WOOD BUFFALO
ENVIRONMENTAL ASSOCIATION

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Wood Buffalo Environmental Association

SEPTEMBER 2026

MONTHLY CALIBRATION REPORT

CONTINUOUS MONITORING

October 30, 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
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	September 17, 2026	Last Cal Date:	August 12, 2026
Start time (MST):	9:47	End time (MST):	13:54
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:	261

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	JC1501301448	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.010049	1.008133	Backgd or Offset:	22.8	22.6
Calibration intercept:	-0.713904	-0.493033	Coeff or Slope:	0.865	0.865

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.4	----
As found High point	4918	81.3	800.3	806.5	0.992
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	806.9	Previous response	807.6	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.4	----
High point	4918	81.3	800.3	806.6	0.992
Mid point	4959	40.7	400.6	402.5	0.995
Low point	4979	20.3	199.8	201.4	0.992
As left zero	5000	0.0	0.0	-0.1	----
As left span	4918	81.3	800.3	808.4	0.990
				Average Correction Factor:	0.993

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

SO_2 Calibration Summary

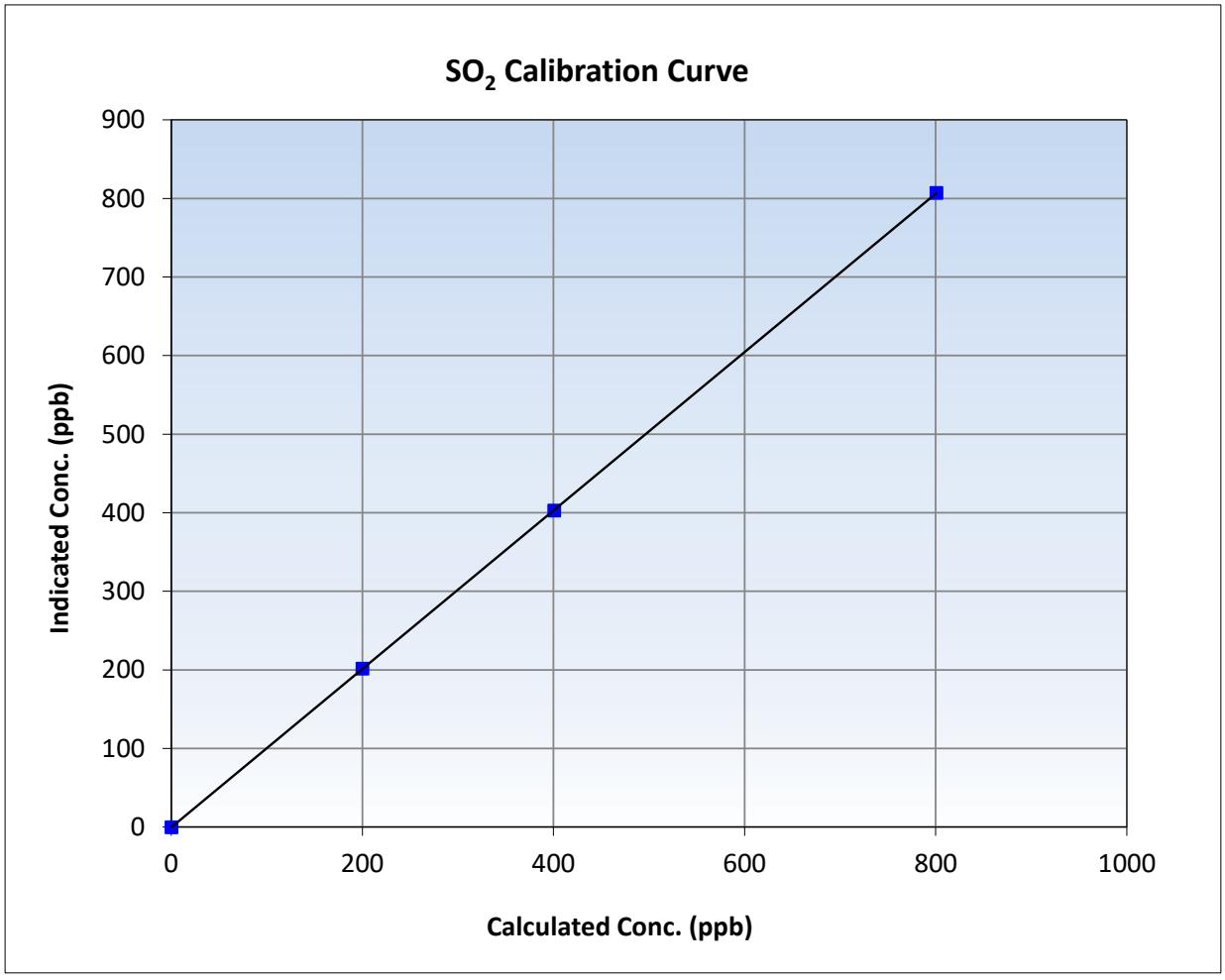
Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 12, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:47	End Time (MST):	13:54
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1501301448

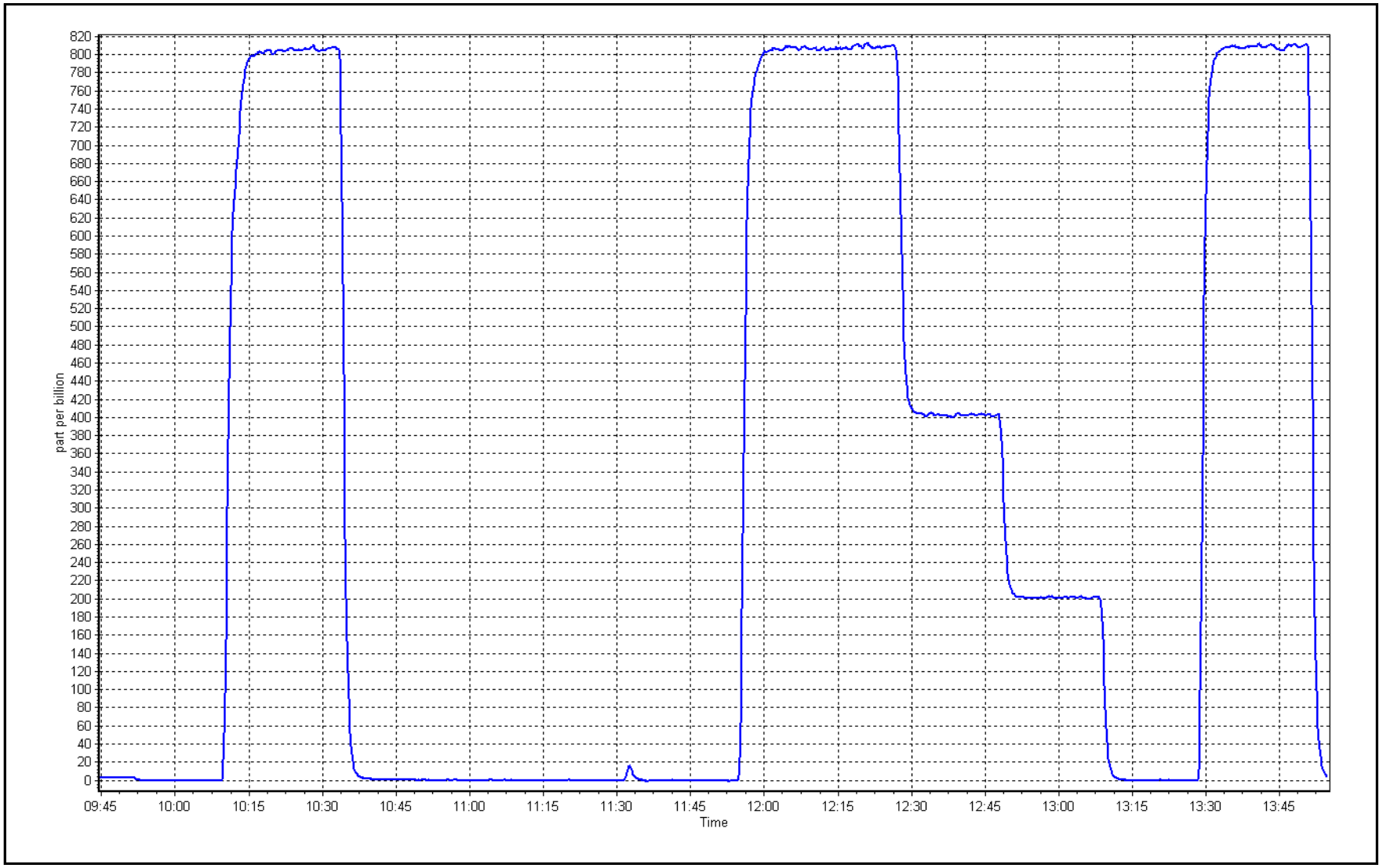
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.4	----
800.3	806.6	0.9921
400.6	402.5	0.9953
199.8	201.4	0.9922

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	1.008133	*0.90 - 1.10*
Intercept	-0.493033	*+/-30*



SO2 Calibration Plot Date: September 17, 2026 Location: Bertha Ganter-Fort McKay



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	September 18, 2026	Last Cal Date:	August 19, 2026
Start time (MST):	10:47	End time (MST):	15:21
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:	261

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.020688	1.008535	Backgd or Offset:	1.83	1.81
Calibration intercept:	-0.218449	-0.018186	Coeff or Slope:	1.012	1.012

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.6	80.0	81.5	0.981
As found Mid point	4959	41.3	40.0	40.8	0.980
As found Low point	4979	20.7	20.0	20.1	0.997
New cylinder response					

Baseline Corr As found:	81.5	Prev response:	81.40	*% change:	0.1%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.020684	AF Intercept:	-0.118337
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999977	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	82.6	80.0	80.6	0.992
Mid point	4959	41.3	40.0	40.4	0.990
Low point	4979	20.7	20.0	20.1	0.997
As left zero	5000	0.0	0.0	0.1	----
As left span	4917	82.6	80.0	80.4	0.995
SO2 Scrubber Check	4919	81.3	813.0	0.0	----

Date of last scrubber change:		January 25, 2024		Ave Corr Factor	0.993
Date of last converter efficiency test:		November 7, 2024		107.9%	efficiency

Notes: Changed inlet filter after as founds. No adjustments made. Scrubber check passed.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

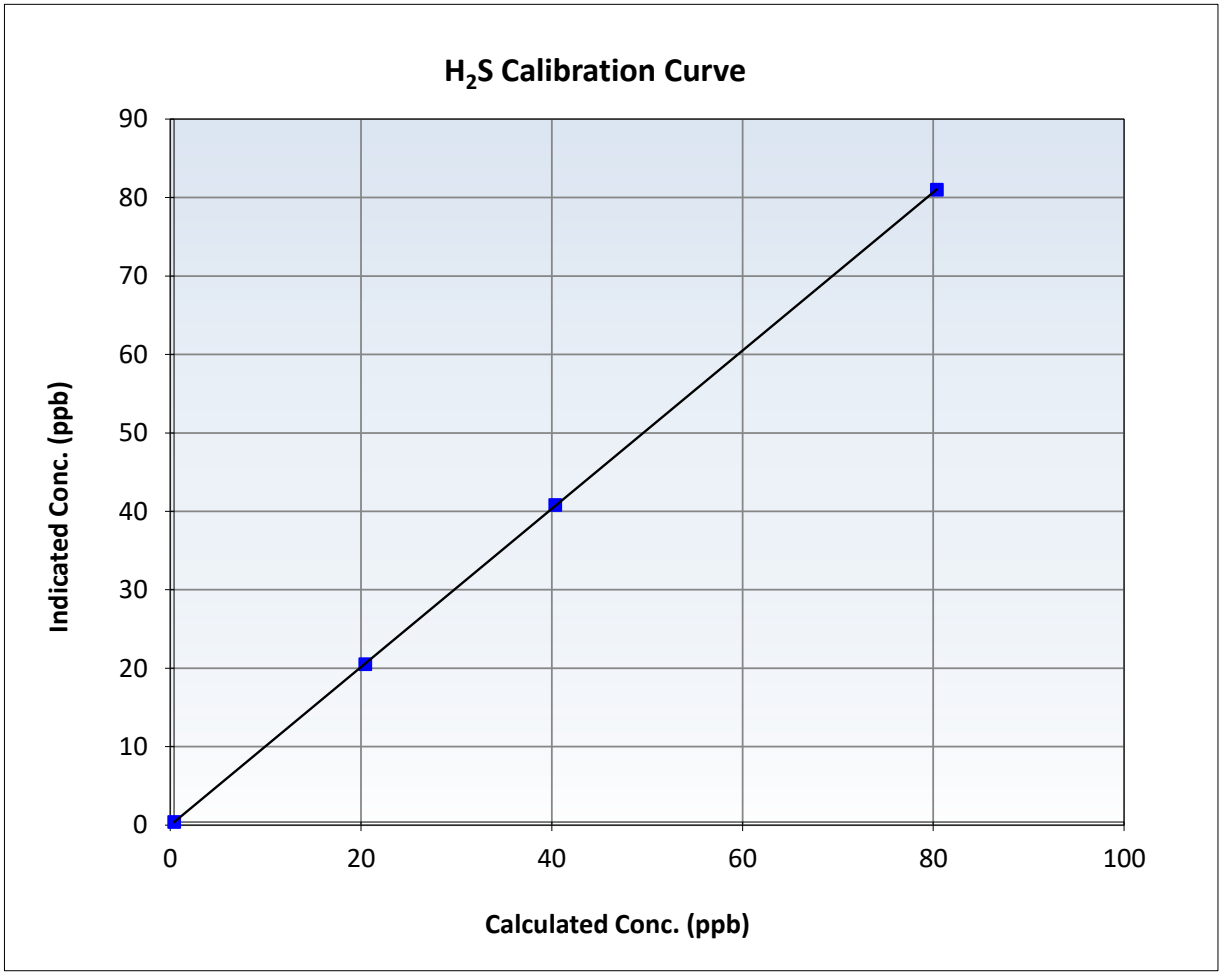
H_2S Calibration Summary

Station Information

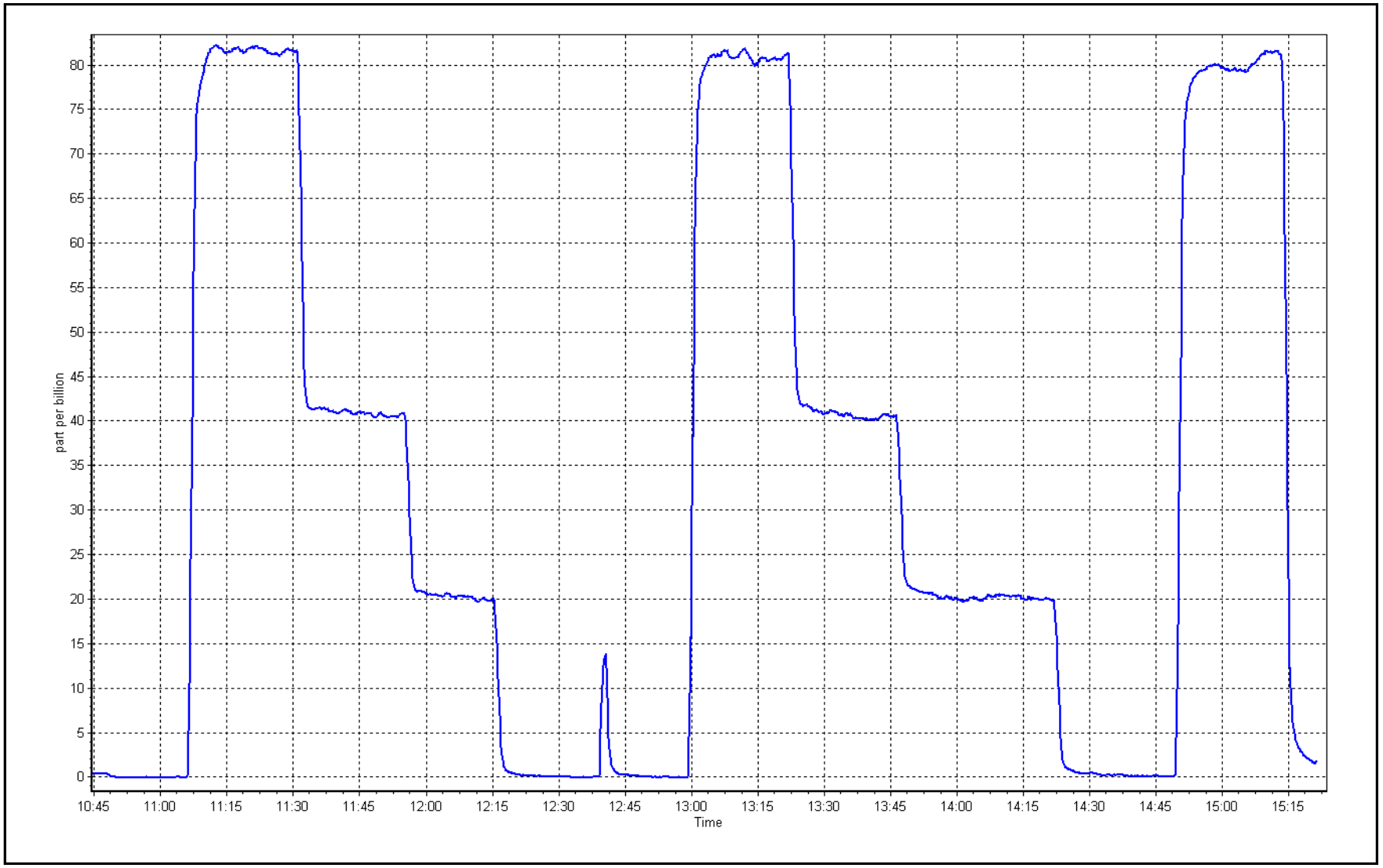
Calibration Date:	September 18, 2026	Previous Calibration:	August 19, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:47	End Time (MST):	15:21
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	1200326167

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999994	*≥0.995*
80.0	80.6	0.9921	Slope	1.008535	*0.90 - 1.10*
40.0	40.4	0.9895			
20.0	20.1	0.9970	Intercept	-0.018186	*+/-3*



H_2S Calibration Plot Date: September 18, 2026 Location: Bertha Ganter-Fort McKay



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	September 4, 2026	Last Cal Date:	August 28, 2026
Start time (MST):	10:48	End time (MST):	13:51
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:	261

Analyzer Information

Analyzer make:	Thermo 43iQ-TLE		Analyzer serial #:	12113311966
Converter make:	CD Nova		Converter serial #:	470
Analyzer Range	0 - 100 ppb		Converter Temp:	800 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.000531	1.006535	Backgd or Offset:	2.12	2.07
Calibration intercept:	0.261933	0.201807	Coeff or Slope:	1.116	1.087

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)) *Limit = 0.90-1.10*
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	

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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	82.6	80.0	80.5	0.993
Mid point	4959	41.3	40.0	40.8	0.980
Low point	4979	20.7	20.0	20.4	0.982
As left zero	5000	0.0	0.0	0.0	----
As left span	4917	82.6	80.0	80.9	0.988
SO2 Scrubber Check	4919	81.3	813.0	0.1	----
Date of last scrubber change:		December 17, 2021		Ave Corr Factor	0.985
Date of last converter efficiency test:					

Notes: As founds could not be performed due to a faulty converter. Converter was replaced. Sample intel filter was changed and adjusted span only. Scrubber check passed.

Calibration Performed By: Mohammed Kashif

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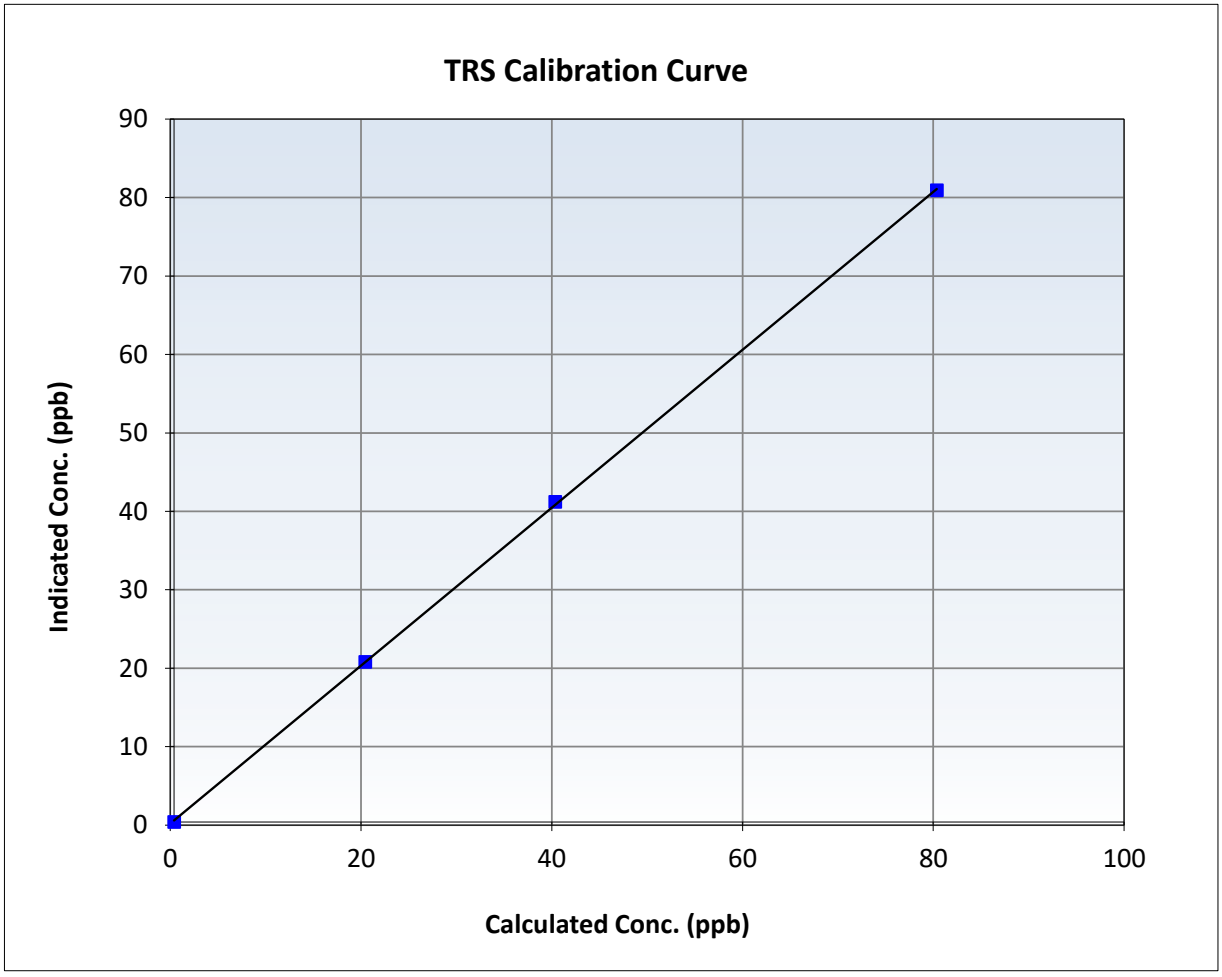
TRS Calibration Summary

Station Information

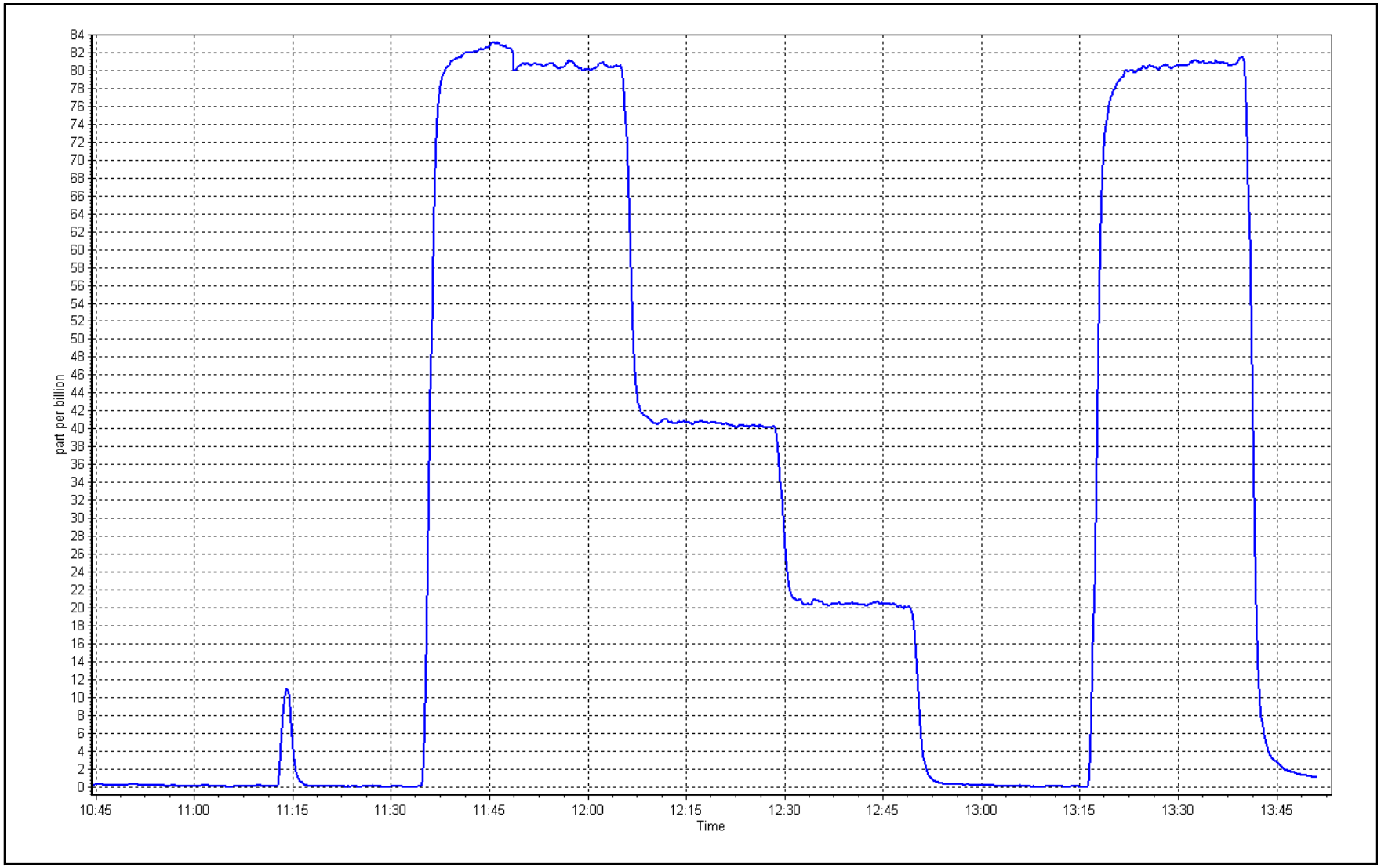
Calibration Date:	September 4, 2026	Previous Calibration:	August 28, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:48	End Time (MST):	13:51
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	12113311966

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999942	*≥0.995*
80.0	80.5	0.9933	Slope	1.006535	*0.90 - 1.10*
40.0	40.8	0.9798			
20.0	20.4	0.9823	Intercept	0.201807	*+/-3*



TRS Calibration Plot Date: September 4, 2026 Location: Bertha Ganter-Fort McKay



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	September 17, 2026	Last Cal Date:	August 12, 2026
Start time (MST):	9:47	End time (MST):	13:54
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC418809	Cal Gas Expiry Date:	March 10, 2031
CH4 Cal Gas Conc.	497.2 ppm	CH4 Equiv Conc.	1061.8 ppm
C3H8 Cal Gas Conc.	205.3 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	497.2 ppm	CH4 Equiv Conc.	1061.8 ppm
Removed C3H8 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:	261

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1193585648	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	2.41E-04	2.40E-04	NMHC SP Ratio:	4.72E-05	4.67E-05
CH4 Retention time:	15.0	15.0	NMHC Peak Area:	194614	196377
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	81.3	17.27	17.32	0.997
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.32	Prev response	17.26	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	81.3	17.27	17.26	1.000
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	0.00	----
As left span	4918	81.3	17.27	17.28	0.999
				Average Correction Factor	0.998

Notes: Sample inlet filter and both N_2 and H_2 cylinders were changed after as founds. Span adjusted.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	81.3	9.18	9.25	0.993
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.25	Prev response	9.20	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	81.3	9.18	9.17	1.001
Mid point	4959	40.7	4.60	4.61	0.997
Low point	4979	20.3	2.29	2.32	0.988
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	81.3	9.18	9.17	1.002
				Average Correction Factor	0.995

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	81.3	8.09	8.07	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.07	Prev response	8.06	*% change	0.1%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	81.3	8.09	8.09	0.999
Mid point	4959	40.7	4.05	4.03	1.004
Low point	4979	20.3	2.02	2.02	0.998
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	81.3	8.09	8.12	0.996
				Average Correction Factor	1.000

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.999548	0.999165
THC Cal Offset:	0.001752	0.013146
CH4 Cal Slope:	0.997227	1.000180
CH4 Cal Offset:	-0.002930	-0.002128
NMHC Cal Slope:	1.001816	0.998221
NMHC Cal Offset:	0.004283	0.015474

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

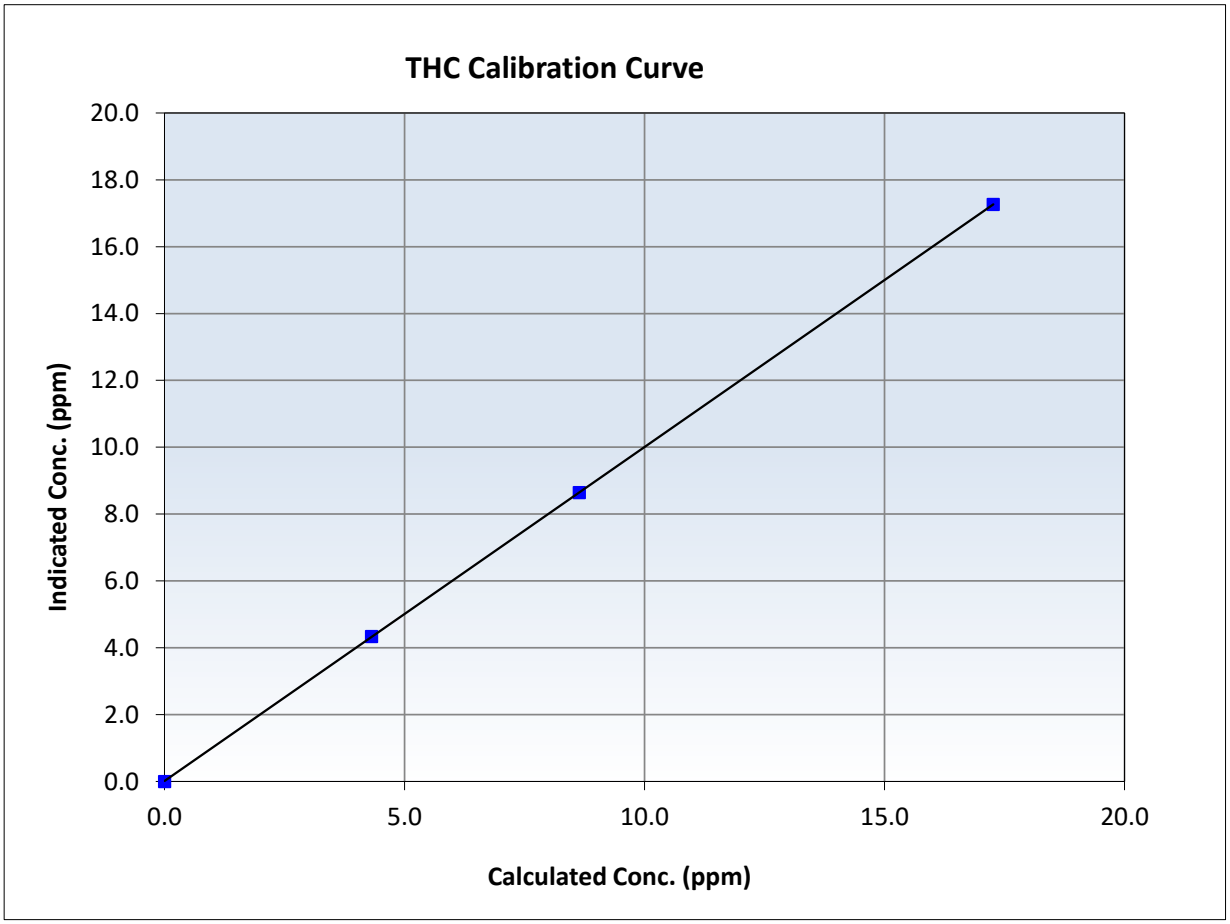
THC Calibration Summary

Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 12, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:47	End Time (MST):	13:54
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585648

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999996	≥0.995
17.27	17.26	1.0002	Slope	0.999165	0.90 - 1.10
8.64	8.64	0.9999	Intercept	0.013146	+/-0.5
4.31	4.34	0.9930			



Wood Buffalo Environmental Association

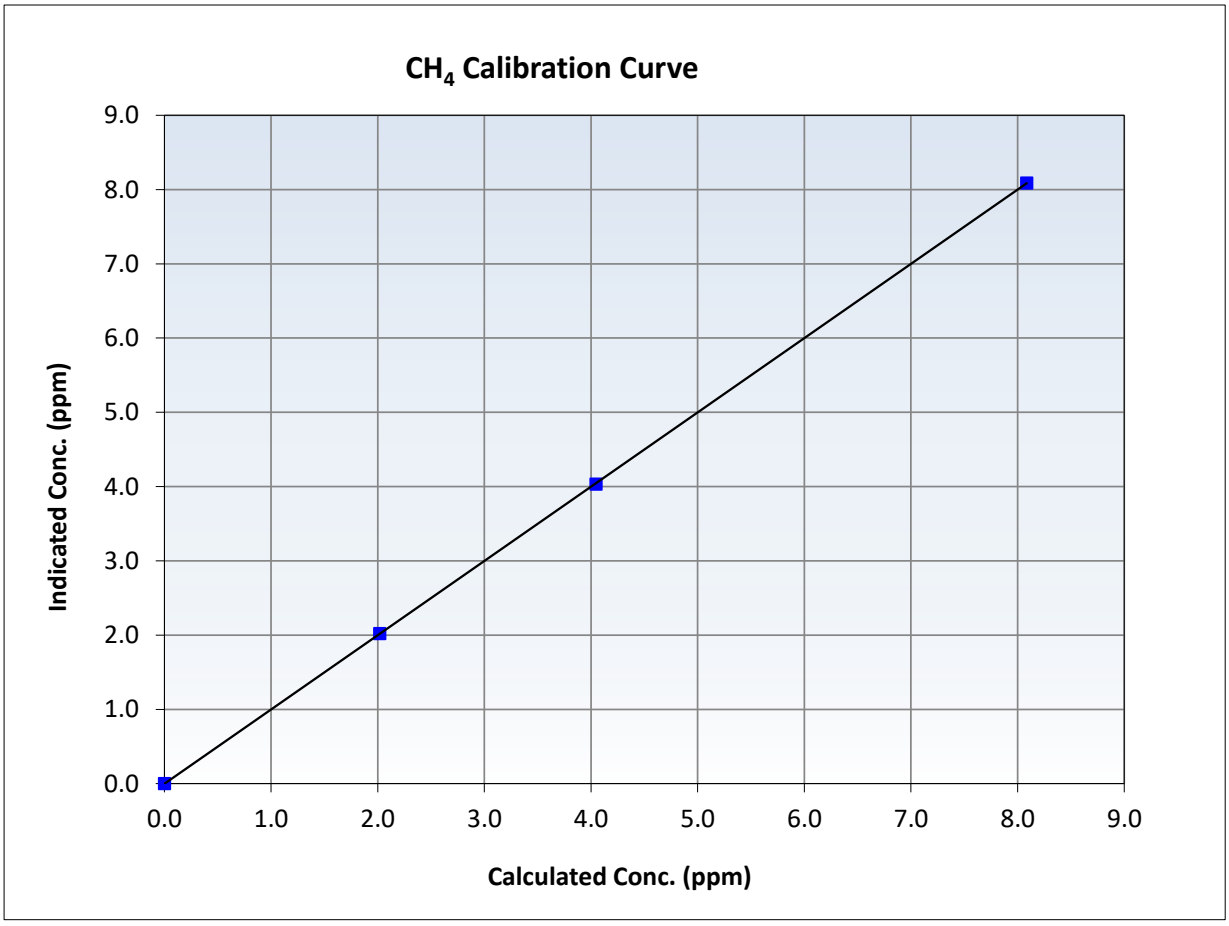
CH_4 Calibration Summary

Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 12, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:47	End Time (MST):	13:54
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585648

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999993	≥0.995
8.09	8.09	0.9995	Slope	1.000180	0.90 - 1.10
4.05	4.03	1.0036			
2.02	2.02	0.9980	Intercept	-0.002128	+/-0.5



Wood Buffalo Environmental Association

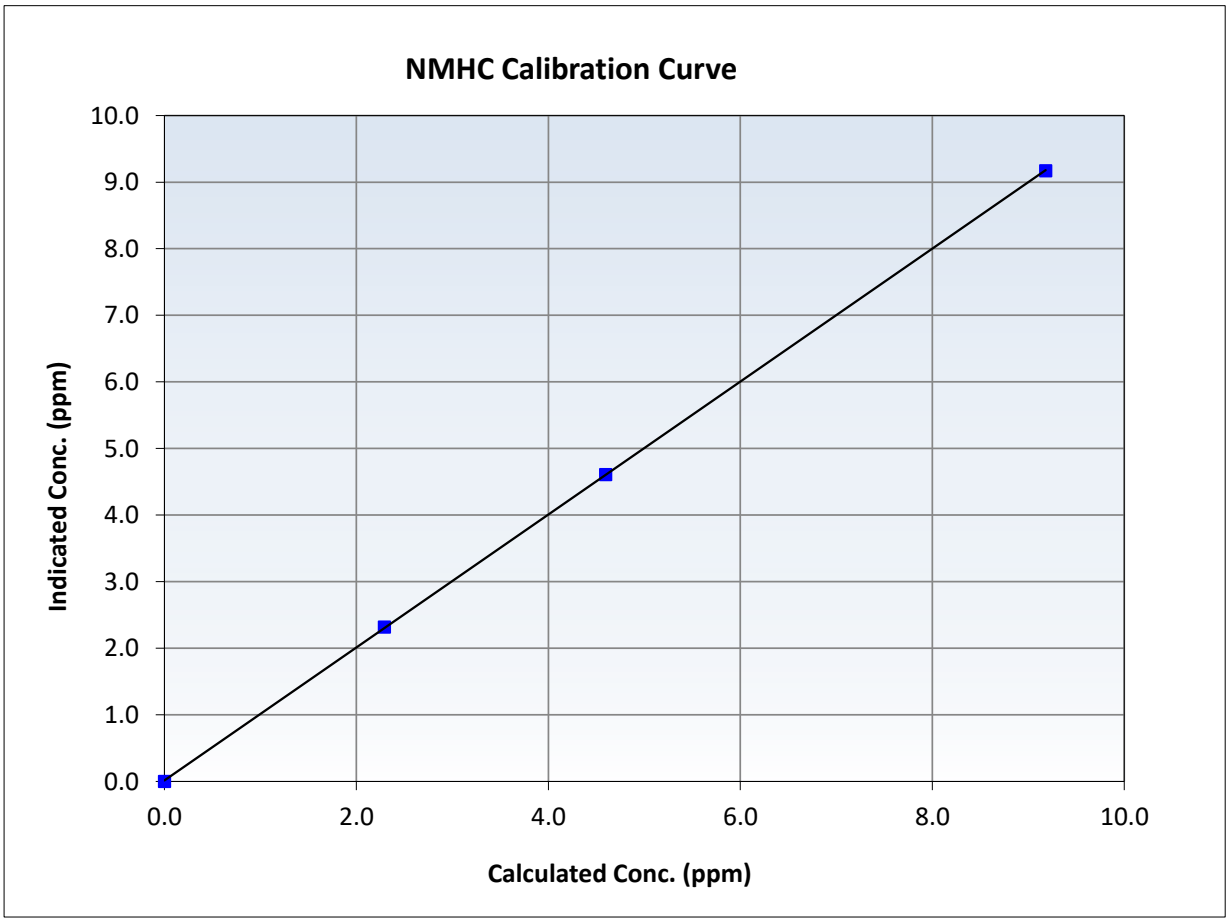
NMHC Calibration Summary

Station Information

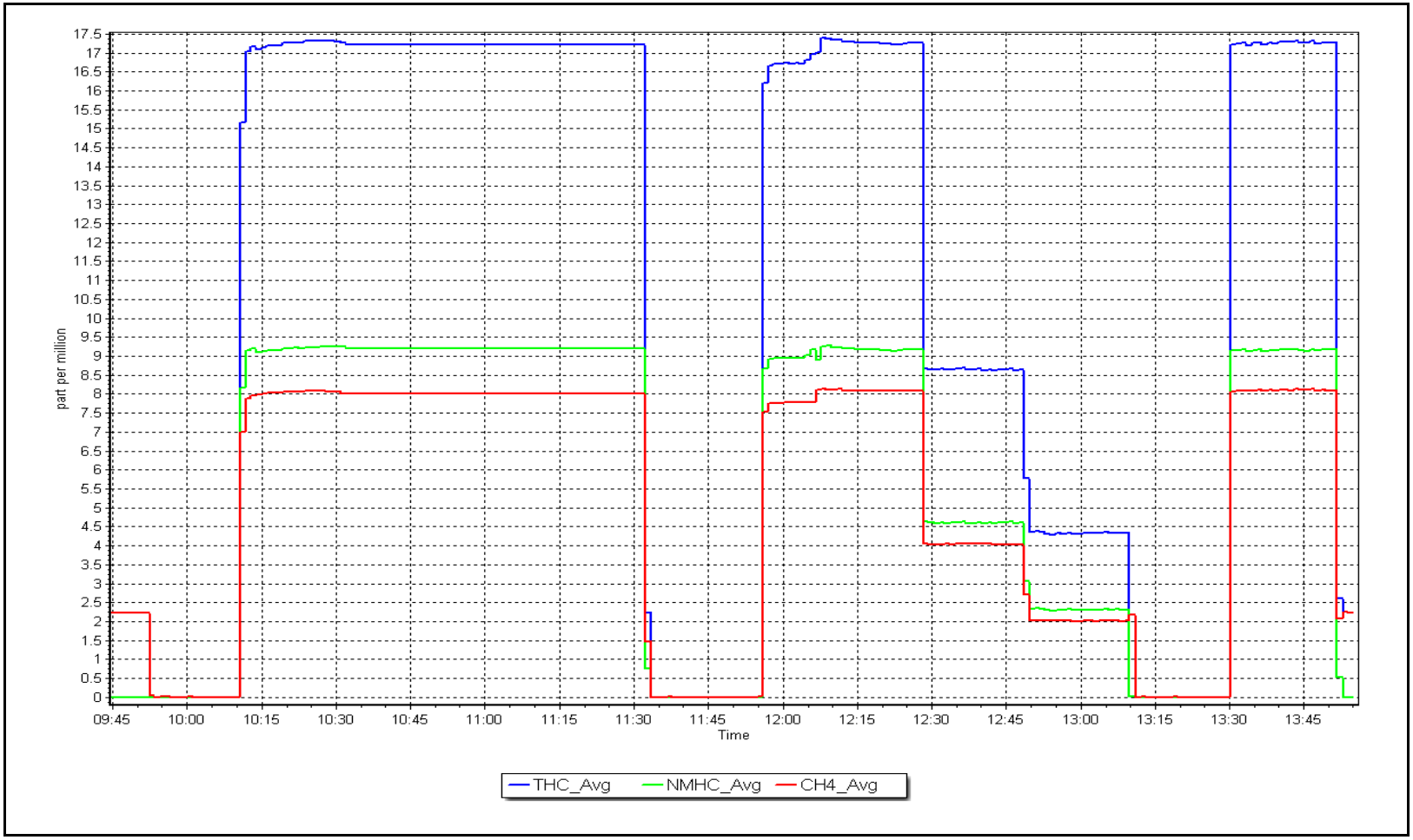
Calibration Date:	September 17, 2026	Previous Calibration:	August 12, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:47	End Time (MST):	13:54
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585648

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999987	≥0.995
9.18	9.17	1.0009	Slope	0.998221	0.90 - 1.10
4.60	4.61	0.9969	Intercept	0.015474	+/-0.5
2.29	2.32	0.9881			



NMHC Calibration Plot Date: September 17, 2026 Location: Bertha Ganter-Fort McKay



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay
Station number:	AMS 01
Calibration Date:	September 8, 2026
Last Cal Date:	August 11, 2026
Start time (MST):	10:50
End time (MST):	15:32
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC335700	Cal Gas Expiry Date:	September 1, 2032
NOX Cal Gas Conc:	59.40 ppm	NO Cal Gas Conc:	59.20 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	59.40 ppm	Removed Gas NO Conc:	59.20 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	3565
ZAG make/model:	Teledyne API T701	Serial Number:	261

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	----	----
AF High point	4932	67.6	803.1	800.4	2.7	805.1	801.5	3.7	0.9975	0.9985
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.0 ppb	NO = 800.5 ppb
Baseline Corr 1st pt	NO_X = 805.1 ppb	NO = 801.6 ppb
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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = 0.3%
As found	NO r^2:	*Percent Change	NO = 0.1%
As found	NO_2 r^2:	Nx Sl:	Nx Int:
		NO Sl:	NO Int:
		NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
Serial Number: 1336160088
NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.748	0.748	NO bkgnd or offset:	2.2	2.2
NOX coeff or slope:	0.998	0.998	NOX bkgnd or offset:	2.3	2.3
NO2 coeff or slope:	0.999	0.999	Reaction cell Press:	161.5	159.7

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999442	0.999442
NO_X Cal Offset:	0.320000	-0.080000
NO Cal Slope:	1.001519	1.001248
NO Cal Offset:	-1.100000	-1.280000
NO_2 Cal Slope:	0.996932	0.997150
NO_2 Cal Offset:	0.537954	-0.575288

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.3	0.2	0.1	----	----
High point	4932	67.6	803.1	800.4	2.7	802.9	801.1	1.7	1.0002	0.9991
Mid point	4966	33.8	401.5	400.2	1.4	400.6	397.9	2.8	1.0024	1.0058
Low point	4983	16.9	200.8	200.1	0.7	200.5	198.1	2.4	1.0014	1.0101
As left zero	5000	0.0	0.0	0.0	0.0	0.5	0.0	0.5	----	----
As left span	4932	67.6	803.1	403.8	399.3	799.5	403.8	395.7	1.0045	1.0000
							Average Correction Factor		1.0013	1.0050

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.1	----	----
High GPT point	796.4	405.6	393.5	392.0	1.0038	99.6%
Mid GPT point	796.4	592.9	206.2	205.2	1.0049	99.5%
Low GPT point	796.4	693.3	105.8	103.9	1.0183	98.2%
				Average Correction Factor	1.0090	99.1%

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

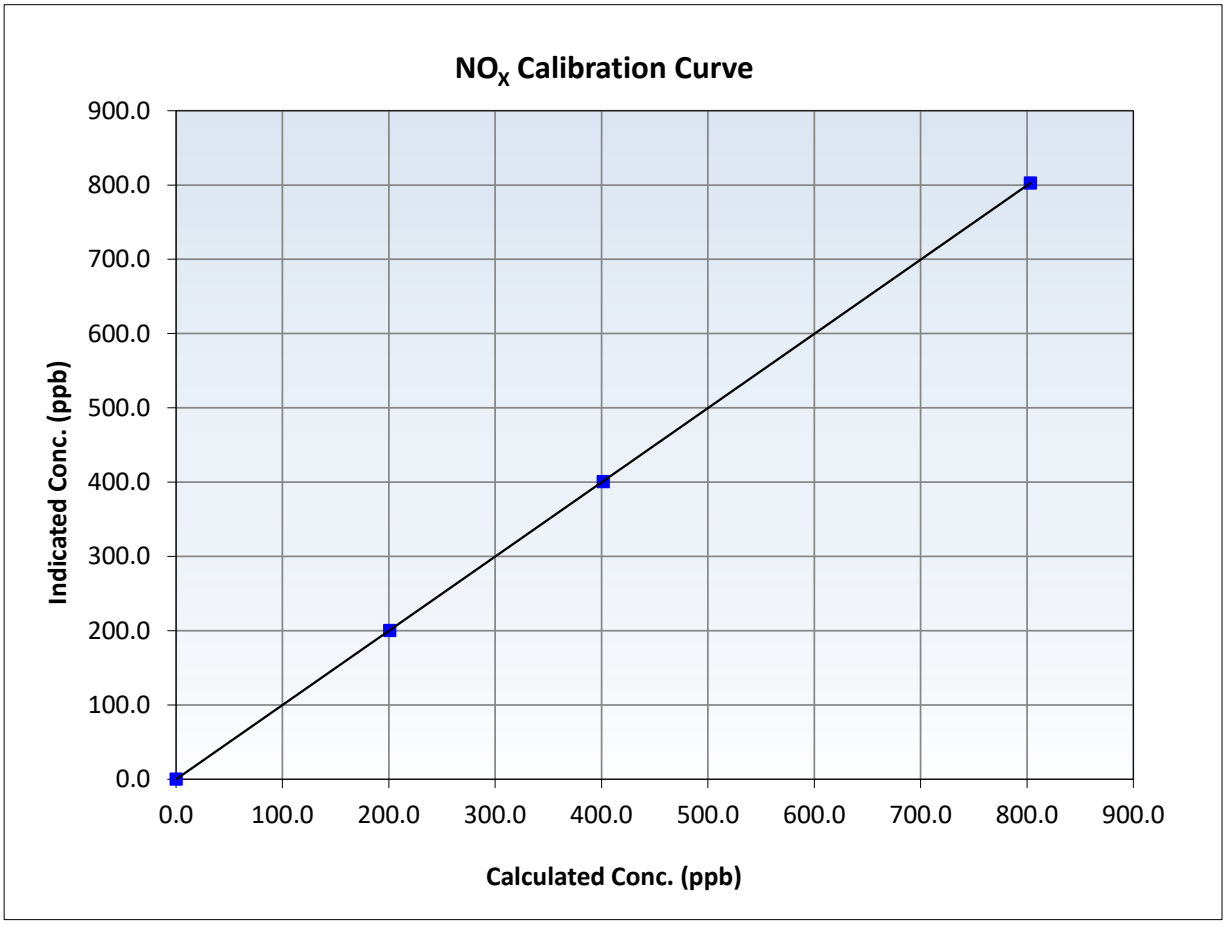
NO_X Calibration Summary

Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 11, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:50	End Time (MST):	15:32
Analyzer make:	Thermo 42i	Analyzer serial #:	1336160088

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.3	----	Correlation Coefficient	0.999998	≥0.995
803.1	802.9	1.0002	Slope	0.999442	0.90 - 1.10
401.5	400.6	1.0024			
200.8	200.5	1.0014	Intercept	-0.080000	+/-20



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NO_2 Calibration Summary

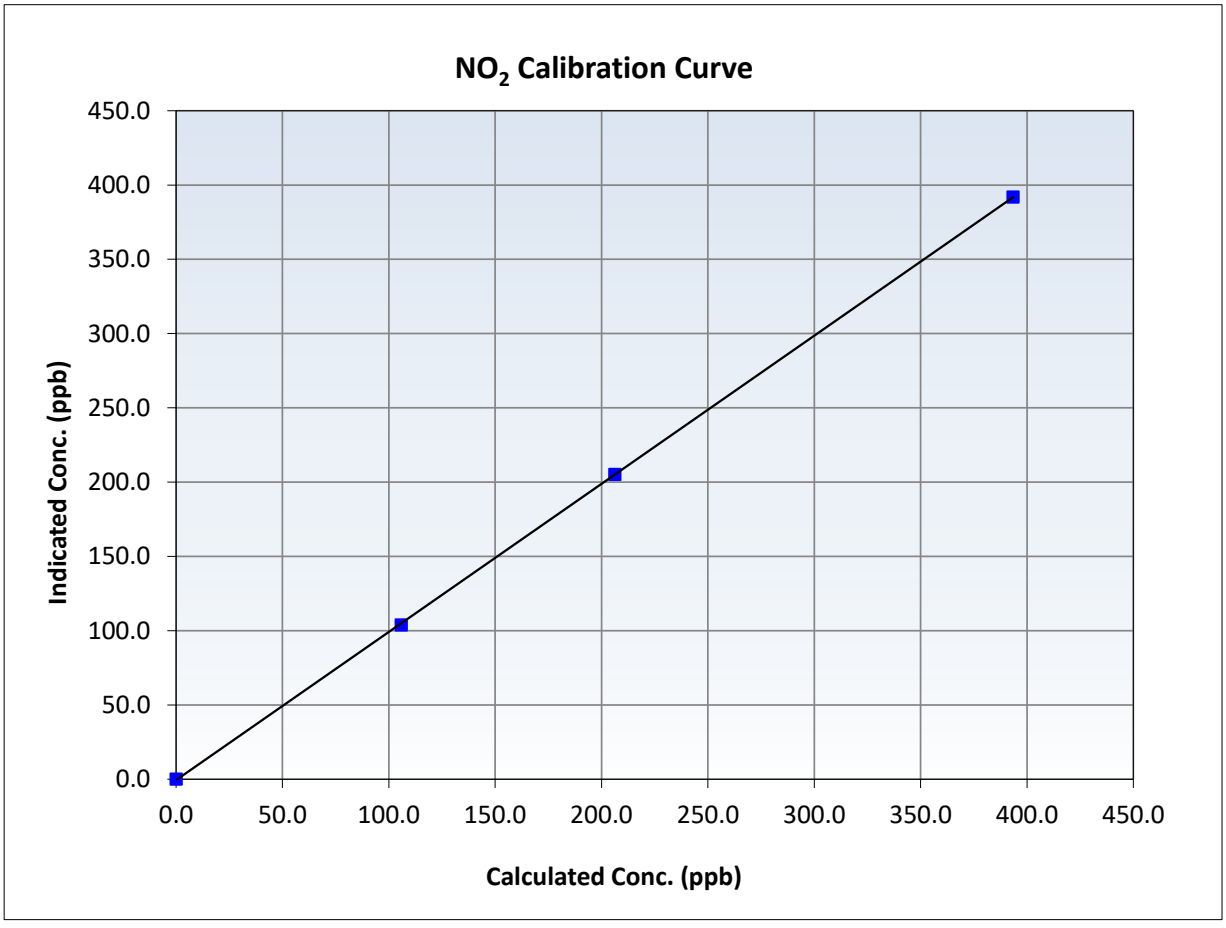
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 11, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:50	End Time (MST):	15:32
Analyzer make:	Thermo 42i	Analyzer serial #:	1336160088

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
393.5	392.0	1.0038
206.2	205.2	1.0049
105.8	103.9	1.0183

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999981	*≥0.995*
Slope	0.997150	*0.90 - 1.10*
Intercept	-0.575288	*+/-20*



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NO Calibration Summary

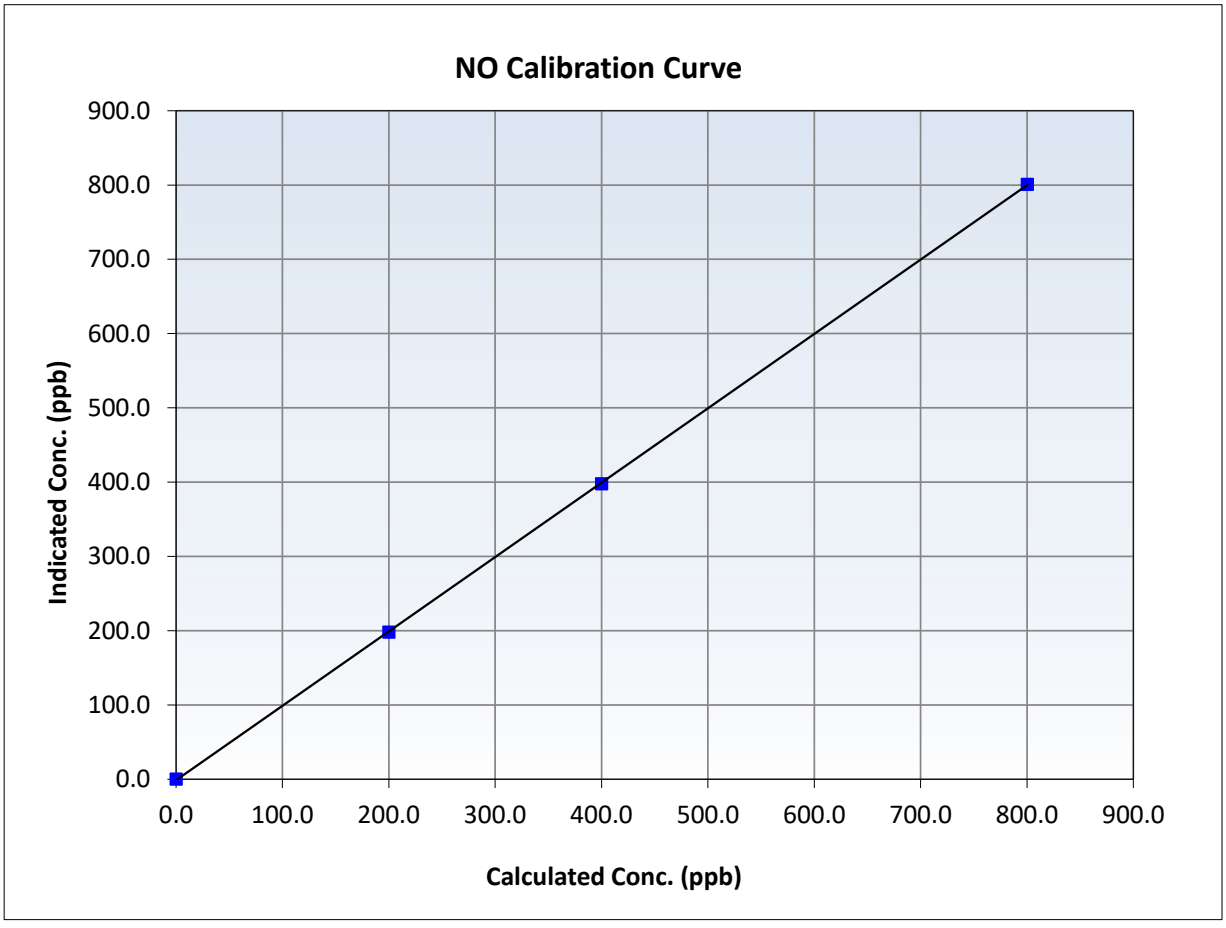
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 11, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:50	End Time (MST):	15:32
Analyzer make:	Thermo 42i	Analyzer serial #:	1336160088

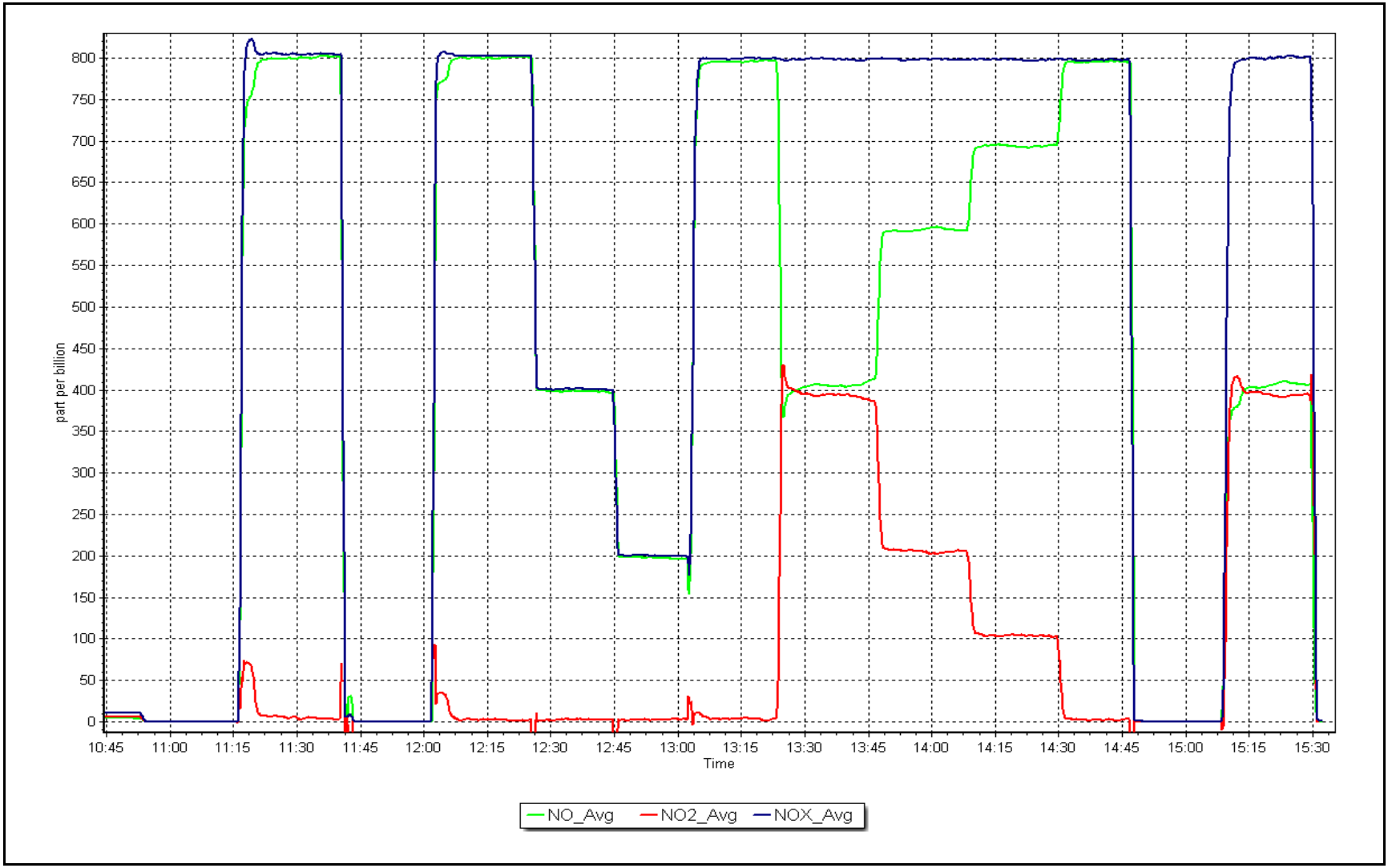
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.4	801.1	0.9991
400.2	397.9	1.0058
200.1	198.1	1.0101

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999982	*≥0.995*
Slope	1.001248	*0.90 - 1.10*
Intercept	-1.280000	*+/-20*



NO_X Calibration Plot Date: September 8, 2026 Location: Bertha Ganter-Fort McKay



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	September 3, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	9:49	End time (MST):	12:42
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:	261

Analyzer Information

Analyzer make:	Teledyne API T400		Analyzer serial #:	7045	
Analyzer Range	0 - 500 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.007600	1.010371	Backgd or Offset:	1.9	1.9
Calibration intercept:	0.620000	1.060000	Coeff or Slope:	1.021	1.021

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.9	----
As found High point	5000	880.4	400.0	403.8	0.988
As found Mid point					
As found Low point					
Baseline Corr As found:	404.7	Previous response	403.7	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	5000	880.4	400.0	404.8	0.988
Mid point	5000	755.0	200.0	203.6	0.982
Low point	5000	661.2	100.0	102.8	0.973
As left zero	5000	0.0	0.0	0.4	----
As left span	5000	880.4	400.0	409.9	0.976
				Average Correction Factor	0.981

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

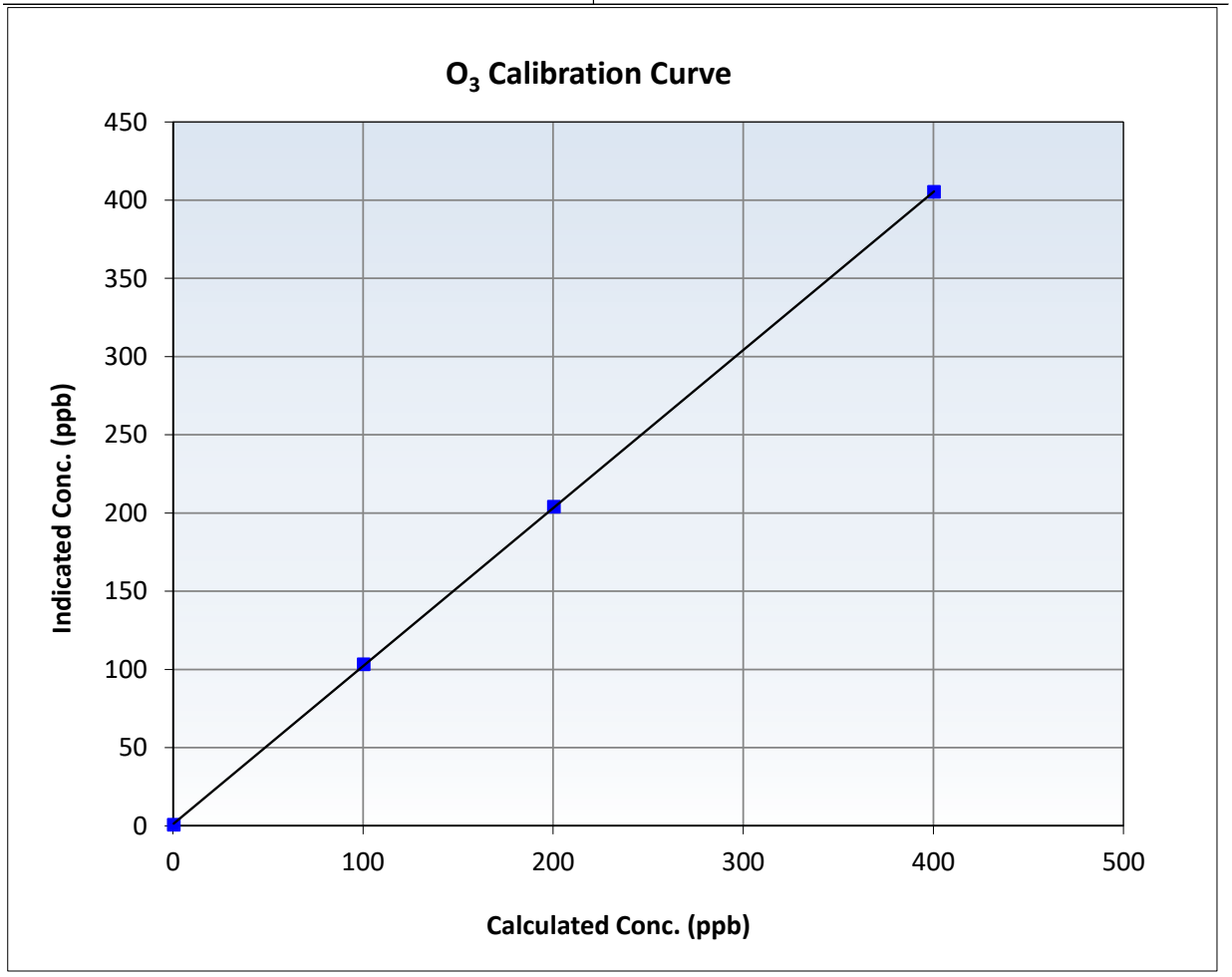
O_3 Calibration Summary

Station Information

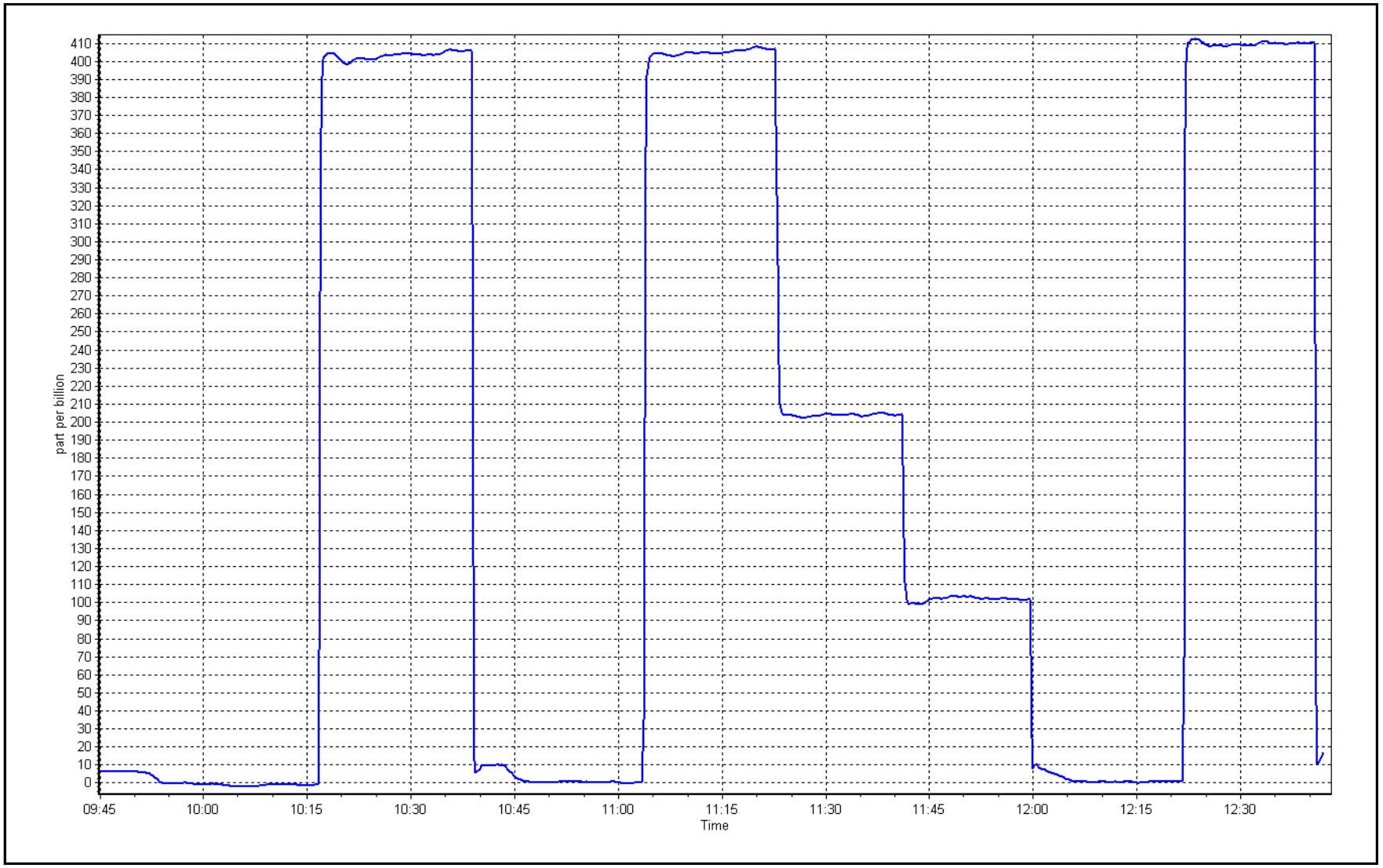
Calibration Date:	September 3, 2026	Previous Calibration:	August 5, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:49	End Time (MST):	12:42
Analyzer make:	Teledyne API T400	Analyzer serial #:	7045

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.3	----	Correlation Coefficient	0.999984	*≥0.995*
400.0	404.8	0.9881	Slope	1.010371	*0.90 - 1.10*
200.0	203.6	0.9823			
100.0	102.8	0.9728	Intercept	1.060000	*+/- 5*



O_3 Calibration Plot Date: September 3, 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:	September 22, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	13:53	End time (MST):	14:04
Analyzer Make:	Teledyne API T640	S/N:	323
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)	22.70	22.1	22.70	☐	+/- 2 °C
P (mmHg)	732.30	731.37	732.30	☐	+/- 10 mmHg
Flow (LPM)	4.98	4.995	4.98	☐	+/- 0.25 LPM
PW% (pump)	30	NA	30	☐	>80%
Zero Verification	PM w/o HEPA:	8.01	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: — Lot No.: — Expiry Date:

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test				☑	10.9 +/- 0.5

Date Optical Chamber Cleaned: August 11, 2026

Date Disposable Filter Changed: August 11, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0.0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: February 24, 2026

Date RH/T Sensor Cleaned: February 24, 2026

Notes: Removal calibration.

Calibration by: Mohammed Kashif

Wood Buffalo Environmental Association

T640X $PM_{2.5}$ CALIBRATION

Version-01-2024

Station Information

Station Name:	Fort McKay - Bertha Ganter	Station number:	AMS 01
Calibration Date:	September 22, 2026	Last Cal Date:	NA
Start time (MST):	14:09	End time (MST):	15:46
Analyzer Make:	API T640X	S/N:	1597
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)	22.2	23.82	22.2	☐	+/- 2 °C
P (mmHg)	732.4	731.54	732.4	☐	+/- 10 mmHg
Flow (LPM)	4.99	5.10	4.99	☐	+/- 0.25 LPM
By-pass flow (LPM)	11.68	11.87	11.68	☐	+/- 5 LPM
PW% (pump)	41	-----	41	☐	>80%
Zero Verification	PM w/o HEPA:	9.10	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 29, 2027 — Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	(Limits)
PMT Peak Test	11.90	11.20	10.90	☑	+/- 0.5

Date Optical Chamber Cleaned: September 22, 2026

Date Disposable Filter Changed: September 22, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: September 22, 2026

Date RH/T Sensor Cleaned: September 22, 2026

Notes: Installation calibration. Performed annual and quarterly maintenance. Leak check passed. By-pass flow was not adjusted. PMT adjusted.

Calibration by: Mohammed Kashif

Wood Buffalo Environmental Association

Nt - NOX - NH3 Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
NOX Cal Date:	September 22, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	10:08	End time (MST):	15:00
NH3 Cal Date:	September 23, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	9:41	End time (MST):	17:05
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:	76.58	ppm	Removed Cylinder #:	NA
NH3 gas Diff:			Removed cyl Expiry:	NA
Calibrator Model:	API T700		Serial Number:	3565
ZAG make/model:	API T701		Serial Number:	261

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:	8.2
NOX Range (ppb):	0 - 1000 ppb		Sample Flow:	562
	Start	***Finish***		***Start***	***Finish***
NO coefficient:	0.971	0.971	Nt coefficient:	0.983	0.983
NOX coefficient:	0.975	0.975	NO bkgrnd:	0.0	0.0
NO2 coefficient:	1.000	1.000	NOX bkgrnd:	0.0	0.0
NH3 coefficient:	0.986	0.983	Nt bkgrnd:	0.0	0.0

Calibration Statistics

	Start	***Finish***
NO_X Cal Slope:	0.998617	1.010556
NO_X Cal Offset:	-0.840000	-0.860000
NO Cal Slope:	1.002847	1.007559
NO Cal Offset:	-0.740000	-1.340000
NO_2 Cal Slope:	0.996970	0.995227
NO_2 Cal Offset:	-0.936088	-0.072187
NH3 Cal Slope:	1.003312	0.997768
NH3 Cal Offset:	4.967805	1.692365
Nt Cal Slope:	1.005873	1.000194
Nt Cal Offset:	5.304732	2.315373

Wood Buffalo Environmental Association

NO_X - NO - NO_2 Calibration Report

NOx / NO / Nt As Found Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	Baseline corr NOx Correction factor (Cc/Ic) *Limit = 0.9 - 1.0*	Baseline corr NO Correction factor (Cc/Ic) *Limit = 0.9 - 1.0*
As found zero	5000	0.0	0.0	0.0	0.0	0.6	-0.2	0.5	----	----
As found span	4932	67.6	803.1	800.4	803.1	808.4	804.5	807.3	0.9934	0.9949
AF GPT span	4932	67.6	803.1	-----	803.1	805.7	-----	812.0	0.9968	-----
new NO cyl rp										

Baseline Corr As Fd Nt = 806.8 ppb NO_X = 807.8 ppb NO = 804.7 ppb

Previous Response Nt = 813.11 ppb NO_X = 801.1 ppb NO = 801.9 ppb

**NO_X Δ (NO to GPT response) = -0.7%

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

*Percent Change $Nt_{(NO)}$ = -0.8%

*Percent Change NO_X = 0.8%

*Percent Change NO = 0.3%

* = > +/-5% change initiates investigation

NOx / NO / Nt Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibration zero	5000	0.0	0.0	0.0	0.0	0.3	-0.1	0.3	----	----
High point	4932	67.6	803.1	800.4	803.1	811.6	805.6	809.0	0.9895	0.9935
Mid point	4966	33.8	401.5	400.2	401.5	403.4	401.6	408.2	0.9954	0.9965
Low point	4983	16.9	200.8	200.1	200.8	201.5	198.8	202.1	0.9964	1.0065
								Average Correction Factor	0.9938	0.9988

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
As Found zero	----	----	0.0	0.8	----	----
Calibration zero	----	----	0.0	0.4	----	----
High GPT point (400 ppb O3)	806.4	396.6	412.5	411.8	1.0017	99.8%
Mid GPT point (200 ppb O3)	806.4	595.0	214.1	209.6	1.0215	97.9%
Low GPT point (100 ppb O3)	806.4	697.6	111.5	112.5	0.9911	100.9%
				Average Correction Factor	1.0048	99.5%

Wood Buffalo Environmental Association
NH_3 - 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)) *Limit = 0.9 - 1.1*	Baseline corr NH3 Correction factor (Cc/(Ic-zero)) *Limit = 0.9 - 1.1*
As found zero	5000	0.0	0.0	0.0	0.0	-1.0	-1.1	0.1	----	----
AF High point										
AF Mid point										
AF Low point										
new NH3 cyl rp										

Baseline Corr As Fd Nt = NA ppb NH3 = NA ppb *Percent Change $Nt_{(NH3)}$ = NA

Previous Response Nt = NA ppb NH3 = NA ppb * = > +/-5% change initiates investigation *Percent Change NH3 = NA

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) *Limit = 0.95-1.05*	NH3 Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibration zero	5000	0.0	0.0	0.0	0.0	0.3	0.3	-0.1	----	----
High point	2930	70.5	1799.6	0.0	1799.6	1800.5	5.0	1795.5	1.000	1.002
Mid point	2961	39.2	1000.6	0.0	1000.6	1005.8	2.6	1003.0	0.995	0.998
Low point	2980	19.6	500.3	0.0	500.3	503.9	2.3	501.6	0.993	0.997
								Average Correction Factor	0.9958	0.9991

NH3 Previous Converter Efficiency = 97.1 %
NH3 Current Converter Efficiency = 97.1 %

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

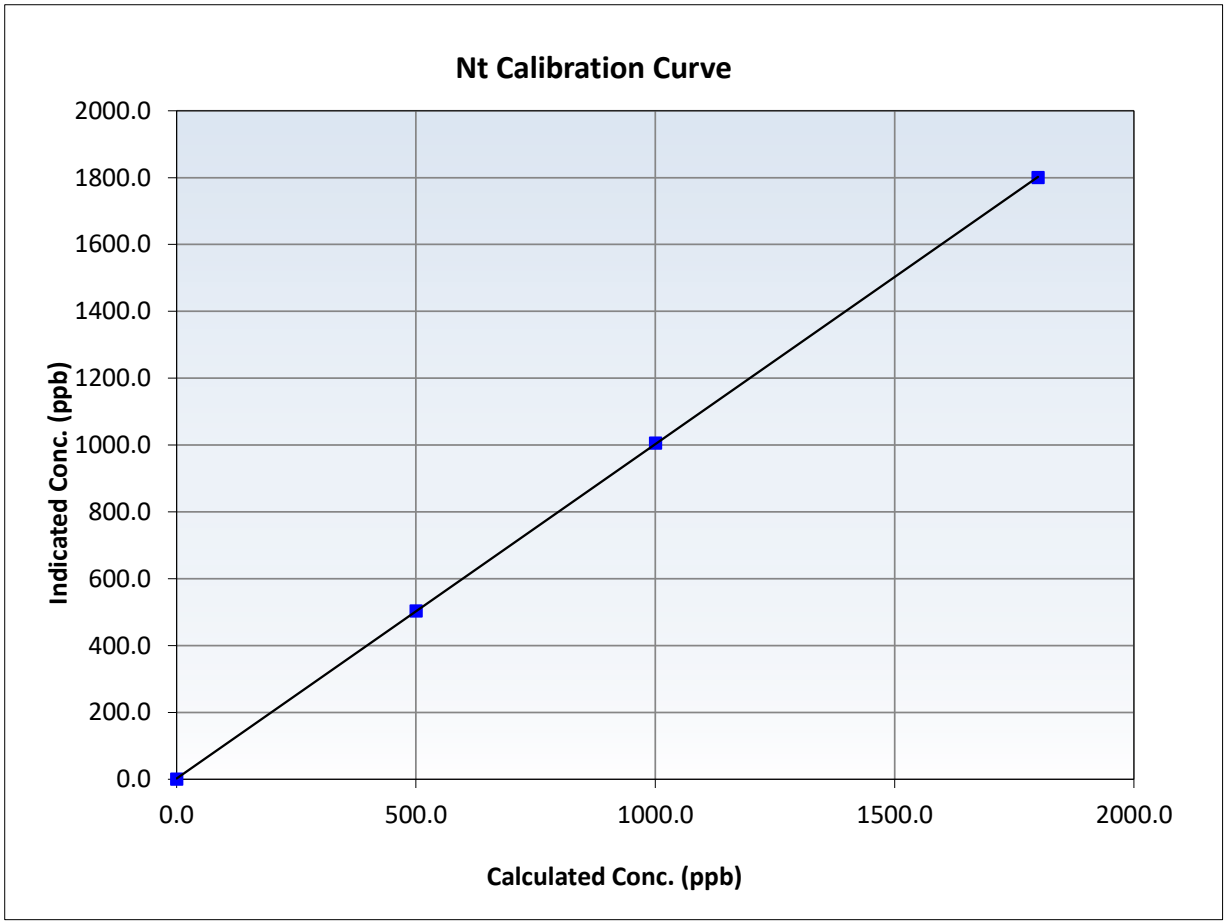
Nt Calibration Summary

Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 25, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:41	End Time (MST):	17:05
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.3	----	Correlation Coefficient	0.999991	≥0.995
1799.6	1800.5	0.9995	Slope	1.000194	0.90 - 1.10
1000.6	1005.8	0.9949	Intercept	2.315373	+/-20
500.3	503.9	0.9929			



Wood Buffalo Environmental Association

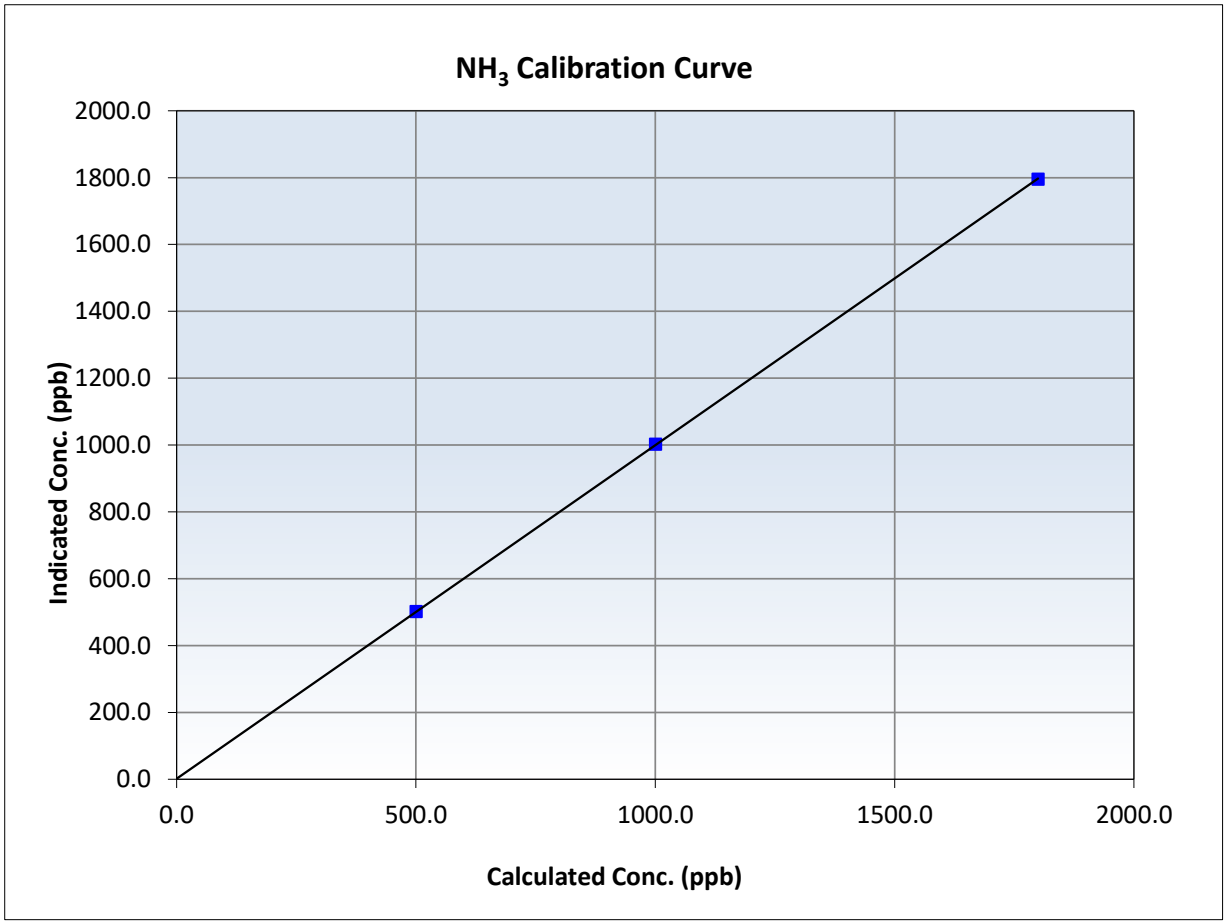
NH_3 Calibration Summary

Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 25, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:41	End Time (MST):	17:05
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.1	----	Correlation Coefficient	0.999991	*≥0.995*
1799.6	1795.5	1.0023	Slope	0.997768	*0.90 - 1.10*
1000.6	1003.0	0.9977	Intercept	1.692365	*+/-20*
500.3	501.6	0.9975			



Wood Buffalo Environmental Association

NO_X Calibration Summary

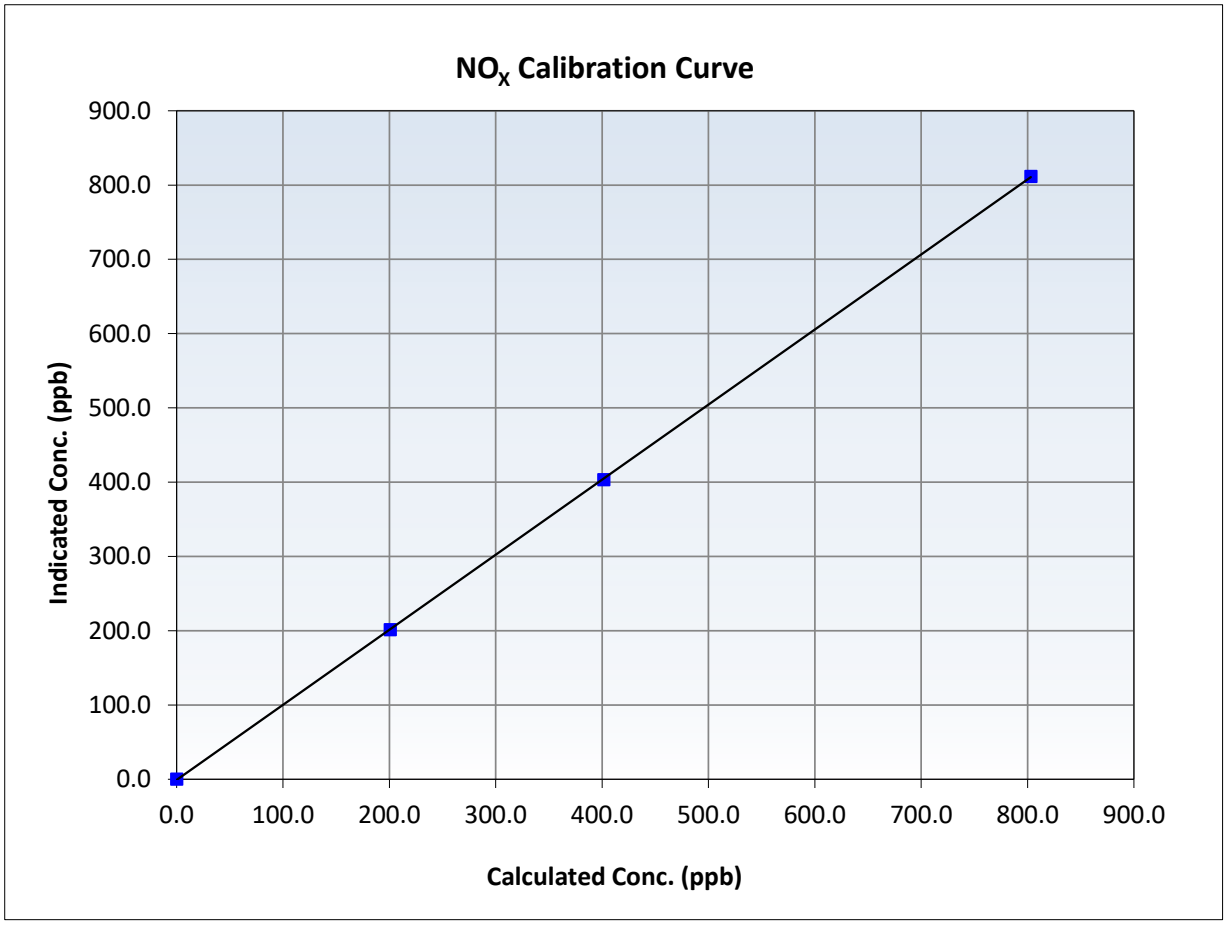
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 25, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:08	End Time (MST):	15:00
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
803.1	811.6	0.9895
401.5	403.4	0.9954
200.8	201.5	0.9964

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999987	*≥0.995*
Slope	1.010556	*0.90 - 1.10*
Intercept	-0.860000	*+/-20*



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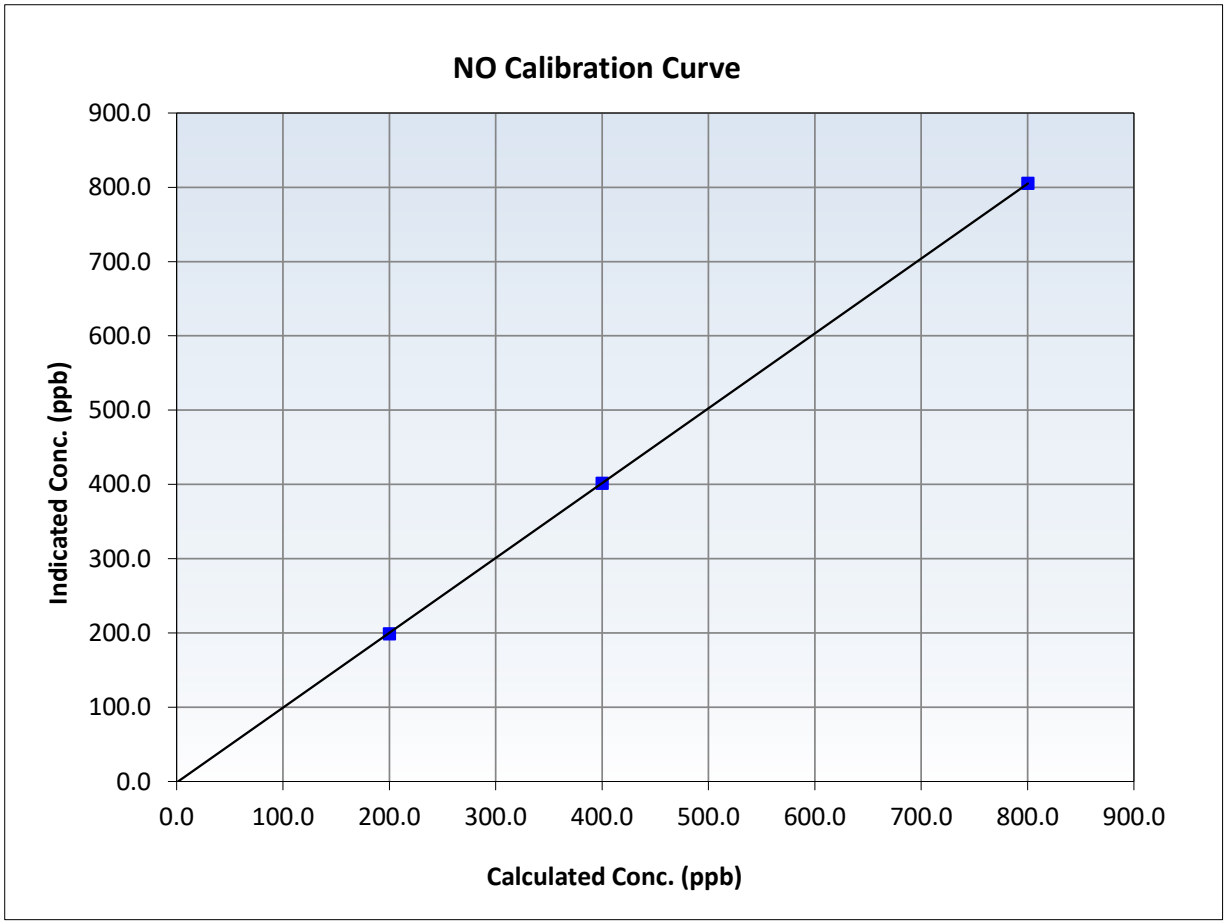
NO Calibration Summary

Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 25, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:08	End Time (MST):	15:00
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.1	----	Correlation Coefficient	0.999989	*≥0.995*
800.4	805.6	0.9935	Slope	1.007559	*0.90 - 1.10*
400.2	401.6	0.9965	Intercept	-1.340000	*+/-20*
200.1	198.8	1.0065			



Wood Buffalo Environmental Association

NO_2 Calibration Summary

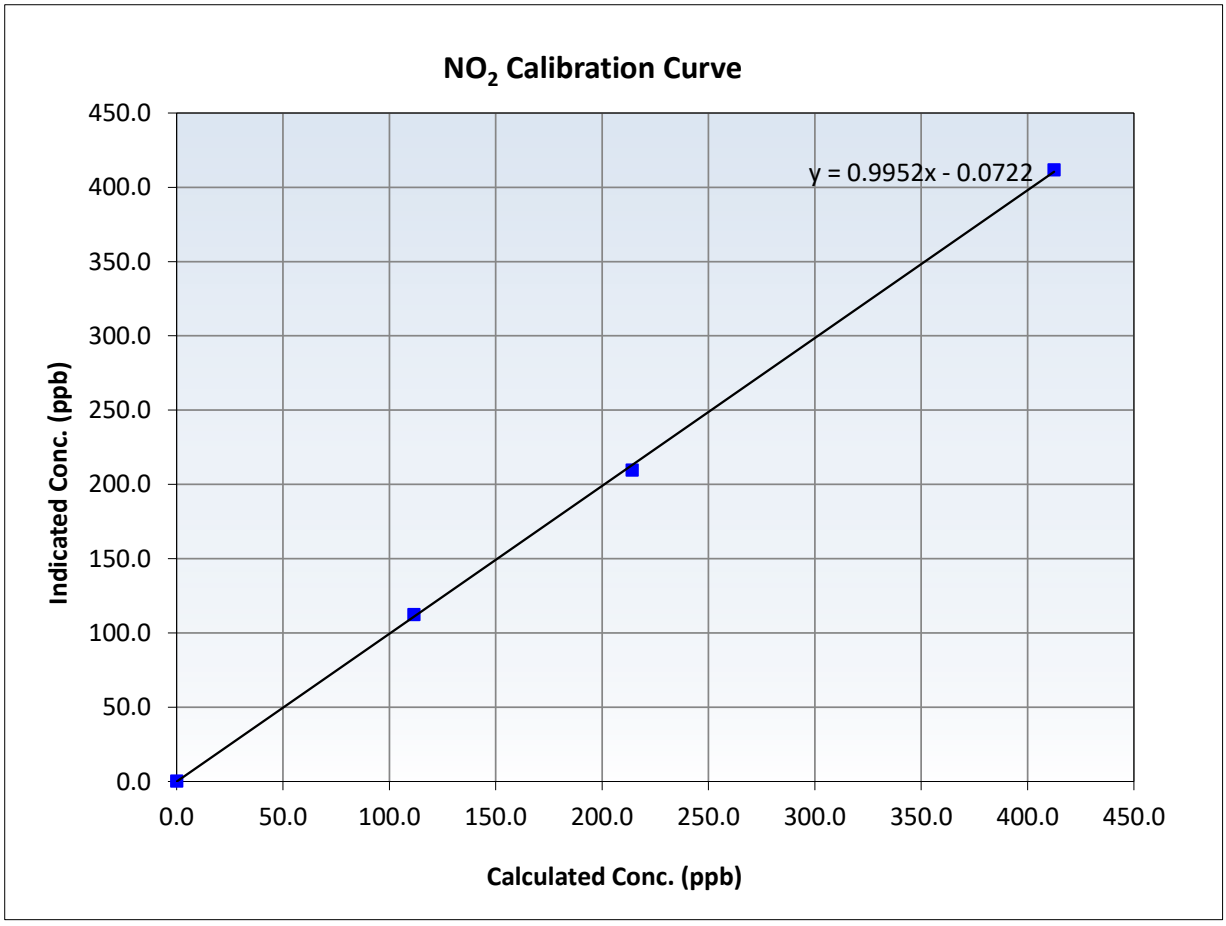
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 25, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:08	End Time (MST):	15:00
Analyzer make:	API T201	Analyzer serial #:	152

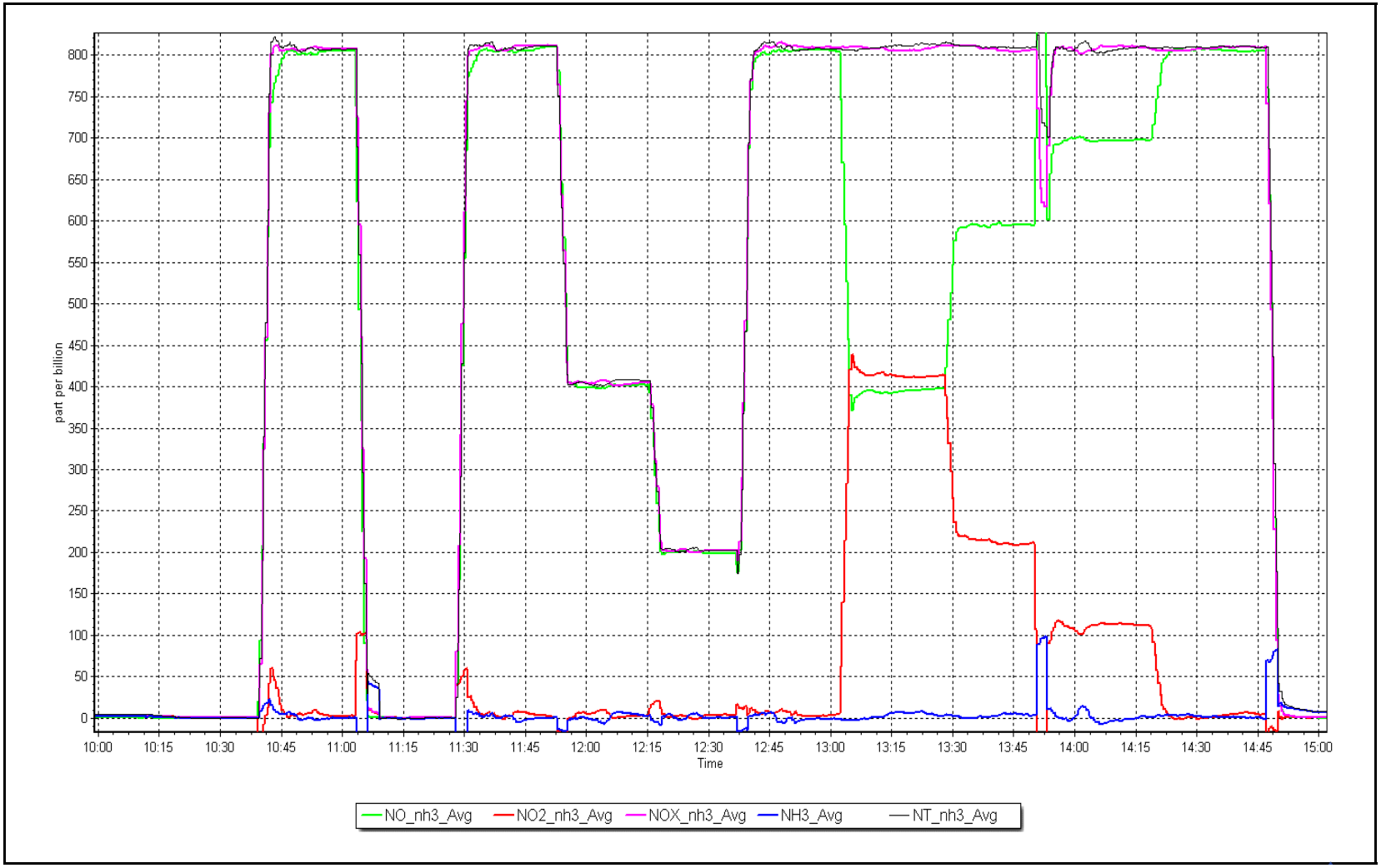
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
412.5	411.8	1.0017
214.1	209.6	1.0215
111.5	112.5	0.9911

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999823	*≥0.995*
Slope	0.995227	*0.90 - 1.10*
Intercept	-0.072187	*+/-20*



NO_X Calibration Plot Date: September 22, 2026 Location: Bertha Ganter-Fort McKay



NH_3 Calibration Plot Date: September 23, 2026 Location: Bertha Ganter-Fort McKay



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS04
BUFFALO VIEWPOINT
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	September 21, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	11:00	End time (MST):	15:00
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.26	ppm	Cal Gas Exp Date:	April 15, 2034
Cal Gas Cylinder #:	CC250460			
Removed Cal Gas Conc:	50.26	ppm	Rem Gas Exp Date:	N/A
Removed Gas Cyl #:	N/A		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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.998971	0.998899	Backgd or Offset:	1.6	1.6
Calibration intercept:	1.306334	1.506364	Coeff or Slope:	1.002	1.008

SO_2 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4920	79.7	801.2	794.3	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	794.4	Previous response	801.7	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4920	79.7	801.2	801.1	1.000
Mid point	4960	39.8	400.1	402.0	0.995
Low point	4980	19.9	200.0	202.5	0.988
As left zero	5000	0.0	0.0	0.1	----
As left span	4920	79.7	801.2	802.4	0.998
				Average Correction Factor:	0.994

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

SO_2 Calibration Summary

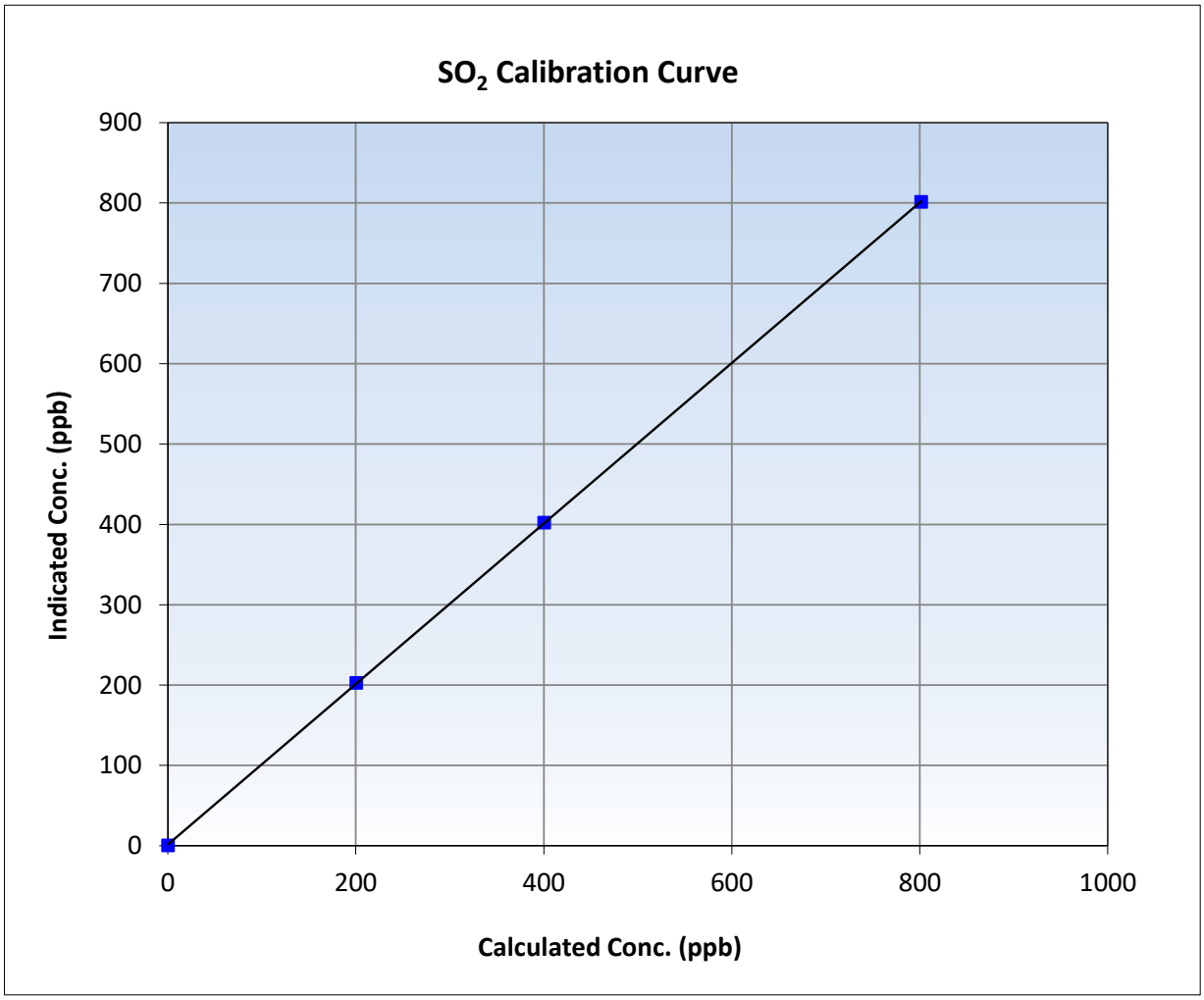
Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	August 5, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	11:00	End Time (MST):	15:00
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1410661331

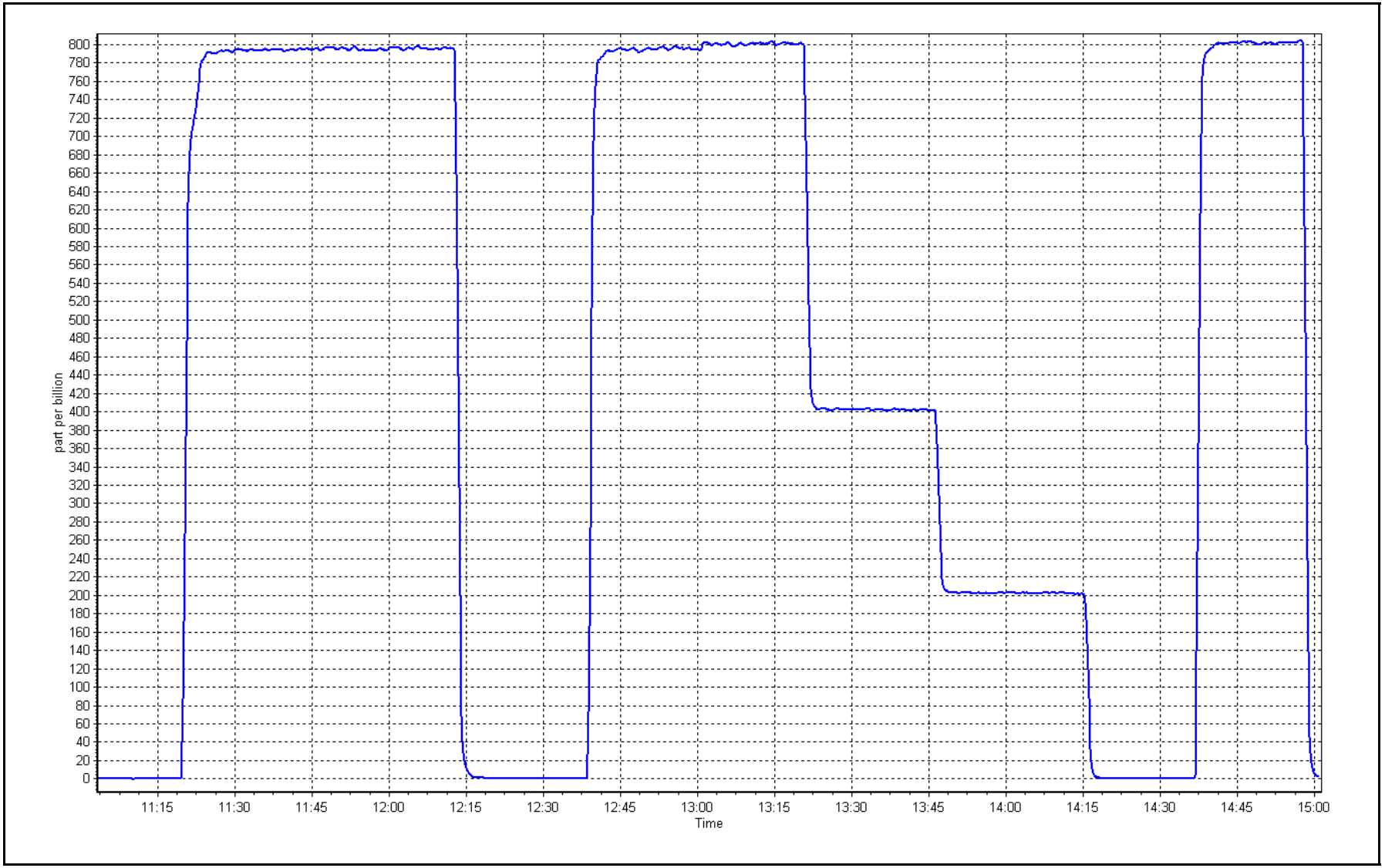
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
801.2	801.1	1.0001
400.1	402.0	0.9952
200.0	202.5	0.9878

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999988	*≥0.995*
Slope	0.998899	*0.90 - 1.10*
Intercept	1.506364	*+/-30*



SO2 Calibration Plot Date: September 21, 2026 Location: Buffalo Viewpoint



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	September 3, 2026	Last Cal Date:	August 10, 2026
Start time (MST):	9:29	End time (MST):	15:09
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.994288	0.994144	Backgd or Offset:	2.12	2.12
Calibration intercept:	-0.041718	-0.061674	Coeff or Slope:	1.107	1.126

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	83.3	80.0	79.0	1.012
As found Mid point	4958	41.7	40.0	39.5	1.014
As found Low point	4979	20.8	20.0	19.7	1.014
New cylinder response					

Baseline Corr As found:	79.0	Prev response:	79.46	*% change:	-0.6%
Baseline Corr 2nd AF pt:	39.5	AF Slope:	0.988001	AF Intercept:	-0.021723
Baseline Corr 3rd AF pt:	19.7	AF Correlation:	0.999999	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	83.3	80.0	79.5	1.006
Mid point	4958	41.7	40.0	39.6	1.011
Low point	4979	20.8	20.0	19.8	1.009
As left zero	5000	0.0	0.0	0.2	----
As left span	4917	83.3	80.0	78.4	1.020
SO2 Scrubber Check	4920	80.0	800.0	-0.1	----
Date of last scrubber change:		12-Mar-26		Ave Corr Factor	1.008
Date of last converter efficiency test:					

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

H_2S Calibration Summary

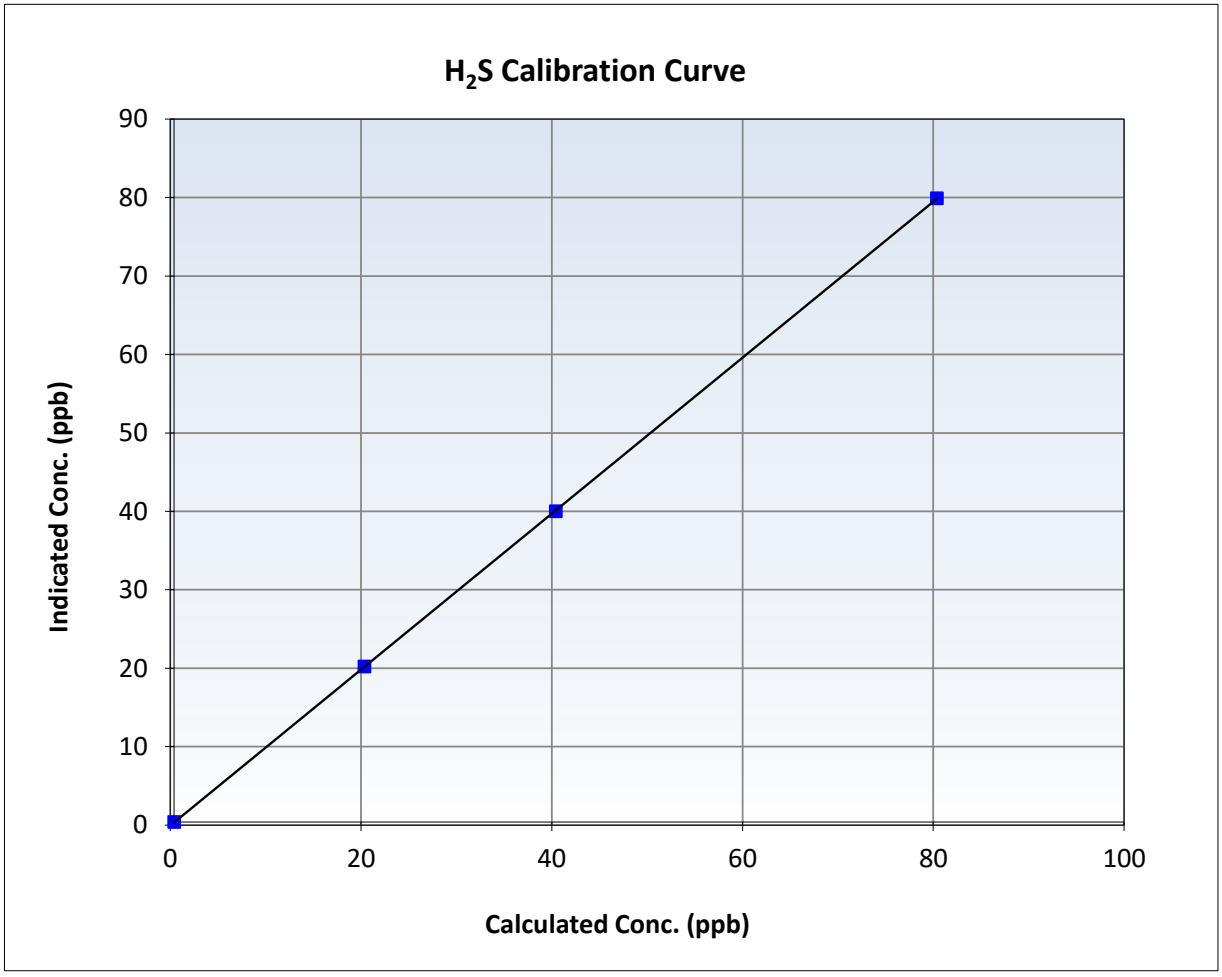
Station Information

Calibration Date:	September 3, 2026	Previous Calibration:	August 10, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:29	End Time (MST):	15:09
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1008841400

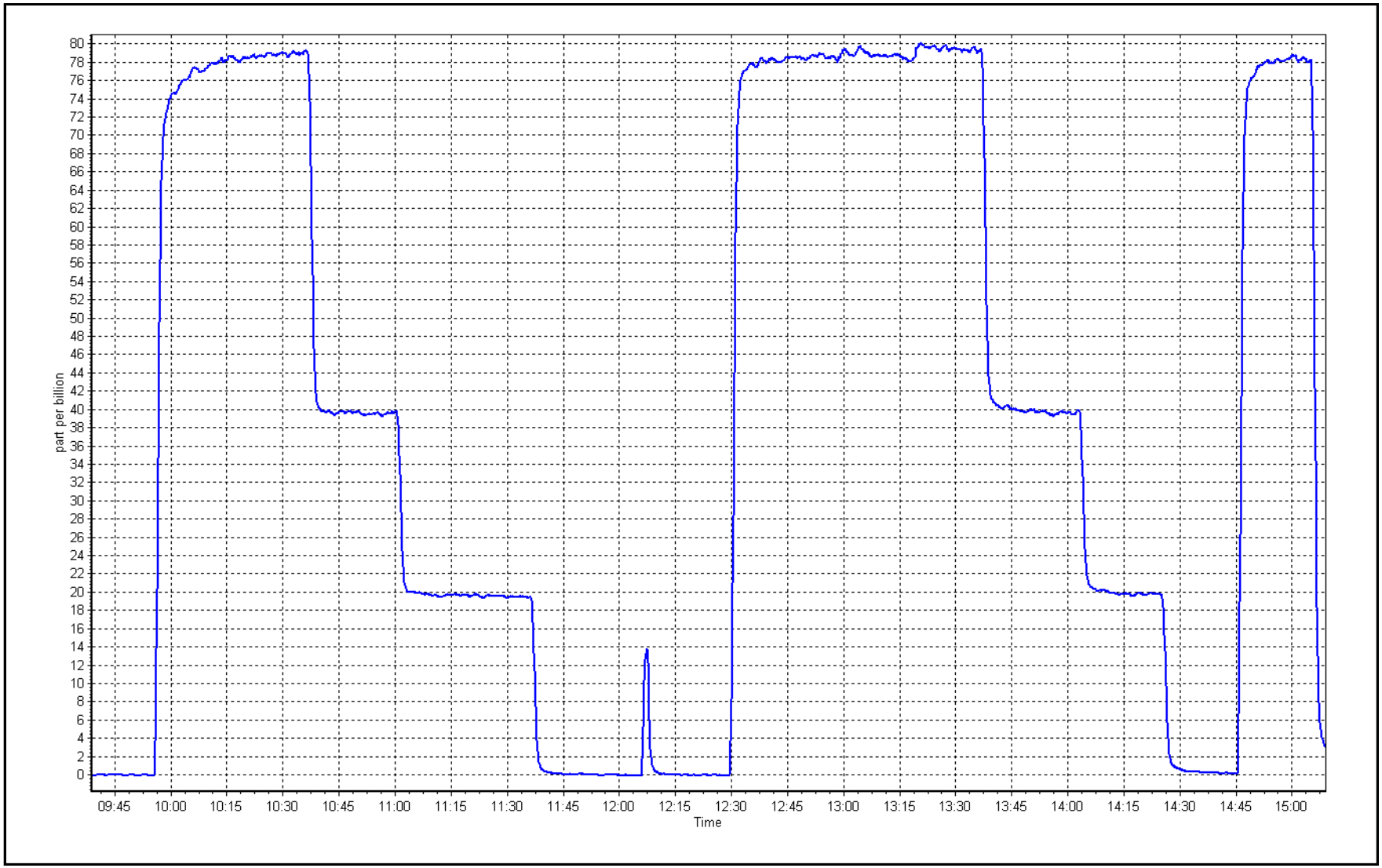
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
80.0	79.5	1.0058
40.0	39.6	1.0110
20.0	19.8	1.0085

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999992	*≥0.995*
Slope	0.994144	*0.90 - 1.10*
Intercept	-0.061674	*+/-3*



H_2S Calibration Plot Date: September 3, 2026 Location: Buffalo Viewpoint



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	September 12, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	11:09	End time (MST):	12:52
Reason:	Cylinder Change		

Calibration Standards

Gas Cert Reference:	CC250460	Cal Gas Expiry Date:	April 15, 2034
CH4 Cal Gas Conc.	500.0 ppm	CH4 Equiv Conc.	1056.1 ppm
C3H8 Cal Gas Conc.	202.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	500.0 ppm	CH4 Equiv Conc.	1056.1 ppm
Removed C3H8 Conc.	202.2 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

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.45E-04	2.45E-04	NMHC SP Ratio:	4.56E-05	4.56E-05
CH4 Retention time:	11.4	11.4	NMHC Peak Area:	194337	194337
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.0	16.90	15.17	1.114
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	15.17	Prev response	16.90	*% change	-11.4%
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)) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.7	16.83	16.76	1.005
				Average Correction Factor	

Notes: An investigation was conducted, and no issues were found with the analyzer or its setup. The span point was off-limits because the H_2 cylinder was nearly empty. The H_2 cylinder was replaced, and no adjustments required.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.0	8.90	7.39	1.204
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.39	Prev response	8.88	*% change	-20.2%
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) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.7	8.86	8.78	1.010
				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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.0	8.00	7.78	1.028
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.78	Prev response	8.02	*% 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

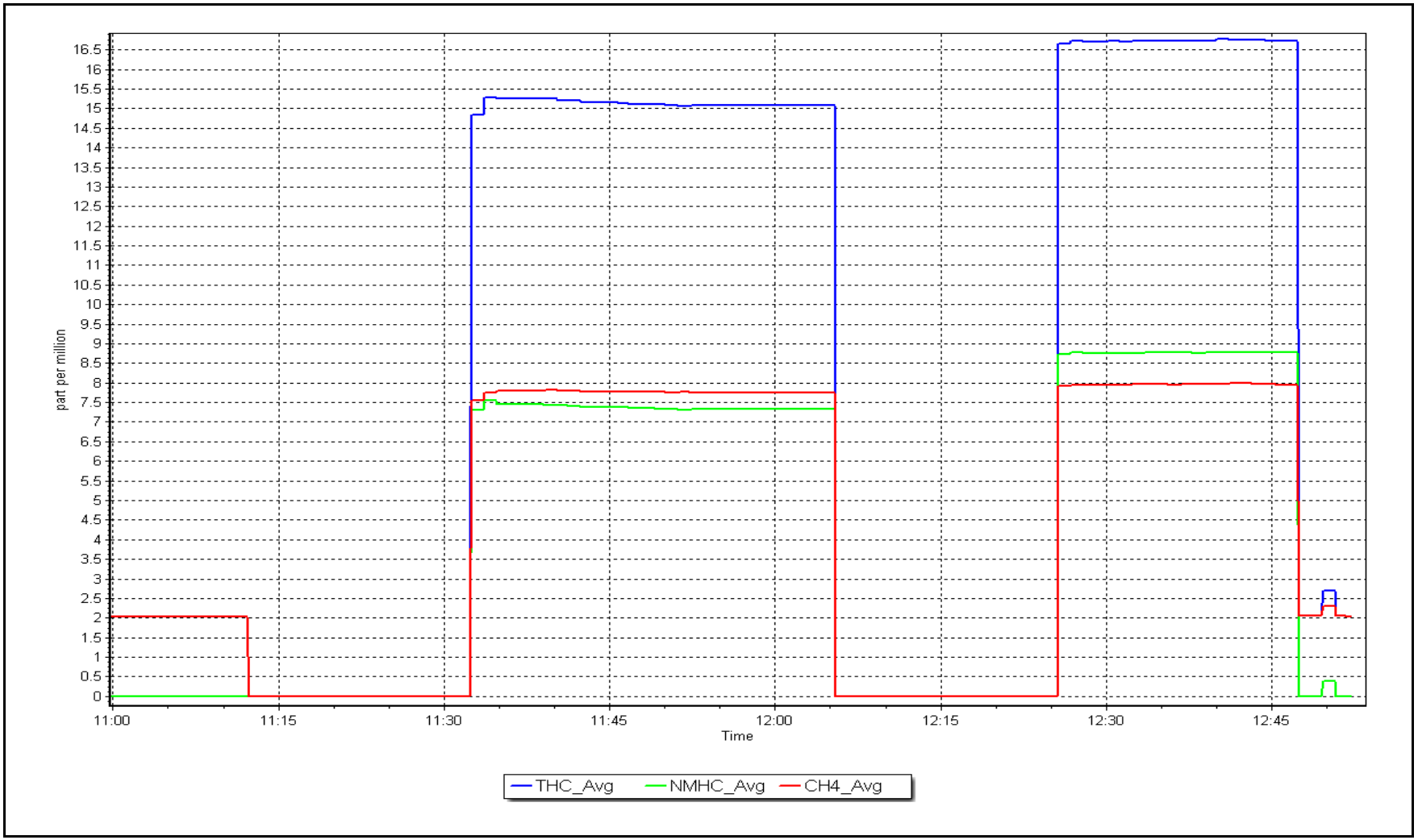
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.7	7.97	7.98	0.999
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.999217	
THC Cal Offset:	0.015736	
CH4 Cal Slope:	1.001686	
CH4 Cal Offset:	0.002454	
NMHC Cal Slope:	0.996984	
NMHC Cal Offset:	0.013082	

Calibration Performed By: Mohammed Kashif

NMHC Calibration Plot Date: September 12, 2026 Location: Buffalo Viewpoint



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	September 21, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	11:00	End time (MST):	15:00
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC250460	Cal Gas Expiry Date:	April 15, 2034
CH4 Cal Gas Conc.	500.0 ppm	CH4 Equiv Conc.	1056.1 ppm
C3H8 Cal Gas Conc.	202.2 ppm		
Removed Gas Cert:	N/A	Removed Gas Expiry:	N/A
Removed CH4 Conc.	500.0 ppm	CH4 Equiv Conc.	1056.1 ppm
Removed C3H8 Conc.	202.2 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

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.45E-04	2.45E-04	NMHC SP Ratio:	4.56E-05	4.65E-05
CH4 Retention time:	11.4	11.6	NMHC Peak Area:	194337	190334
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.7	16.83	16.75	1.005
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.75	Prev response	16.84	*% change	-0.5%
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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.7	16.83	16.82	1.001
Mid point	4960	39.8	8.41	8.45	0.995
Low point	4980	19.9	4.20	4.22	0.997
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.7	16.83	16.87	0.998
				Average Correction Factor	0.998

Notes: N2 changed out. Span adjusted.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.7	8.86	8.77	1.011
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.77	Prev response	8.85	*% change	-0.9%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.7	8.86	8.85	1.002
Mid point	4960	39.8	4.43	4.45	0.995
Low point	4980	19.9	2.21	2.23	0.994
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.7	8.86	8.88	0.998
				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)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.7	7.97	7.99	0.998
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.99	Prev response	7.99	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.7	7.97	7.97	1.000
Mid point	4960	39.8	3.98	4.00	0.995
Low point	4980	19.9	1.99	1.99	1.000
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.7	7.97	7.99	0.997
				Average Correction Factor	0.998

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.999217	0.998918
THC Cal Offset:	0.015736	0.016937
CH4 Cal Slope:	1.001686	1.000337
CH4 Cal Offset:	0.002454	0.003655
NMHC Cal Slope:	0.996984	0.997642
NMHC Cal Offset:	0.013082	0.013283

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

THC Calibration Summary

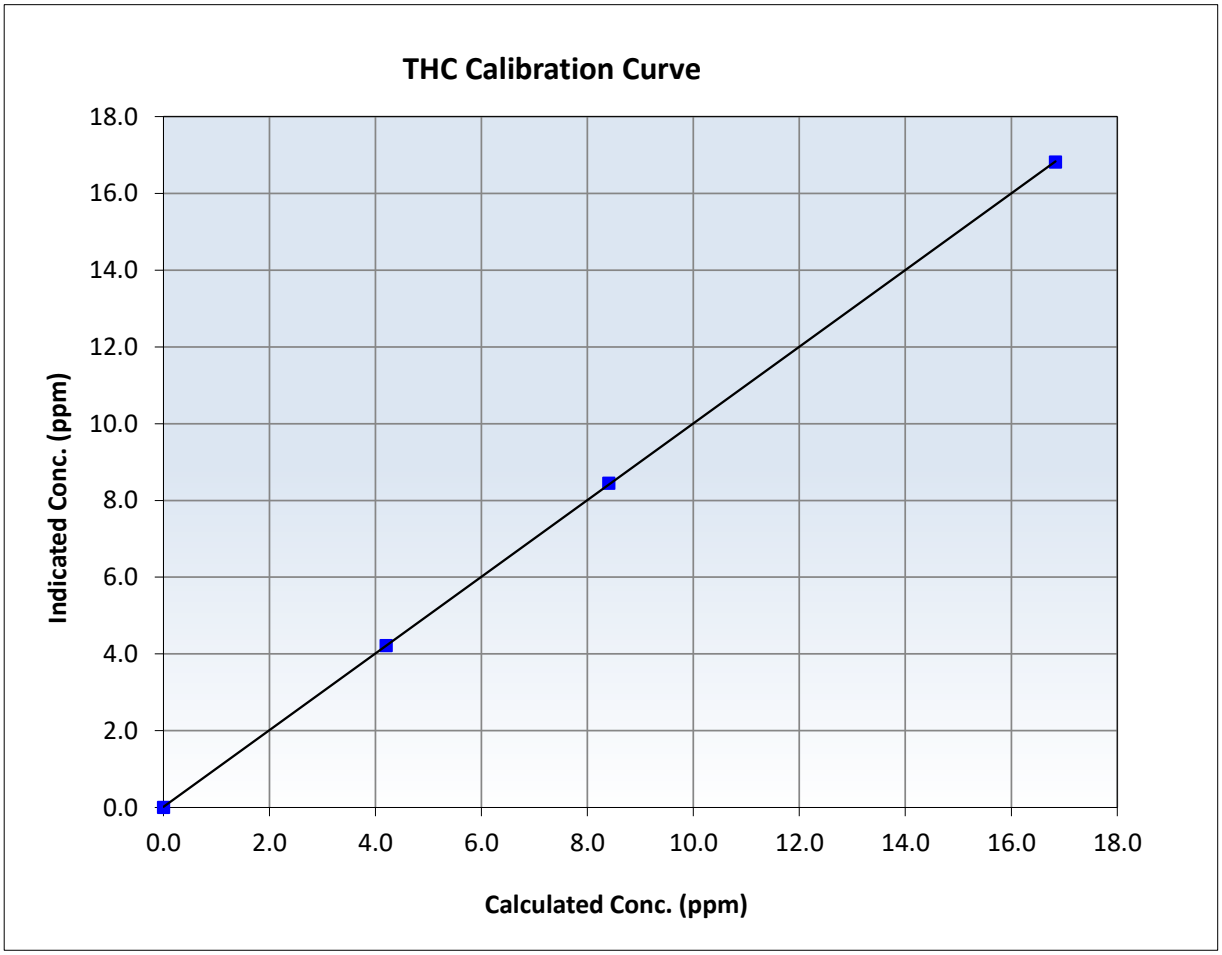
Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	August 5, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	11:00	End Time (MST):	15:00
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
16.83	16.82	1.0010
8.41	8.45	0.9953
4.20	4.22	0.9967

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999990	*≥0.995*
Slope	0.998918	*0.90 - 1.10*
Intercept	0.016937	*+/-0.5*



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CH_4 Calibration Summary

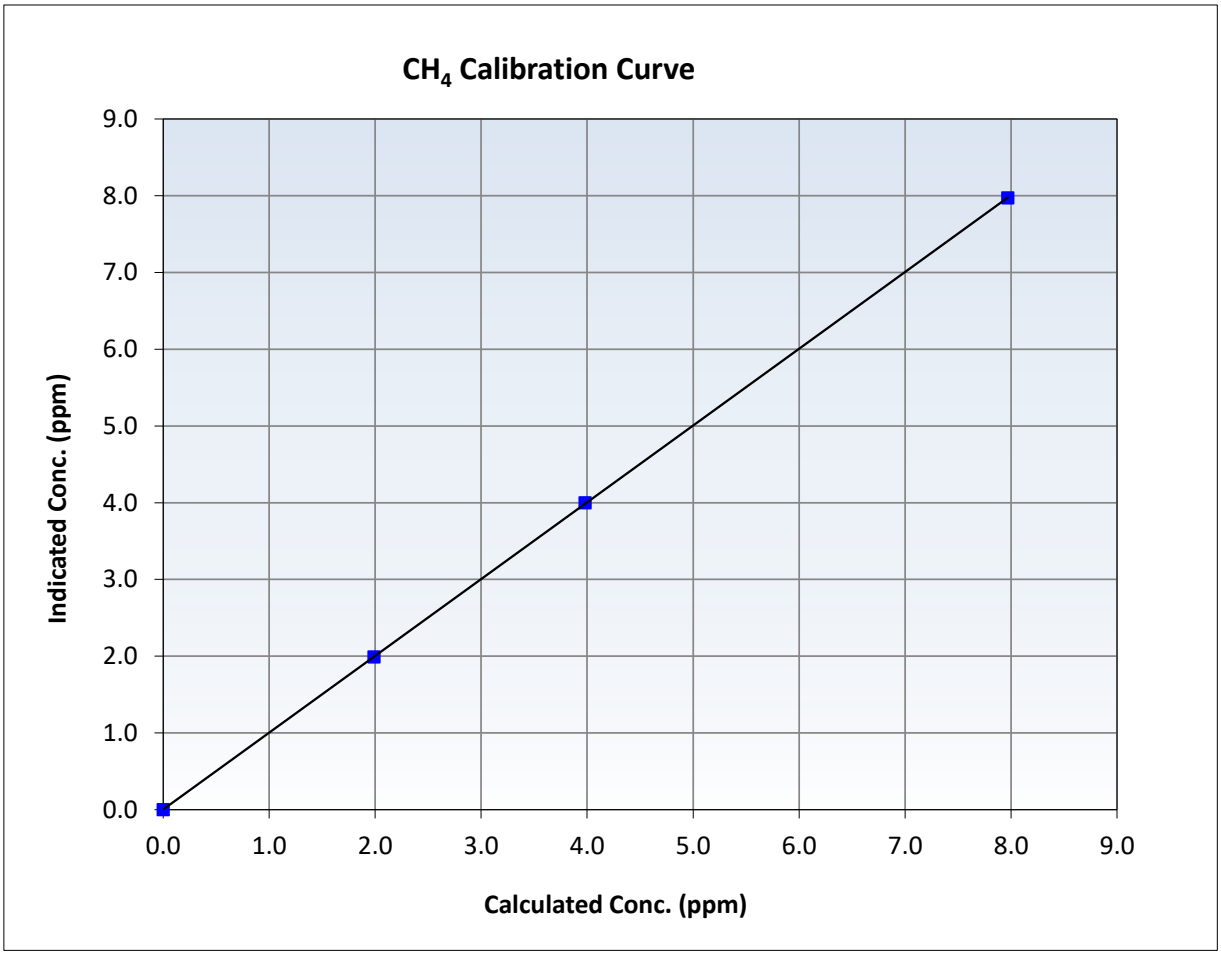
Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	August 5, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	11:00	End Time (MST):	15:00
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
7.97	7.97	0.9999
3.98	4.00	0.9953
1.99	1.99	1.0000

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999993	*≥0.995*
Slope	1.000337	*0.90 - 1.10*
Intercept	0.003655	*+/-0.5*



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NMHC Calibration Summary

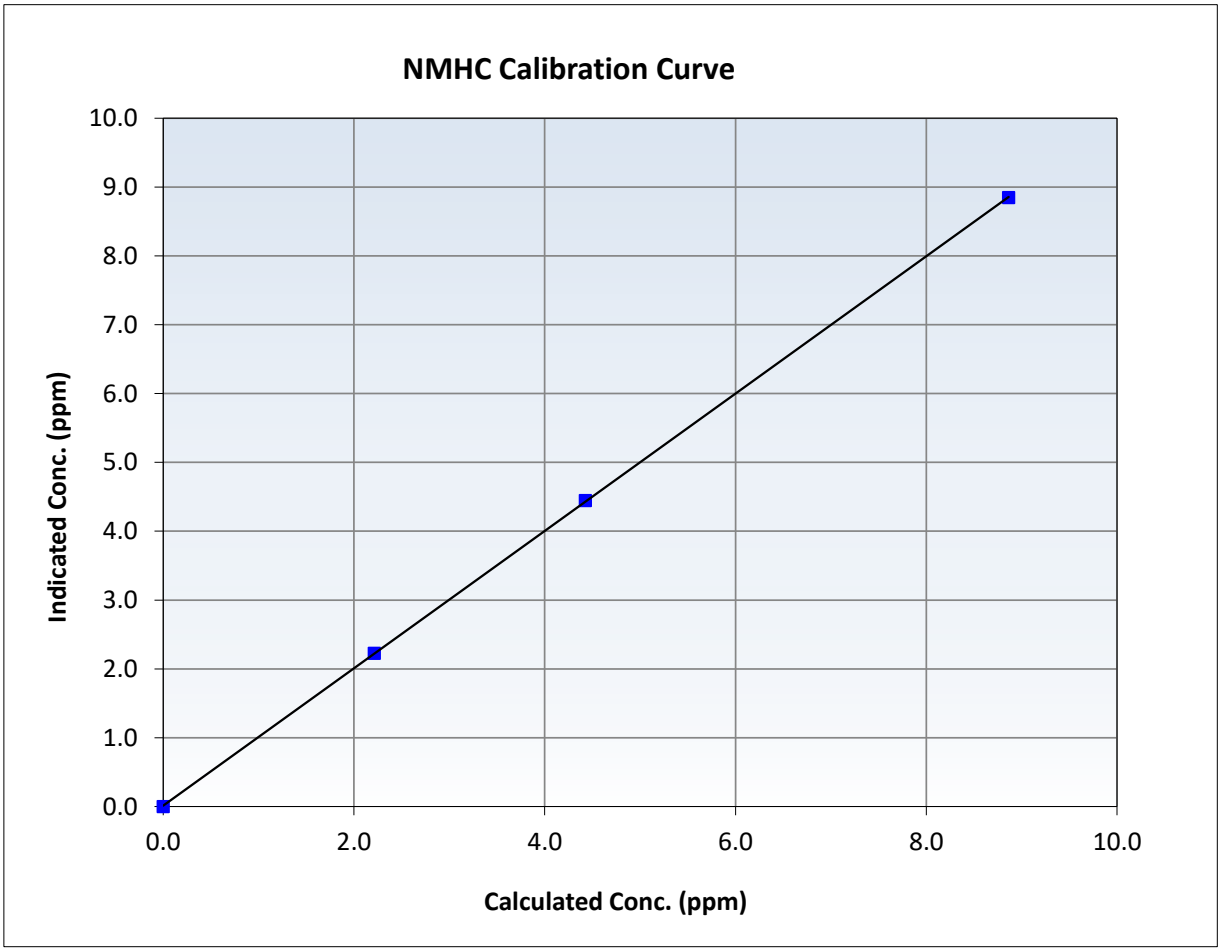
Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	August 5, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	11:00	End Time (MST):	15:00
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

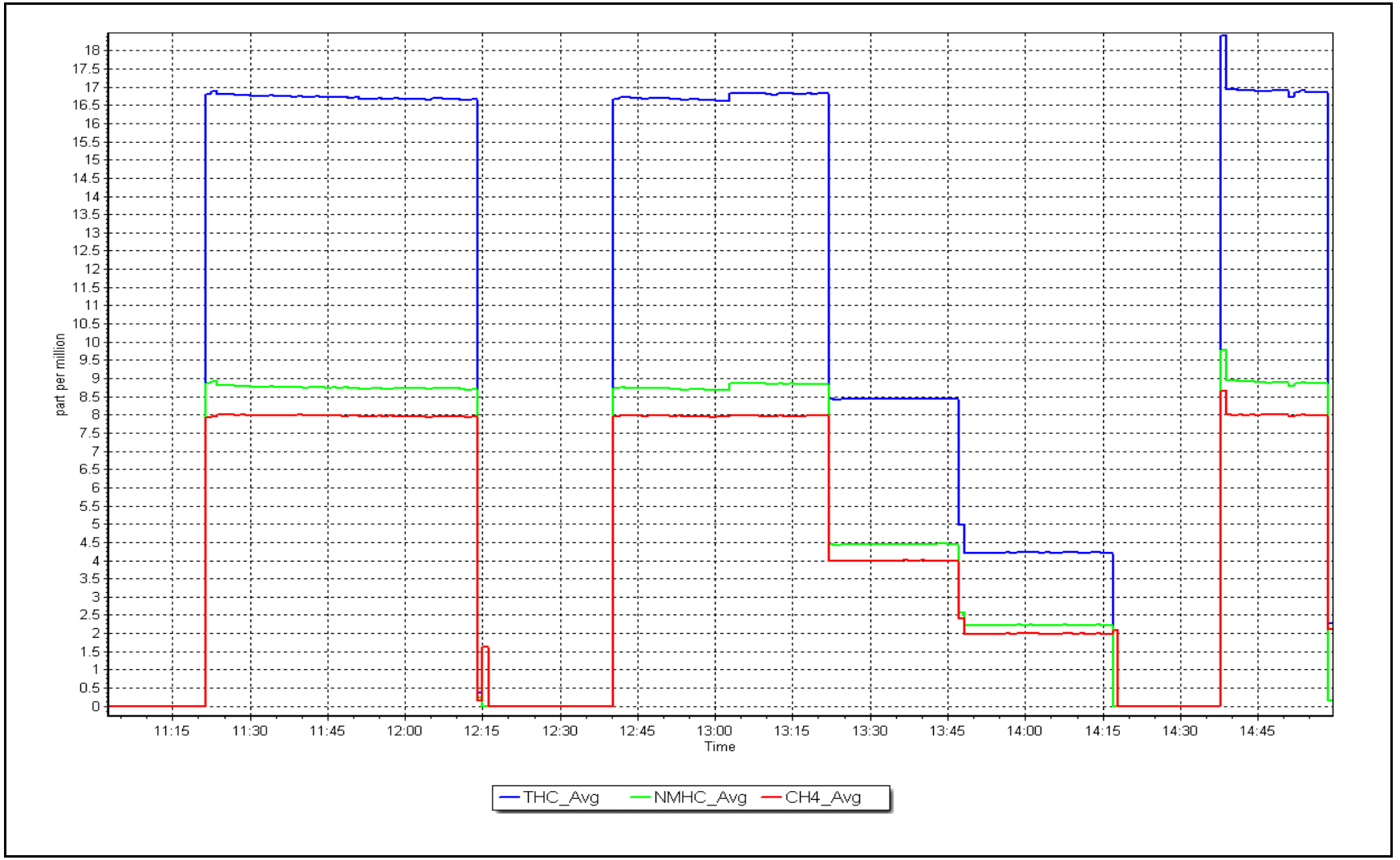
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.86	8.85	1.0020
4.43	4.45	0.9954
2.21	2.23	0.9938

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	0.997642	*0.90 - 1.10*
Intercept	0.013283	*+/-0.5*



NMHC Calibration Plot Date: September 21, 2026 Location: Buffalo Viewpoint



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Buffalo Viewpoint
Station number:	AMS 04
Calibration Date:	September 17, 2026
Last Cal Date:	August 12, 2026
Start time (MST):	10:15
End time (MST):	15:19
Reason:	Routine

Calibration Standards

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

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.1	-0.2	----	----
AF High point	4918	81.8	800.0	798.4	1.6	781.5	777.9	3.7	1.0236	1.0265
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 799.1 ppb	NO = 796.8 ppb
Baseline Corr 1st pt	NO_X = 781.6 ppb	NO = 777.8 ppb
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

*Percent Change NO_X = -2.2%

*Percent Change NO = -2.4%

As Found Statistics

As found NO_X r^2: Nx Sl: Nx Int:

As found NO r^2: NO Sl: NO Int:

As found NO_2 r^2: NO2 Sl: NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1152430007

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.093	1.121	NO bkgnd or offset:	3.3	3.4
NOX coeff or slope:	0.994	0.994	NOX bkgnd or offset:	3.7	3.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	182.0	184.4

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998065	0.998565
NO_X Cal Offset:	0.566610	0.866610
NO Cal Slope:	0.998709	0.999296
NO Cal Offset:	-0.594281	-0.274333
NO_2 Cal Slope:	1.000986	1.001808
NO_2 Cal Offset:	0.583668	-0.413833

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.2	0.4	-0.2	----	----
High point	4918	81.8	800.0	798.4	1.6	799.2	797.7	1.5	1.0010	1.0009
Mid point	4959	40.9	400.0	399.2	0.8	401.3	398.9	2.3	0.9968	1.0007
Low point	4980	20.4	199.5	199.1	0.4	200.3	197.6	2.7	0.9960	1.0075
As left zero	5000	0.0	0.0	0.3	-0.3	0.1	0.3	-0.2	----	----
As left span	4918	81.8	800.0	403.7	800.0	798.5	403.7	394.8	1.0019	1.0000
								Average Correction Factor	0.9979	1.0030

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	795.4	402.1	394.9	395.3	0.9991	100.1%
Mid GPT point	795.4	601.1	195.9	195.9	1.0002	100.0%
Low GPT point	795.4	698.0	99.0	98.5	1.0054	99.5%
				Average Correction Factor	1.0016	99.8%

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

NO_X Calibration Summary

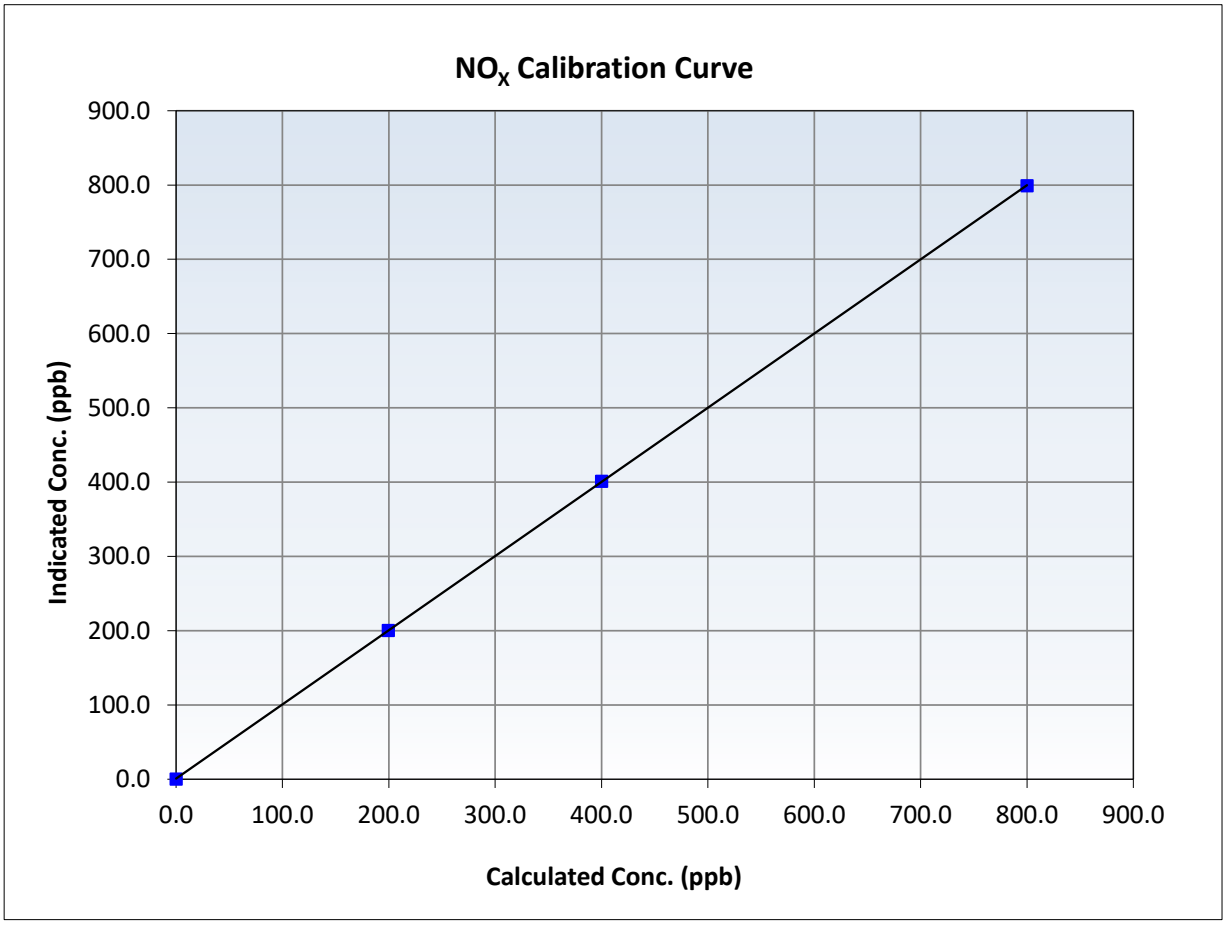
Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 12, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	10:15	End Time (MST):	15:19
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.0	799.2	1.0010
400.0	401.3	0.9968
199.5	200.3	0.9960

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999995	*≥0.995*
Slope	0.998565	*0.90 - 1.10*
Intercept	0.866610	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

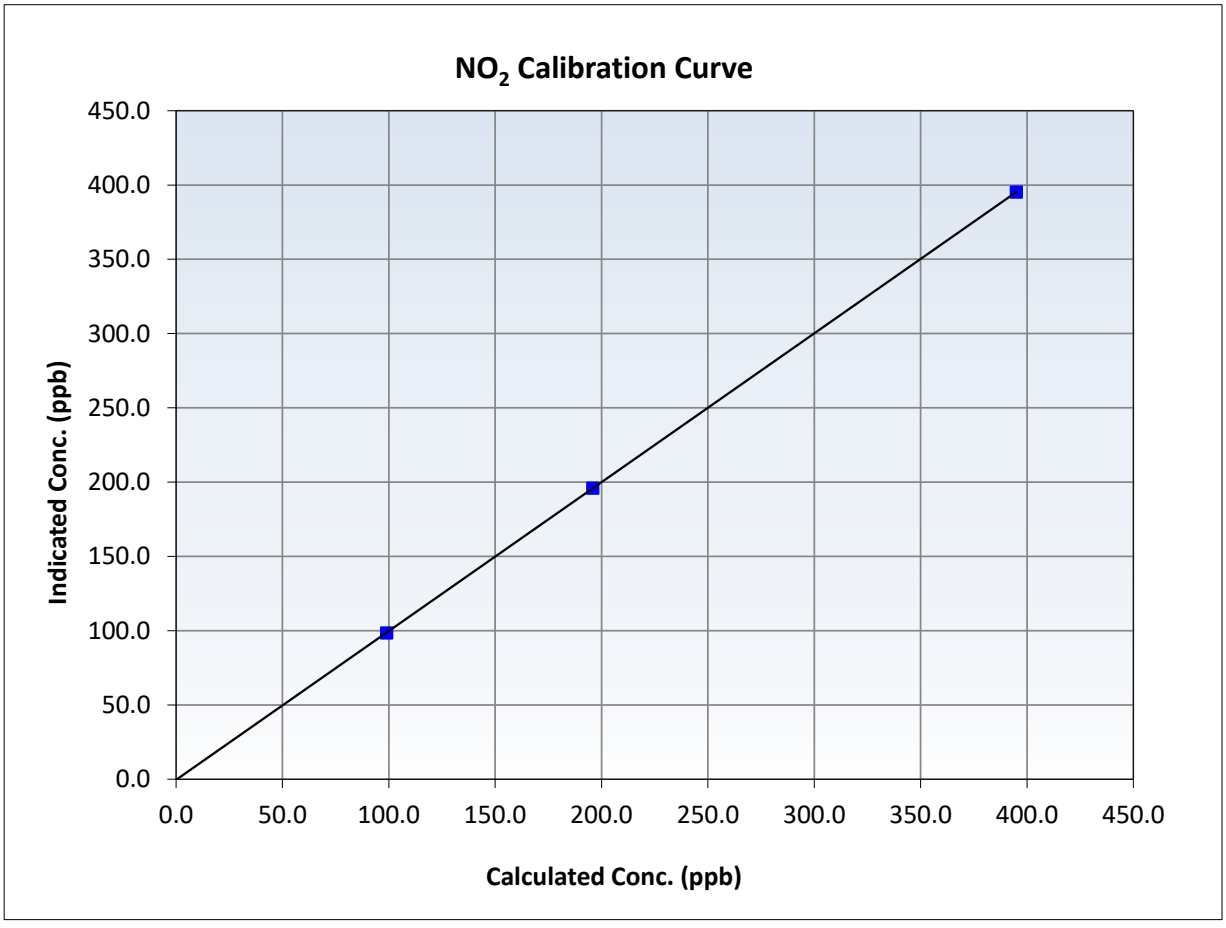
Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 12, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	10:15	End Time (MST):	15:19
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
394.9	395.3	0.9991
195.9	195.9	1.0002
99.0	98.5	1.0054

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	1.001808	*0.90 - 1.10*
Intercept	-0.413833	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

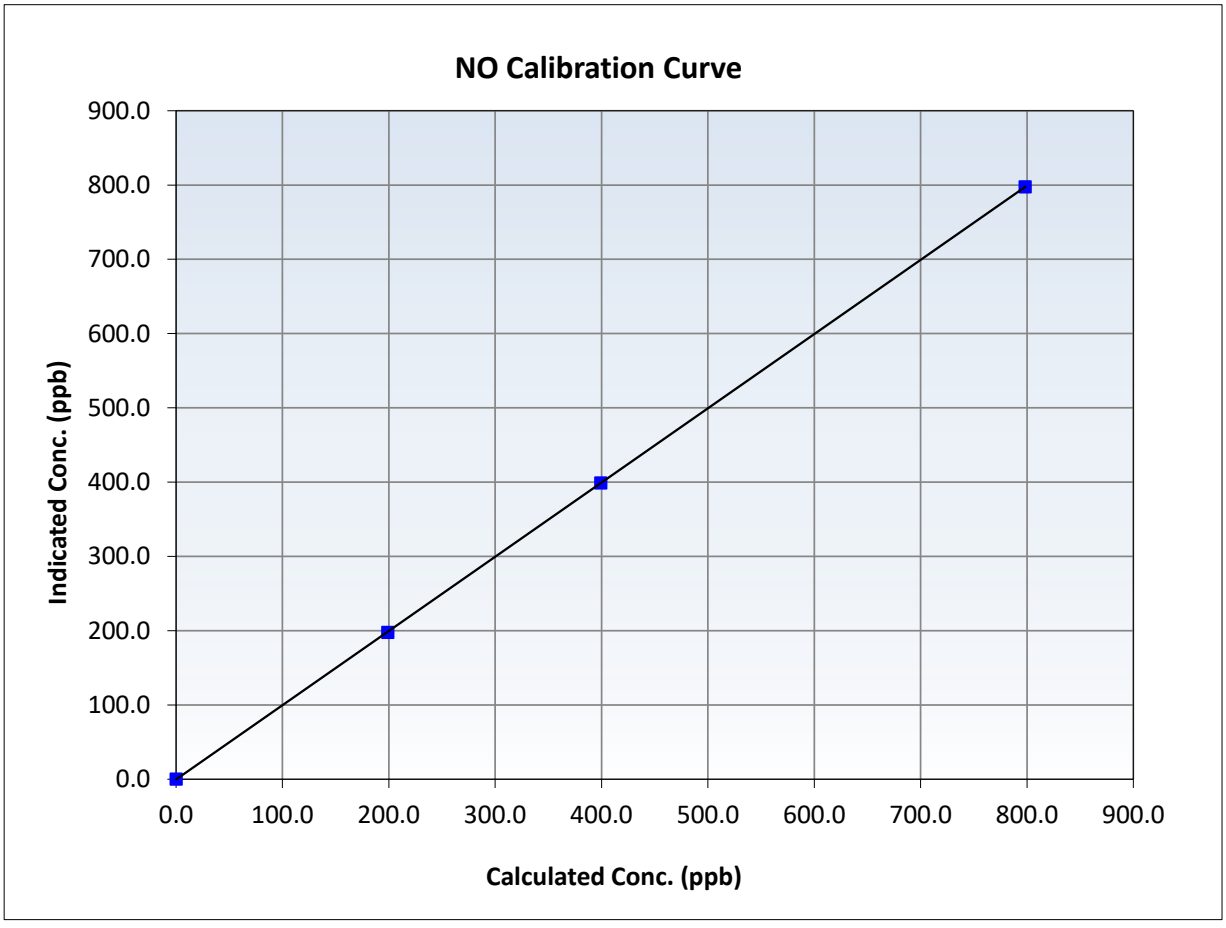
Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 12, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	10:15	End Time (MST):	15:19
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

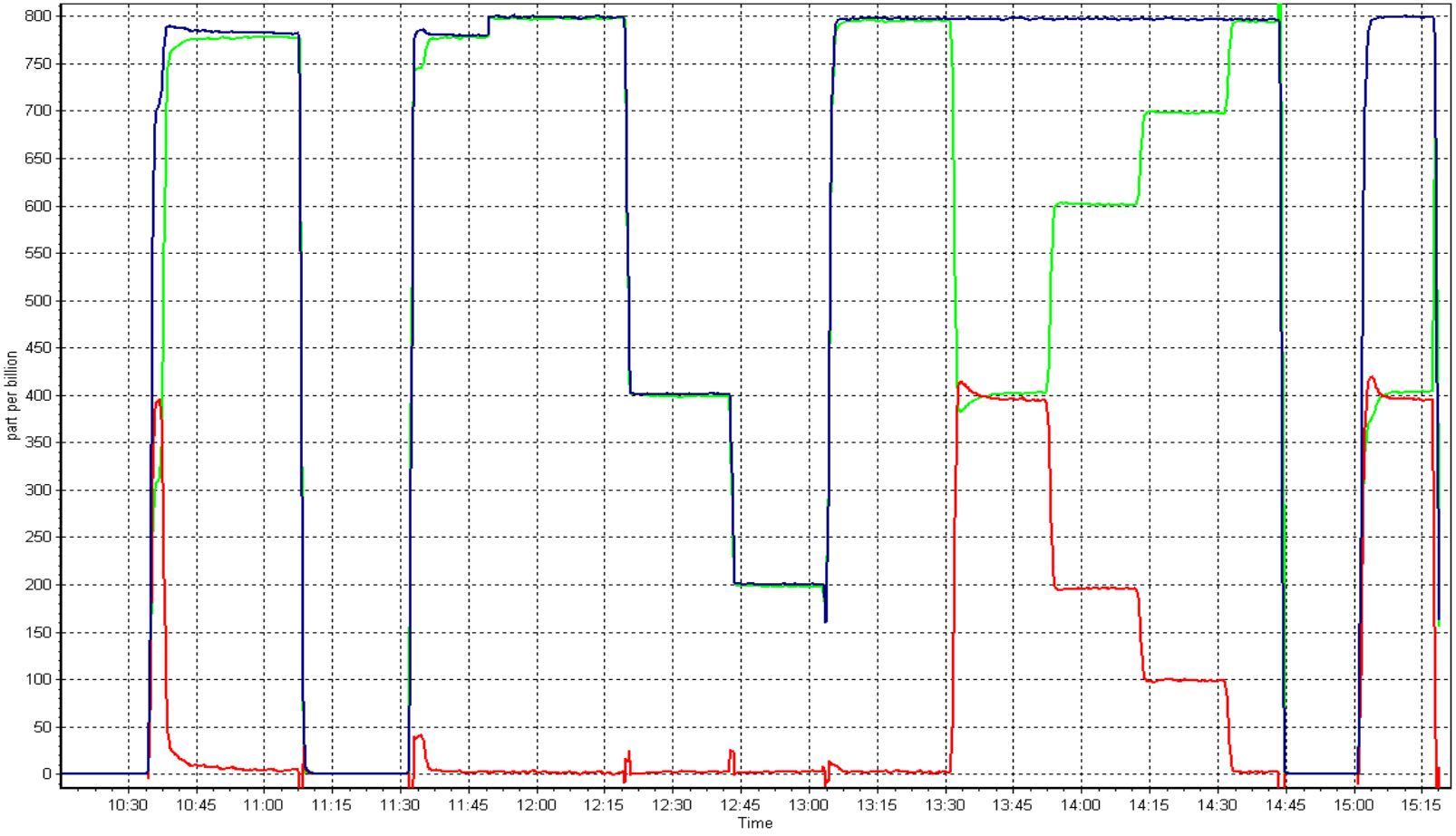
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
798.4	797.7	1.0009
399.2	398.9	1.0007
199.1	197.6	1.0075

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999995	*≥0.995*
Slope	0.999296	*0.90 - 1.10*
Intercept	-0.274333	*+/-20*



NO_X Calibration Plot Date: September 17, 2026 Location: Buffalo Viewpoint



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	September 2, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	9:38	End time (MST):	13:15
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	Teledyne API T700	Serial Number:	3808
ZAG Make/Model:	Teledyne API T701H	Serial Number:	362

Analyzer Information

Analyzer make:	Teledyne API T400		Analyzer serial #:	2961	
Analyzer Range	0 - 500 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002429	1.002029	Backgd or Offset:	-0.7	-0.7
Calibration intercept:	0.900000	0.820000	Coeff or Slope:	1.026	1.019

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.3	----
As found High point	5000	1071.2	400.0	403.3	0.993
As found Mid point					
As found Low point					
Baseline Corr As found:	403.0	Previous response	401.9	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	5000	1072.6	400.0	401.3	0.997
Mid point	5000	864.1	200.0	201.7	0.992
Low point	5000	742.1	100.0	101.4	0.986
As left zero	5000	0.0	0.0	0.1	----
As left span	5000	1072.4	400.0	403.5	0.991
				Average Correction Factor	0.992

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

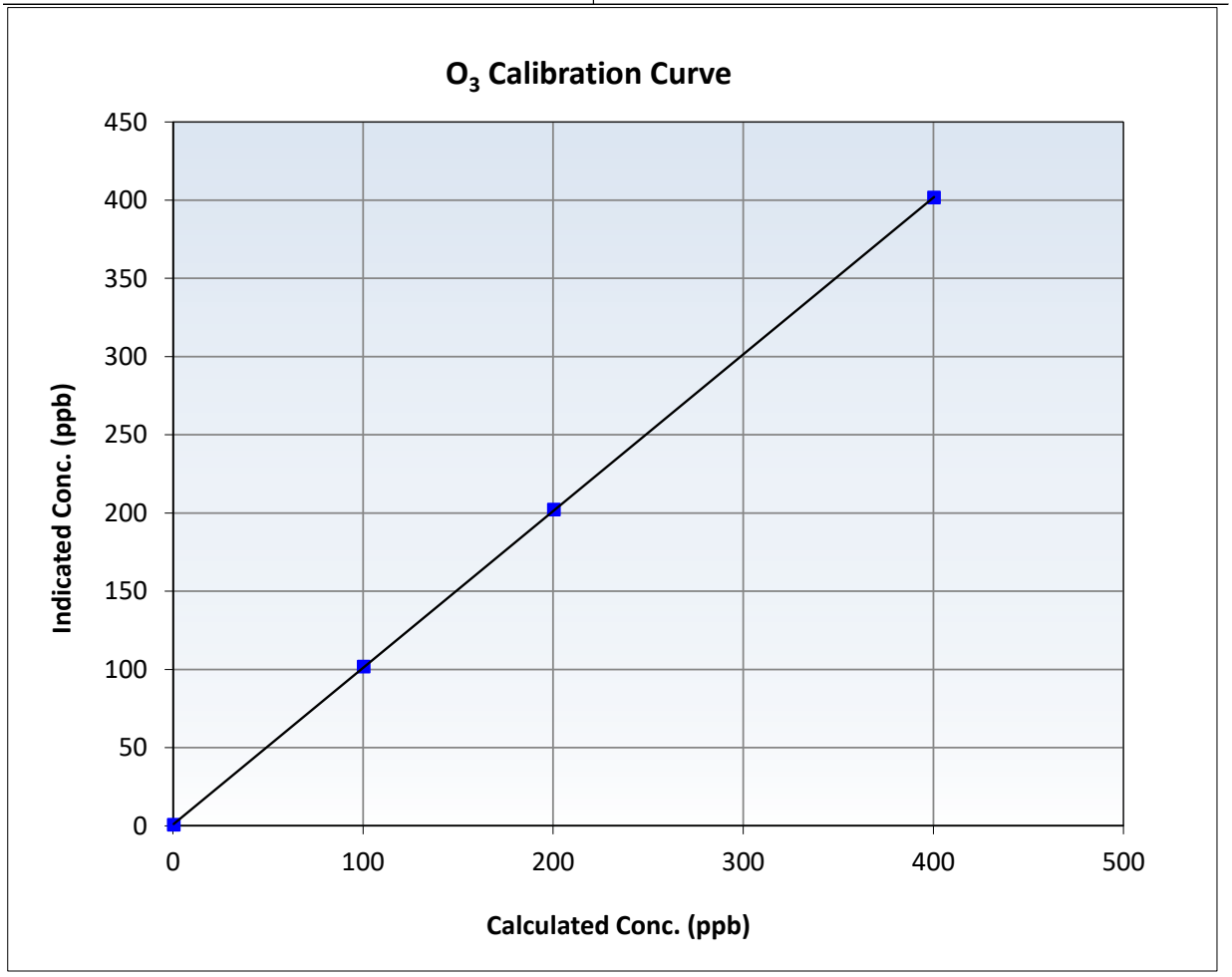
O_3 Calibration Summary

Station Information

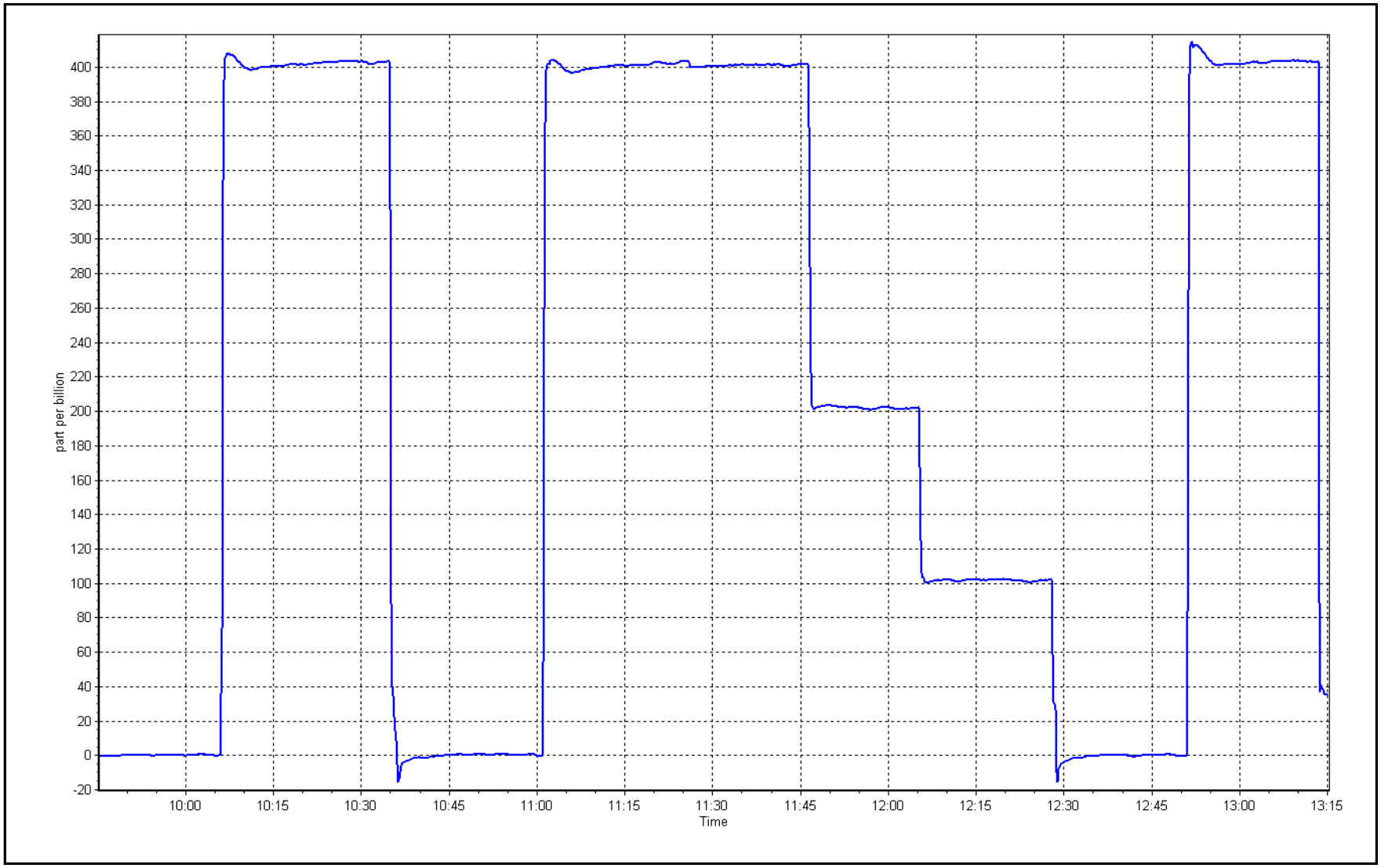
Calibration Date:	September 2, 2026	Previous Calibration:	August 20, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:38	End Time (MST):	13:15
Analyzer make:	Teledyne API T400	Analyzer serial #:	2961

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.3	----	Correlation Coefficient	0.999991	*≥0.995*
400.0	401.3	0.9968	Slope	1.002029	*0.90 - 1.10*
200.0	201.7	0.9916			
100.0	101.4	0.9862	Intercept	0.820000	*+/- 5*



O_3 Calibration Plot Date: September 2, 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:	September 24, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	13:50	End time (MST):	14:10
Analyzer Make:	Teledyne API T640	S/N:	321
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)	19.0	18.3	19.0	☐	+/- 2 °C
P (mmHg)	730.2	728.6	730.2	☐	+/- 10 mmHg
Flow (LPM)	5.00	4.96	5.00	☐	+/- 0.25 LPM
PW% (pump)	35	-----	35	☐	>80%
Zero Verification	PM w/o HEPA:	9.2	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	N/A	N/A	N/A	☐	+/- 0.5

Date Optical Chamber Cleaned: July 31, 2026

Date Disposable Filter Changed: July 31, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0.0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: December 18, 2025

Date RH/T Sensor Cleaned: December 18, 2025

Monthly checks done.

Notes:

Calibration by: Aswin Sasi Kumar

Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Calibration Date:	September 24, 2026	Prev Cal Date:	May 29, 2025
Start Time (MST):	11:29	End Time (MST):	14:12
Tower Height (m):	10.0	Reason:	Routine

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	R10866
WS Calibrator:	MetOne 053	Serial Number:	P15103

Shaft RPM (Hz)	Calculated Speed (K/hr) (Cv)	Indicated Speed (K/hr) (Iv)	% Error *Limit = +/- 1.5%*
0	0.0		
200	20.2		
400	39.4		
600	58.6		
800	77.8		

	Start	***Finish***	*Limits*
Correl Coeff (r^2)			*≥0.9995*
Calculated slope			*0.98 - 1.02*
Calculated intercept			*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	E4852
As Found Declination (deg east of True North):		As Left Declination (deg east of True North):	14
Solar noon (MST):	12:23:48	Calc Declination*:	13.67 Degrees
WD Calibrator:	Met One 040		* - calculated declination as per NOAA website

Physical Direction (Degrees) (Cv)	Indicated Direction (Degrees) (Iv)	% Error (based on 360° FS) *Limit = +/- 1%*
10	11.3	0.4%
90	90.2	0.1%
180	181.1	0.3%
270	272.0	0.6%
350	352.7	0.7%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)		0.999991	*≥0.9995*
Calculated slope		0.994605	*0.97 - 1.03*
Calculated intercept		-0.481007	*+/- 5*

Notes: Checked sensors, WS sensor could not be verified because of a faulty calibrator.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Calibration Date:	September 25, 2026	Prev Cal Date:	September 24, 2026
Start Time (MST):	9:00	End Time (MST):	9:40
Tower Height (m):	10.0	Reason:	Other:

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	P19837
WS Calibrator:	MetOne 053	Serial Number:	P15103

Shaft RPM (Hz)	Calculated Speed (K/hr) (Cv)	Indicated Speed (K/hr) (Iv)	% Error *Limit = +/- 1.5%*
0	0.0	0.0	---
200	20.2	20.1	-0.3%
400	39.4	39.4	0.1%
600	58.6	58.5	-0.1%
800	77.8	77.8	0.1%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)		0.999999	*≥0.9995*
Calculated slope		0.999473	*0.98 - 1.02*
Calculated intercept		0.026227	*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	E4852
As Found Declination (deg east of True North):		As Left Declination (deg east of True North):	14
Solar noon (MST):	12:23:48	Calc Declination*:	13.67 Degrees
WD Calibrator:	Met One 040		* - calculated declination as per NOAA website

Physical Direction (Degrees) (Cv)	Indicated Direction (Degrees) (Iv)	% Error (based on 360° FS) *Limit = +/- 1%*
10		
90		
180		
270		
350		

	Start	***Finish***	*Limits*
Correl Coeff (r^2)			*≥0.9995*
Calculated slope			*0.97 - 1.03*
Calculated intercept			*+/- 5*

Notes: WS sensor bearings changed out, no issues.

Calibration Performed By: Aswin Sasi Kumar

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS05
MANNIX
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	September 11, 2026	Last Cal Date:	August 19, 2026
Start time (MST):	10:32	End time (MST):	14:15
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002135	1.001266	Backgd or Offset:	11.4	11.4
Calibration intercept:	-1.496464	-0.516867	Coeff or Slope:	0.927	0.927

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	79.9	800.0	800.6	0.999
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	800.5	Previous response	800.2	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4920	79.9	800.0	800.9	0.999
Mid point	4960	40.0	400.5	400.0	1.001
Low point	4980	20.0	200.2	199.2	1.005
As left zero	5000	0.0	0.0	0.4	----
As left span	4920	79.9	800.0	805.0	0.994
				Average Correction Factor:	1.002

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

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

SO_2 Calibration Summary

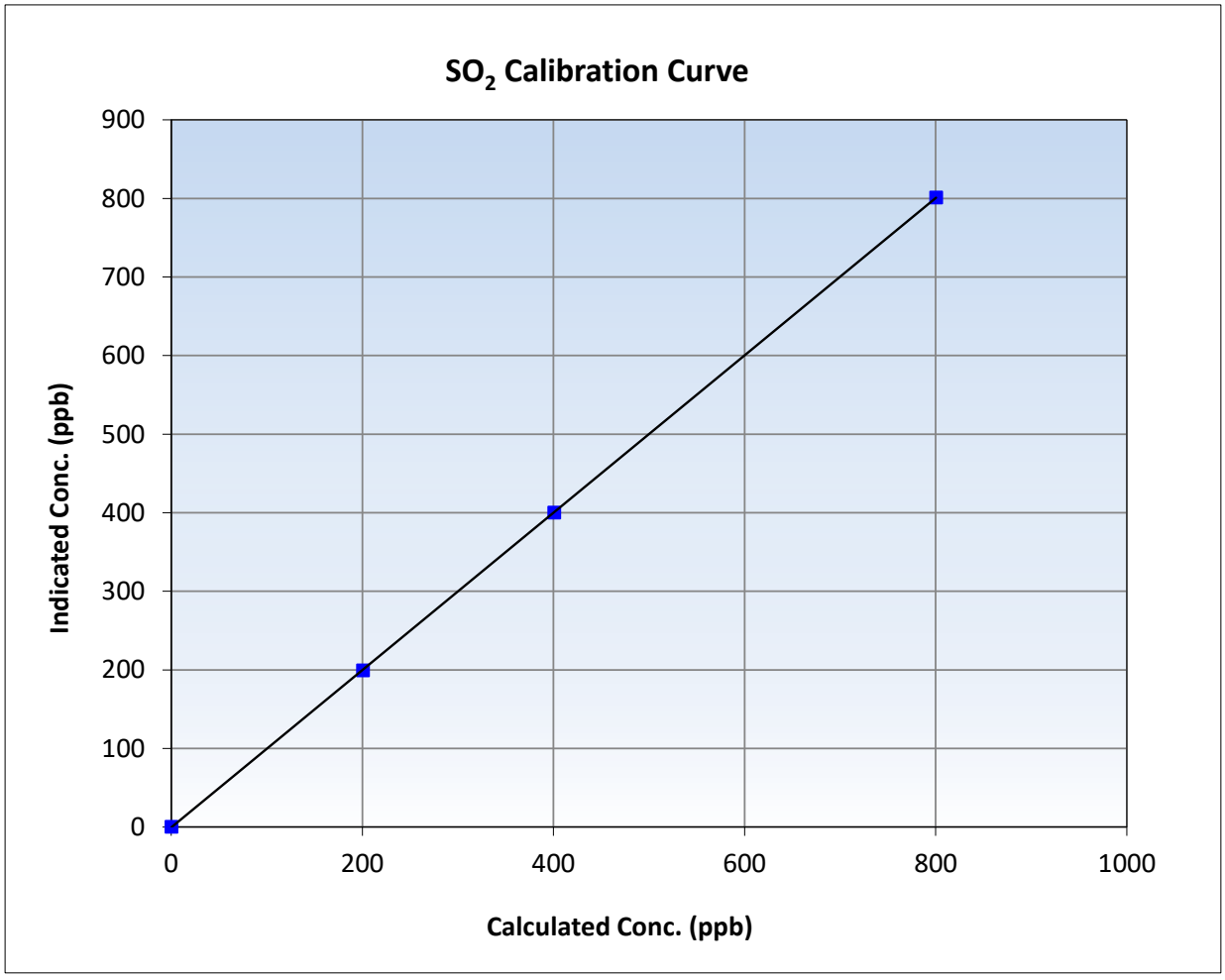
Station Information

Calibration Date:	September 11, 2026	Previous Calibration:	August 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:32	End Time (MST):	14:15
Analyzer make:	Thermo 43i	Analyzer serial #:	1008841399

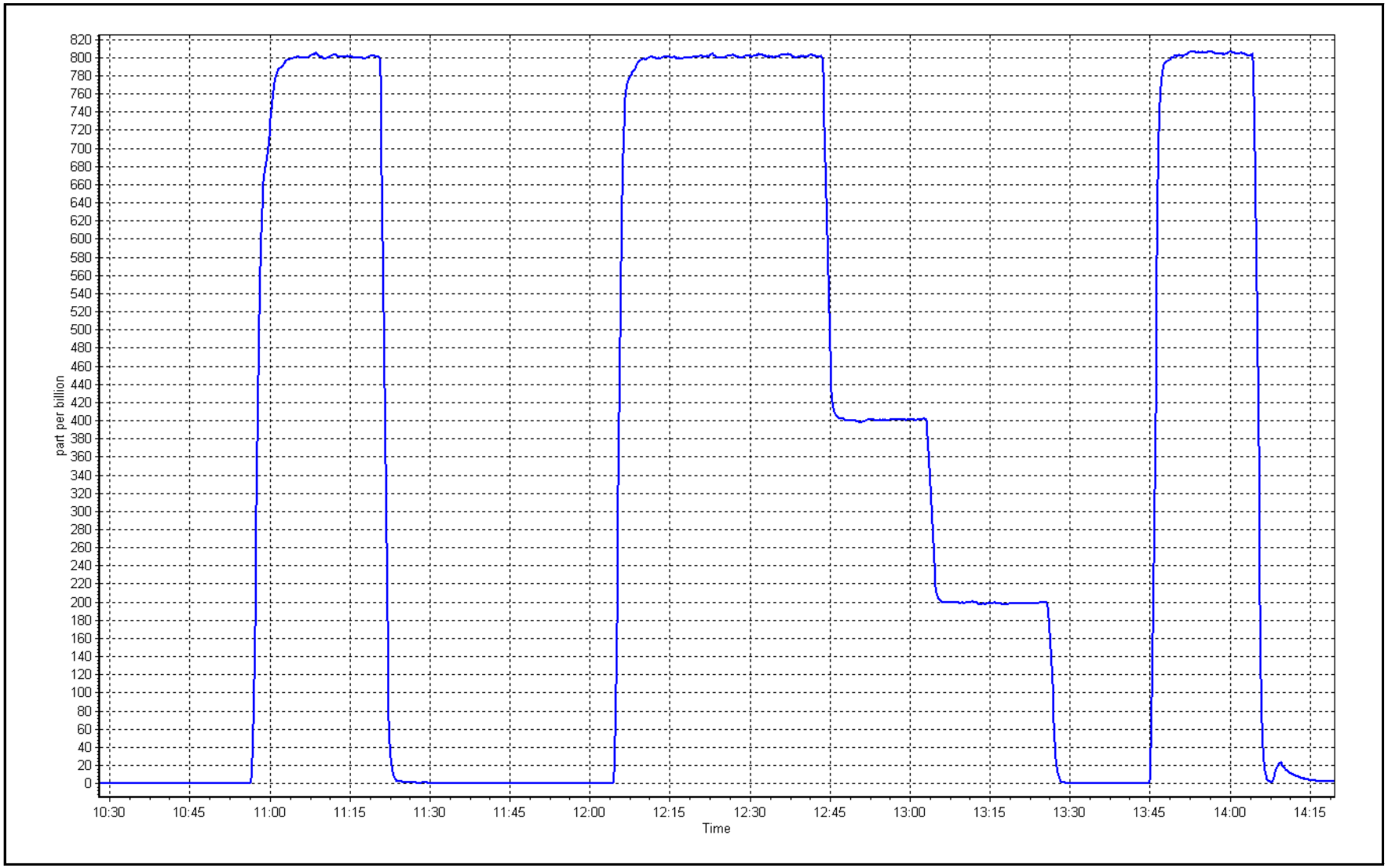
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.0	800.9	0.9988
400.5	400.0	1.0012
200.2	199.2	1.0052

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999995	*≥0.995*
Slope	1.001266	*0.90 - 1.10*
Intercept	-0.516867	*+/-30*



SO2 Calibration Plot Date: September 11, 2026 Location: Mannix



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	September 2, 2026	Last Cal Date:	August 21, 2026
Start time (MST):	9:28	End time (MST):	14:01
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
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002833	0.995114	Backgd or Offset:	1.24	1.24
Calibration intercept:	0.082274	0.002395	Coeff or Slope:	1.020	1.020

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4919	80.6	80.0	79.7	1.005
As found Mid point	4960	40.3	40.0	40.1	0.999
As found Low point	4980	20.2	20.0	20.0	1.007
New cylinder response					
Baseline Corr As found:	79.6	Prev response:	80.27	*% change:	-0.8%
Baseline Corr 2nd AF pt:	40.0	AF Slope:	0.995972	AF Intercept:	0.122358
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999989	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4919	80.6	80.0	79.6	1.005
Mid point	4960	40.3	40.0	39.8	1.004
Low point	4980	20.2	20.0	19.8	1.012
As left zero	5000	0.0	0.0	0.3	----
As left span	4919	80.6	80.0	78.0	1.025
SO2 Scrubber Check	4920	80.3	803.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	1.007
Date of last converter efficiency test:					

Notes: Changed the sample inlet filter after the multi point as founds. Scrubber check done after the calibrator zero. No adjustments made.

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

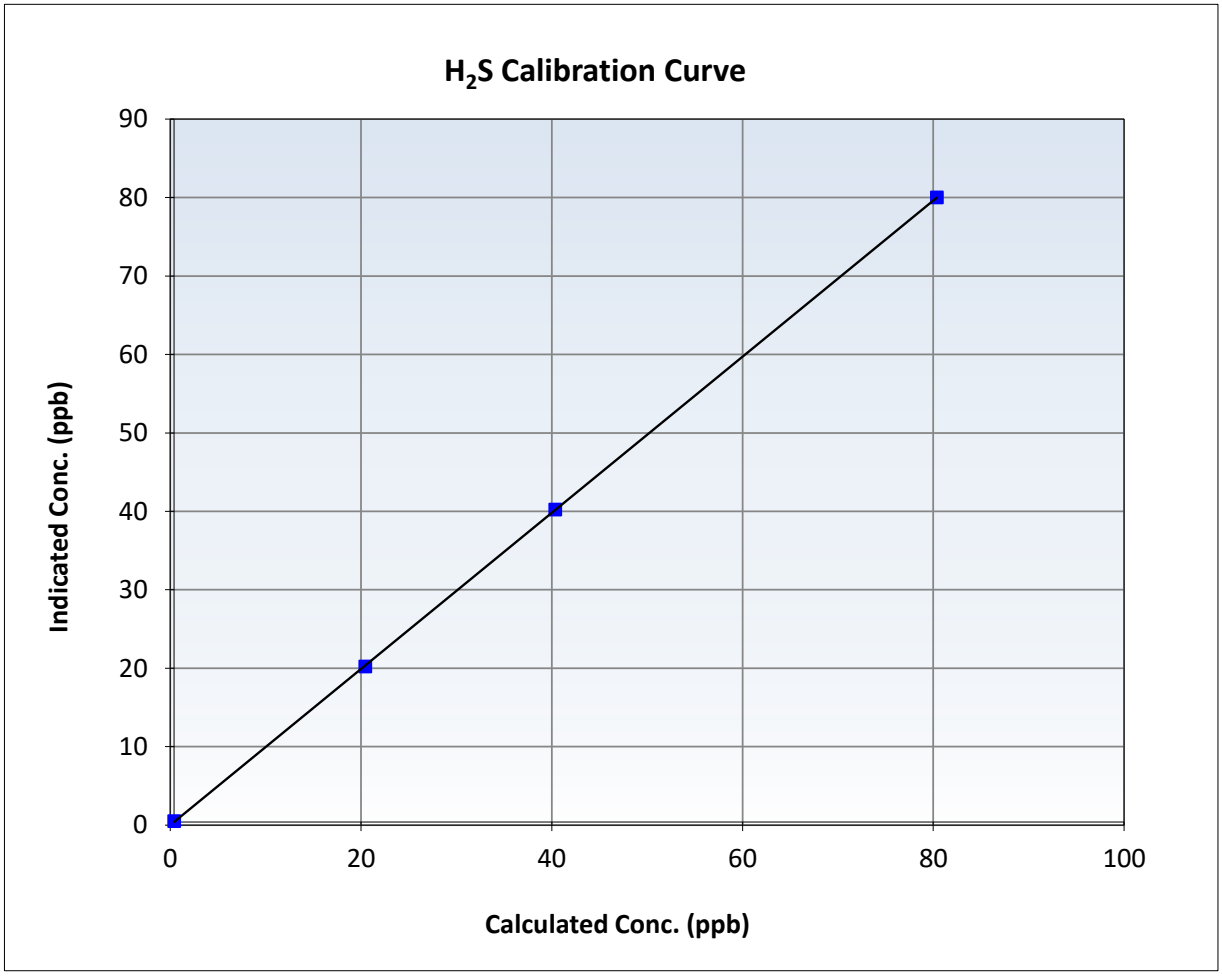
H_2S Calibration Summary

Station Information

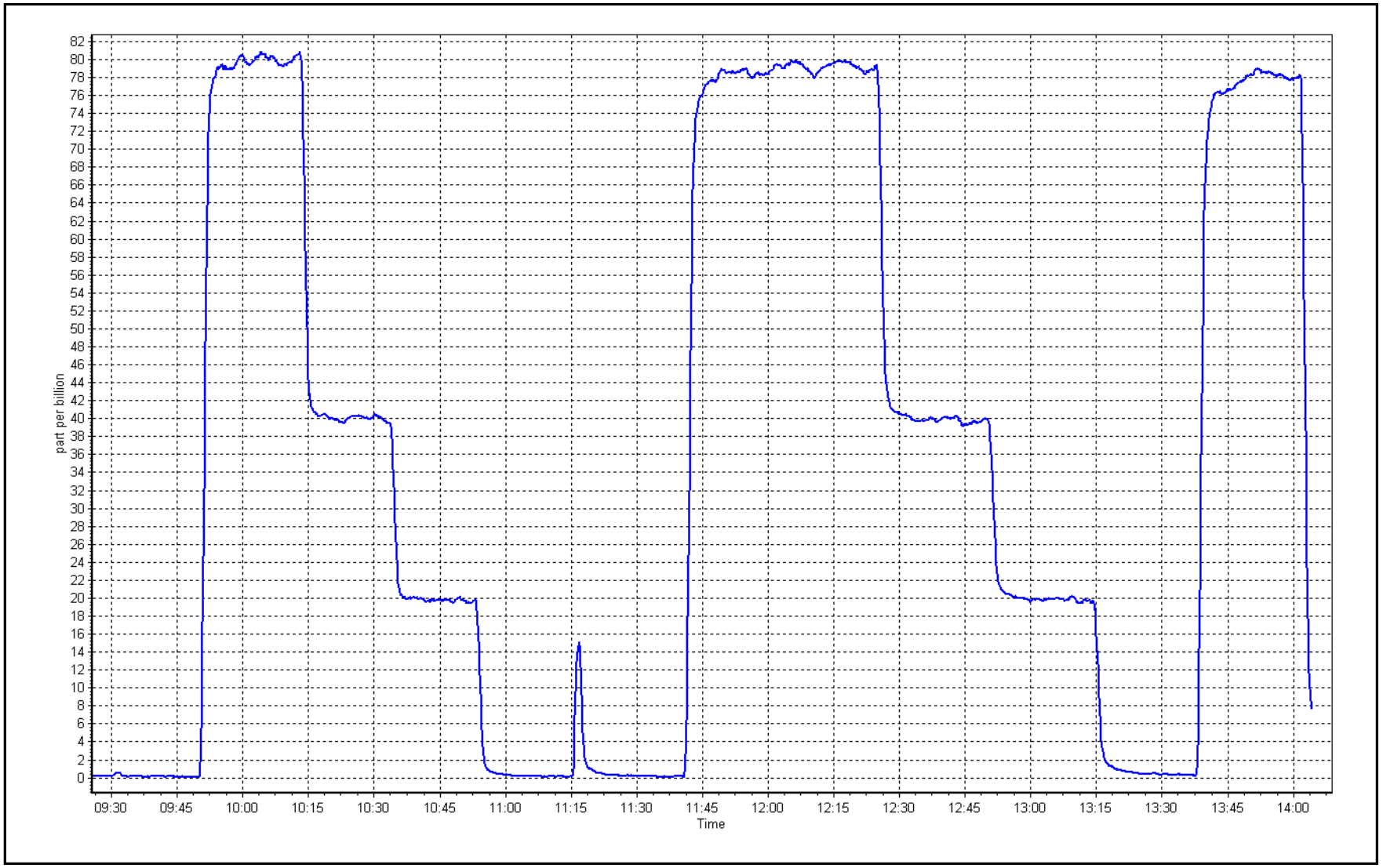
Calibration Date:	September 2, 2026	Previous Calibration:	August 21, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	9:28	End Time (MST):	14:01
Analyzer make:	Thermo 43iQ	Analyzer serial #:	1200326169

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999991	*≥0.995*
80.0	79.6	1.0045	Slope	0.995114	*0.90 - 1.10*
40.0	39.8	1.0044			
20.0	19.8	1.0120	Intercept	0.002395	*+/-3*



H_2S Calibration Plot Date: September 2, 2026 Location: Mannix



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	September 11, 2026	Last Cal Date:	August 19, 2026
Start time (MST):	10:32	End time (MST):	14:15
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/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.71E-04	2.68E-04	NMHC SP Ratio:	5.02E-05	5.17E-05
CH4 Retention time:	14.1	14.1	NMHC Peak Area:	174438	169361
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	16.74	16.70	1.003
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.70	Prev response	16.68	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	16.74	16.75	0.999
Mid point	4960	40.0	8.38	8.43	0.994
Low point	4980	20.0	4.19	4.19	1.001
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	16.74	16.91	0.990
				Average Correction Factor	0.998

Notes: Sample inlet filter and H2/N2 cylinders were changed after the as founds. Adjusted the span.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	8.75	8.55	1.022
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.55	Prev response	8.72	*% change	-1.9%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	8.75	8.77	0.997
Mid point	4960	40.0	4.38	4.43	0.988
Low point	4980	20.0	2.19	2.19	1.000
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	8.75	8.85	0.989
				Average Correction Factor	0.995

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	7.99	8.15	0.981
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.15	Prev response	7.96	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	7.99	7.99	1.001
Mid point	4960	40.0	4.00	4.00	1.000
Low point	4980	20.0	2.00	2.00	1.003
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	7.99	8.06	0.992
				Average Correction Factor	1.001

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.998138	1.001303
THC Cal Offset:	-0.028300	0.005258
CH4 Cal Slope:	0.998448	0.998923
CH4 Cal Offset:	-0.017956	-0.000368
NMHC Cal Slope:	0.998142	1.003465
NMHC Cal Offset:	-0.010944	0.005427

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

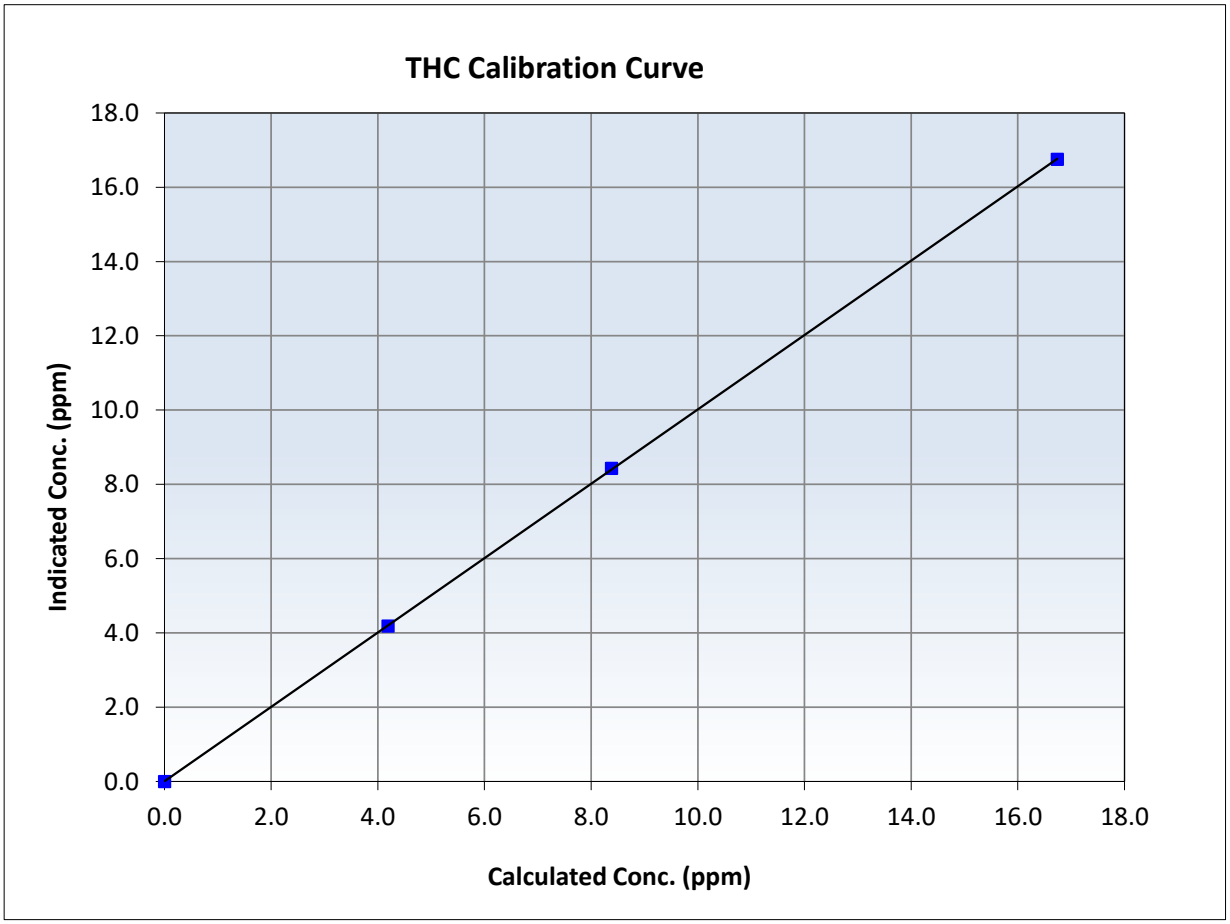
THC Calibration Summary

Station Information

Calibration Date:	September 11, 2026	Previous Calibration:	August 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:32	End Time (MST):	14:15
Analyzer make:	Thermo 55i	Analyzer serial #:	15005164381

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999989	≥0.995
16.74	16.75	0.9992	Slope	1.001303	0.90 - 1.10
8.38	8.43	0.9940	Intercept	0.005258	+/-0.5
4.19	4.19	1.0012			



Wood Buffalo Environmental Association

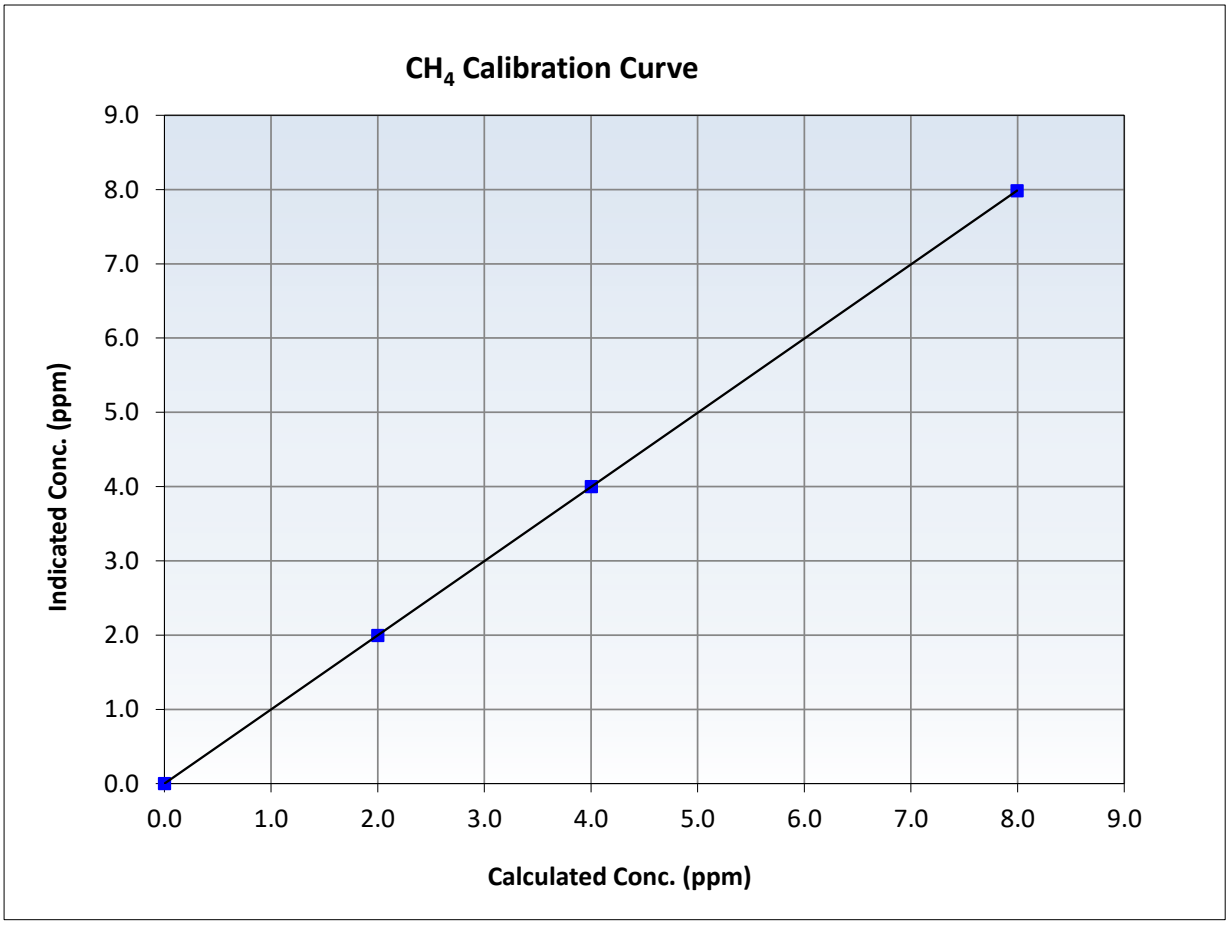
CH_4 Calibration Summary

Station Information

Calibration Date:	September 11, 2026	Previous Calibration:	August 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:32	End Time (MST):	14:15
Analyzer make:	Thermo 55i	Analyzer serial #:	15005164381

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999999	*≥0.995*
7.99	7.99	1.0012	Slope	0.998923	*0.90 - 1.10*
4.00	4.00	1.0003			
2.00	2.00	1.0026	Intercept	-0.000368	*+/-0.5*



Wood Buffalo Environmental Association

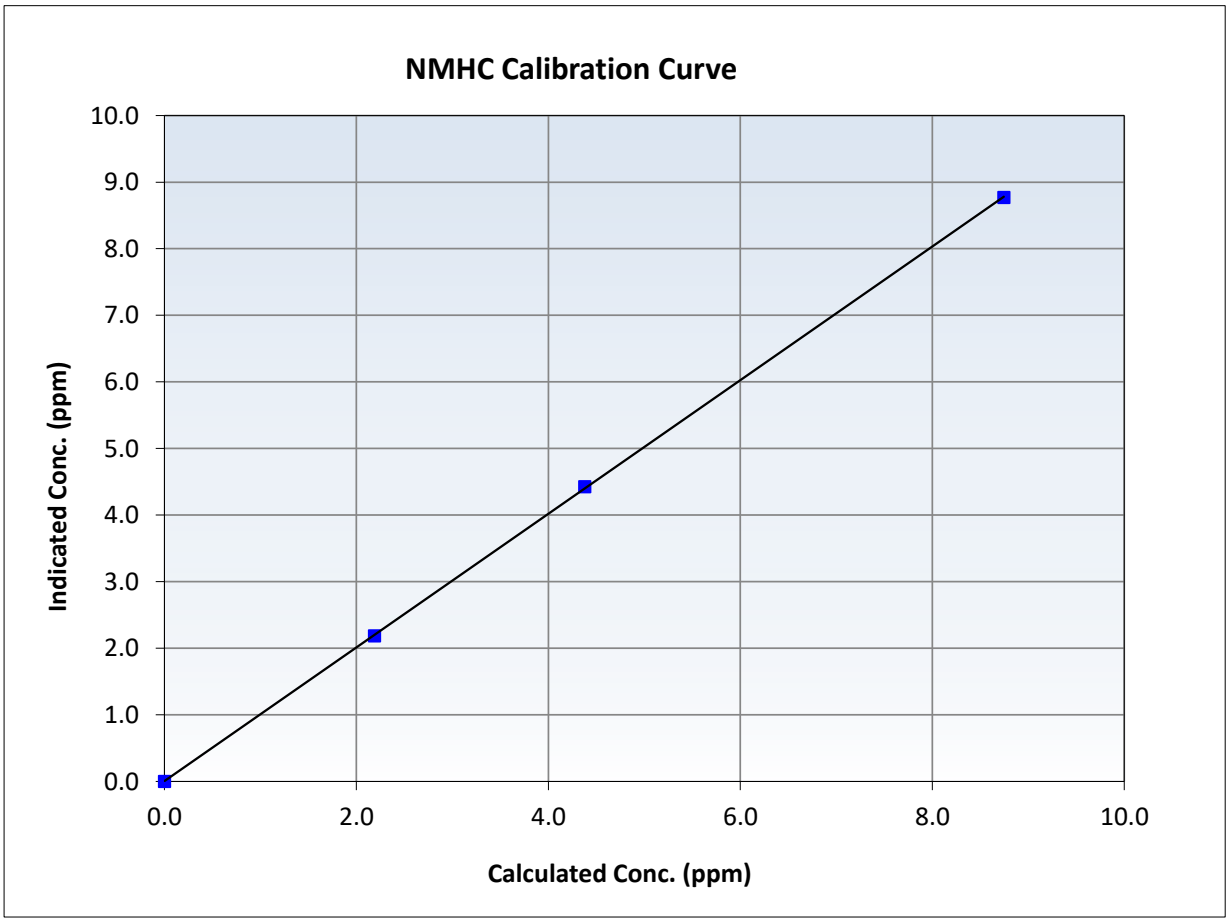
NMHC Calibration Summary

Station Information

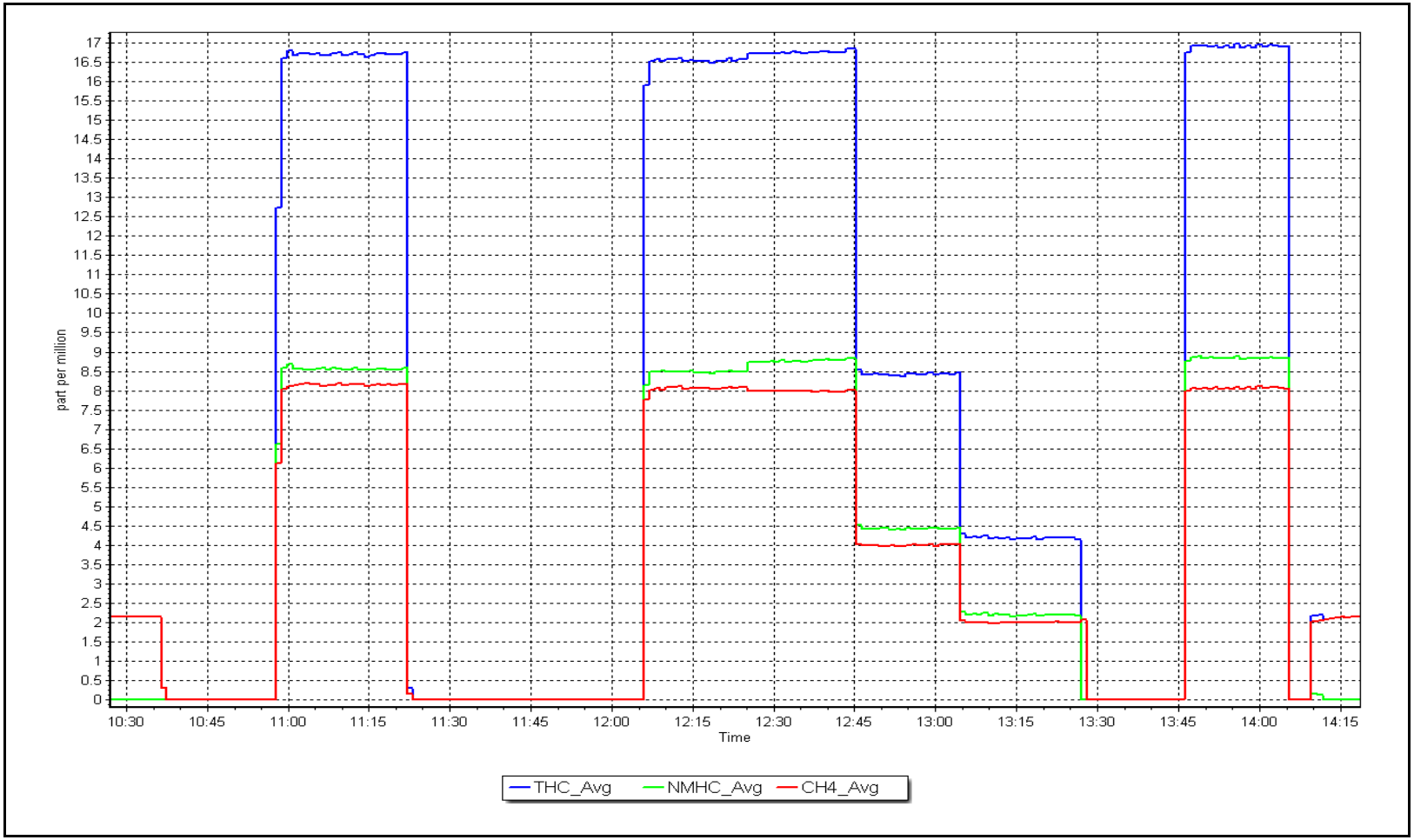
Calibration Date:	September 11, 2026	Previous Calibration:	August 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:32	End Time (MST):	14:15
Analyzer make:	Thermo 55i	Analyzer serial #:	15005164381

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999970	≥0.995
8.75	8.77	0.9973	Slope	1.003465	0.90 - 1.10
4.38	4.43	0.9885	Intercept	0.005427	+/-0.5
2.19	2.19	1.0000			



NMHC Calibration Plot Date: September 11, 2026 Location: Mannix



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS06
PATRICIA MCINNES
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	September 25, 2026	Last Cal Date:	August 14, 2026
Start time (MST):	10:40	End time (MST):	14:24
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:	5240
Zero Air Gen Model:	API T701		Serial Number:	4602

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1160290013	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001048	1.006435	Backgd or Offset:	27.8	28.3
Calibration intercept:	0.942918	0.182185	Coeff or Slope:	1.012	1.024

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4920	79.9	800.3	793.5	1.008
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.6	Previous response	802.1	*% change	-1.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4920	79.9	800.3	805.2	0.994
Mid point	4960	39.9	399.6	403.4	0.991
Low point	4980	20.0	200.3	201.5	0.994
As left zero	5000	0.0	0.0	-0.2	----
As left span	4920	79.9	800.3	803.1	0.997
				Average Correction Factor:	0.993

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

SO_2 Calibration Summary

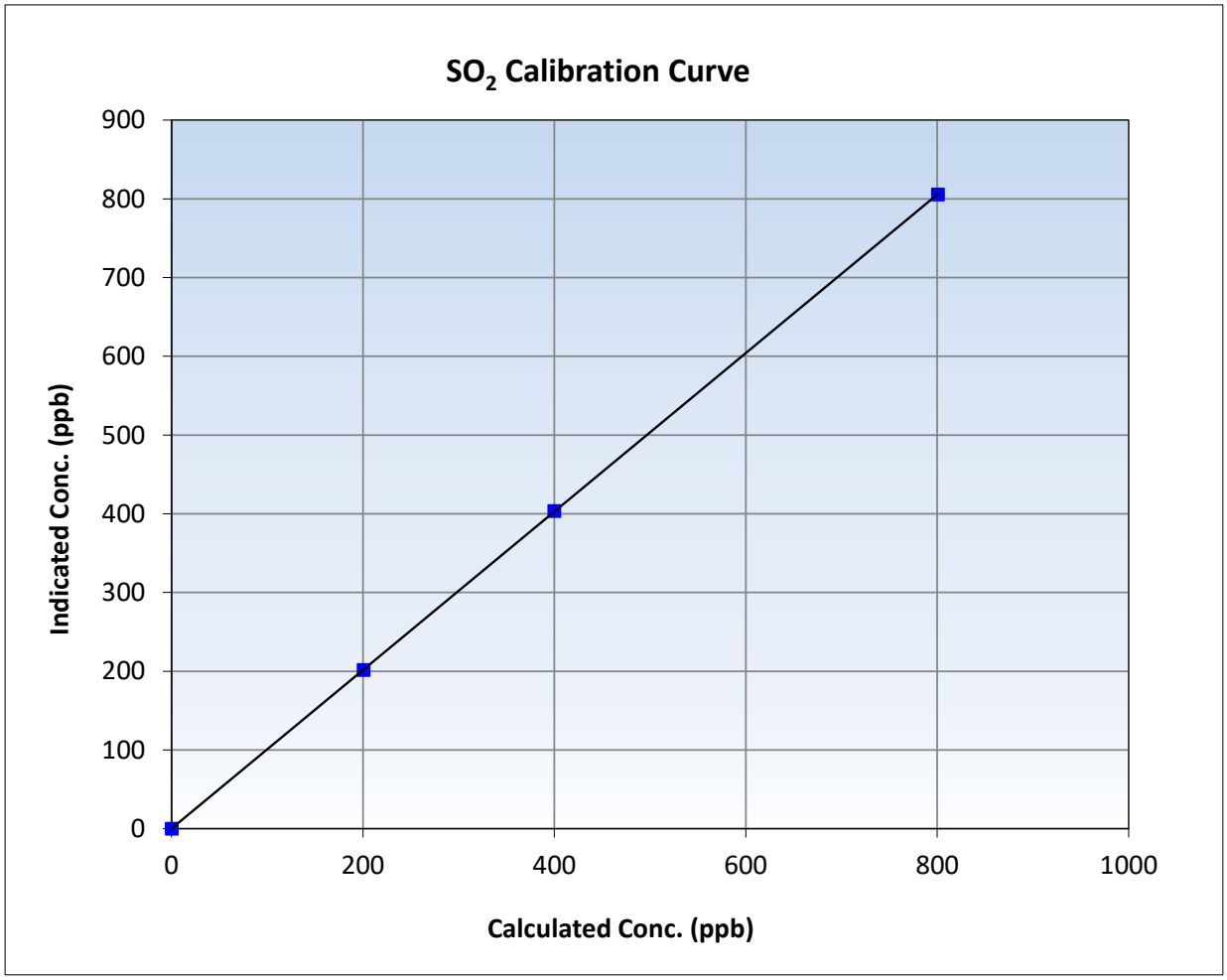
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 14, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:40	End Time (MST):	14:24
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290013

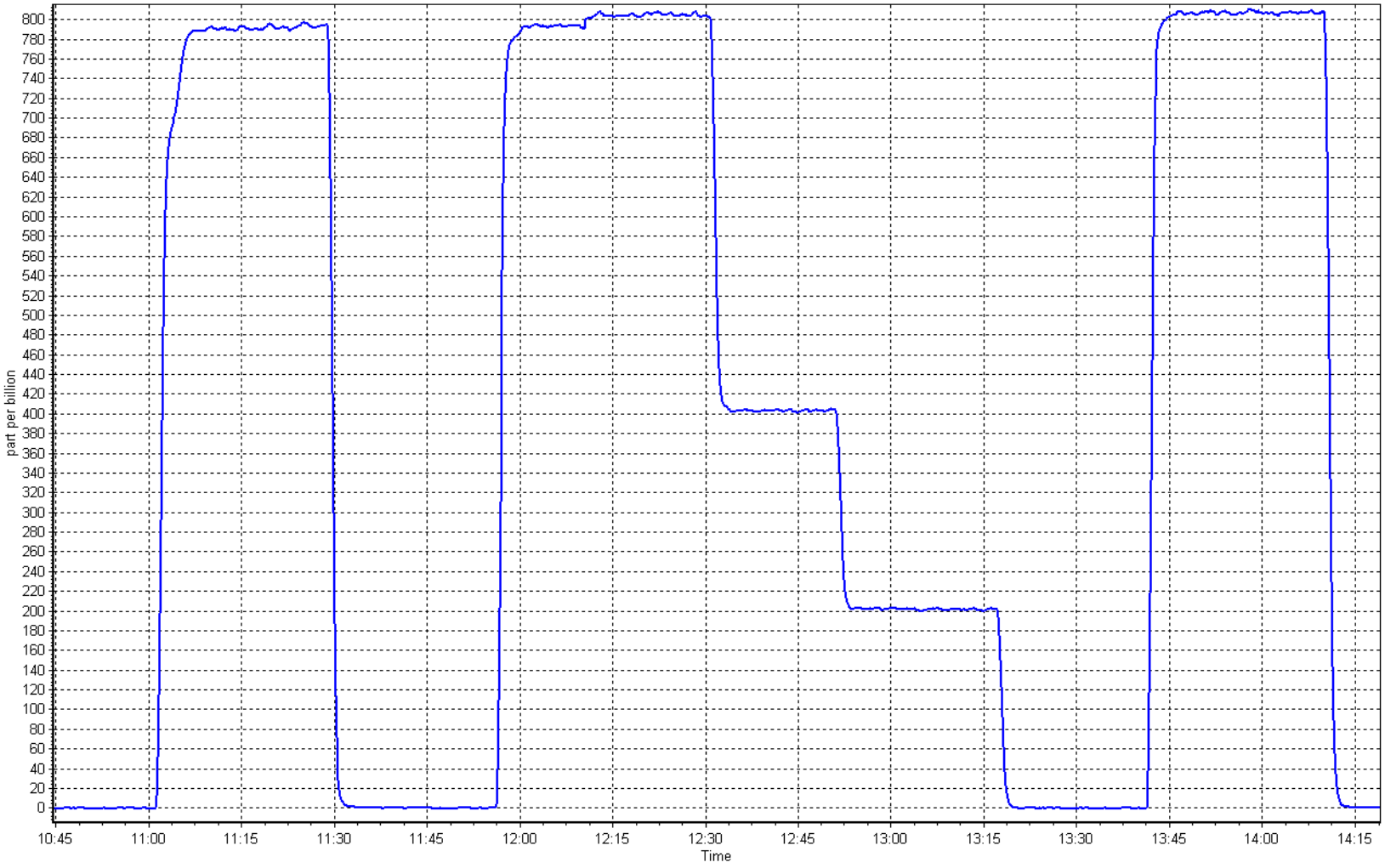
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
800.3	805.2	0.9939
399.6	403.4	0.9907
200.3	201.5	0.9941

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999996	*≥0.995*
Slope	1.006435	*0.90 - 1.10*
Intercept	0.182185	*+/-30*



SO2 Calibration Plot Date: September 25, 2026 Location: Patricia McInnes



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	September 9, 2026	Last Cal Date:	July 27, 2026
Start time (MST):	9:30	End time (MST):	13:55
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:	5240
ZAG Make/Model:	API T701		Serial Number:	4602

Analyzer Information

Analyzer make:	Thermo 43iQ TLE		Analyzer serial #:	12333331546	
Converter make:	CDN-101		Converter serial #:	NA	
Analyzer Range	0 - 100 ppb		Converter Temp:	850	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002973	1.000972	Backgd or Offset:	1.54	1.61
Calibration intercept:	0.060000	-0.020000	Coeff or Slope:	0.997	1.040

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4916	84.0	80.0	78.3	1.021
As found Mid point	4958	42.0	40.0	39.3	1.017
As found Low point	4979	21.0	20.0	19.7	1.015
New cylinder response					
Baseline Corr As found:	78.3	Prev response:	80.27	*% change:	-2.5%
Baseline Corr 2nd AF pt:	39.3	AF Slope:	0.978820	AF Intercept:	0.080000
Baseline Corr 3rd AF pt:	19.7	AF Correlation:	0.999994	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4916	84.0	80.0	79.9	1.001
Mid point	4958	42.0	40.0	40.4	0.990
Low point	4979	21.0	20.0	19.7	1.015
As left zero	5000	0.0	0.0	0.2	----
As left span	4916	84.0	80.0	79.5	1.006
SO2 Scrubber Check	4920	79.9	799.0	0.1	----
Date of last scrubber change:		Thursday, July 23, 2026		Ave Corr Factor	1.002
Date of last converter efficiency test:					

Notes: Sample inlet filter changed after as founds. Sox scrubber test completed after calibrator zero. Span adjusted.

Calibration Performed By: Devin Russell

Wood Buffalo Environmental Association

TRS Calibration Summary

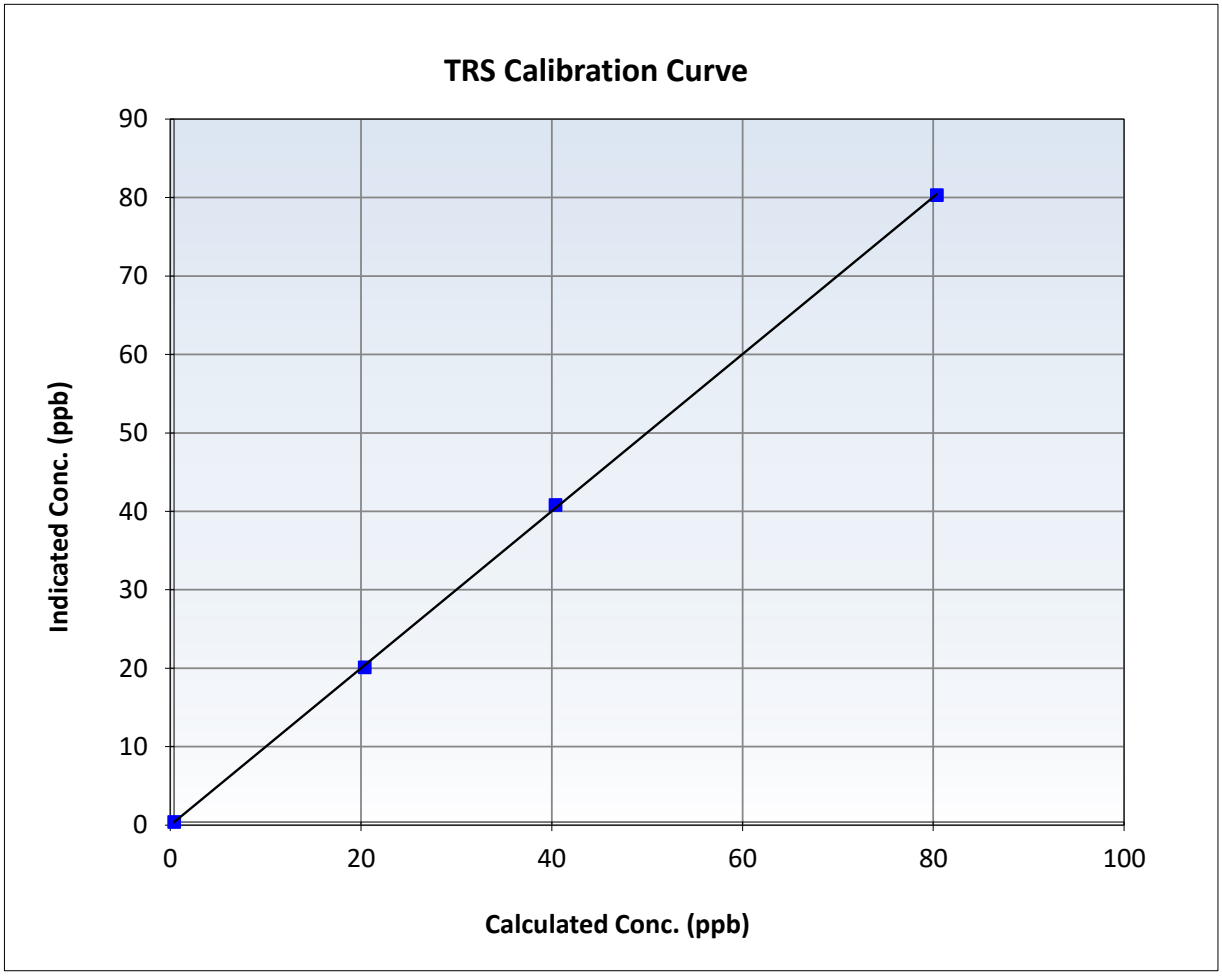
Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	July 27, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:30	End Time (MST):	13:55
Analyzer make:	Thermo 43iQ TLE	Analyzer serial #:	12333331546

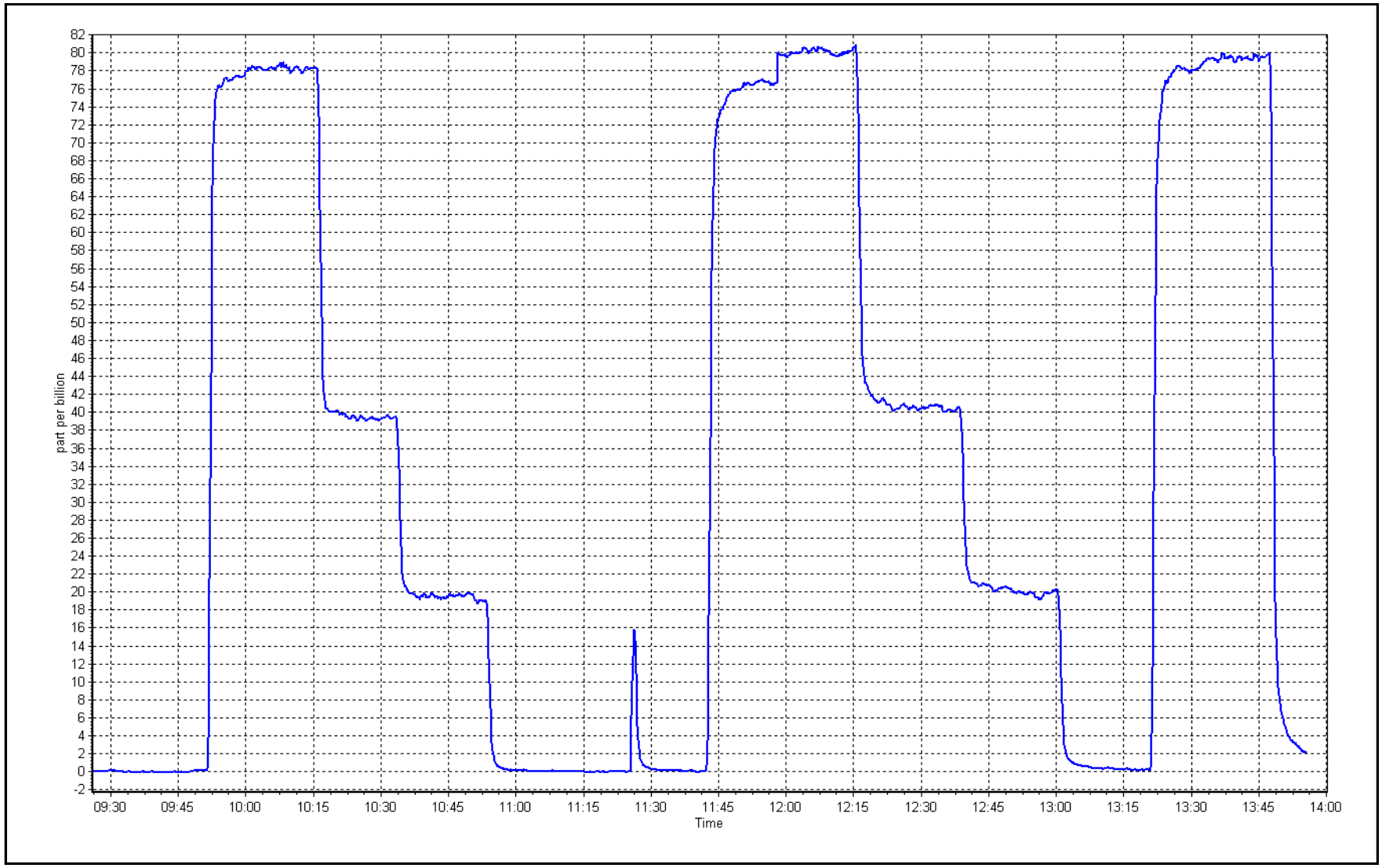
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
80.0	79.9	1.0009
40.0	40.4	0.9897
20.0	19.7	1.0148

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999926	*≥0.995*
Slope	1.000972	*0.90 - 1.10*
Intercept	-0.020000	*+/-3*



TRS Calibration Plot Date: September 9, 2026 Location: Patricia McInnes



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	September 25, 2026	Last Cal Date:	August 17, 2026
Start time (MST):	10:40	End time (MST):	14:24
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC255448		Cal Gas Expiry Date:	October 22, 2032	
CH4 Cal Gas Conc.	501.4	ppm	CH4 Equiv Conc.	1049.5	ppm
C3H8 Cal Gas Conc.	199.3	ppm			
Removed Gas Cert:			Removed Gas Expiry:		
Removed CH4 Conc.	501.4	ppm	CH4 Equiv Conc.	1049.5	ppm
Removed C3H8 Conc.	199.3	ppm	Diff between cyl (THC):		
Diff between cyl (CH_4):			Diff between cyl (NM):		
Calibrator Model:	API T700		Serial Number:	5240	
Zero Air Gen model:	API T701		Serial Number:	4602	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1118148494	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	3.00E-04	3.00E-04	NMHC SP Ratio:	4.59E-05	4.59E-05
CH4 Retention time:	15.5	15.7	NMHC Peak Area:	190802	190968
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	16.77	16.64	1.008
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.64	Prev response	16.75	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	16.77	16.61	1.010
Mid point	4960	39.9	8.37	8.28	1.012
Low point	4980	20.0	4.20	4.12	1.018
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.2	16.83	16.81	1.002
				Average Correction Factor	1.013

Notes: Span adjusted.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	8.76	8.74	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.74	Prev response	8.75	*% change	-0.1%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	8.76	8.73	1.004
Mid point	4960	39.9	4.37	4.34	1.007
Low point	4980	20.0	2.19	2.15	1.022
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.2	8.79	8.75	1.005
				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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.9	8.01	7.90	1.014
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.90	Prev response	8.00	*% change	-1.3%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	8.01	7.89	1.016
Mid point	4960	39.9	4.00	3.93	1.017
Low point	4980	20.0	2.01	1.98	1.014
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.2	8.04	8.06	0.997
				Average Correction Factor	1.016

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.999914	0.991148
THC Cal Offset:	-0.014322	-0.017766
CH4 Cal Slope:	0.998076	0.984362
CH4 Cal Offset:	0.004649	0.000212
NMHC Cal Slope:	1.000708	0.997590
NMHC Cal Offset:	-0.018572	-0.018378

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

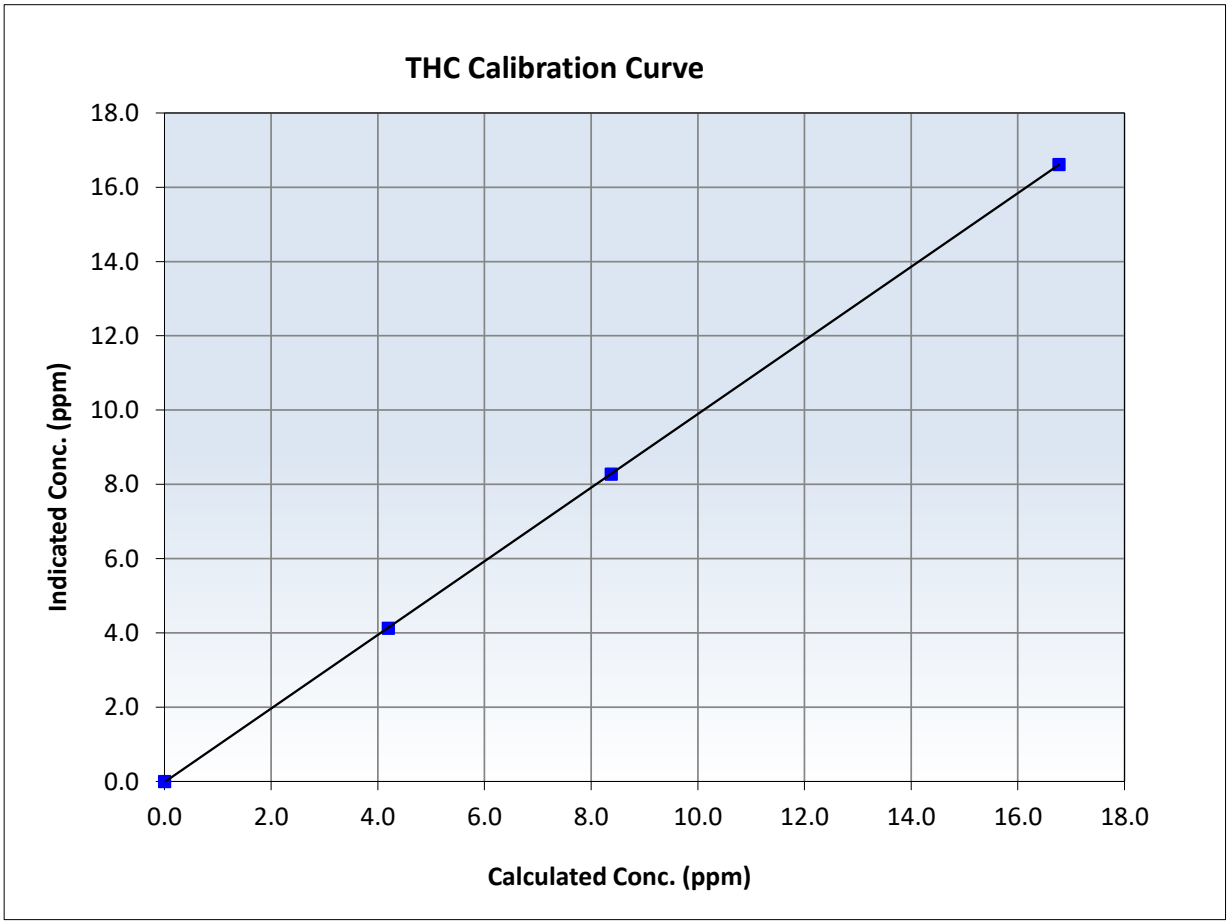
THC Calibration Summary

Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 17, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:40	End Time (MST):	14:24
Analyzer make:	Thermo 55i	Analyzer serial #:	1118148494

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999995	*≥0.995*
16.77	16.61	1.0095	Slope	0.991148	*0.90 - 1.10*
8.37	8.28	1.0120	Intercept	-0.017766	*+/-0.5*
4.20	4.12	1.0179			



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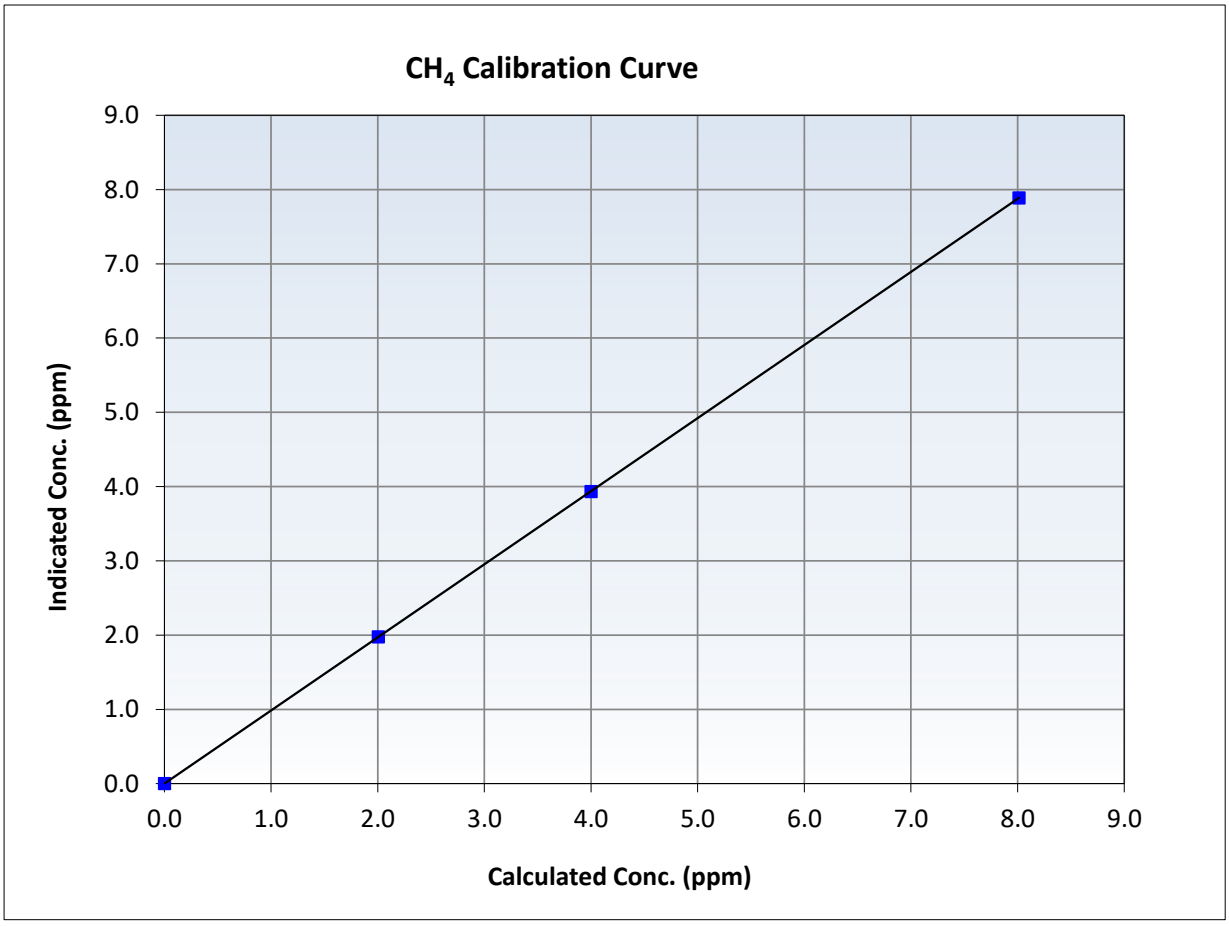
CH_4 Calibration Summary

Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 17, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:40	End Time (MST):	14:24
Analyzer make:	Thermo 55i	Analyzer serial #:	1118148494

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999999	≥0.995
8.01	7.89	1.0157	Slope	0.984362	0.90 - 1.10
4.00	3.93	1.0171			
2.01	1.98	1.0140	Intercept	0.000212	+/-0.5



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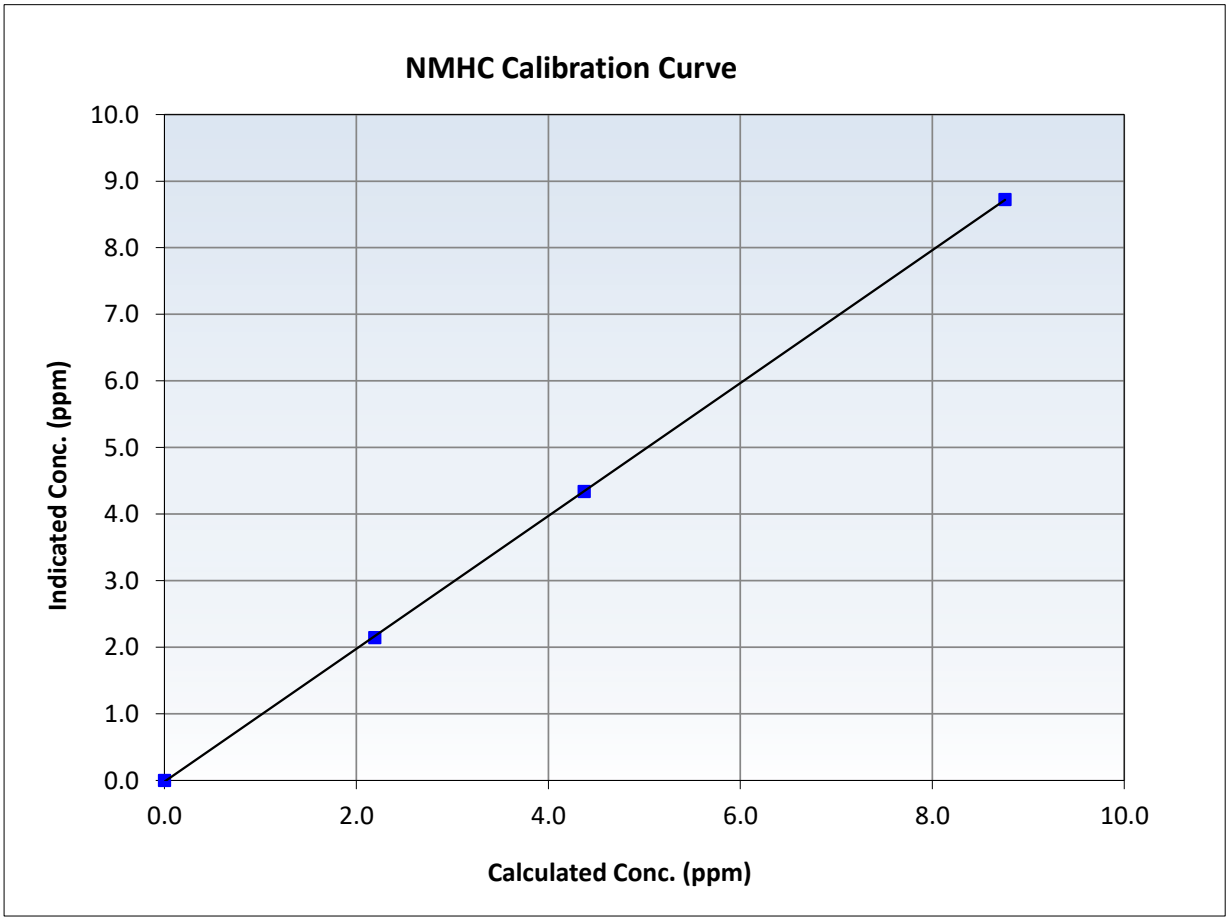
NMHC Calibration Summary

Station Information

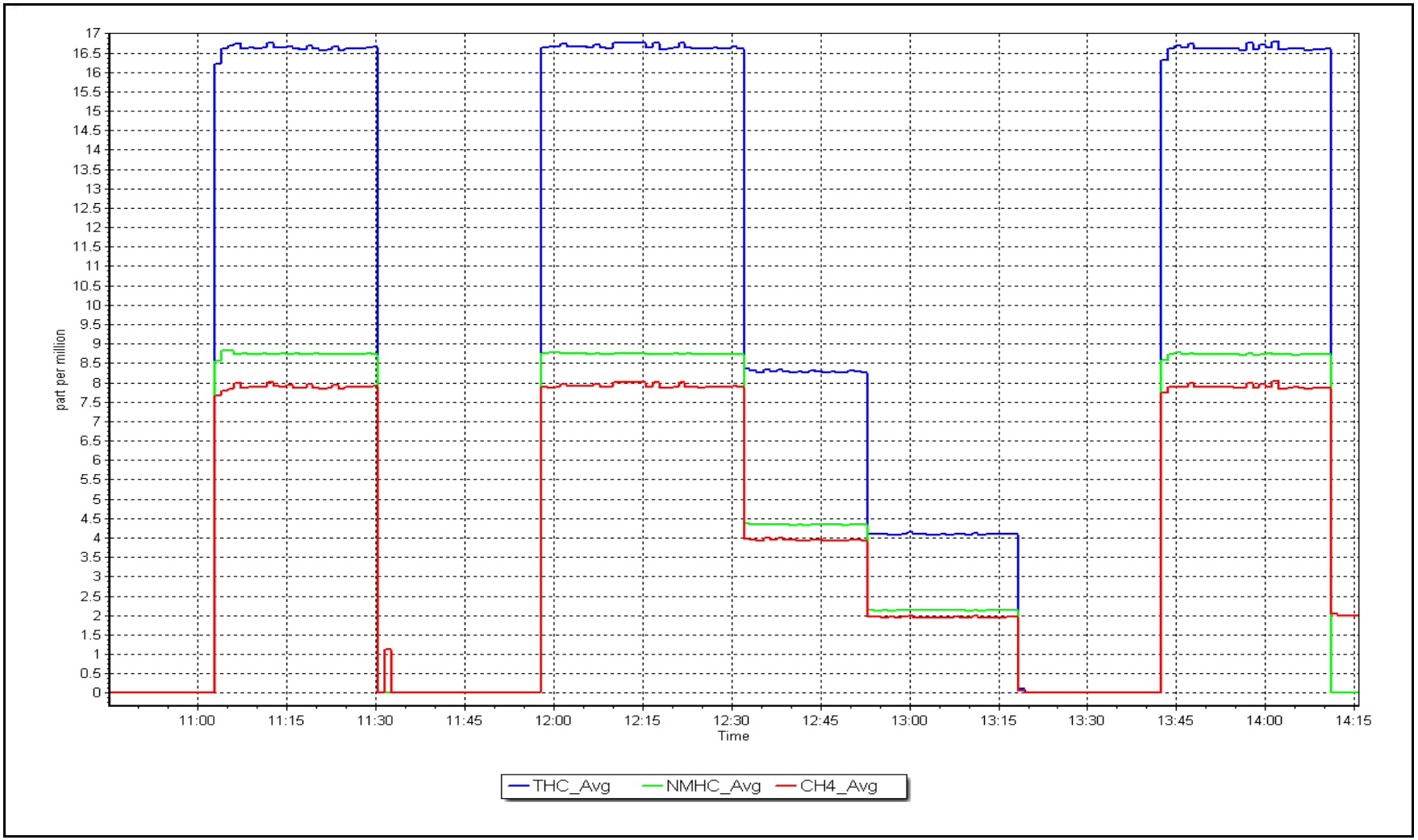
Calibration Date:	September 25, 2026	Previous Calibration:	August 17, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:40	End Time (MST):	14:24
Analyzer make:	Thermo 55i	Analyzer serial #:	1118148494

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999978	≥0.995
8.76	8.73	1.0037	Slope	0.997590	0.90 - 1.10
4.37	4.34	1.0073			
2.19	2.15	1.0216	Intercept	-0.018378	+/-0.5



NMHC Calibration Plot Date: September 25, 2026 Location: Patricia McInnes



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Patricia McInnes
Station number:	AMS 06
Calibration Date:	September 8, 2026
Last Cal Date:	August 27, 2026
Start time (MST):	9:15
End time (MST):	14:33
Reason:	Routine

Calibration Standards

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

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.5	-0.3	-0.2	----	----
AF High point	4935	64.6	803.7	799.8	3.9	803.0	798.2	4.6	1.0002	1.0016
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.6 ppb	NO = 798.7 ppb
Baseline Corr 1st pt	NO_X = 803.5 ppb	NO = 798.5 ppb
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

*Percent Change NO_X = 0.0%

*Percent Change NO = 0.0%

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i

Serial Number: 1172750022

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.910	0.910	NO bkgnd or offset:	4.0	4.0
NOX coeff or slope:	0.996	0.996	NOX bkgnd or offset:	4.6	4.6
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	154.5	155.7

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998787	0.999342
NO_X Cal Offset:	0.852496	0.632293
NO Cal Slope:	1.000180	0.999925
NO Cal Offset:	-1.265518	-0.826233
NO_2 Cal Slope:	1.002426	1.002146
NO_2 Cal Offset:	0.234442	1.306807

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.2	0.0	----	----
High point	4935	64.6	803.7	799.8	3.9	803.0	799.1	3.8	1.0009	1.0009
Mid point	4968	32.3	401.8	399.9	1.9	403.7	399.1	4.6	0.9953	1.0019
Low point	4984	16.2	201.5	200.5	1.0	202.1	198.8	3.2	0.9971	1.0088
As left zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.3	0.0	----	----
As left span	4935	64.6	803.7	385.6	418.1	800.0	385.6	414.9	1.0046	1.0000
							Average Correction Factor		0.9978	1.0039

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	792.5	379.0	417.4	419.2	0.9956	100.4%
Mid GPT point	792.5	595.0	201.4	203.0	0.9920	100.8%
Low GPT point	792.5	695.7	100.7	104.0	0.9680	103.3%
				Average Correction Factor	0.9852	101.5%

Notes: Inlet filter changed after as founds. No adjustments made. Second high NO reference point used for GPT calculations.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

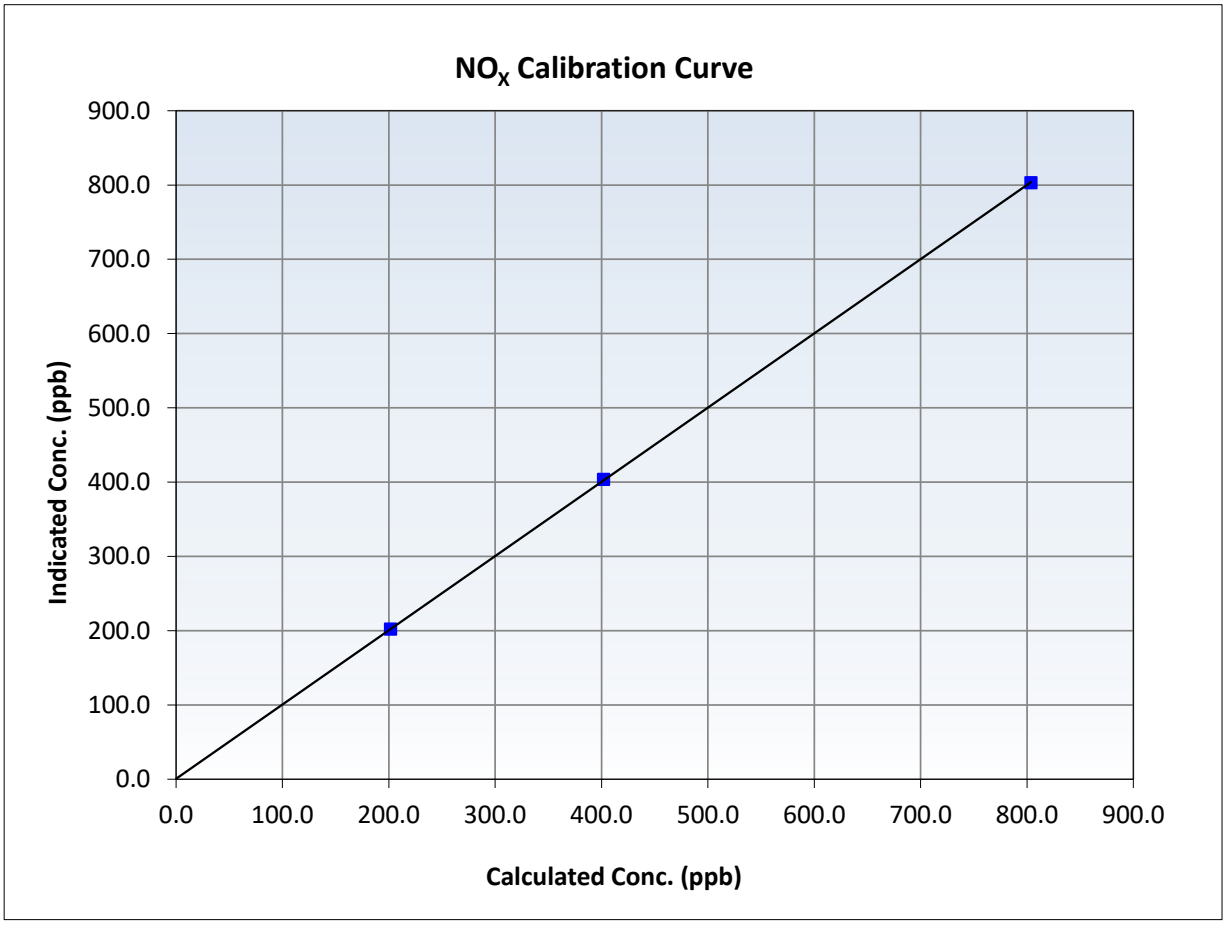
NO_X Calibration Summary

Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 27, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:15	End Time (MST):	14:33
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	-0.2	----	Correlation Coefficient	0.999989	≥0.995
803.7	803.0	1.0009	Slope	0.999342	0.90 - 1.10
401.8	403.7	0.9953	Intercept	0.632293	+/-20
201.5	202.1	0.9971			



Wood Buffalo Environmental Association

NO_2 Calibration Summary

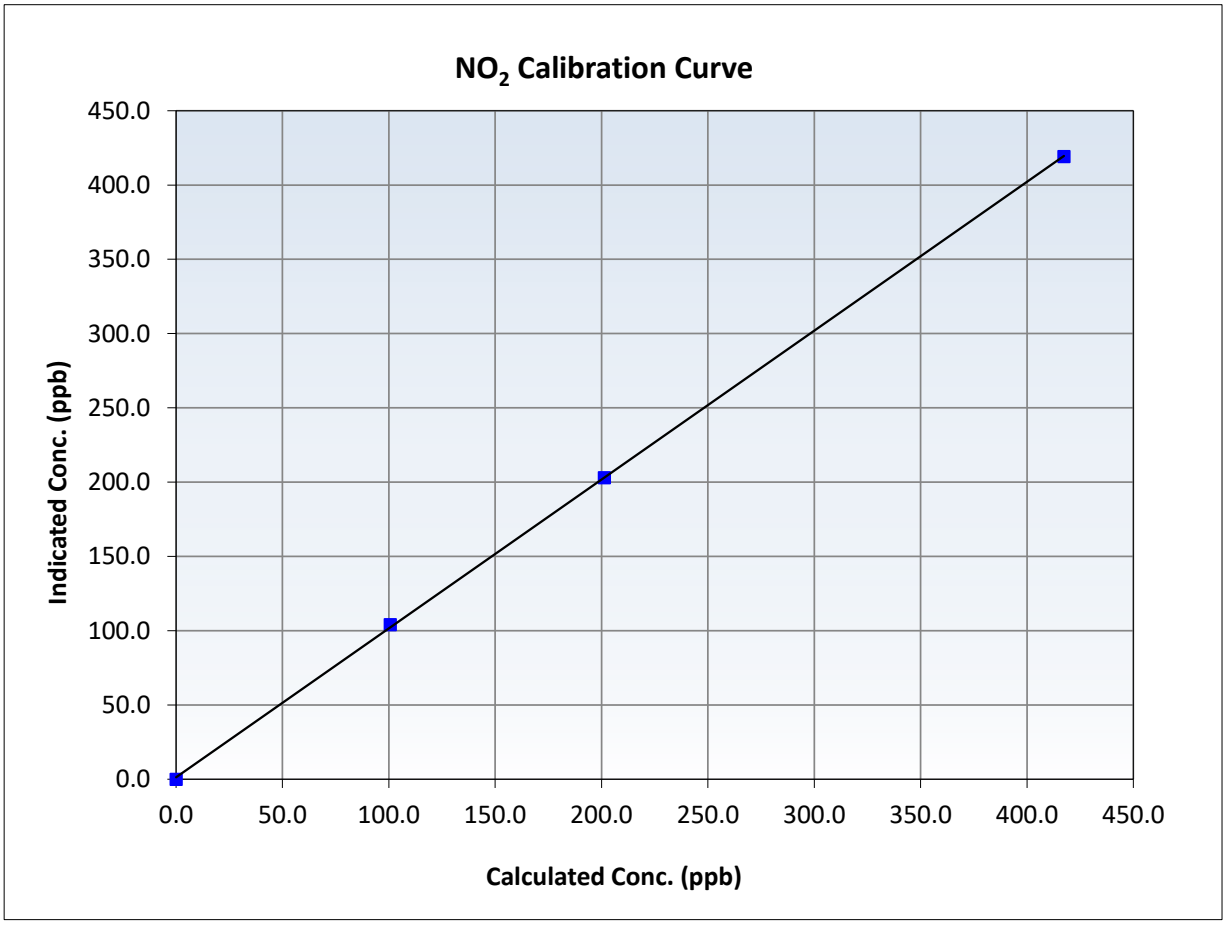
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 27, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:15	End Time (MST):	14:33
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
417.4	419.2	0.9956
201.4	203.0	0.9920
100.7	104.0	0.9680

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999947	*≥0.995*
Slope	1.002146	*0.90 - 1.10*
Intercept	1.306807	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

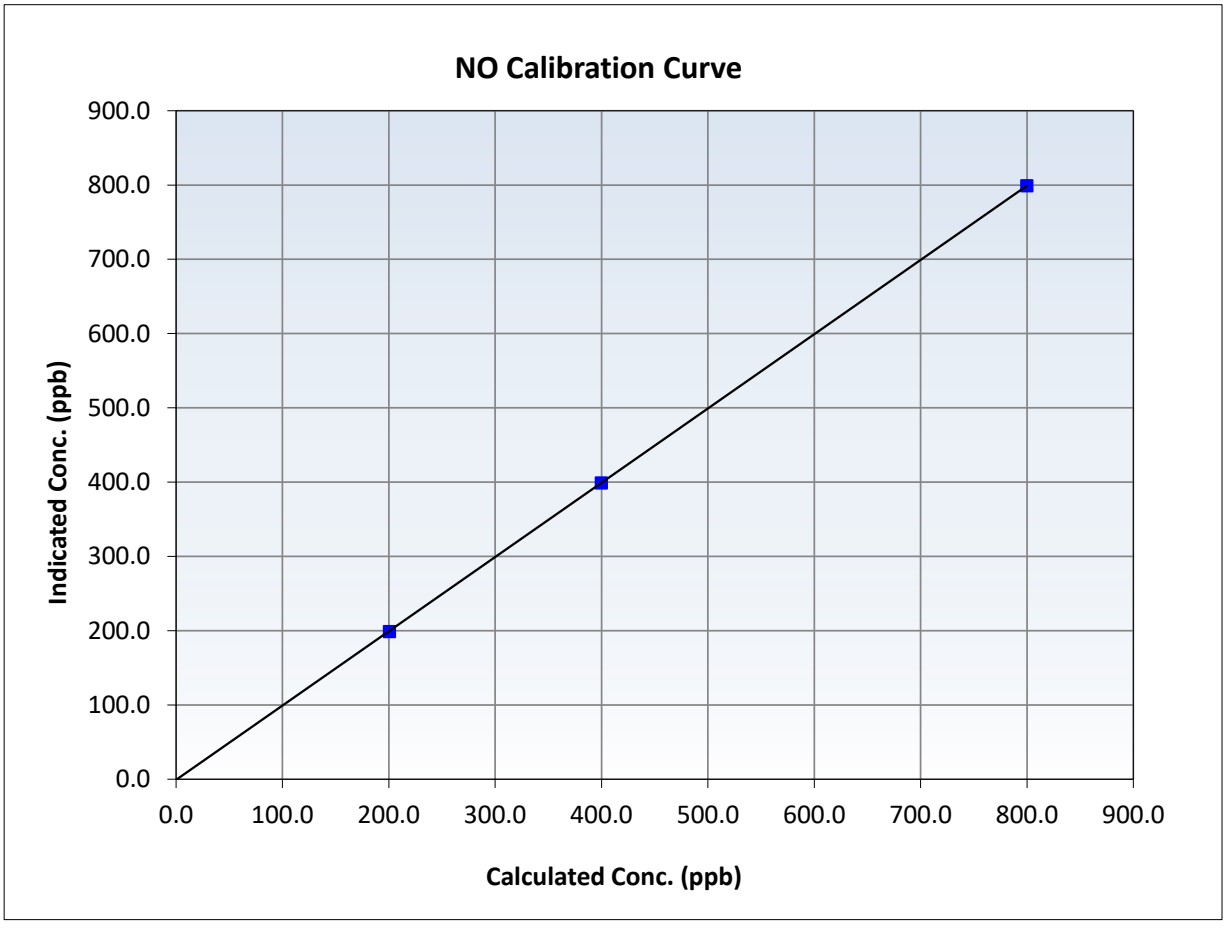
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 27, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:15	End Time (MST):	14:33
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

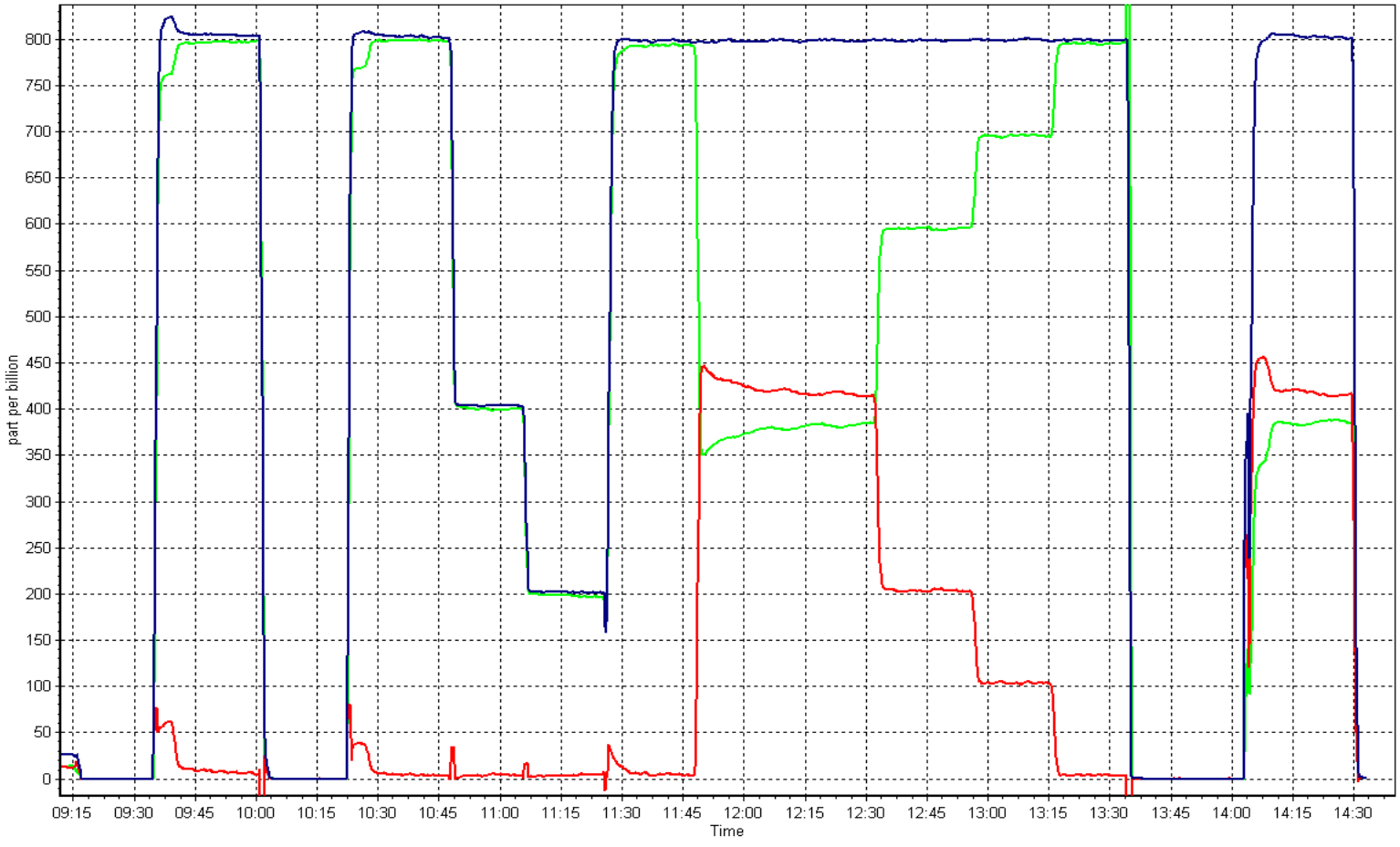
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
799.8	799.1	1.0009
399.9	399.1	1.0019
200.5	198.8	1.0088

Statistical Evaluation		Limits
Correlation Coefficient	0.999996	≥0.995
Slope	0.999925	0.90 - 1.10
Intercept	-0.826233	+/-20



NO_X Calibration Plot Date: September 8, 2026 Location: Patricia McInnes



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	September 17, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	9:11	End time (MST):	13:16
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	API T700	Serial Number:	5240
ZAG Make/Model:	API T701	Serial Number:	4602

Analyzer Information

Analyzer make:	Teledyne API T400		Analyzer serial #:	7046	
Analyzer Range	0 - 500 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.000486	1.004457	Backgd or Offset:	3.6	3.0
Calibration intercept:	0.740000	0.420000	Coeff or Slope:	1.038	1.019

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	800.0	0.0	-0.9	----
As found High point	5000	907.0	400.0	409.3	0.975
As found Mid point					
As found Low point					
Baseline Corr As found:	410.2	Previous response	400.9	*% change	2.3%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	800.0	0.0	0.0	----
High point	5000	907.0	400.0	402.0	0.995
Mid point	5000	792.4	200.0	201.5	0.993
Low point	5000	686.5	100.0	101.3	0.987
As left zero	5000	800.0	0.0	0.0	----
As left span	5000	907.0	400.0	403.4	0.992
				Average Correction Factor	0.992

Notes: Sample inlet filter changed after as founds. Adjusted zero and span.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

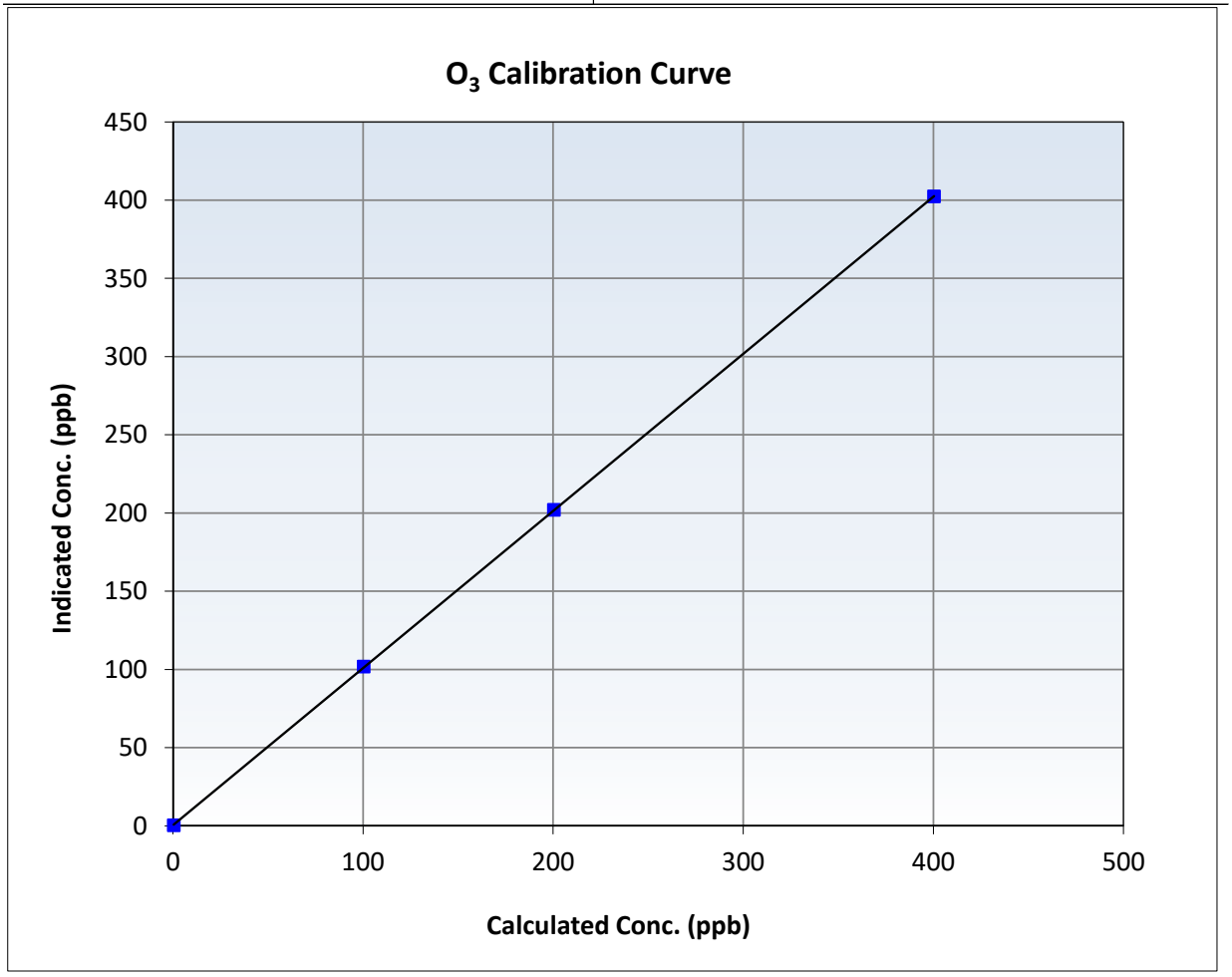
O_3 Calibration Summary

Station Information

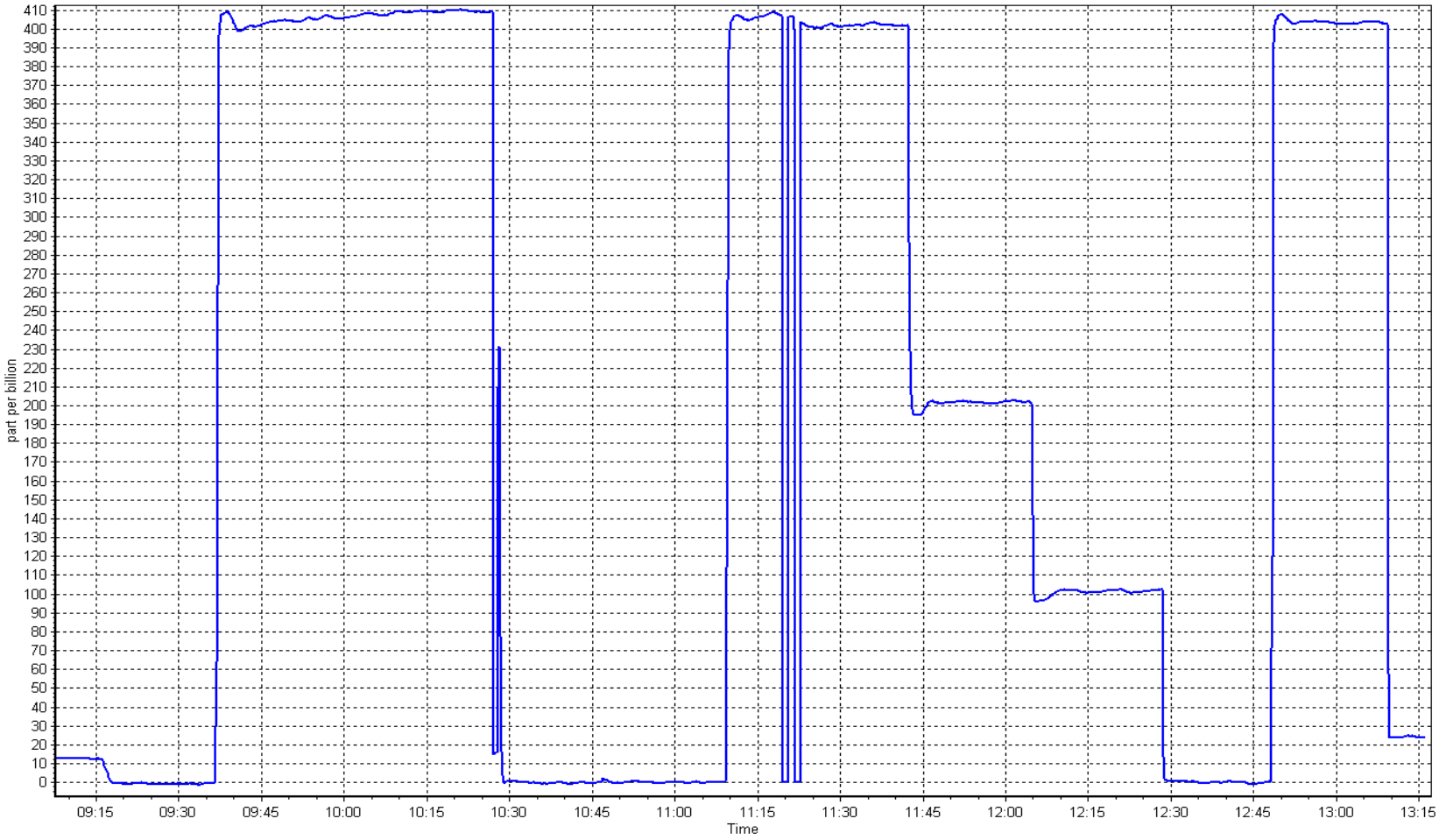
Calibration Date:	September 17, 2026	Previous Calibration:	August 25, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:11	End Time (MST):	13:16
Analyzer make:	Teledyne API T400	Analyzer serial #:	7046

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.0	----	Correlation Coefficient	0.999995	≥0.995
400.0	402.0	0.9950	Slope	1.004457	0.90 - 1.10
200.0	201.5	0.9926			
100.0	101.3	0.9872	Intercept	0.420000	+/- 5



O_3 Calibration Plot Date: September 17, 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:	September 29, 2026	Last Cal Date:	August 27, 2026
Start time (MST):	10:15	End time (MST):	11:54
Analyzer Make:	API T640	S/N:	1547
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388750
Temp/RH standard:	Alicat FP-25BT	S/N:	388750

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (^{o}C)	10.7	10.40	10.7	☐	+/- 2 ^{o}C
P (mmHg)	712.4	712.09	712.4	☐	+/- 10 mmHg
Flow (LPM)	4.99	4.928	4.99	☐	+/- 0.25 LPM
PW% (pump)	31	-----		☐	>80%
Zero Verification	PM w/o HEPA:	1.0	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

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test	10.9	10.9	10.9	☐	+/- 0.5

Date Optical Chamber Cleaned: September 29, 2026

Date Disposable Filter Changed: September 29, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: September 29, 2026

Date RH/T Sensor Cleaned: September 29, 2026

Notes: Verified teamperature, pressure, flow and pump%. Completed yearly and quarterly cleaning. Leak checks passed.

Calibration by: Braiden Boutilier

Wood Buffalo Environmental Association

Nt - NOX - NH3 Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
NOX Cal Date:	September 23, 2026	Last Cal Date:	August 12, 2026
Start time (MST):	7:12	End time (MST):	12:39
NH3 Cal Date:	September 23, 2026	Last Cal Date:	August 12, 2026
Start time (MST):	12:50	End time (MST):	16:36
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:	5240
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:	6.3
NOX Range (ppb):	0 - 1000 ppb		Sample Flow:	544
	Start	***Finish***		***Start***	***Finish***
NO coefficient:	1.032	1.019	Nt coefficient:	1.034	1.035
NOX coefficient:	1.031	1.017	NO bkgrnd:	-0.2	0.8
NO2 coefficient:	1.000	1.000	NOX bkgrnd:	0.5	0.4
NH3 coefficient:	0.947	0.977	Nt bkgrnd:	1.0	2.3

Calibration Statistics

	Start	***Finish***
NO_X Cal Slope:	1.005018	1.000450
NO_X Cal Offset:	0.310878	0.592829
NO Cal Slope:	1.002399	1.002424
NO Cal Offset:	-0.467237	-2.325858
NO_2 Cal Slope:	0.996546	0.998487
NO_2 Cal Offset:	1.563711	0.263235
NH3 Cal Slope:	1.000539	0.997764
NH3 Cal Offset:	12.043705	8.359169
Nt Cal Slope:	1.003796	1.001024
Nt Cal Offset:	12.080350	8.443378

Wood Buffalo Environmental Association

NO_X - NO - NO_2 Calibration Report

NOx / NO / Nt As Found Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	Baseline corr NOx Correction factor (Cc/Ic) *Limit = 0.9 - 1.0*	Baseline corr NO Correction factor (Cc/Ic) *Limit = 0.9 - 1.0*
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.2	-0.1	----	----
As found span	4935	64.6	803.7	799.8	803.7	815.6	814.0	822.2	0.9854	0.9826
AF GPT span										
new NO cyl rp										

Baseline Corr As Fd	Nt =	822.3	ppb	NO_X =	815.7	ppb	NO =	813.8 ppb
Previous Response	Nt =	818.82	ppb	NO_X =	808.0	ppb	NO =	801.3 ppb

**NO_X Δ (NO to GPT response) =

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

*Percent Change $Nt_{(NO)}$ = 0.4%

*Percent Change NO_X = 0.9%

*Percent Change NO = 1.5%

* = > +/-5% change initiates investigation

NOx / NO / Nt Calibration Data

Set Point	Dilution flow rate (sccm)	Source gas flow rate (sccm)	Calculated NOx concentration (ppb) (Cc)	Calculated NO concentration (ppb) (Cc)	Calculated Nt concentration (ppb) (Cc)	Indicated NOx concentration (ppb) (Ic)	Indicated NO concentration (ppb) (Ic)	Indicated Nt concentration (ppb) (Ic)	NOx Correction factor (Cc/Ic) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibration zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.4	-0.7	----	----
High point	4935	64.6	803.7	799.8	803.7	803.4	800.1	824.7	1.0004	0.9996
Mid point	4968	32.3	401.8	399.9	401.8	405.6	398.4	411.6	0.9906	1.0036
Low point	4984	16.2	201.5	200.5	201.5	201.1	196.2	202.6	1.0021	1.0222
								Average Correction Factor	0.9977	1.0085

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
As Found zero	----	----	0.0	-0.3	----	----
Calibration zero	----	----	0.0	0.2	----	----
High GPT point (400 ppb O3)	792.4	385.5	410.8	410.0	1.0019	99.8%
Mid GPT point (200 ppb O3)	792.4	595.9	200.4	201.6	0.9939	100.6%
Low GPT point (100 ppb O3)	792.4	692.2	104.1	103.4	1.0065	99.4%
				Average Correction Factor	1.0008	99.9%

Wood Buffalo Environmental Association
NH_3 - 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)) *Limit = 0.9 - 1.1*	Baseline corr NH3 Correction factor (Cc/(Ic-zero)) *Limit = 0.9 - 1.1*
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
AF High point	3419	81.3	1800.1	0.0	1800.1	1832.9	6.2	1826.8	0.982	0.985
AF Mid point										
AF Low point										
new NH3 cyl rp										

Baseline Corr As Fd Nt = 1833.0 ppb NH3 = 1826.8 ppb *Percent Change $Nt_{(NH3)}$ = 0.8%

Previous Response Nt = 1819.0 ppb NH3 = 1813.1 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) *Limit = 0.95-1.05*	NH3 Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibration zero	5000	0.0	0.0	0.0	0.0	-0.7	-0.1	-0.6	----	----
High point	3419	81.3	1800.1	0.0	1800.1	1801.0	5.9	1795.1	0.999	1.003
Mid point	3455	45.2	1000.8	0.0	1000.8	1025.4	3.4	1022.1	0.976	0.979
Low point	3477	22.6	500.5	0.0	500.5	512.8	2.0	510.8	0.976	0.980
								Average Correction Factor	0.9838	0.9872

NH3 Previous Converter Efficiency = 95.7 %
NH3 Current Converter Efficiency = 97.7 %

Notes: Changed the inlet filter after as founds. Adjusted NOx zero and span. Adjusted NH3 span.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

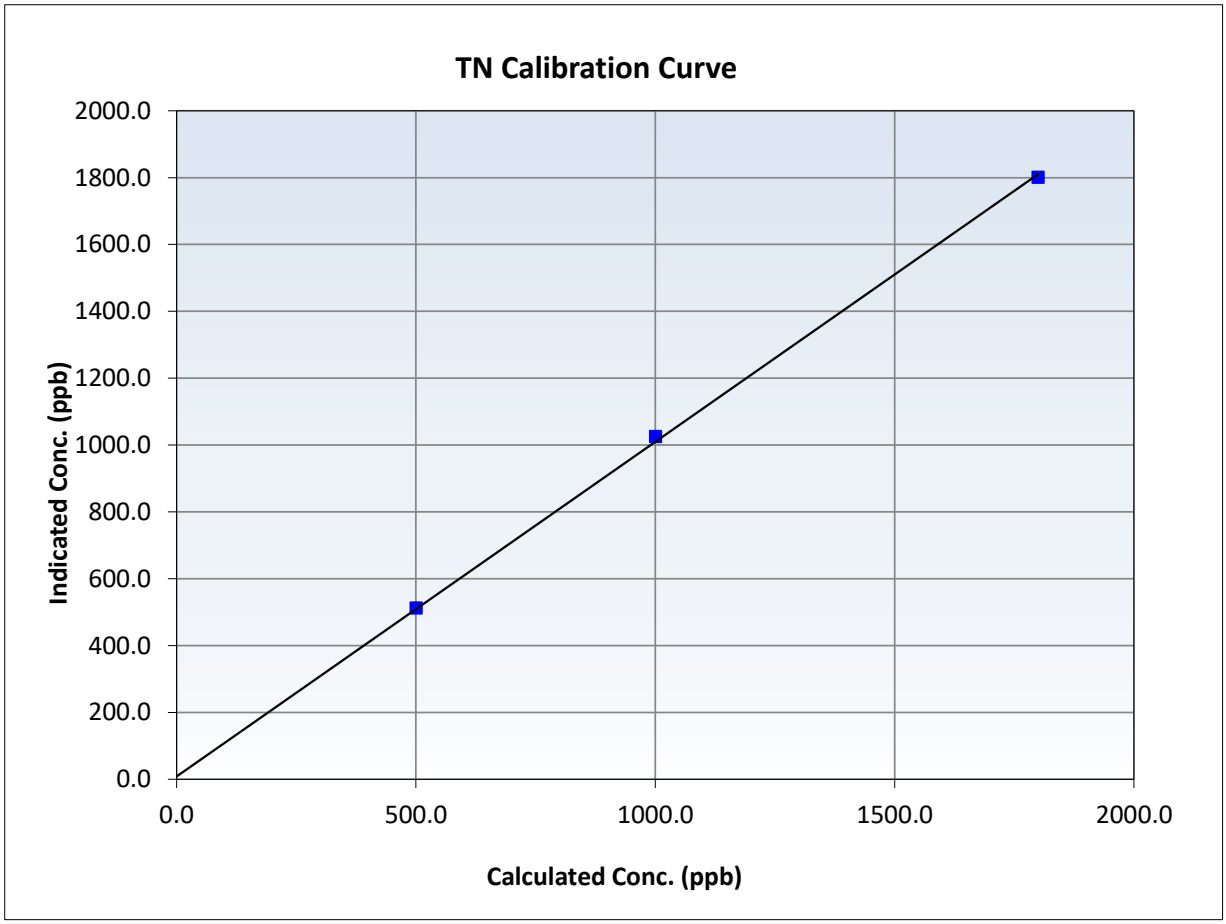
Nt Calibration Summary

Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 12, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	12:50	End Time (MST):	16:36
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.7	----	Correlation Coefficient	0.999768	*≥0.995*
1800.1	1801.0	0.9995	Slope	1.001024	*0.90 - 1.10*
1000.8	1025.4	0.9760	Intercept	8.443378	*+/-20*
500.5	512.8	0.9760			



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NH_3 Calibration Summary

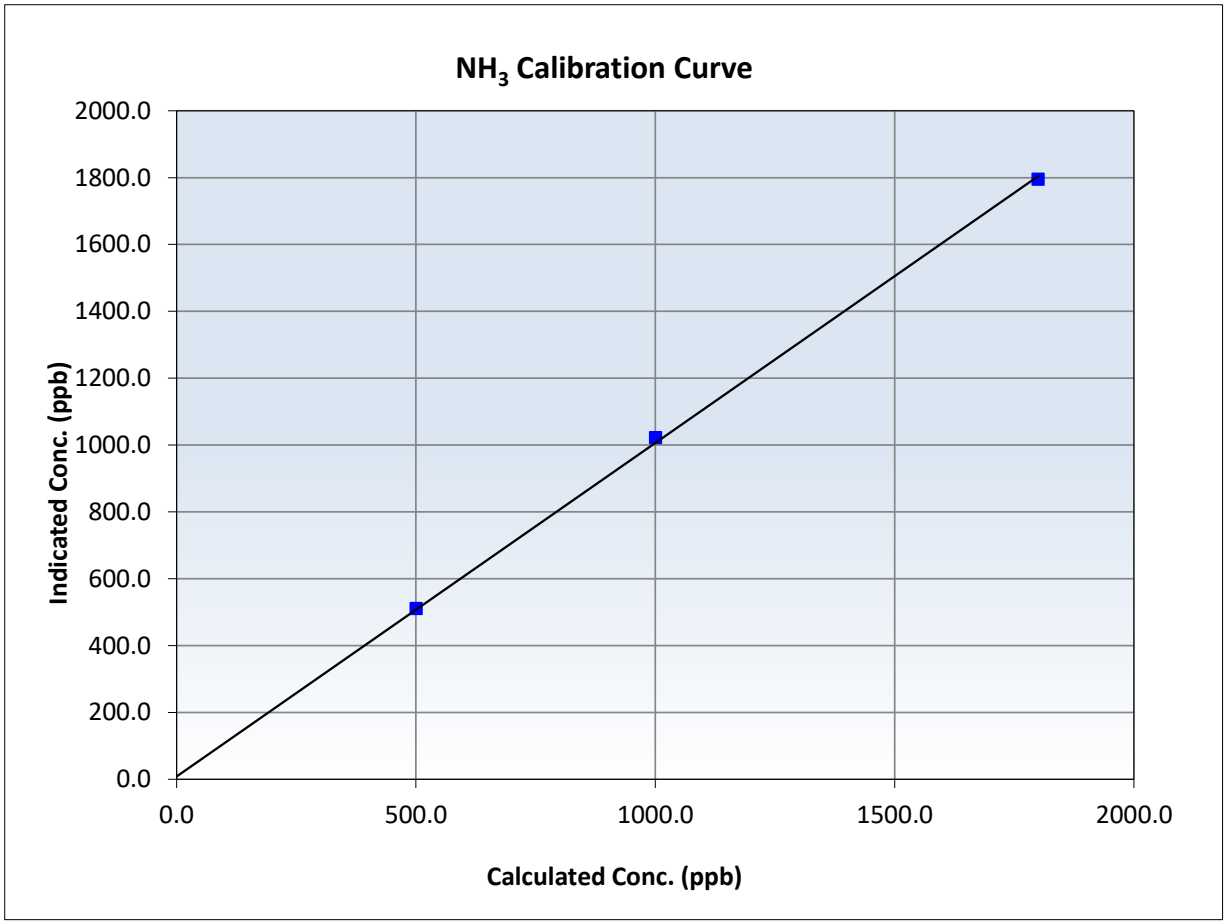
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 12, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	12:50	End Time (MST):	16:36
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.6	----
1800.1	1795.1	1.0028
1000.8	1022.1	0.9792
500.5	510.8	0.9798

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999769	*≥0.995*
Slope	0.997764	*0.90 - 1.10*
Intercept	8.359169	*+/-20*



Wood Buffalo Environmental Association

NO_X Calibration Summary

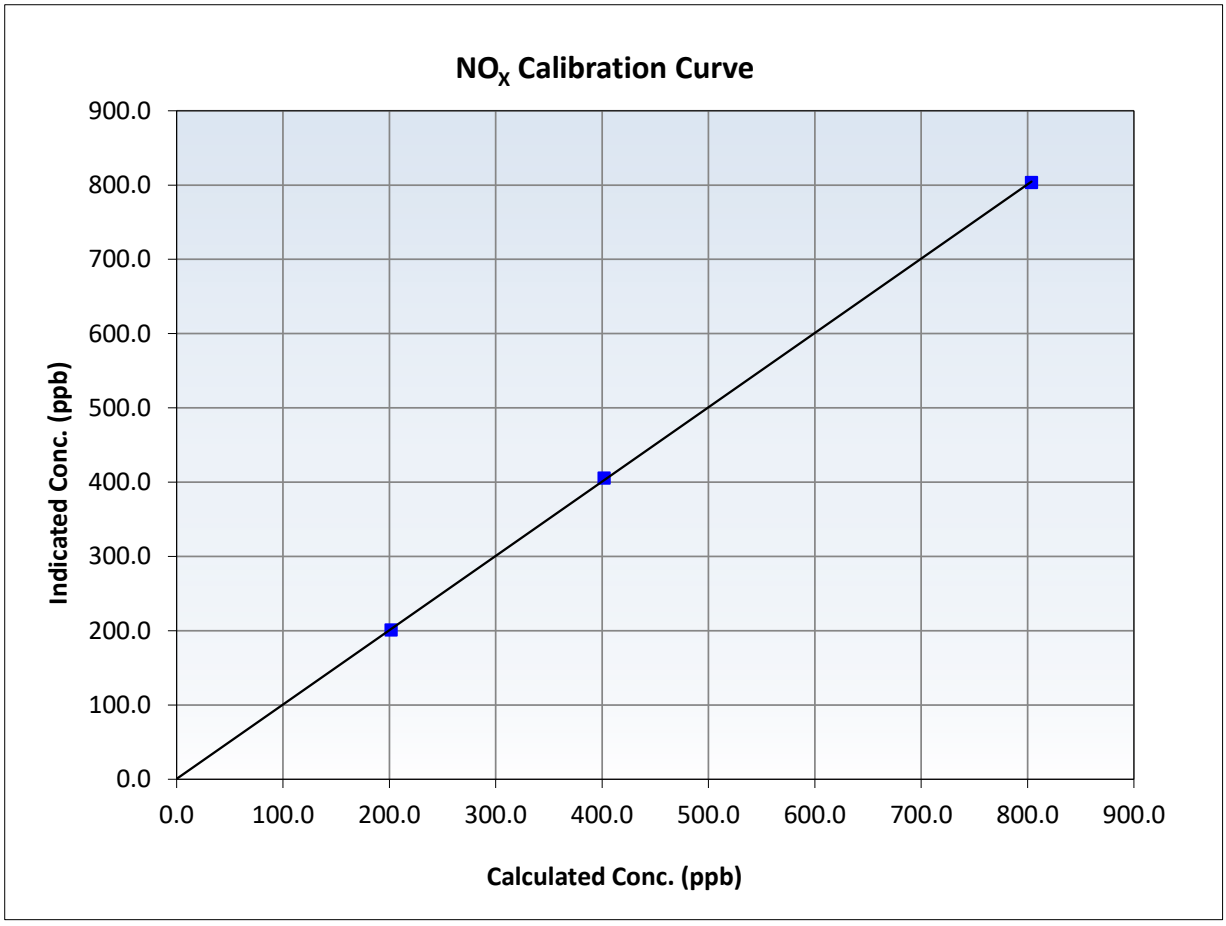
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 12, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	7:12	End Time (MST):	12:39
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
803.7	803.4	1.0004
401.8	405.6	0.9906
201.5	201.1	1.0021

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999965	*≥0.995*
Slope	1.000450	*0.90 - 1.10*
Intercept	0.592829	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

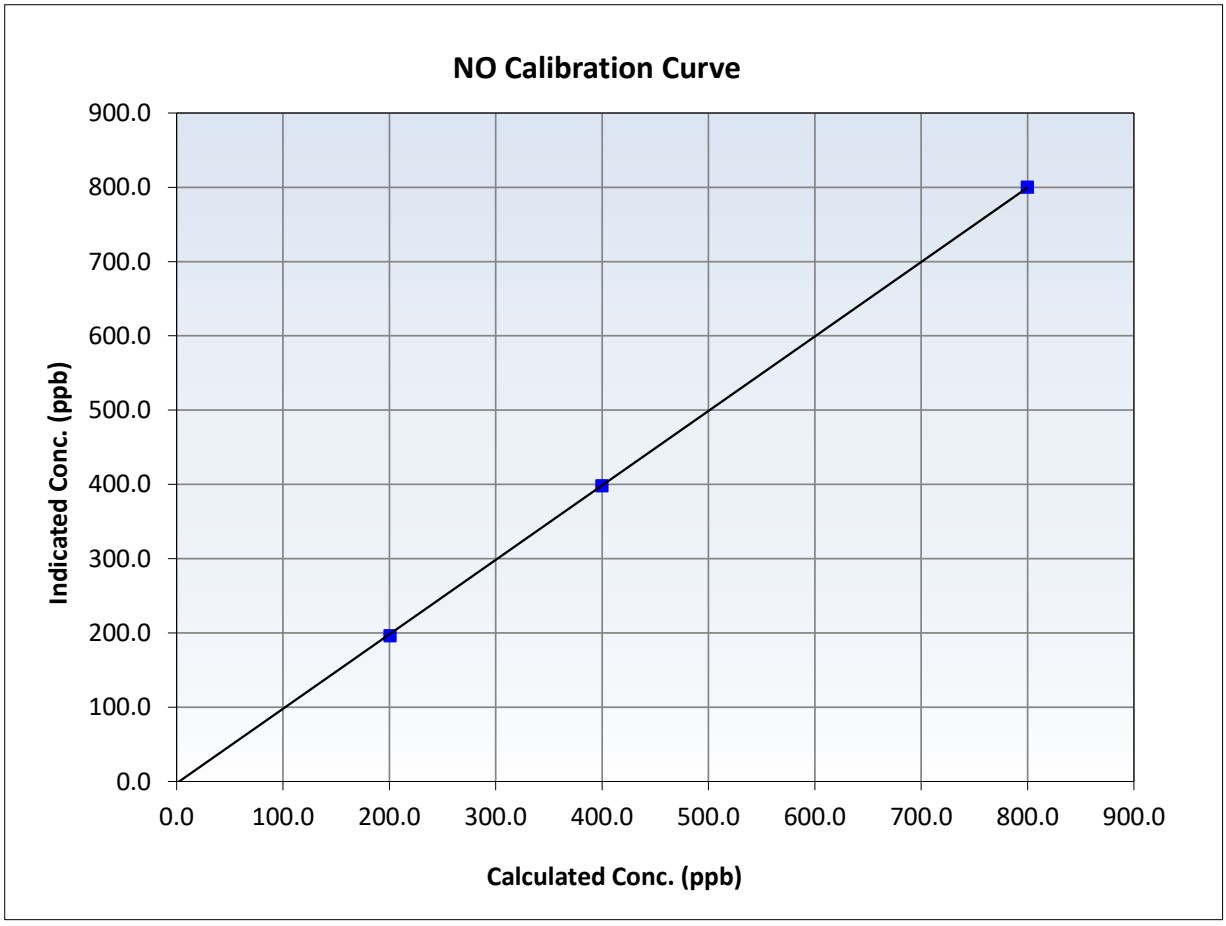
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 12, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	7:12	End Time (MST):	12:39
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.4	----
799.8	800.1	0.9996
399.9	398.4	1.0036
200.5	196.2	1.0222

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999970	*≥0.995*
Slope	1.002424	*0.90 - 1.10*
Intercept	-2.325858	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

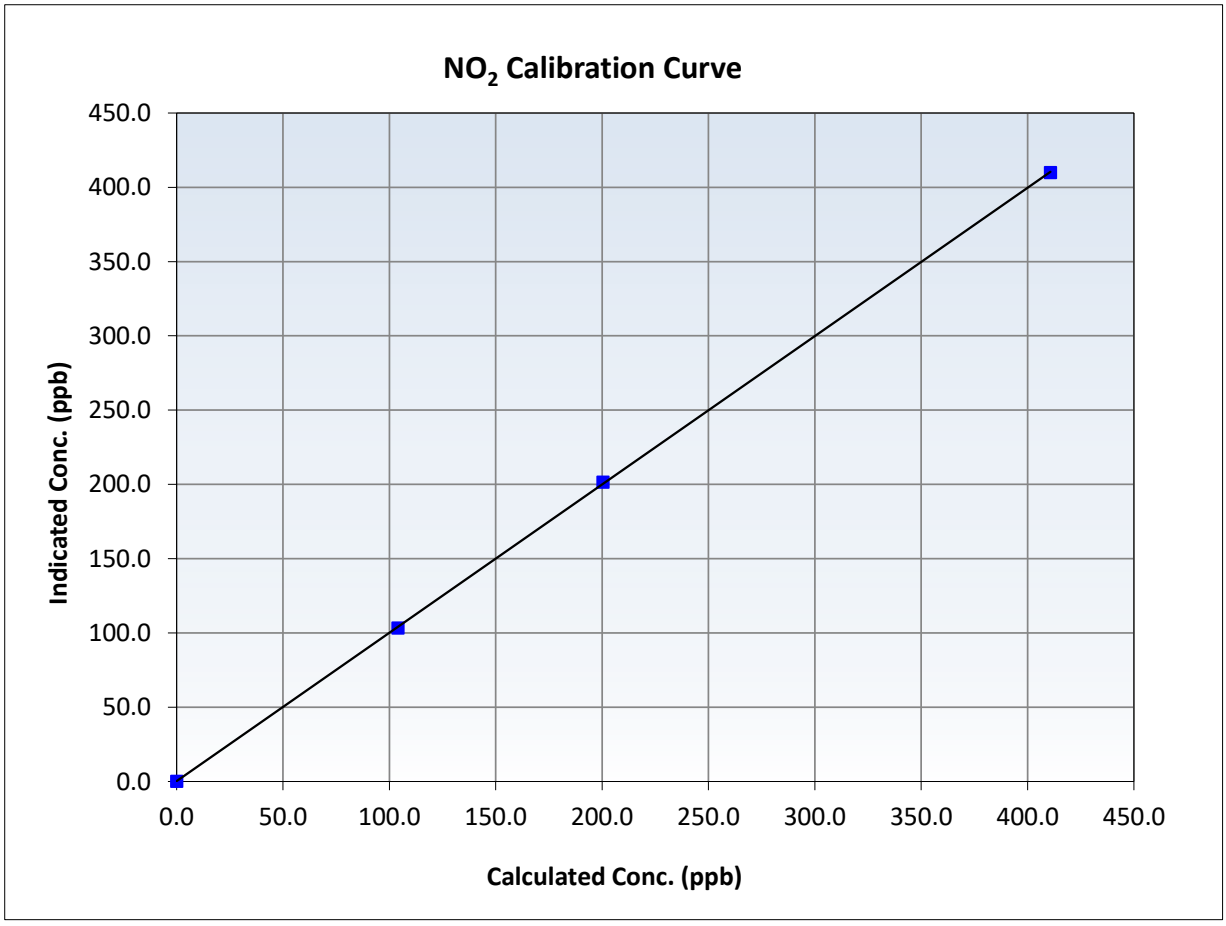
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 12, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	7:12	End Time (MST):	12:39
Analyzer make:	API T201	Analyzer serial #:	215

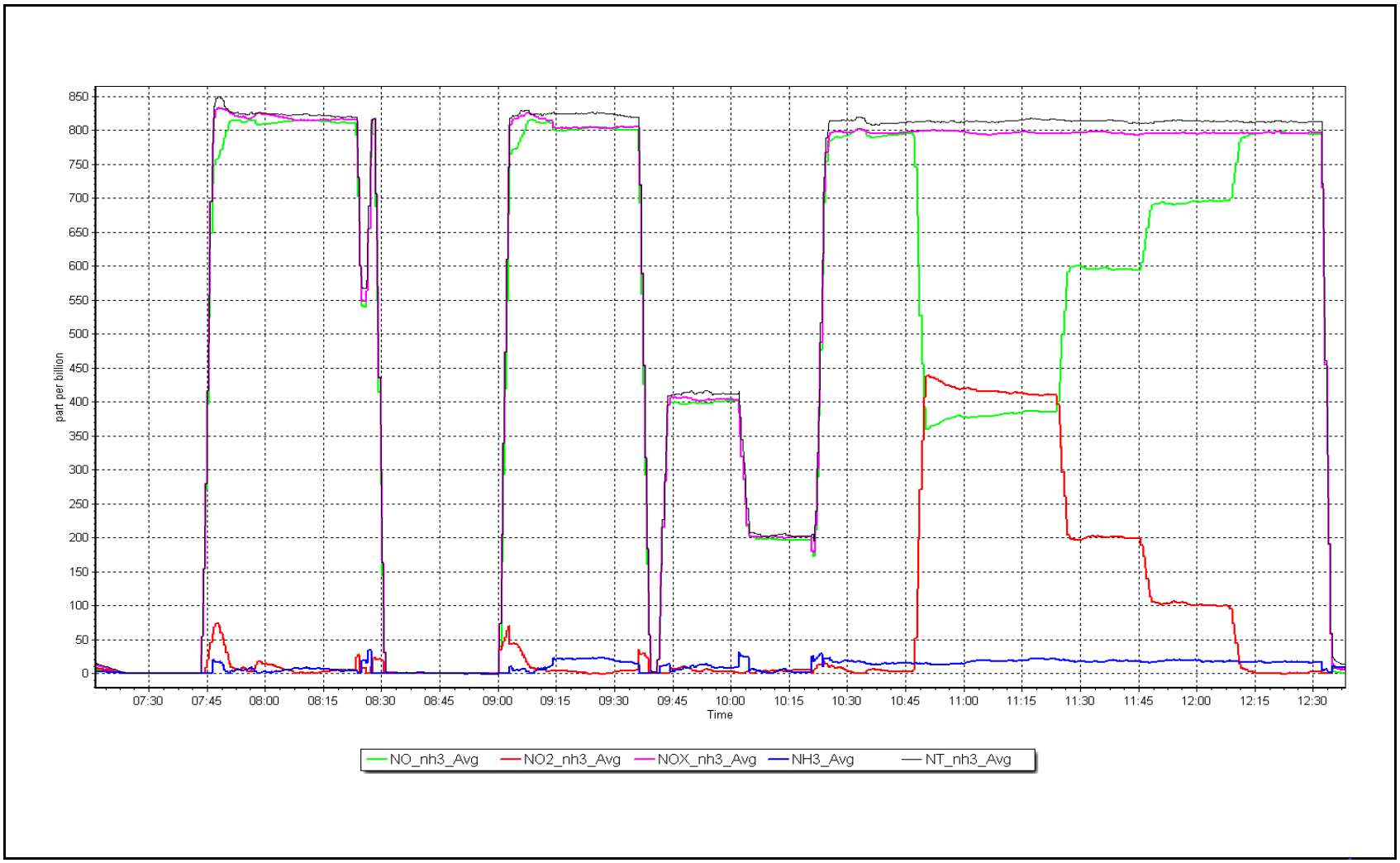
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
410.8	410.0	1.0019
200.4	201.6	0.9939
104.1	103.4	1.0065

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999974	*≥0.995*
Slope	0.998487	*0.90 - 1.10*
Intercept	0.263235	*+/-20*



NO_X Calibration Plot Date: September 23, 2026 Location: Patricia McInnes



NH_3 Calibration Plot Date: September 23, 2026 Location: Patricia McInnes



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS07
ATHABASCA VALLEY
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	September 2, 2026	Last Cal Date:	August 7, 2026
Start time (MST):	8:57	End time (MST):	12:02
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.003424	1.001050	Backgd or Offset:	2.73	2.73
Calibration intercept:	2.623543	2.703808	Coeff or Slope:	0.856	0.856

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	79.8	799.0	801.4	0.997
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	801.3	Previous response	804.3	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4920	79.8	799.0	800.7	0.998
Mid point	4960	39.9	399.5	405.7	0.985
Low point	4980	20.0	200.2	204.3	0.980
As left zero	5000	0.0	0.0	0.2	----
As left span	4920	79.8	799.0	802.5	0.996
				Average Correction Factor:	0.988

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

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

SO_2 Calibration Summary

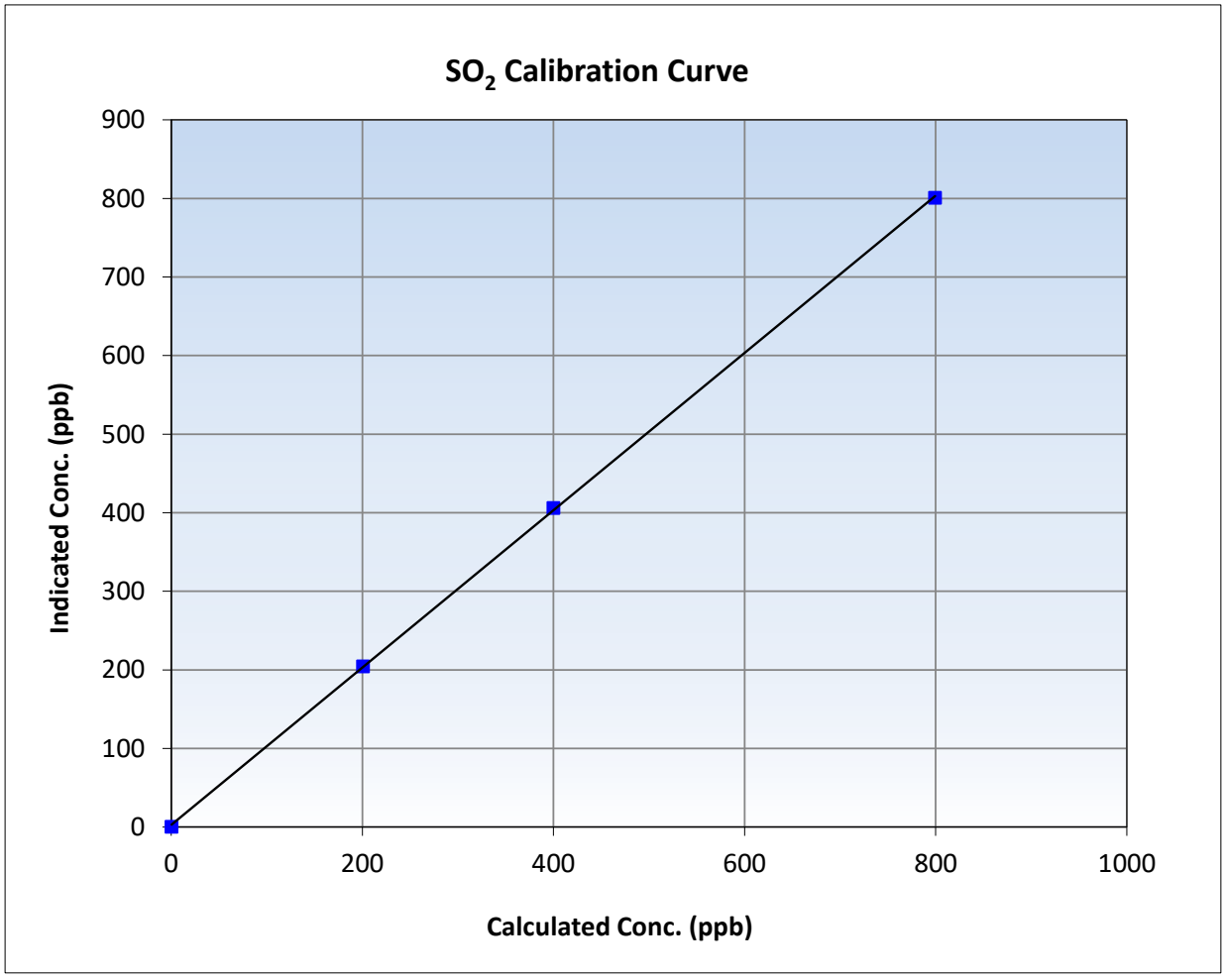
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 7, 2026
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	8:57	End Time (MST):	12:02
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1507864683

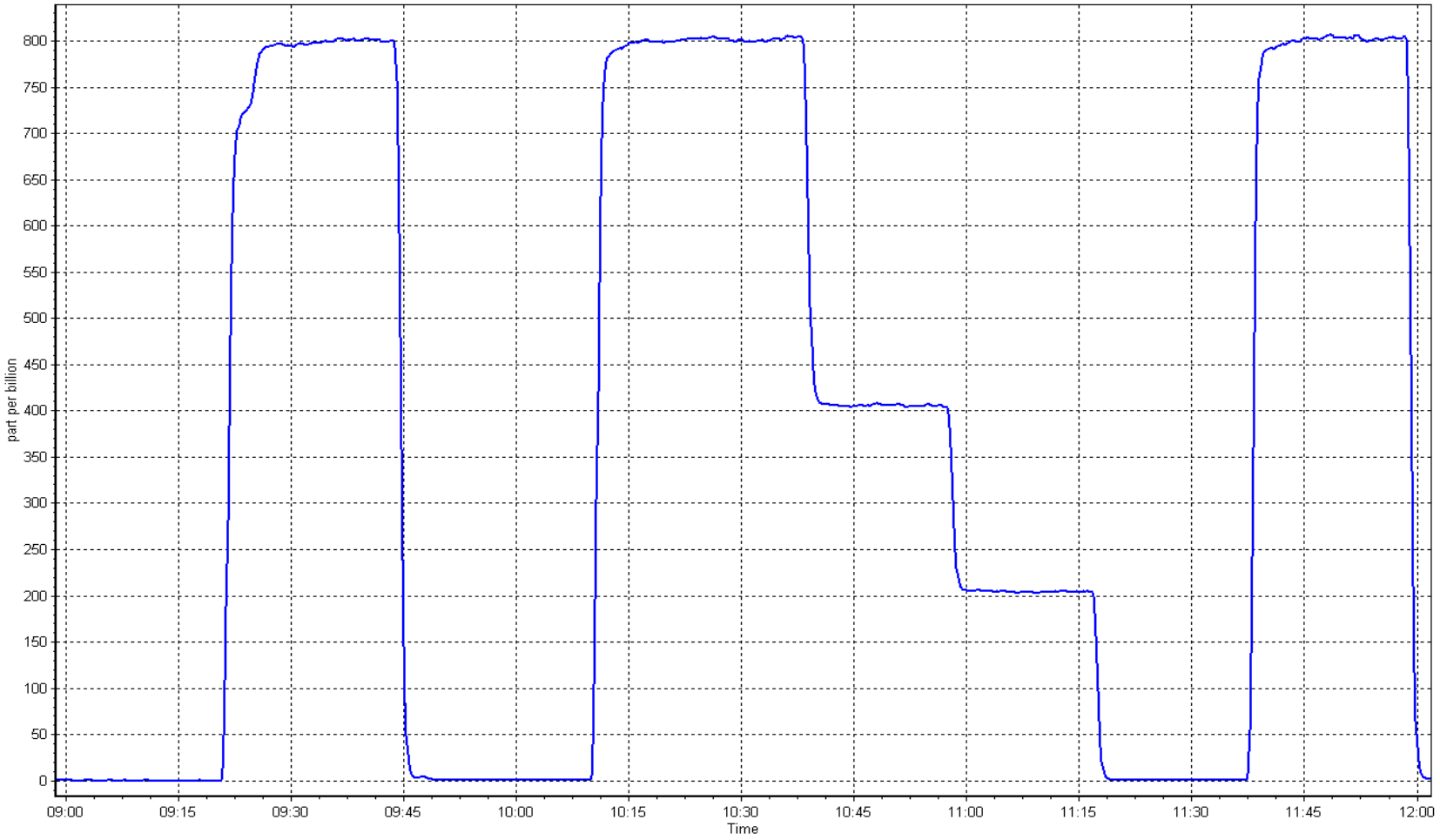
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
799.0	800.7	0.9979
399.5	405.7	0.9847
200.2	204.3	0.9801

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999943	*≥0.995*
Slope	1.001050	*0.90 - 1.10*
Intercept	2.703808	*+/-30*



SO2 Calibration Plot Date: September 2, 2026 Location: Athabasca Valley



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	September 17, 2026	Last Cal Date:	August 10, 2026
Start time (MST):	9:37	End time (MST):	13:39
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.70	ppm	Cal Gas Exp Date:	June 22, 2028
Cal Gas Cylinder #:	SX12538			
Removed Cal Gas Conc:	4.70	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 43iQ TL		Analyzer serial #:	12522542352
Converter make:	CDN-101		Converter serial #:	551
Analyzer Range	0 - 100 ppb		Converter Temp:	840 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.000973	1.004691	Backgd or Offset:	1.9	1.9
Calibration intercept:	-0.499166	-0.179357	Coeff or Slope:	1.104	1.084

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)) *Limit = 0.90-1.10*
As found zero	500	0.0	0.0	-0.3	----
As found High point	4915	85.1	80.0	81.1	0.983
As found Mid point	4957	42.6	40.0	40.5	0.982
As found Low point	4979	21.3	20.0	20.2	0.977
New cylinder response					

Baseline Corr As found:	81.4	Prev response:	79.57	*% change:	2.2%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.017122	AF Intercept:	-0.239631
Baseline Corr 3rd AF pt:	20.5	AF Correlation:	0.999997	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.2	----
High point	4915	85.1	80.0	80.2	0.997
Mid point	4957	42.6	40.0	40.0	1.001
Low point	4979	21.3	20.0	20.0	1.001
As left zero	5000	0.0	0.0	0.0	----
As left span	4915	85.1	80.0	81.6	0.980
SO2 Scrubber Check	4920	79.8	798.0	0.1	----

Date of last scrubber change:	9-Jul-26	Ave Corr Factor	1.000
Date of last converter efficiency test:	Friday, April 22, 2022		

Notes: Changed inlet filter after as founds. Scrubber check passed. Adjusted span only.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

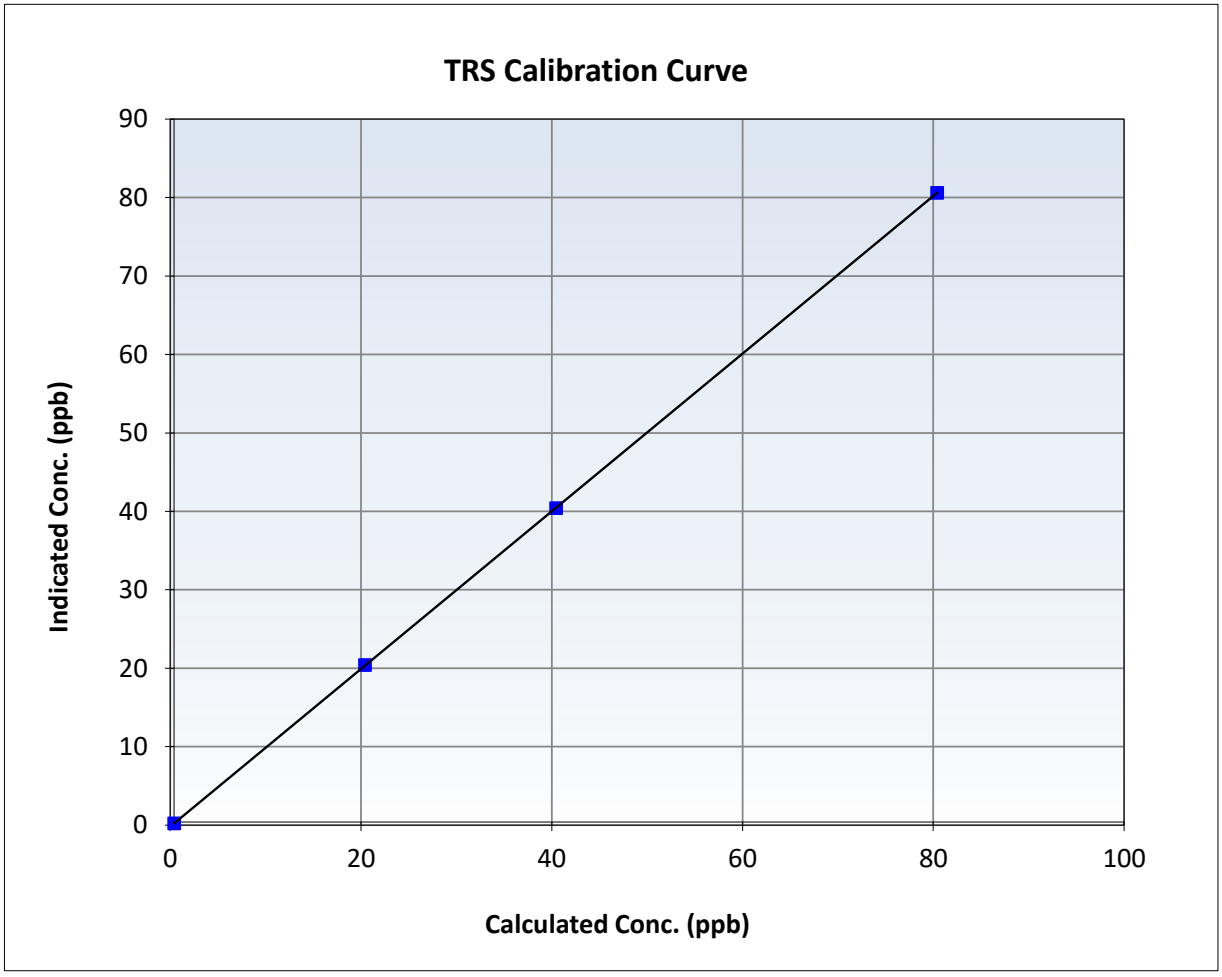
TRS Calibration Summary

Station Information

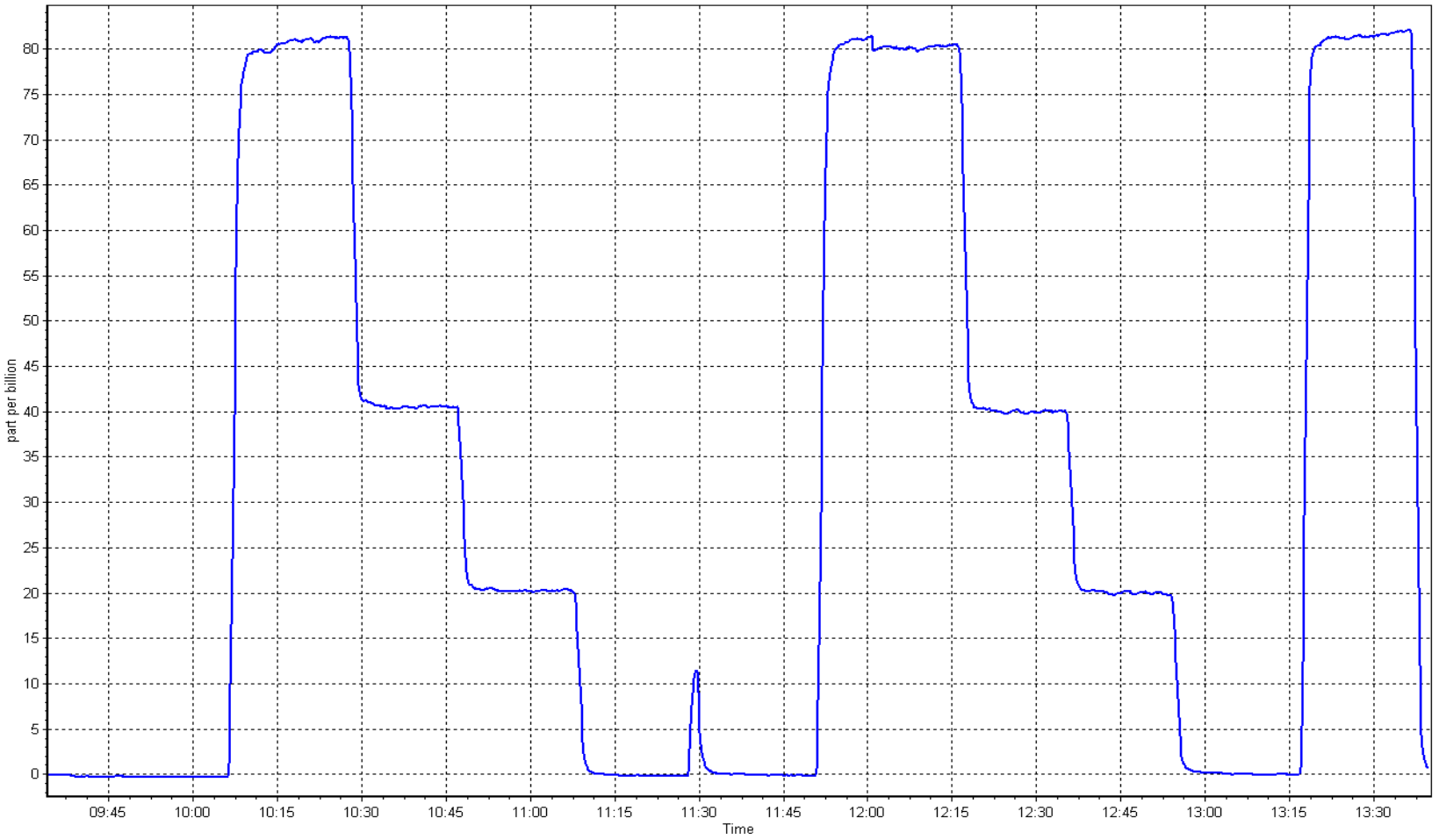
Calibration Date:	September 17, 2026	Previous Calibration:	August 10, 2026
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	9:37	End Time (MST):	13:39
Analyzer make:	Thermo 43iQ TL	Analyzer serial #:	12522542352

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.2	----	Correlation Coefficient	0.999998	*≥0.995*
80.0	80.2	0.9974	Slope	1.004691	*0.90 - 1.10*
40.0	40.0	1.0012			
20.0	20.0	1.0010	Intercept	-0.179357	*+/-3*



TRS Calibration Plot Date: September 17, 2026 Location: Athabasca Valley



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS 07
Calibration Date:	September 2, 2026	Last Cal Date:	August 7, 2026
Start time (MST):	8:57	End time (MST):	12:02
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/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.13E-04	3.13E-04	NMHC SP Ratio:	6.20E-05	6.23E-05
CH4 Retention time:	14.6	14.6	NMHC Peak Area:	14523	144472
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	16.91	16.86	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.86	Prev response	16.96	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	16.91	16.90	1.001
Mid point	4960	39.9	8.46	8.49	0.996
Low point	4980	20.0	4.24	4.30	0.986
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	16.91	16.86	1.003
				Average Correction Factor	0.994

Notes: Sample inlet filter was changed after as founds. N2 cylinder was changed as well. Adjusted span only.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	9.00	8.95	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.95	Prev response	9.02	*% change	-0.8%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	9.00	8.99	1.001
Mid point	4960	39.9	4.50	4.54	0.992
Low point	4980	20.0	2.26	2.30	0.980
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	9.00	8.97	1.003
				Average Correction Factor	0.991

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.8	7.92	7.90	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.90	Prev response	7.94	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.8	7.92	7.91	1.001
Mid point	4960	39.9	3.96	3.96	1.001
Low point	4980	20.0	1.98	2.00	0.993
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	7.92	7.89	1.003
				Average Correction Factor	0.998

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.000432	0.998120
THC Cal Offset:	0.041239	0.033853
CH4 Cal Slope:	1.001339	0.998161
CH4 Cal Offset:	0.013452	0.006462
NMHC Cal Slope:	0.999672	0.998134
NMHC Cal Offset:	0.027387	0.027191

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

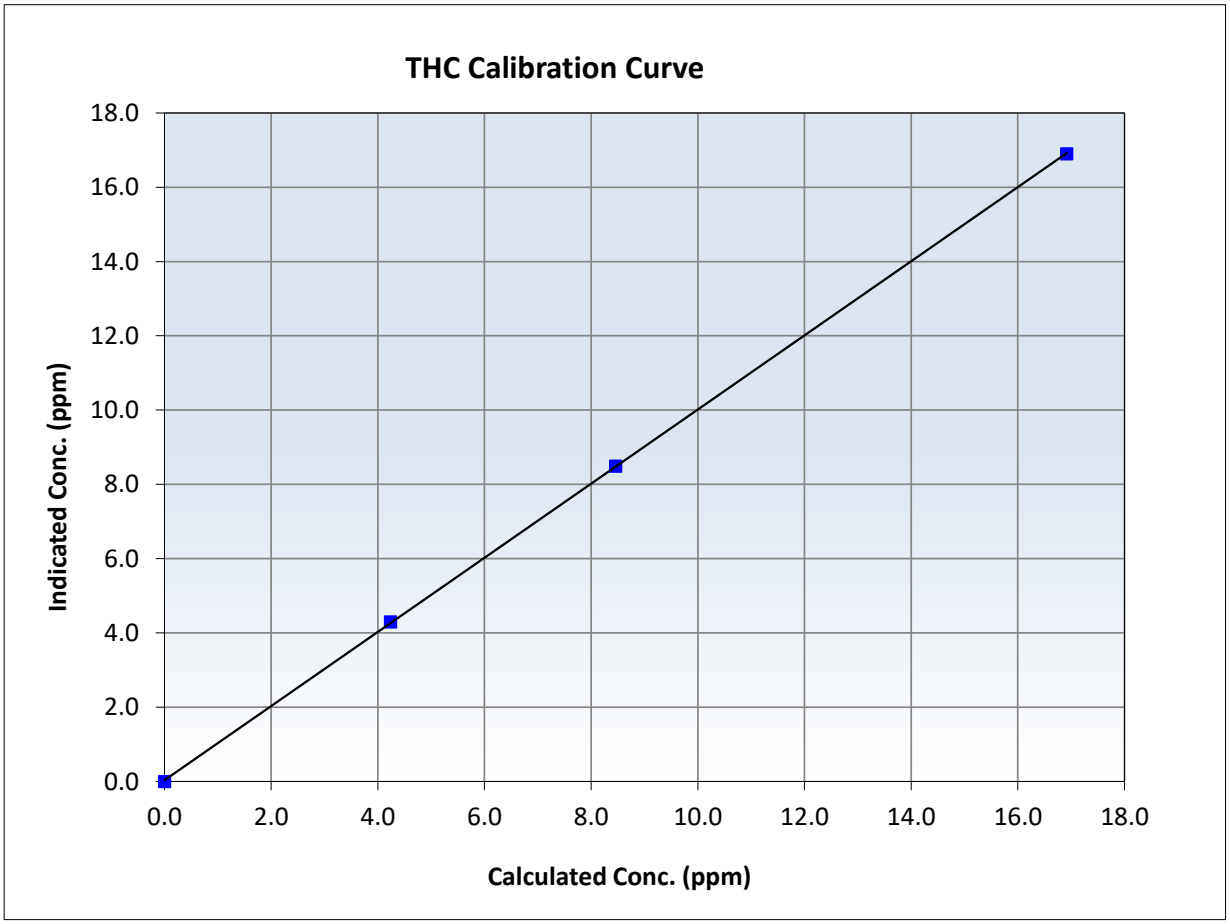
THC Calibration Summary

Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 7, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	8:57	End Time (MST):	12:02
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259520

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999982	*≥0.995*
16.91	16.90	1.0008	Slope	0.998120	*0.90 - 1.10*
8.46	8.49	0.9961	Intercept	0.033853	*+/-0.5*
4.24	4.30	0.9858			



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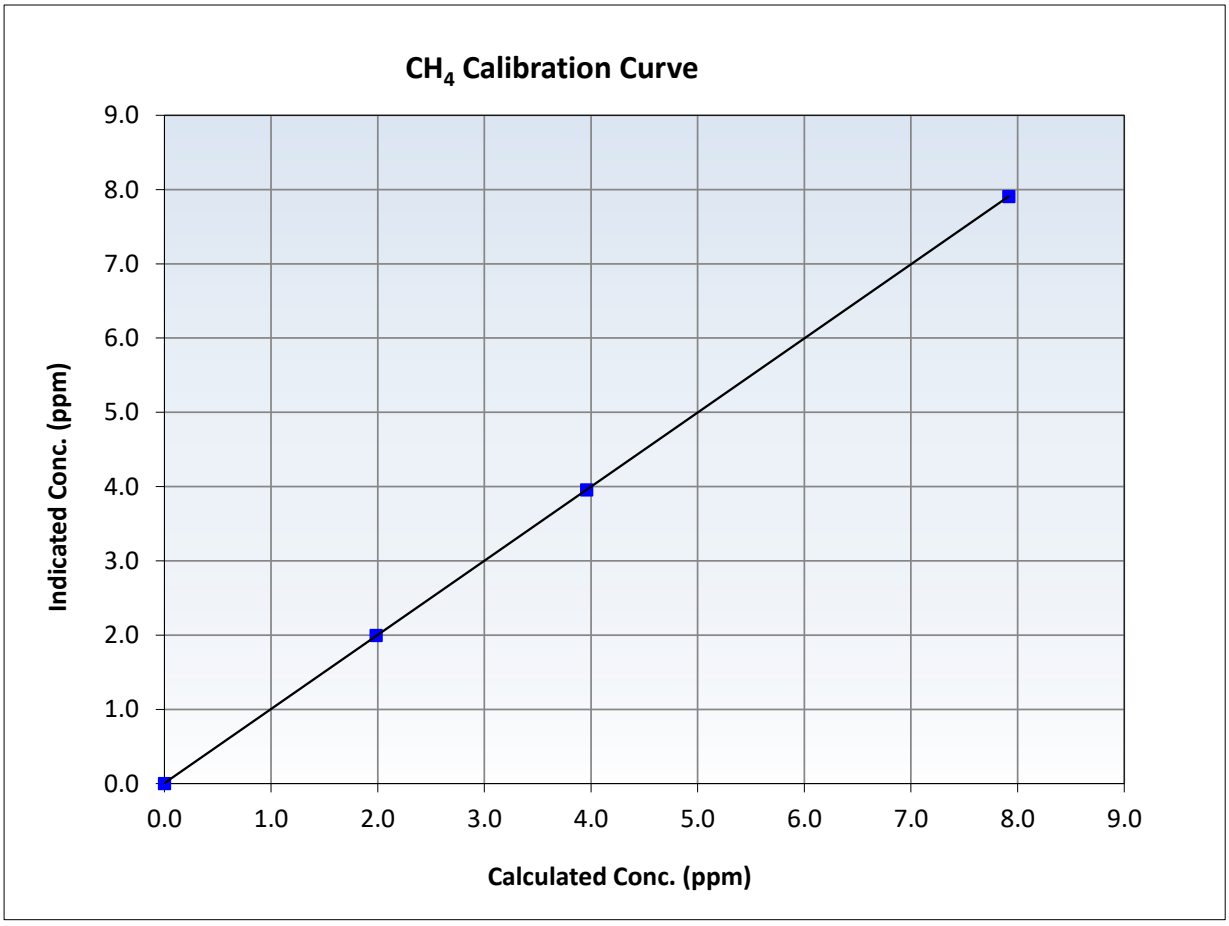
CH_4 Calibration Summary

Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 7, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	8:57	End Time (MST):	12:02
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259520

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999996	*≥0.995*
7.92	7.91	1.0012	Slope	0.998161	*0.90 - 1.10*
3.96	3.96	1.0008	Intercept	0.006462	*+/-0.5*
1.98	2.00	0.9935			



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NMHC Calibration Summary

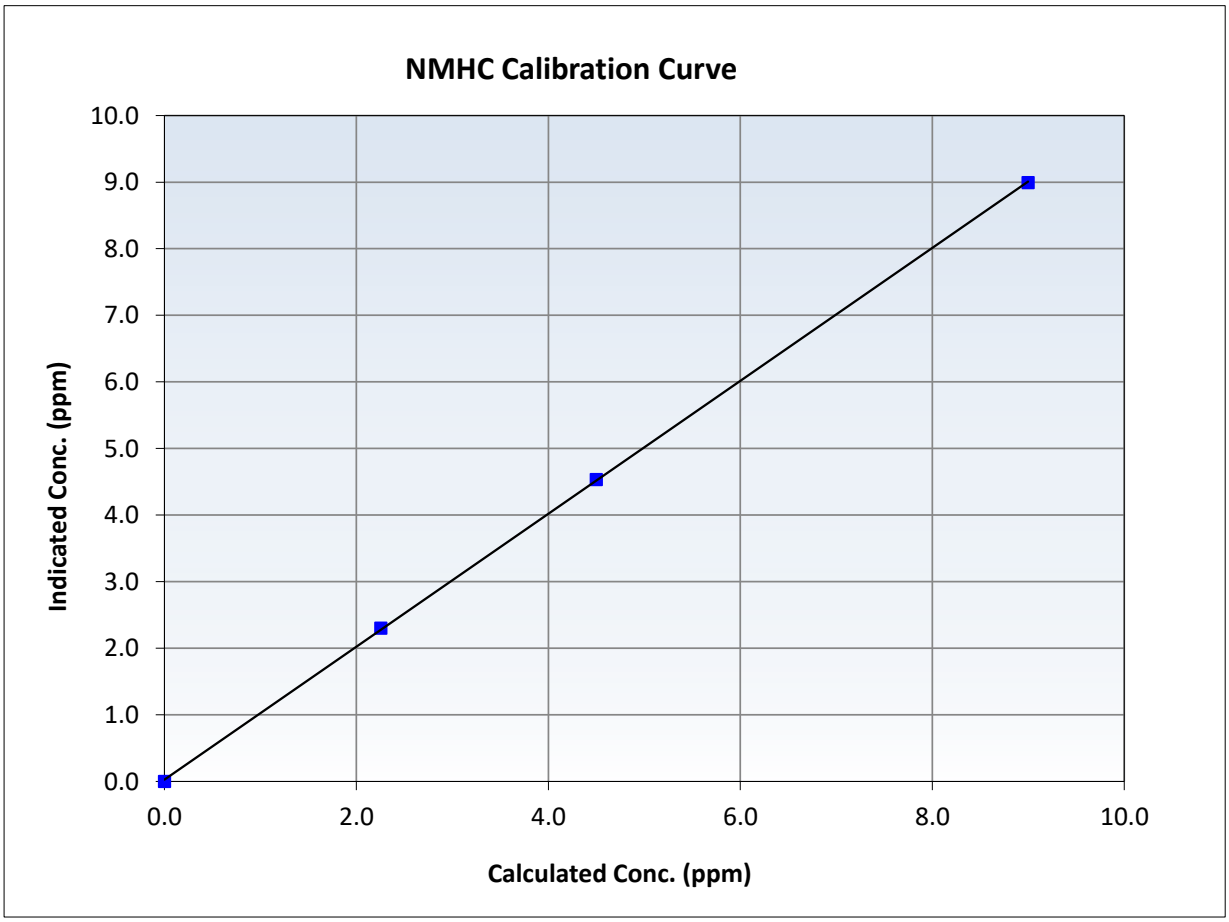
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 7, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	8:57	End Time (MST):	12:02
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259520

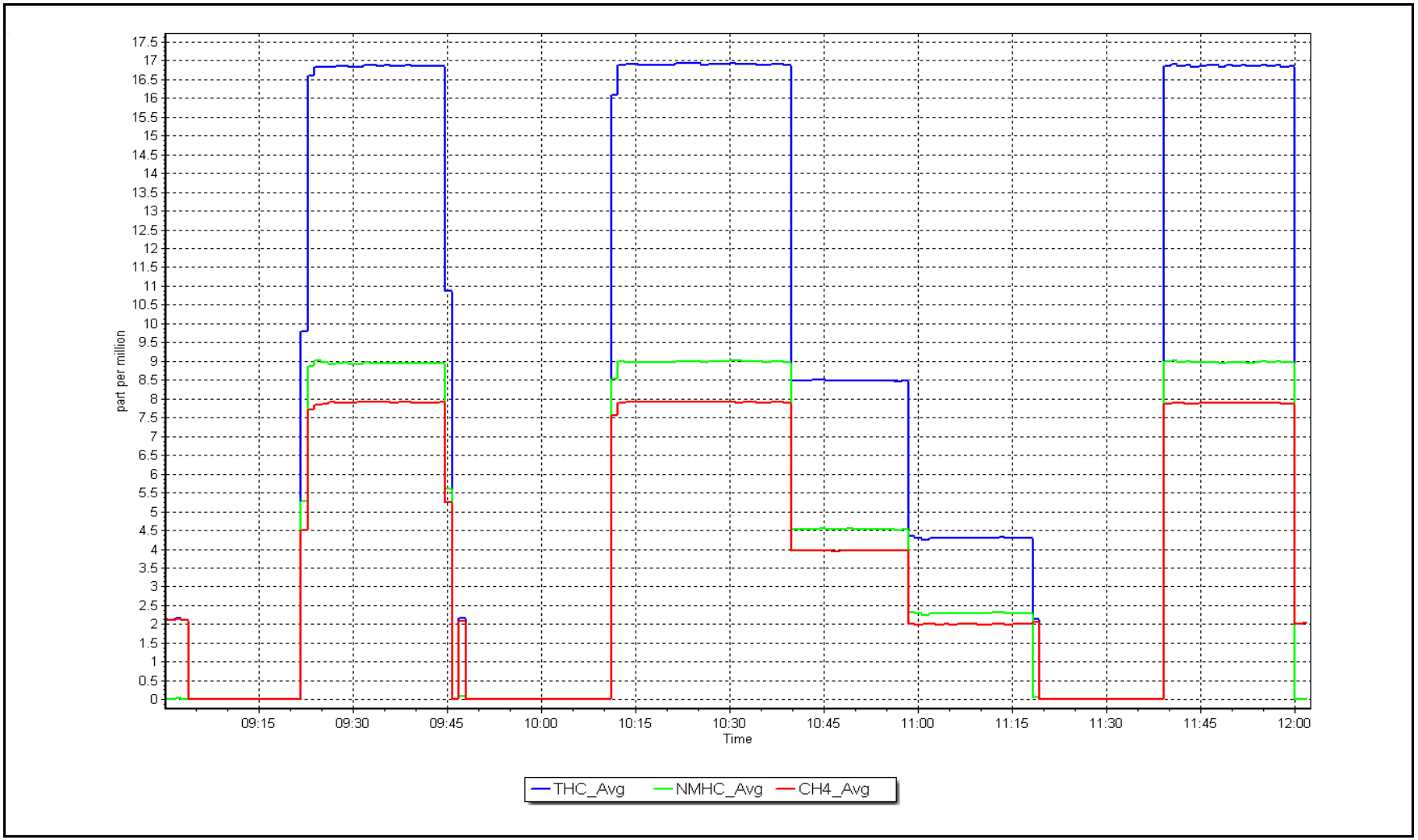
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
9.00	8.99	1.0005
4.50	4.54	0.9918
2.26	2.30	0.9796

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999957	*≥0.995*
Slope	0.998134	*0.90 - 1.10*
Intercept	0.027191	*+/-0.5*



NMHC Calibration Plot Date: September 2, 2026 Location: Athabasca Valley



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Athabasca Valley
Station number:	AMS 07
Calibration Date:	September 23, 2026
Last Cal Date:	August 19, 2026
Start time (MST):	8:22
End time (MST):	12:57
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC2940	Cal Gas Expiry Date:	January 9, 2032
NOX Cal Gas Conc:	60.10 ppm	NO Cal Gas Conc:	59.90 ppm
Removed Cylinder #:	N/A	Removed Gas Exp Date:	N/A
Removed Gas NOX Conc:	60.10 ppm	Removed Gas NO Conc:	59.90 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	API T700	Serial Number:	3805
ZAG make/model:	API T701H	Serial Number:	198

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.2	0.0	----	----
AF High point	4933	66.8	803.0	800.3	2.7	812.5	806.2	6.4	0.9879	0.9924
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 806.6 ppb	NO = 801.1 ppb
Baseline Corr 1st pt	NO_X = 812.8 ppb	NO = 806.4 ppb
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

*Percent Change NO_X = 0.8%

*Percent Change NO = 0.7%

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1160120024

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.920	0.912	NO bkgnd or offset:	6.5	6.4
NOX coeff or slope:	1.005	1.004	NOX bkgnd or offset:	6.8	6.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	184.2	186.3

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.002037	1.000343
NO_X Cal Offset:	1.951883	2.071885
NO Cal Slope:	0.999042	0.999199
NO Cal Offset:	1.571938	1.691933
NO_2 Cal Slope:	1.006076	1.008009
NO_2 Cal Offset:	1.424774	0.871685

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	----	----
High point	4933	66.8	803.0	800.3	2.7	803.8	800.1	3.6	0.9990	1.0002
Mid point	4966	33.4	401.5	400.2	1.3	406.1	403.6	2.5	0.9887	0.9915
Low point	4983	16.7	200.7	200.1	0.7	204.2	202.5	1.7	0.9831	0.9880
As left zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1	----	----
As left span	4933	66.8	803.0	398.2	404.8	803.3	398.2	405.1	0.9996	1.0000
							Average Correction Factor		0.9903	0.9933

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	794.3	397.5	399.5	403.0	0.9912	100.9%
Mid GPT point	794.3	597.7	199.3	202.5	0.9841	101.6%
Low GPT point	794.3	696.9	100.1	102.4	0.9773	102.3%
				Average Correction Factor	0.9842	101.6%

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

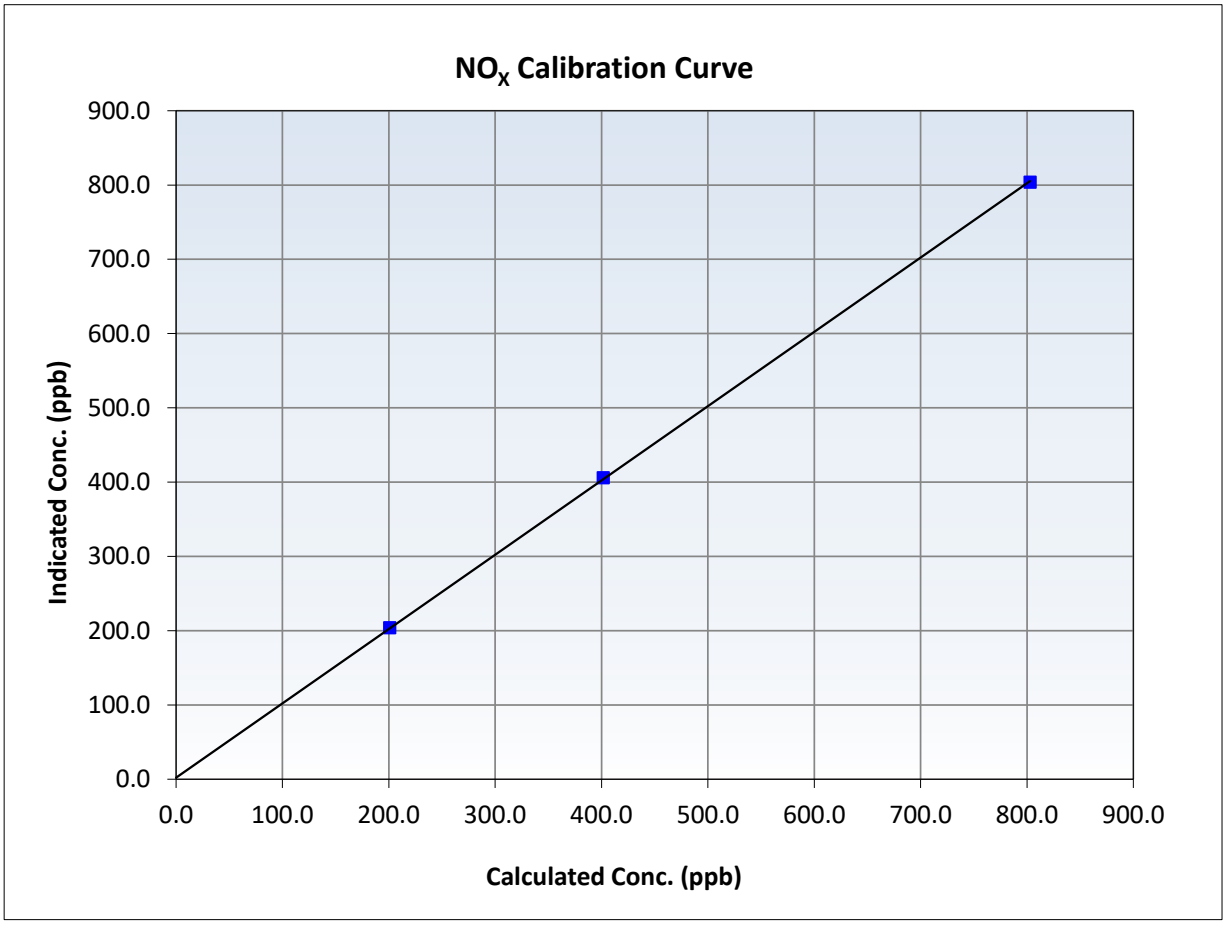
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 19, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	8:22	End Time (MST):	12:57
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
803.0	803.8	0.9990
401.5	406.1	0.9887
200.7	204.2	0.9831

Statistical Evaluation		Limits
Correlation Coefficient	0.999959	≥0.995
Slope	1.000343	0.90 - 1.10
Intercept	2.071885	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

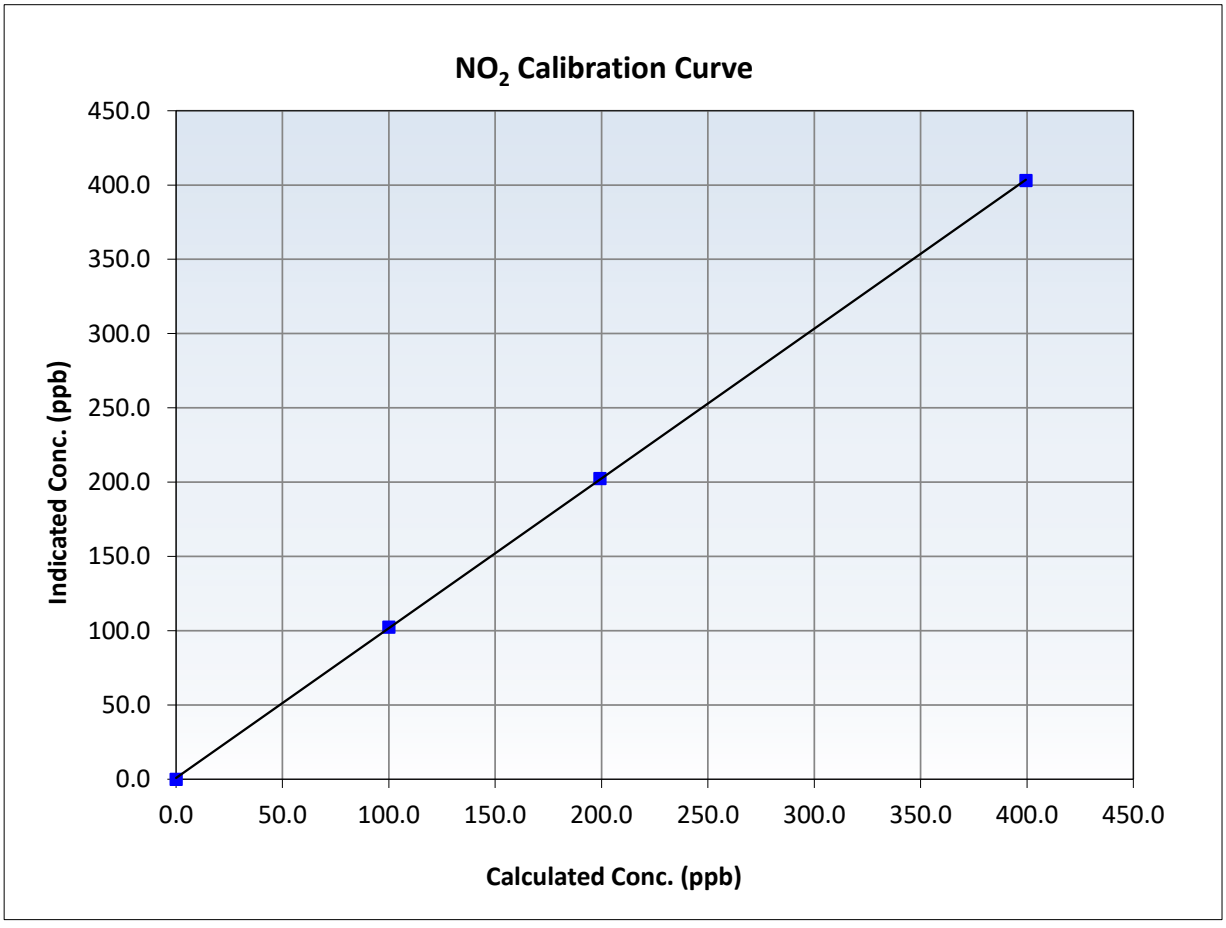
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 19, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	8:22	End Time (MST):	12:57
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
399.5	403.0	0.9912
199.3	202.5	0.9841
100.1	102.4	0.9773

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999977	*≥0.995*
Slope	1.008009	*0.90 - 1.10*
Intercept	0.871685	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

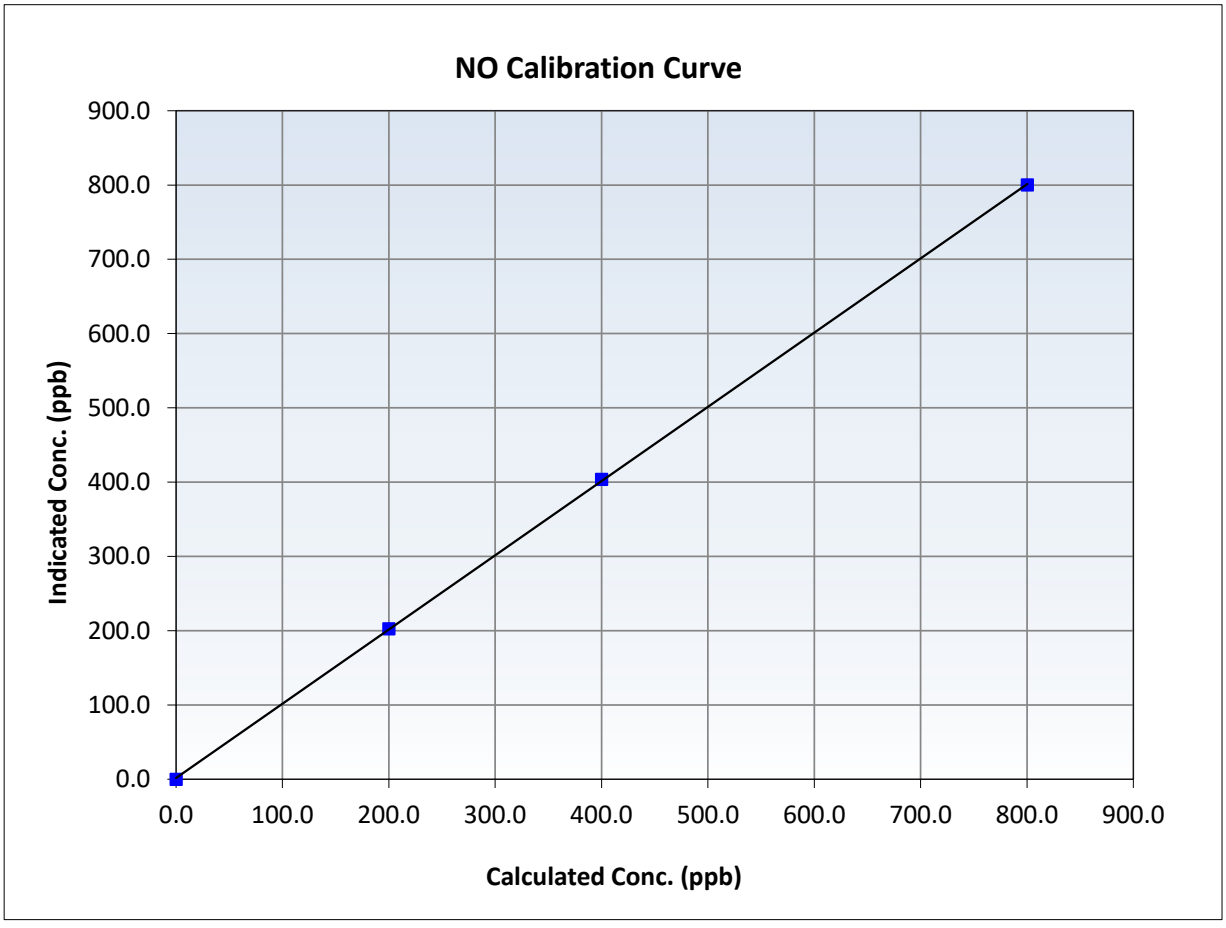
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 19, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	8:22	End Time (MST):	12:57
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

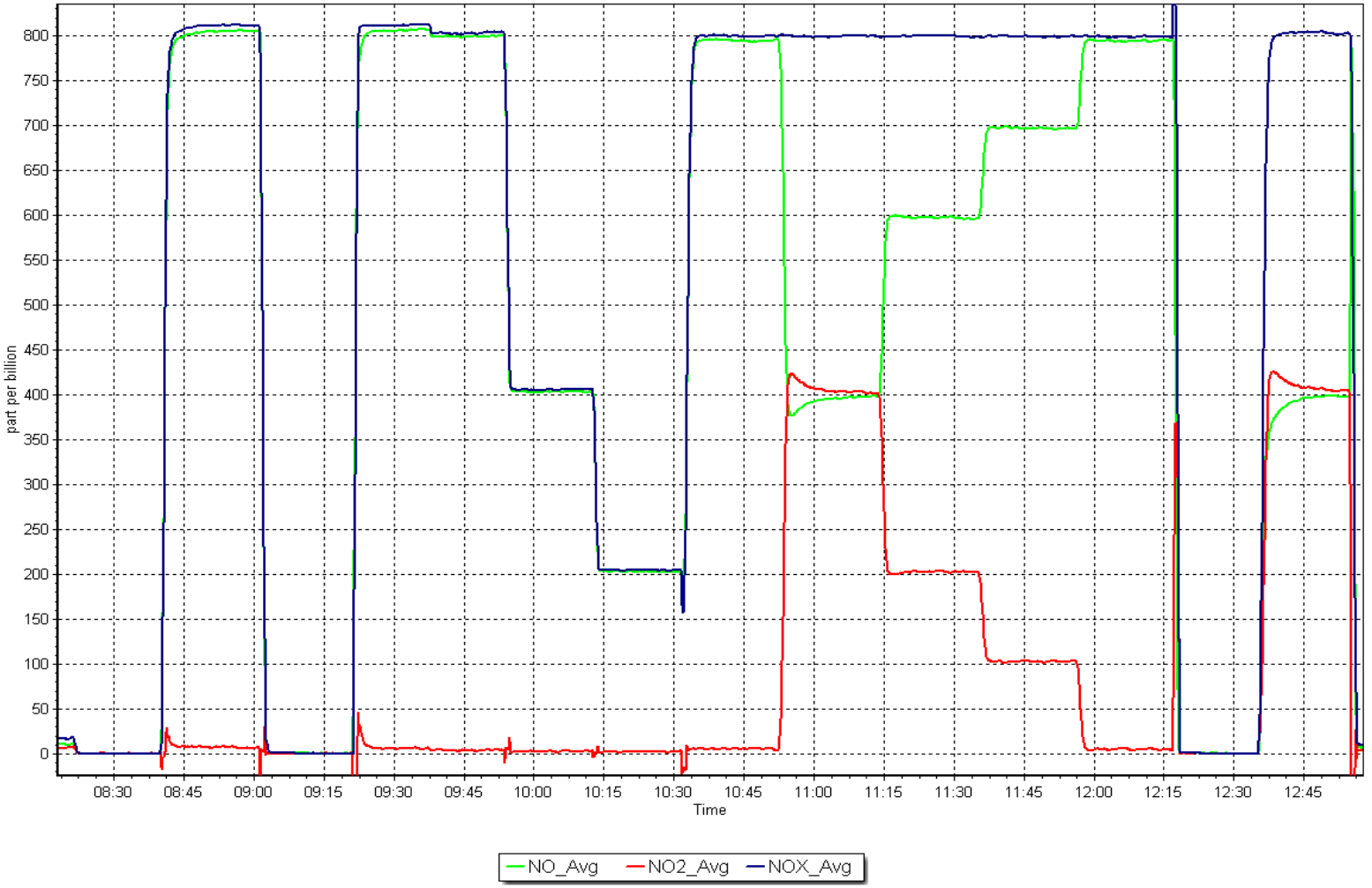
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.3	800.1	1.0002
400.2	403.6	0.9915
200.1	202.5	0.9880

Statistical Evaluation		Limits
Correlation Coefficient	0.999973	≥0.995
Slope	0.999199	0.90 - 1.10
Intercept	1.691933	+/-20



NO_X Calibration Plot Date: September 23, 2026 Location: Athabasca Valley



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	September 11, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	9:38	End time (MST):	12:47
Reason:	Routine		

Calibration Standards

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

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.999771	0.999714	Backgd or Offset:	-0.2	-0.2
Calibration intercept:	-0.060000	-0.100000	Coeff or Slope:	1.003	1.003

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	NA	0.0	-0.4	----
As found High point	5000	1876.6	400.0	397.5	1.005
As found Mid point					
As found Low point					
Baseline Corr As found:	397.9	Previous response	399.8	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	NA	0.0	-0.2	----
High point	5000	1876.6	400.0	399.7	1.001
Mid point	5000	1253.9	200.0	200.0	1.000
Low point	5000	957.2	100.0	99.9	1.001
As left zero	5000	NA	0.0	-0.2	----
As left span	5000	1876.6	400.0	401.7	0.996
				Average Correction Factor	1.001

Notes: Sample inlet filter changed after as founds. No adjustment made.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

O_3 Calibration Summary

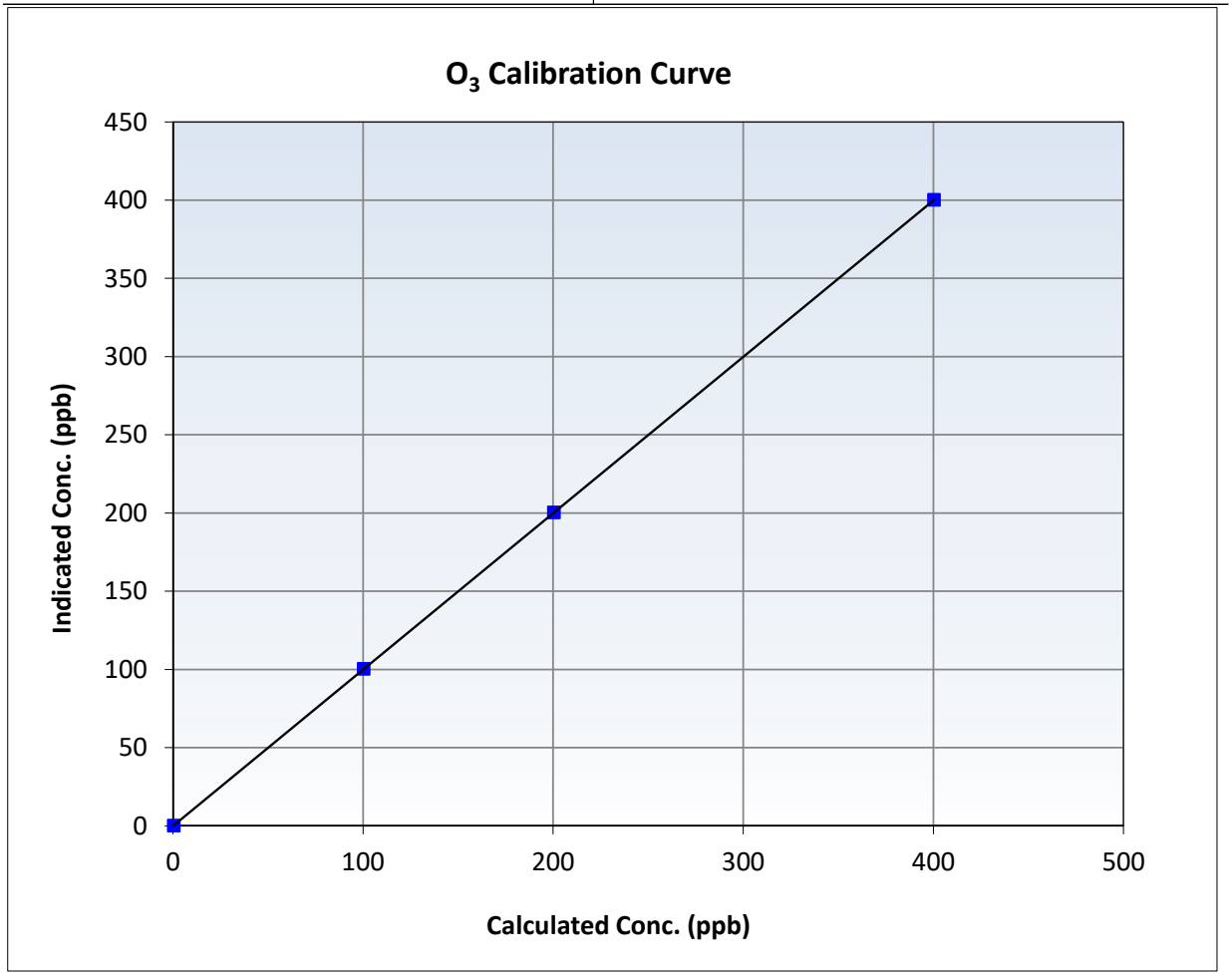
Station Information

Calibration Date:	September 11, 2026	Previous Calibration:	August 5, 2026
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	9:38	End Time (MST):	12:47
Analyzer make:	Thermo 49i	Analyzer serial #:	1507964700

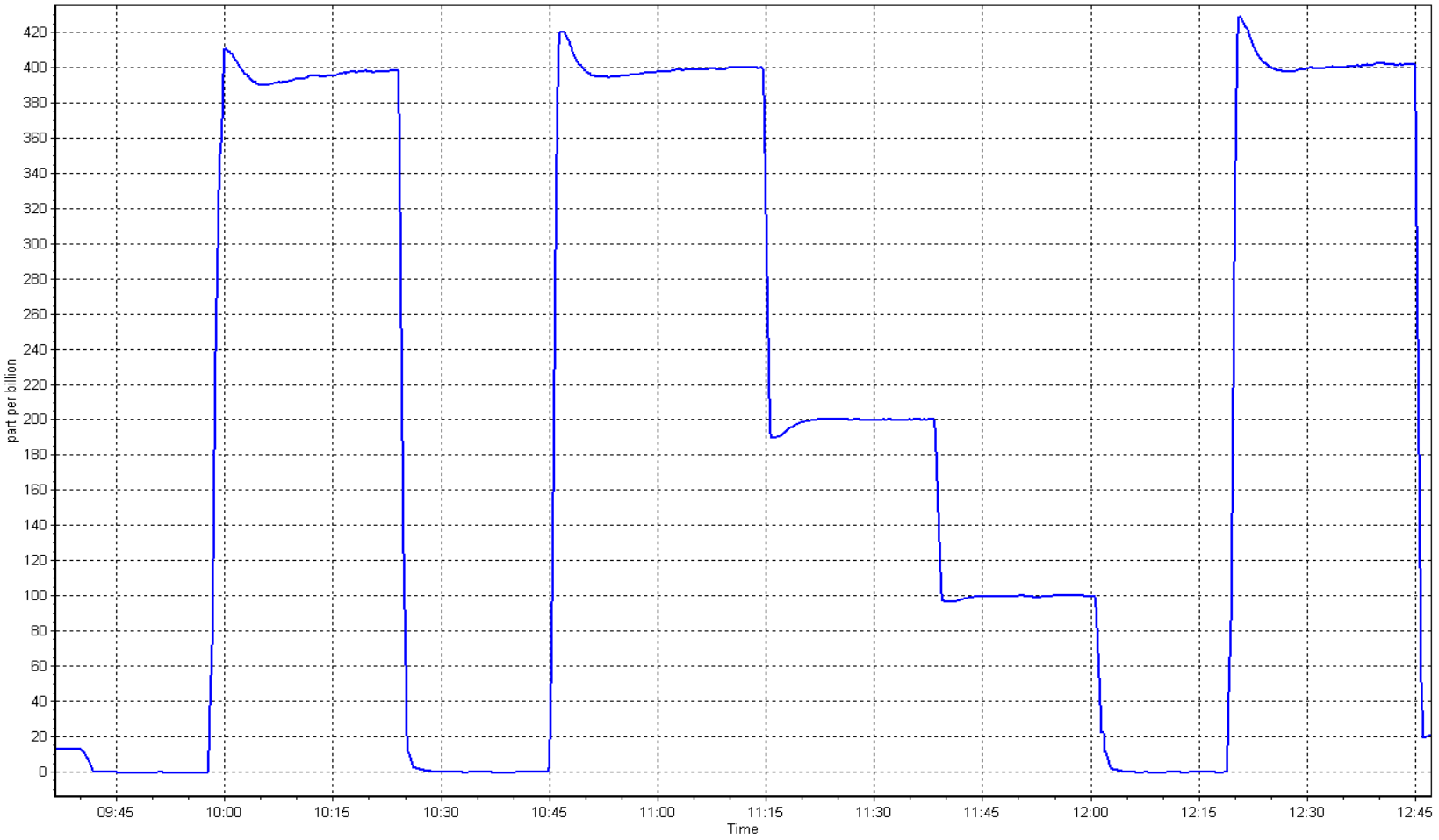
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
400.0	399.7	1.0008
200.0	200.0	1.0000
100.0	99.9	1.0010

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	0.999714	*0.90 - 1.10*
Intercept	-0.100000	*+/- 5*



O_3 Calibration Plot Date: September 11, 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:	September 23, 2026	Last Cal Date:	August 19, 2026
Start time (MST):	10:27	End time (MST):	10:58
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 (^{o}C)	9.80	8.86	9.80	☐	+/- 2 ^{o}C
P (mmHg)	738.90	738.69	738.90	☐	+/- 10 mmHg
Flow (LPM)	4.99	4.89	4.99	☐	+/- 0.25 LPM
PW% (pump)	45	-----	45	☐	>80%
Zero Verification	PM w/o HEPA:	3.70	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: January 31, 2027 — Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test				☐	+/- 0.5

Date Optical Chamber Cleaned: July 24, 2026

Date Disposable Filter Changed: July 24, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: July 24, 2026

Date RH/T Sensor Cleaned: July 24, 2026

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

Calibration by: Sean Bala

Wood Buffalo Environmental Association

CO Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS 07
Calibration Date:	September 15, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	8:43	End time (MST):	12:47
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 48iQ		Analyzer serial #:	12522542354	
Analyzer Range:	0 - 50 ppm				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999664	1.000492	Backgd or Offset:	-3.050	-3.050
Calibration intercept:	0.134040	0.192047	Coeff or Slope:	0.962	0.962

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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.5	----
As found High point	4932	67.8	40.0	42.2	0.960
As found Mid point	4966	33.9	20.0	21.8	0.941
As found Low point	4983	16.9	10.0	11.2	0.935
New cylinder response					

Baseline Corr As found:	41.72	Prev response:	40.16	*% change:	3.7%
Baseline Corr 2nd AF pt:	21.3	AF Slope:	1.040724	AF Intercept:	0.702515
Baseline Corr 3rd AF pt:	10.7	AF Correlation:	0.999864	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4932	67.8	40.0	40.1	0.999
Mid point	4966	33.9	20.0	20.5	0.978
Low point	4983	16.9	10.0	10.3	0.970
As left zero	5000	0.0	0.0	0.0	----
As left span	4932	67.8	40.0	40.0	1.001
				Average Correction Factor	0.982

Notes: Here to address baseline drift. Changed inlet filter after as founds. Average time adjusted. Pressure compensation enabled. Adjusted zero and span.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

CO Calibration Summary

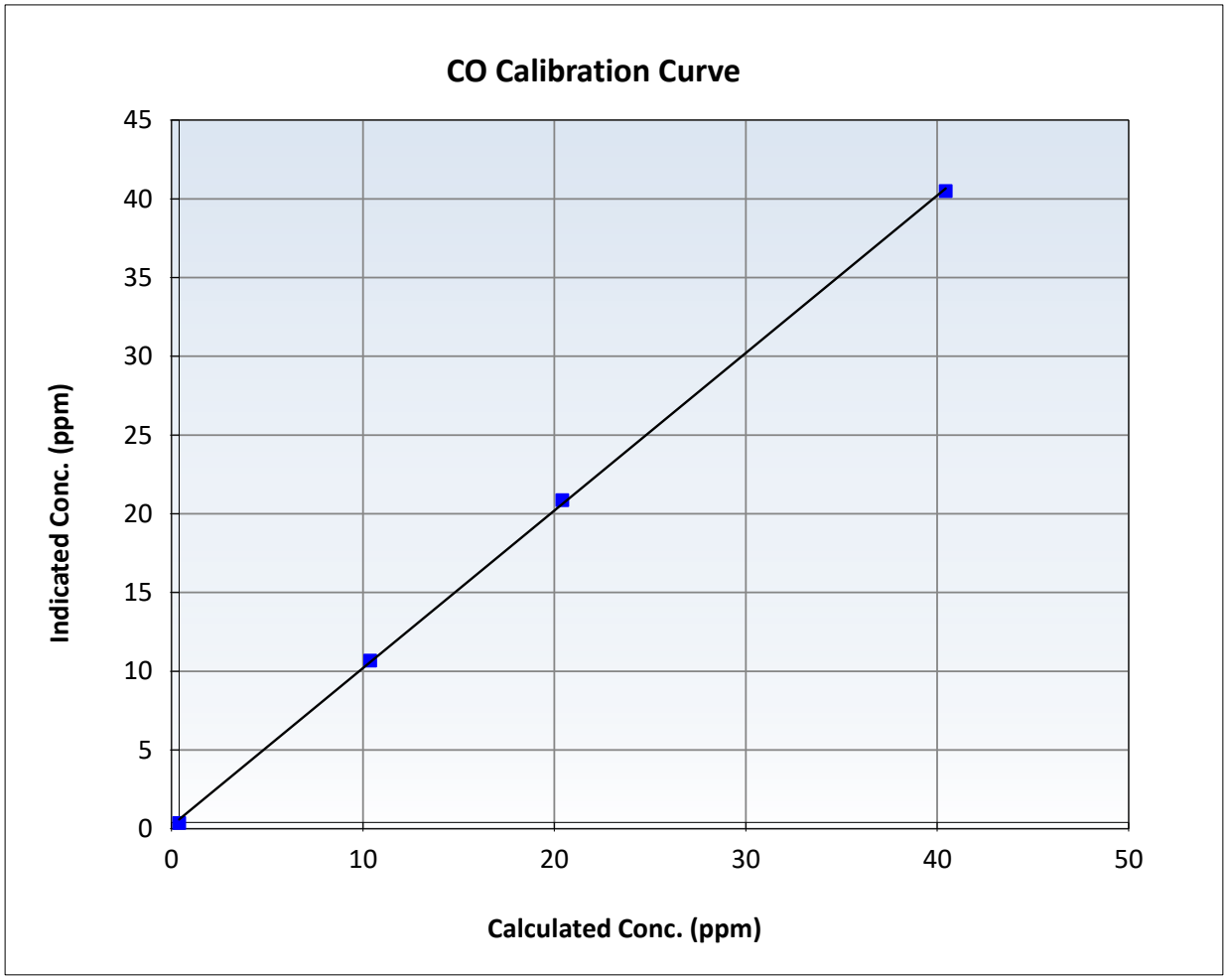
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 6, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	8:43	End Time (MST):	12:47
Analyzer make:	Thermo 48iQ	Analyzer serial #:	12522542354

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
40.0	40.1	0.9986
20.0	20.5	0.9776
10.0	10.3	0.9700

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999832	*≥0.995*
Slope	1.000492	*0.90 - 1.10*
Intercept	0.192047	*+/-1.5*



CO Calibration Plot Date: September 15, 2026 Location: Athabasca Valley



Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Athabasca Valley	Station Number:	AMS 07
Calibration Date:	September 23, 2026	Prev Cal Date:	July 10, 2025
Start Time (MST):	8:47	End Time (MST):	9:44
Tower Height (m):	10.0	Reason:	Routine

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	G3212
WS Calibrator:	MetOne 053	Serial Number:	CA 05230

Shaft RPM (Hz)	Calculated Speed (K/hr) (Cv)	Indicated Speed (K/hr) (Iv)	% Error *Limit = +/- 1.5%*
0	0.0	0.0	---
200	20.2	20.1	-0.3%
400	39.4	39.4	0.1%
600	58.6	58.5	0.0%
800	77.8	77.8	0.1%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)		0.999999	*≥0.9995*
Calculated slope		0.999268	*0.98 - 1.02*
Calculated intercept		0.026262	*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	D13602
As Found Declination (deg east of True North):	13	As Left Declination (deg east of True North):	13
Solar noon (MST):	22:27	Calc Declination*:	12.81 Degrees
WD Calibrator:	Met One 040		* - calculated declination as per NOAA website

Physical Direction (Degrees) (Cv)	Indicated Direction (Degrees) (Iv)	% Error (based on 360° FS) *Limit = +/- 1%*
10	11.4	0.4%
90	89.8	-0.1%
180	180.9	0.3%
270	272.9	0.8%
350	352.5	0.7%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)		0.999978	*≥0.9995*
Calculated slope		0.993699	*0.97 - 1.03*
Calculated intercept		-0.356285	*+/- 5*

Notes: Verified sensors within limits. Bearings still good. Cross-arm was aligned using compass.

Calibration Performed By: Sean Bala

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS08
FORT CHIPEWYAN
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	September 14, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	12:19	End time (MST):	14:35
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:	1170050147	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001190	0.998633	Backgd or Offset:	3.39	3.39
Calibration intercept:	0.574983	0.395836	Coeff or Slope:	0.977	0.985

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.5	----
As found High point	4920	80.3	800.4	792.7	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.2	Previous response	801.9	*% change	-1.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4920	80.3	800.4	799.4	1.001
Mid point	4960	40.2	400.7	401.1	0.999
Low point	4980	20.1	200.4	200.5	0.999
As left zero	5000	0.0	0.0	0.0	----
As left span	4920	80.3	800.4	803.0	0.997
				Average Correction Factor:	1.000

Notes: Changed inlet filter. after as founds Made adjustment to HIGH point span.

Calibration Performed By: Jermey cardinal

Wood Buffalo Environmental Association

SO_2 Calibration Summary

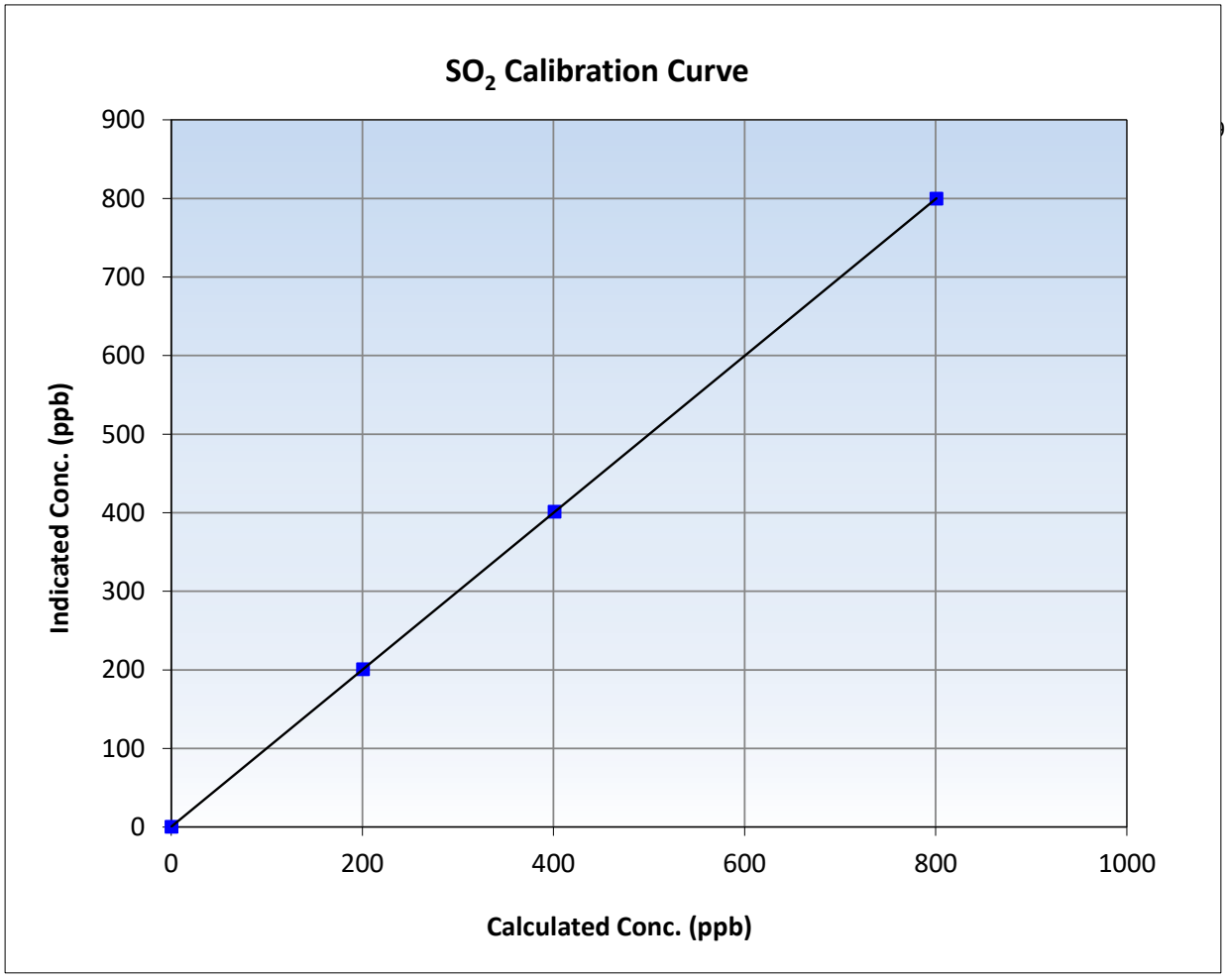
Station Information

Calibration Date:	September 14, 2026	Previous Calibration:	August 6, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	12:19	End Time (MST):	14:35
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1170050147

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.4	799.4	1.0012
400.7	401.1	0.9990
200.4	200.5	0.9993

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	0.998633	*0.90 - 1.10*
Intercept	0.395836	*+/-30*



SO2 Calibration Plot Date: September 14, 2026 Location: Fort Chipewyan



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	September 4, 2026	Last Cal Date:	August 12, 2026
Start time (MST):	8:24	End time (MST):	10:23
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.992521	1.004388	Backgd or Offset:	3.0	3.0
Calibration intercept:	-0.257789	0.001957	Coeff or Slope:	1.147	1.147

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)) *Limit = 0.90-1.10*
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	

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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4917	82.6	80.0	80.3	0.996
Mid point	4959	41.3	40.0	40.3	0.992
Low point	4979	20.7	20.0	19.9	1.007
As left zero	5000	0.0	0.0	0.4	----
As left span	4917	82.6	80.0	81.2	0.985
SO2 Scrubber Check	4920	80.3	803.0	-0.1	----
Date of last scrubber change:		July 24, 2026		Ave Corr Factor	0.998
Date of last converter efficiency test:					

Notes: Changed inlet filter. No as founds due to failed converter, was replaced.

Calibration Performed By: Jermey cardinal

Wood Buffalo Environmental Association

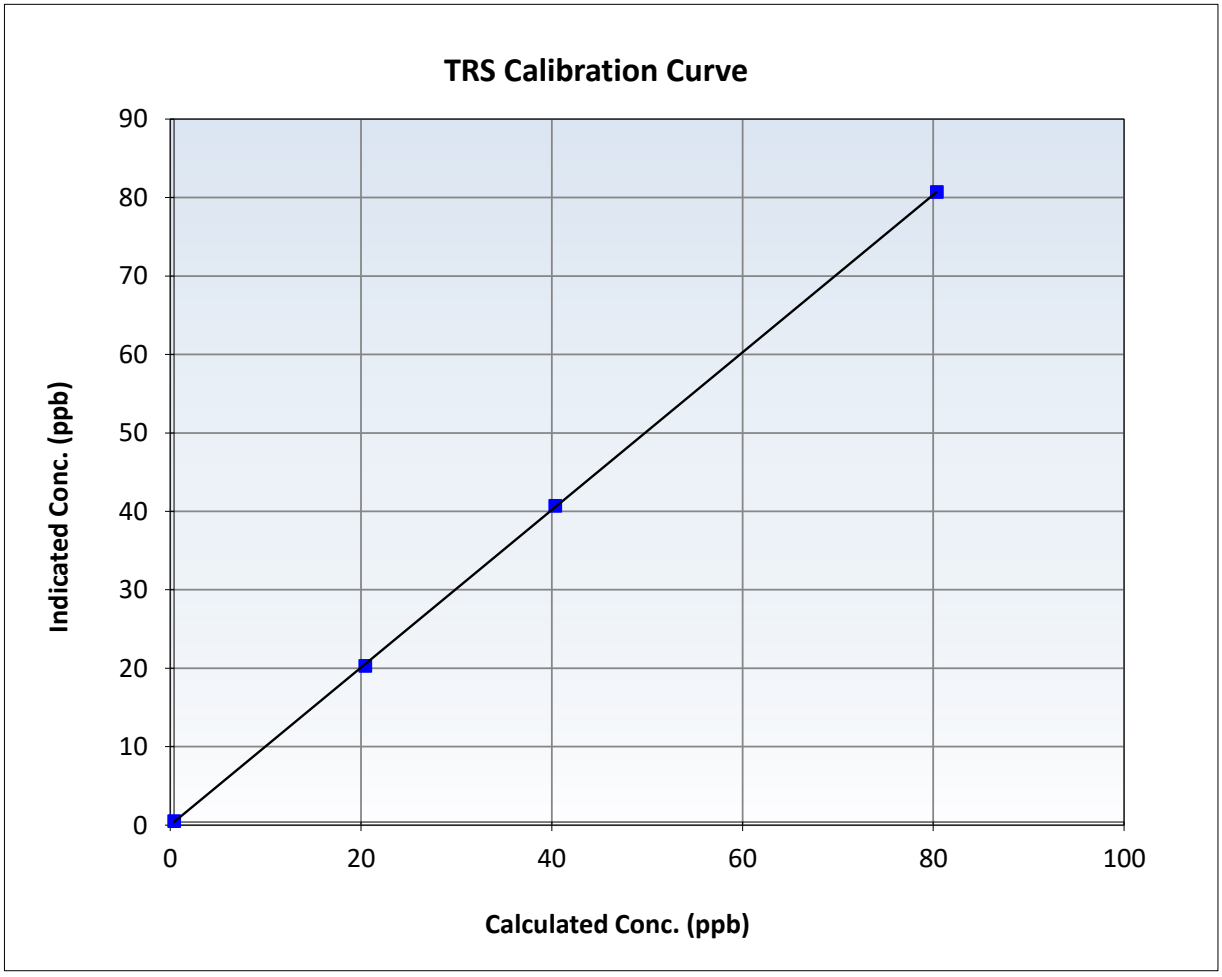
TRS Calibration Summary

Station Information

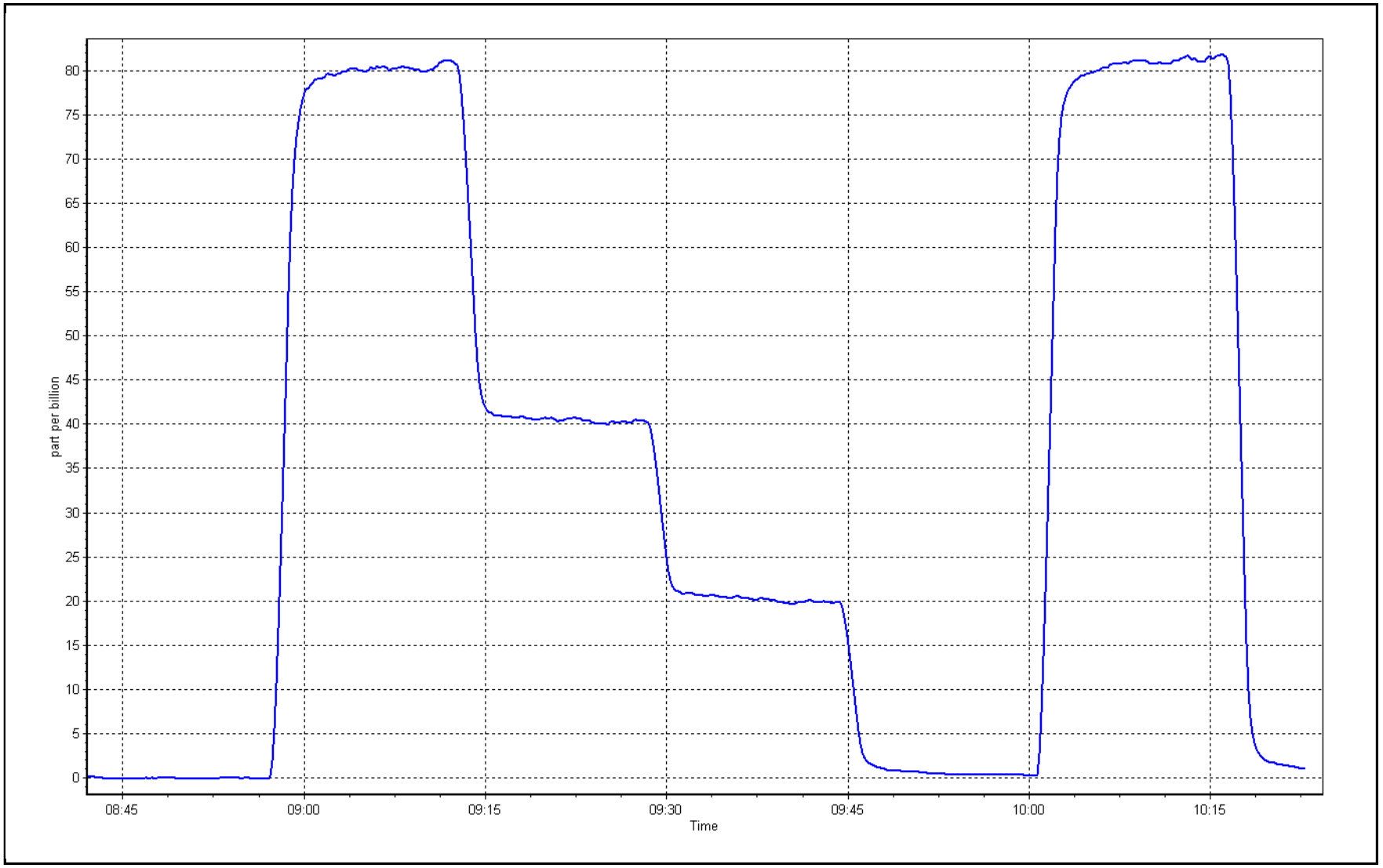
Calibration Date:	September 4, 2026	Previous Calibration:	August 12, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	8:24	End Time (MST):	10:23
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153461

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999976	*≥0.995*
80.0	80.3	0.9958	Slope	1.004388	*0.90 - 1.10*
40.0	40.3	0.9920	Intercept	0.001957	*+/-3*
20.0	19.9	1.0070			



TRS Calibration Plot Date: September 4, 2026 Location: Fort Chipewyan



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Fort Chipewyan
Station number:	AMS 08
Calibration Date:	September 15, 2026
Last Cal Date:	August 7, 2026
Start time (MST):	8:32
End time (MST):	12:17
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC358100	Cal Gas Expiry Date:	January 5, 2032
NOX Cal Gas Conc:	60.10 ppm	NO Cal Gas Conc:	60.00 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	60.10 ppm	Removed Gas NO Conc:	60.00 ppm
NOX ga 4.8		NO gas Diff:	
Calibrat 5.2	Teledyne API T700	Serial Number:	3810
ZAG make/model:	Teledyne API T701H	Serial Number:	197

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.2	0.2	0.0	----	----
AF High point	4933	66.7	801.8	800.4	1.3	808.6	805.9	2.7	0.9918	0.9935
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 796.4 ppb	NO = 795.1 ppb
Baseline Corr 1st pt	NO_X = 808.4 ppb	NO = 805.7 ppb
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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = 1.5%
As found	NO r^2:	*Percent Change	NO = 1.3%
As found	NO_2 r^2:	Nx Sl:	Nx Int:
		NO Sl:	NO Int:
		NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1426262592

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.006	1.006	NO bkgnd or offset:	6.3	6.3
NOX coeff or slope:	0.995	0.995	NOX bkgnd or offset:	6.3	6.3
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	171.9	171.9

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.992332	1.006703
NO_X Cal Offset:	0.774519	1.634882
NO Cal Slope:	0.993958	1.008480
NO Cal Offset:	-0.465512	0.574972
NO_2 Cal Slope:	0.998011	1.000538
NO_2 Cal Offset:	0.128835	0.225756

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.3	0.3	0.0	----	----
High point	4933	66.7	801.8	800.4	1.3	808.0	807.5	0.7	0.9923	0.9913
Mid point	4967	33.3	400.2	399.6	0.7	405.6	404.2	1.4	0.9868	0.9886
Low point	4983	16.7	200.7	200.4	0.3	204.8	202.6	2.2	0.9801	0.9891
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.3	0.0	----	----
As left span	4933	66.7	801.8	390.8	411.0	811.2	390.8	420.4	0.9884	1.0000
							Average Correction Factor		0.9864	0.9897

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	805.7	387.9	419.1	419.3	0.9996	100.0%
Mid GPT point	805.7	597.0	210.0	211.0	0.9954	100.5%
Low GPT point	805.7	702.6	104.4	104.6	0.9984	100.2%
				Average Correction Factor	0.9978	100.2%

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

Calibration Performed By: Jermey Cardinal

Wood Buffalo Environmental Association

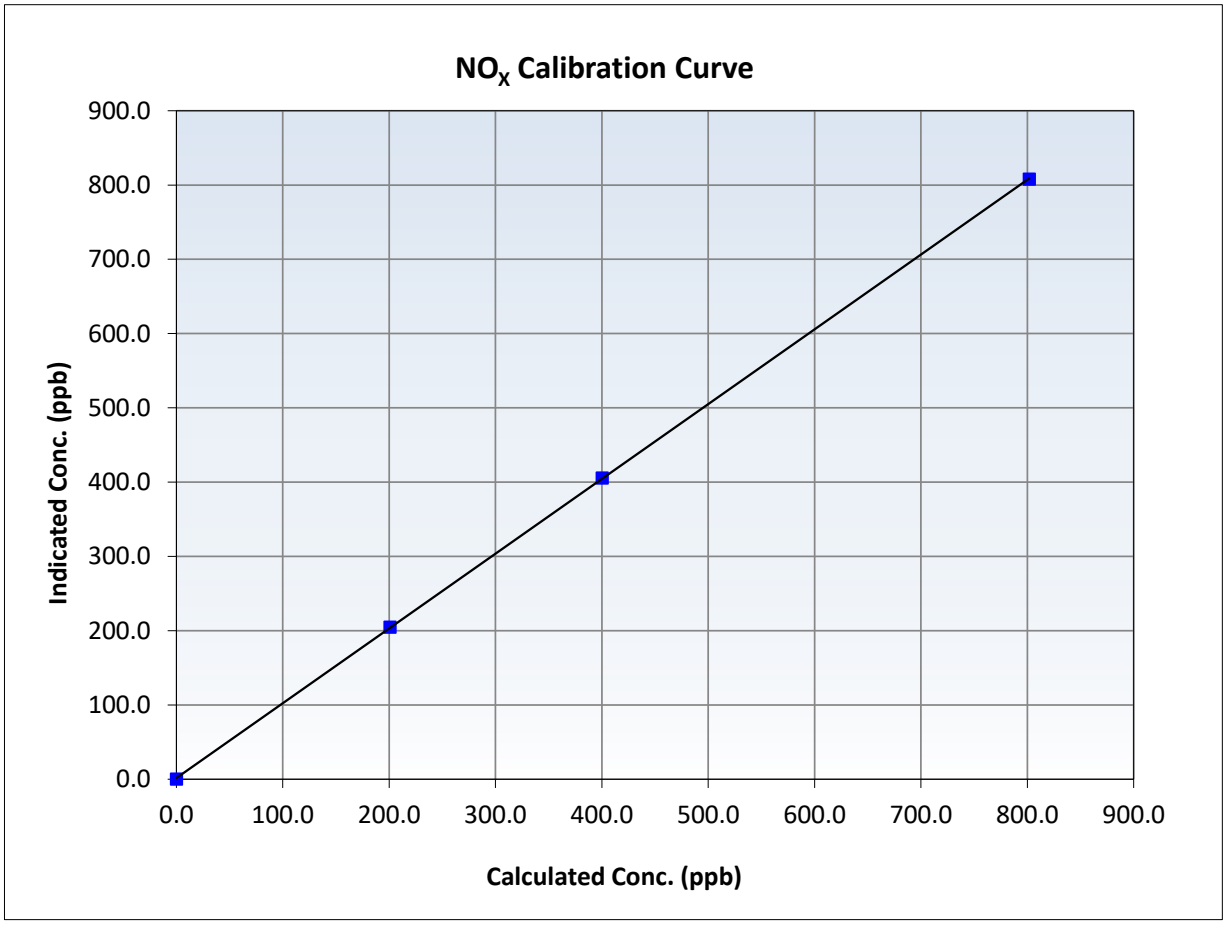
NO_X Calibration Summary

Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 7, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	8:32	End Time (MST):	12:17
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.3	----	Correlation Coefficient	0.999987	≥0.995
801.8	808.0	0.9923	Slope	1.006703	0.90 - 1.10
400.2	405.6	0.9868	Intercept	1.634882	+/-20
200.7	204.8	0.9801			



Wood Buffalo Environmental Association

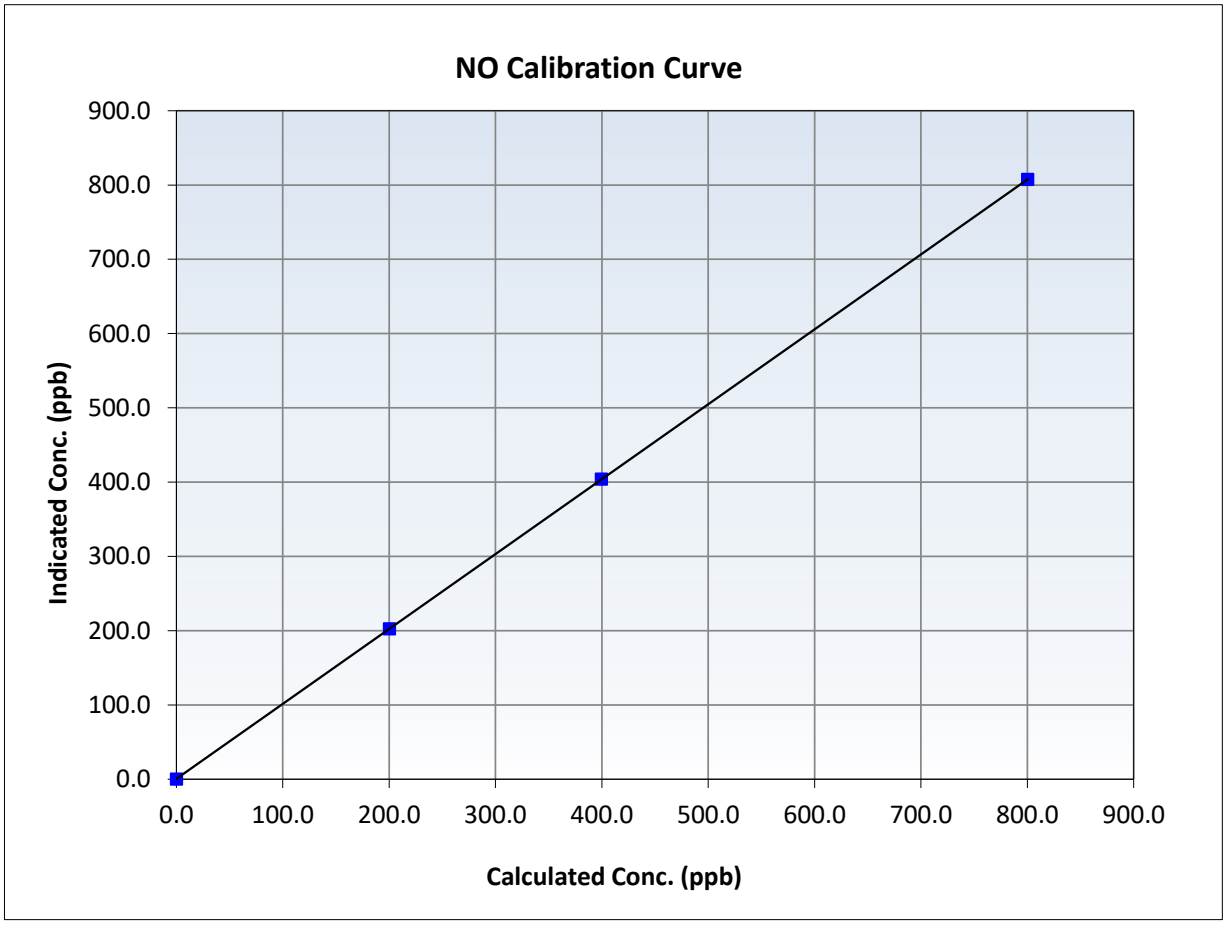
NO Calibration Summary

Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 7, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	8:32	End Time (MST):	12:17
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.3	----	Correlation Coefficient	0.999998	≥0.995
800.4	807.5	0.9913	Slope	1.008480	0.90 - 1.10
399.6	404.2	0.9886			
200.4	202.6	0.9891	Intercept	0.574972	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

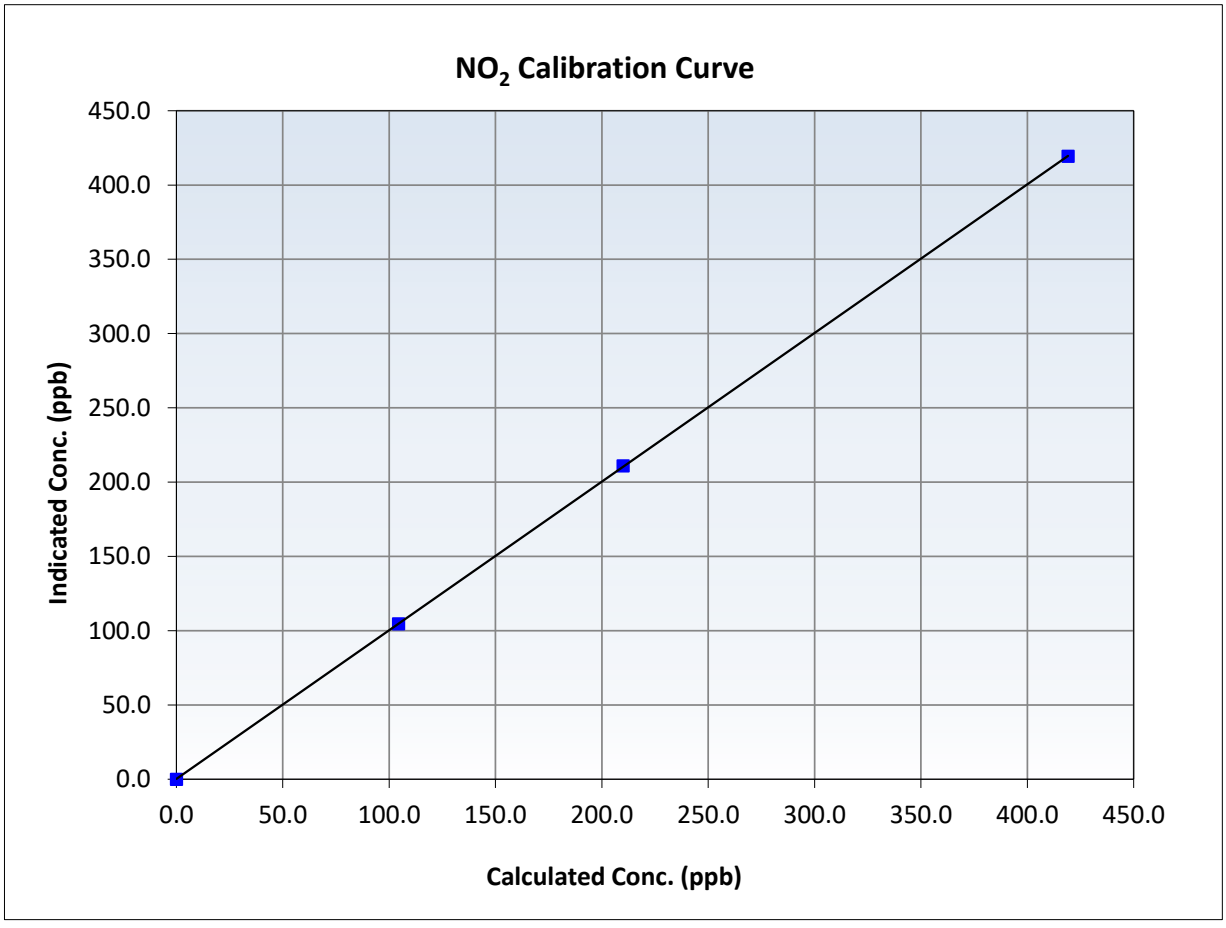
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 7, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	8:32	End Time (MST):	12:17
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

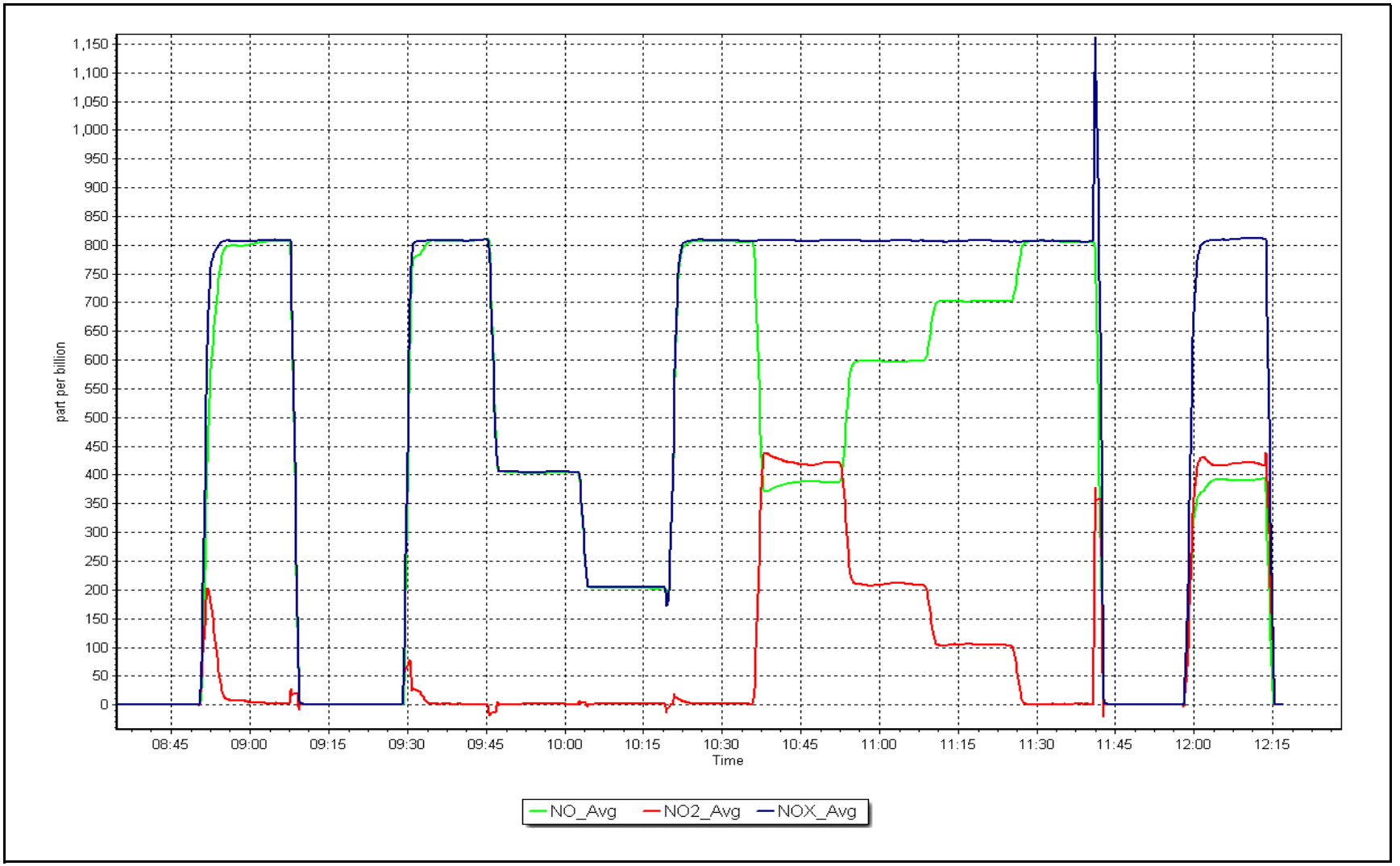
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
419.1	419.3	0.9996
210.0	211.0	0.9954
104.4	104.6	0.9984

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999994	*≥0.995*
Slope	1.000538	*0.90 - 1.10*
Intercept	0.225756	*+/-20*



NO_X Calibration Plot Date: September 15, 2026 Location: Fort Chipewyan



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	September 14, 2026	Last Cal Date:	July 16, 2026
Start time (MST):	8:22	End time (MST):	10:57
Reason:	Routine		

Calibration Standards

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

Analyzer Information

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

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.995971	0.999286	Backgd or Offset:	-2.7	-2.7
Calibration intercept:	3.080000	2.000000	Coeff or Slope:	1.002	1.002

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	5000	968.7	400.0	398.6	1.004
As found Mid point					
As found Low point					
Baseline Corr As found:	398.6	Previous response	401.5	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.2	----
High point	5000	968.7	400.0	400.8	0.998
Mid point	5000	820.5	200.0	202.8	0.986
Low point	5000	720.0	100.0	103.7	0.964
As left zero	5000	0.0	0.0	0.3	----
As left span	5000	968.7	400.0	401.3	0.997
				Average Correction Factor	0.983

Notes: Changed inlet filters after as founds. No adjustments made.

Calibration Performed By: Jermey cardinal

Wood Buffalo Environmental Association

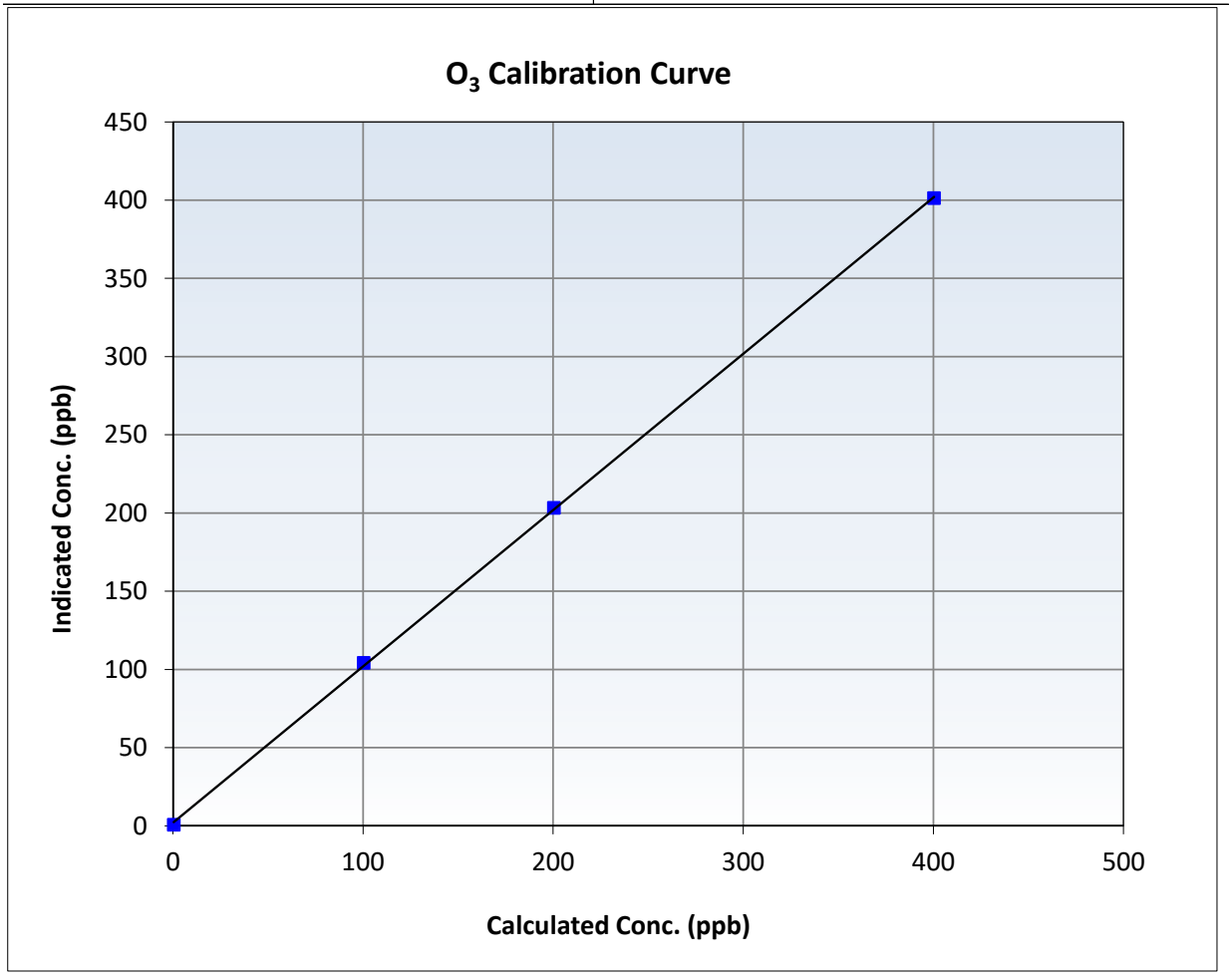
O_3 Calibration Summary

Station Information

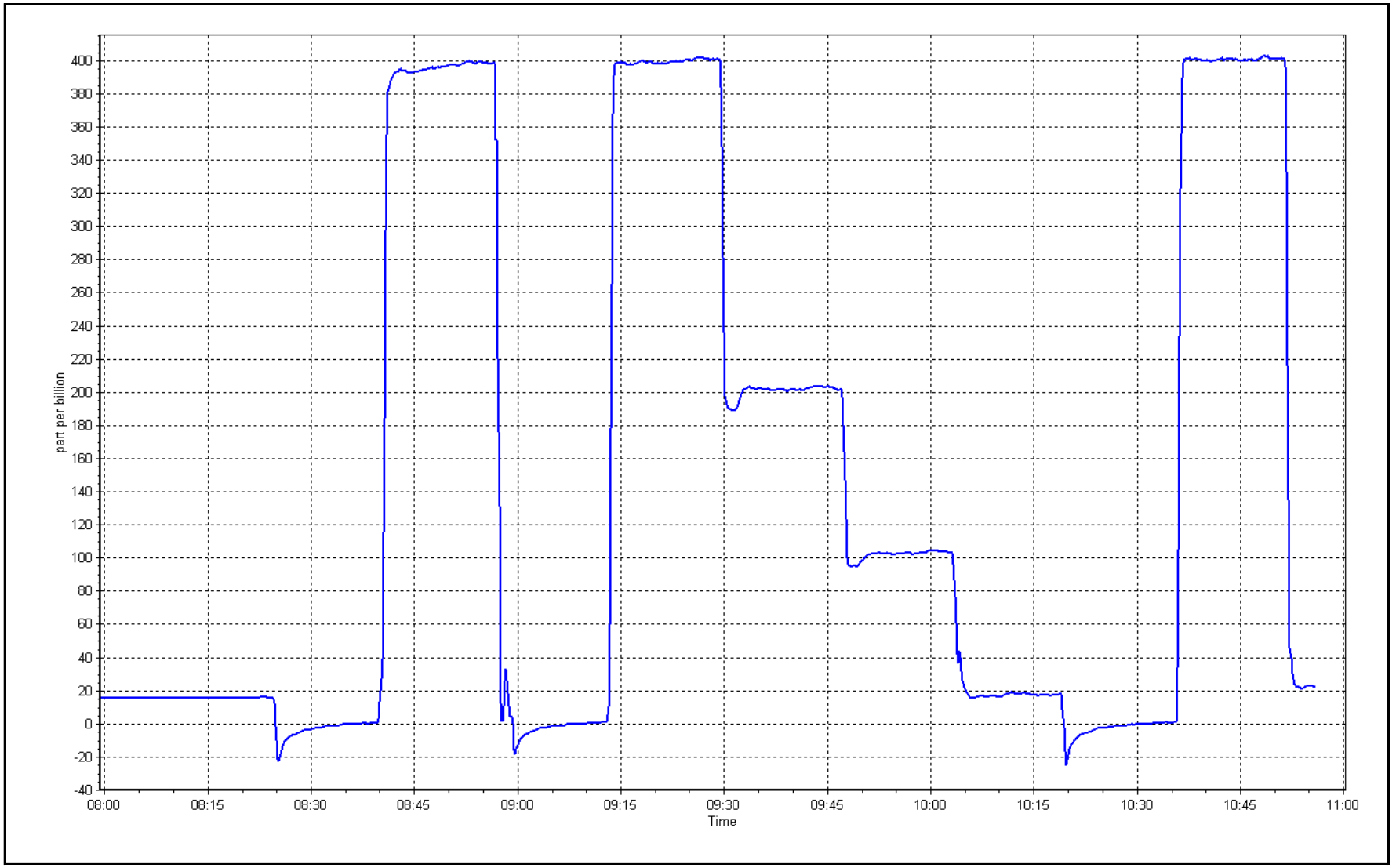
Calibration Date:	September 14, 2026	Previous Calibration:	July 16, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	8:22	End Time (MST):	10:57
Analyzer make:	Thermo 49i	Analyzer serial #:	1152220026

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.2	----	Correlation Coefficient	0.999907	*≥0.995*
400.0	400.8	0.9980	Slope	0.999286	*0.90 - 1.10*
200.0	202.8	0.9862			
100.0	103.7	0.9643	Intercept	2.000000	*+/- 5*



O_3 Calibration Plot Date: September 14, 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:	September 29, 2026	Last Cal Date:	August 21, 2026
Start time (MST):	9:22	End time (MST):	9:40
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)	10.5	9.95	10.9	☐	+/- 2 °C
P (mmHg)	719.9	722.00	719.9	☐	+/- 10 mmHg
Flow (LPM)	5.01	4.95	4.99	☐	+/- 0.25 LPM
PW% (pump)	30%	NA	29%	☐	>80%
Zero Verification	PM w/o HEPA:	29.10	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	10.9	10.8	10.9	☐	+/- 0.5

Date Optical Chamber Cleaned: July 23, 2026

Date Disposable Filter Changed: July 23, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: July 23, 2026

Date RH/T Sensor Cleaned: July 23, 2026

Notes: no adjustment

Calibration by: Jermey cardinal

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS09
BARGE LANDING
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	September 1, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	10:09	End time (MST):	14:36
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 T700P		Serial Number:	2464
Zero Air Gen Model:	APIT701		Serial Number:	5613

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1118148498	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.997012	1.005460	Backgd or Offset:	12.5	12.4
Calibration intercept:	-0.217894	-0.498385	Coeff or Slope:	1.029	1.046

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.3	----
As found High point	4921	79.1	799.8	795.2	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	795.5	Previous response	797.2	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4921	79.1	799.8	804.0	0.995
Mid point	4961	39.5	399.4	400.8	0.996
Low point	4980	19.8	200.2	200.2	1.000
As left zero	5000	0.0	0.0	0.0	----
As left span	4921	79.1	799.8	794.4	1.007
				Average Correction Factor:	0.997

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

SO_2 Calibration Summary

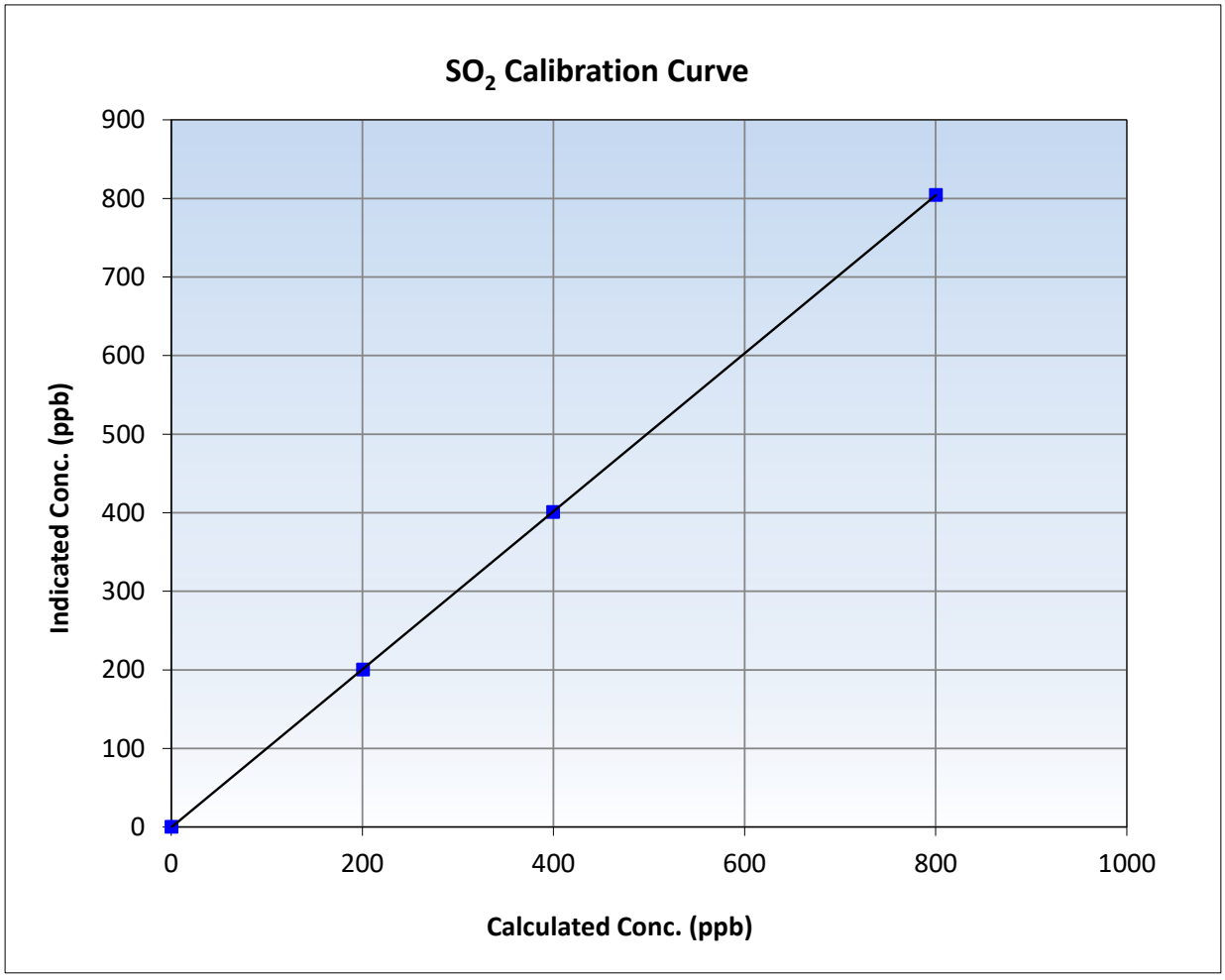
Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 25, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:09	End Time (MST):	14:36
Analyzer make:	Thermo 43i	Analyzer serial #:	1118148498

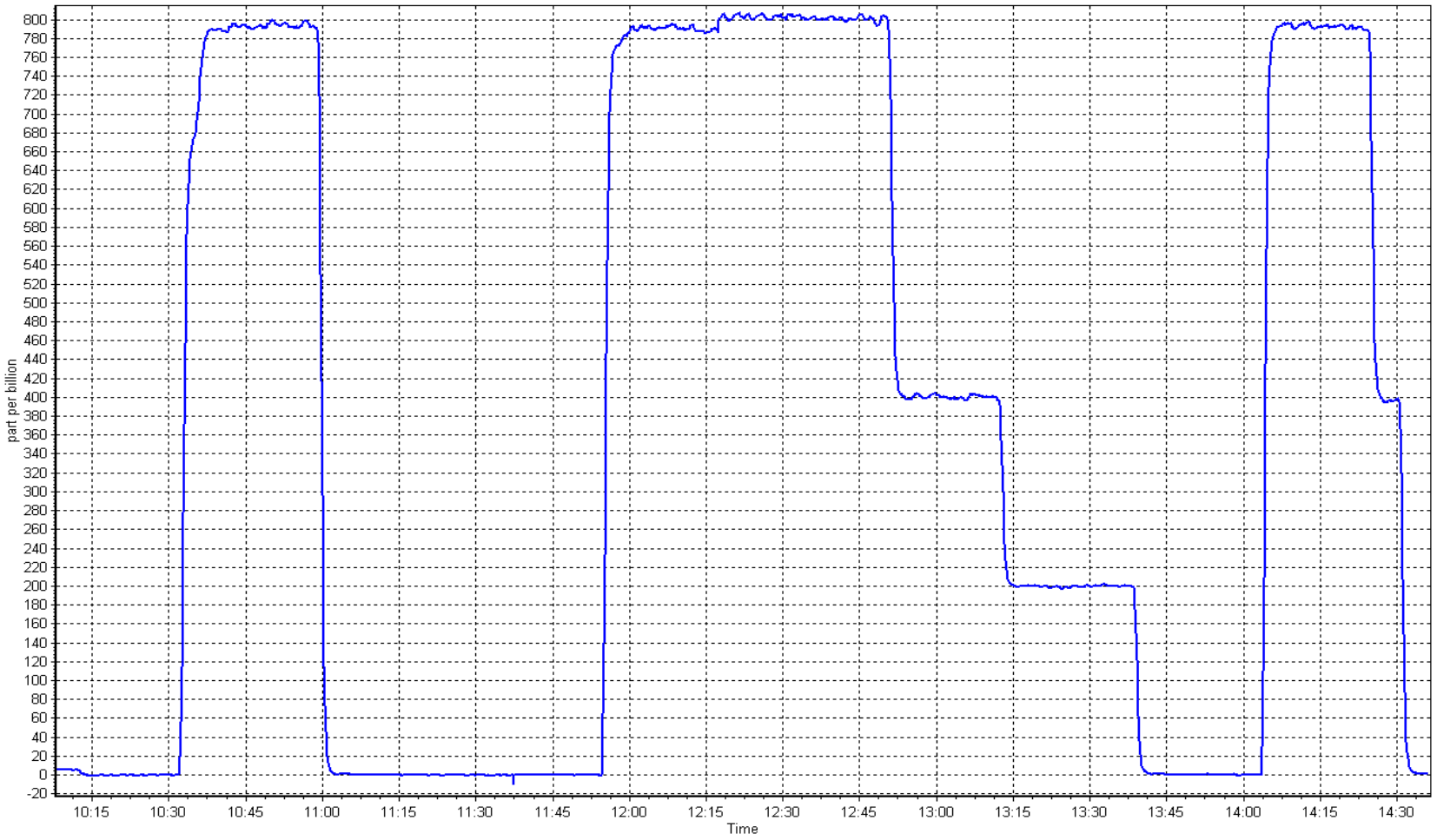
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
799.8	804.0	0.9948
399.4	400.8	0.9965
200.2	200.2	1.0001

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	1.005460	*0.90 - 1.10*
Intercept	-0.498385	*+/-30*



SO2 Calibration Plot Date: September 1, 2026 Location: Barge Landing



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	September 3, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	9:50	End time (MST):	15:11
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:	2464
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.006543	1.004689	Backgd or Offset:	1.810	1.800
Calibration intercept:	-0.060433	-0.120513	Coeff or Slope:	0.702	0.692

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.2	----
As found High point	4923	77.4	80.0	80.3	0.999
As found Mid point	4961	38.7	40.0	40.2	1.001
As found Low point	4981	19.3	20.0	20.2	0.998
New cylinder response					

Baseline Corr As found:	80.1	Prev response:	80.50	*% change:	-0.5%
Baseline Corr 2nd AF pt:	40.0	AF Slope:	1.000548	AF Intercept:	0.199431
Baseline Corr 3rd AF pt:	20.0	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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4923	77.4	80.0	80.4	0.996
Mid point	4961	38.7	40.0	39.9	1.003
Low point	4981	19.3	20.0	19.9	1.003
As left zero	5000	0.0	0.0	0.0	----
As left span	4923	77.4	80.0	80.2	0.998
SO2 Scrubber Check	4920	80.2	802.0	0.0	----
Date of last scrubber change:		8-Jul-25		Ave Corr Factor	1.001
Date of last converter efficiency test:					

Notes: Changed the sample inlet filter after as founds. Adjusted span. SOx scrubber check done after cal zero, passed.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

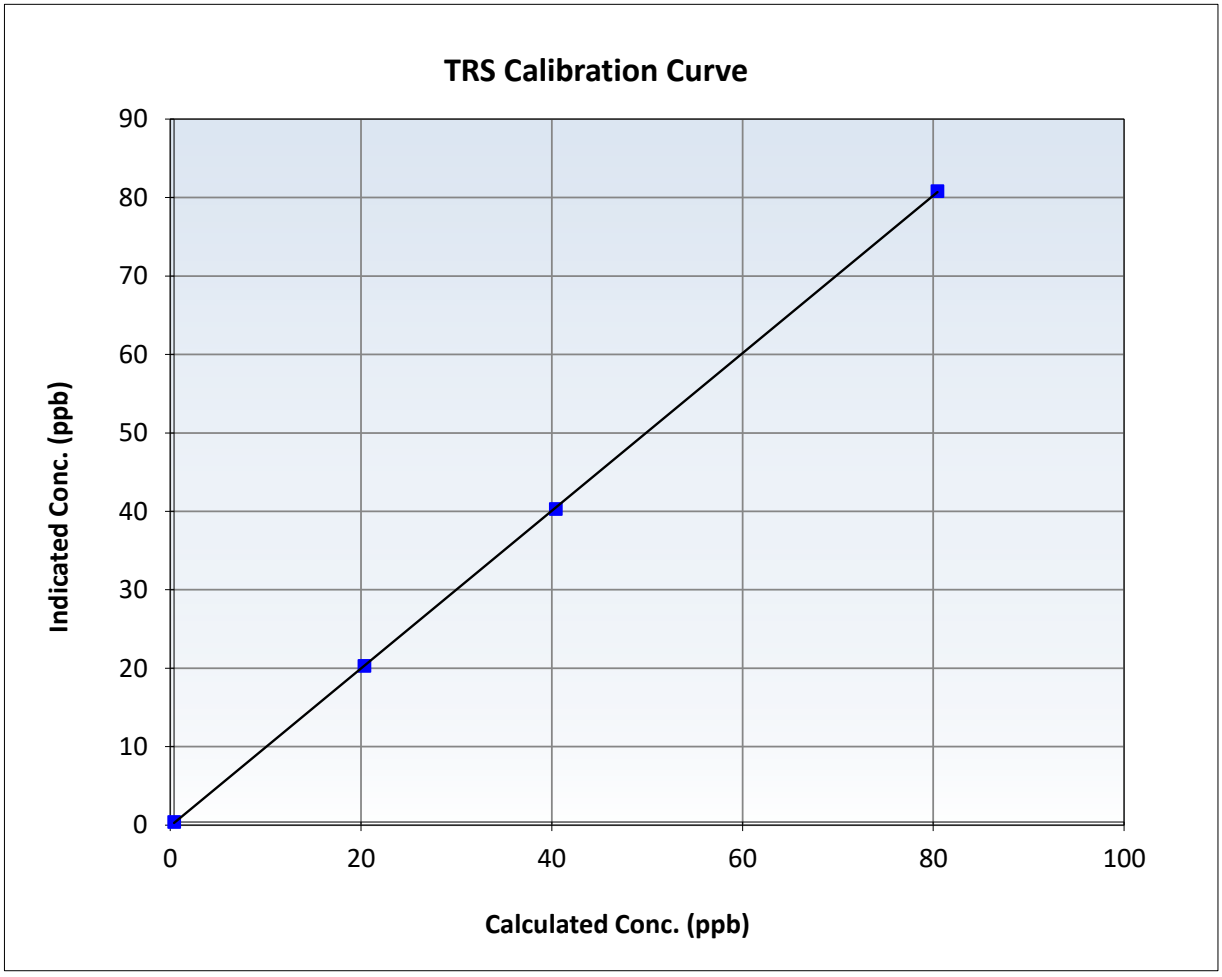
TRS Calibration Summary

Station Information

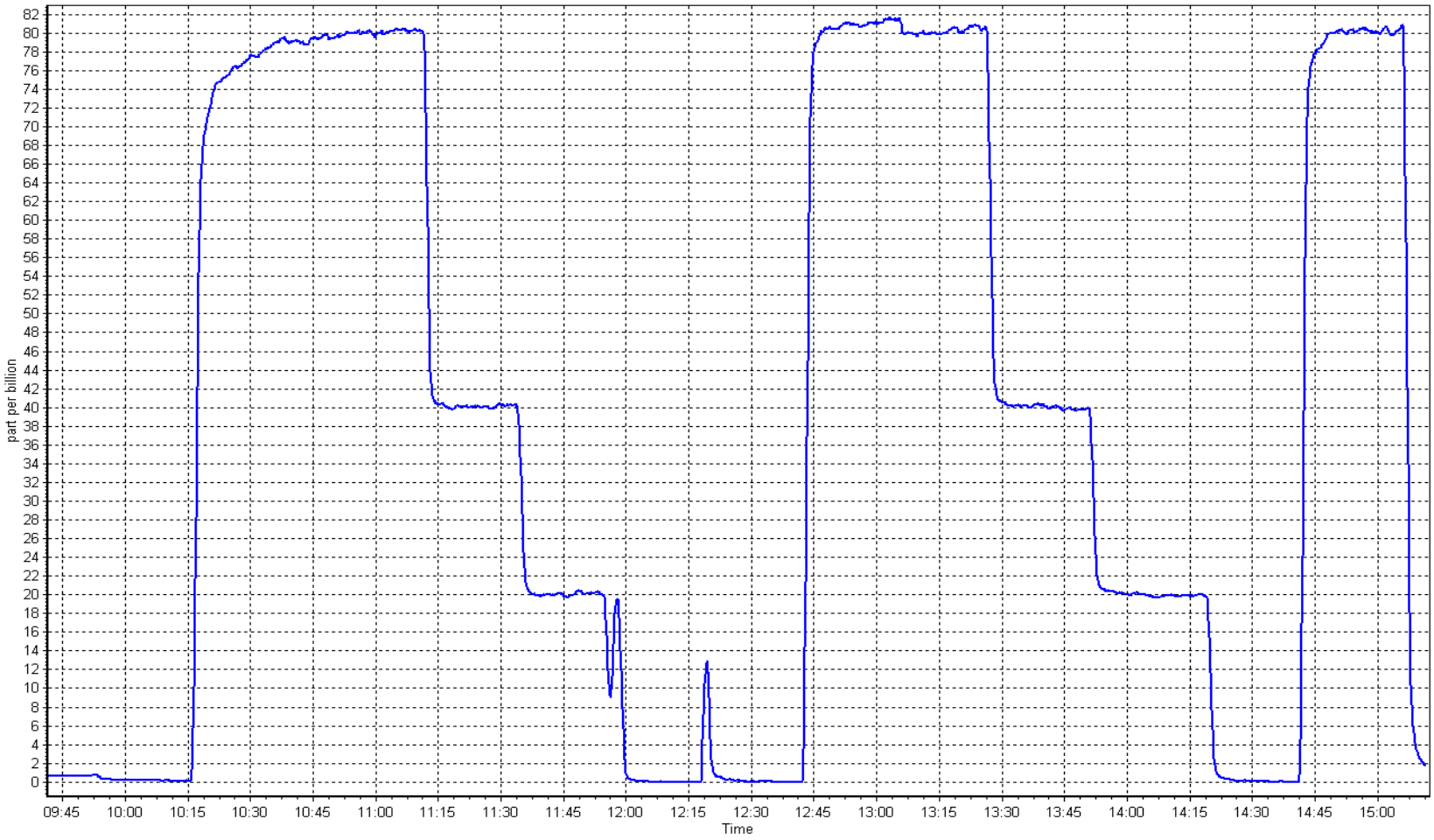
Calibration Date:	September 3, 2026	Previous Calibration:	August 6, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:50	End Time (MST):	15:11
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1203169744

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999982	*≥0.995*
80.0	80.4	0.9955	Slope	1.004689	*0.90 - 1.10*
40.0	39.9	1.0032			
20.0	19.9	1.0030	Intercept	-0.120513	*+/-3*



TRS Calibration Plot Date: September 3, 2026 Location: Barge Landing



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	September 1, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	10:09	End time (MST):	14:36
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 T700P	Serial Number:	2464
Zero Air Gen model:	APIT701	Serial Number:	5613

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.37E-04	2.37E-04	NMHC SP Ratio:	5.61E-05	5.53E-05
CH4 Retention time:	14.6	14.6	NMHC Peak Area:	158727	161010
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	16.91	16.92	0.999
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.92	Prev response	16.89	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	16.91	16.93	0.999
Mid point	4961	39.5	8.44	8.36	1.010
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	17.26	0.980
				Average Correction Factor	1.010

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

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	8.91	8.97	0.993
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.97	Prev response	8.90	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.91	8.86	1.006
Mid point	4961	39.5	4.45	4.39	1.013
Low point	4980	19.8	2.23	2.15	1.038
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.91	9.12	0.977
				Average Correction Factor	1.019

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	8.00	7.95	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.95	Prev response	7.99	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.00	8.07	0.991
Mid point	4961	39.5	3.99	3.97	1.007
Low point	4980	19.8	2.00	1.99	1.007
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.00	8.14	0.983
				Average Correction Factor	1.002

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.001634	1.002696
THC Cal Offset:	-0.043179	-0.058779
CH4 Cal Slope:	1.000874	1.009438
CH4 Cal Offset:	-0.017191	-0.025403
NMHC Cal Slope:	1.002329	0.996668
NMHC Cal Offset:	-0.025788	-0.033976

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

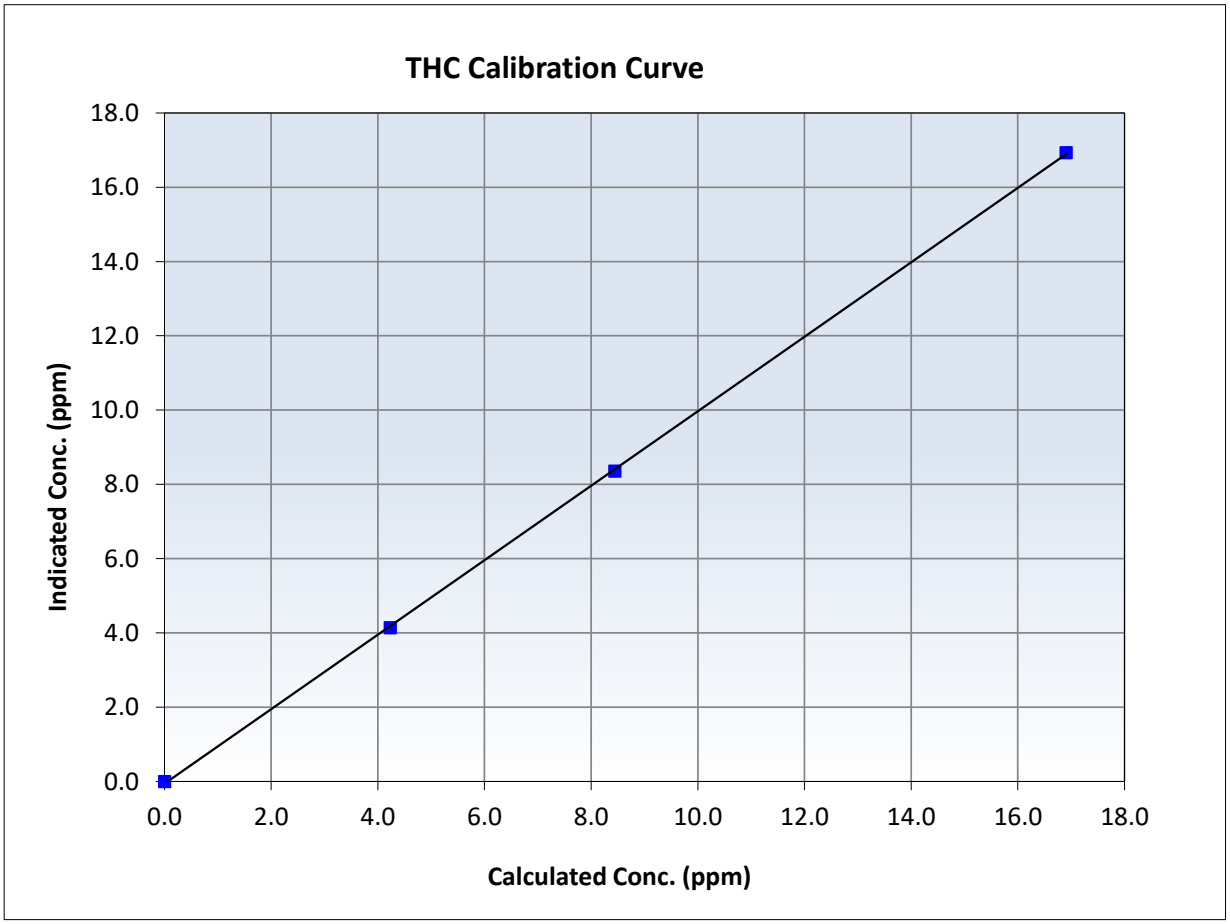
THC Calibration Summary

Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 25, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:09	End Time (MST):	14:36
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999942	*≥0.995*
16.91	16.93	0.9987	Slope	1.002696	*0.90 - 1.10*
8.44	8.36	1.0099	Intercept	-0.058779	*+/-0.5*
4.23	4.14	1.0229			



Wood Buffalo Environmental Association

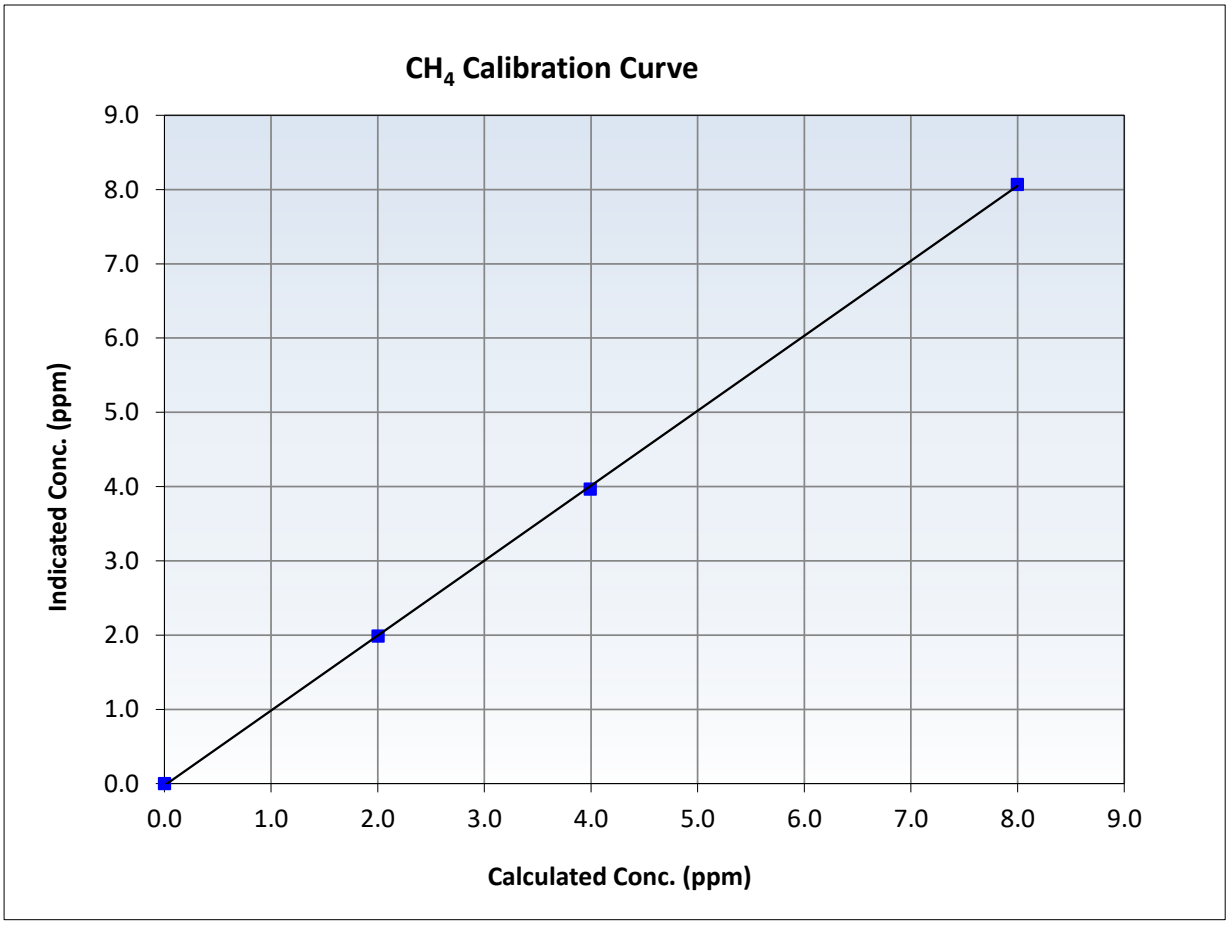
CH_4 Calibration Summary

Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 25, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:09	End Time (MST):	14:36
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999924	≥0.995
8.00	8.07	0.9911	Slope	1.009438	0.90 - 1.10
3.99	3.97	1.0068			
2.00	1.99	1.0072	Intercept	-0.025403	+/-0.5



Wood Buffalo Environmental Association

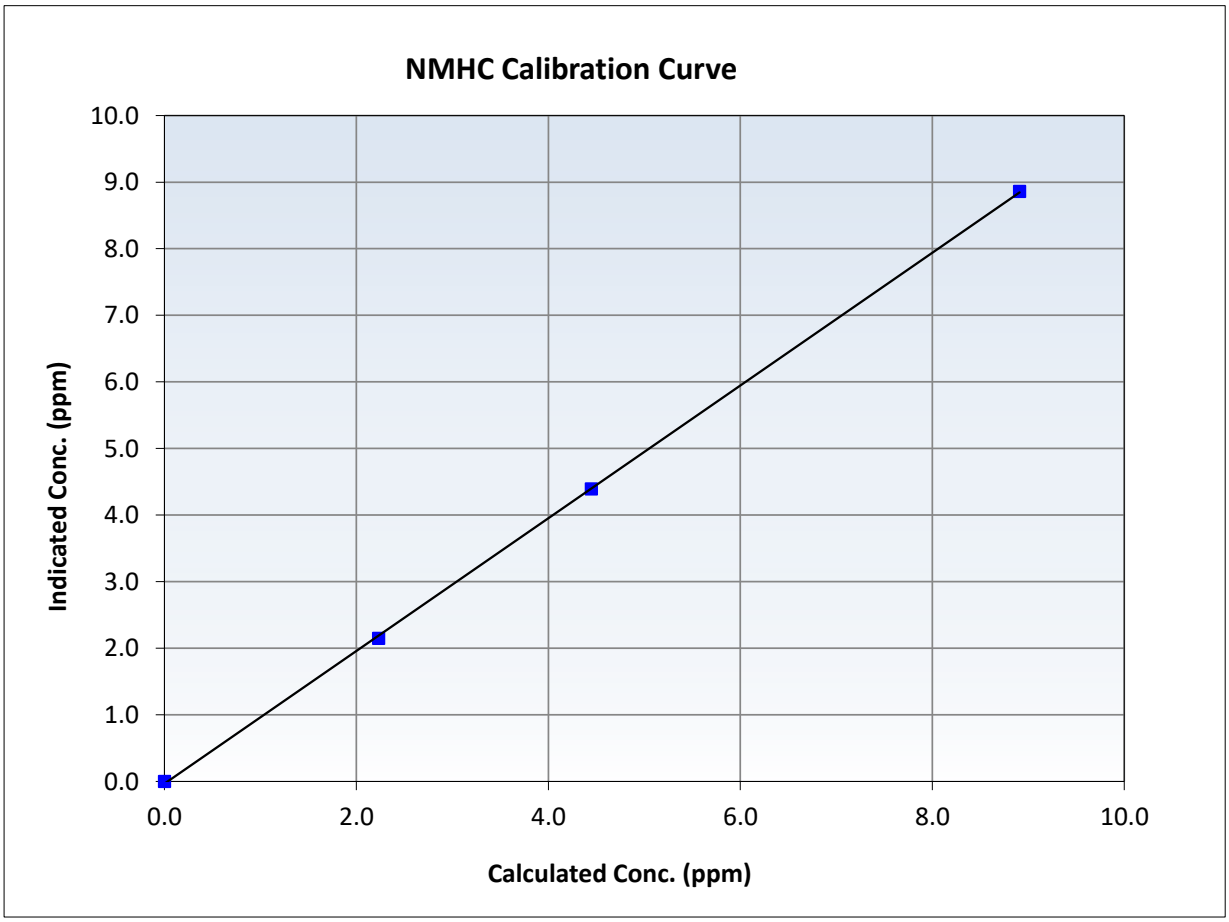
NMHC Calibration Summary

Station Information

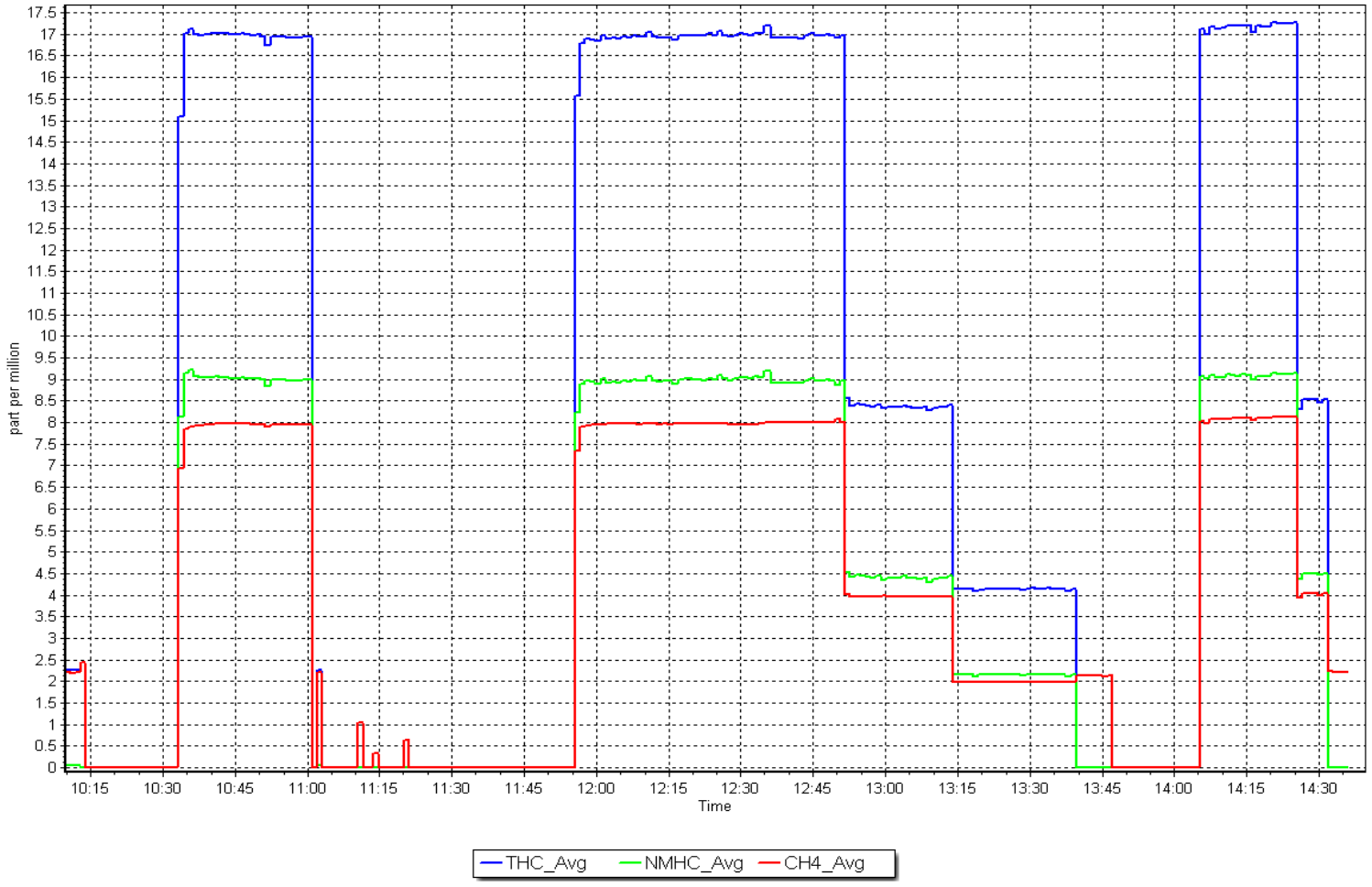
Calibration Date:	September 1, 2026	Previous Calibration:	August 25, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:09	End Time (MST):	14:36
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999930	≥0.995
8.91	8.86	1.0056	Slope	0.996668	0.90 - 1.10
4.45	4.39	1.0129			
2.23	2.15	1.0379	Intercept	-0.033976	+/-0.5



NMHC Calibration Plot Date: September 1, 2026 Location: Barge Landing



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Barge Landing
Station number:	AMS 09
Calibration Date:	September 28, 2026
Last Cal Date:	August 13, 2026
Start time (MST):	9:49
End time (MST):	15:29
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	T2Y1KDH	Cal Gas Expiry Date:	November 17, 2026
NOX Cal Gas Conc:	47.38 ppm	NO Cal Gas Conc:	46.94 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	47.38 ppm	Removed Gas NO Conc:	46.94 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API 700	Serial Number:	2464
ZAG make/model:	Teledyne API T701	Serial Number:	5613

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.4	-0.4	0.0	----	----
AF High point	4915	85.3	808.3	800.8	7.5	811.7	795.8	15.9	0.9953	1.0058
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.3 ppb	NO = 793.0 ppb
Baseline Corr 1st pt	NO_X = 812.1 ppb	NO = 796.2 ppb
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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = 1.1%
As found	NO r^2:	*Percent Change	NO = 0.4%
As found	NO_2 r^2:	Nx Sl:	Nx Int:
		NO Sl:	NO Int:
		NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Teledyne API T200 Serial Number: 1035

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.963	0.959	NO bkgnd or offset:	-3.1	-3.1
NOX coeff or slope:	0.961	0.963	NOX bkgnd or offset:	-2.5	-2.5
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	3.9	3.9

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.991789	0.999100
NO_X Cal Offset:	1.667530	0.308143
NO Cal Slope:	0.989357	1.000733
NO Cal Offset:	0.724610	-1.034229
NO_2 Cal Slope:	1.000647	0.993407
NO_2 Cal Offset:	0.877661	-1.264654

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.3	-0.2	----	----
High point	4915	85.3	808.3	800.8	7.5	807.4	800.9	6.5	1.0011	0.9999
Mid point	4957	42.6	403.7	400.0	3.7	404.9	398.9	6.1	0.9971	1.0027
Low point	4979	21.3	201.8	200.0	1.9	201.4	197.5	3.9	1.0021	1.0124
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.4	-0.4	----	----
As left span	4915	85.3	808.3	401.2	407.1	802.8	401.2	401.7	1.0069	1.0000
								Average Correction Factor	1.0001	1.0050

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	800.9	401.3	407.1	403.9	1.0079	99.2%
Mid GPT point	800.9	602.6	205.8	202.1	1.0183	98.2%
Low GPT point	800.9	699.2	109.2	106.5	1.0254	97.5%
				Average Correction Factor	1.0172	98.3%

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

NO_X Calibration Summary

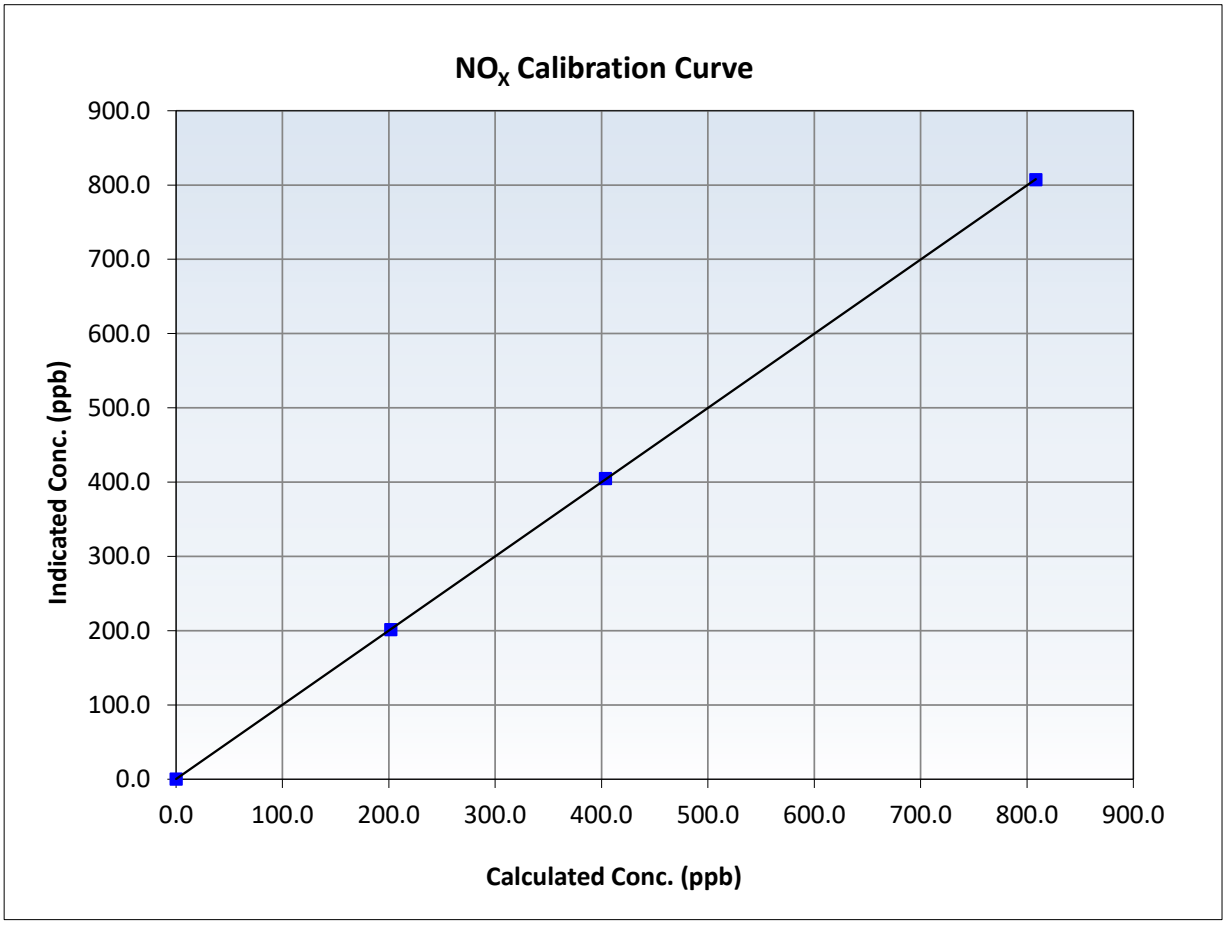
Station Information

Calibration Date:	September 28, 2026	Previous Calibration:	August 13, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:49	End Time (MST):	15:29
Analyzer make:	Teledyne API T200	Analyzer serial #:	1035

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
808.3	807.4	1.0011
403.7	404.9	0.9971
201.8	201.4	1.0021

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999994	*≥0.995*
Slope	0.999100	*0.90 - 1.10*
Intercept	0.308143	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

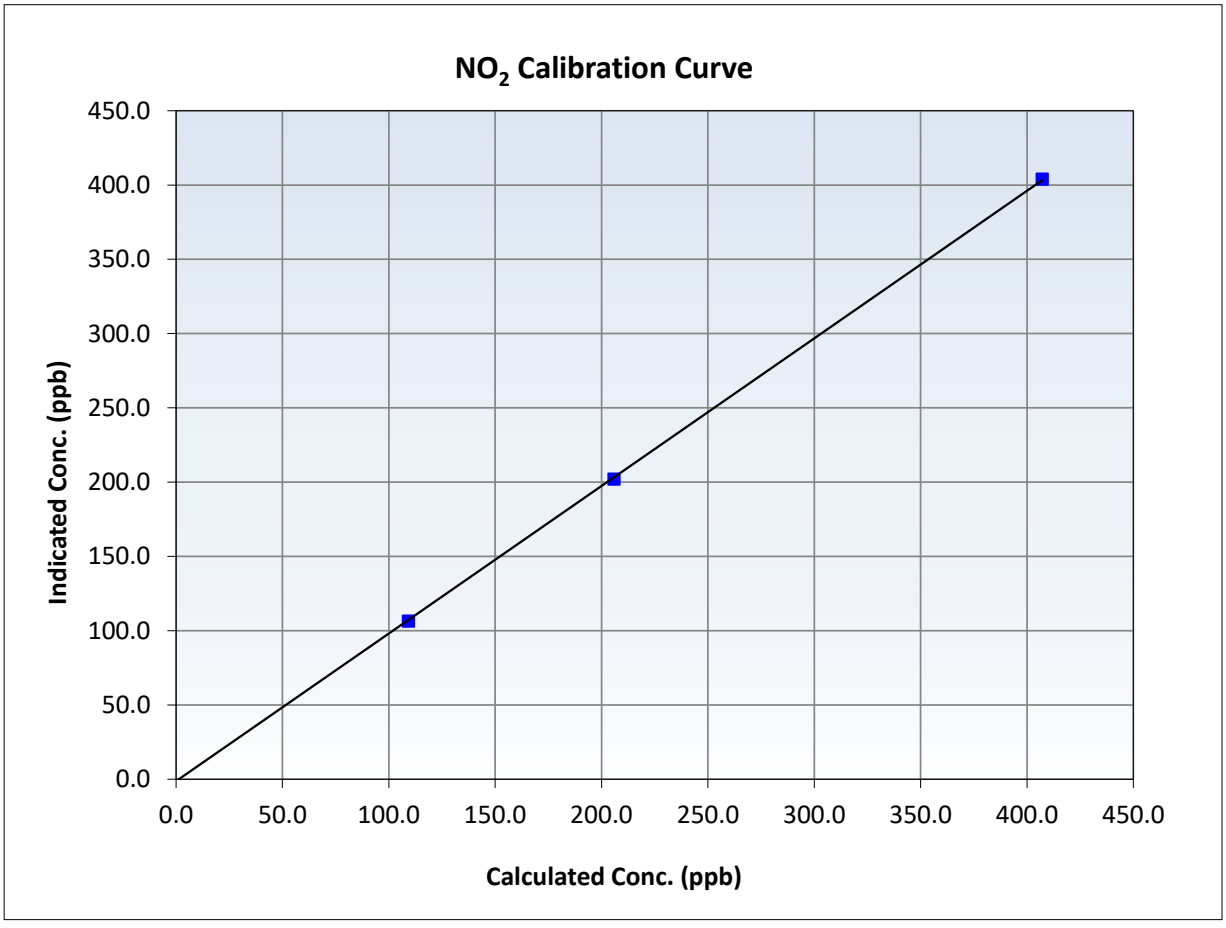
Station Information

Calibration Date:	September 28, 2026	Previous Calibration:	August 13, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:49	End Time (MST):	15:29
Analyzer make:	Teledyne API T200	Analyzer serial #:	1035

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
407.1	403.9	1.0079
205.8	202.1	1.0183
109.2	106.5	1.0254

Statistical Evaluation		Limits
Correlation Coefficient	0.999962	≥0.995
Slope	0.993407	0.90 - 1.10
Intercept	-1.264654	+/-20



Wood Buffalo Environmental Association

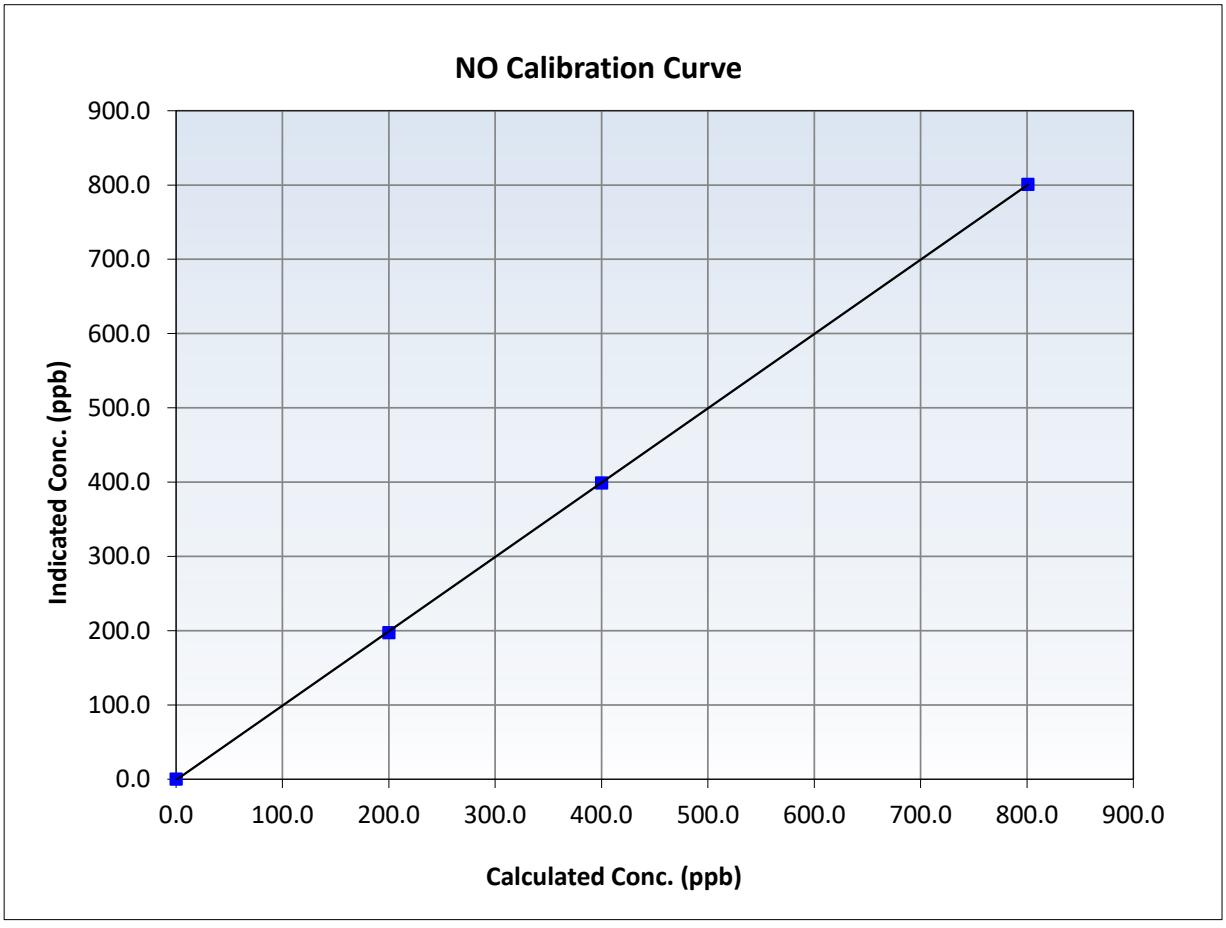
NO Calibration Summary

Station Information

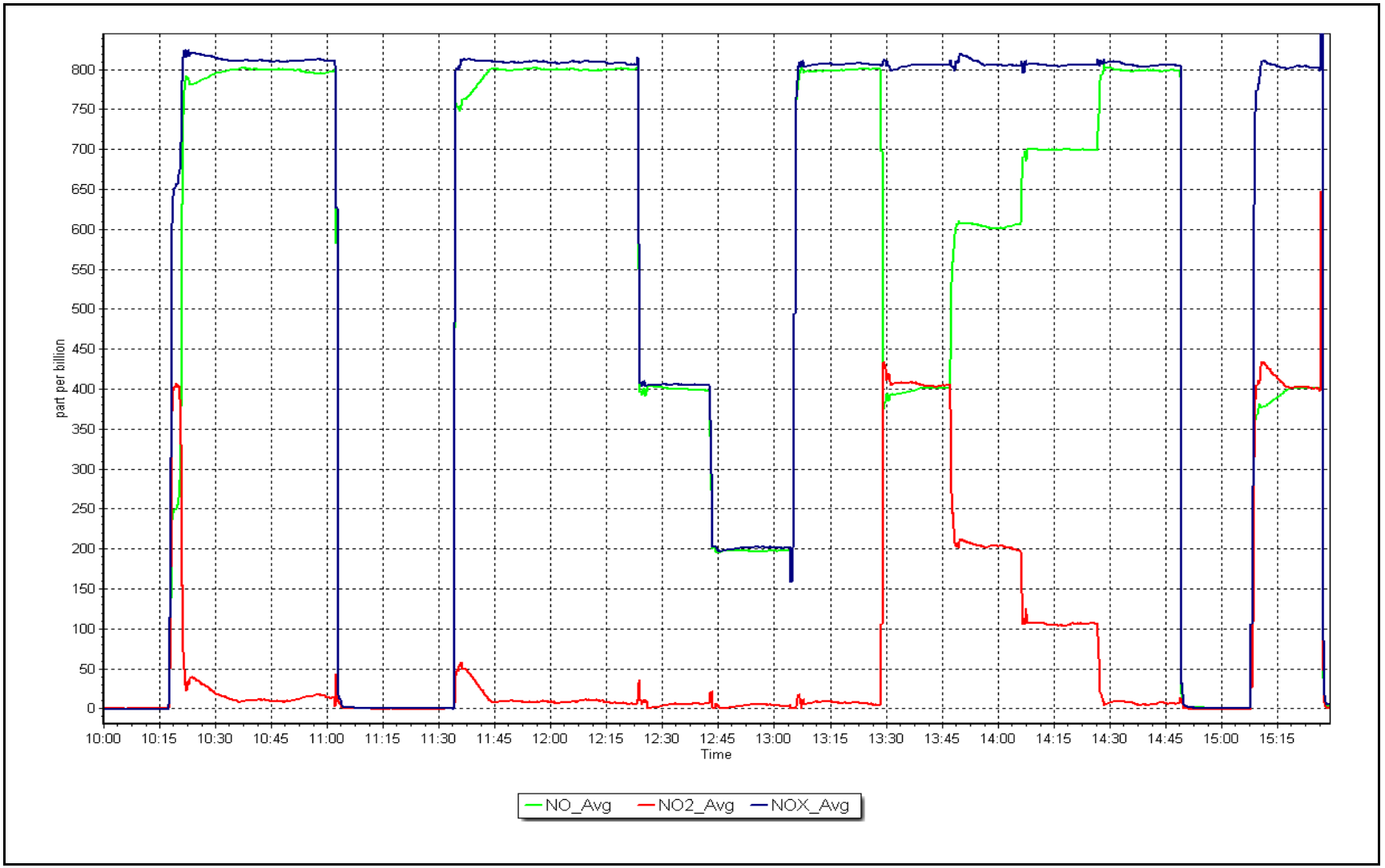
Calibration Date:	September 28, 2026	Previous Calibration:	August 13, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:49	End Time (MST):	15:29
Analyzer make:	Teledyne API T200	Analyzer serial #:	1035

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.3	----	Correlation Coefficient	0.999987	≥0.995
800.8	800.9	0.9999	Slope	1.000733	0.90 - 1.10
400.0	398.9	1.0027			
200.0	197.5	1.0124	Intercept	-1.034229	+/-20



NO_X Calibration Plot Date: September 28, 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:	September 28, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	14:31	End time (MST):	15:15
Analyzer Make:	API T640	S/N:	2237
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25	S/N:	388748
Temp/RH standard:	Alicat FP-25	S/N:	388748

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	17.8	17.40	17.8	☐	+/- 2 °C
P (mmHg)	725.0	724.60	725.0	☐	+/- 10 mmHg
Flow (LPM)	5.02	4.95	5.02	☐	+/- 0.25 LPM
PW% (pump)	29	-----	29	☐	>80%
Zero Verification	PM w/o HEPA:	19.0	PM w/ HEPA:	0.1	<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				☐	+/- 0.5

Date Optical Chamber Cleaned: July 14, 2026

Date Disposable Filter Changed: July 14, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: March 5, 2026

Date RH/T Sensor Cleaned: July 22, 2025

Notes: Verified flow, pressure, temperature and pump power. Leak check passed.

Calibration by: Aswin Sasi Kumar

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS11
LOWER CAMP
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	September 29, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	9:43	End time (MST):	12:56
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	48.75	ppm	Cal Gas Exp Date:	October 9, 2032
Cal Gas Cylinder #:	CC741503			
Removed Cal Gas Conc:	48.75	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:	CC741503		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	3811
Zero Air Gen Model:	Teledyne API T701		Serial Number:	4428

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	100841398	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999073	0.999201	Backgd or Offset:	19.4	20.3
Calibration intercept:	1.667100	0.747206	Coeff or Slope:	1.017	1.023

SO_2 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.4	----
As found High point	4918	82.1	800.5	793.8	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.4	Previous response	801.4	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4918	82.1	800.5	800.6	1.000
Mid point	4959	41.1	400.7	400.3	1.001
Low point	4980	20.5	199.9	202.0	0.989
As left zero	5000	0.0	0.0	0.0	----
As left span	4918	82.1	800.5	802.2	0.998
				Average Correction Factor:	0.997

Notes: Inlet filter changed after as founds, Adjusted zero and span.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

SO_2 Calibration Summary

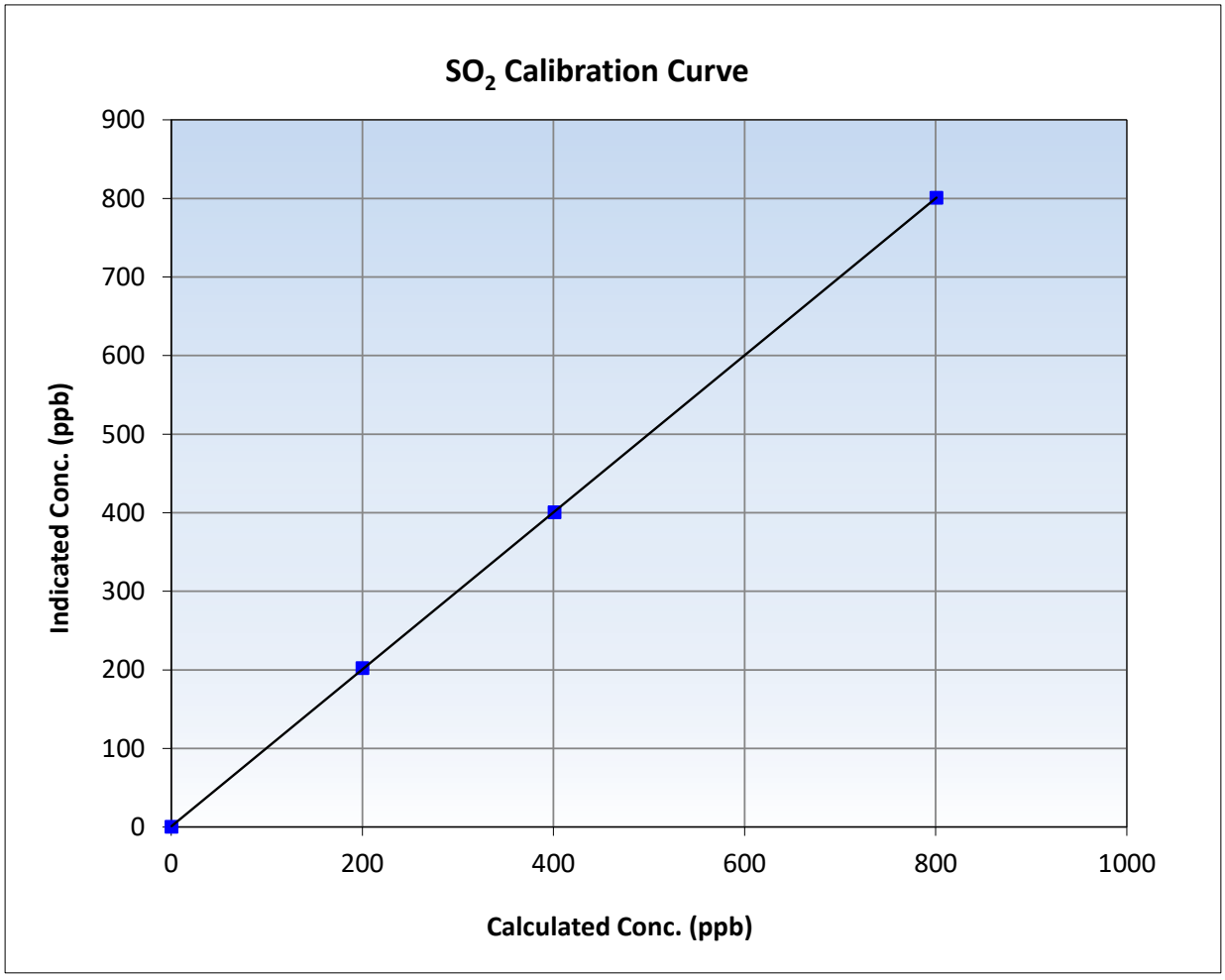
Station Information

Calibration Date:	September 29, 2026	Previous Calibration:	August 26, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:43	End Time (MST):	12:56
Analyzer make:	Thermo 43i	Analyzer serial #:	100841398

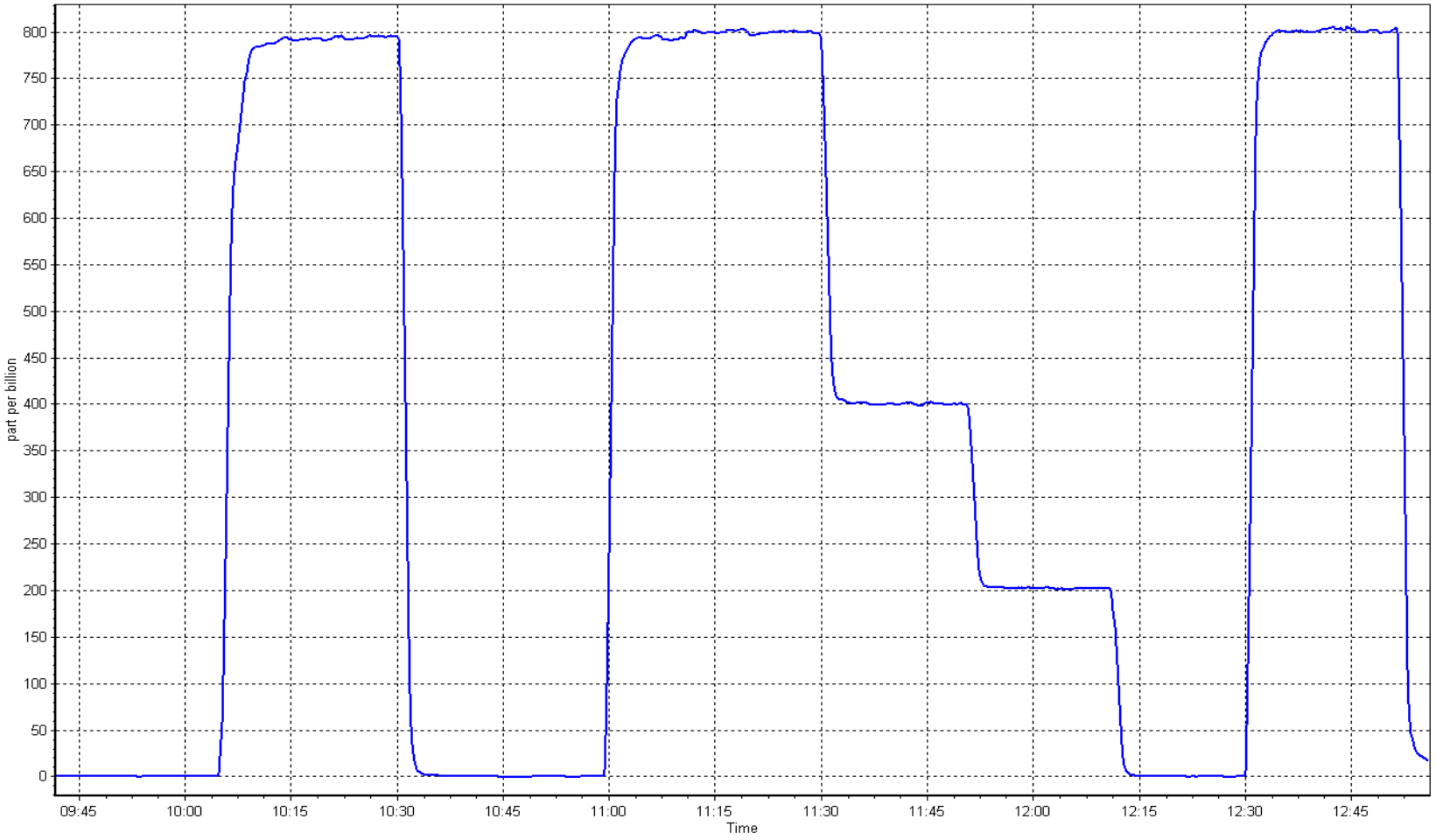
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.5	800.6	0.9998
400.7	400.3	1.0010
199.9	202.0	0.9894

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999989	*≥0.995*
Slope	0.999201	*0.90 - 1.10*
Intercept	0.747206	*+/-30*



SO2 Calibration Plot Date: September 29, 2026 Location: Lower Camp



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	September 16, 2026	Last Cal Date:	August 28, 2026
Start time (MST):	9:22	End time (MST):	13:38
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.83	ppm	Cal Gas Exp Date:	August 28, 2027
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-TL		Analyzer serial #:	1203169745	
Converter make:	Global G150		Converter serial #:	2022-223	
Analyzer Range	0 - 100 ppb		Converter Temp:	325	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.994729	1.012018	Backgd or Offset:	2.4	2.4
Calibration intercept:	0.340808	0.260812	Coeff or Slope:	0.783	0.783

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.8	80.0	81.8	0.978
As found Mid point	4959	41.4	40.0	41.2	0.971
As found Low point	4979	20.7	20.0	20.9	0.957
New cylinder response					

Baseline Corr As found:	81.8	Prev response:	79.91	*% change:	2.3%
Baseline Corr 2nd AF pt:	41.2	AF Slope:	1.021162	AF Intercept:	0.240822
Baseline Corr 3rd AF pt:	20.9	AF Correlation:	0.999960	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	82.8	80.0	81.1	0.986
Mid point	4959	41.4	40.0	40.8	0.980
Low point	4979	20.7	20.0	20.8	0.961
As left zero	5000	0.0	0.0	0.2	----
As left span	4923	82.8	79.9	80.5	0.992
SO2 Scrubber Check	4932	82.2	819.7	0.1	----
Date of last scrubber change:				Ave Corr Factor	0.976
Date of last converter efficiency test:					

Notes: Inlet filter changed after as founds, scrubber check passed. No adjustment.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

H_2S Calibration Summary

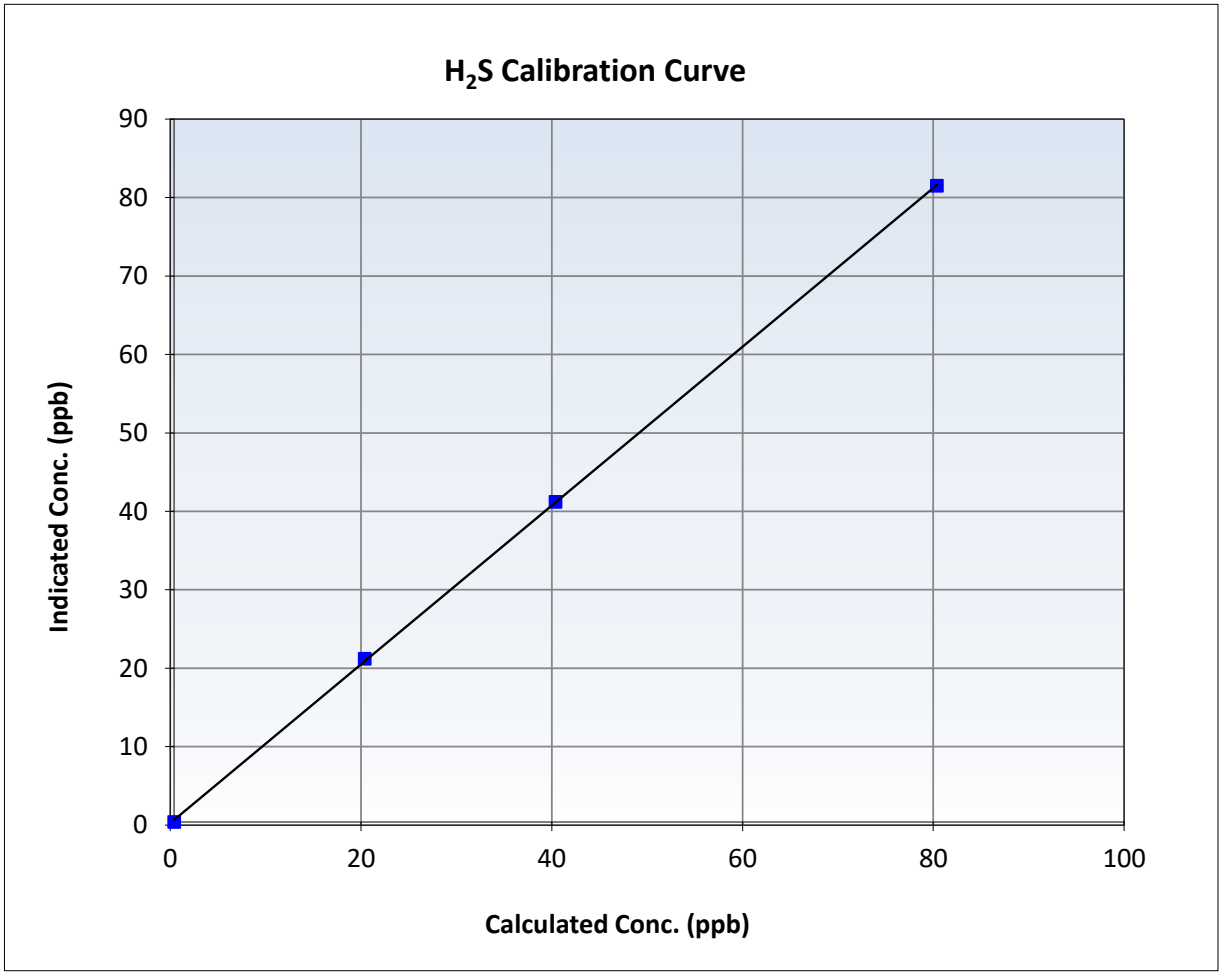
Station Information

Calibration Date:	September 16, 2026	Previous Calibration:	August 28, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:22	End Time (MST):	13:38
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	1203169745

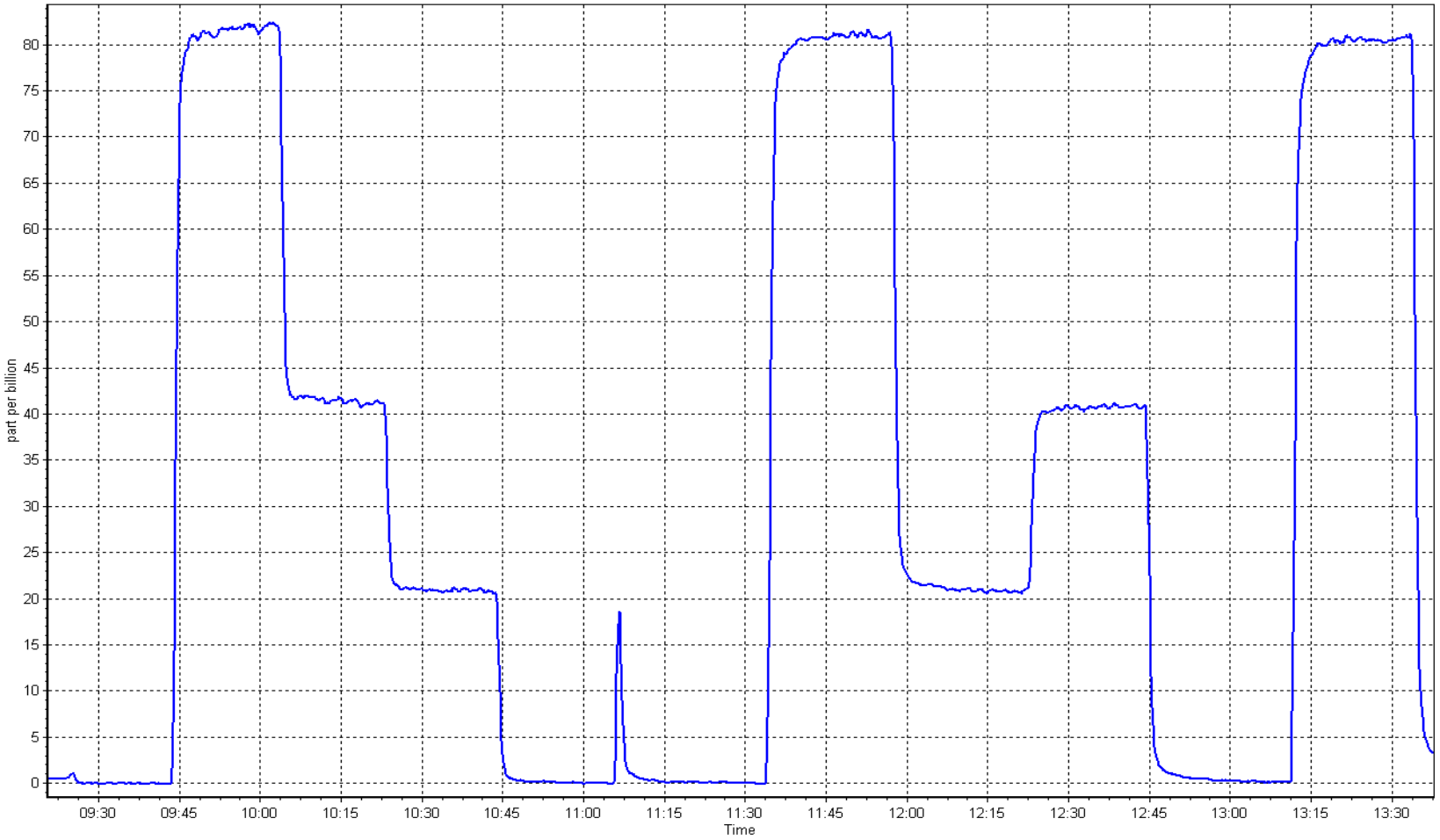
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
80.0	81.1	0.9863
40.0	40.8	0.9801
20.0	20.8	0.9614

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999951	*≥0.995*
Slope	1.012018	*0.90 - 1.10*
Intercept	0.260812	*+/-3*



H_2S Calibration Plot Date: September 16, 2026 Location: Lower Camp



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	September 22, 2026	Last Cal Date:	NA
Start time (MST):	9:40	End time (MST):	12:55
Reason:	Install		

Calibration Standards

Cal Gas Concentration:	4.83	ppm	Cal Gas Exp Date:	August 28, 2027
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 43TLE		Analyzer serial #:	1180540018
Converter make:	Global G150		Converter serial #:	2022-223
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:		1.005588	Backgd or Offset:		2.8
Calibration intercept:		0.460810	Coeff or Slope:		0.986

H_2S 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)) *Limit = 0.90-1.10*
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	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4917	82.8	80.0	80.8	0.990
Mid point	4959	41.4	40.0	40.8	0.980
Low point	4979	20.7	20.0	20.7	0.966
As left zero	5000	0.0	0.0	0.2	----
As left span	4923	82.8	79.9	80.0	0.999
SO2 Scrubber Check	4932	82.2	819.7	-0.1	----
Date of last scrubber change:				Ave Corr Factor	0.979
Date of last converter efficiency test:					

Notes: Install calibration. Inlet filter changed after as founds, scrubber check passed. No adjustment.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

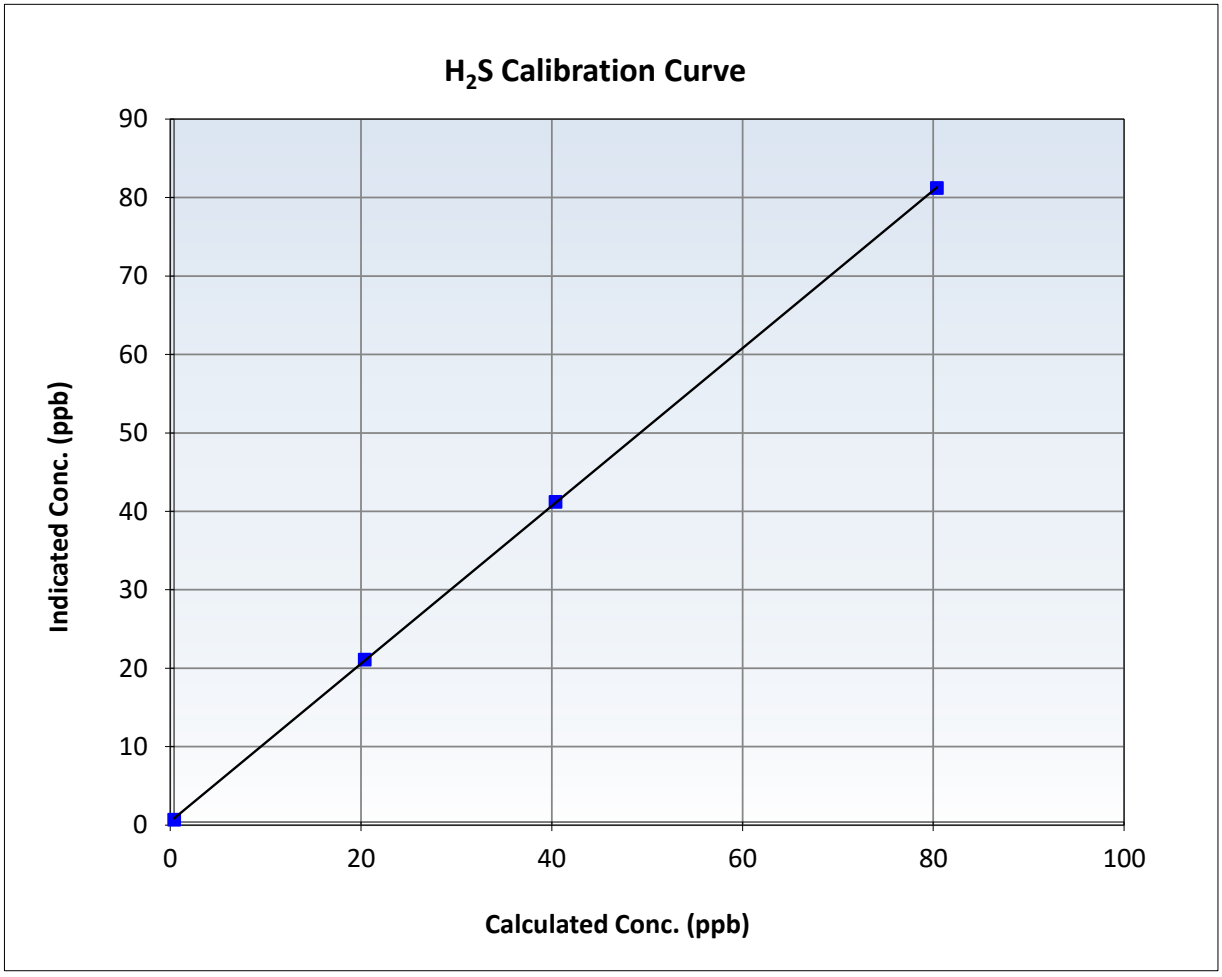
H_2S Calibration Summary

Station Information

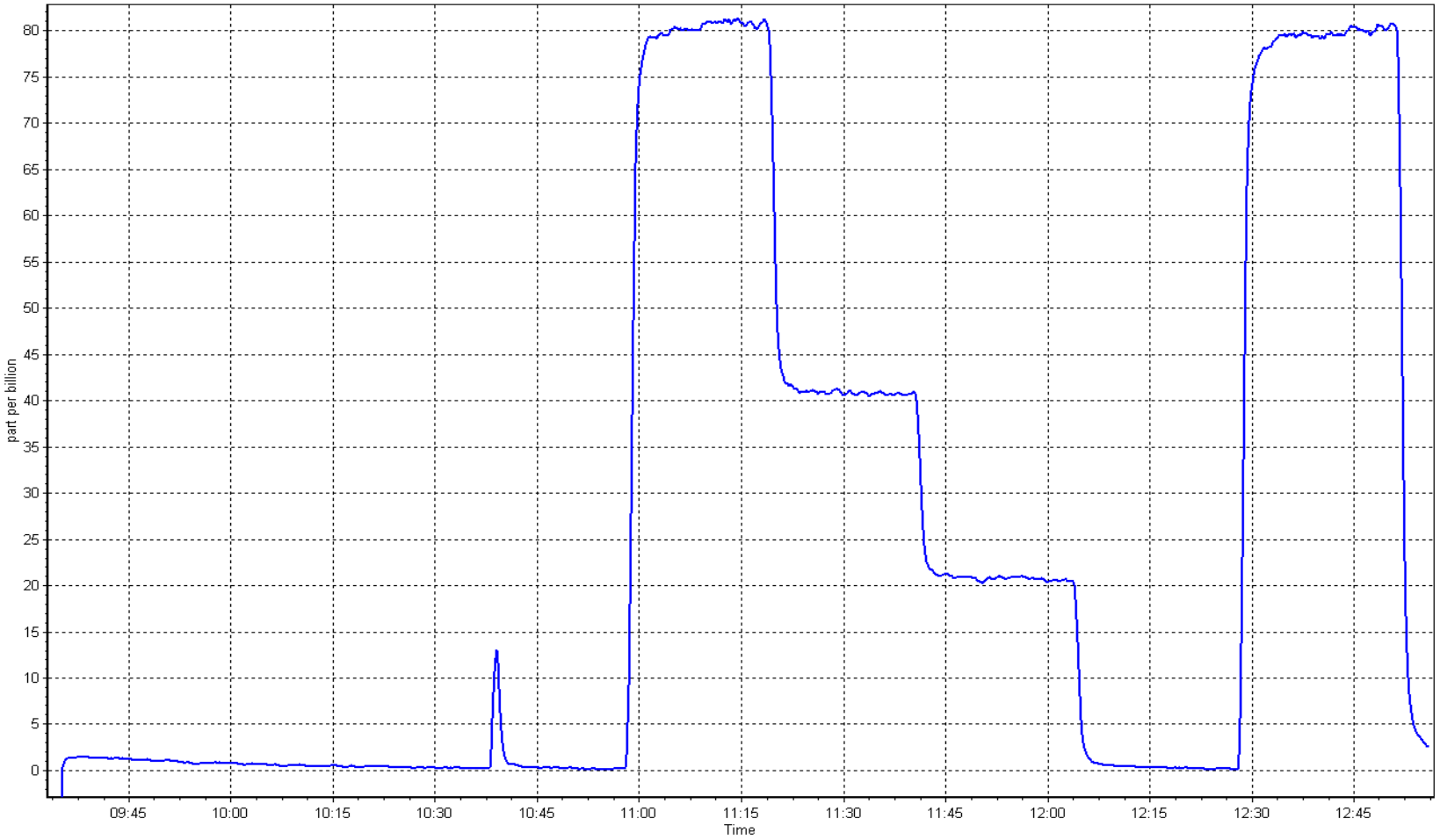
Calibration Date:	September 22, 2026	Previous Calibration:	NA
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:40	End Time (MST):	12:55
Analyzer make:	Thermo 43TLE	Analyzer serial #:	1180540018

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.3	----	Correlation Coefficient	0.999981	*≥0.995*
80.0	80.8	0.9900	Slope	1.005588	*0.90 - 1.10*
40.0	40.8	0.9801			
20.0	20.7	0.9661	Intercept	0.460810	*+/-3*



H_2S Calibration Plot Date: September 22, 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:	September 29, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	9:43	End time (MST):	12:56
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	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	2.23E-04	2.28E-04	NMHC SP Ratio:	5.17E-05	5.33E-05
CH4 Retention time:	13.2	13.2	NMHC Peak Area:	179986	174679
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	17.60	17.20	1.023
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.20	Prev response	17.65	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	17.60	17.62	0.999
Mid point	4959	41.1	8.81	8.85	0.996
Low point	4980	20.5	4.39	4.50	0.978
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.60	17.46	1.008
				Average Correction Factor	0.991

Notes: Inlet filter changed after as founds. Adjusted span only.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	9.31	9.11	1.022
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.11	Prev response	9.35	*% change	-2.7%
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) *Limit = 0.95-1.05*
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	4.71	0.989
Low point	4980	20.5	2.32	2.40	0.969
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.31	9.23	1.009
				Average Correction Factor	0.985

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	8.29	8.10	1.024
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.10	Prev response	8.30	*% change	-2.5%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	8.29	8.28	1.002
Mid point	4959	41.1	4.15	4.14	1.003
Low point	4980	20.5	2.07	2.10	0.987
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.29	8.23	1.007
				Average Correction Factor	0.997

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.999895	0.999460
THC Cal Offset:	0.053557	0.043158
CH4 Cal Slope:	0.998966	0.997091
CH4 Cal Offset:	0.017876	0.010678
NMHC Cal Slope:	1.000379	1.001717
NMHC Cal Offset:	0.036080	0.032879

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

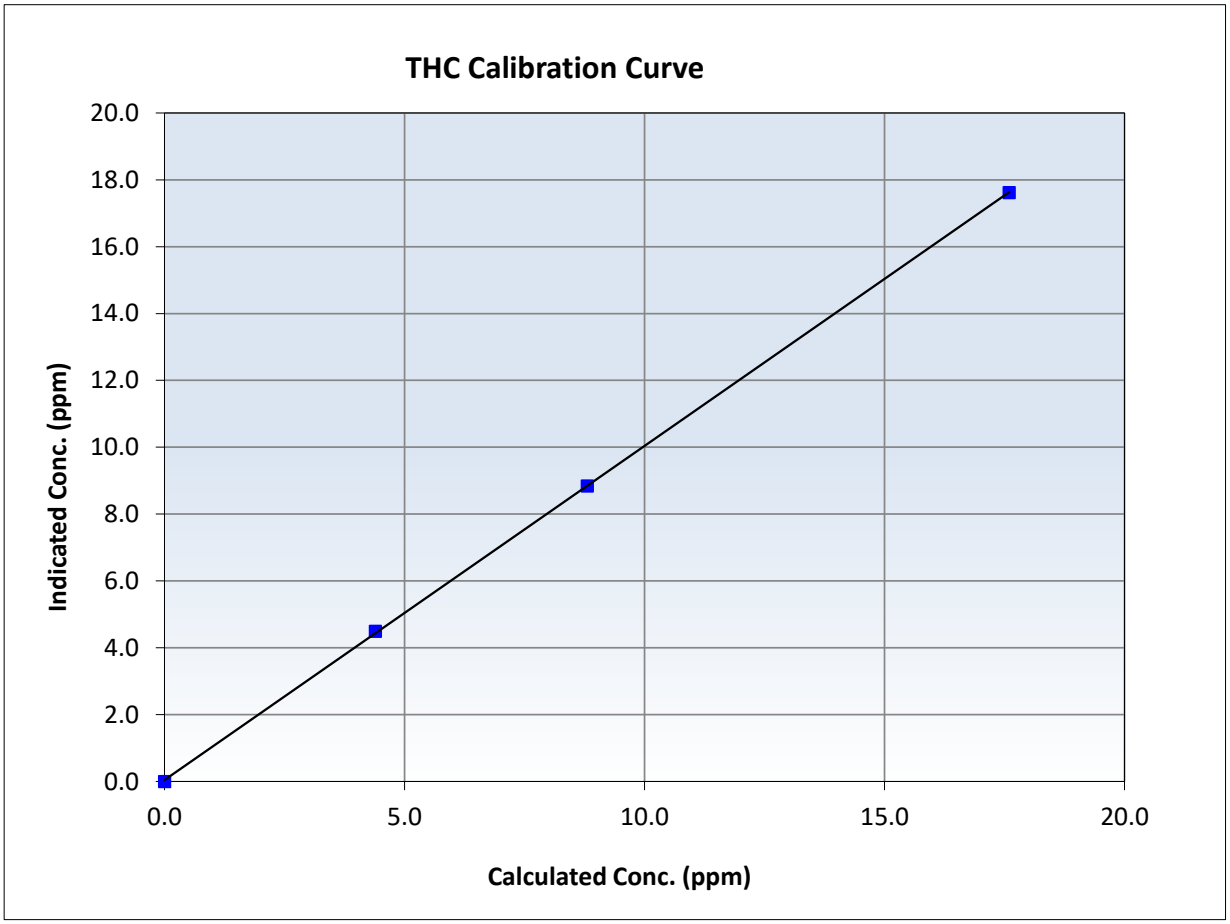
THC Calibration Summary

Station Information

Calibration Date:	September 29, 2026	Previous Calibration:	August 26, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:43	End Time (MST):	12:56
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430012

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999967	*≥0.995*
17.60	17.62	0.9988	Slope	0.999460	*0.90 - 1.10*
8.81	8.85	0.9961	Intercept	0.043158	*+/-0.5*
4.39	4.50	0.9776			



Wood Buffalo Environmental Association

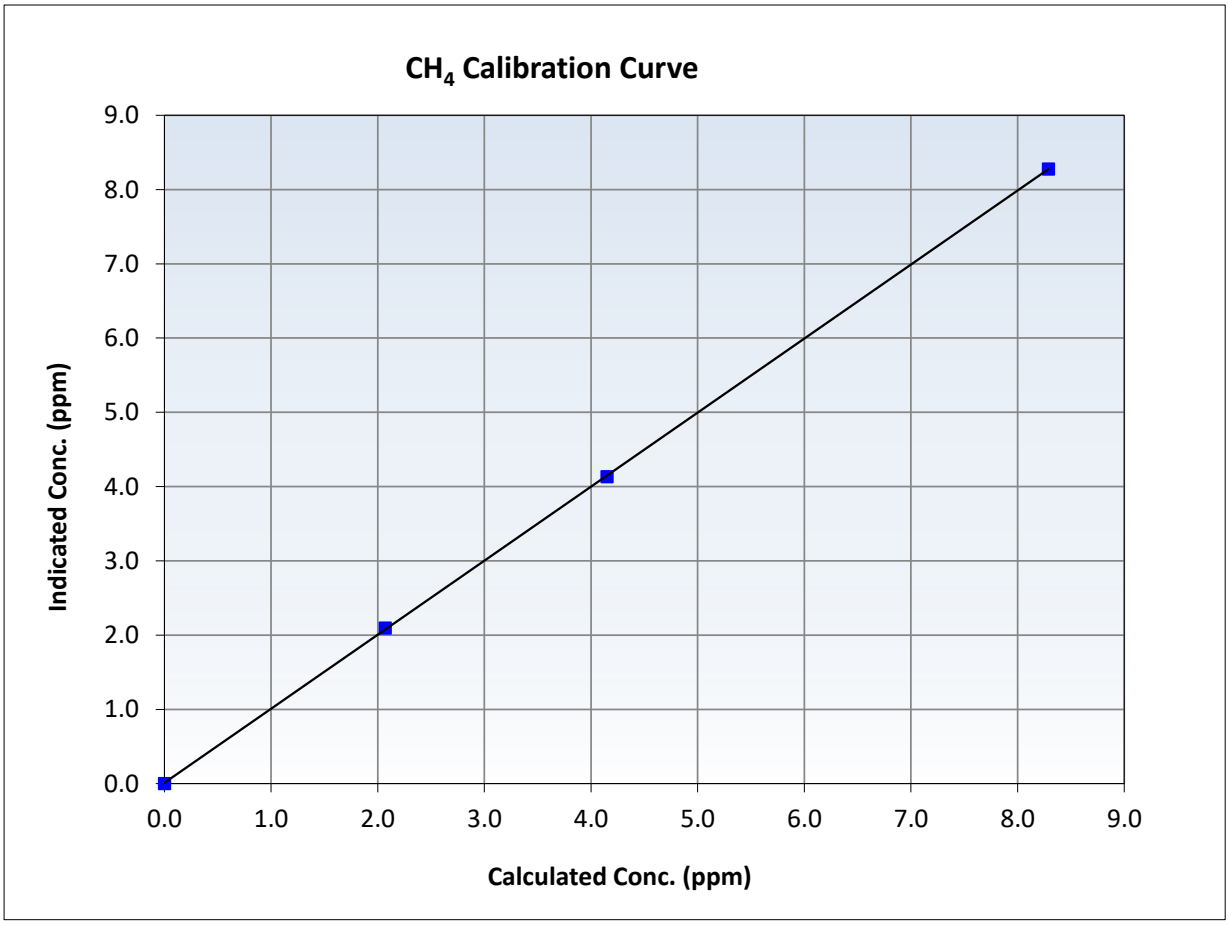
CH_4 Calibration Summary

Station Information

Calibration Date:	September 29, 2026	Previous Calibration:	August 26, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:43	End Time (MST):	12:56
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430012

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999978	≥0.995
8.29	8.28	1.0015	Slope	0.997091	0.90 - 1.10
4.15	4.14	1.0035			
2.07	2.10	0.9869	Intercept	0.010678	+/-0.5



Wood Buffalo Environmental Association

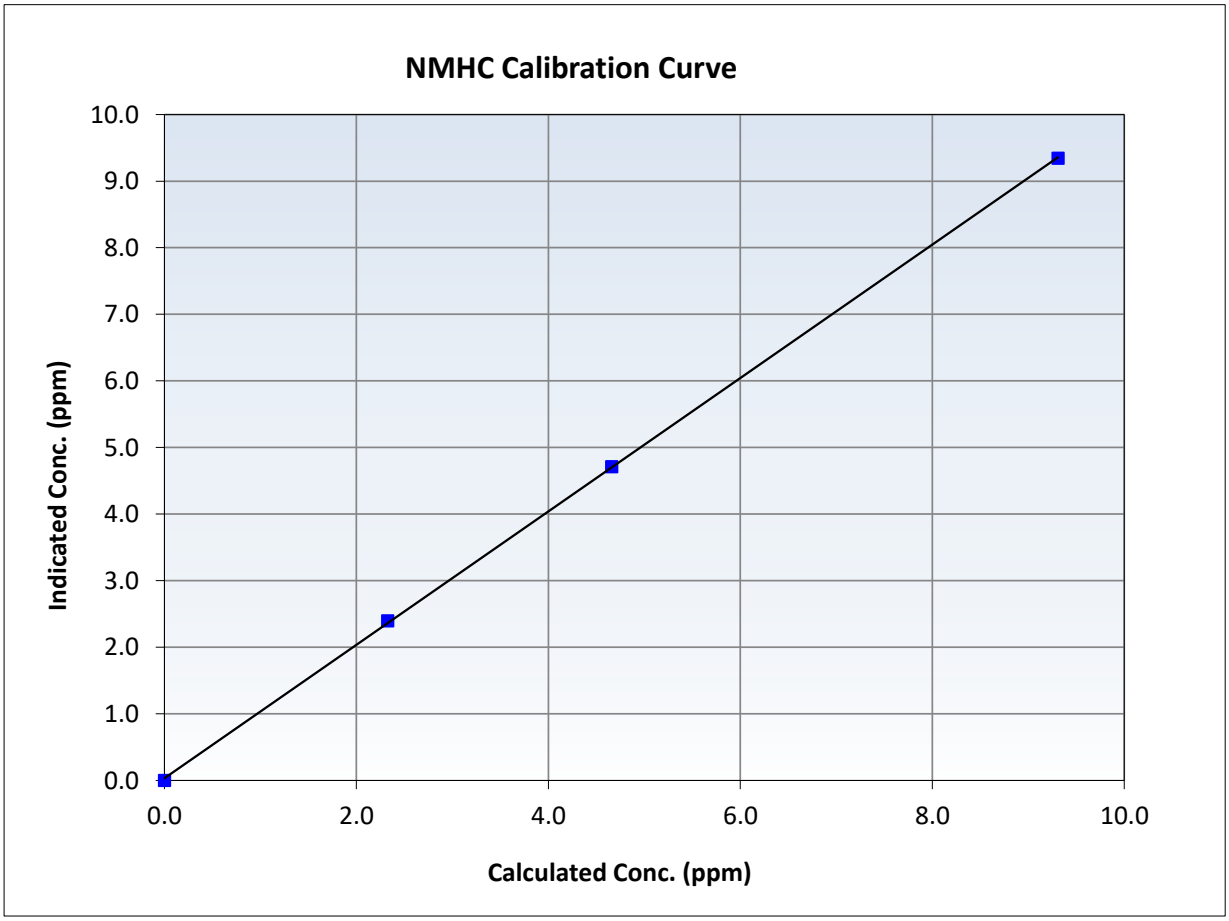
NMHC Calibration Summary

Station Information

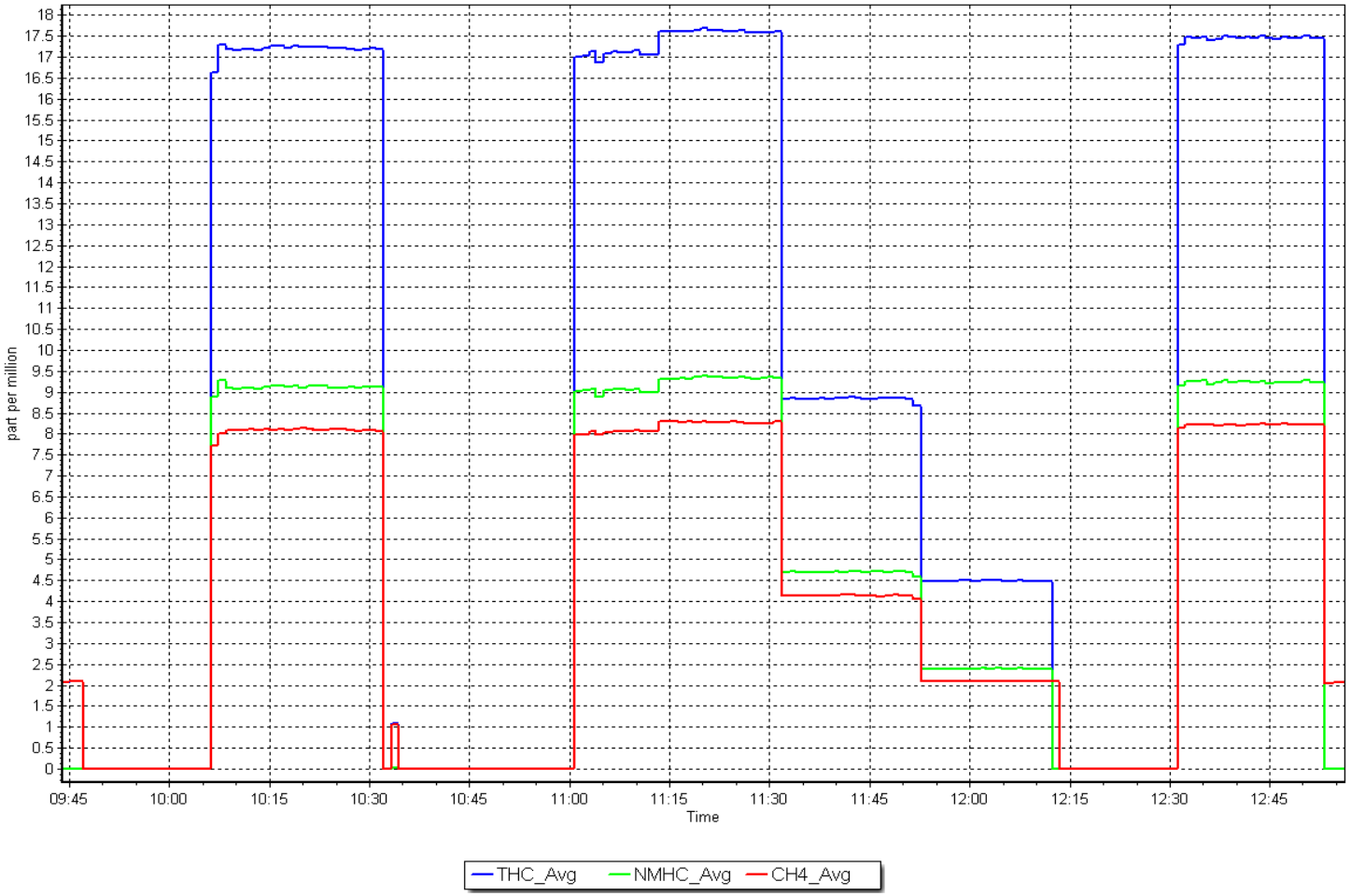
Calibration Date:	September 29, 2026	Previous Calibration:	August 26, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:43	End Time (MST):	12:56
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430012

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999942	*≥0.995*
9.31	9.35	0.9963	Slope	1.001717	*0.90 - 1.10*
4.66	4.71	0.9890			
2.32	2.40	0.9694	Intercept	0.032879	*+/-0.5*



NMHC Calibration Plot Date: September 29, 2026 Location: Lower Camp



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS13
FORT MCKAY SOUTH
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	September 1, 2026	Last Cal Date:	August 10, 2026
Start time (MST):	9:34	End time (MST):	13:53
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.59	ppm	Cal Gas Exp Date:	April 16, 2034
Cal Gas Cylinder #:	CC504296			
Removed Cal Gas Conc:	50.59	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	2657
Zero Air Gen Model:	Teledyne API T701		Serial Number:	1118

Analyzer Information

Analyzer make:	Thermo 43i-TLE		Serial Number:	1331259320	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999835	1.006476	Backgd or Offset:	3.03	3.03
Calibration intercept:	0.462054	-0.237905	Coeff or Slope:	0.987	0.987

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.4	----
As found High point	4921	79.1	800.3	805.7	0.993
As found Mid point	4961	39.5	399.6	403.4	0.990
As found Low point	4980	19.8	200.3	202.2	0.989
New cylinder response					
Baseline Corr As found:	806.1	Previous response	800.6	*% change	0.7%
Baseline Corr 2nd AF pt:	403.8	AF Slope:	1.007062	AF Intercept:	0.181945
Baseline Corr 3rd AF pt:	202.6	AF Correlation:	0.999997	* = > +/-5% change initiates investigation	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.3	----
High point	4921	79.1	800.3	805.0	0.994
Mid point	4961	39.5	399.6	402.7	0.992
Low point	4980	19.8	200.3	201.0	0.997
As left zero	5000	0.0	0.0	-0.1	----
As left span	4921	79.1	800.3	802.8	0.997
				Average Correction Factor:	0.994

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

SO_2 Calibration Summary

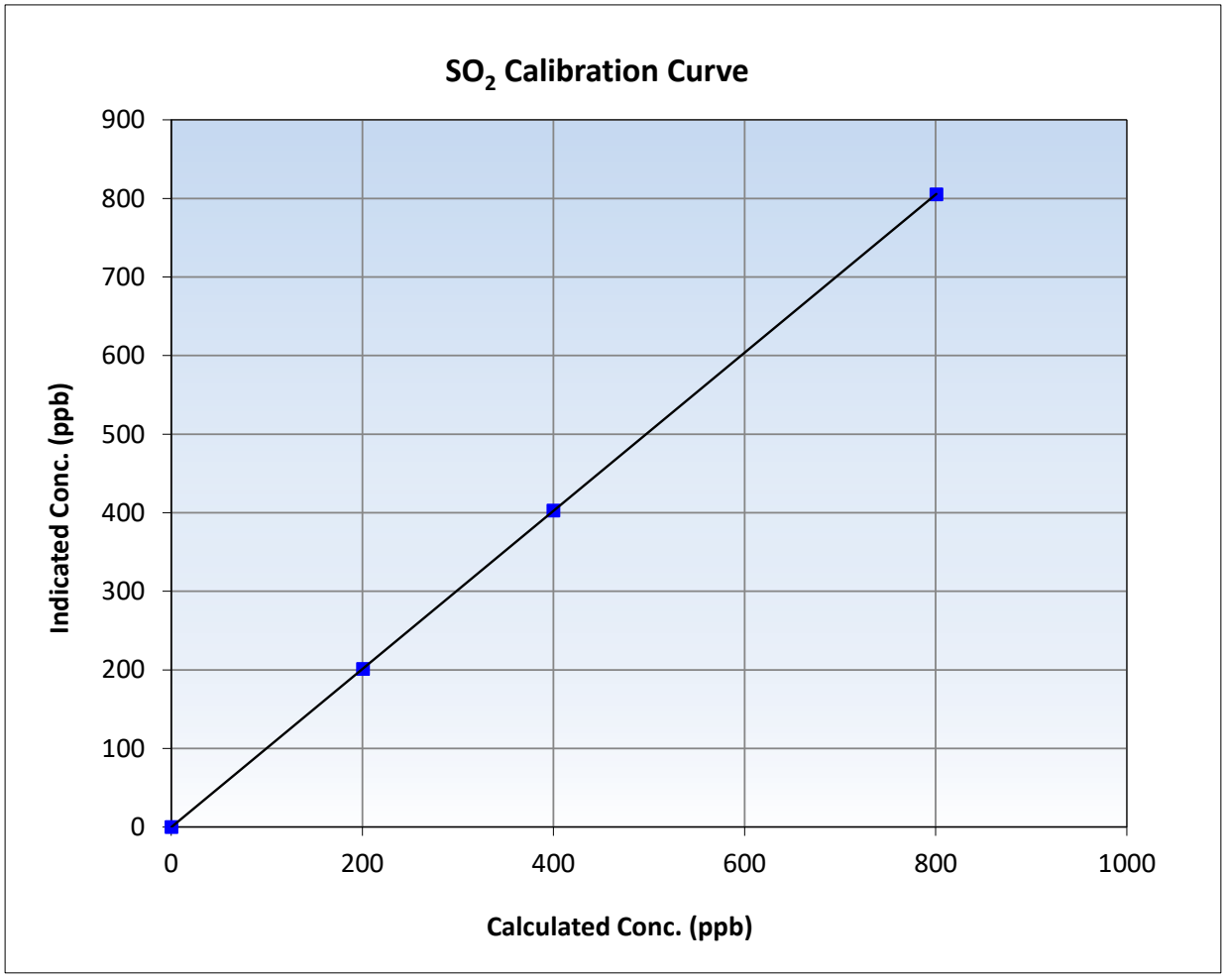
Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:34	End Time (MST):	13:53
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1331259320

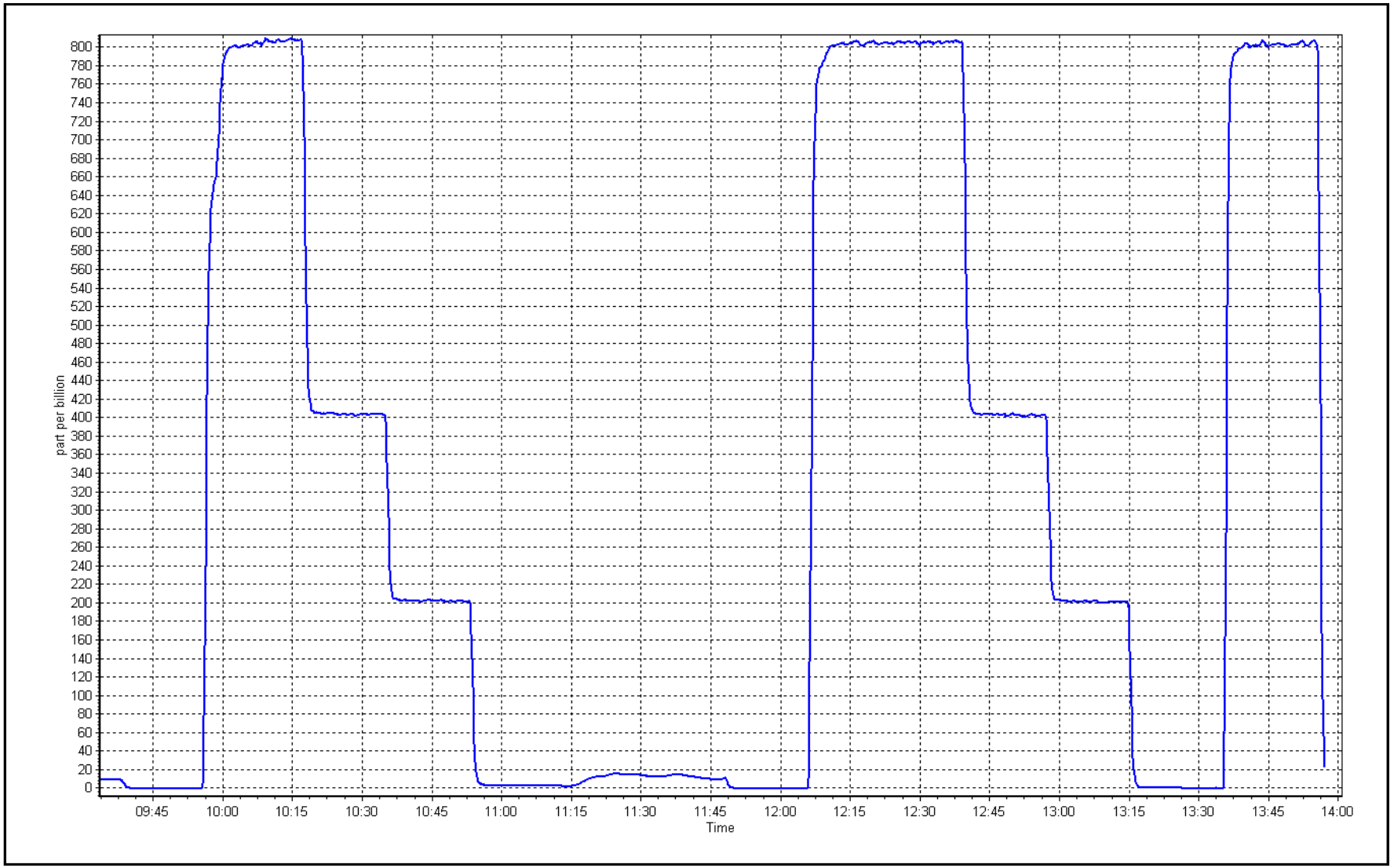
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
800.3	805.0	0.9942
399.6	402.7	0.9924
200.3	201.0	0.9967

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	1.006476	*0.90 - 1.10*
Intercept	-0.237905	*+/-30*



SO2 Calibration Plot Date: September 1, 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:	September 17, 2026	Last Cal Date:	August 19, 2026
Start time (MST):	8:43	End time (MST):	12:26
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 T700P		Serial Number:	2657
ZAG Make/Model:	Teledyne API T701		Serial Number:	138

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

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.007135	1.010005	Backgd or Offset:	3.77	3.73
Calibration intercept:	-0.218405	-0.318400	Coeff or Slope:	1.13	1.112

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4918	81.6	79.6	81.5	0.975
As found Mid point	4959	40.8	39.8	40.3	0.983
As found Low point	4980	20.4	19.9	19.7	1.000
New cylinder response					

Baseline Corr As found:	81.7	Prev response:	80.00	*% change:	2.1%
Baseline Corr 2nd AF pt:	40.5	AF Slope:	1.027510	AF Intercept:	-0.478374
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999947	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4918	81.6	79.6	80.2	0.993
Mid point	4959	40.8	39.8	39.9	0.998
Low point	4980	20.4	19.9	19.5	1.021
As left zero	5000	0.0	0.0	-0.1	----
As left span	4918	81.6	79.6	80.7	0.987
SO2 Scrubber Check	4921	79.1	791.0	0.0	----

Date of last scrubber change:	July 20, 2026	Ave Corr Factor	1.004
Date of last converter efficiency test:			

Notes: Changed inlet filter after multipoint as founds. SO2 scrubber check after calibrator zero and passed. Adjusted span only.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

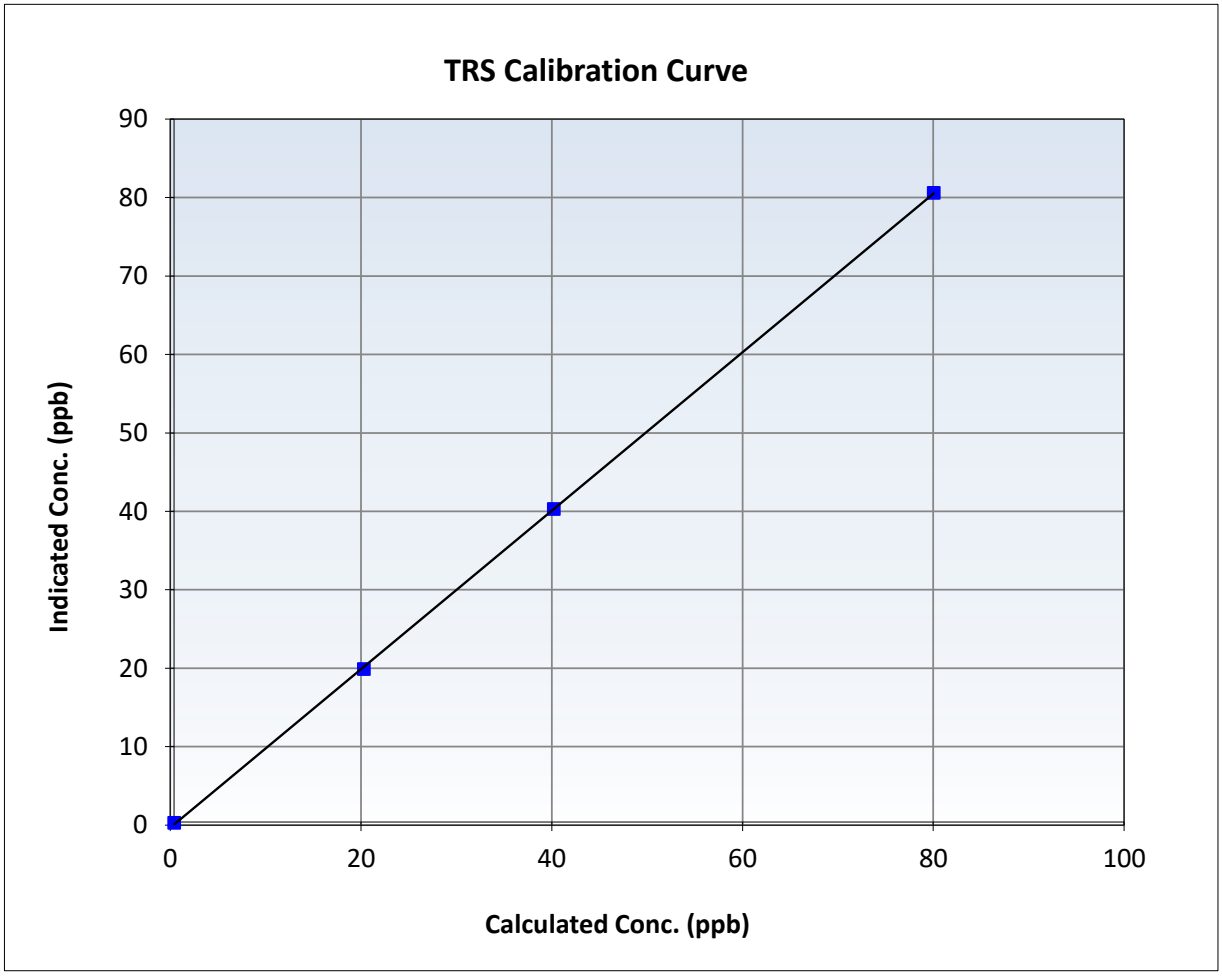
TRS Calibration Summary

Station Information

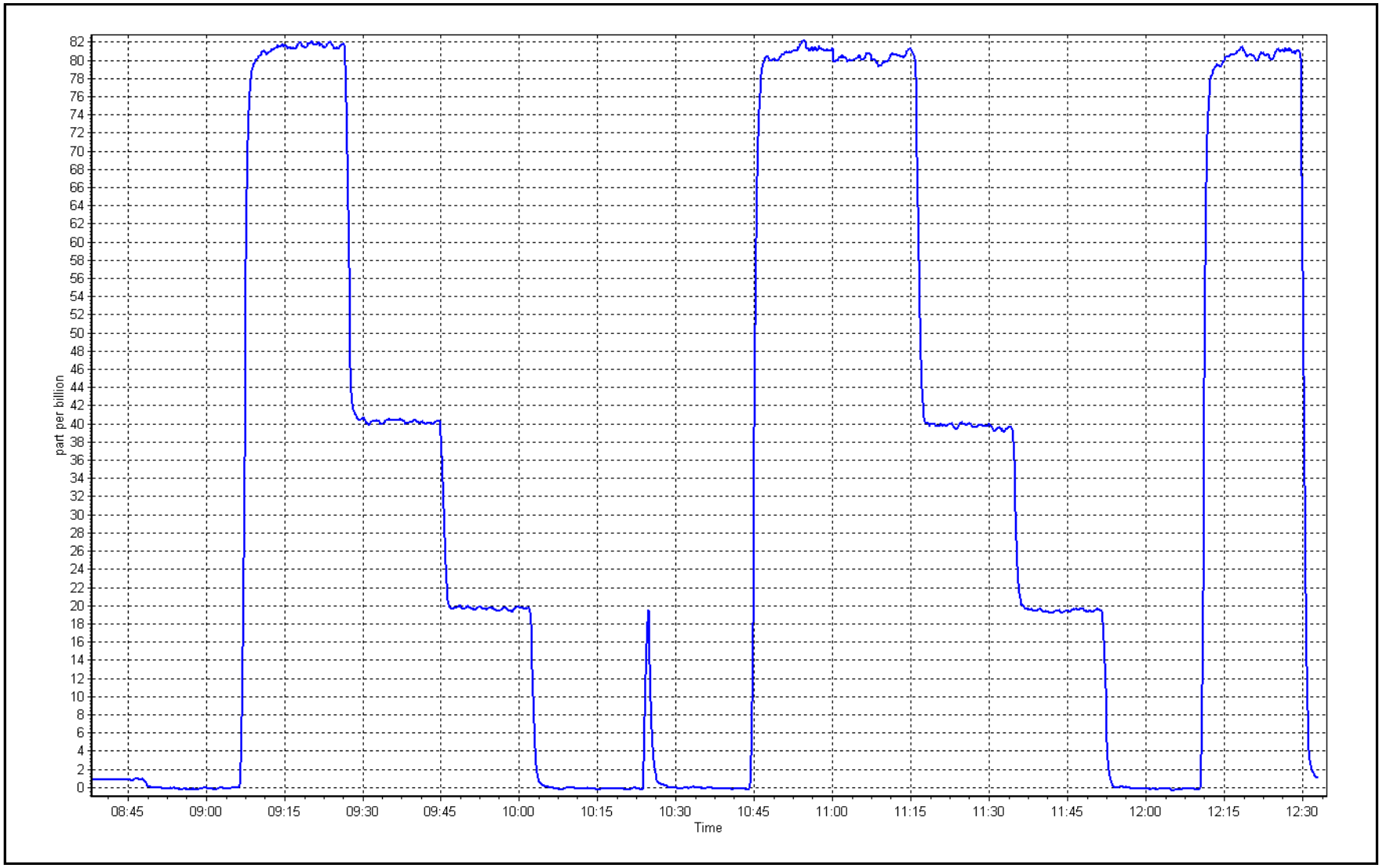
Calibration Date:	September 17, 2026	Previous Calibration:	August 19, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	8:43	End Time (MST):	12:26
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1180540017

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.1	----	Correlation Coefficient	0.999961	*≥0.995*
79.6	80.2	0.9931	Slope	1.010005	*0.90 - 1.10*
39.8	39.9	0.9981			
19.9	19.5	1.0210	Intercept	-0.318400	*+/-3*



TRS Calibration Plot Date: September 17, 2026 Location: Fort McKay South



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	September 1, 2026	Last Cal Date:	August 10, 2026
Start time (MST):	9:34	End time (MST):	13:53
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC504296	Cal Gas Expiry Date:	April 16, 2034
CH4 Cal Gas Conc.	499.0 ppm	CH4 Equiv Conc.	1053.7 ppm
C3H8 Cal Gas Conc.	201.7 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	499.0 ppm	CH4 Equiv Conc.	1053.7 ppm
Removed C3H8 Conc.	201.7 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	2657
Zero Air Gen model:	Teledyne API T701	Serial Number:	1118

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.18E-04	3.14E-04	NMHC SP Ratio:	4.29E-05	4.33E-05
CH4 Retention time:	16.60	16.80	NMHC Peak Area:	204258	202608
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	16.67	16.37	1.018
As found Mid point	4961	39.5	8.32	8.11	1.026
As found Low point	4980	19.8	4.17	3.98	1.048
New cylinder response					
Baseline Corr AF:	16.37	Prev response	16.59	*% change	-1.3%
Baseline Corr 2nd AF:	8.11	AF Slope:	0.983807	AF Intercept:	-0.058362
Baseline Corr 3rd AF:	3.98	AF Correlation:	0.999941	* = > +/-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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	16.67	16.71	0.998
Mid point	4961	39.5	8.32	8.34	0.998
Low point	4980	19.8	4.17	4.12	1.014
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	16.67	16.77	0.994
				Average Correction Factor	1.003

Notes: Sample inlet filter, sample pump and N2 was changed after multipoint as founds. Adjusted span only.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	8.77	8.59	1.021
As found Mid point	4961	39.5	4.38	4.26	1.029
As found Low point	4980	19.8	2.20	2.09	1.049
New cylinder response					
Baseline Corr AF:	8.59	Prev response	8.77	*% change	-2.1%
Baseline Corr 2nd AF:	4.26	AF Slope:	0.980892	AF Intercept:	-0.029380
Baseline Corr 3rd AF:	2.09	AF Correlation:	0.999946	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.77	8.77	1.000
Mid point	4961	39.5	4.38	4.34	1.010
Low point	4980	19.8	2.20	2.16	1.019
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.77	8.76	1.001
				Average Correction Factor	1.010

CH4 As Found Data

Set Point	Dilution air flow rate (sccm)	16	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	196813
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	7.89	7.77	1.015
As found Mid point	4961	39.5	3.94	3.85	1.024
As found Low point	4980	19.8	1.98	1.89	1.046
New cylinder response					
Baseline Corr AF:	7.77	Prev response	7.82	*% change	-0.6%
Baseline Corr 2nd AF:	3.85	AF Slope:	0.986771	AF Intercept:	-0.028782
Baseline Corr 3rd AF:	1.89	AF Correlation:	0.999937	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	7.89	7.93	0.995
Mid point	4961	39.5	3.94	4.00	0.985
Low point	4980	19.8	1.98	1.96	1.008
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	7.89	8.01	0.985
				Average Correction Factor	0.996

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.995989	1.003692
THC Cal Offset:	-0.015937	-0.028349
CH4 Cal Slope:	0.990165	1.006761
CH4 Cal Offset:	0.004247	-0.002558
NMHC Cal Slope:	1.001723	1.000969
NMHC Cal Offset:	-0.020584	-0.025190

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

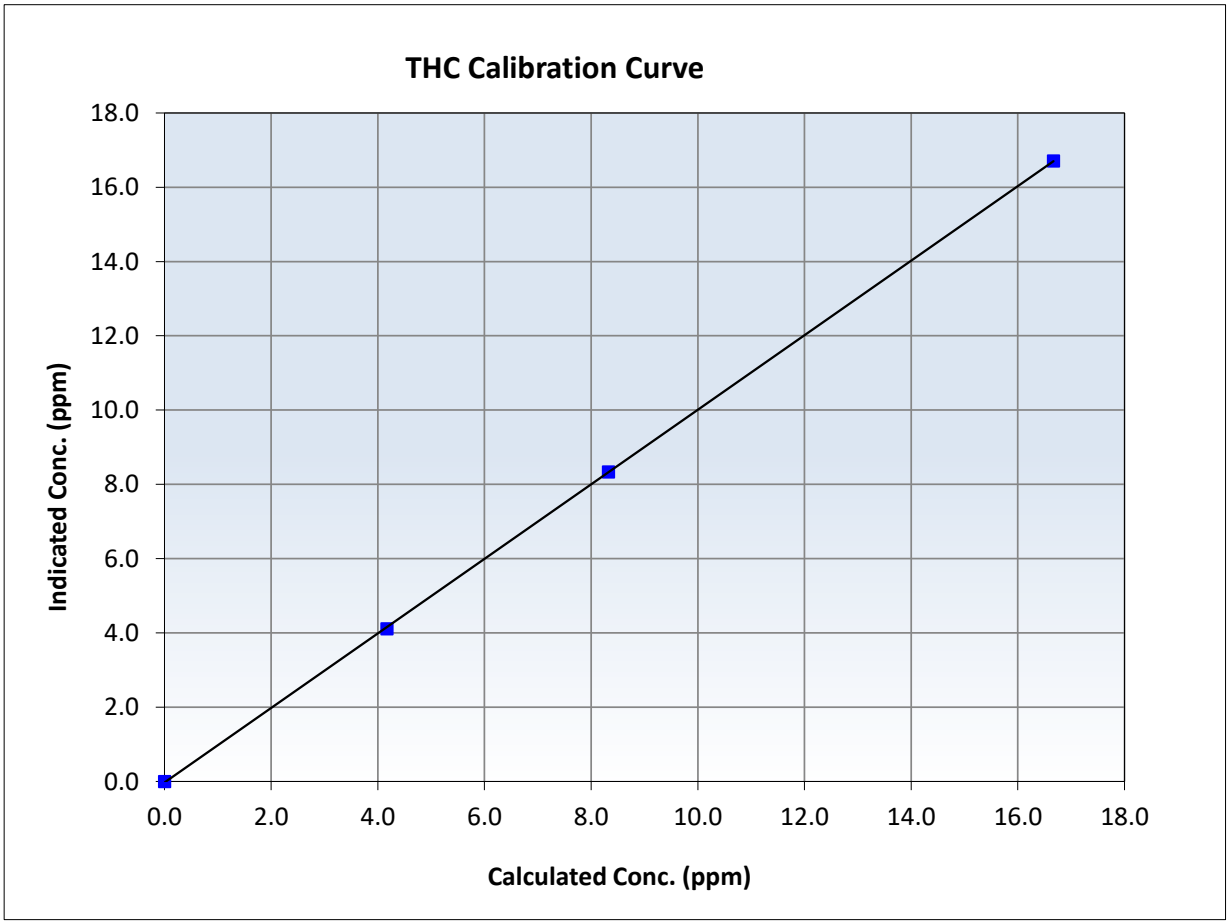
THC Calibration Summary

Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:34	End Time (MST):	13:53
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999981	≥0.995
16.67	16.71	0.9977	Slope	1.003692	0.90 - 1.10
8.32	8.34	0.9985	Intercept	-0.028349	+/-0.5
4.17	4.12	1.0140			



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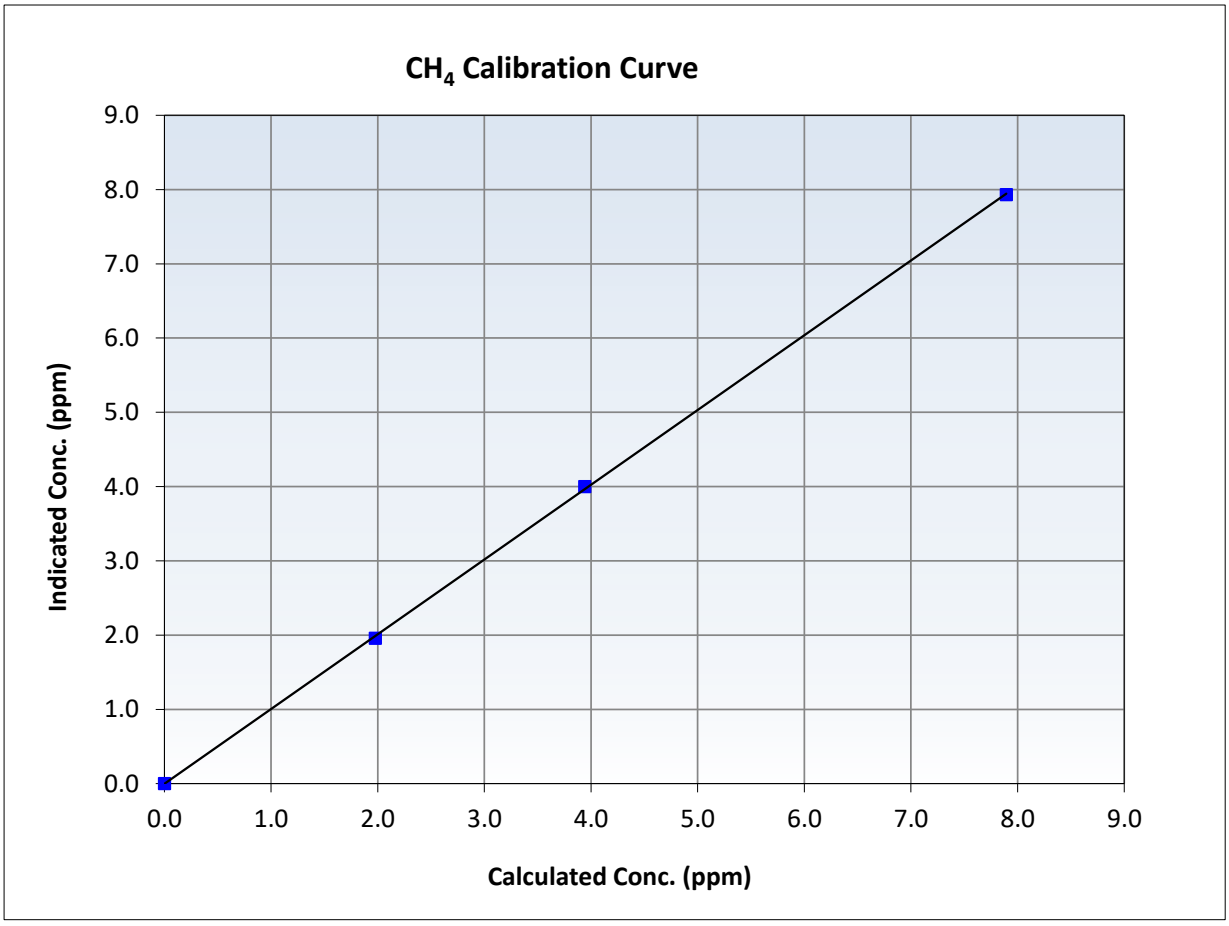
CH_4 Calibration Summary

Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:34	End Time (MST):	13:53
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999940	≥0.995
7.89	7.93	0.9950	Slope	1.006761	0.90 - 1.10
3.94	4.00	0.9852			
1.98	1.96	1.0082	Intercept	-0.002558	+/-0.5



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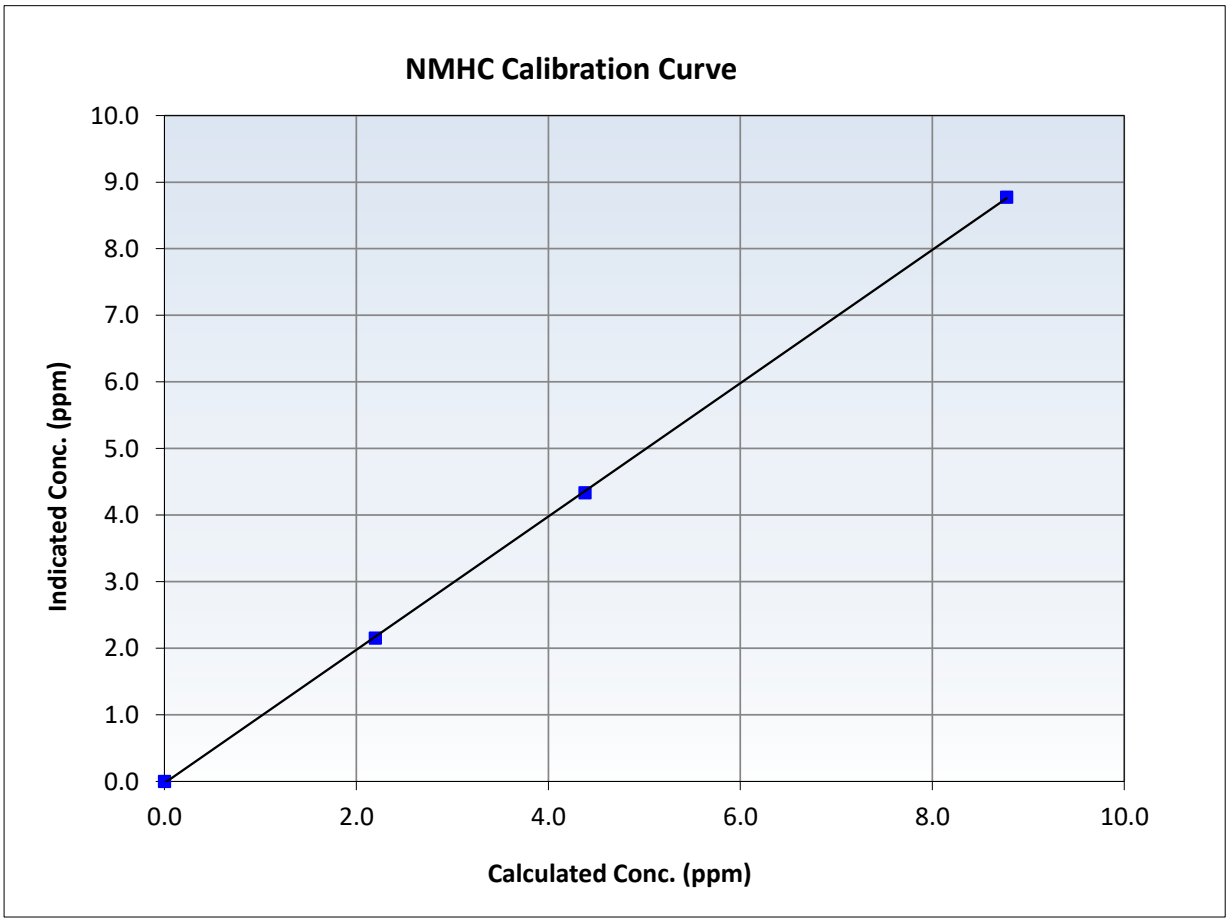
NMHC Calibration Summary

Station Information

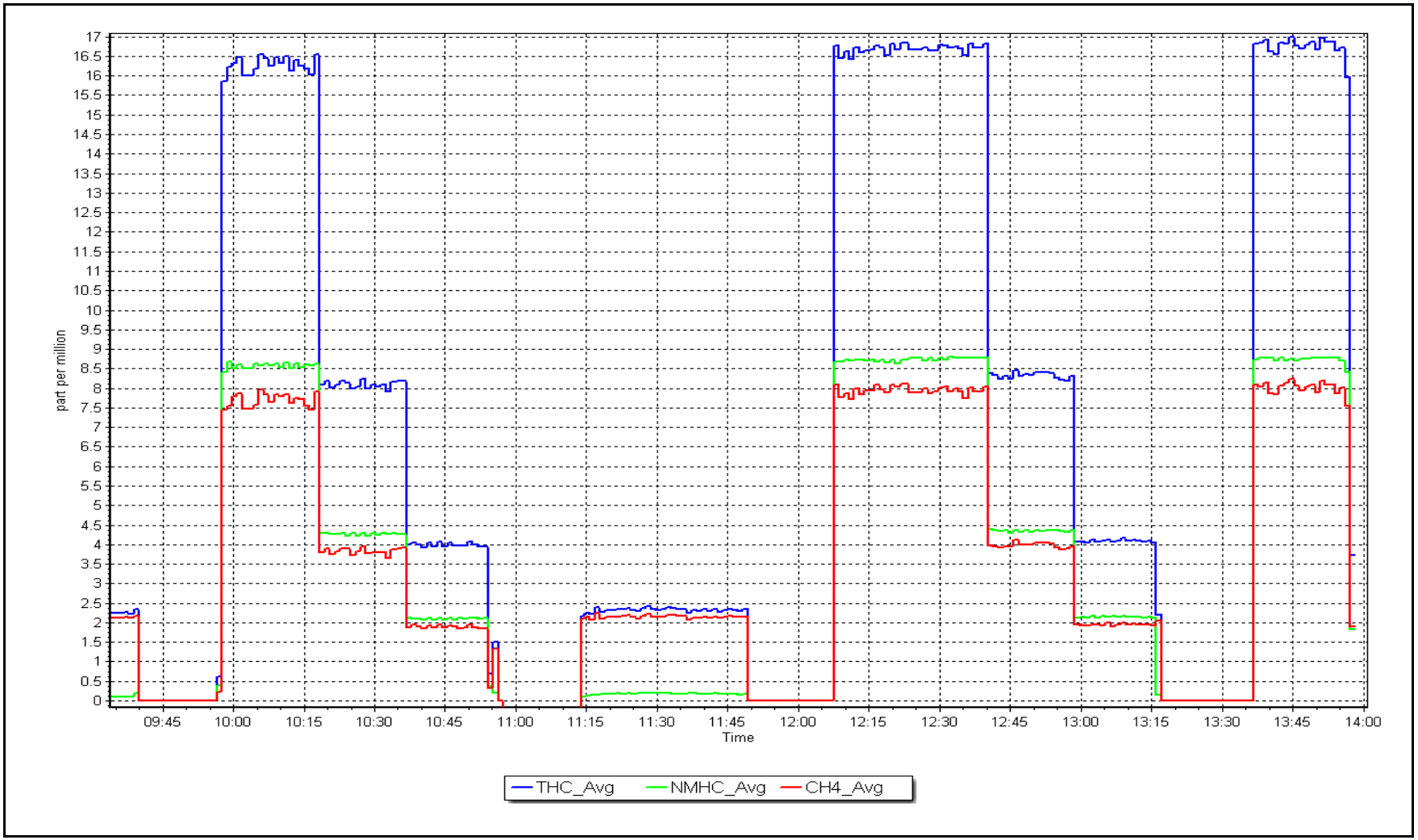
Calibration Date:	September 1, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:34	End Time (MST):	13:53
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999959	≥0.995
8.77	8.77	1.0001	Slope	1.000969	0.90 - 1.10
4.38	4.34	1.0100	Intercept	-0.025190	+/-0.5
2.20	2.16	1.0193			



NMHC Calibration Plot Date: September 1, 2026 Location: Fort McKay South



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	September 2, 2026	Last Cal Date:	September 1, 2026
Start time (MST):	10:02	End time (MST):	12:15
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC504296	Cal Gas Expiry Date:	April 16, 2034
CH4 Cal Gas Conc.	499.0 ppm	CH4 Equiv Conc.	1053.7 ppm
C3H8 Cal Gas Conc.	201.7 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	499.0 ppm	CH4 Equiv Conc.	1053.7 ppm
Removed C3H8 Conc.	201.7 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	2657
Zero Air Gen model:	Teledyne API T701	Serial Number:	138

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.14E-04	3.31E-04	NMHC SP Ratio:	4.33E-05	4.28E-05
CH4 Retention time:	16.80	17.00	NMHC Peak Area:	202608	204887
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)) *Limit = 0.90-1.10*
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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	16.67	16.71	0.998
Mid point	4961	39.5	8.32	8.29	1.004
Low point	4980	19.8	4.17	4.09	1.021
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	16.67	16.73	0.996
				Average Correction Factor	1.007

Notes: No asfounds done as the sample pump unresponsive. Sample pump replaced. Adjusted span only.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.77	8.76	1.002
Mid point	4961	39.5	4.38	4.35	1.007
Low point	4980	19.8	2.20	2.15	1.022
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.77	8.73	1.005
				Average Correction Factor	1.010

CH4 As Found Data

Set Point	Dilution air flow rate (sccm)	16	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	196813
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	7.89	7.95	0.993
Mid point	4961	39.5	3.94	3.94	1.000
Low point	4980	19.8	1.98	1.94	1.020
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	7.89	8.00	0.987
				Average Correction Factor	1.004

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	1.003692	1.004084
THC Cal Offset:	-0.028349	-0.048962
CH4 Cal Slope:	1.006761	1.009360
CH4 Cal Offset:	-0.002558	-0.027782
NMHC Cal Slope:	1.000969	0.999338
NMHC Cal Offset:	-0.025190	-0.021180

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

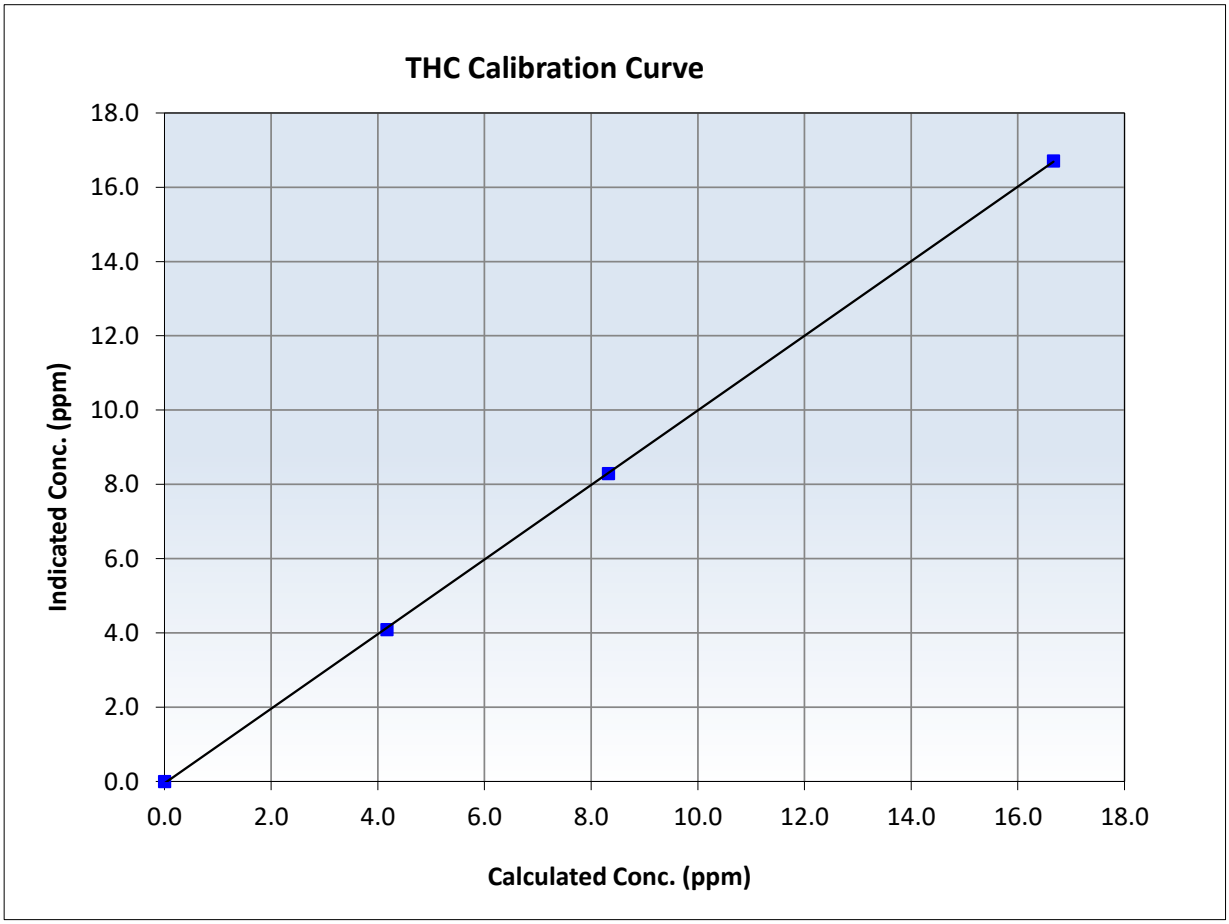
THC Calibration Summary

Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	September 1, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:02	End Time (MST):	12:15
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999960	≥0.995
16.67	16.71	0.9975	Slope	1.004084	0.90 - 1.10
8.32	8.29	1.0039			
4.17	4.09	1.0210	Intercept	-0.048962	+/-0.5



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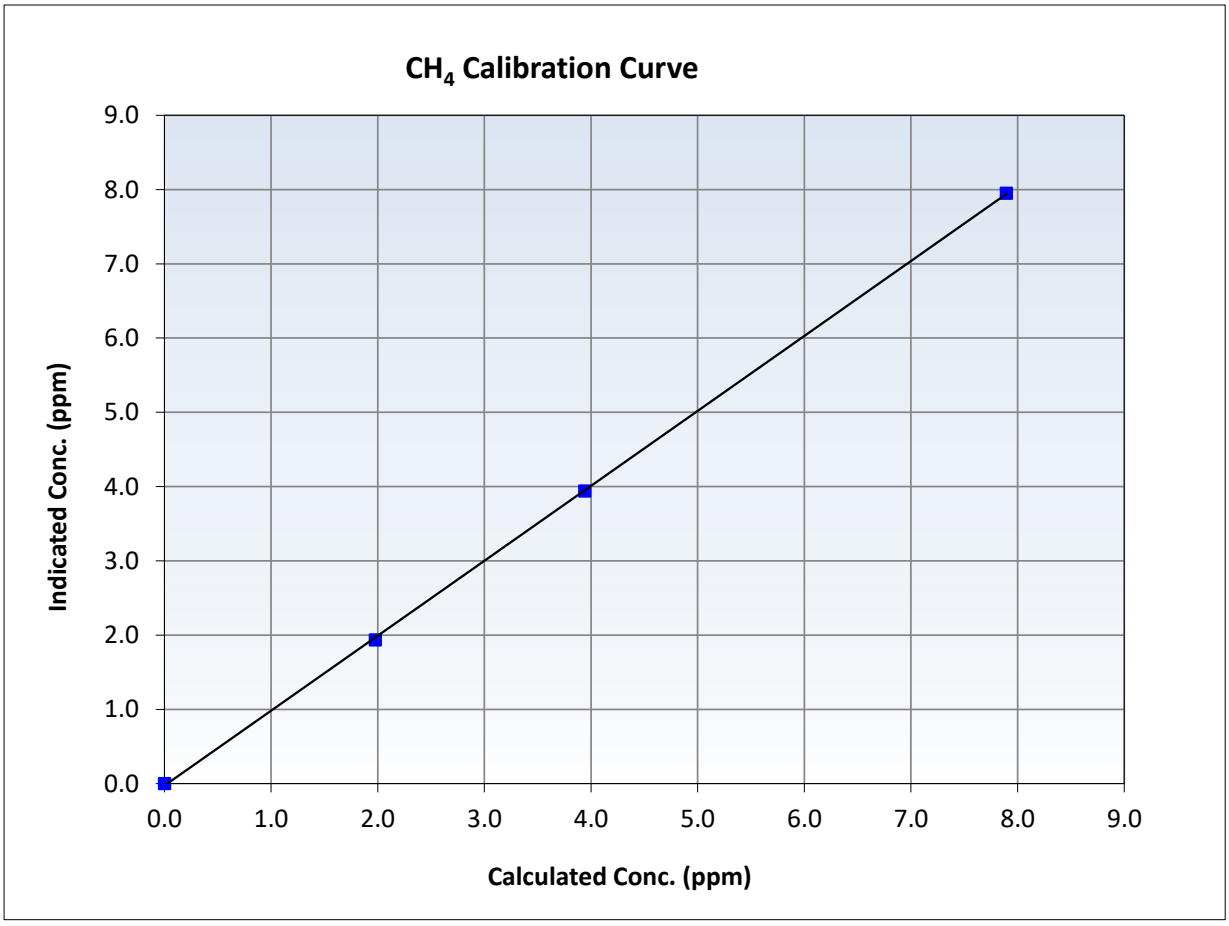
CH_4 Calibration Summary

Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	September 1, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:02	End Time (MST):	12:15
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999944	≥0.995
7.89	7.95	0.9926	Slope	1.009360	0.90 - 1.10
3.94	3.94	1.0004			
1.98	1.94	1.0202	Intercept	-0.027782	+/-0.5



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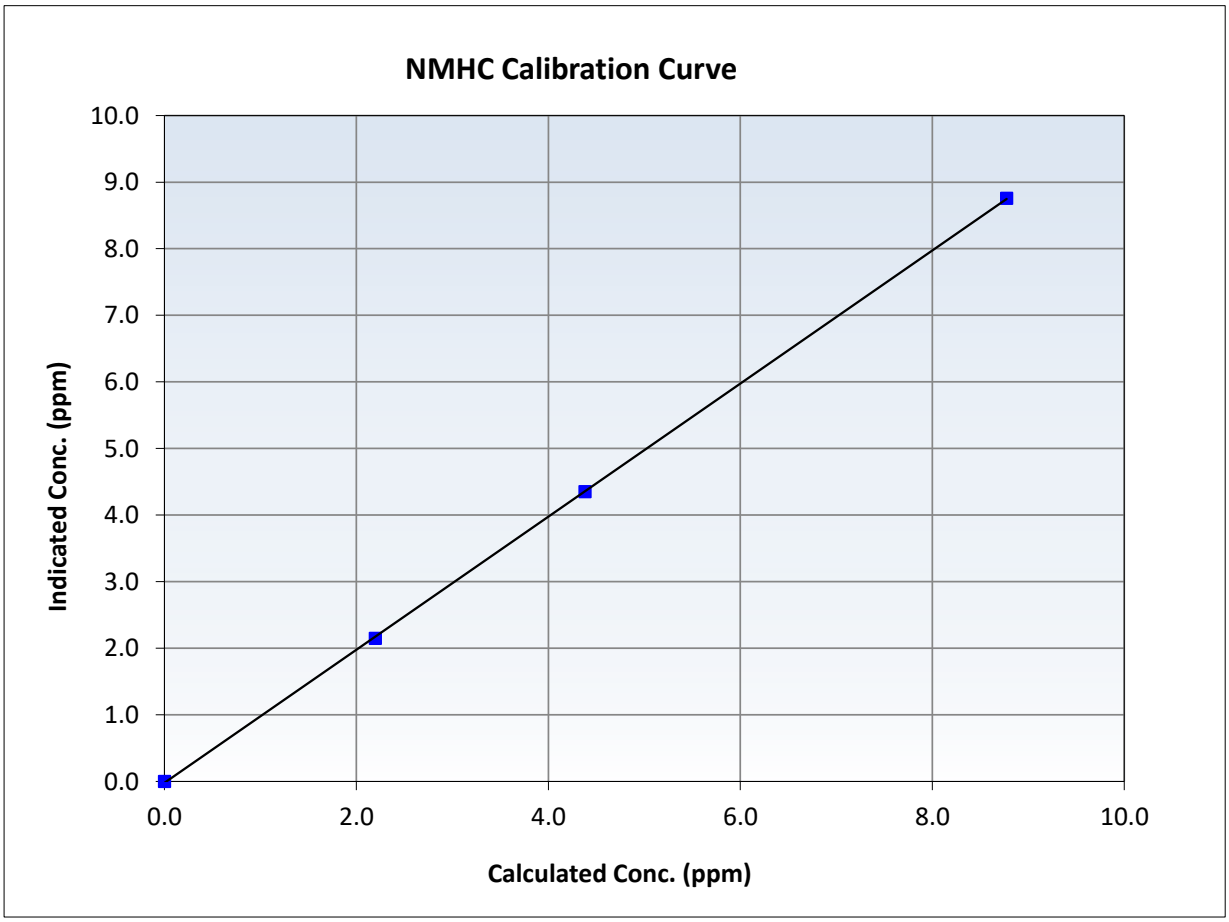
NMHC Calibration Summary

Station Information

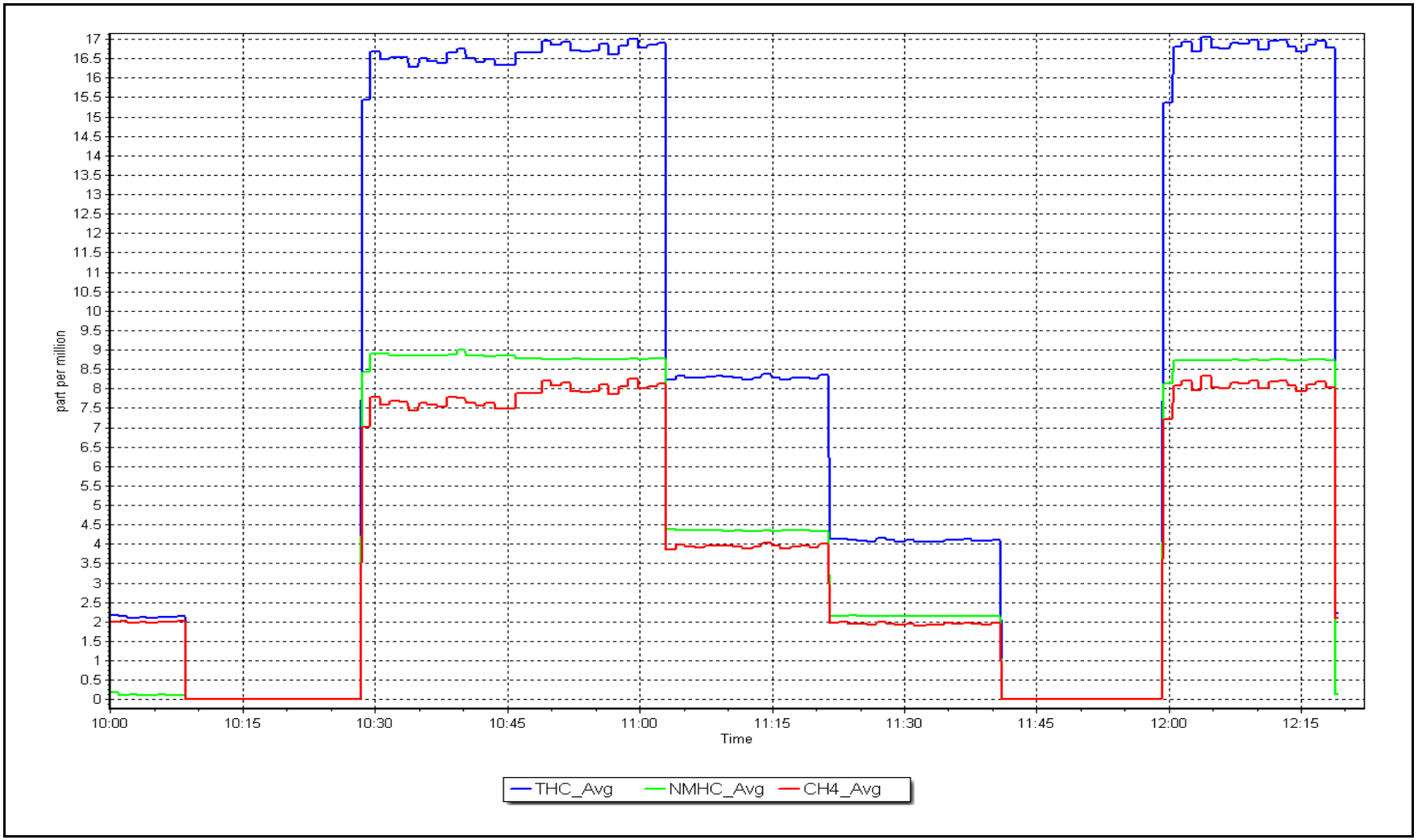
Calibration Date:	September 2, 2026	Previous Calibration:	September 1, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:02	End Time (MST):	12:15
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999973	≥0.995
8.77	8.76	1.0020	Slope	0.999338	0.90 - 1.10
4.38	4.35	1.0070	Intercept	-0.021180	+/-0.5
2.20	2.15	1.0217			



NMHC Calibration Plot Date: September 2, 2026 Location: Fort McKay South



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	September 21, 2026	Last Cal Date:	September 2, 2026
Start time (MST):	9:30	End time (MST):	13:10
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC504296	Cal Gas Expiry Date:	April 16, 2034
CH4 Cal Gas Conc.	499.0 ppm	CH4 Equiv Conc.	1053.7 ppm
C3H8 Cal Gas Conc.	201.7 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	499.0 ppm	CH4 Equiv Conc.	1053.7 ppm
Removed C3H8 Conc.	201.7 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	2657
Zero Air Gen model:	Teledyne API T701	Serial Number:	138

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.31E-04	3.05E-04	NMHC SP Ratio:	4.28E-05	5.04E-05
CH4 Retention time:	17.00	17.20	NMHC Peak Area:	204887	173839
Zero Chromatogram:	ON	OFF	Flat Baseline:	ON	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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	16.67	17.59	0.948
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	17.59	Prev response	16.69	*% change	5.1%
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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	16.67	16.70	0.998
Mid point	4961	39.5	8.32	8.26	1.008
Low point	4980	19.8	4.17	4.10	1.019
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	16.67	16.57	1.006
				Average Correction Factor	1.008

Notes: Windows updated, gas pressures adjusted. New Zero chrome ran, not applied. Removed "use flat baseline"

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	8.77	8.79	0.999
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.79	Prev response	8.75	*% change	0.4%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.77	8.77	1.000
Mid point	4961	39.5	4.38	4.33	1.013
Low point	4980	19.8	2.20	2.15	1.022
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.77	8.66	1.013
				Average Correction Factor	1.012

CH4 As Found Data

Set Point	Dilution air flow rate (sccm)	16	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	196813
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	7.89	8.81	0.896
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.81	Prev response	7.94	*% change	9.9%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	7.89	7.92	0.996
Mid point	4961	39.5	3.94	3.93	1.002
Low point	4980	19.8	1.98	1.95	1.016
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	7.89	7.91	0.998
				Average Correction Factor	1.005

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	1.004084	1.002783
THC Cal Offset:	-0.048962	-0.048976
CH4 Cal Slope:	1.009360	1.005002
CH4 Cal Offset:	-0.027782	-0.019983
NMHC Cal Slope:	0.999338	1.000658
NMHC Cal Offset:	-0.021180	-0.028993

Calibration Performed By: Ryan Power

Wood Buffalo Environmental Association

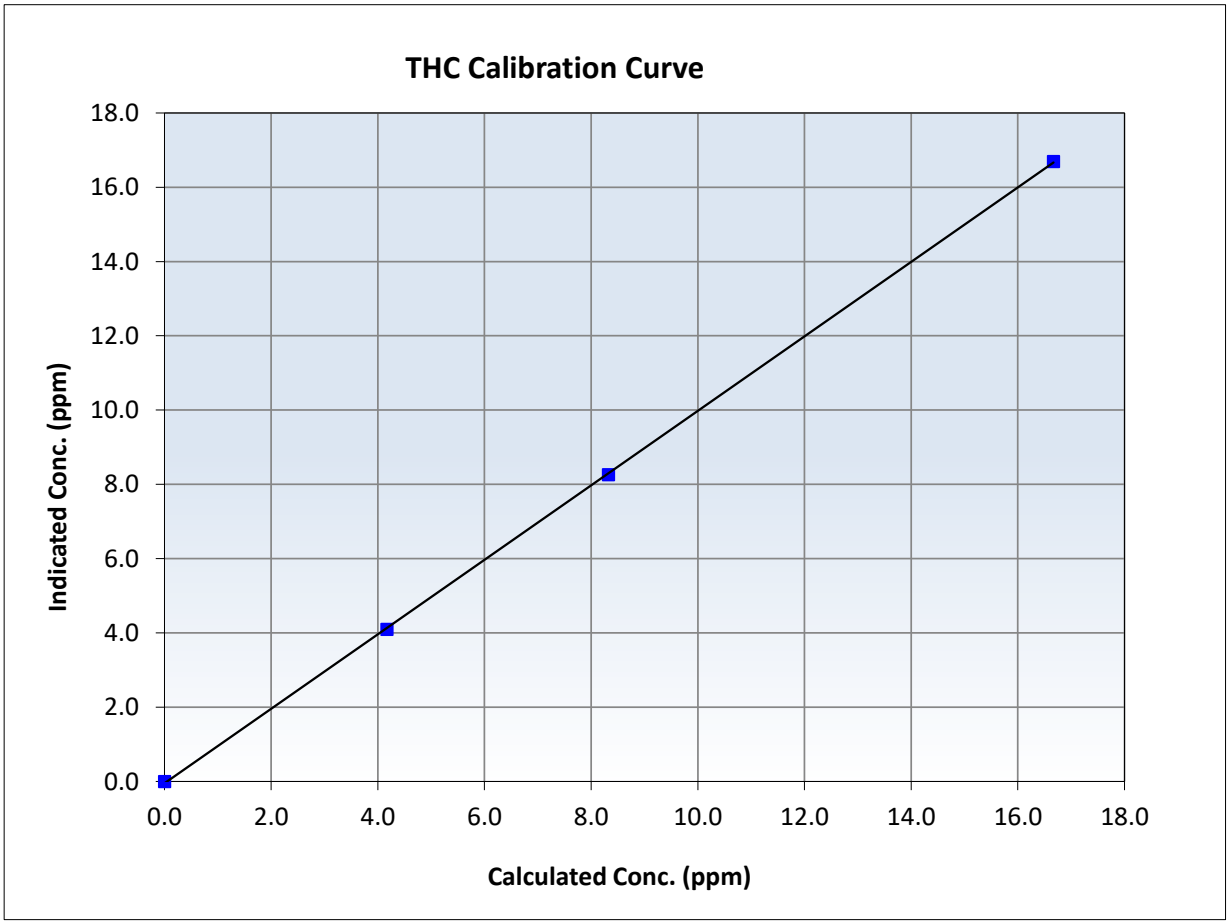
THC Calibration Summary

Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	September 2, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:30	End Time (MST):	13:10
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999959	≥0.995
16.67	16.70	0.9984	Slope	1.002783	0.90 - 1.10
8.32	8.26	1.0077			
4.17	4.10	1.0190	Intercept	-0.048976	+/-0.5



Wood Buffalo Environmental Association

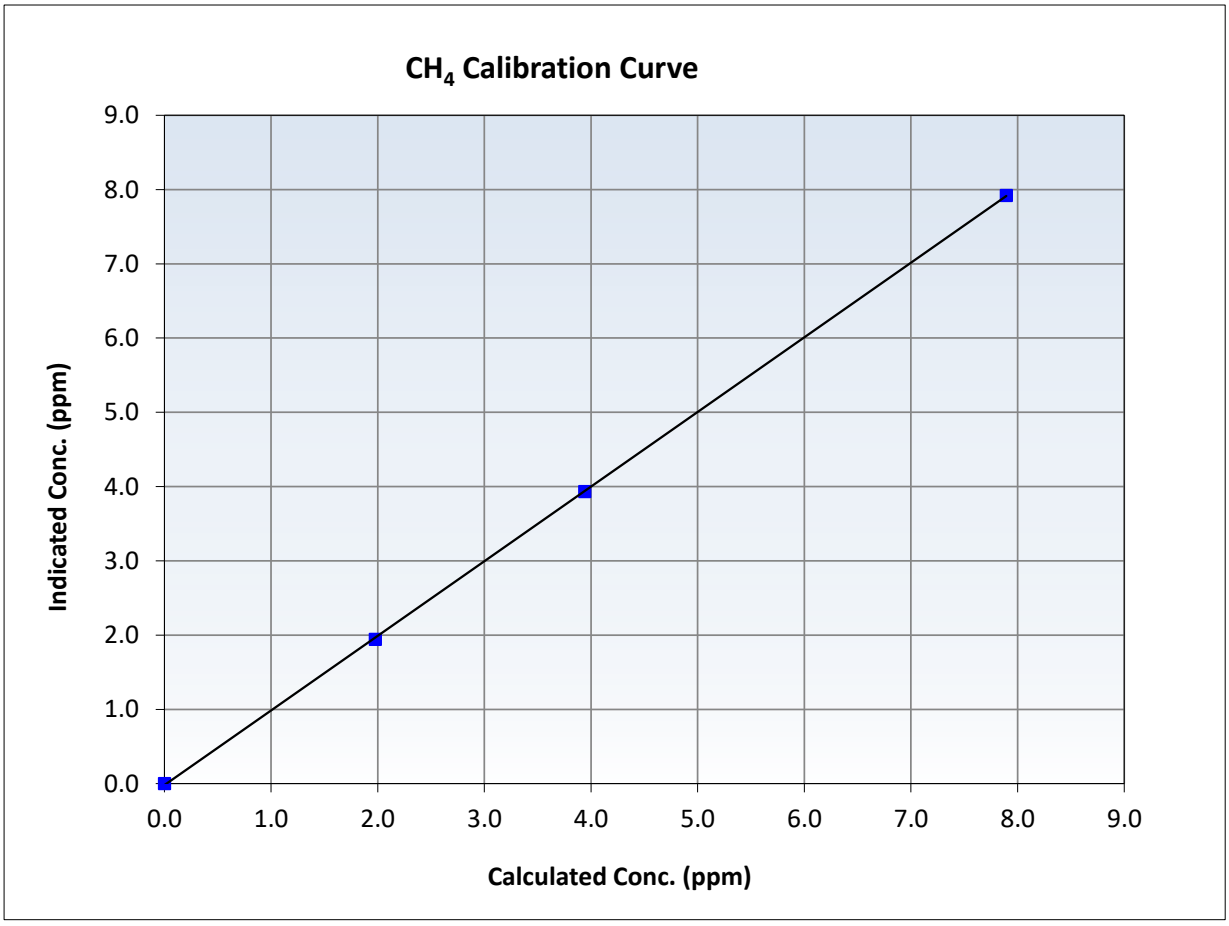
CH_4 Calibration Summary

Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	September 2, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:30	End Time (MST):	13:10
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999971	≥0.995
7.89	7.92	0.9963	Slope	1.005002	0.90 - 1.10
3.94	3.93	1.0022			
1.98	1.95	1.0160	Intercept	-0.019983	+/-0.5



Wood Buffalo Environmental Association

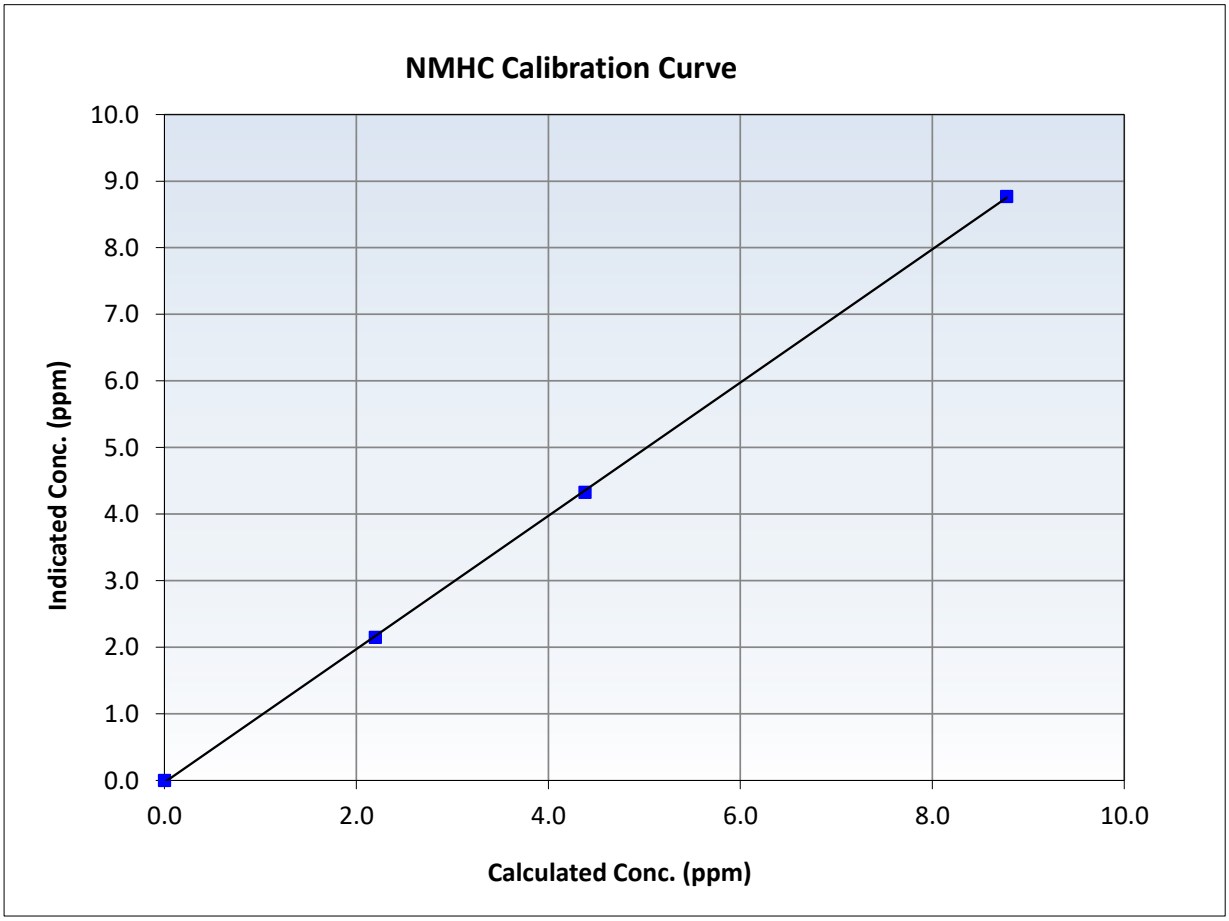
NMHC Calibration Summary

Station Information

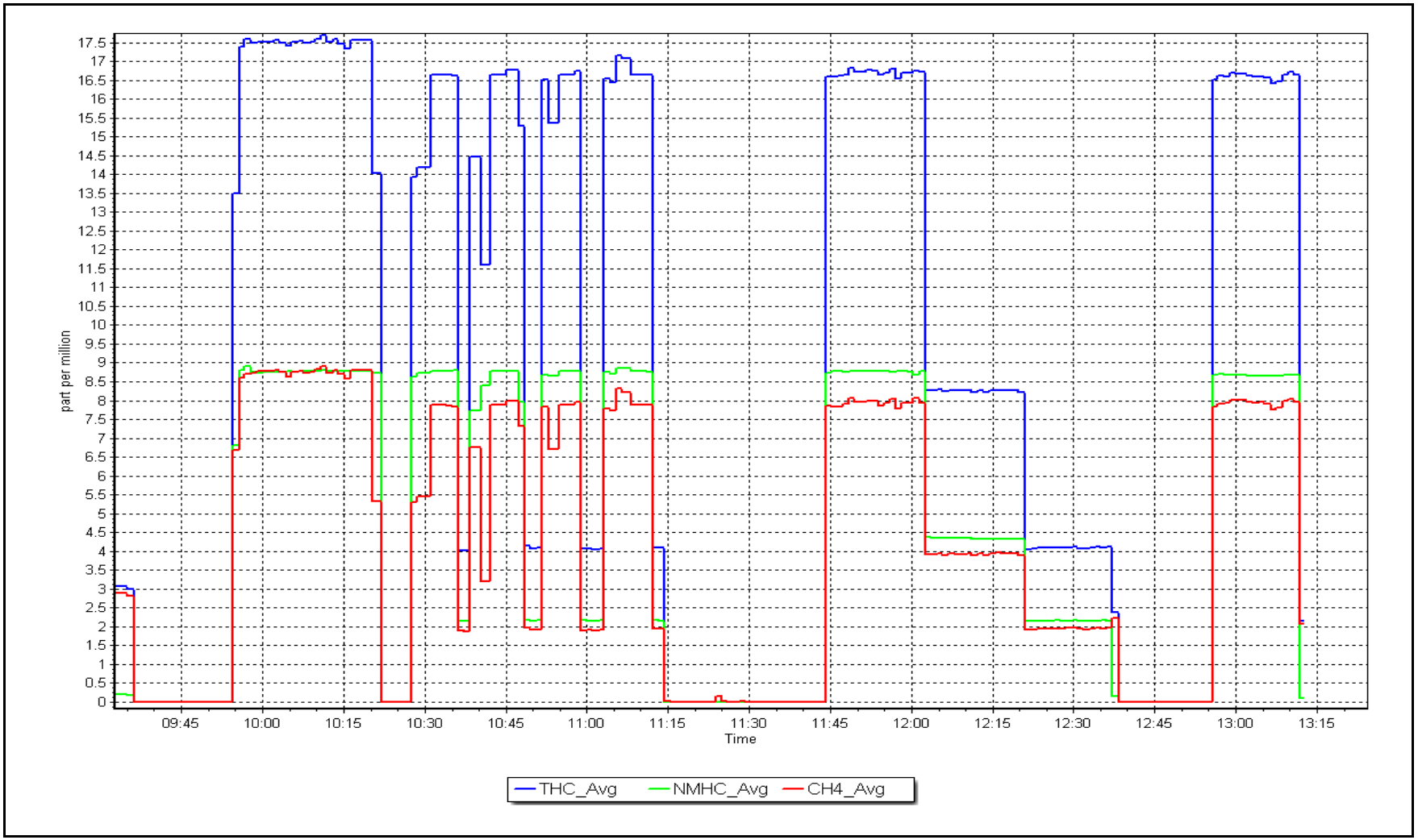
Calibration Date:	September 21, 2026	Previous Calibration:	September 2, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:30	End Time (MST):	13:10
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999942	≥0.995
8.77	8.77	1.0004	Slope	1.000658	0.90 - 1.10
4.38	4.33	1.0128			
2.20	2.15	1.0217	Intercept	-0.028993	+/-0.5



NMHC Calibration Plot Date: September 21, 2026 Location: Fort McKay South



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Fort McKay South
Station number:	AMS 13
Calibration Date:	September 17, 2026
Last Cal Date:	August 14, 2026
Start time (MST):	9:31
End time (MST):	13:28
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	T2UP1RP	Cal Gas Expiry Date:	November 17, 2026
NOX Cal Gas Conc:	48.25 ppm	NO Cal Gas Conc:	47.88 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	48.25 ppm	Removed Gas NO Conc:	47.88 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne T750	Serial Number:	282
ZAG make/model:	Teledyne 751H	Serial Number:	530

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.2	-0.1	----	----
AF High point	4917	83.5	805.7	799.5	6.2	806.4	802.0	4.3	0.9988	0.9967
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 807.8 ppb	NO = 800.6 ppb
Baseline Corr 1st pt	NO_X = 806.7 ppb	NO = 802.2 ppb
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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = -0.1%
As found	NO r^2:	*Percent Change	NO = 0.2%
As found	NO_2 r^2:	Nx Sl:	Nx Int:
		NO Sl:	NO Int:
		NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42iQ Serial Number: 12300522720

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.135	1.135	NO bkgnd or offset:	4.0	4.0
NOX coeff or slope:	1.000	1.000	NOX bkgnd or offset:	4.2	4.2
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	165.3	165.7

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.007898	1.001520
NO_X Cal Offset:	-4.253098	-1.853394
NO Cal Slope:	1.008009	1.004740
NO Cal Offset:	-5.290748	-2.571869
NO_2 Cal Slope:	1.014102	0.994085
NO_2 Cal Offset:	0.736324	-0.554051

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.2	----	----
High point	4917	83.5	805.7	799.5	6.2	805.9	802.1	3.8	0.9997	0.9968
Mid point	4958	41.8	403.4	400.3	3.1	401.3	398.0	3.2	1.0052	1.0058
Low point	4979	20.9	201.7	200.1	1.5	198.5	196.3	2.1	1.0161	1.0196
As left zero	5000	0.0	0.0	0.0	0.0	-0.4	-0.3	-0.2	----	----
As left span	4917	83.5	805.7	413.1	392.6	811.0	413.1	397.8	0.9935	1.0000
							Average Correction Factor		1.0070	1.0074

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	798.5	342.7	462.0	458.8	1.0069	99.3%
Mid GPT point	798.5	572.4	232.3	230.4	1.0082	99.2%
Low GPT point	798.5	684.3	120.4	118.6	1.0150	98.5%
				Average Correction Factor	1.0100	99.0%

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

Jan Castro

Wood Buffalo Environmental Association

NO_X Calibration Summary

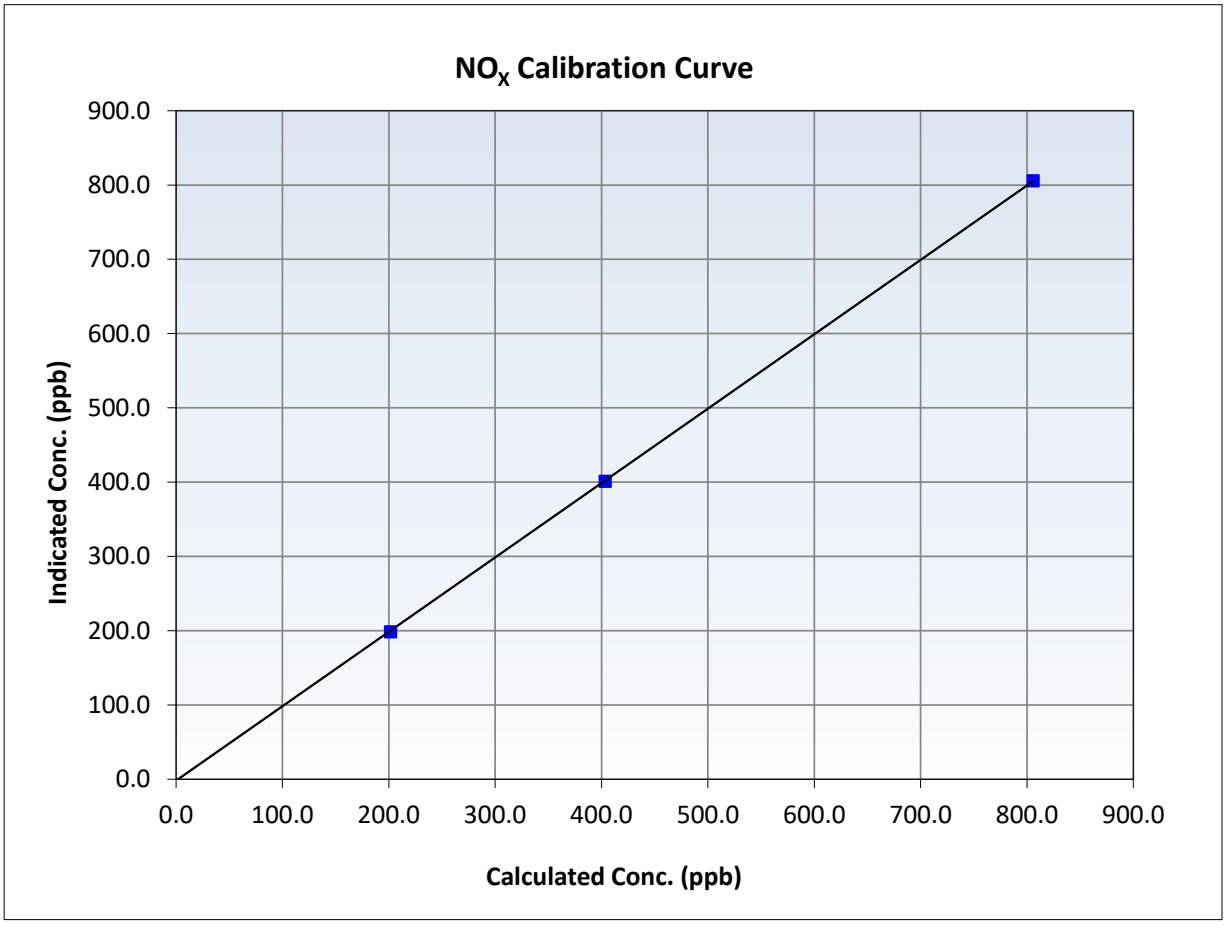
Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 14, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:31	End Time (MST):	13:28
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12300522720
		14:18	

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
805.7	805.9	0.9997
403.4	401.3	1.0052
201.7	198.5	1.0161

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999981	*≥0.995*
Slope	1.001520	*0.90 - 1.10*
Intercept	-1.853394	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

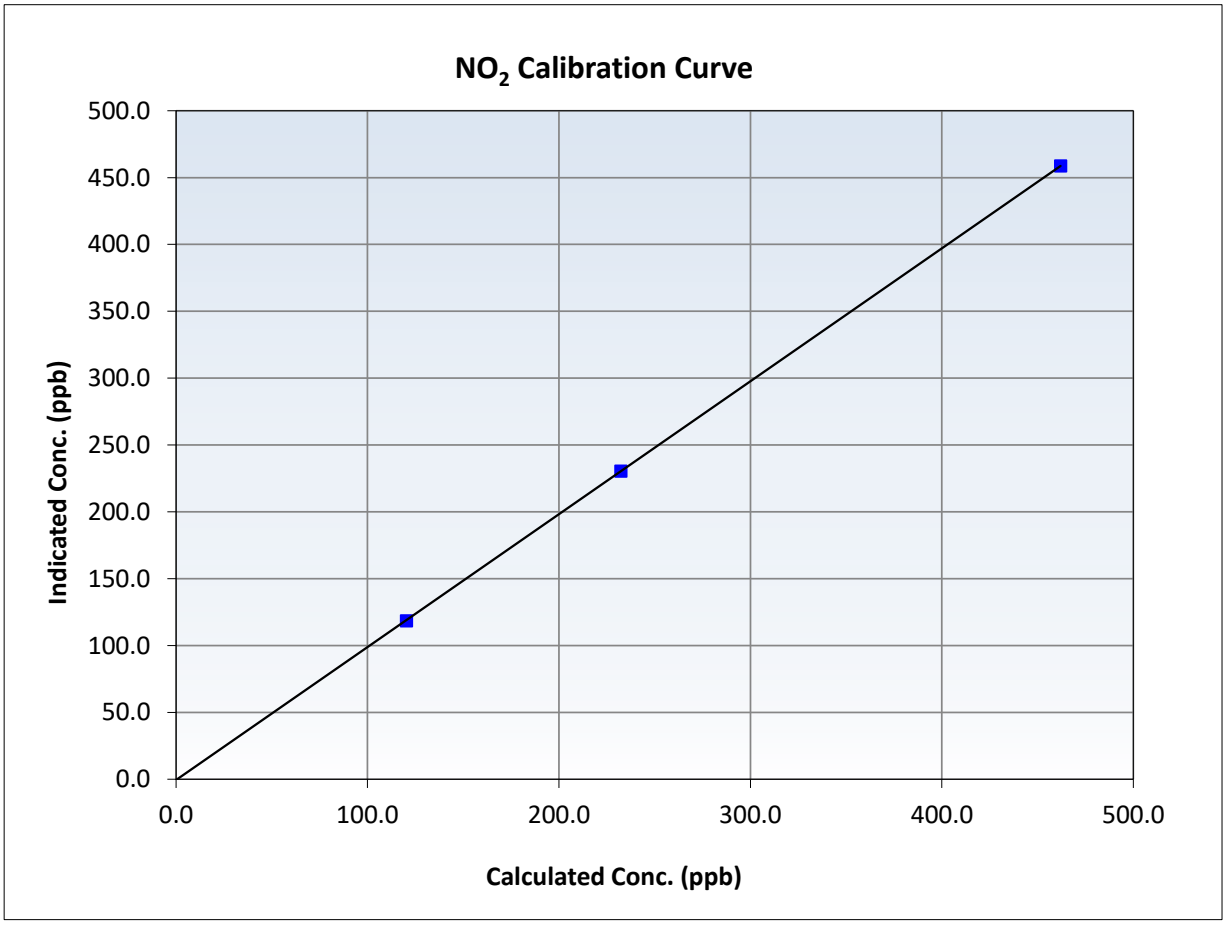
Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 14, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:31	End Time (MST):	13:28
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12300522720
		14:18	

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
462.0	458.8	1.0069
232.3	230.4	1.0082
120.4	118.6	1.0150

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999996	*≥0.995*
Slope	0.994085	*0.90 - 1.10*
Intercept	-0.554051	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

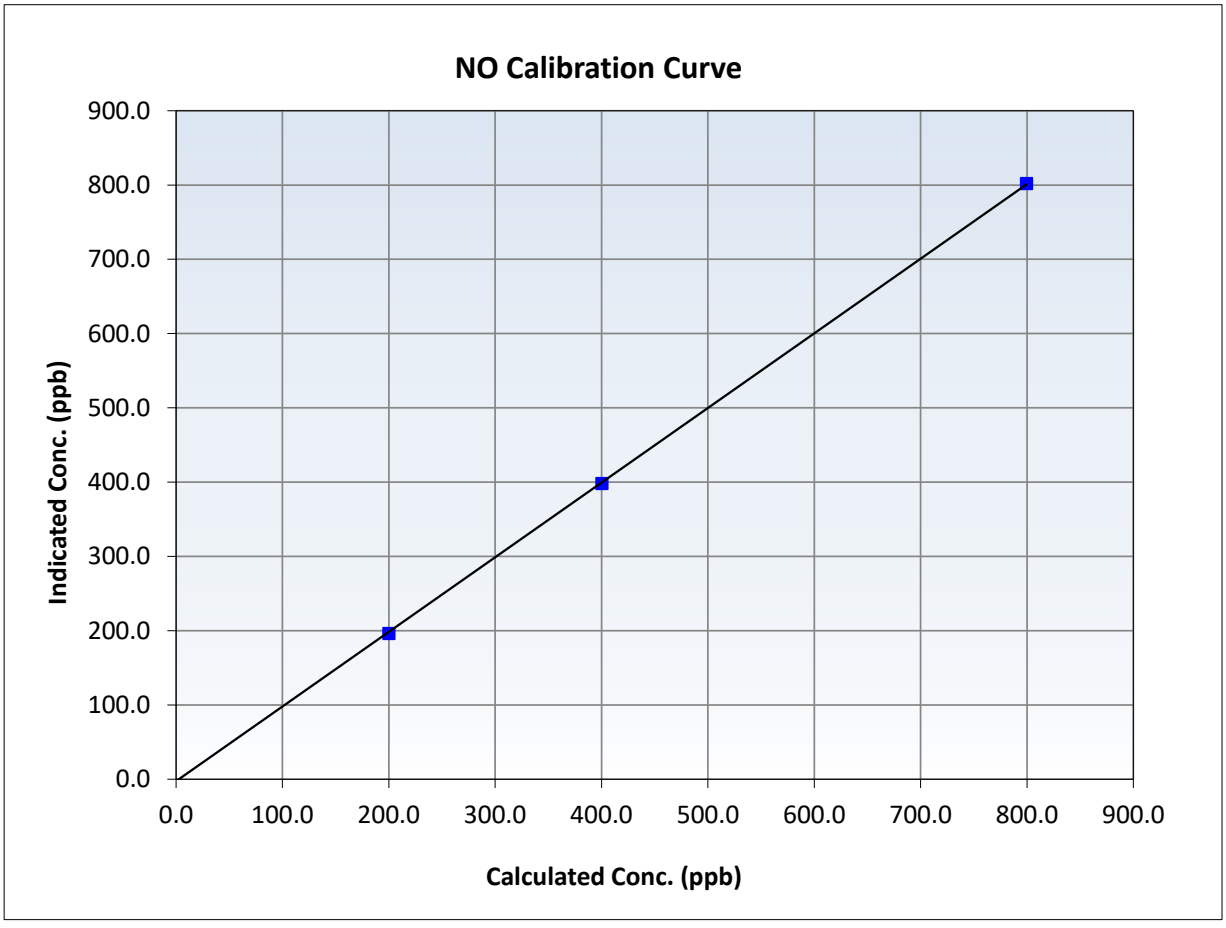
Station Information

Calibration Date:	September 17, 2026	Previous Calibration:	August 14, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:31	End Time (MST):	13:28
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12300522720
		14:18	

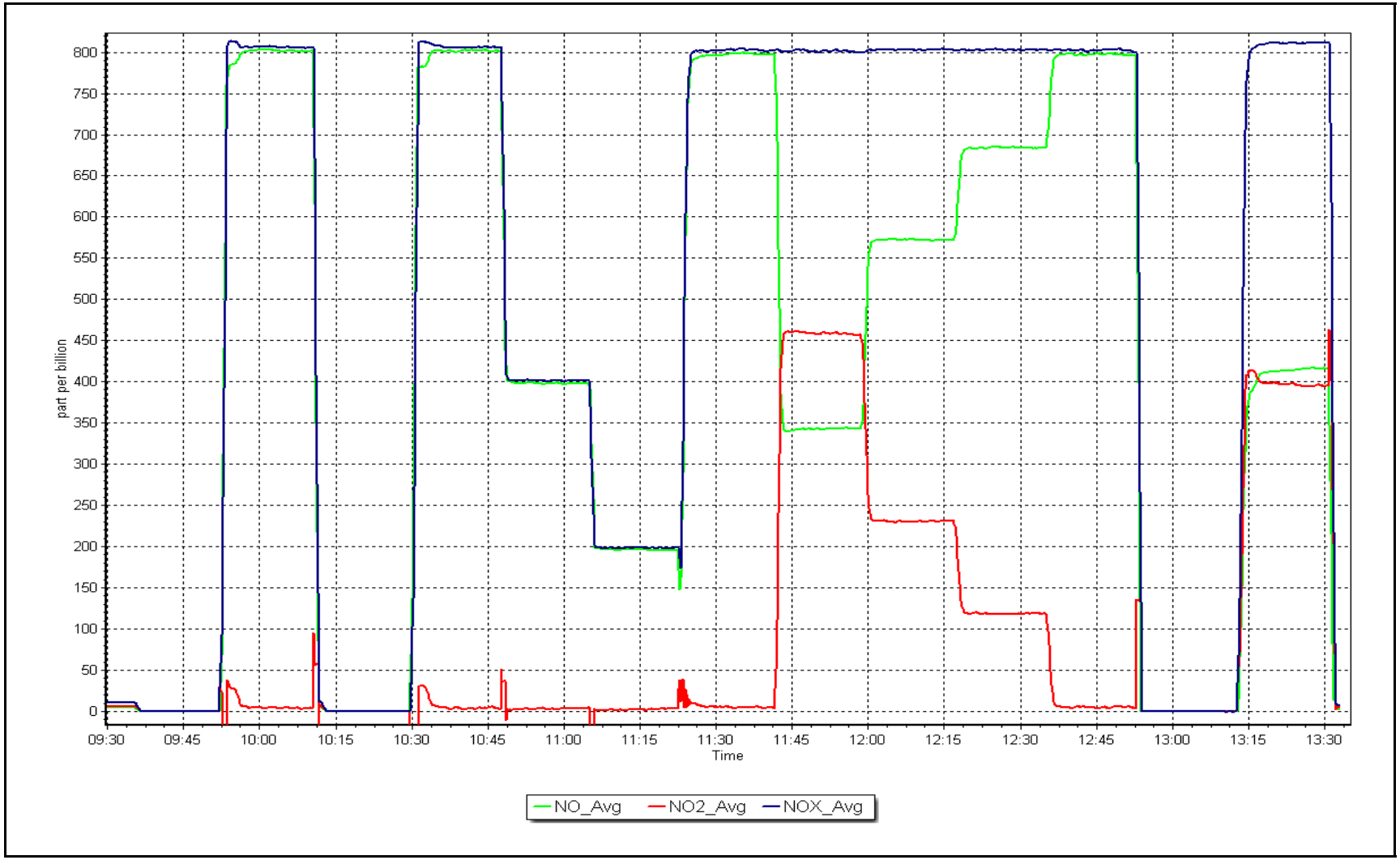
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
799.5	802.1	0.9968
400.3	398.0	1.0058
200.1	196.3	1.0196

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999956	*≥0.995*
Slope	1.004740	*0.90 - 1.10*
Intercept	-2.571869	*+/-20*



NO_X Calibration Plot Date: September 17, 2026 Location: Fort McKay South



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	September 14, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	9:47	End time (MST):	12:36
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	Teledyne API T700	Serial Number:	2657
ZAG Make/Model:	Teledyne API 701	Serial Number:	138

Analyzer Information

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

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.000829	0.999371	Backgd or Offset:	0.6	0.6
Calibration intercept:	0.480000	0.660000	Coeff or Slope:	1.666	1.650

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	800.0	0.0	-1.0	----
As found High point	5000	976.3	400.0	402.0	0.993
As found Mid point					
As found Low point					
Baseline Corr As found:	403.0	Previous response	400.8	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	800.0	0.0	-0.1	----
High point	5000	977.5	400.0	400.0	1.000
Mid point	5000	794.3	200.0	201.0	0.995
Low point	5000	678.7	100.0	101.3	0.987
As left zero	5000	800.0	0.0	-0.3	----
As left span	5000	978.1	400.0	399.5	1.001
				Average Correction Factor	0.994

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

O_3 Calibration Summary

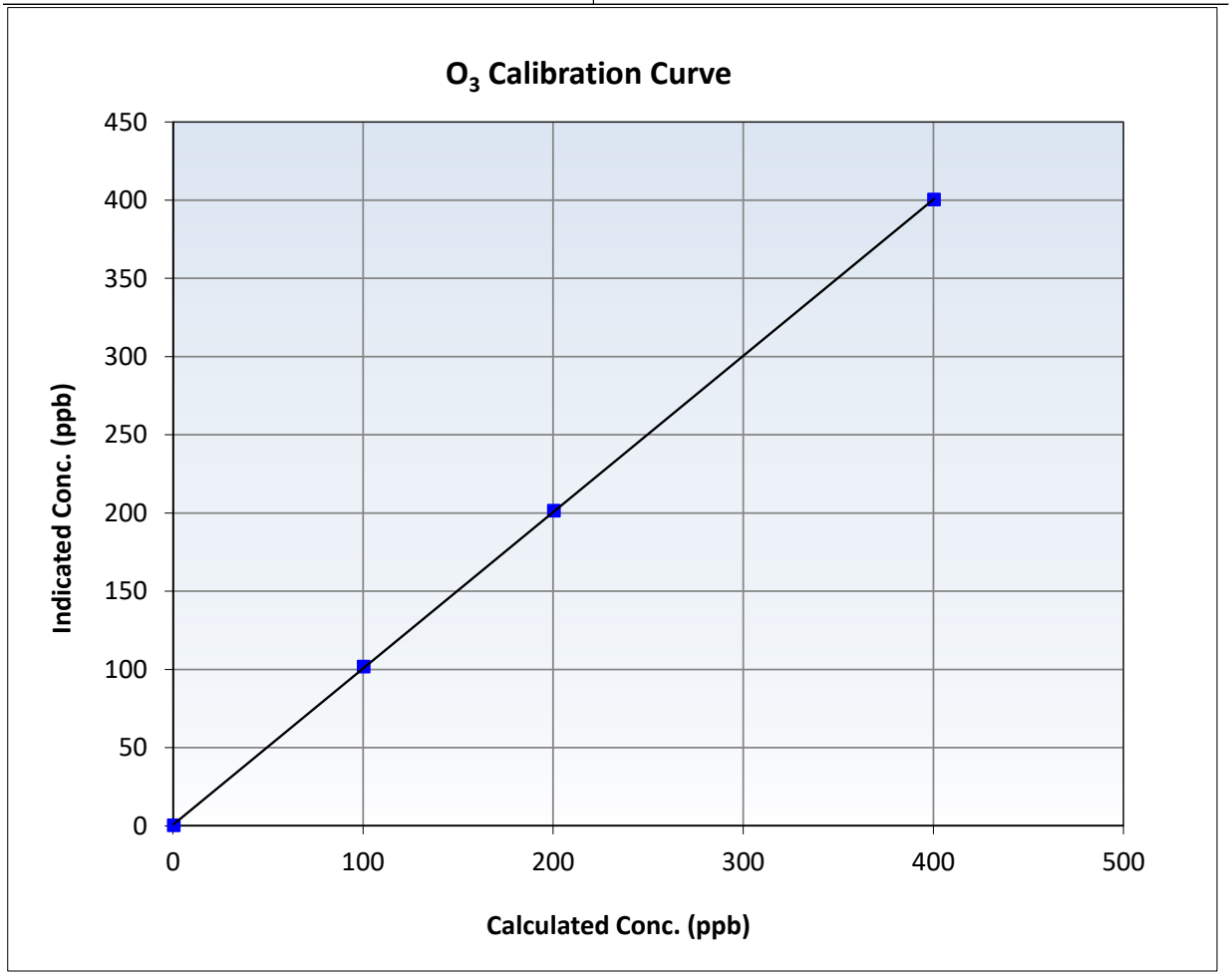
Station Information

Calibration Date:	September 14, 2026	Previous Calibration:	August 6, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:47	End Time (MST):	12:36
Analyzer make:	Thermo 49i	Analyzer serial #:	1426262595

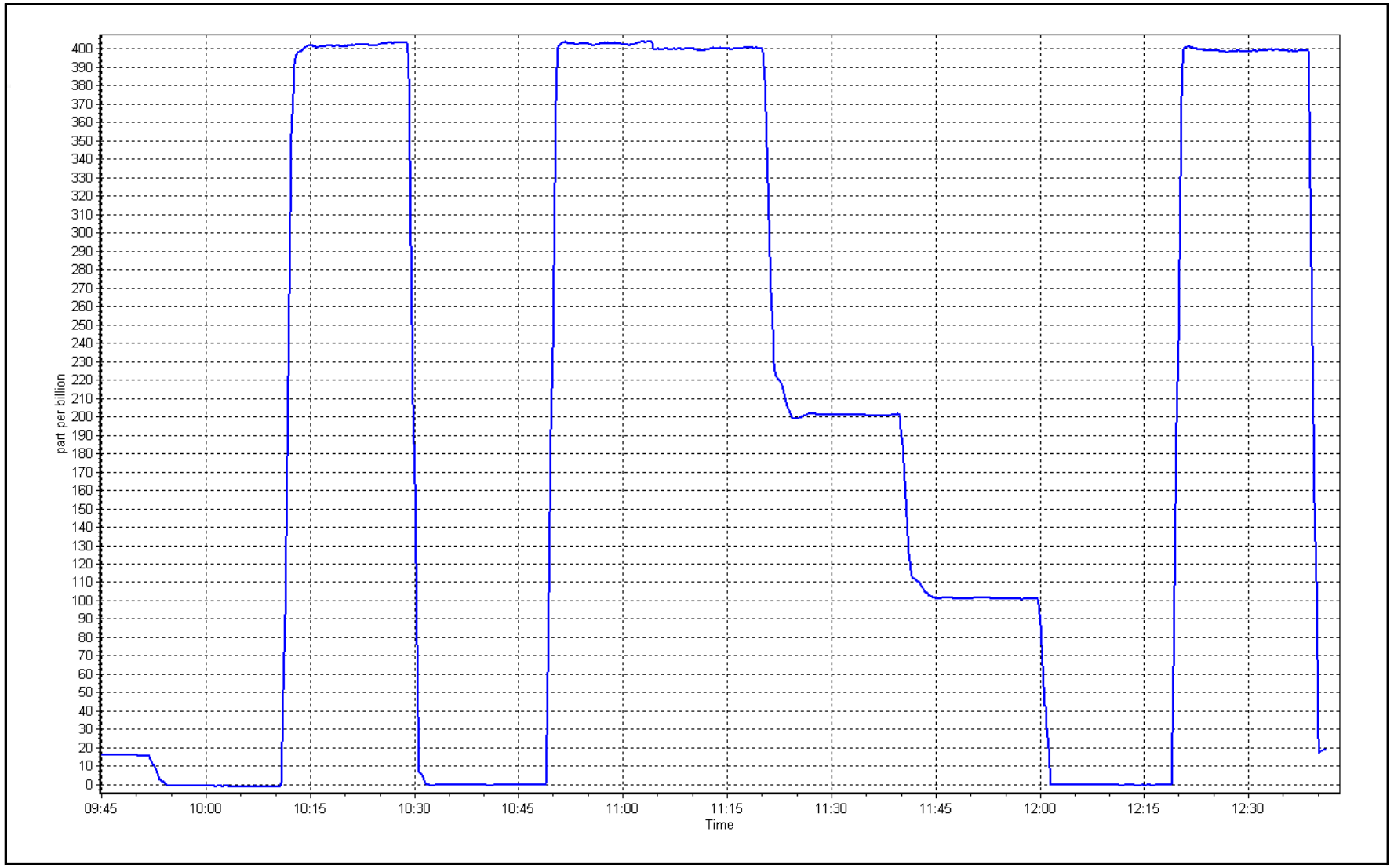
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
400.0	400.0	1.0000
200.0	201.0	0.9950
100.0	101.3	0.9872

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999983	*≥0.995*
Slope	0.999371	*0.90 - 1.10*
Intercept	0.660000	*+/- 5*



O_3 Calibration Plot Date: September 14, 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:	September 17, 2026	Last Cal Date:	August 19, 2026
Start time (MST):	10:45	End time (MST):	12:00
Analyzer Make:	Teledyne API T640	S/N:	1335
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25	S/N:	388754
Temp/RH standard:	Alicat FP-25	S/N:	388754

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (^{o}C)	15.20	14.34	15.20	☐	+/- 2 ^{o}C
P (mmHg)	733.20	734.48	733.20	☐	+/- 10 mmHg
Flow (LPM vol)	5.02	4.90	5.02	☐	+/- 0.25 LPM
PW% (pump)	47	-----	47	☐	>80%
Zero Verification	PM w/o HEPA:	5.80	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	10.00	11.00	11.00	☐	+/- 0.5

Date Optical Chamber Cleaned: September 17, 2026

Date Disposable Filter Changed: September 17, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: September 17, 2026

Date RH/T Sensor Cleaned: September 17, 2026

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

AMS14
ANZAC
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	September 29, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	9:50	End time (MST):	12:29
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:	3812
Zero Air Gen Model:	API T701H		Serial Number:	357

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	0710321322	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001608	1.004378	Backgd or Offset:	29.6	29.6
Calibration intercept:	0.309645	0.389312	Coeff or Slope:	1.106	1.106

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.5	----
As found High point	4920	79.5	800.2	801.6	0.999
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	801.1	Previous response	801.8	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.8	----
High point	4920	79.5	800.2	804.3	0.995
Mid point	4960	39.8	400.6	402.4	0.995
Low point	4980	19.9	200.3	201.2	0.995
As left zero	5000	0.0	0.0	0.8	----
As left span	4920	79.5	800.2	805.1	0.994
				Average Correction Factor:	0.995

Notes: No adjustments or maintenance done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

SO_2 Calibration Summary

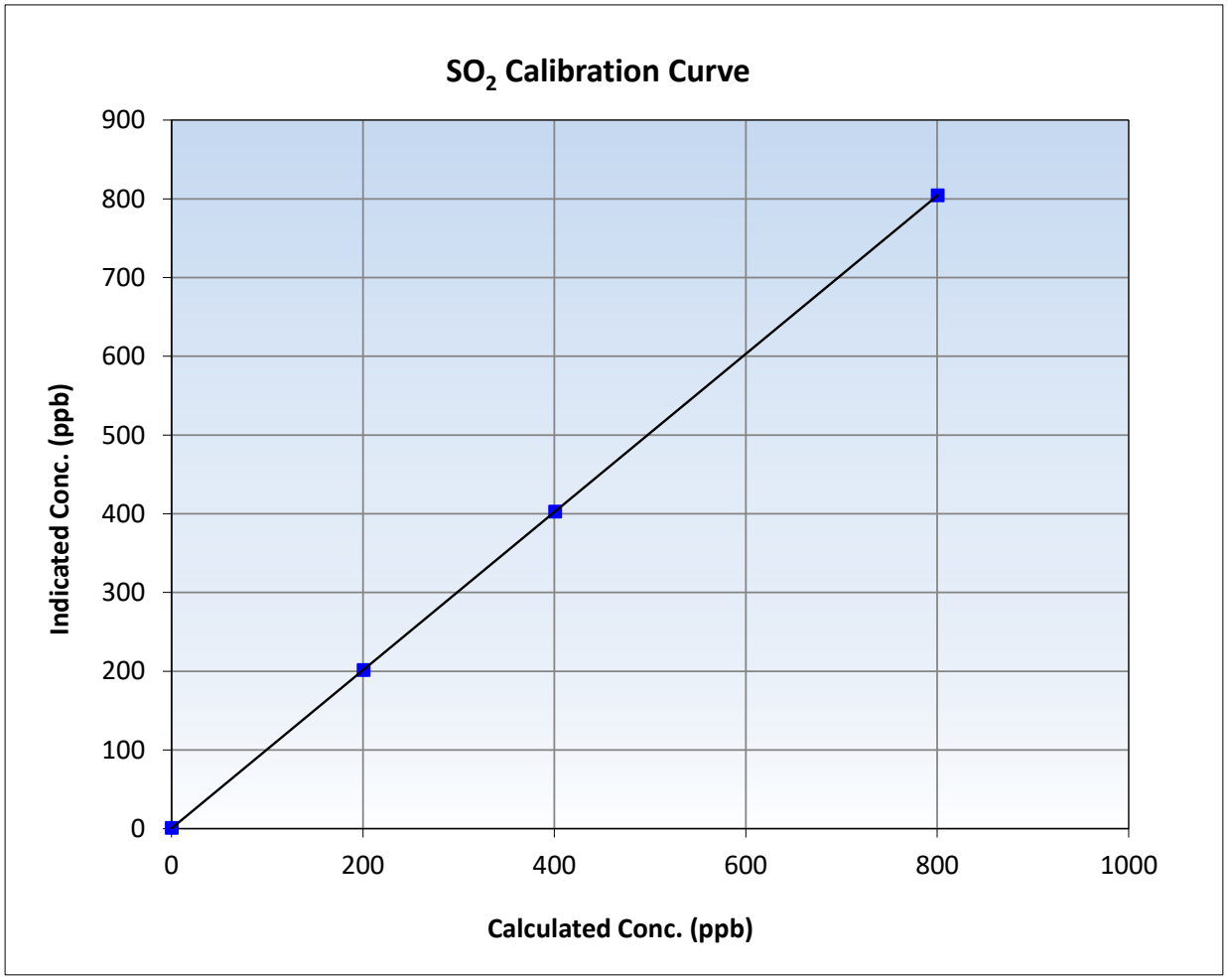
Station Information

Calibration Date:	September 29, 2026	Previous Calibration:	August 20, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	9:50	End Time (MST):	12:29
Analyzer make:	Thermo 43i	Analyzer serial #:	0710321322

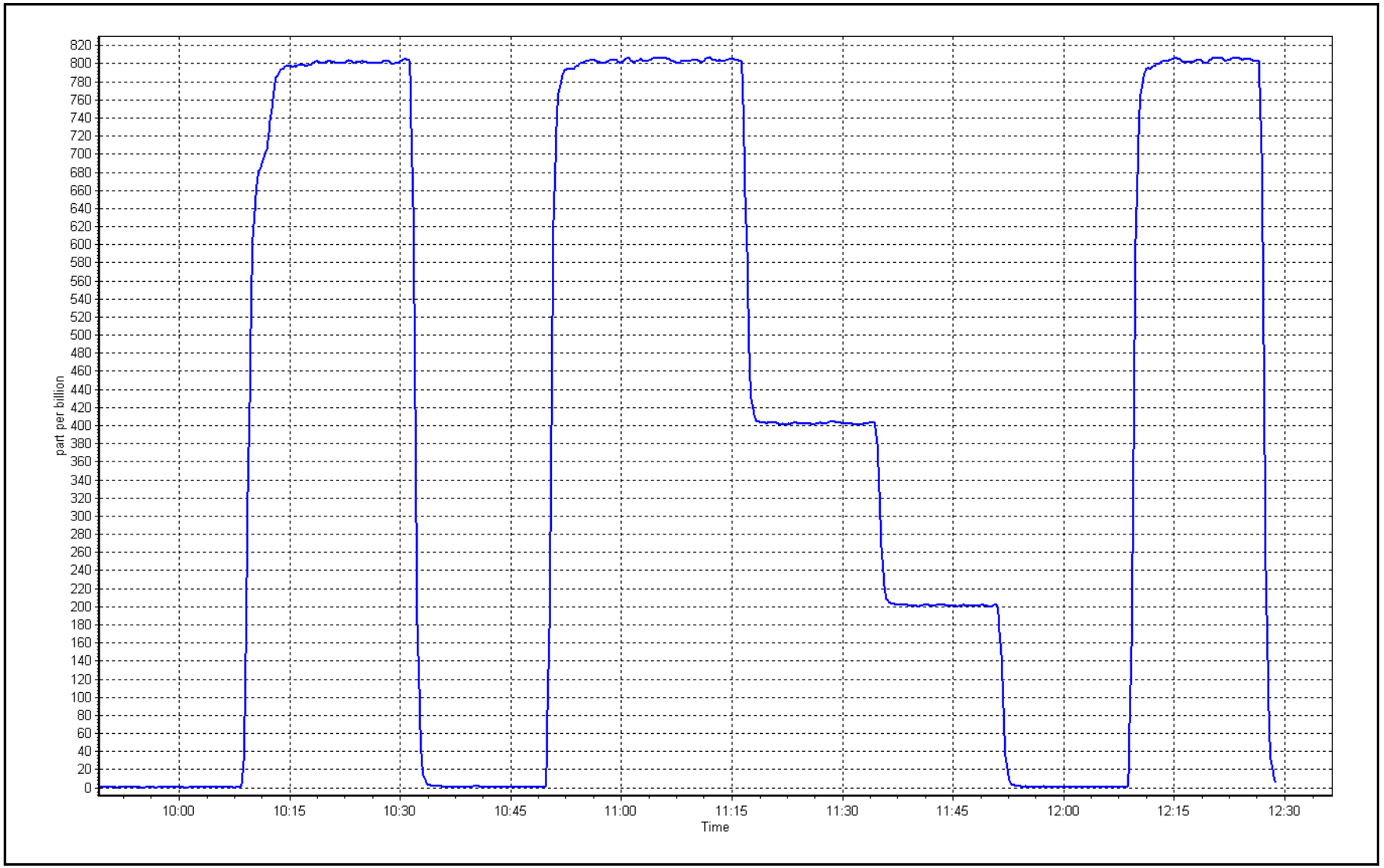
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.8	----
800.2	804.3	0.9949
400.6	402.4	0.9954
200.3	201.2	0.9954

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.004378	*0.90 - 1.10*
Intercept	0.389312	*+/-30*



SO2 Calibration Plot Date: September 29, 2026 Location: Anzac



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	September 24, 2026	Last Cal Date:	August 18, 2026
Start time (MST):	8:24	End time (MST):	12:53
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.05	ppm	Cal Gas Exp Date:	September 22, 2028
Cal Gas Cylinder #:	DT0021903			
Removed Cal Gas Conc:	5.05	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	3812
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 #:	461	
Analyzer Range	0 - 100 ppb		Converter Temp:	800	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.006283	0.999140	Backgd or Offset:	2.29	2.25
Calibration intercept:	-0.241597	-0.141587	Coeff or Slope:	0.984	0.962

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4921	79.2	80.0	81.8	0.977
As found Mid point	4960	39.6	40.0	40.6	0.983
As found Low point	4980	19.8	20.0	20.3	0.980
New cylinder response					

Baseline Corr As found:	81.9	Prev response:	80.25	*% change:	2.0%
Baseline Corr 2nd AF pt:	40.7	AF Slope:	1.023857	AF Intercept:	-0.181630
Baseline Corr 3rd AF pt:	20.4	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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4921	79.2	80.0	79.9	1.001
Mid point	4960	39.6	40.0	39.6	1.010
Low point	4980	19.8	20.0	19.8	1.010
As left zero	5000	0.0	0.0	0.0	----
As left span	4921	79.2	80.0	77.5	1.032
SO2 Scrubber Check	4921	79.5	794.9	0.0	----

Date of last scrubber change:		28-May-25		Ave Corr Factor	1.007
Date of last converter efficiency test:		September 16, 2025		103.4%	efficiency

Notes: Inlet filter changed after as founds, scrubber check passed, span adjusted.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

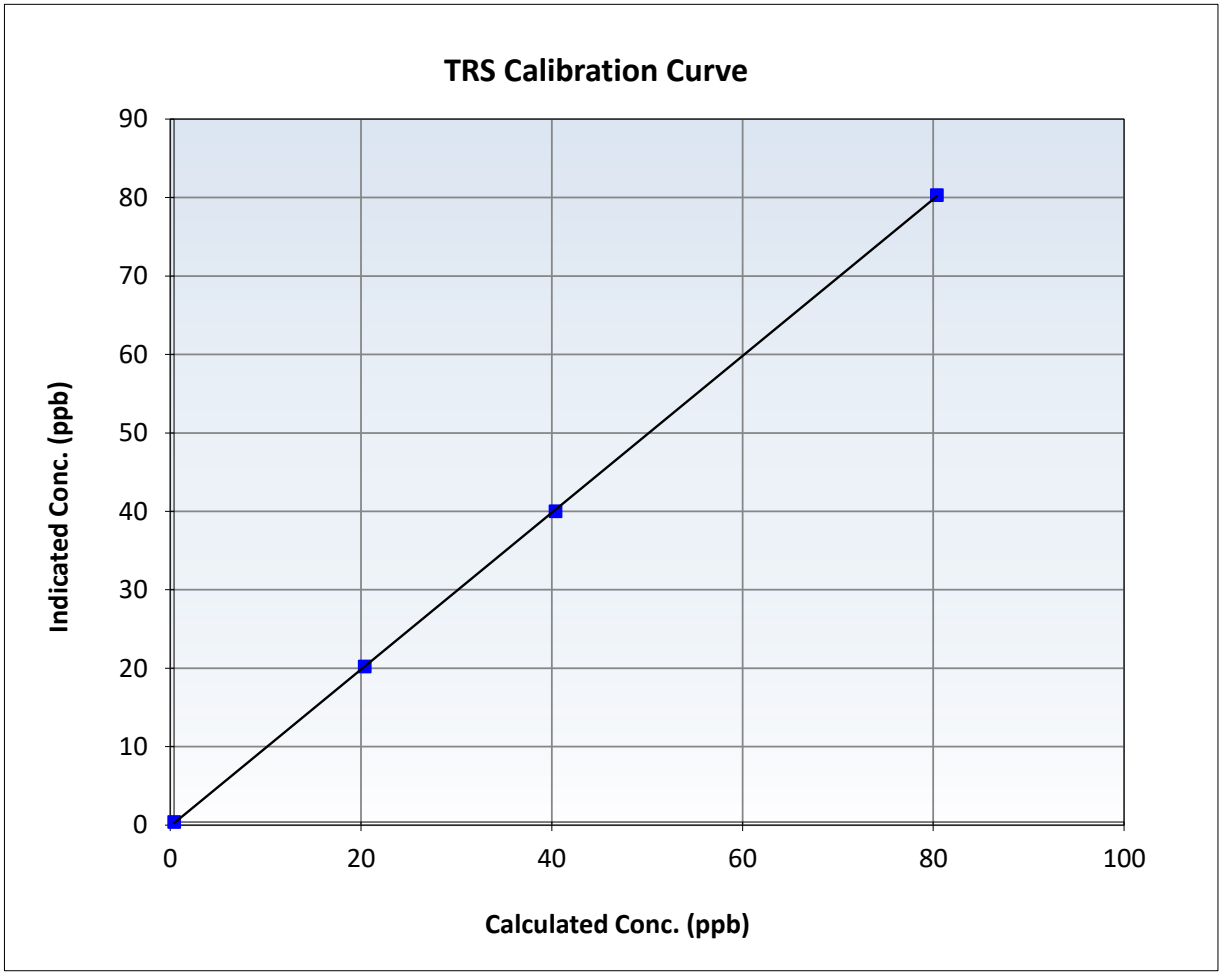
TRS Calibration Summary

Station Information

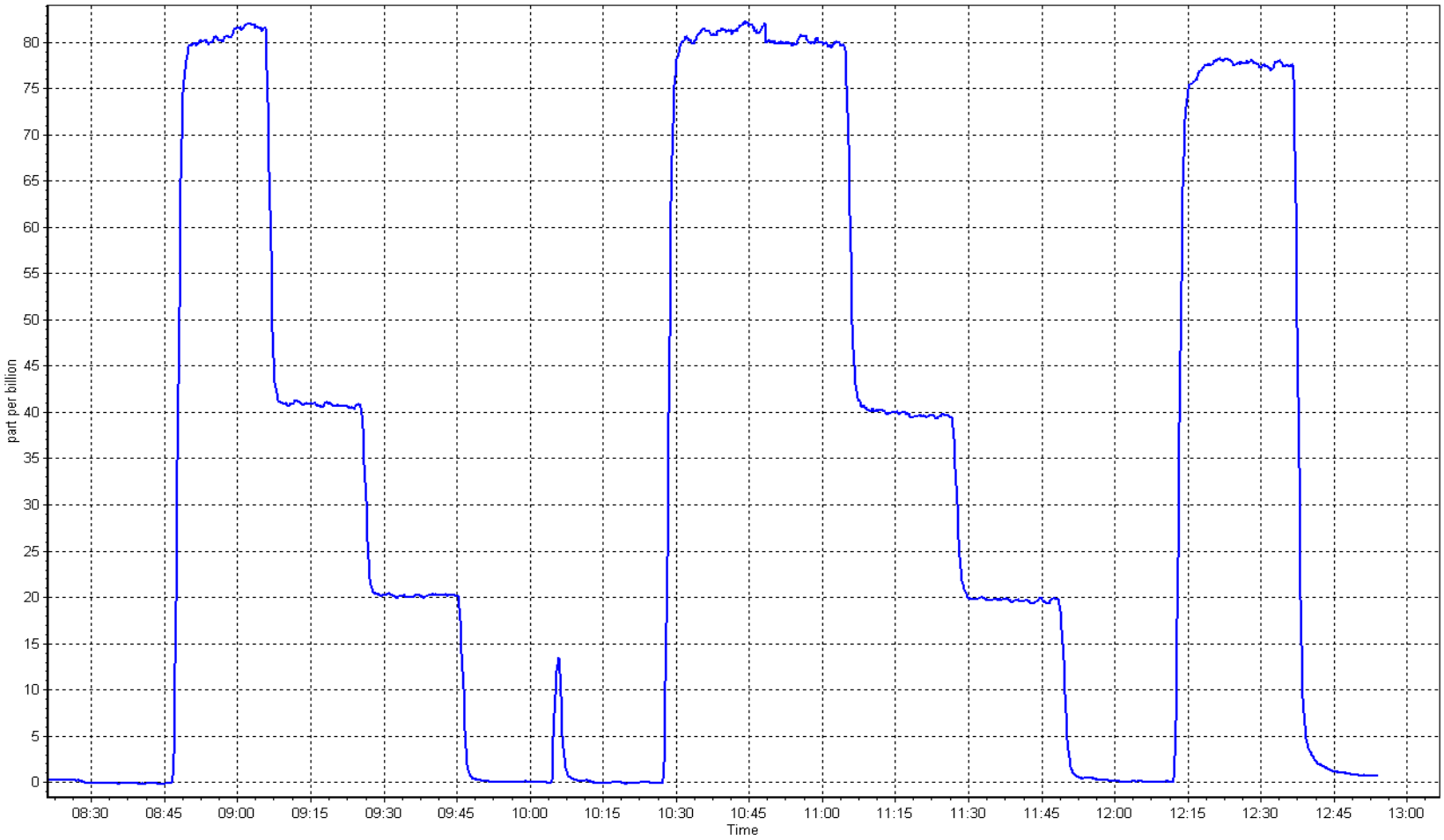
Calibration Date:	September 24, 2026	Previous Calibration:	August 18, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	8:24	End Time (MST):	12:53
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153582

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999975	*≥0.995*
80.0	79.9	1.0011	Slope	0.999140	*0.90 - 1.10*
40.0	39.6	1.0101			
20.0	19.8	1.0100	Intercept	-0.141587	*+/-3*



TRS Calibration Plot Date: September 24, 2026 Location: Anzac



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	September 29, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	9:50	End time (MST):	12:29
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:	3812
Zero Air Gen model:	API 701H	Serial Number:	357

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	4.23E-04	4.31E-04	NMHC SP Ratio:	6.63E-05	6.69E-05
CH4 Retention time:	17.0	17.2	NMHC Peak Area:	135090	133893
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	17.00	16.75	1.015
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.75	Prev response	16.90	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	17.00	16.94	1.003
Mid point	4960	39.8	8.51	8.40	1.013
Low point	4980	19.9	4.25	4.19	1.015
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.5	17.00	16.92	1.004
				Average Correction Factor	1.011

Notes: No Maintenance done. Span adjusted.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	8.96	8.86	1.012
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.86	Prev response	8.92	*% 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) *Limit = 0.95-1.05*
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	4.44	1.010
Low point	4980	19.9	2.24	2.22	1.010
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.5	8.96	8.91	1.006
				Average Correction Factor	1.008

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	79.5	8.04	7.89	1.018
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.5	8.04	8.02	1.002
Mid point	4960	39.8	4.02	3.96	1.017
Low point	4980	19.9	2.01	1.97	1.022
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.5	8.04	8.02	1.002
				Average Correction Factor	1.013

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.997054	0.997015
THC Cal Offset:	-0.047791	-0.035998
CH4 Cal Slope:	0.997751	0.999218
CH4 Cal Offset:	-0.035479	-0.027887
NMHC Cal Slope:	0.996646	0.995078
NMHC Cal Offset:	-0.012912	-0.008511

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

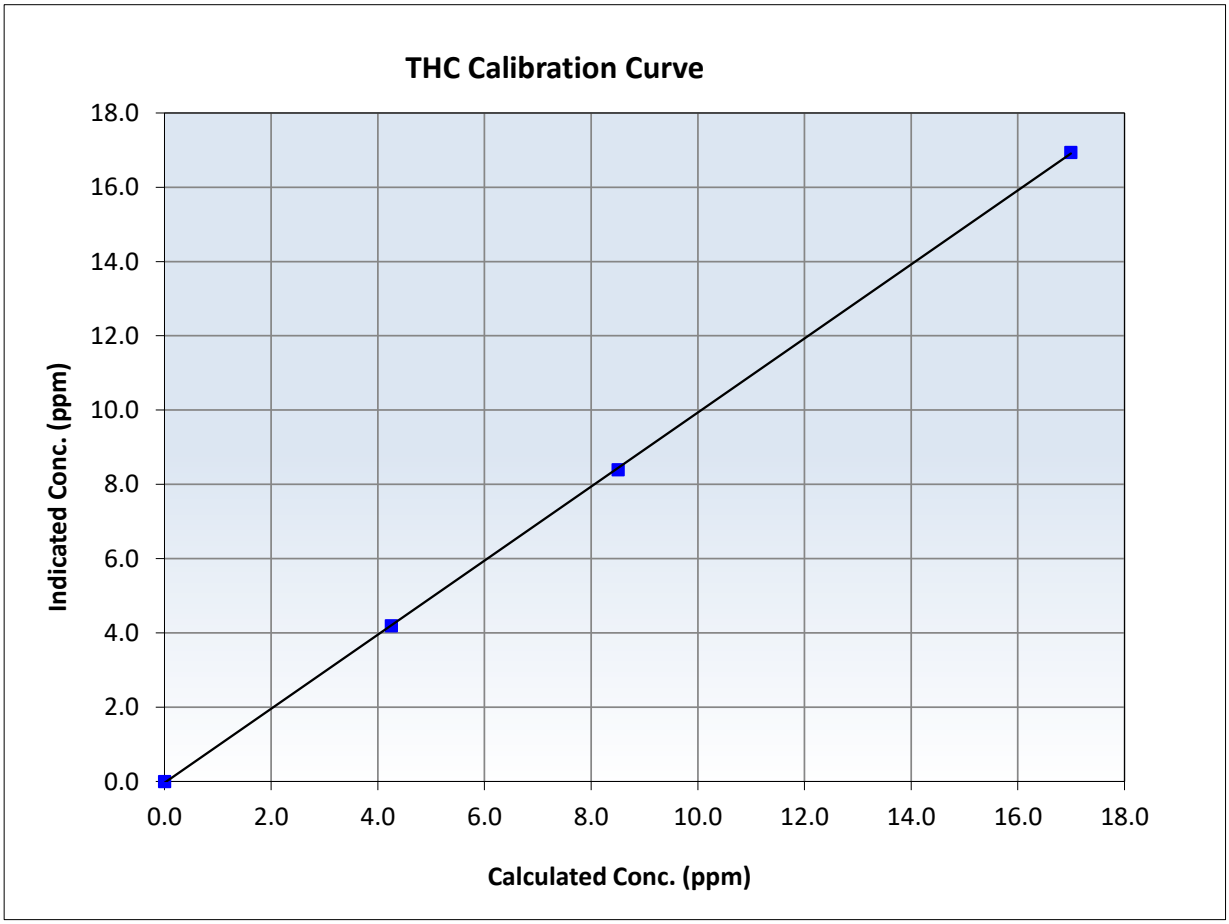
THC Calibration Summary

Station Information

Calibration Date:	September 29, 2026	Previous Calibration:	August 20, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	9:50	End Time (MST):	12:29
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999970	≥0.995
17.00	16.94	1.0034	Slope	0.997015	0.90 - 1.10
8.51	8.40	1.0132	Intercept	-0.035998	+/-0.5
4.25	4.19	1.0152			



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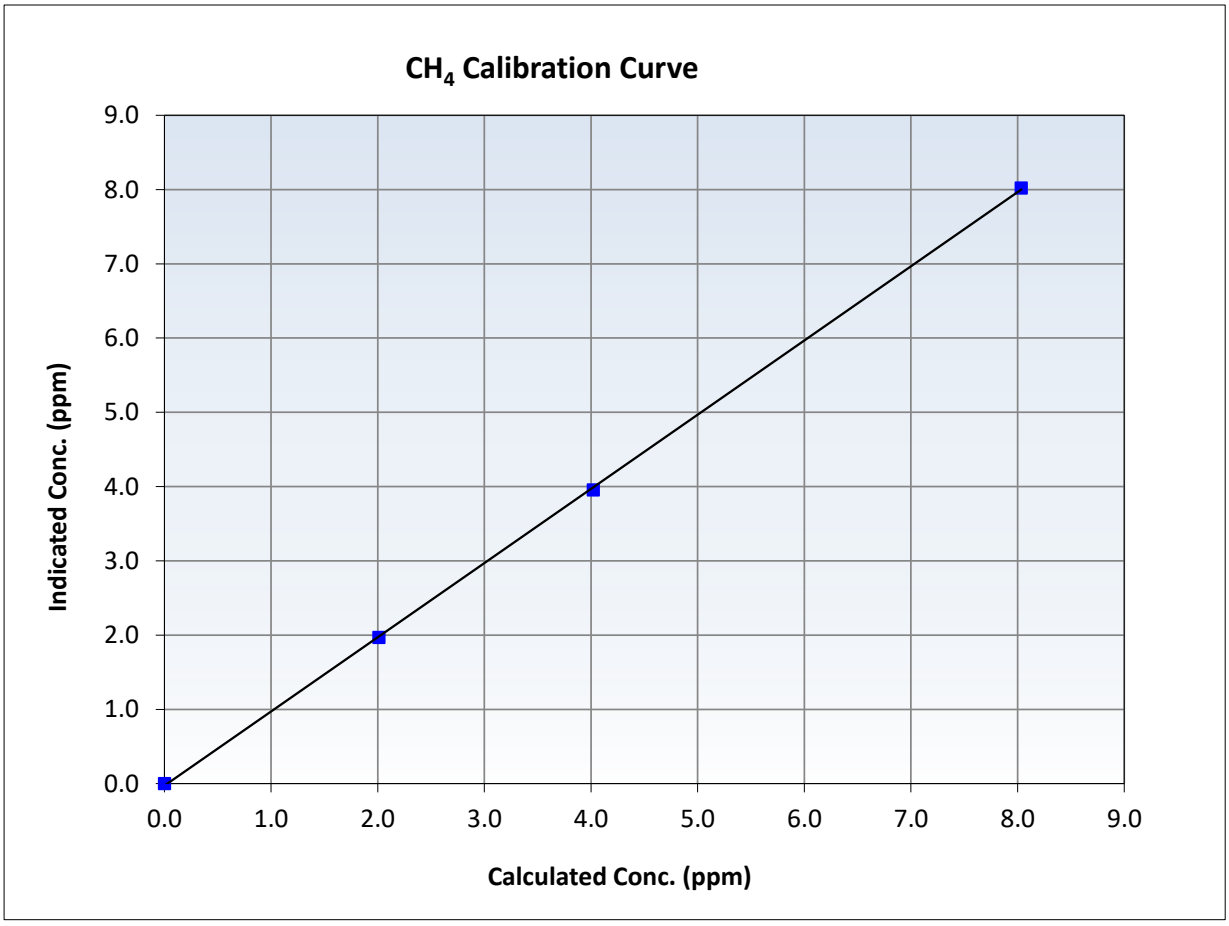
CH_4 Calibration Summary

Station Information

Calibration Date:	September 29, 2026	Previous Calibration:	August 20, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	9:50	End Time (MST):	12:29
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999925	*≥0.995*
8.04	8.02	1.0016	Slope	0.999218	*0.90 - 1.10*
4.02	3.96	1.0168			
2.01	1.97	1.0219	Intercept	-0.027887	*+/-0.5*



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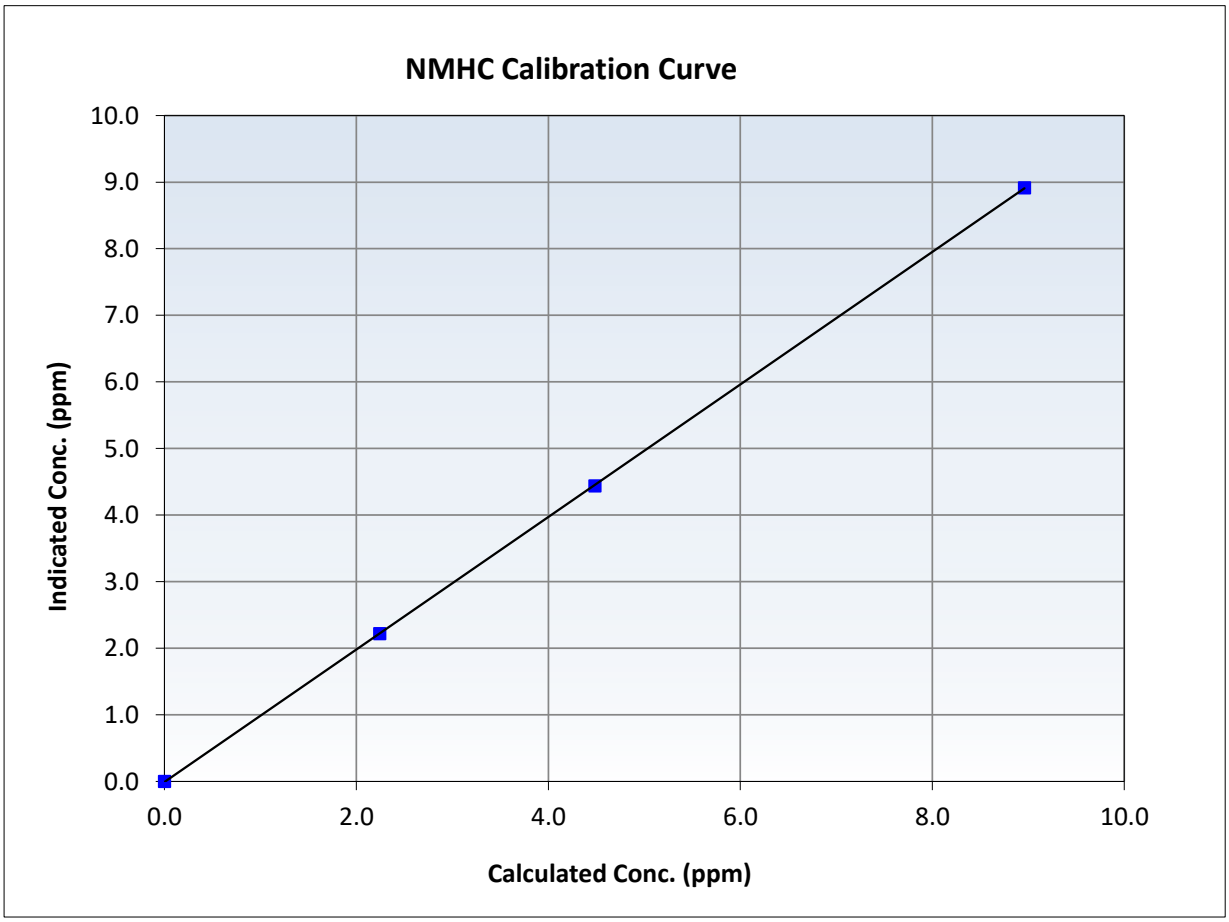
NMHC Calibration Summary

Station Information

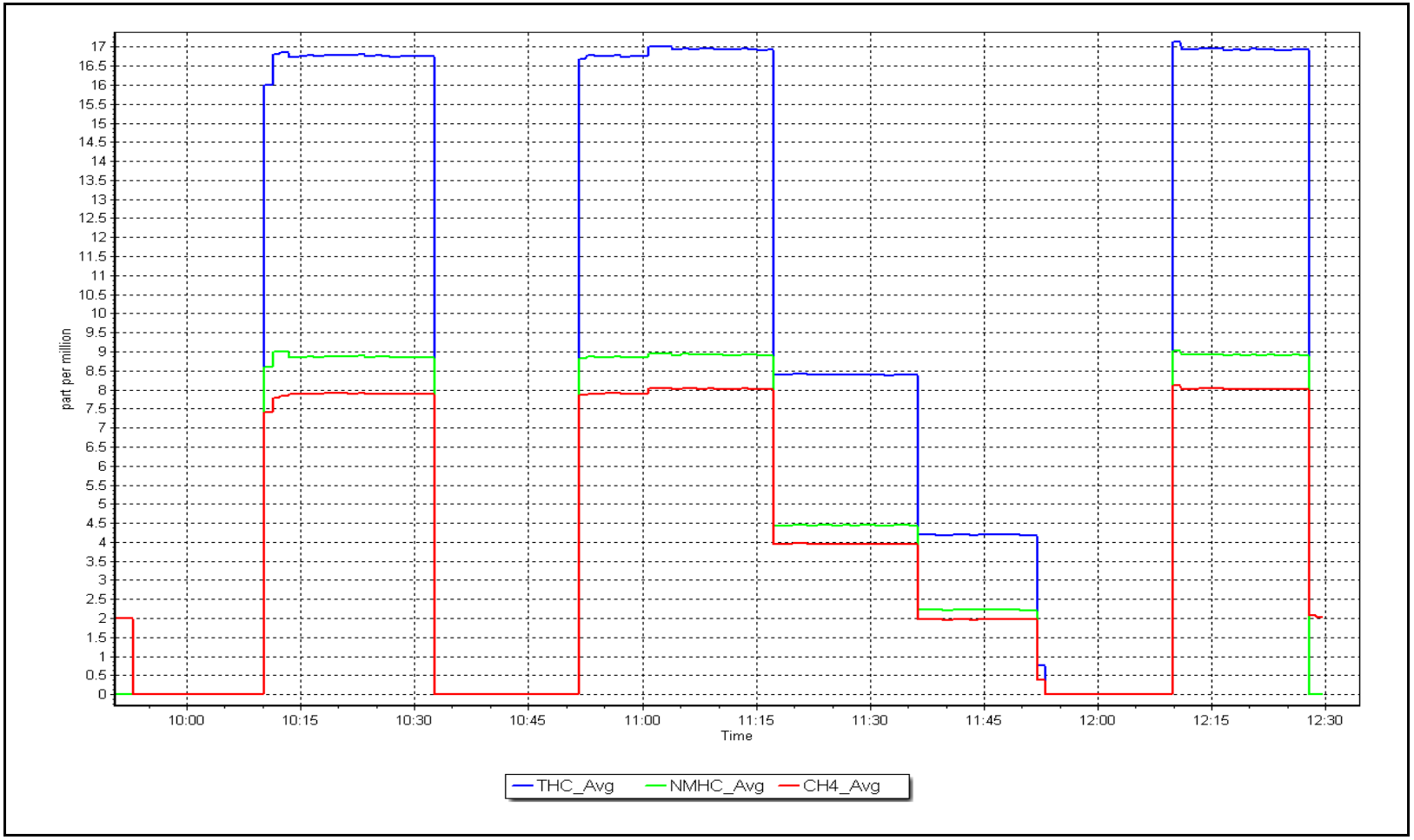
Calibration Date:	September 29, 2026	Previous Calibration:	August 20, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	9:50	End Time (MST):	12:29
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999993	≥0.995
8.96	8.92	1.0051	Slope	0.995078	0.90 - 1.10
4.49	4.44	1.0100	Intercept	-0.008511	+/-0.5
2.24	2.22	1.0098			



NMHC Calibration Plot Date: September 29, 2026 Location: Anzac



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Anzac
Station number:	AMS 14
Calibration Date:	September 25, 2026
Last Cal Date:	August 25, 2026
Start time (MST):	6:45
End time (MST):	11:13
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0037092		Cal Gas Expiry Date:	May 16, 2031	
NOX Cal Gas Conc:	60.7	ppm	NO Cal Gas Conc:	60.40	ppm
Removed Cylinder #:	NA		Removed Gas Exp Date:	NA	
Removed Gas NOX Conc:	60.70	ppm	Removed Gas NO Conc:	60.40	ppm
NOX gas Diff:			NO gas Diff:		
Calibrator Model:	Teledyne API T700		Serial Number:	3812	
ZAG make/model:	Teledyne API T701H		Serial Number:	357	

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
AF High point	4934	66.2	803.6	799.7	4.0	801.1	796.8	4.4	1.0033	1.0036
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	800.0	ppb	NO =	798.2	ppb	
Baseline Corr 1st pt	NO_X =	801.0	ppb	NO =	796.8	ppb	
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

*Percent Change	NO_X =	0.1%	
*Percent Change	NO =	-0.2%	

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1152430008

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.386	1.386	NO bkgnd or offset:	3.8	3.8
NOX coeff or slope:	0.996	0.996	NOX bkgnd or offset:	3.8	3.8
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	150.9	150.9

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.994137	0.993639
NO_X Cal Offset:	1.086941	0.987069
NO Cal Slope:	0.999029	0.997142
NO Cal Offset:	-0.672078	-0.511738
NO_2 Cal Slope:	0.995415	0.996280
NO_2 Cal Offset:	-0.614729	-0.960258

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.3	0.1	0.1	----	----
High point	4934	66.2	803.6	799.7	4.0	799.2	797.2	2.0	1.0056	1.0031
Mid point	4967	33.1	401.8	399.8	2.0	400.5	397.8	2.7	1.0033	1.0051
Low point	4983	16.6	201.5	200.5	1.0	202.0	198.9	3.1	0.9977	1.0083
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.2	0.1	----	----
As left span	4934	66.2	803.6	387.0	416.6	795.6	387.0	408.6	1.0101	1.0000
							Average Correction Factor		1.0022	1.0055

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.1	----	----
High GPT point	794.3	387.0	411.3	409.4	1.0046	99.5%
Mid GPT point	794.3	577.7	220.6	218.2	1.0109	98.9%
Low GPT point	794.3	684.3	114.0	111.5	1.0222	97.8%
				Average Correction Factor	1.0125	98.8%

Notes: No Maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

NO_X Calibration Summary

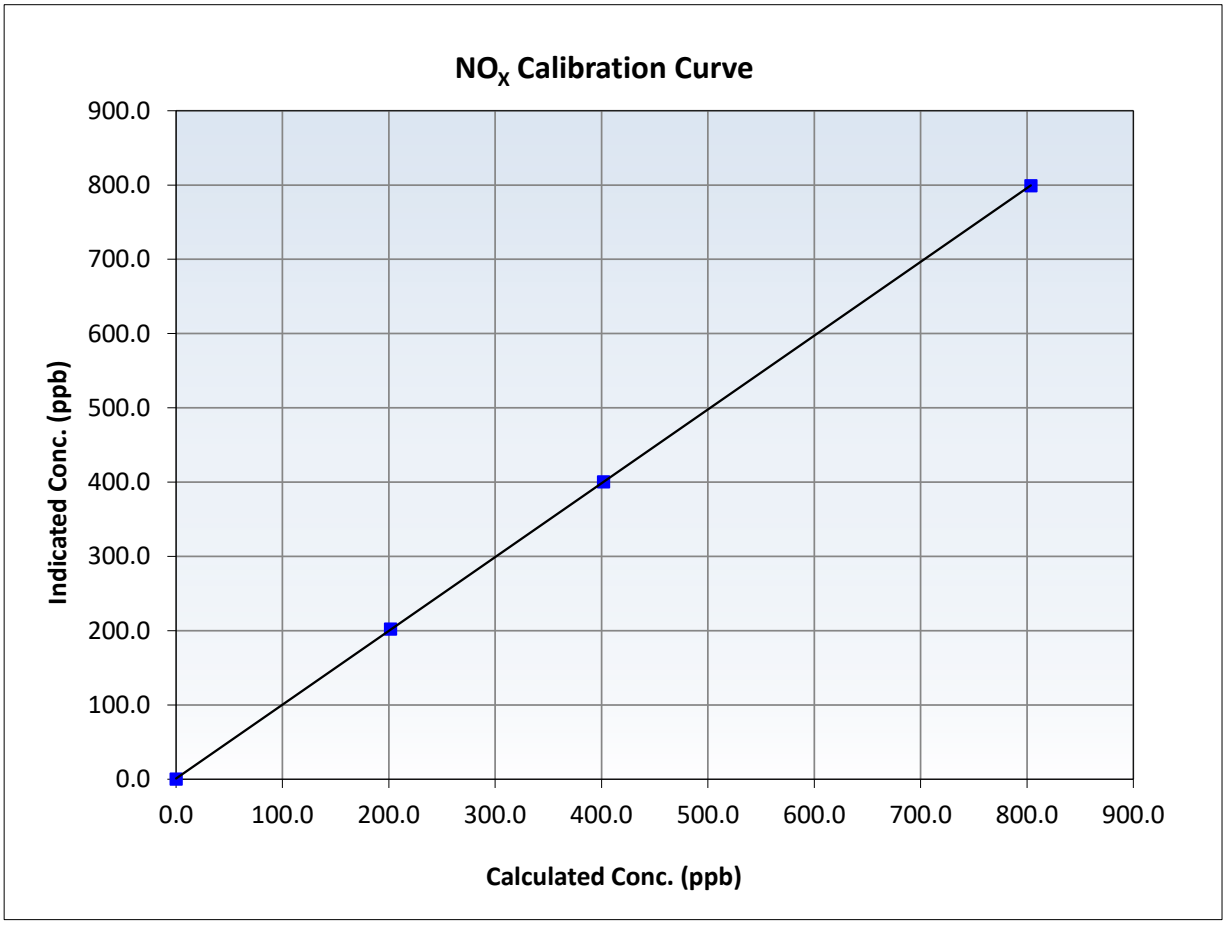
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 25, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	6:45	End Time (MST):	11:13
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
803.6	799.2	1.0056
401.8	400.5	1.0033
201.5	202.0	0.9977

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.993639	*0.90 - 1.10*
Intercept	0.987069	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

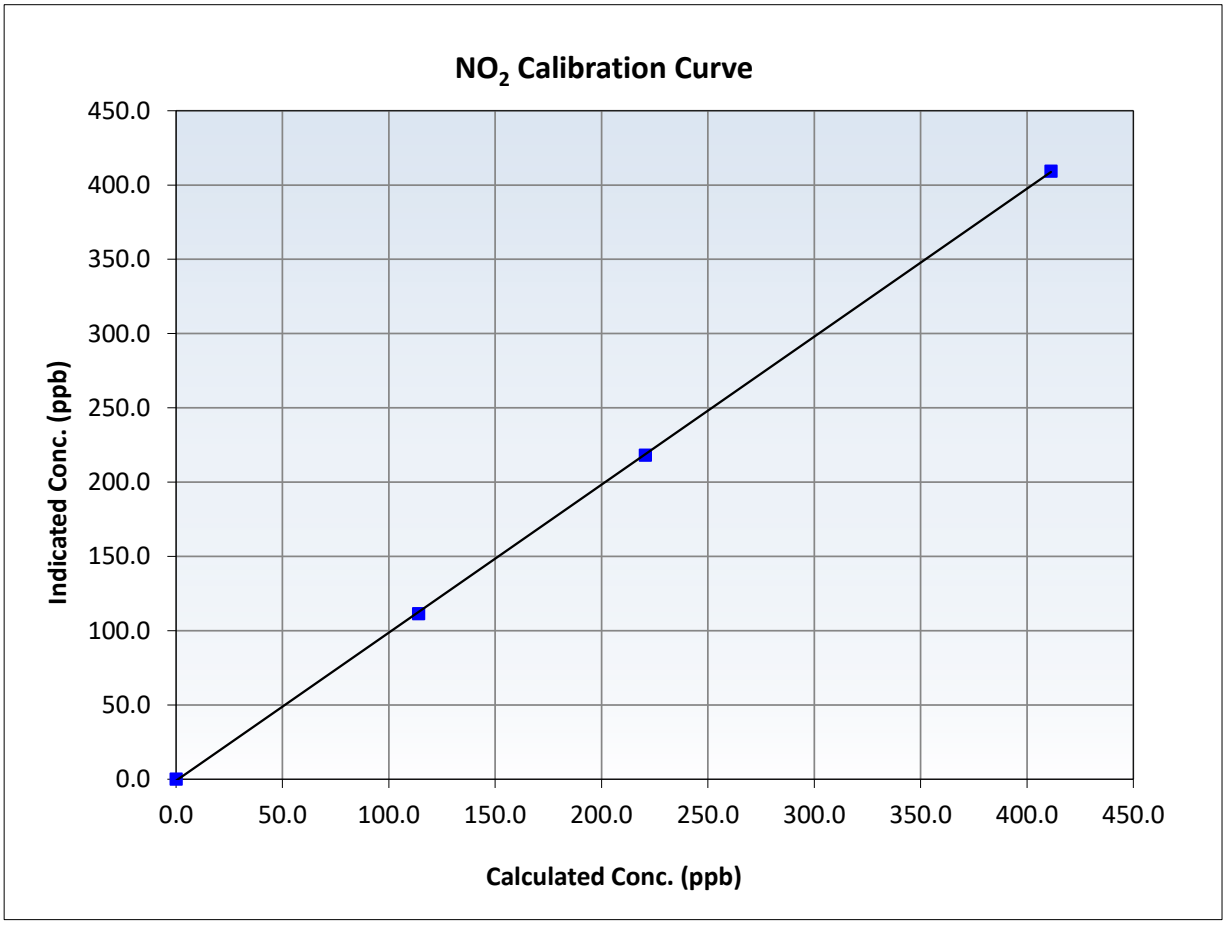
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 25, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	6:45	End Time (MST):	11:13
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
411.3	409.4	1.0046
220.6	218.2	1.0109
114.0	111.5	1.0222

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999967	*≥0.995*
Slope	0.996280	*0.90 - 1.10*
Intercept	-0.960258	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

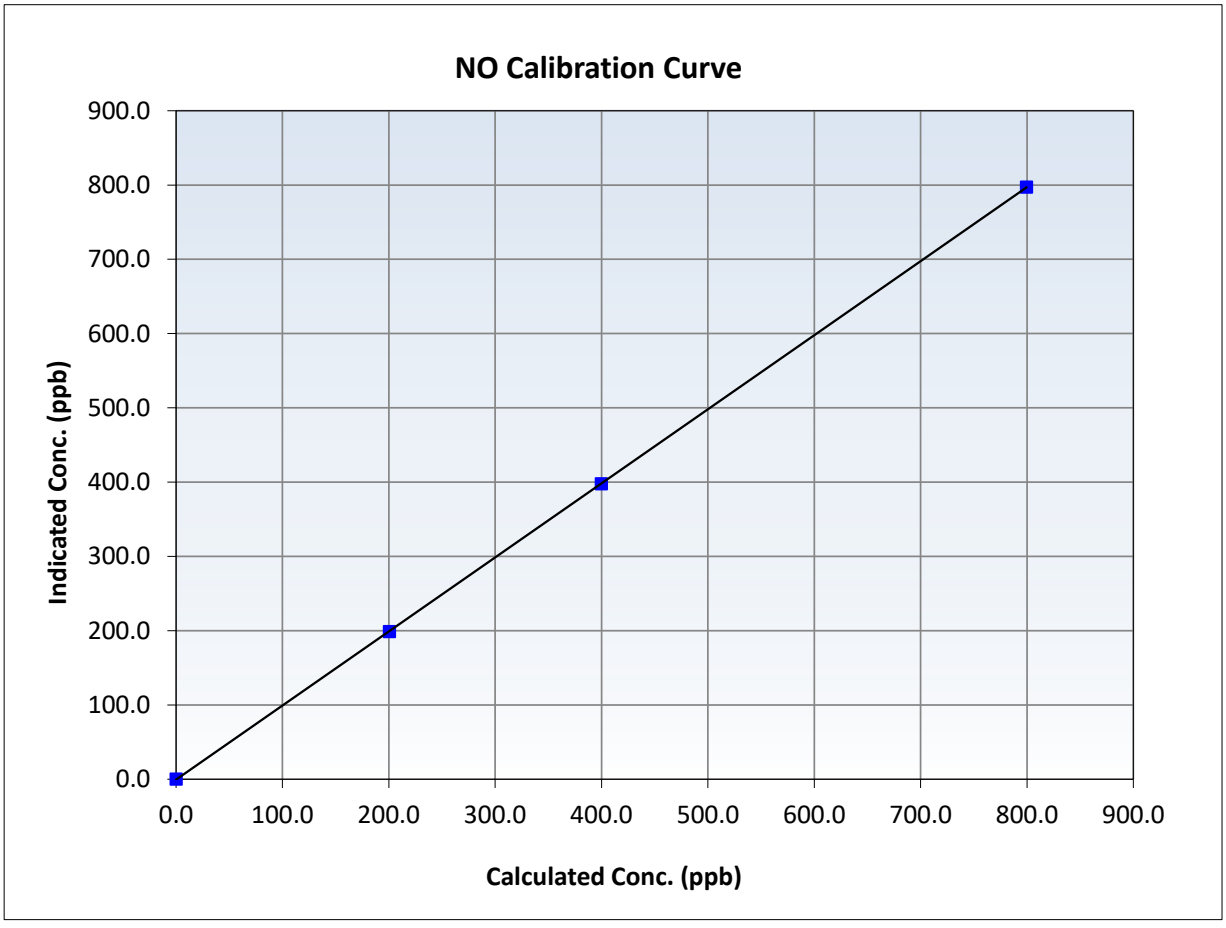
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 25, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	6:45	End Time (MST):	11:13
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

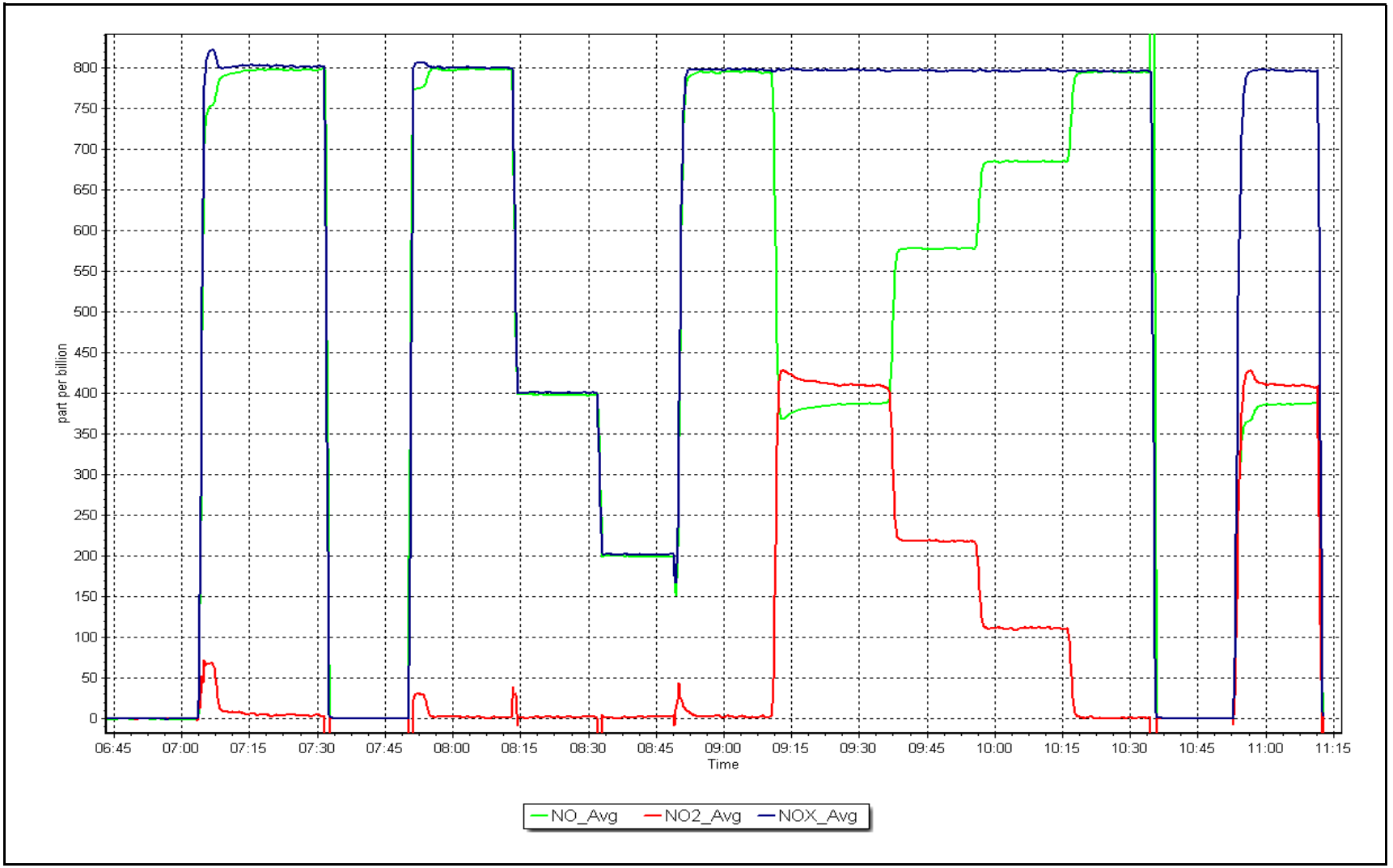
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
799.7	797.2	1.0031
399.8	397.8	1.0051
200.5	198.9	1.0083

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.997142	*0.90 - 1.10*
Intercept	-0.511738	*+/-20*



NO_X Calibration Plot Date: September 25, 2026 Location: Anzac



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	September 29, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	7:27	End time (MST):	9:53
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	API T700	Serial Number:	3812
ZAG Make/Model:	API T701H	Serial Number:	357

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1152220023
Analyzer Range	0 - 500 ppb		

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.000943	1.002971	Backgd or Offset:	-0.8	-0.8
Calibration intercept:	0.460000	0.680000	Coeff or Slope:	1.532	1.532

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.5	----
As found High point	5000	926.4	400.0	399.7	1.002
As found Mid point					
As found Low point					
Baseline Corr As found:	399.2	Previous response	400.8	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.4	----
High point	5000	927.2	400.0	401.7	0.996
Mid point	5000	799.7	200.0	201.5	0.993
Low point	5000	704.6	100.0	101.2	0.988
As left zero	5000	0.0	0.0	0.7	----
As left span	5000	926.6	400.0	401.5	0.996
				Average Correction Factor	0.992

Notes: No adjustments or mainenance done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

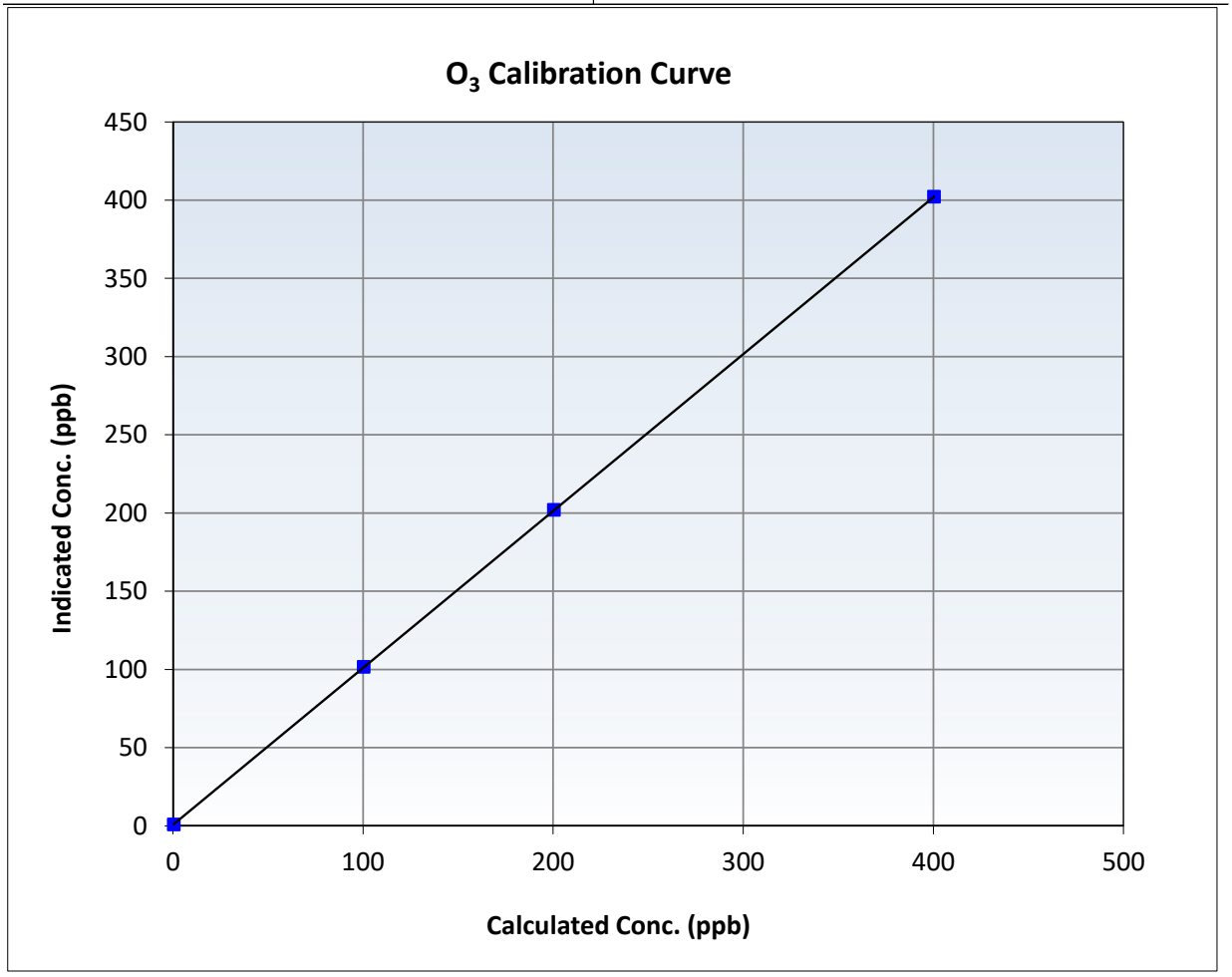
O_3 Calibration Summary

Station Information

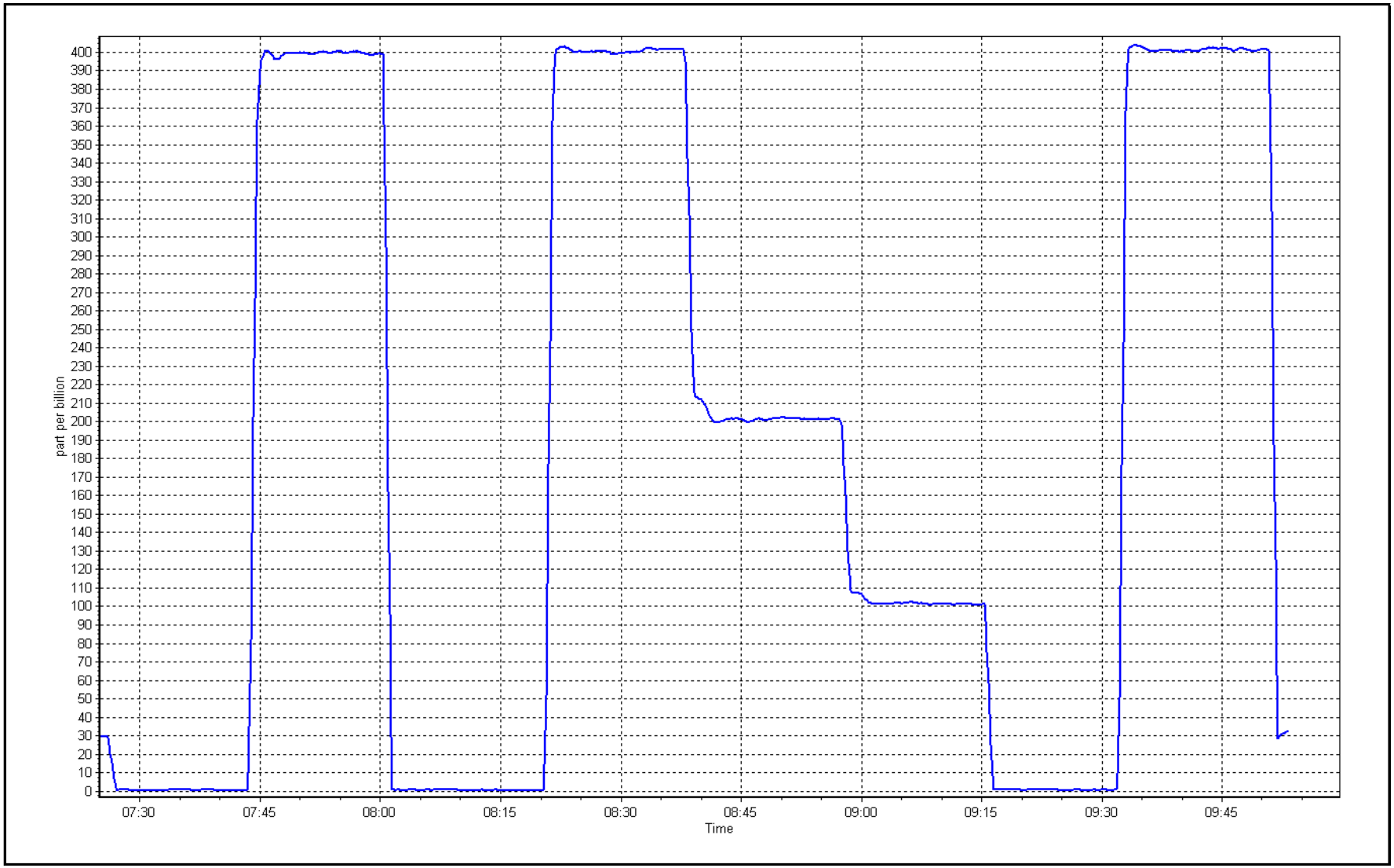
Calibration Date:	September 29, 2026	Previous Calibration:	August 5, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	7:27	End Time (MST):	9:53
Analyzer make:	Thermo 49i	Analyzer serial #:	1152220023

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.4	----	Correlation Coefficient	0.999998	*≥0.995*
400.0	401.7	0.9958	Slope	1.002971	*0.90 - 1.10*
200.0	201.5	0.9926			
100.0	101.2	0.9881	Intercept	0.680000	*+/- 5*



O_3 Calibration Plot Date: September 29, 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:	September 29, 2026	Last Cal Date:	August 31, 2026
Start time (MST):	8:14	End time (MST):	8:33
Analyzer Make:	AP T640	S/N:	1546
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388745
Temp/RH standard:	Alicat FP-25BT	S/N:	388745

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	(Limits)
T (°C)	9.20	9.10	9.20	☐	+/- 2 °C
P (mmHg)	696.70	699.8	696.70	☐	+/- 10 mmHg
Flow (LPM)	5.01	5.05	5.01	☐	+/- 0.25 LPM
PW% (pump)	37	-----	37	☐	>80%
Zero Verification	PM w/o HEPA:	0.90	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				☐	+/- 0.5

Date Optical Chamber Cleaned: August 25, 2026

Date Disposable Filter Changed: August 25, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: August 25, 2026

Date RH/T Sensor Cleaned: August 25, 2026

Notes: No adjustments done. Leak check Passed.

Calibration by: Melissa Lemay

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS17
WAPASU
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	September 15, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	9:39	End time (MST):	13:27
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:	2448
Zero Air Gen Model:	Teledyne API 701H		Serial Number:	1238

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1218153459	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.998606	1.003780	Backgd or Offset:	14.7	15.7
Calibration intercept:	-0.335181	-0.096551	Coeff or Slope:	1.088	1.101

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.5	----
As found High point	4920	79.8	799.9	792.6	1.010
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	792.1	Previous response	798.5	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4920	79.8	799.9	803.0	0.996
Mid point	4960	39.9	400.0	401.0	0.997
Low point	4980	20.0	200.5	201.4	0.995
As left zero	5000	0.0	0.0	-0.3	----
As left span	4920	79.8	799.9	804.5	0.994
				Average Correction Factor:	0.996

Notes: Sample inlet filter was changed after as founds. Adjusted zero and span.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

SO_2 Calibration Summary

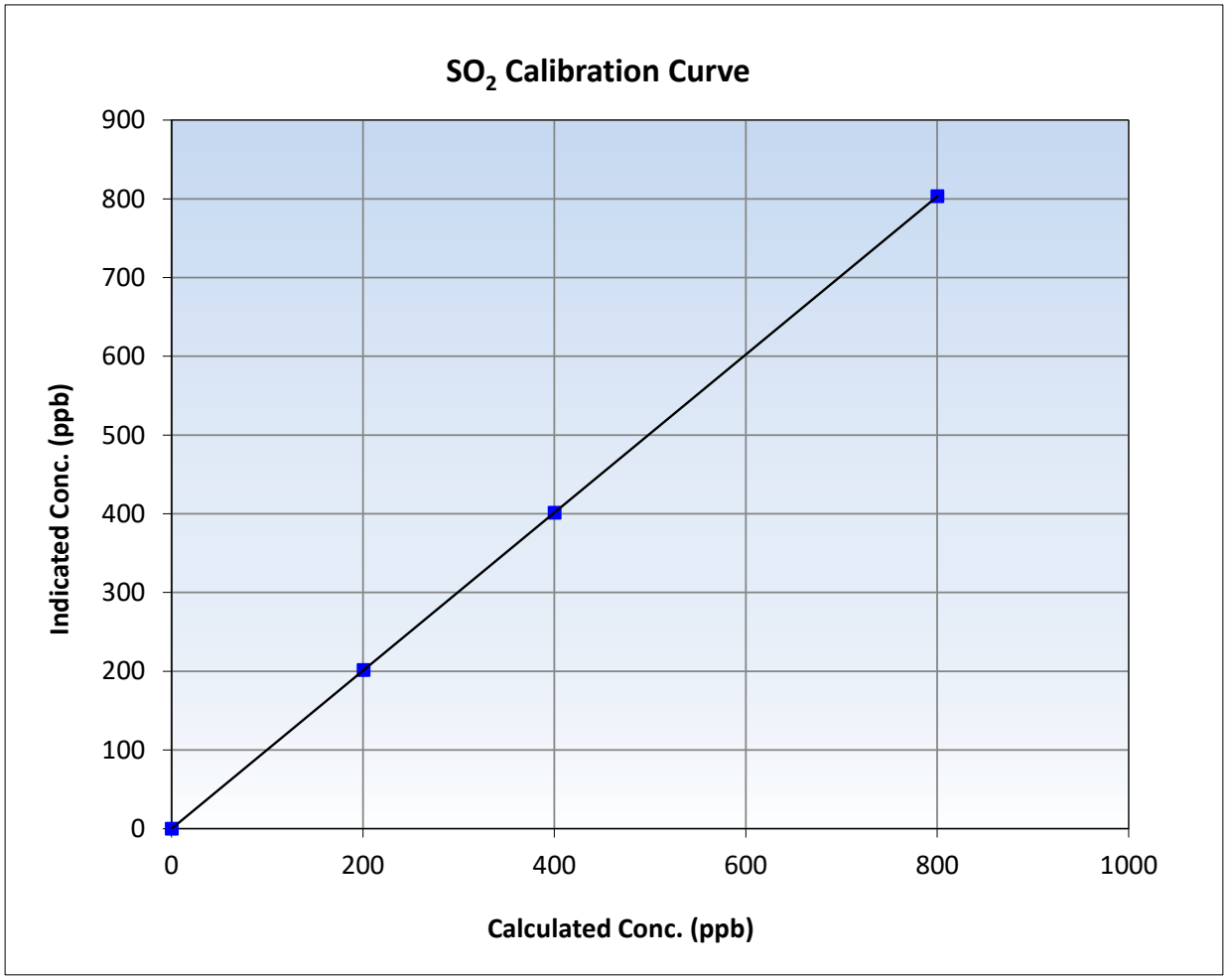
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 11, 2026
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	9:39	End Time (MST):	13:27
Analyzer make:	Thermo 43i	Analyzer serial #:	1218153459

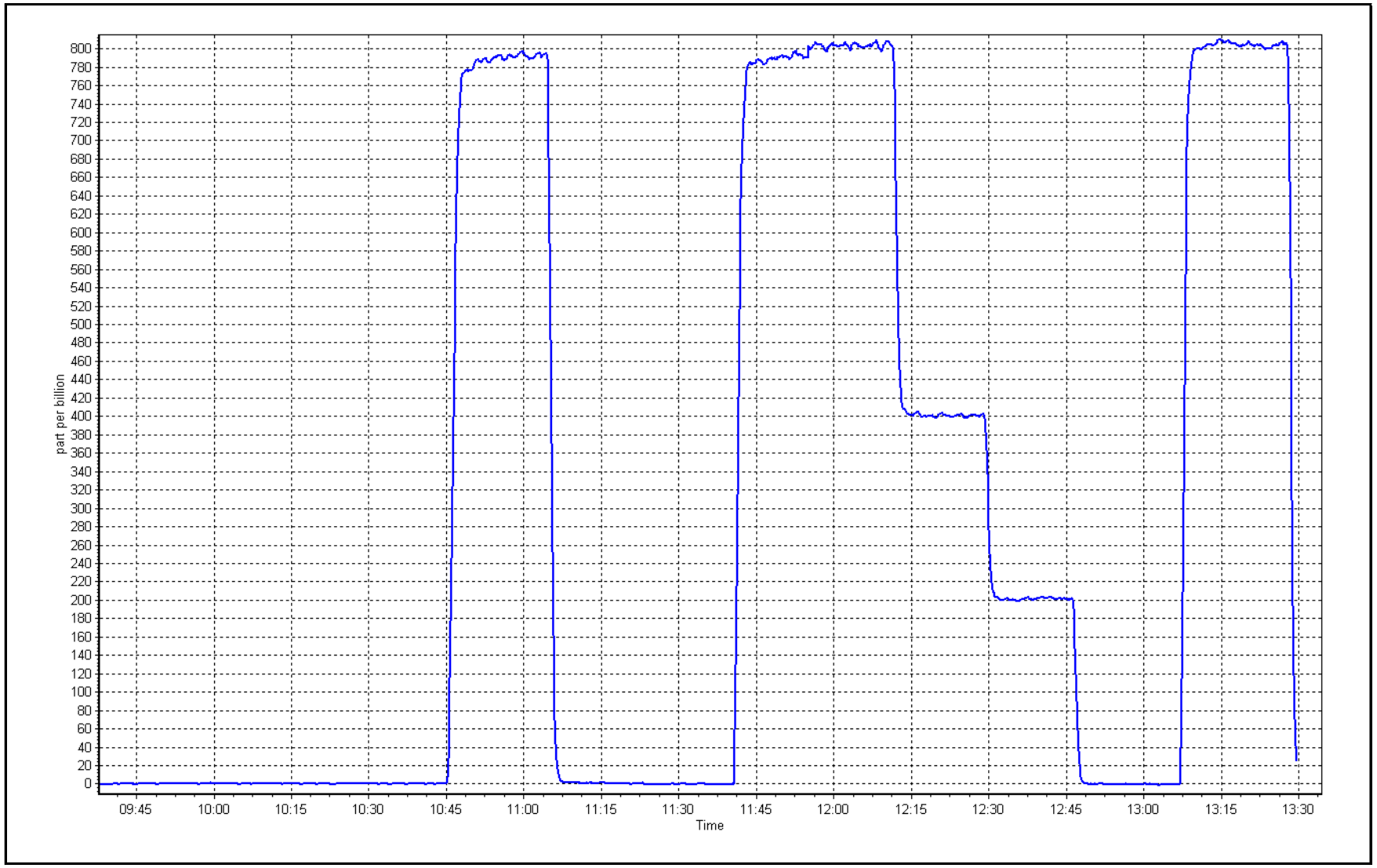
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
799.9	803.0	0.9962
400.0	401.0	0.9974
200.5	201.4	0.9954

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.003780	*0.90 - 1.10*
Intercept	-0.096551	*+/-30*



SO2 Calibration Plot Date: September 15, 2026 Location: Wapasu



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS 17
Calibration Date:	September 16, 2026	Last Cal Date:	August 17, 2026
Start time (MST):	10:27	End time (MST):	14:31
Reason:	Routine		

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:	2448
ZAG Make/Model:	API T701H		Serial Number:	1238

Analyzer Information

Analyzer make:	Thermo 43iQ-TL		Analyzer serial #:	12228021057
Converter make:	Global G150		Converter serial #:	2026-101
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.003209	0.997786	Backgd or Offset:	2.82	2.76
Calibration intercept:	0.100255	0.140132	Coeff or Slope:	0.935	0.917

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4916	83.9	80.0	81.4	0.983
As found Mid point	4958	41.9	40.0	40.8	0.980
As found Low point	4979	21.0	20.0	20.5	0.977
New cylinder response					

Baseline Corr As found:	81.4	Prev response:	80.40	*% change:	1.2%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.016634	AF Intercept:	0.080189
Baseline Corr 3rd AF pt:	20.5	AF Correlation:	0.999995	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4916	83.9	80.0	80.0	1.001
Mid point	4958	41.9	40.0	40.0	0.999
Low point	4979	21.0	20.0	20.2	0.992
As left zero	5000	0.0	0.0	0.1	----
As left span	4916	83.9	80.0	79.7	1.004
SO2 Scrubber Check	4920	79.8	798.0	0.0	----

Date of last scrubber change:	N/A	Ave Corr Factor	0.997
Date of last converter efficiency test:	N/A		

Notes: Sample inlet filter was changed after multipoint as founds. SO2 scrubber check done and passed. Adjusted span only.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

H_2S Calibration Summary

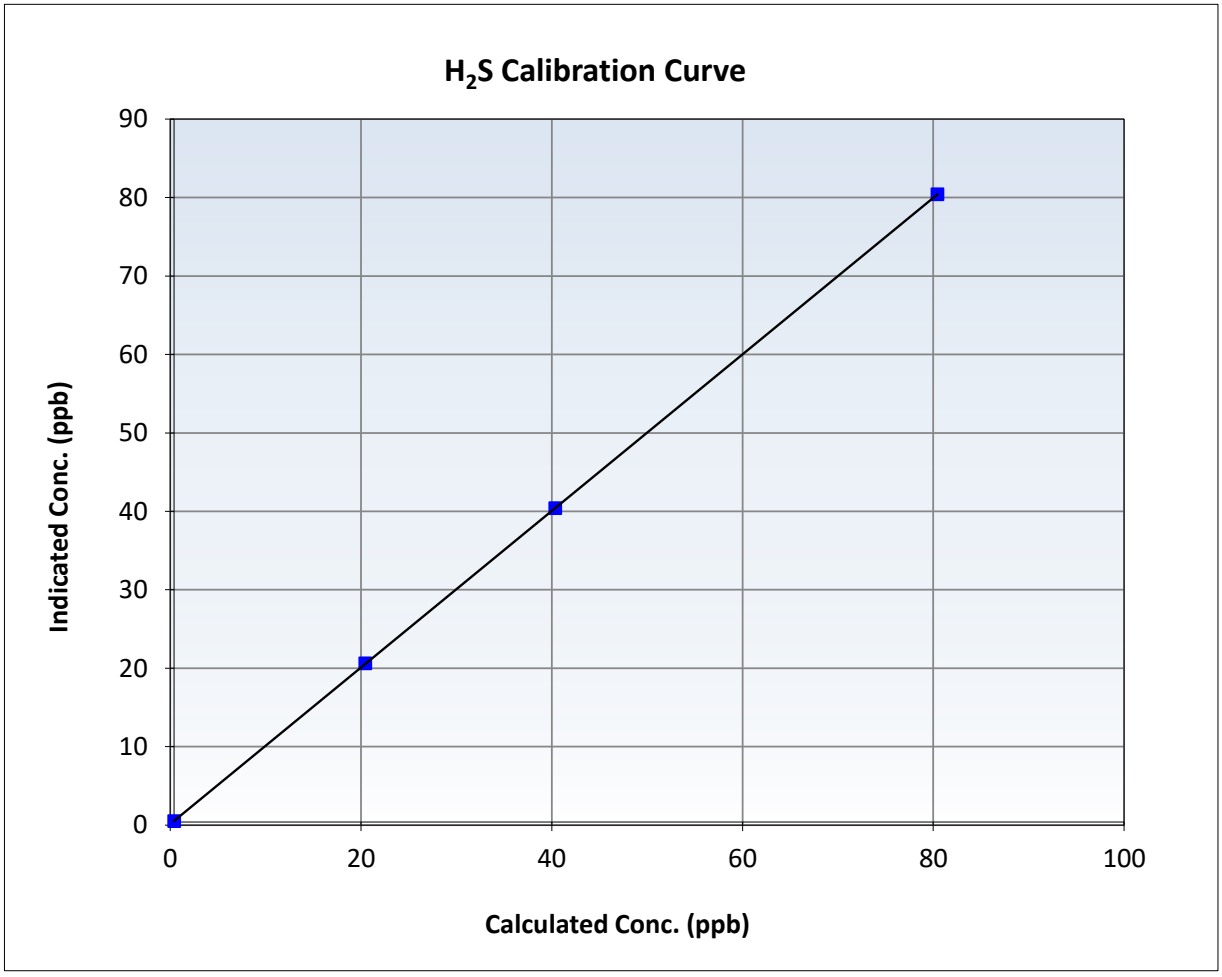
Station Information

Calibration Date:	September 16, 2026	Previous Calibration:	August 17, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	10:27	End Time (MST):	14:31
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	12228021057

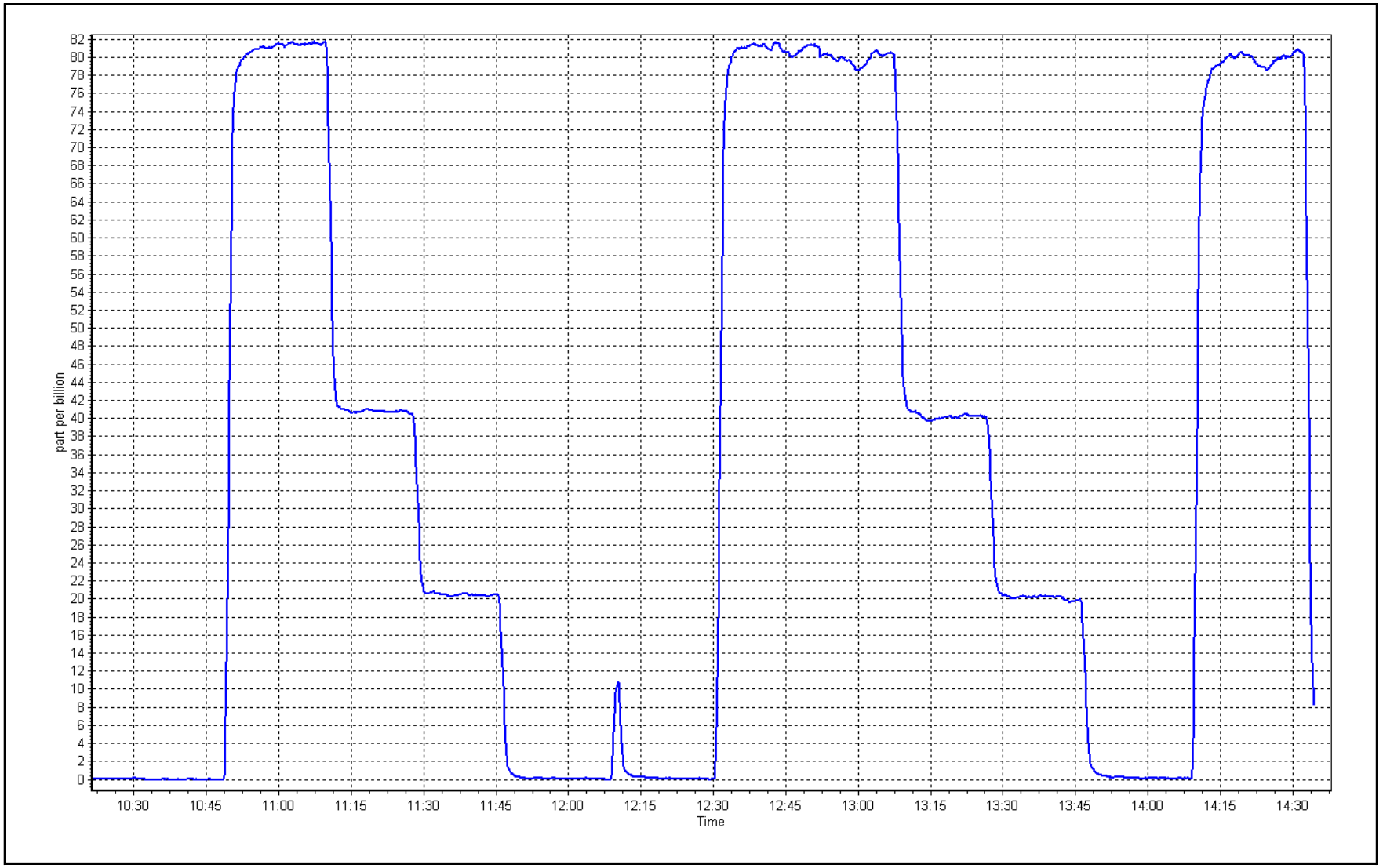
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
80.0	80.0	1.0005
40.0	40.0	0.9993
20.0	20.2	0.9918

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	0.997786	*0.90 - 1.10*
Intercept	0.140132	*+/-3*



H_2S Calibration Plot Date: September 16, 2026 Location: Wapasu



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	September 15, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	9:39	End time (MST):	13:27
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC422255		Cal Gas Expiry Date:	April 9, 2033	
CH4 Cal Gas Conc.	499.6	ppm	CH4 Equiv Conc.	1059.0	ppm
C3H8 Cal Gas Conc.	203.4	ppm			
Removed Gas Cert:		n/a	Removed Gas Expiry:		
Removed CH4 Conc.	499.6	ppm	CH4 Equiv Conc.	1059.0	ppm
Removed C3H8 Conc.	203.4	ppm	Diff between cyl:		
Calibrator Make/Model:	Teledyne API T700		Serial Number:	2448	
ZAG Make/Model:	Teledyne API 701H		Serial Number:	1238	

Analyzer Information

Analyzer make:	Thermo 51i-LT		Analyzer serial #:	1218153352	
Analyzer Range:	0 - 20 ppm				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.994185	1.005042	Background:	2.770	3.000
Calibration intercept:	0.099290	-0.040770	Coefficient:	4.323	4.374

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.21	----
As found High point	4920	79.8	16.90	16.99	1.007
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	16.78	Previous response	16.90	*% 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	

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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	-0.05	----
High point	4920	79.8	16.90	16.95	0.997
Mid point	4960	39.9	8.45	8.43	1.002
Low point	4980	20.0	4.24	4.25	0.998
As left zero	5000	0.0	0.00	-0.06	----
As left span	4920	79.8	16.90	17.00	0.994
				Average Correction Factor	0.999

Notes: Sample inlet filter was changed after as founds. Adjusted zero only.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

THC Calibration Summary

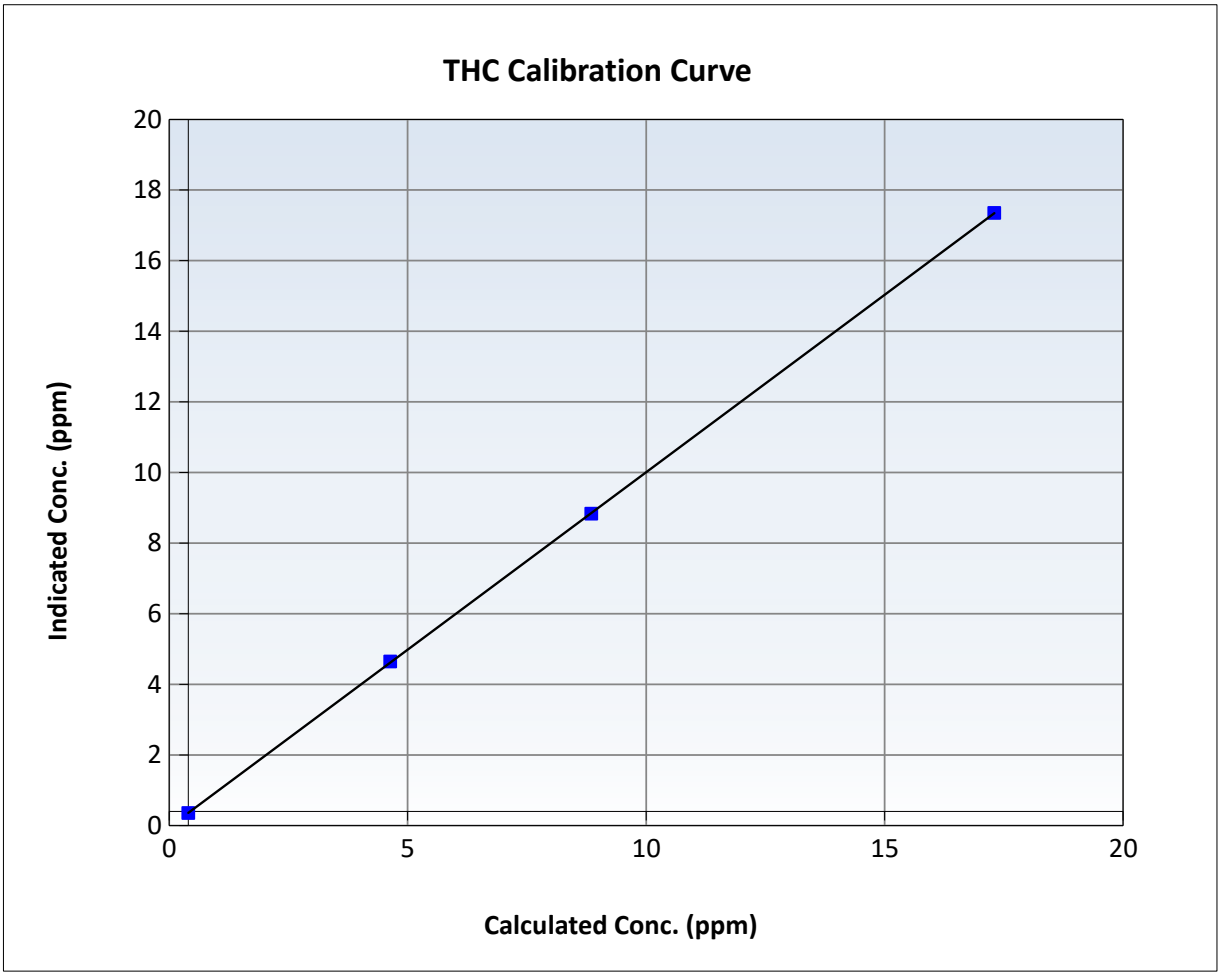
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 11, 2026
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	9:39	End Time (MST):	13:27
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1218153352

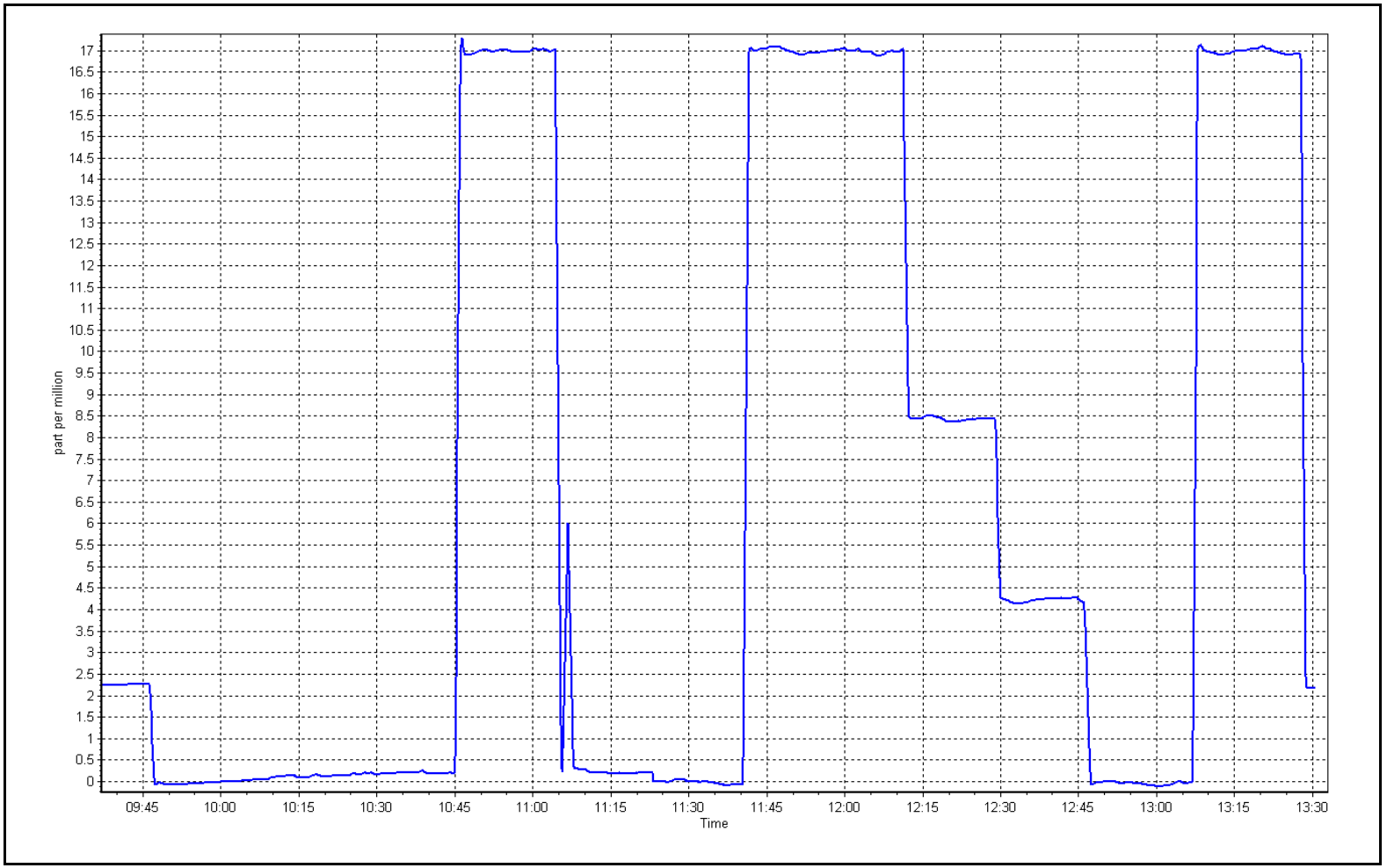
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	-0.05	----
16.90	16.95	0.9971
8.45	8.43	1.0024
4.24	4.25	0.9978

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.005042	*0.90 - 1.10*
Intercept	-0.040770	*+/-1.5*



THC Calibration Plot Date: September 15, 2026 Location: Wapasu



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Wapasu
Station number:	AMS 17
Calibration Date:	September 22, 2026
Last Cal Date:	August 20, 2026
Start time (MST):	8:40
End time (MST):	13:18
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0045177	Cal Gas Expiry Date:	July 19, 2032
NOX Cal Gas Conc:	61.30 ppm	NO Cal Gas Conc:	61.00 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	
Removed Gas NOX Conc:	61.30 ppm	Removed Gas NO Conc:	61.00 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	API T700	Serial Number:	2448
ZAG make/model:	API T701H	Serial Number:	359

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.1	0.5	-0.4	----	----
AF High point	4934	65.6	804.3	800.4	3.9	775.0	769.6	5.4	1.0380	1.0407
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	803.6 ppb	NO =	798.1 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = -3.7%
Baseline Corr 1st pt	NO_X =	774.9 ppb	NO =	769.1 ppb	As Found Statistics	*Percent Change	NO = -3.8%
Baseline Corr 2nd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO_X r^2:	Nx Sl:	Nx Int:
Baseline Corr 3rd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO r^2:	NO Sl:	NO Int:
					As found NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo Scientific 42i
Serial Number: 1218153460
NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.048	1.090	NO bkgnd or offset:	3.6	4.4
NOX coeff or slope:	0.997	0.996	NOX bkgnd or offset:	4.0	4.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	223.5	220.8

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.996564	0.997672
NO_X Cal Offset:	2.056113	2.116134
NO Cal Slope:	0.995896	0.999609
NO Cal Offset:	0.955962	0.556027
NO_2 Cal Slope:	1.002669	1.009922
NO_2 Cal Offset:	0.041081	-0.959580

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	----	----
High point	4934	65.6	804.3	800.4	3.9	803.6	800.3	3.2	1.0009	1.0001
Mid point	4967	32.8	402.1	400.2	2.0	404.1	400.9	3.2	0.9952	0.9982
Low point	4984	16.4	201.0	200.1	1.0	205.0	201.2	3.8	0.9807	0.9944
As left zero	5000	0.0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
As left span	4934	65.6	804.3	394.8	409.5	802.6	394.8	407.8	1.0021	1.0000
								Average Correction Factor	0.9923	0.9976

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	795.6	399.9	399.6	403.3	0.9909	100.9%
Mid GPT point	795.6	602.4	197.1	197.1	1.0002	100.0%
Low GPT point	795.6	697.9	101.6	101.1	1.0053	99.5%
				Average Correction Factor	0.9988	100.1%

Notes: Sample inlet filter was changed after as founds. Adjusted zero and span. Used 2nd NO point because of drift.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

NO_X Calibration Summary

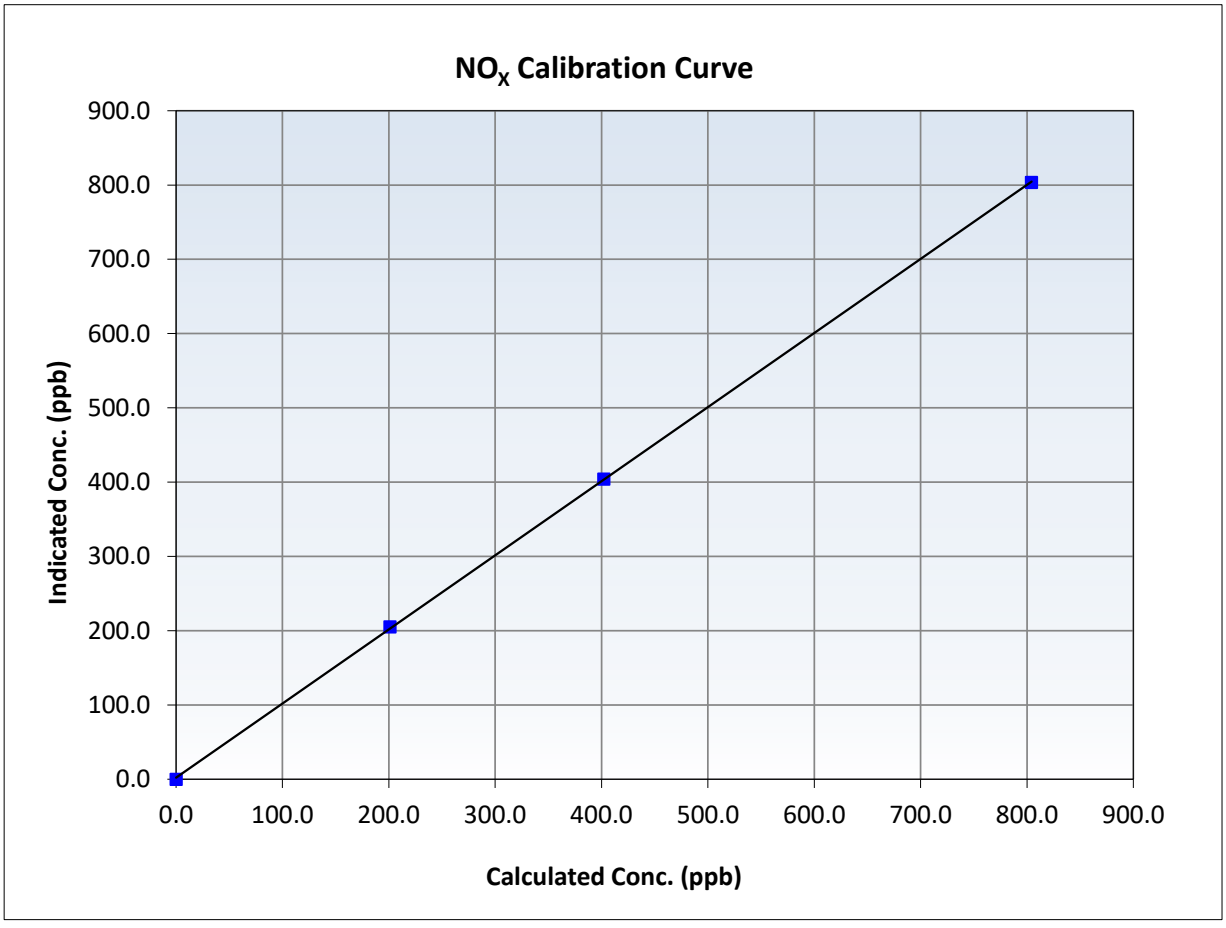
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 20, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	8:40	End Time (MST):	13:18
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
804.3	803.6	1.0009
402.1	404.1	0.9952
201.0	205.0	0.9807

Statistical Evaluation		Limits
Correlation Coefficient	0.999968	≥0.995
Slope	0.997672	0.90 - 1.10
Intercept	2.116134	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

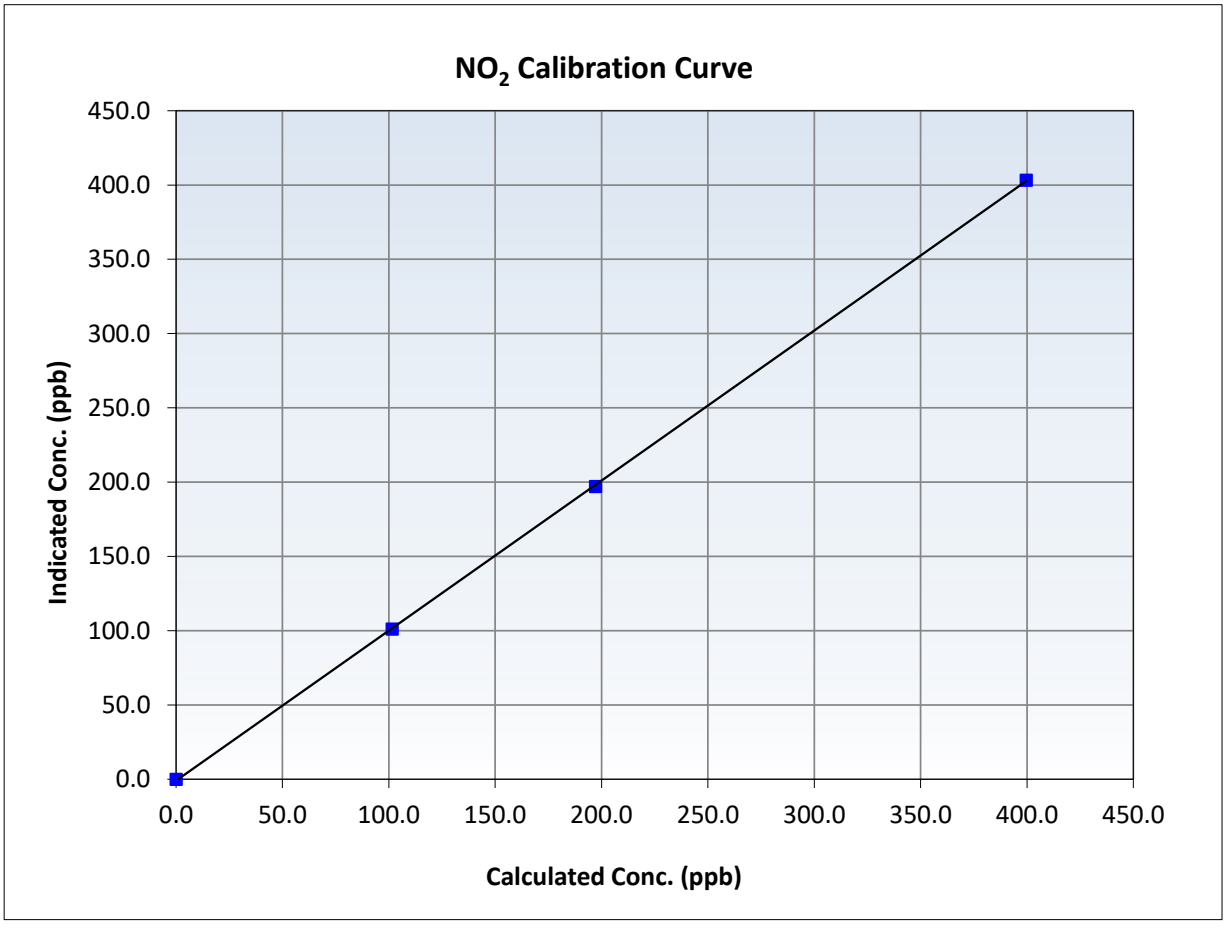
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 20, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	8:40	End Time (MST):	13:18
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
399.6	403.3	0.9909
197.1	197.1	1.0002
101.6	101.1	1.0053

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999969	*≥0.995*
Slope	1.009922	*0.90 - 1.10*
Intercept	-0.959580	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

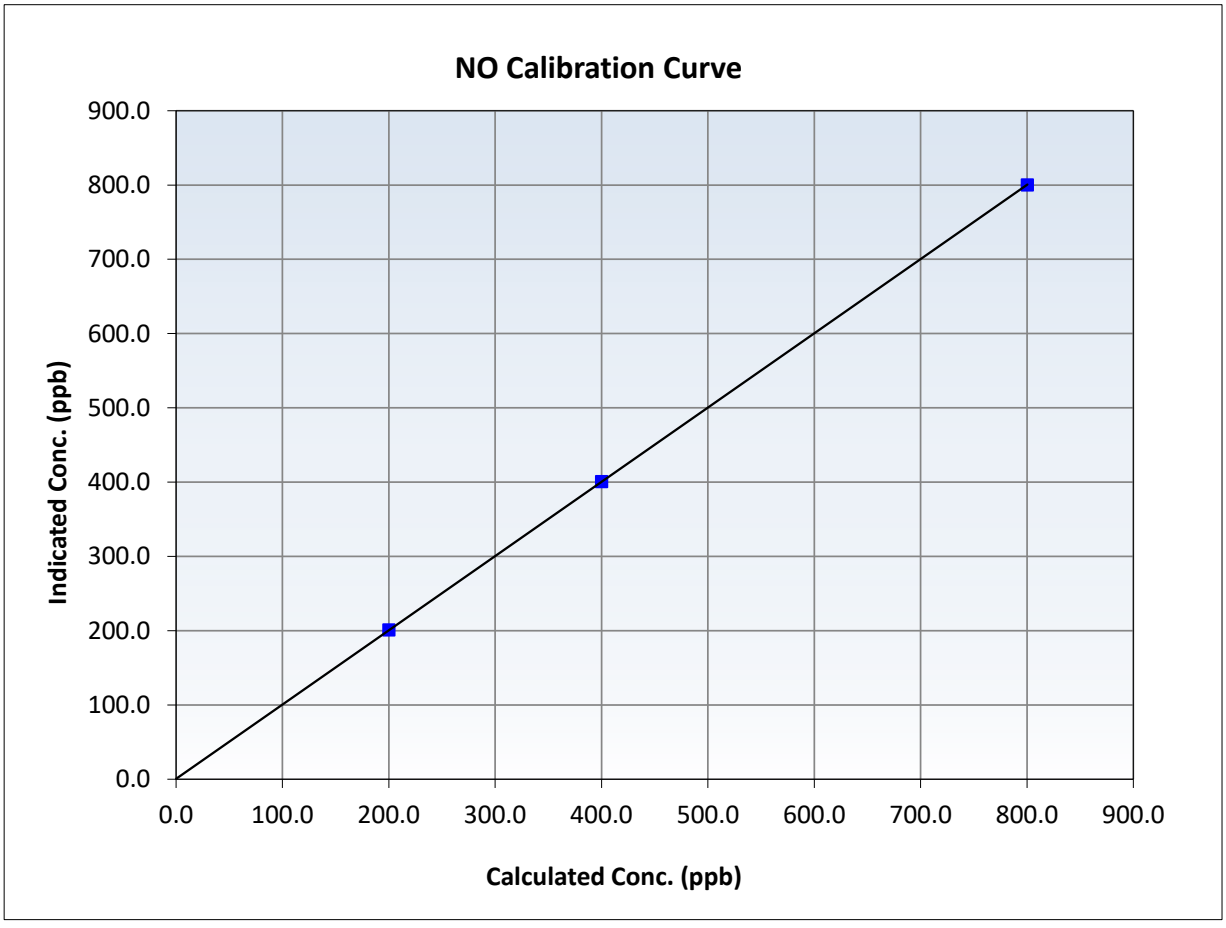
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 20, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	8:40	End Time (MST):	13:18
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

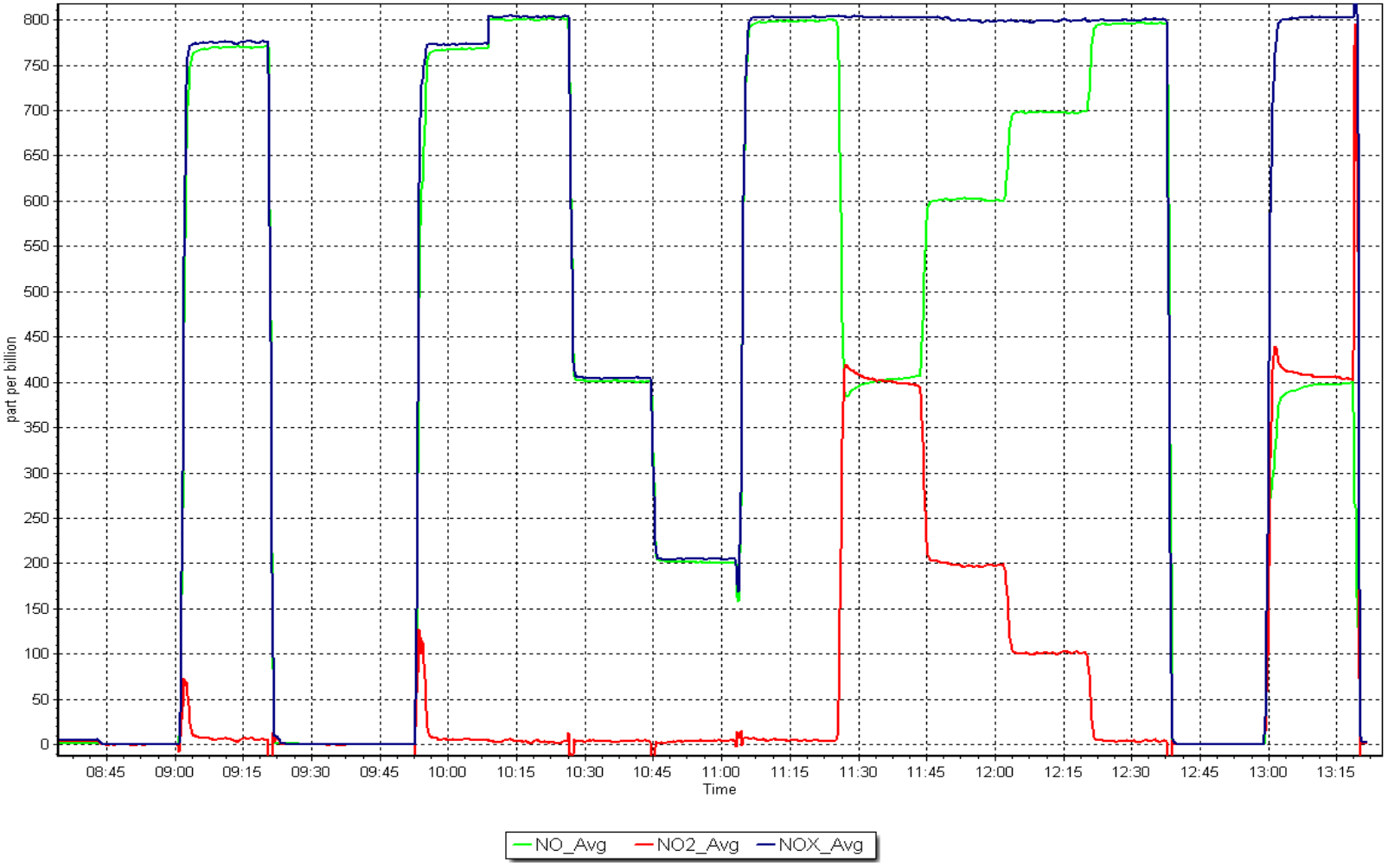
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
800.4	800.3	1.0001
400.2	400.9	0.9982
200.1	201.2	0.9944

Statistical Evaluation		Limits
Correlation Coefficient	0.999997	≥0.995
Slope	0.999609	0.90 - 1.10
Intercept	0.556027	+/-20



NO_X Calibration Plot Date: September 22, 2026 Location: Wapasu



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	September 18, 2026	Last Cal Date:	August 7, 2026
Start time (MST):	10:13	End time (MST):	12:53
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	API T700	Serial Number:	2448
ZAG Make/Model:	API T701H	Serial Number:	359

Analyzer Information

Analyzer make:	Thermo Scientific 49i	Analyzer serial #:	1501663734
Analyzer Range	0 - 500 ppb		

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.997571	1.003029	Backgd or Offset:	-0.6	-0.6
Calibration intercept:	0.400000	0.120000	Coeff or Slope:	1.013	1.013

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	200.0	0.0	0.4	----
As found High point	5000	1004.3	400.0	400.4	1.000
As found Mid point					
As found Low point					
Baseline Corr As found:	400.0	Previous response	399.4	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	200.0	0.0	0.3	----
High point	5000	1005.7	400.0	401.3	0.997
Mid point	5000	851.4	200.0	201.0	0.995
Low point	5000	742.3	100.0	100.0	1.000
As left zero	5000	200.0	0.0	0.6	----
As left span	5000	1002.2	400.0	405.2	0.987
				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

O_3 Calibration Summary

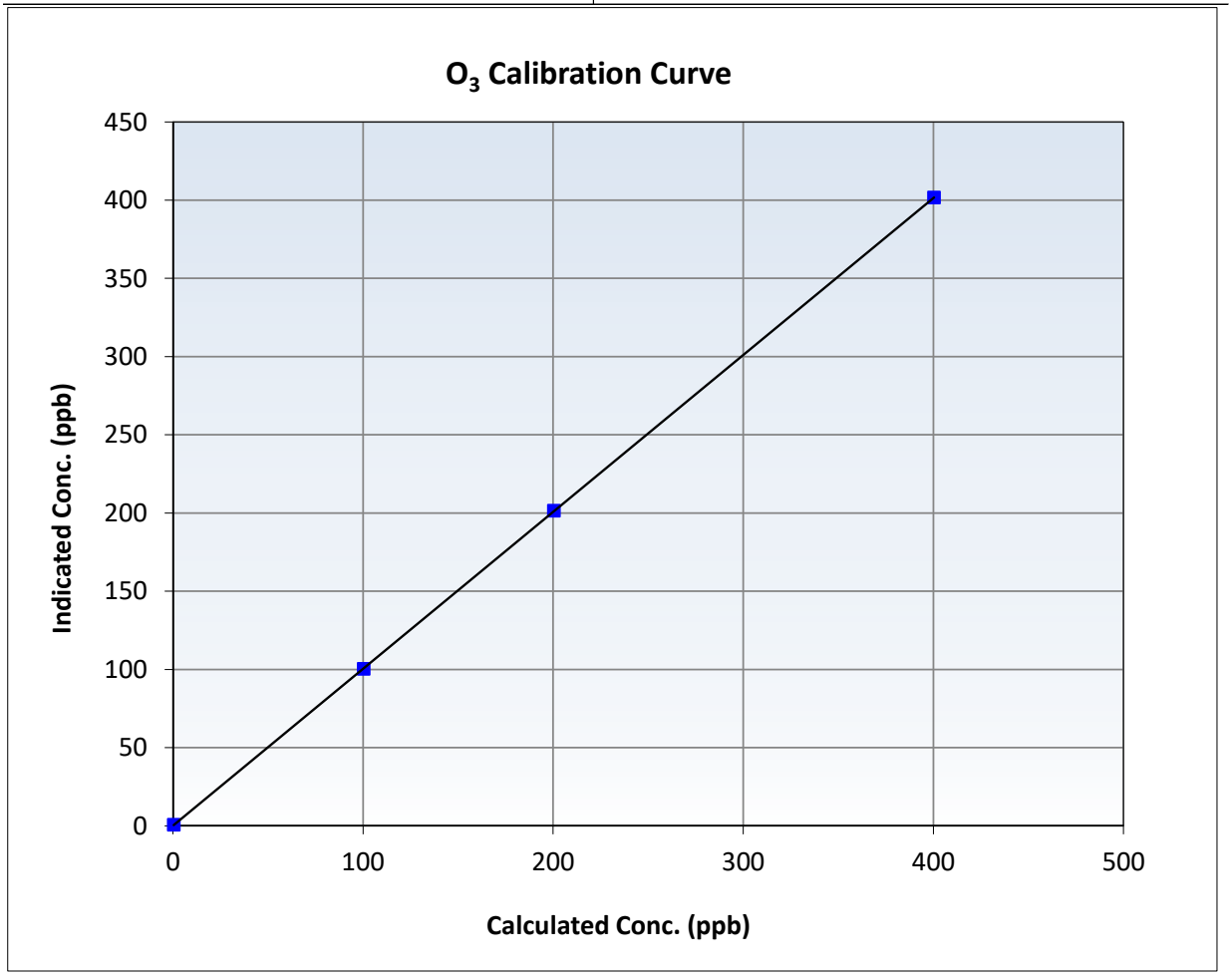
Station Information

Calibration Date:	September 18, 2026	Previous Calibration:	August 7, 2026
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	10:13	End Time (MST):	12:53
Analyzer make:	Thermo Scientific 49i	Analyzer serial #:	1501663734

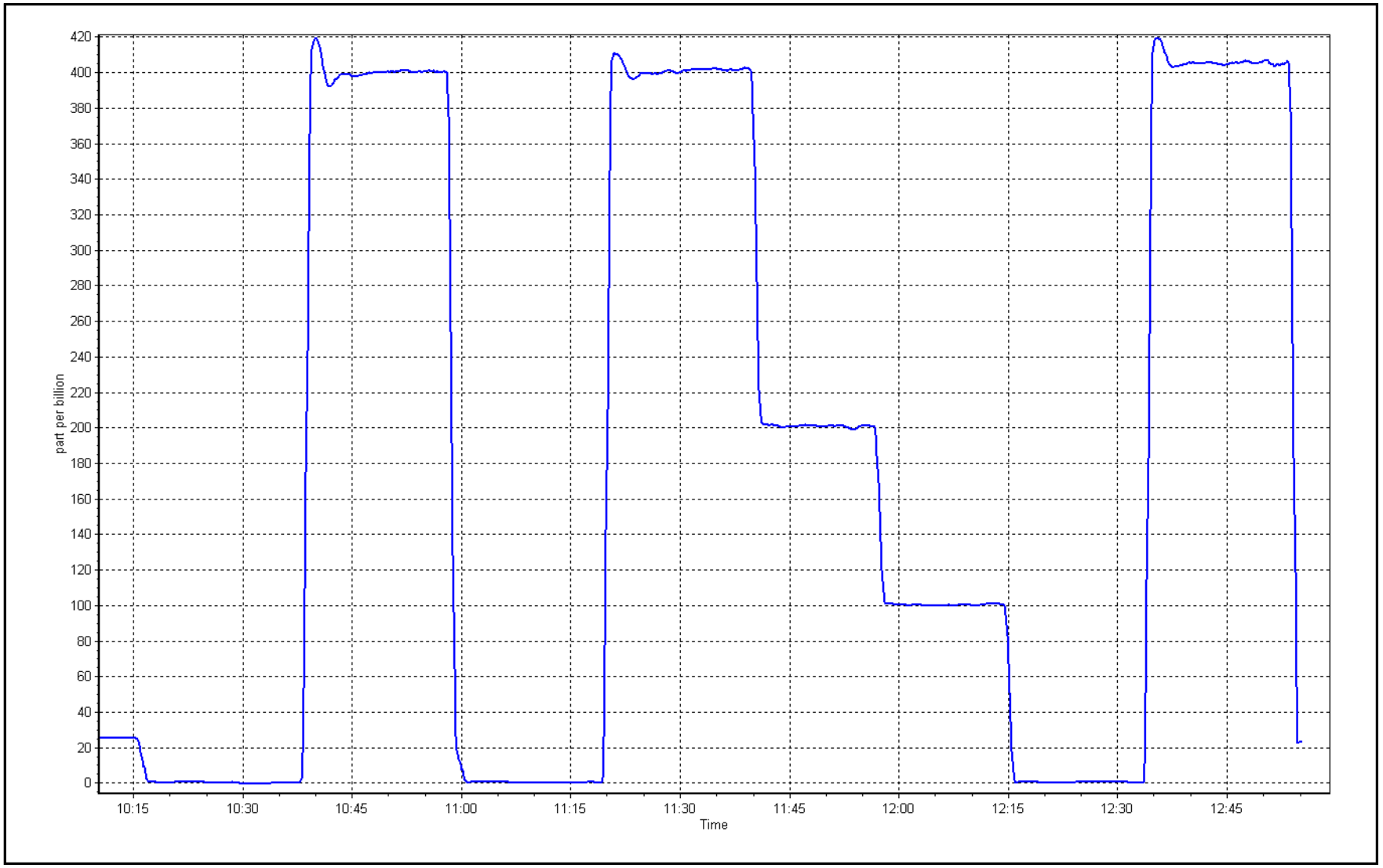
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
400.0	401.3	0.9968
200.0	201.0	0.9950
100.0	100.0	1.0000

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	1.003029	*0.90 - 1.10*
Intercept	0.120000	*+/- 5*



O_3 Calibration Plot Date: September 18, 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:	September 16, 2026	Last Cal Date:	August 17, 2026
Start time (MST):	13:21	End time (MST):	13:39
Analyzer Make:	Teledyne API T640	S/N:	1183
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)	8.10	8.40	8.10	☐	+/- 2 °C
P (mmHg)	717.70	720.84	717.70	☐	+/- 10 mmHg
Flow (LPM)	5.00	4.97	5.00	☐	+/- 0.25 LPM
PW% (pump)	53	-----	53	☐	>80%
Zero Verification	PM w/o HEPA:	12.30	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: January 30, 2027

Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test				☐	+/- 0.5

Date Optical Chamber Cleaned: August 17, 2026

Date Disposable Filter Changed: August 17, 2026

Post- maintenance Zero Verification: PM w/ HEPA: _____ <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 made. Leak check passed.

Calibration by: Jan Castro

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS18
STONY MOUNTAIN
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	September 9, 2026	Last Cal Date:	August 13, 2026
Start time (MST):	10:51	End time (MST):	15:18
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	51.22	ppm	Cal Gas Exp Date:	October 9, 2032
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.011438	1.013579	Backgd or Offset:	26.7	27.1
Calibration intercept:	-1.217646	-1.317105	Coeff or Slope:	0.812	0.812

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.3	----
As found High point	4921	78.1	800.2	809.7	0.989
As found Mid point	4960	39.1	400.6	405.6	0.988
As found Low point	4981	19.5	199.7	200.4	0.998
New cylinder response					
Baseline Corr As found:	809.4	Previous response	808.1	*% change	0.2%
Baseline Corr 2nd AF pt:	405.3	AF Slope:	1.012339	AF Intercept:	-0.458026
Baseline Corr 3rd AF pt:	200.1	AF Correlation:	0.999993	* = > +/-5% change initiates investigation	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4921	78.1	800.2	810.7	0.987
Mid point	4960	39.1	400.6	403.5	0.993
Low point	4981	19.5	199.7	199.8	1.000
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	78.1	800.2	811.3	0.986
				Average Correction Factor:	0.993

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

SO_2 Calibration Summary

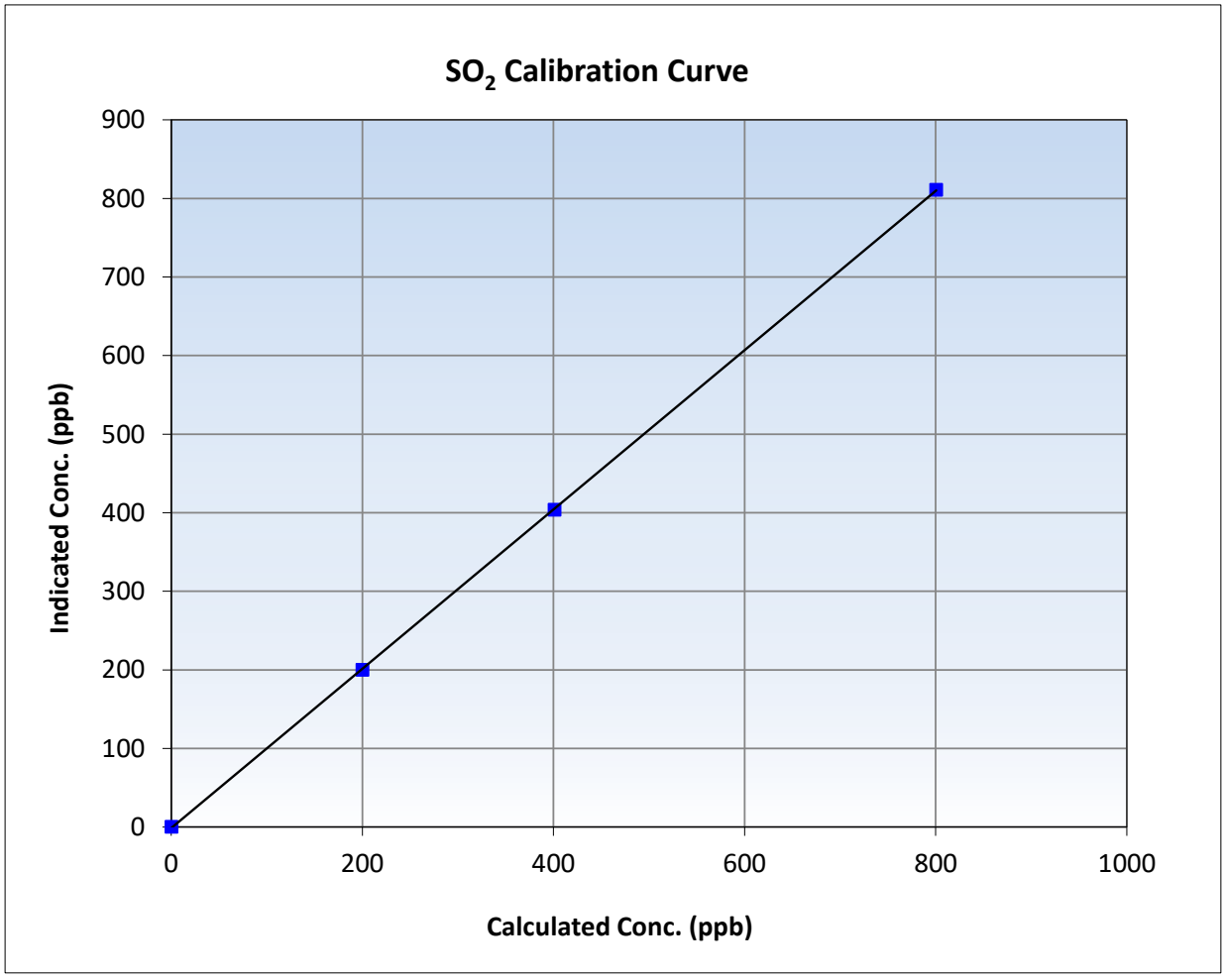
Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 13, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	10:51	End Time (MST):	15:18
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1501301453

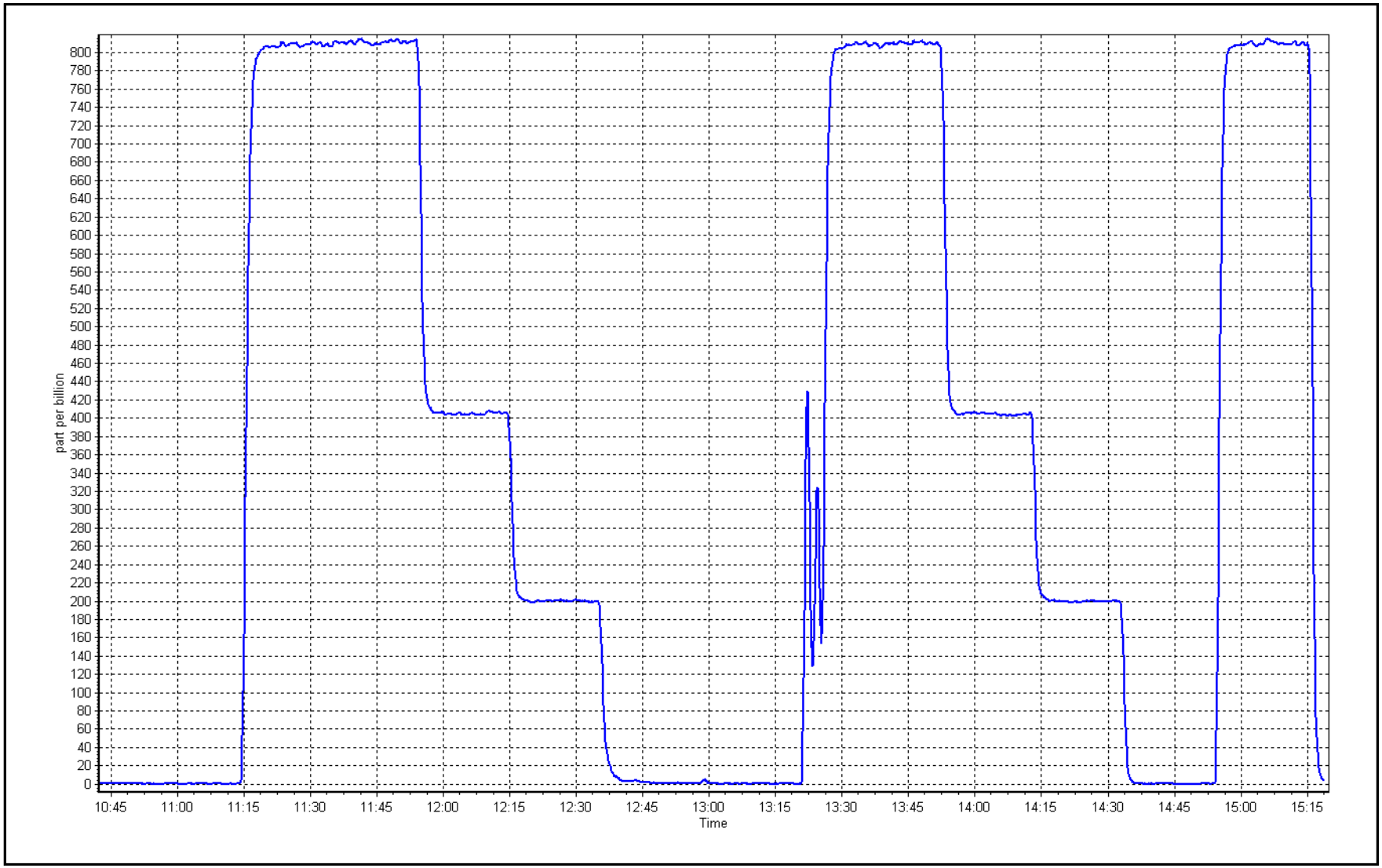
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.2	810.7	0.9870
400.6	403.5	0.9928
199.7	199.8	0.9997

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999981	*≥0.995*
Slope	1.013579	*0.90 - 1.10*
Intercept	-1.317105	*+/-30*



SO2 Calibration Plot Date: September 9, 2026 Location: Stony Mountain



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS18
Calibration Date:	September 15, 2026	Last Cal Date:	August 31, 2026
Start time (MST):	10:23	End time (MST):	14:34
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 43IQ-TLE		Analyzer serial #:	12530443166
Converter make:	CD Nova CDN-101		Converter serial #:	555
Analyzer Range	0 - 100 ppb		Converter Temp:	800 degC

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.994656	0.985942	Backgd or Offset:	0.50	0.50
Calibration intercept:	-0.258947	-0.178761	Coeff or Slope:	1.173	1.173

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.3	80.0	80.5	0.994
As found Mid point	4958	41.2	40.1	40.0	1.001
As found Low point	4979	20.6	20.0	19.4	1.032
New cylinder response					

Baseline Corr As found:	80.5	Prev response:	79.32	*% change:	1.5%
Baseline Corr 2nd AF pt:	40.0	AF Slope:	1.008939	AF Intercept:	-0.359165
Baseline Corr 3rd AF pt:	19.4	AF Correlation:	0.999902	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	82.3	80.0	78.8	1.015
Mid point	4958	41.2	40.1	39.2	1.022
Low point	4979	20.6	20.0	19.4	1.032
As left zero	5000	0.0	0.0	0.1	----
As left span	4917	82.3	80.0	77.6	1.031
SO2 Scrubber Check	4923	77.1	771.0	0.0	----
Date of last scrubber change:		17-Dec-21		Ave Corr Factor	1.023
Date of last converter efficiency test:					

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

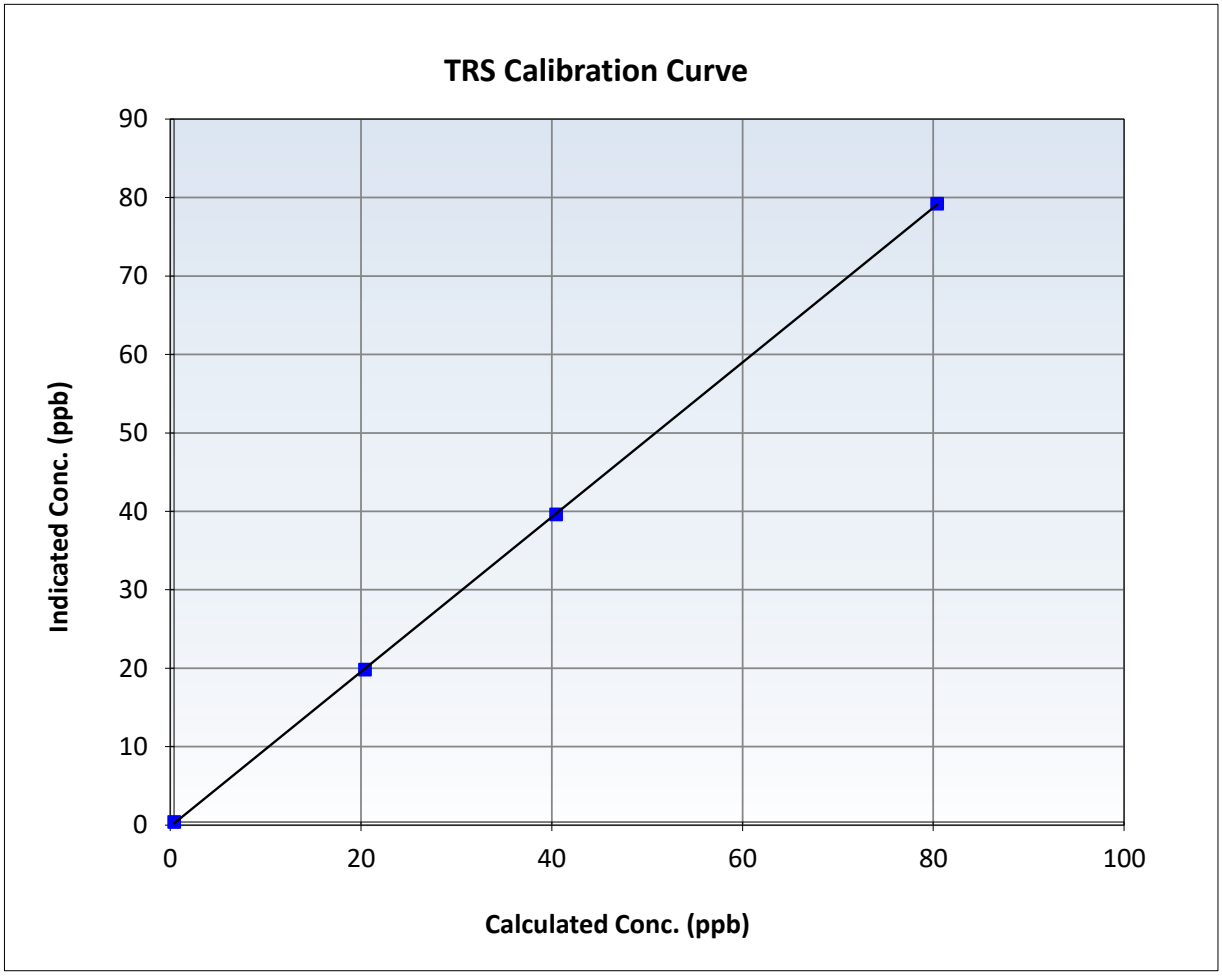
TRS Calibration Summary

Station Information

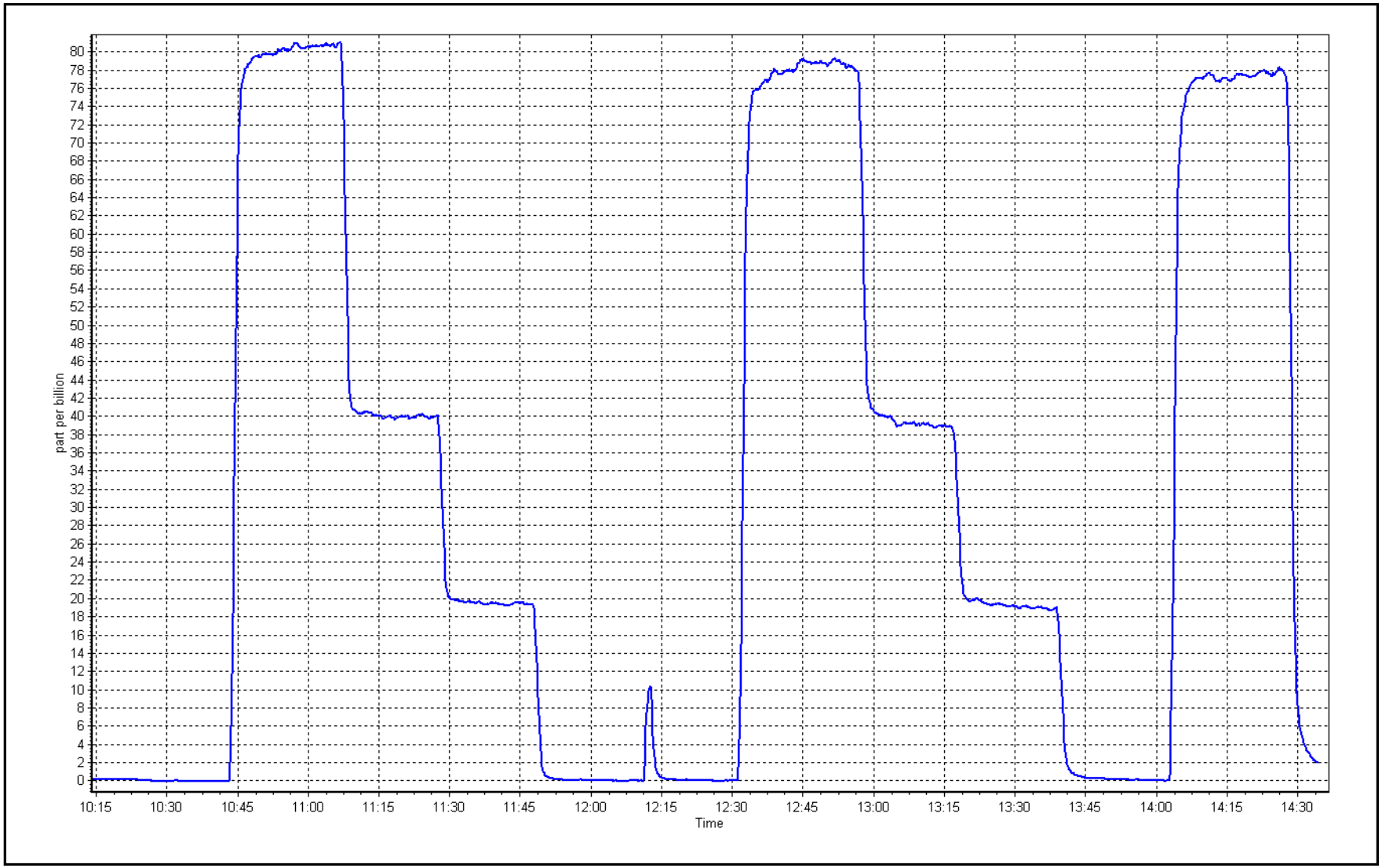
Calibration Date:	September 15, 2026	Previous Calibration:	August 31, 2026
Station Name:	Stony Mountain	Station Number:	AMS18
Start Time (MST):	10:23	End Time (MST):	14:34
Analyzer make:	Thermo 43IQ-TLE	Analyzer serial #:	12530443166

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999976	*≥0.995*
80.0	78.8	1.0153	Slope	0.985942	*0.90 - 1.10*
40.1	39.2	1.0218			
20.0	19.4	1.0322	Intercept	-0.178761	*+/-3*



TRS Calibration Plot Date: September 15, 2026 Location: Stony Mountain



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	September 9, 2026	Last Cal Date:	August 13, 2026
Start time (MST):	10:51	End time (MST):	15:18
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/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.94E-04	2.87E-04	NMHC SP Ratio:	4.89E-05	4.80E-05
CH4 Retention time:	14.8	14.8	NMHC Peak Area:	182721	185953
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.03	----
As found High point	4921	78.1	16.82	16.69	1.009
As found Mid point	4960	39.1	8.42	8.28	1.021
As found Low point	4981	19.5	4.20	4.17	1.013
New cylinder response					
Baseline Corr AF:	16.66	Prev response	16.70	*% change	-0.2%
Baseline Corr 2nd AF:	8.25	AF Slope:	0.990290	AF Intercept:	0.005702
Baseline Corr 3rd AF:	4.14	AF Correlation:	0.999962	* = > +/-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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.03	----
High point	4921	78.1	16.82	16.70	1.007
Mid point	4960	39.1	8.42	8.36	1.008
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	16.48	1.021
				Average Correction Factor	1.010

Notes: Changed sample inlet filter and H2 cylinder after as founds. Adjusted span only.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.1	8.93	8.86	1.008
As found Mid point	4960	39.1	4.47	4.40	1.017
As found Low point	4981	19.5	2.23	2.22	1.007
New cylinder response					
Baseline Corr AF:	8.86	Prev response	8.86	*% change	0.0%
Baseline Corr 2nd AF:	4.40	AF Slope:	0.991786	AF Intercept:	-0.006934
Baseline Corr 3rd AF:	2.22	AF Correlation:	0.999972	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	78.1	8.93	8.85	1.010
Mid point	4960	39.1	4.47	4.43	1.010
Low point	4981	19.5	2.23	2.20	1.014
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.1	8.93	8.69	1.028
				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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.03	----
As found High point	4921	78.1	7.89	7.83	1.012
As found Mid point	4960	39.1	3.95	3.88	1.025
As found Low point	4981	19.5	1.97	1.96	1.021
New cylinder response					
Baseline Corr AF:	7.80	Prev response	7.83	*% change	-0.4%
Baseline Corr 2nd AF:	3.85	AF Slope:	0.988335	AF Intercept:	0.013035
Baseline Corr 3rd AF:	1.93	AF Correlation:	0.999948	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.03	----
High point	4921	78.1	7.89	7.85	1.005
Mid point	4960	39.1	3.95	3.93	1.005
Low point	4981	19.5	1.97	1.94	1.014
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.1	7.89	7.78	1.013
				Average Correction Factor	1.008

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.990419	0.991994
THC Cal Offset:	0.036250	0.003659
CH4 Cal Slope:	0.990674	0.993282
CH4 Cal Offset:	0.015213	0.008214
NMHC Cal Slope:	0.990296	0.990857
NMHC Cal Offset:	0.018636	-0.004555

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

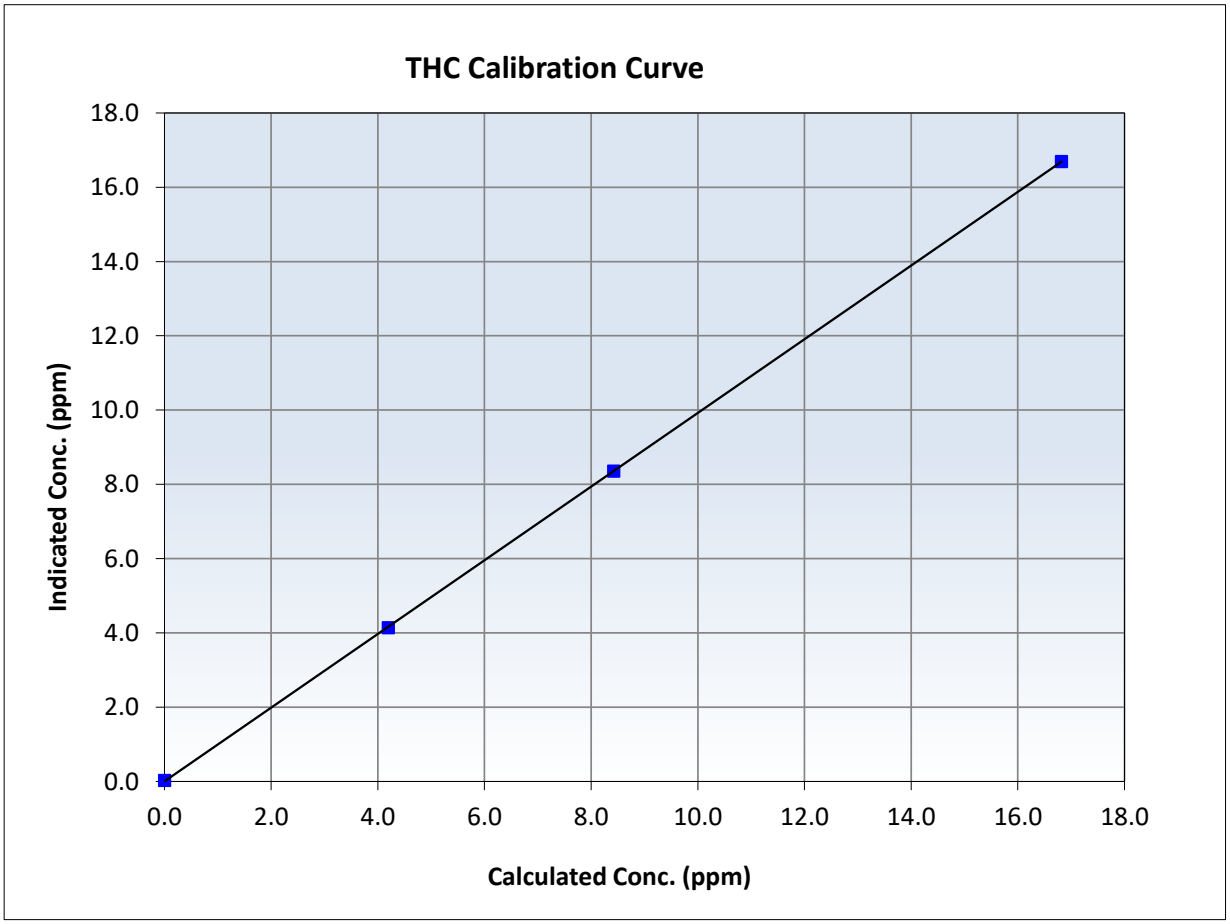
THC Calibration Summary

Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 13, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	10:51	End Time (MST):	15:18
Analyzer make:	Thermo 55i	Analyzer serial #:	1170050130

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.03	----	Correlation Coefficient	0.999991	≥0.995
16.82	16.70	1.0074	Slope	0.991994	0.90 - 1.10
8.42	8.36	1.0079			
4.20	4.14	1.0141	Intercept	0.003659	+/-0.5



Wood Buffalo Environmental Association

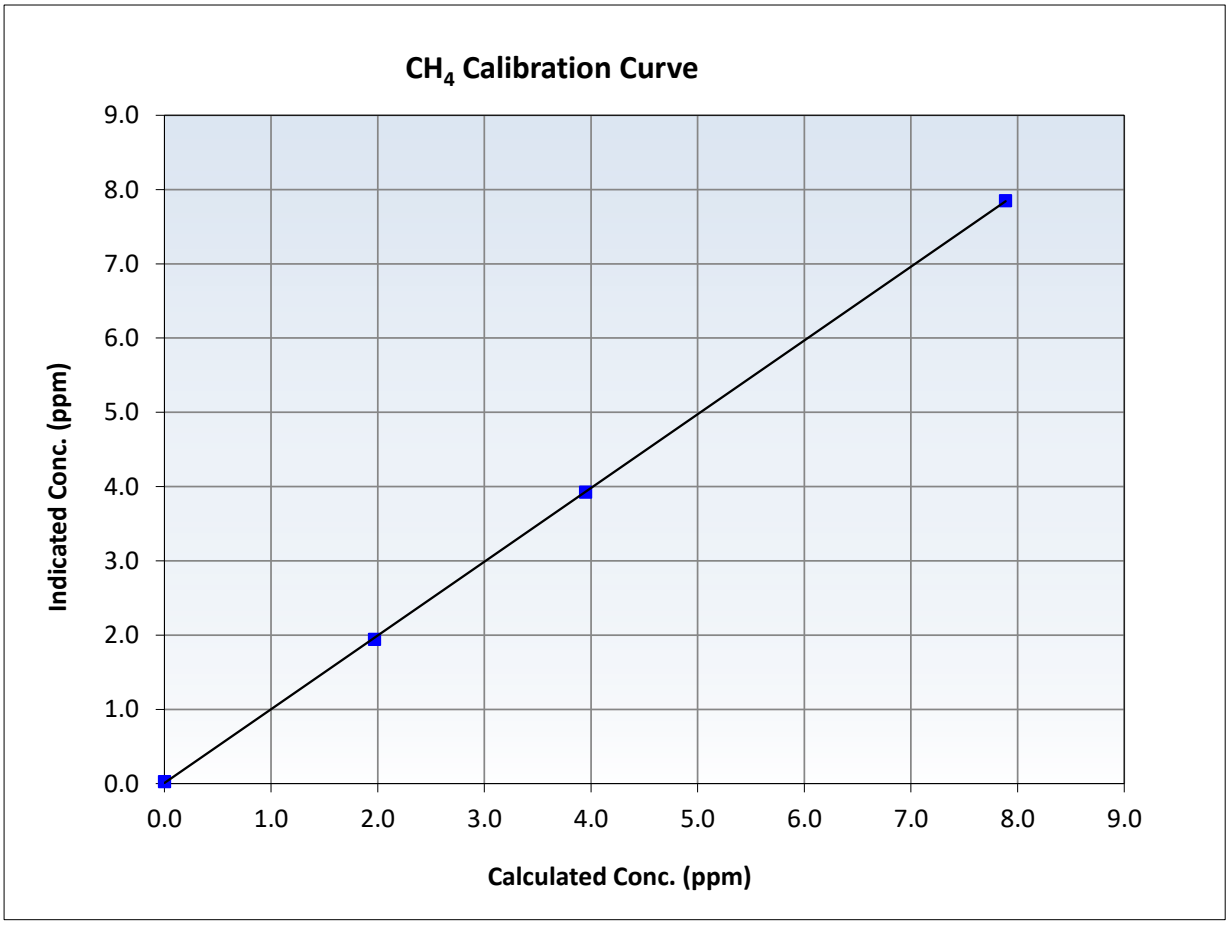
CH_4 Calibration Summary

Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 13, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	10:51	End Time (MST):	15:18
Analyzer make:	Thermo 55i	Analyzer serial #:	1170050130

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.03	----	Correlation Coefficient	0.999975	≥0.995
7.89	7.85	1.0048	Slope	0.993282	0.90 - 1.10
3.95	3.93	1.0054			
1.97	1.94	1.0139	Intercept	0.008214	+/-0.5



Wood Buffalo Environmental Association

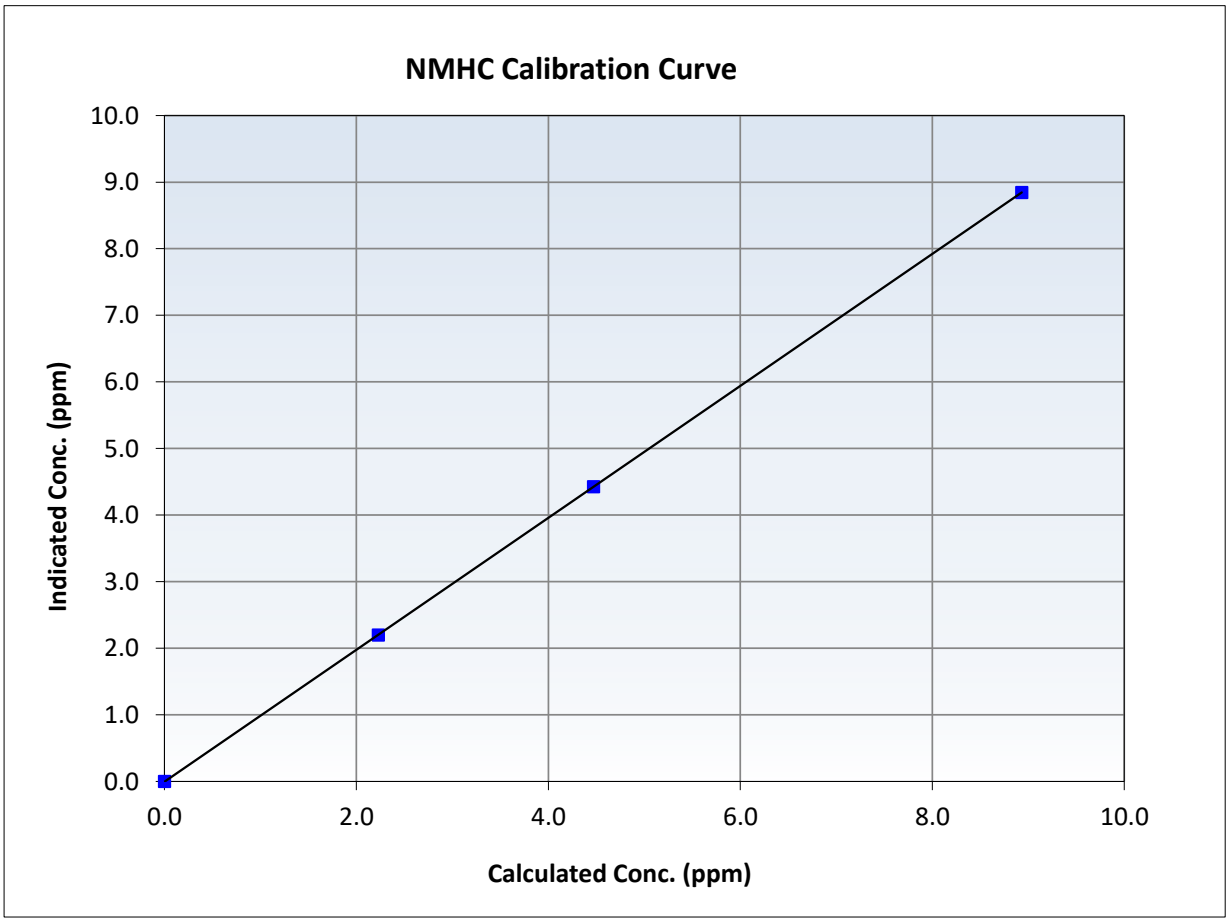
NMHC Calibration Summary

Station Information

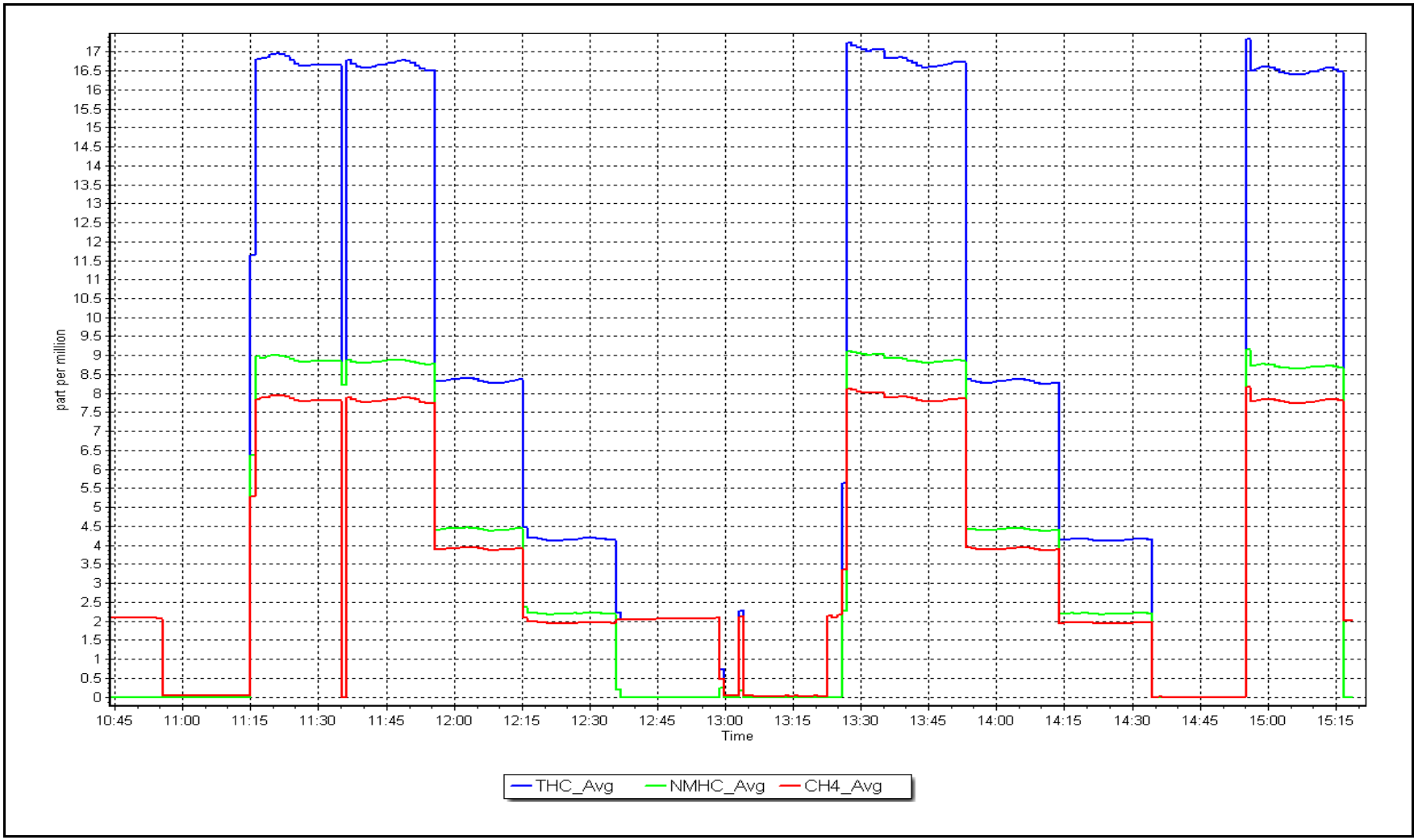
Calibration Date:	September 9, 2026	Previous Calibration:	August 13, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	10:51	End Time (MST):	15:18
Analyzer make:	Thermo 55i	Analyzer serial #:	1170050130

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999998	≥0.995
8.93	8.85	1.0096	Slope	0.990857	0.90 - 1.10
4.47	4.43	1.0101	Intercept	-0.004555	+/-0.5
2.23	2.20	1.0143			



NMHC Calibration Plot Date: September 9, 2026 Location: Stony Mountain



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Stony Mountain
Station number:	AMS 18
Calibration Date:	September 2, 2026
Last Cal Date:	August 20, 2026
Start time (MST):	9:47
End time (MST):	14:19
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0045516	Cal Gas Expiry Date:	November 17, 2026
NOX Cal Gas Conc:	60.30 ppm	NO Cal Gas Conc:	60.10 ppm
Removed Cylinder #:	N/A	Removed Gas Exp Date:	N/A
Removed Gas NOX Conc:	60.30 ppm	Removed Gas NO Conc:	60.10 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	2658
ZAG make/model:	Teledyne API 701	Serial Number:	4890

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.0	0.1	0.0	----	----
AF High point	4933	66.6	803.3	800.6	2.7	728.5	726.4	2.1	1.1026	1.1023
AF Mid point										
AF Low point										
New cyl resp										

Previous Respo	4933	NO_X =	799.7 ppb	NO =	798.4 ppb		
Baseline Corr 1st pt		NO_X =	728.5 ppb	NO =	726.3 ppb		
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

*Percent Change	NO_X =	-9.8%	
*Percent Change	NO =	-9.9%	

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo Scientific 42i Serial Number: 1501663731

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.079	1.186	NO bkgnd or offset:	10.7	11.8
NOX coeff or slope:	0.997	0.997	NOX bkgnd or offset:	10.8	11.8
NO2 coeff or slope:	1.000	0.998	Reaction cell Press:	220.7	218.6

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998400	0.998526
NO_X Cal Offset:	-2.249424	-1.568905
NO Cal Slope:	1.001582	1.000638
NO Cal Offset:	-3.450199	-2.769994
NO_2 Cal Slope:	0.999723	0.998688
NO_2 Cal Offset:	0.277198	-0.460485

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.2	0.2	0.0	----	----
High point	4933	66.6	803.3	800.6	2.7	801.5	799.9	1.5	1.0022	1.0009
Mid point	4967	33.3	401.6	400.2	1.3	398.2	396.0	2.3	1.0085	1.0107
Low point	4983	16.6	200.2	199.5	0.7	196.8	194.1	2.7	1.0173	1.0281
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	389.8	413.5	802.4	389.8	412.6	1.0011	1.0000
								Average Correction Factor	1.0093	1.0132

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	798.4	386.4	414.7	413.5	1.0028	99.7%
Mid GPT point	798.4	595.5	205.6	205.8	0.9989	100.1%
Low GPT point	798.4	696.6	104.5	102.6	1.0182	98.2%
				Average Correction Factor	1.0066	99.3%

Notes: An investigation was conducted, diagnostics were consistent with previous calibration results. No issues were identified with the setup, and the flow remained within acceptable limits. Changed the inlet filter after as founds. Adjusted span only.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

NO_X Calibration Summary

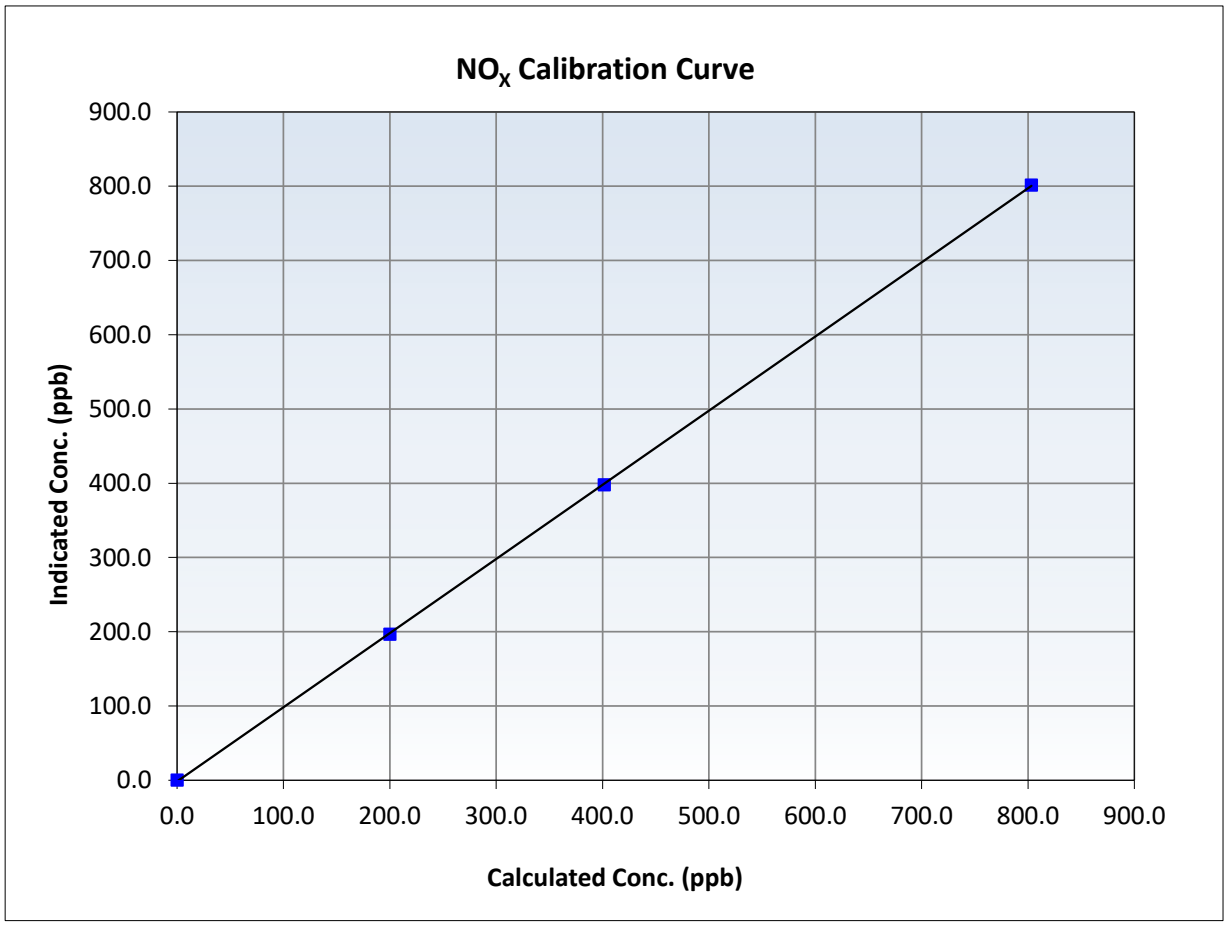
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 20, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	9:47	End Time (MST):	14:19
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
803.3	801.5	1.0022
401.6	398.2	1.0085
200.2	196.8	1.0173

Statistical Evaluation		Limits
Correlation Coefficient	0.999977	≥0.995
Slope	0.998526	0.90 - 1.10
Intercept	-1.568905	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

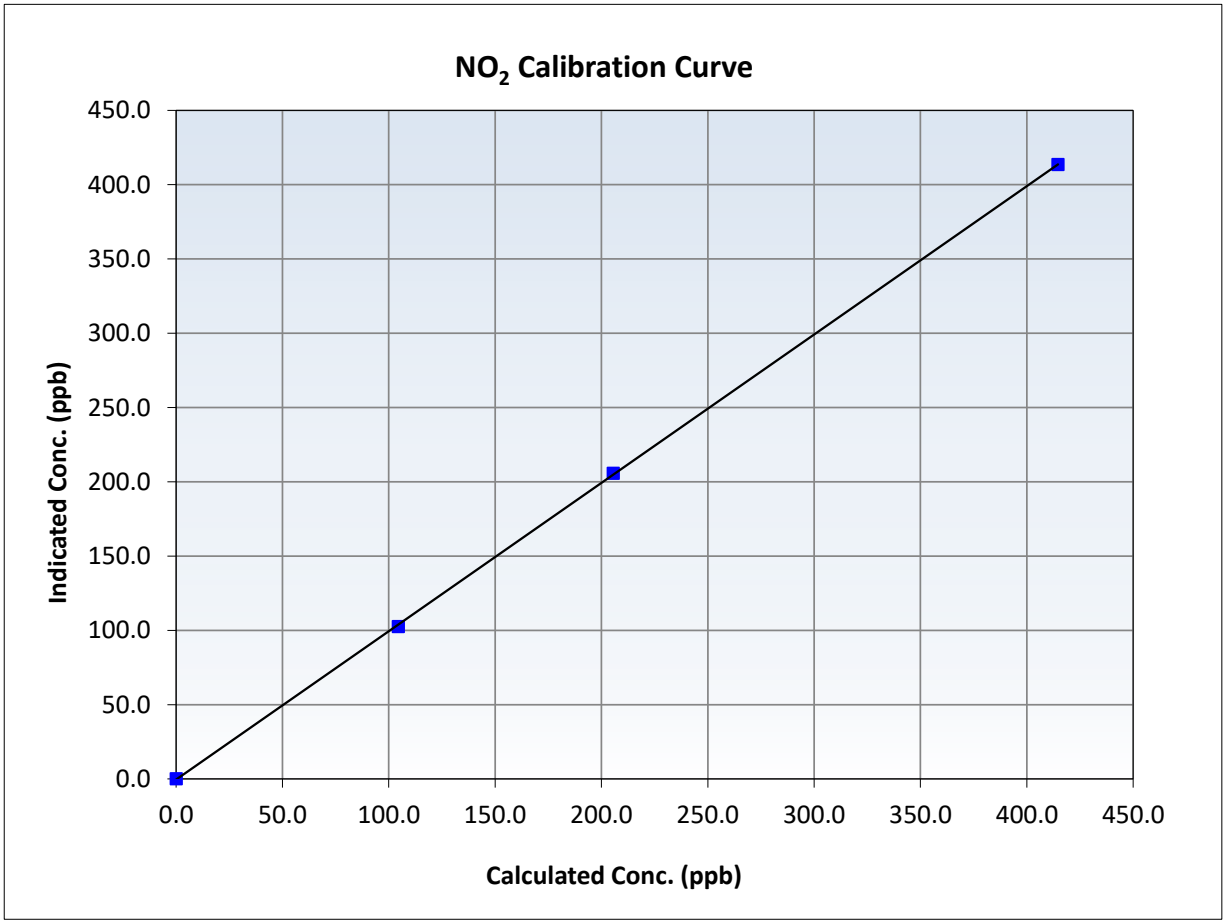
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 20, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	9:47	End Time (MST):	14:19
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
414.7	413.5	1.0028
205.6	205.8	0.9989
104.5	102.6	1.0182

Statistical Evaluation		Limits
Correlation Coefficient	0.999970	≥0.995
Slope	0.998688	0.90 - 1.10
Intercept	-0.460485	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

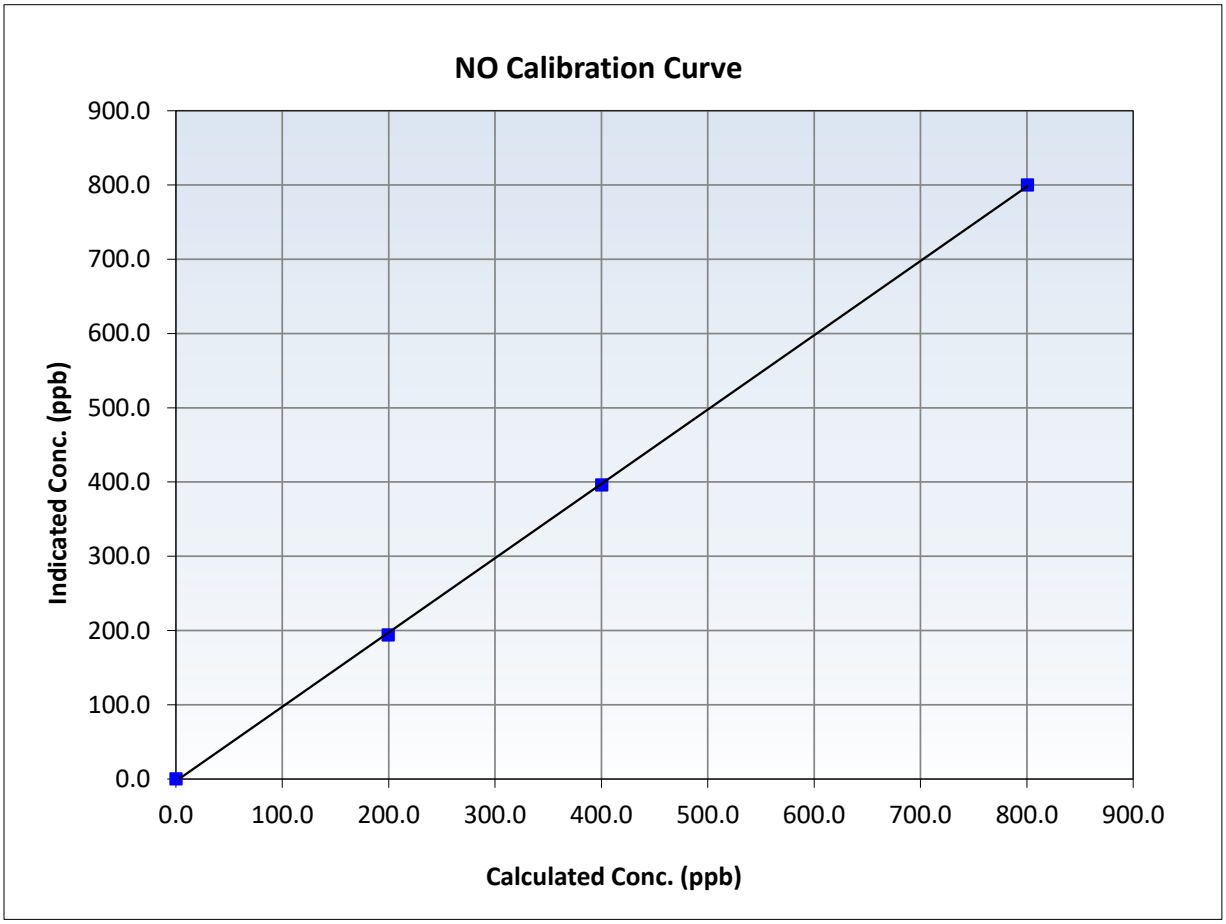
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 20, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	9:47	End Time (MST):	14:19
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

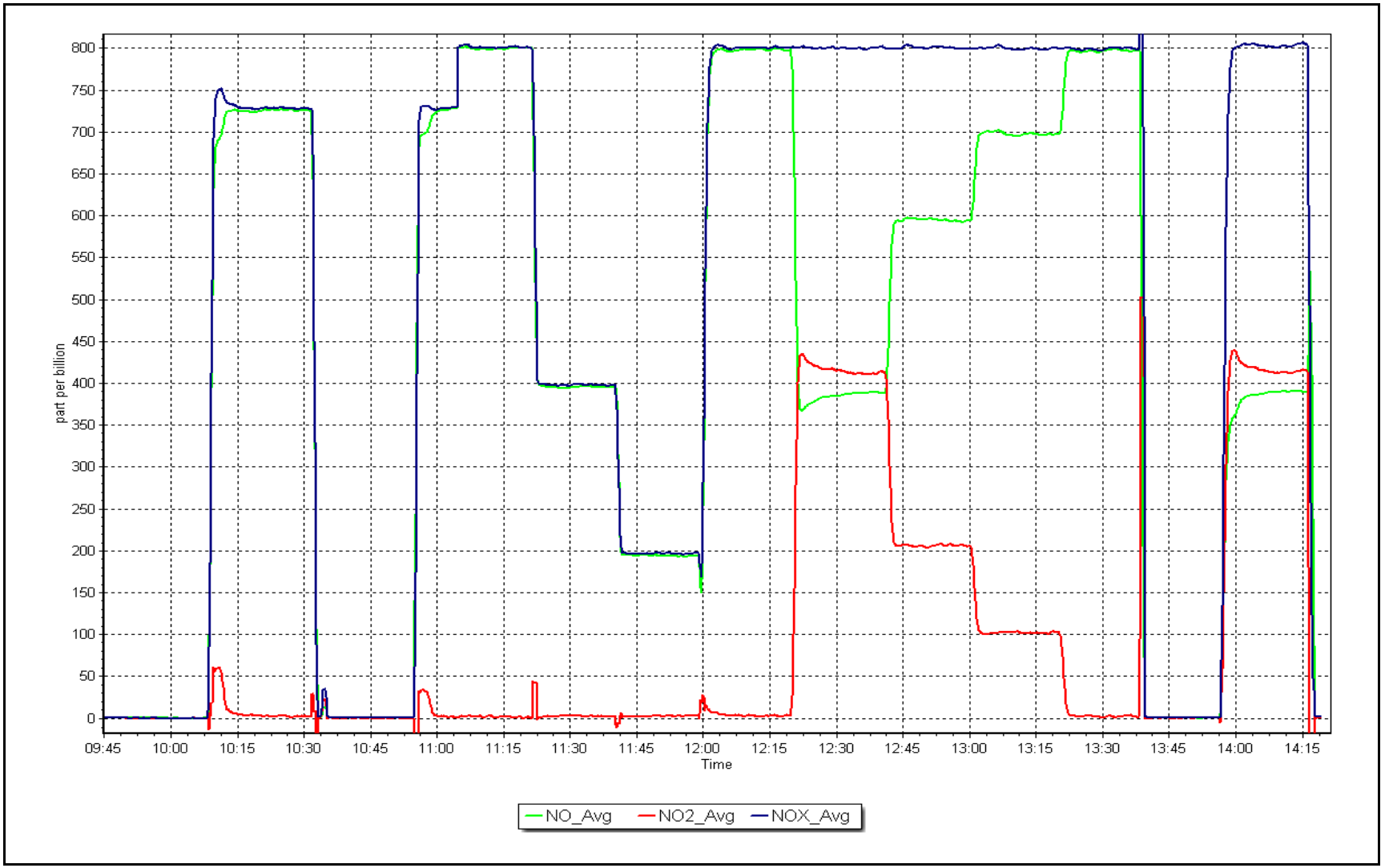
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.6	799.9	1.0009
400.2	396.0	1.0107
199.5	194.1	1.0281

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999937	*≥0.995*
Slope	1.000638	*0.90 - 1.10*
Intercept	-2.769994	*+/-20*



NO_X Calibration Plot Date: September 2, 2026 Location: Stony Mountain



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	September 21, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	11:02	End time (MST):	14:17
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	Teledyne API T700	Serial Number:	2658
ZAG Make/Model:	Teledyne API 701H	Serial Number:	4890

Analyzer Information

Analyzer make:	API T400		Analyzer serial #:	825	
Analyzer Range	0 - 500 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999314	1.003771	Backgd or Offset:	2.8	2.8
Calibration intercept:	0.620000	0.440000	Coeff or Slope:	0.992	0.992

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	NA	0.0	0.1	----
As found High point	4888	1155.7	400.0	400.5	0.999
As found Mid point					
As found Low point					
Baseline Corr As found:	400.4	Previous response	400.3	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	NA	0.0	0.3	----
High point	4888	1155.7	400.0	401.7	0.996
Mid point	4888	894.4	200.0	201.8	0.991
Low point	4888	762.7	100.0	100.6	0.994
As left zero	5000	NA	0.0	0.4	----
As left span	4812	1155.7	400.0	405.6	0.986
				Average Correction Factor	0.994

Notes: Sample inlet filter changed and no adjustments made.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

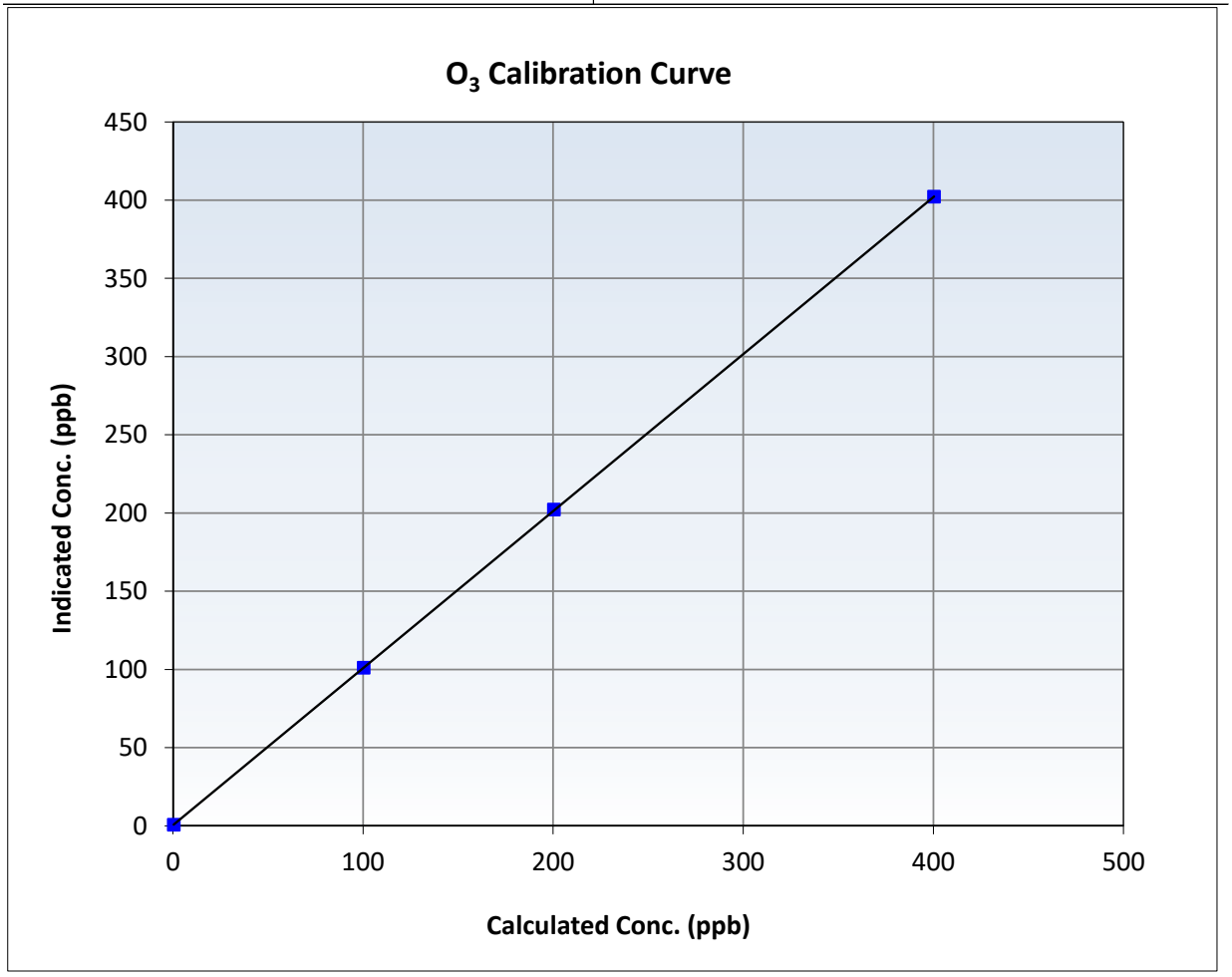
O_3 Calibration Summary

Station Information

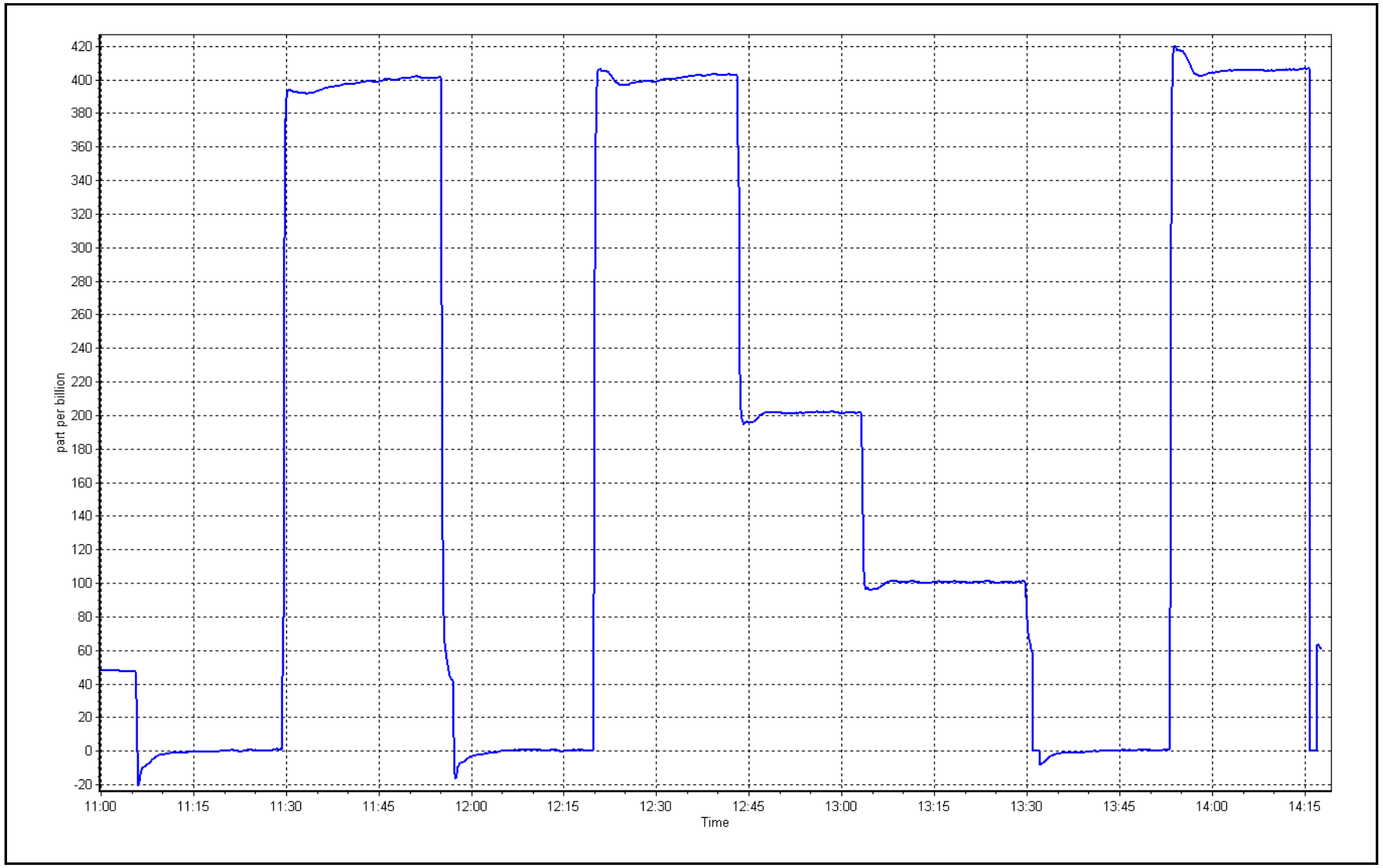
Calibration Date:	September 21, 2026	Previous Calibration:	August 24, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:02	End Time (MST):	14:17
Analyzer make:	API T400	Analyzer serial #:	825

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.3	----	Correlation Coefficient	0.999994	*≥0.995*
400.0	401.7	0.9958	Slope	1.003771	*0.90 - 1.10*
200.0	201.8	0.9911			
100.0	100.6	0.9940	Intercept	0.440000	*+/- 5*



O_3 Calibration Plot Date: September 21, 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:	September 21, 2026	Last Cal Date:	August 31, 2026
Start time (MST):	13:33	End time (MST):	13:44
Analyzer Make:	API T640	S/N:	645
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25	S/N:	388749
Temp/RH standard:	Alicat FP-25	S/N:	388749

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	24.8	25.67	24.8	☐	+/- 2 °C
P (mmHg)	697.7	697.41	697.7	☐	+/- 10 mmHg
Flow (LPM)	5.01	5.033	5.01	☐	+/- 0.25 LPM
PW% (pump)	34	-----	34	☐	>80%
Zero Verification	PM w/o HEPA:	9.2	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: — Lot No.: — Expiry Date:

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test				☐	+/- 0.5

Date Optical Chamber Cleaned: June 4, 2026

Date Disposable Filter Changed: June 4, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: May 21, 2026

Date RH/T Sensor Cleaned: May 21, 2026

Notes: Flow, temperature, and pressure were verified. No adjustments made. Leak check passed. Inlet head cleaned.

Calibration by: Mohammed Kashif

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS19
FIREBAG
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	September 11, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	9:24	End time (MST):	12:23
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.97	ppm	Cal Gas Exp Date:	October 9, 2032
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:	5258
Zero Air Gen Model:	Teledyne API T701H		Serial Number:	201

Analyzer Information

Analyzer make:	Thermo 43iQTL		Serial Number:	12530443167	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.013033	1.012860	Backgd or Offset:	2.02	2.02
Calibration intercept:	-1.540430	-0.879817	Coeff or Slope:	1.077	1.077

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.7	----
As found High point	4922	78.5	800.2	809.2	0.988
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	809.9	Previous response	809.1	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.3	----
High point	4922	78.5	800.2	809.5	0.989
Mid point	4961	39.2	399.6	404.8	0.987
Low point	4980	19.6	199.8	200.1	0.999
As left zero	5000	0.0	0.0	-0.4	----
As left span	4922	78.5	800.2	814.9	0.982
				Average Correction Factor:	0.991

Notes: Inlet filter changed after as found, no changes made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

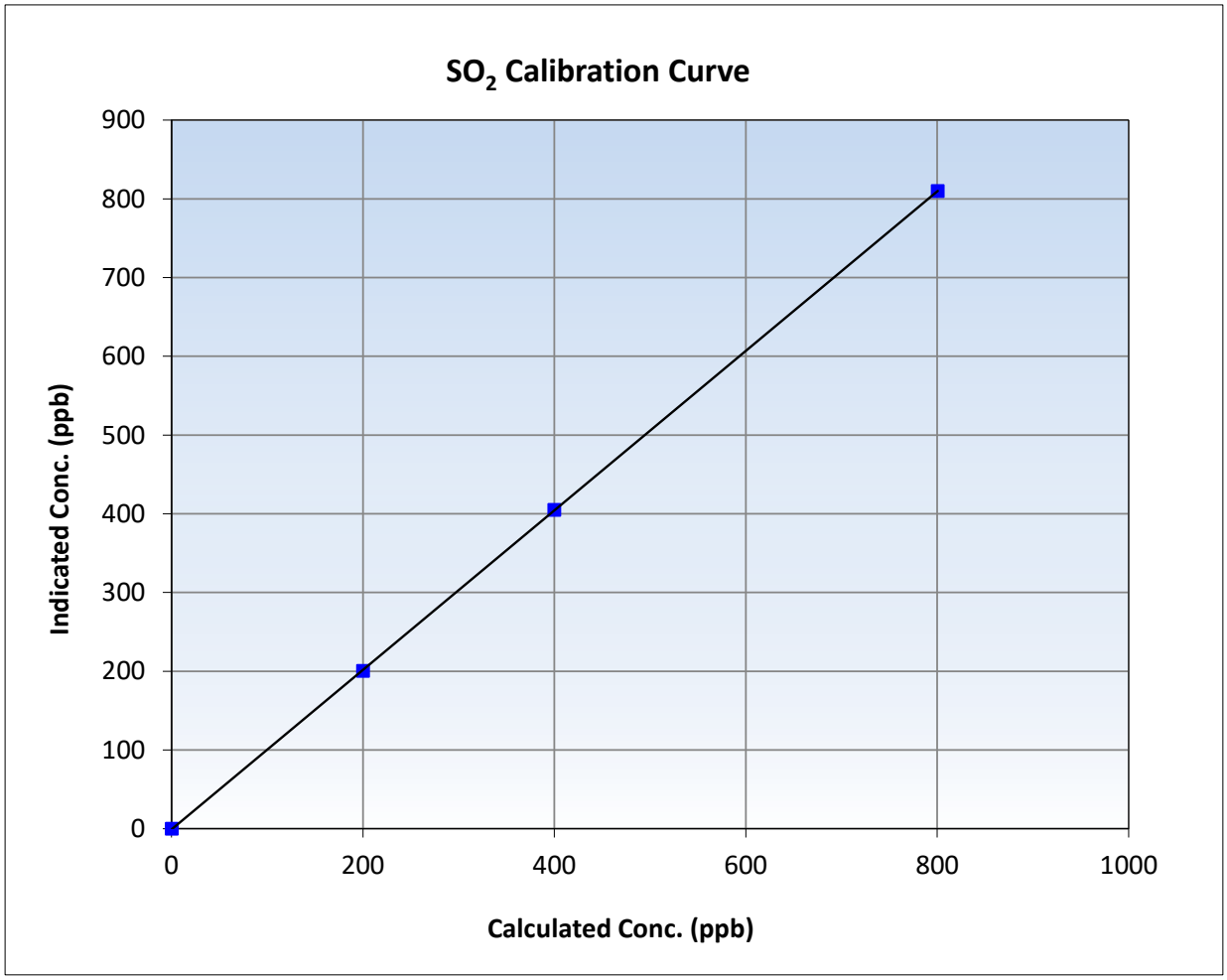
Station Information

Calibration Date:	September 11, 2026	Previous Calibration:	August 24, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	9:24	End Time (MST):	12:23
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12530443167

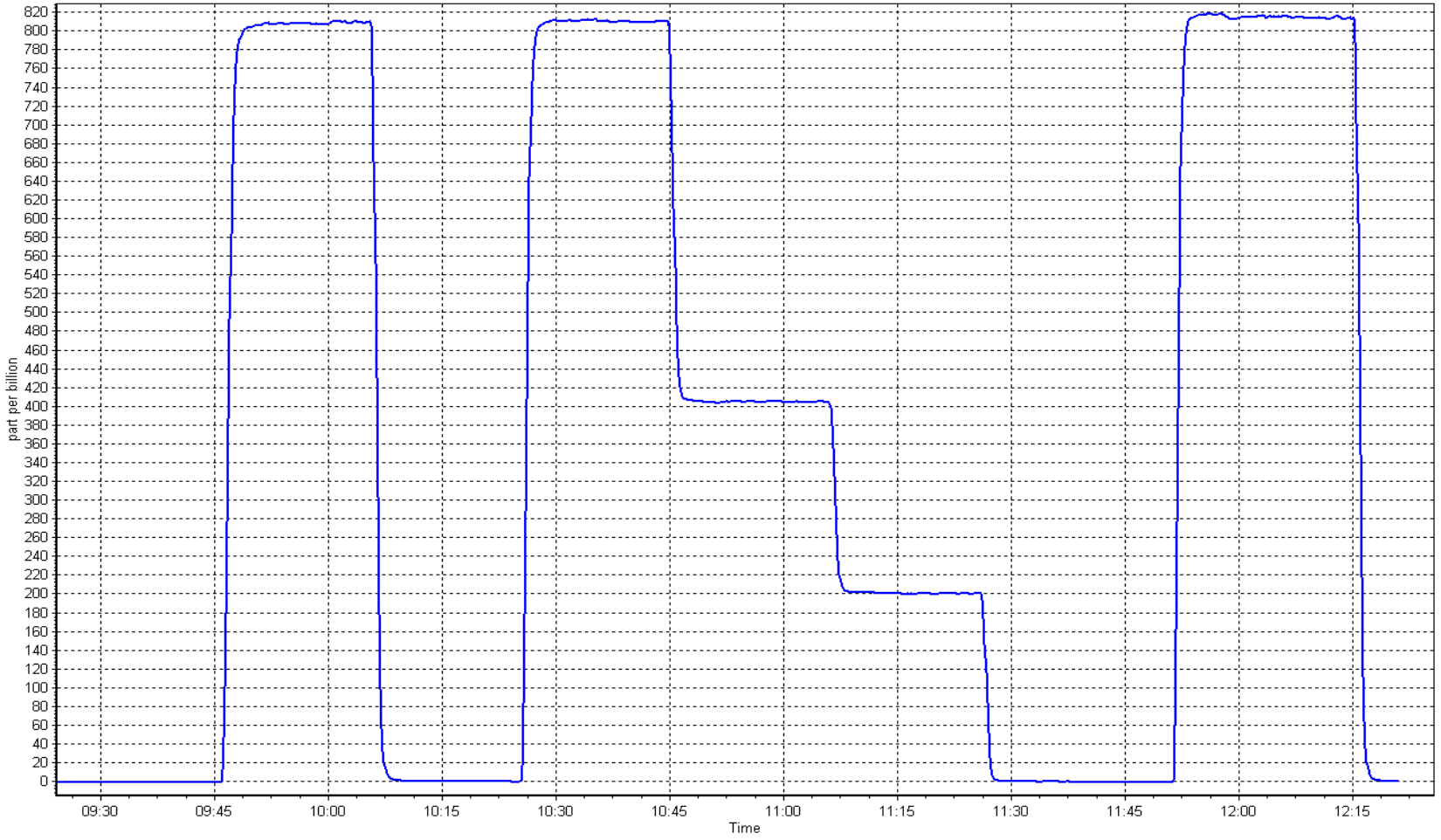
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
800.2	809.5	0.9885
399.6	404.8	0.9871
199.8	200.1	0.9986

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.012860	*0.90 - 1.10*
Intercept	-0.879817	*+/-30*



SO2 Calibration Plot Date: September 11, 2026 Location: Firebag



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	September 22, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	9:31	End time (MST):	13:26
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:	5258
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

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.012192	1.017336	Backgd or Offset:	3.06	3.06
Calibration intercept:	-0.320000	-0.500000	Coeff or Slope:	1.208	1.208

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.4	----
As found High point	4924	75.6	80.0	81.0	0.983
As found Mid point	4962	37.8	40.0	40.4	0.980
As found Low point	4981	18.9	20.0	19.5	1.005
New cylinder response					

Baseline Corr As found:	81.4	Prev response:	80.64	*% change:	0.9%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.019765	AF Intercept:	-0.560000
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999954	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.4	----
High point	4924	75.6	80.0	80.9	0.989
Mid point	4962	37.8	40.0	40.2	0.995
Low point	4981	18.9	20.0	19.7	1.015
As left zero	5000	0.0	0.0	-0.2	----
As left span	4924	75.6	80.0	81.5	0.981
SO2 Scrubber Check	4922	78.5	785.0	0.1	----
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: Inlet filter changed after as founds, Scrubber check passed, no changes made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

H2S Calibration Summary

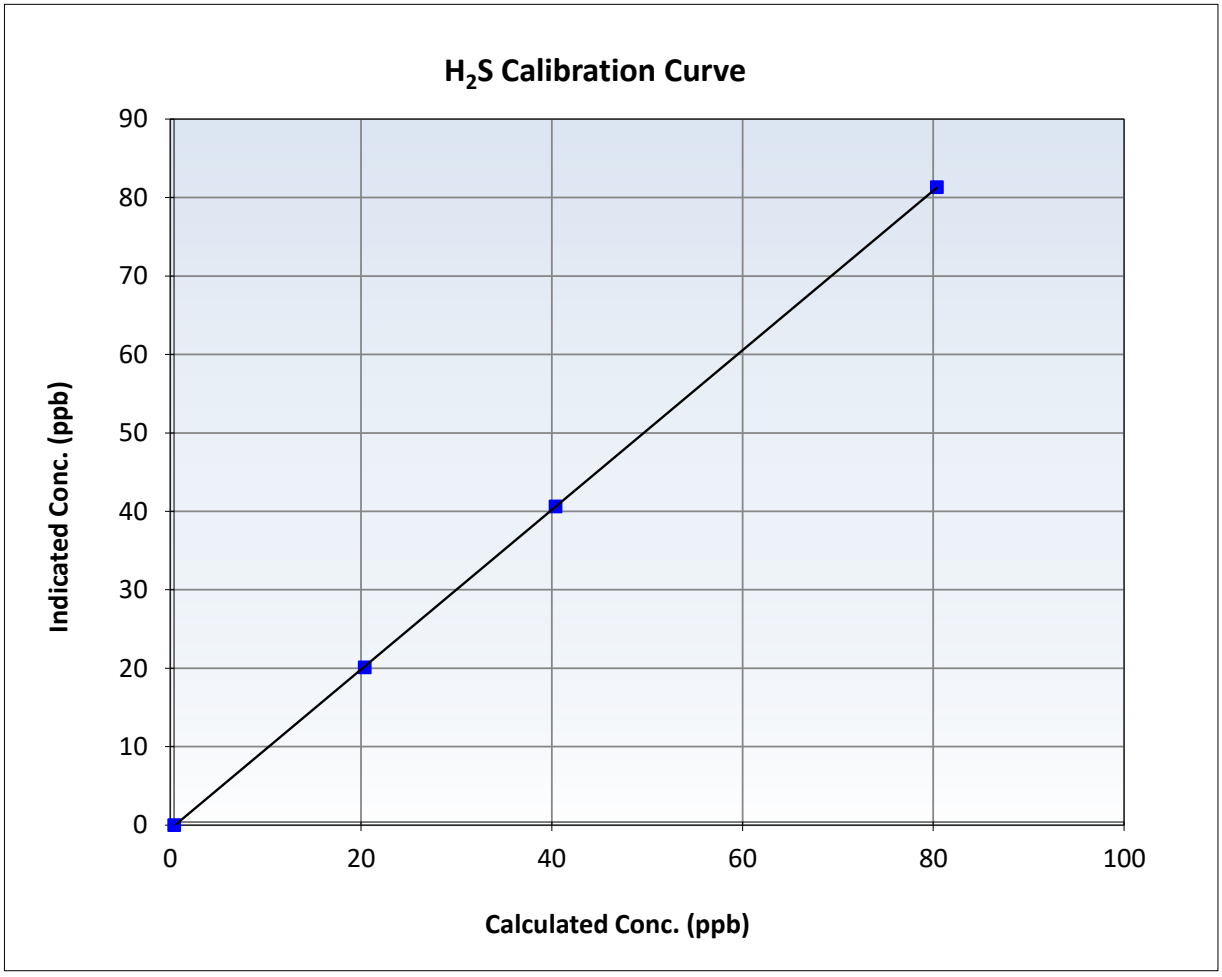
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 25, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	9:31	End Time (MST):	13:26
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680032

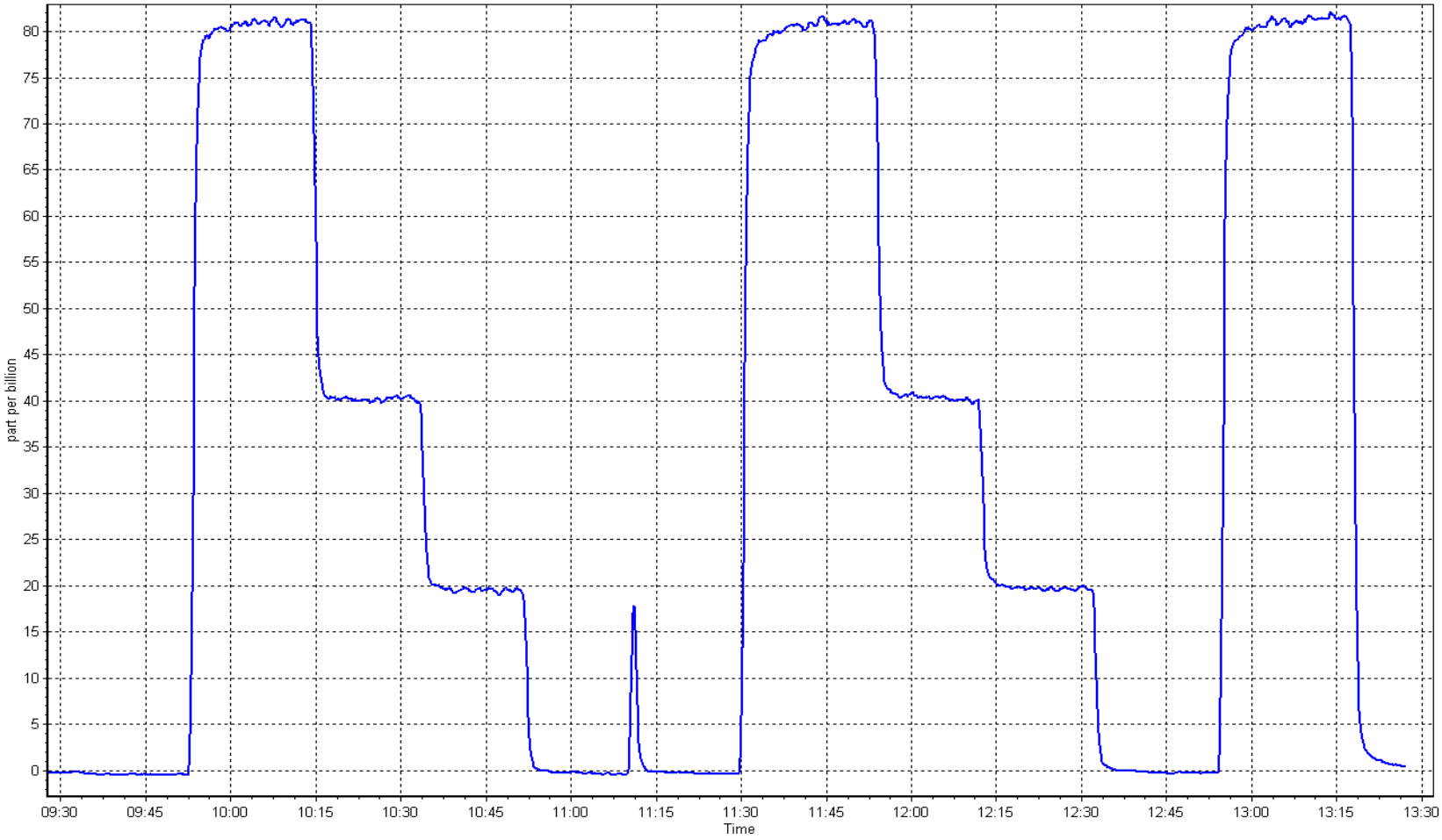
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.4	----
80.0	80.9	0.9887
40.0	40.2	0.9948
20.0	19.7	1.0150

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.017336	*0.90 - 1.10*
Intercept	-0.500000	*+/-3*



H2S Calibration Plot Date: September 22, 2026 Location: Firebag



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	September 11, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	9:24	End time (MST):	12:23
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC705799		Cal Gas Expiry Date:	October 9, 2032	
CH4 Cal Gas Conc.	505.1	ppm	CH4 Equiv Conc.	1066.9	ppm
C3H8 Cal Gas Conc.	204.3	ppm			
Removed Gas Cert:			Removed Gas Expiry:		
Removed CH4 Conc.	505.1	ppm	CH4 Equiv Conc.	1066.9	ppm
Removed C3H8 Conc.	204.3	ppm	Diff between cyl:		
Calibrator Make/Model:	Teledyne API T700		Serial Number:	5258	
ZAG Make/Model:	Teledyne API T701H		Serial Number:	201	

Analyzer Information

Analyzer make:	Thermo 51i-LT		Analyzer serial #:	1336160089	
Analyzer Range:	0 - 20 ppm				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.984662	0.990696	Background:	2.35	2.35
Calibration intercept:	0.010404	-0.082796	Coefficient:	3.844	3.844

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	-0.22	----
As found High point	4922	78.5	16.75	16.38	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	16.60	Previous response	16.50	*% 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	

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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	-0.06	----
High point	4922	78.5	16.75	16.54	1.013
Mid point	4961	39.2	8.36	8.15	1.026
Low point	4980	19.6	4.18	4.07	1.029
As left zero	4999	0.0	0.00	-0.08	----
As left span	4922	78.4	16.73	16.53	1.012
				Average Correction Factor	1.023

Notes: Inlet filter changed after as founds, no changes made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

THC Calibration Summary

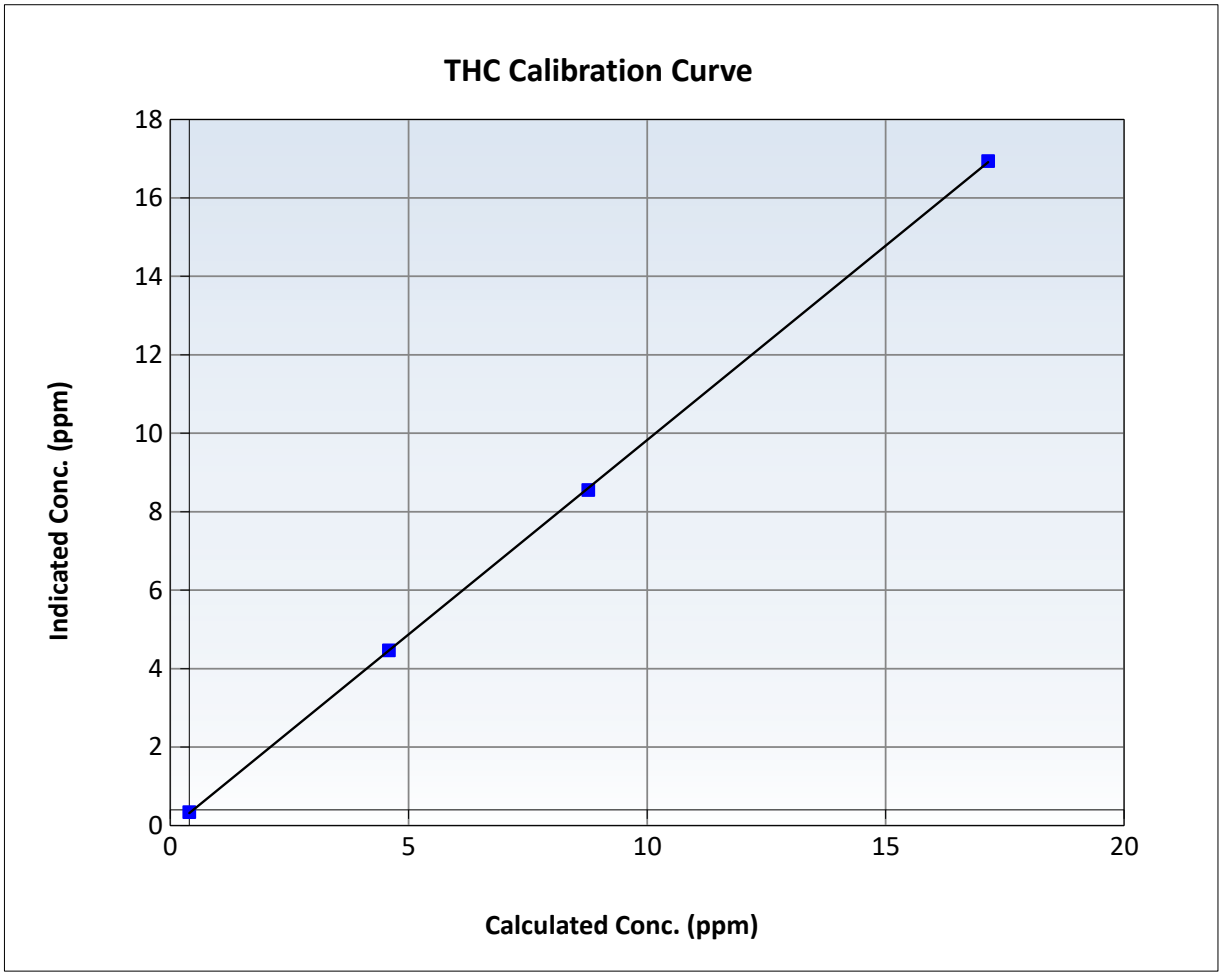
Station Information

Calibration Date:	September 11, 2026	Previous Calibration:	August 24, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	9:24	End Time (MST):	12:23
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1336160089

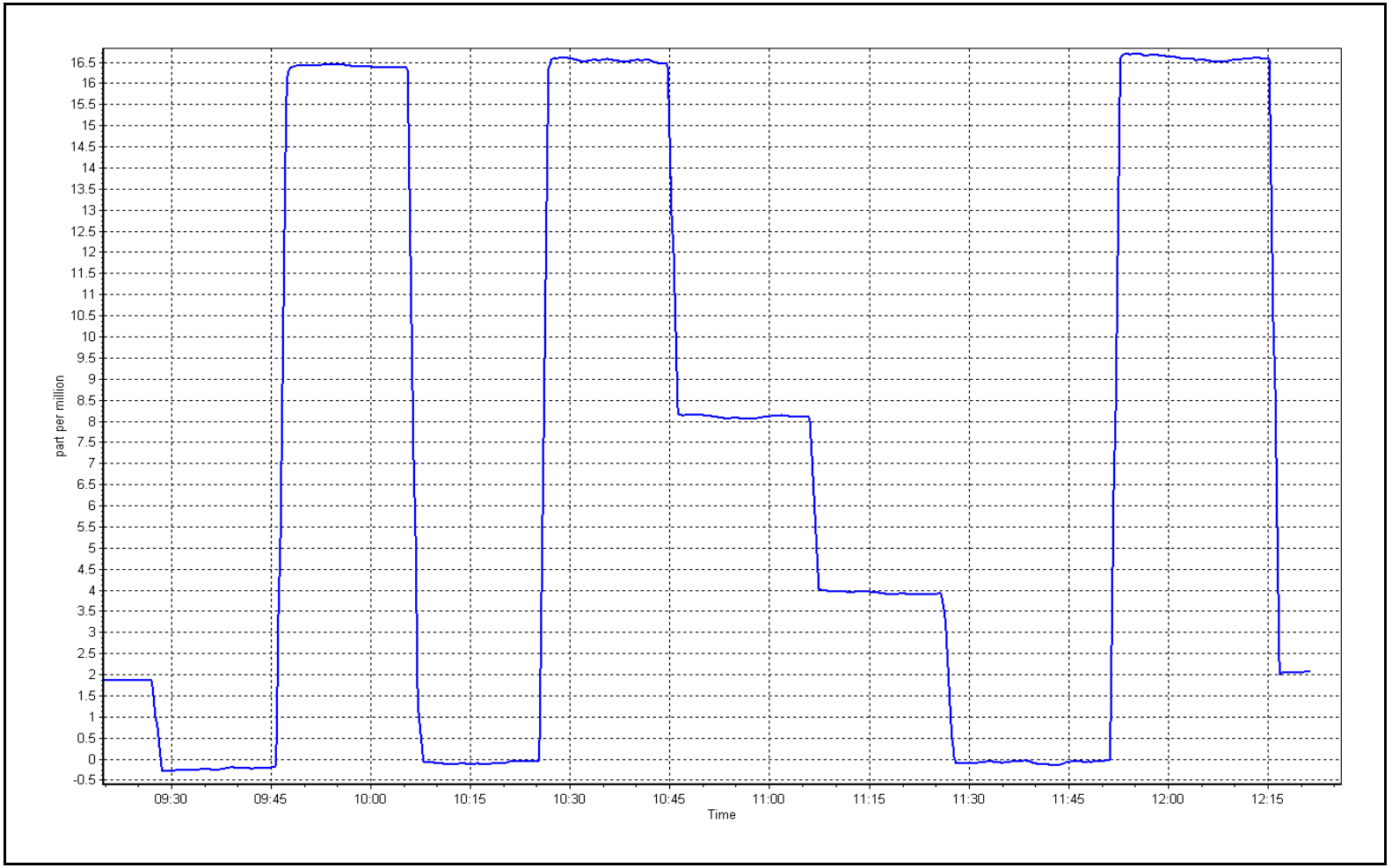
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	-0.06	----
16.75	16.54	1.0129
8.36	8.15	1.0262
4.18	4.07	1.0287

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999973	*≥0.995*
Slope	0.990696	*0.90 - 1.10*
Intercept	-0.082796	*+/-1.5*



THC Calibration Plot Date: September 11, 2026 Location: Firebag



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	September 29, 2026	Last Cal Date:	September 11, 2026
Start time (MST):	10:10	End time (MST):	13:50
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC705799		Cal Gas Expiry Date:	October 9, 2032	
CH4 Cal Gas Conc.	505.1	ppm	CH4 Equiv Conc.	1066.9	ppm
C3H8 Cal Gas Conc.	204.3	ppm			
Removed Gas Cert:			Removed Gas Expiry:		
Removed CH4 Conc.	505.1	ppm	CH4 Equiv Conc.	1066.9	ppm
Removed C3H8 Conc.	204.3	ppm	Diff between cyl:		
Calibrator Make/Model:	Teledyne API T700		Serial Number:	5258	
ZAG Make/Model:	Teledyne API T701H		Serial Number:	201	

Analyzer Information

Analyzer make:	Thermo 51i-LT		Analyzer serial #:	1336160089	
Analyzer Range:	0 - 20 ppm				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.990696	0.995323	Background:	2.35	2.18
Calibration intercept:	-0.082796	-0.002183	Coefficient:	3.844	3.890

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	1.12	----
As found High point	4922	78.5	16.75	18.20	0.981
As found Mid point	4961	39.2	8.36	9.51	0.997
As found Low point	4980	19.6	4.18	5.20	1.025
New cylinder response					
Baseline Corr As found:	17.08	Previous response	16.51	*% change	3.3%
Baseline Corr 2nd AF pt:	8.39	AF Slope:	1.022360	AF Intercept:	1.019374
Baseline Corr 3rd AF pt:	4.08	AF Correlation:	0.999842	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.06	----
High point	4922	78.5	16.75	16.70	1.003
Mid point	4961	39.2	8.36	8.29	1.009
Low point	4980	19.6	4.18	4.10	1.019
As left zero	4999	0.0	0.00	0.03	----
As left span	4922	78.4	16.73	16.82	0.995
				Average Correction Factor	1.010

Notes: ZAG can't hold pressure and was replaced after as founds. Zero and span adjusted.

Calibration Performed By: Devin Russell

Wood Buffalo Environmental Association

THC Calibration Summary

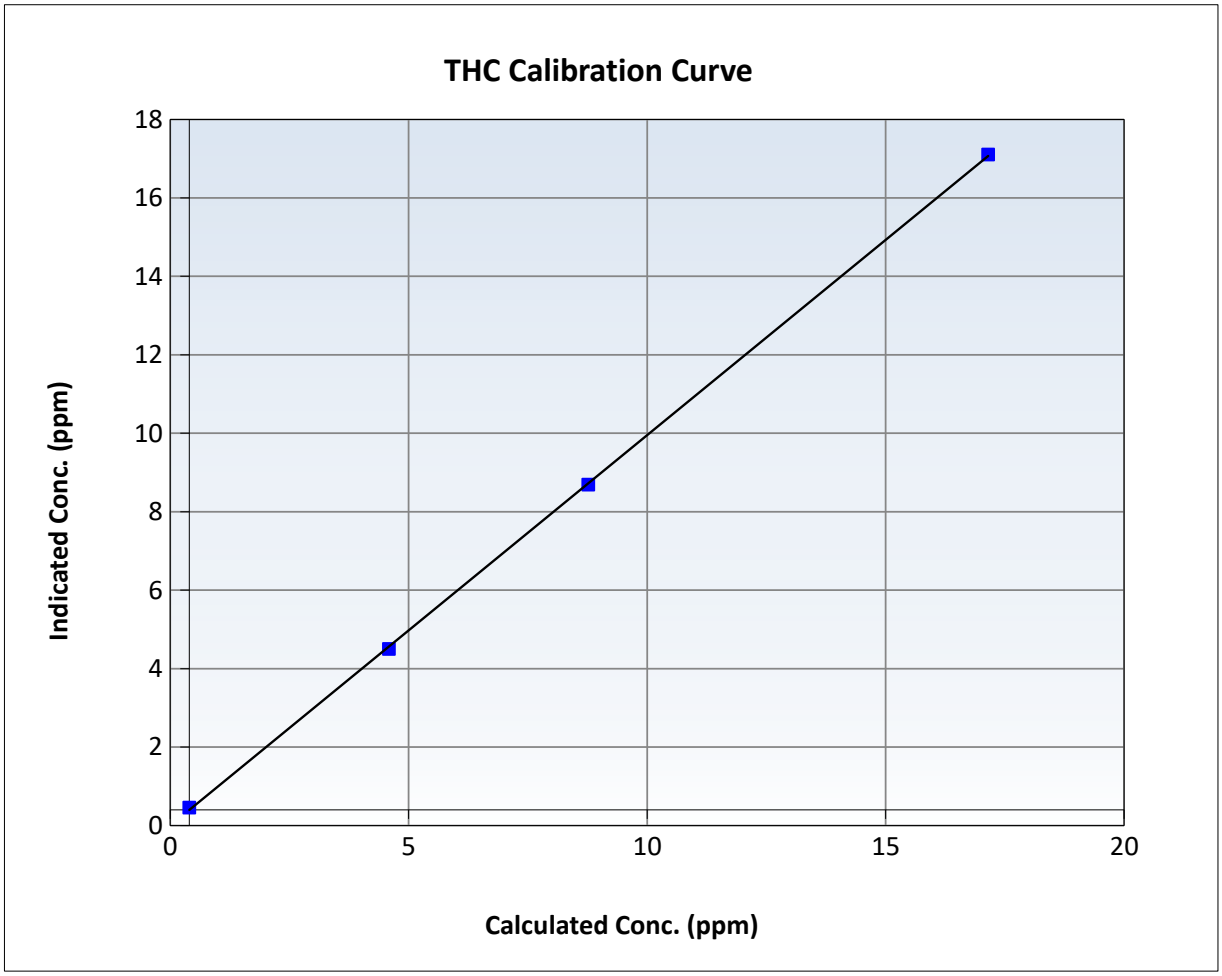
Station Information

Calibration Date:	September 29, 2026	Previous Calibration:	September 11, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	10:10	End Time (MST):	13:50
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1336160089

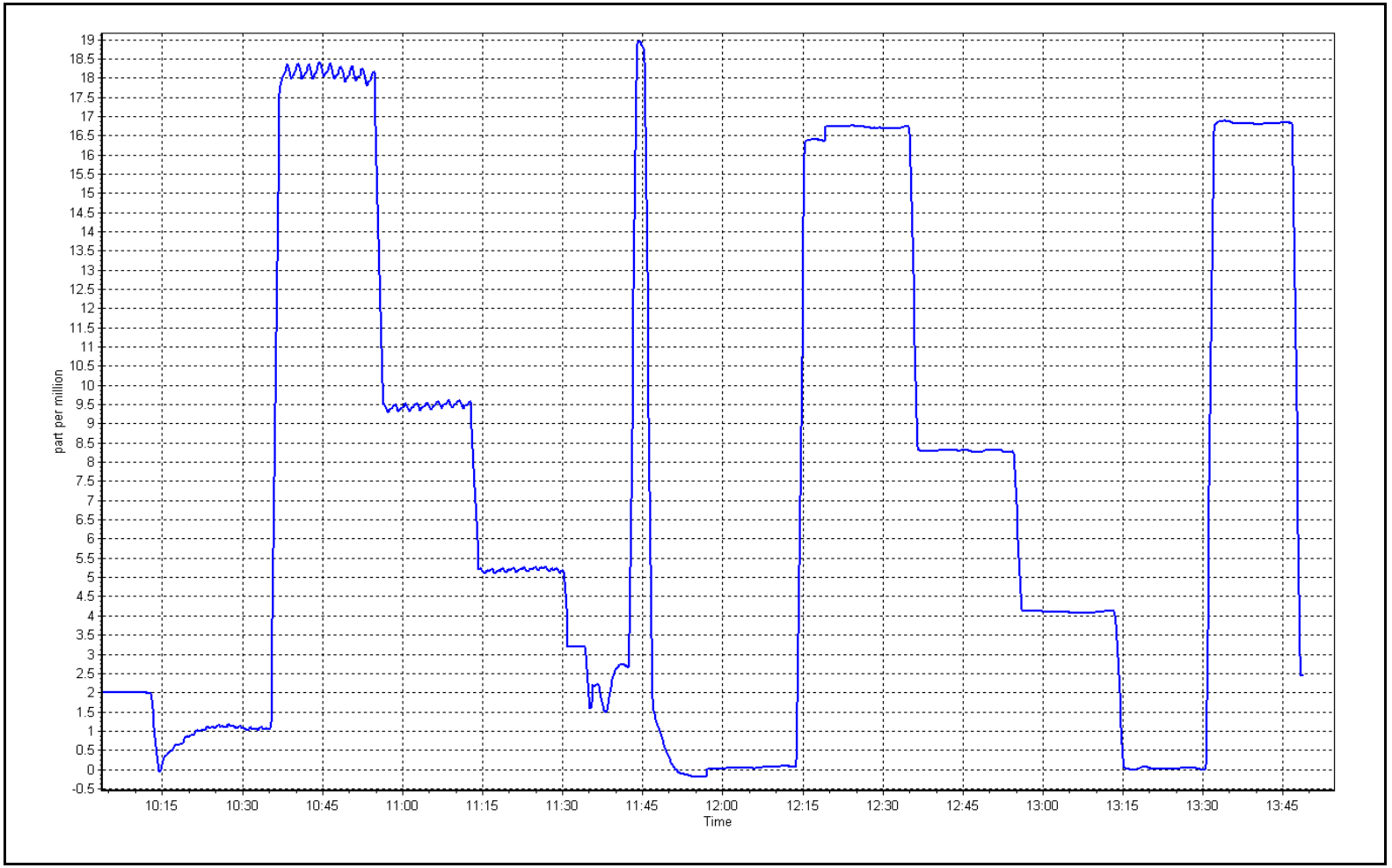
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.06	----
16.75	16.70	1.0030
8.36	8.29	1.0090
4.18	4.10	1.0194

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999940	*≥0.995*
Slope	0.995323	*0.90 - 1.10*
Intercept	-0.002183	*+/-1.5*



THC Calibration Plot Date: September 29, 2026 Location: Firebag



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Firebag
Station number:	AMS 19
Calibration Date:	September 23, 2026
Last Cal Date:	August 26, 2026
Start time (MST):	9:31
End time (MST):	13:48
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0045593	Cal Gas Expiry Date:	July 22, 2032
NOX Cal Gas Conc:	62.10 ppm	NO Cal Gas Conc:	61.90 ppm
Removed Cylinder #:		Removed Gas Exp Date:	
Removed Gas NOX Conc:	62.10 ppm	Removed Gas NO Conc:	61.90 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	5258
ZAG make/model:	Teledyne API T701H	Serial Number:	201

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	----	----
AF High point	4936	64.4	799.8	797.2	2.6	801.0	793.5	7.7	0.9985	1.0045
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 795.3 ppb	NO = 793.1 ppb
Baseline Corr 1st pt	NO_X = 801.0 ppb	NO = 793.6 ppb
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

*Percent Change	NO_X = 0.7%		
*Percent Change	NO = 0.1%		

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1410661309

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.942	0.942	NO bkgnd or offset:	4.7	4.7
NOX coeff or slope:	0.991	0.991	NOX bkgnd or offset:	4.7	4.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	167.6	164.8

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.995514	1.000001
NO_X Cal Offset:	-0.867949	-1.287974
NO Cal Slope:	0.997326	1.001197
NO Cal Offset:	-1.927922	-2.227943
NO_2 Cal Slope:	0.995800	0.999040
NO_2 Cal Offset:	-0.546457	-0.238747

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
High point	4936	64.4	799.8	797.2	2.6	799.0	796.8	2.3	1.0010	1.0005
Mid point	4968	32.2	399.9	398.6	1.3	398.5	396.5	2.0	1.0035	1.0053
Low point	4984	16.1	200.0	199.3	0.6	196.9	194.6	2.2	1.0155	1.0242
As left zero	5000	0	0.0	0.0	0.0	0.2	0.0	0.2	----	----
As left span	4936	64.4	799.8	397.1	402.7	794.0	397.1	396.9	1.0073	1.0000
								Average Correction Factor	1.0067	1.0100

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.1	----	----
High GPT point	788.9	392.5	399.0	398.5	1.0012	99.9%
Mid GPT point	788.9	601.3	190.2	189.7	1.0025	99.7%
Low GPT point	788.9	680.2	111.3	110.5	1.0070	99.3%
				Average Correction Factor	1.0036	99.6%

Notes: Inlet filter changed after as founds, no changes made. GPT points good.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

NO_X Calibration Summary

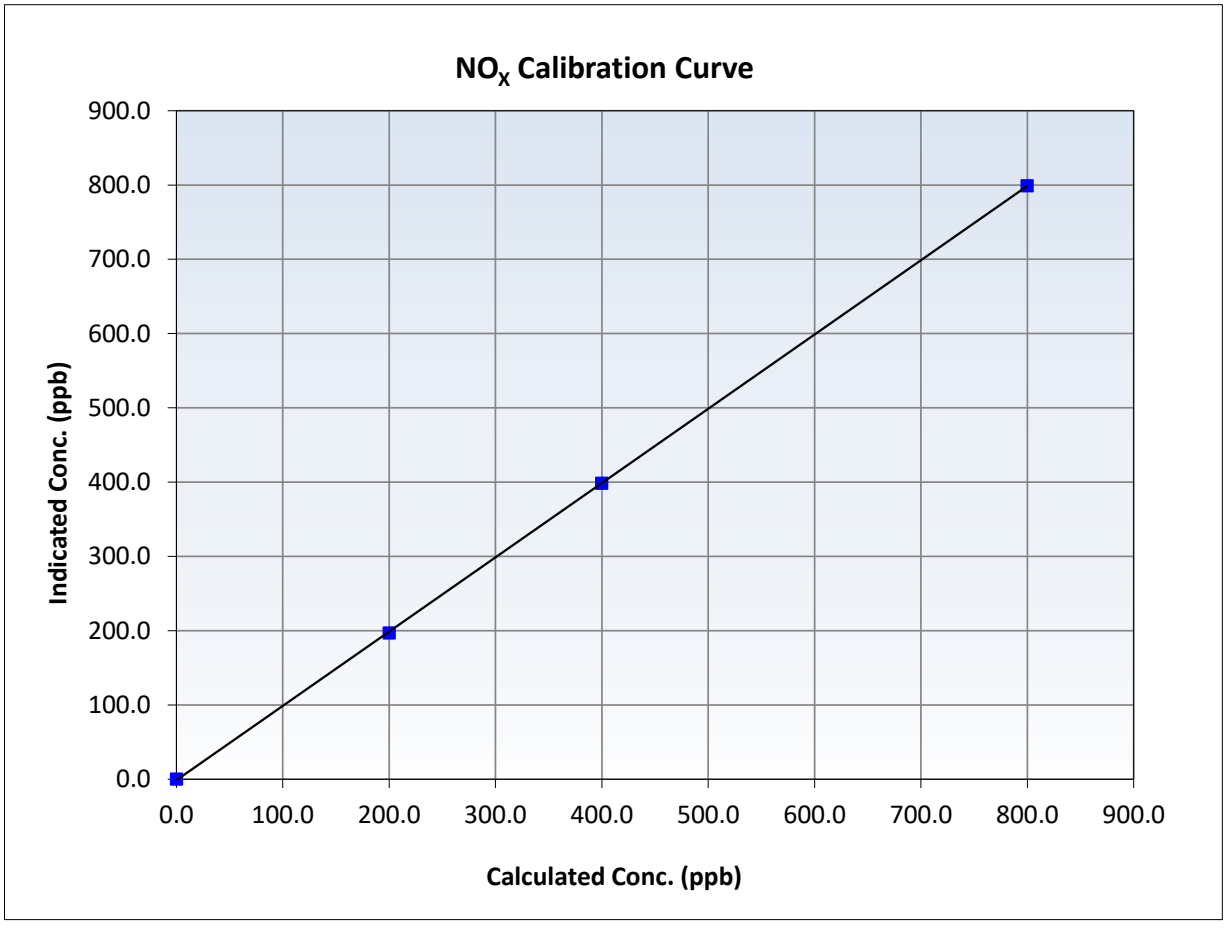
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 26, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	9:31	End Time (MST):	13:48
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661309

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
799.8	799.0	1.0010
399.9	398.5	1.0035
200.0	196.9	1.0155

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	1.000001	*0.90 - 1.10*
Intercept	-1.287974	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

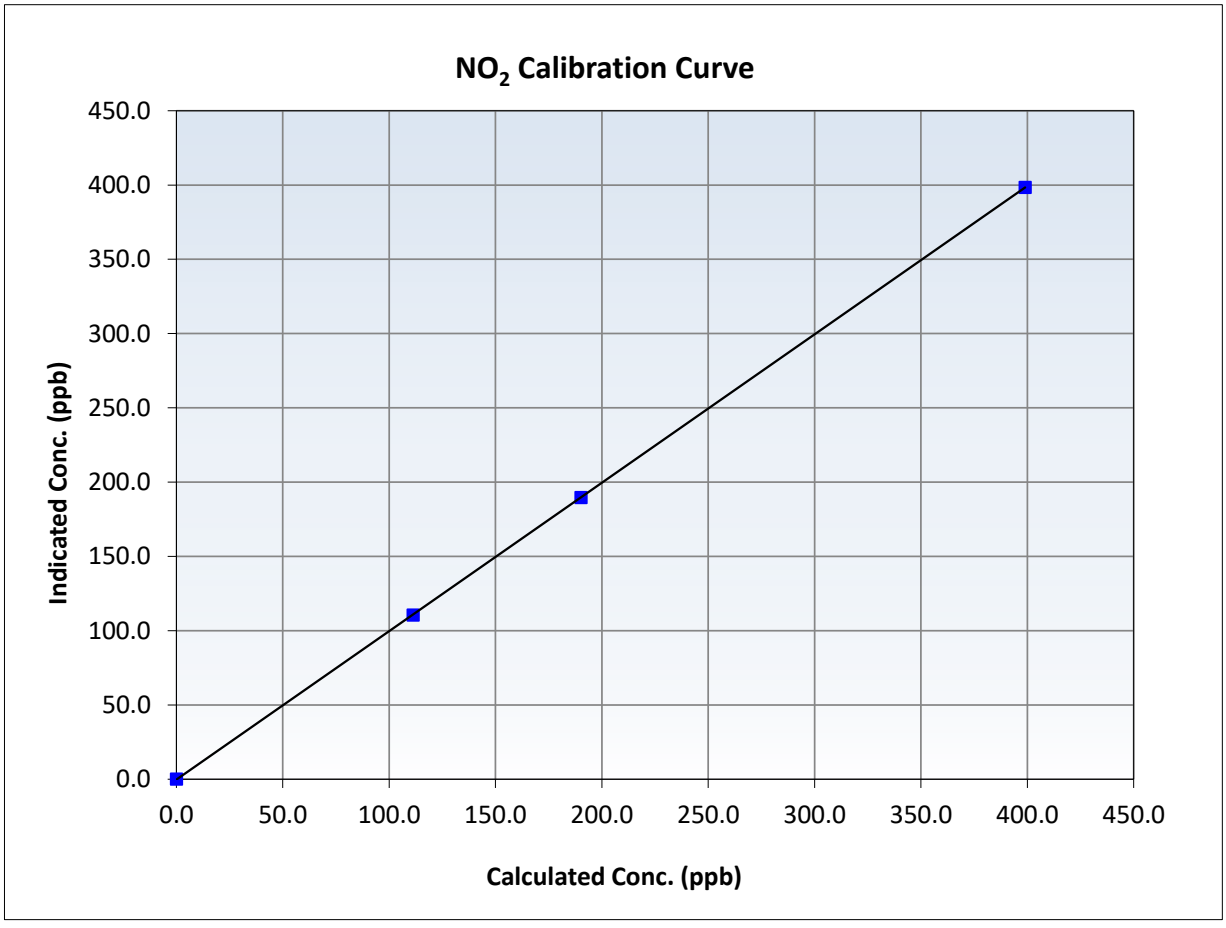
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 26, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	9:31	End Time (MST):	13:48
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661309

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
399.0	398.5	1.0012
190.2	189.7	1.0025
111.3	110.5	1.0070

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999996	*≥0.995*
Slope	0.999040	*0.90 - 1.10*
Intercept	-0.238747	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

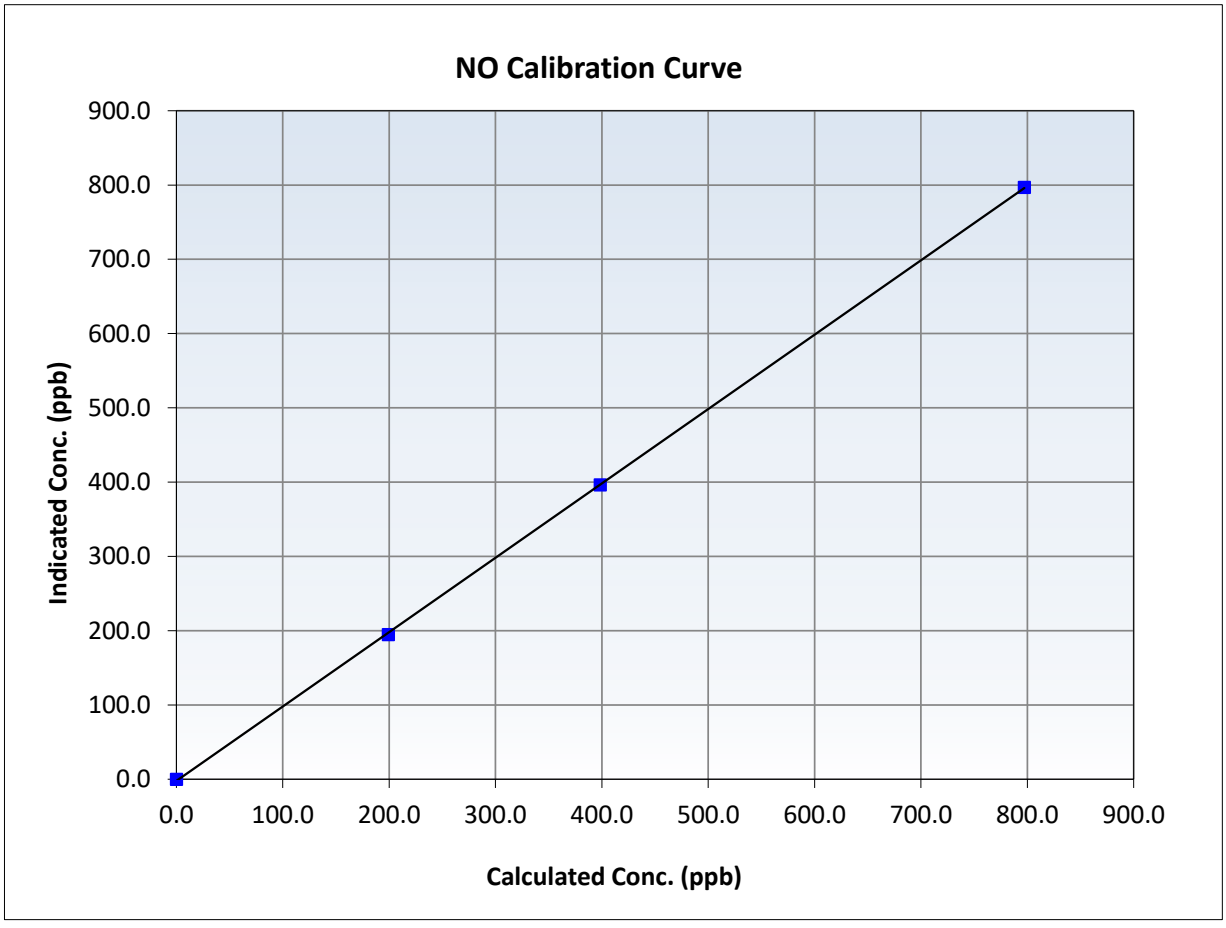
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 26, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	9:31	End Time (MST):	13:48
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661309

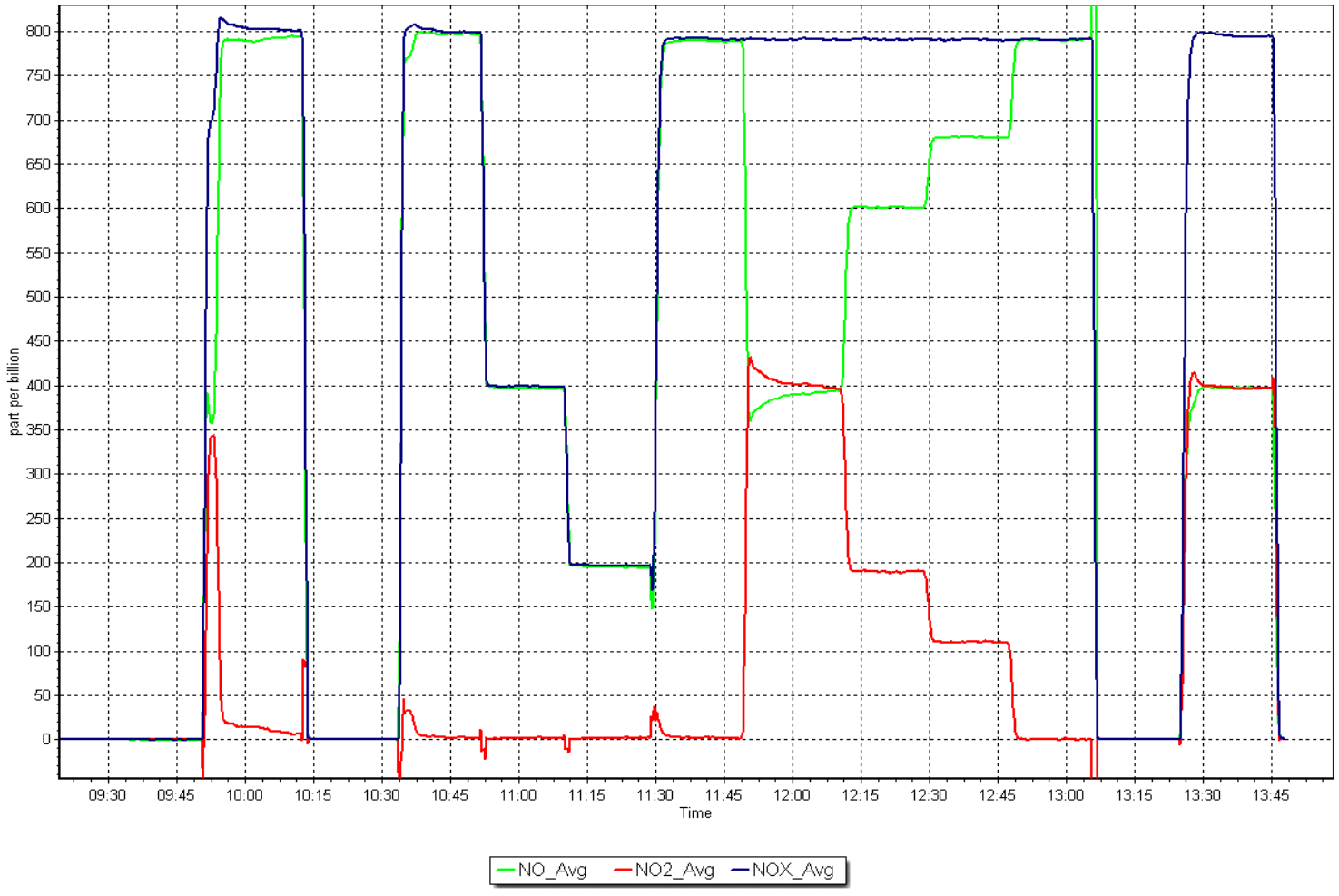
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
797.2	796.8	1.0005
398.6	396.5	1.0053
199.3	194.6	1.0242

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999962	*≥0.995*
Slope	1.001197	*0.90 - 1.10*
Intercept	-2.227943	*+/-20*



NO_X Calibration Plot Date: September 23, 2026 Location: Firebag



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS20
MACKAY RIVER
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	MacKay River	Station number:	AMS 20
Calibration Date:	September 8, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	8:32	End time (MST):	11:12
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.995790	0.996618	Backgd or Offset:	20.8	20.8
Calibration intercept:	-0.236789	0.123376	Coeff or Slope:	0.909	0.909

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4919	81.4	800.1	797.1	1.004
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	797.3	Previous response	796.5	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4919	81.4	800.1	797.5	1.003
Mid point	4959	40.7	400.1	398.7	1.004
Low point	4980	20.3	199.5	199.4	1.001
As left zero	5000	0.0	0.0	-0.1	----
As left span	4919	81.4	800.1	798.2	1.002
				Average Correction Factor:	1.002

Notes: No maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

SO_2 Calibration Summary

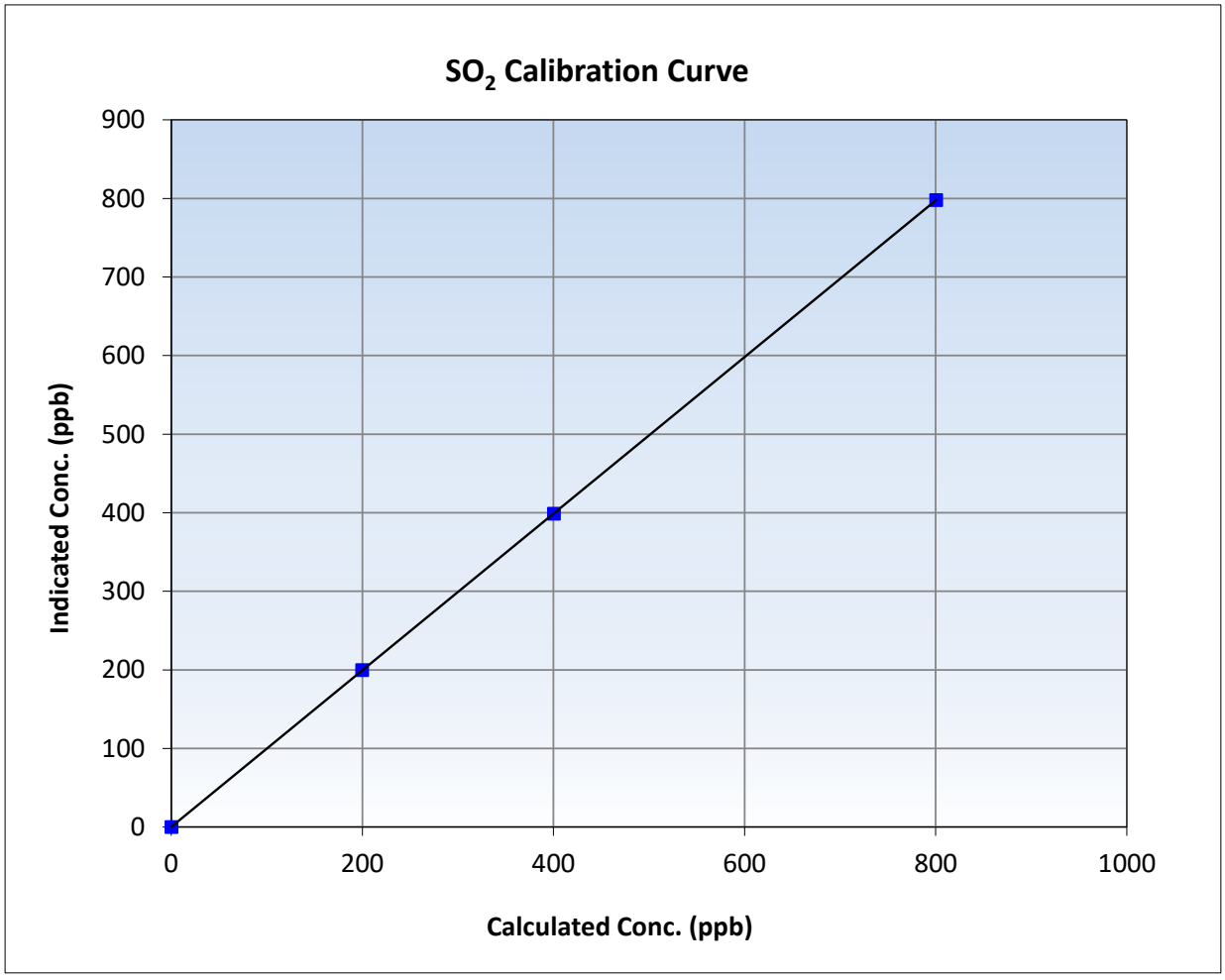
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 20, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	8:32	End Time (MST):	11:12
Analyzer make:	Thermo 43i	Analyzer serial #:	1501301450

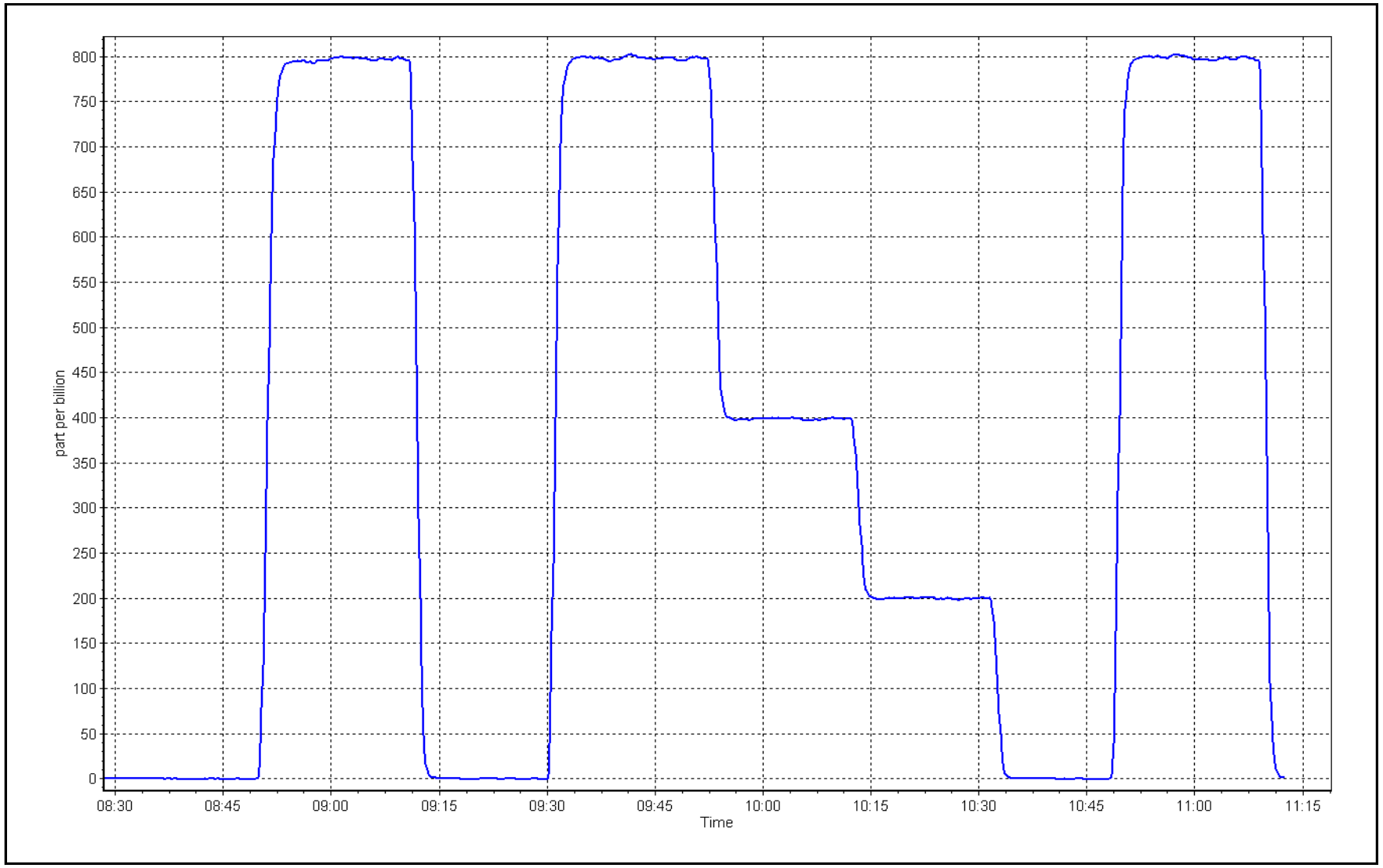
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
800.1	797.5	1.0033
400.1	398.7	1.0035
199.5	199.4	1.0007

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	0.996618	*0.90 - 1.10*
Intercept	0.123376	*+/-30*



SO2 Calibration Plot Date: September 8, 2026 Location: MacKay River



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	MacKay River	Station number:	AMS 20
Calibration Date:	September 8, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	8:32	End time (MST):	11:12
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC409669		Cal Gas Expiry Date:	October 9, 2032	
CH4 Cal Gas Conc.	505.1	ppm	CH4 Equiv Conc.	1072.7	ppm
C3H8 Cal Gas Conc.	206.4	ppm			
Removed Gas Cert:			Removed Gas Expiry:		
Removed CH4 Conc.	505.1	ppm	CH4 Equiv Conc.	1072.7	ppm
Removed C3H8 Conc.	206.4	ppm	Diff between cyl:		
Calibrator Make/Model:	API T700		Serial Number:	5706	
ZAG Make/Model:	API 701		Serial Number:	4888	

Analyzer Information

Analyzer make:	Thermo 51i-LT		Analyzer serial #:	1501663727	
Analyzer Range:	0 - 20 ppm				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.004804	0.996754	Background:	2.620	2.65
Calibration intercept:	-0.032779	-0.034802	Coefficient:	4.285	4.323

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.01	----
As found High point	4919	81.4	17.46	17.28	1.011
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	17.28	Previous response	17.51	*% change	-1.4%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	-0.03	----
High point	4919	81.4	17.46	17.37	1.005
Mid point	4959	40.7	8.73	8.66	1.008
Low point	4980	20.3	4.35	4.31	1.012
As left zero	5000	0.0	0.00	-0.06	----
As left span	4919	81.4	17.46	17.37	1.005
				Average Correction Factor	1.008

Notes: No Maintenance done. Span adjusted.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

THC Calibration Summary

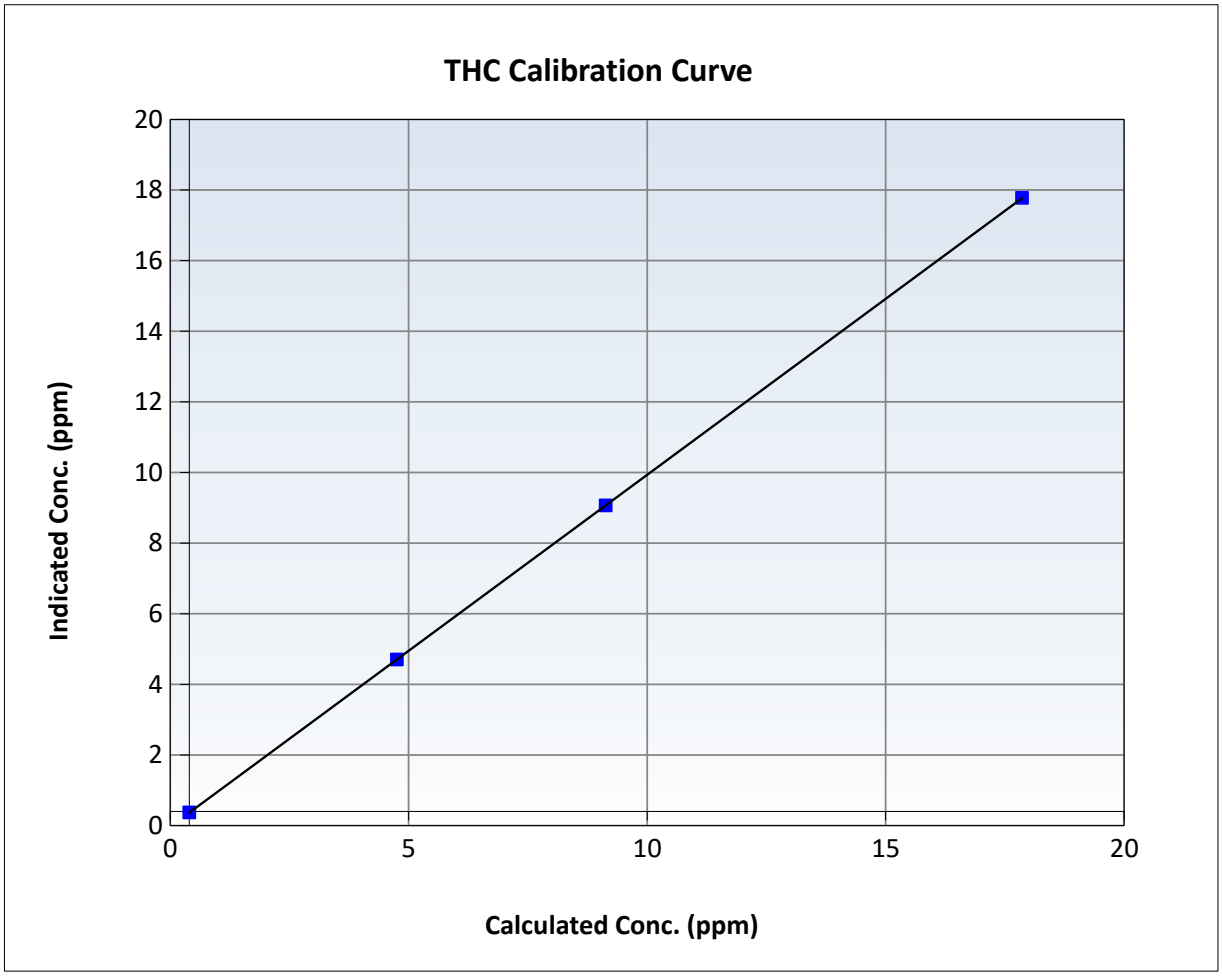
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 20, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	8:32	End Time (MST):	11:12
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1501663727

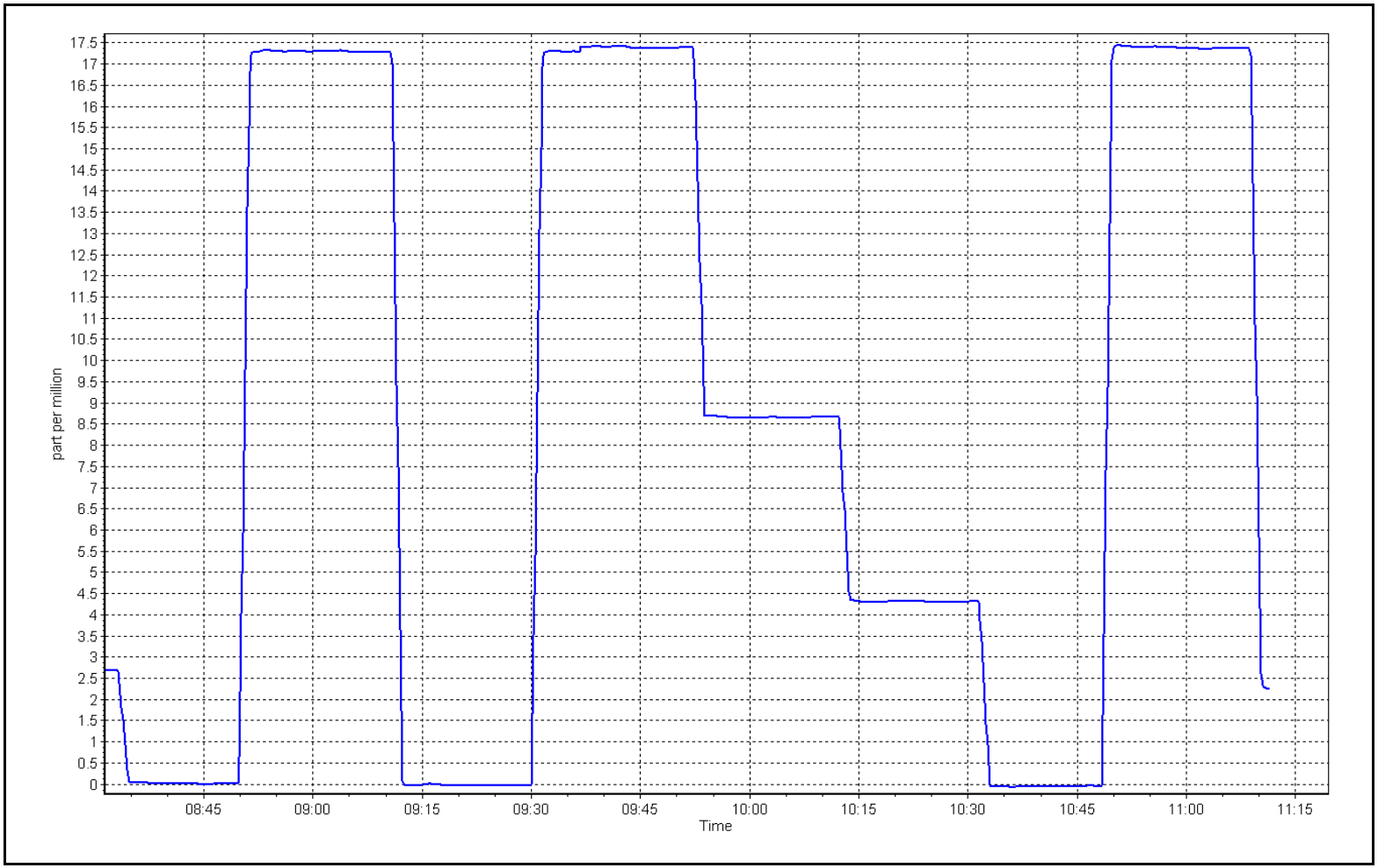
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	-0.03	----
17.46	17.37	1.0051
8.73	8.66	1.0080
4.35	4.31	1.0116

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	0.996754	*0.90 - 1.10*
Intercept	-0.034802	*+/-1.5*



THC Calibration Plot Date: September 8, 2026 Location: MacKay River



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	MacKay River	Station number:	AMS 20
Calibration Date:	September 3, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	7:16	End time (MST):	11:53
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.96	ppm	Cal Gas Exp Date:	September 22, 2028
Cal Gas Cylinder #:	CC737854			
Removed Cal Gas Conc:	4.96	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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.009227	1.006524	Backgd or Offset:	3.90	3.90
Calibration intercept:	0.076081	-0.071836	Coeff or Slope:	1.071	1.071

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4919	80.6	80.0	81.1	0.984
As found Mid point	4960	40.3	40.0	40.7	0.978
As found Low point	4980	20.2	20.0	20.3	0.977
New cylinder response					

Baseline Corr As found:	81.3	Prev response:	80.78	*% change:	0.6%
Baseline Corr 2nd AF pt:	40.9	AF Slope:	1.016517	AF Intercept:	-0.104105
Baseline Corr 3rd AF pt:	20.5	AF Correlation:	0.999990	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4919	80.6	80.0	80.4	0.995
Mid point	4960	40.3	40.0	40.2	0.995
Low point	4980	20.2	20.0	20.1	0.995
As left zero	5000	0.0	0.0	0.2	----
As left span	4919	80.6	80.0	78.9	1.013
SO2 Scrubber Check	4982	81.3	802.8	0.0	----
Date of last scrubber change:		25-May-23		Ave Corr Factor	0.995
Date of last converter efficiency test:					

Notes: Sox scrubber checked after the calibrator zero. No adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

H_2S Calibration Summary

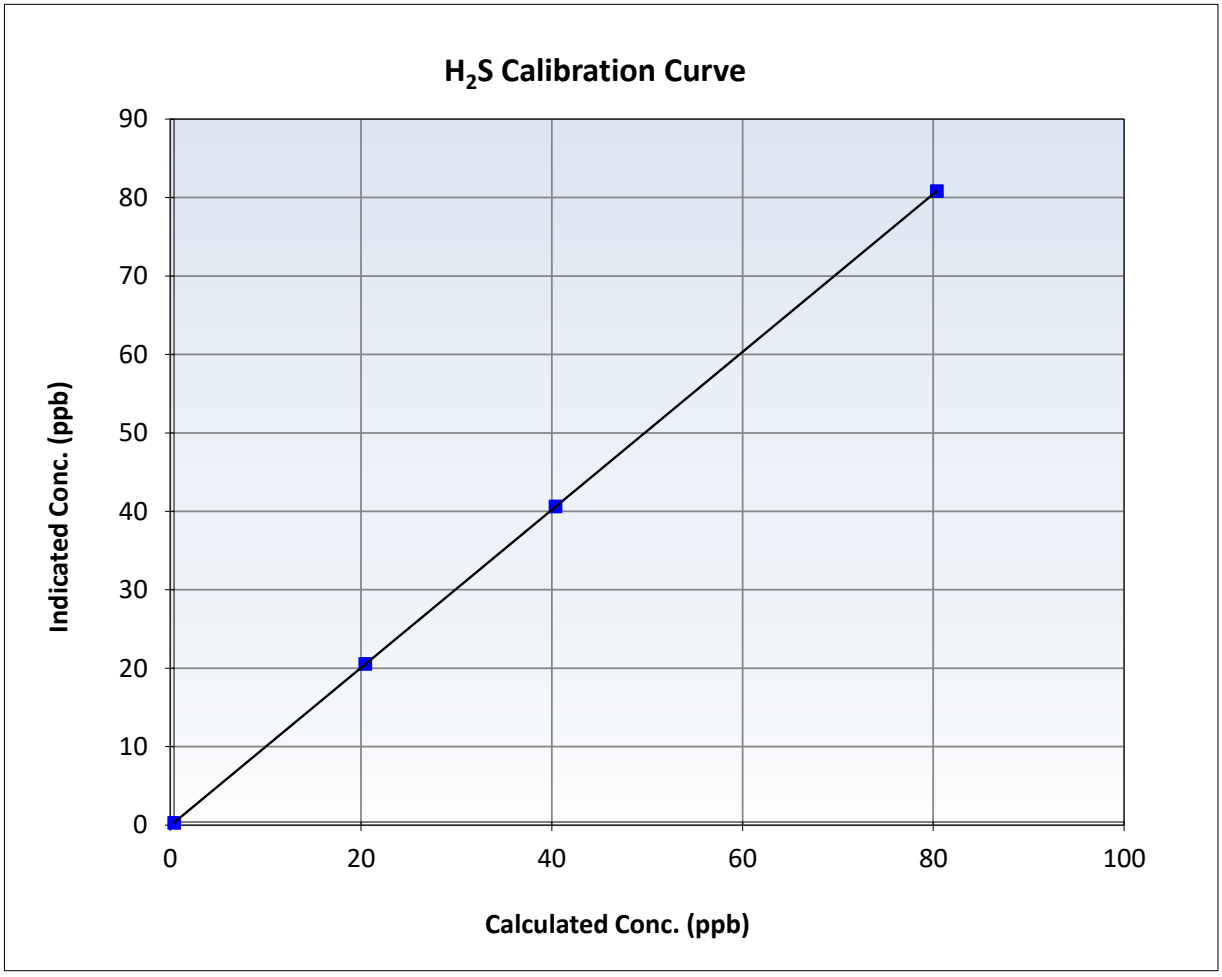
Station Information

Calibration Date:	September 3, 2026	Previous Calibration:	August 11, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:16	End Time (MST):	11:53
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1236656117

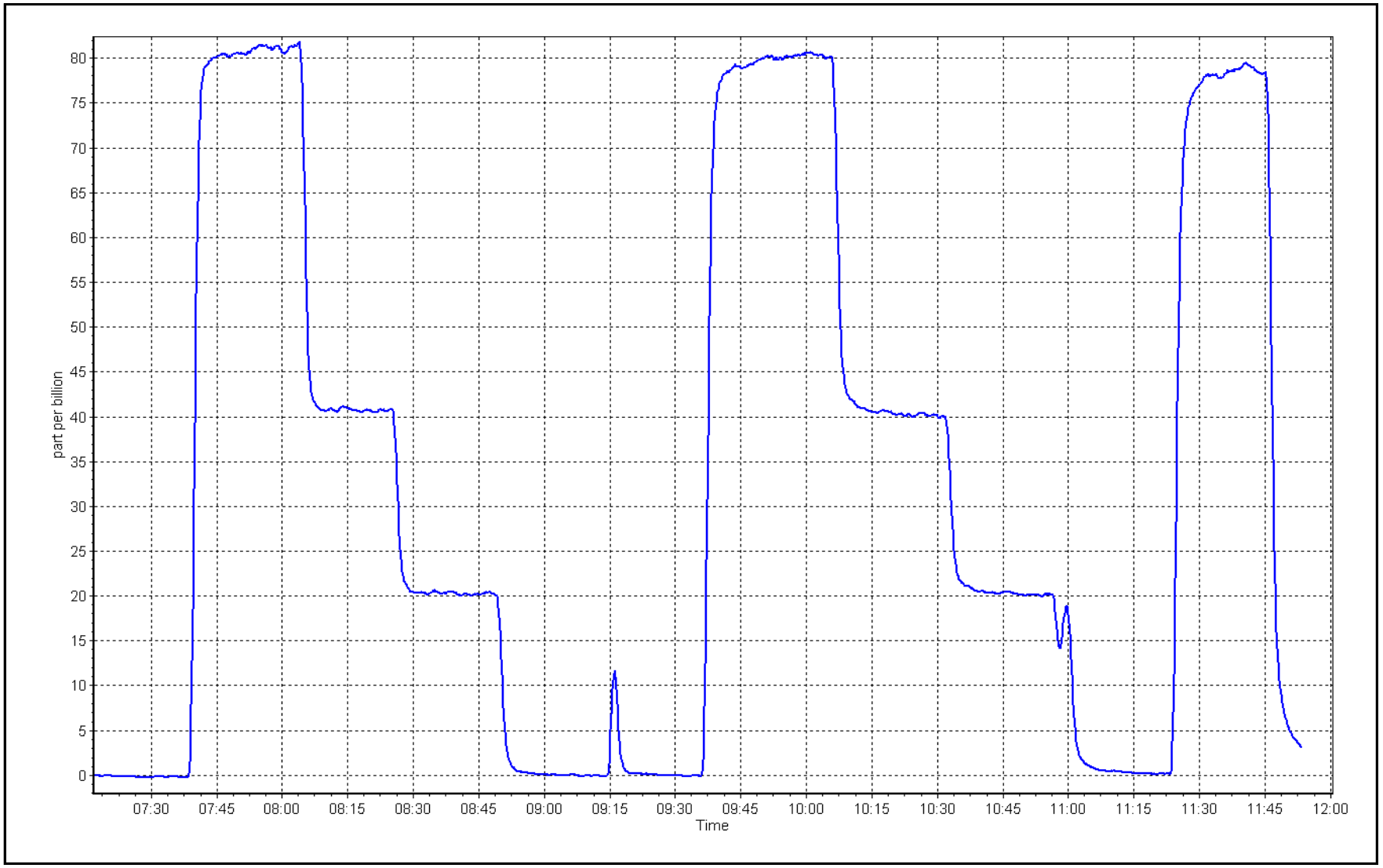
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
80.0	80.4	0.9945
40.0	40.2	0.9951
20.0	20.1	0.9954

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.006524	*0.90 - 1.10*
Intercept	-0.071836	*+/-3*



H_2S Calibration Plot Date: September 3, 2026 Location: MacKay River



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	MacKay River
Station number:	AMS 20
Calibration Date:	September 2, 2026
Last Cal Date:	August 10, 2026
Start time (MST):	7:30
End time (MST):	12:04
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0037393	Cal Gas Expiry Date:	July 22, 2032
NOX Cal Gas Conc:	62.00 ppm	NO Cal Gas Conc:	61.90 ppm
Removed Cylinder #:		Removed Gas Exp Date:	
Removed Gas NOX Conc:	62.00 ppm	Removed Gas NO Conc:	61.90 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	API T700	Serial Number:	5706
ZAG make/model:	API T701	Serial Number:	4888

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.2	0.1	-0.2	----	----
AF High point	4935	64.6	801.1	799.8	1.3	806.7	804.0	2.8	0.9928	0.9949
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 806.8 ppb	NO = 804.6 ppb
Baseline Corr 1st pt	NO_X = 806.9 ppb	NO = 803.9 ppb
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

*Percent Change	NO_X = 0.0%		
*Percent Change	NO = -0.1%		

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1505164379

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	Finish		Start	Finish
NO coeff or slope:	1.065	1.065	NO bkgnd or offset:	2.9	2.9
NOX coeff or slope:	0.991	0.991	NOX bkgnd or offset:	3.2	3.2
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	152.2	152.2

Calibration Statistics

	Start	Finish
NO_X Cal Slope:	1.005778	1.004479
NO_X Cal Offset:	1.031141	1.311412
NO Cal Slope:	1.006699	1.005085
NO Cal Offset:	-0.547622	-0.107467
NO_2 Cal Slope:	1.001160	1.002810
NO_2 Cal Offset:	-0.534128	-0.539719

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
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	805.1	803.7	1.4	0.9950	0.9952
Mid point	4968	32.3	400.5	399.9	0.6	405.0	402.3	2.6	0.9889	0.9939
Low point	4984	16.2	200.9	200.5	0.3	203.9	200.7	3.2	0.9851	0.9992
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.2	-0.2	----	----
As left span	4935	64.6	801.1	448.5	352.6	804.7	448.5	356.1	0.9955	1.0000
							Average Correction Factor		0.9897	0.9961

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.2	----	----
High GPT point	801.4	444.3	358.4	358.9	0.9986	100.1%
Mid GPT point	801.4	620.0	182.7	182.9	0.9989	100.1%
Low GPT point	801.4	709.4	93.3	92.4	1.0097	99.0%
				Average Correction Factor	1.0024	99.8%

Notes: No Maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

NO_X Calibration Summary

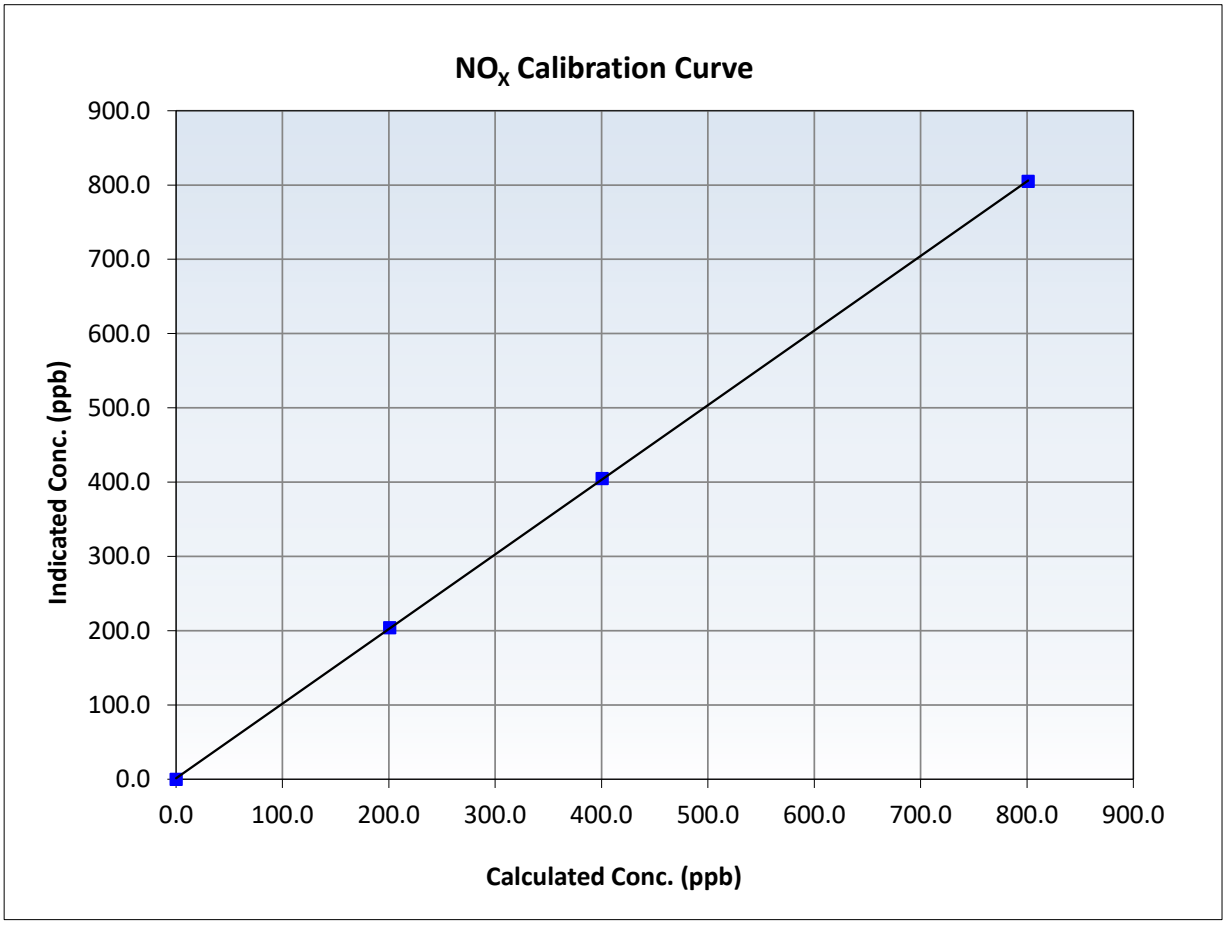
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 10, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:30	End Time (MST):	12:04
Analyzer make:	Thermo 42i	6:50:00 AM	1505164379

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
801.1	805.1	0.9950
400.5	405.0	0.9889
200.9	203.9	0.9851

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	1.004479	*0.90 - 1.10*
Intercept	1.311412	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

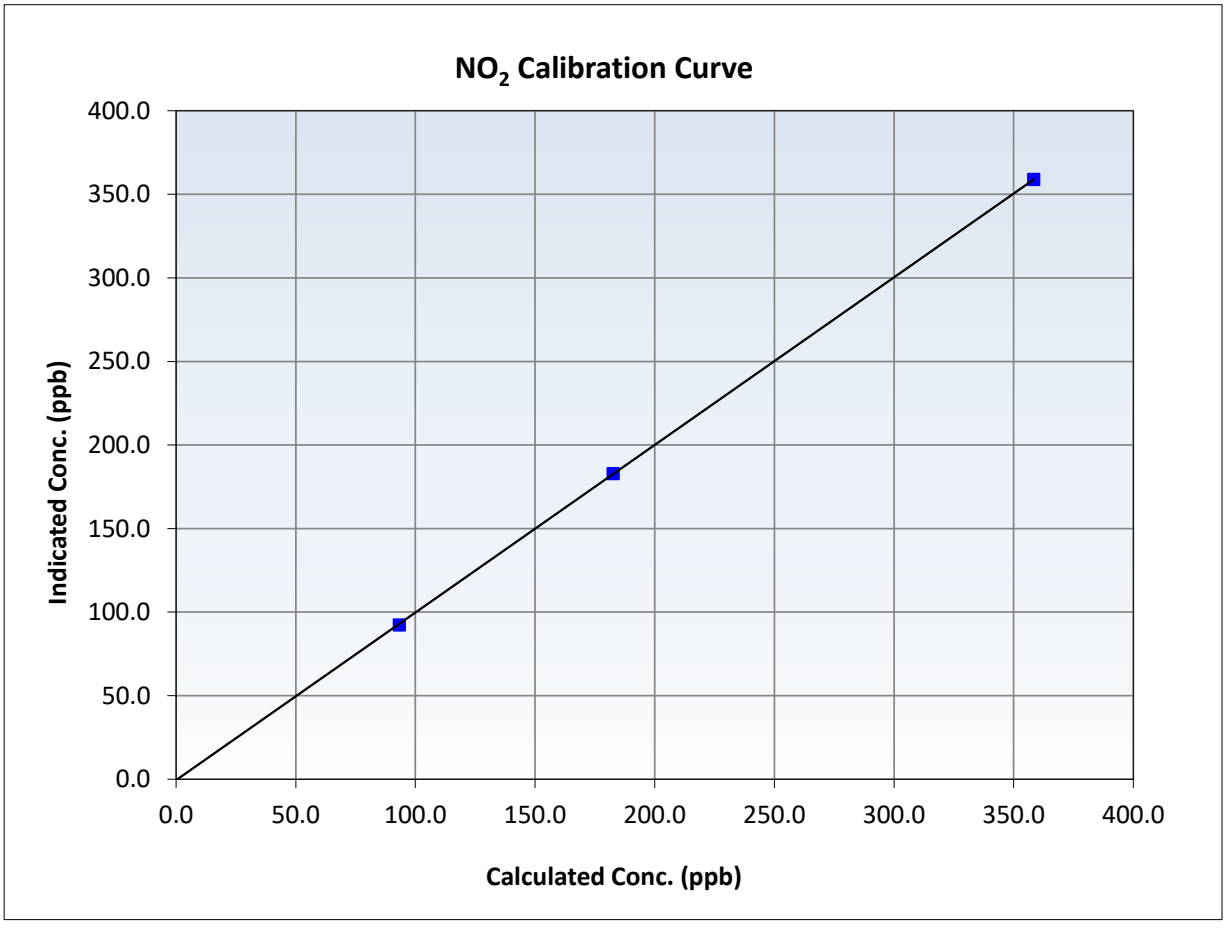
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 10, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:30	End Time (MST):	12:04
Analyzer make:	Thermo 42i	6:50:00 AM	1505164379

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
358.4	358.9	0.9986
182.7	182.9	0.9989
93.3	92.4	1.0097

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999992	*≥0.995*
Slope	1.002810	*0.90 - 1.10*
Intercept	-0.539719	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

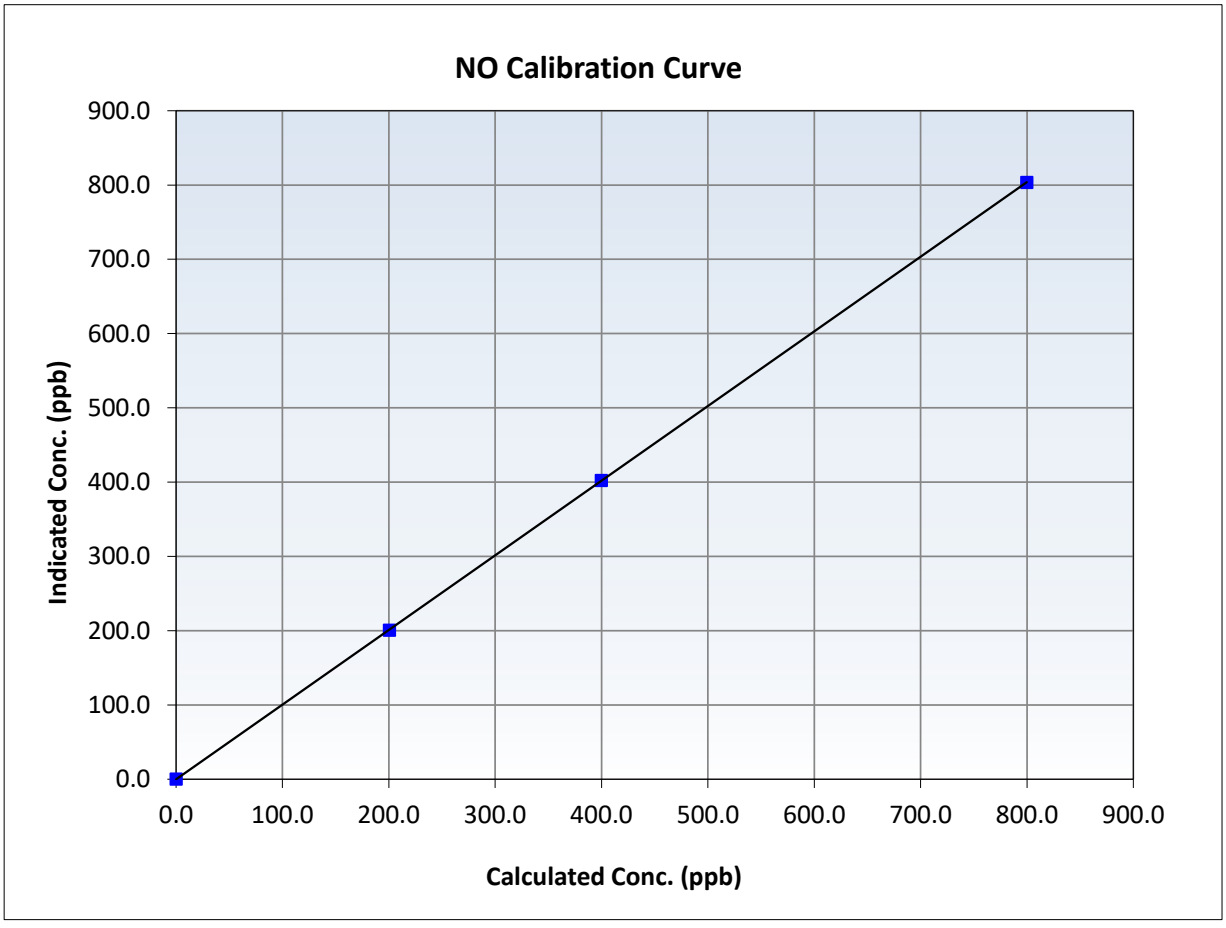
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 10, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:30	End Time (MST):	12:04
Analyzer make:	Thermo 42i	6:50:00 AM	1505164379

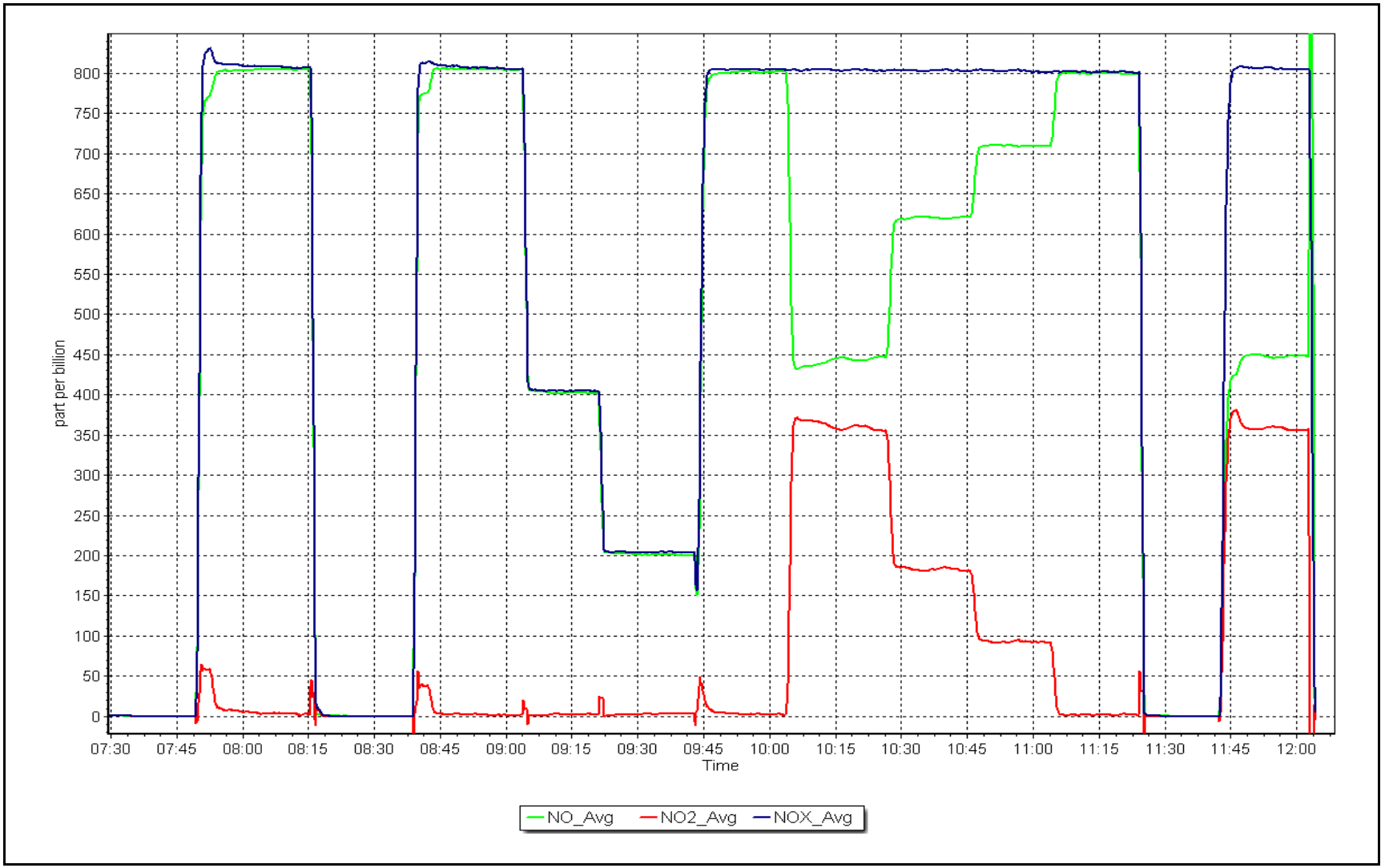
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
799.8	803.7	0.9952
399.9	402.3	0.9939
200.5	200.7	0.9992

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	1.005085	*0.90 - 1.10*
Intercept	-0.107467	*+/-20*



NO_X Calibration Plot Date: September 2, 2026 Location: MacKay River



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS21
CONKLIN
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	September 15, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	10:26	End time (MST):	14:35
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.34	ppm	Cal Gas Exp Date:	October 9, 2032
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002232	1.002291	Backgd or Offset:	31.0	31.0
Calibration intercept:	2.516641	2.996039	Coeff or Slope:	0.887	0.887

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4921	79.5	800.3	804.5	0.995
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	804.7	Previous response	804.6	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4921	79.5	800.3	804.0	0.995
Mid point	4960	39.8	400.7	405.2	0.989
Low point	4980	19.9	200.4	207.3	0.967
As left zero	5000	0.0	0.0	-0.3	----
As left span	4921	79.5	800.3	804.9	0.994
				Average Correction Factor:	0.984

Notes: No adjustment needed.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

SO_2 Calibration Summary

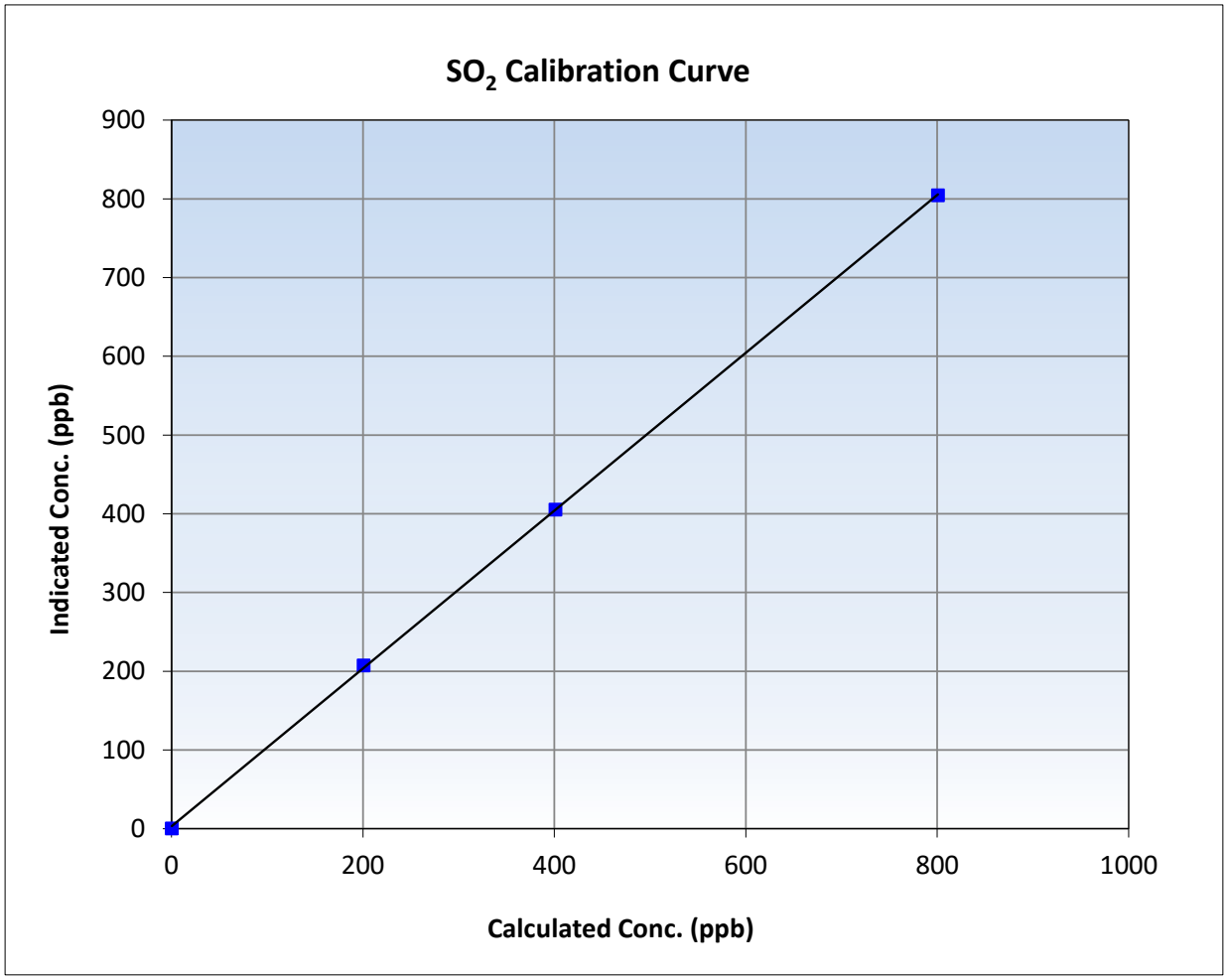
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 24, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:26	End Time (MST):	14:35
Analyzer make:	Thermo 43i	Analyzer serial #:	1428701363

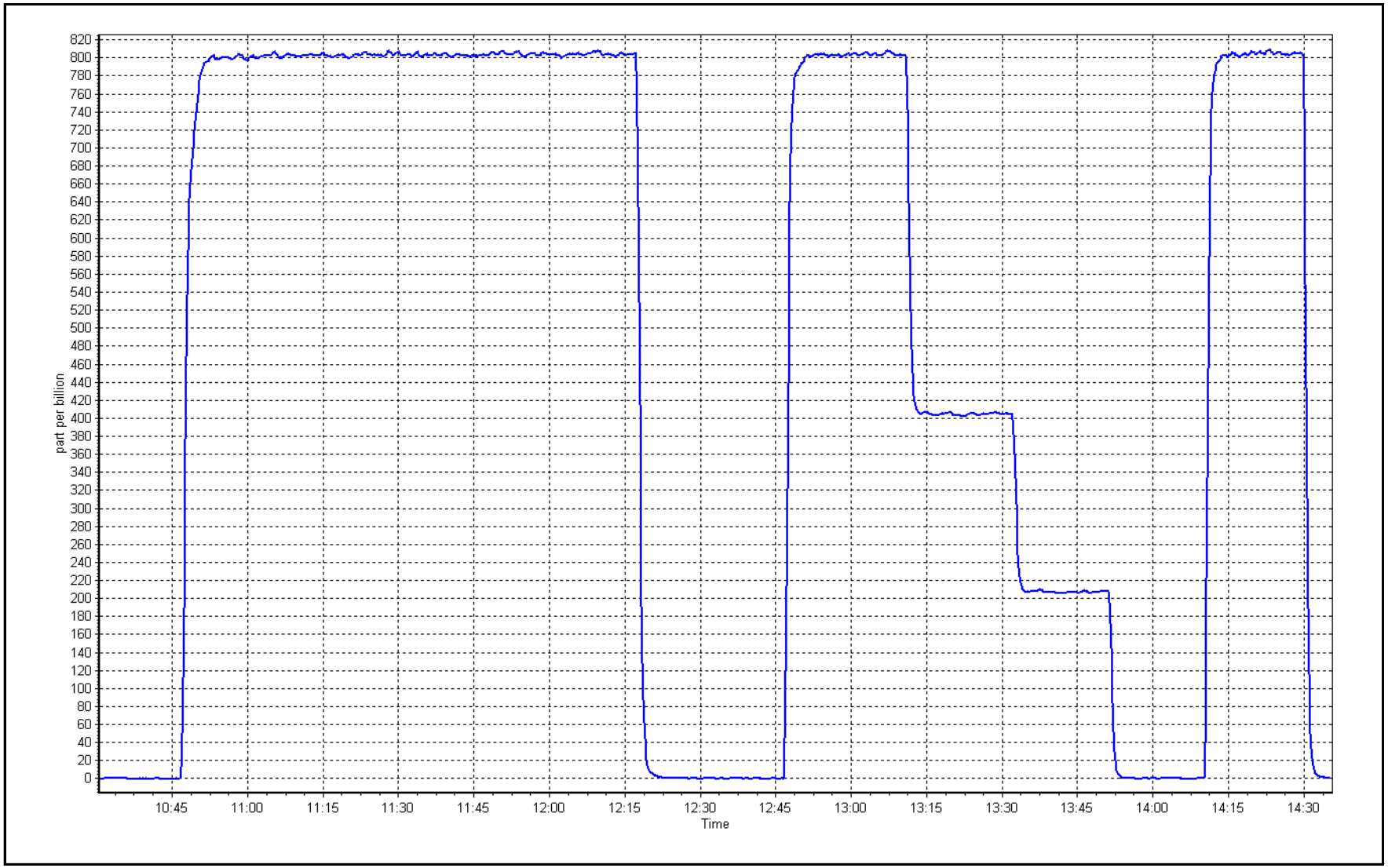
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.3	804.0	0.9954
400.7	405.2	0.9889
200.4	207.3	0.9665

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999937	*≥0.995*
Slope	1.002291	*0.90 - 1.10*
Intercept	2.996039	*+/-30*



SO2 Calibration Plot Date: September 15, 2026 Location: Conklin



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	September 23, 2026	Last Cal Date:	August 27, 2026
Start time (MST):	10:17	End time (MST):	15:17
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:	5.06	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.007579	0.994730	Backgd or Offset:	3.08	3.08
Calibration intercept:	0.021006	0.220602	Coeff or Slope:	1.408	1.408

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4921	79.1	80.0	79.1	1.011
As found Mid point	4961	39.5	40.0	40.0	0.997
As found Low point	4980	19.7	19.9	20.1	0.987
New cylinder response					

Baseline Corr As found:	79.2	Prev response:	80.68	*% change:	-1.9%
Baseline Corr 2nd AF pt:	40.1	AF Slope:	0.988164	AF Intercept:	0.200311
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999924	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4921	79.1	80.0	79.6	1.006
Mid point	4961	39.5	40.0	40.4	0.989
Low point	4980	19.7	19.9	20.2	0.987
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	79.1	80.0	78.8	1.016
SO2 Scrubber Check	4921	79.5	794.9	0.0	----
Date of last scrubber change:		August 6, 2025		Ave Corr Factor	0.994
Date of last converter efficiency test:		October 7, 2025			

Notes: Sox scrubber checked after calibrator zero. No adjustments done.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

TRS Calibration Summary

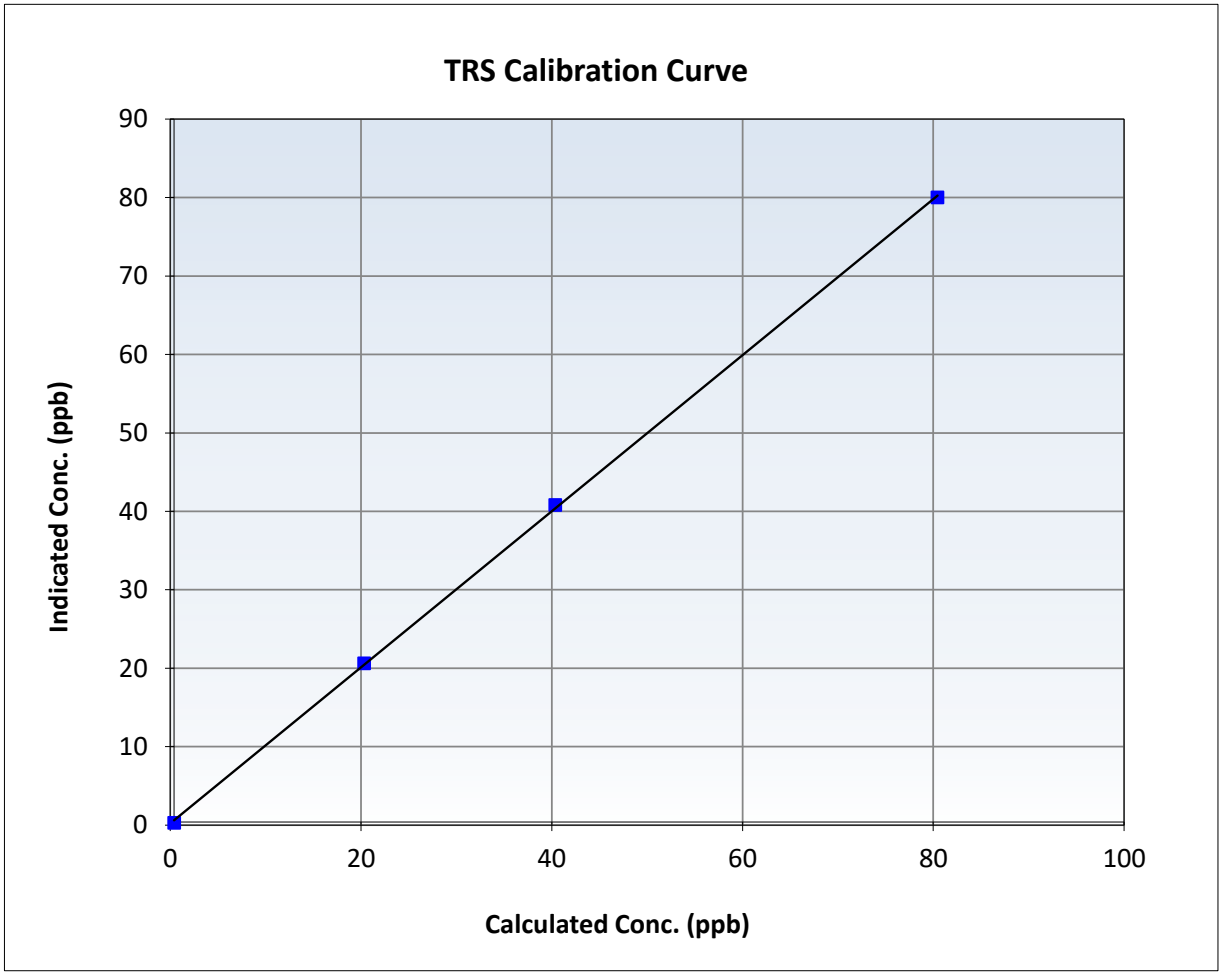
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 27, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:17	End Time (MST):	15:17
Analyzer make:	Thermo 43i-QTL	Analyzer serial #:	12228021058

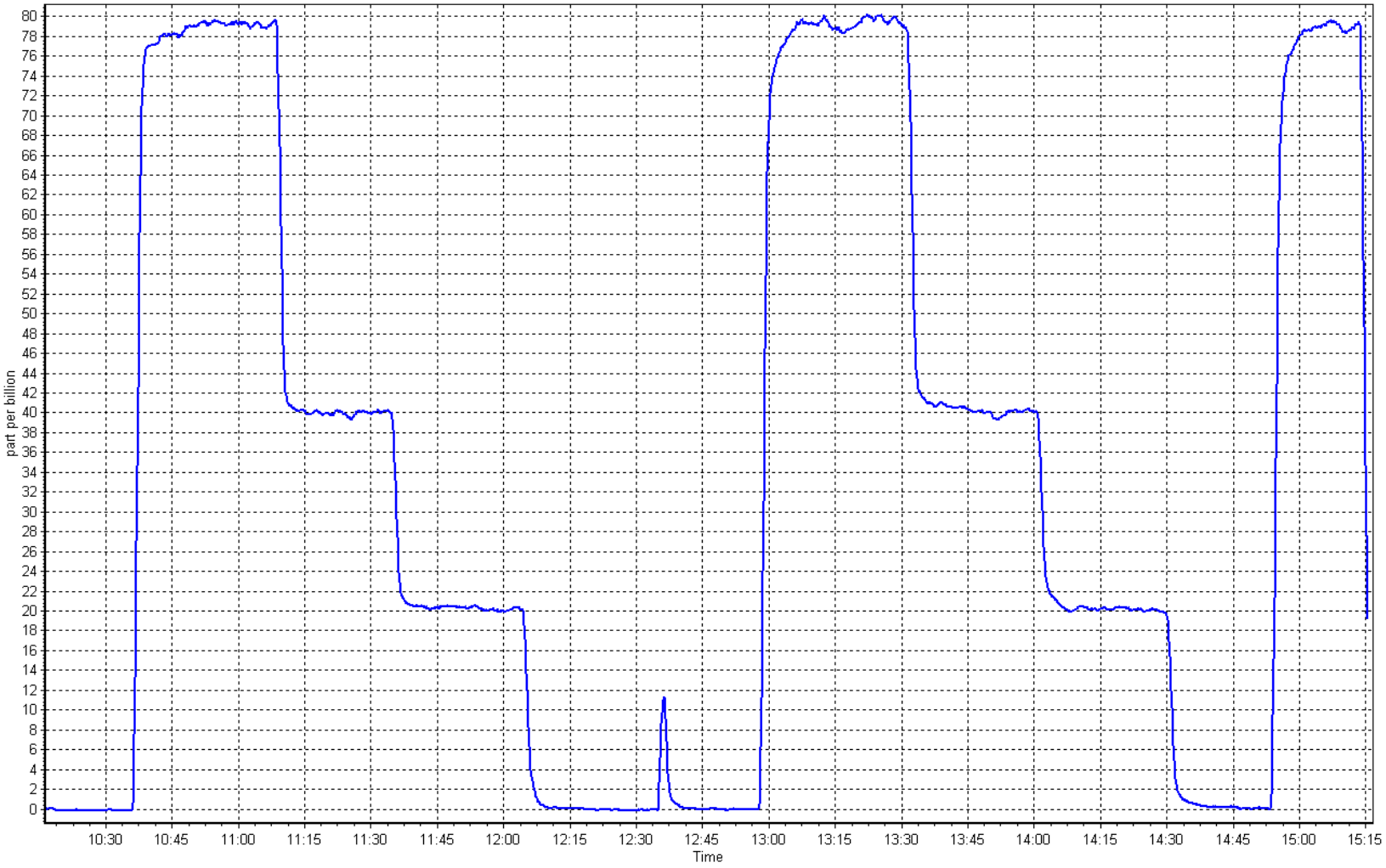
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
80.0	79.6	1.0056
40.0	40.4	0.9894
19.9	20.2	0.9870

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999896	*≥0.995*
Slope	0.994730	*0.90 - 1.10*
Intercept	0.220602	*+/-3*



TRS Calibration Plot Date: September 23, 2026 Location: Conklin



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	September 15, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	10:26	End time (MST):	14:35
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 #:	1152430011
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.62E-04	2.60E-04	NMHC SP Ratio:	5.50E-05	5.52E-05
CH4 Retention time:	13.0	12.8	NMHC Peak Area:	162961	162319
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	16.97	17.02	0.997
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	17.02	Prev response	17.01	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	16.97	16.97	1.000
Mid point	4960	39.8	8.50	8.50	0.999
Low point	4980	19.9	4.25	4.32	0.984
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	0.995

Notes: N2 changed out, no adjustments made.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.96	8.99	0.998
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.99	Prev response	8.98	*% change	0.1%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.5	8.96	8.96	1.001
Mid point	4960	39.8	4.49	4.46	1.006
Low point	4980	19.9	2.24	2.24	1.002
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.96	8.98	0.998
				Average Correction Factor	1.003

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.01	8.04	0.996
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.04	Prev response	8.03	*% change	0.1%
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) *Limit = 0.95-1.05*
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	4.04	0.992
Low point	4980	19.9	2.01	2.08	0.965
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.01	8.03	0.997
				Average Correction Factor	0.985

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.999898	0.998557
THC Cal Offset:	0.037679	0.028889
CH4 Cal Slope:	0.998769	0.998185
CH4 Cal Offset:	0.030768	0.034565
NMHC Cal Slope:	1.000907	0.998928
NMHC Cal Offset:	0.006911	-0.005078

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

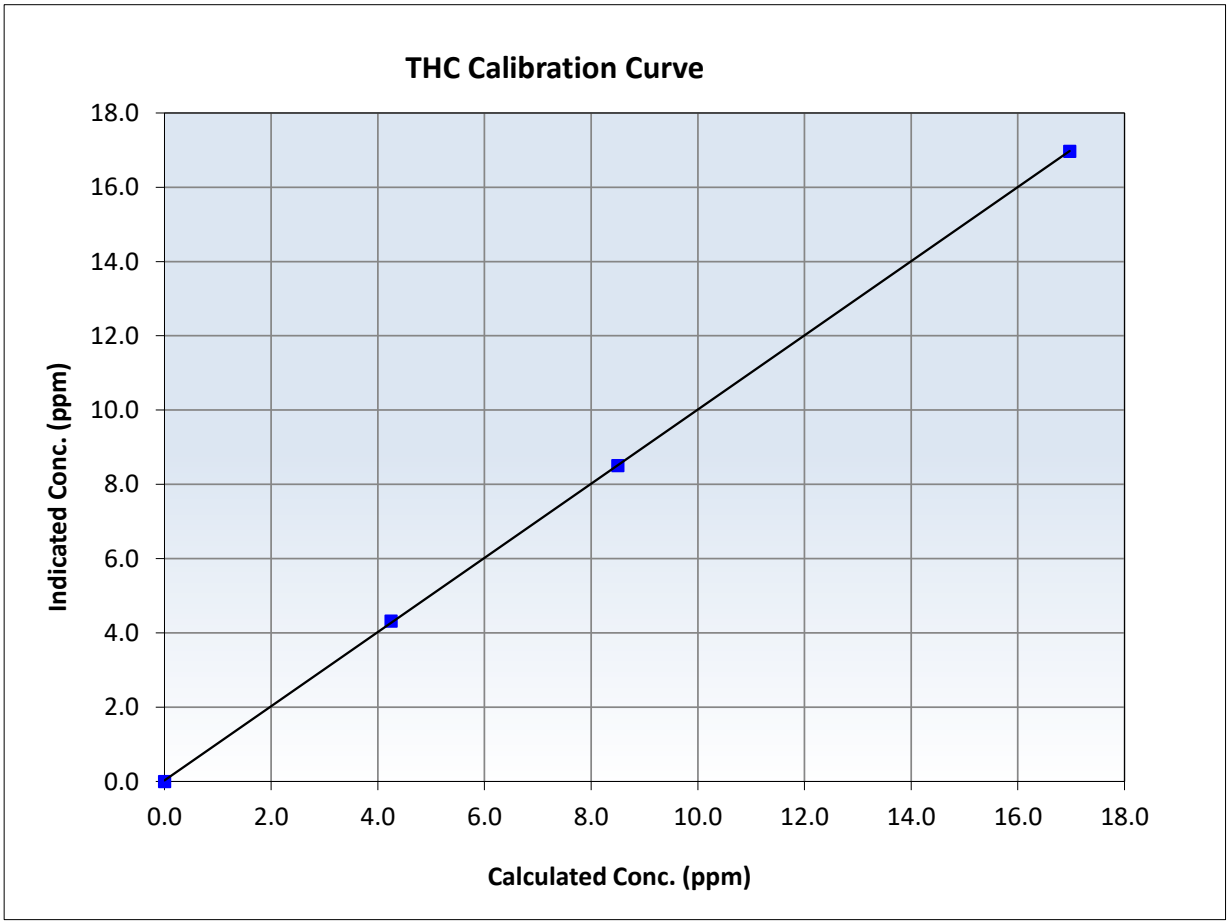
THC Calibration Summary

Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 24, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:26	End Time (MST):	14:35
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999980	*≥0.995*
16.97	16.97	1.0001	Slope	0.998557	*0.90 - 1.10*
8.50	8.50	0.9994	Intercept	0.028889	*+/-0.5*
4.25	4.32	0.9840			



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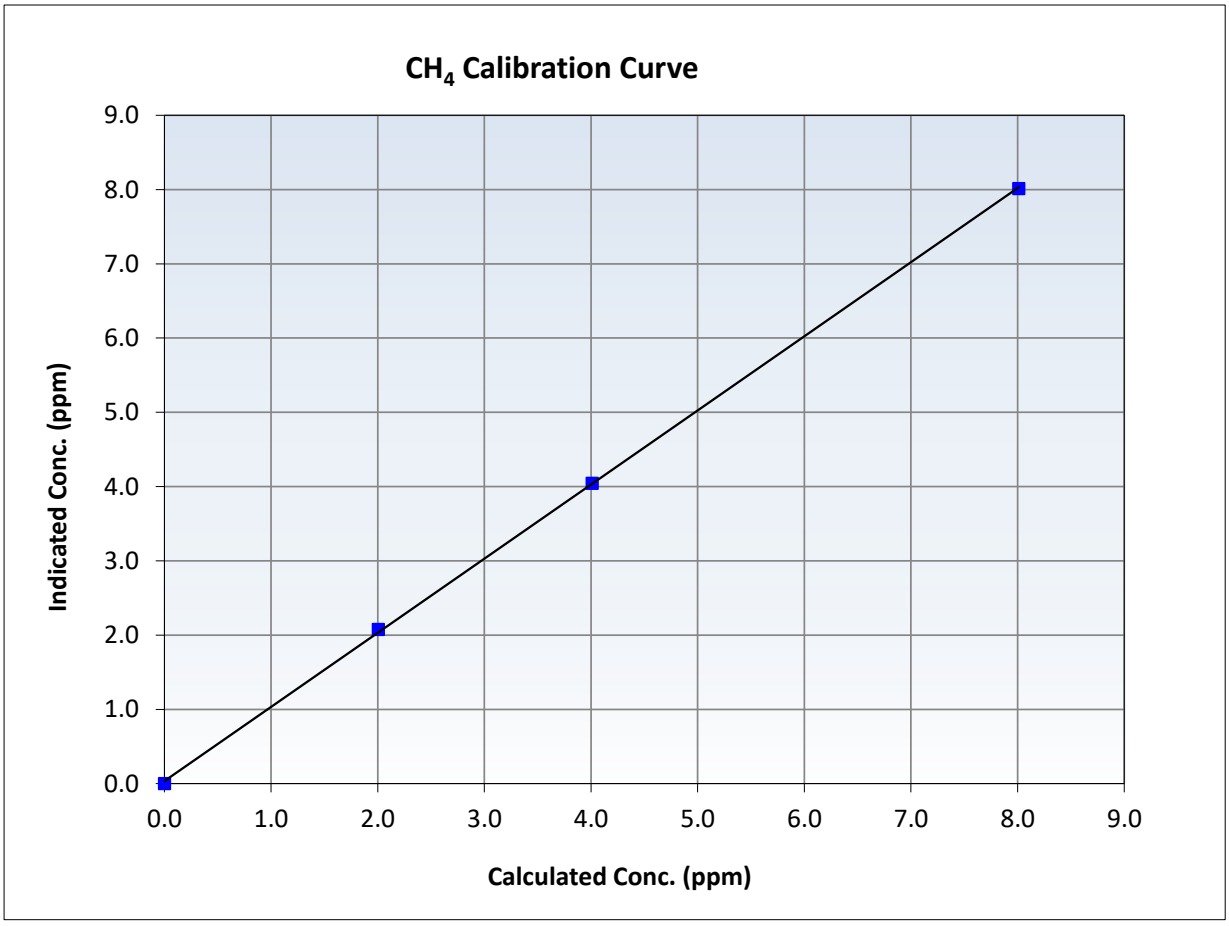
CH_4 Calibration Summary

Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 24, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:26	End Time (MST):	14:35
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999909	*≥0.995*
8.01	8.02	0.9992	Slope	0.998185	*0.90 - 1.10*
4.01	4.04	0.9917	Intercept	0.034565	*+/-0.5*
2.01	2.08	0.9649			



Wood Buffalo Environmental Association

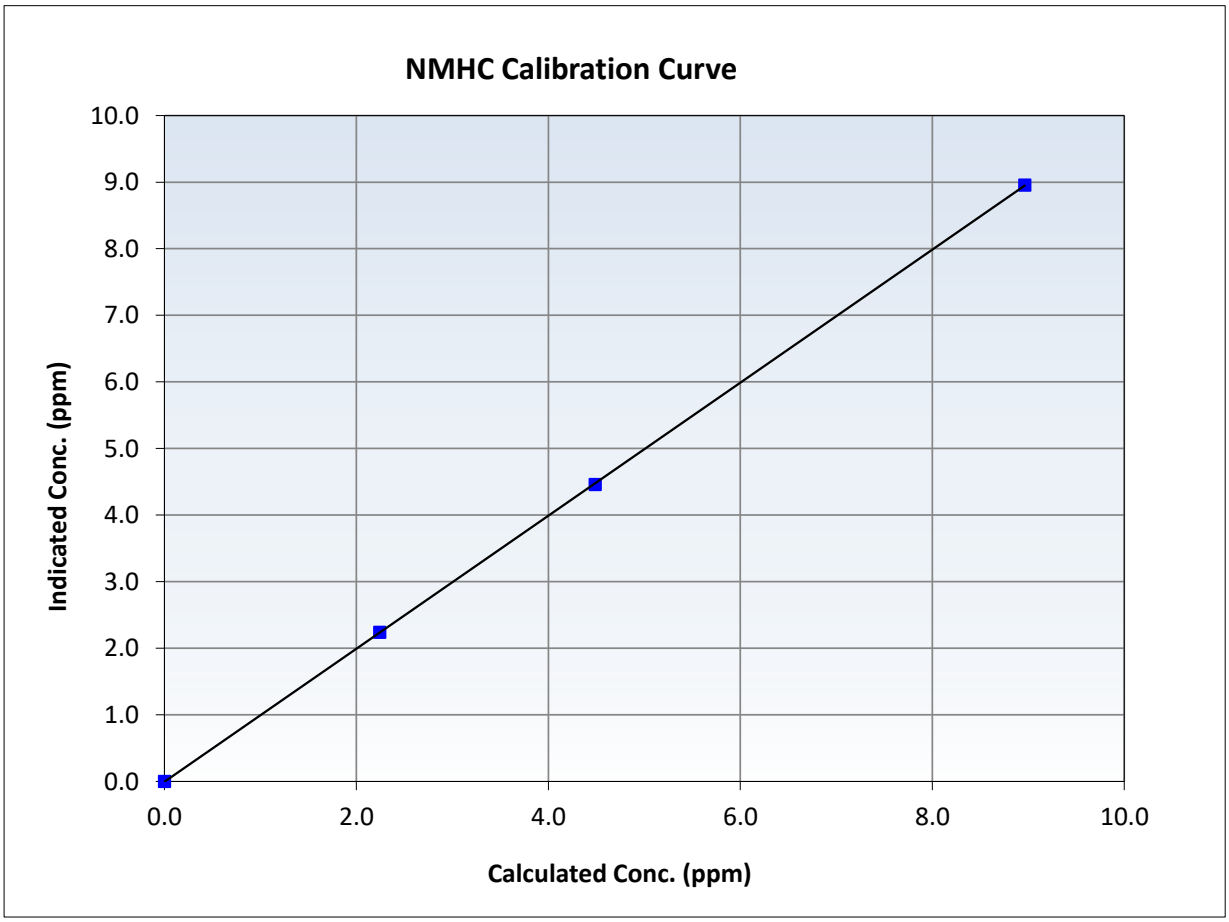
NMHC Calibration Summary

Station Information

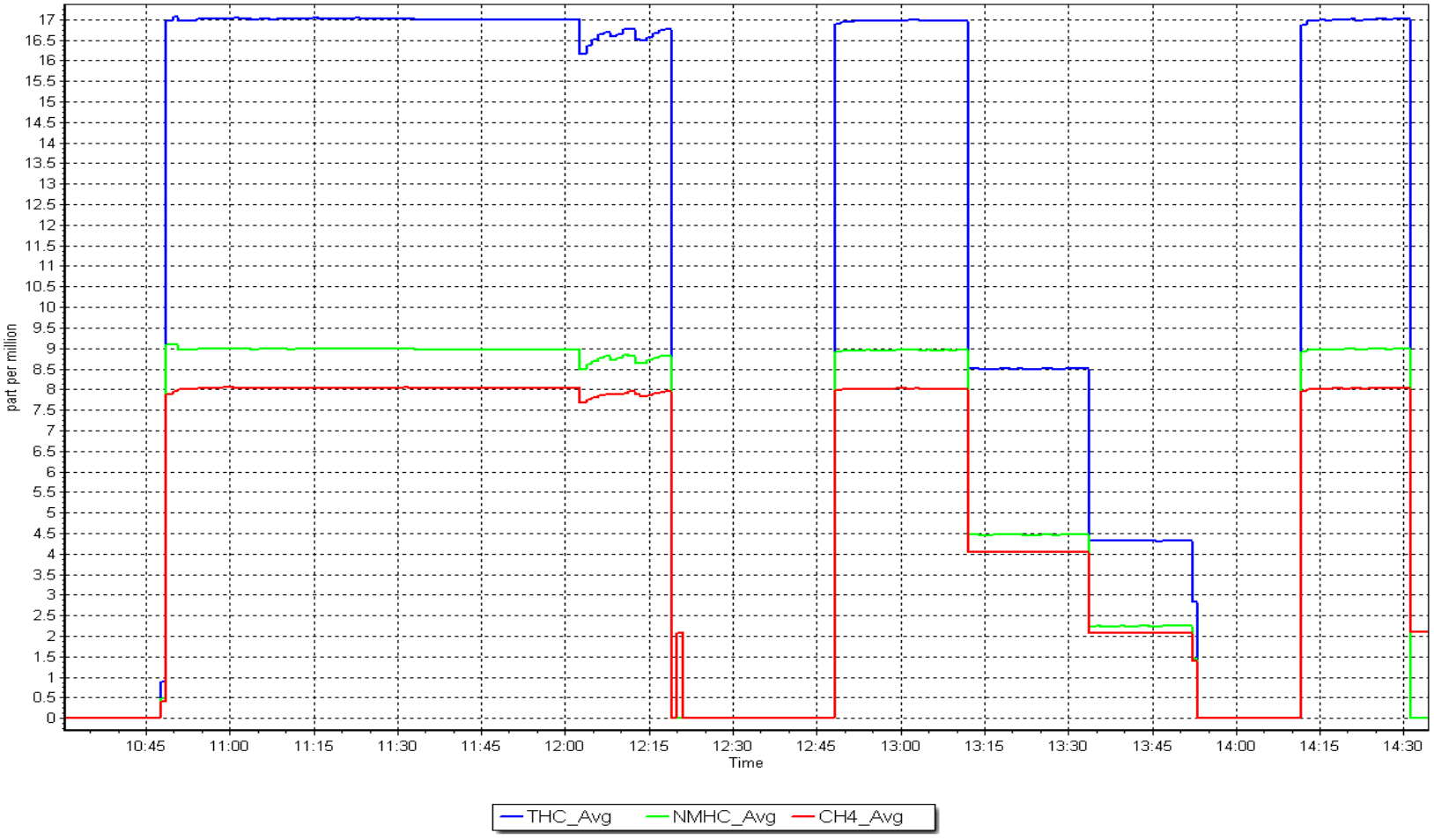
Calibration Date:	September 15, 2026	Previous Calibration:	August 24, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:26	End Time (MST):	14:35
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999992	*≥0.995*
8.96	8.96	1.0009	Slope	0.998928	*0.90 - 1.10*
4.49	4.46	1.0057	Intercept	-0.005078	*+/-0.5*
2.24	2.24	1.0017			



NMHC Calibration Plot Date: September 15, 2026 Location: Conklin



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	September 16, 2026	Last Cal Date:	September 15, 2026
Start time (MST):	11:00	End time (MST):	12:47
Reason:	Cylinder Change		

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 #:	1152430011
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.62E-04	2.60E-04	NMHC SP Ratio:	5.50E-05	5.52E-05
CH4 Retention time:	13.0	12.8	NMHC Peak Area:	162961	162319
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	16.97	17.01	0.998
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	17.01	Prev response	16.98	*% change	0.2%
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)) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	16.97	17.02	0.997
				Average Correction Factor	

Notes: H2 changed out.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.96	8.98	0.998
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.98	Prev response	8.95	*% change	0.4%
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) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.96	8.98	0.998
				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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.01	8.02	0.998
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.02	Prev response	8.03	*% change	-0.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

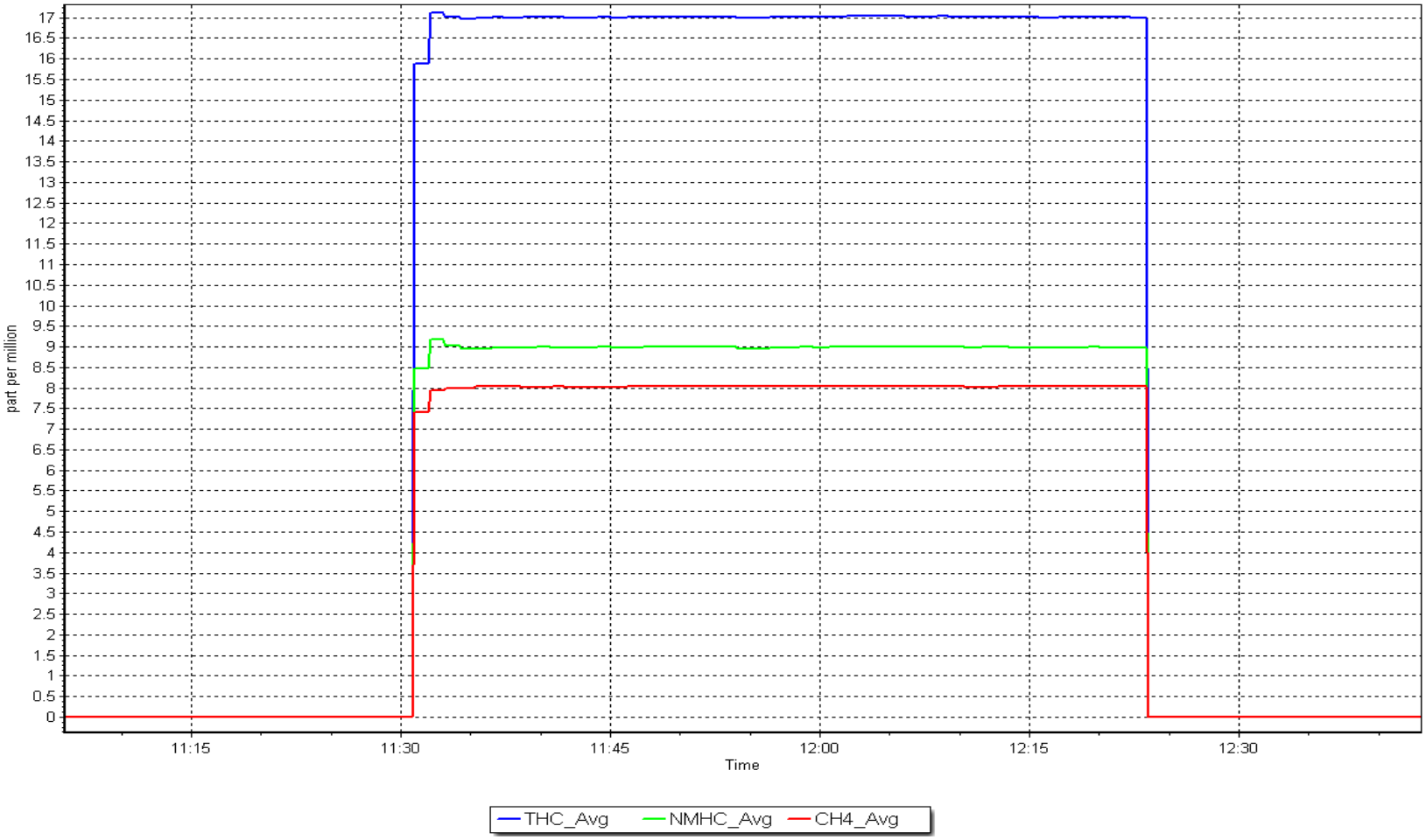
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.01	8.04	0.997
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.998557	
THC Cal Offset:	0.028889	
CH4 Cal Slope:	0.998185	
CH4 Cal Offset:	0.034565	
NMHC Cal Slope:	0.998928	
NMHC Cal Offset:	-0.005078	

Calibration Performed By: Aswin Sasi Kumar

NMHC Calibration Plot Date: September 16, 2026 Location: Conklin



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	September 29, 2026	Last Cal Date:	September 15, 2026
Start time (MST):	10:55	End time (MST):	12:42
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:	690

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.60E-04	2.60E-04	NMHC SP Ratio:	5.52E-05	5.52E-05
CH4 Retention time:	12.8	12.8	NMHC Peak Area:	162319	162319
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.35	----
As found High point	4921	79.5	16.97	16.84	1.029
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.49	Prev response	16.98	*% 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)) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	16.97	16.96	1.001
				Average Correction Factor	

Notes: ZAG was changed after as founds. No adjustment made.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.96	8.70	1.031
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.70	Prev response	8.95	*% 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) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.96	8.91	1.006
				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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.35	----
As found High point	4921	79.5	8.01	8.14	1.028
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.79	Prev response	8.03	*% 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

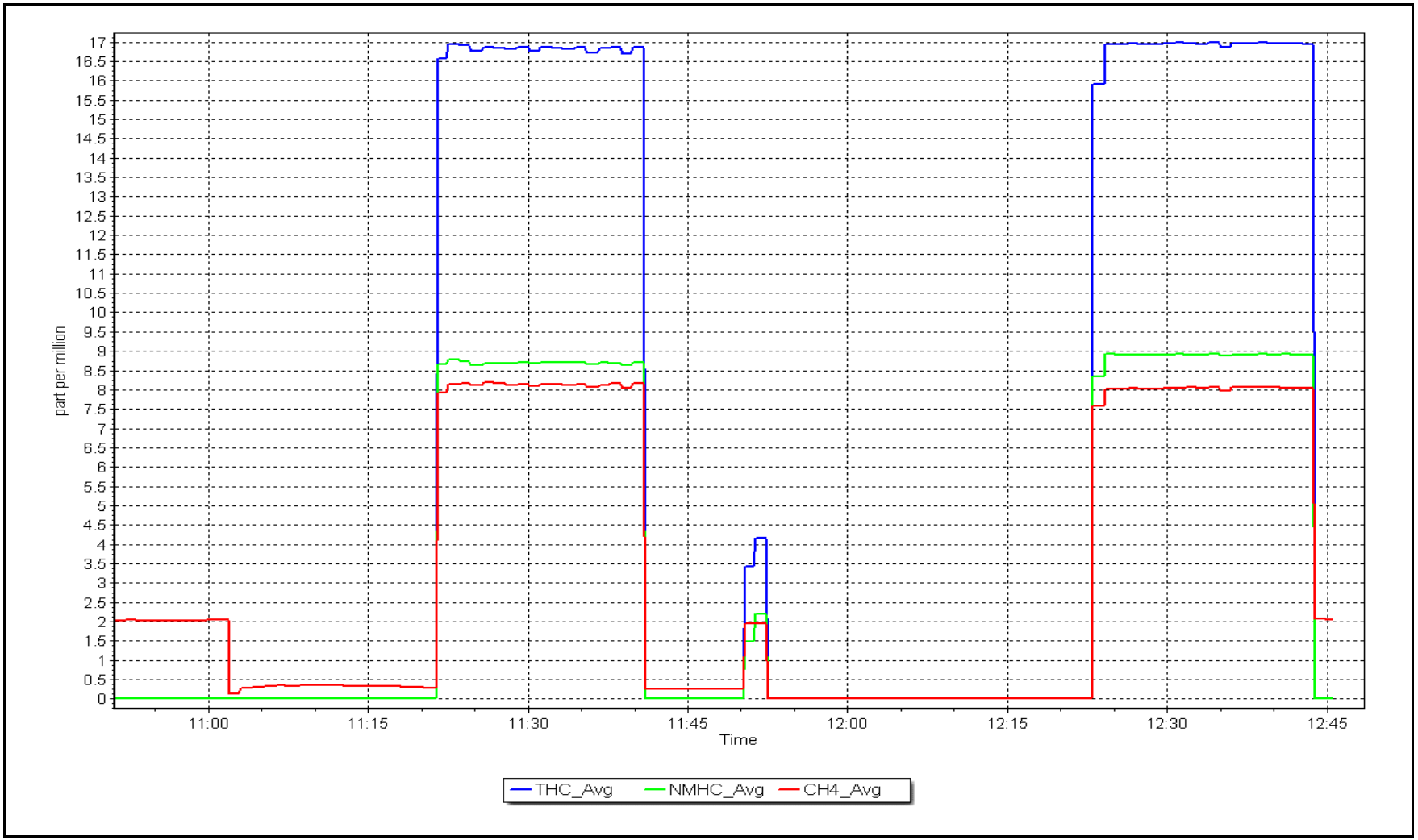
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.01	8.04	0.996
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.998557	
THC Cal Offset:	0.028889	
CH4 Cal Slope:	0.998185	
CH4 Cal Offset:	0.034565	
NMHC Cal Slope:	0.998928	
NMHC Cal Offset:	-0.005078	

Calibration Performed By: Jan Castro

NMHC Calibration Plot Date: September 29, 2026 Location: Conklin



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Conklin
Station number:	AMS 21
Calibration Date:	September 22, 2026
Last Cal Date:	August 25, 2026
Start time (MST):	10:45
End time (MST):	15:45
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	SA18828	Cal Gas Expiry Date:	November 3, 2031
NOX Cal Gas Conc:	48.90 ppm	NO Cal Gas Conc:	48.80 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	48.90 ppm	Removed Gas NO Conc:	48.80 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	2656
ZAG make/model:	Teledyne API T701	Serial Number:	355

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.3	0.3	0.0	----	----
AF High point	4918	82.0	802.0	800.3	1.6	809.2	805.3	3.8	0.9914	0.9942
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.8 ppb	NO = 800.5 ppb
Baseline Corr 1st pt	NO_X = 808.9 ppb	NO = 805.0 ppb
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

*Percent Change NO_X = 0.6%

*Percent Change NO = 0.6%

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1218153356

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.613	0.607	NO bkgnd or offset:	2.9	2.9
NOX coeff or slope:	0.997	0.998	NOX bkgnd or offset:	3.0	3.0
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	166.5	165.3

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.997561	0.997205
NO_X Cal Offset:	3.828075	3.928072
NO Cal Slope:	0.997507	0.997278
NO Cal Offset:	2.188029	2.268027
NO_2 Cal Slope:	0.998944	1.003979
NO_2 Cal Offset:	0.859911	0.045292

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.4	0.4	0.0	----	----
High point	4918	82.0	802.0	800.3	1.6	802.0	799.7	2.2	1.0000	1.0008
Mid point	4959	41.0	401.0	400.2	0.8	405.2	401.6	3.6	0.9896	0.9964
Low point	4980	20.5	200.5	200.1	0.4	207.6	204.1	3.5	0.9657	0.9802
As left zero	5000	0.0	0.0	0.0	0.0	0.4	0.3	0.1	----	----
As left span	4918	82.0	802.0	386.2	415.8	804.0	386.2	418.2	0.9975	1.0000
								Average Correction Factor	0.9851	0.9925

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	800.5	385.5	416.6	418.1	0.9965	100.4%
Mid GPT point	800.5	594.5	207.6	209.2	0.9925	100.8%
Low GPT point	800.5	697.8	104.3	104.4	0.9994	100.1%
				Average Correction Factor	0.9962	100.4%

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

NO_X Calibration Summary

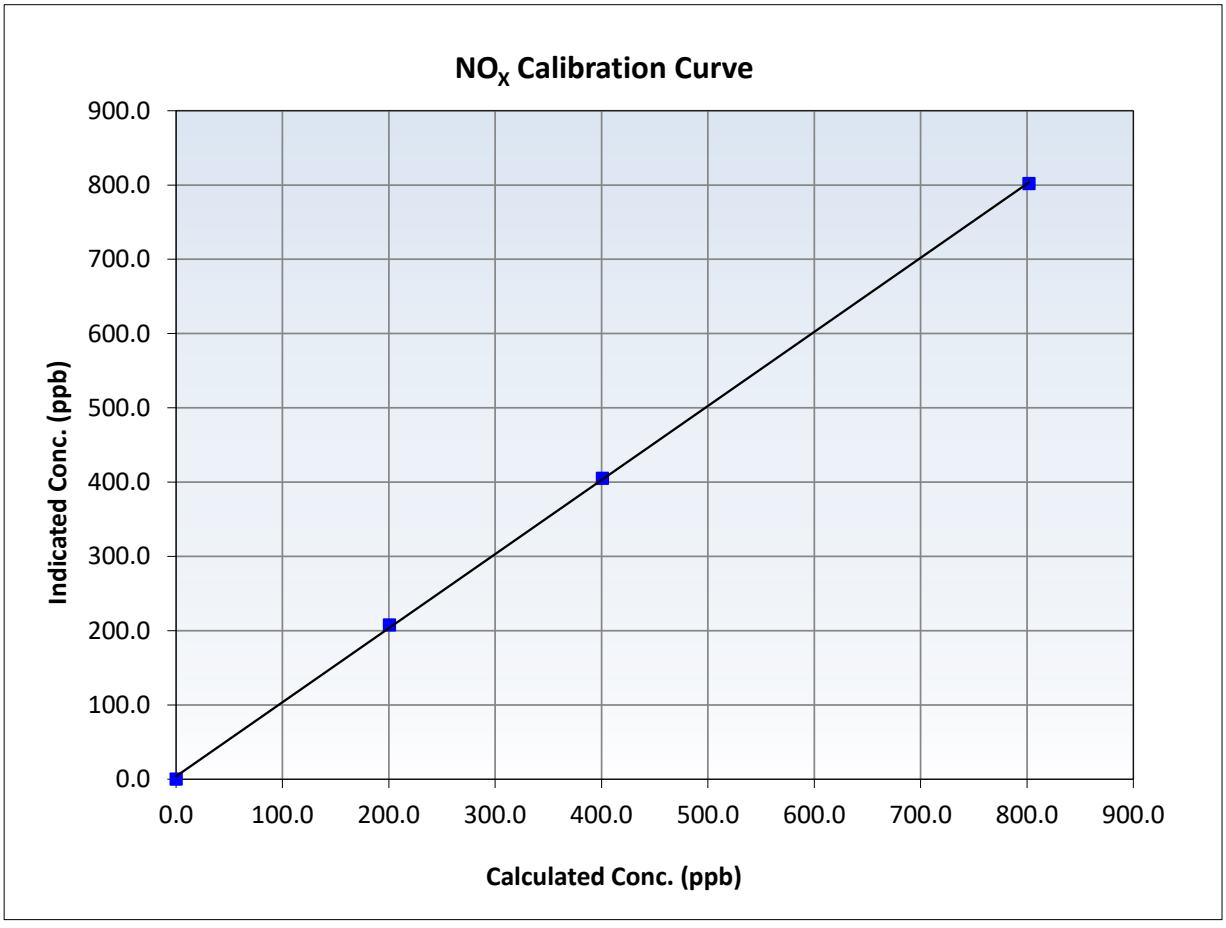
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 25, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	15:45
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
802.0	802.0	1.0000
401.0	405.2	0.9896
200.5	207.6	0.9657

Statistical Evaluation		Limits
Correlation Coefficient	0.999910	≥0.995
Slope	0.997205	0.90 - 1.10
Intercept	3.928072	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

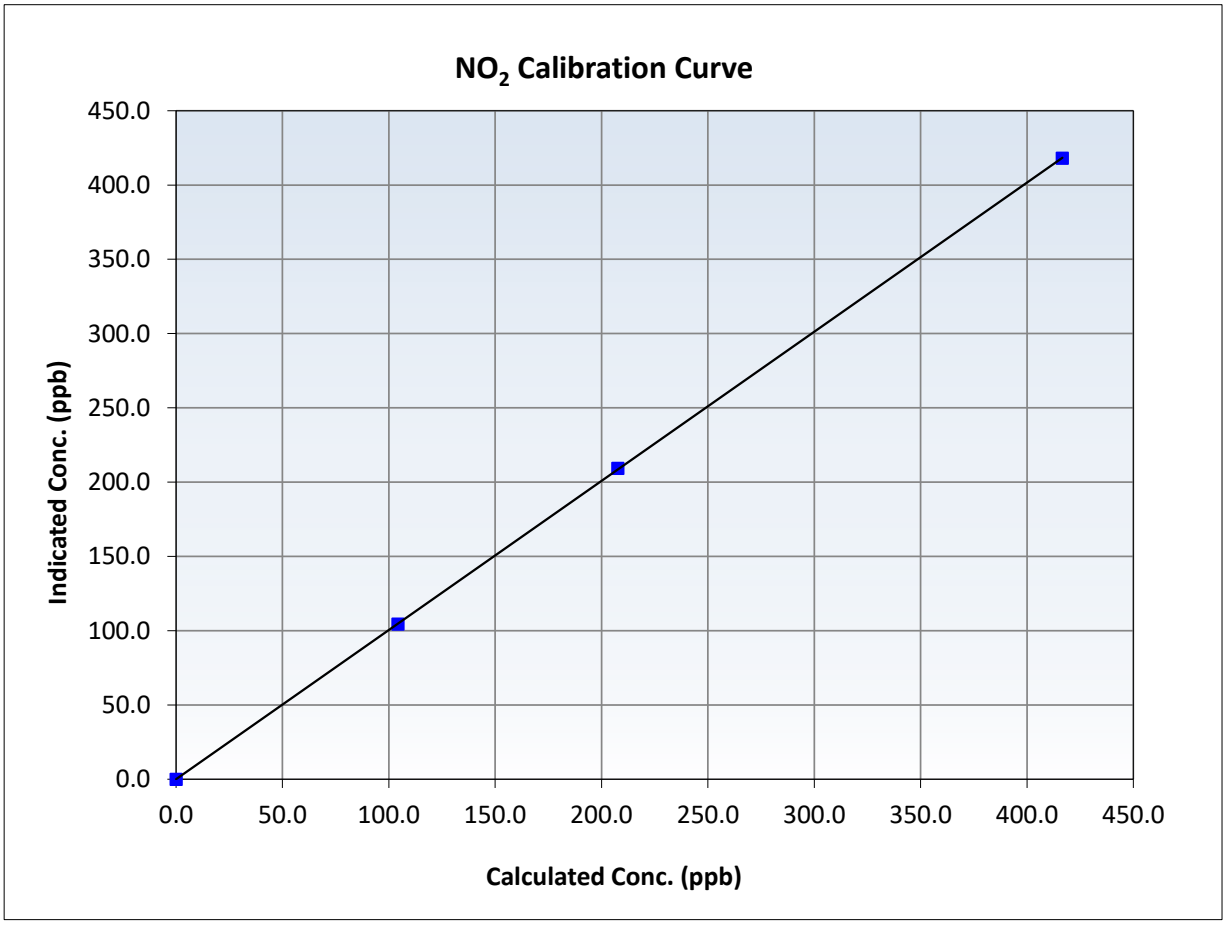
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 25, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	15:45
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
416.6	418.1	0.9965
207.6	209.2	0.9925
104.3	104.4	0.9994

Statistical Evaluation		Limits
Correlation Coefficient	0.999993	≥0.995
Slope	1.003979	0.90 - 1.10
Intercept	0.045292	+/-20



Wood Buffalo Environmental Association

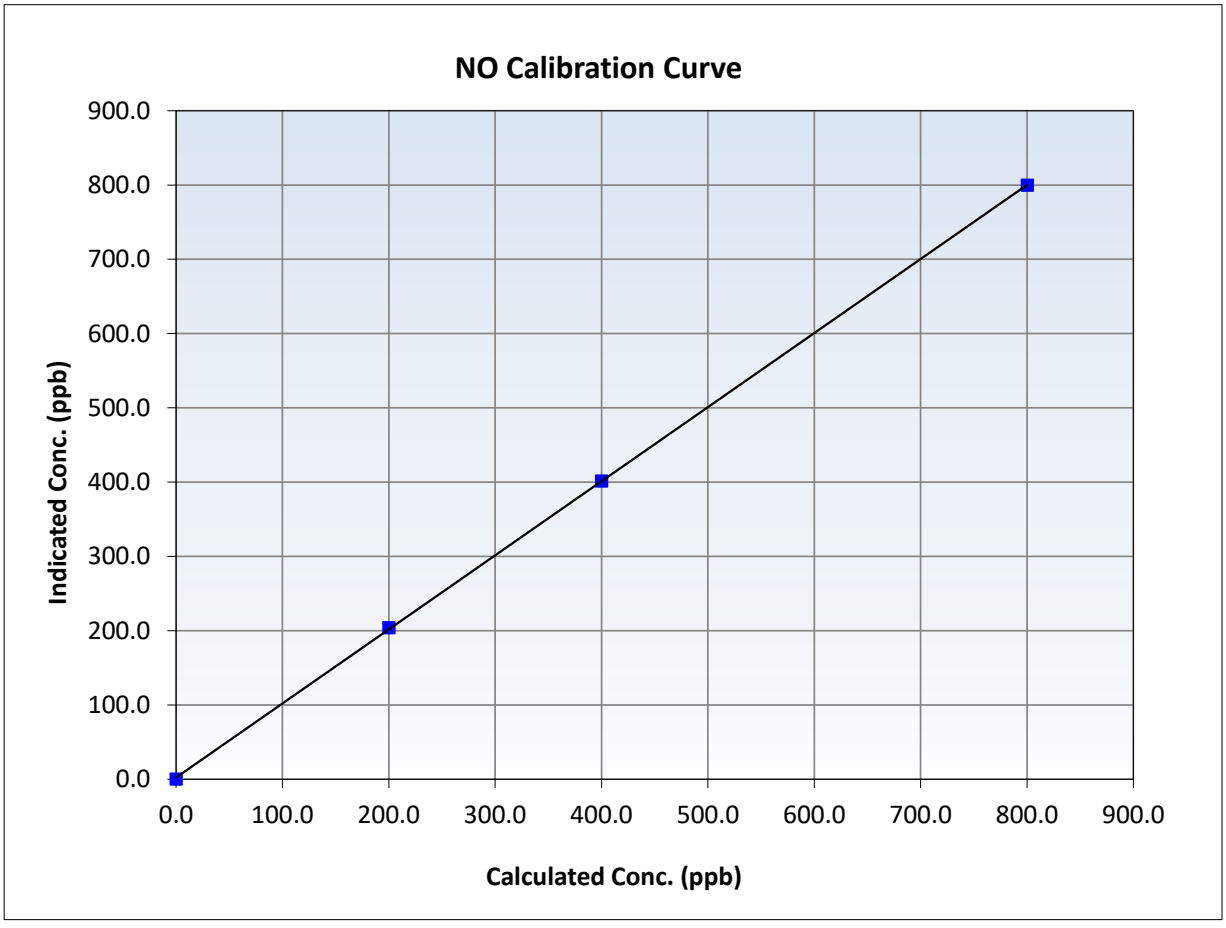
NO Calibration Summary

Station Information

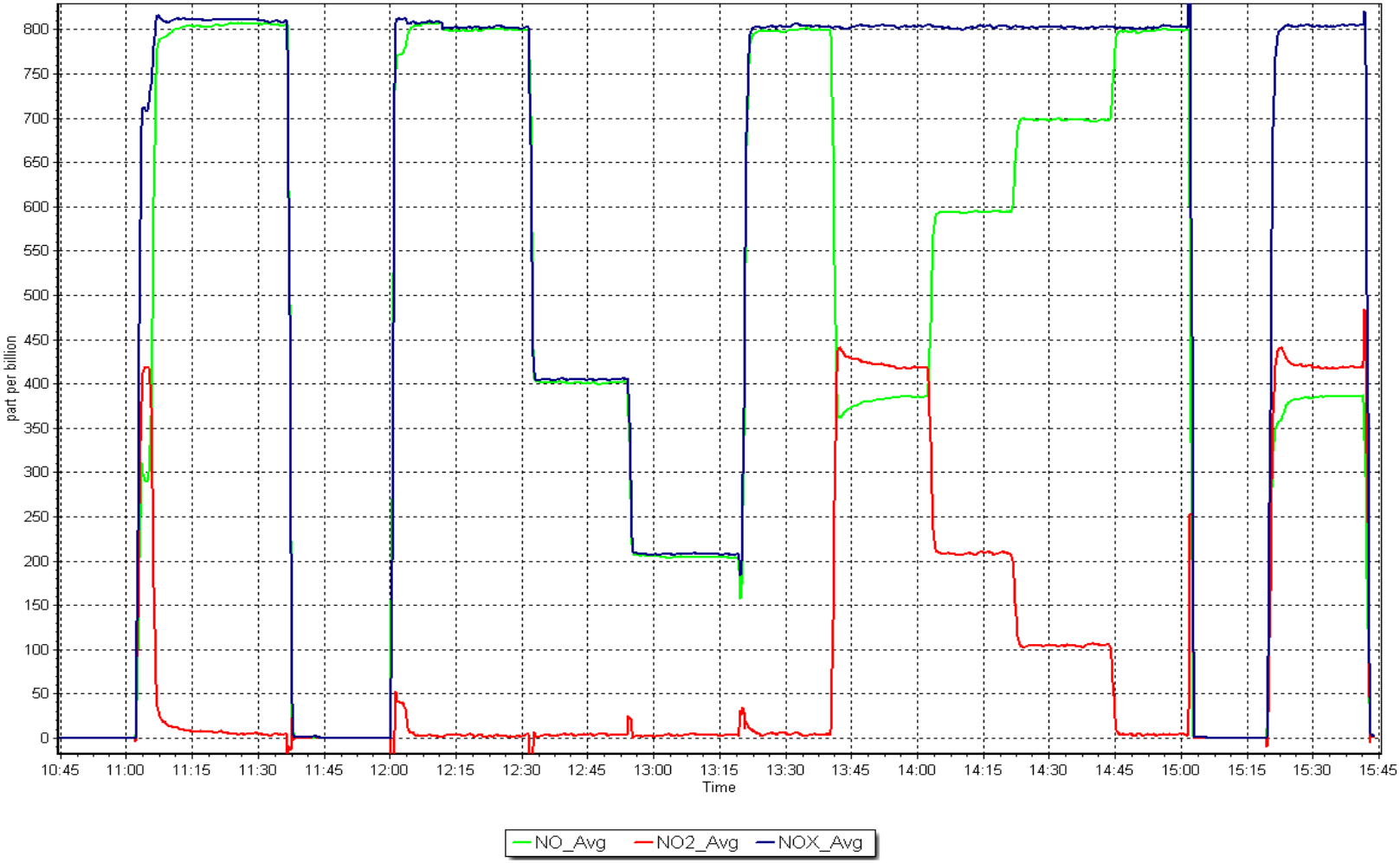
Calibration Date:	September 22, 2026	Previous Calibration:	August 25, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	15:45
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.4	----	Correlation Coefficient	0.999973	≥0.995
800.3	799.7	1.0008	Slope	0.997278	0.90 - 1.10
400.2	401.6	0.9964	Intercept	2.268027	+/-20
200.1	204.1	0.9802			



NO_X Calibration Plot Date: September 22, 2026 Location: Conklin



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	September 1, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	10:45	End time (MST):	14:35
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	Teledyne API T700P	Serial Number:	2656
ZAG Make/Model:	Teledyne API T701H	Serial Number:	355

Analyzer Information

Analyzer make:	Thermo 49i		Analyzer serial #:	1300156233	
Analyzer Range	0 - 500 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999629	0.999229	Backgd or Offset:	0.2	0.2
Calibration intercept:	0.640000	0.560000	Coeff or Slope:	1.213	1.227

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	800.0	0.0	-1.2	----
As found High point	5000	1036.7	400.0	397.1	1.004
As found Mid point					
As found Low point					
Baseline Corr As found:	398.3	Previous response	400.5	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	800.0	0.0	0.1	----
High point	5000	1037.8	400.0	400.1	1.000
Mid point	5000	865.1	200.0	200.4	0.998
Low point	5000	748.0	100.0	101.1	0.989
As left zero	5000	800.0	0.0	0.0	----
As left span	5000	1028.2	400.0	405.9	0.985
				Average Correction Factor	0.996

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

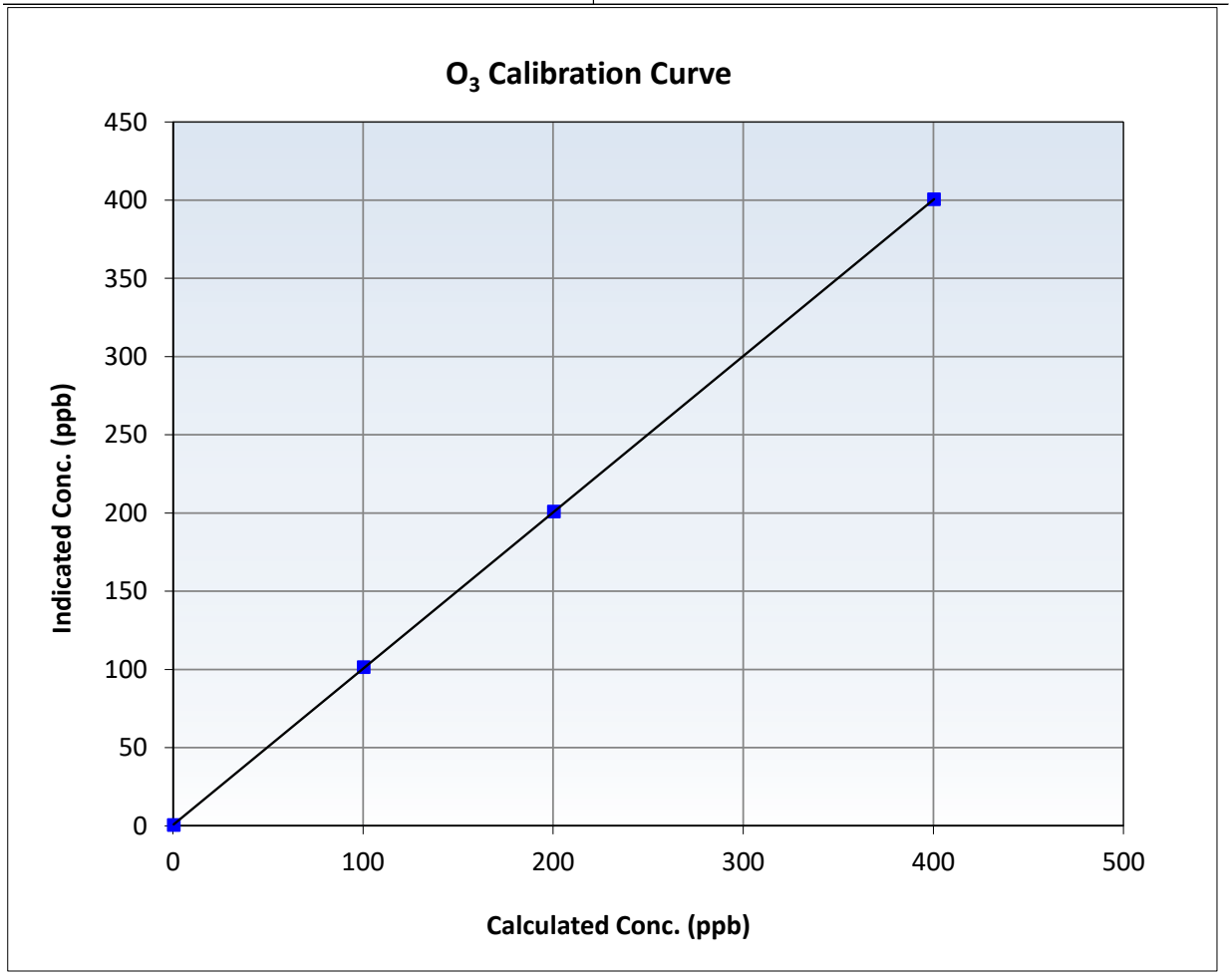
O_3 Calibration Summary

Station Information

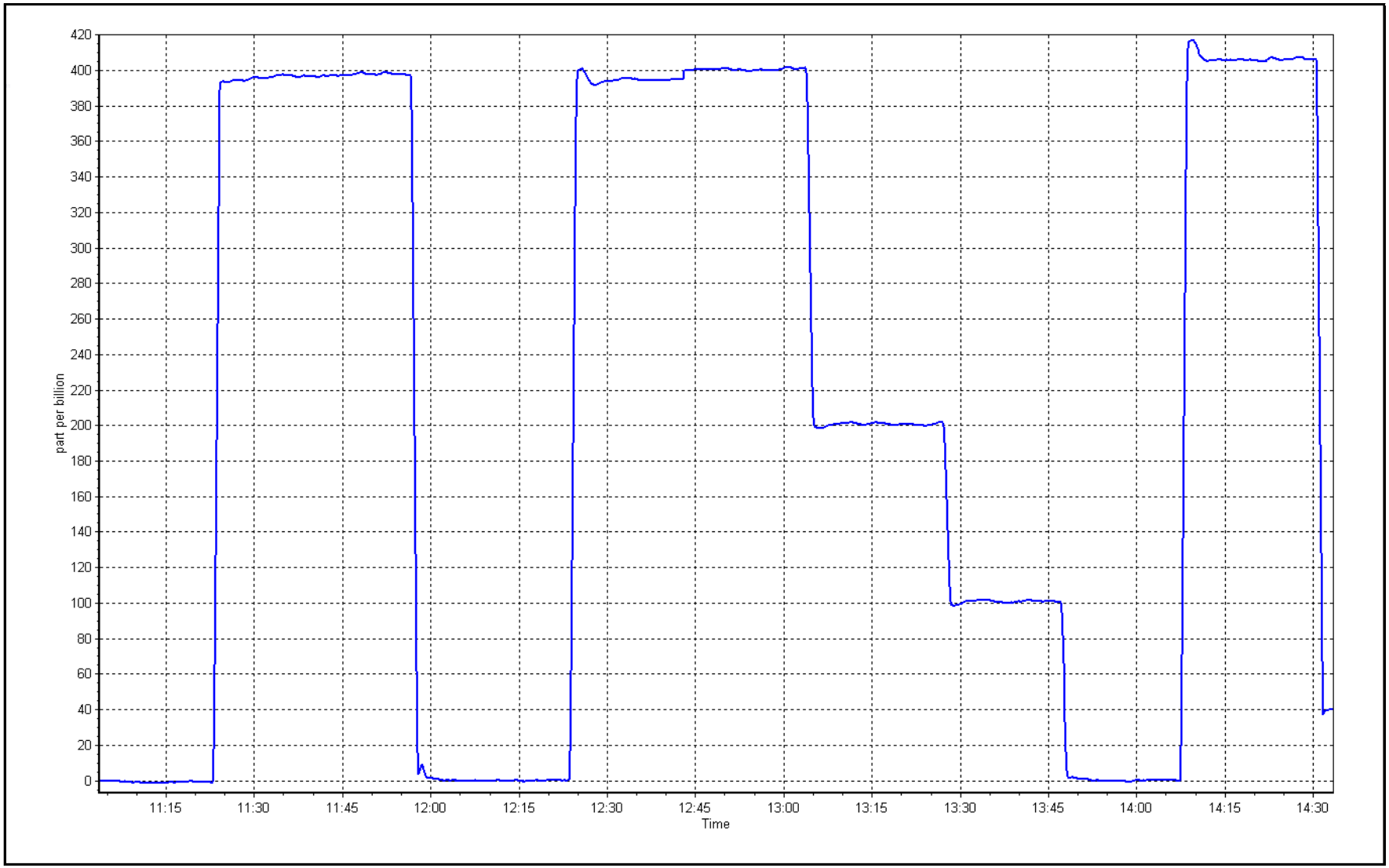
Calibration Date:	September 1, 2026	Previous Calibration:	August 6, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	14:35
Analyzer make:	Thermo 49i	Analyzer serial #:	1300156233

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999993	*≥0.995*
400.0	400.1	0.9998	Slope	0.999229	*0.90 - 1.10*
200.0	200.4	0.9980			
100.0	101.1	0.9891	Intercept	0.560000	*+/- 5*



O_3 Calibration Plot Date: September 1, 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:	September 23, 2026	Last Cal Date:	August 27, 2026
Start time (MST):	14:02	End time (MST):	14:22
Analyzer Make:	API T640	S/N:	1266
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)	15.00	14.40	15.00	☐	+/- 2 °C
P (mmHg)	708.80	707.60	708.80	☐	+/- 10 mmHg
Flow (LPM)	5.01	4.92	5.01	☐	+/- 0.25 LPM
PW% (pump)	48	-----	48	☐	>80%
Zero Verification	PM w/o HEPA:	4.10	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	N/A	N/A	N/A	☑	+/- 0.5

Date Optical Chamber Cleaned: June 25, 2026

Date Disposable Filter Changed: June 25, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: February 26, 2026

Date RH/T Sensor Cleaned: February 26, 2026

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

Calibration by: Aswin Sasi Kumar

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS22
JANVIER
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	September 3, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	9:13	End time (MST):	12:32
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:	49.82	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	3806
Zero Air Gen Model:	Teledyne API T701H		Serial Number:	363

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1152430006	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999863	0.997661	Backgd or Offset:	27.8	27.7
Calibration intercept:	1.255438	0.476535	Coeff or Slope:	1.025	1.012

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	80.3	800.1	802.6	0.997
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	802.5	Previous response	801.2	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4920	80.3	800.1	798.8	1.002
Mid point	4960	40.2	400.5	399.4	1.003
Low point	4980	20.1	200.3	201.1	0.996
As left zero	5000	0.0	0.0	0.3	----
As left span	4920	80.3	800.1	801.3	0.998
				Average Correction Factor:	1.000

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

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

SO_2 Calibration Summary

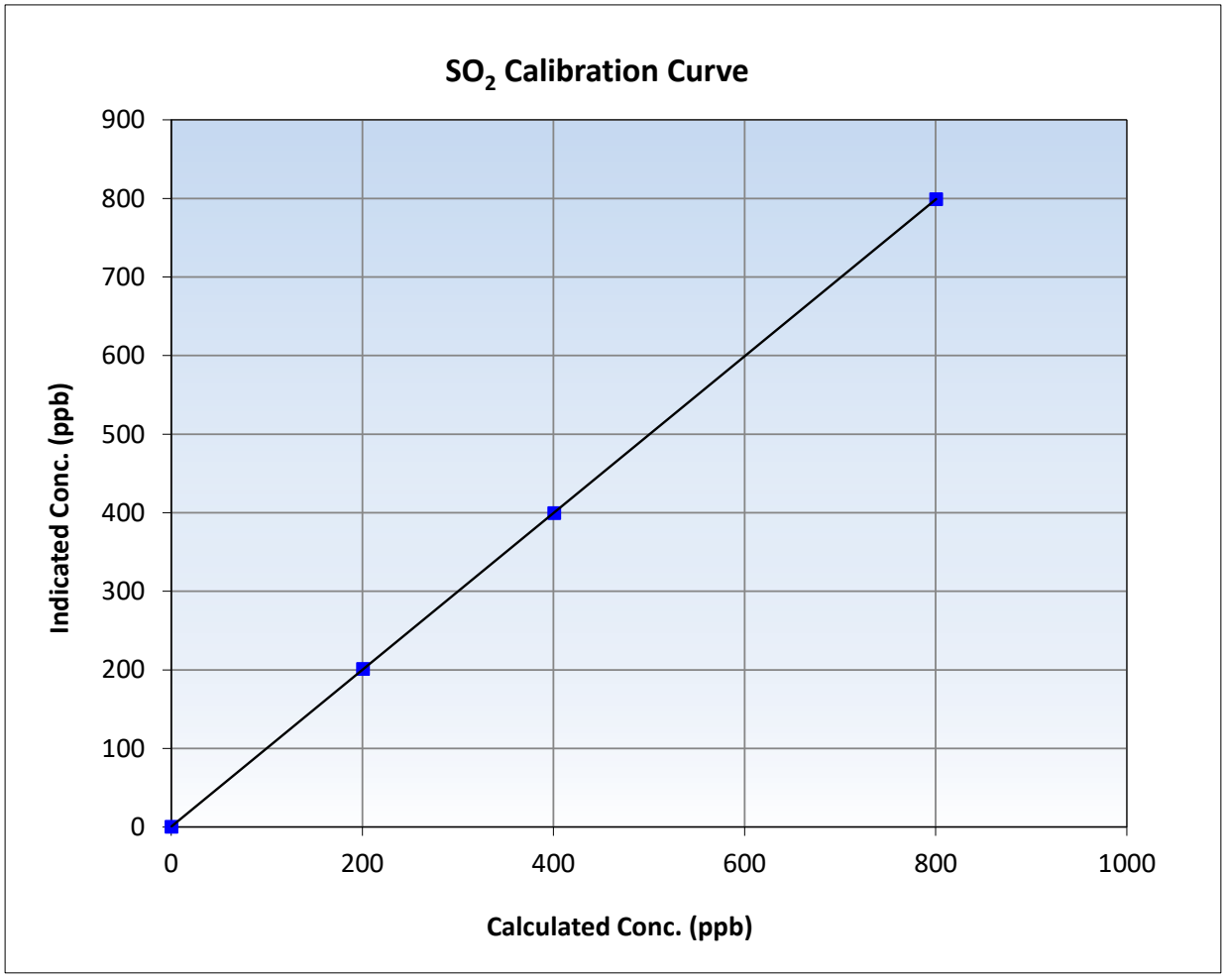
Station Information

Calibration Date:	September 3, 2026	Previous Calibration:	August 24, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:13	End Time (MST):	12:32
Analyzer make:	Thermo 43i	Analyzer serial #:	1152430006

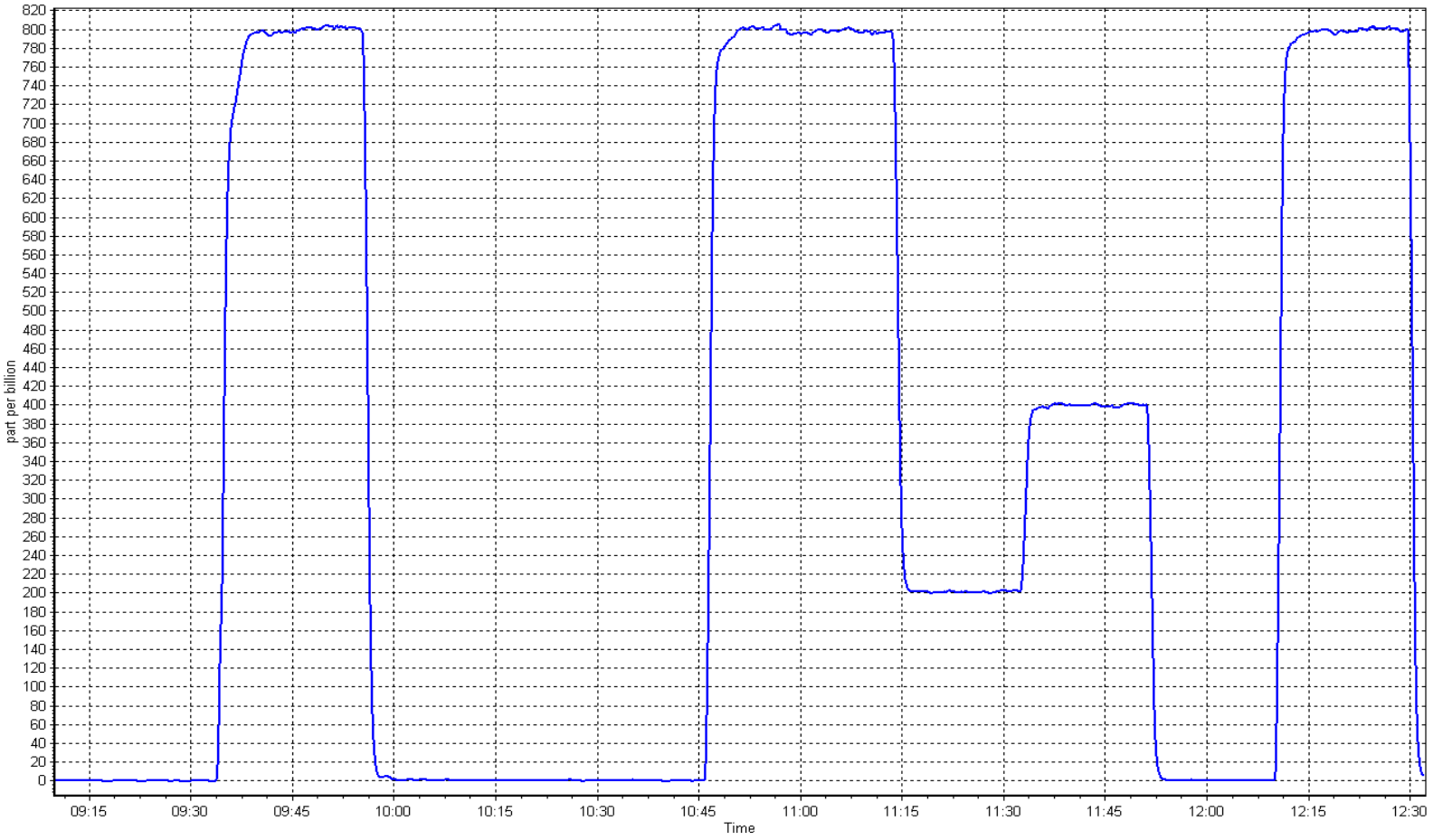
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.1	798.8	1.0016
400.5	399.4	1.0028
200.3	201.1	0.9959

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999996	*≥0.995*
Slope	0.997661	*0.90 - 1.10*
Intercept	0.476535	*+/-30*



SO2 Calibration Plot Date: September 3, 2026 Location: Janvier



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	September 1, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	9:47	End time (MST):	13:55
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.007089	0.997662	Backgd or Offset:	3.76	3.76
Calibration intercept:	-0.039138	0.040694	Coeff or Slope:	1.165	1.172

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.3	----
As found High point	4920	79.7	80.0	78.2	1.019
As found Mid point	4960	39.8	40.0	39.5	1.004
As found Low point	4980	19.9	20.0	19.6	1.004
New cylinder response					

Baseline Corr As found:	78.5	Prev response:	80.55	*% change:	-2.6%
Baseline Corr 2nd AF pt:	39.8	AF Slope:	0.980524	AF Intercept:	-0.059630
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999927	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.2	----
High point	4920	79.7	80.0	79.7	1.004
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	0.0	----
As left span	4920	79.7	80.0	79.4	1.008
SO2 Scrubber Check	4920	79.8	798.0	0.0	----
Date of last scrubber change:		6-May-26		Ave Corr Factor	0.997
Date of last converter efficiency test:					

Notes: Changed the inlet filter after as founds. Scrubber test performed, Adjusted span only.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

TRS Calibration Summary

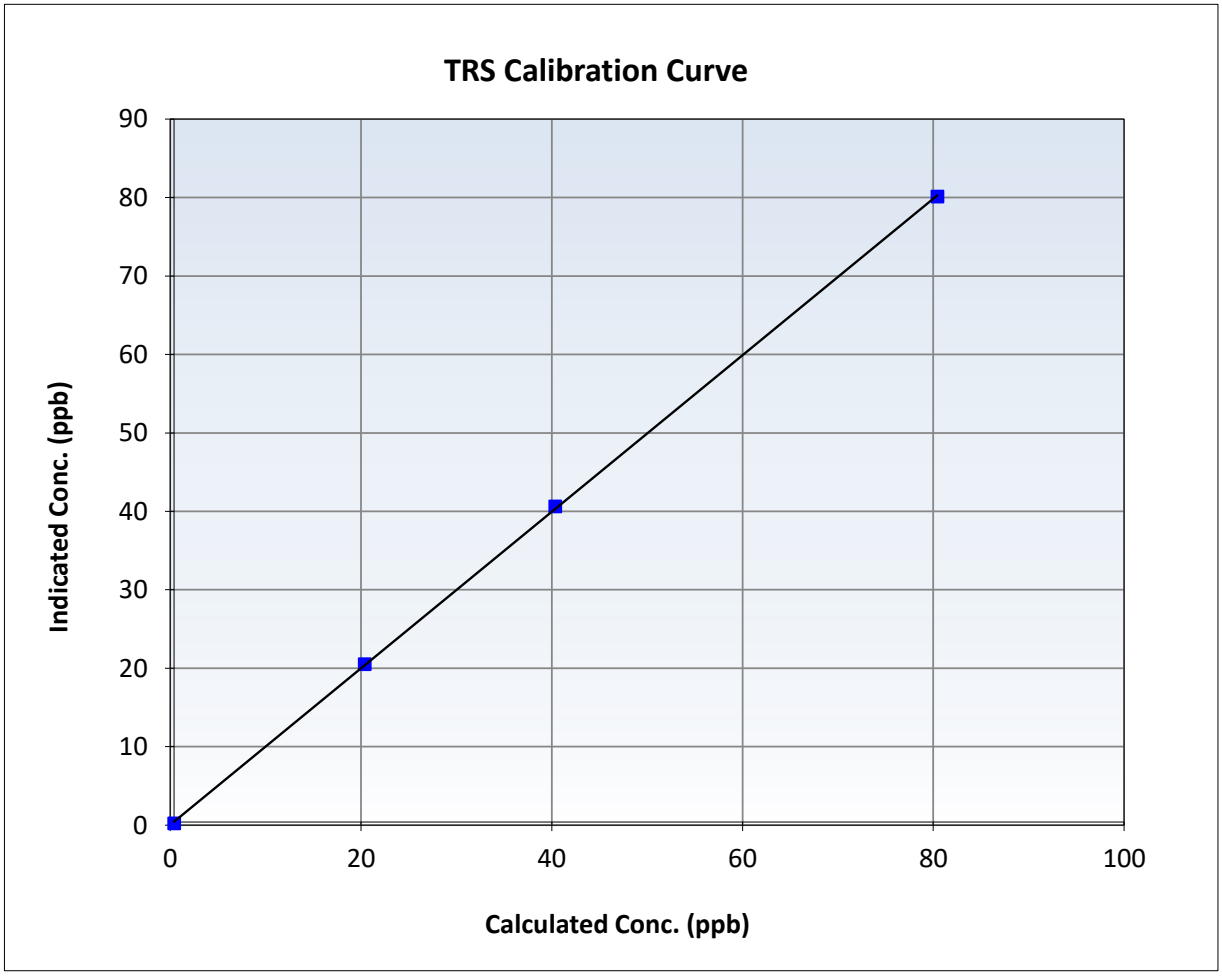
Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 25, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:47	End Time (MST):	13:55
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680031

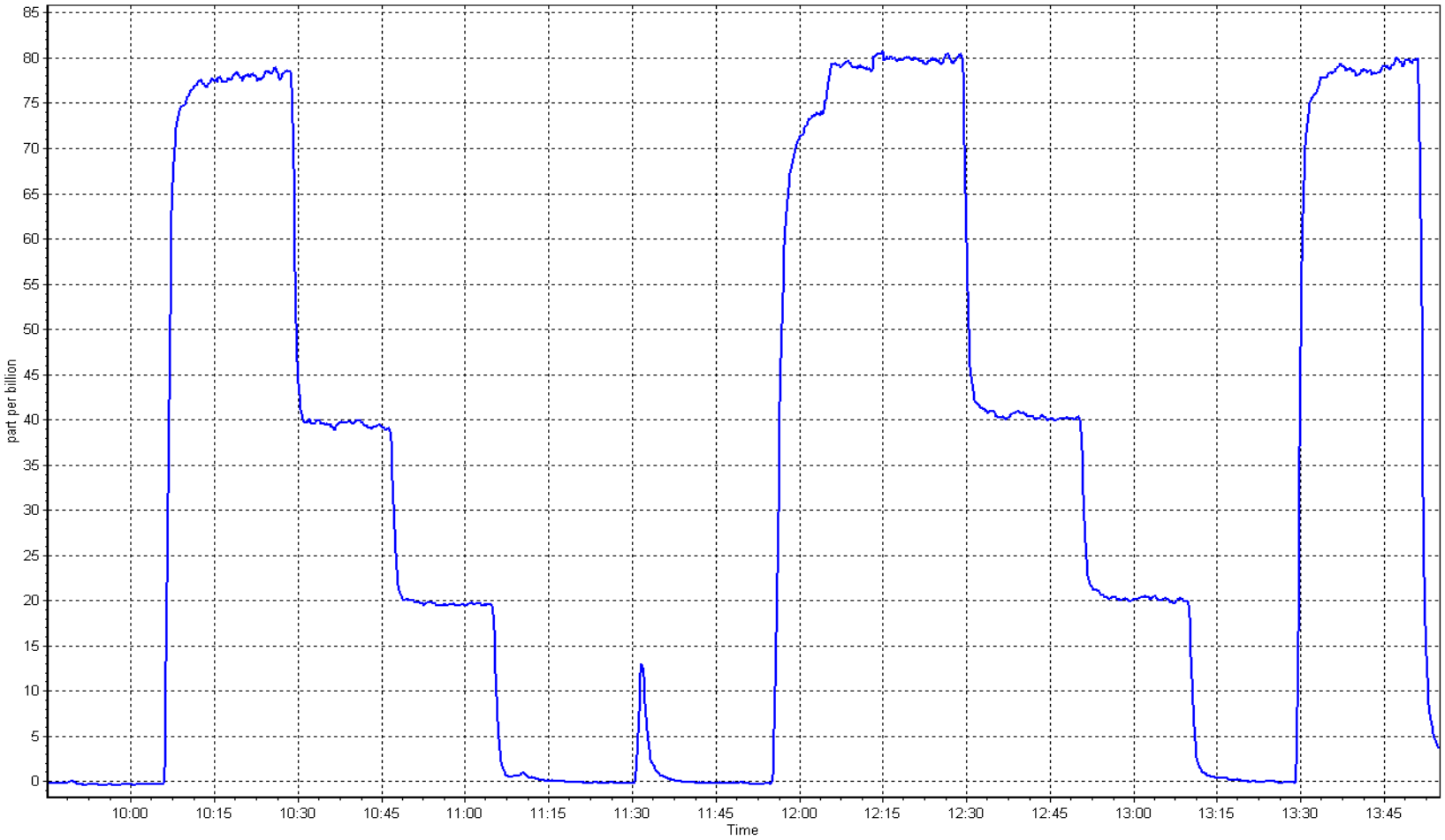
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
80.0	79.7	1.0041
40.0	40.2	0.9940
20.0	20.1	0.9940

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999945	*≥0.995*
Slope	0.997662	*0.90 - 1.10*
Intercept	0.040694	*+/-3*



TRS Calibration Plot Date: September 1, 2026 Location: Janvier



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	September 3, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	9:13	End time (MST):	12:32
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC494522		Cal Gas Expiry Date:	April 9, 2033	
CH4 Cal Gas Conc.	499.5	ppm	CH4 Equiv Conc.	1057.5	ppm
C3H8 Cal Gas Conc.	202.9	ppm			
Removed Gas Cert:	NA		Removed Gas Expiry:	NA	
Removed CH4 Conc.	499.5	ppm	CH4 Equiv Conc.	1057.5	ppm
Removed C3H8 Conc.	202.9	ppm	Diff between cyl (THC):		
Diff between cyl (CH_4):			Diff between cyl (NM):		
Calibrator Model:	Teledyne API T700		Serial Number:	3806	
Zero Air Gen model:	Teledyne API 701H		Serial Number:	363	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1317958219	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	2.64E-04	2.62E-04	NMHC SP Ratio:	5.73E-05	5.63E-05
CH4 Retention time:	11.8	11.8	NMHC Peak Area:	156302	159086
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.3	16.98	17.13	0.991
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.13	Prev response	16.91	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.3	16.98	16.94	1.002
Mid point	4960	40.2	8.50	8.41	1.011
Low point	4980	20.1	4.25	4.21	1.010
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	16.98	16.93	1.003
				Average Correction Factor	1.008

Notes: Changed sample inlet filter. H2 and N2 cylinder were swapped. Adjusted the span only.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.3	8.96	9.06	0.989
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.06	Prev response	8.93	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.3	8.96	8.94	1.003
Mid point	4960	40.2	4.49	4.46	1.006
Low point	4980	20.1	2.24	2.24	1.003
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	8.96	8.92	1.005
				Average Correction Factor	1.004

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4920	80.3	8.02	8.07	0.994
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.07	Prev response	7.99	*% change	1.0%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.3	8.02	8.01	1.002
Mid point	4960	40.2	4.02	3.95	1.016
Low point	4980	20.1	2.01	1.97	1.019
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	8.02	8.01	1.001
				Average Correction Factor	1.012

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.997123	0.997735
THC Cal Offset:	-0.020302	-0.027098
CH4 Cal Slope:	0.999418	0.998735
CH4 Cal Offset:	-0.029022	-0.024624
NMHC Cal Slope:	0.995629	0.996953
NMHC Cal Offset:	0.007520	-0.002674

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

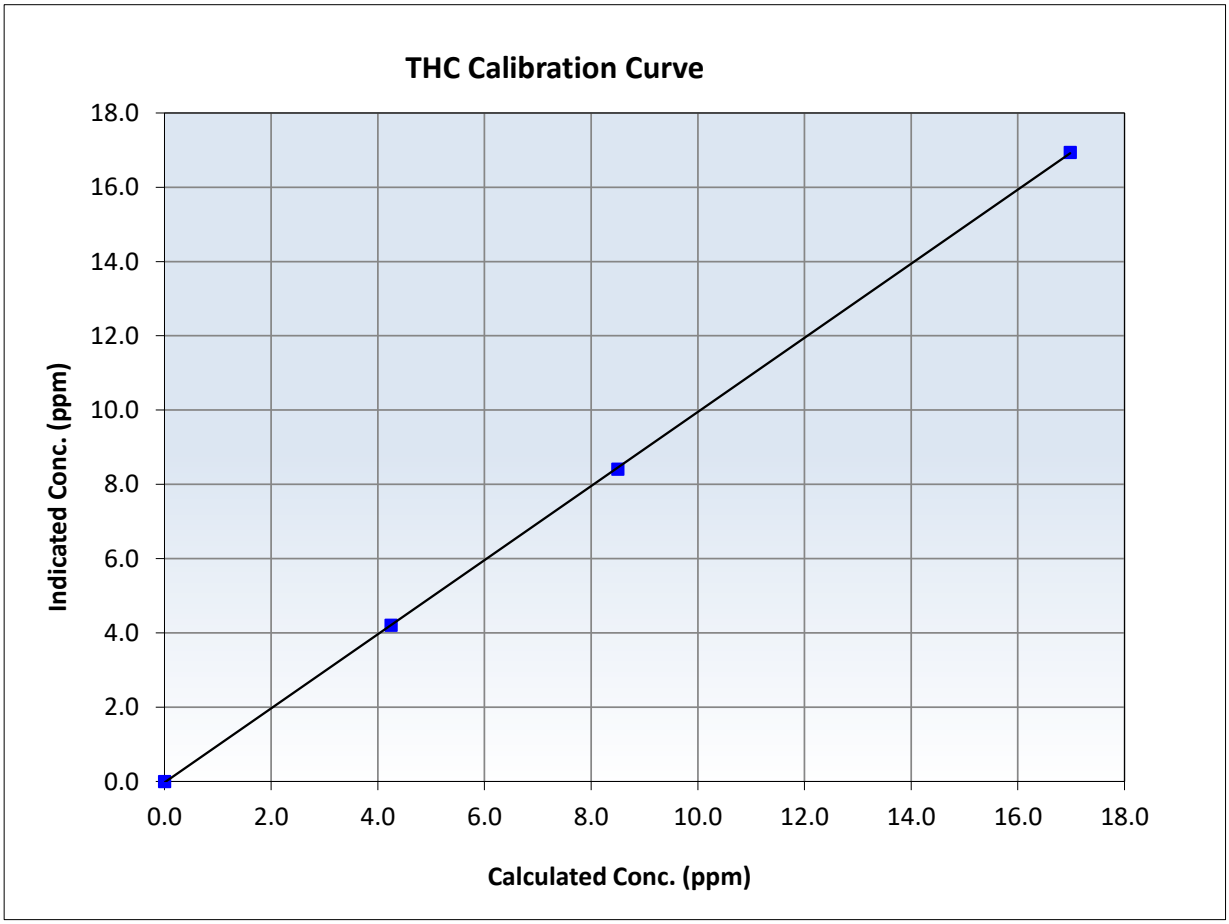
THC Calibration Summary

Station Information

Calibration Date:	September 3, 2026	Previous Calibration:	August 24, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:13	End Time (MST):	12:32
Analyzer make:	Thermo 55i	Analyzer serial #:	1317958219

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999979	≥0.995
16.98	16.94	1.0025	Slope	0.997735	0.90 - 1.10
8.50	8.41	1.0107	Intercept	-0.027098	+/-0.5
4.25	4.21	1.0105			



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CH_4 Calibration Summary

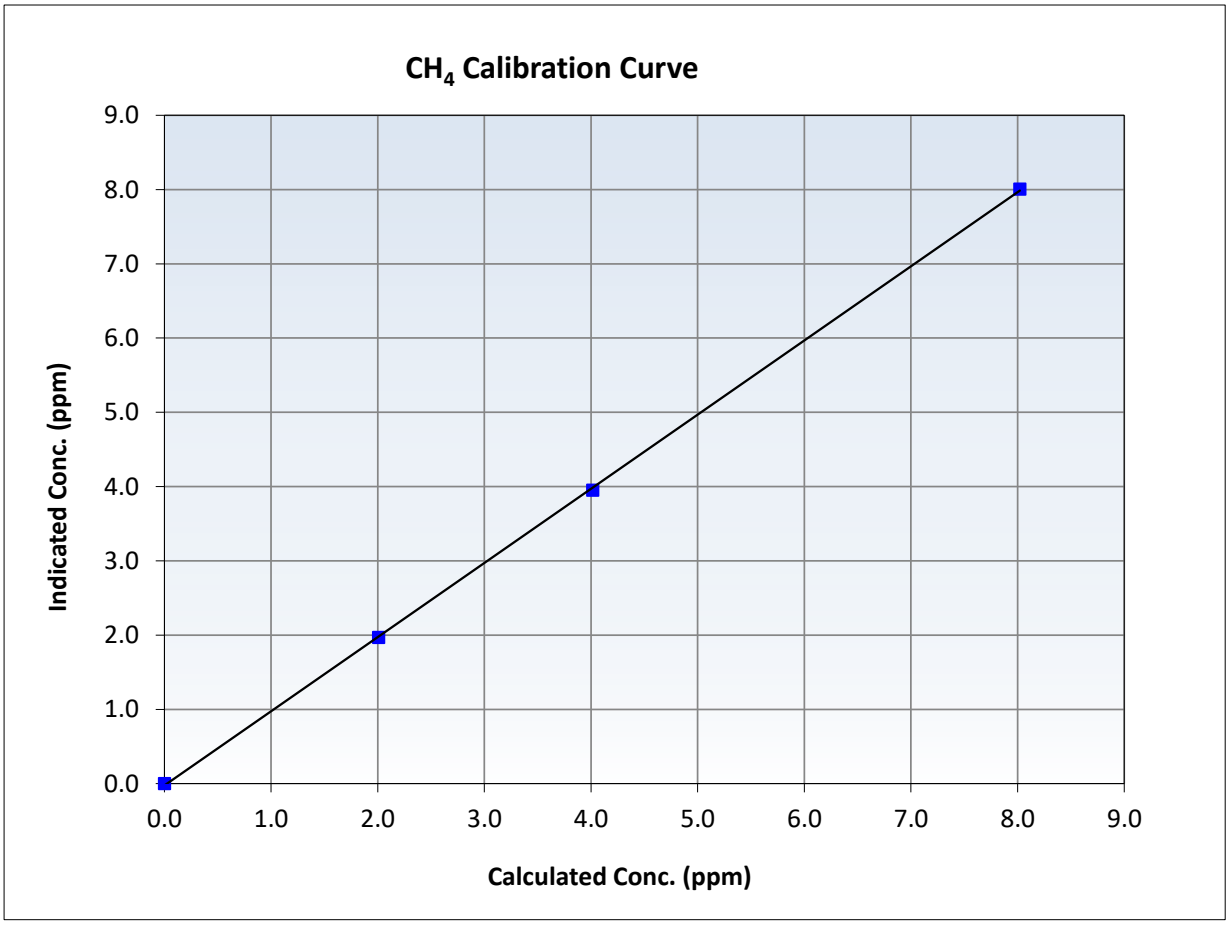
Station Information

Calibration Date:	September 3, 2026	Previous Calibration:	August 24, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:13	End Time (MST):	12:32
Analyzer make:	Thermo 55i	Analyzer serial #:	1317958219

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.02	8.01	1.0019
4.02	3.95	1.0159
2.01	1.97	1.0193

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999938	*≥0.995*
Slope	0.998735	*0.90 - 1.10*
Intercept	-0.024624	*+/-0.5*



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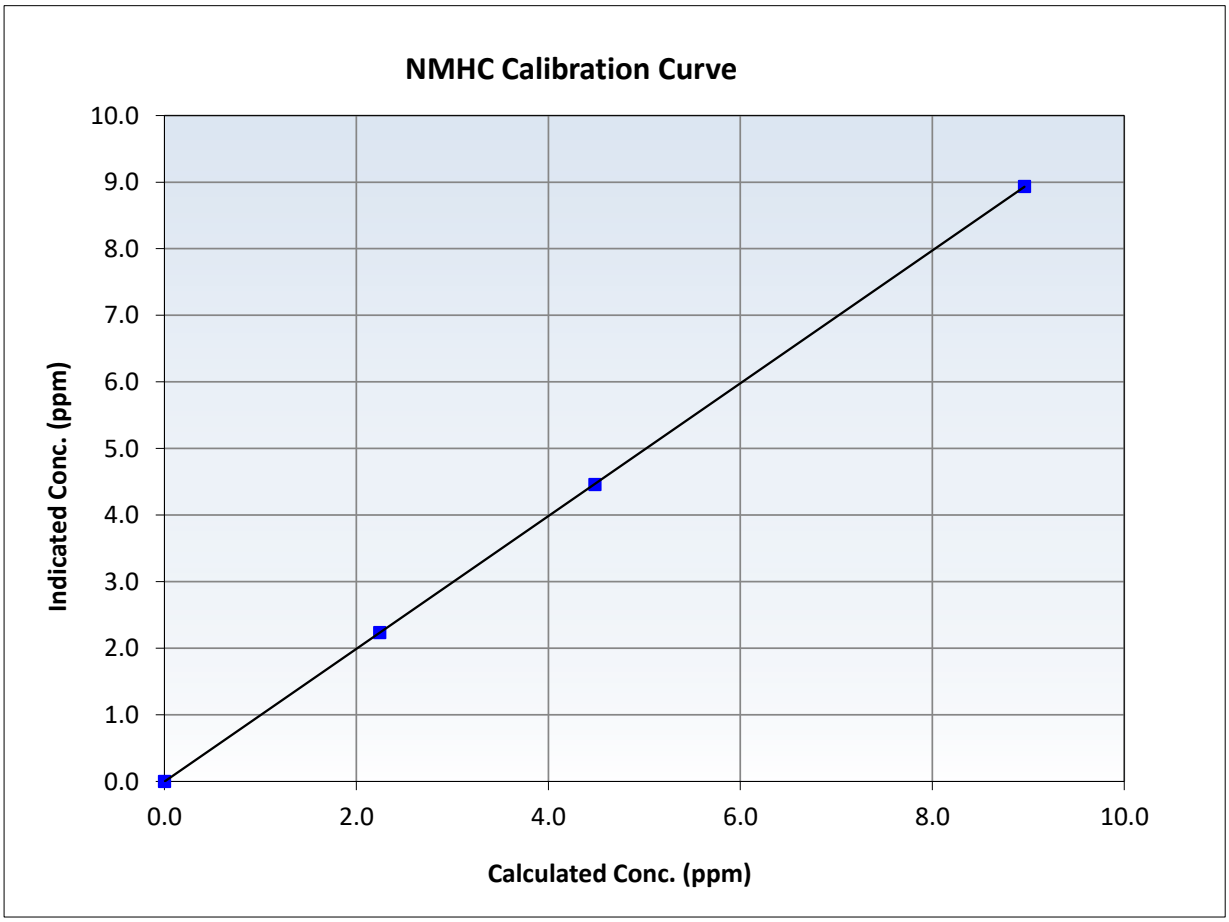
NMHC Calibration Summary

Station Information

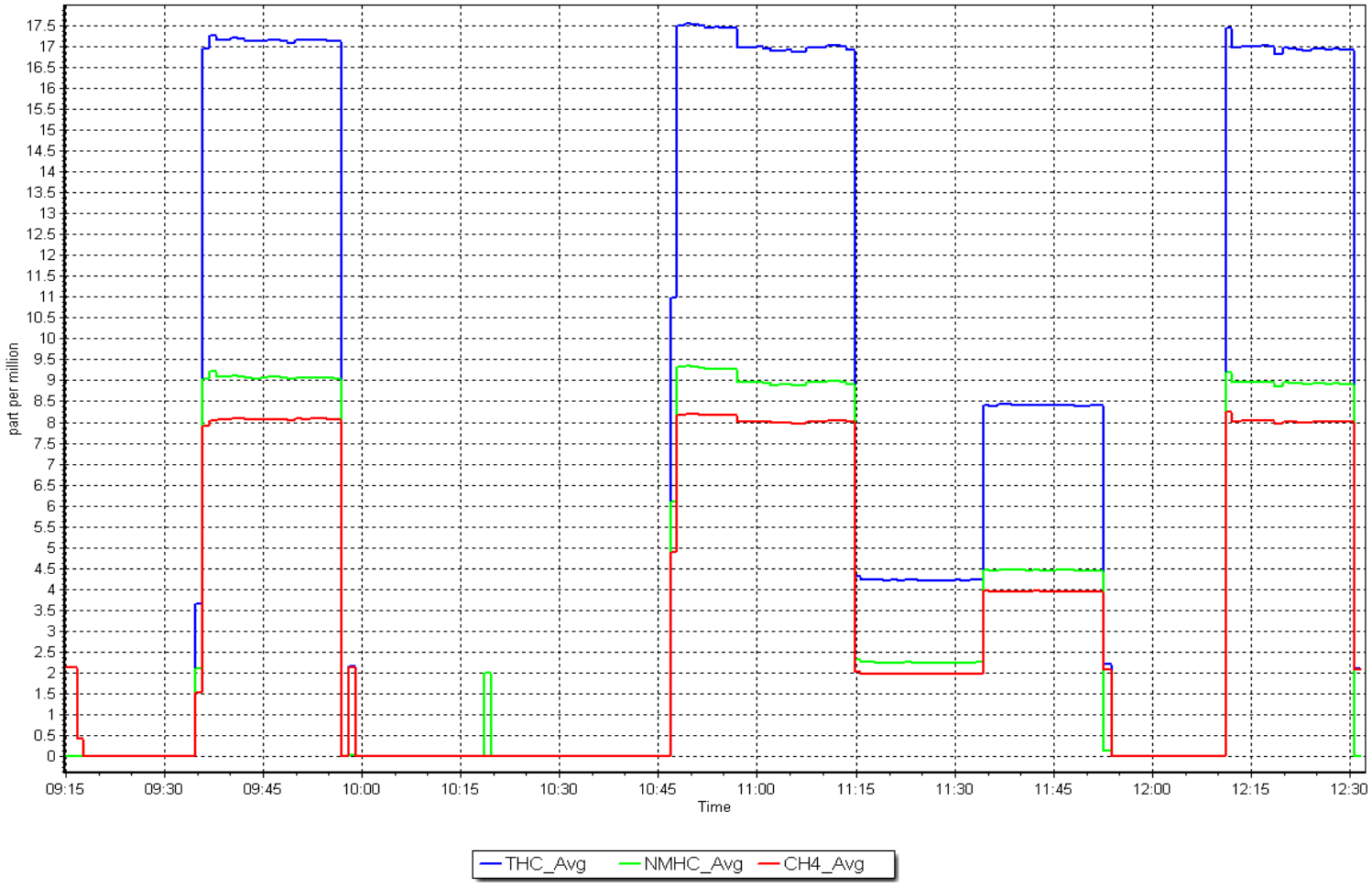
Calibration Date:	September 3, 2026	Previous Calibration:	August 24, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:13	End Time (MST):	12:32
Analyzer make:	Thermo 55i	Analyzer serial #:	1317958219

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999997	≥0.995
8.96	8.94	1.0029	Slope	0.996953	0.90 - 1.10
4.49	4.46	1.0060			
2.24	2.24	1.0027	Intercept	-0.002674	+/-0.5



NMHC Calibration Plot Date: September 3, 2026 Location: Janvier



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Janvier
Station number:	AMS 22
Calibration Date:	September 24, 2026
Last Cal Date:	August 27, 2026
Start time (MST):	8:50
End time (MST):	12:46
Reason:	As Found

Calibration Standards

NO Gas Cylinder #:	DT0047765	Cal Gas Expiry Date:	March 11, 2031
NOX Cal Gas Conc:	48.90 ppm	NO Cal Gas Conc:	48.80 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	48.90 ppm	Removed Gas NO Conc:	48.80 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	3806
ZAG make/model:	Teledyne API T701	Serial Number:	691

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.3	-0.1	----	----
AF High point	4918	82.0	802.0	800.3	1.6	803.7	799.1	4.7	0.9975	1.0012
AF Mid point	4960	41.0	400.9	400.1	0.8	393.1	389.4	3.7	1.0191	1.0266
AF Low point	4980	20.5	200.5	200.1	0.4	192.0	188.9	3.1	1.0425	1.0574
New cyl resp										

Previous Response	NO_X = 800.4 ppb	NO = 797.0 ppb
Baseline Corr 1st pt	NO_X = 804.0 ppb	NO = 799.4 ppb
Baseline Corr 2nd pt	NO_X = 393.4 ppb	NO = 389.7 ppb
Baseline Corr 3rd pt	NO_X = 192.3 ppb	NO = 189.2 ppb

* = > +/-5% change initiates investigation

*Percent Change NO_X = 0.4%

*Percent Change NO = 0.3%

As Found Statistics

As found	NO_X r^2: 0.999798	Nx Sl: 1.005042	Nx Int: -5.476
As found	NO r^2: 0.999709	NO Sl: 1.001989	NO Int: -6.536
As found	NO_2 r^2: 0.999940	NO2 Sl: 1.007939	NO_2 Int: 1.360

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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
As Found GPT zero	----	----	0.0	-0.1	----	----
As found high GPT point	797.4	393.2	405.8	409.8	0.9903	101.0%
As found mid GPT point	797.4	597.0	202.0	205.4	0.9836	101.7%
As found low GPT point	797.4	696.7	102.3	106.2	0.9637	103.8%

Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
Serial Number: 1229254994
NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.102		NO bkgnd or offset:	3.0	
NOX coeff or slope:	0.995		NOX bkgnd or offset:	3.1	
NO2 coeff or slope:	1.000		Reaction cell Press:	176.2	

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.003873	
NO_X Cal Offset:	-4.616241	
NO Cal Slope:	1.002989	
NO Cal Offset:	-5.736402	
NO_2 Cal Slope:	1.002398	
NO_2 Cal Offset:	0.342699	

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero										
High point										
Mid point										
Low point										
As left zero										
As left span										
								Average Correction Factor		

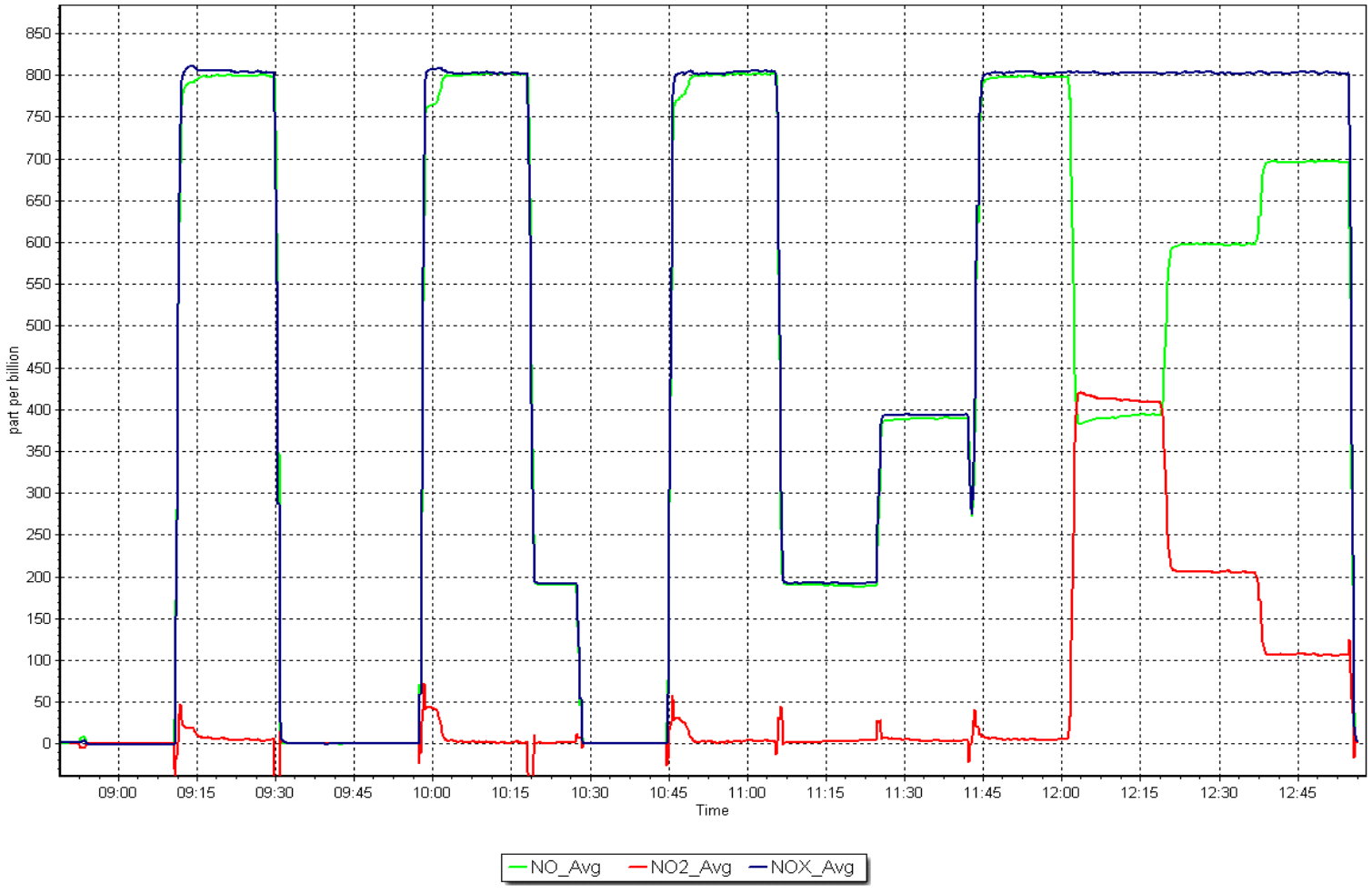
GPT Calibration Data

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero						
High GPT point						
Mid GPT point						
Low GPT point						
				Average Correction Factor		

Notes: Removal calibration

Calibration Performed By: Sean Bala

NO_X Calibration Plot Date: September 24, 2026 Location: Janvier



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Janvier
Station number:	AMS 22
Calibration Date:	September 25, 2026
Last Cal Date:	NA
Start time (MST):	9:07
End time (MST):	13:33
Reason:	Install

Calibration Standards

NO Gas Cylinder #:	DT0047765	Cal Gas Expiry Date:	March 11, 2031
NOX Cal Gas Conc:	48.90 ppm	NO Cal Gas Conc:	48.80 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	48.90 ppm	Removed Gas NO Conc:	48.80 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	3806
ZAG make/model:	Teledyne API T701	Serial Number:	363

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero										
AF High point										
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	NA	ppb	NO =	NA	ppb		*Percent Change	NO_X = NA
Baseline Corr 1st pt	NO_X =	NA	ppb	NO =	NA	ppb		*Percent Change	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

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1426262593

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	Finish		Start	Finish
NO coeff or slope:		1.046	NO bkgnd or offset:		4.8
NOX coeff or slope:		0.989	NOX bkgnd or offset:		5.3
NO2 coeff or slope:		1.000	Reaction cell Press:		161.3

Calibration Statistics

	Start	Finish
NO_X Cal Slope:		0.998485
NO_X Cal Offset:		1.024051
NO Cal Slope:		0.999703
NO Cal Offset:		-0.136027
NO_2 Cal Slope:		1.001417
NO_2 Cal Offset:		-0.071369

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	----	----
High point	4918	82.0	802.0	800.3	1.6	801.4	800.1	1.2	1.0007	1.0003
Mid point	4960	41.0	400.9	400.1	0.8	401.4	399.5	1.8	0.9988	1.0015
Low point	4980	20.5	200.5	200.1	0.4	202.5	199.9	2.6	0.9900	1.0008
As left zero	5000	0.0	0.0	0.0	0.0	-0.3	0.0	-0.2	----	----
As left span	4918	82.0	802.0	405.5	396.5	796.1	405.5	390.6	1.0074	1.0000
							Average Correction Factor		0.9965	1.0008

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	793.6	404.3	390.9	391.3	0.9991	100.1%
Mid GPT point	793.6	603.4	191.8	192.5	0.9966	100.3%
Low GPT point	793.6	696.8	98.4	98.1	1.0035	99.7%
				Average Correction Factor	0.9997	100.0%

Notes: Install calibration. Adjusted zero and span. The 2nd NO reference point was used due to drift.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

NO_X Calibration Summary

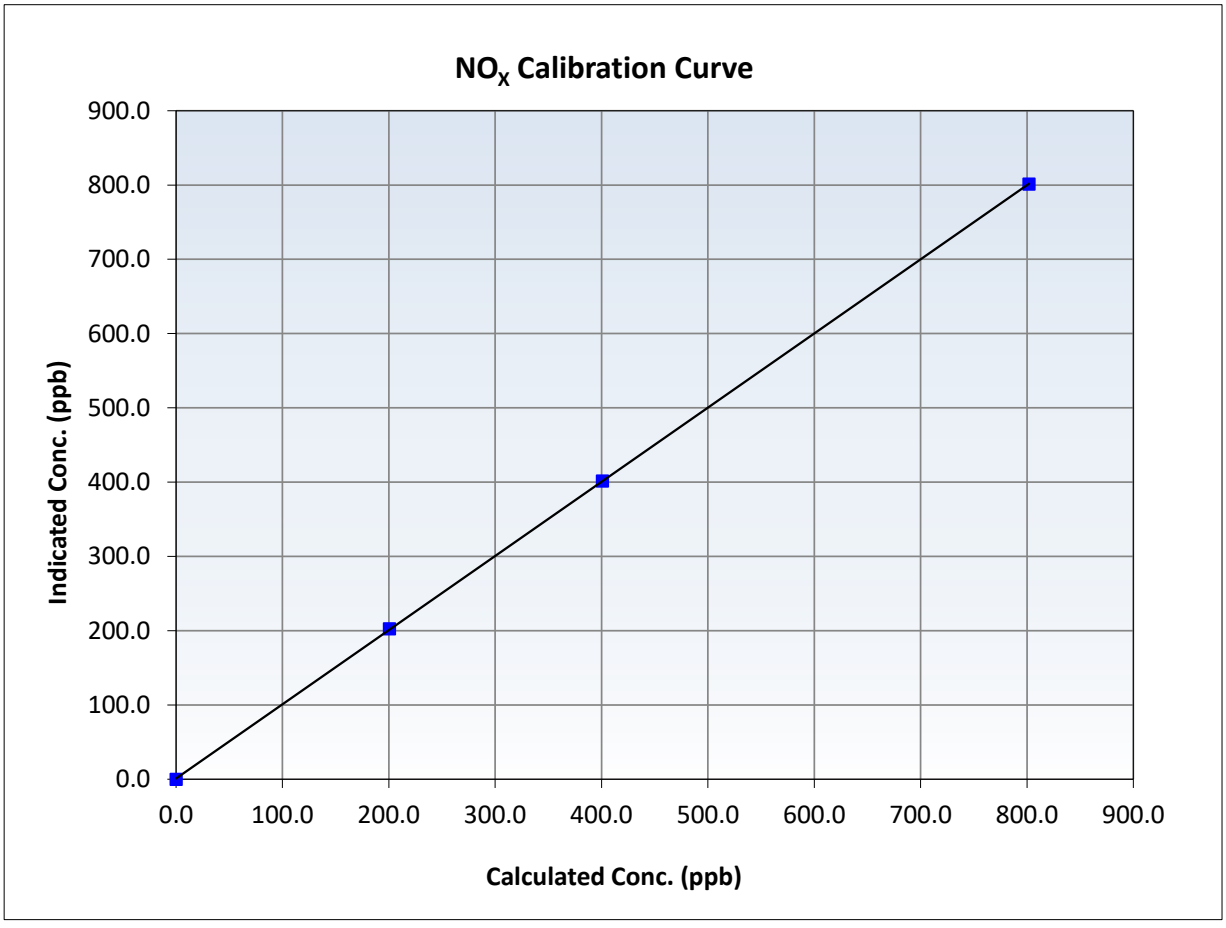
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	NA
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:07	End Time (MST):	13:33
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
802.0	801.4	1.0007
400.9	401.4	0.9988
200.5	202.5	0.9900

Statistical Evaluation		Limits
Correlation Coefficient	0.999992	≥0.995
Slope	0.998485	0.90 - 1.10
Intercept	1.024051	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

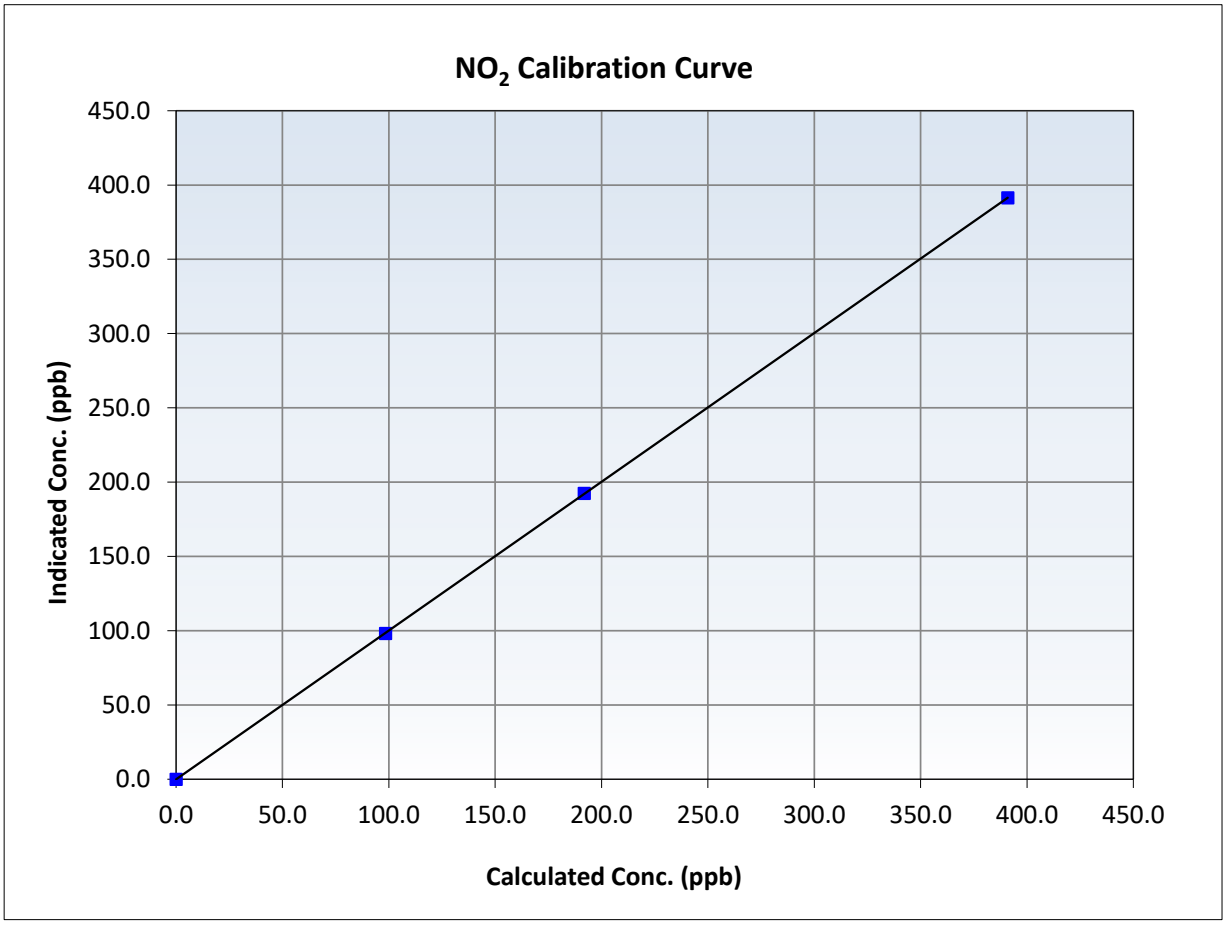
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	NA
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:07	End Time (MST):	13:33
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
390.9	391.3	0.9991
191.8	192.5	0.9966
98.4	98.1	1.0035

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999995	*≥0.995*
Slope	1.001417	*0.90 - 1.10*
Intercept	-0.071369	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

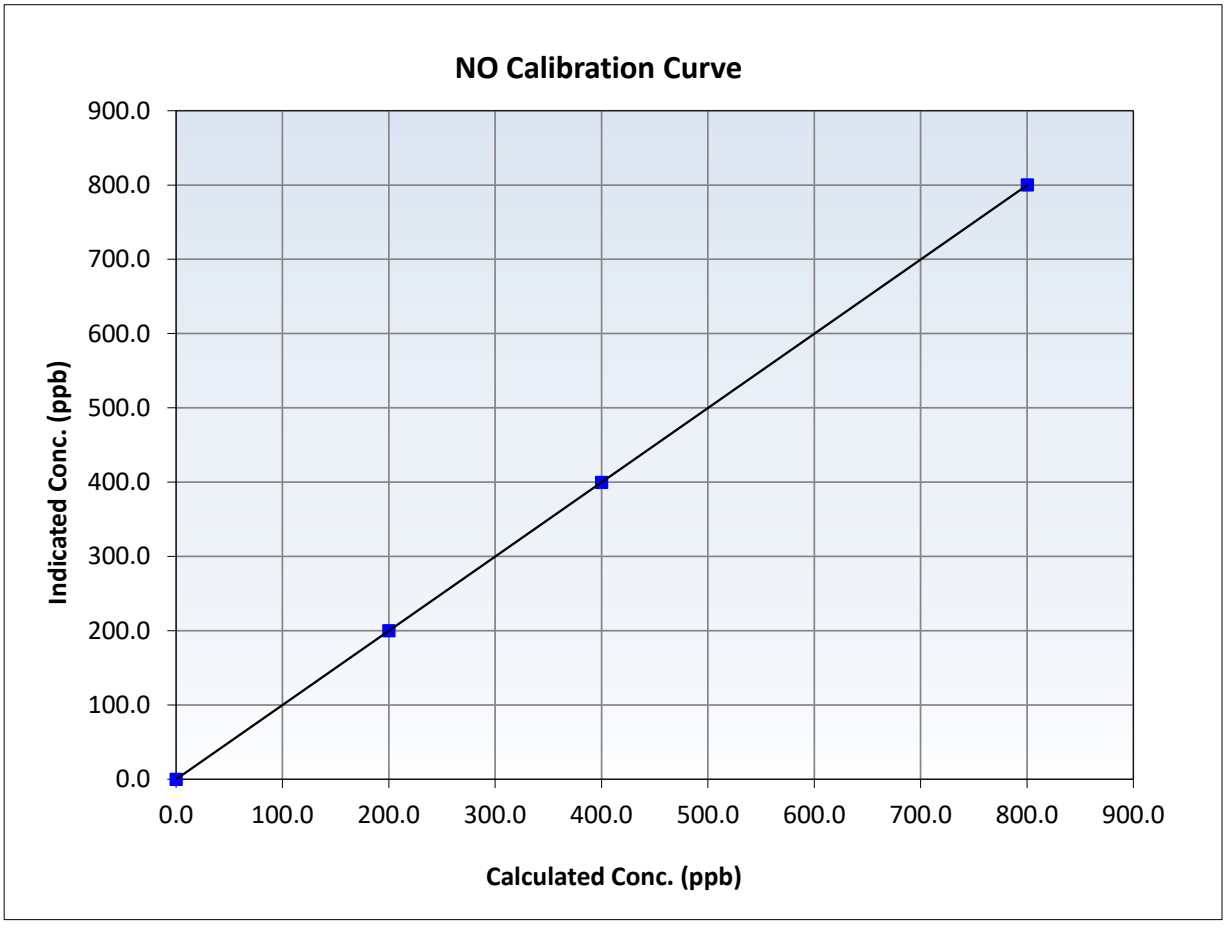
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	NA
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	9:07	End Time (MST):	13:33
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

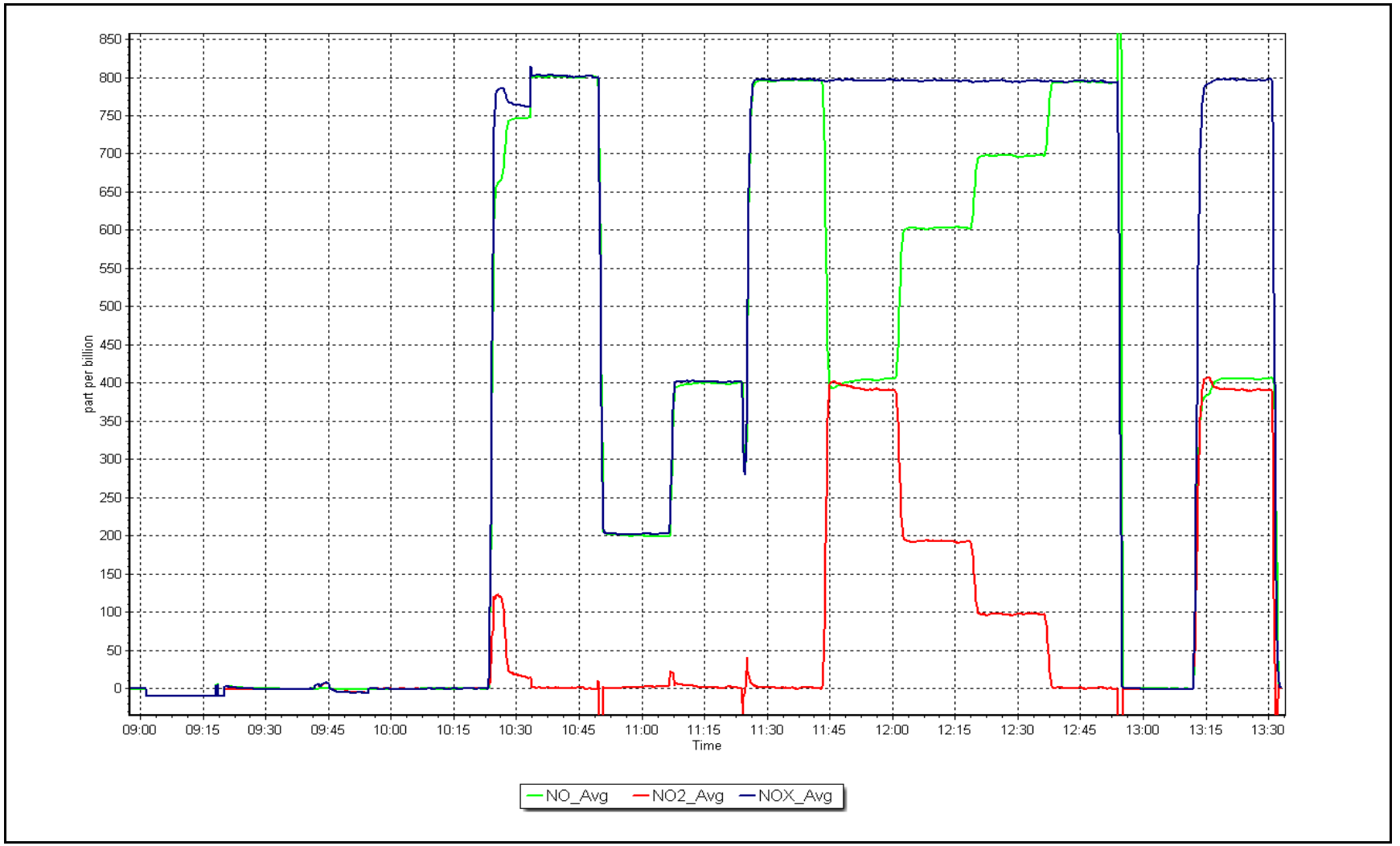
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.3	800.1	1.0003
400.1	399.5	1.0015
200.1	199.9	1.0008

Statistical Evaluation		Limits
Correlation Coefficient	1.000000	≥0.995
Slope	0.999703	0.90 - 1.10
Intercept	-0.136027	+/-20



NO_X Calibration Plot Date: September 25, 2026 Location: Janvier



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	September 21, 2026	Last Cal Date:	August 21, 2026
Start time (MST):	10:05	End time (MST):	12:43
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	Teledyne API T700	Serial Number:	3806
ZAG Make/Model:	Teledyne API T701H	Serial Number:	363

Analyzer Information

Analyzer make:	Thermo 49i	Analyzer serial #:	1227254861
Analyzer Range	0 - 500 ppb		

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001771	0.997000	Backgd or Offset:	-0.2	-0.2
Calibration intercept:	0.040000	0.000000	Coeff or Slope:	1.347	1.347

O_3 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) *Limit = 0.90-1.10*
As found zero	5000	800.0	0.0	-0.4	----
As found High point	5000	928.3	400.0	398.0	1.004
As found Mid point					
As found Low point					
Baseline Corr As found:	398.4	Previous response	400.7	*% 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	

O_3 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) *Limit = 0.95-1.05*
Calibrator zero	5000	800.0	0.0	0.1	----
High point	5000	929.2	400.0	398.9	1.003
Mid point	5000	767.3	200.0	199.2	1.004
Low point	5000	688.9	100.0	99.7	1.003
As left zero	5000	800.0	0.0	0.2	----
As left span	5000	926.9	400.0	402.0	0.995
				Average Correction Factor	1.003

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

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

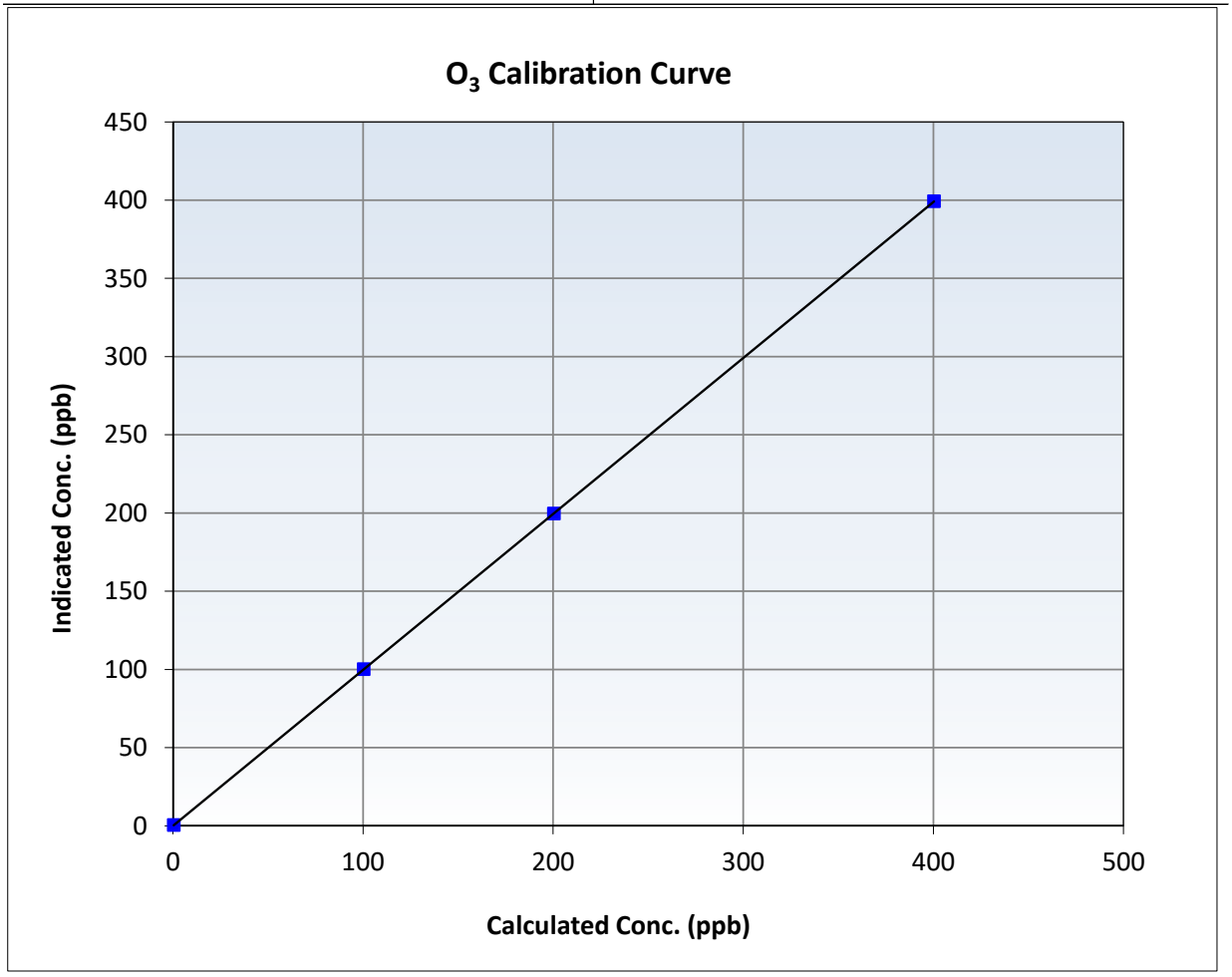
O_3 Calibration Summary

Station Information

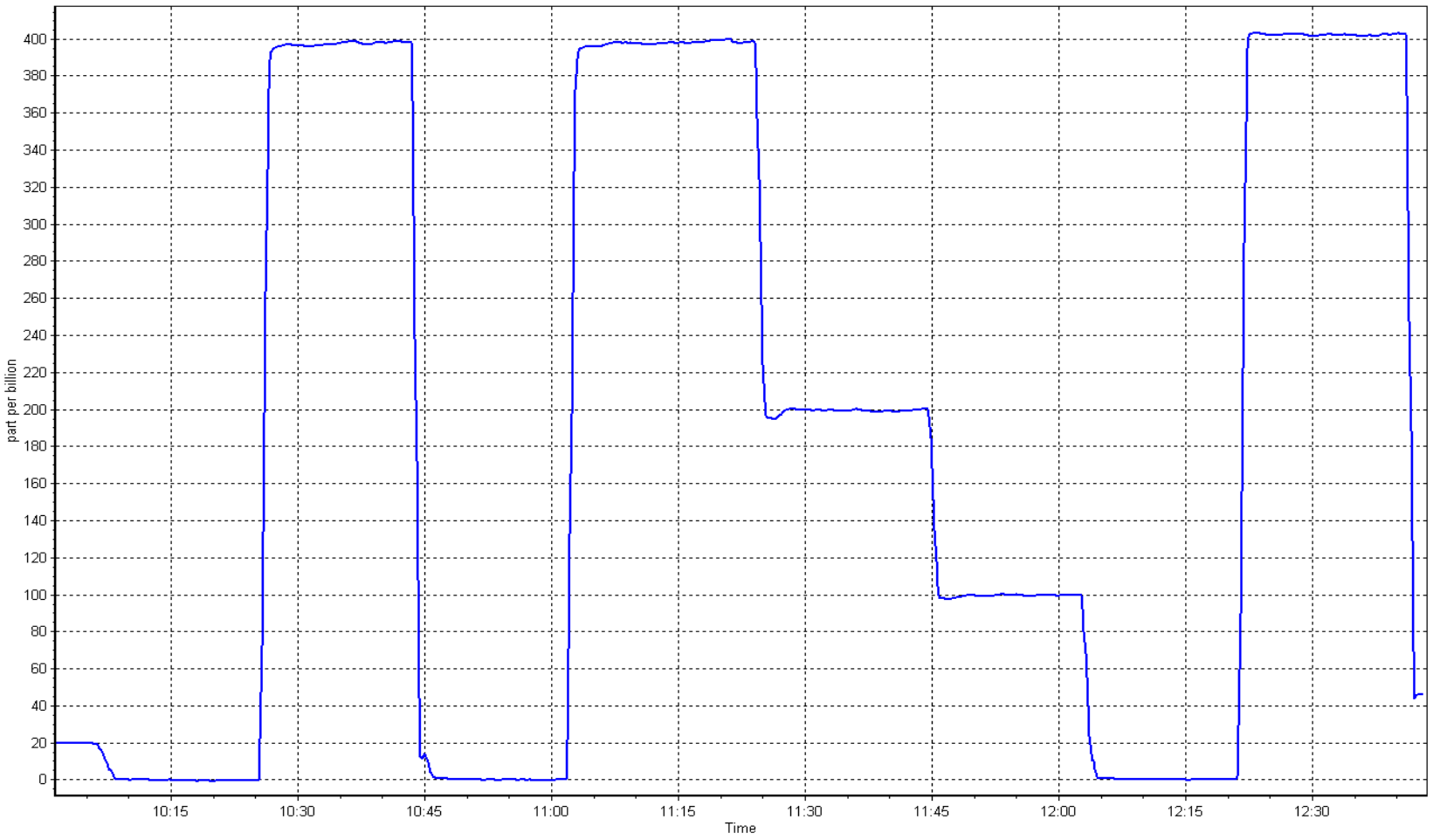
Calibration Date:	September 21, 2026	Previous Calibration:	August 21, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:05	End Time (MST):	12:43
Analyzer make:	Thermo 49i	Analyzer serial #:	1227254861

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999999	*≥0.995*
400.0	398.9	1.0028	Slope	0.997000	*0.90 - 1.10*
200.0	199.2	1.0040			
100.0	99.7	1.0030	Intercept	0.000000	*+/- 5*



O_3 Calibration Plot Date: September 21, 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:	September 24, 2026	Last Cal Date:	August 24, 2026
Start time (MST):	11:46	End time (MST):	12:12
Analyzer Make:	Teledyne API T640	S/N:	766
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 (^{o}C)	17.00	16.41	17.00	☐	+/- 2 ^{o}C
P (mmHg)	722.70	720.36	722.70	☐	+/- 10 mmHg
Flow (LPM)	4.98	5.09	4.98	☐	+/- 0.25 LPM
PW% (pump)	30	-----	30	☐	>80%
Zero Verification	PM w/o HEPA:	3.80	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				☐	10.9 +/- 0.5

Date Optical Chamber Cleaned: _____

Date Disposable Filter Changed: _____

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

Annual Maintenance

Date Sample Tube Cleaned: February 24, 2026

Date RH/T Sensor Cleaned: February 24, 2026

Notes:

Verified the flow, temperature, pressure and pump PWM. Leak check passed.

Calibration by: Sean Bala

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS23
FORT HILLS
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	September 23, 2026	Last Cal Date:	August 10, 2026
Start time (MST):	9:20	End time (MST):	12:40
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.35	ppm	Cal Gas Exp Date:	October 9, 2032
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:	5762
Zero Air Gen Model:	API T701		Serial Number:	1117

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1160290012	
Analyzer Range:	0-1000ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002377	1.001505	Backgd or Offset:	18.7	19.3
Calibration intercept:	-0.578756	-0.098937	Coeff or Slope:	1.044	1.065

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4921	79.4	799.5	794.6	1.006
As found Mid point	4960	39.7	399.8	396.7	1.008
As found Low point	4980	19.8	199.4	198.7	1.004
New cylinder response					
Baseline Corr As found:	794.5	Previous response	800.8	*% change	-0.8%
Baseline Corr 2nd AF pt:	396.6	AF Slope:	0.993458	AF Intercept:	0.139700
Baseline Corr 3rd AF pt:	198.6	AF Correlation:	0.999998	* = > +/-5% change initiates investigation	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4921	79.4	799.5	801.2	0.998
Mid point	4960	39.7	399.8	399.0	1.002
Low point	4980	19.8	199.4	199.8	0.998
As left zero	5000	0.0	0.0	0.4	----
As left span	4921	79.4	799.5	802.3	0.997
				Average Correction Factor:	0.999

Notes: Multi-point as found done prior to changing sample pump. Inlet filter changed after as founds. Span adjustment performed.

Calibration Performed By: Kelly Baragar

Wood Buffalo Environmental Association

SO_2 Calibration Summary

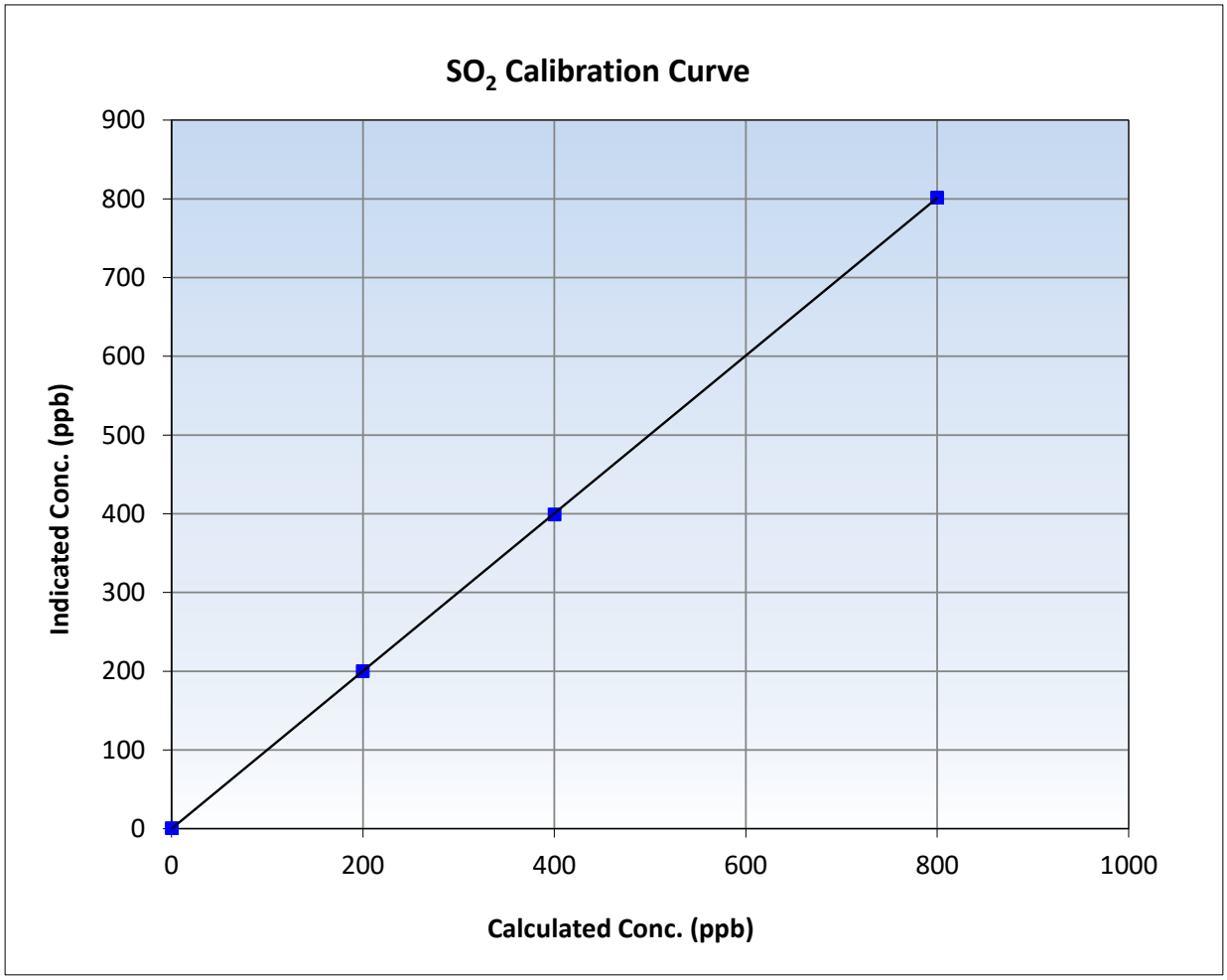
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	9:20	End Time (MST):	12:40
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290012

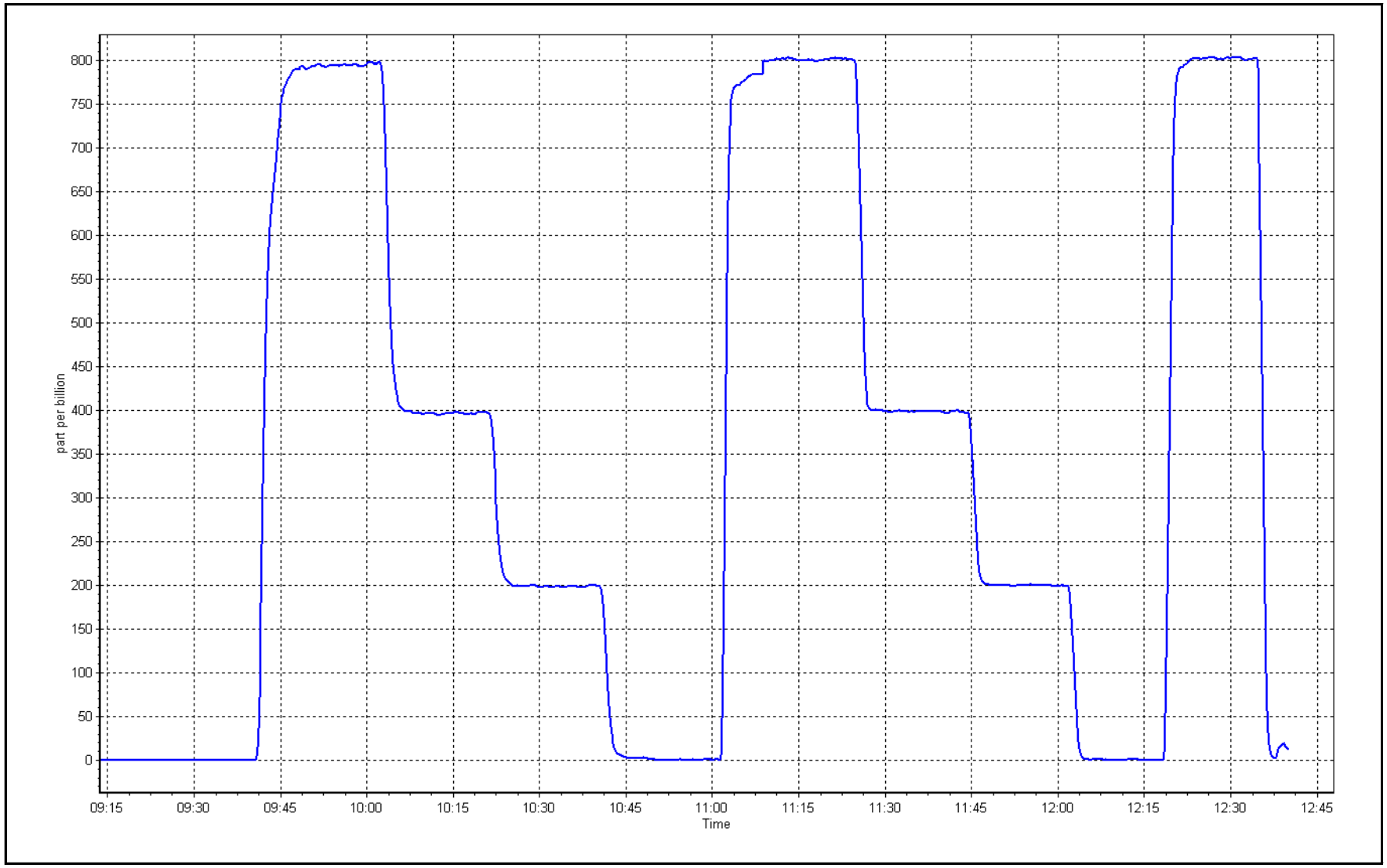
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
799.5	801.2	0.9979
399.8	399.0	1.0020
199.4	199.8	0.9980

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999993	*≥0.995*
Slope	1.001505	*0.90 - 1.10*
Intercept	-0.098937	*+/-30*



SO2 Calibration Plot Date: September 23, 2026 Location: Fort Hills



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	September 28, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	9:30	End time (MST):	13:35
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.017687	1.008678	Backgd or Offset:	1.95	1.92
Calibration intercept:	-0.138443	-0.098185	Coeff or Slope:	0.968	0.957

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.6	80.0	79.7	1.003
As found Mid point	4959	41.3	40.0	39.8	1.004
As found Low point	4979	20.7	20.0	19.8	1.012
New cylinder response					

Baseline Corr As found:	79.7	Prev response:	81.24	*% change:	-1.9%
Baseline Corr 2nd AF pt:	39.8	AF Slope:	0.997385	AF Intercept:	-0.077982
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999995	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4917	82.6	80.0	80.6	0.992
Mid point	4959	41.3	40.0	40.2	0.994
Low point	4979	20.7	20.0	20.0	1.002
As left zero	5000	0.0	0.0	0.1	----
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:			Ave Corr Factor	0.996
Date of last converter efficiency test:	March 13, 2024		110.3%	efficiency

Notes: Inlet filter changed after as founds. Scrubber check completed after calibrator zero. Span adjusted.

Calibration Performed By: Devin Russell

Wood Buffalo Environmental Association

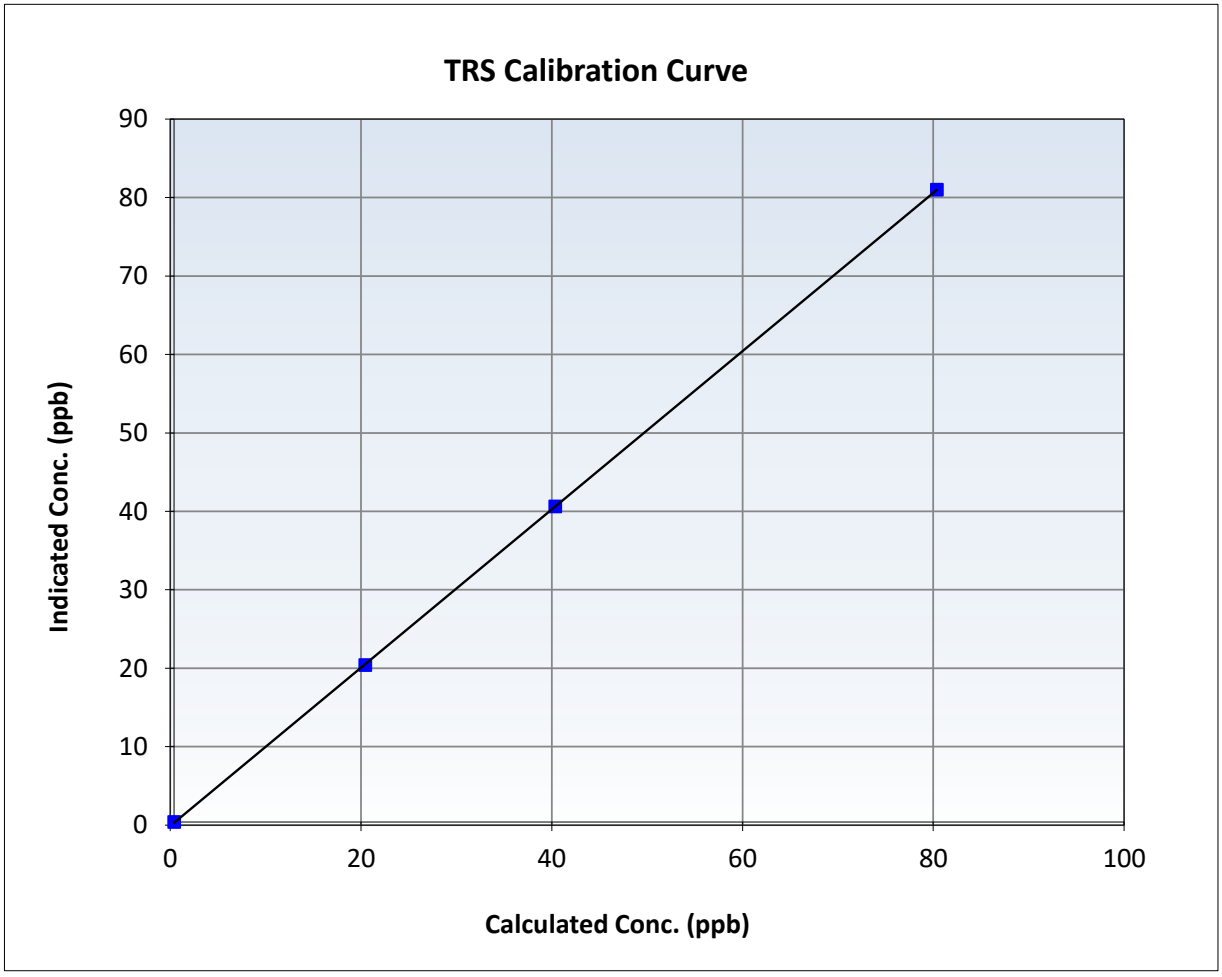
TRS Calibration Summary

Station Information

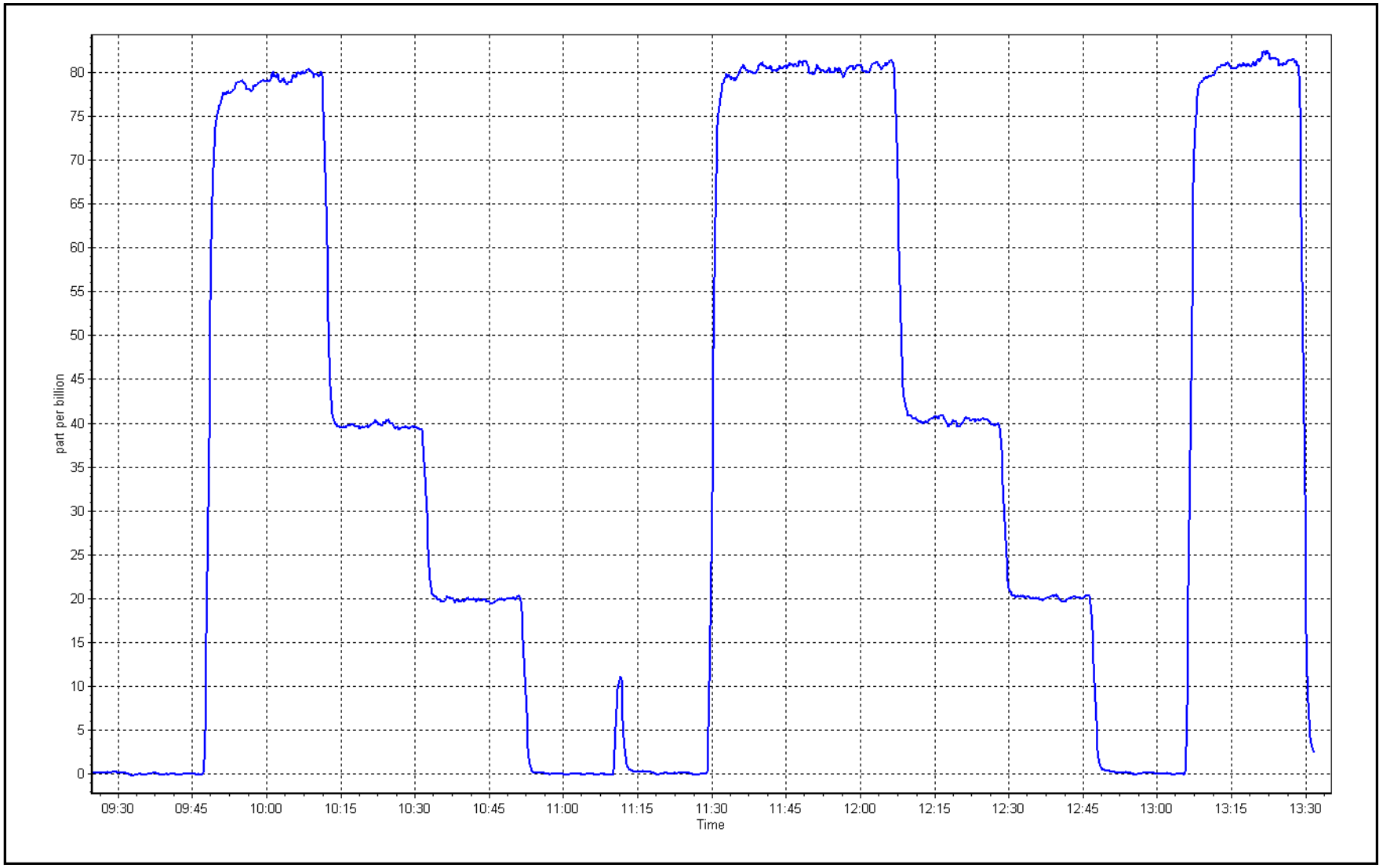
Calibration Date:	September 28, 2026	Previous Calibration:	August 6, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	9:30	End Time (MST):	13:35
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1300156232

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999993	*≥0.995*
80.0	80.6	0.9921	Slope	1.008678	*0.90 - 1.10*
40.0	40.2	0.9944			
20.0	20.0	1.0019	Intercept	-0.098185	*+/-3*



TRS Calibration Plot Date: September 28, 2026 Location: Fort Hills



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	September 28, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	9:30	End time (MST):	13:35
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:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	5762
ZAG Make/Model:	API T701		Serial Number:	1117

Analyzer Information

Analyzer make:	Thermo 43iQ Trace level		Analyzer serial #:	1200326168
Converter make:	Global		Converter serial #:	2022-227
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.997388	0.997385	Backgd or Offset:	0.96	0.95
Calibration intercept:	0.021916	0.122018	Coeff or Slope:	1.036	1.010

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4917	82.6	80.0	81.7	0.980
As found Mid point	4959	41.3	40.0	40.7	0.985
As found Low point	4979	20.7	20.0	20.4	0.987
New cylinder response					

Baseline Corr As found:	81.6	Prev response:	79.78	*% change:	2.2%
Baseline Corr 2nd AF pt:	40.6	AF Slope:	1.020830	AF Intercept:	0.001563
Baseline Corr 3rd AF pt:	20.3	AF Correlation:	0.999992	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4917	82.6	80.0	79.9	1.001
Mid point	4959	41.3	40.0	40.0	0.999
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	79.9	1.001
SO2 Scrubber Check	4920	80.3	803.0	0.1	----
Date of last scrubber change:		April 28, 2026		Ave Corr Factor	1.001
Date of last converter efficiency test:					

Notes: Inlet filter changed after as founds. Scrubber check completed after calibrator zero. Span adjusted.

Calibration Performed By: Devin Russell

Wood Buffalo Environmental Association

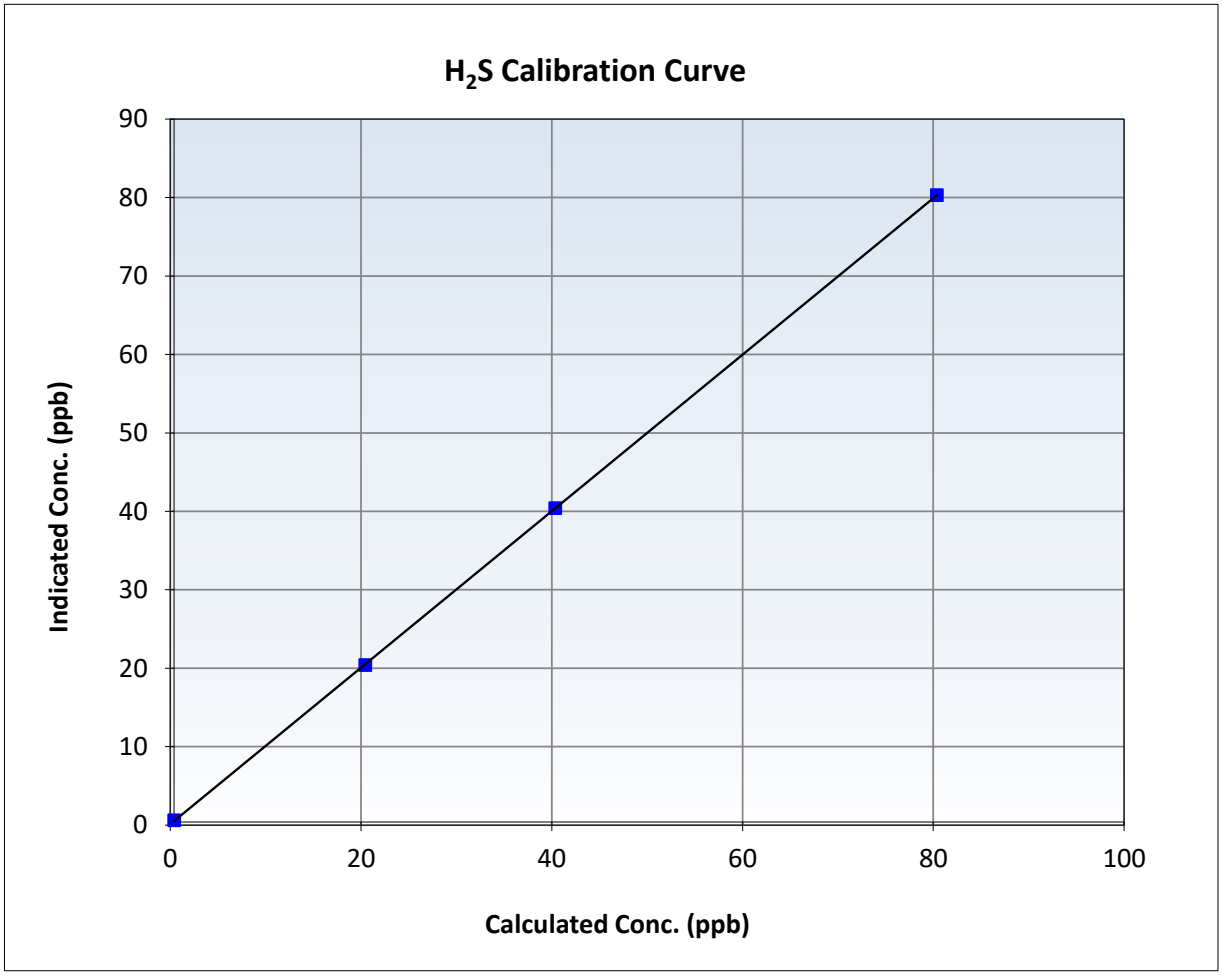
H_2S Calibration Summary

Station Information

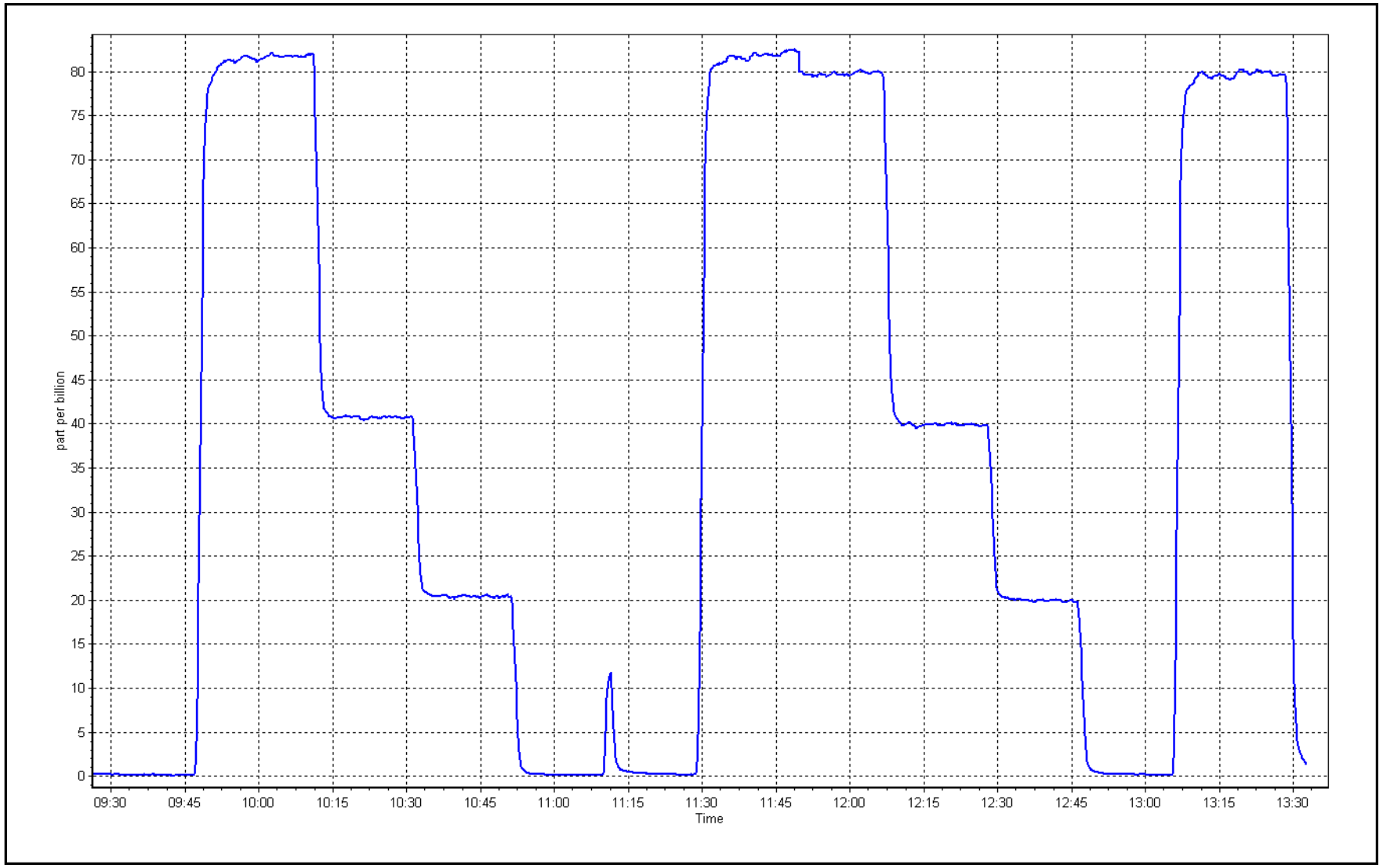
Calibration Date:	September 28, 2026	Previous Calibration:	August 6, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	9:30	End Time (MST):	13:35
Analyzer make:	Thermo 43iQ Trace level	Analyzer serial #:	1200326168

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.2	----	Correlation Coefficient	0.999995	*≥0.995*
80.0	79.9	1.0008	Slope	0.997385	*0.90 - 1.10*
40.0	40.0	0.9994			
20.0	20.0	1.0019	Intercept	0.122018	*+/-3*



H_2S Calibration Plot Date: September 28, 2026 Location: Fort Hills



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	September 23, 2026	Last Cal Date:	August 10, 2026
Start time (MST):	9:20	End time (MST):	12:40
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:	Teledyne API T700	Serial Number:	5762
Zero Air Gen model:	Teledyne API T701	Serial Number:	1117

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1172750023
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.16E-04	3.16E-04	NMHC SP Ratio:	5.62E-05	5.62E-05
CH4 Retention time:	15.6	15.6	NMHC Peak Area:	158457	158457
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.02	----
As found High point	4921	79.4	16.92	16.94	1.000
As found Mid point	4960	39.7	8.46	8.44	1.005
As found Low point	4980	19.8	4.22	4.24	0.999
New cylinder response					
Baseline Corr AF:	16.93	Prev response	16.91	*% change	0.1%
Baseline Corr 2nd AF:	8.42	AF Slope:	1.000165	AF Intercept:	0.007030
Baseline Corr 3rd AF:	4.22	AF Correlation:	0.999991	* = > +/-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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.4	16.92	16.93	0.999
Mid point	4960	39.7	8.46	8.43	1.004
Low point	4980	19.8	4.22	4.23	0.998
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	16.92	16.94	0.999
				Average Correction Factor	1.000

Notes: Inlet filter was changed after as founds. No adjustment performed.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.4	8.91	8.87	1.005
As found Mid point	4960	39.7	4.46	4.43	1.007
As found Low point	4980	19.8	2.22	2.23	0.997
New cylinder response					
Baseline Corr AF:	8.87	Prev response	8.91	*% change	-0.4%
Baseline Corr 2nd AF:	4.43	AF Slope:	0.994619	AF Intercept:	0.005010
Baseline Corr 3rd AF:	2.23	AF Correlation:	0.999993	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.4	8.91	8.87	1.005
Mid point	4960	39.7	4.46	4.43	1.006
Low point	4980	19.8	2.22	2.23	0.999
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.91	8.89	1.003
				Average Correction Factor	1.003

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.02	----
As found High point	4921	79.4	8.01	8.07	0.994
As found Mid point	4960	39.7	4.00	4.01	1.002
As found Low point	4980	19.8	2.00	2.01	1.002
New cylinder response					
Baseline Corr AF:	8.06	Prev response	8.00	*% change	0.7%
Baseline Corr 2nd AF:	4.00	AF Slope:	1.006338	AF Intercept:	0.002020
Baseline Corr 3rd AF:	1.99	AF Correlation:	0.999978	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.4	8.01	8.07	0.993
Mid point	4960	39.7	4.00	4.00	1.001
Low point	4980	19.8	2.00	2.00	0.998
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.01	8.05	0.995
				Average Correction Factor	0.997

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.999530	1.000253
THC Cal Offset:	-0.000770	-0.005369
CH4 Cal Slope:	1.000030	1.007079
CH4 Cal Offset:	-0.006388	-0.010576
NMHC Cal Slope:	0.998927	0.994440
NMHC Cal Offset:	0.005218	0.005208

Calibration Performed By: Kelly Baragar

Wood Buffalo Environmental Association

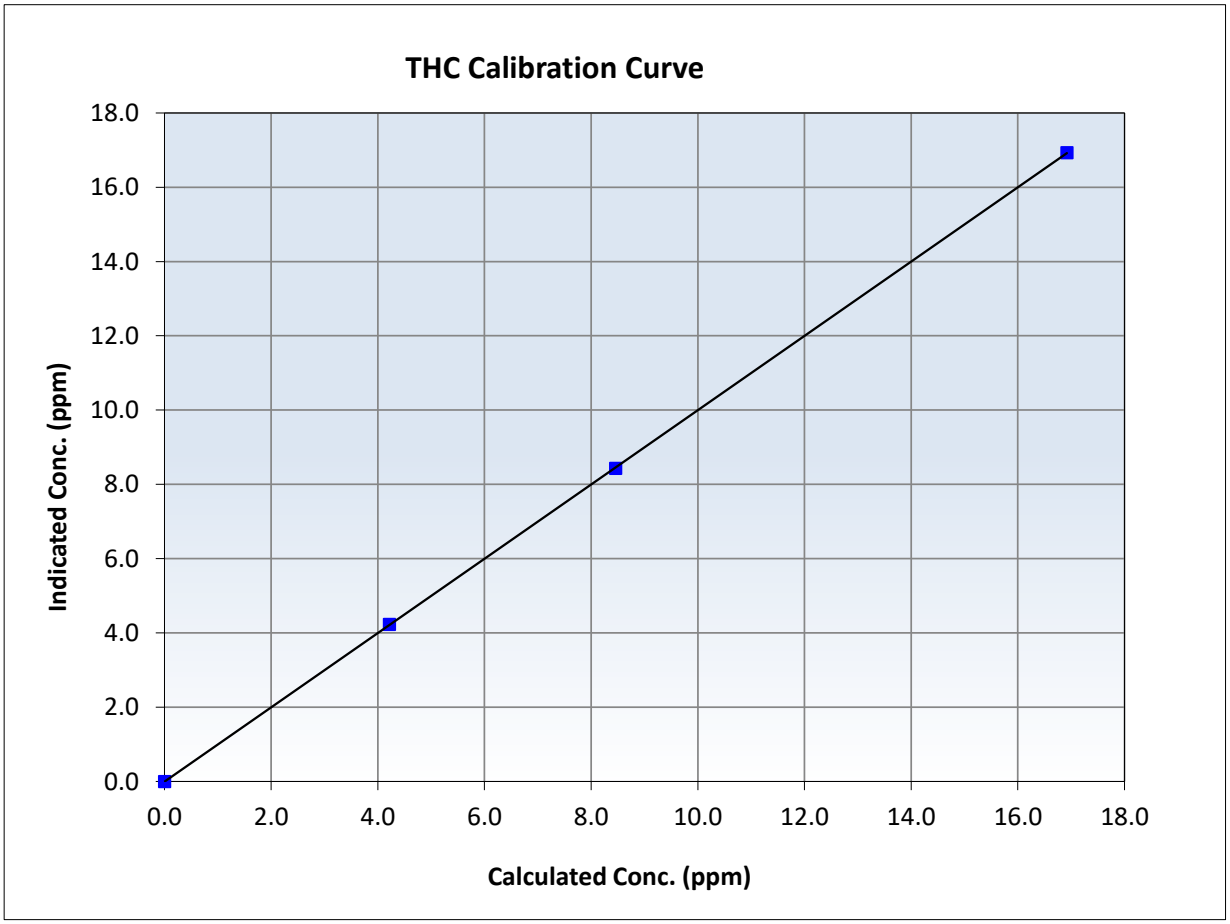
THC Calibration Summary

Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	9:20	End Time (MST):	12:40
Analyzer make:	Thermo 55i	Analyzer serial #:	1172750023

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999993	≥0.995
16.92	16.93	0.9994	Slope	1.000253	0.90 - 1.10
8.46	8.43	1.0037	Intercept	-0.005369	+/-0.5
4.22	4.23	0.9983			



Wood Buffalo Environmental Association

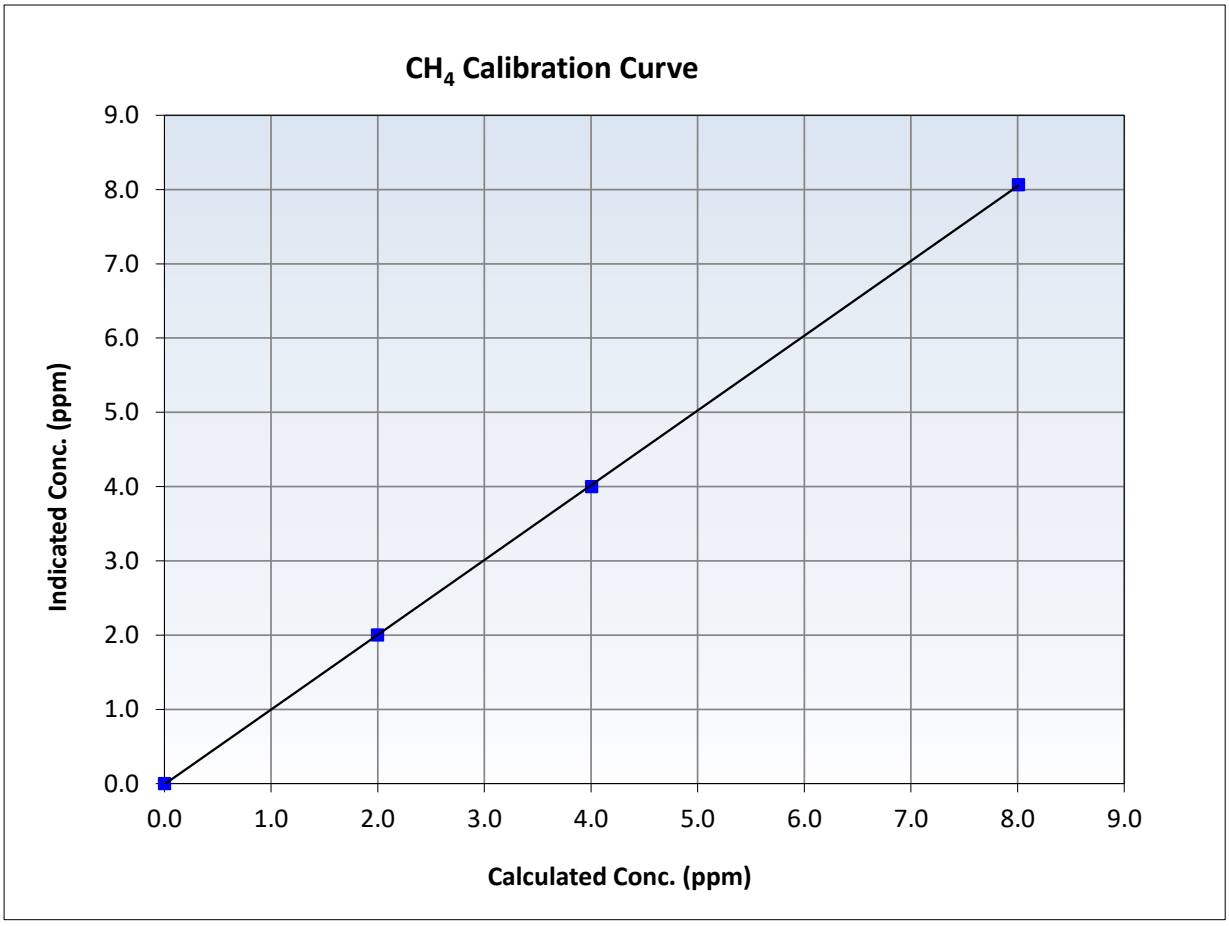
CH_4 Calibration Summary

Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	9:20	End Time (MST):	12:40
Analyzer make:	Thermo 55i	Analyzer serial #:	1172750023

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999978	≥0.995
8.01	8.07	0.9929	Slope	1.007079	0.90 - 1.10
4.00	4.00	1.0013			
2.00	2.00	0.9976	Intercept	-0.010576	+/-0.5



Wood Buffalo Environmental Association

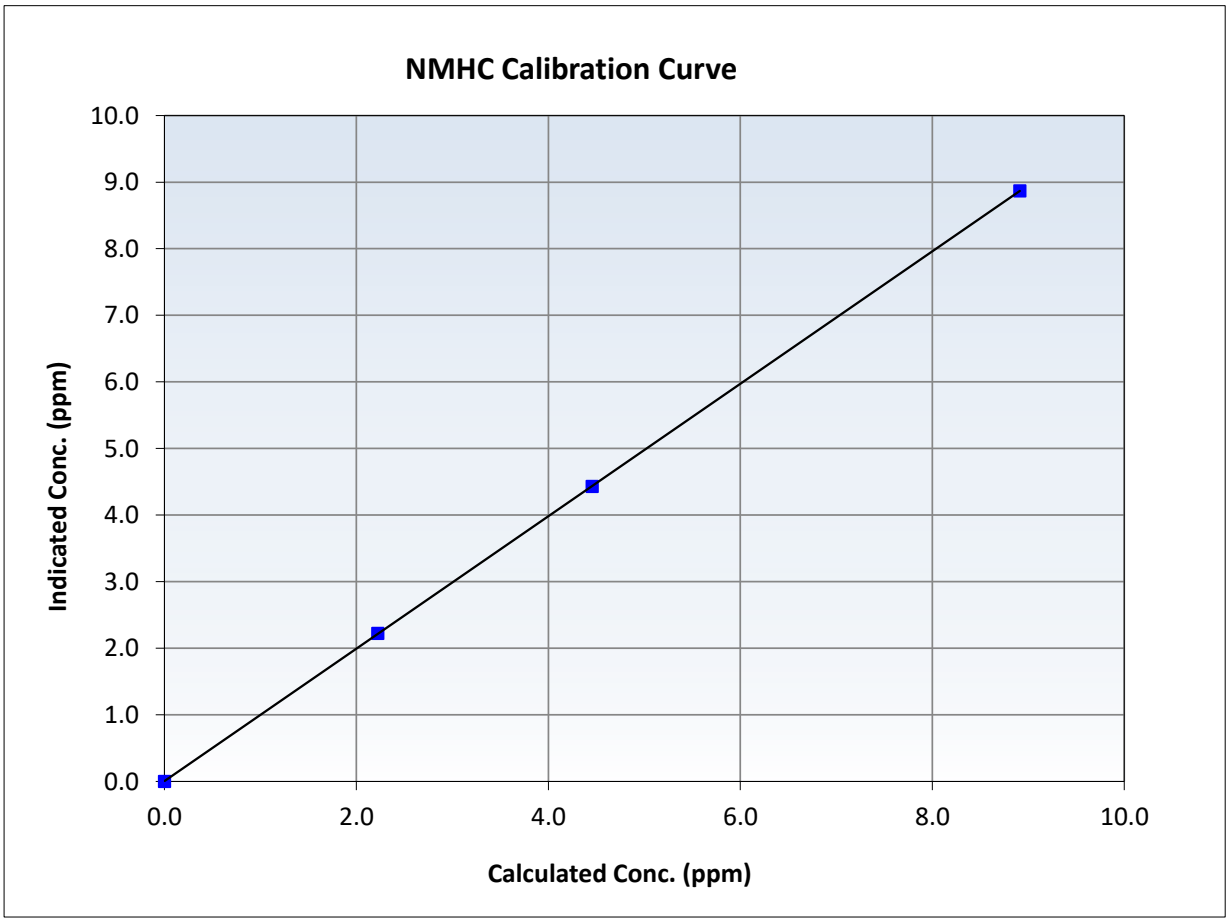
NMHC Calibration Summary

Station Information

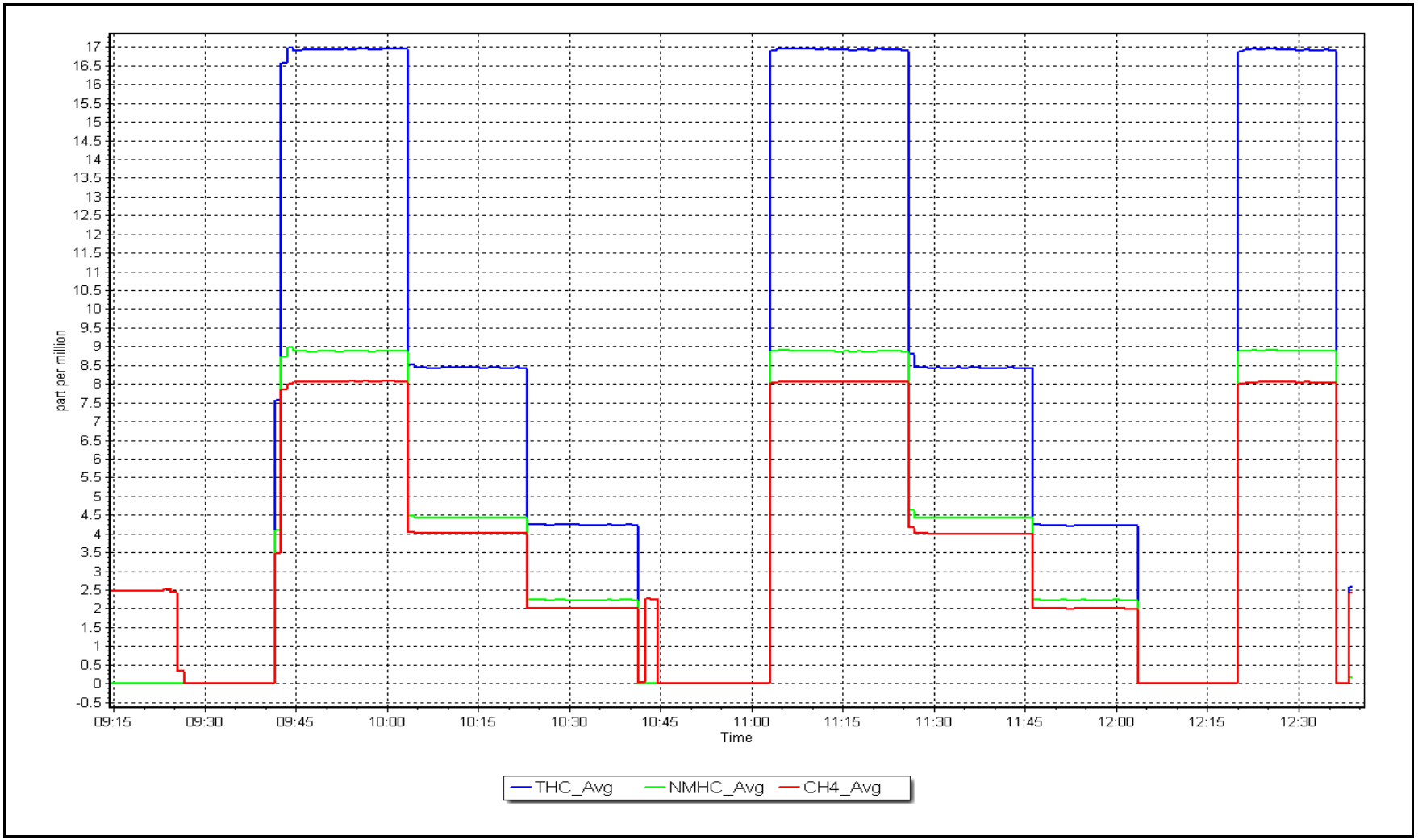
Calibration Date:	September 23, 2026	Previous Calibration:	August 10, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	9:20	End Time (MST):	12:40
Analyzer make:	Thermo 55i	Analyzer serial #:	1172750023

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999996	≥0.995
8.91	8.87	1.0050	Slope	0.994440	0.90 - 1.10
4.46	4.43	1.0056	Intercept	0.005208	+/-0.5
2.22	2.23	0.9985			



NMHC Calibration Plot Date: September 23, 2026 Location: Fort Hills



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Fort Hills
Station number:	AMS 23
Calibration Date:	September 25, 2026
Last Cal Date:	August 17, 2026
Start time (MST):	10:23
End time (MST):	15:47
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC358149	Cal Gas Expiry Date:	January 5, 2032
NOX Cal Gas Conc:	60.30 ppm	NO Cal Gas Conc:	60.10 ppm
Removed Cylinder #:		Removed Gas Exp Date:	
Removed Gas NOX Conc:	60.30 ppm	Removed Gas NO Conc:	60.10 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	T700	Serial Number:	5762
ZAG make/model:	API T701	Serial Number:	1117

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	----	----
AF High point	4933	66.6	803.3	800.6	2.7	792.4	787.0	5.4	1.0137	1.0171
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	799.5 ppb	NO =	798.7 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = -0.9%
Baseline Corr 1st pt	NO_X =	792.4 ppb	NO =	787.1 ppb	As Found Statistics	*Percent Change	NO = -1.5%
Baseline Corr 2nd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO_X r^2:	Nx Sl:	Nx Int:
Baseline Corr 3rd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO r^2:	NO Sl:	NO Int:
					As found NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: API T200 Serial Number: 4260

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	Finish		Start	Finish
NO coeff or slope:	0.475	0.480	NO bkgnd or offset:	-1.1	-1.1
NOX coeff or slope:	0.469	0.475	NOX bkgnd or offset:	-0.1	-0.1
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	8.4	8.3

Calibration Statistics

	Start	Finish
NO_X Cal Slope:	0.994937	0.997968
NO_X Cal Offset:	0.291729	0.252352
NO Cal Slope:	0.999079	1.000036
NO Cal Offset:	-1.148908	-1.409188
NO_2 Cal Slope:	0.992444	0.996240
NO_2 Cal Offset:	-0.533664	0.928400

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	----	----
High point	4933	66.6	803.3	800.6	2.7	802.1	800.2	2.1	1.0014	1.0005
Mid point	4967	33.3	401.6	400.2	1.3	400.2	397.5	2.7	1.0034	1.0069
Low point	4983	16.6	200.2	199.5	0.7	200.8	196.9	3.8	0.9971	1.0134
As left zero	5000	0.0	0.0	0.0	0.0	0.2	0.2	0.0	----	----
As left span	4933	66.6	803.3	408.5	394.8	796.6	408.5	388.1	1.0084	1.0000
							Average Correction Factor		1.0007	1.0069

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	794.3	403.5	393.5	392.2	1.0032	99.7%
Mid GPT point	794.3	596.0	201.0	202.2	0.9939	100.6%
Low GPT point	794.3	698.2	98.8	100.0	0.9876	101.3%
				Average Correction Factor	0.9949	100.5%

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

NO_X Calibration Summary

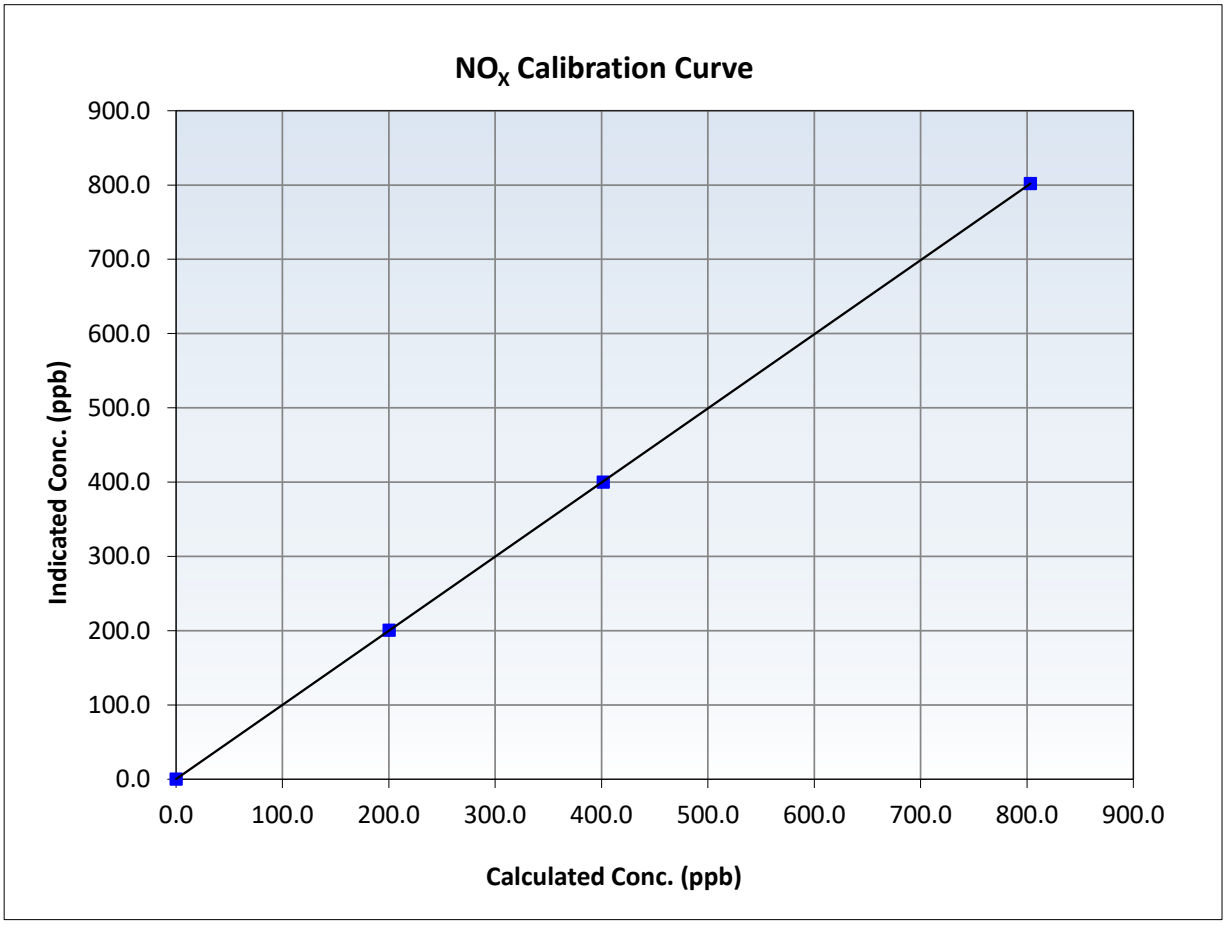
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 17, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	10:23	End Time (MST):	15:47
Analyzer make:	API T200	Analyzer serial #:	4260

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
803.3	802.1	1.0014
401.6	400.2	1.0034
200.2	200.8	0.9971

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999996	*≥0.995*
Slope	0.997968	*0.90 - 1.10*
Intercept	0.252352	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

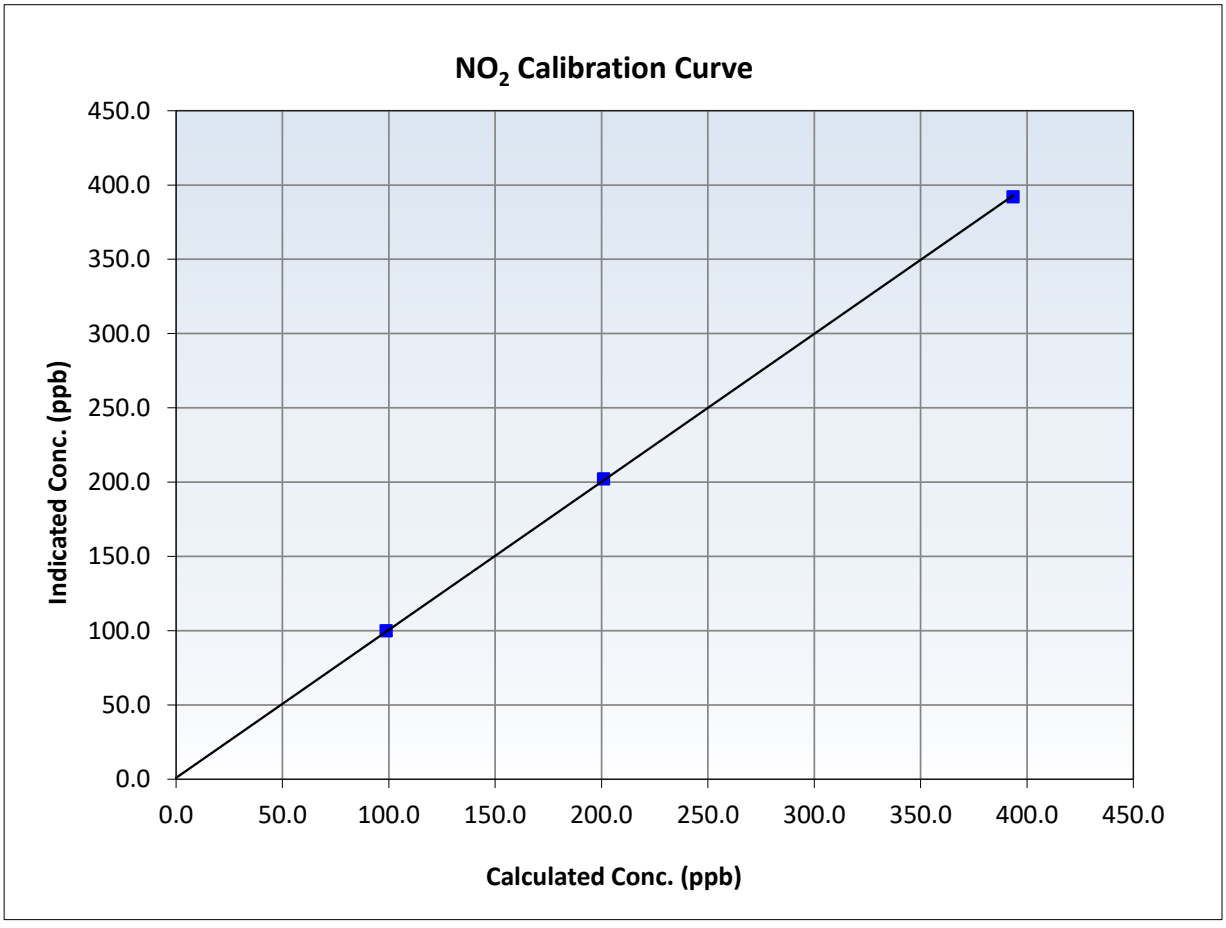
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 17, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	10:23	End Time (MST):	15:47
Analyzer make:	API T200	Analyzer serial #:	4260

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
393.5	392.2	1.0032
201.0	202.2	0.9939
98.8	100.0	0.9876

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999963	*≥0.995*
Slope	0.996240	*0.90 - 1.10*
Intercept	0.928400	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

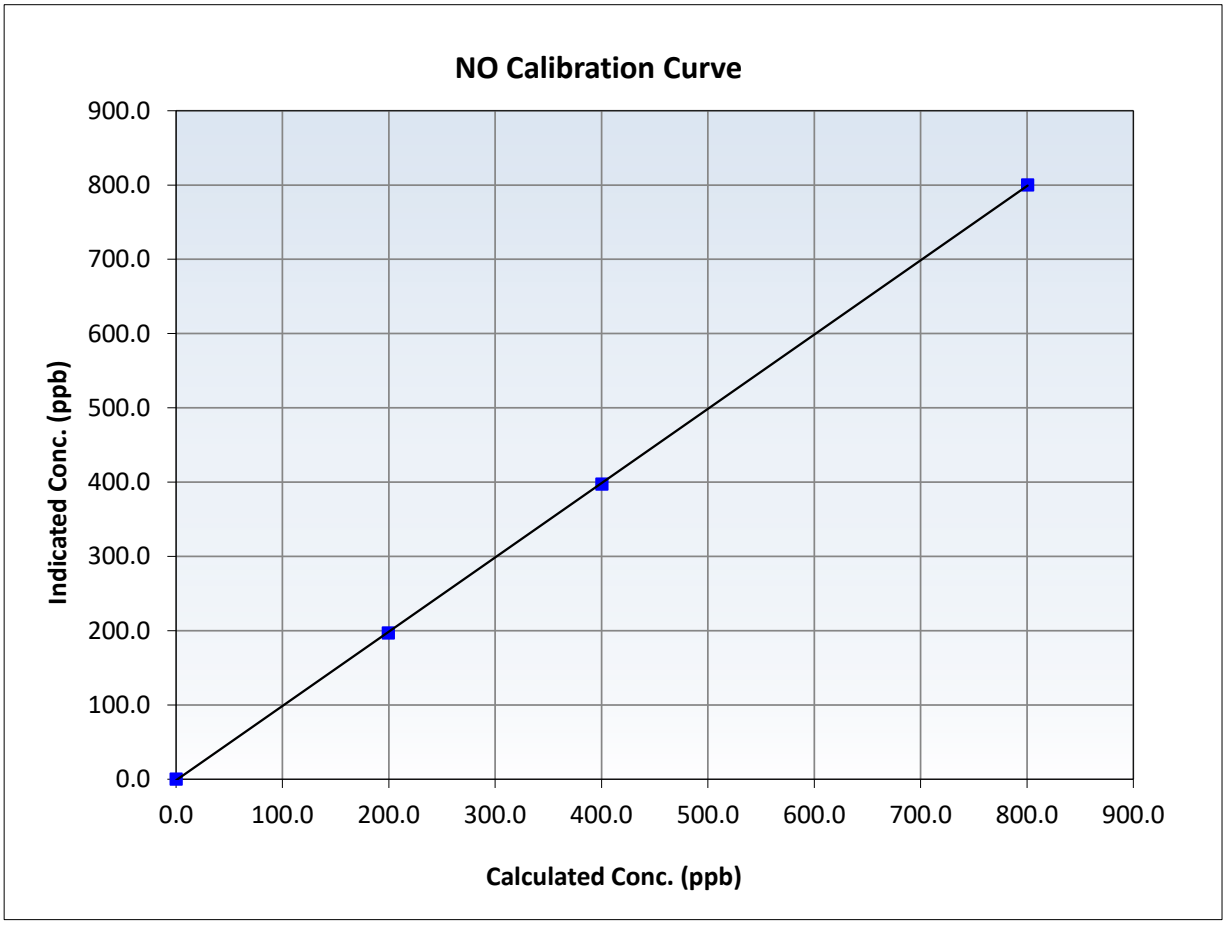
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 17, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	10:23	End Time (MST):	15:47
Analyzer make:	API T200	Analyzer serial #:	4260

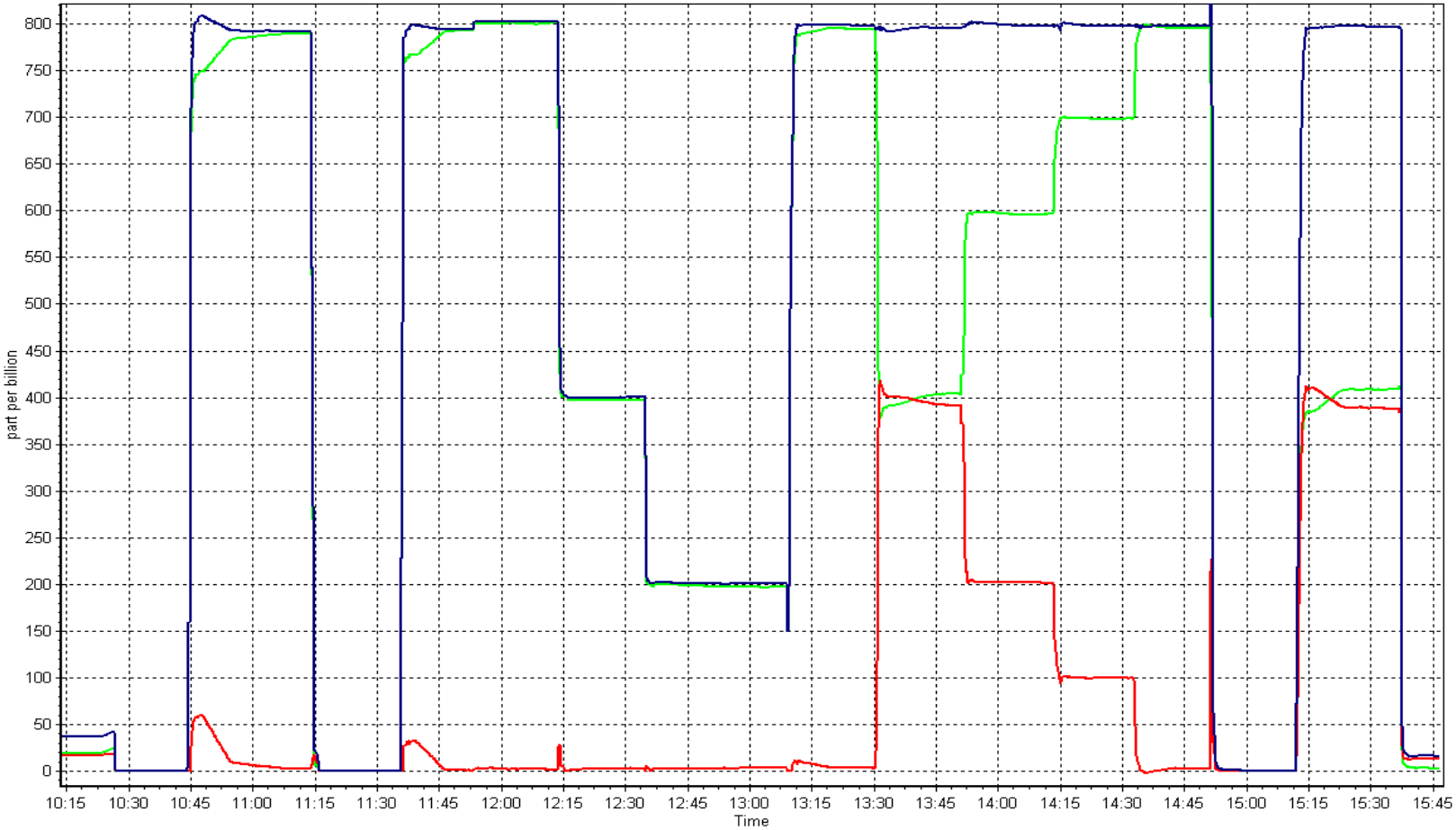
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.6	800.2	1.0005
400.2	397.5	1.0069
199.5	196.9	1.0134

Statistical Evaluation		Limits
Correlation Coefficient	0.999980	≥0.995
Slope	1.000036	0.90 - 1.10
Intercept	-1.409188	+/-20



NO_X Calibration Plot Date: September 25, 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:	September 25, 2026	Last Cal Date:	August 17, 2026
Start time (MST):	13:55	End time (MST):	14:38
Analyzer Make:	API T640	S/N:	320
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 (^{o}C)	10.9	10.49	10.9	☐	+/- 2 ^{o}C
P (mmHg)	730.1	729.46	730.1	☐	+/- 10 mmHg
Flow (LPM)	5.00	5.012	5.00	☐	+/- 0.25 LPM
PW% (pump)	31	-----	31	☐	>80%
Zero Verification	PM w/o HEPA:	8.6	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: 16-Jul-26 — Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test	10	10.8	10.8	☐	+/- 0.5

Date Optical Chamber Cleaned: September 25, 2026

Date Disposable Filter Changed: September 25, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: September 25, 2026

Date RH/T Sensor Cleaned: September 25, 2026

Notes: Leak check, flow, and PMT were checked before and after cleaning. After cleaning the optical chamber, the PMT verified at 10.8 hence PMT adjustments not required. Leak check passed.

Calibration by: Mohammed Kashif

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS25
WASKŌW OHCI PIMÂTISIWIN
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Waskow ohci Pimatisiwin	Station number:	AMS 25
Calibration Date:	September 1, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	10:40	End time (MST):	13:47
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999185	0.993242	Backgd or Offset:	10.7	10.7
Calibration intercept:	-0.052858	0.626522	Coeff or Slope:	1.025	1.025

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	80.5	800.1	794.4	1.007
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	794.3	Previous response	799.4	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4920	80.5	800.1	795.1	1.006
Mid point	4960	40.2	399.6	397.8	1.004
Low point	4980	20.1	199.8	199.3	1.002
As left zero	5000	0.0	0.0	0.4	----
As left span	4920	80.5	800.1	796.2	1.005
				Average Correction Factor:	1.004

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

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

SO_2 Calibration Summary

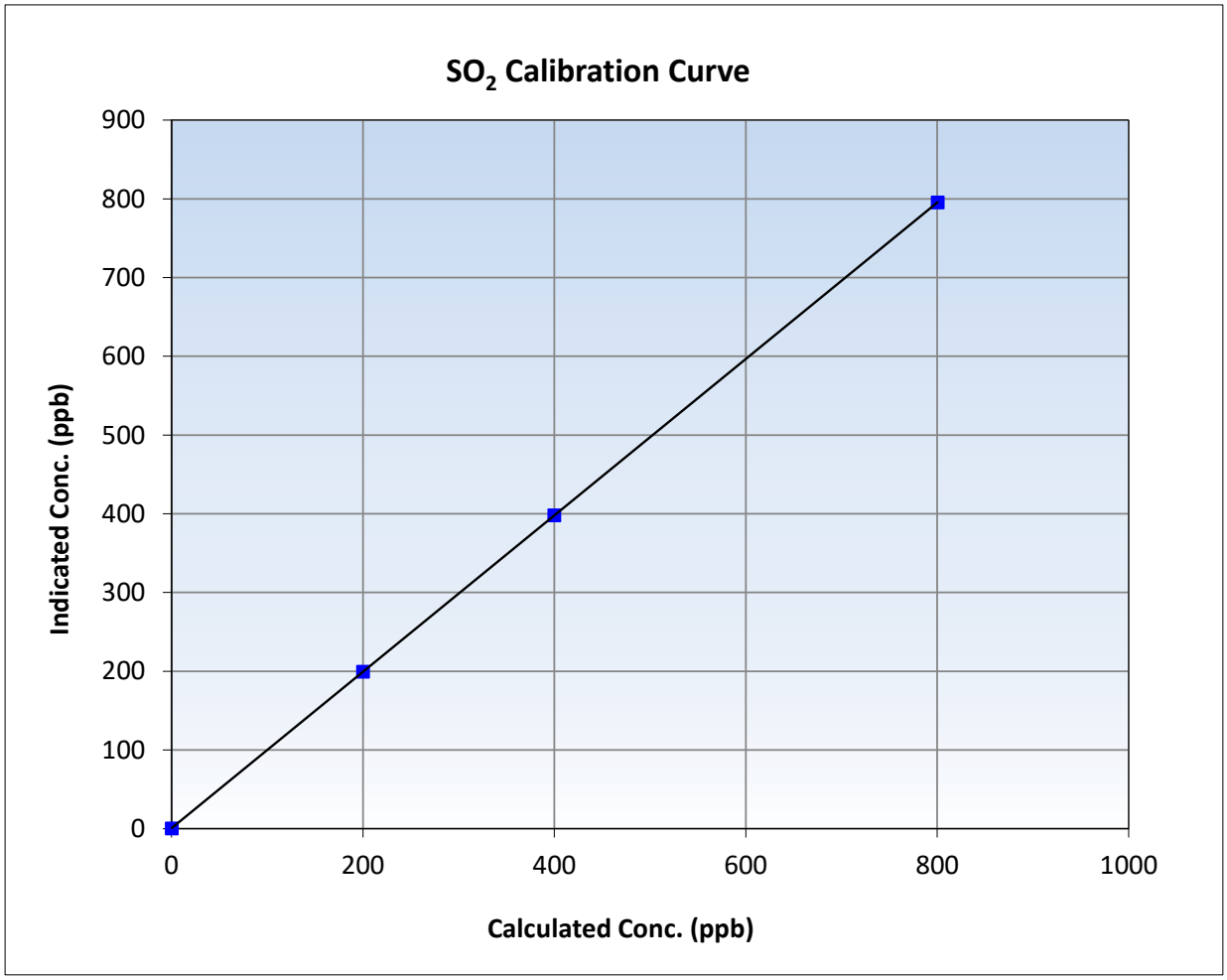
Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 5, 2026
Station Name:	Waskow ohci Pimatisiwin	Station Number:	AMS 25
Start Time (MST):	10:40	End Time (MST):	13:47
Analyzer make:	Thermo 43i	Analyzer serial #:	1118148497

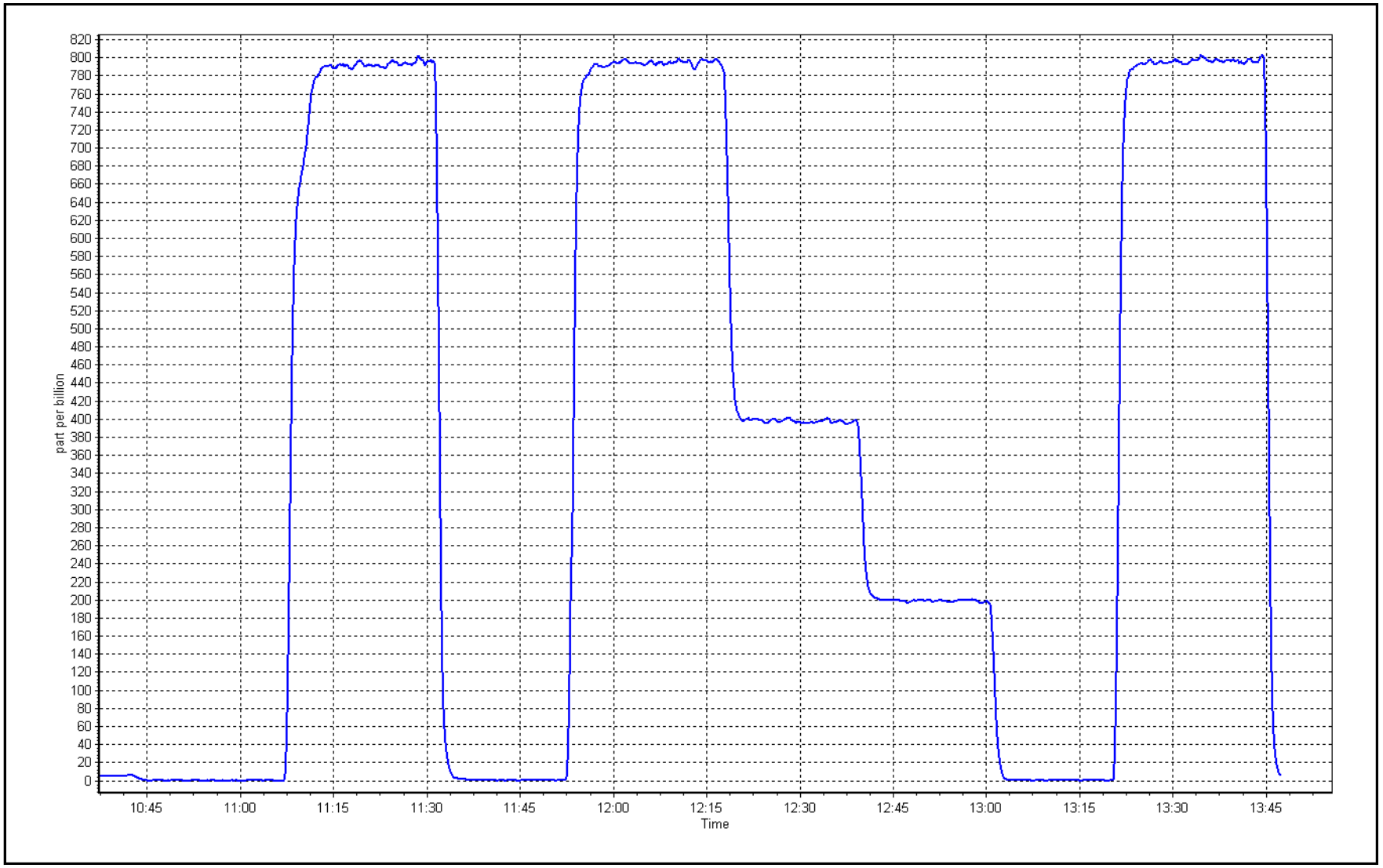
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.1	795.1	1.0063
399.6	397.8	1.0045
199.8	199.3	1.0025

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	0.993242	*0.90 - 1.10*
Intercept	0.626522	*+/-30*



SO2 Calibration Plot Date: September 1, 2026 Location: Waskow ohci Pimatisiwin



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Waskow ohci Pimatisiwin	Station number:	AMS 25
Calibration Date:	September 29, 2026	Last Cal Date:	August 28, 2026
Start time (MST):	9:56	End time (MST):	14:08
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.41	ppm	Cal Gas Exp Date:	April 16, 2029
Cal Gas Cylinder #:	CC526685			
Removed Cal Gas Conc:	5.41	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		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 #:	1218153358
Converter make:	Global G-150		Converter serial #:	2024-287
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.994079	0.994223	Backgd or Offset:	2.47	2.47
Calibration intercept:	0.279637	0.299600	Coeff or Slope:	1.079	1.079

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.2	----
As found High point	4926	73.9	80.0	79.8	1.005
As found Mid point	4963	37.0	40.0	40.3	0.998
As found Low point	4982	18.5	20.0	20.3	0.996
New cylinder response					

Baseline Corr As found:	79.6	Prev response:	79.77	*% change:	-0.2%
Baseline Corr 2nd AF pt:	40.1	AF Slope:	0.995084	AF Intercept:	0.319489
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999987	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4926	73.9	80.0	79.8	1.002
Mid point	4963	37.0	40.0	40.1	0.998
Low point	4982	18.5	20.0	20.2	0.991
As left zero	5000	0.0	0.0	0.4	----
As left span	4926	73.9	800.0	809.4	0.988
SO2 Scrubber Check				0.0	
Date of last scrubber change:				Ave Corr Factor	0.997
Date of last converter efficiency test:		February 12, 2025		102.0%	efficiency

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

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

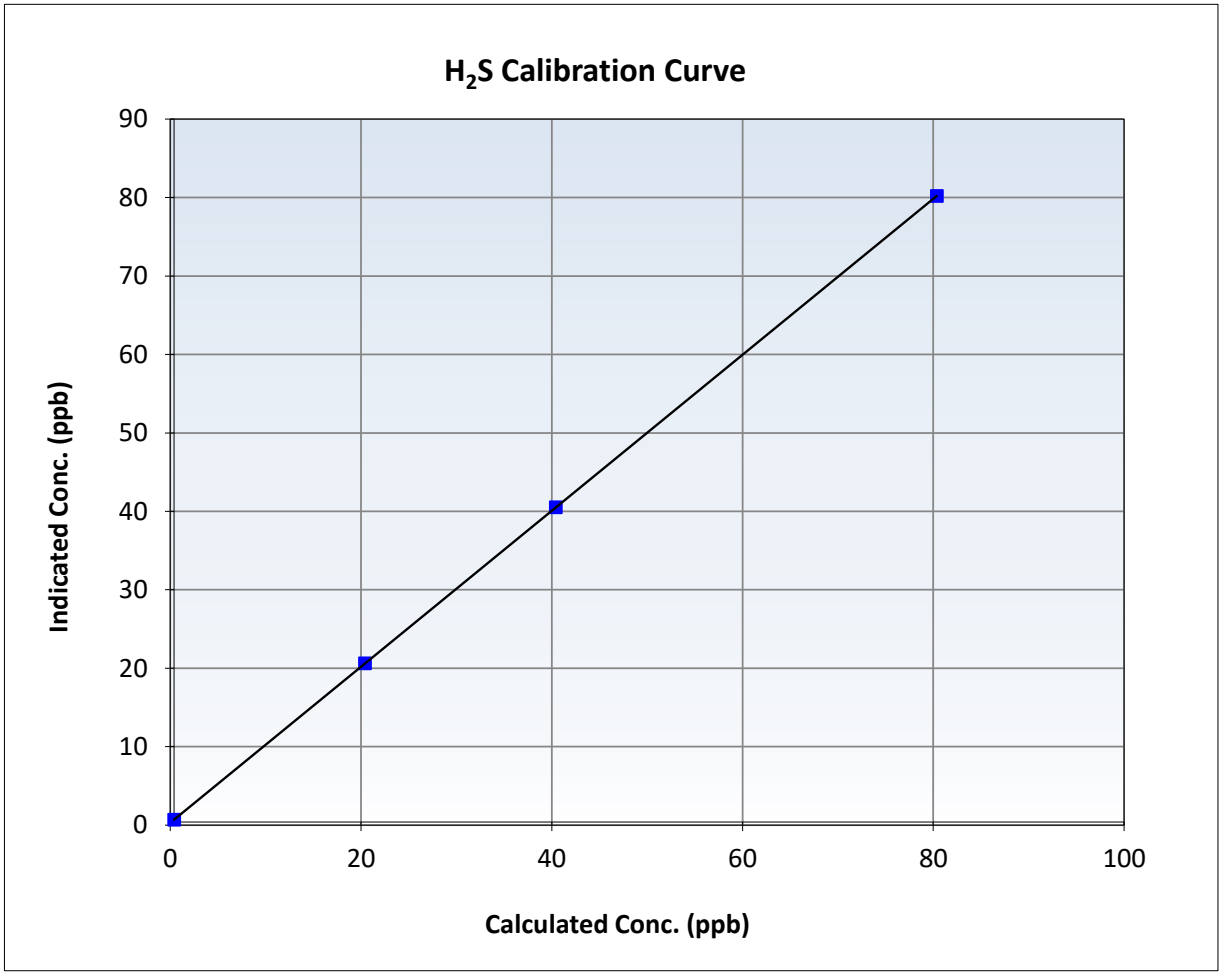
H_2S Calibration Summary

Station Information

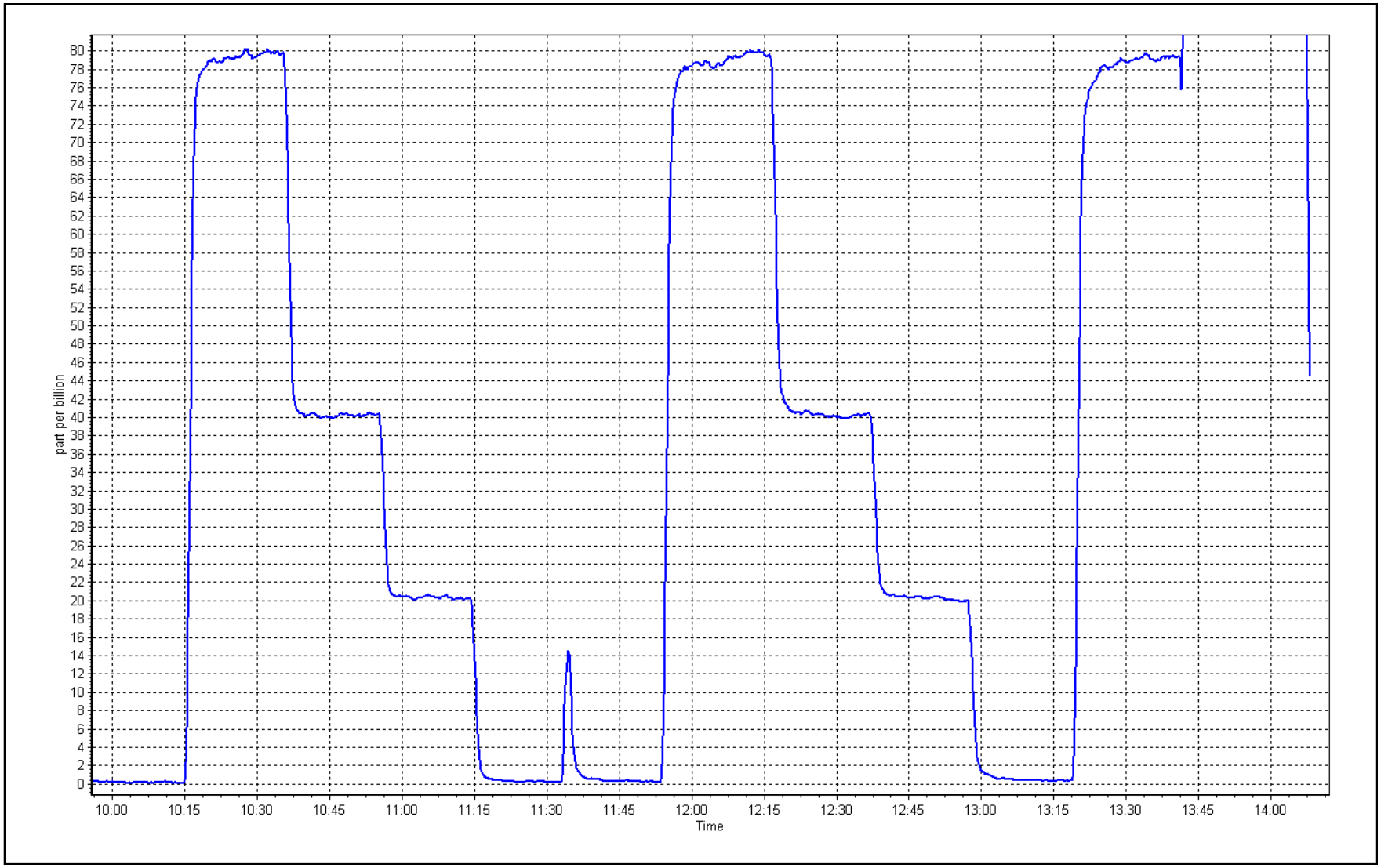
Calibration Date:	September 29, 2026	Previous Calibration:	August 28, 2026
Station Name:	Waskow ohci Pimatisiwin	Station Number:	AMS 25
Start Time (MST):	9:56	End Time (MST):	14:08
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1218153358

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.3	----	Correlation Coefficient	1.000000	*≥0.995*
80.0	79.8	1.0020	Slope	0.994223	*0.90 - 1.10*
40.0	40.1	0.9984			
20.0	20.2	0.9908	Intercept	0.299600	*+/-3*



H_2S Calibration Plot Date: September 29, 2026 Location: Waskow ohci Pimatisiwin



CALS_413

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS27
JACKFISH 2/3
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Jackfish 2/3	Station number:	AMS 27
Calibration Date:	September 28, 2026	Last Cal Date:	August 12, 2026
Start time (MST):	9:18	End time (MST):	12:12
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.70	ppm	Cal Gas Exp Date:	April 15, 2034
Cal Gas Cylinder #:	CC316820			
Removed Cal Gas Conc:	50.70	ppm	Rem Gas Exp Date:	
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.997952	1.002437	Backgd or Offset:	10.7	10.9
Calibration intercept:	0.287382	0.368291	Coeff or Slope:	0.898	0.907

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4921	78.9	800.1	792.9	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.1	Previous response	798.7	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4921	78.9	800.1	802.2	0.997
Mid point	4961	39.4	399.5	401.0	0.996
Low point	4980	19.7	199.8	201.0	0.994
As left zero	5000	0.0	0.0	-0.2	----
As left span	4921	78.9	800.1	804.6	0.994
				Average Correction Factor:	0.996

Notes: Changed the sample inlet filter after as founds. Span adjusted.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

SO_2 Calibration Summary

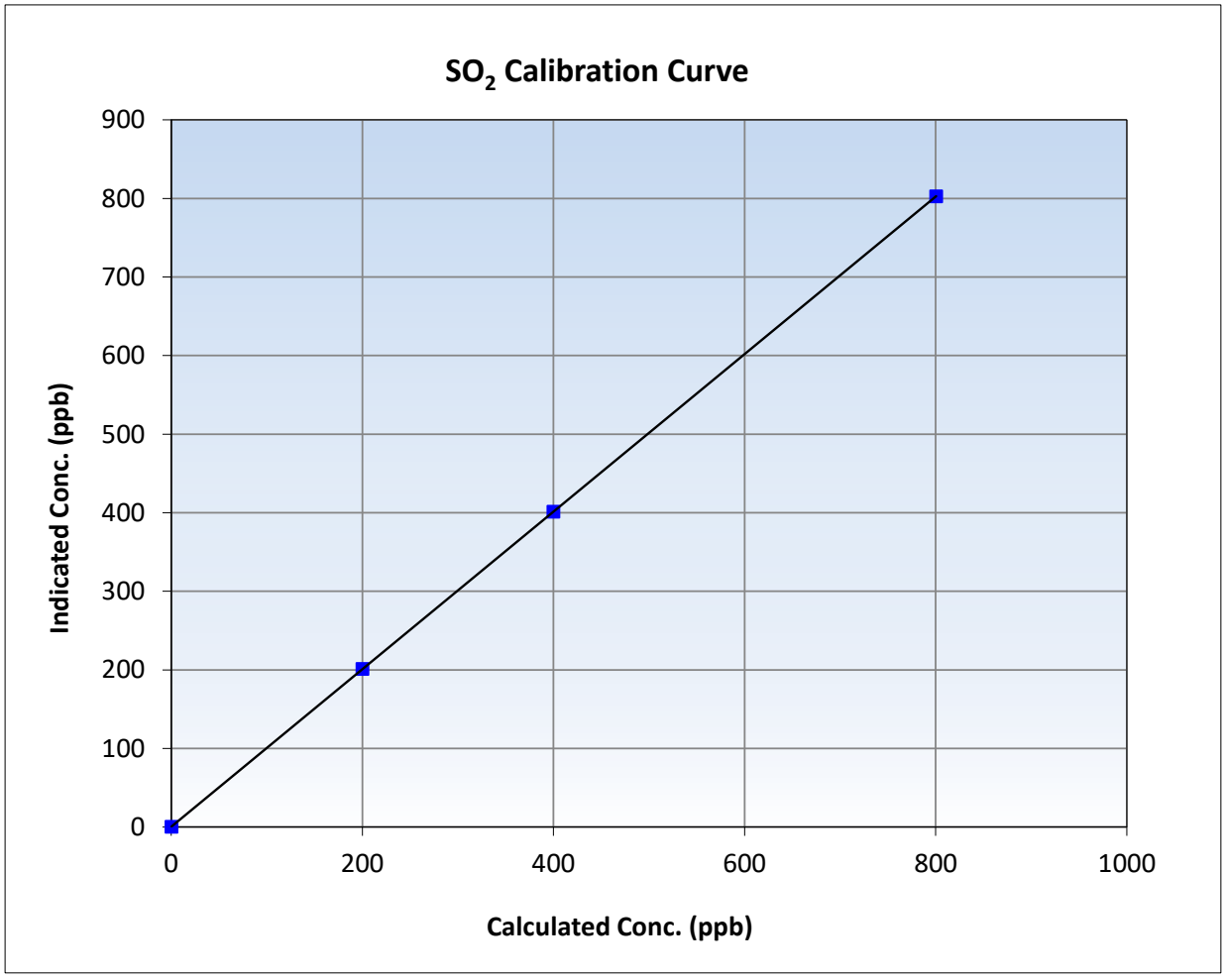
Station Information

Calibration Date:	September 28, 2026	Previous Calibration:	August 12, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	9:18	End Time (MST):	12:12
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	12124313138

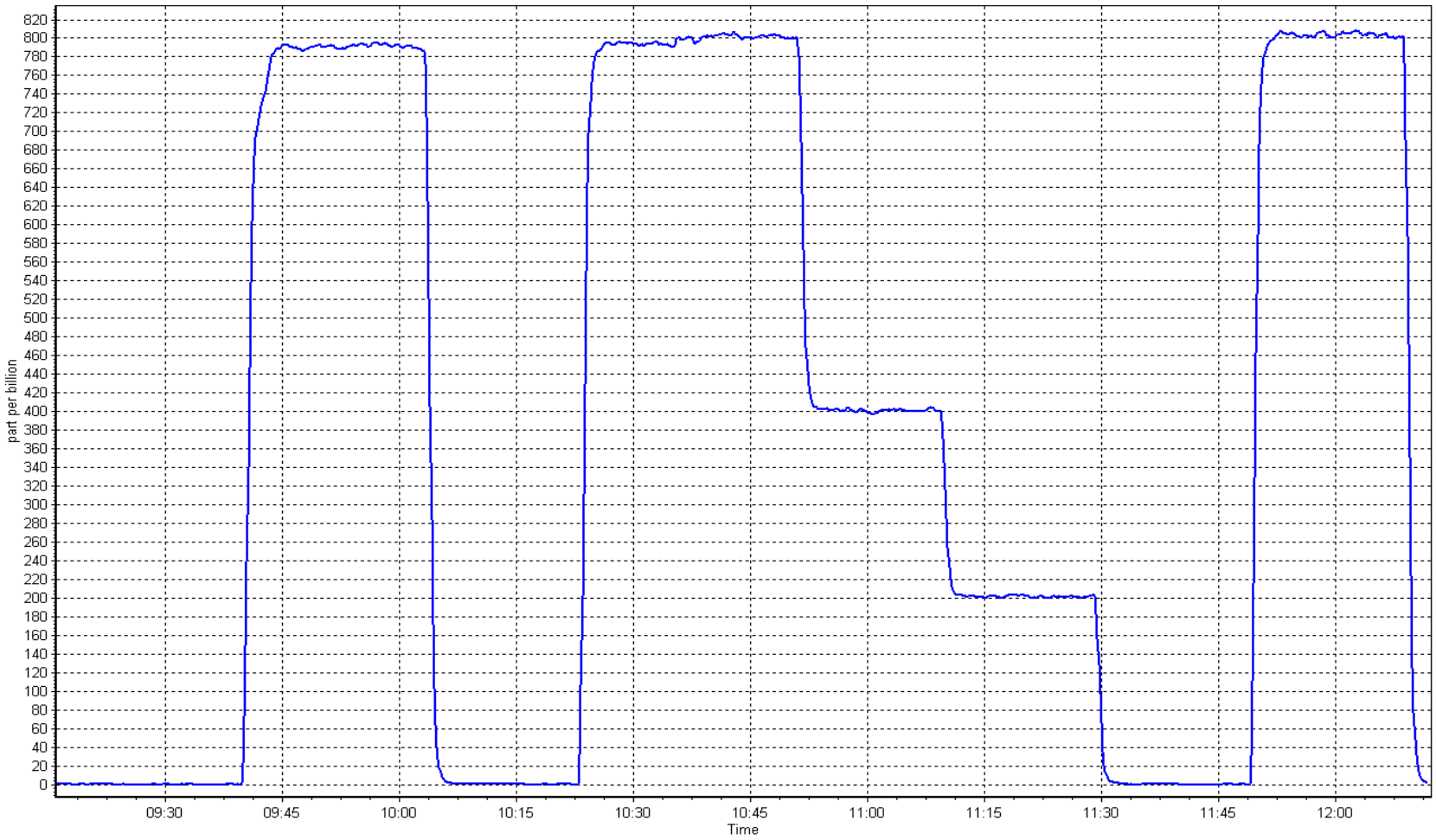
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.1	802.2	0.9973
399.5	401.0	0.9962
199.8	201.0	0.9939

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.002437	*0.90 - 1.10*
Intercept	0.368291	*+/-30*



SO2 Calibration Plot Date: September 28, 2026 Location: Jackfish 2/3



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Jackfish 2/3	Station number:	AMS 27
Calibration Date:	September 10, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	8:20	End time (MST):	12:23
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.985142	1.008005	Backgd or Offset:	3.1	3.2
Calibration intercept:	0.079030	-0.320953	Coeff or Slope:	1.000	1.030

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.4	----
As found High point	4918	82.1	80.0	77.7	1.024
As found Mid point	4959	41.1	40.0	38.4	1.032
As found Low point	4979	20.5	20.0	19.0	1.029
New cylinder response					

Baseline Corr As found:	78.1	Prev response:	78.85	*% change:	-1.0%
Baseline Corr 2nd AF pt:	38.8	AF Slope:	0.976708	AF Intercept:	-0.500841
Baseline Corr 3rd AF pt:	19.4	AF Correlation:	0.999982	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.3	----
High point	4918	82.1	80.0	80.3	0.996
Mid point	4959	41.1	40.0	40.0	1.001
Low point	4979	20.5	20.0	19.8	1.009
As left zero	5000	0.0	0.0	-0.3	----
As left span	4918	82.1	80.0	80.5	0.993
SO2 Scrubber Check	4921	79.1	791.0	0.0	----
Date of last scrubber change:		18-Nov-25		Ave Corr Factor	1.002
Date of last converter efficiency test:		April 23, 2025			

Notes: Sample inlet filter was changed after multipoint as founds. SO2 scrubber check done and passed. Adjusted span only.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

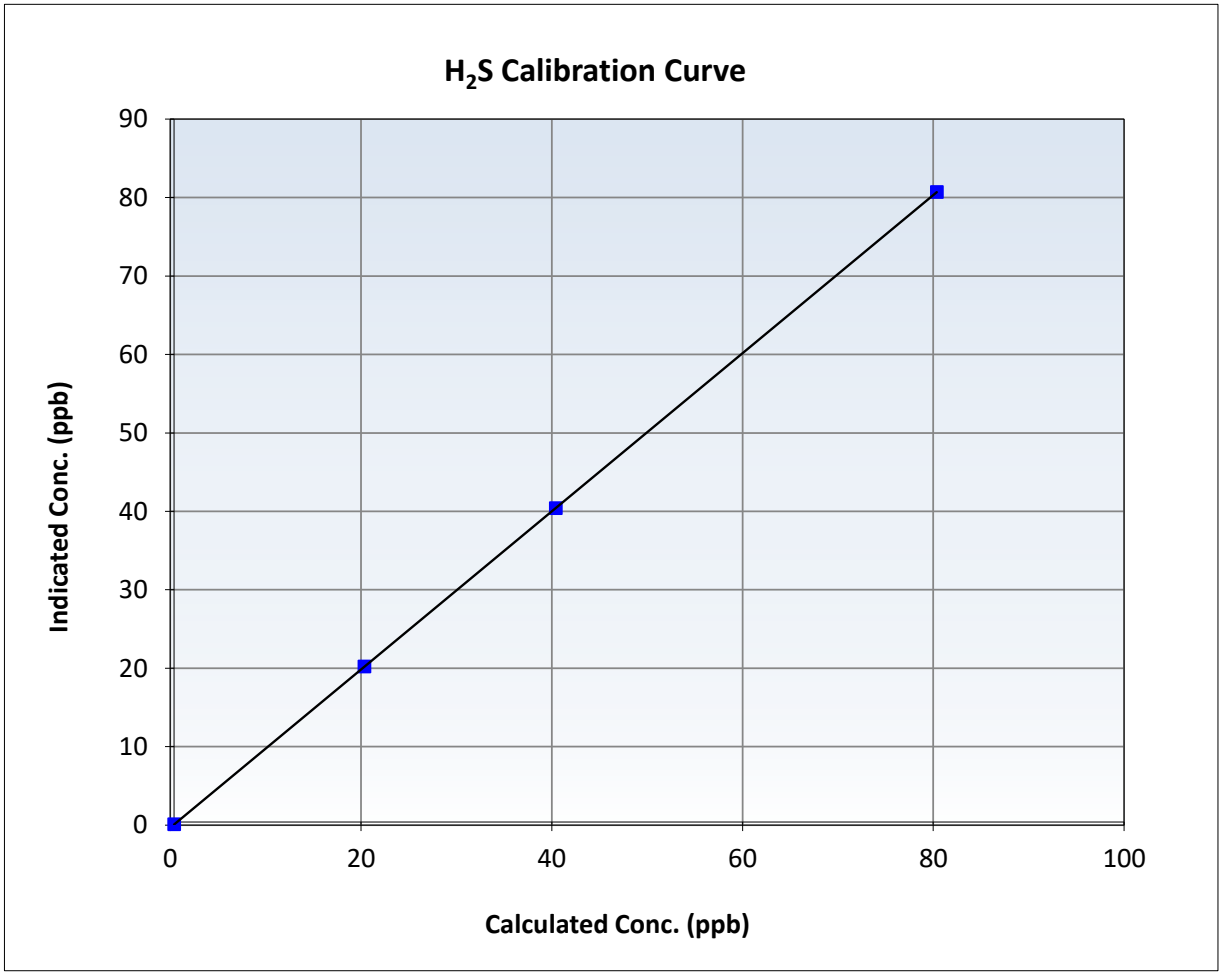
H_2S Calibration Summary

Station Information

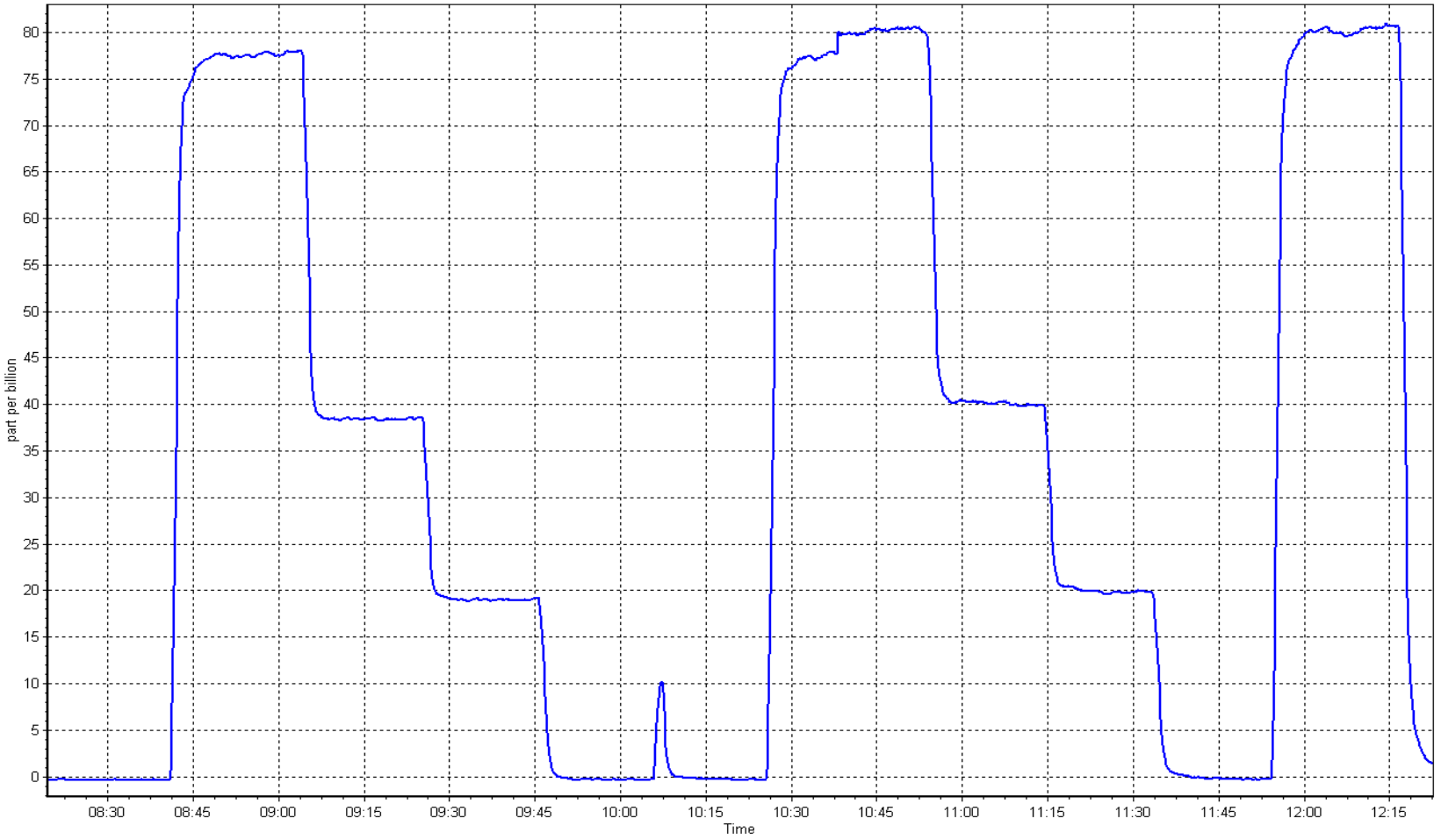
Calibration Date:	September 10, 2026	Previous Calibration:	August 20, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	8:20	End Time (MST):	12:23
Analyzer make:	Thermo 43iQ	Analyzer serial #:	12228021055

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.3	----	Correlation Coefficient	1.000000	*≥0.995*
80.0	80.3	0.9958	Slope	1.008005	*0.90 - 1.10*
40.0	40.0	1.0008			
20.0	19.8	1.0085	Intercept	-0.320953	*+/-3*



H_2S Calibration Plot Date: September 10, 2026 Location: Jackfish 2/3



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Jackfish 2/3
Station number:	AMS 27
Calibration Date:	September 9, 2026
Last Cal Date:	August 11, 2026
Start time (MST):	8:23
End time (MST):	12:37
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC757838	Cal Gas Expiry Date:	January 9, 2032
NOX Cal Gas Conc:	60.30 ppm	NO Cal Gas Conc:	60.20 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	60.30 ppm	Removed Gas NO Conc:	60.20 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	5252
ZAG make/model:	Teledyne API T701H	Serial Number:	268

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	----	----
AF High point	4934	66.4	800.7	799.4	1.3	786.5	784.7	1.8	1.0180	1.0187
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 800.2 ppb	NO = 799.2 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = -1.7%
Baseline Corr 1st pt	NO_X = 786.6 ppb	NO = 784.7 ppb	As Found Statistics	*Percent Change	NO = -1.8%
Baseline Corr 2nd pt	NO_X = NA ppb	NO = NA ppb	As found NO_X r^2:	Nx Sl:	Nx Int:
Baseline Corr 3rd pt	NO_X = NA ppb	NO = NA ppb	As found NO r^2:	NO Sl:	NO Int:
			As found NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermoscientific
Serial Number: 12400232072
NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.010	1.018	NO bkgnd or offset:	0.7	0.7
NOX coeff or slope:	0.990	0.994	NOX bkgnd or offset:	0.8	0.8
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	144.4	143.2

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.997514	1.000968
NO_X Cal Offset:	1.443974	1.383922
NO Cal Slope:	0.999257	1.000901
NO Cal Offset:	0.364019	-0.035991
NO_2 Cal Slope:	1.002986	1.000082
NO_2 Cal Offset:	-0.028909	1.163559

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	----	----
High point	4934	66.4	800.7	799.4	1.3	802.0	800.0	2.0	0.9984	0.9992
Mid point	4967	33.2	400.4	399.7	0.7	403.5	400.5	3.1	0.9923	0.9980
Low point	4983	16.6	200.2	199.9	0.3	202.6	199.4	3.2	0.9882	1.0024
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.2	0.1	----	----
As left span	4934	66.4	800.7	387.9	412.8	798.6	387.9	410.7	1.0027	1.0000
								Average Correction Factor	0.9930	0.9999

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	796.0	373.2	424.1	424.6	0.9989	100.1%
Mid GPT point	796.0	579.6	217.7	219.7	0.9910	100.9%
Low GPT point	796.0	684.0	113.3	115.7	0.9795	102.1%
				Average Correction Factor	0.9898	101.0%

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

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

NO_X Calibration Summary

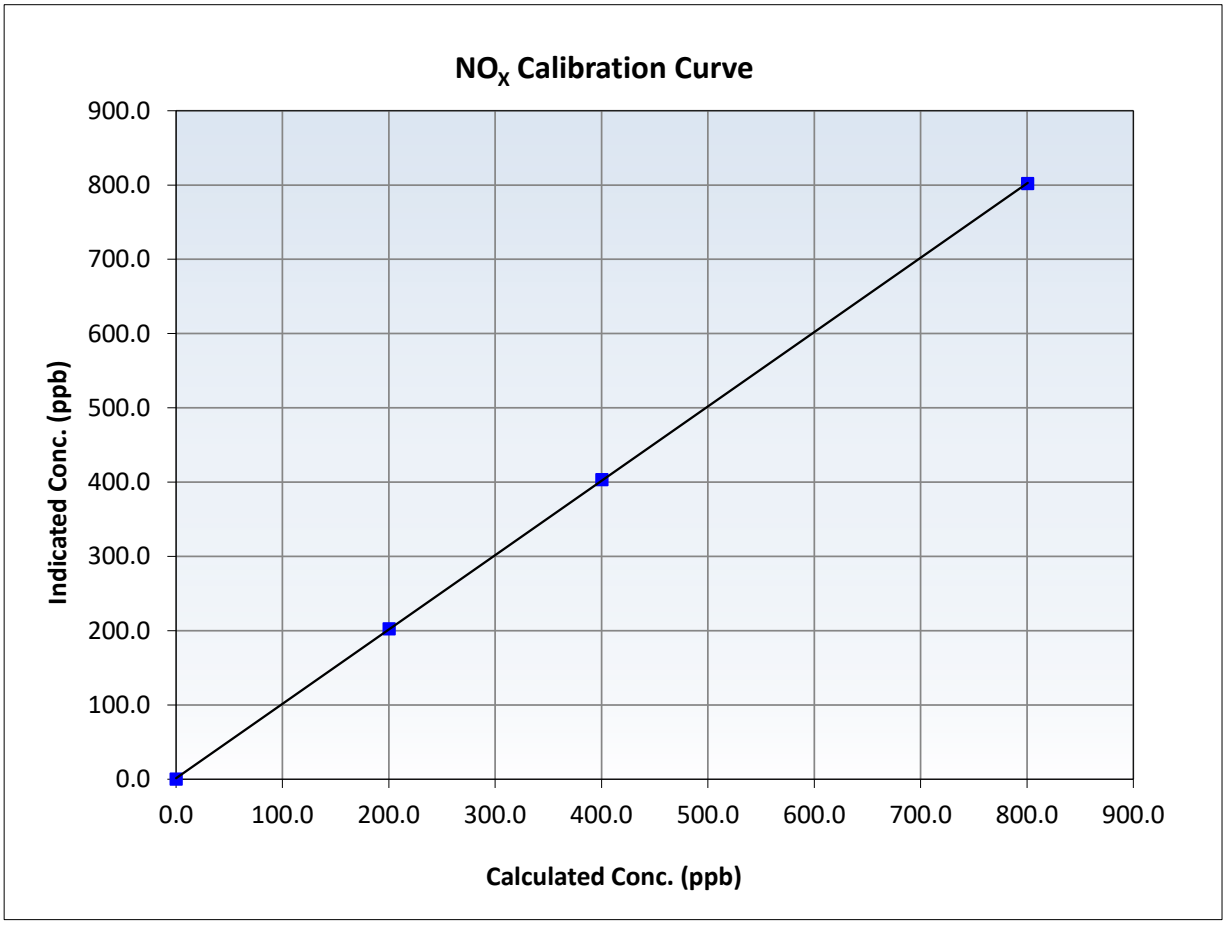
Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 11, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	8:23	End Time (MST):	12:37
Analyzer make:	Thermoscientific	Analyzer serial #:	12400232072

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.7	802.0	0.9984
400.4	403.5	0.9923
200.2	202.6	0.9882

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999986	*≥0.995*
Slope	1.000968	*0.90 - 1.10*
Intercept	1.383922	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

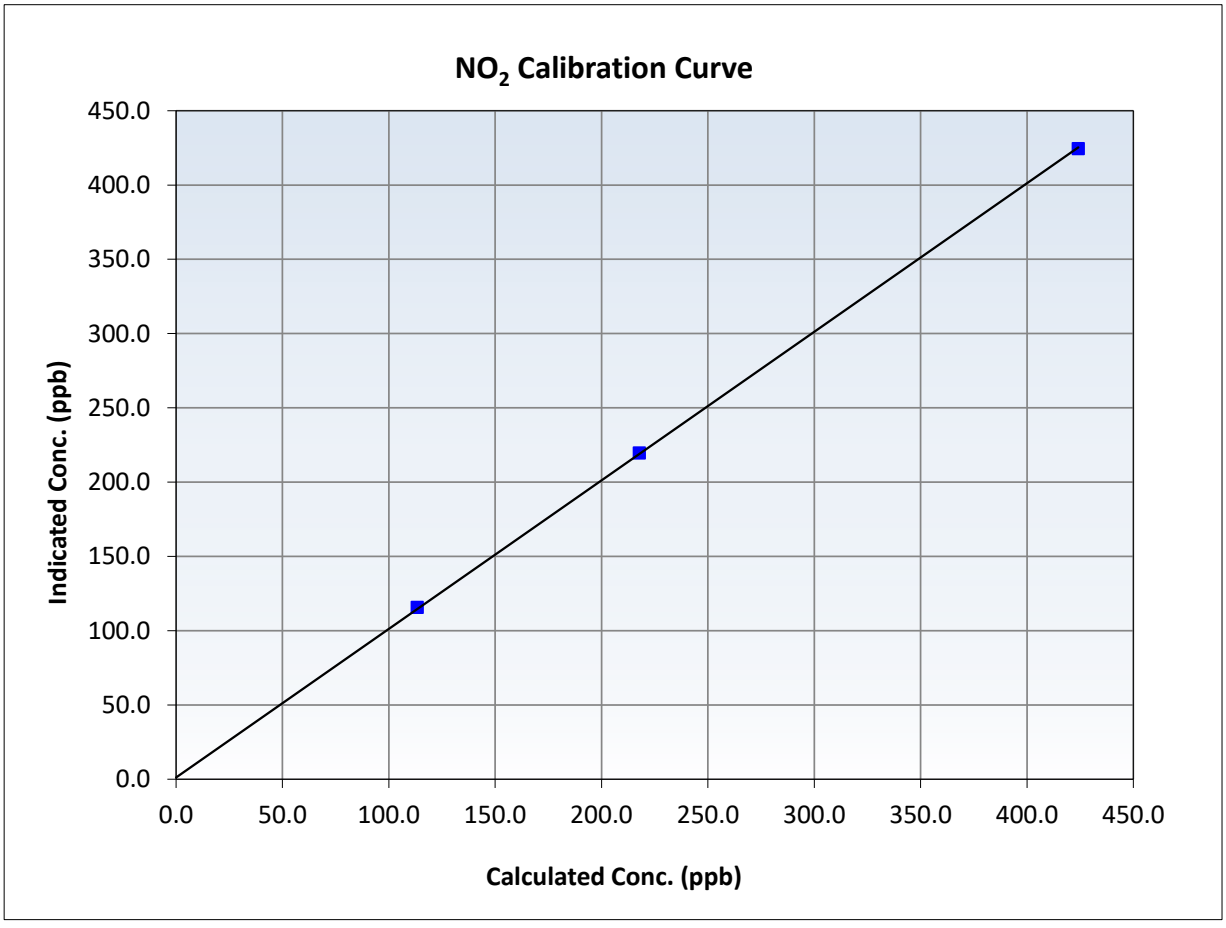
Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 11, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	8:23	End Time (MST):	12:37
Analyzer make:	Thermoscientific	Analyzer serial #:	12400232072

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
424.1	424.6	0.9989
217.7	219.7	0.9910
113.3	115.7	0.9795

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999957	*≥0.995*
Slope	1.000082	*0.90 - 1.10*
Intercept	1.163559	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

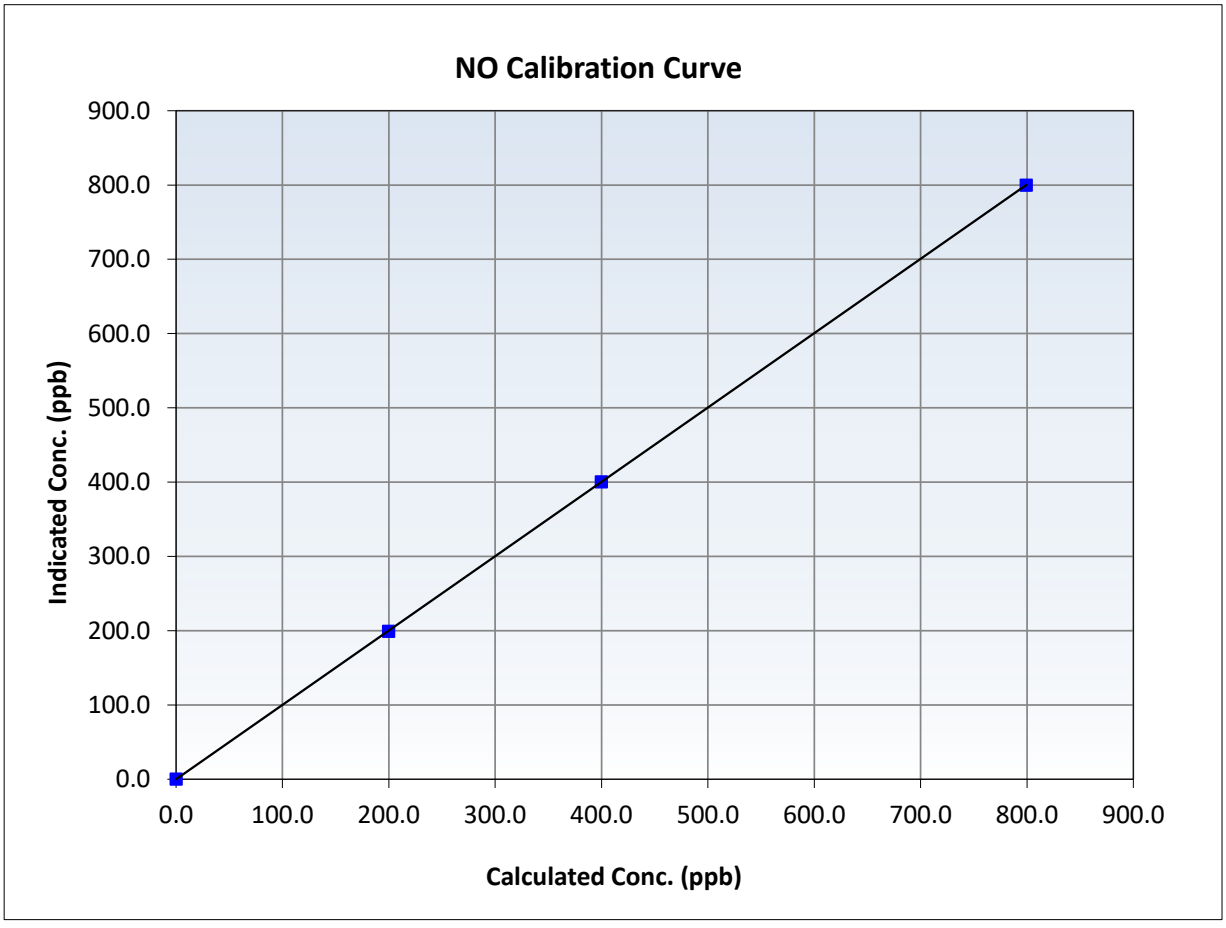
Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 11, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	8:23	End Time (MST):	12:37
Analyzer make:	Thermoscientific	Analyzer serial #:	12400232072

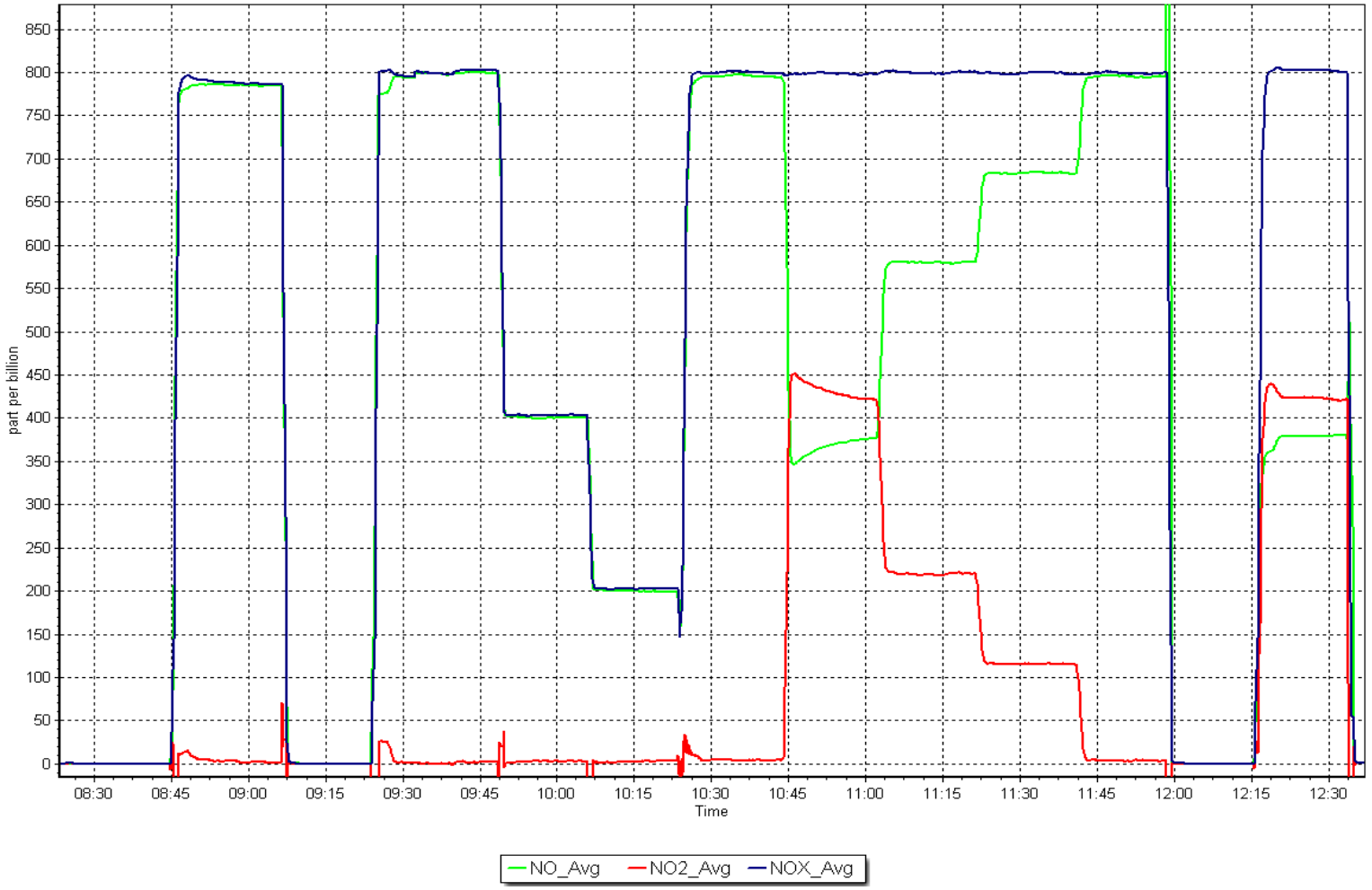
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
799.4	800.0	0.9992
399.7	400.5	0.9980
199.9	199.4	1.0024

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	1.000901	*0.90 - 1.10*
Intercept	-0.035991	*+/-20*



NO_X Calibration Plot Date: September 9, 2026 Location: Jackfish 2/3



Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Jackfish	Station Number:	AMS 27
Calibration Date:	September 10, 2026	Prev Cal Date:	October 3, 2025
Start Time (MST):	9:12	End Time (MST):	10:09
Tower Height (m):	10.0	Reason:	Routine

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	X16480
WS Calibrator:	MetOne 053	Serial Number:	R10866

Shaft RPM (Hz)	Calculated Speed (K/hr) (Cv)	Indicated Speed (K/hr) (Iv)	% Error *Limit = +/- 1.5%*
0	0.0	0.0	---
200	20.2	20.1	-0.3%
400	39.4	39.4	0.1%
600	58.6	58.6	0.1%
800	77.8	77.7	-0.1%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)	0.999999	0.999999	*≥0.9995*
Calculated slope	0.998137	1.000034	*0.98 - 1.02*
Calculated intercept	0.030641	0.001864	*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	X16496
As Found Declination (deg east of True North):	13	As Left Declination (deg east of True North):	13
Solar noon (MST):	1:20:58 PM	Calc Declination*:	12.48 Degrees
WD Calibrator:	Met One 040		* - calculated declination as per NOAA website

Physical Direction (Degrees) (Cv)	Indicated Direction (Degrees) (Iv)	% Error (based on 360° FS) *Limit = +/- 1%*
0	2.1	0.6%
90	90.6	0.2%
180	180.1	0.0%
270	270.5	0.1%
355	354.2	-0.2%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)	0.999977	0.999994	*≥0.9995*
Calculated slope	0.994058	1.006539	*0.97 - 1.03*
Calculated intercept	0.184524	-1.663646	*+/- 5*

Notes: Bearings still good. Cross arm was aligned using compass after calibration.

Calibration Performed By: Sean Bala

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS29
SURMONT 2
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	September 24, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	8:38	End time (MST):	11:28
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	49.95	ppm	Cal Gas Exp Date:	October 9, 2032
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:	1402

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1170050150	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.011057	1.000202	Backgd or Offset:	14.5	14.3
Calibration intercept:	-1.318762	-0.420320	Coeff or Slope:	0.946	0.934

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4920	80.1	800.2	808.1	0.990
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	808.0	Previous response	807.7	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4920	80.1	800.2	800.1	1.000
Mid point	4960	40.0	399.6	399.6	1.000
Low point	4980	20.0	199.8	198.1	1.009
As left zero	5000	0.0	0.0	0.3	----
As left span	4920	80.1	800.2	801.1	0.999
				Average Correction Factor:	1.003

Notes: No Maintenance done. Span adjusted.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

SO_2 Calibration Summary

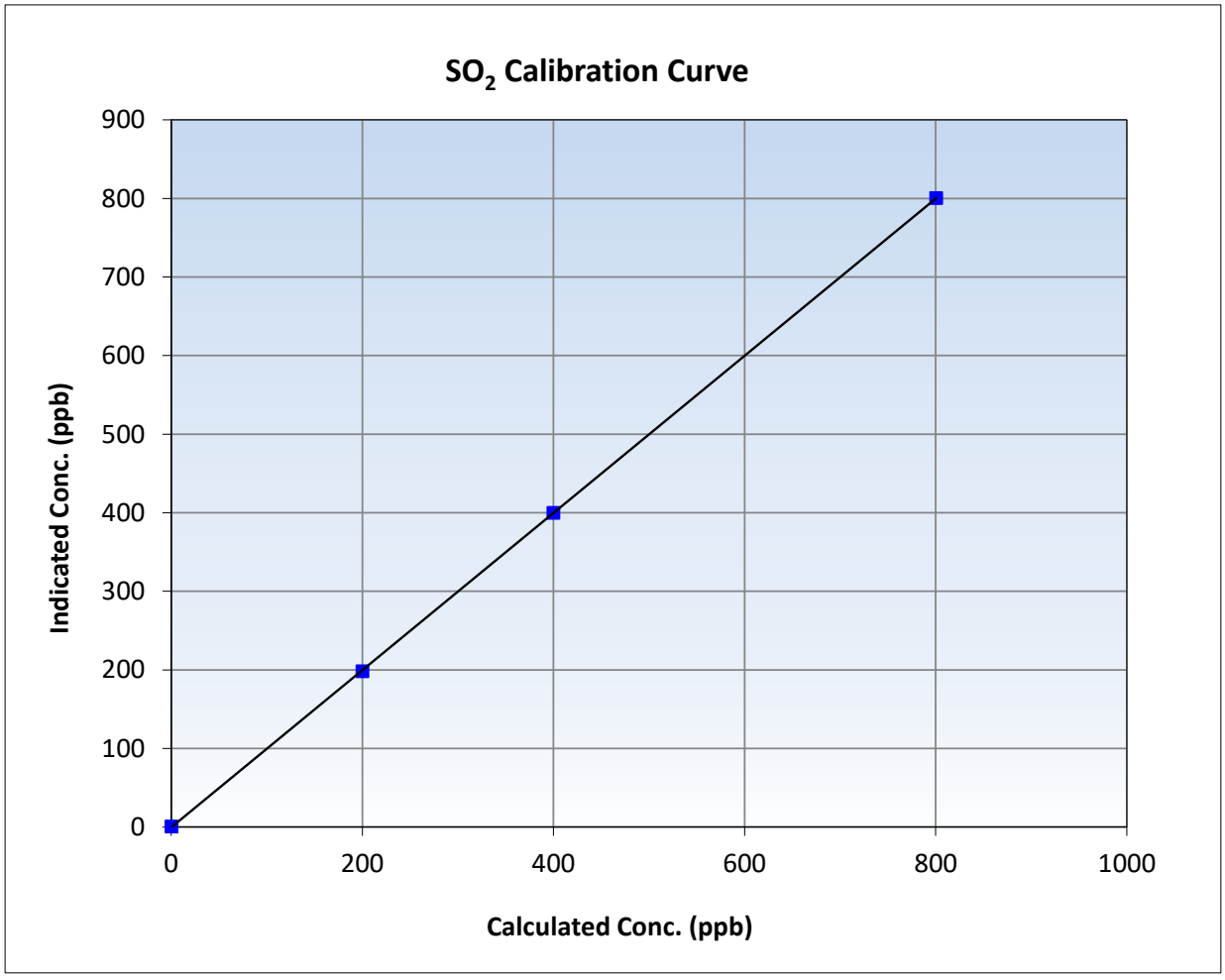
Station Information

Calibration Date:	September 24, 2026	Previous Calibration:	August 26, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	8:38	End Time (MST):	11:28
Analyzer make:	Thermo 43i	Analyzer serial #:	1170050150

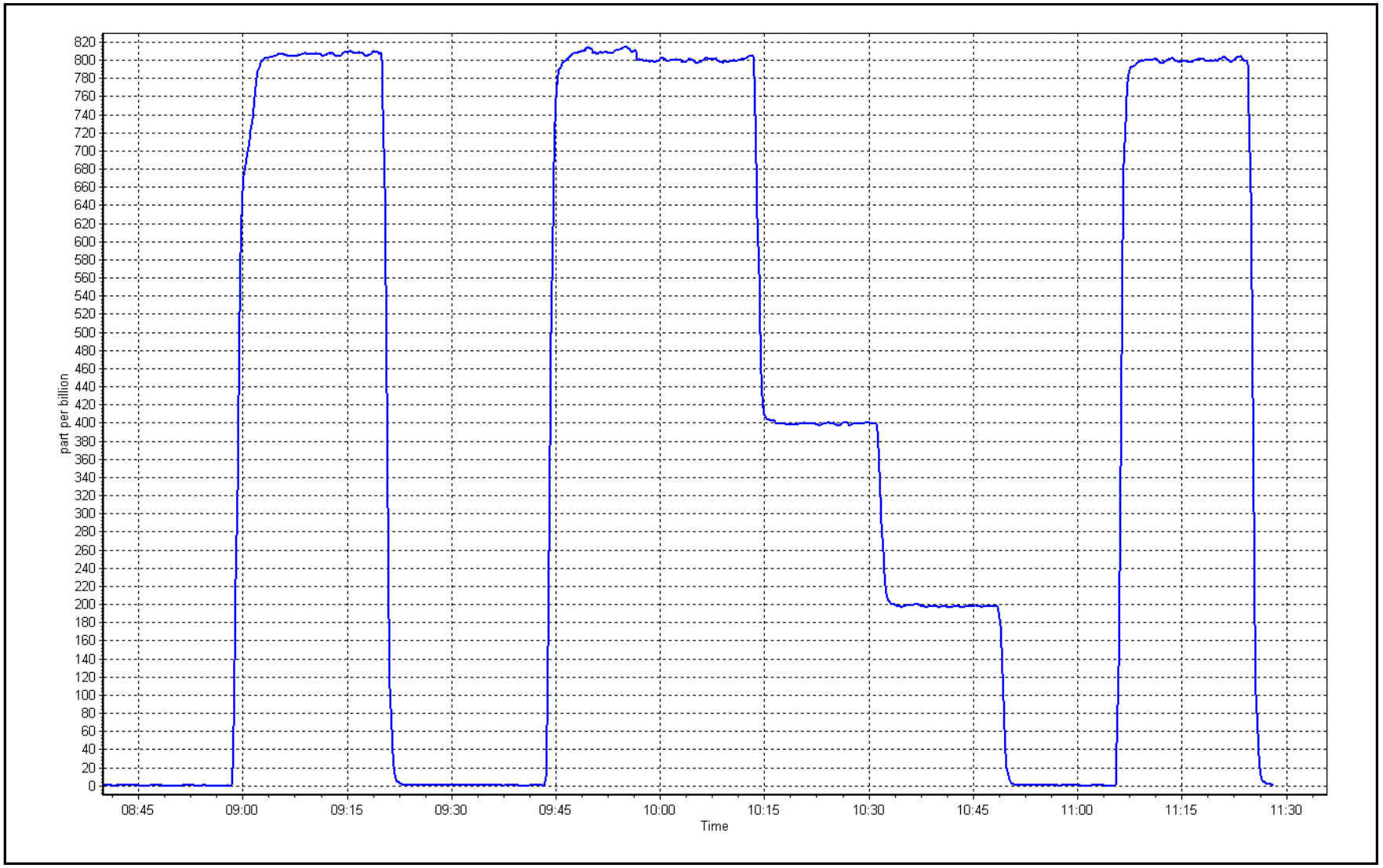
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
800.2	800.1	1.0001
399.6	399.6	1.0000
199.8	198.1	1.0086

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999993	*≥0.995*
Slope	1.000202	*0.90 - 1.10*
Intercept	-0.420320	*+/-30*



SO2 Calibration Plot Date: September 24, 2026 Location: Surmont 2



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	September 9, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	7:50	End time (MST):	12:07
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.750	ppm	Cal Gas Exp Date:	August 28, 2027
Cal Gas Cylinder #:	CC737848			
Removed Cal Gas Conc:	4.750	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	5472
ZAG Make/Model:	Teledyne API T701		Serial Number:	1402

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
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.013455	1.009740	Backgd or Offset:	1.00	1.00
Calibration intercept:	-0.140486	-0.160484	Coeff or Slope:	1.036	1.036

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4916	84.2	80.0	82.2	0.971
As found Mid point	4958	42.1	40.0	41.0	0.971
As found Low point	4979	21.1	20.0	20.3	0.975
New cylinder response					

Baseline Corr As found:	82.4	Prev response:	80.92	*% change:	1.8%
Baseline Corr 2nd AF pt:	41.2	AF Slope:	1.030601	AF Intercept:	-0.240494
Baseline Corr 3rd AF pt:	20.5	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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4916	84.2	80.0	80.6	0.992
Mid point	4958	42.1	40.0	40.3	0.992
Low point	4979	21.1	20.0	19.9	1.005
As left zero	5000	0.0	0.0	0.1	----
As left span	4916	84.2	80.0	79.0	1.012
SO2 Scrubber Check	4919	81.3	813.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	0.997
Date of last converter efficiency test:		December 5, 2024		108.1%	efficiency

Notes: Sox scrubber checked after the calibrator zero. No adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

H2S Calibration Summary

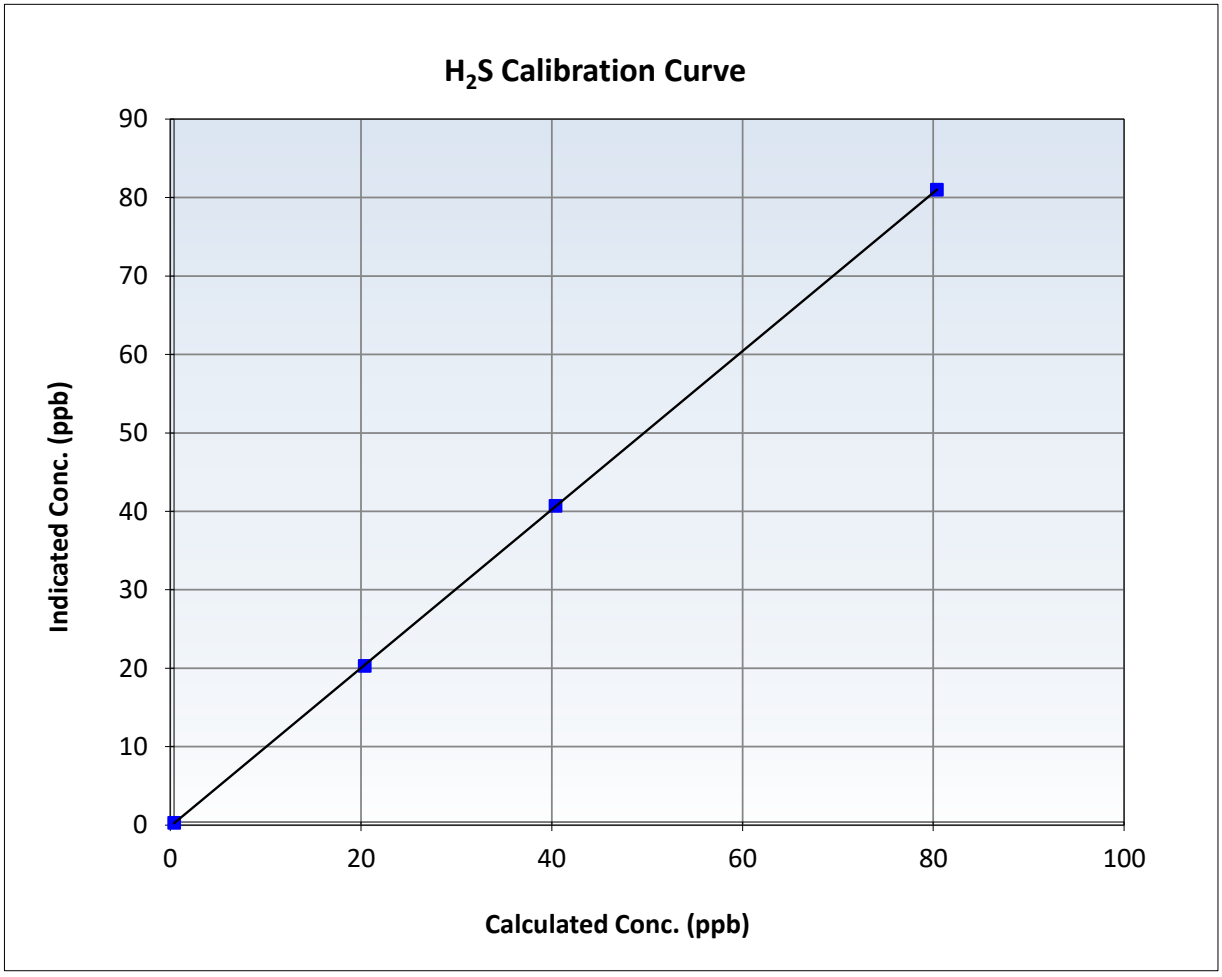
Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 6, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	7:50	End Time (MST):	12:07
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1200326170

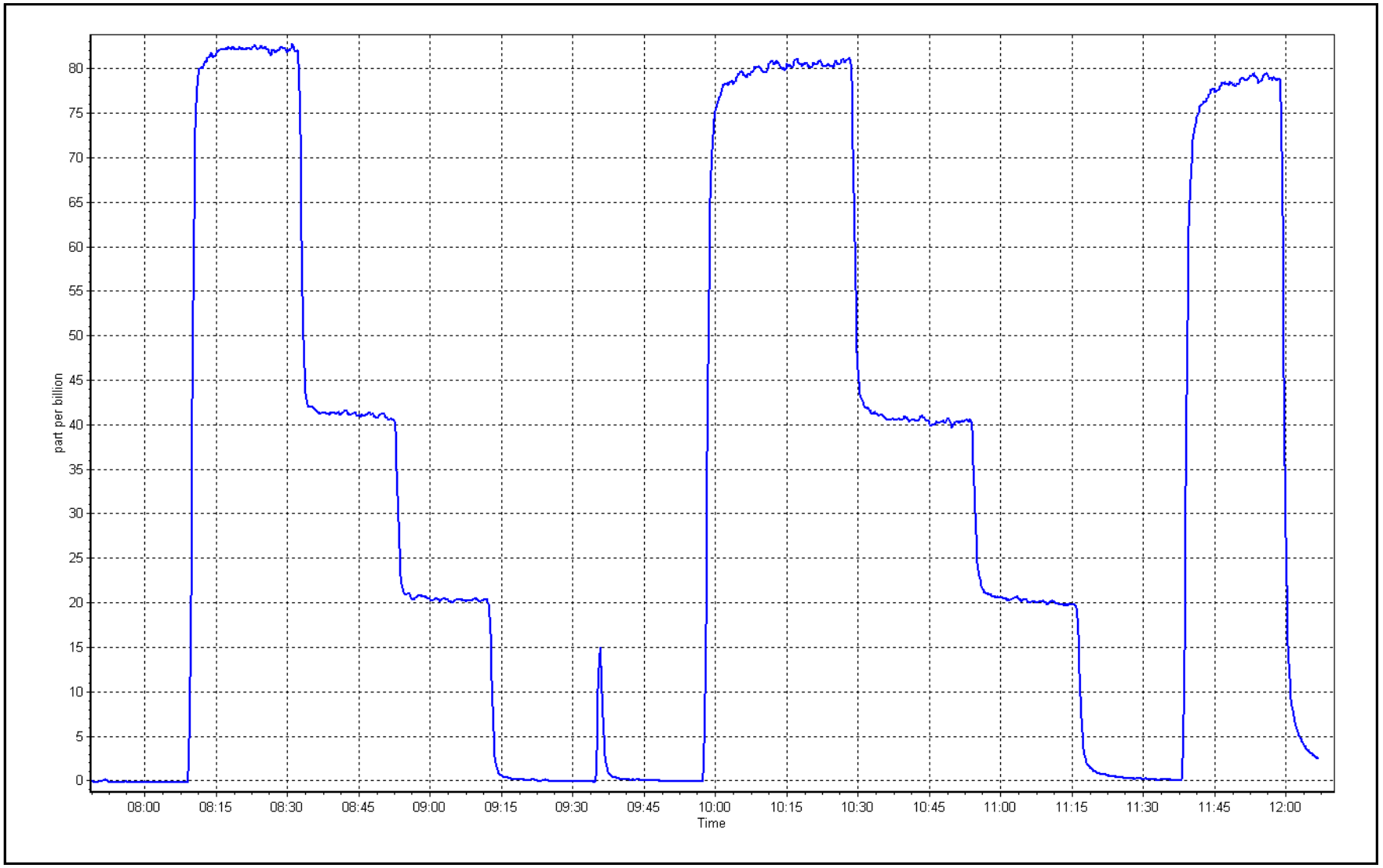
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
80.0	80.6	0.9924
40.0	40.3	0.9924
20.0	19.9	1.0049

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999992	*≥0.995*
Slope	1.009740	*0.90 - 1.10*
Intercept	-0.160484	*+/-3*



H2S Calibration Plot Date: September 9, 2026 Location: Surmont 2



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	September 1, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	7:57	End time (MST):	11:59
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC356229		Cal Gas Expiry Date:	October 9, 2032	
CH4 Cal Gas Conc.	503.7	ppm	CH4 Equiv Conc.	1066.9	ppm
C3H8 Cal Gas Conc.	204.8	ppm			
Removed Gas Cert:	NA		Removed Gas Expiry:	NA	
Removed CH4 Conc.	503.7	ppm	CH4 Equiv Conc.	1066.9	ppm
Removed C3H8 Conc.	204.8	ppm	Diff between cyl:		
Calibrator Make/Model:	Teledyne API T700		Serial Number:	5472	
ZAG Make/Model:	Teledyne API T701		Serial Number:	1402	

Analyzer Information

Analyzer make: Thermo 51i-LT Analyzer serial #: 1180540021

Analyzer Range: 0 - 20 ppm

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.000820	0.993830	Background:	2.26	2.22
Calibration intercept:	0.036235	-0.004775	Coefficient:	3.924	3.924

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	-0.15	----
As found High point	4920	80.1	17.09	16.92	1.001
As found Mid point	4960	40.0	8.54	8.42	0.995
As found Low point	4980	20.0	4.27	4.17	0.987
New cylinder response					
Baseline Corr As found:	17.07	Previous response	17.14	*% change	-0.4%
Baseline Corr 2nd AF pt:	8.58	AF Slope:	0.998025	AF Intercept:	-0.118122
Baseline Corr 3rd AF pt:	4.32	AF Correlation:	0.999982	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.03	----
High point	4920	80.1	17.09	17.00	1.006
Mid point	4960	40.0	8.54	8.46	1.009
Low point	4980	20.0	4.27	4.20	1.016
As left zero	5000	0.0	0.00	0.10	----
As left span	4920	80.1	17.09	16.94	1.009
				Average Correction Factor	1.010

Notes: Hydrogen cylinder and pump changed out. Zero adjusted.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

THC Calibration Summary

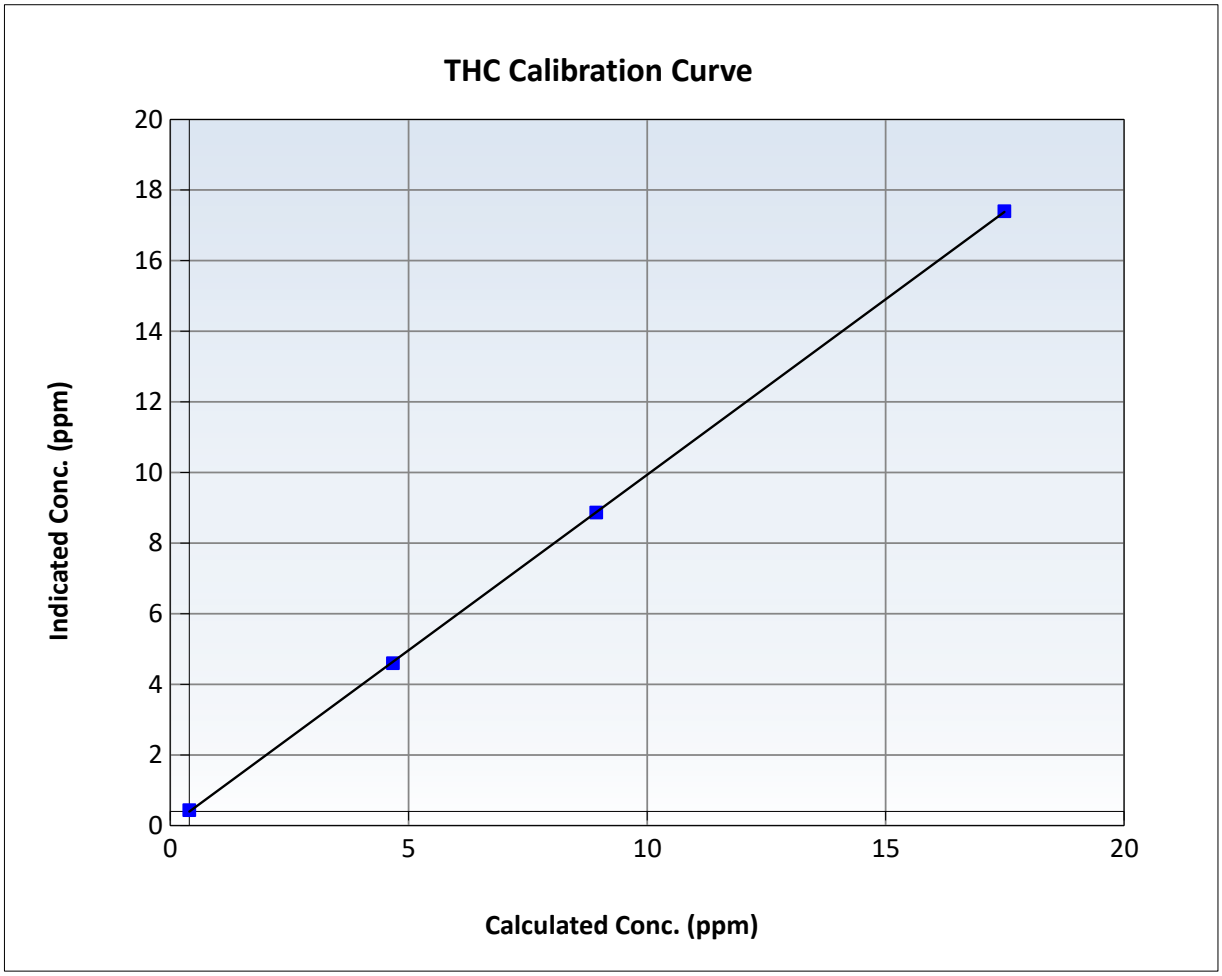
Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 26, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	7:57	End Time (MST):	11:59
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1180540021

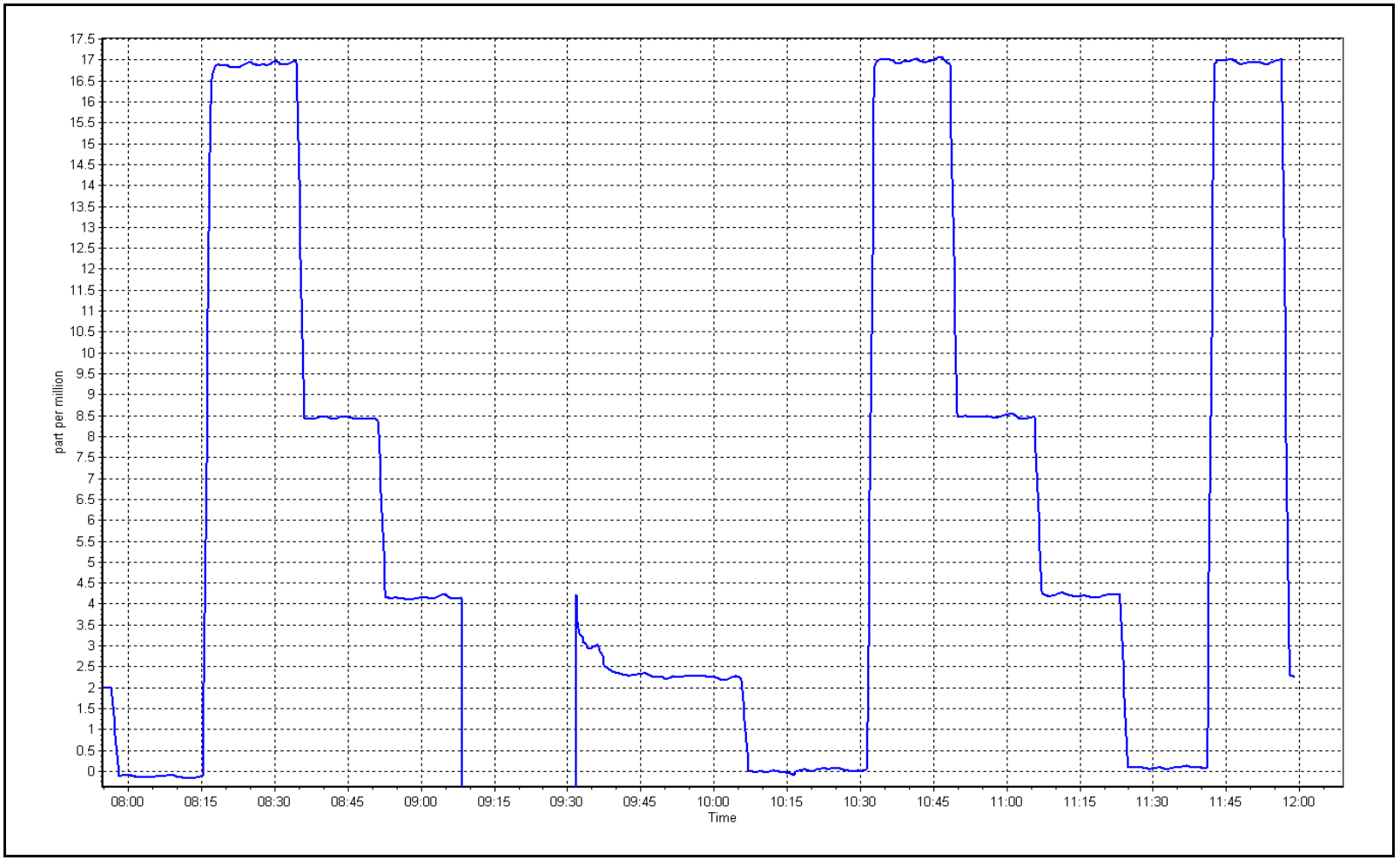
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.03	----
17.09	17.00	1.0055
8.54	8.46	1.0085
4.27	4.20	1.0161

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999981	*≥0.995*
Slope	0.993830	*0.90 - 1.10*
Intercept	-0.004775	*+/-1.5*



THC Calibration Plot Date: September 1, 2026 Location: Surmont 2



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Surmont 2
Station number:	AMS 29
Calibration Date:	September 10, 2026
Last Cal Date:	August 13, 2026
Start time (MST):	7:38
End time (MST):	12:16
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC218007	Cal Gas Expiry Date:	January 9, 2032
NOX Cal Gas Conc:	60.20 ppm	NO Cal Gas Conc:	60.00 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	60.20 ppm	Removed Gas NO Conc:	60.00 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	5472
ZAG make/model:	Teledyne API T701	Serial Number:	1402

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0	0.0	0.0	0.0	-0.1	0.0	-0.1	----	----
AF High point	4933	66.7	803.1	800.4	2.7	799.7	795.3	4.4	1.0041	1.0065
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	802.1 ppb	NO =	798.9 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = -0.3%
Baseline Corr 1st pt	NO_X =	799.8 ppb	NO =	795.3 ppb	As Found Statistics	*Percent Change	NO = -0.5%
Baseline Corr 2nd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO_X r^2:	Nx Sl:	Nx Int:
Baseline Corr 3rd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO r^2:	NO Sl:	NO Int:
					As found NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1410661329

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.979	0.979	NO bkgnd or offset:	9.0	9.0
NOX coeff or slope:	0.995	0.995	NOX bkgnd or offset:	9.1	9.1
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	154.0	154.0

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998214	0.993859
NO_X Cal Offset:	0.451293	0.031097
NO Cal Slope:	0.999385	0.995202
NO Cal Offset:	-1.068728	-1.429106
NO_2 Cal Slope:	0.992693	1.000726
NO_2 Cal Offset:	-0.824652	-0.632478

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0	0.0	0.0	0.0	0.0	0.1	-0.1	----	----
High point	4933	66.7	803.1	800.4	2.7	797.6	795.4	2.2	1.0069	1.0063
Mid point	4967	33.3	400.9	399.6	1.3	400.3	397.1	3.2	1.0015	1.0062
Low point	4983	16.7	201.1	200.4	0.7	198.7	195.4	3.3	1.0120	1.0257
As left zero	5000	0	0.0	0.0	0.0	0.1	0.1	0.0	----	----
As left span	4933	66.7	803.1	450.8	352.3	793.3	450.8	342.5	1.0124	1.0000
								Average Correction Factor	1.0068	1.0127

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	790.1	450.5	342.3	342.1	1.0005	100.0%
Mid GPT point	790.1	631.7	161.1	160.4	1.0042	99.6%
Low GPT point	790.1	710.0	82.8	81.6	1.0143	98.6%
				Average Correction Factor	1.0063	99.4%

Notes: No maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

NO_X Calibration Summary

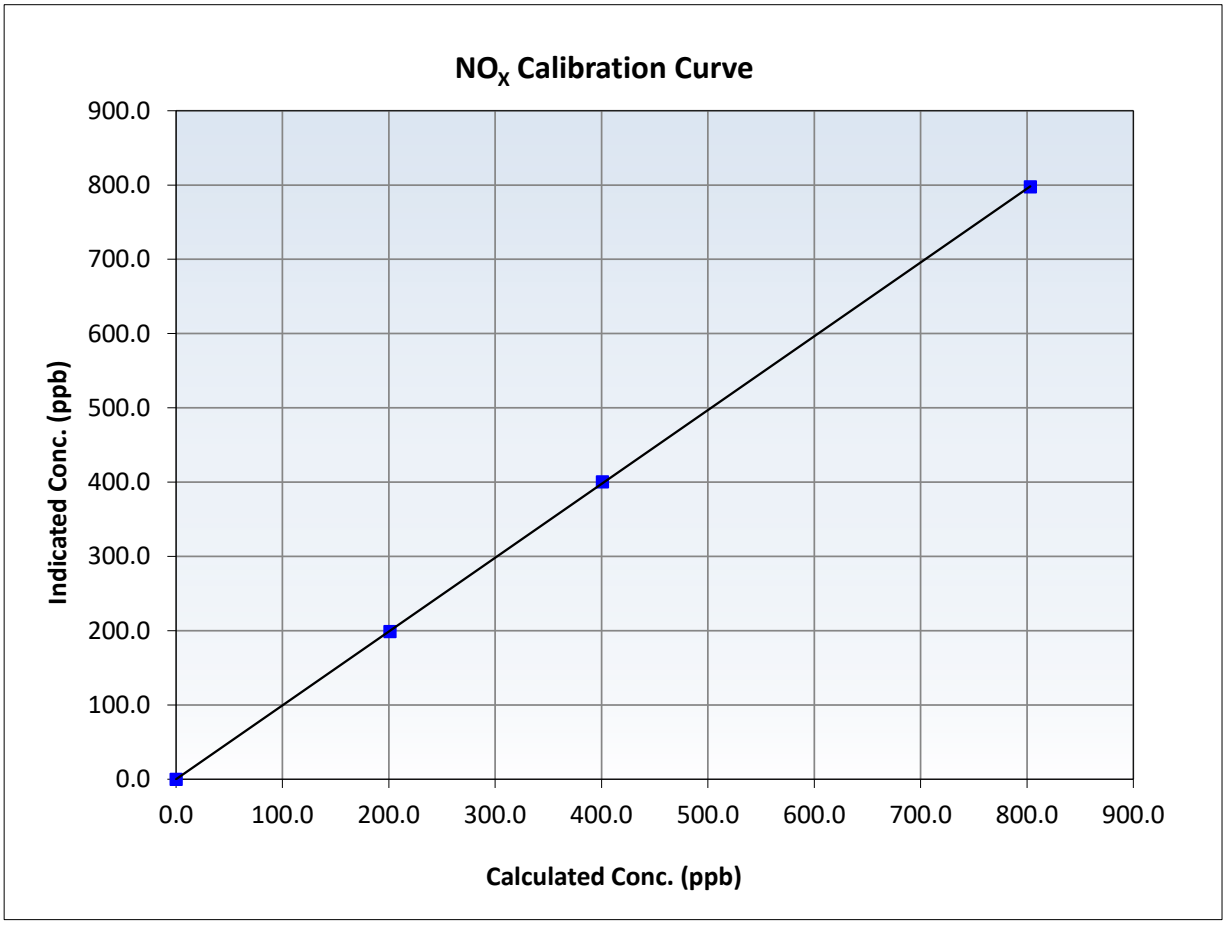
Station Information

Calibration Date:	September 10, 2026	Previous Calibration:	August 13, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	7:38	End Time (MST):	12:16
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661329

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
803.1	797.6	1.0069
400.9	400.3	1.0015
201.1	198.7	1.0120

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	0.993859	*0.90 - 1.10*
Intercept	0.031097	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

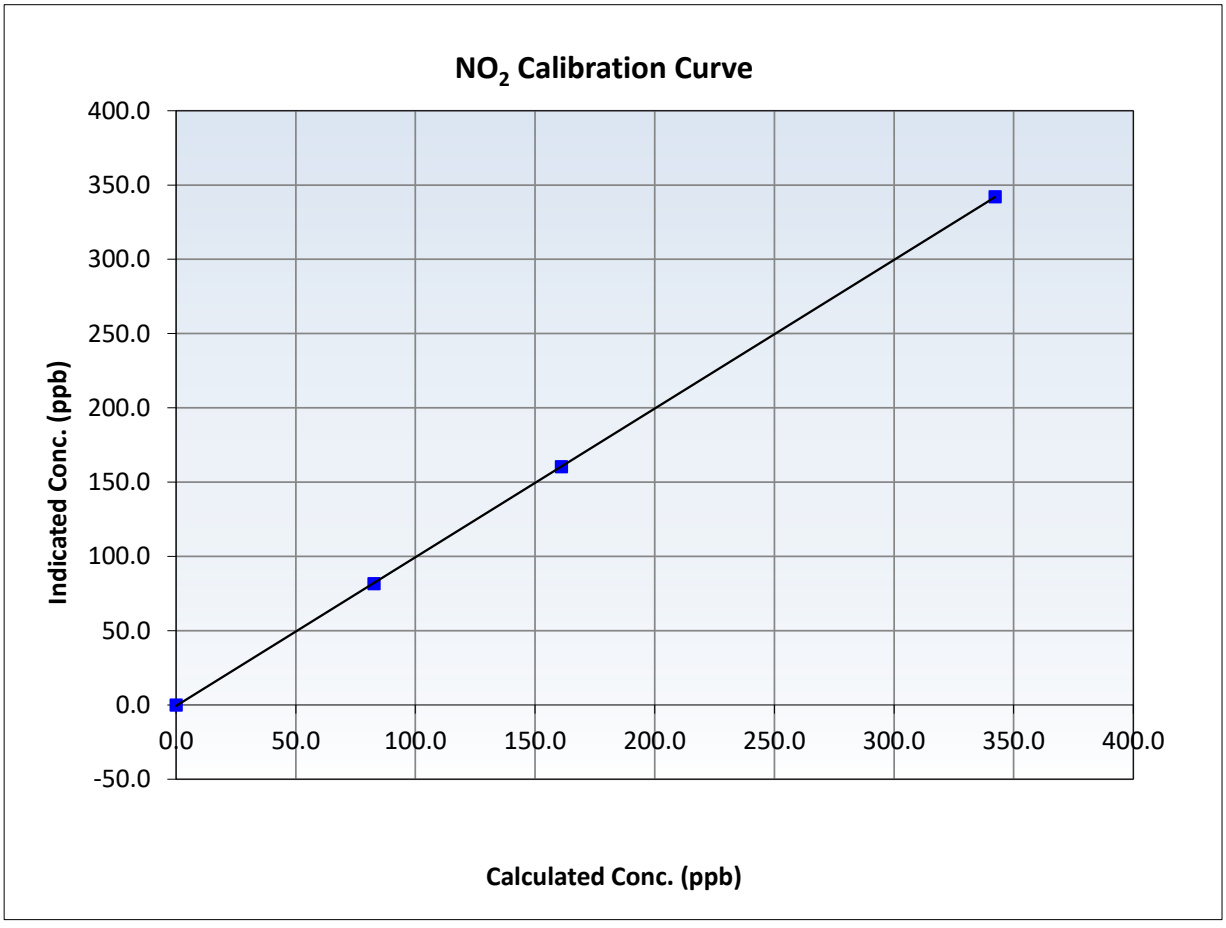
Station Information

Calibration Date:	September 10, 2026	Previous Calibration:	August 13, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	7:38	End Time (MST):	12:16
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661329

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
342.3	342.1	1.0005
161.1	160.4	1.0042
82.8	81.6	1.0143

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999989	*≥0.995*
Slope	1.000726	*0.90 - 1.10*
Intercept	-0.632478	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

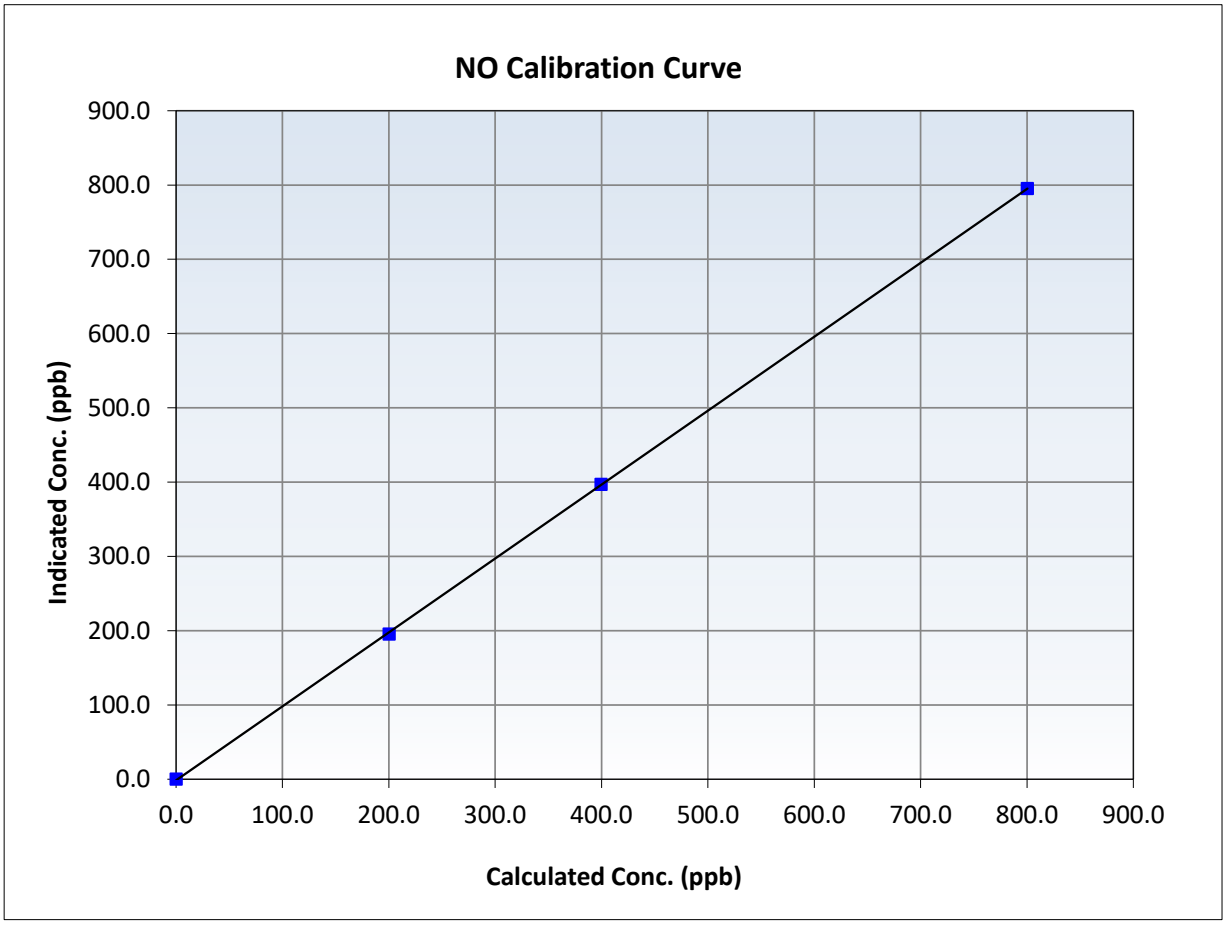
Station Information

Calibration Date:	September 10, 2026	Previous Calibration:	August 13, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	7:38	End Time (MST):	12:16
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661329

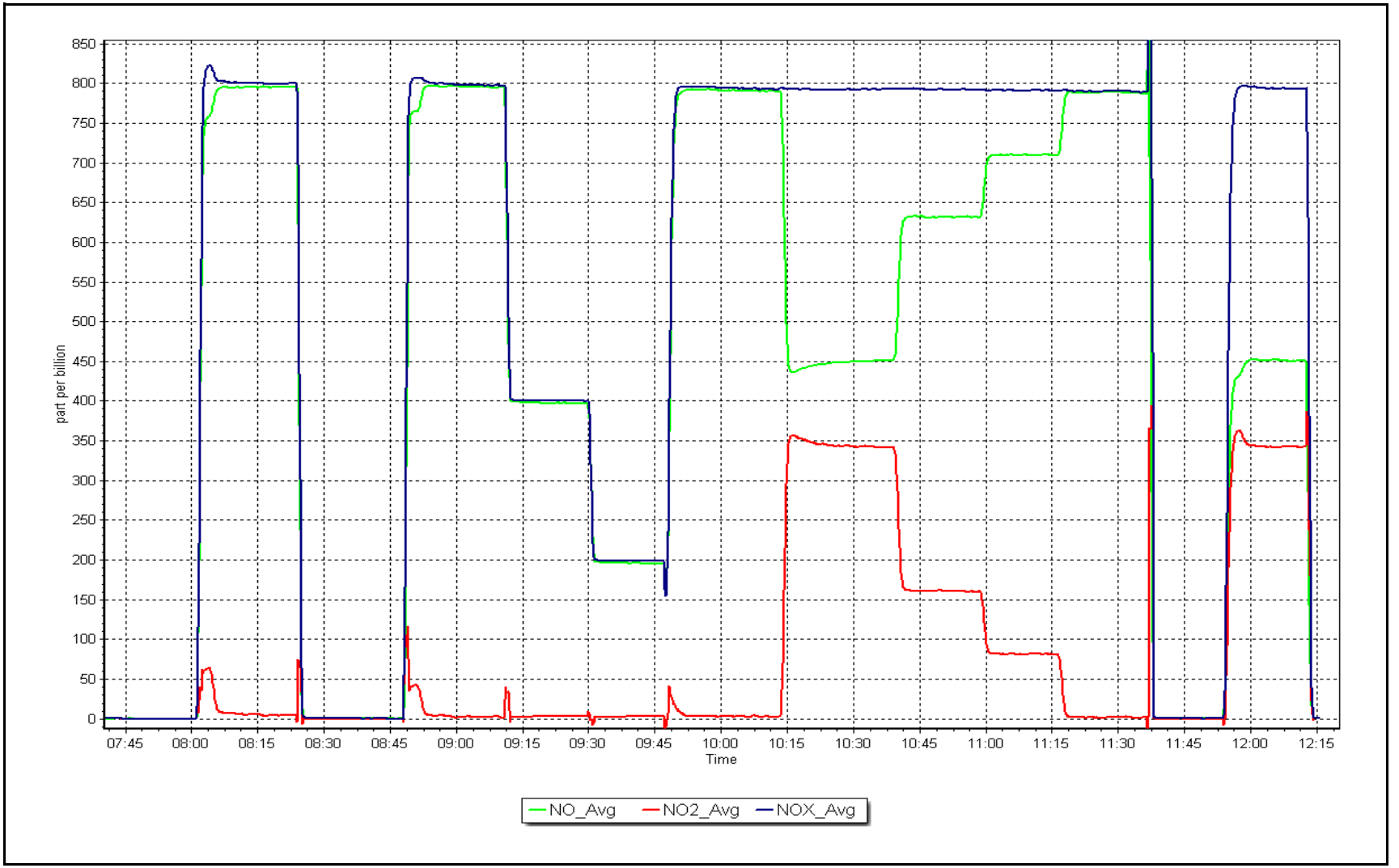
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.4	795.4	1.0063
399.6	397.1	1.0062
200.4	195.4	1.0257

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999971	*≥0.995*
Slope	0.995202	*0.90 - 1.10*
Intercept	-1.429106	*+/-20*



NO_X Calibration Plot Date: September 10, 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:	September 24, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	7:46	End time (MST):	8:42
Analyzer Make:	API T640	S/N:	2236
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)	4.5	4.4	4.5	☐	+/- 2 °C
P (mmHg)	714.6	714.4	714.6	☐	+/- 10 mmHg
Flow (LPM)	5.00	5.16	5.00	☐	+/- 0.25 LPM
PW% (pump)	90	-----	34	☑	>80%
Zero Verification	PM w/o HEPA:	3.2	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	11.7	11.0	11.3	☐	+/- 0.5

Date Optical Chamber Cleaned: August 26, 2026

Date Disposable Filter Changed: August 26, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0.0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: August 26, 2026

Date RH/T Sensor Cleaned: August 26, 2026

Notes: Pump was replaced after as founds. Leak check, flow and PMT checked before and after Pump change.

Calibration by: Melissa Lemay

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS30
ELLS RIVER
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	September 1, 2026	Last Cal Date:	August 7, 2026
Start time (MST):	9:01	End time (MST):	12:31
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.010125	1.009125	Backgd or Offset:	10.9	10.9
Calibration intercept:	-1.495096	-0.494916	Coeff or Slope:	1.013	1.013

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.3	----
As found High point	4918	82.1	800.5	804.1	0.996
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	803.8	Previous response	807.1	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.4	----
High point	4918	82.1	800.5	807.7	0.991
Mid point	4959	41.0	399.8	402.5	0.993
Low point	4979	20.5	199.9	200.3	0.998
As left zero	5000	0.0	0.0	0.5	----
As left span	4918	82.1	800.5	810.4	0.988
				Average Correction Factor:	0.994

Notes: Inlet filter changed after as founds, no changes made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

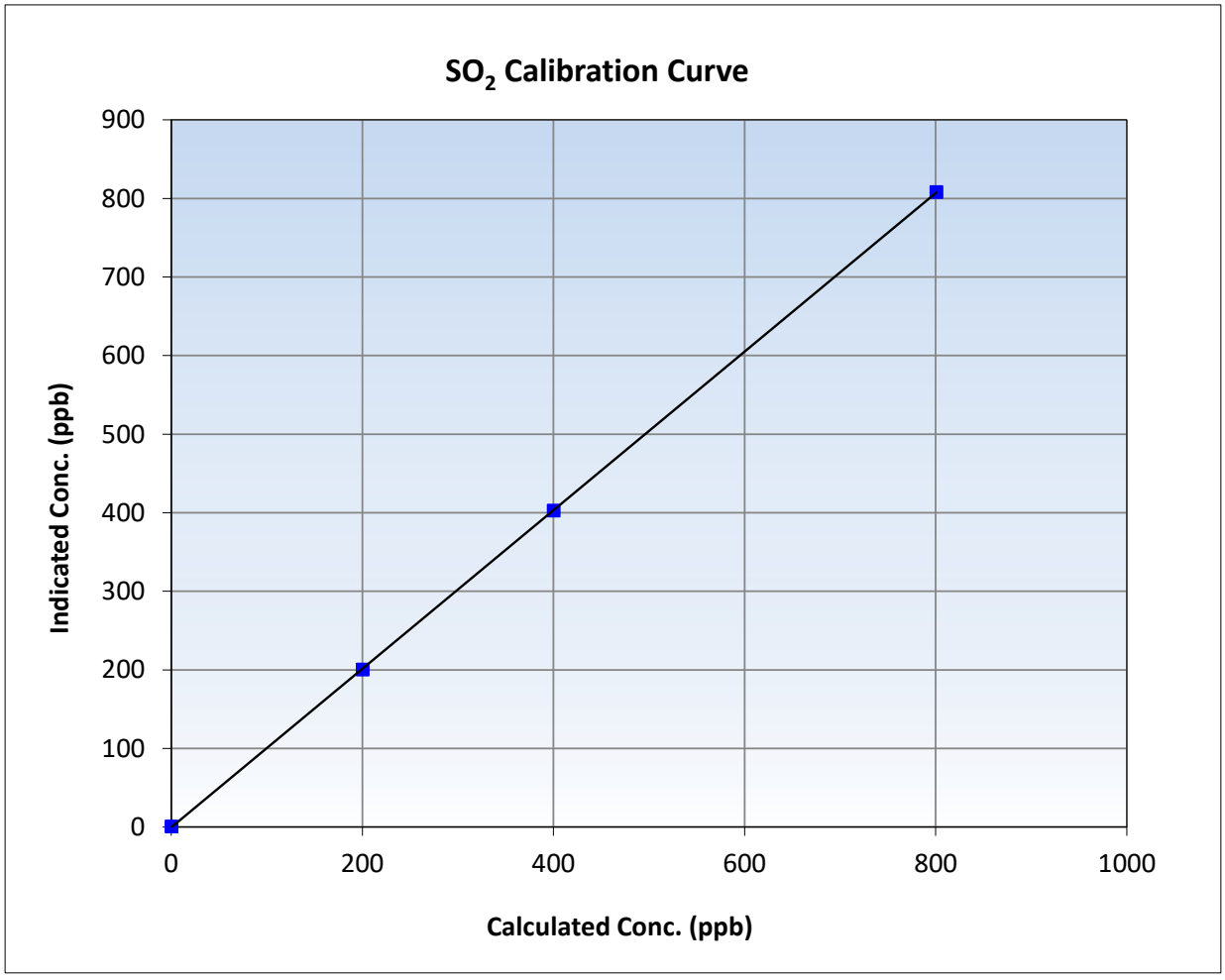
Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 7, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:01	End Time (MST):	12:31
Analyzer make:	Thermo 43i	Analyzer serial #:	1008841397

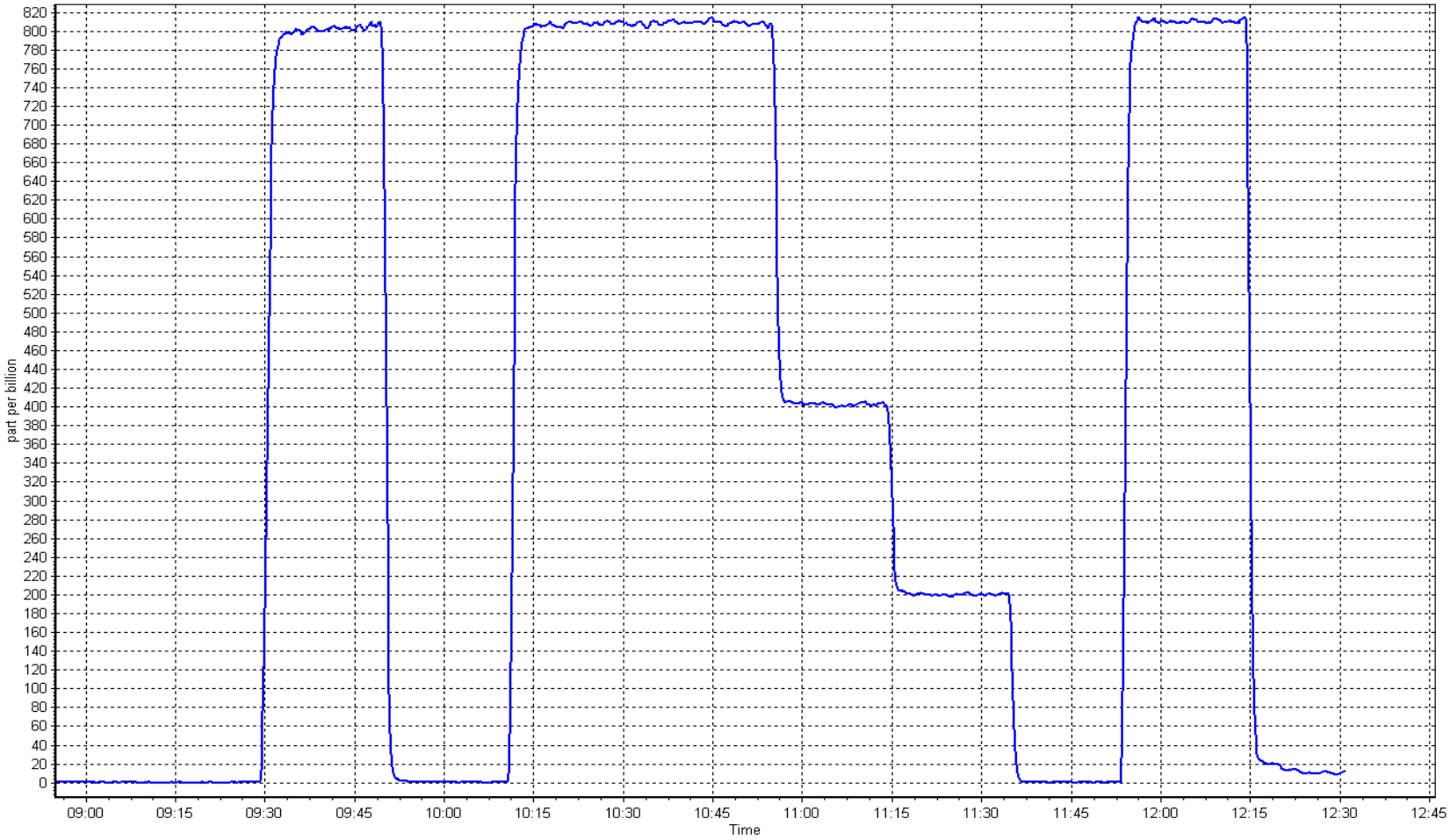
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
800.5	807.7	0.9910
399.8	402.5	0.9932
199.9	200.3	0.9980

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999994	*≥0.995*
Slope	1.009125	*0.90 - 1.10*
Intercept	-0.494916	*+/-30*



SO2 Calibration Plot Date: September 1, 2026 Location: Ells River



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	September 3, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	9:06	End time (MST):	13:33
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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.007189	0.999050	Backgd or Offset:	3.94	3.99
Calibration intercept:	0.019507	-0.020599	Coeff or Slope:	1.271	1.271

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.3	----
As found High point	4920	80.2	80.0	78.2	1.027
As found Mid point	4960	40.1	40.0	39.8	1.013
As found Low point	4980	20.0	20.0	19.8	1.024
New cylinder response					

Baseline Corr As found:	77.9	Prev response:	80.63	*% change:	-3.5%
Baseline Corr 2nd AF pt:	39.5	AF Slope:	0.973781	AF Intercept:	0.438929
Baseline Corr 3rd AF pt:	19.5	AF Correlation:	0.999937	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4920	80.2	80.0	79.9	1.002
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	81.4	0.983
SO2 Scrubber Check	4918	82.0	820.0	0.0	----
Date of last scrubber change:		16-Dec-25		Ave Corr Factor	1.003
Date of last converter efficiency test:					

Notes: Inlet filter changed after as founds, no changes made, scrubber check passed after calibrator zero.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

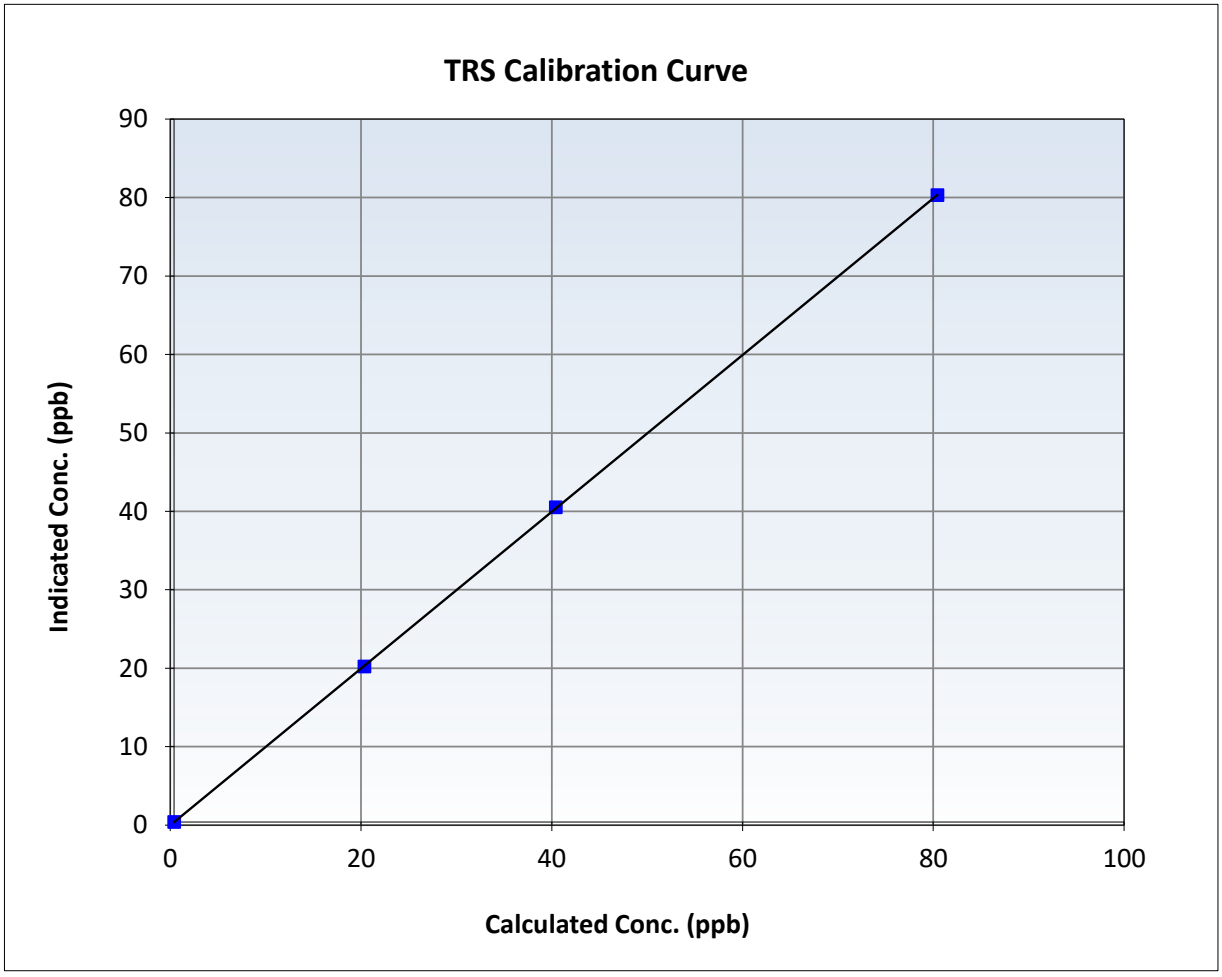
TRS Calibration Summary

Station Information

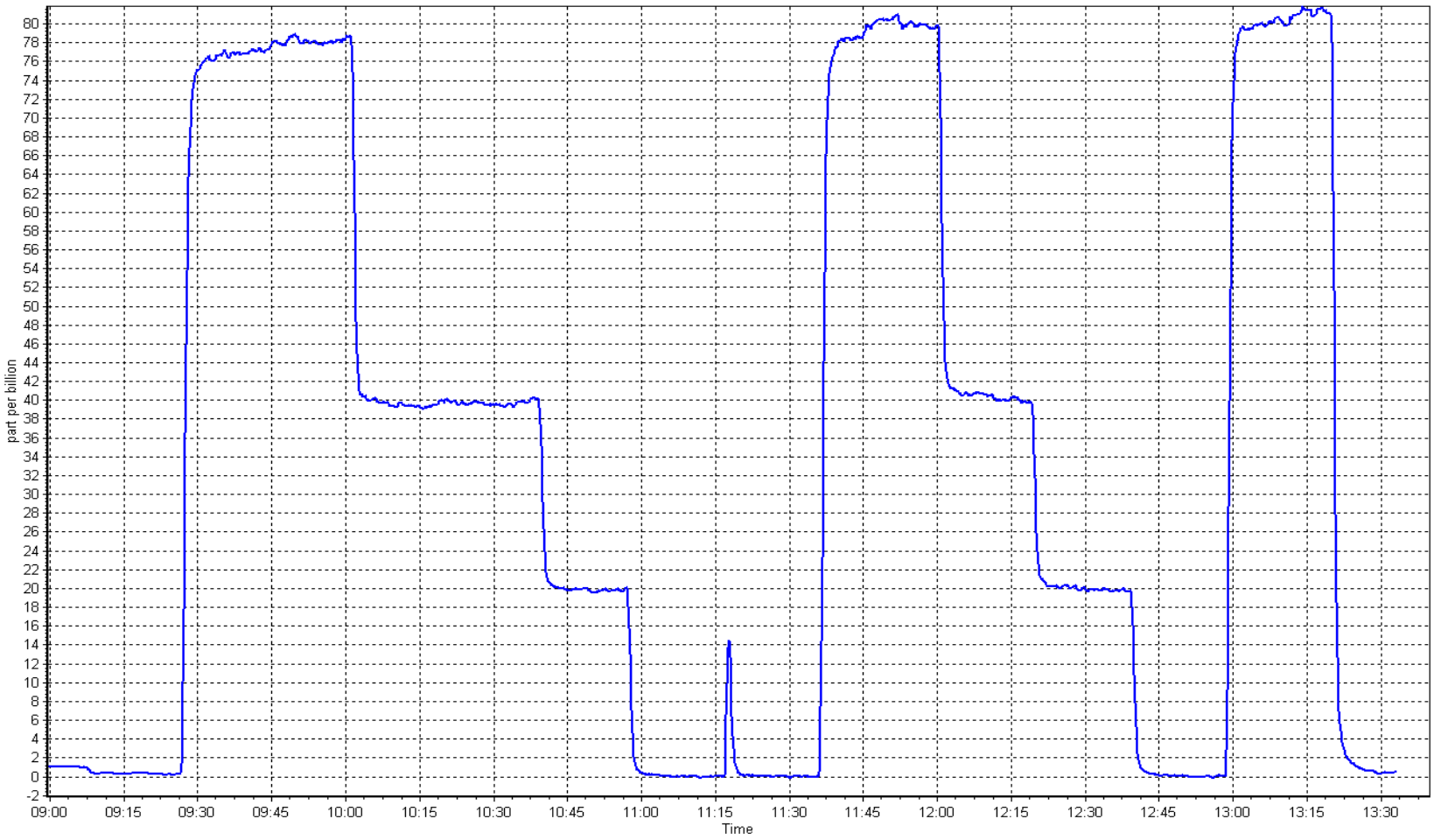
Calibration Date:	September 3, 2026	Previous Calibration:	August 11, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:06	End Time (MST):	13:33
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1170050152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999990	*≥0.995*
80.0	79.9	1.0017	Slope	0.999050	*0.90 - 1.10*
40.0	40.1	0.9980			
20.0	19.8	1.0081	Intercept	-0.020599	*+/-3*



TRS Calibration Plot Date: September 3, 2026 Location: Ells River



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	September 1, 2026	Last Cal Date:	August 7, 2026
Start time (MST):	9:01	End time (MST):	12:28
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC350110	Cal Gas Expiry Date:	Monday, March 10, 2031
CH4 Cal Gas Conc.	496.6 ppm	CH4 Equiv Conc.	1066.4 ppm
C3H8 Cal Gas Conc.	207.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	496.6 ppm	CH4 Equiv Conc.	1066.4 ppm
Removed C3H8 Conc.	207.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	5707
Zero Air Gen model:	API T701H	Serial Number:	358

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1193585649
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	4.33E-04	4.46E-04	NMHC SP Ratio:	8.25E-05	8.48E-05
CH4 Retention time:	17.4	17.4	NMHC Peak Area:	113453	110442
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	17.51	16.99	1.031
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.99	Prev response	17.15	*% change	-1.0%
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)) *Limit = 0.95-1.05*
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	8.63	1.013
Low point	4979	20.5	4.37	4.29	1.019
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.51	17.46	1.003
				Average Correction Factor	1.011

Notes: Inlet filter changed after as founds. Span adjusted, H2 Cyl swapped.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	9.36	9.10	1.029
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.10	Prev response	9.20	*% change	-1.2%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	9.36	9.36	1.000
Mid point	4959	41.0	4.67	4.64	1.007
Low point	4979	20.5	2.34	2.31	1.012
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.36	9.33	1.003
				Average Correction Factor	1.006

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	8.15	7.89	1.033
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.89	Prev response	7.95	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	8.15	8.15	1.001
Mid point	4959	41.0	4.07	4.00	1.019
Low point	4979	20.5	2.04	1.98	1.027
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.15	8.14	1.002
				Average Correction Factor	1.016

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.982344	1.000351
THC Cal Offset:	-0.049083	-0.053214
CH4 Cal Slope:	0.978514	1.000324
CH4 Cal Offset:	-0.030988	-0.035752
NMHC Cal Slope:	0.985351	1.000608
NMHC Cal Offset:	-0.017495	-0.017662

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

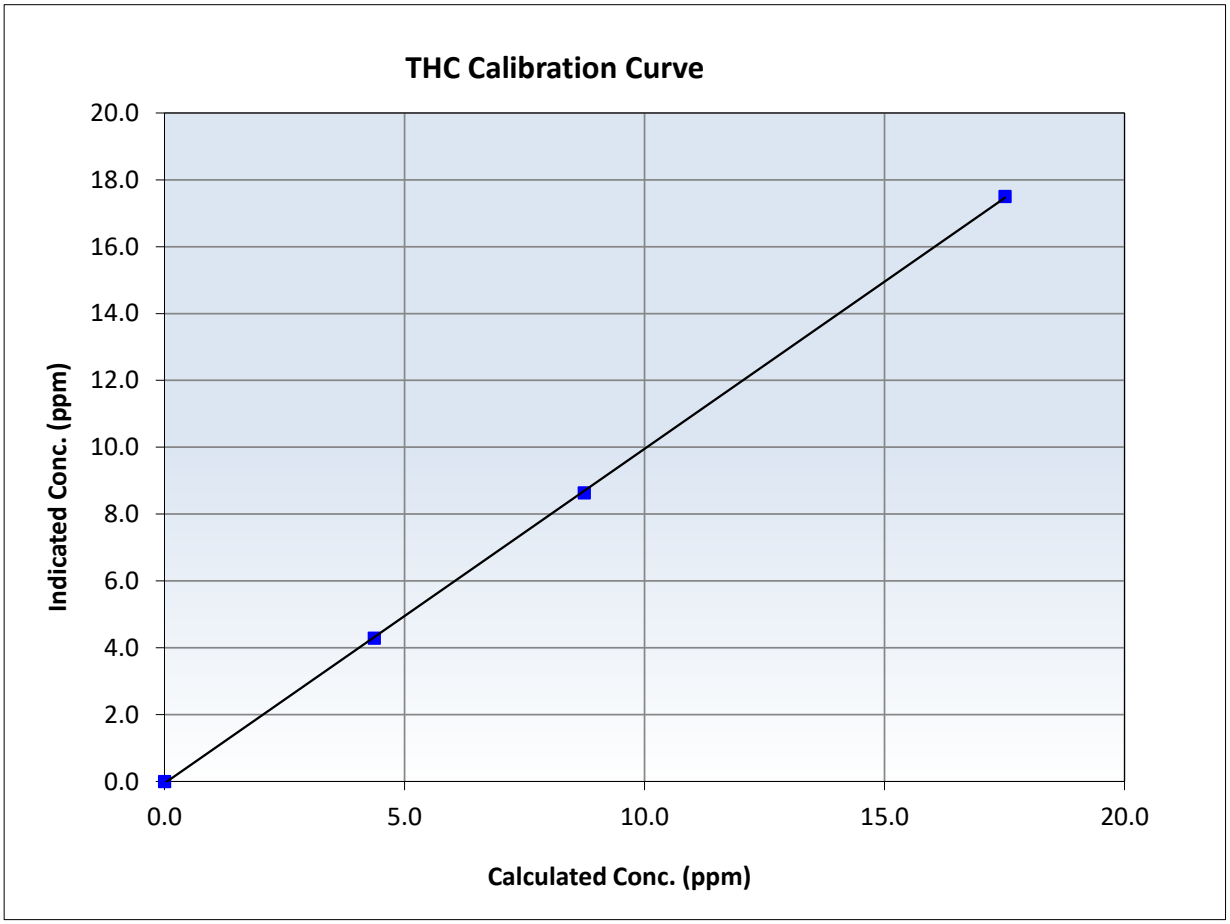
THC Calibration Summary

Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 7, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:01	End Time (MST):	12:28
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585649

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999947	≥0.995
17.51	17.50	1.0005	Slope	1.000351	0.90 - 1.10
8.74	8.63	1.0129	Intercept	-0.053214	+/-0.5
4.37	4.29	1.0190			



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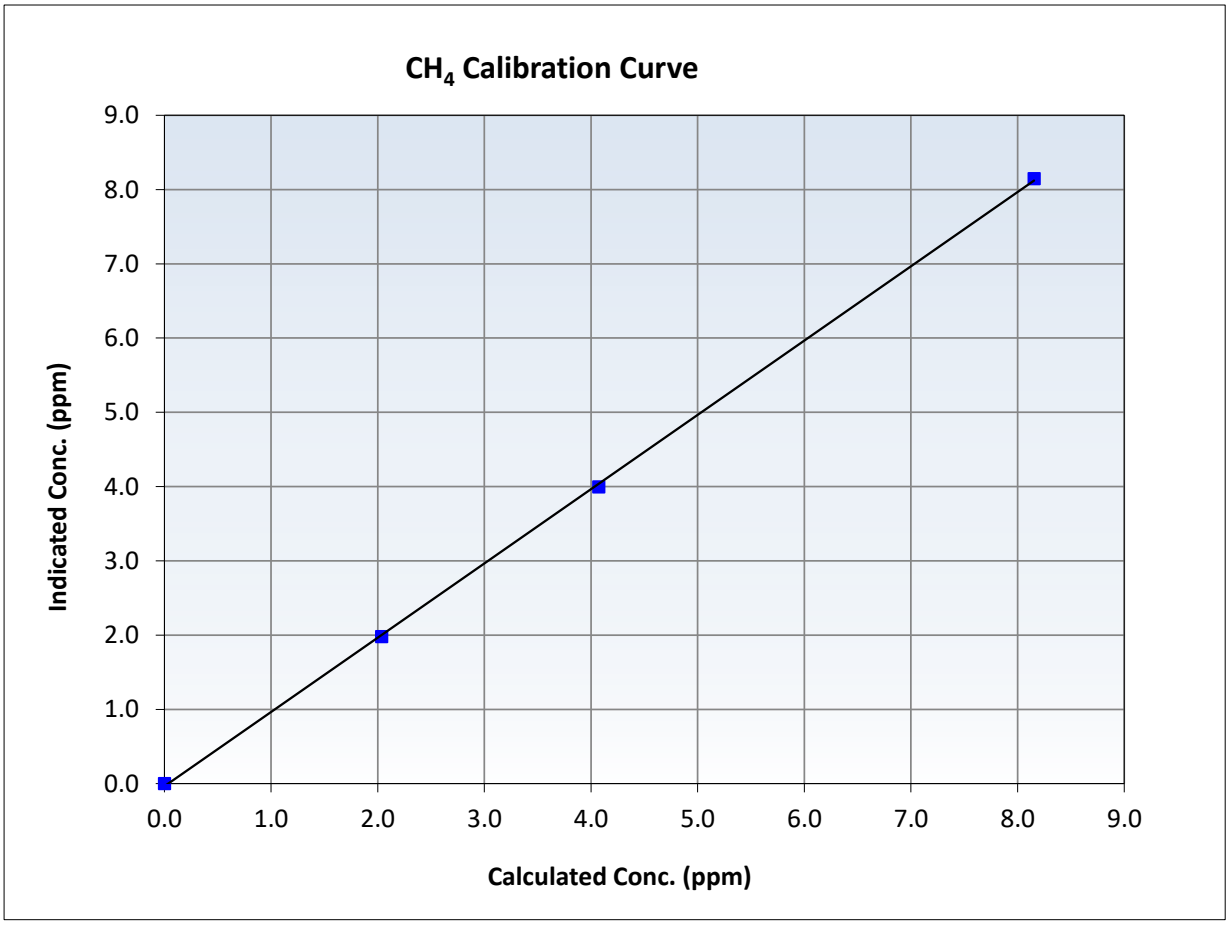
CH_4 Calibration Summary

Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 7, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:01	End Time (MST):	12:28
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585649

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999886	≥0.995
8.15	8.15	1.0009	Slope	1.000324	0.90 - 1.10
4.07	4.00	1.0193	Intercept	-0.035752	+/-0.5
2.04	1.98	1.0274			



Wood Buffalo Environmental Association

NMHC Calibration Summary

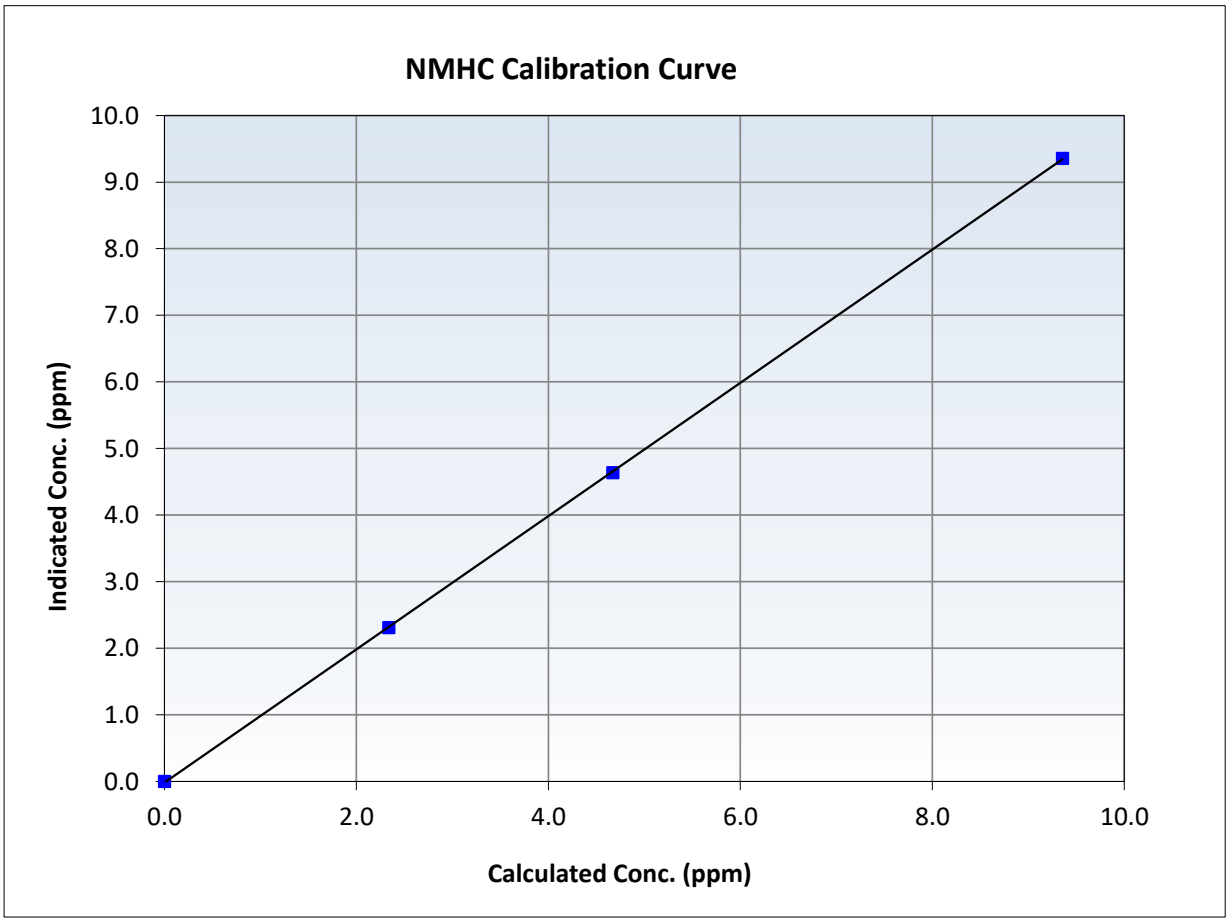
Station Information

Calibration Date:	September 1, 2026	Previous Calibration:	August 7, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:01	End Time (MST):	12:28
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585649

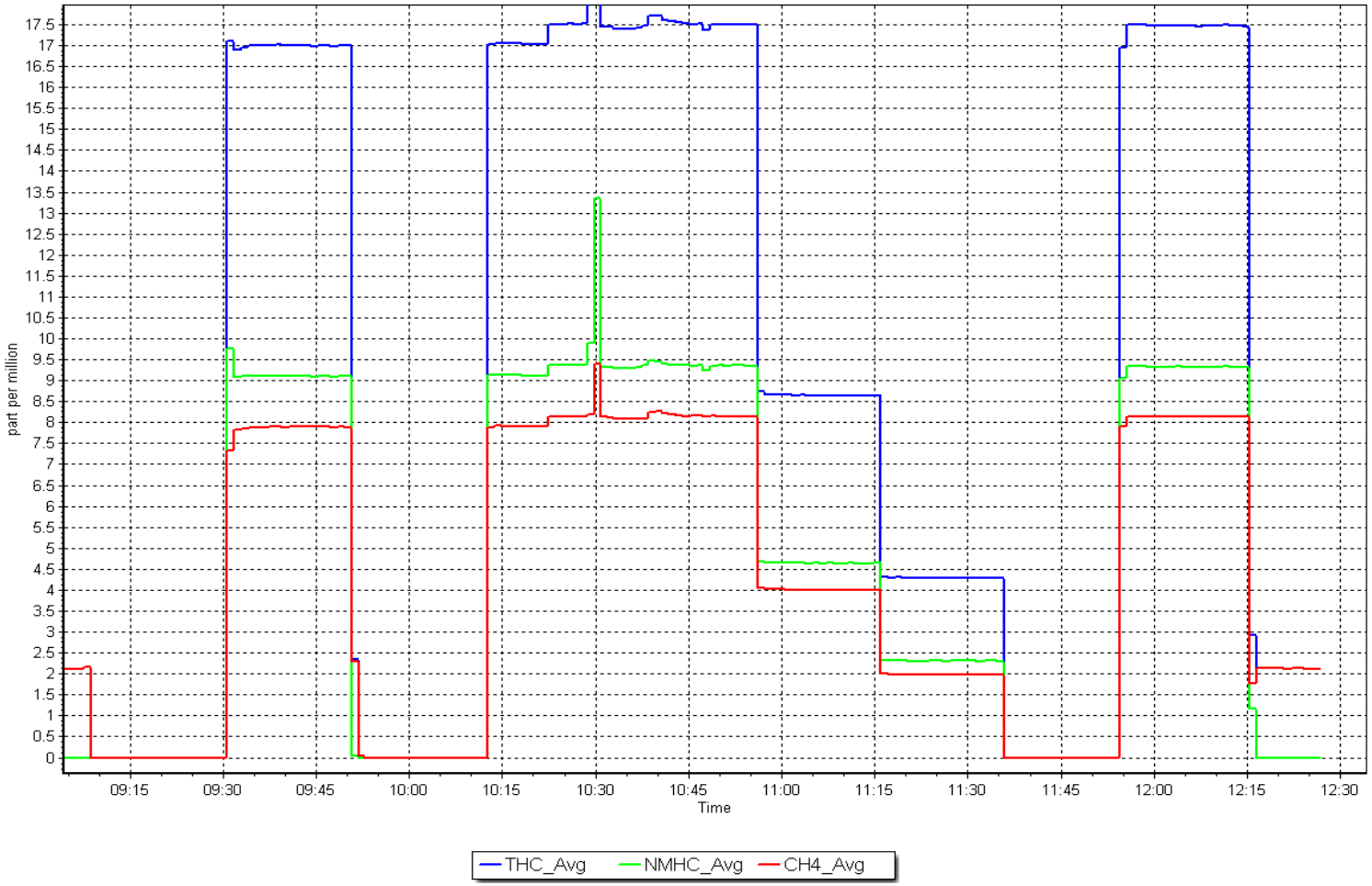
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
9.36	9.36	1.0000
4.67	4.64	1.0072
2.34	2.31	1.0119

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999981	*≥0.995*
Slope	1.000608	*0.90 - 1.10*
Intercept	-0.017662	*+/-0.5*



NMHC Calibration Plot Date: September 1, 2026 Location: Ells River



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Ells River
Station number:	AMS 30
Calibration Date:	September 2, 2026
Last Cal Date:	August 10, 2026
Start time (MST):	9:11
End time (MST):	14:32
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0027487	Cal Gas Expiry Date:	January 9, 2032
NOX Cal Gas Conc:	59.30 ppm	NO Cal Gas Conc:	59.10 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	59.30 ppm	Removed Gas NO Conc:	59.10 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	API T700	Serial Number:	5707
ZAG make/model:	4.7	Serial Number:	358

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.2	-1.2	1.0	----	----
AF High point	4932	67.7	803.0	800.3	2.7	780.8	774.0	6.8	1.0281	1.0323
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 801.8 ppb	NO = 798.8 ppb
Baseline Corr 1st pt	NO_X = 781.0 ppb	NO = 775.2 ppb
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

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 Int:

*Percent Change	NO_X = -2.7%
*Percent Change	NO = -3.0%

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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Teledyne API T200 Serial Number: 723

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.072	1.102	NO bkgnd or offset:	2.3	2.3
NOX coeff or slope:	1.061	1.089	NOX bkgnd or offset:	1.2	1.2
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	5.2	4.7

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998375	0.998419
NO_X Cal Offset:	0.122336	-0.217902
NO Cal Slope:	1.000343	1.002128
NO Cal Offset:	-1.758861	-2.258400
NO_2 Cal Slope:	0.992633	0.983867
NO_2 Cal Offset:	0.835321	1.558299

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	-0.2	-1.0	0.8	----	----
High point	4932	67.7	803.0	800.3	2.7	801.1	799.8	1.3	1.0023	1.0006
Mid point	4966	33.8	400.9	399.5	1.4	401.2	399.1	2.1	0.9992	1.0011
Low point	4983	16.9	200.4	199.8	0.7	199.1	195.6	3.4	1.0067	1.0213
As left zero	5000	0.0	0.0	0.0	0.0	-0.4	-1.1	0.6	----	----
As left span	4932	67.7	803.0	399.4	403.6	799.7	399.4	400.3	1.0041	1.0000
							Average Correction Factor		1.0028	1.0076

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.8	----	----
High GPT point	798.4	394.4	406.7	401.7	1.0125	98.8%
Mid GPT point	798.4	606.1	195.0	192.7	1.0120	98.8%
Low GPT point	798.4	705.0	96.1	97.6	0.9847	101.6%
				Average Correction Factor	1.0031	99.7%

Notes: Inlet filter changed after as founds, span adjusted

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

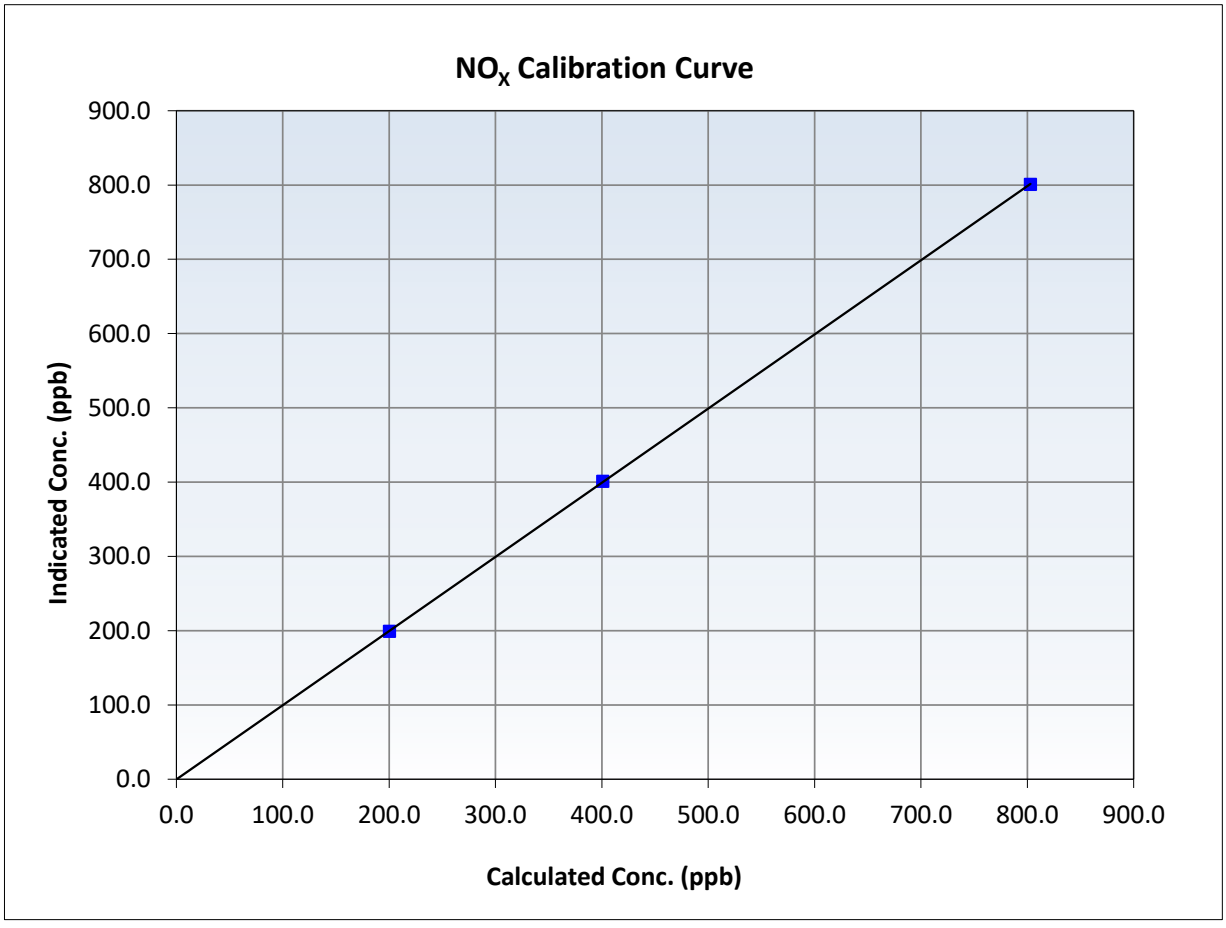
NO_X Calibration Summary

Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 10, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:11	End Time (MST):	14:32
Analyzer make:	Teledyne API T200	Analyzer serial #:	723

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	-0.2	----	Correlation Coefficient	0.999994	≥0.995
803.0	801.1	1.0023	Slope	0.998419	0.90 - 1.10
400.9	401.2	0.9992			
200.4	199.1	1.0067	Intercept	-0.217902	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

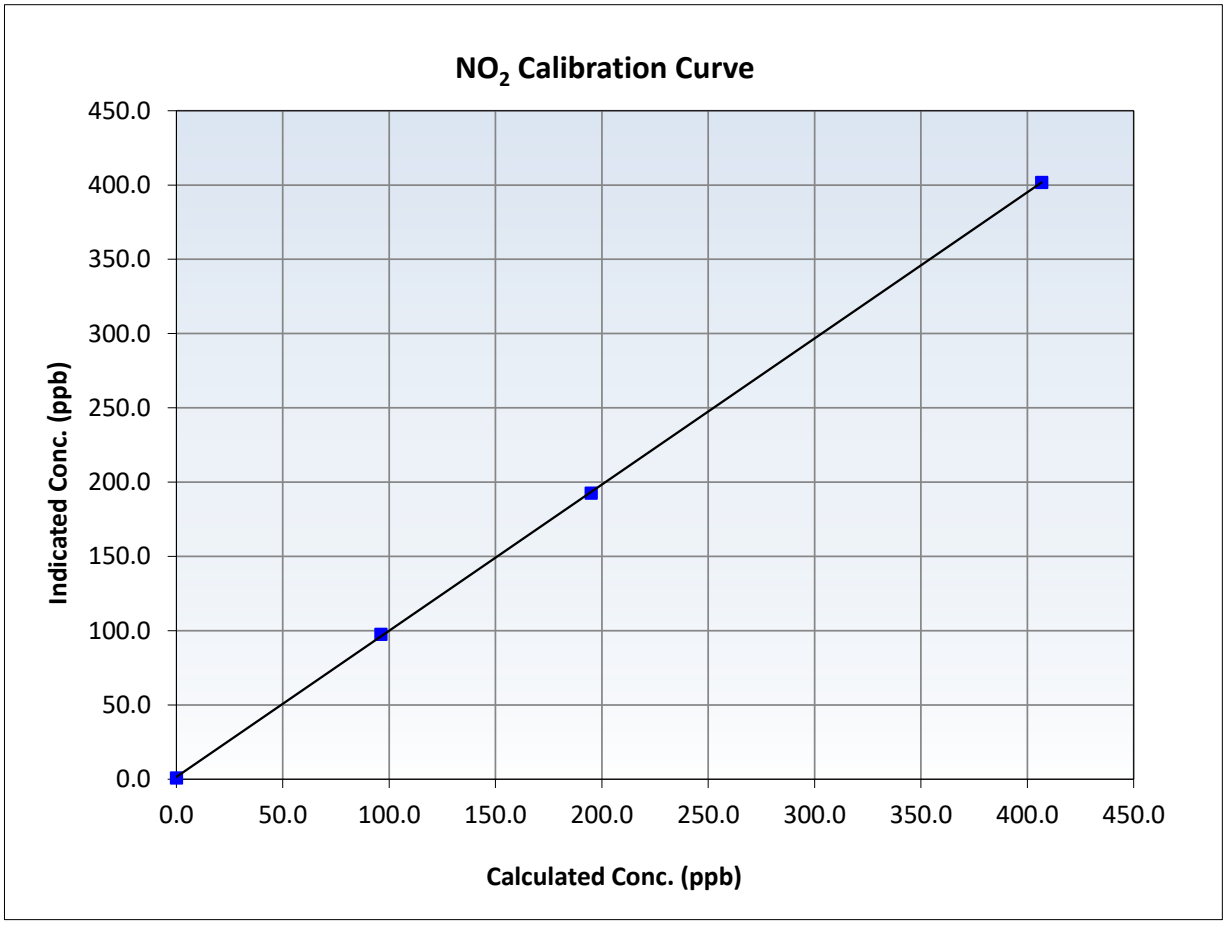
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 10, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:11	End Time (MST):	14:32
Analyzer make:	Teledyne API T200	Analyzer serial #:	723

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.8	----
406.7	401.7	1.0125
195.0	192.7	1.0120
96.1	97.6	0.9847

Statistical Evaluation		Limits
Correlation Coefficient	0.999963	≥0.995
Slope	0.983867	0.90 - 1.10
Intercept	1.558299	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

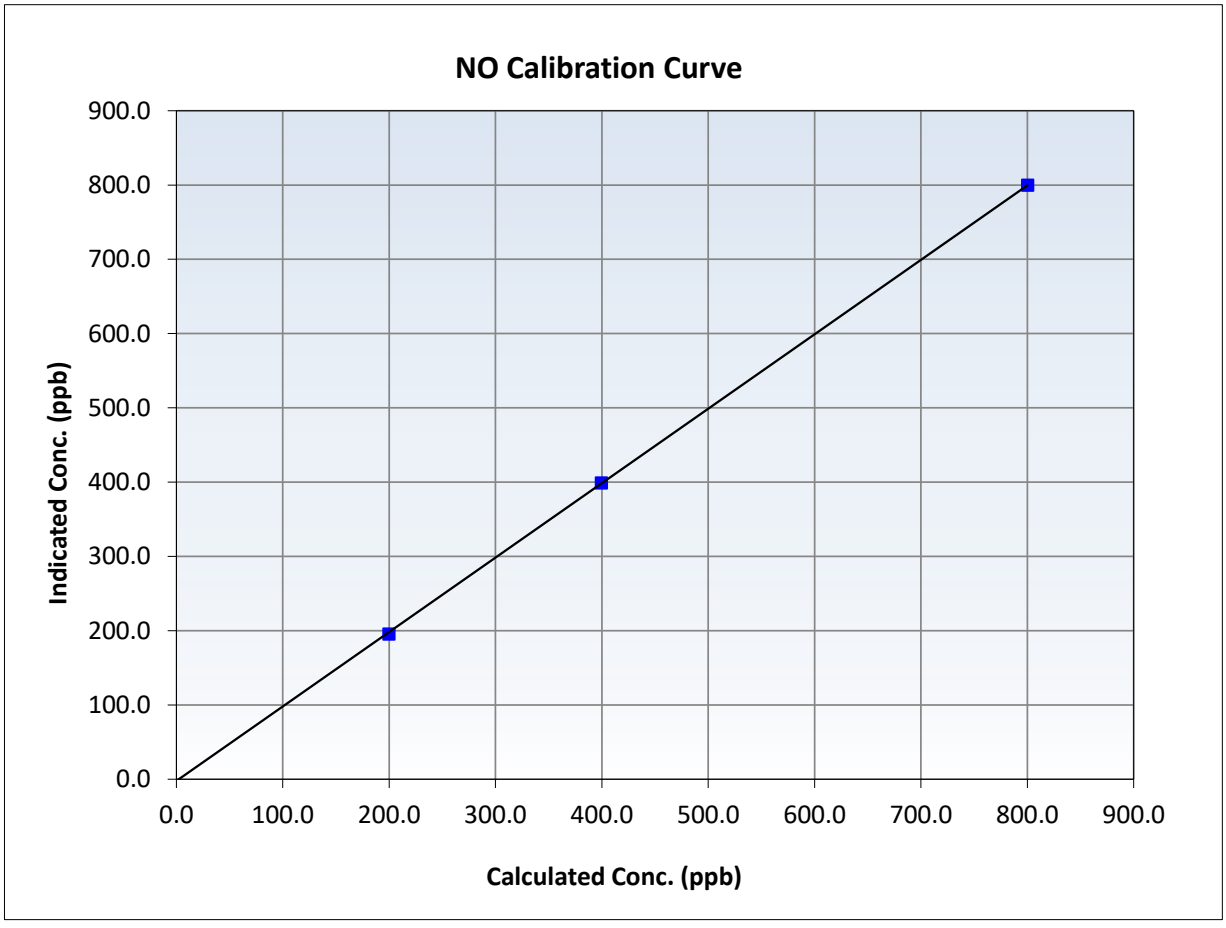
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 10, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:11	End Time (MST):	14:32
Analyzer make:	Teledyne API T200	Analyzer serial #:	723

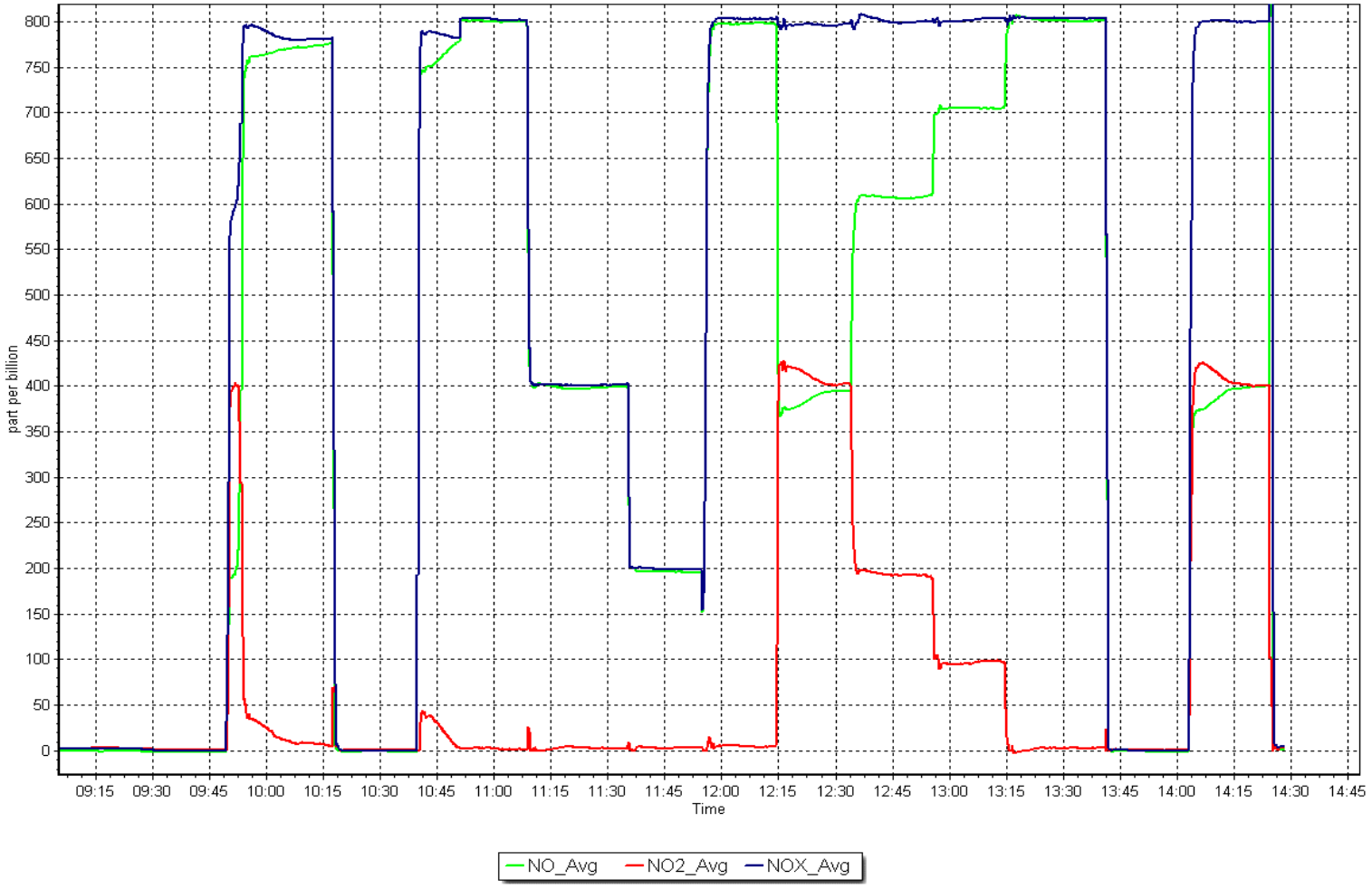
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-1.0	----
800.3	799.8	1.0006
399.5	399.1	1.0011
199.8	195.6	1.0213

Statistical Evaluation		Limits
Correlation Coefficient	0.999977	≥0.995
Slope	1.002128	0.90 - 1.10
Intercept	-2.258400	+/-20



NO_X Calibration Plot Date: September 2, 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:	September 8, 2026	Last Cal Date:	August 7, 2026
Start time (MST):	10:06	End time (MST):	11:08
Analyzer Make:	API T640	S/N:	209
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388745
Temp/RH standard:	Alicat FP-25BT	S/N:	388745

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (^{o}C)	17.60	17.05	17.60	☐	+/- 2 ^{o}C
P (mmHg)	733.10	732.98	733.10	☐	+/- 10 mmHg
Flow (LPM)	4.98	5.11	4.98	☐	+/- 0.25 LPM
PW% (pump)	33		33	☐	>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: 10.90 — Expiry Date: January 30, 2027 — Lot No.: 100128-050-051

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test	11.9	10.9	10.9	☑	+/- 0.5

Date Optical Chamber Cleaned: September 8, 2026

Date Disposable Filter Changed: April 5, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: June 18, 2025

Date RH/T Sensor Cleaned: June 18, 2025

Notes: Temperature, flow, pressure and PW% verified. No adjustments made. Leak check passed Optical chamber cleaned.

Calibration by: Jason Brooks

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS31
BLACKROD
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	September 21, 2026	Last Cal Date:	August 13, 2026
Start time (MST):	9:52	End time (MST):	13:02
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.998117	1.000648	Backgd or Offset:	38.6	39.5
Calibration intercept:	0.158586	-0.101823	Coeff or Slope:	0.964	0.972

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.2	----
As found High point	4921	79.5	798.9	793.8	1.007
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.6	Previous response	797.5	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4921	79.5	798.9	799.4	0.999
Mid point	4960	39.8	400.0	400.0	1.000
Low point	4980	19.9	200.0	200.0	1.000
As left zero	5000	0.0	0.0	0.0	----
As left span	4921	79.5	798.9	799.2	1.000
				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

SO_2 Calibration Summary

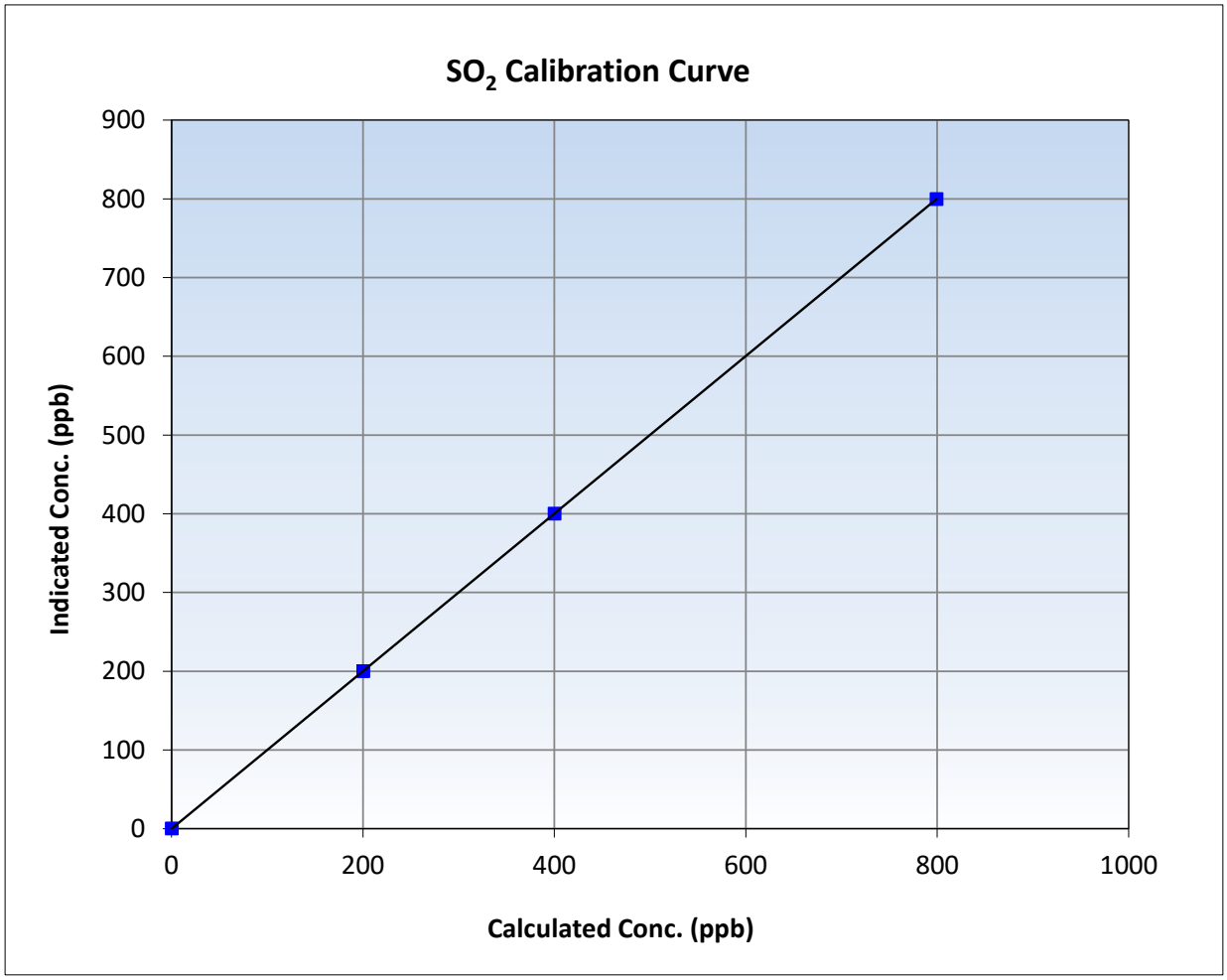
Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	August 13, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:52	End Time (MST):	13:02
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290014

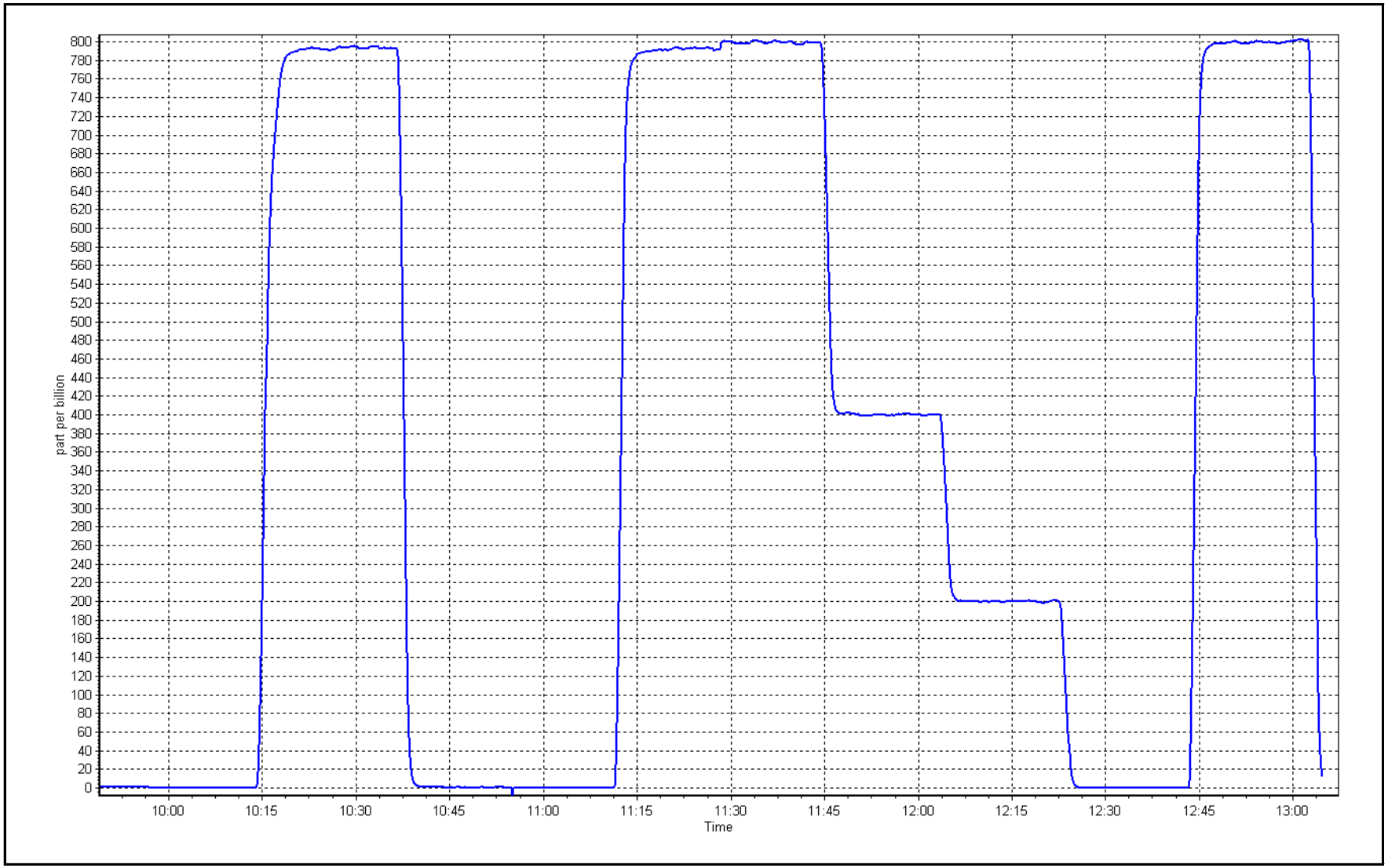
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
798.9	799.4	0.9994
400.0	400.0	1.0000
200.0	200.0	1.0000

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	1.000648	*0.90 - 1.10*
Intercept	-0.101823	*+/-30*



SO2 Calibration Plot Date: September 21, 2026 Location: Blackrod



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	September 3, 2026	Last Cal Date:	August 12, 2026
Start time (MST):	8:58	End time (MST):	13:37
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:	Direct Optics G150		Converter serial #:	2026- 100	
Analyzer Range	0 - 100 ppb		Converter Temp:	325	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.998189	1.001904	Backgd or Offset:	2.91	2.65
Calibration intercept:	-0.100302	-0.080380	Coeff or Slope:	0.946	0.953

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.3	----
As found High point	4926	73.8	80.0	77.7	1.026
As found Mid point	4963	36.9	40.0	39.1	1.015
As found Low point	4982	18.5	20.1	19.3	1.023
New cylinder response					
Baseline Corr As found:	78.0	Prev response:	79.76	*% change:	-2.3%
Baseline Corr 2nd AF pt:	39.4	AF Slope:	0.975329	AF Intercept:	-0.199863
Baseline Corr 3rd AF pt:	19.6	AF Correlation:	0.999966	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4926	73.8	80.0	80.1	0.999
Mid point	4963	36.9	40.0	40.0	1.000
Low point	4982	18.5	20.1	19.9	1.008
As left zero	5000	0.0	0.0	0.1	----
As left span	4926	73.8	80.0	79.7	1.004
SO2 Scrubber Check	4921	79.5	794.9	0.0	----
Date of last scrubber change:		27-Aug-25		Ave Corr Factor	1.002
Date of last converter efficiency test:					

Notes: Sample inlet filter and external pump was changed after multipoint as founds. SO2 scrubber done and passed. Adjusted zero and span.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

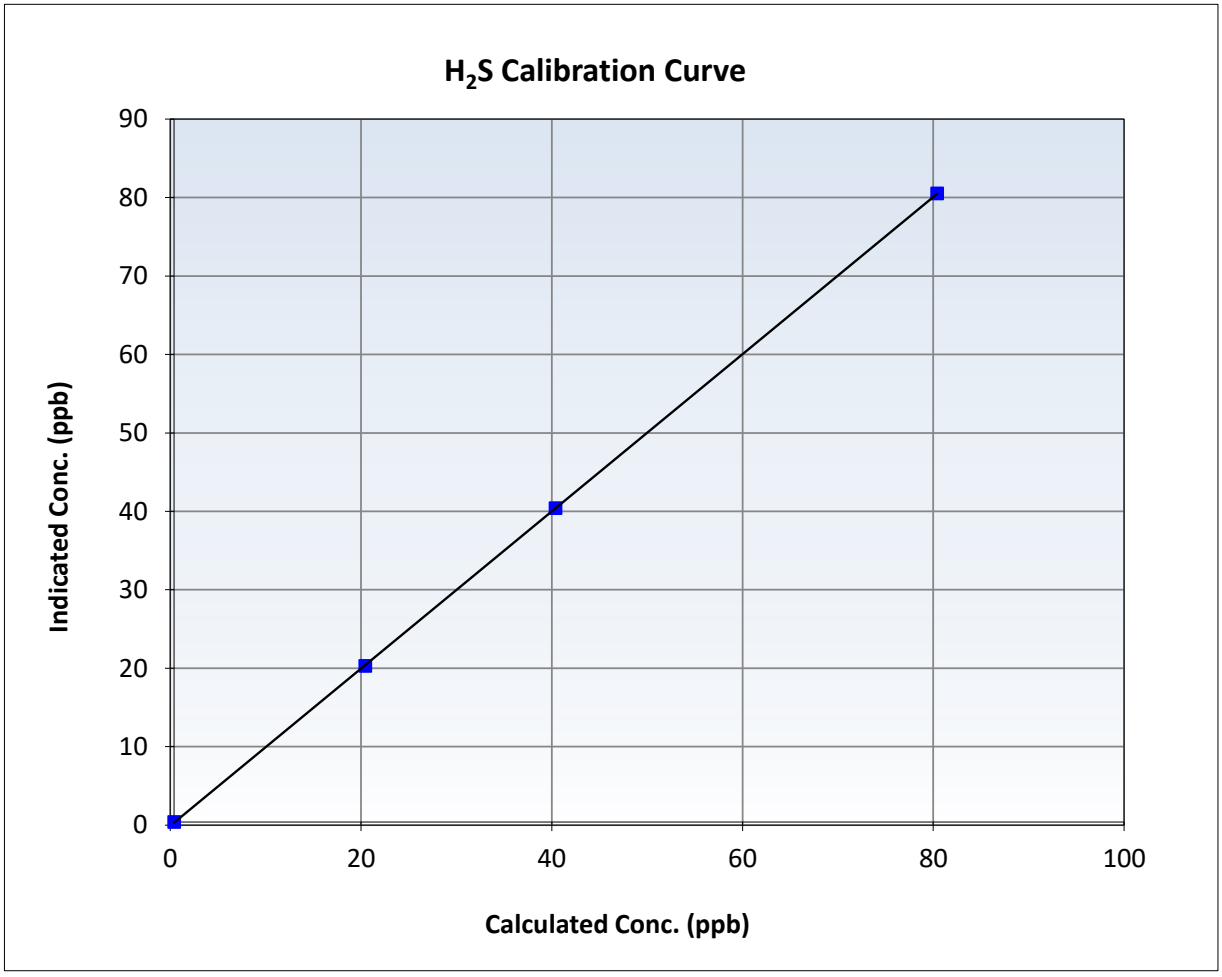
H_2S Calibration Summary

Station Information

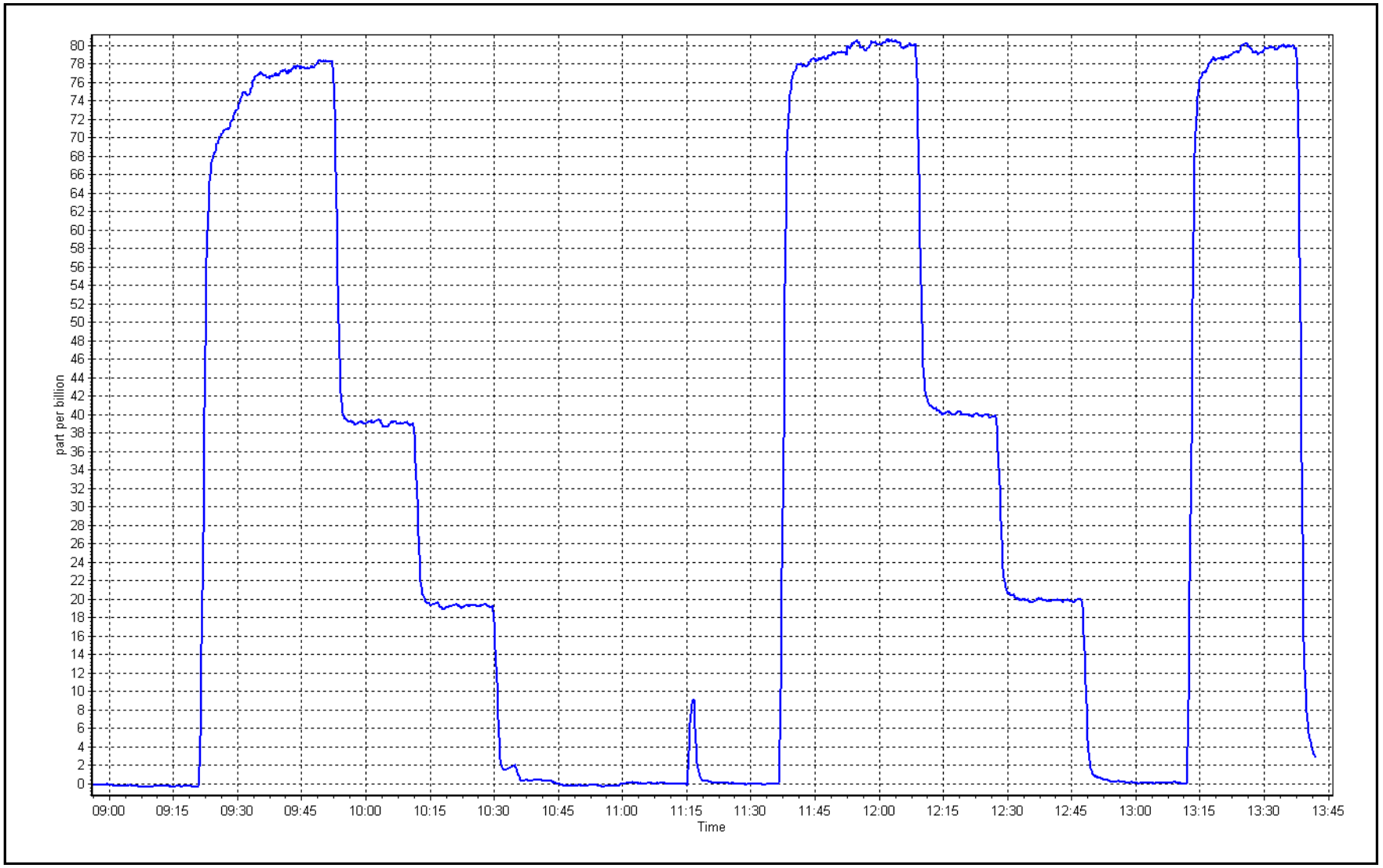
Calibration Date:	September 3, 2026	Previous Calibration:	August 12, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	8:58	End Time (MST):	13:37
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12228021056

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999995	*≥0.995*
80.0	80.1	0.9988	Slope	1.001904	*0.90 - 1.10*
40.0	40.0	1.0000			
20.1	19.9	1.0076	Intercept	-0.080380	*+/-3*



H_2S Calibration Plot Date: September 3, 2026 Location: Blackrod



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	September 21, 2026	Last Cal Date:	August 13, 2026
Start time (MST):	9:52	End time (MST):	13:02
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC327023		Cal Gas Expiry Date:	March 10, 2031	
CH4 Cal Gas Conc.	499.9	ppm	CH4 Equiv Conc.	1058.2	ppm
C3H8 Cal Gas Conc.	203.0	ppm			
Removed Gas Cert:		NA	Removed Gas Expiry:	NA	
Removed CH4 Conc.	499.9	ppm	CH4 Equiv Conc.	1058.2	ppm
Removed C3H8 Conc.	203.0	ppm	Diff between cyl:		
Calibrator Make/Model:	Teledyne T700		Serial Number:	1220	
ZAG Make/Model:	Teledyne API N701H		Serial Number:	72	

Analyzer Information

Analyzer make:	Thermo 51i- LT	Analyzer serial #:	1505164380	
Analyzer Range:	0 - 20 ppm			

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.001455	1.012595	Background:	2.160	2.200
Calibration intercept:	-0.037874	-0.146914	Coefficient:	3.142	3.187

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	-0.17	----
As found High point	4921	79.5	16.82	16.65	1.000
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr As found:	16.82	Previous response	16.81	*% 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	

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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	-0.14	----
High point	4921	79.5	16.82	16.90	0.995
Mid point	4960	39.8	8.42	8.35	1.009
Low point	4980	19.9	4.21	4.13	1.020
As left zero	5000	0.0	0.00	-0.16	----
As left span	4921	79.5	16.82	16.91	0.995
				Average Correction Factor	1.008

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

THC Calibration Summary

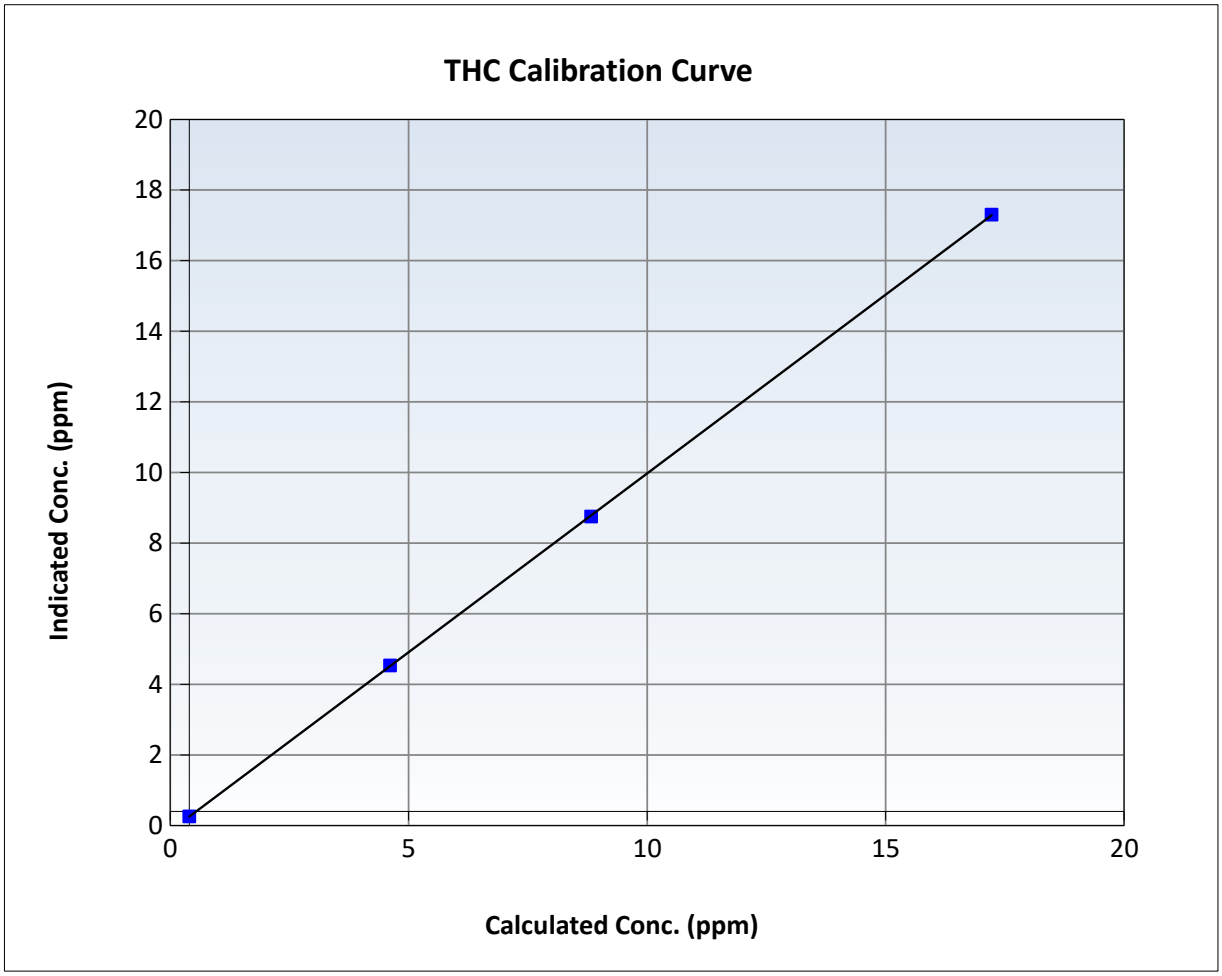
Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	August 13, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:52	End Time (MST):	13:02
Analyzer make:	Thermo 51i- LT	Analyzer serial #:	1505164380

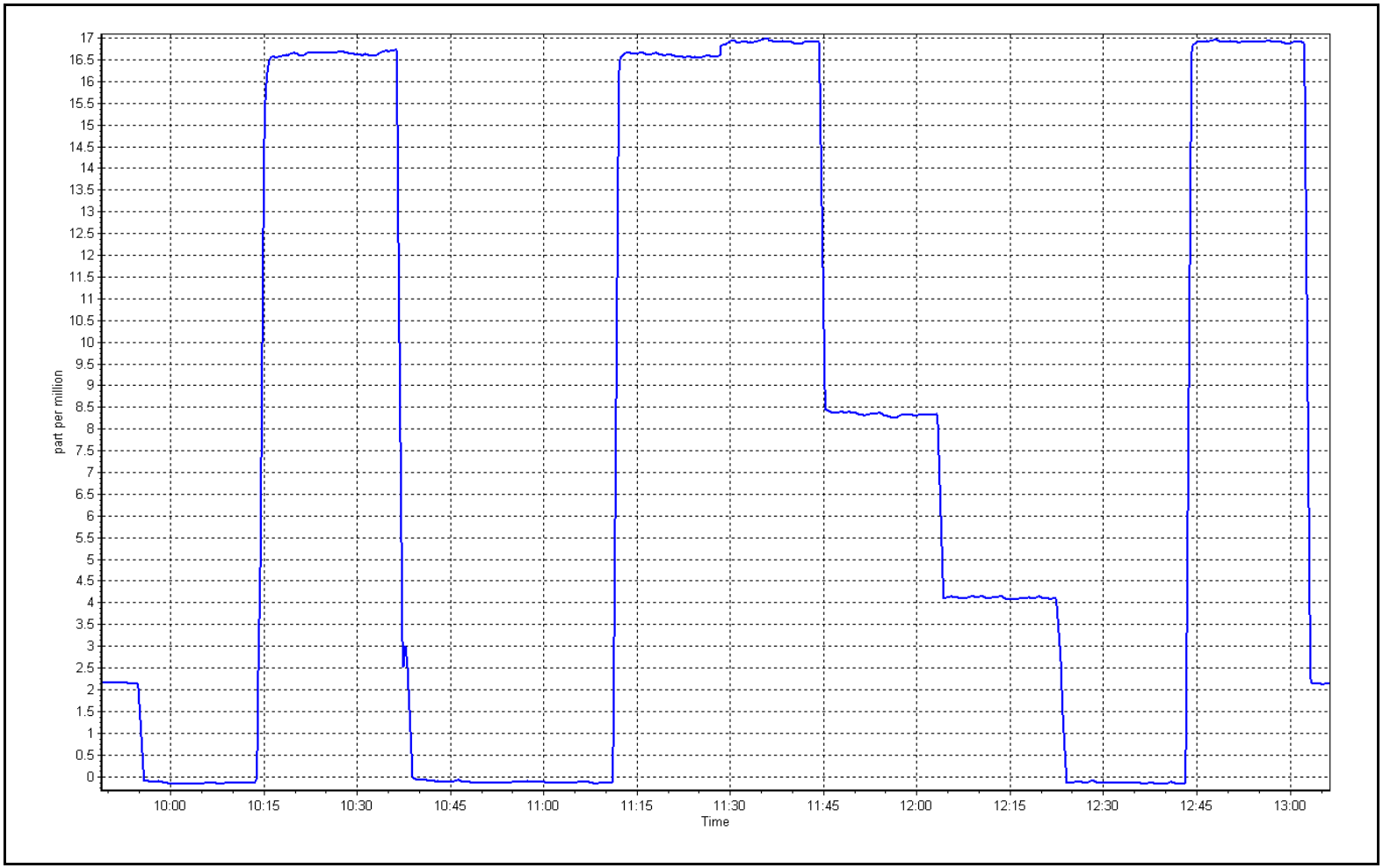
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	-0.14	----
16.82	16.90	0.9954
8.42	8.35	1.0088
4.21	4.13	1.0197

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.012595	*0.90 - 1.10*
Intercept	-0.146914	*+/-1.5*



THC Calibration Plot Date: September 21, 2026 Location: Blackrod



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Blackrod
Station number:	AMS 31
Calibration Date:	September 10, 2026
Last Cal Date:	August 24, 2026
Start time (MST):	9:58
End time (MST):	14:05
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0035071	Cal Gas Expiry Date:	January 9, 2032
NOX Cal Gas Conc:	59.30 ppm	NO Cal Gas Conc:	59.10 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	59.30 ppm	Removed Gas NO Conc:	59.10 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	1220
ZAG make/model:	Teledyne API N701H	Serial Number:	72

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	----	----
AF High point	4932	67.7	803.0	800.3	2.7	803.4	798.2	5.2	0.9995	1.0025
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 807.7 ppb	NO = 803.7 ppb
Baseline Corr 1st pt	NO_X = 803.4 ppb	NO = 798.3 ppb
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

*Percent Change	NO_X = -0.5%	As Found Statistics	
*Percent Change	NO = -0.7%	As found NO_X r^2:	
Nx Sl:	Nx Int:	As found NO r^2:	
NO Sl:	NO Int:	As found NO_2 r^2:	
NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1173480006

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.968	0.968	NO bkgnd or offset:	2.3	2.3
NOX coeff or slope:	0.995	0.995	NOX bkgnd or offset:	2.3	2.3
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	148.6	145.9

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.002172	0.996113
NO_X Cal Offset:	2.964335	0.441434
NO Cal Slope:	1.001695	0.997074
NO Cal Offset:	2.042898	-0.940125
NO_2 Cal Slope:	1.001825	1.002326
NO_2 Cal Offset:	0.175820	0.602599

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.1	0.0	----	----
High point	4932	67.7	803.0	800.3	2.7	800.0	797.5	2.6	1.0037	1.0035
Mid point	4966	33.8	400.9	399.5	1.4	400.3	396.9	3.4	1.0015	1.0066
Low point	4983	16.9	200.4	199.8	0.7	200.2	197.2	3.0	1.0012	1.0130
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	365.4	437.6	801.3	365.4	435.9	1.0021	1.0000
								Average Correction Factor	1.0021	1.0077

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	793.4	367.3	428.8	430.1	0.9970	100.3%
Mid GPT point	793.4	578.7	217.4	218.8	0.9936	100.6%
Low GPT point	793.4	683.6	112.5	114.0	0.9869	101.3%
				Average Correction Factor	0.9925	100.8%

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

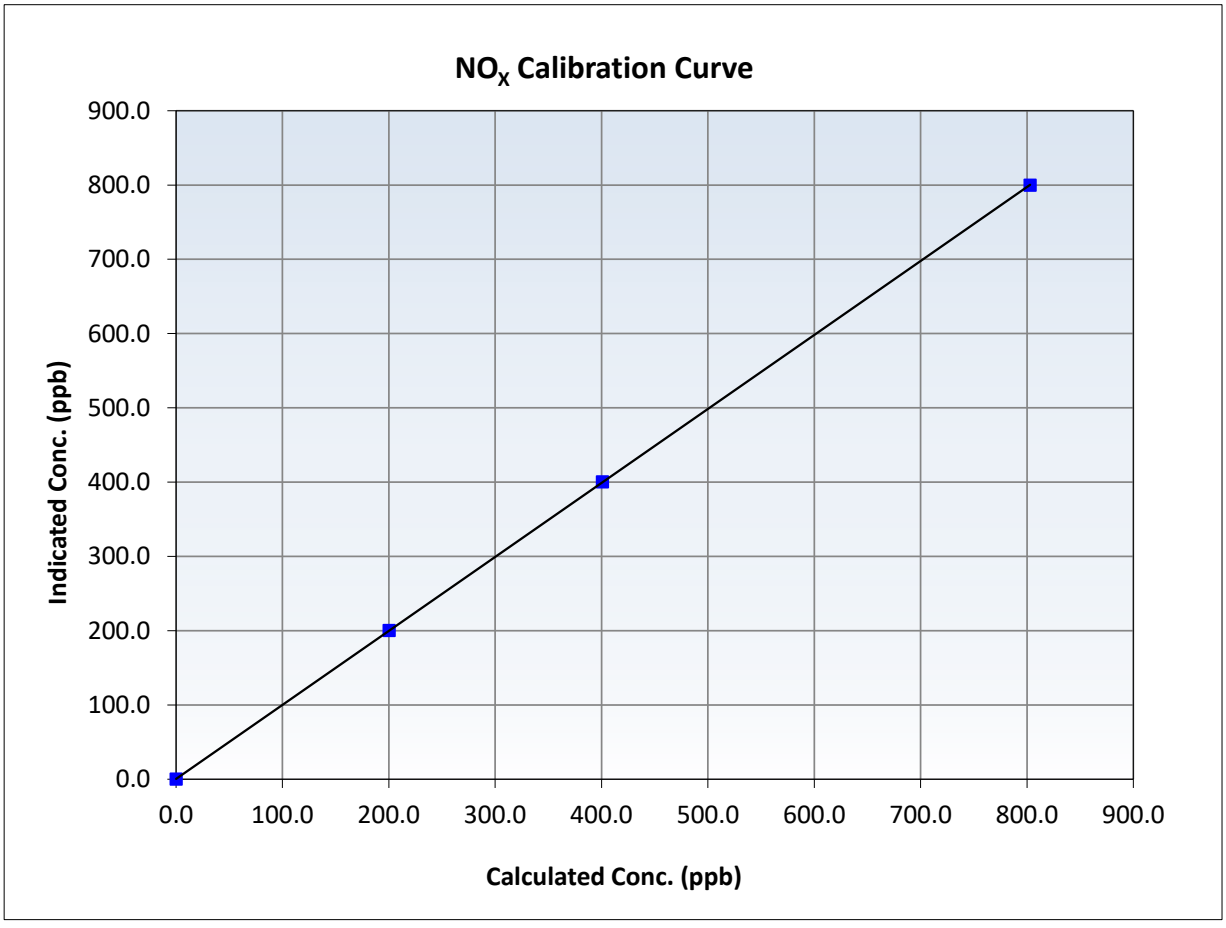
NO_X Calibration Summary

Station Information

Calibration Date:	September 10, 2026	Previous Calibration:	August 24, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:58	End Time (MST):	14:05
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.1	----	Correlation Coefficient	0.999999	≥0.995
803.0	800.0	1.0037	Slope	0.996113	0.90 - 1.10
400.9	400.3	1.0015			
200.4	200.2	1.0012	Intercept	0.441434	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

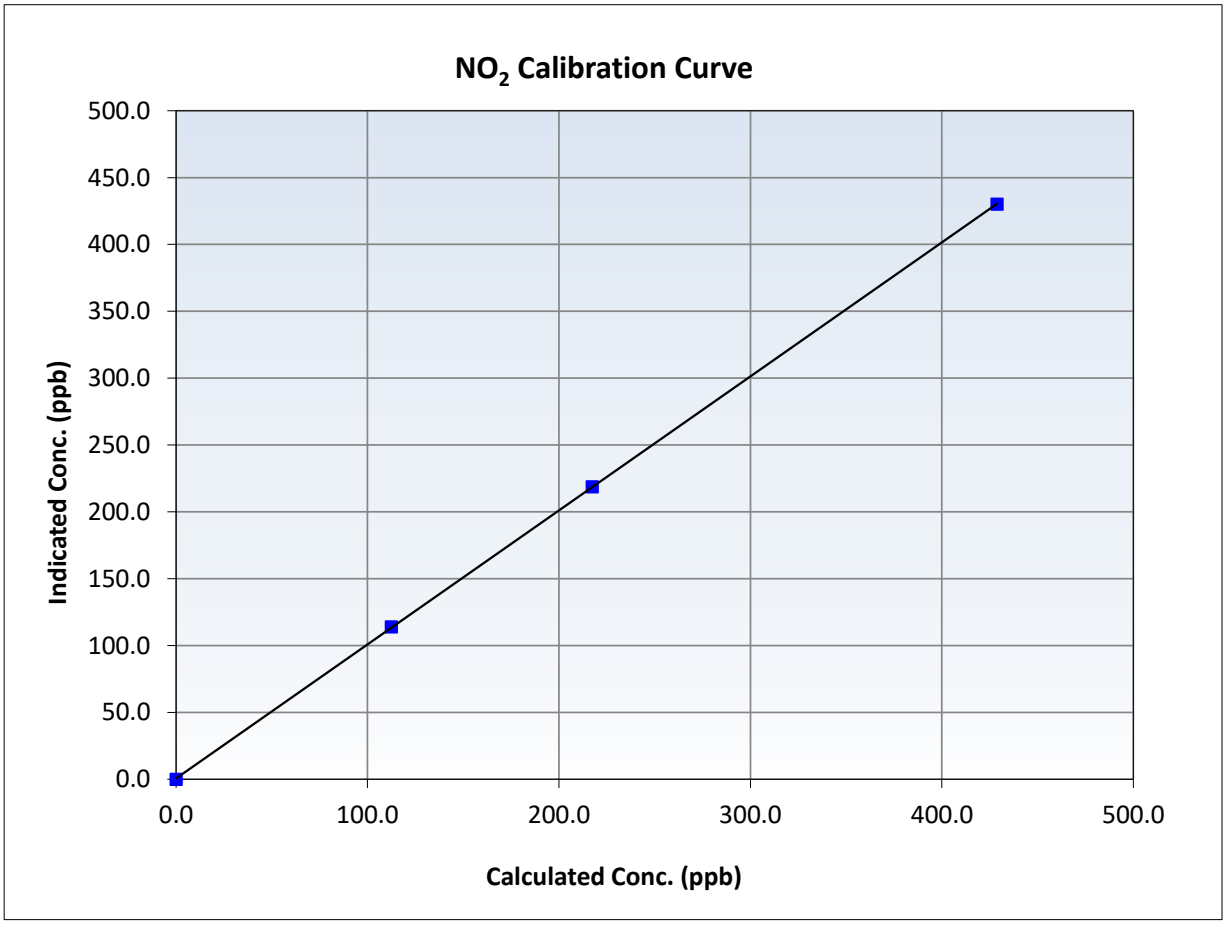
Station Information

Calibration Date:	September 10, 2026	Previous Calibration:	August 24, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:58	End Time (MST):	14:05
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
428.8	430.1	0.9970
217.4	218.8	0.9936
112.5	114.0	0.9869

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.002326	*0.90 - 1.10*
Intercept	0.602599	*+/-20*



Wood Buffalo Environmental Association

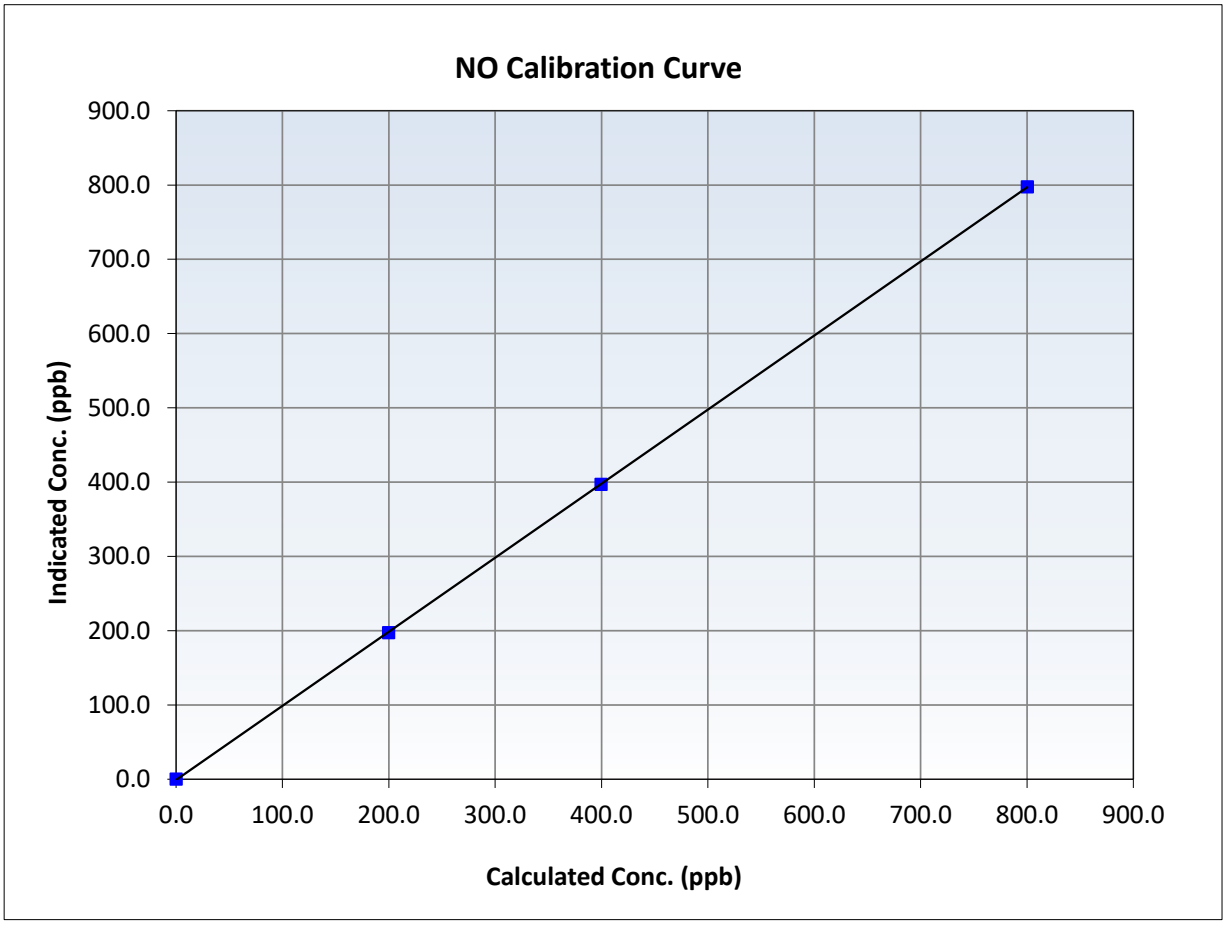
NO Calibration Summary

Station Information

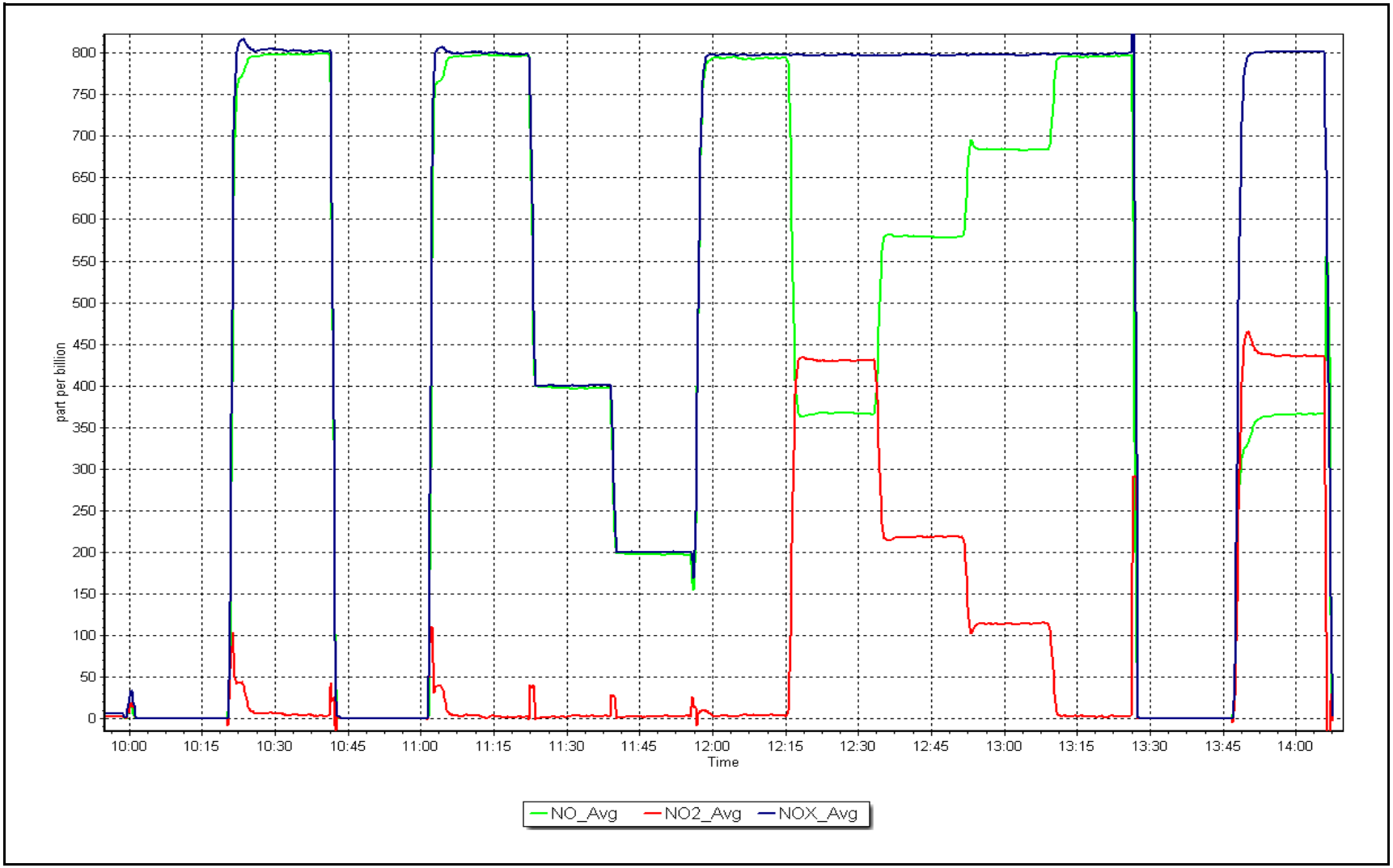
Calibration Date:	September 10, 2026	Previous Calibration:	August 24, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:58	End Time (MST):	14:05
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.1	----	Correlation Coefficient	0.999992	≥0.995
800.3	797.5	1.0035	Slope	0.997074	0.90 - 1.10
399.5	396.9	1.0066			
199.8	197.2	1.0130	Intercept	-0.940125	+/-20



NO_X Calibration Plot Date: September 10, 2026 Location: Blackrod



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT

AMS32
PIHEW POINT
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Pihew Point	Station number:	AMS 32
Calibration Date:	September 2, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	8:50	End time (MST):	12:12
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	51.31	ppm	Cal Gas Exp Date:	October 9, 2032
Cal Gas Cylinder #:	SA150969A			
Removed Cal Gas Conc:	51.31	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne T700		Serial Number:	3804
Zero Air Gen Model:	Teledyne T701H		Serial Number:	692

Analyzer Information

Analyzer make:	Thermo 43i-TLE		Serial Number:	1180540019	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.003102	1.000146	Backgd or Offset:	4.89	4.91
Calibration intercept:	-0.371984	-0.212025	Coeff or Slope:	1.168	1.168

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4922	78.0	800.4	798.2	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	798.3	Previous response	802.5	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4922	78.0	800.4	800.0	1.001
Mid point	4961	39.0	400.2	401.5	0.997
Low point	4981	19.5	200.1	198.4	1.009
As left zero	5000	0.0	0.0	0.2	----
As left span	4922	78.0	800.4	801.0	0.999
				Average Correction Factor:	1.002

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

SO_2 Calibration Summary

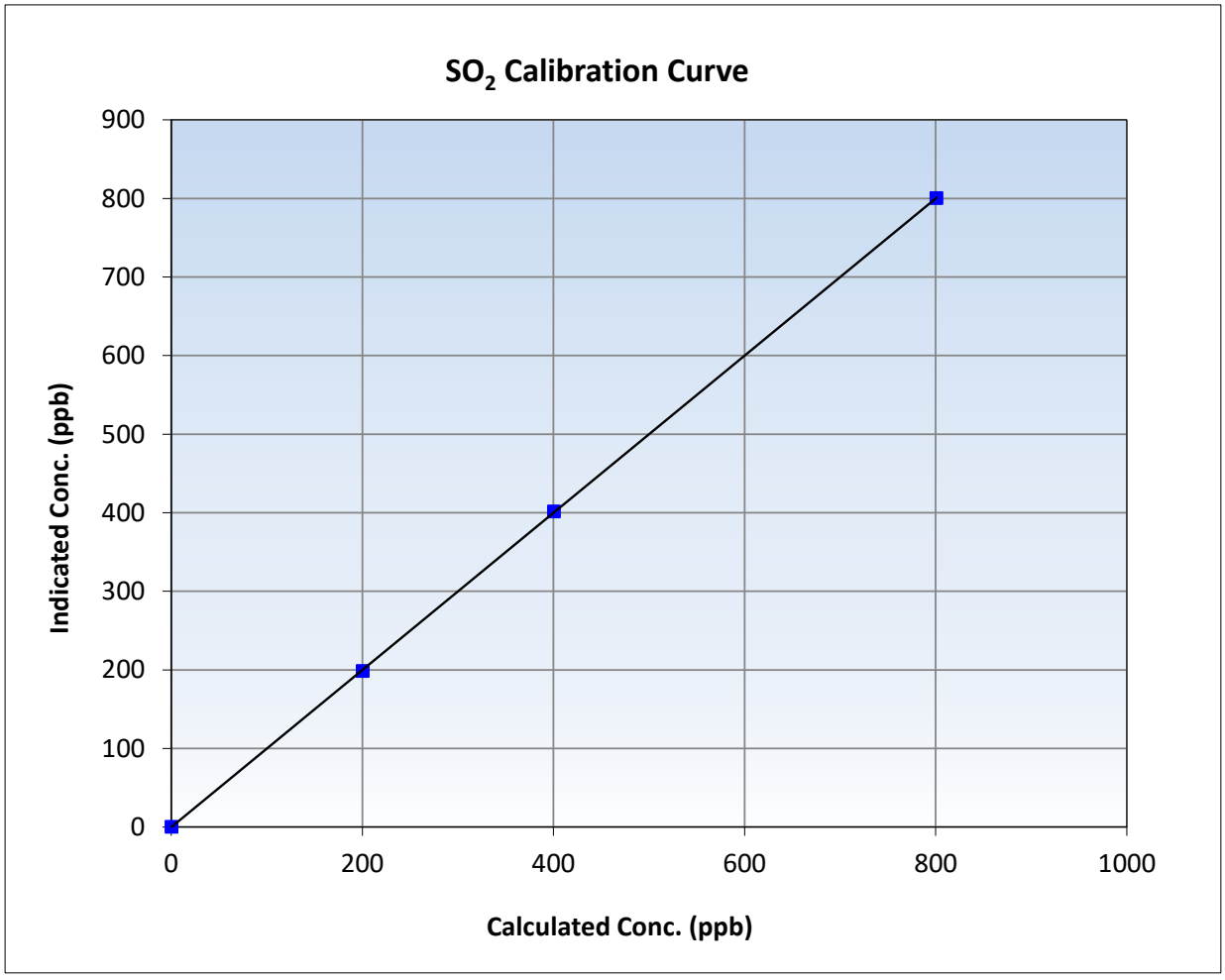
Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 5, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	8:50	End Time (MST):	12:12
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1180540019

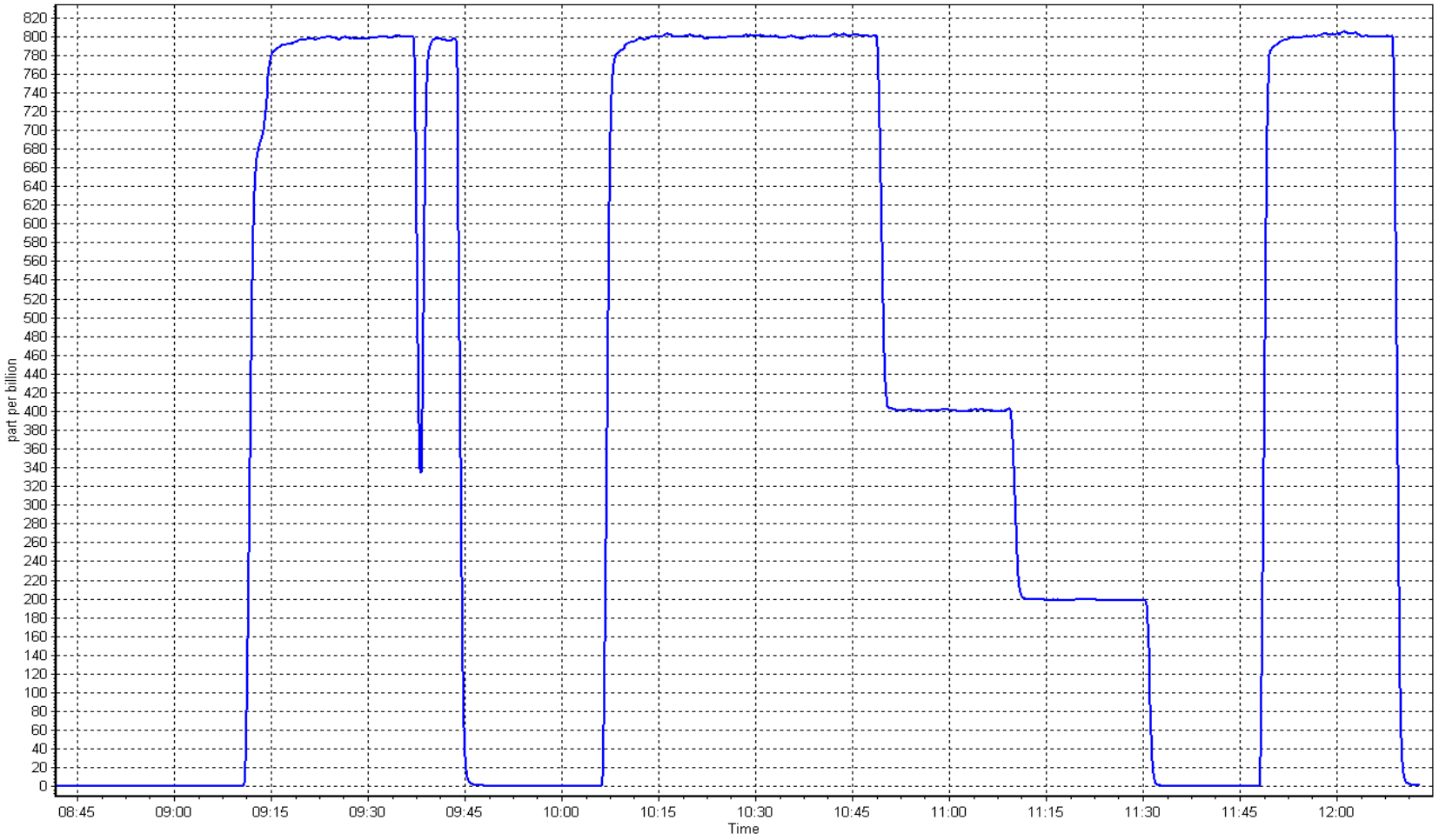
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.4	800.0	1.0005
400.2	401.5	0.9968
200.1	198.4	1.0085

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999987	*≥0.995*
Slope	1.000146	*0.90 - 1.10*
Intercept	-0.212025	*+/-30*



SO2 Calibration Plot Date: September 2, 2026 Location: Pihew Point



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Pihew Point	Station number:	AMS 32
Calibration Date:	September 24, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	8:30	End time (MST):	13:22
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.30	ppm	Cal Gas Exp Date:	March 19, 2027
Cal Gas Cylinder #:	DT0035169			
Removed Cal Gas Conc:	5.30	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne T700		Serial Number:	3804
ZAG Make/Model:	Teledyne T701H		Serial Number:	692

Analyzer Information

Analyzer make:	Thermo 43iQ-TLE		Analyzer serial #:	1200025752
Converter make:	Global G150		Converter serial #:	2024-288
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.994629	0.995201	Backgd or Offset:	1.54	1.64
Calibration intercept:	-0.042178	-0.062212	Coeff or Slope:	0.843	0.843

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.4	----
As found High point	4925	75.5	80.0	79.6	1.010
As found Mid point	4962	37.7	40.0	39.9	1.012
As found Low point	4981	18.9	20.0	19.8	1.033
New cylinder response					

Baseline Corr As found:	79.2	Prev response:	79.55	*% change:	-0.4%
Baseline Corr 2nd AF pt:	39.5	AF Slope:	0.991485	AF Intercept:	0.217887
Baseline Corr 3rd AF pt:	19.4	AF Correlation:	0.999966	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4925	75.5	80.0	79.6	1.005
Mid point	4962	37.7	40.0	39.7	1.007
Low point	4981	18.9	20.0	19.8	1.012
As left zero	5000	0.0	0.0	0.0	----
As left span	4925	75.5	80.0	79.7	1.004
SO2 Scrubber Check	4921	79.5	794.9	0.0	----
Date of last scrubber change:		30-Jul-25		Ave Corr Factor	1.008
Date of last converter efficiency test:		NA			

Notes: Changed sample inlet filter after as founds. Adjusted zero. Scrubber check was done after cal zero, passed.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

H_2S Calibration Summary

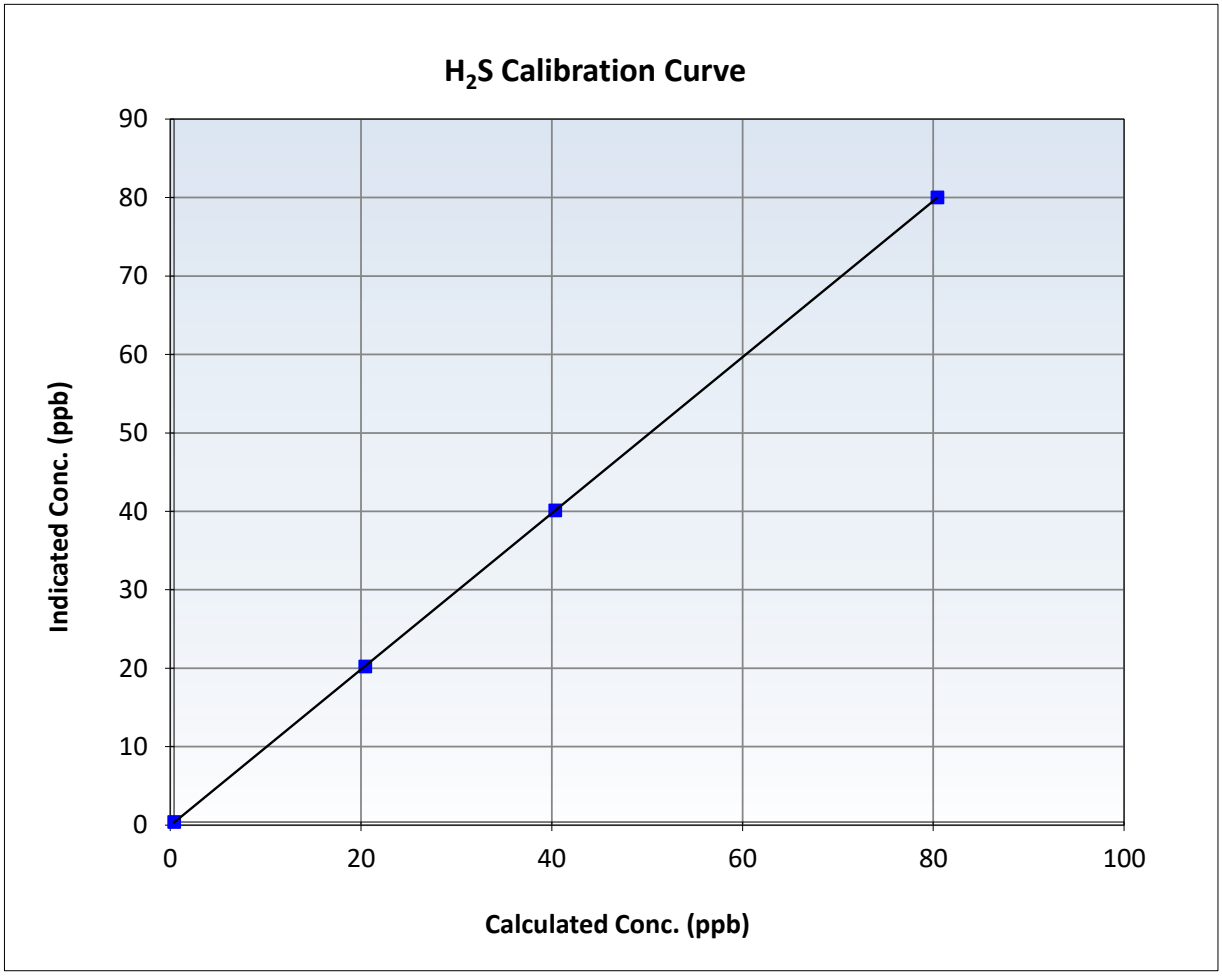
Station Information

Calibration Date:	September 24, 2026	Previous Calibration:	August 11, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	8:30	End Time (MST):	13:22
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1200025752

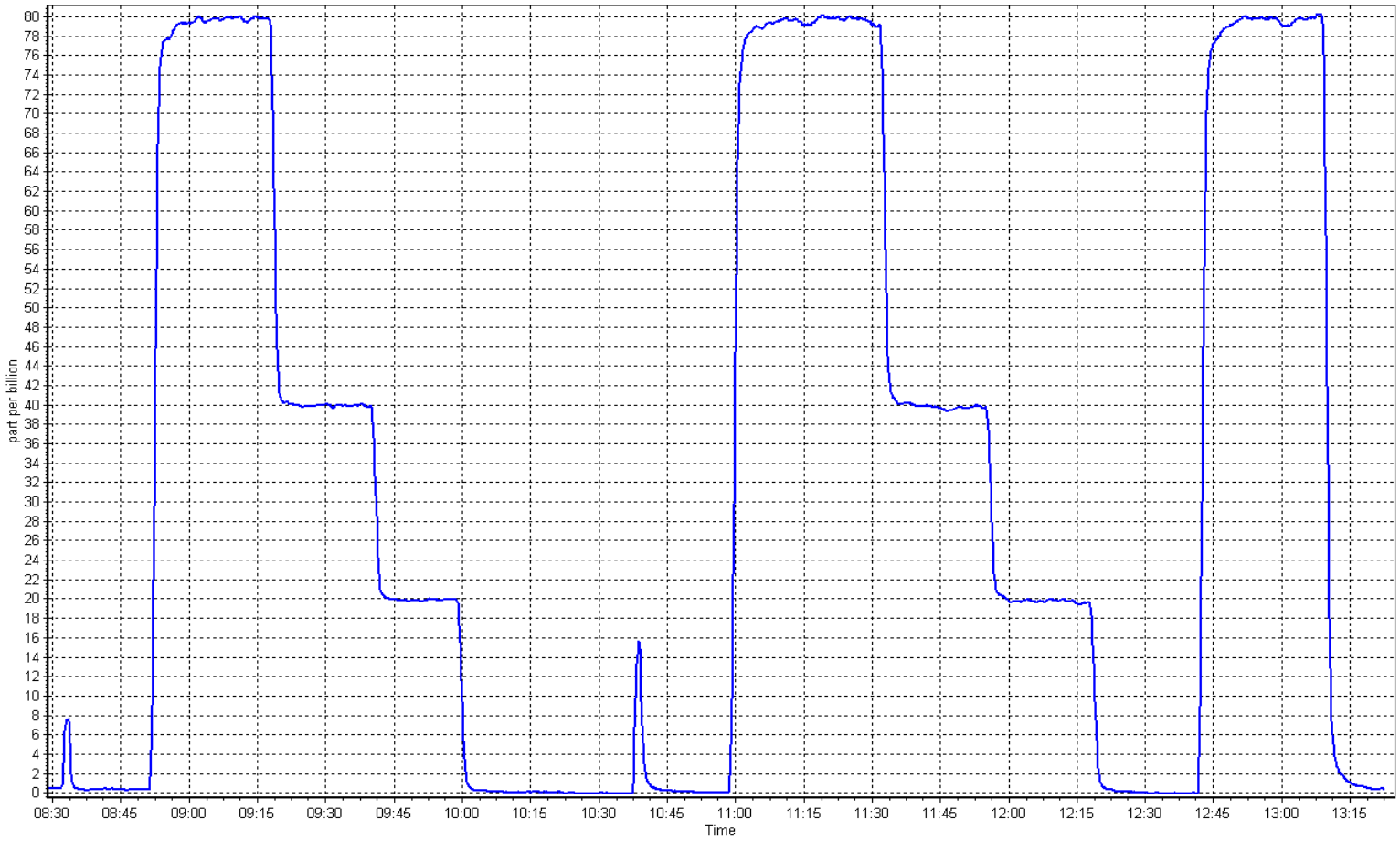
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
80.0	79.6	1.0053
40.0	39.7	1.0067
20.0	19.8	1.0118

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.995201	*0.90 - 1.10*
Intercept	-0.062212	*+/-3*



H_2S Calibration Plot Date: September 24, 2026 Location: Pihew Point



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Pihew Point	Station number:	AMS 32
Calibration Date:	September 2, 2026	Last Cal Date:	August 5, 2026
Start time (MST):	8:50	End time (MST):	12:12
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	SA150969A	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
C3H8 Cal Gas Conc.	204.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
Removed C3H8 Conc.	204.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne T700	Serial Number:	3804
Zero Air Gen model:	Teledyne T701H	Serial Number:	692

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.74E-04	2.85E-04	NMHC SP Ratio:	4.74E-05	4.69E-05
CH4 Retention time:	15.4	15.8	NMHC Peak Area:	184687	184687
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	16.56	16.36	1.012
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.36	Prev response	16.56	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	16.56	16.56	1.000
Mid point	4961	39.0	8.28	8.23	1.006
Low point	4981	19.5	4.14	4.10	1.011
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	16.56	16.53	1.002
				Average Correction Factor	1.006

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

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	8.76	8.86	0.989
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.86	Prev response	8.76	*% 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	8.76	8.77	0.999
Mid point	4961	39.0	4.38	4.37	1.002
Low point	4981	19.5	2.19	2.17	1.010
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	8.76	8.74	1.002
				Average Correction Factor	1.004

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	7.80	7.50	1.040
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.50	Prev response	7.79	*% change	-4.0%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	7.80	7.79	1.001
Mid point	4961	39.0	3.90	3.86	1.010
Low point	4981	19.5	1.95	1.93	1.012
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	7.80	7.79	1.001
				Average Correction Factor	1.007

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	1.001234	1.000661
THC Cal Offset:	-0.022235	-0.027835
CH4 Cal Slope:	1.001188	0.999825
CH4 Cal Offset:	-0.014322	-0.015922
NMHC Cal Slope:	1.001223	1.001889
NMHC Cal Offset:	-0.008713	-0.012513

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

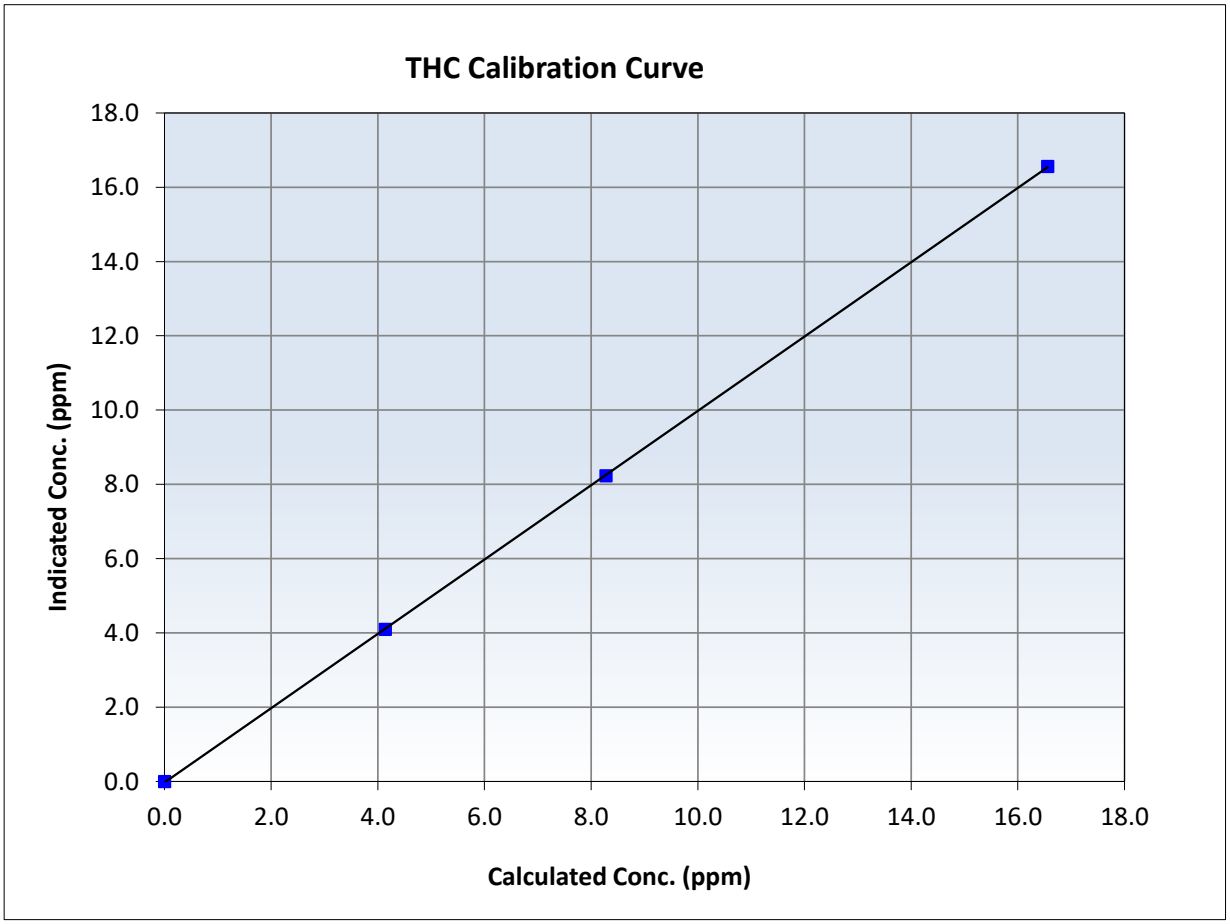
THC Calibration Summary

Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 5, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	8:50	End Time (MST):	12:12
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999985	≥0.995
16.56	16.56	0.9999	Slope	1.000661	0.90 - 1.10
8.28	8.23	1.0060	Intercept	-0.027835	+/-0.5
4.14	4.10	1.0108			



Wood Buffalo Environmental Association

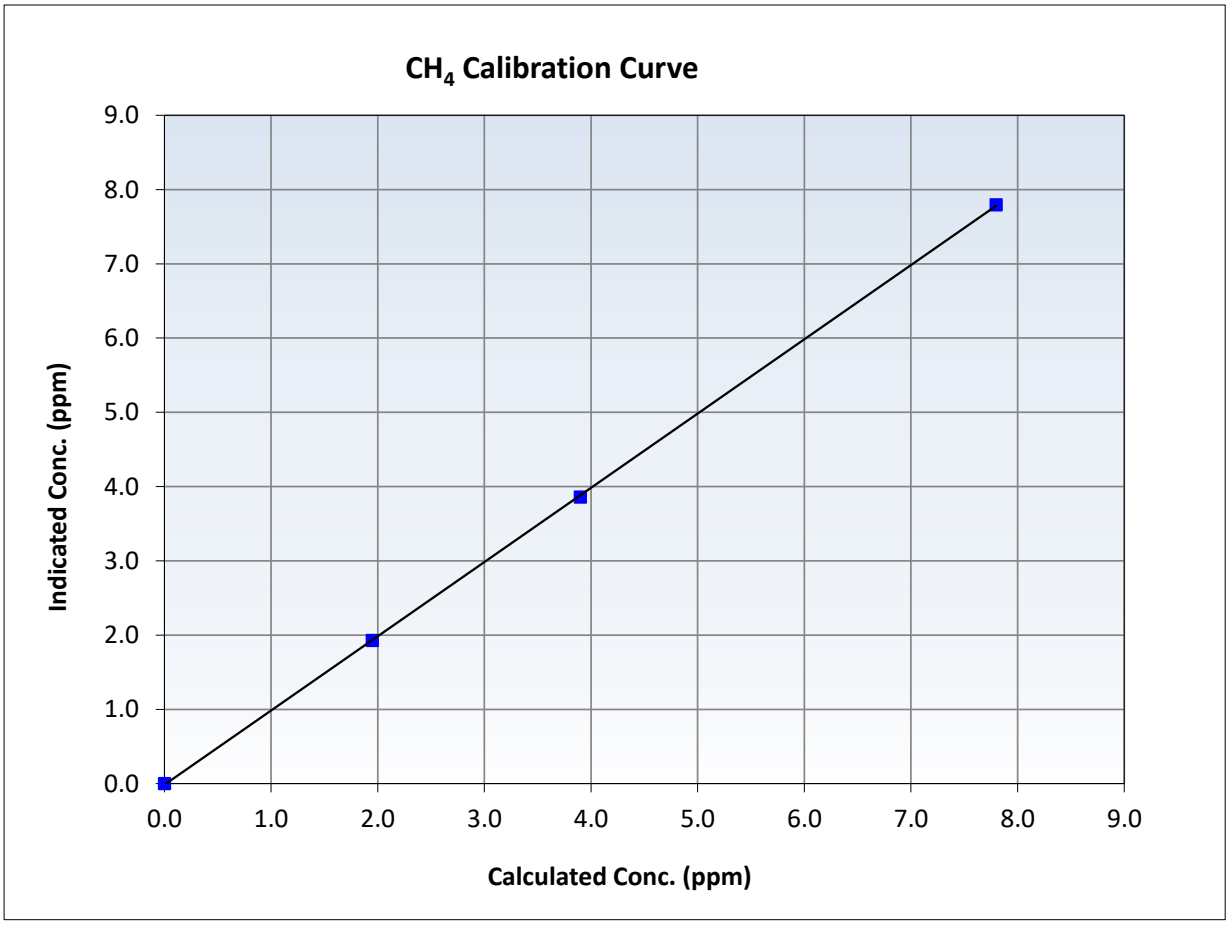
CH_4 Calibration Summary

Station Information

Calibration Date:	September 2, 2026	Previous Calibration:	August 5, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	8:50	End Time (MST):	12:12
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999971	*≥0.995*
7.80	7.79	1.0006	Slope	0.999825	*0.90 - 1.10*
3.90	3.86	1.0102			
1.95	1.93	1.0116	Intercept	-0.015922	*+/-0.5*



Wood Buffalo Environmental Association

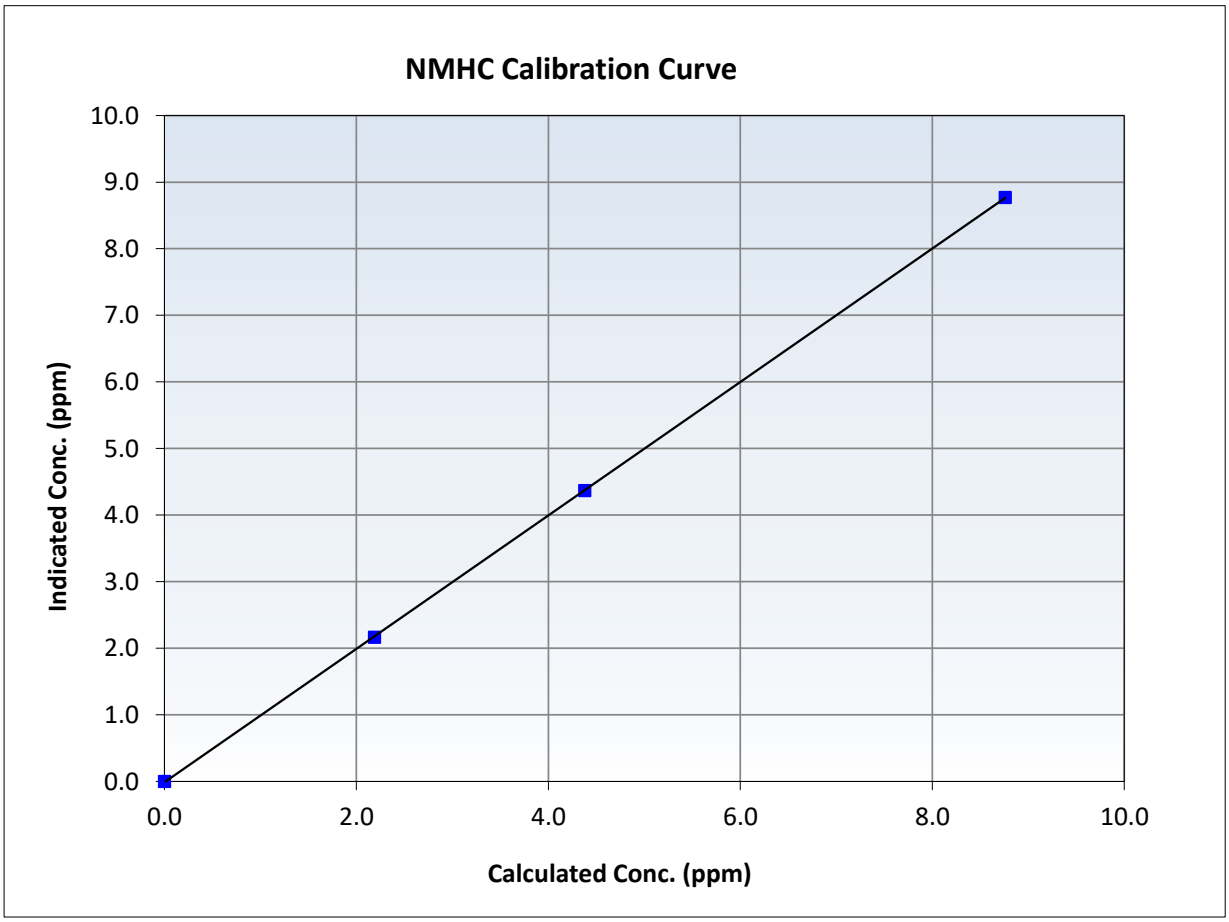
NMHC Calibration Summary

Station Information

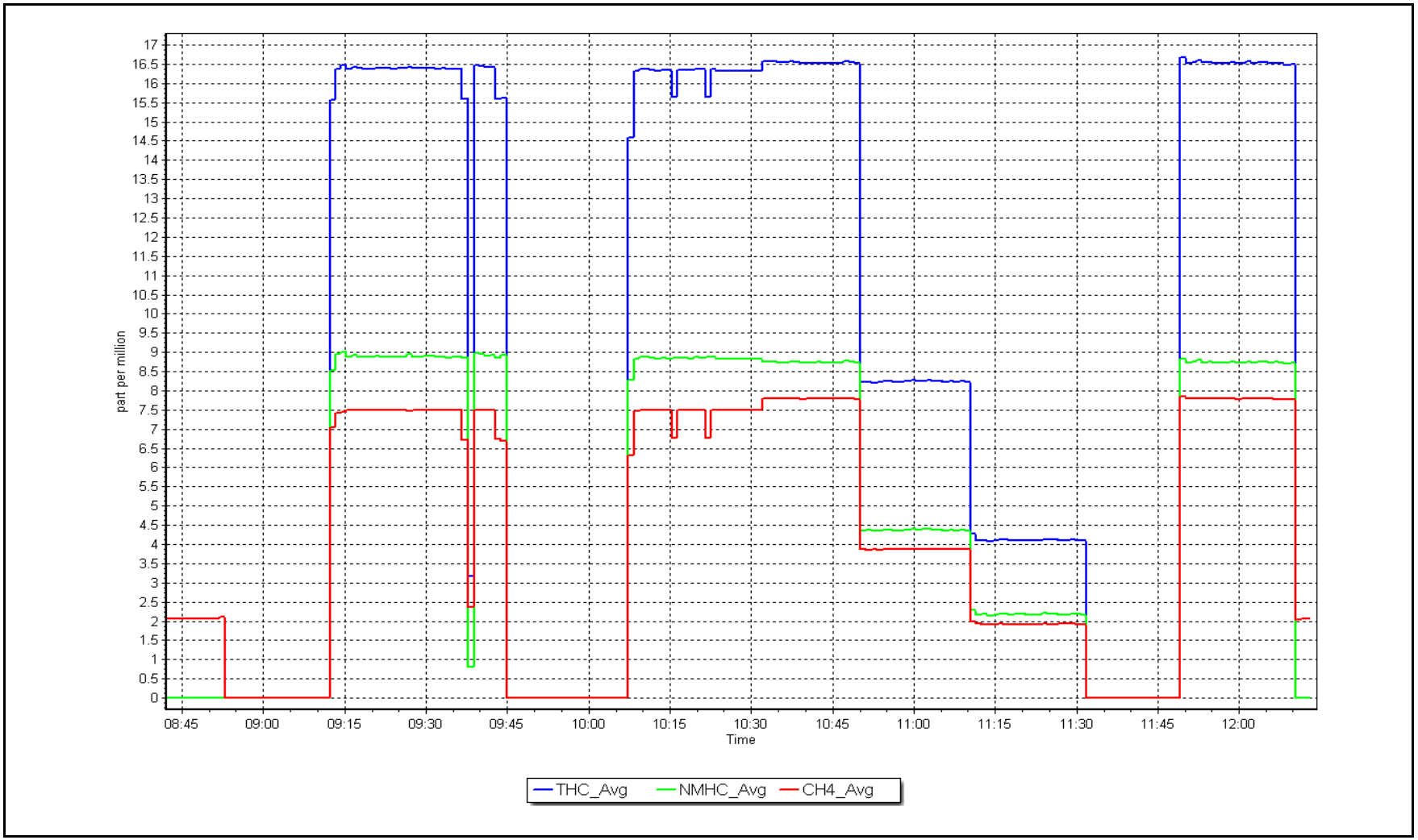
Calibration Date:	September 2, 2026	Previous Calibration:	August 5, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	8:50	End Time (MST):	12:12
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999991	*≥0.995*
8.76	8.77	0.9989	Slope	1.001889	*0.90 - 1.10*
4.38	4.37	1.0021	Intercept	-0.012513	*+/-0.5*
2.19	2.17	1.0101			



NMHC Calibration Plot Date: September 2, 2026 Location: Pihew Point



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Pihew Point	Station number:	AMS 32
Calibration Date:	September 14, 2026	Last Cal Date:	September 2, 2026
Start time (MST):	9:36	End time (MST):	12:52
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	SA150969A	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
C3H8 Cal Gas Conc.	204.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
Removed C3H8 Conc.	204.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne T700	Serial Number:	3804
Zero Air Gen model:	Teledyne T701H	Serial Number:	692

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.85E-04	3.04E-04	NMHC SP Ratio:	4.69E-05	4.65E-05
CH4 Retention time:	15.8	16.2	NMHC Peak Area:	184687	188422
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	16.56	16.22	1.021
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.22	Prev response	16.54	*% 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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	16.56	16.52	1.002
Mid point	4961	39.0	8.28	8.24	1.005
Low point	4981	19.5	4.14	4.11	1.008
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	16.56	16.57	0.999
				Average Correction Factor	1.005

Notes: Changed sample inlet filter after as founds. Adjusted span due to CH4 channel dipping during sampling.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	8.76	8.87	0.988
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.87	Prev response	8.76	*% change	1.2%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	8.76	8.74	1.002
Mid point	4961	39.0	4.38	4.36	1.004
Low point	4981	19.5	2.19	2.17	1.008
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	8.76	8.73	1.003
				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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	7.80	7.34	1.062
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.34	Prev response	7.78	*% change	-6.0%
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	7.80	7.78	1.002
Mid point	4961	39.0	3.90	3.88	1.004
Low point	4981	19.5	1.95	1.94	1.007
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	7.80	7.84	0.994
				Average Correction Factor	1.005

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	1.000661	0.997977
THC Cal Offset:	-0.027835	-0.012635
CH4 Cal Slope:	0.999825	0.998213
CH4 Cal Offset:	-0.015922	-0.005922
NMHC Cal Slope:	1.001889	0.998053
NMHC Cal Offset:	-0.012513	-0.006313

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

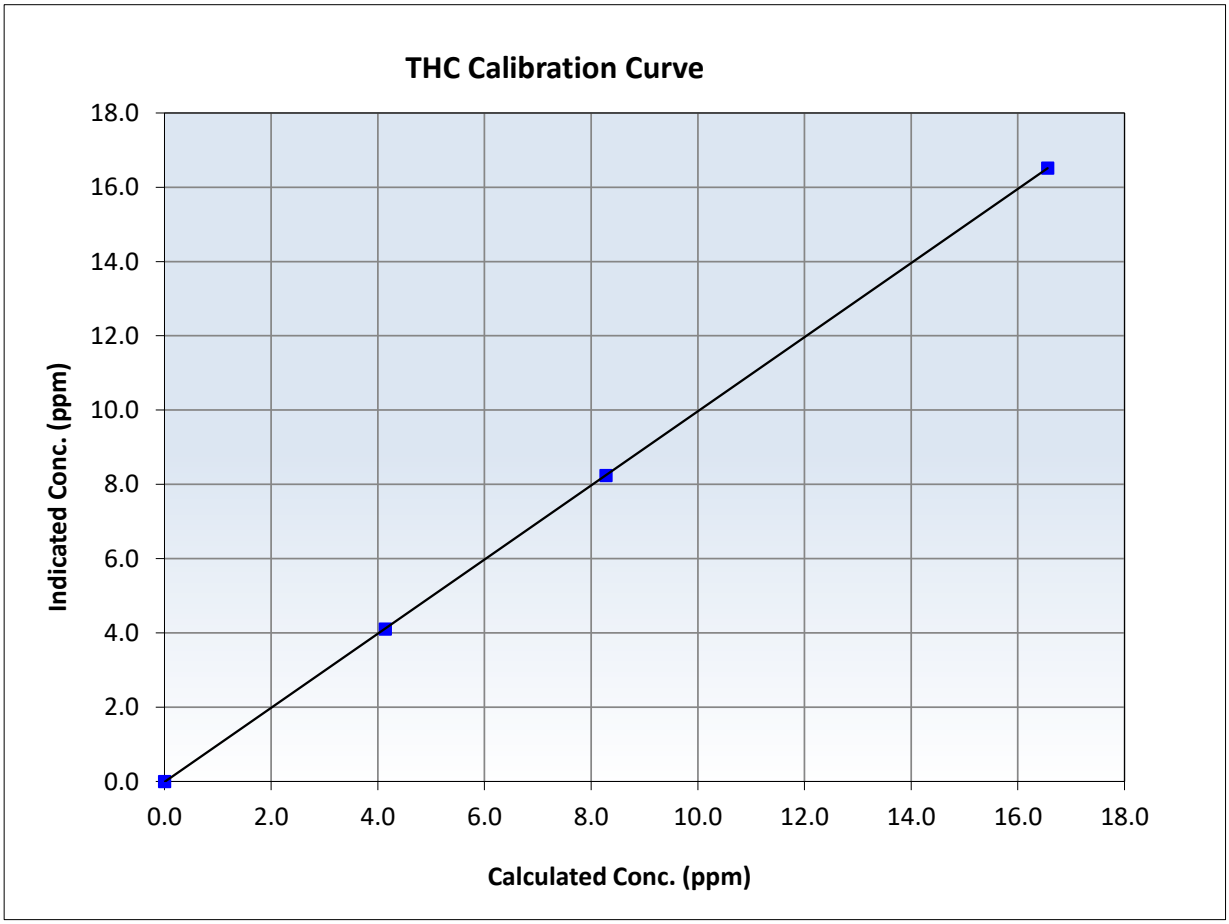
THC Calibration Summary

Station Information

Calibration Date:	September 14, 2026	Previous Calibration:	September 2, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	9:36	End Time (MST):	12:52
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999997	≥0.995
16.56	16.52	1.0023	Slope	0.997977	0.90 - 1.10
8.28	8.24	1.0048	Intercept	-0.012635	+/-0.5
4.14	4.11	1.0076			



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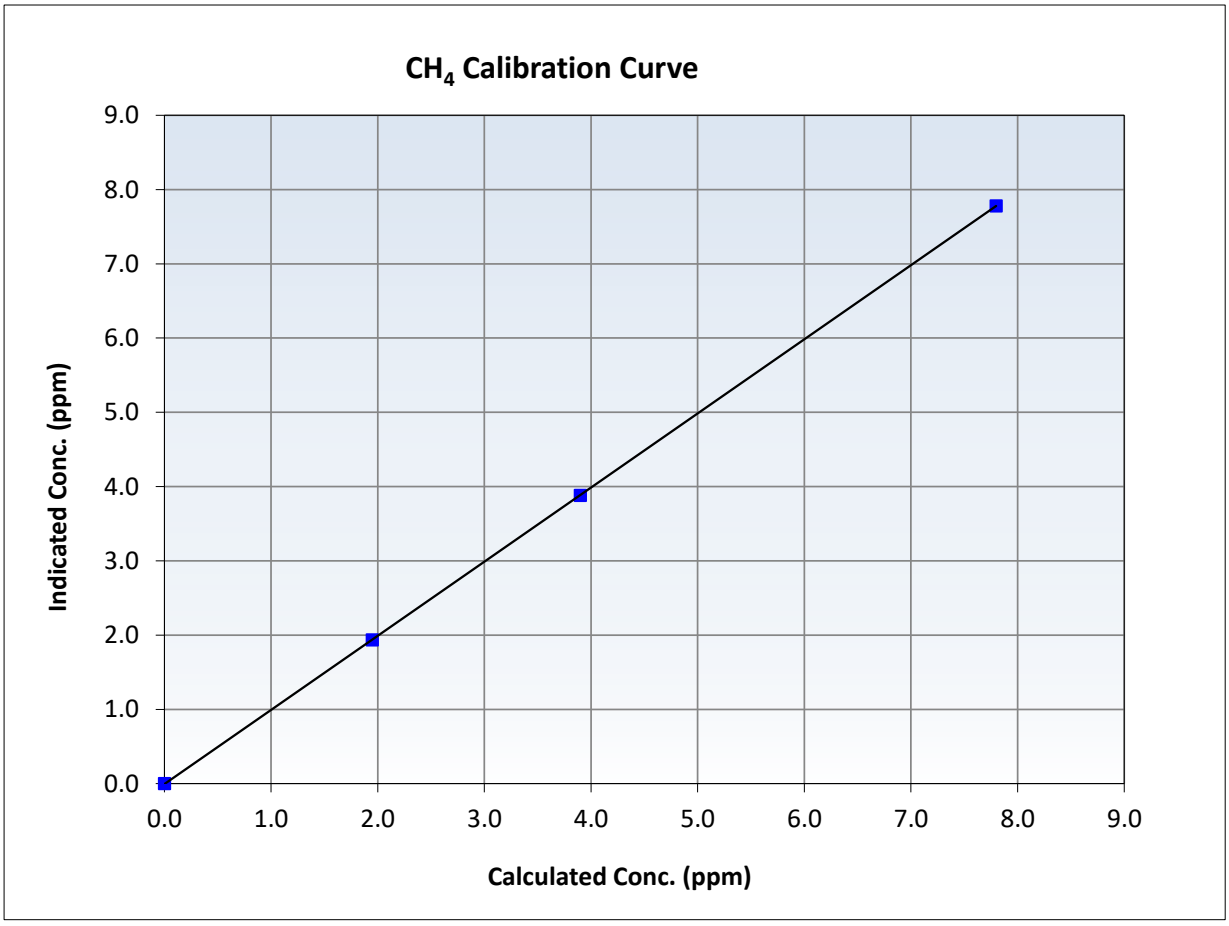
CH_4 Calibration Summary

Station Information

Calibration Date:	September 14, 2026	Previous Calibration:	September 2, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	9:36	End Time (MST):	12:52
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999997	≥0.995
7.80	7.78	1.0021	Slope	0.998213	0.90 - 1.10
3.90	3.88	1.0044			
1.95	1.94	1.0074	Intercept	-0.005922	+/-0.5



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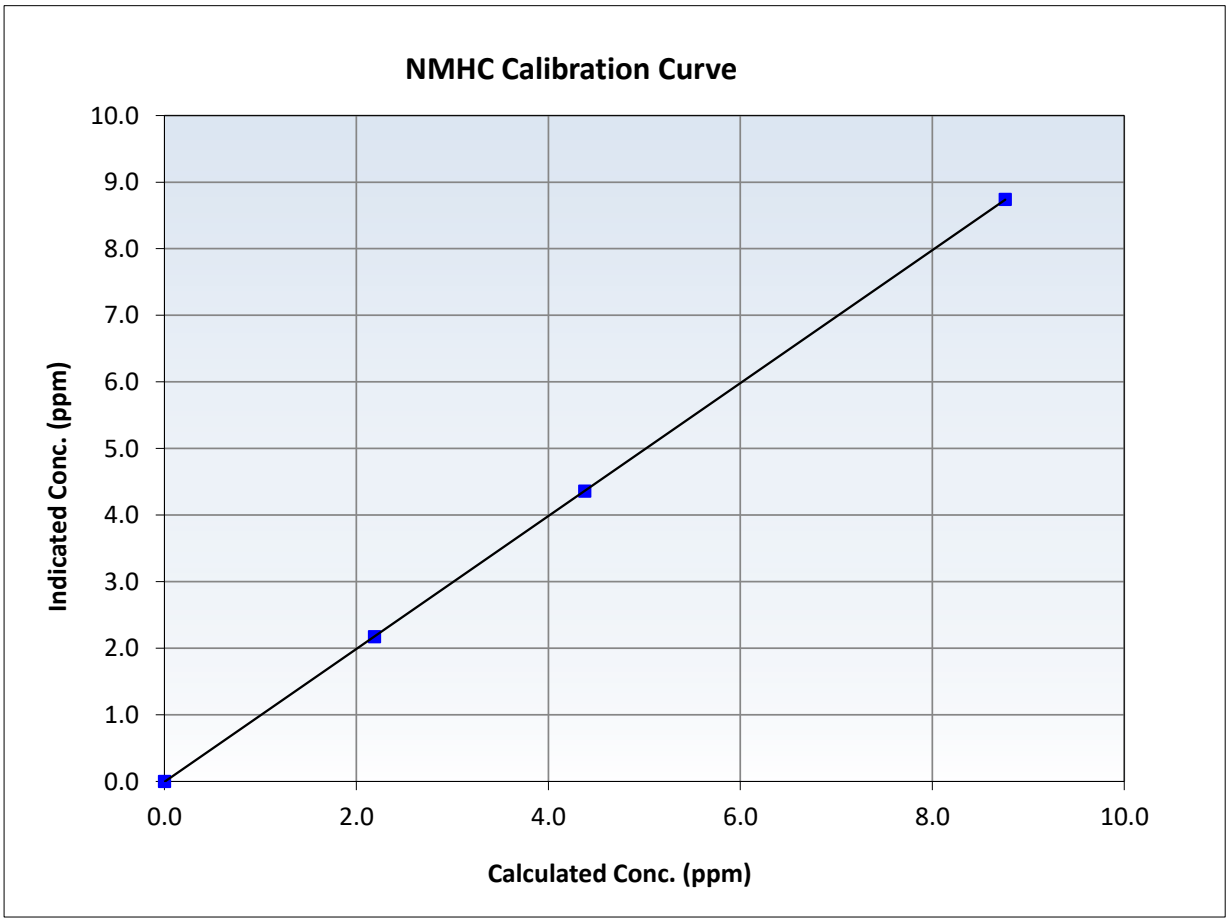
NMHC Calibration Summary

Station Information

Calibration Date:	September 14, 2026	Previous Calibration:	September 2, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	9:36	End Time (MST):	12:52
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999998	≥0.995
8.76	8.74	1.0023	Slope	0.998053	0.90 - 1.10
4.38	4.36	1.0041	Intercept	-0.006313	+/-0.5
2.19	2.17	1.0077			



NMHC Calibration Plot Date: September 14, 2026 Location: Pihew Point



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Pihew Point	Station number:	AMS 32
Calibration Date:	September 21, 2026	Last Cal Date:	September 14, 2026
Start time (MST):	9:00	End time (MST):	13:19
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	SA150969A	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
C3H8 Cal Gas Conc.	204.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
Removed C3H8 Conc.	204.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne T700	Serial Number:	3804
Zero Air Gen model:	Teledyne T701H	Serial Number:	692

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.04E-04	2.67E-04	NMHC SP Ratio:	4.65E-05	4.50E-05
CH4 Retention time:	16.2	15.6	NMHC Peak Area:	188422	194628
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	16.56	15.91	1.041
As found Mid point	4961	39.0	8.28	7.85	1.055
As found Low point	4981	19.5	4.14	3.92	1.057
New cylinder response					
Baseline Corr AF:	15.91	Prev response	16.51	*% change	-3.8%
Baseline Corr 2nd AF:	7.85	AF Slope:	0.961321	AF Intercept:	-0.045841
Baseline Corr 3rd AF:	3.92	AF Correlation:	0.999940	* = > +/-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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	16.56	16.52	1.002
Mid point	4961	39.0	8.28	8.22	1.007
Low point	4981	19.5	4.14	4.08	1.016
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	16.56	16.47	1.005
				Average Correction Factor	1.008

Notes: Adjusted span due to CH4 channel dipping during sampling. Adjusted carrier pressure and span.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	8.76	8.82	0.993
As found Mid point	4961	39.0	4.38	4.34	1.009
As found Low point	4981	19.5	2.19	2.18	1.004
New cylinder response					
Baseline Corr AF:	8.82	Prev response	8.74	*% change	0.9%
Baseline Corr 2nd AF:	4.34	AF Slope:	1.006833	AF Intercept:	-0.022712
Baseline Corr 3rd AF:	2.18	AF Correlation:	0.999928	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	8.76	8.73	1.003
Mid point	4961	39.0	4.38	4.37	1.003
Low point	4981	19.5	2.19	2.17	1.010
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	8.76	8.68	1.009
				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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	7.80	7.09	1.100
As found Mid point	4961	39.0	3.90	3.50	1.113
As found Low point	4981	19.5	1.95	1.74	1.124
New cylinder response					
Baseline Corr AF:	7.09	Prev response	7.78	*% change	-9.7%
Baseline Corr 2nd AF:	3.50	AF Slope:	0.910460	AF Intercept:	-0.023529
Baseline Corr 3rd AF:	1.74	AF Correlation:	0.999943	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	7.80	7.79	1.001
Mid point	4961	39.0	3.90	3.85	1.013
Low point	4981	19.5	1.95	1.91	1.023
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	7.80	7.79	1.001
				Average Correction Factor	1.012

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.997977	0.998522
THC Cal Offset:	-0.012635	-0.029835
CH4 Cal Slope:	0.998213	1.000089
CH4 Cal Offset:	-0.005922	-0.025322
NMHC Cal Slope:	0.998053	0.997101
NMHC Cal Offset:	-0.006313	-0.004913

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

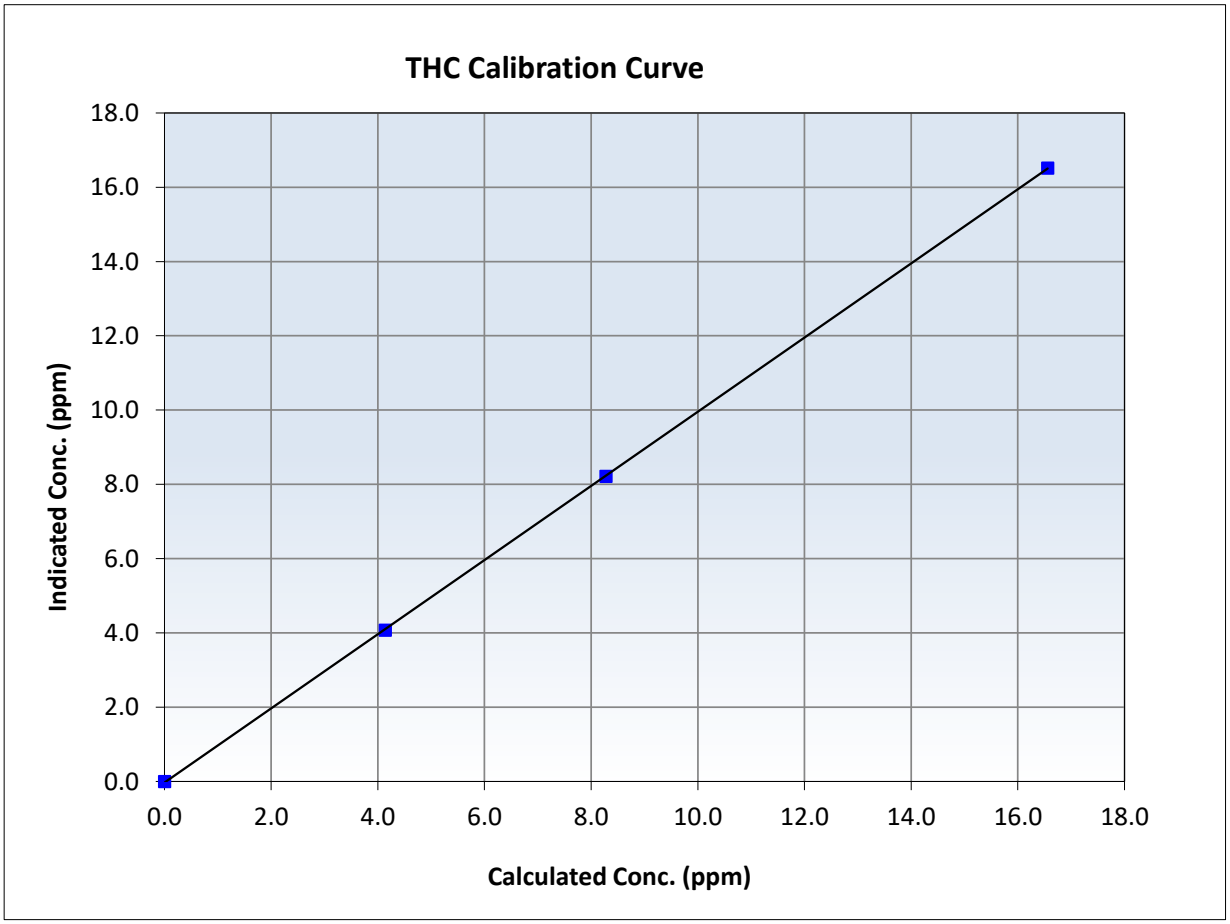
THC Calibration Summary

Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	September 14, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	9:00	End Time (MST):	13:19
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999985	*≥0.995*
16.56	16.52	1.0023	Slope	0.998522	*0.90 - 1.10*
8.28	8.22	1.0072			
4.14	4.08	1.0158	Intercept	-0.029835	*+/-0.5*



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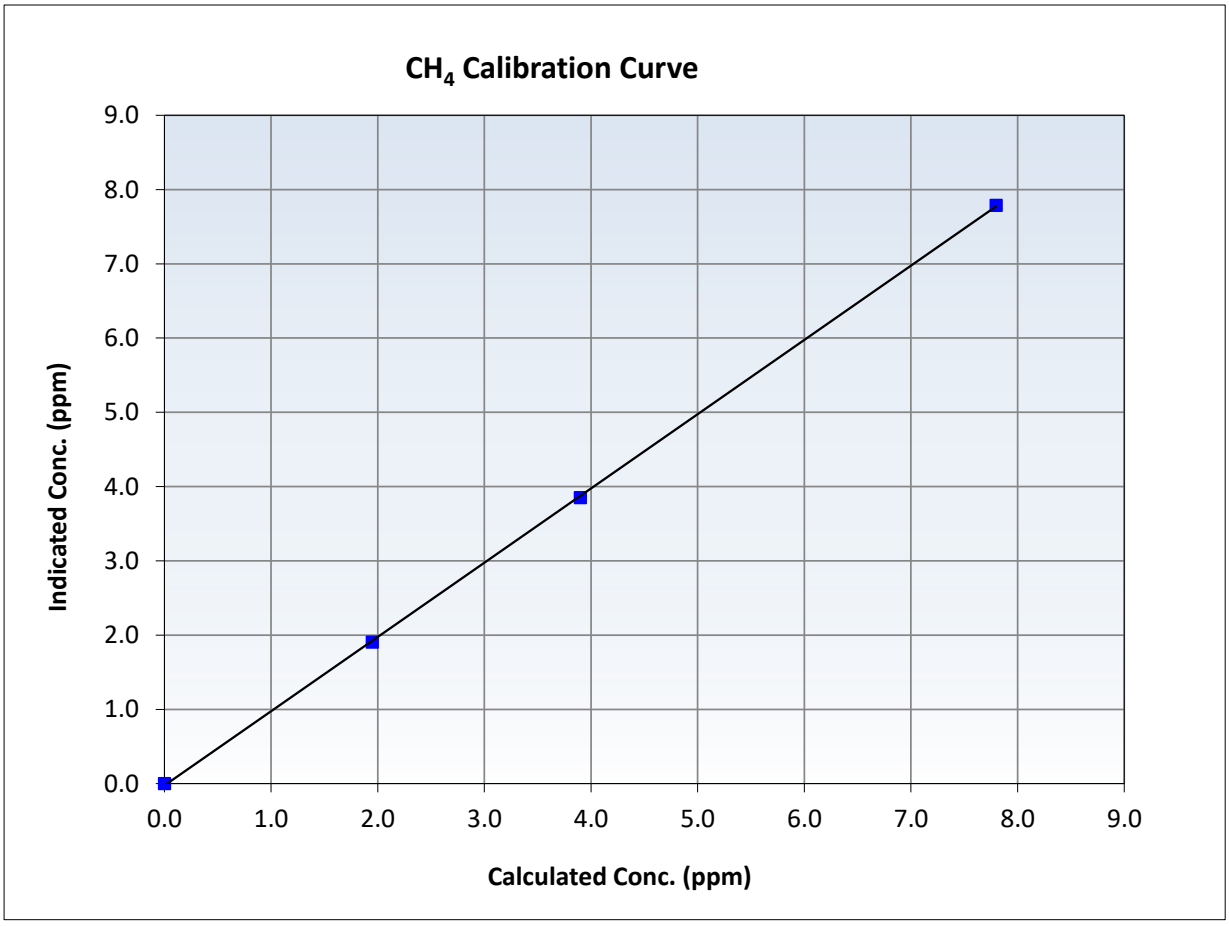
CH_4 Calibration Summary

Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	September 14, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	9:00	End Time (MST):	13:19
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999947	*≥0.995*
7.80	7.79	1.0011	Slope	1.000089	*0.90 - 1.10*
3.90	3.85	1.0125			
1.95	1.91	1.0228	Intercept	-0.025322	*+/-0.5*



Wood Buffalo Environmental Association

NMHC Calibration Summary

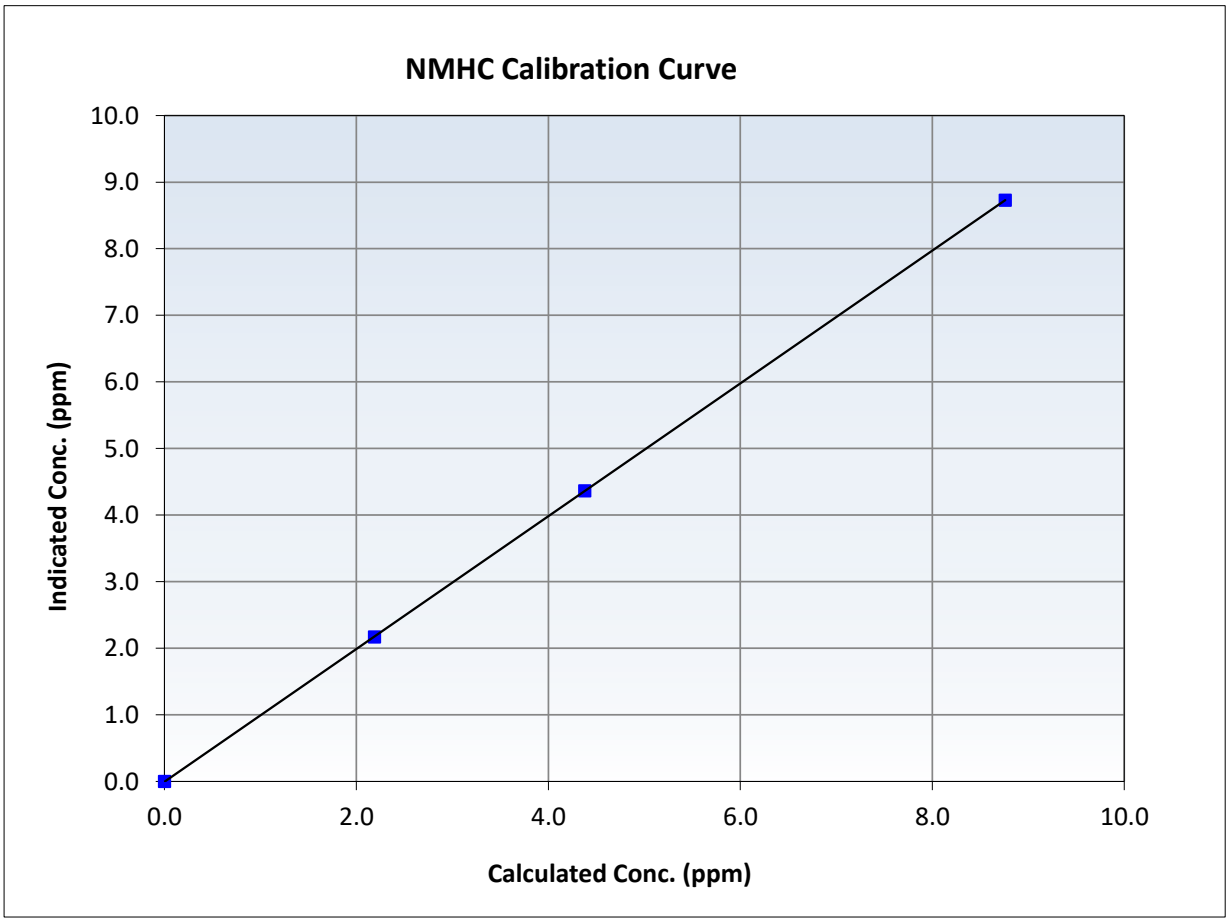
Station Information

Calibration Date:	September 21, 2026	Previous Calibration:	September 14, 2026
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	9:00	End Time (MST):	13:19
Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355

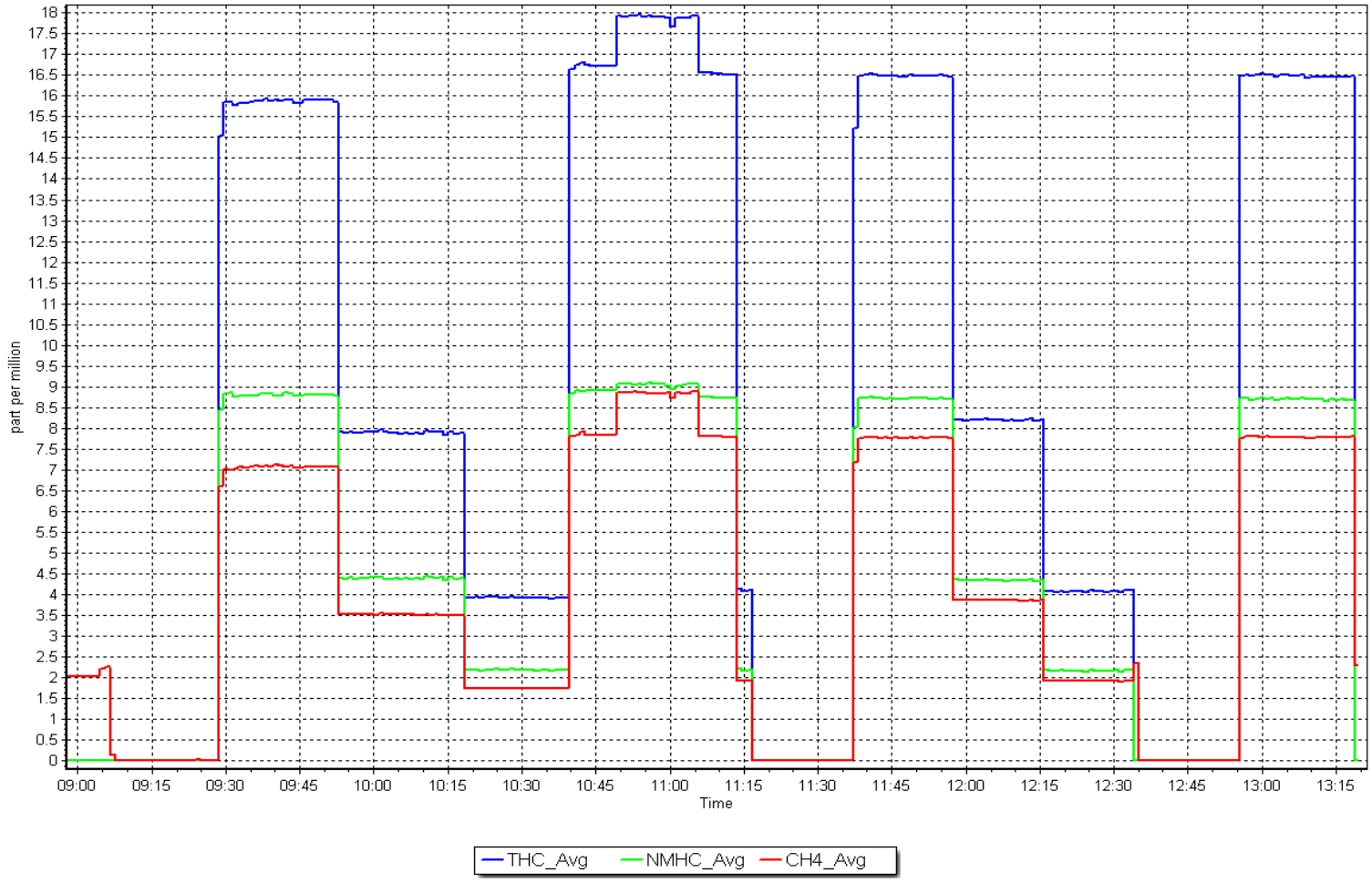
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.76	8.73	1.0035
4.38	4.37	1.0030
2.19	2.17	1.0096

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.997101	*0.90 - 1.10*
Intercept	-0.004913	*+/-0.5*



NMHC Calibration Plot Date: September 21, 2026 Location: Pihew Point



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Pihew Point	Station number:	AMS 32
Calibration Date:	September 25, 2026	Last Cal Date:	September 21, 2026
Start time (MST):	9:54	End time (MST):	11:25
Reason:	Removal		

Calibration Standards

Gas Cert Reference:	SA150969A	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
C3H8 Cal Gas Conc.	204.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
Removed C3H8 Conc.	204.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne T700	Serial Number:	3804
Zero Air Gen model:	Teledyne T701H	Serial Number:	692

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1218153355
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.67E-04	2.67E-04	NMHC SP Ratio:	4.50E-05	4.50E-05
CH4 Retention time:	15.6	15.6	NMHC Peak Area:	194628	194628
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	16.56	16.24	1.020
As found Mid point	4961	39.0	8.28	8.08	1.025
As found Low point	4981	19.5	4.14	4.01	1.034
New cylinder response					
Baseline Corr AF:	16.24	Prev response	16.50	*% change	-1.6%
Baseline Corr 2nd AF:	8.08	AF Slope:	0.981612	AF Intercept:	-0.029838
Baseline Corr 3rd AF:	4.01	AF Correlation:	0.999985	* = > +/-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)) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor

Notes: Removed due to CH4 dips seen during sampling.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	8.76	8.77	0.999
As found Mid point	4961	39.0	4.38	4.36	1.005
As found Low point	4981	19.5	2.19	2.16	1.013
New cylinder response					
Baseline Corr AF:	8.77	Prev response	8.73	*% change	0.5%
Baseline Corr 2nd AF:	4.36	AF Slope:	1.001941	AF Intercept:	-0.017713
Baseline Corr 3rd AF:	2.16	AF Correlation:	0.999980	* = > +/-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) *Limit = 0.95-1.05*
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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4922	78.0	7.80	7.47	1.044
As found Mid point	4961	39.0	3.90	3.72	1.049
As found Low point	4981	19.5	1.95	1.84	1.058
New cylinder response					
Baseline Corr AF:	7.47	Prev response	7.77	*% change	-4.0%
Baseline Corr 2nd AF:	3.72	AF Slope:	0.959143	AF Intercept:	-0.014125
Baseline Corr 3rd AF:	1.84	AF Correlation:	0.999984	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

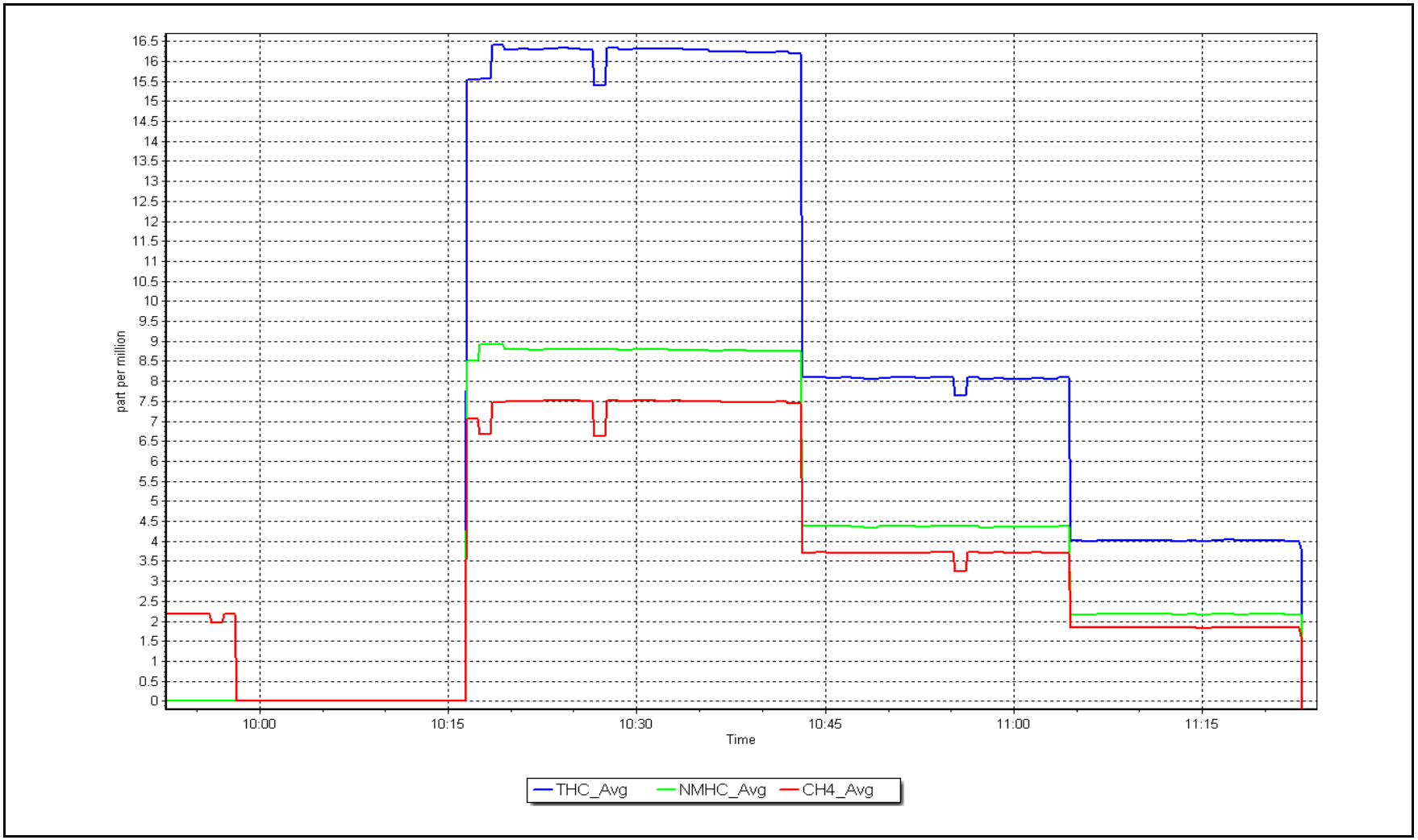
Average Correction Factor

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.998522	
THC Cal Offset:	-0.029835	
CH4 Cal Slope:	1.000089	
CH4 Cal Offset:	-0.025322	
NMHC Cal Slope:	0.997101	
NMHC Cal Offset:	-0.004913	

Calibration Performed By: Braiden Boutilier

NMHC Calibration Plot Date: September 25, 2026 Location: Pihew Point



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Pihew Point	Station number:	AMS 32
Calibration Date:	September 25, 2026	Last Cal Date:	NA
Start time (MST):	11:45	End time (MST):	15:58
Reason:	Install		

Calibration Standards

Gas Cert Reference:	SA150969A	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
C3H8 Cal Gas Conc.	204.2 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	499.9 ppm	CH4 Equiv Conc.	1061.5 ppm
Removed C3H8 Conc.	204.2 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne T700	Serial Number:	3804
Zero Air Gen model:	Teledyne T701H	Serial Number:	692

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:		3.76E-04	NMHC SP Ratio:		6.14E-05
CH4 Retention time:		14.6	NMHC Peak Area:		142601
Zero Chromatogram:		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)) *Limit = 0.90-1.10*
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)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	16.56	16.54	1.001
Mid point	4961	39.0	8.28	8.24	1.005
Low point	4981	19.5	4.14	4.09	1.013
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	16.56	16.49	1.004
				Average Correction Factor	1.006

Notes: Install calibration completed. Adjusted span.

Wood Buffalo Environmental Association

THC / CH_4 / 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)) *Limit = 0.90-1.10*
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	8.76	8.76	1.000
Mid point	4961	39.0	4.38	4.41	0.993
Low point	4981	19.5	2.19	2.19	0.999
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	8.76	8.71	1.006
				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)) *Limit = 0.90-1.10*
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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.0	7.80	7.78	1.002
Mid point	4961	39.0	3.90	3.83	1.018
Low point	4981	19.5	1.95	1.90	1.028
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.0	7.80	7.78	1.002
				Average Correction Factor	1.016

Calibration Statistics

	Start	*Finish*
THC Cal Slope:		0.999654
THC Cal Offset:		-0.025035
CH4 Cal Slope:		0.999166
CH4 Cal Offset:		-0.031922
NMHC Cal Slope:		1.000310
NMHC Cal Offset:		0.006288

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

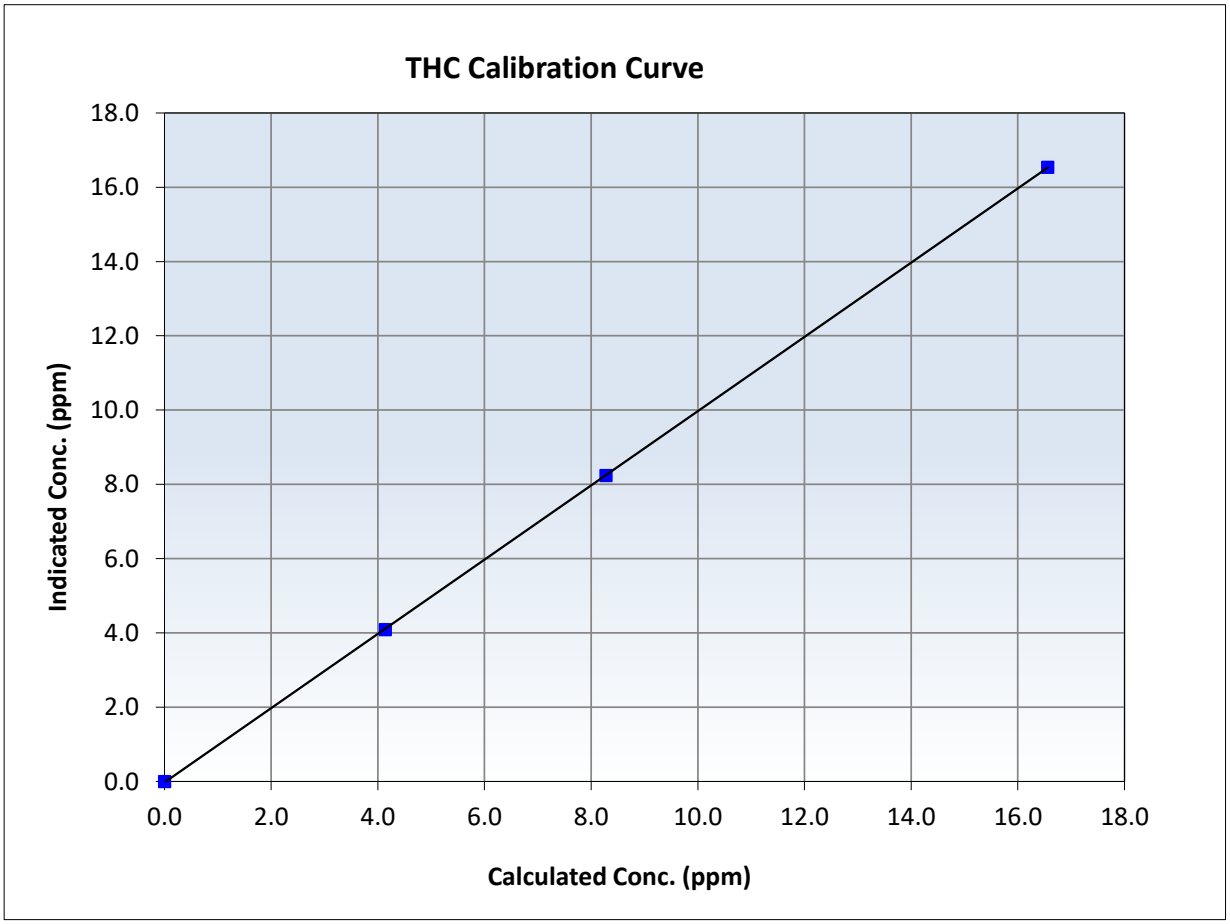
THC Calibration Summary

Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	NA
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	11:45	End Time (MST):	15:58
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999990	*≥0.995*
16.56	16.54	1.0011	Slope	0.999654	*0.90 - 1.10*
8.28	8.24	1.0048			
4.14	4.09	1.0128	Intercept	-0.025035	*+/-0.5*



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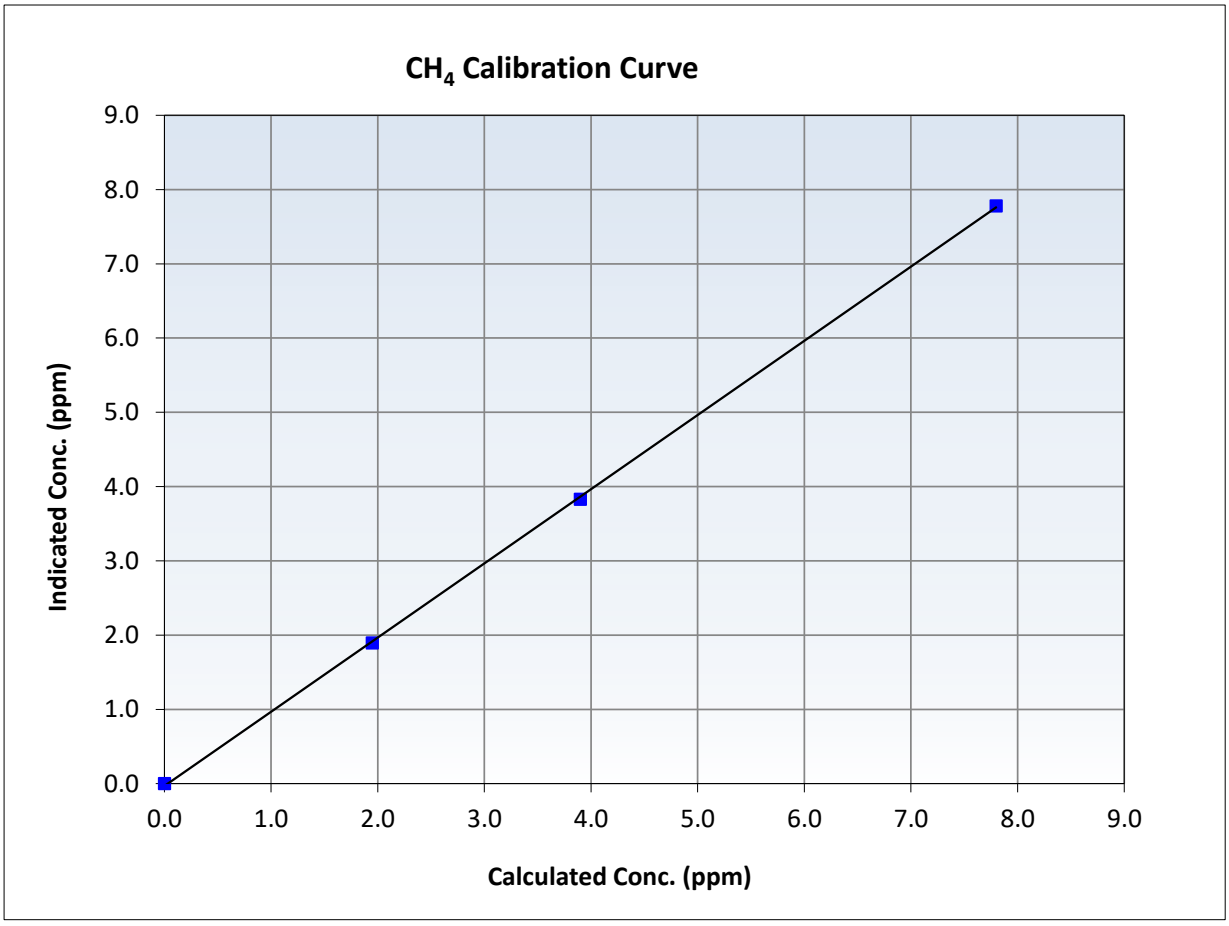
CH_4 Calibration Summary

Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	NA
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	11:45	End Time (MST):	15:58
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999908	≥0.995
7.80	7.78	1.0021	Slope	0.999166	0.90 - 1.10
3.90	3.83	1.0181			
1.95	1.90	1.0282	Intercept	-0.031922	+/-0.5



Wood Buffalo Environmental Association

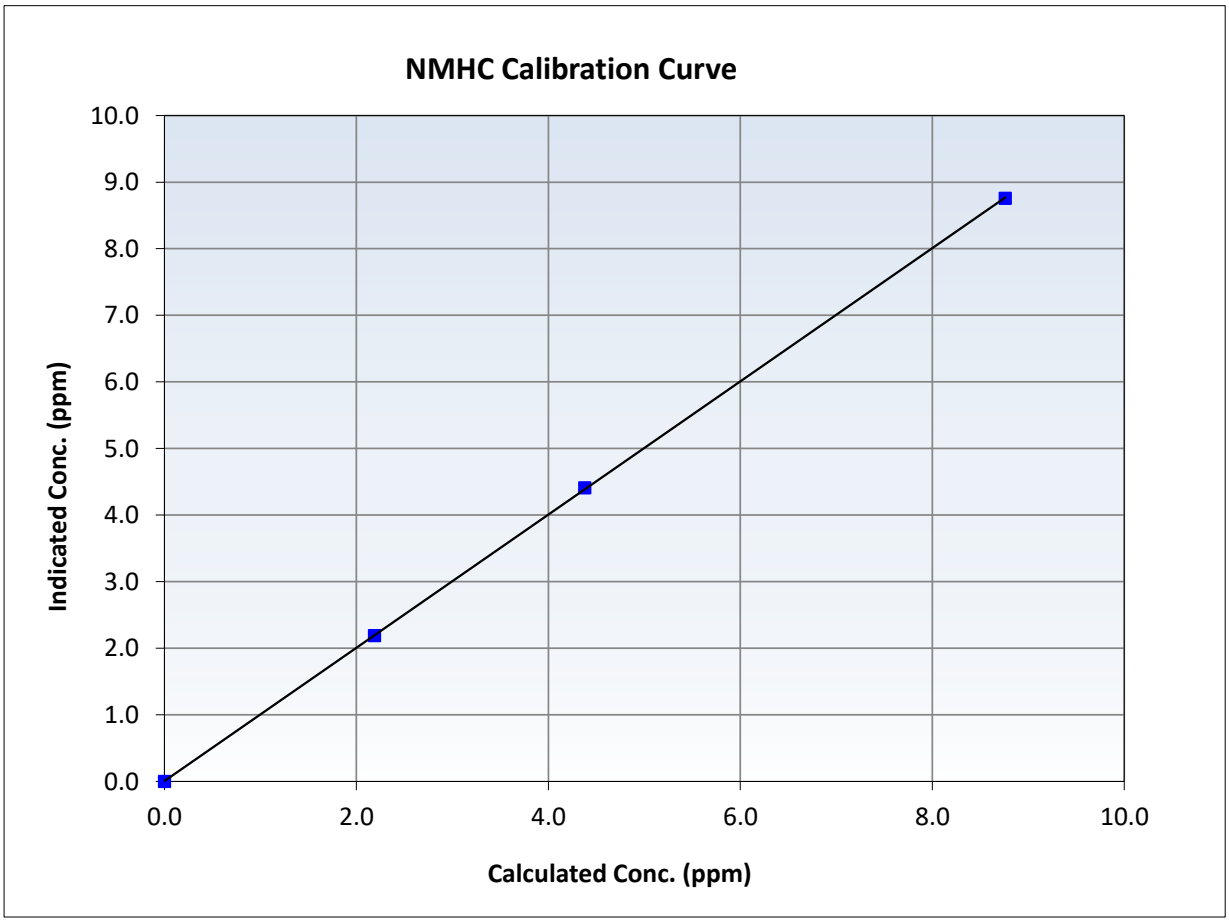
NMHC Calibration Summary

Station Information

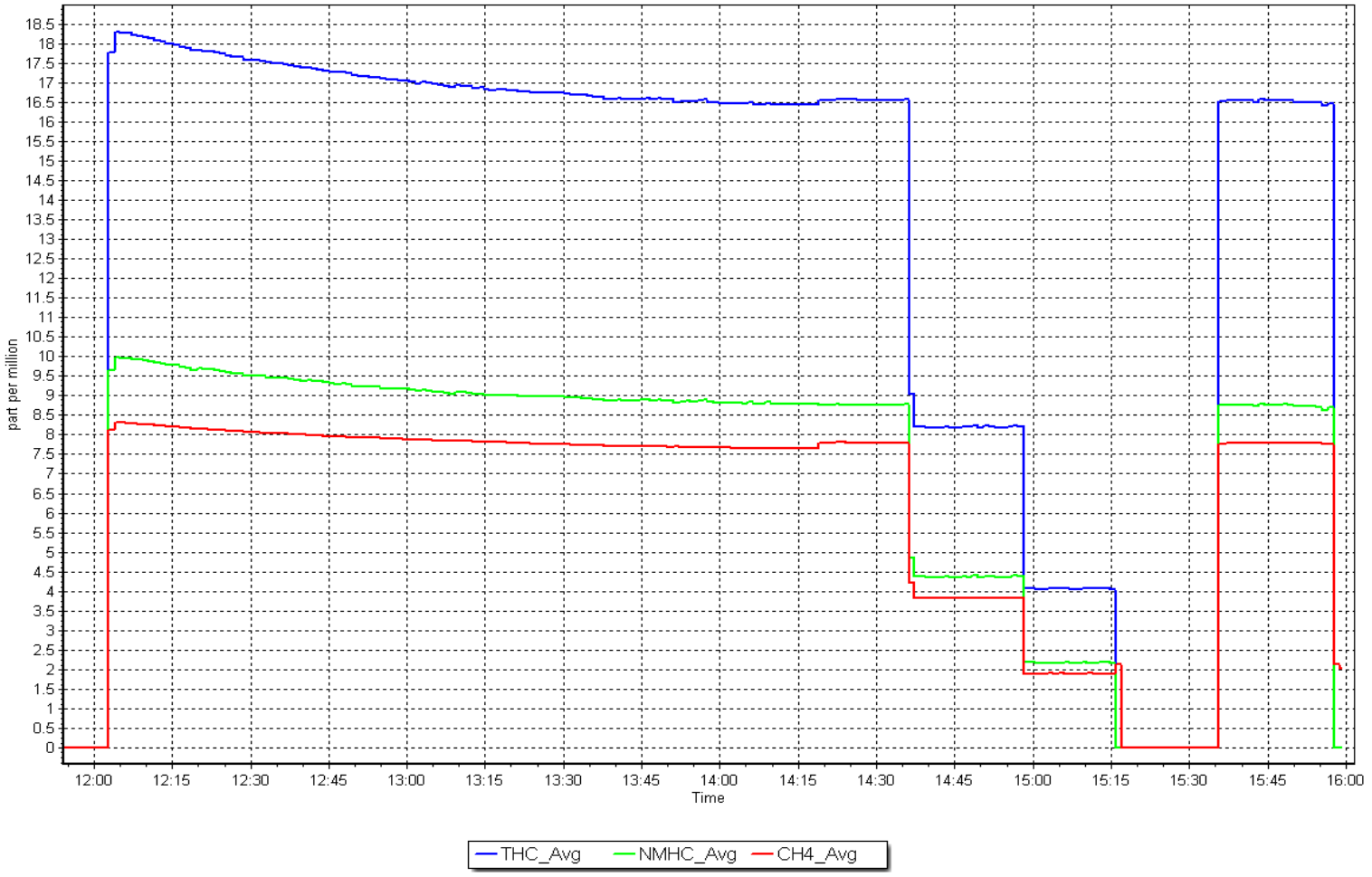
Calibration Date:	September 25, 2026	Previous Calibration:	NA
Station Name:	Pihew Point	Station Number:	AMS 32
Start Time (MST):	11:45	End Time (MST):	15:58
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999985	≥0.995
8.76	8.76	1.0000	Slope	1.000310	0.90 - 1.10
4.38	4.41	0.9934	Intercept	0.006288	+/-0.5
2.19	2.19	0.9995			



NMHC Calibration Plot Date: September 25, 2026 Location: Pihew Point



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS33
MONDAY CREEK
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Monday Creek	Station number:	AMS 33
Calibration Date:	September 14, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	11:04	End time (MST):	14:03
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:	4297

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1152430005	
Analyzer Range:	0- 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.995830	0.994533	Backgd or Offset:	32.1	32.1
Calibration intercept:	0.682322	0.561569	Coeff or Slope:	0.962	0.962

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.2	----
As found High point	4921	79.1	800.8	793.5	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.3	Previous response	798.1	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4921	79.1	800.8	796.8	1.005
Mid point	4961	39.5	399.9	398.4	1.004
Low point	4980	19.8	200.5	200.3	1.001
As left zero	5000	0.0	0.0	0.3	----
As left span	4921	79.1	800.8	799.5	1.002
				Average Correction Factor:	1.003

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

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

SO_2 Calibration Summary

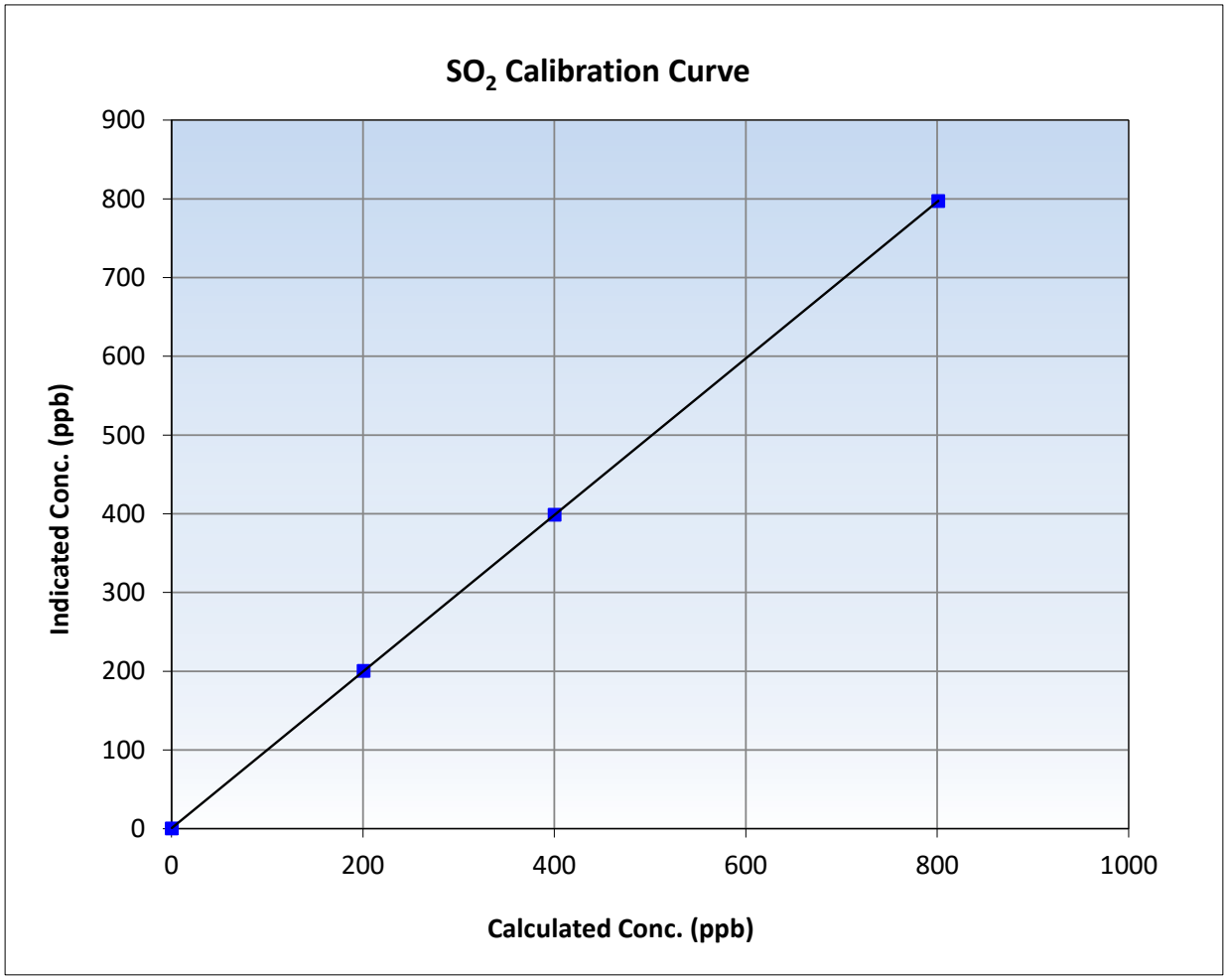
Station Information

Calibration Date:	September 14, 2026	Previous Calibration:	August 26, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	11:04	End Time (MST):	14:03
Analyzer make:	Thermo 43i	Analyzer serial #:	1152430005

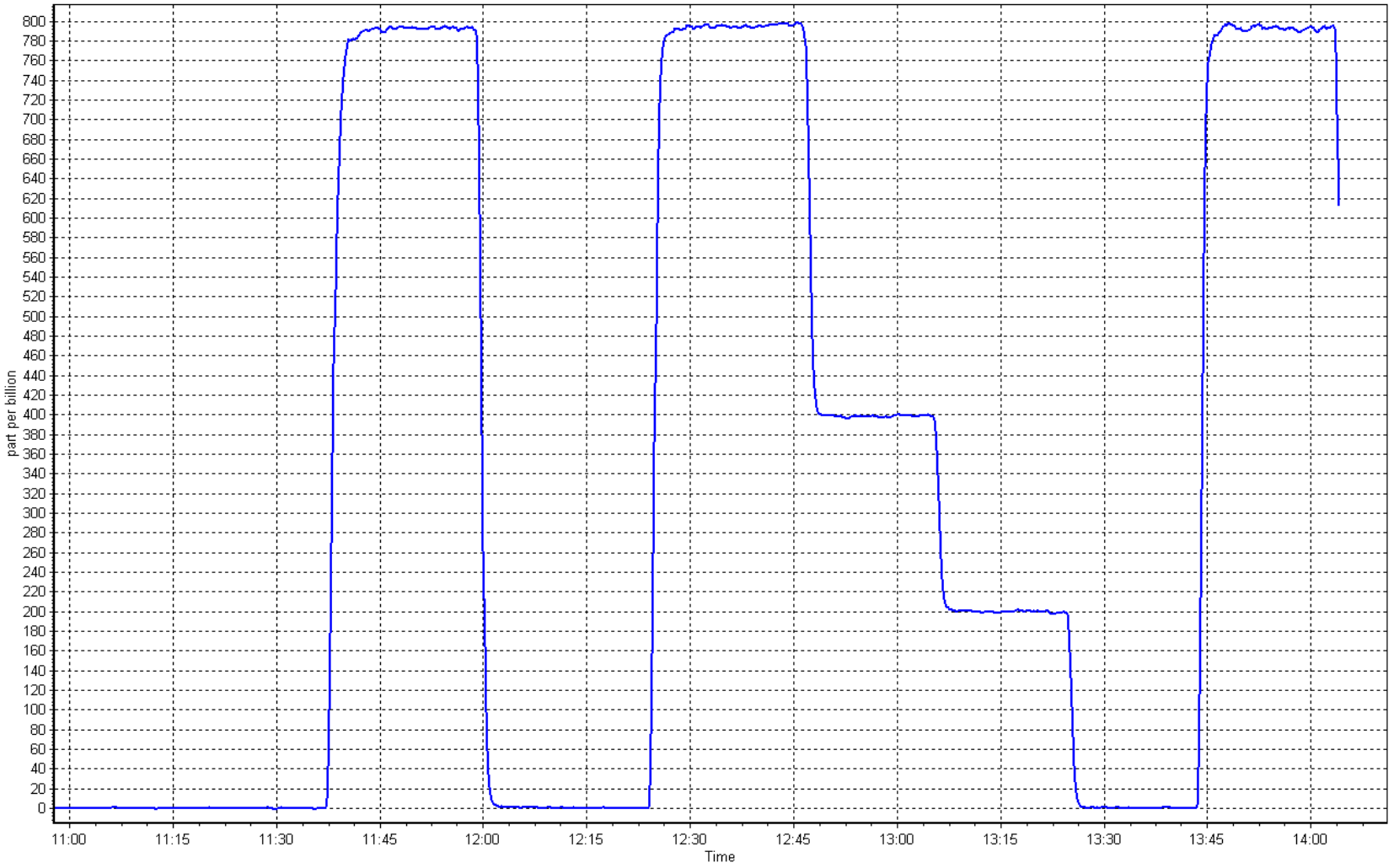
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.8	796.8	1.0050
399.9	398.4	1.0037
200.5	200.3	1.0008

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	0.994533	*0.90 - 1.10*
Intercept	0.561569	*+/-30*



SO2 Calibration Plot Date: September 14, 2026 Location: Monday Creek



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Monday Creek	Station number:	AMS 33
Calibration Date:	September 28, 2026	Last Cal Date:	August 25, 2026
Start time (MST):	11:32	End time (MST):	17:20
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 T750		Serial Number:	281
ZAG Make/Model:	Teledyne T751H		Serial Number:	530

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.001140	0.994568	Backgd or Offset:	1.47	1.52
Calibration intercept:	0.038397	0.118414	Coeff or Slope:	1.039	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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4921	79.2	80.0	79.8	1.001
As found Mid point	4960	39.6	40.0	39.5	1.010
As found Low point	4980	19.8	20.0	19.8	1.005
New cylinder response					

Baseline Corr As found:	79.9	Prev response:	80.12	*% change:	-0.3%
Baseline Corr 2nd AF pt:	39.6	AF Slope:	0.998711	AF Intercept:	-0.201586
Baseline Corr 3rd AF pt:	19.9	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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4921	79.2	80.0	79.7	1.004
Mid point	4960	39.6	40.0	39.7	1.008
Low point	4980	19.8	20.0	20.3	0.985
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	79.2	80.0	82.3	0.972
SO2 Scrubber Check	4921	79.1	791.0	0.0	----

Date of last scrubber change:	11-Apr-24	Ave Corr Factor	0.999
Date of last converter efficiency test:	October 22, 2025		

Notes: Sample inlet filter was changed after the multi-point as founds. SO2 scrubber check passed. Adjusted the span.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

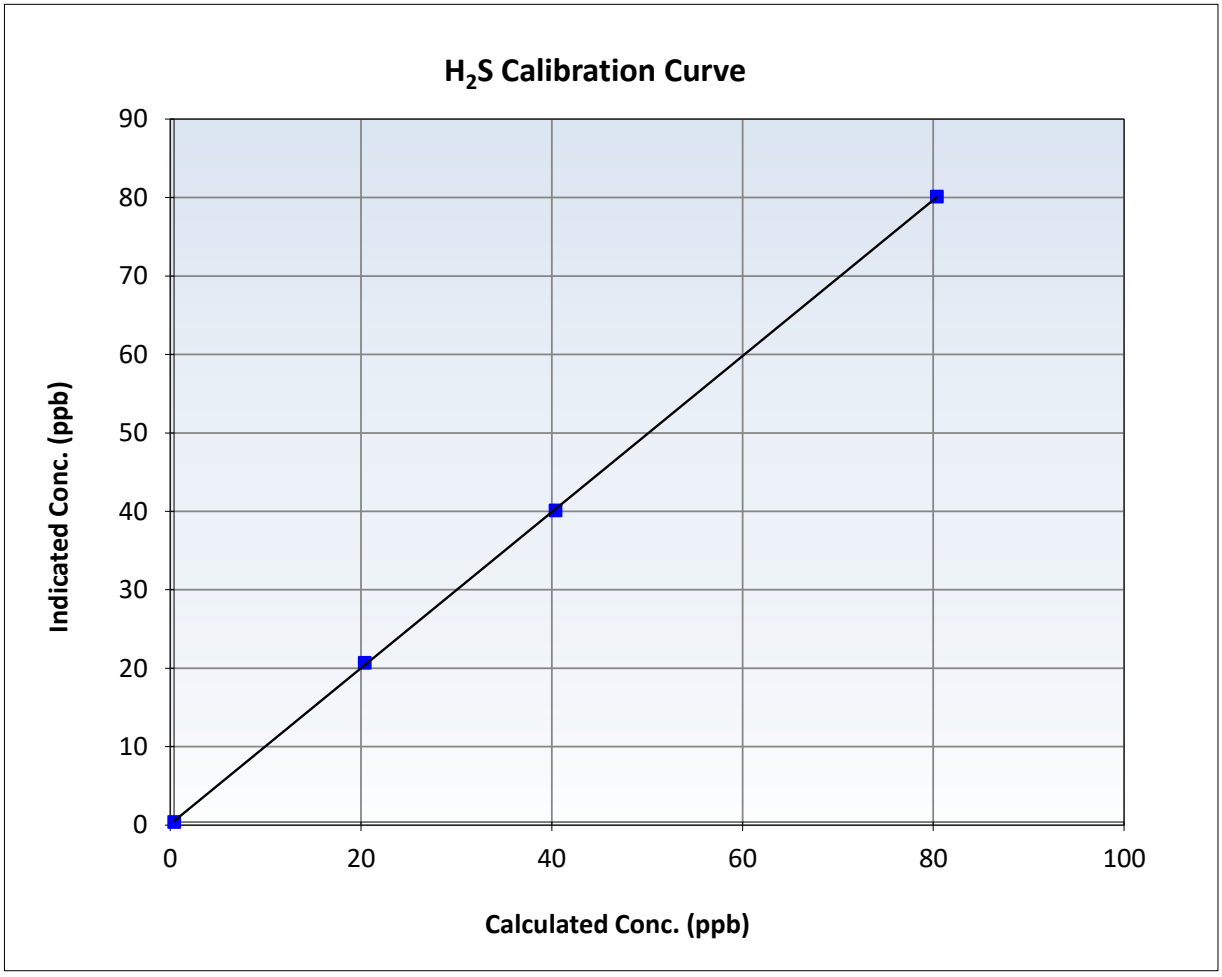
H2S Calibration Summary

Station Information

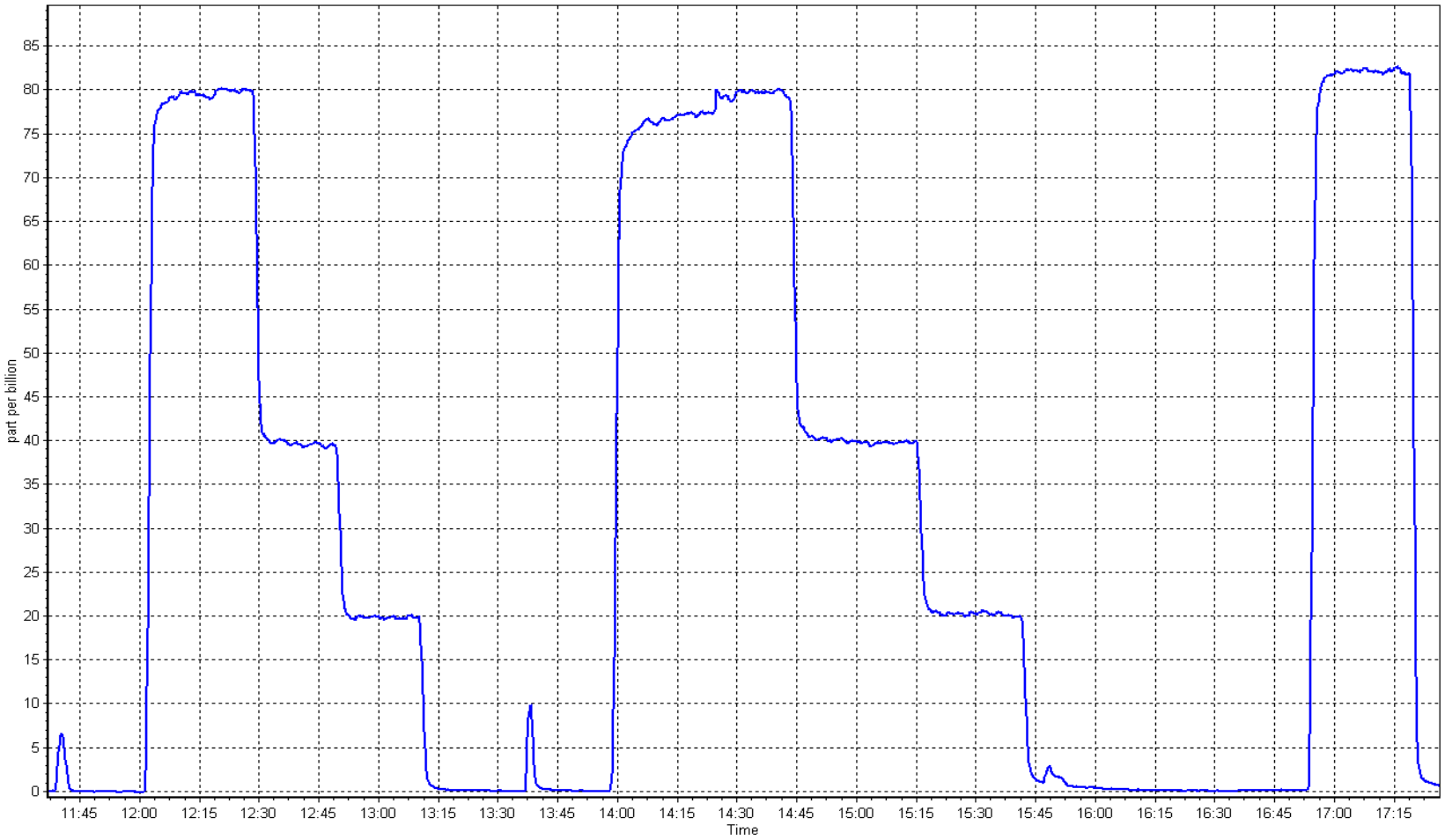
Calibration Date:	September 28, 2026	Previous Calibration:	August 25, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	11:32	End Time (MST):	17:20
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12333331547

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999960	*≥0.995*
80.0	79.7	1.0036	Slope	0.994568	*0.90 - 1.10*
40.0	39.7	1.0075			
20.0	20.3	0.9852	Intercept	0.118414	*+/-3*



H2S Calibration Plot Date: September 28, 2026 Location: Monday Creek



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Monday Creek
Station number:	AMS 33
Calibration Date:	September 28, 2026
Last Cal Date:	August 24, 2026
Start time (MST):	11:32
End time (MST):	16:06
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC755290	Cal Gas Expiry Date:	March 11, 2031
NOX Cal Gas Conc:	48.90 ppm	NO Cal Gas Conc:	48.70 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	48.90 ppm	Removed Gas NO Conc:	48.70 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	3253
ZAG make/model:	Teledyne API T701	Serial Number:	4297

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
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	808.6	805.4	3.2	0.9927	0.9926
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.0 ppb	NO = 801.8 ppb
Baseline Corr 1st pt	NO_X = 808.8 ppb	NO = 805.6 ppb
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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = 0.7%
As found	NO r^2:	*Percent Change	NO = 0.5%
As found	NO_2 r^2:	Nx Sl:	Nx Int:
		NO Sl:	NO Int:
		NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i

Serial Number: 1170050148

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.675	0.675	NO bkgnd or offset:	1.3	1.3
NOX coeff or slope:	0.985	0.985	NOX bkgnd or offset:	1.4	1.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	159.6	158.1

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999297	1.004663
NO_X Cal Offset:	0.686517	0.826403
NO Cal Slope:	1.003301	1.005545
NO Cal Offset:	-0.453403	-0.013604
NO_2 Cal Slope:	0.997432	0.992942
NO_2 Cal Offset:	-0.278617	-1.393932

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
High point	4918	82.1	802.9	799.6	3.3	807.0	804.0	3.1	0.9949	0.9946
Mid point	4959	41.1	401.9	400.3	1.6	405.2	402.6	2.7	0.9920	0.9943
Low point	4980	20.5	200.5	199.7	0.8	203.1	200.8	2.4	0.9871	0.9943
As left zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.1	----	----
As left span	4918	82.1	802.9	416.0	386.9	805.6	416.0	389.6	0.9967	1.0000
								Average Correction Factor	0.9913	0.9944

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	804.0	414.9	392.4	389.0	1.0087	99.1%
Mid GPT point	804.0	609.7	197.6	193.9	1.0190	98.1%
Low GPT point	804.0	706.4	100.9	97.5	1.0347	96.6%
				Average Correction Factor	1.0208	98.0%

Notes: The sample inlet filter was changed after the as founds. No adjustments made.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

NO_X Calibration Summary

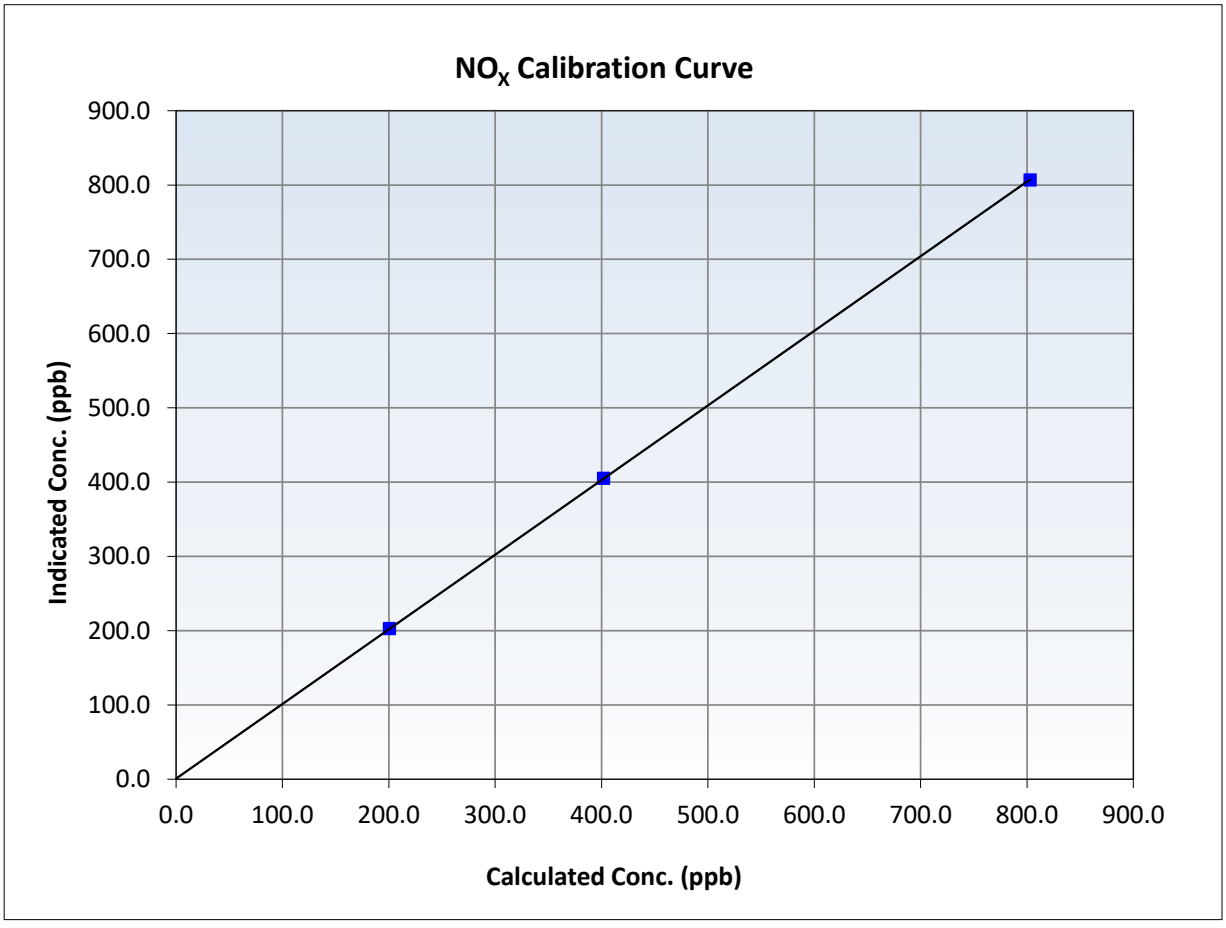
Station Information

Calibration Date:	September 28, 2026	Previous Calibration:	August 24, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	11:32	End Time (MST):	16:06
Analyzer make:	Thermo 42i	Analyzer serial #:	1170050148

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
802.9	807.0	0.9949
401.9	405.2	0.9920
200.5	203.1	0.9871

Statistical Evaluation		Limits
Correlation Coefficient	0.999994	≥0.995
Slope	1.004663	0.90 - 1.10
Intercept	0.826403	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

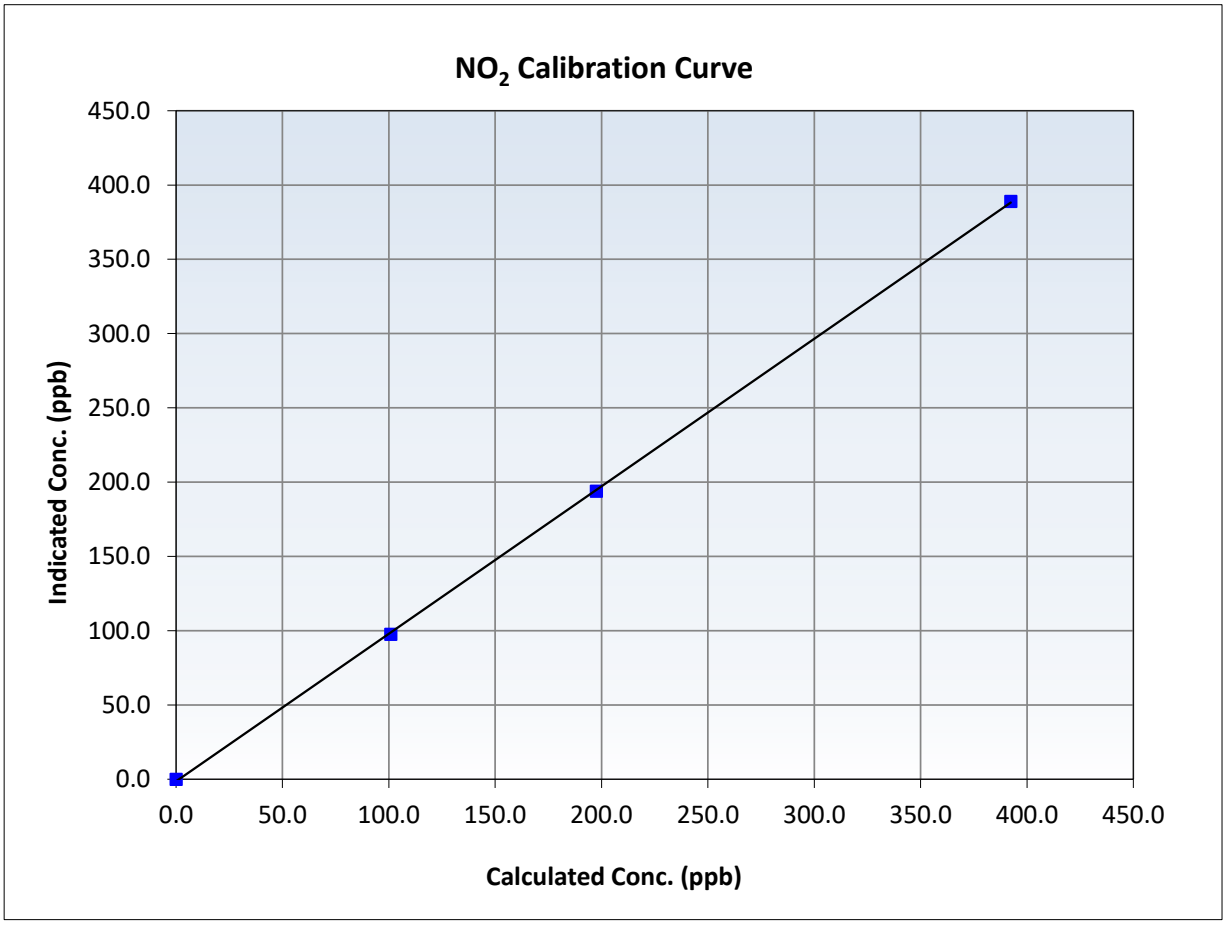
Station Information

Calibration Date:	September 28, 2026	Previous Calibration:	August 24, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	11:32	End Time (MST):	16:06
Analyzer make:	Thermo 42i	Analyzer serial #:	1170050148

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
392.4	389.0	1.0087
197.6	193.9	1.0190
100.9	97.5	1.0347

Statistical Evaluation		Limits
Correlation Coefficient	0.999940	≥0.995
Slope	0.992942	0.90 - 1.10
Intercept	-1.393932	+/-20



Wood Buffalo Environmental Association

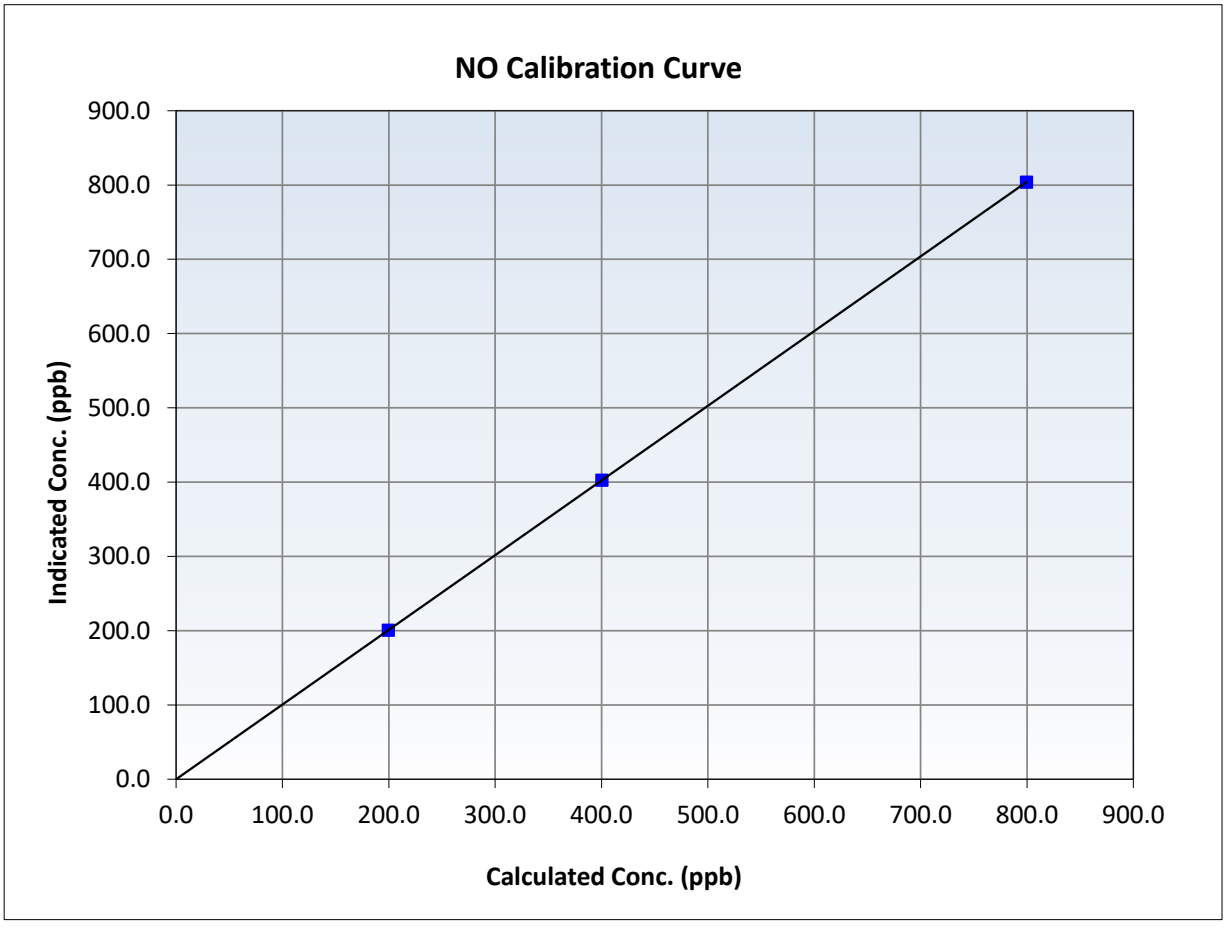
NO Calibration Summary

Station Information

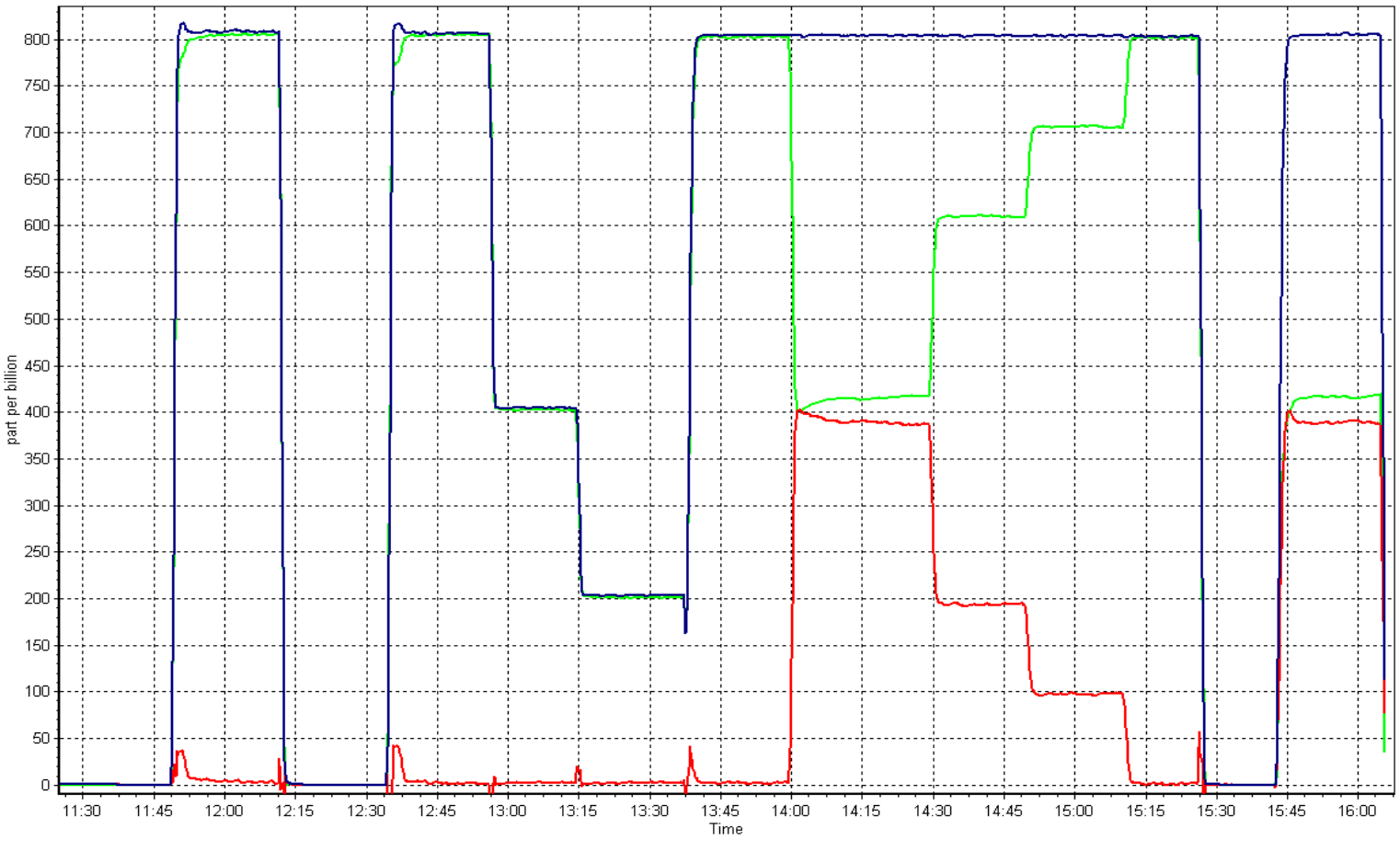
Calibration Date:	September 28, 2026	Previous Calibration:	August 24, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	11:32	End Time (MST):	16:06
Analyzer make:	Thermo 42i	Analyzer serial #:	1170050148

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	-0.1	----	Correlation Coefficient	1.000000	≥0.995
799.6	804.0	0.9946	Slope	1.005545	0.90 - 1.10
400.3	402.6	0.9943			
199.7	200.8	0.9943	Intercept	-0.013604	+/-20



NO_X Calibration Plot Date: September 28, 2026 Location: Monday Creek



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS34
HANGINGSTONE EXPANSION
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Hangingstone Expansion	Station number:	AMS 34
Calibration Date:	September 11, 2026	Last Cal Date:	August 7, 2026
Start time (MST):	7:50	End time (MST):	10:22
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				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.991810	0.994553	Backgd or Offset:	15.3	15.3
Calibration intercept:	-0.998377	-0.958734	Coeff or Slope:	1.143	1.143

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.3	----
As found High point	4919	81.0	799.8	794.1	1.008
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.8	Previous response	792.2	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.7	----
High point	4919	81.0	799.8	795.3	1.006
Mid point	4959	40.5	399.9	396.0	1.010
Low point	4980	20.3	200.4	196.7	1.019
As left zero	5000	0.0	0.0	0.5	----
As left span	4919	81.0	799.8	793.6	1.008
				Average Correction Factor:	1.012

Notes: No Maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

SO_2 Calibration Summary

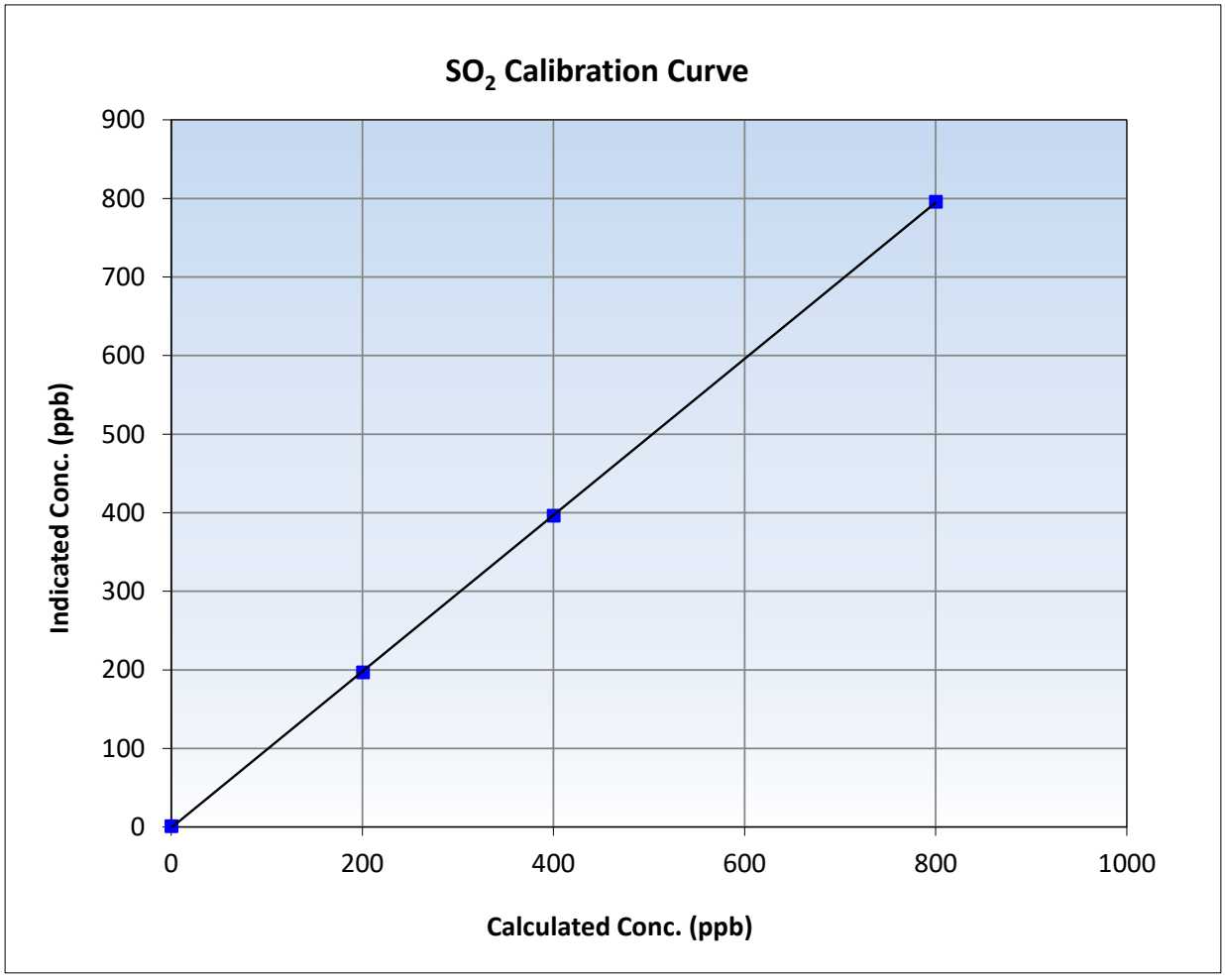
Station Information

Calibration Date:	September 11, 2026	Previous Calibration:	August 7, 2026
Station Name:	Hangingstone Expansion	Station Number:	AMS 34
Start Time (MST):	7:50	End Time (MST):	10:22
Analyzer make:	Thermo 43i	Analyzer serial #:	1173410001

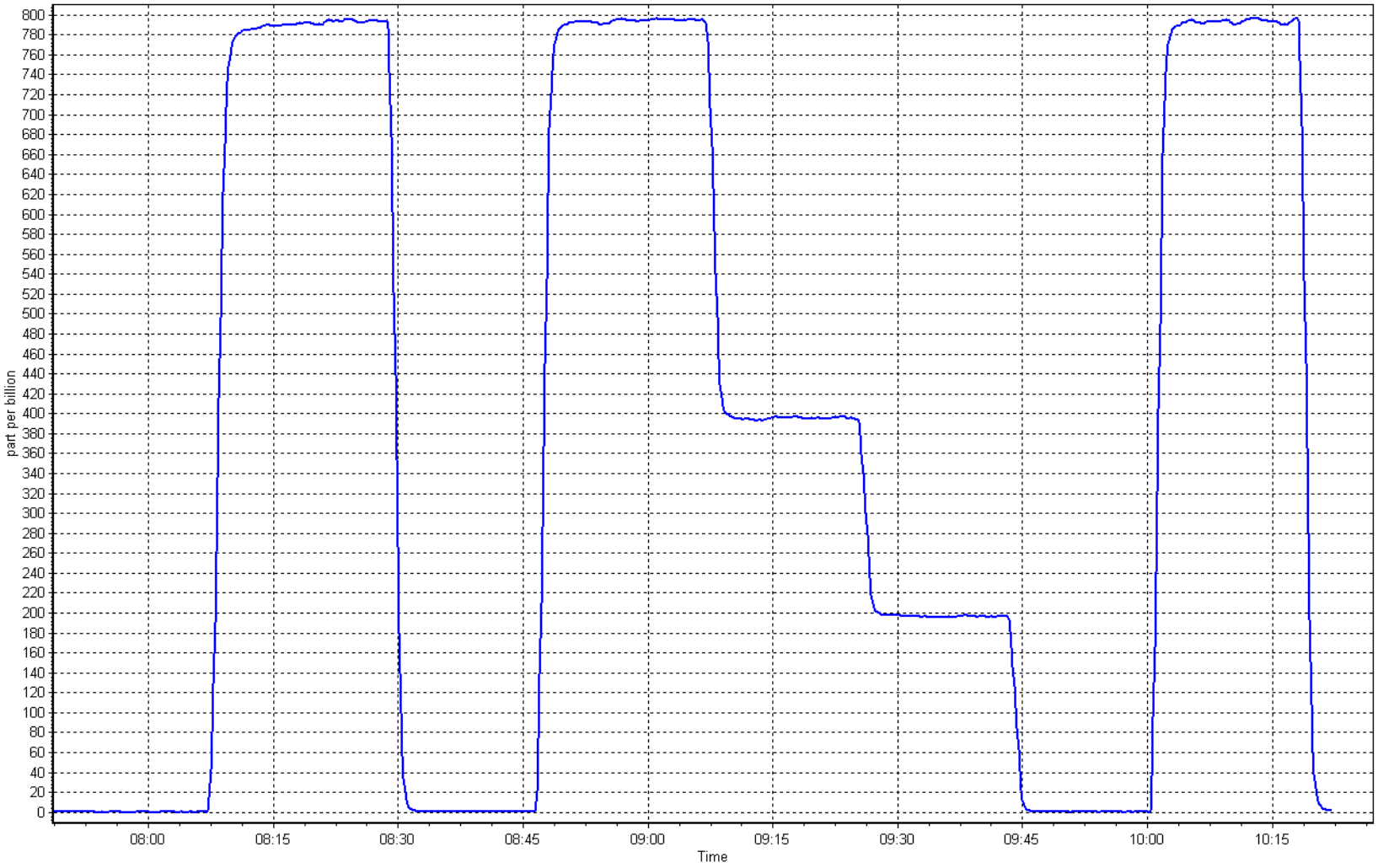
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.7	----
799.8	795.3	1.0057
399.9	396.0	1.0099
200.4	196.7	1.0190

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999980	*≥0.995*
Slope	0.994553	*0.90 - 1.10*
Intercept	-0.958734	*+/-30*



SO2 Calibration Plot Date: September 11, 2026 Location: Hangingstone Expansion



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Hangingstone Expansion	Station number:	AMS 34
Calibration Date:	September 28, 2026	Last Cal Date:	August 14, 2026
Start time (MST):	7:38	End time (MST):	13:03
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.380	ppm	Cal Gas Exp Date:	April 16, 2029
Cal Gas Cylinder #:	CC526512			
Removed Cal Gas Conc:	5.139	ppm	Rem Gas Exp Date:	January 3, 2026
Removed Gas Cyl #:	CC511397		Diff between cyl:	-0.3%
Calibrator Make/Model:	API T700		Serial Number:	2659
ZAG Make/Model:	API T701H		Serial Number:	196

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
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.016071	0.993623	Backgd or Offset:	4.19	4.19
Calibration intercept:	0.040466	0.077451	Coeff or Slope:	1.386	1.386

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4922	77.8	80.0	80.4	0.995
As found Mid point	4961	38.9	40.0	40.1	0.997
As found Low point	4981	19.5	20.0	19.8	1.012
New cylinder response	4926	74.3	79.9	80.1	0.998

Baseline Corr As found:	80.4	Prev response:	81.29	*% change:	-1.1%
Baseline Corr 2nd AF pt:	40.1	AF Slope:	1.006778	AF Intercept:	-0.159300
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999979	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4926	74.3	79.9	79.6	1.004
Mid point	4963	37.2	40.0	39.8	1.006
Low point	4981	18.6	20.0	19.7	1.016
As left zero	5000	0.0	0.0	0.3	----
As left span	4926	74.3	79.9	78.3	1.021
SO2 Scrubber Check	4919	81.0	810.0	-0.2	----
Date of last scrubber change:				Ave Corr Factor	1.009
Date of last converter efficiency test:					

Notes: Sox scrubber checked after the calibrator zero. Calibration gas changed out. No adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

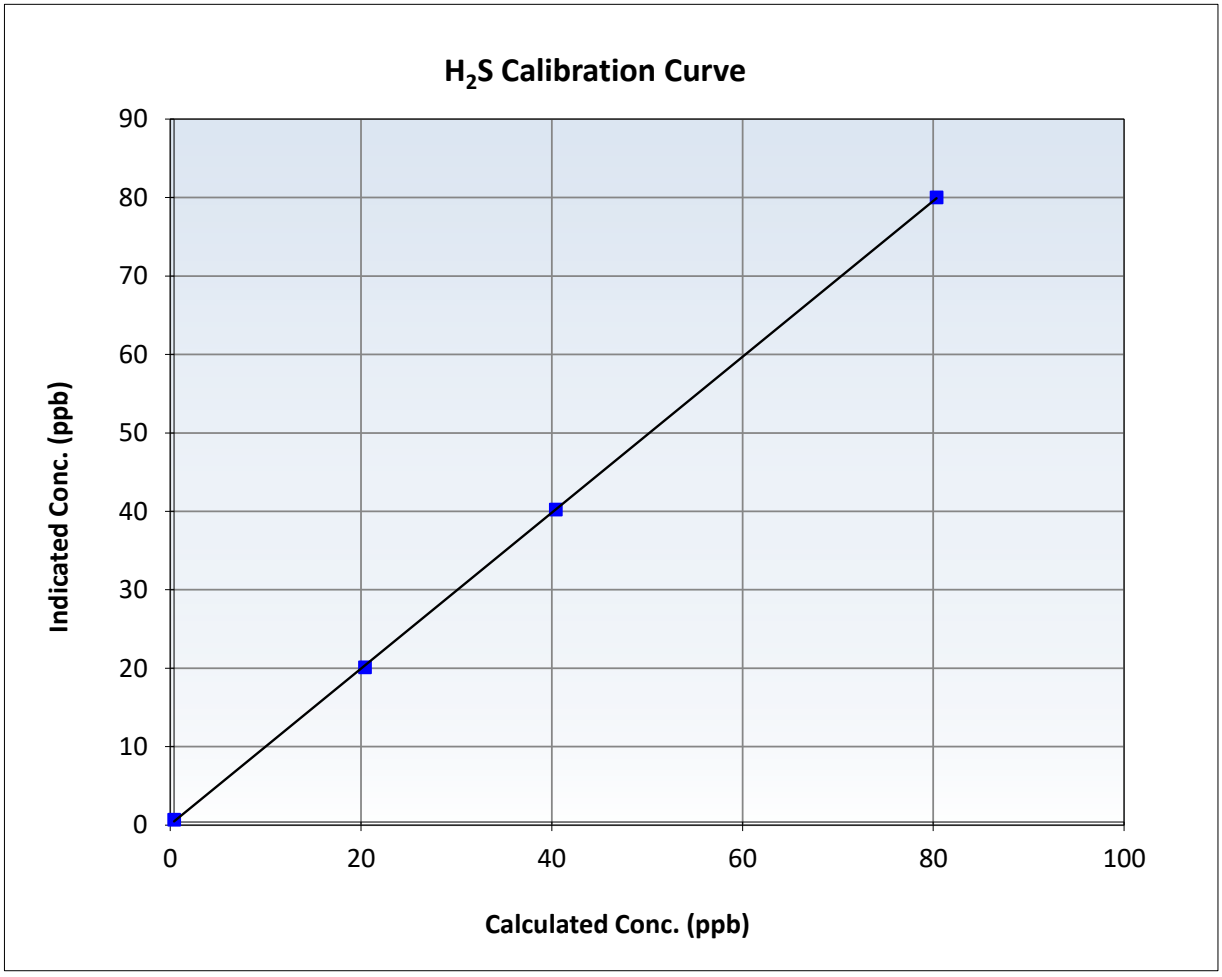
H_2S Calibration Summary

Station Information

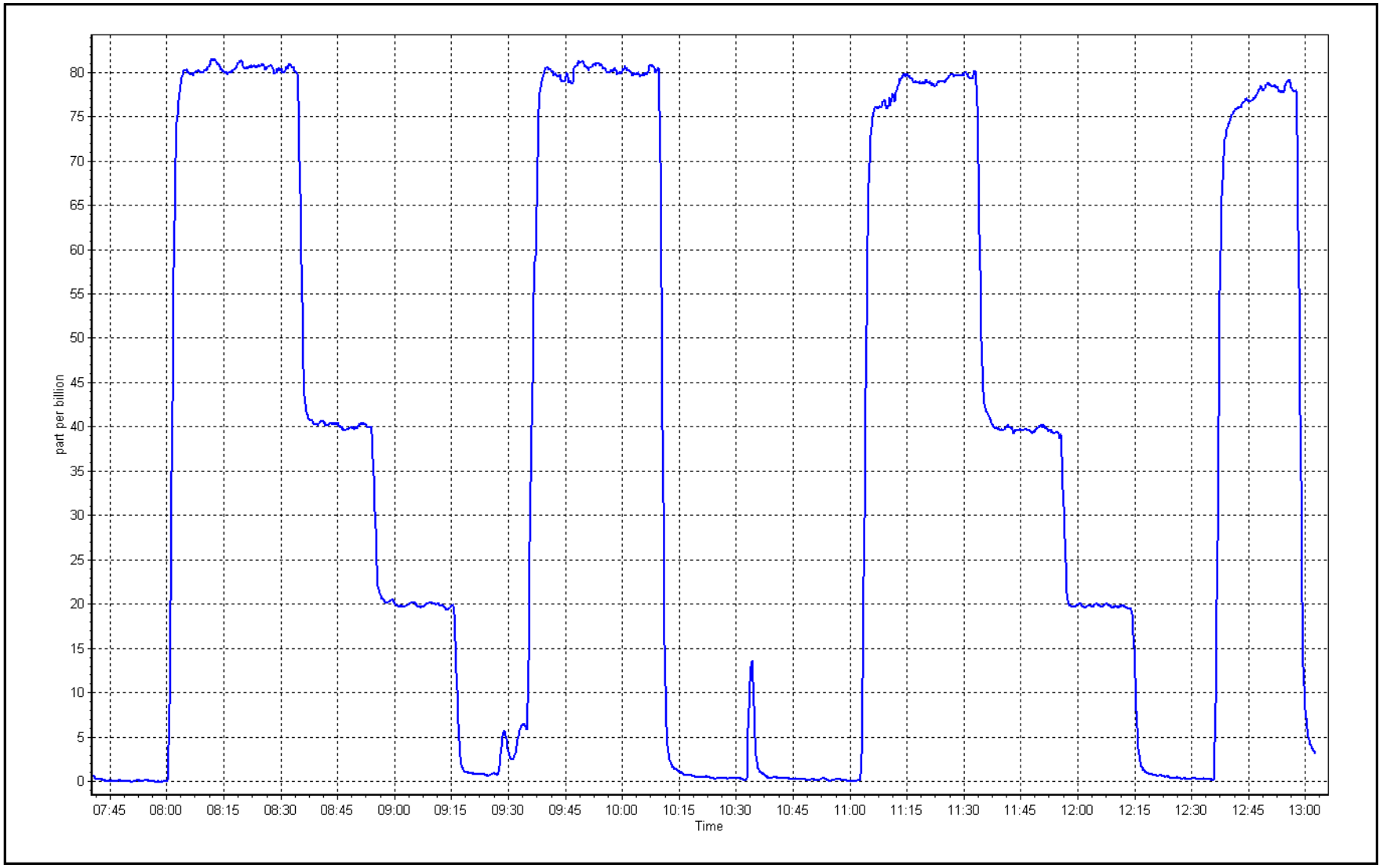
Calibration Date:	July 28, 2026	Previous Calibration:	August 14, 2026
Station Name:	Hangingstone Expansion	Station Number:	AMS 34
Start Time (MST):	7:38	End Time (MST):	13:03
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1336160090

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.3	----	Correlation Coefficient	0.999962	*≥0.995*
79.9	79.6	1.0043	Slope	0.993623	*0.90 - 1.10*
40.0	39.8	1.0057			
20.0	19.7	1.0160	Intercept	0.077451	*+/-3*



H_2S Calibration Plot Date: September 28, 2026 Location: Hangingstone Expansion



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Hangingstone Expansion
Station number:	AMS 34
Calibration Date:	September 22, 2026
Last Cal Date:	August 24, 2026
Start time (MST):	7:02
End time (MST):	11:42
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	T0F8P52	Cal Gas Expiry Date:	August 16, 2026
NOX Cal Gas Conc:	47.43 ppm	NO Cal Gas Conc:	47.43 ppm
Removed Cylinder #:	N/A	Removed Gas Exp Date:	N/A
Removed Gas NOX Conc:	47.43 ppm	Removed Gas NO Conc:	47.43 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	953
ZAG make/model:	Teledyne API 701	Serial Number:	196

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
AF High point	4915	84.4	800.7	800.7	0.0	804.0	800.5	3.5	0.9958	1.0001
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 807.9 ppb	NO = 804.9 ppb
Baseline Corr 1st pt	NO_X = 804.1 ppb	NO = 800.6 ppb
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

As Found Statistics

As found	NO_X r^2:	Nx Sl:	Nx Int:
As found	NO r^2:	NO Sl:	NO Int:
As found	NO_2 r^2:	NO2 Sl:	NO_2 Int:

*Percent Change	NO_X =	-0.5%
*Percent Change	NO =	-0.5%

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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Teledyne API T200 Serial Number: 7029

NOX Range (ppb): 0-1000

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.060	1.060	NO bkgnd or offset:	0.2	0.2
NOX coeff or slope:	1.059	1.059	NOX bkgnd or offset:	0.4	0.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	4.4	4.4

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.009059	1.006333
NO_X Cal Offset:	-0.068089	-0.188058
NO Cal Slope:	1.006176	1.003763
NO Cal Offset:	-0.808046	-1.388012
NO_2 Cal Slope:	1.004391	1.005590
NO_2 Cal Offset:	0.143139	1.720595

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	----	----
High point	4915	84.4	800.7	800.7	0.0	805.6	803.0	2.4	0.9939	0.9972
Mid point	4957	42.2	400.4	400.4	0.0	402.9	399.9	3.0	0.9937	1.0012
Low point	4978	21.1	200.2	200.2	0.0	200.9	198.1	2.8	0.9965	1.0106
As left zero	5000	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	----	----
As left span	4915	84.4	800.7	390.5	410.2	799.3	390.5	408.8	1.0018	1.0000
								Average Correction Factor	0.9947	1.0030

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	799.5	395.2	404.3	407.4	0.9924	100.8%
Mid GPT point	799.5	604.1	195.4	199.2	0.9809	101.9%
Low GPT point	799.5	698.4	101.1	105.0	0.9629	103.9%
				Average Correction Factor	0.9787	102.2%

Notes: No Maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

NO_X Calibration Summary

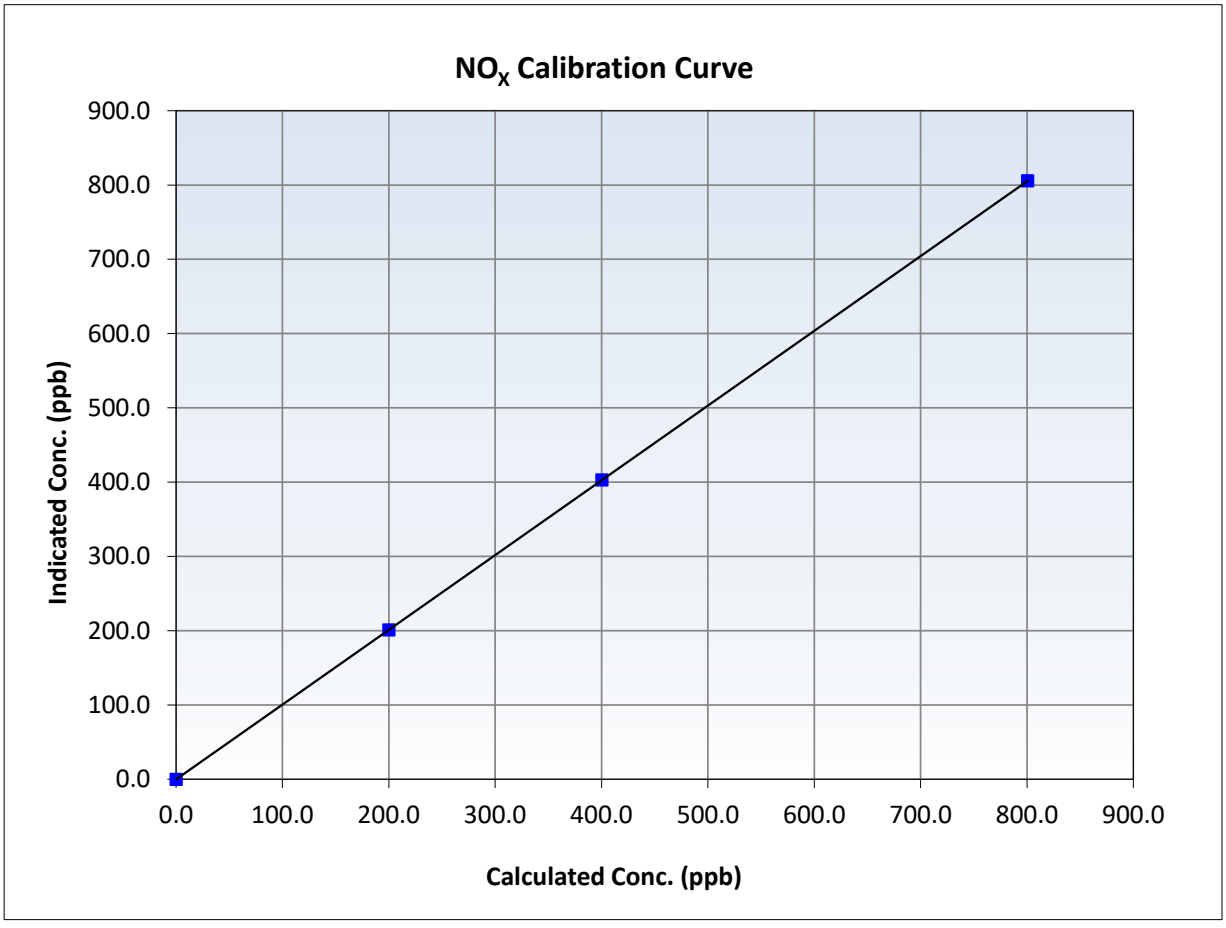
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 24, 2026
Station Name:	Hangingstone Expansion	Station Number:	AMS 34
Start Time (MST):	7:02	End Time (MST):	11:42
Analyzer make:	Teledyne API T200	Analyzer serial #:	7029

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.7	805.6	0.9939
400.4	402.9	0.9937
200.2	200.9	0.9965

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.006333	*0.90 - 1.10*
Intercept	-0.188058	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

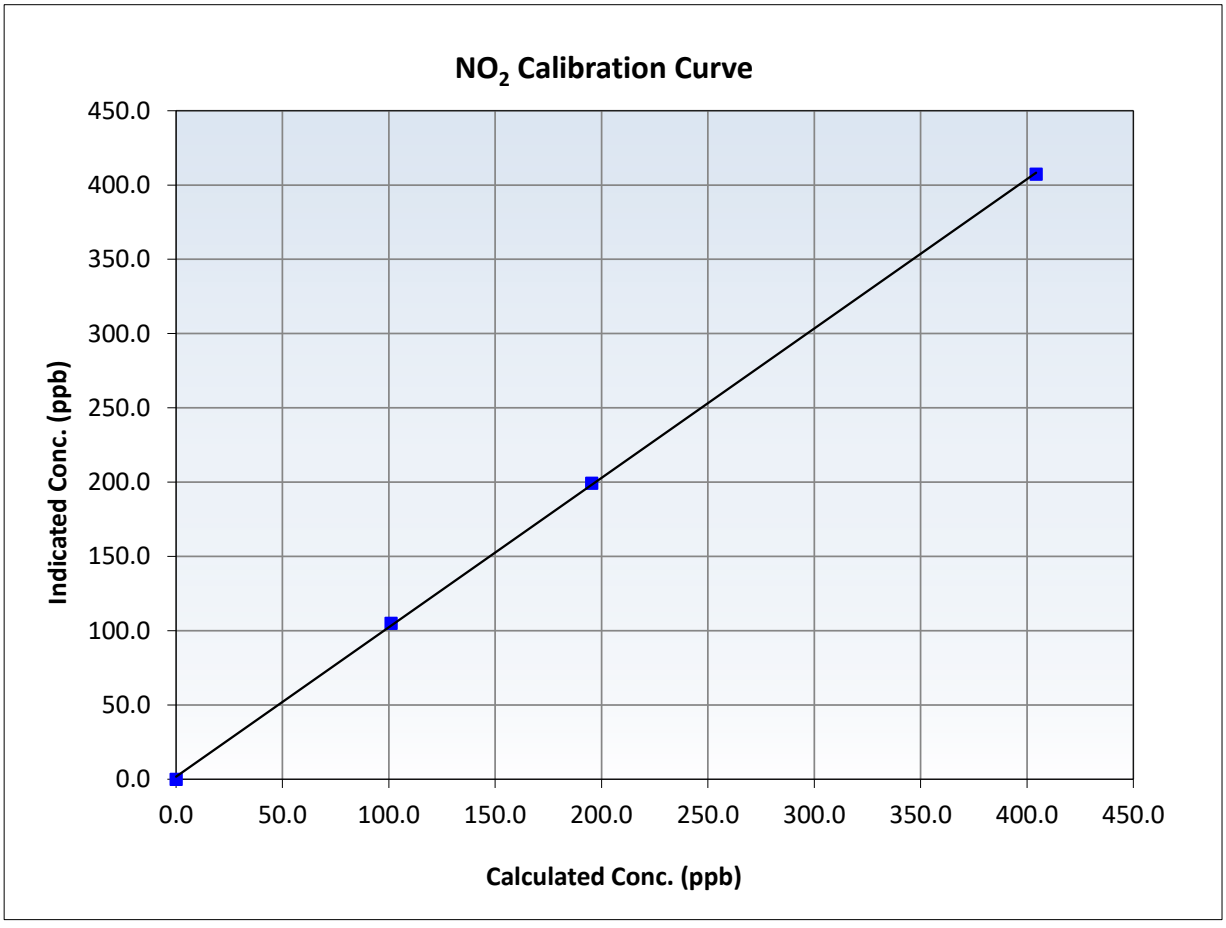
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 24, 2026
Station Name:	Hangingstone Expansion	Station Number:	AMS 34
Start Time (MST):	7:02	End Time (MST):	11:42
Analyzer make:	Teledyne API T200	Analyzer serial #:	7029

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
404.3	407.4	0.9924
195.4	199.2	0.9809
101.1	105.0	0.9629

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999919	*≥0.995*
Slope	1.005590	*0.90 - 1.10*
Intercept	1.720595	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

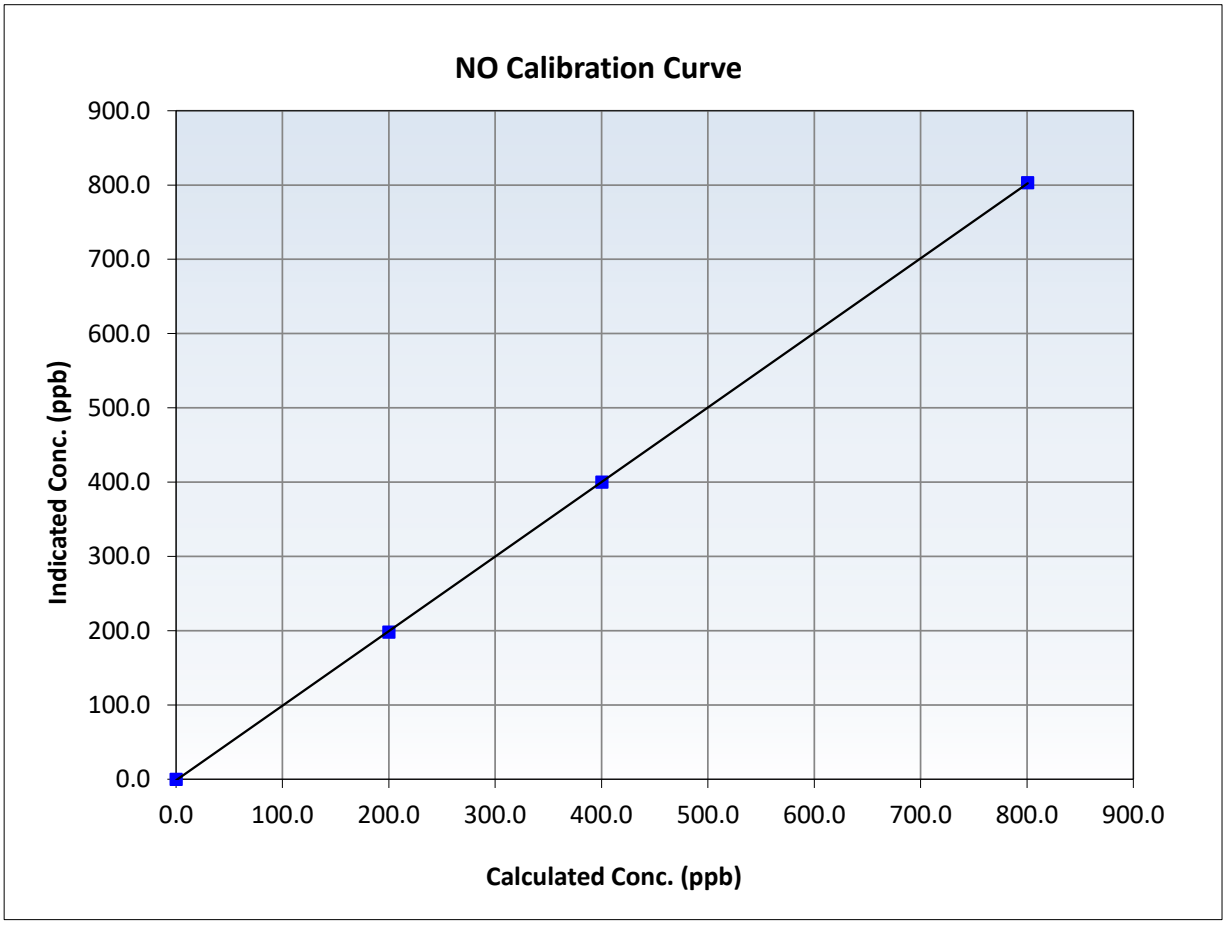
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 24, 2026
Station Name:	Hangingstone Expansion	Station Number:	AMS 34
Start Time (MST):	7:02	End Time (MST):	11:42
Analyzer make:	Teledyne API T200	Analyzer serial #:	7029

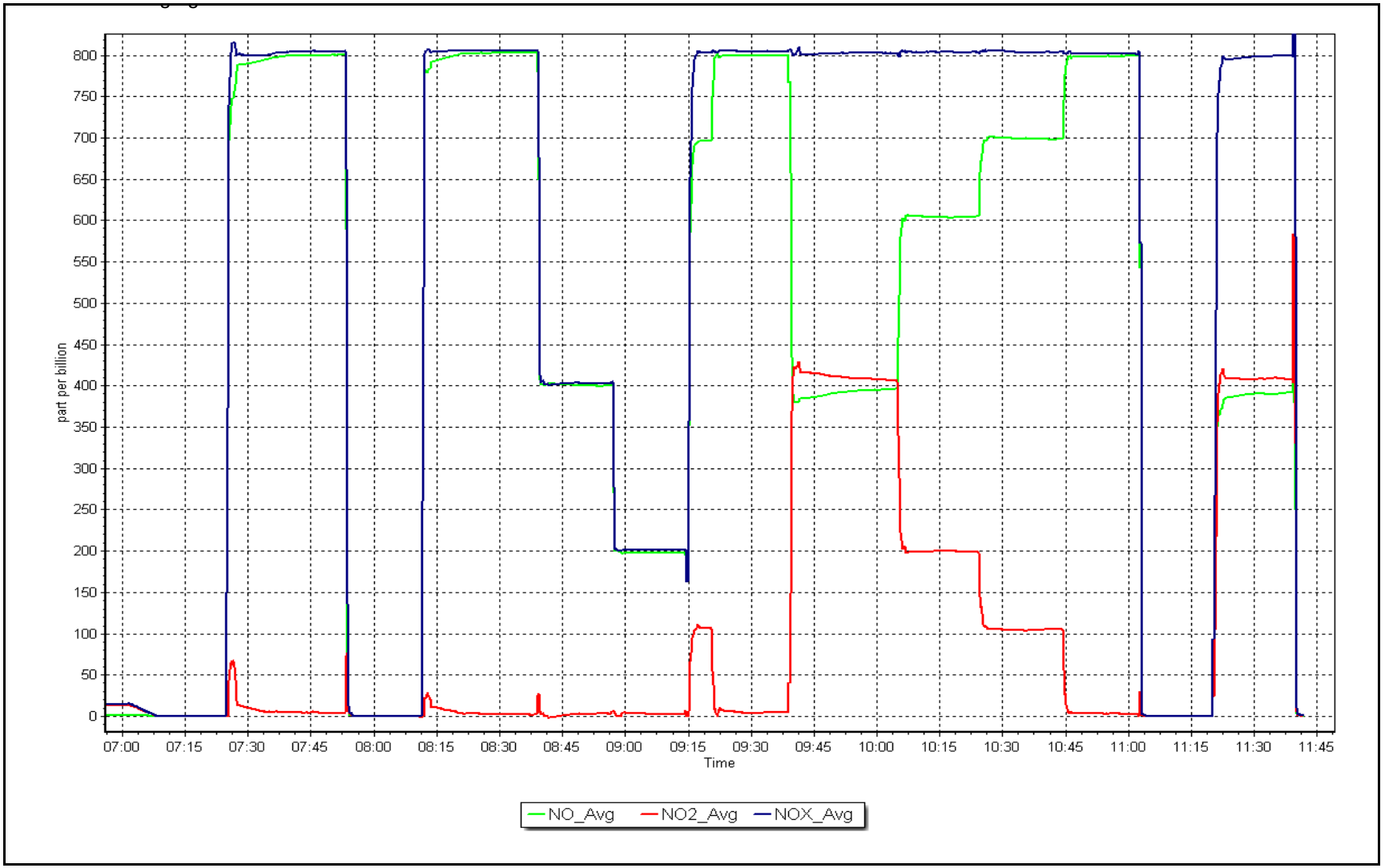
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.7	803.0	0.9972
400.4	399.9	1.0012
200.2	198.1	1.0106

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999986	*≥0.995*
Slope	1.003763	*0.90 - 1.10*
Intercept	-1.388012	*+/-20*



NO_X Calibration Plot Date: September 22, 2026 Location: Hangingstone Expansion



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS505
SAWBONES BAY
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Sawbones Bay	Station number:	AMS 505
Calibration Date:	September 22, 2026	Last Cal Date:	August 28, 2026
Start time (MST):	10:28	End time (MST):	13:35
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:	3807
Zero Air Gen Model:	Teledyne API T701H		Serial Number:	260

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	0710321323	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001346	1.006226	Backgd or Offset:	22.9	22.9
Calibration intercept:	-1.854882	-1.435833	Coeff or Slope:	1.106	1.106

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.3	----
As found High point	4920	79.8	798.8	800.6	0.997
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	800.9	Previous response	798.1	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.0	----
High point	4920	79.8	798.8	803.0	0.995
Mid point	4960	39.9	399.4	400.0	0.999
Low point	4980	20.0	200.2	198.4	1.009
As left zero	5000	0.0	0.0	0.0	----
As left span	4920	79.8	798.8	805.0	0.992
				Average Correction Factor:	1.001

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

SO_2 Calibration Summary

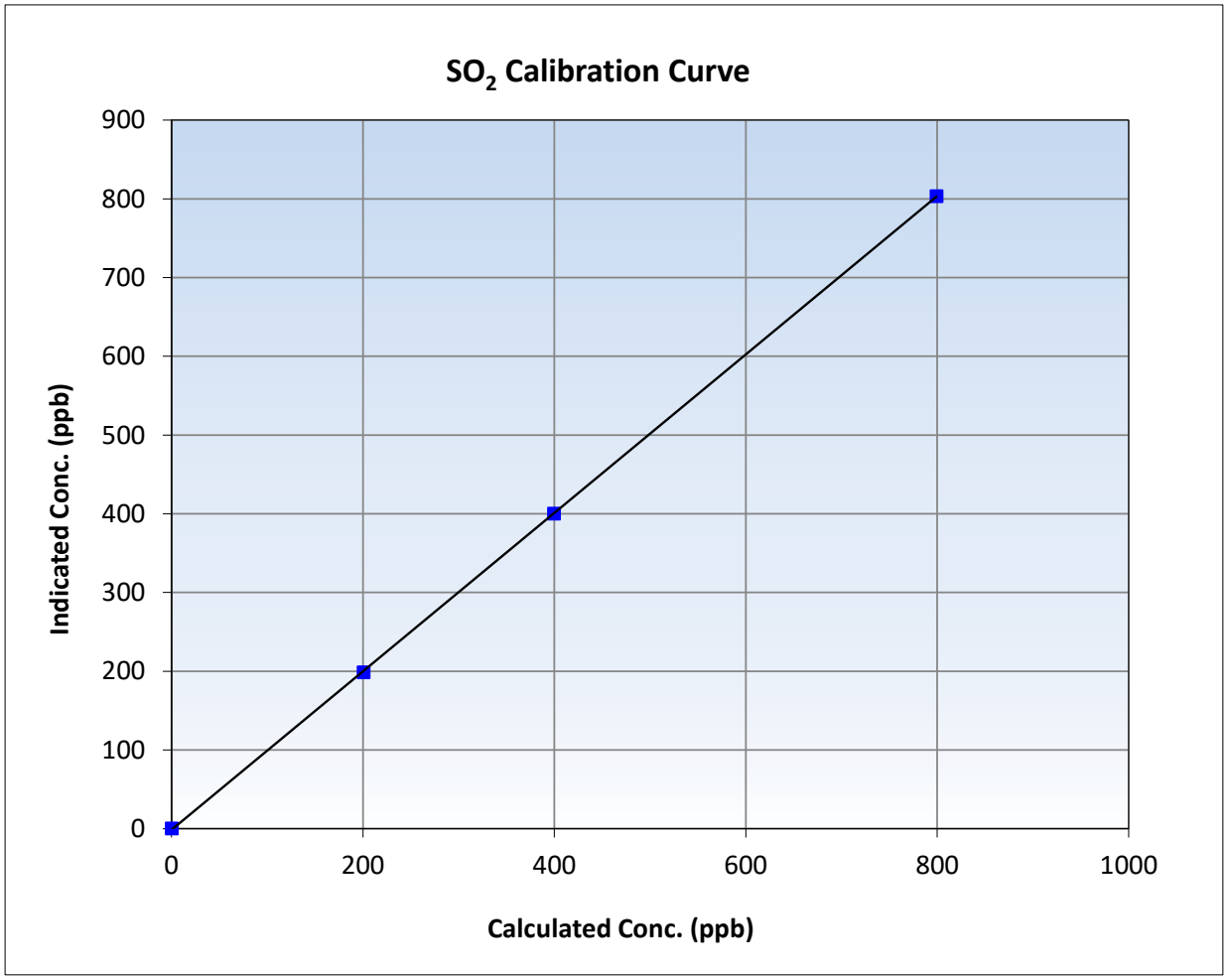
Station Information

Calibration Date:	September 22, 2026	Previous Calibration:	August 28, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:28	End Time (MST):	13:35
Analyzer make:	Thermo 43i	Analyzer serial #:	0710321323

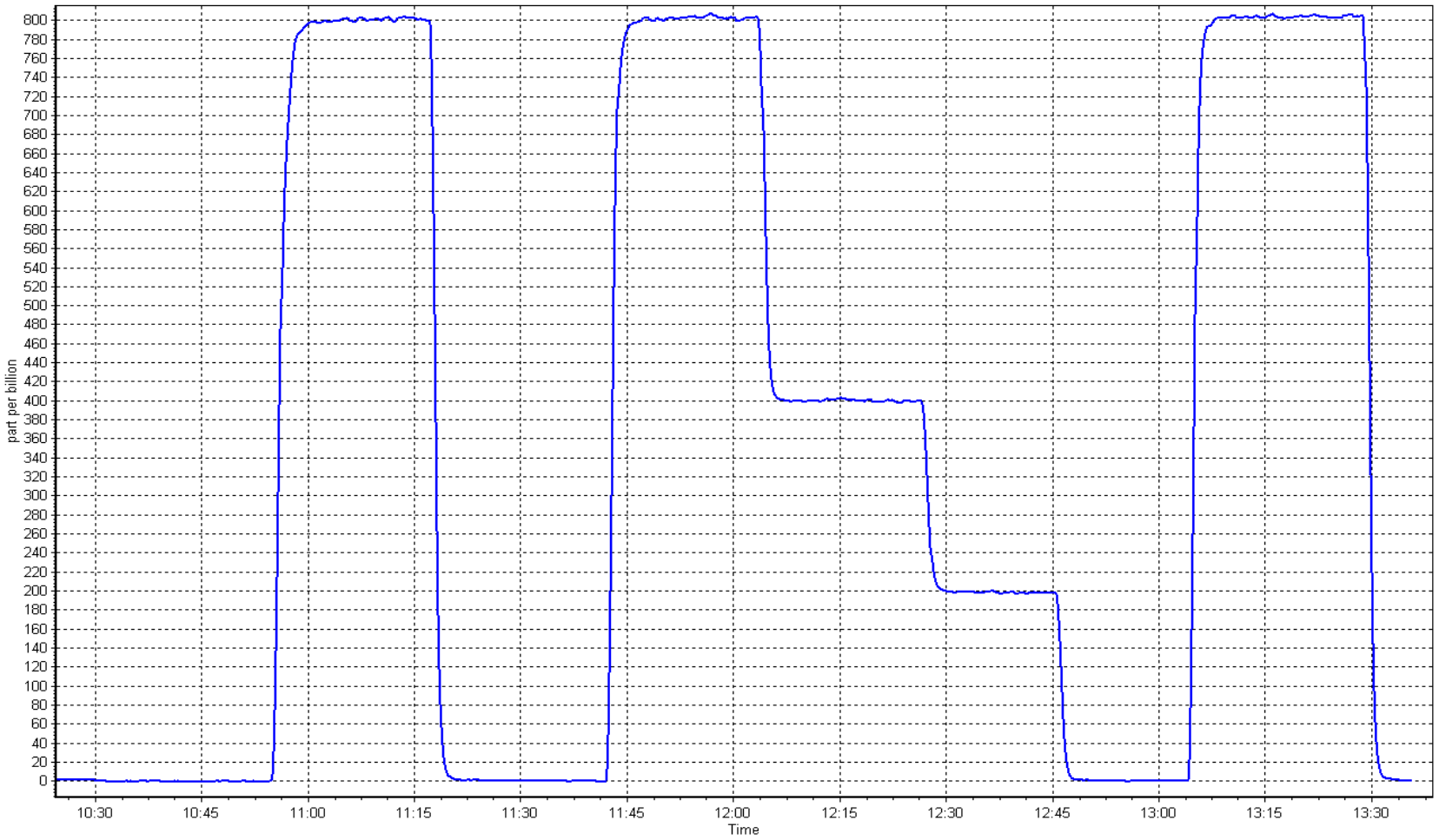
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
798.8	803.0	0.9948
399.4	400.0	0.9985
200.2	198.4	1.0091

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	1.006226	*0.90 - 1.10*
Intercept	-1.435833	*+/-30*



SO2 Calibration Plot Date: September 22, 2026 Location: Sawbones Bay



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Sawbones Bay	Station number:	AMS 505
Calibration Date:	September 16, 2026	Last Cal Date:	August 21, 2026
Start time (MST):	10:45	End time (MST):	16:14
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 T700		Serial Number:	3807
ZAG Make/Model:	Teledyne API T701H		Serial Number:	260

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.002030	1.000886	Backgd or Offset:	1.17	1.17
Calibration intercept:	-0.200000	-0.160000	Coeff or Slope:	1.067	1.067

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4925	76.0	79.9	80.9	0.989
As found Mid point	4962	38.0	40.0	40.1	0.999
As found Low point	4981	19.0	20.0	20.0	1.004
New cylinder response					

Baseline Corr As found:	80.8	Prev response:	79.90	*% change:	1.1%
Baseline Corr 2nd AF pt:	40.0	AF Slope:	1.011528	AF Intercept:	-0.103211
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999964	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4924	76.0	80.0	79.9	1.001
Mid point	4962	38.0	40.0	39.8	1.004
Low point	4981	19.0	20.0	19.8	1.009
As left zero	5000	0.0	0.0	0.0	----
As left span	4925	76.0	79.9	79.2	1.009
SO2 Scrubber Check	4920	79.8	798.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	1.005
Date of last converter efficiency test:					

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

H2S Calibration Summary

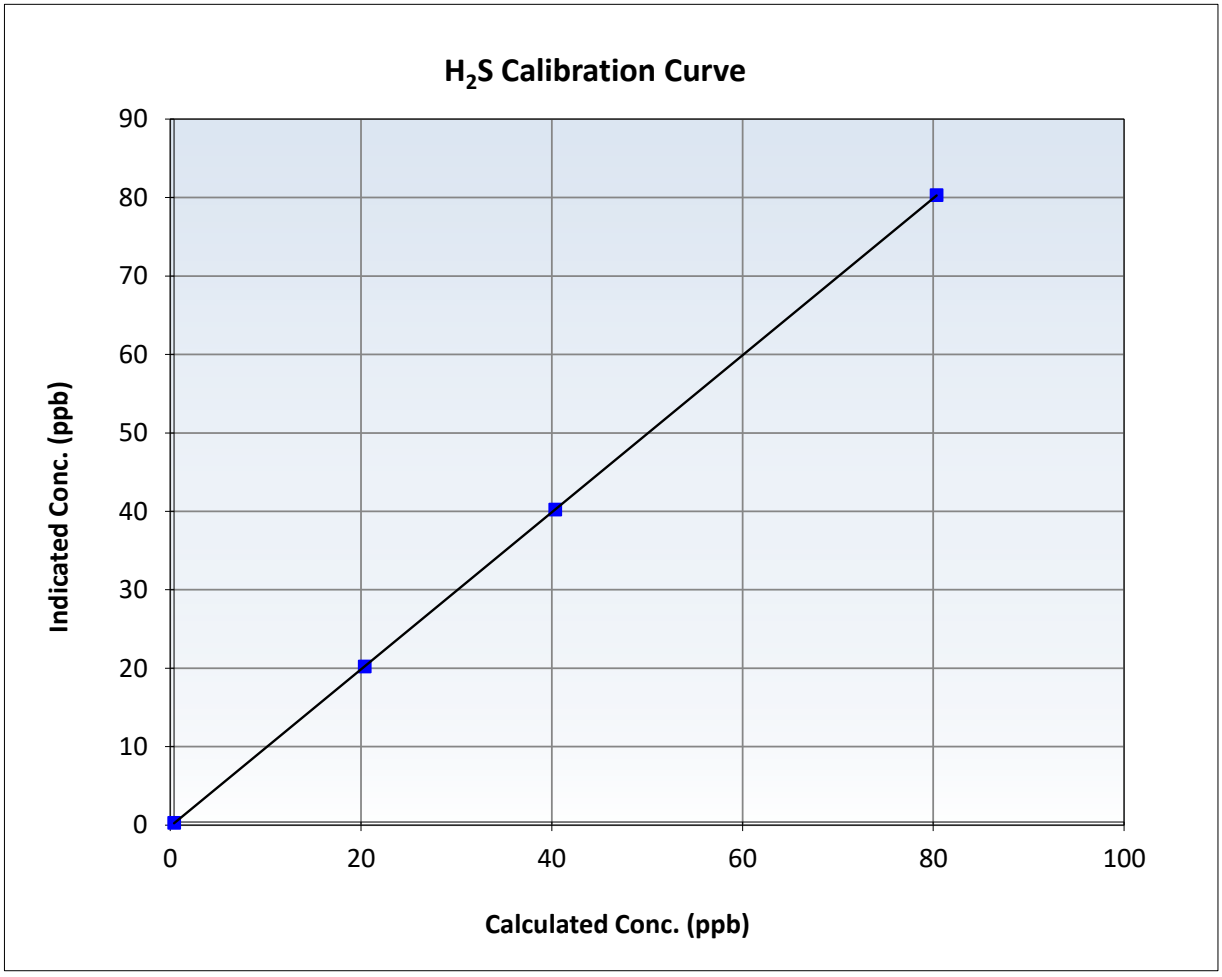
Station Information

Calibration Date:	September 16, 2026	Previous Calibration:	August 21, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:45	End Time (MST):	16:14
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12113311965

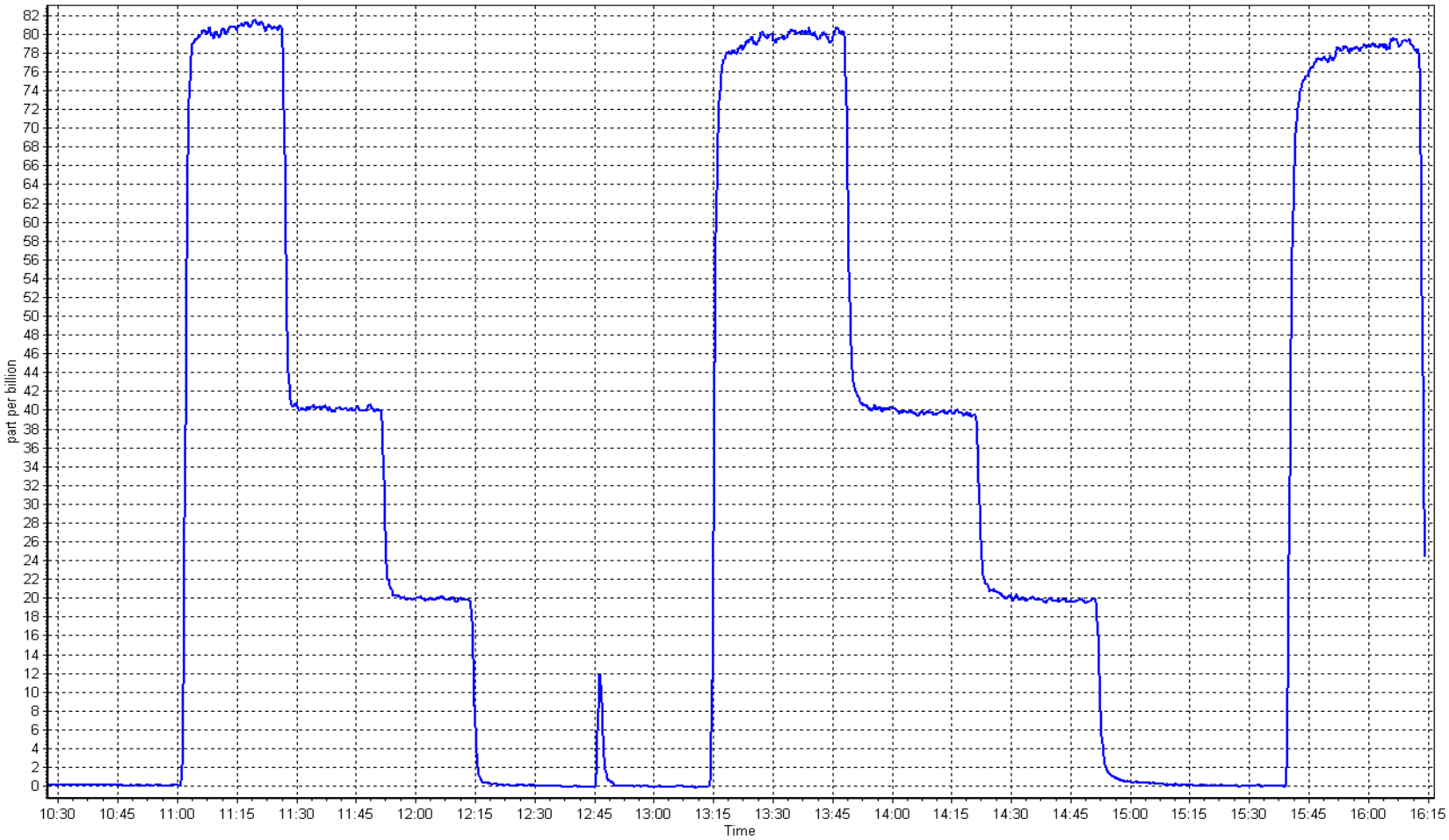
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
80.0	79.9	1.0007
40.0	39.8	1.0044
20.0	19.8	1.0095

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	1.000886	*0.90 - 1.10*
Intercept	-0.160000	*+/-3*



H2S Calibration Plot Date: September 16, 2026 Location: Sawbones Bay



CALS_547

Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Sawbones Bay
Station number:	AMS 505
Calibration Date:	September 15, 2026
Last Cal Date:	August 26, 2026
Start time (MST):	10:49
End time (MST):	15:33
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0009786	Cal Gas Expiry Date:	January 5, 2032
NOX Cal Gas Conc:	60.10 ppm	NO Cal Gas Conc:	60.00 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	60.10 ppm	Removed Gas NO Conc:	60.00 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	API T700	Serial Number:	3807
ZAG make/model:	API T701H	Serial Number:	260

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	2.2	2.5	-0.3	----	----
AF High point	4933	66.7	801.8	800.4	1.3	801.0	800.0	1.3	1.0037	1.0037
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	801.6 ppb	NO =	799.9 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = -0.4%
Baseline Corr 1st pt	NO_X =	798.8 ppb	NO =	797.5 ppb	As Found Statistics	*Percent Change	NO = -0.3%
Baseline Corr 2nd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO_X r^2:	Nx Sl:	Nx Int:
Baseline Corr 3rd pt	NO_X =	NA ppb	NO =	NA ppb	As found NO r^2:	NO Sl:	NO Int:
					As found NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: API T200 Serial Number: 4259

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.964	0.967	NO bkgnd or offset:	-5.4	0.6
NOX coeff or slope:	0.963	0.966	NOX bkgnd or offset:	-4.4	0.9
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	3.8	3.8

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.000563	1.004227
NO_X Cal Offset:	-0.590043	-1.649884
NO Cal Slope:	1.000488	1.004930
NO Cal Offset:	-0.929978	-2.410187
NO_2 Cal Slope:	0.994588	1.002946
NO_2 Cal Offset:	0.226432	0.877661

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.2	-0.1	----	----
High point	4933	66.7	801.8	800.4	1.3	804.0	803.0	0.5	0.9972	0.9968
Mid point	4967	33.3	400.2	399.6	0.7	400.2	398.3	1.9	1.0001	1.0032
Low point	4983	16.7	200.7	200.4	0.3	198.2	196.6	1.5	1.0128	1.0194
As left zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
As left span	4933	66.7	801.8	399.7	402.1	801.0	399.7	401.6	1.0010	1.0000
							Average Correction Factor		1.0034	1.0065

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.1	----	----
High GPT point	799.3	400.2	400.4	402.1	0.9959	100.4%
Mid GPT point	799.3	617.6	183.0	184.8	0.9904	101.0%
Low GPT point	799.3	709.6	91.0	93.2	0.9768	102.4%
				Average Correction Factor	0.9877	101.3%

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

NO_X Calibration Summary

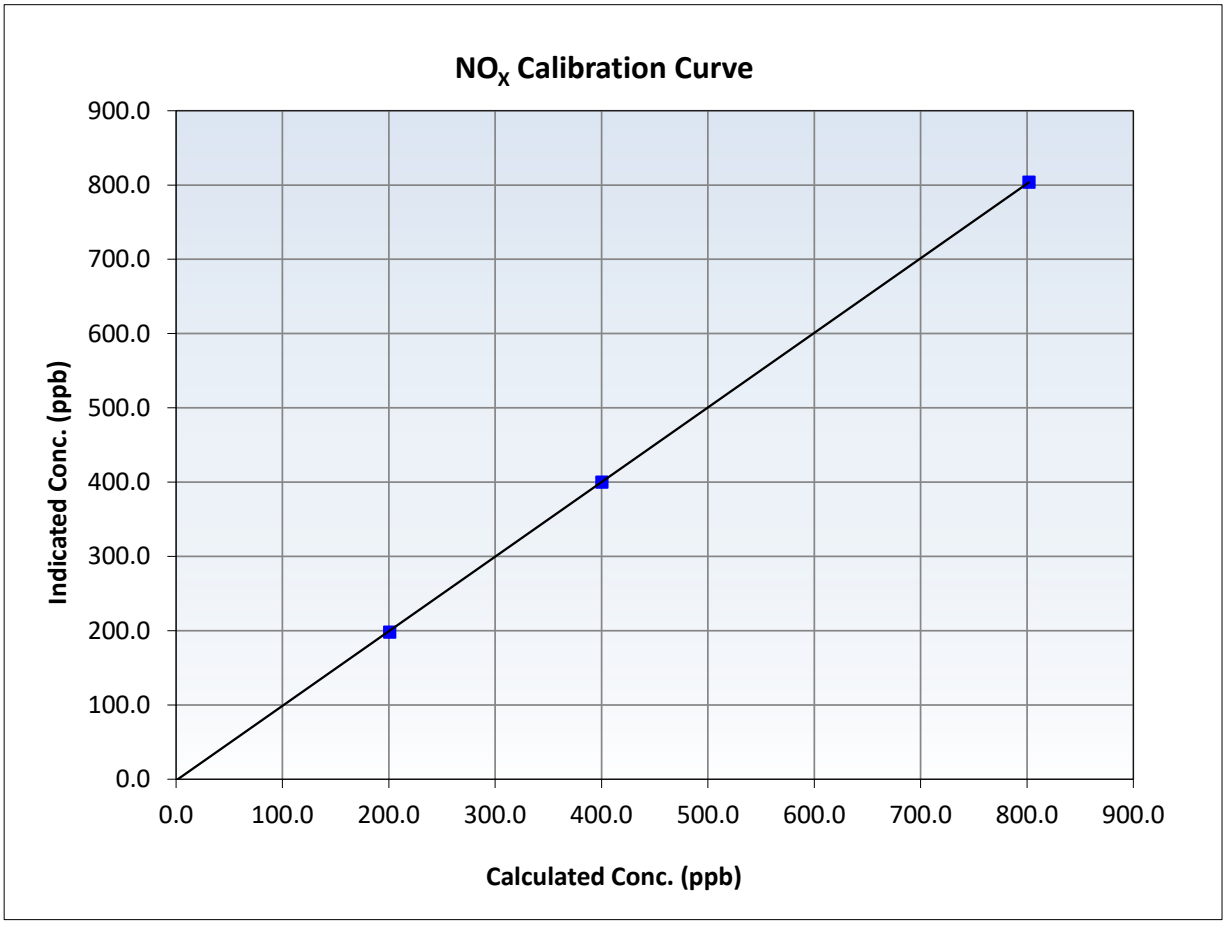
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 26, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:49	End Time (MST):	15:33
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
801.8	804.0	0.9972
400.2	400.2	1.0001
200.7	198.2	1.0128

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999986	*≥0.995*
Slope	1.004227	*0.90 - 1.10*
Intercept	-1.649884	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

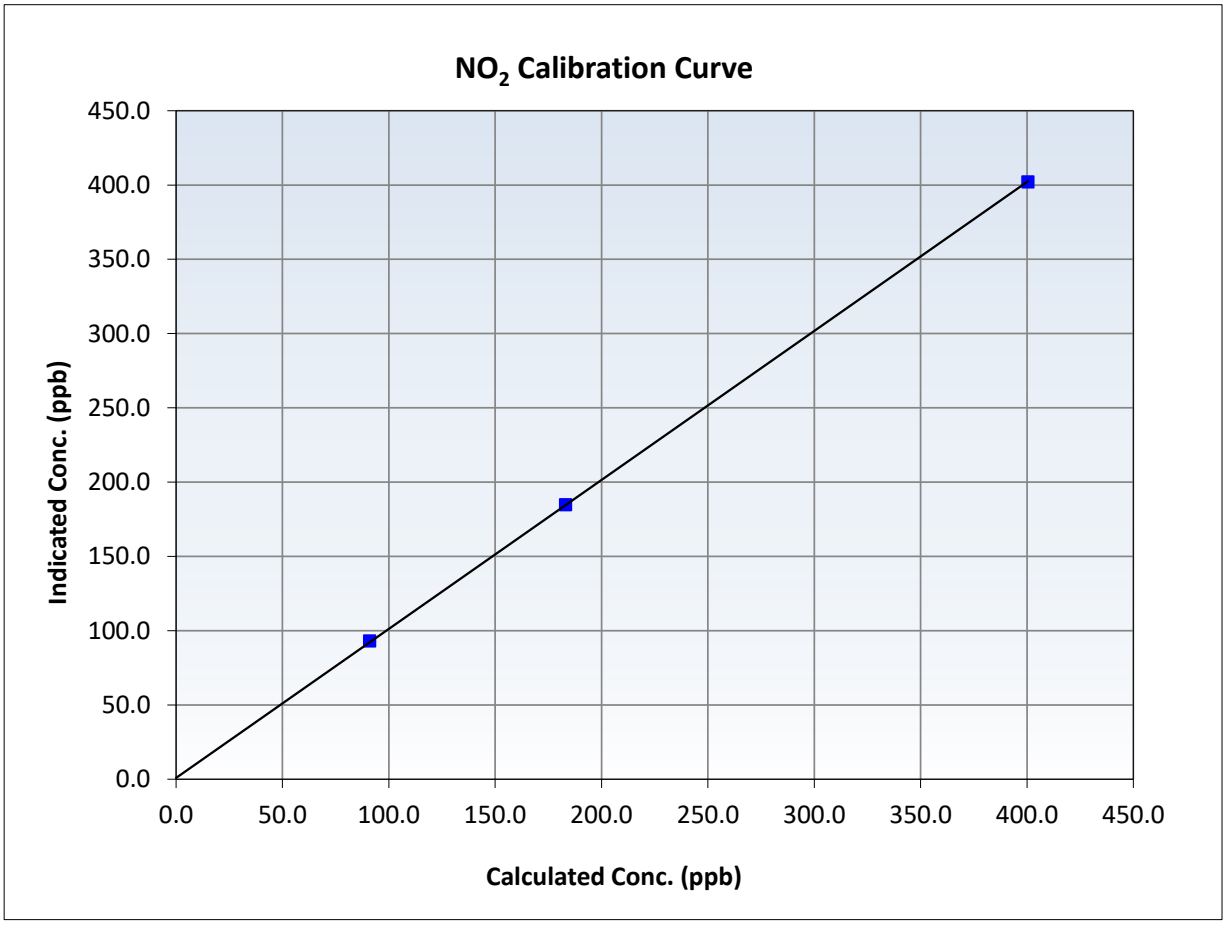
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 26, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:49	End Time (MST):	15:33
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
400.4	402.1	0.9959
183.0	184.8	0.9904
91.0	93.2	0.9768

Statistical Evaluation		Limits
Correlation Coefficient	0.999974	≥0.995
Slope	1.002946	0.90 - 1.10
Intercept	0.877661	+/-20



Wood Buffalo Environmental Association

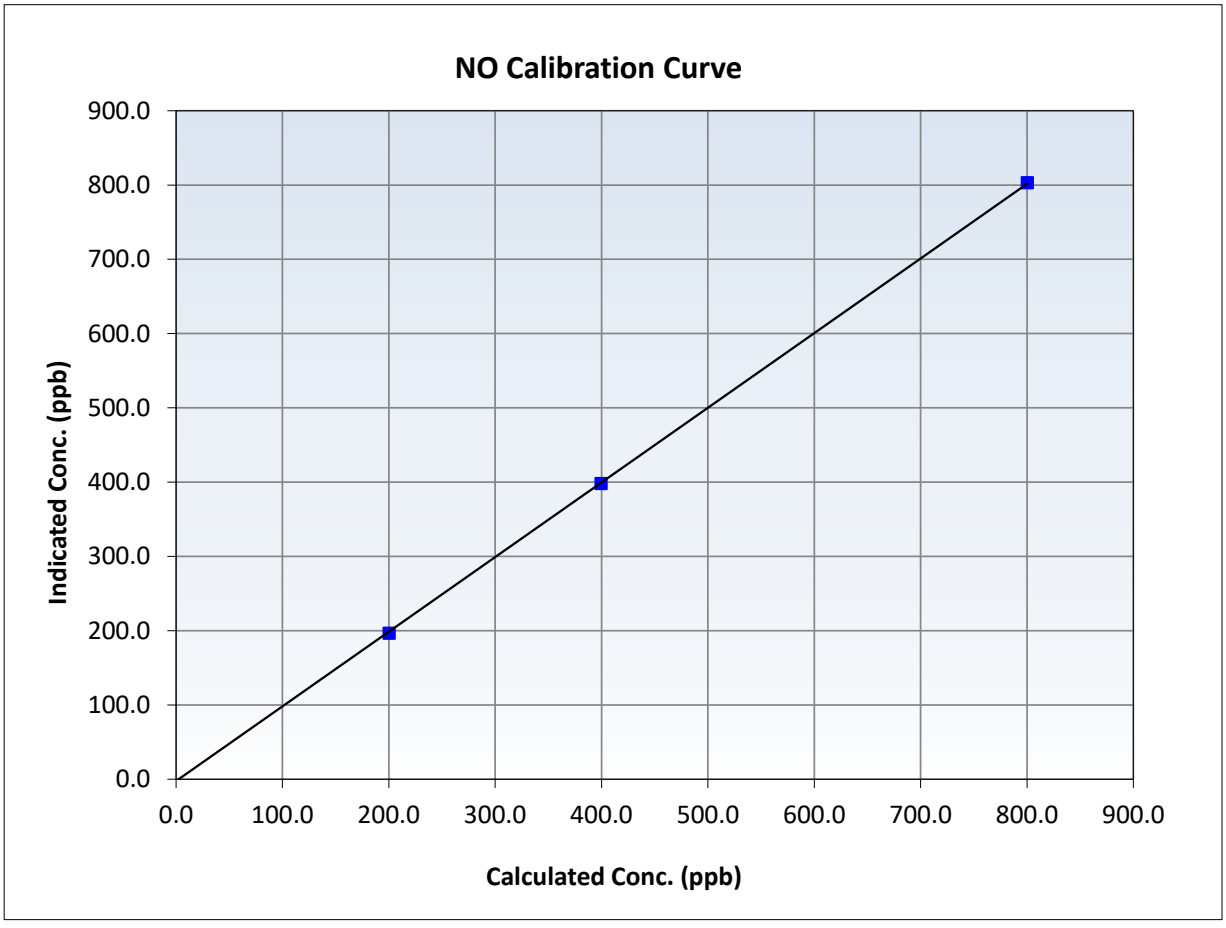
NO Calibration Summary

Station Information

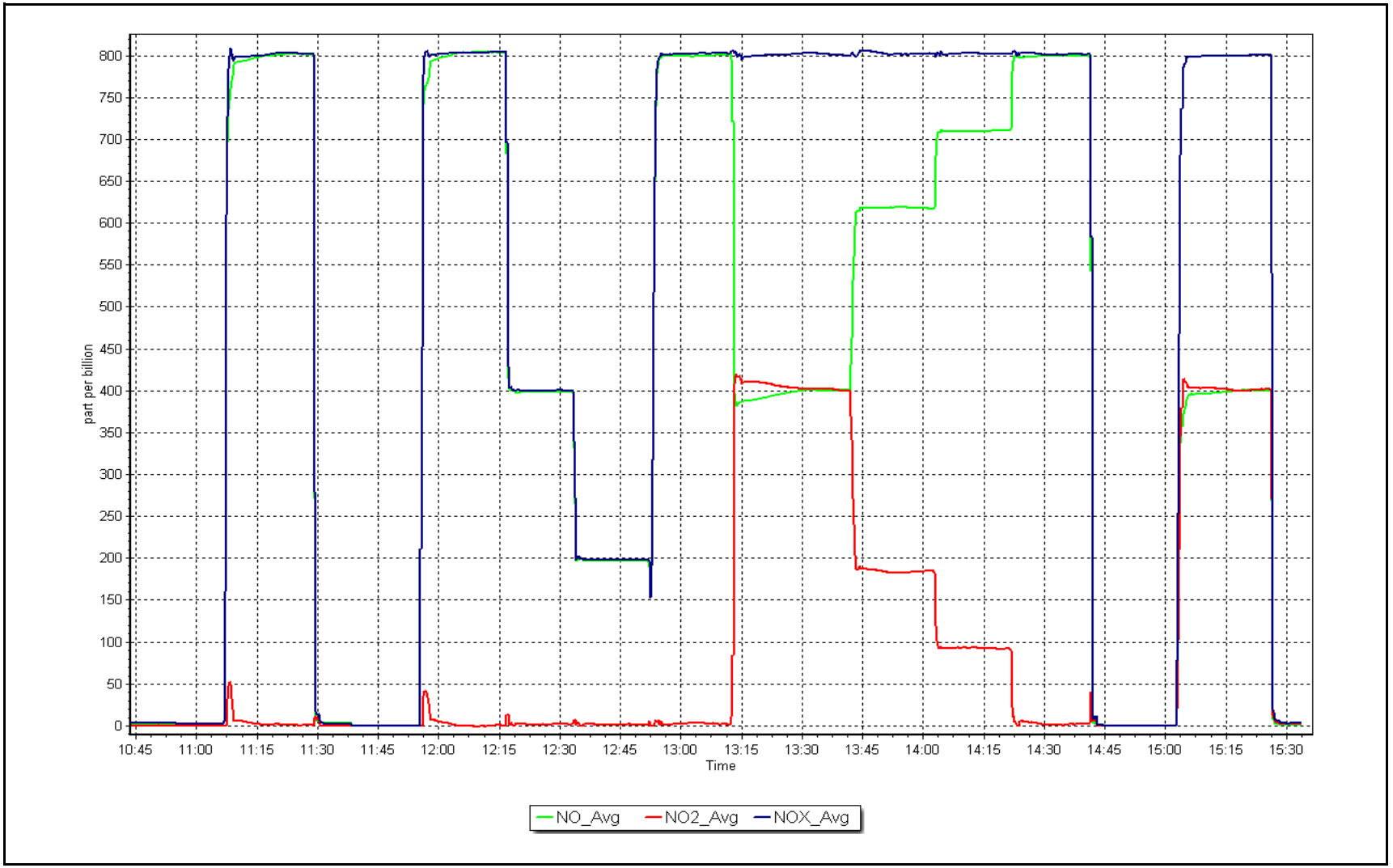
Calibration Date:	September 15, 2026	Previous Calibration:	August 26, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:49	End Time (MST):	15:33
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	-0.2	----	Correlation Coefficient	0.999965	≥0.995
800.4	803.0	0.9968	Slope	1.004930	0.90 - 1.10
399.6	398.3	1.0032			
200.4	196.6	1.0194	Intercept	-2.410187	+/-20



NO_X Calibration Plot Date: September 15, 2026 Location: Sawbones Bay



Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Sawbones Bay	Station Number:	AMS 505
Calibration Date:	September 16, 2026	Prev Cal Date:	March 27, 2025
Start Time (MST):	12:08	End Time (MST):	15:31
Tower Height (m):	10.0	Reason:	Removal

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	
WS Calibrator:	MetOne 053	Serial Number:	

Shaft RPM (Hz)	Calculated Speed (K/hr) (Cv)	Indicated Speed (K/hr) (Iv)	% Error *Limit = +/- 1.5%*
0	0.0		---
200	20.2		
400	39.4		
600	58.6		
800	77.8		

	Start	***Finish***	*Limits*
Correl Coeff (r^2)			*≥0.9995*
Calculated slope			*0.98 - 1.02*
Calculated intercept			*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	B4693
As Found Declination (deg east of True North):	13	As Left Declination (deg east of True North):	NA
Solar noon (MST):	13:17	Calc Declination*:	12.36 Degrees
WD Calibrator:	Met One 040		* - calculated declination as per NOAA website

Physical Direction (Degrees) (Cv)	Indicated Direction (Degrees) (Iv)	% Error (based on 360° FS) *Limit = +/- 1%*
10	9.3	-0.2%
90	84.5	-1.5%
180	174.9	-1.4%
270	269.0	-0.3%
350	351.3	0.4%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)		0.999816	*≥0.9995*
Calculated slope		0.989669	*0.97 - 1.03*
Calculated intercept		4.036825	*+/- 5*

Notes: 90 and 270 degree points outside of company criteria. Replacing with new sensor.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Sawbones Bay	Station Number:	AMS 505
Calibration Date:	September 16, 2026	Prev Cal Date:	March 27, 2025
Start Time (MST):	12:08	End Time (MST):	15:30
Tower Height (m):	10.0	Reason:	Routine

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	P10040
WS Calibrator:	MetOne 053	Serial Number:	CA 4124

Shaft RPM (Hz)	Calculated Speed (K/hr) (Cv)	Indicated Speed (K/hr) (Iv)	% Error *Limit = +/- 1.5%*
0	0.0	0.0	---
200	20.2	20.1	-0.3%
400	39.4	39.4	0.1%
600	58.6	58.5	0.0%
800	77.8	77.8	0.1%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)		0.999999	*≥0.9995*
Calculated slope		0.998909	*0.98 - 1.02*
Calculated intercept		0.030357	*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	B14267
As Found Declination (deg east of True North):	12	As Left Declination (deg east of True North):	12
Solar noon (MST):	13:17	Calc Declination*:	12.36 Degrees
WD Calibrator:	Met One 040		* - calculated declination as per NOAA website

Physical Direction (Degrees) (Cv)	Indicated Direction (Degrees) (Iv)	% Error (based on 360° FS) *Limit = +/- 1%*
10	8.7	-0.4%
90	87.3	-0.8%
180	179.8	0.0%
270	273.3	0.9%
350	350.4	0.1%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)		0.999929	*≥0.9995*
Calculated slope		0.988714	*0.97 - 1.03*
Calculated intercept		2.130280	*+/- 5*

Notes: Removed WD sensor SN: B4693, installed SN: B14267. Verified WS sensor readings, no issues to note.

Calibration Performed By: Braiden Boutilier

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS506
JACKFISH 1
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Jackfish 1	Station number:	AMS 506
Calibration Date:	September 28, 2026	Last Cal Date:	August 18, 2026
Start time (MST):	9:42	End time (MST):	12:40
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:	1185
Zero Air Gen Model:	Teledyne API 701		Serial Number:	4427

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1160290011	
Analyzer Range:	0-1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002043	0.997159	Backgd or Offset:	21.3	21.8
Calibration intercept:	-0.395987	-0.235933	Coeff or Slope:	0.974	0.974

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.4	----
As found High point	4921	79.2	800.2	797.2	1.004
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	796.8	Previous response	801.4	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.2	----
High point	4921	79.2	800.2	798.0	1.003
Mid point	4960	39.6	400.2	398.3	1.005
Low point	4980	19.8	200.1	199.0	1.005
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	79.2	800.2	800.0	1.000
				Average Correction Factor:	1.004

Notes: Sample inlet filter was changed after as founds. Adjusted zero only.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

SO_2 Calibration Summary

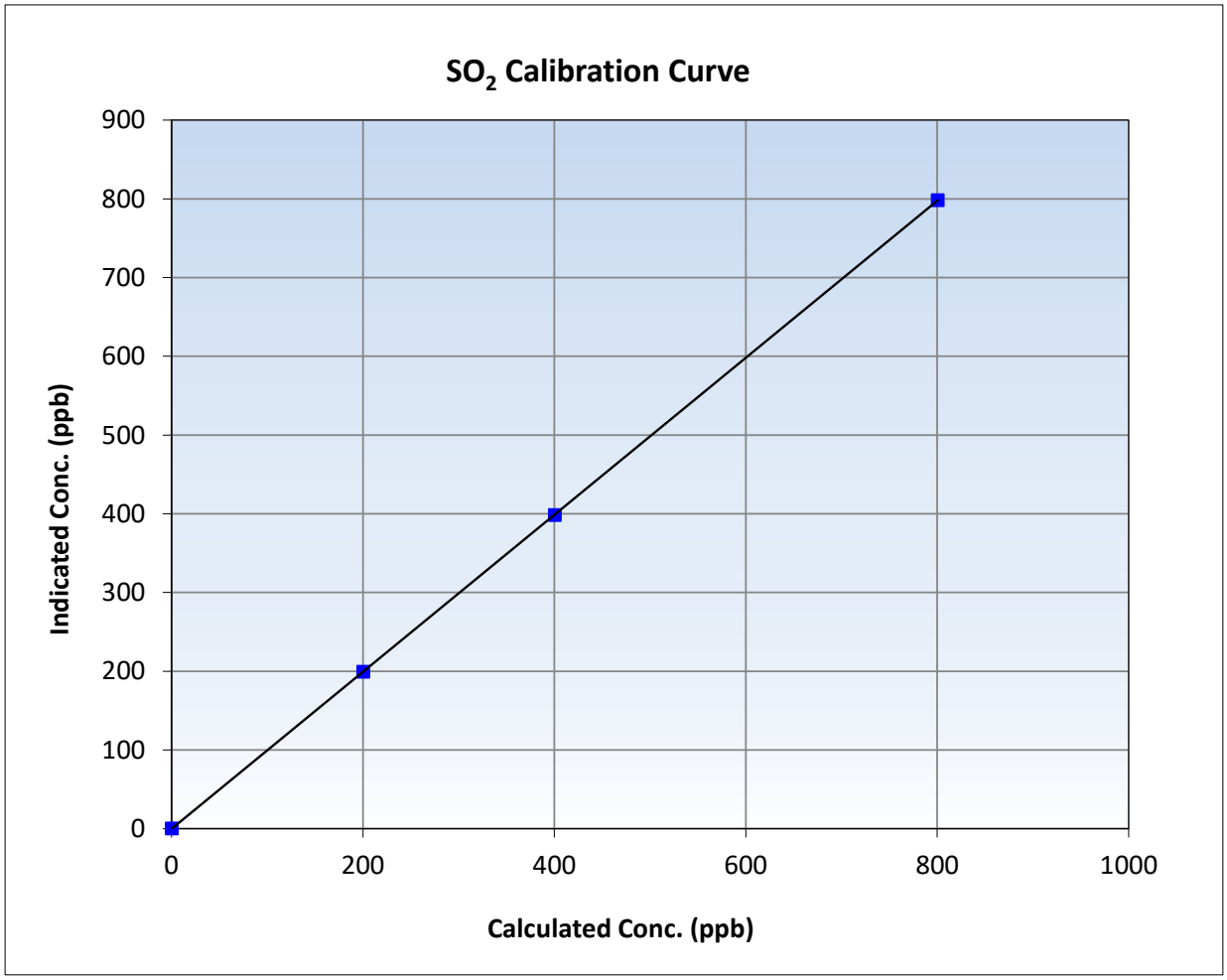
Station Information

Calibration Date:	September 28, 2026	Previous Calibration:	August 18, 2026
Station Name:	Jackfish 1	Station Number:	AMS 506
Start Time (MST):	9:42	End Time (MST):	12:40
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290011

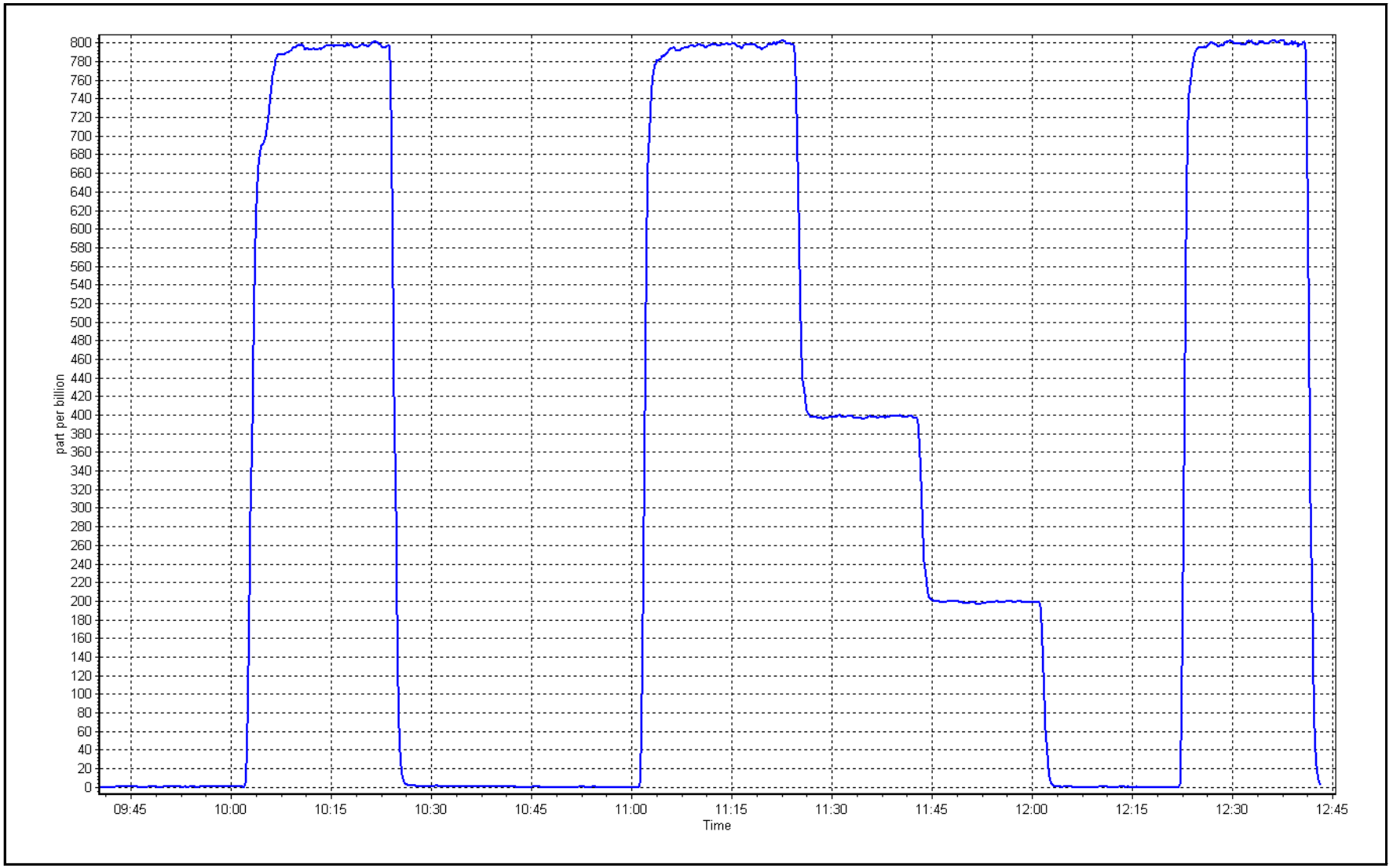
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.2	798.0	1.0028
400.2	398.3	1.0046
200.1	199.0	1.0054

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	0.997159	*0.90 - 1.10*
Intercept	-0.235933	*+/-30*



SO2 Calibration Plot Date: September 28, 2026 Location: Jackfish 1



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Jackfish 1	Station number:	AMS 506
Calibration Date:	September 9, 2026	Last Cal Date:	August 26, 2026
Start time (MST):	9:41	End time (MST):	13:22
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 API T700		Serial Number:	1185
ZAG Make/Model:	API 701		Serial Number:	4427

Analyzer Information

Analyzer make:	Thermo 43i- TLE		Analyzer serial #:	1180540020
Converter make:	Global		Converter serial #:	2022- 218
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.004735	0.998597	Backgd or Offset:	3.5	3.6
Calibration intercept:	-0.179207	-0.339446	Coeff or Slope:	1.175	1.175

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.2	----
As found High point	4918	81.8	80.0	78.1	1.022
As found Mid point	4959	40.9	40.0	38.8	1.026
As found Low point	4980	20.4	19.9	19.1	1.034
New cylinder response					

Baseline Corr As found:	78.3	Prev response:	80.20	*% change:	-2.4%
Baseline Corr 2nd AF pt:	39.0	AF Slope:	0.979458	AF Intercept:	-0.319808
Baseline Corr 3rd AF pt:	19.3	AF Correlation:	0.999989	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4918	81.8	80.0	79.7	1.004
Mid point	4959	40.9	40.0	39.4	1.015
Low point	4980	20.4	19.9	19.4	1.028
As left zero	5000	0.0	0.0	-0.1	----
As left span	4918	81.8	80.0	79.9	1.001
SO2 Scrubber Check	4921	79.2	792.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	1.016
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

H_2S Calibration Summary

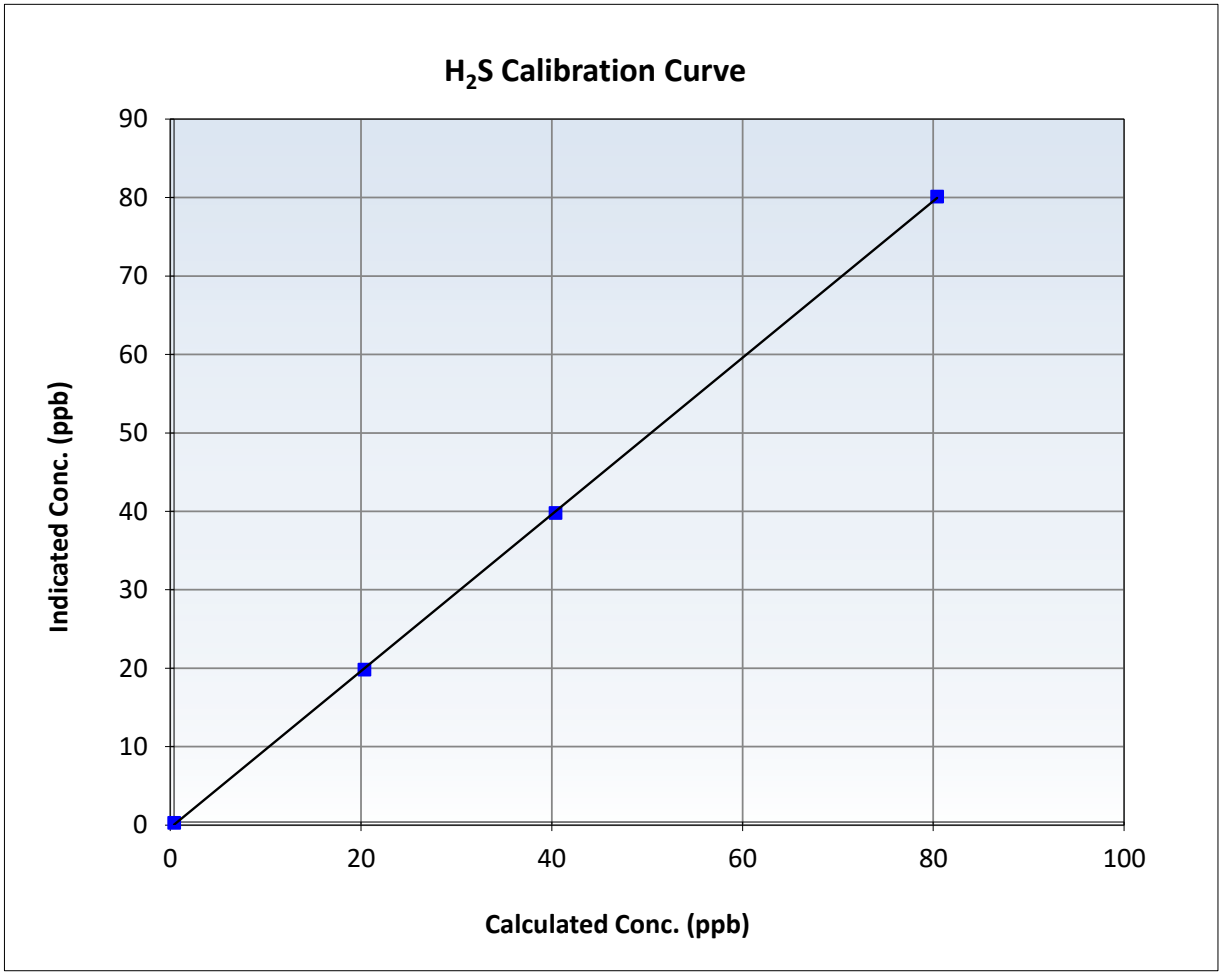
Station Information

Calibration Date:	September 9, 2026	Previous Calibration:	August 26, 2026
Station Name:	Jackfish 1	Station Number:	AMS 506
Start Time (MST):	9:41	End Time (MST):	13:22
Analyzer make:	Thermo 43i- TLE	Analyzer serial #:	1180540020

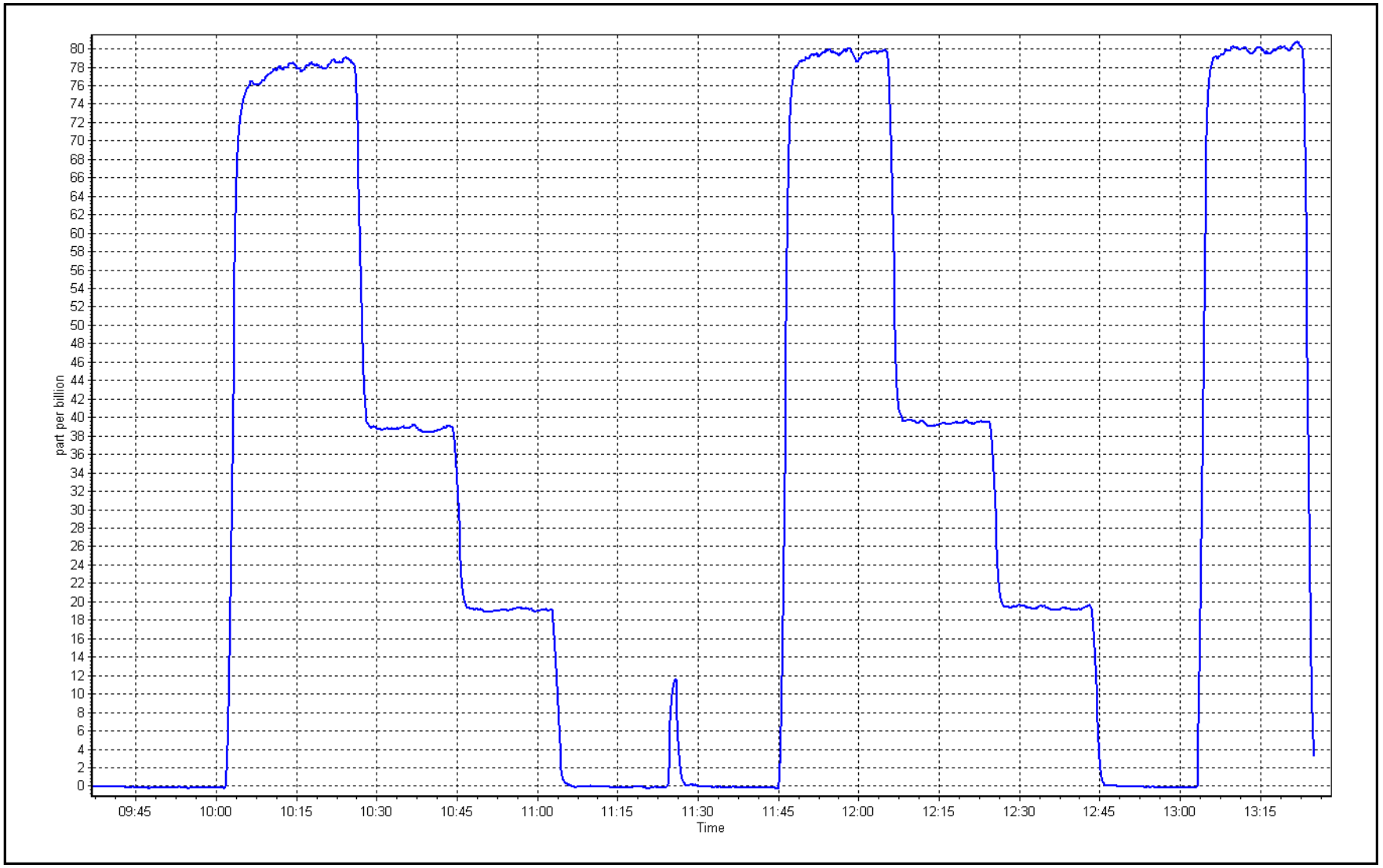
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
80.0	79.7	1.0038
40.0	39.4	1.0153
19.9	19.4	1.0283

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999956	*≥0.995*
Slope	0.998597	*0.90 - 1.10*
Intercept	-0.339446	*+/-3*



H_2S Calibration Plot Date: September 9, 2026 Location: Jackfish 1



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Jackfish 1
Station number:	AMS 506
Calibration Date:	September 8, 2026
Last Cal Date:	August 25, 2026
Start time (MST):	9:06
End time (MST):	13:20
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0022706	Cal Gas Expiry Date:	January 5, 2032
NOX Cal Gas Conc:	60.20 ppm	NO Cal Gas Conc:	60.10 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	60.20 ppm	Removed Gas NO Conc:	60.10 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	1185
ZAG make/model:	API 701	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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	0.5	0.5	0.0	----	----
AF High point	4933	66.6	801.9	800.6	1.3	803.3	800.0	3.4	0.9989	1.0014
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 802.6 ppb	NO = 801.9 ppb
Baseline Corr 1st pt	NO_X = 802.8 ppb	NO = 799.5 ppb
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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = 0.0%
As found	NO r^2:	*Percent Change	NO = -0.3%
As found	NO_2 r^2:	Nx Sl:	Nx Int:
		NO Sl:	NO Int:
		NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i
Serial Number: 710321429
NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.906	0.906	NO bkgnd or offset:	8.7	8.7
NOX coeff or slope:	0.993	0.993	NOX bkgnd or offset:	8.8	8.8
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	188.7	186.6

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999881	0.998741
NO_X Cal Offset:	0.812599	0.912326
NO Cal Slope:	1.001617	0.997822
NO Cal Offset:	0.012354	0.191138
NO_2 Cal Slope:	1.000916	0.997153
NO_2 Cal Offset:	0.655273	0.150340

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.0	0.1	0.0	----	----
High point	4933	66.6	801.9	800.6	1.3	801.4	799.0	2.4	1.0007	1.0020
Mid point	4967	33.3	400.9	400.2	0.7	401.7	399.6	2.0	0.9980	1.0016
Low point	4983	16.6	199.9	199.5	0.3	201.5	199.4	2.1	0.9920	1.0007
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	----	----
As left span	4933	66.6	801.9	522.2	279.7	804.3	522.2	282.0	0.9971	1.0000
								Average Correction Factor	0.9969	1.0014

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.0	----	----
High GPT point	800.0	504.0	297.3	296.6	1.0025	99.8%
Mid GPT point	800.0	650.9	150.4	150.1	1.0022	99.8%
Low GPT point	800.0	723.1	78.2	78.4	0.9979	100.2%
				Average Correction Factor	1.0008	99.9%

Notes: Sample inlet filter was changed after as founds. No adjustment made. Used 2nd NO point because of drift.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

NO_X Calibration Summary

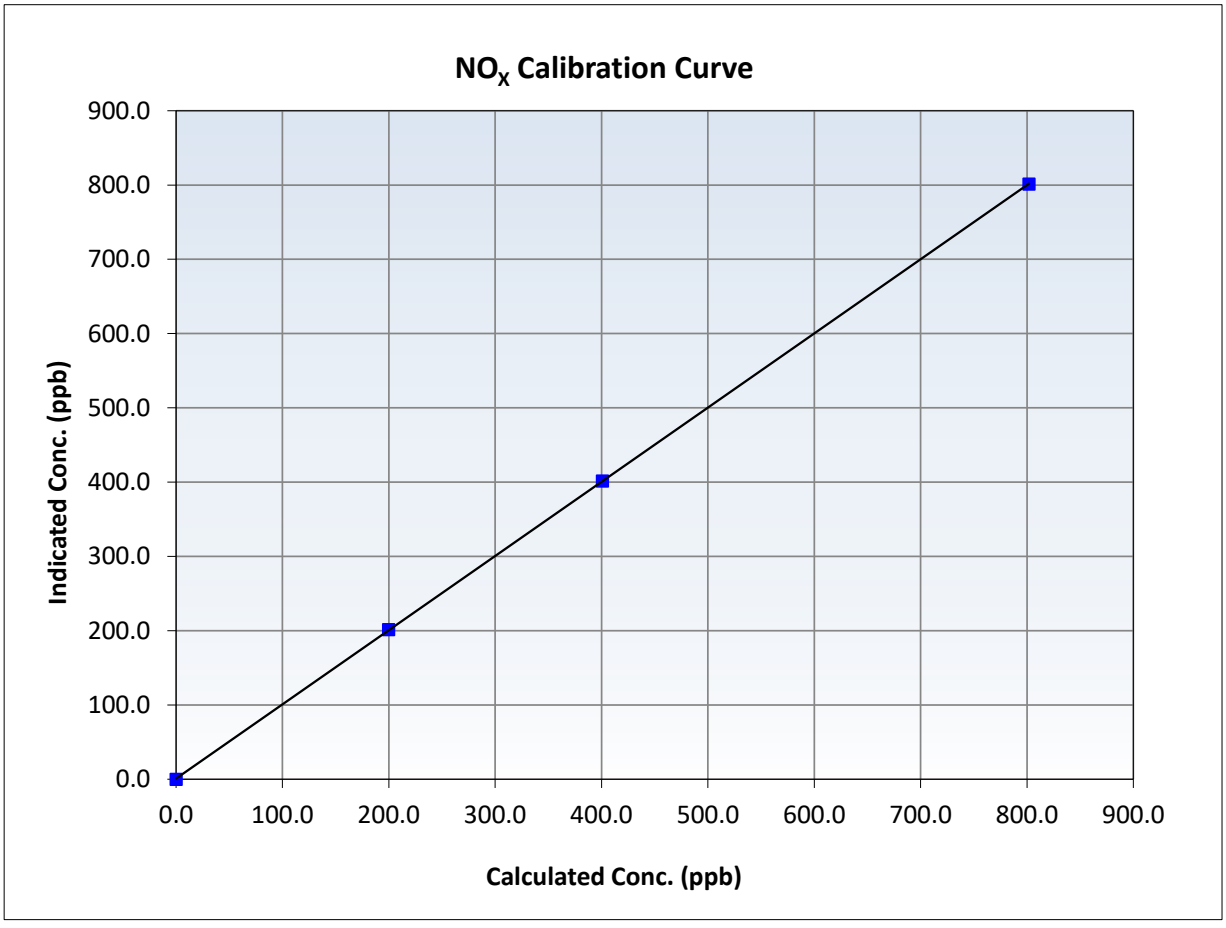
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 25, 2026
Station Name:	Jackfish 1	Station Number:	AMS 506
Start Time (MST):	9:06	End Time (MST):	13:20
Analyzer make:	Thermo 42i	Analyzer serial #:	710321429

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
801.9	801.4	1.0007
400.9	401.7	0.9980
199.9	201.5	0.9920

Statistical Evaluation		Limits
Correlation Coefficient	0.999994	≥0.995
Slope	0.998741	0.90 - 1.10
Intercept	0.912326	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

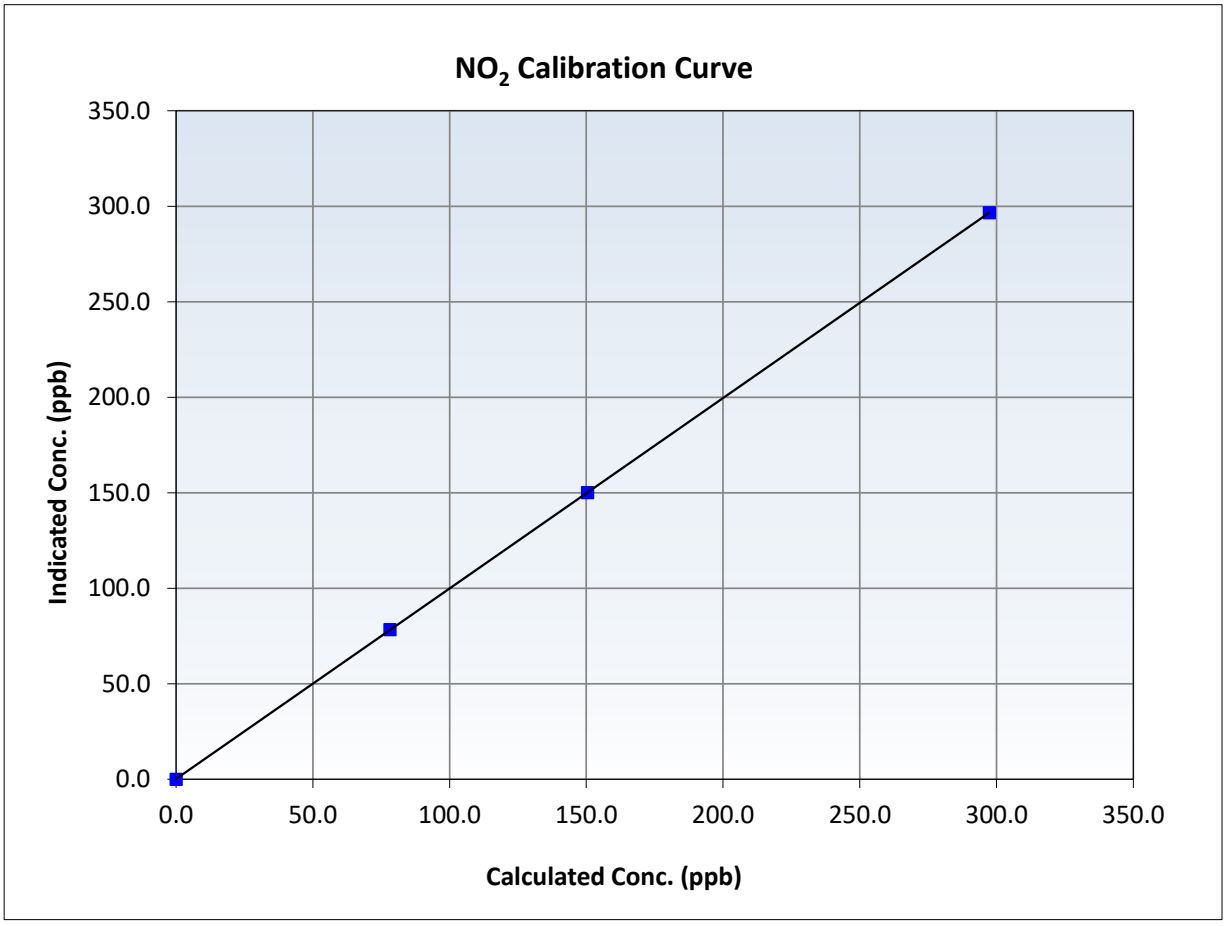
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 25, 2026
Station Name:	Jackfish 1	Station Number:	AMS 506
Start Time (MST):	9:06	End Time (MST):	13:20
Analyzer make:	Thermo 42i	Analyzer serial #:	710321429

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
297.3	296.6	1.0025
150.4	150.1	1.0022
78.2	78.4	0.9979

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	0.997153	*0.90 - 1.10*
Intercept	0.150340	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

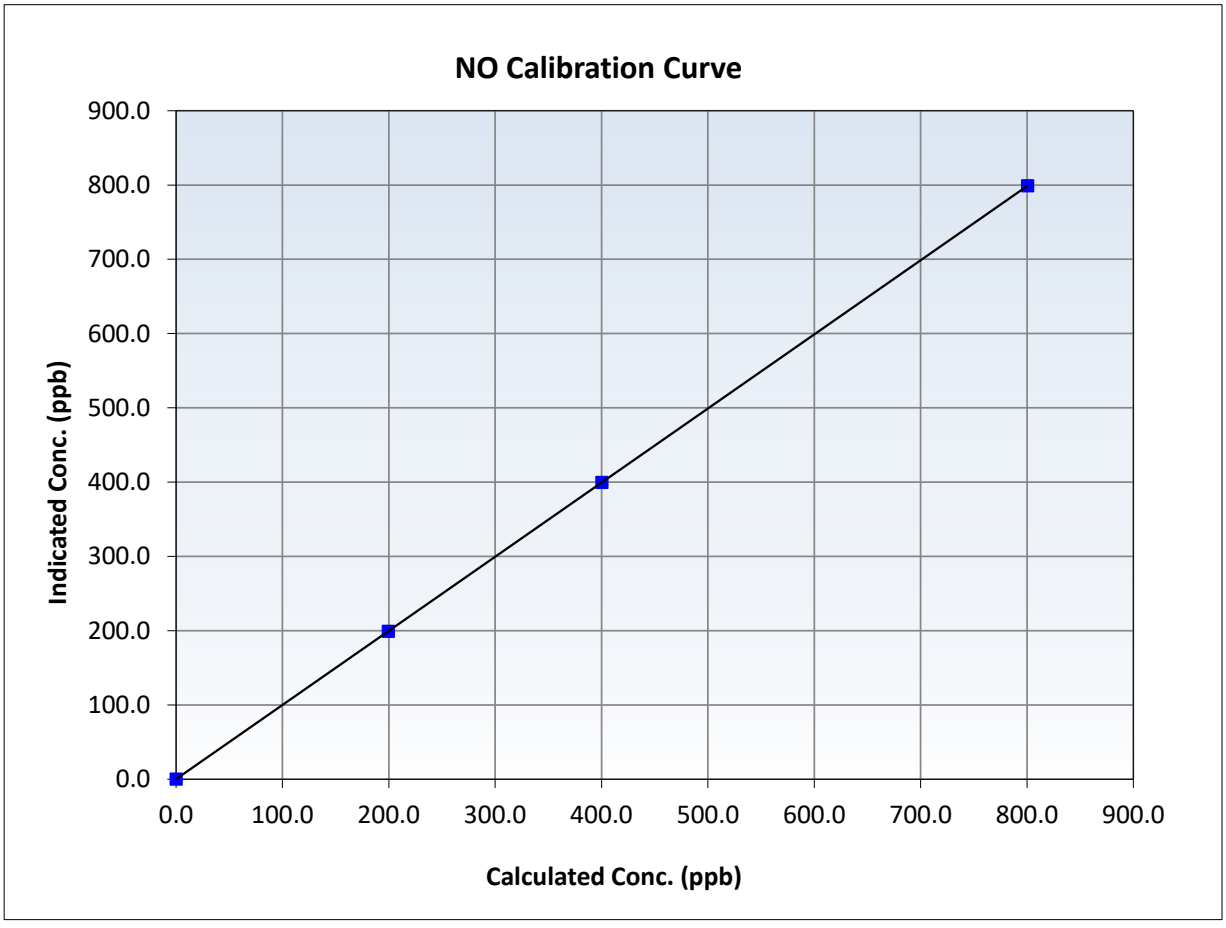
Station Information

Calibration Date:	September 8, 2026	Previous Calibration:	August 25, 2026
Station Name:	Jackfish 1	Station Number:	AMS 506
Start Time (MST):	9:06	End Time (MST):	13:20
Analyzer make:	Thermo 42i	Analyzer serial #:	710321429

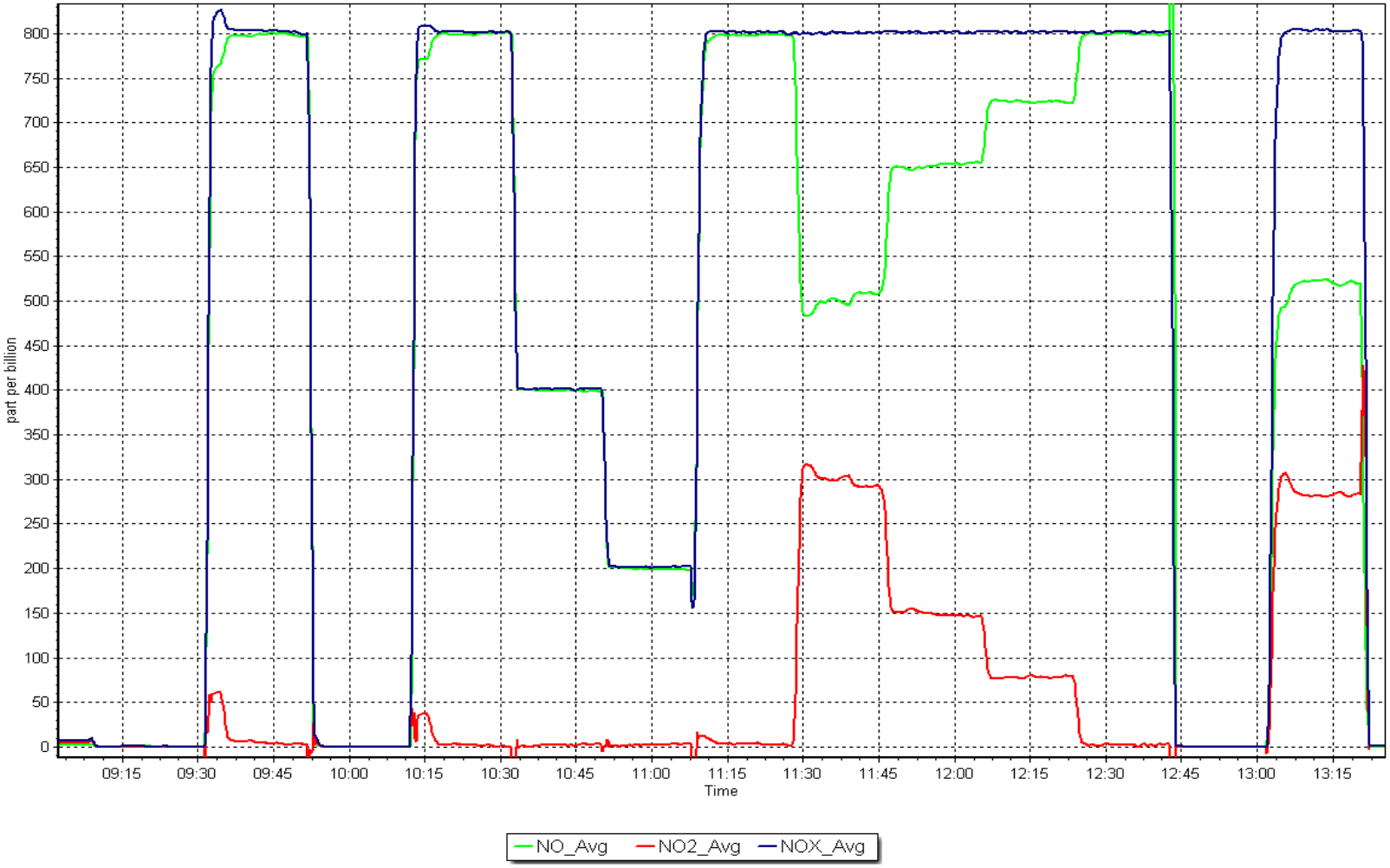
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.6	799.0	1.0020
400.2	399.6	1.0016
199.5	199.4	1.0007

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	0.997822	*0.90 - 1.10*
Intercept	0.191138	*+/-20*



NO_X Calibration Plot Date: September 8, 2026 Location: Jackfish 1



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS508
KIRBY NORTH
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Kirby North	Station number:	AMS 508
Calibration Date:	September 15, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	11:00	End time (MST):	13:46
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.74	ppm	Cal Gas Exp Date:	October 9, 2032
Cal Gas Cylinder #:	CC255918			
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-TLE		Serial Number:	1182340007	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999977	0.997976	Backgd or Offset:	30.6	30.7
Calibration intercept:	0.527919	0.827939	Coeff or Slope:	1.099	1.099

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.8	----
As found High point	4921	78.8	799.7	800.7	1.000
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	799.9	Previous response	800.2	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.9	----
High point	4921	78.8	799.7	799.2	1.001
Mid point	4961	39.4	399.8	399.0	1.002
Low point	4980	19.7	199.9	200.8	0.996
As left zero	5000	0.0	0.0	0.8	----
As left span	4921	78.8	799.7	799.0	1.001
				Average Correction Factor:	0.999

Notes: Inlet filter changed after as founds, no changes made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

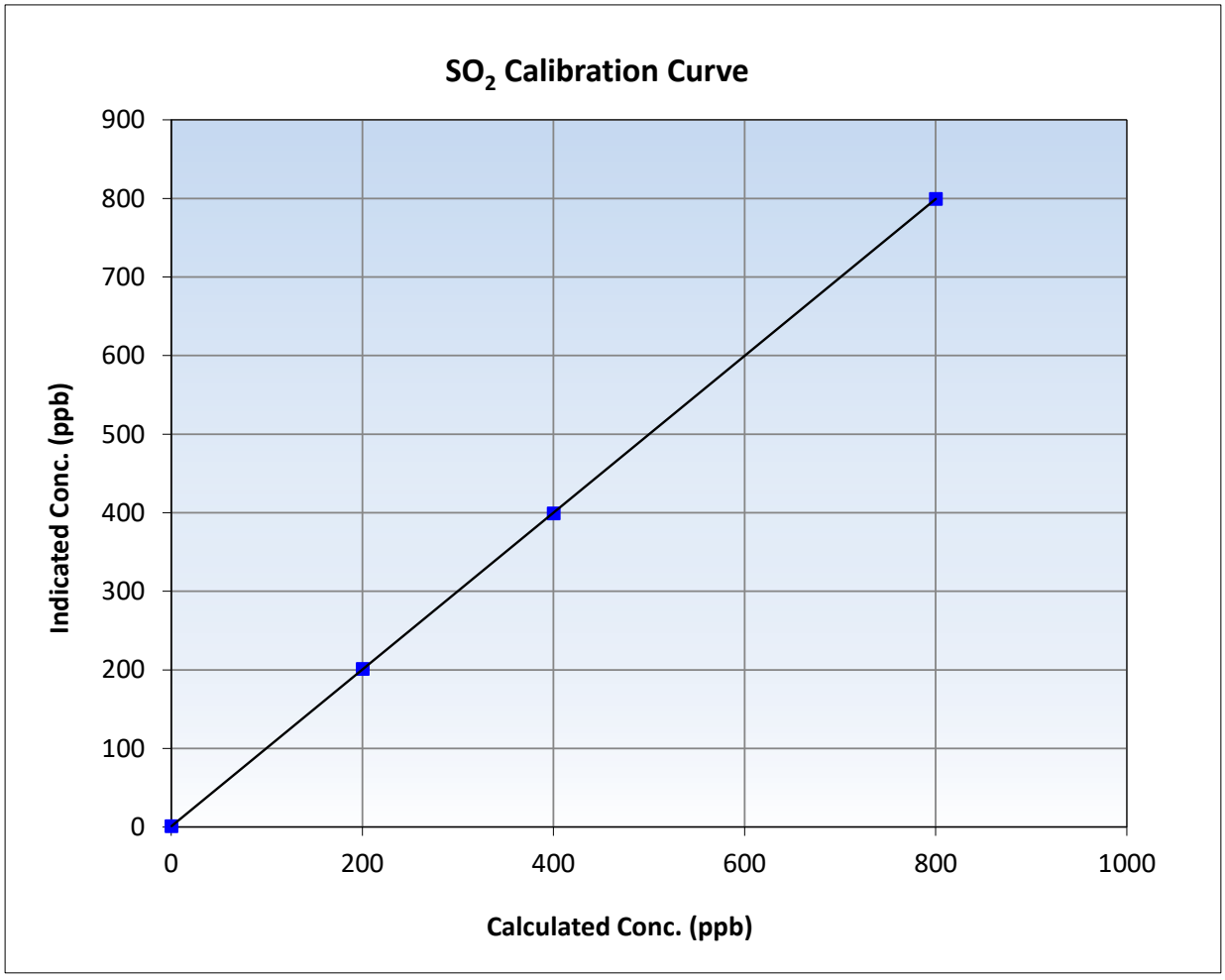
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 6, 2026
Station Name:	Kirby North	Station Number:	AMS 508
Start Time (MST):	11:00	End Time (MST):	13:46
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1182340007

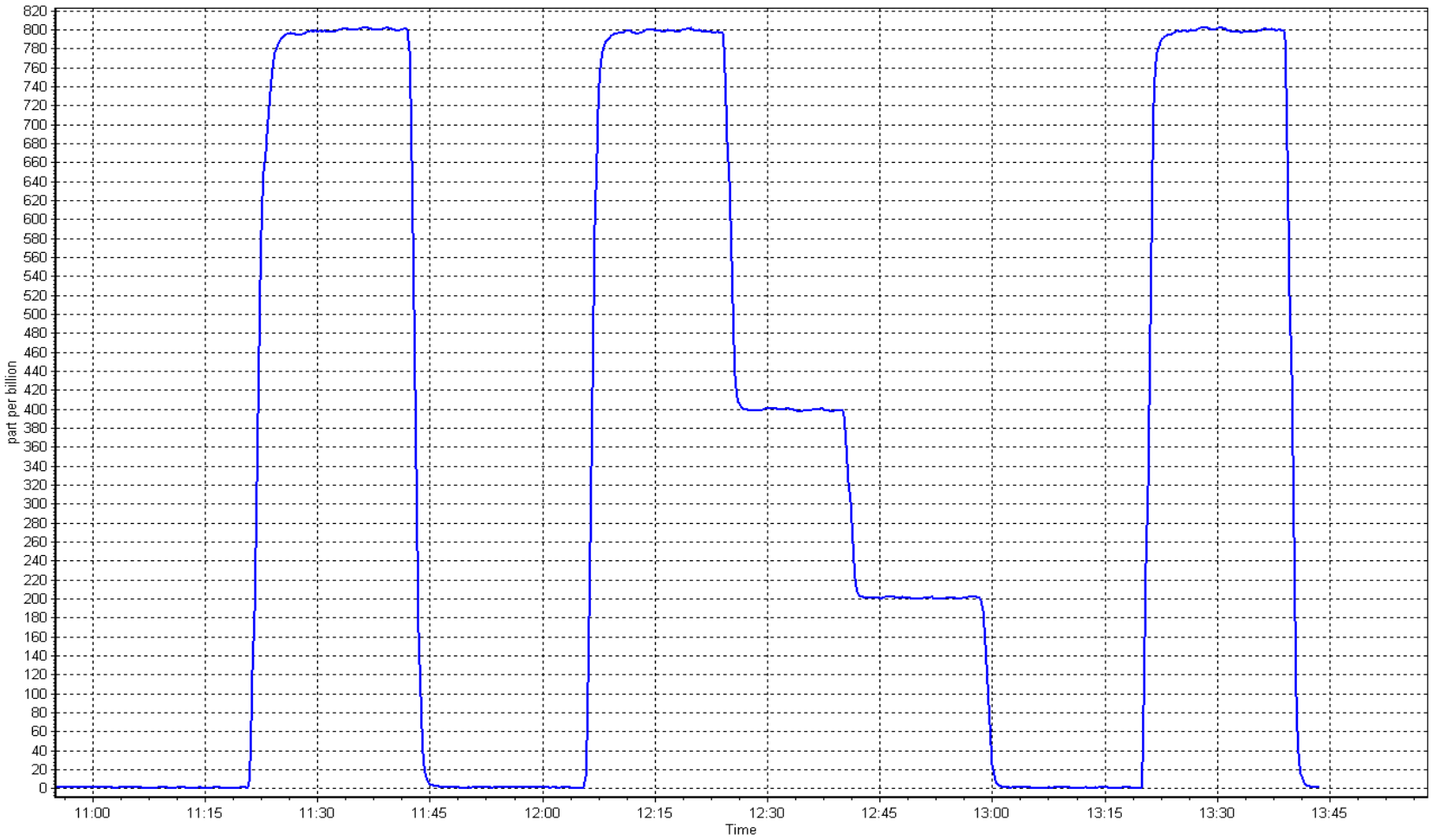
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.9	----
799.7	799.2	1.0006
399.8	399.0	1.0020
199.9	200.8	0.9957

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.997976	*0.90 - 1.10*
Intercept	0.827939	*+/-30*



SO2 Calibration Plot Date: September 15, 2026 Location: Kirby North



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Kirby North	Station number:	AMS 508
Calibration Date:	September 17, 2026	Last Cal Date:	August 20, 2026
Start time (MST):	10:17	End time (MST):	15:08
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.05	ppm	Cal Gas Exp Date:	November 15, 2026
Cal Gas Cylinder #:	DT0019762			
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:	423
ZAG Make/Model:	Teledyne API T751H		Serial Number:	321

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
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.009815	1.005386	Backgd or Offset:	1.71	1.70
Calibration intercept:	-0.140000	-0.160000	Coeff or Slope:	1.072	1.039

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4921	79.2	80.0	82.4	0.971
As found Mid point	4960	39.6	40.0	40.4	0.990
As found Low point	4980	19.8	20.0	19.8	1.010
New cylinder response					

Baseline Corr As found:	82.4	Prev response:	80.64	*% change:	2.1%
Baseline Corr 2nd AF pt:	40.4	AF Slope:	1.032389	AF Intercept:	-0.480000
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999833	* = > +/-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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.1	----
High point	4921	79.2	80.0	80.4	0.995
Mid point	4960	39.6	40.0	39.9	1.002
Low point	4980	19.8	20.0	19.7	1.015
As left zero	5000	0.0	0.0	0.2	----
As left span	4921	79.2	80.0	79.0	1.013
SO2 Scrubber Check				0.0	

Date of last scrubber change:	July 25, 2023	Ave Corr Factor	1.004
Date of last converter efficiency test:	September 18, 2025	102.4%	efficiency

Notes: inlet filter changed after as founds, span adjusted

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

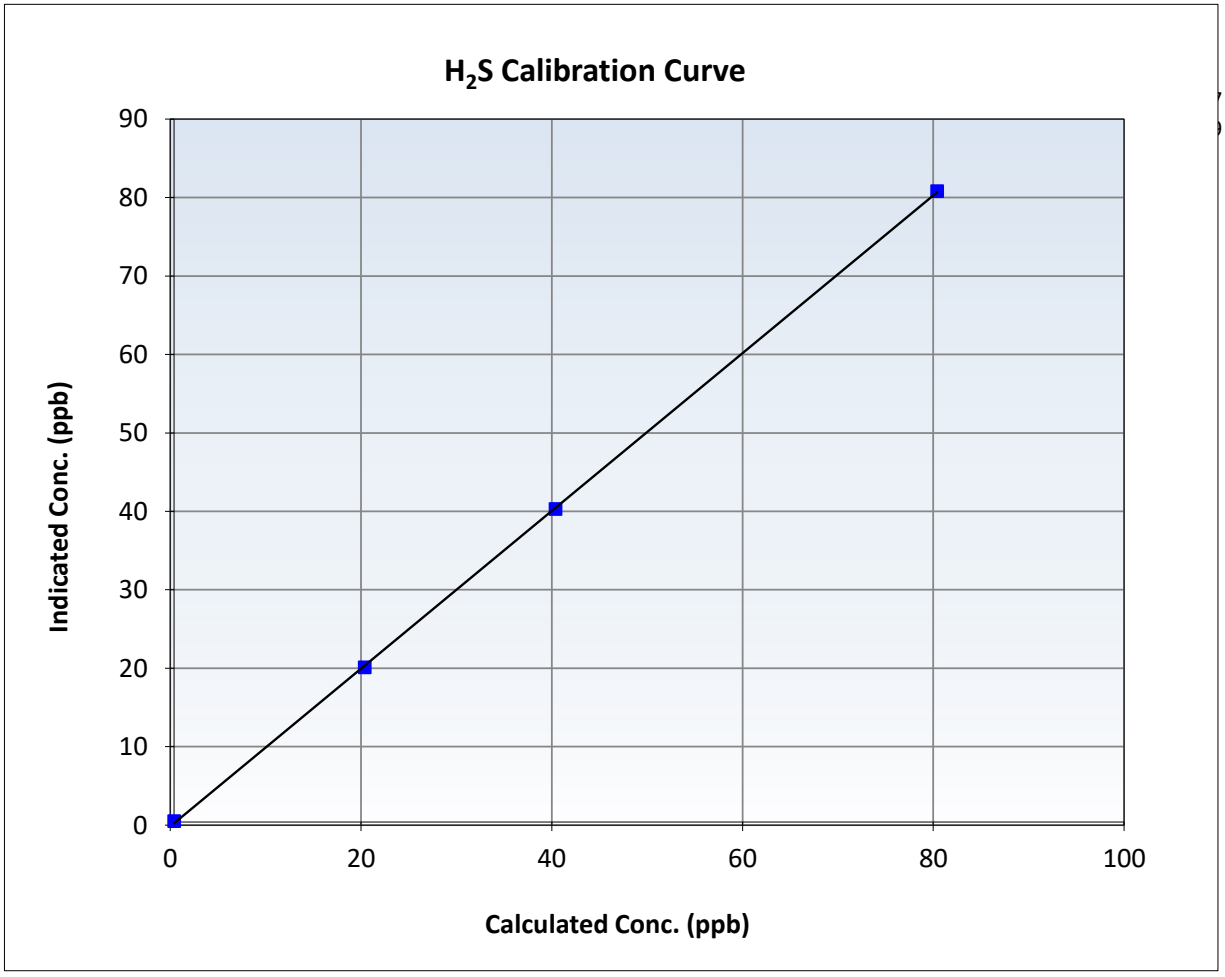
H2S Calibration Summary

Station Information

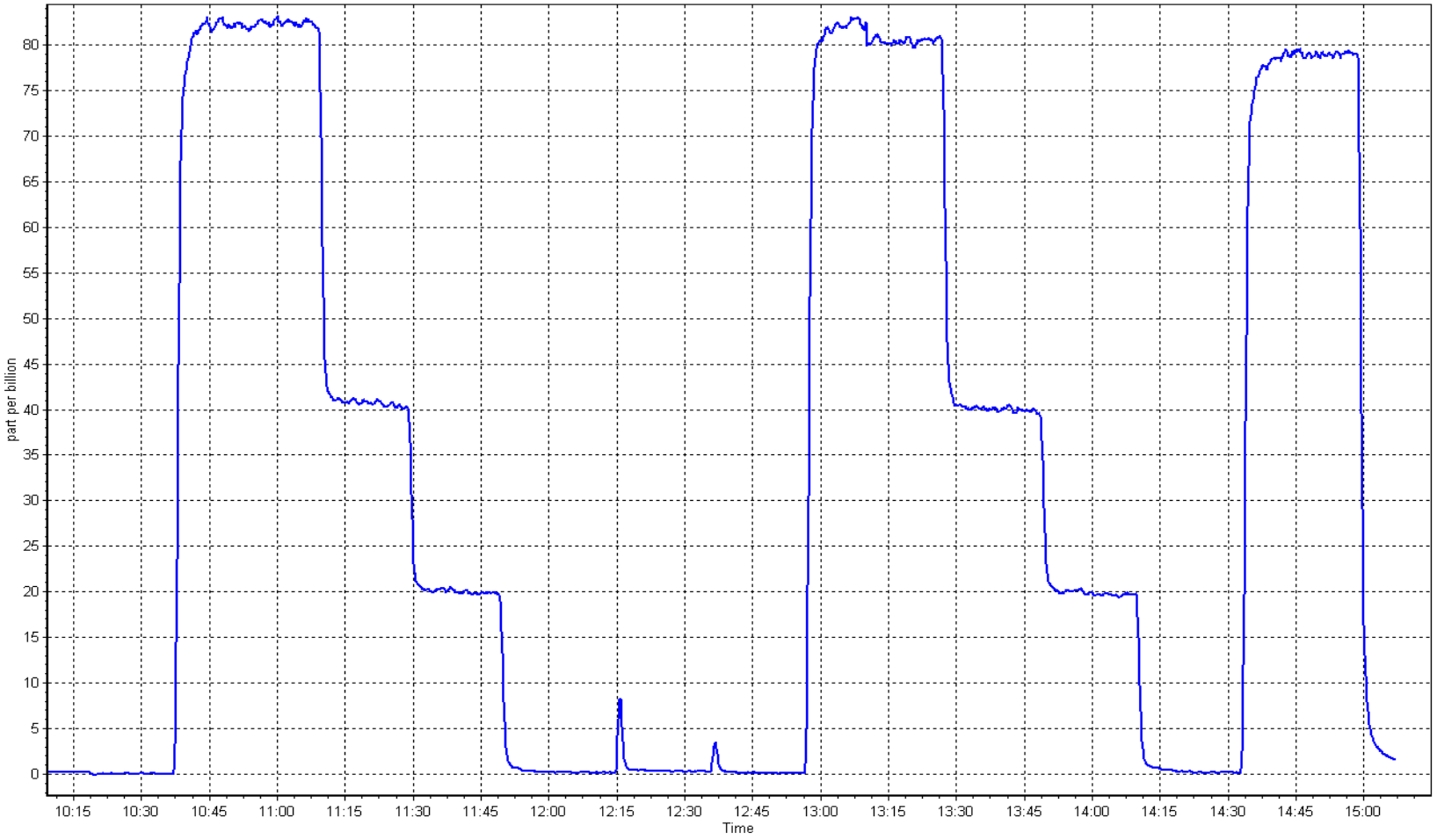
Calibration Date:	September 17, 2026	Previous Calibration:	August 20, 2026
Station Name:	Kirby North	Station Number:	AMS 508
Start Time (MST):	10:17	End Time (MST):	15:08
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1150840012

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999952	*≥0.995*
80.0	80.4	0.9949	Slope	1.005386	*0.90 - 1.10*
40.0	39.9	1.0024			
20.0	19.7	1.0151	Intercept	-0.160000	*+/-3*



H2S Calibration Plot Date: September 17, 2026 Location: Kirby North



CALS_575

Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Kirby North	Station number:	AMS 508
Calibration Date:	September 15, 2026	Last Cal Date:	August 6, 2026
Start time (MST):	11:00	End time (MST):	13:46
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC255918		Cal Gas Expiry Date:	October 9, 2032	
CH4 Cal Gas Conc.	506.4	ppm	CH4 Equiv Conc.	1070.2	ppm
C3H8 Cal Gas Conc.	205.0	ppm			
Removed Gas Cert:			Removed Gas Expiry:		
Removed CH4 Conc.	506.4	ppm	CH4 Equiv Conc.	1070.2	ppm
Removed C3H8 Conc.	205.0	ppm	Diff between cyl:		
Calibrator Make/Model:	Teledyne API T700		Serial Number:	2445	
ZAG Make/Model:	Teledyne API T701H		Serial Number:	880	

Analyzer Information

Analyzer make:	Thermo 51i-LT		Analyzer serial #:	1182340005	
Analyzer Range:	0 - 20 ppm				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002661	1.005995	Background:	1.98	1.98
Calibration intercept:	0.055369	0.058768	Coefficient:	3.305	3.305

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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	78.8	16.87	17.05	0.989
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	17.05	Previous response	16.97	*% 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	

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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.08	
High point	4921	78.8	16.87	17.04	0.990
Mid point	4961	39.4	8.43	8.51	0.991
Low point	4980	19.7	4.22	4.29	0.983
As left zero	5000	0.0	0.00	0.06	----
As left span	4921	78.8	16.87	17.09	0.987
				Average Correction Factor	0.988

Notes: Inlet filter changed after as founds, no changes made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

THC Calibration Summary

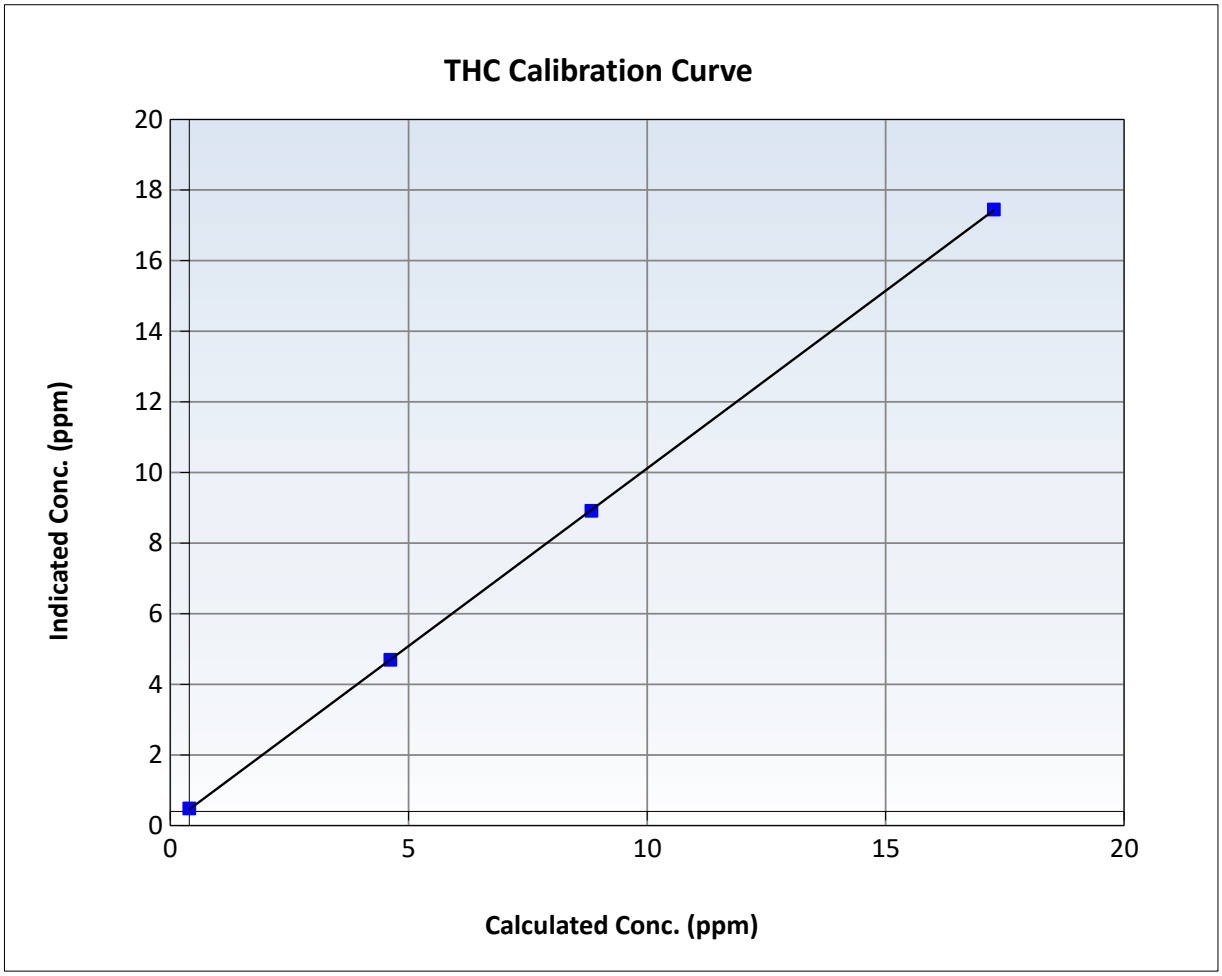
Station Information

Calibration Date:	September 15, 2026	Previous Calibration:	August 6, 2026
Station Name:	Kirby North	Station Number:	AMS 508
Start Time (MST):	11:00	End Time (MST):	13:46
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1182340005

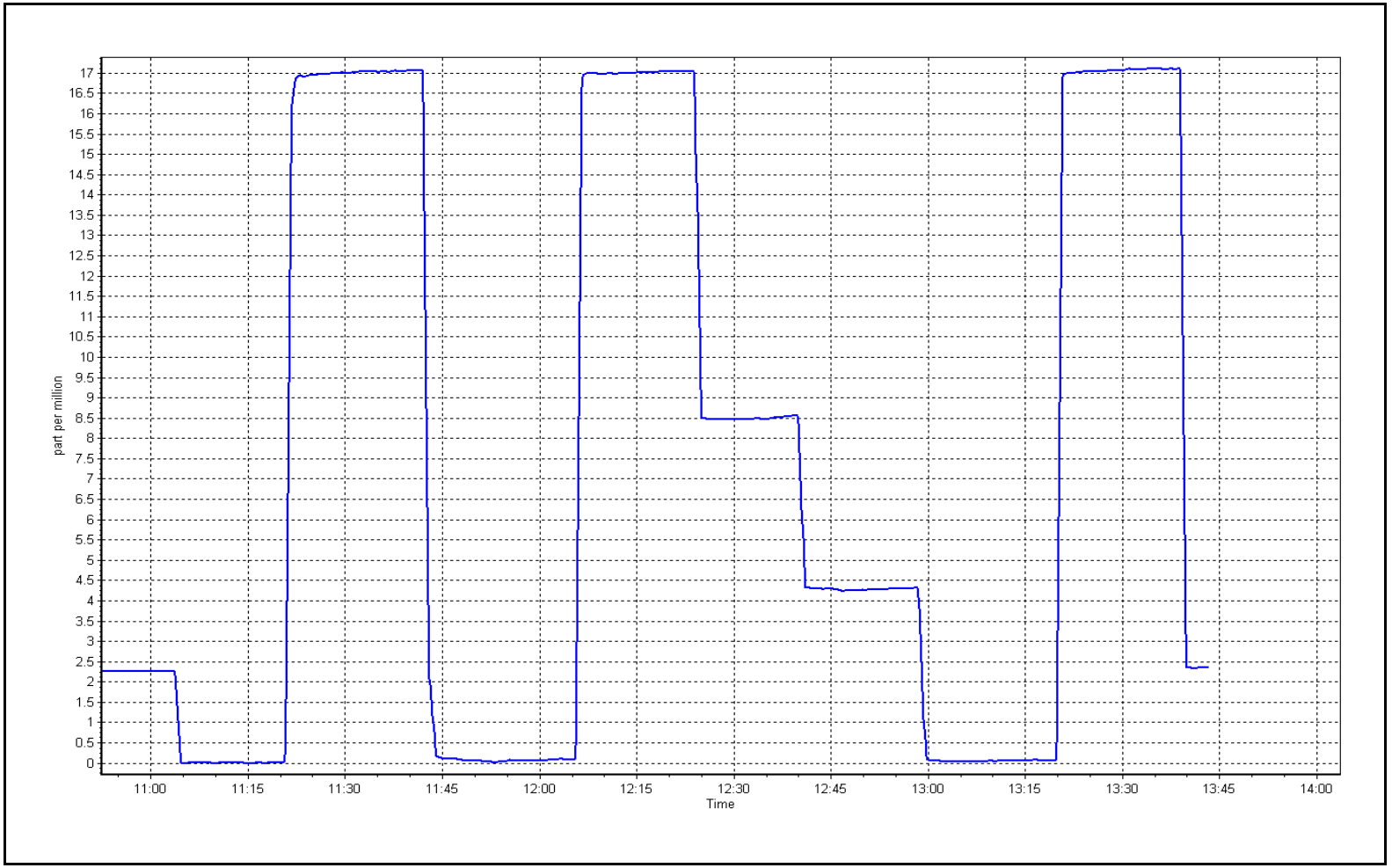
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.08	----
16.87	17.04	0.9896
8.43	8.51	0.9907
4.22	4.29	0.9829

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999988	*≥0.995*
Slope	1.005995	*0.90 - 1.10*
Intercept	0.058768	*+/-1.5*



THC Calibration Plot Date: September 15, 2026 Location: Kirby North



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Kirby North
Station number:	AMS 508
Calibration Date:	September 16, 2026
Last Cal Date:	August 5, 2026
Start time (MST):	10:32
End time (MST):	15:09
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0019572	Cal Gas Expiry Date:	January 5, 2032
NOX Cal Gas Conc:	60.00 ppm	NO Cal Gas Conc:	59.90 ppm
Removed Cylinder #:	NA	Removed Gas Exp Date:	NA
Removed Gas NOX Conc:	60.00 ppm	Removed Gas NO Conc:	59.90 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T700	Serial Number:	2445
ZAG make/model:	Teledyne API T701H	Serial Number:	880

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.8	-0.2	-0.6	----	----
AF High point	4933	66.8	801.6	800.3	1.3	819.2	813.5	5.7	0.9776	0.9835
AF Mid point	4966	33.4	400.8	400.2	0.7					
AF Low point	4983	16.7	200.4	200.1	0.3					
New cyl resp										

Previous Response	NO_X = 799.5 ppb	NO = 796.8 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X =	2.5%
Baseline Corr 1st pt	NO_X = 820.0 ppb	NO = 813.7 ppb	As Found Statistics	*Percent Change	NO =	2.1%
Baseline Corr 2nd pt	NO_X = NA ppb	NO = NA ppb	As found NO_X r^2:	Nx Sl:	Nx Int:	
Baseline Corr 3rd pt	NO_X = NA ppb	NO = NA ppb	As found NO r^2:	NO Sl:	NO Int:	
			As found NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42i Serial Number: 1173480006

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.769	0.758	NO bkgnd or offset:	8.6	8.5
NOX coeff or slope:	0.997	0.993	NOX bkgnd or offset:	9.3	9.1
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	145.6	145.6

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.001670	1.002739
NO_X Cal Offset:	-3.493631	-3.193616
NO Cal Slope:	1.000686	1.004213
NO Cal Offset:	-4.013666	-3.773638
NO_2 Cal Slope:	0.992946	0.987556
NO_2 Cal Offset:	1.121973	0.308439

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	-0.7	0.0	-0.6	----	----
High point	4933	66.8	801.6	800.3	1.3	802.1	802.0	0.3	0.9994	0.9979
Mid point	4967	33.4	400.8	400.1	0.7	396.8	395.5	1.3	1.0101	1.0117
Low point	4983	16.7	200.4	200.1	0.3	195.7	193.8	2.0	1.0240	1.0323
As left zero	5000	0.0	0.0	0.0	0.0	-0.6	0.0	-0.6	----	----
As left span	4933	66.8	801.6	401.6	400.0	796.7	401.6	395.1	1.0062	1.0000
								Average Correction Factor	1.0112	1.0140

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	-0.6	----	----
High GPT point	801.1	400.2	402.2	397.1	1.0129	98.7%
Mid GPT point	801.1	633.8	168.6	167.6	1.0062	99.4%
Low GPT point	801.1	719.0	83.4	83.3	1.0016	99.8%
				Average Correction Factor	1.0069	99.3%

Notes: Inlet filter changed after as founds, span adjusted.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

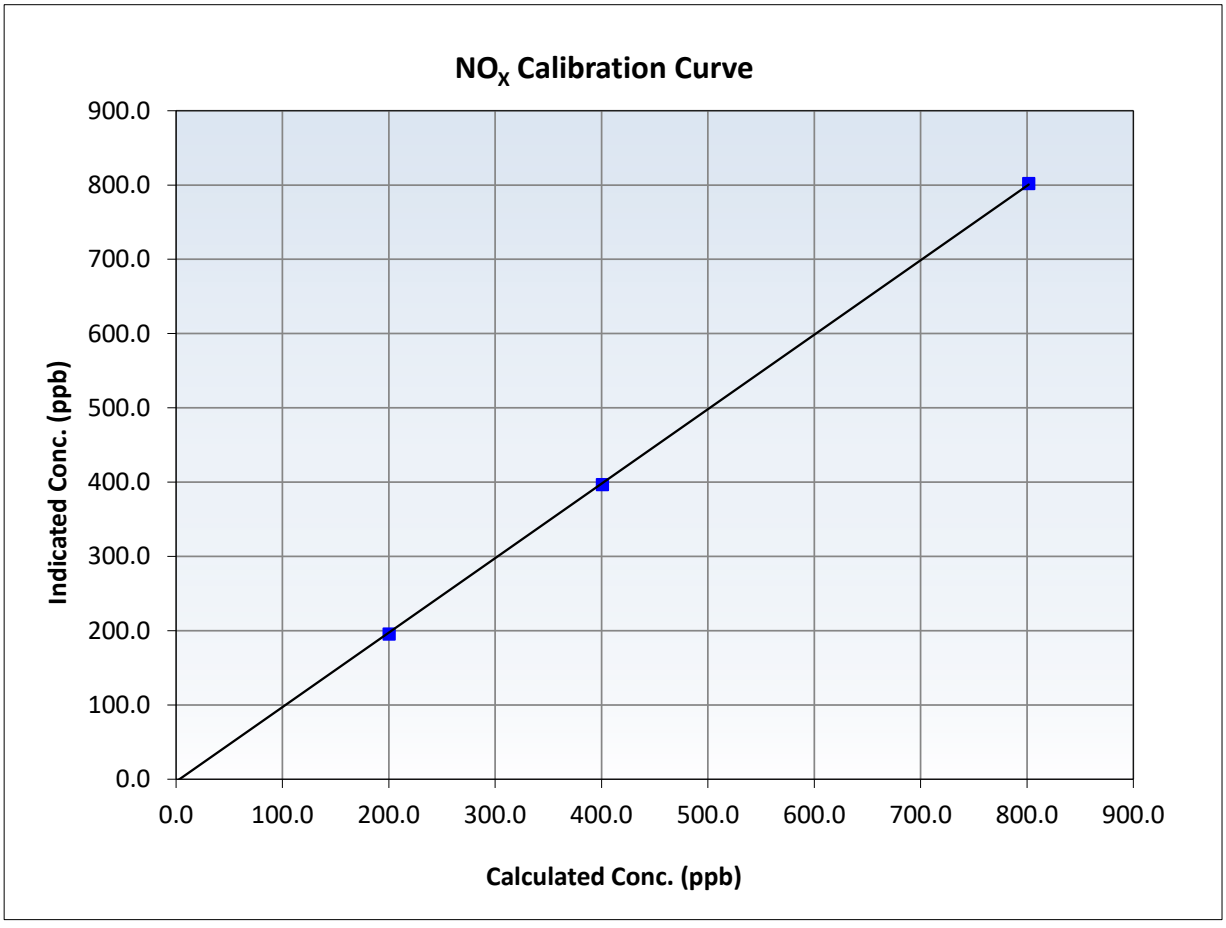
NO_X Calibration Summary

Station Information

Calibration Date:	September 16, 2026	Previous Calibration:	August 5, 2026
Station Name:	Kirby North	Station Number:	AMS 508
Start Time (MST):	10:32	End Time (MST):	15:09
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	-0.7	----	Correlation Coefficient	0.999954	≥0.995
801.6	802.1	0.9994	Slope	1.002739	0.90 - 1.10
400.8	396.8	1.0101			
200.4	195.7	1.0240	Intercept	-3.193616	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

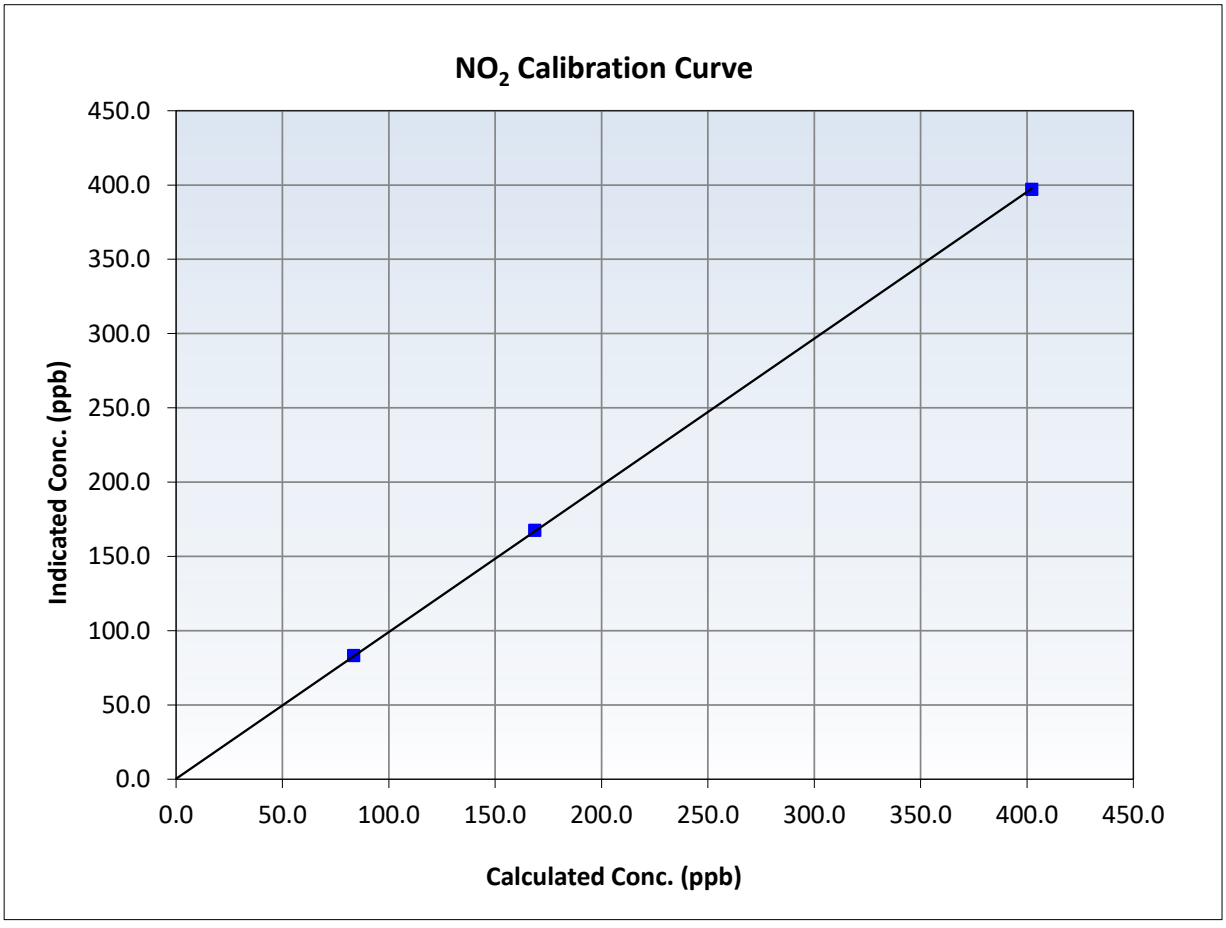
Station Information

Calibration Date:	September 16, 2026	Previous Calibration:	August 5, 2026
Station Name:	Kirby North	Station Number:	AMS 508
Start Time (MST):	10:32	End Time (MST):	15:09
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.6	----
402.2	397.1	1.0129
168.6	167.6	1.0062
83.4	83.3	1.0016

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999978	*≥0.995*
Slope	0.987556	*0.90 - 1.10*
Intercept	0.308439	*+/-20*



Wood Buffalo Environmental Association

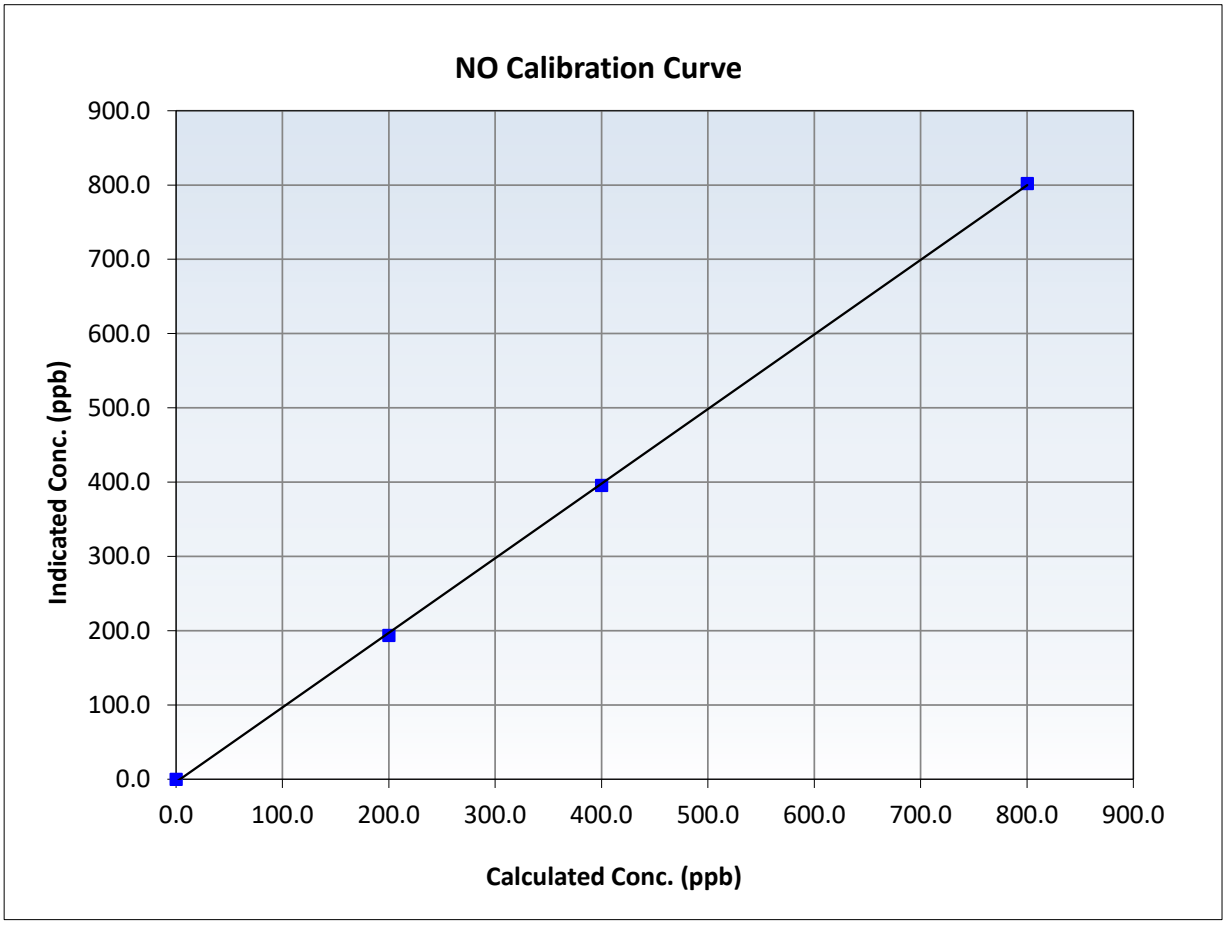
NO Calibration Summary

Station Information

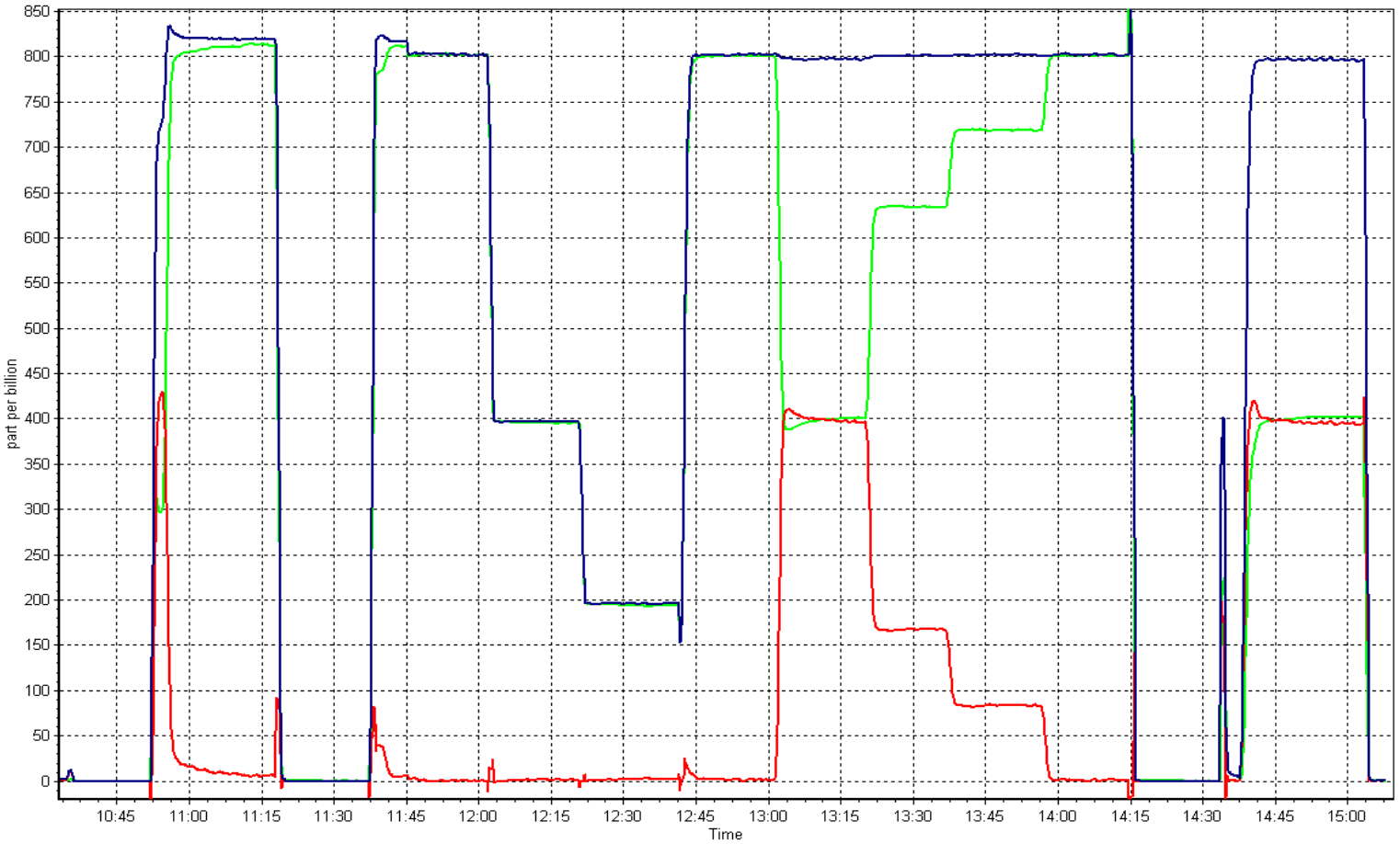
Calibration Date:	September 16, 2026	Previous Calibration:	August 5, 2026
Station Name:	Kirby North	Station Number:	AMS 508
Start Time (MST):	10:32	End Time (MST):	15:09
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.0	----	Correlation Coefficient	0.999897	≥0.995
800.3	802.0	0.9979	Slope	1.004213	0.90 - 1.10
400.1	395.5	1.0117			
200.1	193.8	1.0323	Intercept	-3.773638	+/-20



NO_X Calibration Plot Date: September 16, 2026 Location: Kirby North



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS513
EBRT
SEPTEMBER 2026

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

October 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	EBRT	Station number:	AMS 513
Calibration Date:	September 23, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	9:28	End time (MST):	12:11
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.01	ppm	Cal Gas Exp Date:	April 15, 2034
Cal Gas Cylinder #:	CC475657			
Removed Cal Gas Conc:	50.01	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 T701		Serial Number:	4891

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	JC1404901075	
Analyzer Range:	0-1000ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001471	0.996943	Backgd or Offset:	26.0	26.0
Calibration intercept:	0.340000	-0.700000	Coeff or Slope:	0.719	0.719

SO_2 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) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.2	----
As found High point	4920	80.0	800.2	799.4	1.001
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	799.2	Previous response	801.7	*% 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	

SO_2 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	0.3	----
High point	4920	80.0	800.2	797.6	1.003
Mid point	4960	40.0	400.1	397.4	1.007
Low point	4980	20.0	200.0	197.9	1.011
As left zero	5000	0.0	0.0	0.2	----
As left span	4920	80.0	800.2	797.0	1.004
				Average Correction Factor:	1.007

Notes: Replaced the inlet filter after the as founds. No Adjustments made.

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

SO_2 Calibration Summary

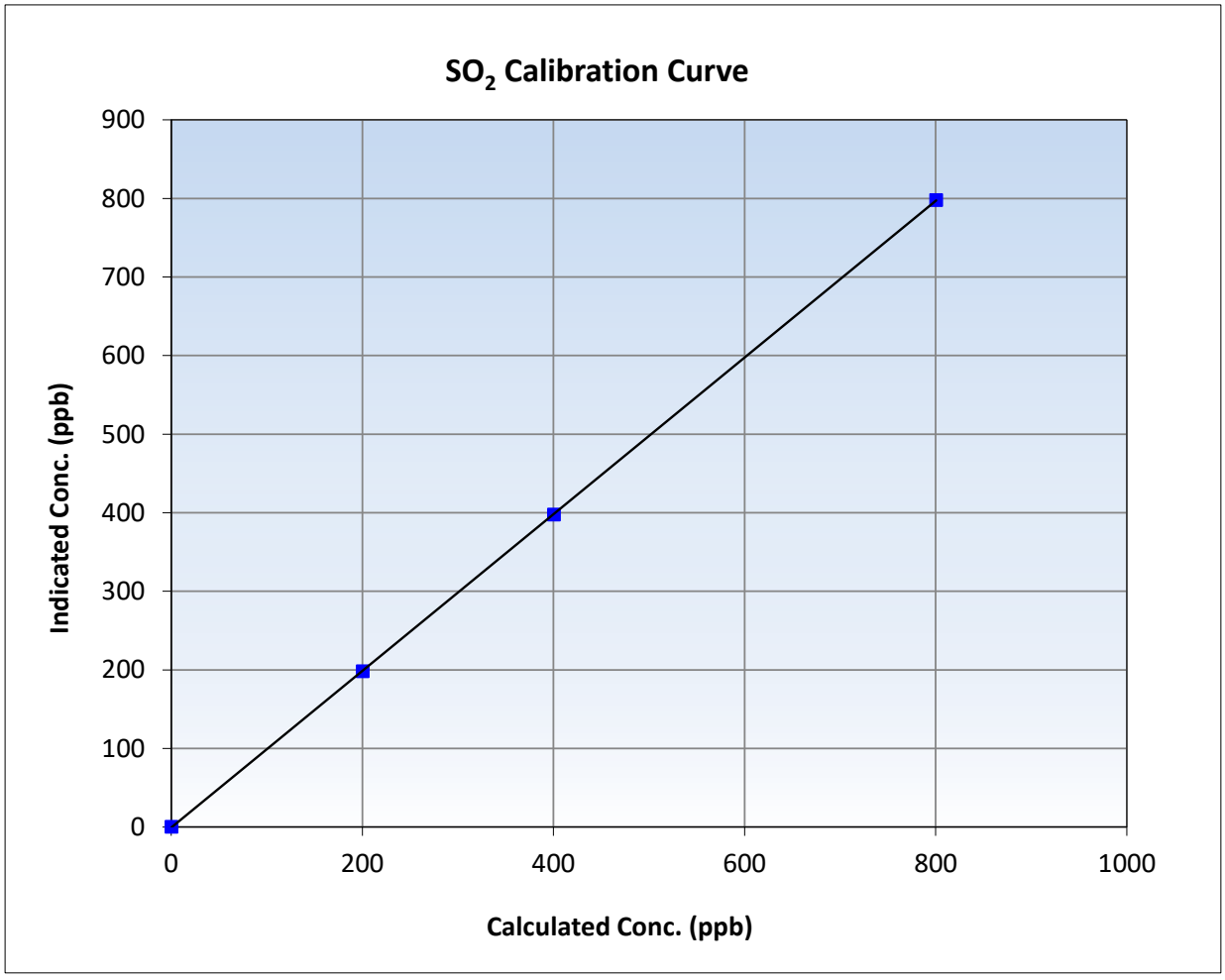
Station Information

Calibration Date:	September 23, 2026	Previous Calibration:	August 11, 2026
Station Name:	EBRT	Station Number:	AMS 513
Start Time (MST):	9:28	End Time (MST):	12:11
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1404901075

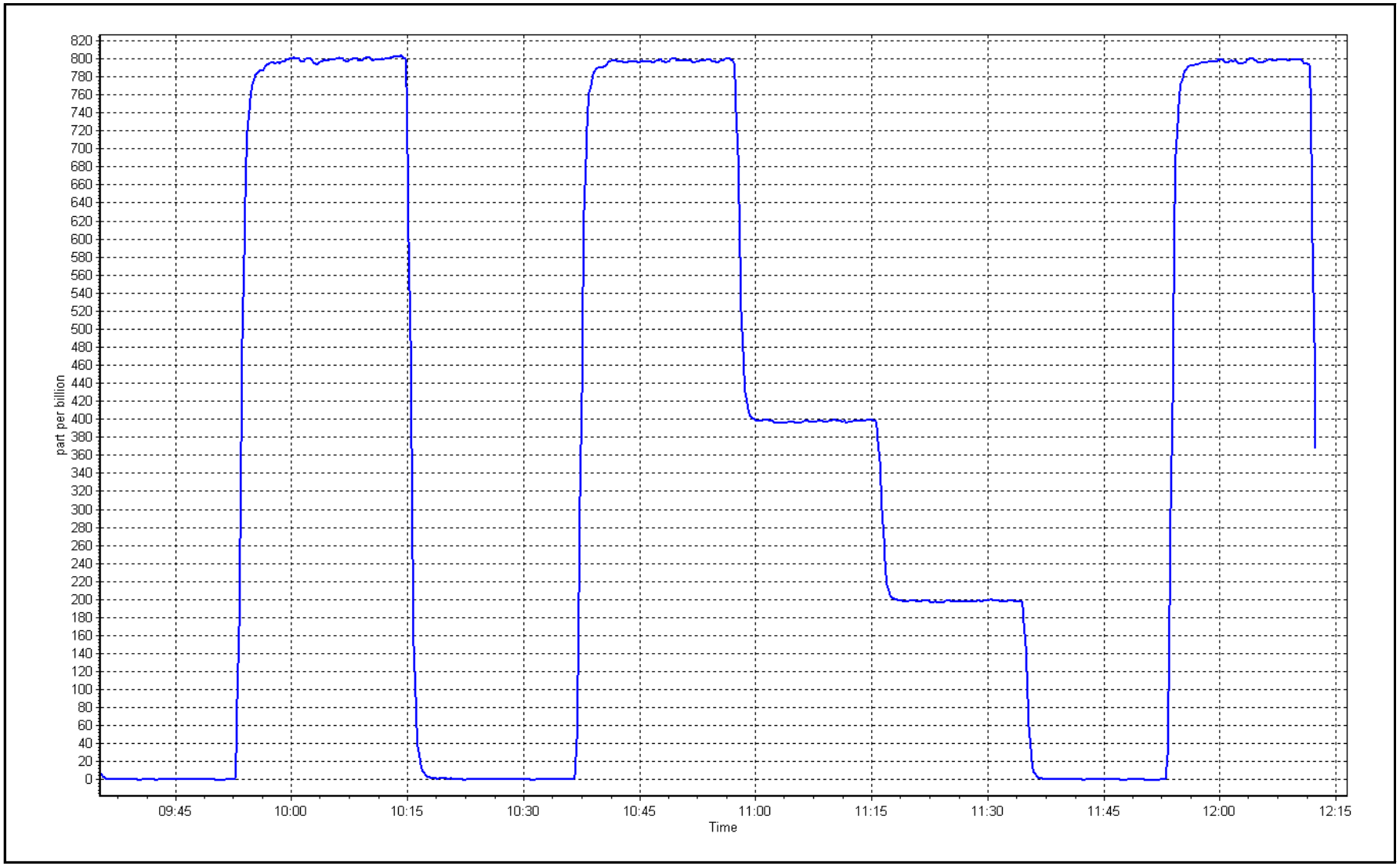
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.2	797.6	1.0032
400.1	397.4	1.0067
200.0	197.9	1.0108

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999993	*≥0.995*
Slope	0.996943	*0.90 - 1.10*
Intercept	-0.700000	*+/-30*



SO2 Calibration Plot Date: September 23, 2026 Location: EBRT



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	EBRT	Station number:	AMS 513
Calibration Date:	September 24, 2026	Last Cal Date:	August 11, 2026
Start time (MST):	9:49	End time (MST):	13:59
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.60	ppm	Cal Gas Exp Date:	June 22, 2028
Cal Gas Cylinder #:	CC13654			
Removed Cal Gas Conc:	4.60	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	1607
ZAG Make/Model:	Teledyne API T701		Serial Number:	4891

Analyzer Information

Analyzer make:	Thermo 43iQTL		Analyzer serial #:	12426335706
Converter make:	Global G150		Converter serial #:	2023-267
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.003591	1.006729	Backgd or Offset:	2.3	2.3
Calibration intercept:	-0.439338	-0.241548	Coeff or Slope:	1.053	1.043

H_2S 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)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4913	87.0	80.0	81.4	0.982
As found Mid point	4957	43.5	40.0	40.6	0.983
As found Low point	4978	21.7	20.0	20.0	0.993
New cylinder response					

Baseline Corr As found:	81.5	Prev response:	79.89	*% change:	2.0%
Baseline Corr 2nd AF pt:	40.7	AF Slope:	1.019149	AF Intercept:	-0.201314
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999991	* = > +/-5% change initiates investigation	

H_2S 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) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4913	87.0	80.0	80.4	0.996
Mid point	4957	43.5	40.0	40.0	1.001
Low point	4978	21.7	20.0	19.7	1.013
As left zero	5000	0.0	0.0	0.0	----
As left span	4913	87.0	80.0	80.1	0.999
SO2 Scrubber Check	4920	80.0	800.0	0.1	----
Date of last scrubber change:				Ave Corr Factor	1.003
Date of last converter efficiency test:					

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

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

H_2S Calibration Summary

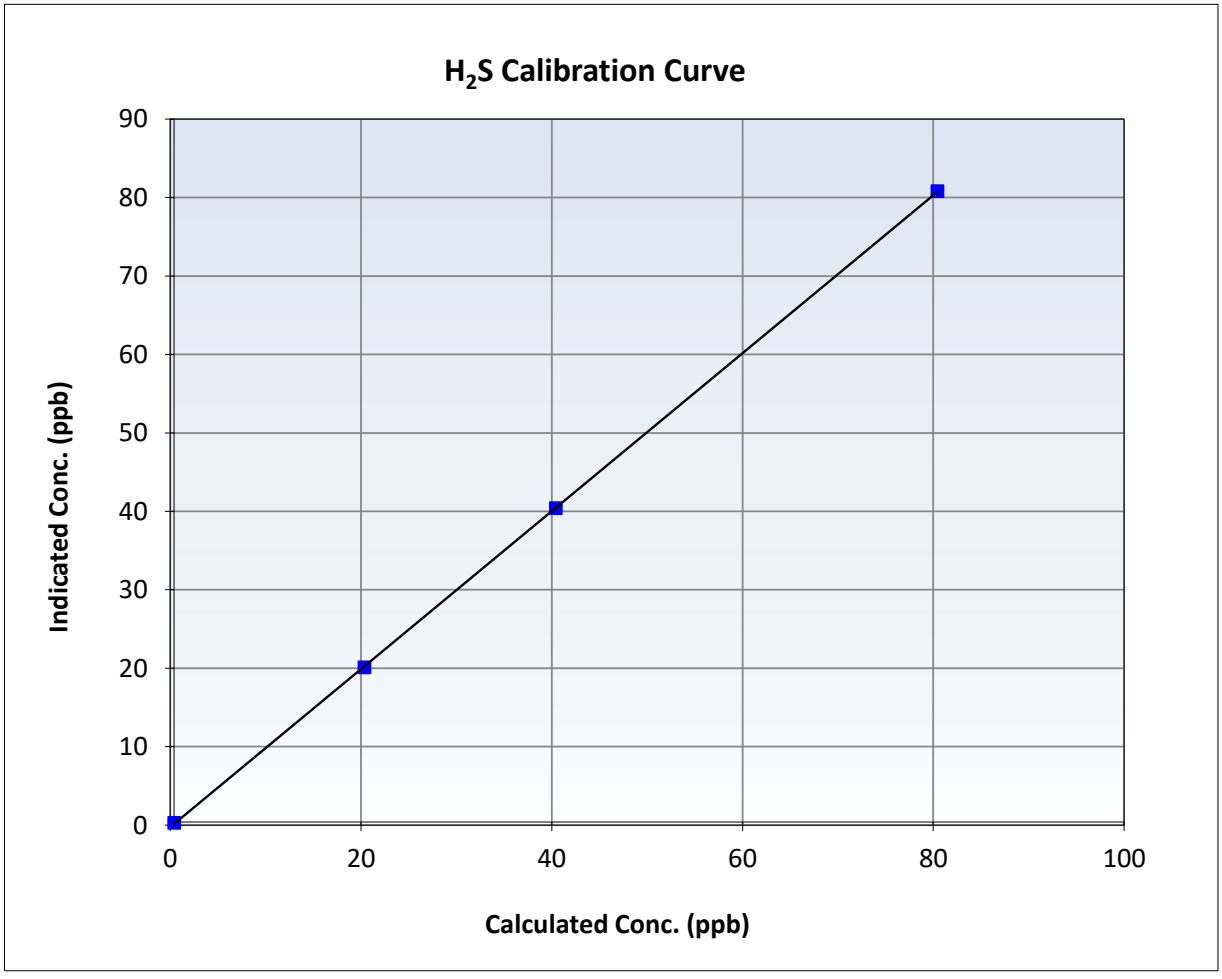
Station Information

Calibration Date:	September 24, 2026	Previous Calibration:	August 11, 2026
Station Name:	EBRT	Station Number:	AMS 513
Start Time (MST):	9:49	End Time (MST):	13:59
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12426335706

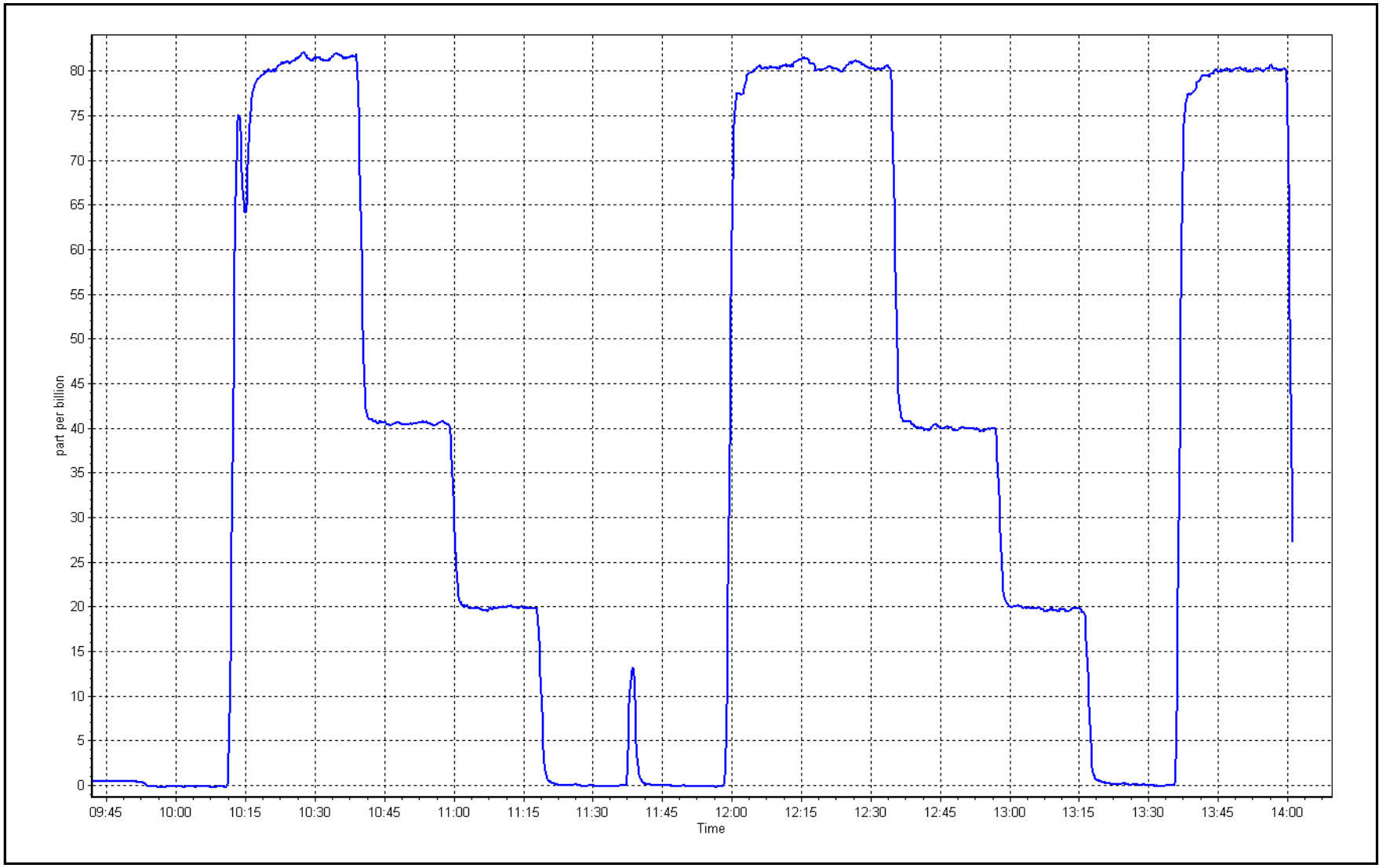
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
80.0	80.4	0.9955
40.0	40.0	1.0005
20.0	19.7	1.0134

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999986	*≥0.995*
Slope	1.006729	*0.90 - 1.10*
Intercept	-0.241548	*+/-3*



H_2S Calibration Plot Date: September 24, 2026 Location: EBRT



CALS_591

Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	EBRT
Station number:	AMS 513
Calibration Date:	September 25, 2026
Last Cal Date:	August 12, 2026
Start time (MST):	10:23
End time (MST):	15:01
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	CC424105	Cal Gas Expiry Date:	July 19, 2032
NOX Cal Gas Conc:	59.90 ppm	NO Cal Gas Conc:	59.90 ppm
Removed Cylinder #:		Removed Gas Exp Date:	
Removed Gas NOX Conc:	59.90 ppm	Removed Gas NO Conc:	59.90 ppm
NOX gas Diff:		NO gas Diff:	
Calibrator Model:	Teledyne API T750	Serial Number:	282
ZAG make/model:	Teledyne API T701	Serial Number:	4891

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)) *Limit = 0.90 - 1.10*	Baseline Adjusted NO Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90 - 1.10*
As found zero	5000	0.0	0.0	0.0	0.0	-0.1	0.0	-0.1	----	----
AF High point	4933	66.8	800.3	800.3	0.0	836.2	835.7	0.6	0.9569	0.9576
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 798.7 ppb	NO = 802.0 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = 4.5%
Baseline Corr 1st pt	NO_X = 836.3 ppb	NO = 835.7 ppb	As Found Statistics	*Percent Change	NO = 4.0%
Baseline Corr 2nd pt	NO_X = NA ppb	NO = NA ppb	As found NO_X r^2:	Nx Sl:	Nx Int:
Baseline Corr 3rd pt	NO_X = NA ppb	NO = NA ppb	As found NO r^2:	NO Sl:	NO Int:
			As found NO_2 r^2:	NO2 Sl:	NO_2 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)) *Limit = 0.90 - 1.10*	Converter Efficiency *Limit = 96-104%*
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 \ NO_2 Calibration Report

Analyzer Information

Analyzer Make: Thermo 42iQ
Serial Number: 12400232071
NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.053	1.012	NO bkgnd or offset:	0.6	0.7
NOX coeff or slope:	0.992	0.993	NOX bkgnd or offset:	0.8	0.8
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	146.2	157.7

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.996397	1.002495
NO_X Cal Offset:	1.268026	-3.092103
NO Cal Slope:	1.000024	1.001653
NO Cal Offset:	1.648087	-3.272098
NO_2 Cal Slope:	0.990849	0.986615
NO_2 Cal Offset:	0.741934	2.131224

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) *Limit = 0.95-1.05*	NO Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Cal zero	5000	0.0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
High point	4933	66.8	800.3	800.3	0.0	801.2	800.3	0.8	0.9989	1.0000
Mid point	4967	33.4	400.1	400.1	0.0	395.2	394.9	0.3	1.0124	1.0132
Low point	4983	16.7	200.1	200.1	0.0	195.1	194.5	0.5	1.0255	1.0287
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	----	----
As left span	4821	66.8	818.6	299.3	501.0	784.0	299.3	484.7	1.0442	1.0000
								Average Correction Factor	1.0123	1.0139

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) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero	----	----	0.0	0.1	----	----
High GPT point	793.6	384.6	409.0	404.6	1.0109	98.9%
Mid GPT point	793.6	587.9	205.7	206.3	0.9971	100.3%
Low GPT point	793.6	696.7	96.9	99.6	0.9729	102.8%
				Average Correction Factor	0.9936	100.7%

Notes: Replaced the inlet filter after the as founds. Adjusted the span. Used the 2nd GPT reference point because of drift.

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

NO_X Calibration Summary

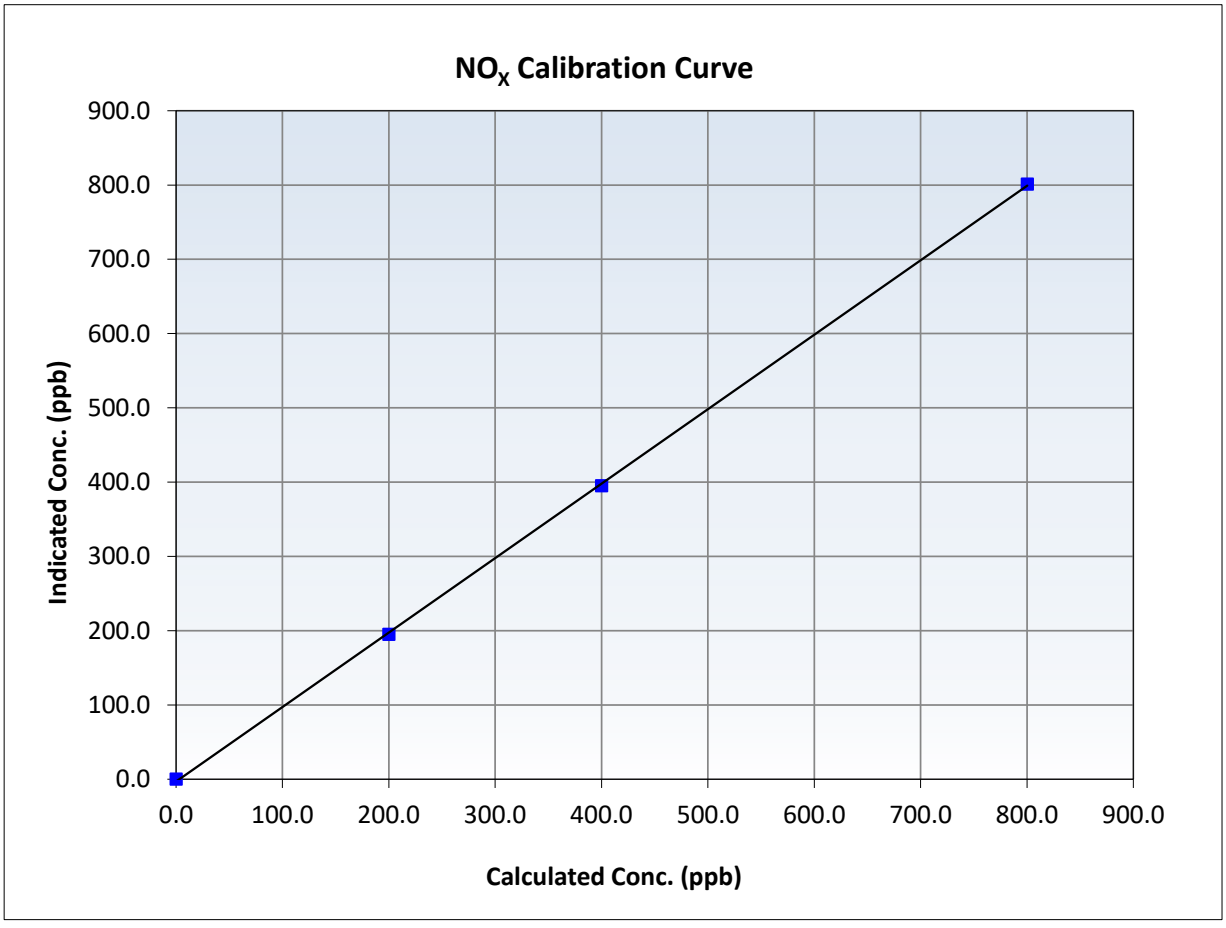
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 12, 2026
Station Name:	EBRT	Station Number:	AMS 513
Start Time (MST):	10:23	End Time (MST):	15:01
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12400232071

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.3	801.2	0.9989
400.1	395.2	1.0124
200.1	195.1	1.0255

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999921	*≥0.995*
Slope	1.002495	*0.90 - 1.10*
Intercept	-3.092103	*+/-20*



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NO_2 Calibration Summary

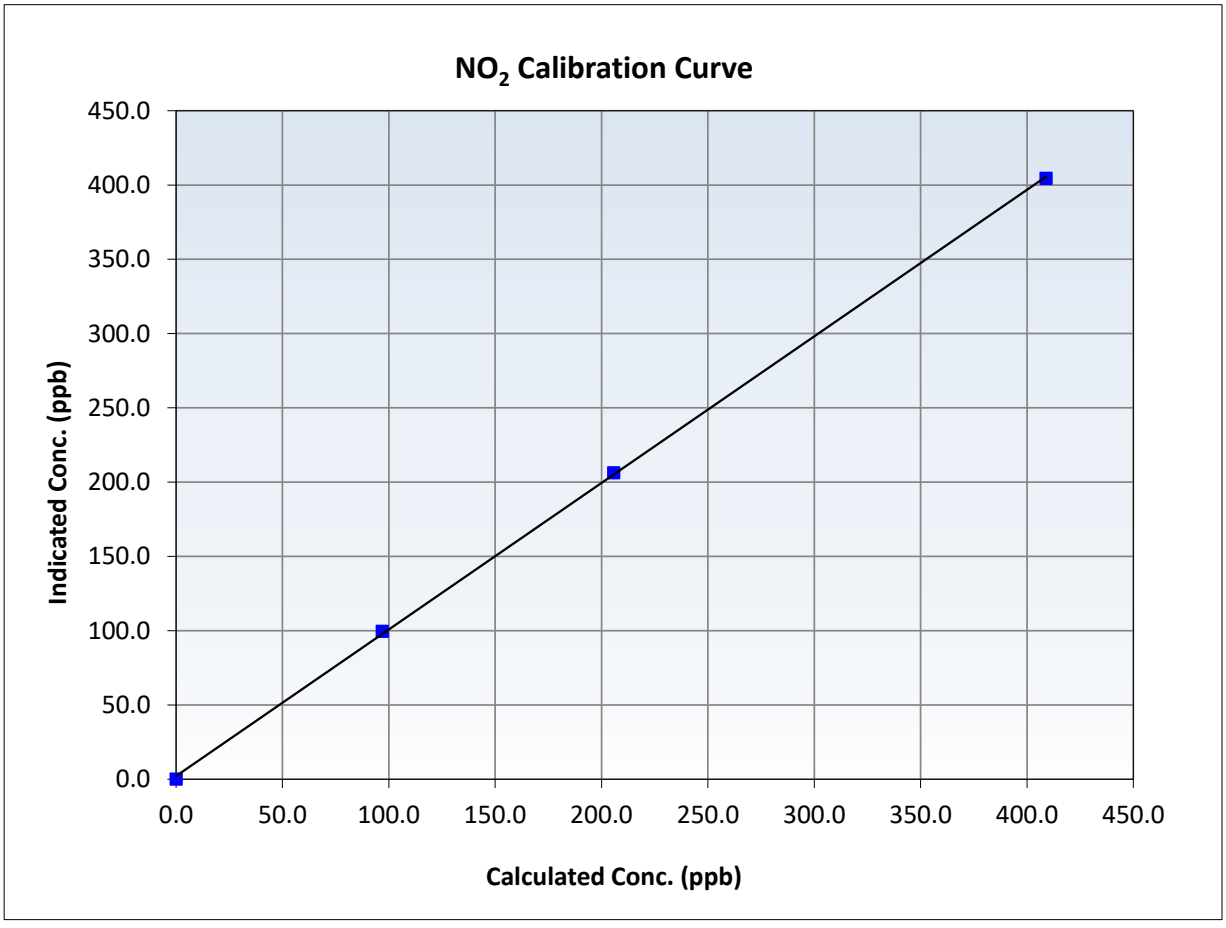
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 12, 2026
Station Name:	EBRT	Station Number:	AMS 513
Start Time (MST):	10:23	End Time (MST):	15:01
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12400232071

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
409.0	404.6	1.0109
205.7	206.3	0.9971
96.9	99.6	0.9729

Statistical Evaluation		Limits
Correlation Coefficient	0.999886	≥0.995
Slope	0.986615	0.90 - 1.10
Intercept	2.131224	+/-20



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NO Calibration Summary

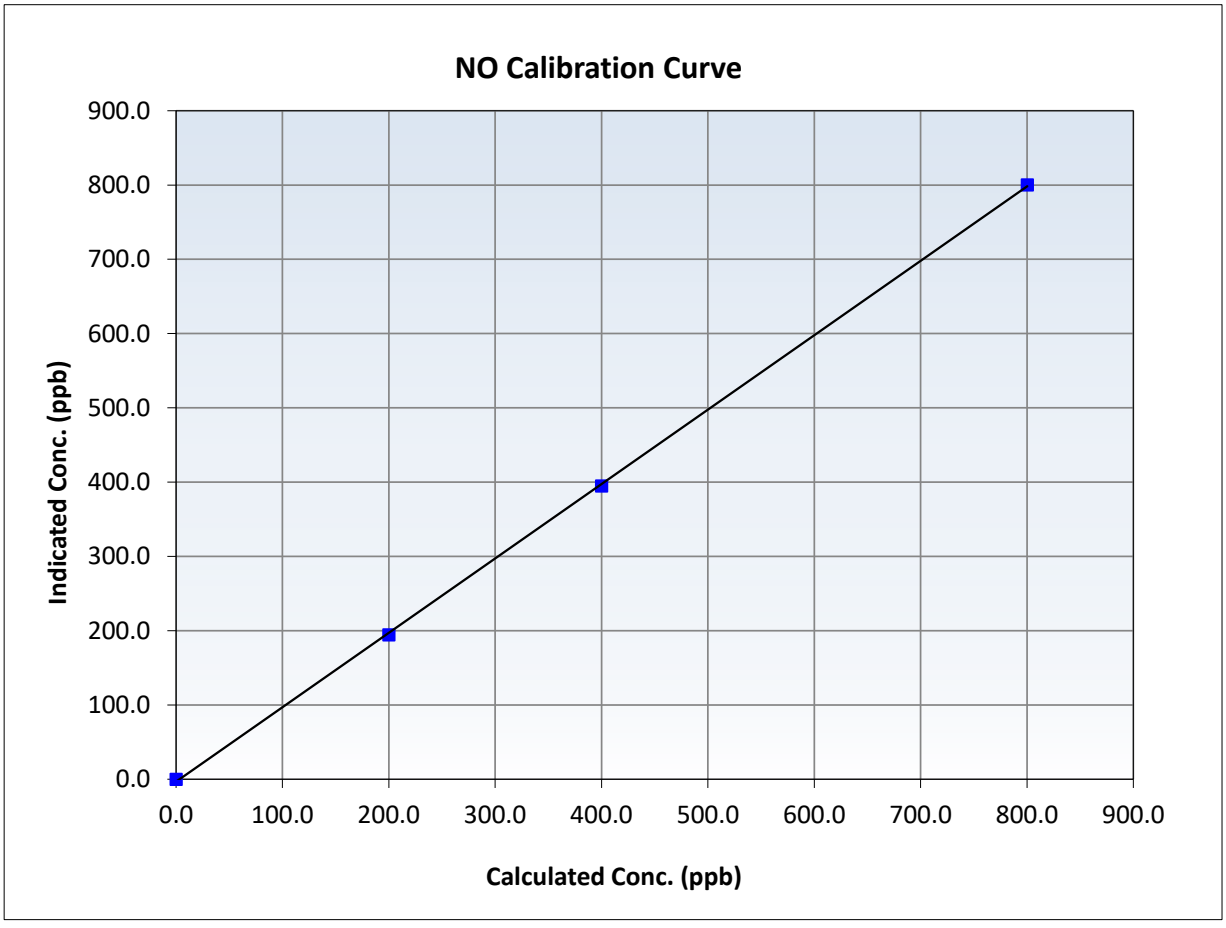
Station Information

Calibration Date:	September 25, 2026	Previous Calibration:	August 12, 2026
Station Name:	EBRT	Station Number:	AMS 513
Start Time (MST):	10:23	End Time (MST):	15:01
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12400232071

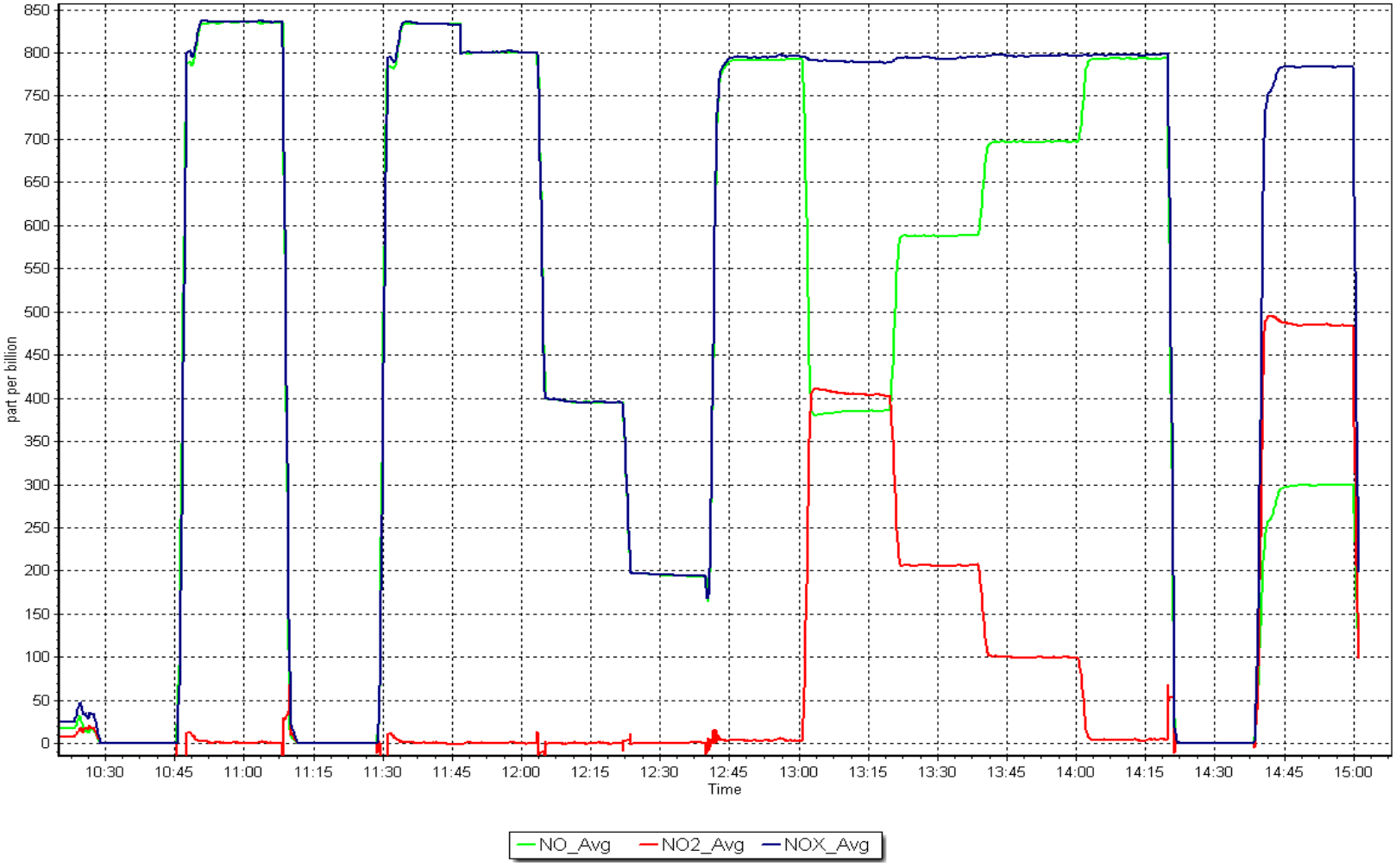
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.3	800.3	1.0000
400.1	394.9	1.0132
200.1	194.5	1.0287

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999920	*≥0.995*
Slope	1.001653	*0.90 - 1.10*
Intercept	-3.272098	*+/-20*



NO_X Calibration Plot Date: September 25, 2026 Location: EBRT



End of Report