



**WOOD BUFFALO
ENVIRONMENTAL ASSOCIATION**

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Wood Buffalo Environmental Association

JANUARY 2026

MONTHLY CALIBRATION REPORT

CONTINUOUS MONITORING

February 27, 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS01 BERTHA GANTER - FORT MCKAY JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number: AMS 01
Calibration Date:	January 9, 2026	Last Cal Date: December 11, 2025
Start time (MST):	10:30	End time (MST): 13:50
Reason:	Routine	

Calibration Standards

Cal Gas Concentration:	49.21	ppm	Cal Gas Exp Date: March 10, 2031
Cal Gas Cylinder #:	CC418809		
Removed Cal Gas Conc:	49.21	ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #:	NA		Diff between cyl:
Calibrator Model:	Teledyne API T700		Serial Number: 3565
Zero Air Gen Model:	Teledyne API T701		Serial Number: 146

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: JC1501301448
Analyzer Range:	0 - 1000 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.000423	0.996039	Backgd or Offset:	21.4	21.5
Calibration intercept:	-0.293328	-0.833222	Coeff or Slope:	0.888	0.888

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4918	81.3	800.3	795.6	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	795.8	Previous response	800.3	*% change	-0.6%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4918	81.3	800.3	797.0	1.004
Mid point	4959	40.7	400.6	397.0	1.009
Low point	4979	20.3	199.8	197.6	1.011
As left zero	5000	0.0	0.0	0.2	----
As left span	4918	81.3	800.3	797.2	1.004
Average Correction Factor:					1.008

Notes: Changed the inlet filter after as founds. No adjustments made.

Calibration Performed By: Rene Chamberland, Parampreet Kaur



Wood Buffalo Environmental Association

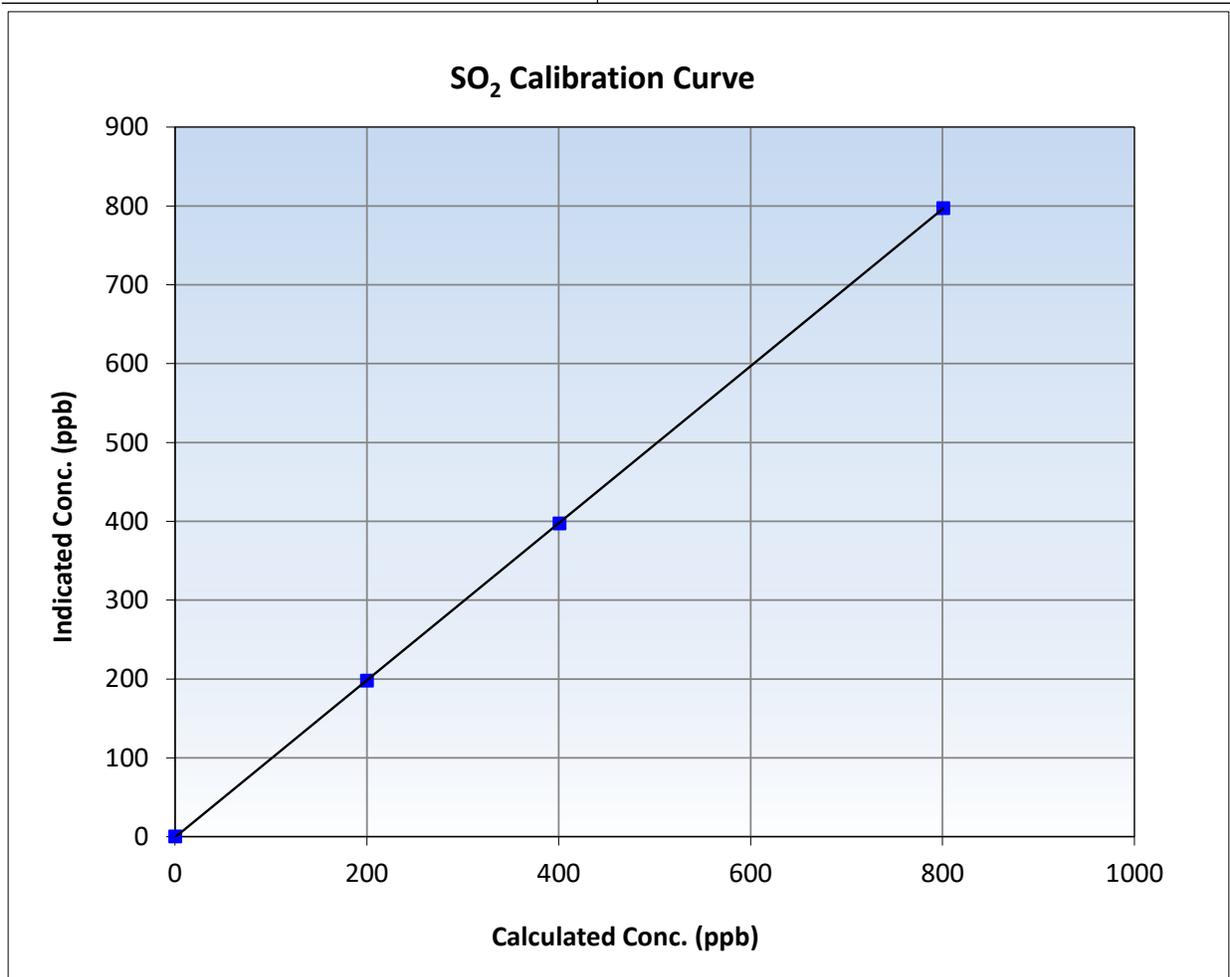
SO₂ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 11, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:30	End Time (MST):	13:50
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1501301448

Calibration Data

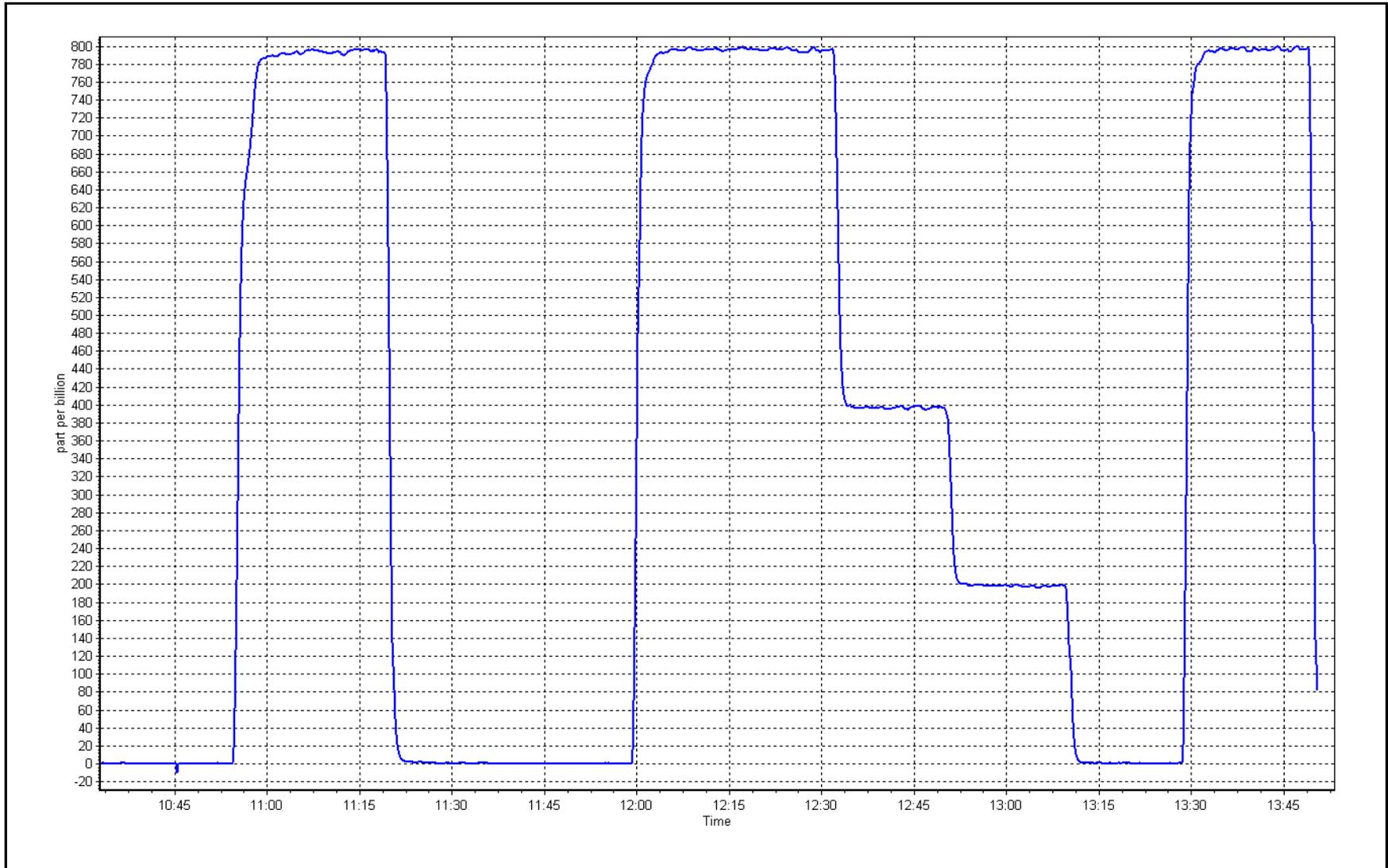
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999990	≥0.995
800.3	797.0	1.0041	Slope	0.996039	0.90 - 1.10
400.6	397.0	1.0091	Intercept	-0.833222	+/-30
199.8	197.6	1.0112			



SO2 Calibration Plot

Date: January 9, 2026

Location: Bertha Ganter-Fort McKay





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	January 7, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	10:06	End time (MST):	14:30
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.84	ppm	Cal Gas Exp Date:	September 5, 2027
Cal Gas Cylinder #:	CC738239			
Removed Cal Gas Conc:	4.84	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	3565
ZAG Make/Model:	Teledyne API T701		Serial Number:	146

Analyzer Information

Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	1200326167
Converter make:	CD Nova	Converter serial #:	2022-221
Analyzer Range	0 - 100 ppb	Converter Temp:	315 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.986094	1.001818	Backgd or Offset:	2.01	2.06
Calibration intercept:	0.242119	0.041877	Coeff or Slope:	0.973	0.987

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4917	82.6	80.0	78.3	1.023
As found Mid point	4959	41.3	40.0	39.2	1.022
As found Low point	4979	20.7	20.0	19.6	1.028
New cylinder response					
Baseline Corr As found:	78.2	Prev response:	79.09	*% change:	-1.1%
Baseline Corr 2nd AF pt:	39.1	AF Slope:	0.978373	AF Intercept:	0.062343
Baseline Corr 3rd AF pt:	19.5	AF Correlation:	0.999998	<i>* = > +/-5% change initiates investigation</i>	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4917	82.6	80.0	80.3	0.996
Mid point	4959	41.3	40.0	39.8	1.004
Low point	4979	20.7	20.0	20.1	0.997
As left zero	5000	0.0	0.0	0.2	----
As left span	4917	82.6	80.0	79.6	1.005
SO ₂ Scrubber Check	4919	81.3	813.0	-0.1	----
Date of last scrubber change:	January 25, 2024			Ave Corr Factor	0.999
Date of last converter efficiency test:	November 7, 2024			107.9% efficiency	

Notes: Inlet filter change completed after as founds. Span adjustment made. Scrubber check passed.

Calibration Performed By: Rene Chamberland, Parampreet Kaur



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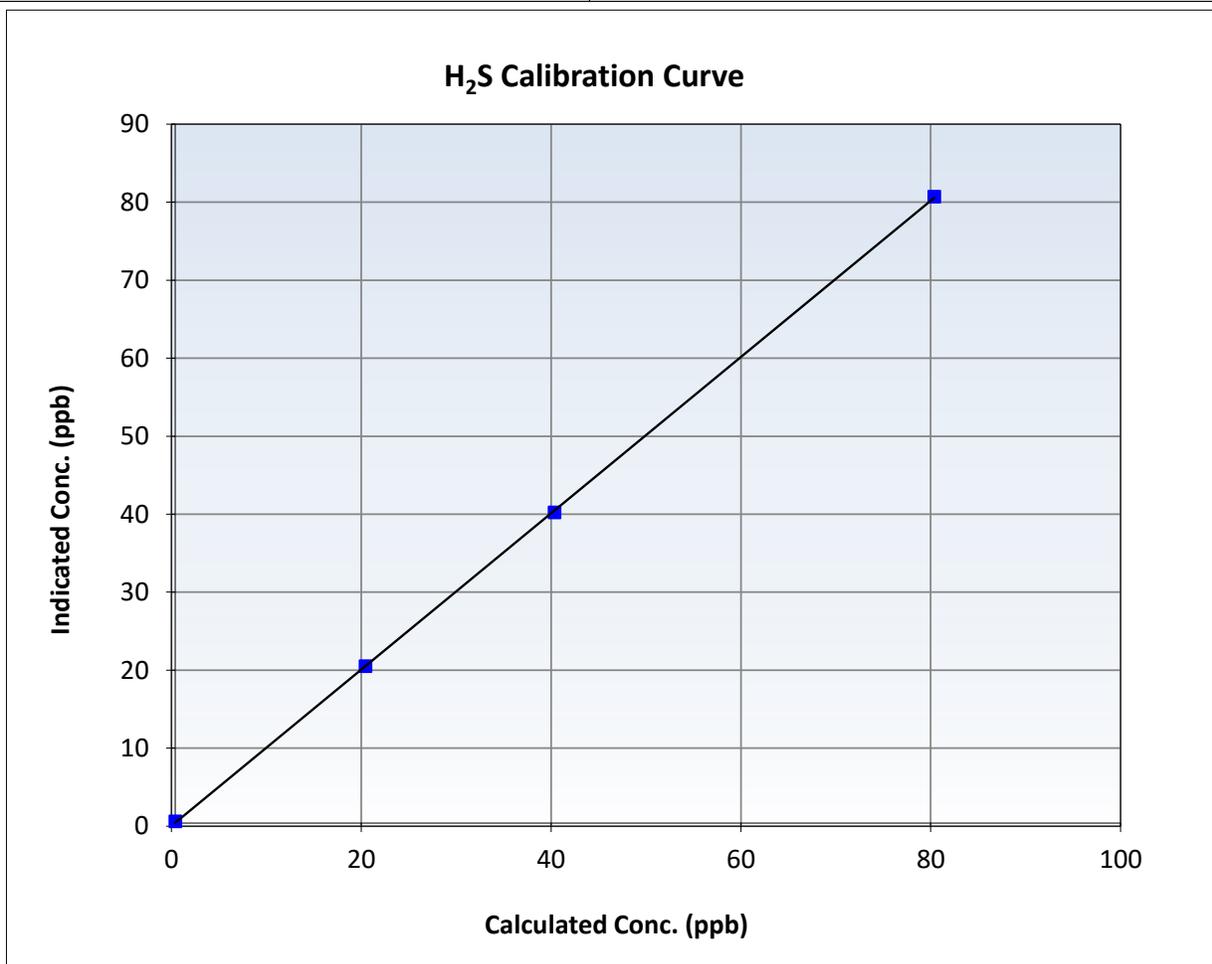
H₂S Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 10, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:06	End Time (MST):	14:30
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	1200326167

Calibration Data

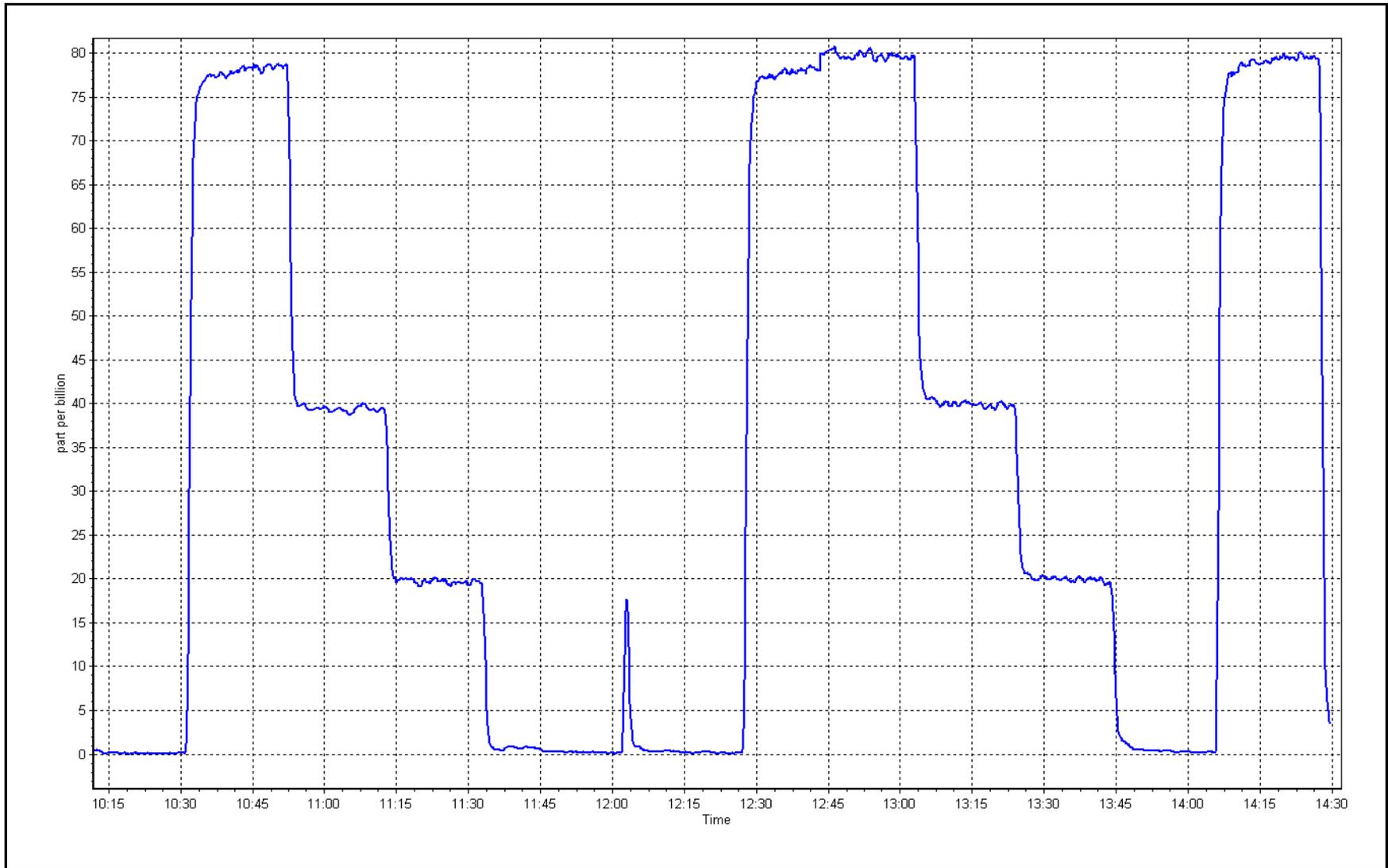
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999962	≥0.995
80.0	80.3	0.9958	Slope	1.001818	0.90 - 1.10
40.0	39.8	1.0044	Intercept	0.041877	+/-3
20.0	20.1	0.9970			



H₂S Calibration Plot

Date: January 7, 2026

Location: Bertha Ganter-Fort McKay





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TRS Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	January 7, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	10:06	End time (MST):	14:30
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.84	ppm	Cal Gas Exp Date:	September 5, 2027
Cal Gas Cylinder #:	CC738239			
Removed Cal Gas Conc:	4.84	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	3565
ZAG Make/Model:	Teledyne API T701		Serial Number:	146

Analyzer Information

Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	12113311966
Converter make:	CD Nova	Converter serial #:	580
Analyzer Range	0 - 100 ppb	Converter Temp:	850 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.992949	0.998243	Backgd or Offset:	2.13	2.17
Calibration intercept:	-0.197762	0.041980	Coeff or Slope:	1.119	1.139

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.6	80.0	79.2	1.010
As found Mid point	4959	41.3	40.0	39.6	1.009
As found Low point	4979	20.7	20.0	19.9	1.007
New cylinder response					
Baseline Corr As found:	79.2	Prev response:	79.20	*% change:	0.0%
Baseline Corr 2nd AF pt:	39.6	AF Slope:	0.990239	AF Intercept:	0.022078
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999999	* = > +/-5% change initiates investigation	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	82.6	80.0	79.8	1.002
Mid point	4959	41.3	40.0	40.1	0.997
Low point	4979	20.7	20.0	20.0	1.002
As left zero	5000	0.0	0.0	0.2	----
As left span	4917	82.6	80.0	79.2	1.010
SO2 Scrubber Check	4919	81.3	813.0	0.1	----
Date of last scrubber change:	December 17, 2021			Ave Corr Factor	1.000
Date of last converter efficiency test:					

Notes: Inlet filter change completed after as founds. Span adjustment made. Scrubber check passed.

Calibration Performed By: Rene Chamberland, Parampreet Kaur



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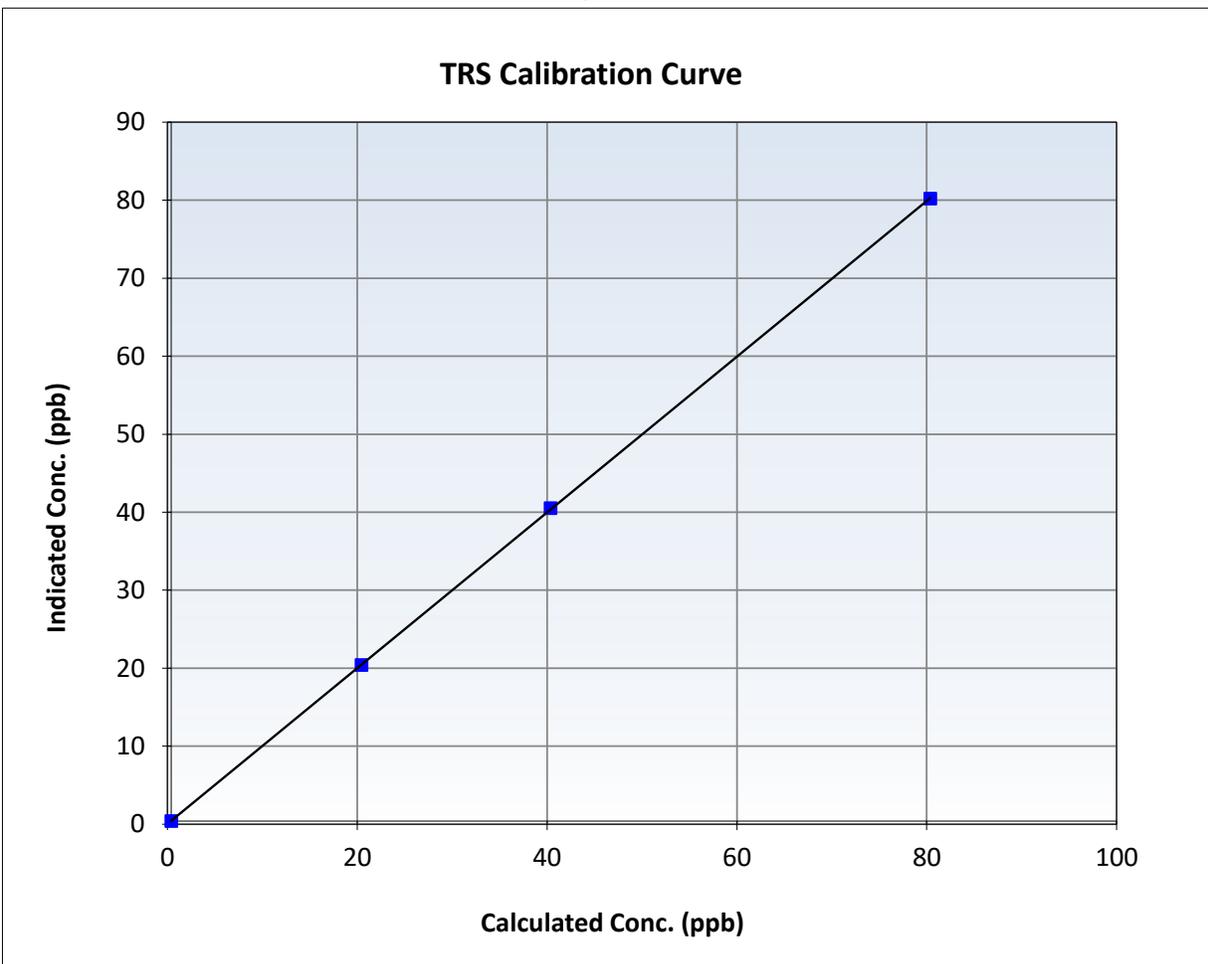
TRS Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 10, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:06	End Time (MST):	14:30
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	12113311966

Calibration Data

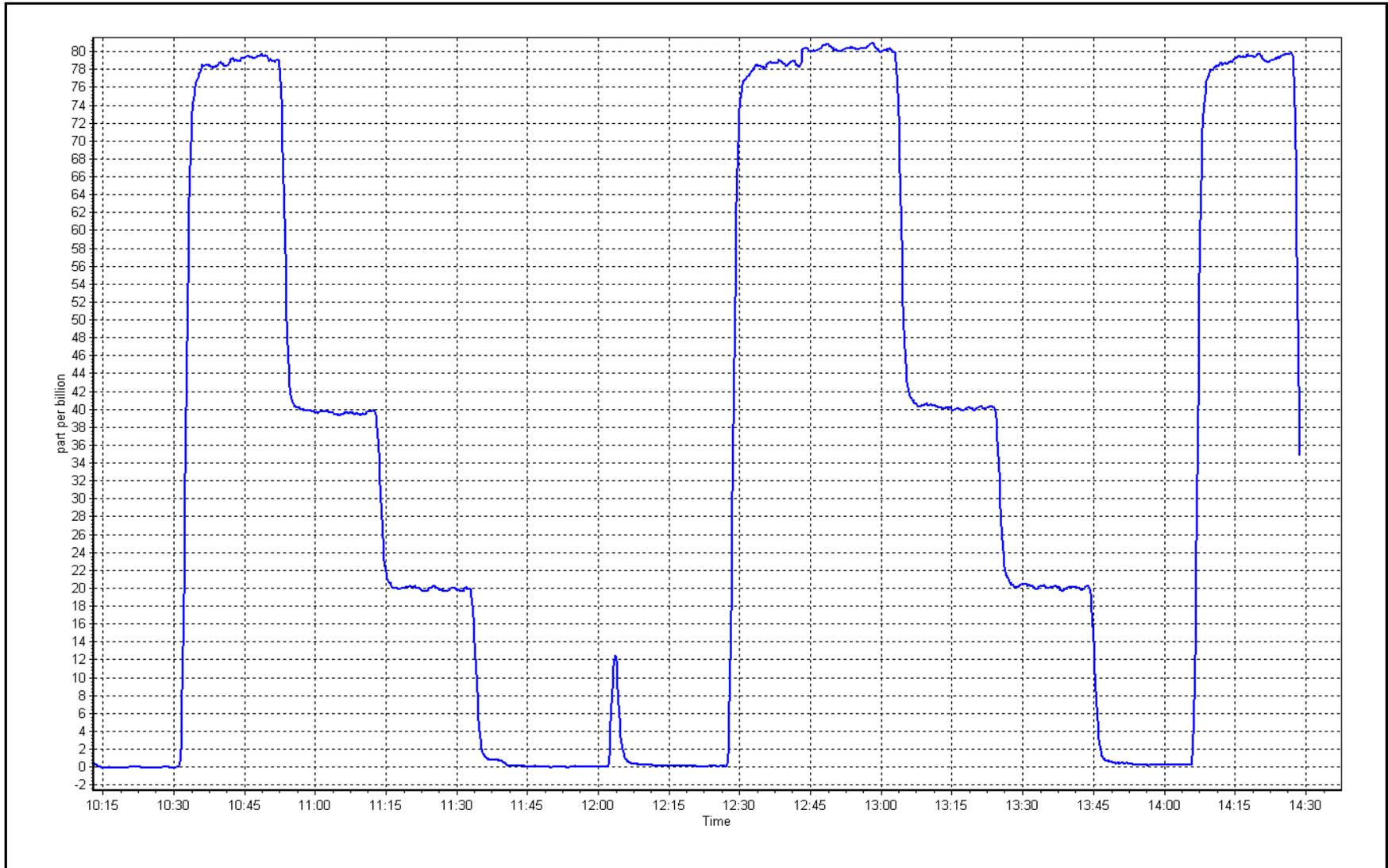
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999991	≥ 0.995
80.0	79.8	1.0020	Slope	0.998243	$0.90 - 1.10$
40.0	40.1	0.9969	Intercept	0.041980	± 3
20.0	20.0	1.0019			



TRS Calibration Plot

Date: January 7, 2026

Location: Bertha Ganter-Fort McKay





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	January 9, 2026	Last Cal Date:	December 31, 2025
Start time (MST):	10:30	End time (MST):	13:50
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC418809	Cal Gas Expiry Date:	March 10, 2031
CH ₄ Cal Gas Conc.	497.2 ppm	CH ₄ Equiv Conc.	1061.8 ppm
C ₃ H ₈ Cal Gas Conc.	205.3 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH ₄ Conc.	497.2 ppm	CH ₄ Equiv Conc.	1061.8 ppm
Removed C ₃ H ₈ Conc.	205.3 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3565
Zero Air Gen model:	Teledyne API T701	Serial Number:	146

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1193585648
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH ₄ SP Ratio:	2.48E-04	2.51E-04	4.76E-05	4.87E-05
CH ₄ Retention time:	15.0	15.0	192877	188312
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	81.3	17.27	16.99	1.016
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.99	Prev response	17.15	*% change	-0.9%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	81.3	17.27	17.25	1.001
Mid point	4959	40.7	8.64	8.64	1.000
Low point	4979	20.3	4.31	4.34	0.993
As left zero	5000	0.0	0.00	0.01	----
As left span	4918	81.3	17.27	17.34	0.996
Average Correction Factor					0.998

Notes: Changed the inlet filter and N₂ cylinder after as founds. Adjusted the span.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	81.3	9.18	9.02	1.018
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.02	Prev response	9.08	*% change	-0.7%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	81.3	9.18	9.15	1.003
Mid point	4959	40.7	4.60	4.59	1.001
Low point	4979	20.3	2.29	2.32	0.989
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	81.3	9.18	9.26	0.991
Average Correction Factor					0.998

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	81.3	8.09	7.97	1.014
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.97	Prev response	8.06	*% change	-1.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	81.3	8.09	8.10	0.998
Mid point	4959	40.7	4.05	4.05	1.000
Low point	4979	20.3	2.02	2.02	0.998
As left zero	5000	0.0	0.00	0.01	----
As left span	4918	81.3	8.09	8.08	1.000
Average Correction Factor					0.999

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.992719	0.998351
THC Cal Offset:	0.004349	0.016544
CH ₄ Cal Slope:	0.997170	1.001184
CH ₄ Cal Offset:	-0.002730	0.001067
NMHC Cal Slope:	0.988326	0.995607
NMHC Cal Offset:	0.007479	0.015478

Calibration Performed By: Rene Chamberland, Parampreet Kaur



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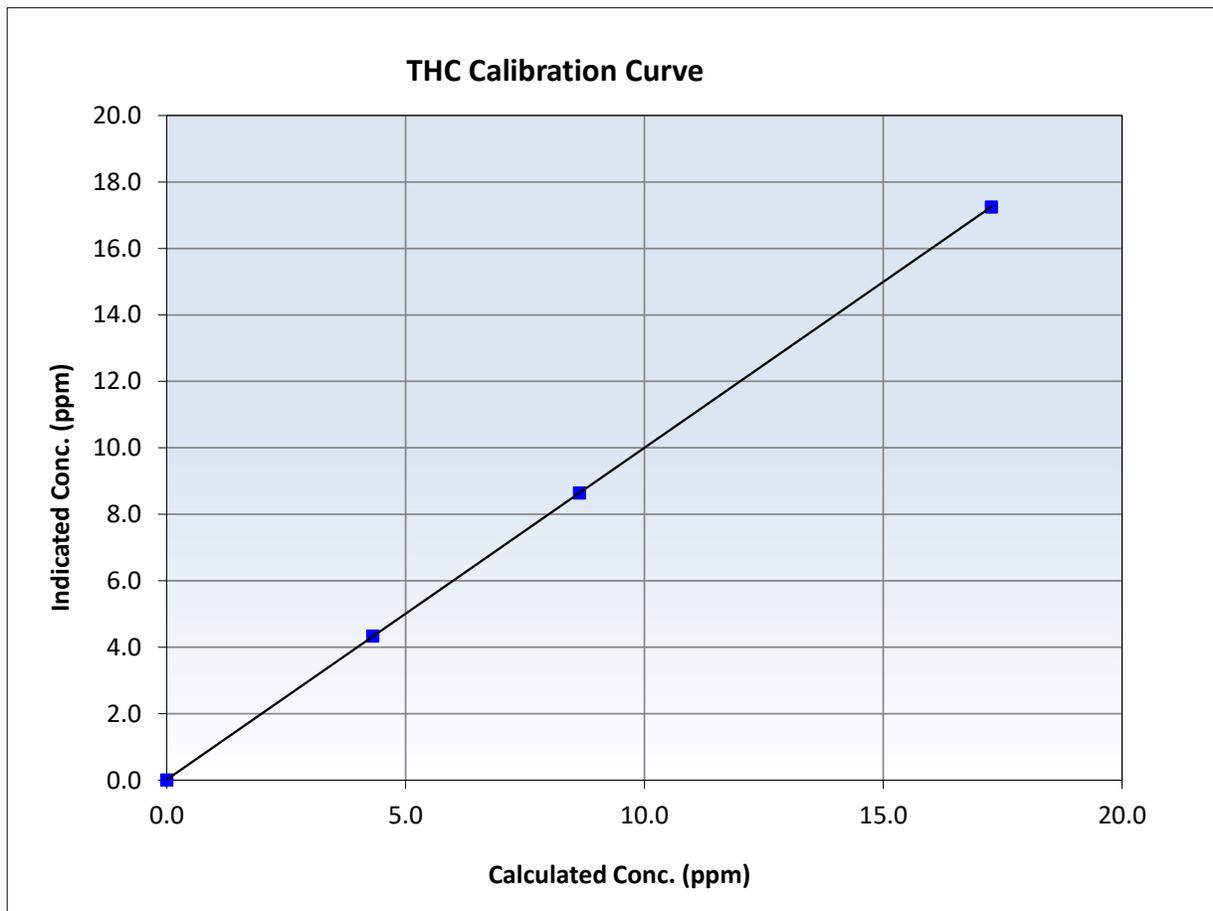
THC Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 31, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:30	End Time (MST):	13:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585648

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999997	<i>≥0.995</i>
17.27	17.25	1.0009	Slope	0.998351	<i>0.90 - 1.10</i>
8.64	8.64	1.0002	Intercept	0.016544	<i>+/-0.5</i>
4.31	4.34	0.9934			





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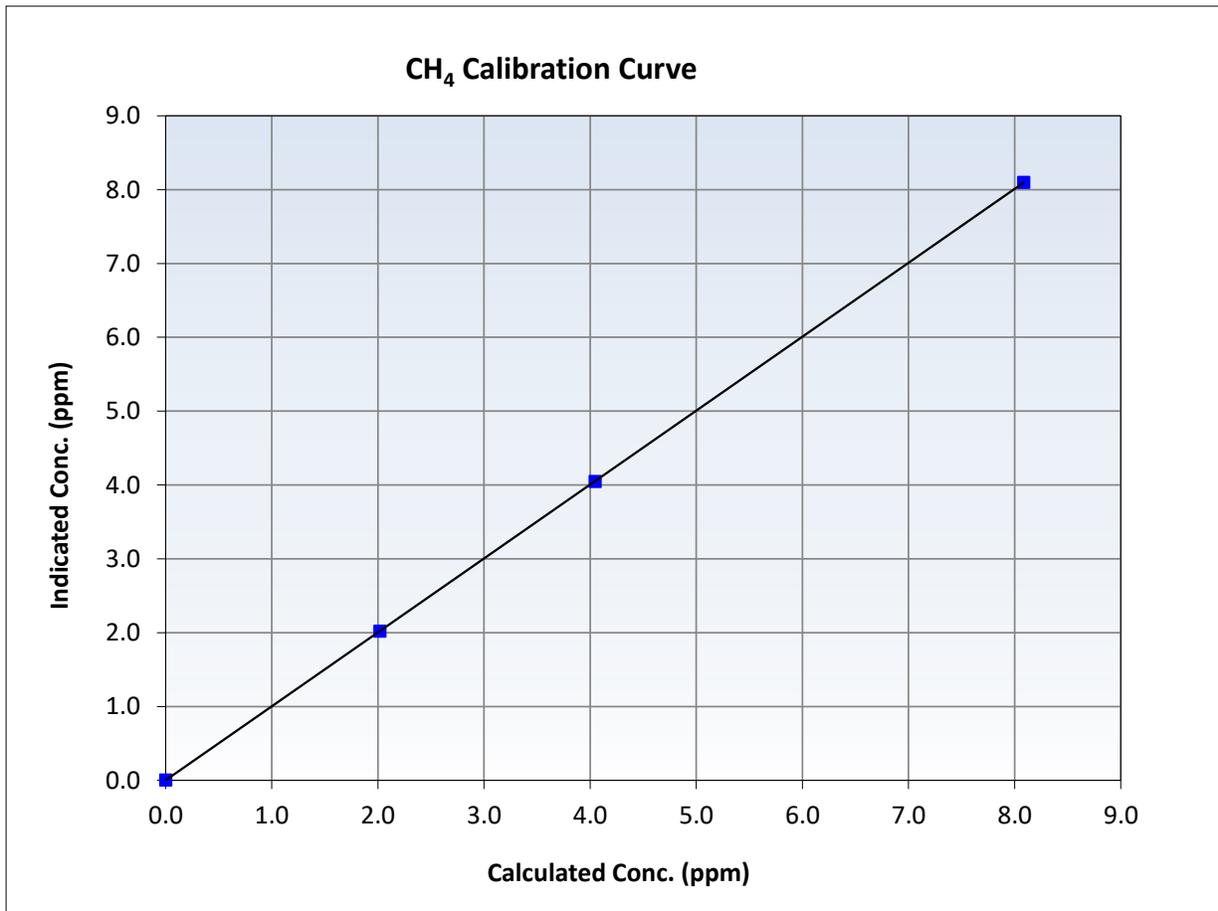
CH₄ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 31, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:30	End Time (MST):	13:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585648

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	≥0.995
8.09	8.10	0.9983	Slope	0.90 - 1.10
4.05	4.05	0.9999	Intercept	+/-0.5
2.02	2.02	0.9985		





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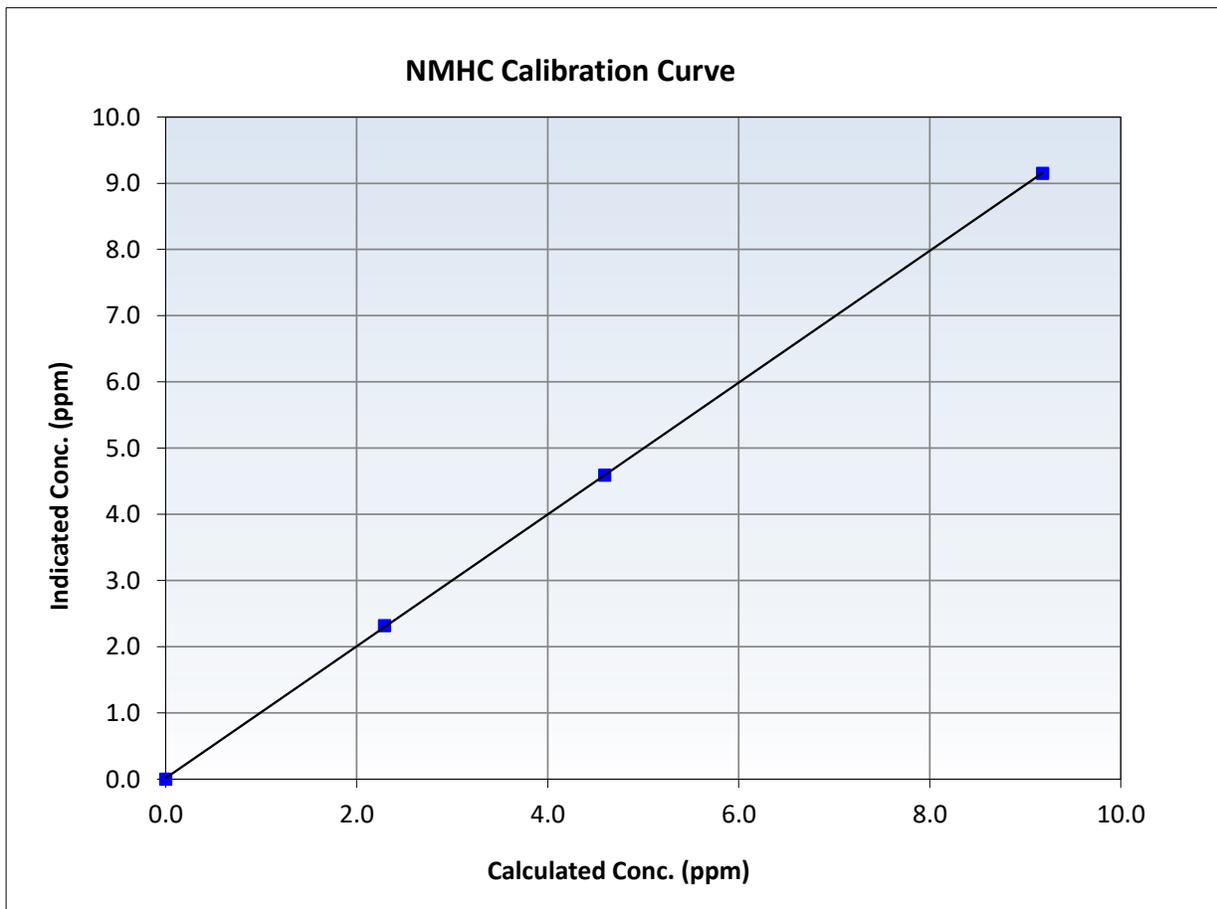
NMHC Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 31, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:30	End Time (MST):	13:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585648

Calibration Data

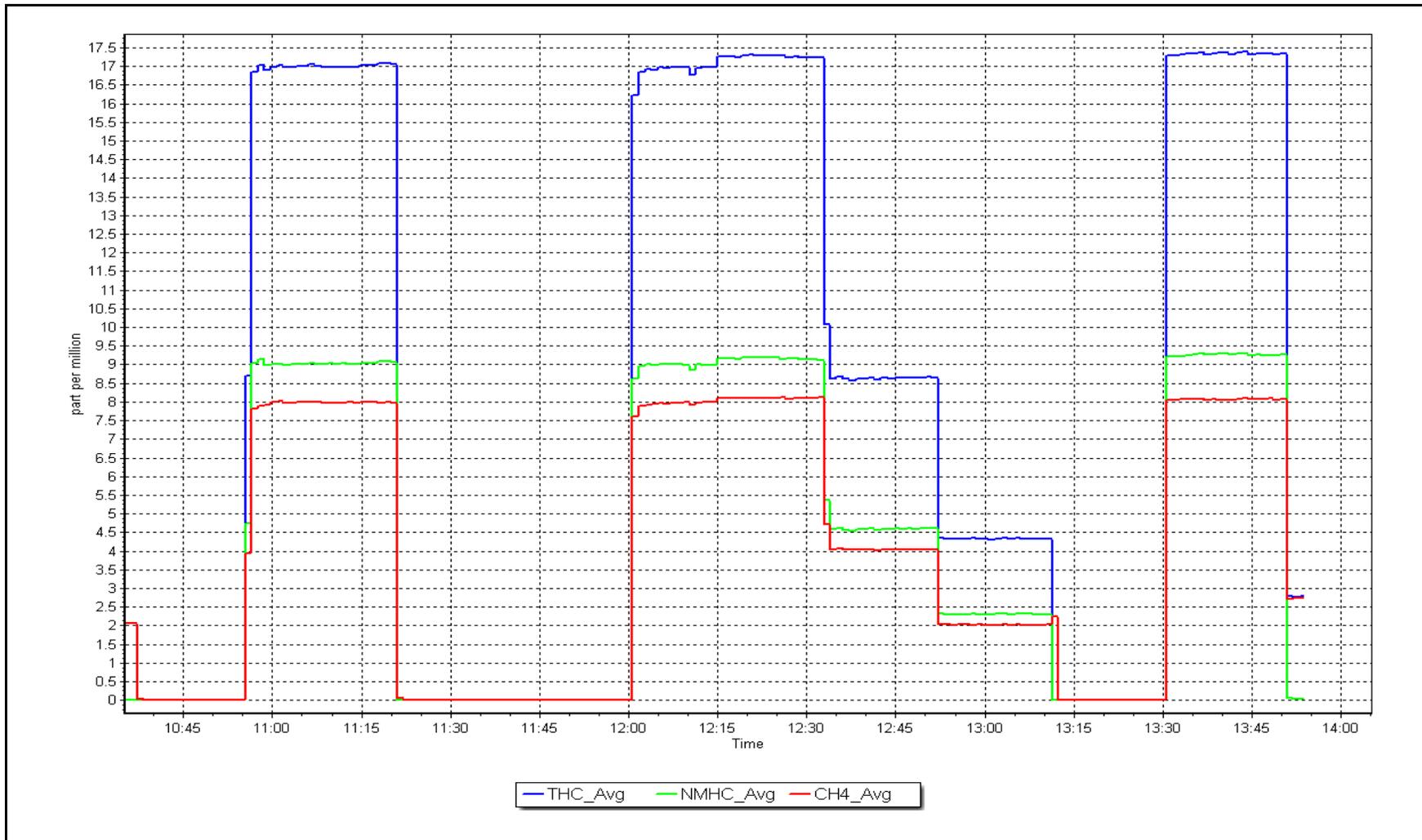
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999985	<i>≥0.995</i>
9.18	9.15	1.0033	Slope	0.995607	<i>0.90 - 1.10</i>
4.60	4.59	1.0009	Intercept	0.015478	<i>+/-0.5</i>
2.29	2.32	0.9890			



NMHC Calibration Plot

Date: January 9, 2026

Location: Bertha Ganter-Fort McKay





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Bertha Ganter-Fort McKay
 Station number: AMS 01
 Calibration Date: January 8, 2026
 Last Cal Date: December 4, 2025
 Start time (MST): 10:14
 End time (MST): 14:56
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: CC335700
 NOX Cal Gas Conc: 59.40 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 59.40 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701
 Cal Gas Expiry Date: September 1, 2032
 NO Cal Gas Conc: 59.20 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 59.20 ppm
 NO gas Diff:
 Serial Number: 3565
 Serial Number: 146

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
AF High point	4932	67.6	803.1	800.4	2.7	803.2	797.0	6.2	0.9997	1.0041
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO _x = 803.1 ppb	NO = 800.1 ppb	<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 0.0%
Baseline Corr 1st pt	NO _x = 803.3 ppb	NO = 797.1 ppb	<u>As Found Statistics</u>		*Percent Change	NO = -0.4%
Baseline Corr 2nd pt	NO _x = NA ppb	NO = NA ppb	As found	NO _x r ² :	Nx SI:	Nx Int:
Baseline Corr 3rd pt	NO _x = NA ppb	NO = NA ppb	As found	NO r ² :	NO SI:	NO Int:
			As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1336160088

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.999798	0.995870
NO _x Cal Offset:	0.220000	0.000000
NO Cal Slope:	1.000920	0.996950
NO Cal Offset:	-1.040000	-1.900000
NO ₂ Cal Slope:	1.000193	1.002294
NO ₂ Cal Offset:	-0.637373	0.700760

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.745	0.748	NO bkgnd or offset:	2.2	2.2
NOX coeff or slope:	0.998	1.001	NOX bkgnd or offset:	2.3	2.3
NO2 coeff or slope:	0.999	0.999	Reaction cell Press:	159.7	159.7

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.6	0.0	0.6	----	----
High point	4932	67.6	803.1	800.4	2.7	800.1	797.1	3.1	1.0037	1.0041
Mid point	4966	33.8	401.5	400.2	1.4	399.5	395.8	3.7	1.0051	1.0111
Low point	4983	16.9	200.8	200.1	0.7	199.4	195.9	3.5	1.0069	1.0214
As left zero	5000	0.0	0.0	0.0	0.0	0.6	0.0	0.6	----	----
As left span	4932	67.6	803.1	395.5	407.6	794.7	395.5	399.2	1.0106	1.0000
Average Correction Factor									1.0052	1.0122

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.6	----	----
High GPT point	789.9	395.7	396.9	398.5	0.9960	100.4%
Mid GPT point	789.9	596.5	196.1	197.2	0.9944	100.6%
Low GPT point	789.9	694.6	98.0	99.1	0.9889	101.1%
Average Correction Factor					0.9931	100.7%

Notes: Changed the inlet filter after as founds. Adjusted the span.

Calibration Performed By: Parampreet Kaur, Rene Chamberland



Wood Buffalo Environmental Association

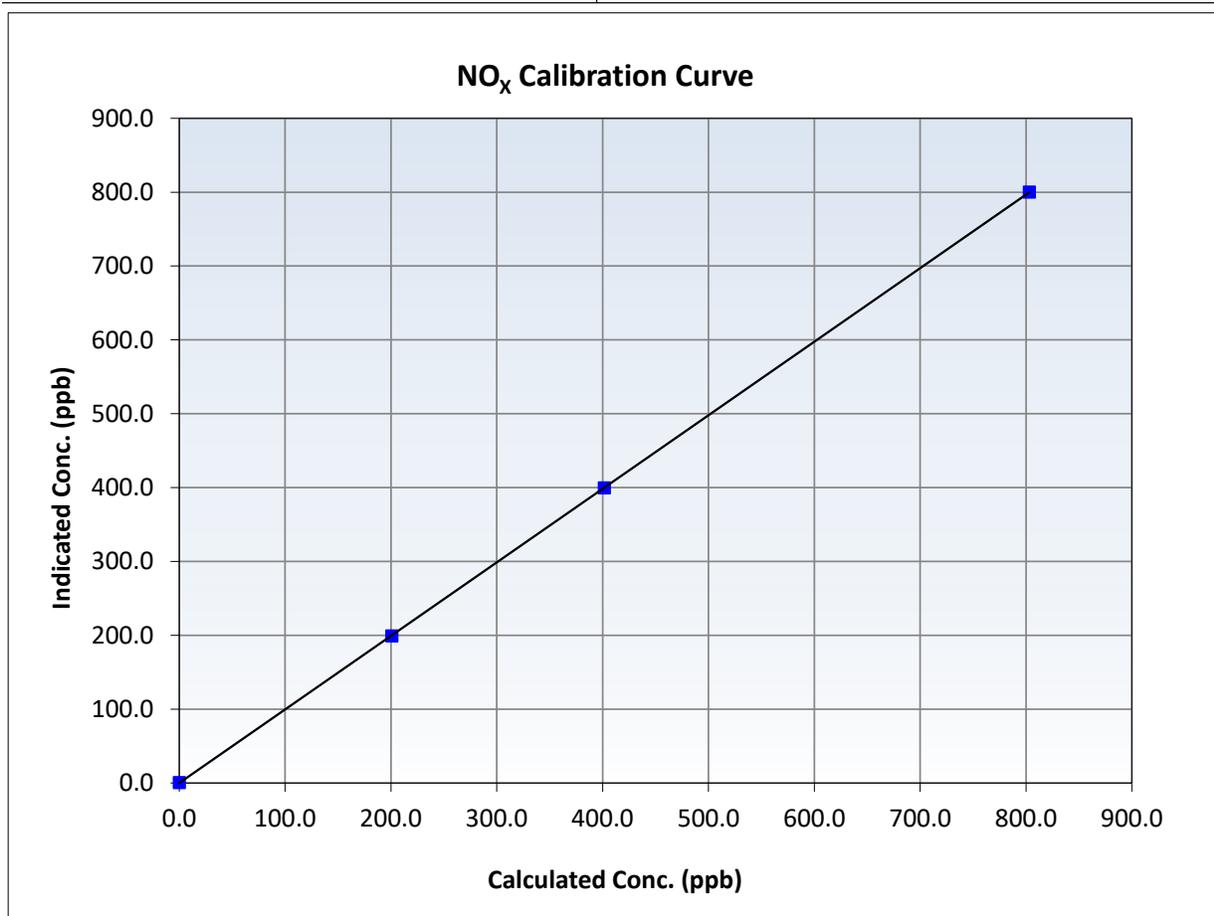
NO_x Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 4, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:14	End Time (MST):	14:56
Analyzer make:	Thermo 42i	Analyzer serial #:	1336160088

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.6	----	Correlation Coefficient	0.999997	<i>≥0.995</i>
803.1	800.1	1.0037	Slope	0.995870	<i>0.90 - 1.10</i>
401.5	399.5	1.0051	Intercept	0.000000	<i>+/-20</i>
200.8	199.4	1.0069			





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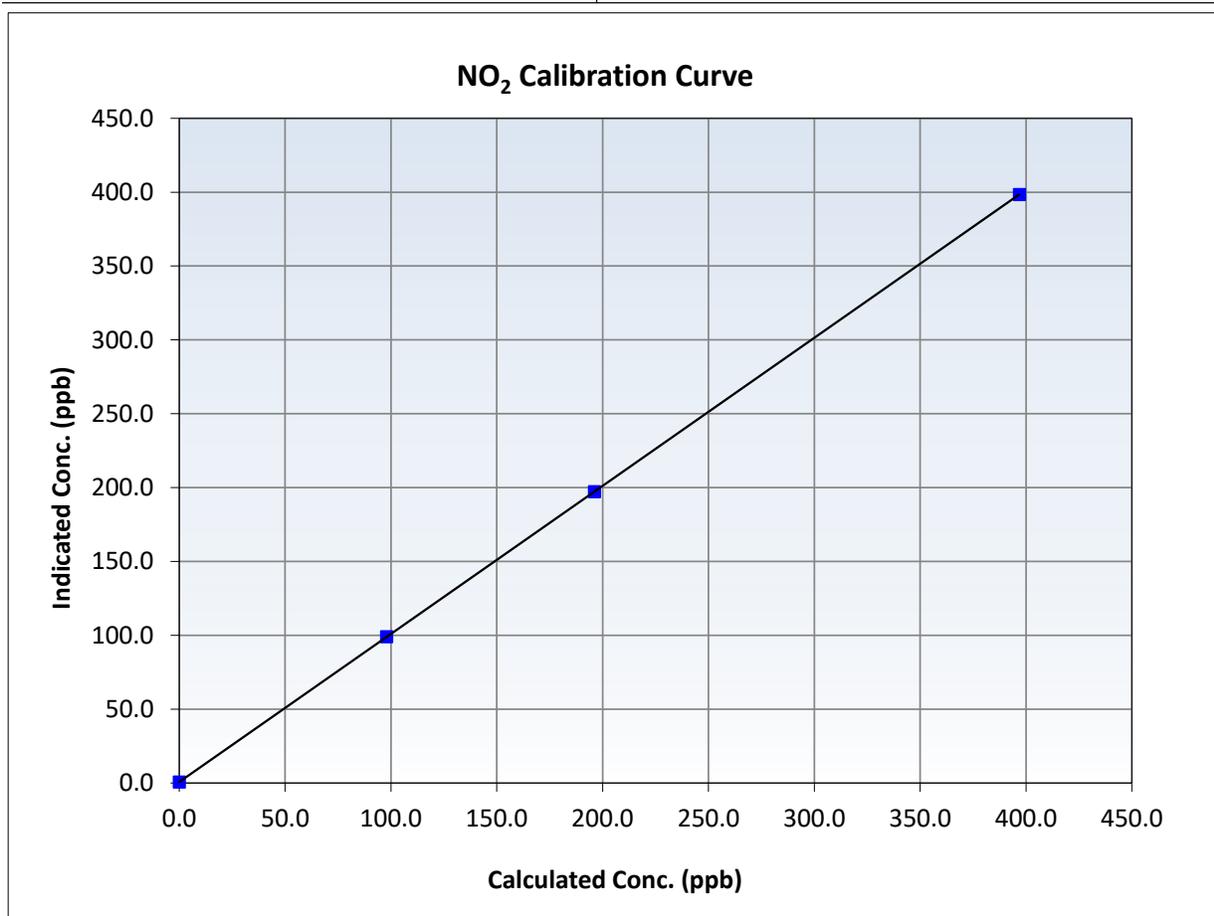
NO₂ Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 4, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:14	End Time (MST):	14:56
Analyzer make:	Thermo 42i	Analyzer serial #:	1336160088

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.6	----	Correlation Coefficient	1.000000	<i>≥0.995</i>
396.9	398.5	0.9960	Slope	1.002294	<i>0.90 - 1.10</i>
196.1	197.2	0.9944	Intercept	0.700760	<i>+/-20</i>
98.0	99.1	0.9889			





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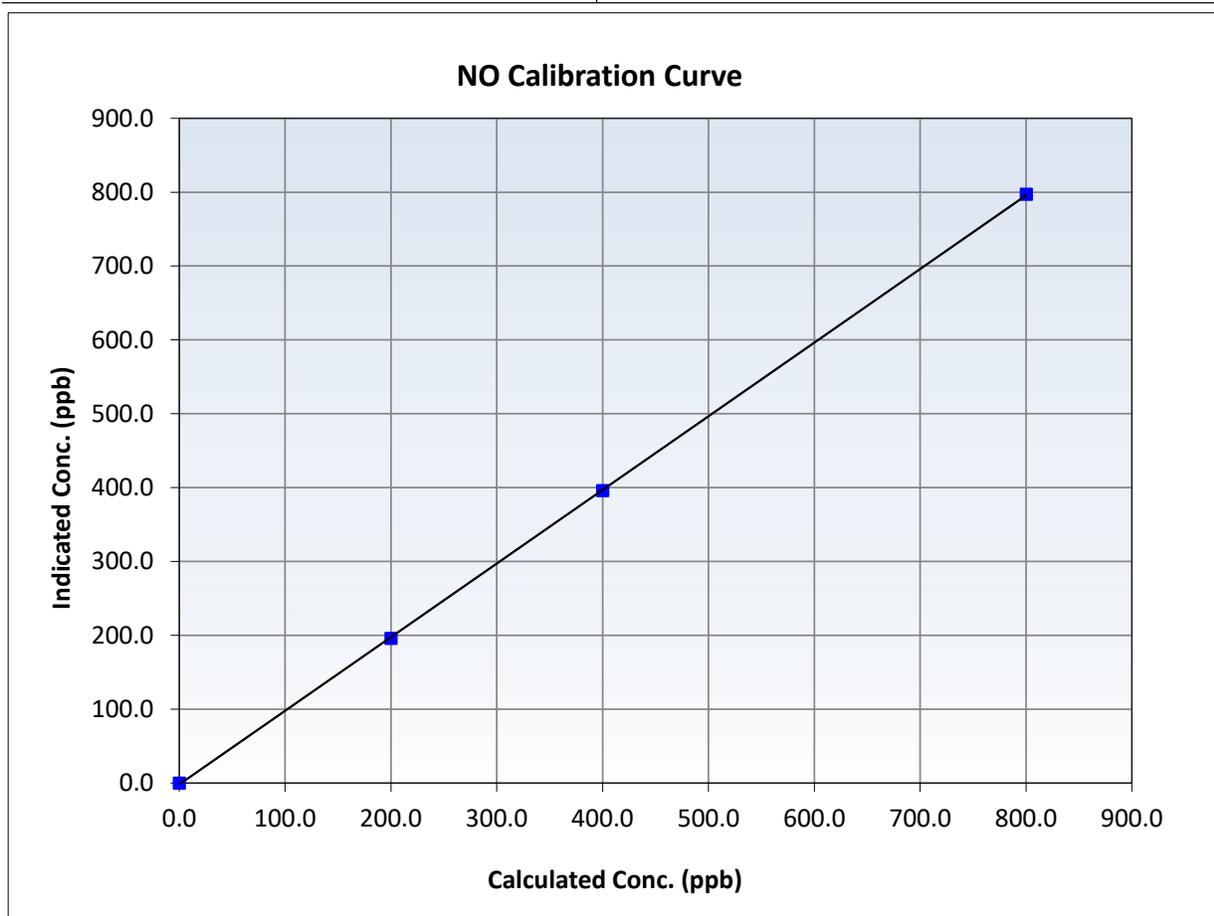
NO Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 4, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:14	End Time (MST):	14:56
Analyzer make:	Thermo 42i	Analyzer serial #:	1336160088

Calibration Data

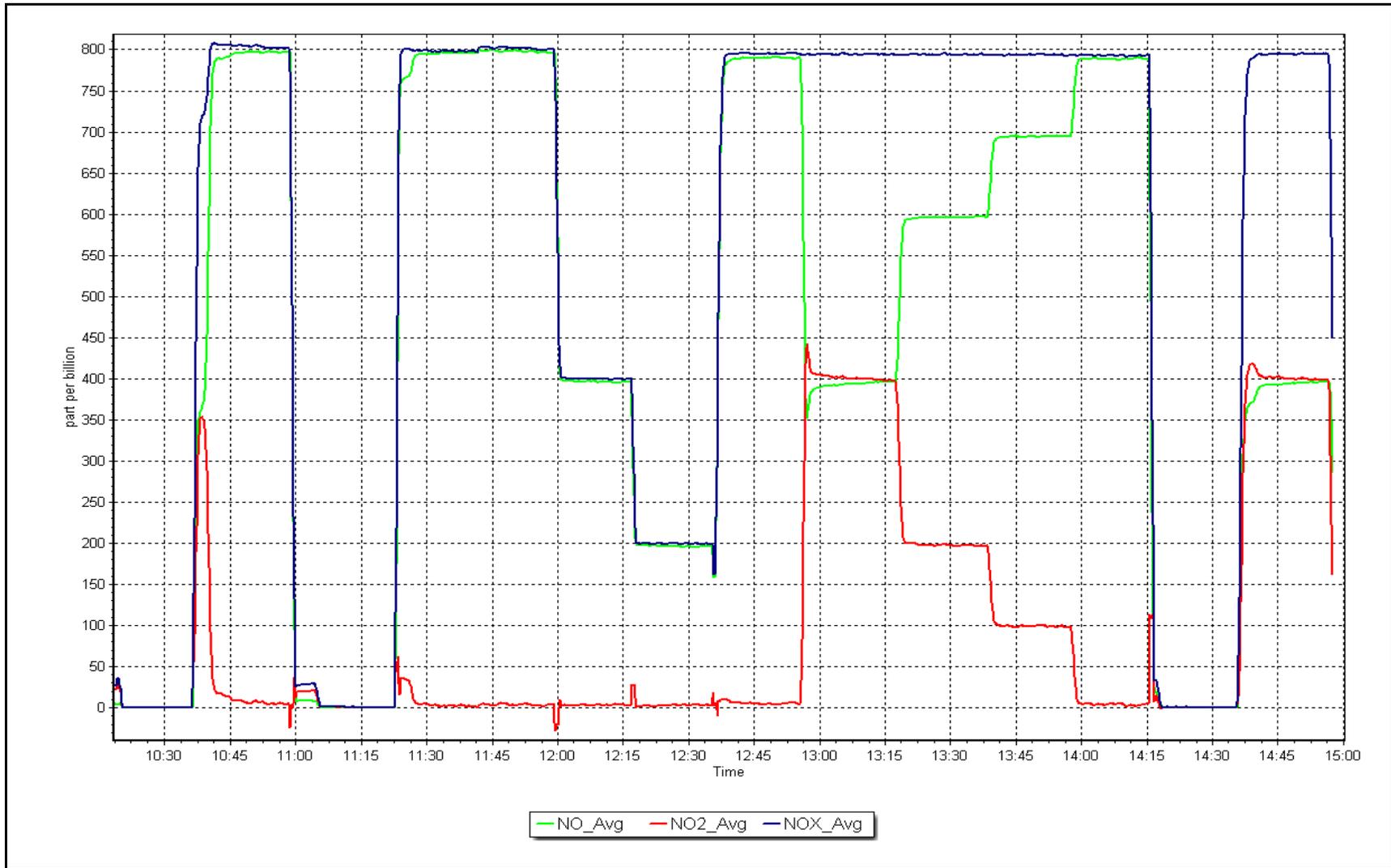
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999974	<i>≥0.995</i>
800.4	797.1	1.0041	Slope	0.996950	<i>0.90 - 1.10</i>
400.2	395.8	1.0111	Intercept	-1.900000	<i>+/-20</i>
200.1	195.9	1.0214			



NO_x Calibration Plot

Date: January 8, 2026

Location: Bertha Ganter-Fort McKay





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number: AMS 01
Calibration Date:	January 5, 2026	Last Cal Date: December 3, 2025
Start time (MST):	10:31	End time (MST): 13:09
Reason:	Routine	

Calibration Standards

O3 generation mode:	Photometer	
Calibrator Make/Model:	Teledyne API T700	Serial Number: 3565
ZAG Make/Model:	Teledyne API T701	Serial Number: 146

Analyzer Information

Analyzer make:	Teledyne API T400	Analyzer serial #: 7045
Analyzer Range	0 - 500 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.001714	1.007314	Backgd or Offset:	2.6	2.7
Calibration intercept:	0.800000	0.520000	Coeff or Slope:	1.072	1.132

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.4	----
As found High point	5000	874.8	400.0	382.9	1.044
As found Mid point					
As found Low point					
Baseline Corr As found:	383.3	Previous response	401.5	*% change	-4.7%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	5000	874.8	400.0	403.0	0.993
Mid point	5000	744.0	200.0	202.7	0.987
Low point	5000	651.7	100.0	101.6	0.984
As left zero	5000	0.0	0.0	-0.1	----
As left span	5000	874.8	400.0	405.8	0.986
Average Correction Factor					0.988

Notes: Changed the inlet filter after as founds. Adjusted the span.

Calibration Performed By: Rene Chamberland & Param Kaur



Wood Buffalo Environmental Association

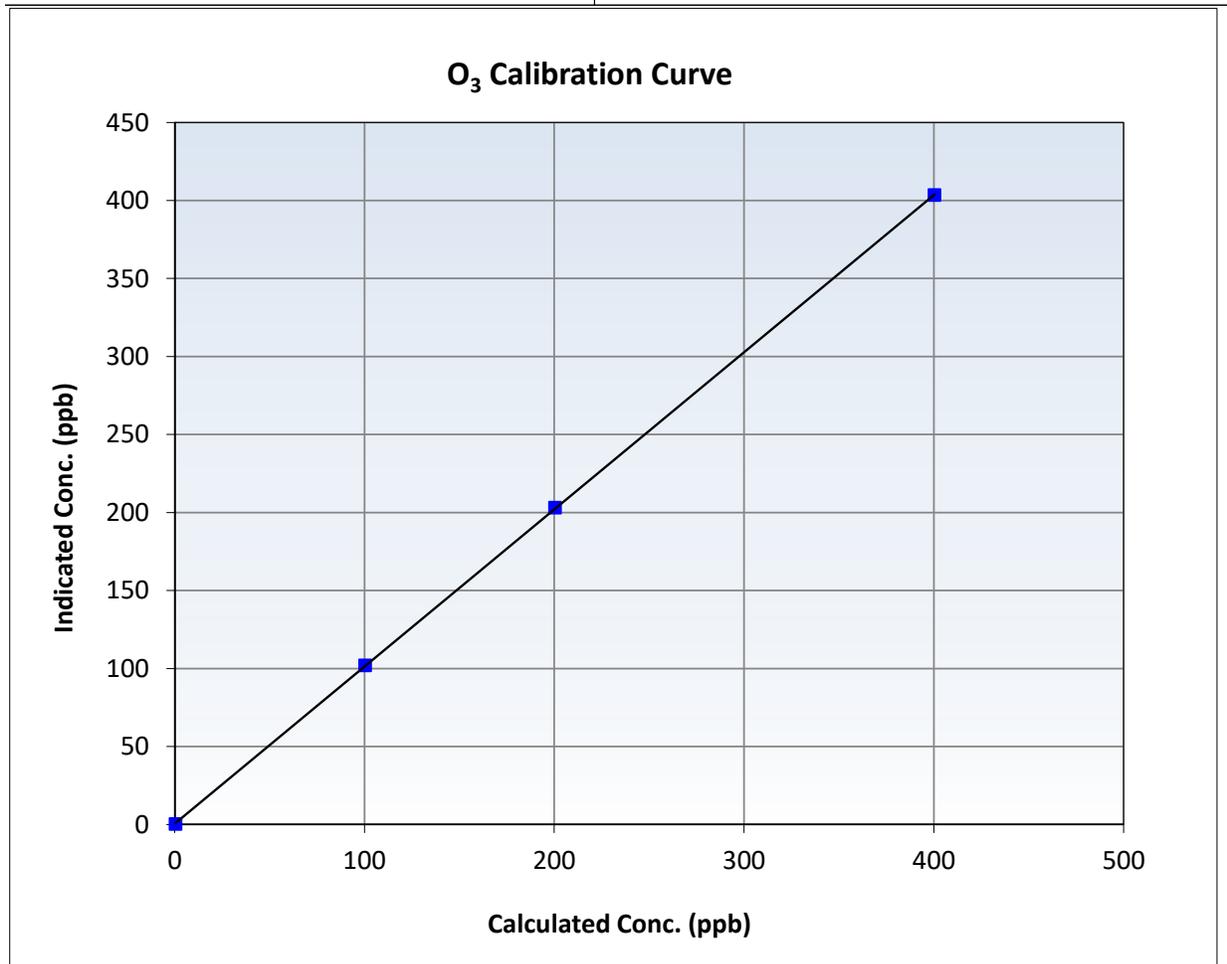
O₃ Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 3, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:31	End Time (MST):	13:09
Analyzer make:	Teledyne API T400	Analyzer serial #:	7045

Calibration Data

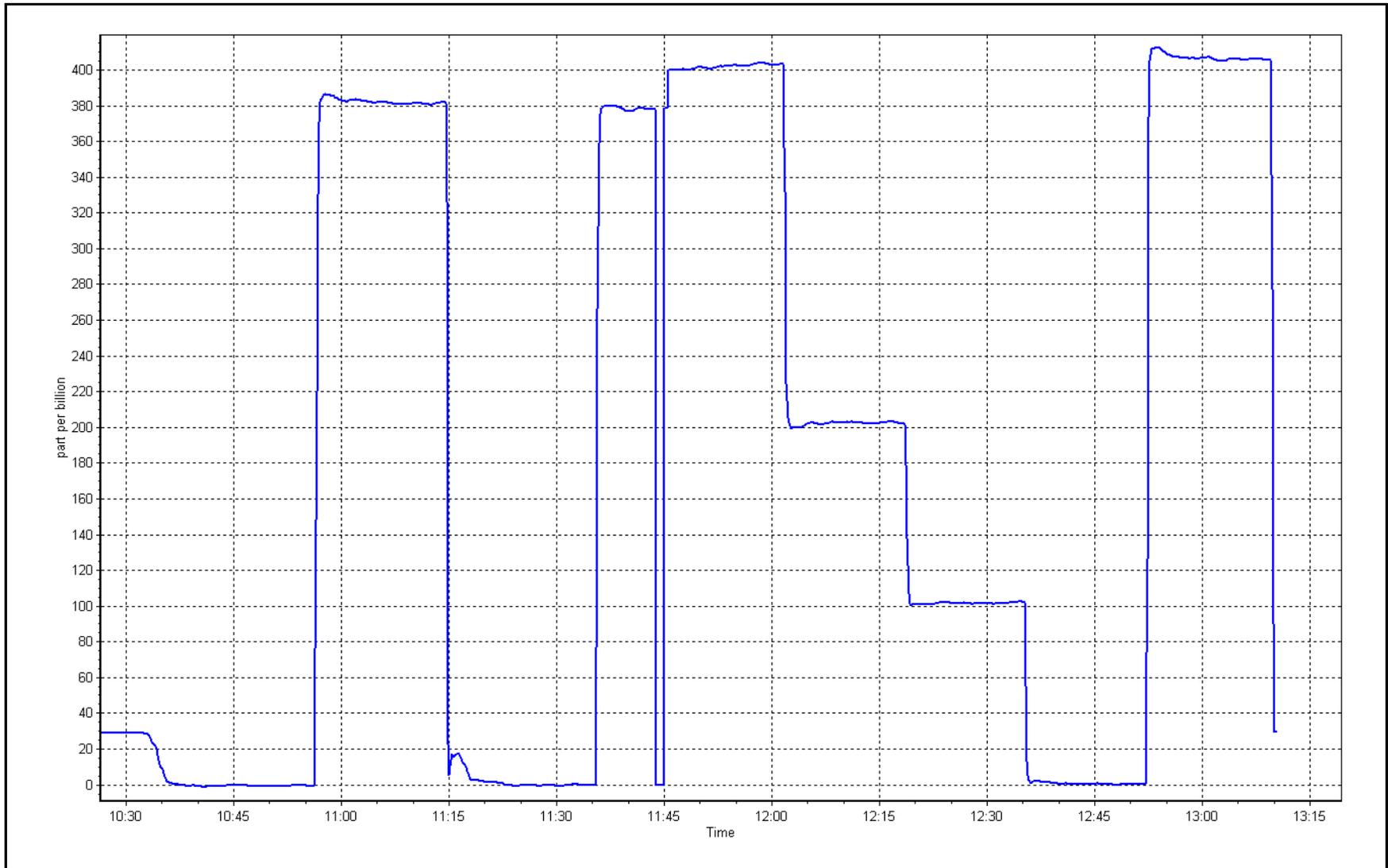
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.1	----	Correlation Coefficient	0.999986	≥0.995
400.0	403.0	0.9926	Slope	1.007314	0.90 - 1.10
200.0	202.7	0.9867	Intercept	0.520000	+/- 5
100.0	101.6	0.9843			



O₃ Calibration Plot

Date: January 5, 2026

Location: Bertha Ganter-Fort McKay





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Fort McKay - Bertha Ganter Station number: AMS 01
Calibration Date: January 28, 2026 Last Cal Date: December 11, 2025
Start time (MST): 12:40 End time (MST): 13:37

Analyzer Make: Teledyne API T640 S/N: 323
Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388752
Temp/RH standard: Alicat FP-25BT S/N: 388752

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-11	-11.6	-11	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	744	743.04	744	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	4.97	4.942	4.97	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	39		39	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	3.7	PM w/ HEPA: _____	0.0	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.9 Expiry Date: June 10, 2024
Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	10.9 +/- 0.5

Date Optical Chamber Cleaned: _____ NA
Date Disposable Filter Changed: _____ NA

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: _____ August 20, 2025
Date RH/T Sensor Cleaned: _____ NA

Notes: Flow, temperature, and pressure were verified. Leak check passed. Quarterly maintenance is scheduled for February.

Calibration by: Rene Chamberland



Wood Buffalo Environmental Association

Nt - NOX - NH3 Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
NOX Cal Date:	January 27, 2026	Last Cal Date:	December 8, 2025
Start time (MST):	12:04	End time (MST):	16:24
NH3 Cal Date:	January 28, 2026	Last Cal Date:	December 9, 2025
Start time (MST):	11:19	End time (MST):	15:42
Reason:	Routine		

Calibration Standards

NOX Cal Gas Conc:	59.40	ppm	NO Gas Cylinder #:	CC335700
NO Cal Gas Conc:	59.20	ppm	NO Cal Gas Expiry:	September 1, 2032
Removed NOX Conc:	59.40	ppm	Removed Cylinder #:	NA
Removed NO Conc:	59.20	ppm	Removed cyl Expiry:	NA
NOX gas Diff:			NO gas Diff:	
NH3 Cal Gas Conc:	76.58	ppm	NH3 Gas Cylinder #:	CC482625
			NH3 Cal Gas Expiry:	September 10, 2026
Removed NH3 Conc:	77.80	ppm	Removed Cylinder #:	CC711249
NH3 gas Diff:	0.6%		Removed cyl Expiry:	December 31, 2025
Calibrator Model:		API T700	Serial Number:	3565
ZAG make/model:		API T701	Serial Number:	146

Analyzer Information

Analyzer model:	API T201	Analyzer serial #:	152
Converter model:	API T501	Converter serial #:	484
NH3 Range (ppb):	0 - 2000 ppb	Reaction cell Press:	7.90
NOX Range (ppb):	0 - 1000 ppb	Sample Flow:	554

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coefficient:	1.020	0.978	Nt coefficient:	1.035	0.993
NOX coefficient:	1.025	0.984	NO bkgrnd:	-0.1	-0.6
NO2 coefficient:	1.000	1.000	NOX bkgrnd:	0.0	-0.5
NH3 coefficient:	0.970	0.970	Nt bkgrnd:	0.0	-0.2

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.004209	0.999371
NO _x Cal Offset:	-1.180000	-1.080000
NO Cal Slope:	1.008687	0.999163
NO Cal Offset:	-2.860000	-1.000000
NO ₂ Cal Slope:	1.006307	1.010970
NO ₂ Cal Offset:	1.715340	0.577158
NH3 Cal Slope:	1.004436	1.000087
NH3 Cal Offset:	-3.739477	-0.945989
Nt Cal Slope:	1.007036	1.003641
Nt Cal Offset:	-3.735237	-0.178982



Wood Buffalo Environmental Association

NO_x - NO - NO₂ Calibration Report

NO_x / NO / Nt As Found Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	Baseline corr NO _x Correction factor (Cc/Ic) <i>Limit = 0.9 - 1.0</i>	Baseline corr NO Correction factor (Cc/Ic) <i>Limit = 0.9 - 1.0</i>
As found zero	5000	0.0	0.0	0.0	0.0	-3.0	-2.5	-1.6	----	----
As found span	4932	67.6	803.1	800.4	803.1	833.9	831.7	839.4	0.9631	0.9623
AF GPT span	4932	67.6	803.2	-----	803.2	791.8	-----	794.5	1.0143	-----
new NO cyl rp										

Baseline Corr As Fd Nt = 841 ppb NO_x = 836.9 ppb NO = 834.2 ppb
 Previous Response Nt = 805 ppb NO_x = 805.3 ppb NO = 804.5 ppb

**NO_x Δ (NO to GPT response) = -1.3%

* * = > +/-2% difference initiates investigation

*Percent Change Nt_(NO) = 4.3%

*Percent Change NO_x = 3.8%

*Percent Change NO = 3.6%

* = > +/-5% change initiates investigation

NO_x / NO / Nt Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibration zero	5000	0.0	0.0	0.0	0.0	-0.2	0.9	-0.1	----	----
High point	4932	67.6	803.1	800.4	803.1	802.2	799.6	805.6	1.0011	1.0010
Mid point	4966	33.8	401.5	400.2	401.5	399.0	398.1	399.5	1.0064	1.0053
Low point	4983	16.9	200.8	200.1	200.8	199.2	196.9	199.6	1.0079	1.0162
Average Correction Factor									1.0051	1.0075

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found zero	----	----	0.0	-0.5	----	----
Calibration zero	----	----	0.0	-1.1	----	----
High GPT point (400 ppb O3)	789.3	427.4	364.6	368.4	0.9897	101.0%
Mid GPT point (200 ppb O3)	789.3	608.9	183.1	186.4	0.9823	101.8%
Low GPT point (100 ppb O3)	789.3	703.5	88.5	91.8	0.9641	103.7%
Average Correction Factor					0.9787	102.2%



Wood Buffalo Environmental Association NH₃ - N_T Calibration Report

NH₃ As Found Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated Nt concentration (ppb) (Cc)	Calculated NOX concentration (ppb) (Cc)	Calculated NH3 concentration (ppb) (Cc)	Indicated Nt concentration (ppb) (Ic)	Indicated NOX concentration (ppb) (Ic)	Indicated NH3 concentration (ppb) (Ic)	Baseline corr Nt Correction factor (Cc/(Ic-zero)) <i>Limit = 0.9 - 1.1</i>	Baseline corr NH3 Correction factor (Cc/(Ic-zero)) <i>Limit = 0.9 - 1.1</i>
As found zero	5000	0.0	0.0	0.0	0.0	1.8	3.0	-1.2	----	----
AF High point	2931	69.4	1799.8	0.0	1799.8	1796.8	8.2	1788.8	1.003	1.005
AF Mid point										
AF Low point										
new NH3 cyl rp	2930	70.5	1799.6	----	1799.6	1806.5	----	1800.2	0.996	1.000
Baseline Corr As Fd	Nt = 1795.0 ppb	NH3 = 1790.0 ppb						*Percent Change	Nt _(NH3) = -0.8%	
Previous Response	Nt = 1808.7 ppb	NH3 = 1804.0 ppb				* = > +/-5% change initiates investigation		*Percent Change	NH3 = -0.8%	

NH₃ Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated Nt concentration (ppb) (Cc)	Calculated NOX concentration (ppb) (Cc)	Calculated NH3 concentration (ppb) (Cc)	Indicated Nt concentration (ppb) (Ic)	Indicated NOX concentration (ppb) (Ic)	Indicated NH3 concentration (ppb) (Ic)	Nt Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NH3 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibration zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.2	0.1	----	----
High point	2930	70.5	1799.6	0.0	1799.6	1806.5	6.3	1800.2	0.996	1.000
Mid point	2961	39.2	1000.6	0.0	1000.6	1002.9	5.6	997.3	0.998	1.003
Low point	2980	19.6	500.3	0.0	500.3	502.6	3.1	499.5	0.995	1.002
Average Correction Factor								0.9965	1.0016	
NH3 Previous Converter Efficiency =		97.0 %								
NH3 Current Converter Efficiency =		97.0 %								

Notes: Changed the inlet filter after as founds. Adjusted the NOx, NO, NT zero and spans. Replaced the NH3 calibration gas cylinder.

Calibration Performed By: Rene Chamberland



Wood Buffalo Environmental Association

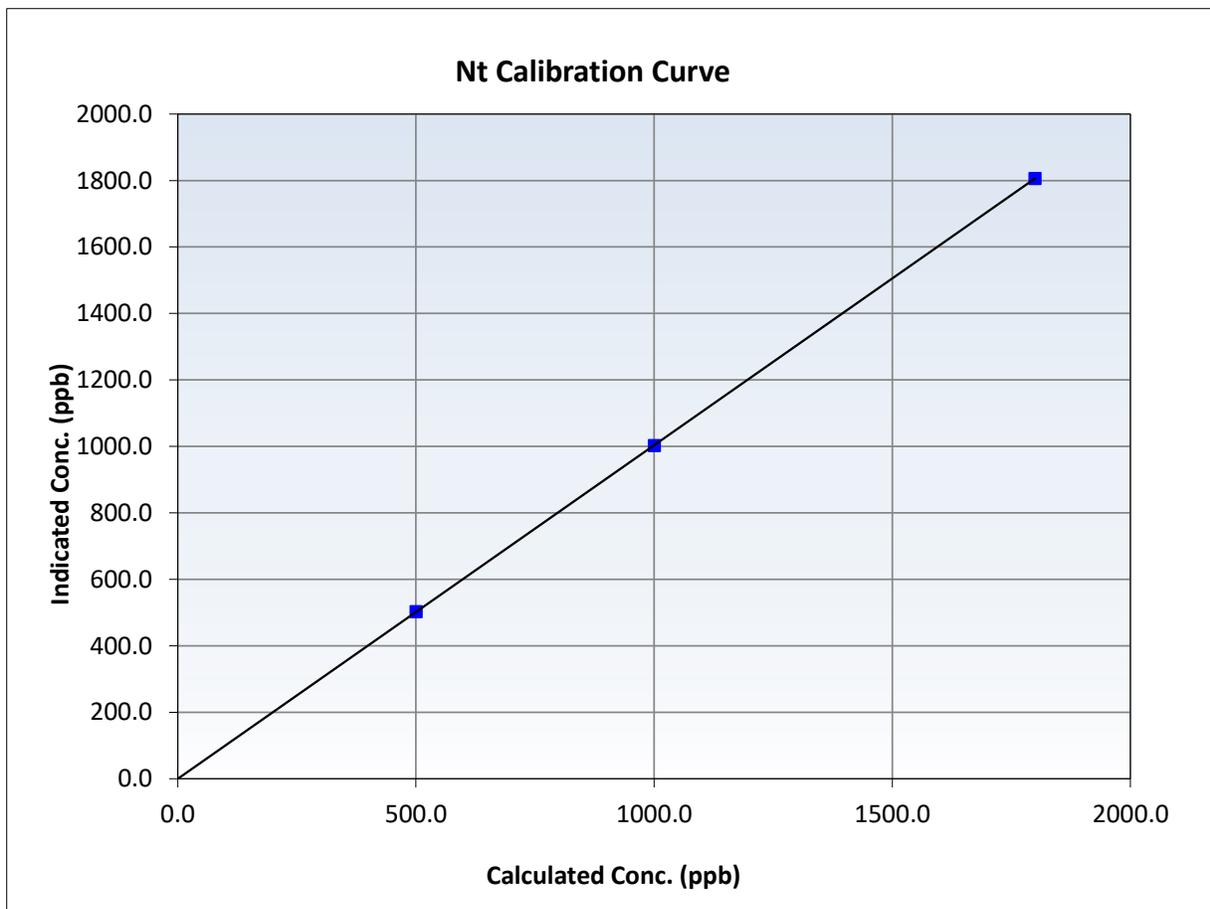
Nt Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 8, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	12:04	End Time (MST):	16:24
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.1	----	Correlation Coefficient	0.999999	<i>≥0.995</i>
1799.6	1806.5	0.9962	Slope	1.003641	<i>0.90 - 1.10</i>
1000.6	1002.9	0.9978	Intercept	-0.178982	<i>+/-20</i>
500.3	502.6	0.9955			





Wood Buffalo Environmental Association

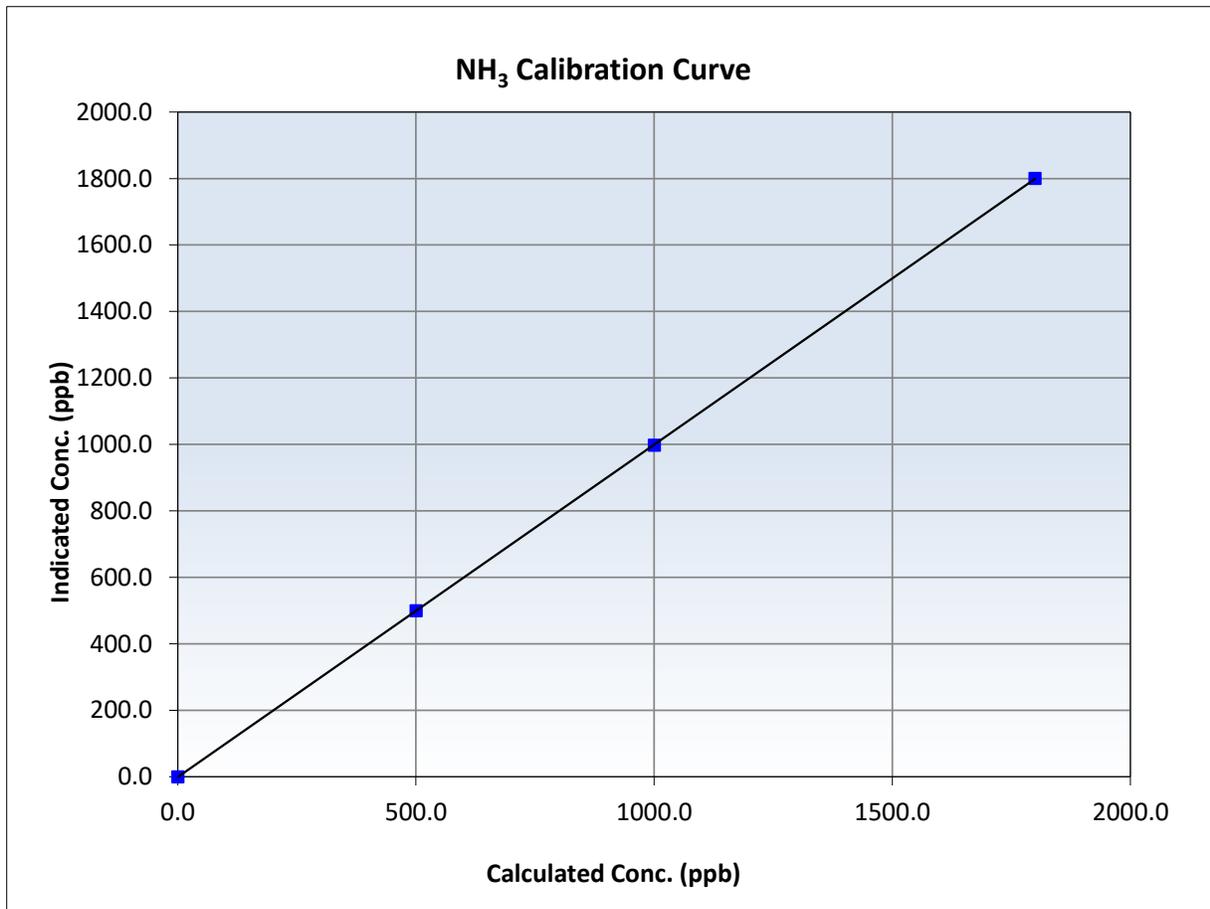
NH₃ Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 8, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	12:04	End Time (MST):	16:24
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999995	≥0.995
1799.6	1800.2	0.9997	Slope	1.000087	0.90 - 1.10
1000.6	997.3	1.0034	Intercept	-0.945989	+/-20
500.3	499.5	1.0016			





Wood Buffalo Environmental Association

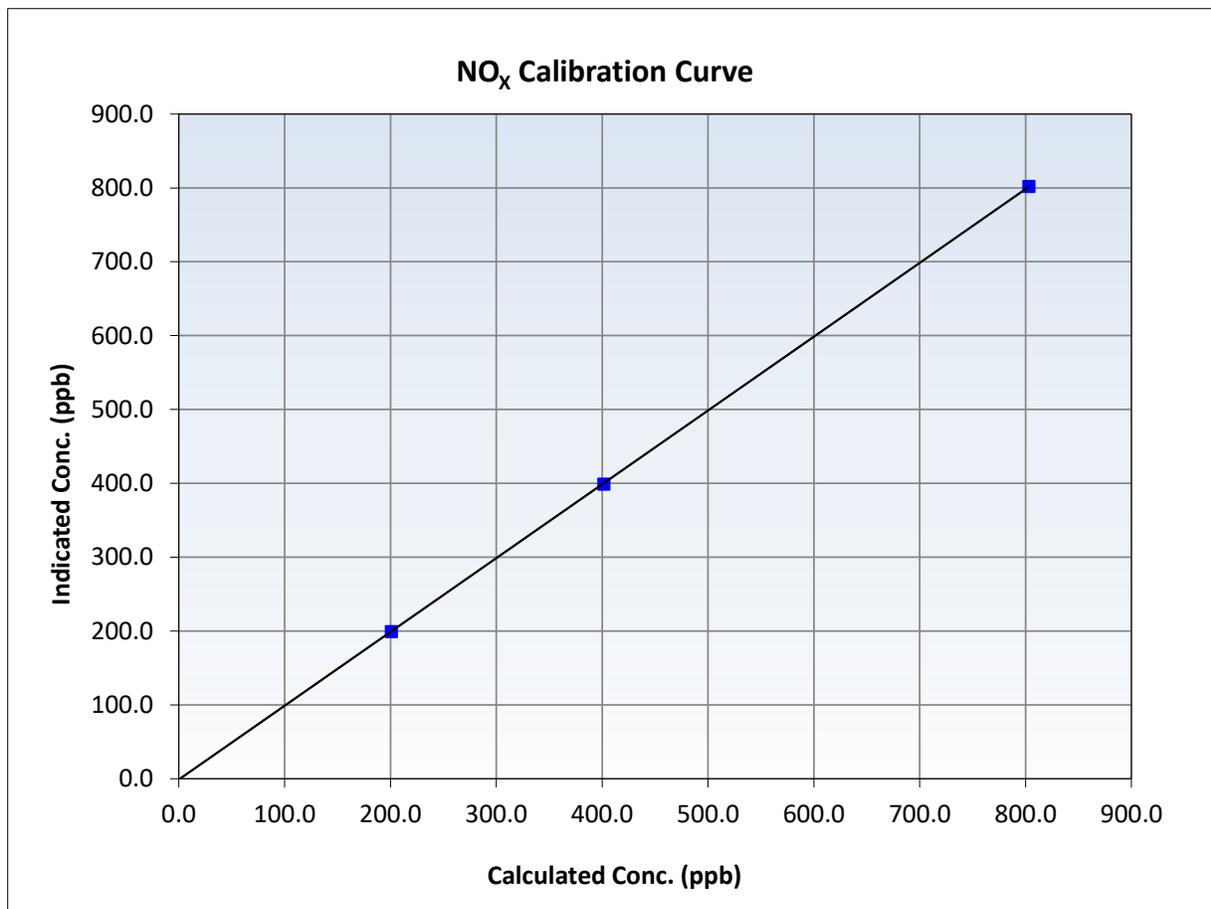
NO_x Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 8, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	12:04	End Time (MST):	16:24
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.2	----	Correlation Coefficient	0.999992	≥0.995
803.1	802.2	1.0011	Slope	0.999371	0.90 - 1.10
401.5	399.0	1.0064	Intercept	-1.080000	+/-20
200.8	199.2	1.0079			





Wood Buffalo Environmental Association

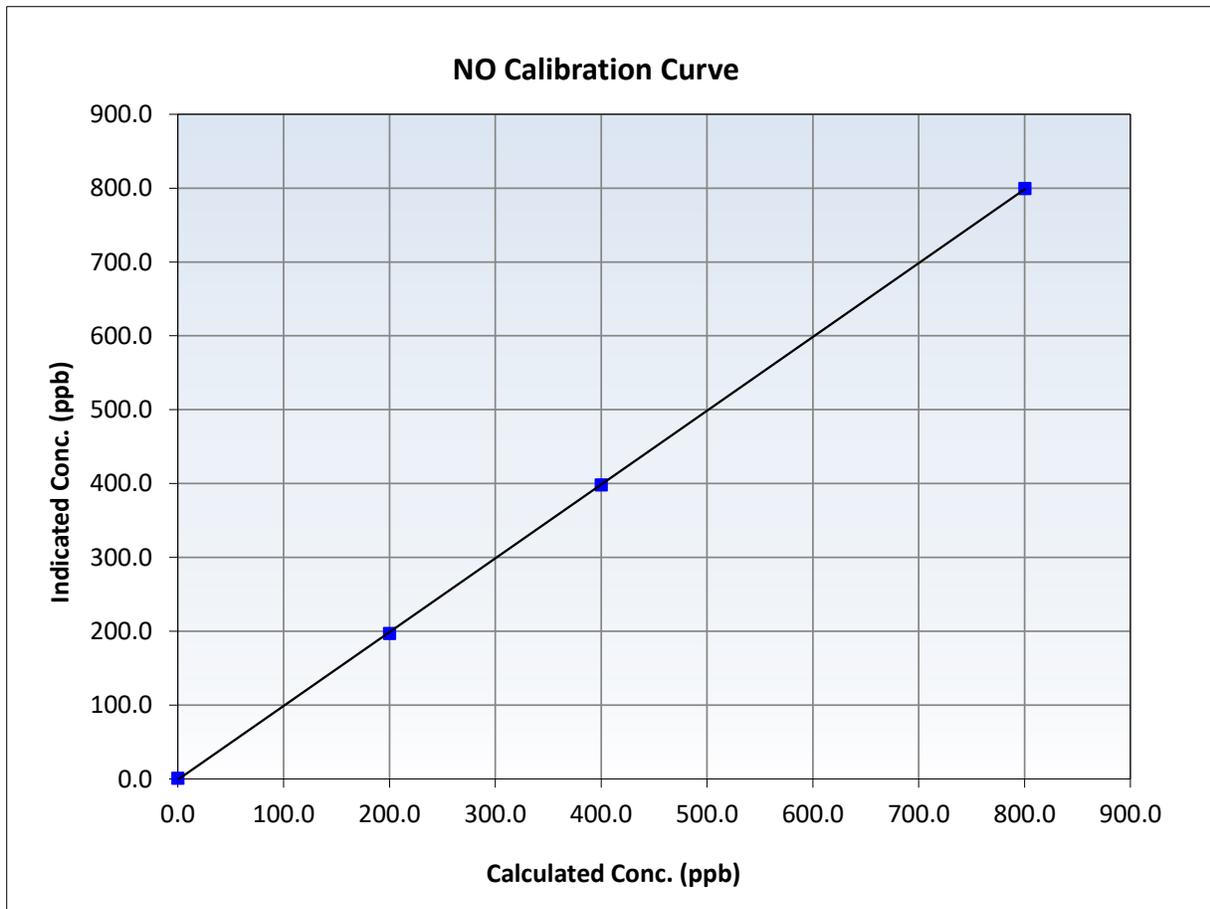
NO Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 8, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	12:04	End Time (MST):	16:24
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.9	----	Correlation Coefficient	0.999974	≥ 0.995
800.4	799.6	1.0010	Slope	0.999163	0.90 - 1.10
400.2	398.1	1.0053	Intercept	-1.000000	+/-20
200.1	196.9	1.0162			





Wood Buffalo Environmental Association

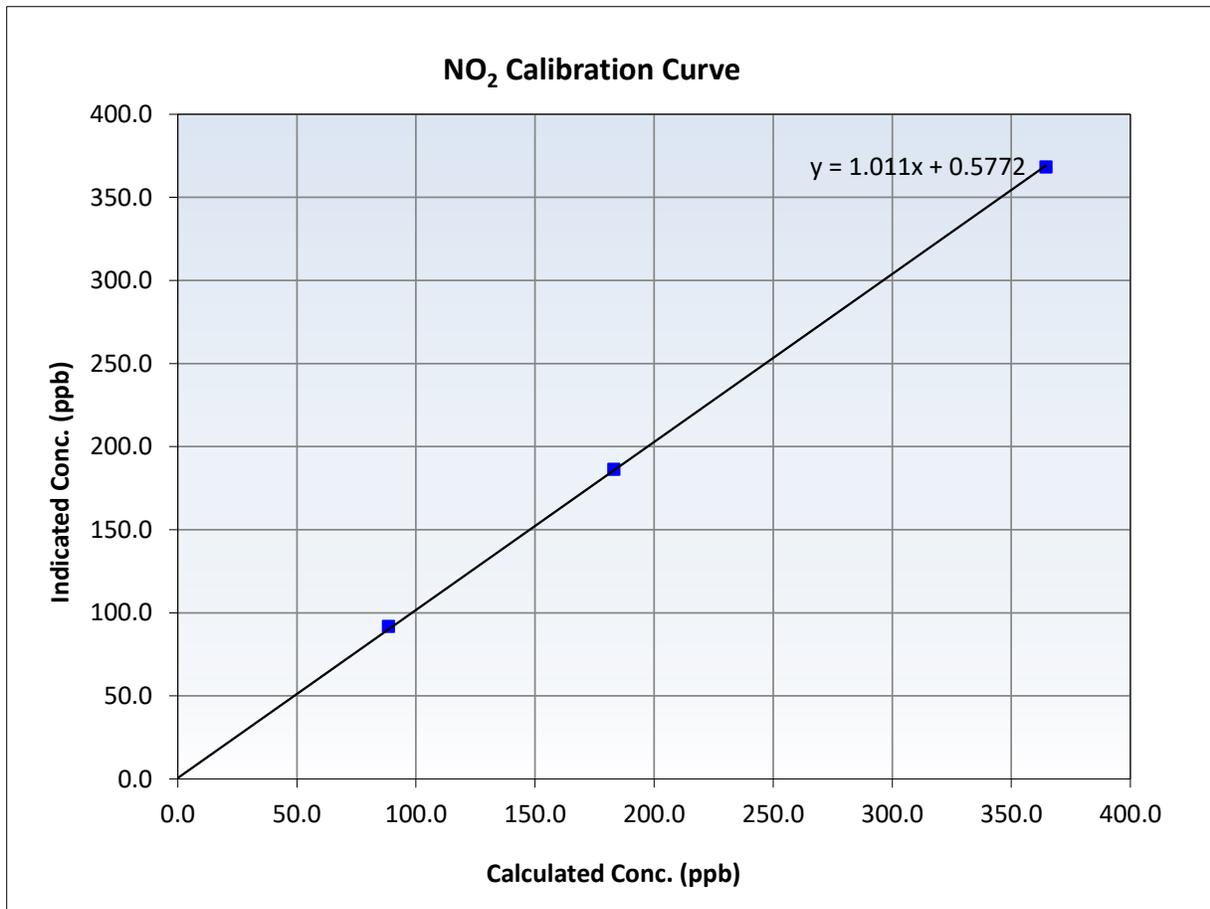
NO₂ Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 8, 2025
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	12:04	End Time (MST):	16:24
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

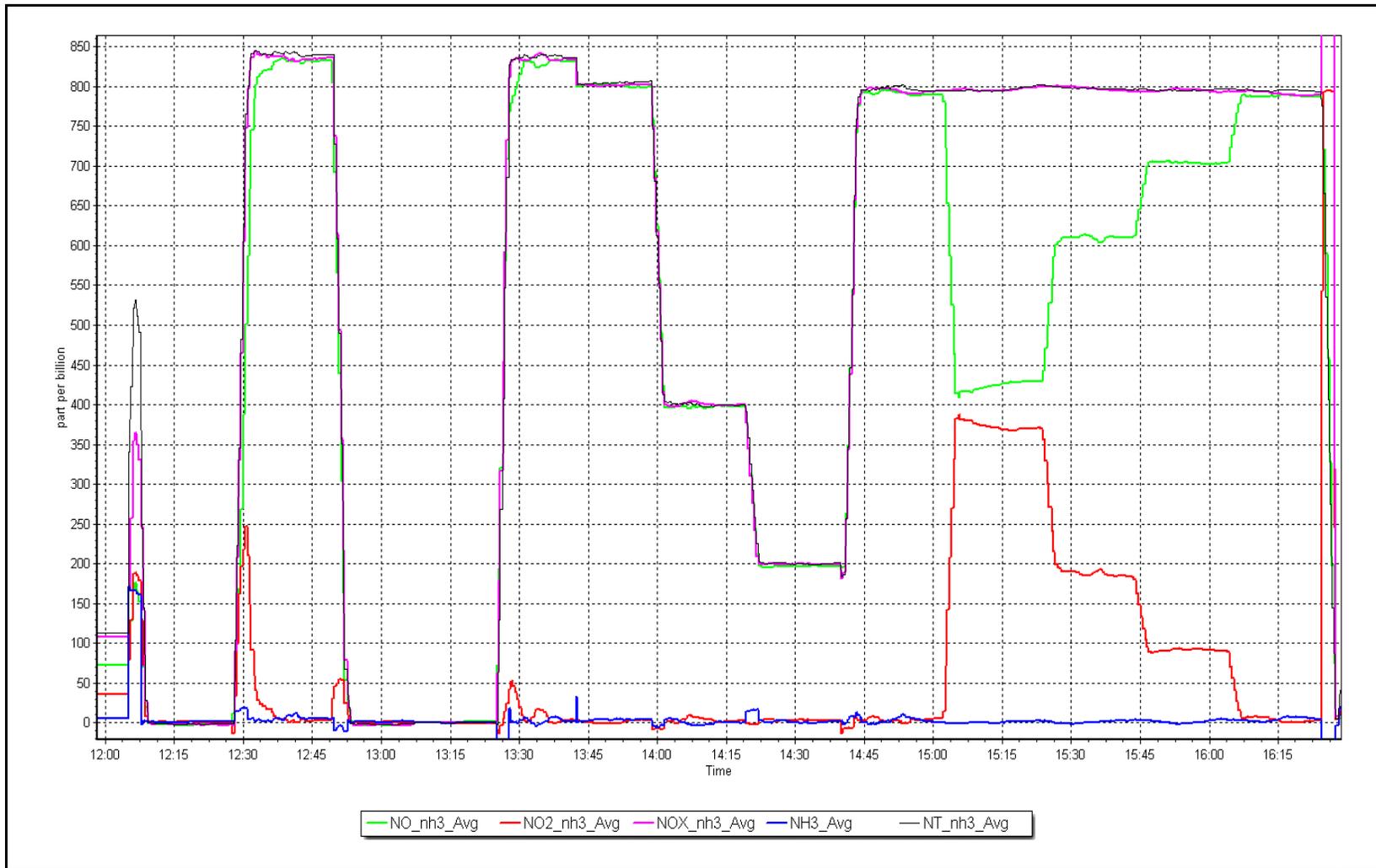
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-1.1	----	Correlation Coefficient	0.999907	≥0.995
364.6	368.4	0.9897	Slope	1.010970	0.90 - 1.10
183.1	186.4	0.9823	Intercept	0.577158	+/-20
88.5	91.8	0.9641			



NO_x Calibration Plot

Date: January 27, 2026

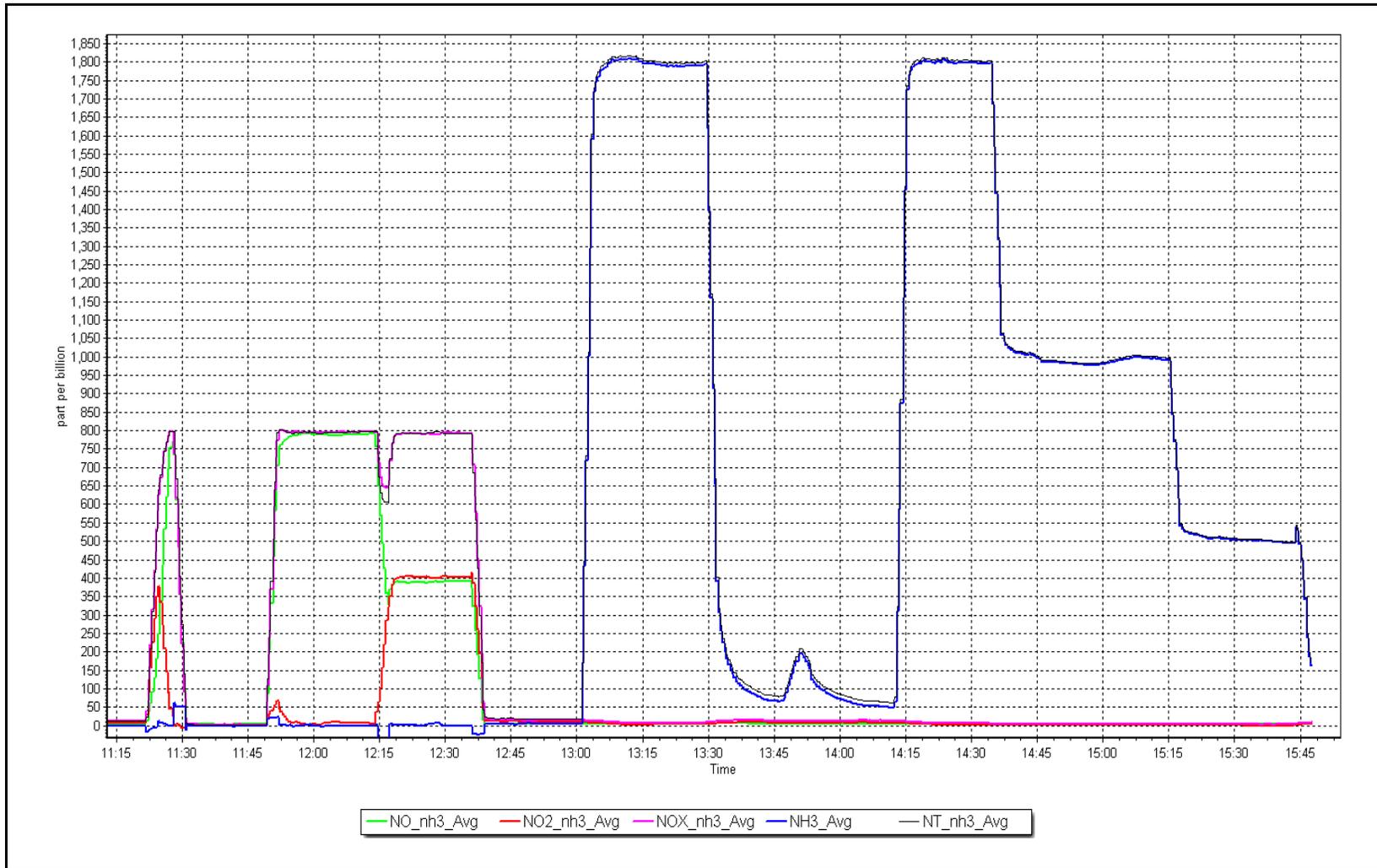
Location: Bertha Ganter-Fort McKay



NH₃ Calibration Plot

Date: January 28, 2026

Location: Bertha Ganter-Fort McKay





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS02 MILDRED LAKE JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Mildred Lake	Station number:	AMS 02
Calibration Date:	January 29, 2026	Last Cal Date:	December 15, 2025
Start time (MST):	10:17	End time (MST):	14:45
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.99	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	EB0112903			
Removed Cal Gas Conc:	50.99	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	1185
Zero Air Gen Model:	Teledyne API T701		Serial Number:	4891

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	JC1404901075
Analyzer Range:	0-1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.004008	1.007648	Backgd or Offset:	25.1	24.9
Calibration intercept:	-0.930144	-0.229936	Coeff or Slope:	0.785	0.785

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.4	----
As found High point	4913	78.6	803.0	803.2	1.000
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	802.8	Previous response	805.3	*% change	-0.3%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.7	----
High point	4913	78.4	801.0	807.2	0.992
Mid point	4961	39.2	399.8	402.5	0.993
Low point	4980	19.6	199.9	200.0	0.999
As left zero	5000	0.0	0.0	0.8	----
As left span	4913	78.4	801.0	806.8	0.993
Average Correction Factor:					0.995

Notes: Changed sample inlet filter after as founds. Adjusted span.

Calibration Performed By: Braiden Boutilier, Jason Brooks



Wood Buffalo Environmental Association

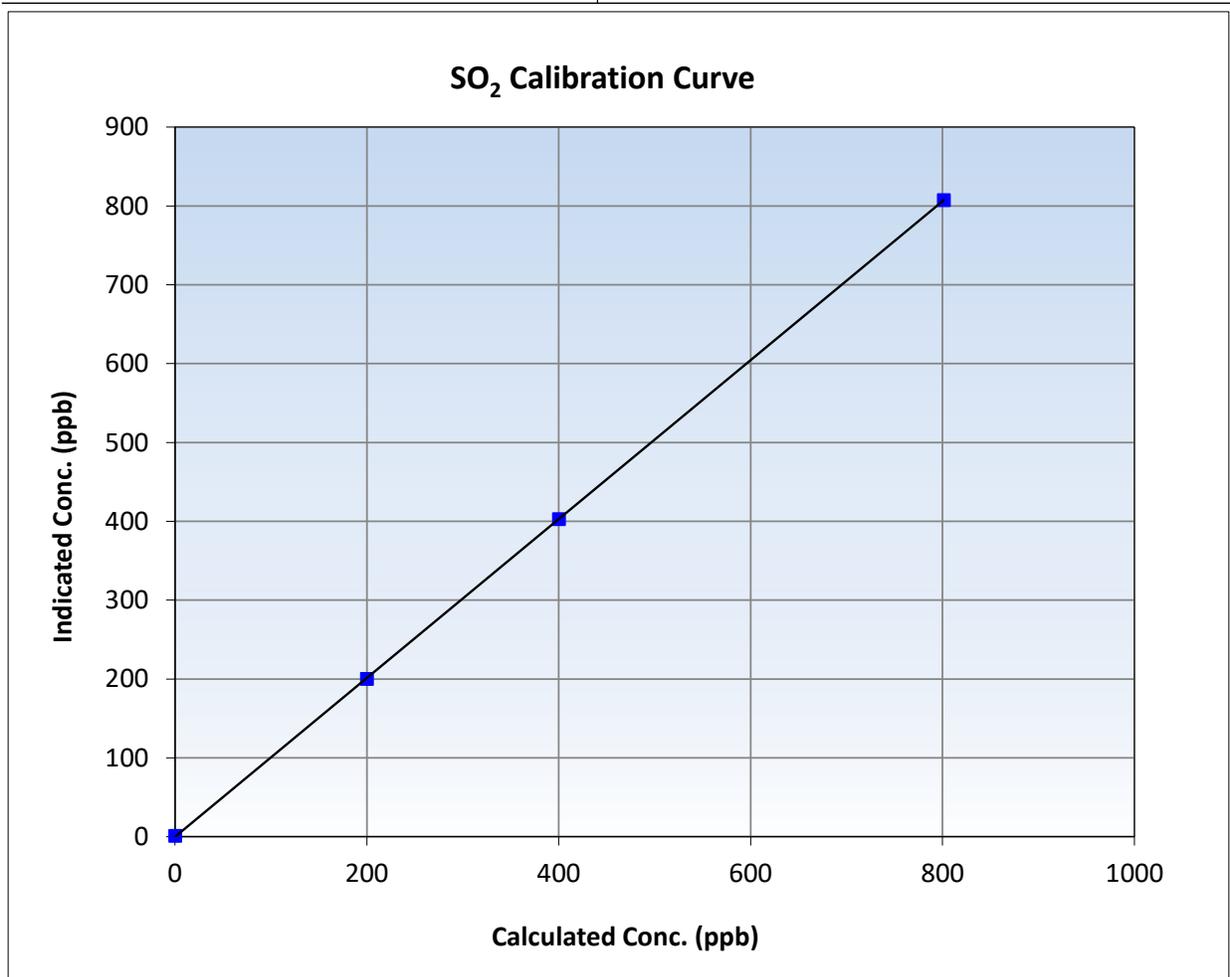
SO₂ Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 15, 2025
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	10:17	End Time (MST):	14:45
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1404901075

Calibration Data

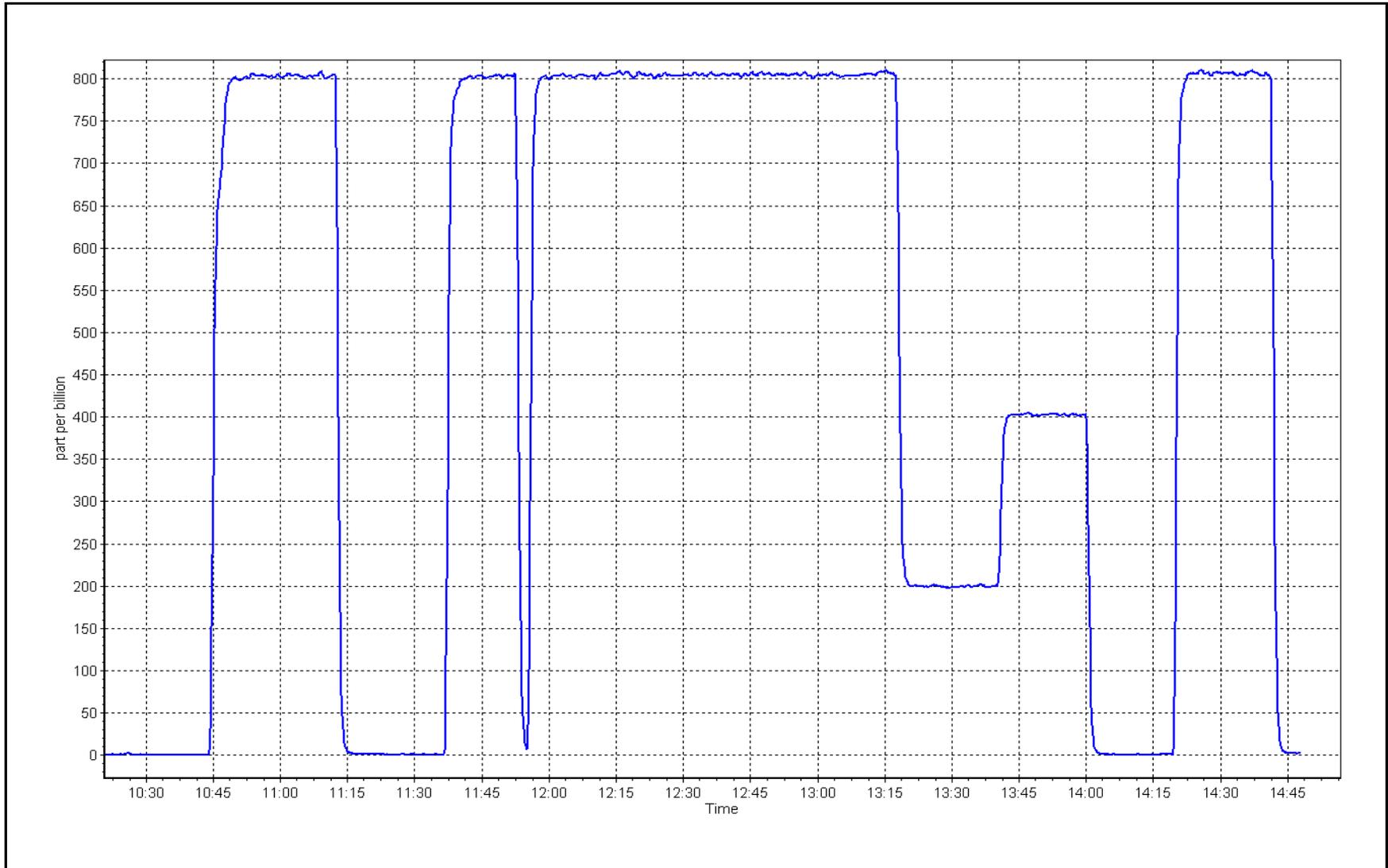
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>
0.0	0.7	----	Correlation Coefficient	0.999993
801.0	807.2	0.9923	Slope	1.007648
399.8	402.5	0.9932	Intercept	-0.229936
199.9	200.0	0.9994		
				≥0.995
				0.90 - 1.10
				+/-30



SO2 Calibration Plot

Date: January 29, 2026

Location: Mildred Lake





Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Mildred Lake	Station number:	AMS 02
Calibration Date:	January 20, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	11:05	End time (MST):	15:27
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.75	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	CC700774			
Removed Cal Gas Conc:	4.75	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	1185
ZAG Make/Model:	Teledyne API T701		Serial Number:	4891

Analyzer Information

Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12333331546
Converter make:	Global G150	Converter serial #:	2023-267
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.997696	1.001554	Backgd or Offset:	1.58	1.58
Calibration intercept:	0.060000	0.100000	Coeff or Slope:	0.965	0.965

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4916	84.2	80.0	80.7	0.991
As found Mid point	4958	42.1	40.0	40.2	0.995
As found Low point	4979	21.1	20.0	20.2	0.990
New cylinder response					
Baseline Corr As found:	80.7	Prev response:	79.87	*% change:	1.0%
Baseline Corr 2nd AF pt:	40.2	AF Slope:	1.008555	AF Intercept:	-0.020000
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999995	<i>* = > +/-5% change initiates investigation</i>	

H2S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4916	84.2	80.0	80.2	0.997
Mid point	4958	42.1	40.0	40.2	0.995
Low point	4979	21.1	20.0	20.1	0.995
As left zero	5000	0.0	0.0	0.1	----
As left span	4916	84.2	80.0	80.7	0.991
SO2 Scrubber Check	4922	78.4	783.9	0.0	----
Date of last scrubber change:		July 16, 2024		Ave Corr Factor	0.996
Date of last converter efficiency test:		NA			

Notes: Changed sample inlet filter after multipoint as founds. SO2 scrubber check done and passed. No adjustments made.

Calibration Performed By: Braiden Boutilier



Wood Buffalo Environmental Association

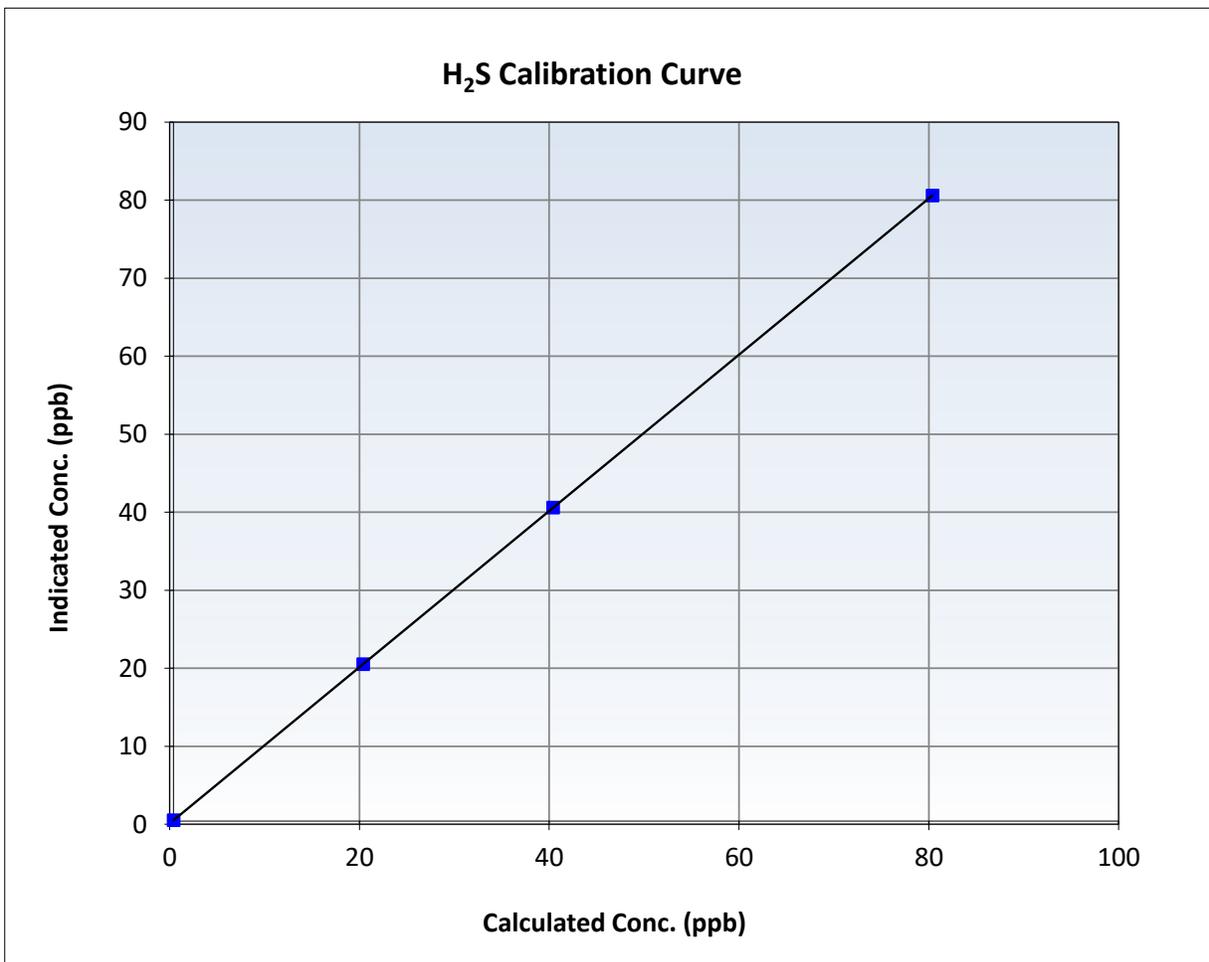
H2S Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 10, 2025
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	11:05	End Time (MST):	15:27
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12333331546

Calibration Data

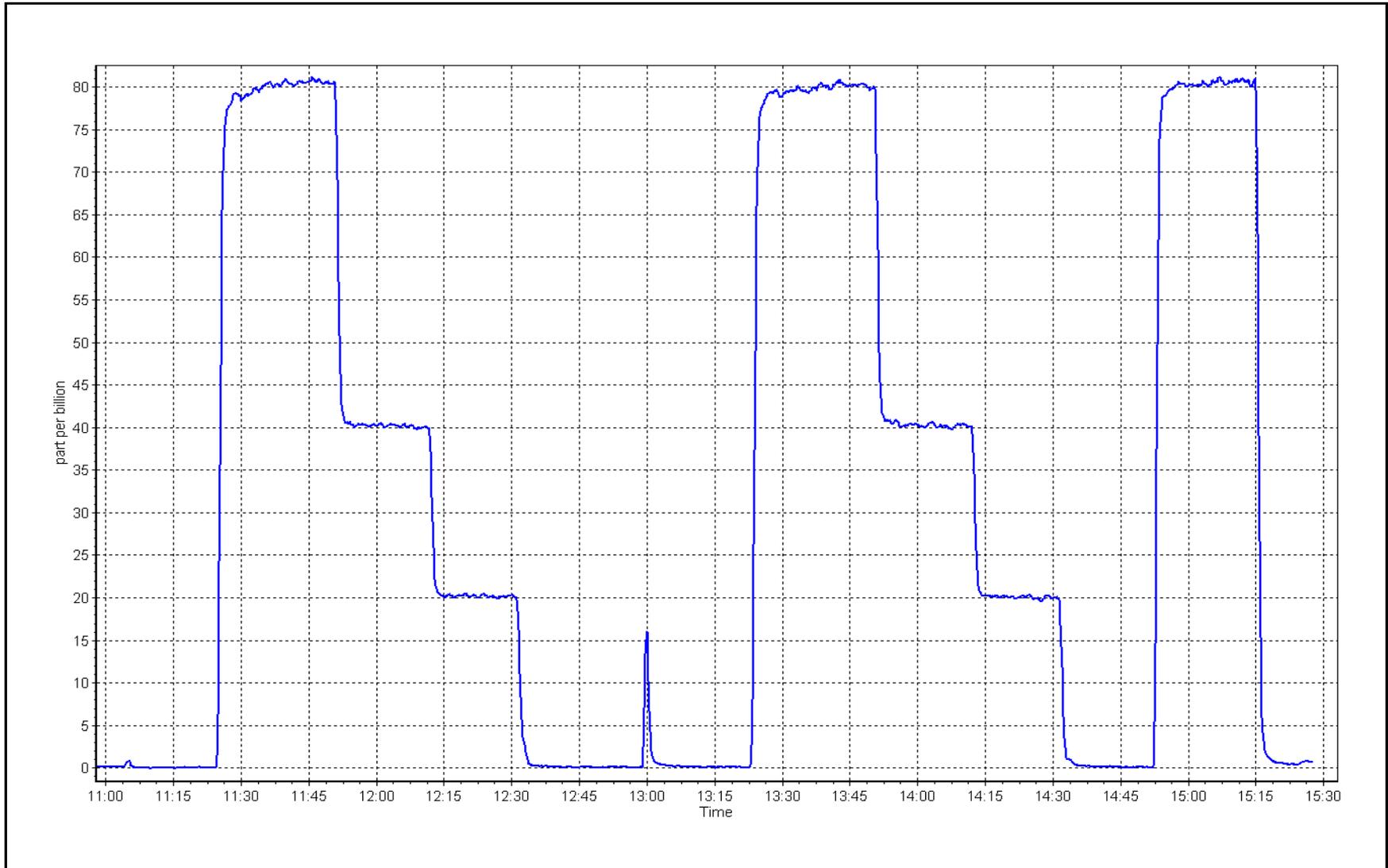
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999999	≥ 0.995
80.0	80.2	0.9974	Slope	1.001554	$0.90 - 1.10$
40.0	40.2	0.9949	Intercept	0.100000	± 3
20.0	20.1	0.9949			



H2S Calibration Plot

Date: January 20, 2026

Location: Mildred Lake





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Mildred Lake	Station number:	AMS 02
Calibration Date:	January 29, 2026	Last Cal Date:	December 15, 2025
Start time (MST):	10:17	End time (MST):	14:45
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	EB0112903	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	503.1 ppm	CH4 Equiv Conc.	1067.1 ppm
C3H8 Cal Gas Conc.	205.1 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	503.1 ppm	CH4 Equiv Conc.	1067.1 ppm
Removed C3H8 Conc.	205.1 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	1185
Zero Air Gen model:	Teledyne API T701	Serial Number:	4891

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1180320040
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	4.90E-04	4.87E-04	NMHC SP Ratio:	7.83E-05	7.68E-05
CH4 Retention time:	15.7	15.7	NMHC Peak Area:	112894	115165
Zero Chromatogram:	ON	ON	Flat Baseline:	ON	ON

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	---
As found High point	4922	78.4	16.73	17.28	0.968
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.28	Prev response	16.77	*% change	3.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	
High point	4922	78.4	16.73	16.71	1.001
Mid point	4961	39.2	8.37	8.30	1.008
Low point	4980	19.6	4.18	4.04	1.036
As left zero	5000	0.0	0.00	0.00	---
As left span	4922	78.4	16.73	17.19	0.973
Average Correction Factor					1.015

Notes: Changed sample inlet filter and nitrogen cylinder after as founds. Adjusted span.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.4	8.84	9.15	0.966
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.15	Prev response	8.88	*% change	3.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.4	8.84	8.79	1.007
Mid point	4961	39.2	4.42	4.40	1.005
Low point	4980	19.6	2.21	2.13	1.036
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.4	8.84	8.98	0.985
Average Correction Factor					1.016

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.4	7.89	8.13	0.970
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.13	Prev response	7.89	*% change	3.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.4	7.89	7.93	0.995
Mid point	4961	39.2	3.94	3.90	1.012
Low point	4980	19.6	1.97	1.91	1.035
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.4	7.89	8.22	0.960
Average Correction Factor					1.014

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.003125	1.001362
THC Cal Offset:	-0.014268	-0.066866
CH ₄ Cal Slope:	1.005032	1.007350
CH ₄ Cal Offset:	-0.035726	-0.043726
NMHC Cal Slope:	1.001643	0.996073
NMHC Cal Offset:	0.020857	-0.023341

Calibration Performed By: Braiden Boutilier, Jason Brooks



Wood Buffalo Environmental Association

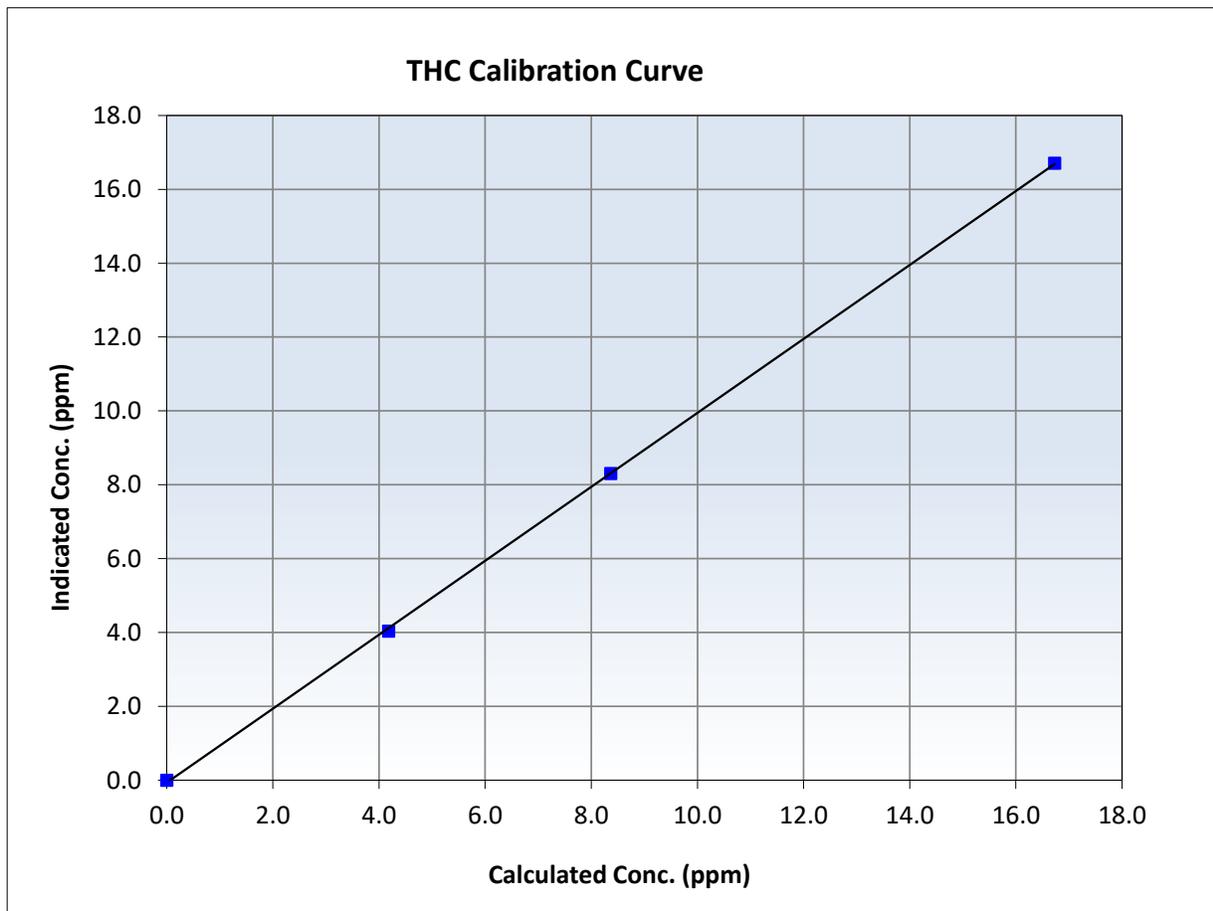
THC Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 15, 2025
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	10:17	End Time (MST):	14:45
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320040

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999921	<i>≥0.995</i>
16.73	16.71	1.0011	Slope	1.001362	<i>0.90 - 1.10</i>
8.37	8.30	1.0076	Intercept	-0.066866	<i>+/-0.5</i>
4.18	4.04	1.0359			





Wood Buffalo Environmental Association

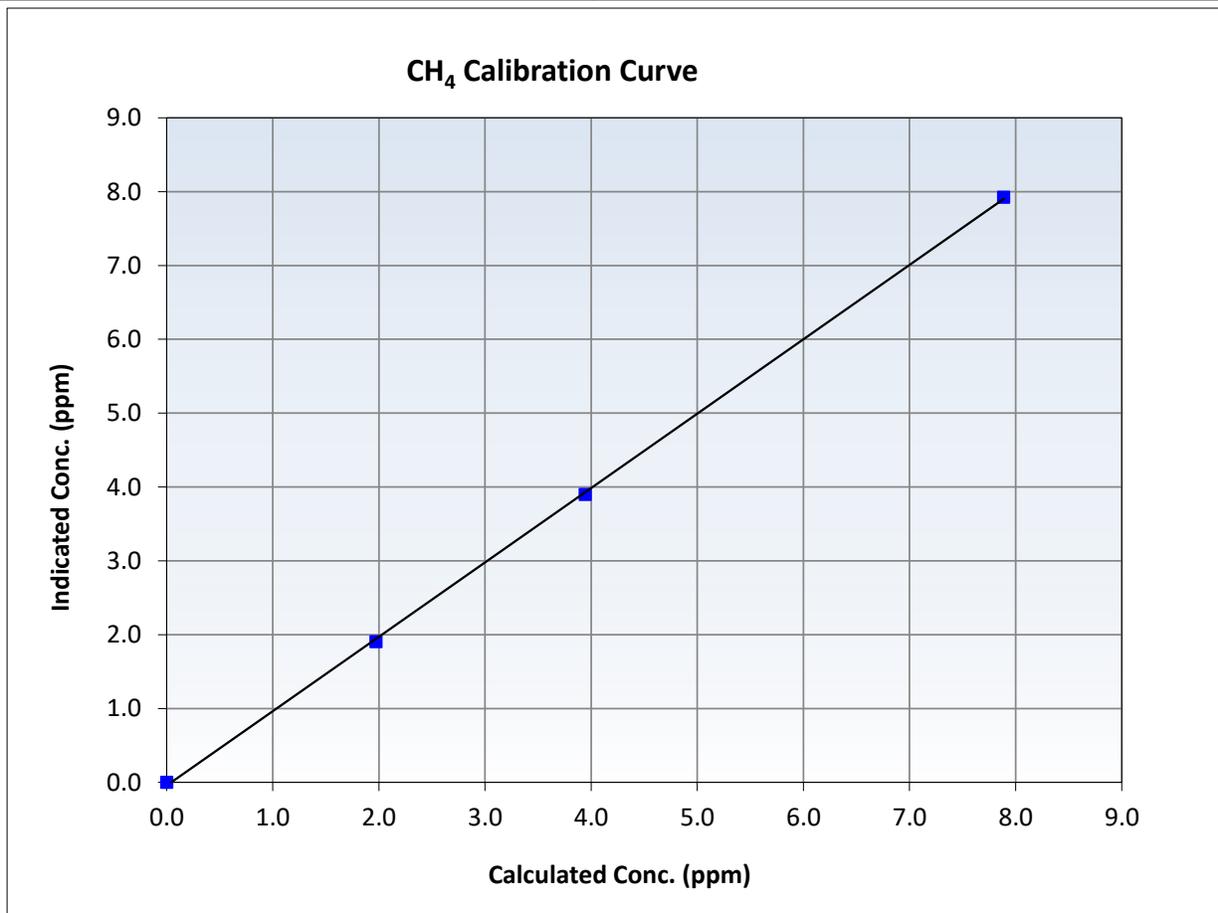
CH₄ Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 15, 2025
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	10:17	End Time (MST):	14:45
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320040

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999858	<i>≥0.995</i>
7.89	7.93	0.9951	Slope	1.007350	<i>0.90 - 1.10</i>
3.94	3.90	1.0116	Intercept	-0.043726	<i>+/-0.5</i>
1.97	1.91	1.0353			





Wood Buffalo Environmental Association

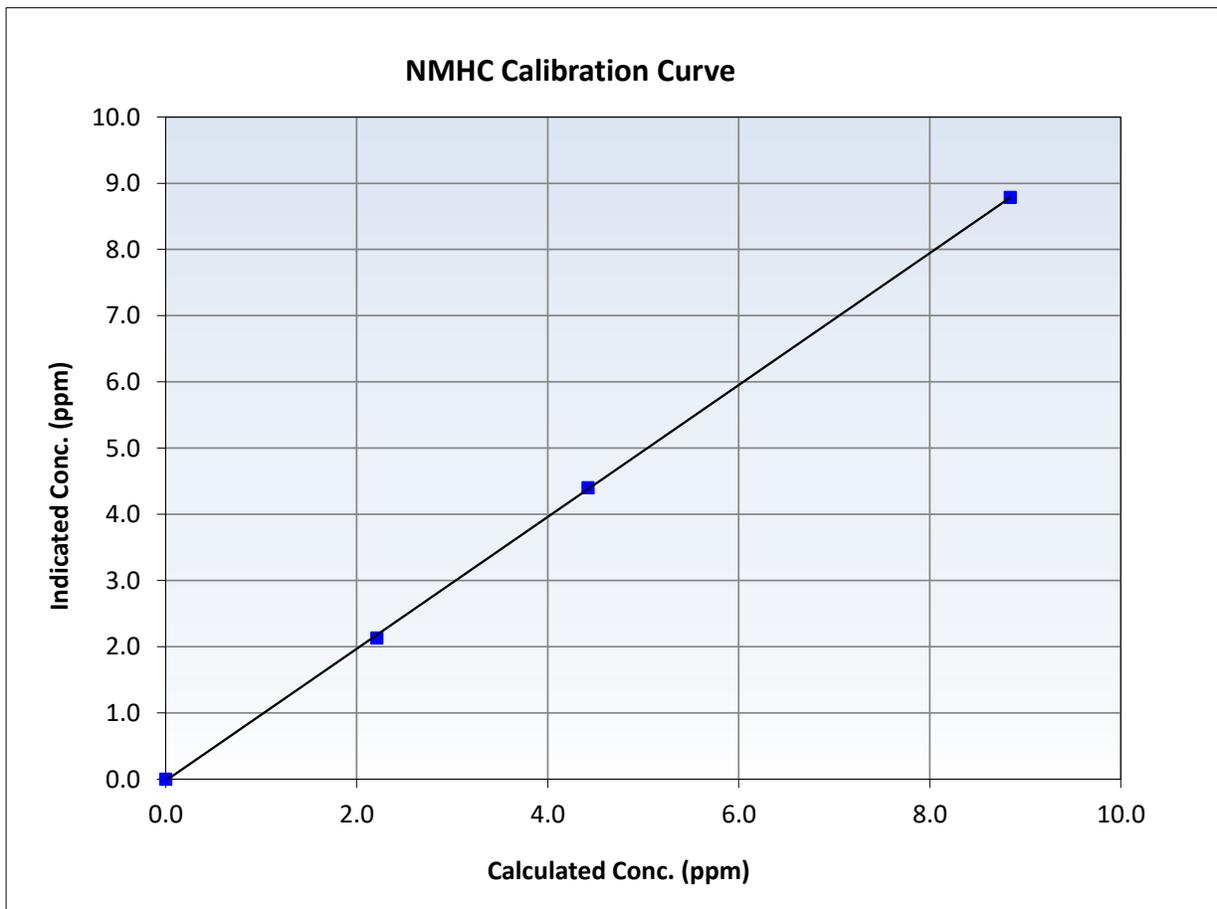
NMHC Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 15, 2025
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	10:17	End Time (MST):	14:45
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320040

Calibration Data

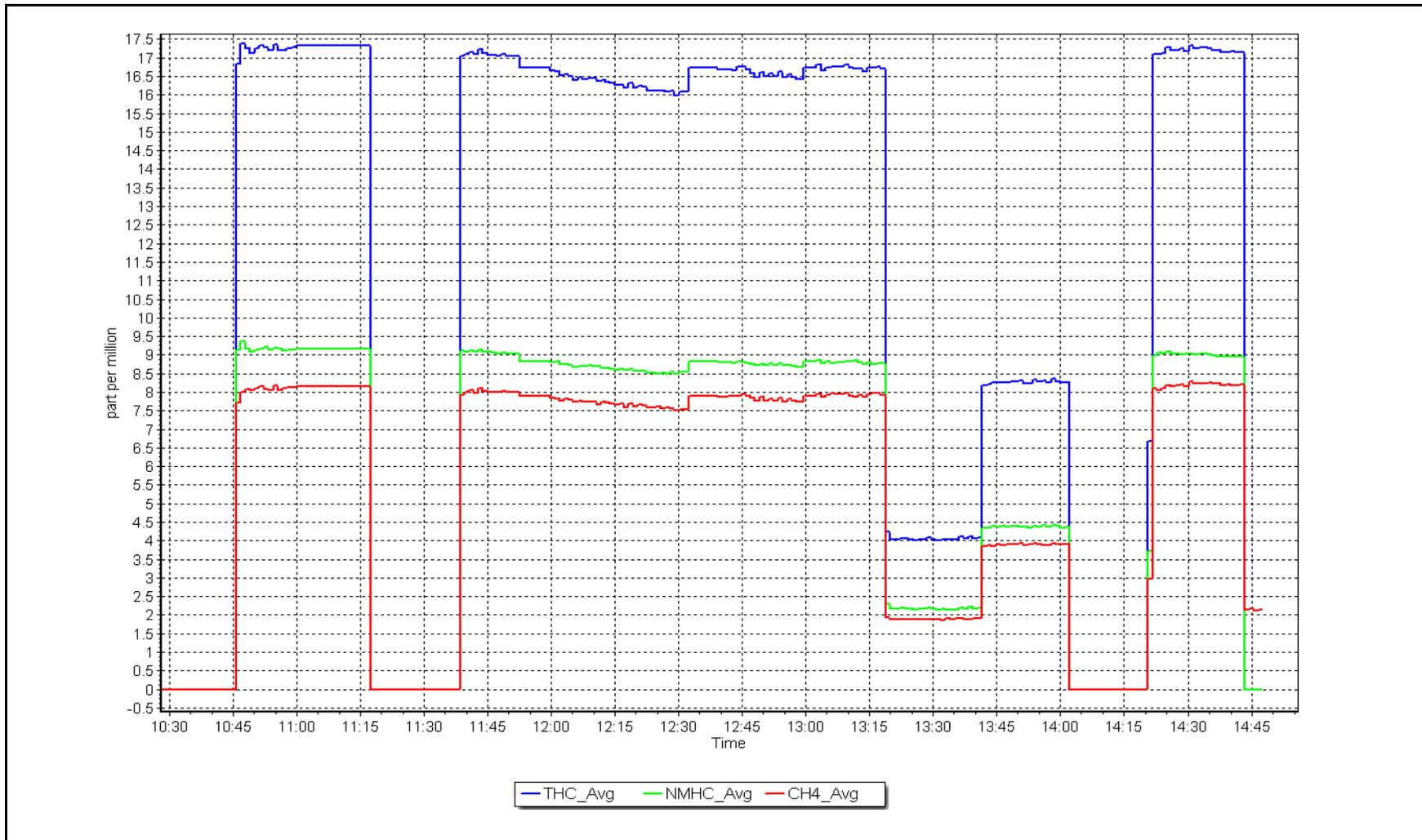
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999929	<i>≥0.995</i>
8.84	8.79	1.0065	Slope	0.996073	<i>0.90 - 1.10</i>
4.42	4.40	1.0045	Intercept	-0.023341	<i>+/-0.5</i>
2.21	2.13	1.0361			



NMHC Calibration Plot

Date: January 29, 2026

Location: Mildred Lake





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS04 BUFFALO VIEWPOINT JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number: AMS 04
Calibration Date:	January 22, 2026	Last Cal Date: October 22, 2025
Start time (MST):	8:00	End time (MST): 12:18
Reason:	Routine	

Calibration Standards

Cal Gas Concentration:	50.87	ppm	Cal Gas Exp Date: March 10, 2031
Cal Gas Cylinder #:	CC446753		
Removed Cal Gas Conc:	50.87	ppm	Rem Gas Exp Date:
Removed Gas Cyl #:			Diff between cyl:
Calibrator Model:	Teledyne API T700		Serial Number: 3808
Zero Air Gen Model:	Teledyne API T701		Serial Number: 362

Analyzer Information

Analyzer make:	Thermo 43i-LTE	Serial Number: 1410661331
Analyzer Range:	0-1000ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.003285	1.003686	Backgd or Offset:	1.9	1.9
Calibration intercept:	0.355708	0.615709	Coeff or Slope:	1.013	1.013

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4921	78.6	799.7	804.3	0.994
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	804.3	Previous response	802.7	*% change	0.2%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4921	78.6	799.7	803.1	0.996
Mid point	4961	39.3	399.8	402.1	0.994
Low point	4980	19.6	199.4	201.2	0.991
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	78.6	799.7	806.7	0.991
Average Correction Factor:					0.994

Notes: No adjustments or maintenance done.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

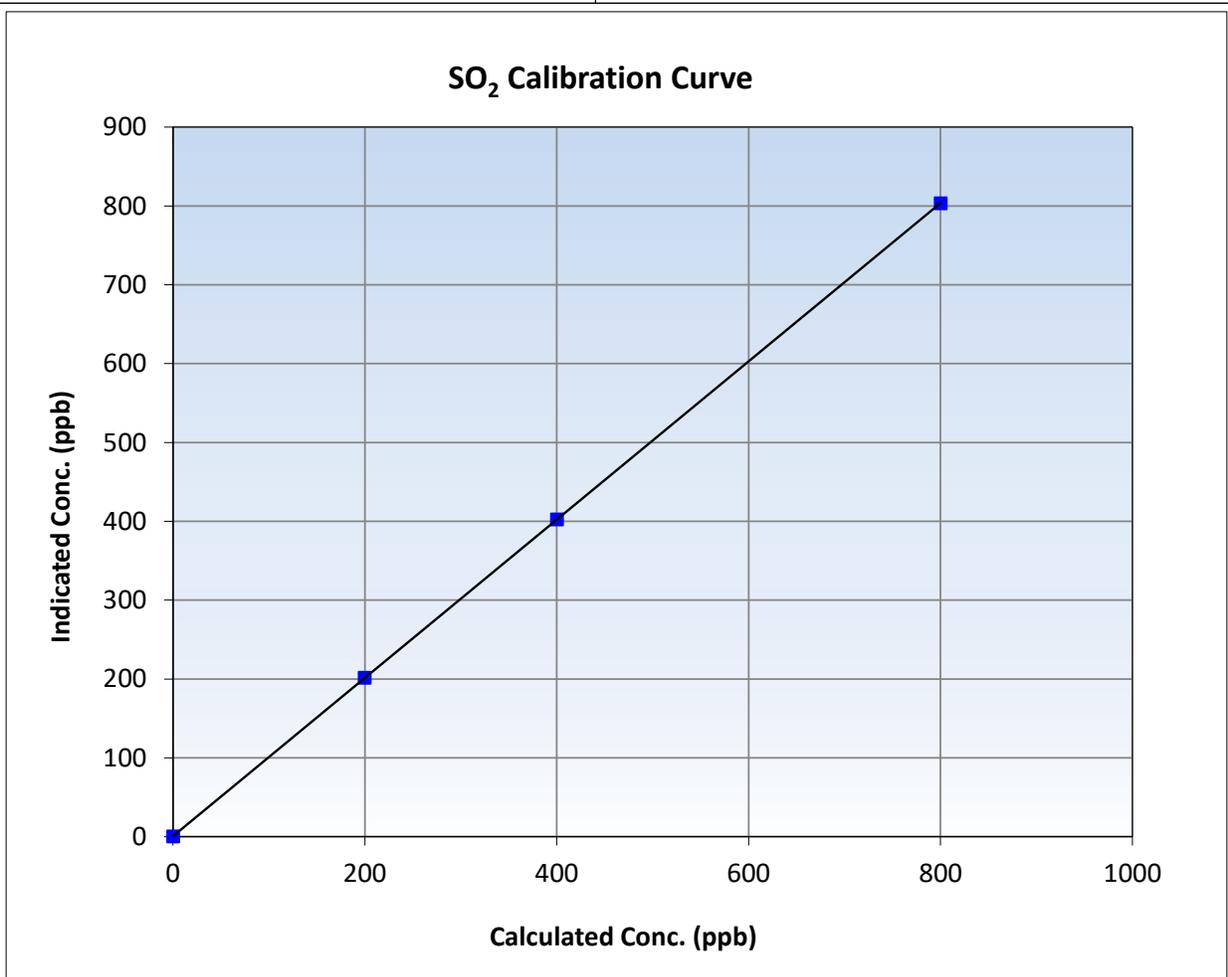
SO₂ Calibration Summary

Station Information

Calibration Date:	January 22, 2026	Previous Calibration:	October 22, 2025
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	8:00	End Time (MST):	12:18
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1410661331

Calibration Data

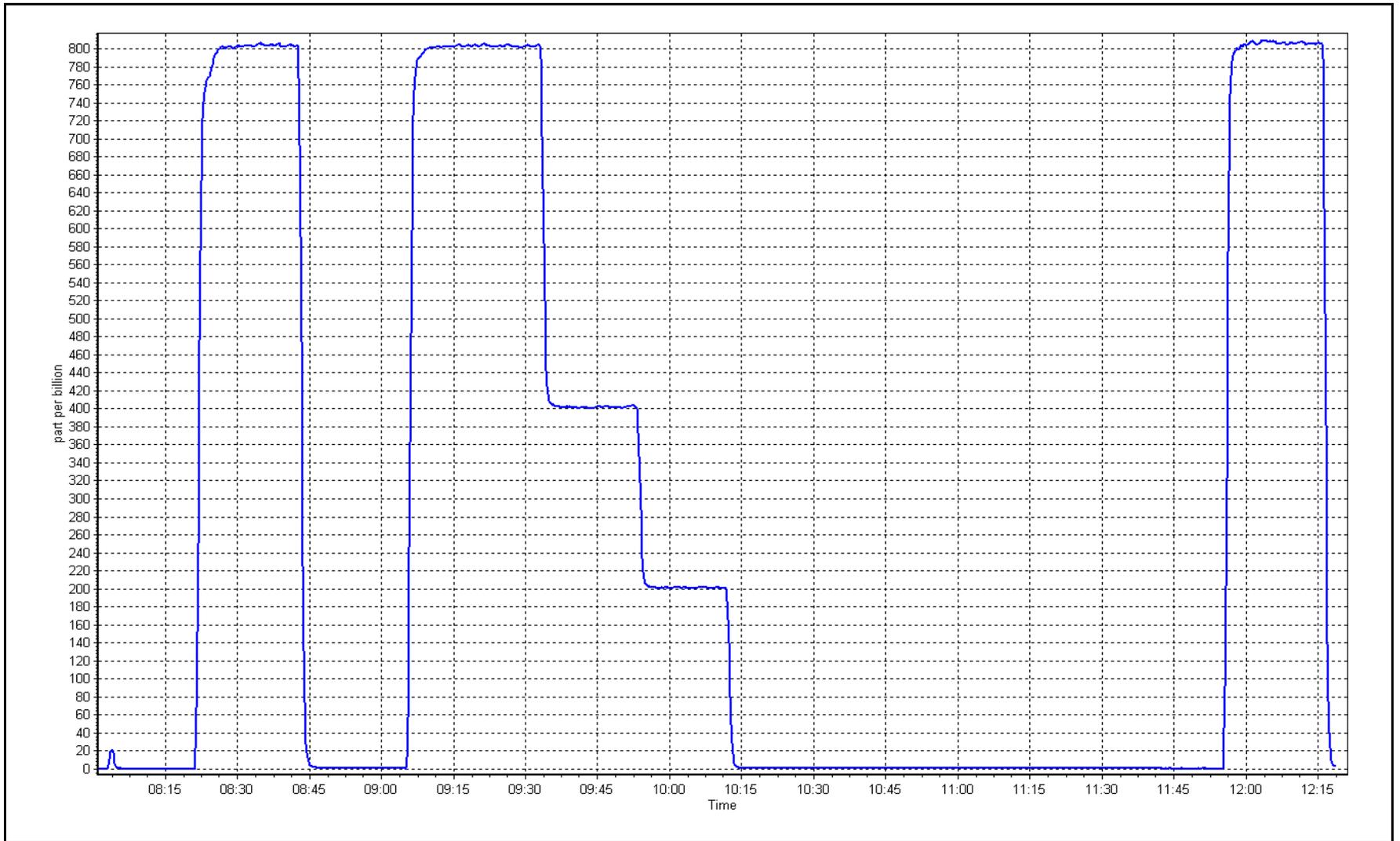
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.2	----	Correlation Coefficient	0.999999	≥0.995
799.7	803.1	0.9958	Slope	1.003686	0.90 - 1.10
399.8	402.1	0.9943	Intercept	0.615709	+/-30
199.4	201.2	0.9912			



SO2 Calibration Plot

Date: January 22, 2026

Location: Buffalo Viewpoint





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	January 21, 2026	Last Cal Date:	December 2, 2025
Start time (MST):	6:25	End time (MST):	11:27
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.80 ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	DT0037528		
Removed Cal Gas Conc:	4.80 ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700	Serial Number:	3808
ZAG Make/Model:	Teledyne API T701H	Serial Number:	362

Analyzer Information

Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1008841400
Converter make:	Global	Converter serial #:	2022-200
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.981858	1.002581	Backgd or Offset:	1.86	1.92
Calibration intercept:	0.218228	0.318077	Coeff or Slope:	1.077	1.123

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4917	83.3	80.0	73.6	1.088
As found Mid point	4958	41.7	40.0	36.7	1.094
As found Low point	4979	20.8	20.0	18.3	1.097
New cylinder response					
Baseline Corr As found:	73.5	Prev response:	78.73	*% change:	-7.1%
Baseline Corr 2nd AF pt:	36.6	AF Slope:	0.919551	AF Intercept:	-0.001572
Baseline Corr 3rd AF pt:	18.2	AF Correlation:	0.999989	* = > +/-5% change initiates investigation	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4917	83.3	80.0	80.4	0.995
Mid point	4958	41.7	40.0	40.7	0.984
Low point	4979	20.8	20.0	20.2	0.989
As left zero	5000	0.0	0.0	0.4	----
As left span	4917	83.3	80.0	80.5	0.993
SO ₂ Scrubber Check	4920	80.0	800.0	0.1	----
Date of last scrubber change:	16-May-23			Ave Corr Factor	0.989
Date of last converter efficiency test:					

Notes: Sox scrubber checked after calibrator zero. Span adjusted.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

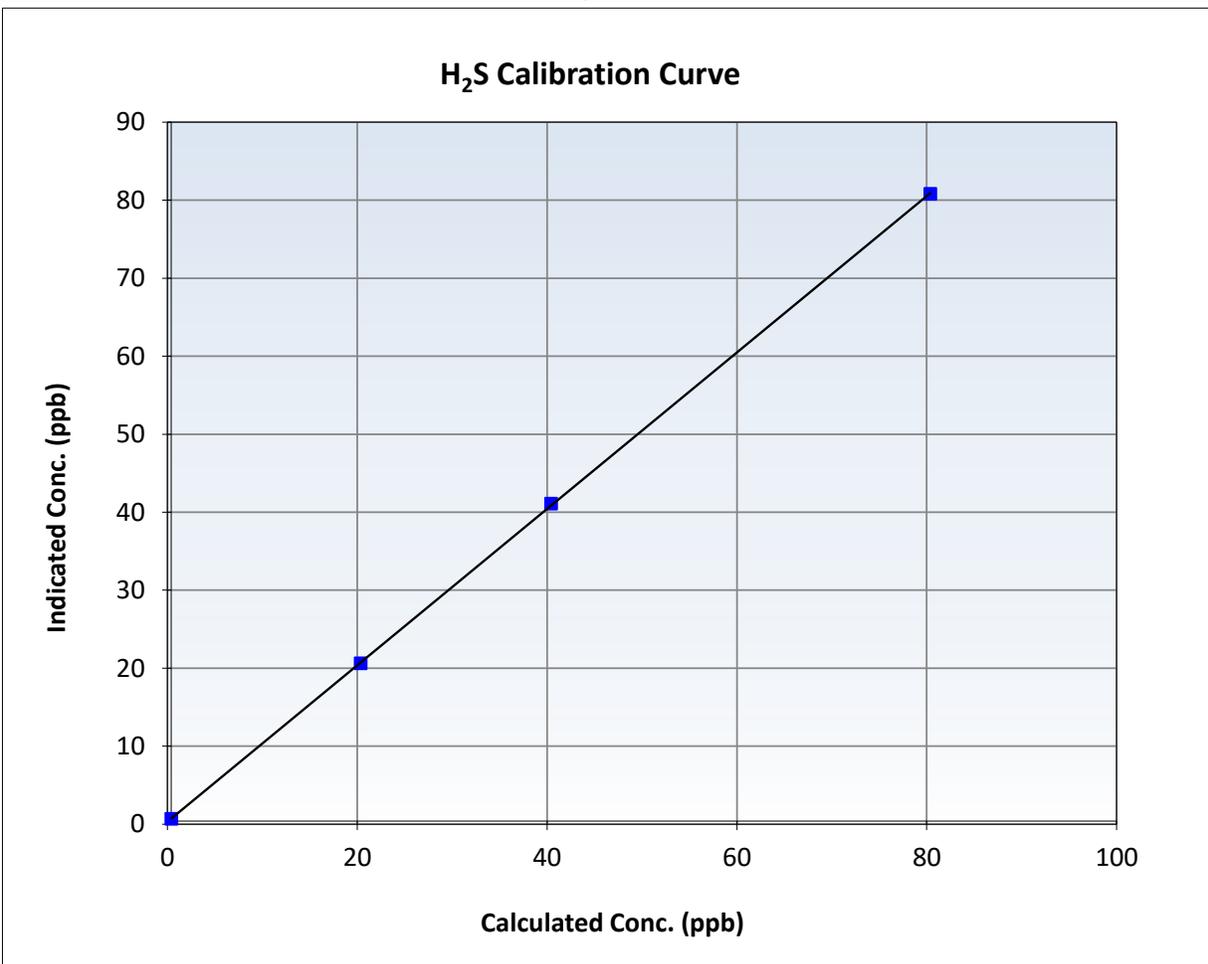
H₂S Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 2, 2025
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	6:25	End Time (MST):	11:27
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1008841400

Calibration Data

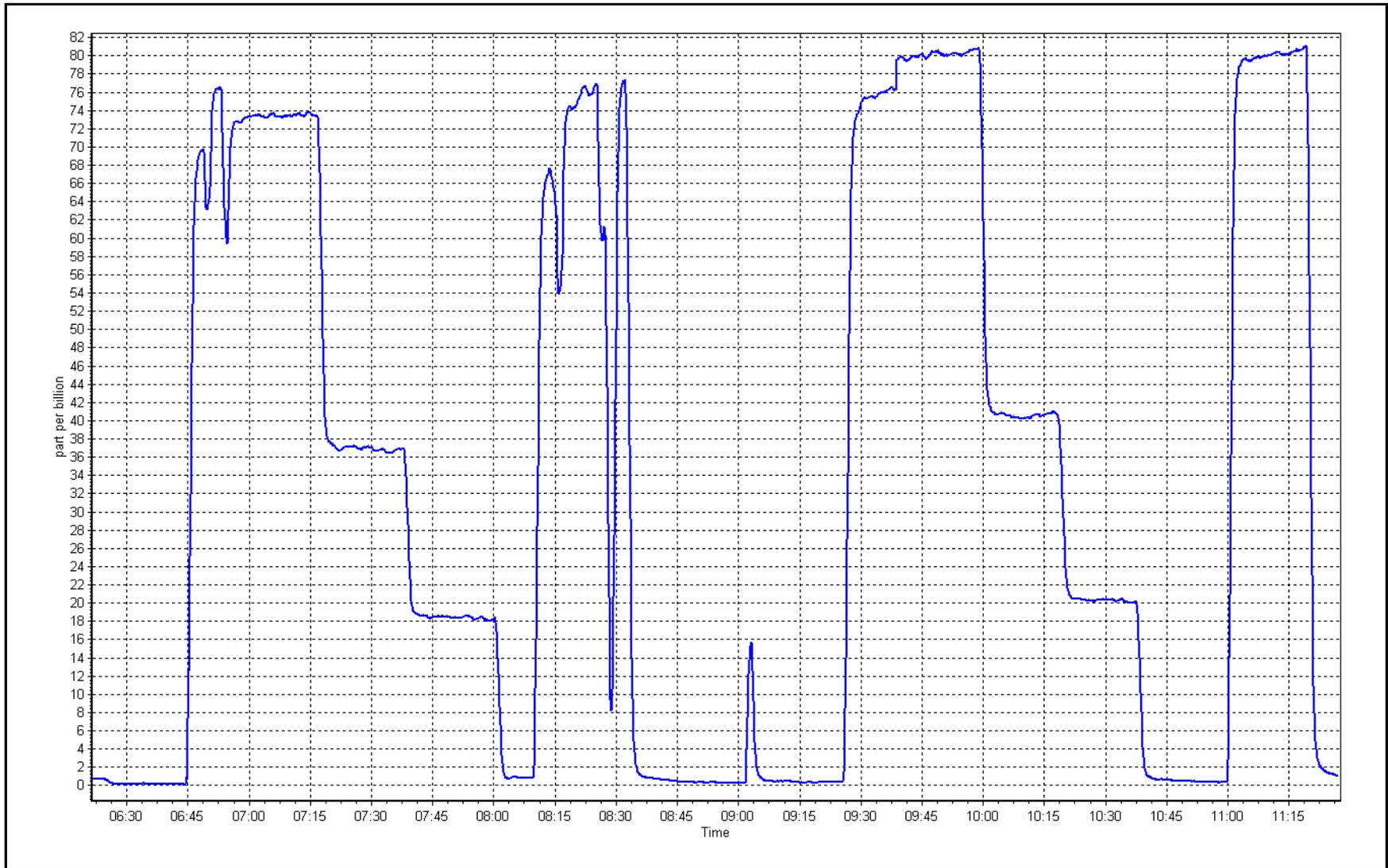
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.3	----	Correlation Coefficient	0.999975	≥ 0.995
80.0	80.4	0.9946	Slope	1.002581	$0.90 - 1.10$
40.0	40.7	0.9836	Intercept	0.318077	± 3
20.0	20.2	0.9886			



H₂S Calibration Plot

Date: January 21, 2026

Location: Buffalo Viewpoint





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	January 22, 2026	Last Cal Date:	December 23, 2025
Start time (MST):	8:00	End time (MST):	10:15
Reason:	Removal		

Calibration Standards

Gas Cert Reference:	CC446753	Cal Gas Expiry Date:	March 10, 2031
CH4 Cal Gas Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
C3H8 Cal Gas Conc.	204.0 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
Removed C3H8 Conc.	204.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3808
Zero Air Gen model:	Teledyne API T701	Serial Number:	362

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1180320038
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	3.40E-04	3.62E-04	NMHC SP Ratio:	5.78E-04	6.28E-04
CH4 Retention time:	15.2	15.4	NMHC Peak Area:	152505	140366
Zero Chromatogram:	OFF	OFF	Flat Baseline:	ON	ON

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.6	16.64	15.52	1.072
As found Mid point	4961	39.3	8.32	8.14	1.022
As found Low point	4980	19.6	4.15	4.00	1.037
New cylinder response					
Baseline Corr AF:	15.52	Prev response	16.54	*% change	-6.6%
Baseline Corr 2nd AF:	8.14	AF Slope:	0.932781	AF Intercept:	0.128381
Baseline Corr 3rd AF:	4.00	AF Correlation:	0.999264	* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor

Notes: Third point on the CH₄ was 6% low. Analyzer Removed due to nonlinearity. As found Second and Third Point done after an adjustment to the high point.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.6	8.82	8.17	1.080
As found Mid point	4961	39.3	4.41	4.36	1.012
As found Low point	4980	19.6	2.20	2.16	1.018
New cylinder response					
Baseline Corr AF:	8.17	Prev response	8.76	*% change	-7.2%
Baseline Corr 2nd AF:	4.36	AF Slope:	0.924776	AF Intercept:	0.104610
Baseline Corr 3rd AF:	2.16	AF Correlation:	0.998587	* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.6	7.82	7.35	1.063
As found Mid point	4961	39.3	3.91	3.78	1.034
As found Low point	4980	19.6	1.95	1.84	1.060
New cylinder response					
Baseline Corr AF:	7.35	Prev response	7.78	*% change	-5.7%
Baseline Corr 2nd AF:	3.78	AF Slope:	0.942105	AF Intercept:	0.022771
Baseline Corr 3rd AF:	1.84	AF Correlation:	0.999739	* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor

Calibration Statistics

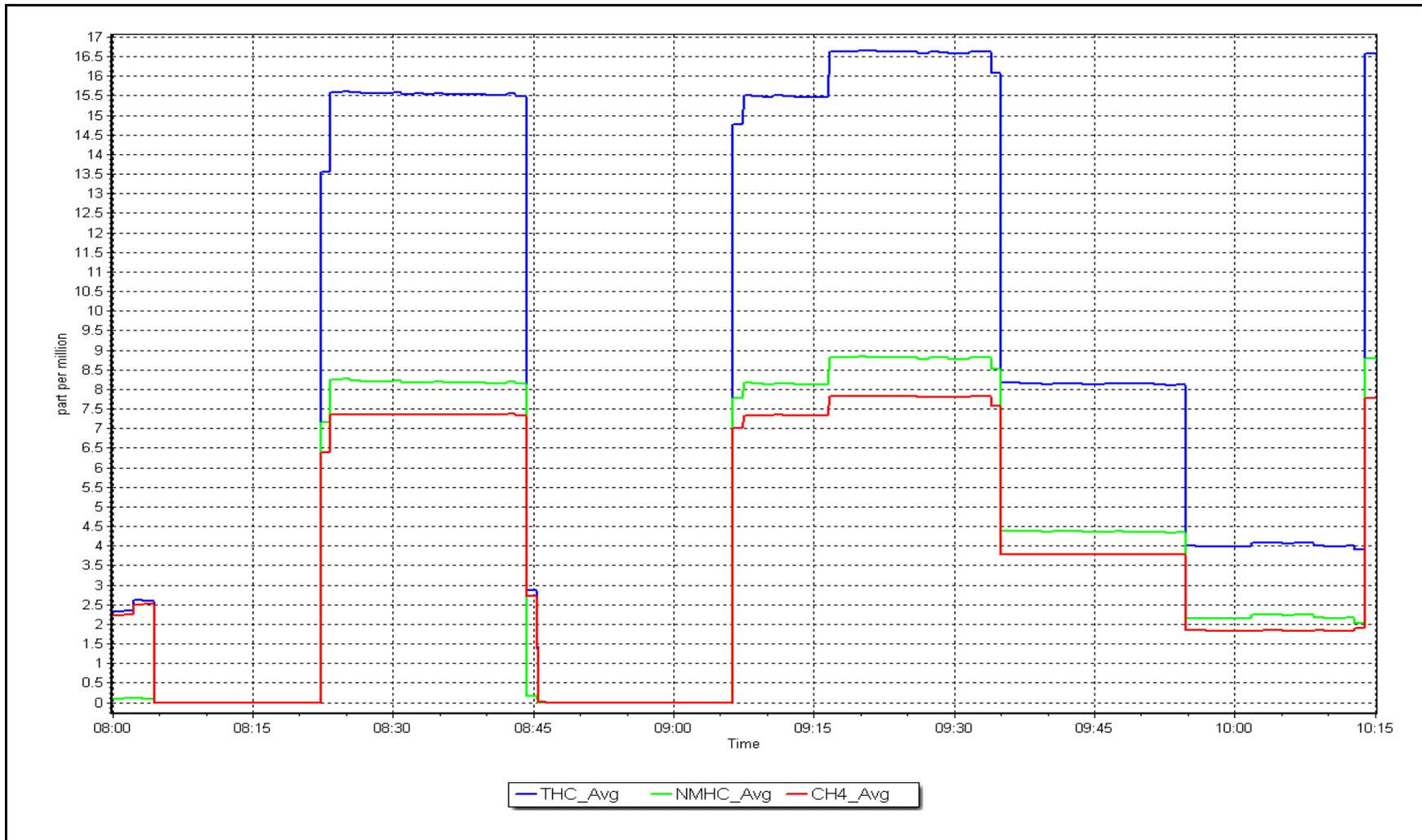
	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.998015	
THC Cal Offset:	-0.066973	
CH ₄ Cal Slope:	1.000990	
CH ₄ Cal Offset:	-0.047520	
NMHC Cal Slope:	0.995249	
NMHC Cal Offset:	-0.019453	

Calibration Performed By: Melissa Lemay

NMHC Calibration Plot

Date: January 22, 2026

Location: Buffalo Viewpoint





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	January 23, 2026	Last Cal Date:	
Start time (MST):	9:00	End time (MST):	10:50
Reason:	Install		

Calibration Standards

Gas Cert Reference:	CC446753	Cal Gas Expiry Date:	March 10, 2031
CH4 Cal Gas Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
C3H8 Cal Gas Conc.	204.0 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
Removed C3H8 Conc.	204.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3808
Zero Air Gen model:	Teledyne API T701	Serial Number:	362

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1180320038
THC Range: 0 - 20 ppm	NMHC/CH4 Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:		2.21E-04	NMHC SP Ratio:	4.24E-04
CH4 Retention time:		11.2	NMHC Peak Area:	208215
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero					
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.6	16.64	16.66	0.999
Mid point	4961	39.3	8.32	8.36	0.994
Low point	4980	19.6	4.15	4.20	0.988
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	16.64	16.67	0.998
Average Correction Factor					0.994

Notes: Install Due to old 55i not working properly. Span adjusted.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero					Limit = 0.90-1.10
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.6	8.82	8.80	1.002
Mid point	4961	39.3	4.41	4.46	0.990
Low point	4980	19.6	2.20	2.27	0.971
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	8.82	8.82	1.000
Average Correction Factor					0.988

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero					Limit = 0.90-1.10
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.6	7.82	7.85	0.995
Mid point	4961	39.3	3.91	3.91	0.999
Low point	4980	19.6	1.95	1.94	1.007
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	7.82	7.85	0.996
Average Correction Factor					1.001

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.998015	1.000420
THC Cal Offset:	-0.066973	0.026281
CH ₄ Cal Slope:	1.000990	1.005473
CH ₄ Cal Offset:	-0.047520	-0.012097
NMHC Cal Slope:	0.995249	0.996096
NMHC Cal Offset:	-0.019453	0.038778

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

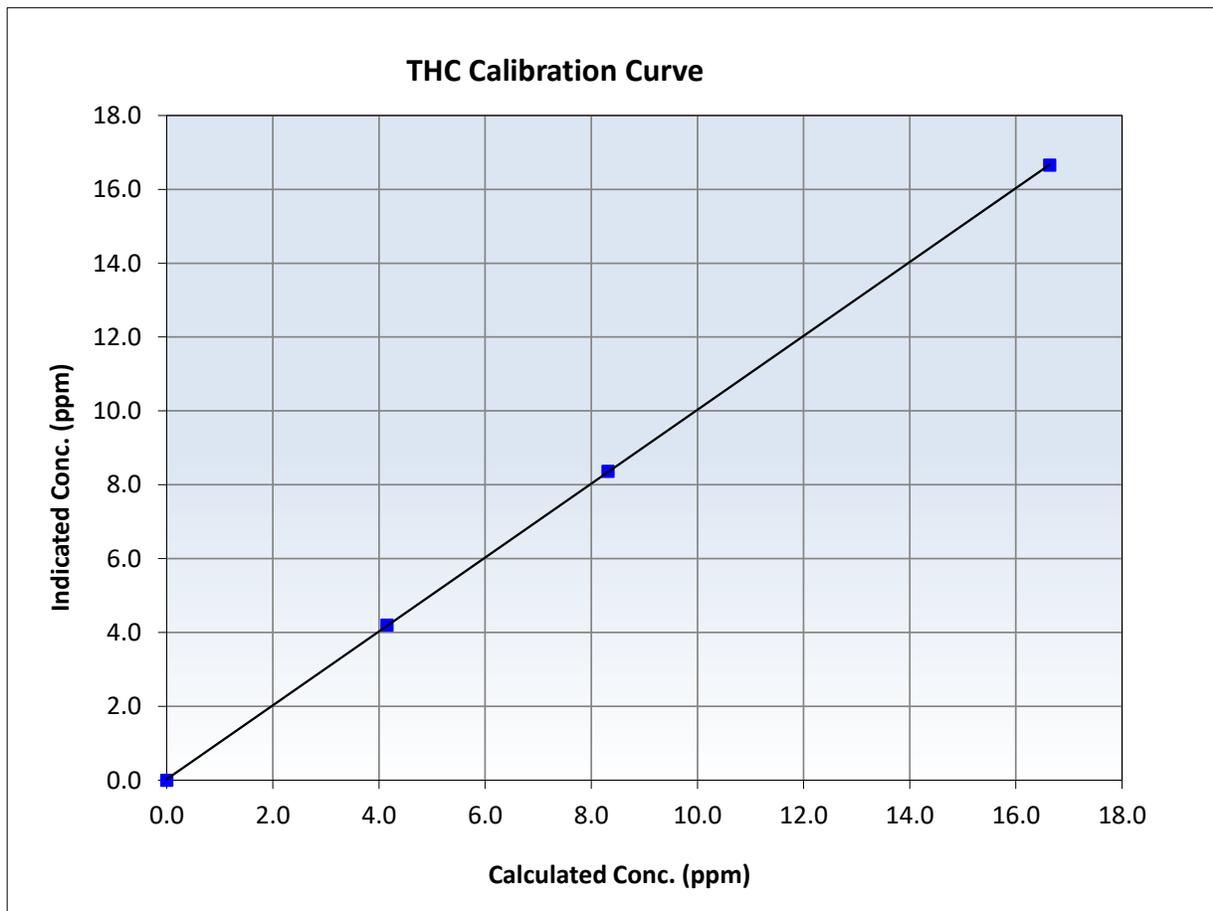
THC Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:00	End Time (MST):	10:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>	
0.00	0.00	----	Correlation Coefficient	0.999988	<i>≥0.995</i>
16.64	16.66	0.9989	Slope	1.000420	<i>0.90 - 1.10</i>
8.32	8.36	0.9944	Intercept	0.026281	<i>+/-0.5</i>
4.15	4.20	0.9877			





Wood Buffalo Environmental Association

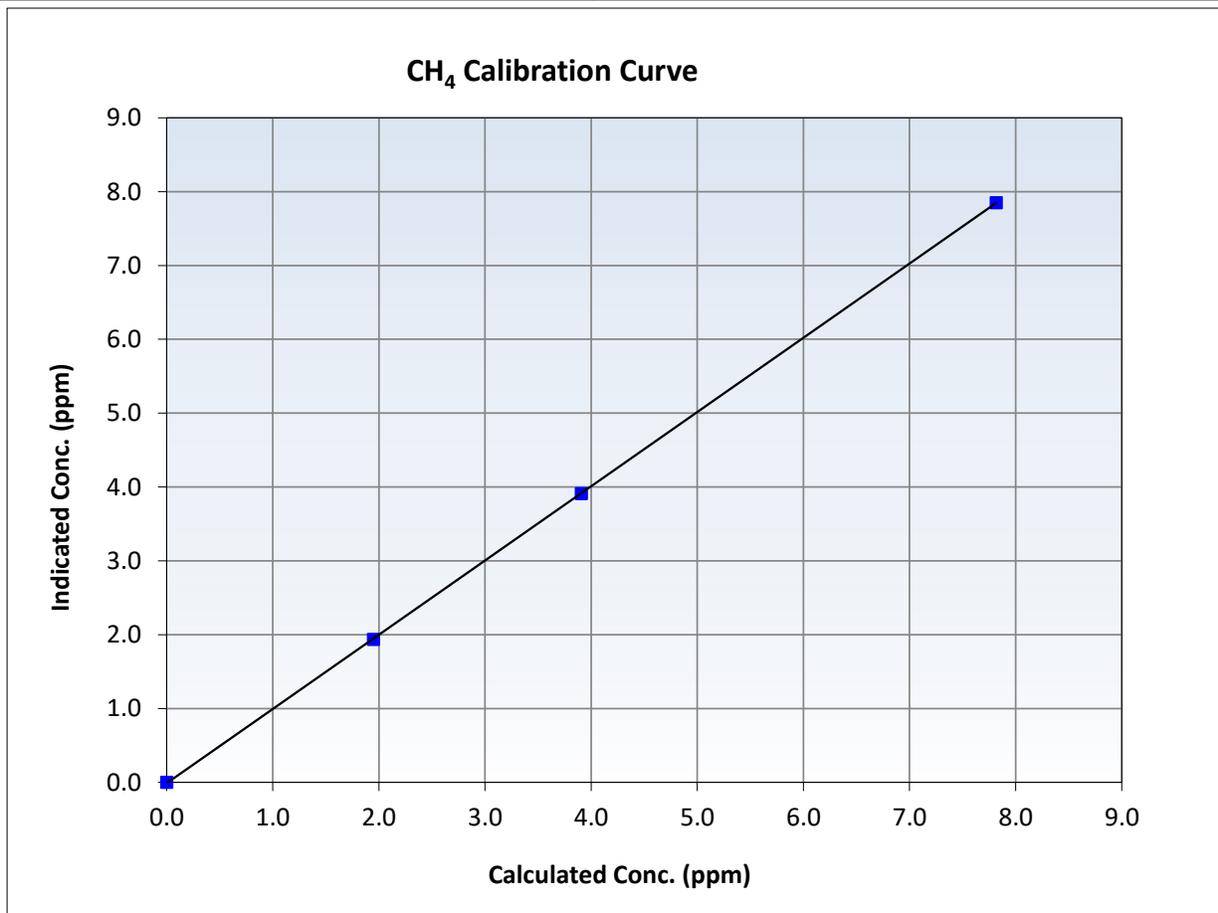
CH₄ Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:00	End Time (MST):	10:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999989 ≥0.995
7.82	7.85	0.9954	Slope	1.005473 0.90 - 1.10
3.91	3.91	0.9989	Intercept	-0.012097 +/-0.5
1.95	1.94	1.0073		





Wood Buffalo Environmental Association

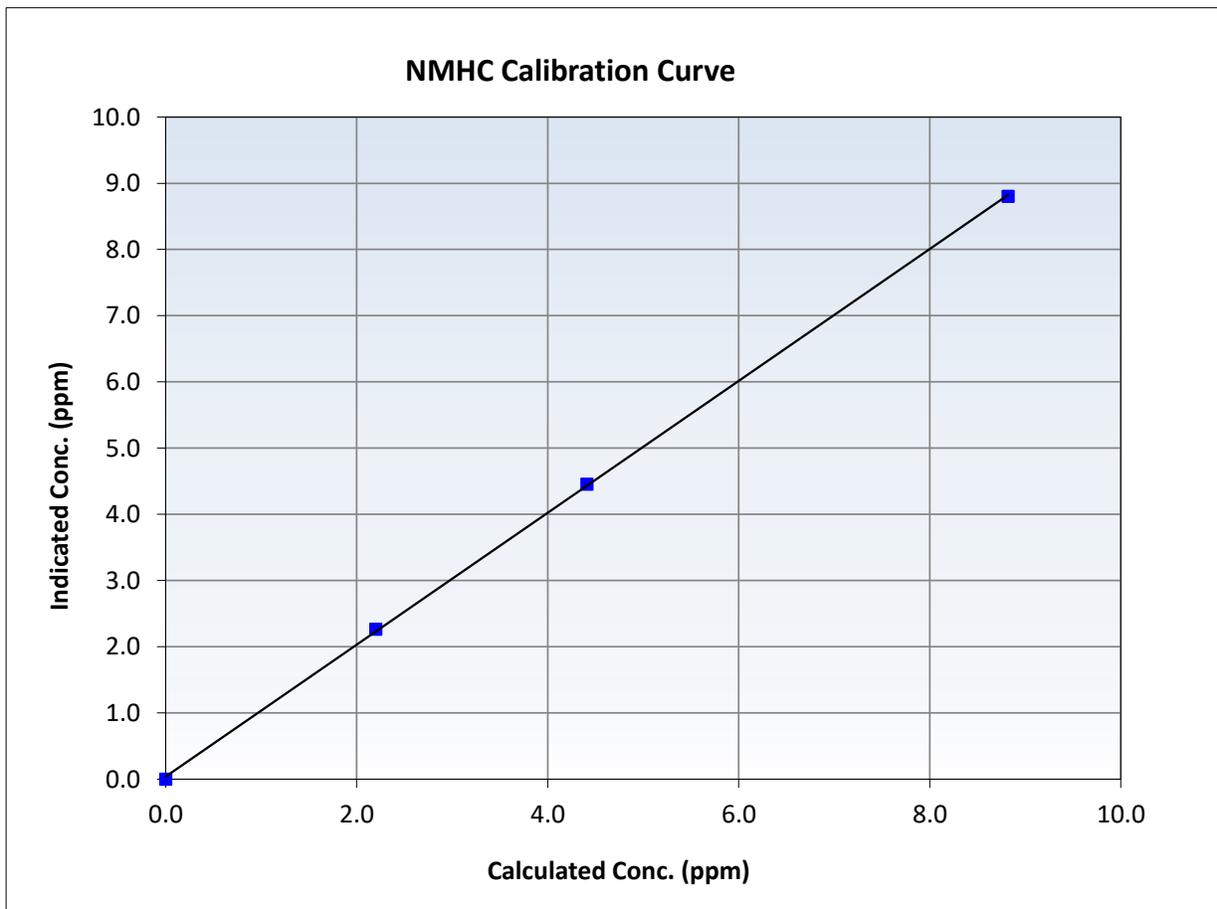
NMHC Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:00	End Time (MST):	10:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

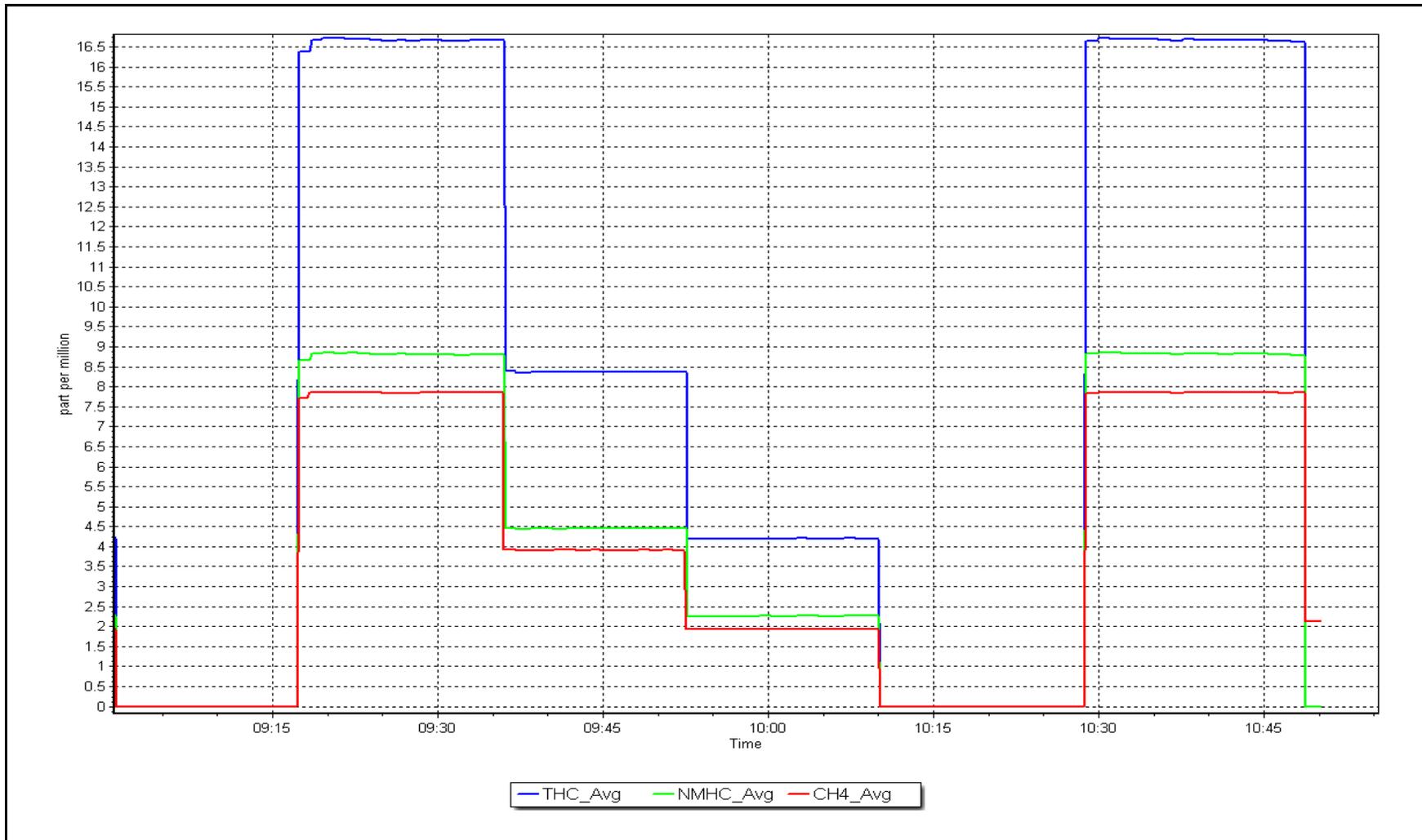
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999910	<i>≥0.995</i>
8.82	8.80	1.0019	Slope	0.996096	<i>0.90 - 1.10</i>
4.41	4.46	0.9897	Intercept	0.038778	<i>+/-0.5</i>
2.20	2.27	0.9710			



NMHC Calibration Plot

Date: January 23, 2026

Location: Buffalo Viewpoint





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	January 28, 2026	Last Cal Date:	January 23, 2026
Start time (MST):	7:20	End time (MST):	10:53
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC446753	Cal Gas Expiry Date:	March 10, 2031
CH4 Cal Gas Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
C3H8 Cal Gas Conc.	204.0 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
Removed C3H8 Conc.	204.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3808
Zero Air Gen model:	Teledyne API T701	Serial Number:	362

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1180320038
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.21E-04	2.25E-04	4.24E-04	4.21E-04
CH4 Retention time:	11.2	11.2	208215	209613
Zero Chromatogram:	OFF	OFF	Flat Baseline: OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.6	16.64	16.55	1.005
As found Mid point	4961	39.3	8.32	8.32	0.999
As found Low point	4980	19.6	4.15	4.15	1.000
New cylinder response					
Baseline Corr AF:	16.55	Prev response	16.67	*% change	-0.7%
Baseline Corr 2nd AF:	8.32	AF Slope:	0.994659	AF Intercept:	0.018446
Baseline Corr 3rd AF:	4.15	AF Correlation:	0.999989	* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.6	16.64	16.61	1.001
Mid point	4961	39.3	8.32	8.35	0.997
Low point	4980	19.6	4.15	4.16	0.997
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	16.64	16.67	0.998
Average Correction Factor					0.998

Notes: Nitrogen Cylinder changed. 55i needs extra time to stabilize. Multi point as found to check linearity. Span adjusted.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted
					Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.6	8.82	8.90	0.991
As found Mid point	4961	39.3	4.41	4.47	0.986
As found Low point	4980	19.6	2.20	2.24	0.981
New cylinder response					
Baseline Corr AF:	8.90	Prev response	8.82	*% change	0.8%
Baseline Corr 2nd AF:	4.47	AF Slope:	1.008109	AF Intercept:	0.014193
Baseline Corr 3rd AF:	2.24	AF Correlation:	0.999987	* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted
					Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.6	8.82	8.80	1.003
Mid point	4961	39.3	4.41	4.43	0.995
Low point	4980	19.6	2.20	2.22	0.990
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	8.82	8.82	1.000
Average Correction Factor					0.996

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted
					Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.6	7.82	7.65	1.021
As found Mid point	4961	39.3	3.91	3.85	1.016
As found Low point	4980	19.6	1.95	1.91	1.022
New cylinder response					
Baseline Corr AF:	7.65	Prev response	7.85	*% change	-2.5%
Baseline Corr 2nd AF:	3.85	AF Slope:	0.979584	AF Intercept:	0.003653
Baseline Corr 3rd AF:	1.91	AF Correlation:	0.999989	* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted
					Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.6	7.82	7.82	1.000
Mid point	4961	39.3	3.91	3.92	0.998
Low point	4980	19.6	1.95	1.94	1.005
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	7.82	7.85	0.995
Average Correction Factor					1.001

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.000420	0.998498
THC Cal Offset:	0.026281	0.015263
CH ₄ Cal Slope:	1.005473	1.000751
CH ₄ Cal Offset:	-0.012097	-0.002704
NMHC Cal Slope:	0.996096	0.996760
NMHC Cal Offset:	0.038778	0.017967

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

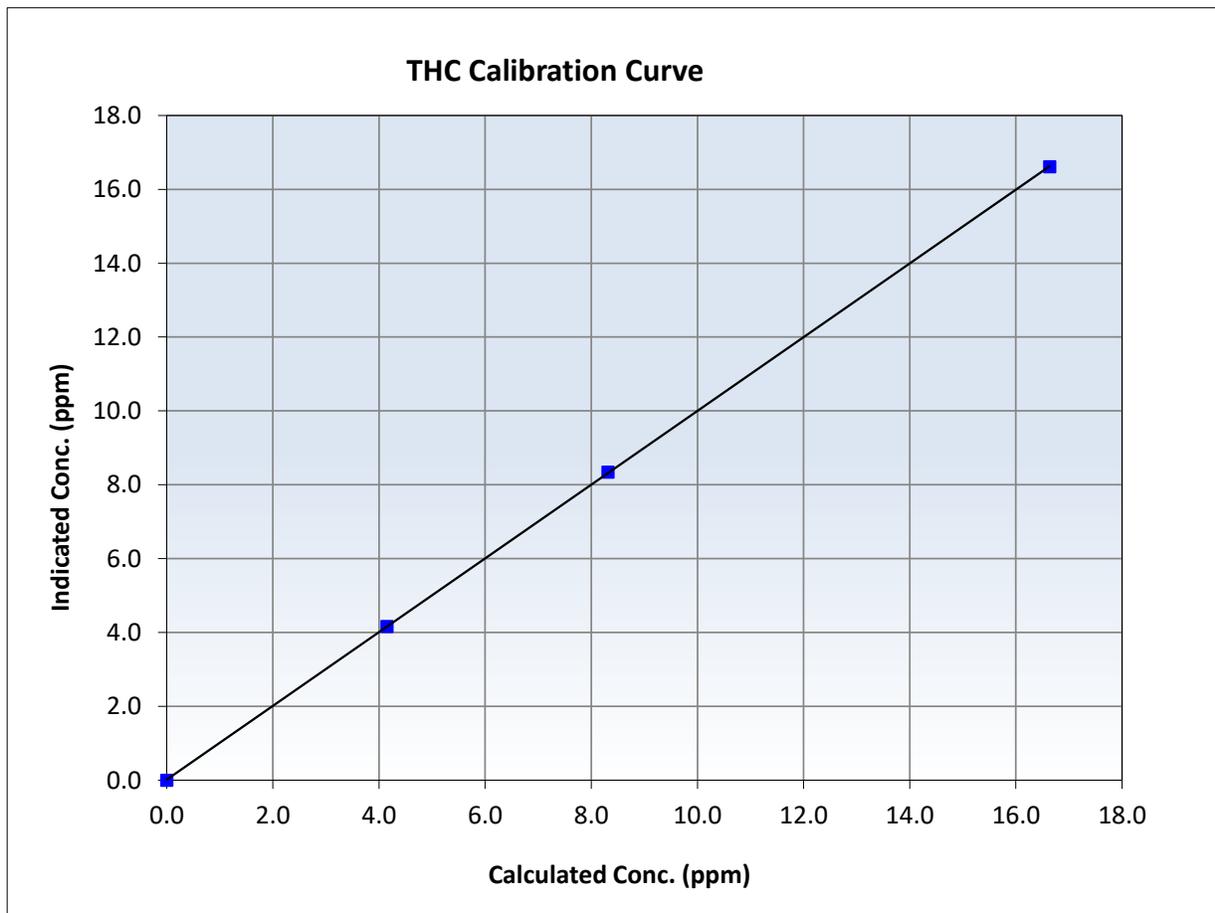
THC Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	January 23, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	7:20	End Time (MST):	10:53
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999993	<i>≥0.995</i>
16.64	16.61	1.0014	Slope	0.998498	<i>0.90 - 1.10</i>
8.32	8.35	0.9966	Intercept	0.015263	<i>+/-0.5</i>
4.15	4.16	0.9970			





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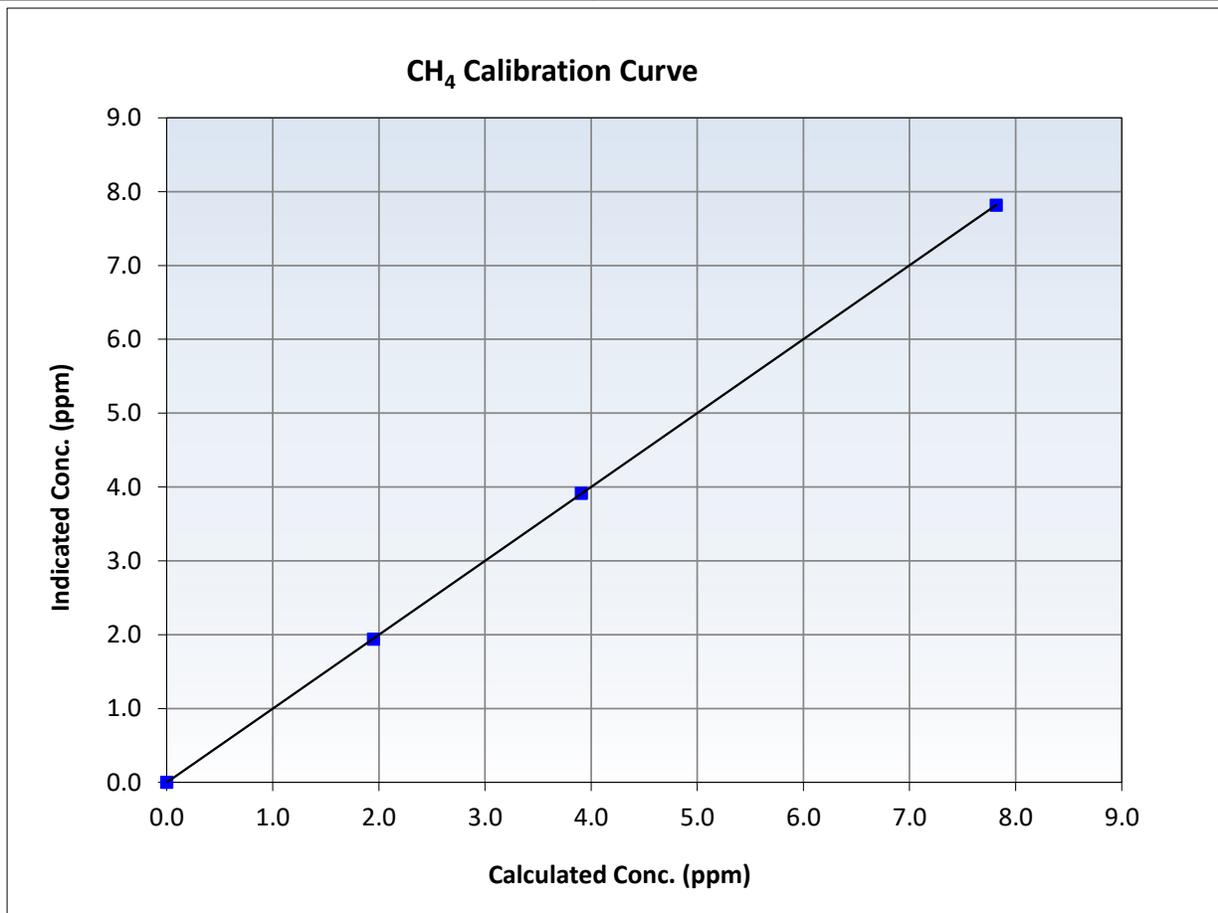
CH₄ Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	January 23, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	7:20	End Time (MST):	10:53
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999995	<i>≥0.995</i>
7.82	7.82	0.9998	Slope	1.000751	<i>0.90 - 1.10</i>
3.91	3.92	0.9979	Intercept	-0.002704	<i>+/-0.5</i>
1.95	1.94	1.0053			





Wood Buffalo Environmental Association

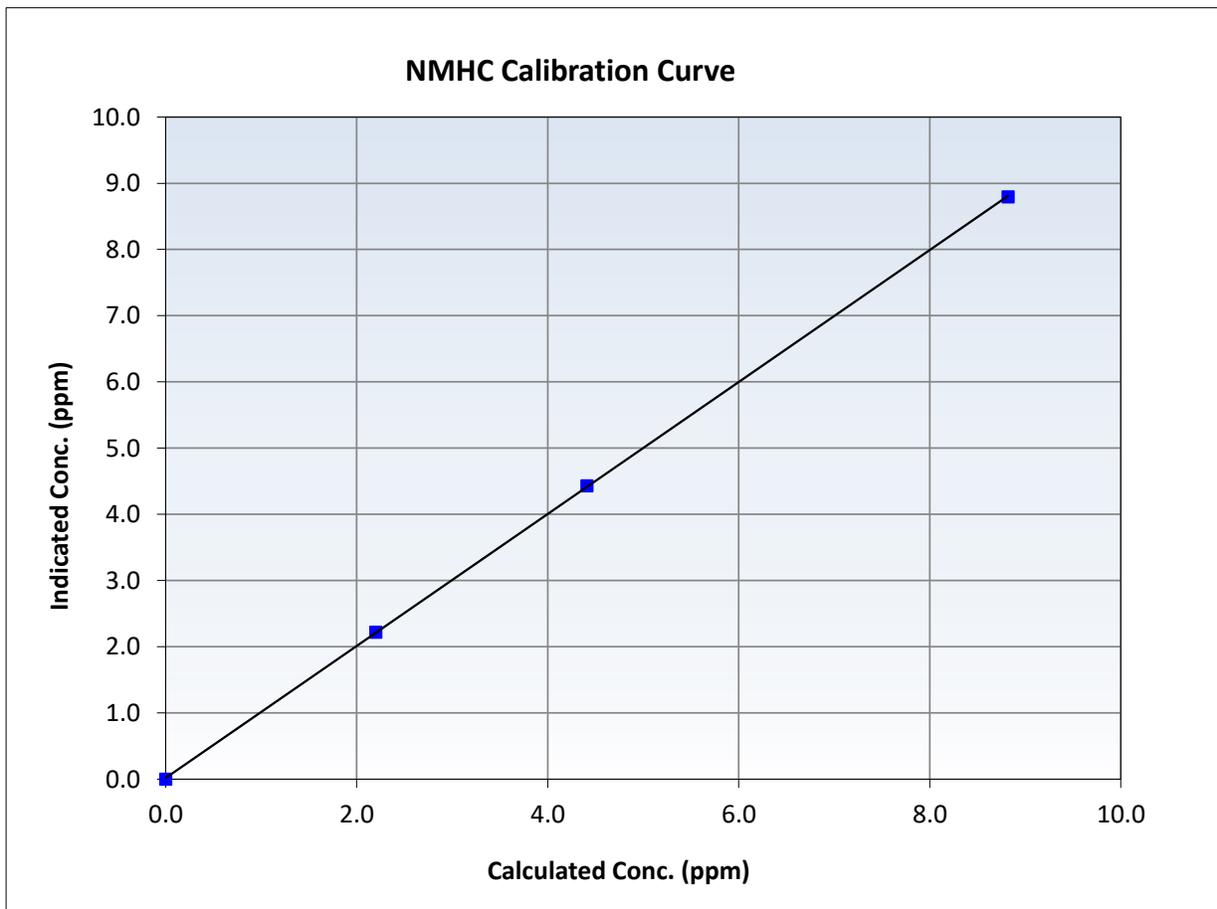
NMHC Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	January 23, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	7:20	End Time (MST):	10:53
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

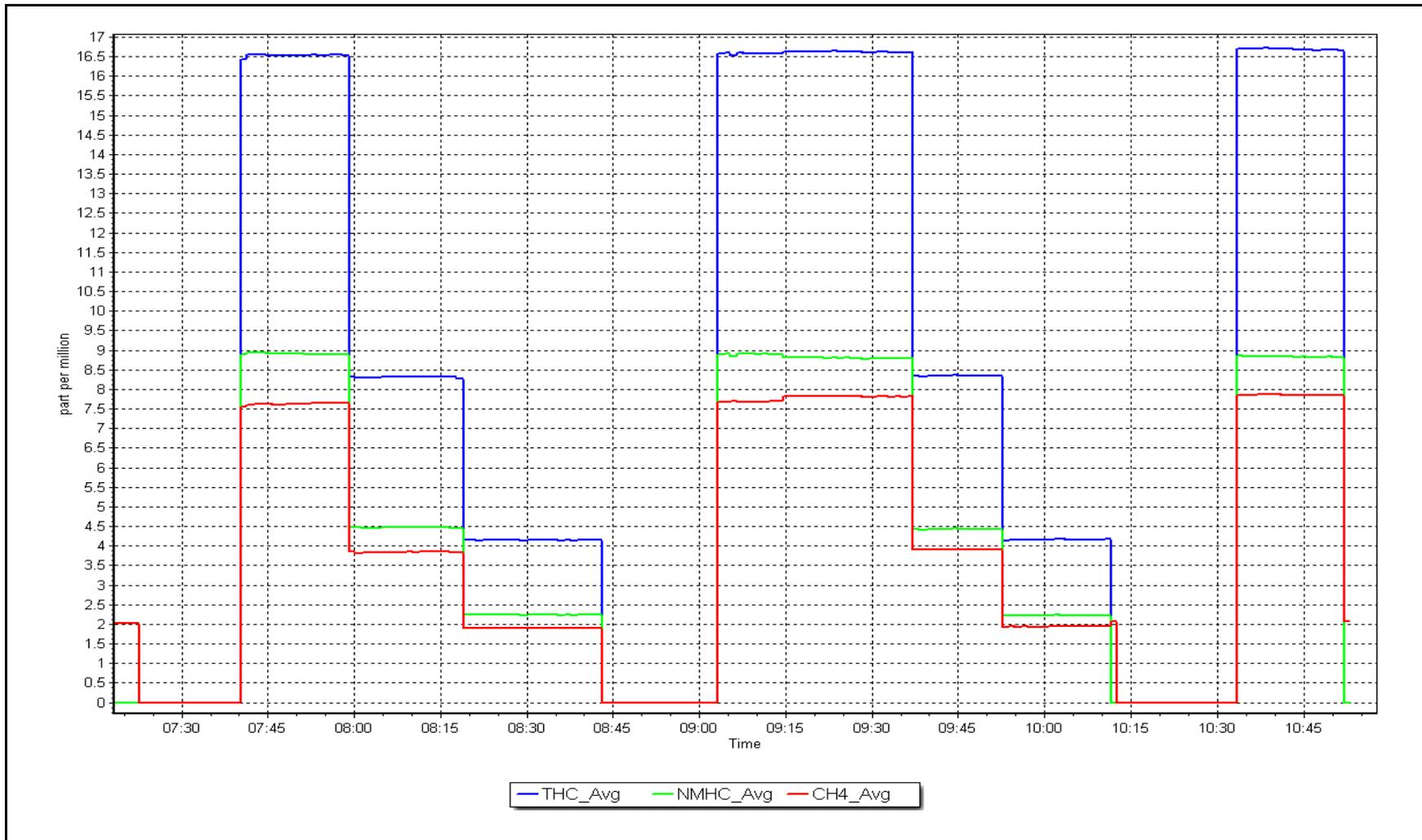
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999978	<i>≥0.995</i>
8.82	8.80	1.0026	Slope	0.996760	<i>0.90 - 1.10</i>
4.41	4.43	0.9951	Intercept	0.017967	<i>+/-0.5</i>
2.20	2.22	0.9898			



NMHC Calibration Plot

Date: January 28, 2026

Location: Buffalo Viewpoint





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Buffalo Viewpoint
 Station number: AMS 04
 Calibration Date: January 12, 2026
 Last Cal Date: December 18, 2025
 Start time (MST): 6:45
 End time (MST): 11:40
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: CC324979
 NOX Cal Gas Conc: 48.90 ppm
 Removed Cylinder #:
 Removed Gas NOX Conc: 48.90 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701
 Cal Gas Expiry Date: November 3, 2032
 NO Cal Gas Conc: 48.80 ppm
 Removed Gas Exp Date:
 Removed Gas NO Conc: 48.80 ppm
 NO gas Diff:
 Serial Number: 3808
 Serial Number: 362

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.3	0.1	0.2	----	----
AF High point	4918	81.8	800.0	798.4	1.6	738.5	736.9	1.6	1.0838	1.0836
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 799.9 ppb		NO = 796.6 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = -8.4%	
Baseline Corr 1st pt	NO _x = 738.2 ppb		NO = 736.8 ppb			<u>As Found Statistics</u>		*Percent Change	NO = -8.1%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Teledyne API T200
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 721

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.001939	1.001139
NO _x Cal Offset:	-1.713832	-1.433856
NO Cal Slope:	1.001533	1.005783
NO Cal Offset:	-3.055294	-2.714214
NO ₂ Cal Slope:	0.999089	0.996850
NO ₂ Cal Offset:	-0.172967	0.280458

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.063	1.145	NO bkgnd or offset:	-0.6	-0.6
NOX coeff or slope:	1.055	1.136	NOX bkgnd or offset:	-0.7	-0.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	4.4	4.4

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.4	0.6	-0.2	----	----
High point	4918	81.8	800.0	798.4	1.6	800.5	801.9	-1.3	0.9994	0.9956
Mid point	4959	40.9	400.0	399.2	0.8	397.9	397.3	0.6	1.0053	1.0048
Low point	4980	20.4	199.5	199.1	0.4	196.6	194.1	2.4	1.0147	1.0257
As left zero	5000	0.0	0.0	1.0	-1.0	0.7	1.0	-0.3	----	----
As left span	4918	81.8	800.0	405.8	800.0	794.3	405.8	388.5	1.0072	1.0000
Average Correction Factor									1.0065	1.0087

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	796.0	407.9	389.7	388.8	1.0024	99.8%
Mid GPT point	796.0	606.7	190.9	190.1	1.0044	99.6%
Low GPT point	796.0	702.2	95.4	96.4	0.9900	101.0%
Average Correction Factor					0.9989	100.1%

Notes: Reaction Cell Pressure at 4.4 down from last month. Power outage for more than 8 days last month. Carcoal and pump changed out. Span adjusted. Drifting during High point the span was adjusted twice.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

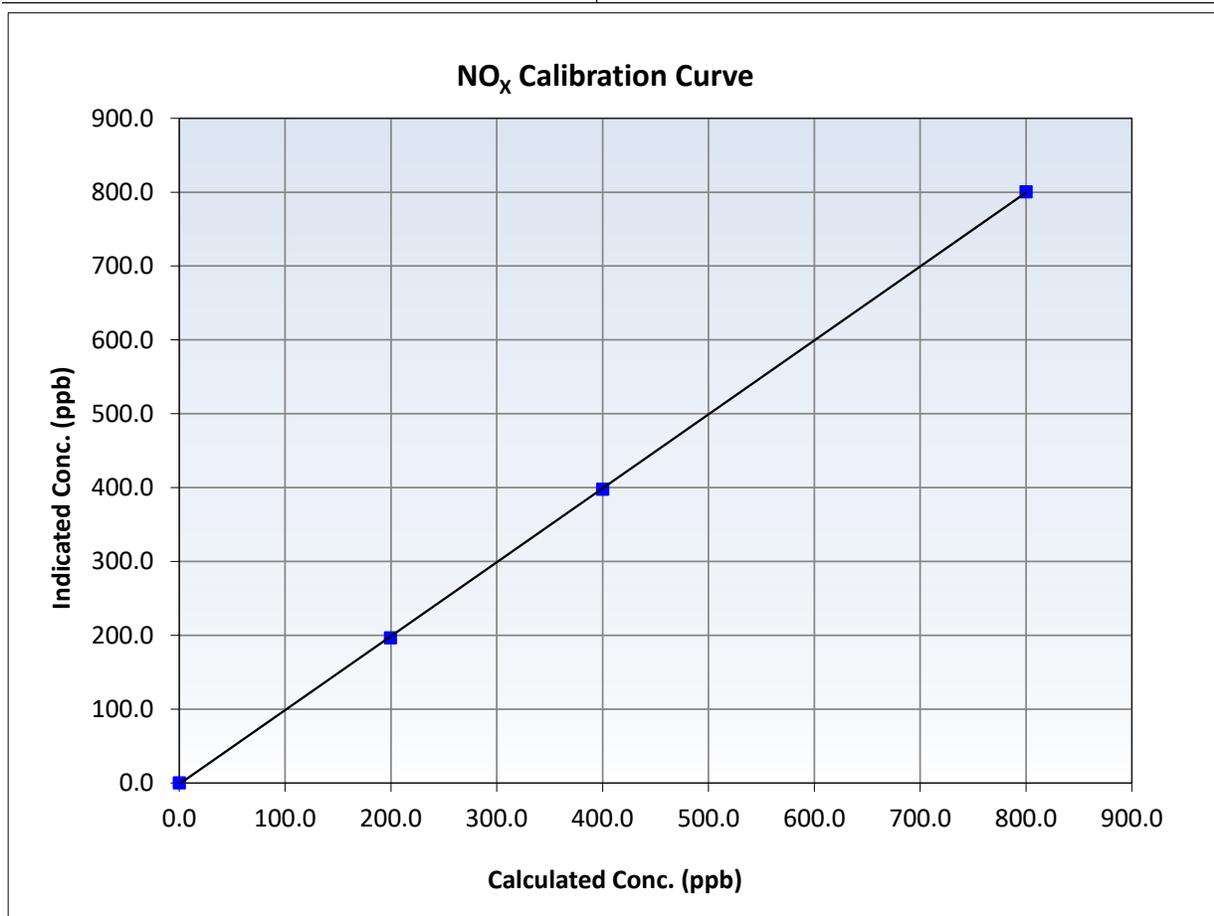
NO_x Calibration Summary

Station Information

Calibration Date:	January 12, 2026	Previous Calibration:	December 18, 2025
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	6:45	End Time (MST):	11:40
Analyzer make:	Teledyne API T200	Analyzer serial #:	721

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.4	----	Correlation Coefficient	0.999976	≥0.995
800.0	800.5	0.9994	Slope	1.001139	0.90 - 1.10
400.0	397.9	1.0053	Intercept	-1.433856	+/-20
199.5	196.6	1.0147			





Wood Buffalo Environmental Association

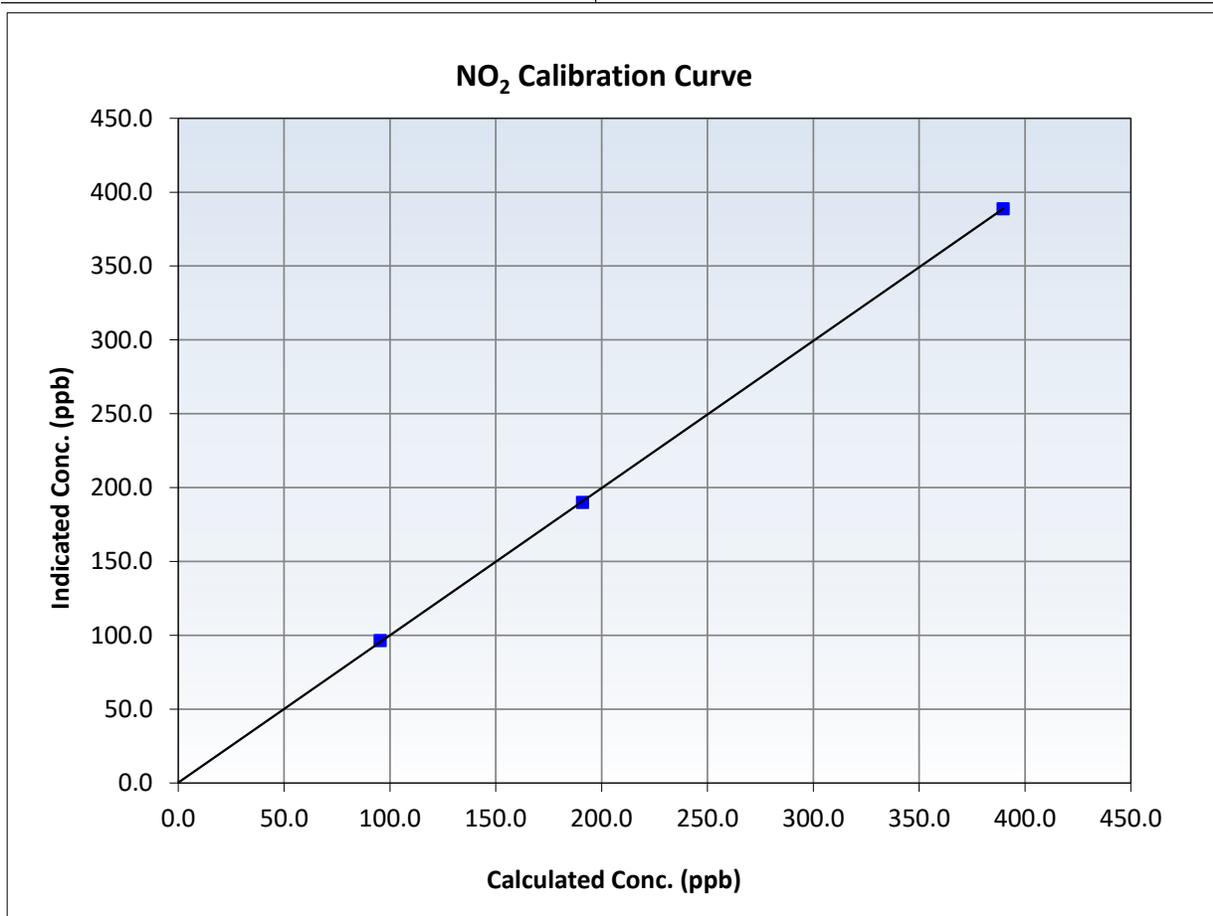
NO₂ Calibration Summary

Station Information

Calibration Date:	January 12, 2026	Previous Calibration:	December 18, 2025
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	6:45	End Time (MST):	11:40
Analyzer make:	Teledyne API T200	Analyzer serial #:	721

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.2	----	Correlation Coefficient	0.999982	≥0.995
389.7	388.8	1.0024	Slope	0.996850	0.90 - 1.10
190.9	190.1	1.0044	Intercept	0.280458	+/-20
95.4	96.4	0.9900			





Wood Buffalo Environmental Association

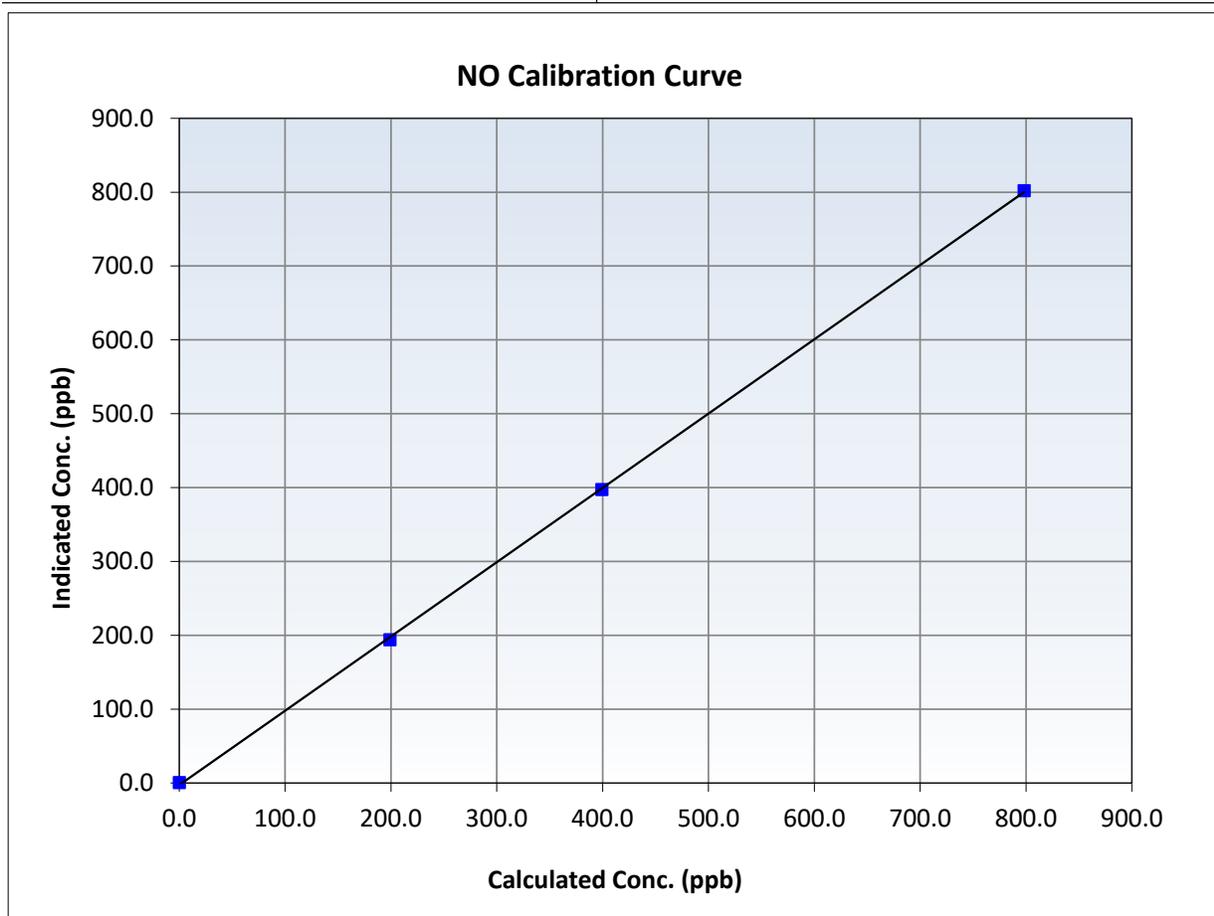
NO Calibration Summary

Station Information

Calibration Date:	January 12, 2026	Previous Calibration:	December 18, 2025
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	6:45	End Time (MST):	11:40
Analyzer make:	Teledyne API T200	Analyzer serial #:	721

Calibration Data

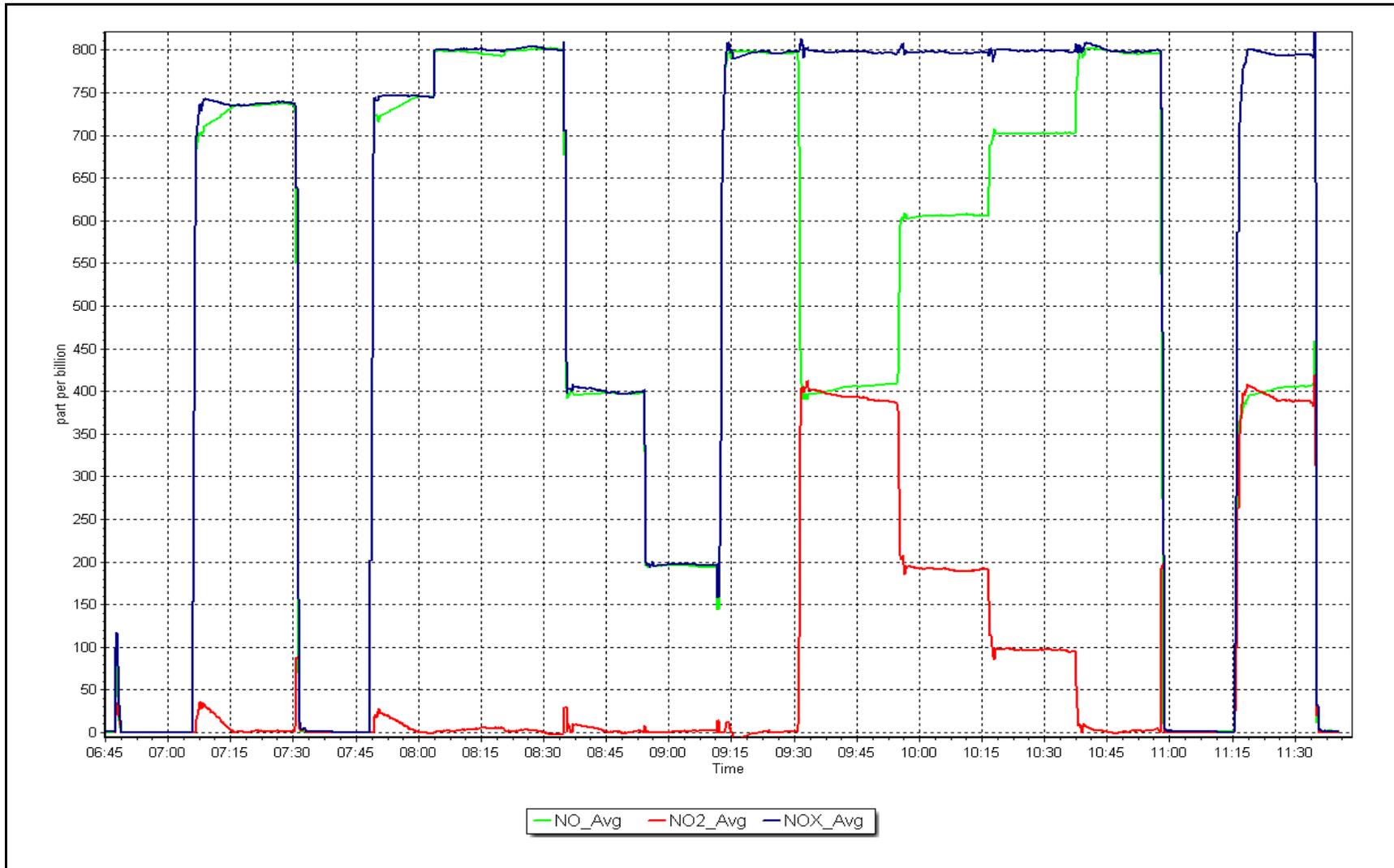
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.6	----	Correlation Coefficient	0.999922	<i>≥0.995</i>
798.4	801.9	0.9956	Slope	1.005783	<i>0.90 - 1.10</i>
399.2	397.3	1.0048	Intercept	-2.714214	<i>+/-20</i>
199.1	194.1	1.0257			



NO_x Calibration Plot

Date: January 12, 2026

Location: Buffalo Viewpoint





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	January 20, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	7:00	End time (MST):	9:53
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	3808
Calibrator Make/Model:	Teledyne API T700	Serial Number:	362
ZAG Make/Model:	Teledyne API T701		

Analyzer Information

Analyzer make:	Teledyne API T400	Analyzer serial #:	2961
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.991743	1.003457	Backgd or Offset:	-1.0	-1.0
Calibration intercept:	0.920000	0.920000	Coeff or Slope:	1.008	1.020

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	5000	1011.9	400.0	396.0	1.010
As found Mid point					
As found Low point					
Baseline Corr As found:	395.9	Previous response	397.6	*% change	-0.4%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.6	----
High point	5000	1011.6	400.0	402.2	0.995
Mid point	5000	830.9	200.0	201.6	0.992
Low point	5000	720.3	100.0	101.7	0.983
As left zero	5000	0.0	0.0	0.0	----
As left span	5000	1011.0	400.0	403.8	0.991
Average Correction Factor					0.990

Notes: No Maintenance done. Span adjusted.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

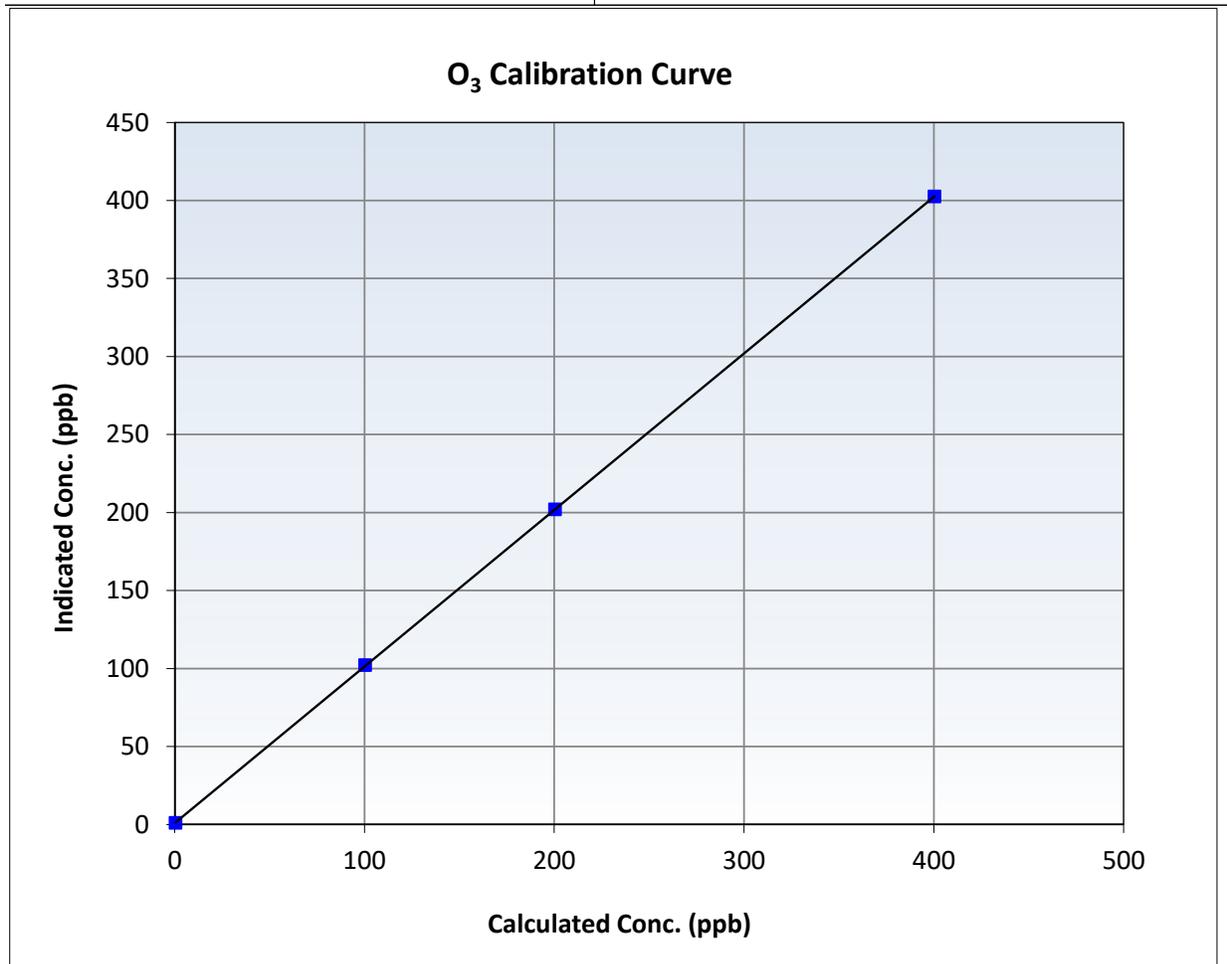
O₃ Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 17, 2025
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	7:00	End Time (MST):	9:53
Analyzer make:	Teledyne API T400	Analyzer serial #:	2961

Calibration Data

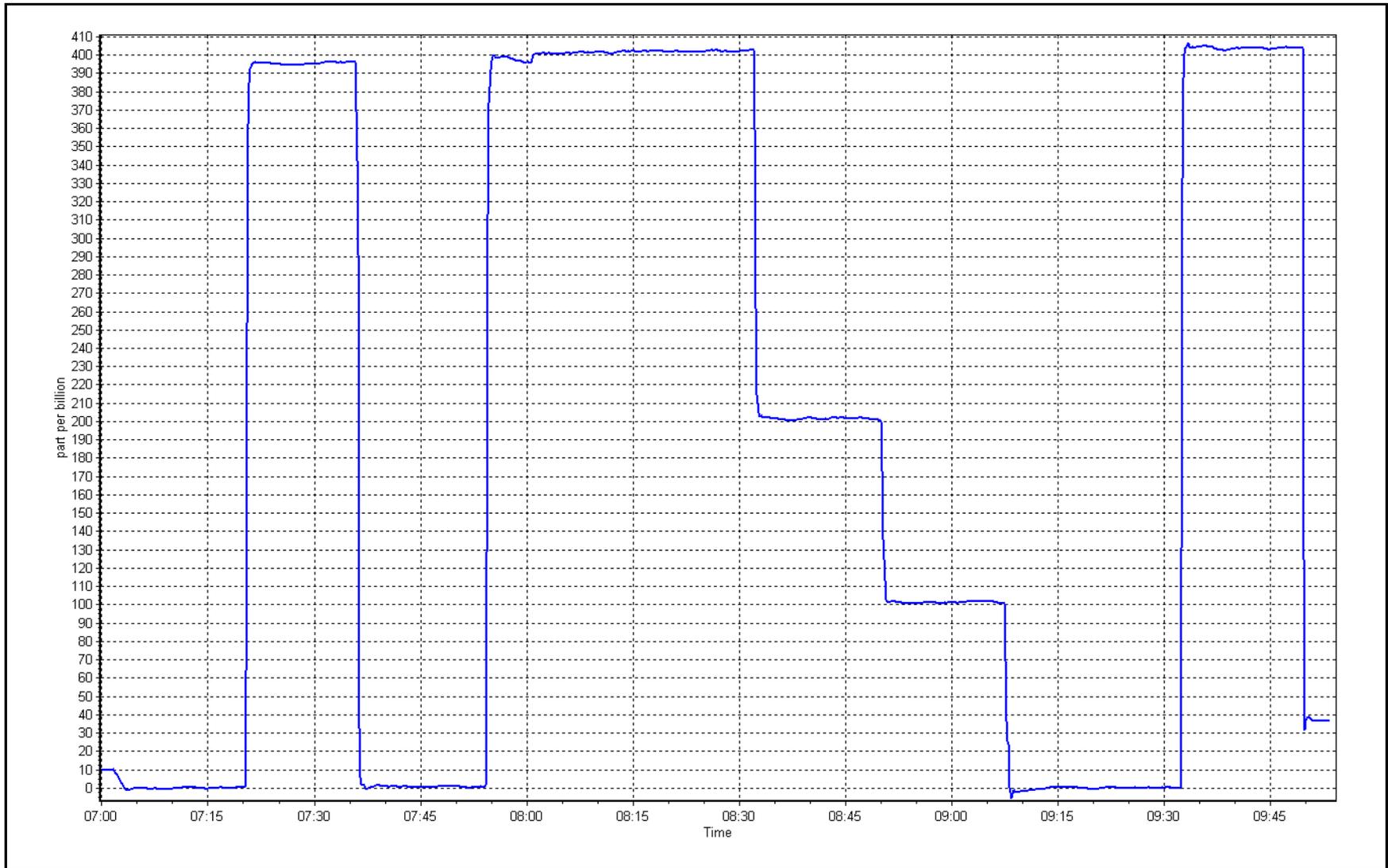
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.6	----	Correlation Coefficient	0.999997	≥0.995
400.0	402.2	0.9945	Slope	1.003457	0.90 - 1.10
200.0	201.6	0.9921	Intercept	0.920000	+/- 5
100.0	101.7	0.9833			



O₃ Calibration Plot

Date: January 20, 2026

Location: Buffalo Viewpoint





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Buffalo Viewpoint Station number: AMS 04
 Calibration Date: January 22, 2026 Last Cal Date: December 18, 2025
 Start time (MST): 7:09 End time (MST): 7:36

Analyzer Make: Teledyne API T640 S/N: 321
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388753
 Temp/RH standard: Alicat FP-25BT S/N: 388753

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-29.9	-30.9	-29.9	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	749.0	751.0	749.0	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.00	4.95	5.00	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	35	----	35	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	5.4	PM w/ HEPA: _____	0.0	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: **10.9** Expiry Date: 30-Jan-27
 Lot No.: 100128-050-051

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: December 18, 2025
 Date Disposable Filter Changed: December 18, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: December 18, 2025
 Date RH/T Sensor Cleaned: December 18, 2025

No adjustments done.

Notes:

Calibration by: Melissa Lemay



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

**AMS05
MANNIX
JANUARY 2026**

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	January 16, 2026	Last Cal Date:	December 4, 2025
Start time (MST):	10:22	End time (MST):	15:32
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.06	ppm	Cal Gas Exp Date:	October 22, 2032
Cal Gas Cylinder #:	CC308040			
Removed Cal Gas Conc:	50.06	ppm	Rem Gas Exp Date:	October 22, 2032
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Model:	API T700		Serial Number:	5470
Zero Air Gen Model:	API T701		Serial Number:	361

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1008841399
Analyzer Range:	1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.005580	1.000152	Backgd or Offset:	11.0	11.2
Calibration intercept:	-0.920059	-0.876794	Coeff or Slope:	0.944	0.933

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4920	79.9	800.0	807.1	0.991
As found Mid point	4960	40.0	400.5	402.6	0.995
As found Low point	4980	20.0	200.2	200.1	1.001
New cylinder response					
Baseline Corr As found:	807.1	Previous response	803.5	*% change	0.4%
Baseline Corr 2nd AF pt:	402.6	AF Slope:	1.009523	AF Intercept:	-1.058360
Baseline Corr 3rd AF pt:	200.1	AF Correlation:	0.999992	<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.2	----
High point	4920	79.9	800.0	799.5	1.001
Mid point	4960	40.0	400.5	399.5	1.002
Low point	4980	20.0	200.2	198.6	1.008
As left zero	5000	0.0	0.0	-0.1	----
As left span	4920	79.9	800.0	801.1	0.999
Average Correction Factor:					1.004

Notes: Adjusted zero and span. Changed the flow sensor after MPAFs.

Calibration Performed By: Parampreet Kaur



Wood Buffalo Environmental Association

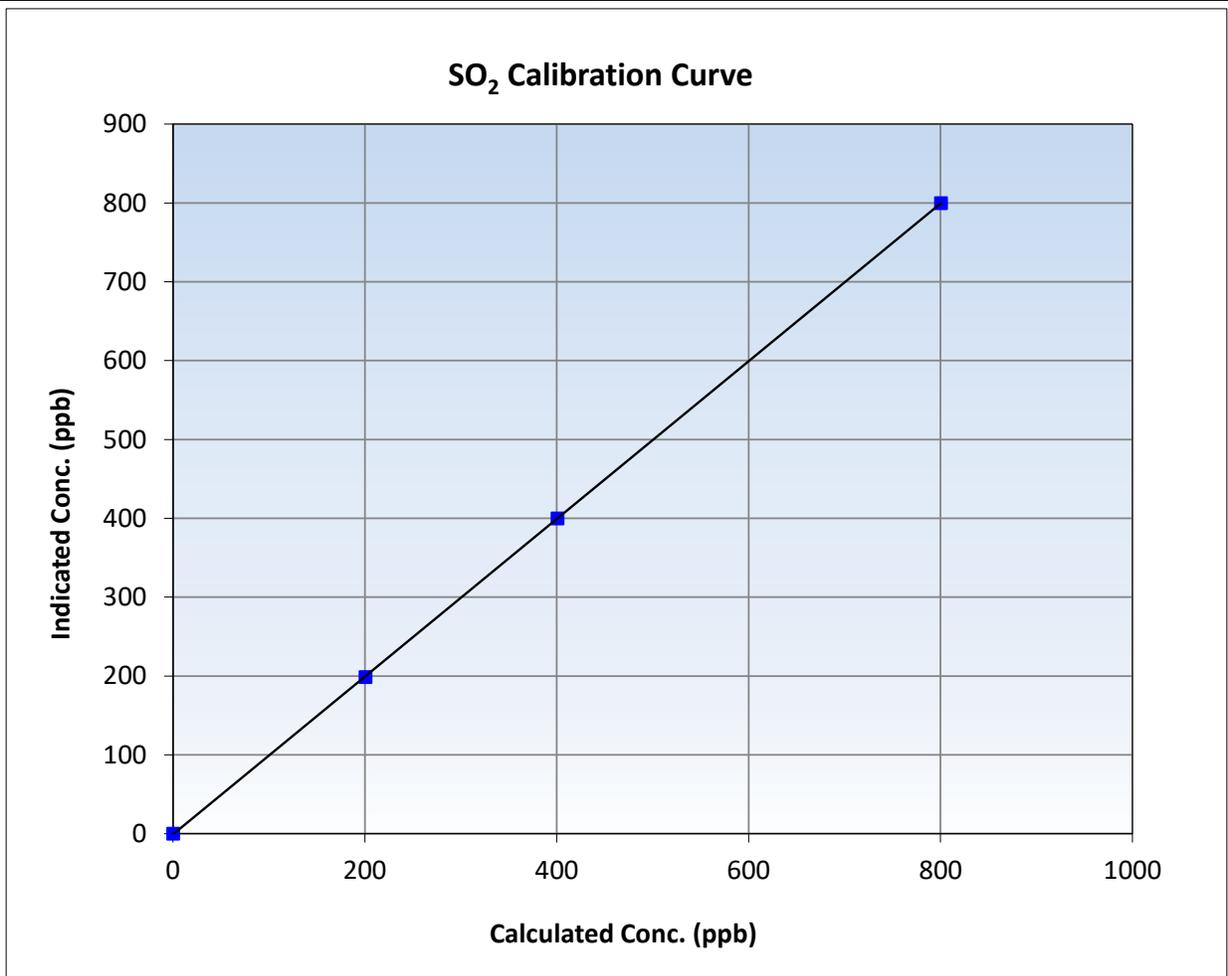
SO₂ Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 4, 2025
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:22	End Time (MST):	15:32
Analyzer make:	Thermo 43i	Analyzer serial #:	1008841399

Calibration Data

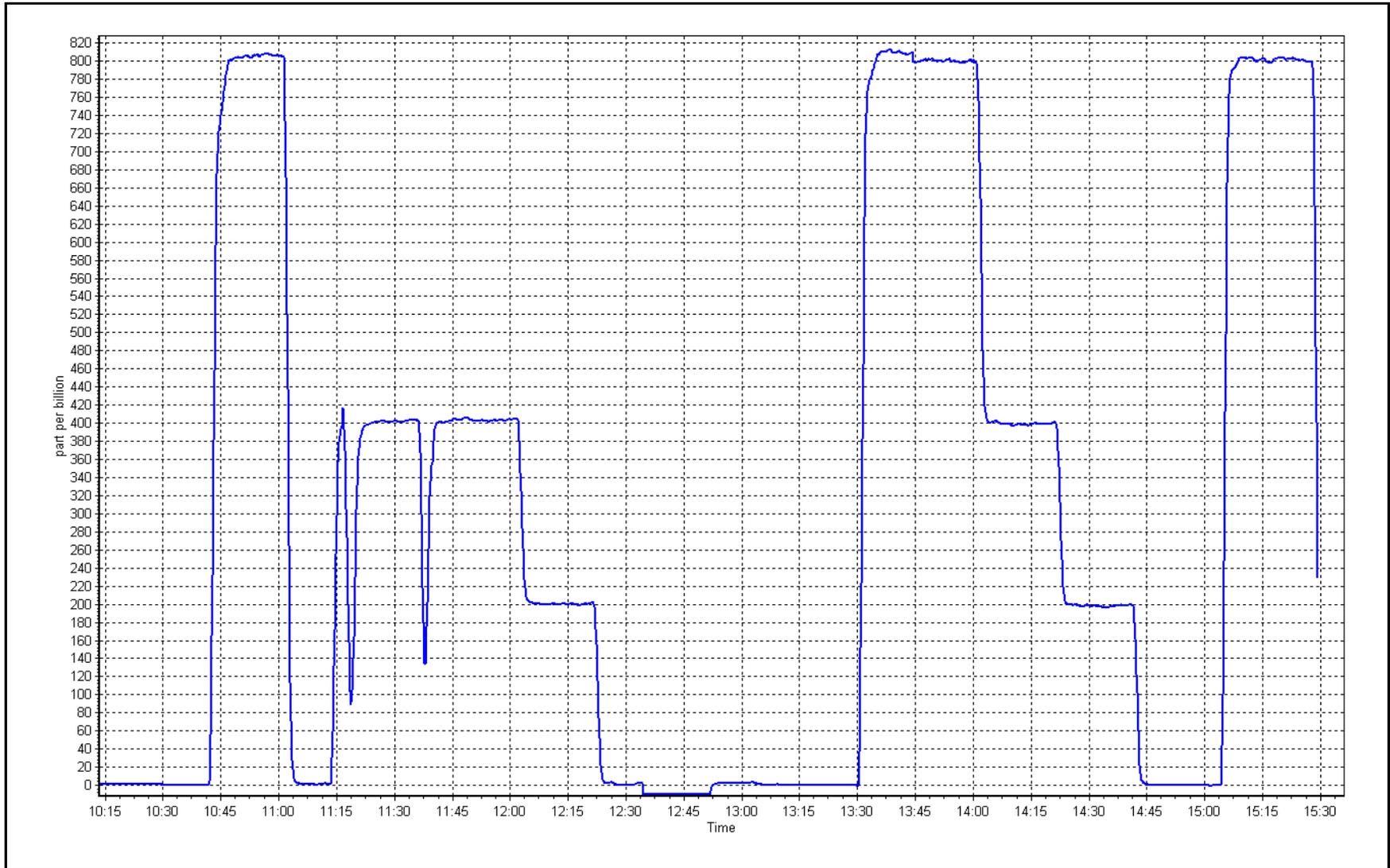
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.2	----	Correlation Coefficient	0.999997	≥0.995
800.0	799.5	1.0006	Slope	1.000152	0.90 - 1.10
400.5	399.5	1.0025	Intercept	-0.876794	+/-30
200.2	198.6	1.0083			



SO2 Calibration Plot

Date: January 16, 2026

Location: Mannix





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	January 5, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	7:58	End time (MST):	12:06
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.96	ppm	Cal Gas Exp Date:	November 15, 2026
Cal Gas Cylinder #:	DT0037363			
Removed Cal Gas Conc:	4.96	ppm	Rem Gas Exp Date:	N/A
Removed Gas Cyl #:	N/A		Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	5470
ZAG Make/Model:	API T701		Serial Number:	361

Analyzer Information

Analyzer make:	Thermo 43iQ	Analyzer serial #:	1200326169
Converter make:	Global	Converter serial #:	2022-225
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.991681	0.988966	Backgd or Offset:	1.26	1.26
Calibration intercept:	0.422498	0.342518	Coeff or Slope:	1.040	1.040

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.2	----
As found High point	4919	80.6	80.0	78.9	1.016
As found Mid point	4960	40.3	40.0	40.0	1.004
As found Low point	4980	20.2	20.0	20.1	1.007
New cylinder response					
Baseline Corr As found:	78.7	Prev response:	79.72	*% change:	-1.3%
Baseline Corr 2nd AF pt:	39.8	AF Slope:	0.984108	AF Intercept:	0.362530
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999959	<i>* = > +/-5% change initiates investigation</i>	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4919	80.6	80.0	79.4	1.007
Mid point	4960	40.3	40.0	40.0	0.999
Low point	4980	20.2	20.0	20.0	1.002
As left zero	5000	0.0	0.0	0.5	----
As left span	4919	80.6	80.0	79.3	1.008
SO ₂ Scrubber Check	4920	80.3	803.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	1.003
Date of last converter efficiency test:					

Notes: SOx scrubber check after calibrator zero. No adjustments done.

Calibration Performed By: Param Kaur



Wood Buffalo Environmental Association

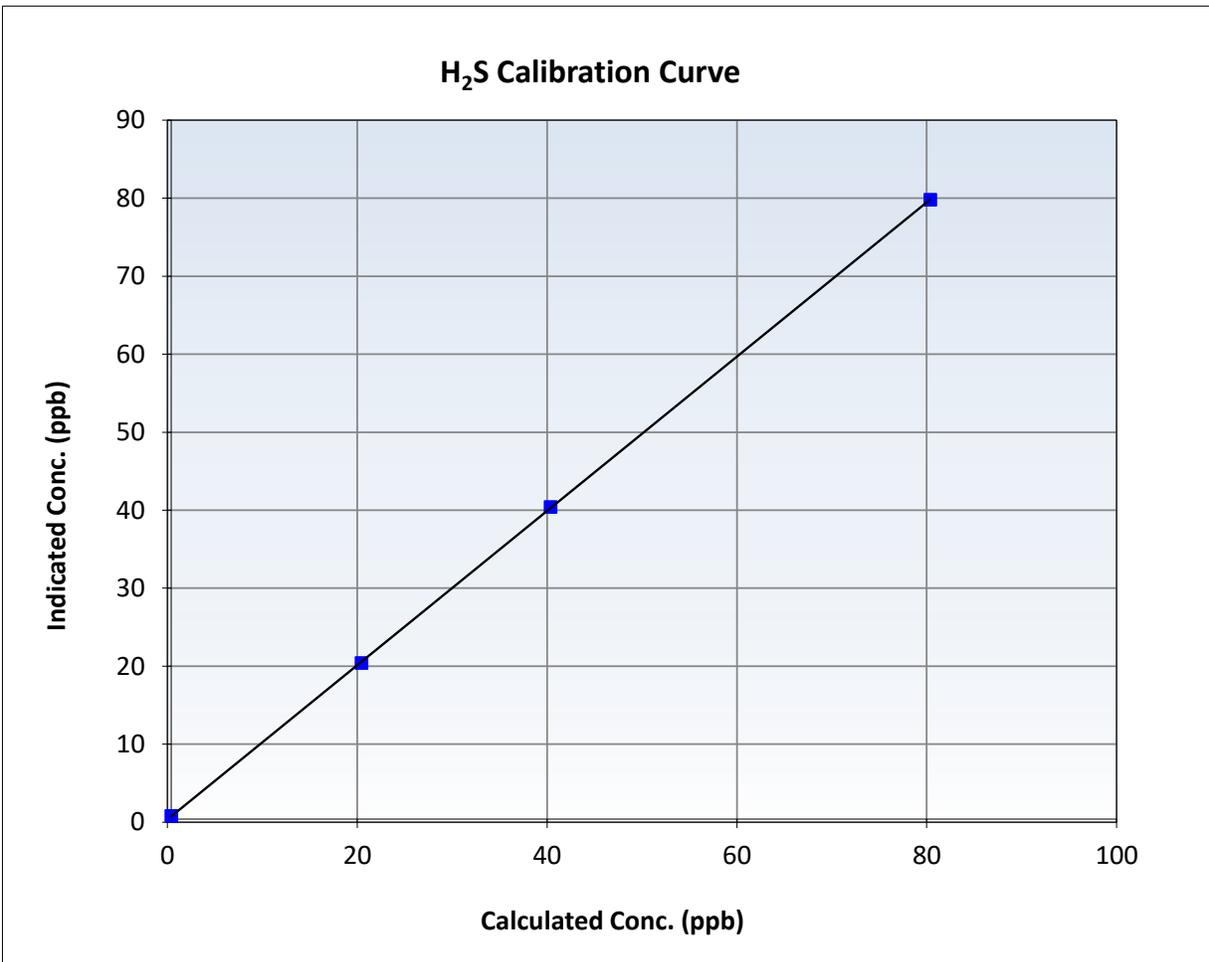
H₂S Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 10, 2025
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	7:58	End Time (MST):	12:06
Analyzer make:	Thermo 43iQ	Analyzer serial #:	1200326169

Calibration Data

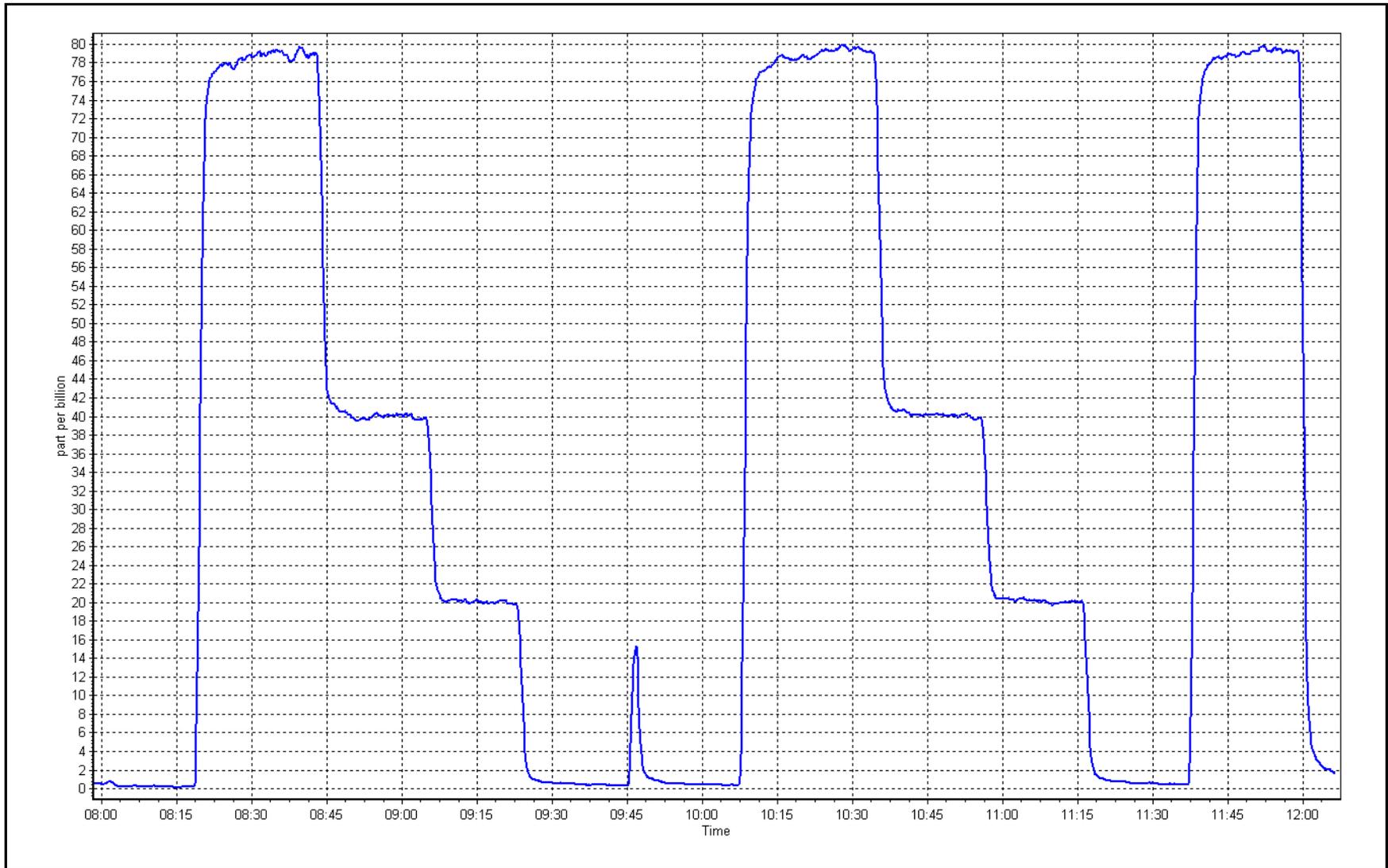
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.4	----	Correlation Coefficient	0.999987	≥0.995
80.0	79.4	1.0071	Slope	0.988966	0.90 - 1.10
40.0	40.0	0.9994	Intercept	0.342518	+/-3
20.0	20.0	1.0019			



H₂S Calibration Plot

Date: January 5, 2026

Location: Mannix





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	January 16, 2026	Last Cal Date:	December 4, 2025
Start time (MST):	10:22	End time (MST):	15:35
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC308040	Cal Gas Expiry Date:	October 22, 2032
CH4 Cal Gas Conc.	500.3 ppm	CH4 Equiv Conc.	1047.6 ppm
C3H8 Cal Gas Conc.	199.0 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	500.3 ppm	CH4 Equiv Conc.	1047.6 ppm
Removed C3H8 Conc.	199.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	5470
Zero Air Gen model:	API T701	Serial Number:	361

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 15005164381
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.57E-04	2.57E-04	NMHC SP Ratio:	4.84E-05
CH4 Retention time:	13.9	13.9	NMHC Peak Area:	180863
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	16.74	16.65	1.006
As found Mid point	4960	40.0	8.38	8.36	1.002
As found Low point	4980	20.0	4.19	4.16	1.007
New cylinder response					
Baseline Corr AF:	16.65	Prev response	16.72	*% change	-0.4%
Baseline Corr 2nd AF:	8.36	AF Slope:	0.994761	AF Intercept:	0.003690
Baseline Corr 3rd AF:	4.16	AF Correlation:	0.999996	<i>* = > +/-5% change initiates investigation</i>	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	16.74	16.60	1.008
Mid point	4960	40.0	8.38	8.34	1.005
Low point	4980	20.0	4.19	4.15	1.009
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	16.74	16.74	1.000
Average Correction Factor					1.008

Notes: No adjustments made.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	8.75	8.71	1.004
As found Mid point	4960	40.0	4.38	4.39	0.997
As found Low point	4980	20.0	2.19	2.18	1.006
New cylinder response					
Baseline Corr AF:	8.71	Prev response	8.71	*% change	0.0%
Baseline Corr 2nd AF:	4.39	AF Slope:	0.996512	AF Intercept:	0.004045
Baseline Corr 3rd AF:	2.18	AF Correlation:	0.999984	* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	8.75	8.69	1.006
Mid point	4960	40.0	4.38	4.37	1.002
Low point	4980	20.0	2.19	2.17	1.008
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	8.75	8.76	0.998
Average Correction Factor					1.005

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	7.99	7.94	1.007
As found Mid point	4960	40.0	4.00	3.97	1.007
As found Low point	4980	20.0	2.00	1.99	1.007
New cylinder response					
Baseline Corr AF:	7.94	Prev response	8.02	*% change	-1.0%
Baseline Corr 2nd AF:	3.97	AF Slope:	0.992747	AF Intercept:	0.000245
Baseline Corr 3rd AF:	1.99	AF Correlation:	1.000000	* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	7.99	7.91	1.011
Mid point	4960	40.0	4.00	3.97	1.008
Low point	4980	20.0	2.00	1.98	1.012
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	7.99	7.97	1.003
Average Correction Factor					1.010

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.998101	0.991922
THC Cal Offset:	0.013467	0.004501
CH ₄ Cal Slope:	1.001427	0.989460
CH ₄ Cal Offset:	0.009618	0.001249
NMHC Cal Slope:	0.995061	0.993950
NMHC Cal Offset:	0.003849	0.002853

Calibration Performed By: Parampreet Kaur



Wood Buffalo Environmental Association

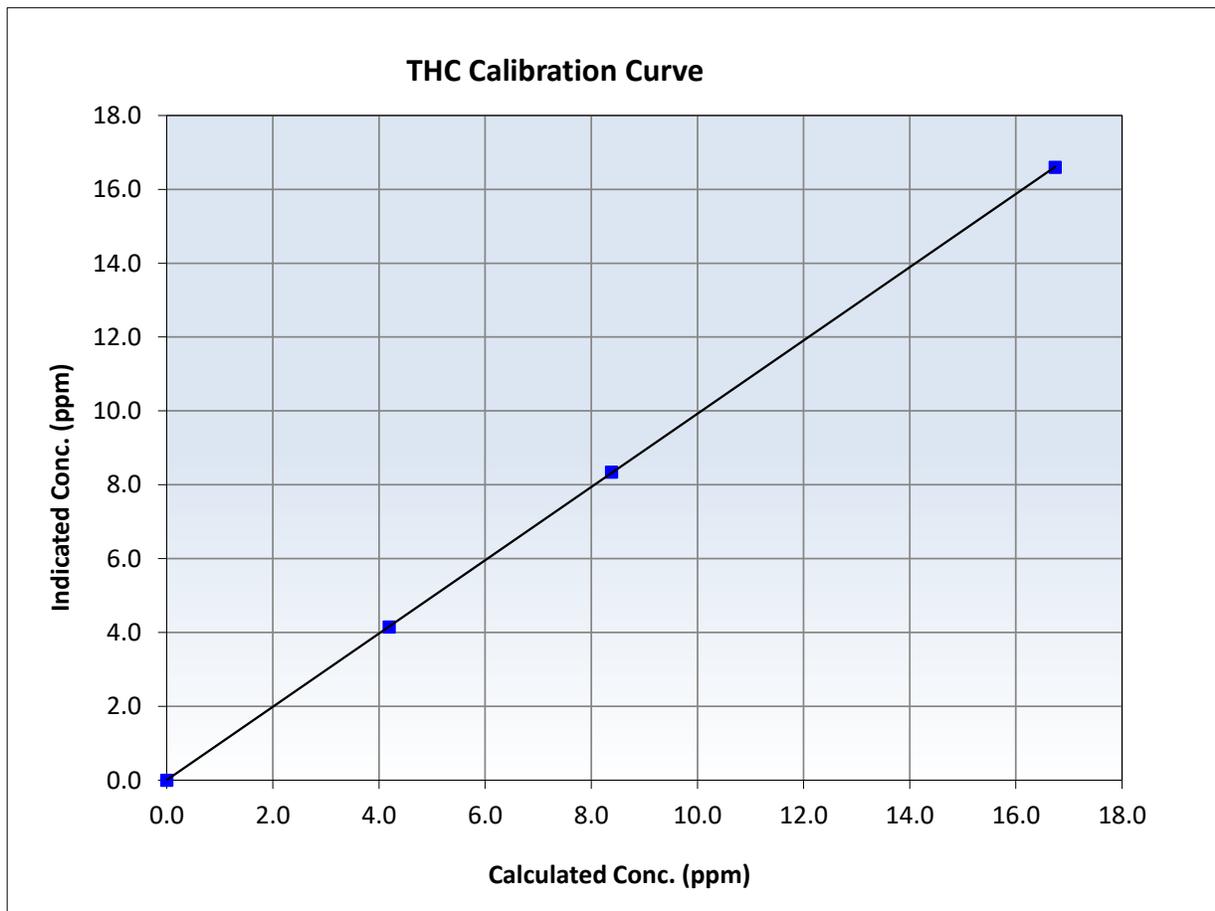
THC Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 4, 2025
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:22	End Time (MST):	15:35
Analyzer make:	Thermo 55i	Analyzer serial #:	15005164381

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999995	<i>≥0.995</i>
16.74	16.60	1.0084	Slope	0.991922	<i>0.90 - 1.10</i>
8.38	8.34	1.0047	Intercept	0.004501	<i>+/-0.5</i>
4.19	4.15	1.0094			





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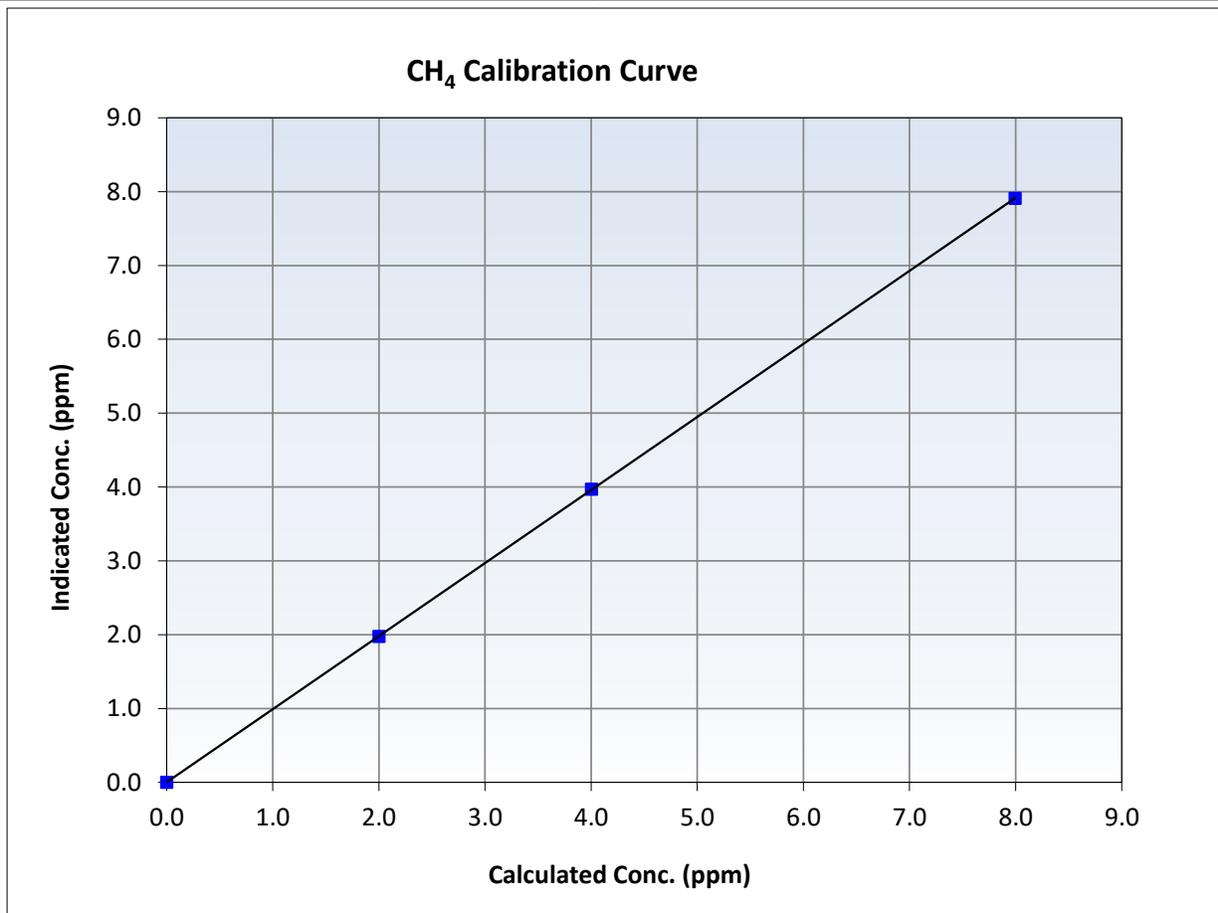
CH₄ Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 4, 2025
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:22	End Time (MST):	15:35
Analyzer make:	Thermo 55i	Analyzer serial #:	15005164381

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999998	<i>≥0.995</i>
7.99	7.91	1.0109	Slope	0.989460	<i>0.90 - 1.10</i>
4.00	3.97	1.0084	Intercept	0.001249	<i>+/-0.5</i>
2.00	1.98	1.0117			





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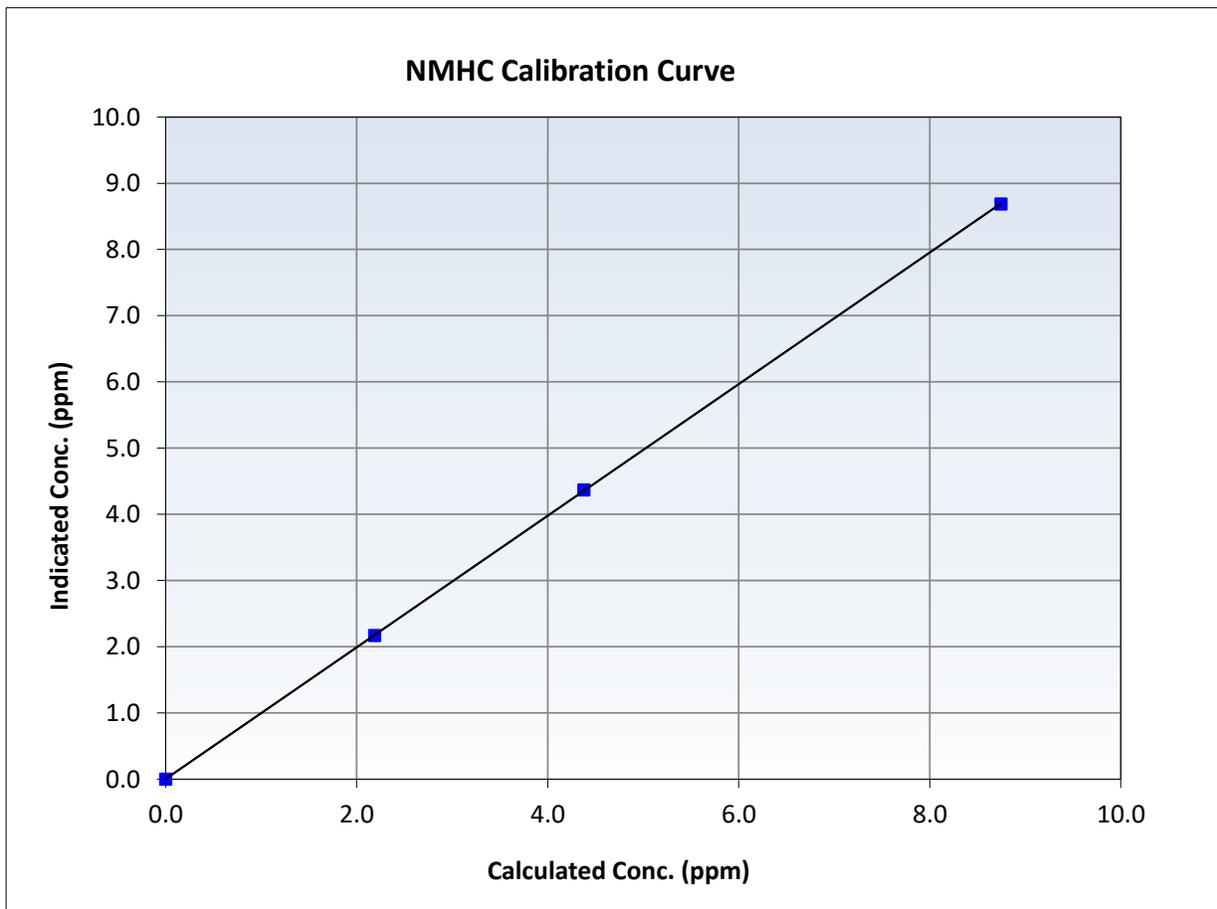
NMHC Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 4, 2025
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:22	End Time (MST):	15:35
Analyzer make:	Thermo 55i	Analyzer serial #:	15005164381

Calibration Data

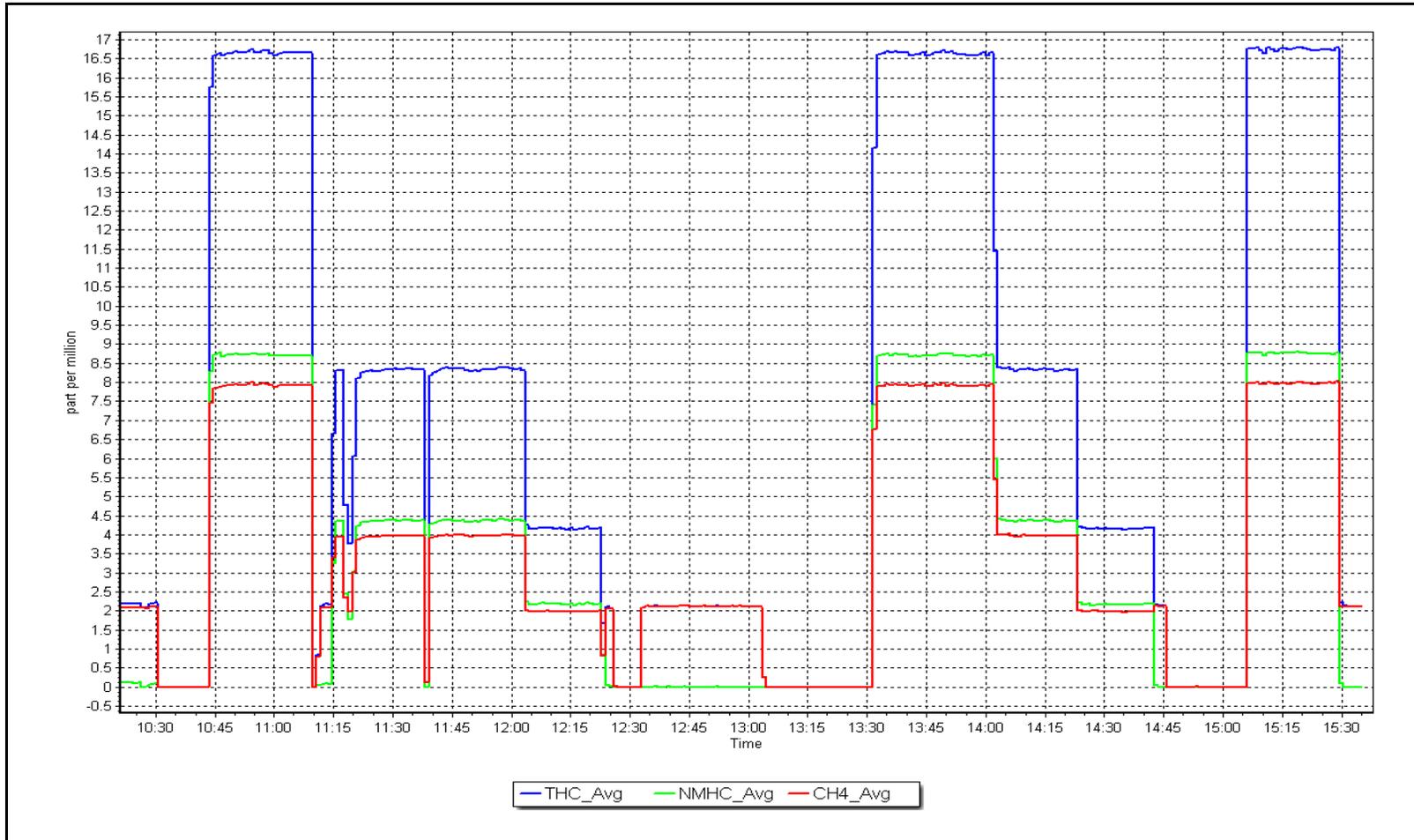
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999992	<i>≥0.995</i>
8.75	8.69	1.0065	Slope	0.993950	<i>0.90 - 1.10</i>
4.38	4.37	1.0018	Intercept	0.002853	<i>+/-0.5</i>
2.19	2.17	1.0078			



NMHC Calibration Plot

Date: January 16, 2026

Location: Mannix





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS06
PATRICIA MCINNES
JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	January 16, 2026	Last Cal Date:	December 19, 2025
Start time (MST):	10:21	End time (MST):	13:25
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.08	ppm	Cal Gas Exp Date:	October 22, 2032
Cal Gas Cylinder #:	CC255448			
Removed Cal Gas Conc:	50.08	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Model:	API T700		Serial Number:	3566
Zero Air Gen Model:	API T701		Serial Number:	4602

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1160290013
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.999863	1.006127	Backgd or Offset:	18.6	18.6
Calibration intercept:	1.904020	1.762901	Coeff or Slope:	0.931	0.931

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	79.8	799.3	803.0	0.996
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	802.9	Previous response	801.1	*% change	0.2%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4920	79.8	799.3	805.0	0.993
Mid point	4960	39.9	399.6	405.4	0.986
Low point	4980	20.0	200.3	204.1	0.981
As left zero	5000	0.0	0.0	0.4	----
As left span	4920	79.8	799.3	807.0	0.990
Average Correction Factor:					0.987

Notes: Changed the inlet filter after as founds. No adjustment made.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

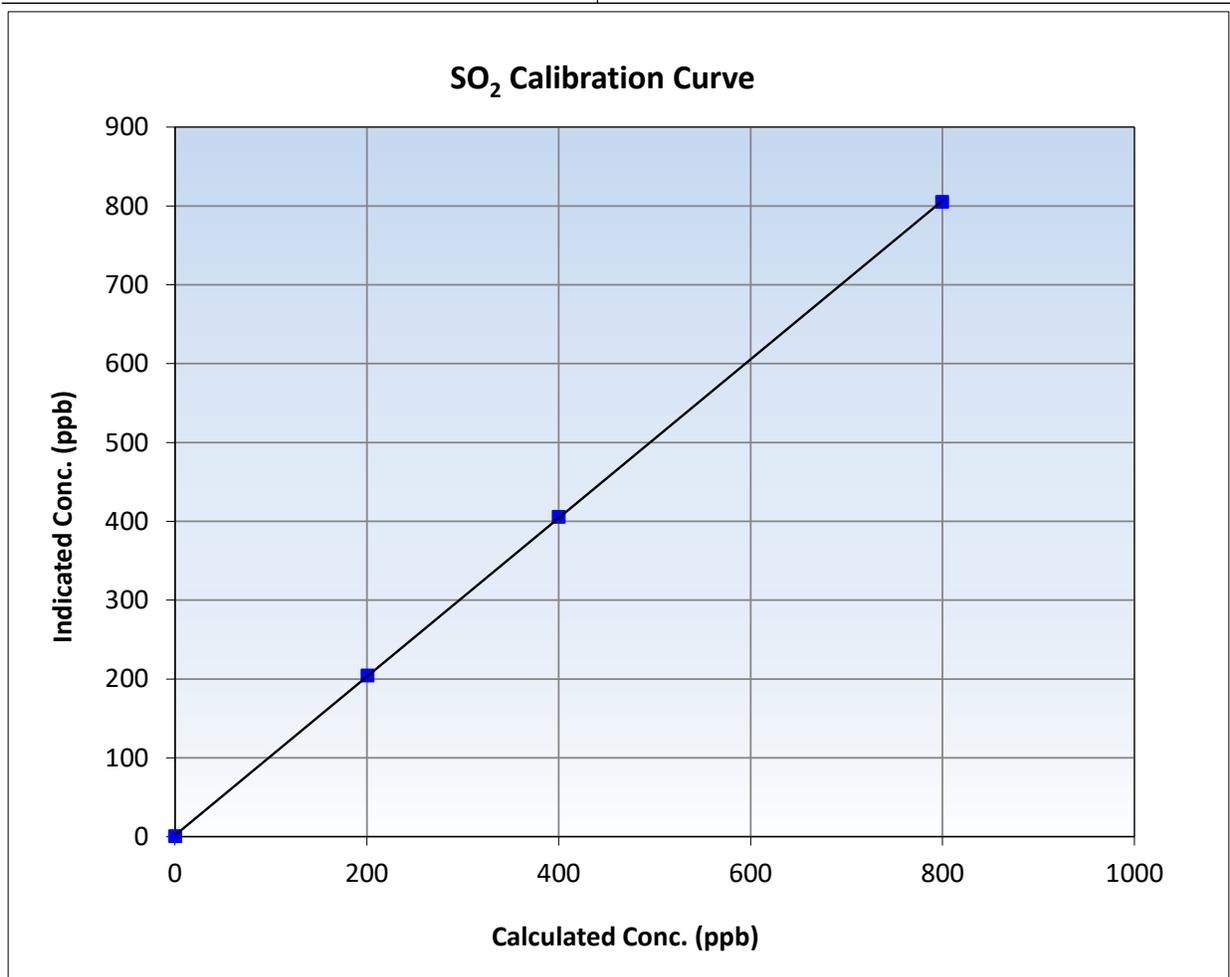
SO₂ Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 19, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:21	End Time (MST):	13:25
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290013

Calibration Data

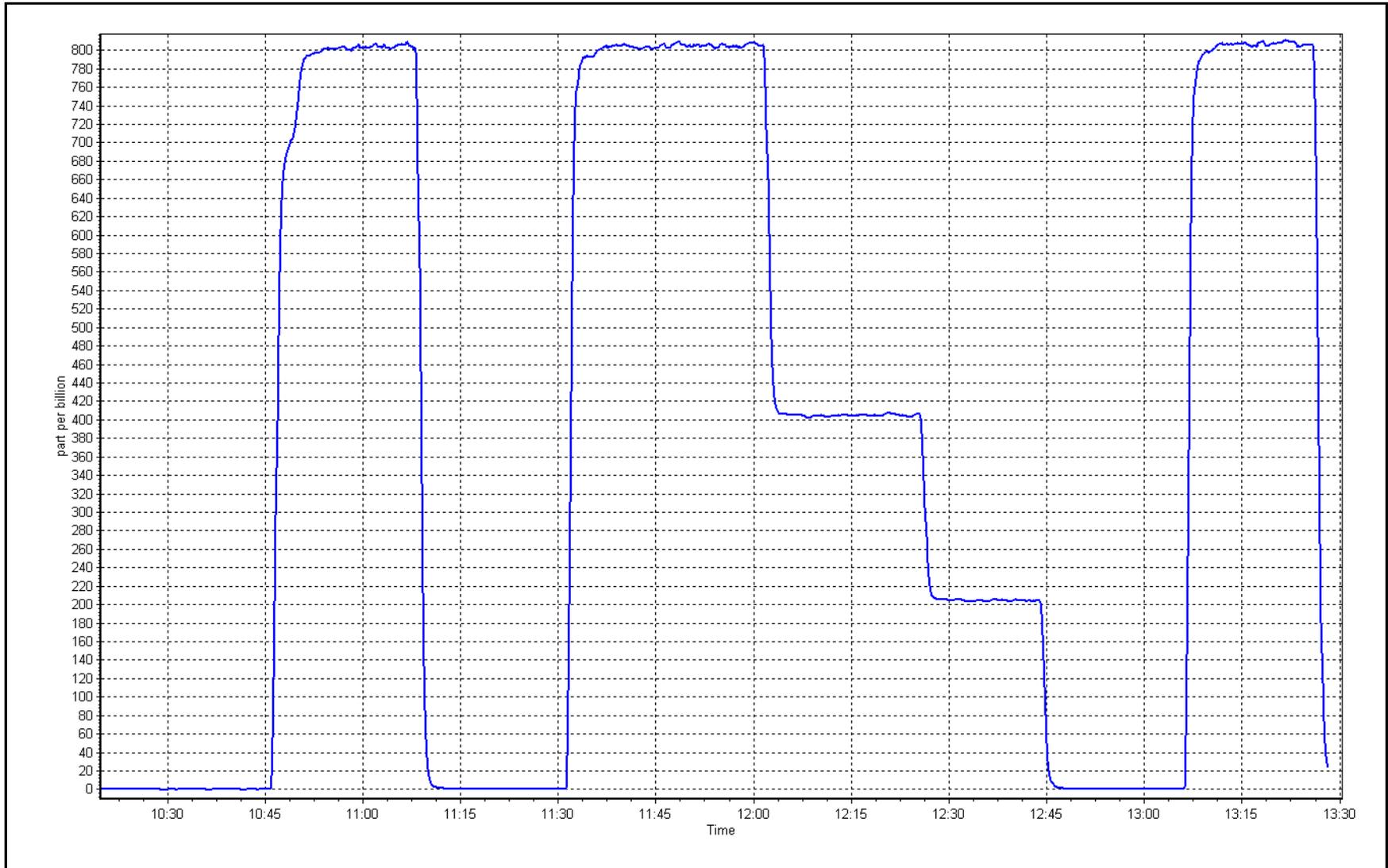
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.4	----	Correlation Coefficient	0.999984	≥0.995
799.3	805.0	0.9929	Slope	1.006127	0.90 - 1.10
399.6	405.4	0.9858	Intercept	1.762901	+/-30
200.3	204.1	0.9815			



SO2 Calibration Plot

Date: January 16, 2026

Location: Patricia McInnes





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	January 12, 2026	Last Cal Date:	December 9, 2025
Start time (MST):	10:25	End time (MST):	14:33
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.760	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	DT0014585			
Removed Cal Gas Conc:	4.760	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	3566
ZAG Make/Model:	API T701		Serial Number:	4602

Analyzer Information

Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1218153358
Converter make:	CDN-101	Converter serial #:	621
Analyzer Range	0 - 100 ppb	Converter Temp:	825 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.003687	0.997256	Backgd or Offset:	1.99	1.95
Calibration intercept:	0.160000	0.260000	Coeff or Slope:	1.146	1.115

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.2	----
As found High point	4916	84.0	80.0	83.5	0.960
As found Mid point	4958	42.0	40.0	42.1	0.954
As found Low point	4979	21.0	20.0	21.1	0.957
New cylinder response					
Baseline Corr As found:	83.3	Prev response:	80.42	*% change:	3.5%
Baseline Corr 2nd AF pt:	41.9	AF Slope:	1.041702	AF Intercept:	0.280000
Baseline Corr 3rd AF pt:	20.9	AF Correlation:	0.999989	* = > +/-5% change initiates investigation	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4916	84.0	80.0	79.9	1.001
Mid point	4958	42.0	40.0	40.5	0.987
Low point	4979	21.0	20.0	19.9	1.005
As left zero	5000	0.0	0.0	0.4	----
As left span	4916	84.0	80.0	80.0	1.000
SO2 Scrubber Check				0.1	
Date of last scrubber change:		Monday, December 20, 2021		Ave Corr Factor	0.998
Date of last converter efficiency test:					

Notes: Sox scrubber ran after calibrator zero. Adjusted span only.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

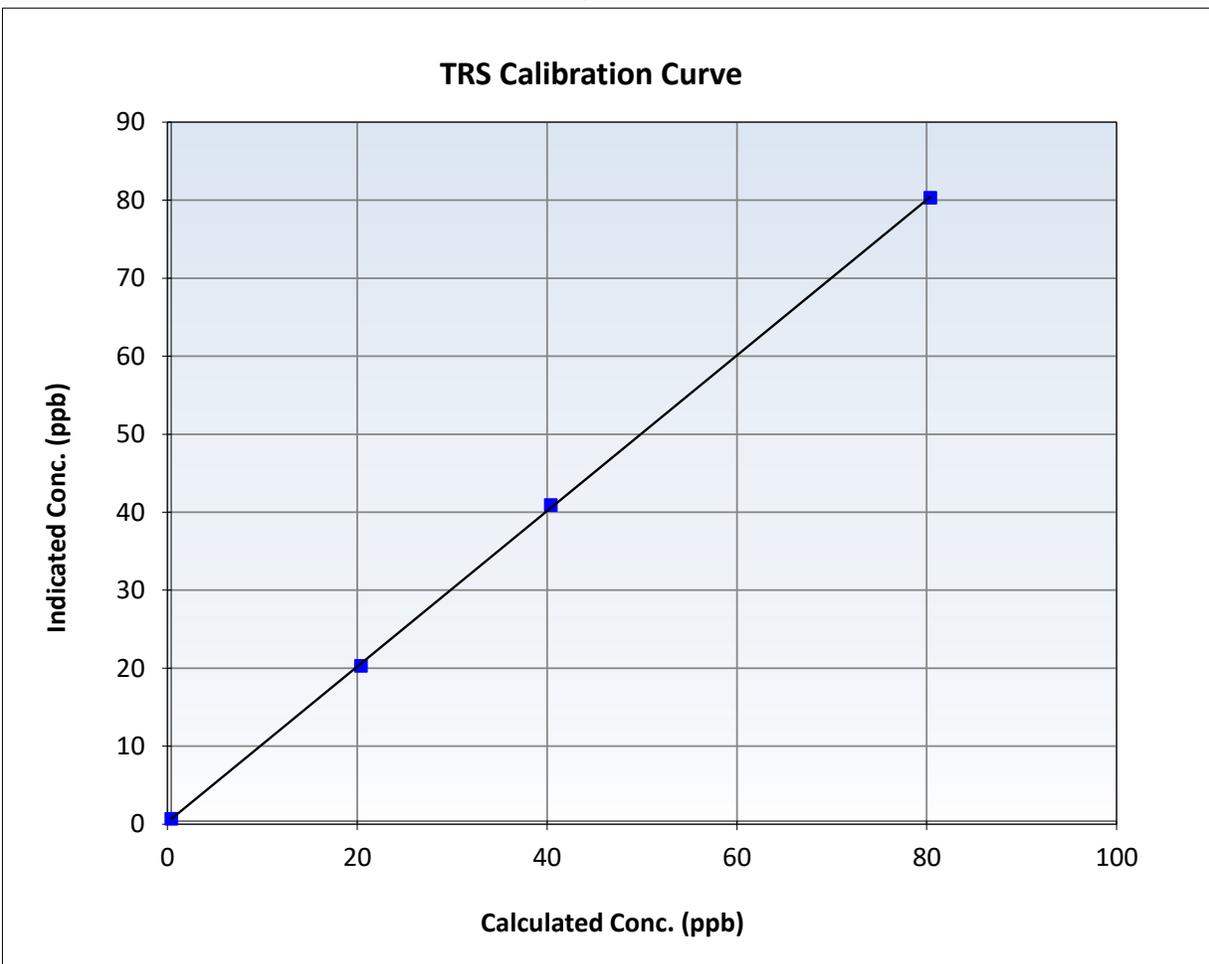
TRS Calibration Summary

Station Information

Calibration Date:	January 12, 2026	Previous Calibration:	December 9, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:25	End Time (MST):	14:33
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1218153358

Calibration Data

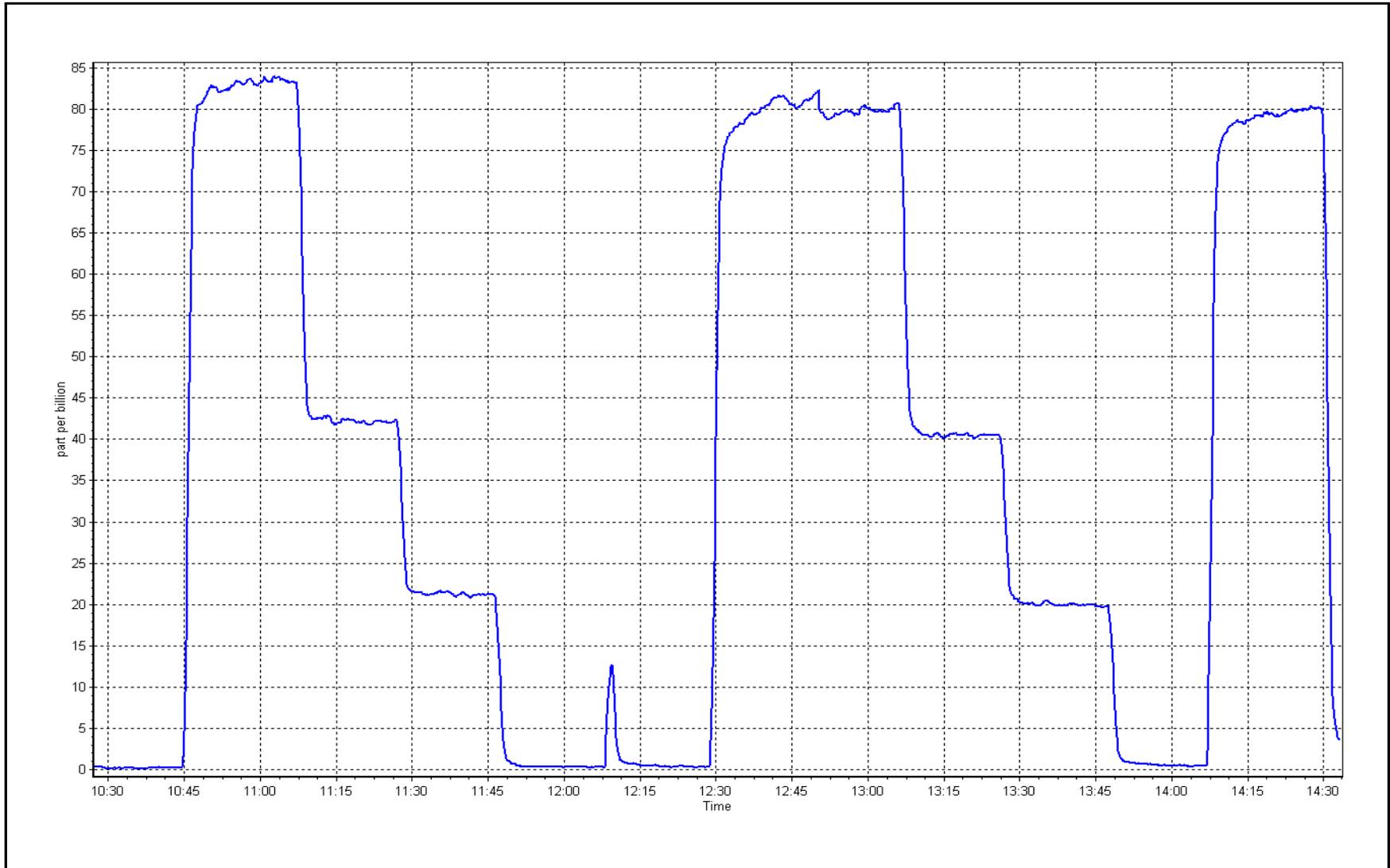
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.3	----	Correlation Coefficient	0.999932	≥ 0.995
80.0	79.9	1.0009	Slope	0.997256	$0.90 - 1.10$
40.0	40.5	0.9873	Intercept	0.260000	± 3
20.0	19.9	1.0046			



TRS Calibration Plot

Date: January 12, 2026

Location: Patricia McInnes





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	January 16, 2026	Last Cal Date:	December 19, 2025
Start time (MST):	10:21	End time (MST):	13:25
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC255448	Cal Gas Expiry Date:	October 22, 2032
CH ₄ Cal Gas Conc.	501.4 ppm	CH ₄ Equiv Conc.	1049.5 ppm
C ₃ H ₈ Cal Gas Conc.	199.3 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH ₄ Conc.	501.4 ppm	CH ₄ Equiv Conc.	1049.5 ppm
Removed C ₃ H ₈ Conc.	199.3 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3566
Zero Air Gen model:	API T701	Serial Number:	4602

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1118148494
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH ₄ SP Ratio:	2.65E-04	2.60E-04	NMHC SP Ratio:	5.25E-05	5.22E-05
CH ₄ Retention time:	14.2	14.2	NMHC Peak Area:	166553	167538
Zero Chromatogram:	ON	ON	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	16.75	16.95	0.988
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.95	Prev response	16.77	*% change	1.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	16.75	16.75	1.000
Mid point	4960	39.9	8.37	8.35	1.003
Low point	4980	20.0	4.20	4.17	1.007
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	16.75	16.71	1.002
Average Correction Factor					1.003

Notes: Changed the inlet filter after as founds. Adjusted span only.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	8.75	8.82	0.992
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.82	Prev response	8.67	*% change	1.7%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	8.75	8.75	1.000
Mid point	4960.1	39.9	4.37	4.41	0.993
Low point	4980	20.0	2.19	2.23	0.983
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	8.75	8.75	0.999
Average Correction Factor					0.992

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	8.00	8.14	0.983
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.14	Prev response	8.10	*% change	0.5%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	8.00	8.00	1.001
Mid point	4960.1	39.9	4.00	3.94	1.014
Low point	4980	20.0	2.01	1.94	1.034
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	8.00	7.96	1.005
Average Correction Factor					1.016

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.002437	1.000424
THC Cal Offset:	-0.021200	-0.016193
CH ₄ Cal Slope:	1.016787	1.001474
CH ₄ Cal Offset:	-0.037824	-0.037192
NMHC Cal Slope:	0.989113	0.999228
NMHC Cal Offset:	0.016625	0.021400

Calibration Performed By: Jan Castro



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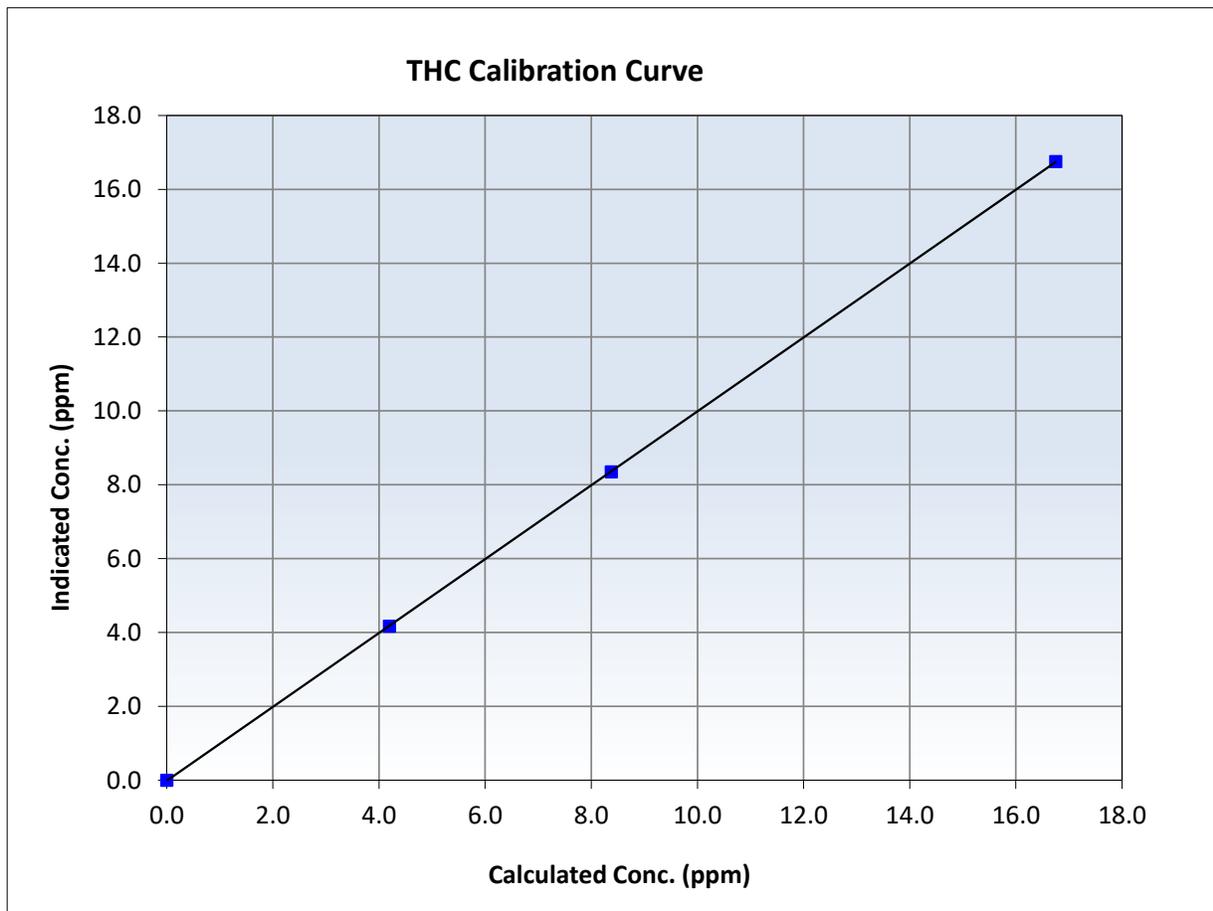
THC Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 19, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:21	End Time (MST):	13:25
Analyzer make:	Thermo 55i	Analyzer serial #:	1118148494

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999996	<i>≥0.995</i>
16.75	16.75	1.0000	Slope	1.000424	<i>0.90 - 1.10</i>
8.37	8.35	1.0030	Intercept	-0.016193	<i>+/-0.5</i>
4.20	4.17	1.0067			





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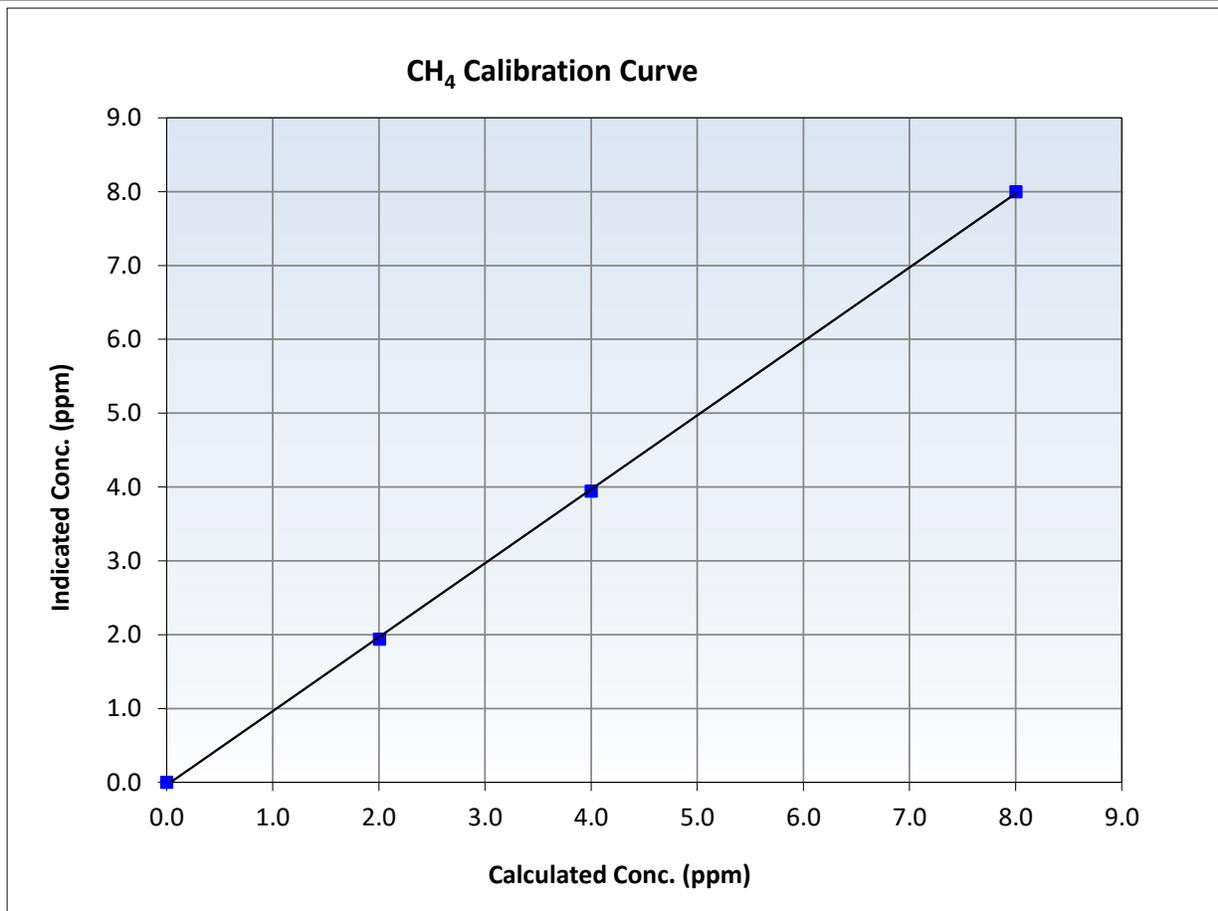
CH₄ Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 19, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:21	End Time (MST):	13:25
Analyzer make:	Thermo 55i	Analyzer serial #:	1118148494

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999899	<i>≥0.995</i>
8.00	8.00	1.0005	Slope	1.001474	<i>0.90 - 1.10</i>
4.00	3.94	1.0145	Intercept	-0.037192	<i>+/-0.5</i>
2.01	1.94	1.0343			





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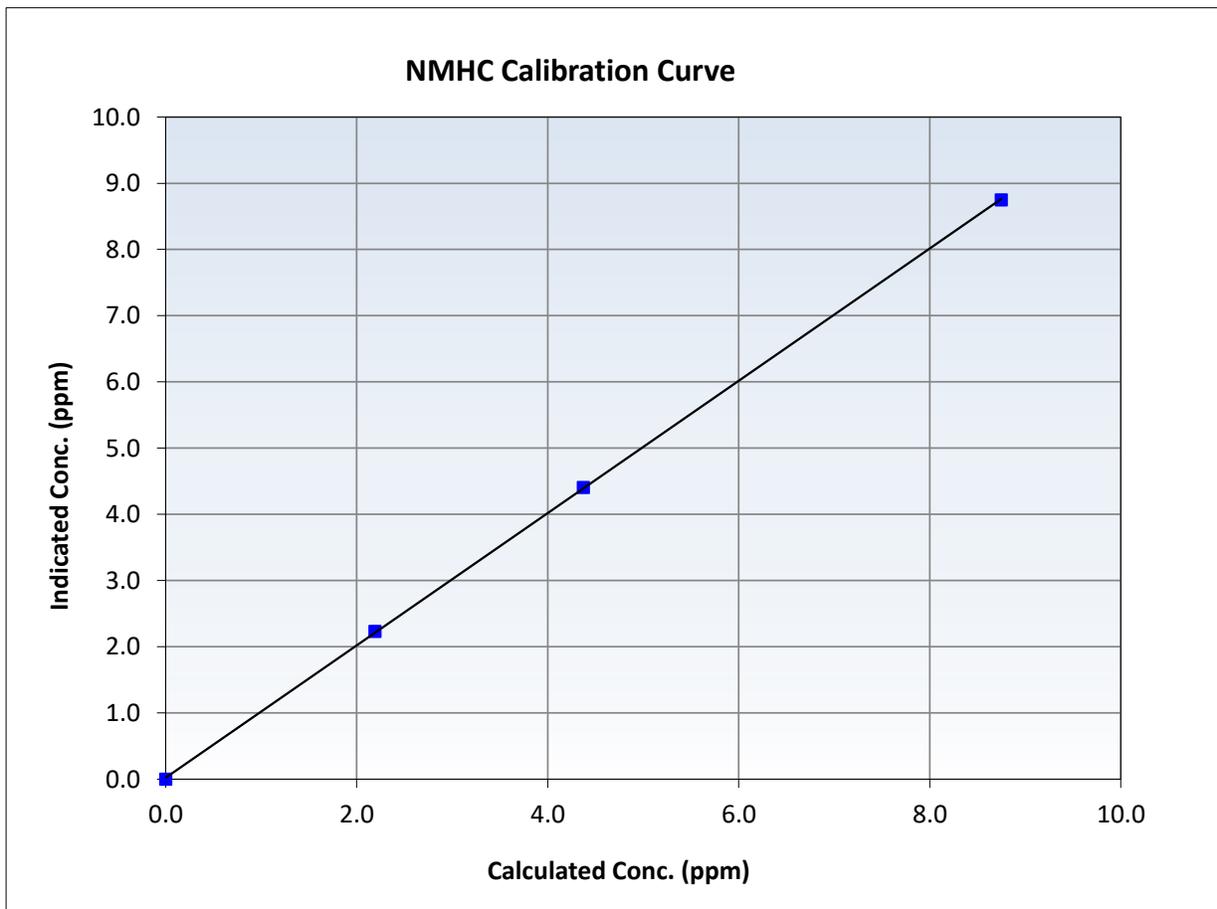
NMHC Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 19, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:21	End Time (MST):	13:25
Analyzer make:	Thermo 55i	Analyzer serial #:	1118148494

Calibration Data

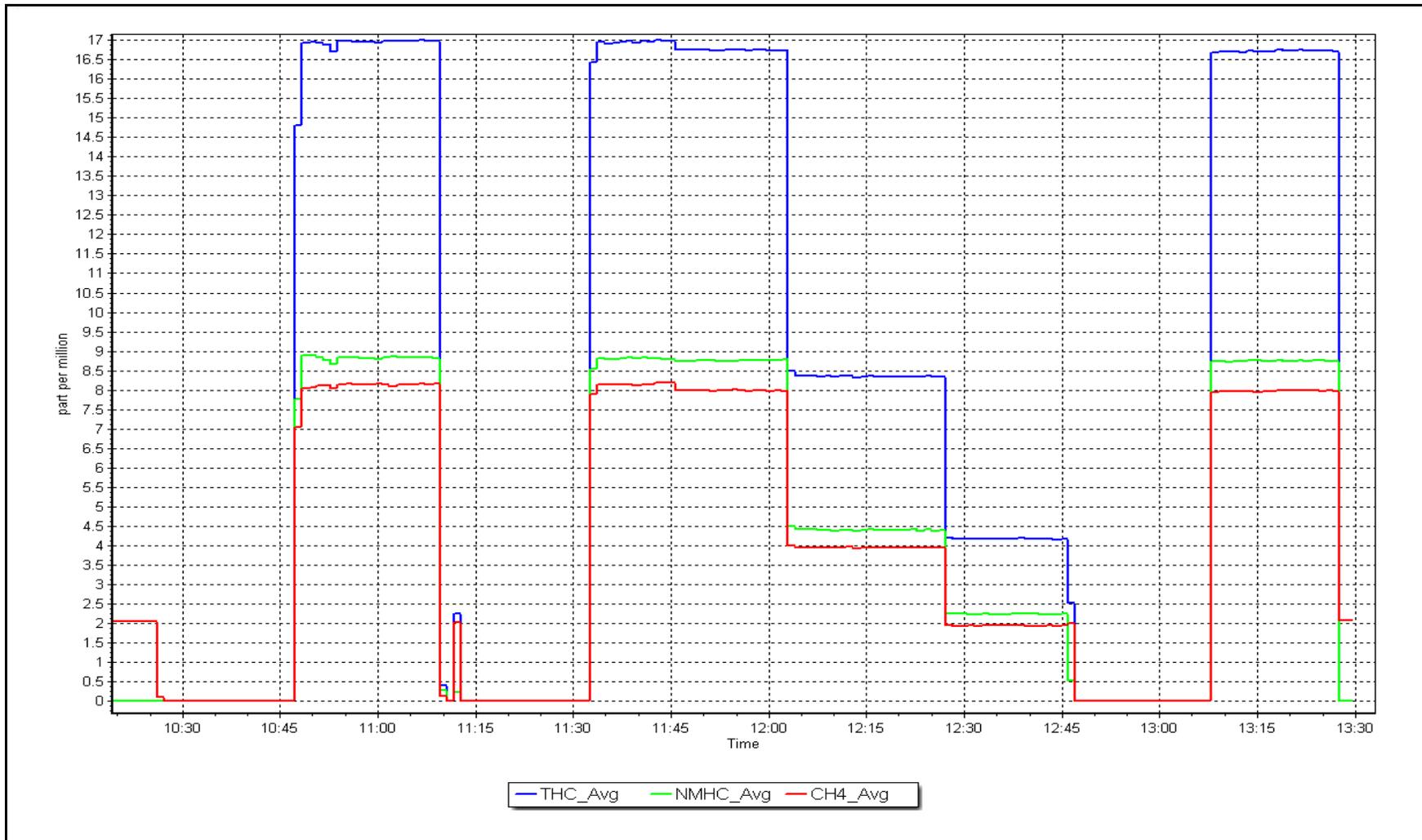
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999972	<i>≥0.995</i>
8.75	8.75	0.9997	Slope	0.999228	<i>0.90 - 1.10</i>
4.37	4.41	0.9927	Intercept	0.021400	<i>+/-0.5</i>
2.19	2.23	0.9827			



NMHC Calibration Plot

Date: January 16, 2026

Location: Patricia McInnes





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Patricia McInnes
 Station number: AMS 06
 Calibration Date: January 20, 2026
 Last Cal Date: December 5, 2025
 Start time (MST): 10:24
 End time (MST): 15:22
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0036234
 NOX Cal Gas Conc: 62.2 ppm
 Removed Cylinder #:
 Removed Gas NOX Conc: 62.20 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701
 Cal Gas Expiry Date: July 22, 2032
 NO Cal Gas Conc: 61.90 ppm
 Removed Gas Exp Date:
 Removed Gas NO Conc: 61.90 ppm
 NO gas Diff:
 Serial Number: 5240
 Serial Number: 4602

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.0	0.2	-0.2	----	----
AF High point	4935	64.6	803.7	799.8	3.9	813.0	805.0	8.1	0.9885	0.9938
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 805.6 ppb	NO = 800.5 ppb	<i>* = > +/-5% change initiates investigation</i>				*Percent Change	NO _x = 0.9%		
Baseline Corr 1st pt	NO _x = 813.0 ppb	NO = 804.8 ppb	<u>As Found Statistics</u>				*Percent Change	NO = 0.5%		
Baseline Corr 2nd pt	NO _x = NA ppb	NO = NA ppb	As found	NO _x r ² :		Nx SI:	Nx Int:			
Baseline Corr 3rd pt	NO _x = NA ppb	NO = NA ppb	As found	NO r ² :		NO SI:	NO Int:			
			As found	NO ₂ r ² :		NO ₂ SI:	NO ₂ Int:			

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1172750022

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.999018	0.999824
NO _x Cal Offset:	2.671459	0.412722
NO Cal Slope:	0.999712	1.000067
NO Cal Offset:	0.873162	-0.725906
NO ₂ Cal Slope:	1.002366	1.003465
NO ₂ Cal Offset:	0.167588	0.630013

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.878	0.871	NO bkgnd or offset:	3.5	3.5
NOX coeff or slope:	0.998	0.998	NOX bkgnd or offset:	3.9	3.8
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	161.2	160.5

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.7	0.5	0.2	----	----
High point	4935	64.6	803.7	799.8	3.9	803.8	799.6	4.3	0.9999	1.0003
Mid point	4968	32.3	401.8	399.9	1.9	402.9	399.0	3.9	0.9972	1.0021
Low point	4984	16.2	201.5	200.5	1.0	201.0	198.3	2.7	1.0026	1.0113
As left zero	5000	0.0	0.0	0.0	0.0	0.8	0.4	0.3	----	----
As left span	4935	64.6	803.7	397.4	406.3	798.5	397.4	401.1	1.0065	1.0000
Average Correction Factor									0.9999	1.0046

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.2	----	----
High GPT point	792.4	391.8	404.5	406.2	0.9958	100.4%
Mid GPT point	792.4	595.2	201.1	202.9	0.9910	100.9%
Low GPT point	792.4	694.4	101.9	103.1	0.9881	101.2%
Average Correction Factor					0.9916	100.8%

Notes:

Changed the inlet filter after as founds. Span adjusted.

Calibration Performed By:

Param Kaur



Wood Buffalo Environmental Association

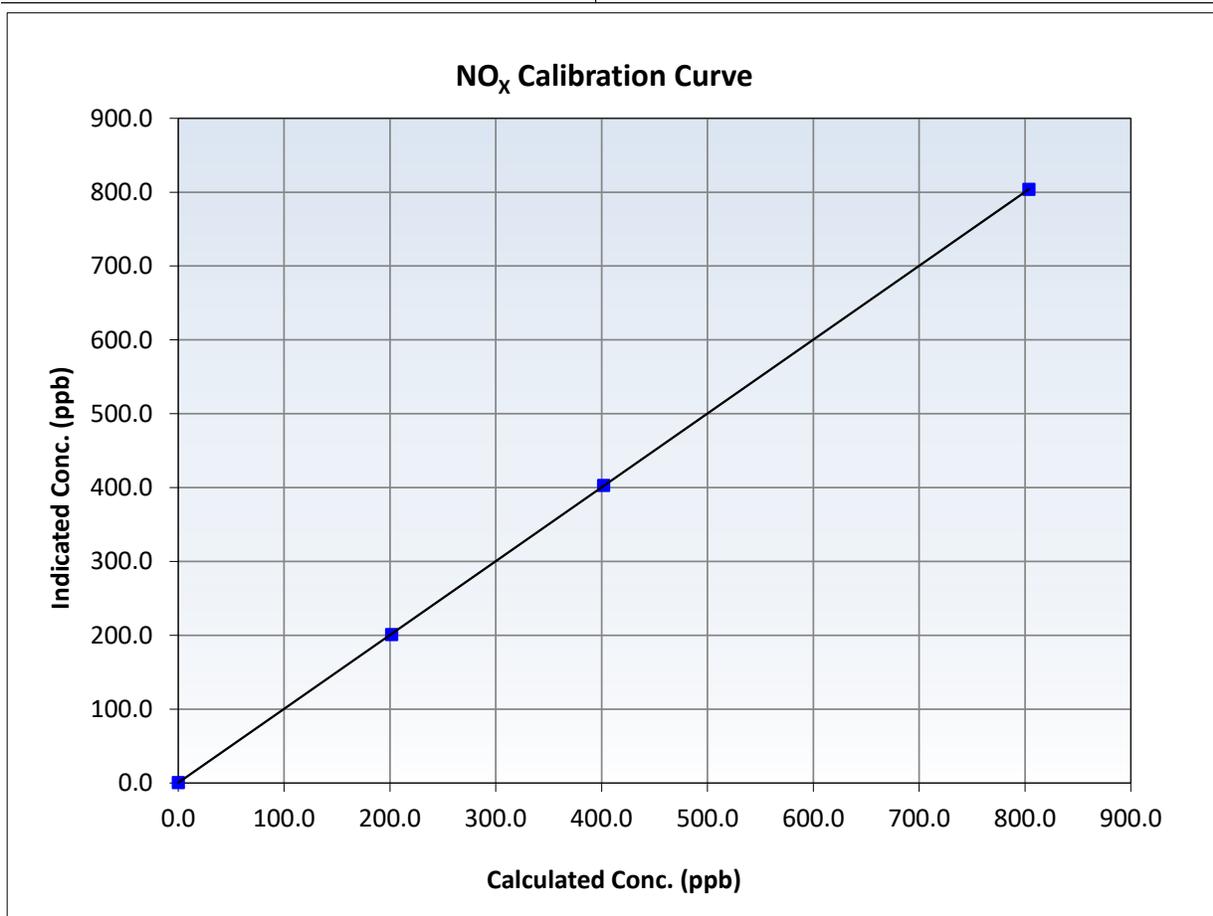
NO_x Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 5, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:24	End Time (MST):	15:22
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.7	----	Correlation Coefficient	0.999996	<i>≥0.995</i>
803.7	803.8	0.9999	Slope	0.999824	<i>0.90 - 1.10</i>
401.8	402.9	0.9972	Intercept	0.412722	<i>+/-20</i>
201.5	201.0	1.0026			





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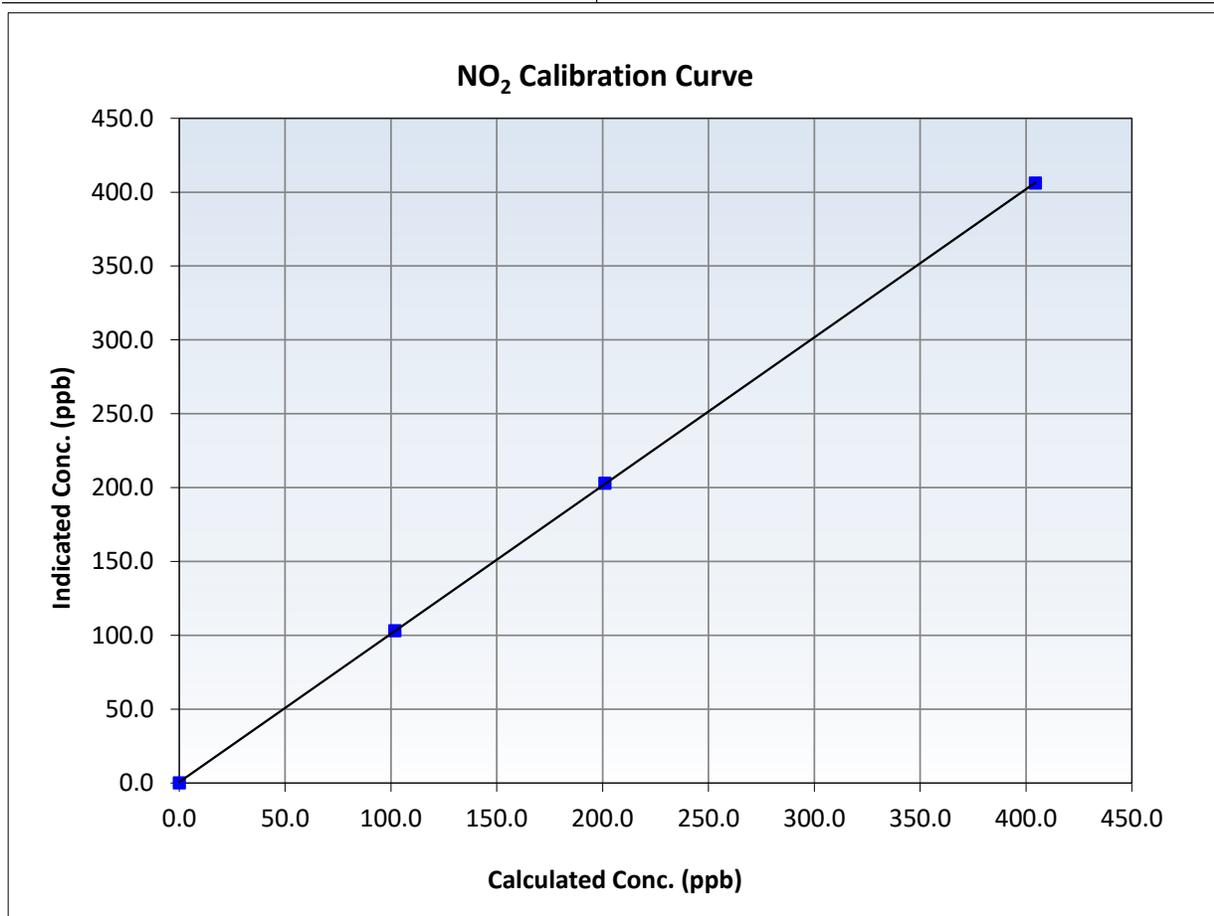
NO₂ Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 5, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:24	End Time (MST):	15:22
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.2	----	Correlation Coefficient	0.999993	<i>≥0.995</i>
404.5	406.2	0.9958	Slope	1.003465	<i>0.90 - 1.10</i>
201.1	202.9	0.9910	Intercept	0.630013	<i>+/-20</i>
101.9	103.1	0.9881			





Wood Buffalo Environmental Association

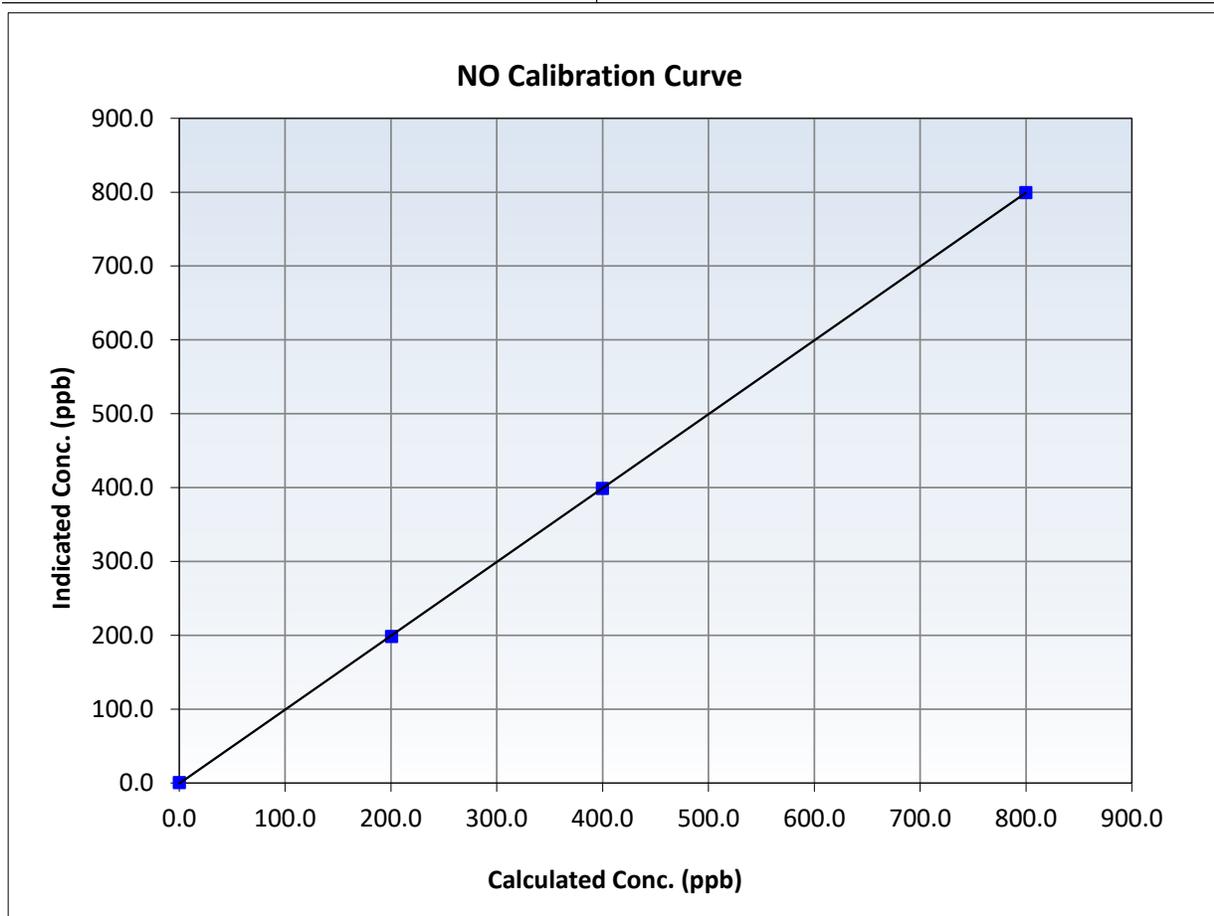
NO Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 5, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:24	End Time (MST):	15:22
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

Calibration Data

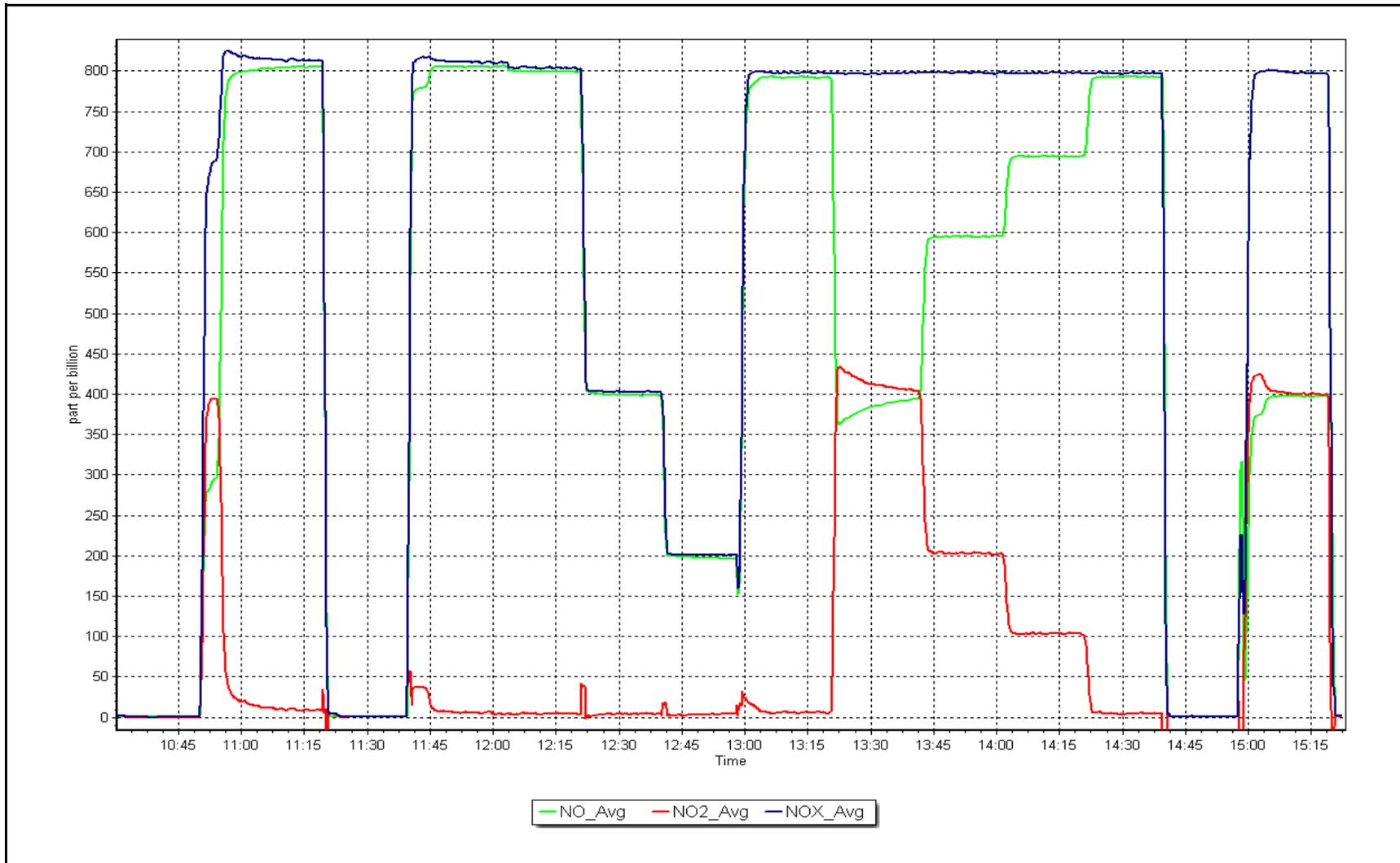
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.5	----	Correlation Coefficient	0.999988	<i>≥0.995</i>
799.8	799.6	1.0003	Slope	1.000067	<i>0.90 - 1.10</i>
399.9	399.0	1.0021	Intercept	-0.725906	<i>+/-20</i>
200.5	198.3	1.0113			



NO_x Calibration Plot

Date: January 20, 2026

Location: Patricia McInnes





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	January 9, 2026	Last Cal Date:	December 22, 2025
Start time (MST):	10:01	End time (MST):	11:19
Reason:	Removal		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	3566
Calibrator Make/Model:	API T700	Serial Number:	4602
ZAG Make/Model:	API T701		

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1300156234
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006571		Backgd or Offset:	-1.1
Calibration intercept:	0.700000		Coeff or Slope:	1.020

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	800.0	0.0	0.2	----
As found High point	5000	1045.8	400.0	403.0	0.993
As found Mid point	5000	832.9	200.0	201.7	0.993
As found Low point	5000	706.8	100.0	101.4	0.988
Baseline Corr As found:	402.8	Previous response	403.3	*% change	-0.1%
Baseline Corr 2nd AF pt:	201.5	AF Slope:	1.006600	AF Intercept:	0.420000
Baseline Corr 3rd AF pt:	101.2	AF Correlation:	0.999998	<i>* = > +/-5% change initiates investigation</i>	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor

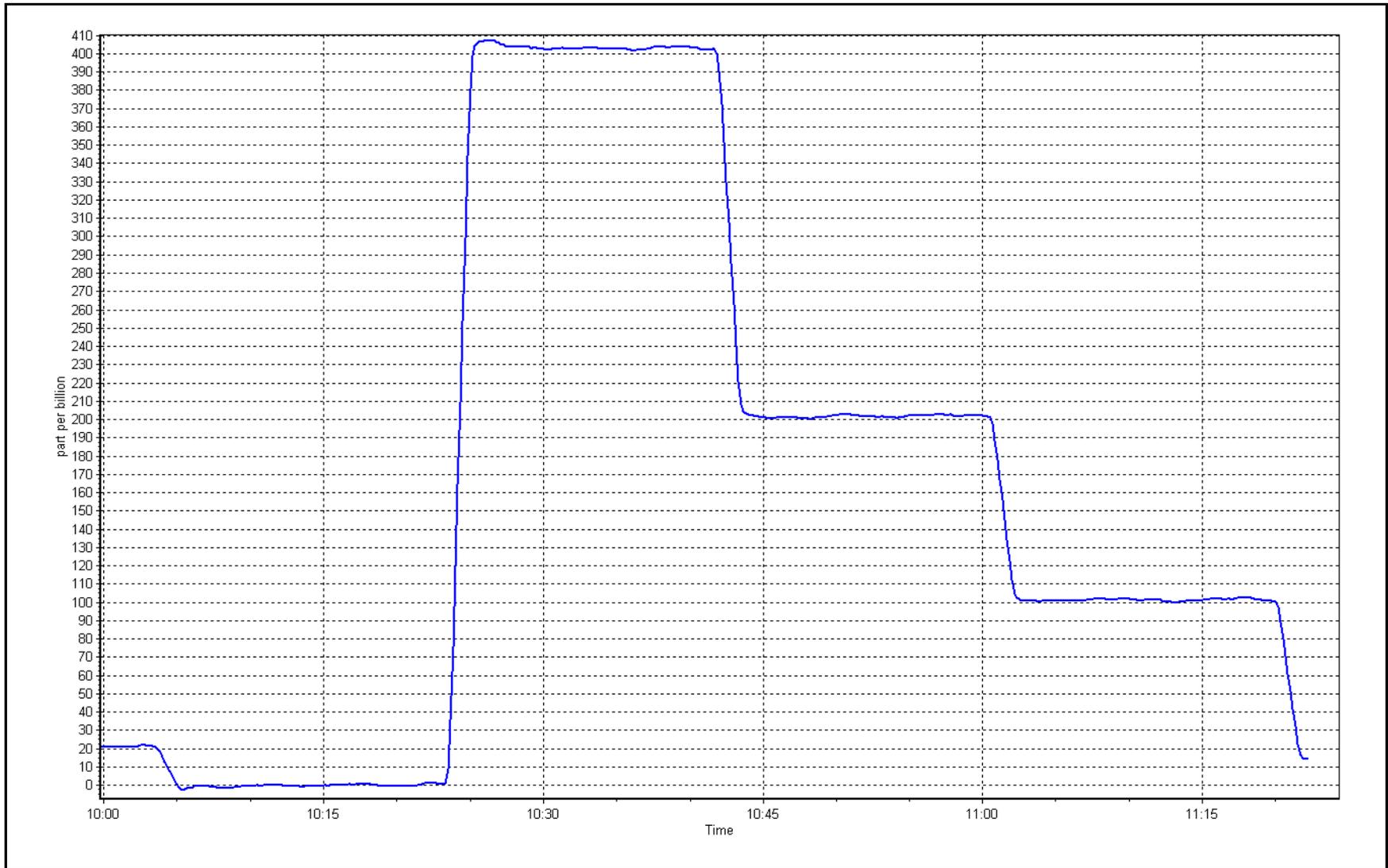
Notes: Removal calibrations done due to noisy zero. Will do further troubleshooting at the shop.

Calibration Performed By: Jan Castro

O₃ Calibration Plot

Date: January 9, 2026

Location: Patricia McInnes





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	January 9, 2026	Last Cal Date:	
Start time (MST):	11:59	End time (MST):	13:59
Reason:	Install		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	3566
Calibrator Make/Model:	API T700	Serial Number:	4602
ZAG Make/Model:	API T701		

Analyzer Information

Analyzer make:	Teledyne API T400	Analyzer serial #:	7046
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:		1.004371	Backgd or Offset:		2.8
Calibration intercept:		0.360000	Coeff or Slope:		1.023

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero					<i>Limit = 0.90-1.10</i>
As found High point					
As found Mid point					
As found Low point					
Baseline Corr As found:	NA	Previous response	NA	*% change	NA
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero))
Calibrator zero	5000	800.0	0.0	0.1	----
High point	5000	1045.7	400.0	402.0	0.995
Mid point	5000	832.7	200.0	201.3	0.994
Low point	5000	707.3	100.0	101.1	0.989
As left zero	5000	800.0	0.0	0.2	----
As left span	5000	1047.2	400.0	405.0	0.988
Average Correction Factor					0.993

Notes: Sample inlet filter was changed before calibrator zero. Adjusted zero and span.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

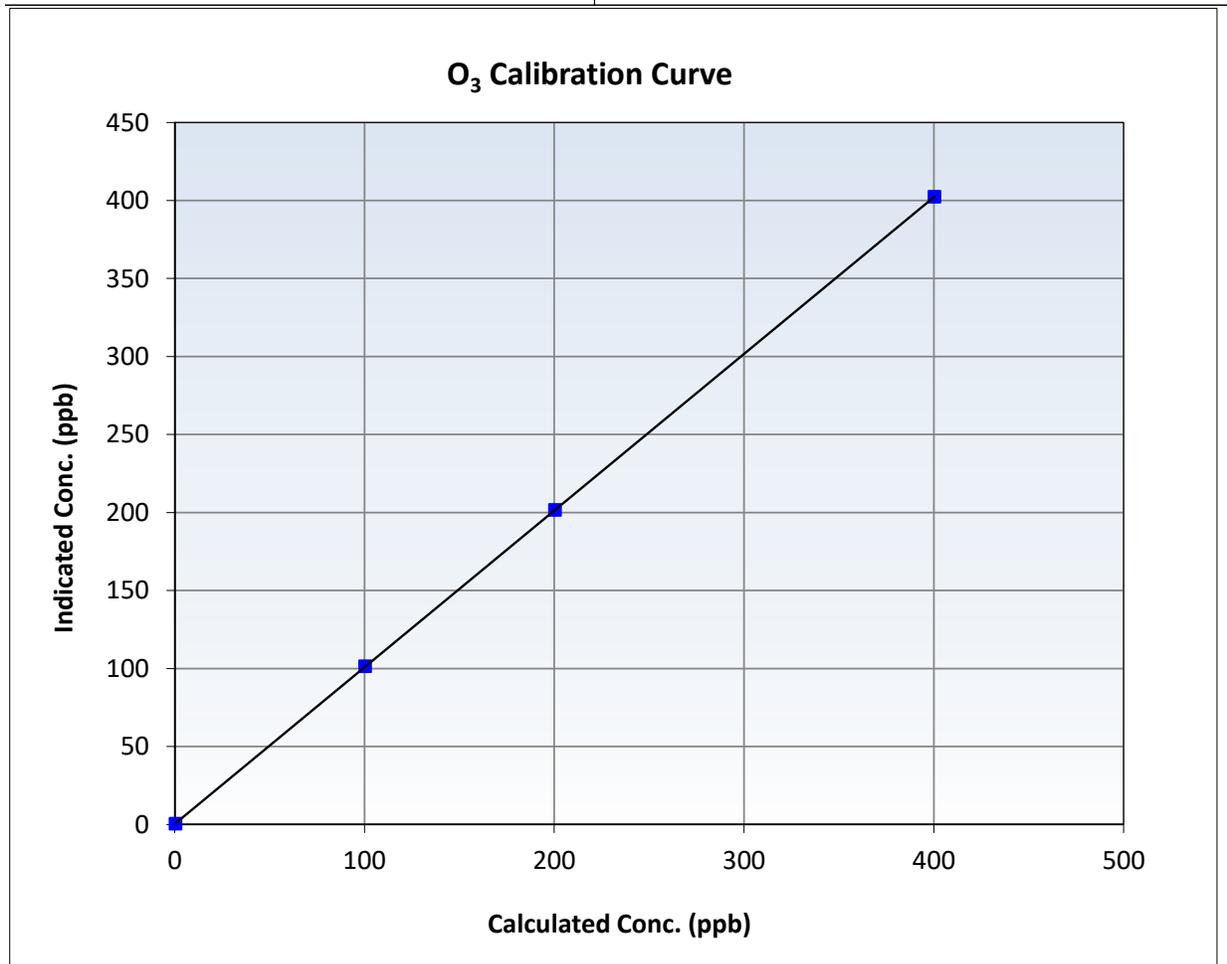
O₃ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	11:59	End Time (MST):	13:59
Analyzer make:	Teledyne API T400	Analyzer serial #:	7046

Calibration Data

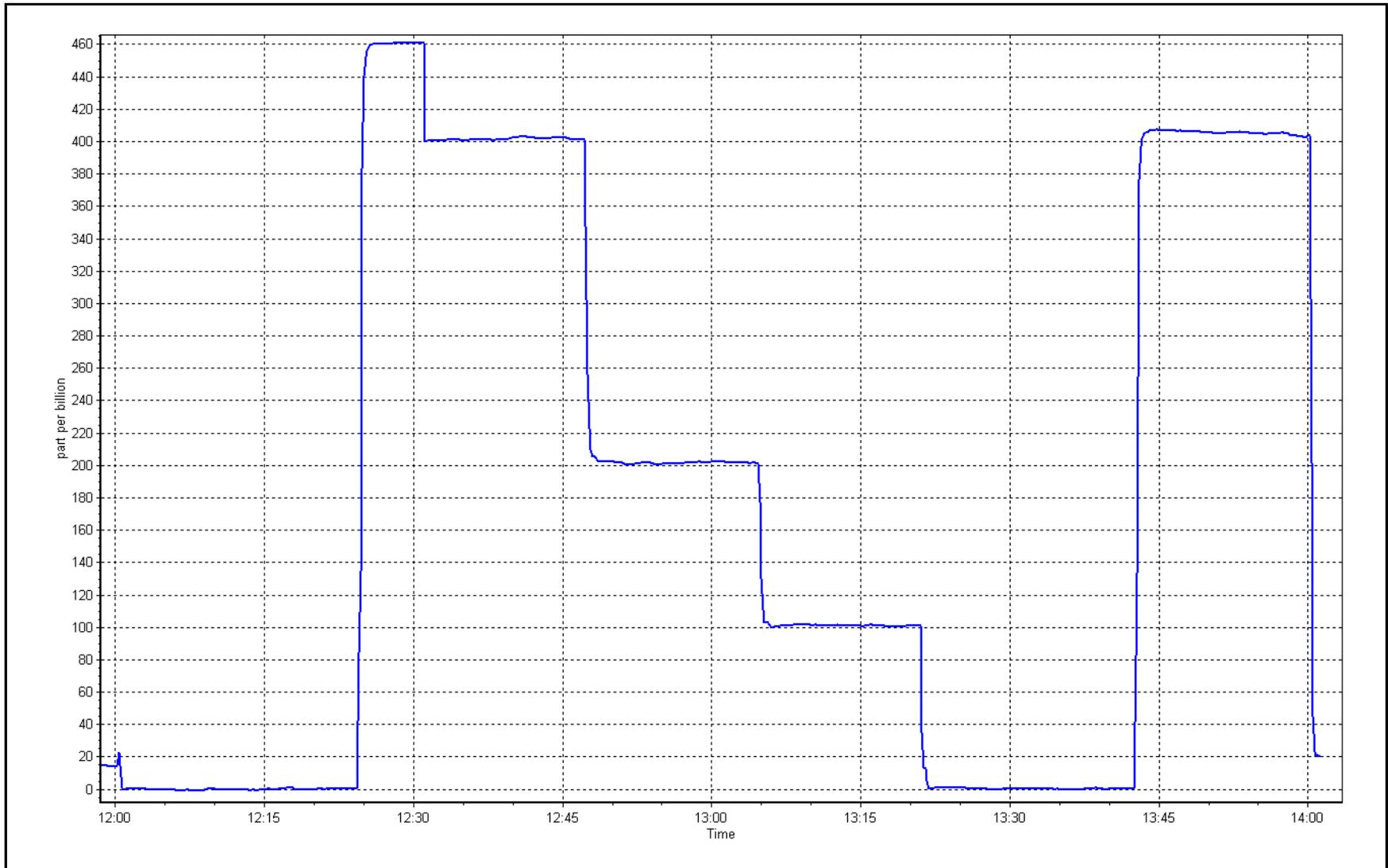
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999998	≥0.995
400.0	402.0	0.9950	Slope	1.004371	0.90 - 1.10
200.0	201.3	0.9935	Intercept	0.360000	+/- 5
100.0	101.1	0.9891			



O₃ Calibration Plot

Date: January 9, 2026

Location: Patricia McInnes





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	January 15, 2026	Last Cal Date:	December 19, 2025
Start time (MST):	12:54	End time (MST):	14:07
Analyzer Make:	API T640	S/N:	1547
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388754
Temp/RH standard:	Alicat FP-25BT	S/N:	388754

<u>Parameter</u>	<u>As found</u>	<u>Measured</u>	<u>As left</u>	<u>Adjusted</u>	(Limits)
T (°C)	-7.20	-7.7	-7.20	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	732.60	731.45	732.60	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.03	4.93	5.03	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	34	----	34	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	0.70	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: **10.9** Expiry Date: 07-16-2026
 Lot No.: 100128-050-050

<u>Parameter</u>	<u>As found</u>	<u>Post maintenance</u>	<u>As left</u>	<u>Adjusted</u>	(Limits)
PMT Peak Test	10.7	10.7	10.7	<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: January 15, 2026
 Date Disposable Filter Changed: January 15, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0.00 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: April 4, 2025
 Date RH/T Sensor Cleaned: April 4, 2025

Verified flow, pressure, temperature and pump power. No adjustment needed. Leak check passed.

Notes:

Calibration by: Param Kaur



Wood Buffalo Environmental Association

Nt - NOX - NH3 Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
NOX Cal Date:	January 15, 2026	Last Cal Date:	December 4, 2025
Start time (MST):	9:13	End time (MST):	13:00
NH3 Cal Date:	January 15, 2026	Last Cal Date:	December 4, 2025
Start time (MST):	13:03	End time (MST):	15:40
Reason:	Routine		

Calibration Standards

NOX Cal Gas Conc:	62.20	ppm	NO Gas Cylinder #:	DT0036234
NO Cal Gas Conc:	61.90	ppm	NO Cal Gas Expiry:	July 22, 2032
Removed NOX Conc:	62.20	ppm	Removed Cylinder #:	N/A
Removed NO Conc:	61.90	ppm	Removed cyl Expiry:	N/A
NOX gas Diff:			NO gas Diff:	
NH3 Cal Gas Conc:	77.5	ppm	NH3 Gas Cylinder #:	CC15099
			NH3 Cal Gas Expiry:	September 10, 2026
Removed NH3 Conc:	77.5	ppm	Removed Cylinder #:	
NH3 gas Diff:			Removed cyl Expiry:	
Calibrator Model:	API T700		Serial Number:	3566
ZAG make/model:	API T701		Serial Number:	4602

Analyzer Information

Analyzer model:	API T201	Analyzer serial #:	215
Converter model:	API T501	Converter serial #:	147
NH3 Range (ppb):	0 - 2000 ppb	Reaction cell Press:	6.00
NOX Range (ppb):	0 - 1000 ppb	Sample Flow:	25.3

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coefficient:	1.033	1.033	Nt coefficient:	1.008	1.008
NOX coefficient:	1.028	1.028	NO bkgrnd:	0.2	0.2
NO2 coefficient:	1.000	1.000	NOX bkgrnd:	-0.1	-0.1
NH3 coefficient:	0.950	0.943	Nt bkgrnd:	3.5	3.5

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.011931	0.994480
NO _x Cal Offset:	1.529231	1.092455
NO Cal Slope:	1.014820	0.993953
NO Cal Offset:	0.009796	0.514191
NO ₂ Cal Slope:	0.993425	1.002144
NO ₂ Cal Offset:	0.970865	-0.241257
NH3 Cal Slope:	0.978370	0.986924
NH3 Cal Offset:	-0.309136	5.930471
Nt Cal Slope:	0.981947	0.990412
Nt Cal Offset:	0.013529	6.401550



Wood Buffalo Environmental Association

NO_x - NO - NO₂ Calibration Report

NO_x / NO / Nt As Found Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	Baseline corr NO _x Correction factor (Cc/Ic) <i>Limit = 0.9 - 1.0</i>	Baseline corr NO Correction factor (Cc/Ic) <i>Limit = 0.9 - 1.0</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.2	-1.7	----	----
As found span	4935	64.6	803.7	799.8	803.7	806.4	798.5	806.4	0.9966	1.0016
AF GPT span										
new NO cyl rp										

Baseline Corr As Fd Nt = 808.1 ppb NO_x = 806.6 ppb NO = 798.7 ppb
 Previous Response Nt = 789.19 ppb NO_x = 814.8 ppb NO = 811.7 ppb

*Percent Change Nt_(NO) = 2.3%

*Percent Change NO_x = -1.0%

*Percent Change NO = -1.6%

**NO_x Δ (NO to GPT response) =

* * = > +/-2% difference initiates investigation

* = > +/-5% change initiates investigation

NO_x / NO / Nt Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibration zero	5000	0.0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
High point	4935	64.6	803.7	799.8	803.7	800.1	795.3	800.1	1.0045	1.0057
Mid point	4968	32.3	401.8	399.9	401.8	400.4	398.0	400.5	1.0035	1.0046
Low point	4984	16.2	201.5	200.5	201.5	203.0	200.5	203.0	0.9927	1.0002
Average Correction Factor									1.0002	1.0035

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found zero	----	----	0.0	0.0	----	----
Calibration zero	----	----	0.0	0.1	----	----
High GPT point (400 ppb O3)	791.2	382.8	412.3	412.7	0.9990	100.1%
Mid GPT point (200 ppb O3)	791.2	593.2	201.9	203.1	0.9940	100.6%
Low GPT point (100 ppb O3)	791.2	692.8	102.3	101.1	1.0116	98.8%
Average Correction Factor					1.0015	99.9%



Wood Buffalo Environmental Association NH₃ - N_T Calibration Report

NH₃ As Found Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated Nt concentration (ppb) (Cc)	Calculated NOX concentration (ppb) (Cc)	Calculated NH3 concentration (ppb) (Cc)	Indicated Nt concentration (ppb) (Ic)	Indicated NOX concentration (ppb) (Ic)	Indicated NH3 concentration (ppb) (Ic)	Baseline corr Nt Correction factor (Cc/(Ic-zero)) <i>Limit = 0.9 - 1.1</i>	Baseline corr NH3 Correction factor (Cc/(Ic-zero)) <i>Limit = 0.9 - 1.1</i>
As found zero	5000	0.0	0.0	0.0	0.0	-1.7	-0.2	-1.5	----	----
AF High point	3419	81.3	1800.1	0.0	1800.1	1784.7	6.4	1778.3	1.008	1.011
AF Mid point										
AF Low point										
new NH3 cyl rp										
Baseline Corr As Fd	Nt = 1786.4 ppb	NH3 = 1779.8 ppb							*Percent Change	Nt _(NH3) = 1.1%
Previous Response	Nt = 1767.6 ppb	NH3 = 1760.8 ppb							*Percent Change	NH3 = 1.1%

* = > +/-5% change initiates investigation

NH₃ Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated Nt concentration (ppb) (Cc)	Calculated NOX concentration (ppb) (Cc)	Calculated NH3 concentration (ppb) (Cc)	Indicated Nt concentration (ppb) (Ic)	Indicated NOX concentration (ppb) (Ic)	Indicated NH3 concentration (ppb) (Ic)	Nt Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NH3 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibration zero	5000	0.0	0.0	0.0	0.0	0.1	0.1	0.0	----	----
High point	3419	81.3	1800.1	0.0	1800.1	1784.7	6.4	1778.3	1.009	1.012
Mid point	3455	45.2	1000.8	0.0	1000.8	1003.0	4.4	998.5	0.998	1.002
Low point	3477	22.6	500.5	0.0	500.5	507.5	2.3	505.1	0.986	0.991
								Average Correction Factor	0.9975	1.0018
NH3 Previous Converter Efficiency =	95.0 %									
NH3 Current Converter Efficiency =	94.3 %									

Notes:

Changed the inlet filter after as founds. No adjustment made on NOx. Adjusted NH3 span.

Calibration Performed By:

Jan Castro



Wood Buffalo Environmental Association

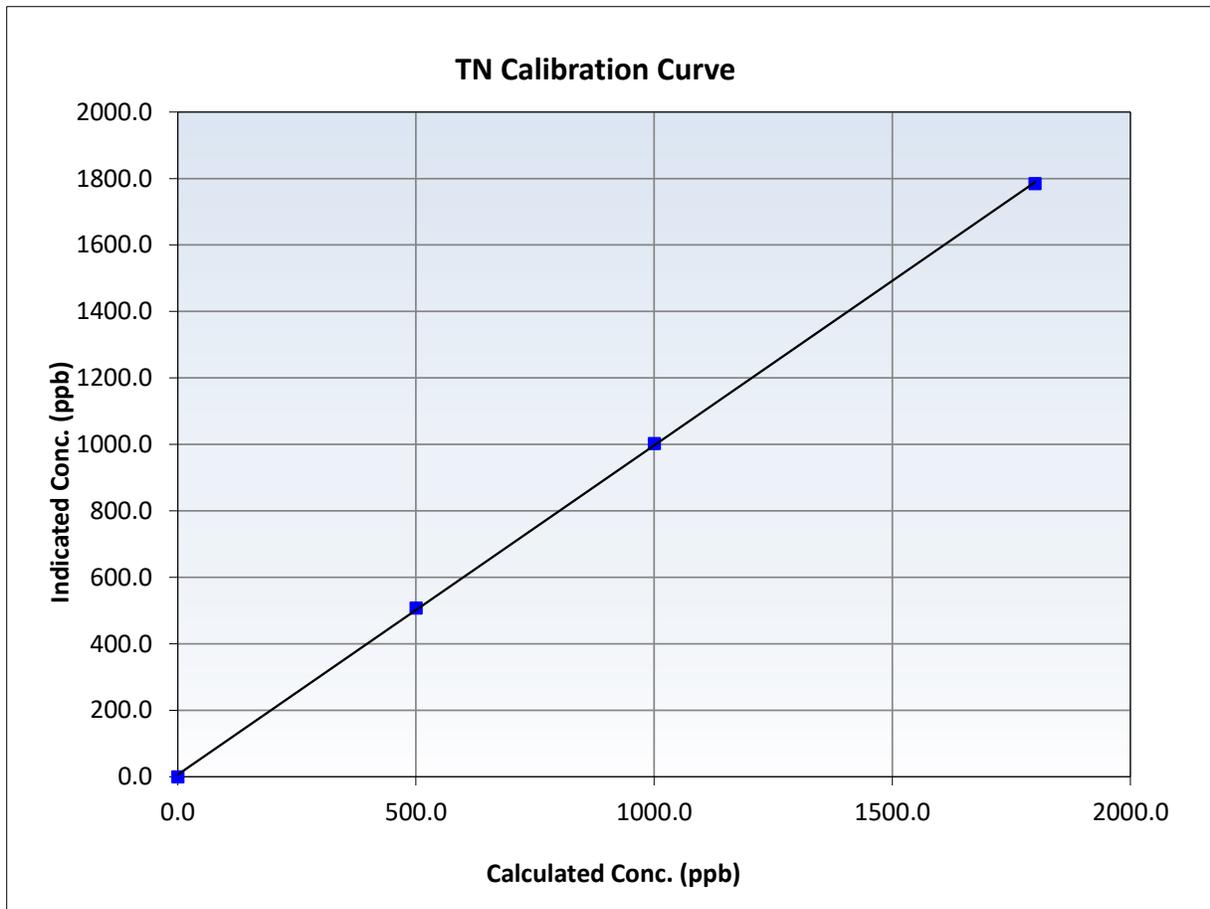
Nt Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:13	End Time (MST):	13:00
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999932	<i>≥0.995</i>
1800.1	1784.7	1.0086	Slope	0.990412	<i>0.90 - 1.10</i>
1000.8	1003.0	0.9978	Intercept	6.401550	<i>+/-20</i>
500.5	507.5	0.9862			





Wood Buffalo Environmental Association

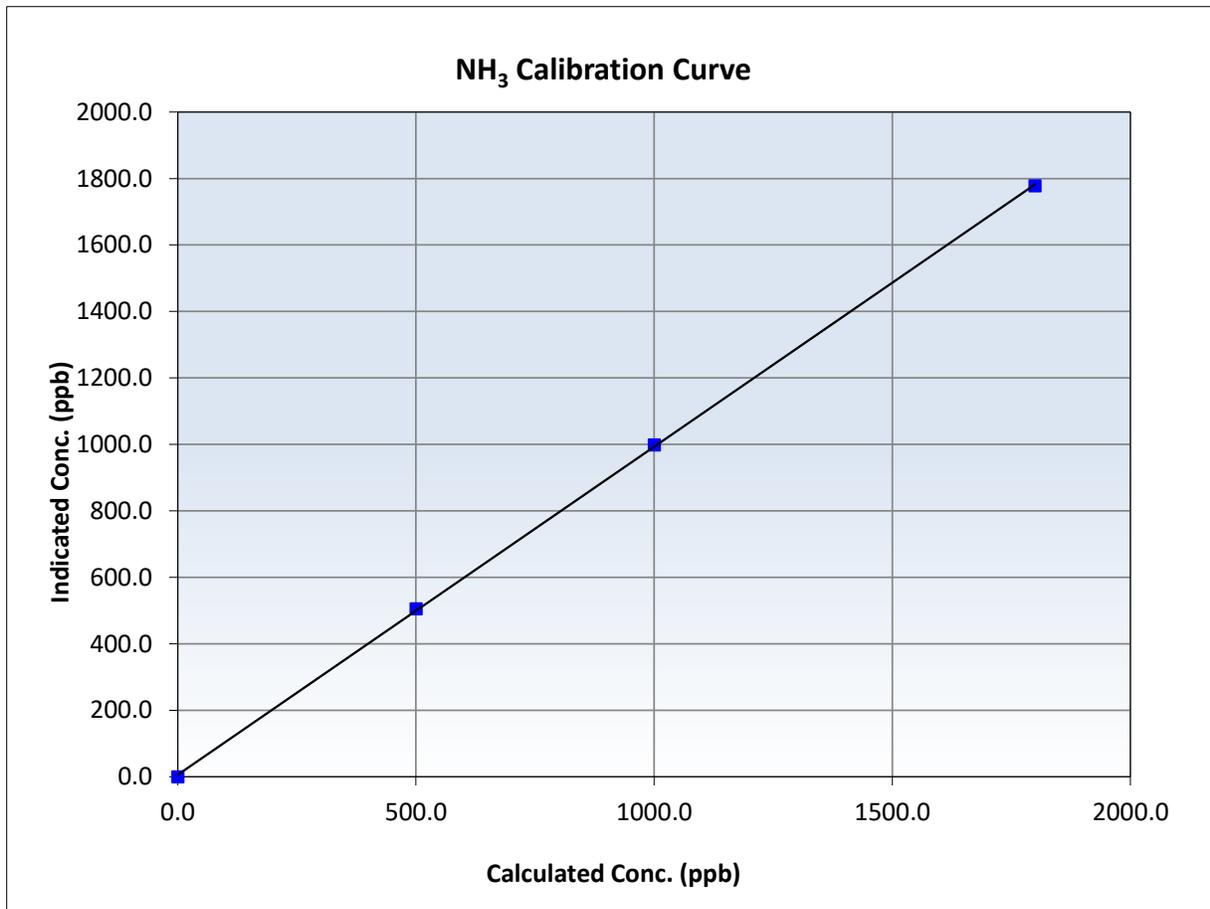
NH₃ Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:13	End Time (MST):	13:00
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999940	<i>≥0.995</i>
1800.1	1778.3	1.0122	Slope	0.986924	<i>0.90 - 1.10</i>
1000.8	998.5	1.0023	Intercept	5.930471	<i>+/-20</i>
500.5	505.1	0.9909			





Wood Buffalo Environmental Association

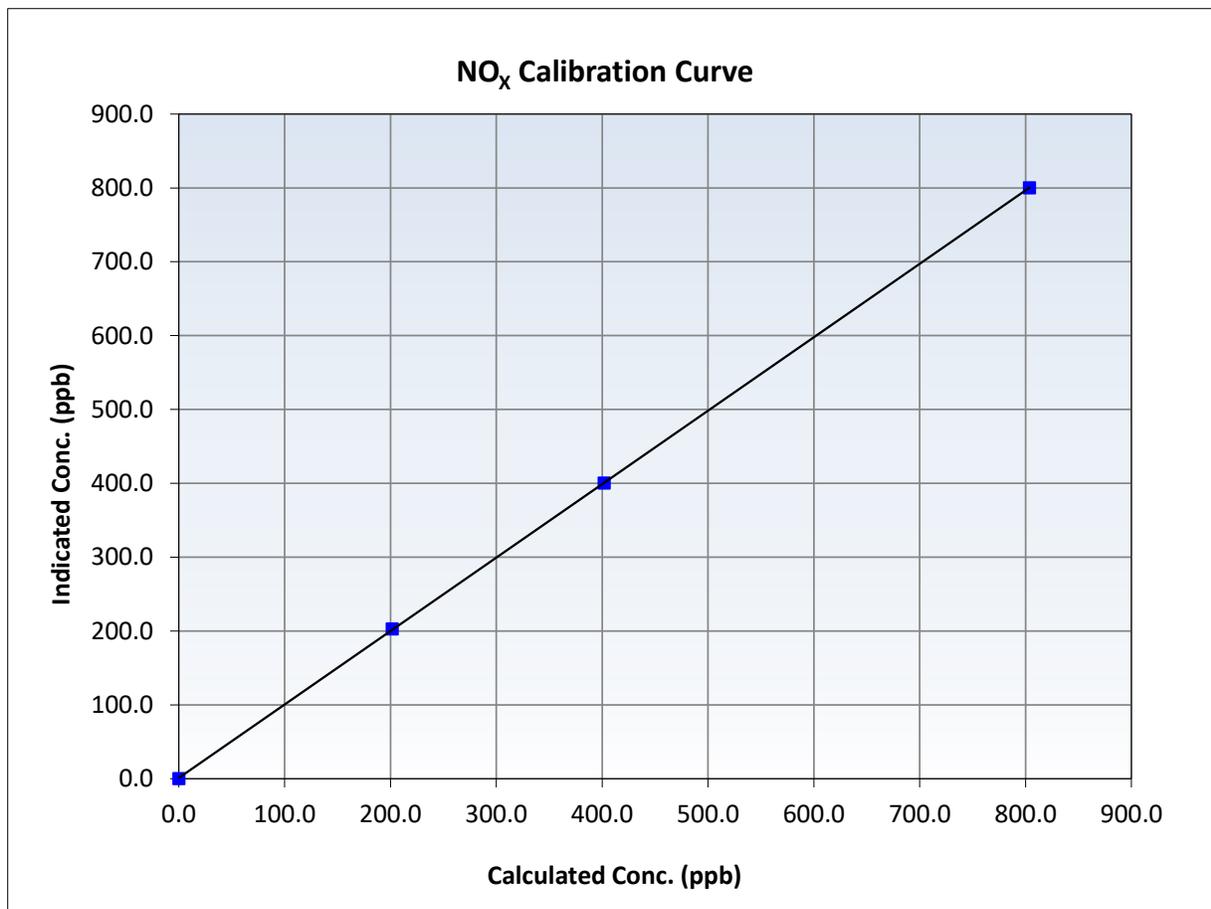
NO_x Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:13	End Time (MST):	13:00
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999990	≥0.995
803.7	800.1	1.0045	Slope	0.994480	0.90 - 1.10
401.8	400.4	1.0035	Intercept	1.092455	+/-20
201.5	203.0	0.9927			





Wood Buffalo Environmental Association

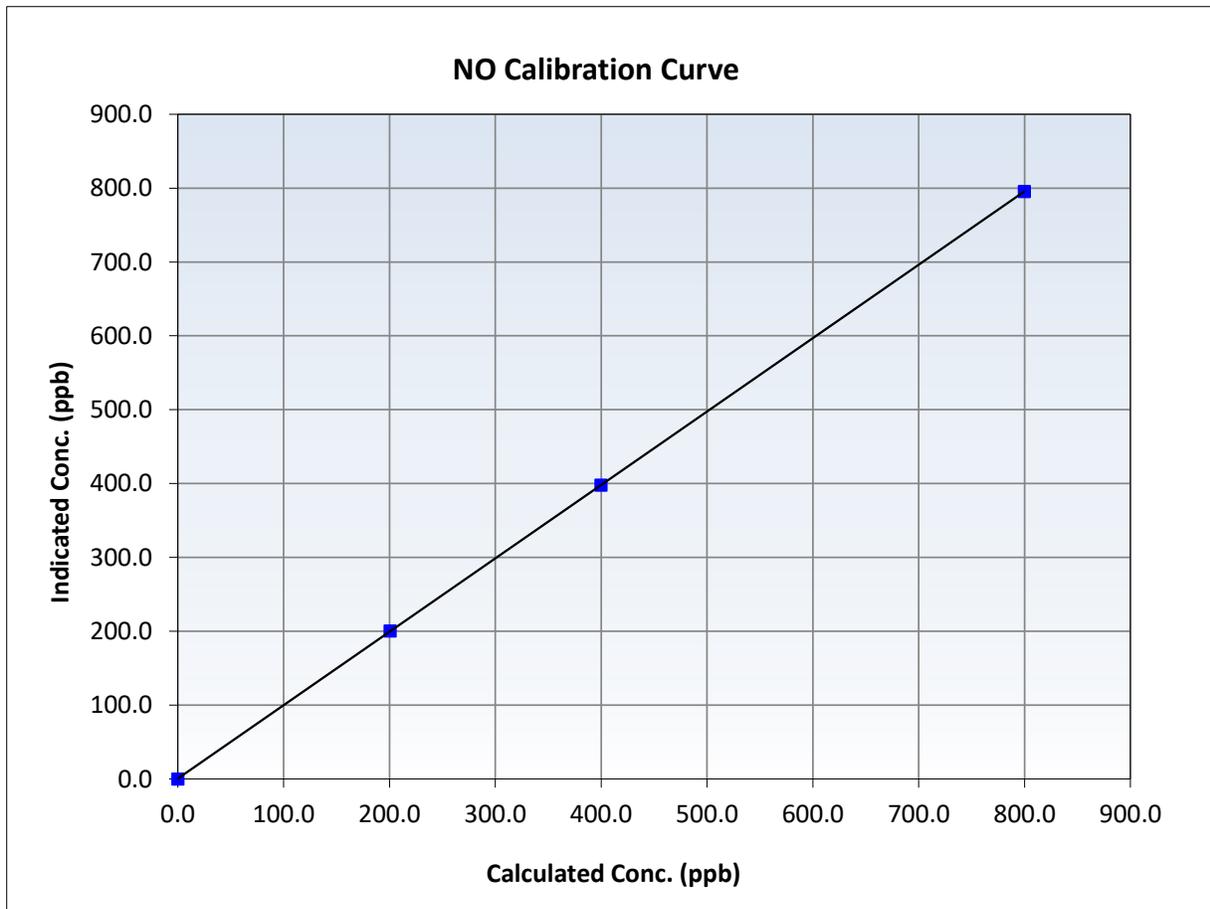
NO Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:13	End Time (MST):	13:00
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999998	<i>≥0.995</i>
799.8	795.3	1.0057	Slope	0.993953	<i>0.90 - 1.10</i>
399.9	398.0	1.0046	Intercept	0.514191	<i>+/-20</i>
200.5	200.5	1.0002			





Wood Buffalo Environmental Association

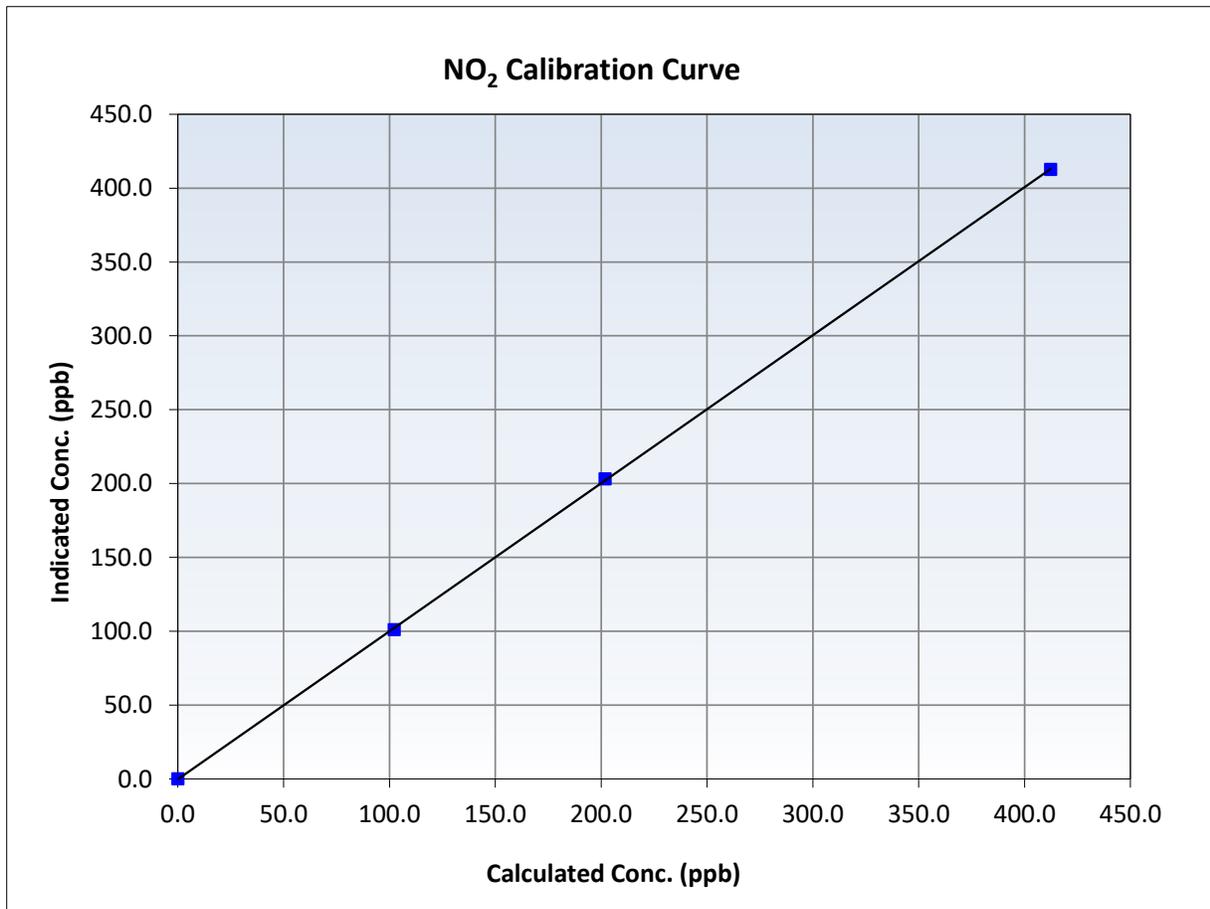
NO₂ Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:13	End Time (MST):	13:00
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

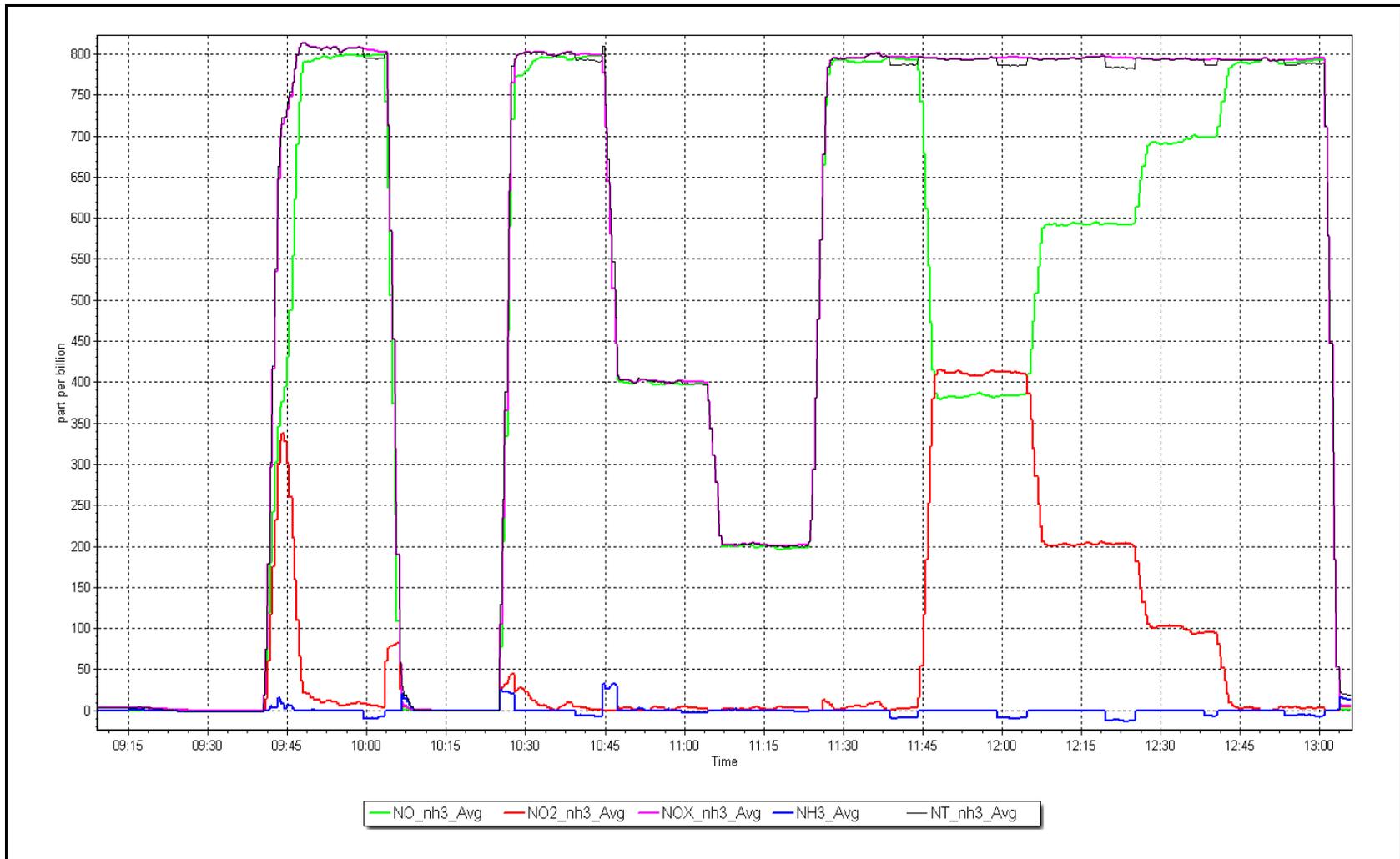
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999973	≥0.995
412.3	412.7	0.9990	Slope	1.002144	0.90 - 1.10
201.9	203.1	0.9940	Intercept	-0.241257	+/-20
102.3	101.1	1.0116			



NO_x Calibration Plot

Date: January 15, 2026

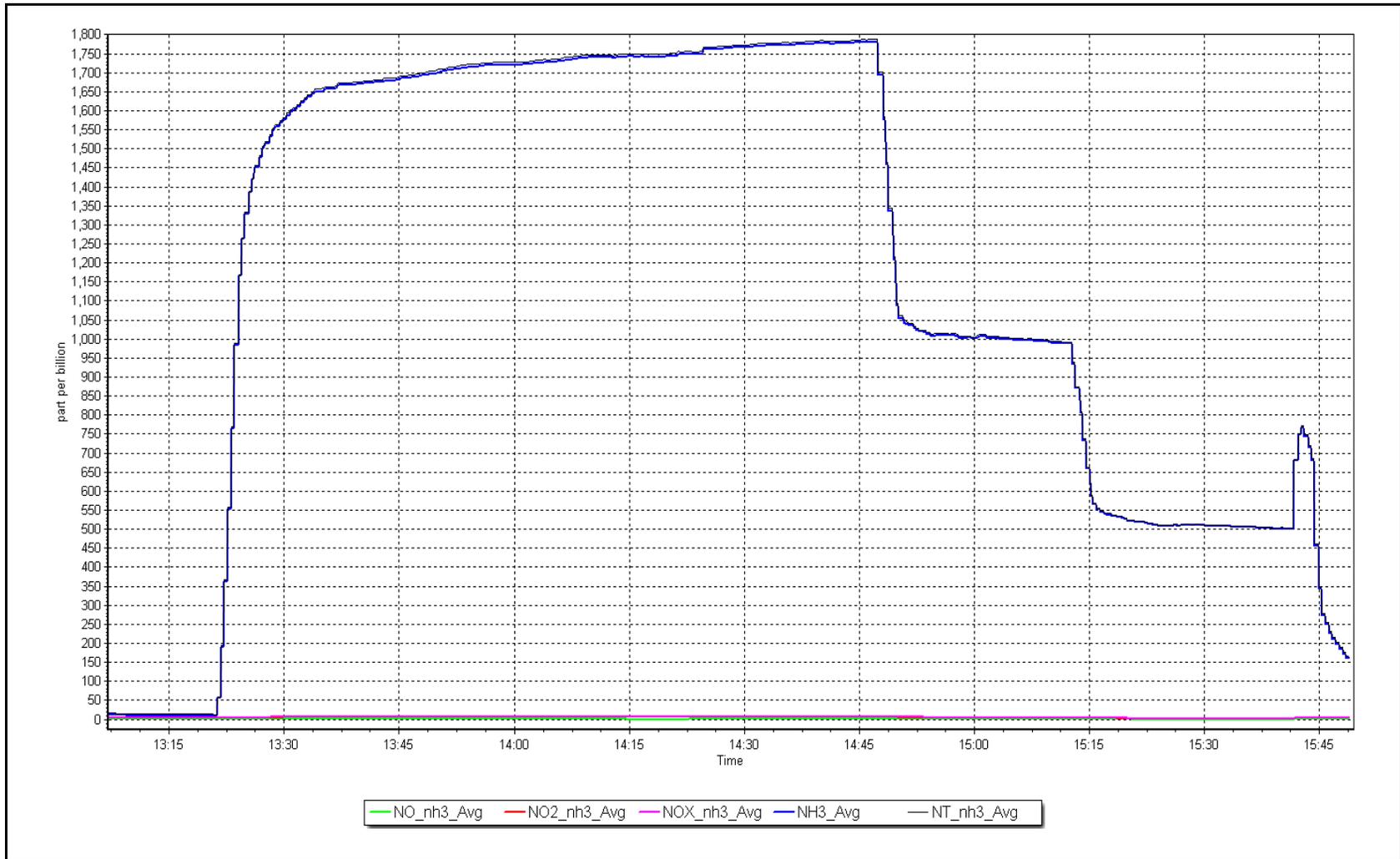
Location: Patricia McInnes



NH₃ Calibration Plot

Date: January 15, 2026

Location: Patricia McInnes





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS07 ATHABASCA VALLEY JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	January 7, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	9:32	End time (MST):	13:03
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.06	ppm	Cal Gas Exp Date:	March 10, 2031
Cal Gas Cylinder #:	CC320556			
Removed Cal Gas Conc:	50.06	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	API T700		Serial Number:	3805
Zero Air Gen Model:	API 701H		Serial Number:	198

Analyzer Information

Analyzer make:	Thermo 43i-LTE	Serial Number:	1507864683
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.996686	1.001264	Backgd or Offset:	2.73	2.79
Calibration intercept:	2.404670	2.403832	Coeff or Slope:	0.859	0.874

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4920	79.8	799.0	786.6	1.016
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	786.6	Previous response	798.7	*% change	-1.5%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4920	79.8	799.0	800.9	0.998
Mid point	4960	39.9	399.5	404.9	0.987
Low point	4980	20.0	200.2	203.9	0.982
As left zero	5000	0.0	0.0	0.2	----
As left span	4920	79.8	799.0	801.8	0.996
Average Correction Factor:					0.989

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

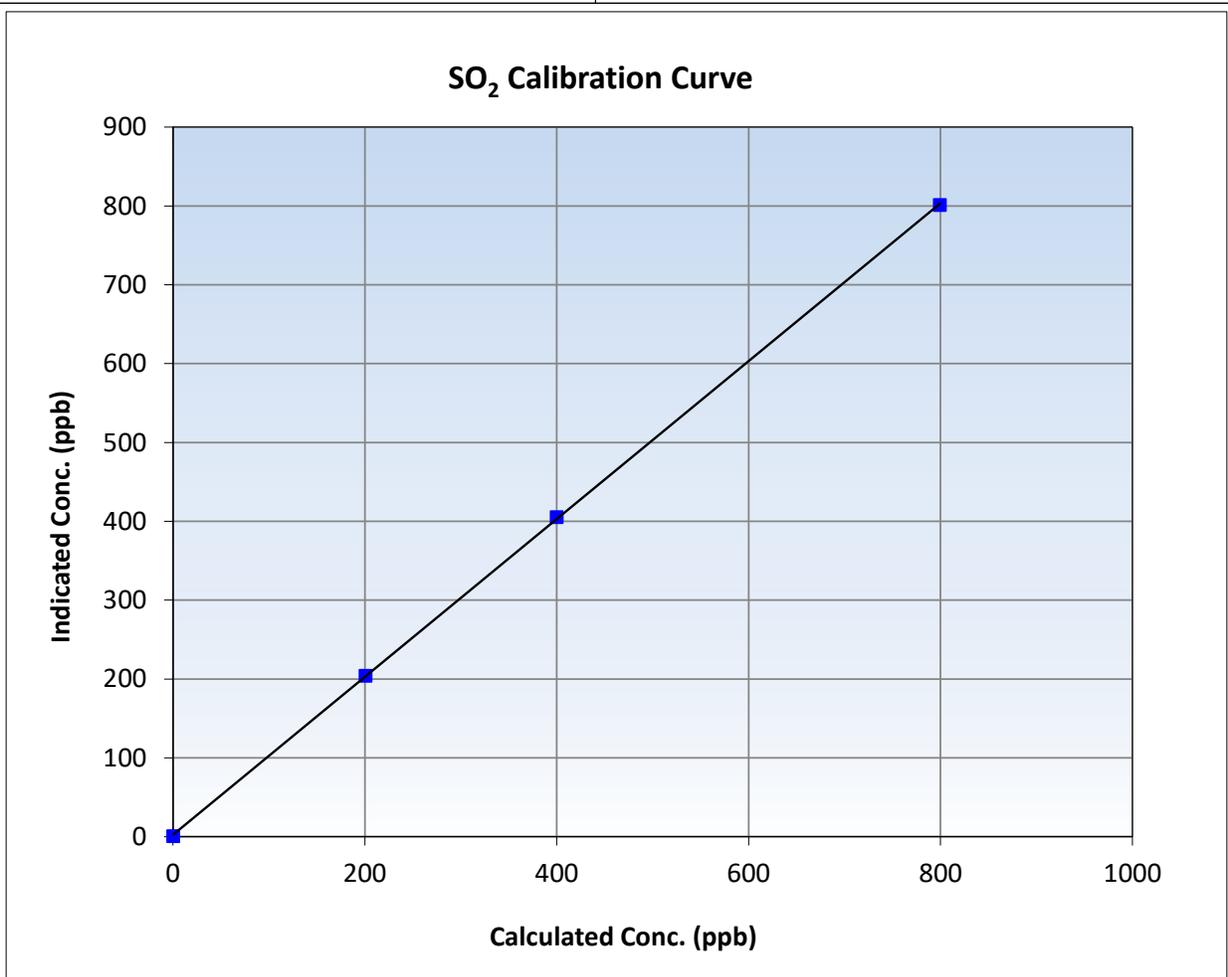
SO₂ Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 10, 2025
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	9:32	End Time (MST):	13:03
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1507864683

Calibration Data

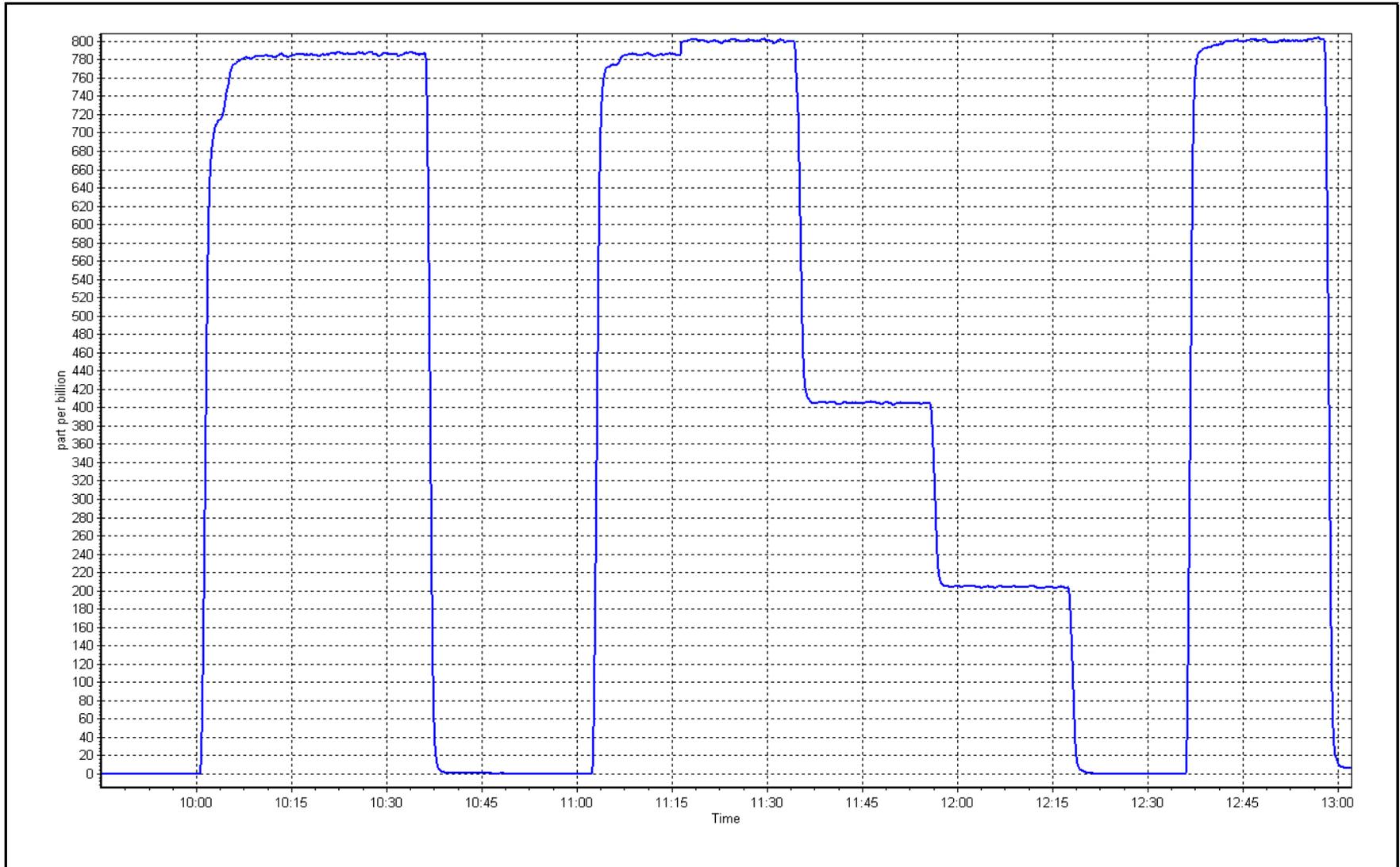
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.4	----	Correlation Coefficient	0.999961	≥0.995
799.0	800.9	0.9976	Slope	1.001264	0.90 - 1.10
399.5	404.9	0.9866	Intercept	2.403832	+/-30
200.2	203.9	0.9821			



SO2 Calibration Plot

Date: January 7, 2026

Location: Athabasca Valley





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name: Athabasca Valley	Station number: AMS07
Calibration Date: January 6, 2026	Last Cal Date: December 18, 2025
Start time (MST): 10:15	End time (MST): 14:34
Reason: Routine	

Calibration Standards

Cal Gas Concentration: 5.25 ppm	Cal Gas Exp Date: January 3, 2026
Cal Gas Cylinder #: CC504080	
Removed Cal Gas Conc: 5.25 ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #: NA	Diff between cyl:
Calibrator Make/Model: API T700	Serial Number: 3805
ZAG Make/Model: API T701H	Serial Number: 198

Analyzer Information

Analyzer make: Thermo 43i LTE	Analyzer serial #: 1180540018
Converter make: CDN-101	Converter serial #: 551
Analyzer Range: 0 - 100 ppb	Converter Temp: 840 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.994592	1.001942	Backgd or Offset:	2.6	2.6
Calibration intercept:	0.217869	0.037849	Coeff or Slope:	0.884	0.884

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4925	75.5	79.3	78.9	1.005
As found Mid point	4962	37.7	39.6	39.6	1.000
As found Low point	4981	18.9	19.8	19.7	1.007
New cylinder response					
Baseline Corr As found:	78.9	Prev response:	79.06	*% change:	-0.2%
Baseline Corr 2nd AF pt:	39.6	AF Slope:	0.995880	AF Intercept:	0.017887
Baseline Corr 3rd AF pt:	19.7	AF Correlation:	0.999990	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4925	75.5	79.3	79.5	0.998
Mid point	4962	37.7	39.6	39.8	0.995
Low point	4981	18.9	19.9	19.8	1.003
As left zero	5000	0.0	0.0	0.2	----
As left span	4925	75.5	79.3	79.3	1.000
SO2 Scrubber Check	4920	79.2	792.1	0.1	----
Date of last scrubber change:	8-Aug-25			Ave Corr Factor	0.999
Date of last converter efficiency test:	Friday, April 22, 2022				

Notes: No adjustments needed.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

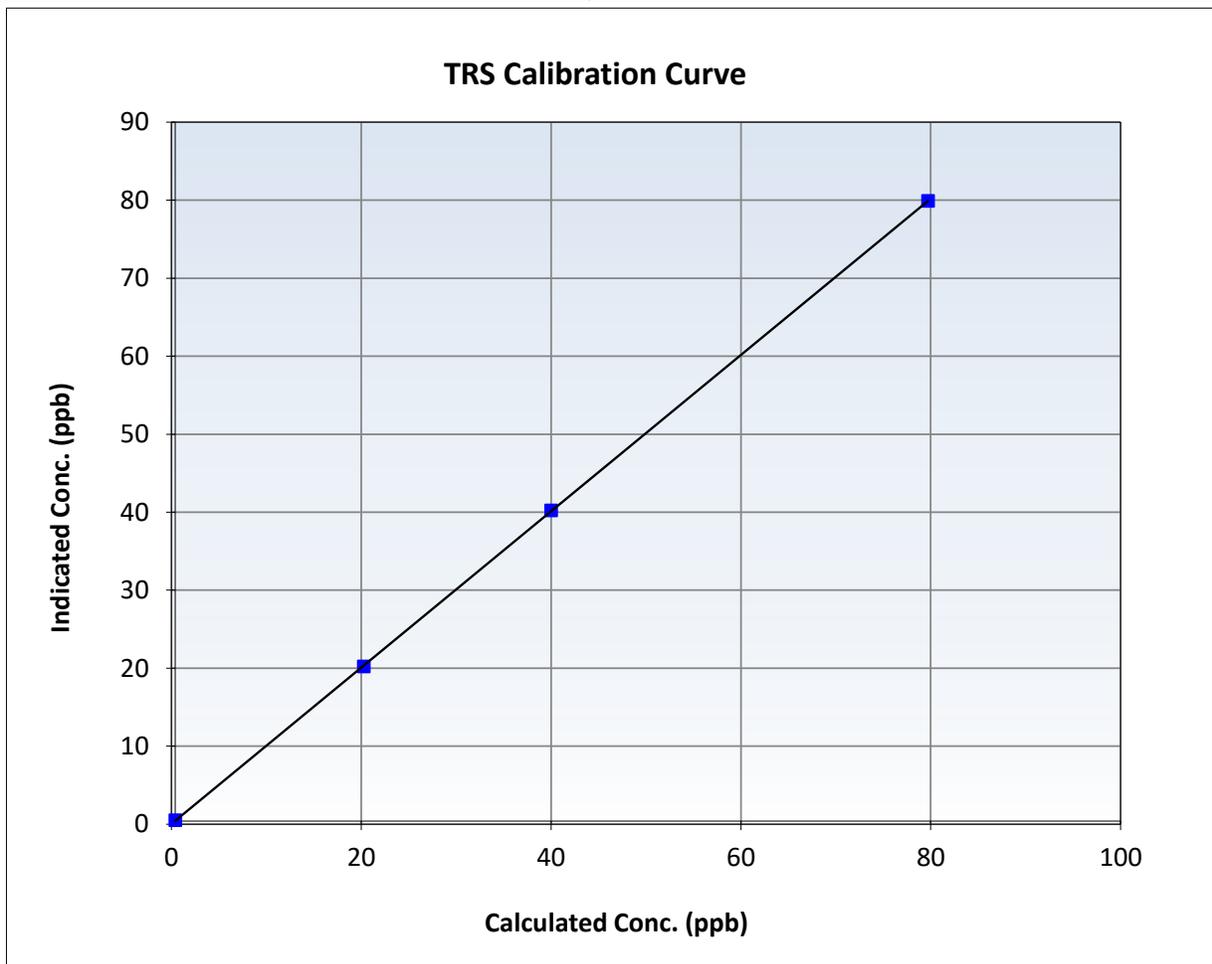
TRS Calibration Summary

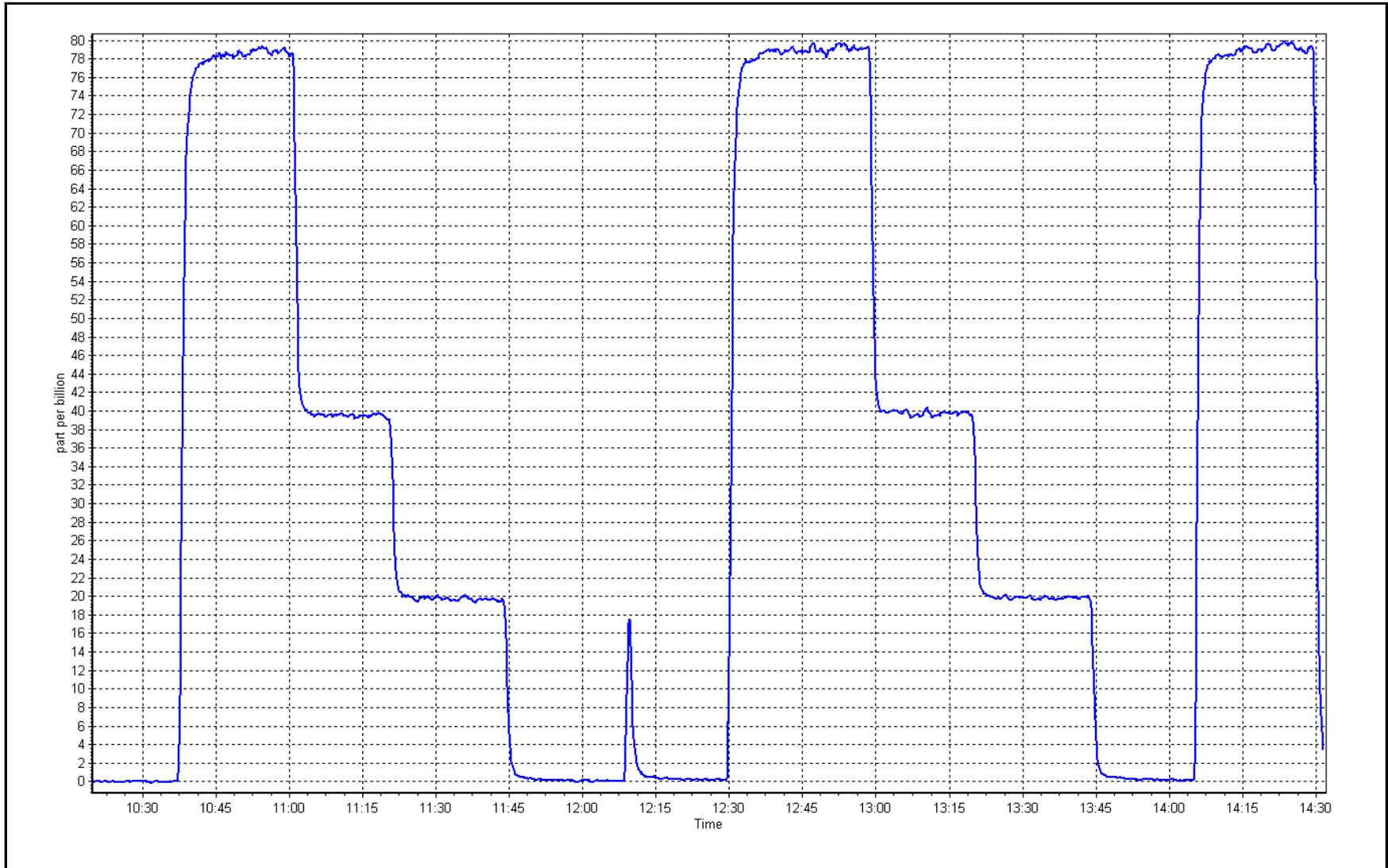
Station Information

Calibration Date:	January 6, 2026	Previous Calibration:	December 18, 2025
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	10:15	End Time (MST):	14:34
Analyzer make:	Thermo 43i LTE	Analyzer serial #:	1180540018

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999992	≥ 0.995
79.3	79.5	0.9976	Slope	1.001942	$0.90 - 1.10$
39.6	39.8	0.9952	Intercept	0.037849	± 3
19.9	19.8	1.0029			







Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS 07
Calibration Date:	January 7, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	9:32	End time (MST):	13:03
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC320556	Cal Gas Expiry Date:	March 10, 2031
CH4 Cal Gas Conc.	496.0 ppm	CH4 Equiv Conc.	1059.8 ppm
C3H8 Cal Gas Conc.	205.0 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	496.0 ppm	CH4 Equiv Conc.	1059.8 ppm
Removed C3H8 Conc.	205.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3805
Zero Air Gen model:	Teledyne API T701H	Serial Number:	198

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1331259520
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.73E-04	2.78E-04	NMHC SP Ratio:	5.25E-05	5.52E-05
CH4 Retention time:	14.4	14.2	NMHC Peak Area:	171388	162932
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	16.91	16.63	1.017
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.63	Prev response	16.86	*% change	-1.4%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	16.91	16.95	0.998
Mid point	4960	39.9	8.46	8.48	0.997
Low point	4980	20.0	4.24	4.29	0.989
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	16.91	16.97	0.997
Average Correction Factor					0.995

Notes: H2 cylinder changed out. Span adjusted.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	9.00	8.75	1.029
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.75	Prev response	8.92	*% change	-2.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	9.00	9.03	0.997
Mid point	4960	39.9	4.50	4.53	0.994
Low point	4980	20.0	2.26	2.28	0.989
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	9.00	9.06	0.993
Average Correction Factor					0.993

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	7.92	7.88	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.88	Prev response	7.94	*% change	-0.7%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	7.92	7.92	0.999
Mid point	4960	39.9	3.96	3.96	1.000
Low point	4980	20.0	1.98	2.01	0.989
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	7.92	7.90	1.003
Average Correction Factor					0.996

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.995409	1.001079
THC Cal Offset:	0.018669	0.018446
CH ₄ Cal Slope:	1.001323	0.999765
CH ₄ Cal Offset:	0.008256	0.007657
NMHC Cal Slope:	0.990434	1.002579
NMHC Cal Offset:	0.010013	0.010188

Calibration Performed By: Aswin Sasi Kumar



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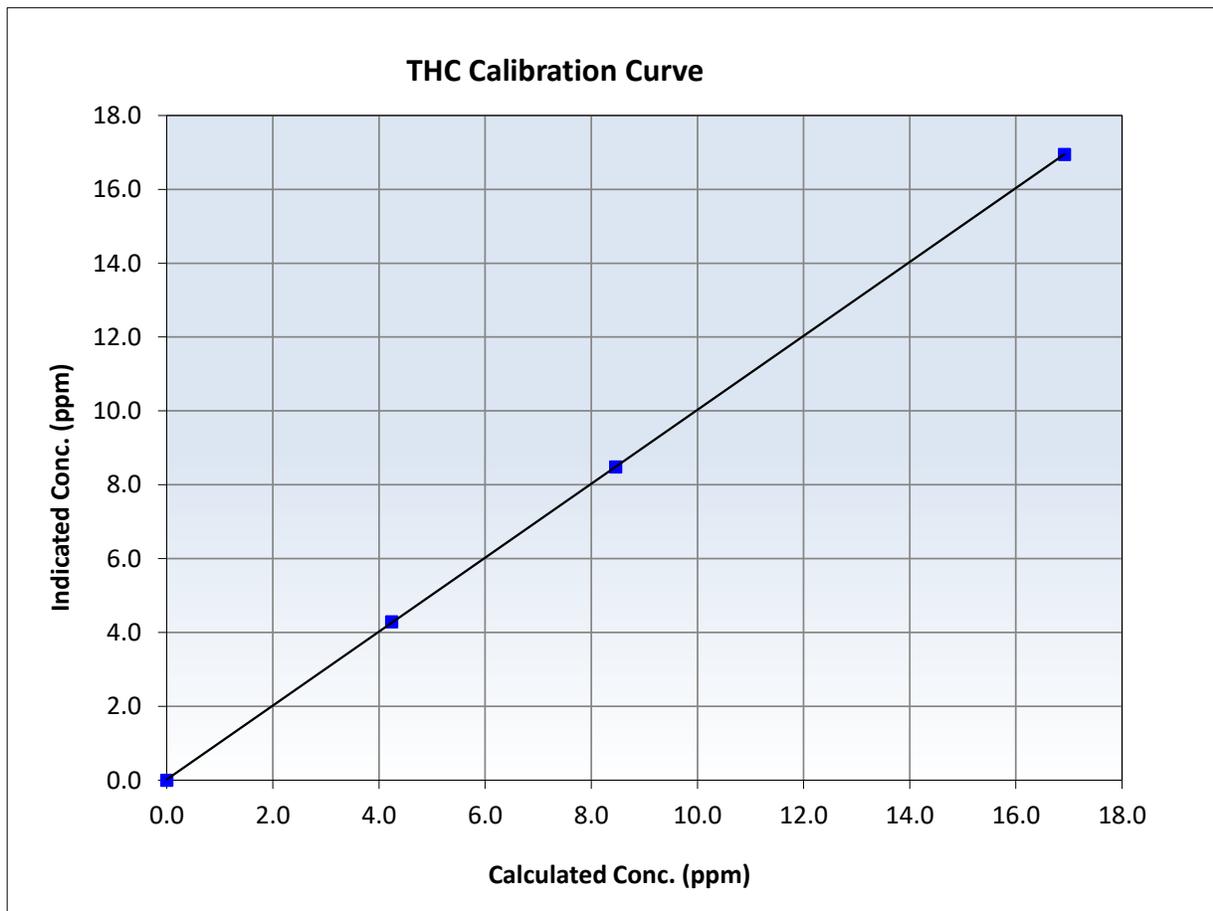
THC Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 10, 2025
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	9:32	End Time (MST):	13:03
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259520

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.00	----	Correlation Coefficient	0.999994	≥0.995
16.91	16.95	0.9982	Slope	1.001079	0.90 - 1.10
8.46	8.48	0.9968	Intercept	0.018446	+/-0.5
4.24	4.29	0.9888			





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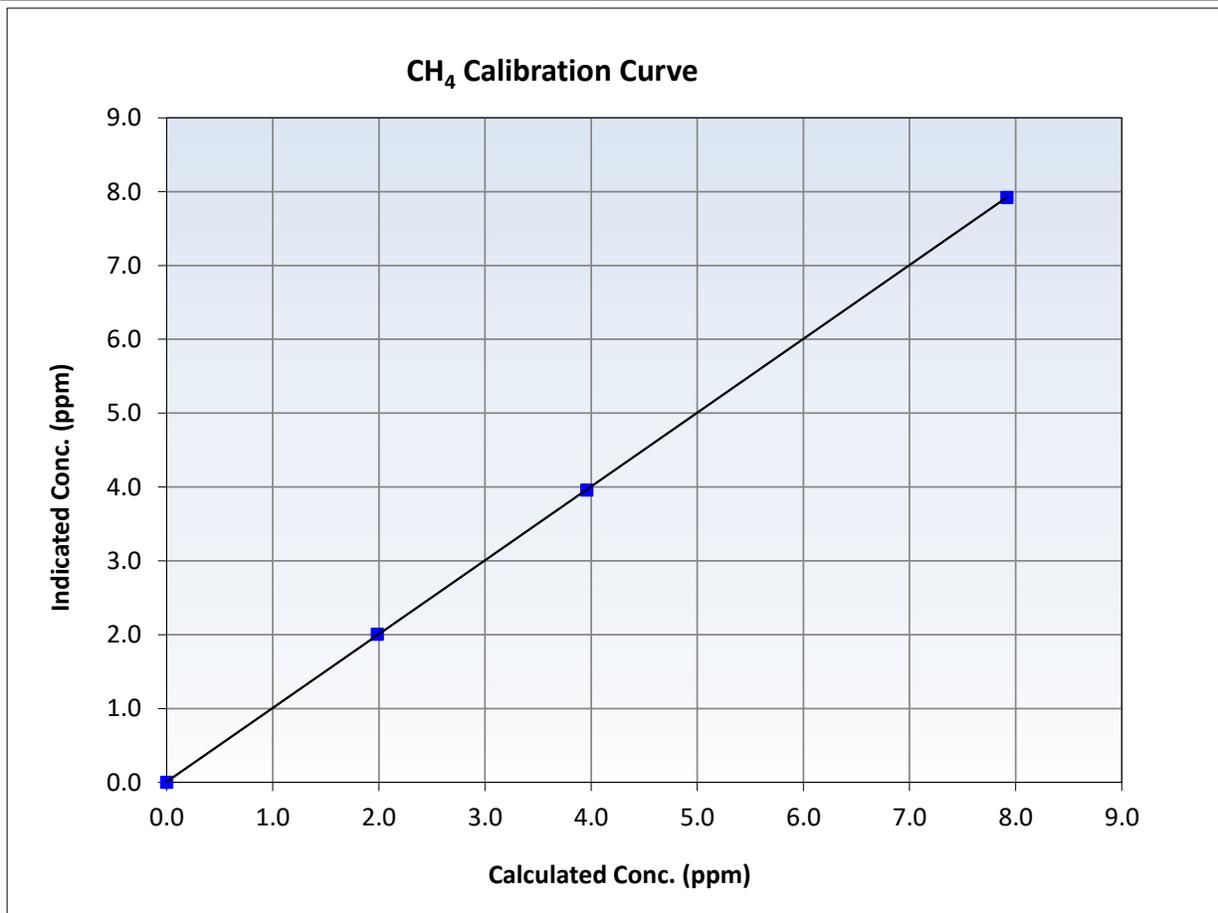
CH₄ Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 10, 2025
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	9:32	End Time (MST):	13:03
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259520

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999990	<i>≥0.995</i>
7.92	7.92	0.9993	Slope	0.999765	<i>0.90 - 1.10</i>
3.96	3.96	1.0000	Intercept	0.007657	<i>+/-0.5</i>
1.98	2.01	0.9890			





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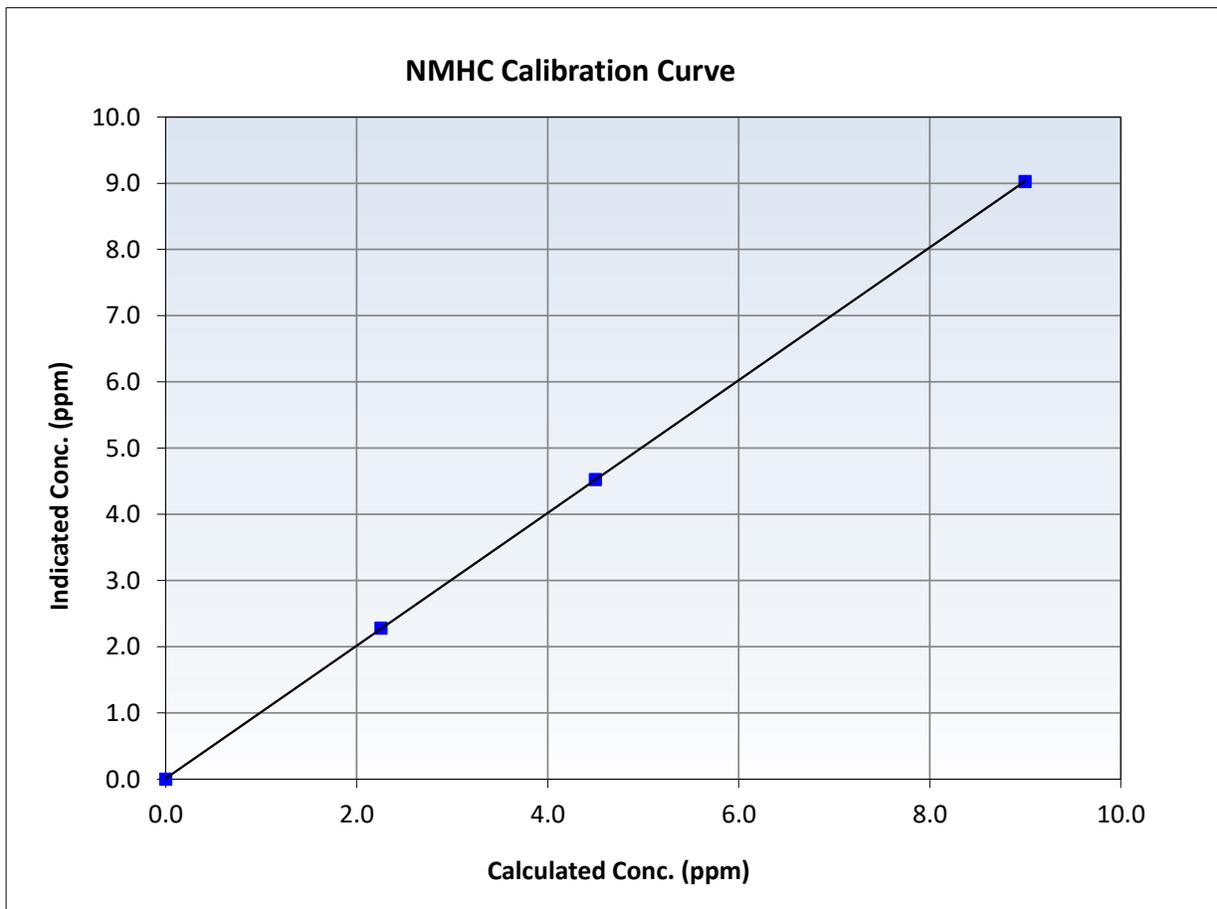
NMHC Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 10, 2025
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	9:32	End Time (MST):	13:03
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259520

Calibration Data

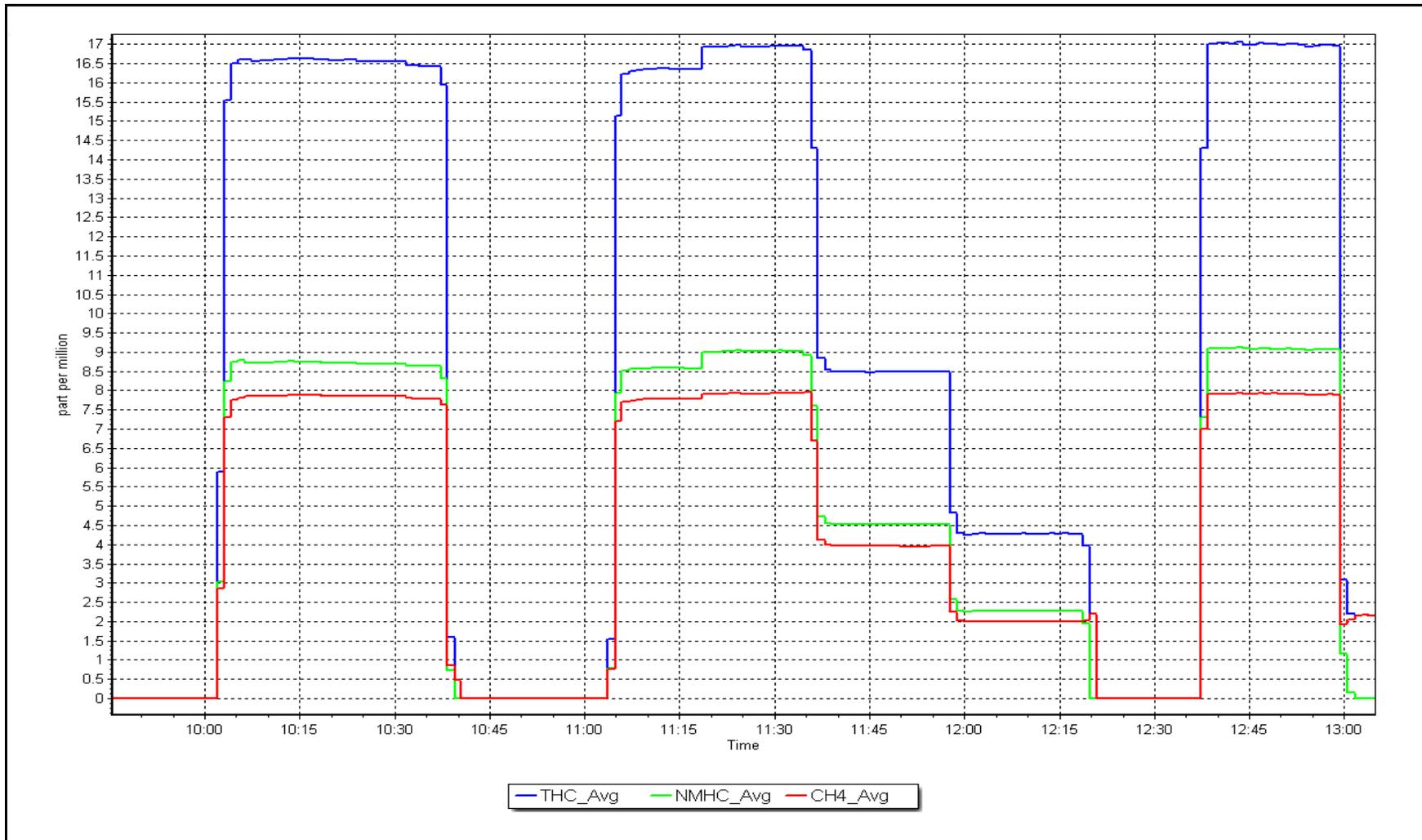
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999994	<i>≥0.995</i>
9.00	9.03	0.9969	Slope	1.002579	<i>0.90 - 1.10</i>
4.50	4.53	0.9940	Intercept	0.010188	<i>+/-0.5</i>
2.26	2.28	0.9886			



NMHC Calibration Plot

Date: January 7, 2026

Location: Athabasca Valley





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Athabasca Valley
 Station number: AMS 07
 Calibration Date: January 15, 2026
 Last Cal Date: December 4, 2025
 Start time (MST): 10:45
 End time (MST): 15:50
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0033919
 NOX Cal Gas Conc: 60.10 ppm
 Removed Cylinder #: N/A
 Removed Gas NOX Conc: 60.10 ppm
 NOX gas Diff:
 Calibrator Model: API T700
 ZAG make/model: API T701H
 Cal Gas Expiry Date: January 9, 2032
 NO Cal Gas Conc: 59.90 ppm
 Removed Gas Exp Date: N/A
 Removed Gas NO Conc: 59.90 ppm
 NO gas Diff:
 Serial Number: 3805
 Serial Number: 198

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	----	----
AF High point	4933	66.8	803.0	800.3	2.7	805.5	801.6	3.9	0.9967	0.9984
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 804.7 ppb		NO = 802.8 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 0.1%	
Baseline Corr 1st pt	NO _x = 805.6 ppb		NO = 801.6 ppb			<u>As Found Statistics</u>		*Percent Change	NO = -0.2%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1160120024

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.999276	0.998407
NO _x Cal Offset:	2.271907	2.351901
NO Cal Slope:	1.000870	0.998614
NO Cal Offset:	1.831923	2.171929
NO ₂ Cal Slope:	0.999285	1.001934
NO ₂ Cal Offset:	0.472275	0.902579

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.913	0.910	NO bkgnd or offset:	6.4	6.4
NOX coeff or slope:	1.002	1.003	NOX bkgnd or offset:	6.6	6.6
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	183.9	187.8

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOX concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOX concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOX Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.1	0.0	----	----
High point	4933	66.8	803.0	800.3	2.7	802.5	799.9	2.5	1.0006	1.0005
Mid point	4966	33.4	401.5	400.2	1.3	405.6	404.1	1.5	0.9899	0.9903
Low point	4983	16.7	200.7	200.1	0.7	204.2	203.2	1.0	0.9831	0.9846
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	----	----
As left span	4933	66.8	803.0	397.7	405.3	805.2	397.7	407.5	0.9972	1.0000
Average Correction Factor									0.9912	0.9918

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.0	----	----
High GPT point	797.3	396.5	403.5	404.7	0.9970	100.3%
Mid GPT point	797.3	596.8	203.2	204.9	0.9916	100.9%
Low GPT point	797.3	696.5	103.5	105.5	0.9808	102.0%
Average Correction Factor					0.9898	101.0%

Notes:

Span adjusted.

Calibration Performed By:

Aswin Sasi Kumar



Wood Buffalo Environmental Association

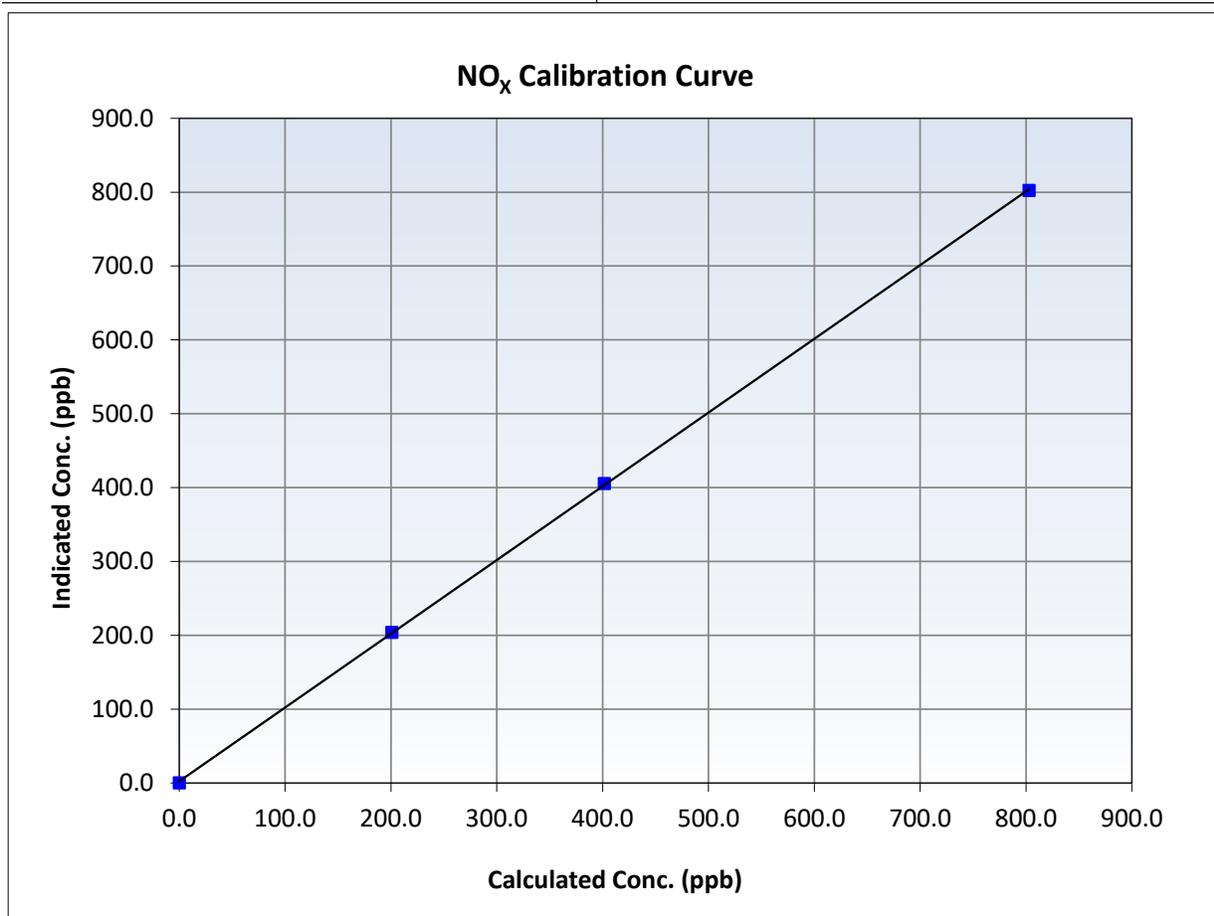
NO_x Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	10:45	End Time (MST):	15:50
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999957	≥0.995
803.0	802.5	1.0006	Slope	0.998407	0.90 - 1.10
401.5	405.6	0.9899	Intercept	2.351901	+/-20
200.7	204.2	0.9831			





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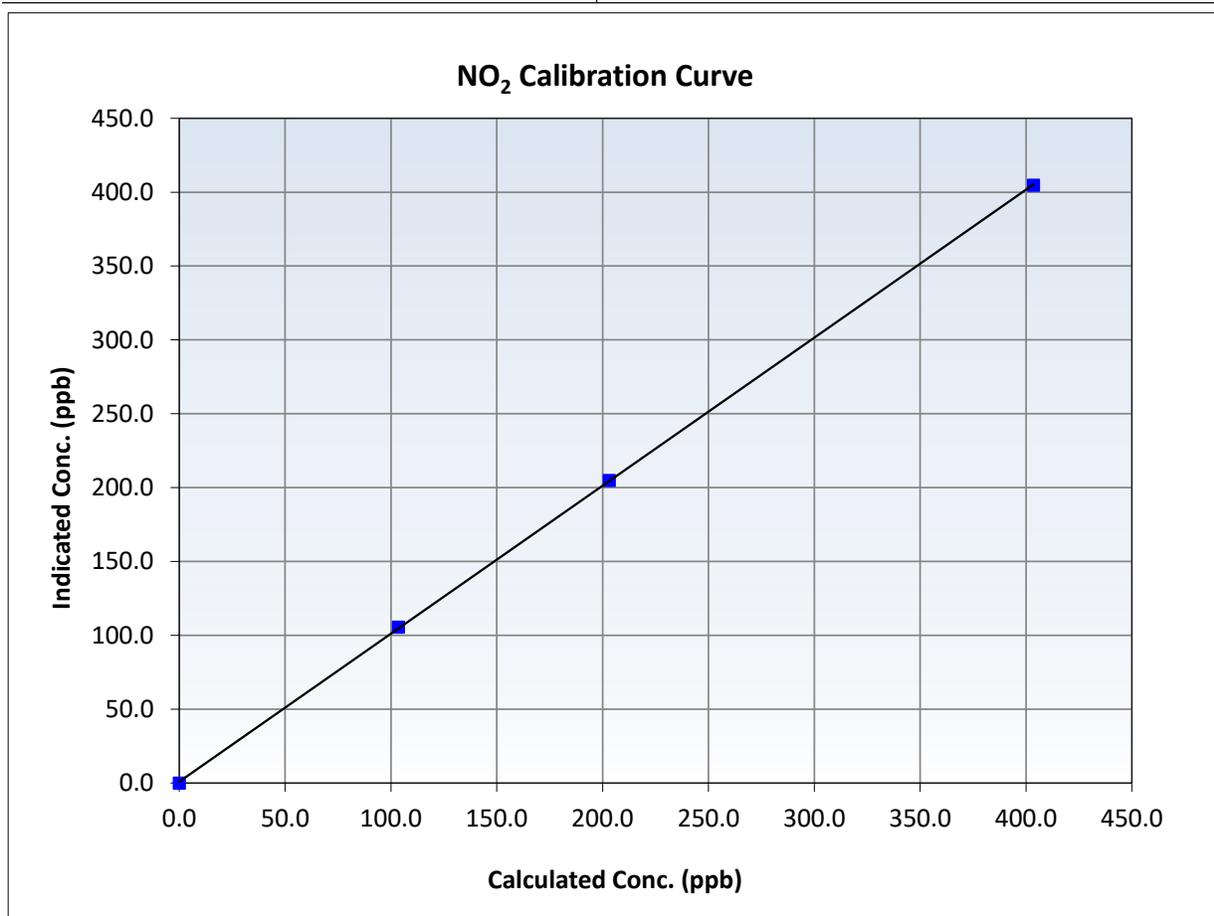
NO₂ Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	10:45	End Time (MST):	15:50
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999977	<i>≥0.995</i>
403.5	404.7	0.9970	Slope	1.001934	<i>0.90 - 1.10</i>
203.2	204.9	0.9916	Intercept	0.902579	<i>+/-20</i>
103.5	105.5	0.9808			





Wood Buffalo Environmental Association

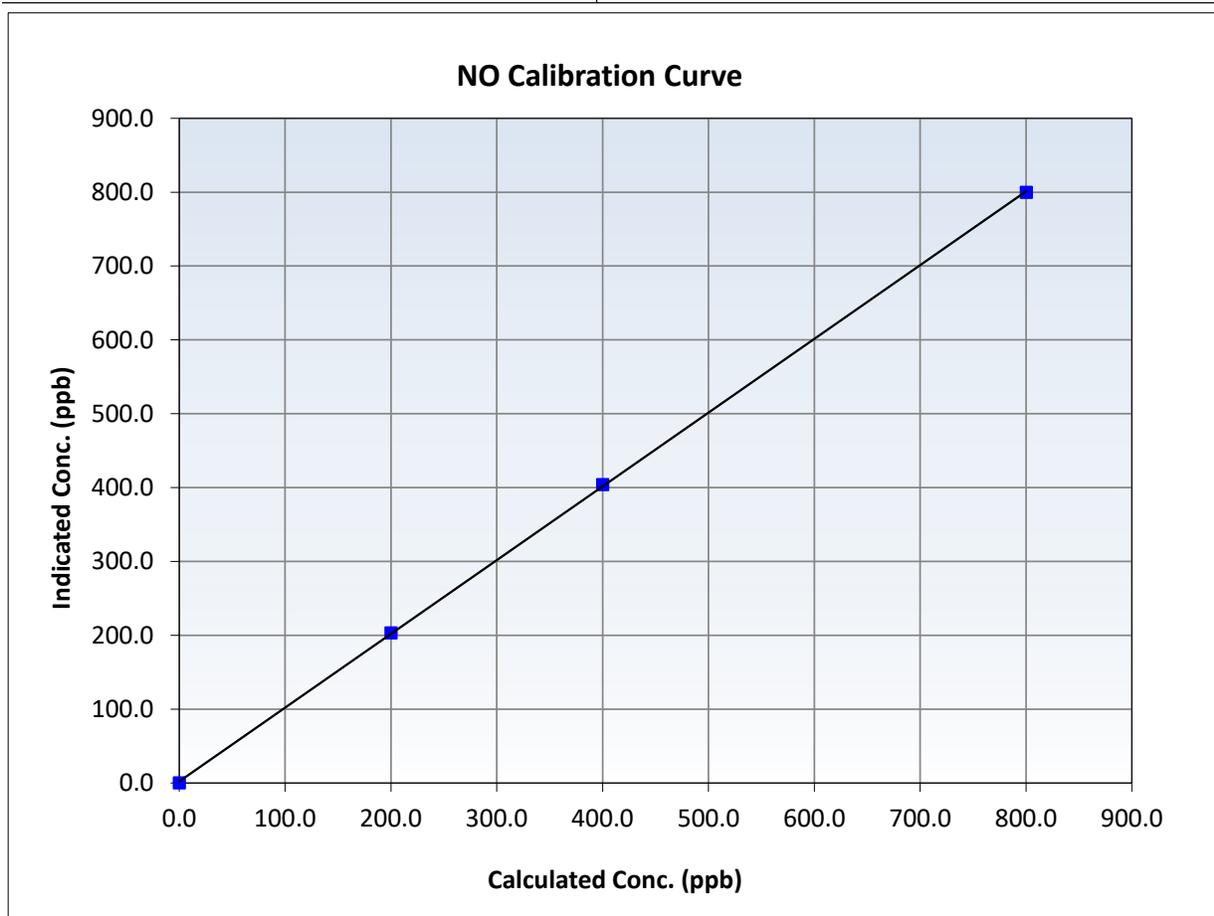
NO Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	10:45	End Time (MST):	15:50
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

Calibration Data

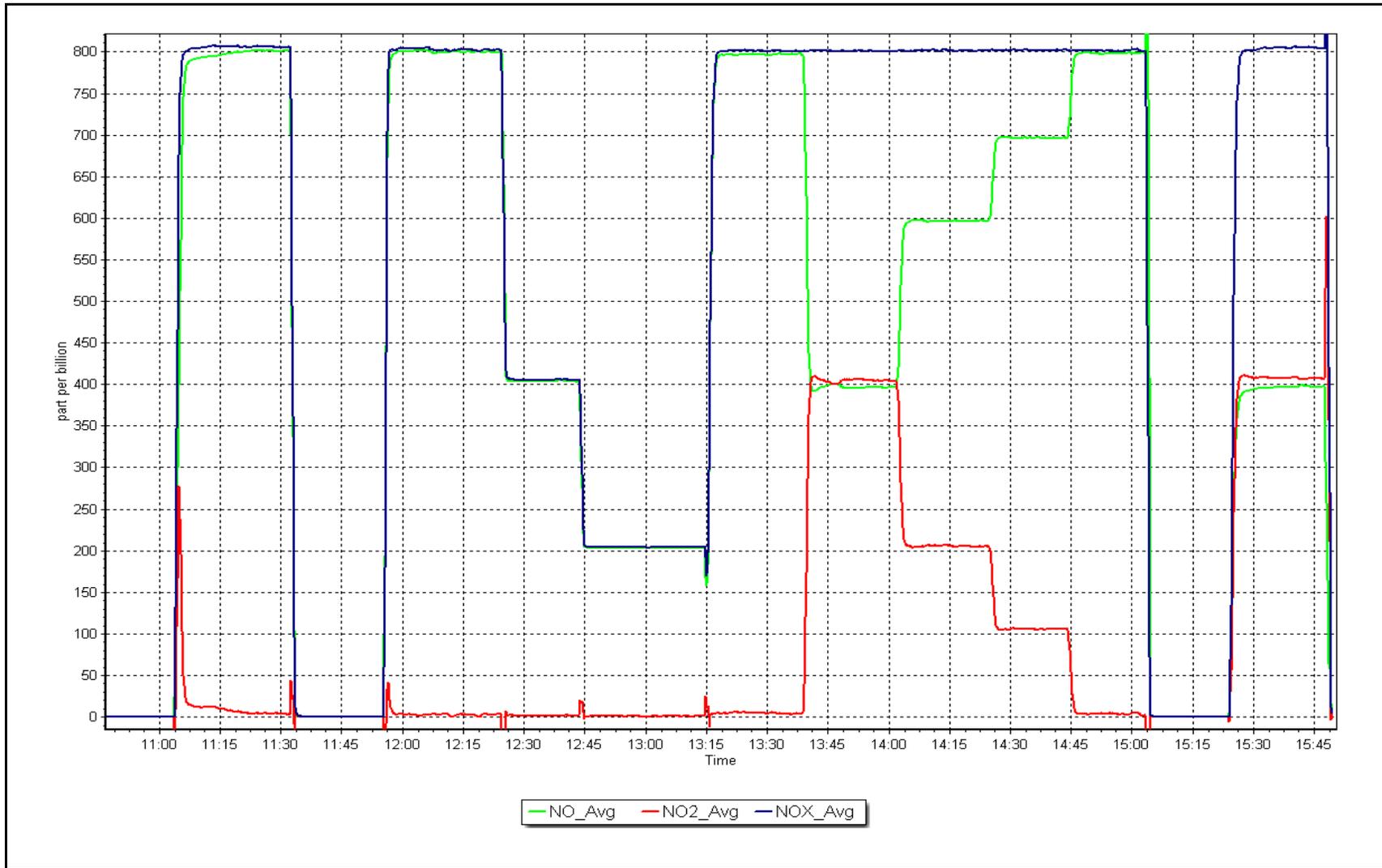
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999962	<i>≥0.995</i>
800.3	799.9	1.0005	Slope	0.998614	<i>0.90 - 1.10</i>
400.2	404.1	0.9903	Intercept	2.171929	<i>+/-20</i>
200.1	203.2	0.9846			



NO_x Calibration Plot

Date: January 15, 2026

Location: Athabasca Valley





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	January 7, 2026	Last Cal Date:	December 1, 2025
Start time (MST):	13:00	End time (MST):	15:41
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	3805
Calibrator Make/Model:	T700	Serial Number:	198
ZAG Make/Model:	T701H		

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1507964700
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.001400	0.999943	Backgd or Offset:	-0.2	-0.2
Calibration intercept:	-0.020000	0.560000	Coeff or Slope:	1.002	1.002

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	NA	0.0	-0.1	----
As found High point	5000	1705.1	400.0	402.2	0.994
As found Mid point					
As found Low point					
Baseline Corr As found:	402.3	Previous response	400.5	*% change	0.4%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	NA	0.0	0.1	----
High point	5000	1705.1	400.0	400.2	1.000
Mid point	5000	1172.8	200.0	201.1	0.995
Low point	5000	921.2	100.0	100.8	0.992
As left zero	5000	NA	0.0	0.1	----
As left span	5000	1582.6	400.0	404.0	0.990
Average Correction Factor					0.995

Notes: No adjustments made.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

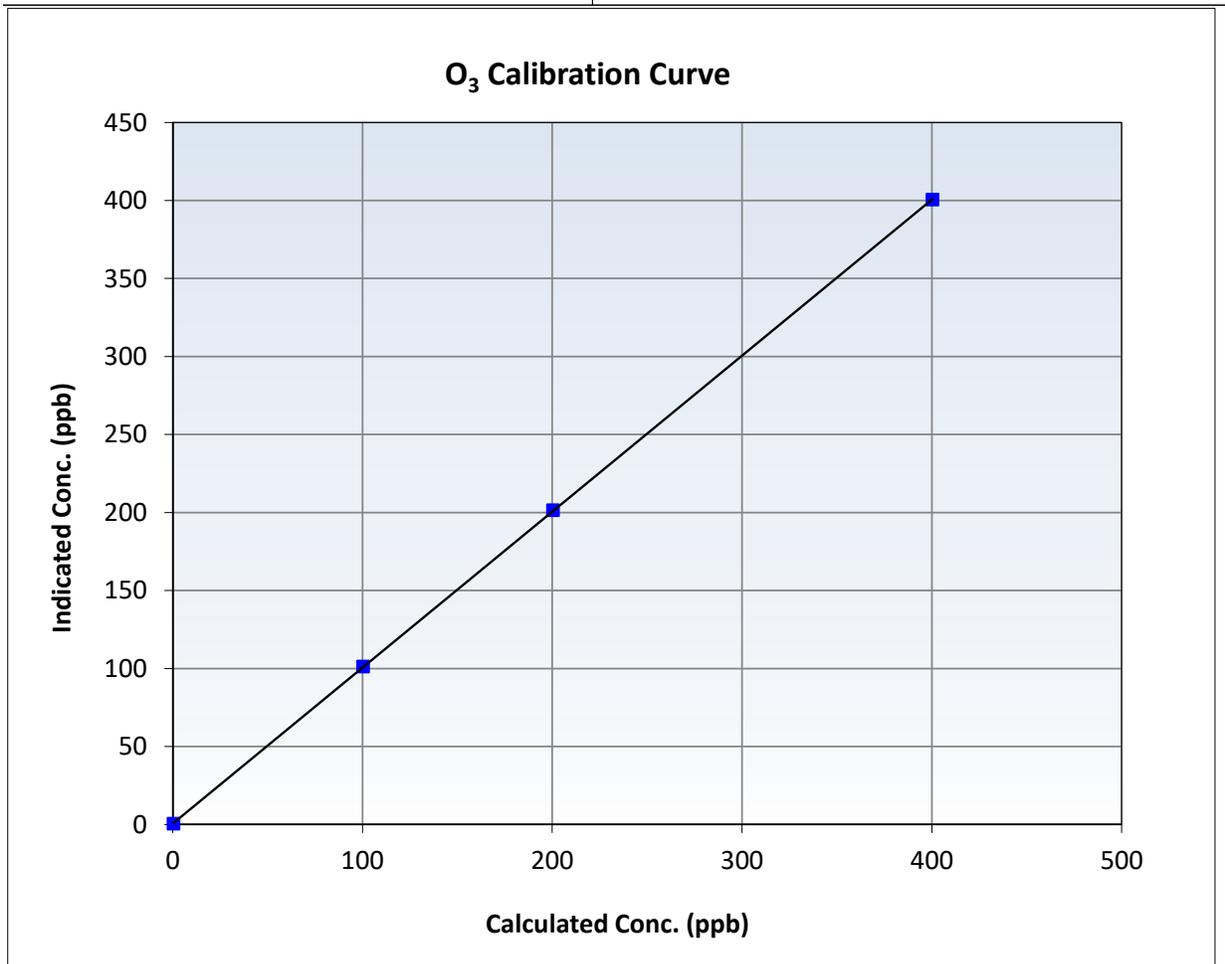
O₃ Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 1, 2025
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	13:00	End Time (MST):	15:41
Analyzer make:	Thermo 49i	Analyzer serial #:	1507964700

Calibration Data

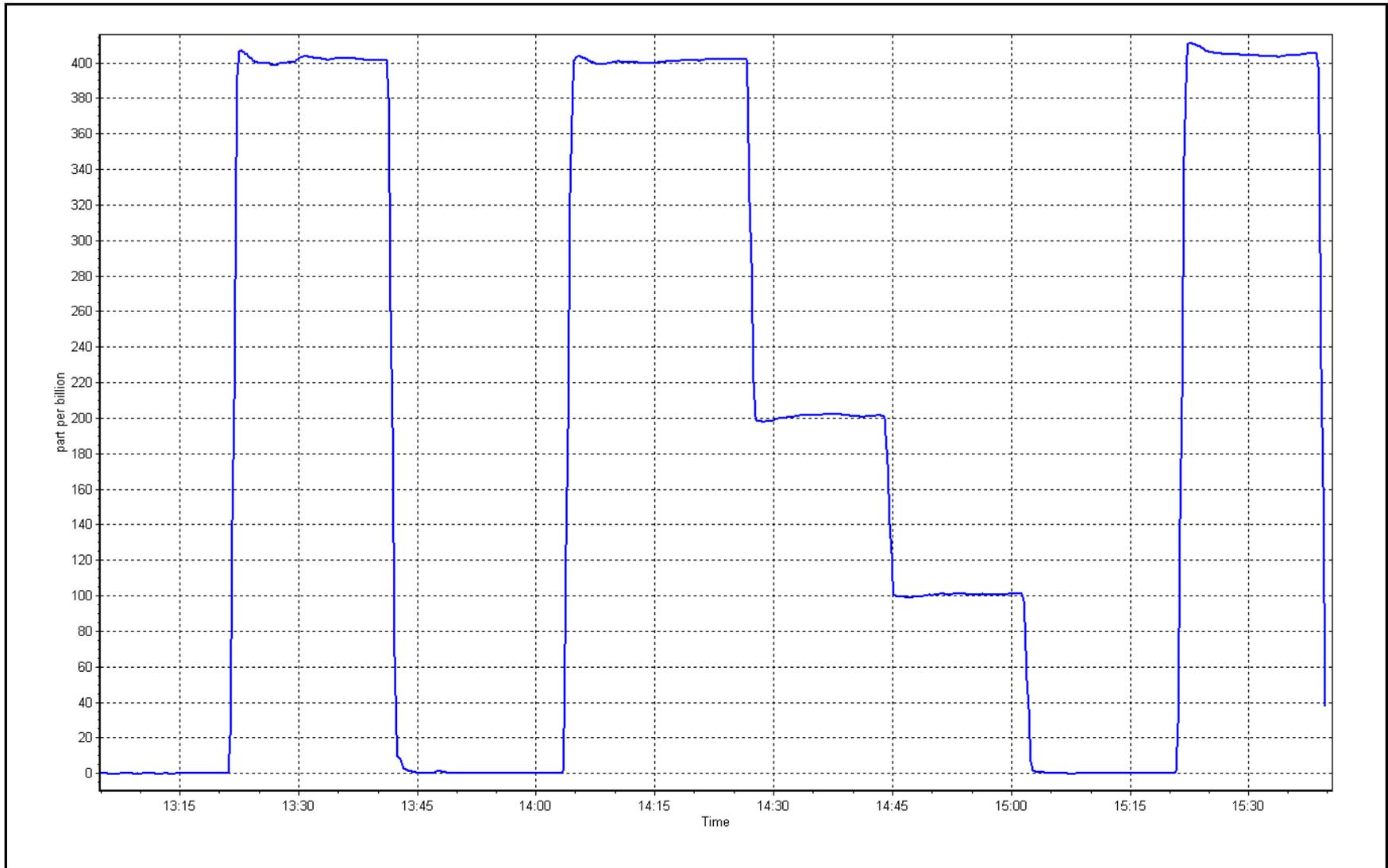
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999992	≥0.995
400.0	400.2	0.9995	Slope	0.999943	0.90 - 1.10
200.0	201.1	0.9945	Intercept	0.560000	+/- 5
100.0	100.8	0.9921			



O₃ Calibration Plot

Date: January 7, 2026

Location: Athabasca Valley





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Athabasca Valley Station number: AMS 07
Calibration Date: January 15, 2026 Last Cal Date: December 18, 2025
Start time (MST): 13:30 End time (MST): 15:12
Analyzer Make: API T640 S/N: 2235
Particulate Fraction: PM2.5
Flow Meter Make/Model: Alicat FP-25BT S/N: 388746
Temp/RH standard: Alicat FP-25BT S/N: 388746

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-6.30	-6.90	-6.30	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	743.30	742.4	743.30	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.01	4.95	5.01	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	35	----	39	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	1.70	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: **10.9** Expiry Date: July 16, 2026
Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: November 24, 2025
Date Disposable Filter Changed: November 24, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: October 9, 2025
Date RH/T Sensor Cleaned: October 9, 2025

Notes: Temp, pressure and flow checked. Leak check passed.

Calibration by: Aswin Sasi Kumar



Wood Buffalo Environmental Association

CO Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS 07
Calibration Date:	January 14, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	10:47	End time (MST):	13:56
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	2,953	ppm	Cal Gas Exp Date: September 30, 2029
Cal Gas Cylinder #:	T1TWKRN		
Removed Cal Gas Conc:	2,953	ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #:	NA		Diff between cyl:
Calibrator Make/Model:	Teledyne API T700		Serial Number: 3805
ZAG Make/Model:	Teledyne API 701H		Serial Number: 198

Analyzer Information

Analyzer make:	Thermo 48i-TLE	Analyzer serial #:	1408761381
Analyzer Range:	0 - 50 ppm		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.997638	0.996212	Backgd or Offset:	5.170	6.012
Calibration intercept:	0.222017	0.171996	Coeff or Slope:	1.077	1.077

CO As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4932	67.8	40.0	40.3	0.997
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	40.16	Prev response:	40.17	*% change:	0.0%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CO Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4932	67.8	40.0	40.0	1.002
Mid point	4966	33.9	20.0	20.3	0.987
Low point	4983	16.9	10.0	10.2	0.976
As left zero	5000	0.0	0.0	0.0	----
As left span	4932	67.8	40.0	39.9	1.003
Average Correction Factor					0.988

Notes: Zero adjusted.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

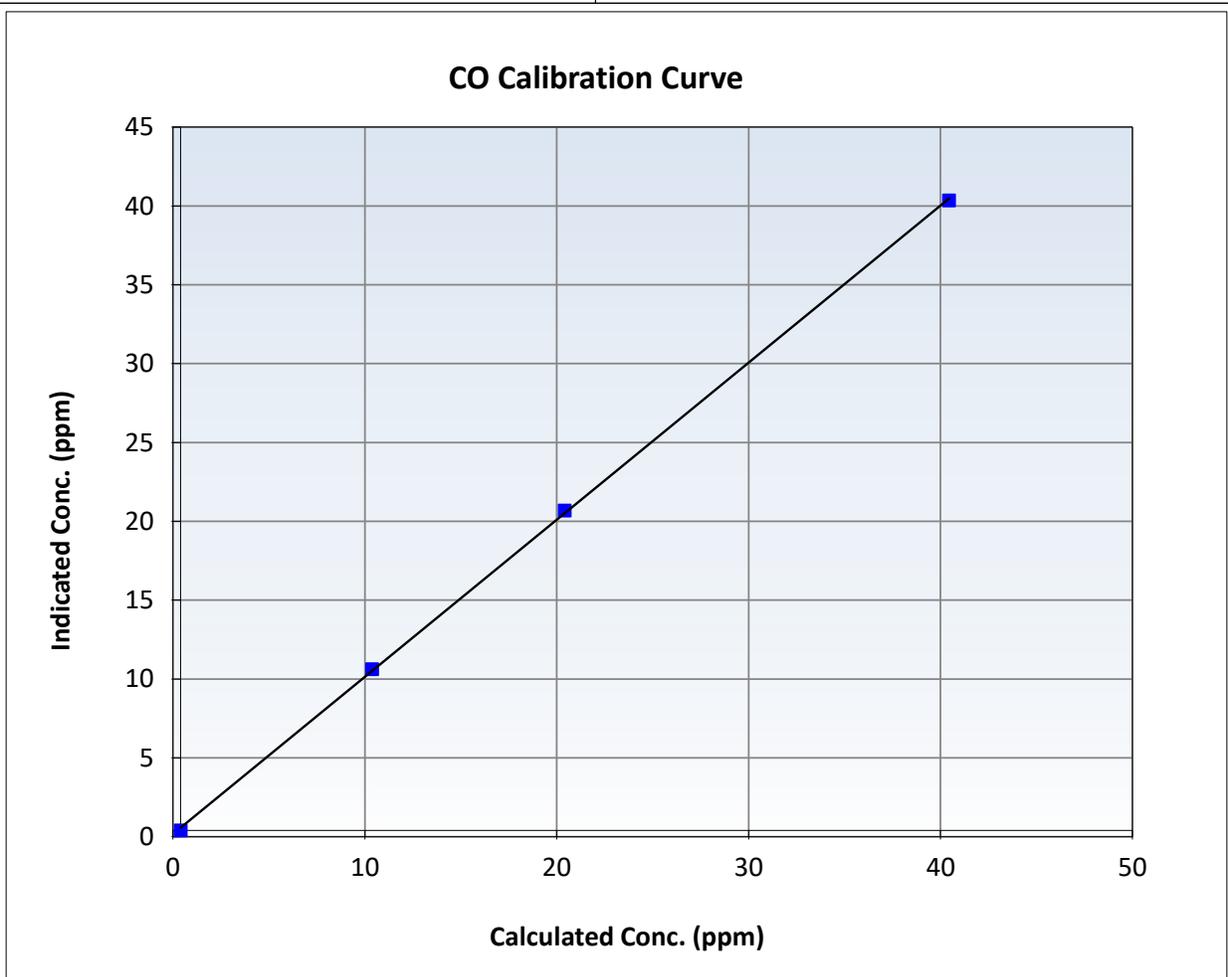
CO Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 10, 2025
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	10:47	End Time (MST):	13:56
Analyzer make:	Thermo 48i-TLE	Analyzer serial #:	1408761381

Calibration Data

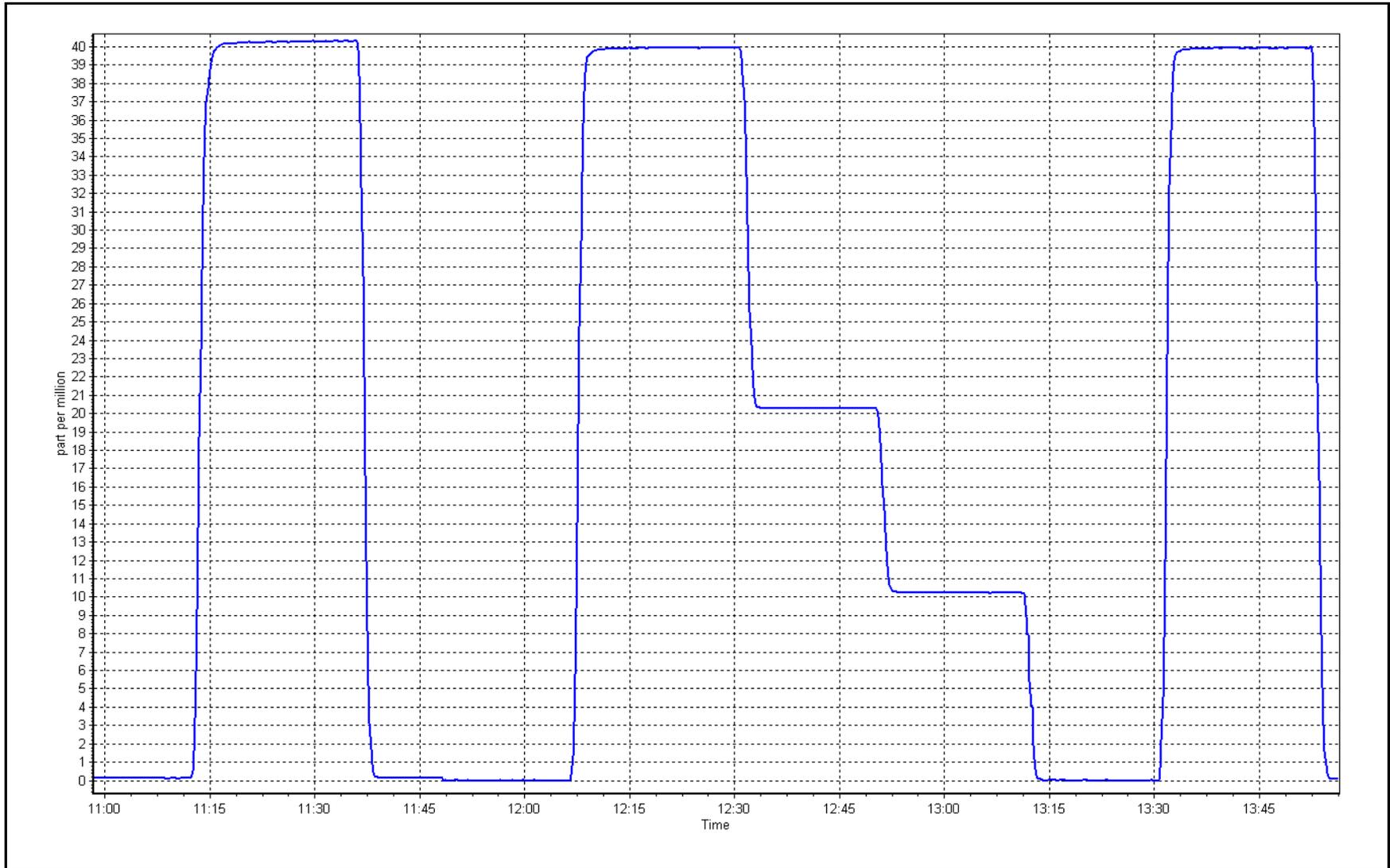
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999902
40.0	40.0	1.0024	Slope	0.996212
20.0	20.3	0.9868	Intercept	0.171996
10.0	10.2	0.9757		
				≥0.995 0.90 - 1.10 +/-1.5



CO Calibration Plot

Date: January 14, 2026

Location: Athabasca Valley





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS08 FORT CHIPEWYAN JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	January 19, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	13:55	End time (MST):	16:50
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	49.84	ppm	Cal Gas Exp Date:	January 6, 2030
Cal Gas Cylinder #:	CC196697			
Removed Cal Gas Conc:	49.84	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	3810
Zero Air Gen Model:	Teledyne API T701		Serial Number:	135

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Serial Number:	1236656116
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006171	1.002101	Backgd or Offset:	1.9	1.9
Calibration intercept:	0.154810	-0.144300	Coeff or Slope:	1.014	1.029

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	80.3	800.4	789.1	1.014
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	789.0	Previous response	805.5	*% change	-2.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4920	80.3	800.4	802.2	0.998
Mid point	4960	40.2	400.7	401.1	0.999
Low point	4980	20.1	200.4	200.1	1.001
As left zero	5000	0.0	0.0	0.3	----
As left span	4920	80.3	800.4	804.0	0.996
Average Correction Factor:					0.999

Notes: Changed out inlet filter after as founds. Span adjustment made.

Calibration Performed By: Matthew Courtoreille



Wood Buffalo Environmental Association

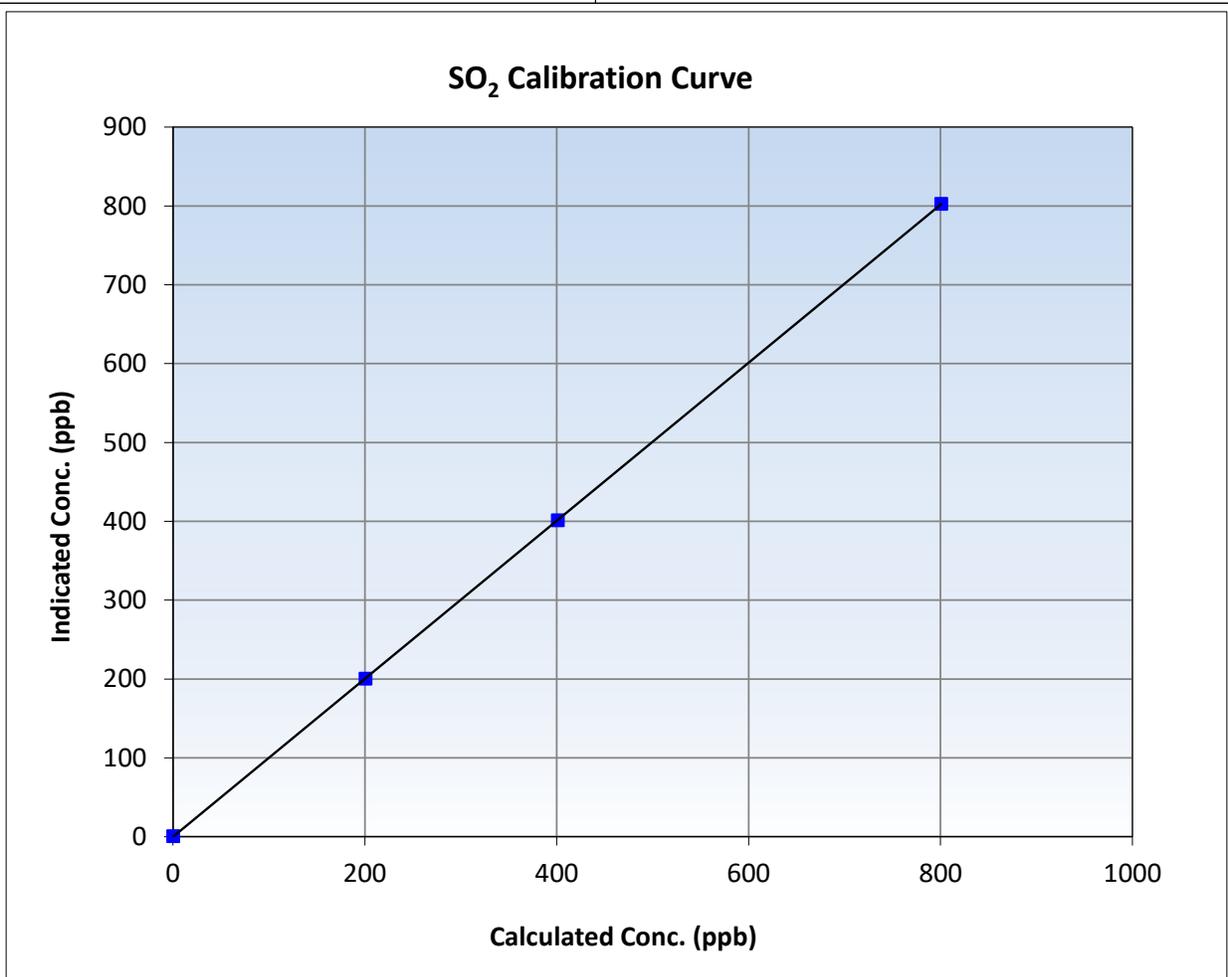
SO₂ Calibration Summary

Station Information

Calibration Date:	January 19, 2026	Previous Calibration:	December 5, 2025
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	13:55	End Time (MST):	16:50
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1236656116

Calibration Data

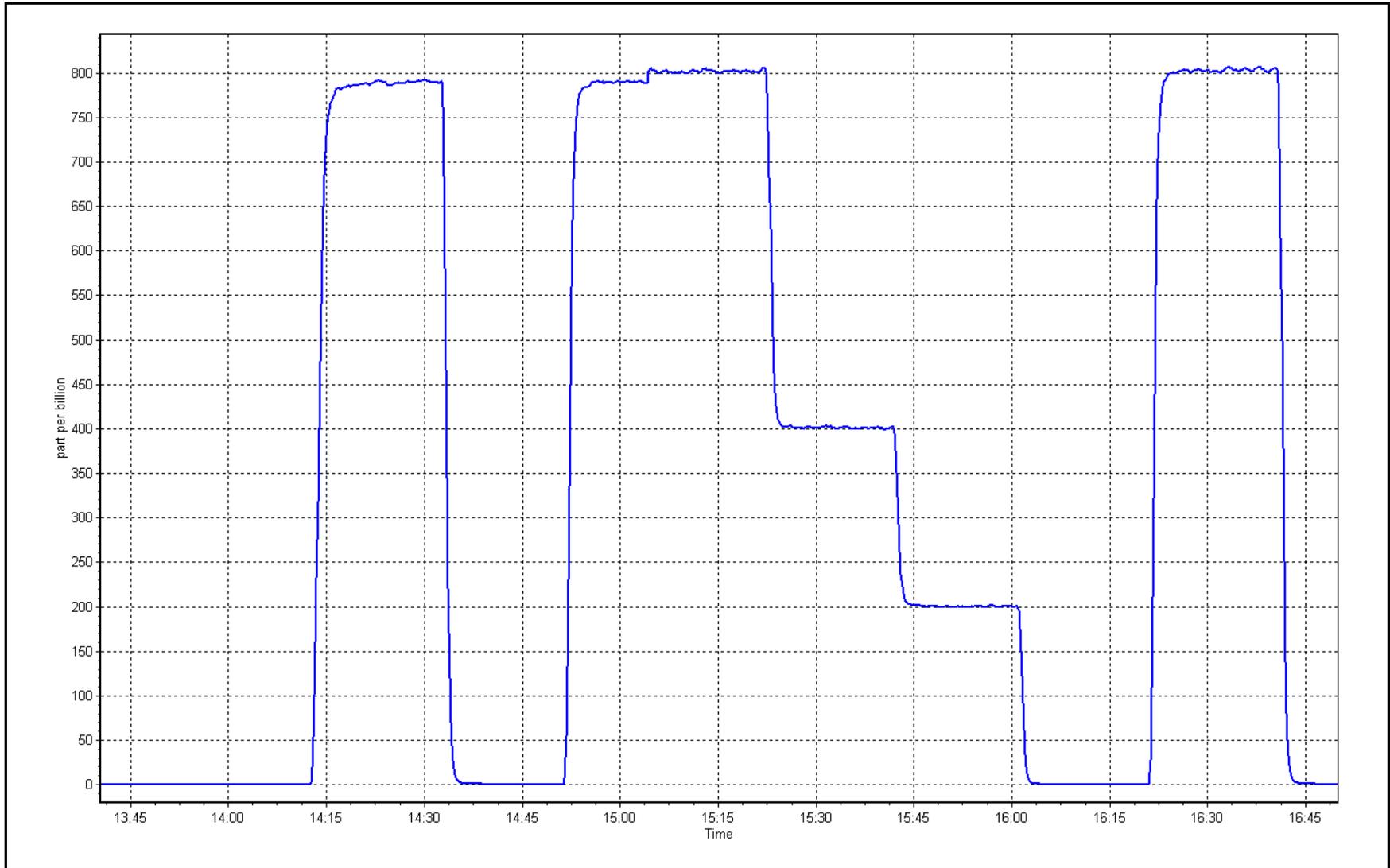
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.4	----	Correlation Coefficient	0.999998	≥0.995
800.4	802.2	0.9977	Slope	1.002101	0.90 - 1.10
400.7	401.1	0.9990	Intercept	-0.144300	+/-30
200.4	200.1	1.0013			



SO2 Calibration Plot

Date: January 19, 2026

Location: Fort Chipewyan





Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	January 29, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	8:07	End time (MST):	9:20
Reason:	Removal		

Calibration Standards

Cal Gas Concentration:	49.84	ppm	Cal Gas Exp Date:	January 6, 2030
Cal Gas Cylinder #:	CC196697			
Removed Cal Gas Conc:	49.84	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	3810
Zero Air Gen Model:	Teledyne API T701		Serial Number:	135

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Serial Number:	1236656116
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006171		Backgd or Offset:	1.9	
Calibration intercept:	0.154810		Coeff or Slope:	1.029	

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	80.3	800.4	798.3	1.003
As found Mid point	4960	40.2	400.7	399.2	1.004
As found Low point	4980	20.1	200.4	199.6	1.004
New cylinder response					
Baseline Corr As found:	798.2	Previous response	805.5	*% change	-0.9%
Baseline Corr 2nd AF pt:	399.1	AF Slope:	0.997332	AF Intercept:	-0.123433
Baseline Corr 3rd AF pt:	199.5	AF Correlation:	0.999999	<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor:

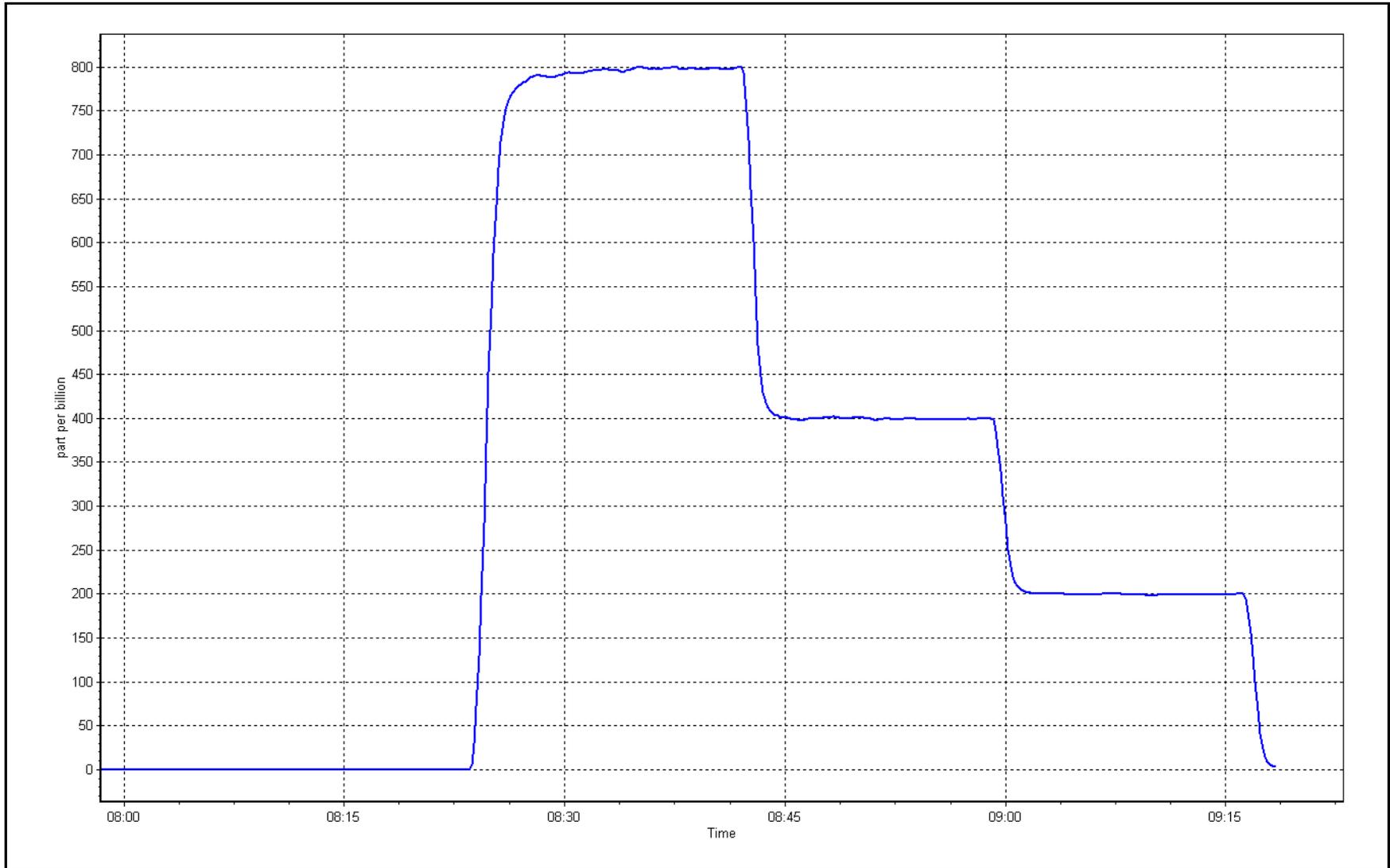
Notes: Removal cal for replacement of instrument, front display has failed.

Calibration Performed By: Kelly Baragar

SO2 Calibration Plot

Date: January 29, 2026

Location: Fort Chipewyan





Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	January 29, 2026	Last Cal Date:	NA
Start time (MST):	9:20	End time (MST):	11:55
Reason:	Install		

Calibration Standards

Cal Gas Concentration:	49.84	ppm	Cal Gas Exp Date:	January 6, 2030
Cal Gas Cylinder #:	CC196697			
Removed Cal Gas Conc:	49.84	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	3810
Zero Air Gen Model:	Teledyne API T701		Serial Number:	135

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Serial Number:	1170050147
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:		0.997821	Backgd or Offset:		3.94
Calibration intercept:		1.155383	Coeff or Slope:		1.039

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
-----------	----------------------------------	--------------------------------	---	---------------------------------------	--

As found zero
As found High point
As found Mid point
As found Low point
New cylinder response

Baseline Corr As found:	NA	Previous response	NA	*% change	NA
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
-----------	----------------------------------	--------------------------------	---	---------------------------------------	--

Calibrator zero	5000	0.0	0.0	0.0	----
High point	4920	80.3	800.4	798.9	1.002
Mid point	4960	40.2	400.7	402.5	0.996
Low point	4980	20.1	200.4	201.6	0.994
As left zero	5000	0.0	0.0	-0.2	----
As left span	4920	80.3	800.4	798.3	1.003

Average Correction Factor: 0.997

Notes: Installation of replacement analyzer.

Calibration Performed By: Kelly Baragar



Wood Buffalo Environmental Association

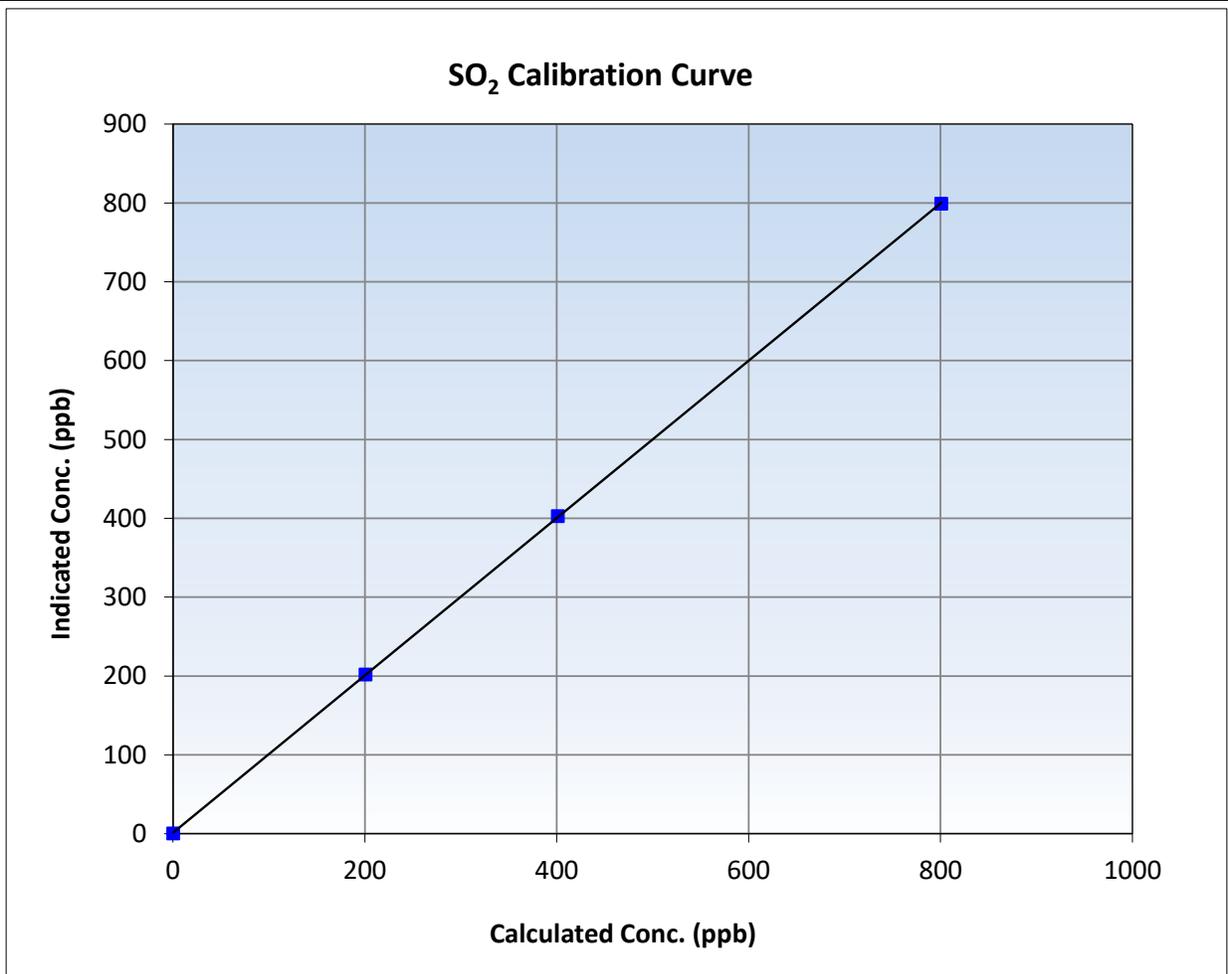
SO₂ Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	NA
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:20	End Time (MST):	11:55
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1170050147

Calibration Data

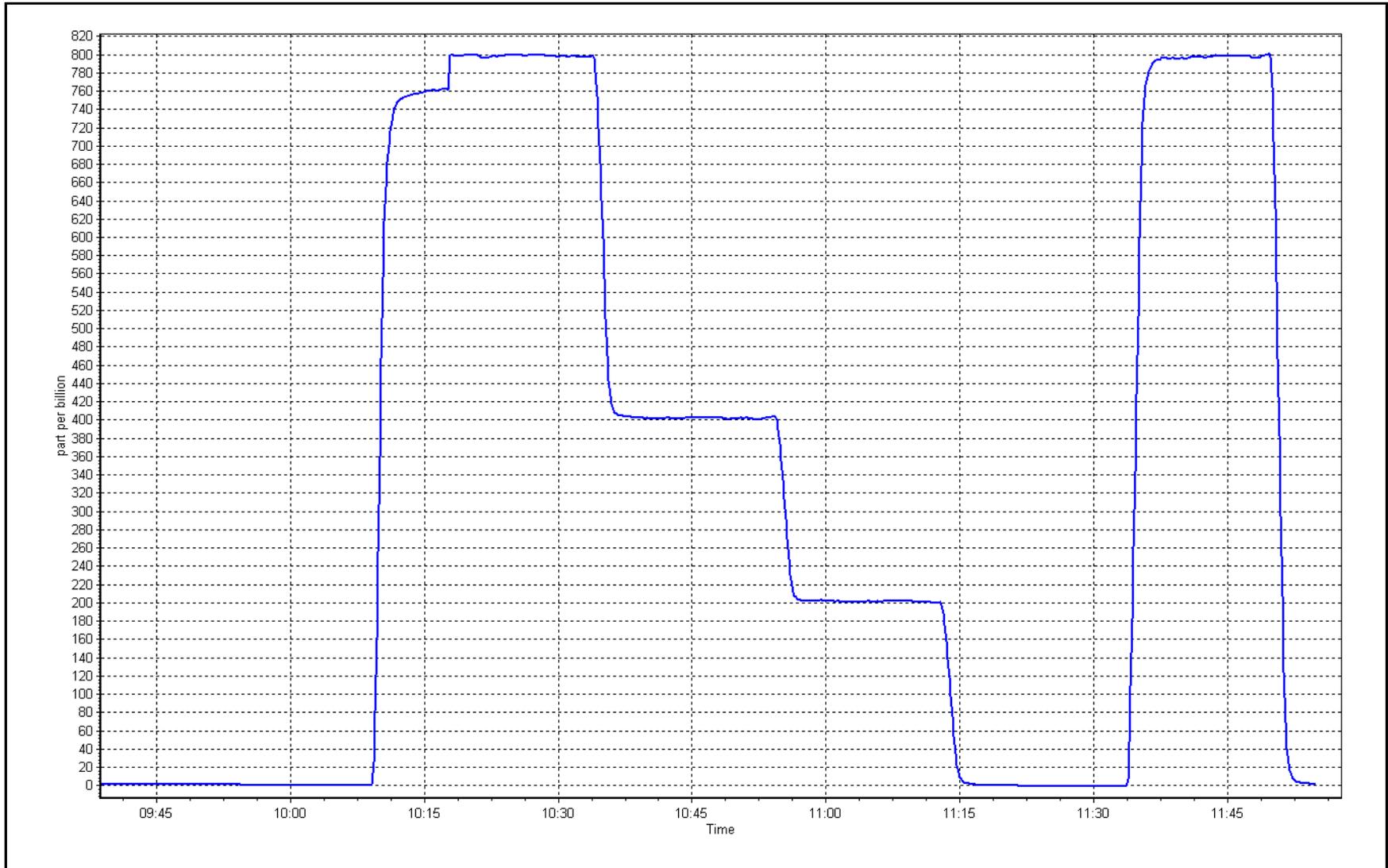
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>	
0.0	0.0	----	Correlation Coefficient	0.999986	≥0.995
800.4	798.9	1.0019	Slope	0.997821	0.90 - 1.10
400.7	402.5	0.9955	Intercept	1.155383	+/-30
200.4	201.6	0.9938			



SO2 Calibration Plot

Date: January 29, 2026

Location: Fort Chipewyan





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	January 15 2026	Last Cal Date:	December 10, 2025
Start time (MST):	10:35	End time (MST):	1:41
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.84	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	SA7549			
Removed Cal Gas Conc:	4.84	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	3810
ZAG Make/Model:	Teledyne API T701		Serial Number:	135

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153461
Converter make:	CDN-101	Converter serial #:	630
Analyzer Range	0 - 100 ppb	Converter Temp:	800 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.022547	1.005109	Backgd or Offset:	3.6	3.6
Calibration intercept:	-0.158523	-0.098297	Coeff or Slope:	1.206	1.206

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.5	----
As found High point	4917	82.6	80.0	80.9	0.982
As found Mid point	4959	41.3	40.0	40.7	0.970
As found Low point	4979	20.7	20.0	20.1	0.973
New cylinder response					
Baseline Corr As found:	81.4	Prev response:	81.61	*% change:	-0.3%
Baseline Corr 2nd AF pt:	41.2	AF Slope:	1.017828	AF Intercept:	-0.318396
Baseline Corr 3rd AF pt:	20.6	AF Correlation:	0.999953	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.3	----
High point	4917	82.6	80.0	80.2	0.997
Mid point	4959	41.3	40.0	40.1	0.997
Low point	4979	20.7	20.0	20.3	0.987
As left zero	5000	0.0	0.0	0.2	----
As left span	4917	82.6	80.0	81.4	0.982
SO2 Scrubber Check	4920	80.3	803.0	-0.1	----
Date of last scrubber change:	May 15, 2025			Ave Corr Factor	0.994
Date of last converter efficiency test:					

Notes: Changed inlet filter after as founds. No adjustment made

Calibration Performed By: Jeremy cardinal



Wood Buffalo Environmental Association

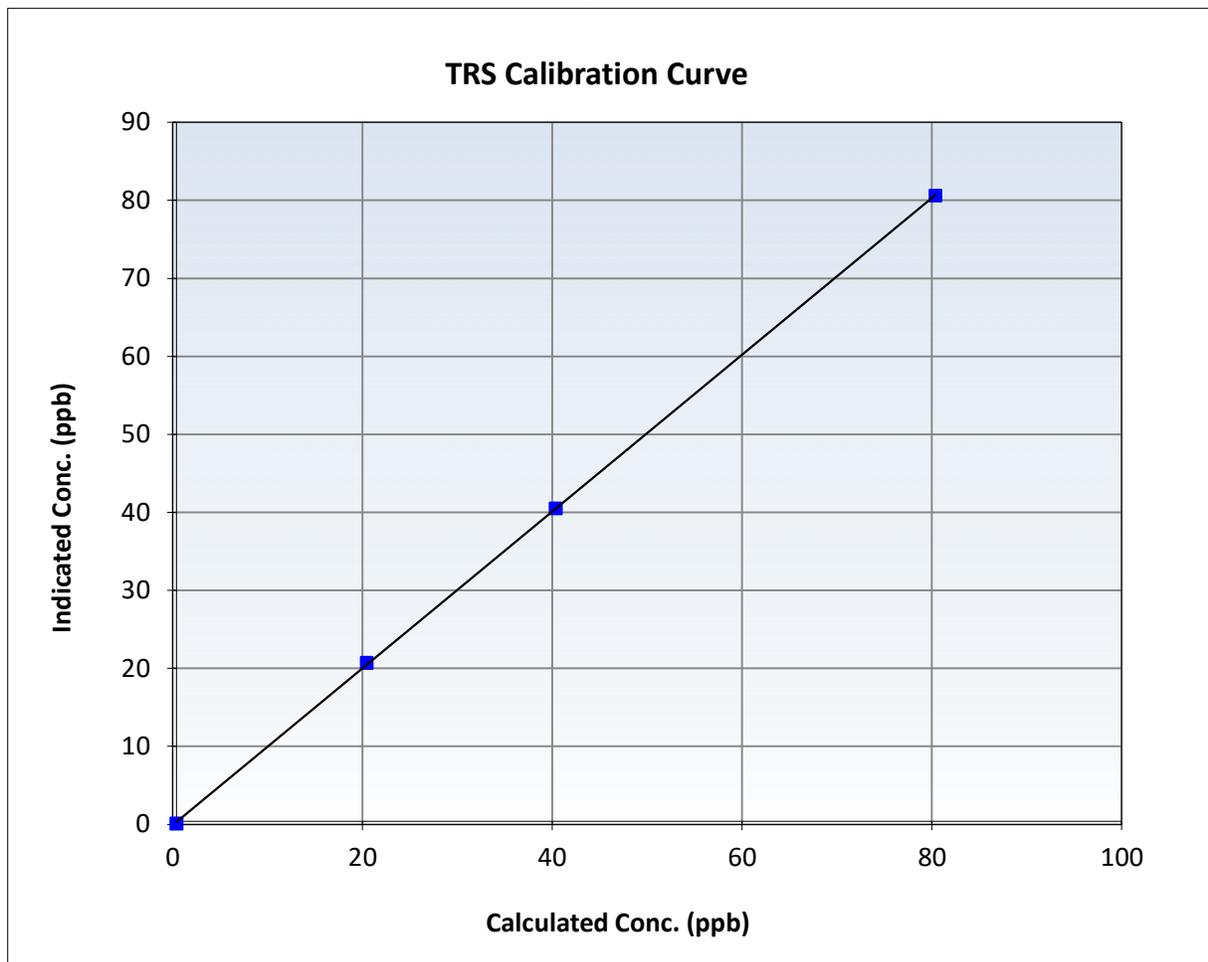
TRS Calibration Summary

Station Information

Calibration Date:	January 15 2026	Previous Calibration:	December 10, 2025
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	10:35	End Time (MST):	1:41
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153461

Calibration Data

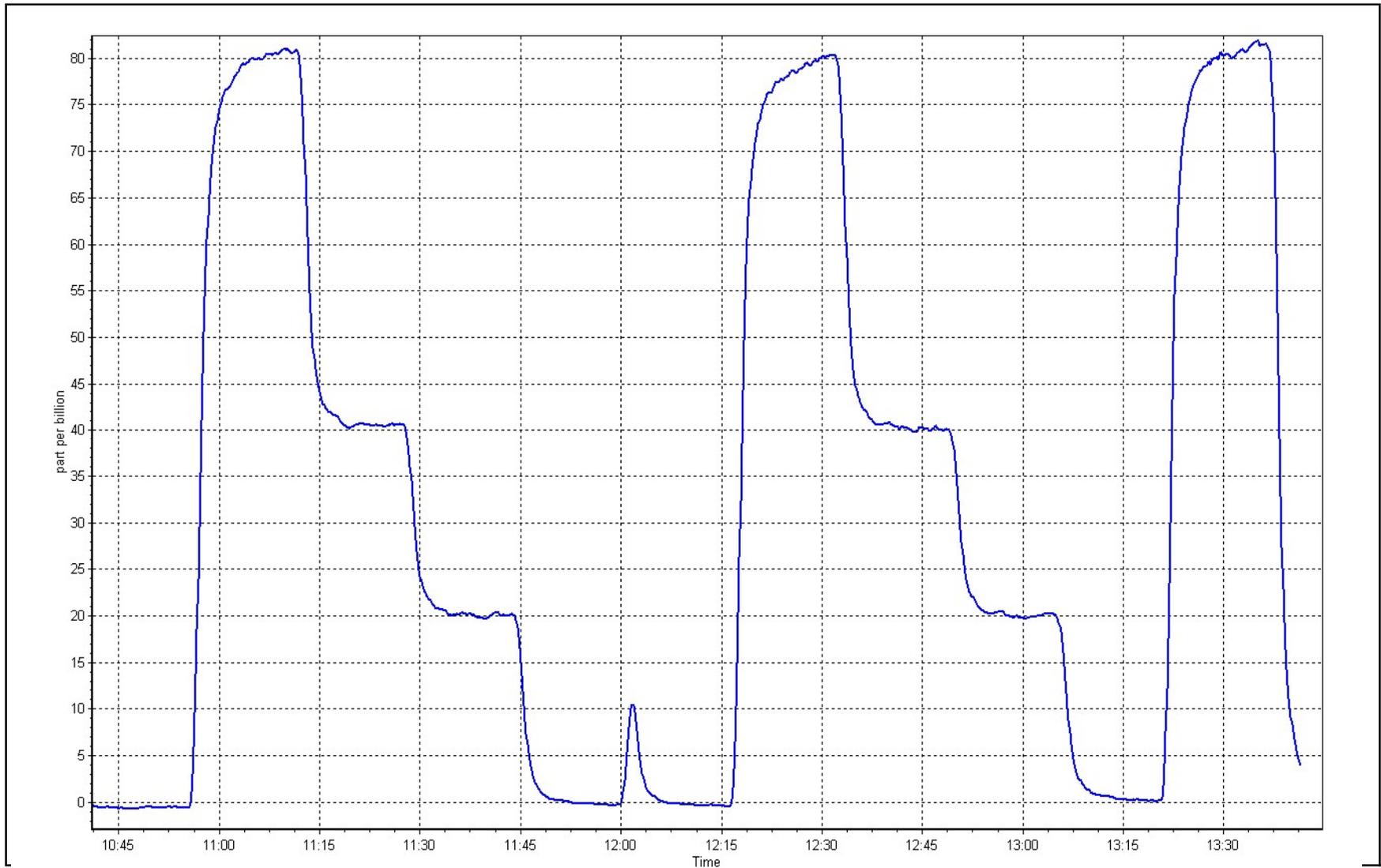
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.3	----	Correlation Coefficient	0.999968	≥ 0.995
80.0	80.2	0.9970	Slope	1.005109	$0.90 - 1.10$
40.0	40.1	0.9969	Intercept	-0.098297	± 3
20.0	20.3	0.9871			



TRS Calibration Plot

Date: January 15 2026

Location: Fort Chipewyan





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	January 28, 2026	Last Cal Date:	January 15 2026
Start time (MST):	16:10	End time (MST):	19:25
Reason:	Maintenance		

Calibration Standards

Cal Gas Concentration:	4.84	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	SA7549			
Removed Cal Gas Conc:	4.84	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	3810
ZAG Make/Model:	Teledyne API T701		Serial Number:	135

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153461
Converter make:	CDN-101	Converter serial #:	630
Analyzer Range	0 - 100 ppb	Converter Temp:	800 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.005109	1.007959	Backgd or Offset:	3.6	3.0
Calibration intercept:	-0.098297	-0.298033	Coeff or Slope:	1.206	1.157

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4917	82.6	80.0	80.8	0.987
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	81.0	Prev response:	80.27	*% change:	0.9%
Baseline Corr 2nd AF pt:	NA	AF Slope:	NA	AF Intercept:	NA
Baseline Corr 3rd AF pt:	NA	AF Correlation:	NA	* = > +/-5% change initiates investigation	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	82.6	80.0	80.4	0.995
Mid point	4959	41.3	40.0	40.0	0.999
Low point	4979	20.7	20.0	19.5	1.028
As left zero	5000	0.0	0.0	0.3	----
As left span					
SO2 Scrubber Check	4920	80.3	803.0	0.0	----
Date of last scrubber change:		May 15, 2025		Ave Corr Factor	1.007
Date of last converter efficiency test:					

Notes: Performed single point as found, audit was performed prior to maintenance cal and found analyzer to be linear. Replaced pump after as found and adjusted span.

Calibration Performed By: Kelly Baragar



Wood Buffalo Environmental Association

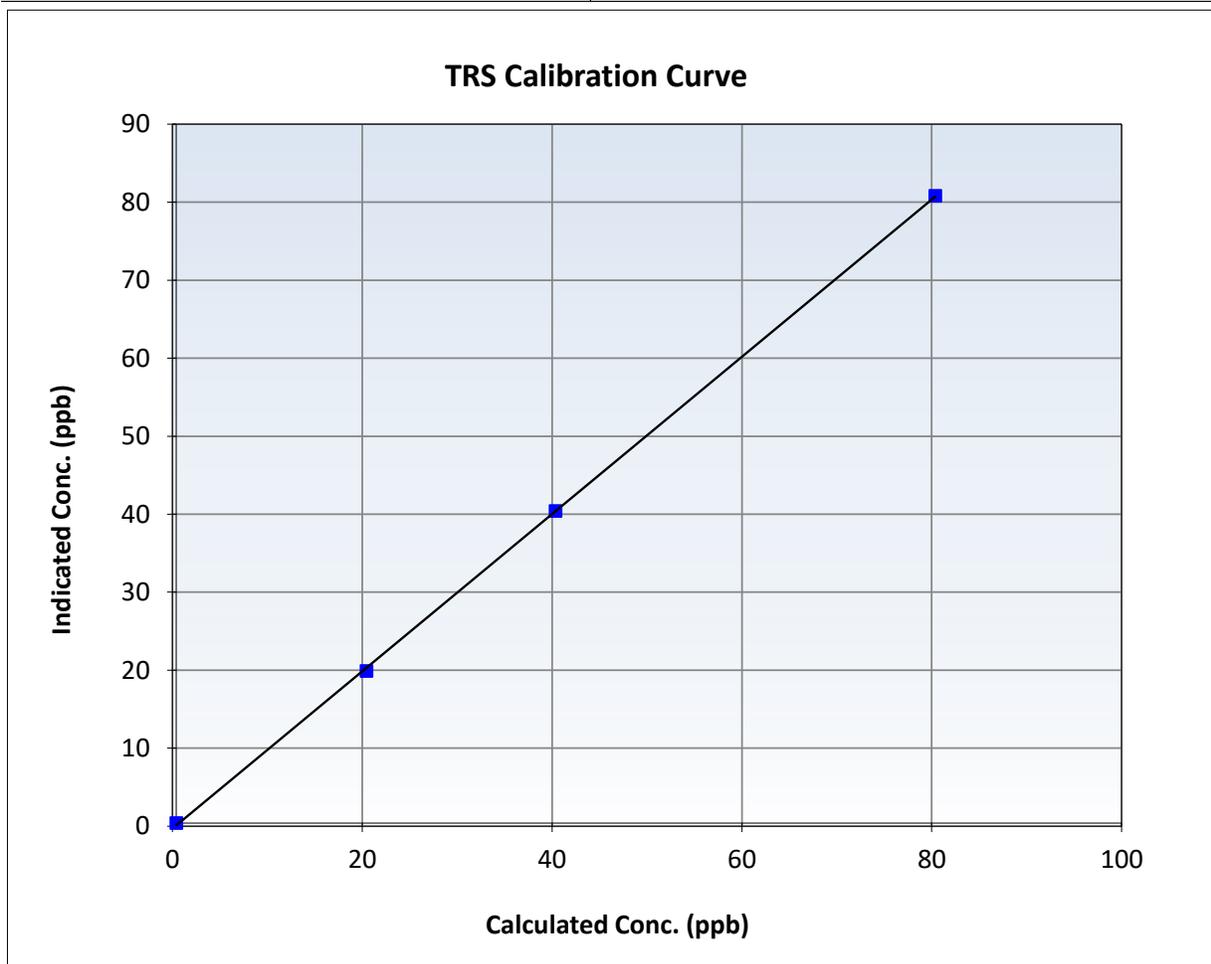
TRS Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	January 15 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	16:10	End Time (MST):	19:25
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153461

Calibration Data

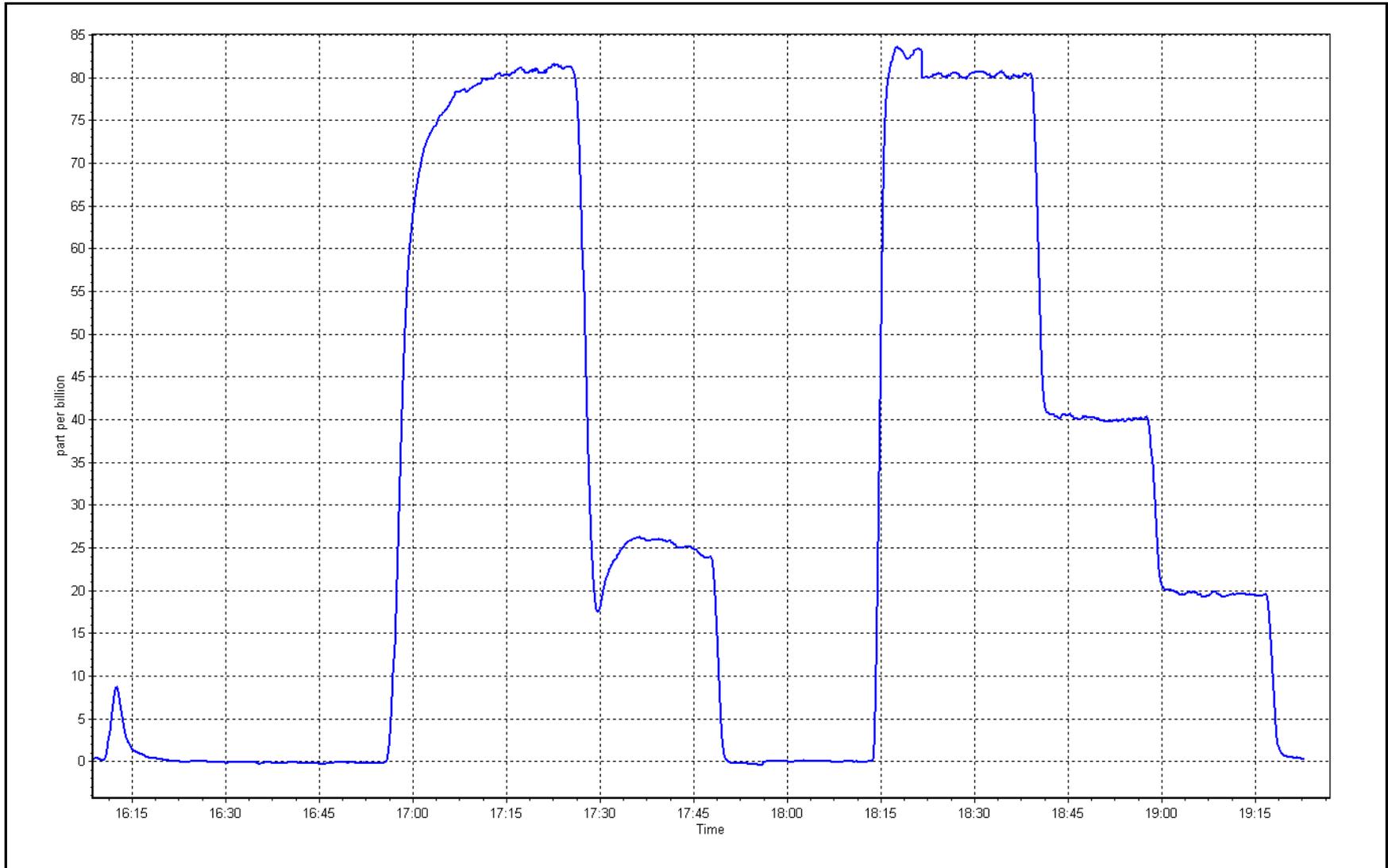
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999927	≥ 0.995
80.0	80.4	0.9946	Slope	1.007959	$0.90 - 1.10$
40.0	40.0	0.9994	Intercept	-0.298033	± 3
20.0	19.5	1.0276			



TRS Calibration Plot

Date: January 28, 2026

Location: Fort Chipewyan





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Fort Chipewyan
 Station number: AMS 08
 Calibration Date: January 20, 2026
 Last Cal Date: December 31, 2025
 Start time (MST): 9:59
 End time (MST): 14:17
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: CC358100
 NOX Cal Gas Conc: 60.10 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.10 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701H
 Cal Gas Expiry Date: January 5, 2032
 NO Cal Gas Conc: 60.00 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.00 ppm
 NO gas Diff:
 Serial Number: 3810
 Serial Number: 197

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.1	0.5	-0.4	----	----
AF High point	4933	66.7	801.8	800.4	1.3	816.0	813.0	2.9	0.9827	0.9852
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 803.0 ppb		NO = 800.7 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 1.6%	
Baseline Corr 1st pt	NO _x = 815.9 ppb		NO = 812.5 ppb			<u>As Found Statistics</u>		*Percent Change	NO = 1.4%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1426262592

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.000358	0.998291
NO _x Cal Offset:	0.935069	0.934879
NO Cal Slope:	1.000183	0.999098
NO Cal Offset:	0.154966	0.134608
NO ₂ Cal Slope:	1.001471	1.000660
NO ₂ Cal Offset:	-0.034943	0.457906

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.103	1.087	NO bkgnd or offset:	5.0	4.9
NOX coeff or slope:	0.996	0.997	NOX bkgnd or offset:	5.3	5.3
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	178.5	178.5

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.2	0.6	-0.3	----	----
High point	4933	66.7	801.8	800.4	1.3	800.8	800.0	0.9	1.0012	1.0006
Mid point	4967	33.3	400.2	399.6	0.7	401.4	399.4	2.0	0.9971	1.0004
Low point	4983	16.7	200.7	200.4	0.3	201.7	199.7	2.2	0.9952	1.0035
As left zero	5000	0.0	0.0	0.0	0.0	1.2	0.7	0.5	----	----
As left span	4933	66.7	801.8	401.7	400.1	804.1	401.7	402.4	0.9971	1.0000
Average Correction Factor									0.9979	1.0015

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.3	----	----
High GPT point	796.2	397.0	400.5	400.7	0.9996	100.0%
Mid GPT point	796.2	594.1	203.4	204.9	0.9928	100.7%
Low GPT point	796.2	695.2	102.3	103.3	0.9906	100.9%
Average Correction Factor					0.9944	100.6%

Notes: Made adjustments after high point, changed in-line filter.

Calibration Performed By: Jerme Cardinal



Wood Buffalo Environmental Association

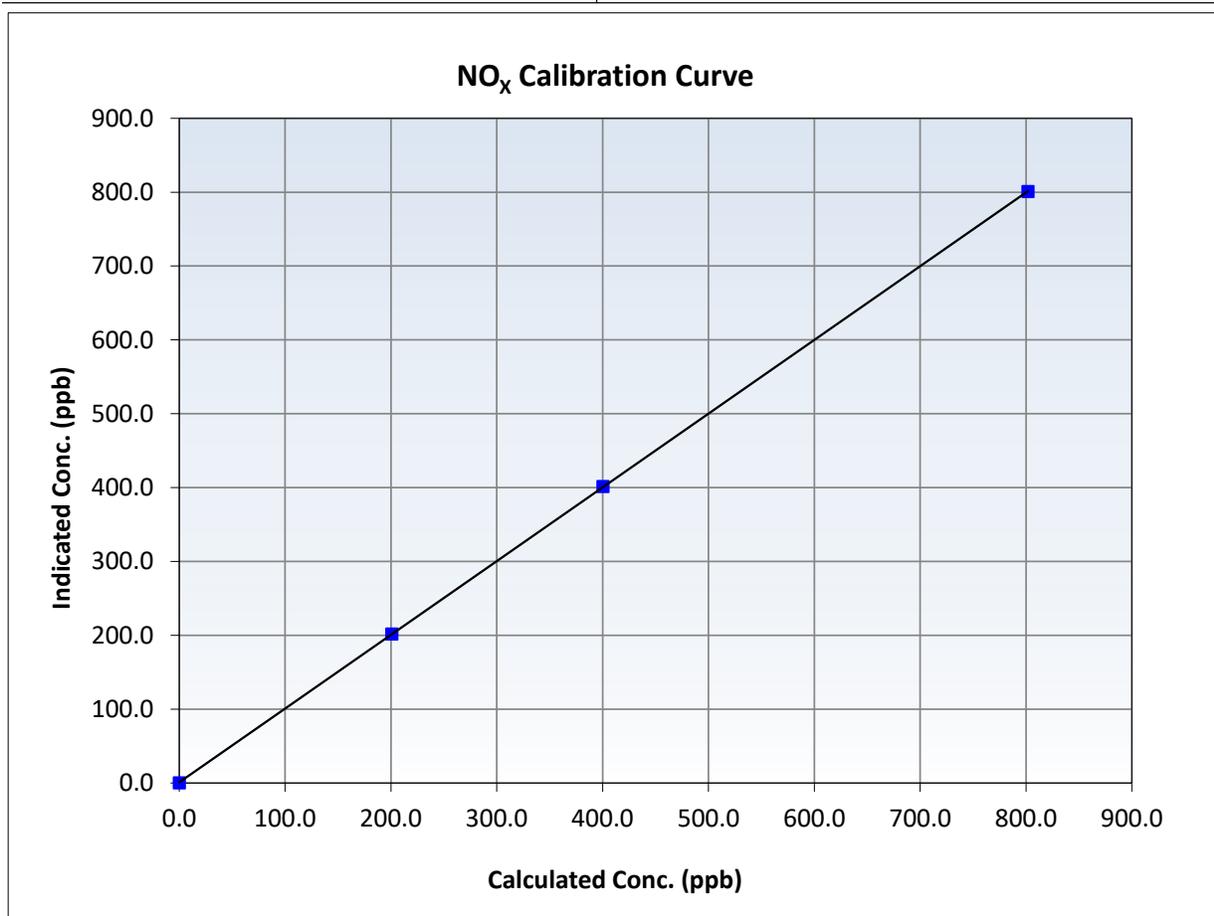
NO_x Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 31, 2025
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:59	End Time (MST):	14:17
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.2	----	Correlation Coefficient	0.999995	<i>≥0.995</i>
801.8	800.8	1.0012	Slope	0.998291	<i>0.90 - 1.10</i>
400.2	401.4	0.9971	Intercept	0.934879	<i>+/-20</i>
200.7	201.7	0.9952			





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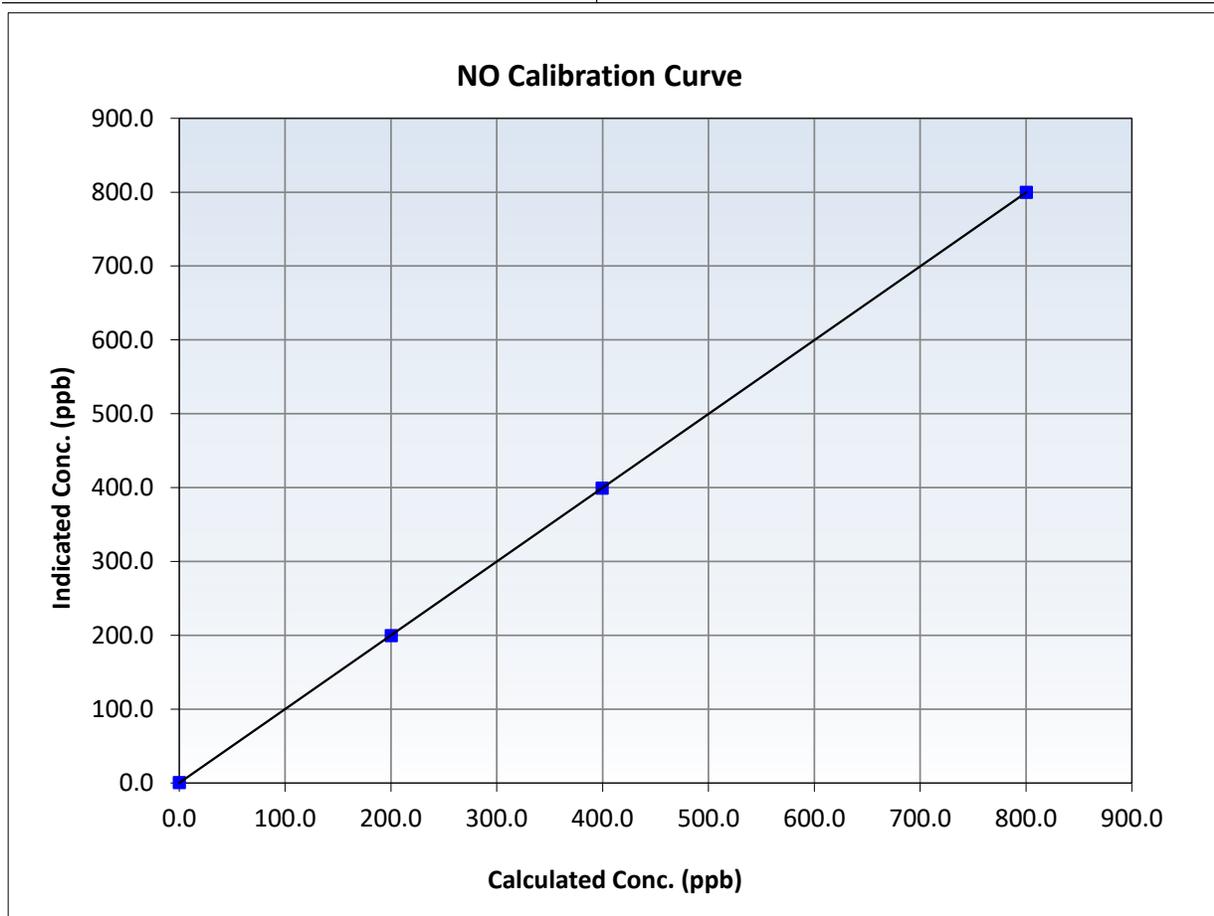
NO Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 31, 2025
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:59	End Time (MST):	14:17
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.6	----	Correlation Coefficient	0.999998	<i>≥0.995</i>
800.4	800.0	1.0006	Slope	0.999098	<i>0.90 - 1.10</i>
399.6	399.4	1.0004	Intercept	0.134608	<i>+/-20</i>
200.4	199.7	1.0035			





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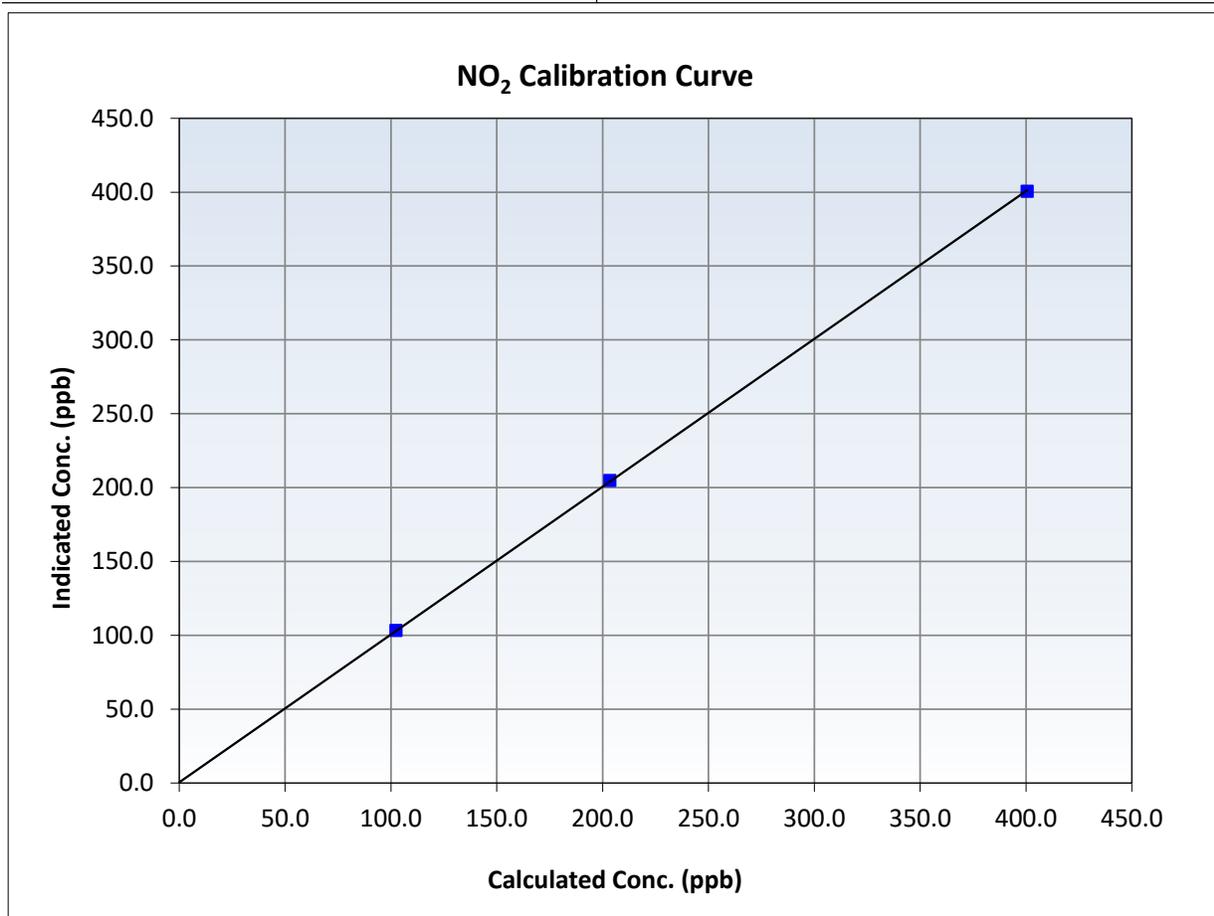
NO₂ Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 31, 2025
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:59	End Time (MST):	14:17
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

Calibration Data

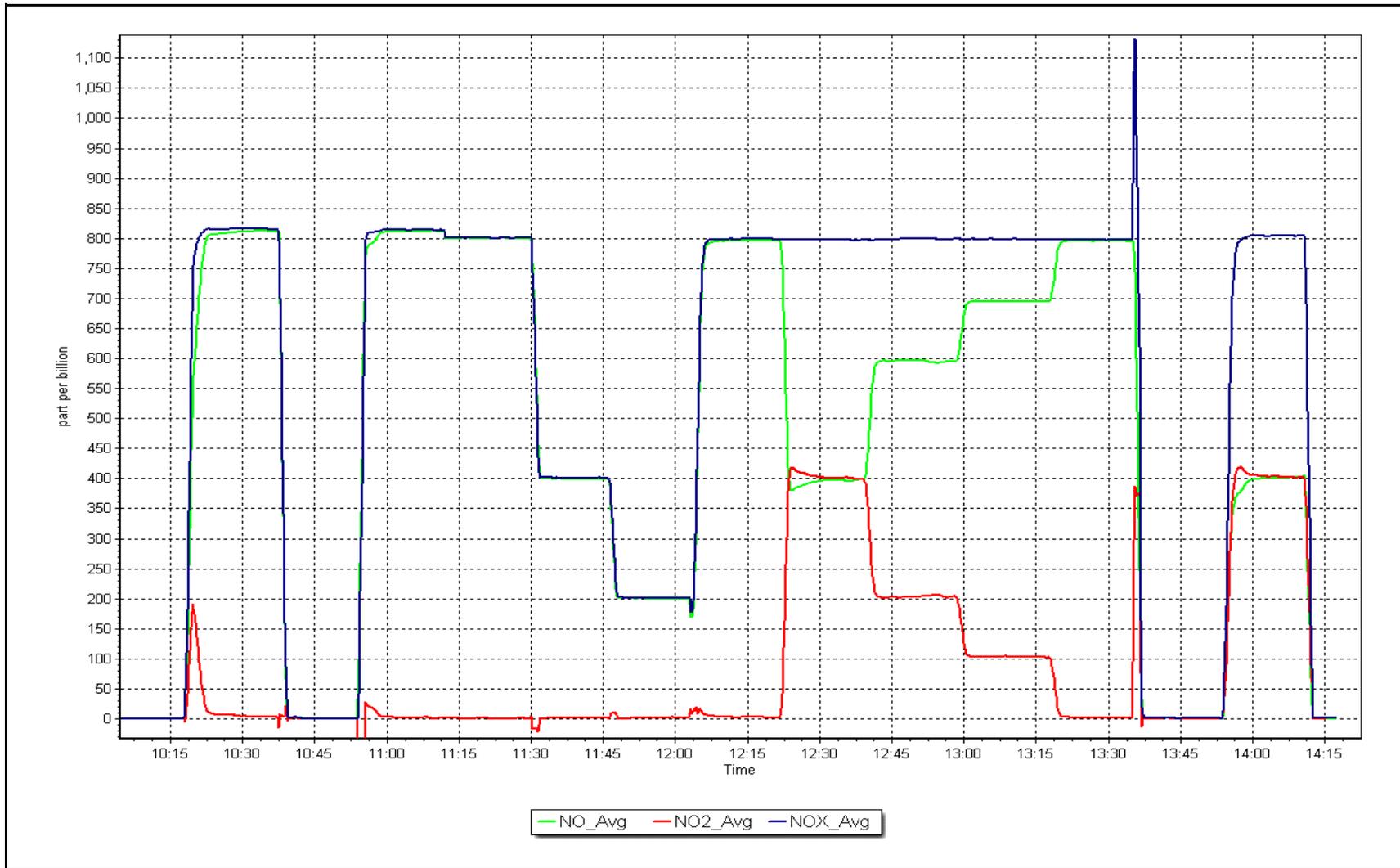
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.3	----	Correlation Coefficient	0.999979	≥0.995
400.5	400.7	0.9996	Slope	1.000660	0.90 - 1.10
203.4	204.9	0.9928	Intercept	0.457906	+/-20
102.3	103.3	0.9906			



NO_x Calibration Plot

Date: January 20, 2026

Location: Fort Chipewyan





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	January 7, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	10:04	End time (MST):	12:24
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	3810
Calibrator Make/Model:	Teledyne API T700	Serial Number:	135
ZAG Make/Model:	Teledyne API T701		

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1152220026
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.003314	1.004971	Backgd or Offset:	-2.6	-2.6
Calibration intercept:	1.520000	1.780000	Coeff or Slope:	1.002	1.002

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	1.2	----
As found High point	5000	968.7	400.0	403.1	0.995
As found Mid point					
As found Low point					
Baseline Corr As found:	401.9	Previous response	402.8	*% change	-0.2%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	1.4	----
High point	5000	968.7	400.0	403.5	0.991
Mid point	5000	820.5	200.0	203.2	0.984
Low point	5000	720.0	100.0	102.5	0.976
As left zero					
As left span	5000	968.7	400.0	403.0	0.993
Average Correction Factor					0.984

Notes: Changed inlet filters after as founds. no adjustment made to high point span.

Calibration Performed By: Jermey cardinal



Wood Buffalo Environmental Association

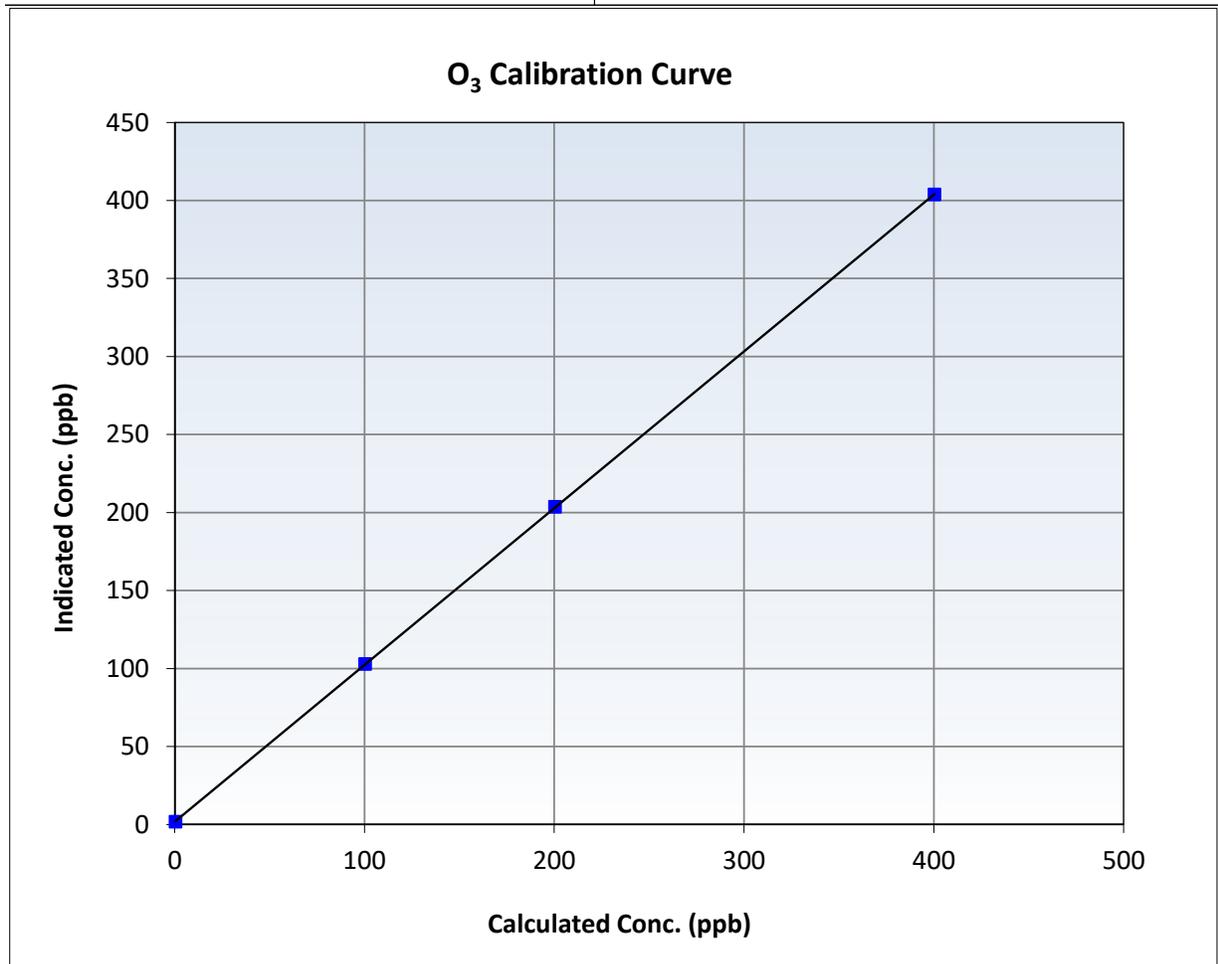
O₃ Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 5, 2025
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	10:04	End Time (MST):	12:24
Analyzer make:	Thermo 49i	Analyzer serial #:	1152220026

Calibration Data

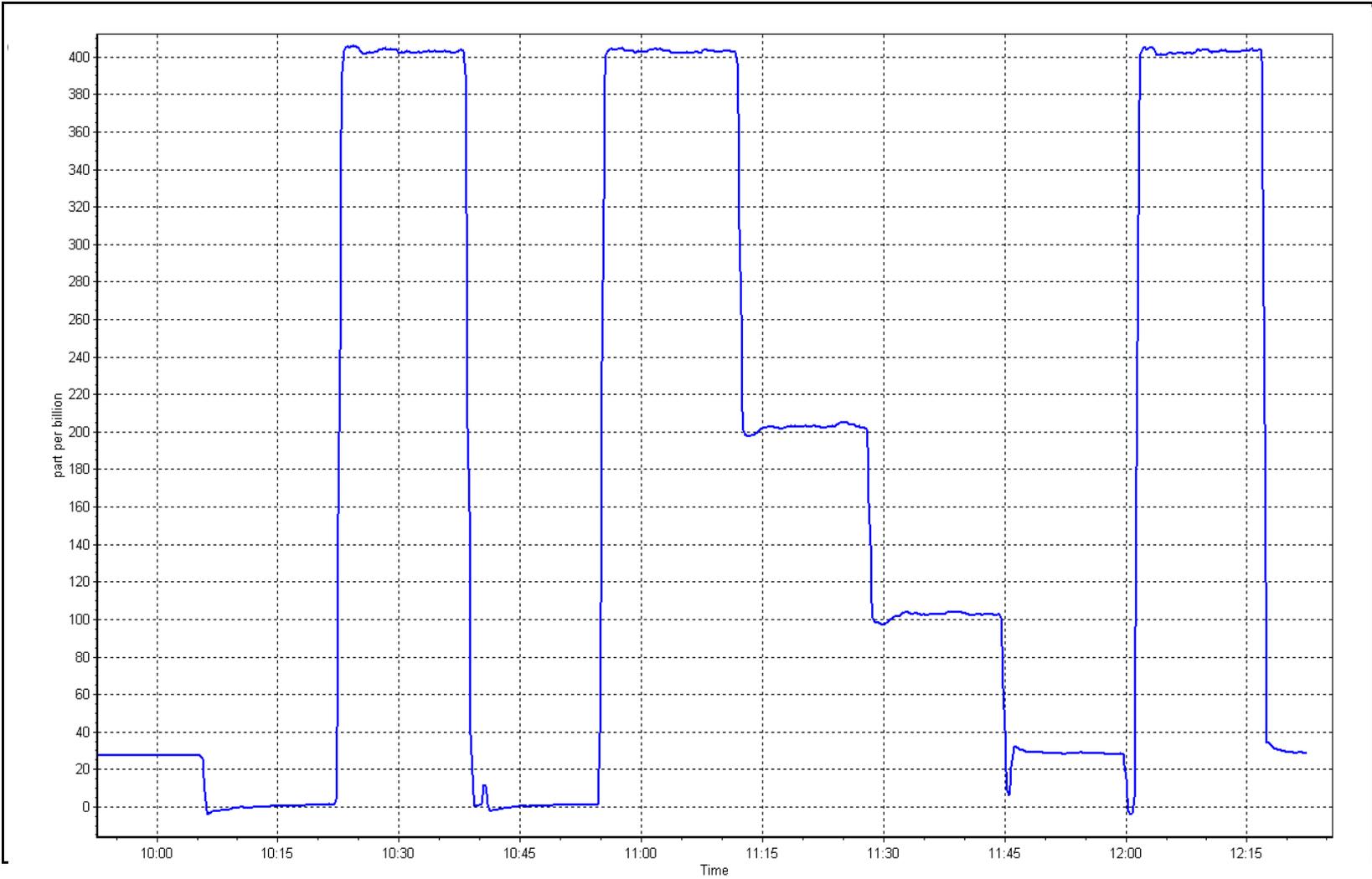
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	1.4	----	Correlation Coefficient	0.999995	≥0.995
400.0	403.5	0.9913	Slope	1.004971	0.90 - 1.10
200.0	203.2	0.9843	Intercept	1.780000	+/- 5
100.0	102.5	0.9756			



O₃ Calibration Plot

Date: January 7, 2026

Location: Fort Chipewyan





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Fort Chipewyan Station number: AMS 08
 Calibration Date: January 29, 2026 Last Cal Date: December 3, 2025
 Start time (MST): 12:30 End time (MST): 12:50

Analyzer Make: Teledyne API T640 S/N: 319
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388749
 Temp/RH standard: Alicat FP-25BT S/N: 388749

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-7.2	-7.93	-7.2	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	739.1	740.95	739.1	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.02	5.05	5.02	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	34%	NA	34%	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	26.30	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.90 Expiry Date: 30-Jan-27
 Lot No.: 100128-050-051

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: December 3, 2025
 Date Disposable Filter Changed: December 3, 2025

Post- maintenance Zero Verification: PM w/ HEPA: 0.00 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: December 3, 2025
 Date RH/T Sensor Cleaned: December 3, 2025

Notes: Verified flows, temp, and pressure, all good. Leak check passed.

Calibration by: Kelly Baragar



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS09 BARGE LANDING JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	January 14, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	11:40	End time (MST):	14:35
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.56	ppm	Cal Gas Exp Date: October 9, 2032
Cal Gas Cylinder #:	CC705748		
Removed Cal Gas Conc:	50.56	ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #:	NA		Diff between cyl:
Calibrator Model:	API T700		Serial Number: 3812
Zero Air Gen Model:	APIT701		Serial Number: 4888

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: 1118148498
Analyzer Range:	0 - 1000 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006548	1.000829	Backgd or Offset:	12.2	12.2
Calibration intercept:	-1.179075	-1.278382	Coeff or Slope:	1.036	1.036

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4921	79.1	799.8	800.4	0.999
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	800.4	Previous response	803.9	*% change	-0.4%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4921	79.1	799.8	799.9	1.000
Mid point	4961	39.5	399.4	397.8	1.004
Low point	4980	19.8	200.2	197.7	1.013
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	79.1	799.8	799.5	1.000
Average Correction Factor:					1.006

Notes: Sample inlet filter was changed after as founds. No adjustments needed

Calibration Performed By: Ryan Power



Wood Buffalo Environmental Association

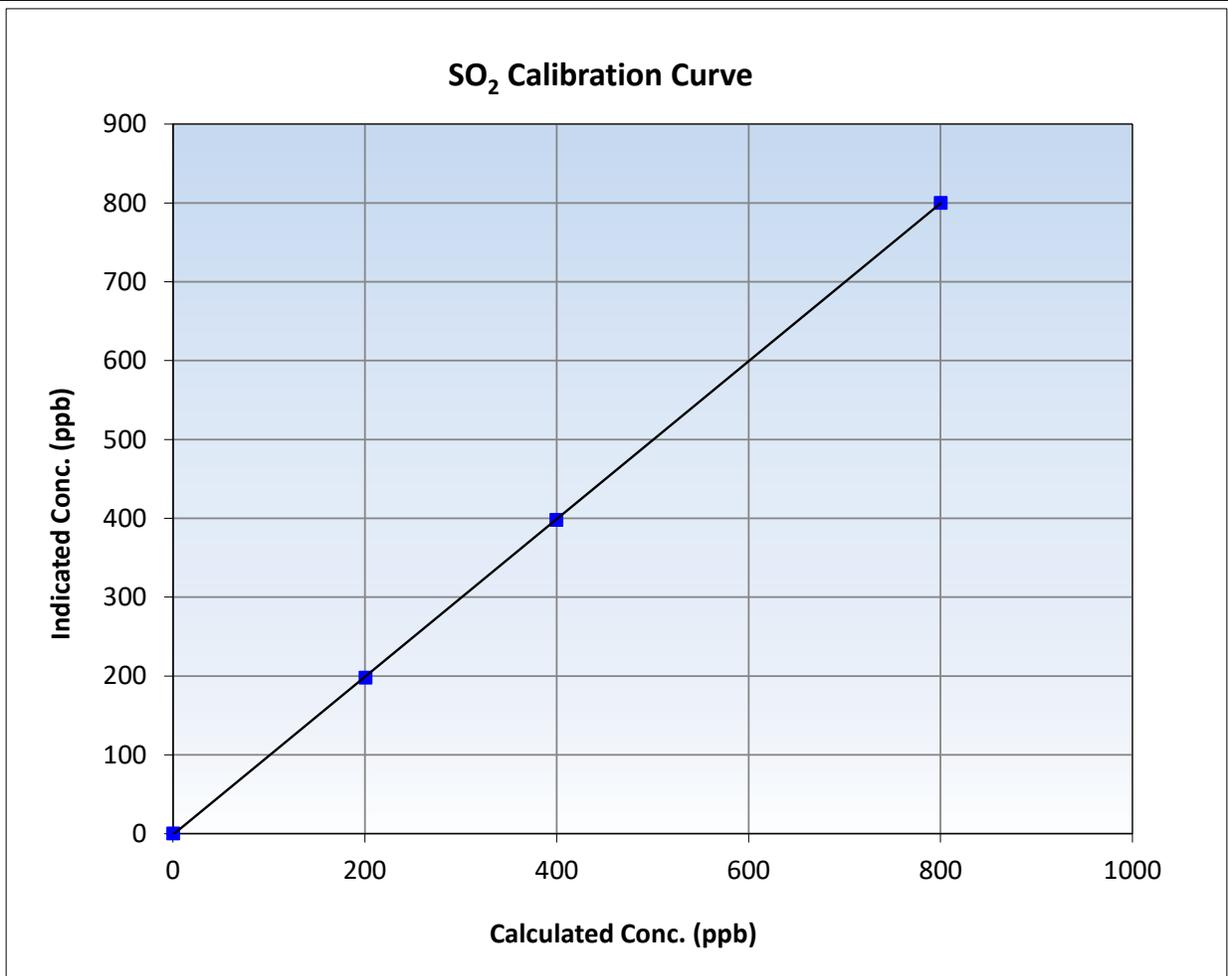
SO₂ Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 5, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	11:40	End Time (MST):	14:35
Analyzer make:	Thermo 43i	Analyzer serial #:	1118148498

Calibration Data

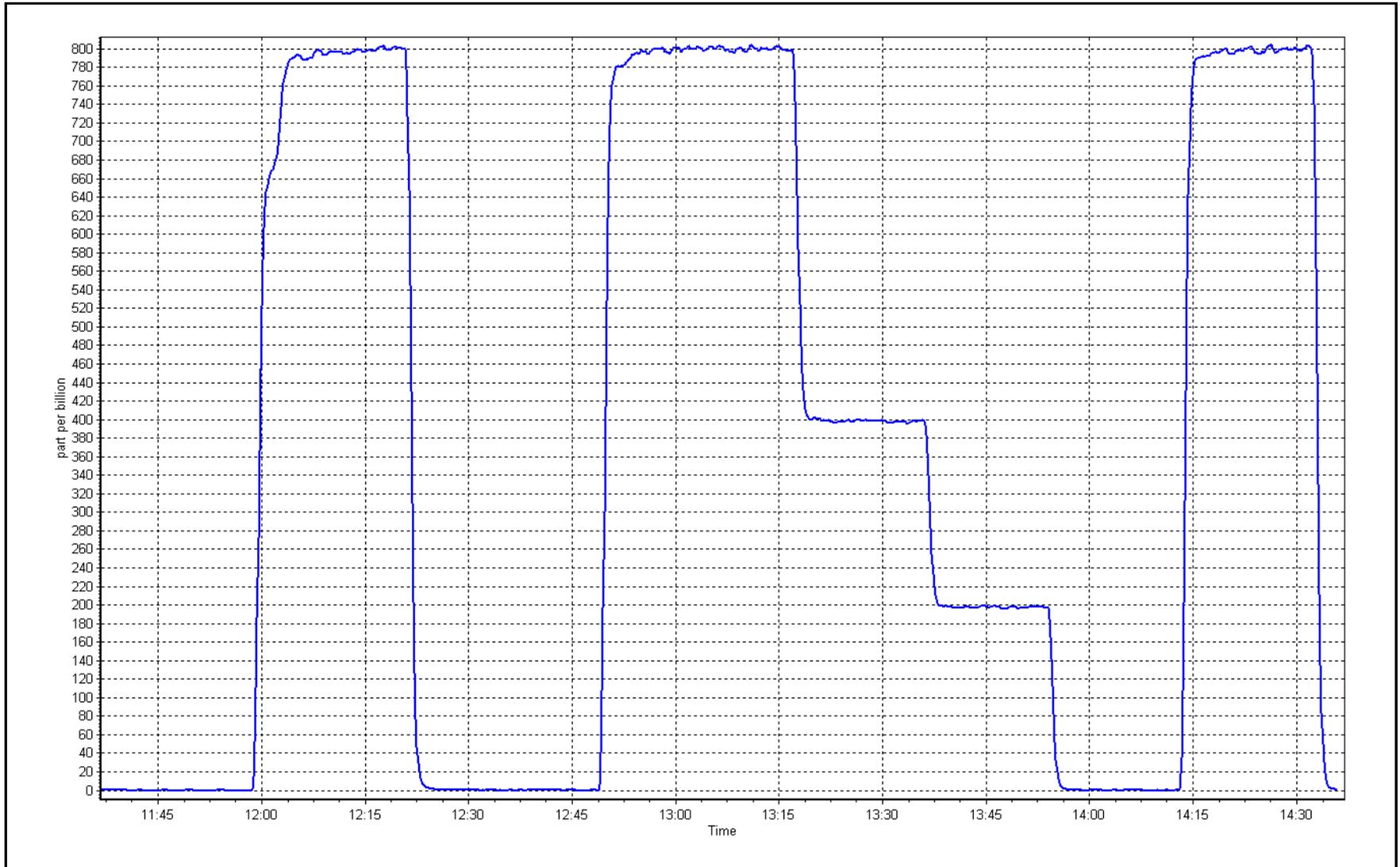
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.1	----	Correlation Coefficient	0.999986	≥0.995
799.8	799.9	0.9999	Slope	1.000829	0.90 - 1.10
399.4	397.8	1.0040	Intercept	-1.278382	+/-30
200.2	197.7	1.0128			



SO2 Calibration Plot

Date: January 14, 2026

Location: Barge Landing





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	January 15, 2026	Last Cal Date:	December 4, 2025
Start time (MST):	10:09	End time (MST):	14:02
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.17	ppm	Cal Gas Exp Date:	August 22, 2026
Cal Gas Cylinder #:	CC511415			
Removed Cal Gas Conc:	5.17	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	3812
ZAG Make/Model:	API T701		Serial Number:	5613

Analyzer Information

Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1203169744
Converter make:	CDN-101	Converter serial #:	519
Analyzer Range	0 - 100 ppb	Converter Temp:	830 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.004546	0.993555	Backgd or Offset:	1.890	1.890
Calibration intercept:	-0.040511	-0.080743	Coeff or Slope:	0.729	0.729

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4923	77.4	80.0	78.8	1.014
As found Mid point	4961	38.7	40.0	39.5	1.011
As found Low point	4981	19.3	20.0	19.7	1.008
New cylinder response					
Baseline Corr As found:	78.9	Prev response:	80.36	*% change:	-1.9%
Baseline Corr 2nd AF pt:	39.6	AF Slope:	0.985417	AF Intercept:	-0.020858
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999995	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4923	77.4	80.0	79.5	1.007
Mid point	4961	38.7	40.0	39.6	1.011
Low point	4981	19.3	20.0	19.7	1.013
As left zero	5000	0.0	0.0	0.1	----
As left span	4923	77.4	80.0	79.9	1.002
SO2 Scrubber Check	4920	80.2	802.0	0.1	----
Date of last scrubber change:	8-Jul-25			Ave Corr Factor	1.010
Date of last converter efficiency test:					

Notes: Changed inlet filter after as founds. Scrubber test was done after calibrator zero and passed. No adjustments.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

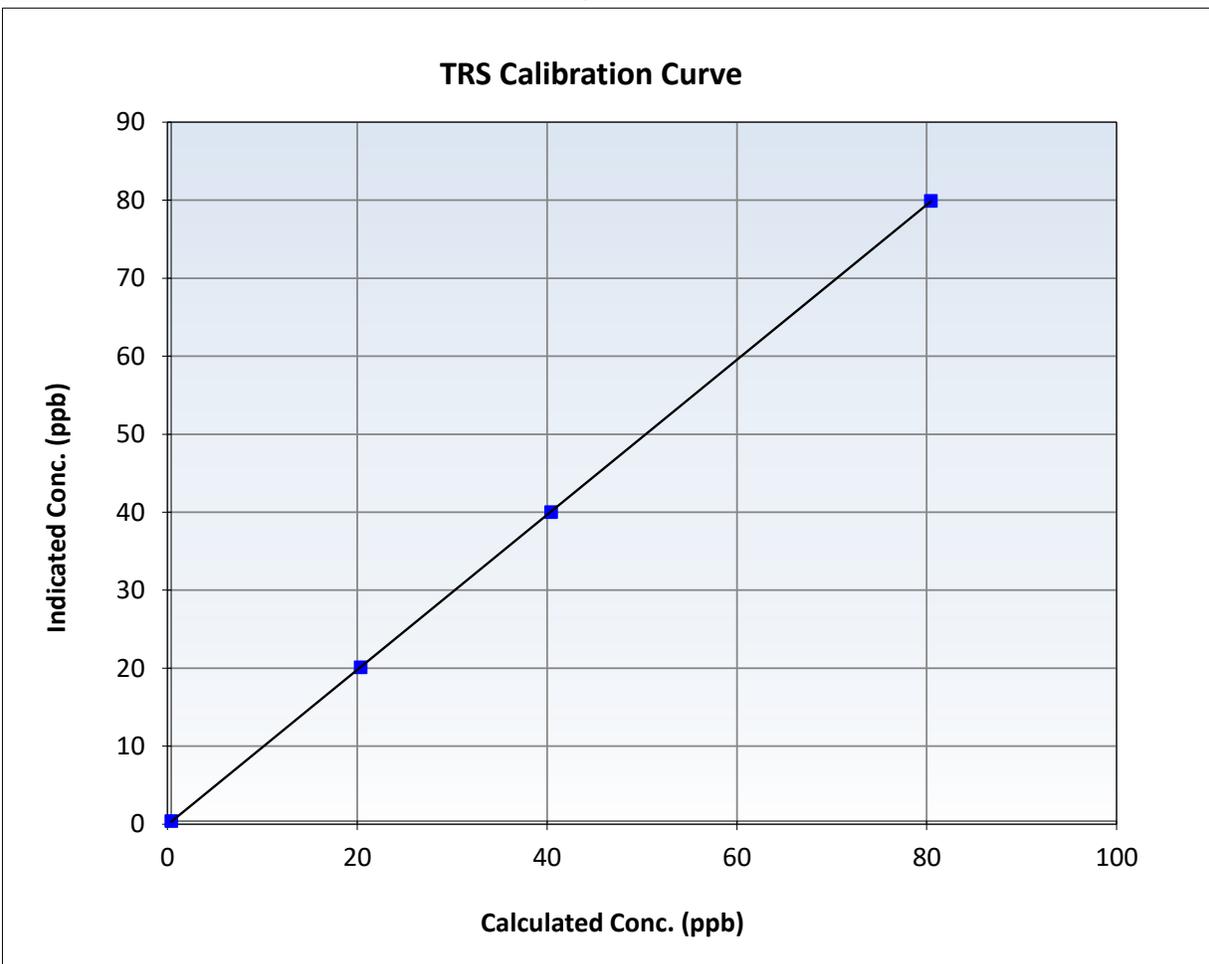
TRS Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 4, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:09	End Time (MST):	14:02
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1203169744

Calibration Data

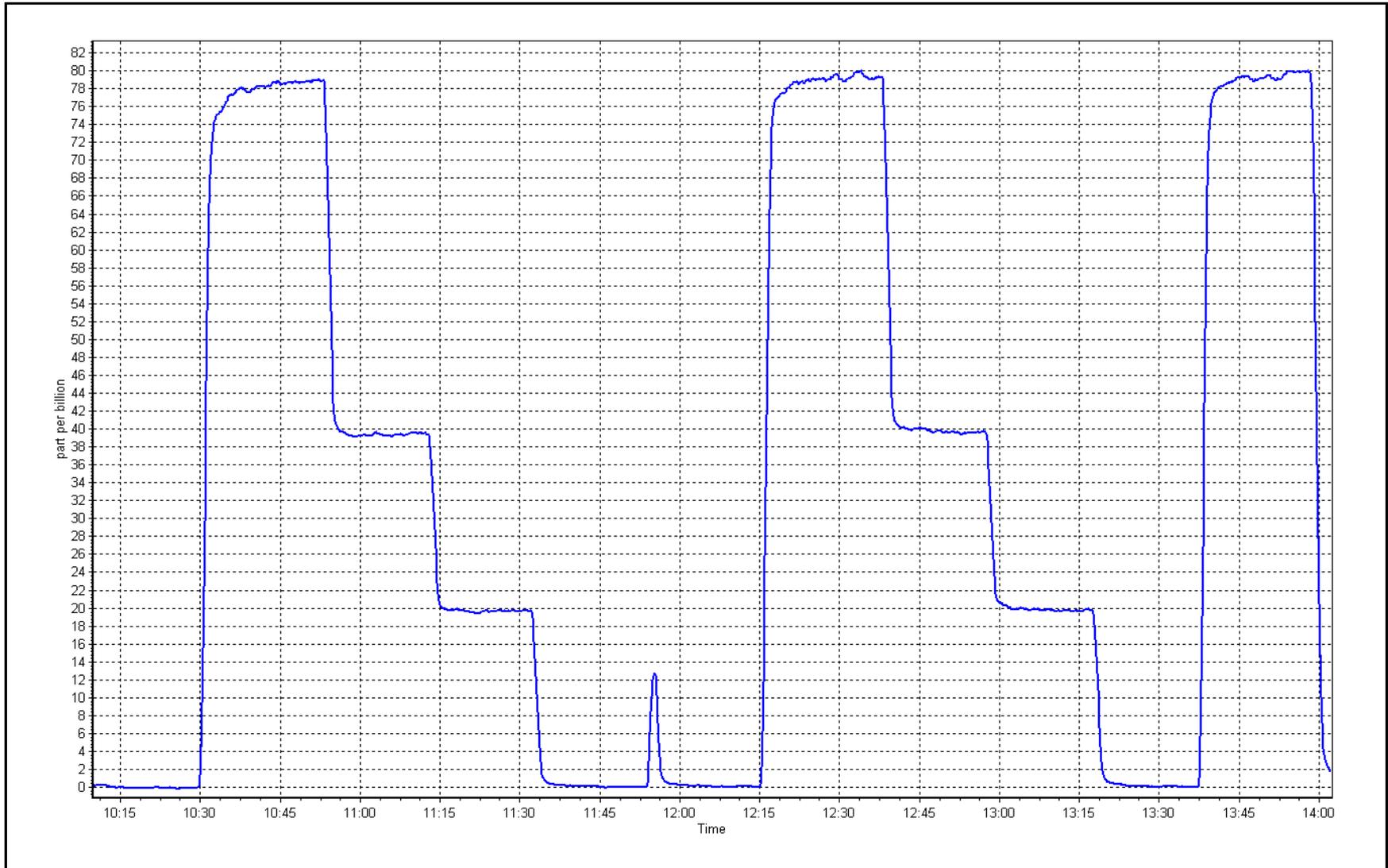
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999994	≥ 0.995
80.0	79.5	1.0068	Slope	0.993555	$0.90 - 1.10$
40.0	39.6	1.0108	Intercept	-0.080743	± 3
20.0	19.7	1.0131			



TRS Calibration Plot

Date: January 15, 2026

Location: Barge Landing





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	January 14, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	11:40	End time (MST):	14:34
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC705748	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	505.6 ppm	CH4 Equiv Conc.	1068.8 ppm
C3H8 Cal Gas Conc.	204.8 ppm		
Removed Gas Cert:	CC151285	Removed Gas Expiry:	January 5, 2025
Removed CH4 Conc.	505.6 ppm	CH4 Equiv Conc.	1068.8 ppm
Removed C3H8 Conc.	204.8 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3812
Zero Air Gen model:	APIT701	Serial Number:	5613

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1193585650
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.35E-04	2.42E-04	5.77E-05	5.67E-05
CH4 Retention time:	14.4	14.4	154344	157013
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	16.91	17.05	0.992
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.05	Prev response	16.85	*% change	1.2%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	16.91	16.94	0.998
Mid point	4961	39.5	8.44	8.37	1.009
Low point	4980	19.8	4.23	4.14	1.023
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	16.91	16.95	0.997
Average Correction Factor					1.010

Notes:

Sample inlet filter was changed after as founds. Adjusted span only.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	8.91	9.25	0.964
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.25	Prev response	8.87	*% change	4.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.91	8.95	0.995
Mid point	4961	39.5	4.45	4.43	1.004
Low point	4980	19.8	2.23	2.18	1.021
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.91	8.98	0.992
Average Correction Factor					1.007

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	8.00	7.81	1.025
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.81	Prev response	7.98	*% change	-2.2%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.00	7.99	1.002
Mid point	4961	39.5	3.99	3.94	1.013
Low point	4980	19.8	2.00	1.95	1.026
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.00	7.97	1.003
Average Correction Factor					1.013

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.999416	1.003581
THC Cal Offset:	-0.047777	-0.059576
CH ₄ Cal Slope:	1.001217	0.999831
CH ₄ Cal Offset:	-0.028391	-0.027790
NMHC Cal Slope:	0.997903	1.006652
NMHC Cal Offset:	-0.019787	-0.031384

Calibration Performed By: Ryan Power



Wood Buffalo Environmental Association

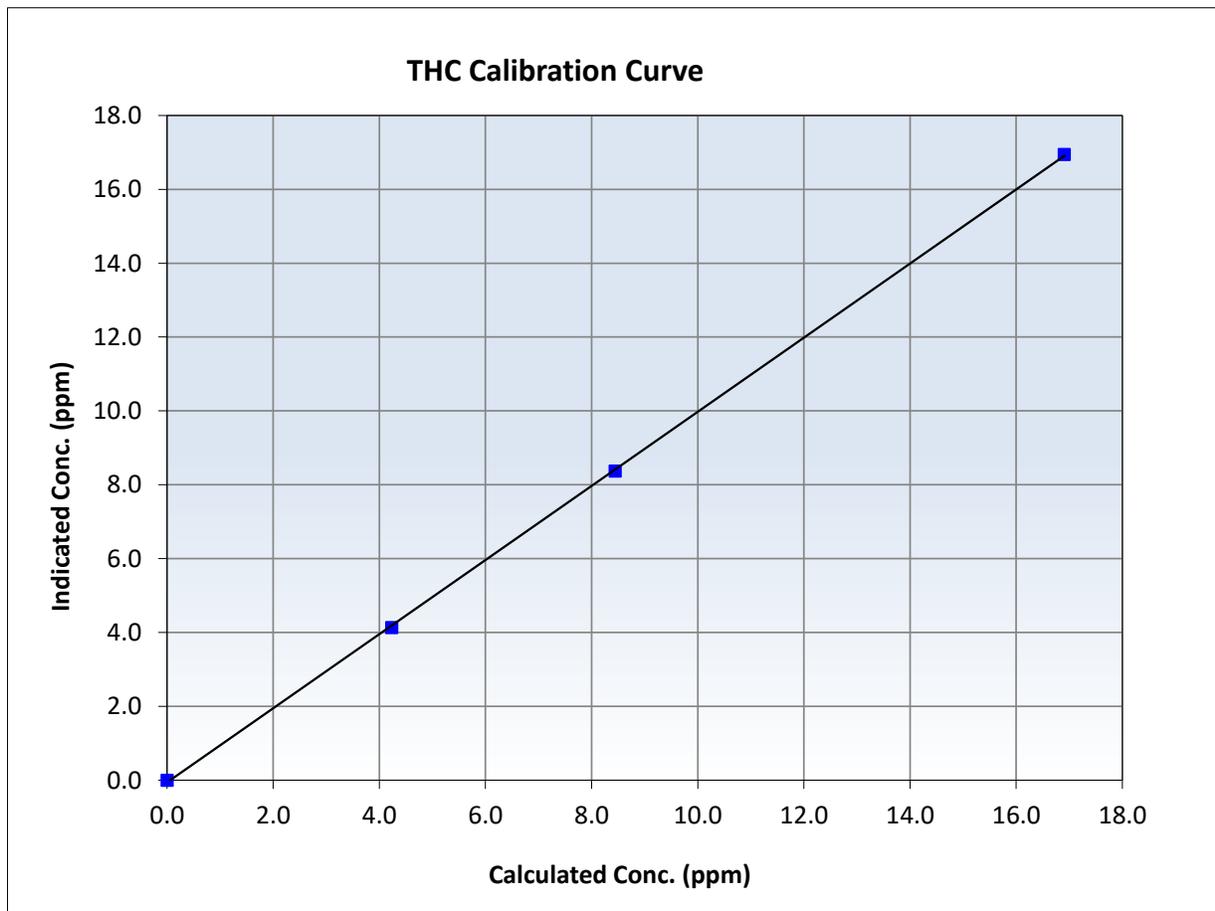
THC Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 5, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	11:40	End Time (MST):	14:34
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999942	<i>≥0.995</i>
16.91	16.94	0.9979	Slope	1.003581	<i>0.90 - 1.10</i>
8.44	8.37	1.0086	Intercept	-0.059576	<i>+/-0.5</i>
4.23	4.14	1.0231			





Wood Buffalo Environmental Association

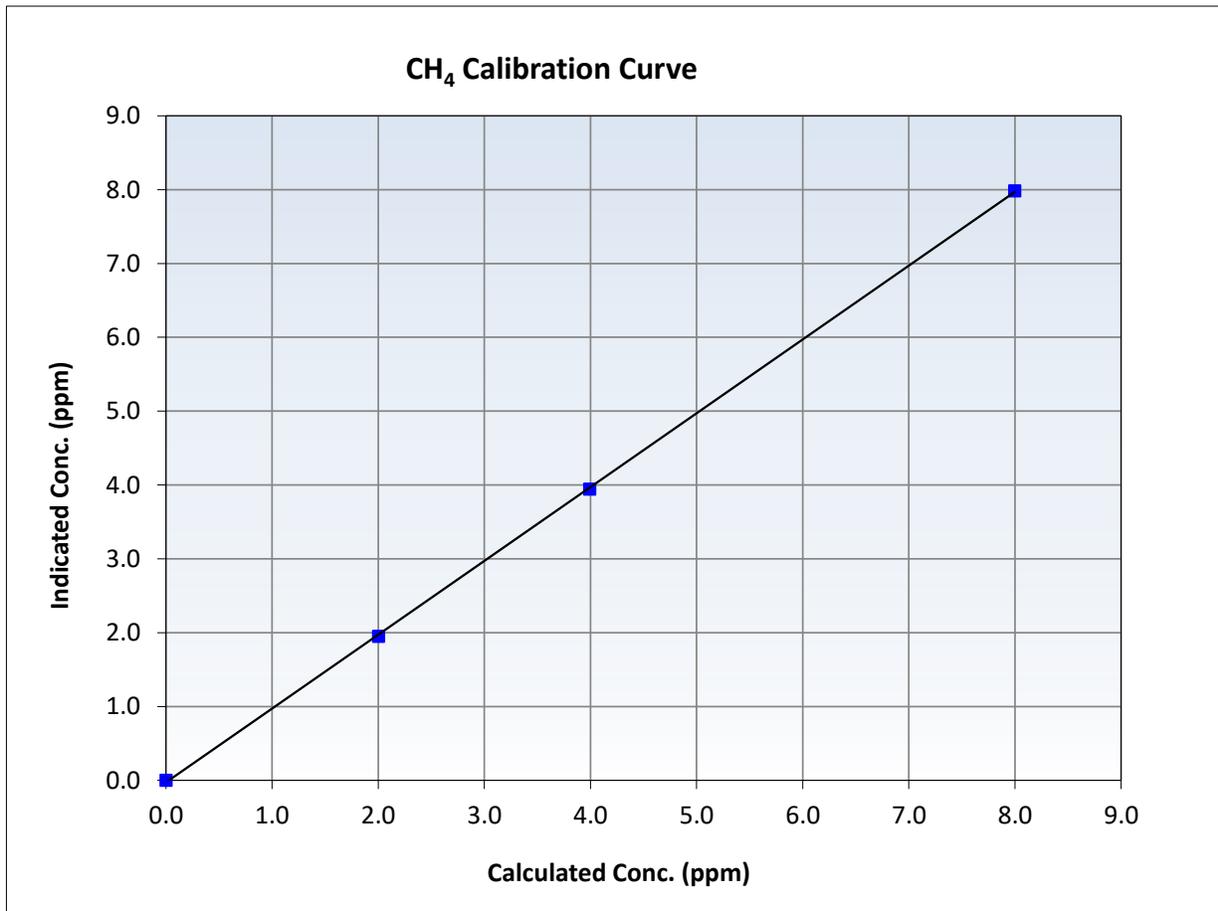
CH₄ Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 5, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	11:40	End Time (MST):	14:34
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999942	<i>≥0.995</i>
8.00	7.99	1.0016	Slope	0.999831	<i>0.90 - 1.10</i>
3.99	3.94	1.0129	Intercept	-0.027790	<i>+/-0.5</i>
2.00	1.95	1.0257			





Wood Buffalo Environmental Association

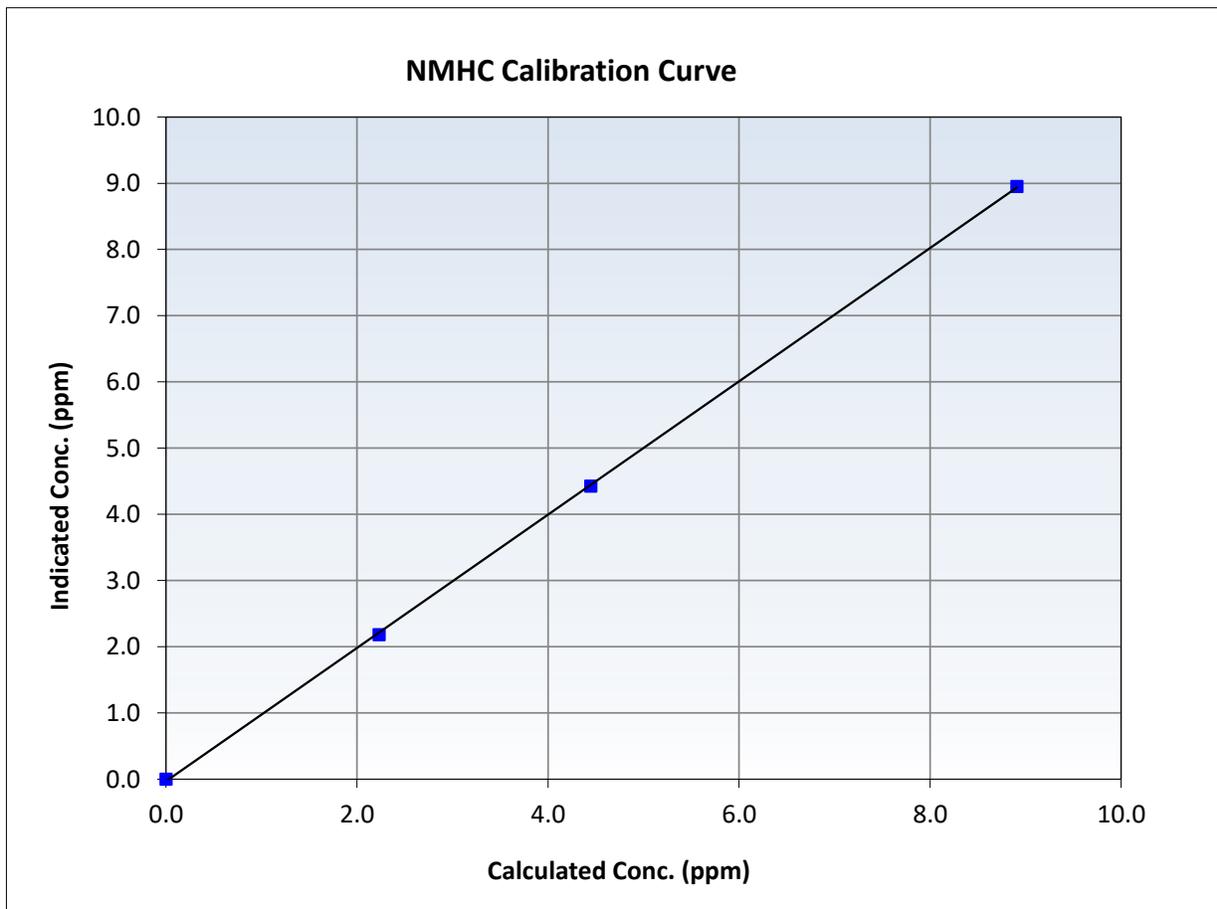
NMHC Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 5, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	11:40	End Time (MST):	14:34
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650

Calibration Data

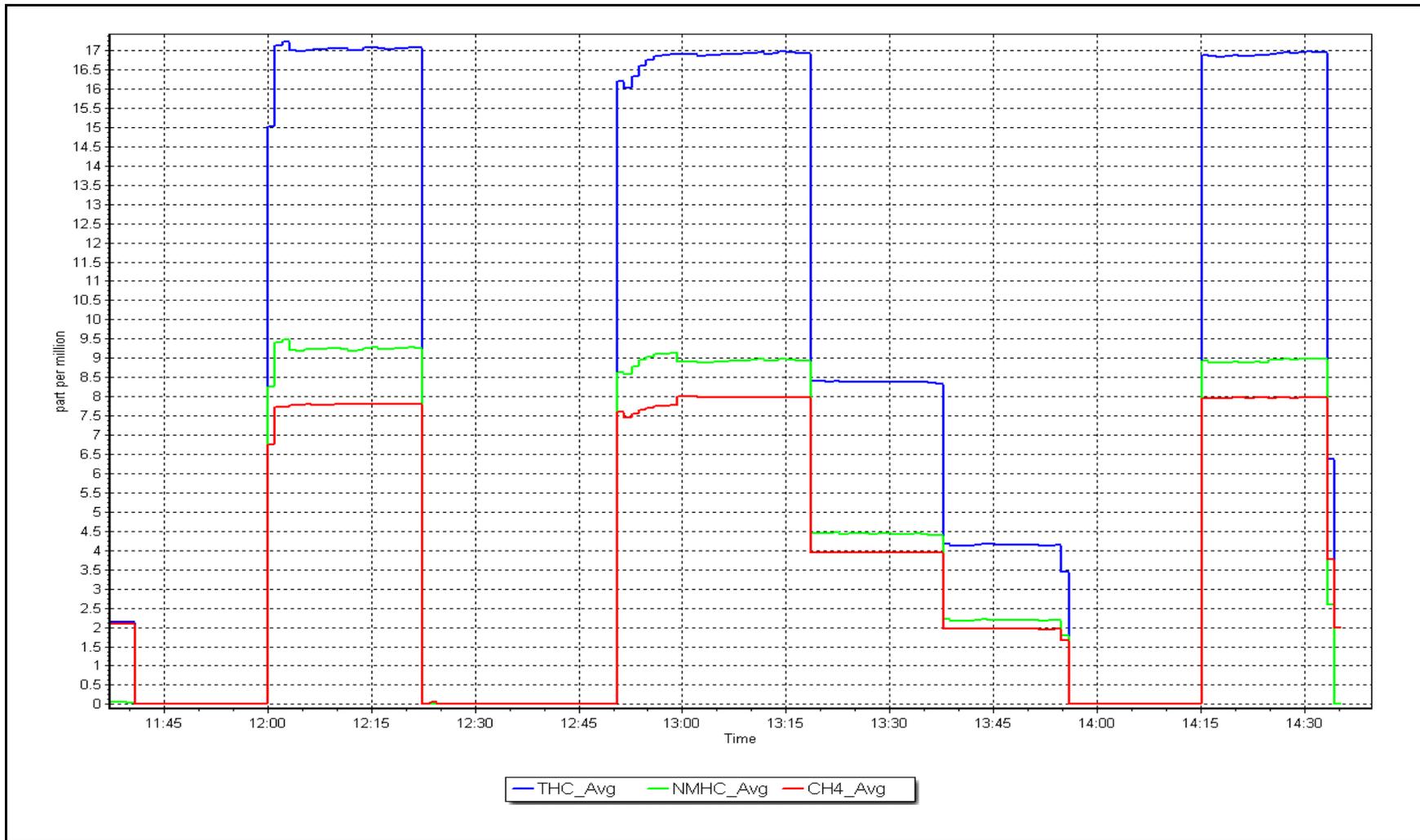
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999944	<i>≥0.995</i>
8.91	8.95	0.9950	Slope	1.006652	<i>0.90 - 1.10</i>
4.45	4.43	1.0045	Intercept	-0.031384	<i>+/-0.5</i>
2.23	2.18	1.0212			



NMHC Calibration Plot

Date: January 14, 2026

Location: Barge Landing





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Barge Landing
 Station number: AMS 09
 Calibration Date: January 19, 2026
 Last Cal Date: December 11, 2025
 Start time (MST): 10:49
 End time (MST): 15:16
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: T2Y1KDH
 NOX Cal Gas Conc: 47.38 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 47.38 ppm
 NOX gas Diff:
 Calibrator Model: API 700
 ZAG make/model: API T701
 Cal Gas Expiry Date: November 17, 2026
 NO Cal Gas Conc: 46.94 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 46.94 ppm
 NO gas Diff:
 Serial Number: 3812
 Serial Number: 4888

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.2	0.0	-0.2	----	----
AF High point	4915	85.3	808.3	800.7	7.5	807.0	797.2	9.9	1.0013	1.0045
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO _x = 806.8 ppb	NO = 798.9 ppb	<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 0.1%
Baseline Corr 1st pt	NO _x = 807.2 ppb	NO = 797.2 ppb	<u>As Found Statistics</u>		*Percent Change	NO = -0.2%
Baseline Corr 2nd pt	NO _x = NA ppb	NO = NA ppb	As found	NO _x r ² :	Nx SI:	Nx Int:
Baseline Corr 3rd pt	NO _x = NA ppb	NO = NA ppb	As found	NO r ² :	NO SI:	NO Int:
			As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1426262593

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.998937	0.999206
NO _x Cal Offset:	-0.622111	-0.442061
NO Cal Slope:	0.999211	0.999154
NO Cal Offset:	-1.264087	-1.244122
NO ₂ Cal Slope:	1.003707	1.003001
NO ₂ Cal Offset:	0.074394	-0.801999

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.098	1.103	NO bkgnd or offset:	10.1	10.1
NOX coeff or slope:	1.002	1.002	NOX bkgnd or offset:	10.4	10.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	177.1	176.2

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOX concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOX concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOX Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.0	0.2	-0.2	----	----
High point	4915	85.3	808.3	800.7	7.5	807.3	799.4	8.0	1.0012	1.0017
Mid point	4957	42.6	403.7	400.0	3.7	403.0	398.1	4.9	1.0018	1.0047
Low point	4979	21.3	201.8	200.0	1.9	200.6	196.8	3.8	1.0061	1.0160
As left zero	5000	0.0	0.0	0.0	0.0	-0.1	0.1	-0.2	----	----
As left span	4915	85.3	808.3	406.9	401.4	803.8	406.9	396.9	1.0055	1.0000
Average Correction Factor									1.0030	1.0075

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	795.2	406.9	395.8	396.5	0.9982	100.2%
Mid GPT point	795.2	607.4	195.3	194.8	1.0026	99.7%
Low GPT point	795.2	697.3	105.4	104.3	1.0106	99.0%
Average Correction Factor					1.0038	99.6%

Notes:

Inlet filter changed after as founds. Adjusted span only.

Calibration Performed By:

Sean Bala



Wood Buffalo Environmental Association

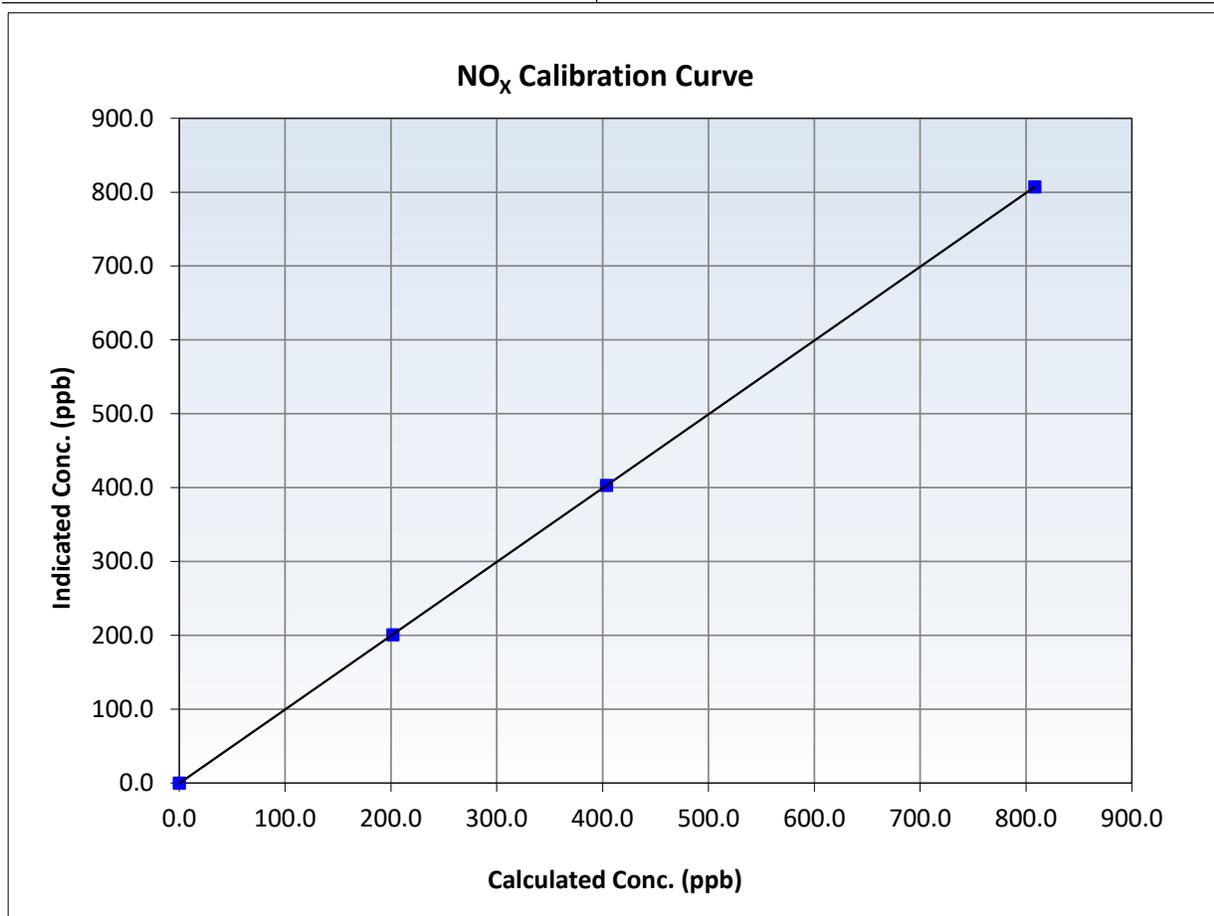
NO_x Calibration Summary

Station Information

Calibration Date:	January 19, 2026	Previous Calibration:	December 11, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:49	End Time (MST):	15:16
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999998	<i>≥0.995</i>
808.3	807.3	1.0012	Slope	0.999206	<i>0.90 - 1.10</i>
403.7	403.0	1.0018	Intercept	-0.442061	<i>+/-20</i>
201.8	200.6	1.0061			





Wood Buffalo Environmental Association

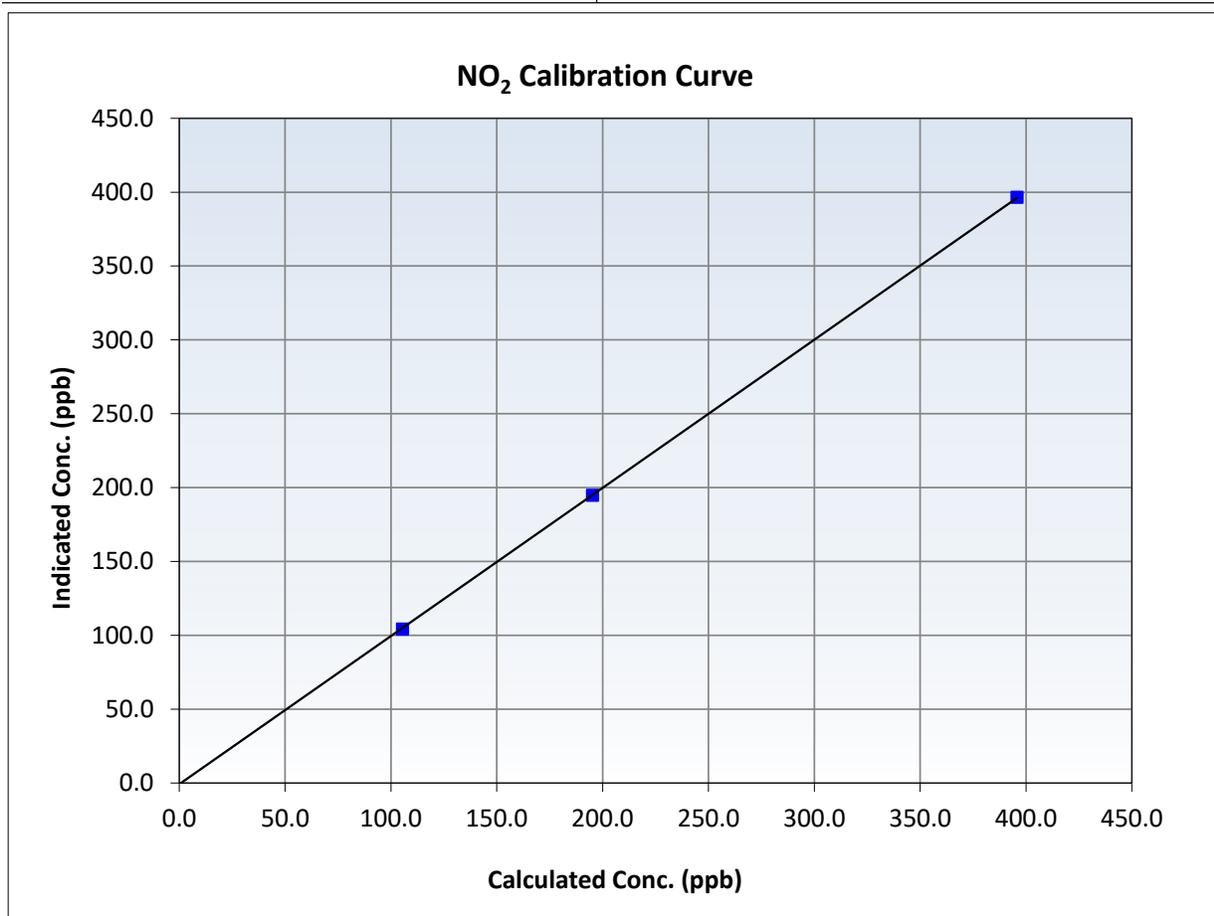
NO₂ Calibration Summary

Station Information

Calibration Date:	January 19, 2026	Previous Calibration:	December 11, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:49	End Time (MST):	15:16
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.2	----	Correlation Coefficient	0.999989	<i>≥0.995</i>
395.8	396.5	0.9982	Slope	1.003001	<i>0.90 - 1.10</i>
195.3	194.8	1.0026	Intercept	-0.801999	<i>+/-20</i>
105.4	104.3	1.0106			





Wood Buffalo Environmental Association

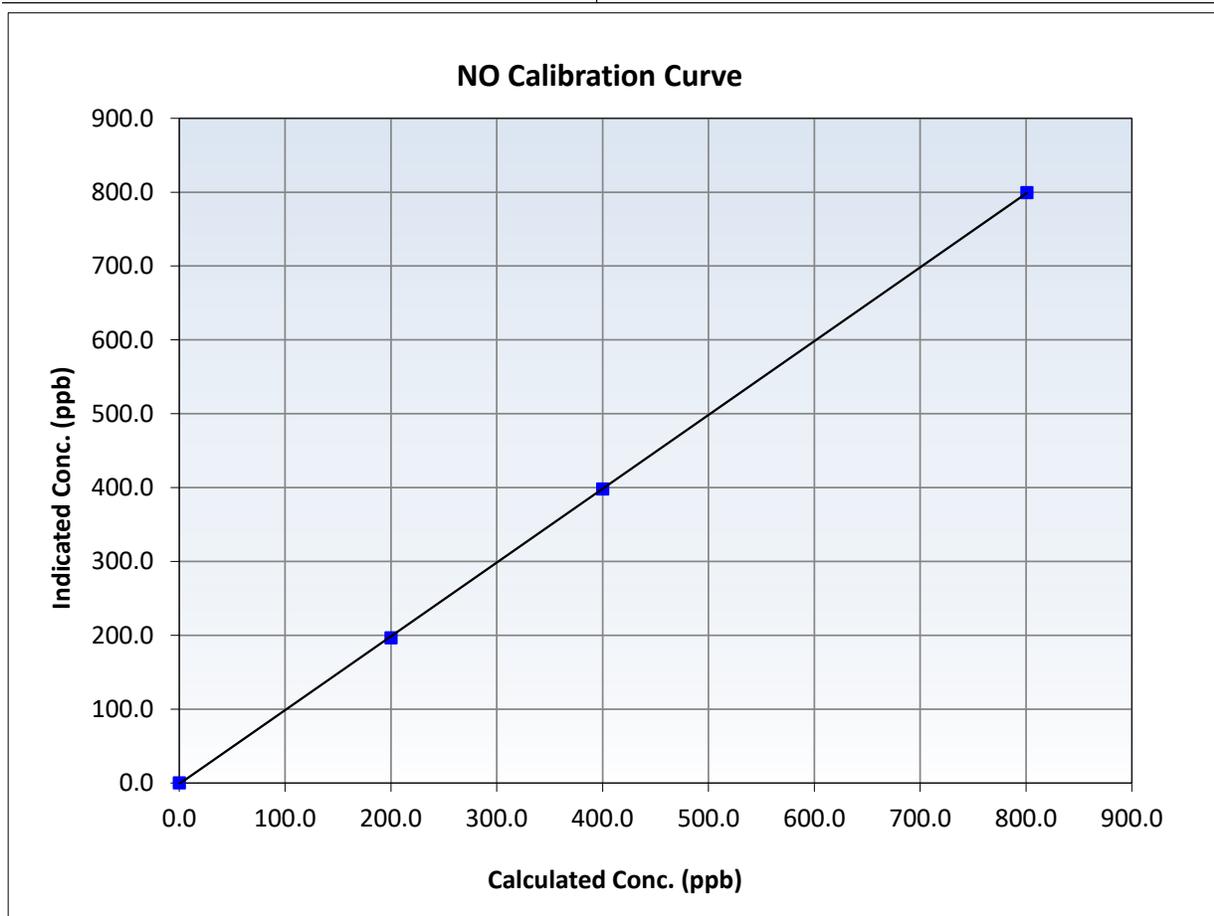
NO Calibration Summary

Station Information

Calibration Date:	January 19, 2026	Previous Calibration:	December 11, 2025
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:49	End Time (MST):	15:16
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

Calibration Data

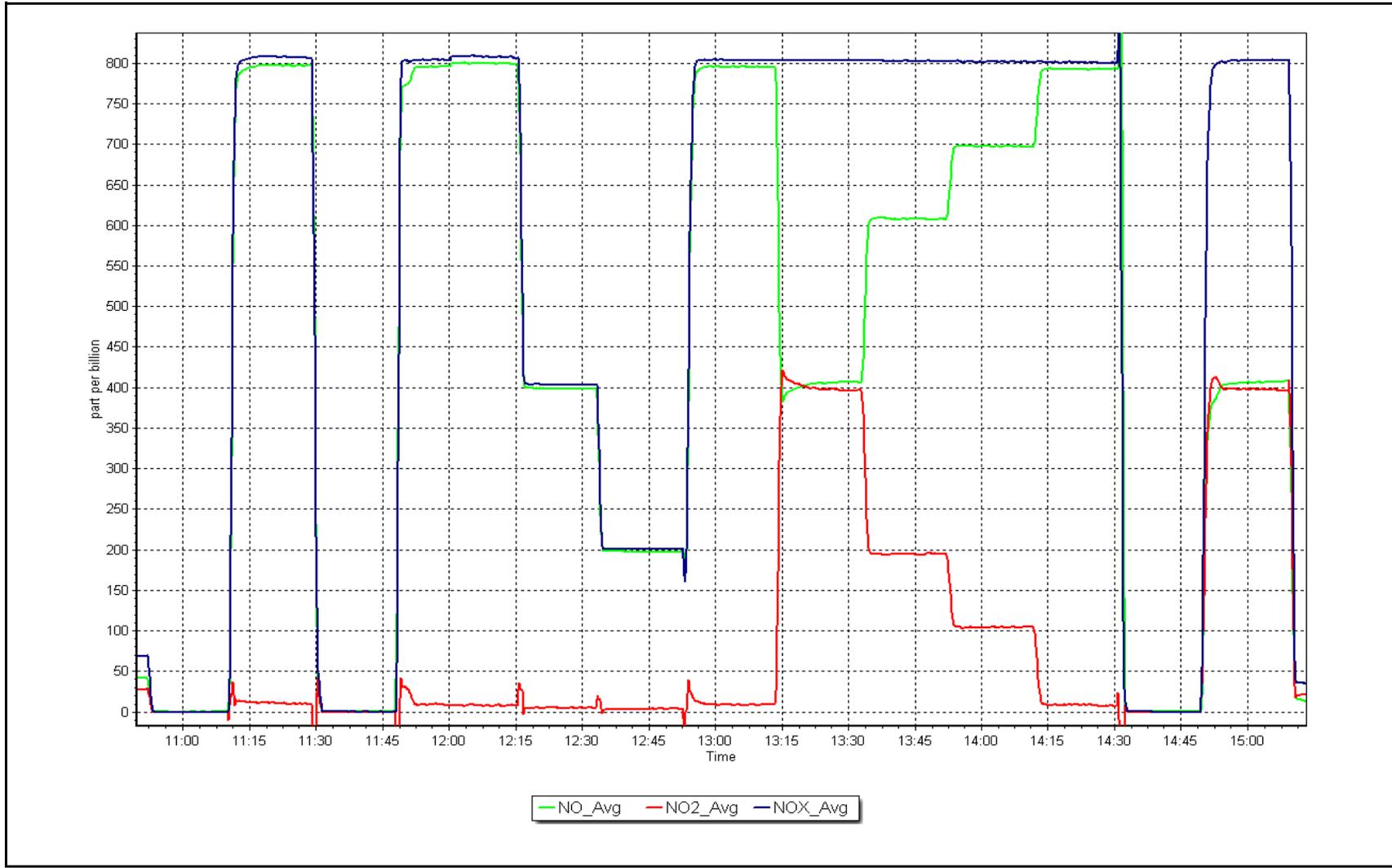
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.2	----	Correlation Coefficient	0.999984	≥0.995
800.7	799.4	1.0017	Slope	0.999154	0.90 - 1.10
400.0	398.1	1.0047	Intercept	-1.244122	+/-20
200.0	196.8	1.0160			



NO_x Calibration Plot

Date: January 19, 2026

Location: Barge Landing





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Barge Landing Station number: AMS 09
 Calibration Date: January 26, 2026 Last Cal Date: December 11, 2025
 Start time (MST): 13:39 End time (MST): 15:39

Analyzer Make: API T640 S/N: 2237
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25 S/N: 388755
 Temp/RH standard: Alicat FP-25 S/N: 388755

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-17.20	-16.72	-17.20	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	743.80	742.78	743.80	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.00	5.03	5.00	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	36	----	36	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	3.50	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: **10.9** Expiry Date: January 30, 2027
 Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test	NA	10.0	10.8	<input checked="" type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: January 26, 2026
 Date Disposable Filter Changed: January 26, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0.1 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: July 22, 2025
 Date RH/T Sensor Cleaned: July 22, 2025

Notes: Verified flow, pressure, temperature and pump power. Leak check passed. Optical chamber was cleaned, and disposable filter was changed. PMT peak channel adjusted.

Calibration by: Param Kaur



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS11 LOWER CAMP JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	January 14, 2026	Last Cal Date:	December 2, 2025
Start time (MST):	11:10	End time (MST):	14:15
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	48.75	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	CC741503		Rem Gas Exp Date:	
Removed Cal Gas Conc:	48.75	ppm	Diff between cyl:	
Removed Gas Cyl #:	CC741503		Serial Number:	3811
Calibrator Model:	Teledyne API T700		Serial Number:	4428
Zero Air Gen Model:	Teledyne API T701			

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	100841398
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.999686	1.002869	Backgd or Offset:	18.9	19.5
Calibration intercept:	-0.851970	-0.912713	Coeff or Slope:	1.036	1.047

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.4	----
As found High point	4918	82.1	800.5	791.5	1.011
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	791.9	Previous response	799.4	*% change	-0.9%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4918	82.1	800.5	802.8	0.997
Mid point	4959	41.1	400.7	399.1	1.004
Low point	4980	20.5	199.9	199.4	1.002
As left zero	5000	0.0	0.0	0.0	----
As left span	4918	82.1	800.5	803.4	0.996
Average Correction Factor:					1.001

Notes: Sample inlet filter changed after as founds, Span adjusted

Calibration Performed By: Jason Brooks, Devin Russell



Wood Buffalo Environmental Association

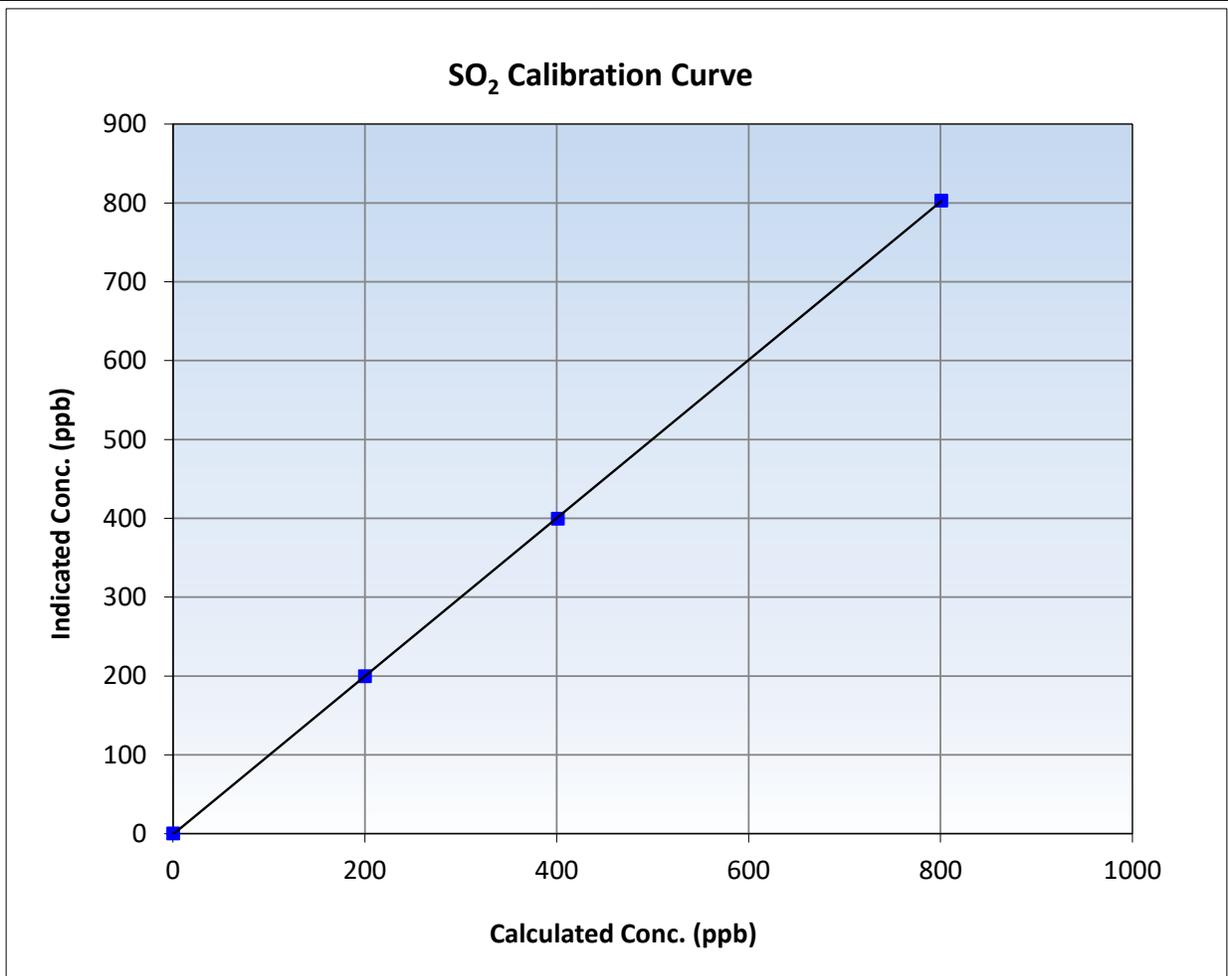
SO₂ Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 2, 2025
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	11:10	End Time (MST):	14:15
Analyzer make:	Thermo 43i	Analyzer serial #:	100841398

Calibration Data

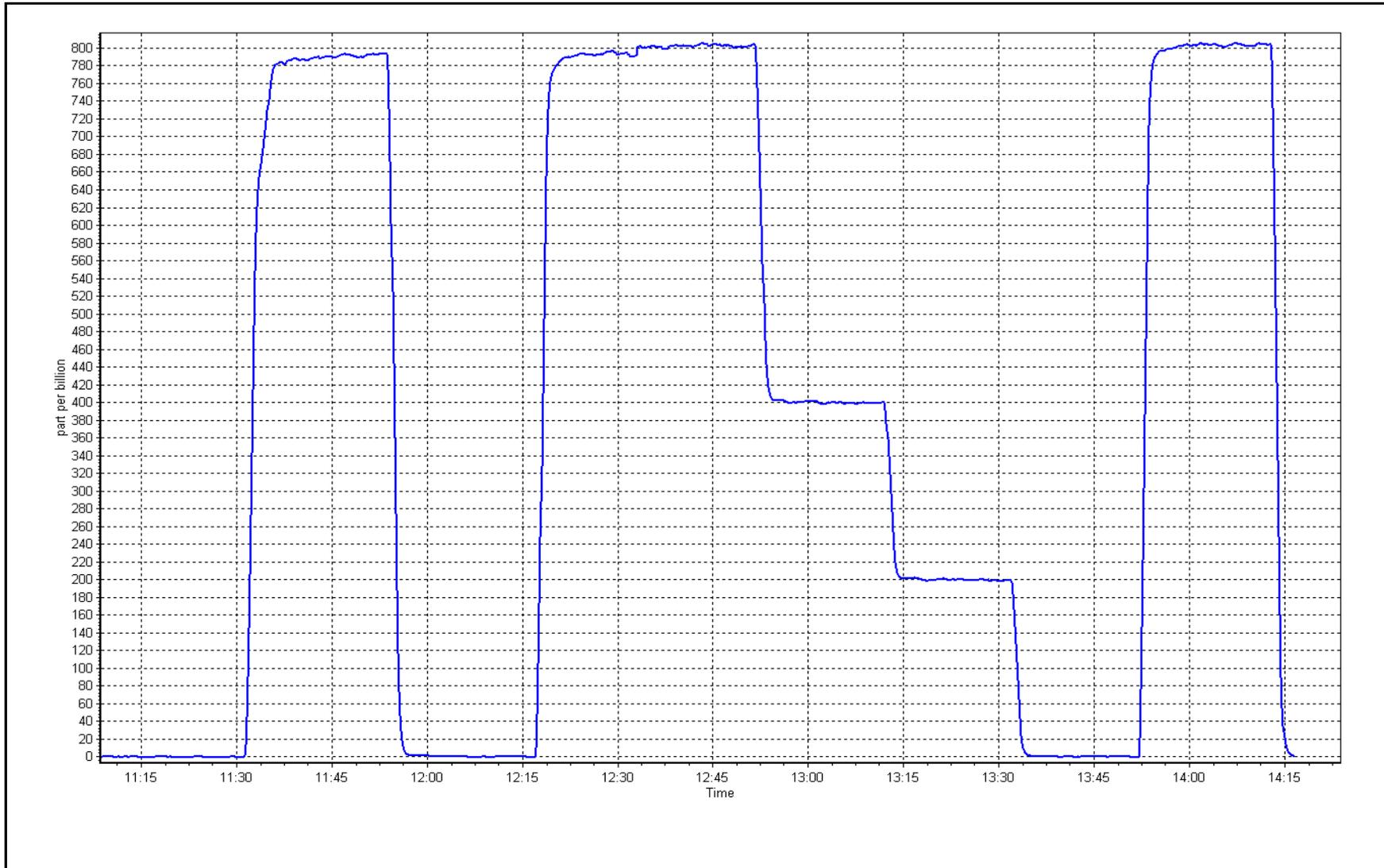
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.1	----	Correlation Coefficient	0.999985	≥0.995
800.5	802.8	0.9971	Slope	1.002869	0.90 - 1.10
400.7	399.1	1.0041	Intercept	-0.912713	+/-30
199.9	199.4	1.0023			



SO2 Calibration Plot

Date: January 14, 2026

Location: Lower Camp





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	January 28, 2026	Last Cal Date:	December 2, 2025
Start time (MST):	10:02	End time (MST):	14:00
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.83	ppm	Cal Gas Exp Date:	August 28, 2028
Cal Gas Cylinder #:	CC737863			
Removed Cal Gas Conc:	4.83	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	3811
ZAG Make/Model:	API T701H		Serial Number:	4428

Analyzer Information

Analyzer make:	Thermo 43iQ	Analyzer serial #:	1203169745
Converter make:	Global G150	Converter serial #:	2022-223
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.016730	1.003709	Backgd or Offset:	2.5	2.5
Calibration intercept:	0.208089	0.288582	Coeff or Slope:	0.808	0.808

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4923	82.8	79.9	80.7	0.991
As found Mid point	4967	41.5	40.0	40.4	0.993
As found Low point	4999	20.8	20.0	20.3	0.991
New cylinder response					
Baseline Corr As found:	80.6	Prev response:	81.44	*% change:	-1.0%
Baseline Corr 2nd AF pt:	40.3	AF Slope:	1.008712	AF Intercept:	0.088576
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999999	<i>* = > +/-5% change initiates investigation</i>	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4923	82.8	79.9	80.4	0.994
Mid point	4967	41.5	40.0	40.6	0.986
Low point	4999	20.8	20.0	20.4	0.981
As left zero	5000	0.0	0.0	0.2	----
As left span	4923	82.8	79.9	80.8	0.989
SO2 Scrubber Check	4932	82.2	819.7	0.0	----
Date of last scrubber change:				Ave Corr Factor	0.987
Date of last converter efficiency test:					

Notes: Changed sample inlet filter after as founds. Ran scrubber check after calibrator zero and it passed.
No adjustments made.

Calibration Performed By: Jason Brooks, Param Kaur



Wood Buffalo Environmental Association

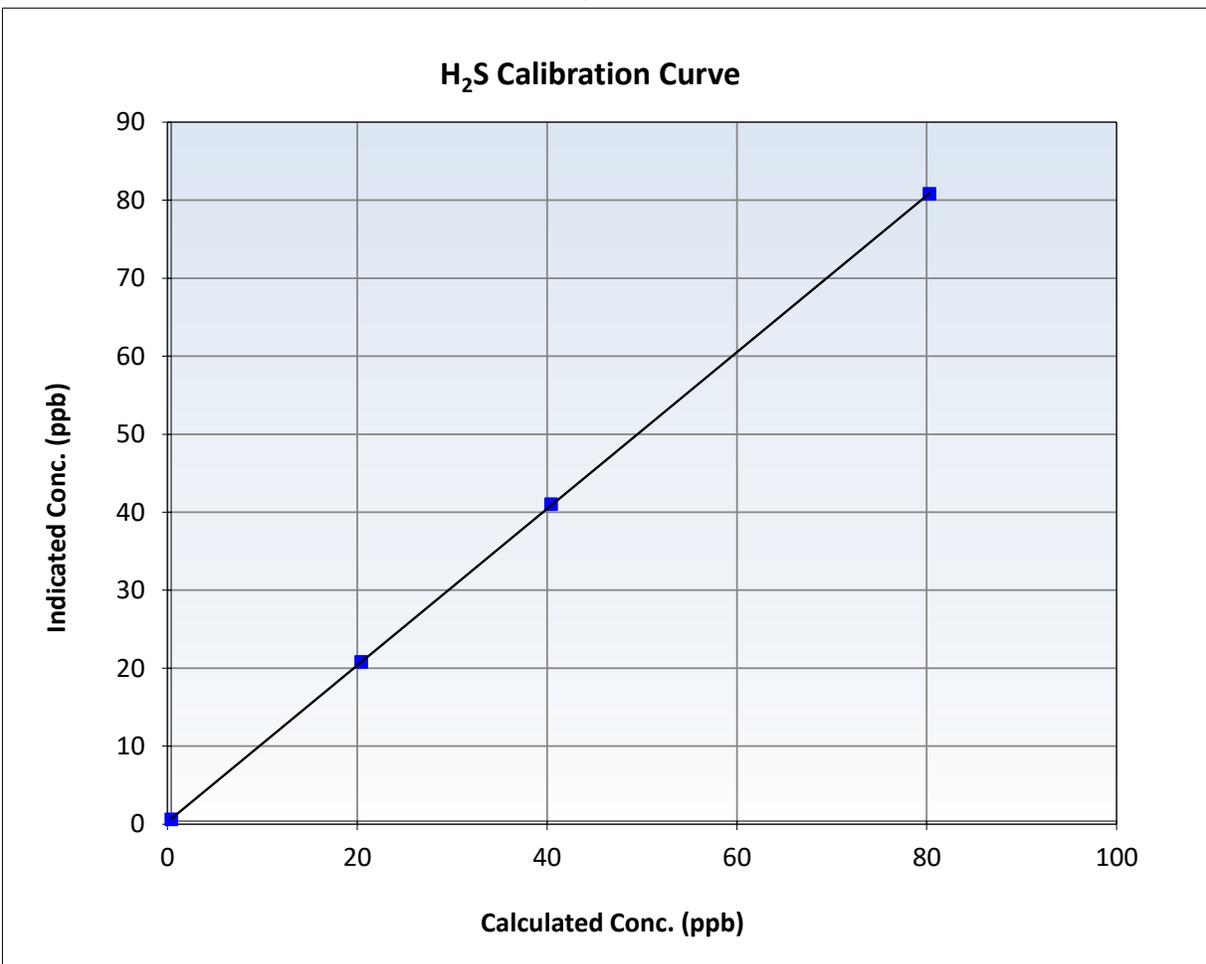
H₂S Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 2, 2025
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	10:02	End Time (MST):	14:00
Analyzer make:	Thermo 43iQ	Analyzer serial #:	1203169745

Calibration Data

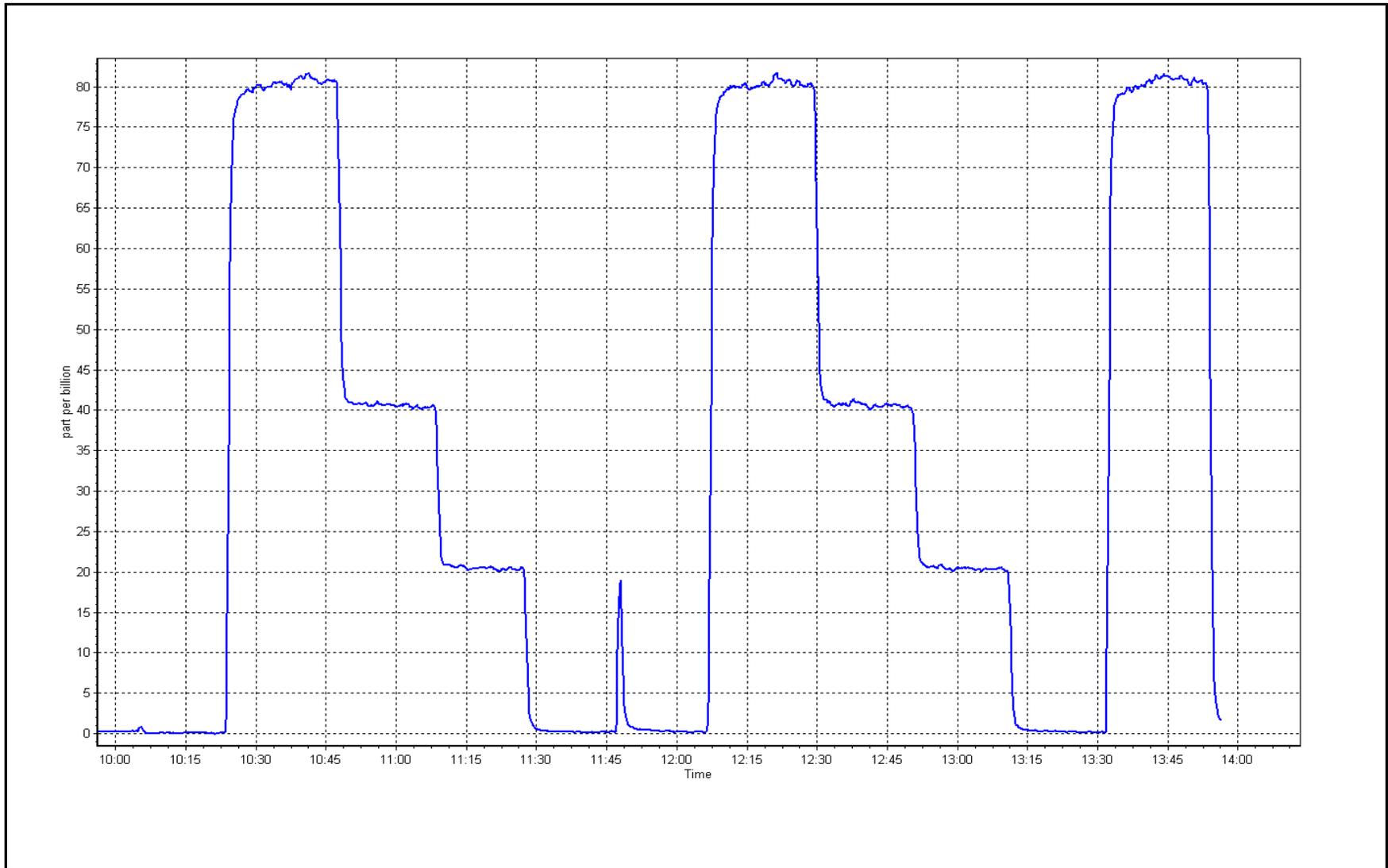
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999990	≥0.995
79.9	80.4	0.9937	Slope	1.003709	0.90 - 1.10
40.0	40.6	0.9857	Intercept	0.288582	+/-3
20.0	20.4	0.9811			



H₂S Calibration Plot

Date: January 28, 2026

Location: Lower Camp





Wood Buffalo Environmental Association

THC / CH4 / NMHC Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	January 14, 2026	Last Cal Date:	December 30, 2025
Start time (MST):	11:10	End time (MST):	14:15
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC741503	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	504.8 ppm	CH4 Equiv Conc.	1071.9 ppm
C3H8 Cal Gas Conc.	206.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	504.8 ppm	CH4 Equiv Conc.	1071.9 ppm
Removed C3H8 Conc.	206.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3811
Zero Air Gen model:	Teledyne API T701	Serial Number:	4428

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1152430012
THC Range: 0 - 20 ppm	NMHC/CH4 Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.31E-04	2.28E-04	NMHC SP Ratio:	5.22E-05	5.18E-05
CH4 Retention time:	13.2	13.0	NMHC Peak Area:	178392	179862
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	17.60	17.89	0.984
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.89	Prev response	17.67	*% change	1.2%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	17.60	17.64	0.997
Mid point	4959	41.1	8.81	8.80	1.001
Low point	4980	20.5	4.39	4.42	0.995
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.60	17.58	1.001
Average Correction Factor					0.998

Notes: Sample inlet filter changed after as founds, Span adjusted



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	9.31	9.48	0.983
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.48	Prev response	9.31	*% change	1.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	9.31	9.35	0.996
Mid point	4959	41.1	4.66	4.67	0.998
Low point	4980	20.5	2.32	2.35	0.988
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.31	9.33	0.998
Average Correction Factor					0.994

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	8.29	8.42	0.985
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.42	Prev response	8.36	*% change	0.6%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	8.29	8.30	0.999
Mid point	4959	41.1	4.15	4.13	1.004
Low point	4980	20.5	2.07	2.07	1.002
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.29	8.26	1.004
Average Correction Factor					1.002

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.004123	1.002090
THC Cal Offset:	-0.003994	-0.000843
CH ₄ Cal Slope:	1.010643	1.001255
CH ₄ Cal Offset:	-0.015552	-0.006927
NMHC Cal Slope:	0.998195	1.003495
NMHC Cal Offset:	0.011558	0.004885

Calibration Performed By:

Jason Brooks, Devin Russell



Wood Buffalo Environmental Association

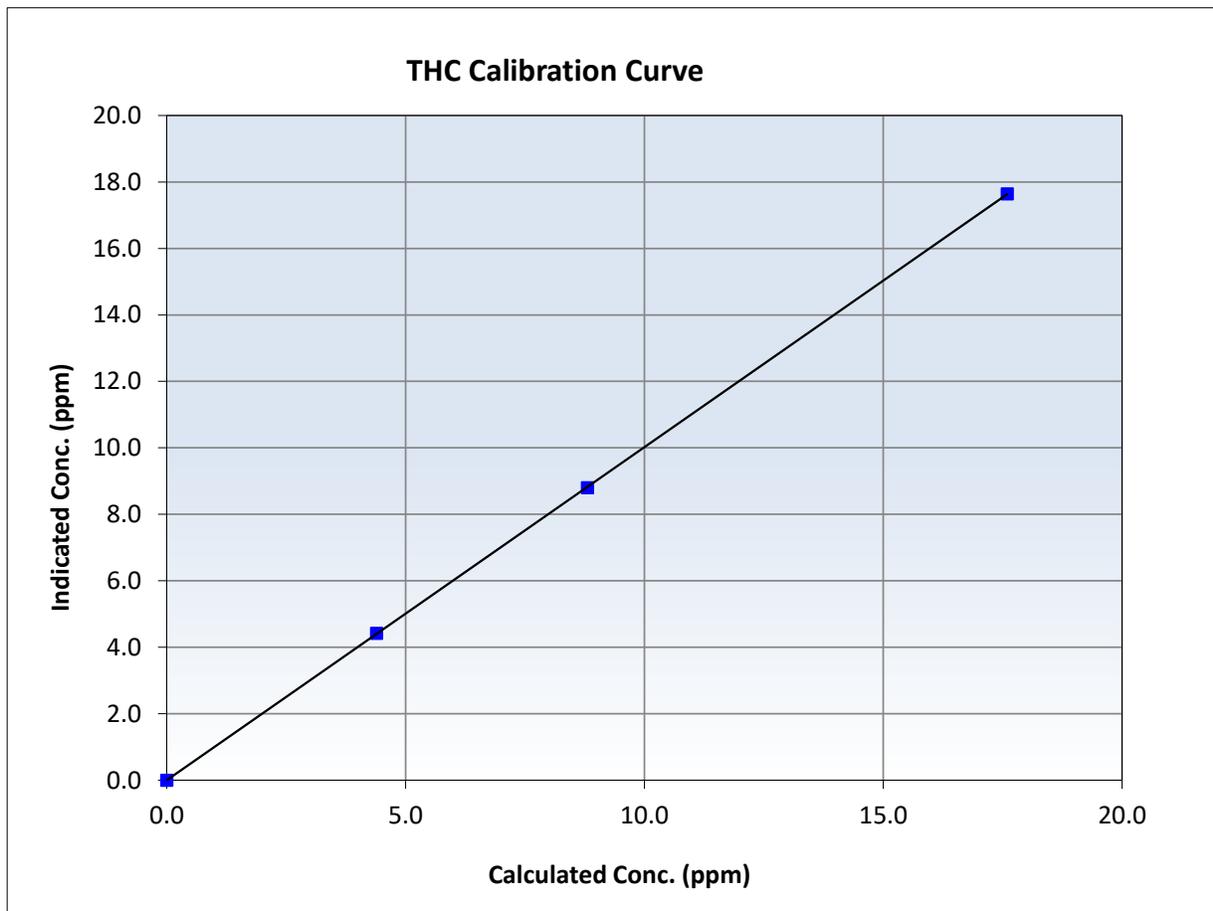
THC Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 30, 2025
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	11:10	End Time (MST):	14:15
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430012

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.00	----	Correlation Coefficient	0.999994	≥0.995
17.60	17.64	0.9975	Slope	1.002090	0.90 - 1.10
8.81	8.80	1.0008	Intercept	-0.000843	+/-0.5
4.39	4.42	0.9946			





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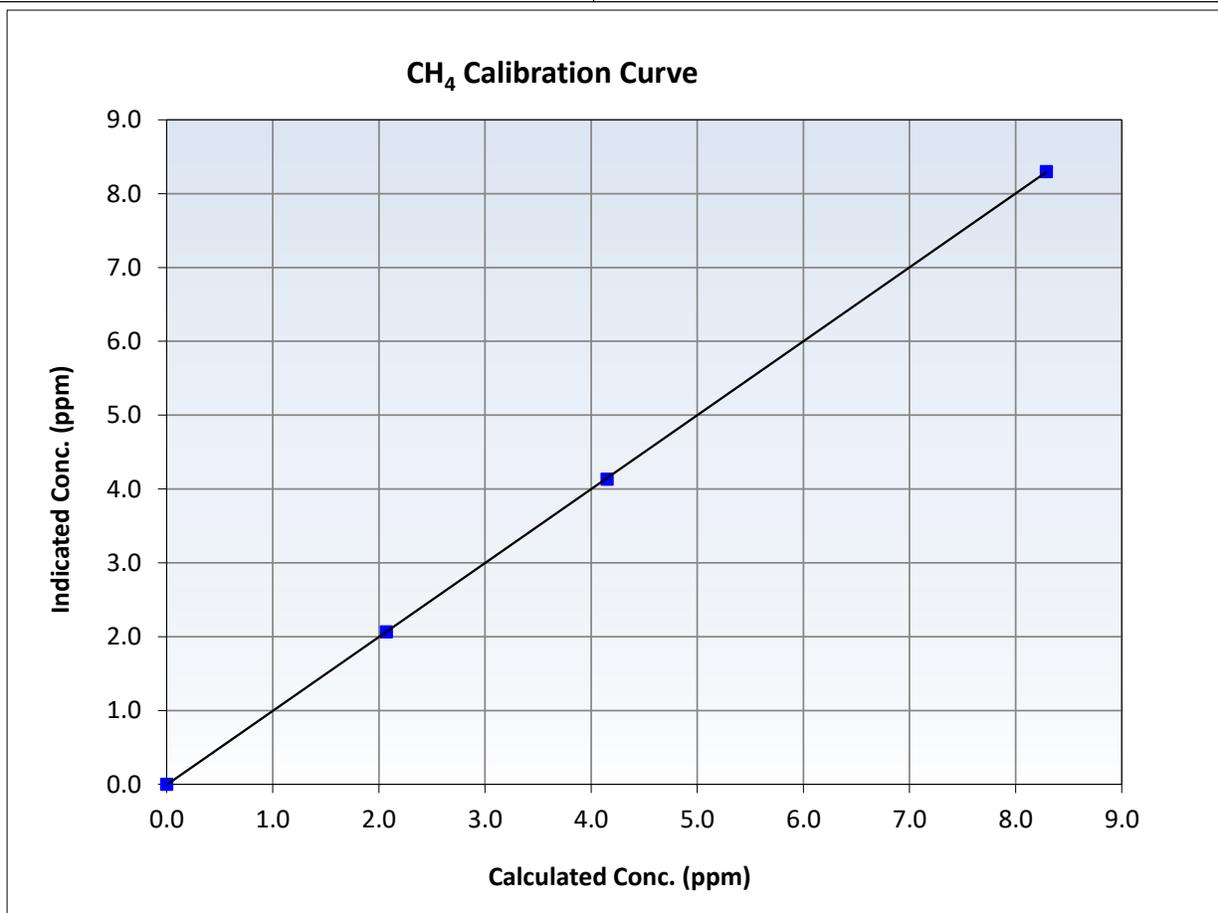
CH₄ Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 30, 2025
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	11:10	End Time (MST):	14:15
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430012

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999993 ≥0.995
8.29	8.30	0.9988	Slope	1.001255 0.90 - 1.10
4.15	4.13	1.0037	Intercept	-0.006927 +/-0.5
2.07	2.07	1.0022		





Wood Buffalo Environmental Association

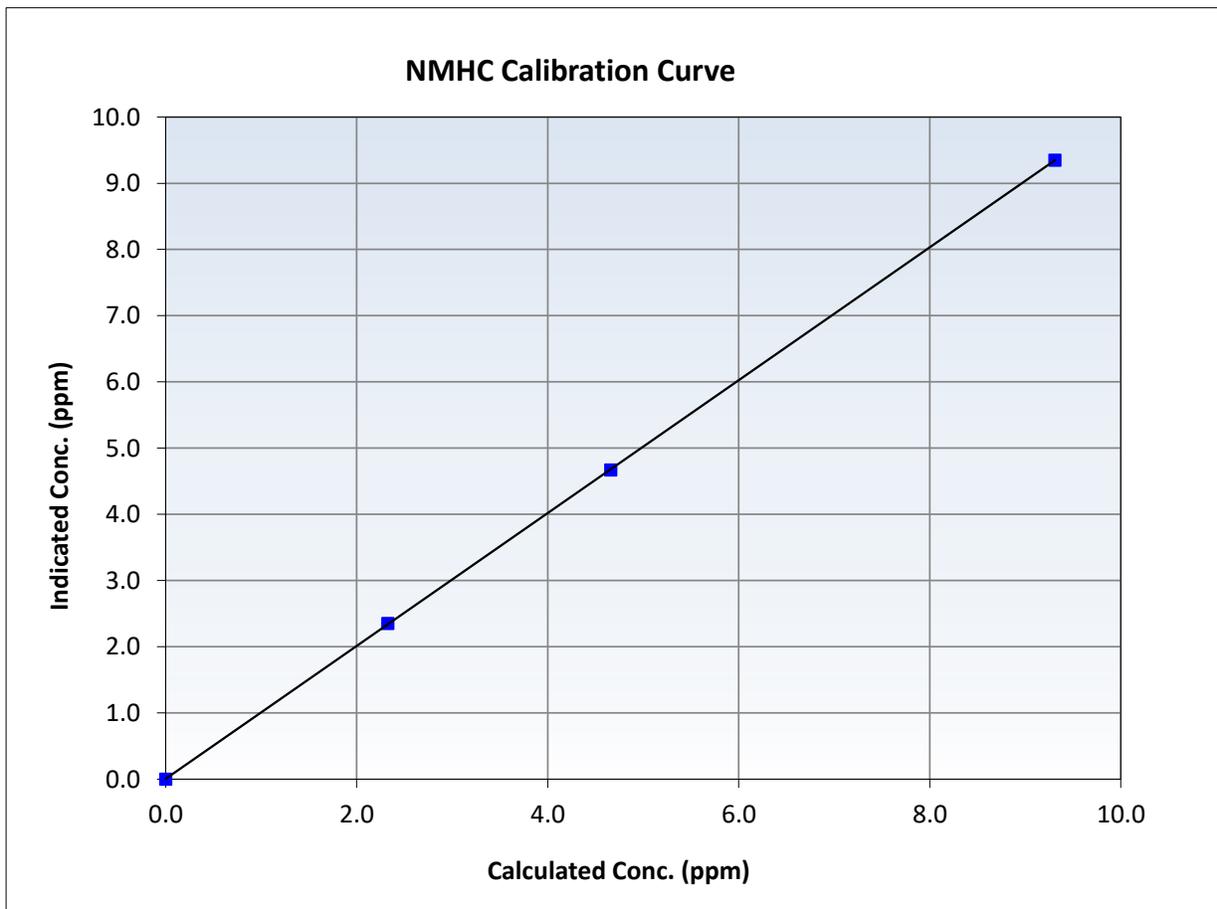
NMHC Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 30, 2025
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	11:10	End Time (MST):	14:15
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430012

Calibration Data

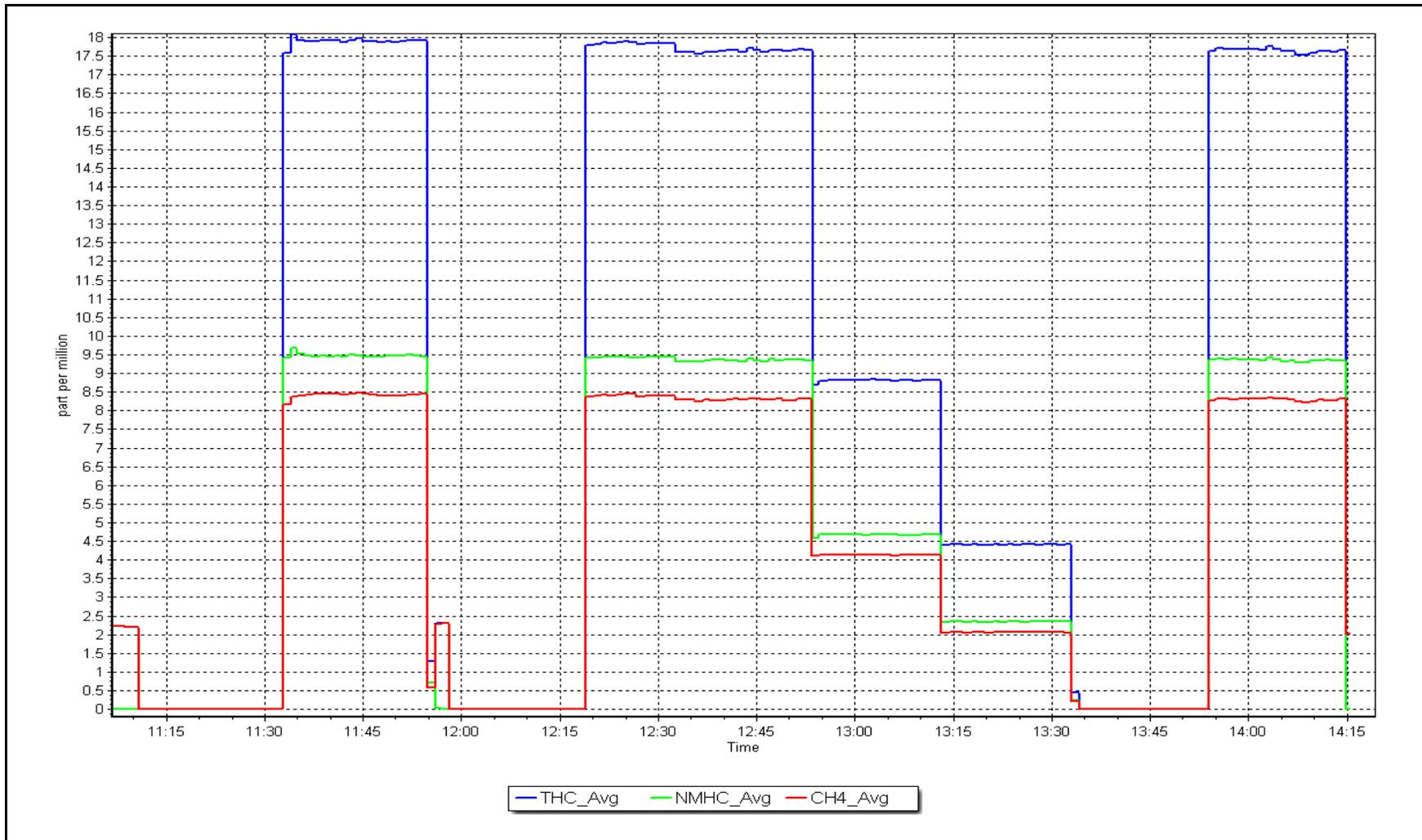
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999991	<i>≥0.995</i>
9.31	9.35	0.9957	Slope	1.003495	<i>0.90 - 1.10</i>
4.66	4.67	0.9983	Intercept	0.004885	<i>+/-0.5</i>
2.32	2.35	0.9880			



NMHC Calibration Plot

Date: January 14, 2026

Location: Lower Camp





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS13 FORT MCKAY SOUTH JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Fort McKay South	Station number: AMS 13
Calibration Date:	January 9, 2026	Last Cal Date: December 17, 2025
Start time (MST):	9:45	End time (MST): 13:00
Reason:	Routine	

Calibration Standards

Cal Gas Concentration:	50.55 ppm	Cal Gas Exp Date: December 29, 2028
Cal Gas Cylinder #:	CC260812	
Removed Cal Gas Conc:	50.55 ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #:	NA	Diff between cyl:
Calibrator Model:	Teledyne API T750	Serial Number: 281
Zero Air Gen Model:	Teledyne API 751H	Serial Number: 321

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Serial Number: 1331259320
Analyzer Range:	0 - 1000 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.999543	1.000014	Backgd or Offset:	3.40	3.37
Calibration intercept:	-0.254296	0.005984	Coeff or Slope:	0.992	0.992

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.5	----
As found High point	4921	79.1	799.7	797.7	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	798.2	Previous response	799.1	*% change	-0.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.2	----
High point	4921	79.1	799.7	799.4	1.000
Mid point	4960	39.5	399.4	400.1	0.998
Low point	4980	19.8	200.2	200.0	1.001
As left zero	5000	0.0	0.0	-0.3	----
As left span	4921	79.1	799.7	801.3	0.998
Average Correction Factor:					1.000

Notes: Changed inlet filter after as founds. No adjustments.

Calibration Performed By: Devin Russell, Jason Brooks



Wood Buffalo Environmental Association

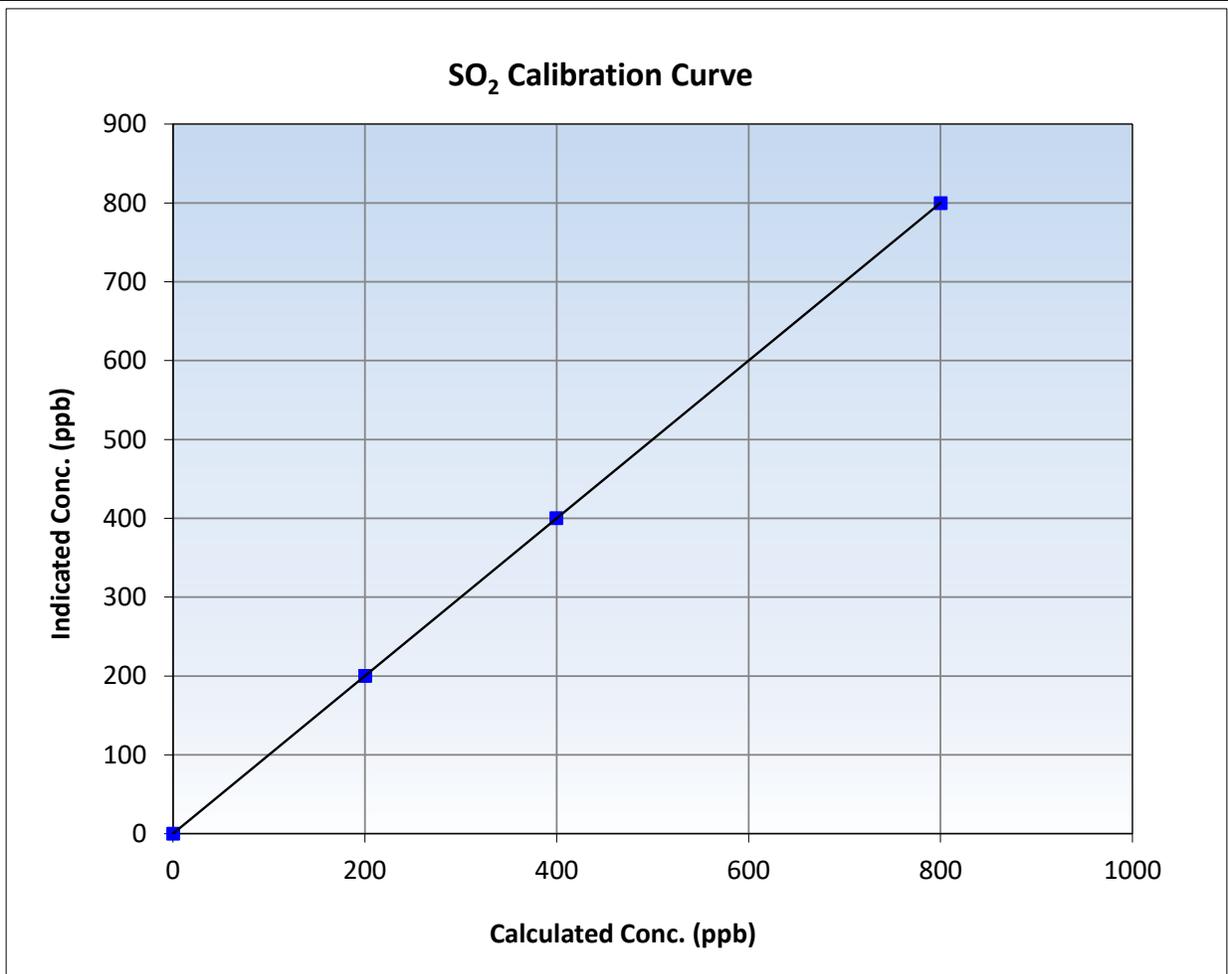
SO₂ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:45	End Time (MST):	13:00
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1331259320

Calibration Data

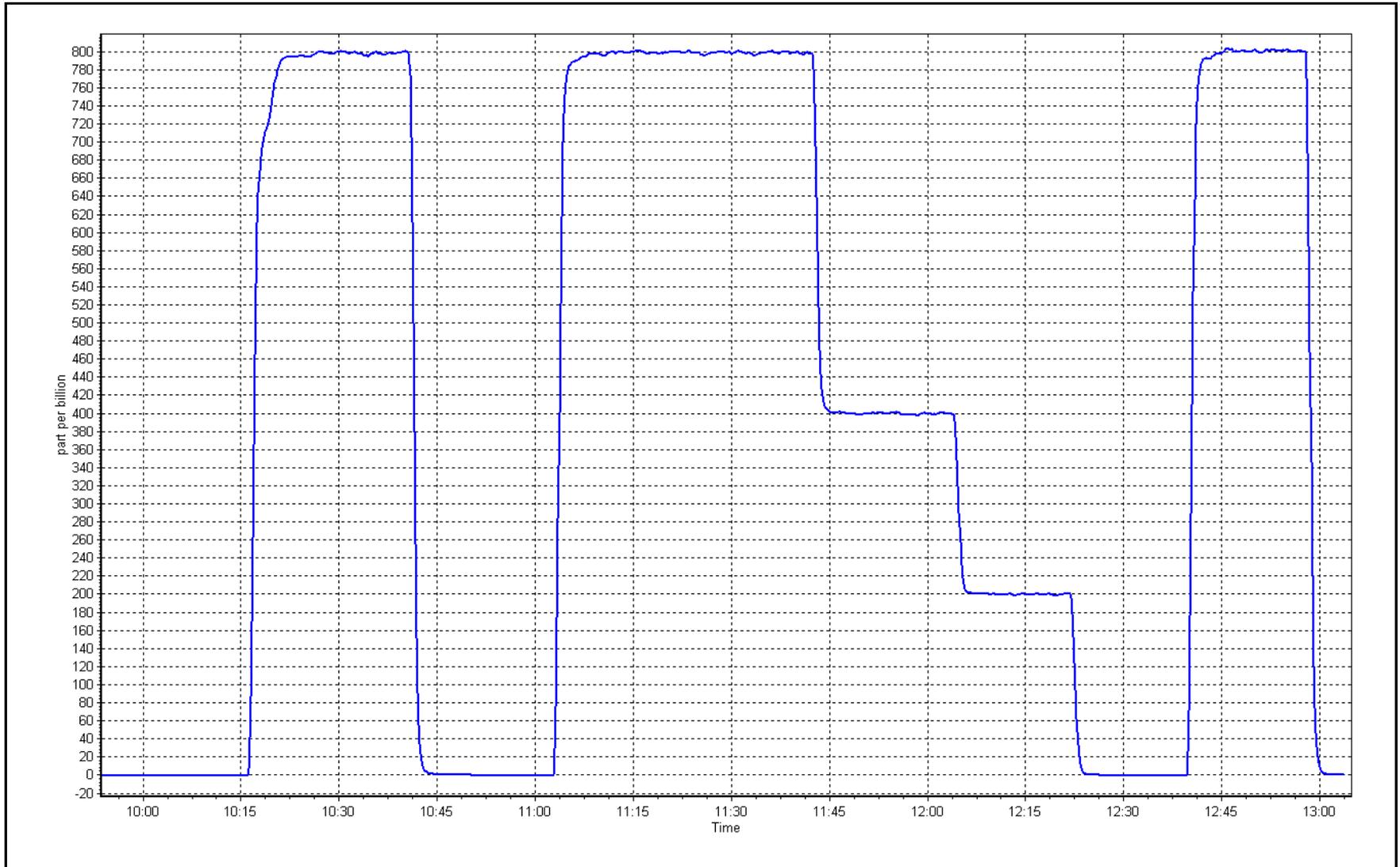
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.2	----	Correlation Coefficient	0.999998	≥0.995
799.7	799.4	1.0004	Slope	1.000014	0.90 - 1.10
399.4	400.1	0.9982	Intercept	0.005984	+/-30
200.2	200.0	1.0009			



SO2 Calibration Plot

Date: January 9, 2026

Location: Fort McKay South





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name: Fort McKay South	Station number: AMS 13
Calibration Date: January 7, 2026	Last Cal Date: December 15, 2025
Start time (MST): 10:09	End time (MST): 13:59
Reason: Routine	

Calibration Standards

Cal Gas Concentration: 4.88 ppm	Cal Gas Exp Date: September 5, 2027
Cal Gas Cylinder #: CC500241	
Removed Cal Gas Conc: 4.88 ppm	Rem Gas Exp Date:
Removed Gas Cyl #: CC500241	Diff between cyl:
Calibrator Make/Model: Teledyne API T700	Serial Number: 2657
ZAG Make/Model: Teledyne API T701	Serial Number: 1118

Analyzer Information

Analyzer make: Thermo 43i TLE	Analyzer serial #: 1180540017
Converter make: CDN-101	Converter serial #: 521
Analyzer Range: 0 - 100 ppb	Converter Temp: 800 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.991925	0.985755	Backgd or Offset:	3.36	3.36
Calibration intercept:	0.161571	0.201562	Coeff or Slope:	1.09	1.09

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.4	----
As found High point	4918	81.6	79.6	78.5	1.020
As found Mid point	4959	40.8	39.8	39.1	1.029
As found Low point	4980	20.4	19.9	19.5	1.042
New cylinder response					
Baseline Corr As found:	78.1	Prev response:	79.17	*% change:	-1.4%
Baseline Corr 2nd AF pt:	38.7	AF Slope:	0.981881	AF Intercept:	0.161555
Baseline Corr 3rd AF pt:	19.1	AF Correlation:	0.999957	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4918	81.6	79.6	78.8	1.011
Mid point	4959	40.8	39.8	39.4	1.011
Low point	4980	20.4	19.9	19.6	1.016
As left zero	5000	0.0	0.0	0.4	----
As left span	4918	81.6	79.6	79.1	1.007
SO2 Scrubber Check	4921	79.1	791.0	0.1	----
Date of last scrubber change:	7-Aug-25			Ave Corr Factor	1.012
Date of last converter efficiency test:					

Notes: Changed inlet filter after as found. SO2 scrubber check after calibrator zero and passed. No adjustment.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

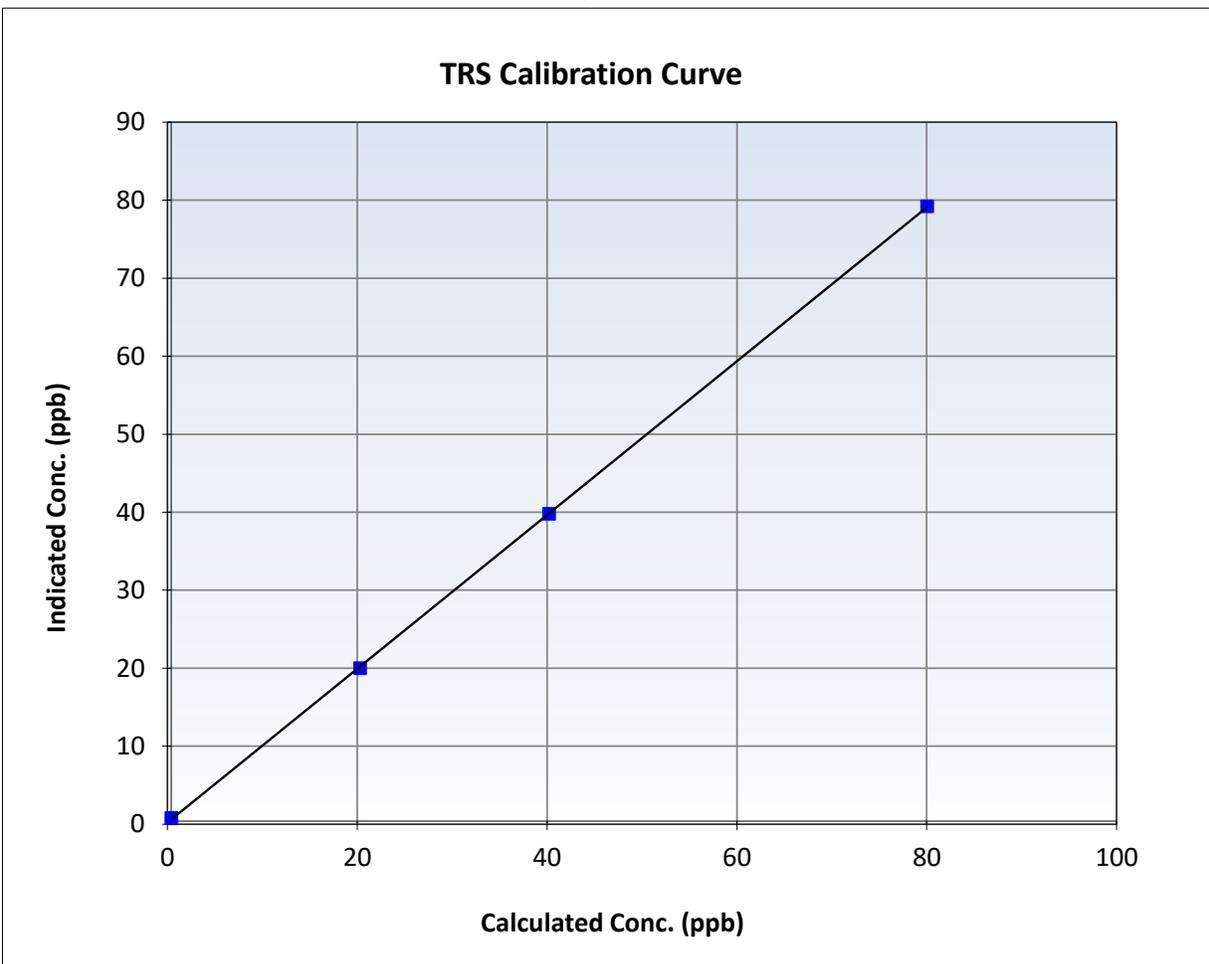
TRS Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 15, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:09	End Time (MST):	13:59
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1180540017

Calibration Data

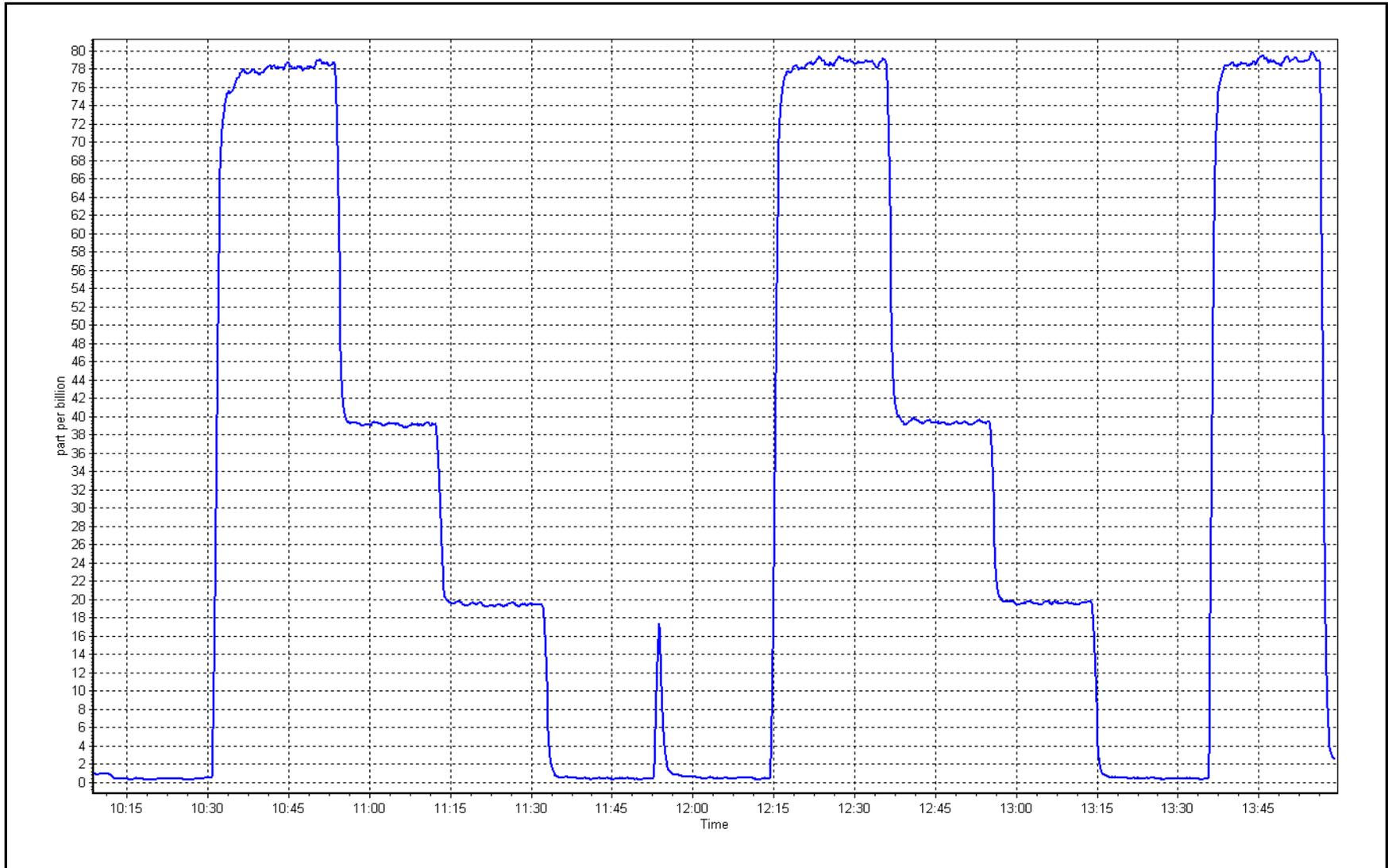
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.4	----	Correlation Coefficient	0.999970	≥ 0.995
79.6	78.8	1.0108	Slope	0.985755	$0.90 - 1.10$
39.8	39.4	1.0107	Intercept	0.201562	± 3
19.9	19.6	1.0158			



TRS Calibration Plot

Date: January 7, 2026

Location: Fort McKay South





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	January 9, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	9:45	End time (MST):	13:00
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC260812	Cal Gas Expiry Date:	Friday, December 29, 2028
CH4 Cal Gas Conc.	503.6 ppm	CH4 Equiv Conc.	1077.5 ppm
C3H8 Cal Gas Conc.	208.7 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	
Removed CH4 Conc.	503.6 ppm	CH4 Equiv Conc.	1077.5 ppm
Removed C3H8 Conc.	208.7 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T750	Serial Number:	281
Zero Air Gen model:	Teledyne API 751H	Serial Number:	321

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1181490018
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	3.10E-04	3.14E-04	NMHC SP Ratio:	4.62E-05	4.60E-05
CH4 Retention time:	16.00	16.40	NMHC Peak Area:	196471	197544
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	17.05	16.93	1.007
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.93	Prev response	17.07	*% change	-0.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	17.05	17.00	1.003
Mid point	4960	39.5	8.51	8.44	1.009
Low point	4980	19.8	4.27	4.16	1.026
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	17.05	17.06	0.999
Average Correction Factor					1.012

Notes: Changed inlet filter after as founds. Adjusted span.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	9.08	9.16	0.991
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.16	Prev response	9.07	*% change	1.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	9.08	9.10	0.997
Mid point	4960	39.5	4.53	4.52	1.004
Low point	4980	19.8	2.27	2.23	1.019
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	9.08	9.09	0.999
Average Correction Factor					1.007

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	7.97	7.77	1.025
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.77	Prev response	8.00	*% change	-2.9%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	7.97	7.90	1.008
Mid point	4960	39.5	3.98	3.92	1.015
Low point	4980	19.8	1.99	1.93	1.033
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	7.97	7.97	0.999
Average Correction Factor					1.019

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.003802	0.998895
THC Cal Offset:	-0.044490	-0.048901
CH ₄ Cal Slope:	1.006970	0.993385
CH ₄ Cal Offset:	-0.023531	-0.023939
NMHC Cal Slope:	1.001223	1.004195
NMHC Cal Offset:	-0.020759	-0.025562

Calibration Performed By: Devin Russell, Jason Brooks



Wood Buffalo Environmental Association

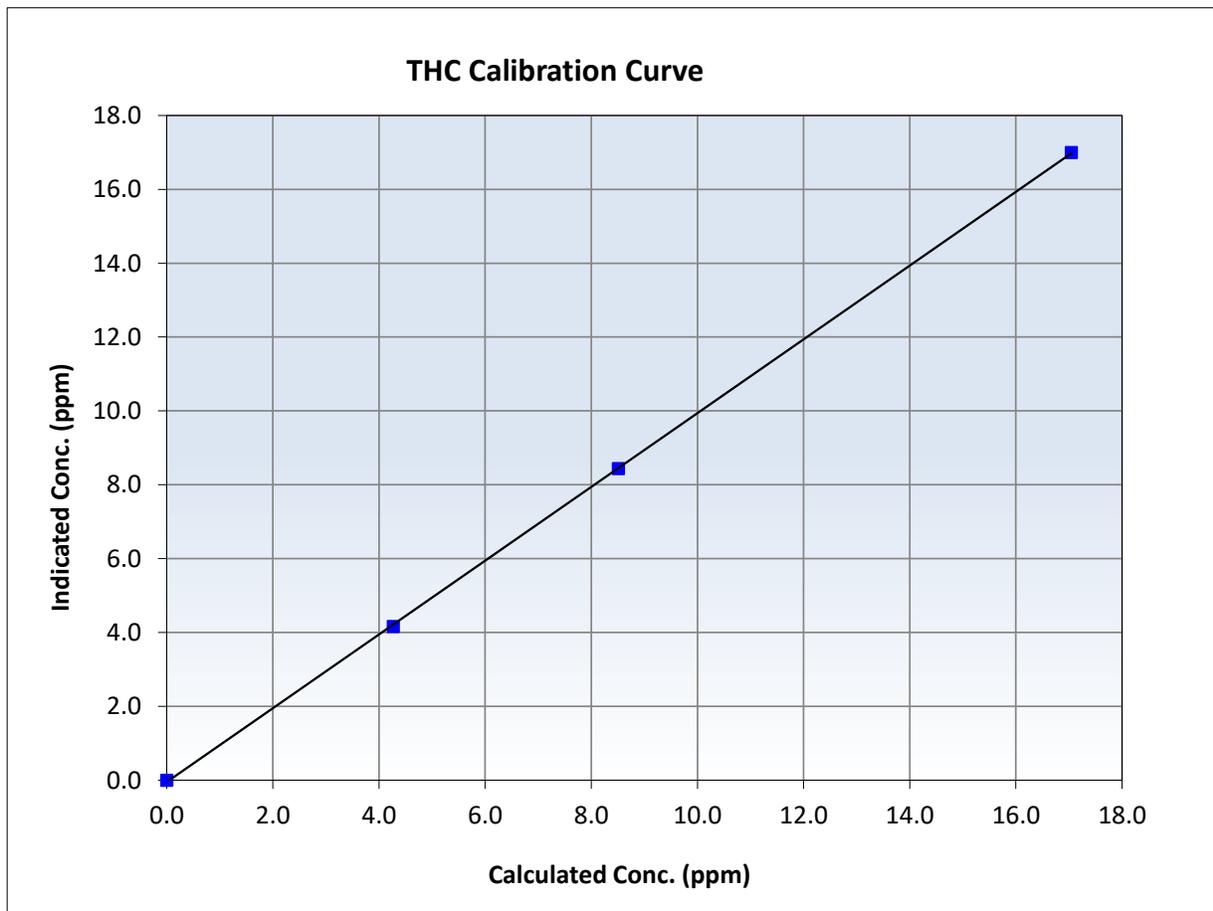
THC Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:45	End Time (MST):	13:00
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999962	<i>≥0.995</i>
17.05	17.00	1.0027	Slope	0.998895	<i>0.90 - 1.10</i>
8.51	8.44	1.0092	Intercept	-0.048901	<i>+/-0.5</i>
4.27	4.16	1.0255			





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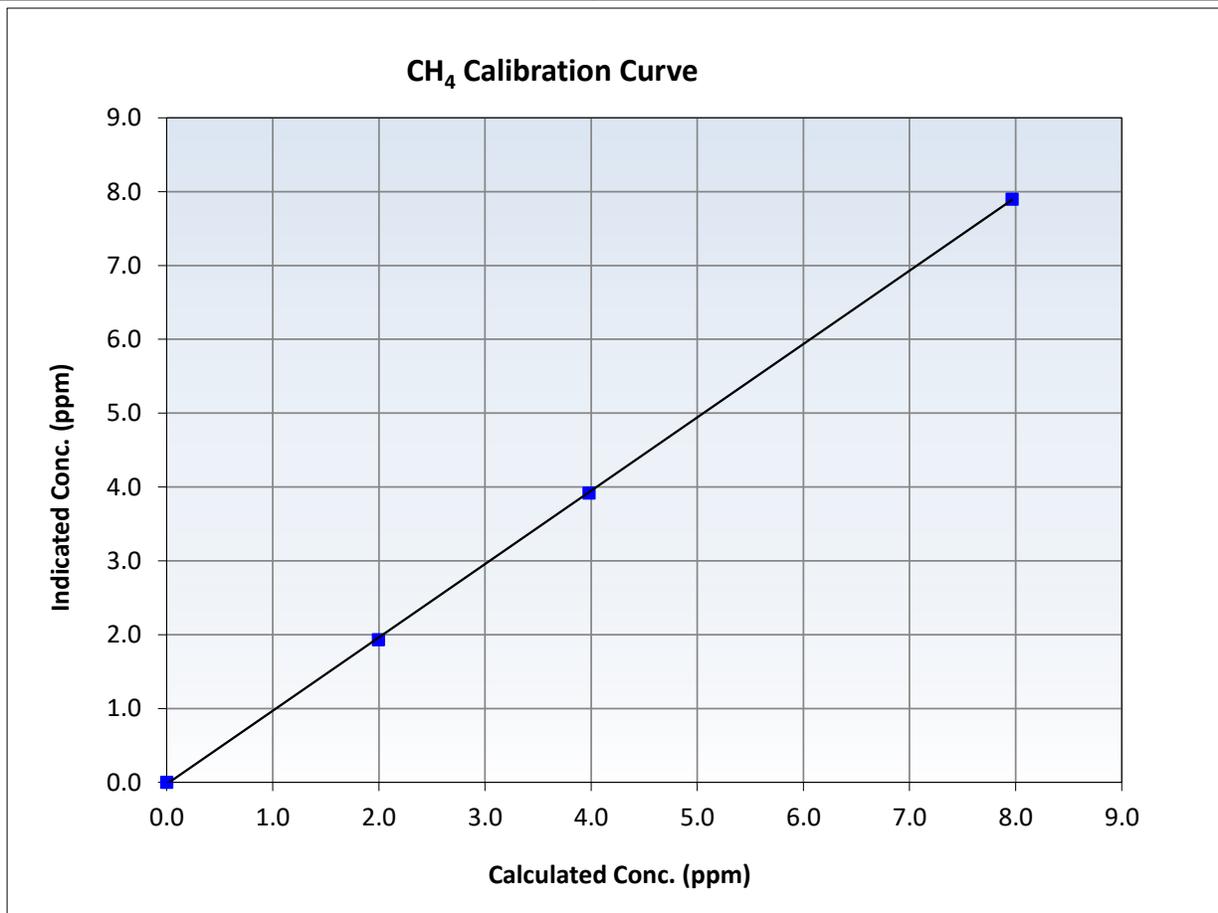
CH₄ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:45	End Time (MST):	13:00
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999958	<i>≥0.995</i>
7.97	7.90	1.0083	Slope	0.993385	<i>0.90 - 1.10</i>
3.98	3.92	1.0150	Intercept	-0.023939	<i>+/-0.5</i>
1.99	1.93	1.0328			





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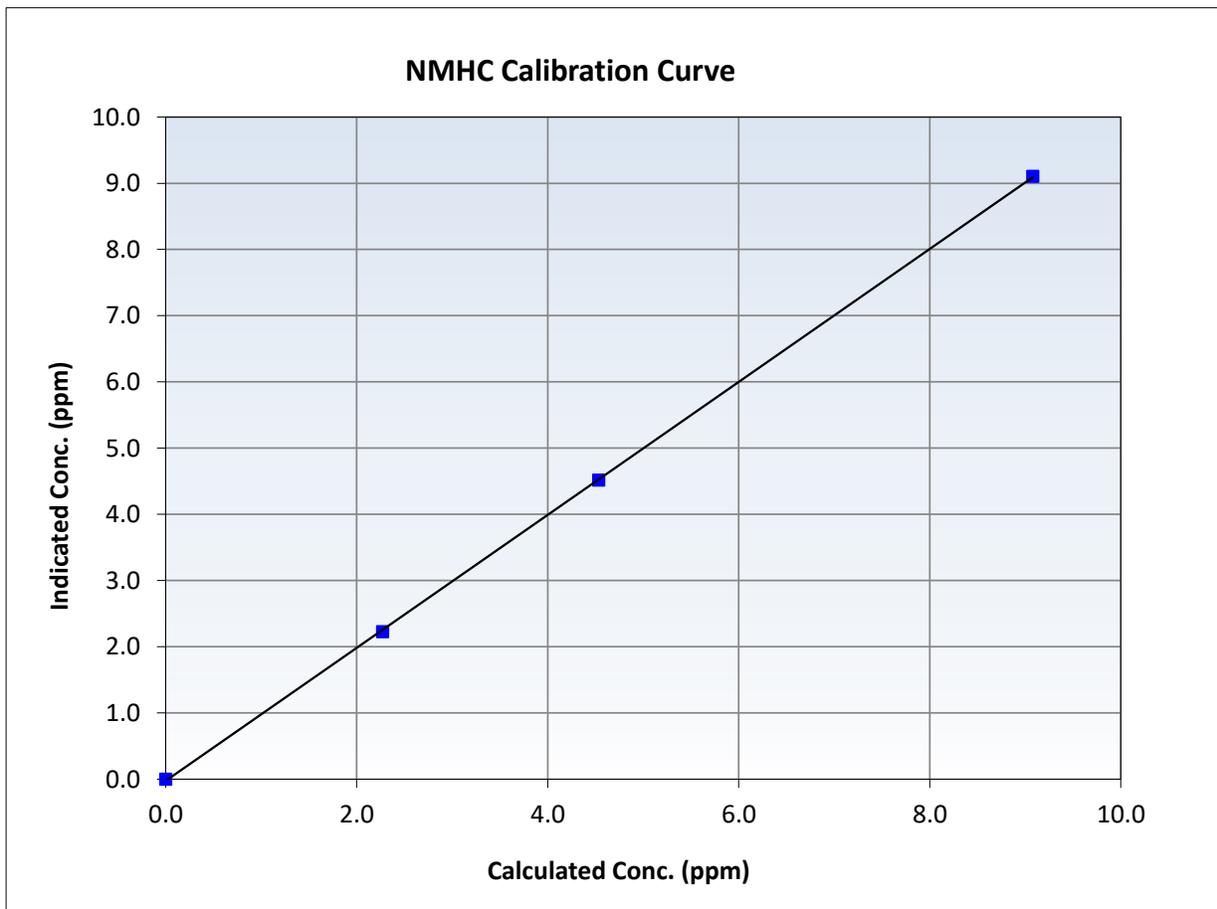
NMHC Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:45	End Time (MST):	13:00
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

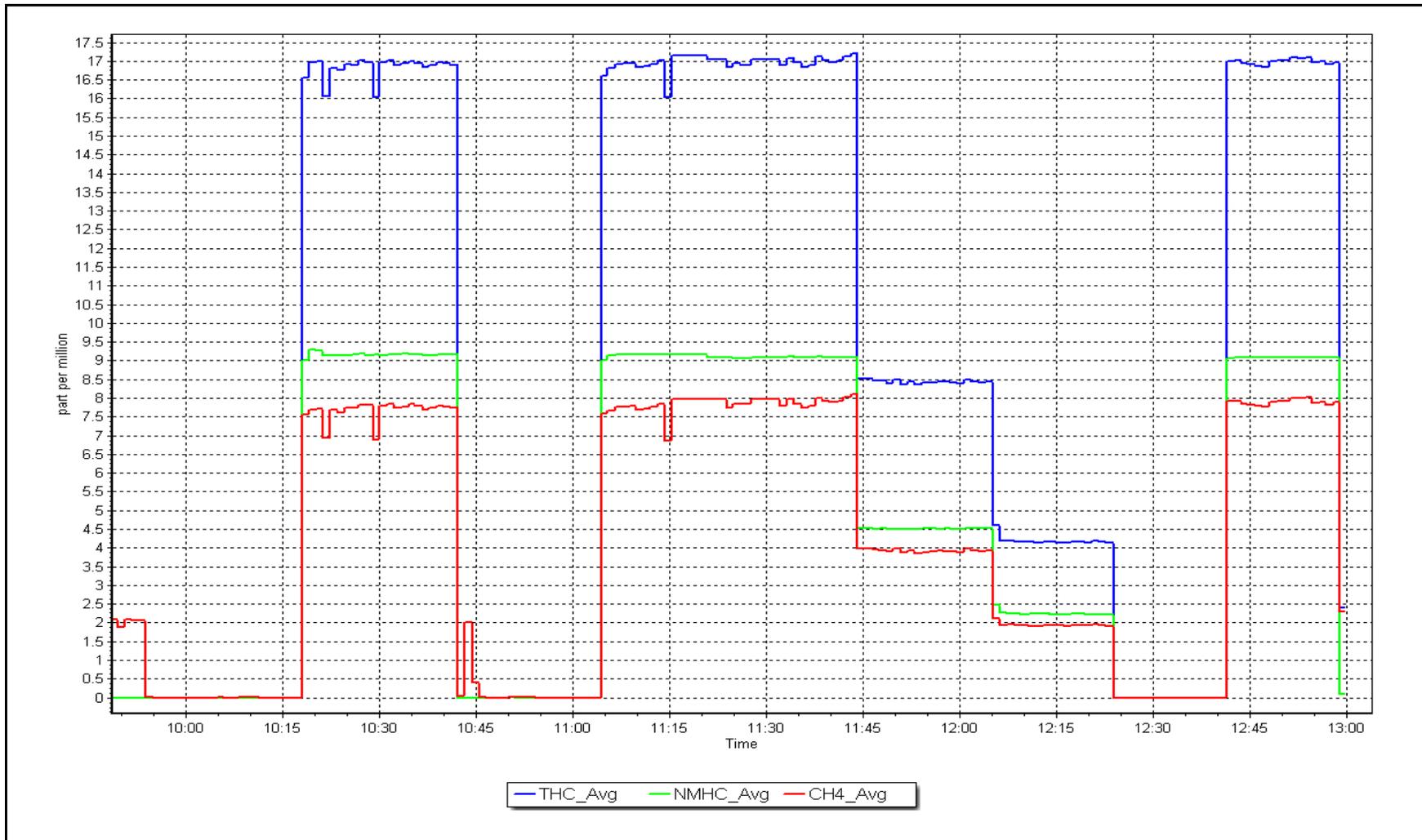
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999964	<i>≥0.995</i>
9.08	9.10	0.9973	Slope	1.004195	<i>0.90 - 1.10</i>
4.53	4.52	1.0039	Intercept	-0.025562	<i>+/-0.5</i>
2.27	2.23	1.0192			



NMHC Calibration Plot

Date: January 9, 2026

Location: Fort McKay South





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Fort McKay South
 Station number: AMS 13
 Calibration Date: January 13, 2026
 Last Cal Date: December 16, 2025
 Start time (MST): 10:28
 End time (MST): 14:48
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: T2UP1RP
 NOX Cal Gas Conc: 48.25 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 48.25 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne APIT701
 Cal Gas Expiry Date: November 17, 2026
 NO Cal Gas Conc: 47.88 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 47.88 ppm
 NO gas Diff:
 Serial Number: 2657
 Serial Number: 1118

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	----	----
AF High point	4917	83.5	805.7	799.5	6.2	825.0	821.7	3.4	0.9765	0.9730
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 803.7 ppb		NO = 797.7 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 2.6%	
Baseline Corr 1st pt	NO _x = 825.1 ppb		NO = 821.7 ppb			<u>As Found Statistics</u>		*Percent Change	NO = 2.9%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42iQ
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 12300522720

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.000723	0.999617
NO _x Cal Offset:	-2.572306	-2.032442
NO Cal Slope:	1.002665	1.002008
NO Cal Offset:	-3.970410	-3.090649
NO ₂ Cal Slope:	0.975925	0.966069
NO ₂ Cal Offset:	1.128677	1.982802

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.125	1.095	NO bkgnd or offset:	3.0	2.9
NOX coeff or slope:	0.993	0.997	NOX bkgnd or offset:	3.2	3.1
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	160.9	162.2

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.3	0.5	-0.1	----	----
High point	4917	83.5	805.7	799.5	6.2	804.7	800.0	4.7	1.0012	0.9994
Mid point	4958	41.8	403.4	400.3	3.1	399.5	395.7	3.8	1.0097	1.0116
Low point	4979	20.9	201.7	200.1	1.5	197.6	194.2	3.4	1.0207	1.0306
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.4	-0.1	----	----
As left span	4917	83.5	805.7	404.1	401.6	788.5	404.1	384.5	1.0218	1.0000
Average Correction Factor									1.0106	1.0139

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	797.5	385.7	418.0	404.3	1.0338	96.7%
Mid GPT point	797.5	585.8	217.9	214.5	1.0158	98.4%
Low GPT point	797.5	689.0	114.7	114.3	1.0033	99.7%
Average Correction Factor					1.0176	98.3%

Notes:

Adjusted span only.

Calibration Performed By:

Sean Bala



Wood Buffalo Environmental Association

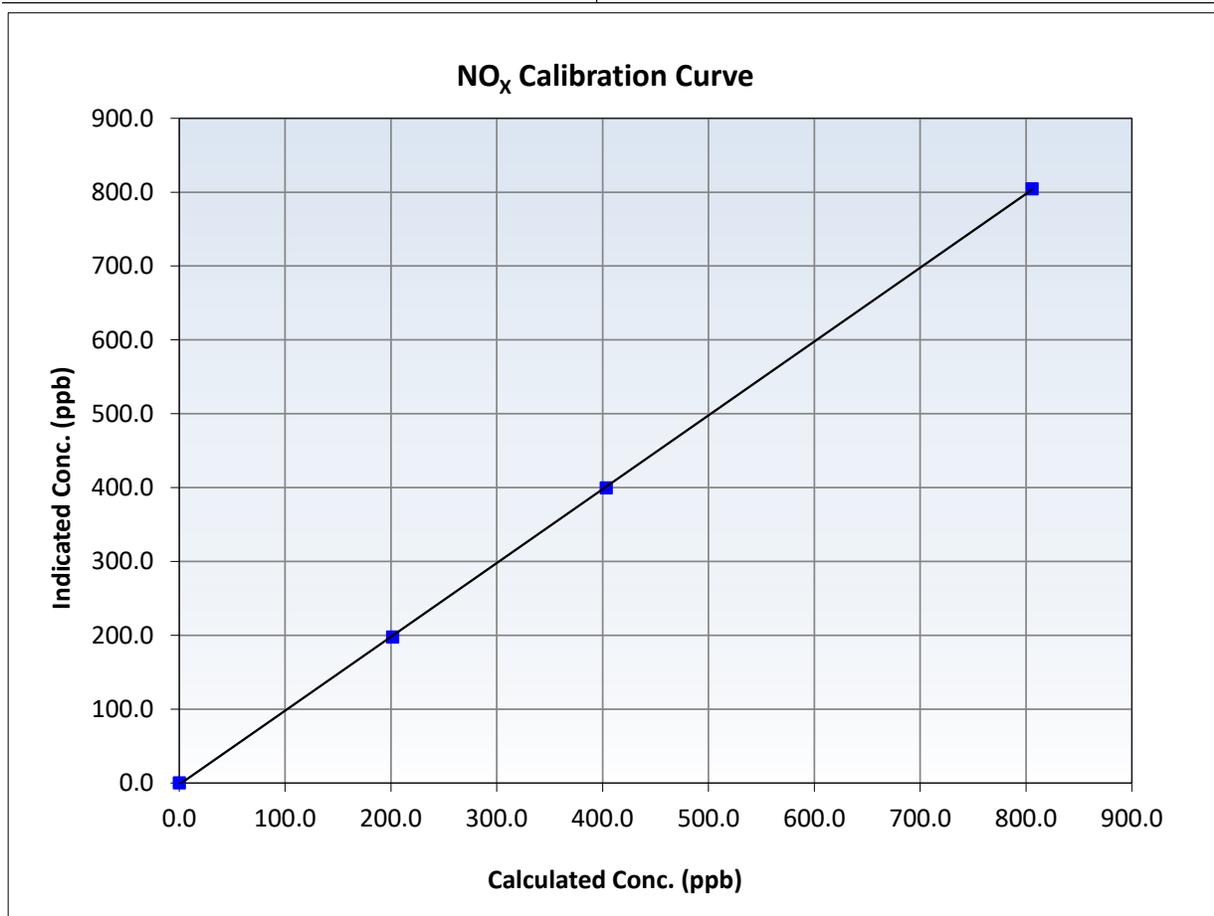
NO_x Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 16, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:28	End Time (MST):	14:48
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12300522720
			14:18

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.3	----	Correlation Coefficient	0.999960	<i>≥0.995</i>
805.7	804.7	1.0012	Slope	0.999617	<i>0.90 - 1.10</i>
403.4	399.5	1.0097	Intercept	-2.032442	<i>+/-20</i>
201.7	197.6	1.0207			





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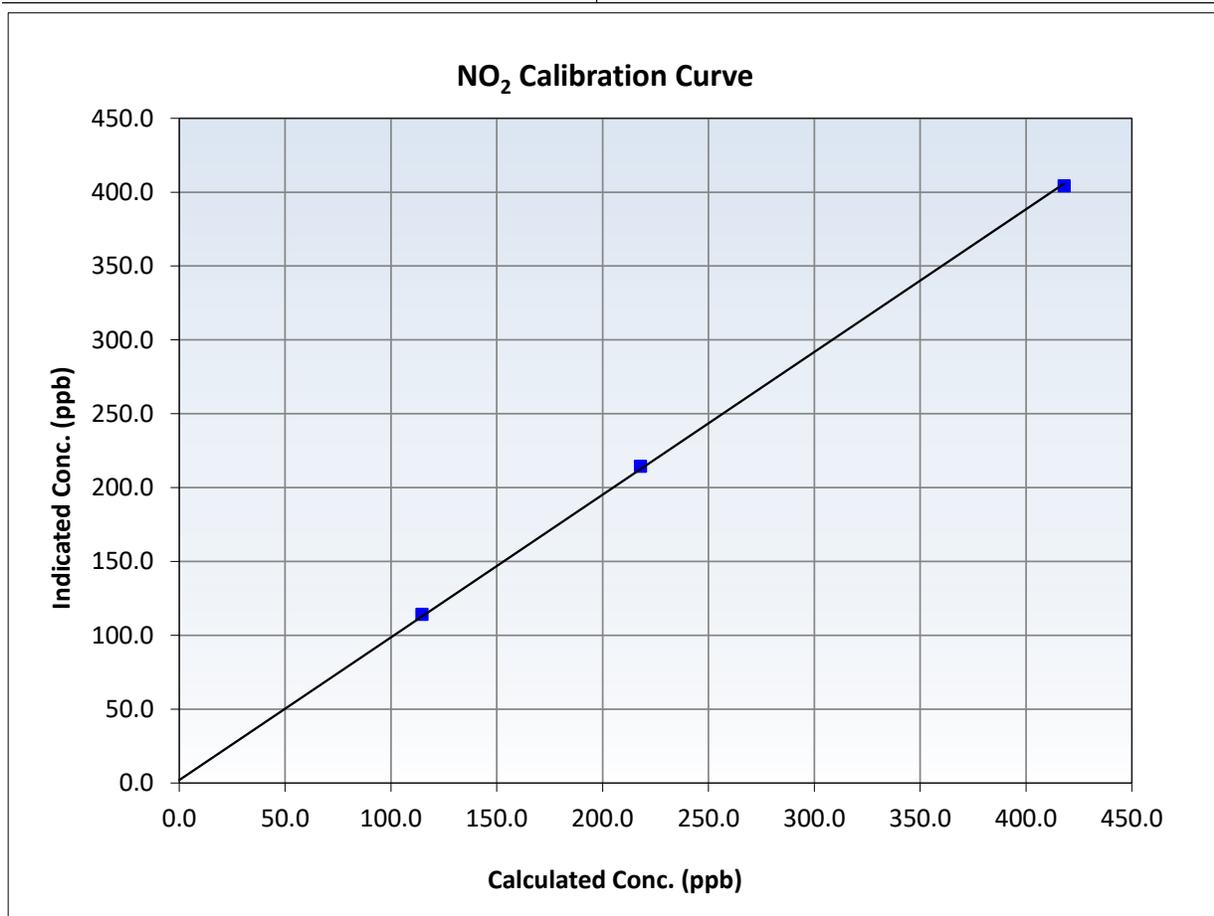
NO₂ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 16, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:28	End Time (MST):	14:48
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12300522720
			14:18

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999853	<i>≥0.995</i>
418.0	404.3	1.0338	Slope	0.966069	<i>0.90 - 1.10</i>
217.9	214.5	1.0158	Intercept	1.982802	<i>+/-20</i>
114.7	114.3	1.0033			





Wood Buffalo Environmental Association

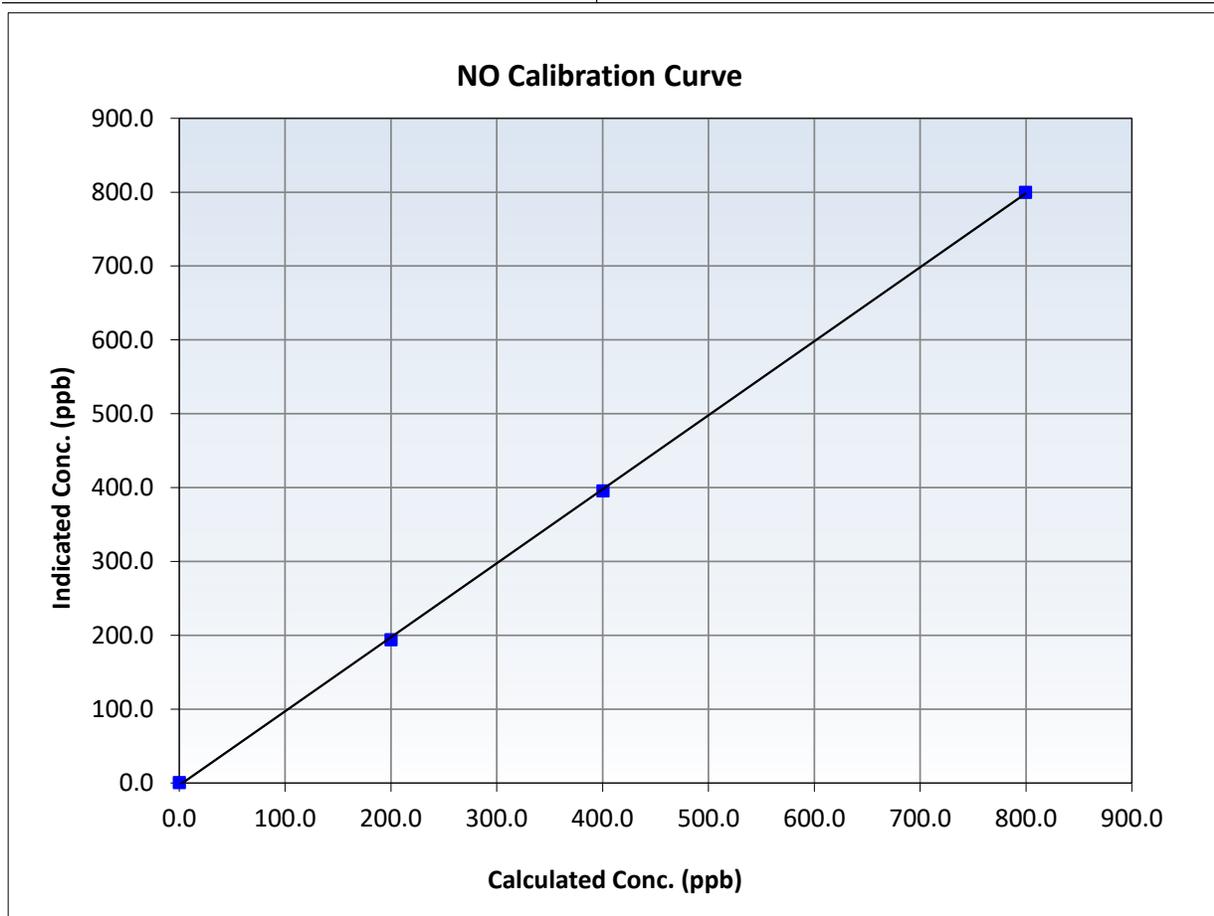
NO Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 16, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:28	End Time (MST):	14:48
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12300522720
			14:18

Calibration Data

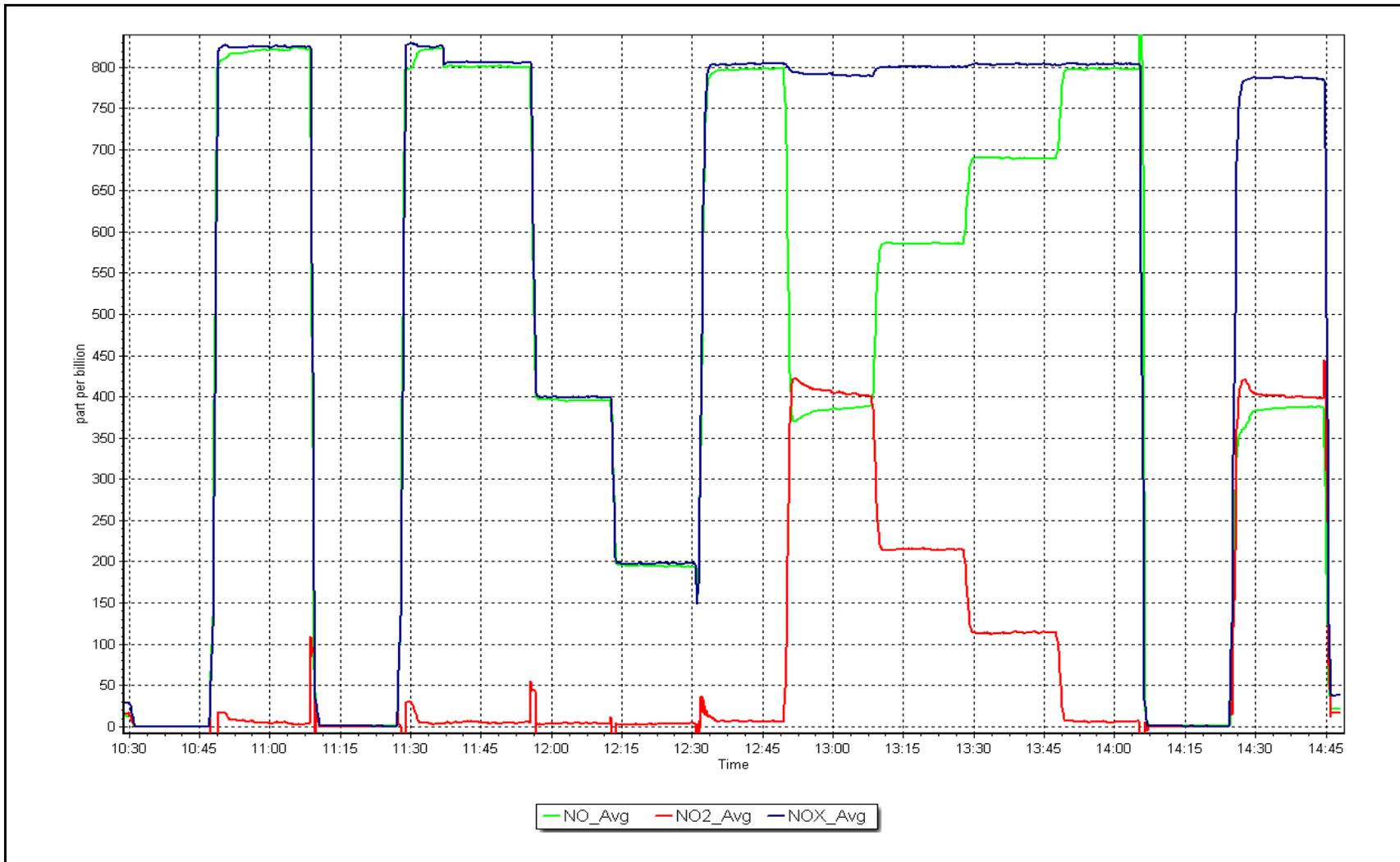
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.5	----	Correlation Coefficient	0.999907	≥0.995
799.5	800.0	0.9994	Slope	1.002008	0.90 - 1.10
400.3	395.7	1.0116	Intercept	-3.090649	+/-20
200.1	194.2	1.0306			



NO_x Calibration Plot

Date: January 13, 2026

Location: Fort McKay South





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	January 5, 2026	Last Cal Date:	December 1, 2025
Start time (MST):	10:18	End time (MST):	13:05
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	281
Calibrator Make/Model:	Teledyne API T700	Serial Number:	321
ZAG Make/Model:	Teledyne API 701		

Analyzer Information

Analyzer make:	Teledyne API T400	Analyzer serial #:	7413
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.000114	1.002343	Backgd or Offset:	-2.8	-2.8
Calibration intercept:	1.580000	2.240000	Coeff or Slope:	1.025	1.025

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	800.0	0.0	-0.1	----
As found High point	5000	984.4	400.0	403.4	0.991
As found Mid point					
As found Low point					
Baseline Corr As found:	403.5	Previous response	401.6	*% change	0.5%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	800.0	0.0	0.8	----
High point	5000	984.4	400.0	402.4	0.994
Mid point	5000	799.8	200.0	203.6	0.982
Low point	5000	682.8	100.0	103.8	0.963
As left zero	5000	800.0	0.0	1.2	----
As left span	5000	984.4	400.0	406.0	0.985
Average Correction Factor					0.980

Notes: Sample inlet filter was changed after as founds. No adjustments.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

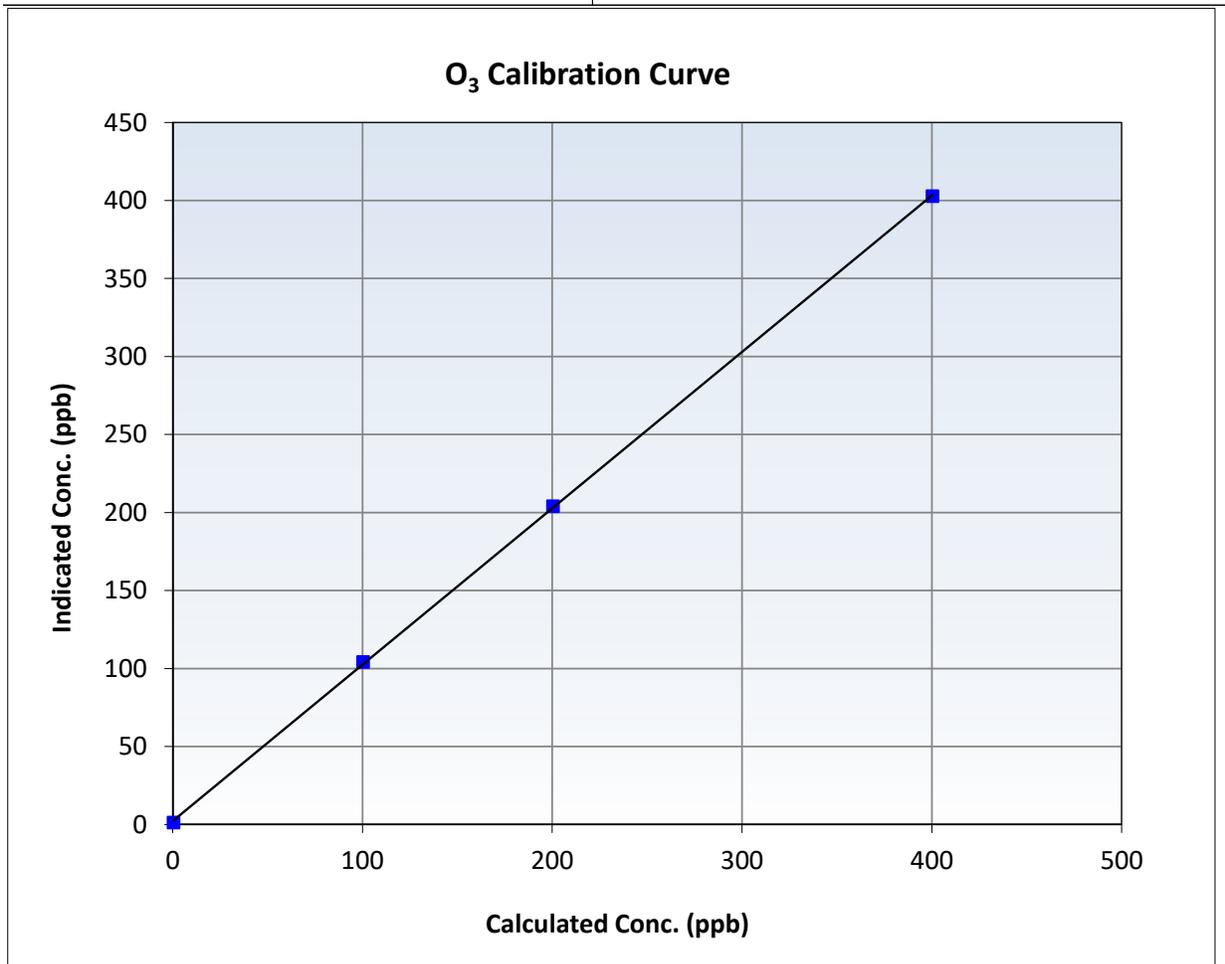
O₃ Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 1, 2025
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:18	End Time (MST):	13:05
Analyzer make:	Teledyne API T400	Analyzer serial #:	7413

Calibration Data

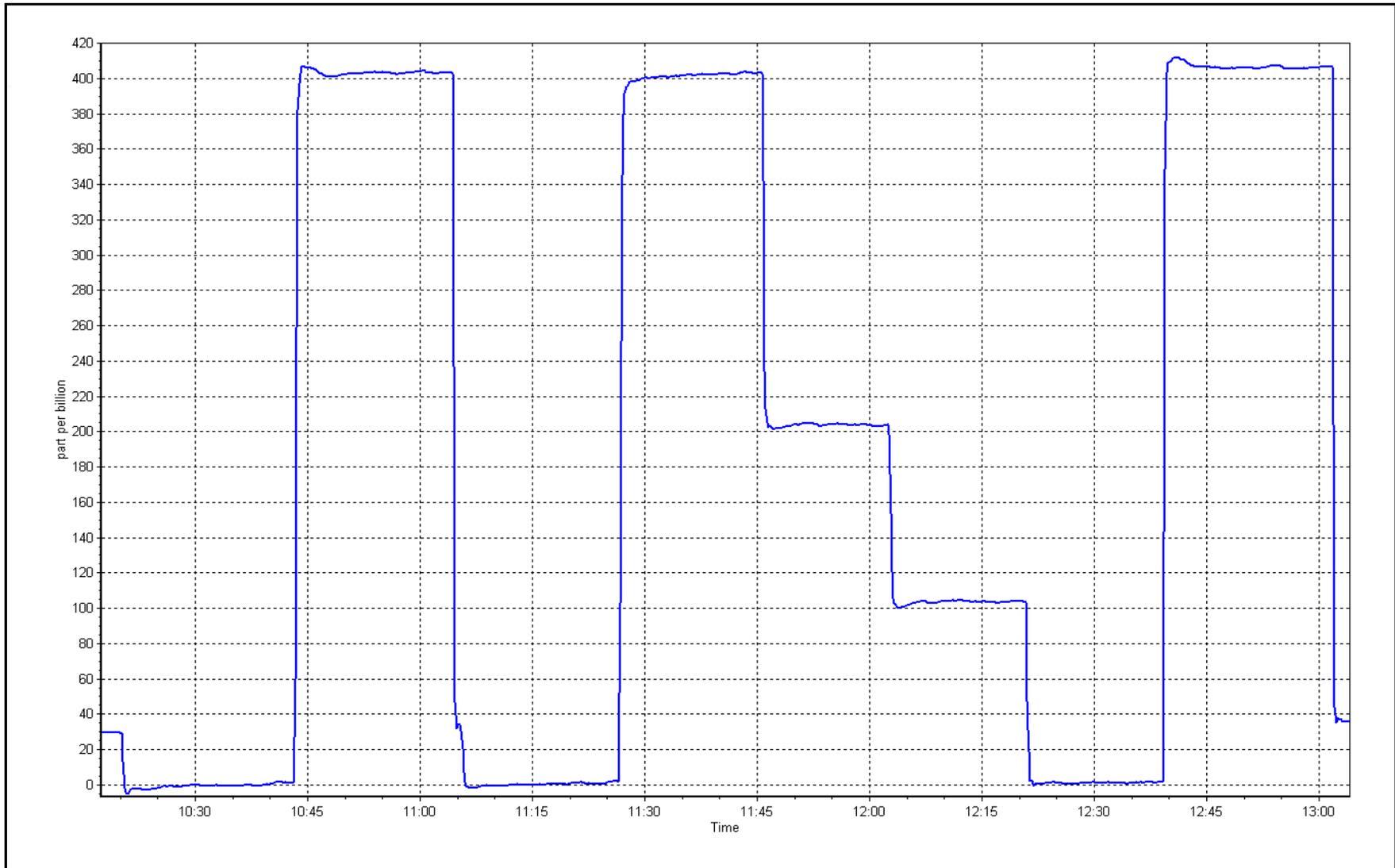
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.8	----	Correlation Coefficient	0.999941	≥0.995
400.0	402.4	0.9940	Slope	1.002343	0.90 - 1.10
200.0	203.6	0.9823	Intercept	2.240000	+/- 5
100.0	103.8	0.9634			



O₃ Calibration Plot

Date: January 5, 2026

Location: Fort McKay South





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Fort McKay South Station number: AMS 13
 Calibration Date: January 26, 2026 Last Cal Date: December 19, 2025
 Start time (MST): 10:49 End time (MST): 15:22

Analyzer Make: Teledyne API T640 S/N: 1335
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25 S/N: 388750
 Temp/RH standard: Alicat FP-25 S/N: 388750

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-18.93	-16.90	-18.93	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	742.20	744.09	742.20	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.00	4.47	5.00	<input checked="" type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	NA	----	47	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	2.6	PM w/ HEPA: _____	0.0	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.9 Expiry Date: June 10, 2024
 Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: _____ December 19, 2025
 Date Disposable Filter Changed: _____ December 16, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: _____ June 2, 2025
 Date RH/T Sensor Cleaned: _____ June 2, 2025

Notes: Verified temperature, pressure and flow. Flow adjusted. Temperature may have been influenced by presence around sensor.

Calibration by: Kelly Baragar



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

**AMS14
ANZAC
JANUARY 2026**

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	January 5, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	11:51	End time (MST):	15:52
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.32	ppm	Cal Gas Exp Date: October 9, 2032
Cal Gas Cylinder #:	CC462030		
Removed Cal Gas Conc:	50.32	ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #:	NA		Diff between cyl:
Calibrator Model:	API T700		Serial Number: 3060
Zero Air Gen Model:	API T701H		Serial Number: 357

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	0710321322
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.002105	0.997719	Backgd or Offset:	25.4	26.3
Calibration intercept:	0.028161	-2.128235	Coeff or Slope:	1.111	1.111

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.5	----
As found High point	4920	79.5	800.2	798.7	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	798.2	Previous response	801.9	*% change	-0.5%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4920	79.5	800.2	797.7	1.003
Mid point	4960	39.8	400.6	395.4	1.013
Low point	4980	19.9	200.3	196.0	1.022
As left zero	5000	0.0	0.0	0.1	----
As left span	4920	79.5	800.2	799.0	1.001
Average Correction Factor:					1.013

Notes: Changed the sample inlet filter after as founds. Adjusted zero.

Calibration Performed By: Braiden Boutilier



Wood Buffalo Environmental Association

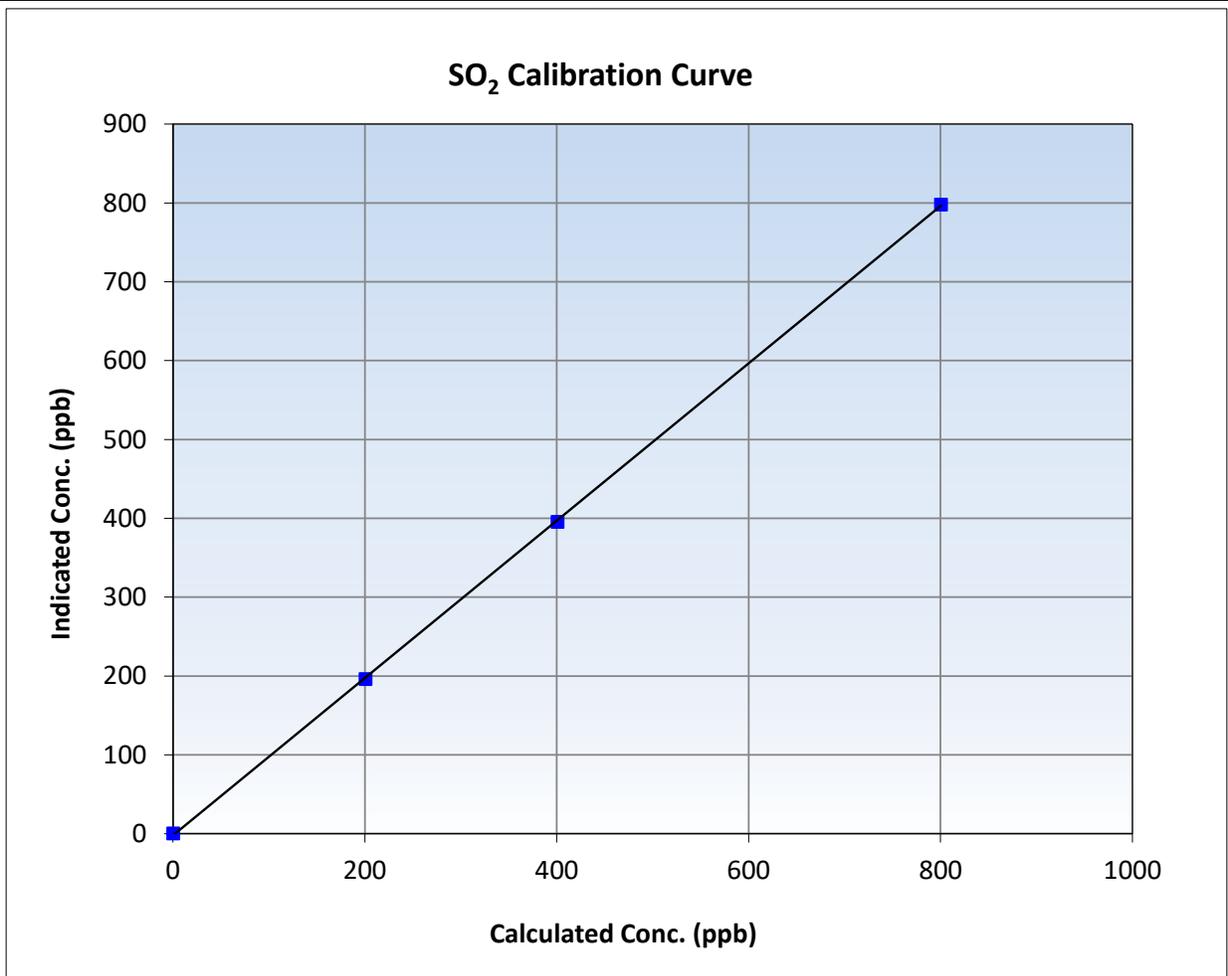
SO₂ Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 5, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	11:51	End Time (MST):	15:52
Analyzer make:	Thermo 43i	Analyzer serial #:	0710321322

Calibration Data

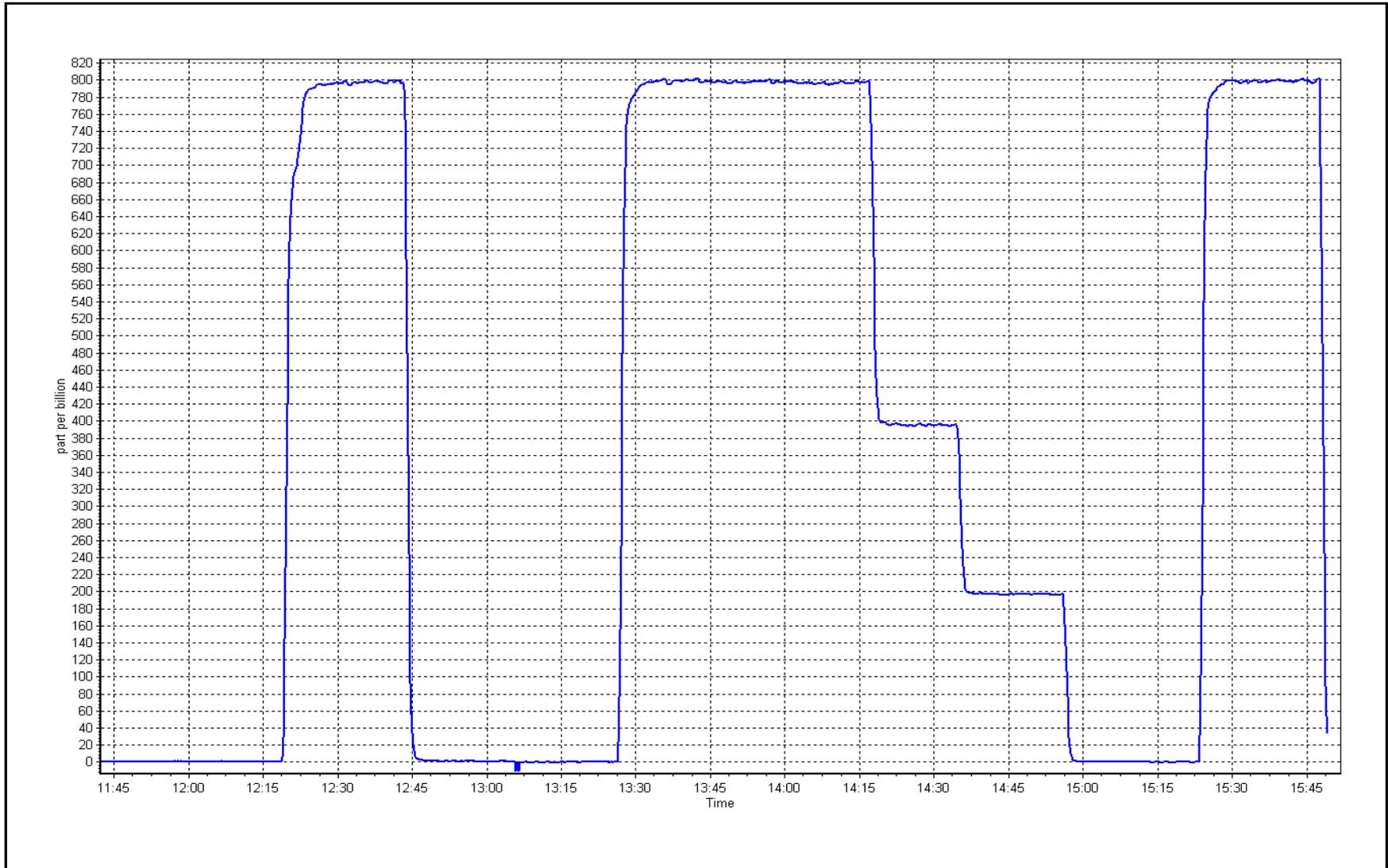
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.2	----	Correlation Coefficient	0.999957	≥0.995
800.2	797.7	1.0031	Slope	0.997719	0.90 - 1.10
400.6	395.4	1.0131	Intercept	-2.128235	+/-30
200.3	196.0	1.0218			



SO2 Calibration Plot

Date: January 5, 2026

Location: Anzac





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	January 13, 2026	Last Cal Date:	December 11, 2025
Start time (MST):	10:04	End time (MST):	14:30
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.15 ppm	Cal Gas Exp Date:	January 3, 2026
Cal Gas Cylinder #:	CC510379		
Removed Cal Gas Conc:	5.15 ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA	Diff between cyl:	
Calibrator Make/Model:	API T700	Serial Number:	3060
ZAG Make/Model:	API 701H	Serial Number:	357

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153582
Converter make:	CD Nova CDN-101	Converter serial #:	631
Analyzer Range	0 - 100 ppb	Converter Temp:	800 degC

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
Calibration slope:	1.010603	1.001320	Backgd or Offset:	2.38
Calibration intercept:	-0.078584	-0.078609	Coeff or Slope:	1.027
				1.006

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4922	77.7	80.0	82.3	0.971
As found Mid point	4961	38.9	40.1	41.0	0.975
As found Low point	4981	19.4	20.0	20.4	0.975
New cylinder response					
Baseline Corr As found:	82.4	Prev response:	80.81	*% change:	1.9%
Baseline Corr 2nd AF pt:	41.1	AF Slope:	1.029624	AF Intercept:	-0.158474
Baseline Corr 3rd AF pt:	20.5	AF Correlation:	0.999996	* = > +/-5% change initiates investigation	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4922	77.7	80.0	80.1	0.999
Mid point	4961	38.9	40.1	40.0	1.001
Low point	4981	19.4	20.0	19.7	1.014
As left zero	5000	0.0	0.0	0.2	----
As left span	4922	77.7	80.0	79.1	1.011
SO2 Scrubber Check	4921	79.5	794.9	0.0	----
Date of last scrubber change:	28-May-25		Ave Corr Factor		1.005
Date of last converter efficiency test:	September 16, 2025		103.4% efficiency		

Notes: Changed sample inlet filter after as founds. Ran scrubber check after calibrator zero and it passed. Adjusted span only.

Calibration Performed By: Parampreet Kaur



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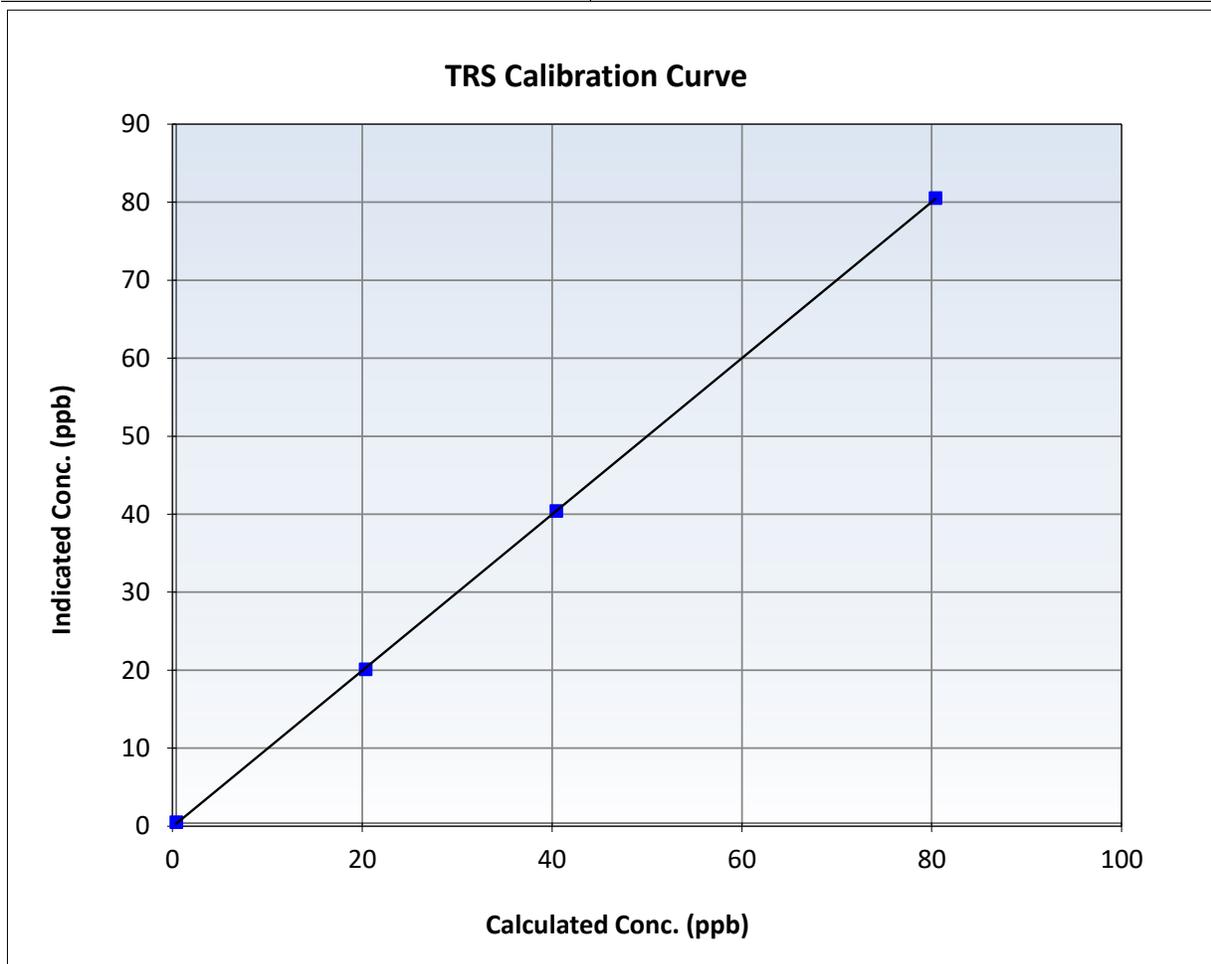
TRS Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 11, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:04	End Time (MST):	14:30
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153582

Calibration Data

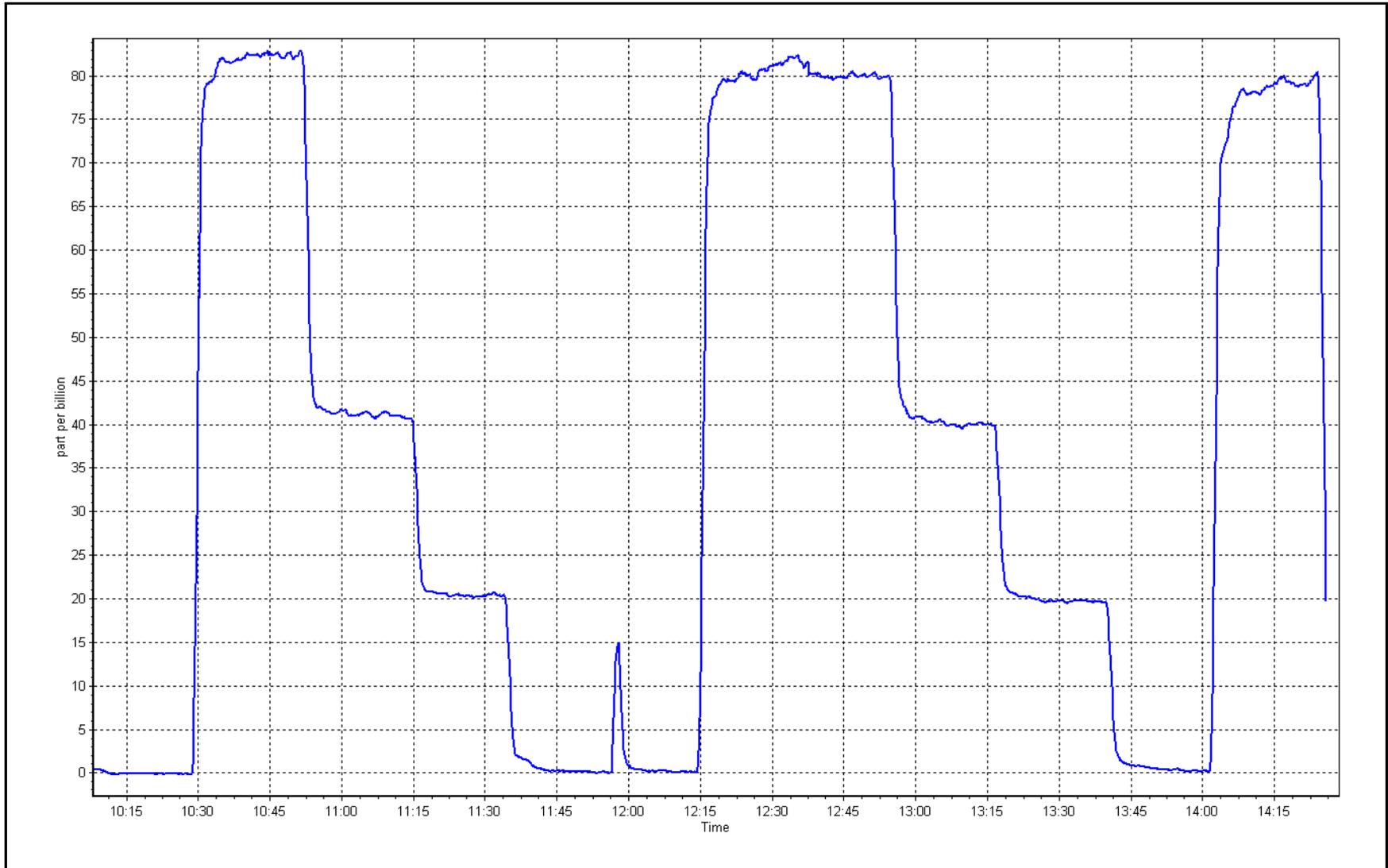
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999976	≥ 0.995
80.0	80.1	0.9988	Slope	1.001320	$0.90 - 1.10$
40.1	40.0	1.0013	Intercept	-0.078609	± 3
20.0	19.7	1.0138			



TRS Calibration Plot

Date: January 13, 2026

Location: Anzac





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	January 5, 2026	Last Cal Date:	December 12, 2025
Start time (MST):	11:51	End time (MST):	15:52
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC462030	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
C3H8 Cal Gas Conc.	204.9 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
Removed C3H8 Conc.	204.9 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3060
Zero Air Gen model:	API 701H	Serial Number:	357

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1331259521
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	3.95E-04	3.55E-04	NMHC SP Ratio:	5.41E-05	5.75E-05
CH4 Retention time:	17.1	16.6	NMHC Peak Area:	165711	155866
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	17.00	17.41	0.976
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.41	Prev response	17.06	*% change	2.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	17.00	16.92	1.004
Mid point	4960	39.8	8.51	8.34	1.020
Low point	4980	19.9	4.25	4.13	1.031
As left zero	5000	0.0	0.00	0.00	----
As left span	4937	79.6	16.96	16.91	1.003
Average Correction Factor					1.003

Notes: Changed the sample inlet filter and hydrogen cylinder after as founds. Adjusted carrier pressure, span and window timings.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	8.96	9.19	0.975
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.19	Prev response	8.99	*% change	2.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	8.96	8.92	1.005
Mid point	4960	39.8	4.49	4.42	1.016
Low point	4980	19.9	2.24	2.19	1.024
As left zero	5000	0.0	0.00	0.00	----
As left span	4937	79.6	8.94	8.91	1.003
Average Correction Factor					1.015

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	8.04	8.22	0.978
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.22	Prev response	8.07	*% change	1.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	8.04	8.00	1.004
Mid point	4960	39.8	4.02	3.92	1.026
Low point	4980	19.9	2.01	1.94	1.039
As left zero	5000	0.0	0.00	0.00	----
As left span	4937	79.6	8.02	8.00	1.002
Average Correction Factor					1.023

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.005476	0.996912
THC Cal Offset:	-0.027439	-0.069980
CH ₄ Cal Slope:	1.006943	0.997309
CH ₄ Cal Offset:	-0.022307	-0.043675
NMHC Cal Slope:	1.004173	0.996517
NMHC Cal Offset:	-0.004932	-0.026904

Calibration Performed By: Braiden Boutillier



Wood Buffalo Environmental Association

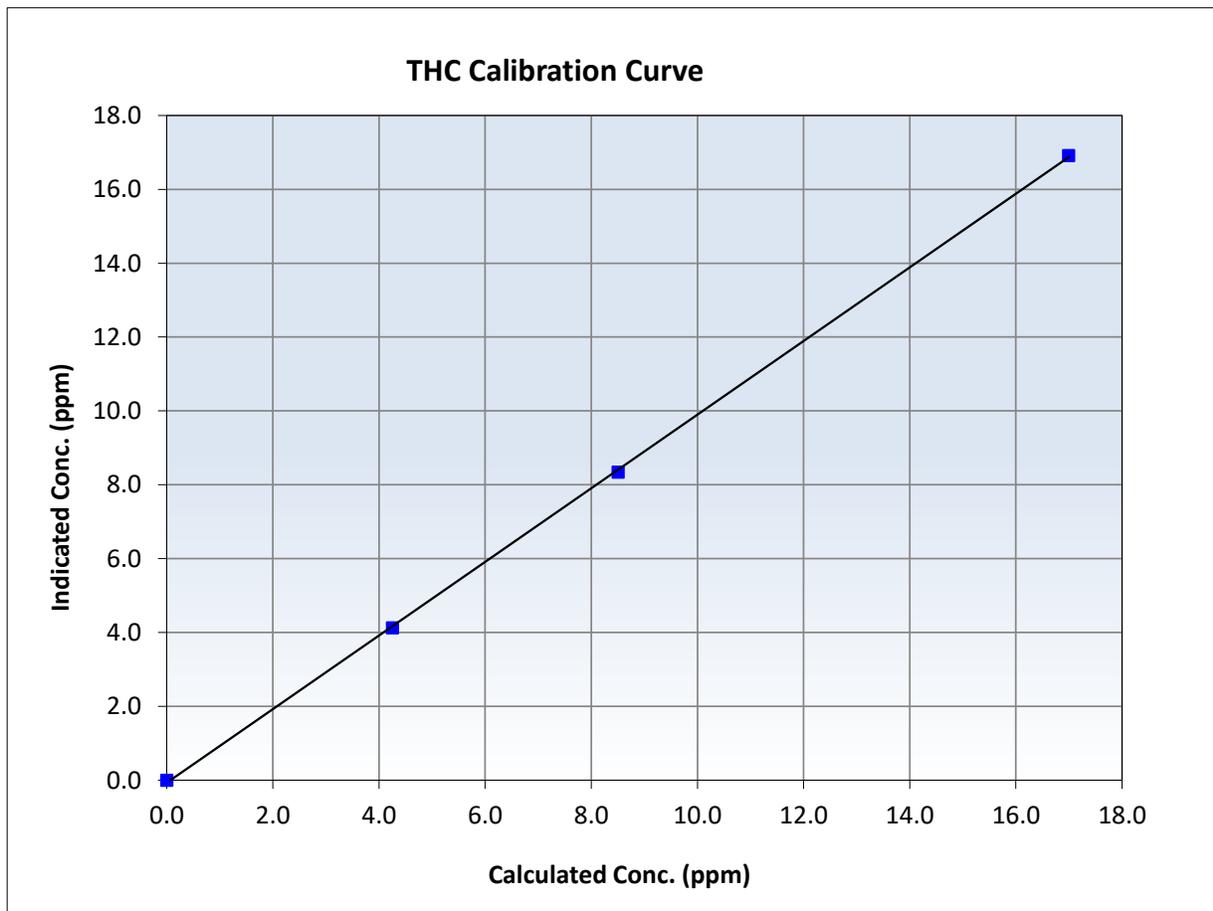
THC Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 12, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	11:51	End Time (MST):	15:52
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999909	<i>≥0.995</i>
17.00	16.92	1.0044	Slope	0.996912	<i>0.90 - 1.10</i>
8.51	8.34	1.0201	Intercept	-0.069980	<i>+/-0.5</i>
4.25	4.13	1.0312			





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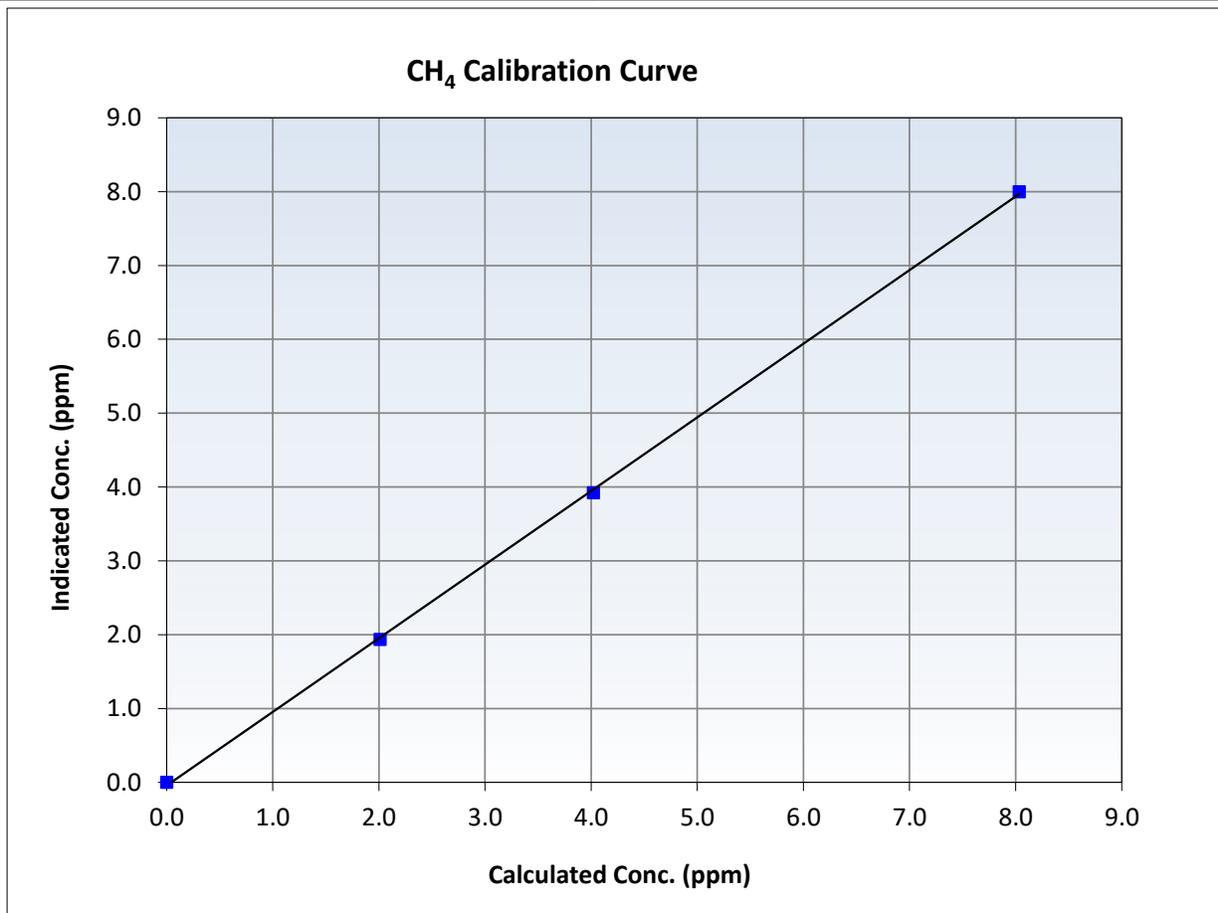
CH₄ Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 12, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	11:51	End Time (MST):	15:52
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999836 ≥0.995
8.04	8.00	1.0044	Slope	0.997309 0.90 - 1.10
4.02	3.92	1.0258	Intercept	-0.043675 +/-0.5
2.01	1.94	1.0393		





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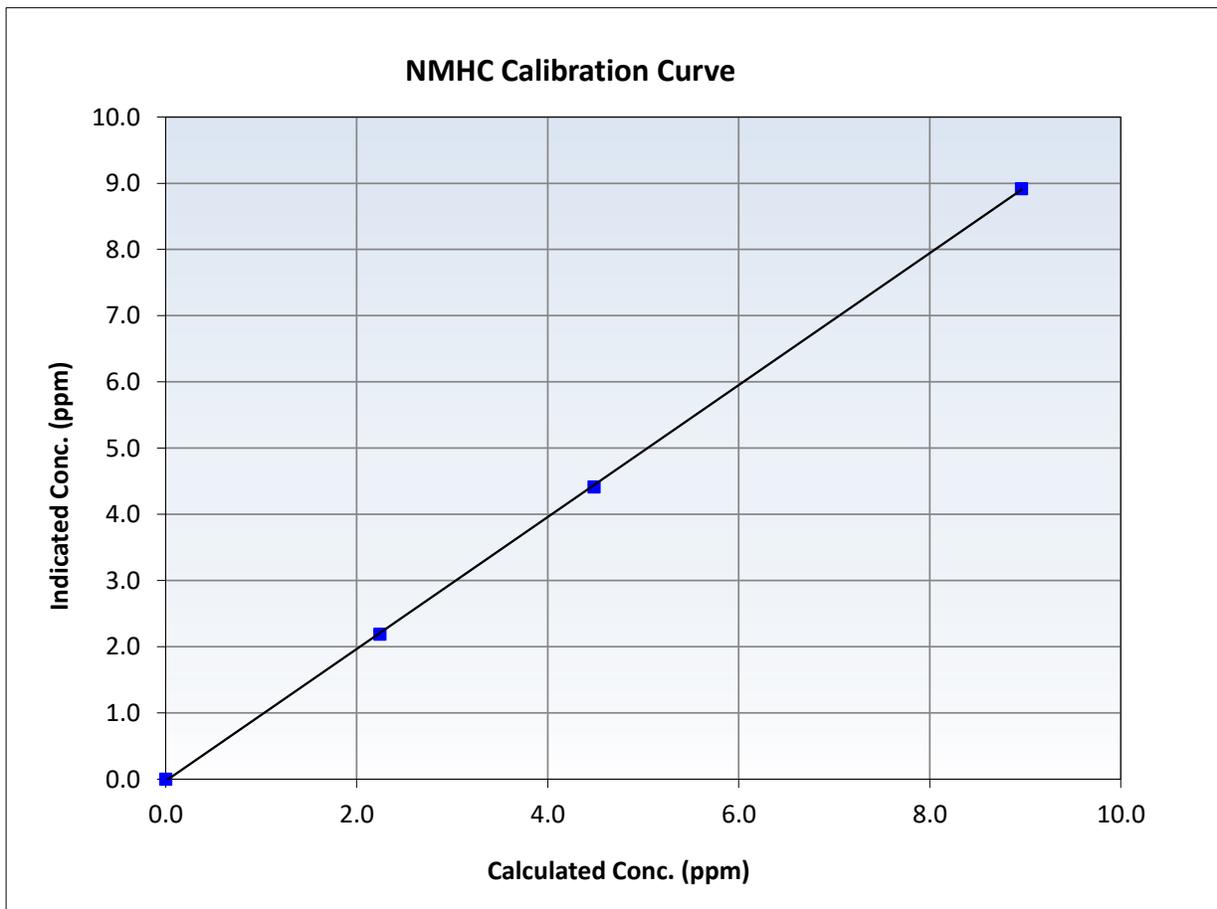
NMHC Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 12, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	11:51	End Time (MST):	15:52
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

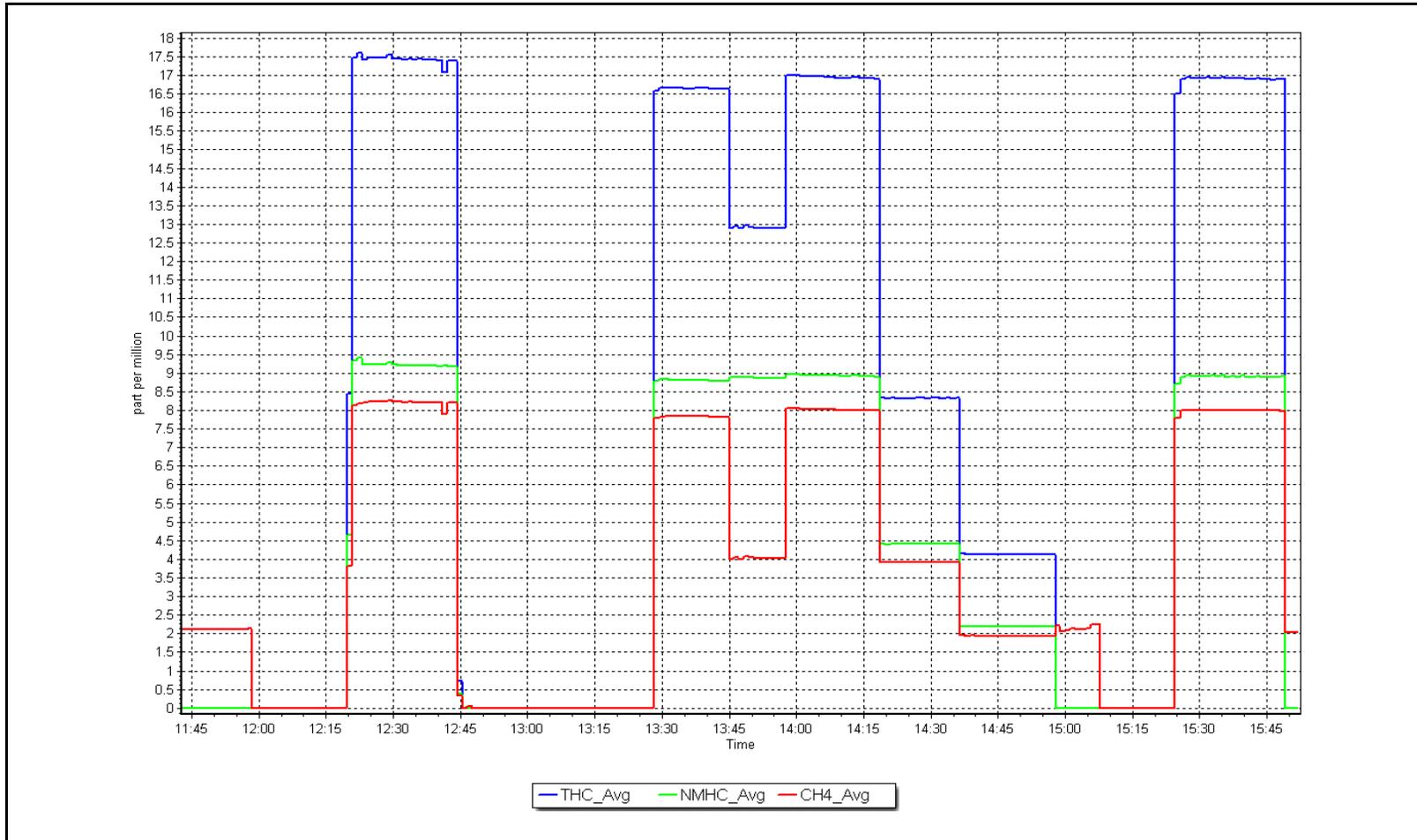
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999952	<i>≥0.995</i>
8.96	8.92	1.0045	Slope	0.996517	<i>0.90 - 1.10</i>
4.49	4.42	1.0157	Intercept	-0.026904	<i>+/-0.5</i>
2.24	2.19	1.0241			



NMHC Calibration Plot

Date: January 5, 2026

Location: Anzac





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	January 8, 2026	Last Cal Date:	January 5, 2026
Start time (MST):	10:46	End time (MST):	11:35
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC462030	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
C3H8 Cal Gas Conc.	204.9 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
Removed C3H8 Conc.	204.9 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3060
Zero Air Gen model:	API 701H	Serial Number:	357

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1331259521
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	3.55E-04	3.55E-04	NMHC SP Ratio:	5.75E-05	5.75E-05
CH4 Retention time:	16.6	16.6	NMHC Peak Area:	155866	155866
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	17.00	16.92	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.92	Prev response	16.87	*% change	0.3%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	17.00	16.92	1.005
Mid point	4960	39.8	8.51	8.32	1.022
Low point	4980	19.9	4.25	4.12	1.031
As left zero					
As left span					

Average Correction Factor 1.019

Notes: Remote linearity check to verify operation post maintenance done last calibration performed January 5th.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	8.96	8.94	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.94	Prev response	8.90	*% change	0.5%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	8.96	8.94	1.002
Mid point	4960	39.8	4.49	4.42	1.015
Low point	4980	19.9	2.24	2.20	1.022
As left zero					
As left span					

Average Correction Factor 1.013

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	8.04	7.97	1.008
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.97	Prev response	7.97	*% change	0.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	8.04	7.97	1.008
Mid point	4960	39.8	4.02	3.90	1.031
Low point	4980	19.9	2.01	1.93	1.043
As left zero					
As left span					

Average Correction Factor 1.027

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.996912	0.996568
THC Cal Offset:	-0.069980	-0.073174
CH ₄ Cal Slope:	0.997309	0.993710
CH ₄ Cal Offset:	-0.043675	-0.044266
NMHC Cal Slope:	0.996517	0.999003
NMHC Cal Offset:	-0.026904	-0.028907

Calibration Performed By: Kelly Baragar



Wood Buffalo Environmental Association

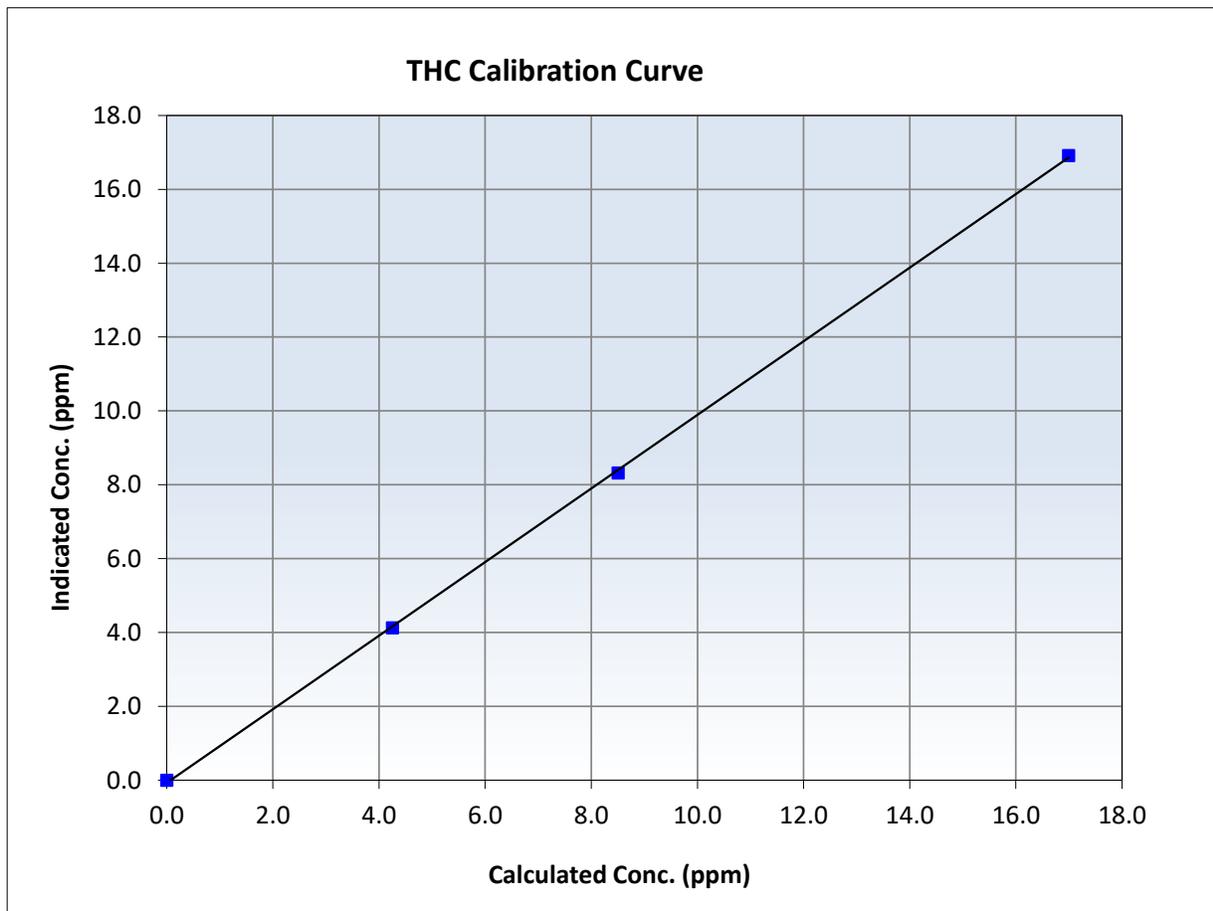
THC Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	January 5, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:46	End Time (MST):	11:35
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999893	<i>>0.995</i>
17.00	16.92	1.0047	Slope	0.996568	<i>0.90 - 1.10</i>
8.51	8.32	1.0223	Intercept	-0.073174	<i>+/-0.5</i>
4.25	4.12	1.0315			





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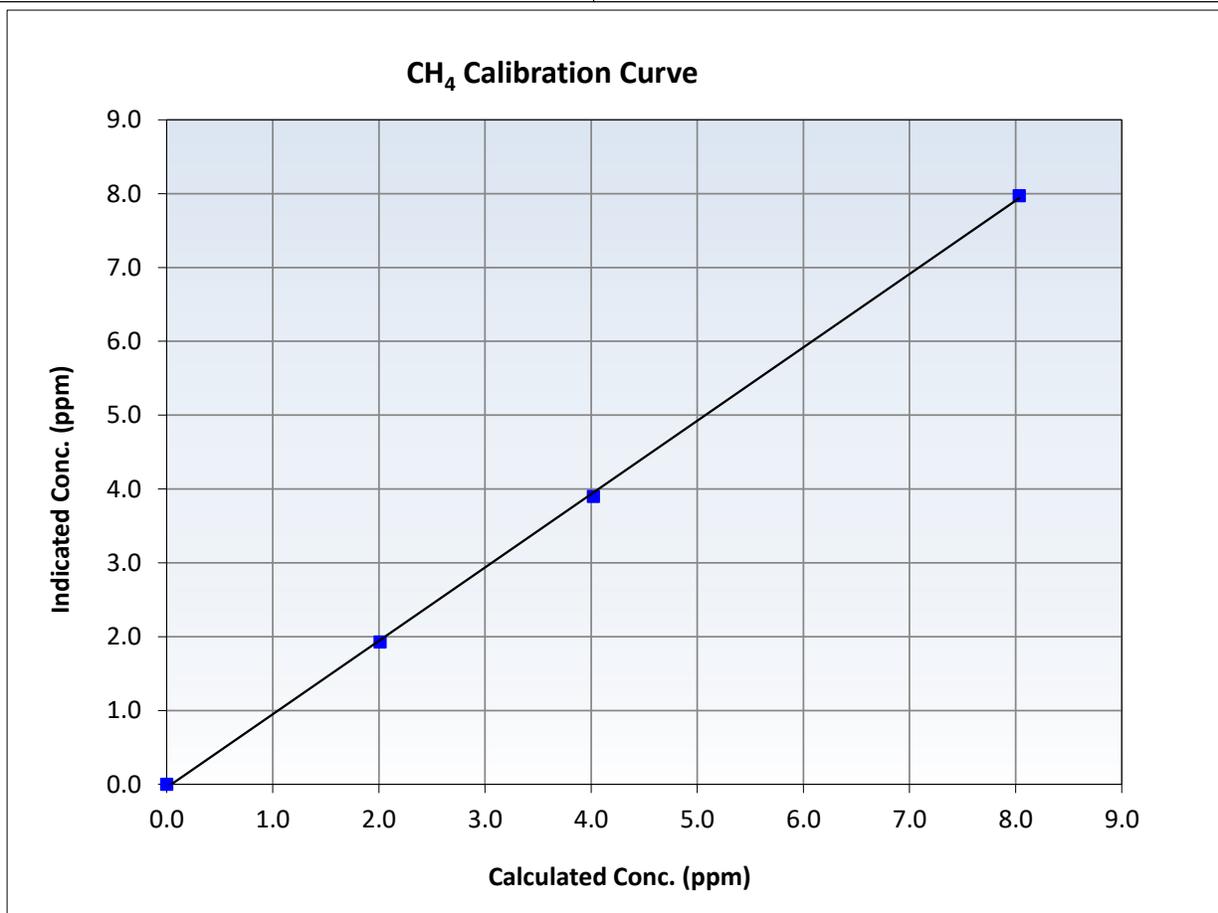
CH₄ Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	January 5, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:46	End Time (MST):	11:35
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999823	<i>≥0.995</i>
8.04	7.97	1.0079	Slope	0.993710	<i>0.90 - 1.10</i>
4.02	3.90	1.0308	Intercept	-0.044266	<i>+/-0.5</i>
2.01	1.93	1.0426			





Wood Buffalo Environmental Association

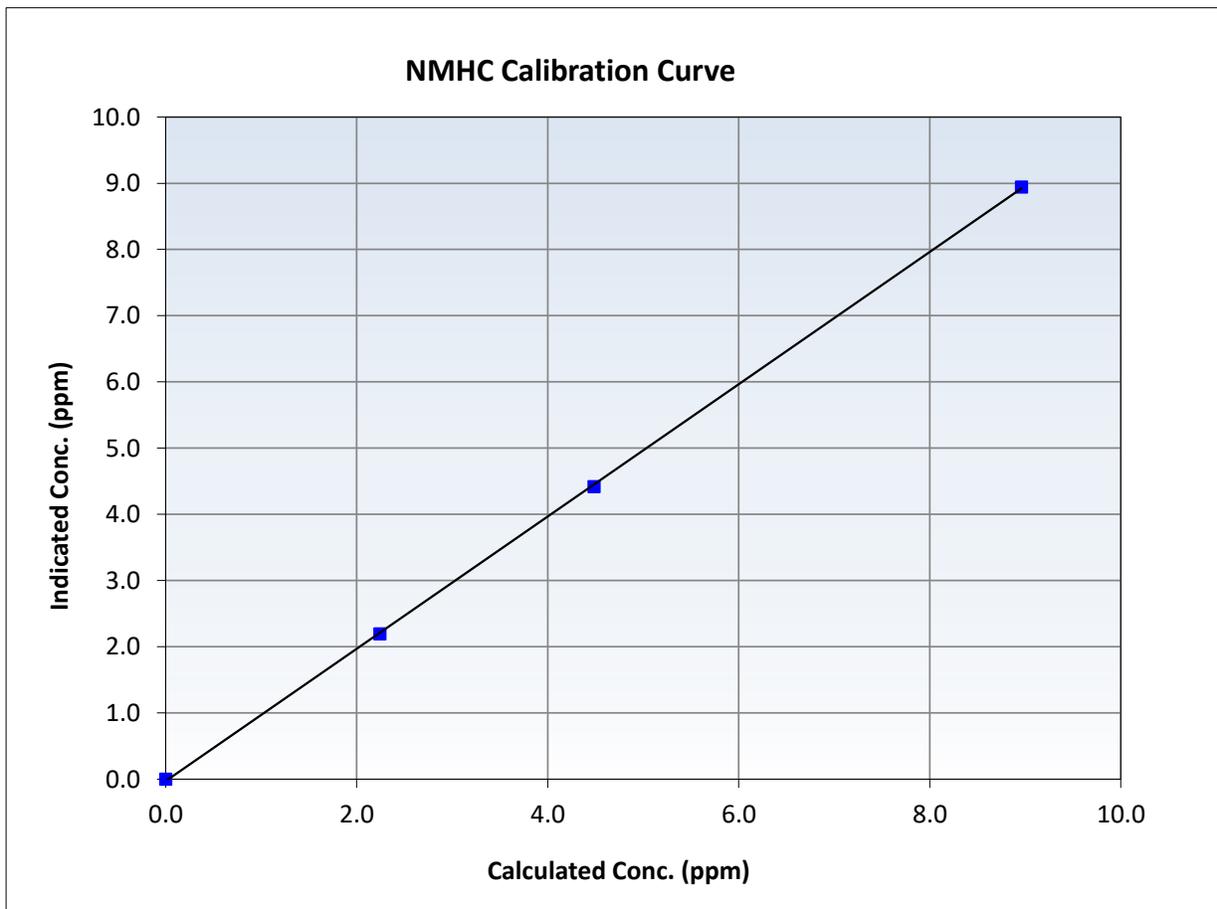
NMHC Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	January 5, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:46	End Time (MST):	11:35
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

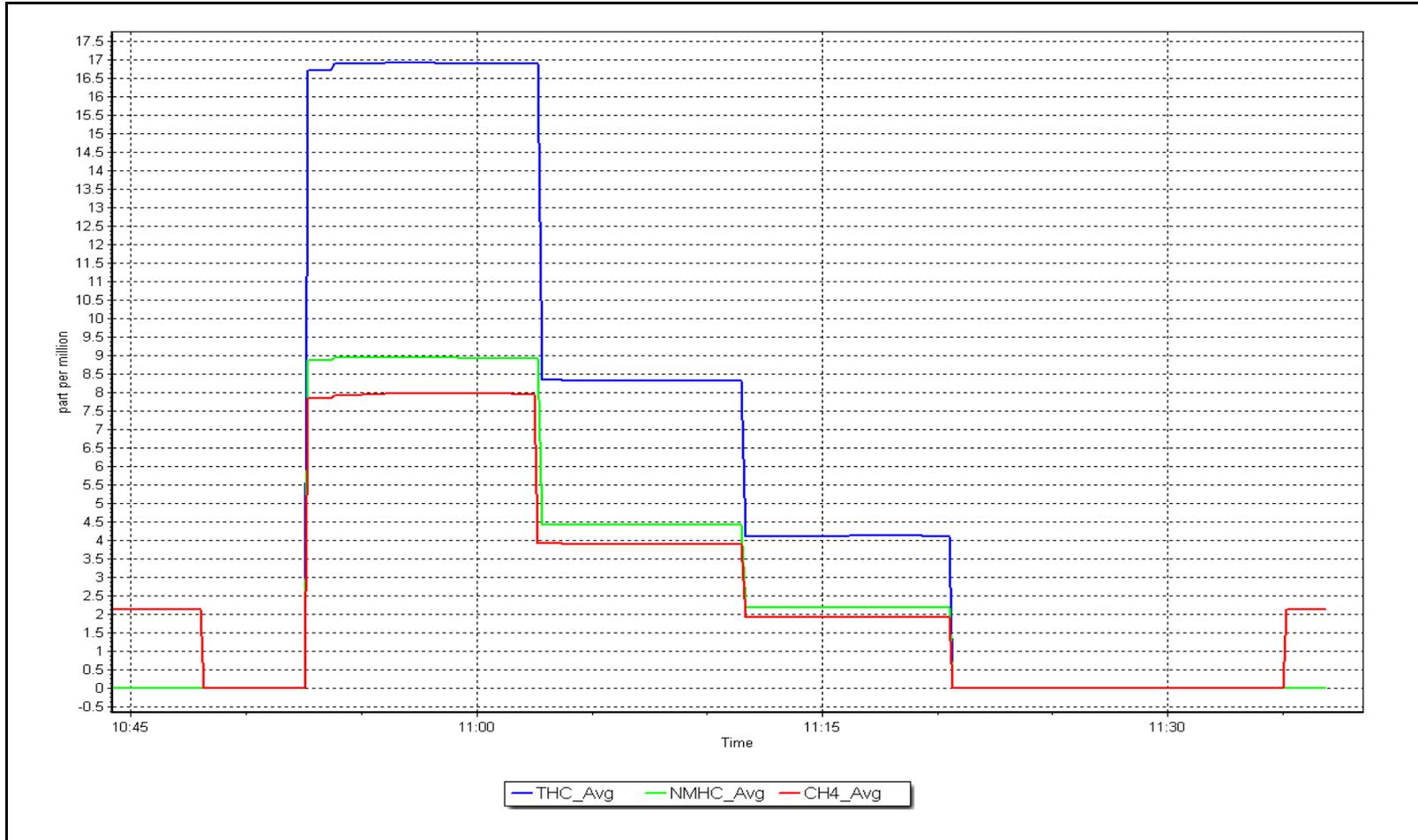
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999940	<i>>0.995</i>
8.96	8.94	1.0019	Slope	0.999003	<i>0.90 - 1.10</i>
4.49	4.42	1.0150	Intercept	-0.028907	<i>+/-0.5</i>
2.24	2.20	1.0217			



NMHC Calibration Plot

Date: January 8, 2026

Location: Anzac





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Anzac
 Station number: AMS 14
 Calibration Date: January 20, 2026
 Last Cal Date: December 12, 2025
 Start time (MST): 10:52
 End time (MST): 15:07
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0037092
 NOX Cal Gas Conc: 60.7 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.70 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701H
 Cal Gas Expiry Date: May 16, 2031
 NO Cal Gas Conc: 60.40 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.40 ppm
 NO gas Diff:
 Serial Number: 3060
 Serial Number: 357

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	----	----
AF High point	4934	66.2	803.6	799.7	4.0	826.6	815.9	10.6	0.9722	0.9800
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 805.1 ppb		NO = 798.0 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 2.6%	
Baseline Corr 1st pt	NO _x = 826.6 ppb		NO = 816.0 ppb			<u>As Found Statistics</u>		*Percent Change	NO = 2.2%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1152430008

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.002806	0.999397
NO _x Cal Offset:	-0.813209	-0.513472
NO Cal Slope:	1.000131	1.002687
NO Cal Offset:	-1.809755	-1.752460
NO ₂ Cal Slope:	1.005100	0.998794
NO ₂ Cal Offset:	0.813324	-1.219384

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.357	1.331	NO bkgnd or offset:	3.7	3.6
NOX coeff or slope:	1.002	0.997	NOX bkgnd or offset:	3.7	3.6
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	151.5	149.4

Dilution Calibration Data

Set Point	Dilution flow rate (scm)	Source gas flow rate (scm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.2	0.1	0.1	----	----
High point	4934	66.2	803.6	799.7	4.0	803.0	801.1	1.9	1.0008	0.9982
Mid point	4967	33.1	401.8	399.8	2.0	400.7	397.9	2.8	1.0028	1.0049
Low point	4983	16.6	201.5	200.5	1.0	200.2	197.7	2.4	1.0067	1.0144
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.1	0.2	----	----
As left span	4934	66.2	803.6	415.0	388.6	798.2	415.0	383.1	1.0068	1.0000
Average Correction Factor									1.0034	1.0058

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.1	----	----
High GPT point	797.9	401.9	400.0	399.0	1.0024	99.8%
Mid GPT point	797.9	605.8	196.1	193.7	1.0122	98.8%
Low GPT point	797.9	702.8	99.1	96.6	1.0256	97.5%
Average Correction Factor					1.0134	98.7%

Notes:

Sample inlet filter was changed after as founds. Adjusted span only.

Calibration Performed By:

Jan Castro



Wood Buffalo Environmental Association

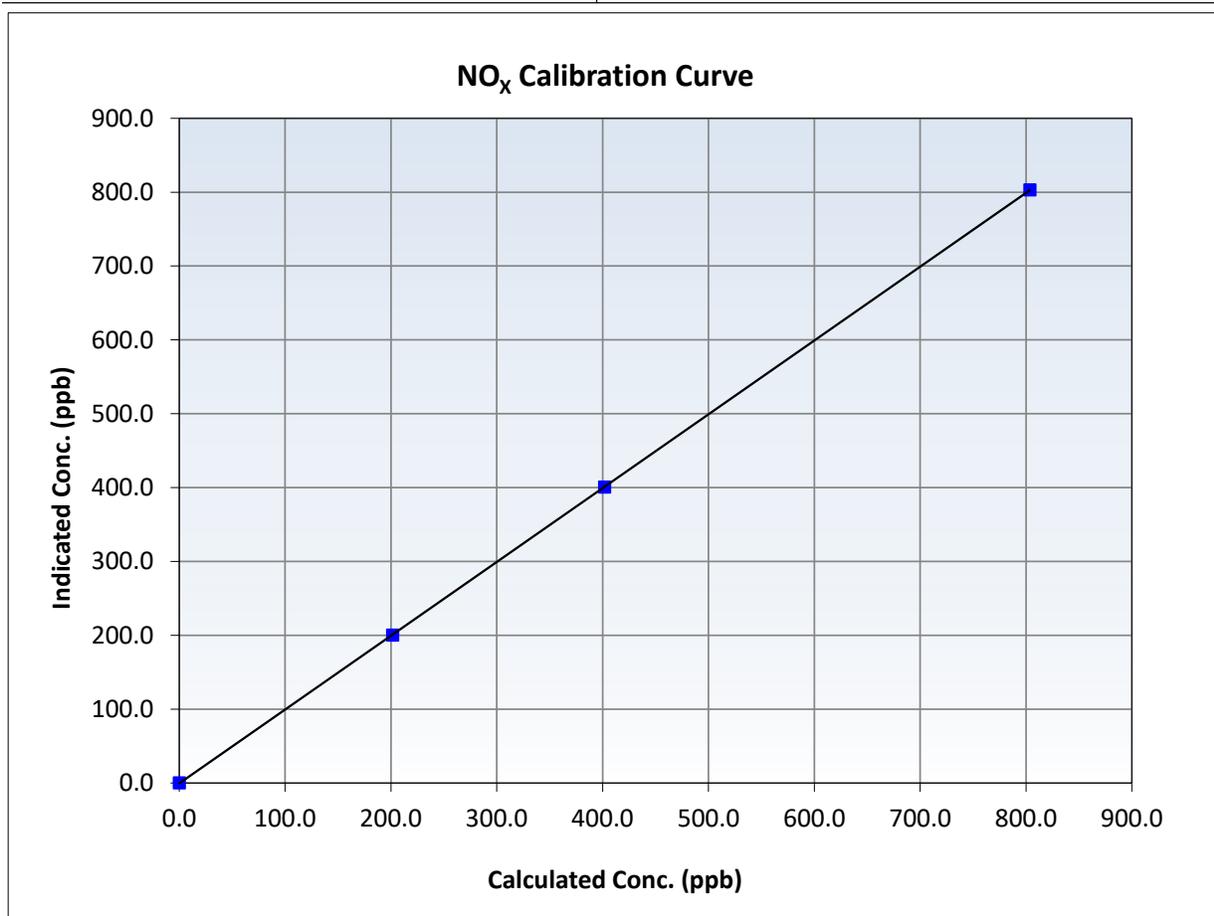
NO_x Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 12, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:52	End Time (MST):	15:07
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.2	----	Correlation Coefficient	0.999996	<i>≥0.995</i>
803.6	803.0	1.0008	Slope	0.999397	<i>0.90 - 1.10</i>
401.8	400.7	1.0028	Intercept	-0.513472	<i>+/-20</i>
201.5	200.2	1.0067			





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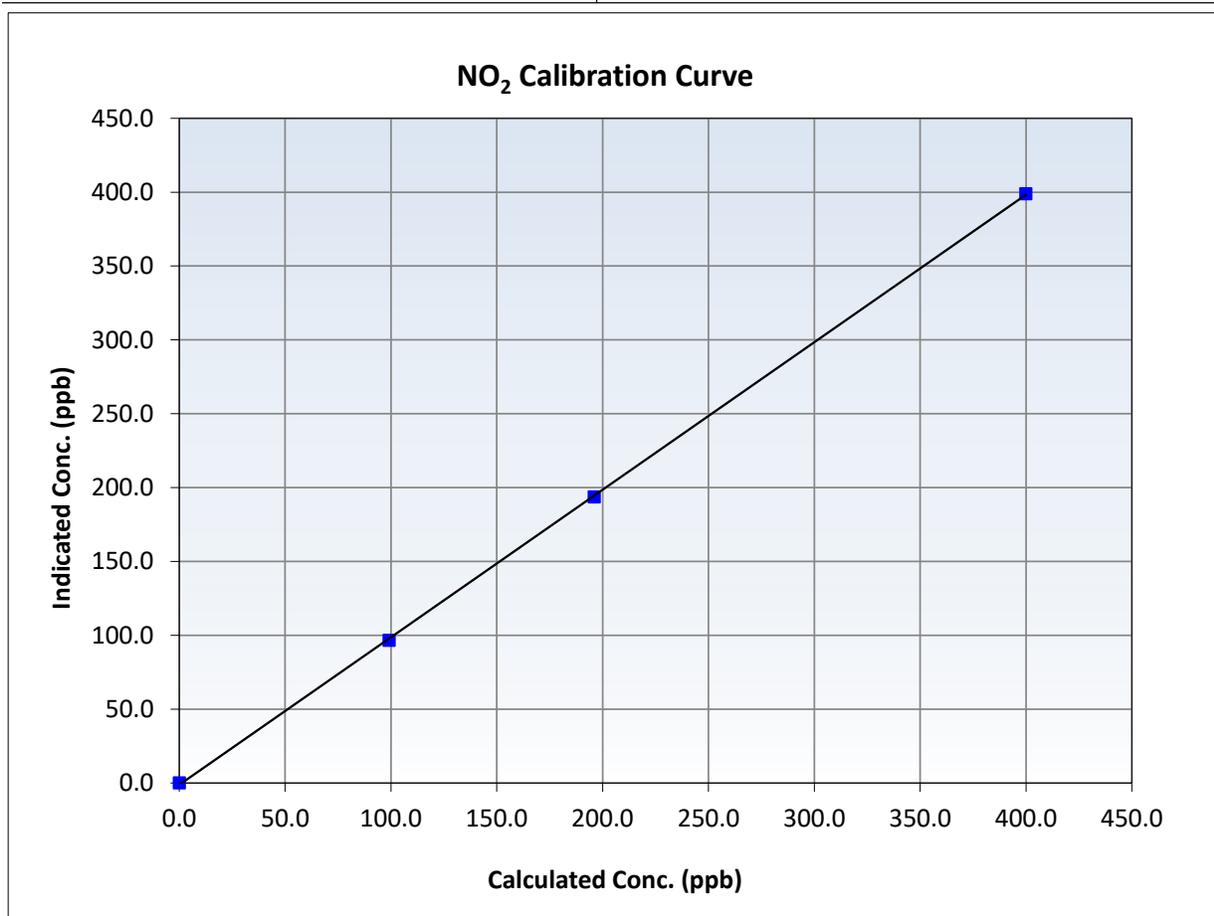
NO₂ Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 12, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:52	End Time (MST):	15:07
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999950	<i>≥0.995</i>
400.0	399.0	1.0024	Slope	0.998794	<i>0.90 - 1.10</i>
196.1	193.7	1.0122	Intercept	-1.219384	<i>+/-20</i>
99.1	96.6	1.0256			





Wood Buffalo Environmental Association

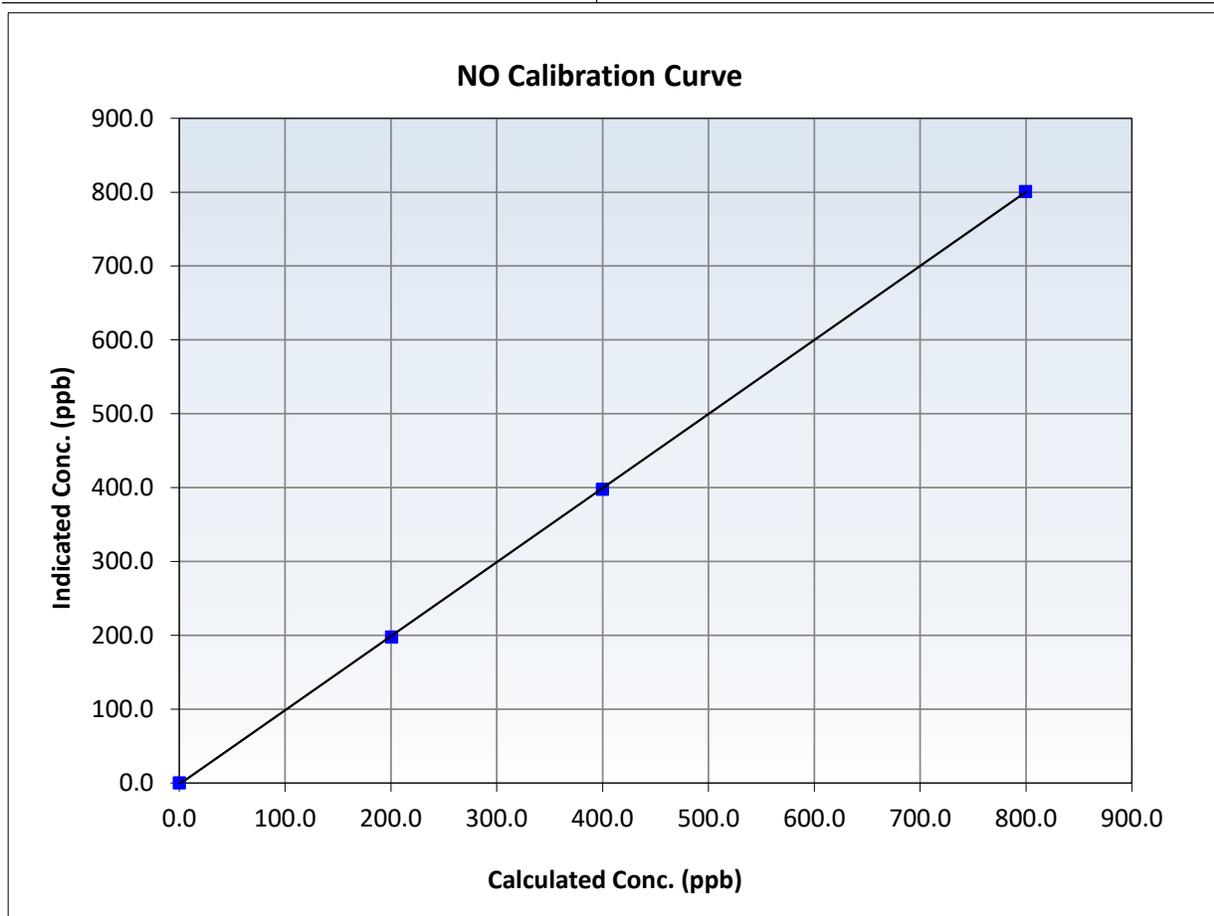
NO Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 12, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:52	End Time (MST):	15:07
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

Calibration Data

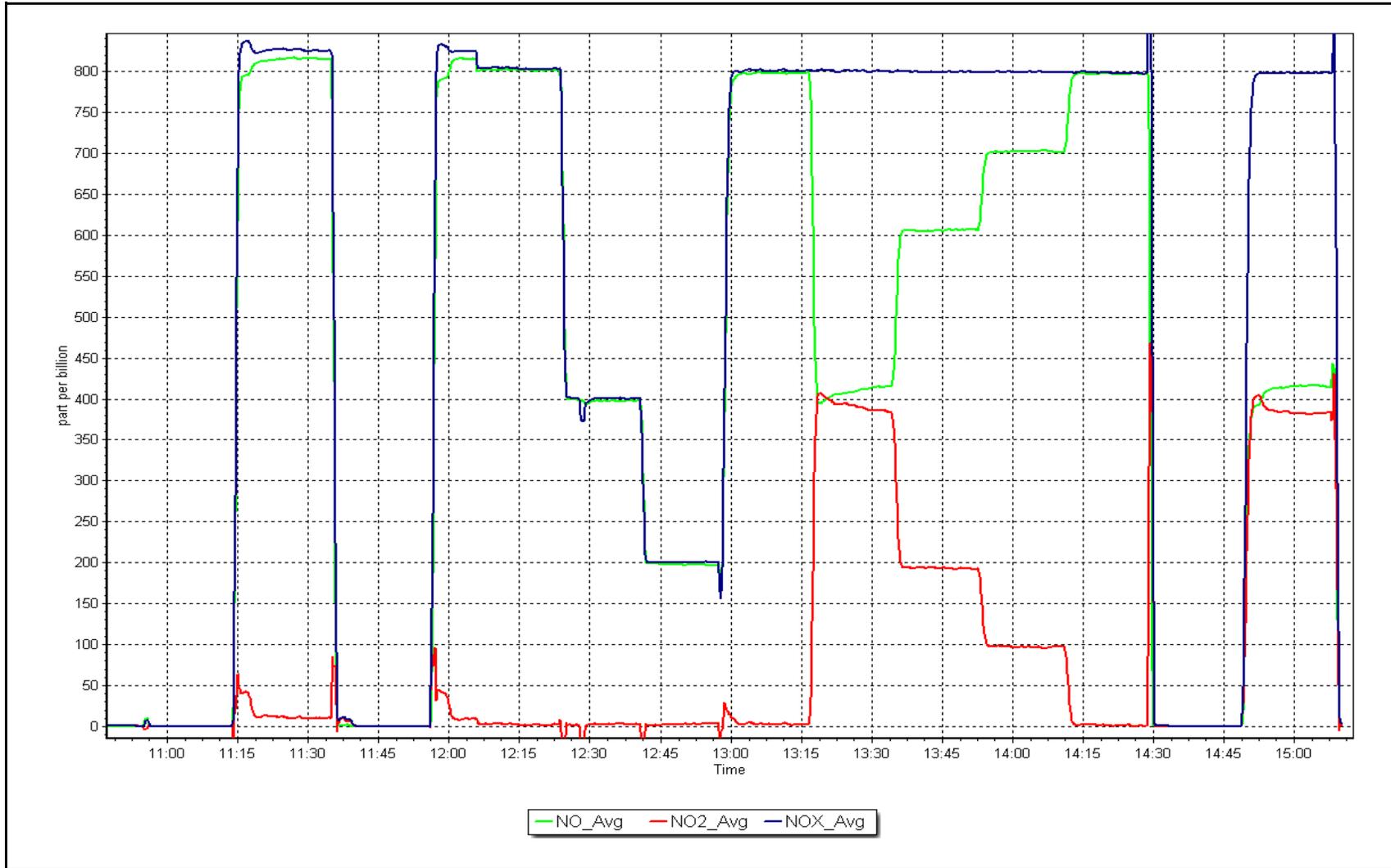
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999975	<i>≥0.995</i>
799.7	801.1	0.9982	Slope	1.002687	<i>0.90 - 1.10</i>
399.8	397.9	1.0049	Intercept	-1.752460	<i>+/-20</i>
200.5	197.7	1.0144			



NO_x Calibration Plot

Date: January 20, 2026

Location: Anzac





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	January 15, 2026	Last Cal Date:	December 1, 2025
Start time (MST):	10:57	End time (MST):	14:26
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	3060
Calibrator Make/Model:	API T700	Serial Number:	357
ZAG Make/Model:	API 701H		

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1426262595
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.001571	0.999343	Backgd or Offset:	1.6	1.1
Calibration intercept:	-0.300000	0.340000	Coeff or Slope:	1.689	1.670

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.4	----
As found High point	5000	941.3	400.0	404.0	0.989
As found Mid point					
As found Low point					
Baseline Corr As found:	404.4	Previous response	400.3	*% change	1.0%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.2	----
High point	5000	941.3	400.0	399.8	1.001
Mid point	5000	820.3	200.0	200.5	0.998
Low point	5000	724.3	100.0	100.8	0.992
As left zero	5000	0.0	0.0	0.6	----
As left span	5000	941.3	400.0	403.5	0.991
Average Correction Factor					0.997

Notes: Sample inlet filter changed after asfound. Slight adjustments to both zero and span

Calibration Performed By: Ryan Power



Wood Buffalo Environmental Association

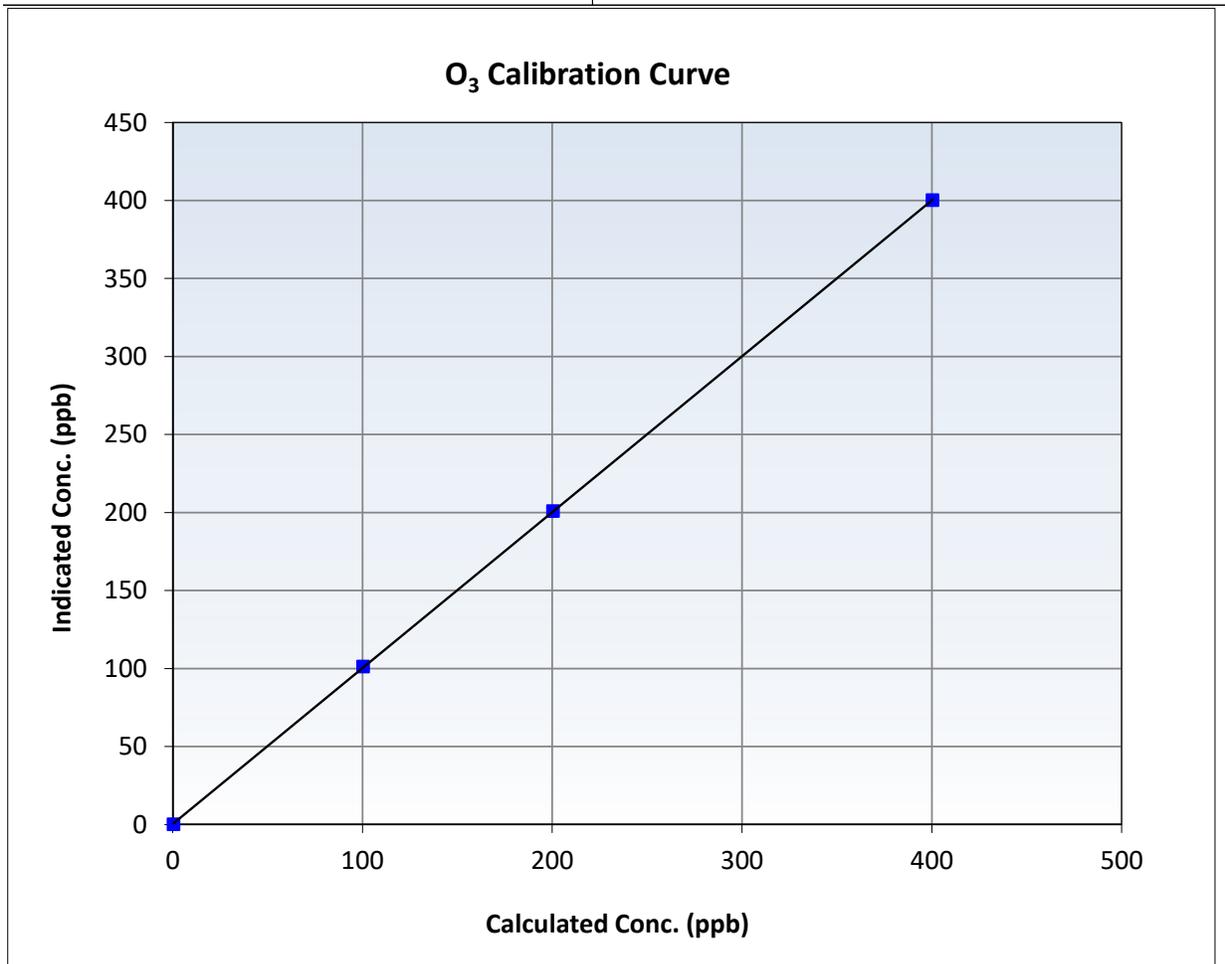
O₃ Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 1, 2025
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	10:57	End Time (MST):	14:26
Analyzer make:	Thermo 49i	Analyzer serial #:	1426262595

Calibration Data

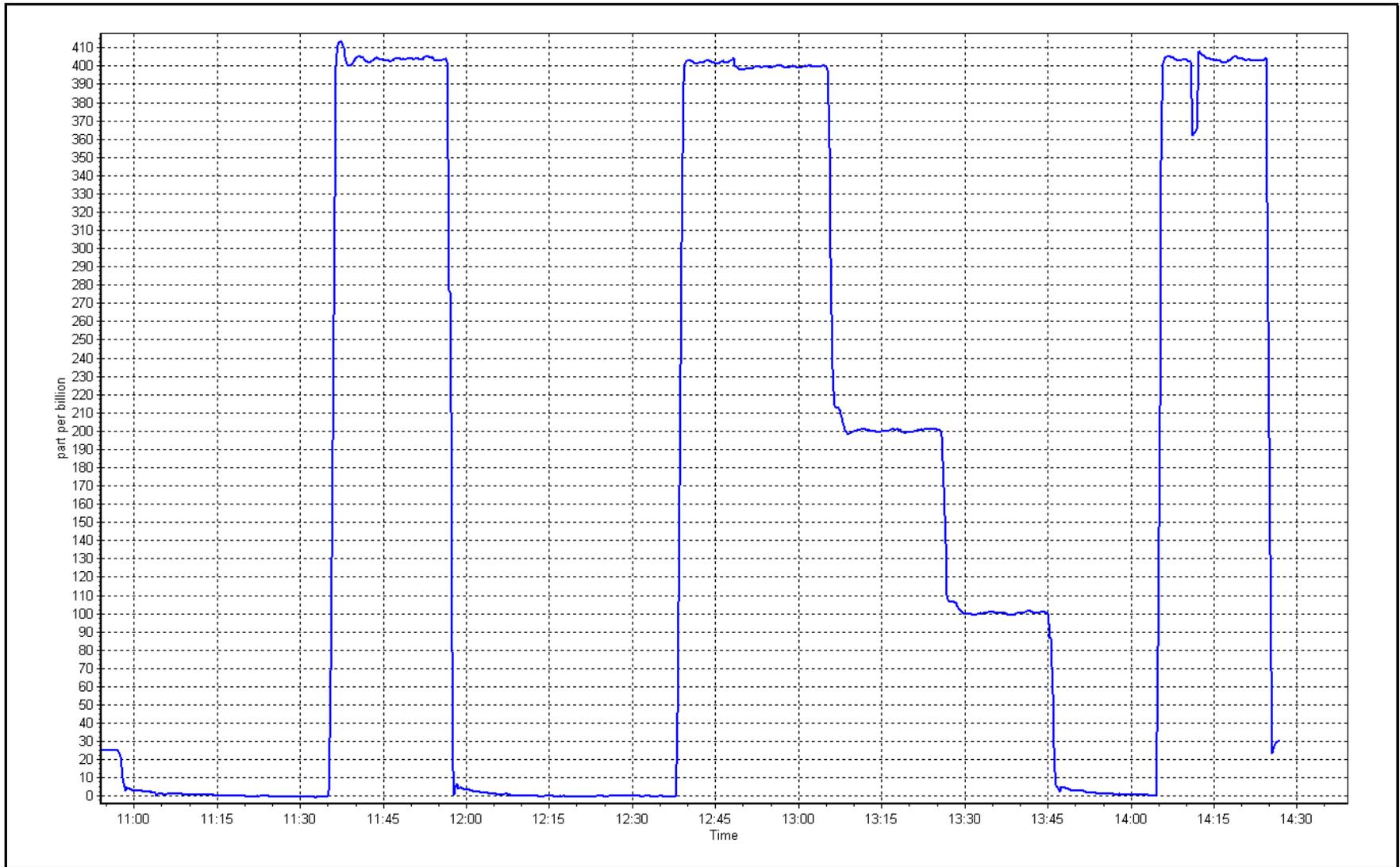
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.2	----	Correlation Coefficient	0.999992	≥0.995
400.0	399.8	1.0005	Slope	0.999343	0.90 - 1.10
200.0	200.5	0.9975	Intercept	0.340000	+/- 5
100.0	100.8	0.9921			



O₃ Calibration Plot

Date: January 15, 2026

Location: Anzac





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Anzac Station number: AMS 14
 Calibration Date: January 20, 2026 Last Cal Date: December 11, 2025
 Start time (MST): 14:13 End time (MST): 14:27

Analyzer Make: AP T640 S/N: 825
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388755
 Temp/RH standard: Alicat FP-25BT S/N: 388755

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-4.40	-5.18	-4.40	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	712.30	713.24	712.30	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.00	5.00	5.00	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	39	----	39	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	3.30	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.9 Expiry Date: July 16, 2026
Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input checked="" type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: December 11, 2025
Date Disposable Filter Changed: December 11, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: August 26, 2025
Date RH/T Sensor Cleaned: August 26, 2025

Notes: Verified flow, pressure, temperature and pump power. No adjustment made. Leak check passed.

Calibration by: Jan Castro



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS17 WAPASU JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	January 12, 2026	Last Cal Date:	December 11, 2025
Start time (MST):	12:09	End time (MST):	15:19
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.12	ppm	Cal Gas Exp Date:	April 9, 2033
Cal Gas Cylinder #:	CC422255			
Removed Cal Gas Conc:	50.12	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:	N/A		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	2449
Zero Air Gen Model:	Teledyne API 701H		Serial Number:	1238

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1218153459
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.998918	0.997676	Backgd or Offset:	15.4	15.4
Calibration intercept:	-2.694411	-2.534458	Coeff or Slope:	1.113	1.113

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.5	----
As found High point	4920	79.8	799.9	795.1	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	795.6	Previous response	796.4	*% change	-0.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.6	----
High point	4920	79.8	799.9	796.7	1.004
Mid point	4960	39.9	400.0	395.0	1.013
Low point	4980	20.0	200.5	195.9	1.023
As left zero	5000	0.0	0.0	-0.7	----
As left span	4920	79.8	799.9	799.8	1.000
Average Correction Factor:					1.013

Notes: No adjustments made.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

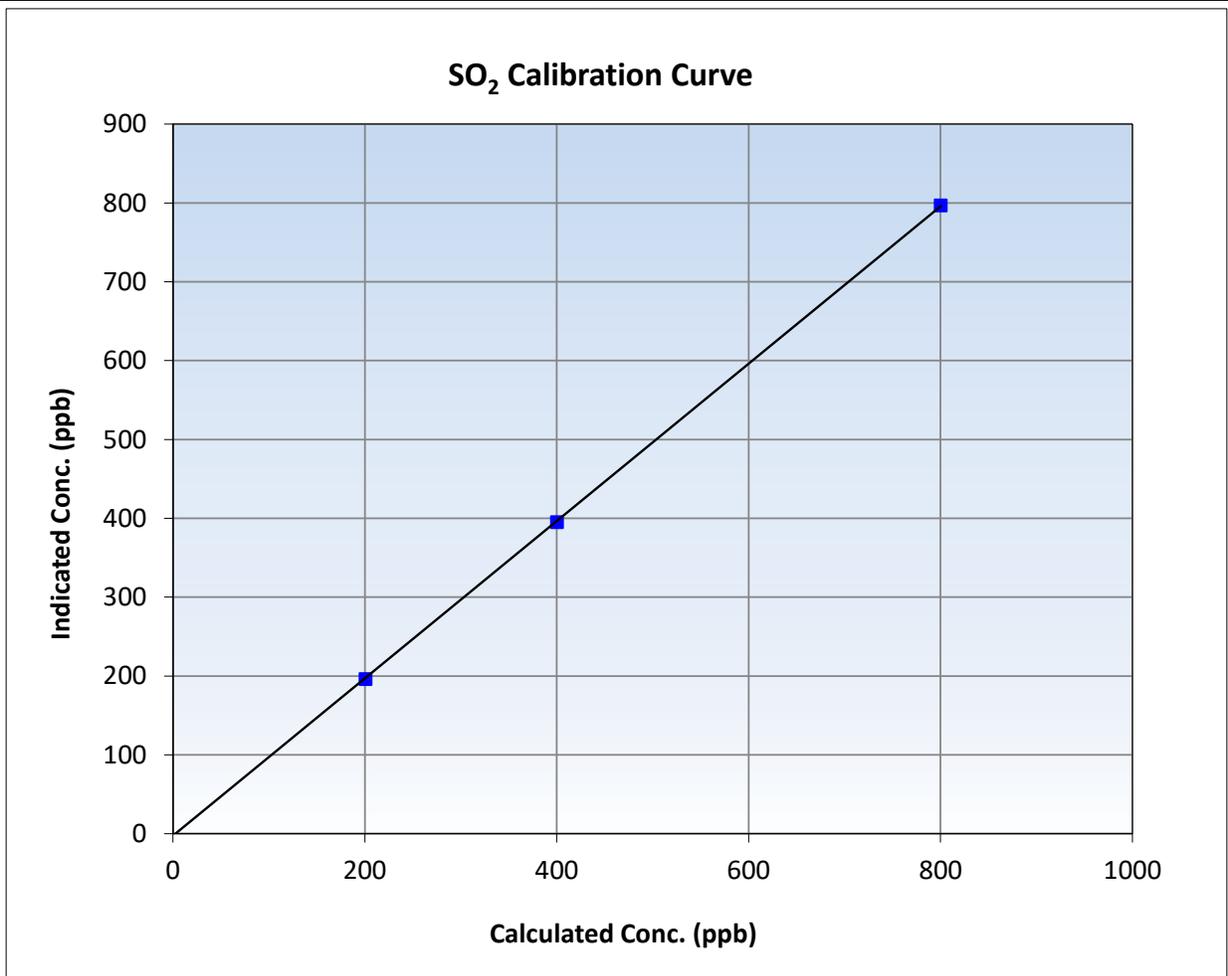
SO₂ Calibration Summary

Station Information

Calibration Date:	January 12, 2026	Previous Calibration:	December 11, 2025
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	12:09	End Time (MST):	15:19
Analyzer make:	Thermo 43i	Analyzer serial #:	1218153459

Calibration Data

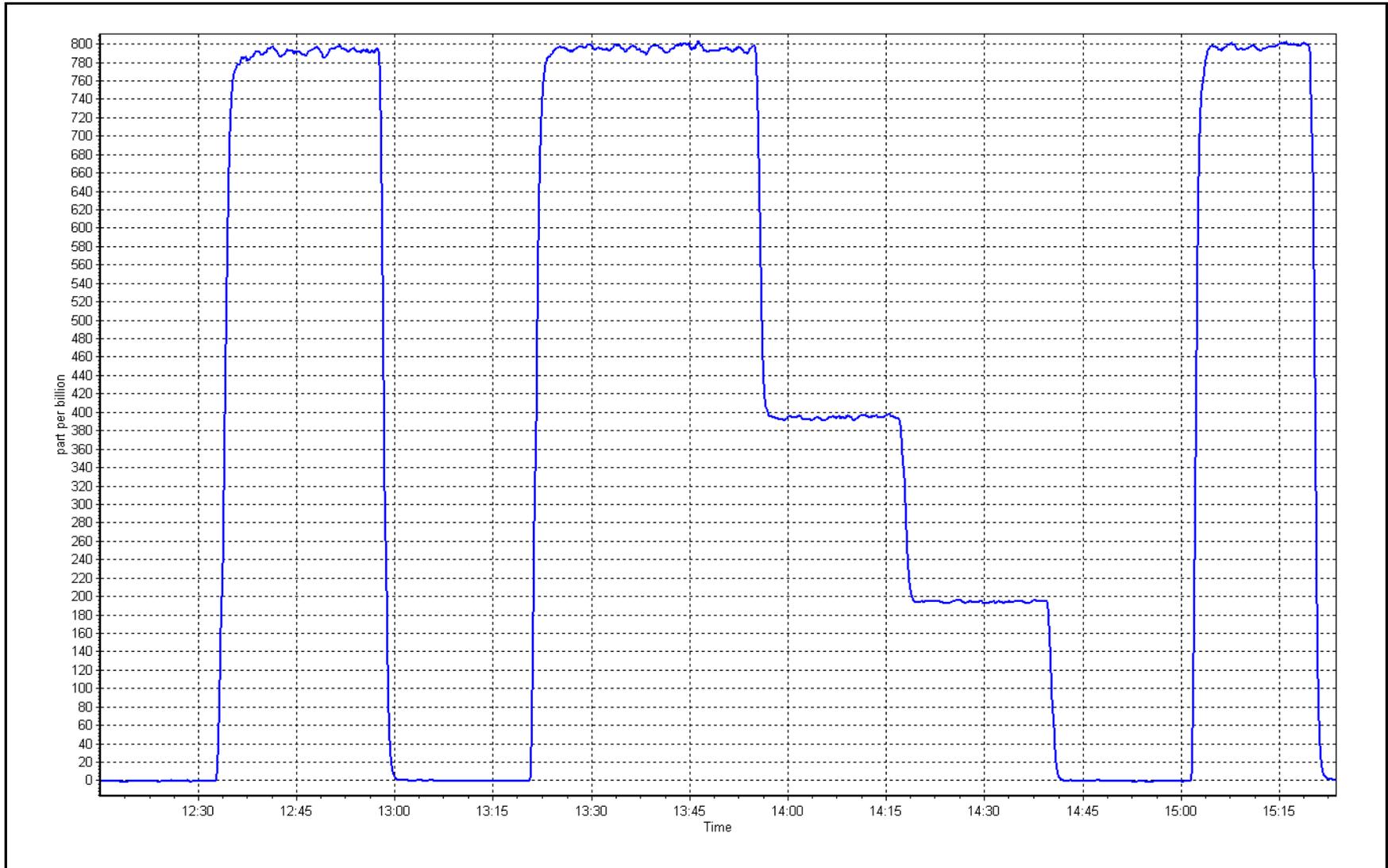
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.6	----	Correlation Coefficient	0.999972	≥0.995
799.9	796.7	1.0041	Slope	0.997676	0.90 - 1.10
400.0	395.0	1.0126	Intercept	-2.534458	+/-30
200.5	195.9	1.0234			



SO2 Calibration Plot

Date: January 12, 2026

Location: Wapasu





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS 17
Calibration Date:	January 21, 2026	Last Cal Date:	December 18, 2025
Start time (MST):	11:00	End time (MST):	12:55
Reason:	Removal		

Calibration Standards

Cal Gas Concentration:	4.77	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	DT20029267			
Removed Cal Gas Conc:	4.77	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	2449
ZAG Make/Model:	API T701H		Serial Number:	359

Analyzer Information

Analyzer make:	Thermo 450i	Analyzer serial #:	1218153583
Converter make:	CD Nova	Converter serial #:	N/A
Analyzer Range	0 - 100 ppb	Converter Temp:	340 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.000923		Backgd or Offset:	13.6	13.4
Calibration intercept:	0.380268		Coeff or Slope:	1.150	1.150

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4916	83.9	80.0	83.0	0.963
As found Mid point	4958	41.9	40.0	41.3	0.966
As found Low point	4979	21.0	20.0	20.5	0.973
New cylinder response					
Baseline Corr As found:	83.1	Prev response:	80.50	*% change:	3.1%
Baseline Corr 2nd AF pt:	41.4	AF Slope:	1.038913	AF Intercept:	-0.199821
Baseline Corr 3rd AF pt:	20.6	AF Correlation:	0.999993	* = > +/-5% change initiates investigation	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					
SO2 Scrubber Check					
Date of last scrubber change:		N/A		Ave Corr Factor	
Date of last converter efficiency test:		N/A			

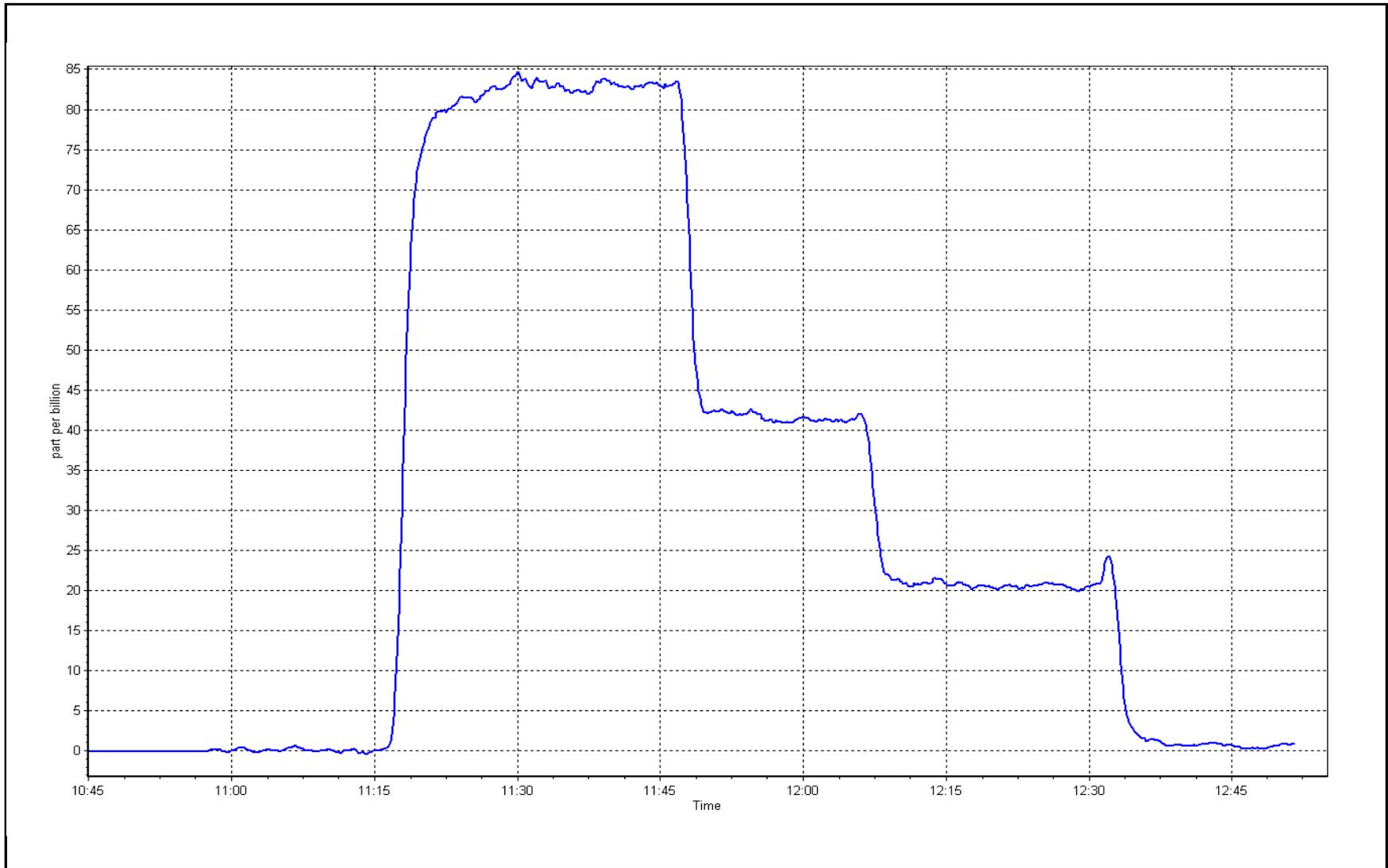
Notes: removal calibration

Calibration Performed By: jason brooks, Devin Russell

H₂S Calibration Plot

Date: January 21, 2026

Location: Wapasu





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS 17
Calibration Date:	January 21, 2026	Last Cal Date:	
Start time (MST):	13:30	End time (MST):	16:10
Reason:	Install		

Calibration Standards

Cal Gas Concentration:	4.77	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	DT20029267			
Removed Cal Gas Conc:	4.77	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	2449
ZAG Make/Model:	API T701H		Serial Number:	359

Analyzer Information

Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	12228021057
Converter make:	Global G150	Converter serial #:	2022-219
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:		1.012778	Backgd or Offset:		2.79
Calibration intercept:		-0.059771	Coeff or Slope:		1.043

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero					
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	NA	Prev response:	NA	*% change:	NA
Baseline Corr 2nd AF pt:	NA	AF Slope:	NA	AF Intercept:	NA
Baseline Corr 3rd AF pt:	NA	AF Correlation:	NA	* = > +/-5% change initiates investigation	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4916	83.9	80.0	81.0	0.988
Mid point	4958	41.9	40.0	40.5	0.987
Low point	4979	21.0	20.0	20.1	0.997
As left zero	5000	0.0	0.0	0.0	----
As left span	4916	83.9	80.0	81.3	0.985
SO2 Scrubber Check	4921	79.4	793.9	-0.1	----
Date of last scrubber change:	N/A			Ave Corr Factor	0.991
Date of last converter efficiency test:	N/A				

Notes: Installation calibration

Calibration Performed By: Jason Brooks, Devin Russell



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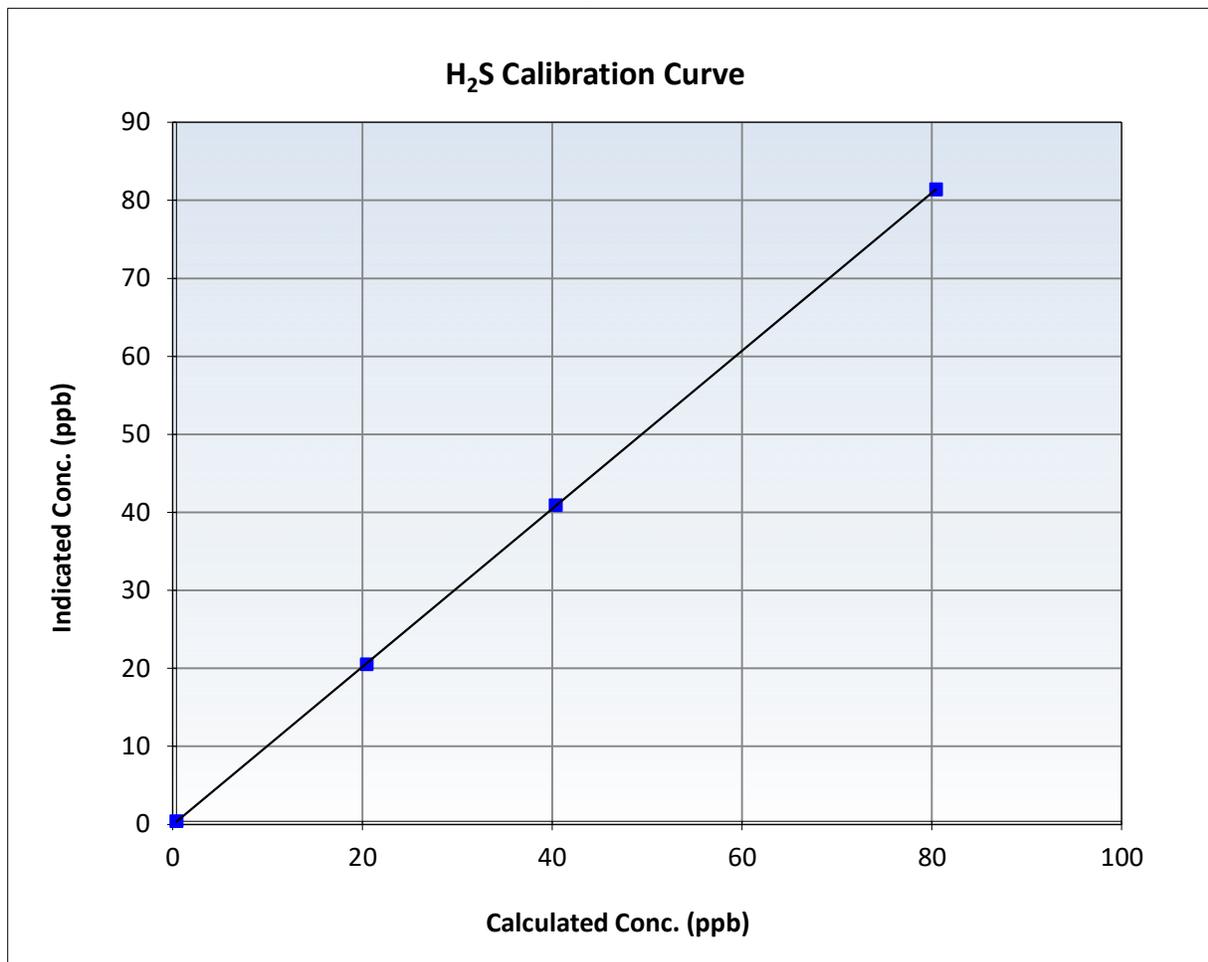
H₂S Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	13:30	End Time (MST):	16:10
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	12228021057

Calibration Data

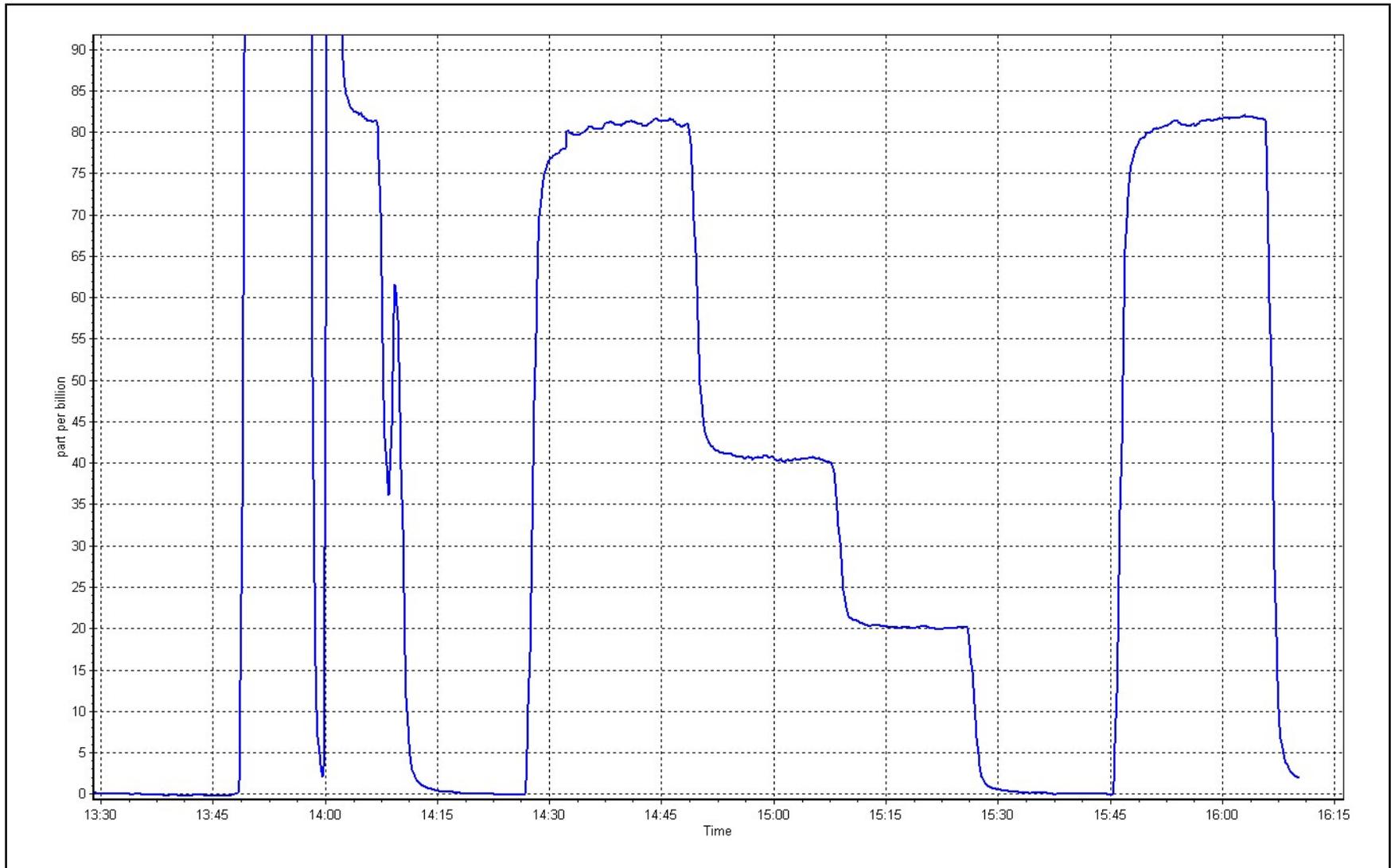
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999993	≥0.995
80.0	81.0	0.9882	Slope	1.012778	0.90 - 1.10
40.0	40.5	0.9870	Intercept	-0.059771	+/-3
20.0	20.1	0.9967			



H₂S Calibration Plot

Date: January 21, 2026

Location: Wapasu





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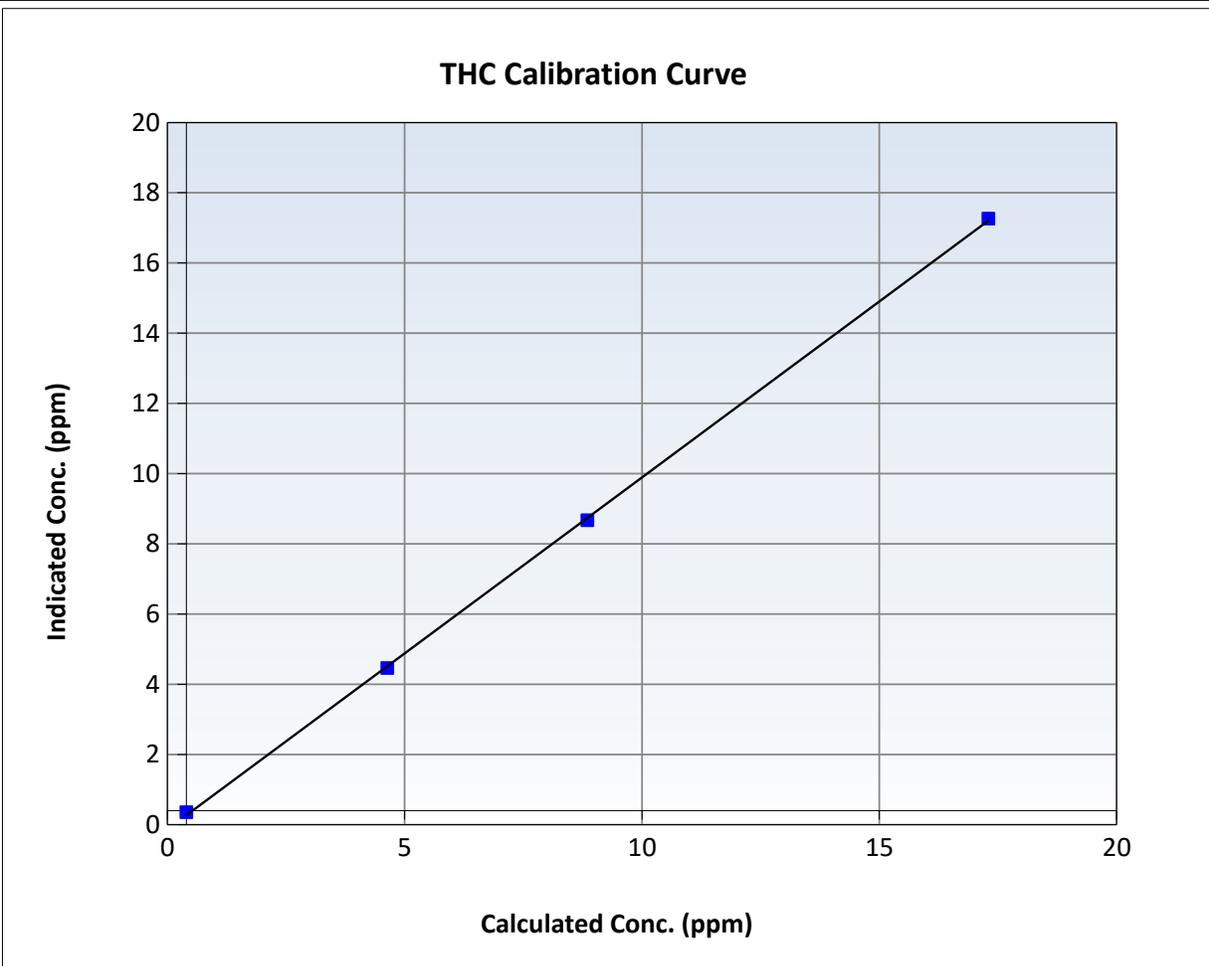
THC Calibration Summary

Station Information

Calibration Date:	January 12, 2026	Previous Calibration:	December 11, 2025
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	12:09	End Time (MST):	15:19
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1218153352

Calibration Data

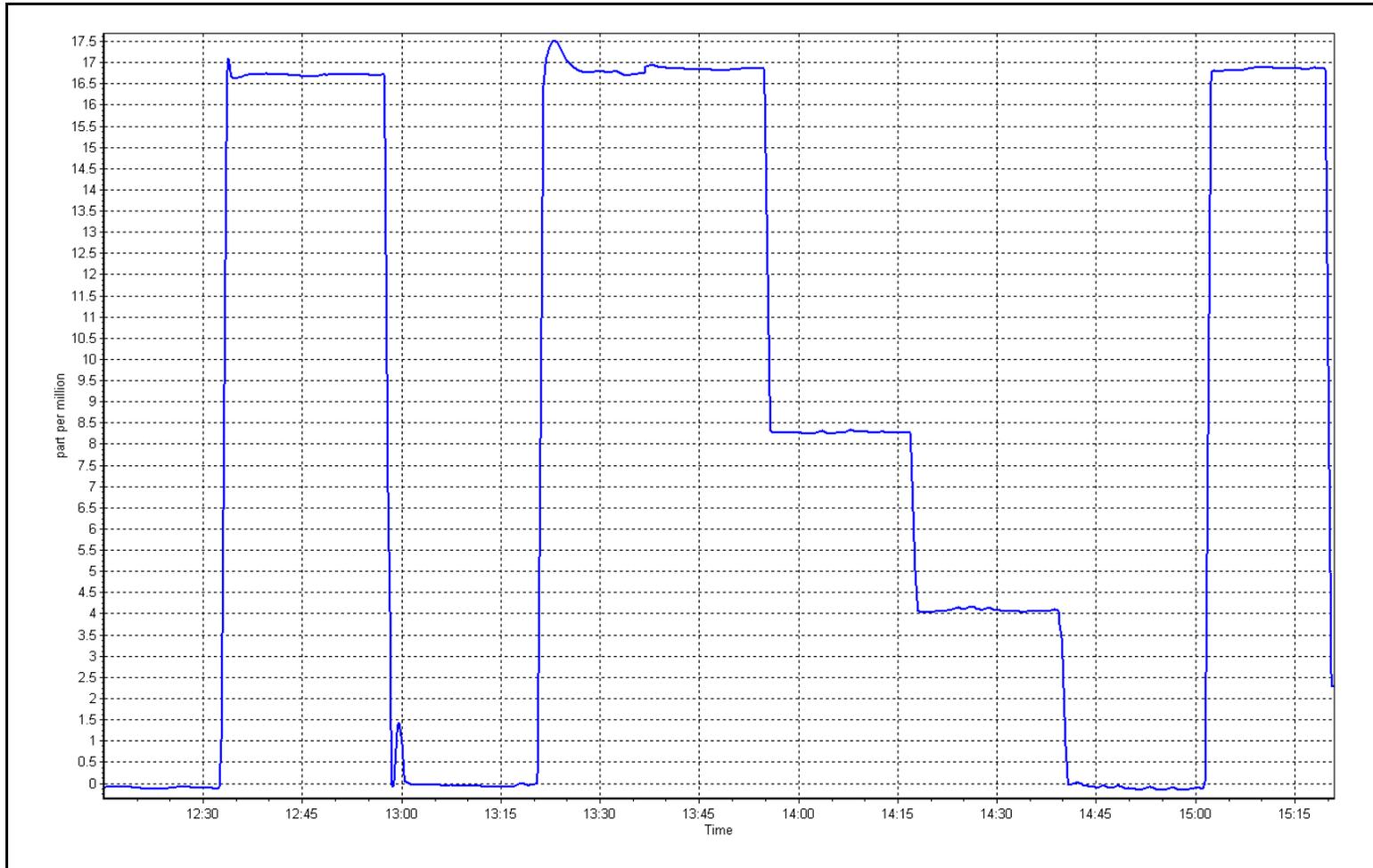
Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	-0.05	----	Correlation Coefficient	0.999891	≥0.995
16.90	16.86	1.0025	Slope	1.002310	0.90 - 1.10
8.45	8.27	1.0218	Intercept	-0.130315	+/-1.5
4.24	4.06	1.0443			



THC Calibration Plot

Date: January 12, 2026

Location: Wapasu





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Wapasu
 Station number: AMS 17
 Calibration Date: January 8, 2026
 Last Cal Date: December 17, 2025
 Start time (MST): 11:21
 End time (MST): N/A
 Reason: As Found

Calibration Standards

NO Gas Cylinder #: DT0045177
 NOX Cal Gas Conc: 61.30 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 61.30 ppm
 NOX gas Diff:
 Calibrator Model: API T700
 ZAG make/model: API T701H
 Cal Gas Expiry Date: July 19, 2032
 NO Cal Gas Conc: 61.00 ppm
 Removed Gas Exp Date:
 Removed Gas NO Conc: 61.00 ppm
 NO gas Diff:
 Serial Number: 2449
 Serial Number: 359

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.4	-0.1	-0.3	----	----
AF High point	4934	65.6	804.3	800.4	3.9	802.4	797.0	5.4	1.0019	1.0041
AF Mid point	4967	32.8	402.1	400.2	2.0	399.8	394.7	5.2	1.0049	1.0136
AF Low point	4984	16.4	201.0	200.1	1.0	198.3	194.4	3.9	1.0118	1.0286

New cyl resp

Previous Response	NO _x = 803.8 ppb	NO = 798.8 ppb	<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = -0.1%
Baseline Corr 1st pt	NO _x = 802.8 ppb	NO = 797.1 ppb	<u>As Found Statistics</u>		*Percent Change	NO = -0.2%
Baseline Corr 2nd pt	NO _x = 400.2 ppb	NO = 394.8 ppb	As found	NO _x r ² : 0.999993	Nx SI: 0.998781	Nx Int: -1.424
Baseline Corr 3rd pt	NO _x = 198.7 ppb	NO = 194.5 ppb	As found	NO r ² : 0.999949	NO SI: 0.997396	NO Int: -2.744
			As found	NO ₂ r ² : 0.999951	NO ₂ SI: 1.000001	NO ₂ Int: 0.648

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero	----	----	0.0	-0.3	----	----
As found high GPT point	794.3	397.7	400.5	401.1	0.9986	100.1%
As found mid GPT point	794.3	596.4	201.8	201.8	1.0002	100.0%
As found low GPT point	794.3	698.1	100.1	102.5	0.9769	102.4%



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NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo Scientific 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1218153460

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.000514	
NO _x Cal Offset:	-0.883933	
NO Cal Slope:	1.000880	
NO Cal Offset:	-2.264069	
NO ₂ Cal Slope:	1.005033	
NO ₂ Cal Offset:	0.034613	

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.905	N/A	NO bkgnd or offset:	3.1	N/A
NOX coeff or slope:	0.998	N/A	NOX bkgnd or offset:	3.5	N/A
NO2 coeff or slope:	1.000	N/A	Reaction cell Press:	201.0	N/A

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
-----------	---------------------------	-----------------------------	---	--	---	--	---------------------------------------	--	---	--

Cal zero
 High point
 Mid point
 Low point
 As left zero
 As left span

Average Correction Factor

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
-------------------	--	---------------------------------------	---	--	---	--

Cal zero
 High GPT point
 Mid GPT point
 Low GPT point

Average Correction Factor

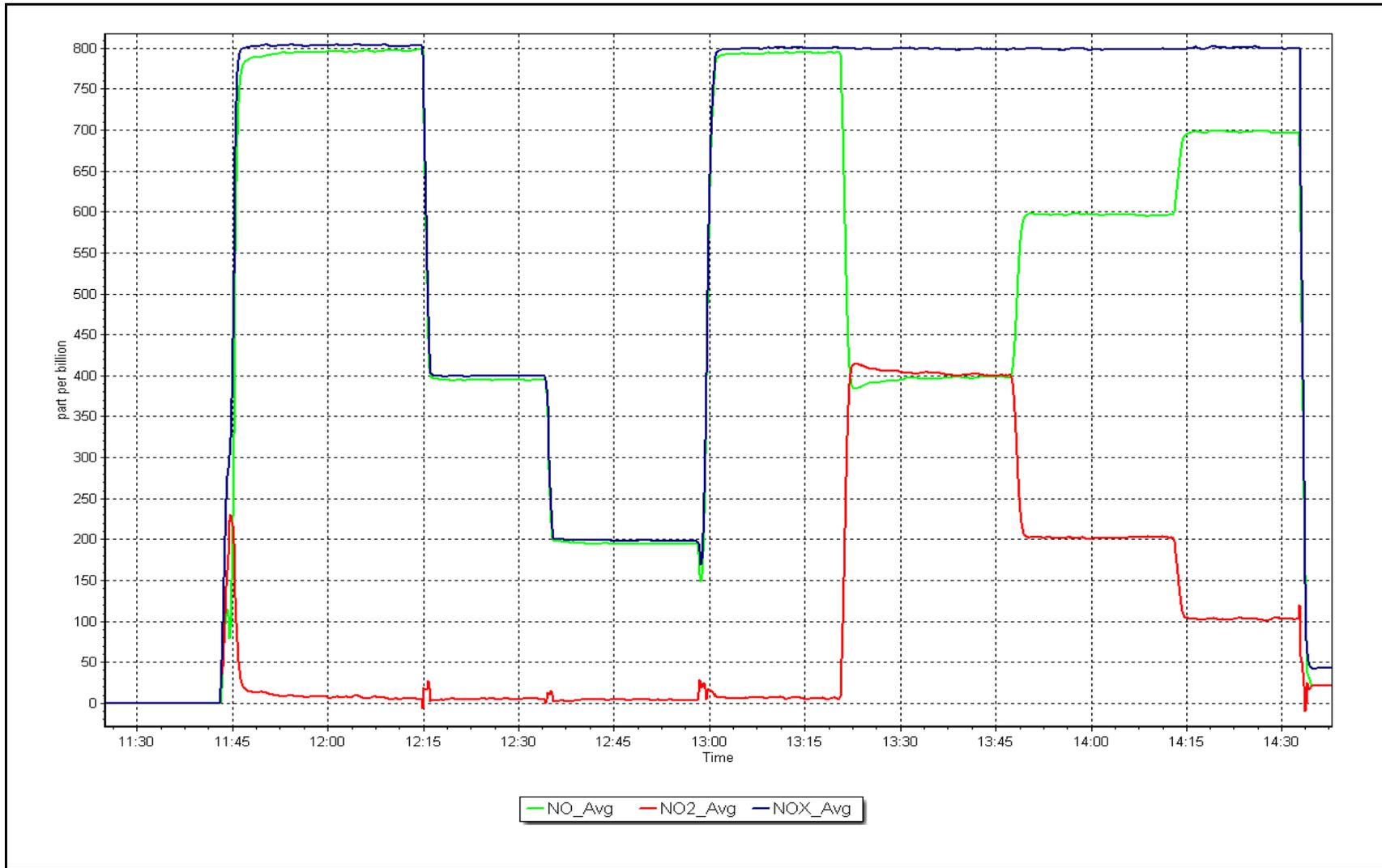
Notes: Multi-point asfound done.

Calibration Performed By: Aswin Sasi Kumar

NO_x Calibration Plot

Date: January 8, 2026

Location: Wapasu





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Wapasu
 Station number: AMS 17
 Calibration Date: January 9, 2026
 Last Cal Date: December 17, 2025
 Start time (MST): 11:15
 End time (MST): 15:30
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0045177
 NOX Cal Gas Conc: 61.30 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 61.30 ppm
 NOX gas Diff:
 Calibrator Model: API T700
 ZAG make/model: API T701H
 Cal Gas Expiry Date: July 19, 2032
 NO Cal Gas Conc: 61.00 ppm
 Removed Gas Exp Date:
 Removed Gas NO Conc: 61.00 ppm
 NO gas Diff:
 Serial Number: 2449
 Serial Number: 359

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero										
AF High point										
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = NA	ppb	NO = NA	ppb	<i>* = > +/-5% change initiates investigation</i>		<i>*Percent Change</i>		NO _x =	NA
Baseline Corr 1st pt	NO _x = NA	ppb	NO = NA	ppb	<u>As Found Statistics</u>		<i>*Percent Change</i>		NO =	NA
Baseline Corr 2nd pt	NO _x = NA	ppb	NO = NA	ppb	As found	NO _x r ² :	Nx SI:	Nx Int:		
Baseline Corr 3rd pt	NO _x = NA	ppb	NO = NA	ppb	As found	NO r ² :	NO SI:	NO Int:		
					As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:		

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo Scientific 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1218153460

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.000514	0.996876
NO _x Cal Offset:	-0.883933	-1.003986
NO Cal Slope:	1.000880	1.001237
NO Cal Offset:	-2.264069	-2.464065
NO ₂ Cal Slope:	1.005033	0.992858
NO ₂ Cal Offset:	0.034613	-1.281506

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	N/A	1.027	NO bkgnd or offset:	N/A	3.6
NOX coeff or slope:	N/A	0.993	NOX bkgnd or offset:	N/A	4.0
NO2 coeff or slope:	N/A	1.000	Reaction cell Press:	N/A	226.4

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	-0.4	-0.1	-0.3	----	----
High point	4934	65.6	804.3	800.4	3.9	801.3	800.3	0.9	1.0038	1.0001
Mid point	4967	32.8	402.1	400.2	2.0	399.0	396.4	2.5	1.0079	1.0095
Low point	4984	16.4	201.0	200.1	1.0	199.2	195.9	3.3	1.0093	1.0213
As left zero	5000	0.0	0.0	0.0	0.0	-0.2	0.1	-0.3	----	----
As left span	4934	65.6	804.3	398.3	406.0	804.4	398.3	406.0	0.9999	1.0000
Average Correction Factor									1.0070	1.0103

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.3	----	----
High GPT point	799.7	399.2	404.4	400.8	1.0091	99.1%
Mid GPT point	799.7	598.8	204.8	201.5	1.0166	98.4%
Low GPT point	799.7	701.2	102.4	99.5	1.0295	97.1%
Average Correction Factor					1.0184	98.2%

Notes: Multi-point asfound done on Jan 08. Pump changed out. Span adjusted.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

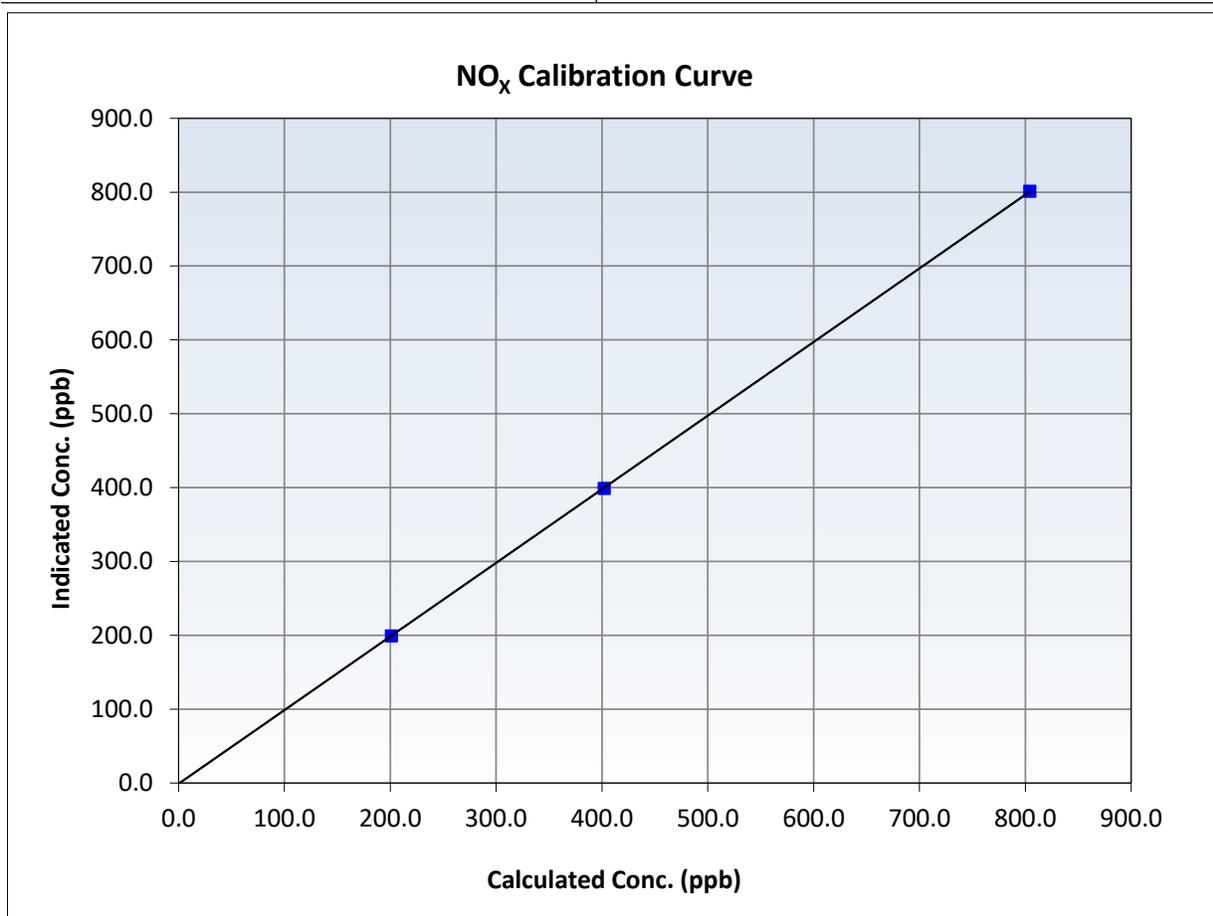
NO_x Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 17, 2025
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	11:15	End Time (MST):	15:30
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.4	----	Correlation Coefficient	0.999996	<i>≥0.995</i>
804.3	801.3	1.0038	Slope	0.996876	<i>0.90 - 1.10</i>
402.1	399.0	1.0079	Intercept	-1.003986	<i>+/-20</i>
201.0	199.2	1.0093			





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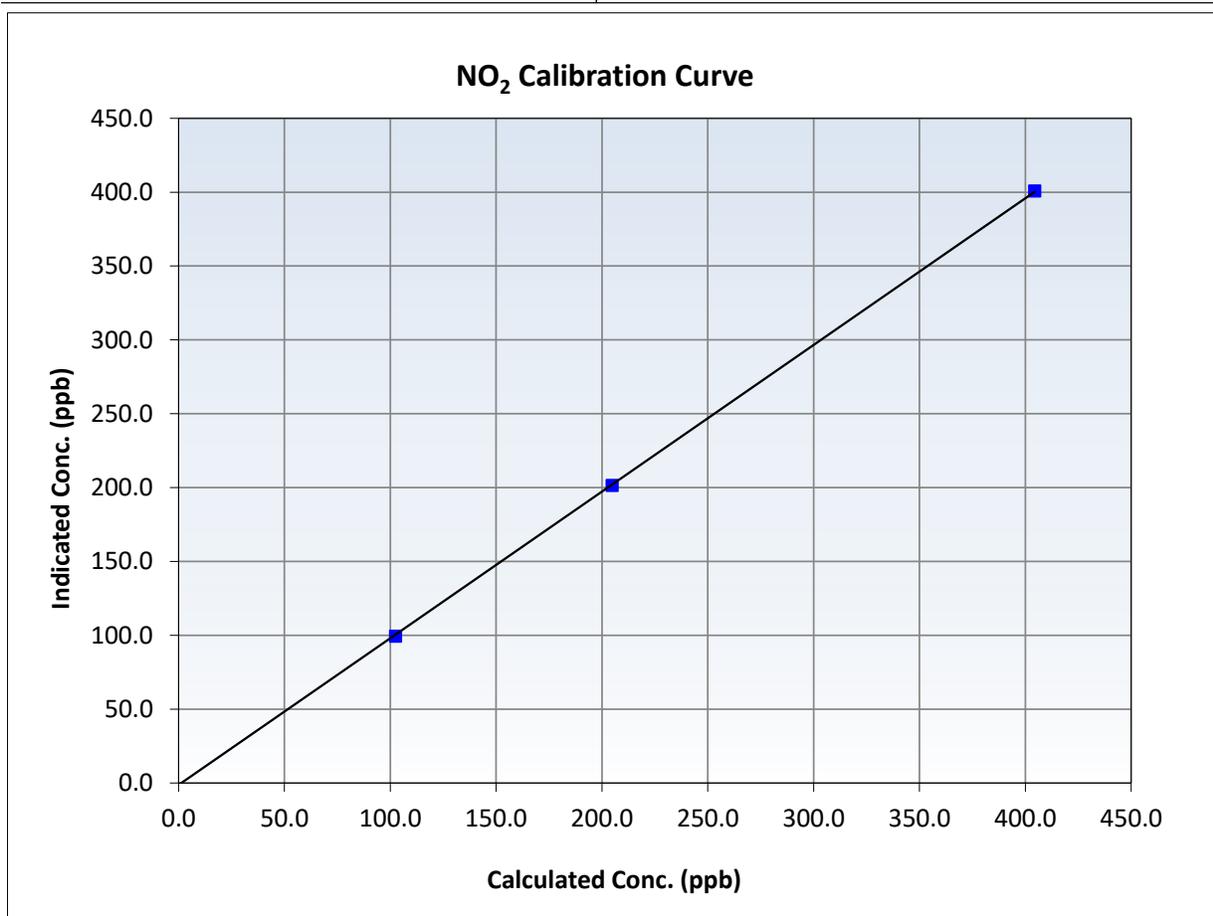
NO₂ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 17, 2025
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	11:15	End Time (MST):	15:30
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.3	----	Correlation Coefficient	0.999972	≥0.995
404.4	400.8	1.0091	Slope	0.992858	0.90 - 1.10
204.8	201.5	1.0166	Intercept	-1.281506	+/-20
102.4	99.5	1.0295			





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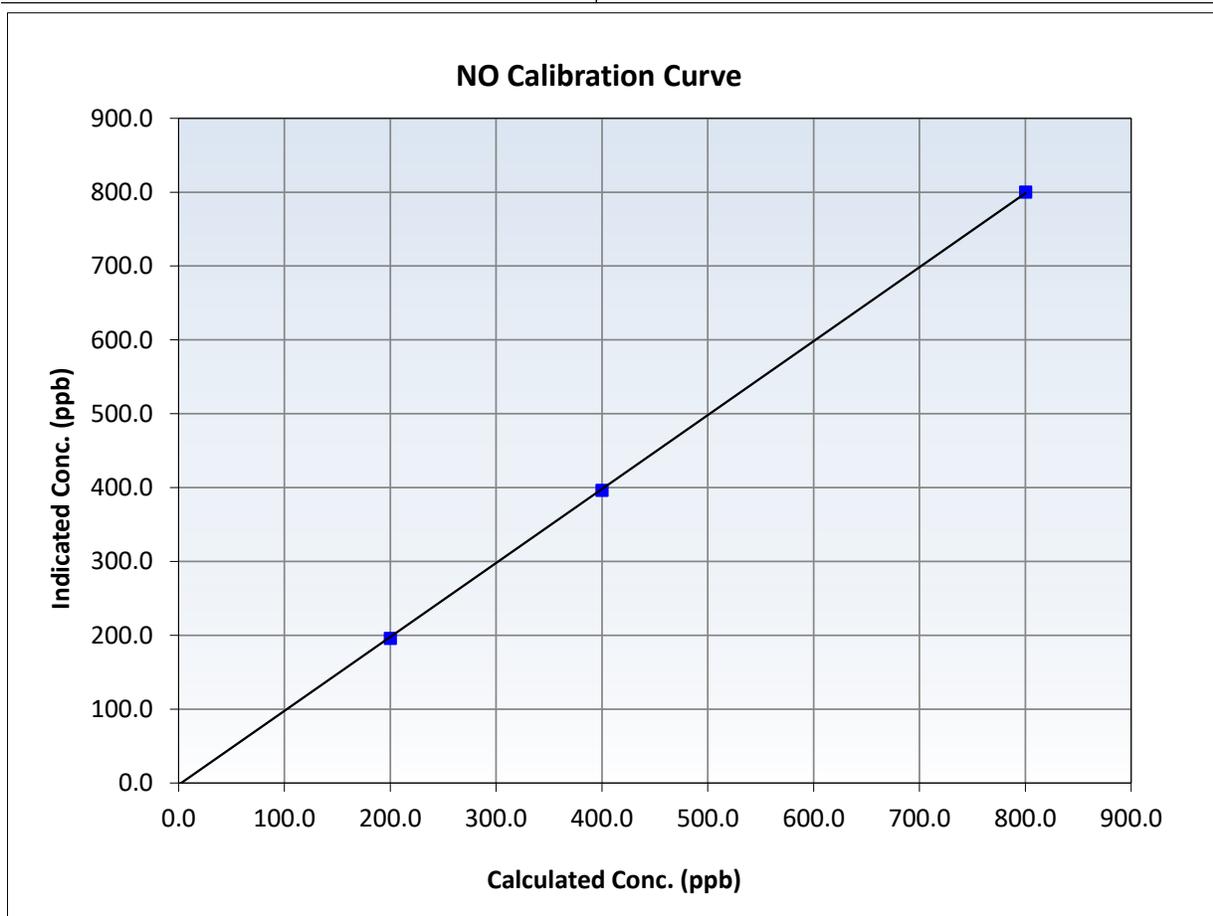
NO Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 17, 2025
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	11:15	End Time (MST):	15:30
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

Calibration Data

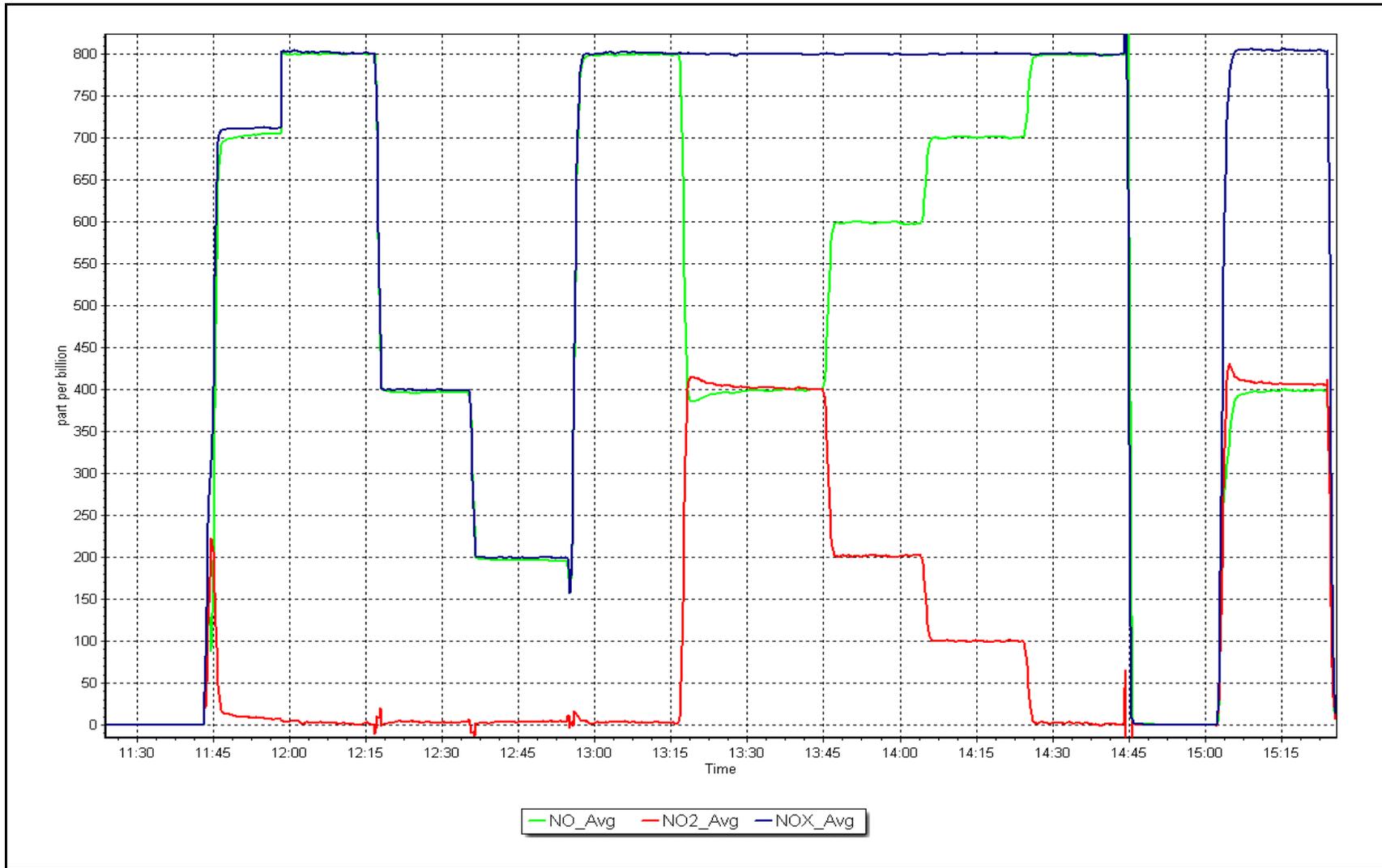
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.1	----	Correlation Coefficient	0.999958	≥0.995
800.4	800.3	1.0001	Slope	1.001237	0.90 - 1.10
400.2	396.4	1.0095	Intercept	-2.464065	+/-20
200.1	195.9	1.0213			



NO_x Calibration Plot

Date: January 9, 2026

Location: Wapasu





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	January 5, 2026	Last Cal Date:	December 2, 2025
Start time (MST):	10:27	End time (MST):	13:11
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	2449
Calibrator Make/Model:	API T700	Serial Number:	359
ZAG Make/Model:	API T701H		

Analyzer Information

Analyzer make:	Thermo Scientific 49i	Analyzer serial #:	1501663734
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.008514	1.008800	Backgd or Offset:	0.1	0.1
Calibration intercept:	-1.540000	-1.140000	Coeff or Slope:	1.043	1.043

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.4	----
As found High point	5000	1104.7	400.0	401.9	0.994
As found Mid point					
As found Low point					
Baseline Corr As found:	402.3	Previous response	401.9	*% change	0.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	5000	1104.7	400.0	402.9	0.993
Mid point	5000	917.3	200.0	200.1	1.000
Low point	5000	797.9	100.0	98.7	1.013
As left zero	5000	0.0	0.0	-0.3	----
As left span	5000	1104.7	400.0	408.4	0.979
Average Correction Factor					1.002

Notes: No adjustments made.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

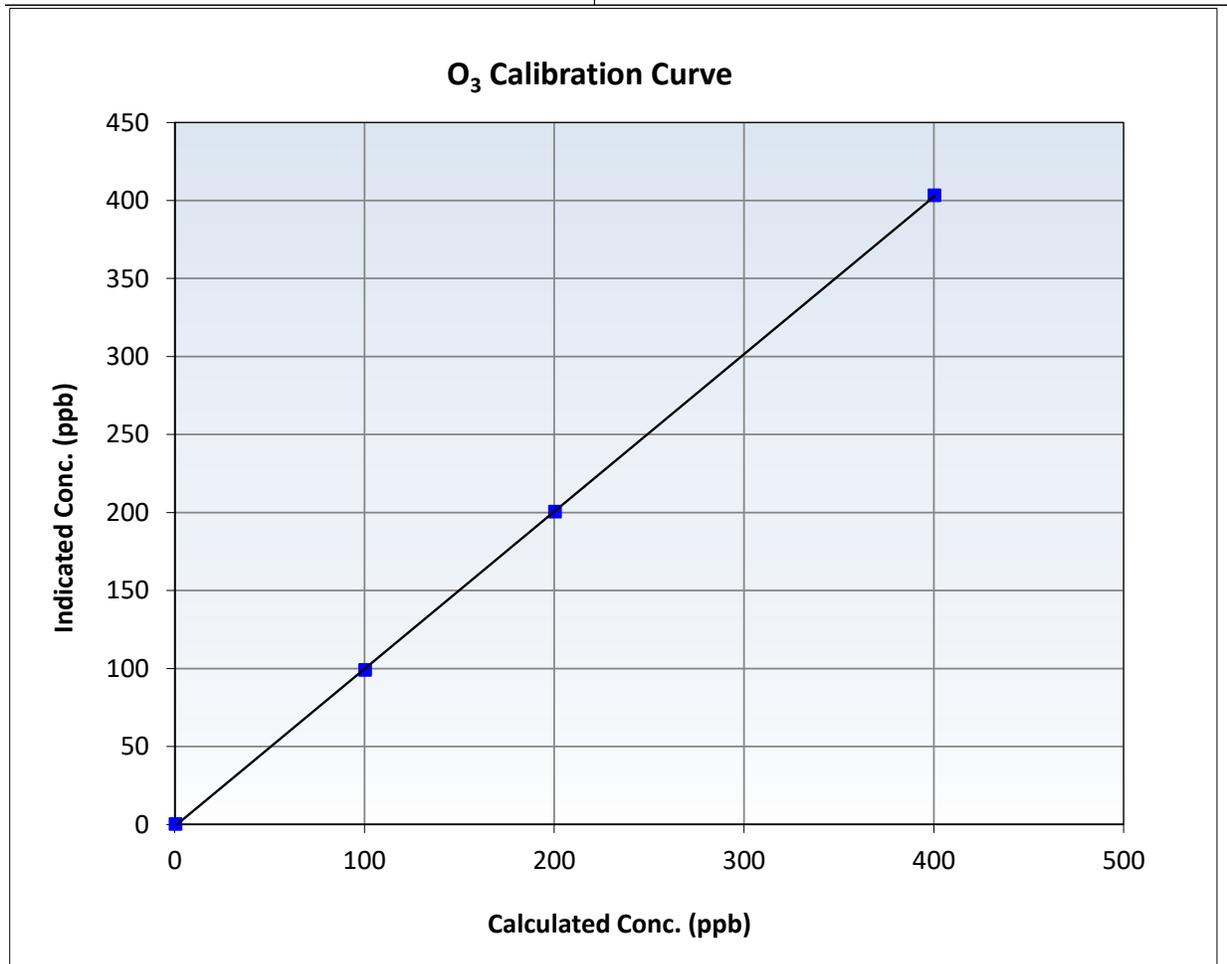
O₃ Calibration Summary

Station Information

Calibration Date:	January 5, 2026	Previous Calibration:	December 2, 2025
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	10:27	End Time (MST):	13:11
Analyzer make:	Thermo Scientific 49i	Analyzer serial #:	1501663734

Calibration Data

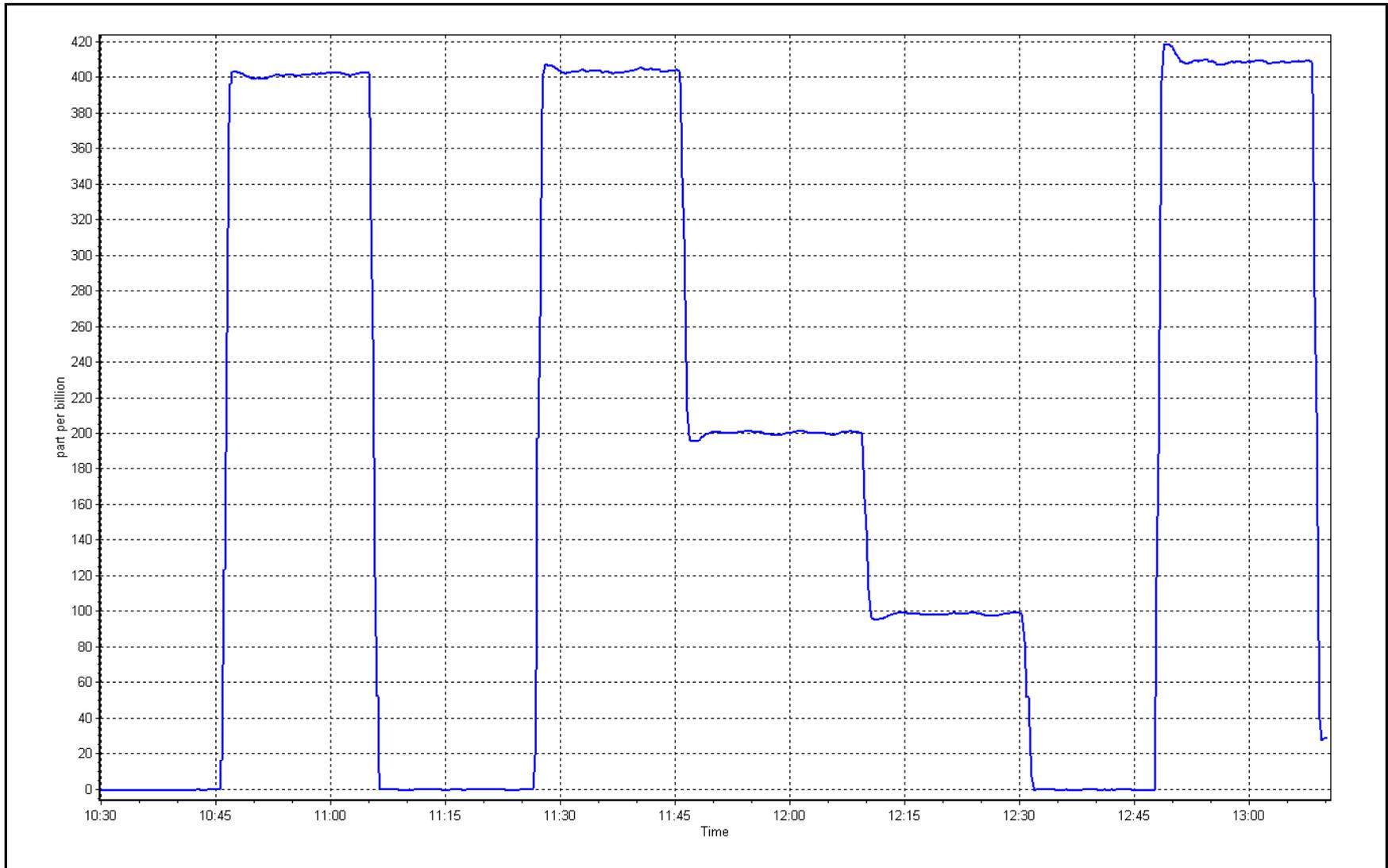
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.1	----	Correlation Coefficient	0.999970	≥0.995
400.0	402.9	0.9928	Slope	1.008800	0.90 - 1.10
200.0	200.1	0.9995	Intercept	-1.140000	+/- 5
100.0	98.7	1.0132			



O₃ Calibration Plot

Date: January 5, 2026

Location: Wapasu





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Wapasu Station number: AMS 17
 Calibration Date: January 27, 2026 Last Cal Date: December 18, 2025
 Start time (MST): 11:41 End time (MST): 12:20

Analyzer Make: Teledyne API T640 S/N: 1183
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388748
 Temp/RH standard: Alicat FP-25BT S/N: 388748

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-15.60	-15.60	-15.60	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	719.80	722.80	719.80	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.01	5.22	5.01	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	41	----	41	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	0.60	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: **10.9** Expiry Date: October 6, 2024
 Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test	8.50	11.00	11.00	<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: December 18, 2025
 Date Disposable Filter Changed: December 18, 2025

Post- maintenance Zero Verification: PM w/ HEPA: 0.00 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: July 21, 2025
 Date RH/T Sensor Cleaned: July 21, 2025

Notes:

Verified flow, pressure, temperature and pump power. No adjustment needed. Leak check passed.

Calibration by: Jason Brooks, Aswin Sasi Kumar



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS18 STONY MOUNTAIN JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	January 21, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	12:10	End time (MST):	16:16
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	51.22	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	CC417455			
Removed Cal Gas Conc:	51.22	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	CC417455		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	2658
Zero Air Gen Model:	Teledyne API 701		Serial Number:	4890

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	JC1501301453
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.997530	0.998771	Backgd or Offset:	25.9	25.9
Calibration intercept:	-1.297845	-1.757425	Coeff or Slope:	0.816	0.816

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4921	78.1	800.2	799.3	1.001
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	799.2	Previous response	796.9	*% change	0.3%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4921	78.1	800.2	798.7	1.002
Mid point	4960	39.1	400.6	396.8	1.010
Low point	4981	19.5	199.7	195.9	1.020
As left zero	5000	0.0	0.0	0.5	----
As left span	4921	78.1	800.2	798.9	1.002
Average Correction Factor:					1.010

Notes: Changed the inlet filter after as founds. No adjustments made.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

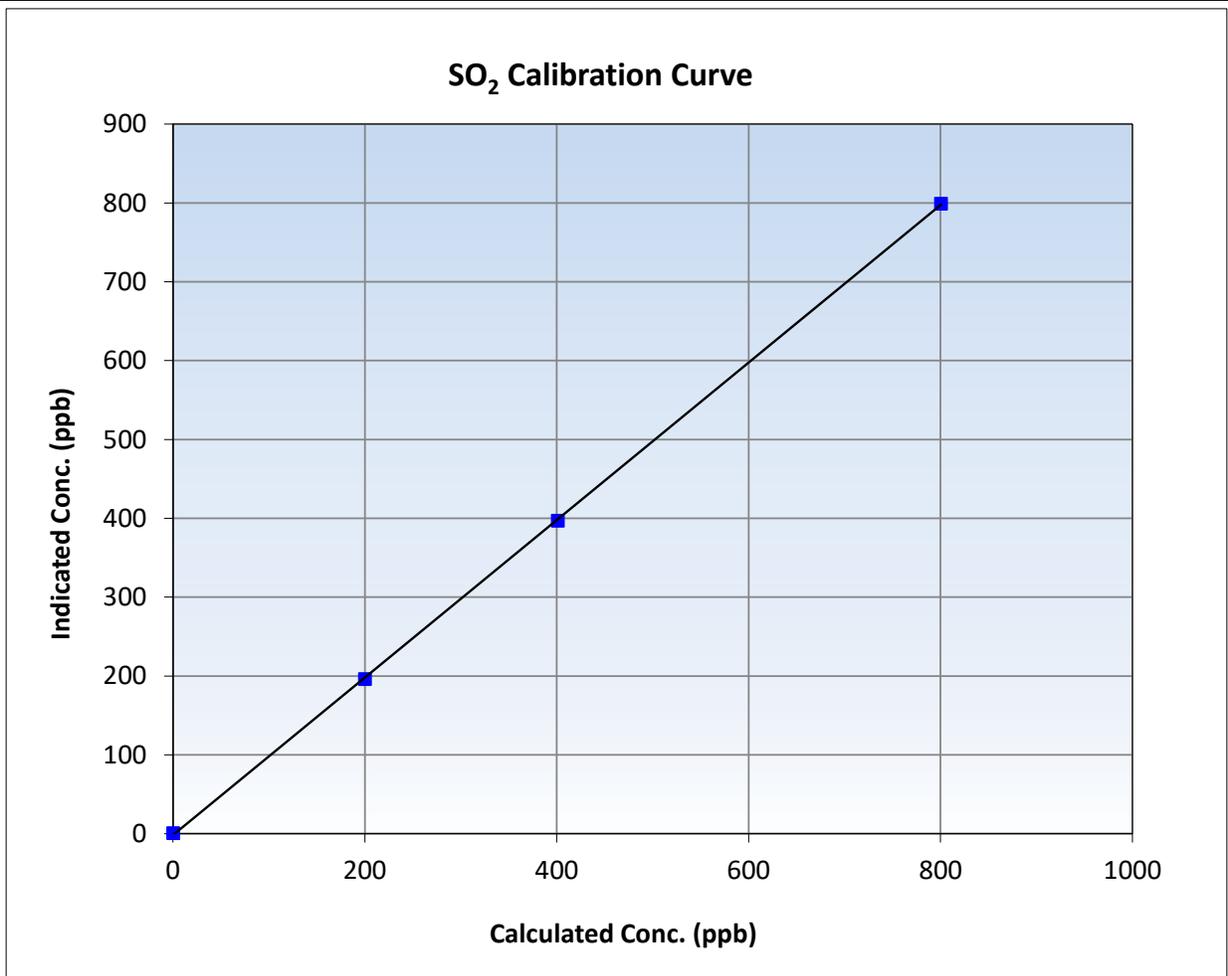
SO₂ Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	12:10	End Time (MST):	16:16
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1501301453

Calibration Data

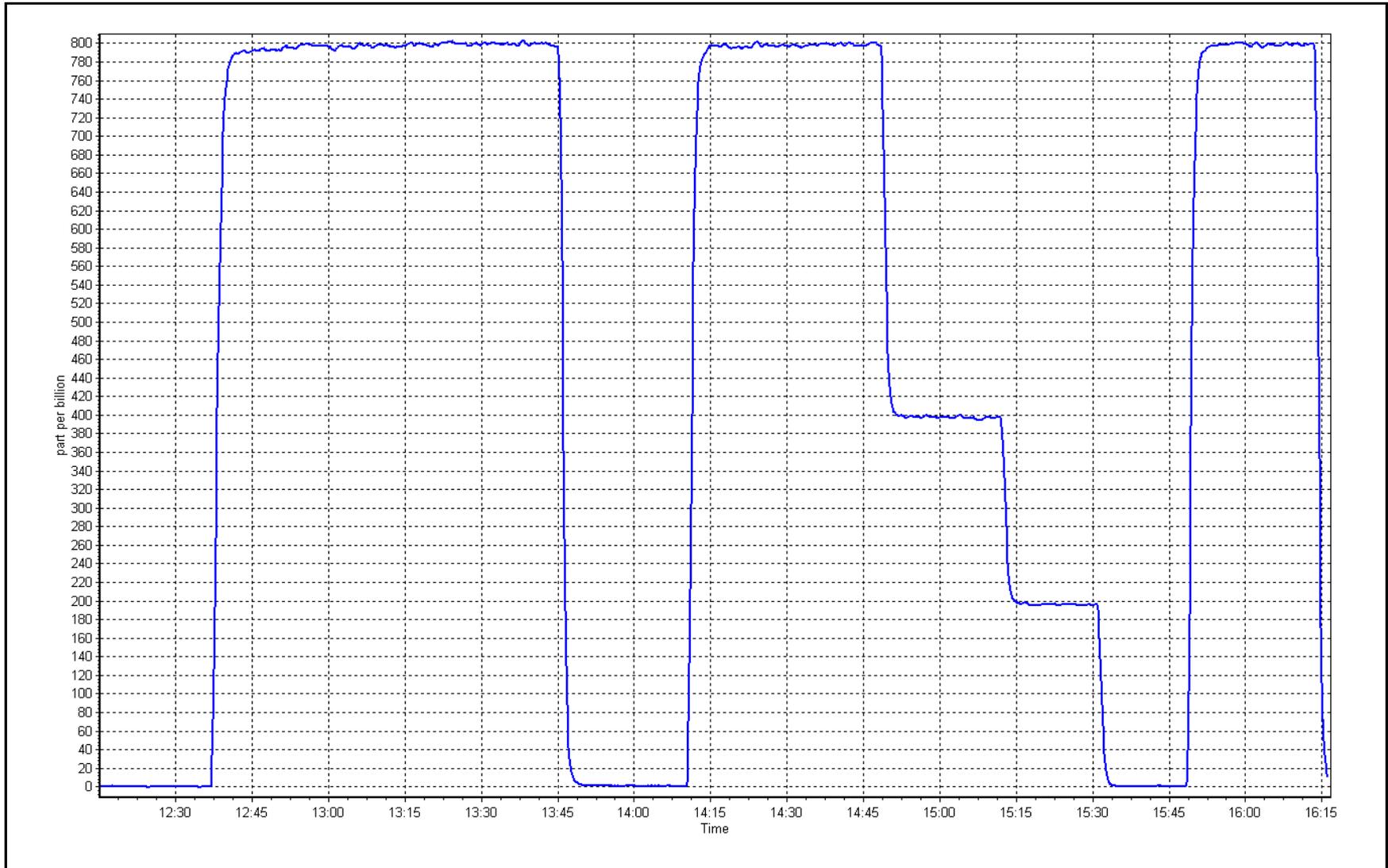
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.4	----	Correlation Coefficient	0.999966	≥0.995
800.2	798.7	1.0019	Slope	0.998771	0.90 - 1.10
400.6	396.8	1.0096	Intercept	-1.757425	+/-30
199.7	195.9	1.0196			



SO2 Calibration Plot

Date: January 21, 2026

Location: Stony Mountain





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS18
Calibration Date:	January 20, 2026	Last Cal Date:	December 16, 2025
Start time (MST):	9:12	End time (MST):	14:16
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.86	ppm	Cal Gas Exp Date:	May 9, 2027
Cal Gas Cylinder #:	CC523103			
Removed Cal Gas Conc:	4.86	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	2658
ZAG Make/Model:	Teledyne API T701		Serial Number:	4890

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153359
Converter make:	CD Nova CDN-101	Converter serial #:	555
Analyzer Range	0 - 100 ppb	Converter Temp:	800 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.979372	1.000225	Backgd or Offset:	3.10	2.90
Calibration intercept:	0.301312	0.121022	Coeff or Slope:	1.245	1.190

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.3	80.0	85.0	0.941
As found Mid point	4958	41.2	40.1	42.5	0.942
As found Low point	4979	20.6	20.0	21.0	0.954
New cylinder response					
Baseline Corr As found:	85.0	Prev response:	78.66	*% change:	7.5%
Baseline Corr 2nd AF pt:	42.5	AF Slope:	1.063510	AF Intercept:	-0.120308
Baseline Corr 3rd AF pt:	21.0	AF Correlation:	0.999988	* = > +/-5% change initiates investigation	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4917	82.3	80.0	80.3	0.996
Mid point	4958	41.2	40.1	40.0	1.001
Low point	4979	20.6	20.0	19.9	1.006
As left zero	5000	0.0	0.0	0.4	----
As left span	4917	82.3	80.0	79.5	1.006
SO2 Scrubber Check	4923	77.1	771.0	-0.1	----
Date of last scrubber change:		17-Dec-21		Ave Corr Factor	1.001
Date of last converter efficiency test:					

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

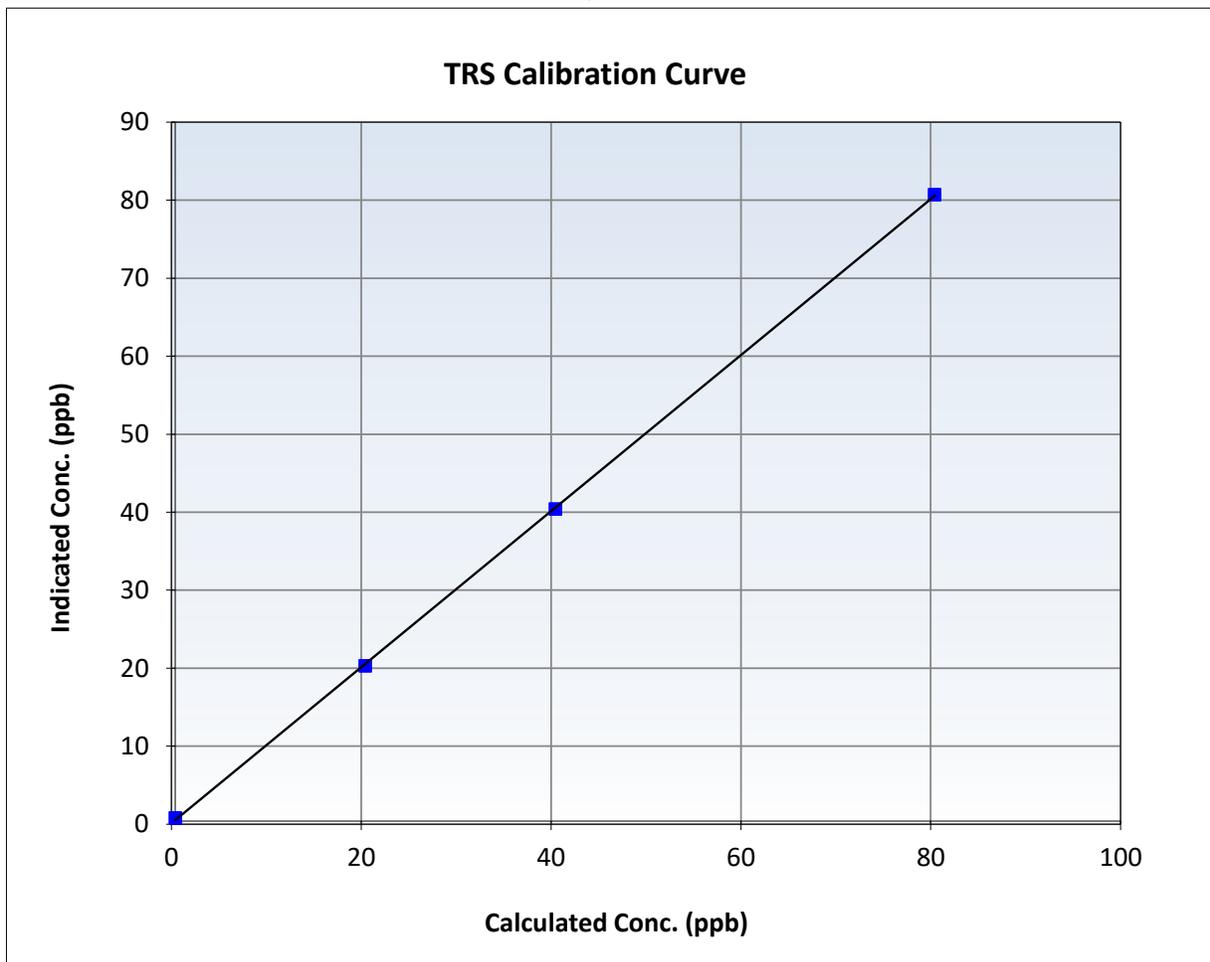
TRS Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 16, 2025
Station Name:	Stony Mountain	Station Number:	AMS18
Start Time (MST):	9:12	End Time (MST):	14:16
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153359

Calibration Data

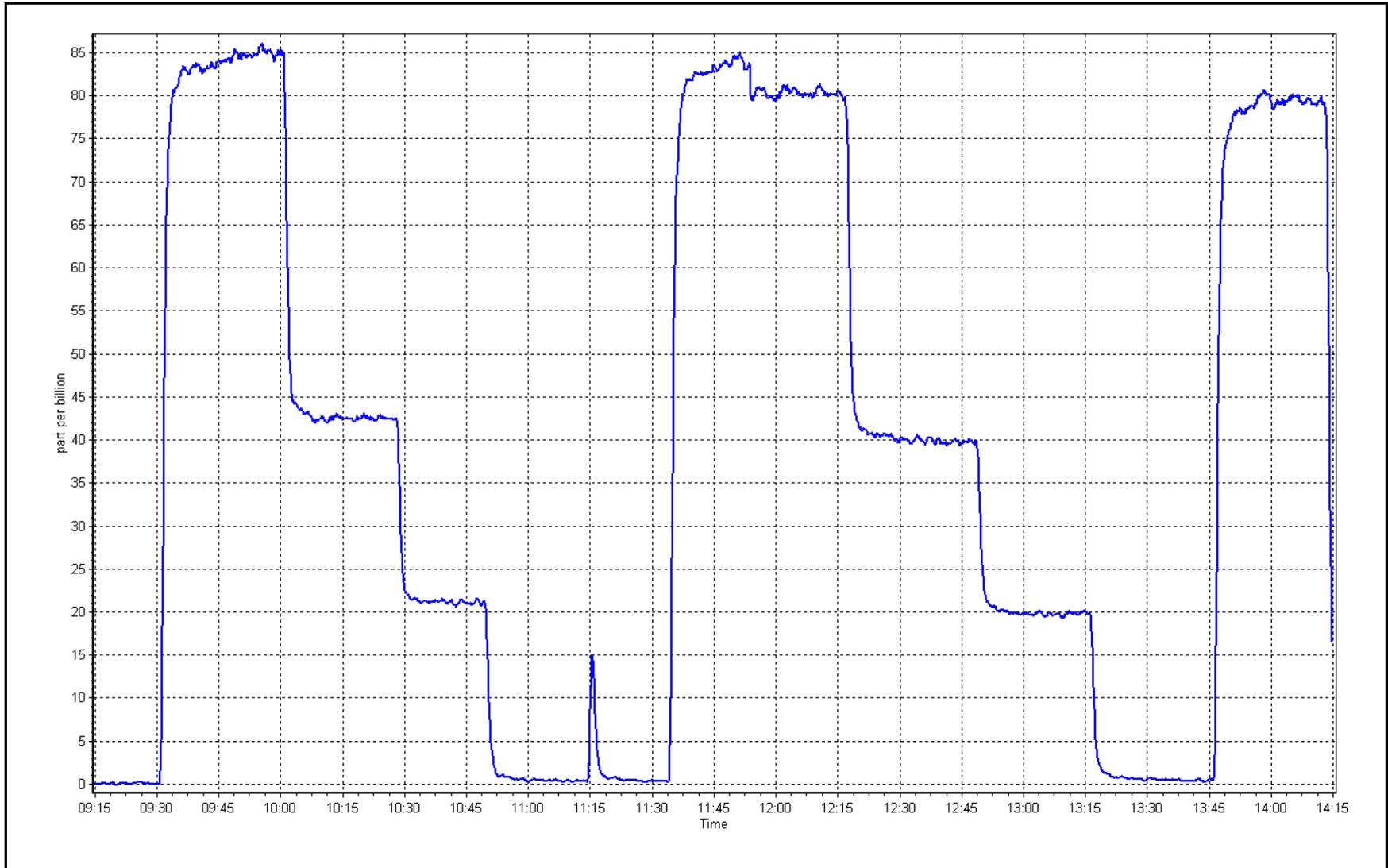
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.4	----	Correlation Coefficient	0.999944	≥ 0.995
80.0	80.3	0.9963	Slope	1.000225	$0.90 - 1.10$
40.1	40.0	1.0013	Intercept	0.121022	± 3
20.0	19.9	1.0063			



TRS Calibration Plot

Date: January 20, 2026

Location: Stony Mountain





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	January 21, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	12:10	End time (MST):	16:16
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	XC026809B	Cal Gas Expiry Date:	January 12, 2029
CH4 Cal Gas Conc.	504.9 ppm	CH4 Equiv Conc.	1076.6 ppm
C3H8 Cal Gas Conc.	207.9 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	504.9 ppm	CH4 Equiv Conc.	1076.6 ppm
Removed C3H8 Conc.	207.9 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	2658
Zero Air Gen model:	Teledyne API T701	Serial Number:	4890

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1170050130
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.72E-04	2.71E-04	5.15E-05	5.04E-05
CH4 Retention time:	14.8	15.2	173441	177167
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.01	---
As found High point	4921	78.1	16.82	17.08	0.985
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.07	Prev response	16.84	*% change	1.3%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.02	---
High point	4921	78.1	16.82	16.81	1.001
Mid point	4960	39.1	8.42	8.36	1.007
Low point	4981	19.5	4.20	4.14	1.014
As left zero	5000	0.0	0.00	0.00	---
As left span	4921	78.1	16.82	16.72	1.006
Average Correction Factor					1.007

Notes: N2 cylinder changed out. Adjusted the span.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.1	8.93	9.04	0.988
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.04	Prev response	8.94	*% change	1.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.1	8.93	8.93	1.000
Mid point	4960	39.1	4.47	4.45	1.006
Low point	4981	19.5	2.23	2.21	1.010
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.1	8.93	8.95	0.998
Average Correction Factor					1.005

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.01	----
As found High point	4921	78.1	7.89	8.03	0.984
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.02	Prev response	7.90	*% change	1.5%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.02	----
High point	4921	78.1	7.89	7.88	1.001
Mid point	4960	39.1	3.95	3.92	1.008
Low point	4981	19.5	1.97	1.93	1.019
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.1	7.89	7.76	1.016
Average Correction Factor					1.009

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.001490	0.999241
THC Cal Offset:	-0.000728	-0.020925
CH ₄ Cal Slope:	1.001522	0.998292
CH ₄ Cal Offset:	-0.000978	-0.007579
NMHC Cal Slope:	1.001423	1.000284
NMHC Cal Offset:	-0.000349	-0.013146

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

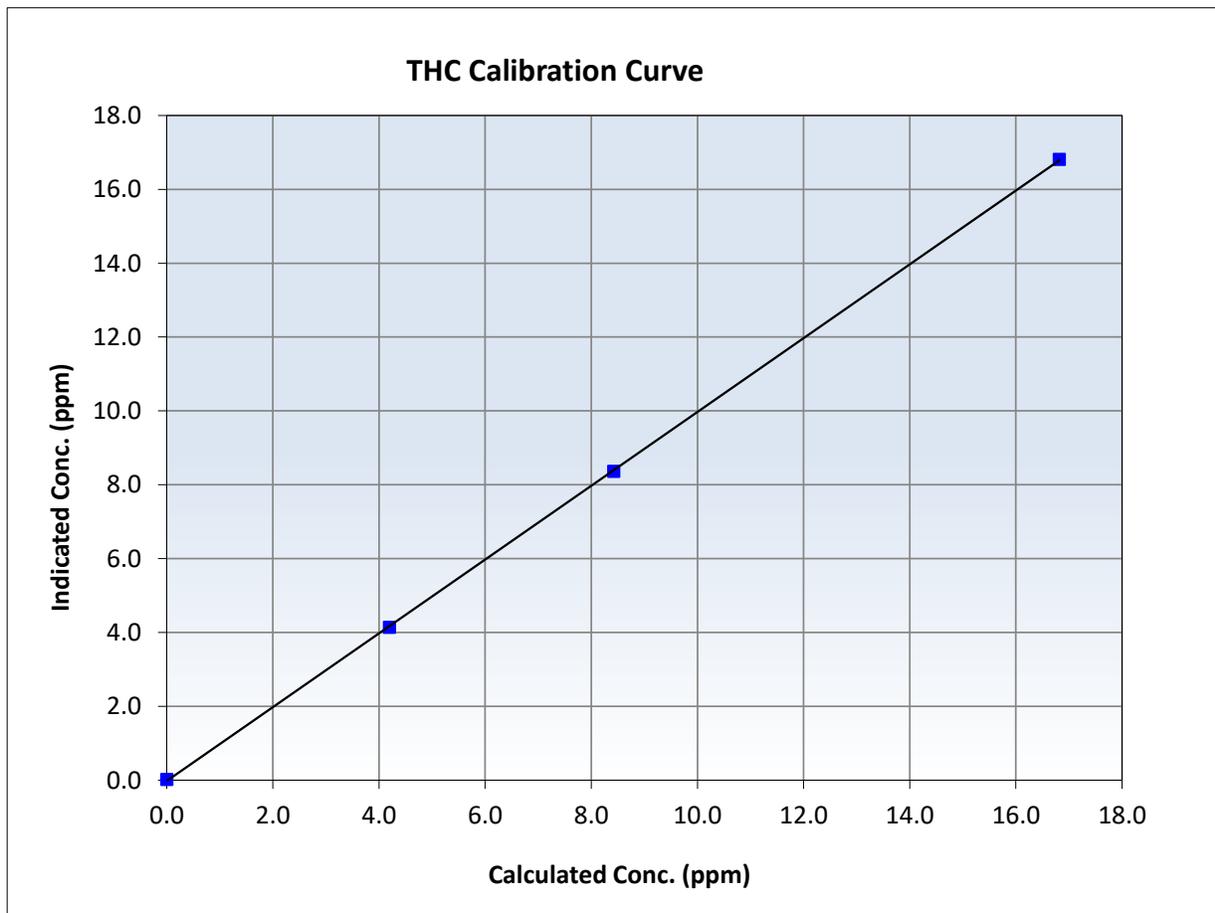
THC Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	12:10	End Time (MST):	16:16
Analyzer make:	Thermo 55i	Analyzer serial #:	1170050130

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.02	----	Correlation Coefficient	0.999972	<i>≥0.995</i>
16.82	16.81	1.0006	Slope	0.999241	<i>0.90 - 1.10</i>
8.42	8.36	1.0069	Intercept	-0.020925	<i>+/-0.5</i>
4.20	4.14	1.0141			





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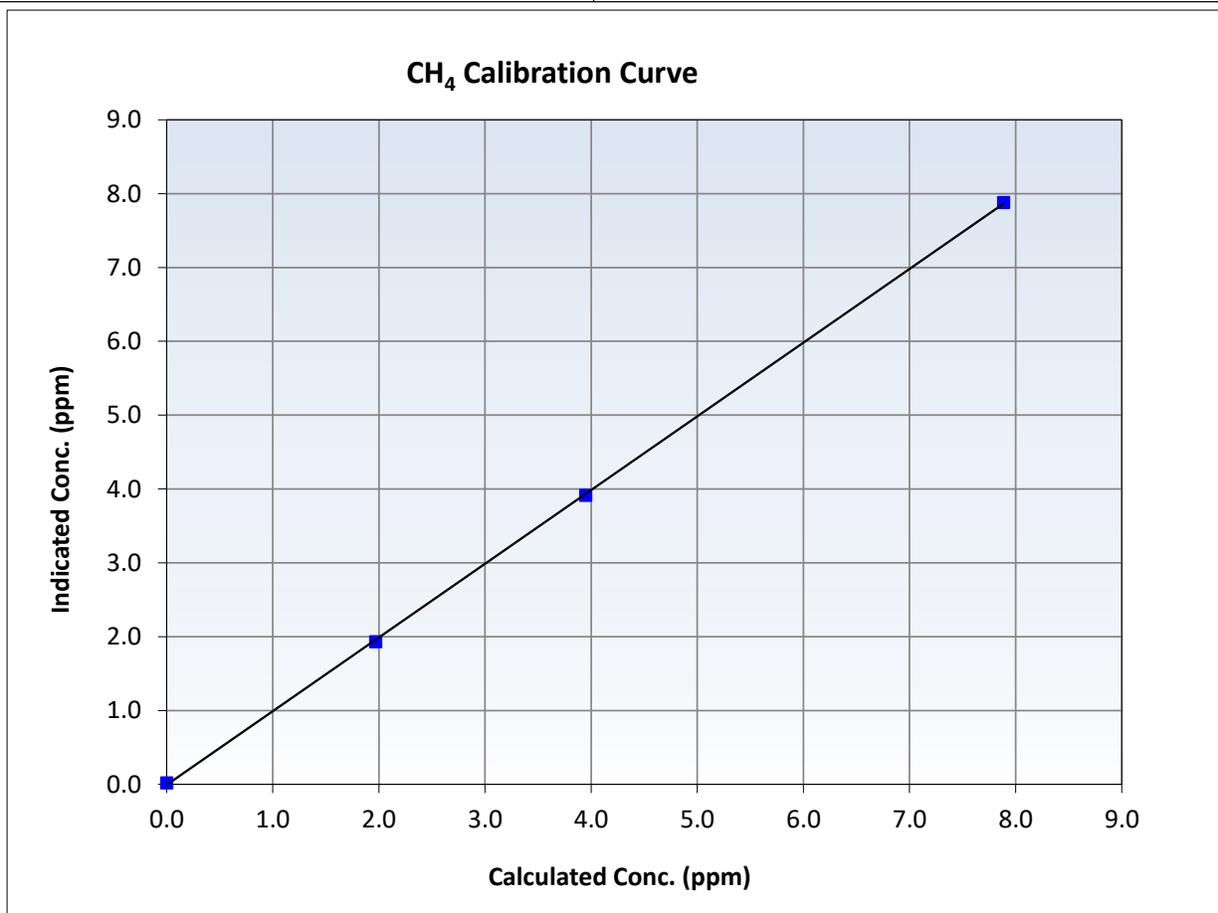
CH₄ Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	12:10	End Time (MST):	16:16
Analyzer make:	Thermo 55i	Analyzer serial #:	1170050130

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>
0.00	0.02	----	Correlation Coefficient	0.999943 ≥0.995
7.89	7.88	1.0008	Slope	0.998292 0.90 - 1.10
3.95	3.92	1.0082	Intercept	-0.007579 +/-0.5
1.97	1.93	1.0186		





Wood Buffalo Environmental Association

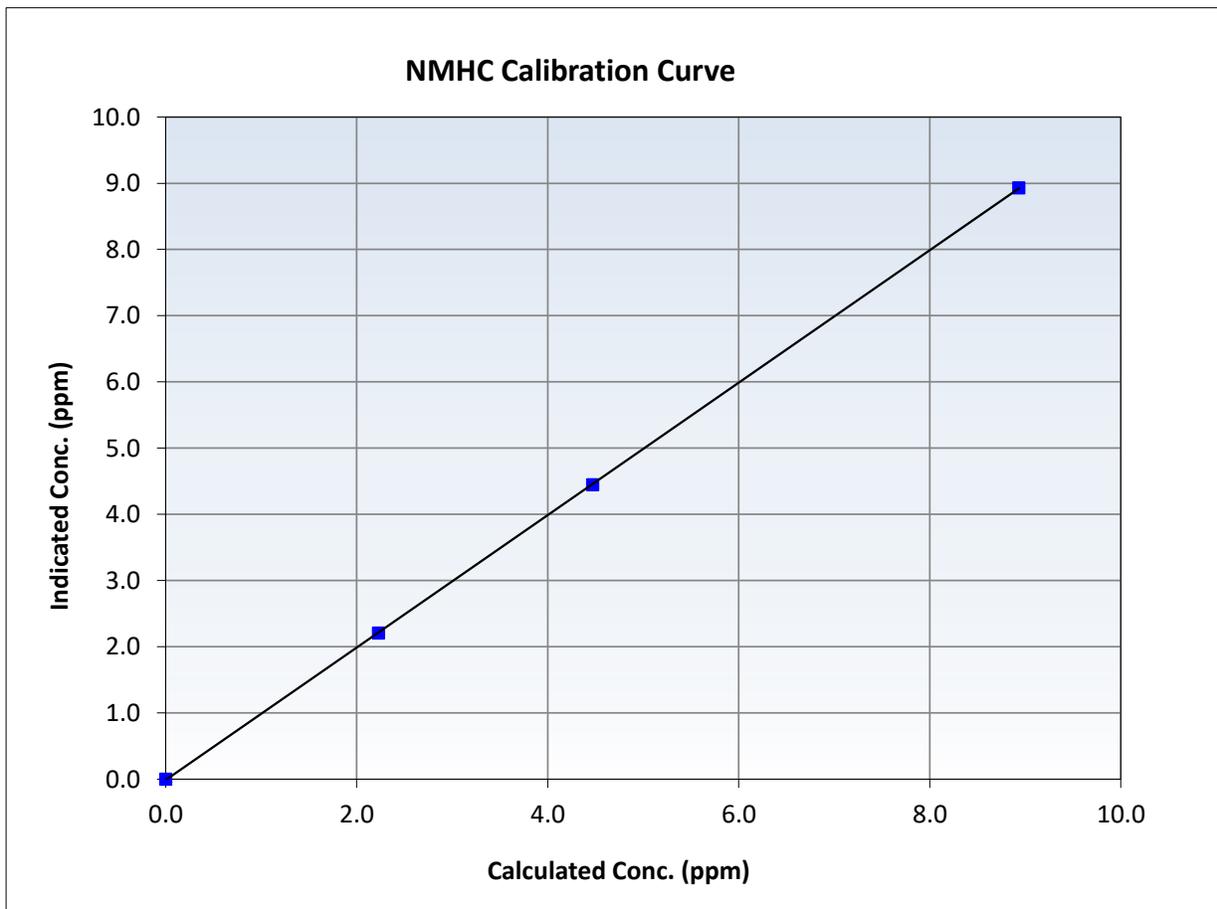
NMHC Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	12:10	End Time (MST):	16:16
Analyzer make:	Thermo 55i	Analyzer serial #:	1170050130

Calibration Data

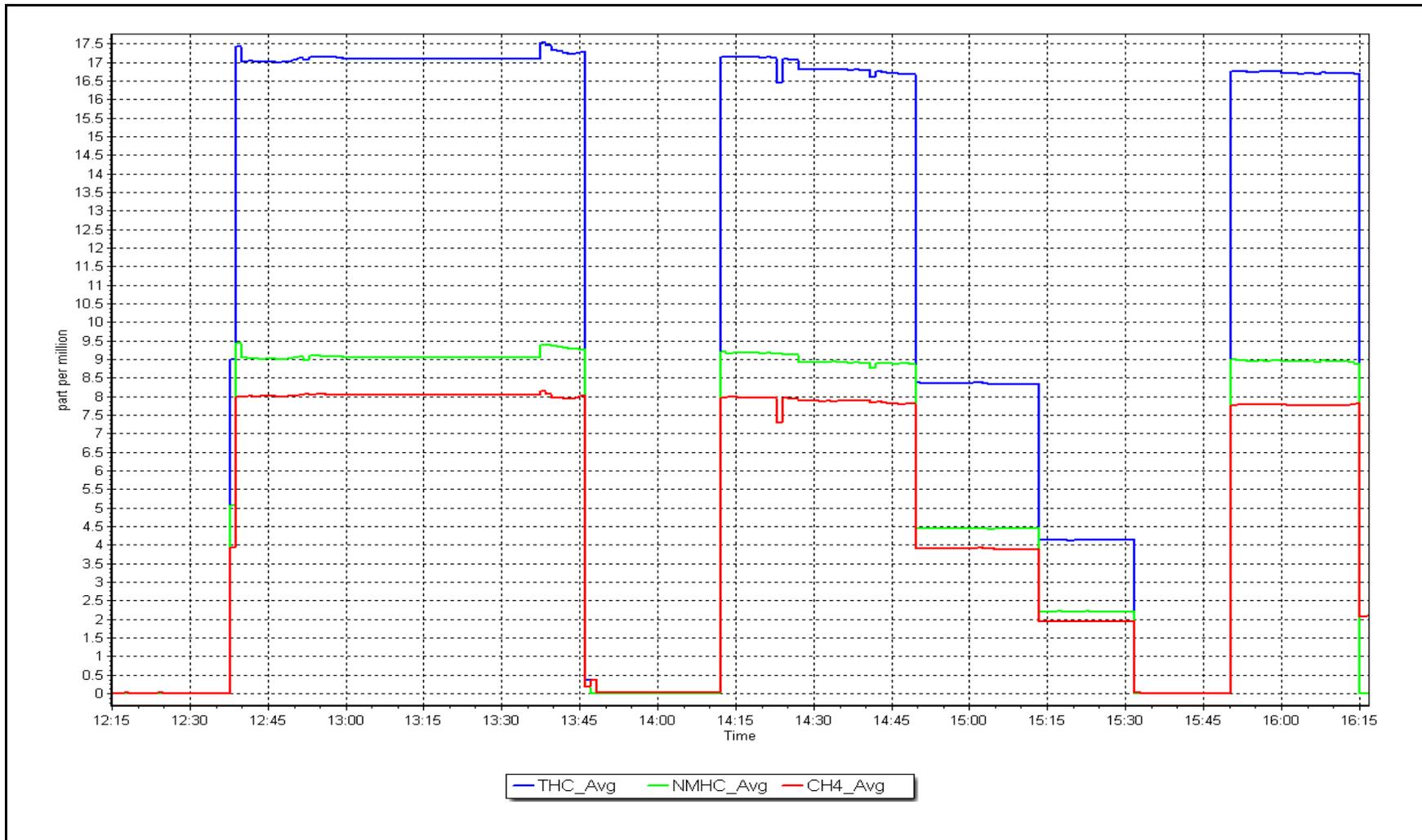
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999989	<i>≥0.995</i>
8.93	8.93	1.0002	Slope	1.000284	<i>0.90 - 1.10</i>
4.47	4.45	1.0056	Intercept	-0.013146	<i>+/-0.5</i>
2.23	2.21	1.0097			



NMHC Calibration Plot

Date: January 21, 2026

Location: Stony Mountain





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Stony Mountain
 Station number: AMS 18
 Calibration Date: January 26, 2026
 Last Cal Date: December 18, 2025
 Start time (MST): 11:50
 End time (MST): 17:07
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0045516
 NOX Cal Gas Conc: 60.30 ppm
 Removed Cylinder #: N/A
 Removed Gas NOX Conc: 60.30 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API 701
 Cal Gas Expiry Date: November 17, 2026
 NO Cal Gas Conc: 60.10 ppm
 Removed Gas Exp Date: N/A
 Removed Gas NO Conc: 60.10 ppm
 NO gas Diff:
 Serial Number: 2658
 Serial Number: 4890

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.1	-0.1	0.1	----	----
AF High point	4933	66.6	803.3	800.6	2.7	797.1	791.6	5.5	1.0079	1.0112
AF Mid point										
AF Low point										
New cyl resp										
Previous Respo 4933	NO _x = 802.6 ppb	NO = 798.9 ppb	<i>* = > +/-5% change initiates investigation</i>				*Percent Change	NO _x = -0.7%		
Baseline Corr 1st pt	NO _x = 797.0 ppb	NO = 791.7 ppb	<u>As Found Statistics</u>				*Percent Change	NO = -0.9%		
Baseline Corr 2nd pt	NO _x = NA ppb	NO = NA ppb	As found	NO _x r ² :		Nx SI:	Nx Int:			
Baseline Corr 3rd pt	NO _x = NA ppb	NO = NA ppb	As found	NO r ² :		NO SI:	NO Int:			
			As found	NO ₂ r ² :		NO ₂ SI:	NO ₂ Int:			

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo Scientific 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1501663731

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.001044	0.997644
NO _x Cal Offset:	-1.528163	-1.308803
NO Cal Slope:	1.001266	0.999224
NO Cal Offset:	-2.689590	-2.649880
NO ₂ Cal Slope:	1.007381	1.004639
NO ₂ Cal Offset:	-0.226180	-0.226181

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.097	1.107	NO bkgnd or offset:	10.9	11.0
NOX coeff or slope:	1.001	1.000	NOX bkgnd or offset:	11.0	11.1
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	216.8	221.0

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOX concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOX concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOX Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.4	0.1	0.3	----	----
High point	4933	66.6	803.3	800.6	2.7	801.3	799.1	2.1	1.0024	1.0019
Mid point	4967	33.3	401.6	400.2	1.3	397.3	394.7	2.6	1.0108	1.0140
Low point	4983	16.6	200.2	199.5	0.7	197.5	194.8	2.7	1.0137	1.0244
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.1	0.2	----	----
As left span	4933	66.6	803.3	388.2	415.1	800.6	388.2	412.5	1.0033	1.0000
Average Correction Factor									1.0090	1.0134

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.3	----	----
High GPT point	793.9	388.3	408.3	410.2	0.9953	100.5%
Mid GPT point	793.9	594.4	202.2	202.6	0.9978	100.2%
Low GPT point	793.9	693.0	103.6	103.3	1.0026	99.7%
Average Correction Factor					0.9986	100.1%

Notes:

Sample inlet filter changed out, span adjusted.

Calibration Performed By: Aswin Sasi Kumar, Jason Brooks



Wood Buffalo Environmental Association

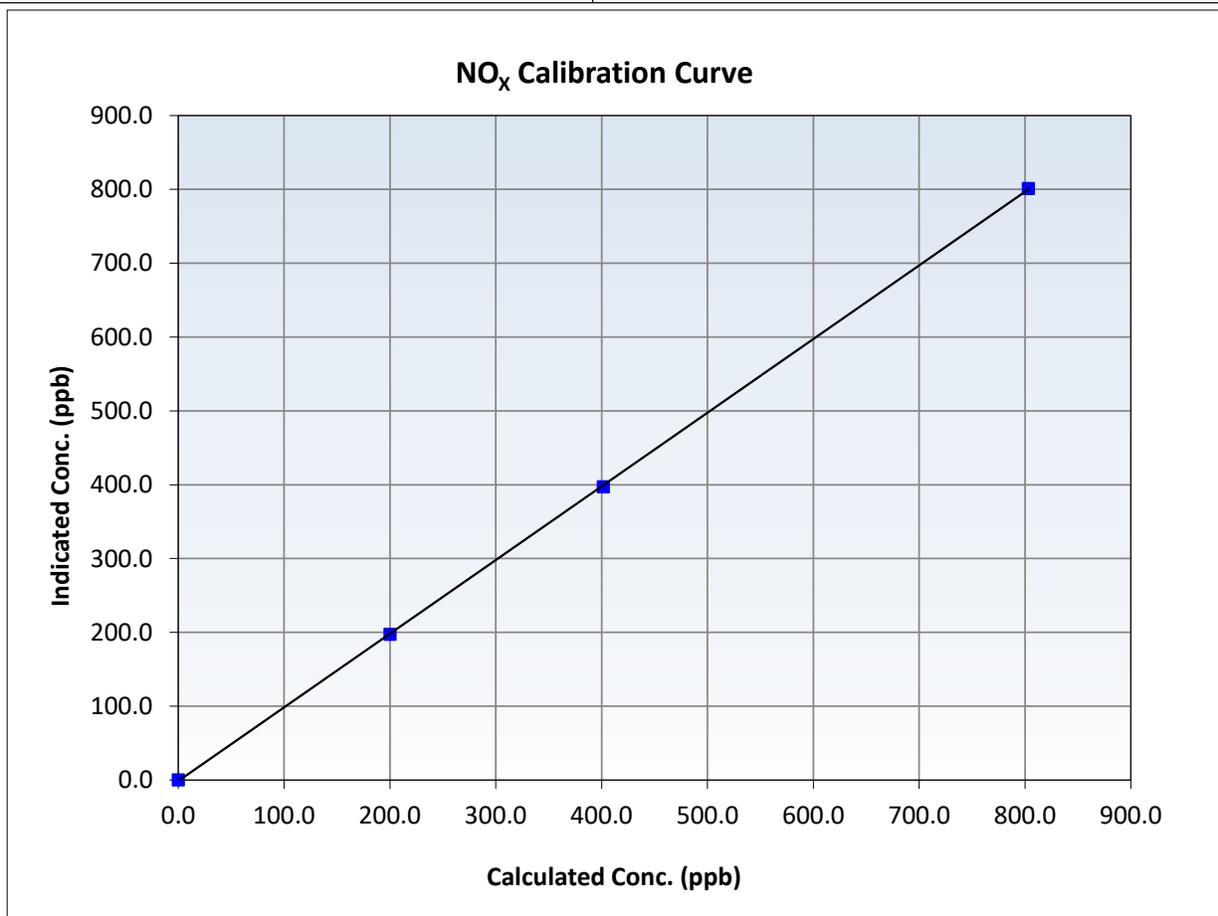
NO_x Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 18, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:50	End Time (MST):	17:07
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.4	----	Correlation Coefficient	0.999973	<i>≥0.995</i>
803.3	801.3	1.0024	Slope	0.997644	<i>0.90 - 1.10</i>
401.6	397.3	1.0108	Intercept	-1.308803	<i>+/-20</i>
200.2	197.5	1.0137			





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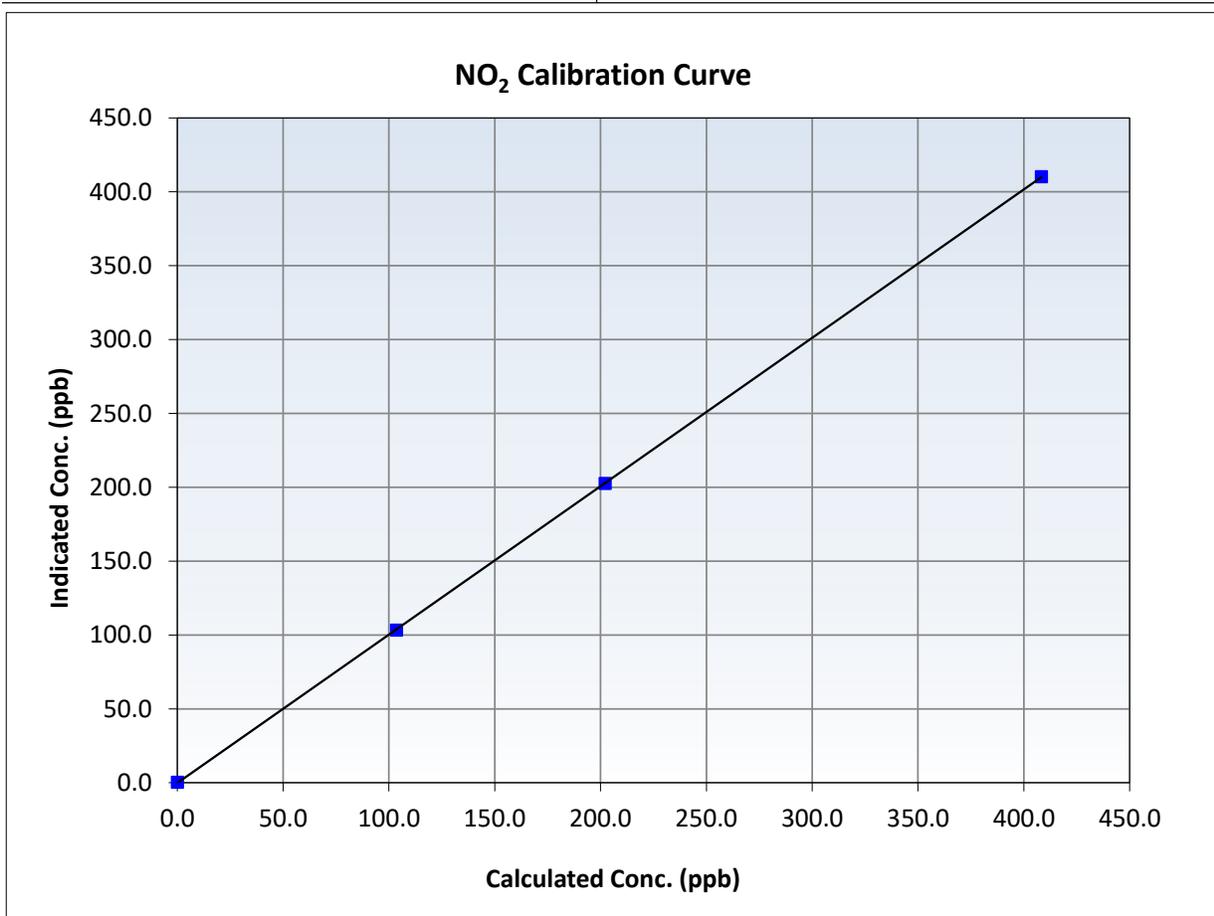
NO₂ Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 18, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:50	End Time (MST):	17:07
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.3	----	Correlation Coefficient	0.999992	≥0.995
408.3	410.2	0.9953	Slope	1.004639	0.90 - 1.10
202.2	202.6	0.9978	Intercept	-0.226181	+/-20
103.6	103.3	1.0026			





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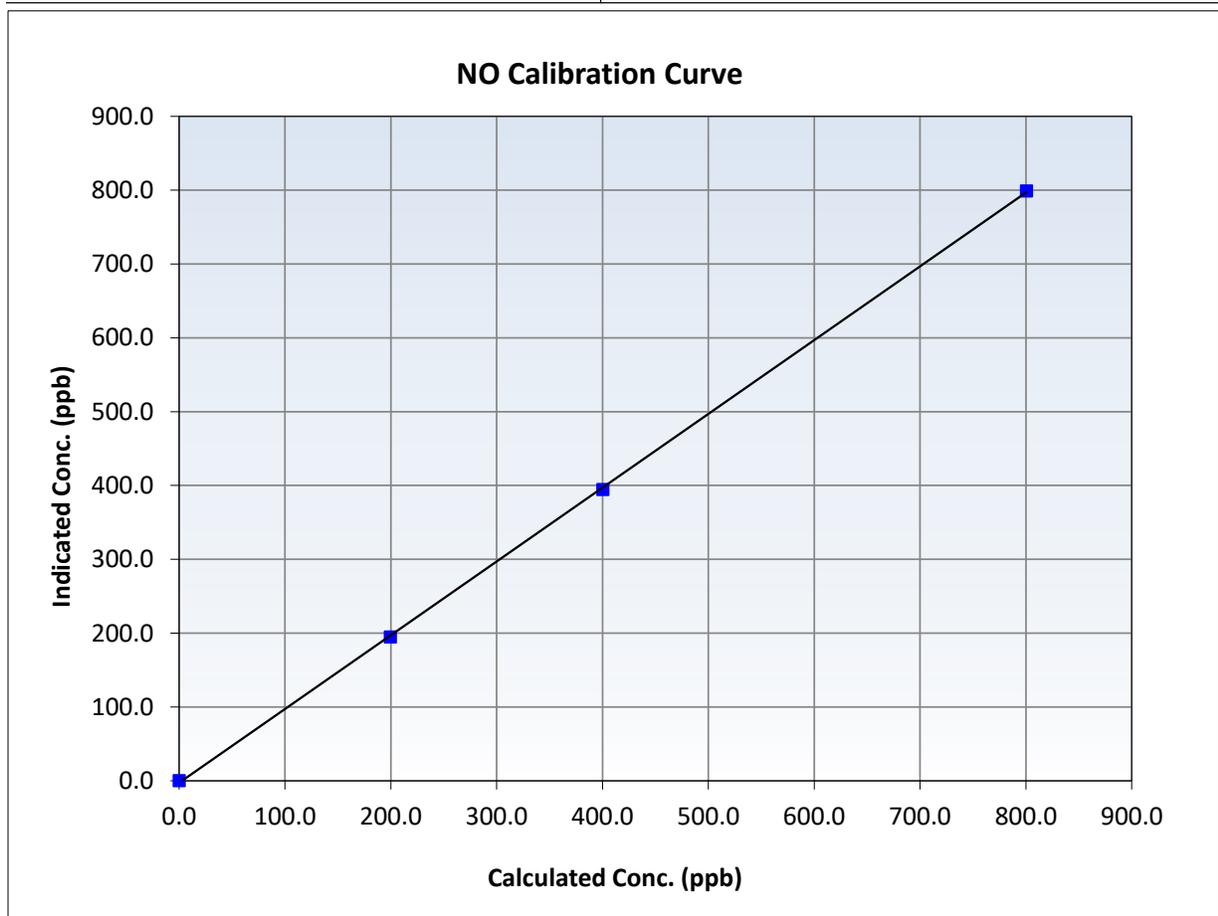
NO Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 18, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:50	End Time (MST):	17:07
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

Calibration Data

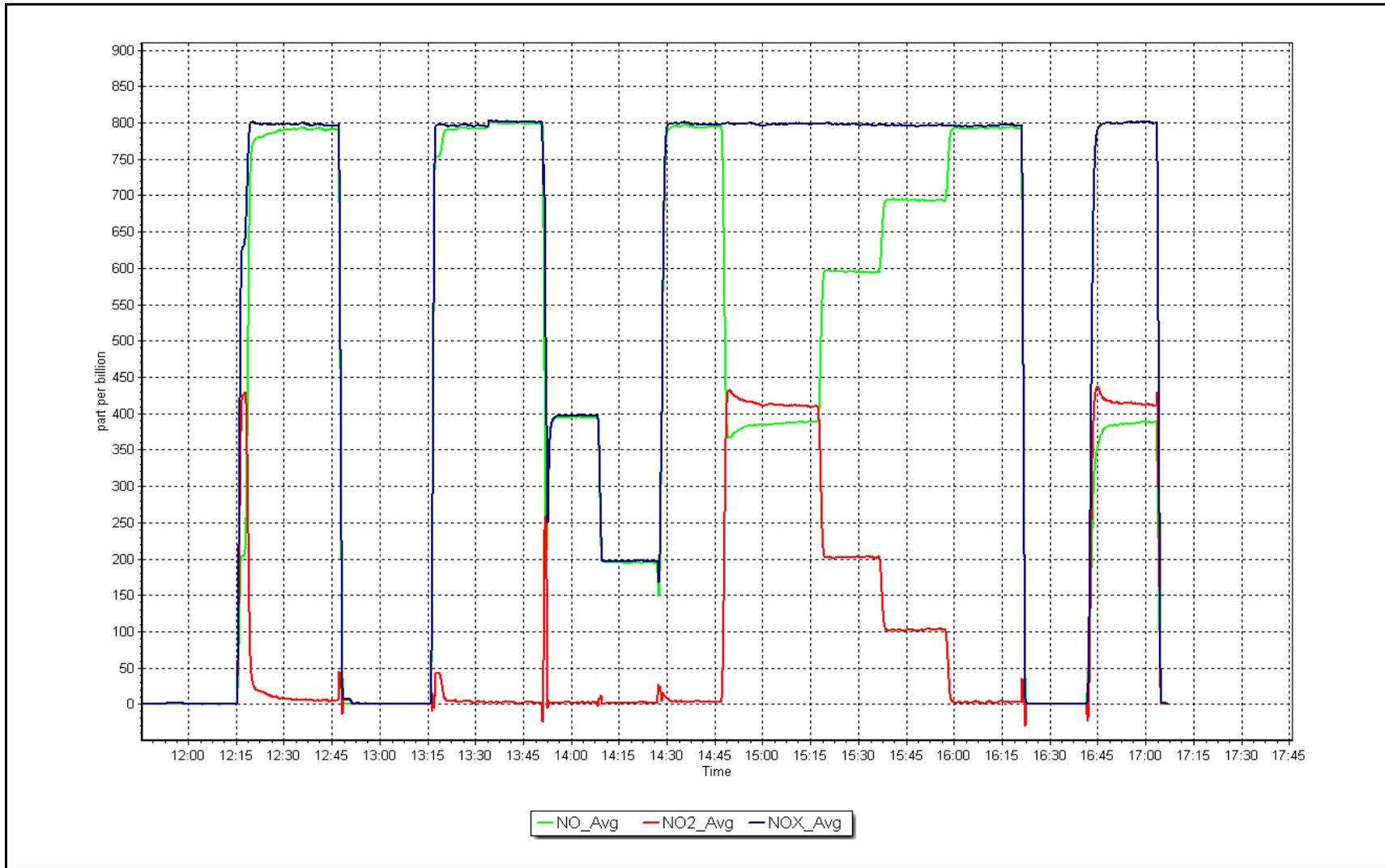
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999940	<i>≥0.995</i>
800.6	799.1	1.0019	Slope	0.999224	<i>0.90 - 1.10</i>
400.2	394.7	1.0140	Intercept	-2.649880	<i>+/-20</i>
199.5	194.8	1.0244			



NO_x Calibration Plot

Date: January 26, 2026

Location: Stony Mountain





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	January 13, 2026	Last Cal Date:	December 3, 2025
Start time (MST):	11:35	End time (MST):	15:06
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	2658
Calibrator Make/Model:	Teledyne API T700	Serial Number:	4890
ZAG Make/Model:	Teledyne API 701H		

Analyzer Information

Analyzer make:	API T400	Analyzer serial #:	825
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.997029	0.999314	Backgd or Offset:	3.1	3.1
Calibration intercept:	-0.180000	0.720000	Coeff or Slope:	1.010	1.023

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	NA	0.0	0.3	----
As found High point	4888	1141.2	400.0	395.9	1.011
As found Mid point					
As found Low point					
Baseline Corr As found:	395.6	Previous response	398.6	*% change	-0.8%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	NA	0.0	0.2	----
High point	4888	1138.1	400.0	400.2	1.000
Mid point	4888	884.5	200.0	200.8	0.996
Low point	4888	741.4	100.0	101.2	0.988
As left zero	5000	NA	0.0	-0.1	----
As left span	4812	1097.9	400.0	400.8	0.998
Average Correction Factor					0.995

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

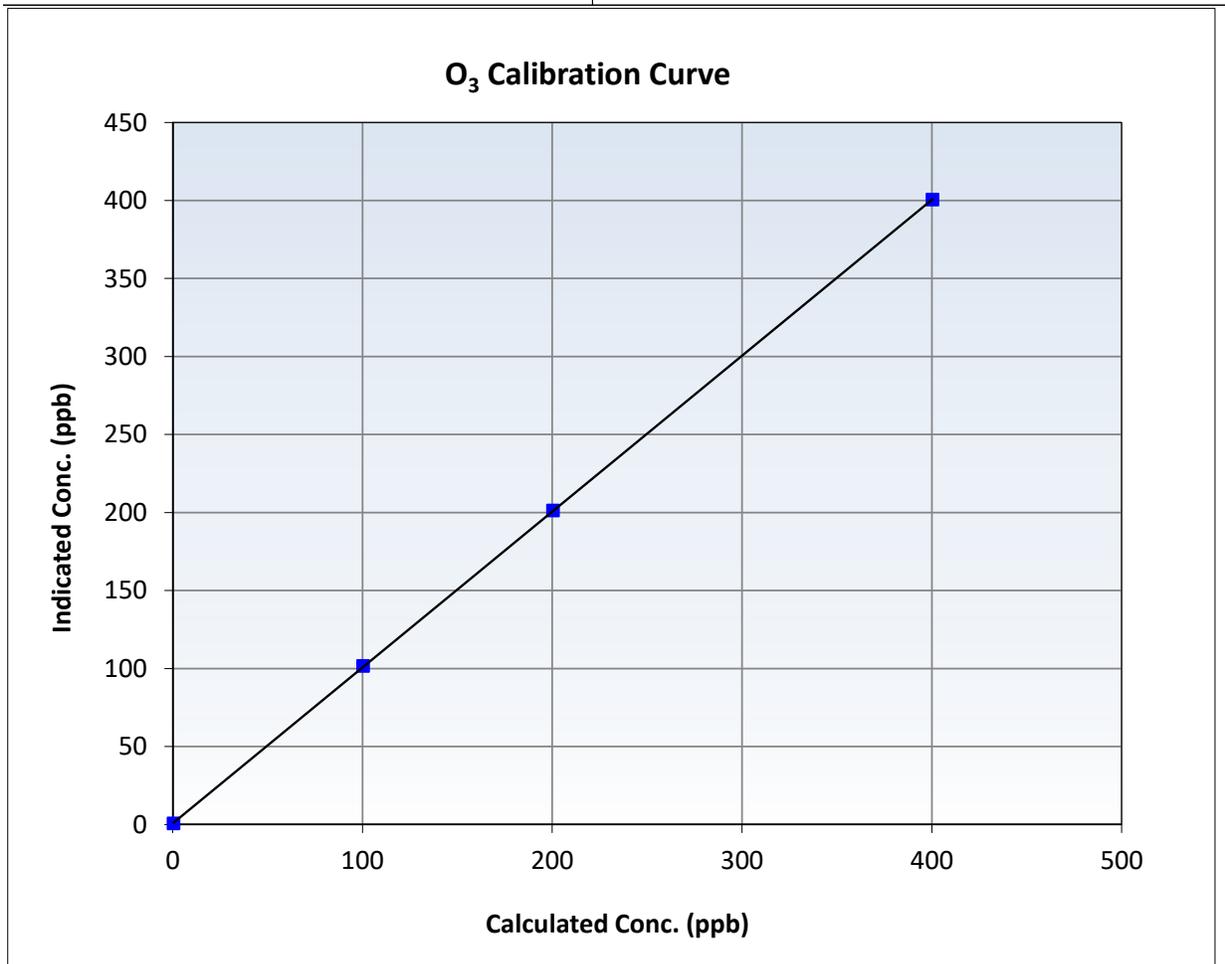
O₃ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 3, 2025
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:35	End Time (MST):	15:06
Analyzer make:	API T400	Analyzer serial #:	825

Calibration Data

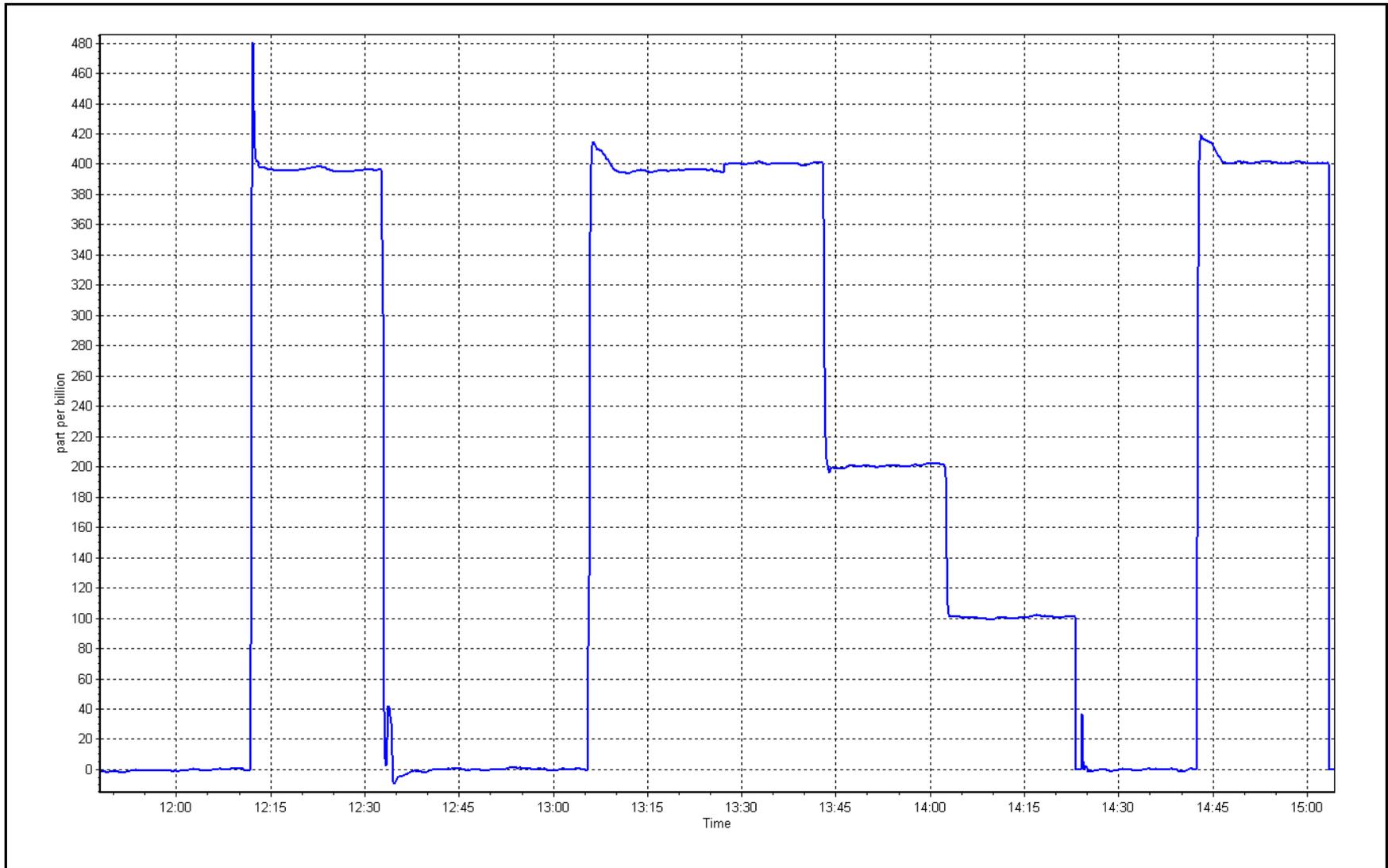
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999992	≥0.995
400.0	400.2	0.9995	Slope	0.999314	0.90 - 1.10
200.0	200.8	0.9960	Intercept	0.720000	+/- 5
100.0	101.2	0.9881			



O₃ Calibration Plot

Date: January 13, 2026

Location: Stony Mountain





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Stony Mountain Station number: AMS 18
 Calibration Date: January 26, 2026 Last Cal Date: December 18, 2025
 Start time (MST): 13:01 End time (MST): 16:01

Analyzer Make: API T640 S/N: 324
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388748
 Temp/RH standard: Alicat FP-25BT S/N: 388748

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-13.7	-15.6	-13.7	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	704.4	704.23	704.4	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.00	3.24	4.98	<input checked="" type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	40	----	40	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	0.3	PM w/ HEPA: _____	0.0	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.9 Expiry Date: October 10, 2024
 Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test	N/A	9	11.1	<input checked="" type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: January 26, 2026
 Date Disposable Filter Changed: October 31, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ 0.0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: September 23, 2025
 Date RH/T Sensor Cleaned: September 23, 2025

Notes: Flow, pressure and temp checked. Flow adjusted. Leak check passed. Quarterly checks done. PMT adjusted.

Calibration by: Aswin Sasi Kumar, Jason Brooks



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS19 FIREBAG JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	January 15, 2026	Last Cal Date:	December 11, 2025
Start time (MST):	11:20	End time (MST):	14:51
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.97	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	CC705799			
Removed Cal Gas Conc:	50.97	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	1607
Zero Air Gen Model:	Teledyne API T701H		Serial Number:	201

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1410661308
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.999545	1.000717	Backgd or Offset:	11.3	11.3
Calibration intercept:	1.280000	0.620000	Coeff or Slope:	1.008	1.008

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	4999	0.0	0.0	-0.1	----
As found High point	4922	78.4	799.2	798.7	1.001
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	798.8	Previous response	800.1	*% change	-0.2%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	4999	0.0	0.0	0.0	----
High point	4922	78.4	799.2	800.0	0.999
Mid point	4961	39.2	399.6	401.1	0.996
Low point	4980	19.6	199.8	201.0	0.994
As left zero	4999	0.0	0.0	0.1	----
As left span	4922	78.4	799.2	801.0	0.998
Average Correction Factor:					0.996

Notes: Changed sample inlet filter after as founds. No adjustments made.

Calibration Performed By: Braiden Boutillier



Wood Buffalo Environmental Association

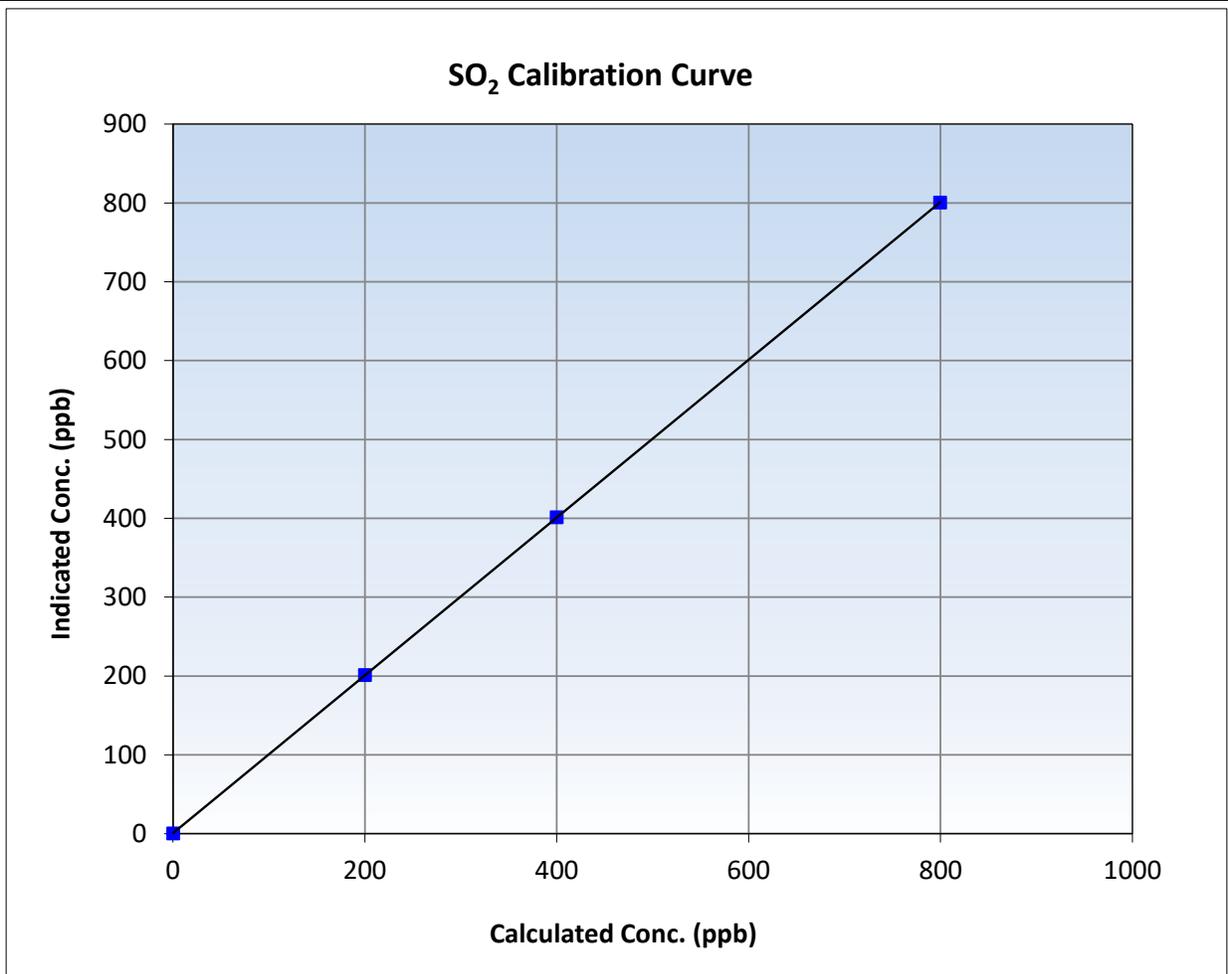
SO₂ Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 11, 2025
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	11:20	End Time (MST):	14:51
Analyzer make:	Thermo 43i	Analyzer serial #:	1410661308

Calibration Data

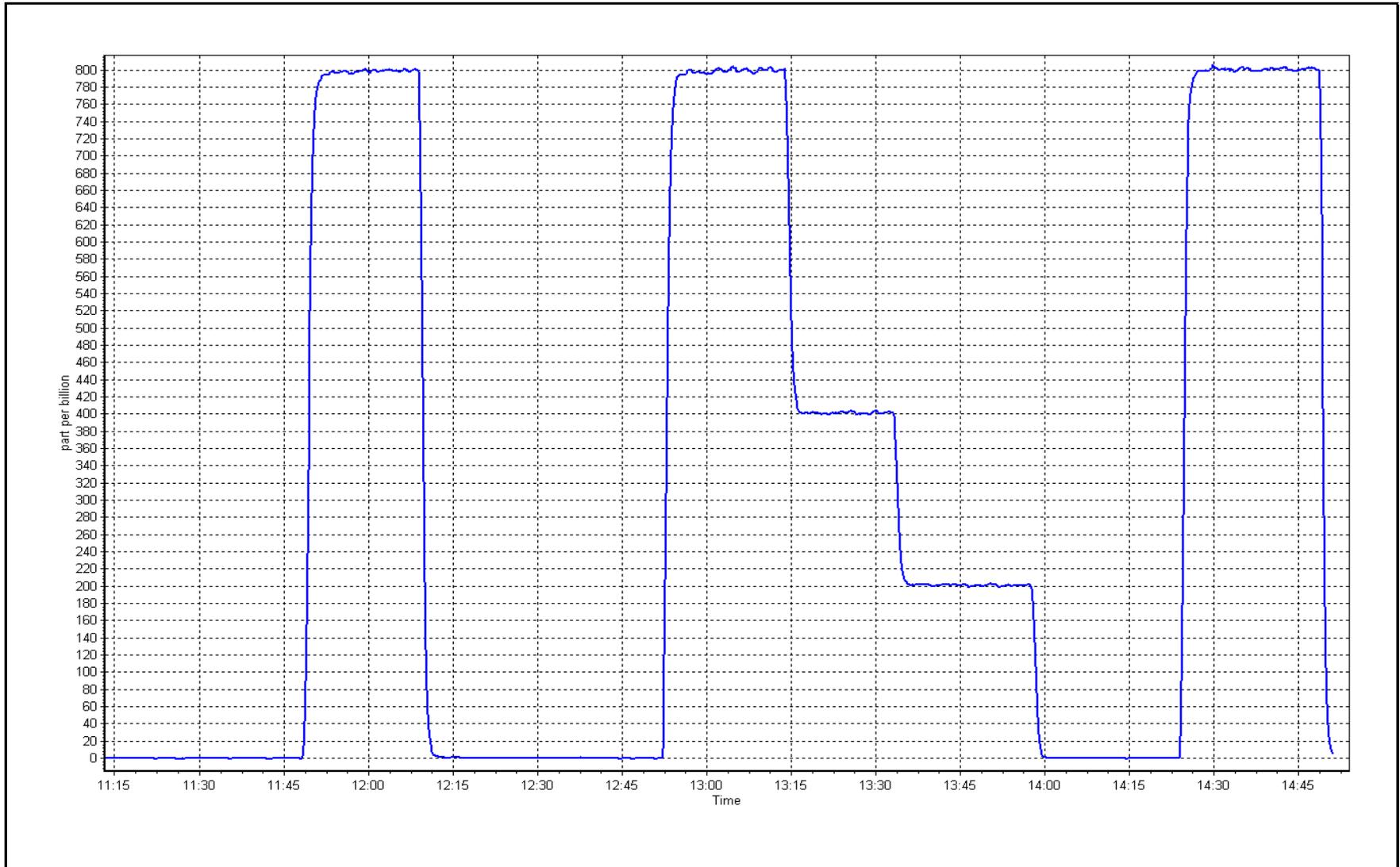
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999997	≥0.995
799.2	800.0	0.9990	Slope	1.000717	0.90 - 1.10
399.6	401.1	0.9963	Intercept	0.620000	+/-30
199.8	201.0	0.9940			



SO2 Calibration Plot

Date: January 15, 2026

Location: Firebag





Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	January 13, 2026	Last Cal Date:	December 16, 2025
Start time (MST):	11:19	End time (MST):	16:58
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.29	ppm	Cal Gas Exp Date:	March 19, 2027
Cal Gas Cylinder #:	DT0010492			
Removed Cal Gas Conc:	5.29	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	1607
ZAG Make/Model:	Teledyne API T701		Serial Number:	201

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680032
Converter make:	Global	Converter serial #:	2022-222
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006048	0.996046	Backgd or Offset:	3.45	2.90
Calibration intercept:	0.020000	0.120000	Coeff or Slope:	1.274	1.219

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.3	----
As found High point	4924	75.6	80.0	84.2	0.947
As found Mid point	4962	37.8	40.0	42.0	0.945
As found Low point	4981	18.9	20.0	20.8	0.948
New cylinder response					
Baseline Corr As found:	84.5	Prev response:	80.49	*% change:	4.7%
Baseline Corr 2nd AF pt:	42.3	AF Slope:	1.056629	AF Intercept:	-0.300000
Baseline Corr 3rd AF pt:	21.1	AF Correlation:	0.999999	<i>* = > +/-5% change initiates investigation</i>	

H2S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4924	75.6	80.0	79.8	1.002
Mid point	4962	37.8	40.0	39.9	1.002
Low point	4981	18.9	20.0	20.1	0.995
As left zero	5000	0.0	0.0	0.2	----
As left span	4924	75.6	80.0	79.1	1.011
SO2 Scrubber Check				0.0	
Date of last scrubber change:		18-Jan-23		Ave Corr Factor	1.000
Date of last converter efficiency test:		November 26, 2024		106.2%	efficiency

Notes: Changed sample inlet filter after as founds. SOx scrubber check done after cal zero, passed.
Adjusted zero and span.

Calibration Performed By: Braiden Boutilier



Wood Buffalo Environmental Association

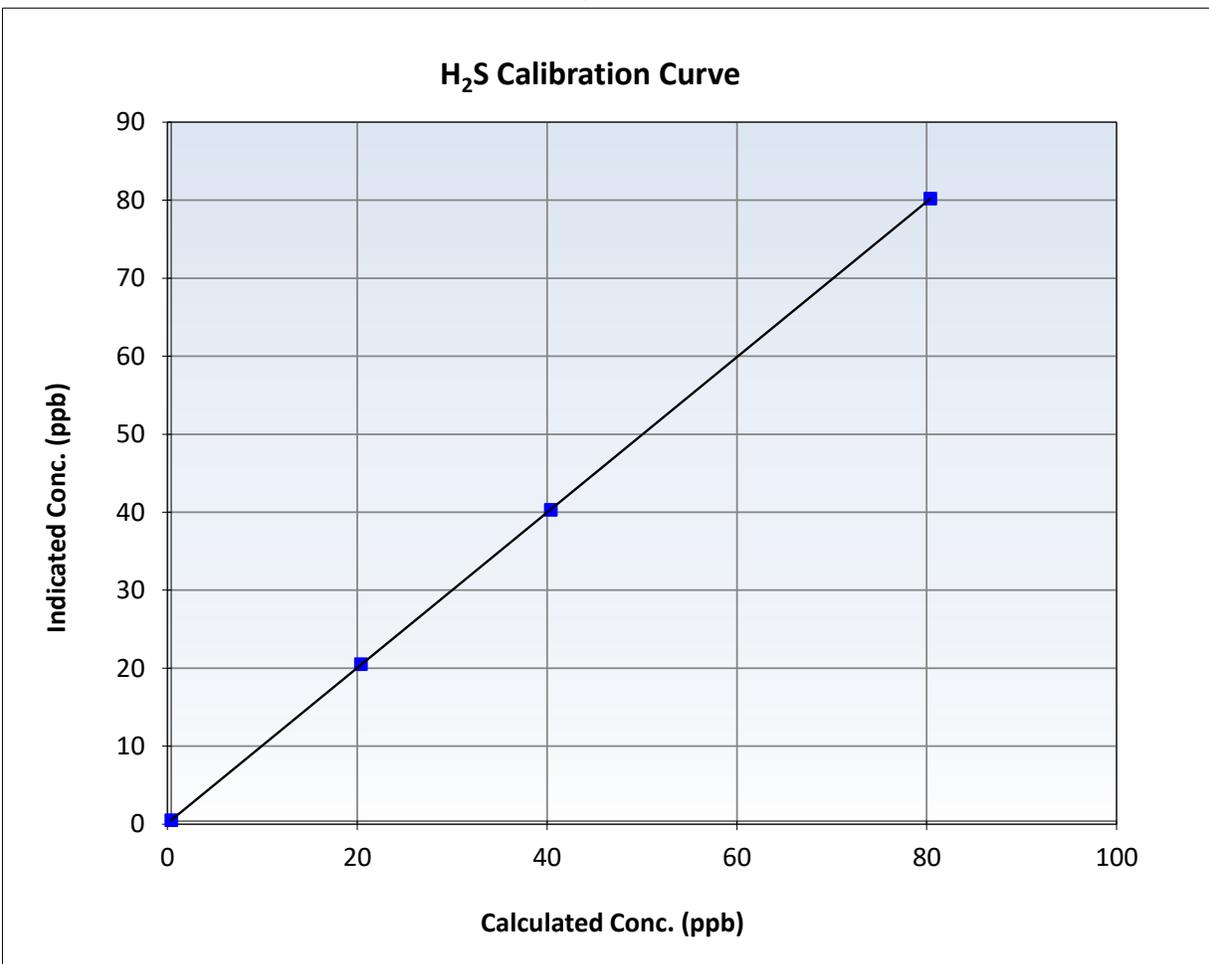
H2S Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 16, 2025
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	11:19	End Time (MST):	16:58
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680032

Calibration Data

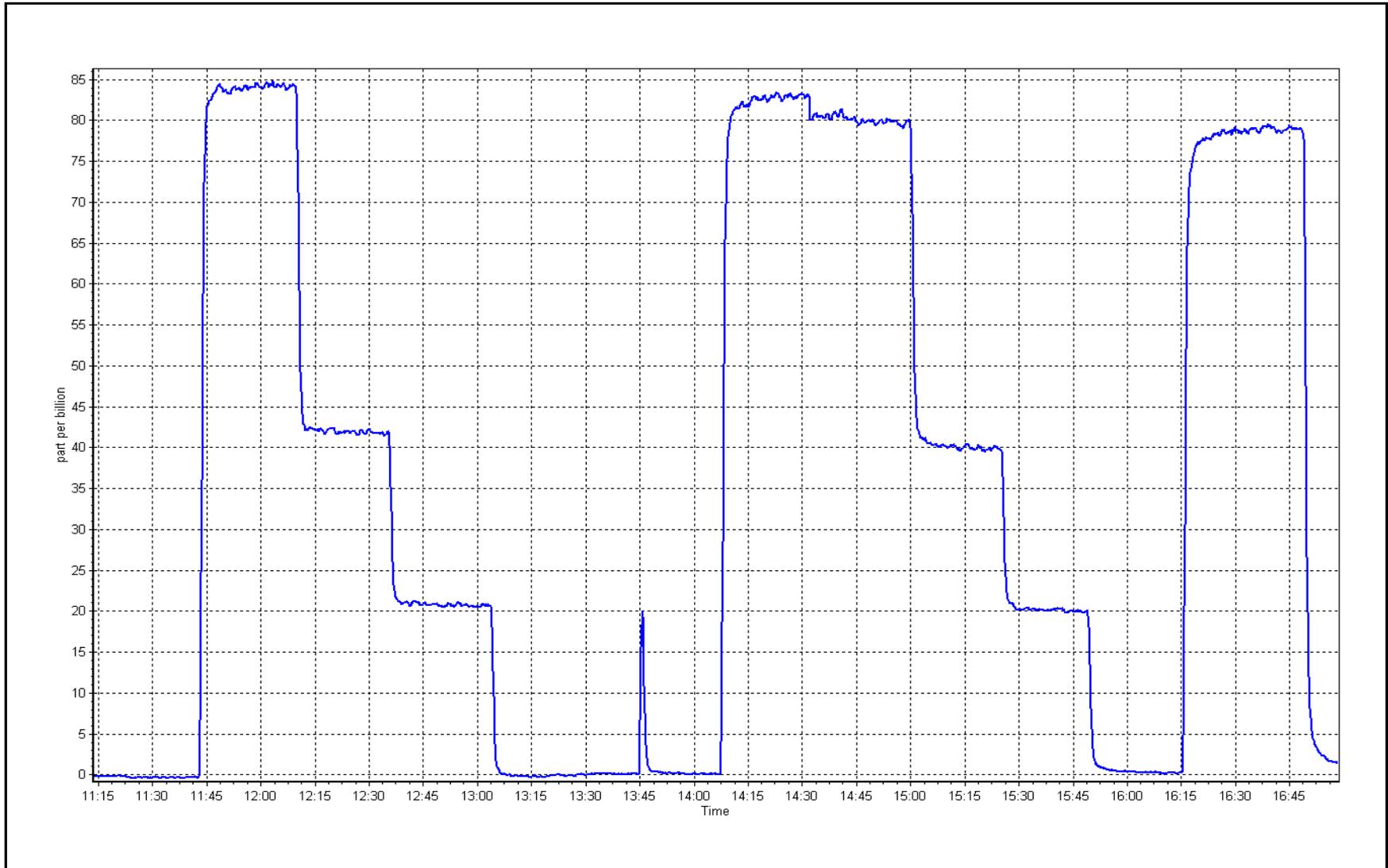
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999998	≥ 0.995
80.0	79.8	1.0023	Slope	0.996046	$0.90 - 1.10$
40.0	39.9	1.0023	Intercept	0.120000	± 3
20.0	20.1	0.9948			



H2S Calibration Plot

Date: January 13, 2026

Location: Firebag





Wood Buffalo Environmental Association

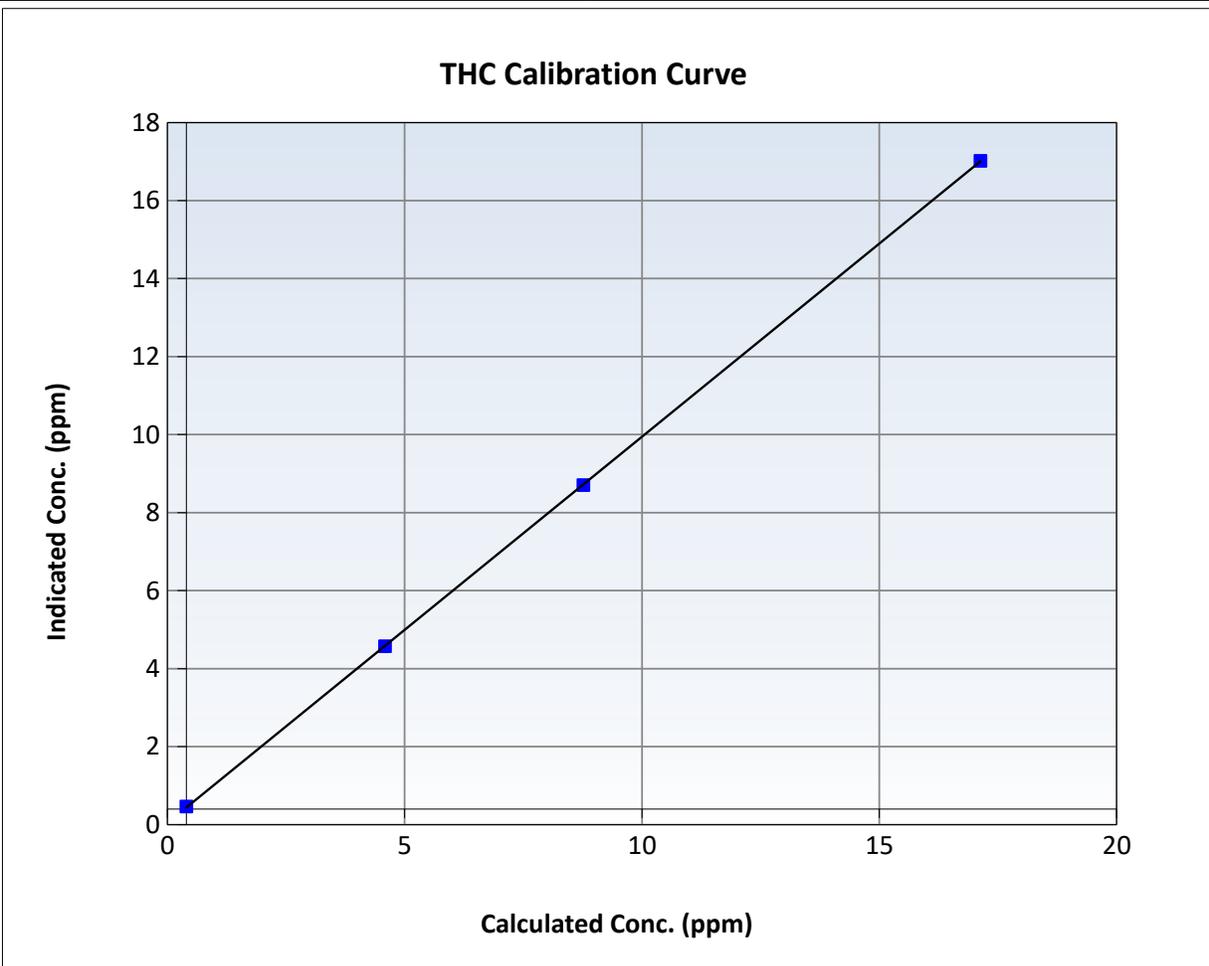
THC Calibration Summary

Station Information

Calibration Date:	January 15, 2026	Previous Calibration:	December 11, 2025
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	11:20	End Time (MST):	14:51
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1336160089

Calibration Data

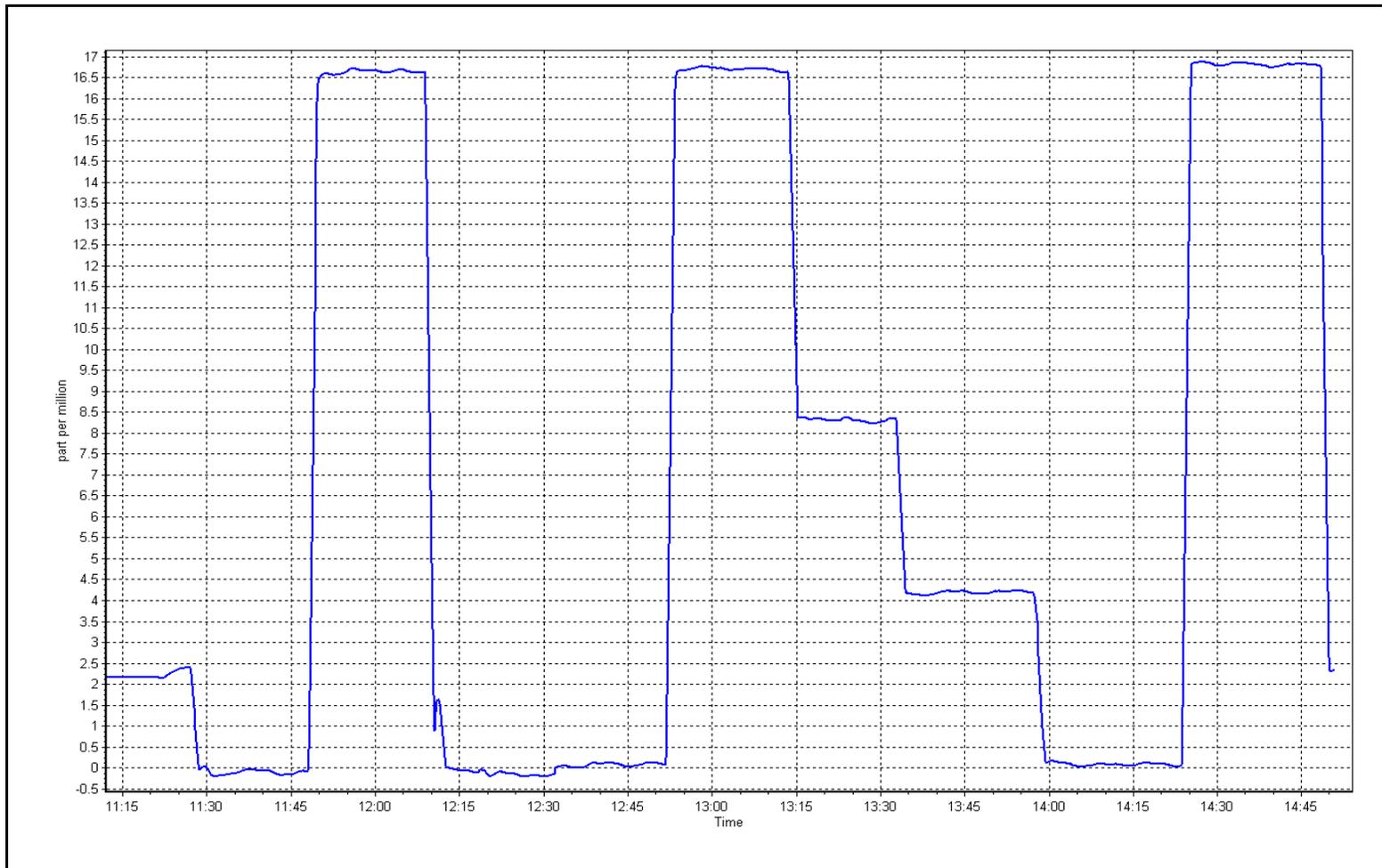
Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.06	----	Correlation Coefficient	0.999992	≥0.995
16.73	16.62	1.0066	Slope	0.990182	0.90 - 1.10
8.36	8.30	1.0078	Intercept	0.040668	+/-1.5
4.18	4.17	1.0026			



THC Calibration Plot

Date: January 15, 2026

Location: Firebag





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Firebag
 Station number: AMS 19
 Calibration Date: January 23, 2026
 Last Cal Date: December 9, 2025
 Start time (MST): 11:01
 End time (MST): 15:40
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0044018
 NOX Cal Gas Conc: 48.90 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 48.90 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701H
 Cal Gas Expiry Date: November 3, 2031
 NO Cal Gas Conc: 48.70 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 48.70 ppm
 NO gas Diff:
 Serial Number: 1607
 Serial Number: 201

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.3	0.0	----	----
AF High point	4918	82.1	802.9	799.7	3.3	821.0	817.0	3.2	0.9776	0.9784
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 810.2 ppb		NO = 806.2 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 1.4%	
Baseline Corr 1st pt	NO _x = 821.3 ppb		NO = 817.3 ppb			<u>As Found Statistics</u>		*Percent Change	NO = 1.4%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1410661309

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.008577	0.994971
NO _x Cal Offset:	0.340108	0.120563
NO Cal Slope:	1.007889	0.995599
NO Cal Offset:	0.279897	0.080340
NO ₂ Cal Slope:	0.997750	1.003808
NO ₂ Cal Offset:	-0.034924	-0.933673

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.922	0.896	NO bkgnd or offset:	4.6	4.5
NOX coeff or slope:	0.993	0.994	NOX bkgnd or offset:	4.6	4.5
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	162.0	164.2

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOX concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOX concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOX Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
High point	4918	82.1	802.9	799.7	3.3	799.2	796.3	2.9	1.0047	1.0042
Mid point	4959	41.1	402.0	400.3	1.6	399.3	398.2	1.1	1.0067	1.0053
Low point	4980	20.5	200.5	199.7	0.8	200.4	199.4	1.1	1.0004	1.0014
As left zero	5000	0	0.0	0.0	0.0	-0.2	-0.2	0.0	----	----
As left span	4918	82.1	802.9	389.5	413.4	794.6	389.5	405.2	1.0105	1.0000
Average Correction Factor									1.0039	1.0036

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.0	----	----
High GPT point	787.8	389.5	401.6	402.5	0.9977	100.2%
Mid GPT point	787.8	589.3	201.8	201.6	1.0009	99.9%
Low GPT point	787.8	690.0	101.1	99.3	1.0180	98.2%
Average Correction Factor					1.0055	99.5%

Notes: Changed sample inlet filter after as founds. Adjusted span.

Calibration Performed By: Braiden Boutilier



Wood Buffalo Environmental Association

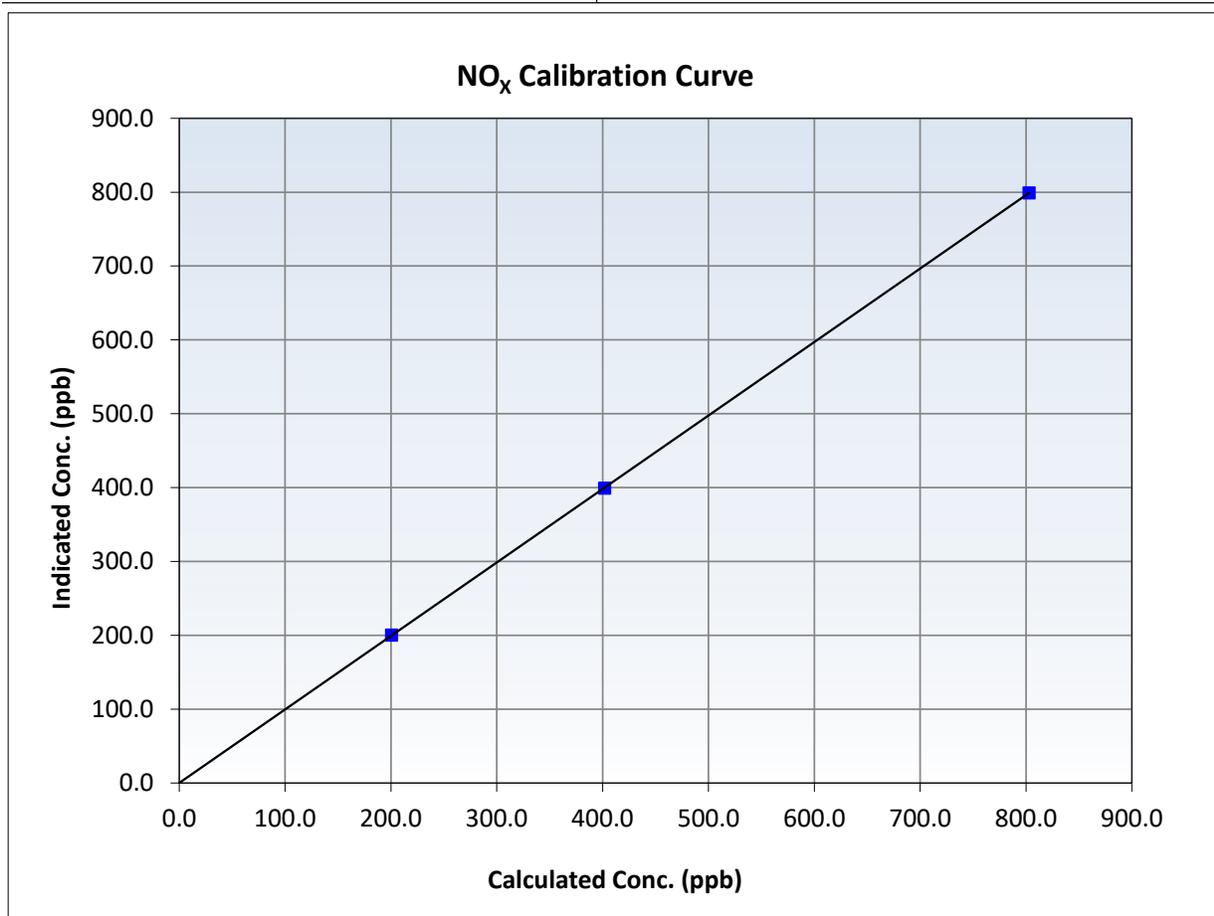
NO_x Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	December 9, 2025
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	11:01	End Time (MST):	15:40
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661309

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999996	≥0.995
802.9	799.2	1.0047	Slope	0.994971	0.90 - 1.10
402.0	399.3	1.0067	Intercept	0.120563	+/-20
200.5	200.4	1.0004			





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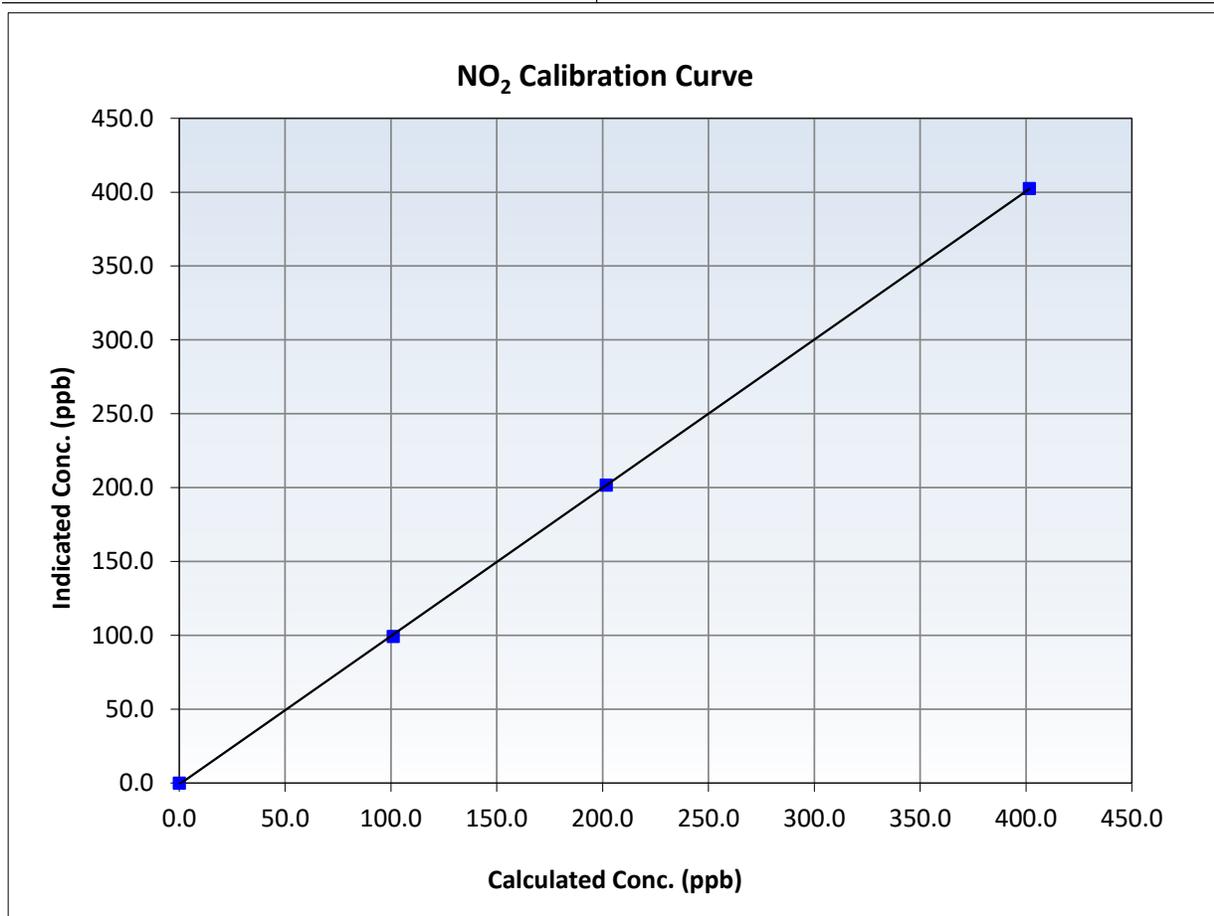
NO₂ Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	December 9, 2025
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	11:01	End Time (MST):	15:40
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661309

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999972	≥0.995
401.6	402.5	0.9977	Slope	1.003808	0.90 - 1.10
201.8	201.6	1.0009	Intercept	-0.933673	+/-20
101.1	99.3	1.0180			





Wood Buffalo Environmental Association

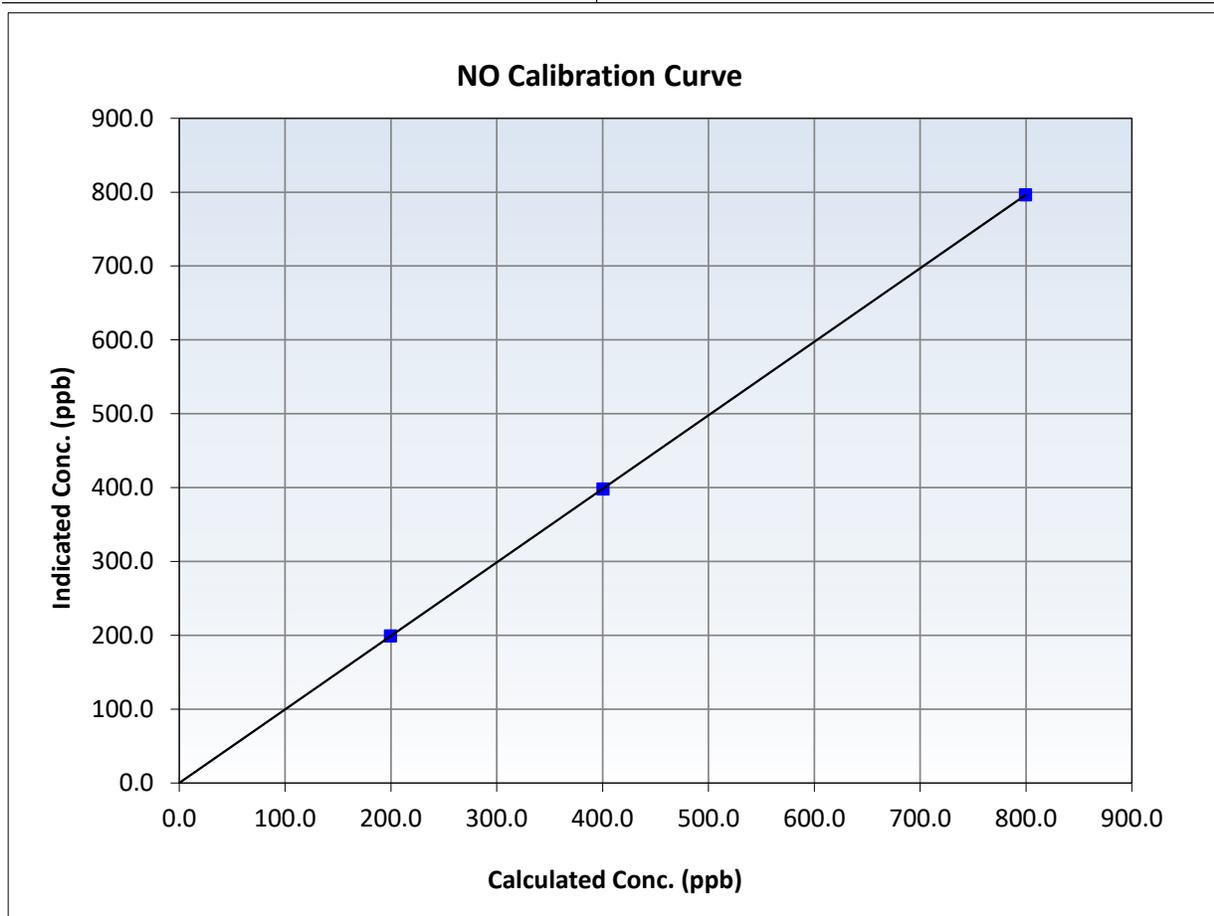
NO Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	December 9, 2025
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	11:01	End Time (MST):	15:40
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661309

Calibration Data

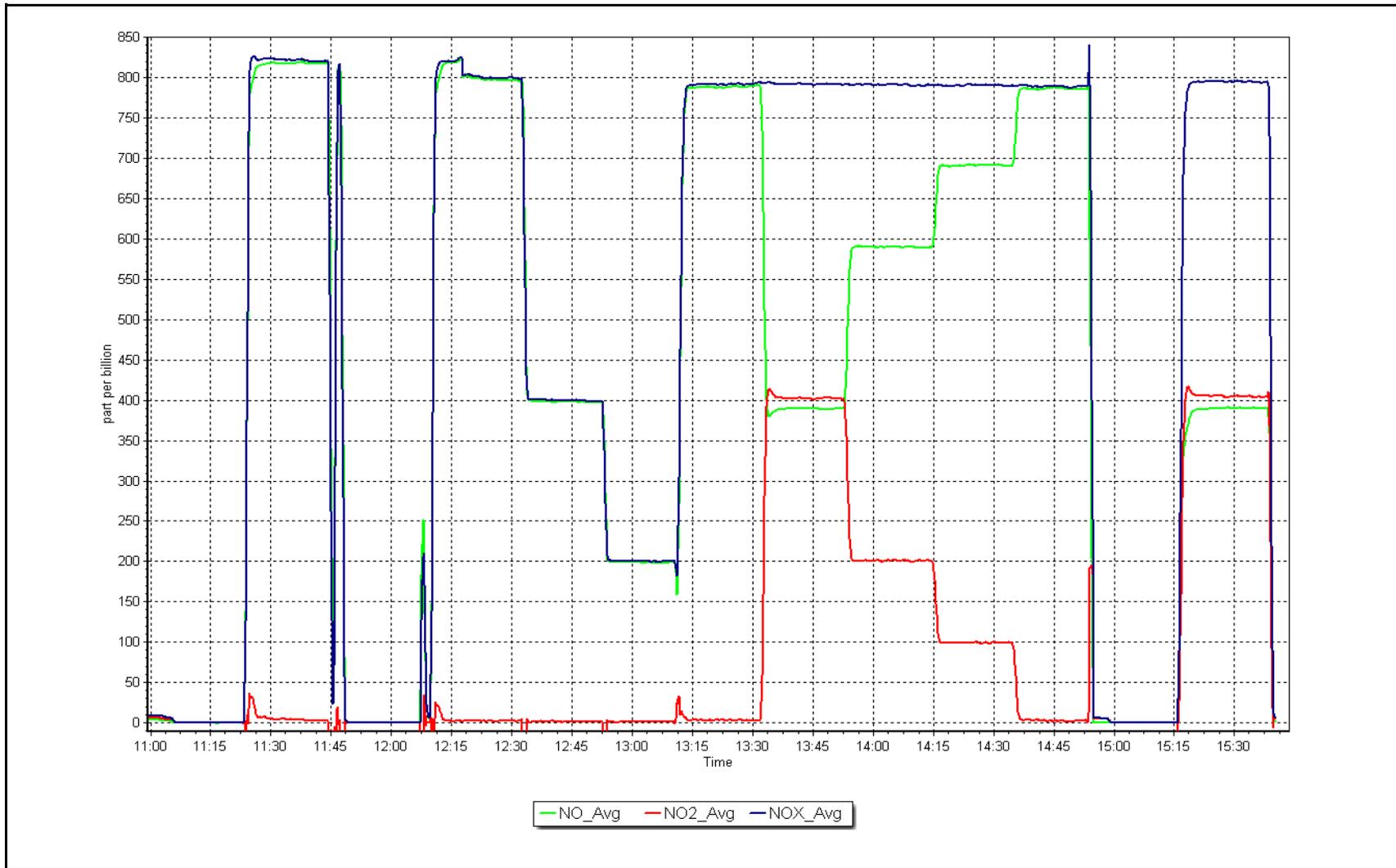
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999999	<i>≥0.995</i>
799.7	796.3	1.0042	Slope	0.995599	<i>0.90 - 1.10</i>
400.3	398.2	1.0053	Intercept	0.080340	<i>+/-20</i>
199.7	199.4	1.0014			



NO_x Calibration Plot

Date: January 23, 2026

Location: Firebag





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS20 MACKAY RIVER JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	MacKay River	Station number: AMS 20
Calibration Date:	January 9, 2026	Last Cal Date: December 5, 2025
Start time (MST):	9:05	End time (MST): 11:53
Reason:	Routine	

Calibration Standards

Cal Gas Concentration:	49.15	ppm	Cal Gas Exp Date: October 9, 2032
Cal Gas Cylinder #:	CC409669		
Removed Cal Gas Conc:	49.15	ppm	Rem Gas Exp Date:
Removed Gas Cyl #:			Diff between cyl:
Calibrator Model:	API T700		Serial Number: 5706
Zero Air Gen Model:	API 701		Serial Number: 4888

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: 1501301450
Analyzer Range:	0-1000ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.997204	0.998332	Backgd or Offset:	20.4	20.6
Calibration intercept:	-0.056655	0.623529	Coeff or Slope:	0.932	0.945

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.5	----
As found High point	4919	81.4	800.1	791.1	1.012
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	790.6	Previous response	797.8	*% change	-0.9%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.7	----
High point	4919	81.4	800.1	799.5	1.001
Mid point	4959	40.7	400.1	399.8	1.001
Low point	4980	20.3	199.5	199.9	0.998
As left zero	5000	0.0	0.0	0.7	----
As left span	4919	81.4	800.1	803.3	0.996
Average Correction Factor:					1.000

Notes: Span adjusted. No Maintenance done.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

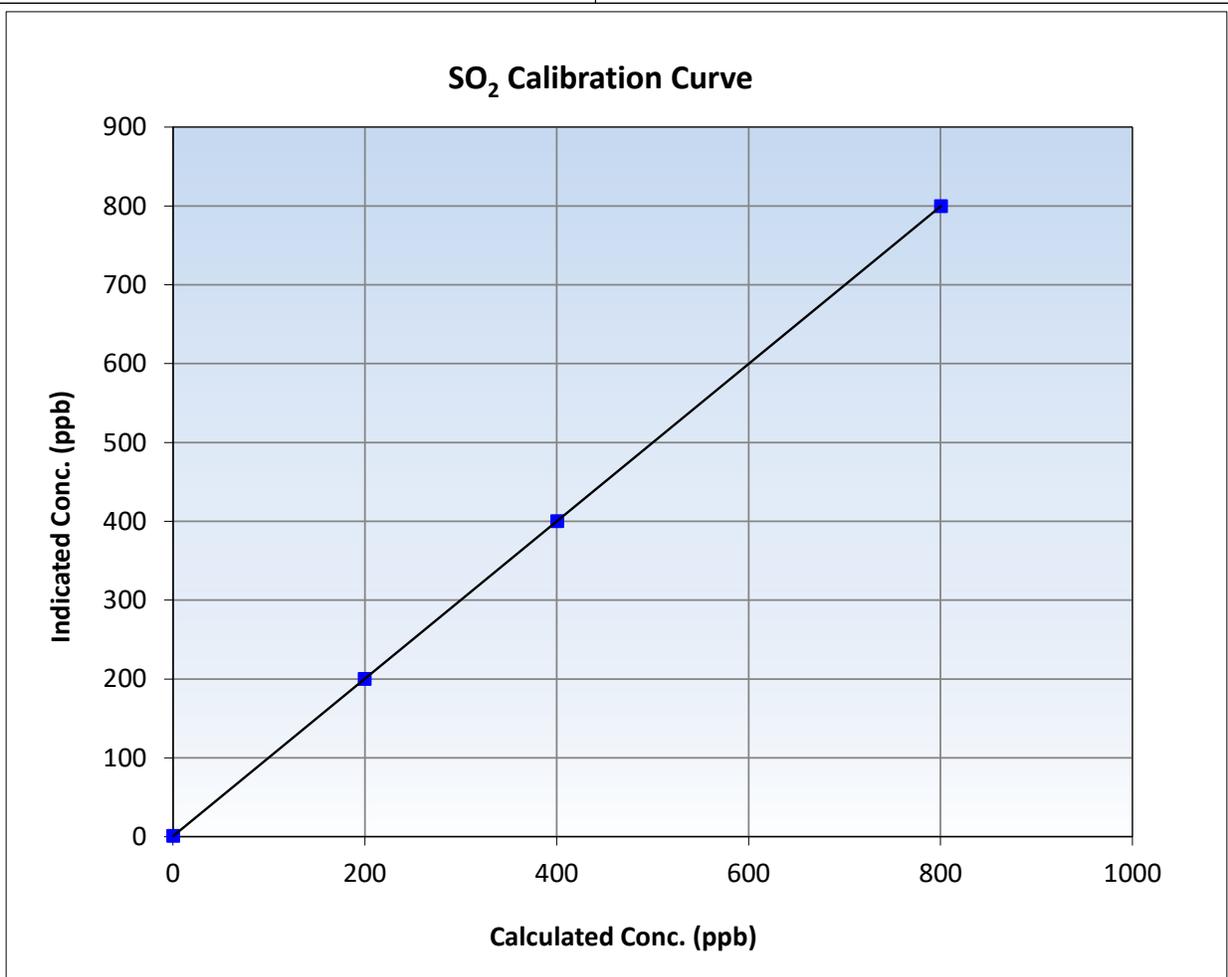
SO₂ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 5, 2025
Station Name:	Mackay River	Station Number:	AMS 20
Start Time (MST):	9:05	End Time (MST):	11:53
Analyzer make:	Thermo 43i	Analyzer serial #:	1501301450

Calibration Data

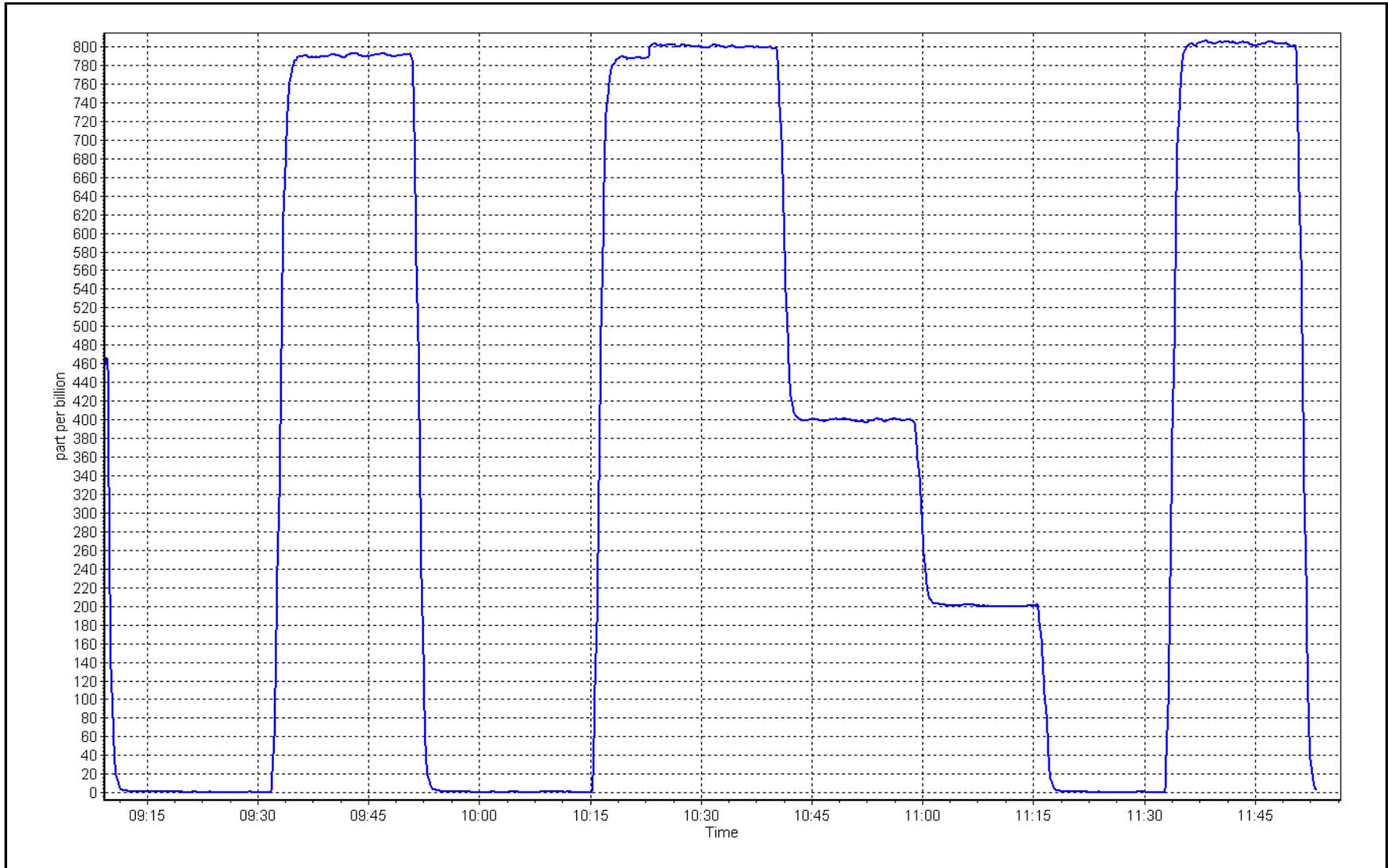
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>
0.0	0.7	----	Correlation Coefficient	1.000000
800.1	799.5	1.0007	Slope	0.998332
400.1	399.8	1.0008	Intercept	0.623529
199.5	199.9	0.9982		
				≥0.995 0.90 - 1.10 +/-30



SO2 Calibration Plot

Date: January 9, 2026

Location: MacKay River





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	MacKay River	Station number:	AMS 20
Calibration Date:	January 6, 2026	Last Cal Date:	December 3, 2025
Start time (MST):	8:28	End time (MST):	12:14
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.12	ppm	Cal Gas Exp Date:	January 3, 2026
Cal Gas Cylinder #:	CC515997			
Removed Cal Gas Conc:	5.12	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	5706
ZAG Make/Model:	API 701		Serial Number:	4888

Analyzer Information

Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1236656117
Converter make:	Global	Converter serial #:	2022-226
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.998597	0.998452	Backgd or Offset:	3.77	3.77
Calibration intercept:	0.079373	0.159443	Coeff or Slope:	1.071	1.071

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4922	78.1	80.0	80.5	0.993
As found Mid point	4961	39.0	39.9	40.3	0.991
As found Low point	4980	19.5	20.0	20.1	0.994
New cylinder response					
Baseline Corr As found:	80.5	Prev response:	79.94	*% change:	0.7%
Baseline Corr 2nd AF pt:	40.3	AF Slope:	1.006742	AF Intercept:	0.019524
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999998	* = > +/-5% change initiates investigation	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4922	78.1	80.0	79.9	1.001
Mid point	4961	39.0	39.9	40.3	0.991
Low point	4980	19.5	20.0	20.0	0.998
As left zero	5000	0.0	0.0	0.1	----
As left span	4922	78.1	80.0	79.7	1.003
SO ₂ Scrubber Check	4982	81.3	802.8	0.0	----
Date of last scrubber change:		25-May-23		Ave Corr Factor	0.997
Date of last converter efficiency test:					

Notes: Sox scrubber checked after the calibrator zero. No adjustments done.

Calibration Performed By: Melissa Lemay



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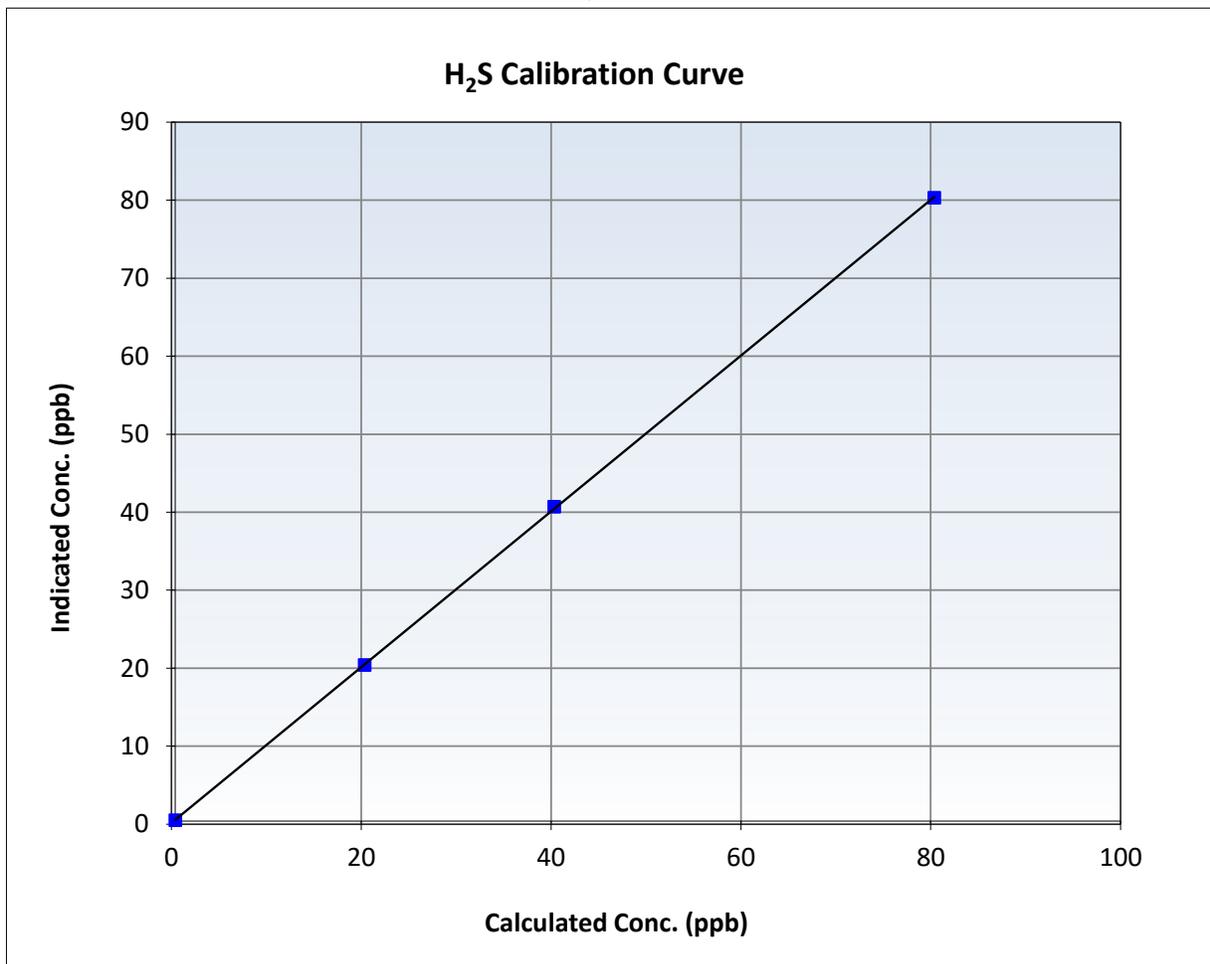
H₂S Calibration Summary

Station Information

Calibration Date:	January 6, 2026	Previous Calibration:	December 3, 2025
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	8:28	End Time (MST):	12:14
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1236656117

Calibration Data

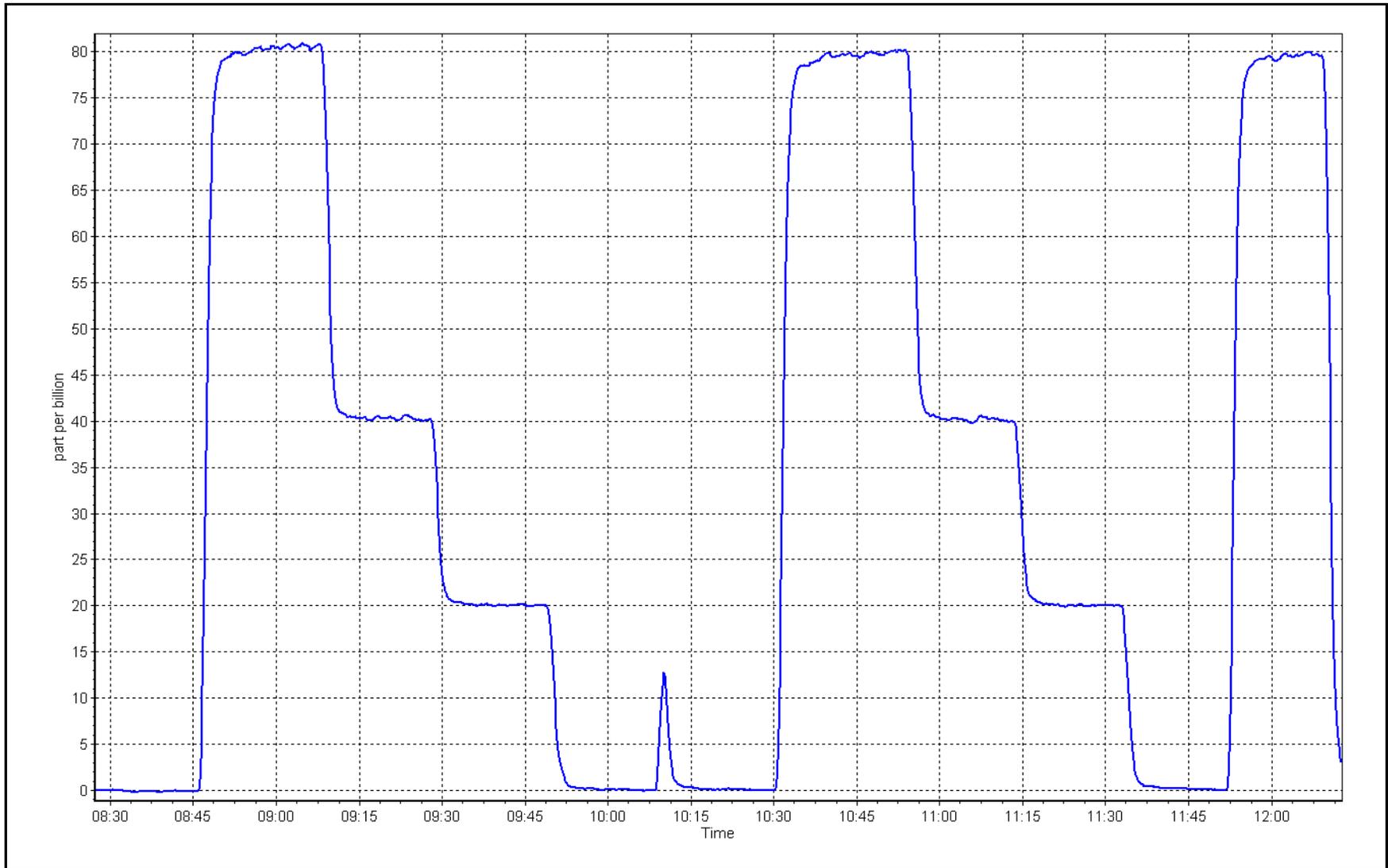
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999972	≥0.995
80.0	79.9	1.0009	Slope	0.998452	0.90 - 1.10
39.9	40.3	0.9910	Intercept	0.159443	+/-3
20.0	20.0	0.9985			



H₂S Calibration Plot

Date: January 6, 2026

Location: MacKay River





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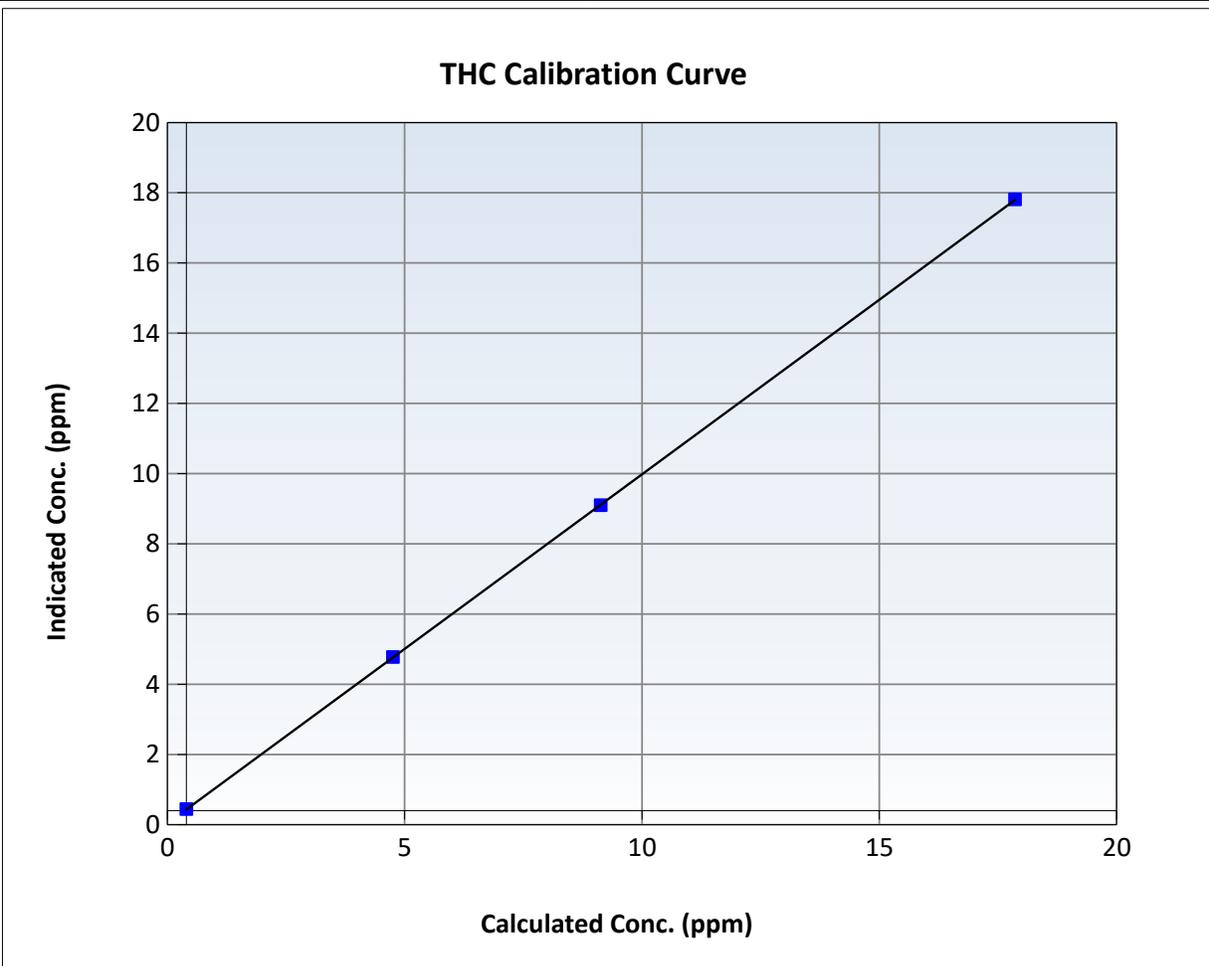
THC Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 5, 2025
Station Name:	Mackay River	Station Number:	AMS 20
Start Time (MST):	9:05	End Time (MST):	11:53
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1501663727

Calibration Data

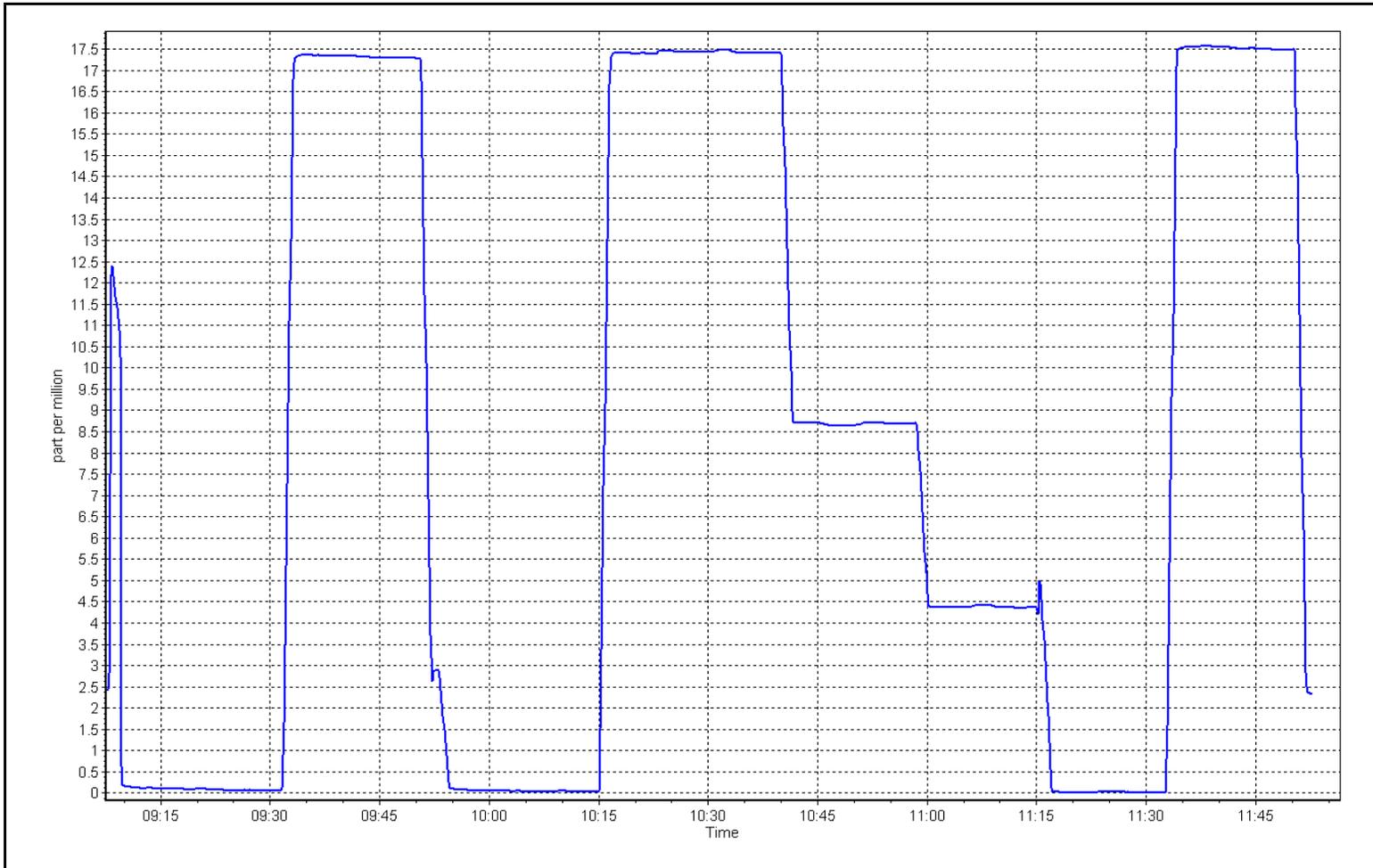
Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.04	----	Correlation Coefficient	0.999996	≥0.995
17.46	17.41	1.0031	Slope	0.994490	0.90 - 1.10
8.73	8.69	1.0044	Intercept	0.032993	+/-1.5
4.35	4.37	0.9965			



THC Calibration Plot

Date: January 9, 2026

Location: MacKay River





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: MacKay River
 Station number: AMS 20
 Calibration Date: January 8, 2026
 Last Cal Date: December 1, 2025
 Start time (MST): 7:39
 End time (MST): 12:03
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0037393
 NOX Cal Gas Conc: 62.00 ppm
 Removed Cylinder #:
 Removed Gas NOX Conc: 62.00 ppm
 NOX gas Diff:
 Calibrator Model: API T700
 ZAG make/model: API T701
 Cal Gas Expiry Date: July 22, 2032
 NO Cal Gas Conc: 61.90 ppm
 Removed Gas Exp Date:
 Removed Gas NO Conc: 61.90 ppm
 NO gas Diff:
 Serial Number: 5706
 Serial Number: 4888

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	----	----
AF High point	4935	64.6	801.1	799.8	1.3	798.0	790.7	7.2	1.0038	1.0115
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 799.7 ppb	NO = 792.8 ppb	<i>* = > +/-5% change initiates investigation</i>				*Percent Change	NO _x = -0.2%		
Baseline Corr 1st pt	NO _x = 798.1 ppb	NO = 790.7 ppb	<u>As Found Statistics</u>				*Percent Change	NO = -0.3%		
Baseline Corr 2nd pt	NO _x = NA ppb	NO = NA ppb	As found	NO _x r ² :		Nx SI:	Nx Int:			
Baseline Corr 3rd pt	NO _x = NA ppb	NO = NA ppb	As found	NO r ² :		NO SI:	NO Int:			
			As found	NO ₂ r ² :		NO ₂ SI:	NO ₂ Int:			

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1505164379

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.997529	0.994461
NO _x Cal Offset:	0.573225	0.673990
NO Cal Slope:	0.992121	0.989348
NO Cal Offset:	-0.744284	-0.623666
NO ₂ Cal Slope:	1.012288	1.007711
NO ₂ Cal Offset:	0.506278	0.784379

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.043	1.043	NO bkgnd or offset:	2.9	2.9
NOX coeff or slope:	1.000	1.000	NOX bkgnd or offset:	3.2	3.2
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	146.2	146.2

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.0	0.2	-0.2	----	----
High point	4935	64.6	801.1	799.8	1.3	796.8	790.9	5.9	1.0054	1.0113
Mid point	4968	32.3	400.5	399.9	0.6	399.9	395.1	4.8	1.0015	1.0120
Low point	4984	16.2	200.9	200.5	0.3	200.7	196.6	4.1	1.0009	1.0201
As left zero	5000	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	----	----
As left span	4935	64.6	801.1	407.2	393.9	796.3	407.2	389.0	1.0060	1.0000
Average Correction Factor									1.0026	1.0145

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	791.7	402.4	390.6	393.8	0.9919	100.8%
Mid GPT point	791.7	590.3	202.7	205.7	0.9854	101.5%
Low GPT point	791.7	687.8	105.2	107.7	0.9767	102.4%
Average Correction Factor					0.9846	101.6%

Notes: No Maintenance or adjustments done. Due to drifting during the GPT the 2nd NO ref point used.

Calibration Performed By: Melissa Lemay



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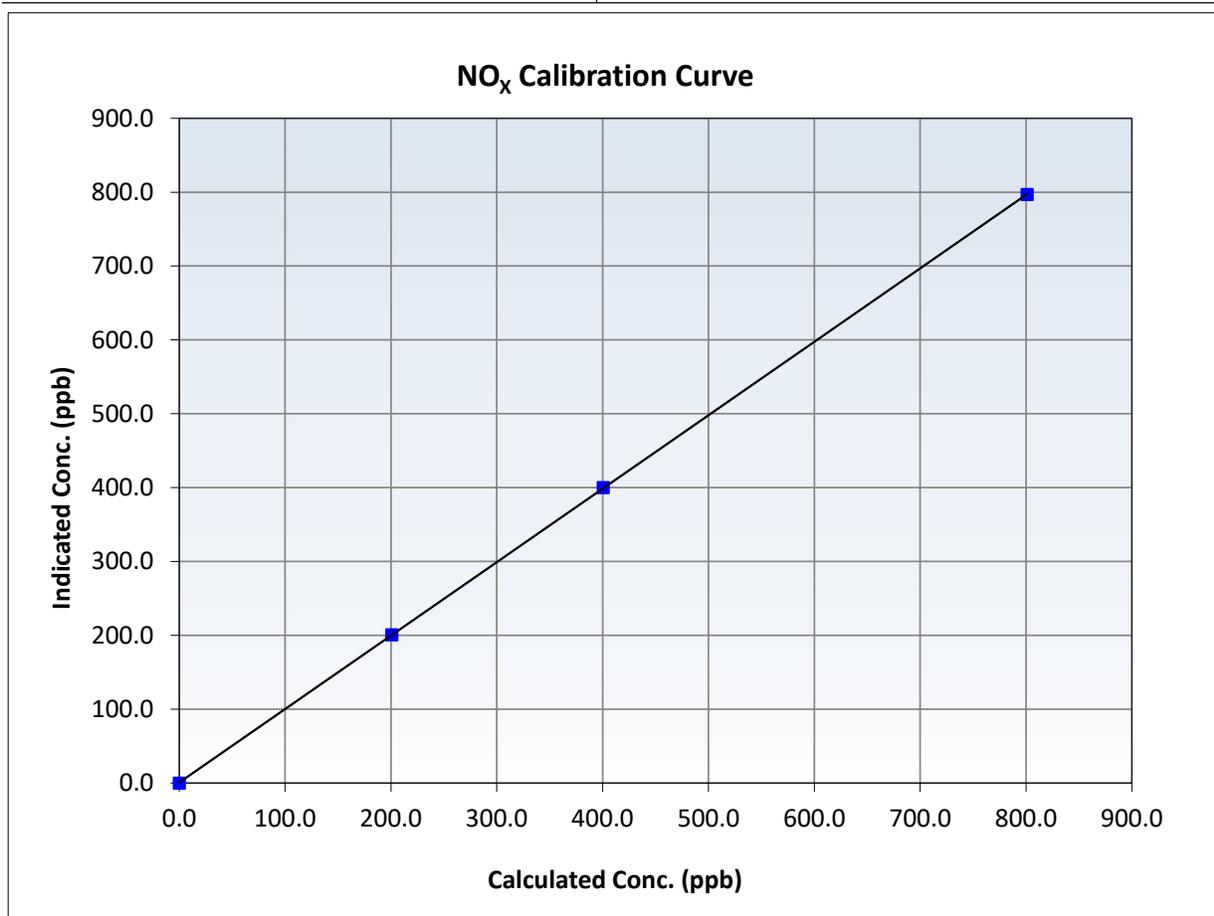
NO_x Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 1, 2025
Station Name:	Mackay River	Station Number:	AMS 20
Start Time (MST):	7:39	End Time (MST):	12:03
Analyzer make:	Thermo 42i	6:50:00 AM	1505164379

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999995	≥0.995
801.1	796.8	1.0054	Slope	0.994461	0.90 - 1.10
400.5	399.9	1.0015	Intercept	0.673990	+/-20
200.9	200.7	1.0009			





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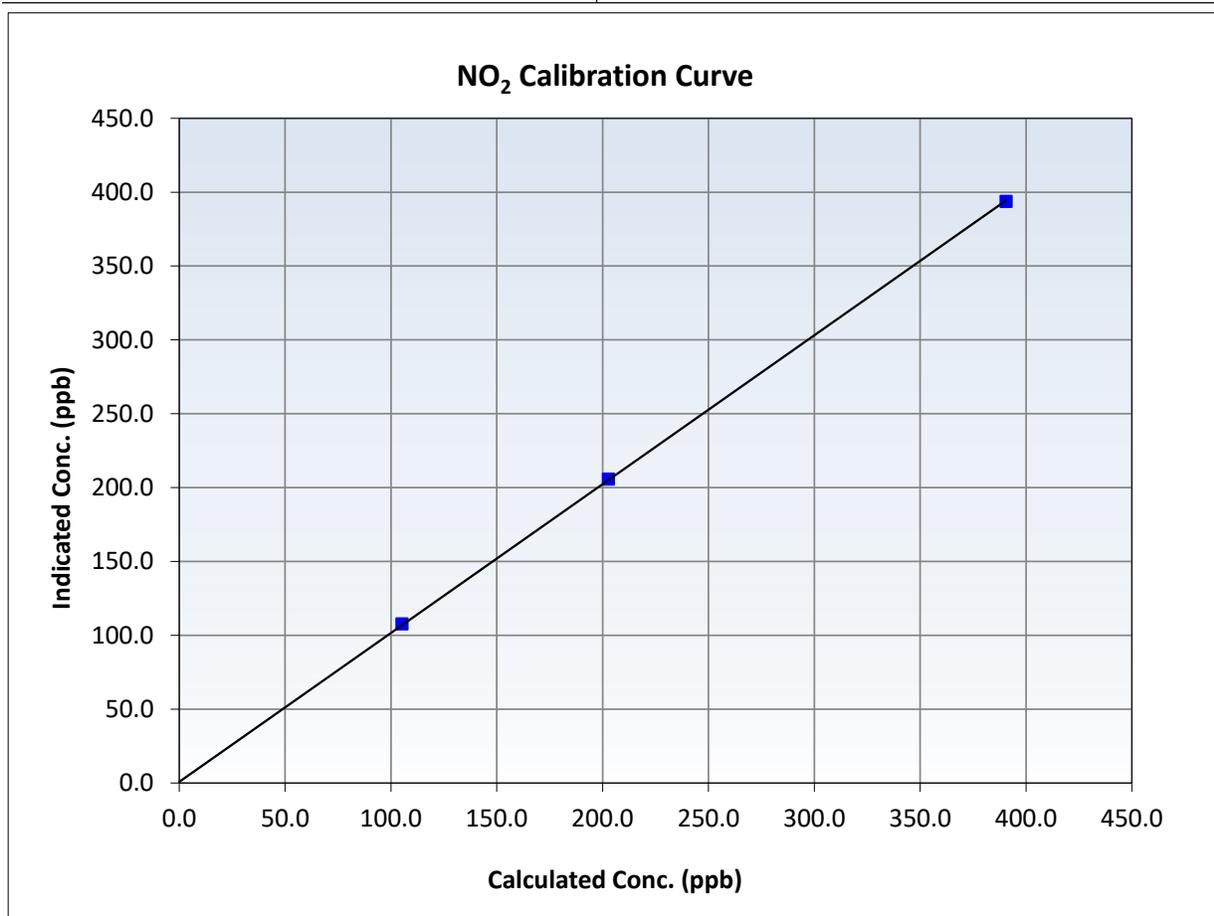
NO₂ Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 1, 2025
Station Name:	Mackay River	Station Number:	AMS 20
Start Time (MST):	7:39	End Time (MST):	12:03
Analyzer make:	Thermo 42i	6:50:00 AM	1505164379

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.2	----	Correlation Coefficient	0.999969	<i>≥0.995</i>
390.6	393.8	0.9919	Slope	1.007711	<i>0.90 - 1.10</i>
202.7	205.7	0.9854	Intercept	0.784379	<i>+/-20</i>
105.2	107.7	0.9767			





Wood Buffalo Environmental Association

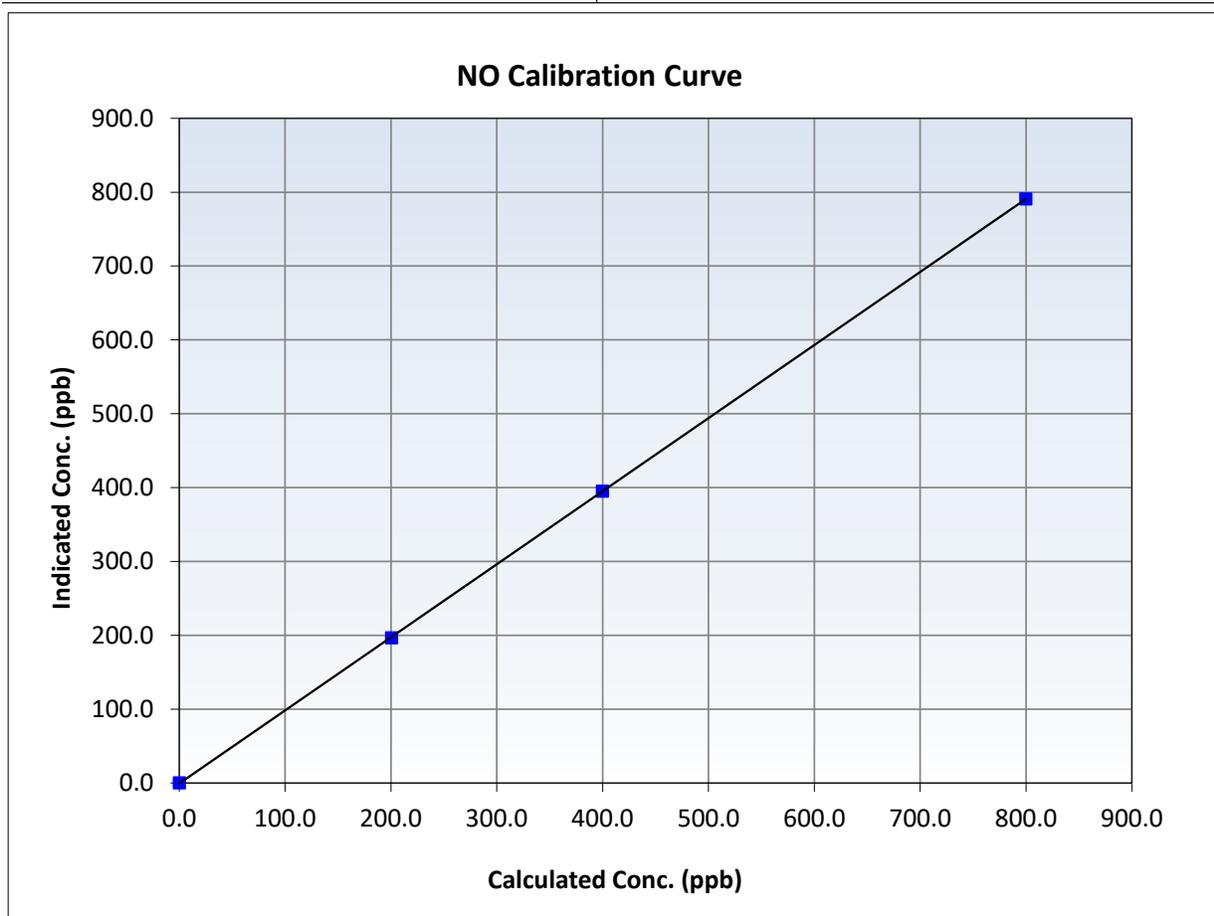
NO Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 1, 2025
Station Name:	Mackay River	Station Number:	AMS 20
Start Time (MST):	7:39	End Time (MST):	12:03
Analyzer make:	Thermo 42i	6:50:00 AM	1505164379

Calibration Data

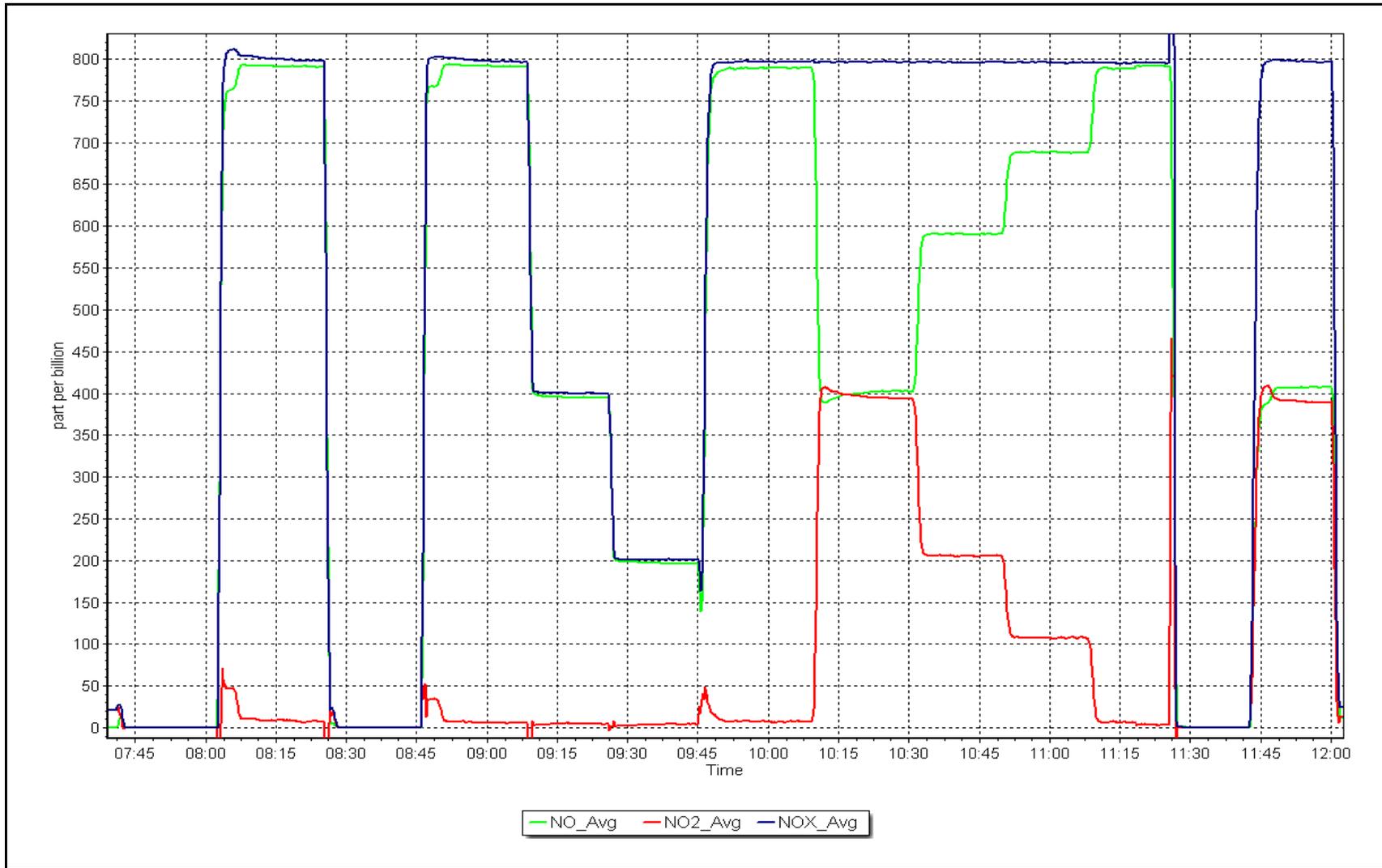
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.2	----	Correlation Coefficient	0.999994	<i>≥0.995</i>
799.8	790.9	1.0113	Slope	0.989348	<i>0.90 - 1.10</i>
399.9	395.1	1.0120	Intercept	-0.623666	<i>+/-20</i>
200.5	196.6	1.0201			



NO_x Calibration Plot

Date: January 8, 2026

Location: MacKay River





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS21 CONKLIN JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	January 13, 2026	Last Cal Date:	December 3, 2025
Start time (MST):	10:32	End time (MST):	13:27
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.34	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	CC340840			
Removed Cal Gas Conc:	50.34	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700P		Serial Number:	2656
Zero Air Gen Model:	Teledyne API T701H		Serial Number:	355

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1428701363
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.998591	0.993292	Backgd or Offset:	30.2	31.3
Calibration intercept:	2.517352	1.698594	Coeff or Slope:	0.905	0.905

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.7	----
As found High point	4921	79.5	800.3	794.1	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.4	Previous response	801.7	*% change	-1.0%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.4	----
High point	4921	79.5	800.3	796.0	1.005
Mid point	4960	39.8	400.7	399.6	1.003
Low point	4980	19.9	200.4	203.6	0.984
As left zero	5000	0.0	0.0	-0.3	----
As left span	4921	79.5	800.3	794.2	1.008
Average Correction Factor:					0.997

Notes: Sample inlet filter was changed after as founds. Adjusted zero only.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

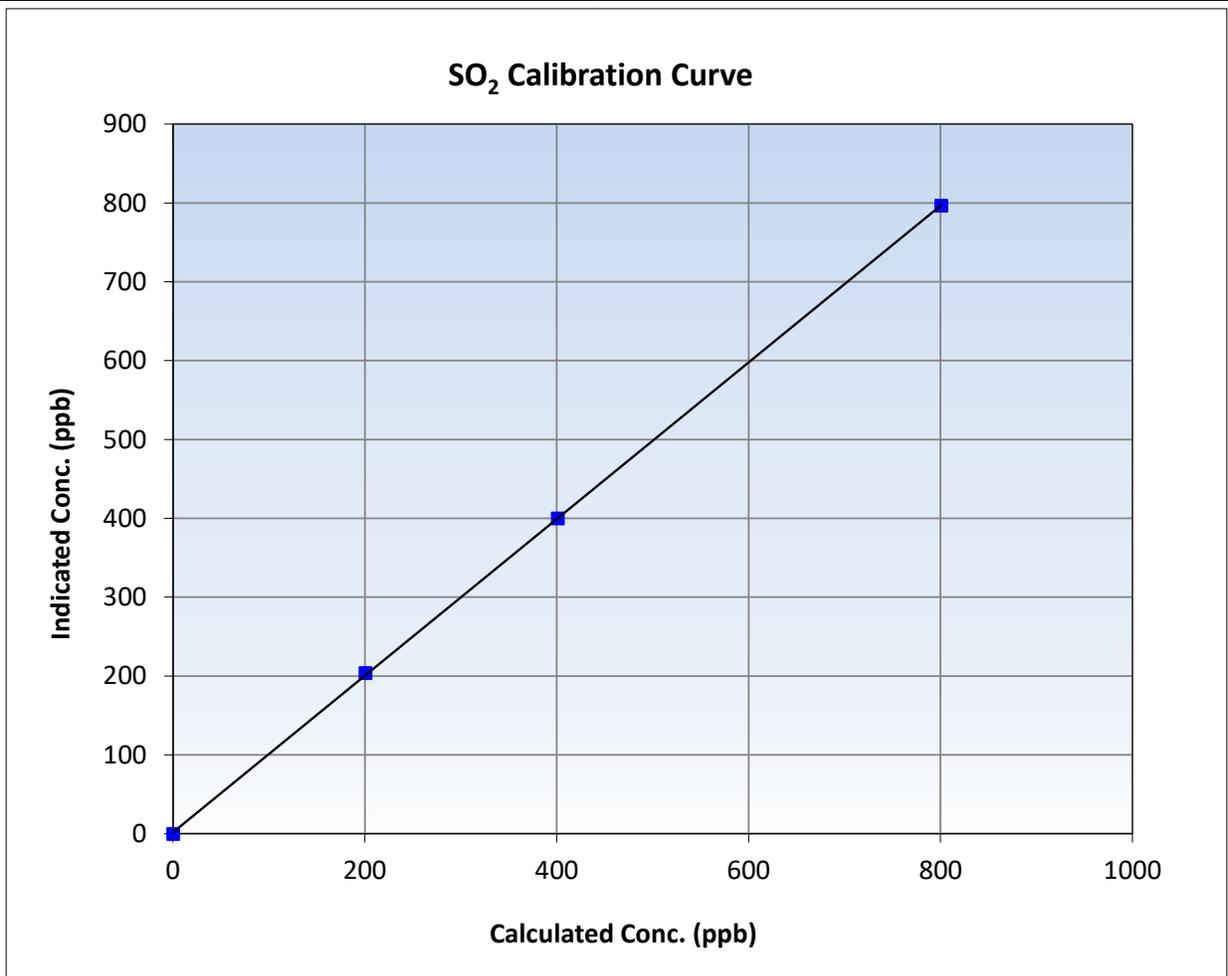
SO₂ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 3, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:32	End Time (MST):	13:27
Analyzer make:	Thermo 43i	Analyzer serial #:	1428701363

Calibration Data

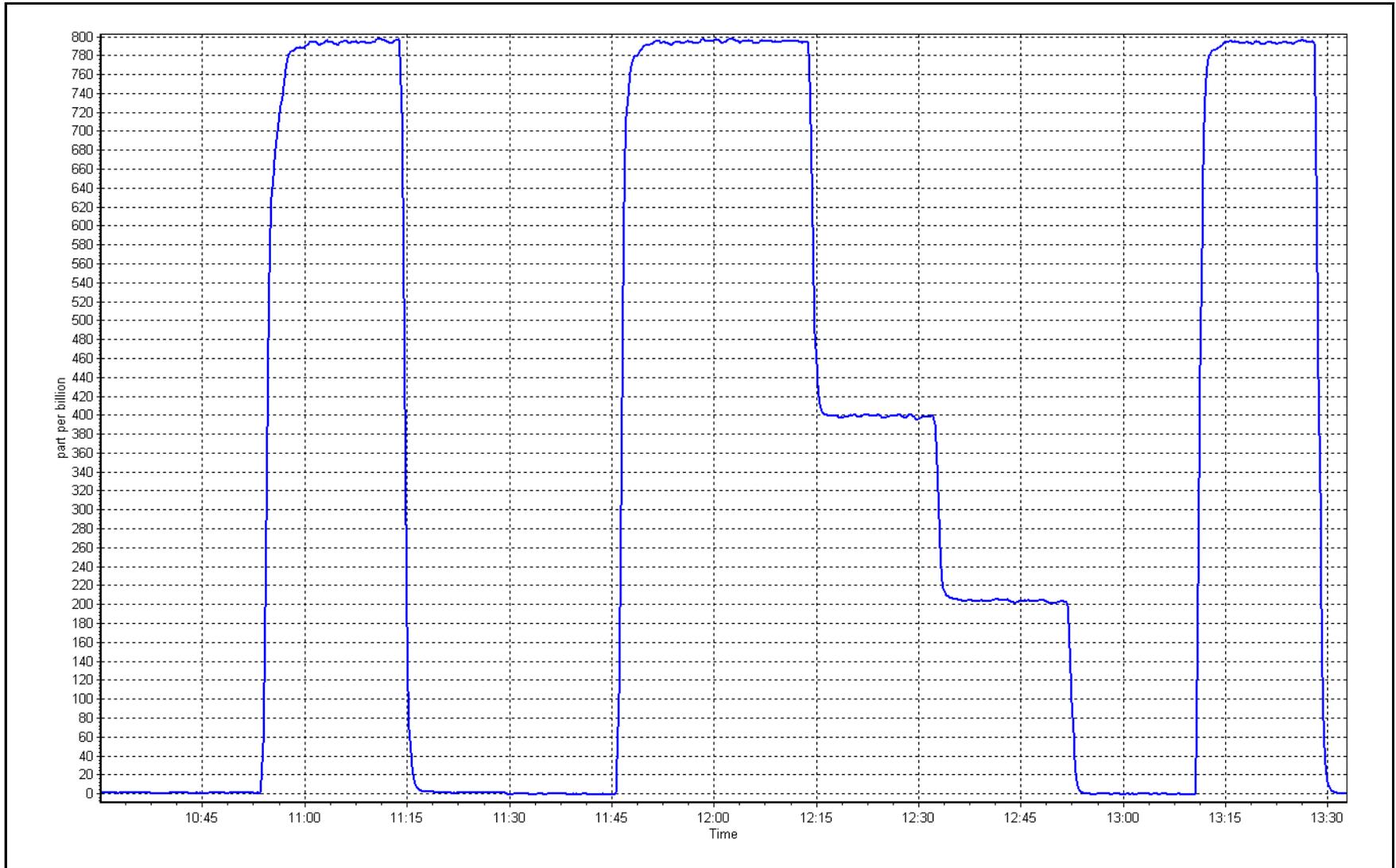
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.4	----	Correlation Coefficient	0.999962	≥0.995
800.3	796.0	1.0054	Slope	0.993292	0.90 - 1.10
400.7	399.6	1.0028	Intercept	1.698594	+/-30
200.4	203.6	0.9841			



SO2 Calibration Plot

Date: January 13, 2026

Location: Conklin





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	January 28, 2026	Last Cal Date:	December 8, 2025
Start time (MST):	10:27	End time (MST):	15:08
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.06	ppm	Cal Gas Exp Date:	September 22, 2028
Cal Gas Cylinder #:	SA15198			
Removed Cal Gas Conc:	5.14	ppm	Rem Gas Exp Date:	January 3, 2026
Removed Gas Cyl #:	CC501204		Diff between cyl:	4.7%
Calibrator Make/Model:	Teledyne T700P		Serial Number:	2656
ZAG Make/Model:	Teledyne T701H		Serial Number:	355

Analyzer Information

Analyzer make:	Thermo 43i-QTL	Analyzer serial #:	12228021058
Converter make:	CD-Nova 101	Converter serial #:	565
Analyzer Range	0 - 100 ppb	Converter Temp:	825 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.005753	0.997597	Backgd or Offset:	3.4	3.2
Calibration intercept:	0.038377	0.398408	Coeff or Slope:	1.542	1.441

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4922	78.4	80.6	81.3	0.992
As found Mid point	4961	39.2	40.3	40.9	0.988
As found Low point	4980	19.6	20.2	20.6	0.983
New cylinder response	4922	78.4	79.3	84.0	0.944
Baseline Corr As found:	81.2	Prev response:	81.09	*% change:	0.1%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.007029	AF Intercept:	0.218372
Baseline Corr 3rd AF pt:	20.5	AF Correlation:	0.999989	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4922	78.4	79.3	79.5	0.998
Mid point	4961	39.2	39.7	39.9	0.994
Low point	4980	19.6	19.8	20.5	0.968
As left zero	5000	0.0	0.0	0.3	----
As left span	4922	78.4	79.3	79.0	1.004
SO2 Scrubber Check	4921	79.5	794.9	0.1	----
Date of last scrubber change:	August 6, 2025			Ave Corr Factor	0.987
Date of last converter efficiency test:	October 7, 2025				

Notes: Sample inlet filter and H2S cylinder was changed after multipoint as founds. SO2 scrubber check done and passed. Adjusted span only.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

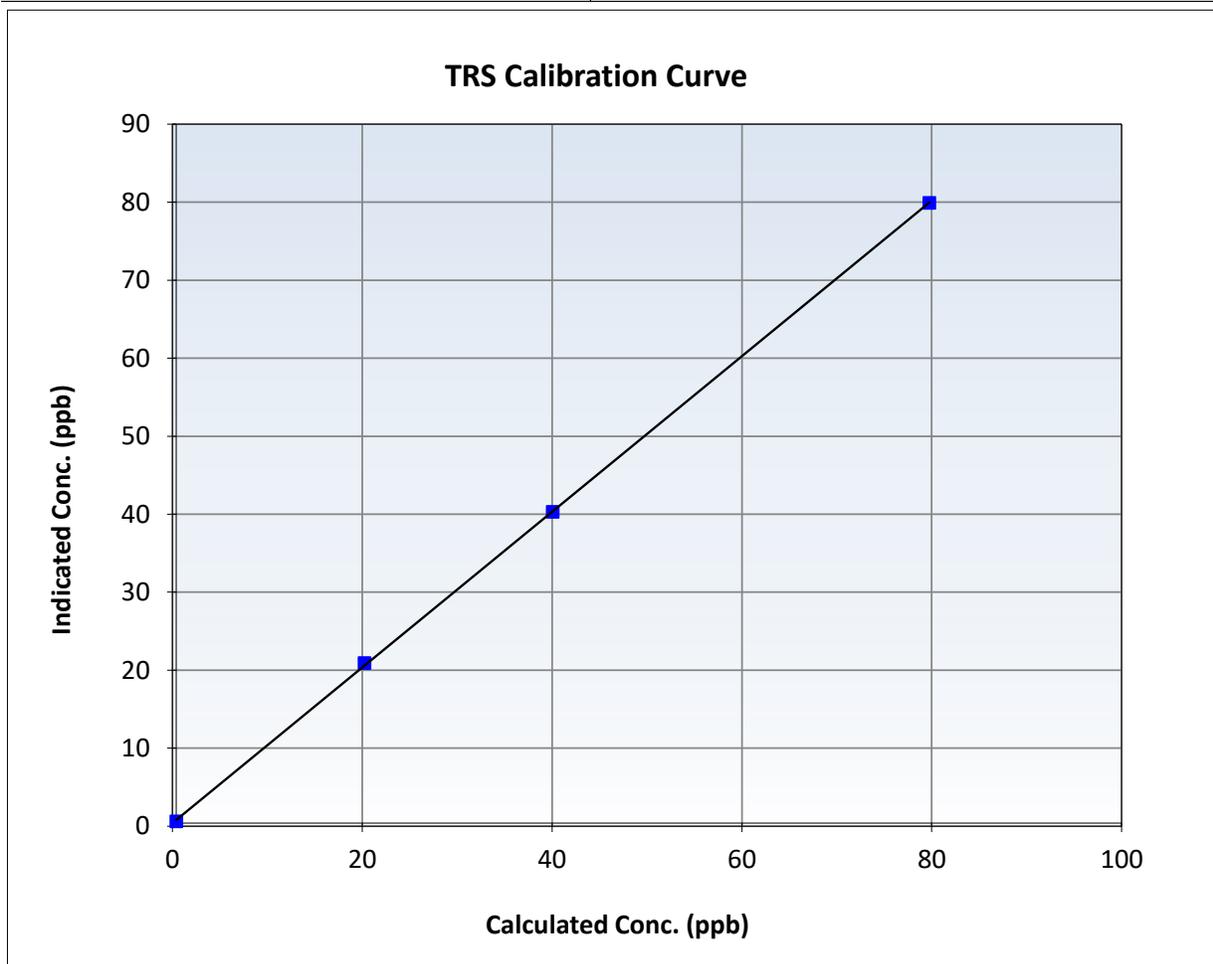
TRS Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 8, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:27	End Time (MST):	15:08
Analyzer make:	Thermo 43i-QTL	Analyzer serial #:	12228021058

Calibration Data

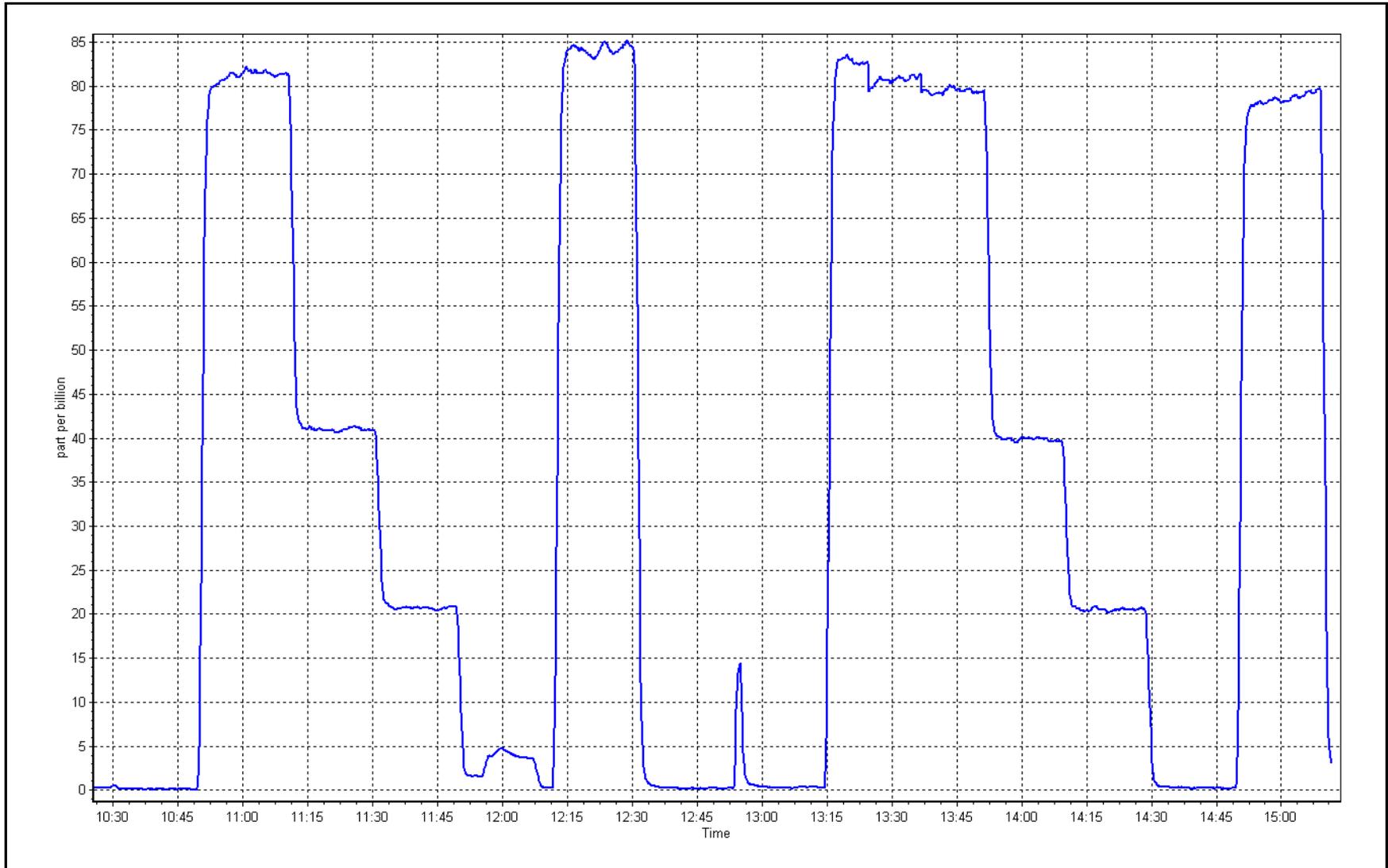
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999958	≥ 0.995
79.3	79.5	0.9979	Slope	0.997597	$0.90 - 1.10$
39.7	39.9	0.9942	Intercept	0.398408	± 3
19.8	20.5	0.9676			



TRS Calibration Plot

Date: January 28, 2026

Location: Conklin





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	January 13, 2026	Last Cal Date:	December 3, 2025
Start time (MST):	10:32	End time (MST):	13:27
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC340840	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
C3H8 Cal Gas Conc.	205.0 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
Removed C3H8 Conc.	205.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700P	Serial Number:	2656
Zero Air Gen model:	Teledyne API T701H	Serial Number:	355

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1180320039
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.34E-04	2.33E-04	NMHC SP Ratio:	5.03E-05	5.14E-05
CH4 Retention time:	15.2	15.4	NMHC Peak Area:	178091	174180
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	16.97	16.71	1.016
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.71	Prev response	17.00	*% change	-1.7%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	16.97	16.95	1.001
Mid point	4960	39.8	8.50	8.48	1.002
Low point	4980	19.9	4.25	4.34	0.979
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	16.97	16.87	1.006
Average Correction Factor					0.994

Notes: Sample inlet filter and N2 was changed after as founds. Adjusted span only.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.96	8.71	1.029
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.71	Prev response	8.96	*% change	-2.9%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	8.96	8.94	1.002
Mid point	4960	39.8	4.49	4.48	1.001
Low point	4980	19.9	2.24	2.30	0.974
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.96	8.88	1.009
Average Correction Factor					0.993

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.01	8.00	1.001
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.00	Prev response	8.03	*% change	-0.4%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	8.01	8.01	1.000
Mid point	4960	39.8	4.01	4.00	1.004
Low point	4980	19.9	2.01	2.04	0.984
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.01	7.99	1.002
Average Correction Factor					0.996

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.998956	0.996867
THC Cal Offset:	0.044680	0.036701
CH ₄ Cal Slope:	1.001391	0.998308
CH ₄ Cal Offset:	0.012575	0.010383
NMHC Cal Slope:	0.996422	0.995348
NMHC Cal Offset:	0.032505	0.026718

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

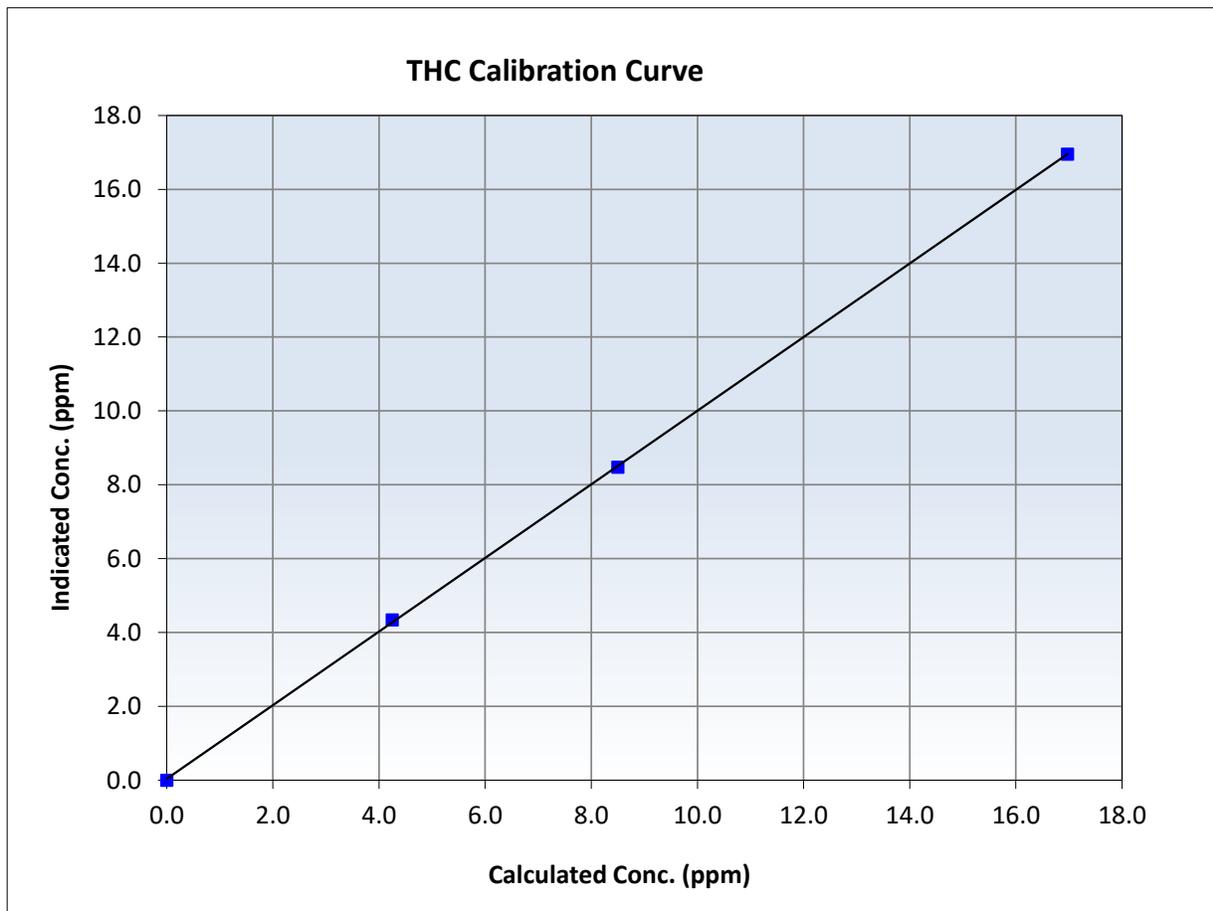
THC Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 3, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:32	End Time (MST):	13:27
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.00	----	Correlation Coefficient	0.999954	≥0.995
16.97	16.95	1.0011	Slope	0.996867	0.90 - 1.10
8.50	8.48	1.0025	Intercept	0.036701	+/-0.5
4.25	4.34	0.9786			





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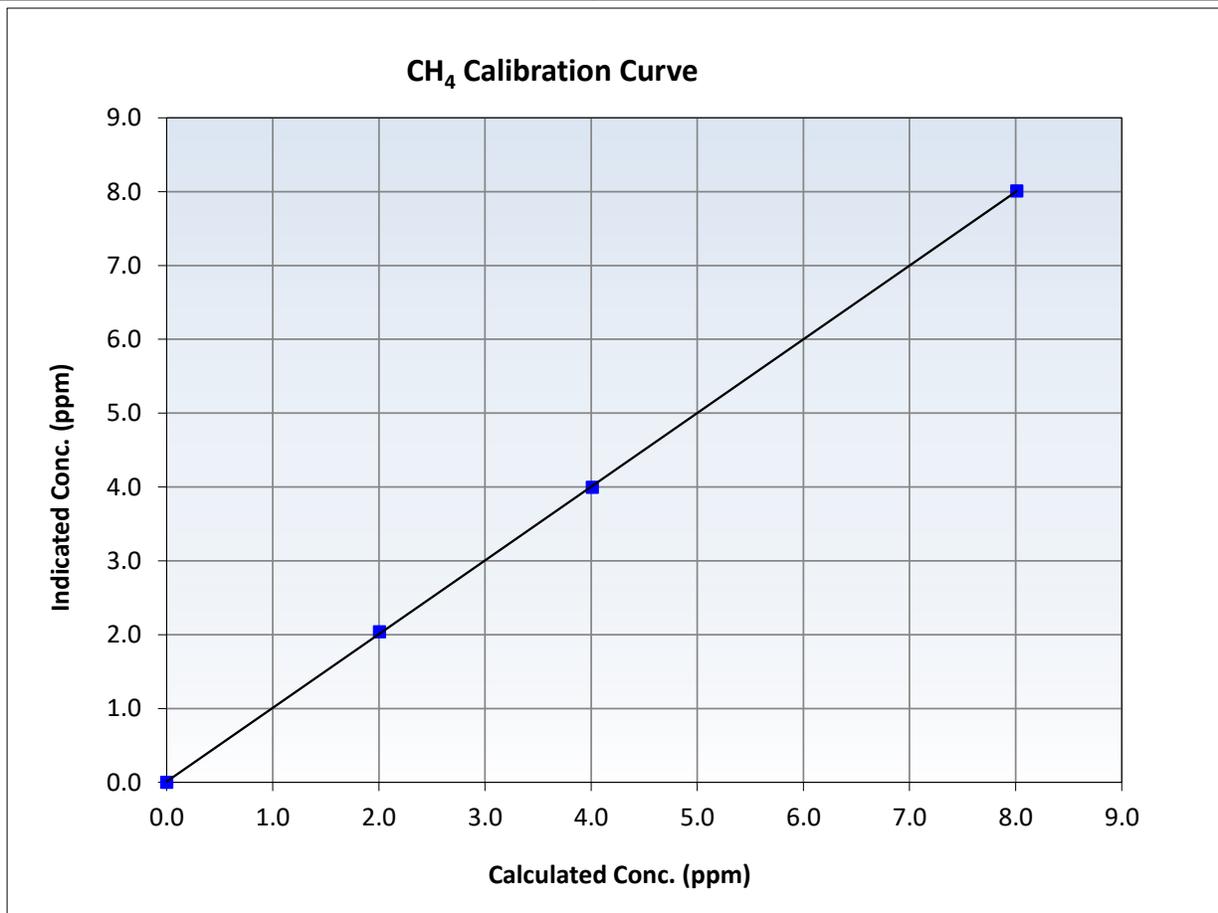
CH₄ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 3, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:32	End Time (MST):	13:27
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999968	<i>≥0.995</i>
8.01	8.01	1.0001	Slope	0.998308	<i>0.90 - 1.10</i>
4.01	4.00	1.0036	Intercept	0.010383	<i>+/-0.5</i>
2.01	2.04	0.9839			





Wood Buffalo Environmental Association

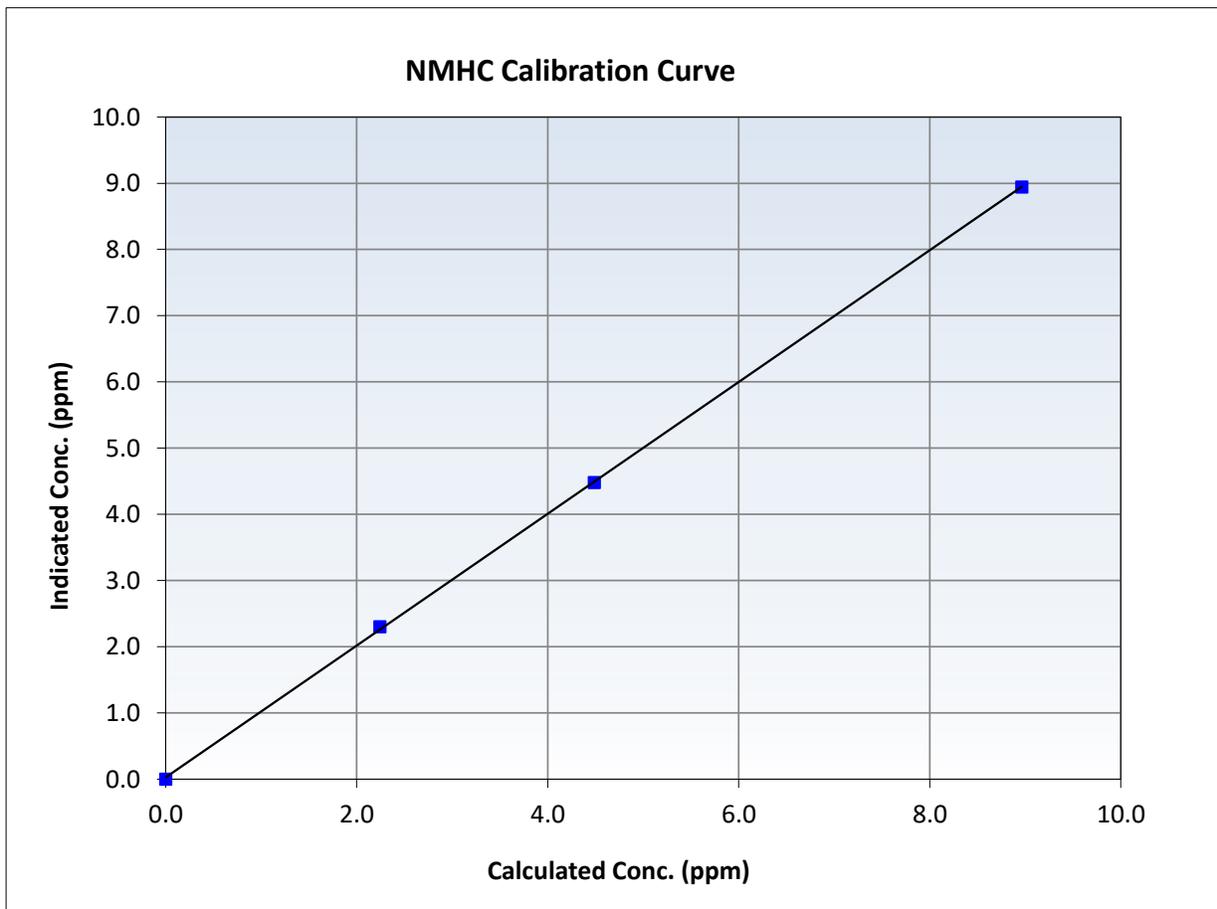
NMHC Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 3, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:32	End Time (MST):	13:27
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

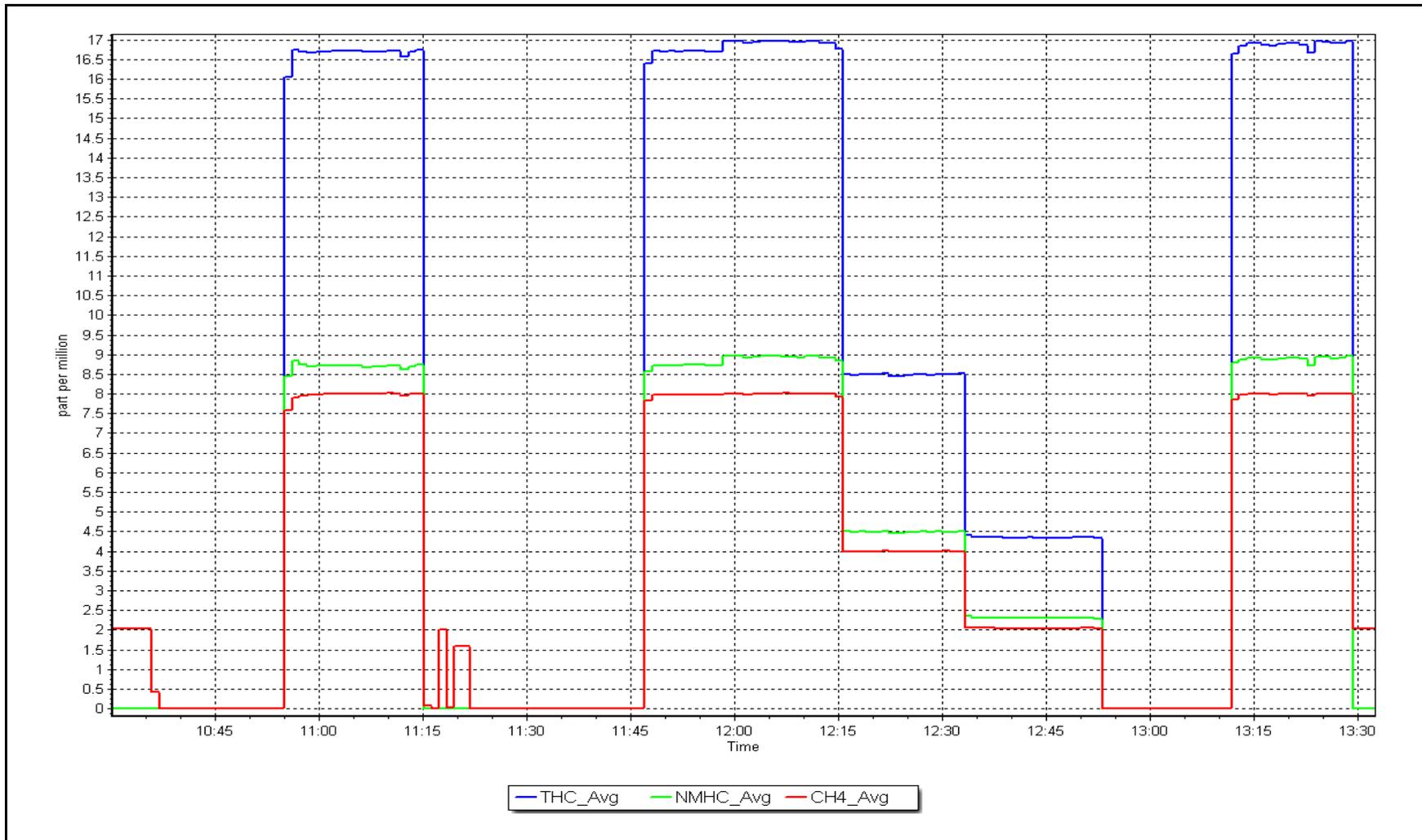
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999935	<i>≥0.995</i>
8.96	8.94	1.0022	Slope	0.995348	<i>0.90 - 1.10</i>
4.49	4.48	1.0015	Intercept	0.026718	<i>+/-0.5</i>
2.24	2.30	0.9739			



NMHC Calibration Plot

Date: January 13, 2026

Location: Conklin





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	January 25, 2026	Last Cal Date:	January 13, 2026
Start time (MST):	11:16	End time (MST):	14:50
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC340840	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
C3H8 Cal Gas Conc.	205.0 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
Removed C3H8 Conc.	205.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700P	Serial Number:	2656
Zero Air Gen model:	Teledyne API T701H	Serial Number:	355

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1180320039
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	2.33E-04		NMHC SP Ratio:	5.14E-05
CH4 Retention time:	15.4		NMHC Peak Area:	174180
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	16.97	16.98	1.000
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.98	Prev response	16.96	*% change	0.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	16.97	16.98	1.000
Mid point	4960	39.8	8.50	8.51	0.999
Low point	4980	19.9	4.25	4.37	0.972
As left zero					
As left span					

Average Correction Factor 0.990

Notes: Baseline dips were present during ambient readings. Carrier pressure increased after asfinds. The actuator was replaced as part of troubleshooting.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.96	9.08	0.987
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.08	Prev response	8.95	*% change	1.4%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	8.96	9.08	0.987
Mid point	4960	39.8	4.49	4.53	0.992
Low point	4980	19.9	2.24	2.33	0.964
As left zero					
As left span					

Average Correction Factor 0.981

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.01	7.89	1.015
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.89	Prev response	8.01	*% change	-1.4%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	8.01	7.89	1.015
Mid point	4960	39.8	4.01	3.98	1.007
Low point	4980	19.9	2.01	2.05	0.981
As left zero					
As left span					

Average Correction Factor 1.001

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.996867	0.997763
THC Cal Offset:	0.036701	0.050290
CH ₄ Cal Slope:	0.998308	0.982903
CH ₄ Cal Offset:	0.010383	0.033400
NMHC Cal Slope:	0.995348	1.010495
NMHC Cal Offset:	0.026718	0.018289

Calibration Performed By: Aswin Sasi Kumar



Wood Buffalo Environmental Association

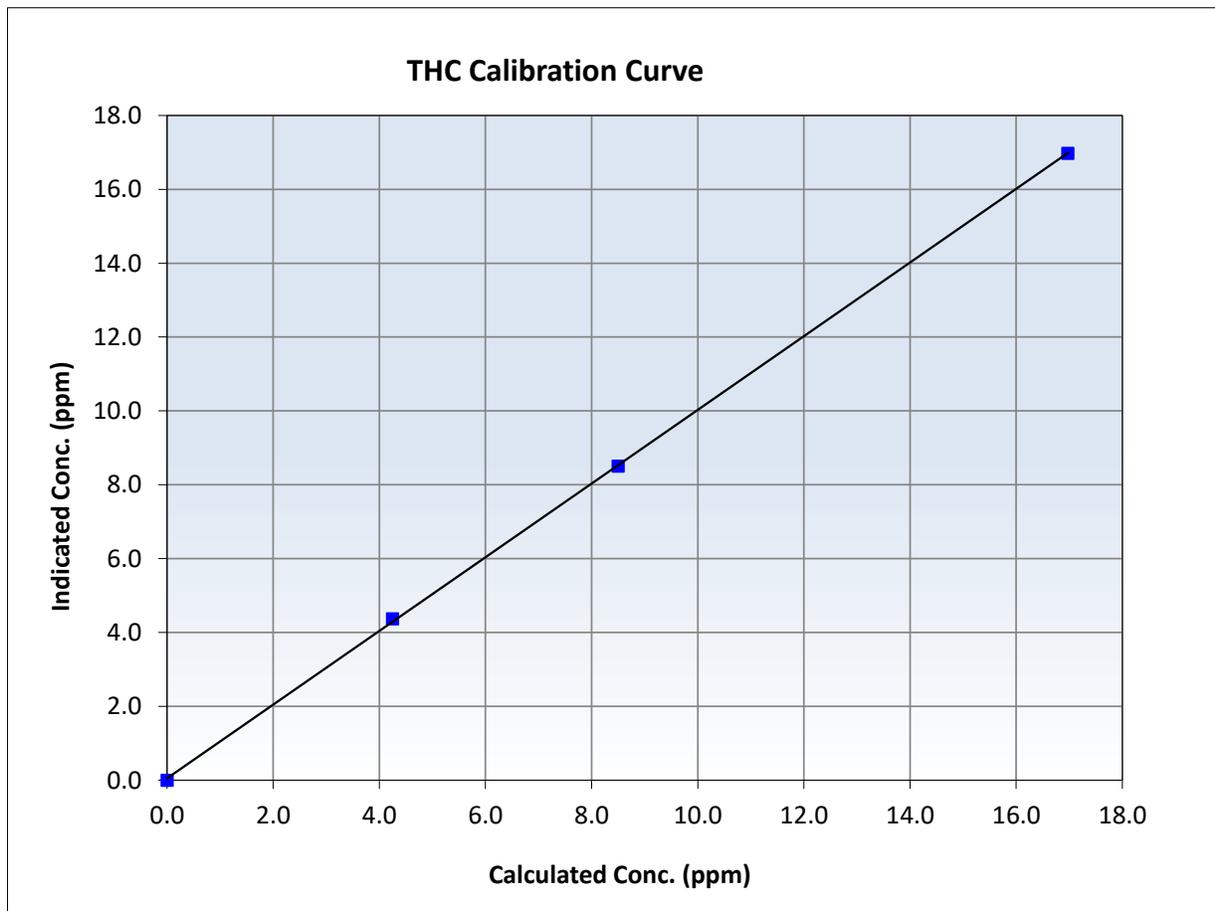
THC Calibration Summary

Station Information

Calibration Date:	January 25, 2026	Previous Calibration:	January 13, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:16	End Time (MST):	14:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999935	<i>≥0.995</i>
16.97	16.98	0.9998	Slope	0.997763	<i>0.90 - 1.10</i>
8.50	8.51	0.9992	Intercept	0.050290	<i>+/-0.5</i>
4.25	4.37	0.9716			





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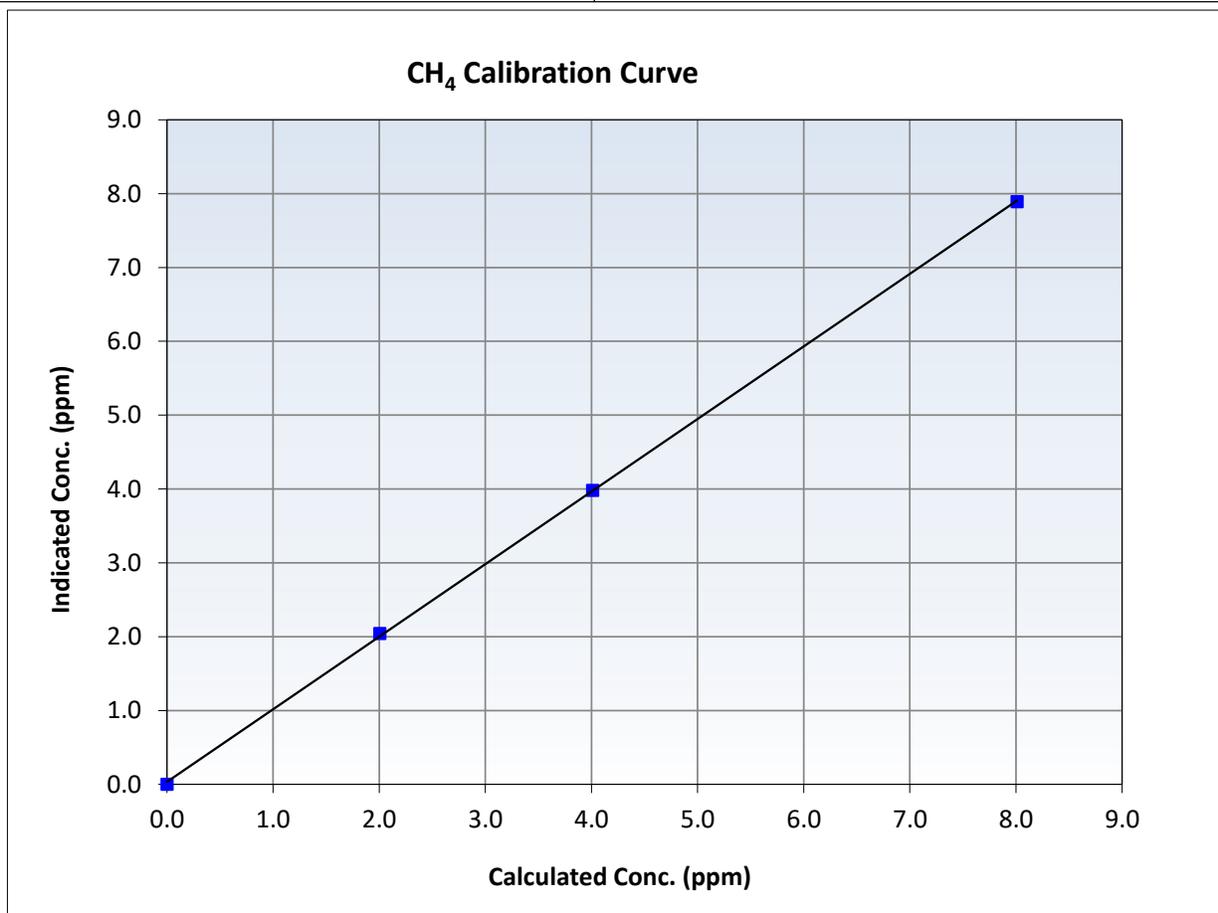
CH₄ Calibration Summary

Station Information

Calibration Date:	January 25, 2026	Previous Calibration:	January 13, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:16	End Time (MST):	14:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.00	----	Correlation Coefficient	0.999912	≥0.995
8.01	7.89	1.0148	Slope	0.982903	0.90 - 1.10
4.01	3.98	1.0074	Intercept	0.033400	±0.5
2.01	2.05	0.9805			





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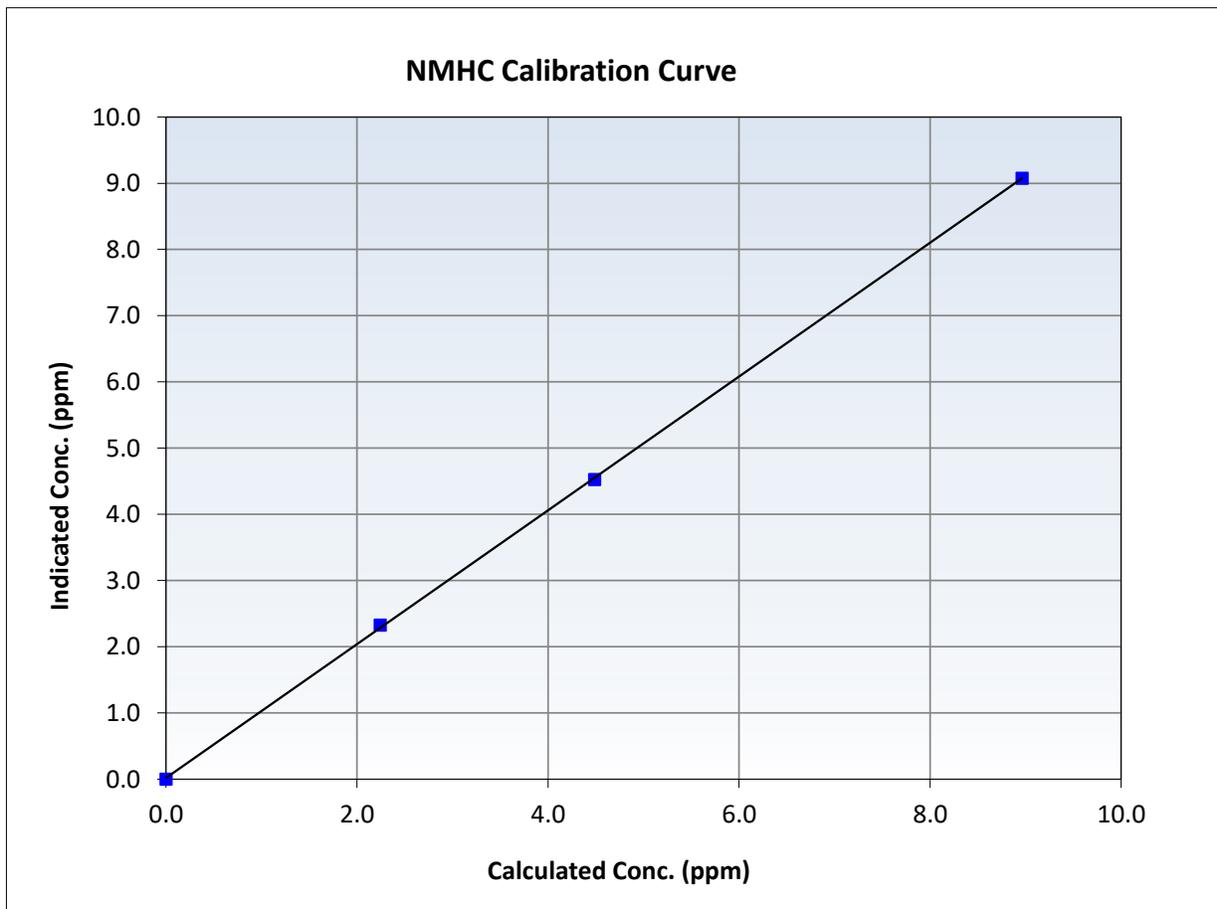
NMHC Calibration Summary

Station Information

Calibration Date:	January 25, 2026	Previous Calibration:	January 13, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:16	End Time (MST):	14:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999936	<i>≥0.995</i>
8.96	9.08	0.9873	Slope	1.010495	<i>0.90 - 1.10</i>
4.49	4.53	0.9915	Intercept	0.018289	<i>+/-0.5</i>
2.24	2.33	0.9638			



NMHC Calibration Plot

Date: January 25, 2026

Location: Conklin





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	January 26, 2026	Last Cal Date:	January 13, 2026
Start time (MST):	11:52	End time (MST):	13:59
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC340840	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
C3H8 Cal Gas Conc.	205.0 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
Removed C3H8 Conc.	205.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700P	Serial Number:	2656
Zero Air Gen model:	Teledyne API T701H	Serial Number:	355

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1180320039
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:		2.20E-04	NMHC SP Ratio:	4.89E-05
CH4 Retention time:		15.0	NMHC Peak Area:	183348
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero					
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	16.97	16.98	1.000
Mid point	4960	39.8	8.50	8.51	0.999
Low point	4980	19.9	4.25	4.35	0.976
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	16.97	17.01	0.998
Average Correction Factor					0.991

Notes: As founds was done yesterday. Sample inlet filter and actuator was changed before calibrator zero.
Adjusted span only.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero					<i>Limit = 0.90-1.10</i>
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	8.96	8.96	1.000
Mid point	4960	39.8	4.49	4.51	0.996
Low point	4980	19.9	2.24	2.31	0.970
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.96	9.00	0.996
Average Correction Factor					0.989

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero					<i>Limit = 0.90-1.10</i>
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	8.01	8.02	0.999
Mid point	4960	39.8	4.01	4.00	1.002
Low point	4980	19.9	2.01	2.04	0.982
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.01	8.01	1.000
Average Correction Factor					0.995

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:		0.998113
THC Cal Offset:		0.043687
CH ₄ Cal Slope:		0.999165
CH ₄ Cal Offset:		0.011380
NMHC Cal Slope:		0.997276
NMHC Cal Offset:		0.031907

Calibration Performed By: Jan Castro



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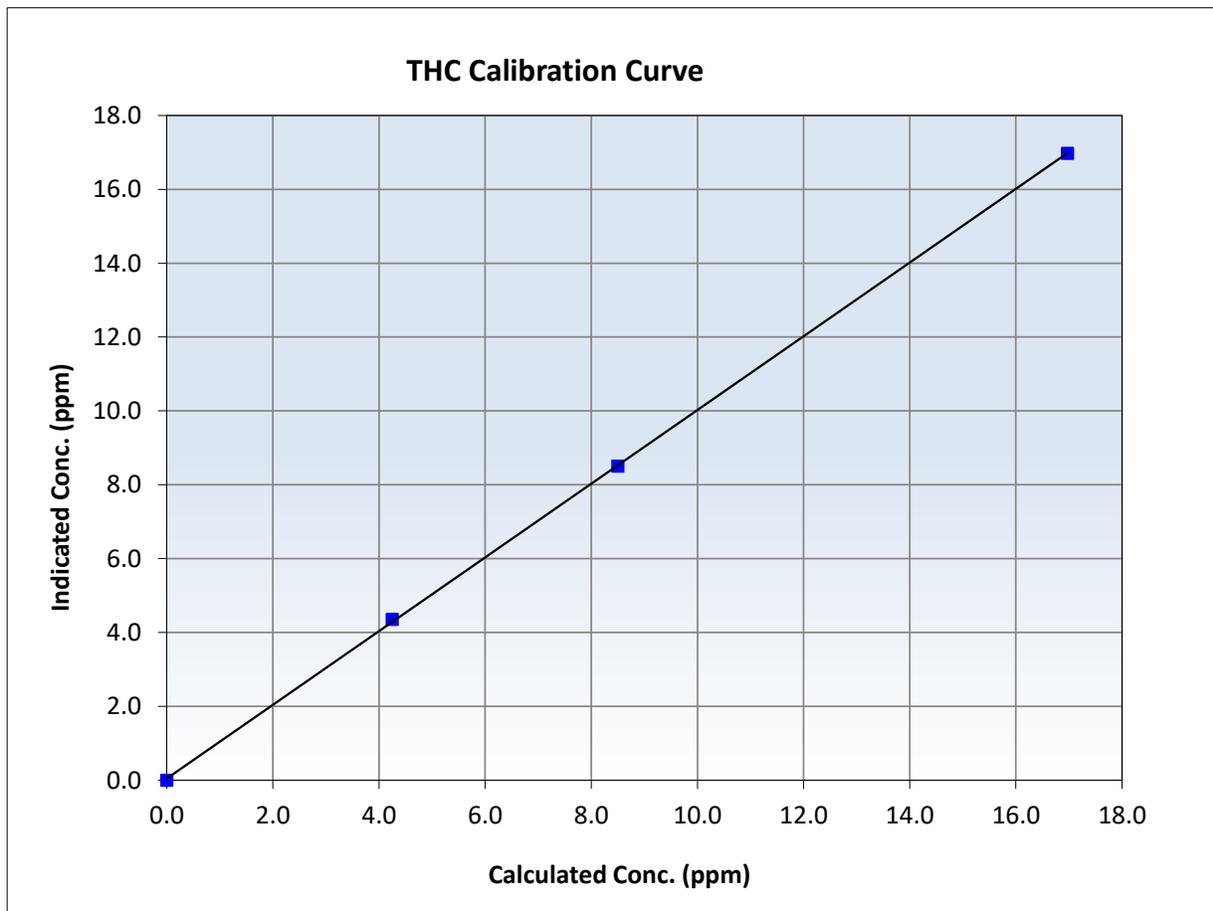
THC Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	January 13, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:52	End Time (MST):	13:59
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999955	<i>≥0.995</i>
16.97	16.98	0.9998	Slope	0.998113	<i>0.90 - 1.10</i>
8.50	8.51	0.9987	Intercept	0.043687	<i>+/-0.5</i>
4.25	4.35	0.9759			





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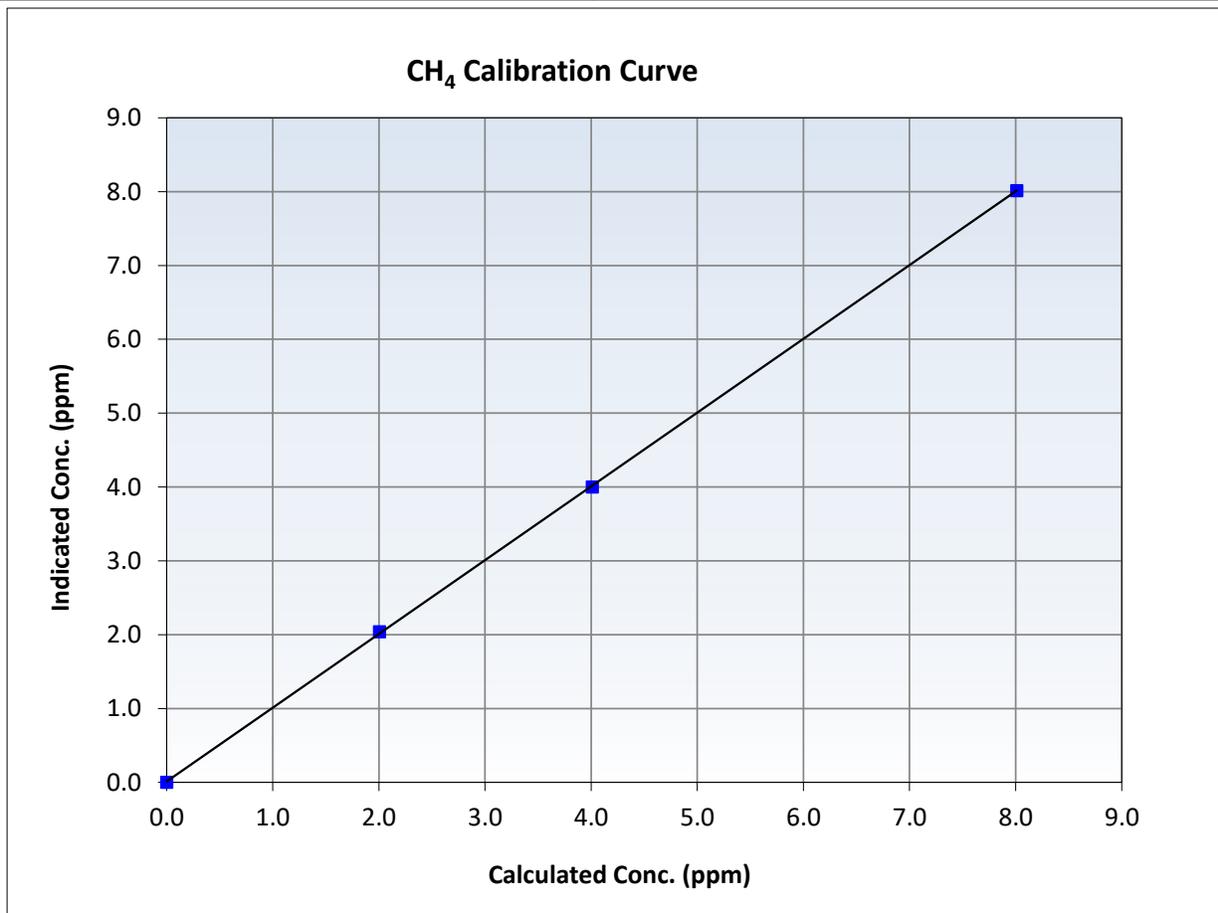
CH₄ Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	January 13, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:52	End Time (MST):	13:59
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999969	<i>≥0.995</i>
8.01	8.02	0.9992	Slope	0.999165	<i>0.90 - 1.10</i>
4.01	4.00	1.0021	Intercept	0.011380	<i>+/-0.5</i>
2.01	2.04	0.9824			





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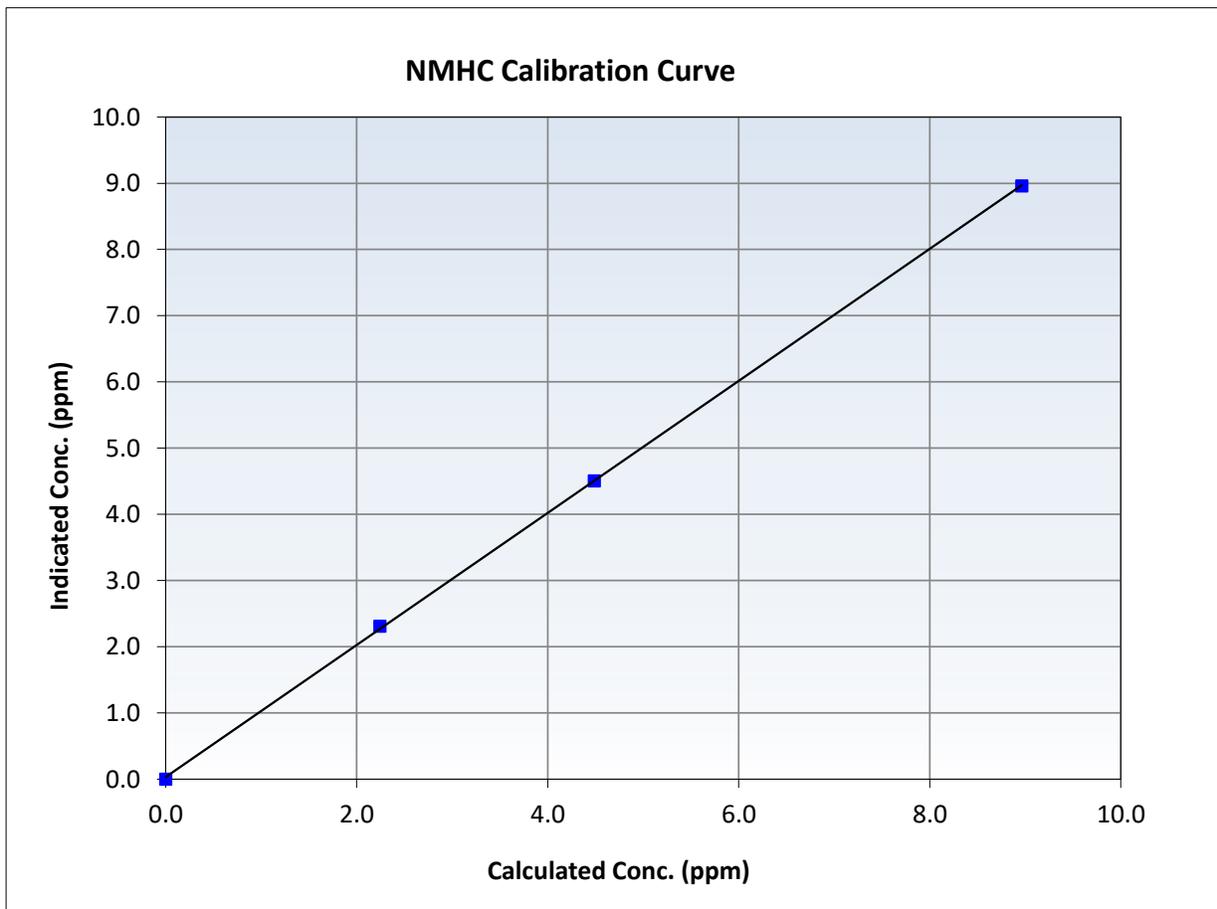
NMHC Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	January 13, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:52	End Time (MST):	13:59
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

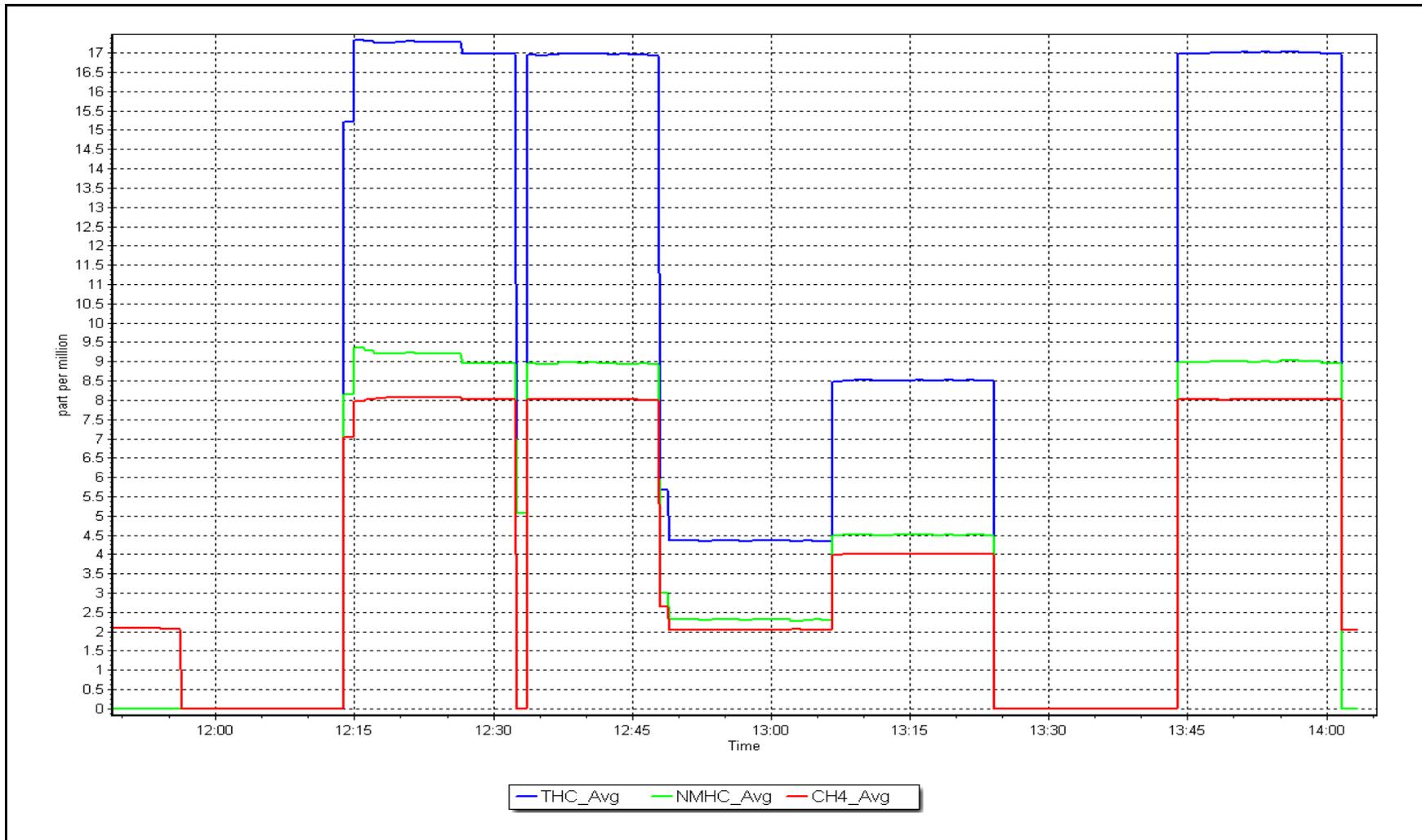
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999931	<i>≥0.995</i>
8.96	8.96	1.0003	Slope	0.997276	<i>0.90 - 1.10</i>
4.49	4.51	0.9959	Intercept	0.031907	<i>+/-0.5</i>
2.24	2.31	0.9701			



NMHC Calibration Plot

Date: January 26, 2026

Location: Conklin





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Conklin
 Station number: AMS 21
 Calibration Date: January 29, 2026
 Last Cal Date: December 9, 2025
 Start time (MST): 11:03
 End time (MST): 15:06
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: SA18828
 NOX Cal Gas Conc: 48.90 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 48.90 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701

Cal Gas Expiry Date: November 3, 2031
 NO Cal Gas Conc: 48.80 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 48.80 ppm
 NO gas Diff:
 Serial Number: 2656
 Serial Number: 355

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.3	-0.1	0.3	----	----
AF High point	4918	82.0	802.0	800.3	1.6	822.3	819.2	3.1	0.9756	0.9768
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 814.6 ppb		NO = 811.8 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 0.9%	
Baseline Corr 1st pt	NO _x = 822.0 ppb		NO = 819.3 ppb			<u>As Found Statistics</u>		*Percent Change	NO = 0.9%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found NO _x r ² :		Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found NO r ² :		NO SI:	NO Int:	
						As found NO ₂ r ² :		NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1218153356

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.012154	1.000283
NO _x Cal Offset:	2.908188	2.948086
NO Cal Slope:	1.011915	0.999849
NO Cal Offset:	1.968148	1.868045
NO ₂ Cal Slope:	0.999128	1.002625
NO ₂ Cal Offset:	-0.594021	0.250230

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.631	0.617	NO bkgnd or offset:	3.7	3.4
NOX coeff or slope:	0.994	0.996	NOX bkgnd or offset:	3.6	3.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	162.4	164.4

Dilution Calibration Data

Set Point	Dilution flow rate (scm)	Source gas flow rate (scm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.2	-0.1	0.3	----	----
High point	4918	82.0	802.0	800.3	1.6	804.0	801.2	2.7	0.9975	0.9989
Mid point	4959	41.0	401.0	400.2	0.8	404.7	402.6	2.1	0.9908	0.9939
Low point	4980	20.5	200.5	200.1	0.4	206.7	204.1	2.6	0.9699	0.9802
As left zero	5000	0.0	0.0	0.0	0.0	0.0	-0.2	0.2	----	----
As left span	4918	82.0	802.0	387.9	414.1	800.0	387.9	412.1	1.0025	1.0000
Average Correction Factor									0.9860	0.9910

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.3	----	----
High GPT point	798.2	386.4	413.4	414.7	0.9970	100.3%
Mid GPT point	798.2	596.8	203.0	204.1	0.9948	100.5%
Low GPT point	798.2	700.6	99.2	99.5	0.9974	100.3%
Average Correction Factor					0.9964	100.4%

Notes:

Sample inlet filter was changed after as founds. Adjusted span only.

Calibration Performed By:

Jan Castro



Wood Buffalo Environmental Association

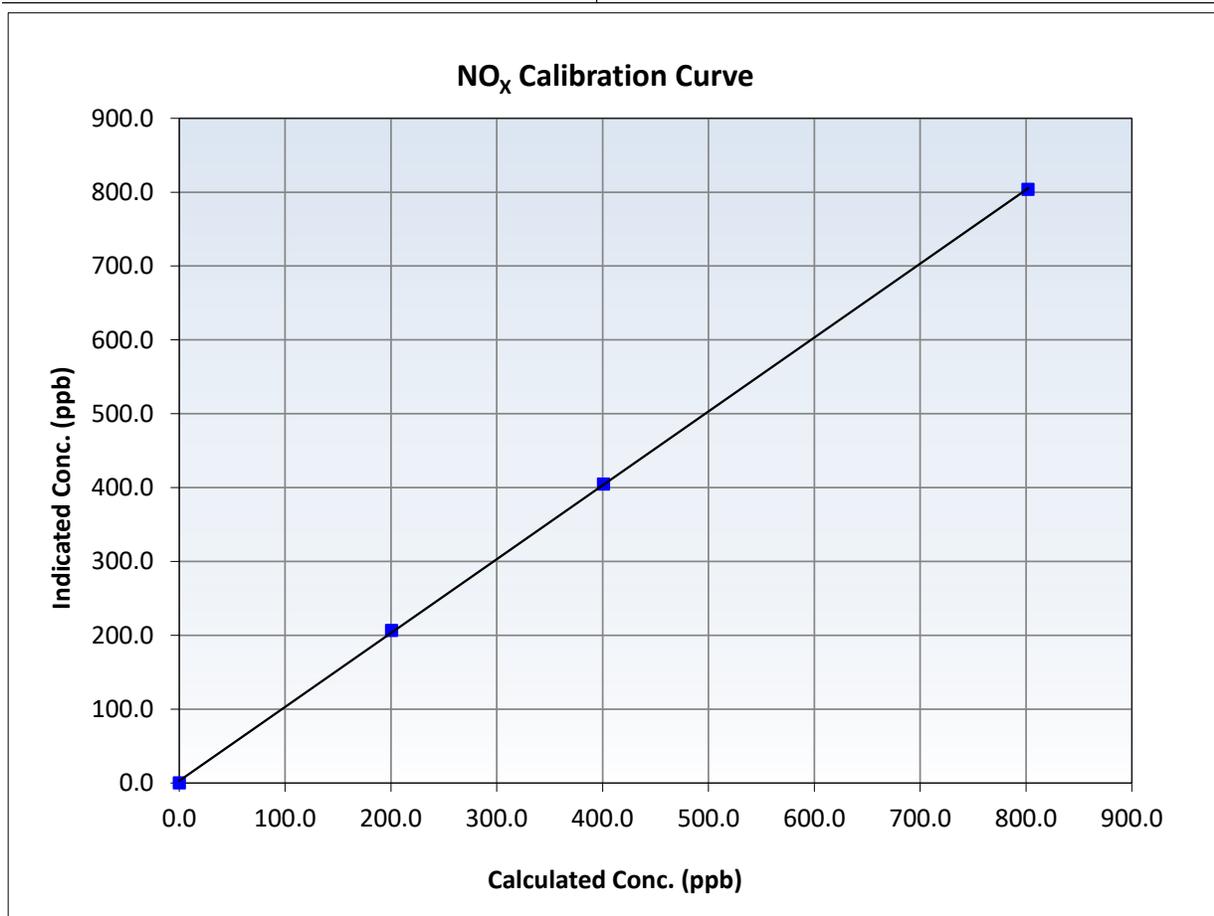
NO_x Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 9, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:03	End Time (MST):	15:06
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.2	----	Correlation Coefficient	0.999944	≥0.995
802.0	804.0	0.9975	Slope	1.000283	0.90 - 1.10
401.0	404.7	0.9908	Intercept	2.948086	+/-20
200.5	206.7	0.9699			





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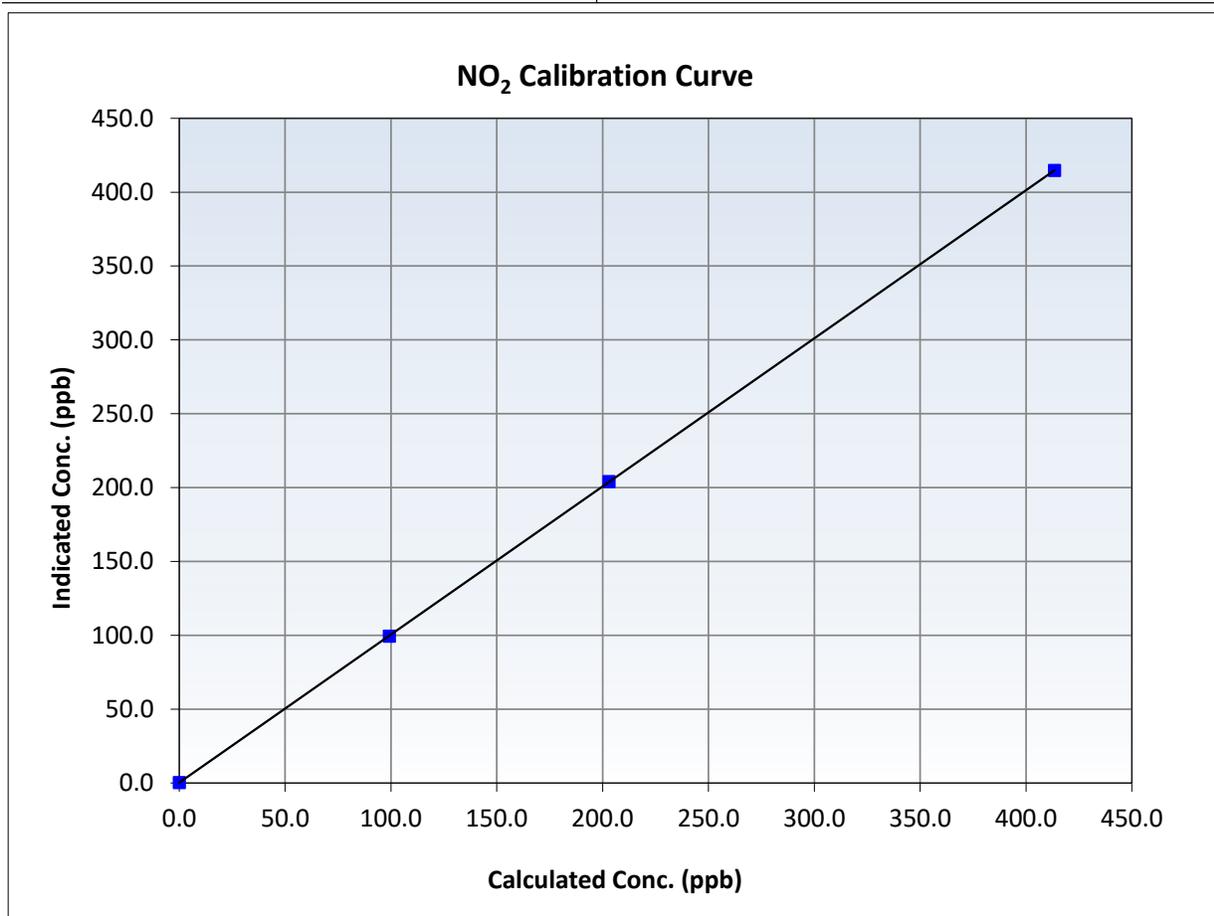
NO₂ Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 9, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:03	End Time (MST):	15:06
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.3	----	Correlation Coefficient	0.999998	<i>≥0.995</i>
413.4	414.7	0.9970	Slope	1.002625	<i>0.90 - 1.10</i>
203.0	204.1	0.9948	Intercept	0.250230	<i>+/-20</i>
99.2	99.5	0.9974			





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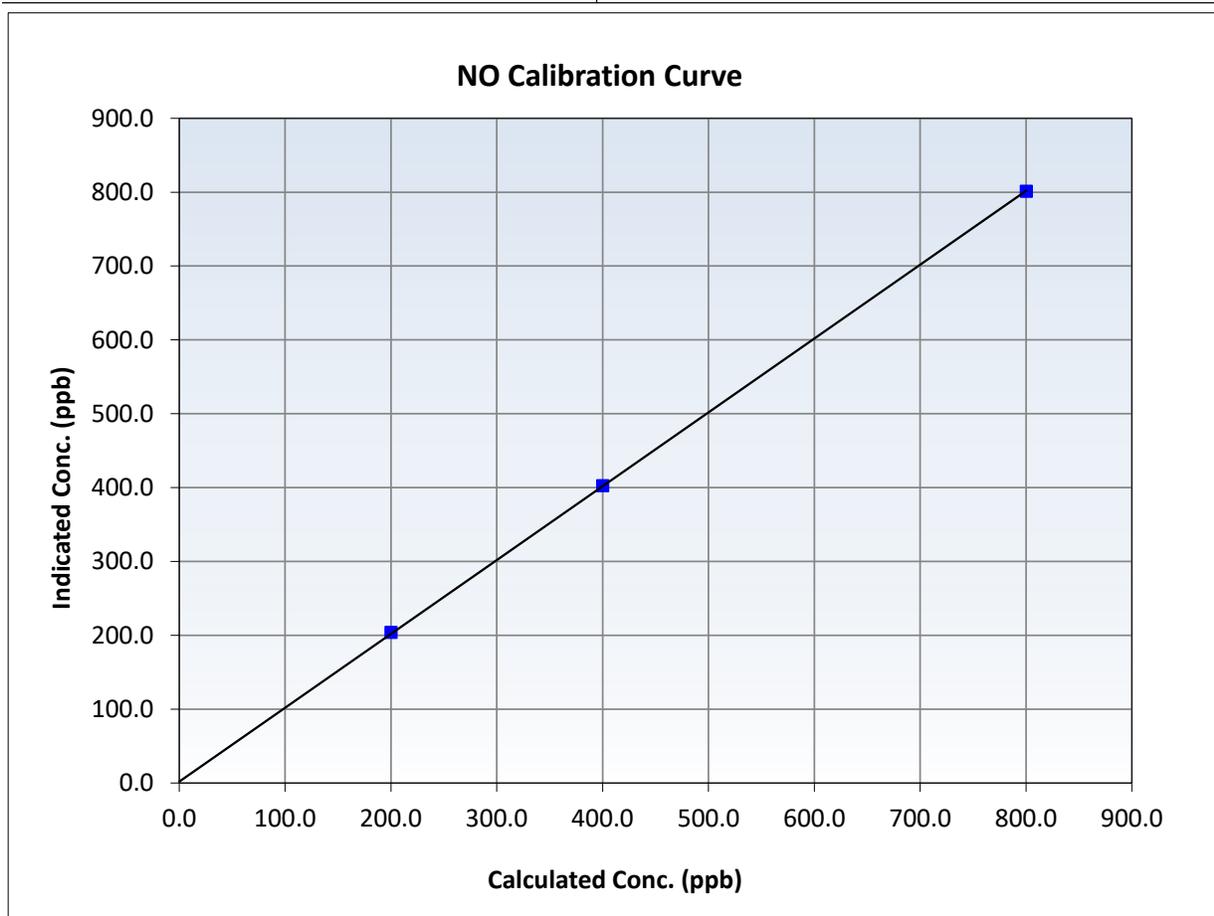
NO Calibration Summary

Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 9, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:03	End Time (MST):	15:06
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

Calibration Data

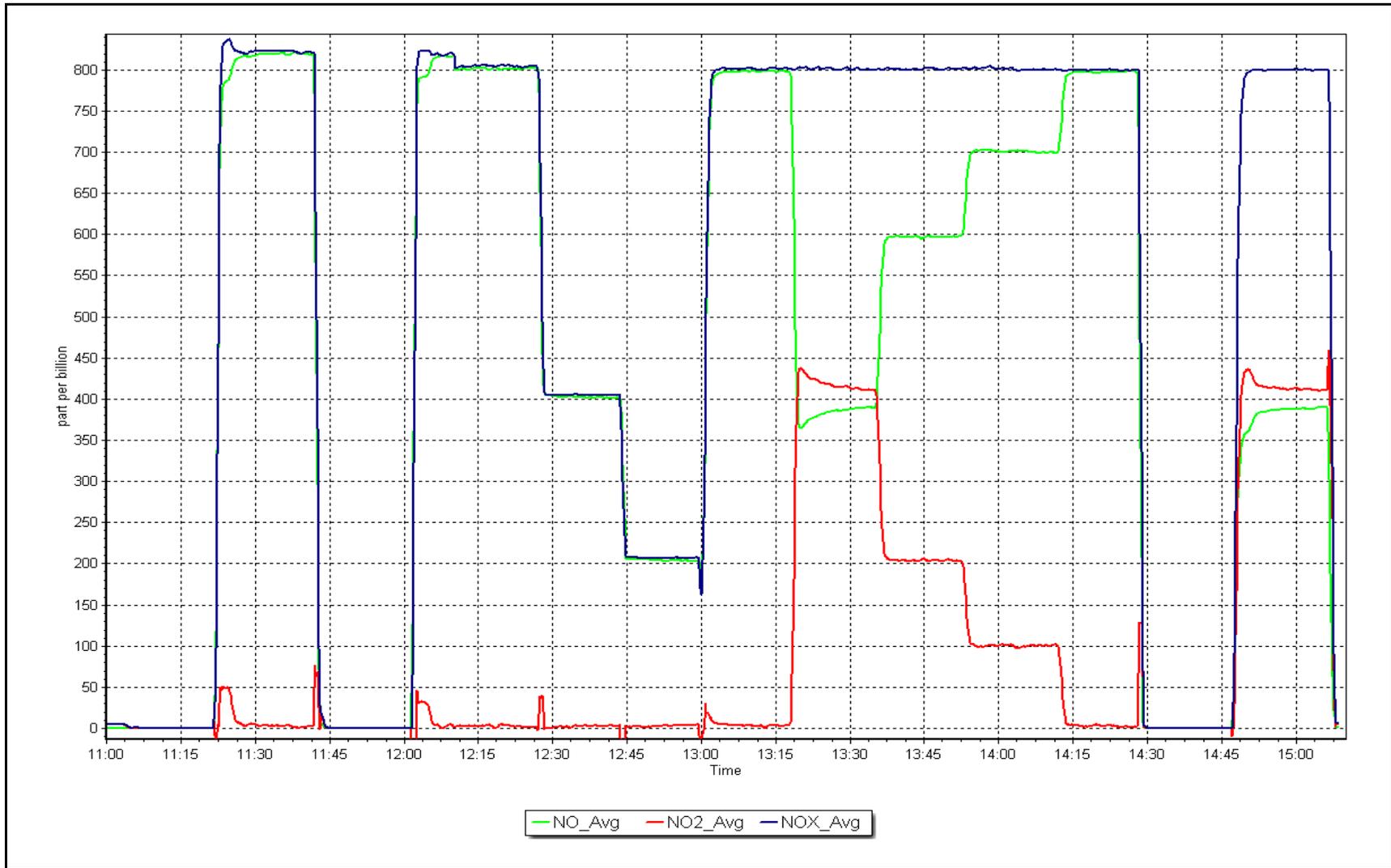
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999972	≥0.995
800.3	801.2	0.9989	Slope	0.999849	0.90 - 1.10
400.2	402.6	0.9939	Intercept	1.868045	+/-20
200.1	204.1	0.9802			



NO_x Calibration Plot

Date: January 29, 2026

Location: Conklin





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	January 8, 2026	Last Cal Date:	December 8, 2025
Start time (MST):	11:17	End time (MST):	13:48
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	2656
Calibrator Make/Model:	Teledyne API T700P	Serial Number:	355
ZAG Make/Model:	Teledyne API T701H		

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1300156233
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.996057	0.993286	Backgd or Offset:	-0.2	-0.2
Calibration intercept:	1.040000	1.100000	Coeff or Slope:	1.229	1.229

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	800.0	0.0	0.0	----
As found High point	5000	1198.9	400.0	396.9	1.008
As found Mid point					
As found Low point					
Baseline Corr As found:	396.9	Previous response	399.5	*% change	-0.6%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	800.0	0.0	0.2	----
High point	5000	1197.0	400.0	398.0	1.005
Mid point	5000	949.9	200.0	200.1	1.000
Low point	5000	815.6	100.0	101.4	0.986
As left zero	5000	800.0	0.0	0.4	----
As left span	5000	1196.8	400.0	401.7	0.996
Average Correction Factor					0.997

Notes: Sample inlet filter was changed after as founds. No adjustment made.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

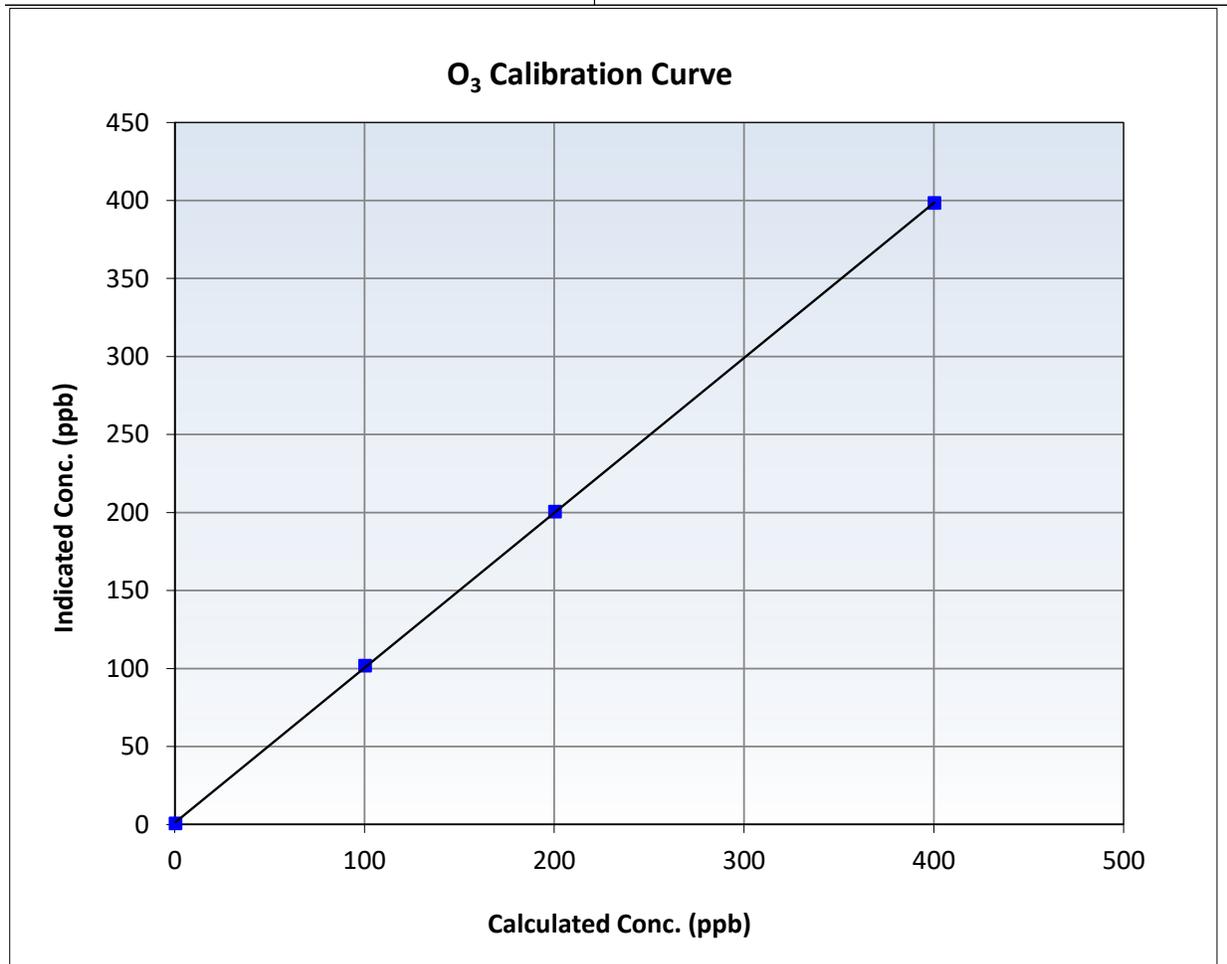
O₃ Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 8, 2025
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:17	End Time (MST):	13:48
Analyzer make:	Thermo 49i	Analyzer serial #:	1300156233

Calibration Data

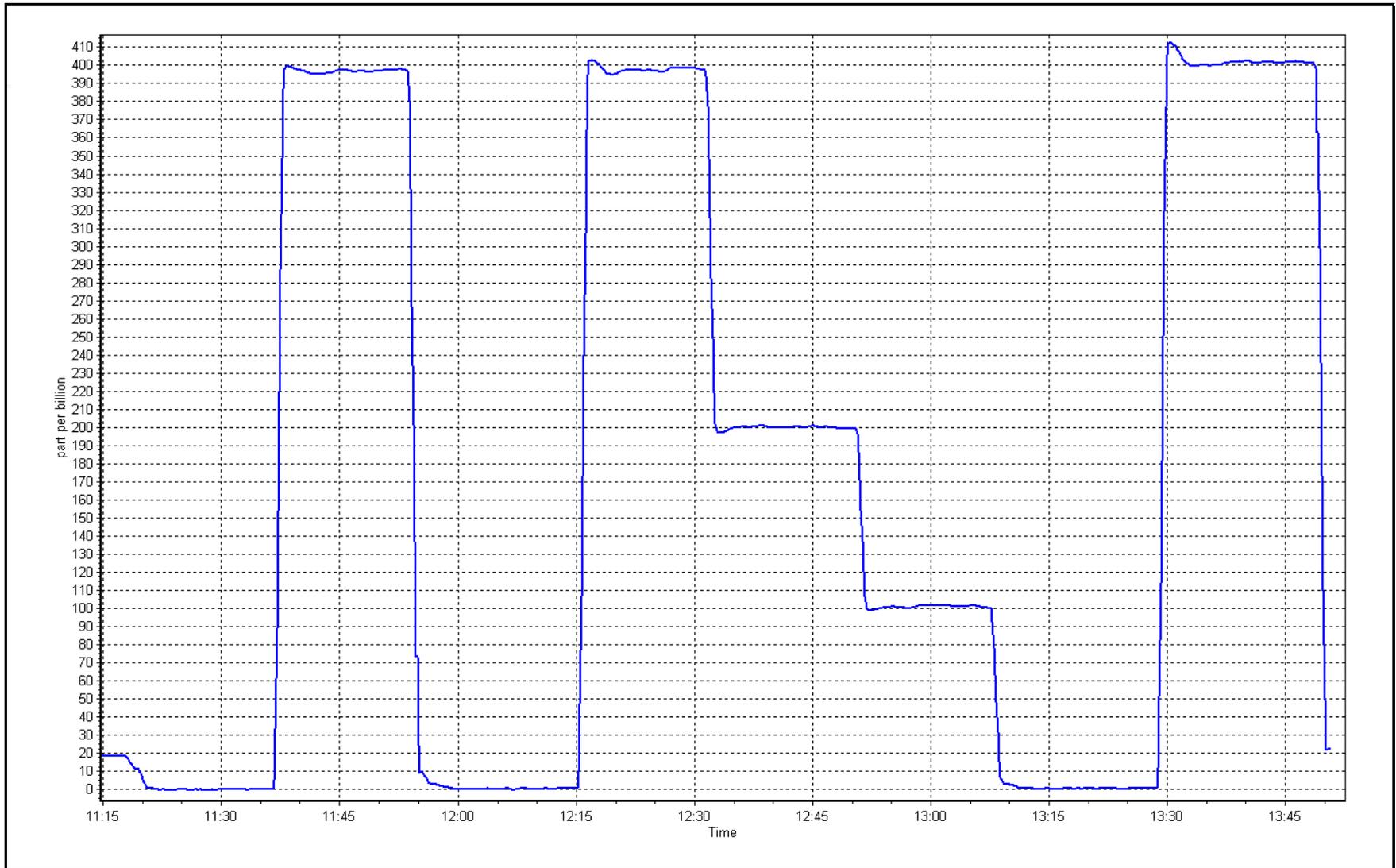
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999976	≥0.995
400.0	398.0	1.0050	Slope	0.993286	0.90 - 1.10
200.0	200.1	0.9995	Intercept	1.100000	+/- 5
100.0	101.4	0.9862			



O₃ Calibration Plot

Date: January 8, 2026

Location: Conklin





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Conklin Station number: AMS 21
 Calibration Date: January 28, 2026 Last Cal Date: December 8, 2025
 Start time (MST): 13:53 End time (MST): 14:09

Analyzer Make: API T640 S/N: 1266
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388754
 Temp/RH standard: Alicat FP-25BT S/N: 388754

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-7.50	-7.62	-7.50	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	712.50	714.16	712.50	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.05	5.08	5.05	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	48	----	48	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	4.50	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.90 Expiry Date: July 16, 2026
 Lot No.: 100128-050-040

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: November 26, 2025
 Date Disposable Filter Changed: November 26, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: June 4, 2025
 Date RH/T Sensor Cleaned: June 30, 2025

Notes: Verified flow, pressure, temperature and pump power. Leak check passed. No adjustment needed.

Calibration by: Jan Castro



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

**AMS22
JANVIER
JANUARY 2026**

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	January 21, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	11:14	End time (MST):	14:41
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	49.82	ppm	Cal Gas Exp Date:	April 9, 2033
Cal Gas Cylinder #:	CC494522			
Removed Cal Gas Conc:	50.11	ppm	Rem Gas Exp Date:	January 18, 2029
Removed Gas Cyl #:	CC281519		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	3806
Zero Air Gen Model:	Teledyne API T701		Serial Number:	691

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1152430006
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.002647	1.000705	Backgd or Offset:	27.5	28.4
Calibration intercept:	0.855249	0.235416	Coeff or Slope:	1.049	1.049

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.7	----
As found High point	4920	80.3	804.7	800.4	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	799.7	Previous response	807.7	*% change	-1.0%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.3	----
High point	4920	80.3	800.1	800.5	0.999
Mid point	4960	40.2	400.5	401.6	0.997
Low point	4980	20.1	200.3	201.0	0.996
As left zero	5000	0.0	0.0	-0.1	----
As left span	4920	80.3	800.1	804.0	0.995
Average Correction Factor:					0.998

Notes: Changed the inlet filter after as founds. Adjusted zero.

Calibration Performed By: Param Kaur



Wood Buffalo Environmental Association

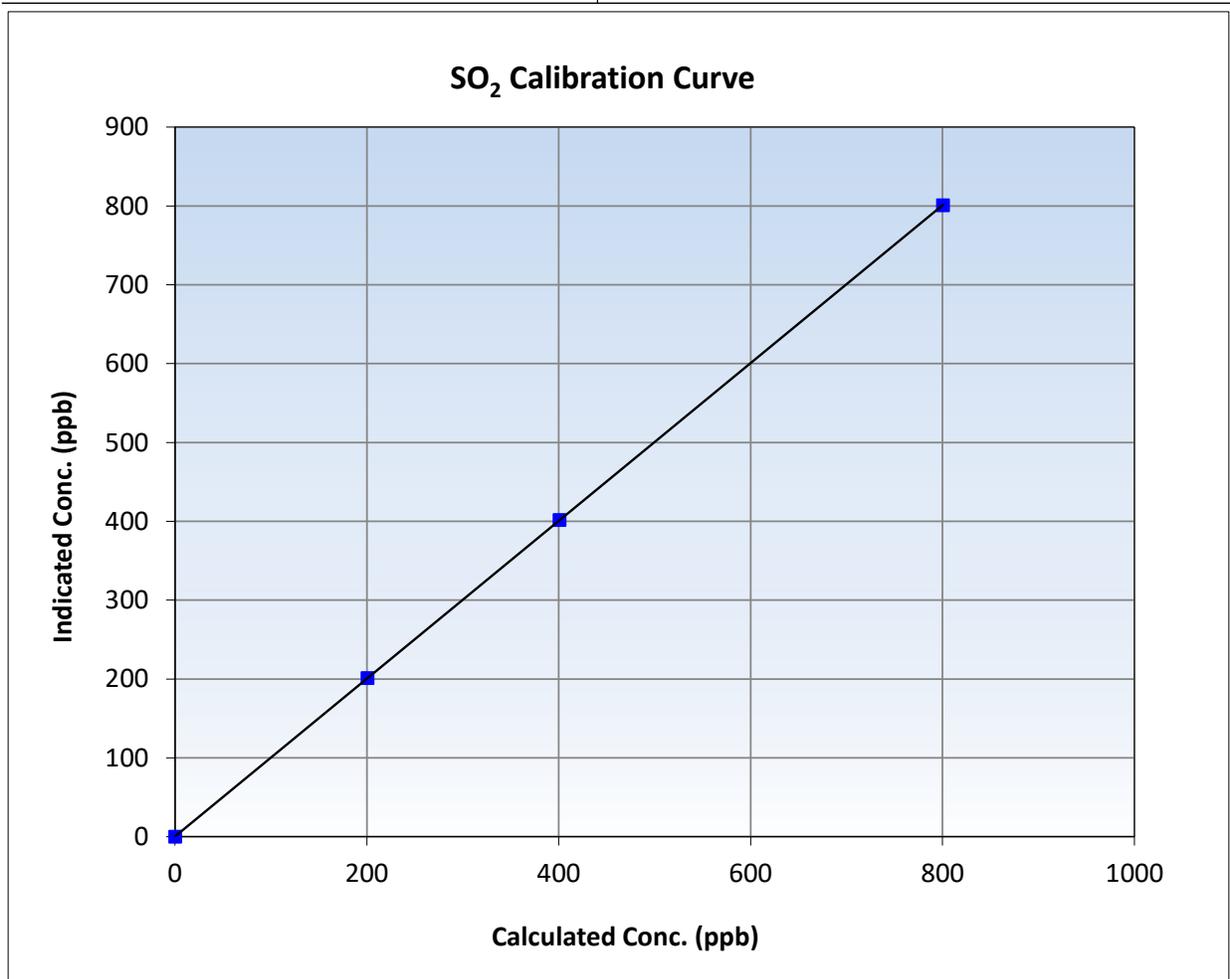
SO₂ Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:14	End Time (MST):	14:41
Analyzer make:	Thermo 43i	Analyzer serial #:	1152430006

Calibration Data

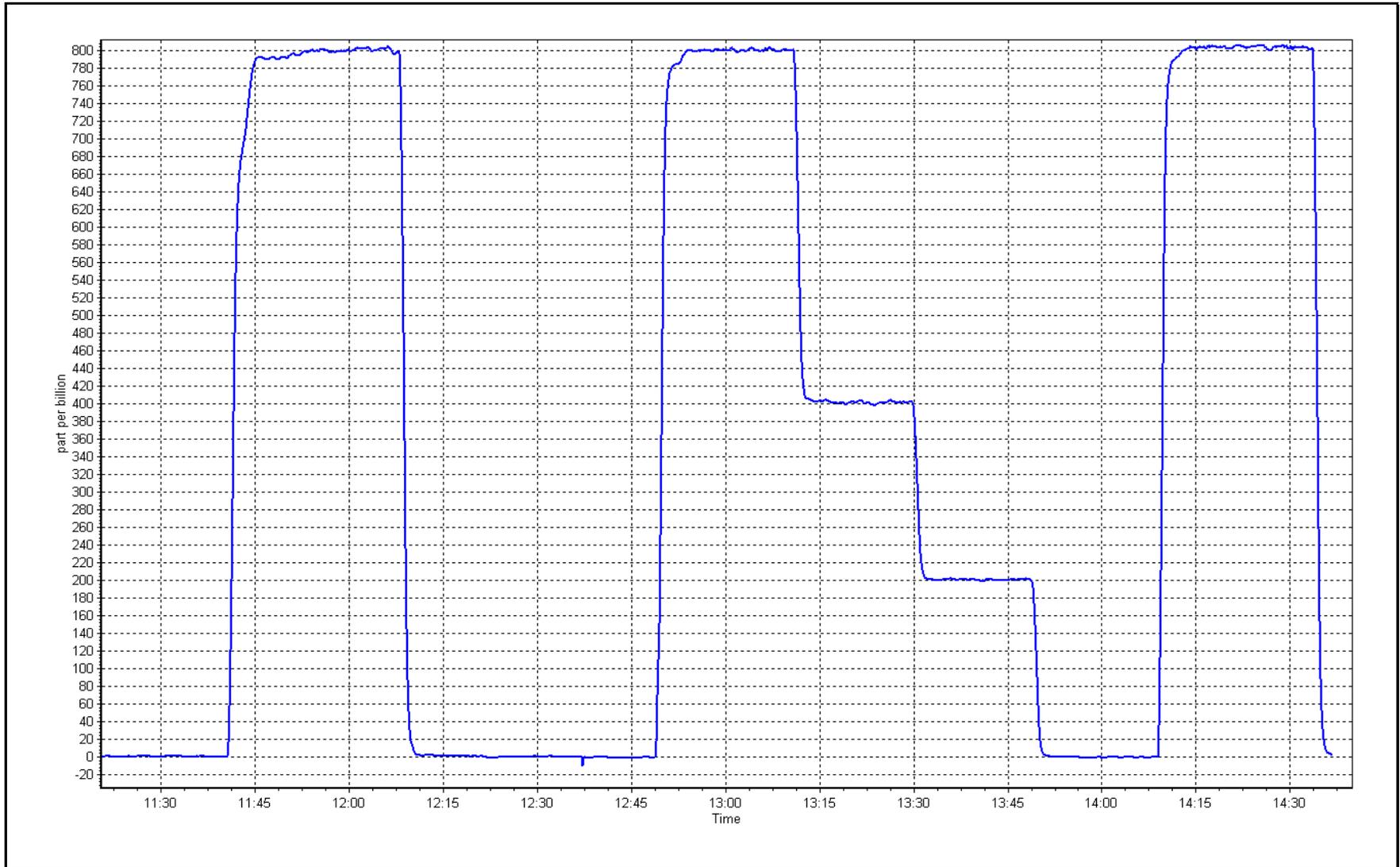
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.3	----	Correlation Coefficient	0.999998	≥0.995
800.1	800.5	0.9995	Slope	1.000705	0.90 - 1.10
400.5	401.6	0.9974	Intercept	0.235416	+/-30
200.3	201.0	0.9964			



SO2 Calibration Plot

Date: January 21, 2026

Location: Janvier





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	January 29, 2026	Last Cal Date:	December 15, 2025
Start time (MST):	12:48	End time (MST):	17:07
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.02	ppm	Cal Gas Exp Date:	November 15, 2026
Cal Gas Cylinder #:	CC424047			
Removed Cal Gas Conc:	5.02	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	3806
ZAG Make/Model:	Teledyne API T701		Serial Number:	691

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680031
Converter make:	CDN-101	Converter serial #:	620
Analyzer Range	0 - 100 ppb	Converter Temp:	850 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.998806	0.991381	Backgd or Offset:	4.14	4.14
Calibration intercept:	0.400667	0.360480	Coeff or Slope:	1.253	1.253

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.2	----
As found High point	4920	79.7	80.0	81.2	0.988
As found Mid point	4960	39.8	40.0	40.8	0.984
As found Low point	4980	19.9	20.0	20.4	0.989
New cylinder response					
Baseline Corr As found:	81.0	Prev response:	80.33	*% change:	0.8%
Baseline Corr 2nd AF pt:	40.6	AF Slope:	1.012518	AF Intercept:	0.220865
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999995	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4920	79.7	80.0	79.6	1.005
Mid point	4960	39.8	40.0	40.2	0.994
Low point	4980	19.9	20.0	20.1	0.994
As left zero	5000	0.0	0.0	0.6	----
As left span	4920	79.7	80.0	79.7	1.004
SO2 Scrubber Check	4920	79.8	798.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	0.998
Date of last converter efficiency test:					

Notes: Changed the inlet filter after as founds. Scrubber test performed, no issues. No adjustments made.

Calibration Performed By: Rene Chamberland



Wood Buffalo Environmental Association

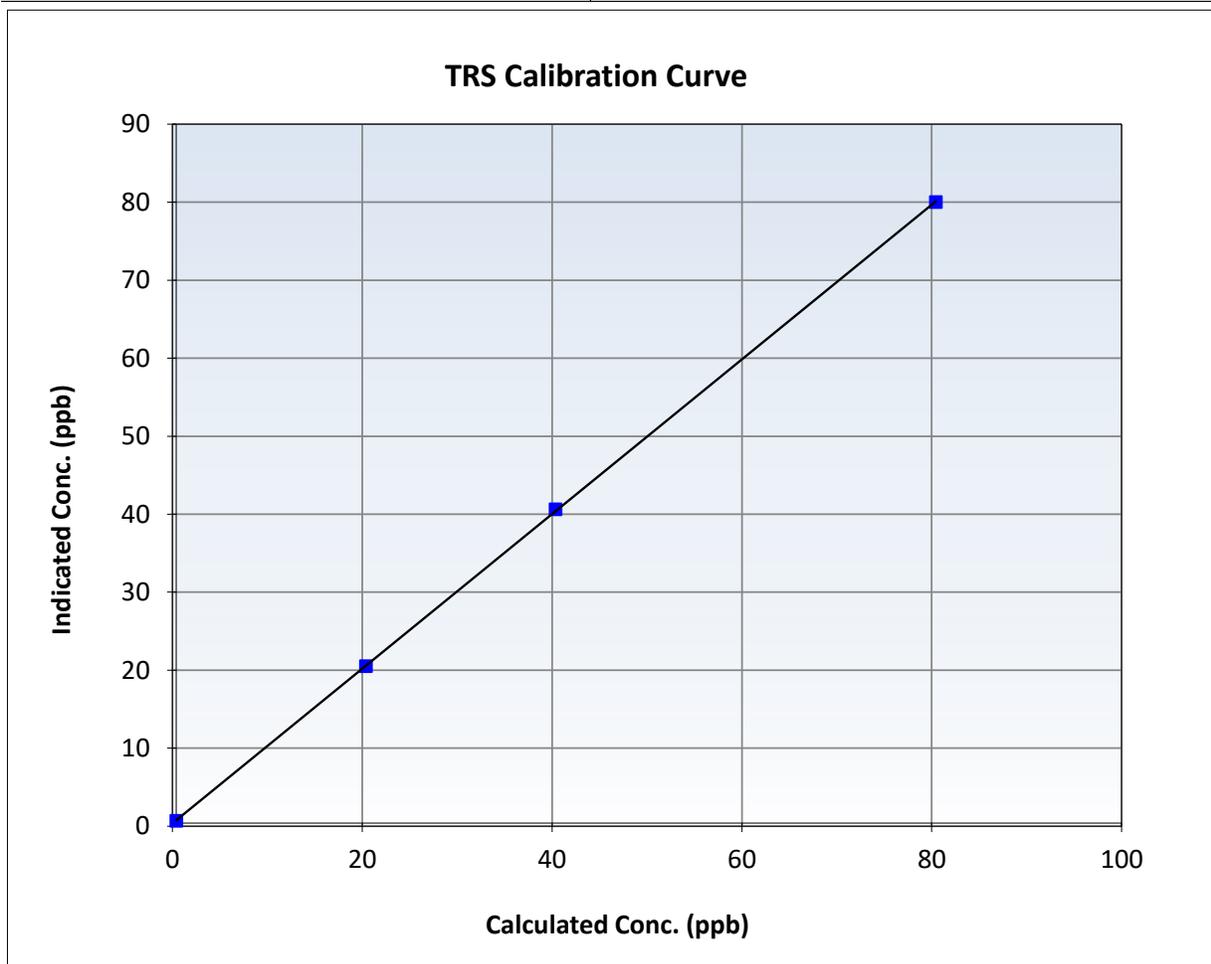
TRS Calibration Summary

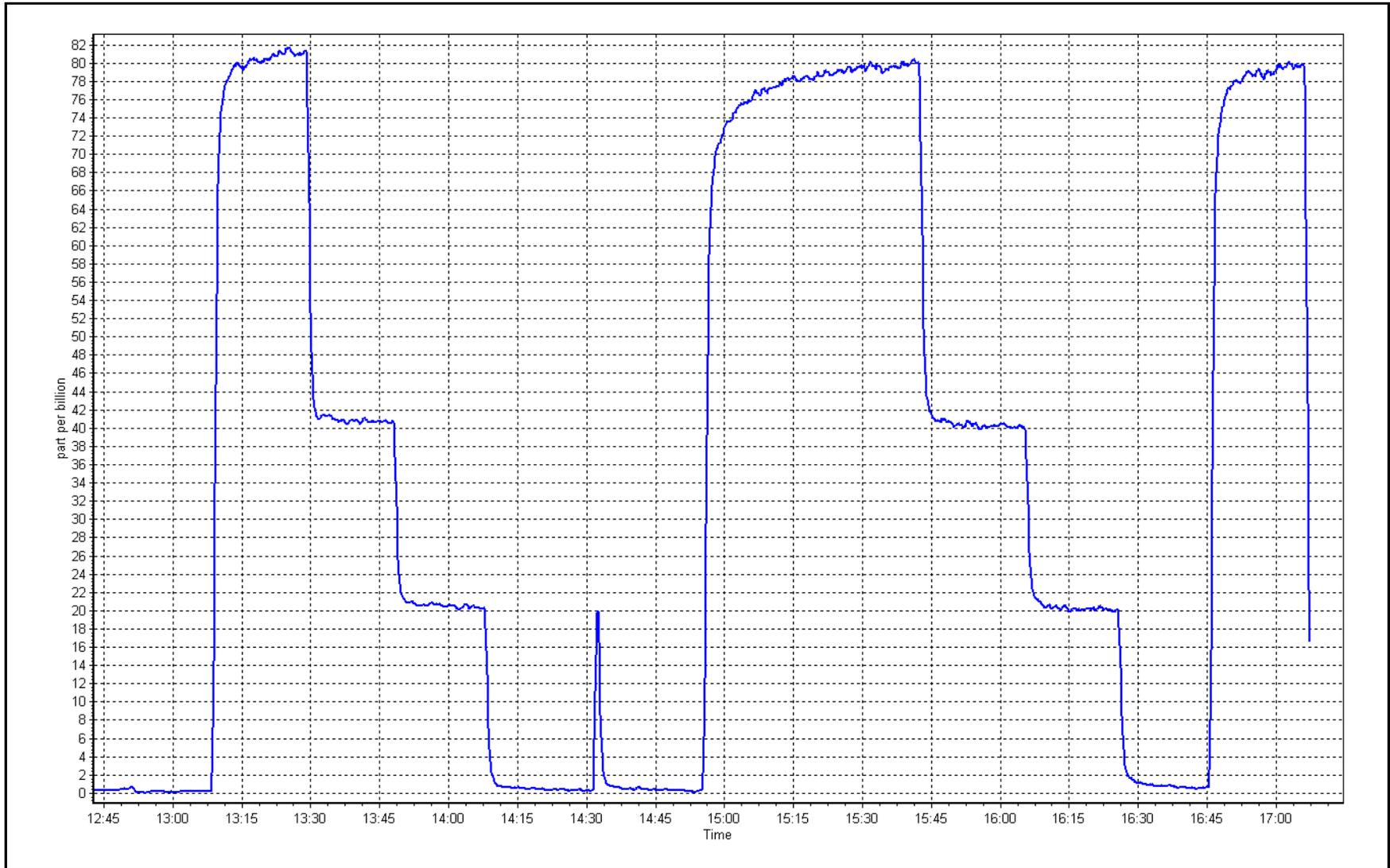
Station Information

Calibration Date:	January 29, 2026	Previous Calibration:	December 15, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	12:48	End Time (MST):	17:07
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680031

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.3	----	Correlation Coefficient	0.999981	≥ 0.995
80.0	79.6	1.0053	Slope	0.991381	$0.90 - 1.10$
40.0	40.2	0.9940	Intercept	0.360480	± 3
20.0	20.1	0.9940			







Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	January 21, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	11:14	End time (MST):	14:41
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC494522	Cal Gas Expiry Date:	April 9, 2033
CH ₄ Cal Gas Conc.	499.5 ppm	CH ₄ Equiv Conc.	1057.5 ppm
C ₃ H ₈ Cal Gas Conc.	202.9 ppm		
Removed Gas Cert:	CC281519	Removed Gas Expiry:	January 18, 2029
Removed CH ₄ Conc.	502.8 ppm	CH ₄ Equiv Conc.	1075.9 ppm
Removed C ₃ H ₈ Conc.	208.4 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API 700	Serial Number:	3806
Zero Air Gen model:	Teledyne API 701	Serial Number:	691

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1317958219
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH ₄ SP Ratio:	2.53E-04	2.53E-04	NMHC SP Ratio:	5.98E-05
CH ₄ Retention time:	11.6	11.6	NMHC Peak Area:	149911
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.3	17.28	17.12	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.12	Prev response	17.23	*% change	-0.6%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.3	16.98	17.13	0.991
Mid point	4960	40.2	8.50	8.46	1.005
Low point	4980	20.1	4.25	4.23	1.005
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	16.98	17.05	0.996
Average Correction Factor					1.001

Notes: Changed the inlet filter after as founds. No adjustments made.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.3	9.20	9.09	1.012
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.09	Prev response	9.19	*% change	-1.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.3	8.96	9.10	0.984
Mid point	4960	40.2	4.49	4.52	0.993
Low point	4980	20.1	2.24	2.27	0.989
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	8.96	9.05	0.990
Average Correction Factor					0.989

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.3	8.07	8.03	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.03	Prev response	8.04	*% change	-0.2%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.3	8.02	8.03	0.999
Mid point	4960	40.2	4.02	3.94	1.020
Low point	4980	20.1	2.01	1.96	1.024
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	8.02	8.00	1.002
Average Correction Factor					1.014

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.998724	1.009214
THC Cal Offset:	-0.028700	-0.047930
CH ₄ Cal Slope:	0.999447	1.001981
CH ₄ Cal Offset:	-0.028622	-0.036021
NMHC Cal Slope:	0.998331	1.015650
NMHC Cal Offset:	-0.001078	-0.011508

Calibration Performed By: Param Kaur



Wood Buffalo Environmental Association

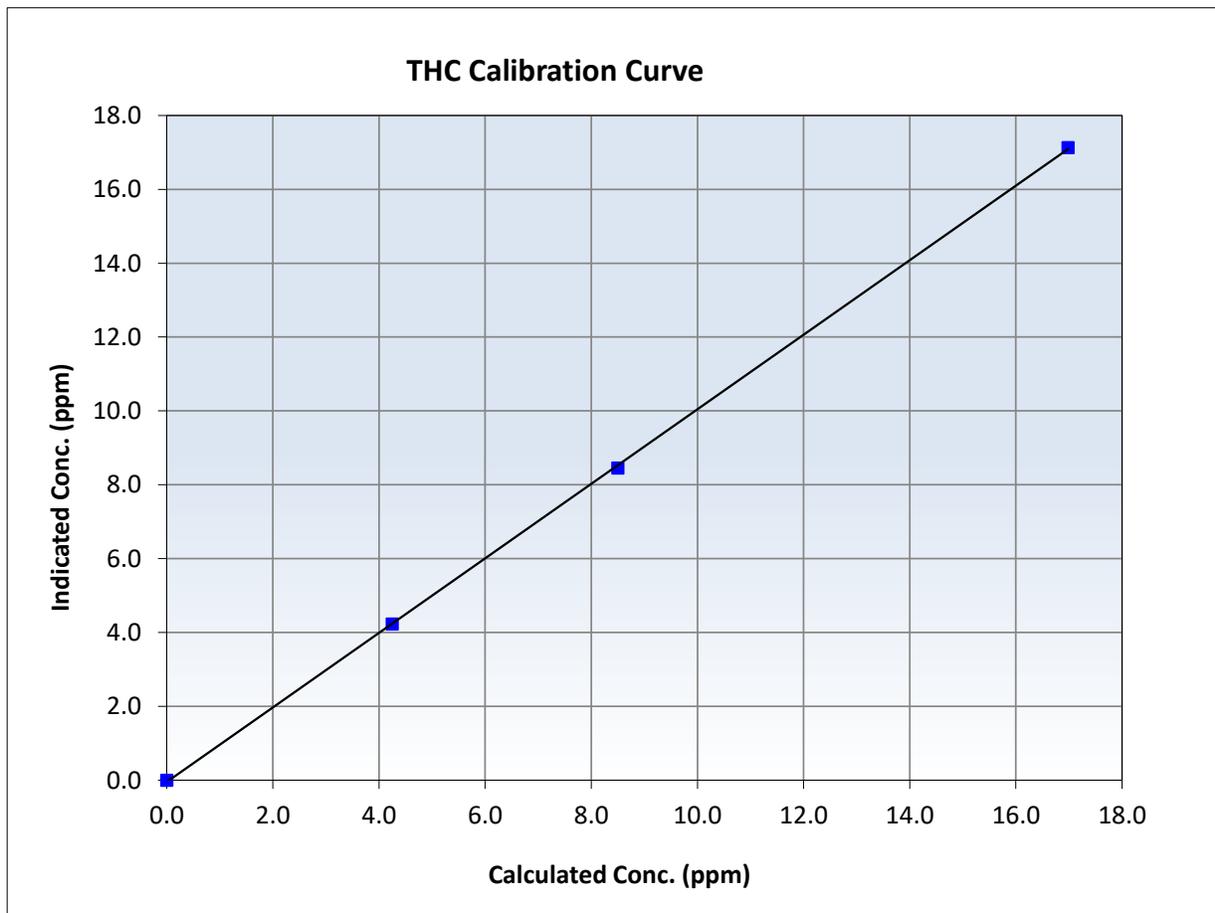
THC Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:14	End Time (MST):	14:41
Analyzer make:	Thermo 55i	Analyzer serial #:	1317958219

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999938	<i>≥0.995</i>
16.98	17.13	0.9912	Slope	1.009214	<i>0.90 - 1.10</i>
8.50	8.46	1.0054	Intercept	-0.047930	<i>+/-0.5</i>
4.25	4.23	1.0052			





Wood Buffalo Environmental Association

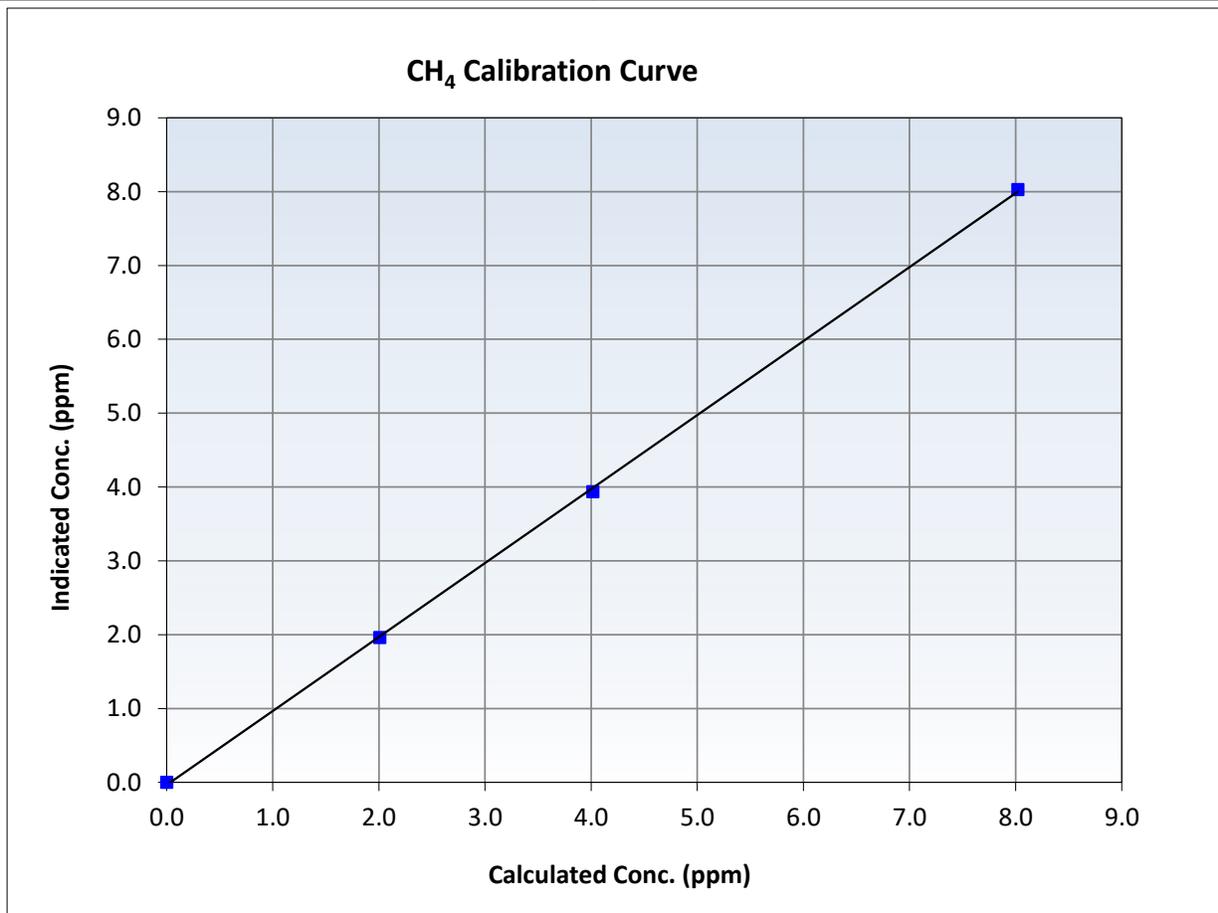
CH₄ Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:14	End Time (MST):	14:41
Analyzer make:	Thermo 55i	Analyzer serial #:	1317958219

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999864	<i>≥0.995</i>
8.02	8.03	0.9989	Slope	1.001981	<i>0.90 - 1.10</i>
4.02	3.94	1.0198	Intercept	-0.036021	<i>+/-0.5</i>
2.01	1.96	1.0239			





Wood Buffalo Environmental Association

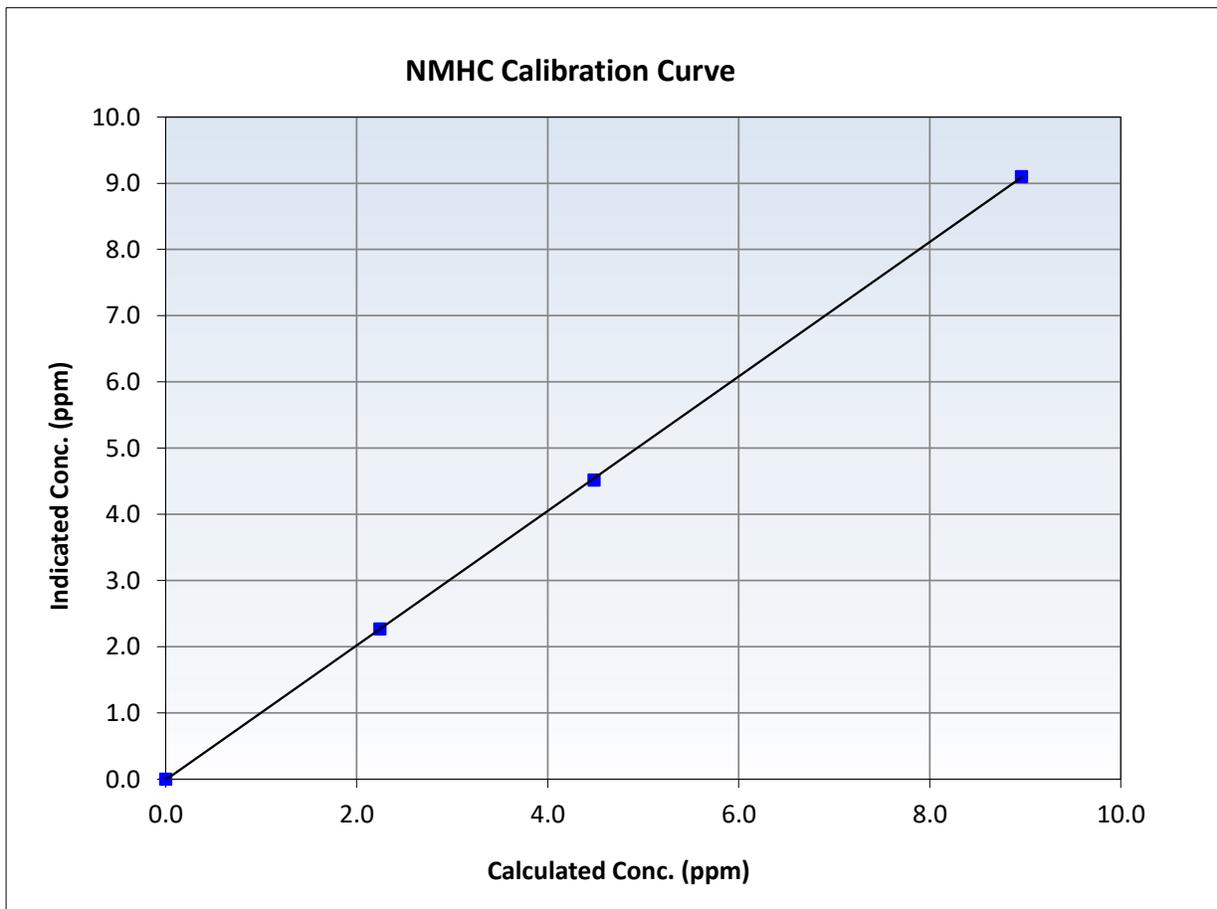
NMHC Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 17, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:14	End Time (MST):	14:41
Analyzer make:	Thermo 55i	Analyzer serial #:	1317958219

Calibration Data

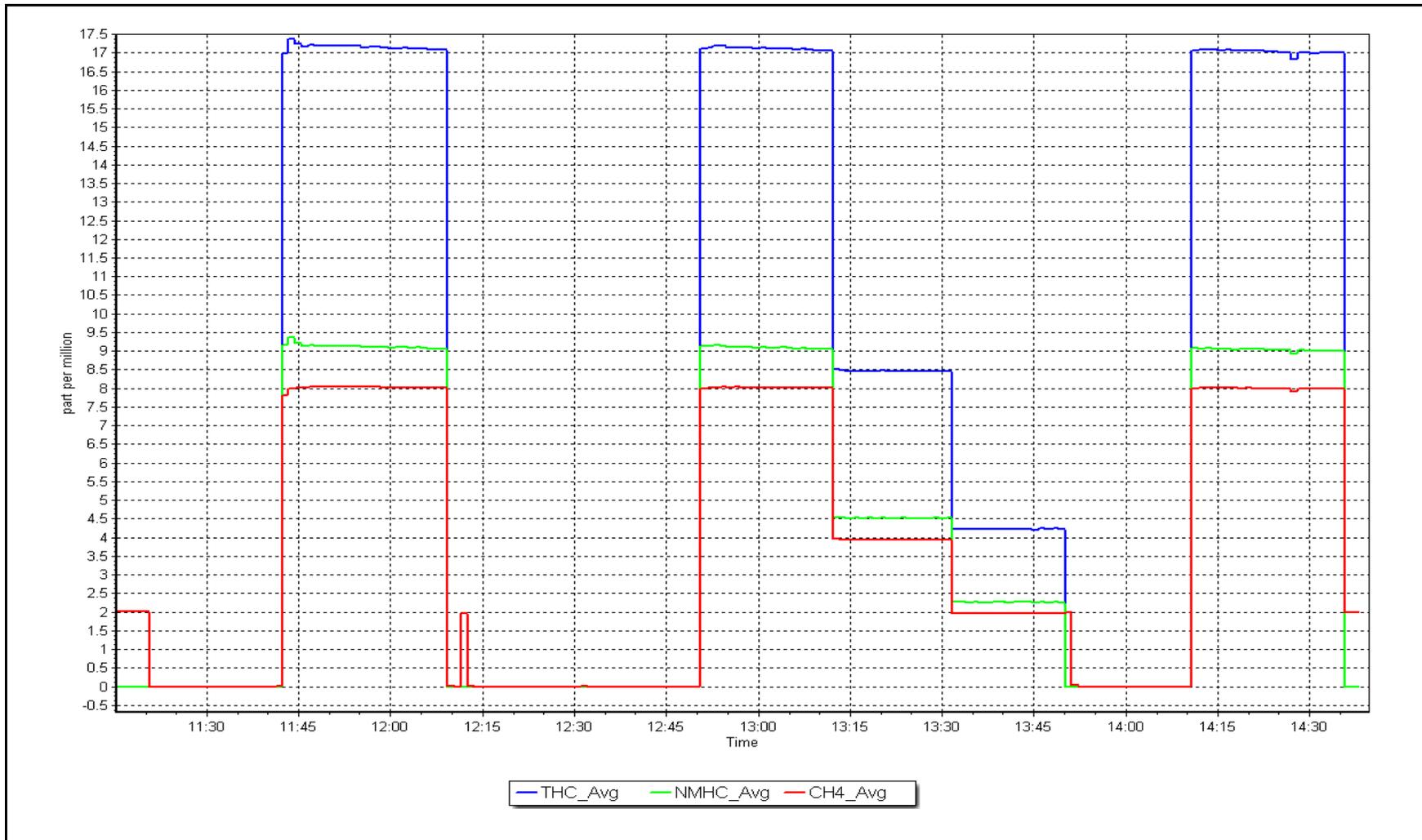
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999978 ≥0.995
8.96	9.10	0.9845	Slope	1.015650 0.90 - 1.10
4.49	4.52	0.9929	Intercept	-0.011508 +/-0.5
2.24	2.27	0.9885		



NMHC Calibration Plot

Date: January 21, 2026

Location: Janvier





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Janvier
 Station number: AMS 22
 Calibration Date: January 26, 2026
 Last Cal Date: December 16, 2025
 Start time (MST): 11:39
 End time (MST): 16:04
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0047765
 NOX Cal Gas Conc: 48.90 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 48.90 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701
 Cal Gas Expiry Date: March 11, 2031
 NO Cal Gas Conc: 48.80 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 48.80 ppm
 NO gas Diff:
 Serial Number: 3806
 Serial Number: 691

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.2	0.0	----	----
AF High point	4918	82.0	802.0	800.3	1.6	800.6	793.7	6.9	1.0014	1.0081
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 806.0 ppb		NO = 802.4 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = -0.7%	
Baseline Corr 1st pt	NO _x = 800.8 ppb		NO = 793.9 ppb			<u>As Found Statistics</u>		*Percent Change	NO = -1.1%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1229254994

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.005169	0.996105
NO _x Cal Offset:	-0.095819	-0.016050
NO Cal Slope:	1.004430	0.995034
NO Cal Offset:	-1.415946	-1.376225
NO ₂ Cal Slope:	1.001236	1.001992
NO ₂ Cal Offset:	0.021878	0.254179

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.012	1.012	NO bkgnd or offset:	2.8	2.7
NOX coeff or slope:	0.997	0.997	NOX bkgnd or offset:	2.9	2.9
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	173.5	175.0

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
High point	4918	82.0	802.0	800.3	1.6	798.9	795.8	3.0	1.0038	1.0057
Mid point	4960	41.0	400.9	400.1	0.8	399.2	395.6	3.6	1.0043	1.0113
Low point	4980	20.5	200.5	200.1	0.4	199.6	196.6	3.0	1.0044	1.0176
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	----	----
As left span	4918	82.0	802.0	391.8	410.2	804.3	391.8	412.5	0.9971	1.0000
Average Correction Factor									1.0041	1.0115

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.1	----	----
High GPT point	794.5	397.8	398.3	399.3	0.9976	100.2%
Mid GPT point	794.5	605.1	191.0	191.8	0.9960	100.4%
Low GPT point	794.5	701.3	94.8	95.4	0.9941	100.6%
Average Correction Factor					0.9959	100.4%

Notes:

Inlet filter was changed after as founds. No adjustments made.

Calibration Performed By:

Rene Chamberland



Wood Buffalo Environmental Association

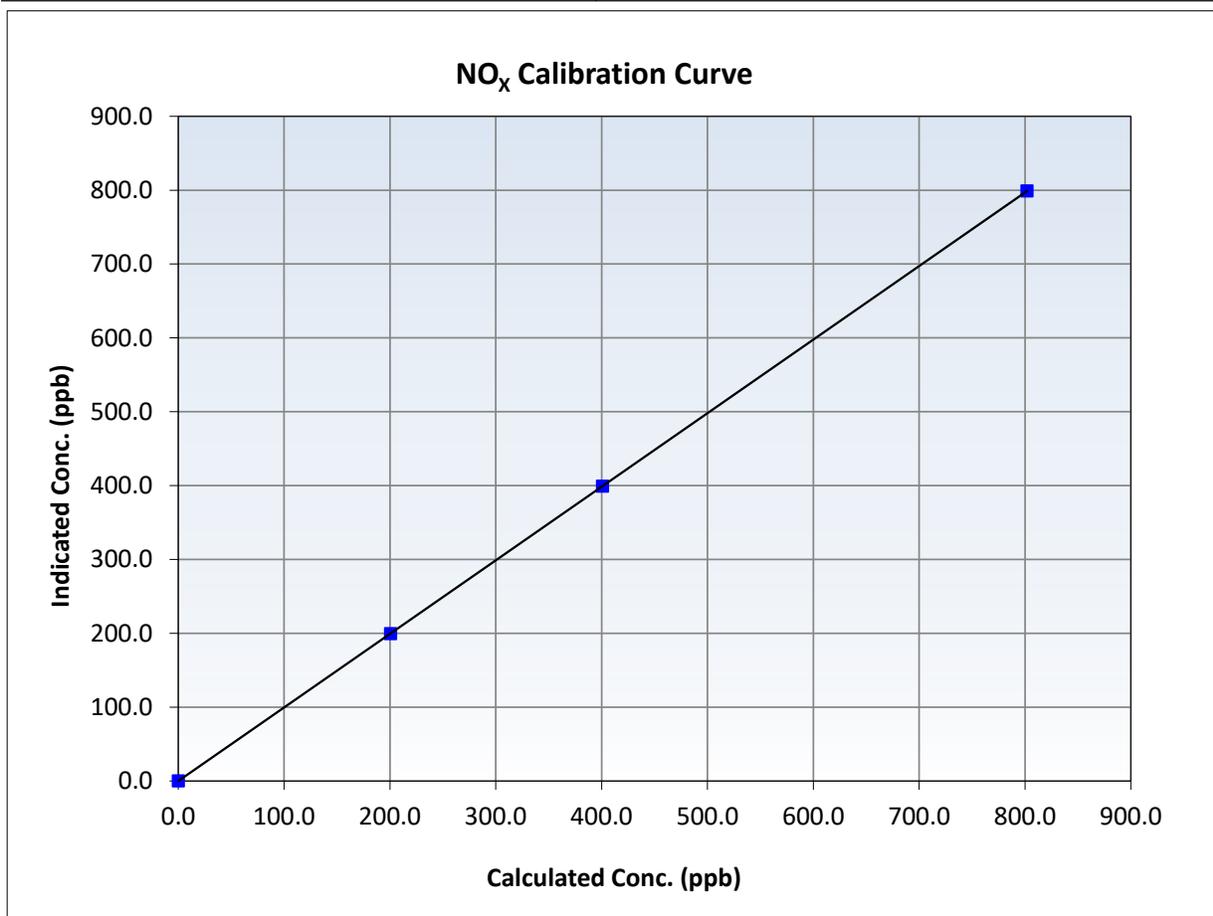
NO_x Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 16, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:39	End Time (MST):	16:04
Analyzer make:	Thermo 42i	Analyzer serial #:	1229254994

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	1.000000	≥0.995
802.0	798.9	1.0038	Slope	0.996105	0.90 - 1.10
400.9	399.2	1.0043	Intercept	-0.016050	+/-20
200.5	199.6	1.0044			





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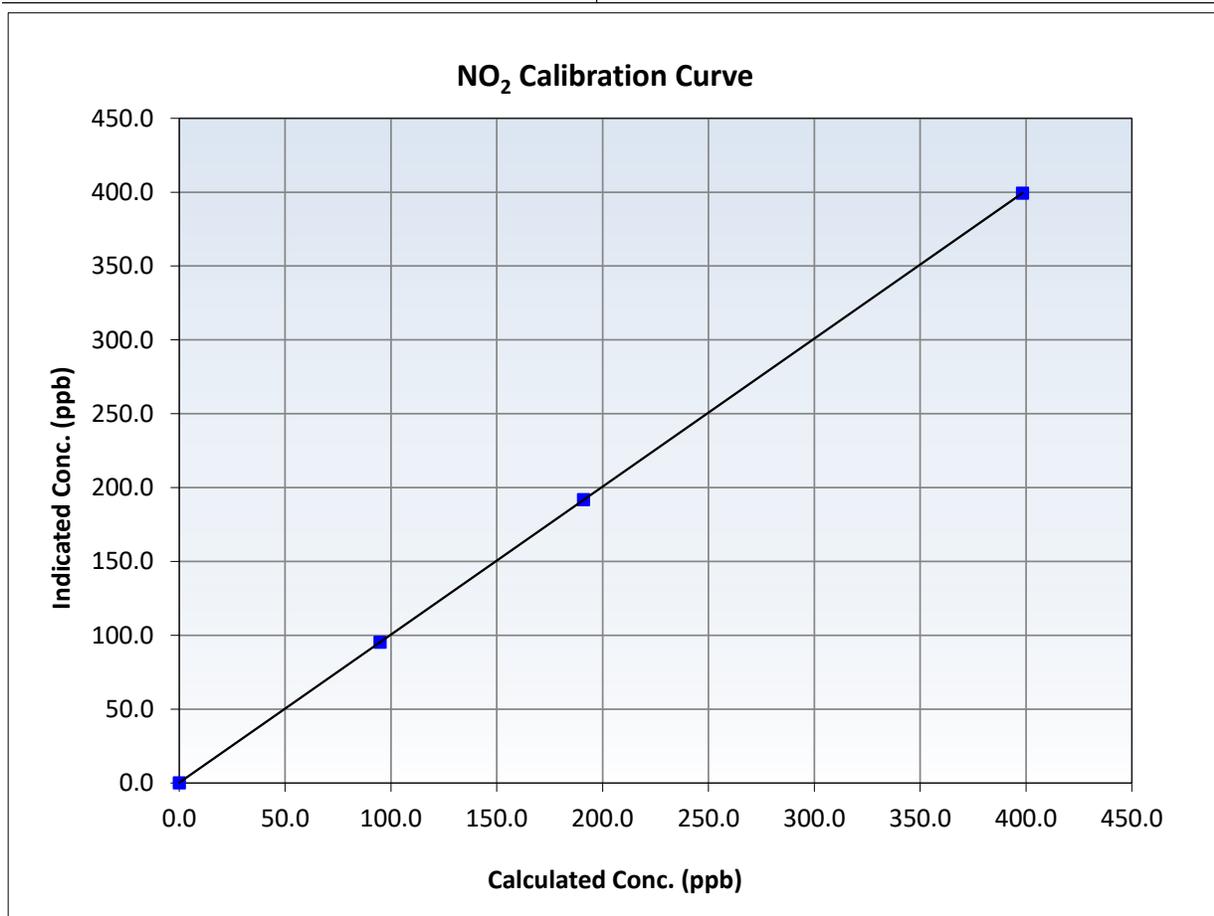
NO₂ Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 16, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:39	End Time (MST):	16:04
Analyzer make:	Thermo 42i	Analyzer serial #:	1229254994

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999999	≥0.995
398.3	399.3	0.9976	Slope	1.001992	0.90 - 1.10
191.0	191.8	0.9960	Intercept	0.254179	+/-20
94.8	95.4	0.9941			





Wood Buffalo Environmental Association

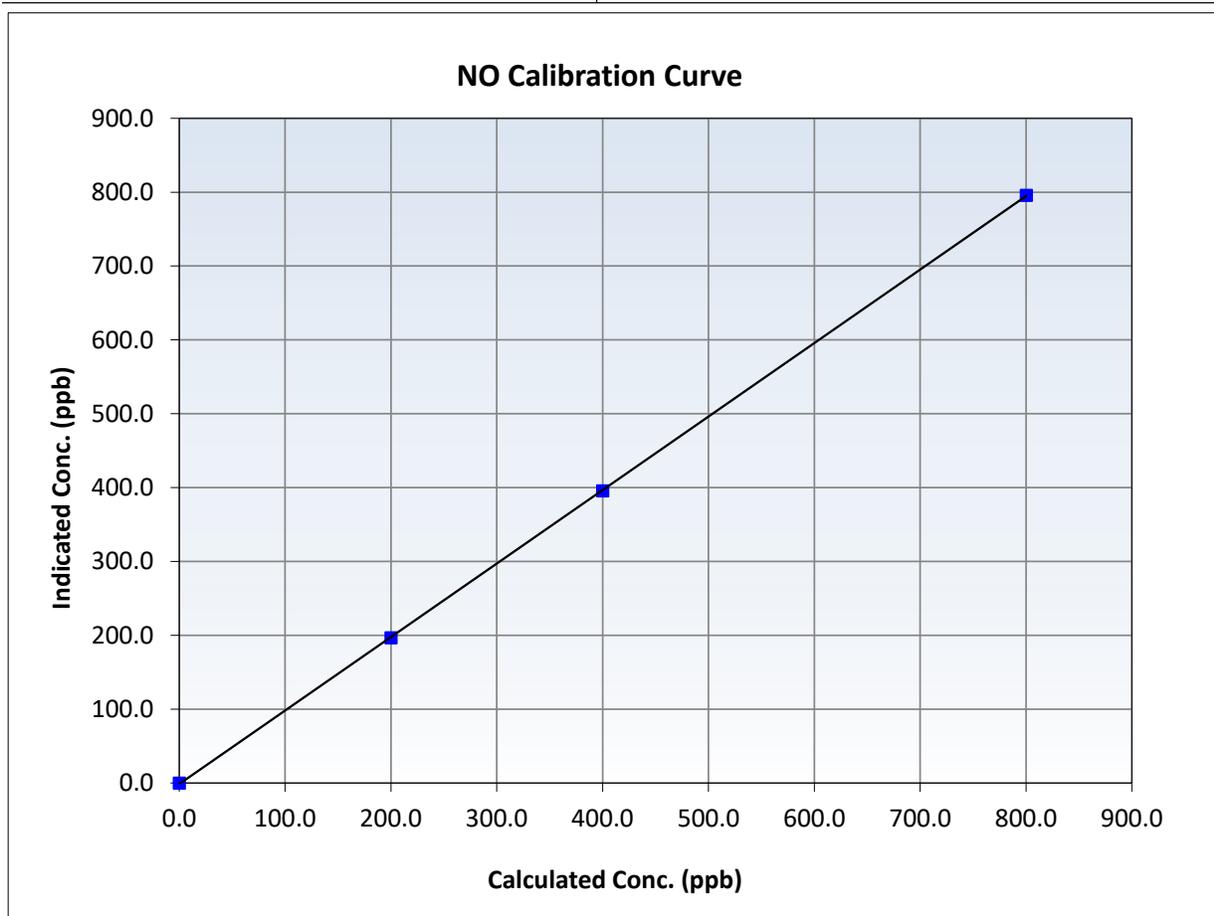
NO Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 16, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:39	End Time (MST):	16:04
Analyzer make:	Thermo 42i	Analyzer serial #:	1229254994

Calibration Data

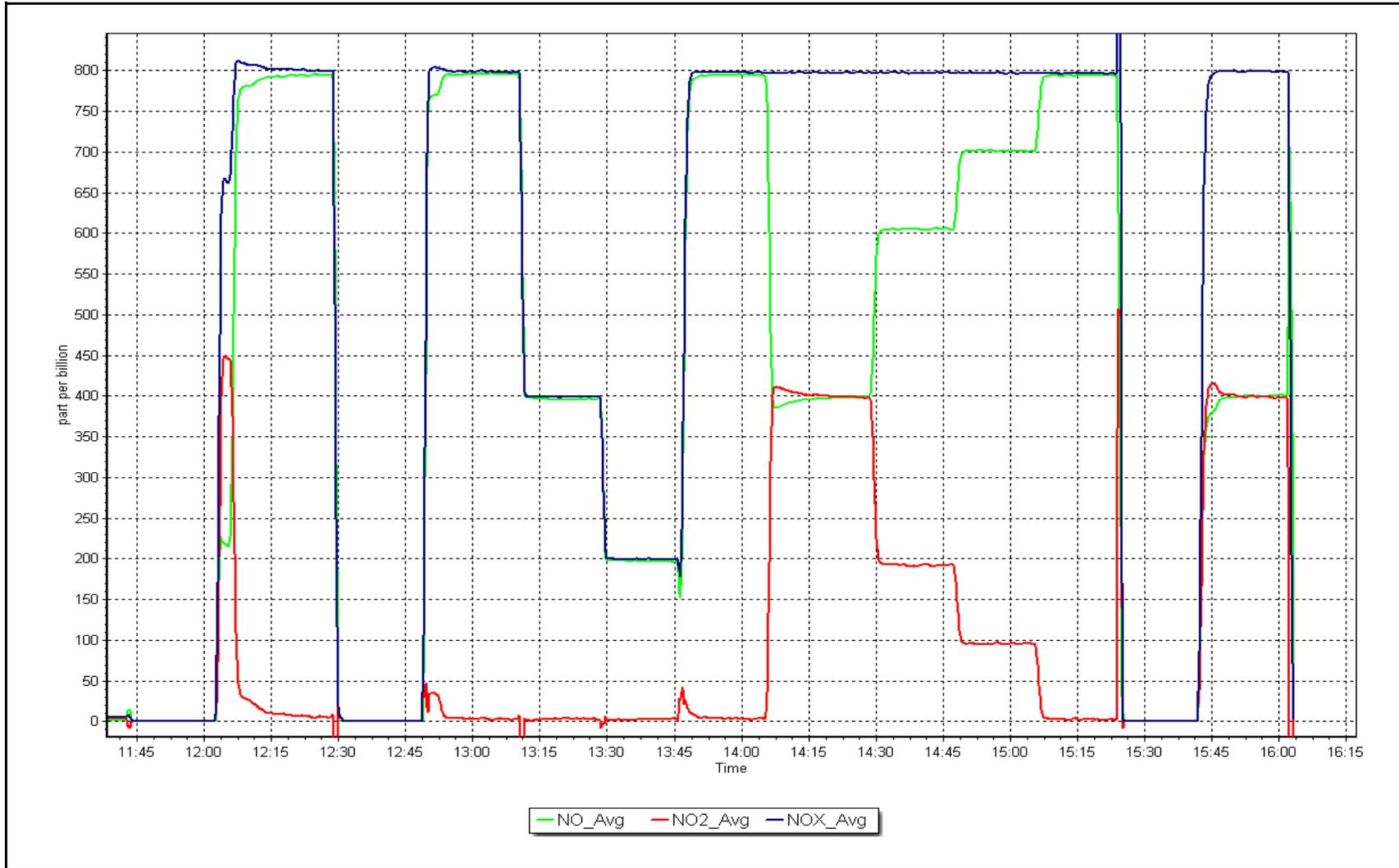
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999986	<i>≥0.995</i>
800.3	795.8	1.0057	Slope	0.995034	<i>0.90 - 1.10</i>
400.1	395.6	1.0113	Intercept	-1.376225	<i>+/-20</i>
200.1	196.6	1.0176			



NO_x Calibration Plot

Date: January 26, 2026

Location: Janvier





Wood Buffalo Environmental Association

O₃ Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	January 19, 2026	Last Cal Date:	December 22, 2025
Start time (MST):	12:19	End time (MST):	15:35
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer	Serial Number:	3806
Calibrator Make/Model:	Teledyne API T700	Serial Number:	691
ZAG Make/Model:	Teledyne API T701H		

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1227254861
Analyzer Range	0 - 500 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.998829	1.000143	Backgd or Offset:	-0.2	-0.2
Calibration intercept:	0.680000	-0.300000	Coeff or Slope:	1.494	1.506

O₃ As Found Data

Set Point	Dilution air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic- AFzero) <i>Limit = 0.90-1.10</i>
As found zero	5000	800.0	0.0	0.2	----
As found High point	5000	926.2	400.0	397.8	1.006
As found Mid point					
As found Low point					
Baseline Corr As found:	397.6	Previous response	400.2	*% change	-0.7%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O₃ Calibration Data

Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	800.0	0.0	0.1	----
High point	5000	926.2	400.0	399.9	1.000
Mid point	5000	768.9	200.0	199.7	1.002
Low point	5000	666.4	100.0	99.2	1.008
As left zero	5000	800.0	0.0	0.2	----
As left span	5000	926.2	400.0	405.5	0.986
Average Correction Factor					1.003

Notes: Changed the inlet filter after the as founds. Adjusted the span.

Calibration Performed By: Rene Chamberland



Wood Buffalo Environmental Association

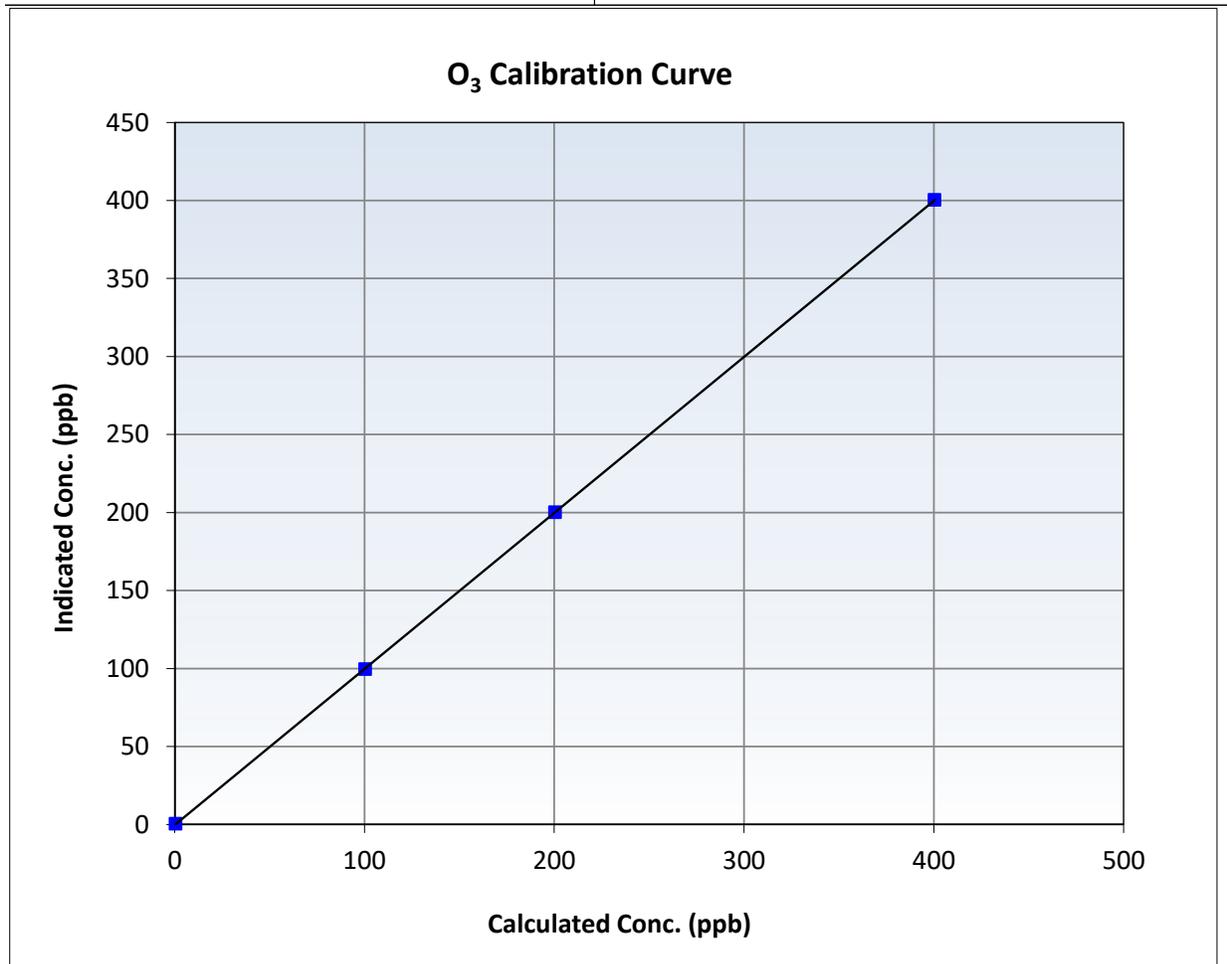
O₃ Calibration Summary

Station Information

Calibration Date:	January 19, 2026	Previous Calibration:	December 22, 2025
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	12:19	End Time (MST):	15:35
Analyzer make:	Thermo 49i	Analyzer serial #:	1227254861

Calibration Data

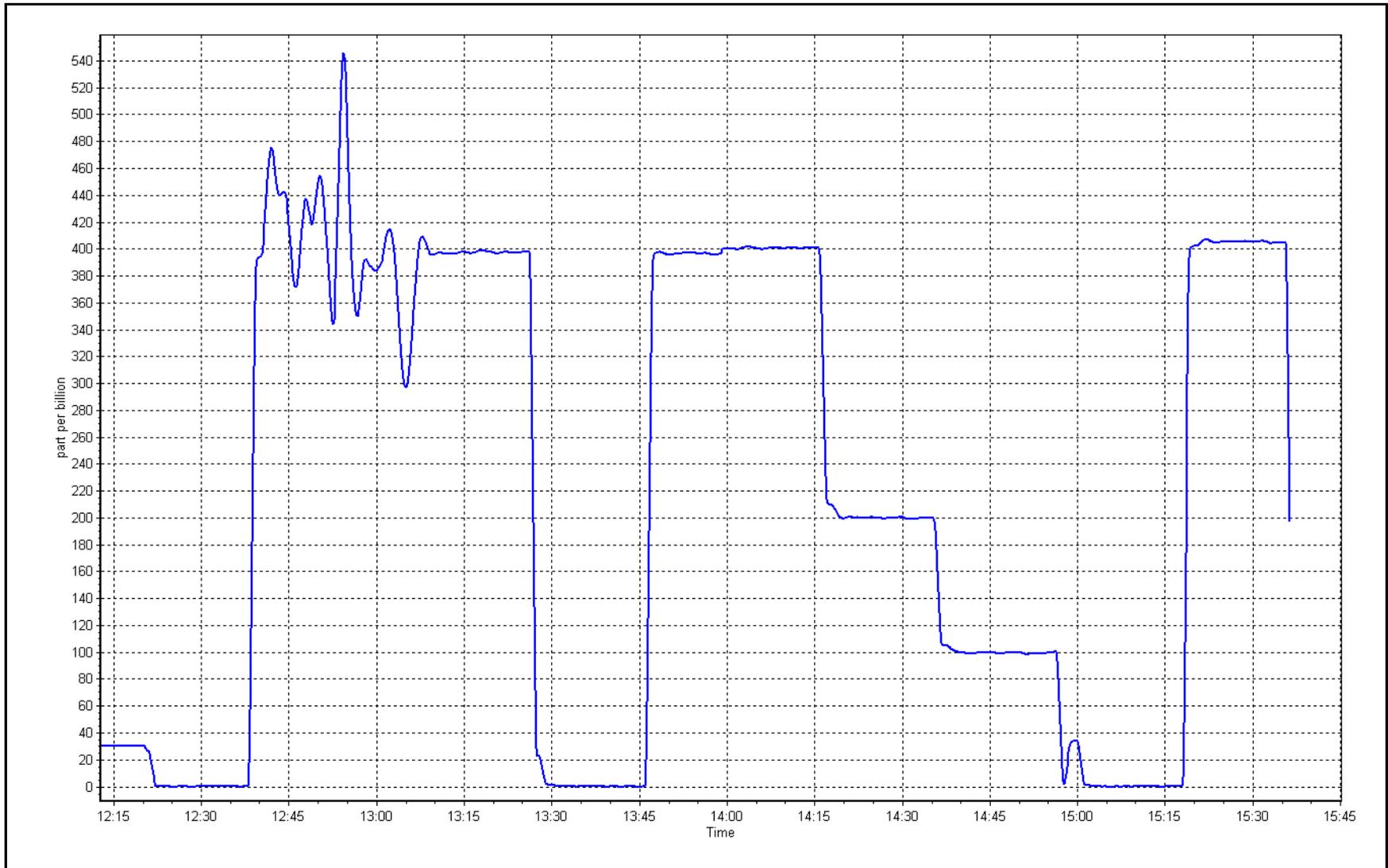
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999995	≥0.995
400.0	399.9	1.0003	Slope	1.000143	0.90 - 1.10
200.0	199.7	1.0015	Intercept	-0.300000	+/- 5
100.0	99.2	1.0081			



O₃ Calibration Plot

Date: January 19, 2026

Location: Janvier





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Janvier Station number: AMS 22
 Calibration Date: January 29, 2026 Last Cal Date: December 22, 2025
 Start time (MST): 15:00 End time (MST): 16:34

Analyzer Make: Teledyne API T640 S/N: 325
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388749
 Temp/RH standard: Alicat FP-25BT S/N: 388749

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-2.5	-2.98	-2.5	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	719.9	720.93	719.9	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	4.97	4.805	4.97	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	37	----	37	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	5.1	PM w/ HEPA: _____	0.0	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: **10.9** Expiry Date: October 6, 2024
 Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	10.9 +/- 0.5

Date Optical Chamber Cleaned: _____ November 18, 2025
 Date Disposable Filter Changed: _____ November 18, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: _____ May 28, 2025
 Date RH/T Sensor Cleaned: _____ November 18, 2025

Notes: Verified flow, temperature, and pressure. Leak check passed.

Calibration by: Rene Chamberland



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS23 FORT HILLS JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	January 16, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	8:51	End time (MST):	11:51
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.35	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	CC484463			
Removed Cal Gas Conc:	50.35	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Model:	API T700		Serial Number:	1222
Zero Air Gen Model:	API T701		Serial Number:	1117

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1160290012
Analyzer Range:	0-1000ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.988872	1.001020	Backgd or Offset:	18.5	19.1
Calibration intercept:	0.018487	-0.779322	Coeff or Slope:	1.063	1.070

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.6	----
As found High point	4921	79.4	799.5	795.4	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	794.8	Previous response	790.6	*% change	0.5%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4921	79.4	799.5	800.3	0.999
Mid point	4960	39.7	399.8	398.1	1.004
Low point	4980	19.8	199.4	198.4	1.005
As left zero	5000	0.0	0.0	0.2	----
As left span	4921	79.4	799.5	802.0	0.997
Average Correction Factor:					1.003

Notes: No maintenance done. Zero and Span adjusted.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

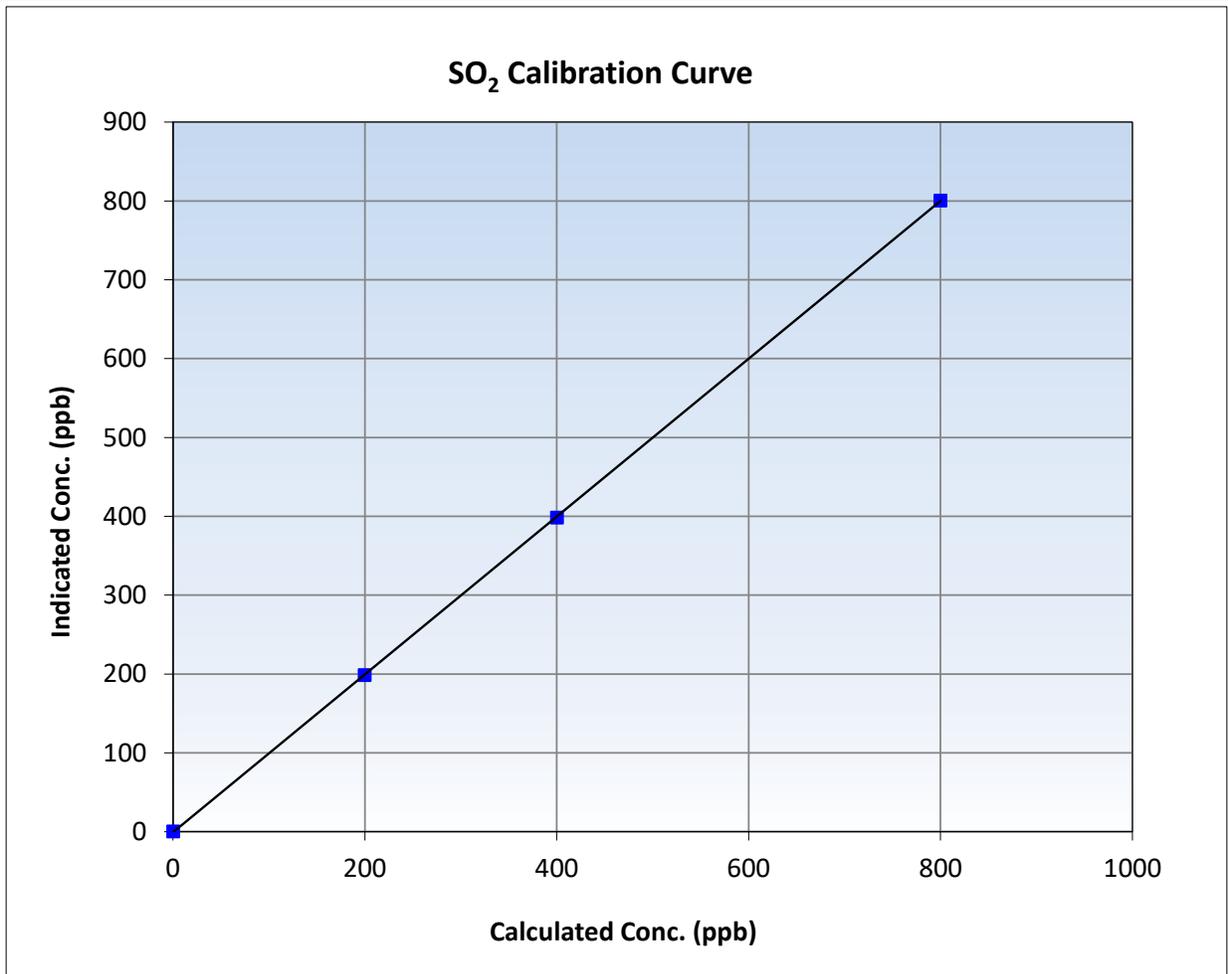
SO₂ Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	8:51	End Time (MST):	11:51
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290012

Calibration Data

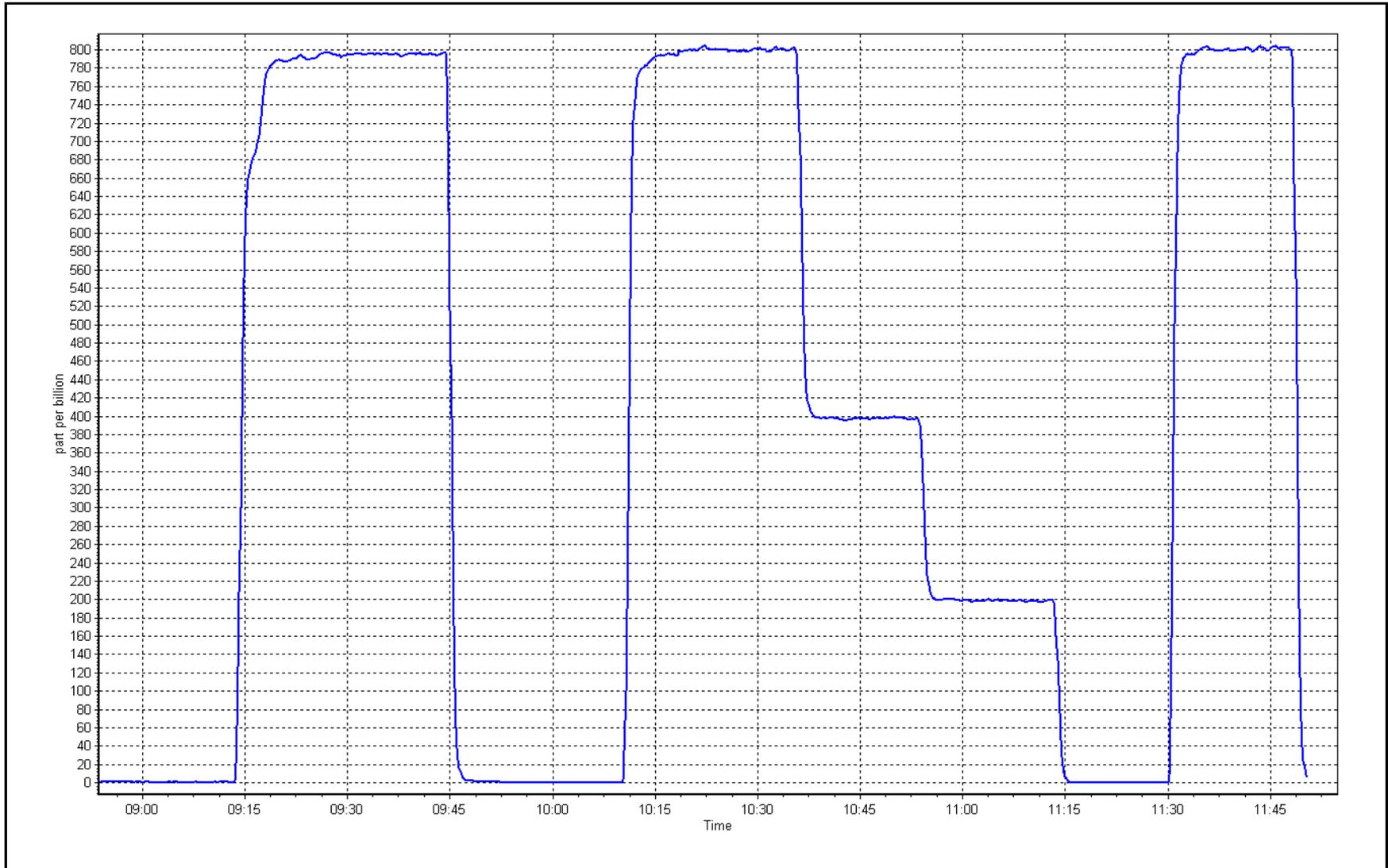
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.2	----	Correlation Coefficient	0.999990	≥0.995
799.5	800.3	0.9990	Slope	1.001020	0.90 - 1.10
399.8	398.1	1.0043	Intercept	-0.779322	+/-30
199.4	198.4	1.0050			



SO2 Calibration Plot

Date: January 16, 2026

Location: Fort Hills





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	January 14, 2026	Last Cal Date:	December 16, 2025
Start time (MST):	7:20	End time (MST):	11:20
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.84	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	DT0021910			
Removed Cal Gas Conc:	4.84	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	5762
ZAG Make/Model:	API T701		Serial Number:	1117

Analyzer Information

Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1300156232
Converter make:	CDN-101	Converter serial #:	594
Analyzer Range	0 - 100 ppb	Converter Temp:	800 degC

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
Calibration slope:	0.993668	1.003387	Backgd or Offset:	1.92
Calibration intercept:	-0.097914	-0.138018	Coeff or Slope:	0.965
				0.986

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.6	80.0	79.3	1.008
As found Mid point	4959	41.3	40.0	39.3	1.017
As found Low point	4979	20.7	20.0	19.6	1.022
New cylinder response					
Baseline Corr As found:	79.3	Prev response:	79.36	*% change:	-0.1%
Baseline Corr 2nd AF pt:	39.3	AF Slope:	0.992382	AF Intercept:	-0.177903
Baseline Corr 3rd AF pt:	19.6	AF Correlation:	0.999972	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4917	82.6	80.0	80.2	0.997
Mid point	4959	41.3	40.0	39.9	1.002
Low point	4979	20.7	20.0	19.7	1.017
As left zero	5000	0.0	0.0	0.0	----
As left span	4917	82.6	80.0	82.2	0.973
SO2 Scrubber Check	4920	80.3	803.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	1.005
Date of last converter efficiency test:	March 13, 2024			110.3%	efficiency

Notes: SOx scrubber checked after the calibrator zero. Span adjusted.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

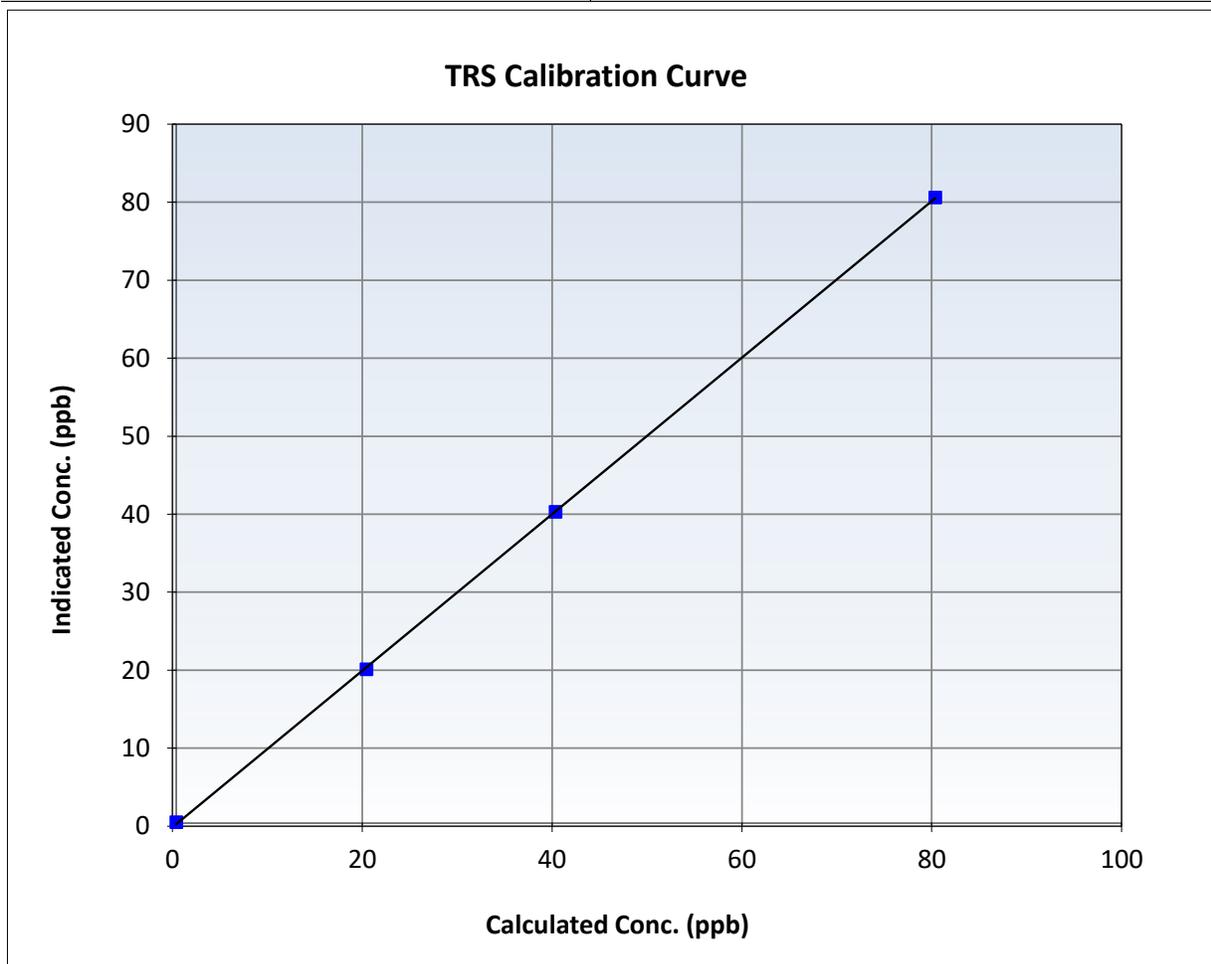
TRS Calibration Summary

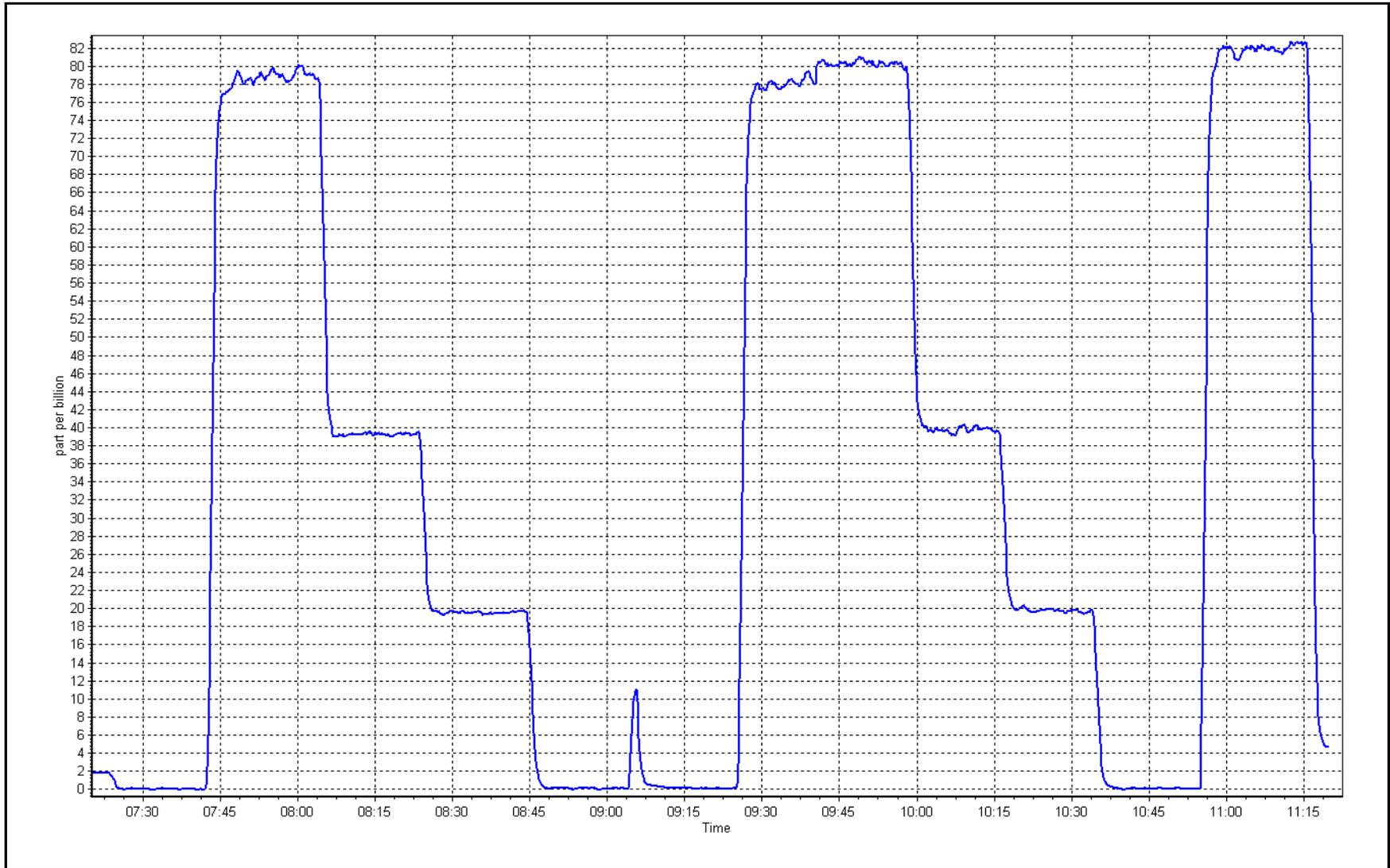
Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 16, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	7:20	End Time (MST):	11:20
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1300156232

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999959	≥ 0.995
80.0	80.2	0.9970	Slope	1.003387	$0.90 - 1.10$
40.0	39.9	1.0019	Intercept	-0.138018	± 3
20.0	19.7	1.0172			







Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	January 16, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	8:51	End time (MST):	11:50
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC484463	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	504.3 ppm	CH4 Equiv Conc.	1065.6 ppm
C3H8 Cal Gas Conc.	204.1 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	504.3 ppm	CH4 Equiv Conc.	1065.6 ppm
Removed C3H8 Conc.	204.1 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	1222
Zero Air Gen model:	API T701	Serial Number:	1117

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 12227620777
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH4 SP Ratio:	3.62E-04	3.68E-04	NMHC SP Ratio:	5.72E-05	5.76E-05
CH4 Retention time:	15.0	15.2	NMHC Peak Area:	156181	155264
Zero Chromatogram:	ON	ON	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.4	16.92	16.82	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.82	Prev response	16.94	*% change	-0.7%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.4	16.92	16.88	1.002
Mid point	4960	39.7	8.46	8.27	1.023
Low point	4980	19.8	4.22	4.12	1.024
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	16.92	16.82	1.006
Average Correction Factor					1.016

Notes: No maintenance done. Span adjusted.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.4	8.91	8.93	0.998
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.93	Prev response	8.96	*% change	-0.3%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.4	8.91	8.88	1.004
Mid point	4960	39.7	4.46	4.38	1.018
Low point	4980	19.8	2.22	2.20	1.011
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.91	8.82	1.010
Average Correction Factor					1.011

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.4	8.01	7.89	1.016
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.89	Prev response	7.98	*% change	-1.2%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.4	8.01	8.00	1.001
Mid point	4960	39.7	4.00	3.89	1.029
Low point	4980	19.8	2.00	1.92	1.039
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.01	8.00	1.001
Average Correction Factor					1.023

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.005109	0.998134
THC Cal Offset:	-0.064560	-0.069189
CH ₄ Cal Slope:	1.003301	1.000689
CH ₄ Cal Offset:	-0.050593	-0.051198
NMHC Cal Slope:	1.006965	0.995709
NMHC Cal Offset:	-0.014367	-0.017991

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

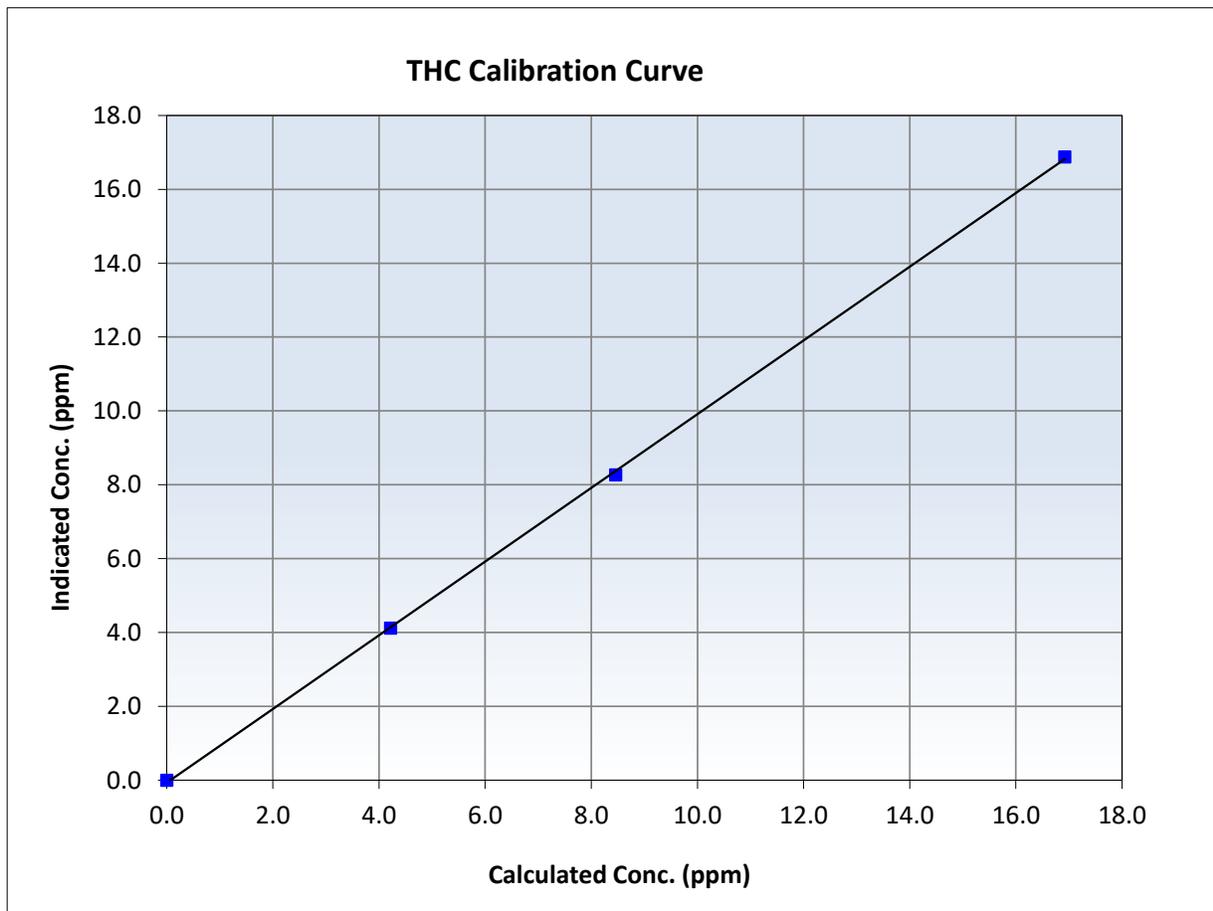
THC Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	8:51	End Time (MST):	11:50
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999871 ≥0.995
16.92	16.88	1.0025	Slope	0.998134 0.90 - 1.10
8.46	8.27	1.0232	Intercept	-0.069189 +/-0.5
4.22	4.12	1.0237		





Wood Buffalo Environmental Association

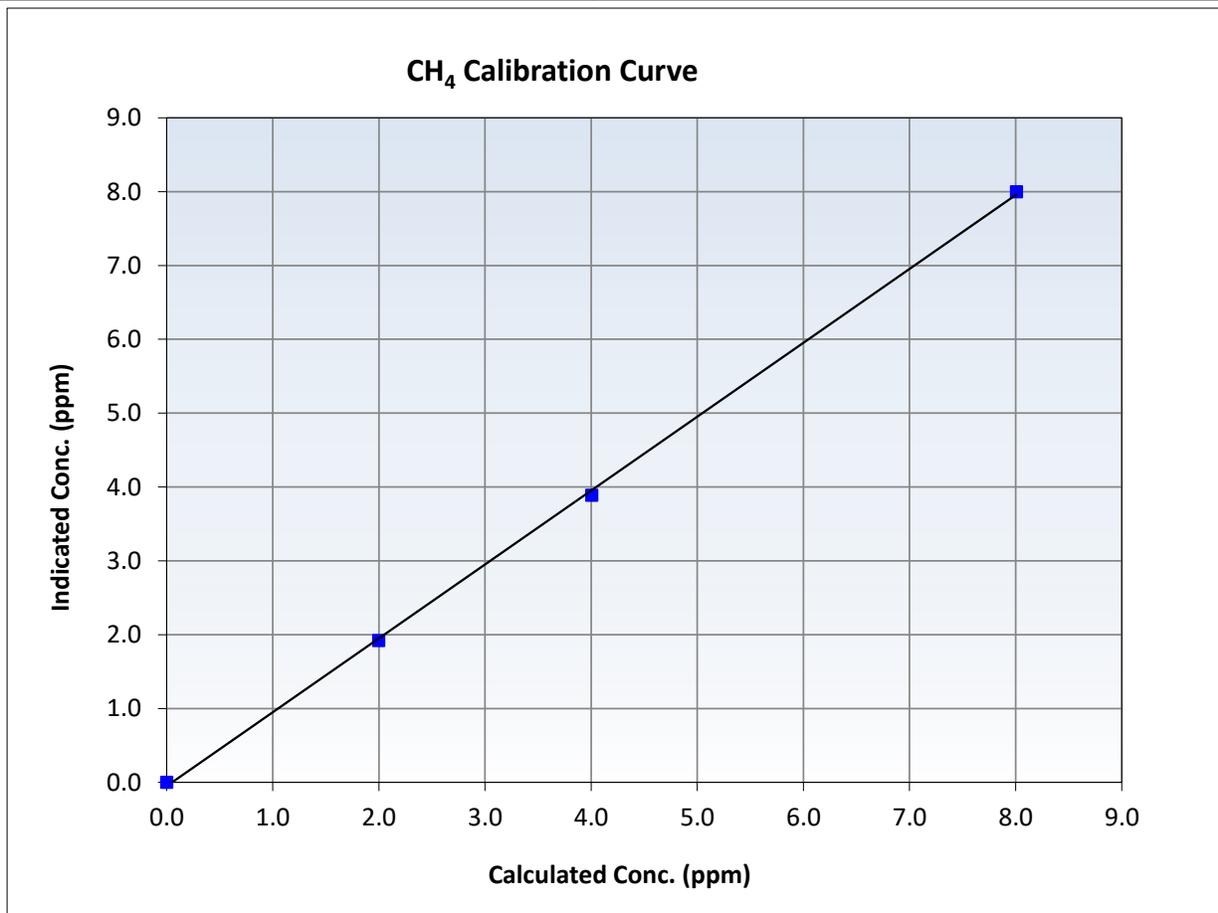
CH₄ Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	8:51	End Time (MST):	11:50
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999742	<i>≥0.995</i>
8.01	8.00	1.0008	Slope	1.000689	<i>0.90 - 1.10</i>
4.00	3.89	1.0294	Intercept	-0.051198	<i>+/-0.5</i>
2.00	1.92	1.0385			





Wood Buffalo Environmental Association

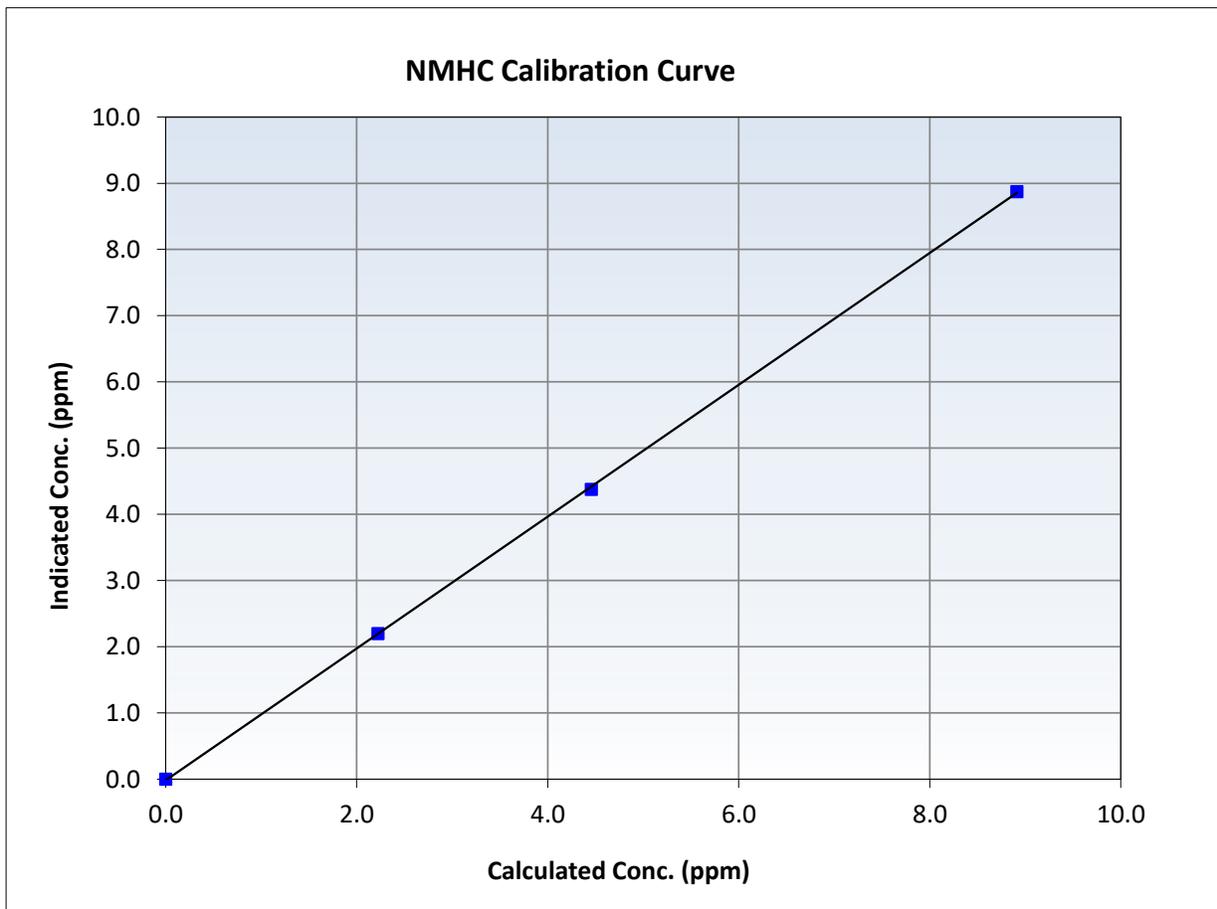
NMHC Calibration Summary

Station Information

Calibration Date:	January 16, 2026	Previous Calibration:	December 17, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	8:51	End Time (MST):	11:50
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

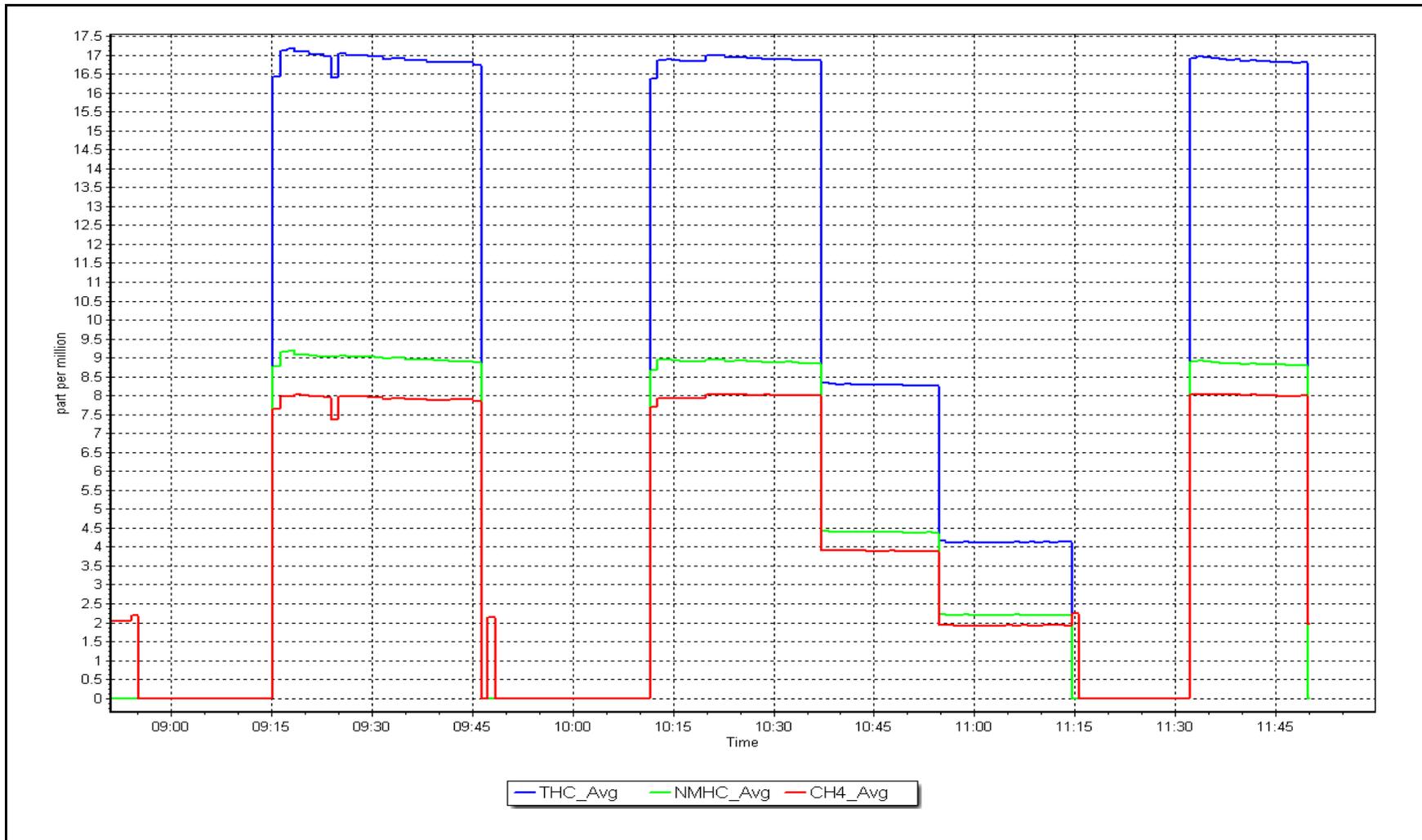
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999943	<i>≥0.995</i>
8.91	8.88	1.0041	Slope	0.995709	<i>0.90 - 1.10</i>
4.46	4.38	1.0180	Intercept	-0.017991	<i>+/-0.5</i>
2.22	2.20	1.0108			



NMHC Calibration Plot

Date: January 16, 2026

Location: Fort Hills





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Fort Hills
 Station number: AMS 23
 Calibration Date: January 13, 2026
 Last Cal Date: December 15, 2025
 Start time (MST): 7:05
 End time (MST): 11:41
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: CC358149
 NOX Cal Gas Conc: 60.30 ppm
 Removed Cylinder #:
 Removed Gas NOX Conc: 60.30 ppm
 NOX gas Diff:
 Calibrator Model: API T700
 ZAG make/model: API T701
 Cal Gas Expiry Date: January 5, 2032
 NO Cal Gas Conc: 60.10 ppm
 Removed Gas Exp Date:
 Removed Gas NO Conc: 60.10 ppm
 NO gas Diff:
 Serial Number: 1222
 Serial Number: 1117

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.3	0.1	-0.3	----	----
AF High point	4934	66.3	799.5	796.9	2.7	797.4	791.7	5.7	1.0023	1.0067
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 805.0 ppb		NO = 802.4 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = -0.9%	
Baseline Corr 1st pt	NO _x = 797.7 ppb		NO = 791.6 ppb			<u>As Found Statistics</u>		*Percent Change	NO = -1.4%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1152430007

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.007430	0.997724
NO _x Cal Offset:	-0.455065	-0.032918
NO Cal Slope:	1.008930	1.000869
NO Cal Offset:	-1.633884	-1.671760
NO ₂ Cal Slope:	1.002698	0.997744
NO ₂ Cal Offset:	-0.641139	-0.573608

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.960	0.966	NO bkgnd or offset:	2.8	2.8
NOX coeff or slope:	0.993	0.992	NOX bkgnd or offset:	3.1	2.9
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	146.9	146.9

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	----	----
High point	4934	66.3	799.5	796.9	2.7	798.1	797.2	1.0	1.0018	0.9996
Mid point	4967	33.2	400.4	399.0	1.3	398.3	395.7	2.6	1.0052	1.0085
Low point	4983	16.6	200.2	199.5	0.7	200.3	196.9	3.4	0.9996	1.0134
As left zero	5000	0.0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
As left span	4934	66.3	799.5	404.4	395.1	794.6	404.4	390.1	1.0062	1.0000
Average Correction Factor									1.0022	1.0072

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	791.6	401.6	392.7	391.5	1.0029	99.7%
Mid GPT point	791.6	595.1	199.2	197.7	1.0073	99.3%
Low GPT point	791.6	694.0	100.3	99.1	1.0116	98.9%
Average Correction Factor					1.0073	99.3%

Notes: No Maintenance done. Zero and Span adjusted.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

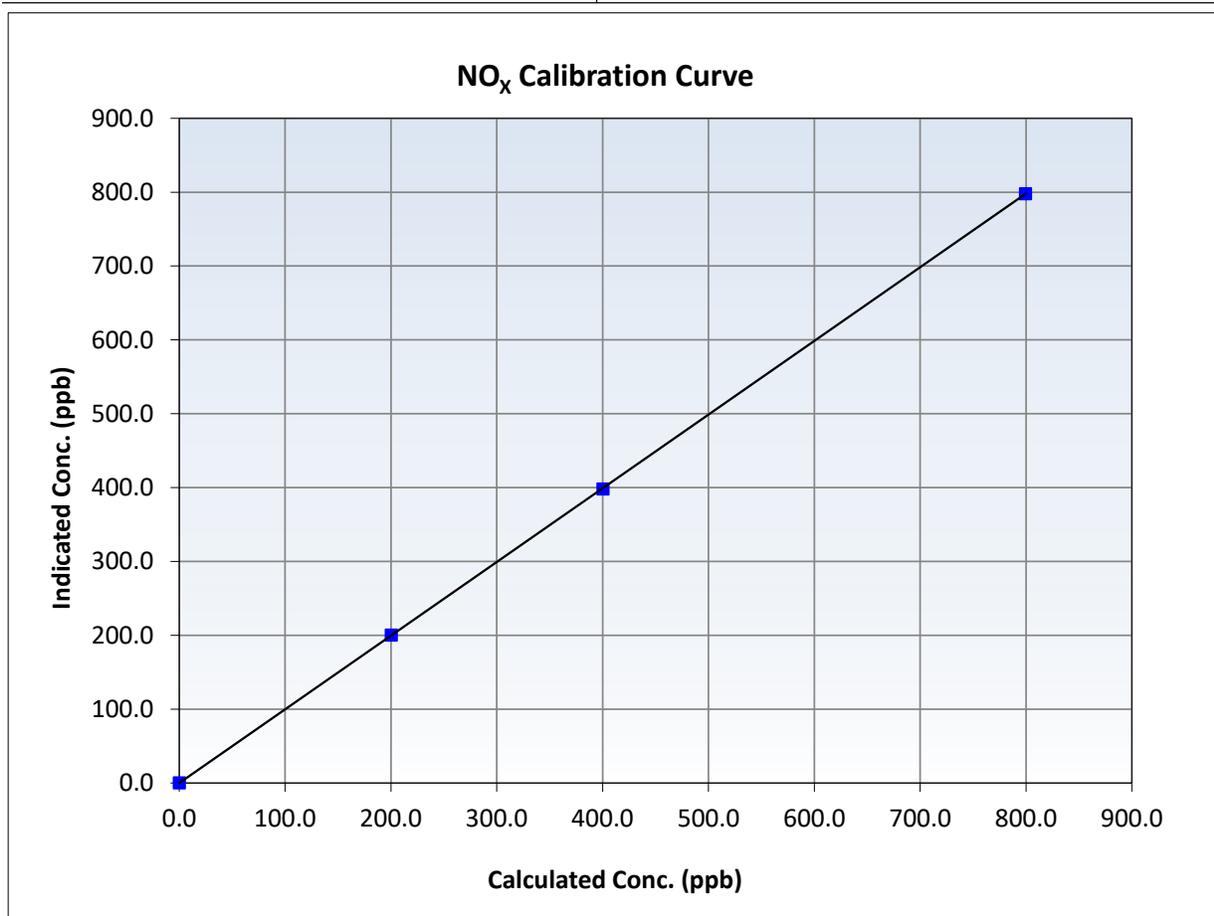
NO_x Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 15, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	7:05	End Time (MST):	11:41
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999995	≥0.995
799.5	798.1	1.0018	Slope	0.997724	0.90 - 1.10
400.4	398.3	1.0052	Intercept	-0.032918	+/-20
200.2	200.3	0.9996			





Wood Buffalo Environmental Association

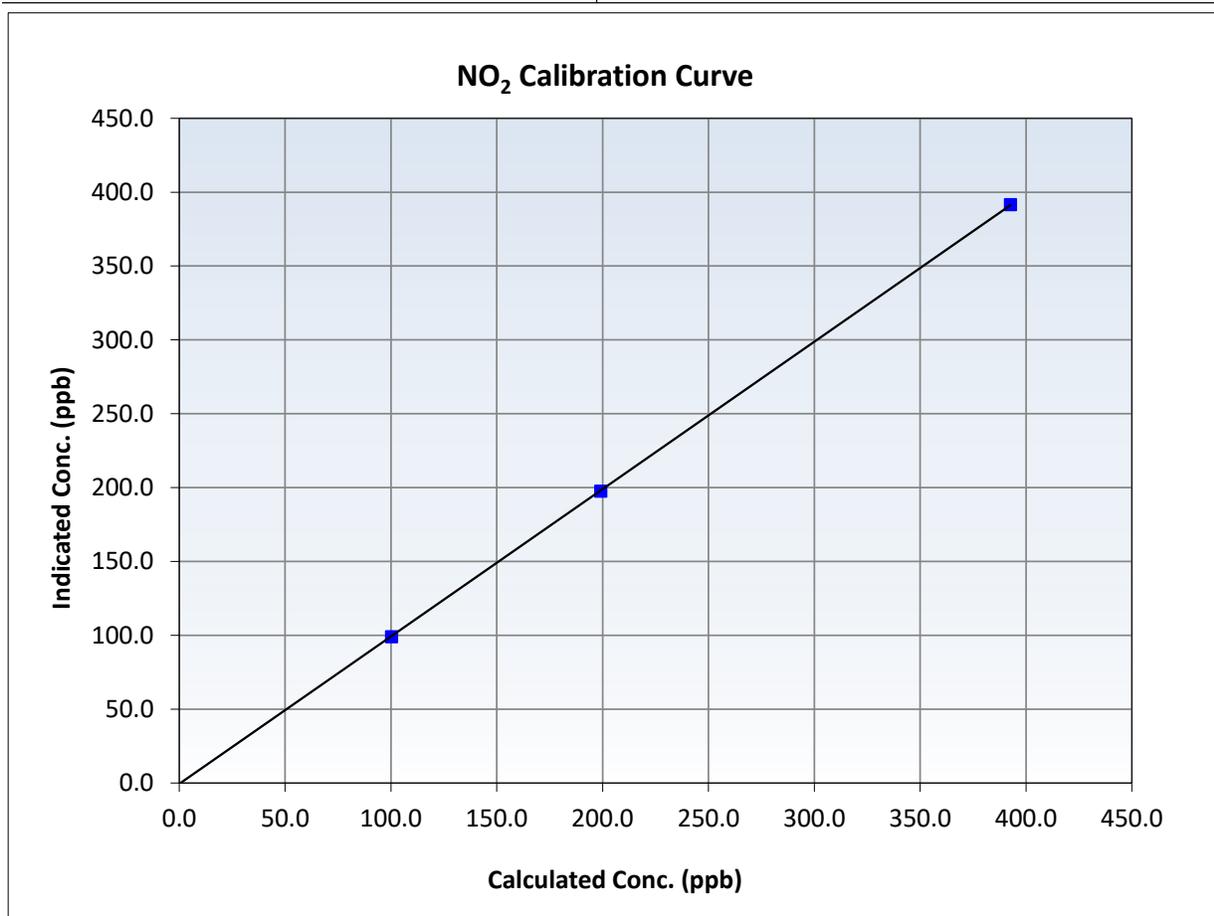
NO₂ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 15, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	7:05	End Time (MST):	11:41
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.1	----	Correlation Coefficient	0.999993	≥0.995
392.7	391.5	1.0029	Slope	0.997744	0.90 - 1.10
199.2	197.7	1.0073	Intercept	-0.573608	+/-20
100.3	99.1	1.0116			





Wood Buffalo Environmental Association

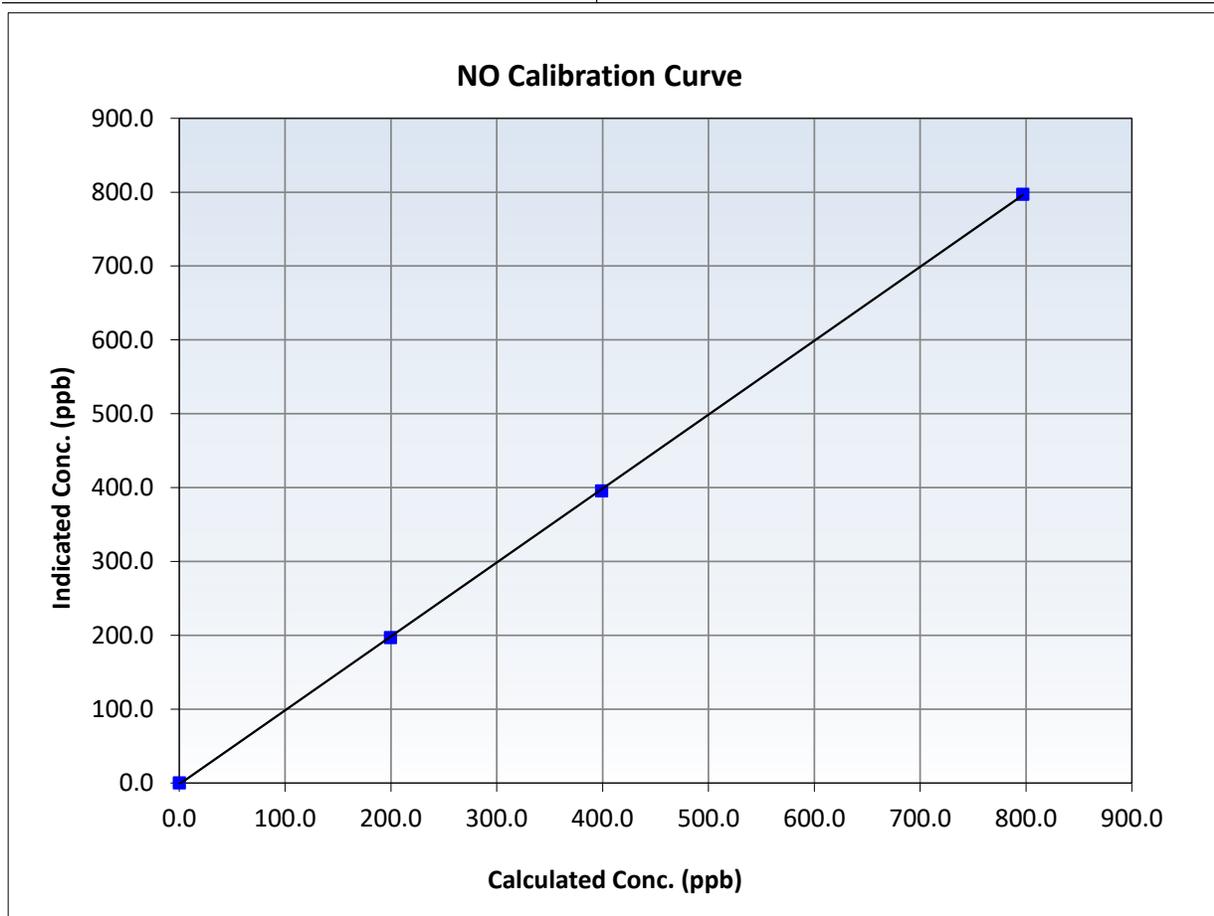
NO Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 15, 2025
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	7:05	End Time (MST):	11:41
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

Calibration Data

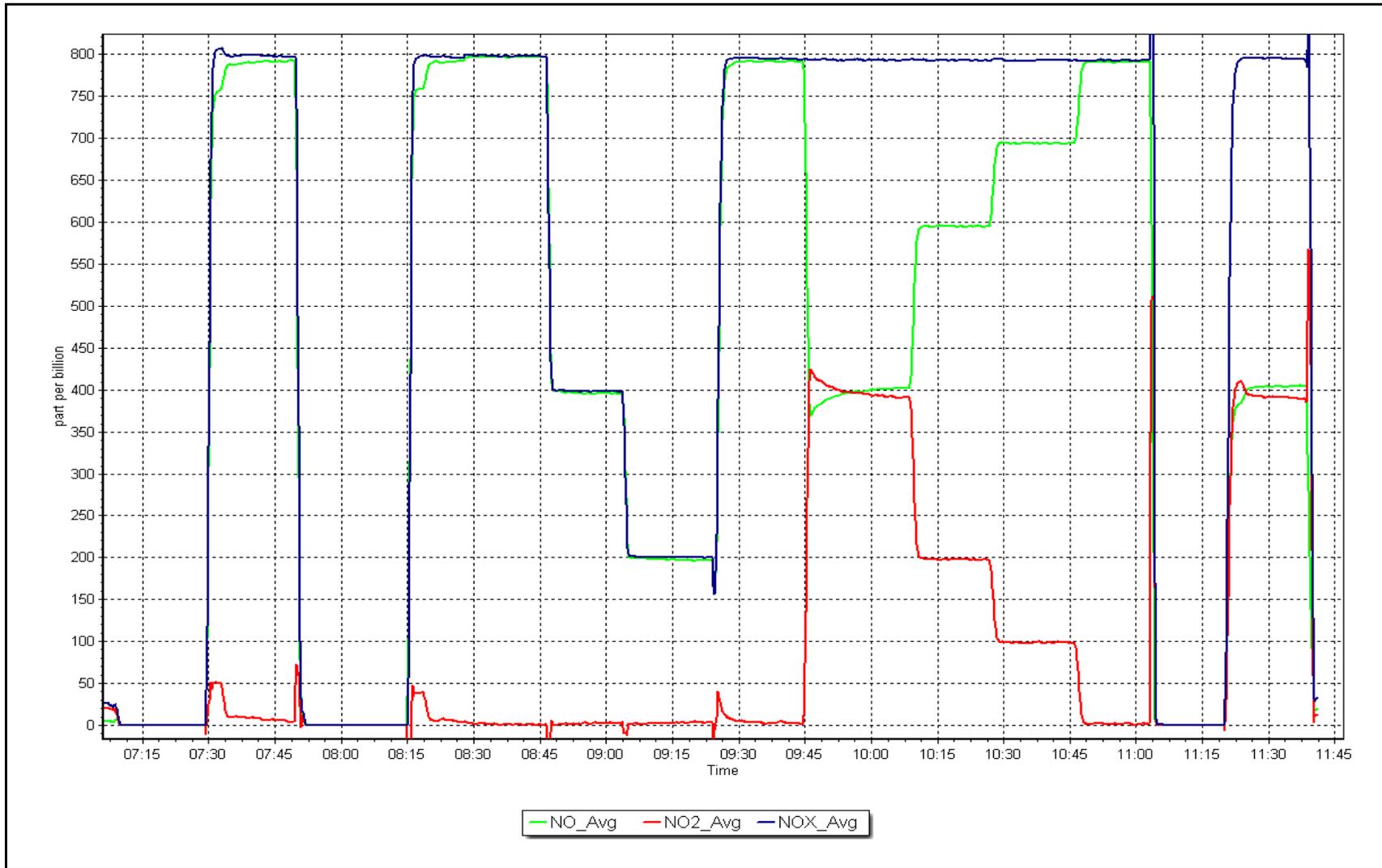
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999969	≥0.995
796.9	797.2	0.9996	Slope	1.000869	0.90 - 1.10
399.0	395.7	1.0085	Intercept	-1.671760	+/-20
199.5	196.9	1.0134			



NO_x Calibration Plot

Date: January 13, 2026

Location: Fort Hills





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Fort Hills Station number: AMS 23
 Calibration Date: January 14, 2026 Last Cal Date: December 17, 2025
 Start time (MST): 8:08 End time (MST): 9:02

Analyzer Make: API T640 S/N: 320
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388744
 Temp/RH standard: Alicat FP-25BT S/N: 388744

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-0.6	-1	-0.6	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	729	728.9	729	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	4.98	5.08	4.98	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	31	----	31	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	7.5	PM w/ HEPA: _____	0.0	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: **10.9** Expiry Date: 16-Jul-26
 Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test	5	7.1	10.5	<input checked="" type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: January 14, 2026
 Date Disposable Filter Changed: January 14, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: January 14, 2026
 Date RH/T Sensor Cleaned: January 14, 2026

Notes: Leak Check, Flow and PMT checked before and after cleaning. PMT adjusted after cleaning of optical chamber and filter change out.

Calibration by: Melissa Lemay



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS25 WASKŌW OHCI PIMÂTISIWIN JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Waskow ohci Pimatisiwin	Station number: AMS 25
Calibration Date:	January 27, 2026	Last Cal Date: December 12, 2025
Start time (MST):	7:10	End time (MST): 10:28
Reason:	Routine	

Calibration Standards

Cal Gas Concentration:	49.70	ppm	Cal Gas Exp Date: March 10, 2031
Cal Gas Cylinder #:	CC342445		
Removed Cal Gas Conc:	49.70	ppm	Rem Gas Exp Date:
Removed Gas Cyl #:			Diff between cyl:
Calibrator Model:	API T700		Serial Number: 621
Zero Air Gen Model:	API T701		Serial Number: 4765

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: 1118148497
Analyzer Range:	0-1000ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.002699	0.998943	Backgd or Offset:	11.7	12.7
Calibration intercept:	-0.632449	-0.393125	Coeff or Slope:	1.083	1.099

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.5	----
As found High point	4920	80.5	800.1	787.4	1.017
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	786.9	Previous response	801.6	*% change	-1.9%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4920	80.5	800.1	799.4	1.001
Mid point	4960	40.2	399.6	397.7	1.005
Low point	4980	20.1	199.8	199.1	1.003
As left zero	5000	0.0	0.0	-0.1	----
As left span	4920	80.5	800.1	799.5	1.001
Average Correction Factor:					1.003

Notes: No maintenance done. Zero and Span adjusted.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

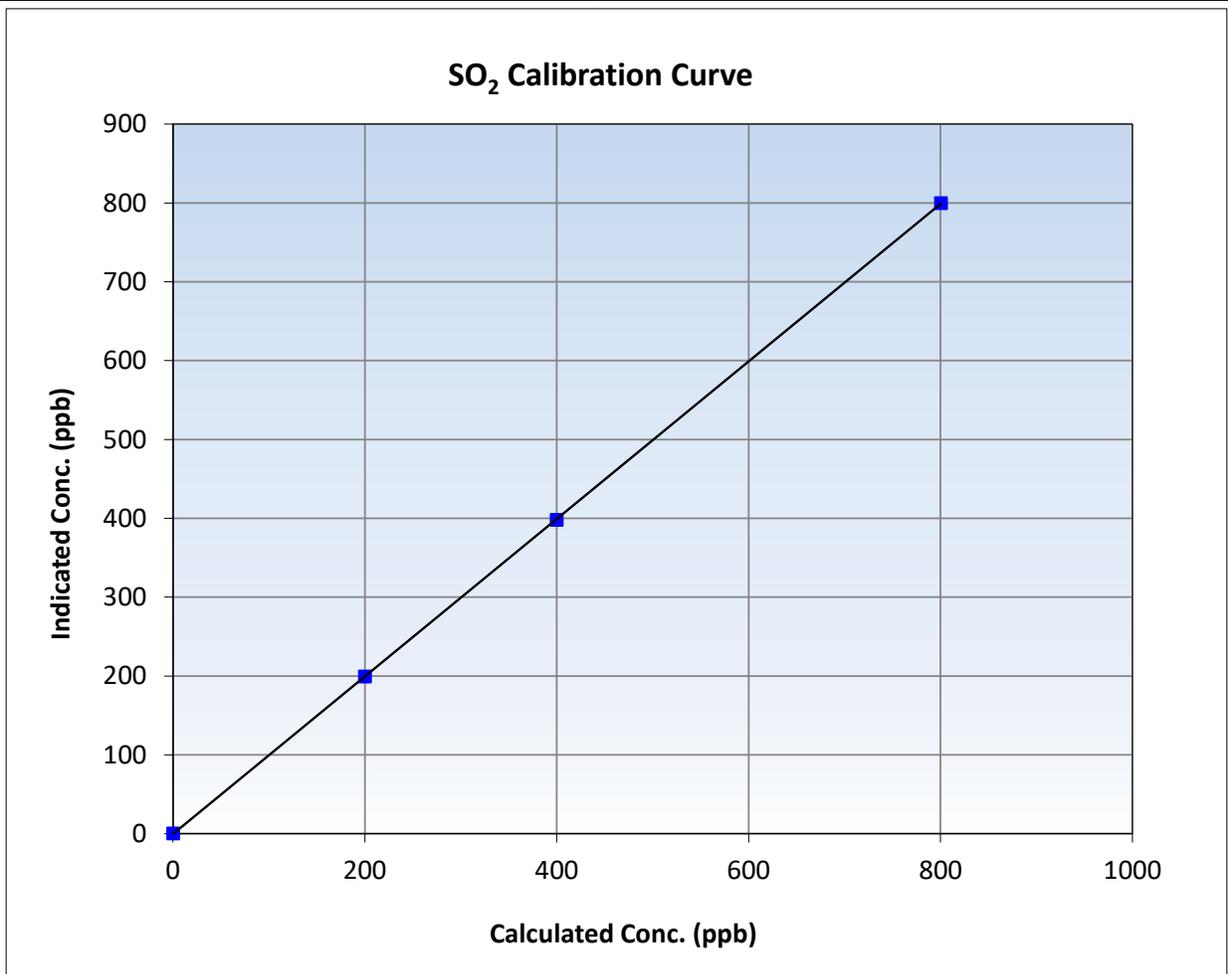
SO₂ Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 12, 2025
Station Name:	Waskow ohci Pimatisiwin	Station Number:	AMS 25
Start Time (MST):	7:10	End Time (MST):	10:28
Analyzer make:	Thermo 43i	Analyzer serial #:	1118148497

Calibration Data

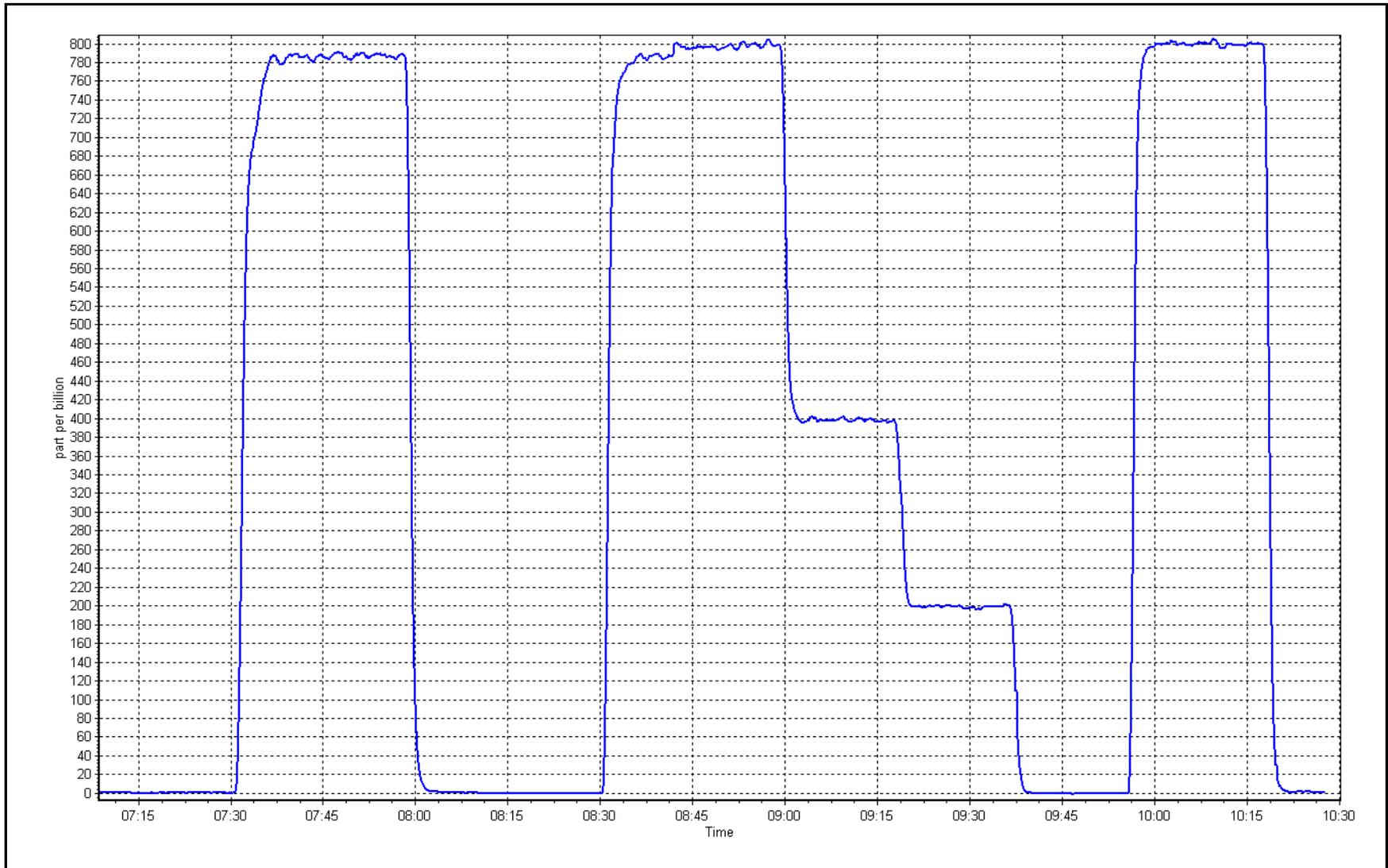
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.2	----	Correlation Coefficient	0.999995	≥0.995
800.1	799.4	1.0009	Slope	0.998943	0.90 - 1.10
399.6	397.7	1.0047	Intercept	-0.393125	+/-30
199.8	199.1	1.0035			



SO2 Calibration Plot

Date: January 27, 2026

Location: Waskow ohci Pimatisiwin





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Waskow ohci Pimatisiwin	Station number:	AMS 25
Calibration Date:	January 26, 2026	Last Cal Date:	December 11, 2025
Start time (MST):	7:20	End time (MST):	11:49
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.97	ppm	Cal Gas Exp Date:	January 3, 2026
Cal Gas Cylinder #:	CC517099			
Removed Cal Gas Conc:	4.97	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	747
ZAG Make/Model:	API T701		Serial Number:	261

Analyzer Information

Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1170050146
Converter make:	Global G-150	Converter serial #:	2024-287
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.988802	1.000793	Backgd or Offset:	3.78	3.86
Calibration intercept:	0.402161	0.082279	Coeff or Slope:	1.129	1.152

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4919	80.5	80.0	77.4	1.033
As found Mid point	4960	40.3	40.1	39.0	1.024
As found Low point	4980	20.1	20.0	19.5	1.019
New cylinder response					
Baseline Corr As found:	77.5	Prev response:	79.53	*% change:	-2.6%
Baseline Corr 2nd AF pt:	39.1	AF Slope:	0.967812	AF Intercept:	0.062122
Baseline Corr 3rd AF pt:	19.6	AF Correlation:	0.999976	* = +/-5% change initiates investigation	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4919	80.5	80.0	80.2	0.998
Mid point	4960	40.3	40.1	40.1	0.999
Low point	4980	20.1	20.0	20.1	0.994
As left zero	5000	0.0	0.0	0.2	----
As left span	4920	80.0	800.0	813.3	0.984
SO2 Scrubber Check	4920	80.0	800.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	0.997
Date of last converter efficiency test:	February 12, 2025			111.0%	efficiency

Notes: Sox scrubber checked after calibrator zero. Flows were low and pressure high, pump Changed out. Span adjusted.

Calibration Performed By: Melissa Lemay



Wood Buffalo Environmental Association

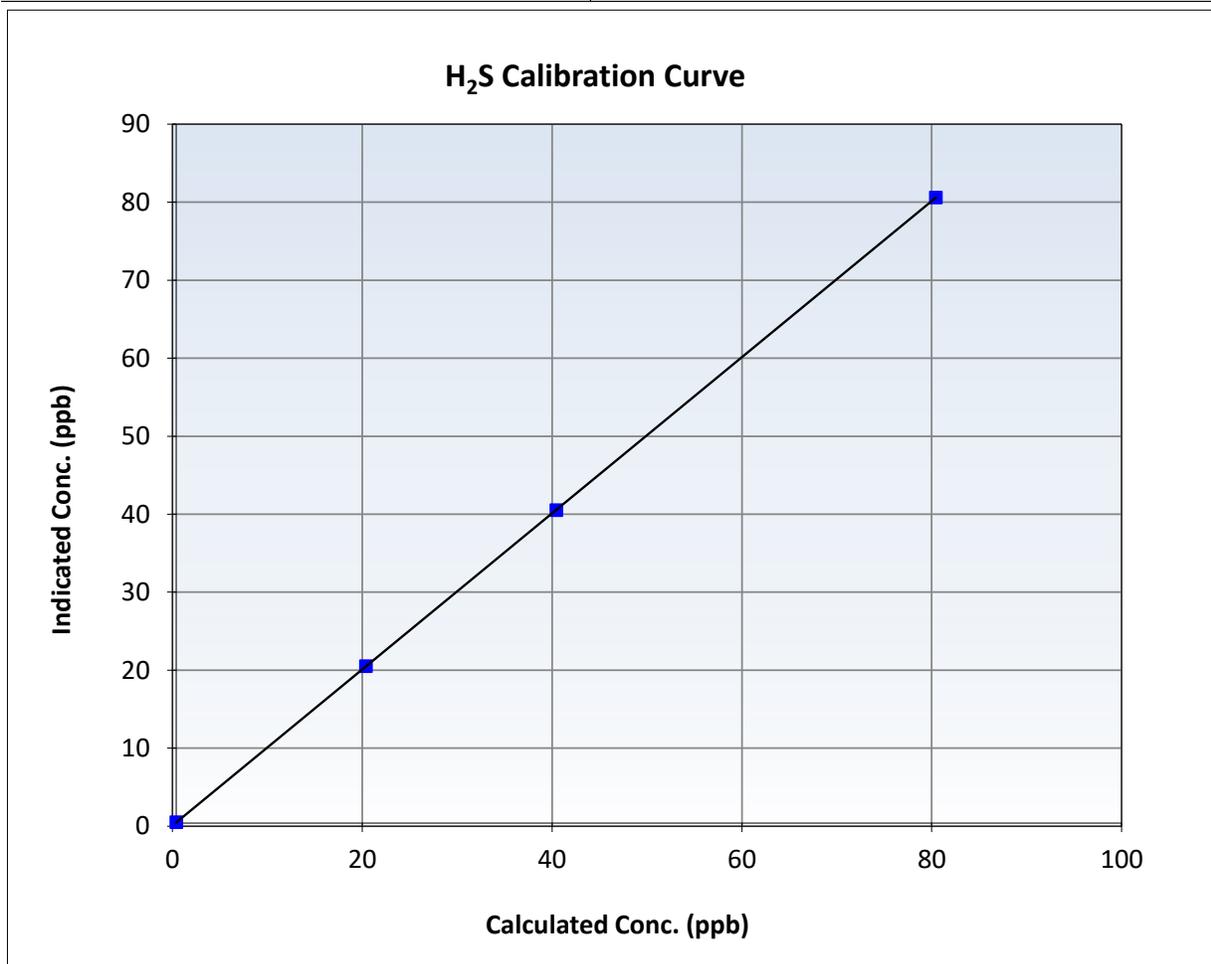
H₂S Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 11, 2025
Station Name:	Waskow ohci Pimatisiwin	Station Number:	AMS 25
Start Time (MST):	7:20	End Time (MST):	11:49
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1170050146

Calibration Data

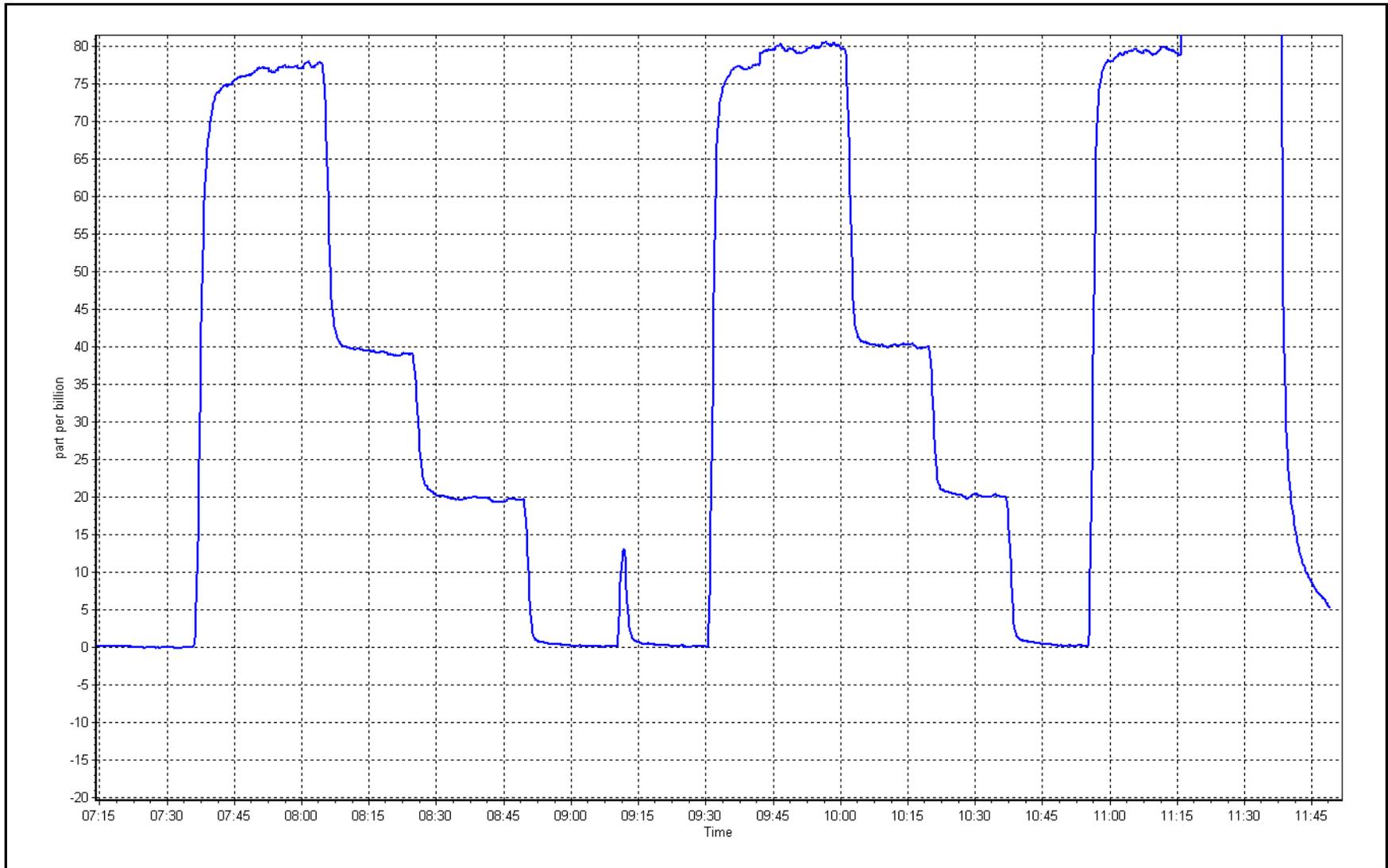
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999998	≥0.995
80.0	80.2	0.9978	Slope	1.000793	0.90 - 1.10
40.1	40.1	0.9989	Intercept	0.082279	+/-3
20.0	20.1	0.9940			



H₂S Calibration Plot

Date: January 26, 2026

Location: Waskow ohci Pimatisiwin





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS27 JACKFISH 2/3 JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Jackfish 2/3	Station number:	AMS 27
Calibration Date:	January 7, 2026	Last Cal Date:	December 8, 2025
Start time (MST):	11:48	End time (MST):	14:34
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.58	ppm	Cal Gas Exp Date:	December 29, 2028
Cal Gas Cylinder #:	SG9133974BAL			
Removed Cal Gas Conc:	50.58	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	API T700		Serial Number:	5252
Zero Air Gen Model:	API 701		Serial Number:	268

Analyzer Information

Analyzer make:	Thermo 43iQ-TL	Serial Number:	12124313138
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.000374	1.001203	Backgd or Offset:	10.1	11.4
Calibration intercept:	1.162665	-1.277263	Coeff or Slope:	0.939	0.939

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	1.1	----
As found High point	4913	78.9	799.4	800.3	1.000
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	799.2	Previous response	800.9	*% change	-0.2%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.2	----
High point	4913	78.9	799.4	799.9	0.999
Mid point	4955	39.5	400.0	398.0	1.005
Low point	4971	19.7	199.7	198.0	1.008
As left zero	5000	0.0	0.0	-0.2	----
As left span	4913	78.9	799.4	800.8	0.998
Average Correction Factor:					1.004

Notes: Changed the sample inlet filter after as founds. Zero slightly adjusted

Calibration Performed By: Ryan Power



Wood Buffalo Environmental Association

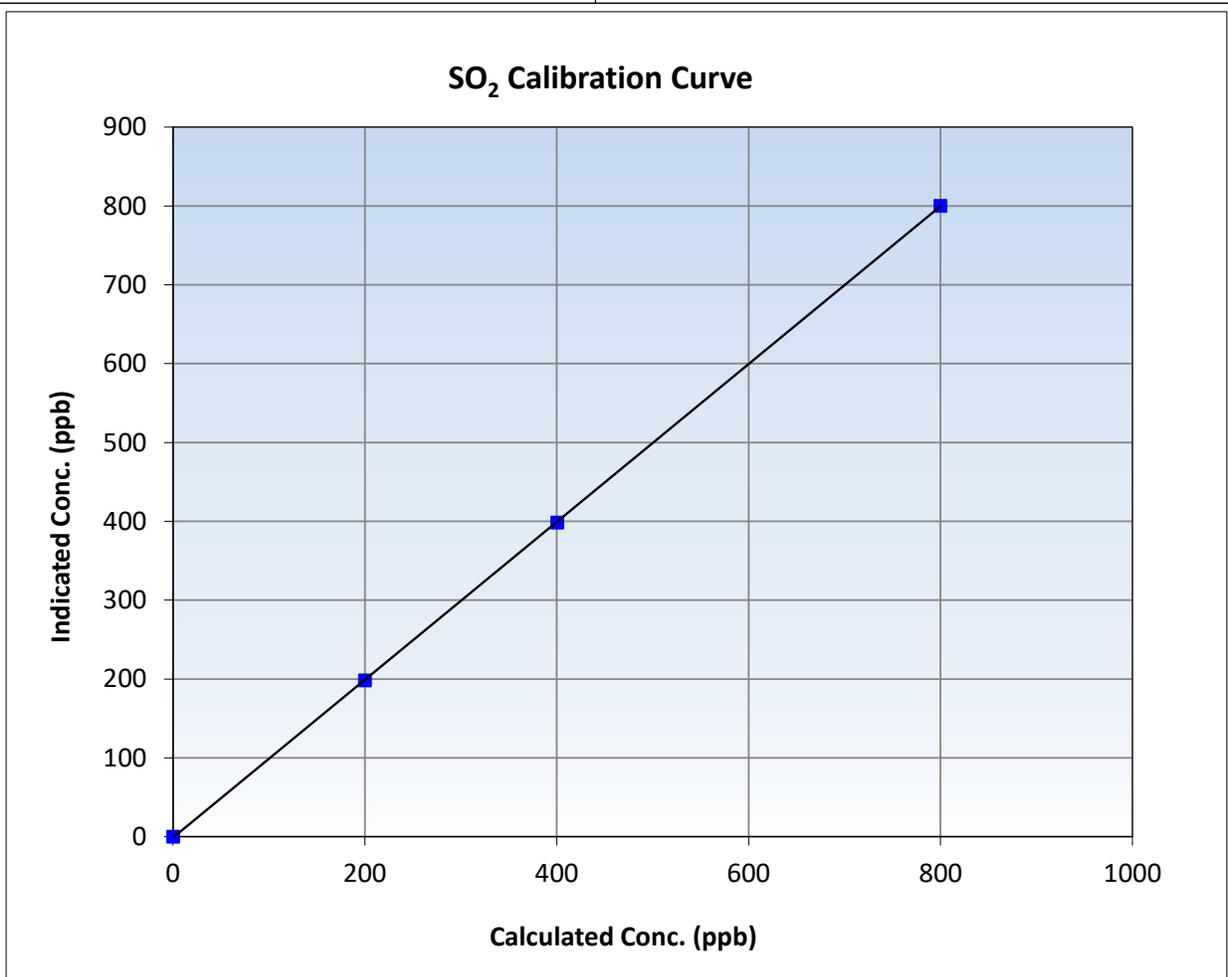
SO₂ Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 8, 2025
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	11:48	End Time (MST):	14:34
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	12124313138

Calibration Data

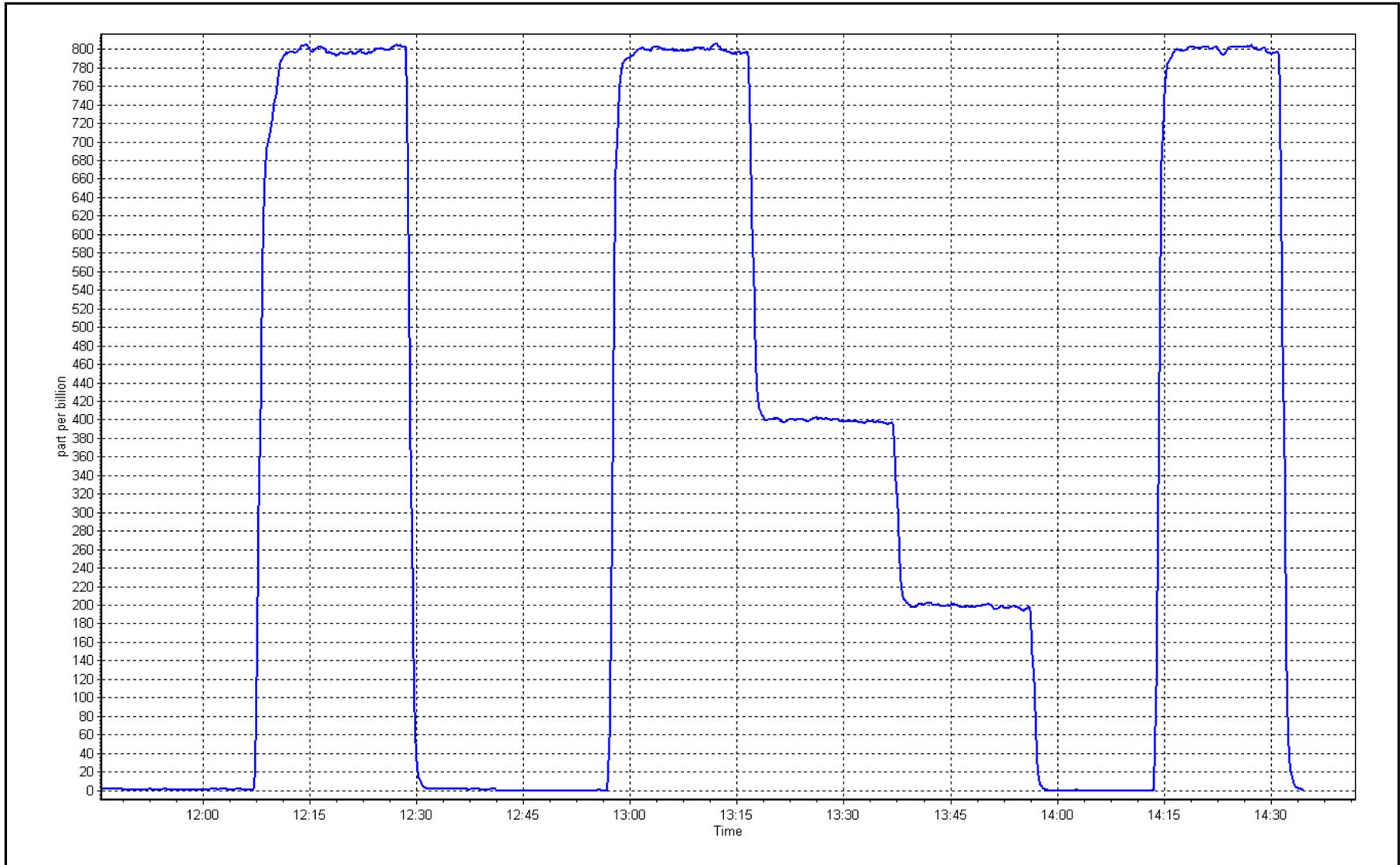
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.2	----	Correlation Coefficient	0.999990	≥0.995
799.4	799.9	0.9994	Slope	1.001203	0.90 - 1.10
400.0	398.0	1.0051	Intercept	-1.277263	+/-30
199.7	198.0	1.0084			



SO2 Calibration Plot

Date: January 7, 2026

Location: Jackfish 2/3





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name: Jackfish 2/3	Station number: AMS 27
Calibration Date: January 13, 2026	Last Cal Date: December 8, 2025
Start time (MST): 11:46	End time (MST): 15:43
Reason: Routine	

Calibration Standards

Cal Gas Concentration: 4.87 ppm	Cal Gas Exp Date: September 5, 2027
Cal Gas Cylinder #: CC523090	
Removed Cal Gas Conc: 4.87 ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #: NA	Diff between cyl:
Calibrator Make/Model: Teledyne API T700	Serial Number: 5252
ZAG Make/Model: Teledyne API T701H	Serial Number: 268

Analyzer Information

Analyzer make: Thermo 43iQ	Analyzer serial #: 12228021055
Converter make: Global G150	Converter serial #: 2022-195
Analyzer Range: 0 - 100 ppb	Converter Temp: 325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.999378	1.007952	Backgd or Offset:	3.17	3.17
Calibration intercept:	-0.123977	0.075963	Coeff or Slope:	1.071	1.071

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4911	82.0	80.0	80.3	0.996
As found Mid point	4950	41.0	40.0	40.1	0.998
As found Low point	4972	20.5	20.0	20.0	1.000
New cylinder response					
Baseline Corr As found:	80.3	Prev response:	79.81	*% change:	0.6%
Baseline Corr 2nd AF pt:	40.1	AF Slope:	1.004237	AF Intercept:	-0.044017
Baseline Corr 3rd AF pt:	20.0	AF Correlation:	0.999999	<i>* = > +/-5% change initiates investigation</i>	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4911	82.0	80.0	80.7	0.991
Mid point	4950	41.0	40.0	40.4	0.990
Low point	4972	20.5	20.0	20.2	0.990
As left zero	5000	0.0	0.0	0.1	----
As left span	4911	82.0	80.0	81.0	0.987
SO2 Scrubber Check	4915	78.9	790.0	-0.1	----
Date of last scrubber change:	18-Nov-25			Ave Corr Factor	0.990
Date of last converter efficiency test:	April 23, 2025			91.4% efficiency	

Notes: Changed sample inlet filter after as founds. Scrubber check passed. No adjustments. New flow card installed, diagnostics now available again

Calibration Performed By: Ryan Power



Wood Buffalo Environmental Association

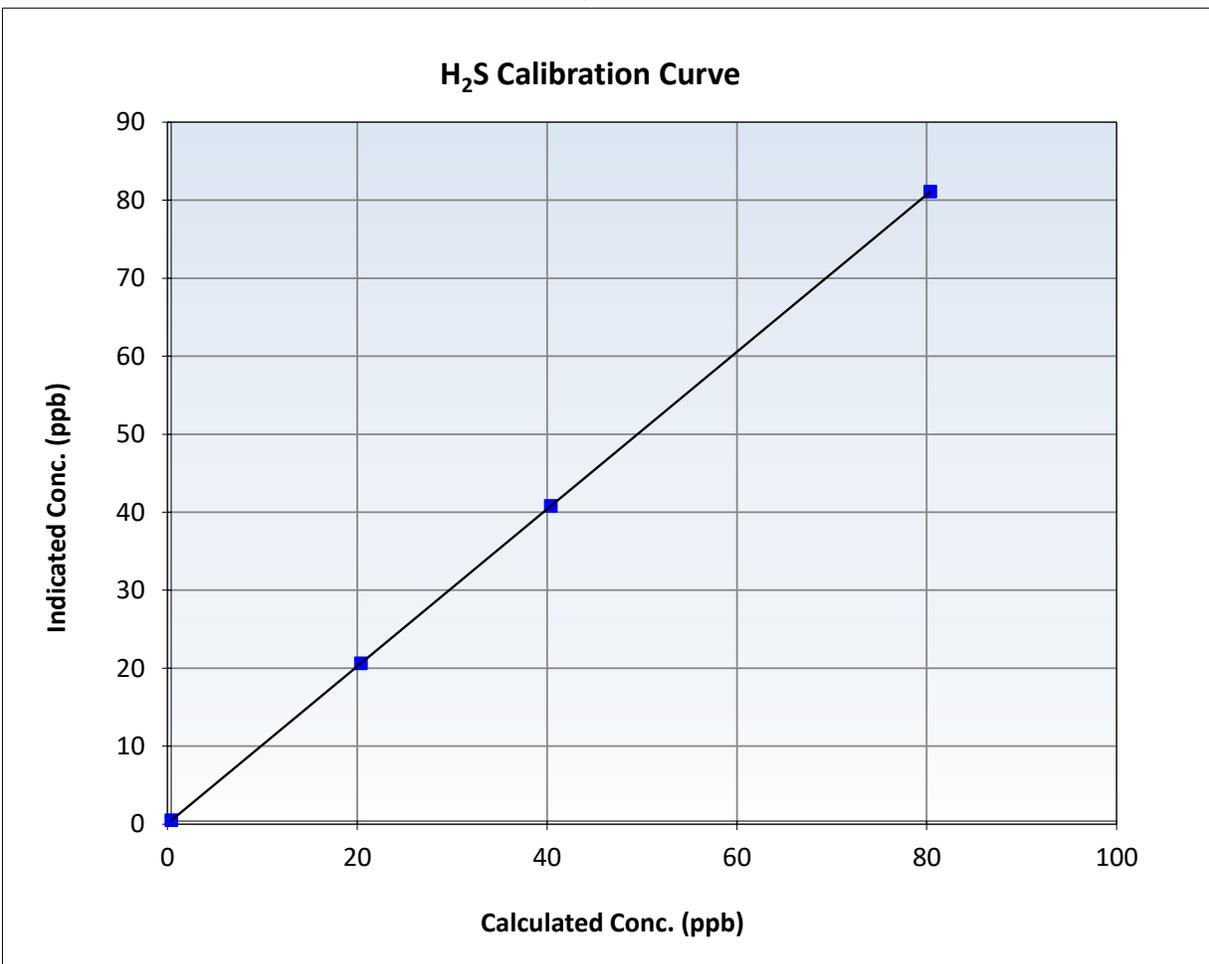
H₂S Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 8, 2025
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	11:46	End Time (MST):	15:43
Analyzer make:	Thermo 43iQ	Analyzer serial #:	12228021055

Calibration Data

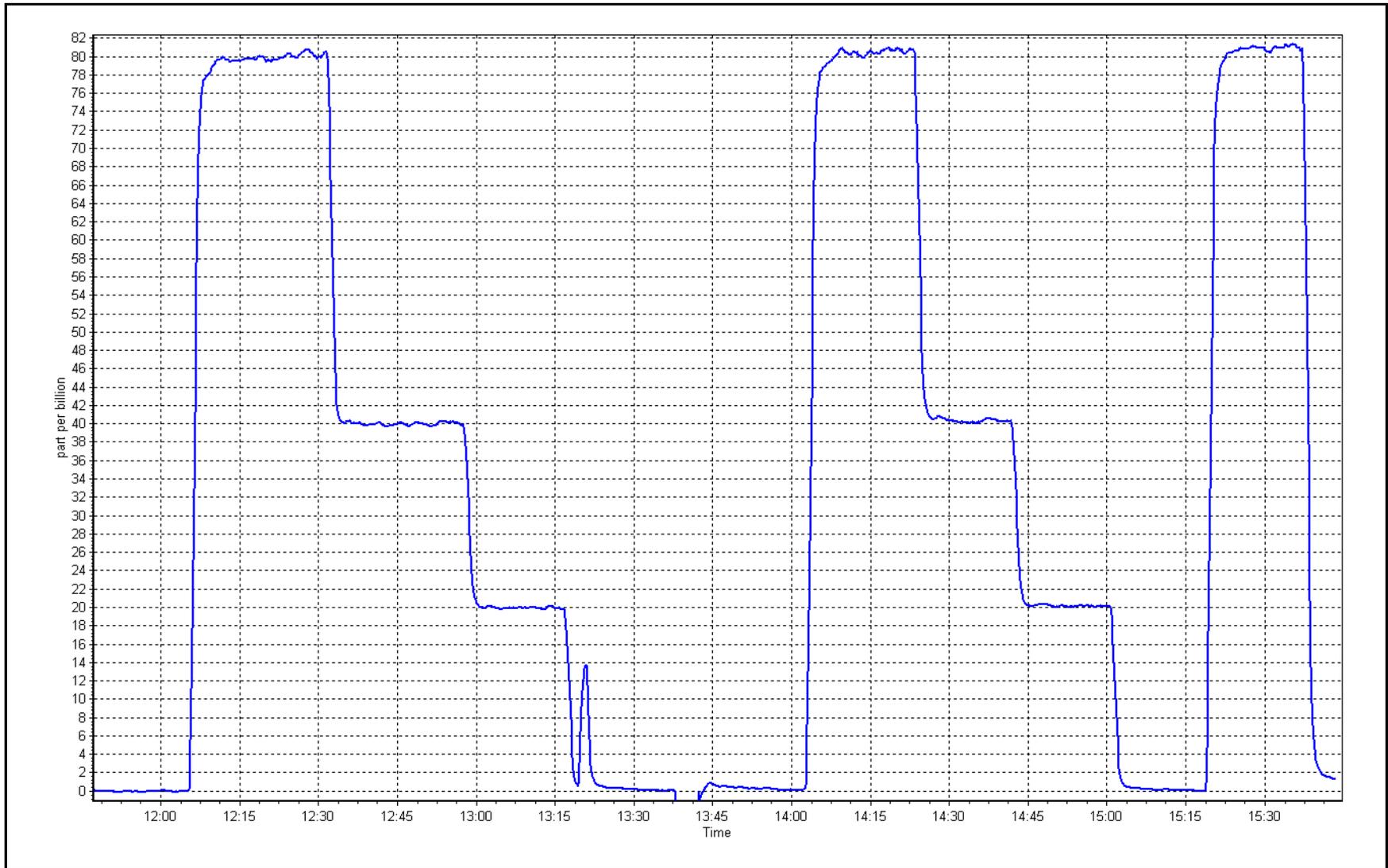
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	1.000000	≥0.995
80.0	80.7	0.9911	Slope	1.007952	0.90 - 1.10
40.0	40.4	0.9902	Intercept	0.075963	+/-3
20.0	20.2	0.9900			



H₂S Calibration Plot

Date: January 13, 2026

Location: Jackfish 2/3





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Jackfish 2/3
 Station number: AMS 27
 Calibration Date: January 12, 2026
 Last Cal Date: December 9, 2025
 Start time (MST): 12:53
 End time (MST): 15:45
 Reason: Removal

Calibration Standards

NO Gas Cylinder #: CC757838
 NOX Cal Gas Conc: 60.30 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.30 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701

Cal Gas Expiry Date: January 9, 2032
 NO Cal Gas Conc: 60.20 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.20 ppm
 NO gas Diff:
 Serial Number: 5252
 Serial Number: 268

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	2.1	2.1	0.0	----	----
AF High point	4924	66.3	801.1	799.8	1.3	835.7	826.8	9.0	0.9611	0.9698
AF Mid point	4958	33.2	401.1	400.4	0.7	421.0	415.1	5.8	0.9575	0.9696
AF Low point	4976	16.6	200.5	200.2	0.3	212.6	207.2	5.4	0.9525	0.9759

New cyl resp

Previous Response	NO _x = 804.6 ppb	NO = 802.3 ppb	<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 3.5%
Baseline Corr 1st pt	NO _x = 833.6 ppb	NO = 824.7 ppb	<u>As Found Statistics</u>		*Percent Change	NO = 2.7%
Baseline Corr 2nd pt	NO _x = 418.9 ppb	NO = 413.0 ppb	As found	NO _x r ² : 0.999992	Nx SI: 1.039944	Nx Int: 3.162
Baseline Corr 3rd pt	NO _x = 210.5 ppb	NO = 205.1 ppb	As found	NO r ² : 0.999997	NO SI: 1.031696	NO Int: 1.604
			As found	NO ₂ r ² : 0.999930	NO ₂ SI: 1.000390	NO ₂ Int: -0.373

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero	----	----	0.0	0.0	----	----
As found high GPT point	829.1	395.7	434.7	434.1	1.0014	99.9%
As found mid GPT point	829.1	607.1	223.3	224.9	0.9930	100.7%
As found low GPT point	829.1	703.0	127.4	125.3	1.0170	98.3%



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NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1218153357

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.003551	
NO _x Cal Offset:	0.649072	
NO Cal Slope:	1.004173	
NO Cal Offset:	-0.810268	
NO ₂ Cal Slope:	1.000933	
NO ₂ Cal Offset:	1.324314	

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.513	NA	NO bkgnd or offset:	6.0	NA
NOX coeff or slope:	0.996	NA	NOX bkgnd or offset:	6.1	NA
NO2 coeff or slope:	1.000	NA	Reaction cell Press:	179.4	NA

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0					
High point	4924	66.3	801.1	799.8	1.3					
Mid point	4958	33.2	401.1	400.4	0.7					
Low point	4976	16.6	200.5	200.2	0.3					
As left zero	5000	0.0	0.0	0.0	0.0					
As left span	4924	66.3	801.1	0.0	801.1					

Average Correction Factor

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero			0.0		----	----
High GPT point						
Mid GPT point						
Low GPT point						

Average Correction Factor

Notes:

Removal Cal, PMT cooler starting to fail

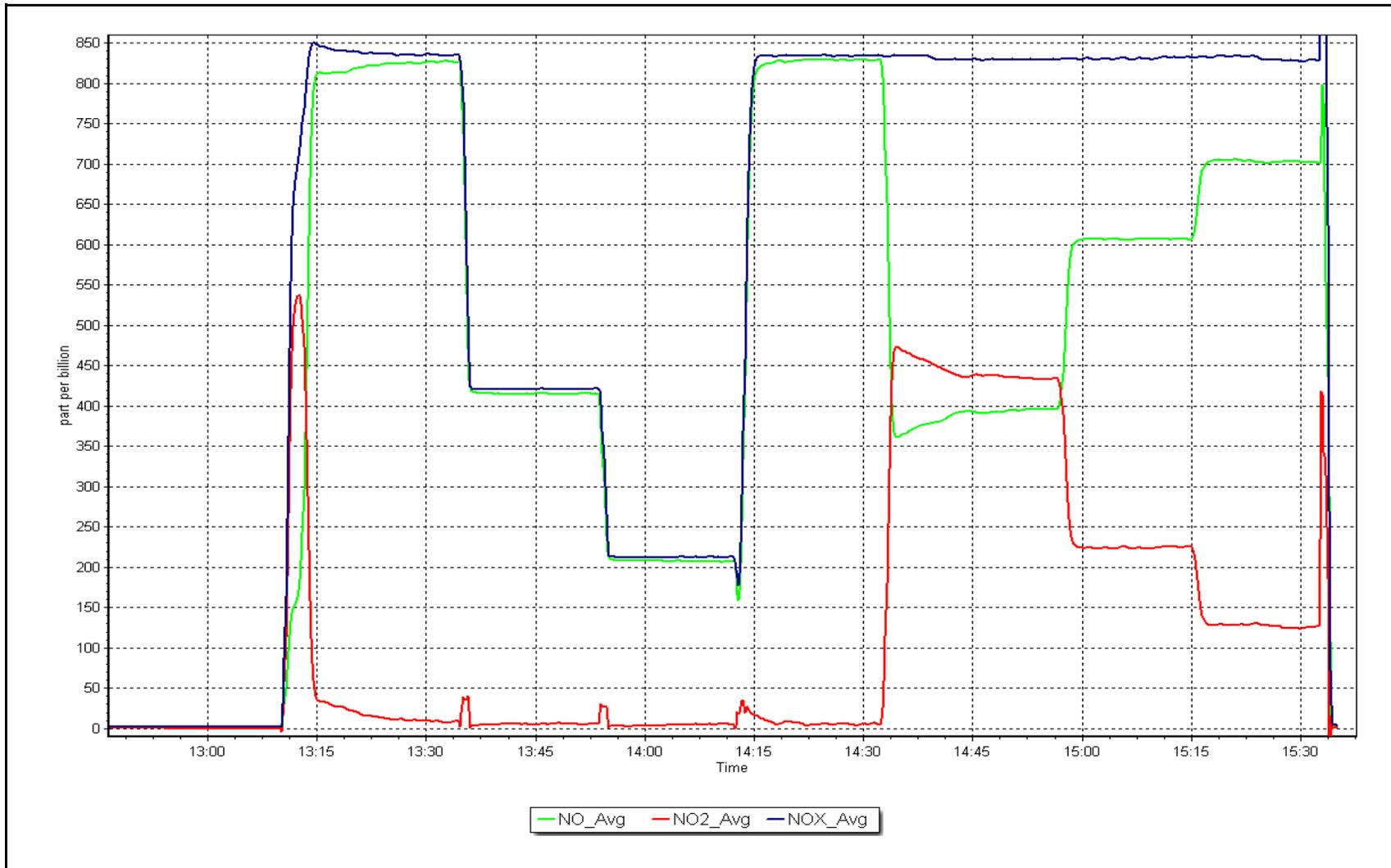
Calibration Performed By:

Ryan Power

NO_x Calibration Plot

Date: January 12, 2026

Location: Jackfish 2/3





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Jackfish 2/3
 Station number: AMS 27
 Calibration Date: January 13, 2026
 Last Cal Date: NA
 Start time (MST): 11:50
 End time (MST): 16:35
 Reason: Install

Calibration Standards

NO Gas Cylinder #: CC757838
 NOX Cal Gas Conc: 60.30 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.30 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T750
 ZAG make/model: Teledyne API T751H
 Cal Gas Expiry Date: January 9, 2032
 NO Cal Gas Conc: 60.20 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.20 ppm
 NO gas Diff:
 Serial Number: 282
 Serial Number: 321

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero))	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero))
As found zero									<i>Limit = 0.90 - 1.10</i>	<i>Limit = 0.90 - 1.10</i>
AF High point										
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = NA	ppb	NO = NA	ppb						NO _x = NA
Baseline Corr 1st pt	NO _x = NA	ppb	NO = NA	ppb						NO = NA
Baseline Corr 2nd pt	NO _x = NA	ppb	NO = NA	ppb						
Baseline Corr 3rd pt	NO _x = NA	ppb	NO = NA	ppb						
* = > +/-5% change initiates investigation										
<u>As Found Statistics</u>										
					As found	NO _x r ² :		Nx SI:		Nx Int:
					As found	NO r ² :		NO SI:		NO Int:
					As found	NO ₂ r ² :		NO ₂ SI:		NO ₂ Int:

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero))	Converter Efficiency
					<i>Limit = 0.90 - 1.10</i>	<i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: API T200
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1035

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.003551	1.000774
NO _x Cal Offset:	0.649072	-1.356830
NO Cal Slope:	1.004173	1.005165
NO Cal Offset:	-0.810268	-2.337023
NO ₂ Cal Slope:	1.000933	0.996488
NO ₂ Cal Offset:	1.324314	-0.462369

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	NA	0.834	NO bkgnd or offset:	NA	-12.4
NOX coeff or slope:	NA	0.827	NOX bkgnd or offset:	NA	-12.2
NO2 coeff or slope:	NA	1.000	Reaction cell Press:	NA	5.6

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.5	0.0	0.5	----	----
High point	4924	66.3	801.1	799.8	1.3	801.8	803.2	-1.3	0.9992	0.9958
Mid point	4958	33.2	401.1	400.4	0.7	397.7	397.7	0.0	1.0085	1.0069
Low point	4983	16.6	200.2	199.9	0.3	198.1	197.1	1.0	1.0107	1.0141
As left zero	5000	0.0	0.0	0.0	0.0	1.2	1.1	0.1	----	----
As left span	4924	66.3	801.1	382.1	419.0	791.7	382.1	409.6	1.0119	1.0000
Average Correction Factor									1.0061	1.0056

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.5	----	----
High GPT point	793.9	416.8	378.4	377.2	1.0033	99.7%
Mid GPT point	793.9	605.5	189.7	187.9	1.0097	99.0%
Low GPT point	793.9	698.1	97.1	95.5	1.0171	98.3%
Average Correction Factor					1.0100	99.0%

Notes: Install cal, all good, calibrated with portable system, As Lefts carried out on station setup

Calibration Performed By: Ryan Power



Wood Buffalo Environmental Association

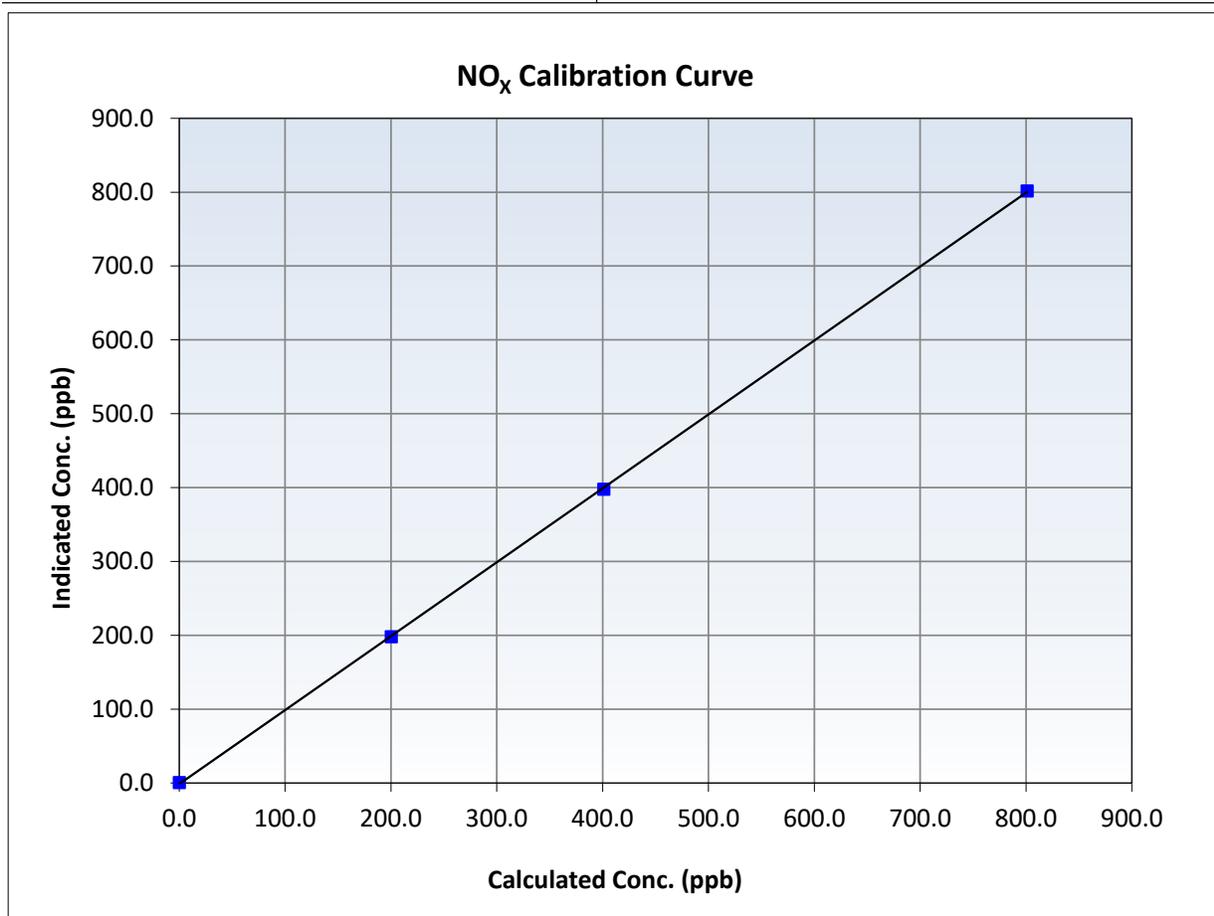
NO_x Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	NA
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	11:50	End Time (MST):	16:35
Analyzer make:	API T200	Analyzer serial #:	1035

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.5	----	Correlation Coefficient	0.999967	<i>≥0.995</i>
801.1	801.8	0.9992	Slope	1.000774	<i>0.90 - 1.10</i>
401.1	397.7	1.0085	Intercept	-1.356830	<i>+/-20</i>
200.2	198.1	1.0107			





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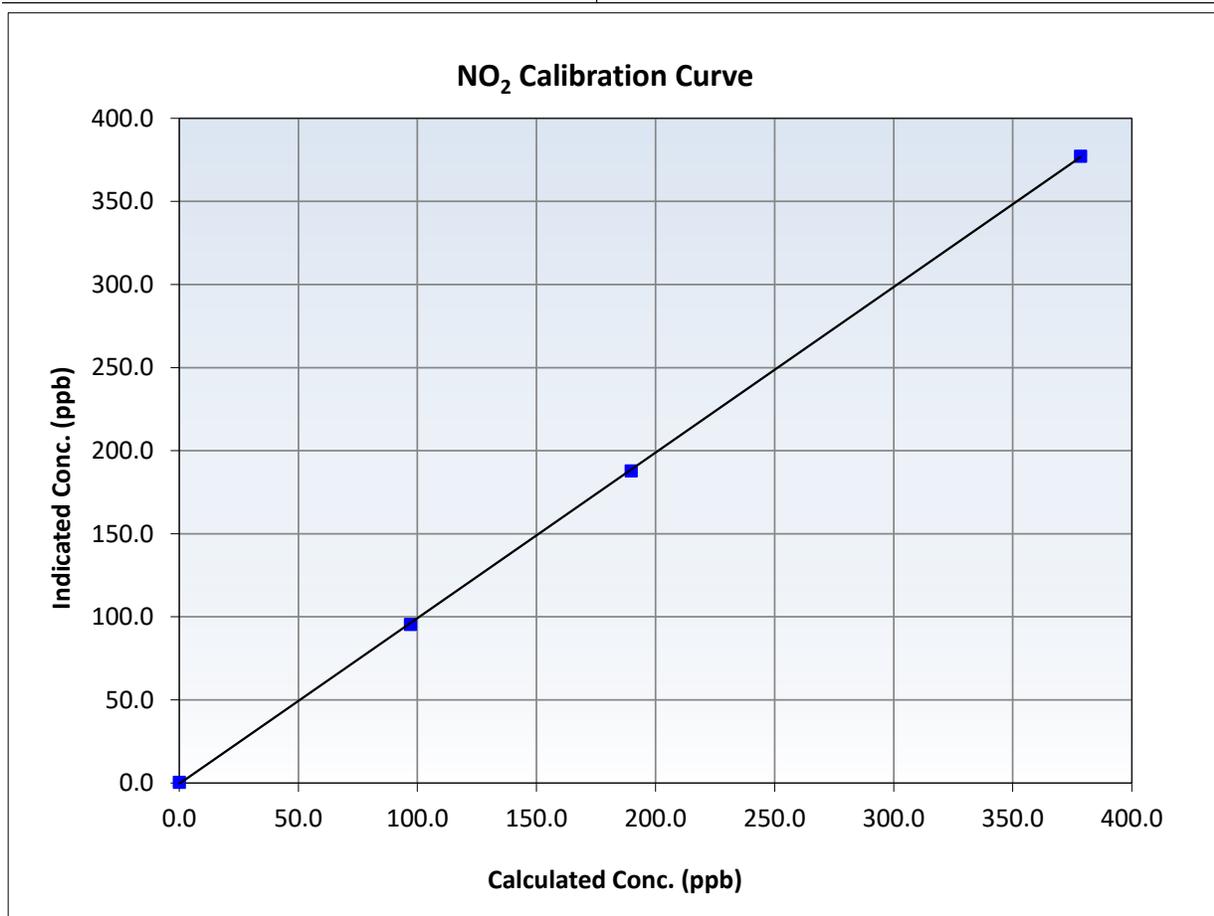
NO₂ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	NA
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	11:50	End Time (MST):	16:35
Analyzer make:	API T200	Analyzer serial #:	1035

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.5	----	Correlation Coefficient	0.999969	≥0.995
378.4	377.2	1.0033	Slope	0.996488	0.90 - 1.10
189.7	187.9	1.0097	Intercept	-0.462369	+/-20
97.1	95.5	1.0171			





Wood Buffalo Environmental Association

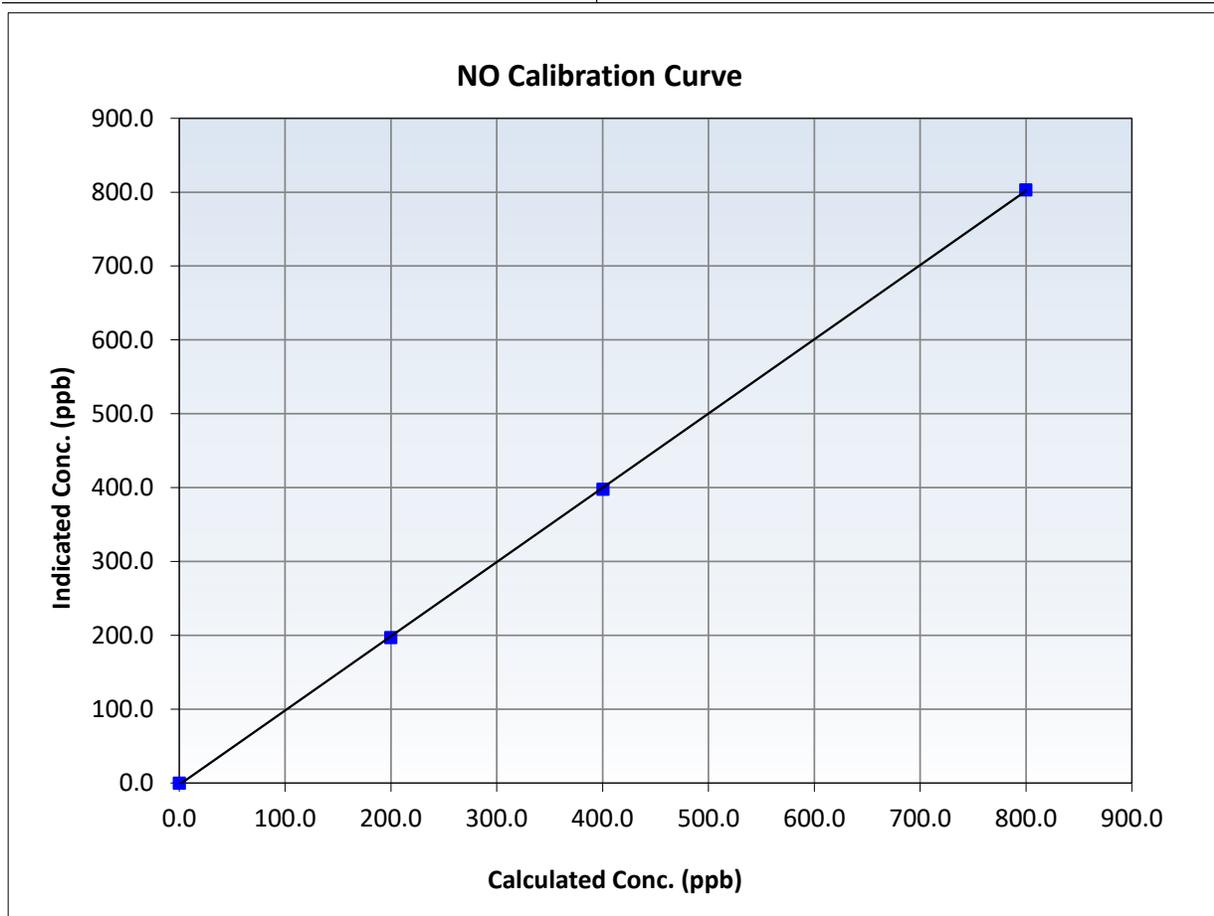
NO Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	NA
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	11:50	End Time (MST):	16:35
Analyzer make:	API T200	Analyzer serial #:	1035

Calibration Data

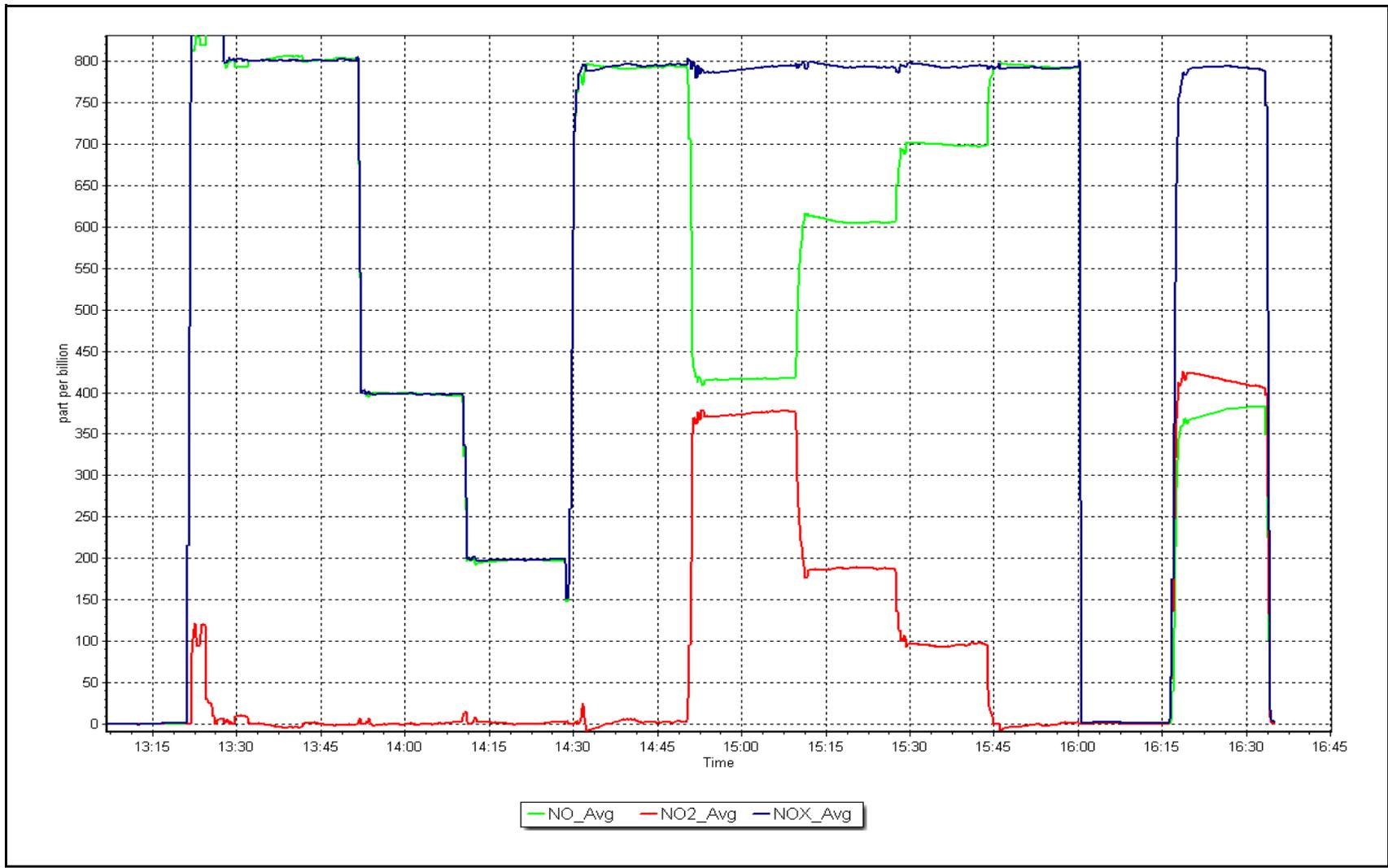
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999954	<i>≥0.995</i>
799.8	803.2	0.9958	Slope	1.005165	<i>0.90 - 1.10</i>
400.4	397.7	1.0069	Intercept	-2.337023	<i>+/-20</i>
199.9	197.1	1.0141			



NO_x Calibration Plot

Date: January 13, 2026

Location: Jackfish 2/3





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS29 SURMONT 2 JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	January 14, 2026	Last Cal Date:	December 17, 2025
Start time (MST):	11:20	End time (MST):	14:50
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	49.95	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	CC356229			
Removed Cal Gas Conc:	49.95	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	5472
Zero Air Gen Model:	Teledyne API T701		Serial Number:	135

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1170050150
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.003988	1.003816	Backgd or Offset:	14.7	15.2
Calibration intercept:	-2.020033	-1.759945	Coeff or Slope:	0.950	0.950

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4919.9	80.1	800.2	801.0	0.999
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	800.9	Previous response	801.4	*% change	-0.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.5	----
High point	4920	80.1	800.2	802.0	0.998
Mid point	4960	40.0	399.6	399.1	1.001
Low point	4980	20.0	199.8	197.3	1.013
As left zero	5000	0.0	0.0	-0.5	----
As left span	4920	80.1	800.2	805.0	0.994
Average Correction Factor:					1.004

Notes: Changed sample inlet filter after as founds. Adjusted zero.

Calibration Performed By: Braiden Boutillier



Wood Buffalo Environmental Association

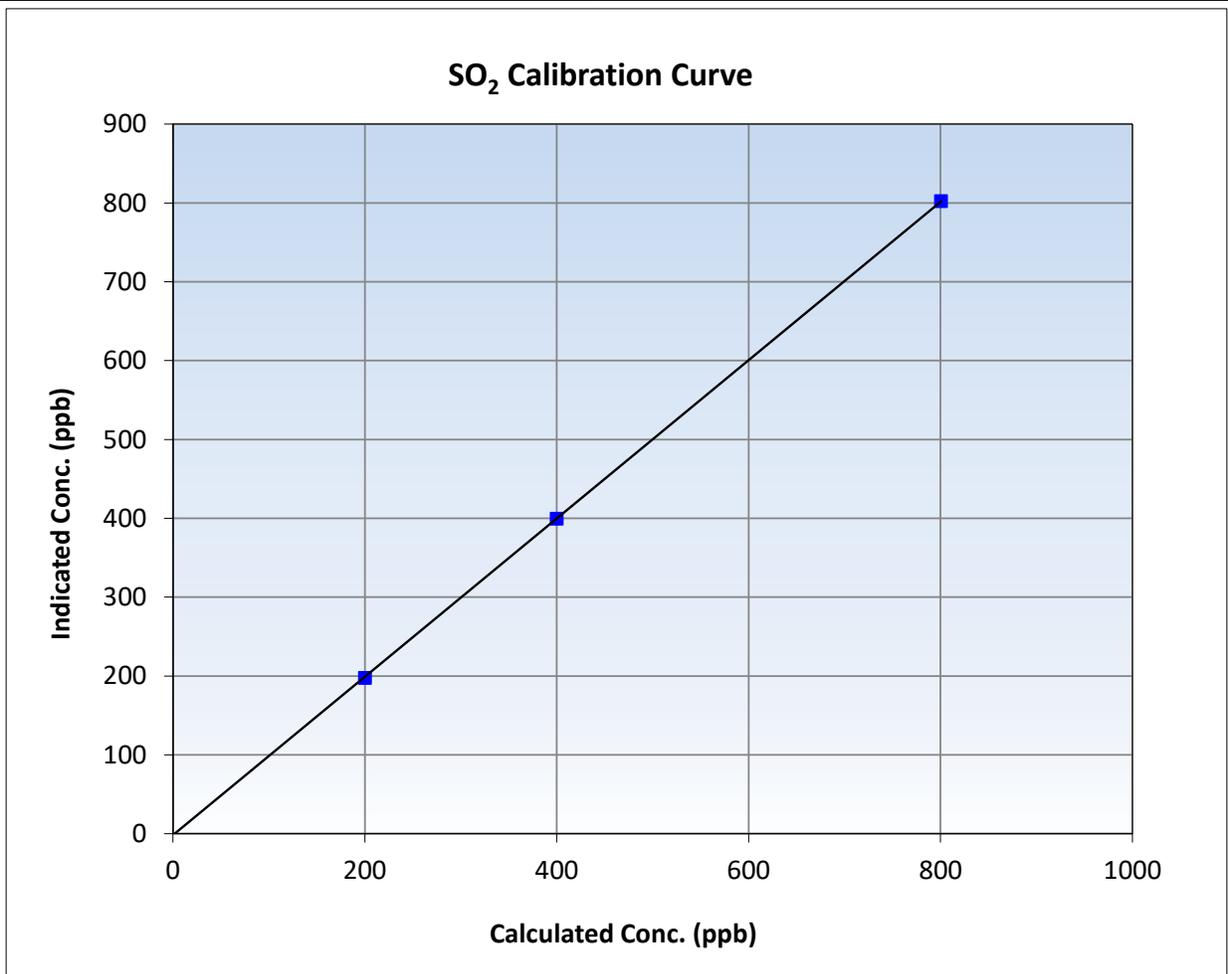
SO₂ Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 17, 2025
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	11:20	End Time (MST):	14:50
Analyzer make:	Thermo 43i	Analyzer serial #:	1170050150

Calibration Data

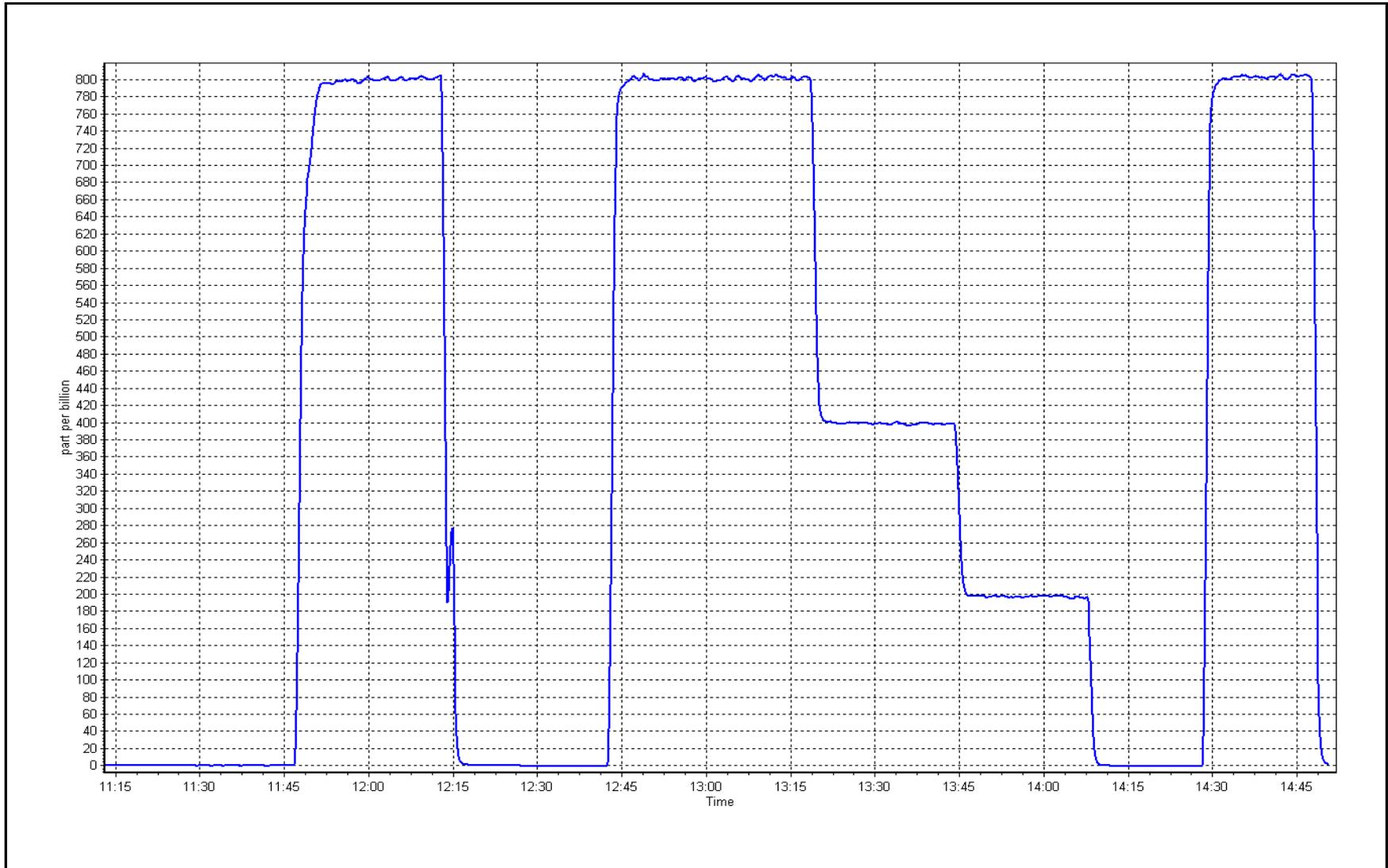
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.5	----	Correlation Coefficient	0.999988	≥0.995
800.2	802.0	0.9978	Slope	1.003816	0.90 - 1.10
399.6	399.1	1.0013	Intercept	-1.759945	+/-30
199.8	197.3	1.0127			



SO2 Calibration Plot

Date: January 14, 2026

Location: Surmont 2





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H2S Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	January 7, 2026	Last Cal Date:	December 1, 2025
Start time (MST):	10:27	End time (MST):	16:00
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	<u>4.750</u>	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	<u>CC737848</u>			
Removed Cal Gas Conc:	<u>4.750</u>	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	<u>NA</u>		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	5472
ZAG Make/Model:	Teledyne API T701		Serial Number:	135

Analyzer Information

Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1200326170
Converter make:	Global	Converter serial #:	2022-220
Analyzer Range:	0 - 100 ppb	Converter Temp:	325.0 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006740	0.997453	Backgd or Offset:	0.85	1.04
Calibration intercept:	0.019518	-0.080478	Coeff or Slope:	1.070	1.070

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4916	84.2	80.0	80.7	0.992
As found Mid point	4958	42.1	40.0	40.5	0.990
As found Low point	4979	21.1	20.0	20.2	0.995
New cylinder response					
Baseline Corr As found:	80.6	Prev response:	80.55	*% change:	0.1%
Baseline Corr 2nd AF pt:	40.4	AF Slope:	1.008026	AF Intercept:	0.099516
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999997	* = +/-5% change initiates investigation	

H2S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4916	84.2	80.0	79.7	1.004
Mid point	4958	42.1	40.0	39.9	1.002
Low point	4979	21.1	20.0	19.7	1.015
As left zero	5000	0.0	0.0	0.1	----
As left span	4916	84.2	80.0	79.6	1.005
SO2 Scrubber Check	4919	81.3	813.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	1.007
Date of last converter efficiency test:	December 5, 2024			108.1%	efficiency

Notes: Changed sample inlet filter after as founds. Ran SOx scrubber check after cal zero, passed. Adjusted zero.

Calibration Performed By: Braiden Boutillier



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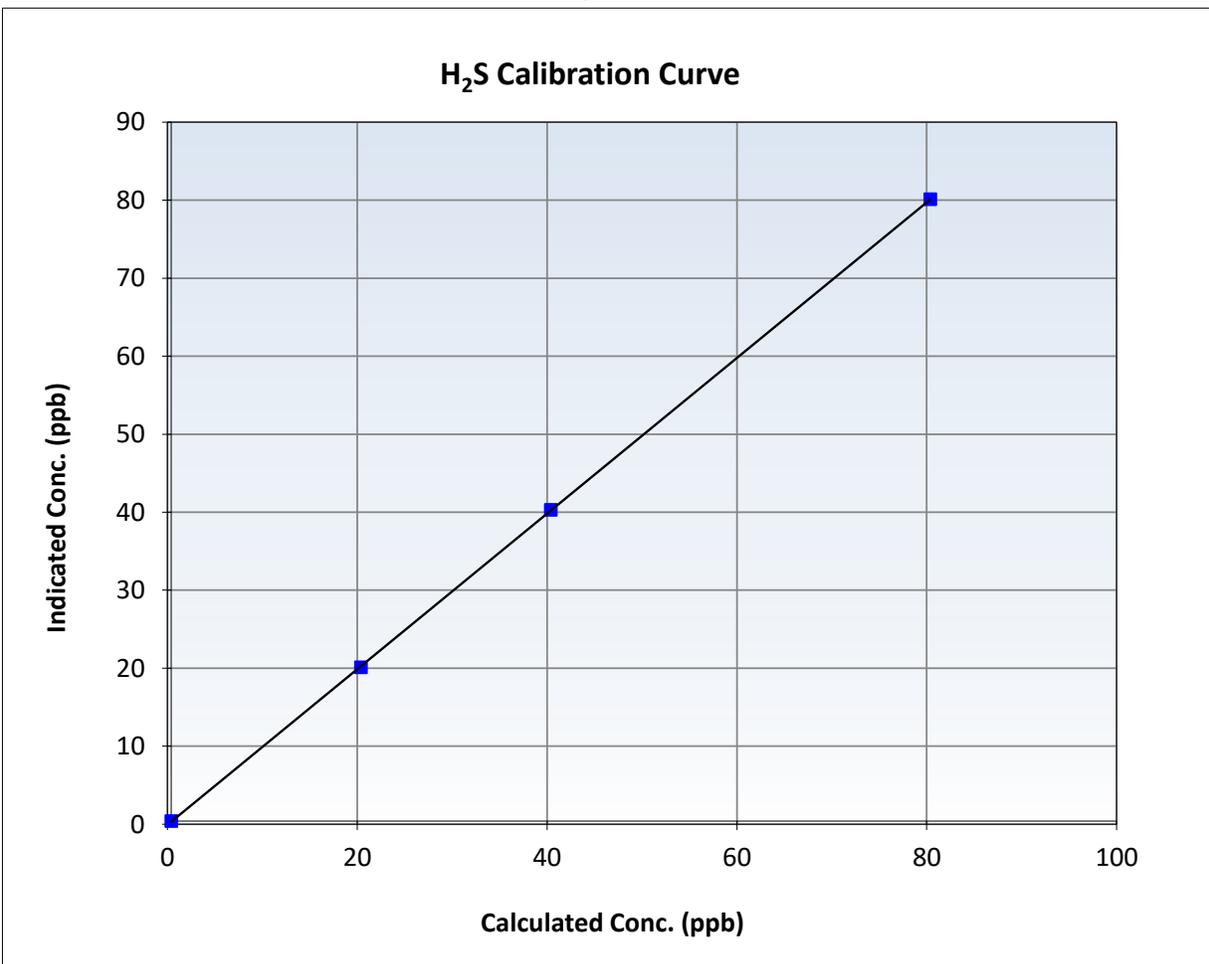
H2S Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 1, 2025
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	10:27	End Time (MST):	16:00
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1200326170

Calibration Data

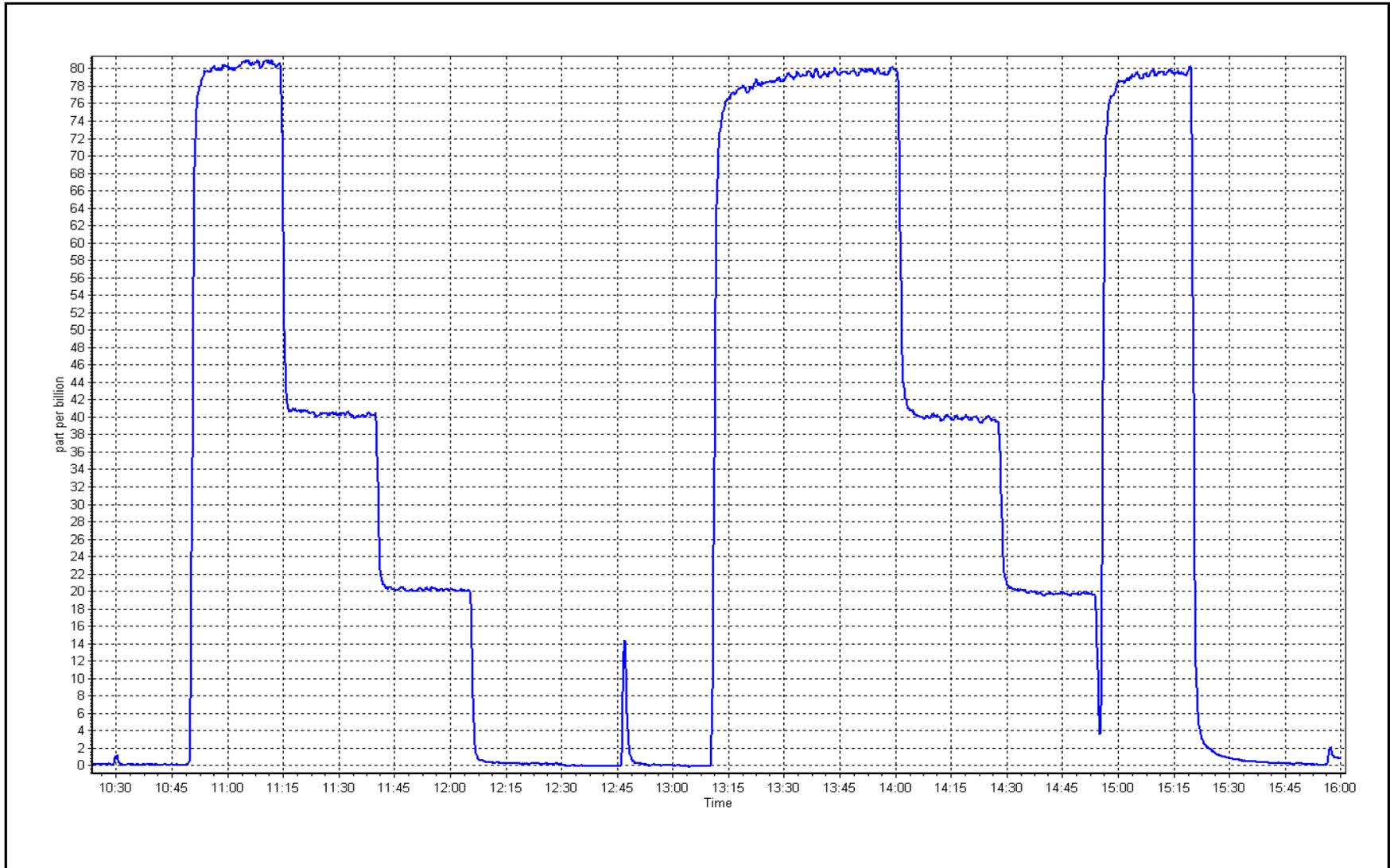
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999988	≥ 0.995
80.0	79.7	1.0036	Slope	0.997453	$0.90 - 1.10$
40.0	39.9	1.0024	Intercept	-0.080478	± 3
20.0	19.7	1.0151			



H2S Calibration Plot

Date: January 7, 2026

Location: Surmont 2





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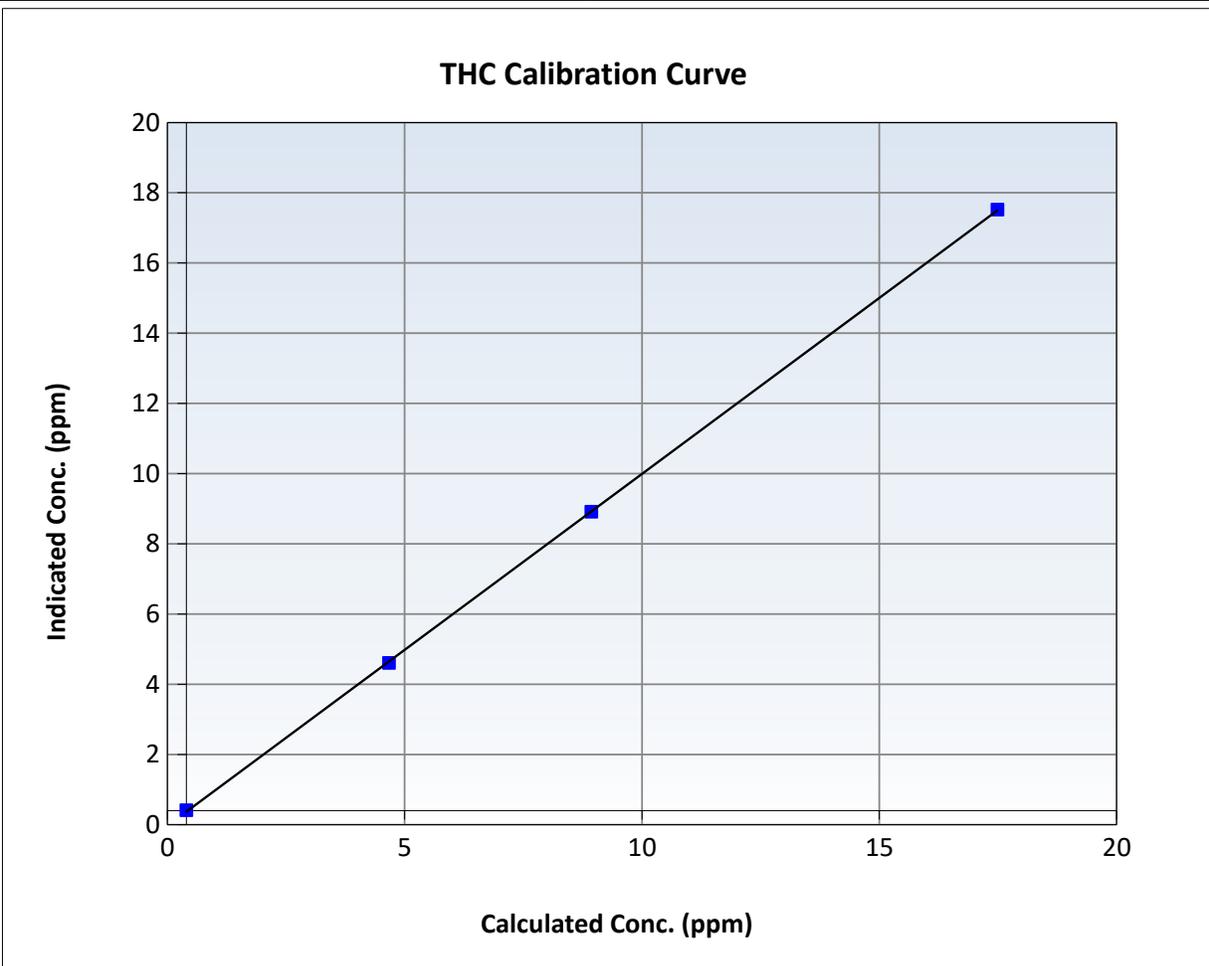
THC Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 17, 2025
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	11:20	End Time (MST):	14:50
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1170050149

Calibration Data

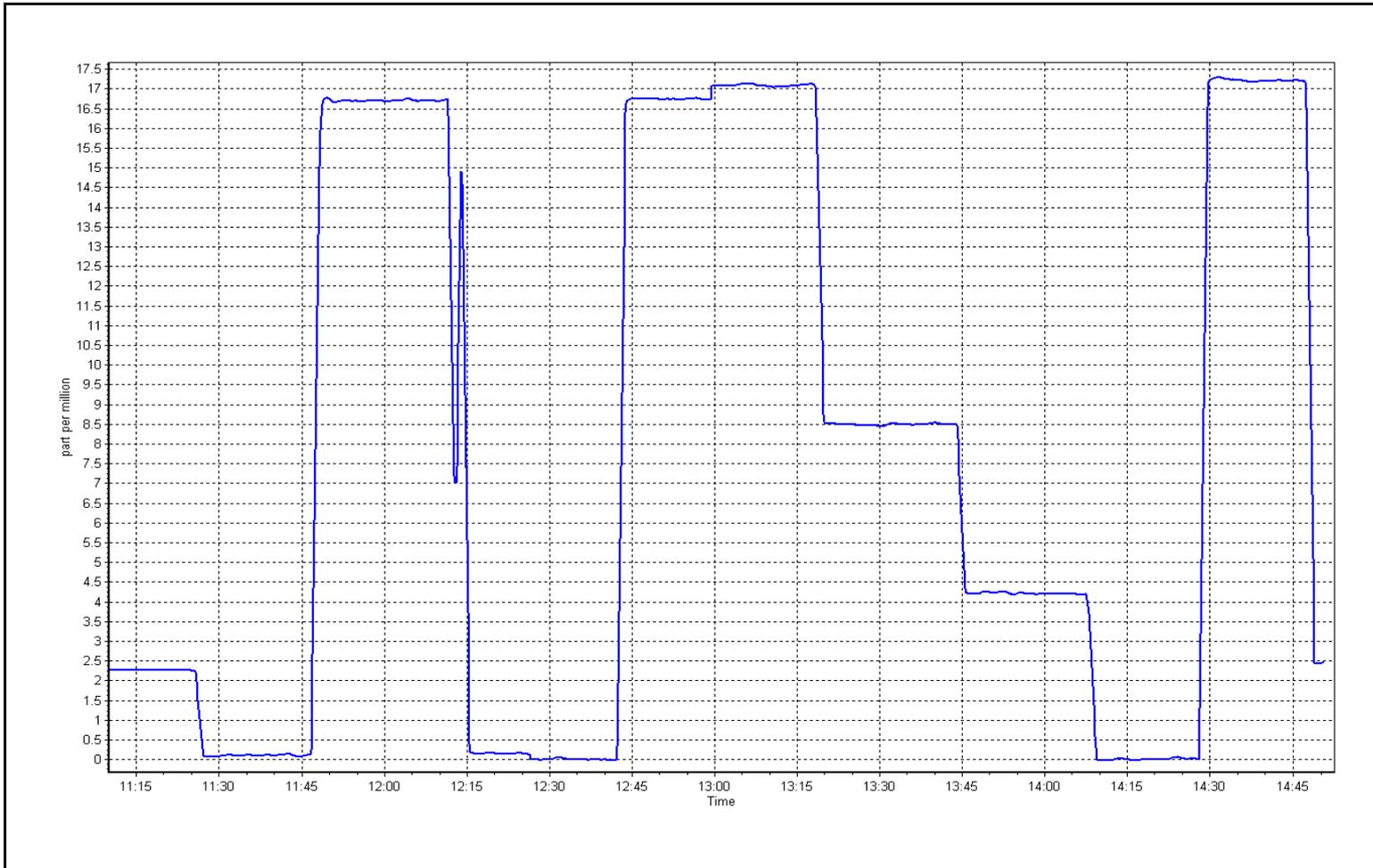
Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.01	----	Correlation Coefficient	0.999975	≥0.995
17.09	17.12	0.9983	Slope	1.002342	0.90 - 1.10
8.54	8.51	1.0030	Intercept	-0.030141	+/-1.5
4.27	4.20	1.0151			



THC Calibration Plot

Date: January 14, 2026

Location: Surmont 2





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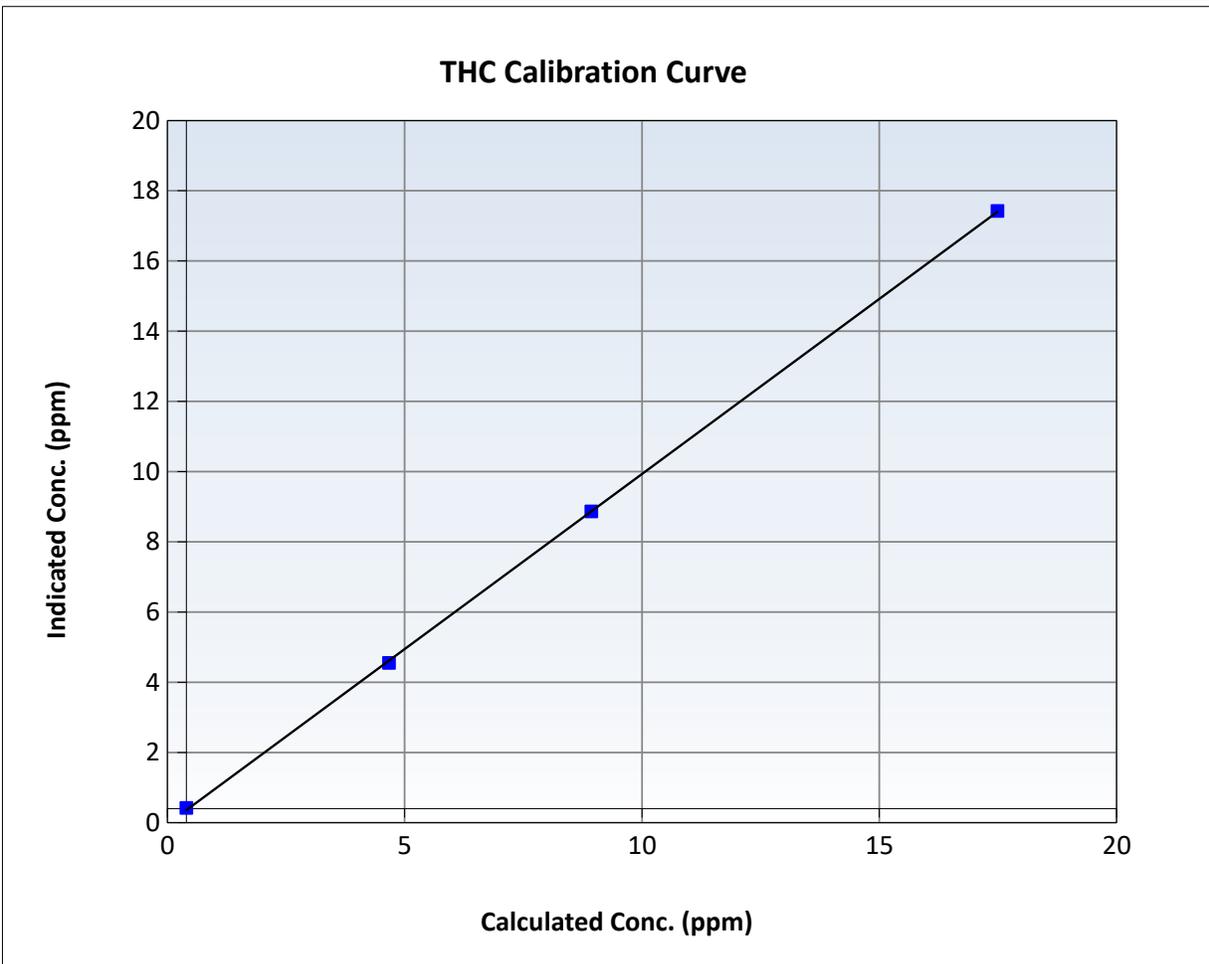
THC Calibration Summary

Station Information

Calibration Date:	January 25, 2026	Previous Calibration:	
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	10:30	End Time (MST):	13:14
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1180540021

Calibration Data

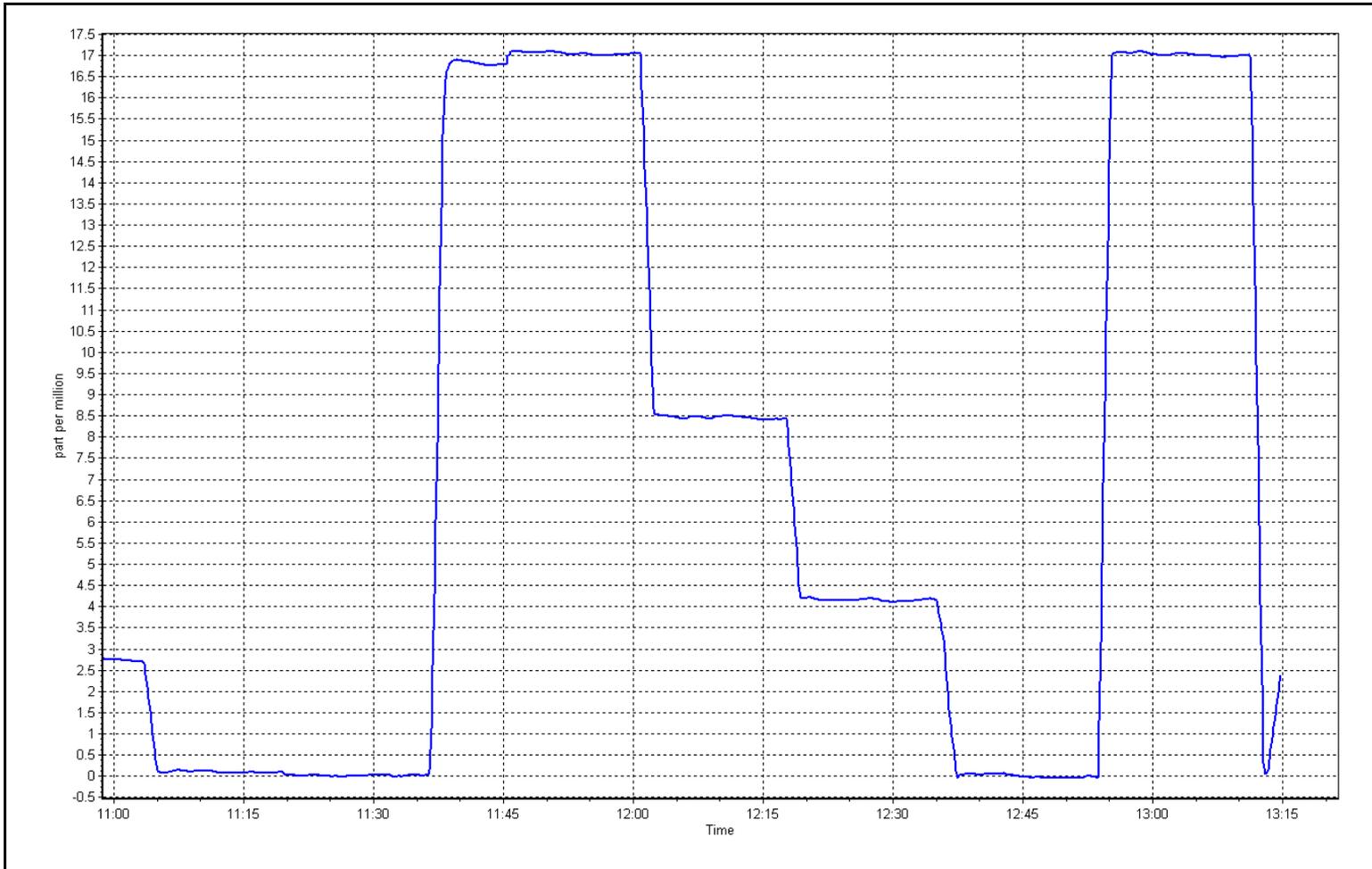
Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.02	----	Correlation Coefficient	0.999946	≥0.995
17.09	17.03	1.0039	Slope	0.997308	0.90 - 1.10
8.54	8.46	1.0088	Intercept	-0.041766	+/-1.5
4.27	4.15	1.0296			



THC Calibration Plot

Date: January 25, 2026

Location: Surmont 2





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NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Surmont 2
 Station number: AMS 29
 Calibration Date: January 27, 2026
 Last Cal Date: December 2, 2025
 Start time (MST): 11:07
 End time (MST): 14:06
 Reason: Removal

Calibration Standards

NO Gas Cylinder #: CC218007
 NOX Cal Gas Conc: 60.20 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.20 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701
 Cal Gas Expiry Date: January 9, 2032
 NO Cal Gas Conc: 60.00 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.00 ppm
 NO gas Diff:
 Serial Number: 5472
 Serial Number: 135

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0	0.0	0.0	0.0	-0.3	-0.2	-0.1	----	----
AF High point	4933	66.7	803.1	800.4	2.7	805.0	798.7	6.5	0.9973	1.0019
AF Mid point	4967	33.3	400.9	399.6	1.3	401.2	396.3	5.0	0.9985	1.0078
AF Low point	4983	16.7	201.1	200.4	0.7	198.3	193.5	4.8	1.0125	1.0347

New cyl resp

Previous Response	NO _x = 802.9 ppb	NO = 799.1 ppb	<i>* = > +/-5% change initiates investigation</i>		<i>*Percent Change</i>		NO _x = 0.3%
Baseline Corr 1st pt	NO _x = 805.3 ppb	NO = 798.9 ppb	<u>As Found Statistics</u>		<i>*Percent Change</i>		NO = 0.0%
Baseline Corr 2nd pt	NO _x = 401.5 ppb	NO = 396.5 ppb	As found	NO _x r ² : 0.999984	Nx Sl: 1.003938	Nx Int: -1.610	
Baseline Corr 3rd pt	NO _x = 198.6 ppb	NO = 193.7 ppb	As found	NO r ² : 0.999930	NO Sl: 1.000444	NO Int: -3.189	
			As found	NO ₂ r ² : 0.999794	NO ₂ Sl: 1.007836	NO ₂ Int: -0.111	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero	----	----	0.0	-0.1	----	----
As found high GPT point	791.5	429.8	364.4	366.2	0.9950	100.5%
As found mid GPT point	791.5	620.8	173.4	177.7	0.9756	102.5%
As found low GPT point	791.5	701.5	92.7	91.1	1.0172	98.3%



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NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1170050148

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.001517	
NO _x Cal Offset:	-1.409038	
NO Cal Slope:	1.001644	
NO Cal Offset:	-2.709539	
NO ₂ Cal Slope:	1.039499	
NO ₂ Cal Offset:	-1.542251	

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.033	1.033	NO bkgnd or offset:	1.3	1.3
NOX coeff or slope:	0.995	0.995	NOX bkgnd or offset:	1.5	1.5
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	148.7	149.9

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
-----------	---------------------------	-----------------------------	---	--	---	--	---------------------------------------	--	---	--

Cal zero
 High point
 Mid point
 Low point
 As left zero
 As left span

Average Correction Factor

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
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Cal zero
 High GPT point
 Mid GPT point
 Low GPT point

Average Correction Factor

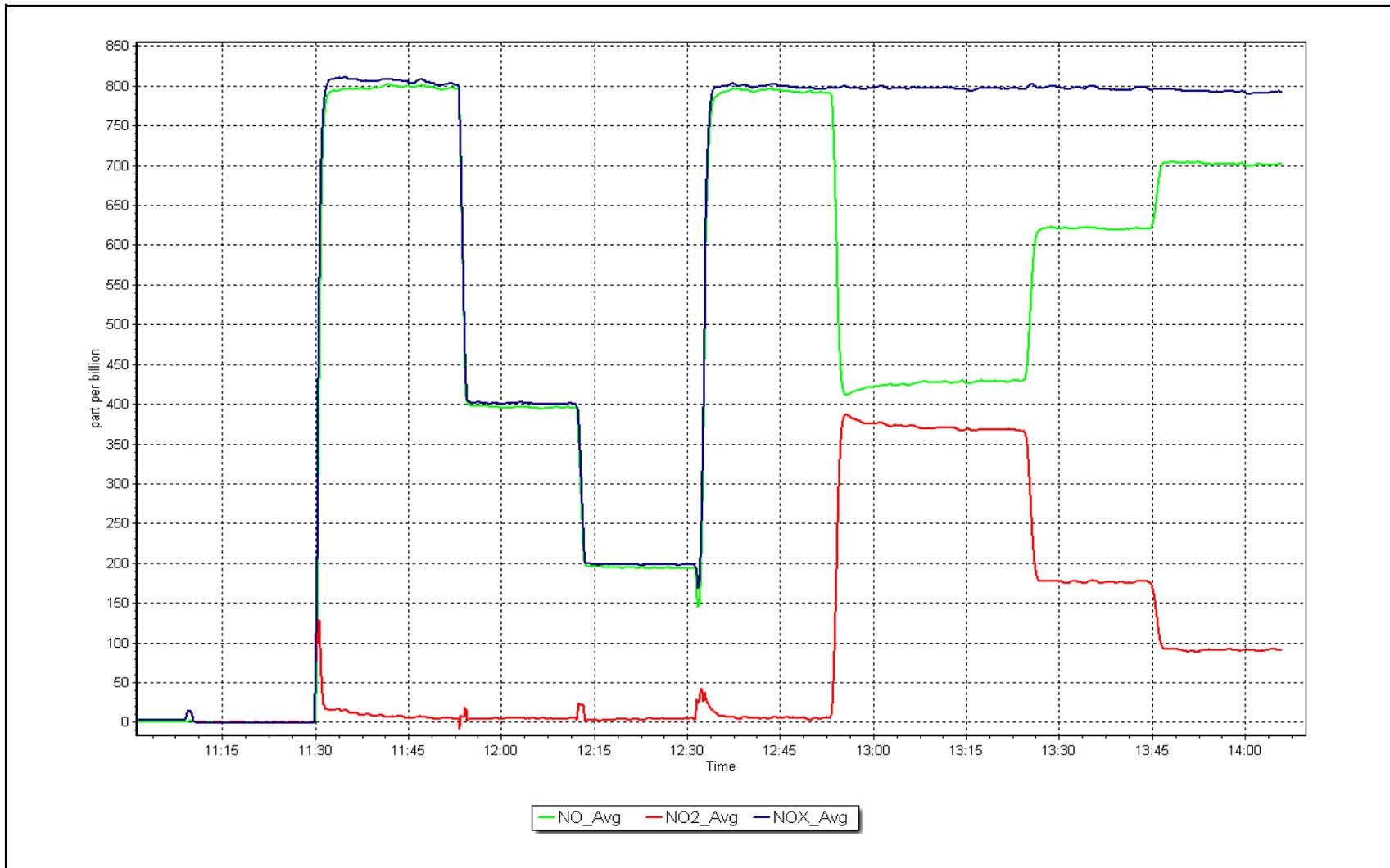
Notes: Removal completed. Swapping analyzer due to inconsistent NOx readings during GPT points.

Calibration Performed By: Braiden Boutilier

NO_x Calibration Plot

Date: January 27, 2026

Location: Surmont 2





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Surmont 2
 Station number: AMS 29
 Calibration Date: January 28, 2026
 Last Cal Date: December 2, 2025
 Start time (MST): 10:45
 End time (MST): 15:57
 Reason: Install

Calibration Standards

NO Gas Cylinder #: CC218007
 NOX Cal Gas Conc: 60.20 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.20 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701
 Cal Gas Expiry Date: January 9, 2032
 NO Cal Gas Conc: 60.00 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.00 ppm
 NO gas Diff:
 Serial Number: 5472
 Serial Number: 135

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero))	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero))
As found zero									<i>Limit = 0.90 - 1.10</i>	<i>Limit = 0.90 - 1.10</i>
AF High point										
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = NA	ppb	NO = NA	ppb		<i>* = > +/-5% change initiates investigation</i>		<i>*Percent Change</i>		NO _x = NA
Baseline Corr 1st pt	NO _x = NA	ppb	NO = NA	ppb		<u>As Found Statistics</u>		<i>*Percent Change</i>		NO = NA
Baseline Corr 2nd pt	NO _x = NA	ppb	NO = NA	ppb		As found NO _x r ² :		Nx SI:		Nx Int:
Baseline Corr 3rd pt	NO _x = NA	ppb	NO = NA	ppb		As found NO r ² :		NO SI:		NO Int:
						As found NO ₂ r ² :		NO ₂ SI:		NO ₂ Int:

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero))	Converter Efficiency
					<i>Limit = 0.90 - 1.10</i>	<i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1410661329

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:		1.002173
NO _x Cal Offset:		-0.789309
NO Cal Slope:		1.002756
NO Cal Offset:		-2.048949
NO ₂ Cal Slope:		1.002890
NO ₂ Cal Offset:		-0.752459

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.967		NO bkgnd or offset:	8.9	
NOX coeff or slope:	0.991		NOX bkgnd or offset:	8.9	
NO2 coeff or slope:	1.000		Reaction cell Press:	154.6	

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
High point	4933	66.7	803.1	800.4	2.7	804.0	801.0	2.9	0.9989	0.9993
Mid point	4967	33.3	400.9	399.6	1.3	401.9	399.4	2.5	0.9975	1.0004
Low point	4983	16.7	201.1	200.4	0.7	199.2	195.8	3.4	1.0094	1.0236
As left zero	5000	0	0.0	0.0	0.0	0.2	0.2	0.0	----	----
As left span	4933	66.7	803.1	430.9	372.2	791.9	430.9	360.9	1.0142	1.0000
Average Correction Factor									1.0020	1.0078

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.0	----	----
High GPT point	790.3	430.2	362.8	363.1	0.9991	100.1%
Mid GPT point	790.3	620.2	172.8	173.2	0.9975	100.2%
Low GPT point	790.3	703.8	89.2	87.2	1.0226	97.8%
Average Correction Factor					1.0064	99.4%

Notes: Install calibration completed. Changed external pump and sample inlet filter before calibration.

Calibration Performed By: Braiden Boutilier



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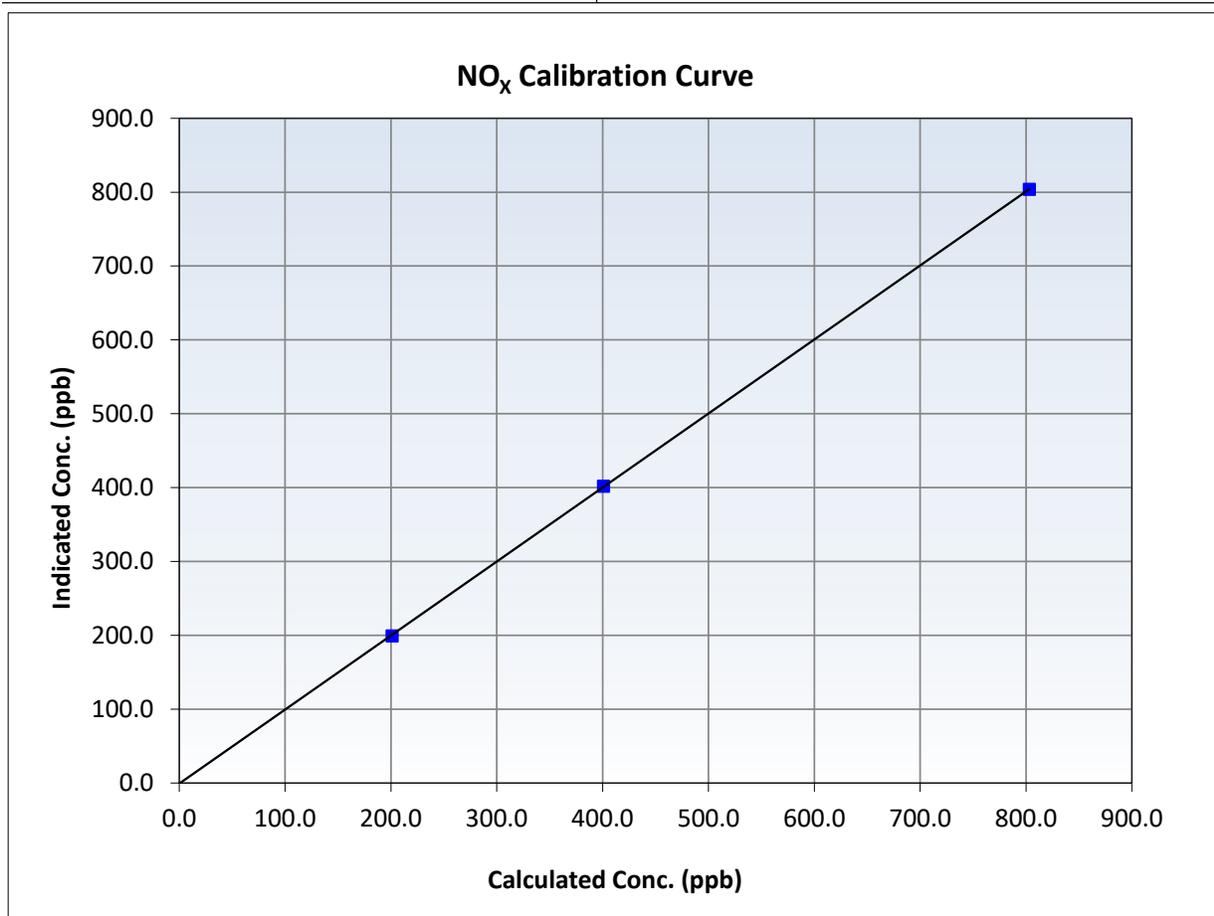
NO_x Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 2, 2025
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	10:45	End Time (MST):	15:57
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661329

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999990	≥0.995
803.1	804.0	0.9989	Slope	1.002173	0.90 - 1.10
400.9	401.9	0.9975	Intercept	-0.789309	+/-20
201.1	199.2	1.0094			





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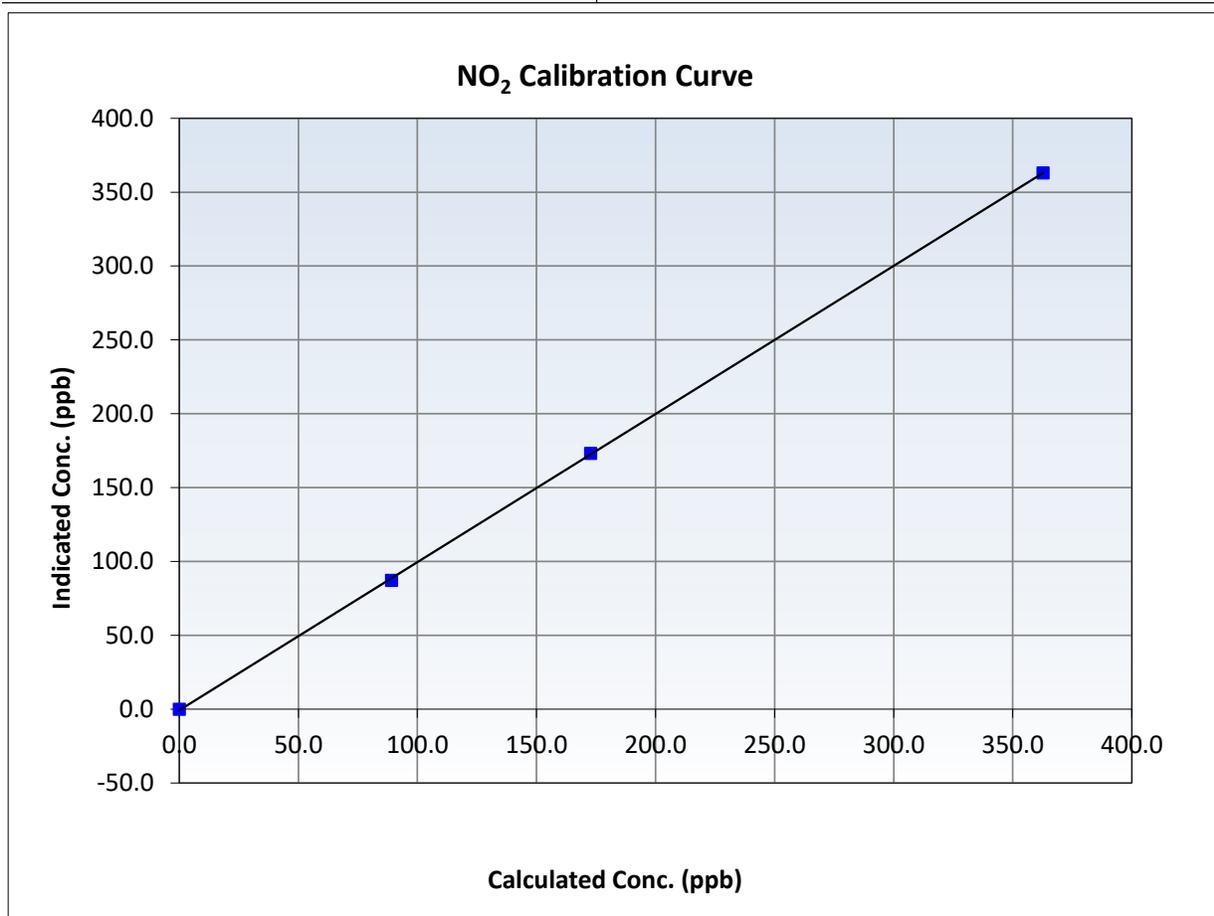
NO₂ Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 2, 2025
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	10:45	End Time (MST):	15:57
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661329

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999956	<i>≥0.995</i>
362.8	363.1	0.9991	Slope	1.002890	<i>0.90 - 1.10</i>
172.8	173.2	0.9975	Intercept	-0.752459	<i>+/-20</i>
89.2	87.2	1.0226			





Wood Buffalo Environmental Association

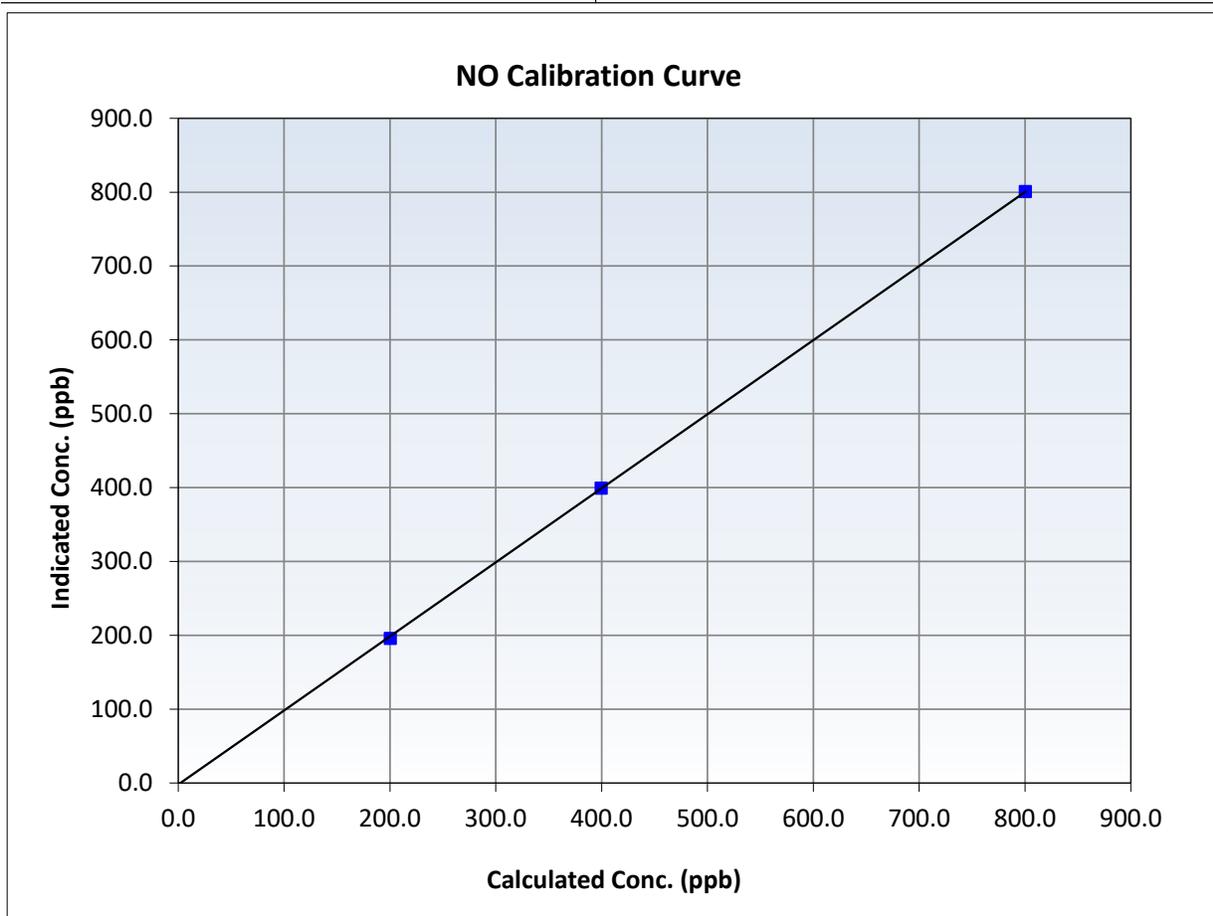
NO Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 2, 2025
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	10:45	End Time (MST):	15:57
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661329

Calibration Data

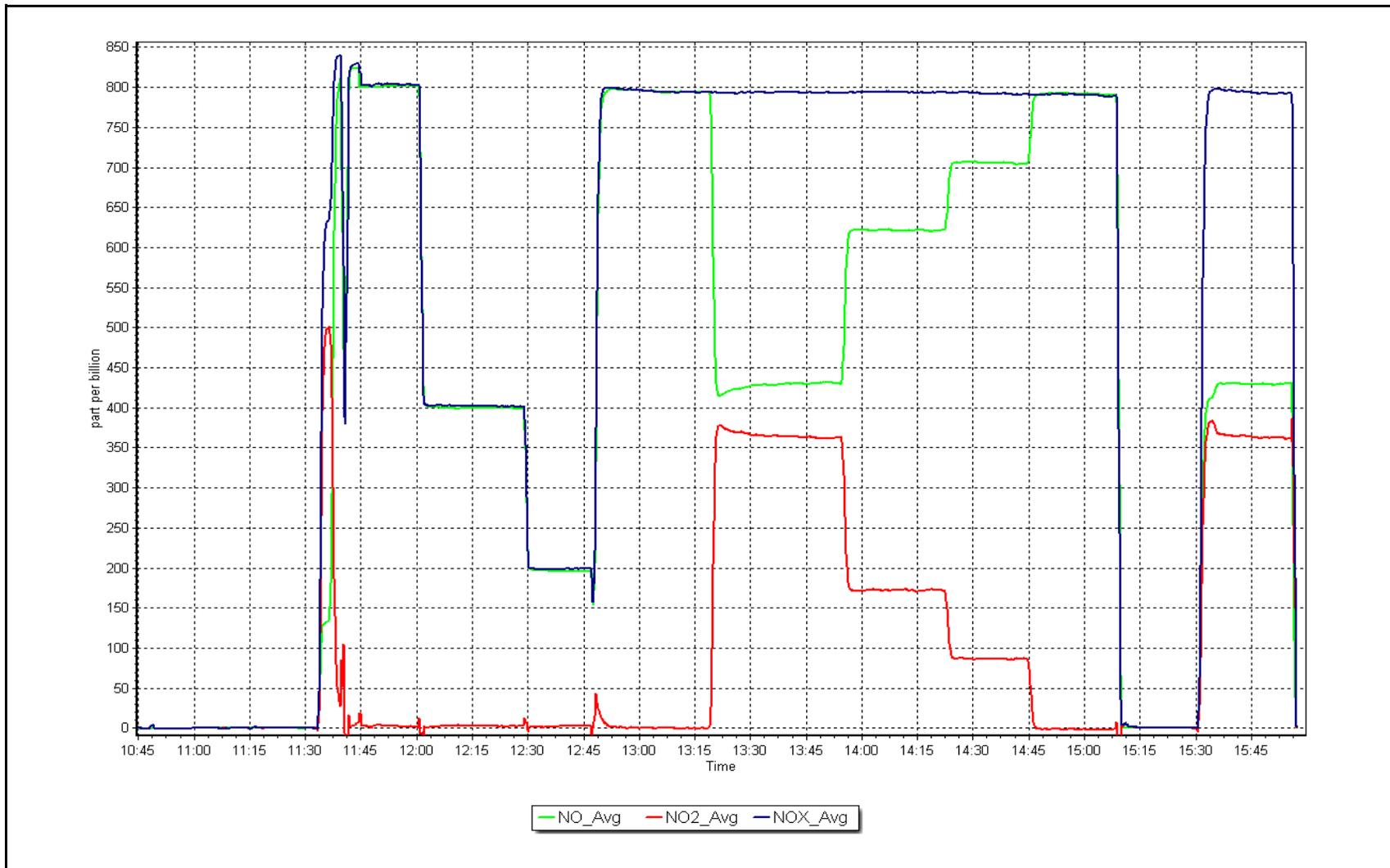
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999960	≥0.995
800.4	801.0	0.9993	Slope	1.002756	0.90 - 1.10
399.6	399.4	1.0004	Intercept	-2.048949	+/-20
200.4	195.8	1.0236			



NO_x Calibration Plot

Date: January 28, 2026

Location: Surmont 2





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Surmont 2 Station number: AMS 29
 Calibration Date: January 28, 2026 Last Cal Date: December 2, 2025
 Start time (MST): 13:37 End time (MST): 14:52

Analyzer Make: API T640 S/N: 2236
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388748
 Temp/RH standard: Alicat FP-25BT S/N: 388748

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-12.1	-12.18	-12.1	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	717.2	715.90	717.2	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	4.99	4.958	4.99	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	40	----	40	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	2.5	PM w/ HEPA: _____	0.0	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.9 Expiry Date: July 16, 2026
 Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: November 3, 2025
 Date Disposable Filter Changed: November 3, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ 0.0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: April 14, 2025
 Date RH/T Sensor Cleaned: July 15, 2025

Notes: Verified temperature pressure and flow. Leak check passed.

Calibration by: Braiden Boutilier



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS30 ELLS RIVER JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Ells River	Station number: AMS 30
Calibration Date:	January 12, 2026	Last Cal Date: December 5, 2025
Start time (MST):	11:44	End time (MST): 14:19
Reason:	Routine	

Calibration Standards

Cal Gas Concentration:	48.75	ppm	Cal Gas Exp Date: March 10, 2031
Cal Gas Cylinder #:	CC350110		
Removed Cal Gas Conc:	48.75	ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #:	NA		Diff between cyl:
Calibrator Model:	API T700		Serial Number: 5707
Zero Air Gen Model:	API T701H		Serial Number: 358

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: 1008841397
Analyzer Range:	0 - 1000 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.007541	1.000615	Backgd or Offset:	10.8	10.8
Calibration intercept:	-1.415671	-0.516137	Coeff or Slope:	1.013	1.013

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.3	----
As found High point	4918	82.1	800.5	798.0	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	798.3	Previous response	805.1	*% change	-0.8%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.2	----
High point	4918	82.1	800.5	800.5	1.000
Mid point	4959	41.0	399.8	399.6	1.000
Low point	4979	20.5	199.9	199.0	1.004
As left zero	5000	0.0	0.0	-0.2	----
As left span	4918	82.1	800.5	805.0	0.994
Average Correction Factor:					1.002

Notes: Sample inlet filter was changed after as founds. No adjustment made.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

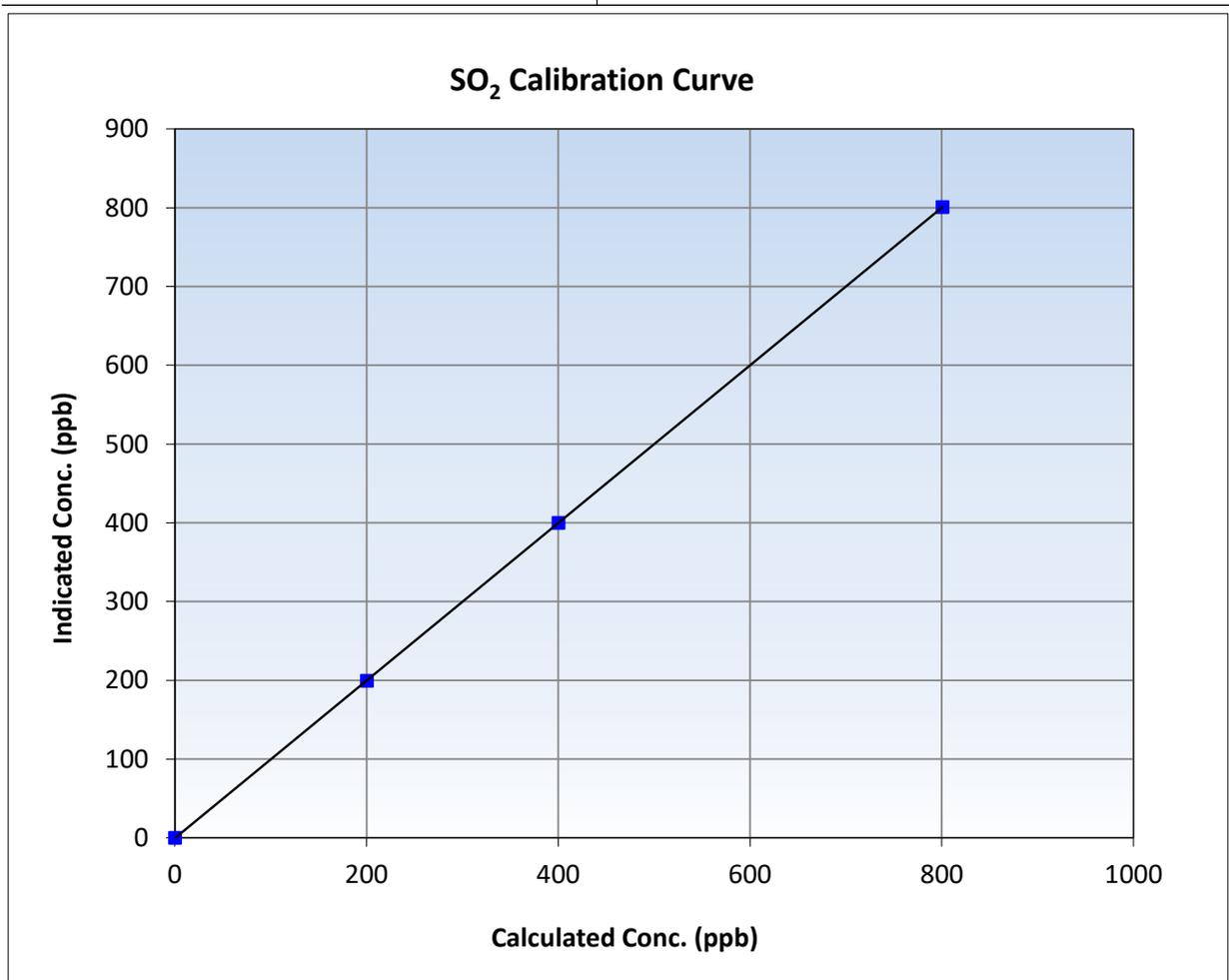
SO₂ Calibration Summary

Station Information

Calibration Date:	January 12, 2026	Previous Calibration:	December 5, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	11:44	End Time (MST):	14:19
Analyzer make:	Thermo 43i	Analyzer serial #:	1008841397

Calibration Data

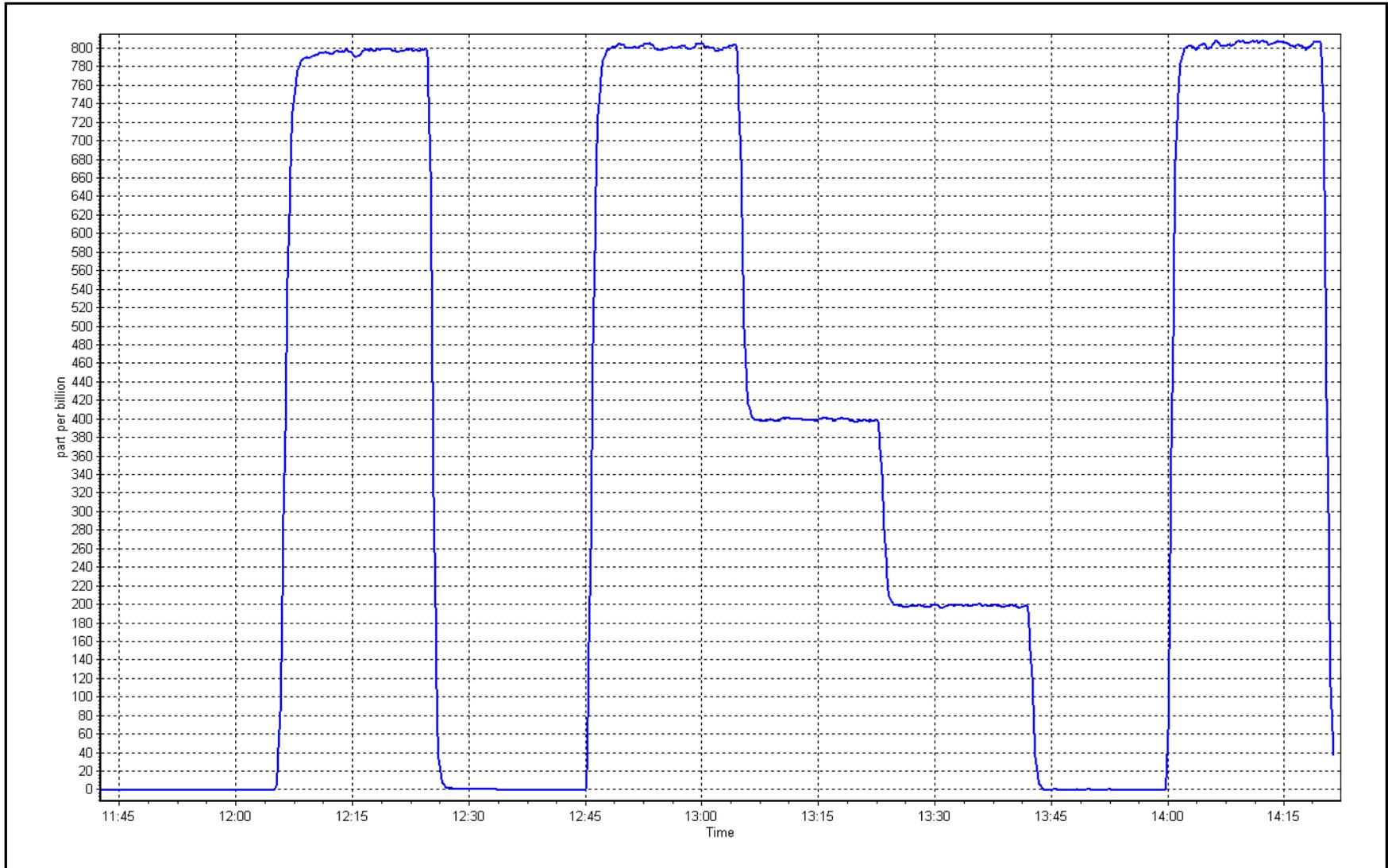
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.2	----	Correlation Coefficient	0.999999	≥0.995
800.5	800.5	0.9999	Slope	1.000615	0.90 - 1.10
399.8	399.6	1.0004	Intercept	-0.516137	+/-30
199.9	199.0	1.0045			



SO2 Calibration Plot

Date: January 12, 2026

Location: Ells River





Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name: Ells River	Station number: AMS 30
Calibration Date: January 19, 2026	Last Cal Date: December 16, 2025
Start time (MST): 11:36	End time (MST): 15:22
Reason: Routine	

Calibration Standards

Cal Gas Concentration: 4.99 ppm	Cal Gas Exp Date: November 15, 2026
Cal Gas Cylinder #: CC505806	
Removed Cal Gas Conc: 4.99 ppm	Rem Gas Exp Date: NA
Removed Gas Cyl #: NA	Diff between cyl:
Calibrator Make/Model: API T700	Serial Number: 5707
ZAG Make/Model: API 701H	Serial Number: 358

Analyzer Information

Analyzer make: Thermo 43i-LTE	Analyzer serial #: 1170050152
Converter make: CDN- 101	Converter serial #: 632
Analyzer Range: 0 - 100 ppb	Converter Temp: 800 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.000905	1.001620	Backgd or Offset:	4.0	3.99
Calibration intercept:	0.139488	-0.060554	Coeff or Slope:	1.286	1.286

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4920	80.2	80.0	79.7	1.003
As found Mid point	4960	40.1	40.0	39.9	1.000
As found Low point	4980	20.0	20.0	19.7	1.008
New cylinder response					
Baseline Corr As found:	79.8	Prev response:	80.25	*% change:	-0.6%
Baseline Corr 2nd AF pt:	40.0	AF Slope:	0.997622	AF Intercept:	-0.120612
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999995	<i>* = > +/-5% change initiates investigation</i>	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4920	80.2	80.0	80.1	0.999
Mid point	4960	40.1	40.0	40.1	0.998
Low point	4980	20.0	20.0	19.8	1.008
As left zero	5000	0.0	0.0	0.0	----
As left span	4920	80.2	80.0	80.5	0.994
SO2 Scrubber Check	4918	82.0	820.0	0.1	----
Date of last scrubber change:	16-Dec-25		Ave Corr Factor		1.002
Date of last converter efficiency test:					

Notes: Sample inlet filter was changed after multipoint as founds. SO2 scrubber check done and passed. No adjustment made.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

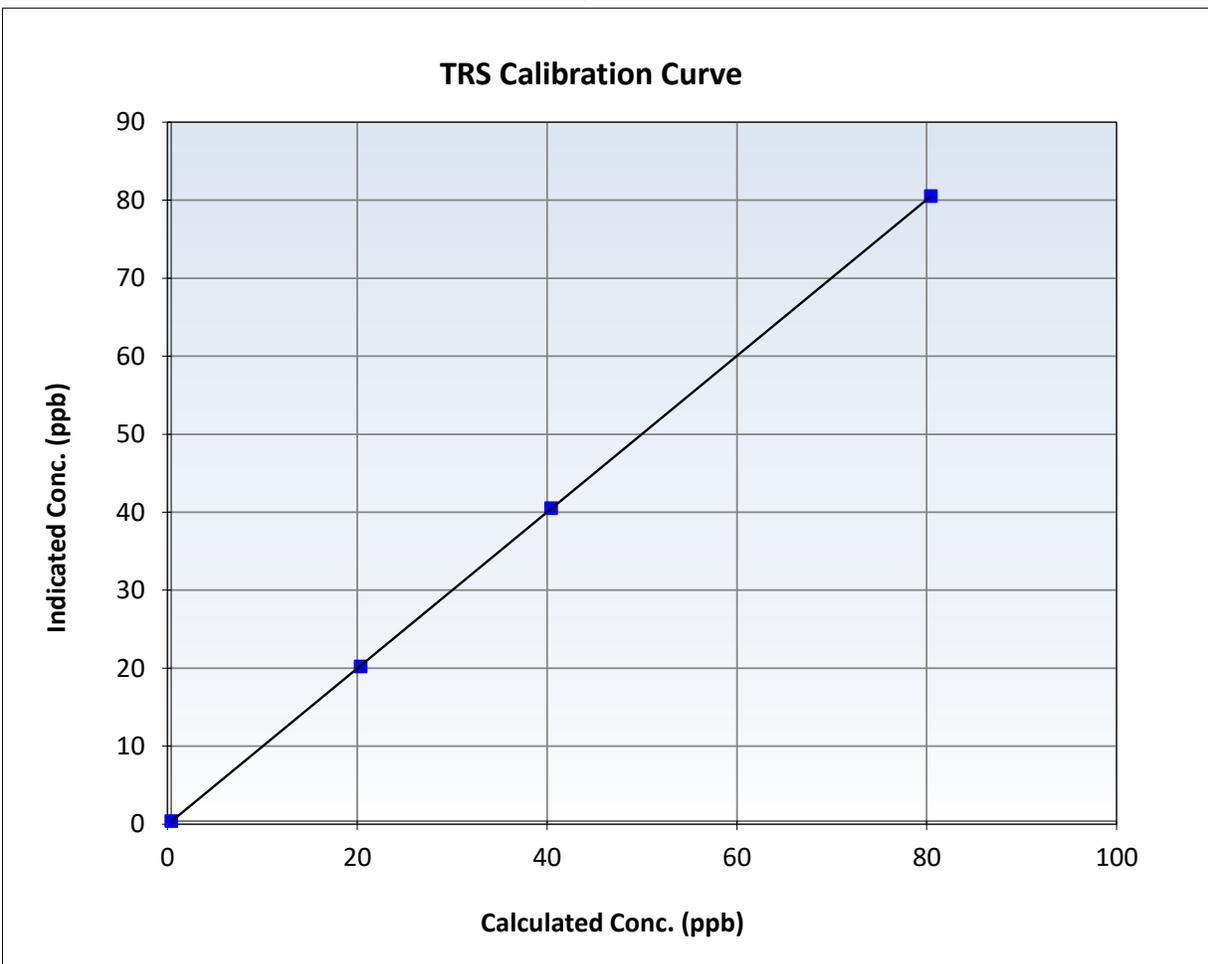
TRS Calibration Summary

Station Information

Calibration Date:	January 19, 2026	Previous Calibration:	December 16, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	11:36	End Time (MST):	15:22
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1170050152

Calibration Data

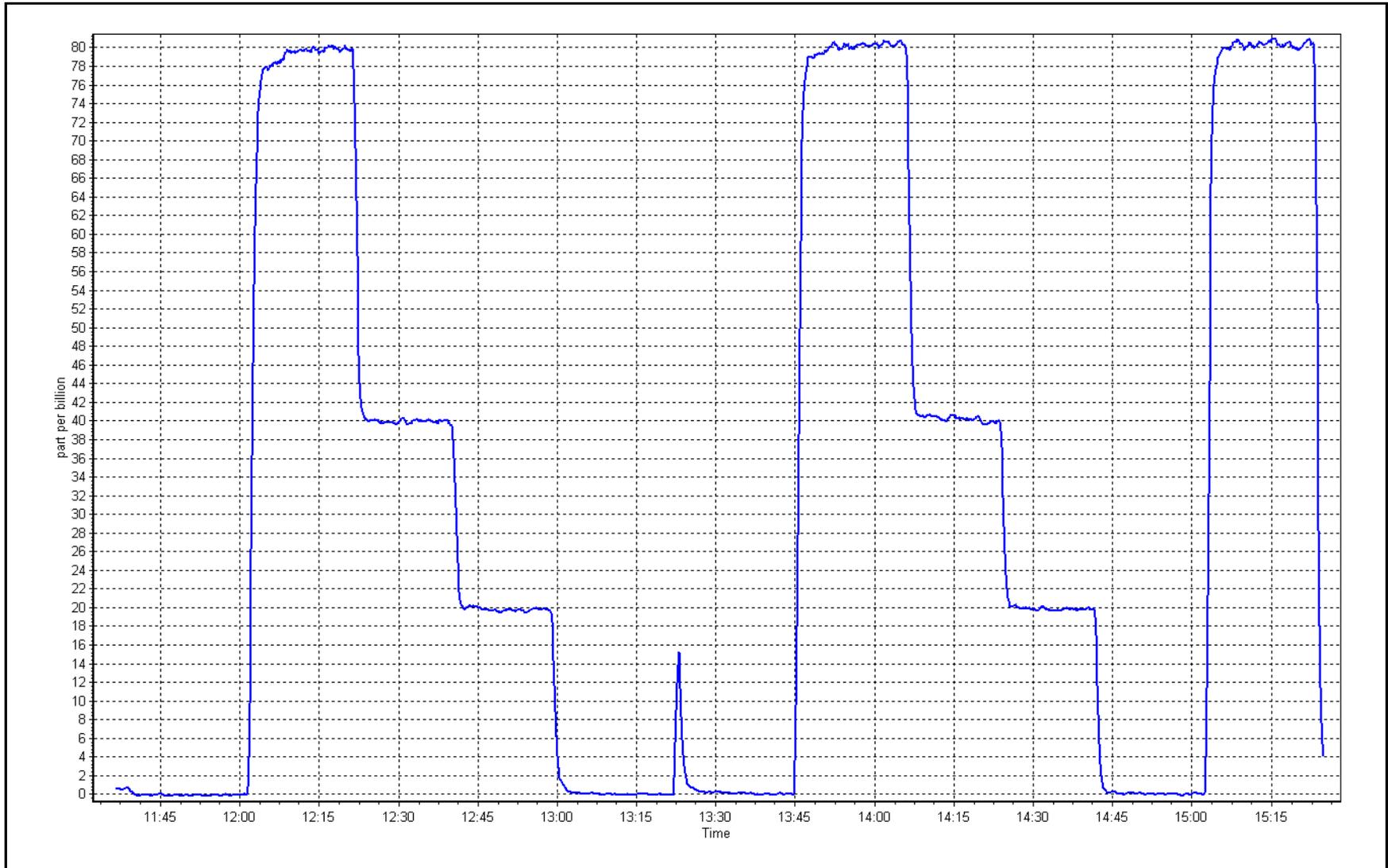
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999992	≥ 0.995
80.0	80.1	0.9992	Slope	1.001620	$0.90 - 1.10$
40.0	40.1	0.9980	Intercept	-0.060554	± 3
20.0	19.8	1.0081			



TRS Calibration Plot

Date: January 19, 2026

Location: Ells River





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	January 7, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	10:00	End time (MST):	12:43
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC350110	Cal Gas Expiry Date:	Monday, March 10, 2031
CH ₄ Cal Gas Conc.	496.6 ppm	CH ₄ Equiv Conc.	1066.4 ppm
C ₃ H ₈ Cal Gas Conc.	207.2 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH ₄ Conc.	496.6 ppm	CH ₄ Equiv Conc.	1066.4 ppm
Removed C ₃ H ₈ Conc.	207.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3061
Zero Air Gen model:	API T701H	Serial Number:	358

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1152430011
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
CH ₄ SP Ratio:	3.10E-04	3.18E-04	NMHC SP Ratio: 5.82E-05	5.96E-05
CH ₄ Retention time:	17.4	17.6	NMHC Peak Area: 160905	157048
Zero Chromatogram:	ON	ON	Flat Baseline: OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero					
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	17.51	17.50	1.001
Mid point	4959	41.0	8.74	8.74	1.001
Low point	4979	20.5	4.37	4.36	1.004
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.51	17.52	1.000
Average Correction Factor					1.002

Notes: No as founds done due to pump failure. Sample inlet filter and pump was changed before calibrator zero. Adjusted span only.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic- AFZero))
<i>Baseline Adjusted</i>					
<i>Limit = 0.90-1.10</i>					
As found zero					
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
<i>Baseline Adjusted</i>					
<i>Limit = 0.95-1.05</i>					
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	9.36	9.35	1.001
Mid point	4959	41.0	4.67	4.69	0.997
Low point	4979	20.5	2.34	2.35	0.995
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.36	9.37	0.999
Average Correction Factor					0.997

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic- AFZero))
<i>Baseline Adjusted</i>					
<i>Limit = 0.90-1.10</i>					
As found zero					
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	NA	Prev response	NA	*% change	NA
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
<i>Baseline Adjusted</i>					
<i>Limit = 0.95-1.05</i>					
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	8.15	8.15	1.000
Mid point	4959	41.0	4.07	4.05	1.005
Low point	4979	20.5	2.04	2.01	1.015
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.15	8.15	1.000
Average Correction Factor					1.007

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	1.000824	0.999714
THC Cal Offset:	-0.015587	-0.005581
CH ₄ Cal Slope:	1.001539	1.000557
CH ₄ Cal Offset:	-0.019336	-0.015334
NMHC Cal Slope:	1.000031	0.999076
NMHC Cal Offset:	0.003949	0.009353

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

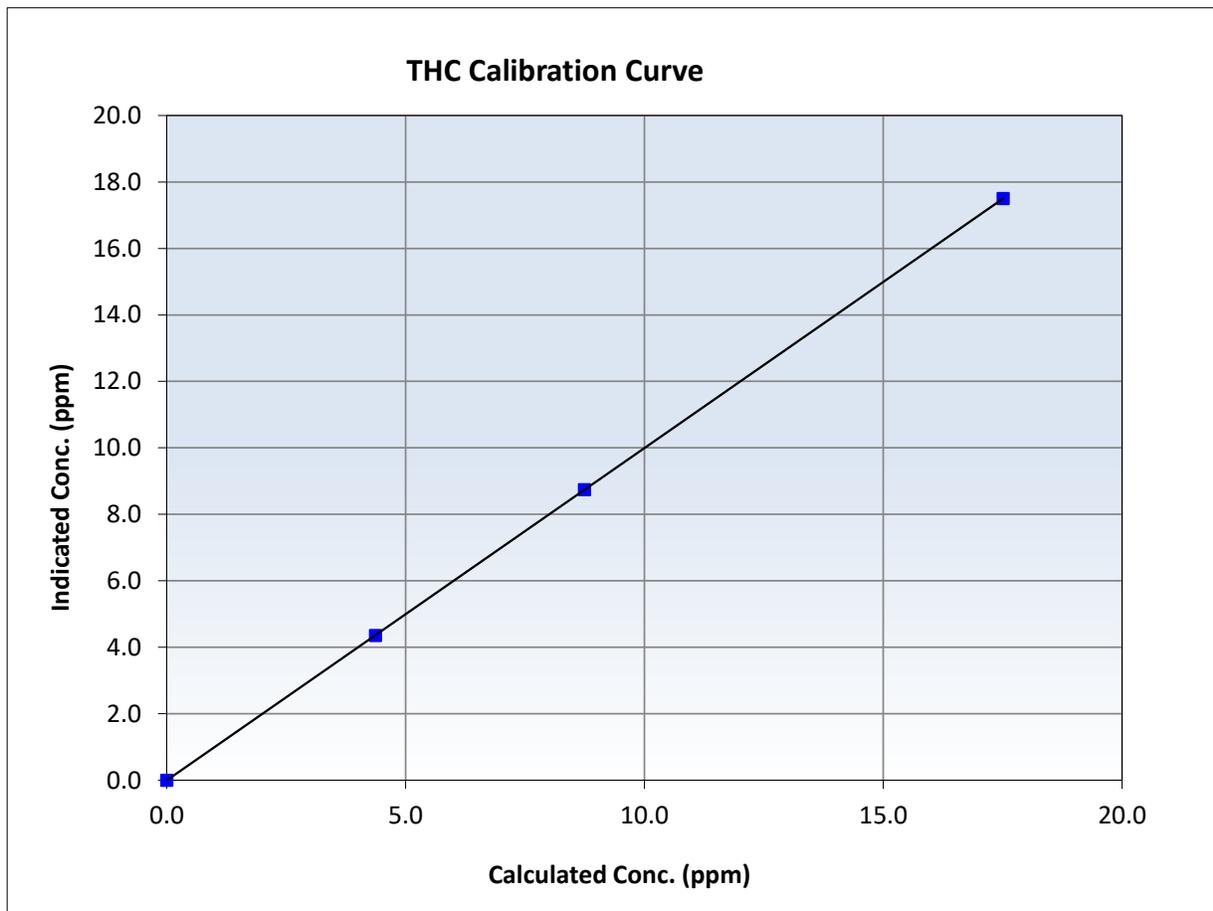
THC Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 5, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:00	End Time (MST):	12:43
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999999	<i>≥0.995</i>
17.51	17.50	1.0006	Slope	0.999714	<i>0.90 - 1.10</i>
8.74	8.74	1.0005	Intercept	-0.005581	<i>+/-0.5</i>
4.37	4.36	1.0038			





Wood Buffalo Environmental Association

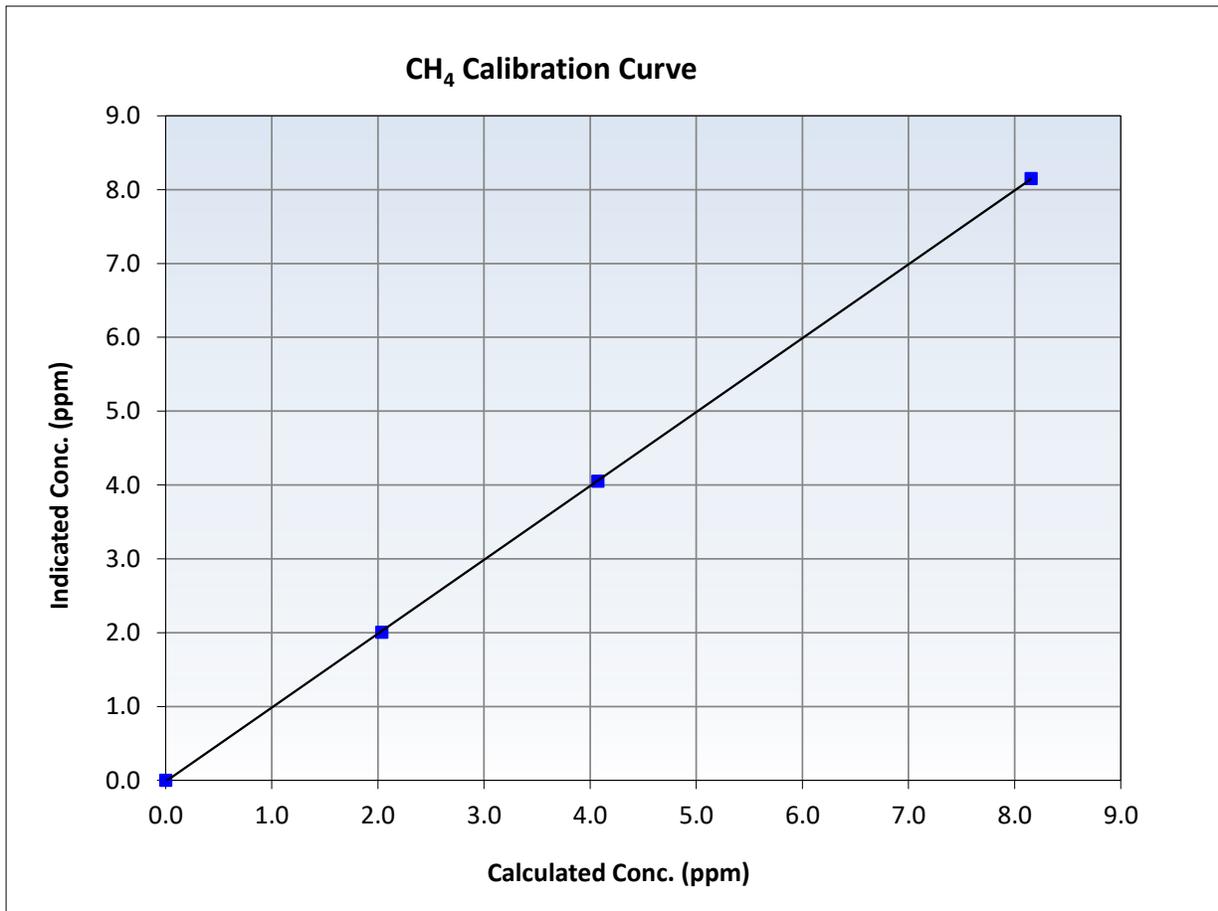
CH₄ Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 5, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:00	End Time (MST):	12:43
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999984	<i>≥0.995</i>
8.15	8.15	1.0004	Slope	1.000557	<i>0.90 - 1.10</i>
4.07	4.05	1.0052	Intercept	-0.015334	<i>+/-0.5</i>
2.04	2.01	1.0146			





Wood Buffalo Environmental Association

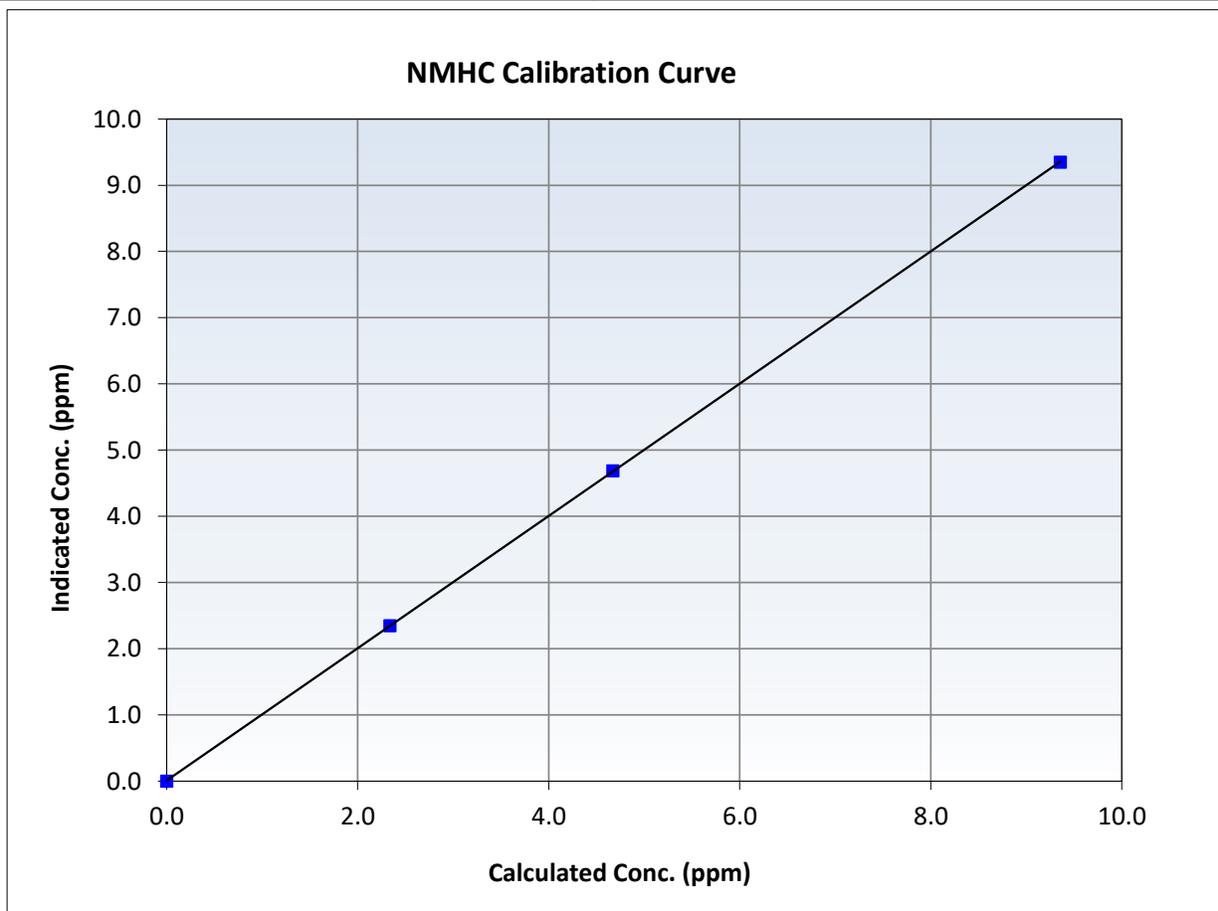
NMHC Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 5, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:00	End Time (MST):	12:43
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

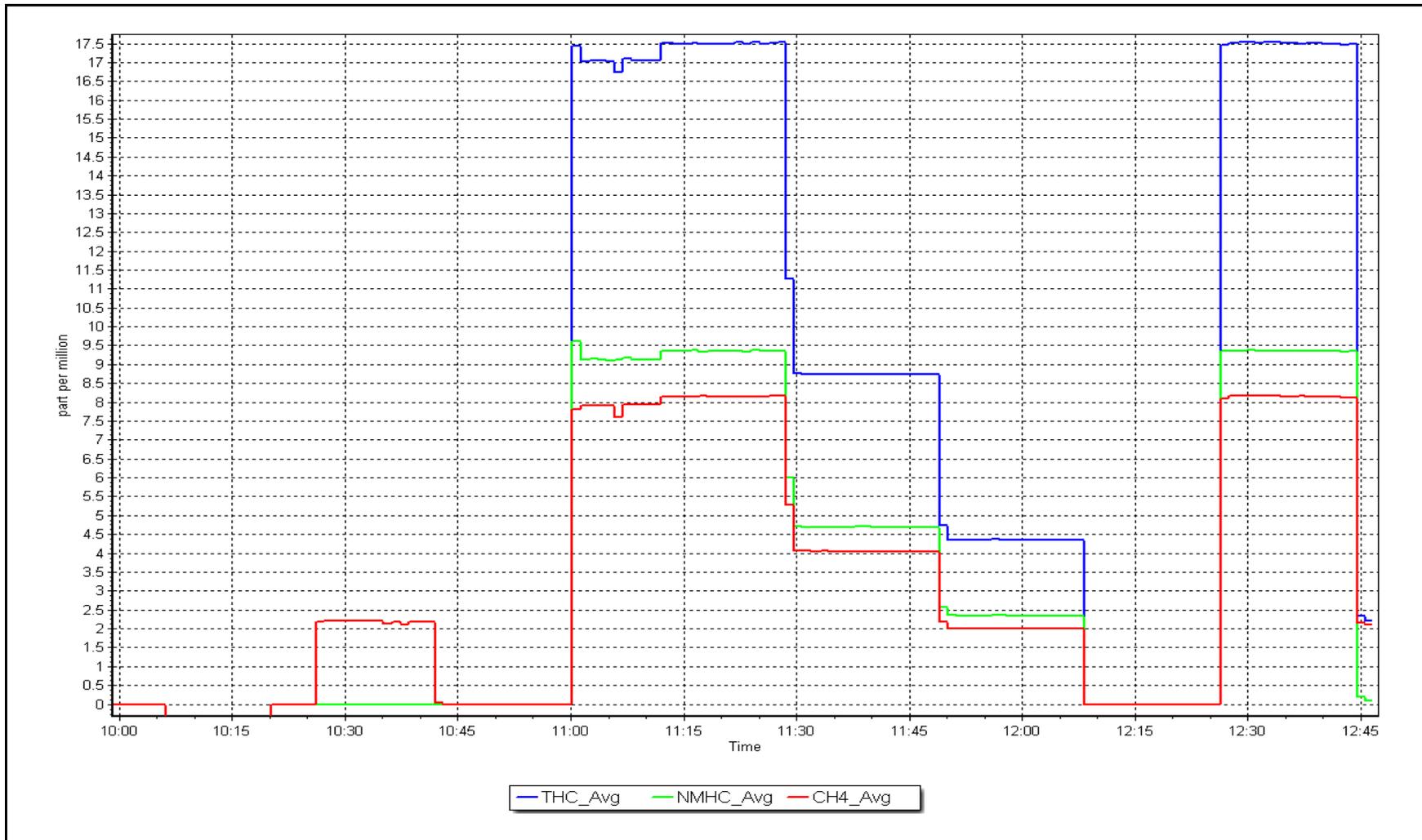
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999994	<i>≥0.995</i>
9.36	9.35	1.0006	Slope	0.999076	<i>0.90 - 1.10</i>
4.67	4.69	0.9967	Intercept	0.009353	<i>+/-0.5</i>
2.34	2.35	0.9946			



NMHC Calibration Plot

Date: January 7, 2026

Location: Ells River





Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	January 23, 2026	Last Cal Date:	January 7, 2026
Start time (MST):	10:26	End time (MST):	13:10
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC350110	Cal Gas Expiry Date:	Monday, March 10, 2031
CH ₄ Cal Gas Conc.	496.6 ppm	CH ₄ Equiv Conc.	1066.4 ppm
C ₃ H ₈ Cal Gas Conc.	207.2 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH ₄ Conc.	496.6 ppm	CH ₄ Equiv Conc.	1066.4 ppm
Removed C ₃ H ₈ Conc.	207.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH ₄):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3061
Zero Air Gen model:	API T701H	Serial Number:	358

Analyzer Information

Analyzer make: Thermo 55i	Analyzer serial #: 1152430011
THC Range: 0 - 20 ppm	NMHC/CH ₄ Range: 0 - 10 ppm

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
CH ₄ SP Ratio:	3.18E-04	3.15E-04	NMHC SP Ratio:	5.96E-05	5.75E-05
CH ₄ Retention time:	17.6	17.8	NMHC Peak Area:	157048	162751
Zero Chromatogram:	ON	ON	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.00	0.00	---
As found High point	4918	82.1	17.51	17.96	0.975
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.96	Prev response	17.50	*% change	2.6%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.00	0.00	---
High point	4918	82.1	17.51	17.50	1.001
Mid point	4959	41.0	8.74	8.72	1.002
Low point	4979	20.5	4.37	4.35	1.005
As left zero	5000	0.0	0.00	0.00	---
As left span	4918	82.1	17.51	17.50	1.001
Average Correction Factor					1.003

Notes: Maintenance calibration done due to baseline dips. Sample inlet filter was changed after as founds. Adjusted span only.



Wood Buffalo Environmental Association

THC / CH₄ / NMHC Calibration Report

NMHC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	9.36	9.74	0.961
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.74	Prev response	9.36	*% change	4.7%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	9.36	9.36	0.999
Mid point	4959	41.0	4.67	4.68	0.999
Low point	4979	20.5	2.34	2.35	0.996
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.36	9.34	1.001
Average Correction Factor					0.998

CH₄ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFZero))
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	8.15	8.22	0.992
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.22	Prev response	8.14	*% change	0.9%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH₄ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	8.15	8.14	1.002
Mid point	4959	41.0	4.07	4.05	1.006
Low point	4979	20.5	2.04	2.01	1.016
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.15	8.15	1.000
Average Correction Factor					1.008

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
THC Cal Slope:	0.999714	0.999727
THC Cal Offset:	-0.005581	-0.011186
CH ₄ Cal Slope:	1.000557	0.999323
CH ₄ Cal Offset:	-0.015334	-0.014936
NMHC Cal Slope:	0.999076	1.000263
NMHC Cal Offset:	0.009353	0.003750

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

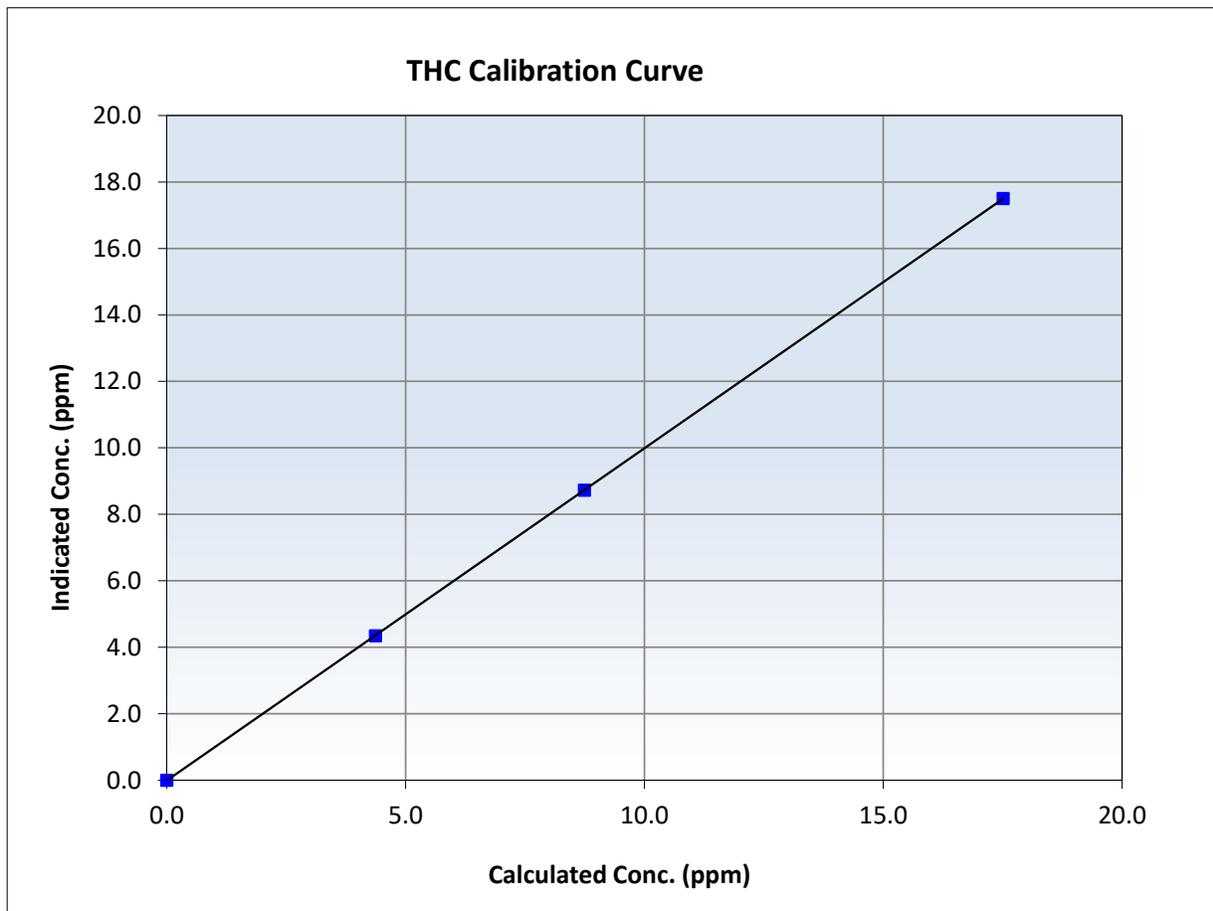
THC Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	January 7, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:26	End Time (MST):	13:10
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999998	<i>≥0.995</i>
17.51	17.50	1.0006	Slope	0.999727	<i>0.90 - 1.10</i>
8.74	8.72	1.0023	Intercept	-0.011186	<i>+/-0.5</i>
4.37	4.35	1.0052			





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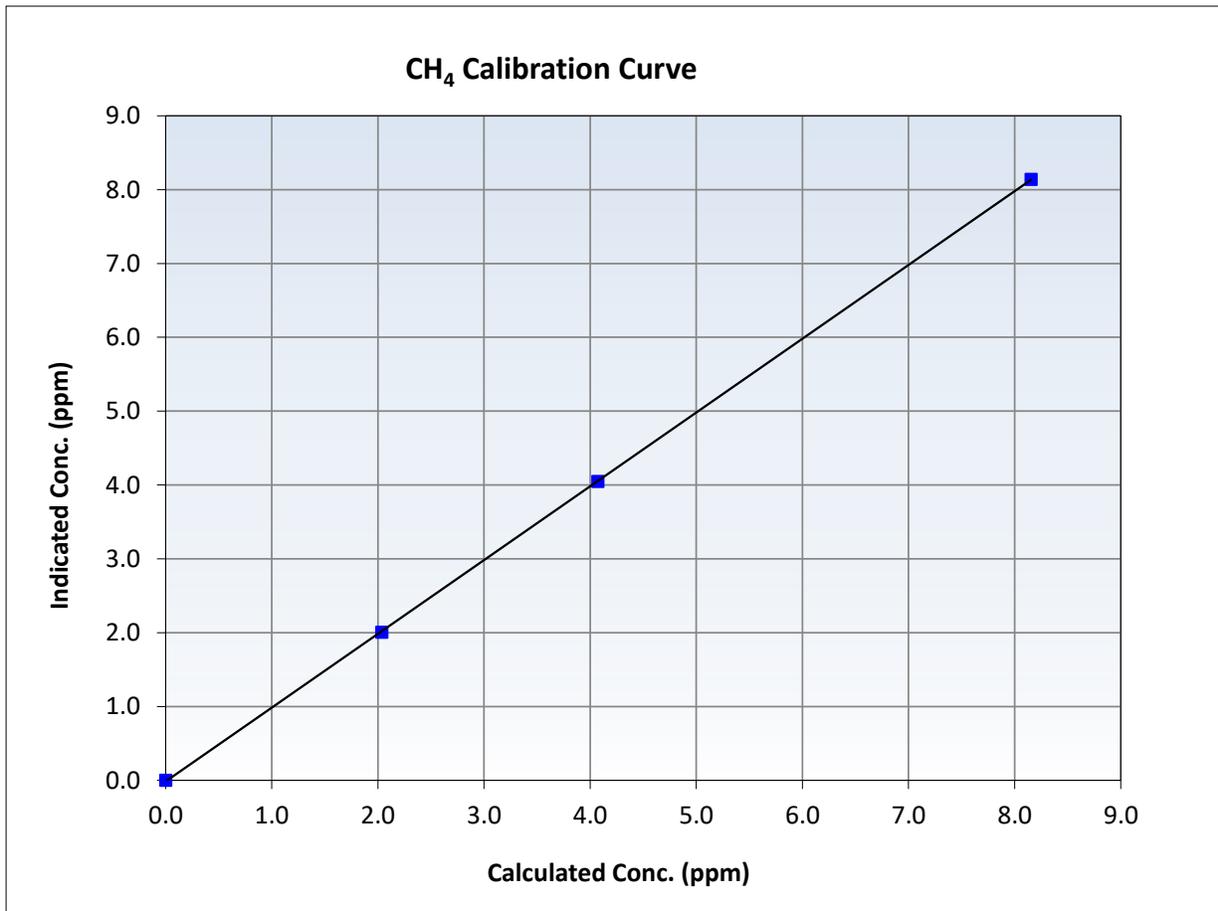
CH₄ Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	January 7, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:26	End Time (MST):	13:10
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999985	<i>≥0.995</i>
8.15	8.14	1.0016	Slope	0.999323	<i>0.90 - 1.10</i>
4.07	4.05	1.0062	Intercept	-0.014936	<i>+/-0.5</i>
2.04	2.01	1.0156			





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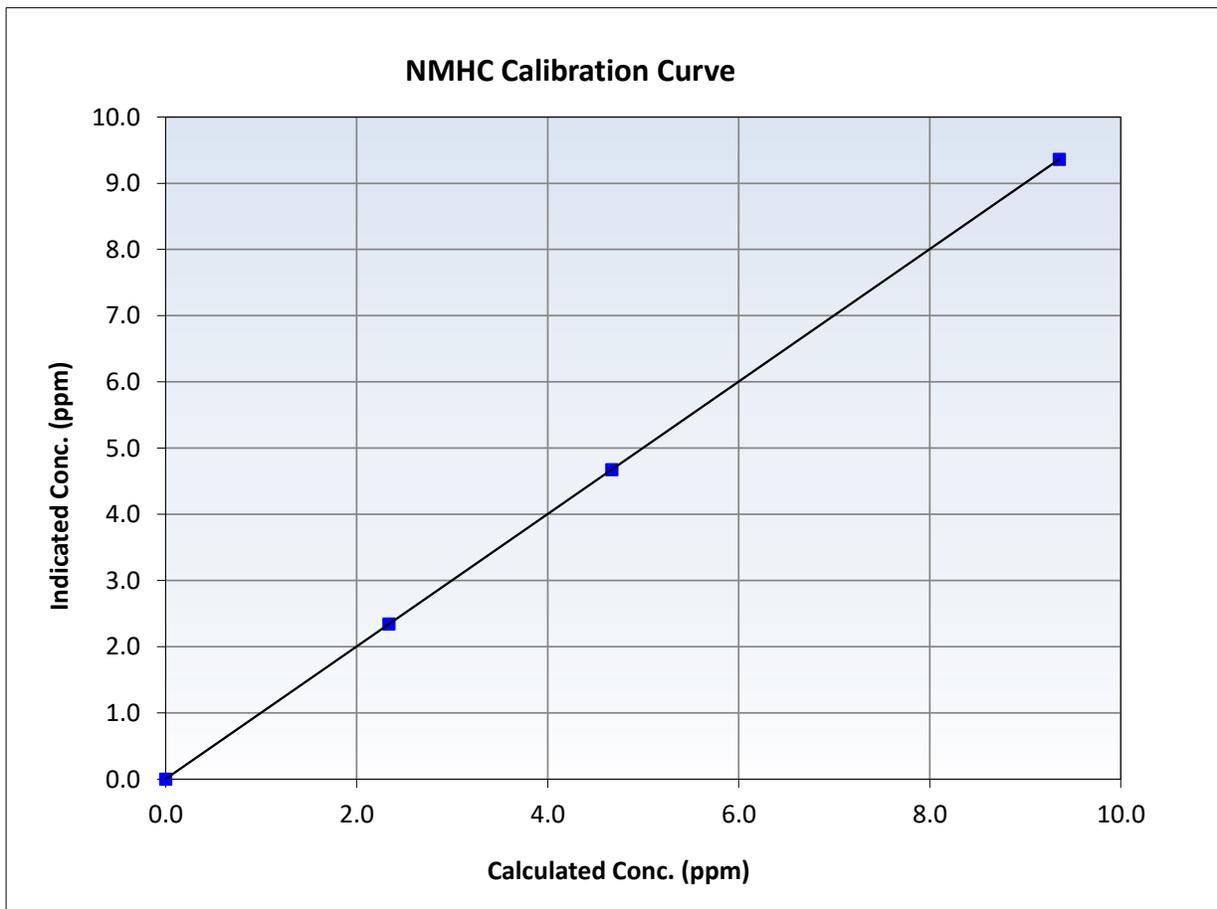
NMHC Calibration Summary

Station Information

Calibration Date:	January 23, 2026	Previous Calibration:	January 7, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:26	End Time (MST):	13:10
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

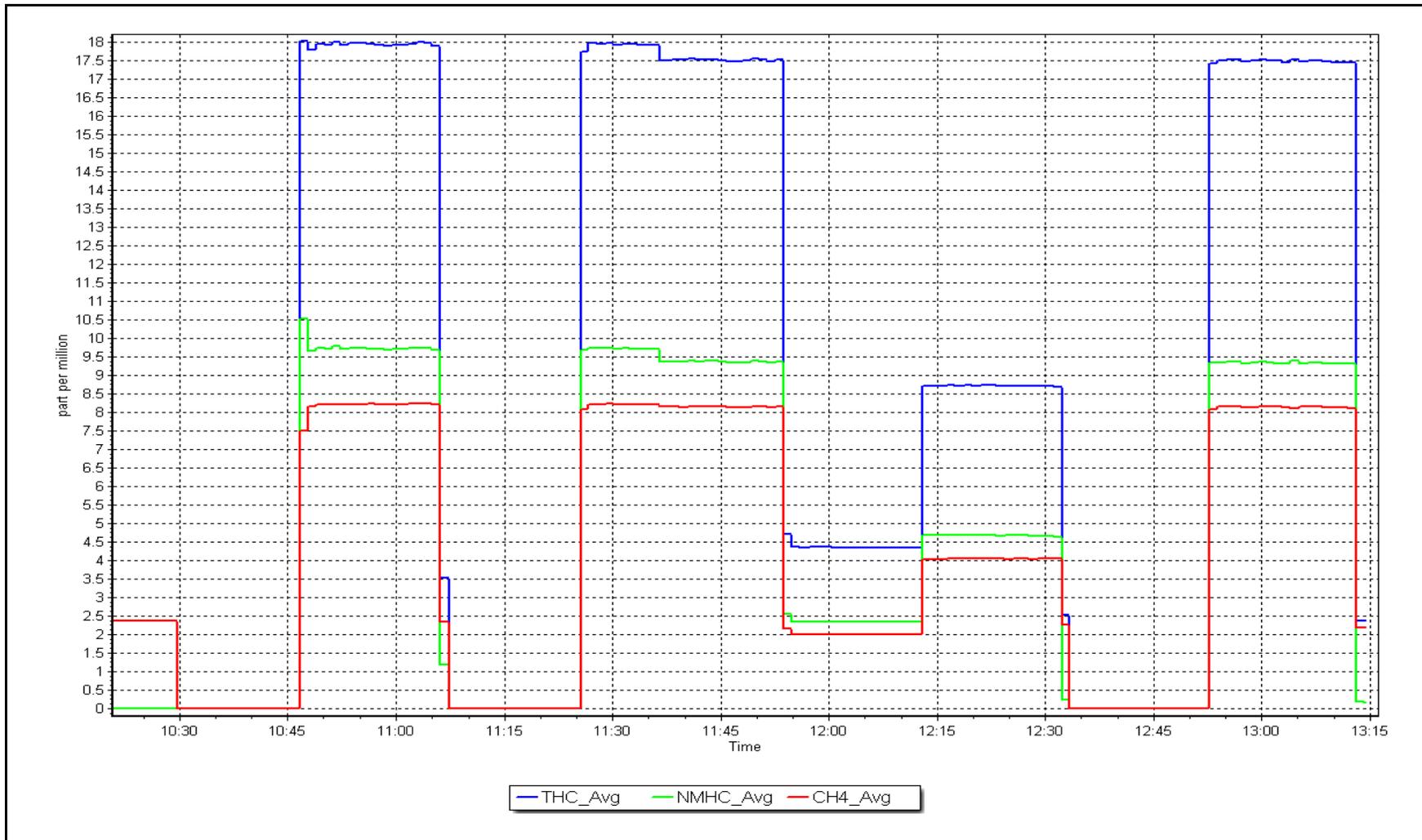
Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.00	0.00	----	Correlation Coefficient	0.999999	<i>≥0.995</i>
9.36	9.36	0.9995	Slope	1.000263	<i>0.90 - 1.10</i>
4.67	4.68	0.9990	Intercept	0.003750	<i>+/-0.5</i>
2.34	2.35	0.9959			



NMHC Calibration Plot

Date: January 23, 2026

Location: Ells River





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Ells River
 Station number: AMS 30
 Calibration Date: January 20, 2026
 Last Cal Date: December 15, 2025
 Start time (MST): 10:16
 End time (MST): 14:48
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0027487
 NOX Cal Gas Conc: 59.30 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 59.30 ppm
 NOX gas Diff:
 Calibrator Model: API T700
 ZAG make/model: API T701H
 Cal Gas Expiry Date: January 9, 2032
 NO Cal Gas Conc: 59.10 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 59.10 ppm
 NO gas Diff:
 Serial Number: 5707
 Serial Number: 358

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	----	----
AF High point	4932	67.7	803.0	800.3	2.7	762.7	758.5	4.2	1.0527	1.0551
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 800.9 ppb		NO = 798.0 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = -5.0%	
Baseline Corr 1st pt	NO _x = 762.8 ppb		NO = 758.5 ppb			<u>As Found Statistics</u>		*Percent Change	NO = -5.2%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 710321429

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.997623	0.997237
NO _x Cal Offset:	-0.138644	0.121922
NO Cal Slope:	0.998331	0.997016
NO Cal Offset:	-0.879981	-1.220053
NO ₂ Cal Slope:	0.997254	0.998819
NO ₂ Cal Offset:	-0.580450	0.134800

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.469	1.550	NO bkgnd or offset:	17.1	17.7
NOX coeff or slope:	0.994	0.996	NOX bkgnd or offset:	17.3	18.0
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	205.3	213.7

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	-0.1	0.1	-0.2	----	----
High point	4932	67.7	803.0	800.3	2.7	800.4	797.1	3.3	1.0032	1.0040
Mid point	4966	33.8	400.9	399.5	1.4	401.1	397.1	4.0	0.9995	1.0061
Low point	4983	16.9	200.4	199.8	0.7	199.5	196.2	3.3	1.0047	1.0182
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	----	----
As left span	4932	67.7	803.0	391.0	412.0	796.2	391.0	405.2	1.0085	1.0000
Average Correction Factor									1.0025	1.0094

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	792.1	388.8	406.0	405.5	1.0013	99.9%
Mid GPT point	792.1	578.6	216.2	216.2	1.0000	100.0%
Low GPT point	792.1	685.9	108.9	109.3	0.9964	100.4%
Average Correction Factor					0.9992	100.1%

Notes: Sample inlet filter was changed after as founds. Adjusted span only.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

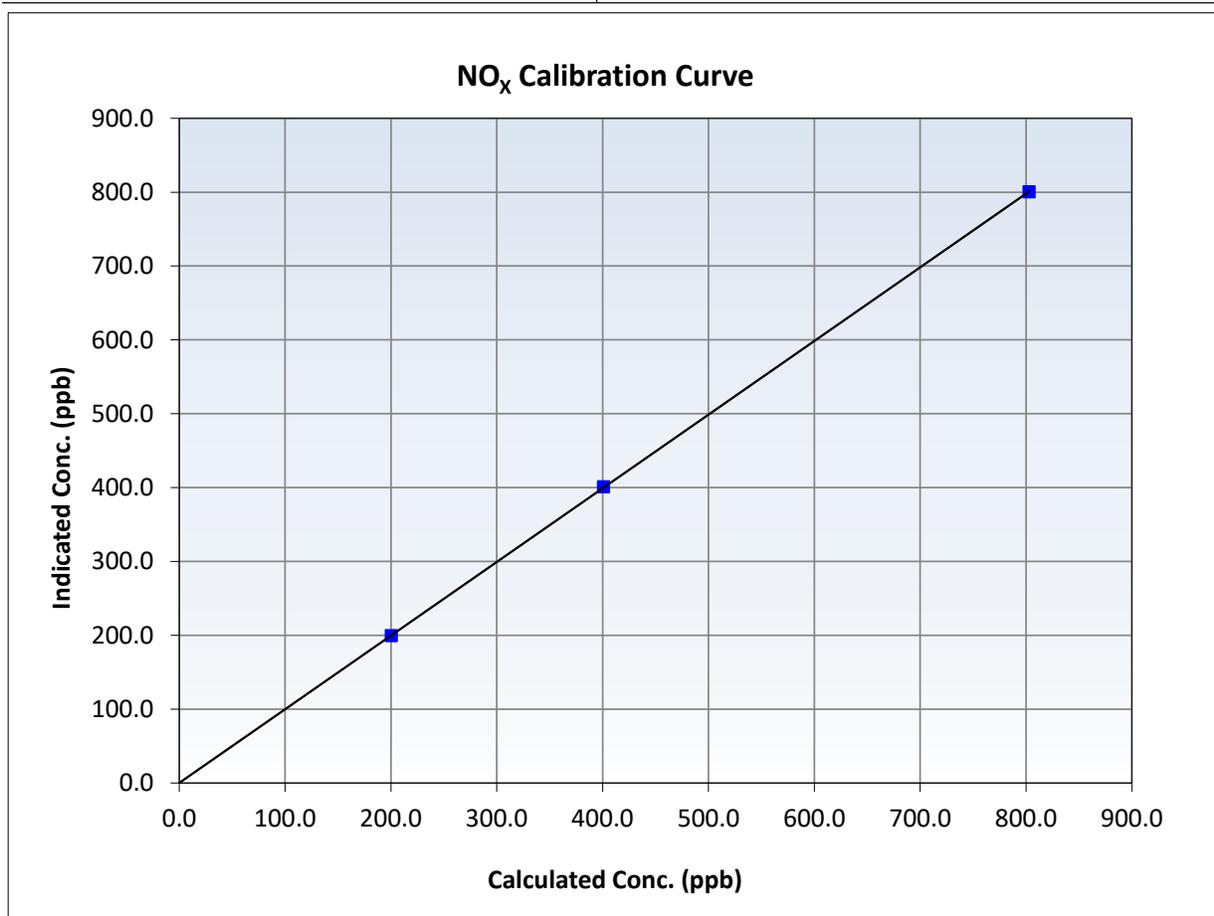
NO_x Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 15, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:16	End Time (MST):	14:48
Analyzer make:	Thermo 42i	Analyzer serial #:	710321429

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999994	≥0.995
803.0	800.4	1.0032	Slope	0.997237	0.90 - 1.10
400.9	401.1	0.9995	Intercept	0.121922	+/-20
200.4	199.5	1.0047			





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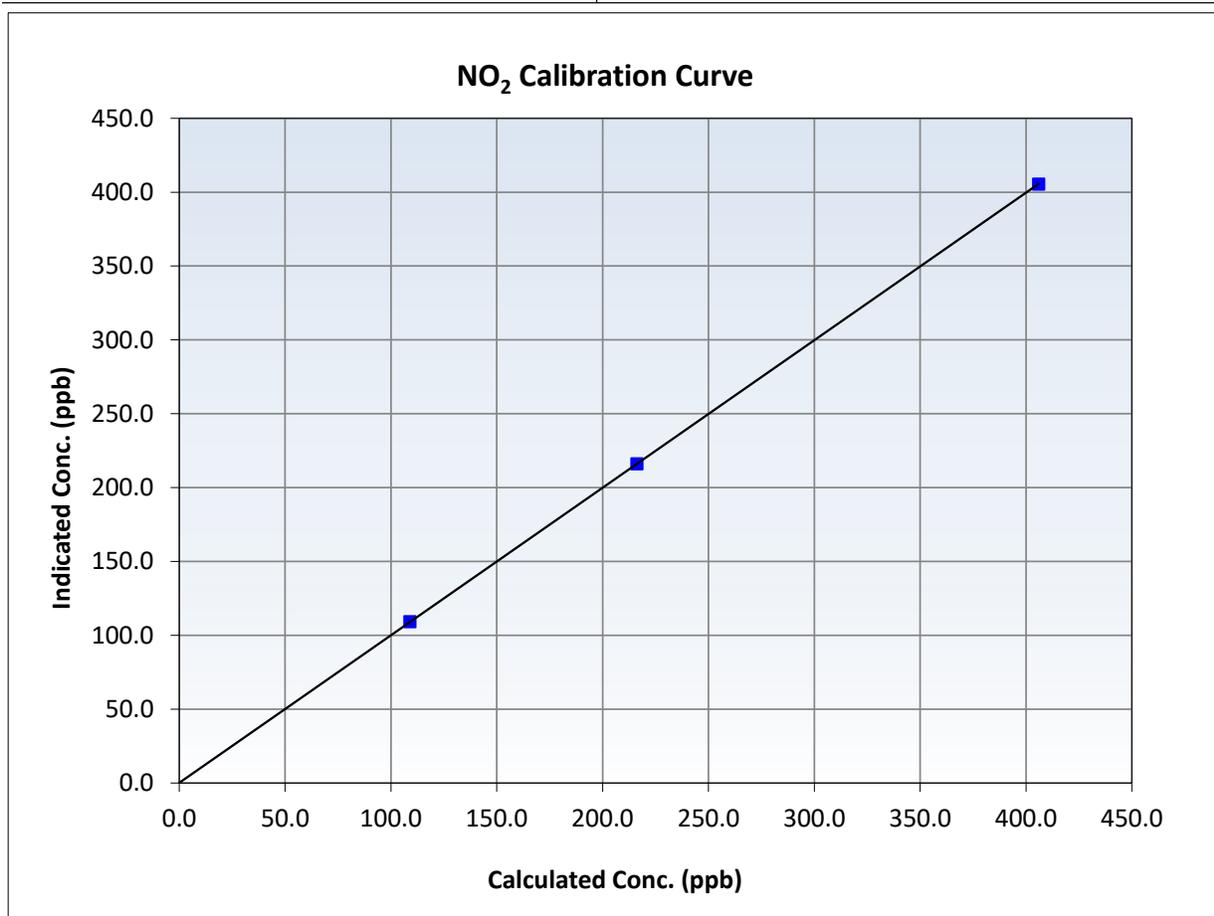
NO₂ Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 15, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:16	End Time (MST):	14:48
Analyzer make:	Thermo 42i	Analyzer serial #:	710321429

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.2	----	Correlation Coefficient	0.999997	<i>≥0.995</i>
406.0	405.5	1.0013	Slope	0.998819	<i>0.90 - 1.10</i>
216.2	216.2	1.0000	Intercept	0.134800	<i>+/-20</i>
108.9	109.3	0.9964			





Wood Buffalo Environmental Association

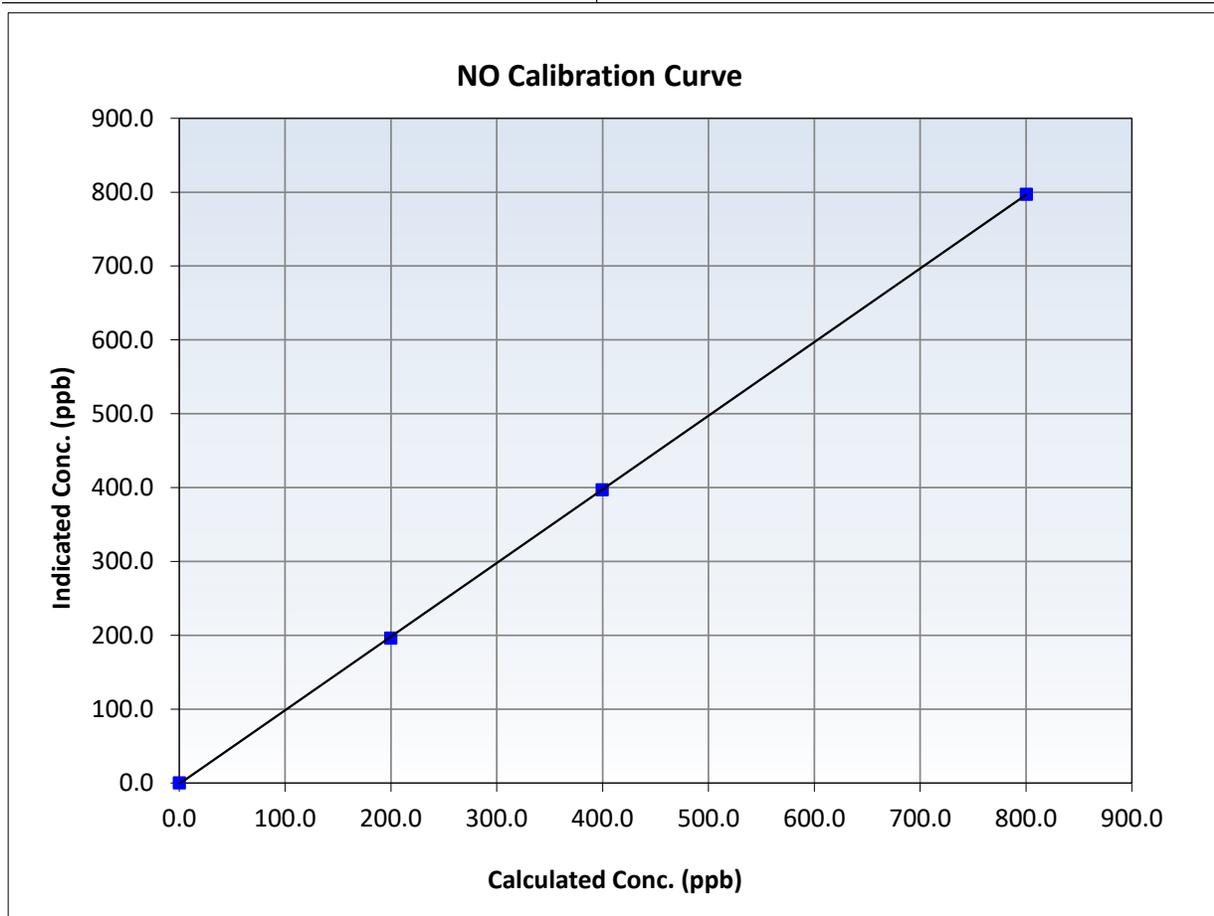
NO Calibration Summary

Station Information

Calibration Date:	January 20, 2026	Previous Calibration:	December 15, 2025
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:16	End Time (MST):	14:48
Analyzer make:	Thermo 42i	Analyzer serial #:	710321429

Calibration Data

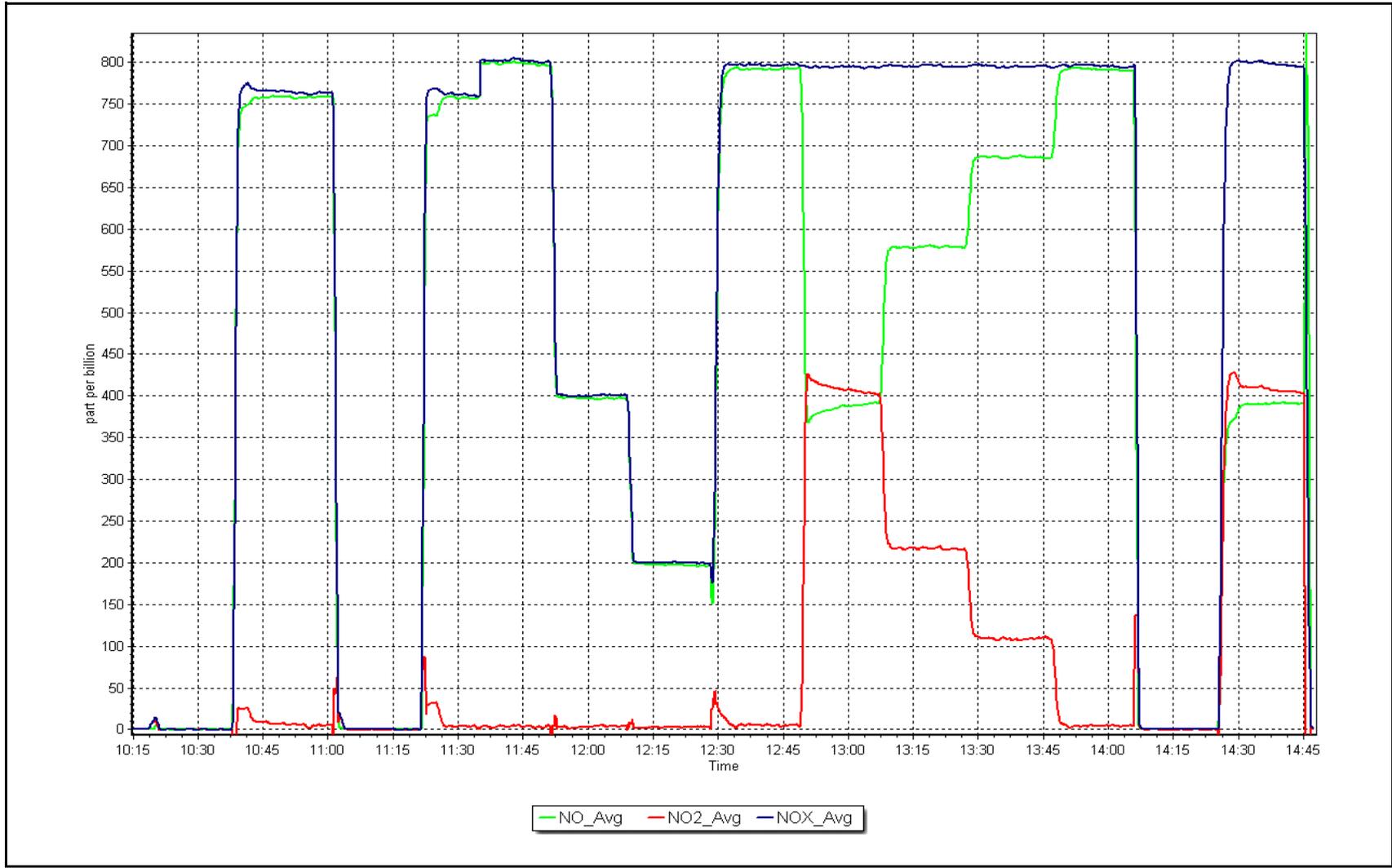
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999986	<i>≥0.995</i>
800.3	797.1	1.0040	Slope	0.997016	<i>0.90 - 1.10</i>
399.5	397.1	1.0061	Intercept	-1.220053	<i>+/-20</i>
199.8	196.2	1.0182			



NO_x Calibration Plot

Date: January 20, 2026

Location: Ells River





Wood Buffalo Environmental Association

T640 PM_{2.5} CALIBRATION

Version-01-2024

Station Information

Station Name: Ells River Station number: AMS 30
 Calibration Date: January 19, 2026 Last Cal Date: December 15, 2025
 Start time (MST): 14:08 End time (MST): 14:22

Analyzer Make: API T640 S/N: 875
 Particulate Fraction: PM2.5

Flow Meter Make/Model: Alicat FP-25BT S/N: 388754
 Temp/RH standard: Alicat FP-25BT S/N: 388754

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	-12.60	-13.02	-12.60	<input type="checkbox"/>	+/- 2 °C
P (mmHg)	737.20	738.66	737.20	<input type="checkbox"/>	+/- 10 mmHg
Flow (LPM)	5.00	5.19	5.00	<input type="checkbox"/>	+/- 0.25 LPM
PW% (pump)	36	----	36	<input type="checkbox"/>	>80%
Zero Verification	PM w/o HEPA: _____	9.40	PM w/ HEPA: _____	0.00	<0.2 ug/m3

Note: this leak check will be completed before the quarterly work and will serve as the pre maintenance leak check

PM Inlet observation : Inlet Head Clean Alignment Factor On :

Quarterly Calibration Test

SPAN DUST Refractive Index: 10.90 Expiry Date: January 30, 2027
 Lot No.: 100128-050-040

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				<input type="checkbox"/>	+/- 0.5

Date Optical Chamber Cleaned: December 15, 2025
 Date Disposable Filter Changed: December 15, 2025

Post- maintenance Zero Verification: PM w/ HEPA: _____ <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: June 18, 2025
 Date RH/T Sensor Cleaned: June 18, 2025

Notes: Verified flow, temperature, pump power and pressure. No adjustment made. Leak check passed.

Calibration by: Jan Castro



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS31 BLACKROD JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	January 21, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	12:17	End time (MST):	15:15
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.25	ppm	Cal Gas Exp Date: March 10, 2031
Cal Gas Cylinder #:	CC327023		
Removed Cal Gas Conc:	50.25	ppm	Rem Gas Exp Date: N/A
Removed Gas Cyl #:	N/A		Diff between cyl:
Calibrator Model:	Teledyne T700		Serial Number: 1220
Zero Air Gen Model:	Teledyne N701H		Serial Number: 72

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: 1160290014
Analyzer Range:	0 - 1000 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.002022	1.002036	Backgd or Offset:	43.4	41.9
Calibration intercept:	-0.682036	-0.562074	Coeff or Slope:	1.051	1.028

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.6	----
As found High point	4921	79.5	798.9	817.0	0.977
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	817.6	Previous response	799.8	*% change	2.2%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.3	----
High point	4921	79.5	798.9	800.1	0.998
Mid point	4960	39.8	400.0	400.1	1.000
Low point	4980	19.9	200.0	199.6	1.002
As left zero	5000	0.0	0.0	-0.2	----
As left span	4921	79.5	798.9	801.0	0.997
Average Correction Factor:					1.000

Notes: Sample inlet filter was changed after as founds. Adjusted zero and span.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

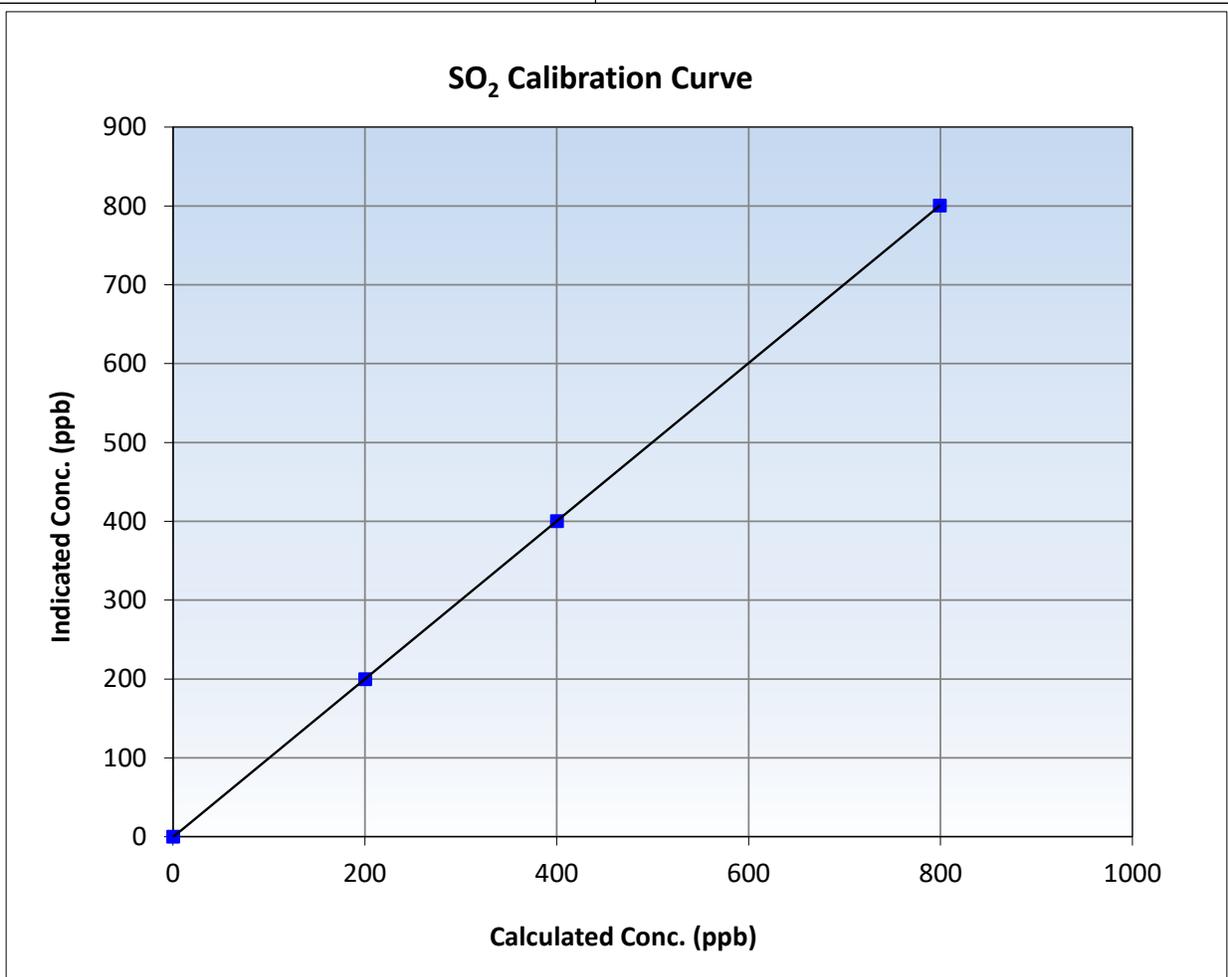
SO₂ Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	12:17	End Time (MST):	15:15
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290014

Calibration Data

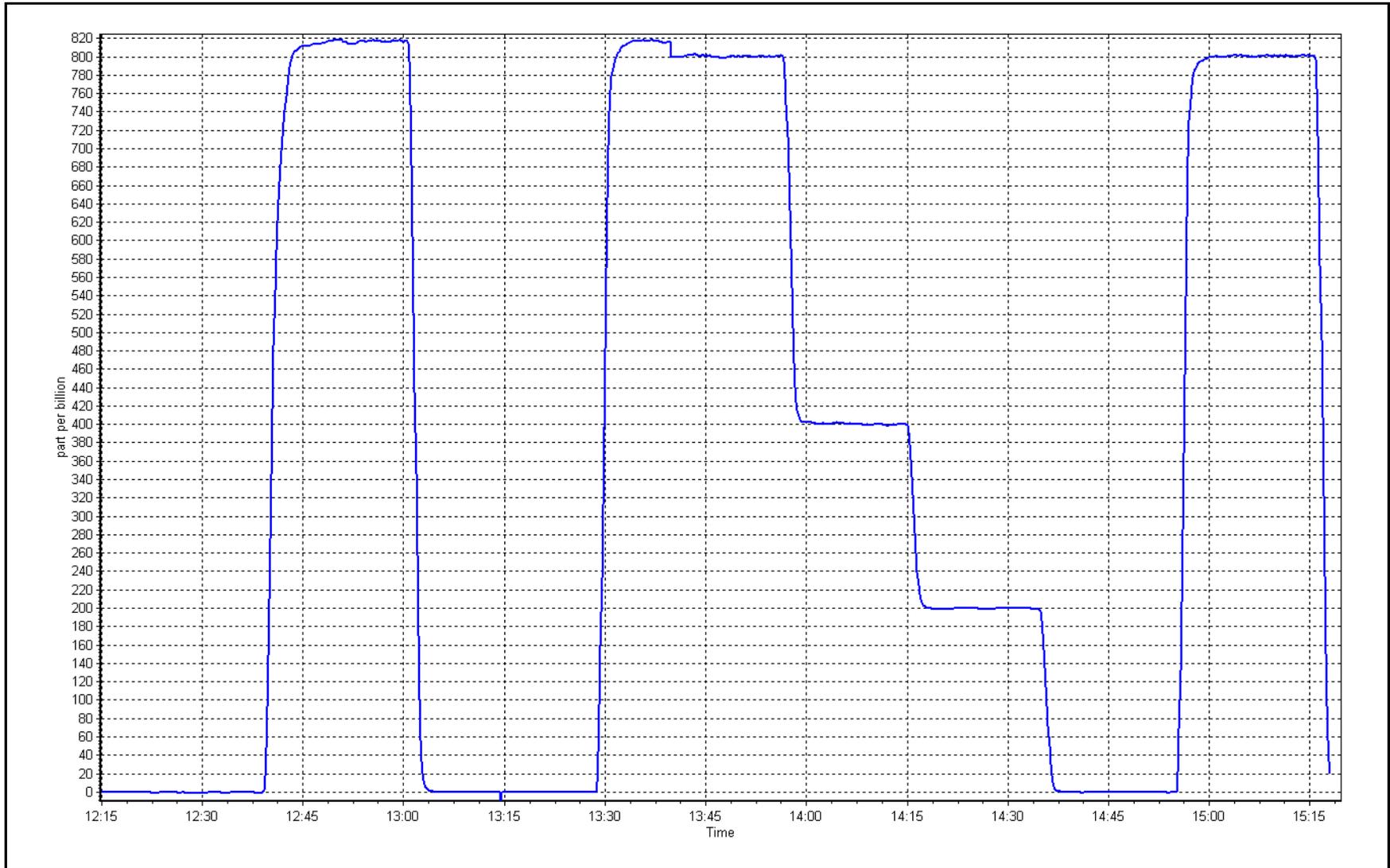
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.3	----	Correlation Coefficient	1.000000	≥0.995
798.9	800.1	0.9985	Slope	1.002036	0.90 - 1.10
400.0	400.1	0.9998	Intercept	-0.562074	+/-30
200.0	199.6	1.0020			



SO2 Calibration Plot

Date: January 21, 2026

Location: Blackrod





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	January 21, 2026	Last Cal Date:	December 11, 2025
Start time (MST):	10:55	End time (MST):	12:17
Reason:	As Found		

Calibration Standards

Cal Gas Concentration:	5.42	ppm	Cal Gas Exp Date:	March 19, 2027
Cal Gas Cylinder #:	DT0016926			
Removed Cal Gas Conc:	5.42	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	1220
ZAG Make/Model:	Teledyne API N701H		Serial Number:	72

Analyzer Information

Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12228021056
Converter make:	Global	Converter serial #:	2023-266
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006763		Backgd or Offset:	3.26	
Calibration intercept:	-0.000488		Coeff or Slope:	0.959	

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.3	----
As found High point	4926	73.8	80.0	80.4	0.991
As found Mid point	4963	36.9	40.0	40.6	0.978
As found Low point	4982	18.5	20.1	20.2	0.978
New cylinder response					
Baseline Corr As found:	80.7	Prev response:	80.54	*% change:	0.2%
Baseline Corr 2nd AF pt:	40.9	AF Slope:	1.008337	AF Intercept:	-0.080597
Baseline Corr 3rd AF pt:	20.5	AF Correlation:	0.999942	<i>* = > +/-5% change initiates investigation</i>	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					
SO2 Scrubber Check					
Date of last scrubber change:		27-Aug-25		Ave Corr Factor	
Date of last converter efficiency test:		October 9, 2025			

Notes: Multipoint as founds done to replace lamp power supply and flash lamp.

Calibration Performed By: Jan Castro

H₂S Calibration Plot

Date: January 21, 2026

Location: Blackrod





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	January 22, 2026	Last Cal Date:	December 11, 2025
Start time (MST):	8:40	End time (MST):	12:14
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.42 ppm	Cal Gas Exp Date:	March 19, 2027
Cal Gas Cylinder #:	DT0016926		
Removed Cal Gas Conc:	5.42 ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA	Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700	Serial Number:	1220
ZAG Make/Model:	Teledyne API N701H	Serial Number:	72

Analyzer Information

Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12228021056
Converter make:	Global	Converter serial #:	2023-266
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>	<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006763	1.008052	Backgd or Offset:	3.26
Calibration intercept:	-0.000488	-0.120619	Coeff or Slope:	0.959

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero					
As found High point					
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	NA	Prev response:	NA	*% change:	NA
Baseline Corr 2nd AF pt:	NA	AF Slope:	NA	AF Intercept:	NA
Baseline Corr 3rd AF pt:	NA	AF Correlation:	NA	<i>* = > +/-5% change initiates investigation</i>	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4926	73.8	80.0	80.6	0.993
Mid point	4963	36.9	40.0	40.0	1.000
Low point	4982	18.5	20.1	20.2	0.993
As left zero	5000	0.0	0.0	-0.1	----
As left span	4926	73.8	80.0	80.7	0.991
SO2 Scrubber Check	4921	79.5	794.9	-0.2	----
Date of last scrubber change:	27-Aug-25		Ave Corr Factor		0.995
Date of last converter efficiency test:	October 9, 2025				

Notes: As founds was done yesterday. Sample inlet filter was changed before calibrator zero. SO2 scrubber check done and passed. Adjusted zero and span.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

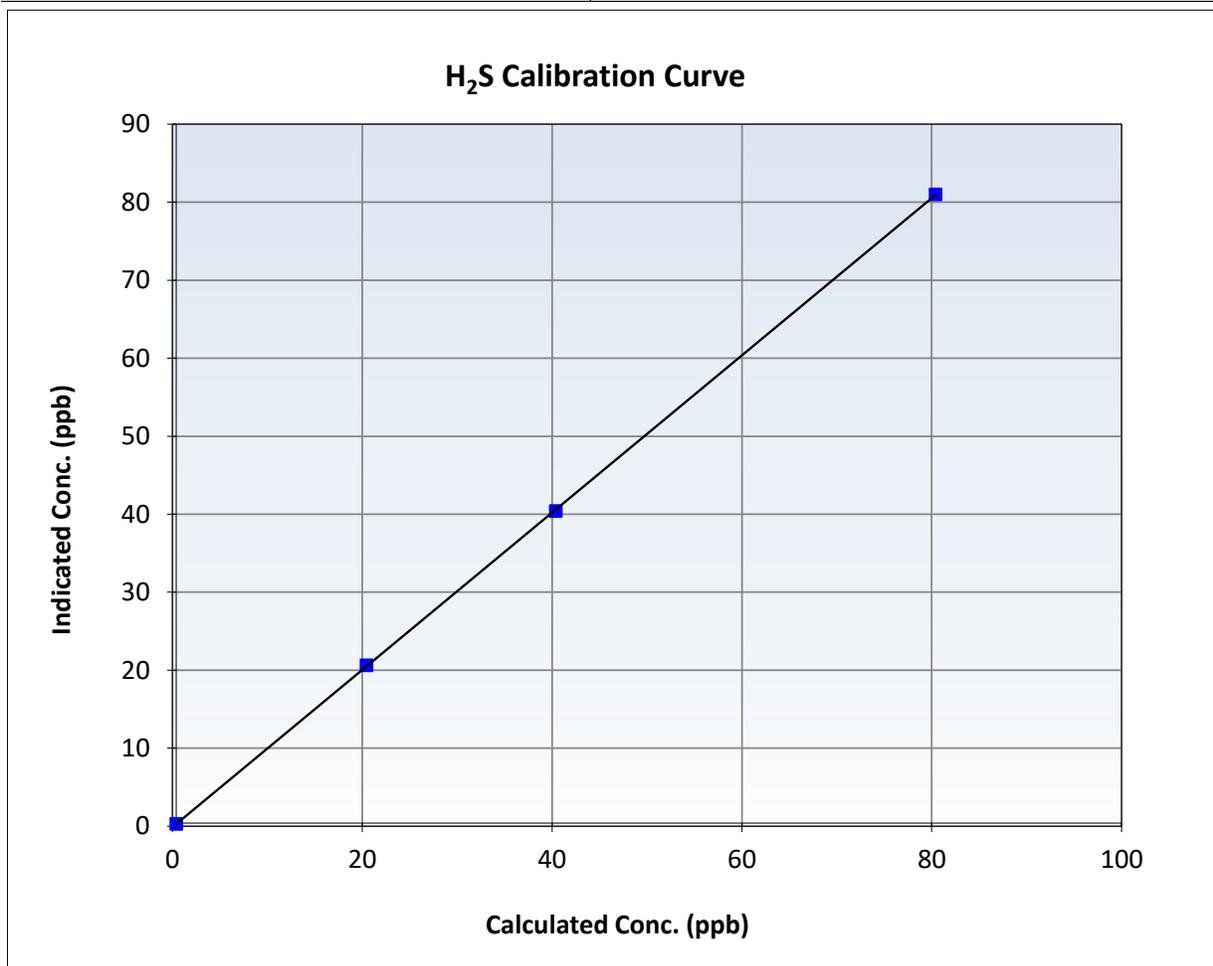
H₂S Calibration Summary

Station Information

Calibration Date:	January 22, 2026	Previous Calibration:	December 11, 2025
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	8:40	End Time (MST):	12:14
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12228021056

Calibration Data

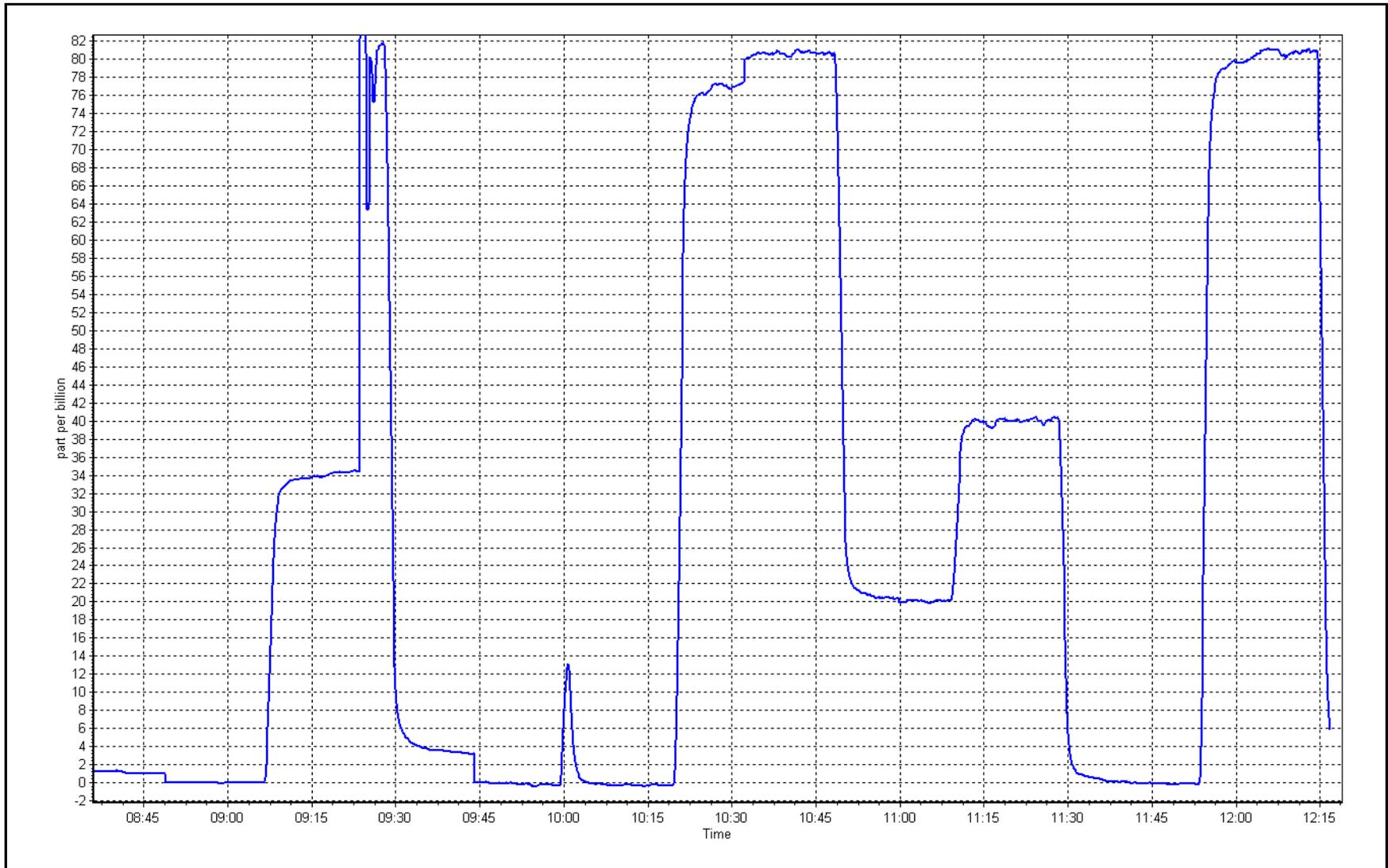
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.1	----	Correlation Coefficient	0.999984	≥0.995
80.0	80.6	0.9926	Slope	1.008052	0.90 - 1.10
40.0	40.0	1.0000	Intercept	-0.120619	+/-3
20.1	20.2	0.9927			



H₂S Calibration Plot

Date: January 22, 2026

Location: Blackrod





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Blackrod
 Station number: AMS 31
 Calibration Date: January 27, 2026
 Last Cal Date: December 10, 2025
 Start time (MST): 10:32
 End time (MST): 14:48
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0035071
 NOX Cal Gas Conc: 59.30 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 59.30 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API N701H
 Cal Gas Expiry Date: January 9, 2032
 NO Cal Gas Conc: 59.10 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 59.10 ppm
 NO gas Diff:
 Serial Number: 1220
 Serial Number: 72

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.0	0.0	0.1	----	----
AF High point	4932	67.7	803.0	800.3	2.7	797.2	791.8	5.4	1.0072	1.0107
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 802.6 ppb		NO = 800.8 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = -0.7%	
Baseline Corr 1st pt	NO _x = 797.2 ppb		NO = 791.8 ppb			<u>As Found Statistics</u>		*Percent Change	NO = -1.1%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1173480006

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.999502	0.998633
NO _x Cal Offset:	0.001869	0.281878
NO Cal Slope:	1.002086	1.000002
NO Cal Offset:	-1.118997	-0.939605
NO ₂ Cal Slope:	1.014841	1.001223
NO ₂ Cal Offset:	-0.464015	-0.180527

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.936	0.947	NO bkgnd or offset:	2.2	2.2
NOX coeff or slope:	0.994	0.996	NOX bkgnd or offset:	2.2	2.3
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	145.9	146.5

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.3	0.1	0.2	----	----
High point	4932	67.7	803.0	800.3	2.7	802.0	800.0	2.0	1.0012	1.0003
Mid point	4966	33.8	400.9	399.5	1.4	401.1	397.6	3.5	0.9995	1.0049
Low point	4983	16.9	200.4	199.8	0.7	200.1	198.1	2.0	1.0017	1.0084
As left zero	5000	0.0	0.0	0.0	0.0	0.2	0.1	0.1	----	----
As left span	4932	67.7	803.0	381.7	421.3	796.8	381.7	415.1	1.0077	1.0000
Average Correction Factor									1.0008	1.0045

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.2	----	----
High GPT point	794.1	384.3	412.5	412.9	0.9991	100.1%
Mid GPT point	794.1	585.8	211.0	211.3	0.9986	100.1%
Low GPT point	794.1	686.3	110.5	109.8	1.0064	99.4%
Average Correction Factor					1.0014	99.9%

Notes: Sample inlet filter was changed after as founds. Adjusted span only.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

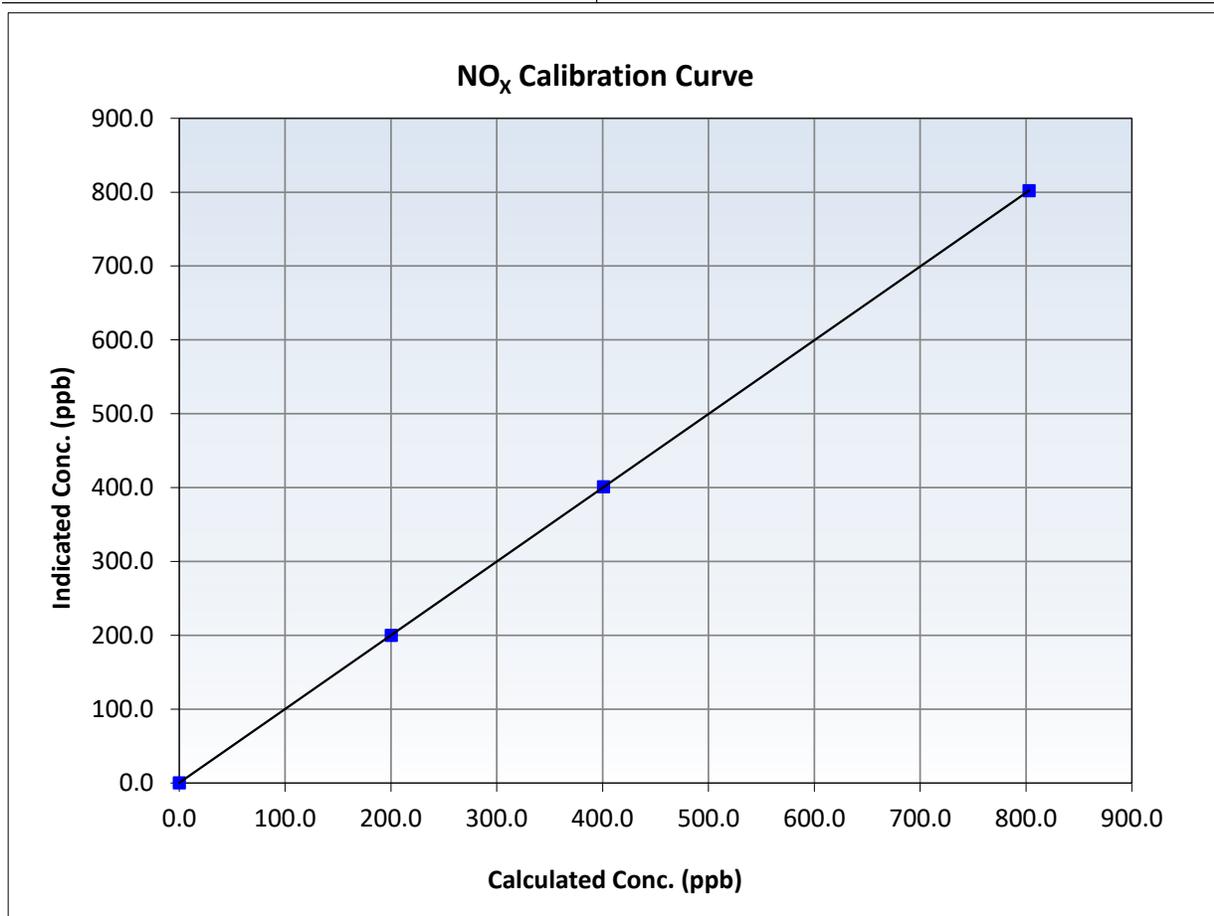
NO_x Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	10:32	End Time (MST):	14:48
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.3	----	Correlation Coefficient	0.999999	<i>≥0.995</i>
803.0	802.0	1.0012	Slope	0.998633	<i>0.90 - 1.10</i>
400.9	401.1	0.9995	Intercept	0.281878	<i>+/-20</i>
200.4	200.1	1.0017			





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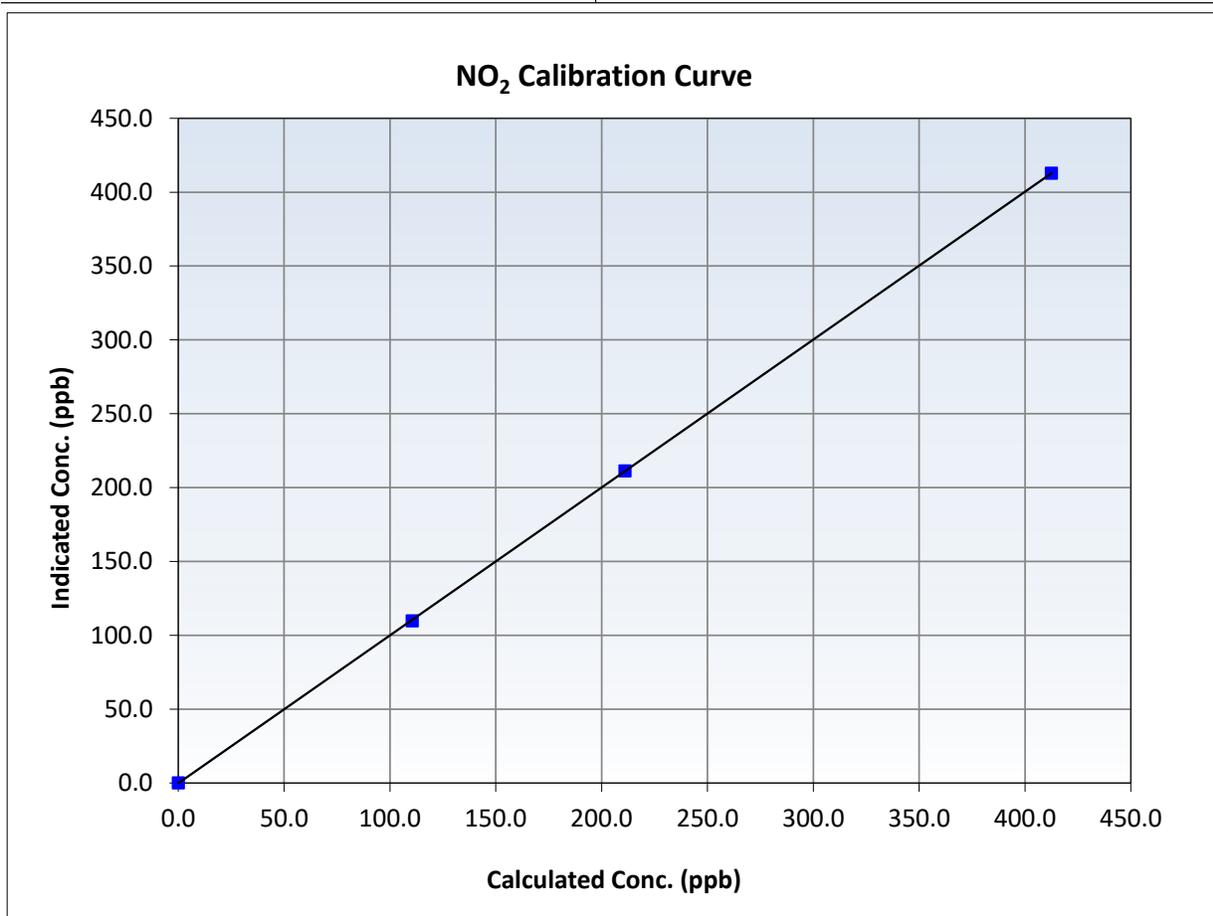
NO₂ Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	10:32	End Time (MST):	14:48
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.2	----	Correlation Coefficient	0.999993	<i>≥0.995</i>
412.5	412.9	0.9991	Slope	1.001223	<i>0.90 - 1.10</i>
211.0	211.3	0.9986	Intercept	-0.180527	<i>+/-20</i>
110.5	109.8	1.0064			





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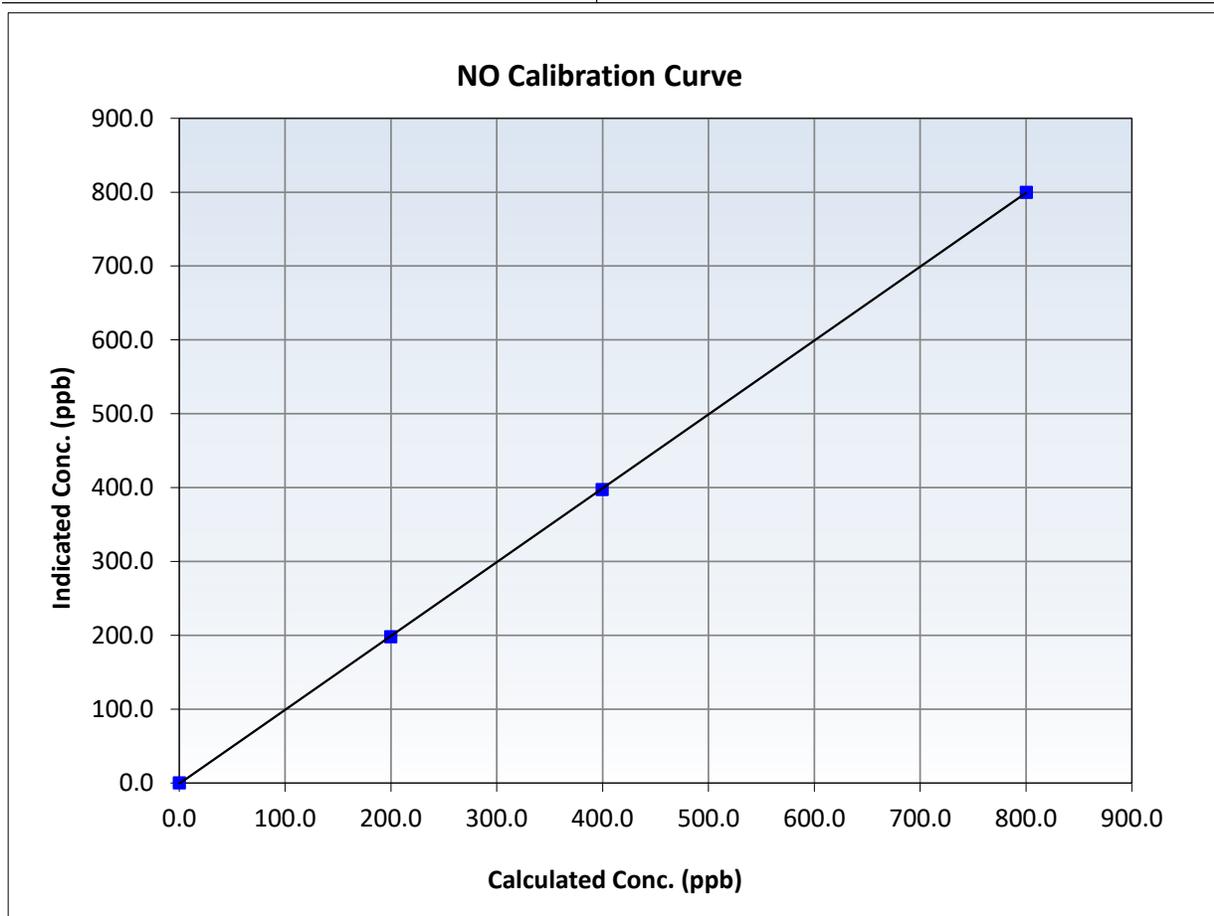
NO Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	10:32	End Time (MST):	14:48
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

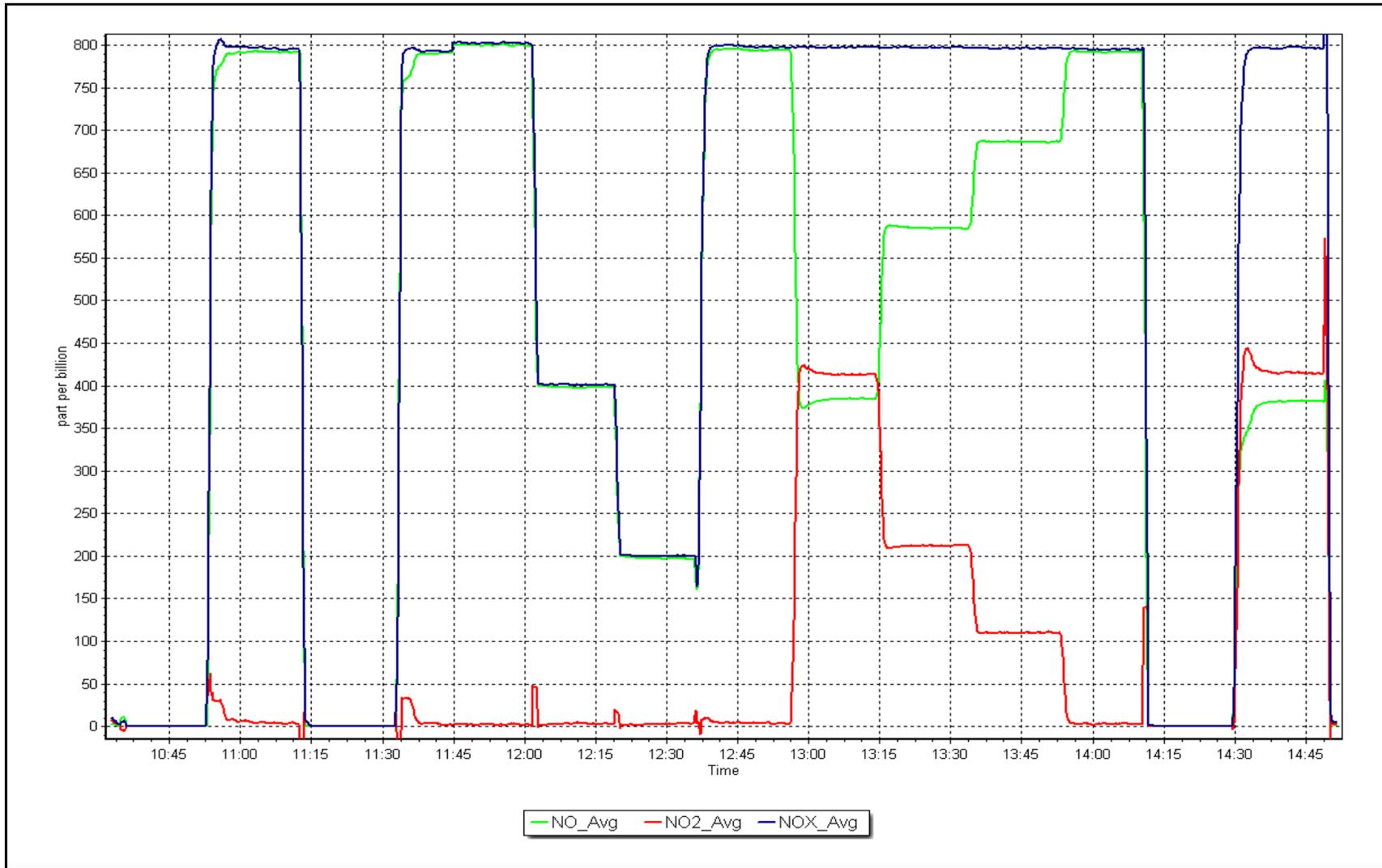
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999991	≥0.995
800.3	800.0	1.0003	Slope	1.000002	0.90 - 1.10
399.5	397.6	1.0049	Intercept	-0.939605	+/-20
199.8	198.1	1.0084			



NO_x Calibration Plot

Date: January 27, 2026

Location: Blackrod





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS33 MONDAY CREEK JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Monday Creek	Station number:	AMS 33
Calibration Date:	January 6, 2026	Last Cal Date:	December 2, 2025
Start time (MST):	11:37	End time (MST):	13:57
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.62	ppm	Cal Gas Exp Date:	March 10, 2031
Cal Gas Cylinder #:	EB0008522			
Removed Cal Gas Conc:	50.62	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne T700		Serial Number:	3253
Zero Air Gen Model:	Teledyne T701H		Serial Number:	832

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1152430005
Analyzer Range:	0- 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.002924	0.998572	Backgd or Offset:	31.1	33.6
Calibration intercept:	0.922443	-0.378072	Coeff or Slope:	0.990	1.016

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
-----------	----------------------------------	--------------------------------	---	---------------------------------------	--

As found zero
 As found High point
 As found Mid point
 As found Low point
 New cylinder response

Baseline Corr As found:	NA	Previous response	NA	*% change	NA
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
-----------	----------------------------------	--------------------------------	---	---------------------------------------	--

Calibrator zero	5000	0.0	0.0	-0.4	----
High point	4921	79.1	800.8	799.1	1.002
Mid point	4961	39.5	399.9	399.4	1.001
Low point	4980	19.8	200.5	199.5	1.005
As left zero	5000	0.0	0.0	-0.5	----
As left span	4921	79.1	800.8	799.4	1.002

Average Correction Factor: 1.003

Notes: No as founds done due to pump failure. Sample inlet filter and pump was changed before calibrator zero. Adjusted zero and span.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

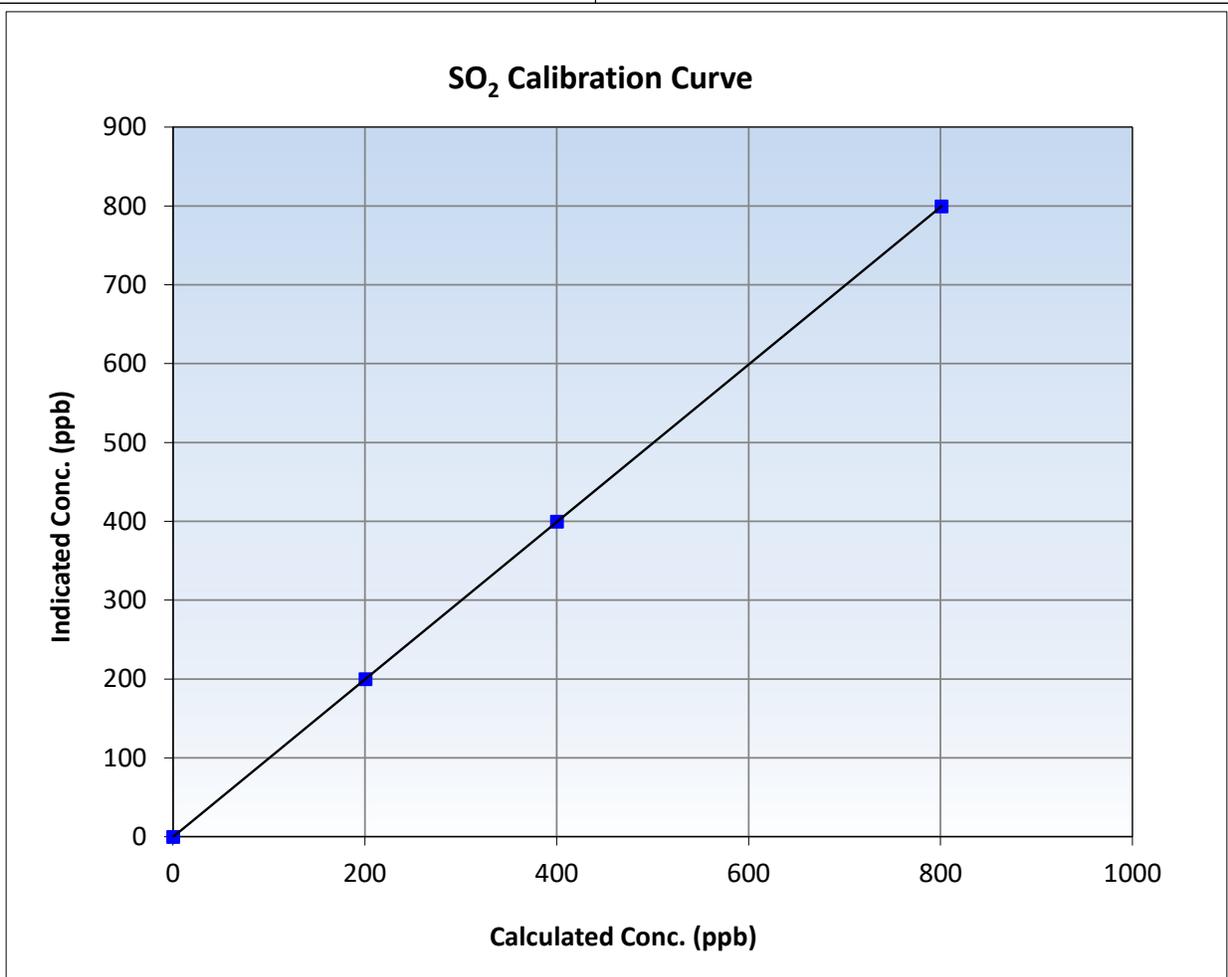
SO₂ Calibration Summary

Station Information

Calibration Date:	January 6, 2026	Previous Calibration:	December 2, 2025
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	11:37	End Time (MST):	13:57
Analyzer make:	Thermo 43i	Analyzer serial #:	1152430005

Calibration Data

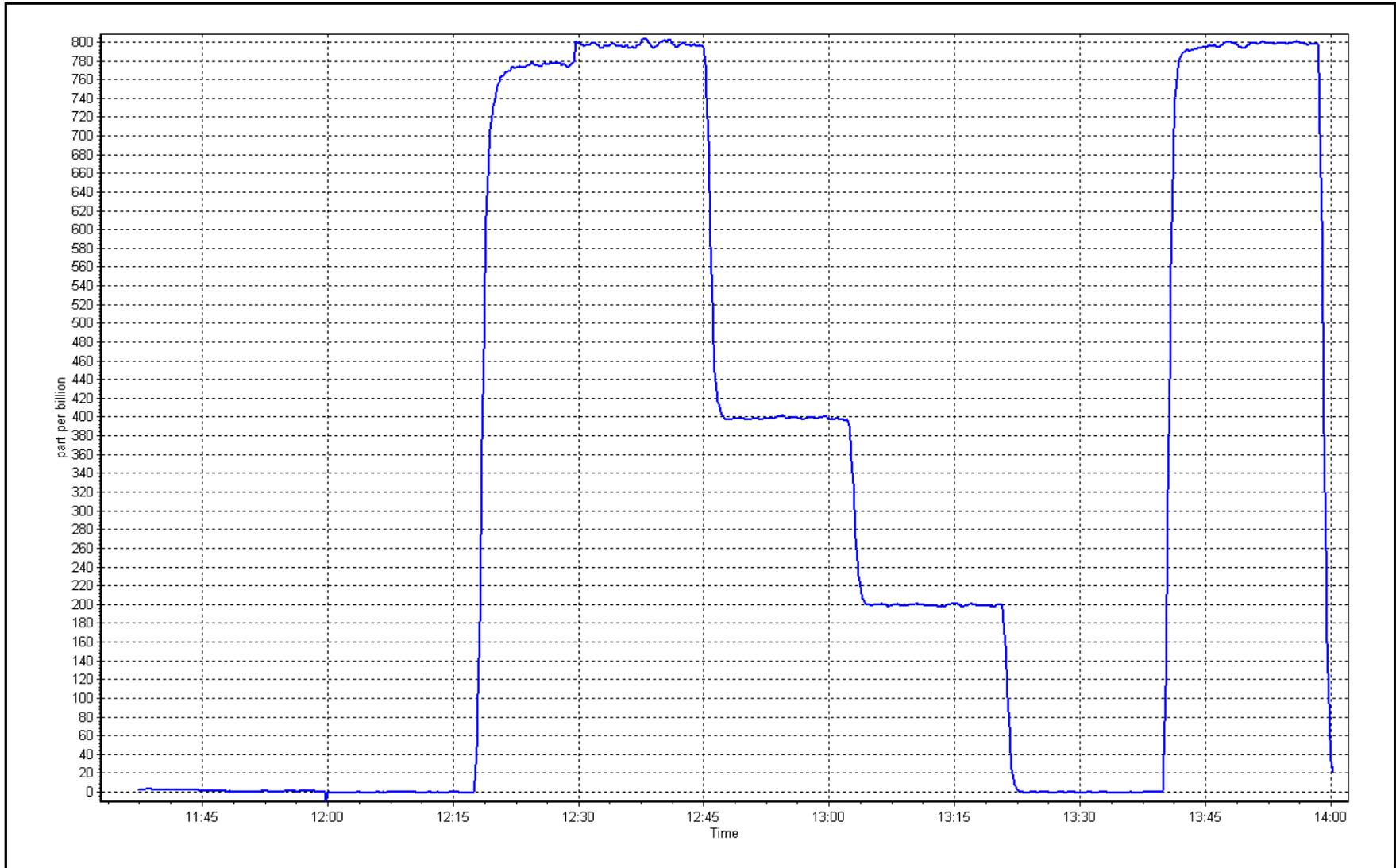
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.4	----	Correlation Coefficient	0.999999	≥0.995
800.8	799.1	1.0021	Slope	0.998572	0.90 - 1.10
399.9	399.4	1.0011	Intercept	-0.378072	+/-30
200.5	199.5	1.0048			



SO2 Calibration Plot

Date: January 6, 2026

Location: Monday Creek





Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Monday Creek	Station number:	AMS 33
Calibration Date:	January 14, 2026	Last Cal Date:	December 1, 2025
Start time (MST):	10:33	End time (MST):	14:11
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.05 ppm	Cal Gas Exp Date:	November 15, 2026
Cal Gas Cylinder #:	DT0014831		
Removed Cal Gas Conc:	5.05 ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA	Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700	Serial Number:	3253
ZAG Make/Model:	Teledyne T701H	Serial Number:	832

Analyzer Information

Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12333331547
Converter make:	Global 150	Converter serial #:	2022-196
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.004855	1.013571	Backgd or Offset:	1.3	1.6
Calibration intercept:	0.358389	0.178375	Coeff or Slope:	1.100	1.100

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.2	----
As found High point	4921	79.2	80.0	82.9	0.967
As found Mid point	4960	39.6	40.0	41.7	0.964
As found Low point	4980	19.8	20.0	21.0	0.961
New cylinder response					
Baseline Corr As found:	82.7	Prev response:	80.74	*% change:	2.4%
Baseline Corr 2nd AF pt:	41.5	AF Slope:	1.033573	AF Intercept:	0.278342
Baseline Corr 3rd AF pt:	20.8	AF Correlation:	0.999995	<i>* = +/-5% change initiates investigation</i>	

H2S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4921	79.2	80.0	81.2	0.985
Mid point	4960	39.6	40.0	40.7	0.983
Low point	4980	19.8	20.0	20.7	0.966
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	79.2	80.0	81.2	0.985
SO2 Scrubber Check	4921	79.1	791.0	0.0	----
Date of last scrubber change:	11-Apr-24			Ave Corr Factor	0.978
Date of last converter efficiency test:	October 22, 2025				

Notes: Sample inlet filter was changed after multipoint as founds. SO2 scrubber check done and passed.
Adjusted zero only.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

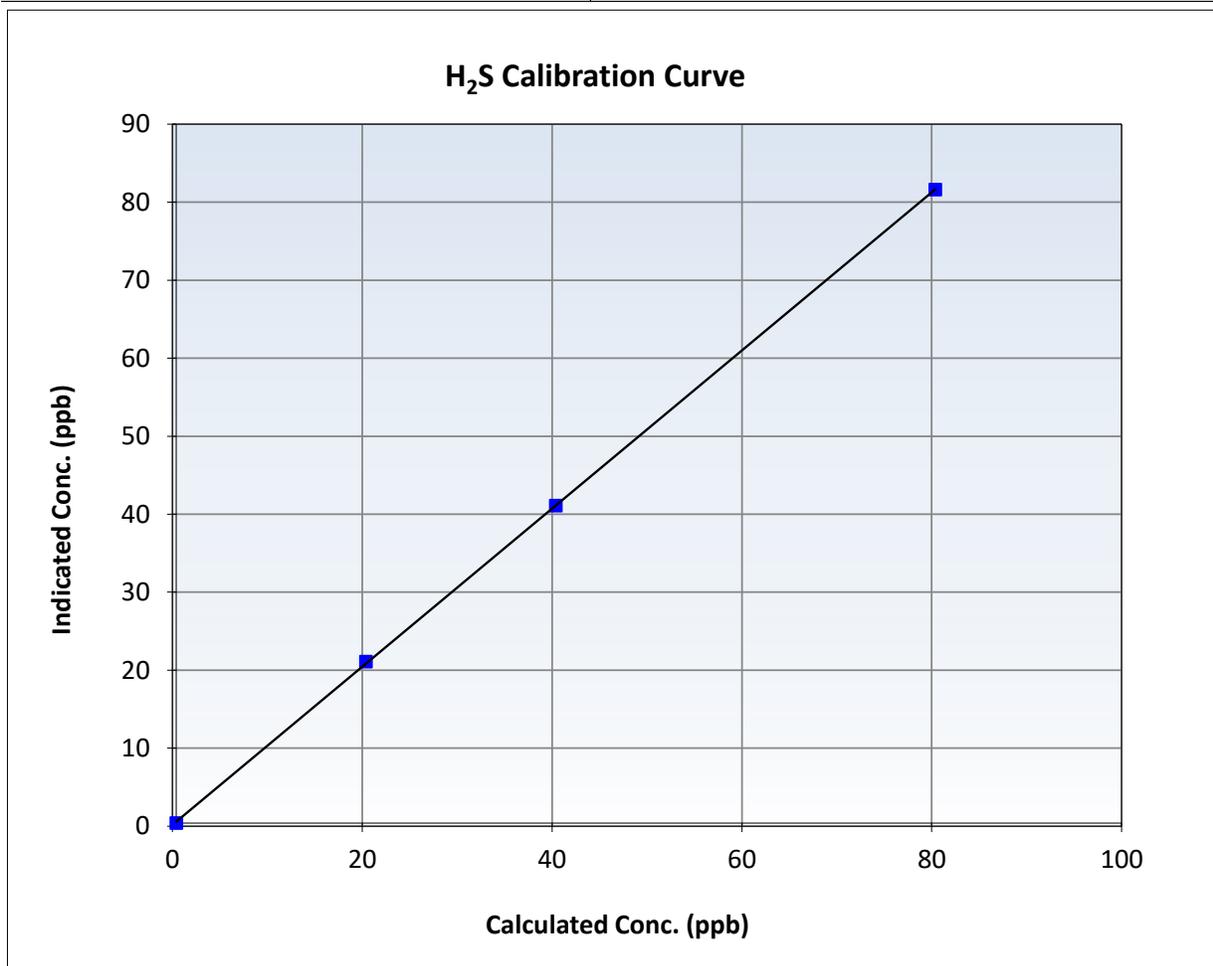
H2S Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 1, 2025
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:33	End Time (MST):	14:11
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12333331547

Calibration Data

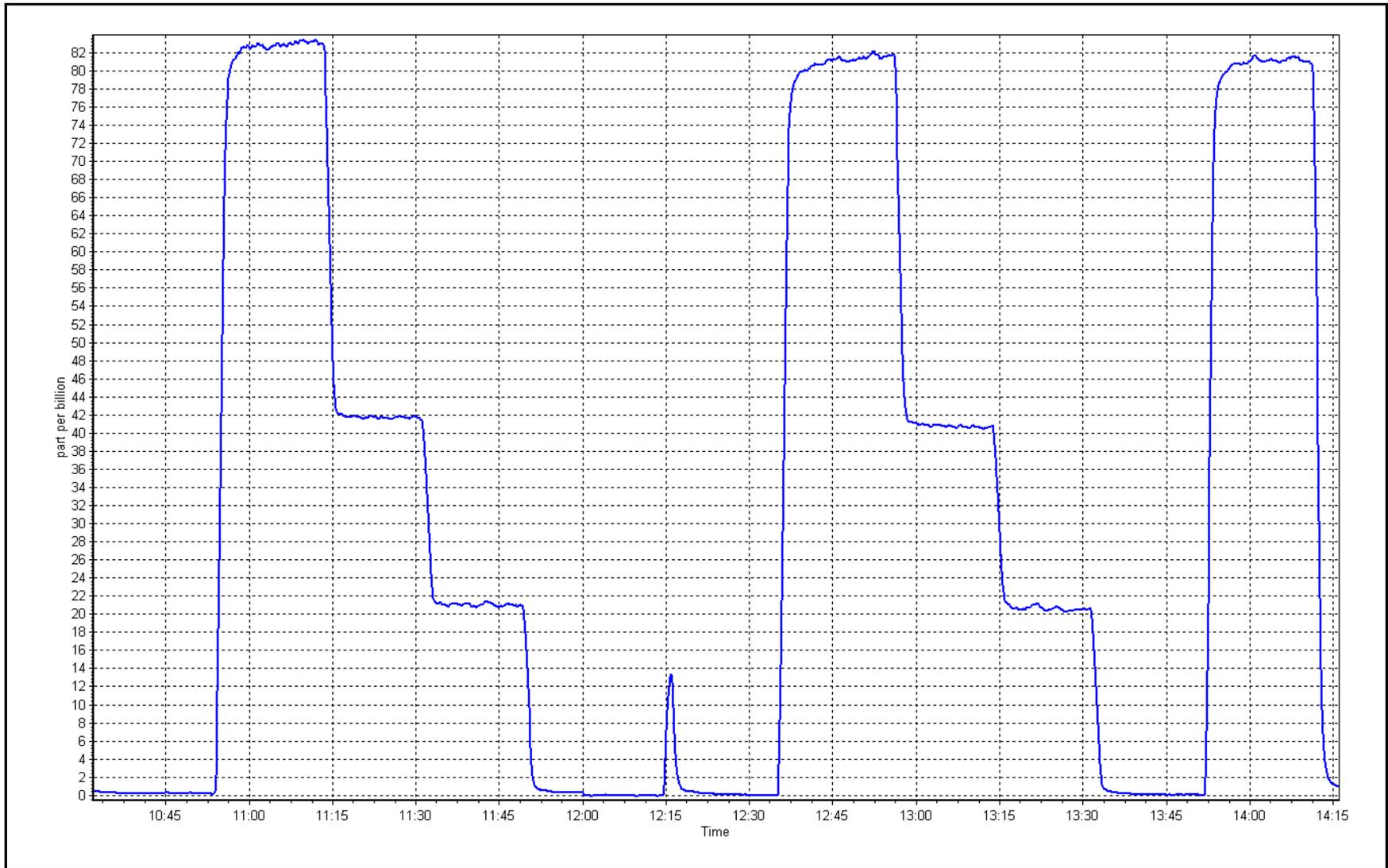
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999973	≥ 0.995
80.0	81.2	0.9851	Slope	1.013571	$0.90 - 1.10$
40.0	40.7	0.9828	Intercept	0.178375	± 3
20.0	20.7	0.9661			



H2S Calibration Plot

Date: January 14, 2026

Location: Monday Creek





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Monday Creek
 Station number: AMS 33
 Calibration Date: January 14, 2026
 Last Cal Date: December 1, 2025
 Start time (MST): 10:41
 End time (MST): 14:47
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: CC755290
 NOX Cal Gas Conc: 48.90 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 48.90 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T750
 ZAG make/model: Teledyne API 751H
 Cal Gas Expiry Date: March 11, 2031
 NO Cal Gas Conc: 48.70 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 48.70 ppm
 NO gas Diff:
 Serial Number: 281
 Serial Number: 530

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.2	0.0	----	----
AF High point	4918	82.1	802.9	799.6	3.3	804.3	800.0	4.2	0.9980	0.9993
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 801.9 ppb		NO = 798.4 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 0.3%	
Baseline Corr 1st pt	NO _x = 804.5 ppb		NO = 800.2 ppb			<u>As Found Statistics</u>		*Percent Change	NO = 0.2%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found	NO _x r ² :	Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found	NO r ² :	NO SI:	NO Int:	
						As found	NO ₂ r ² :	NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42iQ
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 12426335704

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.996639	1.003341
NO _x Cal Offset:	1.710218	1.230558
NO Cal Slope:	0.996945	1.002603
NO Cal Offset:	1.210317	0.730591
NO ₂ Cal Slope:	0.983668	0.989413
NO ₂ Cal Offset:	1.471081	1.424181

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.057	1.057	NO bkgnd or offset:	1.4	1.4
NOX coeff or slope:	1.001	1.001	NOX bkgnd or offset:	1.5	1.5
NO2 coeff or slope:	0.990	0.990	Reaction cell Press:	134.9	135.3

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	----	----
High point	4918	82.1	802.9	799.6	3.3	806.3	802.2	3.9	0.9958	0.9968
Mid point	4959	41.1	401.9	400.3	1.6	404.8	402.1	2.8	0.9930	0.9955
Low point	4979	20.5	200.5	199.7	0.8	204.0	201.9	2.1	0.9829	0.9891
As left zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.3	0.0	----	----
As left span	4918	82.1	802.9	392.4	410.5	784.0	392.4	391.6	1.0241	1.0000
Average Correction Factor									0.9906	0.9938

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.0	----	----
High GPT point	795.2	413.5	385.0	381.5	1.0091	99.1%
Mid GPT point	795.2	611.9	186.6	187.2	0.9967	100.3%
Low GPT point	795.2	704.3	94.2	95.7	0.9842	101.6%
Average Correction Factor					0.9967	100.3%

Notes: Sample inlet filter was changed after as founds. No adjustment made.

Calibration Performed By: Jan Castro



Wood Buffalo Environmental Association

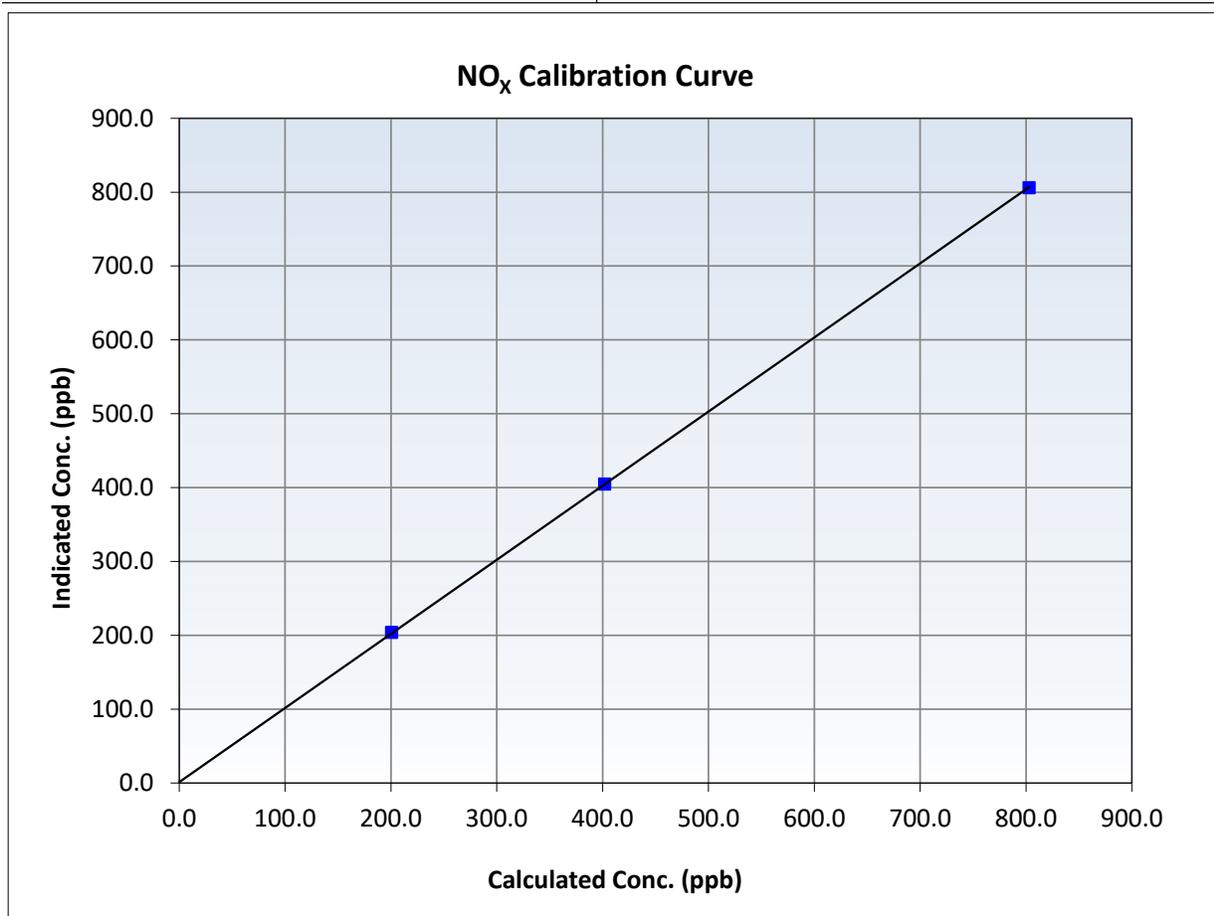
NO_x Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 1, 2025
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:41	End Time (MST):	14:47
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12426335704

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999987	≥0.995
802.9	806.3	0.9958	Slope	1.003341	0.90 - 1.10
401.9	404.8	0.9930	Intercept	1.230558	+/-20
200.5	204.0	0.9829			





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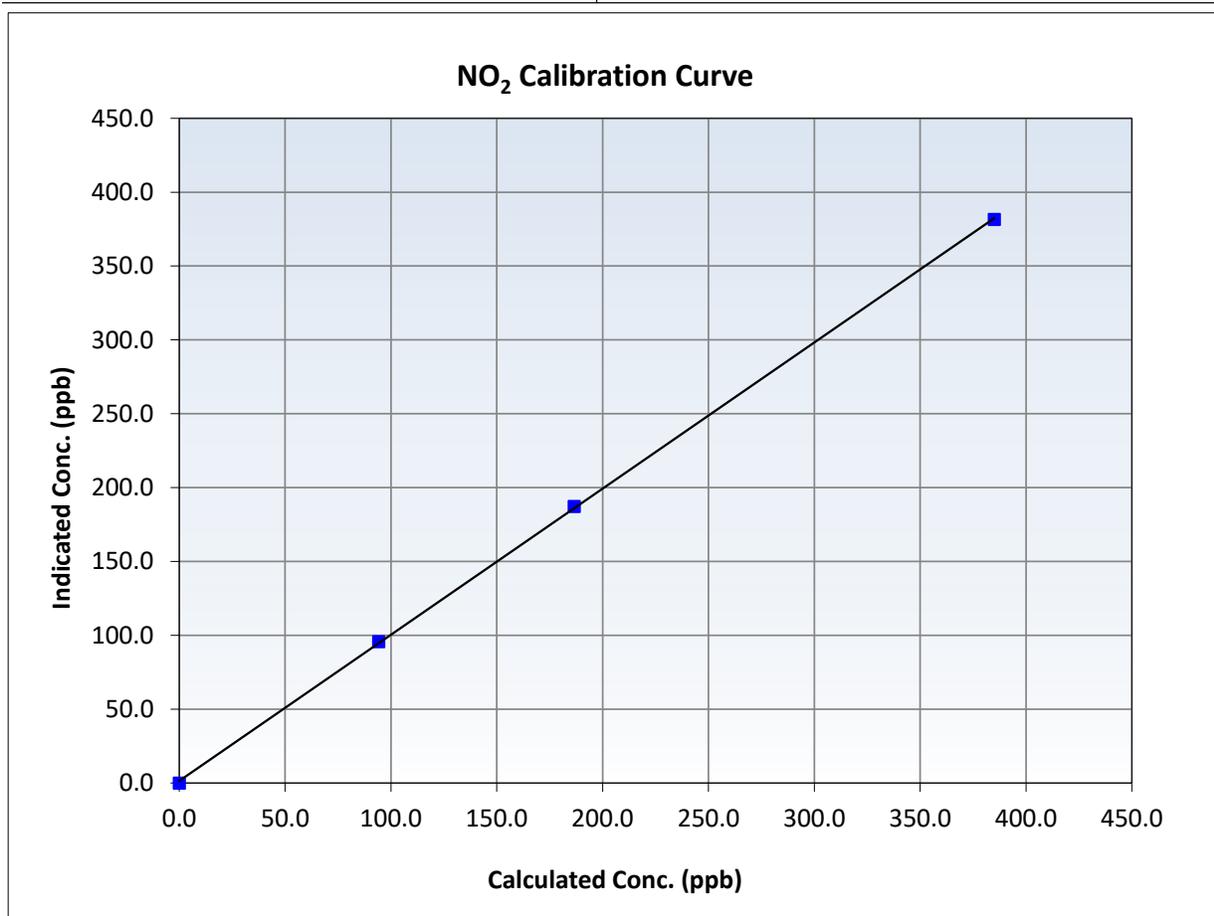
NO₂ Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 1, 2025
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:41	End Time (MST):	14:47
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12426335704

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999934	<i>≥0.995</i>
385.0	381.5	1.0091	Slope	0.989413	<i>0.90 - 1.10</i>
186.6	187.2	0.9967	Intercept	1.424181	<i>+/-20</i>
94.2	95.7	0.9842			





Wood Buffalo Environmental Association

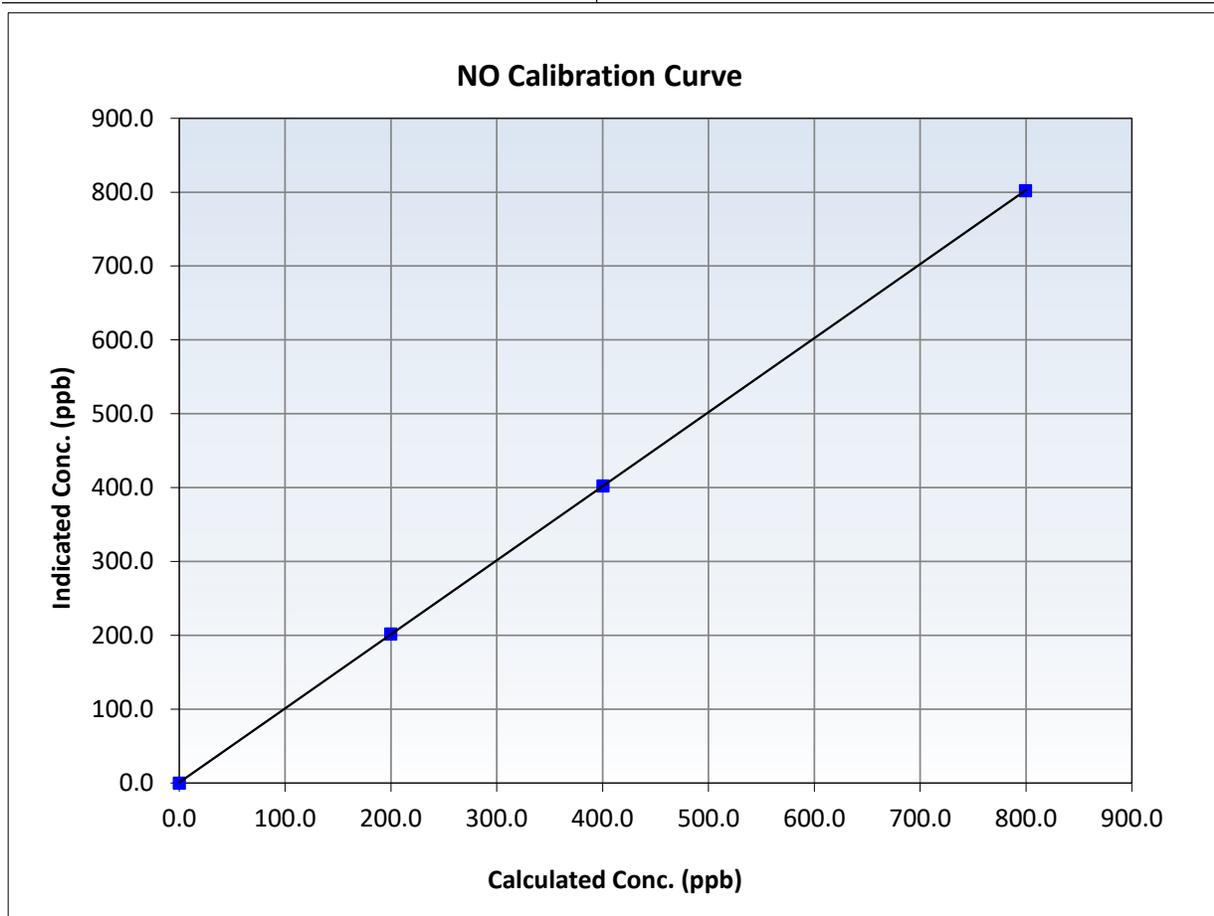
NO Calibration Summary

Station Information

Calibration Date:	January 14, 2026	Previous Calibration:	December 1, 2025
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:41	End Time (MST):	14:47
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12426335704

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999996	<i>≥0.995</i>
799.6	802.2	0.9968	Slope	1.002603	<i>0.90 - 1.10</i>
400.3	402.1	0.9955	Intercept	0.730591	<i>+/-20</i>
199.7	201.9	0.9891			





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

**AMS501
LEISMER
JANUARY 2026**

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Leismer	Station number:	AMS 501
Calibration Date:	January 22, 2026	Last Cal Date:	December 2, 2025
Start time (MST):	10:33	End time (MST):	13:12
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.52	ppm	Cal Gas Exp Date:	December 29, 2028
Cal Gas Cylinder #:	CC274266			
Removed Cal Gas Conc:	50.52	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	2659
Zero Air Gen Model:	Teledyne API T701		Serial Number:	4427

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number:	1160290011
Analyzer Range:	0-1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.993803	0.991946	Backgd or Offset:	21.4	21.4
Calibration intercept:	0.964102	0.464132	Coeff or Slope:	0.994	0.994

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.4	----
As found High point	4921	79.2	800.2	802.6	0.998
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	802.2	Previous response	796.2	*% change	0.7%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.5	----
High point	4921	79.2	800.2	794.3	1.007
Mid point	4960	39.6	400.2	397.2	1.007
Low point	4980	19.8	200.1	199.0	1.005
As left zero	5000	0.0	0.0	0.6	----
As left span	4921	79.2	800.2	793.1	1.009
Average Correction Factor:					1.007

Notes: No adjustment.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

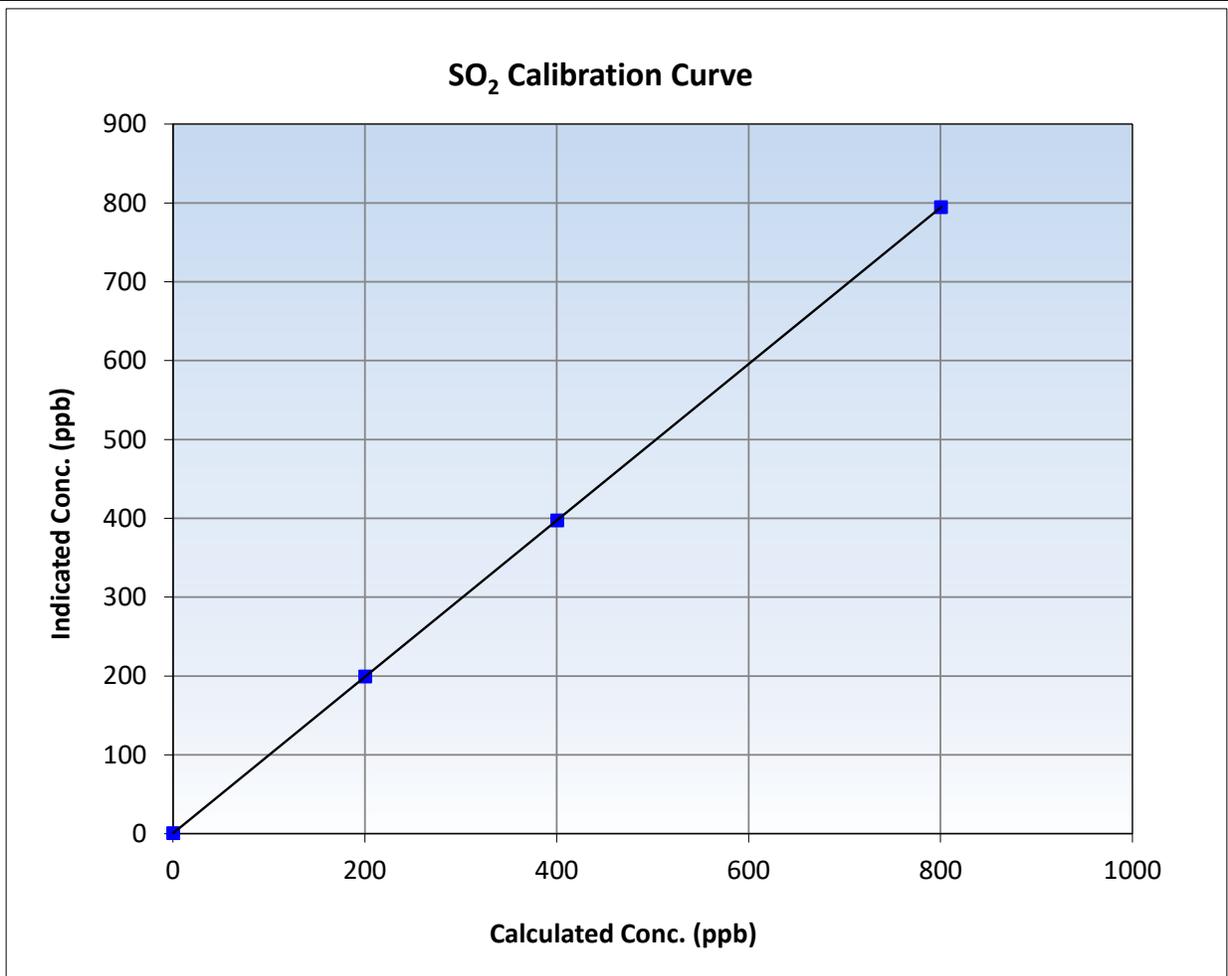
SO₂ Calibration Summary

Station Information

Calibration Date:	January 22, 2026	Previous Calibration:	December 2, 2025
Station Name:	Leismer	Station Number:	AMS 501
Start Time (MST):	10:33	End Time (MST):	13:12
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290011

Calibration Data

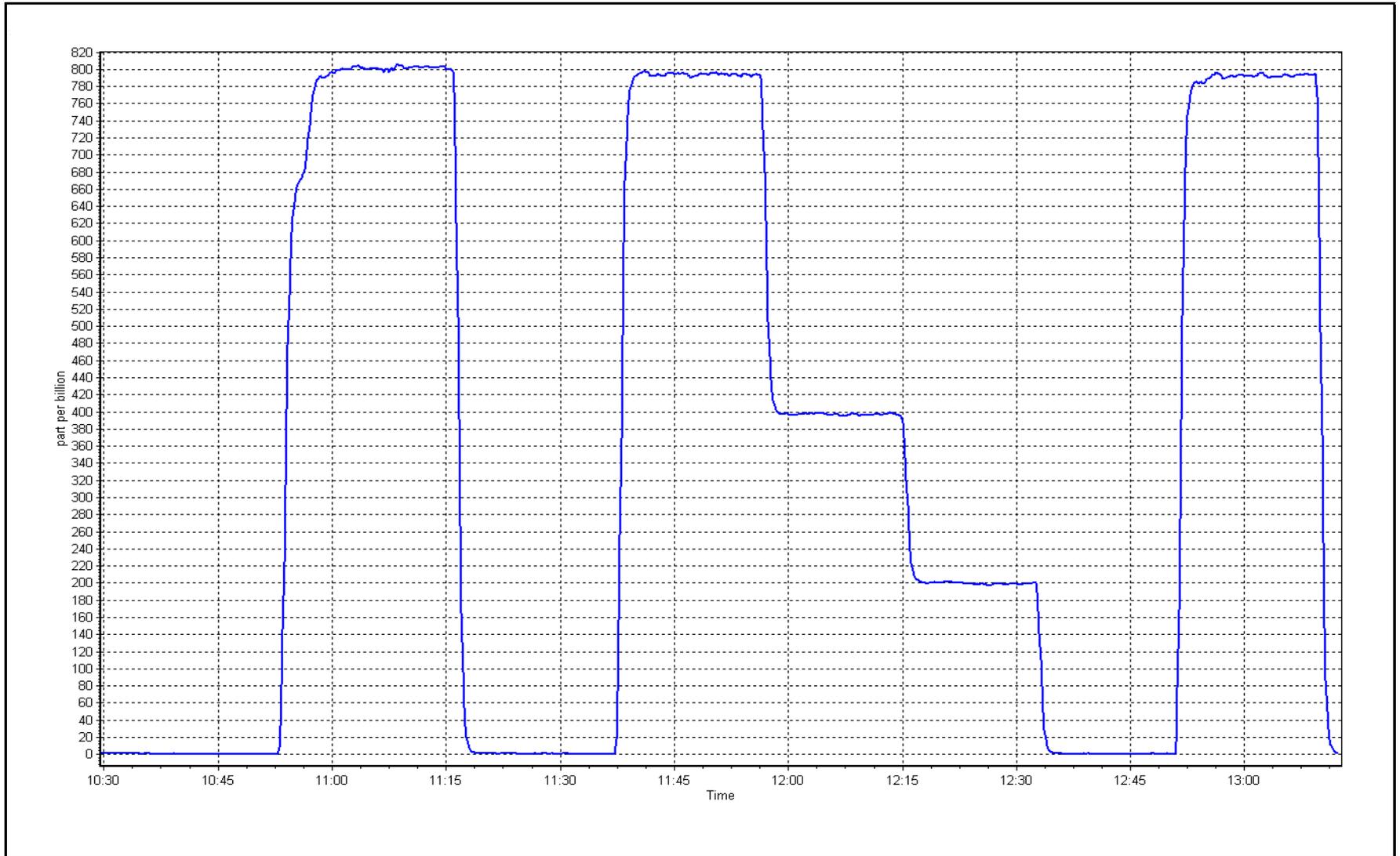
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.5	----	Correlation Coefficient	1.000000	≥0.995
800.2	794.3	1.0074	Slope	0.991946	0.90 - 1.10
400.2	397.2	1.0074	Intercept	0.464132	+/-30
200.1	199.0	1.0054			



SO2 Calibration Plot

Date: January 22, 2026

Location: Leismer





Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Leismer	Station number:	AMS 501
Calibration Date:	January 21, 2026	Last Cal Date:	December 3, 2025
Start time (MST):	11:15	End time (MST):	14:54
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.89	ppm	Cal Gas Exp Date:	September 5, 2027
Cal Gas Cylinder #:	CC737971			
Removed Cal Gas Conc:	4.89	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne 750		Serial Number:	282
ZAG Make/Model:	Teledyne 751H		Serial Number:	321

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1180540020
Converter make:	Global G150	Converter serial #:	2022-218
Analyzer Range	0 - 100 ppb	Converter Temp:	325.0 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.997165	0.984597	Backgd or Offset:	3.80	3.80
Calibration intercept:	0.160644	0.200390	Coeff or Slope:	1.214	1.214

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4918	81.8	80.0	78.1	1.023
As found Mid point	4959	40.9	40.0	39.3	1.015
As found Low point	4980	20.4	19.9	19.7	1.008
New cylinder response					
Baseline Corr As found:	78.2	Prev response:	79.94	*% change:	-2.2%
Baseline Corr 2nd AF pt:	39.4	AF Slope:	0.976598	AF Intercept:	0.080266
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999974	<i>* = > +/-5% change initiates investigation</i>	

H2S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4918	81.8	80.0	78.9	1.014
Mid point	4959	40.9	40.0	39.7	1.008
Low point	4980	20.4	19.9	19.9	1.002
As left zero	5000	0.0	0.0	0.1	----
As left span	4918	81.8	80.0	79.4	1.008
SO2 Scrubber Check	4921	79.2	800.2	0.0	----
Date of last scrubber change:		20-Nov-25		Ave Corr Factor	1.008
Date of last converter efficiency test:					

Notes: No adjustment made.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

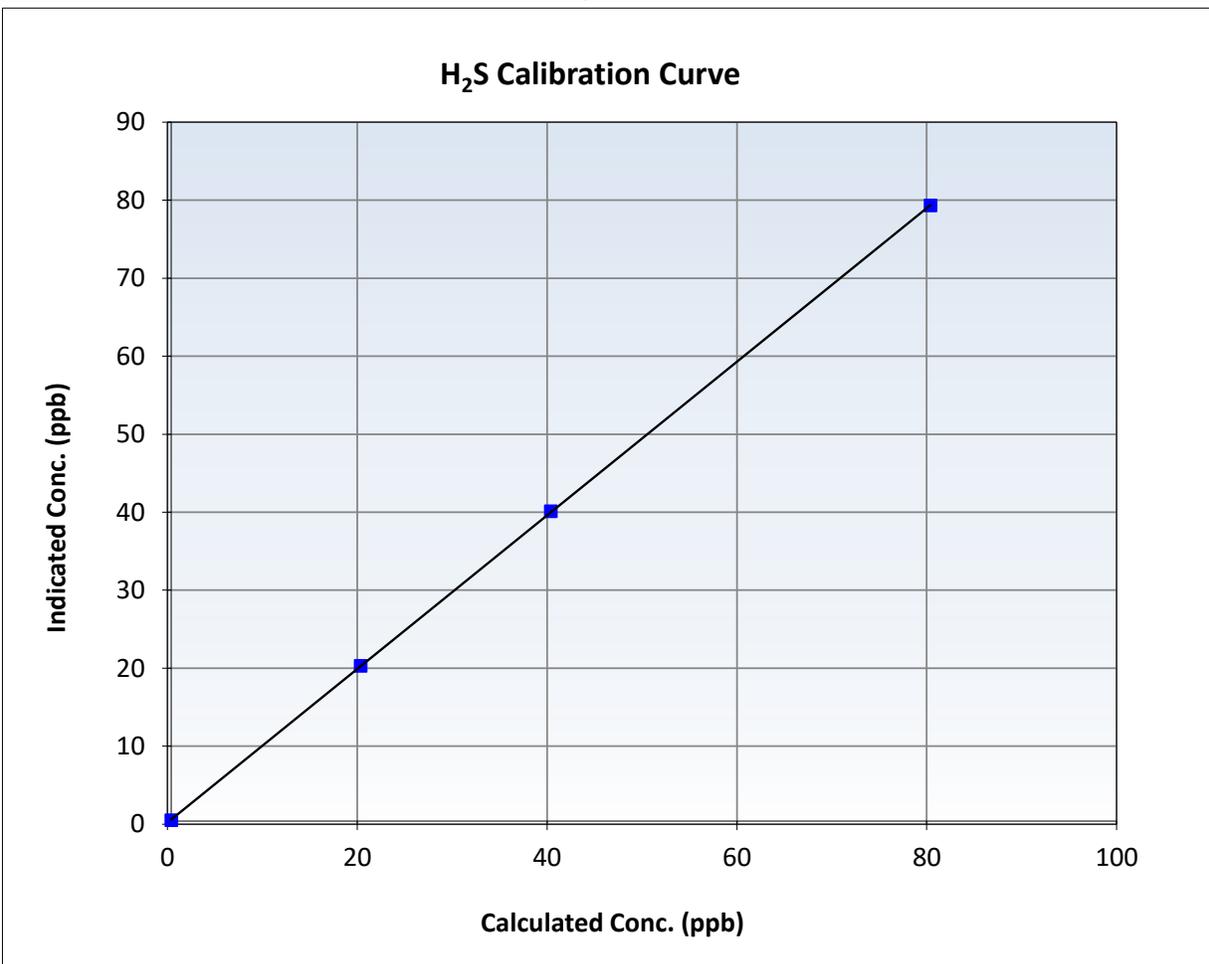
H2S Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 3, 2025
Station Name:	Leismer	Station Number:	AMS 501
Start Time (MST):	11:15	End Time (MST):	14:54
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1180540020

Calibration Data

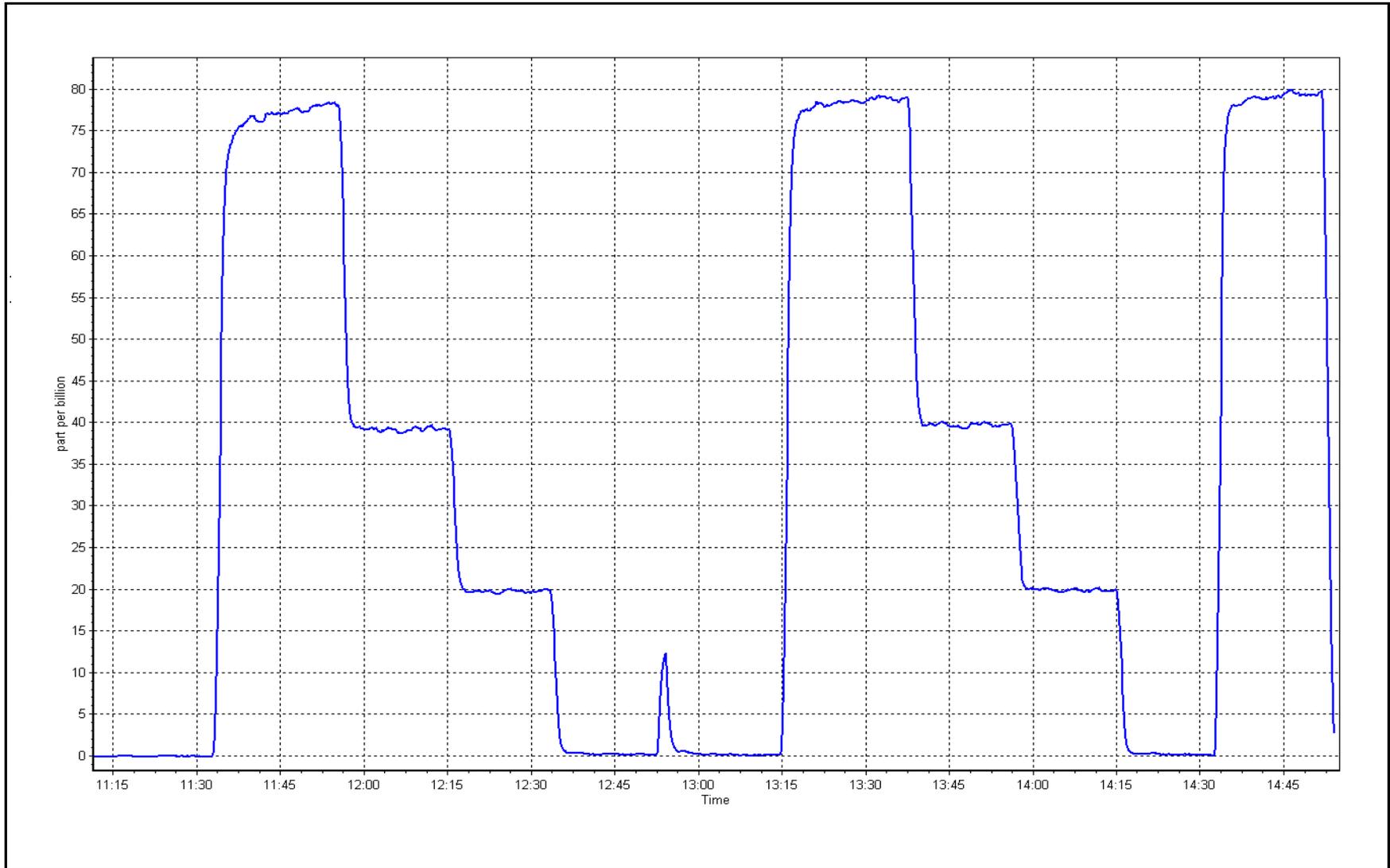
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.1	----	Correlation Coefficient	0.999991	≥ 0.995
80.0	78.9	1.0140	Slope	0.984597	$0.90 - 1.10$
40.0	39.7	1.0076	Intercept	0.200390	± 3
19.9	19.9	1.0025			



H2S Calibration Plot

Date: January 21, 2026

Location: Leismer





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Leismer
 Station number: AMS 501
 Calibration Date: January 9, 2026
 Last Cal Date: December 2, 2025
 Start time (MST): 11:30
 End time (MST): 15:50
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0022706
 NOX Cal Gas Conc: 60.20 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.20 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API 701
 Cal Gas Expiry Date: January 5, 2032
 NO Cal Gas Conc: 60.10 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.10 ppm
 NO gas Diff:
 Serial Number: 3252
 Serial Number: 4427

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	Baseline Adjusted NOx Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.6	0.9	-0.3	----	----
AF High point	4933	66.6	801.9	800.6	1.3	619.0	611.2	7.8	1.2968	1.3118
AF Mid point										
AF Low point										
New cyl resp										

Previous Response NO_x = 803.8 ppb NO = 800.3 ppb * = > +/-5% change initiates investigation *Percent Change NO_x = -30.0%
 Baseline Corr 1st pt NO_x = 618.4 ppb NO = 610.3 ppb As Found Statistics *Percent Change NO = -31.1%
 Baseline Corr 2nd pt NO_x = NA ppb NO = NA ppb As found NO_x r²: Nx SI: Nx Int:
 Baseline Corr 3rd pt NO_x = NA ppb NO = NA ppb As found NO r²: NO SI: NO Int:
 As found NO₂ r²: NO2 SI: NO2 Int:

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	Baseline Adjusted NO2 Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42iQ
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 12400232071

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.999851	0.996532
NO _x Cal Offset:	1.973091	1.912197
NO Cal Slope:	0.999077	0.997606
NO Cal Offset:	0.451548	0.791513
NO ₂ Cal Slope:	0.993290	0.979727
NO ₂ Cal Offset:	0.616781	-0.209417

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.981	0.988	NO bkgnd or offset:	0.3	0.3
NOX coeff or slope:	0.991	0.991	NOX bkgnd or offset:	0.5	0.5
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	436.7	147.1

Dilution Calibration Data

Set Point	Dilution flow rate (scm)	Source gas flow rate (scm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.6	0.3	0.3	----	----
High point	4933	66.6	801.9	800.6	1.3	800.6	799.4	1.2	1.0017	1.0015
Mid point	4967	33.3	400.9	400.2	0.7	401.5	399.8	1.7	0.9985	1.0011
Low point	4983	16.6	199.9	199.5	0.3	202.8	200.7	2.1	0.9856	0.9943
As left zero	5000	0.0	0.0	0.0	0.0	0.7	0.4	0.3	----	----
As left span	4933	66.6	801.9	373.6	428.3	782.8	373.6	409.1	1.0244	1.0000
Average Correction Factor									0.9953	0.9990

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.3	----	----
High GPT point	796.1	376.6	420.8	412.5	1.0202	98.0%
Mid GPT point	796.1	575.4	222.0	216.7	1.0246	97.6%
Low GPT point	796.1	682.7	114.7	111.9	1.0253	97.5%
Average Correction Factor					1.0234	97.7%

Notes: As found response low due to internal and external pumps opposing, switched to external pump only. Minor span adjustment performed.

Calibration Performed By: Kelly Baragar



Wood Buffalo Environmental Association

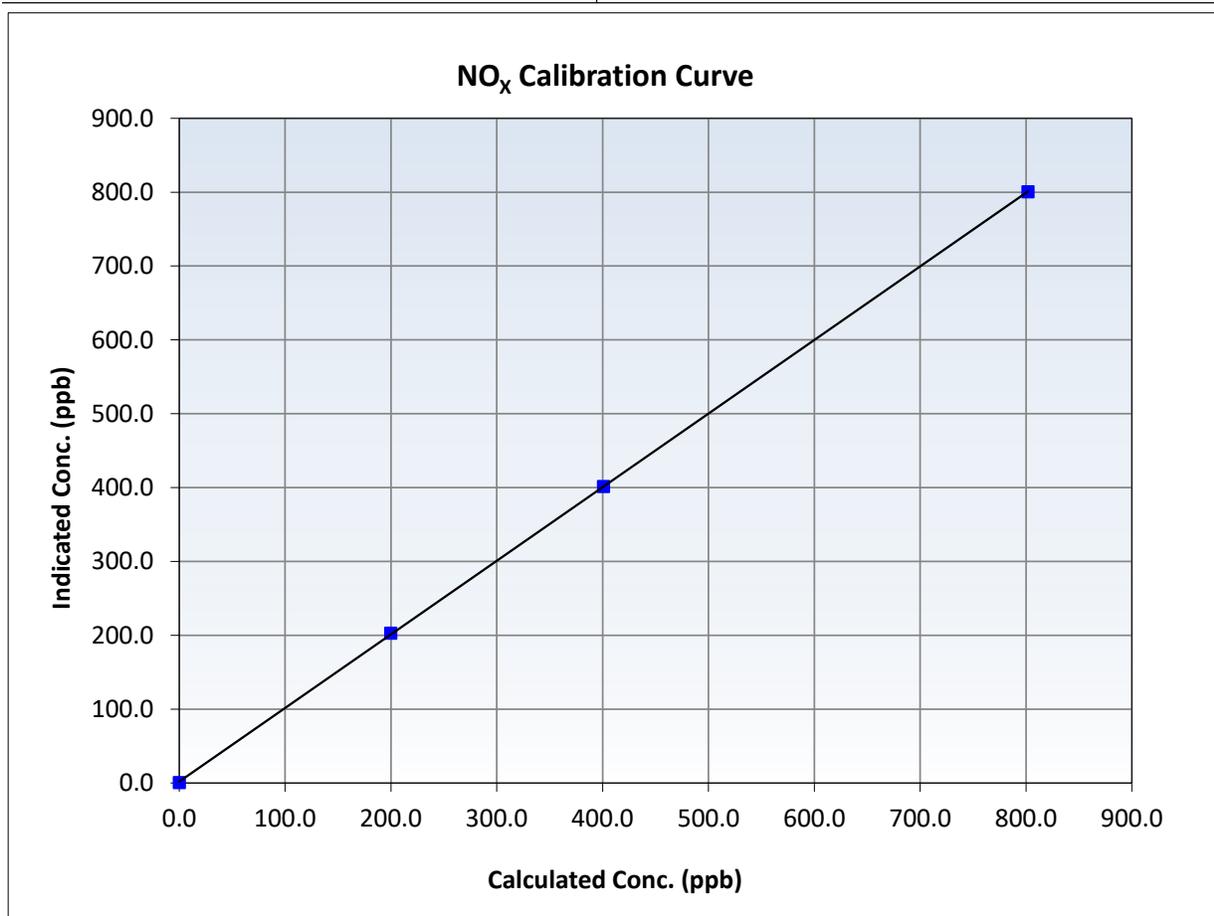
NO_x Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 2, 2025
Station Name:	Leismer	Station Number:	AMS 501
Start Time (MST):	11:30	End Time (MST):	15:50
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12400232071

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.6	----	Correlation Coefficient	0.999986	<i>≥0.995</i>
801.9	800.6	1.0017	Slope	0.996532	<i>0.90 - 1.10</i>
400.9	401.5	0.9985	Intercept	1.912197	<i>+/-20</i>
199.9	202.8	0.9856			





Wood Buffalo Environmental Association

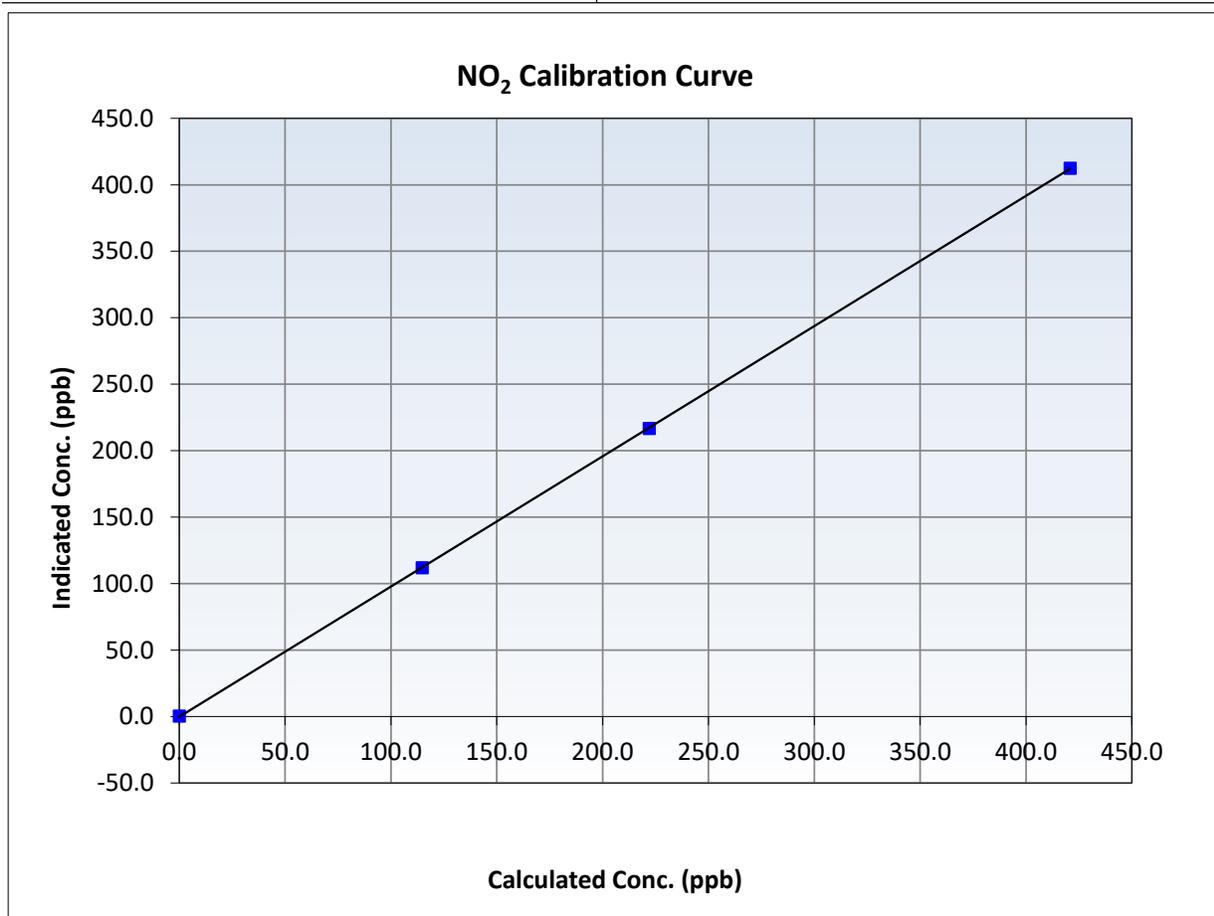
NO₂ Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 2, 2025
Station Name:	Leismer	Station Number:	AMS 501
Start Time (MST):	11:30	End Time (MST):	15:50
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12400232071

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.3	----	Correlation Coefficient	0.999990	≥0.995
420.8	412.5	1.0202	Slope	0.979727	0.90 - 1.10
222.0	216.7	1.0246	Intercept	-0.209417	+/-20
114.7	111.9	1.0253			





Wood Buffalo Environmental Association

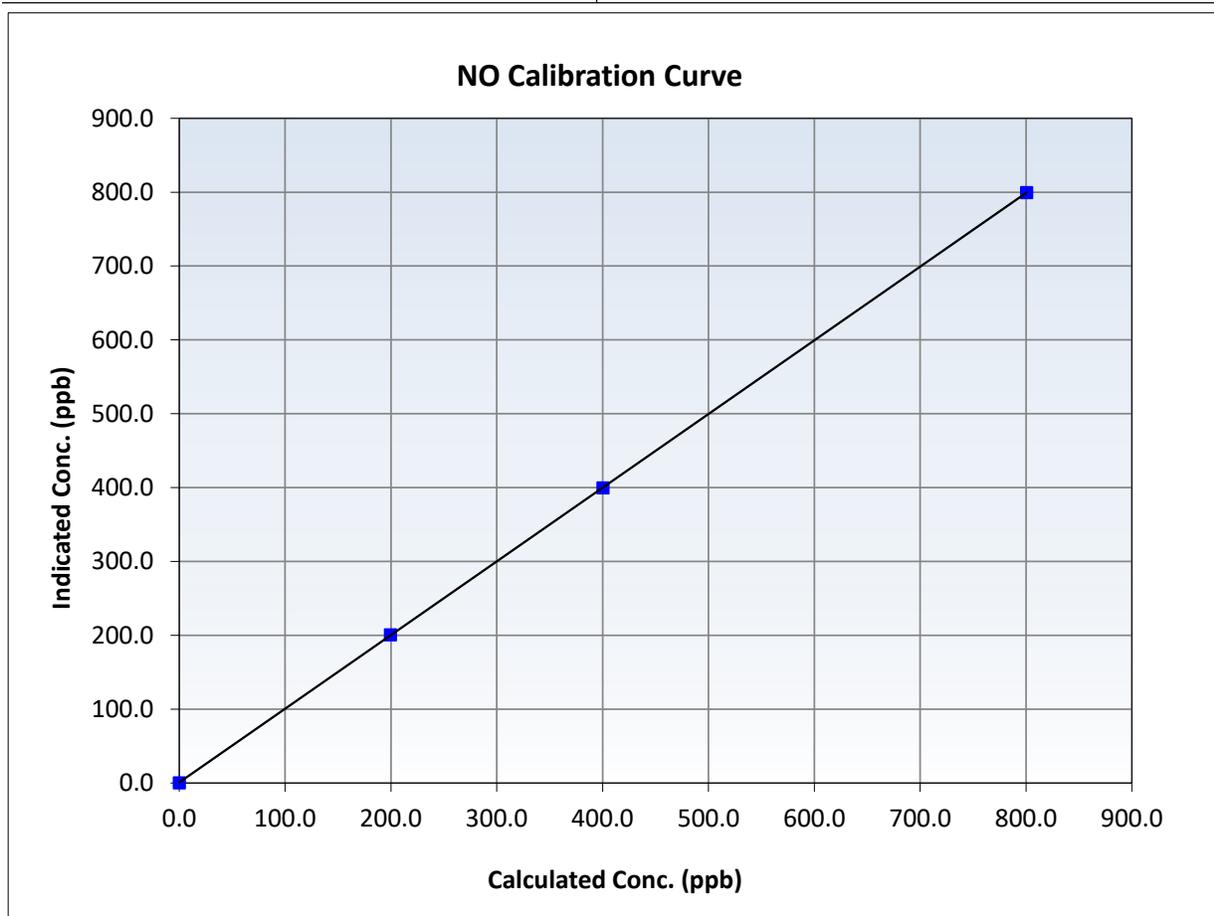
NO Calibration Summary

Station Information

Calibration Date:	January 9, 2026	Previous Calibration:	December 2, 2025
Station Name:	Leismer	Station Number:	AMS 501
Start Time (MST):	11:30	End Time (MST):	15:50
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12400232071

Calibration Data

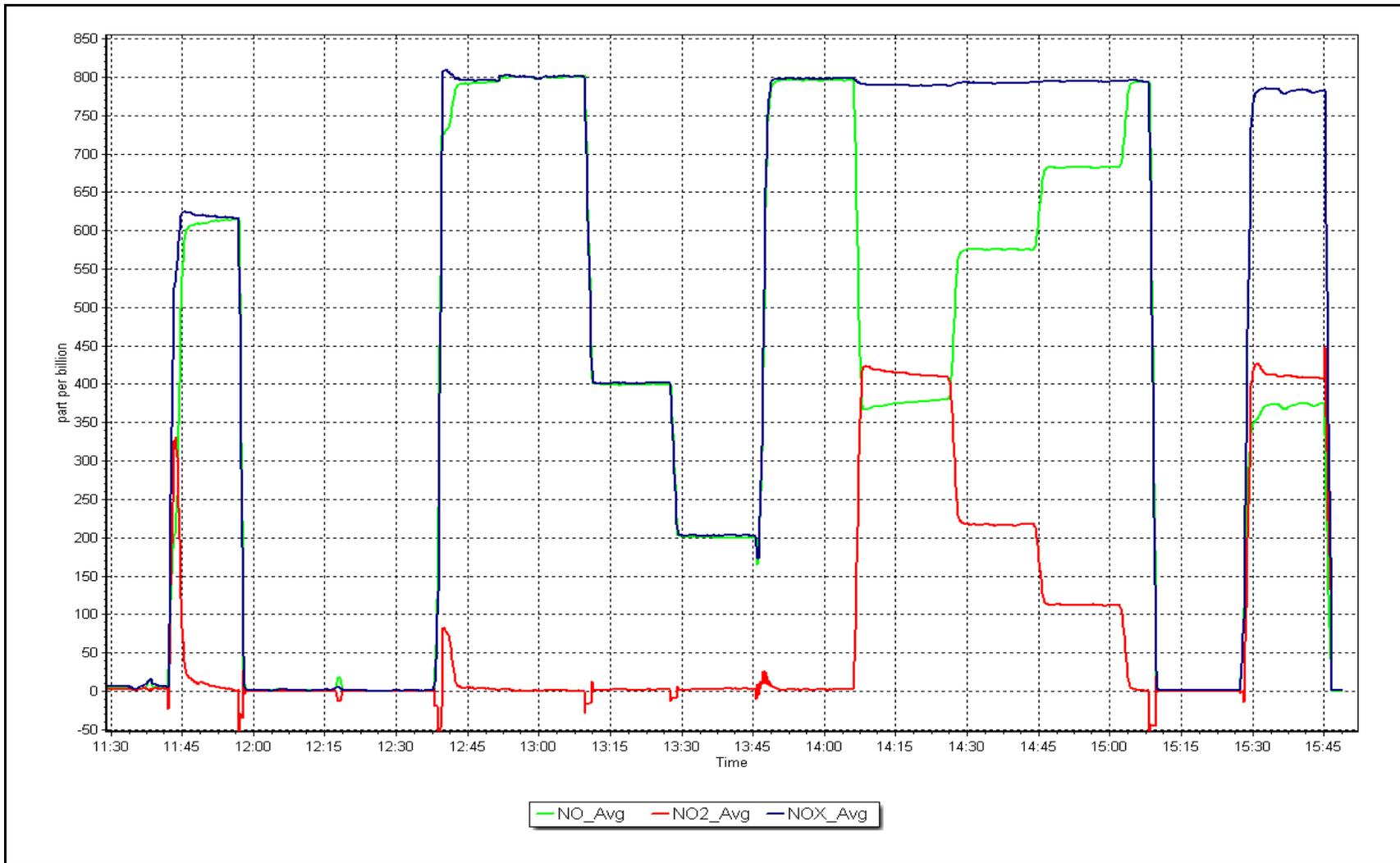
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.3	----	Correlation Coefficient	0.999997	<i>≥0.995</i>
800.6	799.4	1.0015	Slope	0.997606	<i>0.90 - 1.10</i>
400.2	399.8	1.0011	Intercept	0.791513	<i>+/-20</i>
199.5	200.7	0.9943			



NO_x Calibration Plot

Date: January 9, 2026

Location: Leismer





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS505 SAWBONES BAY JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Sawbones Bay	Station number: AMS 505
Calibration Date:	January 26, 2026	Last Cal Date: December 9, 2025
Start time (MST):	11:40	End time (MST): 14:29
Reason:	Routine	

Calibration Standards

Cal Gas Concentration:	50.05 ppm	Cal Gas Exp Date: April 9, 2033
Cal Gas Cylinder #:	EB0063977	
Removed Cal Gas Conc:	50.05 ppm	Rem Gas Exp Date:
Removed Gas Cyl #:	EB0063977	Diff between cyl:
Calibrator Model:	Teledyne API T700	Serial Number: 5112
Zero Air Gen Model:	Teledyne API T701	Serial Number: 690

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: 710321323
Analyzer Range:	0 - 1000 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.001591	1.001748	Backgd or Offset:	21.7	23.0
Calibration intercept:	-0.215425	-0.795524	Coeff or Slope:	1.099	1.117

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.8	----
As found High point	4920	79.8	798.8	789.5	1.013
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	788.7	Previous response	799.9	*% change	-1.4%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	-0.5	----
High point	4920	79.8	798.8	799.5	0.999
Mid point	4960	39.9	399.4	399.4	1.000
Low point	4980	20.0	200.2	199.3	1.005
As left zero	5000	0.0	0.0	-0.5	----
As left span	4920	79.8	798.8	800.7	0.998
Average Correction Factor:					1.001

Notes: Changed inlet filter after as founds. Adjusted zero and span.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

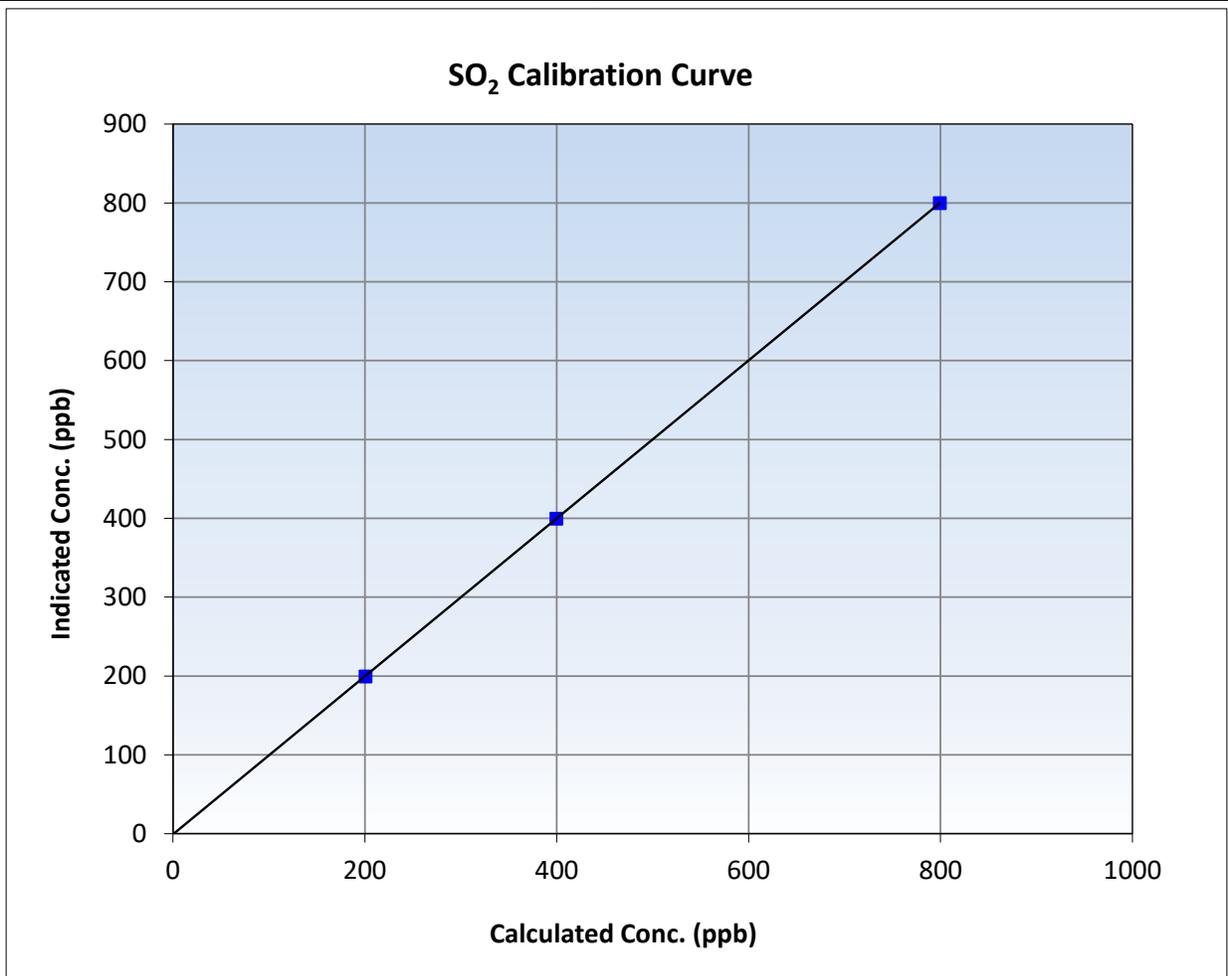
SO₂ Calibration Summary

Station Information

Calibration Date:	January 26, 2026	Previous Calibration:	December 9, 2025
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	11:40	End Time (MST):	14:29
Analyzer make:	Thermo 43i	Analyzer serial #:	710321323

Calibration Data

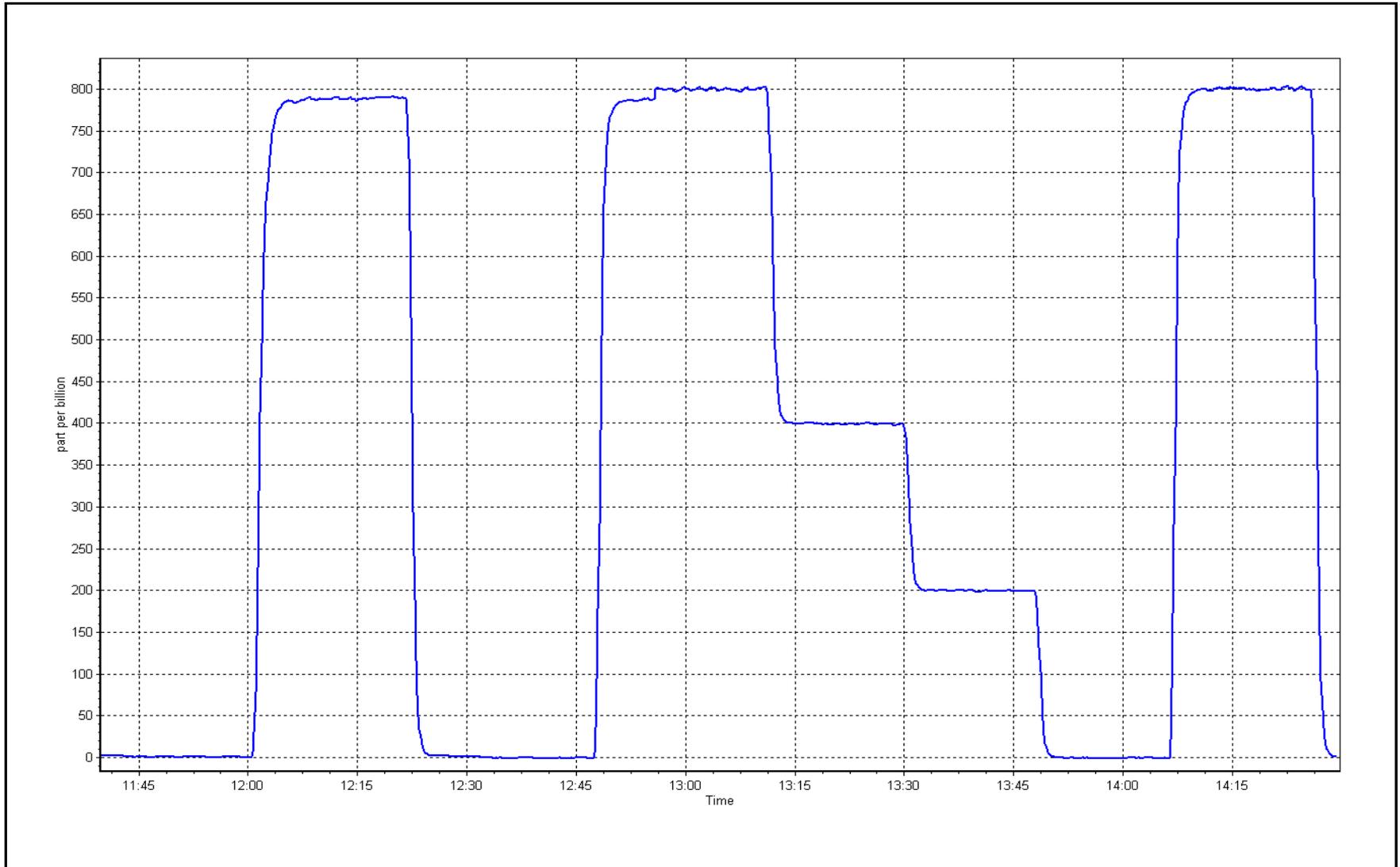
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	-0.5	----	Correlation Coefficient	0.999999	≥0.995
798.8	799.5	0.9992	Slope	1.001748	0.90 - 1.10
399.4	399.4	1.0000	Intercept	-0.795524	+/-30
200.2	199.3	1.0045			



SO2 Calibration Plot

Date: January 26, 2026

Location: Sawbones Bay





Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Sawbones Bay	Station number:	AMS 505
Calibration Date:	January 28, 2026	Last Cal Date:	December 9, 2025
Start time (MST):	10:10	End time (MST):	14:00
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.26	ppm	Cal Gas Exp Date:	March 19, 2027
Cal Gas Cylinder #:	DT0034141			
Removed Cal Gas Conc:	5.26	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T750		Serial Number:	282
ZAG Make/Model:	Teledyne API T751H		Serial Number:	321

Analyzer Information

Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12113311965
Converter make:	Global 150	Converter serial #:	2022-224
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.999171	0.997742	Backgd or Offset:	0.920	0.920
Calibration intercept:	0.300000	0.300000	Coeff or Slope:	1.105	1.105

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4924	76.0	80.0	80.7	0.992
As found Mid point	4962	38.0	40.0	40.6	0.987
As found Low point	4981	19.0	20.0	20.3	0.990
New cylinder response					
Baseline Corr As found:	80.6	Prev response:	80.19	*% change:	0.5%
Baseline Corr 2nd AF pt:	40.5	AF Slope:	1.008176	AF Intercept:	0.160000
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999992	<i>* = +/-5% change initiates investigation</i>	

H2S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4924	76.0	80.0	80.1	0.998
Mid point	4962	38.0	40.0	40.1	0.997
Low point	4981	19.0	20.0	20.3	0.985
As left zero	5000	0.0	0.0	0.4	----
As left span	4924	76.0	80.0	80.1	0.998
SO2 Scrubber Check	4922	77.8	778.0	-0.1	----
Date of last scrubber change:				Ave Corr Factor	0.993
Date of last converter efficiency test:					

Notes: Changed inlet filter after as founds. Scrubber test was done after calibrator zero. No adjustment made.

Calibration Performed By: Sean Bala



Wood Buffalo Environmental Association

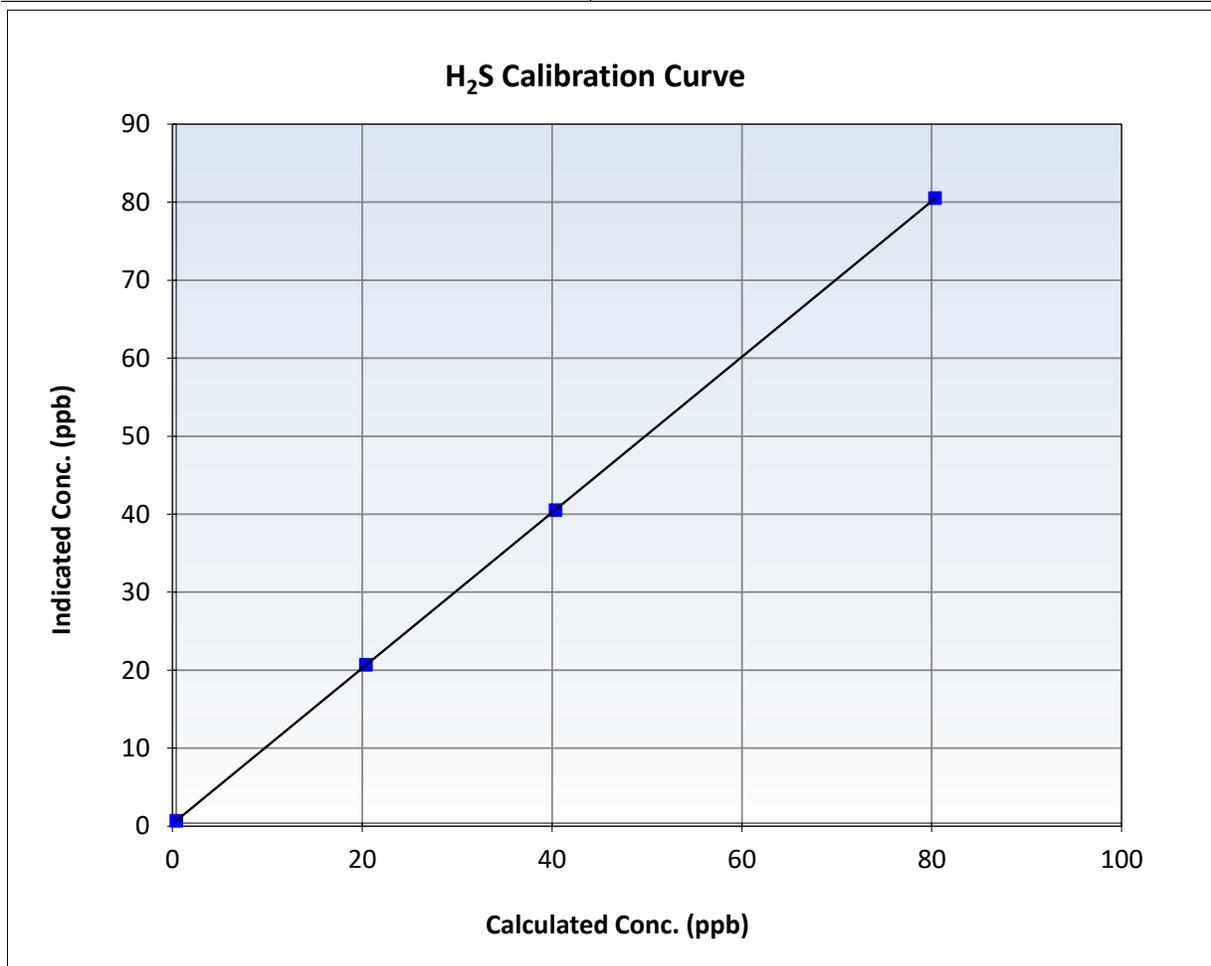
H2S Calibration Summary

Station Information

Calibration Date:	January 28, 2026	Previous Calibration:	December 9, 2025
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:10	End Time (MST):	14:00
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12113311965

Calibration Data

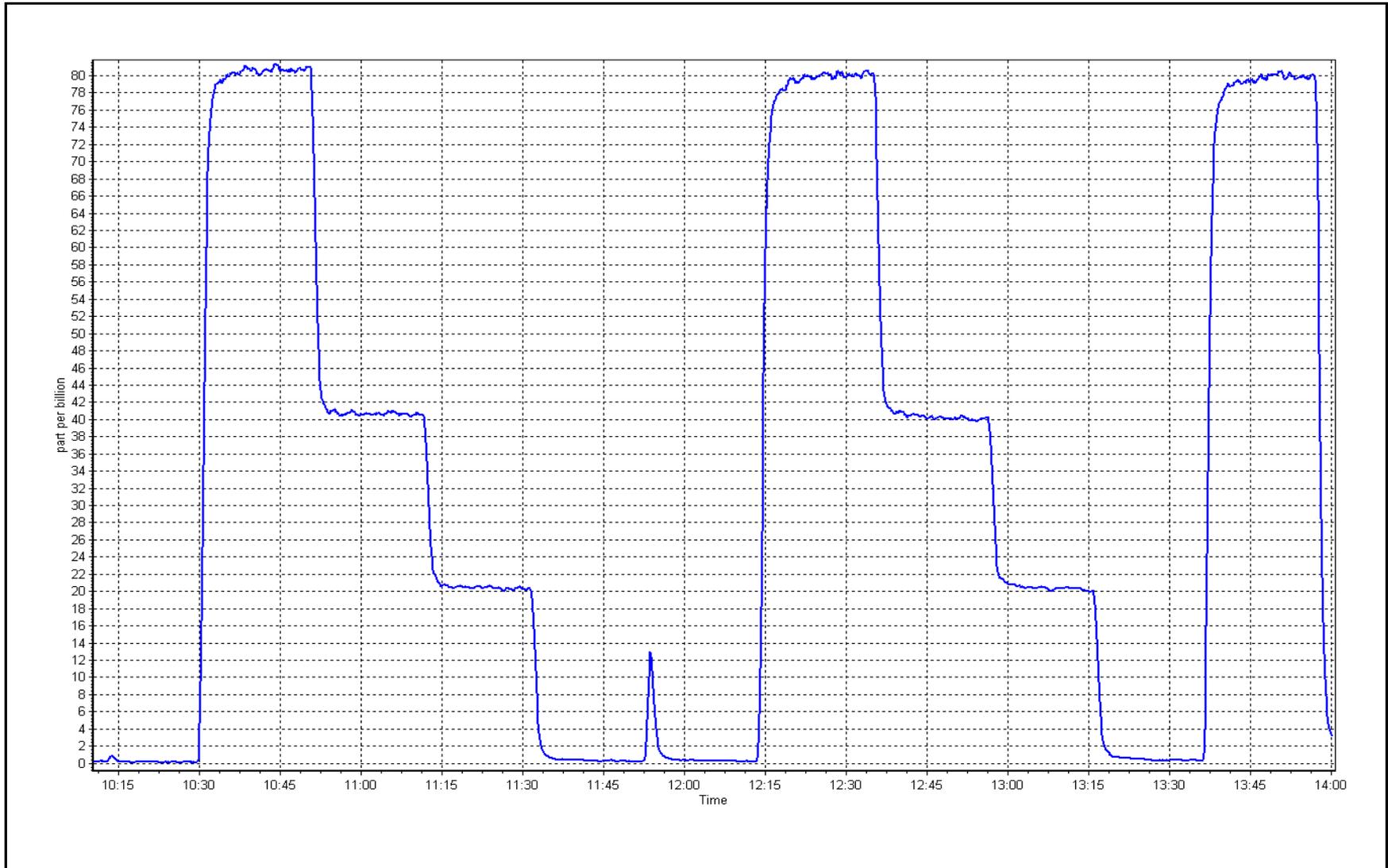
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.3	----	Correlation Coefficient	0.999997	≥ 0.995
80.0	80.1	0.9982	Slope	0.997742	$0.90 - 1.10$
40.0	40.1	0.9969	Intercept	0.300000	± 3
20.0	20.3	0.9846			



H2S Calibration Plot

Date: January 28, 2026

Location: Sawbones Bay





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Sawbones Bay
 Station number: AMS 505
 Calibration Date: January 27, 2026
 Last Cal Date: December 10, 2025
 Start time (MST): 10:26
 End time (MST): 14:34
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0009786
 NOX Cal Gas Conc: 60.10 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.10 ppm
 NOX gas Diff:
 Calibrator Model: API T700
 ZAG make/model: API T701H
 Cal Gas Expiry Date: January 5, 2032
 NO Cal Gas Conc: 60.00 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 60.00 ppm
 NO gas Diff:
 Serial Number: 5112
 Serial Number: 690

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.6	-0.5	-0.1	----	----
AF High point	4933	66.7	801.8	800.4	1.3	807.4	803.3	3.9	0.9923	0.9958
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 800.0 ppb	NO = 799.0 ppb	<i>* = > +/-5% change initiates investigation</i>				*Percent Change	NO _x = 1.0%		
Baseline Corr 1st pt	NO _x = 808.0 ppb	NO = 803.8 ppb	<u>As Found Statistics</u>				*Percent Change	NO = 0.6%		
Baseline Corr 2nd pt	NO _x = NA ppb	NO = NA ppb	As found	NO _x r ² :		Nx SI:	Nx Int:			
Baseline Corr 3rd pt	NO _x = NA ppb	NO = NA ppb	As found	NO r ² :		NO SI:	NO Int:			
			As found	NO ₂ r ² :		NO ₂ SI:	NO ₂ Int:			

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: API T200
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 4259

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	0.998280	1.001061
NO _x Cal Offset:	-0.389367	-0.389650
NO Cal Slope:	0.999803	1.002931
NO Cal Offset:	-1.290066	-1.410058
NO ₂ Cal Slope:	0.995965	0.995217
NO ₂ Cal Offset:	0.259781	-0.289619

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.951	0.945	NO bkgnd or offset:	0.9	0.9
NOX coeff or slope:	0.950	0.943	NOX bkgnd or offset:	1.4	1.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	3.7	3.7

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.1	----	----
High point	4933	66.7	801.8	800.4	1.3	802.0	801.9	-0.1	0.9997	0.9982
Mid point	4967	33.3	400.2	399.6	0.7	401.1	399.1	2.0	0.9979	1.0012
Low point	4983	16.7	200.7	200.4	0.3	199.9	198.0	1.9	1.0042	1.0122
As left zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.2	0.0	----	----
As left span	4933	66.7	801.8	412.4	389.4	794.5	412.4	382.1	1.0092	1.0000
Average Correction Factor									1.0006	1.0039

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	799.5	416.0	384.8	382.6	1.0058	99.4%
Mid GPT point	799.5	619.1	181.7	181.1	1.0035	99.7%
Low GPT point	799.5	710.1	90.7	89.4	1.0149	98.5%
Average Correction Factor					1.0081	99.2%

Notes:

Changed inlet filter after as founds. Adjusted span only.

Calibration Performed By:

Sean Bala



Wood Buffalo Environmental Association

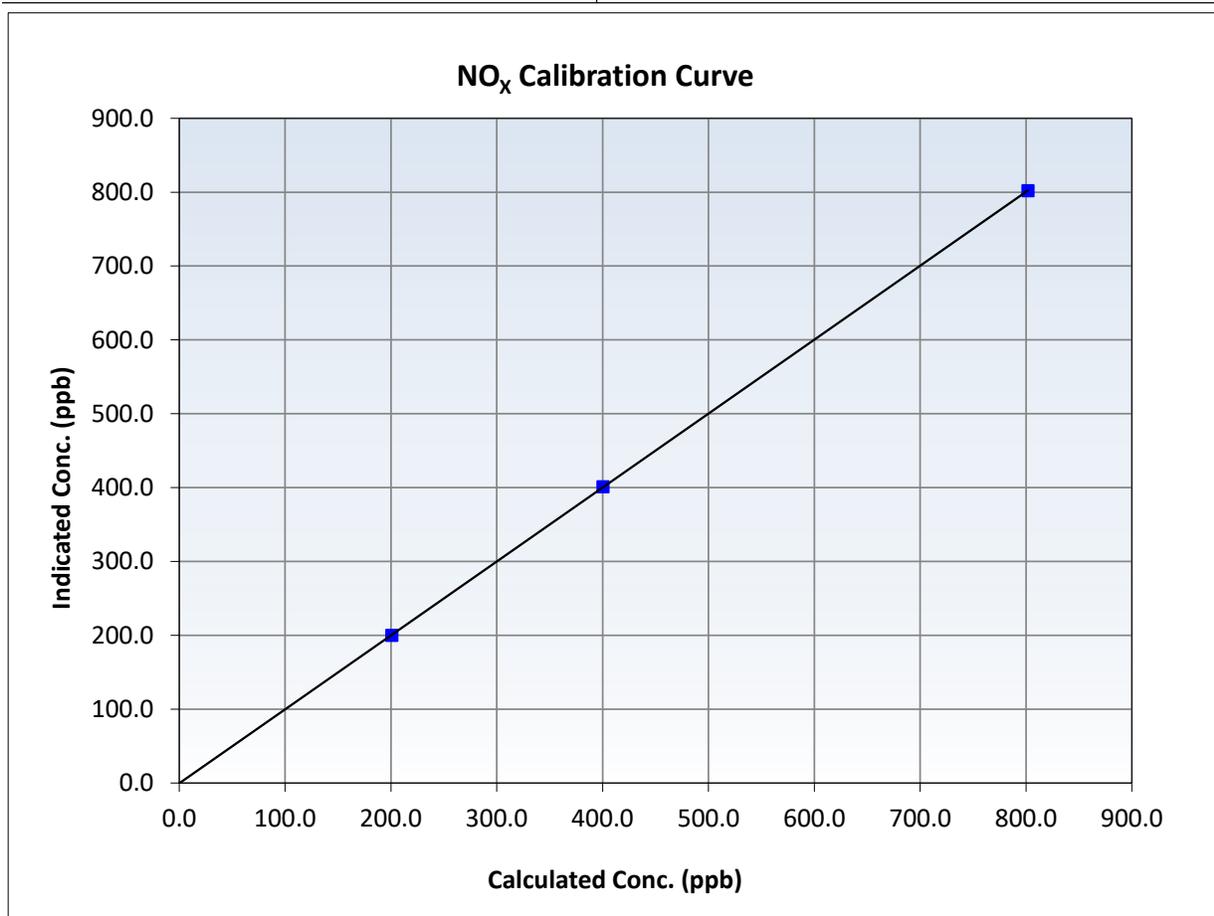
NO_x Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 10, 2025
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:26	End Time (MST):	14:34
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	-0.3	----	Correlation Coefficient	0.999997	≥0.995
801.8	802.0	0.9997	Slope	1.001061	0.90 - 1.10
400.2	401.1	0.9979	Intercept	-0.389650	+/-20
200.7	199.9	1.0042			





Wood Buffalo Environmental Association

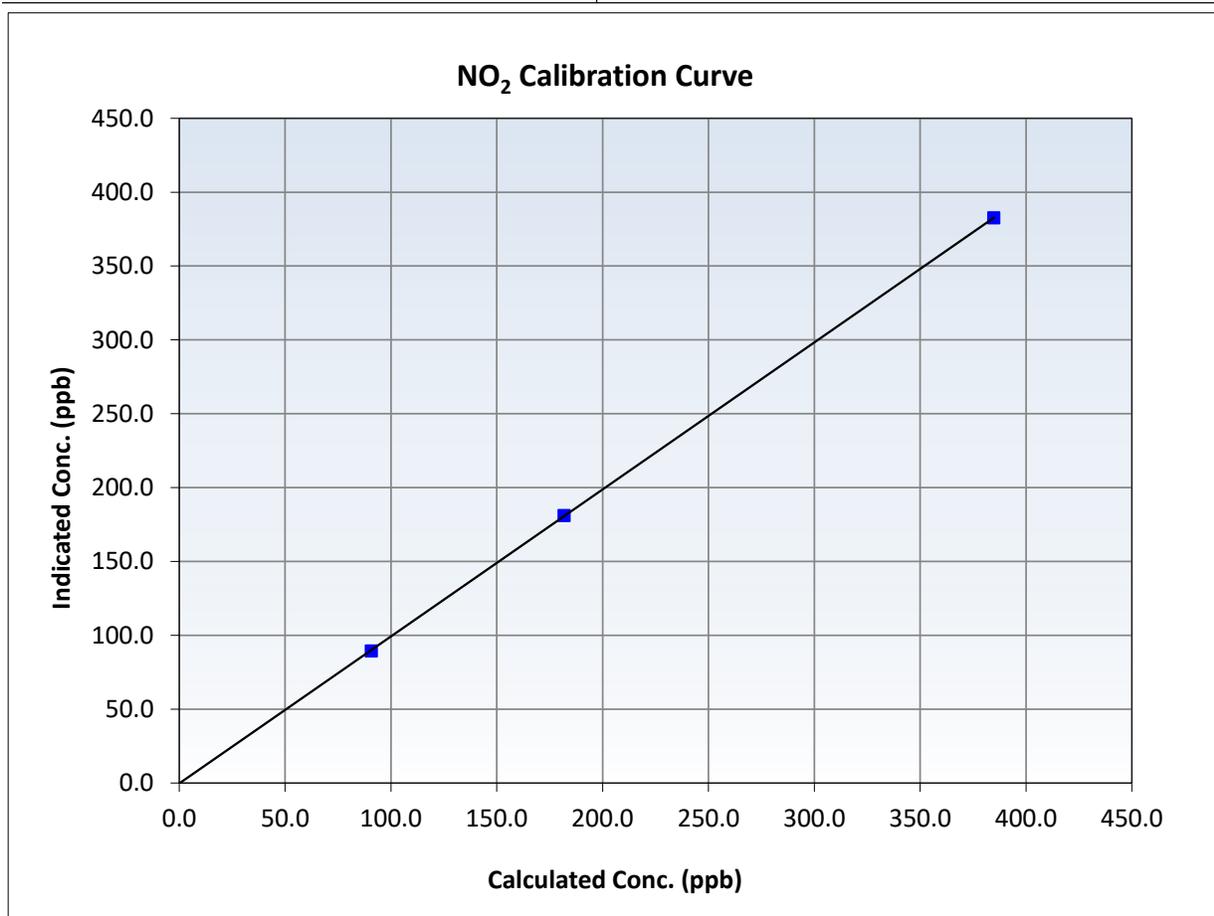
NO₂ Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 10, 2025
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:26	End Time (MST):	14:34
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999991	≥0.995
384.8	382.6	1.0058	Slope	0.995217	0.90 - 1.10
181.7	181.1	1.0035	Intercept	-0.289619	+/-20
90.7	89.4	1.0149			





Wood Buffalo Environmental Association

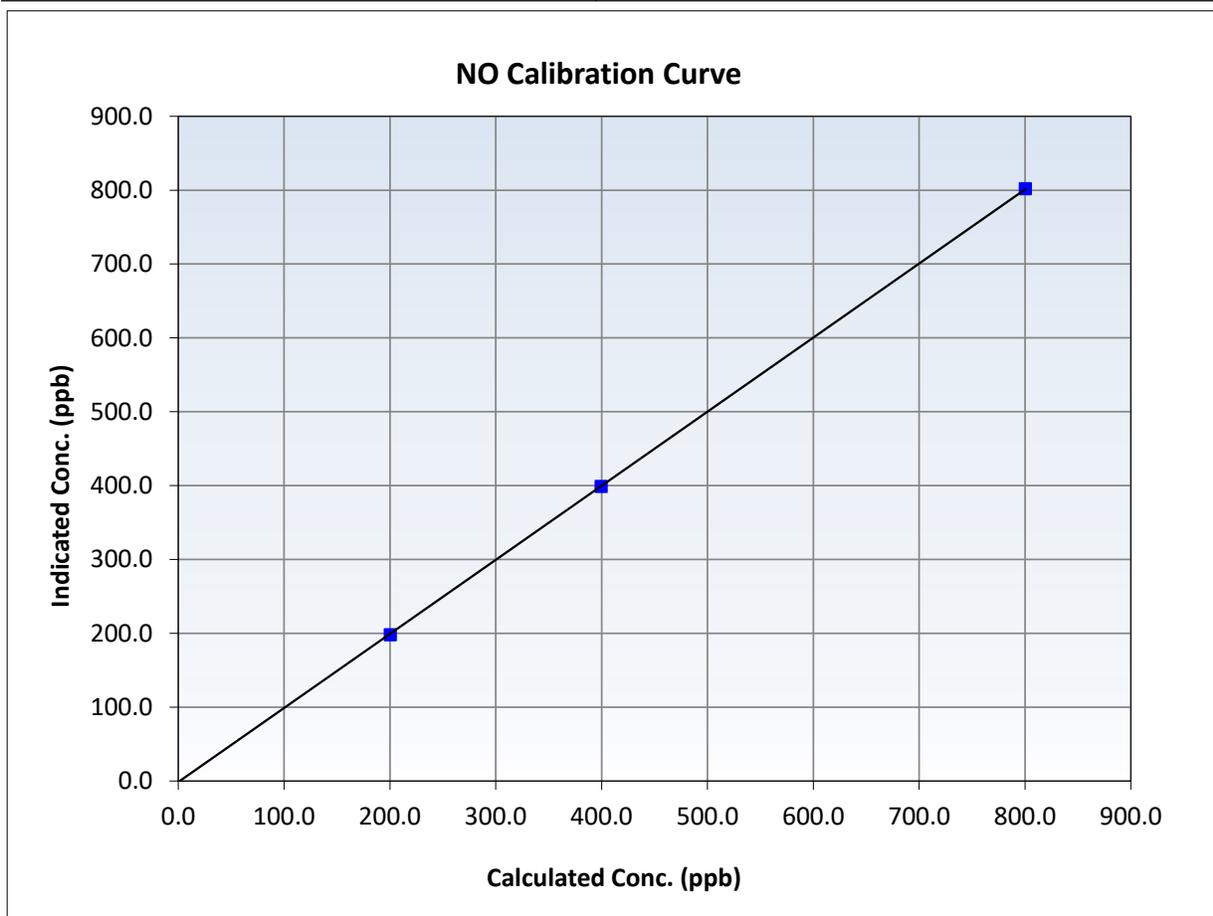
NO Calibration Summary

Station Information

Calibration Date:	January 27, 2026	Previous Calibration:	December 10, 2025
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:26	End Time (MST):	14:34
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

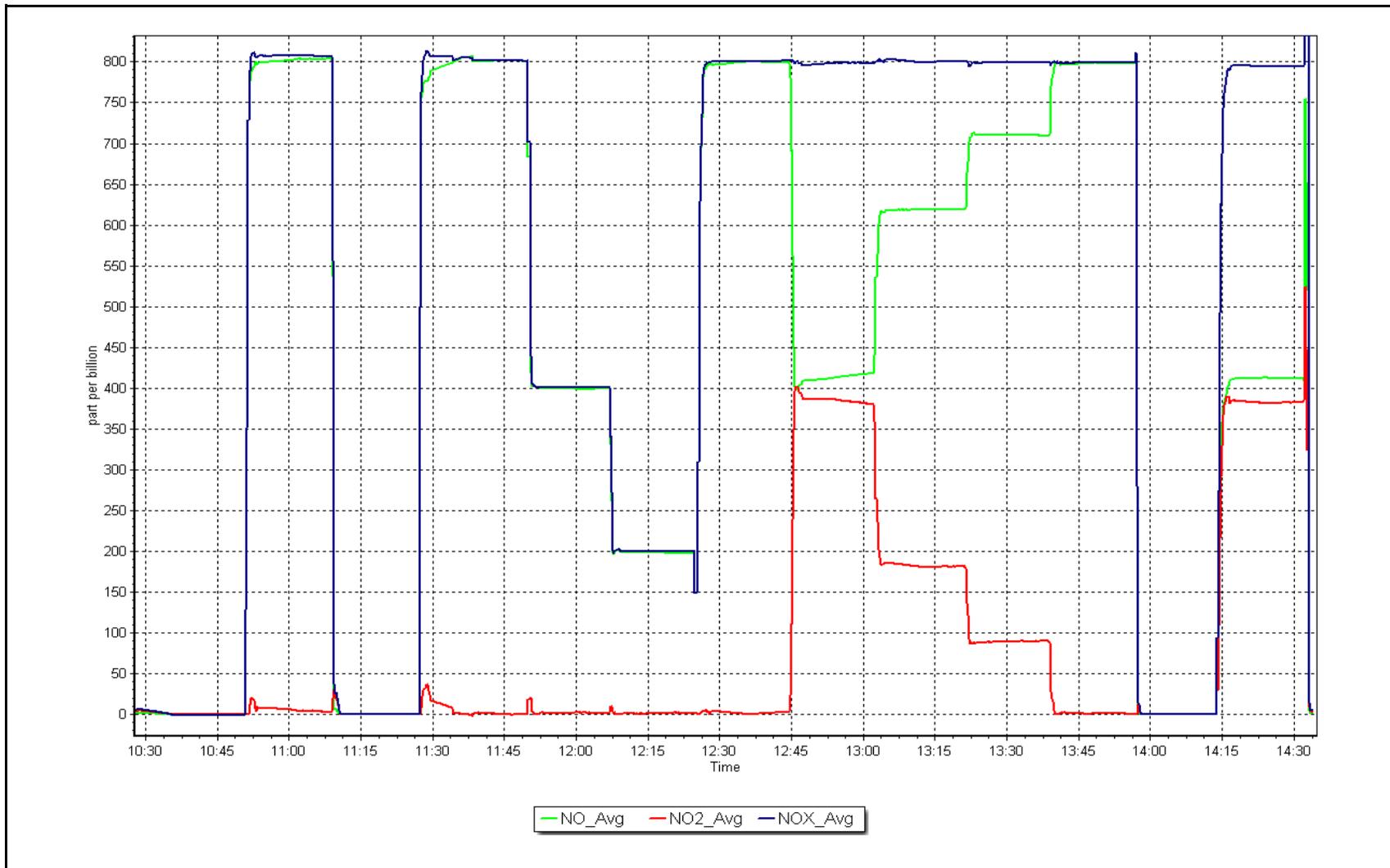
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999987	<i>≥0.995</i>
800.4	801.9	0.9982	Slope	1.002931	<i>0.90 - 1.10</i>
399.6	399.1	1.0012	Intercept	-1.410058	<i>+/-20</i>
200.4	198.0	1.0122			



NO_x Calibration Plot

Date: January 27, 2026

Location: Sawbones Bay





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS507 KIRBY SOUTH JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Kirby South	Station number:	AMS 507
Calibration Date:	January 21, 2026	Last Cal Date:	December 5, 2025
Start time (MST):	12:03	End time (MST):	15:30
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.74	ppm	Cal Gas Exp Date:	October 9, 2023
Cal Gas Cylinder #:	<u>CC255918</u>			
Removed Cal Gas Conc:	50.74	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	2445
Zero Air Gen Model:	Teledyne API T701H		Serial Number:	880

Analyzer Information

Analyzer make:	Thermo 43iQ	Serial Number:	1182340007
Analyzer Range:	0 - 1000 ppb		

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.999962	0.998047	Backgd or Offset:	30.1	30.6
Calibration intercept:	0.007945	0.327956	Coeff or Slope:	1.118	1.124

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.4	----
As found High point	4921	78.8	799.7	795.0	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	794.6	Previous response	799.7	*% change	-0.6%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		<i>* = > +/-5% change initiates investigation</i>	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4921	78.8	799.7	798.5	1.001
Mid point	4961	39.4	399.8	398.9	1.002
Low point	4980	19.7	199.9	200.6	0.997
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	78.8	799.7	800.0	1.000
Average Correction Factor:					1.000

Notes: Changed sample inlet filter after as founds. Adjusted zero and span.

Calibration Performed By: Braiden Boutilier



Wood Buffalo Environmental Association

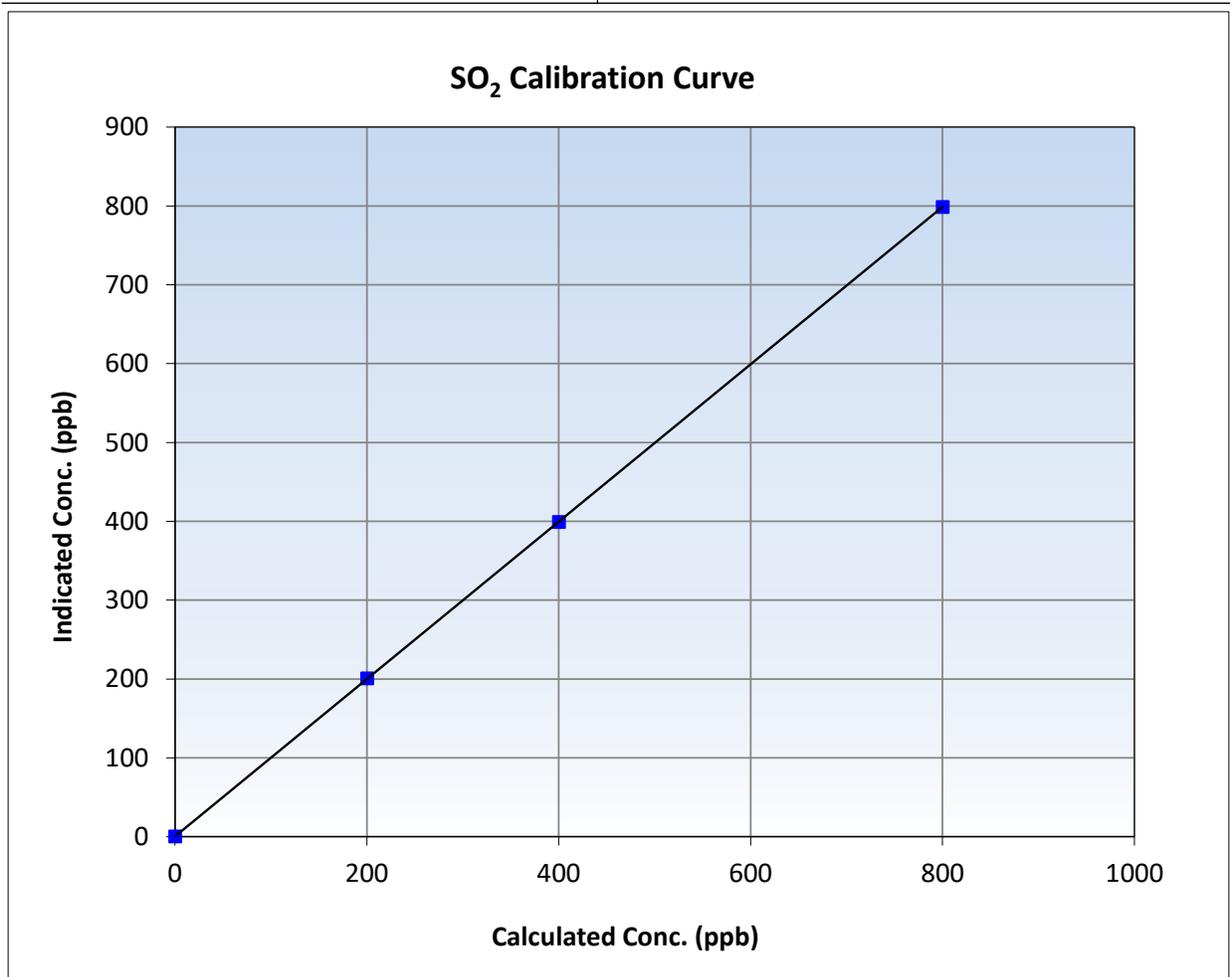
SO₂ Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 5, 2025
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	12:03	End Time (MST):	15:30
Analyzer make:	Thermo 43iQ	Analyzer serial #:	1182340007

Calibration Data

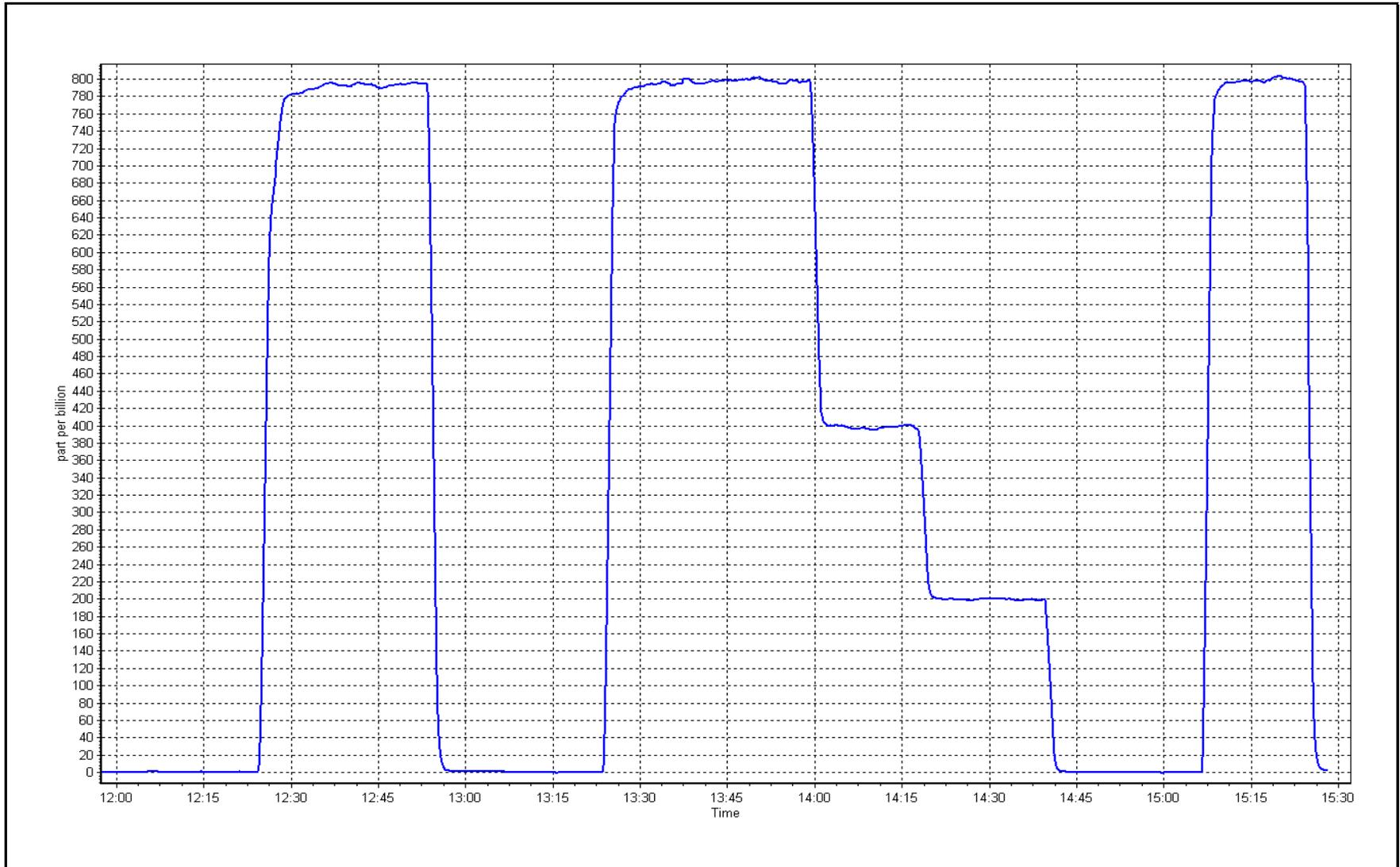
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.0	----	Correlation Coefficient	0.999998	≥0.995
799.7	798.5	1.0015	Slope	0.998047	0.90 - 1.10
399.8	398.9	1.0023	Intercept	0.327956	+/-30
199.9	200.6	0.9966			



SO2 Calibration Plot

Date: January 21, 2026

Location: Kirby South





Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Kirby South	Station number:	AMS 507
Calibration Date:	January 8, 2026	Last Cal Date:	December 4, 2025
Start time (MST):	12:35	End time (MST):	17:55
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.05 ppm	Cal Gas Exp Date:	November 15, 2026
Cal Gas Cylinder #:	<u>DT0019762</u>		
Removed Cal Gas Conc:	5.05 ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	n/a	Diff between cyl:	
Calibrator Make/Model:	Teledyne API T750	Serial Number:	281
ZAG Make/Model:	Teledyne API T751H	Serial Number:	529

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1150840012
Converter make:	Global	Converter serial #:	2022-197
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.009244	1.000957	Backgd or Offset:	1.73	1.70
Calibration intercept:	0.080000	-0.080000	Coeff or Slope:	1.072	1.072

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4921	79.2	80.0	80.5	0.994
As found Mid point	4960	39.6	40.0	40.3	0.992
As found Low point	4980	19.8	20.0	19.8	1.010
New cylinder response					
Baseline Corr As found:	80.5	Prev response:	80.81	*% change:	-0.4%
Baseline Corr 2nd AF pt:	40.3	AF Slope:	1.007815	AF Intercept:	-0.120000
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999977	<i>* = > +/-5% change initiates investigation</i>	

H2S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4921	79.2	80.0	80.0	1.000
Mid point	4960	39.6	40.0	40.0	1.000
Low point	4980	19.8	20.0	19.8	1.010
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	79.2	80.0	81.4	0.983
SO2 Scrubber Check	4919	80.0	800.2	0.1	----
Date of last scrubber change:	July 25, 2023			Ave Corr Factor	1.003
Date of last converter efficiency test:	September 18, 2025			102.4% efficiency	

Notes: Changed sample inlet filter after as founds. No adjustments made.

Calibration Performed By: Braiden Boutillier



Wood Buffalo Environmental Association

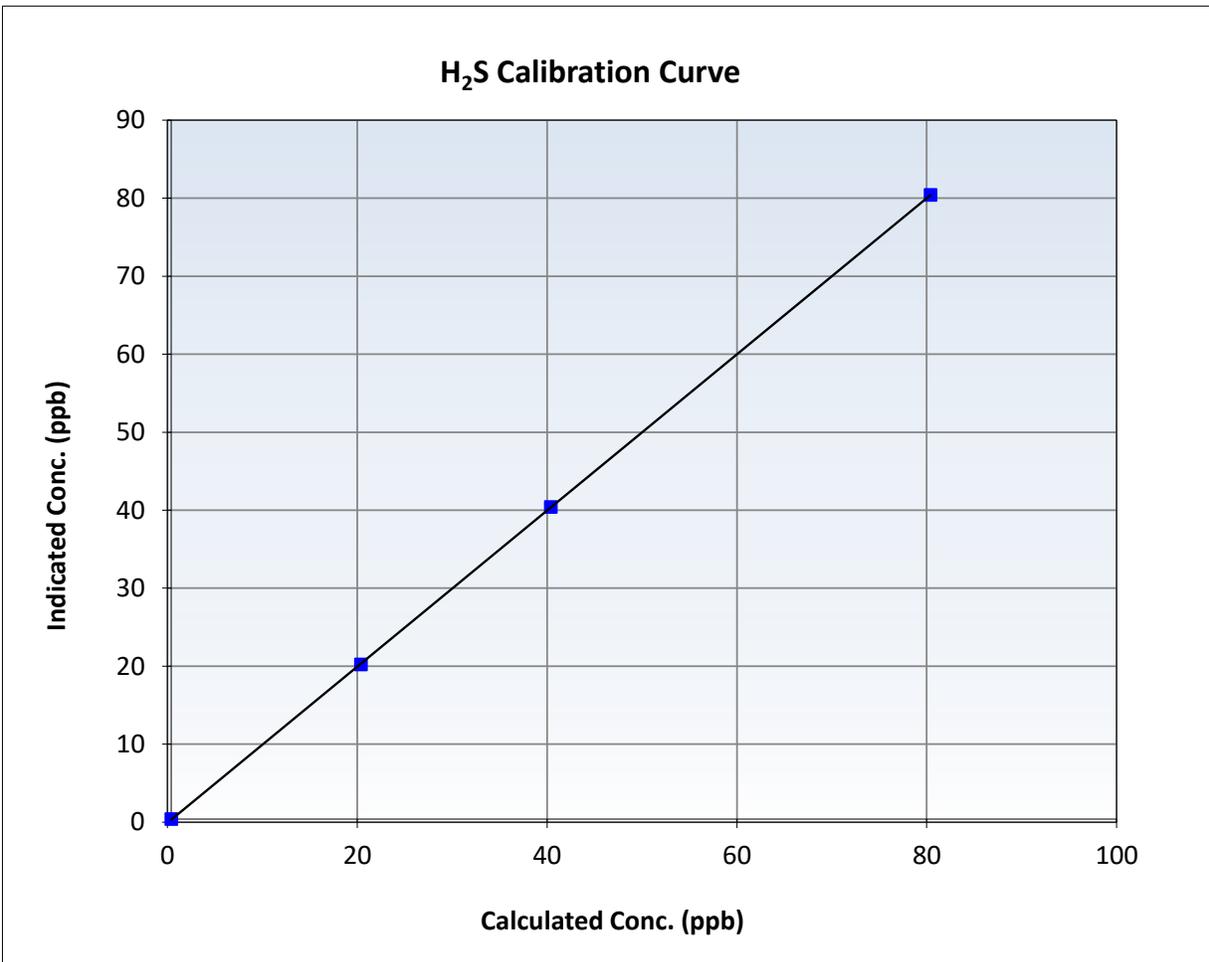
H2S Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 4, 2025
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	12:35	End Time (MST):	17:55
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1150840012

Calibration Data

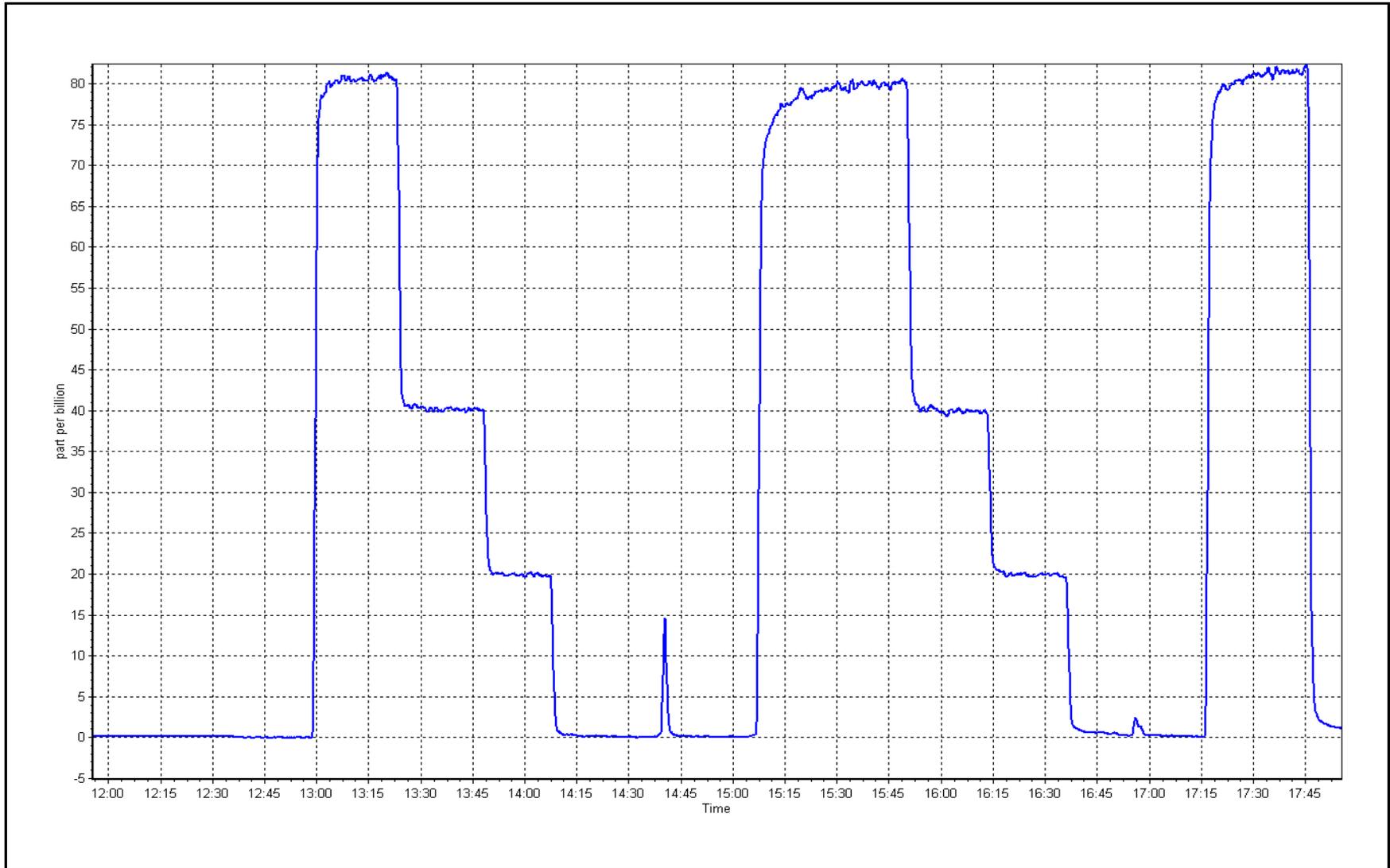
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.0	----	Correlation Coefficient	0.999992	≥ 0.995
80.0	80.0	0.9999	Slope	1.000957	$0.90 - 1.10$
40.0	40.0	0.9999	Intercept	-0.080000	± 3
20.0	19.8	1.0100			



H2S Calibration Plot

Date: January 8, 2026

Location: Kirby South





Wood Buffalo Environmental Association

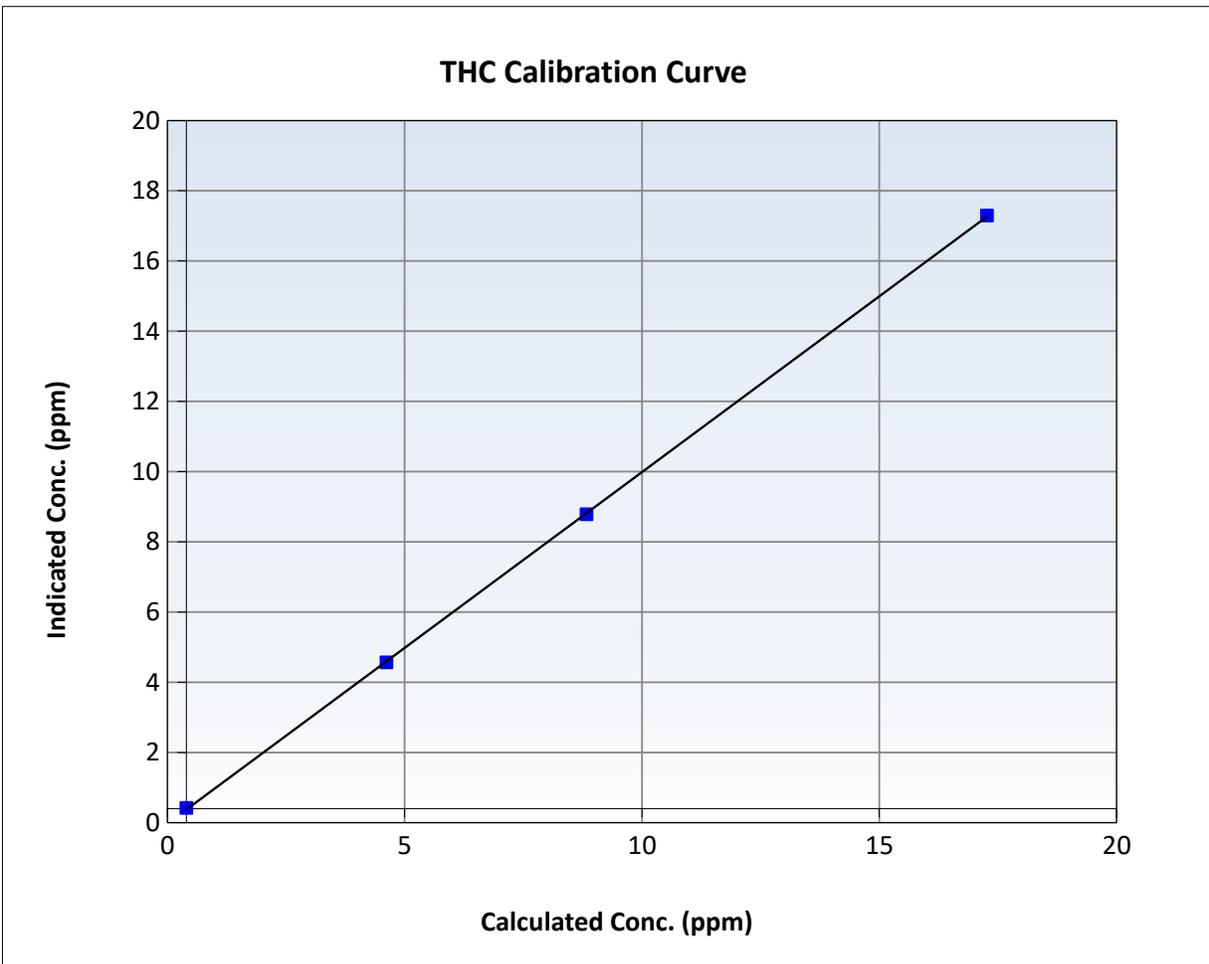
THC Calibration Summary

Station Information

Calibration Date:	January 21, 2026	Previous Calibration:	December 5, 2025
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	12:03	End Time (MST):	15:30
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1182340005

Calibration Data

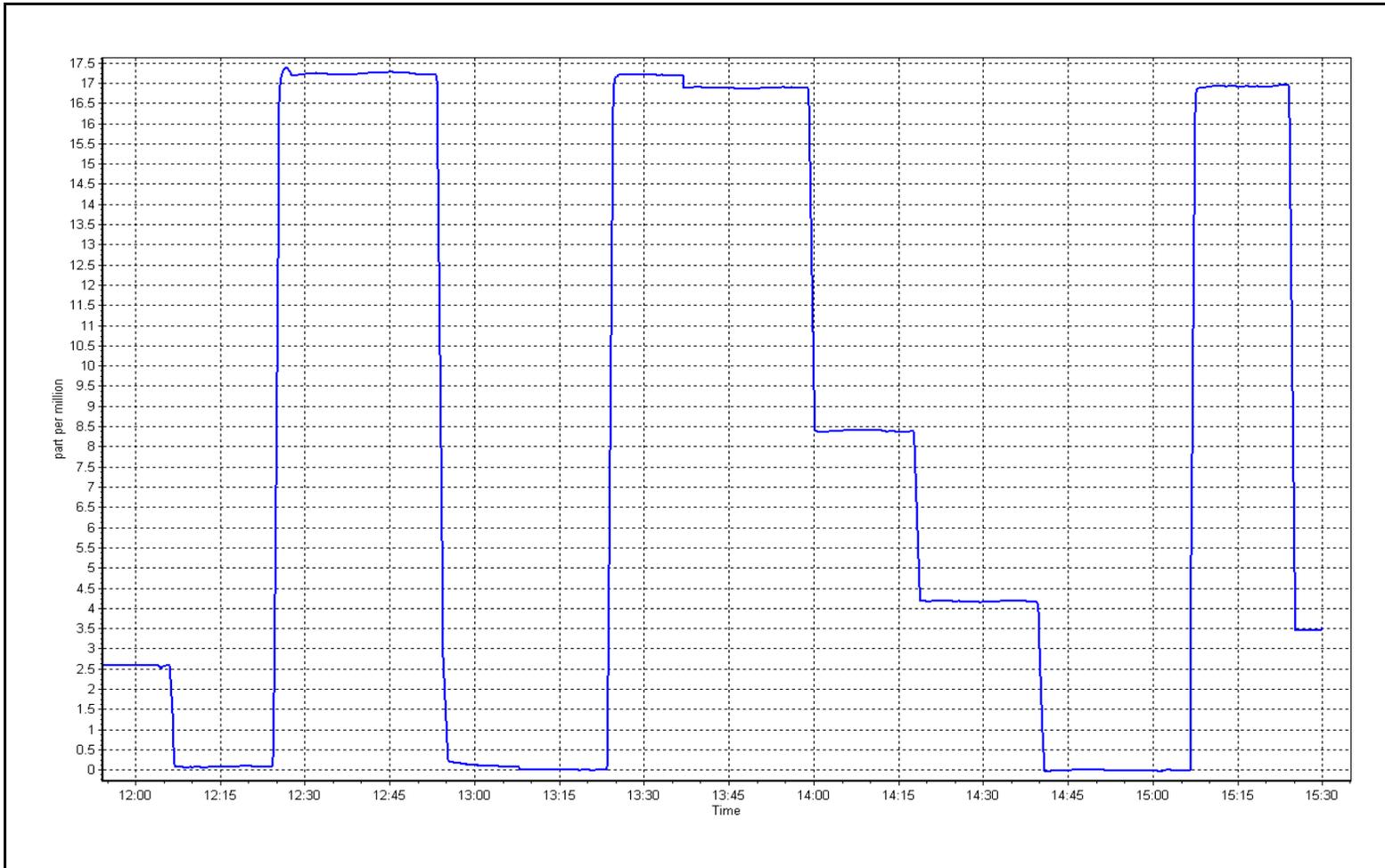
Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.02	----	Correlation Coefficient	0.999969	≥0.995
16.87	16.89	0.9986	Slope	1.001387	0.90 - 1.10
8.43	8.38	1.0062	Intercept	-0.026233	+/-1.5
4.22	4.17	1.0124			



THC Calibration Plot

Date: January 21, 2026

Location: Kirby South





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Kirby South
 Station number: AMS 507
 Calibration Date: January 8, 2026
 Last Cal Date: December 4, 2025
 Start time (MST): 12:35
 End time (MST): 18:31
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: DT0019572
 NOX Cal Gas Conc: 60.00 ppm
 Removed Cylinder #: NA
 Removed Gas NOX Conc: 60.00 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T700
 ZAG make/model: Teledyne API T701H
 Cal Gas Expiry Date: January 5, 2032
 NO Cal Gas Conc: 59.90 ppm
 Removed Gas Exp Date: NA
 Removed Gas NO Conc: 59.90 ppm
 NO gas Diff:
 Serial Number: 2445
 Serial Number: 880

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	0.4	0.3	0.1	----	----
AF High point	4933	66.8	801.6	800.3	1.3	810.0	805.0	5.3	0.9902	0.9945
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 802.4 ppb		NO = 798.6 ppb			<i>* = > +/-5% change initiates investigation</i>		*Percent Change	NO _x = 0.9%	
Baseline Corr 1st pt	NO _x = 809.6 ppb		NO = 804.7 ppb			<u>As Found Statistics</u>		*Percent Change	NO = 0.8%	
Baseline Corr 2nd pt	NO _x = NA ppb		NO = NA ppb			As found NO _x r ² :		Nx SI:	Nx Int:	
Baseline Corr 3rd pt	NO _x = NA ppb		NO = NA ppb			As found NO r ² :		NO SI:	NO Int:	
						As found NO ₂ r ² :		NO ₂ SI:	NO ₂ Int:	

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 1173480006

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.001912	0.996537
NO _x Cal Offset:	-0.753594	-0.293626
NO Cal Slope:	0.999515	1.002828
NO Cal Offset:	-1.353631	-1.813620
NO ₂ Cal Slope:	0.976101	0.966911
NO ₂ Cal Offset:	1.710979	0.221977

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	0.727	0.724	NO bkgnd or offset:	7.5	7.5
NOX coeff or slope:	0.996	0.991	NOX bkgnd or offset:	7.6	7.5
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	141.4	140.8

Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO2 concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO2 concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.4	0.3	0.1	----	----
High point	4933	66.8	801.6	800.3	1.3	799.1	802.0	-2.8	1.0032	0.9979
Mid point	4967	33.4	400.8	400.1	0.7	398.2	397.8	0.4	1.0065	1.0059
Low point	4983	16.7	200.4	200.1	0.3	199.1	197.1	2.0	1.0065	1.0150
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.3	0.0	----	----
As left span	4933	66.8	801.6	403.4	398.2	794.0	403.4	390.6	1.0096	1.0000
Average Correction Factor									1.0054	1.0063

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	0.1	----	----
High GPT point	797.7	410.6	388.4	375.7	1.0339	96.7%
Mid GPT point	797.7	629.4	169.6	164.5	1.0312	97.0%
Low GPT point	797.7	713.5	85.5	82.9	1.0318	96.9%
Average Correction Factor					1.0323	96.9%

Notes: Changed sample inlet filter after as founds. Adjusted span.

Calibration Performed By: Braiden Boutilier



Wood Buffalo Environmental Association

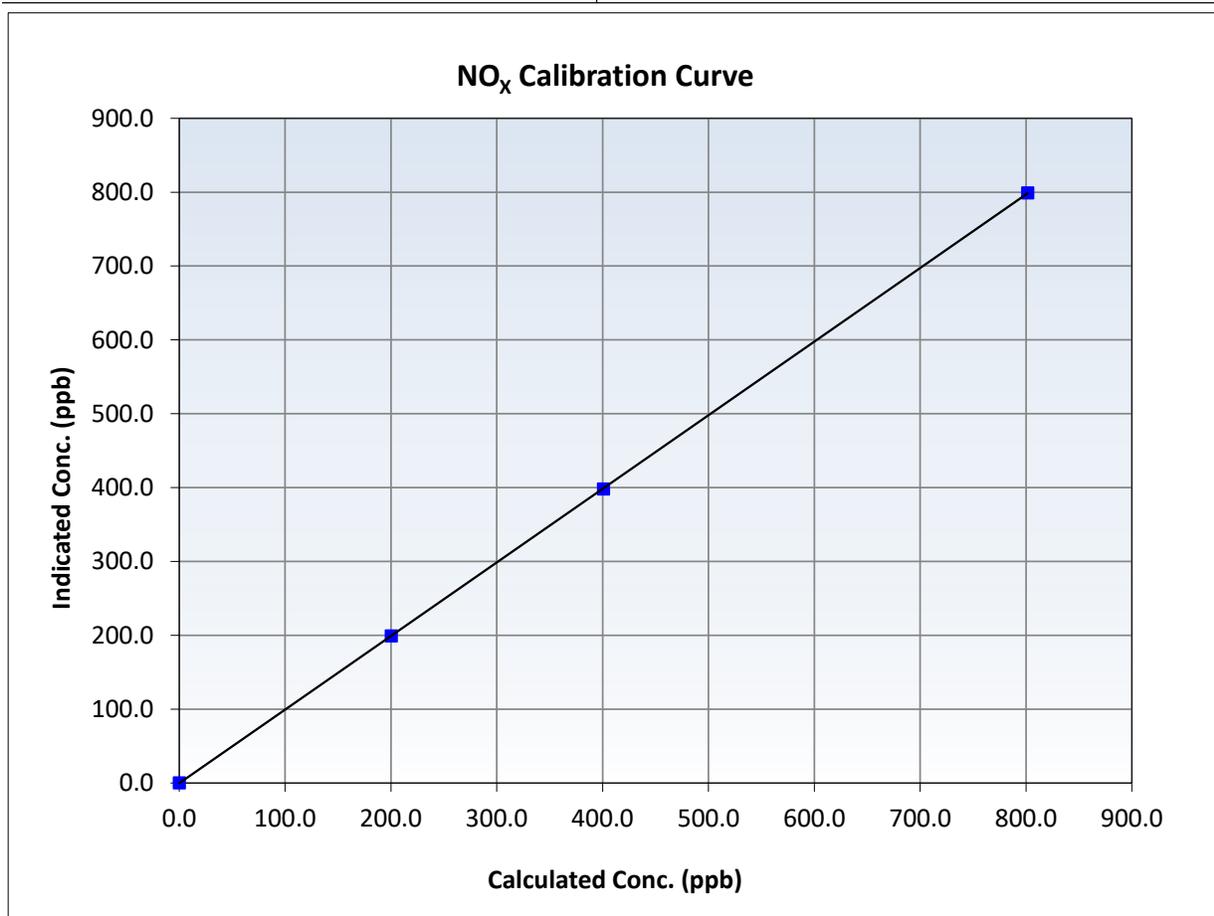
NO_x Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 4, 2025
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	12:35	End Time (MST):	18:31
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.4	----	Correlation Coefficient	0.999995	<i>≥0.995</i>
801.6	799.1	1.0032	Slope	0.996537	<i>0.90 - 1.10</i>
400.8	398.2	1.0065	Intercept	-0.293626	<i>+/-20</i>
200.4	199.1	1.0065			





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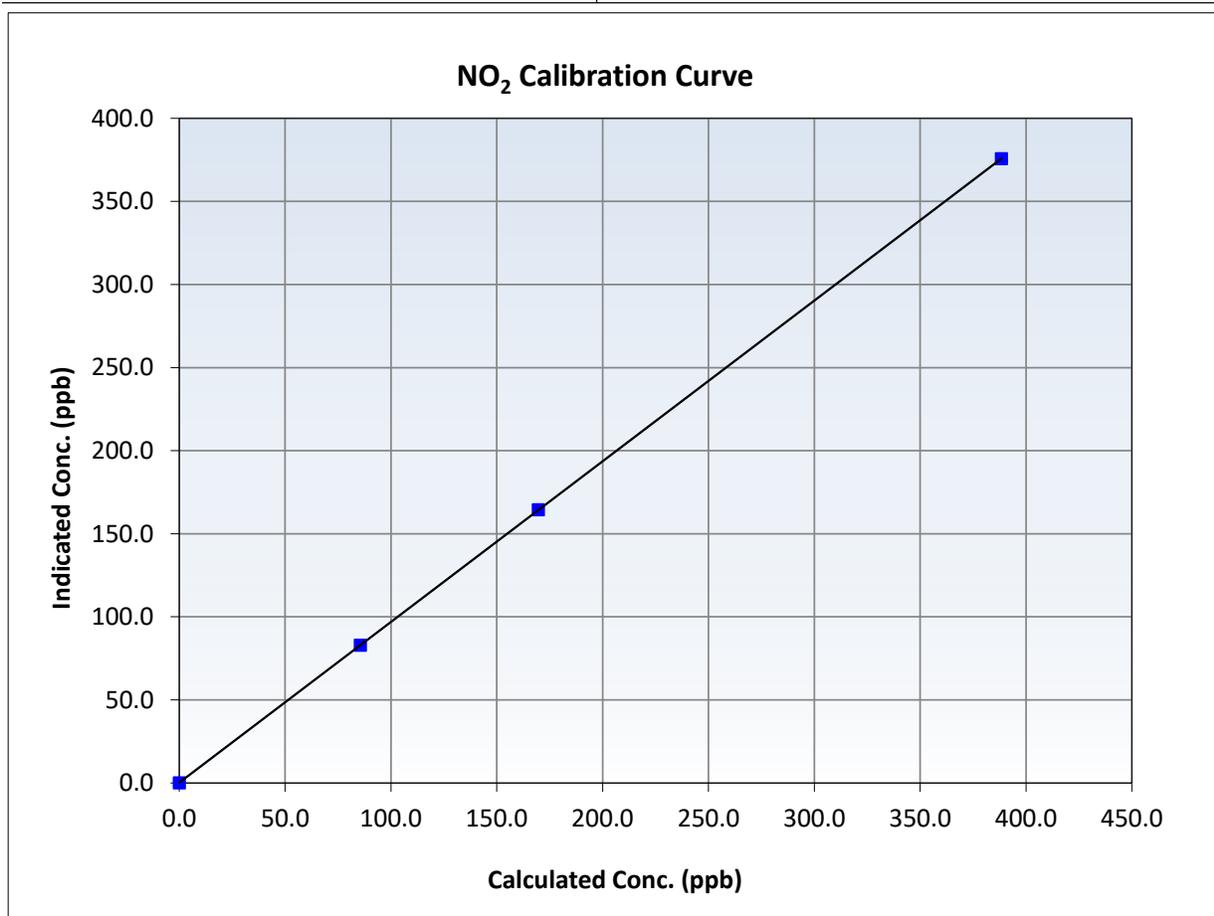
NO₂ Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 4, 2025
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	12:35	End Time (MST):	18:31
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999999	≥0.995
388.4	375.7	1.0339	Slope	0.966911	0.90 - 1.10
169.6	164.5	1.0312	Intercept	0.221977	+/-20
85.5	82.9	1.0318			





Wood Buffalo Environmental Association

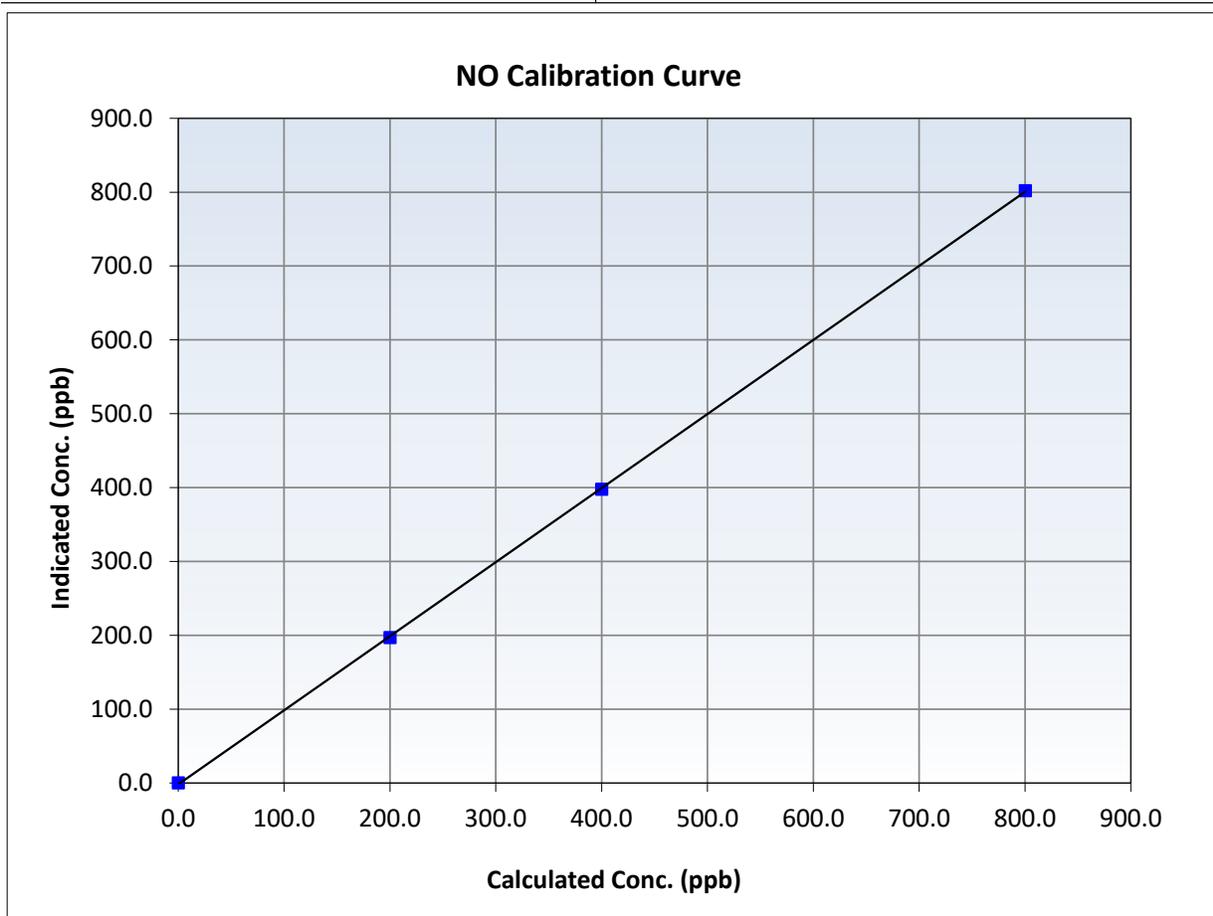
NO Calibration Summary

Station Information

Calibration Date:	January 8, 2026	Previous Calibration:	December 4, 2025
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	12:35	End Time (MST):	18:31
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

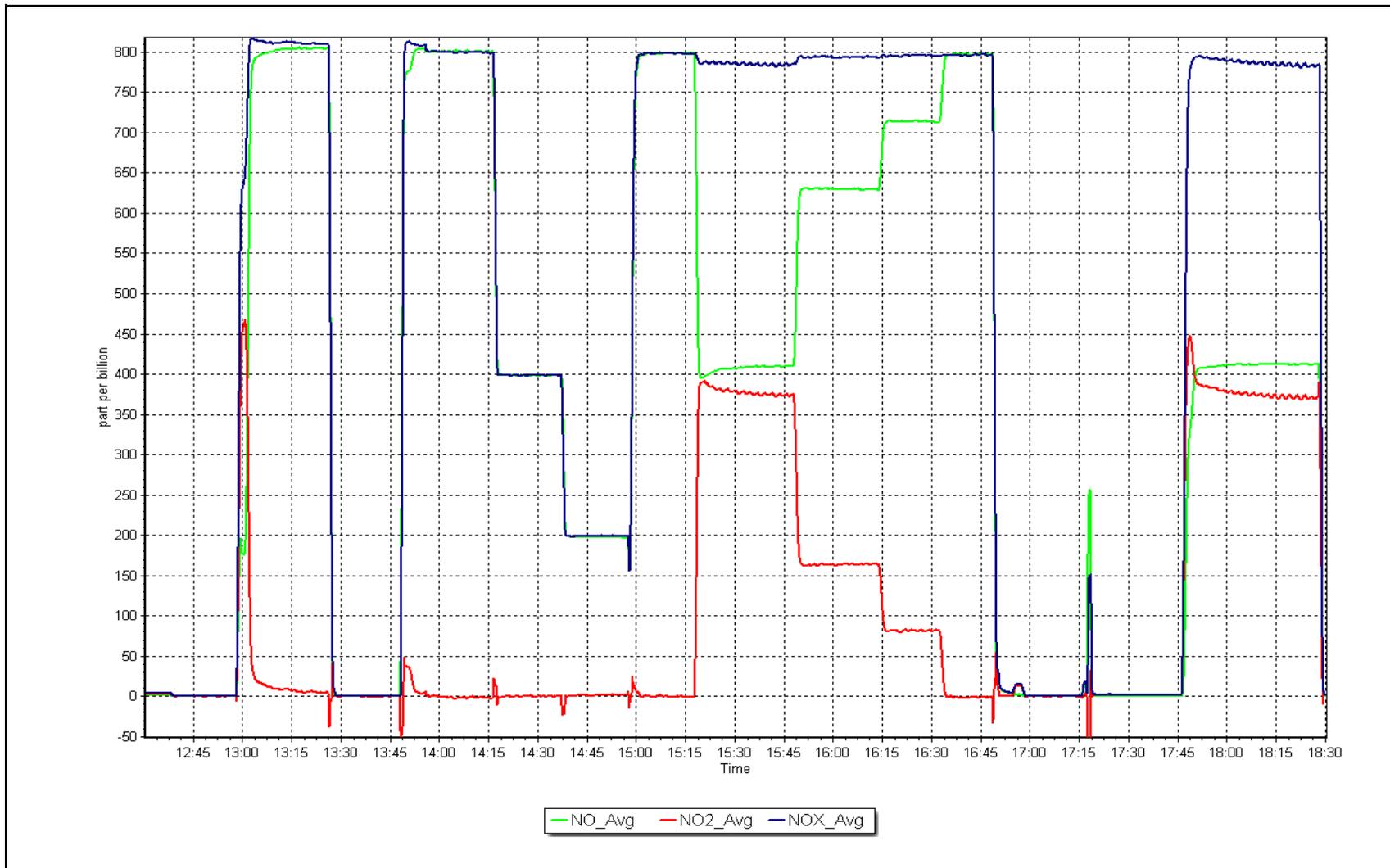
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.3	----	Correlation Coefficient	0.999967	<i>≥0.995</i>
800.3	802.0	0.9979	Slope	1.002828	<i>0.90 - 1.10</i>
400.1	397.8	1.0059	Intercept	-1.813620	<i>+/-20</i>
200.1	197.1	1.0150			



NO_x Calibration Plot

Date: January 8, 2026

Location: Kirby South





WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS511 BLACKGOLD JANUARY 2026

Operations, Data Collection,
QA/QC, Data Validation and Reporting by:
Wood Buffalo Environmental Association
Fort McMurray, Alberta

February 27, 2026



Wood Buffalo Environmental Association

SO₂ Calibration Report

Station Information

Station Name:	Blackgold	Station number:	AMS 511
Calibration Date:	January 13, 2026	Last Cal Date:	December 9, 2025
Start time (MST):	12:00	End time (MST):	14:45
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	49.37	ppm	Cal Gas Exp Date: January 5, 2029
Cal Gas Cylinder #:	CC303094		
Removed Cal Gas Conc:	49.37	ppm	Rem Gas Exp Date:
Removed Gas Cyl #:	N/A		Diff between cyl:
Calibrator Model:	Teledyne API T700		Serial Number: 2659
Zero Air Gen Model:	Teledyne API 701		Serial Number: 953

Analyzer Information

Analyzer make:	Thermo 43i	Serial Number: 1173410001
Analyzer Range:	0 - 1000 ppb	

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	0.998985	1.004301	Backgd or Offset:	15.4	15.2
Calibration intercept:	-0.760073	-1.520673	Coeff or Slope:	1.182	1.167

SO₂ As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.1	----
As found High point	4919	81.0	799.8	808.5	0.989
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	808.4	Previous response	798.2	*% change	1.3%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO₂ Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4919	81.0	799.8	802.8	0.996
Mid point	4959	40.5	399.9	398.8	1.003
Low point	4980	20.3	200.4	198.1	1.012
As left zero	5000	0.0	0.0	0.3	----
As left span	4919	81.0	799.8	803.0	0.996
Average Correction Factor:					1.004

Notes: Sample inlet filter changed after as founds. Span adjustment performed.

Calibration Performed By: Kelly Baragar



Wood Buffalo Environmental Association

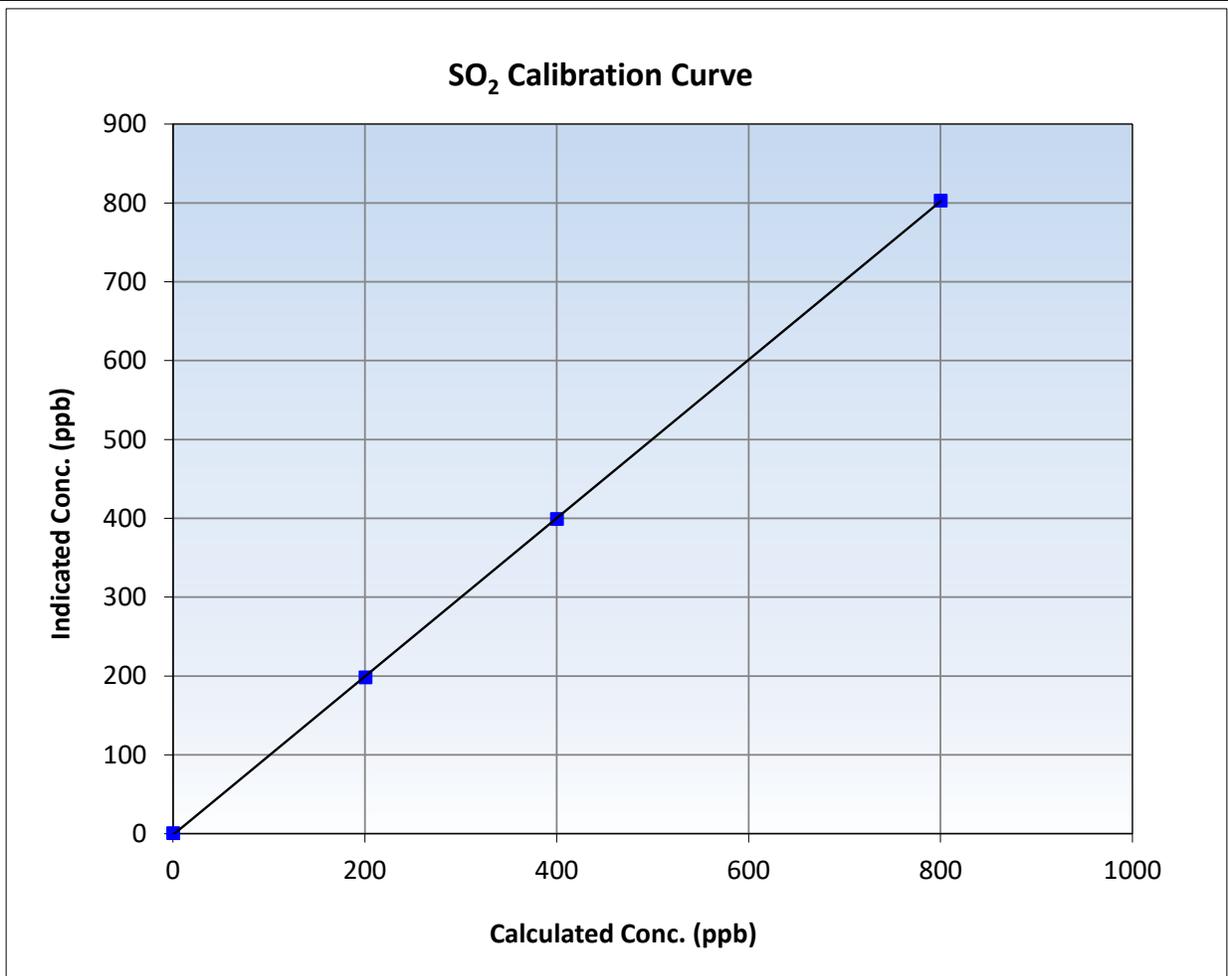
SO₂ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 9, 2025
Station Name:	Blackgold	Station Number:	AMS 511
Start Time (MST):	12:00	End Time (MST):	14:45
Analyzer make:	Thermo 43i	Analyzer serial #:	1173410001

Calibration Data

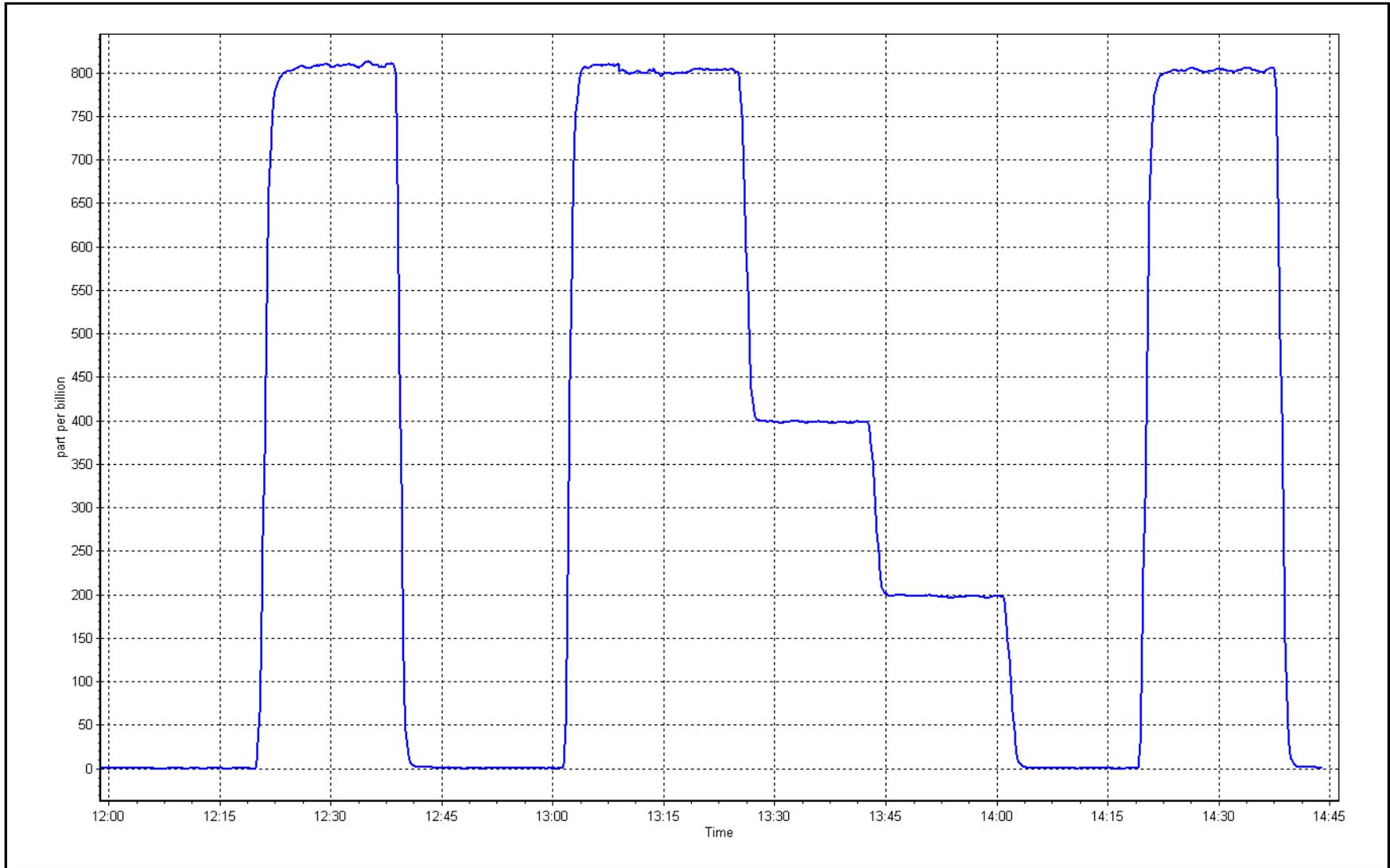
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	<u>Limits</u>	
0.0	0.4	----	Correlation Coefficient	0.999973	≥0.995
799.8	802.8	0.9963	Slope	1.004301	0.90 - 1.10
399.9	398.8	1.0029	Intercept	-1.520673	+/-30
200.4	198.1	1.0118			



SO2 Calibration Plot

Date: January 13, 2026

Location: Blackgold





Wood Buffalo Environmental Association

H₂S Calibration Report

Station Information

Station Name:	Blackgold	Station number:	AMS 511
Calibration Date:	January 7, 2026	Last Cal Date:	December 10, 2025
Start time (MST):	12:08	End time (MST):	15:45
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.139	ppm	Cal Gas Exp Date:	January 3, 2026
Cal Gas Cylinder #:	CC511397			
Removed Cal Gas Conc:	5.139	ppm	Rem Gas Exp Date:	N/A
Removed Gas Cyl #:	N/A		Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	2659
ZAG Make/Model:	API T701		Serial Number:	953

Analyzer Information

Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1336160090
Converter make:	Global G150	Converter serial #:	2025-299
Analyzer Range	0 - 100 ppb	Converter Temp:	325 degC

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
Calibration slope:	1.006062	1.004493	Backgd or Offset:	4.62	4.61
Calibration intercept:	-0.059245	0.120663	Coeff or Slope:	1.448	1.448

H₂S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90-1.10</i>
As found zero	5000	0.0	0.0	0.0	----
As found High point	4922	77.8	80.0	80.8	0.990
As found Mid point	4961	38.9	40.0	40.4	0.990
As found Low point	4981	19.5	20.0	20.1	0.997
New cylinder response					
Baseline Corr As found:	80.8	Prev response:	80.39	*% change:	0.5%
Baseline Corr 2nd AF pt:	40.4	AF Slope:	1.011068	AF Intercept:	-0.059438
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999996	<i>* = > +/-5% change initiates investigation</i>	

H₂S Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4922	77.8	80.0	80.5	0.993
Mid point	4961	38.9	40.0	40.2	0.995
Low point	4981	19.5	20.0	20.2	0.992
As left zero	5000	0.0	0.0	0.2	----
As left span	4922	77.8	80.0	80.7	0.991
SO2 Scrubber Check	4919	81.0	810.0	-0.2	----
Date of last scrubber change:				Ave Corr Factor	0.993
Date of last converter efficiency test:					

Notes: Changed sample inlet filter after as founds. Ran scrubber check after calibrator zero and it passed.
No adjustments performed.

Calibration Performed By: Kelly Baragar



Wood Buffalo Environmental Association

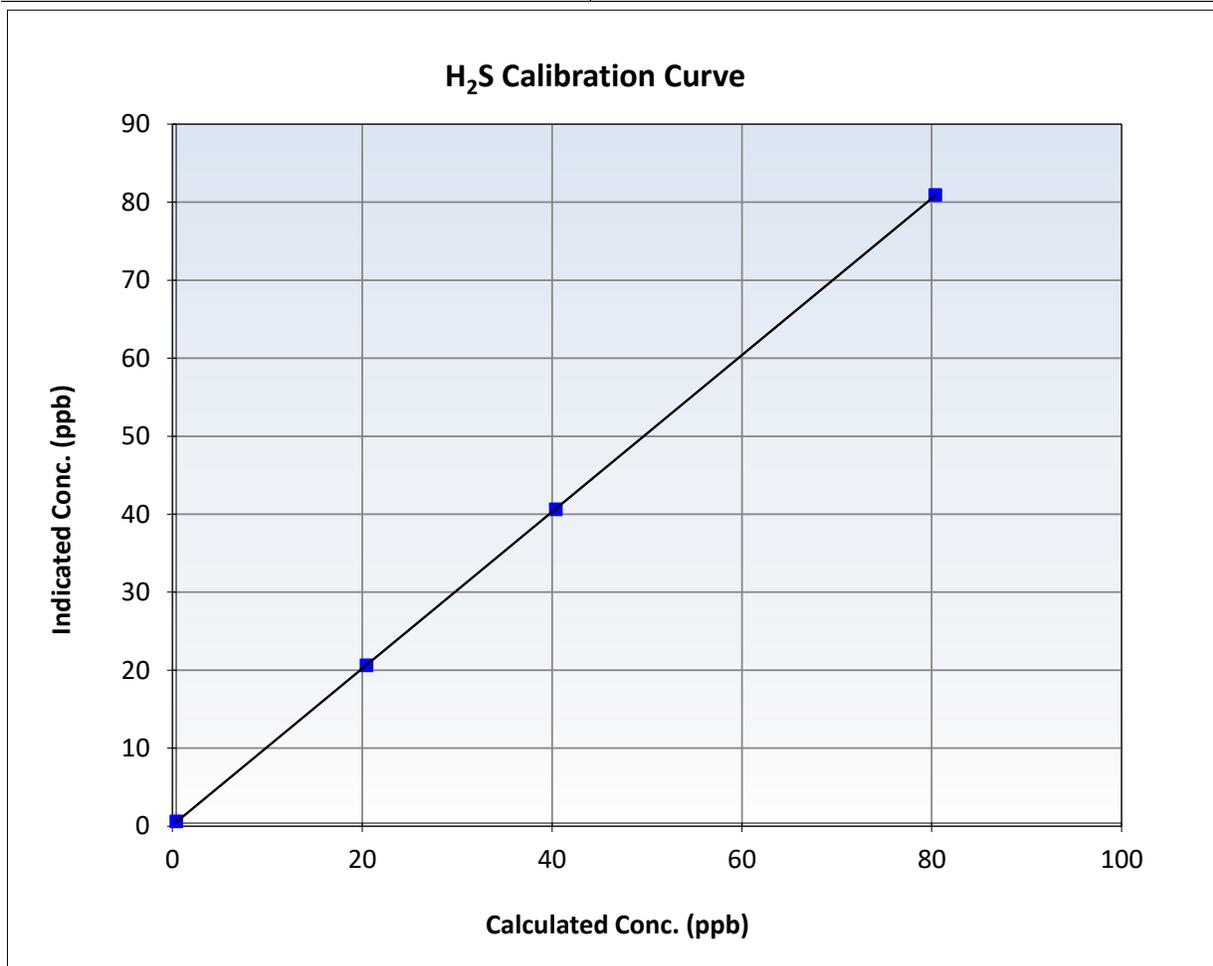
H₂S Calibration Summary

Station Information

Calibration Date:	January 7, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackgold	Station Number:	AMS 511
Start Time (MST):	12:08	End Time (MST):	15:45
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1336160090

Calibration Data

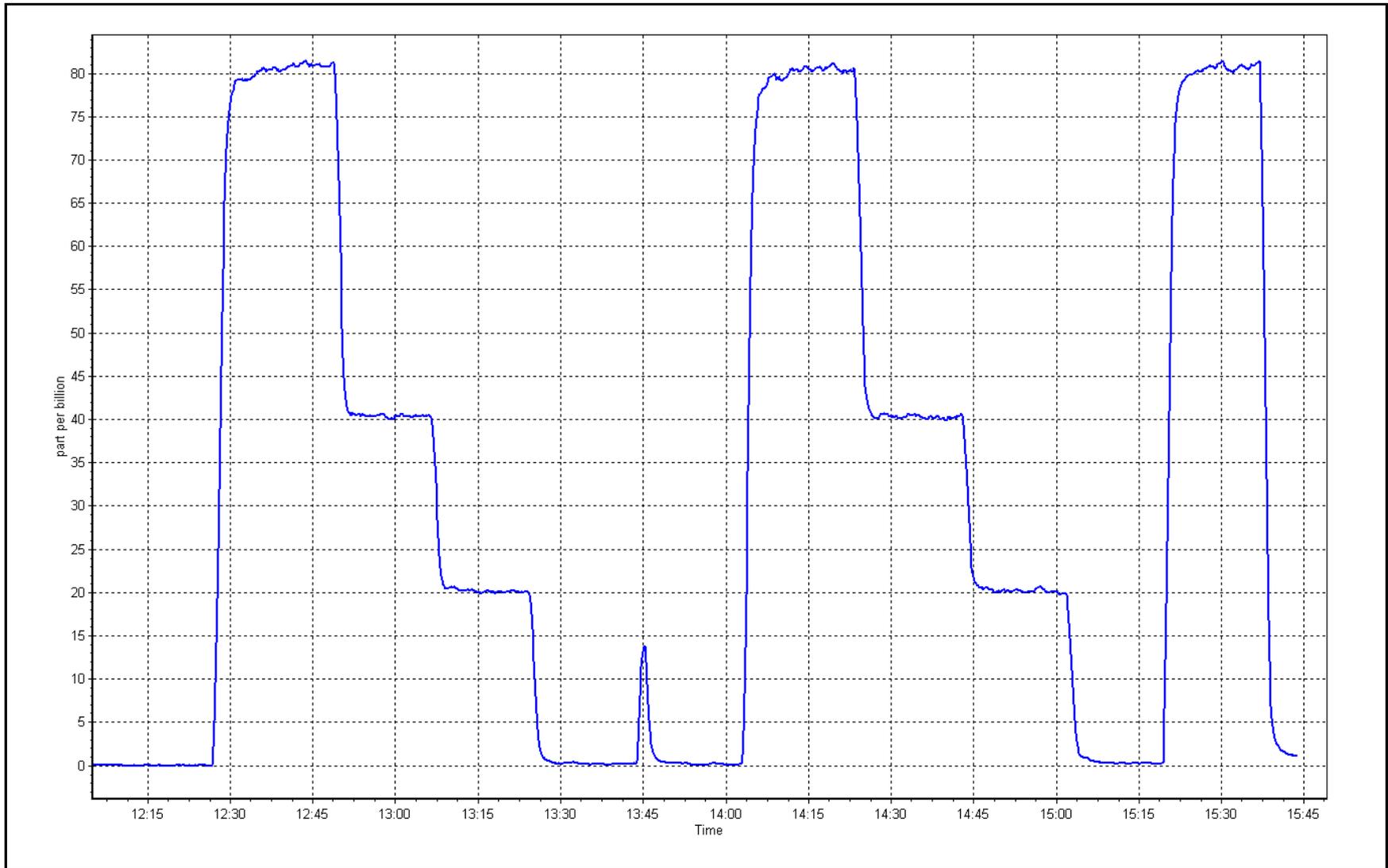
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.0	0.2	----	Correlation Coefficient	0.999995	≥0.995
80.0	80.5	0.9934	Slope	1.004493	0.90 - 1.10
40.0	40.2	0.9946	Intercept	0.120663	+/-3
20.0	20.2	0.9921			



H₂S Calibration Plot

Date: January 7, 2026

Location: Blackgold





Wood Buffalo Environmental Association

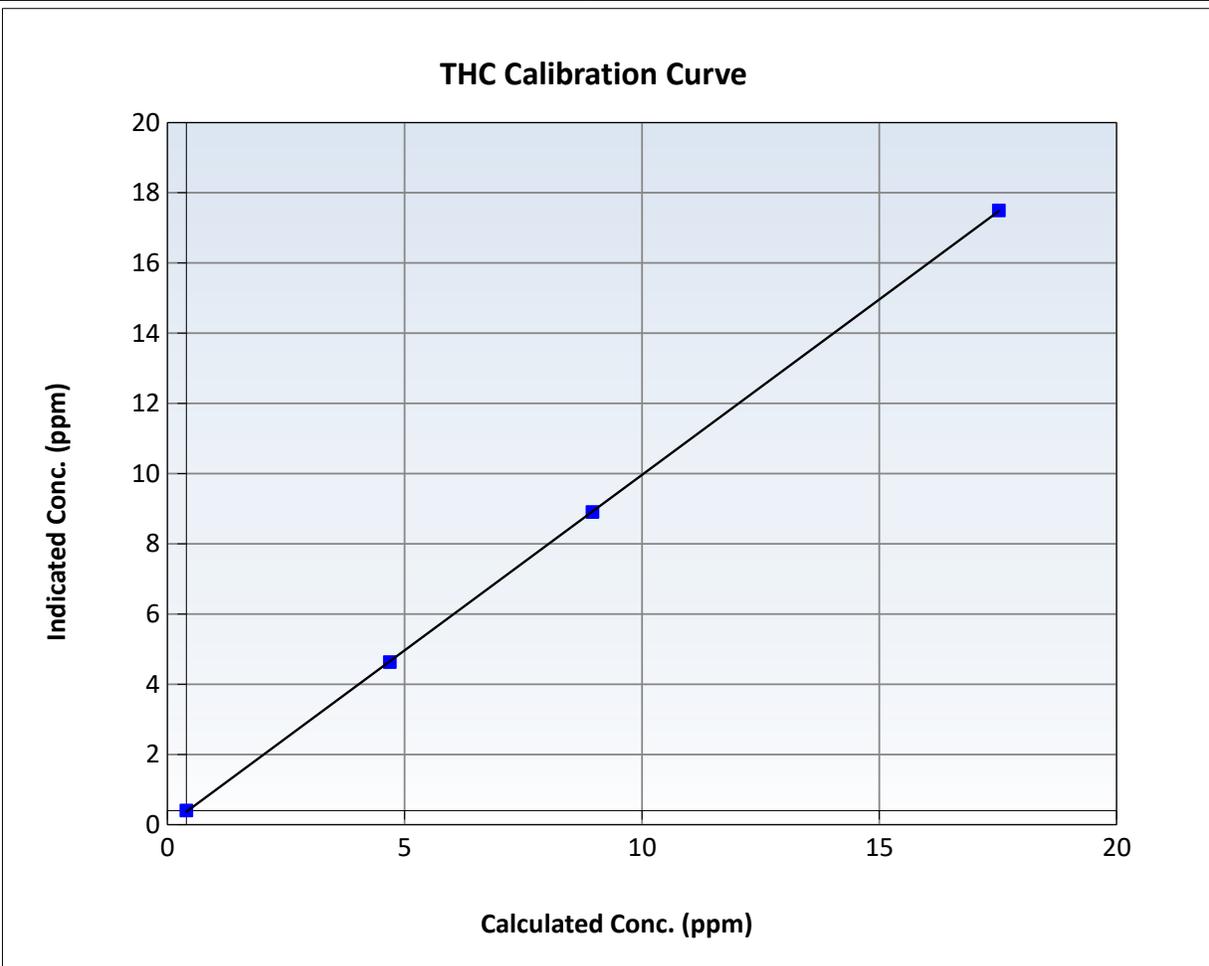
THC Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 9, 2025
Station Name:	2025-09-29	Station Number:	AMS 511
Start Time (MST):	12:00	End Time (MST):	14:45
Analyzer make:	Thermo 51i	Analyzer serial #:	12426335705

Calibration Data

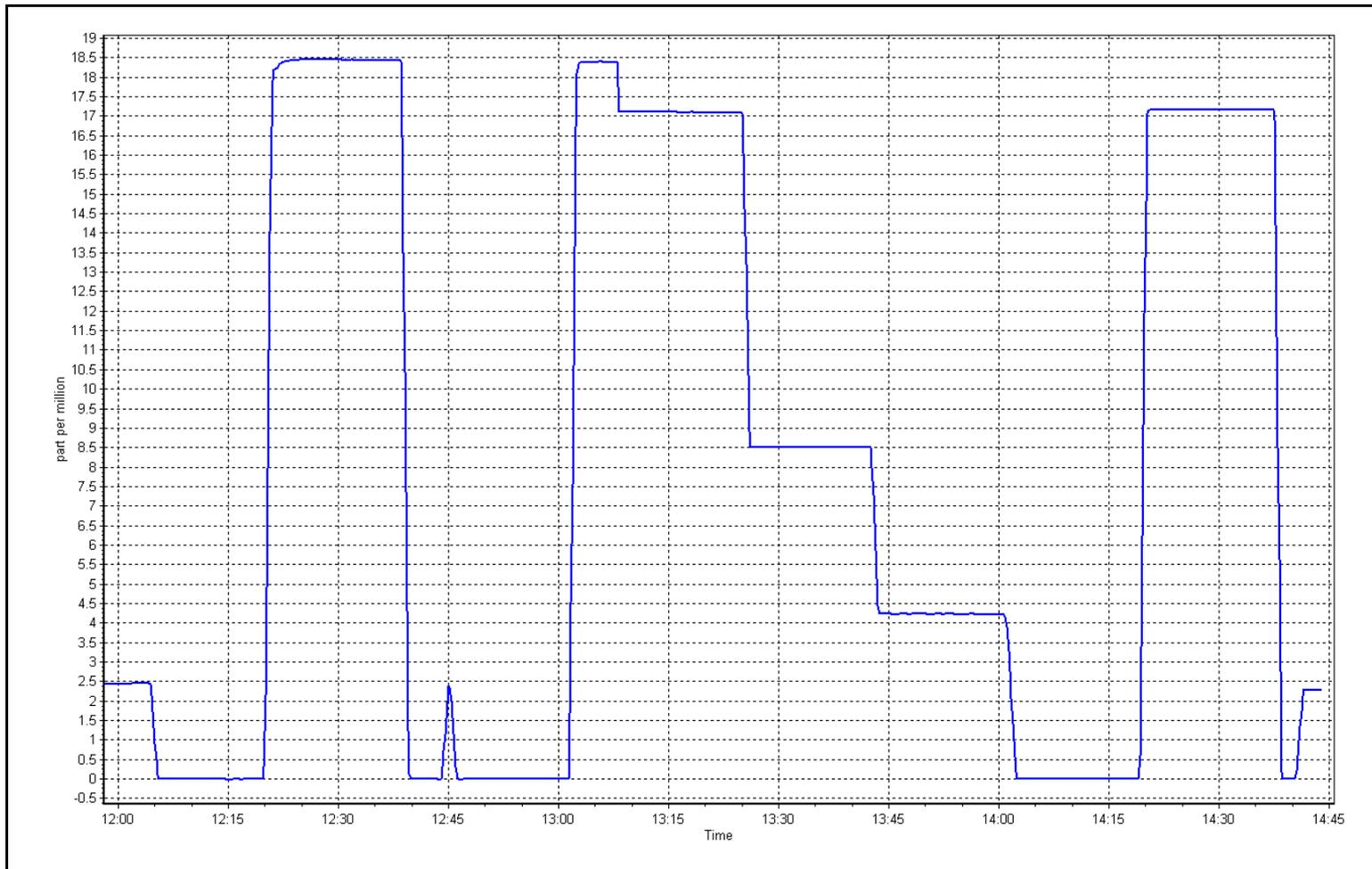
Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<u>Limits</u>
0.00	0.00	----	Correlation Coefficient	0.999984	≥0.995
17.12	17.10	1.0013	Slope	0.999480	0.90 - 1.10
8.56	8.51	1.0064	Intercept	-0.030478	+/-1.5
4.29	4.23	1.0146			



THC Calibration Plot

Date: January 13, 2026

Location: Blackgold





Wood Buffalo Environmental Association

NO_x \ NO \ NO₂ Calibration Report

Station Information

Station Name: Blackgold
 Station number: AMS 511
 Calibration Date: January 13, 2026
 Last Cal Date: December 10, 2025
 Start time (MST): 12:00
 End time (MST): 15:55
 Reason: Routine

Calibration Standards

NO Gas Cylinder #: T0F8P52
 NOX Cal Gas Conc: 47.43 ppm
 Removed Cylinder #: N/A
 Removed Gas NOX Conc: 47.43 ppm
 NOX gas Diff:
 Calibrator Model: Teledyne API T750
 ZAG make/model: Teledyne API T751
 Cal Gas Expiry Date: August 16, 2026
 NO Cal Gas Conc: 47.43 ppm
 Removed Gas Exp Date: N/A
 Removed Gas NO Conc: 47.43 ppm
 NO gas Diff:
 Serial Number: 276
 Serial Number: 529

As Found Dilution Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO _x Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>
As found zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.2	0.0	----	----
AF High point	4916	84.3	799.6	799.6	0.0	806.2	801.3	4.8	0.9916	0.9977
AF Mid point										
AF Low point										
New cyl resp										
Previous Response	NO _x = 808.4 ppb	NO = 805.7 ppb	<i>* = > +/-5% change initiates investigation</i>				*Percent Change	NO _x = -0.3%		
Baseline Corr 1st pt	NO _x = 806.4 ppb	NO = 801.5 ppb	<u>As Found Statistics</u>				*Percent Change	NO = -0.5%		
Baseline Corr 2nd pt	NO _x = NA ppb	NO = NA ppb	As found	NO _x r ² :		Nx SI:	Nx Int:			
Baseline Corr 3rd pt	NO _x = NA ppb	NO = NA ppb	As found	NO r ² :		NO SI:	NO Int:			
			As found	NO ₂ r ² :		NO ₂ SI:	NO ₂ Int:			

As Found GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	Baseline Adjusted NO ₂ Correction factor (Cc/(Ic-AFzero)) <i>Limit = 0.90 - 1.10</i>	Converter Efficiency <i>Limit = 96-104%</i>
As Found GPT zero						
As found high GPT point						
As found mid GPT point						
As found low GPT point						



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NO_x \ NO \ NO₂ Calibration Report

Analyzer Information

Analyzer Make: Teledyne API T200
 NOX Range (ppb): 0 - 1000 ppb

Serial Number: 7029

Instrument Settings

	<u>Start</u>	<u>Finish</u>		<u>Start</u>	<u>Finish</u>
NO coeff or slope:	1.087	1.084	NO bkgnd or offset:	0.2	0.2
NOX coeff or slope:	1.089	1.081	NOX bkgnd or offset:	0.4	0.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	4.8	4.7

Calibration Statistics

	<u>Start</u>	<u>Finish</u>
NO _x Cal Slope:	1.013241	1.003920
NO _x Cal Offset:	-1.781087	-2.618641
NO Cal Slope:	1.009768	1.001705
NO Cal Offset:	-1.740458	-2.718129
NO ₂ Cal Slope:	1.003452	1.003709
NO ₂ Cal Offset:	0.832629	0.925154

Dilution Calibration Data

Set Point	Dilution flow rate (scm)	Source gas flow rate (scm)	Calculated NO _x concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO _x concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated NO ₂ concentration (ppb) (Ic)	NO _x Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	NO Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>
Cal zero	5000	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	----	----
High point	4916	84.3	799.6	799.6	0.0	801.6	799.8	1.7	0.9975	0.9998
Mid point	4958	42.2	400.3	400.3	0.0	397.5	396.5	1.0	1.0071	1.0096
Low point	4979	21.1	200.2	200.2	0.0	196.0	195.2	0.8	1.0212	1.0254
As left zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1	----	----
As left span	4916	84.3	799.6	378.2	421.4	784.4	378.2	406.1	1.0194	1.0000
Average Correction Factor									1.0086	1.0116

GPT Calibration Data

O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO ₂ concentration (ppb) (Cc)	Indicated NO ₂ concentration (ppb) (Ic)	NO ₂ Correction factor (Cc/Ic) <i>Limit = 0.95-1.05</i>	Converter Efficiency <i>Limit = 96-104%</i>
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	802.0	400.4	401.6	403.3	0.9958	100.4%
Mid GPT point	802.0	601.3	200.7	203.5	0.9862	101.4%
Low GPT point	802.0	703.4	98.6	100.5	0.9811	101.9%
Average Correction Factor					0.9877	101.2%

Notes:

Sample inlet filter changed after as founds. Slight span adjustment performed.

Calibration Performed By:

Kelly Baragar



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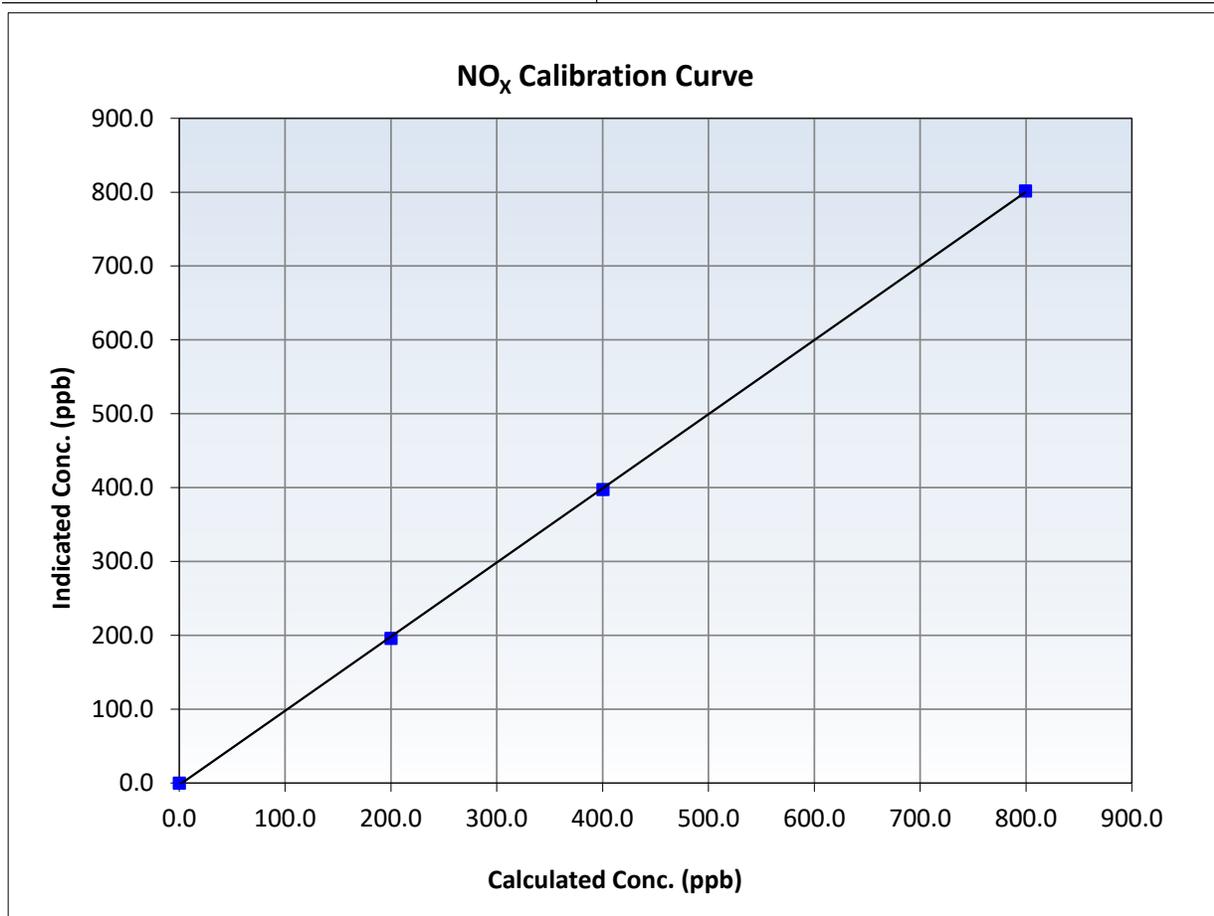
NO_x Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackgold	Station Number:	AMS 511
Start Time (MST):	12:00	End Time (MST):	15:55
Analyzer make:	Teledyne API T200	Analyzer serial #:	7029

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.0	----	Correlation Coefficient	0.999950	≥0.995
799.6	801.6	0.9975	Slope	1.003920	0.90 - 1.10
400.3	397.5	1.0071	Intercept	-2.618641	+/-20
200.2	196.0	1.0212			





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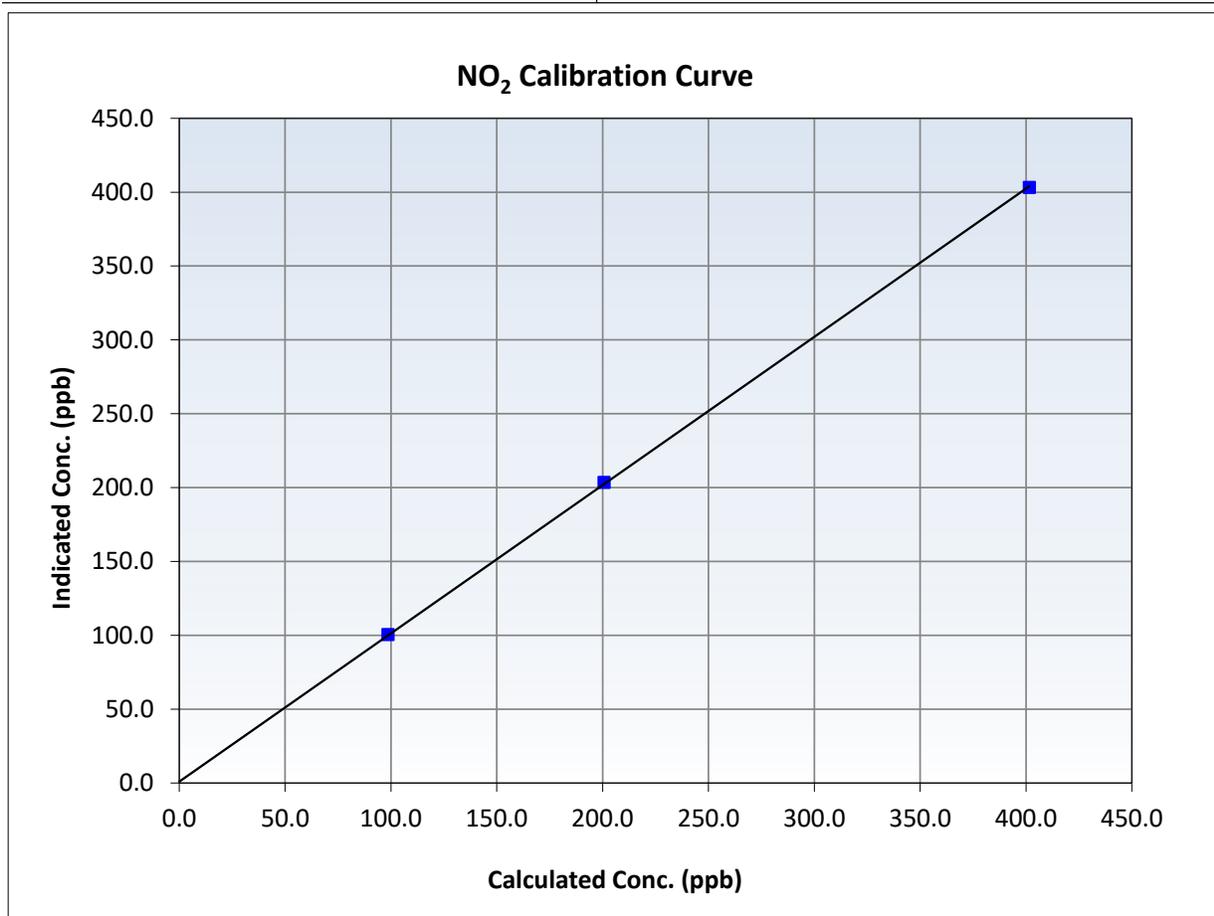
NO₂ Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackgold	Station Number:	AMS 511
Start Time (MST):	12:00	End Time (MST):	15:55
Analyzer make:	Teledyne API T200	Analyzer serial #:	7029

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	-0.1	----	Correlation Coefficient	0.999964	≥0.995
401.6	403.3	0.9958	Slope	1.003709	0.90 - 1.10
200.7	203.5	0.9862	Intercept	0.925154	+/-20
98.6	100.5	0.9811			





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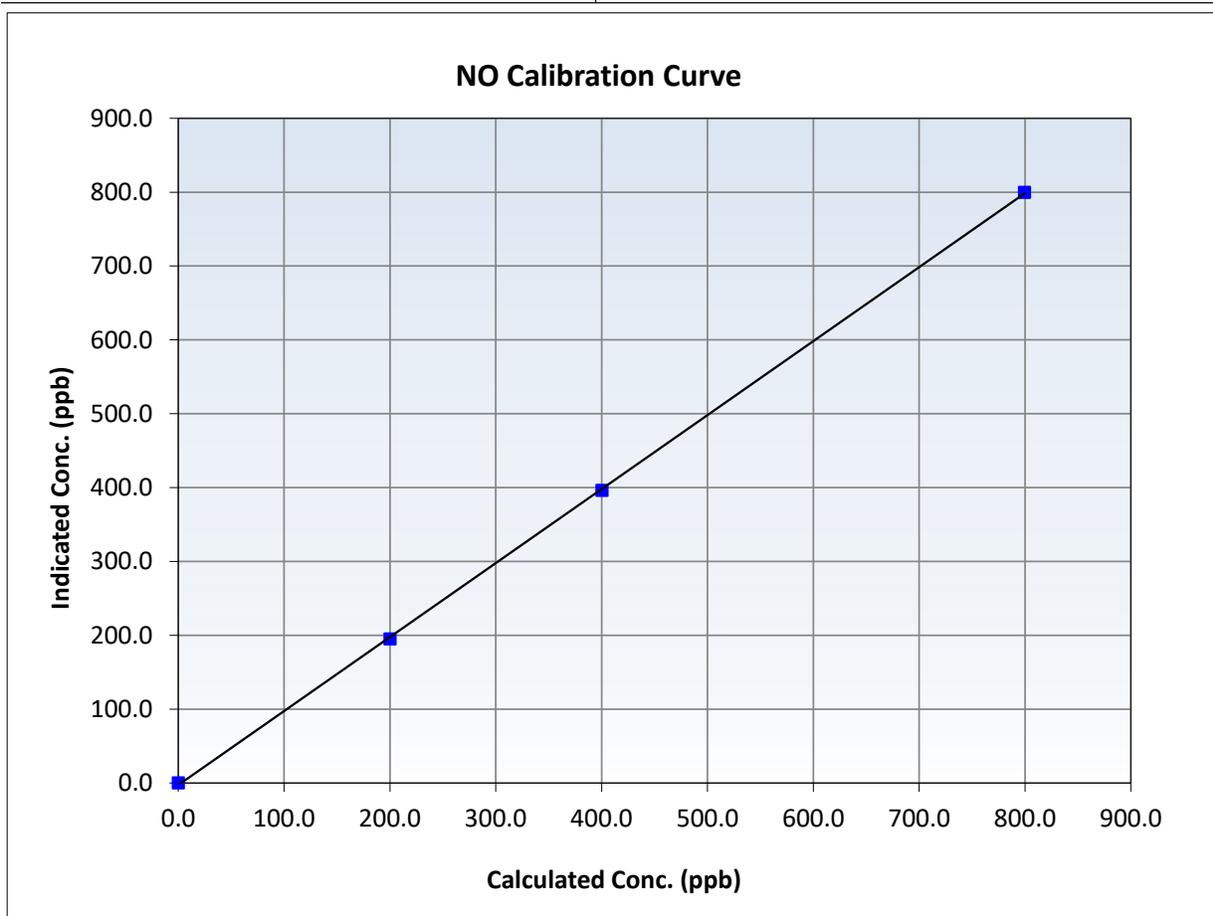
NO Calibration Summary

Station Information

Calibration Date:	January 13, 2026	Previous Calibration:	December 10, 2025
Station Name:	Blackgold	Station Number:	AMS 511
Start Time (MST):	12:00	End Time (MST):	15:55
Analyzer make:	Teledyne API T200	Analyzer serial #:	7029

Calibration Data

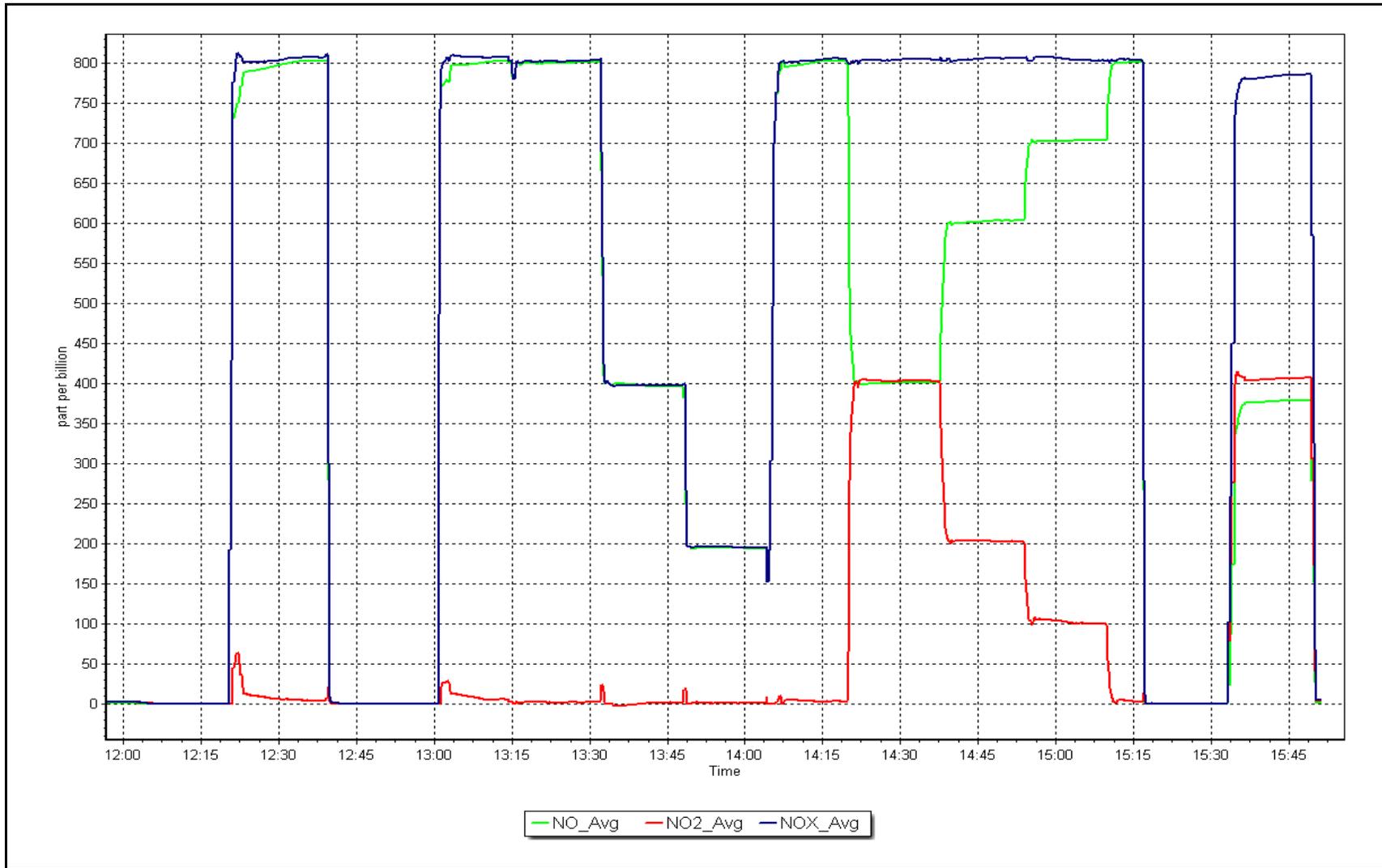
Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		<i>Limits</i>
0.0	0.1	----	Correlation Coefficient	0.999943	<i>≥0.995</i>
799.6	799.8	0.9998	Slope	1.001705	<i>0.90 - 1.10</i>
400.3	396.5	1.0096	Intercept	-2.718129	<i>+/-20</i>
200.2	195.2	1.0254			



NO_x Calibration Plot

Date: January 13, 2026

Location: Blackgold





End of Report