WOOD BUFFALO
ENVIRONMENTAL ASSOCIATION

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Wood Buffalo Environmental Association

MARCH 2026

MONTHLY CALIBRATION REPORT

CONTINUOUS MONITORING

April 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
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
Calibration Date:	March 11, 2026	Last Cal Date:	February 17, 2026
Start time (MST):	10:48	End time (MST):	14:21
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	JC1501301448	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.997438	1.005978	Backgd or Offset:	21.5	21.7
Calibration intercept:	0.126987	0.886645	Coeff or Slope:	0.888	0.888

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	1.0	----
As found High point	4918	81.3	800.3	806.2	0.994
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	805.2	Previous response	798.3	*% 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	1.0	----
High point	4918	81.3	800.3	806.1	0.993
Mid point	4959	40.7	400.6	403.5	0.993
Low point	4979	20.3	199.8	202.0	0.989
As left zero	5000	0.0	0.0	1.1	----
As left span	4918	81.3	800.3	809.2	0.989
				Average Correction Factor:	0.992

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

SO_2 Calibration Summary

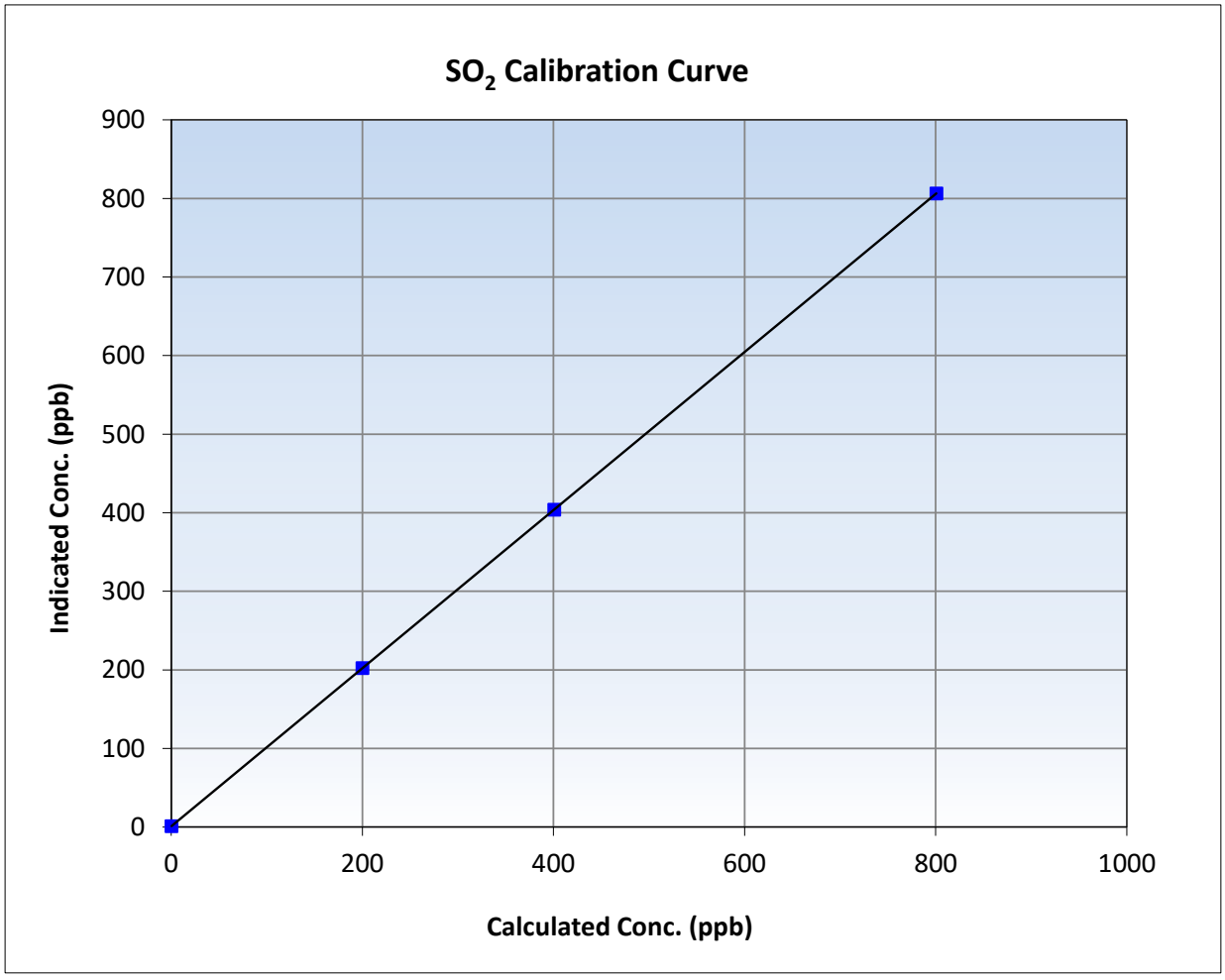
Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 17, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:48	End Time (MST):	14:21
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1501301448

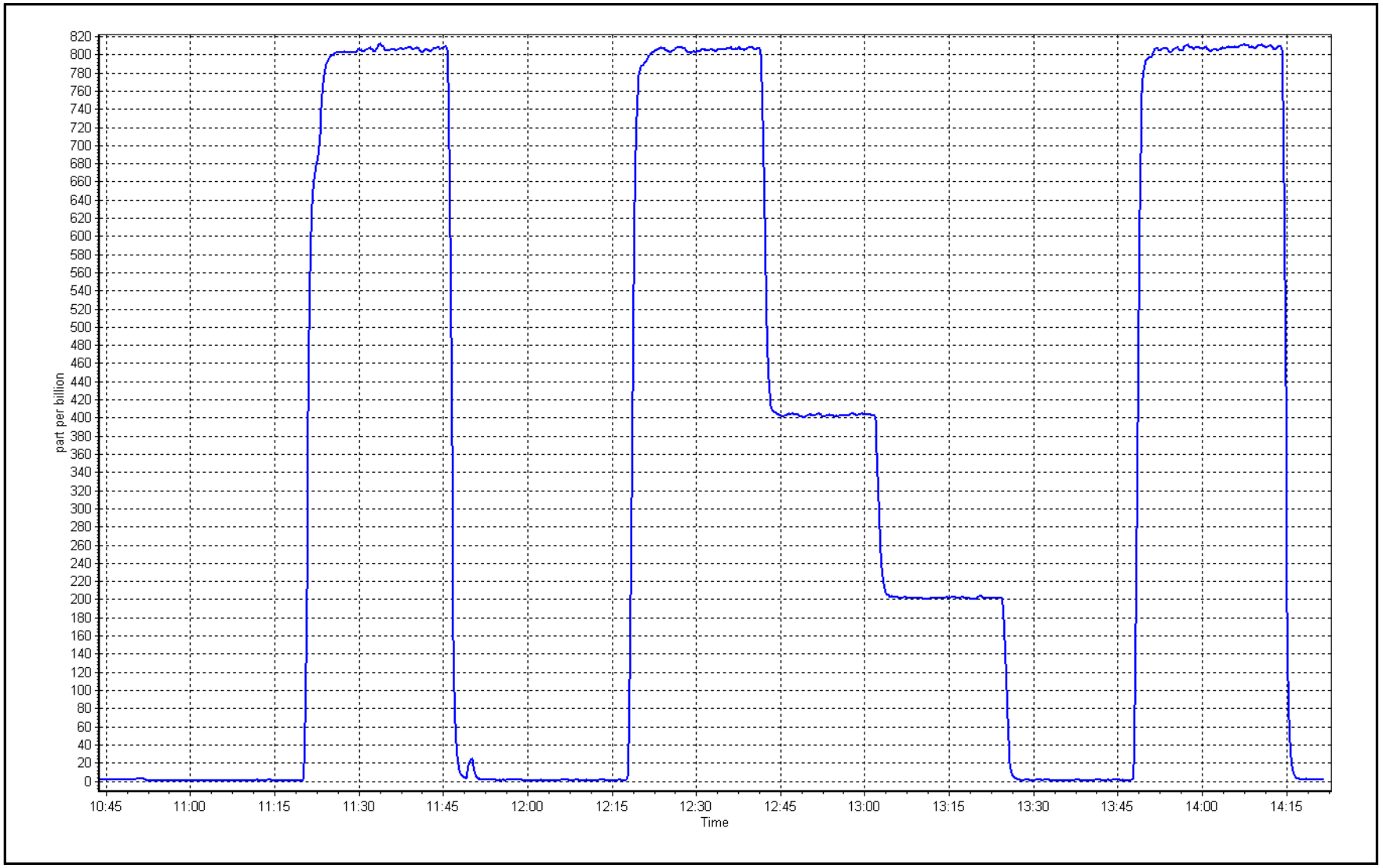
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	1.0	----
800.3	806.1	0.9928
400.6	403.5	0.9928
199.8	202.0	0.9892

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.005978	*0.90 - 1.10*
Intercept	0.886645	*+/-30*



SO2 Calibration Plot Date: March 11, 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:	March 16, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	10:23	End time (MST):	15:02
Reason:	Routine		

Calibration Standards

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

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.000386	0.974798	Backgd or Offset:	2.06	2.07
Calibration intercept:	-0.058000	0.262435	Coeff or Slope:	0.999	0.999

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	78.4	1.021
As found Mid point	4959	41.3	40.0	39.6	1.012
As found Low point	4979	20.7	20.0	19.9	1.012
New cylinder response					

Baseline Corr As found:	78.3	Prev response:	79.94	*% change:	-2.1%
Baseline Corr 2nd AF pt:	39.5	AF Slope:	0.978945	AF Intercept:	0.242292
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999974	* = > +/-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	78.1	1.024
Mid point	4959	41.3	40.0	39.5	1.012
Low point	4979	20.7	20.0	19.7	1.017
As left zero	5000	0.0	0.0	0.2	----
As left span	4917	82.6	80.0	78.3	1.021
SO2 Scrubber Check	4919	81.3	813.0	0.0	----

Date of last scrubber change:	January 25, 2024	Ave Corr Factor	1.018	
Date of last converter efficiency test:	November 7, 2024	107.9%	efficiency	

Notes: Inlet filter change completed after as founds. No adjustments made. Scrubber check passed.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

H_2S Calibration Summary

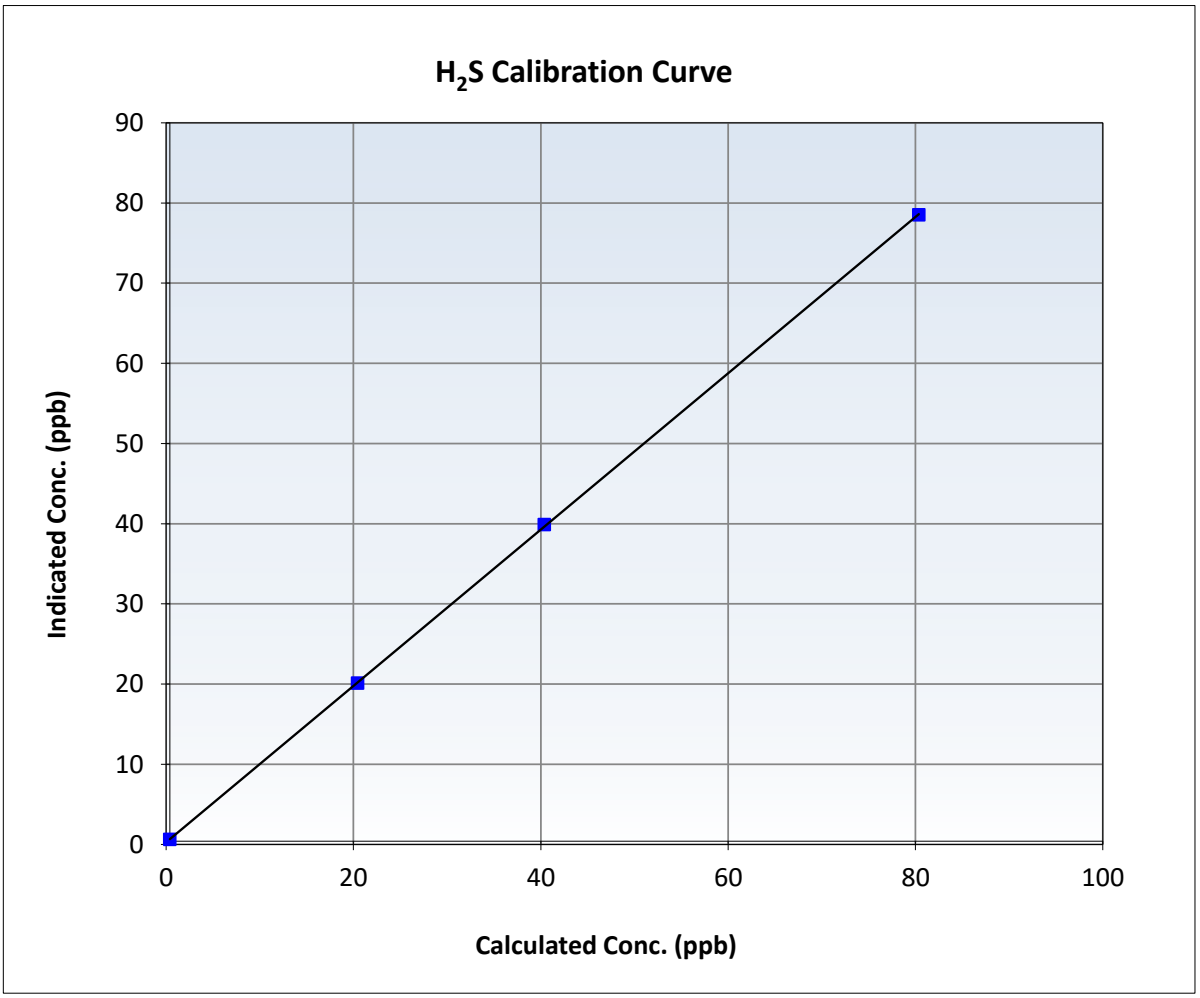
Station Information

Calibration Date:	March 16, 2026	Previous Calibration:	February 12, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:23	End Time (MST):	15:02
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	1200326167

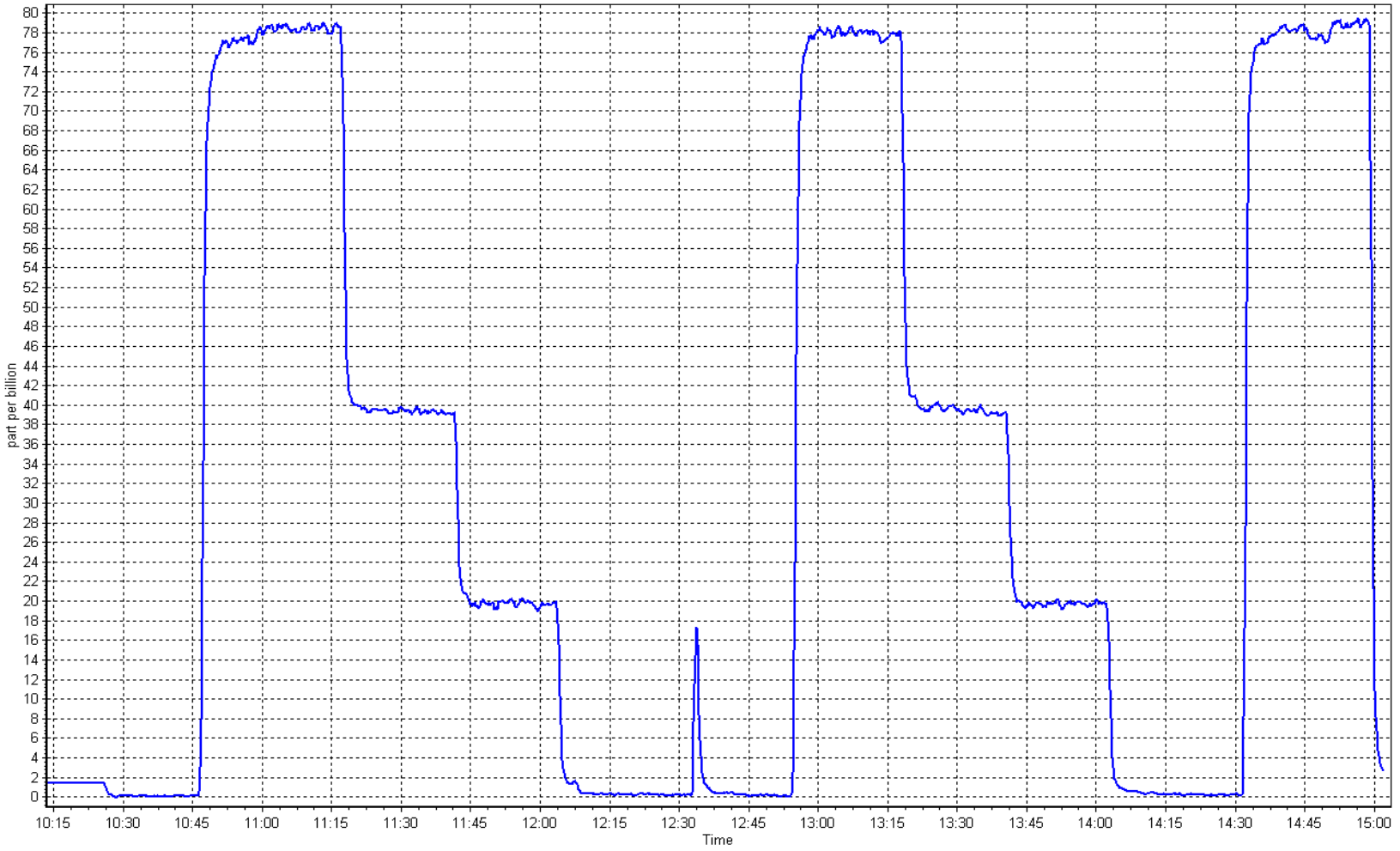
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
80.0	78.1	1.0239
40.0	39.5	1.0121
20.0	19.7	1.0172

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999971	*≥0.995*
Slope	0.974798	*0.90 - 1.10*
Intercept	0.262435	*+/-3*



H_2S Calibration Plot Date: March 16, 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:	March 16, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	10:23	End time (MST):	15:02
Reason:	Routine		

Calibration Standards

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

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.998386	0.992098	Backgd or Offset:	2.11	2.11
Calibration intercept:	-0.038018	0.182015	Coeff or Slope:	1.112	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	-0.1	----
As found High point	4917	82.6	80.0	79.0	1.011
As found Mid point	4959	41.3	40.0	39.3	1.015
As found Low point	4979	20.7	20.0	19.7	1.012
New cylinder response					

Baseline Corr As found:	79.1	Prev response:	79.80	*% change:	-0.9%
Baseline Corr 2nd AF pt:	39.4	AF Slope:	0.989095	AF Intercept:	-0.137899
Baseline Corr 3rd AF pt:	19.8	AF Correlation:	0.999996	* = > +/-5% change initiates investigation	

TRS Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.0	-0.1	----
High point	4917	82.6	80.0	79.3	1.008
Mid point	4959	41.3	40.0	40.2	0.994
Low point	4979	20.7	20.0	20.2	0.992
As left zero	5000	0.0	0.0	0.7	----
As left span	4917	82.6	80.0	78.7	1.016
SO2 Scrubber Check	4919	81.3	813.0	0.2	----

Date of last scrubber change:	December 17, 2021	Ave Corr Factor	0.998
Date of last converter efficiency test:			

Notes: Inlet filter change completed after as founds. No adjustments made. Scrubber check passed.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

TRS Calibration Summary

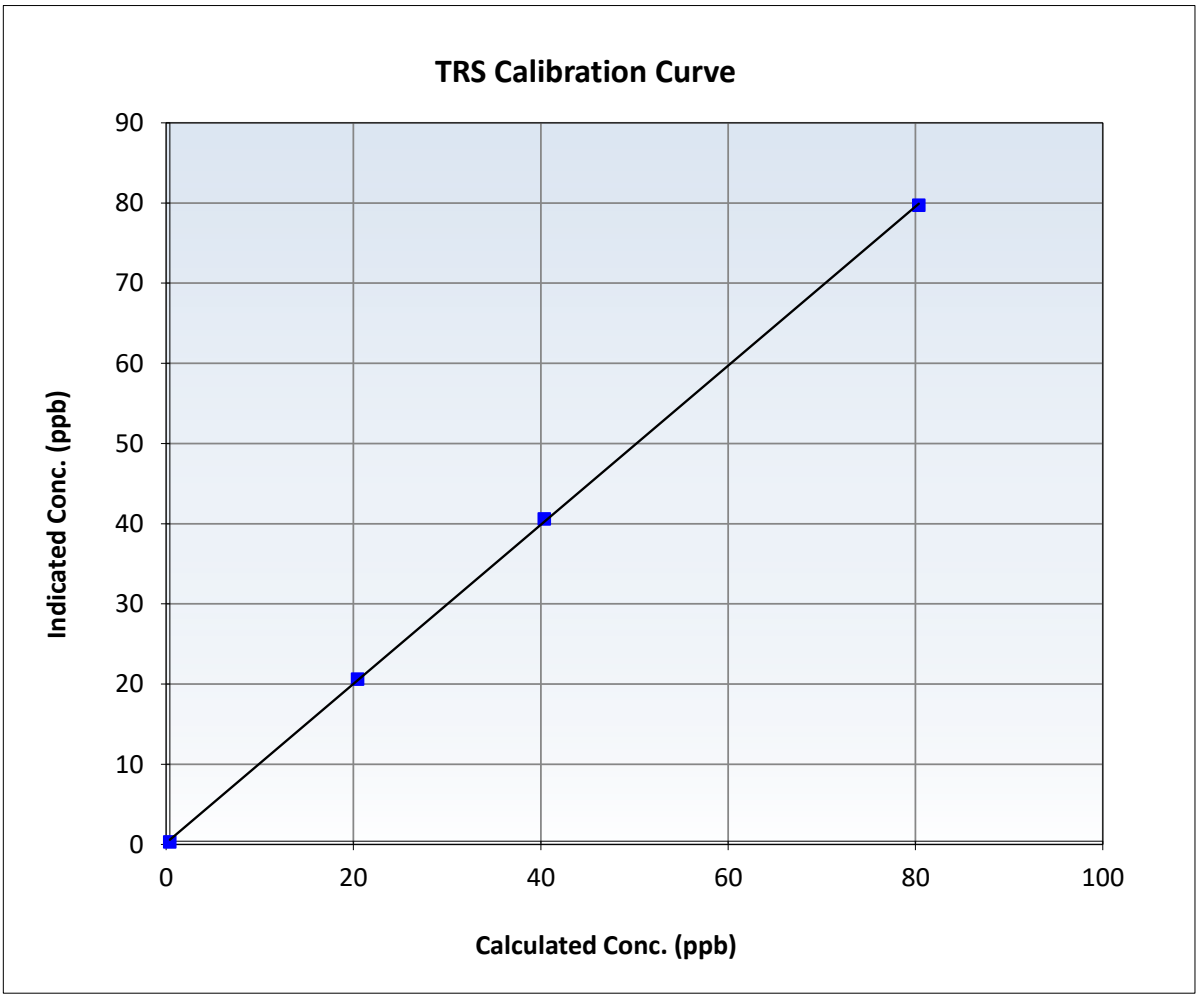
Station Information

Calibration Date:	March 16, 2026	Previous Calibration:	February 12, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:23	End Time (MST):	15:02
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	12113311966

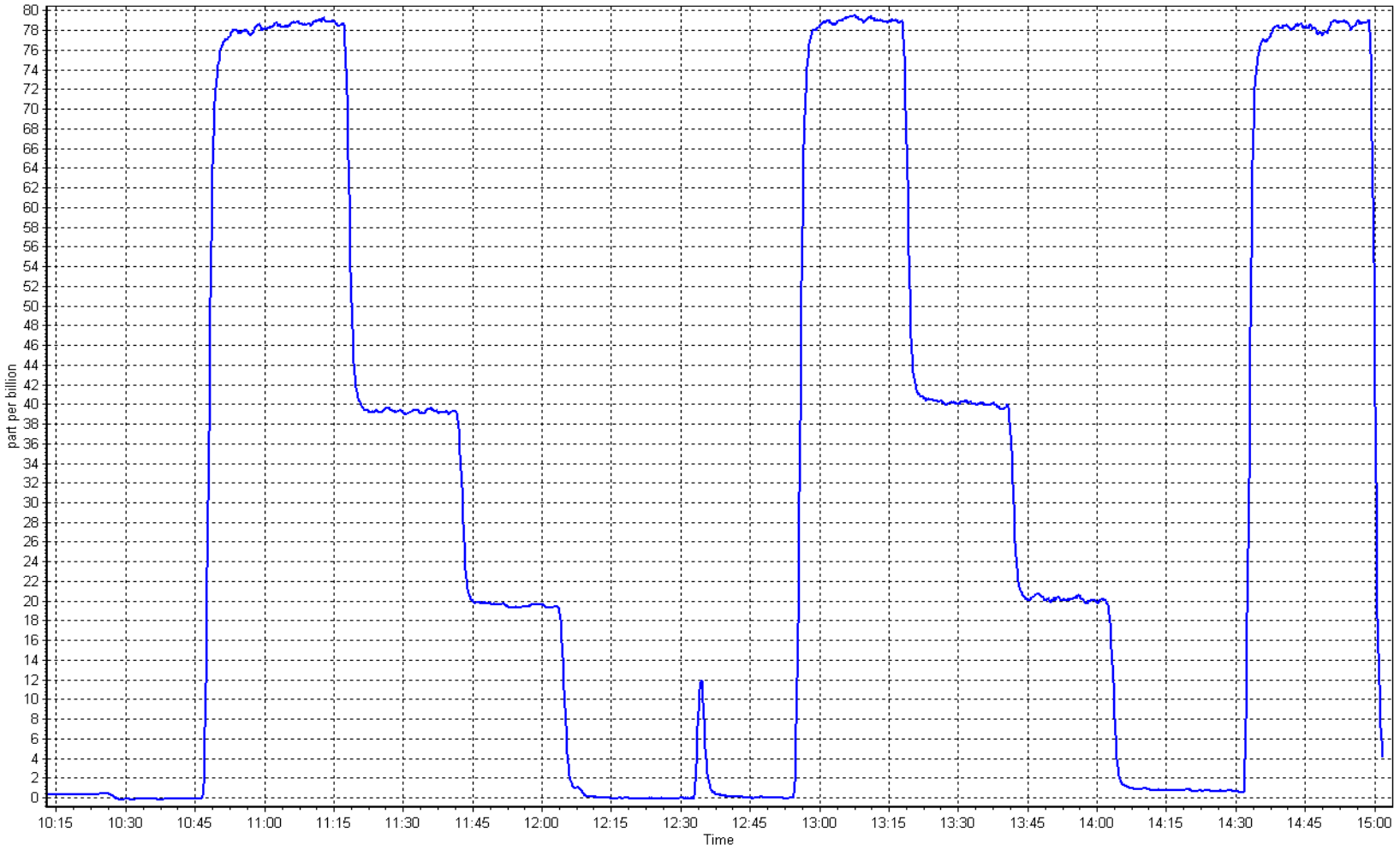
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
80.0	79.3	1.0084
40.0	40.2	0.9944
20.0	20.2	0.9920

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999921	*≥0.995*
Slope	0.992098	*0.90 - 1.10*
Intercept	0.182015	*+/-3*



TRS Calibration Plot Date: March 16, 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:	March 11, 2026	Last Cal Date:	February 17, 2026
Start time (MST):	10:48	End time (MST):	14:21
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:	146	

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:	2.48E-04	2.48E-04	NMHC SP Ratio:	4.81E-05	4.81E-05
CH4 Retention time:	15.0	15.0	NMHC Peak Area:	191019	191019
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	17.28	1.000
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	17.28	Prev response	17.23	*% 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	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	4.32	0.998
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	81.3	17.27	17.36	0.995
				Average Correction Factor	1.000

Notes: Changed the inlet filter after as founds. 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	4918	81.3	9.18	9.22	0.996
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.22	Prev response	9.15	*% 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	4918	81.3	9.18	9.18	1.000
Mid point	4959	40.7	4.60	4.61	0.996
Low point	4979	20.3	2.29	2.31	0.994
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	81.3	9.18	9.29	0.988
				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	4918	81.3	8.09	8.06	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.06	Prev response	8.09	*% change	-0.4%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	81.3	8.09	8.08	1.001
Mid point	4959	40.7	4.05	4.03	1.005
Low point	4979	20.3	2.02	2.01	1.004
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	81.3	8.09	8.07	1.002
				Average Correction Factor	1.003

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.998456	0.999655
THC Cal Offset:	-0.005250	0.002941
CH4 Cal Slope:	1.000872	0.999219
CH4 Cal Offset:	-0.006329	-0.005731
NMHC Cal Slope:	0.996565	0.999766
NMHC Cal Offset:	0.000879	0.009270

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

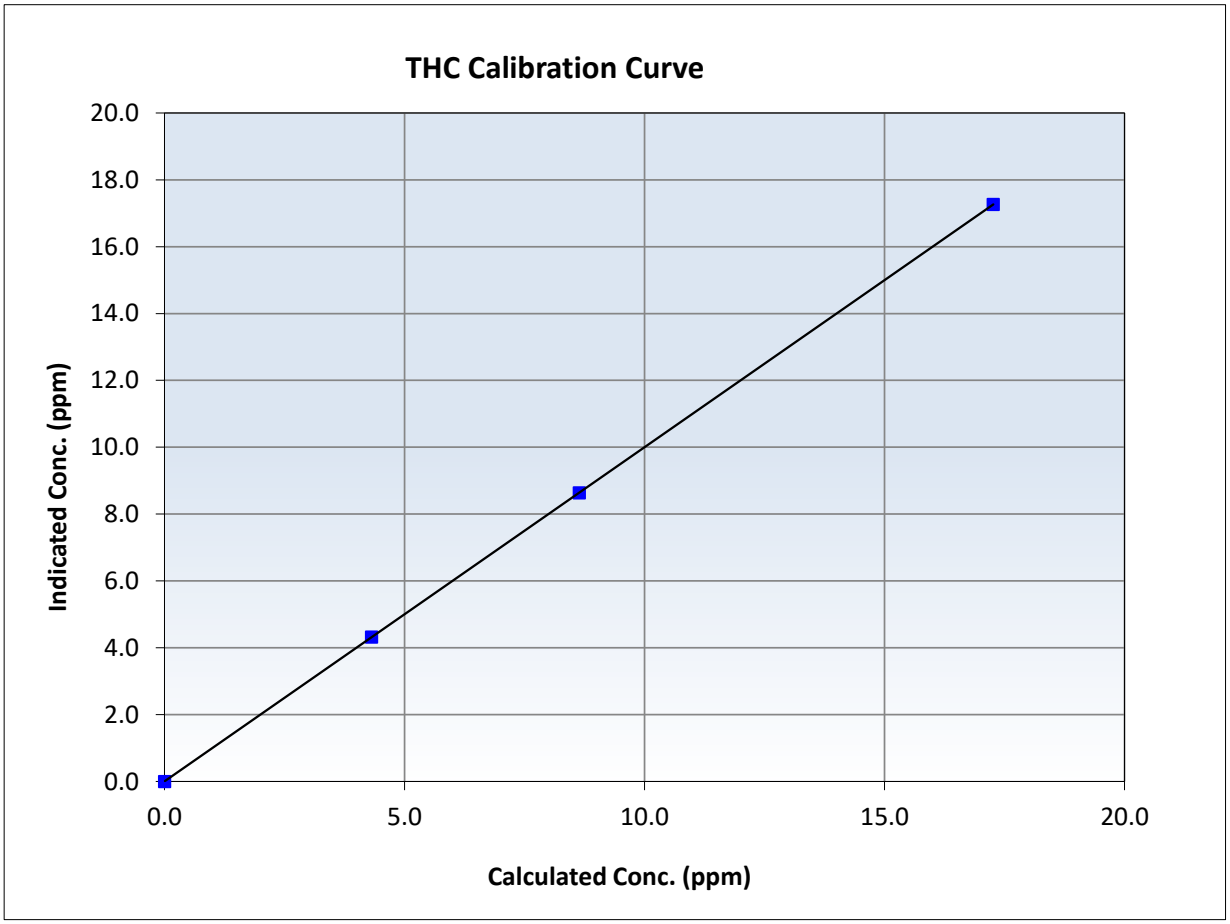
THC Calibration Summary

Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 17, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:48	End Time (MST):	14:21
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	1.000000	≥0.995
17.27	17.26	1.0002	Slope	0.999655	0.90 - 1.10
8.64	8.64	1.0004	Intercept	0.002941	+/-0.5
4.31	4.32	0.9982			



Wood Buffalo Environmental Association

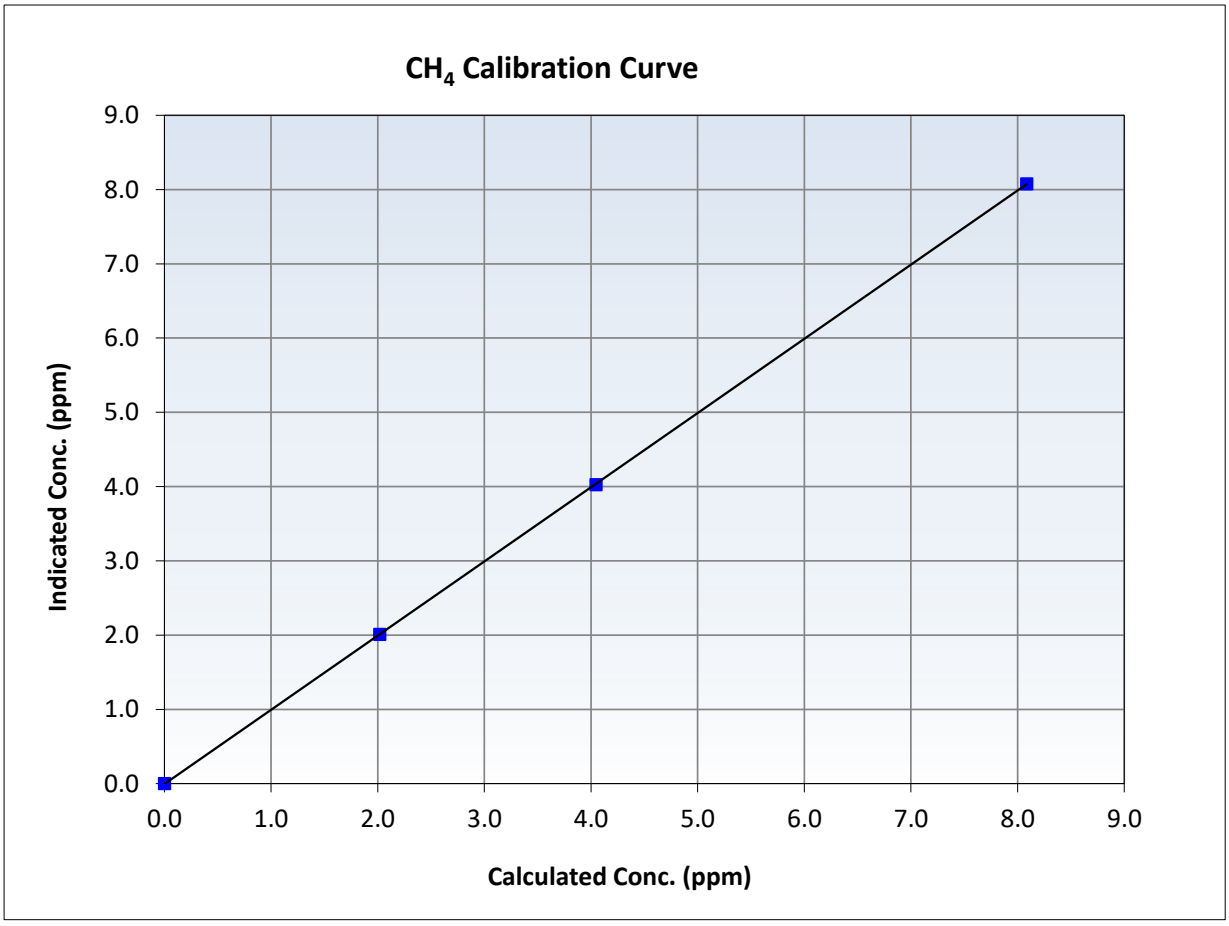
CH_4 Calibration Summary

Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 17, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:48	End Time (MST):	14:21
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	0.999995	≥0.995
8.09	8.08	1.0008	Slope	0.999219	0.90 - 1.10
4.05	4.03	1.0048			
2.02	2.01	1.0039	Intercept	-0.005731	+/-0.5



Wood Buffalo Environmental Association

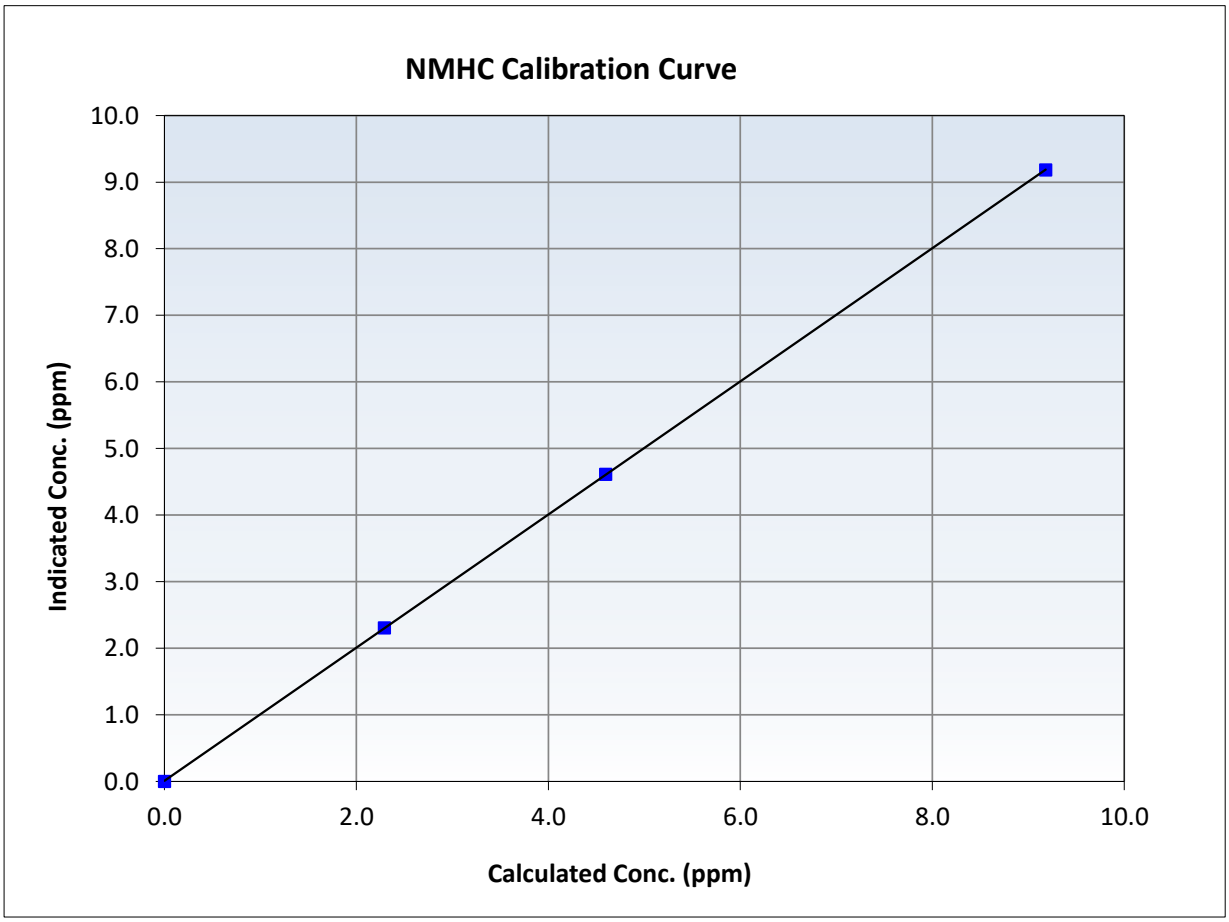
NMHC Calibration Summary

Station Information

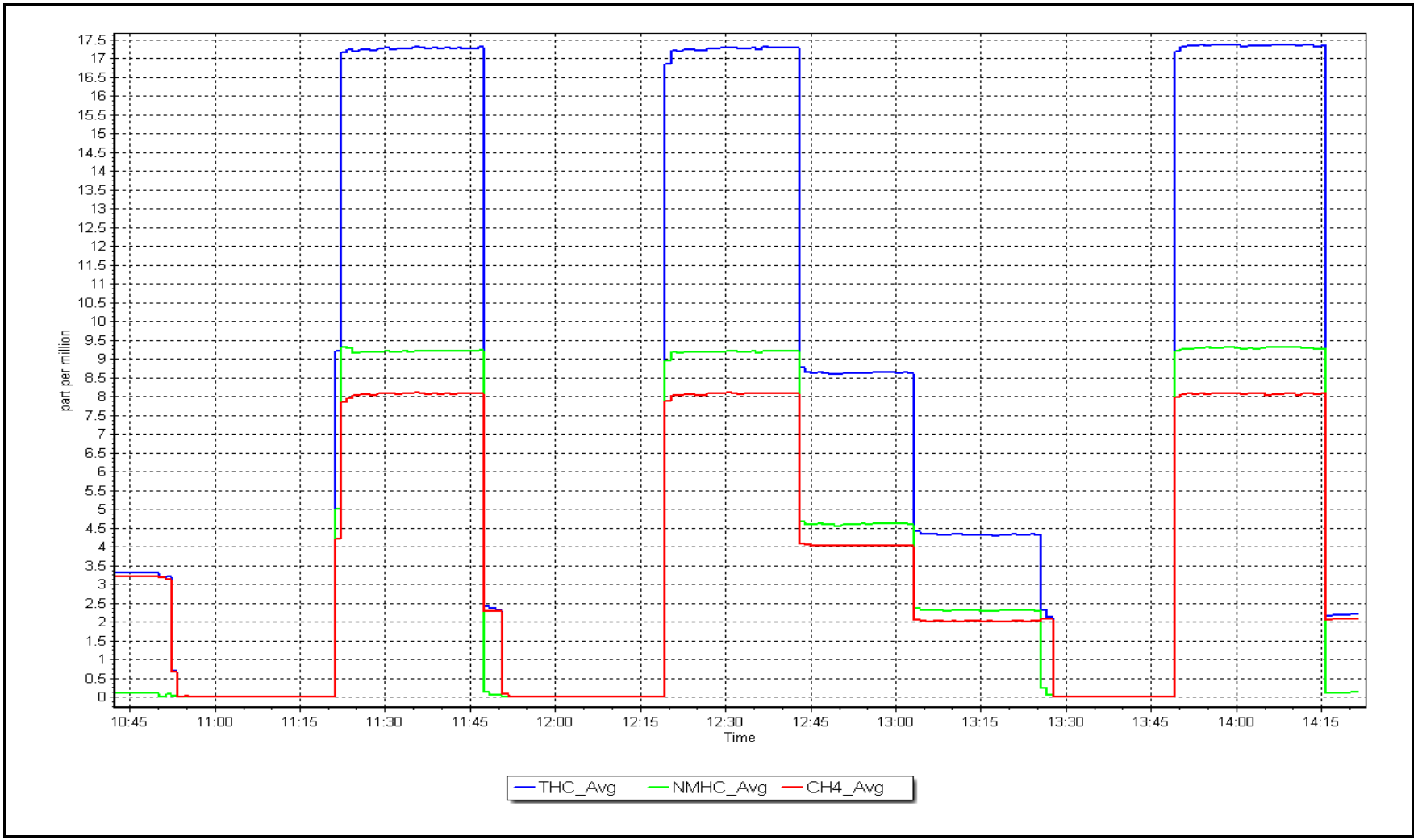
Calibration Date:	March 11, 2026	Previous Calibration:	February 17, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	10:48	End Time (MST):	14:21
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585648

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999994	≥0.995
9.18	9.18	0.9999	Slope	0.999766	0.90 - 1.10
4.60	4.61	0.9961	Intercept	0.009270	+/-0.5
2.29	2.31	0.9937			



NMHC Calibration Plot Date: March 11, 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:	March 5, 2026
Last Cal Date:	February 13, 2026
Start time (MST):	11:10
End time (MST):	16:13
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:	146

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	4932	67.6	803.1	800.4	2.7	806.8	800.7	5.9	0.9953	0.9995
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	803.7 ppb	NO =	798.2 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = 0.4%
Baseline Corr 1st pt	NO_X =	806.9 ppb	NO =	800.8 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: 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:	1.001	1.001	NOX bkgnd or offset:	2.3	2.3
NO2 coeff or slope:	0.999	0.999	Reaction cell Press:	160.3	160.9

Calibration Statistics

	Start	Finish
NO_X Cal Slope:	1.001406	0.995600
NO_X Cal Offset:	-0.520000	-0.080000
NO Cal Slope:	0.999649	0.994308
NO Cal Offset:	-1.920000	-1.300000
NO_2 Cal Slope:	1.007419	0.997680
NO_2 Cal Offset:	0.197571	1.104050

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	4932	67.6	803.1	800.4	2.7	799.7	795.4	4.3	1.0042	1.0063
Mid point	4966	33.8	401.5	400.2	1.4	399.3	395.4	3.9	1.0056	1.0121
Low point	4983	16.9	200.8	200.1	0.7	199.7	196.6	3.1	1.0054	1.0178
As left zero	5000	0.0	0.0	0.0	0.0	0.4	0.0	0.4	----	----
As left span	4932	67.6	803.1	393.2	409.9	795.7	393.2	402.4	1.0093	1.0000
							Average Correction Factor		1.0051	1.0121

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	792.2	387.6	407.3	406.6	1.0017	99.8%
Mid GPT point	792.2	600.1	194.8	197.3	0.9873	101.3%
Low GPT point	792.2	695.2	99.7	100.5	0.9921	100.8%
				Average Correction Factor	0.9937	100.6%

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

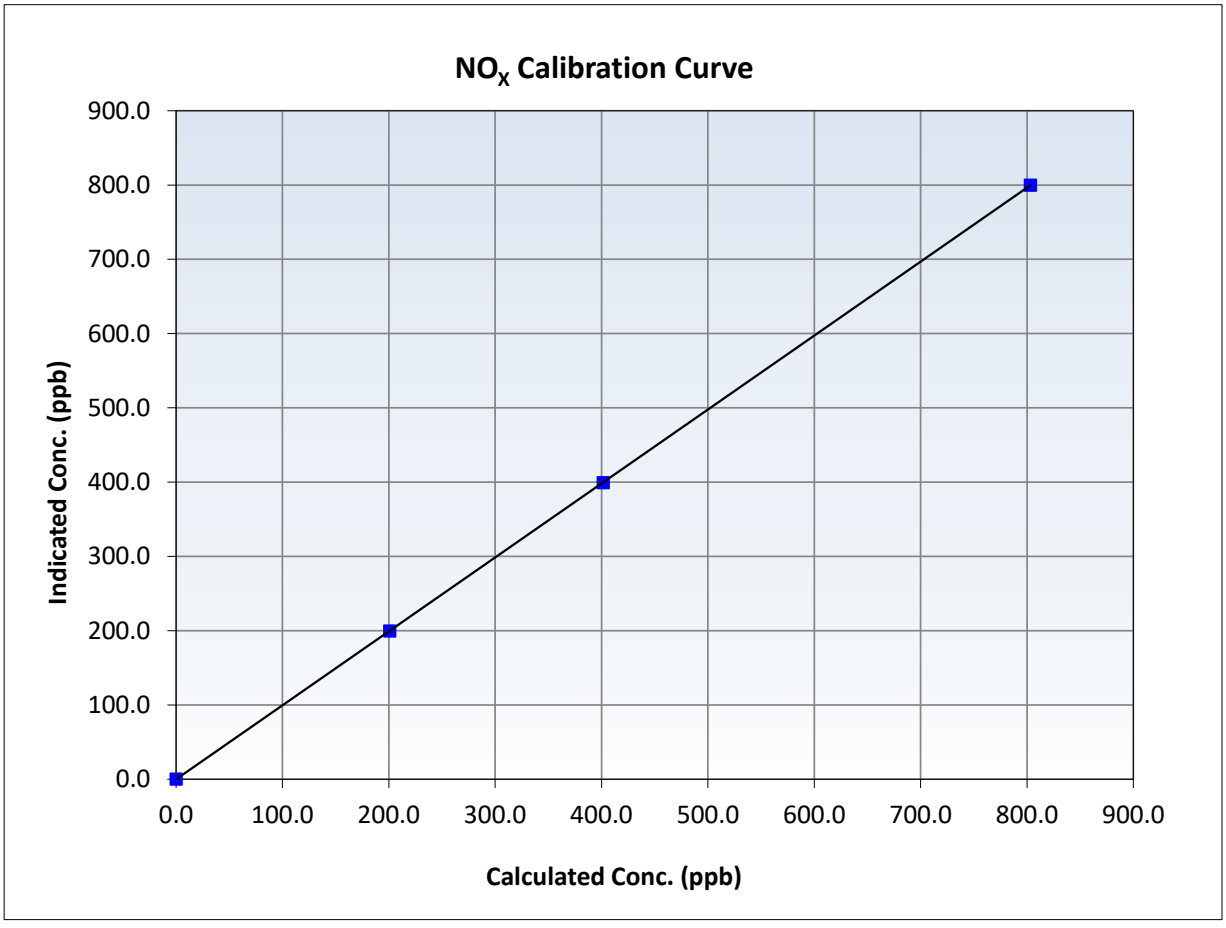
NO_X Calibration Summary

Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 13, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	11:10	End Time (MST):	16:13
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	0.2	----	Correlation Coefficient	0.999999	*≥0.995*
803.1	799.7	1.0042	Slope	0.995600	*0.90 - 1.10*
401.5	399.3	1.0056	Intercept	-0.080000	*+/-20*
200.8	199.7	1.0054			



Wood Buffalo Environmental Association

NO_2 Calibration Summary

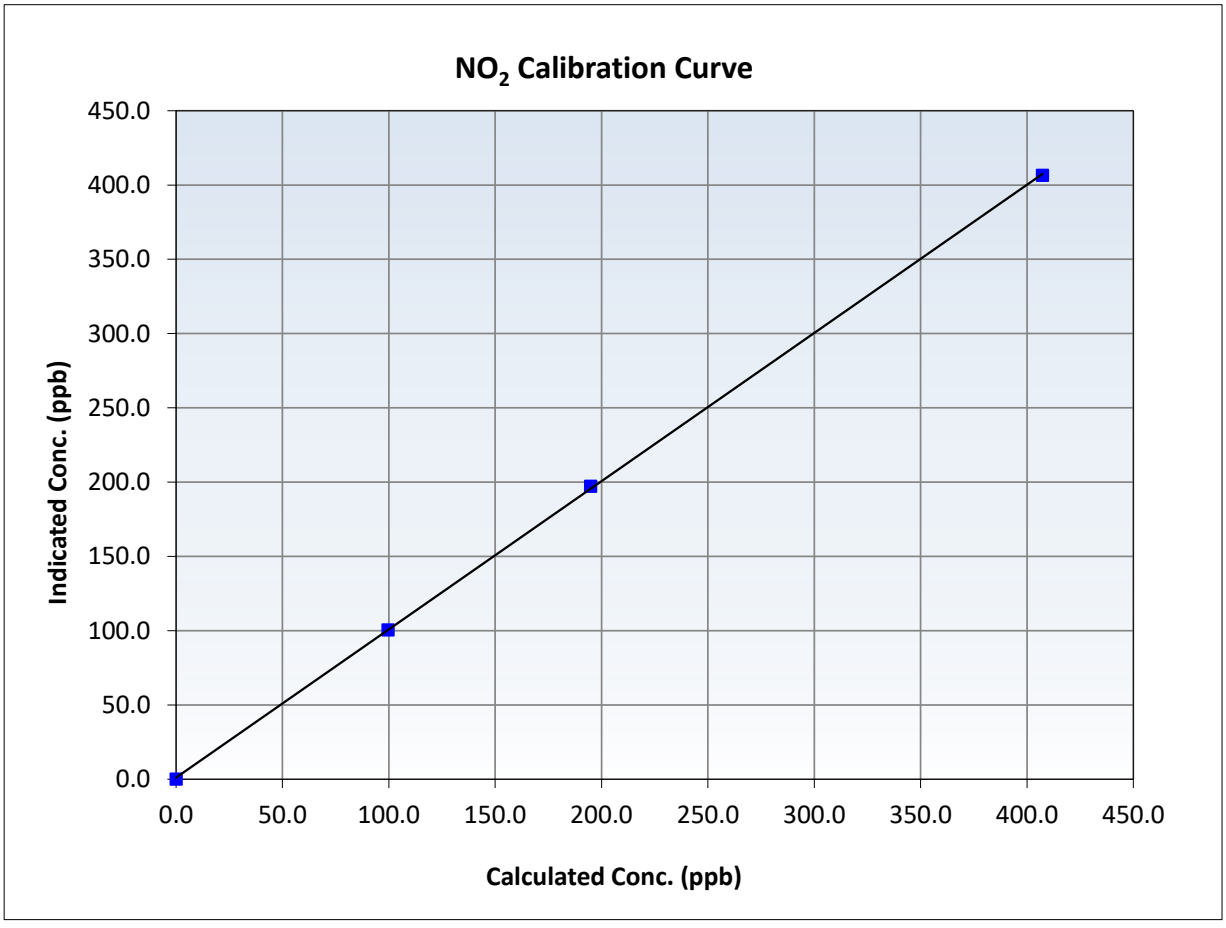
Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 13, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	11:10	End Time (MST):	16:13
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	----
407.3	406.6	1.0017
194.8	197.3	0.9873
99.7	100.5	0.9921

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999945	*≥0.995*
Slope	0.997680	*0.90 - 1.10*
Intercept	1.104050	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

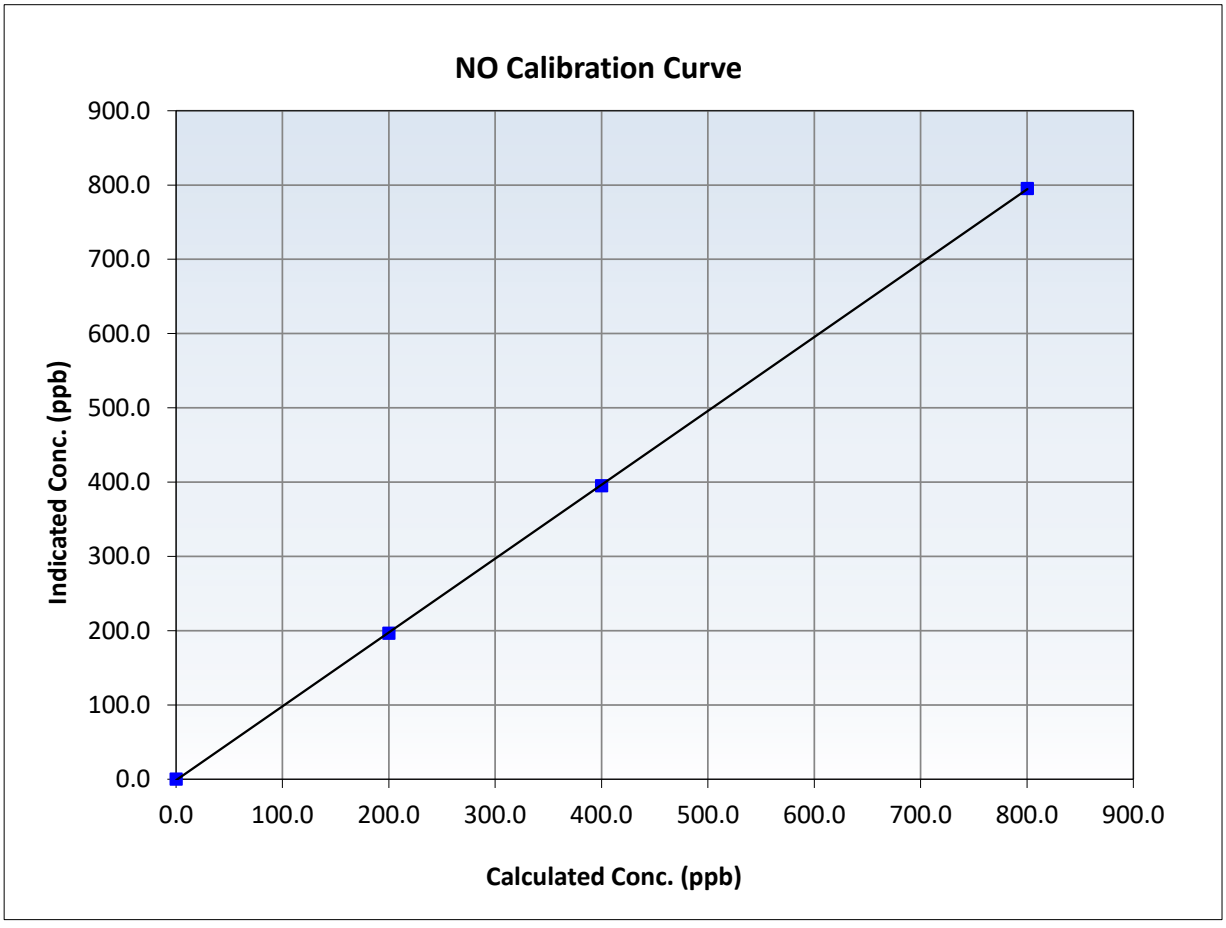
Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 13, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	11:10	End Time (MST):	16:13
Analyzer make:	Thermo 42i	Analyzer serial #:	1336160088

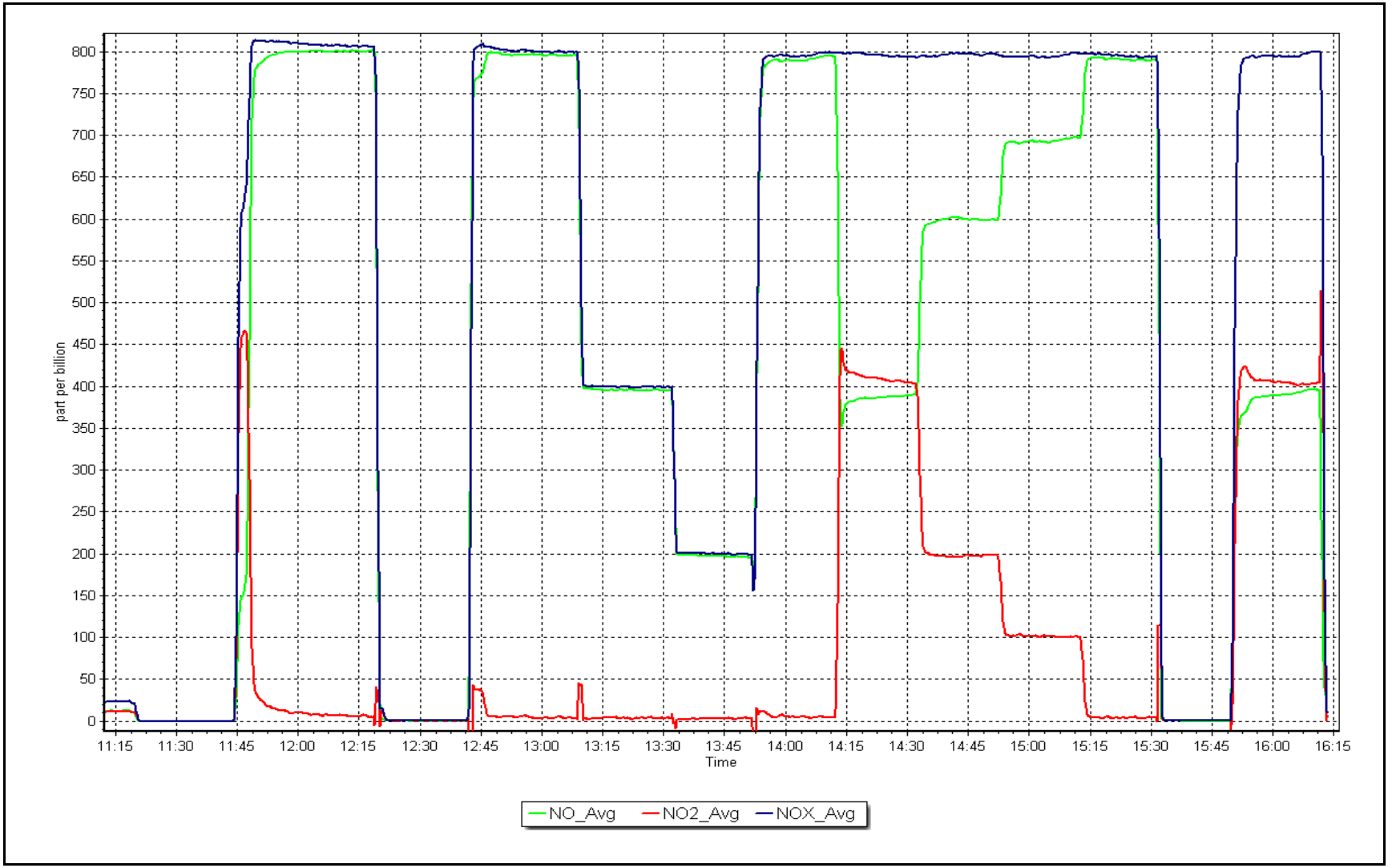
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.4	795.4	1.0063
400.2	395.4	1.0121
200.1	196.6	1.0178

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	0.994308	*0.90 - 1.10*
Intercept	-1.300000	*+/-20*



NO_X Calibration Plot Date: March 5, 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:	March 3, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	11:01	End time (MST):	14:39
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Teledyne API T400		Analyzer serial #:	7045	
Analyzer Range	0 - 500 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.998657	1.008600	Backgd or Offset:	2.7	2.8
Calibration intercept:	0.960000	1.320000	Coeff or Slope:	1.132	1.155

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	874.8	400.0	394.7	1.014
As found Mid point					
As found Low point					
Baseline Corr As found:	394.4	Previous response	400.4	*% change	-1.5%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	874.8	400.0	404.2	0.990
Mid point	5000	744.0	200.0	203.8	0.981
Low point	5000	651.7	100.0	102.9	0.972
As left zero	5000	0.0	0.0	0.4	----
As left span	5000	874.8	400.0	405.9	0.985
				Average Correction Factor	0.981

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

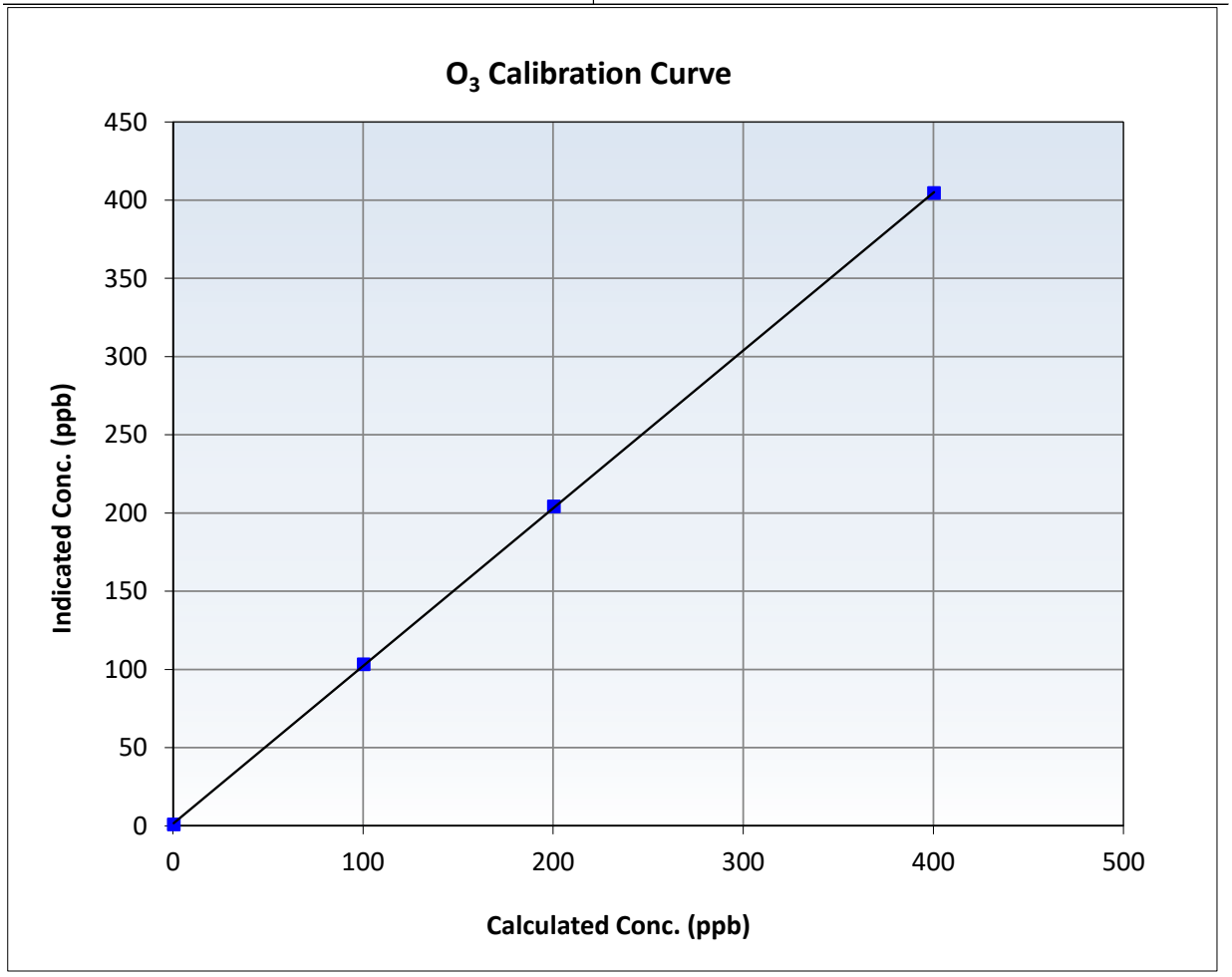
O_3 Calibration Summary

Station Information

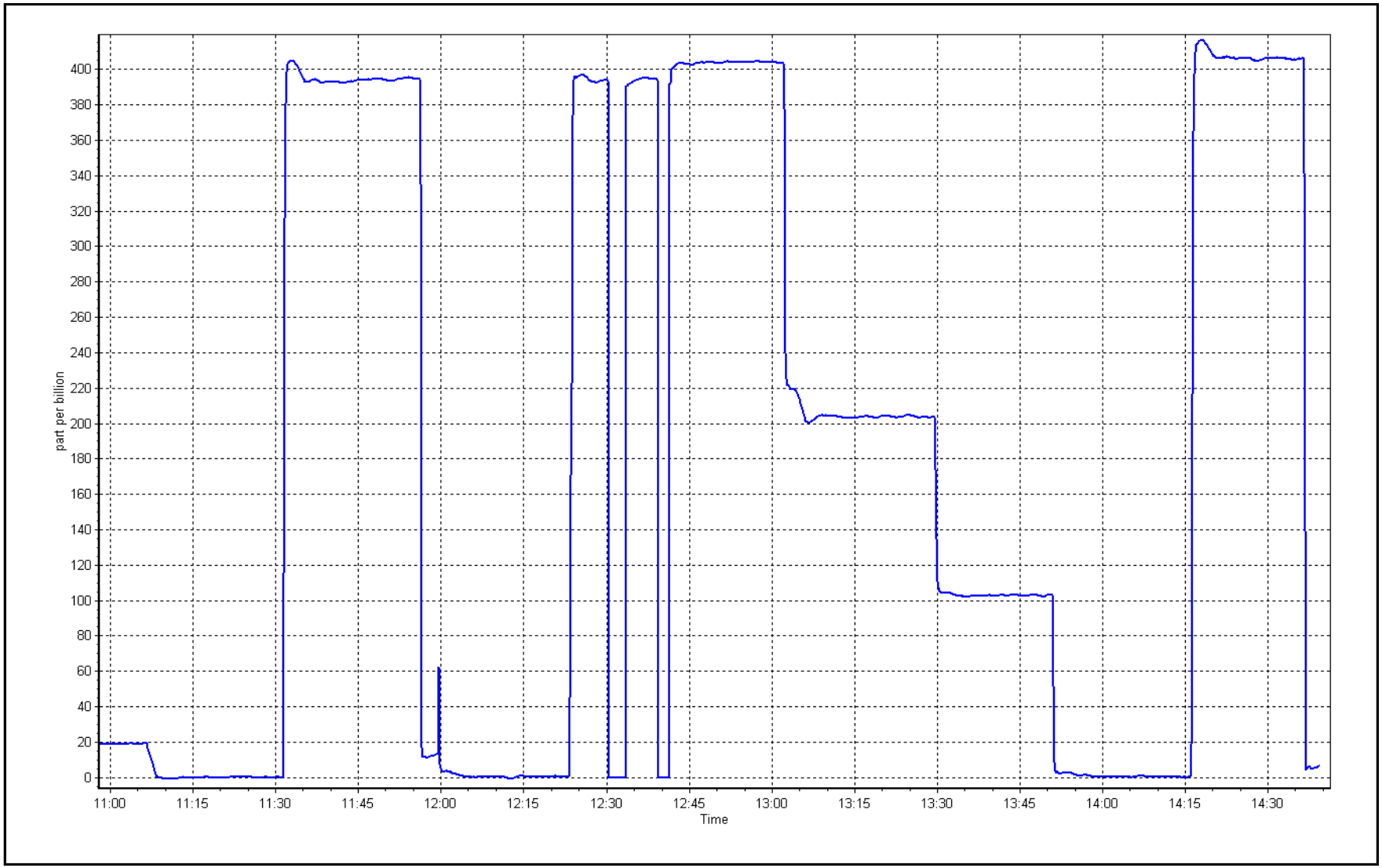
Calibration Date:	March 3, 2026	Previous Calibration:	February 4, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	11:01	End Time (MST):	14:39
Analyzer make:	Teledyne API T400	Analyzer serial #:	7045

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.4	----	Correlation Coefficient	0.999975	*≥0.995*
400.0	404.2	0.9896	Slope	1.008600	*0.90 - 1.10*
200.0	203.8	0.9814			
100.0	102.9	0.9718	Intercept	1.320000	*+/- 5*



O_3 Calibration Plot Date: March 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:	March 27, 2026	Last Cal Date:	February 24, 2026
Start time (MST):	11:56	End time (MST):	14:15
Analyzer Make:	Teledyne API T640	S/N:	323
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388755
Temp/RH standard:	Alicat FP-25BT	S/N:	388755

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	-5.5	-6.3	-5.5	☐	+/- 2 °C
P (mmHg)	745.90	744.72	745.90	☐	+/- 10 mmHg
Flow (LPM)	3.71		5.00	☑	+/- 0.25 LPM
PW% (pump)	100	37	37	☐	>80%
Zero Verification	PM w/o HEPA:	7.1	PM w/ HEPA:	0.0	<0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

SPAN DUST — Refractive Index: 10.9 — Expiry Date: June 10, 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: February 24, 2026

Date Disposable Filter Changed: February 24, 2026

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: Flow, temperature, and pressure were verified. Pump replaced. Leak check passed. Measured flow left blank on the excel sheet as it was only measured after the pump was changed. The T640 flow and measured flow from Alicat after the pump change, are within the limits, 5.02 LPM meausred by alicat and 5.00 measured at T640.

Calibration by: Param Kaur

Wood Buffalo Environmental Association

Nt - NOX - NH3 Calibration Report

Station Information

Station Name:	Bertha Ganter-Fort McKay	Station number:	AMS 01
NOX Cal Date:	March 26, 2026	Last Cal Date:	February 24, 2026
Start time (MST):	9:19	End time (MST):	14:04
NH3 Cal Date:	March 27, 2026	Last Cal Date:	February 24, 2026
Start time (MST):	8:56	End time (MST):	12:48
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:	146

Analyzer Information

Analyzer model:	API T201		Analyzer serial #:	152
Converter model:	API T501		Converter serial #:	484
NH3 Range (ppb):	0 - 2000 ppb		Reaction cell Press:	8.60
NOX Range (ppb):	0 - 1000 ppb		Sample Flow:	578

	Start	*Finish*		*Start*	*Finish*
NO coefficient:	0.982	0.980	Nt coefficient:	0.995	0.991
NOX coefficient:	0.986	0.985	NO bkgrnd:	-0.1	0.4
NO2 coefficient:	1.000	1.000	NOX bkgrnd:	-0.2	0.4
NH3 coefficient:	0.970	0.971	Nt bkgrnd:	0.0	0.6

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.995685	1.004579
NO_X Cal Offset:	-1.660000	1.040000
NO Cal Slope:	0.999506	1.010986
NO Cal Offset:	-3.120000	-2.040000
NO_2 Cal Slope:	1.002794	1.000941
NO_2 Cal Offset:	-0.258715	0.003347
NH3 Cal Slope:	0.996264	1.009031
NH3 Cal Offset:	0.483242	2.148932
Nt Cal Slope:	0.999390	1.011809
Nt Cal Offset:	1.279057	3.655900

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	-1.6	-1.7	-2.3	----	----
As found span	4932	67.6	803.1	800.4	803.1	811.8	806.3	814.9	0.9893	0.9927
AF GPT span	4932	67.6	803.1	-----	803.1	807.9	-----	808.6	0.9940	-----
new NO cyl rp										

Baseline Corr As Fd	Nt =	817.2	ppb	NO_X =	813.4	ppb	NO =	808.0 ppb
Previous Response	Nt =	803.88	ppb	NO_X =	798.0	ppb	NO =	796.9 ppb

**NO_X Δ (NO to GPT response) = 0.1%

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

*Percent Change	$Nt_{(NO)}$ =	1.6%	
*Percent Change	NO_X =	1.9%	
*Percent Change	NO =	1.4%	

* = > +/-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	0.5	0.2	1.3	----	----
High point	4932	67.6	803.1	800.4	803.1	807.4	807.9	813.9	0.9947	0.9907
Mid point	4966	33.8	401.5	400.2	401.5	405.1	402.5	404.6	0.9912	0.9943
Low point	4983	16.9	200.8	200.1	200.8	203.0	197.3	205.5	0.9890	1.0142
								Average Correction Factor	0.9916	0.9997

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	0.1	----	----
Calibration zero	----	----	0.0	0.3	----	----
High GPT point (400 ppb O3)	801.8	396.3	408.2	408.6	0.9990	100.1%
Mid GPT point (200 ppb O3)	801.8	602.2	202.3	202.8	0.9976	100.2%
Low GPT point (100 ppb O3)	801.8	698.1	106.4	105.9	1.0048	99.5%
				Average Correction Factor	1.0004	100.0%

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	1.8	0.6	1.3	----	----
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	1.3	0.5	0.8	----	----
High point	2930	70.5	1799.6	0.0	1799.6	1823.6	6.1	1817.6	0.987	0.990
Mid point	2961	39.2	1000.6	0.0	1000.6	1016.2	4.5	1011.6	0.985	0.989
Low point	2980	19.6	500.3	0.0	500.3	513.1	4.0	509.0	0.975	0.983
								Average Correction Factor	0.9822	0.9874

NH3 Previous Converter Efficiency = 97.0 %
NH3 Current Converter Efficiency = 97.1 %

Notes: Changed the inlet filter after as founds. Adjusted the NOx, NO, NT zero. Adjusted NH3 span.

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

Nt Calibration Summary

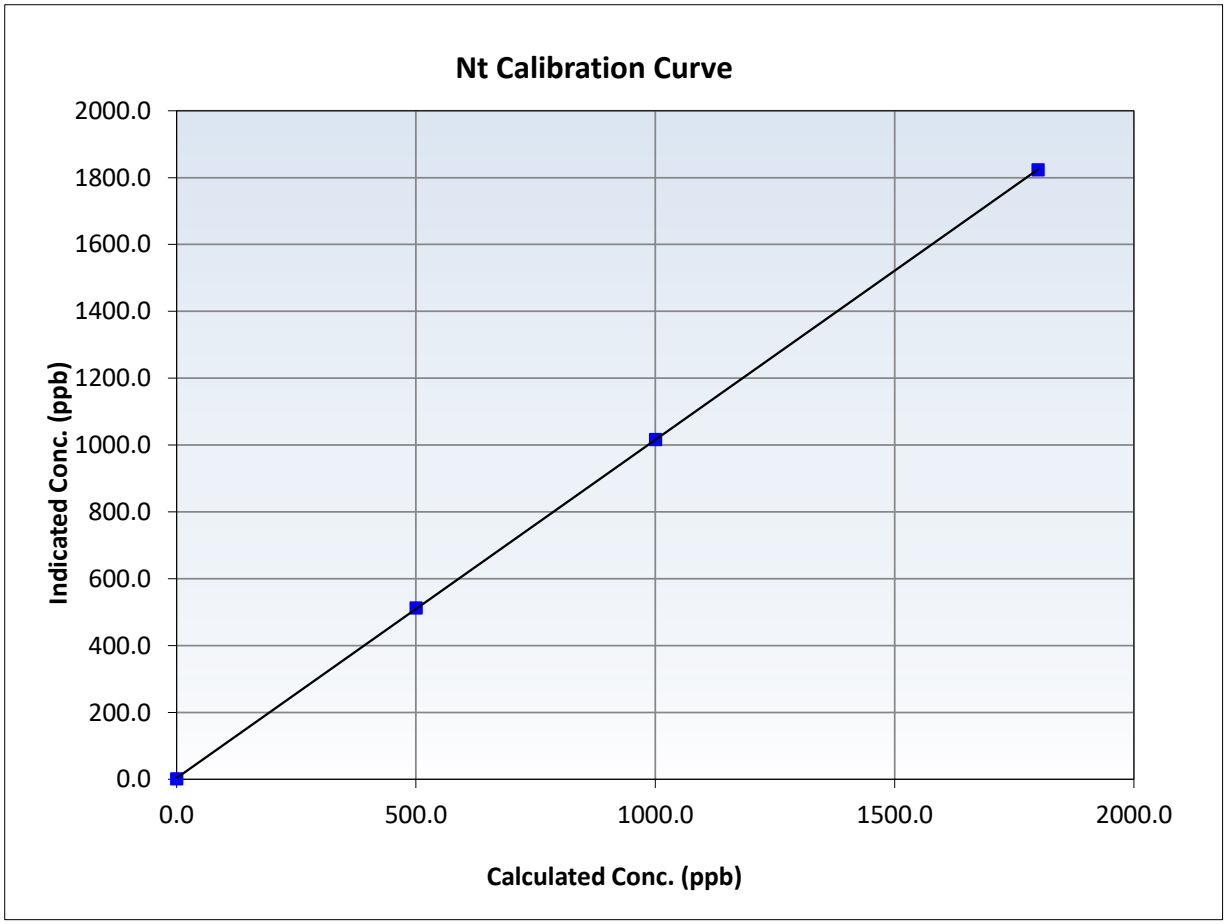
Station Information

Calibration Date:	March 27, 2026	Previous Calibration:	February 24, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	8:56	End Time (MST):	12:48
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	1.3	----
1799.6	1823.6	0.9869
1000.6	1016.2	0.9847
500.3	513.1	0.9751

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.011809	*0.90 - 1.10*
Intercept	3.655900	*+/-20*



Wood Buffalo Environmental Association

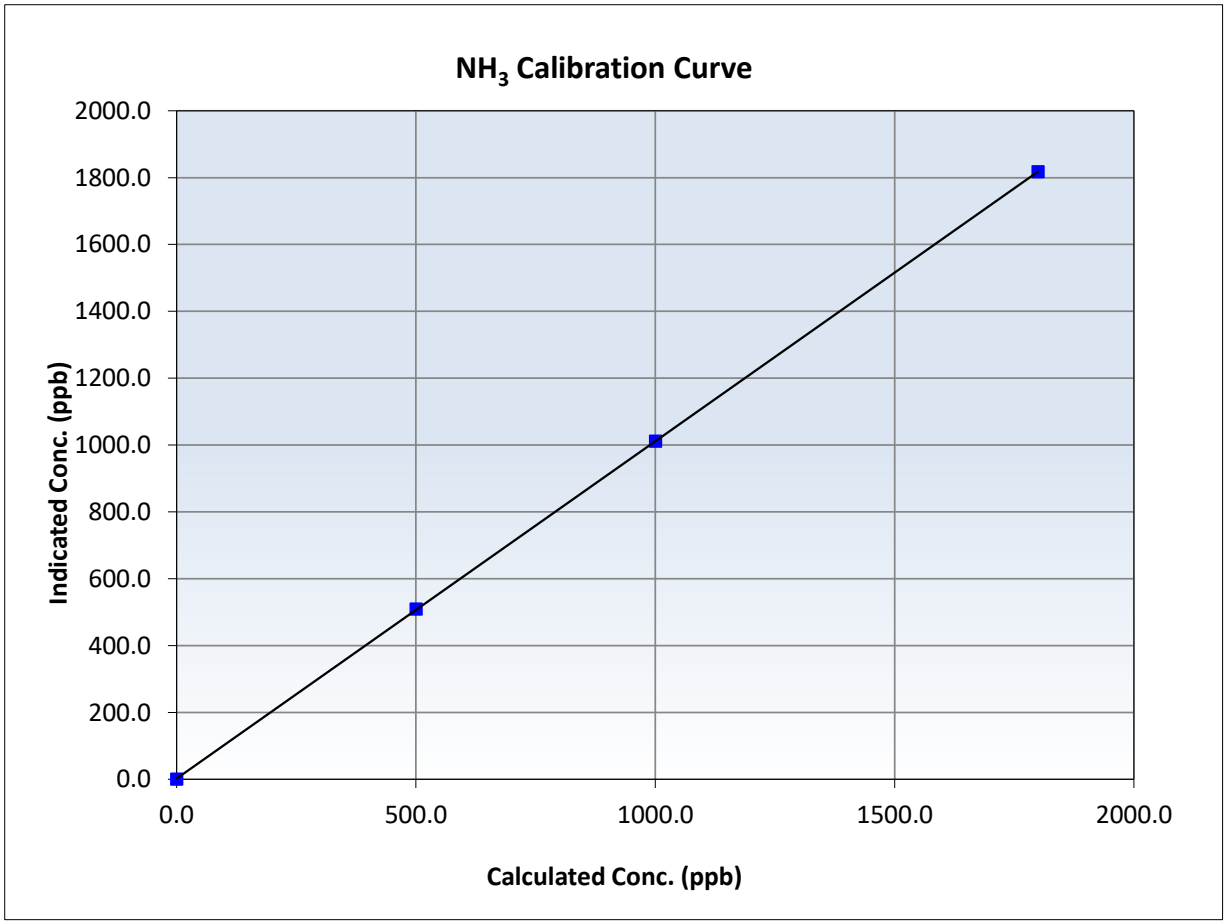
NH_3 Calibration Summary

Station Information

Calibration Date:	March 27, 2026	Previous Calibration:	February 24, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	8:56	End Time (MST):	12:48
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	0.8	----	Correlation Coefficient	0.999997	*≥0.995*
1799.6	1817.6	0.9901	Slope	1.009031	*0.90 - 1.10*
1000.6	1011.6	0.9892			
500.3	509.0	0.9830	Intercept	2.148932	*+/-20*



Wood Buffalo Environmental Association

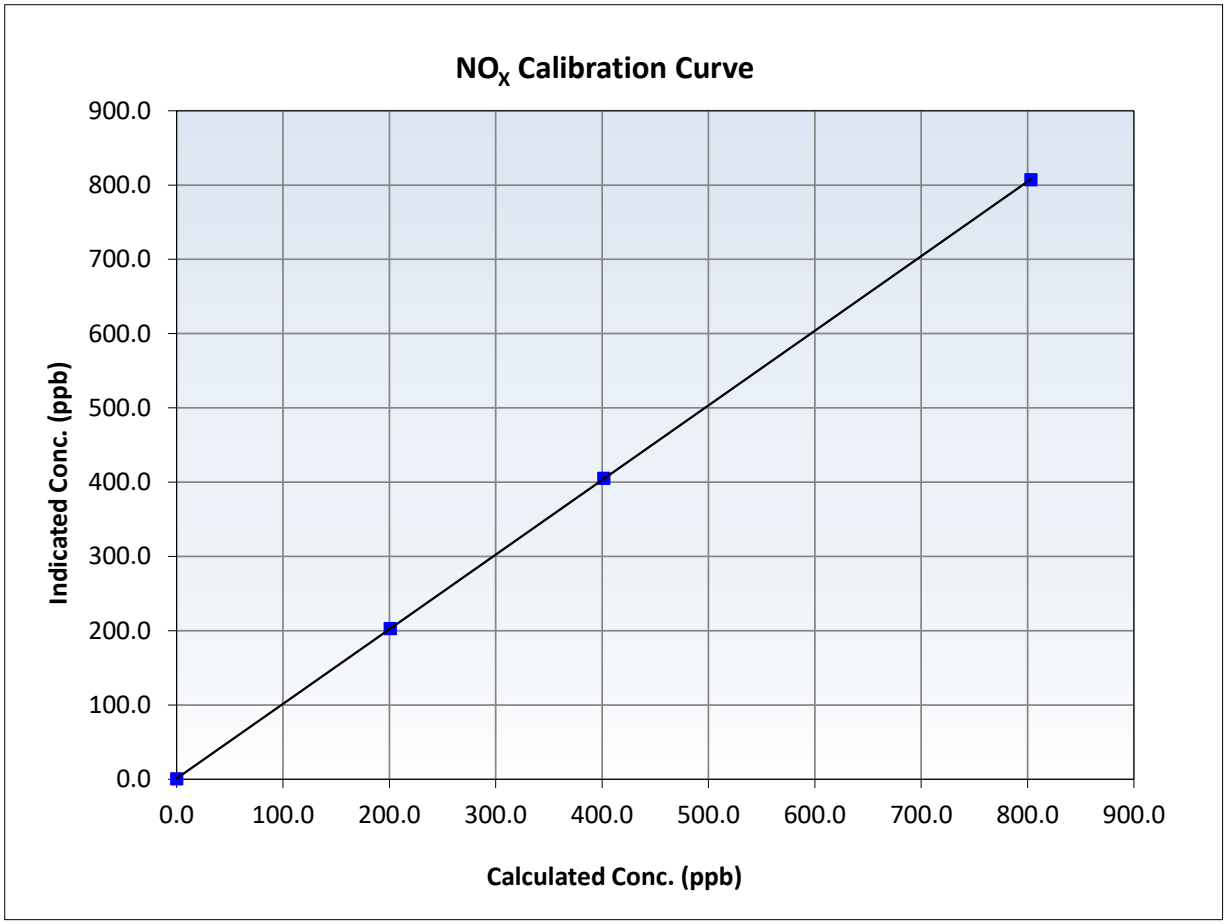
NO_X Calibration Summary

Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 24, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:19	End Time (MST):	14:04
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	0.5	----	Correlation Coefficient	0.999997	*≥0.995*
803.1	807.4	0.9947	Slope	1.004579	*0.90 - 1.10*
401.5	405.1	0.9912	Intercept	1.040000	*+/-20*
200.8	203.0	0.9890			



Wood Buffalo Environmental Association

NO Calibration Summary

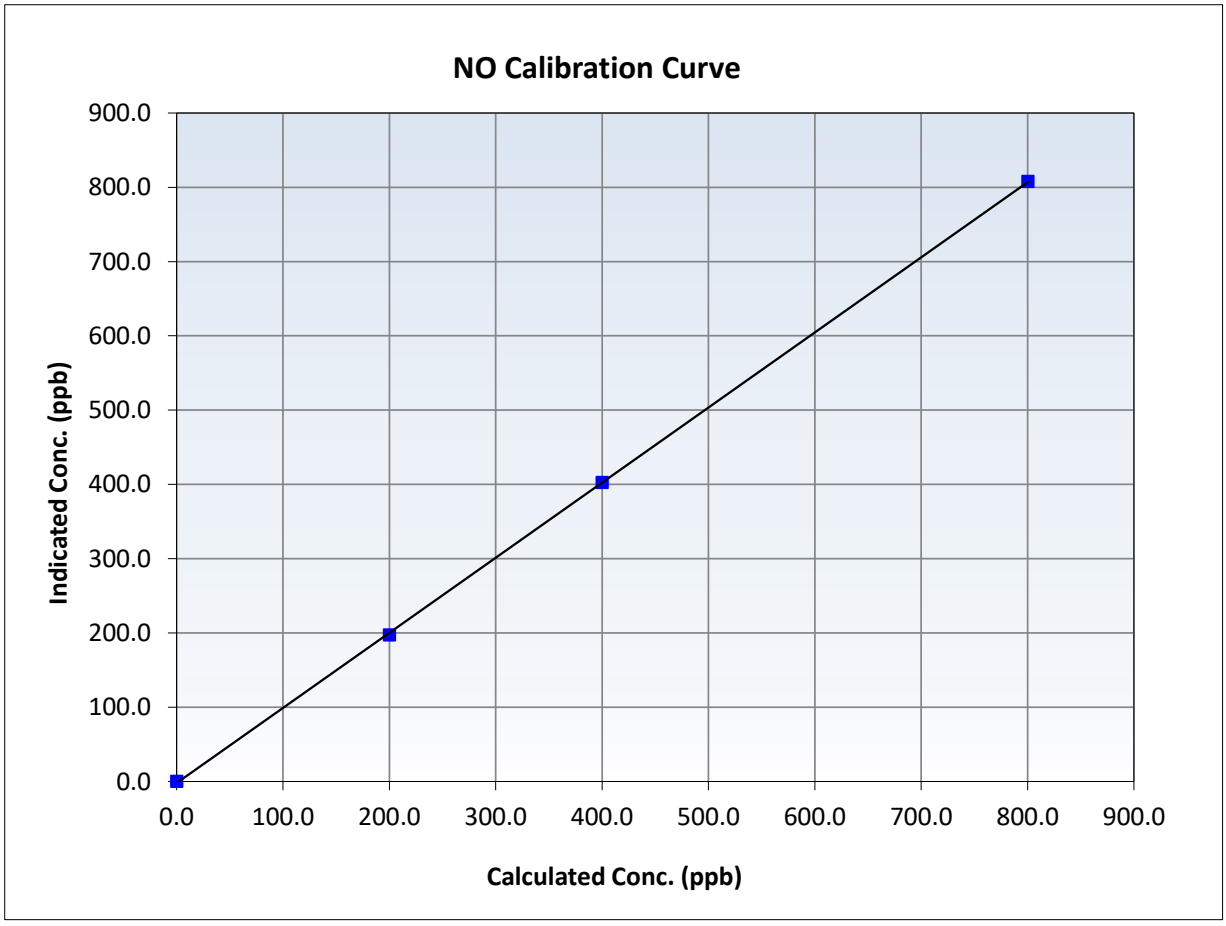
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 24, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:19	End Time (MST):	14:04
Analyzer make:	API T201	Analyzer serial #:	152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.4	807.9	0.9907
400.2	402.5	0.9943
200.1	197.3	1.0142

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999960	*≥0.995*
Slope	1.010986	*0.90 - 1.10*
Intercept	-2.040000	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

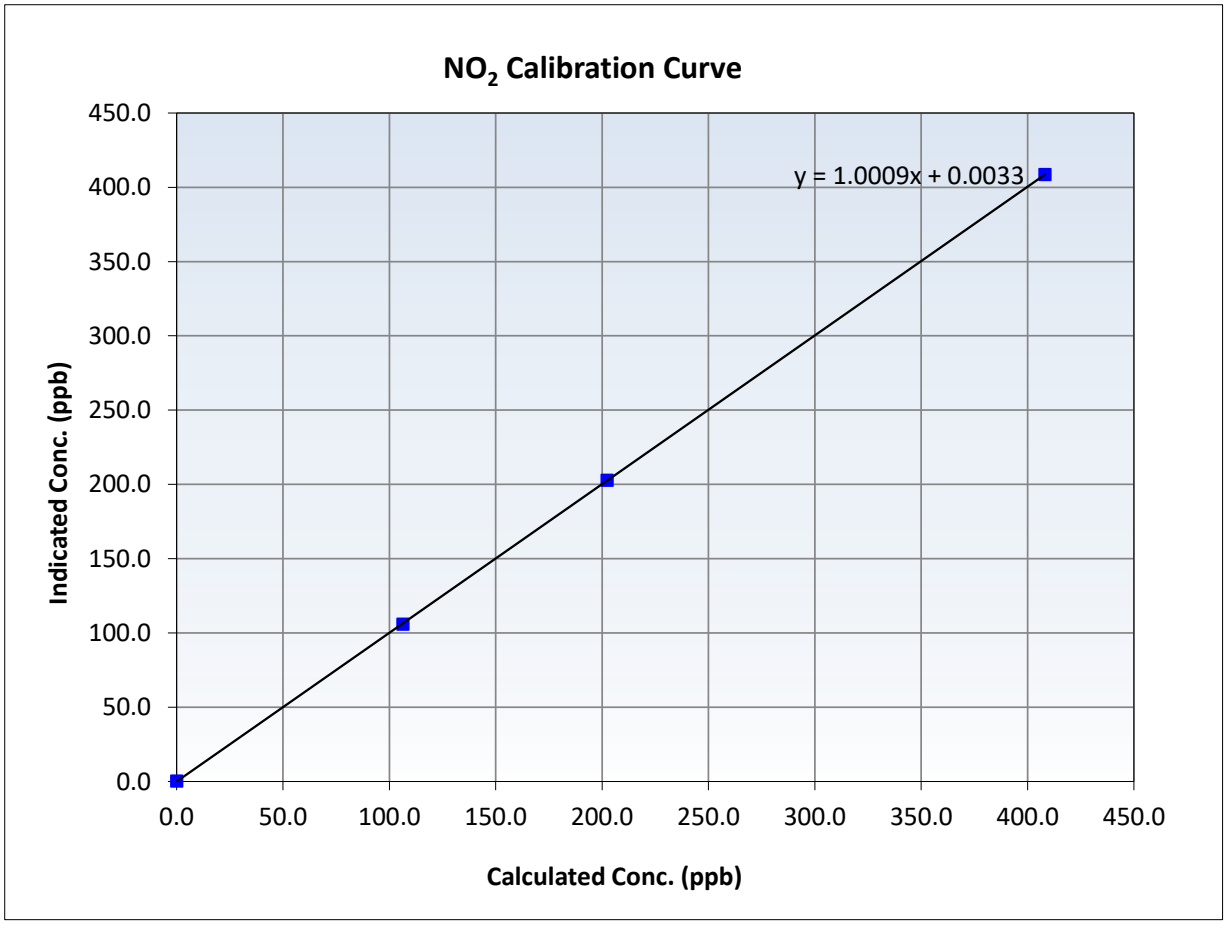
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 24, 2026
Station Name:	Bertha Ganter-Fort McKay	Station Number:	AMS 01
Start Time (MST):	9:19	End Time (MST):	14:04
Analyzer make:	API T201	Analyzer serial #:	152

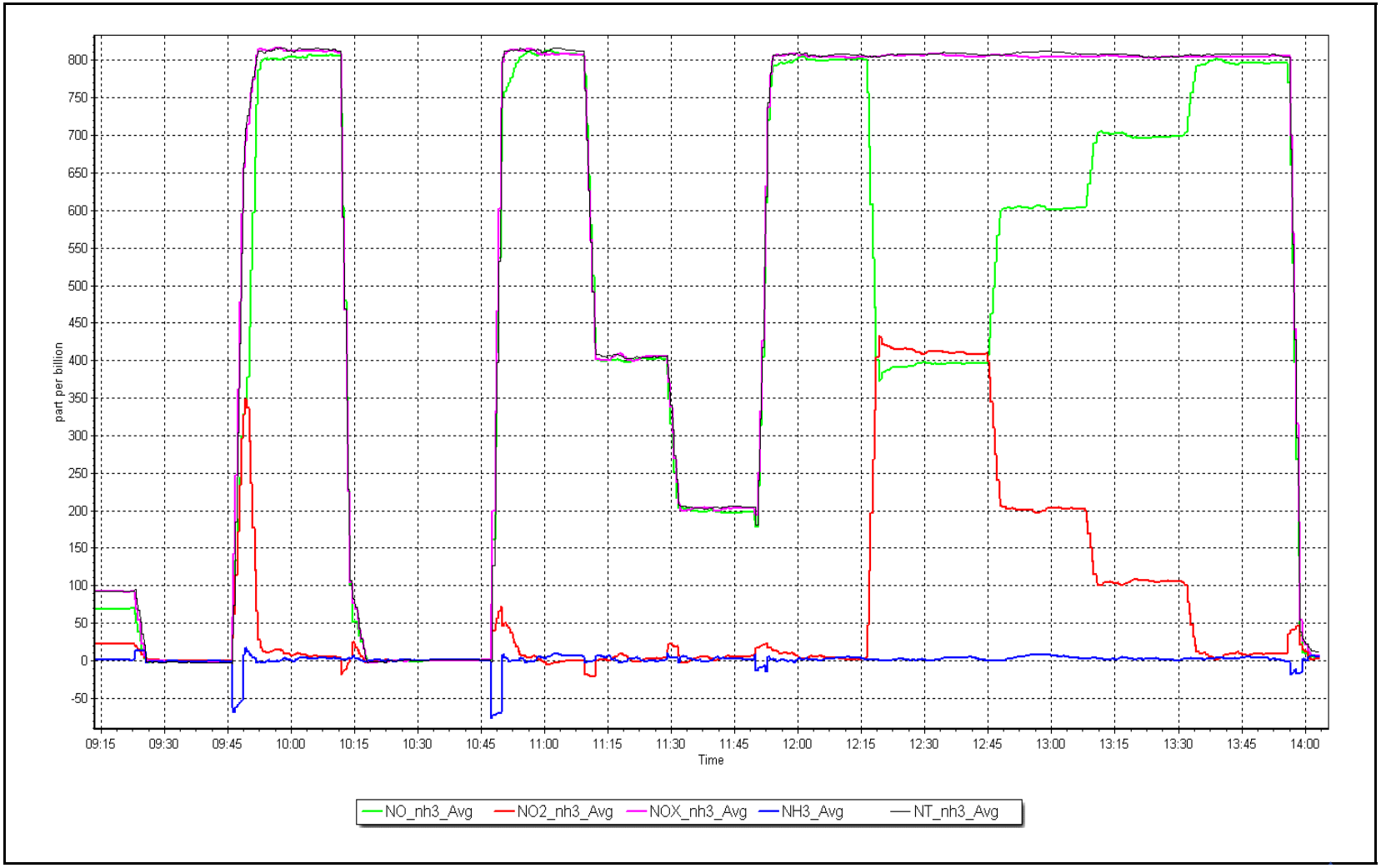
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
408.2	408.6	0.9990
202.3	202.8	0.9976
106.4	105.9	1.0048

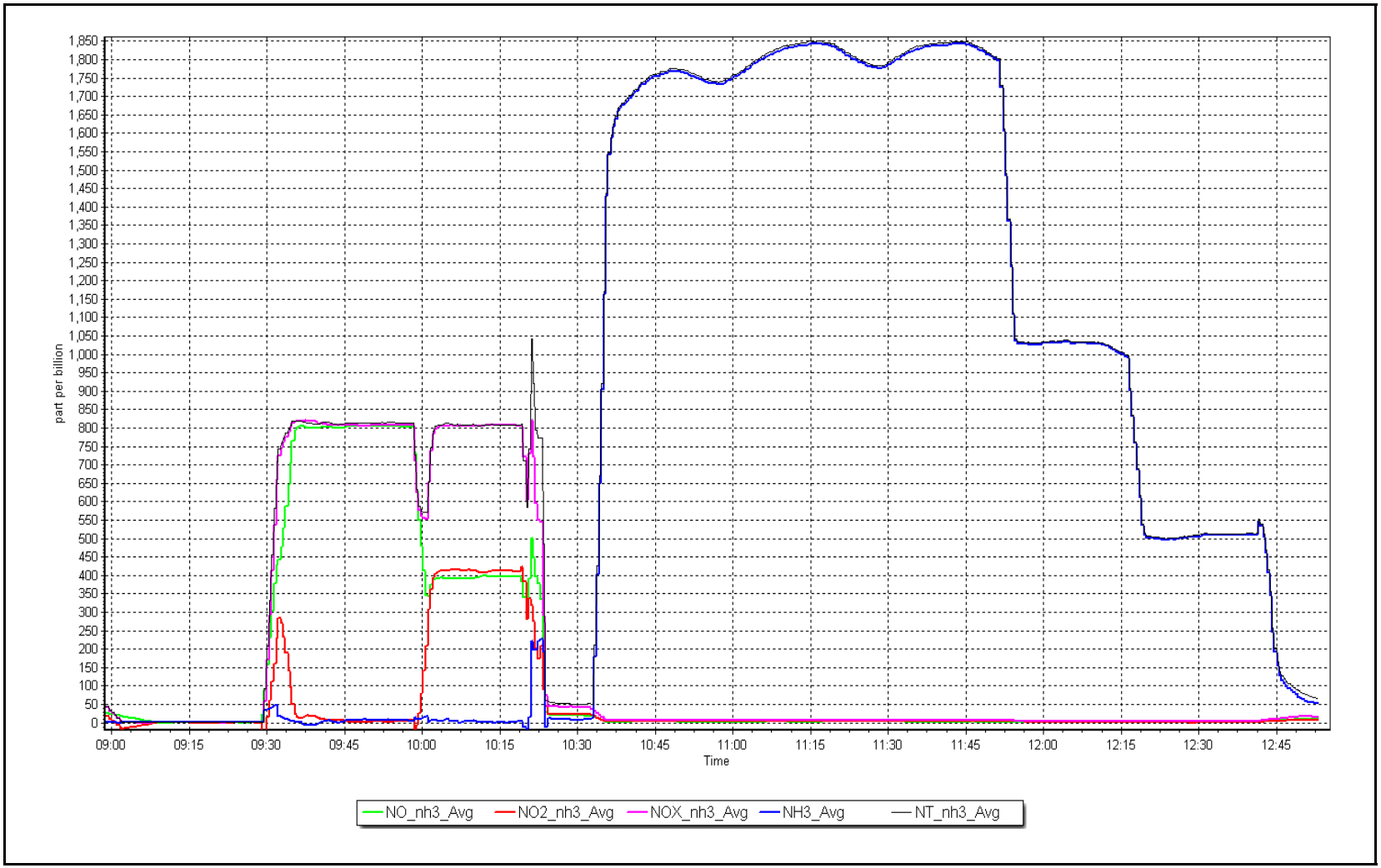
Statistical Evaluation		*Limits*
Correlation Coefficient	0.999994	*≥0.995*
Slope	1.000941	*0.90 - 1.10*
Intercept	0.003347	*+/-20*



NO_X Calibration Plot Date: March 26, 2026 Location: Bertha Ganter-Fort McKay



NH_3 Calibration Plot Date: March 27, 2026 Location: Bertha Ganter-Fort McKay



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS02
MILDRED LAKE
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Mildred Lake	Station number:	AMS 02
Calibration Date:	March 25, 2026	Last Cal Date:	February 26, 2026
Start time (MST):	8:45	End time (MST):	12:02
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.99	ppm	Cal Gas Exp Date:	October 9, 2032
Cal Gas Cylinder #:	EB0112903			
Removed Cal Gas Conc:	50.99	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	1185
Zero Air Gen Model:	Teledyne API T701		Serial Number:	4891

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	JC1404901075	
Analyzer Range:	0-1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.005984	1.001558	Backgd or Offset:	25.4	24.8
Calibration intercept:	-1.372256	-1.072443	Coeff or Slope:	0.770	0.759

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	4913	78.6	803.0	812.3	0.988
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	812.4	Previous response	806.4	*% 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	0.4	----
High point	4913	78.4	801.0	802.0	0.999
Mid point	4961	39.2	399.8	398.2	1.004
Low point	4980	19.6	199.9	197.9	1.010
As left zero	5000	0.0	0.0	0.6	----
As left span	4913	78.4	801.0	807.4	0.992
				Average Correction Factor:	1.004

Notes: Inlet filter changed after as founds, Span adjusted.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

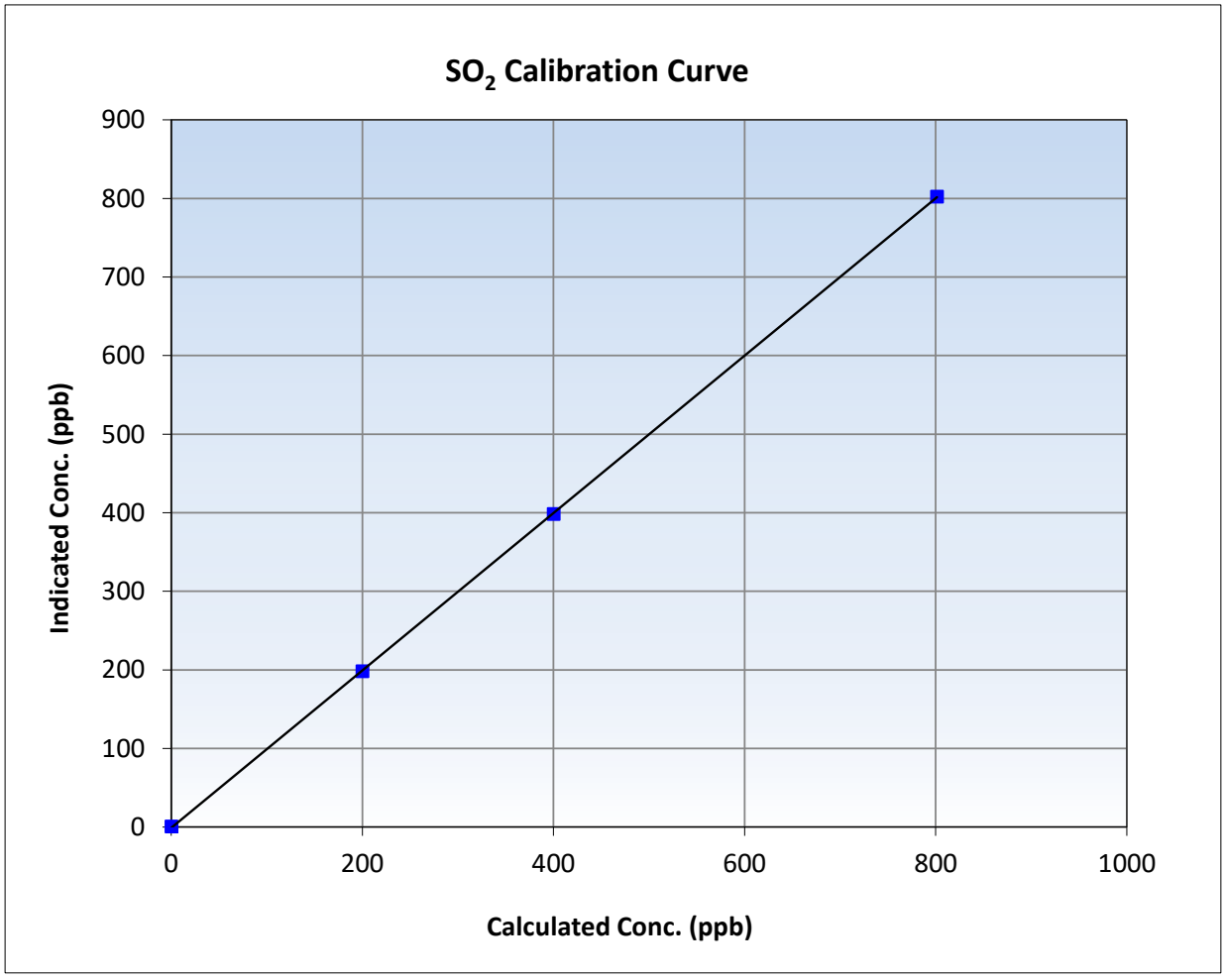
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 26, 2026
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	8:45	End Time (MST):	12:02
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1404901075

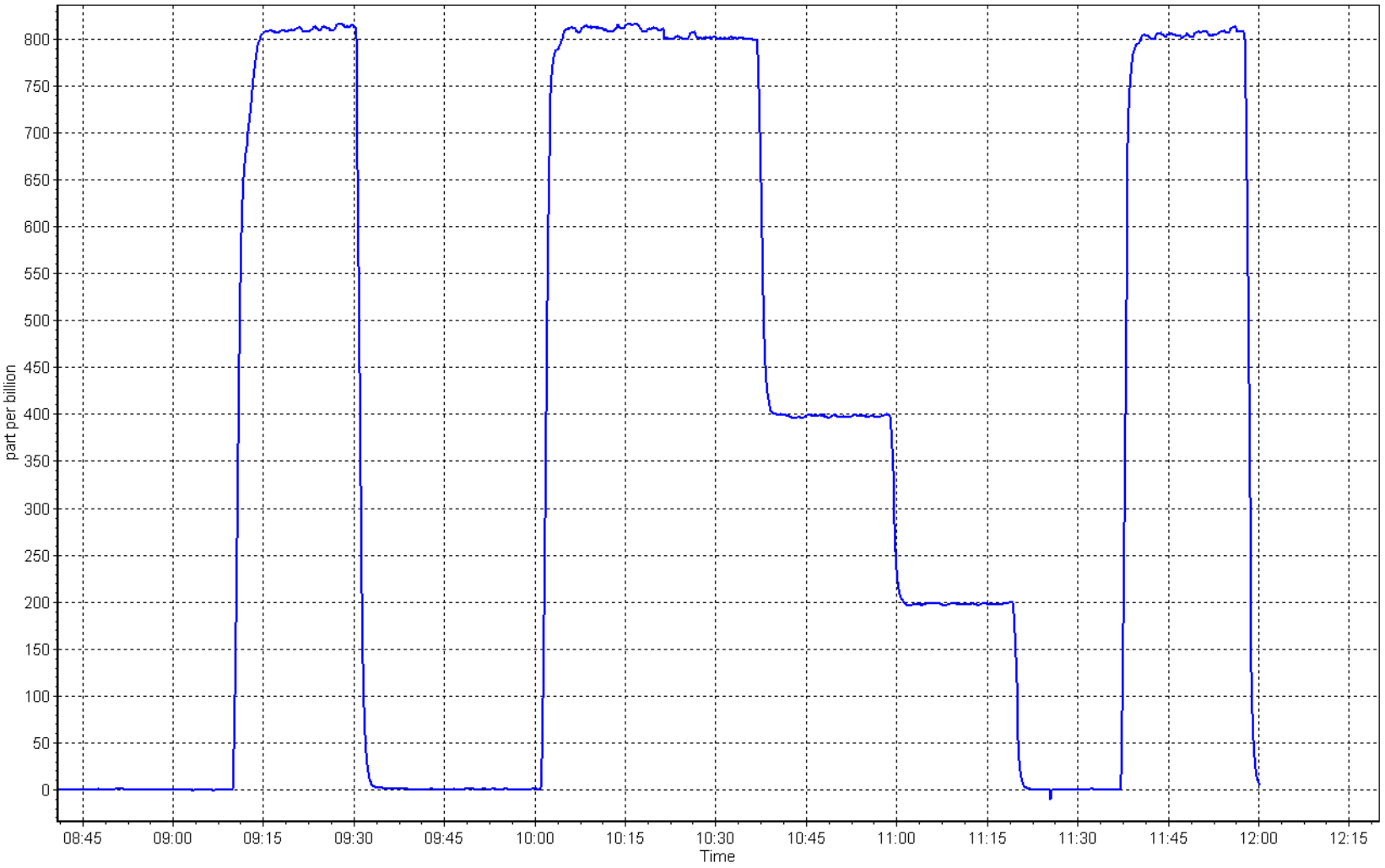
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
801.0	802.0	0.9987
399.8	398.2	1.0039
199.9	197.9	1.0100

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999984	*≥0.995*
Slope	1.001558	*0.90 - 1.10*
Intercept	-1.072443	*+/-30*



SO2 Calibration Plot Date: March 25, 2026 Location: Mildred Lake



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Mildred Lake	Station number:	AMS 02
Calibration Date:	March 27, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	8:45	End time (MST):	12:46
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Thermo 43iQTL		Analyzer serial #:	12333331546	
Converter make:	Global G150		Converter serial #:	2023-267	
Analyzer Range	0 - 100 ppb		Converter Temp:	325	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.002697	1.020128	Backgd or Offset:	1.58	1.58
Calibration intercept:	0.060000	0.200000	Coeff or Slope:	0.965	0.965

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.1	----
As found High point	4916	84.2	80.0	82.1	0.975
As found Mid point	4958	42.1	40.0	41.0	0.978
As found Low point	4979	21.1	20.0	20.6	0.975
New cylinder response					

Baseline Corr As found:	82.0	Prev response:	80.27	*% change:	2.1%
Baseline Corr 2nd AF pt:	40.9	AF Slope:	1.024985	AF Intercept:	0.080000
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	0.2	----
High point	4916	84.2	80.0	81.8	0.978
Mid point	4958	42.1	40.0	41.0	0.975
Low point	4979	21.1	20.0	20.6	0.971
As left zero	5000	0.0	0.0	0.2	----
As left span	4916	84.2	80.0	82.1	0.974
SO2 Scrubber Check	4922	78.4	783.9	0.0	----

Date of last scrubber change:	July 16, 2024	Ave Corr Factor	0.975
Date of last converter efficiency test:	NA		

Notes: Inlet filter changed after MPAF, scrubber check passed. No adjustment made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

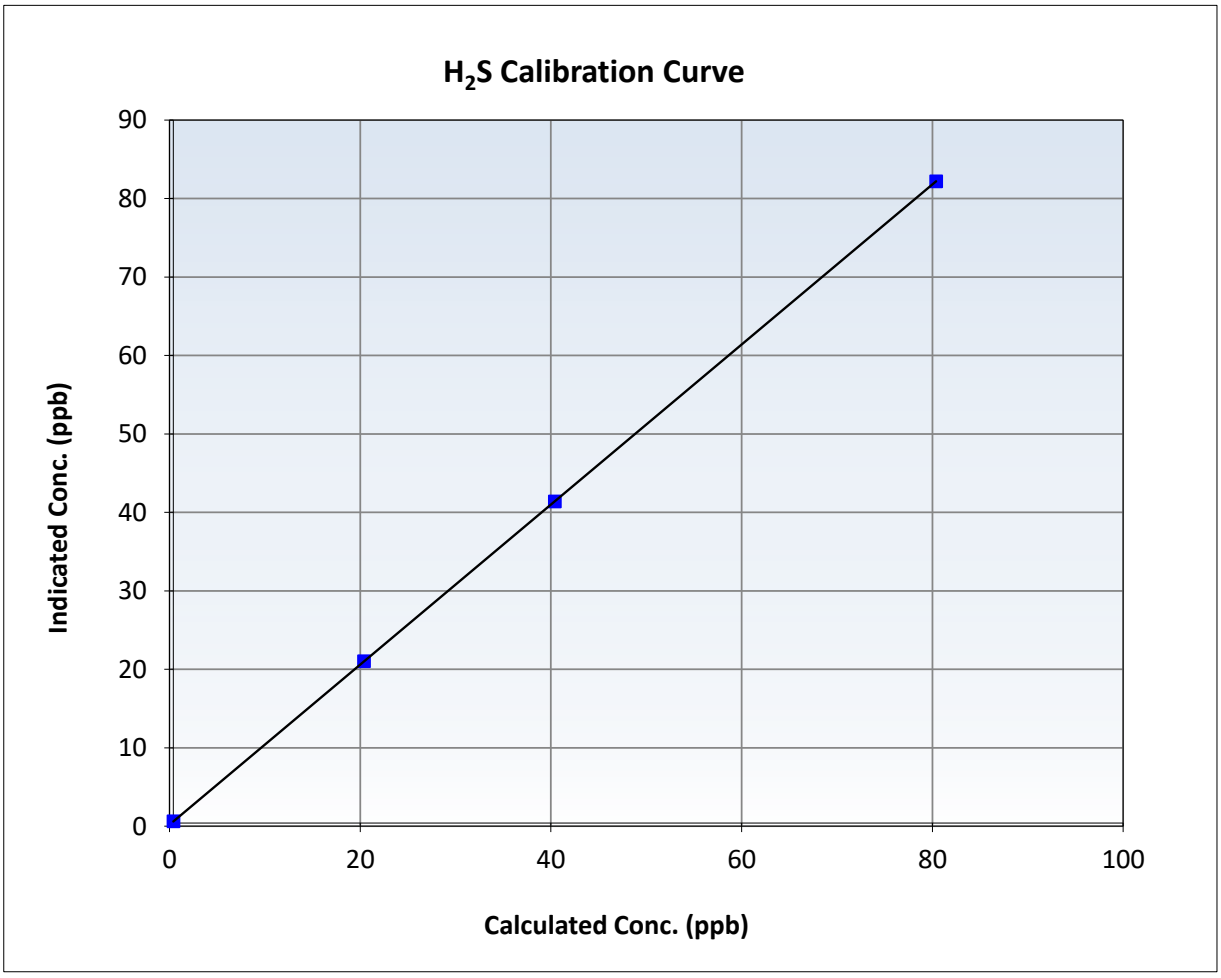
H2S Calibration Summary

Station Information

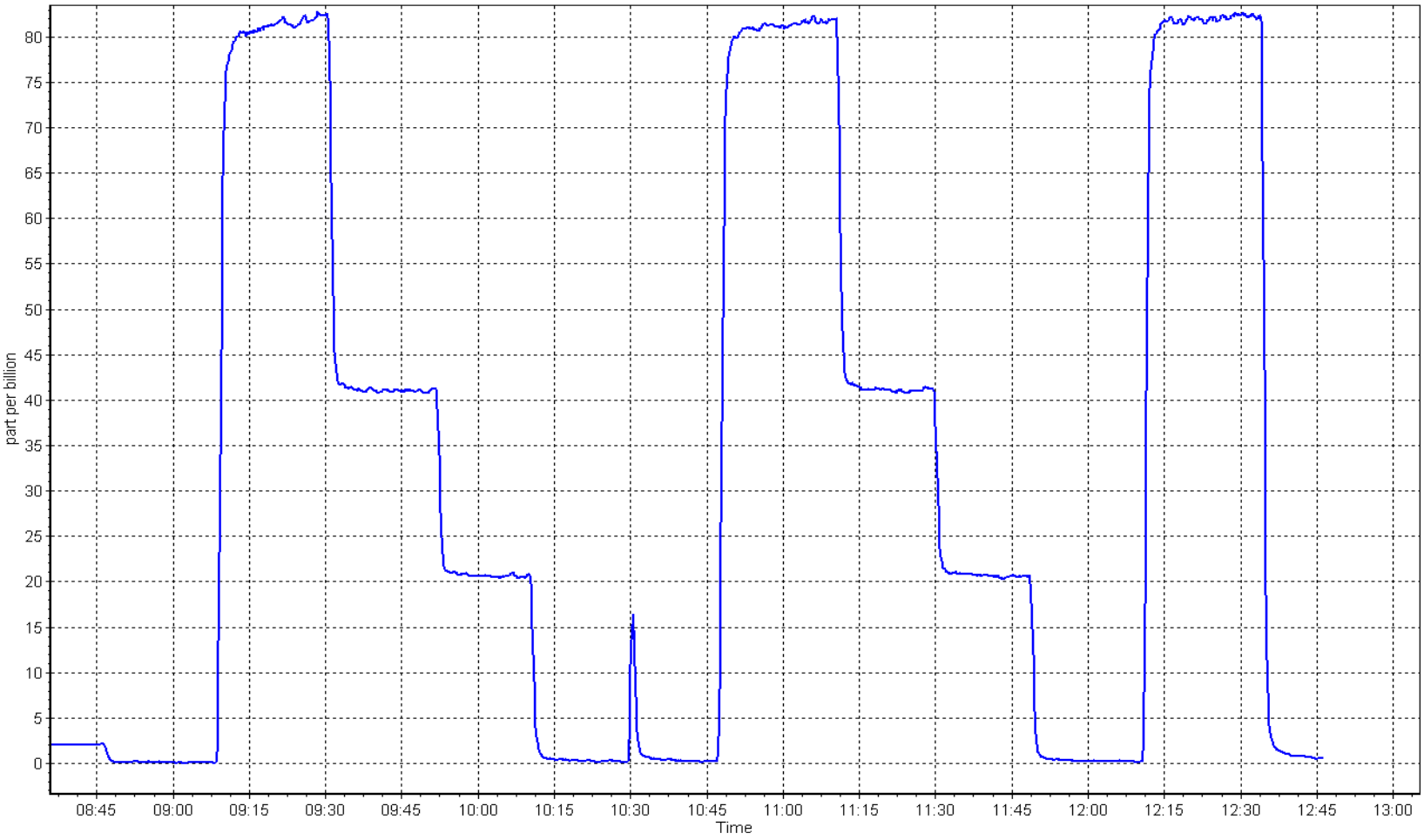
Calibration Date:	March 27, 2026	Previous Calibration:	February 4, 2026
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	8:45	End Time (MST):	12:46
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12333331546

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.2	----	Correlation Coefficient	1.000000	*≥0.995*
80.0	81.8	0.9779	Slope	1.020128	*0.90 - 1.10*
40.0	41.0	0.9755			
20.0	20.6	0.9708	Intercept	0.200000	*+/-3*



H2S Calibration Plot Date: March 27, 2026 Location: Mildred Lake



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Mildred Lake	Station number:	AMS 02
Calibration Date:	March 25, 2026	Last Cal Date:	February 27, 2026
Start time (MST):	8:45	End time (MST):	12:02
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	EB0112903	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	503.1 ppm	CH4 Equiv Conc.	1067.1 ppm
C3H8 Cal Gas Conc.	205.1 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	503.1 ppm	CH4 Equiv Conc.	1067.1 ppm
Removed C3H8 Conc.	205.1 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	1185
Zero Air Gen model:	Teledyne API T701	Serial Number:	4891

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1193585649
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.71E-04	3.83E-04	NMHC SP Ratio:	7.12E-05	7.41E-05
CH4 Retention time:	16.8	17.0	NMHC Peak Area:	124084	119231
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	4922	78.4	16.73	16.15	1.036
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.15	Prev response	16.60	*% change	-2.7%
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	4922	78.4	16.73	16.67	1.004
Mid point	4961	39.2	8.37	8.26	1.013
Low point	4980	19.6	4.18	4.09	1.024
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.4	16.73	16.56	1.010
				Average Correction Factor	1.014

Notes: Inlet filter 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	4922	78.4	8.84	8.53	1.037
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.53	Prev response	8.78	*% 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	5000	0.0	0.00	0.00	----
High point	4922	78.4	8.84	8.81	1.003
Mid point	4961	39.2	4.42	4.38	1.009
Low point	4980	19.6	2.21	2.16	1.022
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.4	8.84	8.70	1.017
				Average Correction Factor	1.012

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	78.4	7.89	7.62	1.035
As found Mid point	4961				
As found Low point	4980				
New cylinder response					
Baseline Corr AF:	7.62	Prev response	7.82	*% change	-2.6%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4922	78.4	7.89	7.85	1.005
Mid point	4961	39.2	3.94	3.88	1.018
Low point	4980	19.6	1.97	1.92	1.025
As left zero	5000	0.0	0.00	0.00	----
As left span	4922	78.4	7.89	7.86	1.003
				Average Correction Factor	1.016

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.994901	0.997483
THC Cal Offset:	-0.048064	-0.048465
CH4 Cal Slope:	0.995861	0.996151
CH4 Cal Offset:	-0.032324	-0.025325
NMHC Cal Slope:	0.994147	0.997947
NMHC Cal Offset:	-0.016140	-0.021341

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

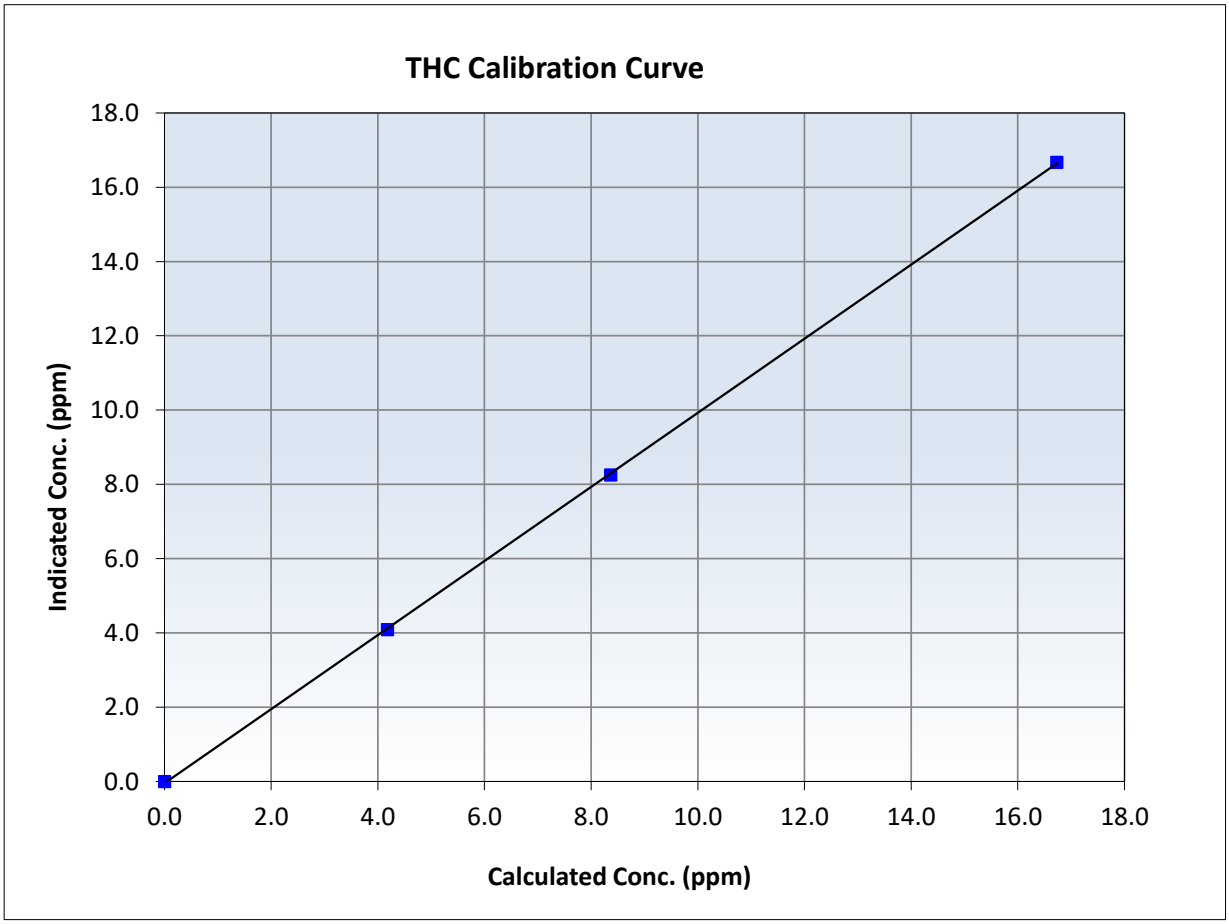
THC Calibration Summary

Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 27, 2026
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	8:45	End Time (MST):	12:02
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	0.999959	≥0.995
16.73	16.67	1.0037	Slope	0.997483	0.90 - 1.10
8.37	8.26	1.0132	Intercept	-0.048465	+/-0.5
4.18	4.09	1.0238			



Wood Buffalo Environmental Association

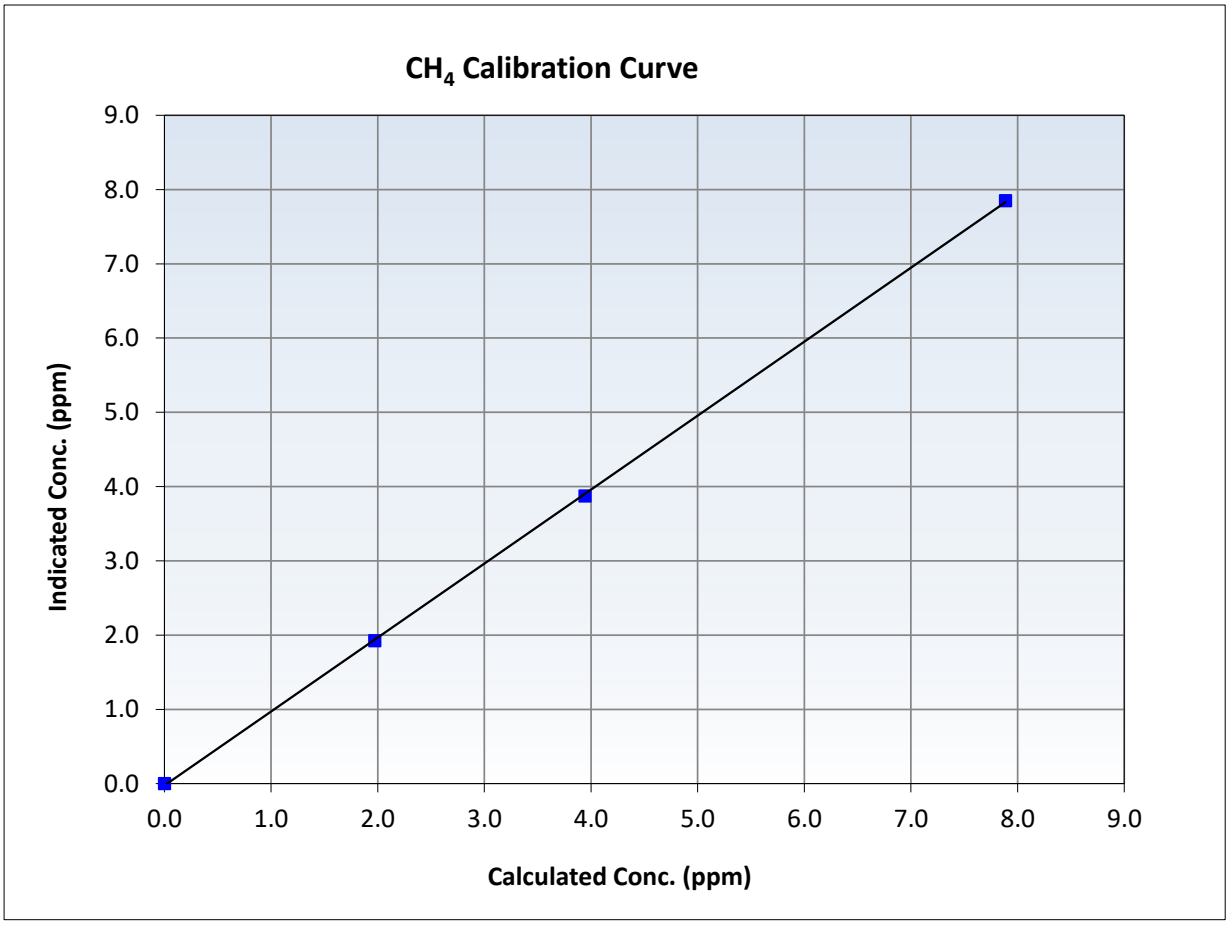
CH_4 Calibration Summary

Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 27, 2026
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	8:45	End Time (MST):	12:02
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	0.999942	≥0.995
7.89	7.85	1.0048	Slope	0.996151	0.90 - 1.10
3.94	3.88	1.0176			
1.97	1.92	1.0250	Intercept	-0.025325	+/-0.5



Wood Buffalo Environmental Association

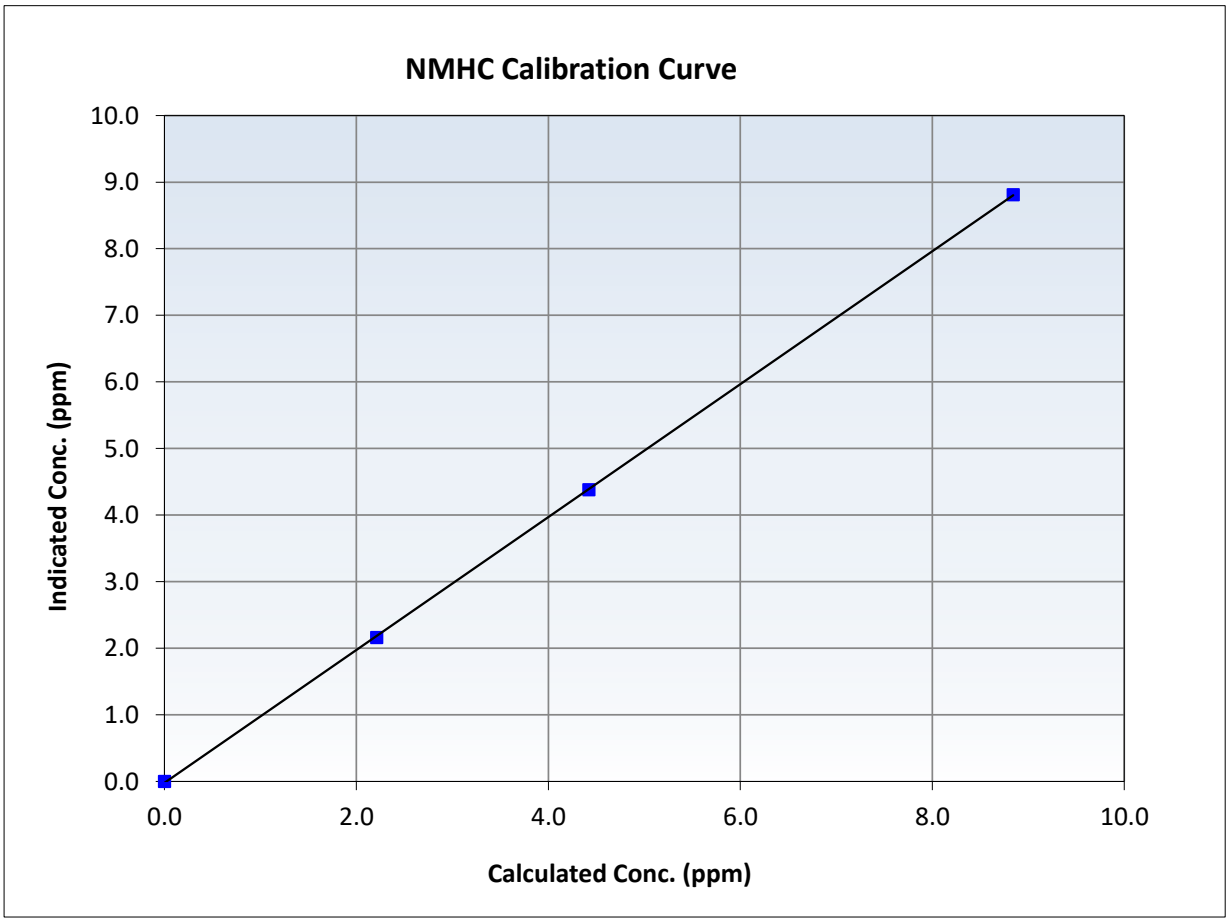
NMHC Calibration Summary

Station Information

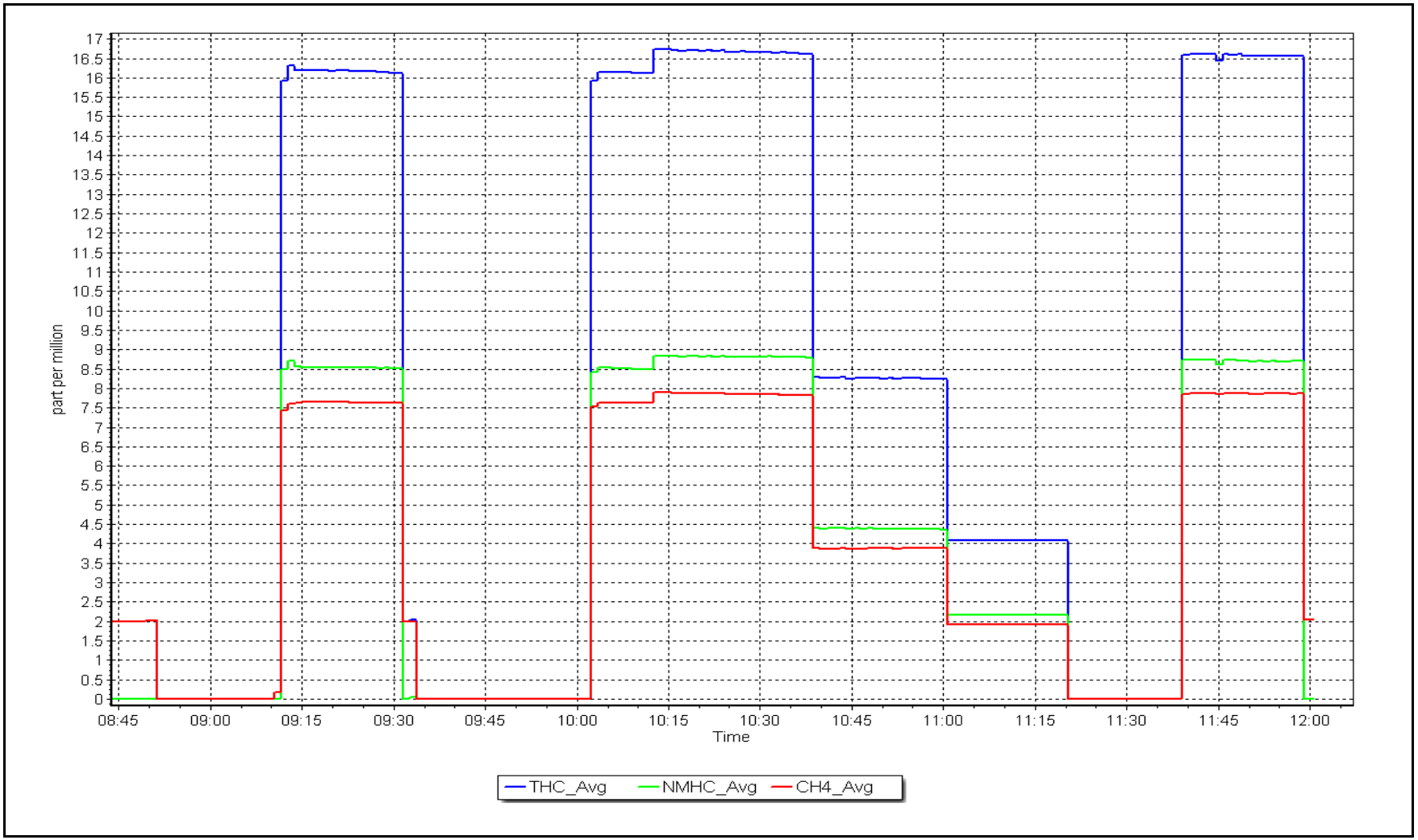
Calibration Date:	March 25, 2026	Previous Calibration:	February 27, 2026
Station Name:	Mildred Lake	Station Number:	AMS 02
Start Time (MST):	8:45	End Time (MST):	12:02
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585649

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999973	≥0.995
8.84	8.81	1.0033	Slope	0.997947	0.90 - 1.10
4.42	4.38	1.0091			
2.21	2.16	1.0222	Intercept	-0.021341	+/-0.5



NMHC Calibration Plot Date: March 25, 2026 Location: Mildred Lake



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS04
BUFFALO VIEWPOINT
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	March 6, 2026	Last Cal Date:	February 23, 2026
Start time (MST):	9:46	End time (MST):	12:50
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Thermo 43i-LTE		Serial Number:	1410661331	
Analyzer Range:	0-1000ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.000314	0.999672	Backgd or Offset:	1.9	1.6
Calibration intercept:	0.194851	0.194555	Coeff or Slope:	1.013	1.016

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	78.6	799.7	799.8	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	0.2	----
High point	4921	78.6	799.7	799.6	1.000
Mid point	4961	39.3	399.8	400.1	0.999
Low point	4980	19.6	199.4	199.4	1.000
As left zero	5000	0.0	0.0	0.2	----
As left span	4921	78.6	799.7	802.3	0.997
				Average Correction Factor:	1.000

Notes: Inlet filter changed after as founds, no adjustment made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

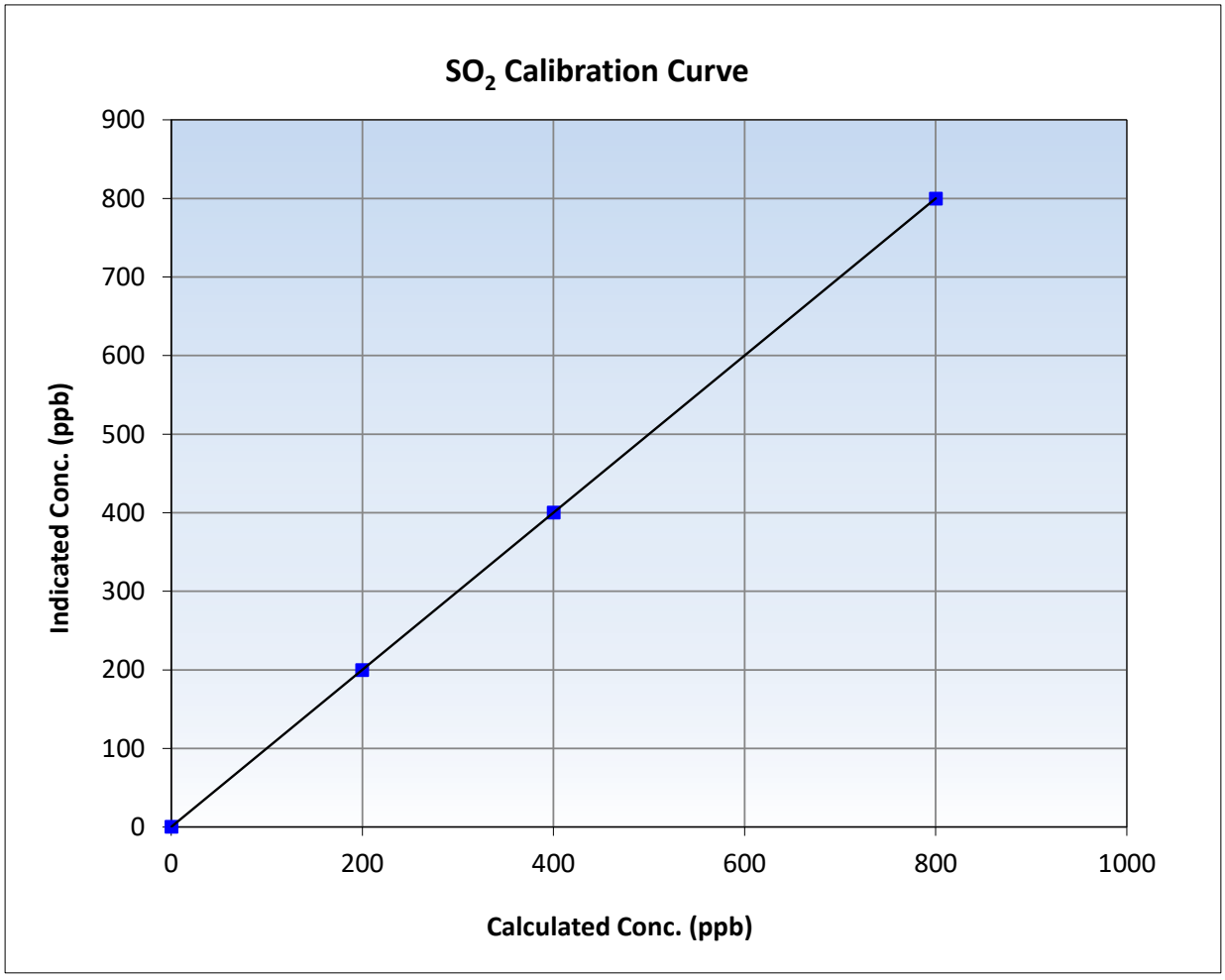
Station Information

Calibration Date:	March 6, 2026	Previous Calibration:	February 23, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:46	End Time (MST):	12:50
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1410661331

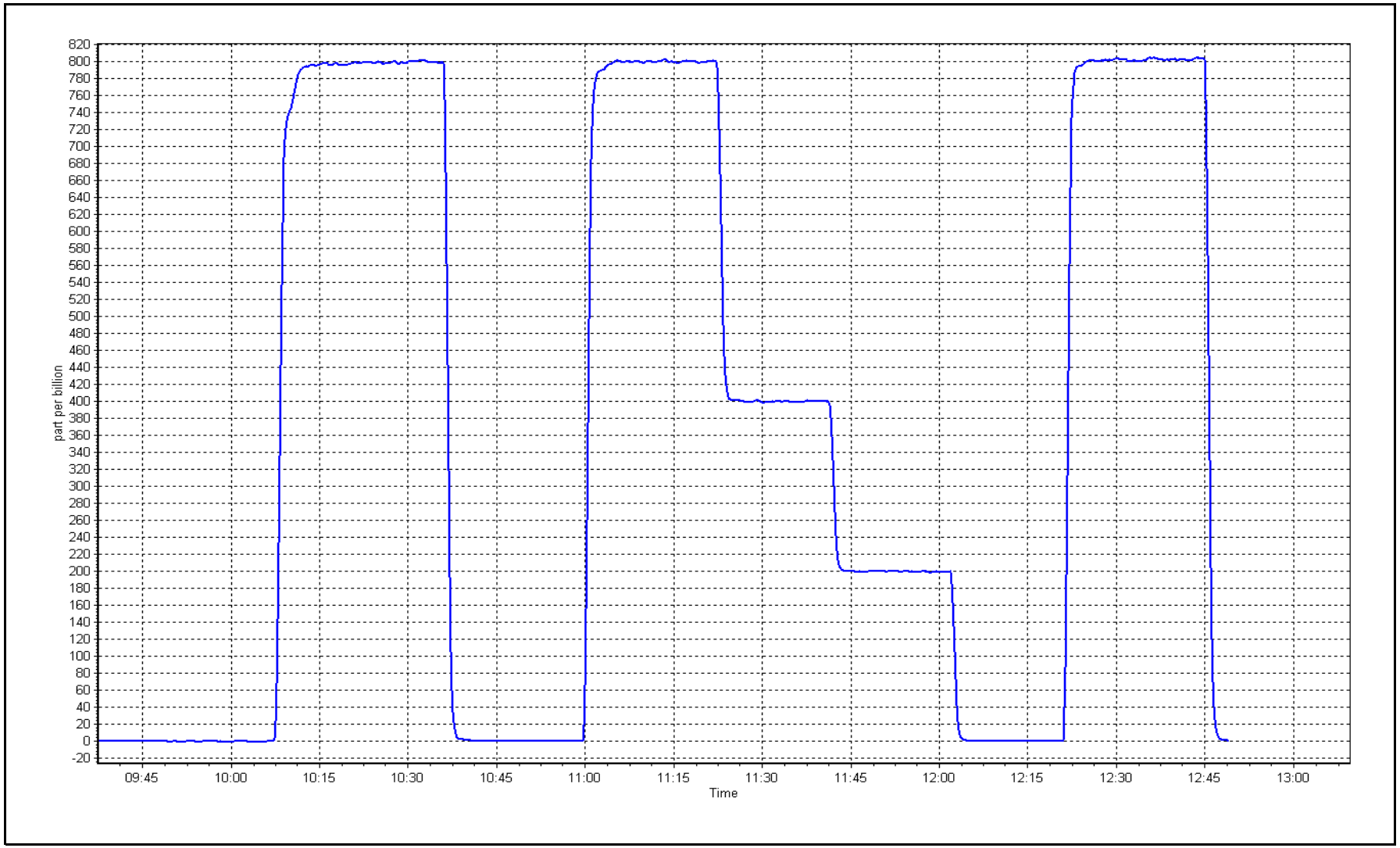
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
799.7	799.6	1.0002
399.8	400.1	0.9993
199.4	199.4	1.0001

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	0.999672	*0.90 - 1.10*
Intercept	0.194555	*+/-30*



SO2 Calibration Plot Date: March 6, 2026 Location: Buffalo Viewpoint



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	March 12, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	9:44	End time (MST):	17:28
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:	0.998862	0.989993	Backgd or Offset:	1.92	2.20
Calibration intercept:	-0.001796	0.158569	Coeff or Slope:	1.123	1.152

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	83.3	80.0	79.4	1.008
As found Mid point	4958	41.7	40.0	39.9	1.006
As found Low point	4979	20.8	20.0	20.0	1.003
New cylinder response					

Baseline Corr As found:	79.3	Prev response:	79.87	*% change:	-0.7%
Baseline Corr 2nd AF pt:	39.8	AF Slope:	0.991431	AF Intercept:	0.158239
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999997	* = > +/-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	79.4	1.007
Mid point	4958	41.7	40.0	39.4	1.016
Low point	4979	20.8	20.0	20.4	0.979
As left zero	5000	0.0	0.0	0.6	----
As left span	4917	83.3	80.0	79.3	1.008
SO2 Scrubber Check	4920	80.0	800.0	0.0	----
Date of last scrubber change:		12-Mar-26		Ave Corr Factor	1.001
Date of last converter efficiency test:					

Notes: Scrubber changed out. Zero and span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

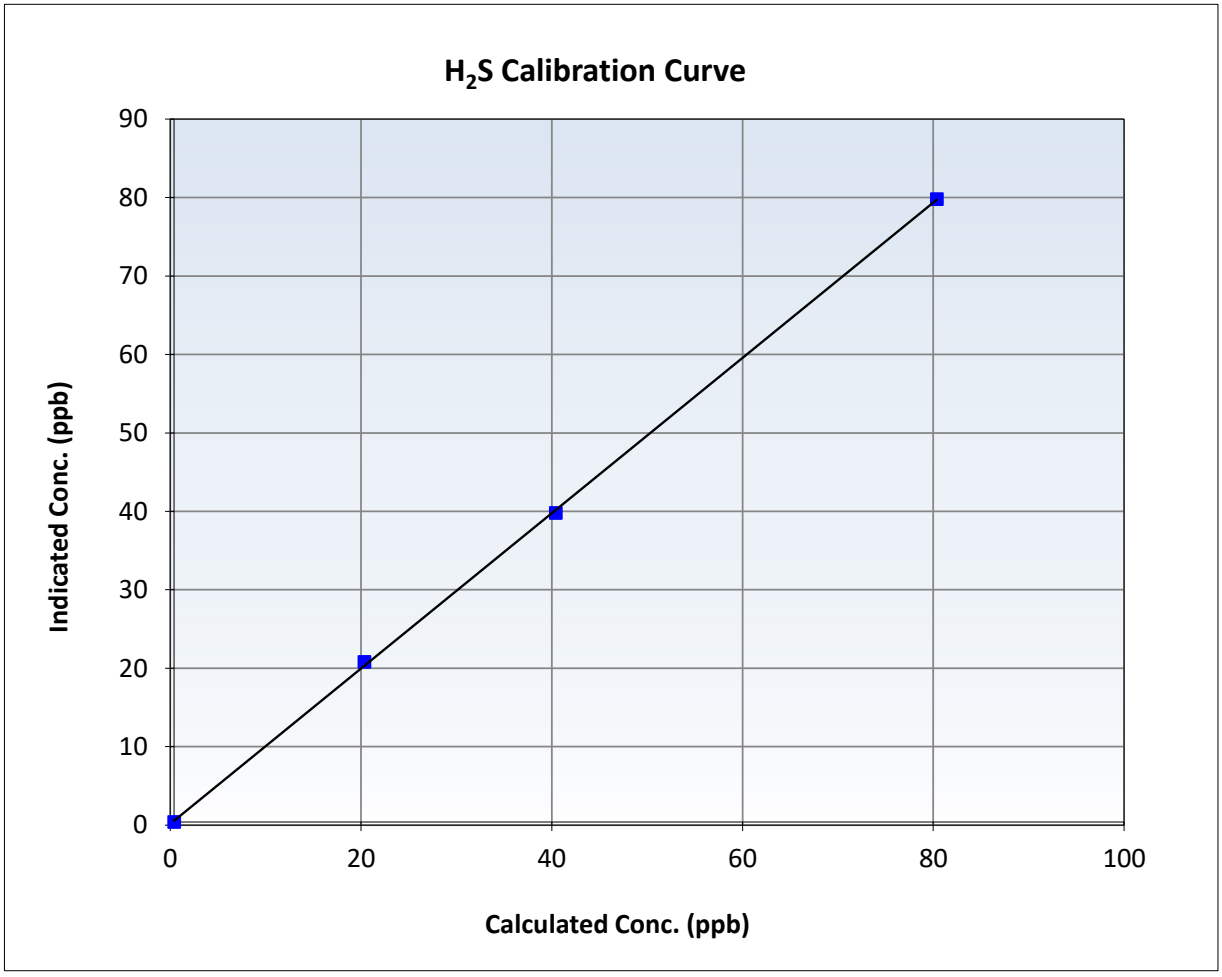
H_2S Calibration Summary

Station Information

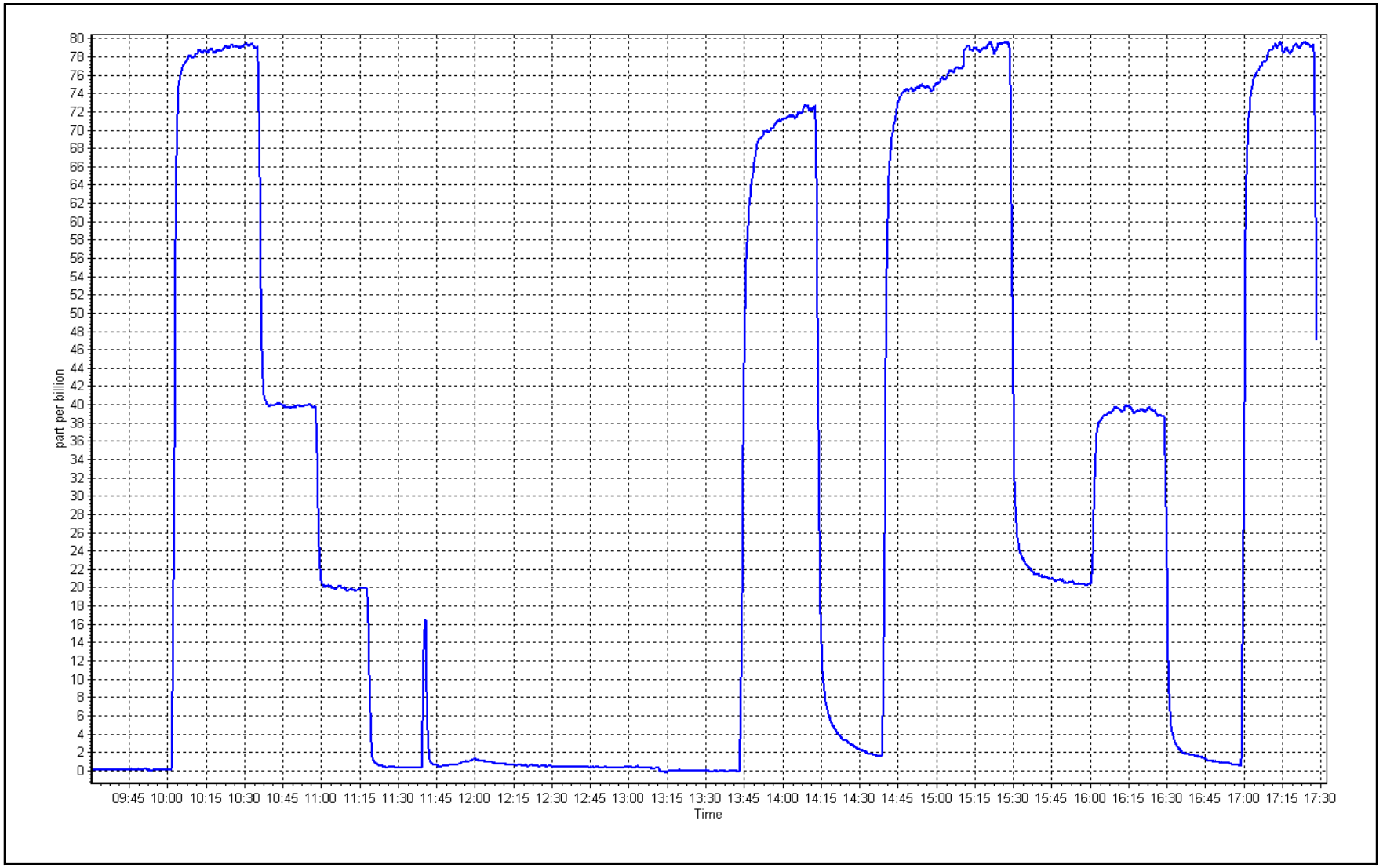
Calibration Date:	March 12, 2026	Previous Calibration:	February 12, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:44	End Time (MST):	17:28
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1008841400

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999881	*≥0.995*
80.0	79.4	1.0071	Slope	0.989993	*0.90 - 1.10*
40.0	39.4	1.0161			
20.0	20.4	0.9789	Intercept	0.158569	*+/-3*



H_2S Calibration Plot Date: March 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:	March 6, 2026	Last Cal Date:	February 23, 2026
Start time (MST):	9:46	End time (MST):	12:50
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC446753	Cal Gas Expiry Date:	March 10, 2031
CH4 Cal Gas Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
C3H8 Cal Gas Conc.	204.0 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
Removed C3H8 Conc.	204.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3808
Zero Air Gen model:	Teledyne API T701	Serial Number:	362

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.27E-04	2.27E-04	NMHC SP Ratio:	4.31E-05	4.31E-05
CH4 Retention time:	11.2	11.2	NMHC Peak Area:	204629	204629
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	78.6	16.64	16.60	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.60	Prev response	16.66	*% change	-0.4%
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	5000	0.0	0.00	0.00	----
High point	4921	78.6	16.64	16.56	1.005
Mid point	4961	39.3	8.32	8.28	1.004
Low point	4980	19.6	4.15	4.12	1.007
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	16.64	16.58	1.004
				Average Correction Factor	1.005

Notes: Inlet filter 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	78.6	8.82	8.79	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.79	Prev response	8.81	*% change	-0.2%
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	4921	78.6	8.82	8.77	1.006
Mid point	4961	39.3	4.41	4.40	1.003
Low point	4980	19.6	2.20	2.19	1.004
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	8.82	8.78	1.004
				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	4921	78.6	7.82	7.81	1.001
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.81	Prev response	7.85	*% 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	78.6	7.82	7.78	1.004
Mid point	4961	39.3	3.91	3.89	1.005
Low point	4980	19.6	1.95	1.93	1.011
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	7.82	7.79	1.003
				Average Correction Factor	1.007

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.001727	0.995374
THC Cal Offset:	-0.003733	-0.002759
CH4 Cal Slope:	1.004889	0.996103
CH4 Cal Offset:	-0.008099	-0.005314
NMHC Cal Slope:	0.998381	0.994378
NMHC Cal Offset:	0.005964	0.004155

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

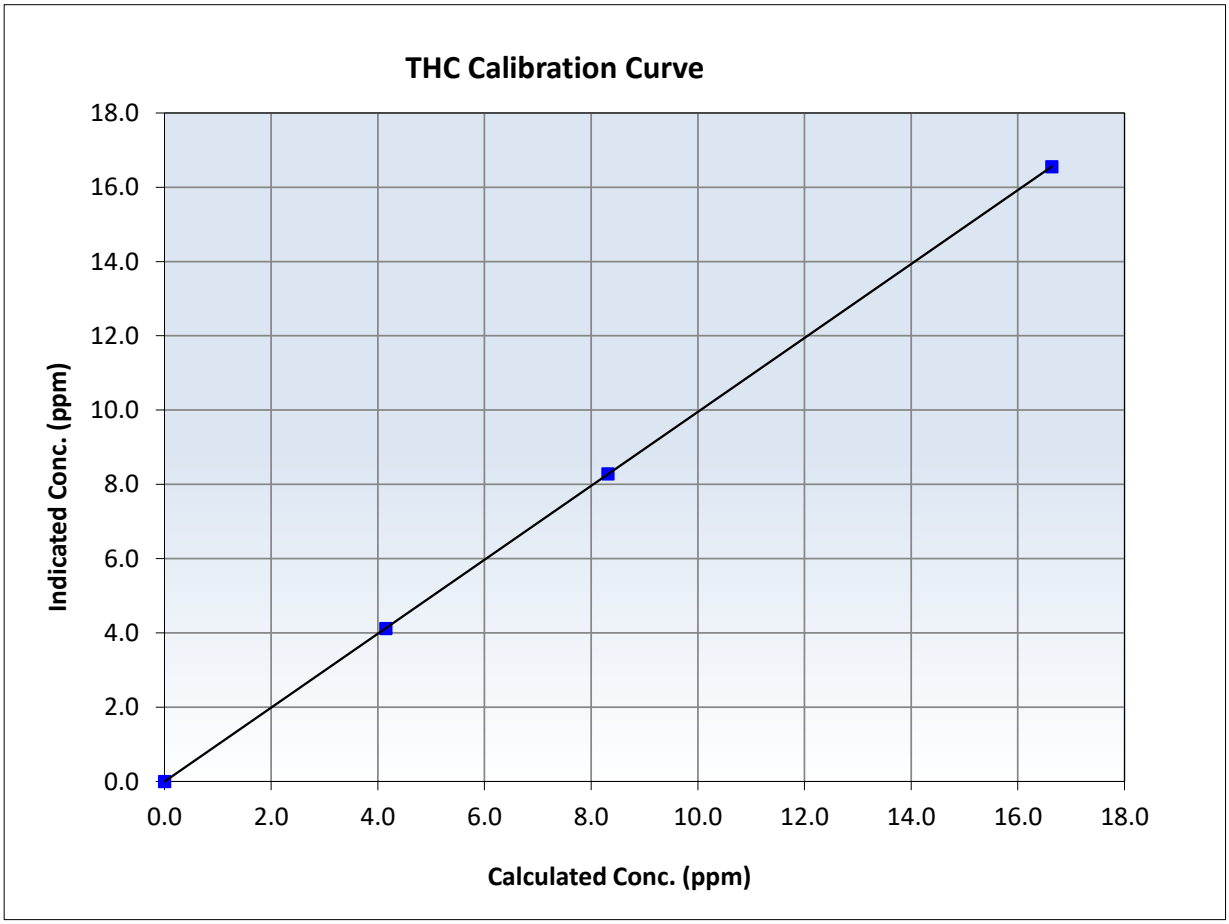
THC Calibration Summary

Station Information

Calibration Date:	March 6, 2026	Previous Calibration:	February 23, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:46	End Time (MST):	12:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

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*
16.64	16.56	1.0049	Slope	0.995374	*0.90 - 1.10*
8.32	8.28	1.0041	Intercept	-0.002759	*+/-0.5*
4.15	4.12	1.0074			



Wood Buffalo Environmental Association

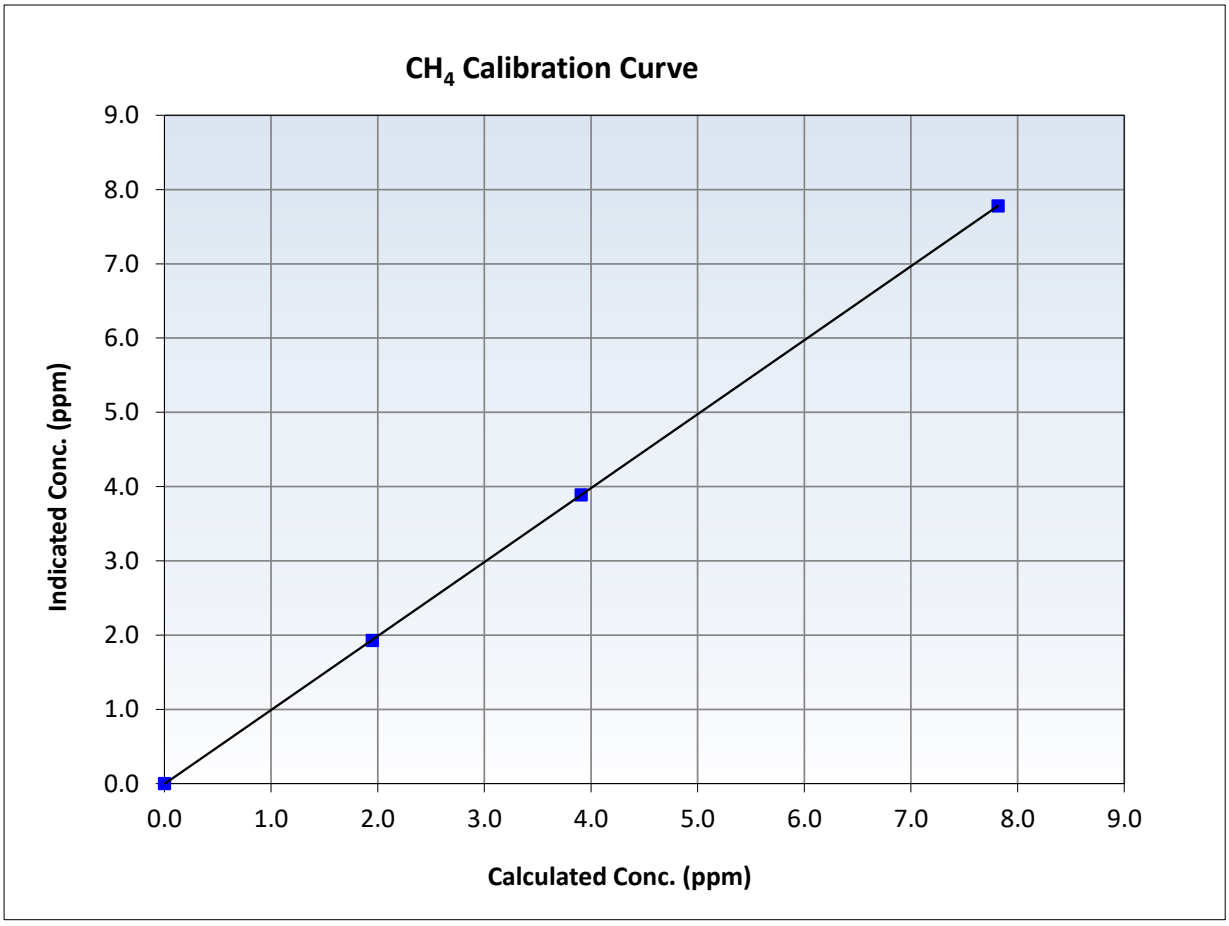
CH_4 Calibration Summary

Station Information

Calibration Date:	March 6, 2026	Previous Calibration:	February 23, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:46	End Time (MST):	12:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

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
7.82	7.78	1.0044	Slope	0.996103	0.90 - 1.10
3.91	3.89	1.0048	Intercept	-0.005314	+/-0.5
1.95	1.93	1.0110			



Wood Buffalo Environmental Association

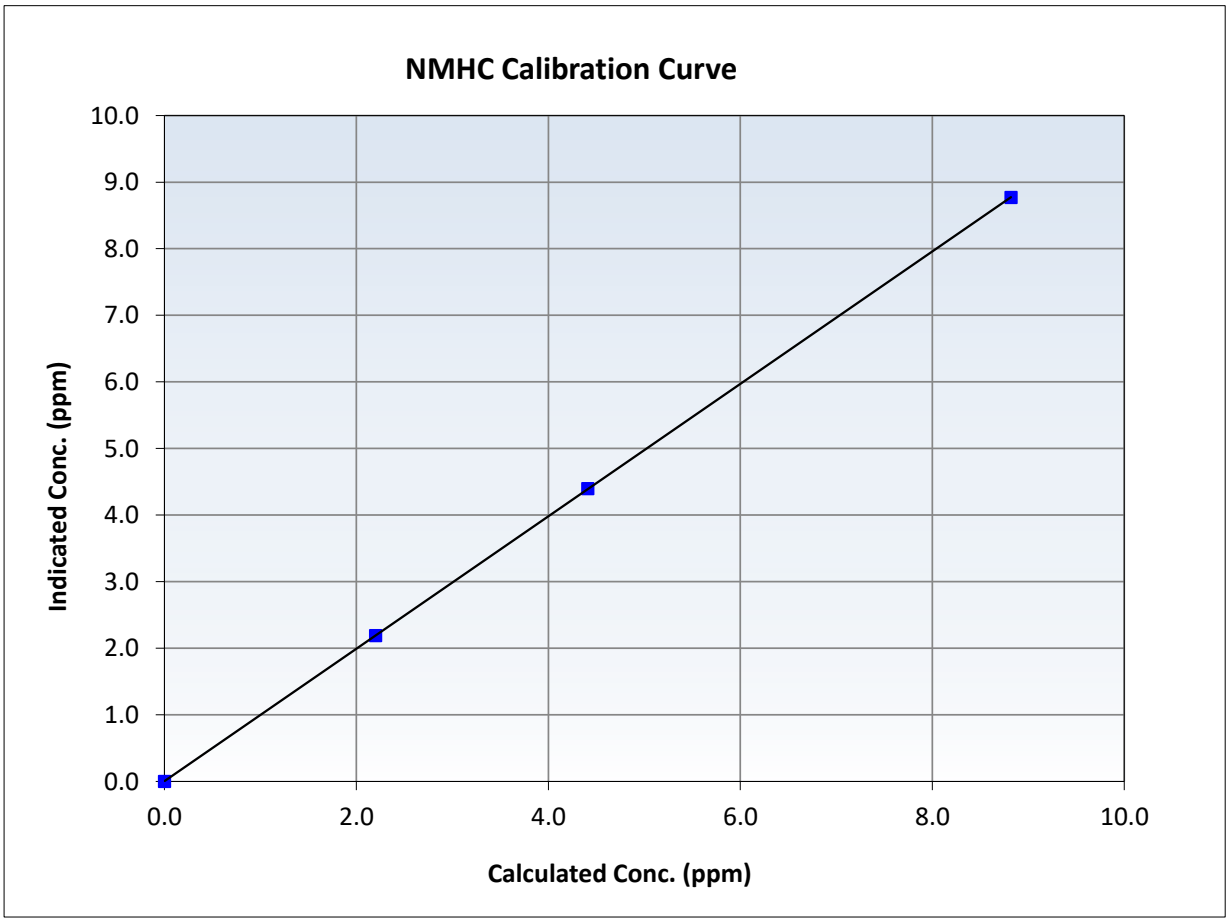
NMHC Calibration Summary

Station Information

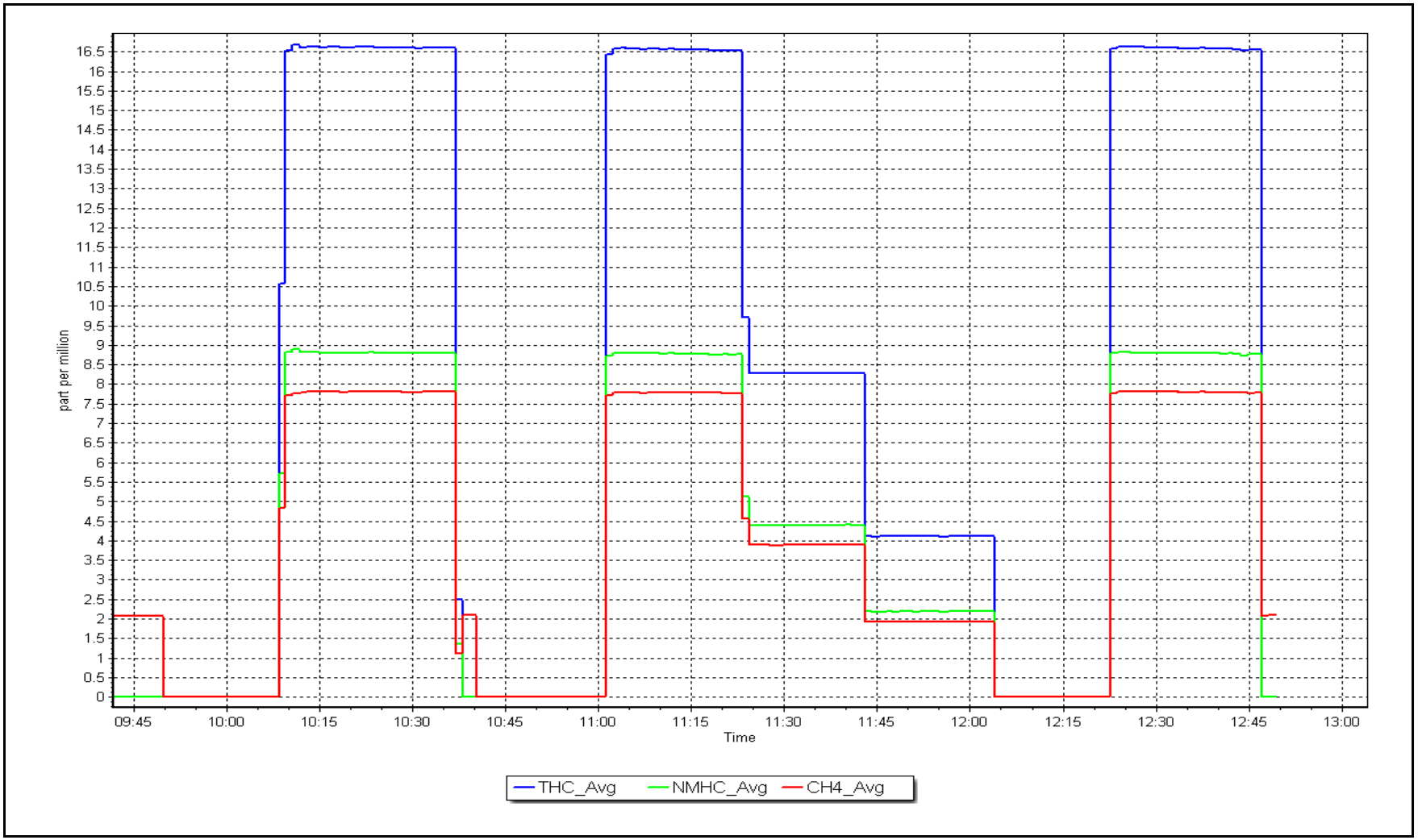
Calibration Date:	March 6, 2026	Previous Calibration:	February 23, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	9:46	End Time (MST):	12:50
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320038

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
8.82	8.77	1.0057	Slope	0.994378	0.90 - 1.10
4.41	4.40	1.0028			
2.20	2.19	1.0038	Intercept	0.004155	+/-0.5



NMHC Calibration Plot Date: March 6, 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:	March 20, 2026	Last Cal Date:	March 6, 2026
Start time (MST):	10:30	End time (MST):	13:22
Reason:	Cylinder Change		

Calibration Standards

Gas Cert Reference:	CC446753	Cal Gas Expiry Date:	March 10, 2031
CH4 Cal Gas Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
C3H8 Cal Gas Conc.	204.0 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	497.2 ppm	CH4 Equiv Conc.	1058.2 ppm
Removed C3H8 Conc.	204.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700	Serial Number:	3808
Zero Air Gen model:	Teledyne API T701	Serial Number:	362

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.27E-04	2.27E-04	NMHC SP Ratio:	4.31E-05	4.31E-05
CH4 Retention time:	11.2	11.2	NMHC Peak Area:	204629	204629
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	78.6	16.64	16.53	1.006
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.53	Prev response	16.56	*% 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	78.6	16.64	16.49	1.009
				Average Correction Factor	

Notes: H2 cylinder 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	78.6	8.82	8.80	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.80	Prev response	8.77	*% change	0.3%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *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	78.6	8.82	8.74	1.009
				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	78.6	7.82	7.73	1.011
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.73	Prev response	7.78	*% change	-0.6%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

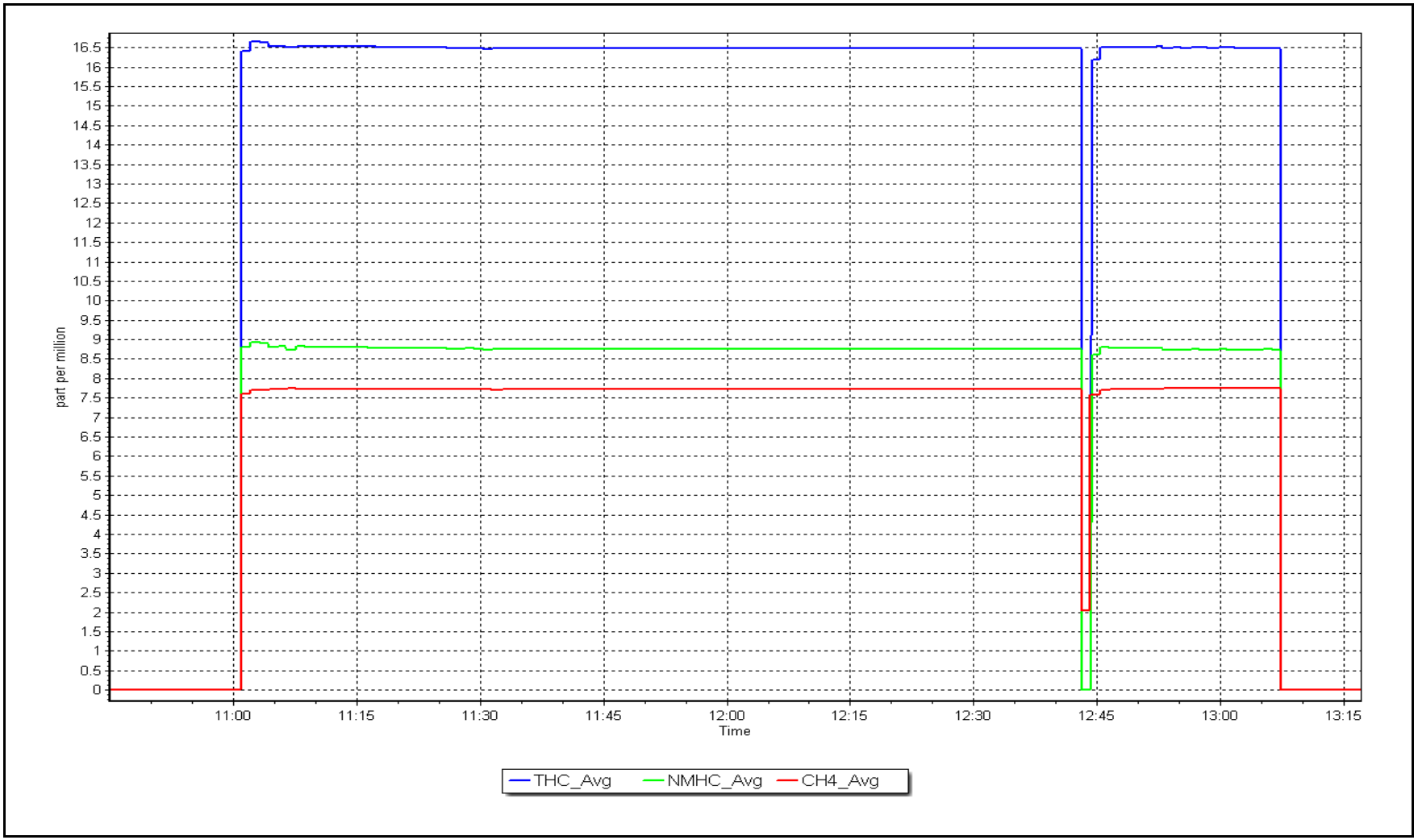
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.6	7.82	7.75	1.008
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.995374	
THC Cal Offset:	-0.002759	
CH4 Cal Slope:	0.996103	
CH4 Cal Offset:	-0.005314	
NMHC Cal Slope:	0.994378	
NMHC Cal Offset:	0.004155	

Calibration Performed By: Aswin Sasi Kumar

NMHC Calibration Plot Date: March 20, 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:	March 10, 2026
Last Cal Date:	February 6, 2026
Start time (MST):	10:00
End time (MST):	15:34
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	-0.2	-0.2	0.0	----	----
AF High point	4918	81.8	800.0	798.4	1.6	851.0	850.0	0.6	0.9399	0.9391
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 797.8 ppb	NO = 795.8 ppb
Baseline Corr 1st pt	NO_X = 851.2 ppb	NO = 850.2 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 =	6.3%
*Percent Change	NO =	6.4%

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: 1218153357

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.996	0.936	NO bkgnd or offset:	6.7	6.4
NOX coeff or slope:	0.992	0.995	NOX bkgnd or offset:	6.7	6.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	240.7	235.1

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.997237	1.000666
NO_X Cal Offset:	0.006087	-0.593556
NO Cal Slope:	0.997808	1.000457
NO Cal Offset:	-0.854756	-1.754537
NO_2 Cal Slope:	1.001133	1.003540
NO_2 Cal Offset:	-0.865835	1.199356

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	81.8	800.0	798.4	1.6	800.1	797.8	2.4	0.9999	1.0008
Mid point	4959	40.9	400.0	399.2	0.8	399.9	397.0	2.9	1.0003	1.0055
Low point	4980	20.4	199.5	199.1	0.4	198.1	195.5	2.6	1.0070	1.0184
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	----	----
As left span	4918	81.8	800.0	399.0	800.0	802.6	399.0	403.6	0.9968	1.0000
								Average Correction Factor	1.0024	1.0082

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	791.7	396.8	396.5	398.4	0.9953	100.5%
Mid GPT point	791.7	607.4	185.9	189.0	0.9838	101.6%
Low GPT point	791.7	699.4	93.9	96.2	0.9765	102.4%
				Average Correction Factor	0.9852	101.5%

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

NO_X Calibration Summary

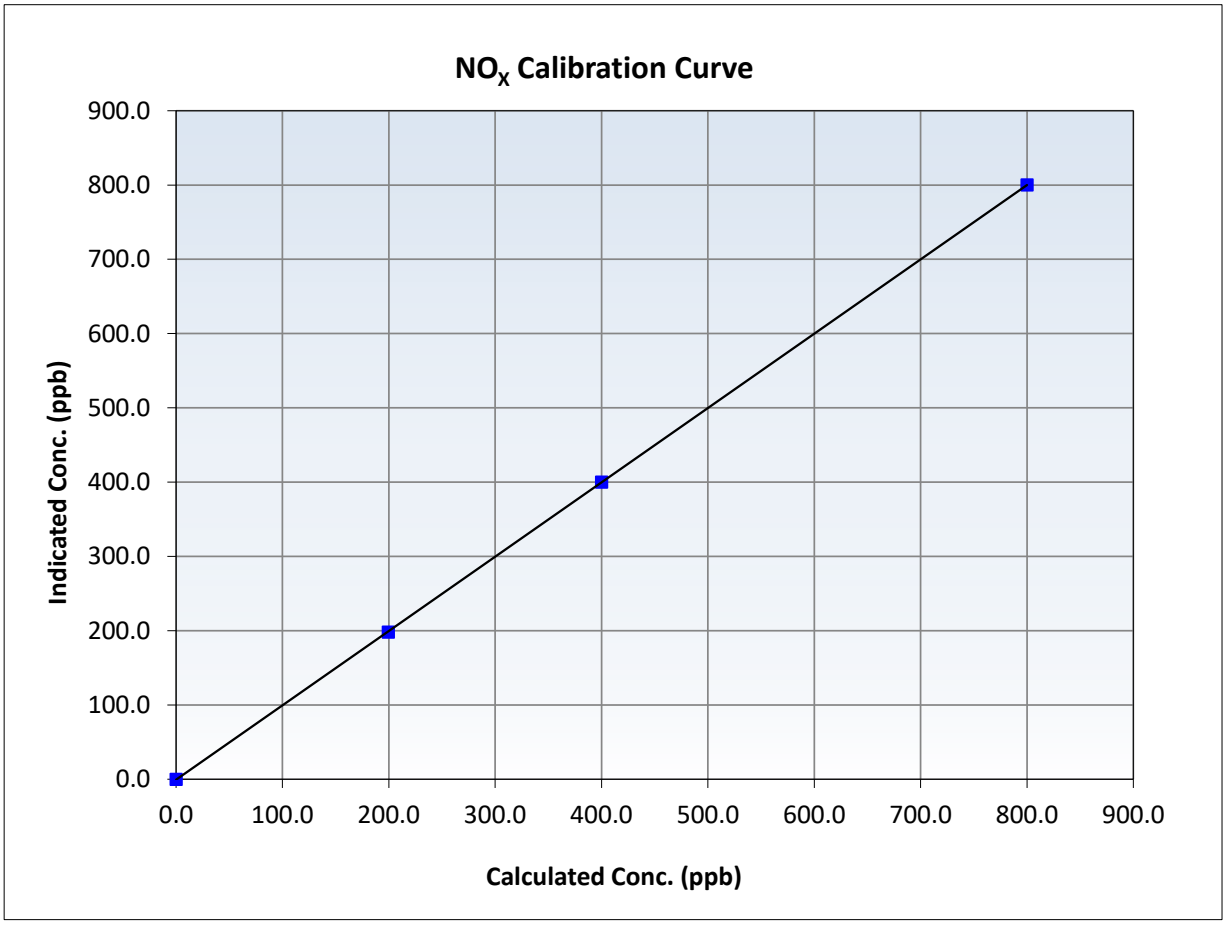
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 6, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	10:00	End Time (MST):	15:34
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153357

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.0	800.1	0.9999
400.0	399.9	1.0003
199.5	198.1	1.0070

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999996	*≥0.995*
Slope	1.000666	*0.90 - 1.10*
Intercept	-0.593556	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

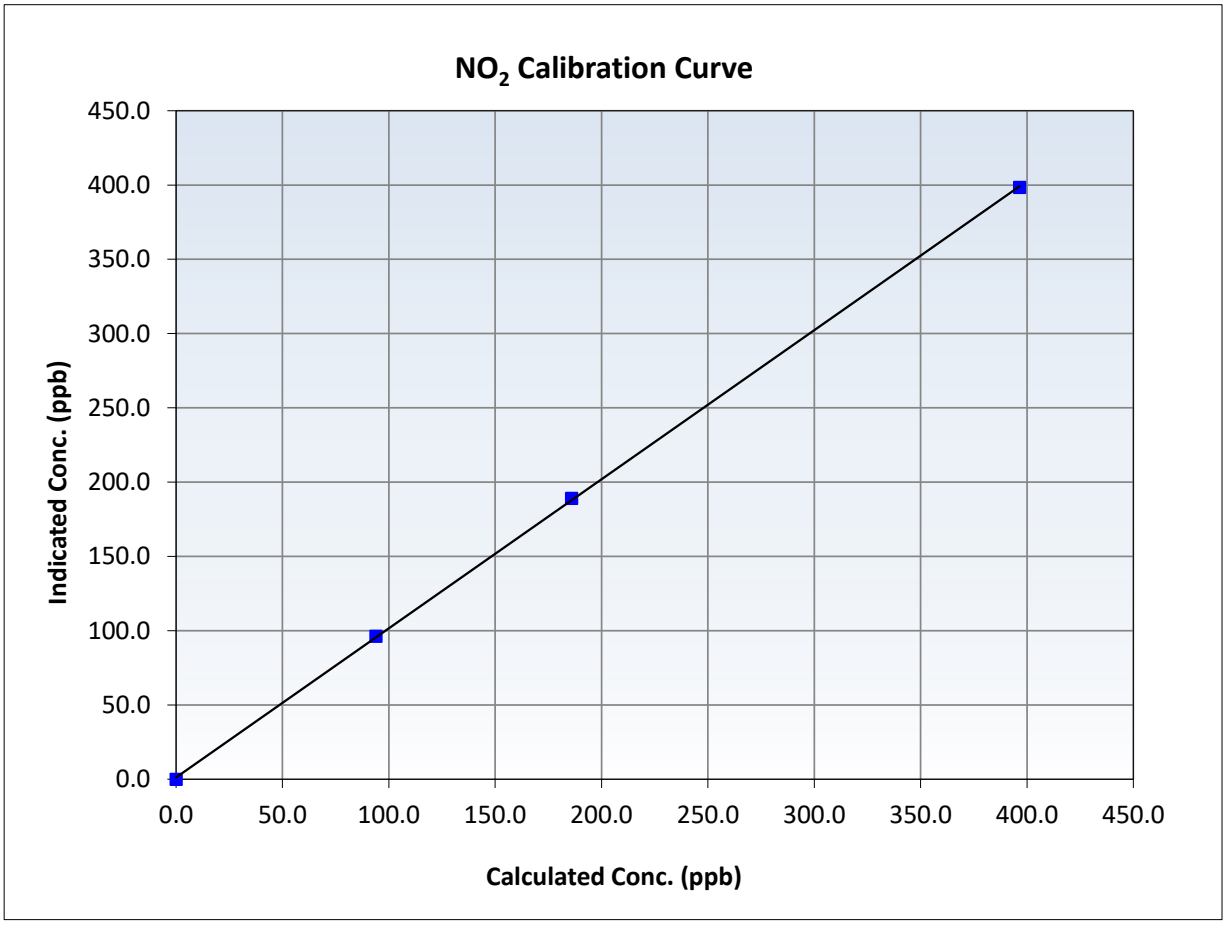
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 6, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	10:00	End Time (MST):	15:34
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153357

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
396.5	398.4	0.9953
185.9	189.0	0.9838
93.9	96.2	0.9765

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999954	*≥0.995*
Slope	1.003540	*0.90 - 1.10*
Intercept	1.199356	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

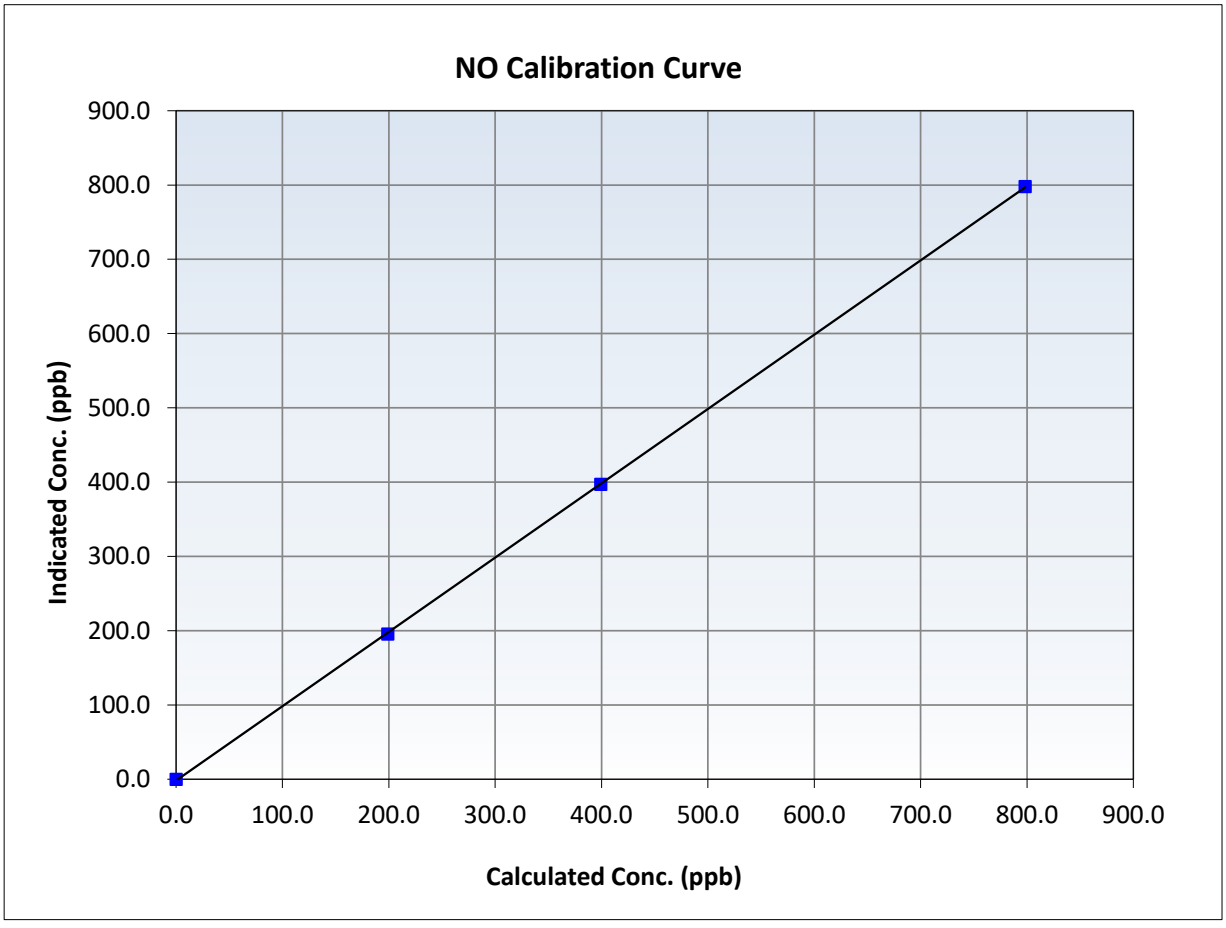
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 6, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	10:00	End Time (MST):	15:34
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153357

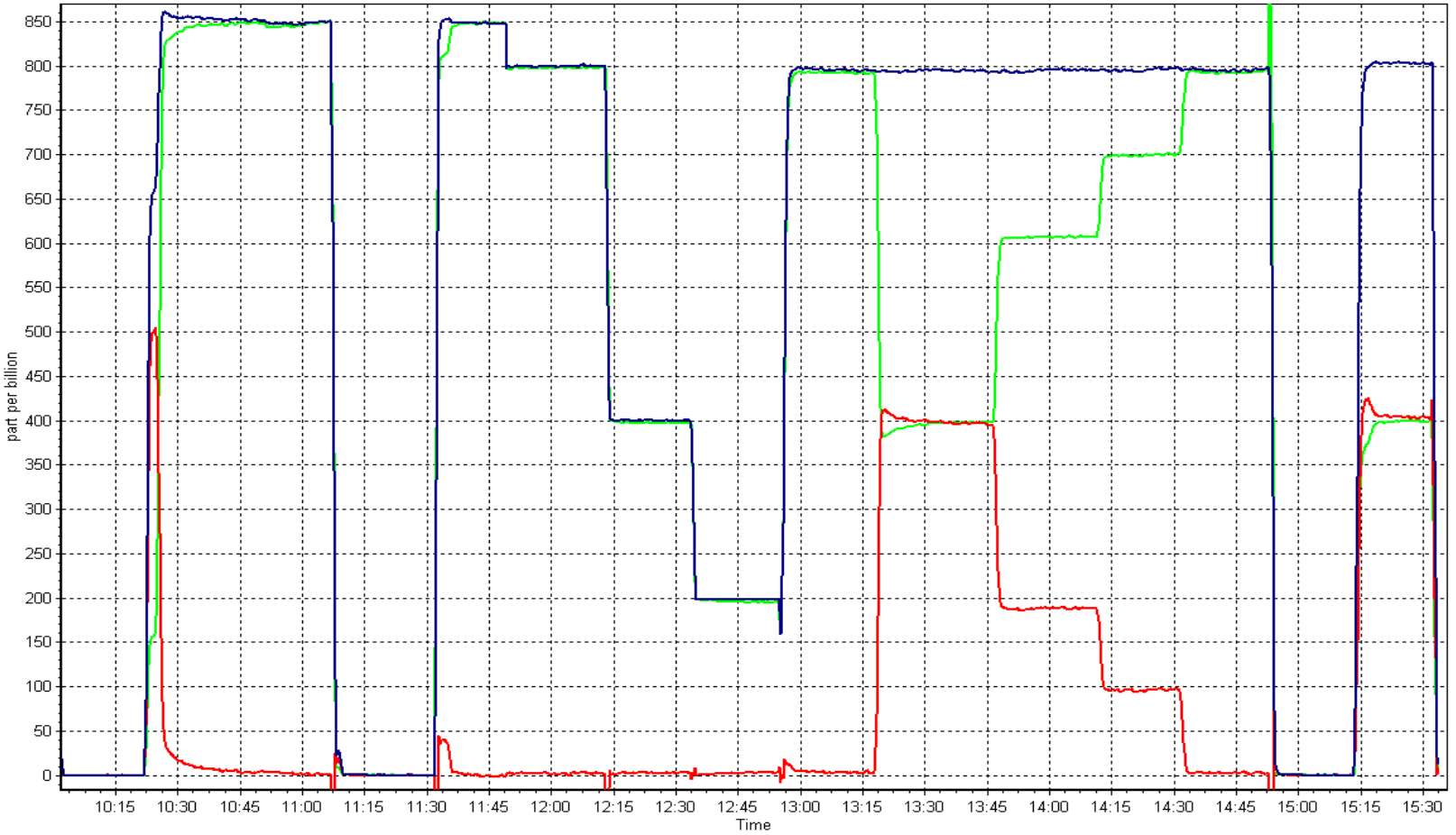
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
798.4	797.8	1.0008
399.2	397.0	1.0055
199.1	195.5	1.0184

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999978	*≥0.995*
Slope	1.000457	*0.90 - 1.10*
Intercept	-1.754537	*+/-20*



NO_X Calibration Plot Date: March 10, 2026 Location: Buffalo Viewpoint



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Buffalo Viewpoint	Station number:	AMS 04
Calibration Date:	March 5, 2026	Last Cal Date:	February 13, 2026
Start time (MST):	11:05	End time (MST):	14:04
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:	1.000114	1.002000	Backgd or Offset:	-0.2	-0.2
Calibration intercept:	-0.220000	0.300000	Coeff or Slope:	1.008	1.020

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	0.2	----
As found High point	5000	1071.2	400.0	396.1	1.010
As found Mid point					
As found Low point					
Baseline Corr As found:	395.9	Previous response	399.8	*% 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	

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	1072.6	400.0	401.1	0.997
Mid point	5000	864.1	200.0	200.6	0.997
Low point	5000	742.1	100.0	100.7	0.993
As left zero	5000	0.0	0.0	-0.1	----
As left span	5000	1072.4	400.0	404.7	0.988
				Average Correction Factor	0.996

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

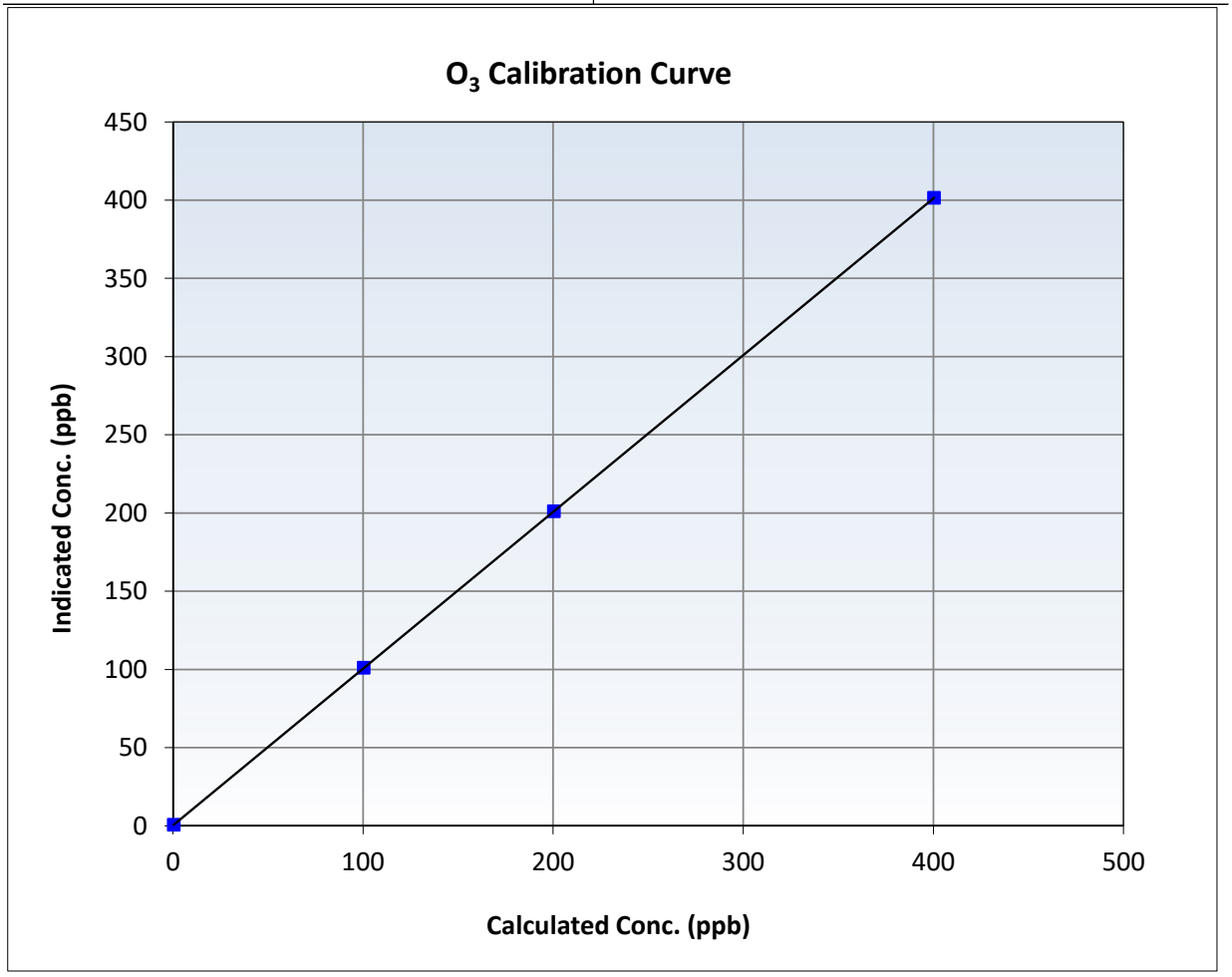
O_3 Calibration Summary

Station Information

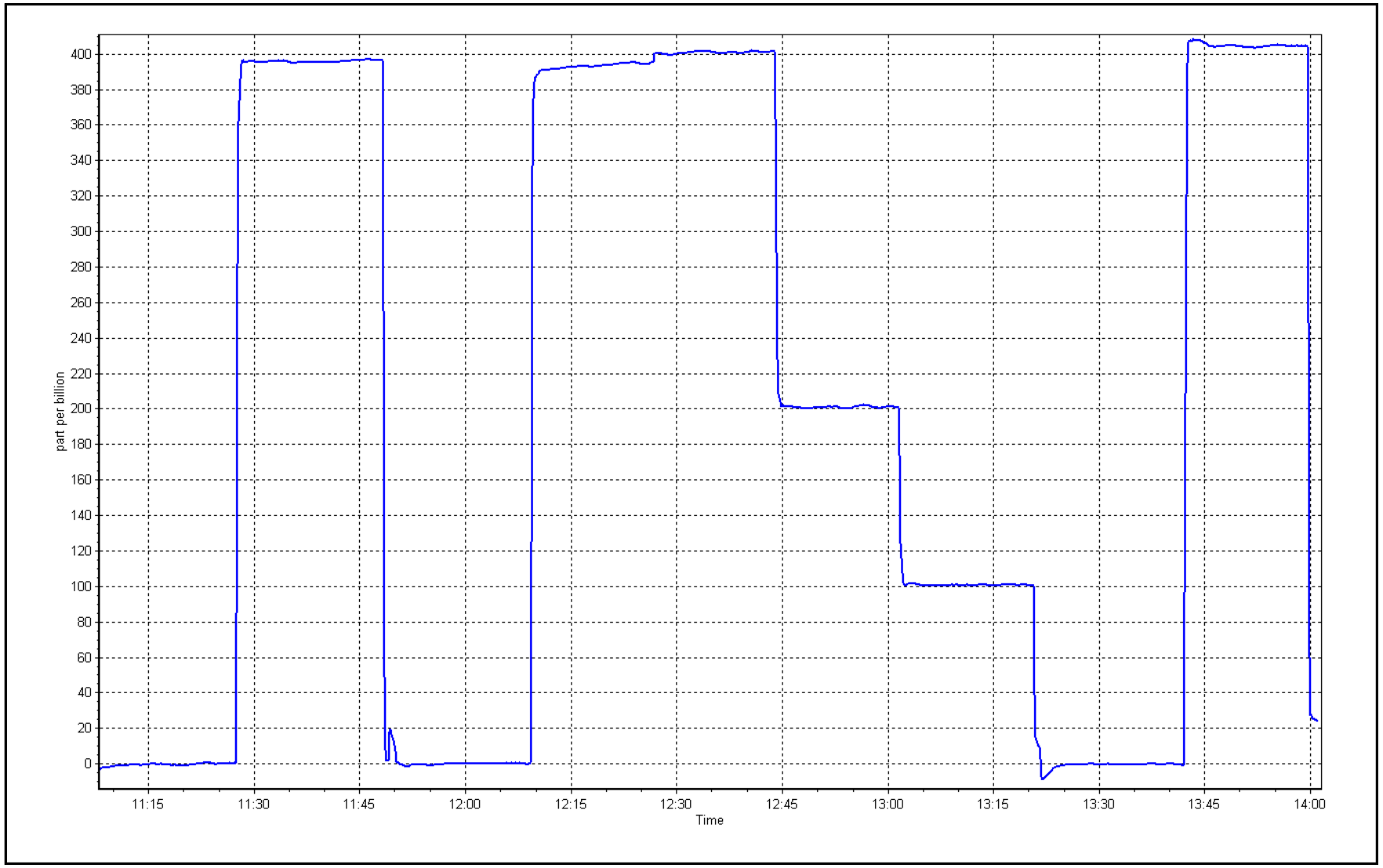
Calibration Date:	March 5, 2026	Previous Calibration:	February 13, 2026
Station Name:	Buffalo Viewpoint	Station Number:	AMS 04
Start Time (MST):	11:05	End Time (MST):	14:04
Analyzer make:	Teledyne API T400	Analyzer serial #:	2961

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.2	----	Correlation Coefficient	0.999999	*≥0.995*
400.0	401.1	0.9973	Slope	1.002000	*0.90 - 1.10*
200.0	200.6	0.9970			
100.0	100.7	0.9930	Intercept	0.300000	*+/- 5*



O_3 Calibration Plot Date: March 5, 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:	March 12, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	15:20	End time (MST):	17:18
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)	-15.8	-16.8	-15.8	☐	+/- 2 °C
P (mmHg)	734.3	733.6	734.3	☐	+/- 10 mmHg
Flow (LPM)	5.02	4.98	5.02	☐	+/- 0.25 LPM
PW% (pump)	40	-----	40	☐	>80%
Zero Verification	PM w/o HEPA:	4.1	PM w/ HEPA:	0.0	<0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

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

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test	N/A	10.8	10.8	☐	+/- 0.5

Date Optical Chamber Cleaned: March 12, 2026

Date Disposable Filter Changed: March 12, 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

Notes: Quarterly checks done. DFU filter replaced.

Calibration by: Aswin Sasi Kumar

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS05
MANNIX
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	March 5, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	12:18	End time (MST):	15:57
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:	0.998551	1.003307	Backgd or Offset:	10.6	10.5
Calibration intercept:	-1.216163	-1.456869	Coeff or Slope:	0.933	0.923

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	810.9	0.987
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	810.8	Previous response	797.6	*% change	1.6%
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	79.9	800.0	802.0	0.997
Mid point	4960	40.0	400.5	399.6	1.002
Low point	4980	20.0	200.2	197.6	1.013
As left zero	5000	0.0	0.0	0.4	----
As left span	4920	79.9	800.0	802.8	0.996
				Average Correction Factor:	1.004

Notes: Inlet filter was changed after the as founds. Adjusted the span.

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

SO_2 Calibration Summary

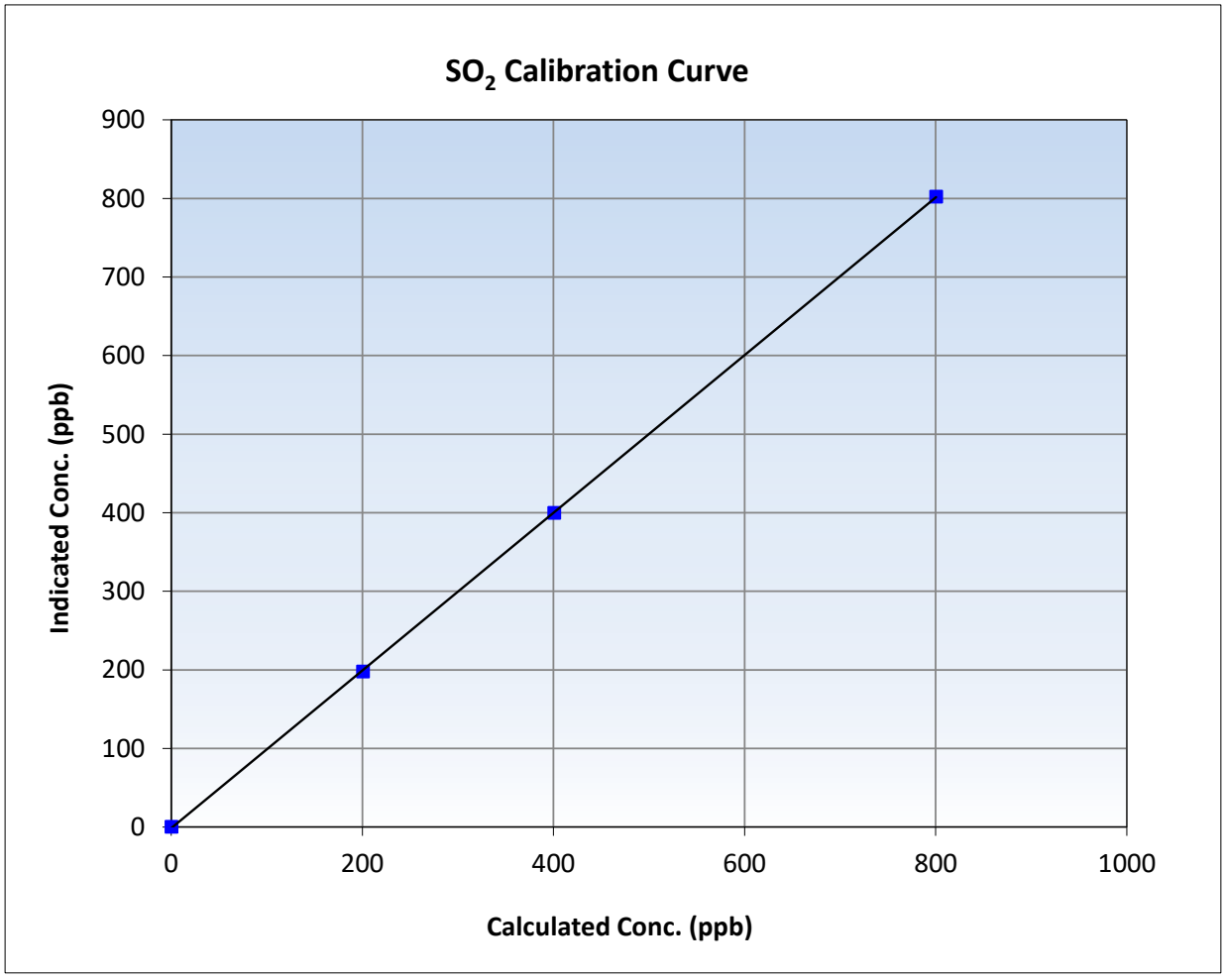
Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	12:18	End Time (MST):	15:57
Analyzer make:	Thermo 43i	Analyzer serial #:	1008841399

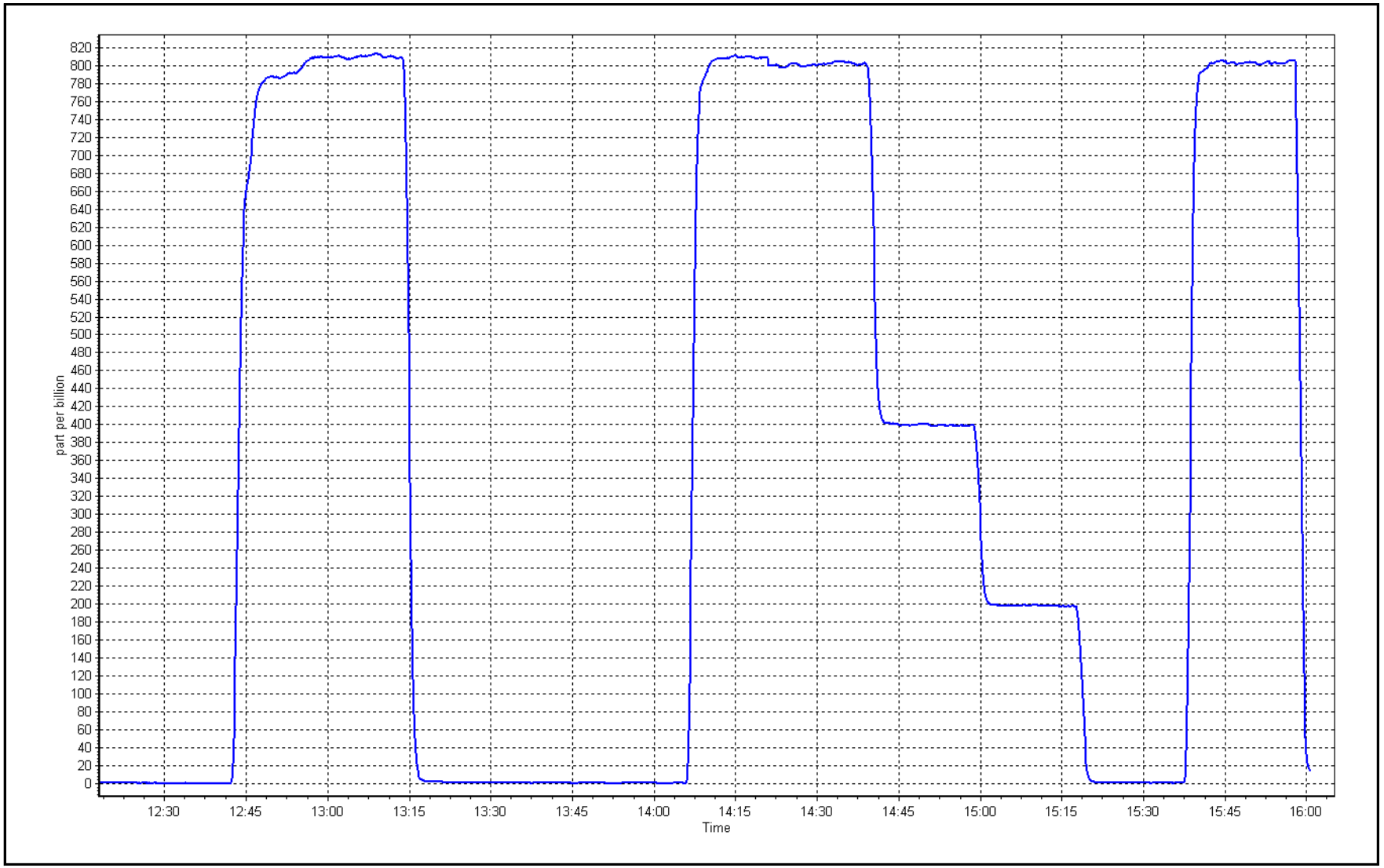
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.0	802.0	0.9975
400.5	399.6	1.0022
200.2	197.6	1.0134

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999978	*≥0.995*
Slope	1.003307	*0.90 - 1.10*
Intercept	-1.456869	*+/-30*



SO2 Calibration Plot Date: March 5, 2026 Location: Mannix



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	March 11, 2026	Last Cal Date:	February 17, 2026
Start time (MST):	10:45	End time (MST):	14:53
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:	0.983106	0.994255	Backgd or Offset:	1.26	1.24
Calibration intercept:	0.522565	0.182443	Coeff or Slope:	1.040	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	81.3	0.985
As found Mid point	4960	40.3	40.0	40.9	0.980
As found Low point	4980	20.2	20.0	20.4	0.987
New cylinder response					
Baseline Corr As found:	81.2	Prev response:	79.13	*% change:	2.5%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.015986	AF Intercept:	0.122003
Baseline Corr 3rd AF pt:	20.3	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	0.3	----
High point	4919	80.6	80.0	79.7	1.003
Mid point	4960	40.3	40.0	40.0	0.999
Low point	4980	20.2	20.0	19.9	1.007
As left zero	5000	0.0	0.0	0.4	----
As left span	4919	80.6	80.0	79.7	1.003
SO2 Scrubber Check	4920	80.3	803.0	0.1	----
Date of last scrubber change:				Ave Corr Factor	1.003
Date of last converter efficiency test:					

Notes: Changed the inlet filter and performed an SO2 scrubber check after the as founds. Adjusted the span.

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

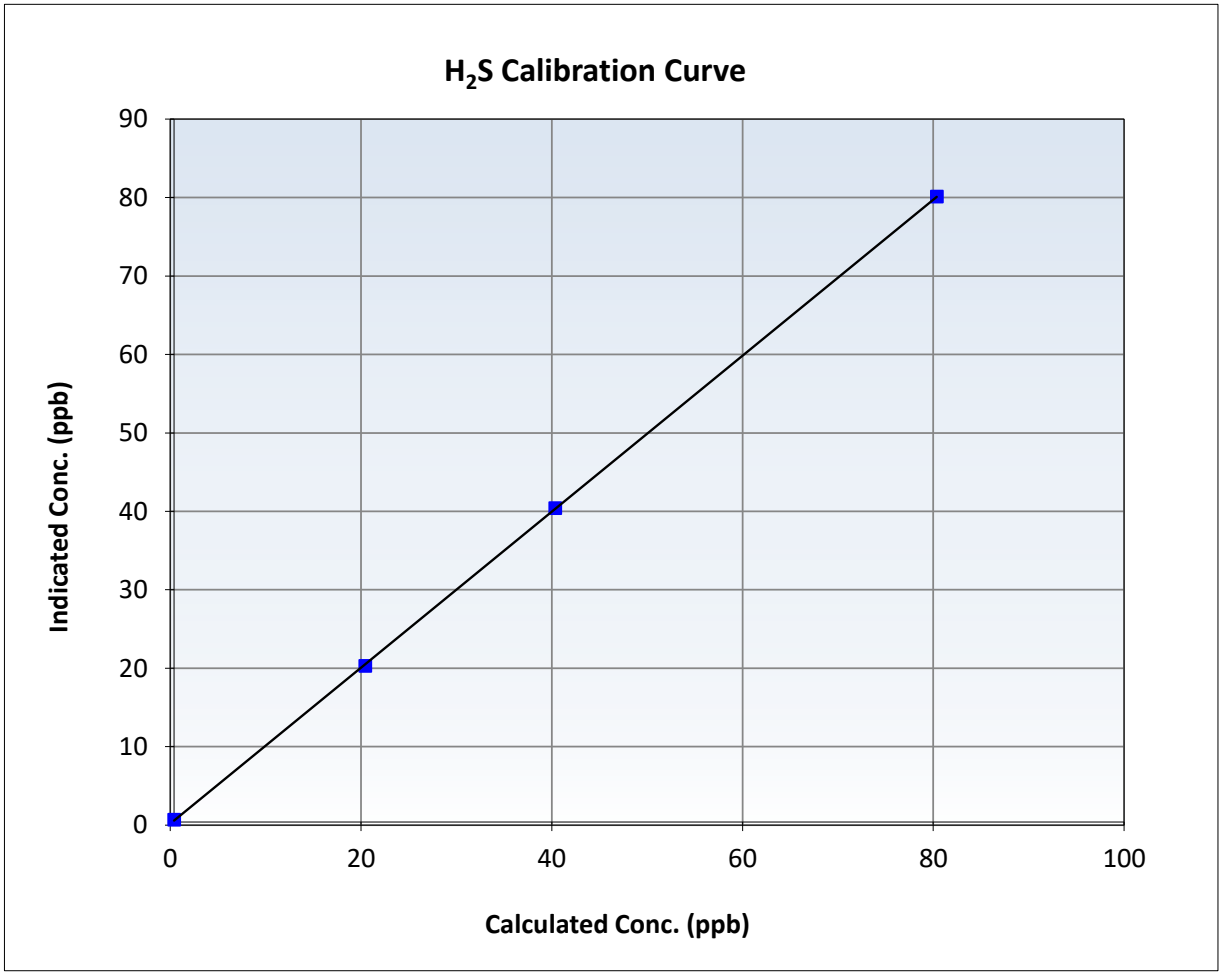
H_2S Calibration Summary

Station Information

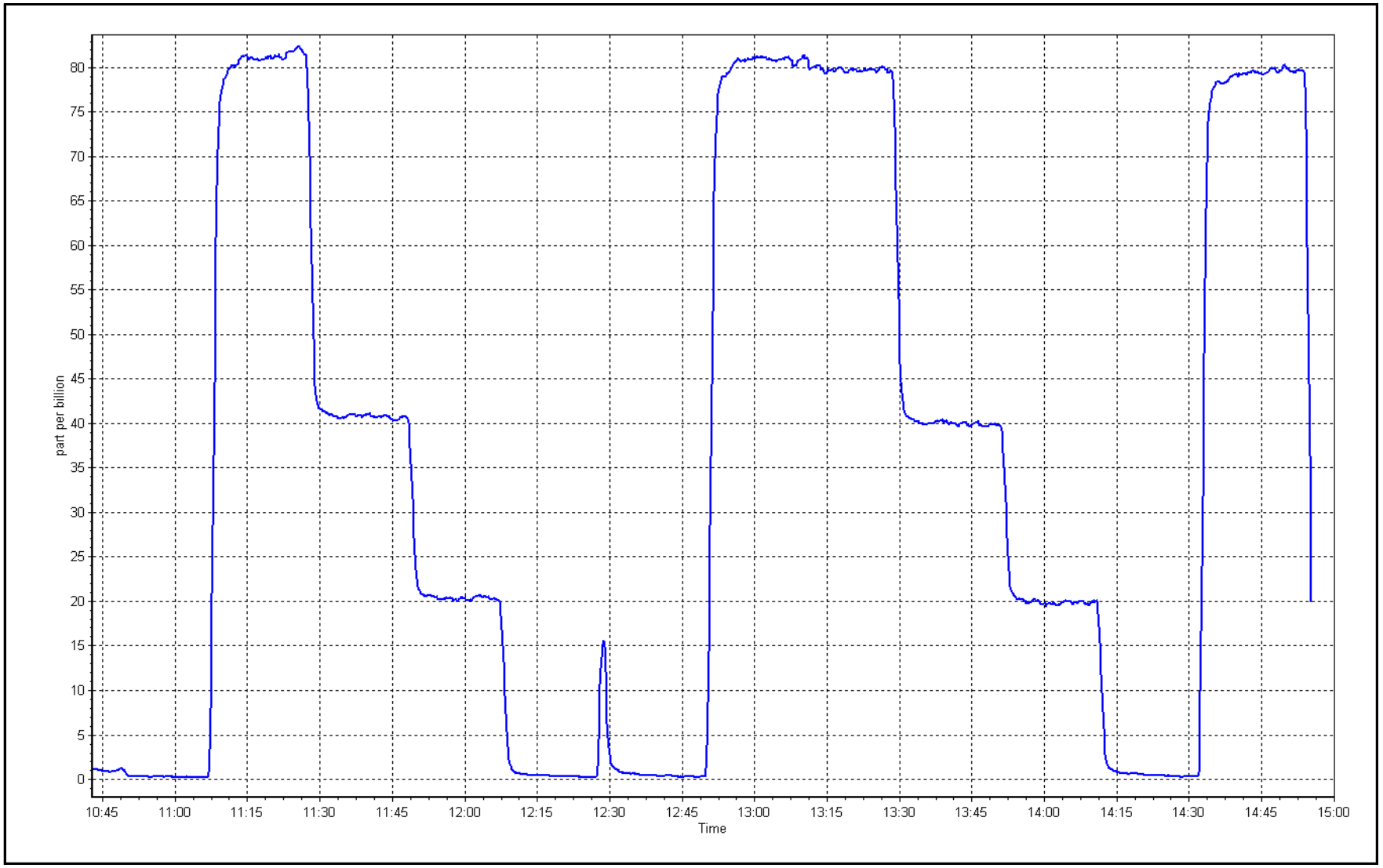
Calibration Date:	March 11, 2026	Previous Calibration:	February 17, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	10:45	End Time (MST):	14:53
Analyzer make:	Thermo 43iQ	Analyzer serial #:	1200326169

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.3	----	Correlation Coefficient	0.999982	*≥0.995*
80.0	79.7	1.0033	Slope	0.994255	*0.90 - 1.10*
40.0	40.0	0.9994			
20.0	19.9	1.0069	Intercept	0.182443	*+/-3*



H_2S Calibration Plot Date: March 11, 2026 Location: Mannix



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Mannix	Station number:	AMS 05
Calibration Date:	March 5, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	12:18	End time (MST):	15:57
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:	2.57E-04	2.71E-04	NMHC SP Ratio:	5.07E-05	5.15E-05
CH4 Retention time:	13.7	13.7	NMHC Peak Area:	172571	170052
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	79.9	16.74	16.17	1.035
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.17	Prev response	16.70	*% change	-3.3%
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	79.9	16.74	16.76	0.999
Mid point	4960	40.0	8.38	8.35	1.004
Low point	4980	20.0	4.19	4.16	1.007
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	16.74	16.82	0.995
				Average Correction Factor	1.003

Notes: Inlet filter and N2/H2 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	8.47	1.032
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.47	Prev response	8.74	*% change	-3.1%
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	8.75	8.76	0.998
Mid point	4960	40.0	4.38	4.36	1.004
Low point	4980	20.0	2.19	2.17	1.010
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	8.75	8.80	0.993
				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	79.9	7.99	7.70	1.039
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.70	Prev response	7.96	*% change	-3.4%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	79.9	7.99	8.00	0.999
Mid point	4960	40.0	4.00	3.99	1.004
Low point	4980	20.0	2.00	1.99	1.004
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.9	7.99	8.02	0.997
				Average Correction Factor	1.002

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.997062	1.001804
THC Cal Offset:	0.008081	-0.022914
CH4 Cal Slope:	0.994835	1.000593
CH4 Cal Offset:	0.007436	-0.006964
NMHC Cal Slope:	0.998981	1.002702
NMHC Cal Offset:	0.001844	-0.015151

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

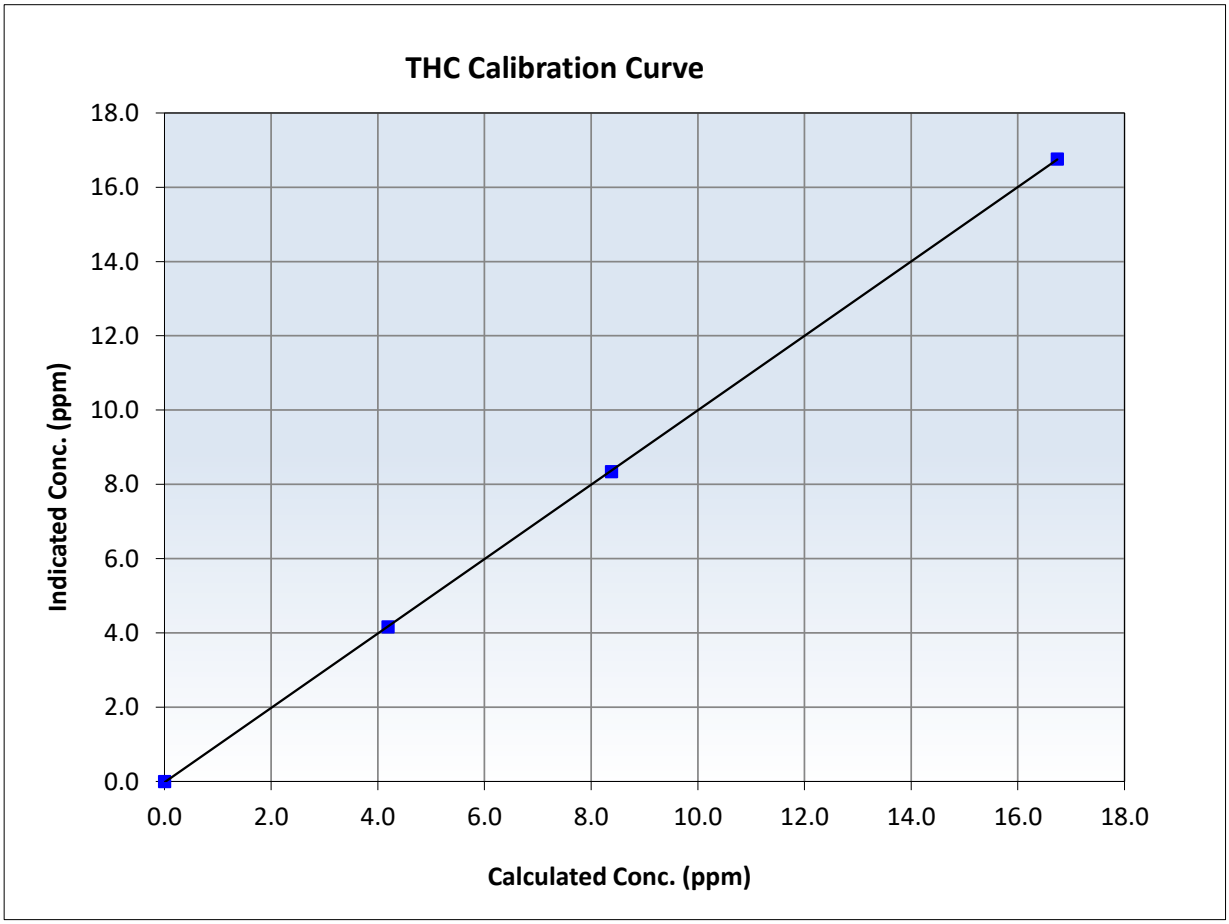
THC Calibration Summary

Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	12:18	End Time (MST):	15:57
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	16.76	0.9986	Slope	1.001804	0.90 - 1.10
8.38	8.35	1.0041	Intercept	-0.022914	+/-0.5
4.19	4.16	1.0068			



Wood Buffalo Environmental Association

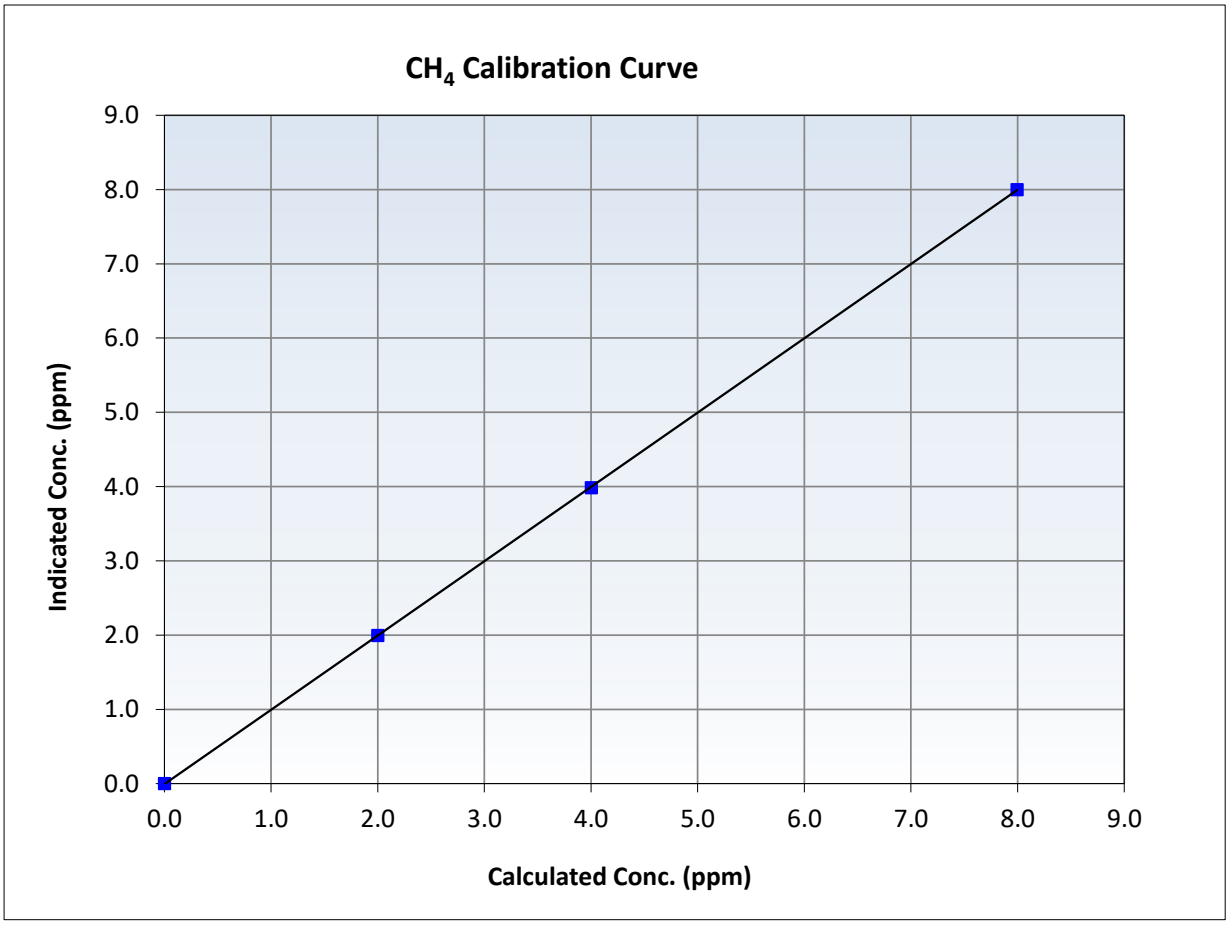
CH_4 Calibration Summary

Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	12:18	End Time (MST):	15:57
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	0.999993	≥0.995
7.99	8.00	0.9995	Slope	1.000593	0.90 - 1.10
4.00	3.99	1.0041	Intercept	-0.006964	+/-0.5
2.00	1.99	1.0036			



Wood Buffalo Environmental Association

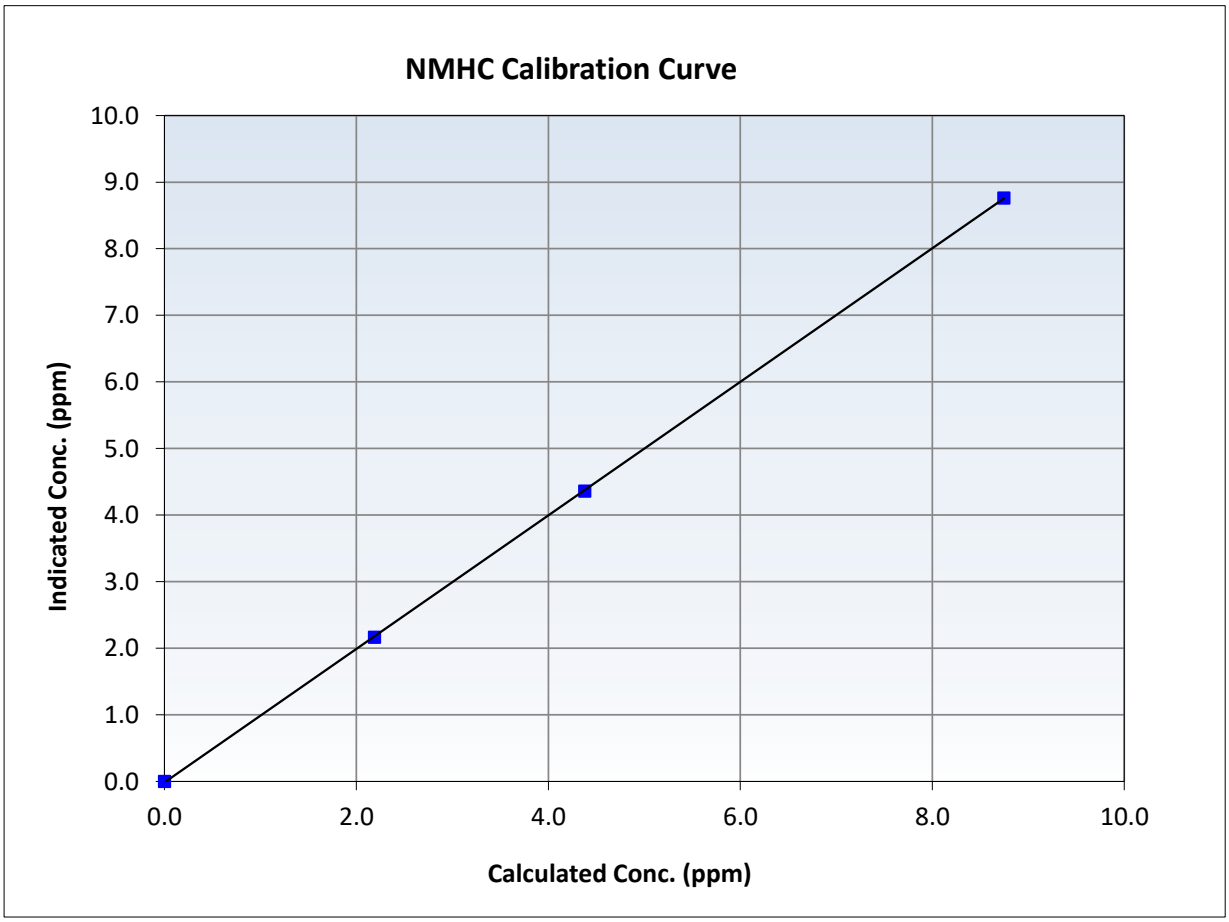
NMHC Calibration Summary

Station Information

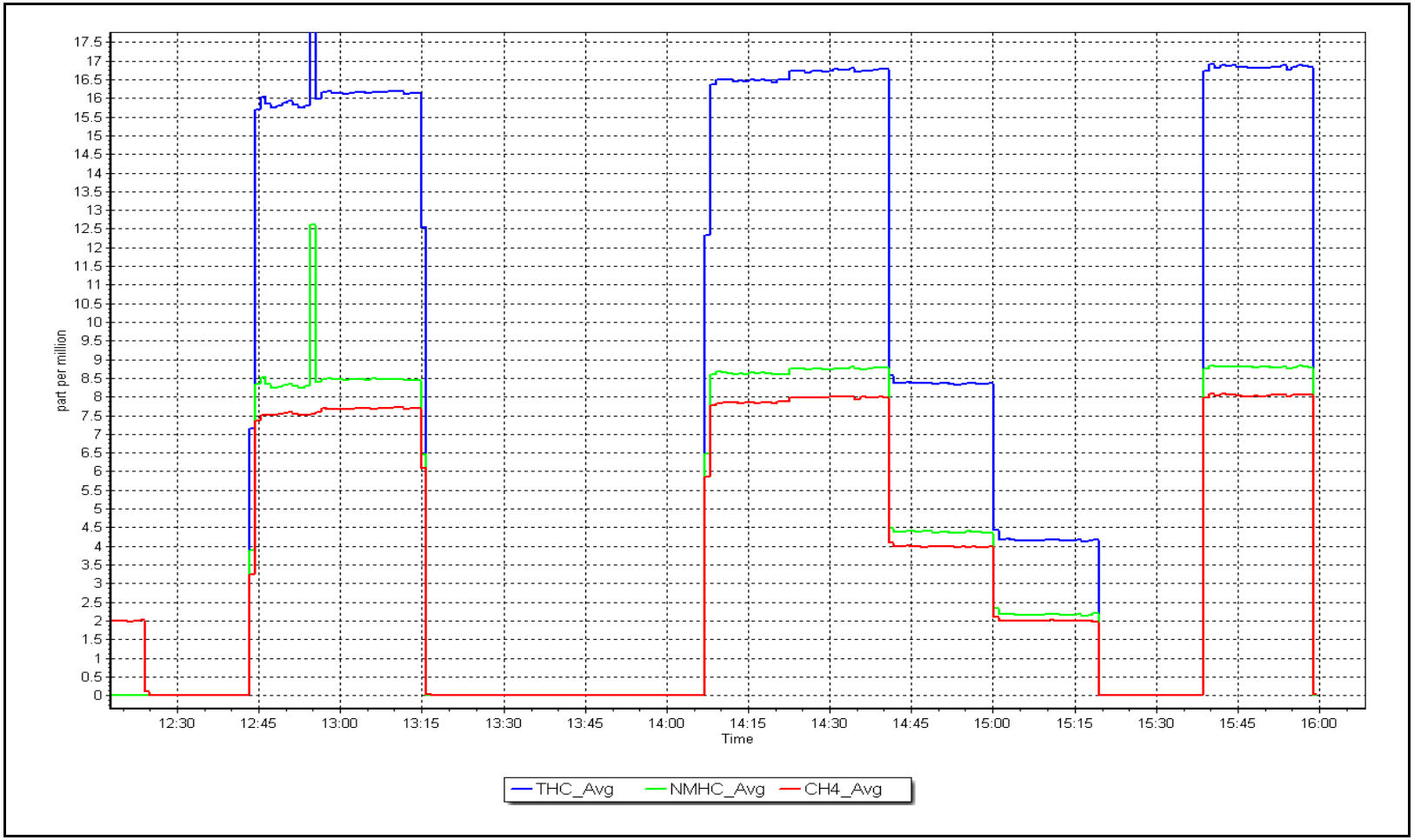
Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Mannix	Station Number:	AMS 05
Start Time (MST):	12:18	End Time (MST):	15:57
Analyzer make:	Thermo 55i	Analyzer serial #:	15005164381

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999985	≥0.995
8.75	8.76	0.9980	Slope	1.002702	0.90 - 1.10
4.38	4.36	1.0037			
2.19	2.17	1.0097	Intercept	-0.015151	+/-0.5



NMHC Calibration Plot Date: March 5, 2026 Location: Mannix



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS06
PATRICIA MCINNES
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	March 3, 2026	Last Cal Date:	February 6, 2026
Start time (MST):	11:03	End time (MST):	14:32
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1160290013	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001577	0.996076	Backgd or Offset:	18.6	18.4
Calibration intercept:	-0.495566	-0.616870	Coeff or Slope:	0.913	0.913

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	80.2	803.3	799.5	1.004
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	799.8	Previous response	804.0	*% 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	4920	80.2	803.3	799.7	1.004
Mid point	4960	40.2	402.6	400.4	1.006
Low point	4980	20.2	202.3	200.1	1.011
As left zero	5000	0.0	0.0	0.0	----
As left span	4920	80.2	803.3	802.9	1.000
				Average Correction Factor:	1.007

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

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

SO_2 Calibration Summary

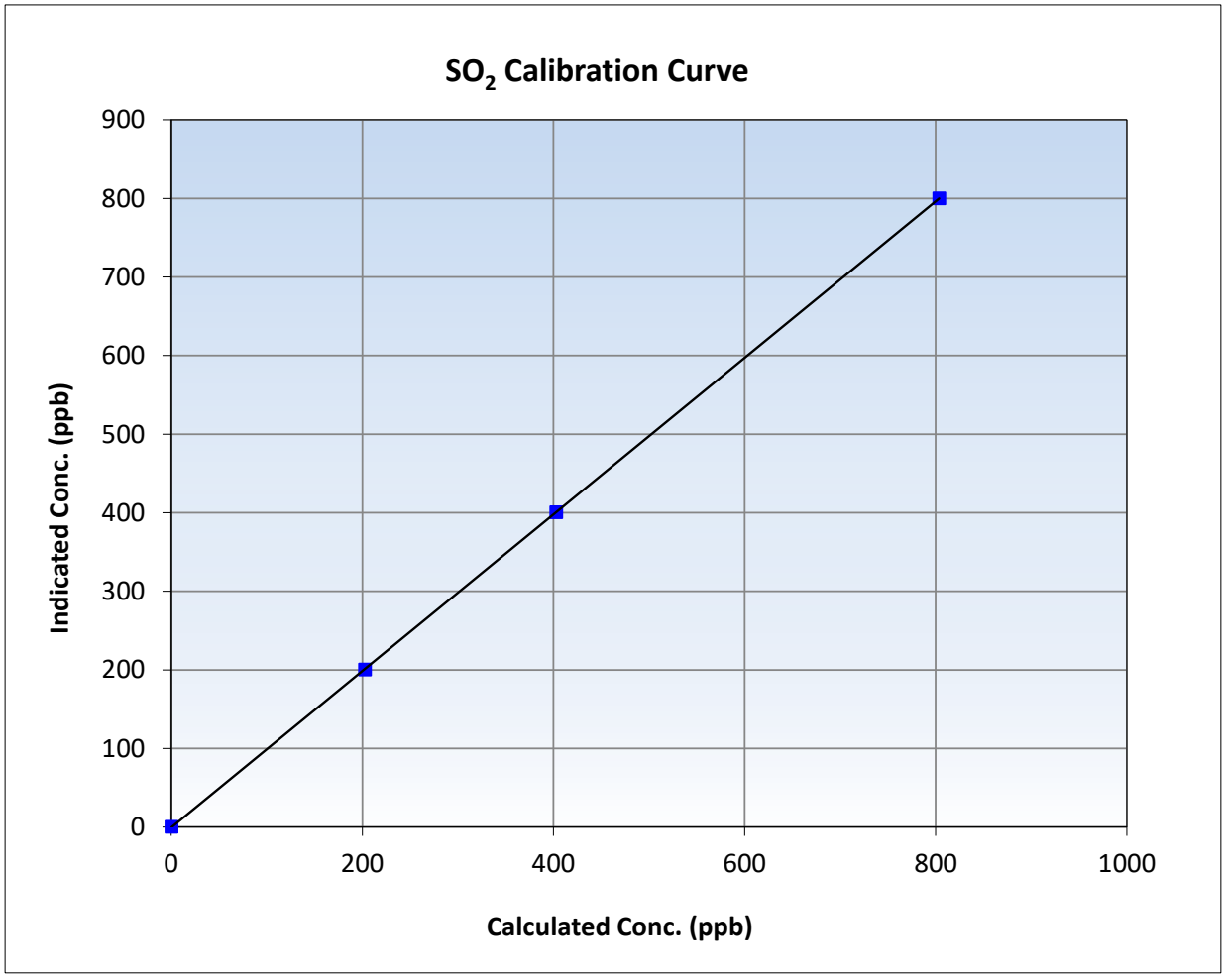
Station Information

Calibration Date:	March 3, 2026	Previous Calibration:	February 6, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	11:03	End Time (MST):	14:32
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290013

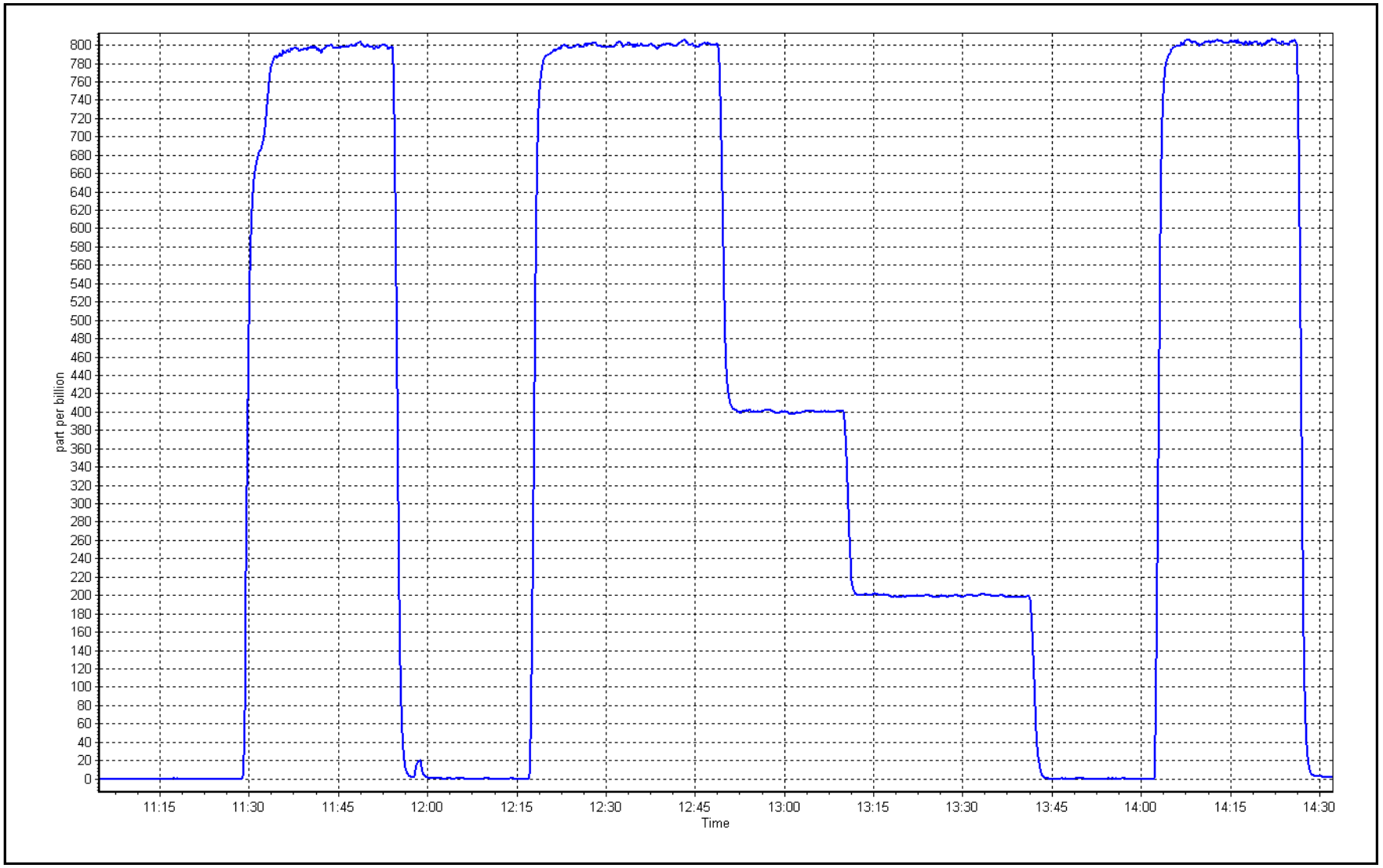
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
803.3	799.7	1.0044
402.6	400.4	1.0056
202.3	200.1	1.0111

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.996076	*0.90 - 1.10*
Intercept	-0.616870	*+/-30*



SO2 Calibration Plot Date: March 3, 2026 Location: Patricia McInnes



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	March 17, 2026	Last Cal Date:	February 5, 2026
Start time (MST):	9:25	End time (MST):	13:50
Reason:	Routine		

Calibration Standards

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

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.009690	1.010690	Backgd or Offset:	2.24	2.28
Calibration intercept:	-0.300000	-0.160000	Coeff or Slope:	1.115	1.115

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4916	84.0	80.0	82.2	0.972
As found Mid point	4958	42.0	40.0	41.4	0.963
As found Low point	4979	21.0	20.0	20.1	0.990
New cylinder response					

Baseline Corr As found:	82.3	Prev response:	80.44	*% change:	2.3%
Baseline Corr 2nd AF pt:	41.5	AF Slope:	1.031270	AF Intercept:	-0.180000
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999933	* = > +/-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	80.6	0.992
Mid point	4958	42.0	40.0	40.6	0.985
Low point	4979	21.0	20.0	19.6	1.020
As left zero	5000	0.0	0.0	0.0	----
As left span	4916	84.0	80.0	81.1	0.986
SO2 Scrubber Check				0.0	

Date of last scrubber change:	Monday, December 20, 2021	Ave Corr Factor	0.999
Date of last converter efficiency test:			

Notes: Sample inlet filter changed after multi point as founds. SOx scrubber ran after calibrator zero and it passed. No adjustments made.

Calibration Performed By: Parampreet Kaur

Wood Buffalo Environmental Association

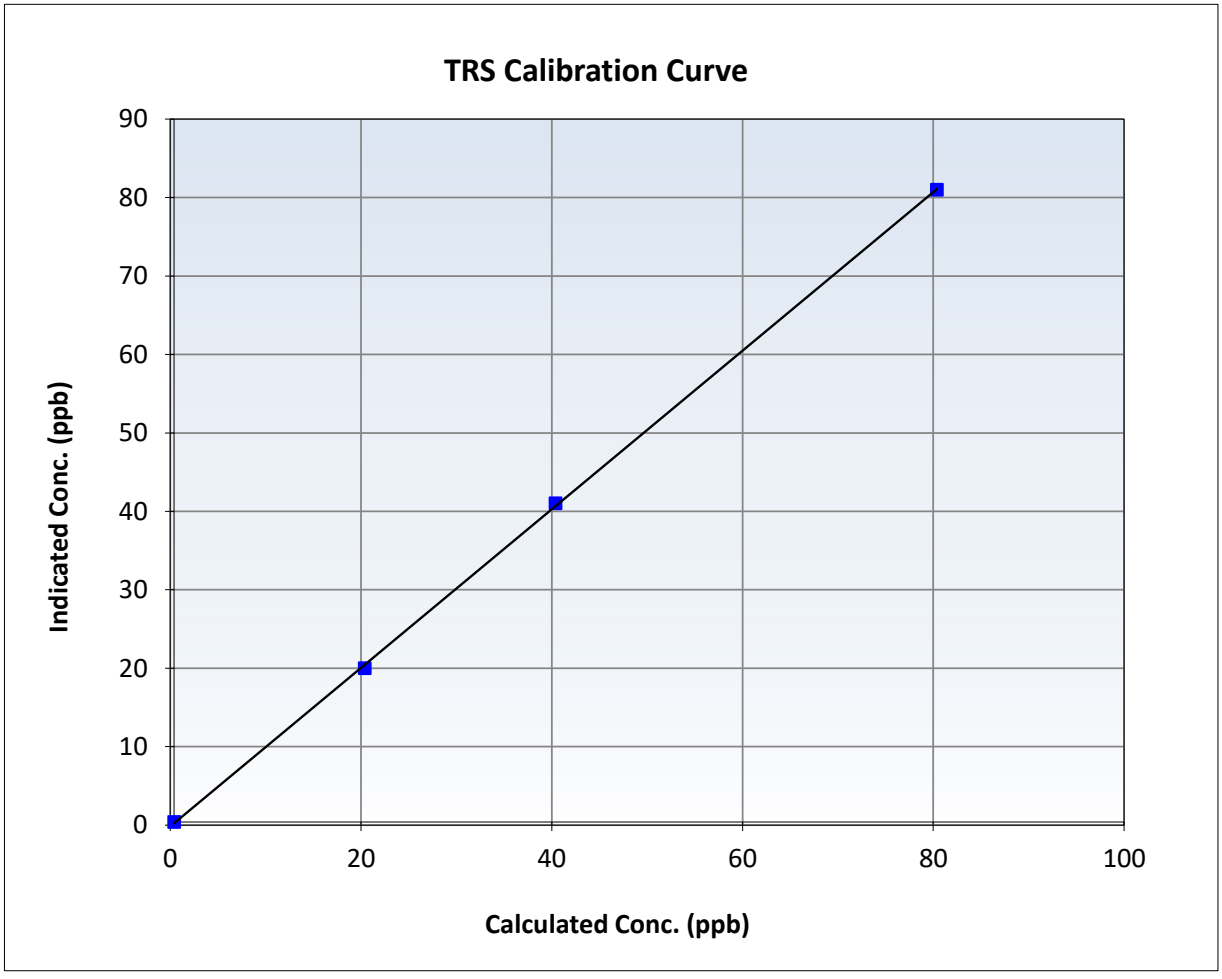
TRS Calibration Summary

Station Information

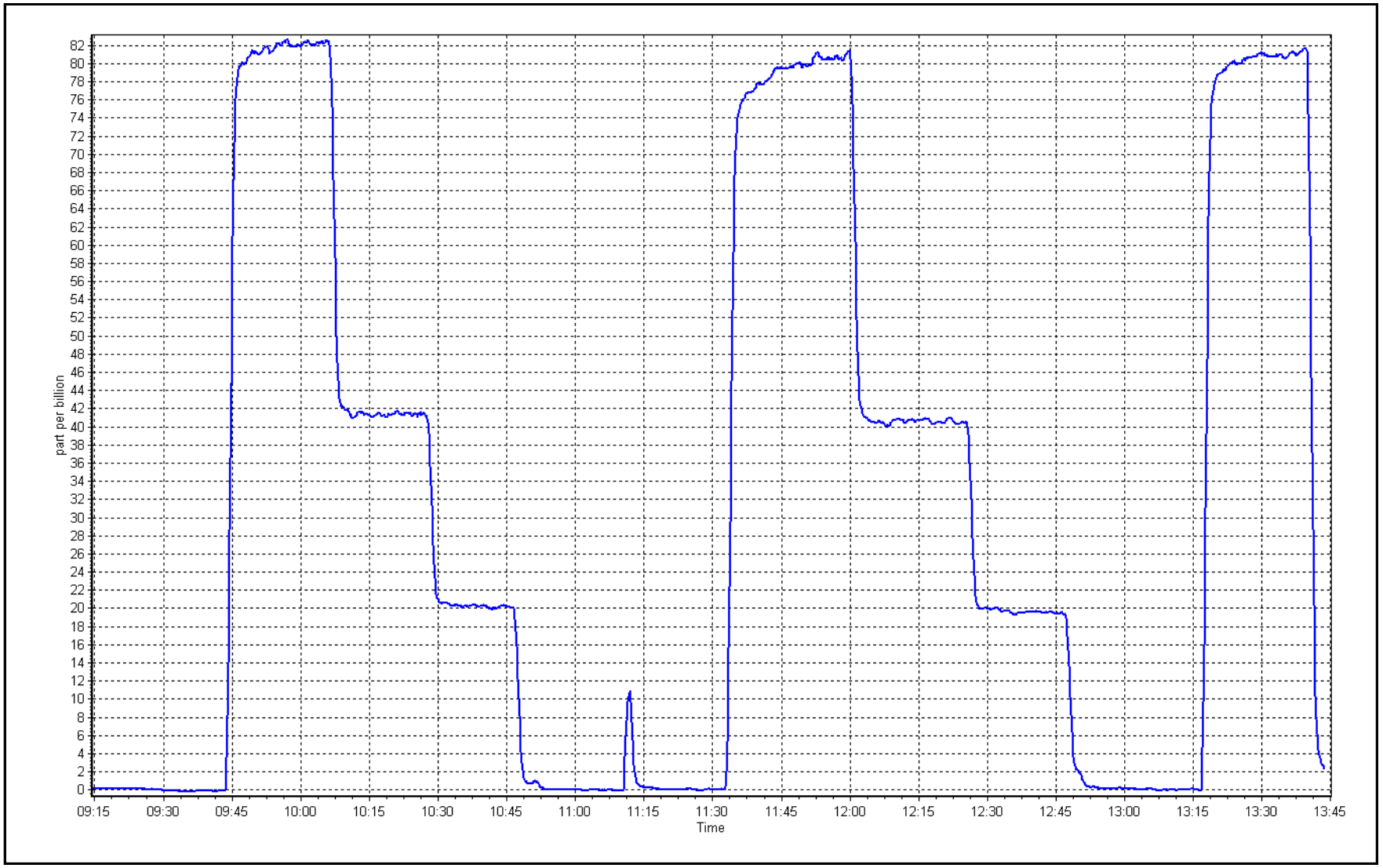
Calibration Date:	March 17, 2026	Previous Calibration:	February 5, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:25	End Time (MST):	13:50
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1218153358

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999902	*≥0.995*
80.0	80.6	0.9922	Slope	1.010690	*0.90 - 1.10*
40.0	40.6	0.9848			
20.0	19.6	1.0200	Intercept	-0.160000	*+/-3*



TRS Calibration Plot Date: March 17, 2026 Location: Patricia McInnes



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	March 20, 2026	Last Cal Date:	March 17, 2026
Start time (MST):	10:30	End time (MST):	13:10
Reason:	Install	Analyzer replacement calibration	

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:	Teledyne API T700		Serial Number:	3566
ZAG Make/Model:	Teledyne API T701		Serial Number:	4602

Analyzer Information

Analyzer make:	Thermo 43i TLE		Analyzer serial #:	1236656116
Converter make:	CDN-101		Converter serial #:	621
Analyzer Range	0 - 100 ppb		Converter Temp:	825 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.010690	0.997113	Backgd or Offset:		2.77
Calibration intercept:	-0.160000	-0.160000	Coeff or Slope:		1.208

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	4916	84.0	80.0	79.6	1.005
Mid point	4958	42.0	40.0	39.8	1.005
Low point	4979	21.0	20.0	19.5	1.025
As left zero	5000	0.0	0.0	-0.1	----
As left span	4916	84.0	80.0	79.3	1.008

SO2 Scrubber Check

Date of last scrubber change: Monday, December 20, 2021 Ave Corr Factor 1.011

Date of last converter efficiency test:

Notes: Analyzer replaced, the previous analyzer was non-responsive on arrival.

Calibration Performed By: Kelly Baragar

Wood Buffalo Environmental Association

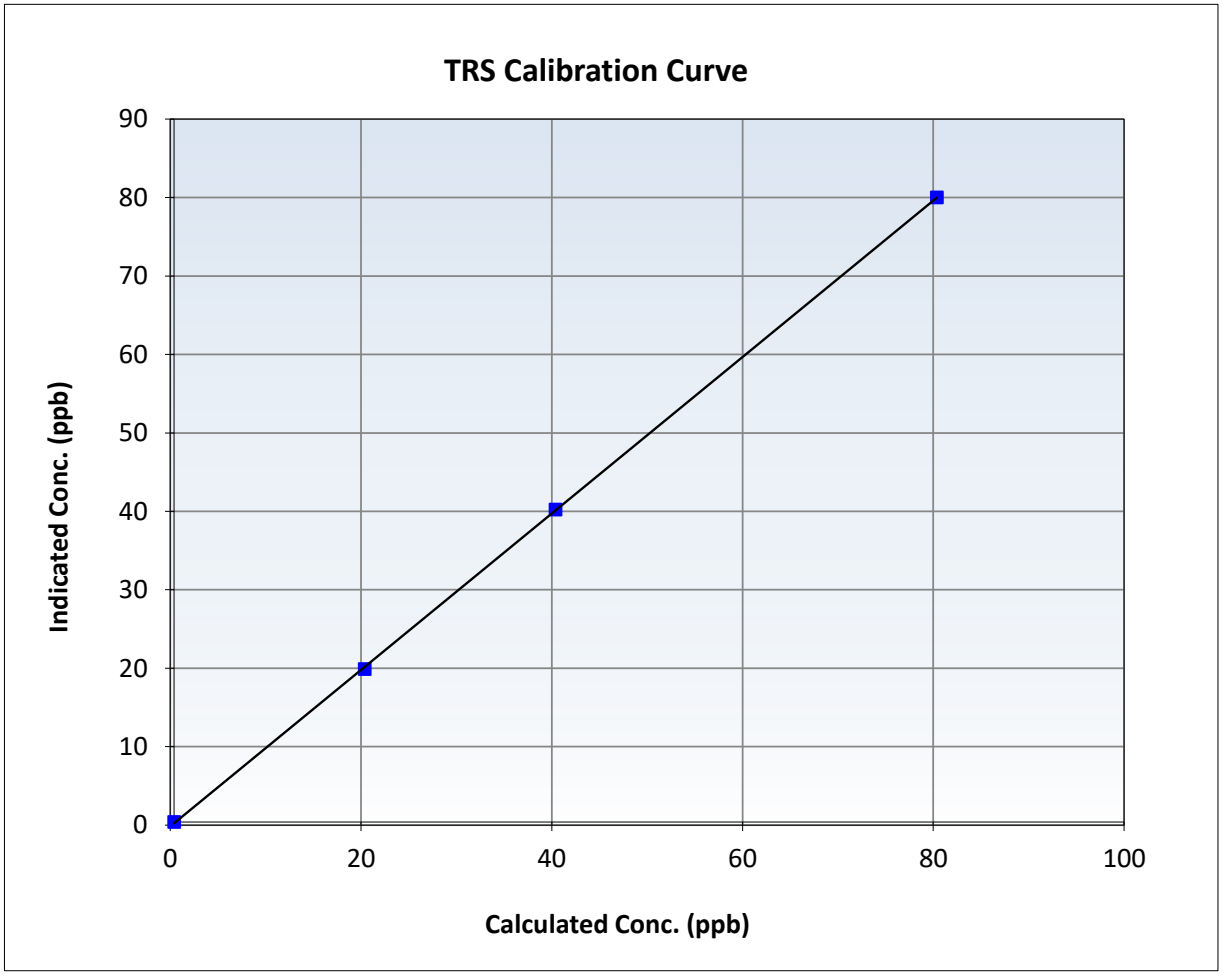
TRS Calibration Summary

Station Information

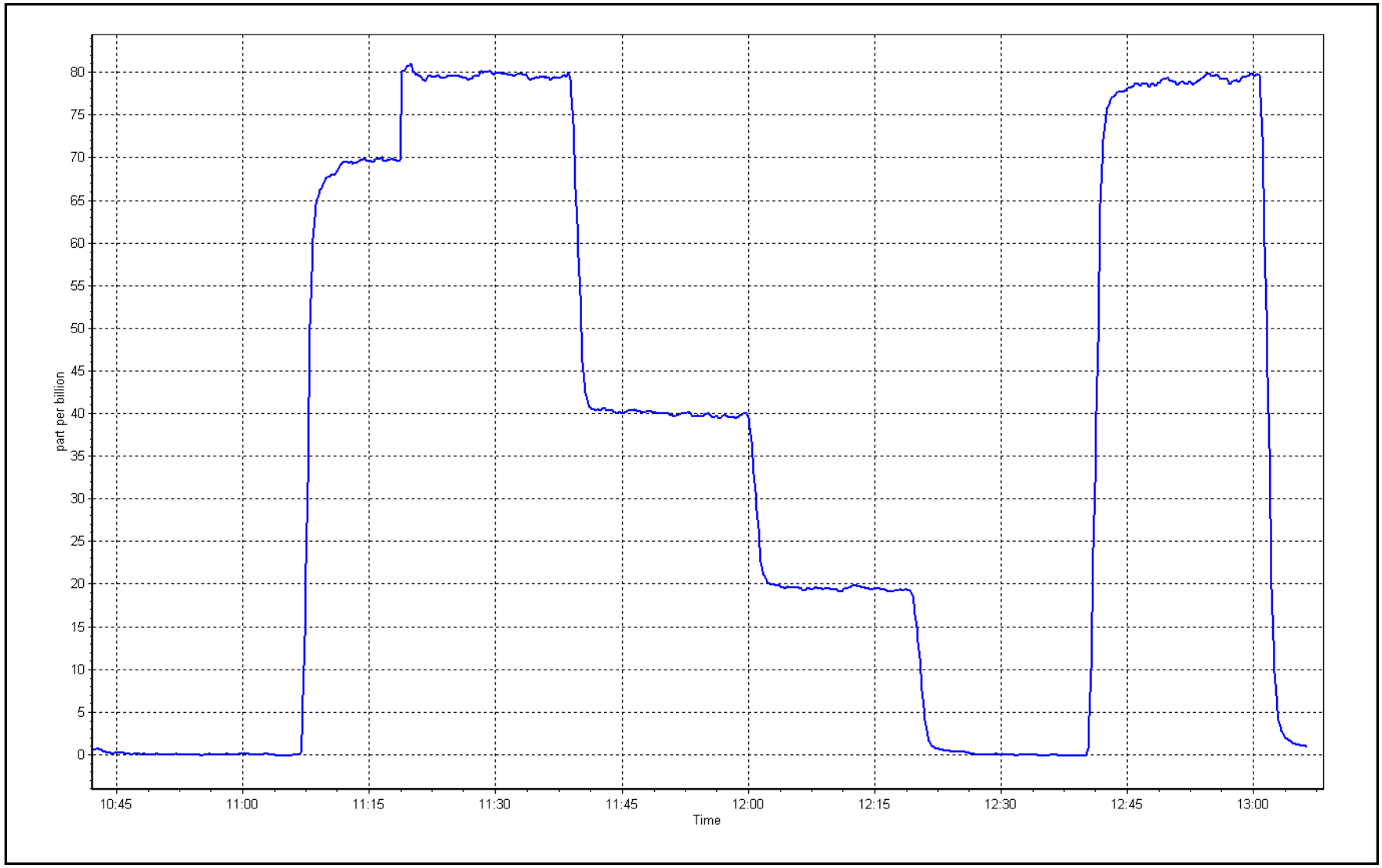
Calibration Date:	March 20, 2026	Previous Calibration:	March 17, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	10:30	End Time (MST):	13:10
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1236656116

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999968	*≥0.995*
80.0	79.6	1.0046	Slope	0.997113	*0.90 - 1.10*
40.0	39.8	1.0046			
20.0	19.5	1.0252	Intercept	-0.160000	*+/-3*



TRS Calibration Plot Date: March 20, 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:	March 3, 2026	Last Cal Date:	February 18, 2026
Start time (MST):	11:03	End time (MST):	16:08
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:	3566	
Zero Air Gen model:	API T701		Serial Number:	4602	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1118148494	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	2.60E-04	2.56E-04	NMHC SP Ratio:	5.22E-05	5.14E-05
CH4 Retention time:	14.2	14.2	NMHC Peak Area:	167538	170127
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	80.2	16.83	17.02	0.989
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	17.02	Prev response	16.88	*% change	0.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.2	16.83	16.71	1.008
Mid point	4960	40.2	8.44	8.36	1.009
Low point	4980	20.2	4.24	4.17	1.016
As left zero					
As left span					

Average Correction Factor: 1.011

Notes: Sample inlet filter was changed after as founds. Initial linearity of calibration following as founds were unlinear, adjusted carrier pressure to improve response. No as left zero and span 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	4920	80.2	8.79	8.88	0.990
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.88	Prev response	8.84	*% 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	4920	80.2	8.79	8.73	1.007
Mid point	4960	40.2	4.41	4.37	1.009
Low point	4980	20.2	2.21	2.19	1.011
As left zero					
As left span					
				Average Correction Factor	1.009

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	80.2	8.04	8.14	0.988
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.14	Prev response	8.04	*% 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	80.2	8.04	7.98	1.008
Mid point	4960	40.2	4.03	3.99	1.010
Low point	4980	20.2	2.03	1.98	1.023
As left zero					
As left span					
				Average Correction Factor	1.014

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.005554	0.993050
THC Cal Offset:	-0.044794	-0.017240
CH4 Cal Slope:	1.004986	0.993046
CH4 Cal Offset:	-0.043990	-0.012940
NMHC Cal Slope:	1.005838	0.993300
NMHC Cal Offset:	-0.001404	-0.004501

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

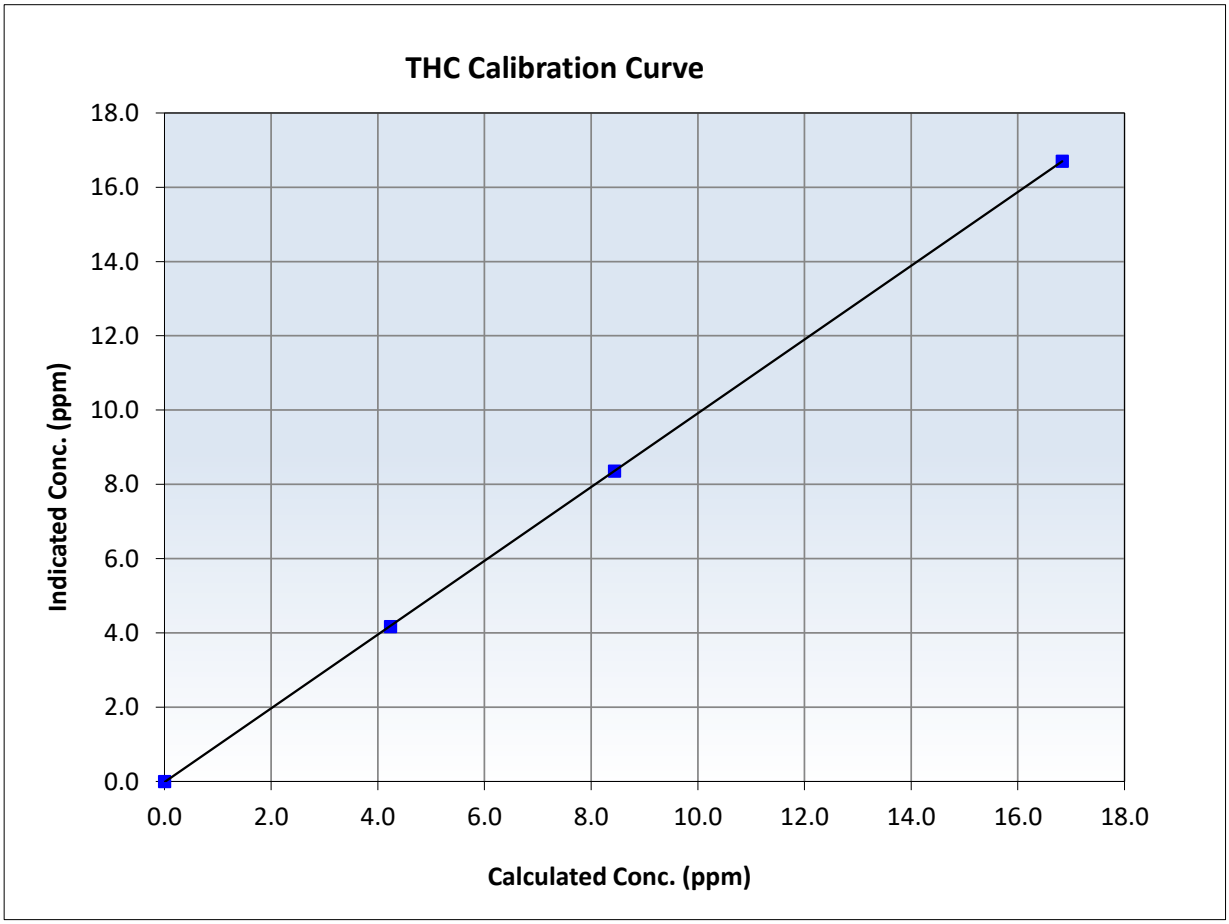
THC Calibration Summary

Station Information

Calibration Date:	March 3, 2026	Previous Calibration:	February 18, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	11:03	End Time (MST):	16:08
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
16.83	16.71	1.0077	Slope	0.993050	0.90 - 1.10
8.44	8.36	1.0093	Intercept	-0.017240	+/-0.5
4.24	4.17	1.0165			



Wood Buffalo Environmental Association

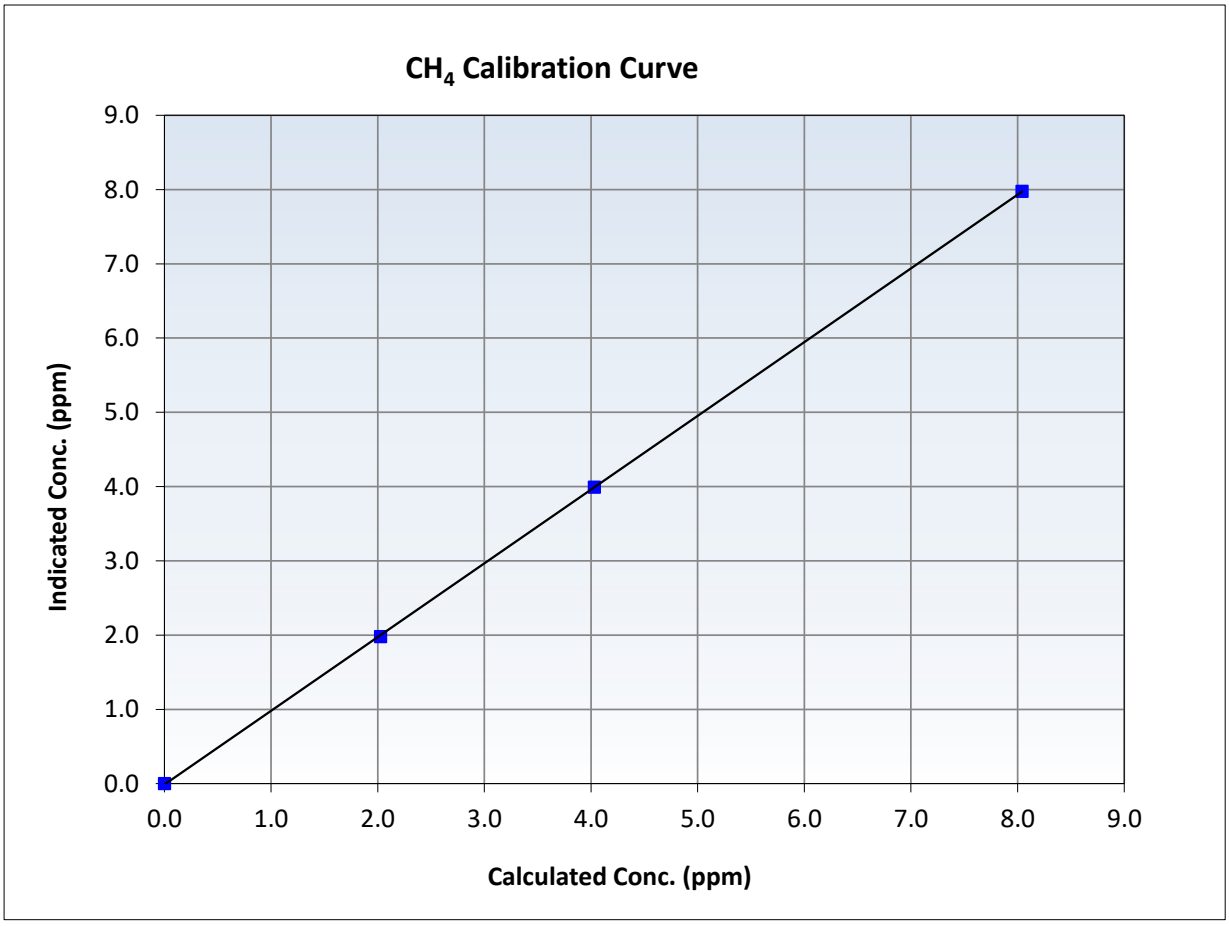
CH_4 Calibration Summary

Station Information

Calibration Date:	March 3, 2026	Previous Calibration:	February 18, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	11:03	End Time (MST):	16:08
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	0.999985	*≥0.995*
8.04	7.98	1.0082	Slope	0.993046	*0.90 - 1.10*
4.03	3.99	1.0098			
2.03	1.98	1.0230	Intercept	-0.012940	*+/-0.5*



Wood Buffalo Environmental Association

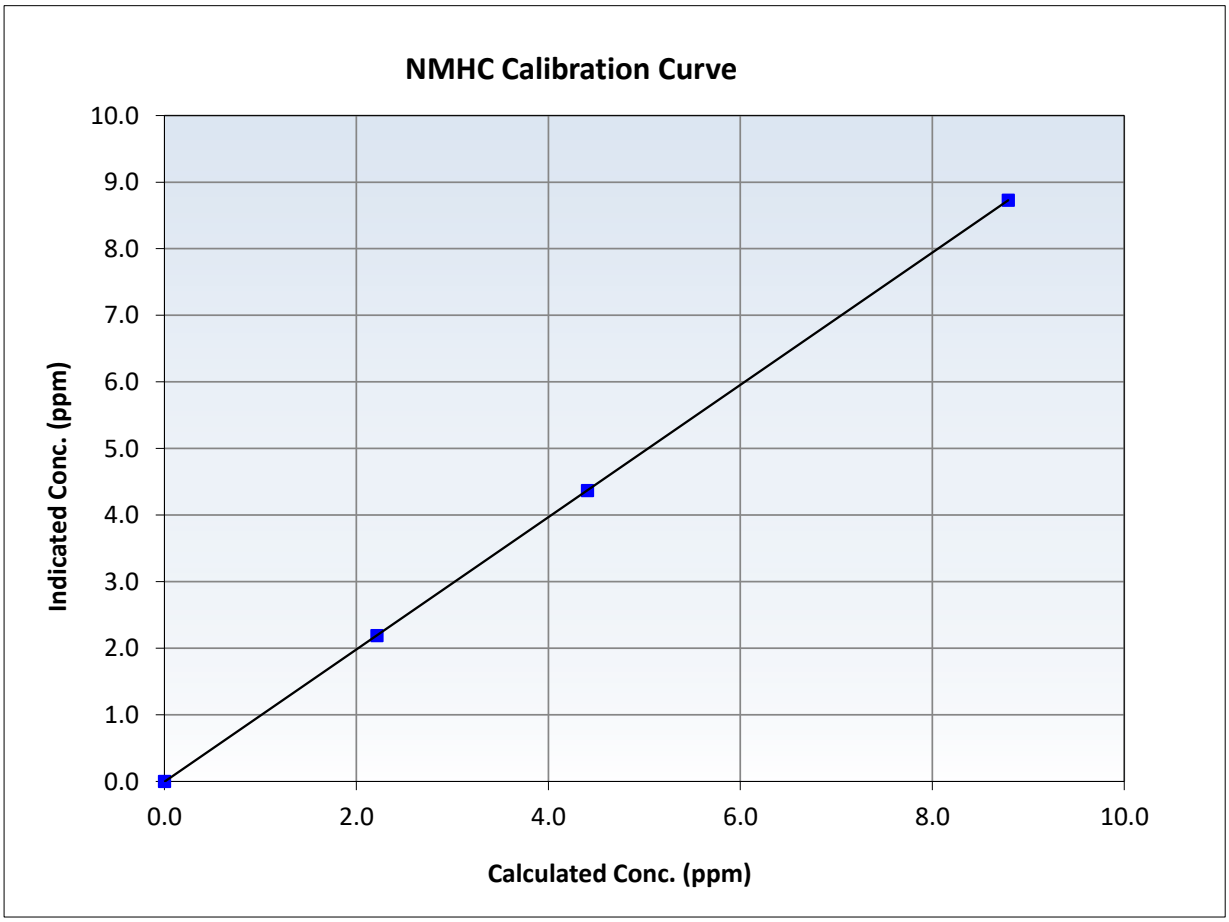
NMHC Calibration Summary

Station Information

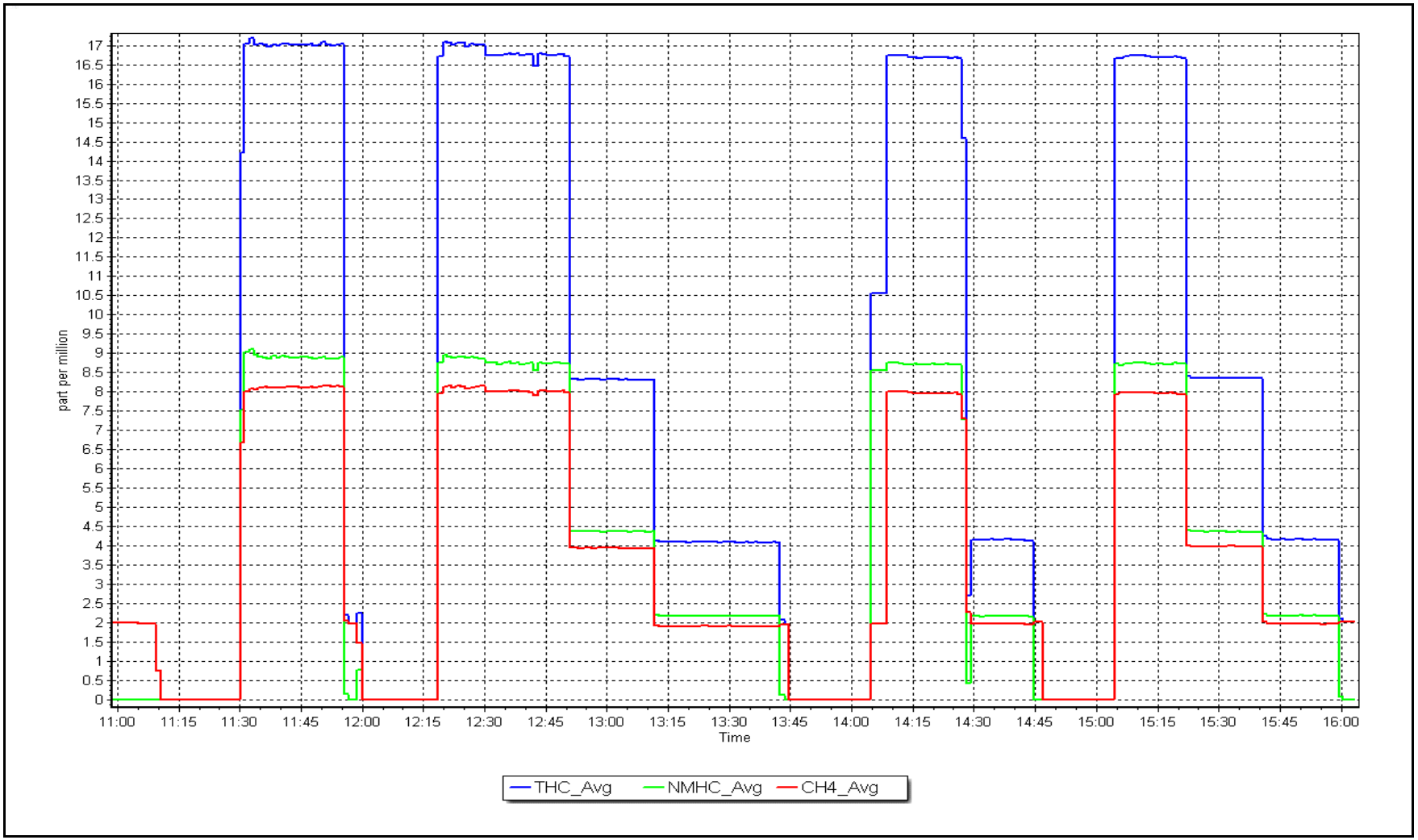
Calibration Date:	March 3, 2026	Previous Calibration:	February 18, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	11:03	End Time (MST):	16:08
Analyzer make:	Thermo 55i	Analyzer serial #:	1118148494

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
8.79	8.73	1.0070	Slope	0.993300	0.90 - 1.10
4.41	4.37	1.0085			
2.21	2.19	1.0106	Intercept	-0.004501	+/-0.5



NMHC Calibration Plot Date: March 3, 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:	March 13, 2026
Last Cal Date:	February 9, 2026
Start time (MST):	8:55
End time (MST):	13:58
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0036234	Cal Gas Expiry Date:	July 22, 2032
NOX Cal Gas Conc:	62.2 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	0.0	0.1	-0.1	----	----
AF High point	4935	64.6	803.7	799.8	3.9	812.1	802.6	9.6	0.9896	0.9967
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 805.6 ppb	NO = 799.2 ppb
Baseline Corr 1st pt	NO_X = 812.1 ppb	NO = 802.5 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 = 0.8%

*Percent Change NO = 0.4%

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: 1172750022

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.871	0.864	NO bkgnd or offset:	3.5	3.8
NOX coeff or slope:	0.998	0.995	NOX bkgnd or offset:	3.8	4.3
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	161.5	161.2

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.001716	0.999070
NO_X Cal Offset:	0.572234	-0.846872
NO Cal Slope:	1.000595	1.002781
NO Cal Offset:	-1.085729	-2.325856
NO_2 Cal Slope:	1.002000	0.995616
NO_2 Cal Offset:	1.010862	-0.666279

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	-0.2	----	----
High point	4935	64.6	803.7	799.8	3.9	802.0	800.6	1.3	1.0021	0.9990
Mid point	4968	32.3	401.8	399.9	1.9	401.4	398.2	3.1	1.0010	1.0041
Low point	4984	16.2	201.5	200.5	1.0	199.2	196.1	3.2	1.0116	1.0227
As left zero	5000	0.0	0.0	0.0	0.0	-0.4	-0.1	-0.3	----	----
As left span	4935	64.6	803.7	392.5	411.2	791.7	392.5	399.2	1.0151	1.0000
							Average Correction Factor		1.0049	1.0086

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	792.8	390.4	406.3	404.0	1.0056	99.4%
Mid GPT point	792.8	603.8	192.9	191.3	1.0082	99.2%
Low GPT point	792.8	697.0	99.7	98.0	1.0171	98.3%
				Average Correction Factor	1.0103	99.0%

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

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

NO_X Calibration Summary

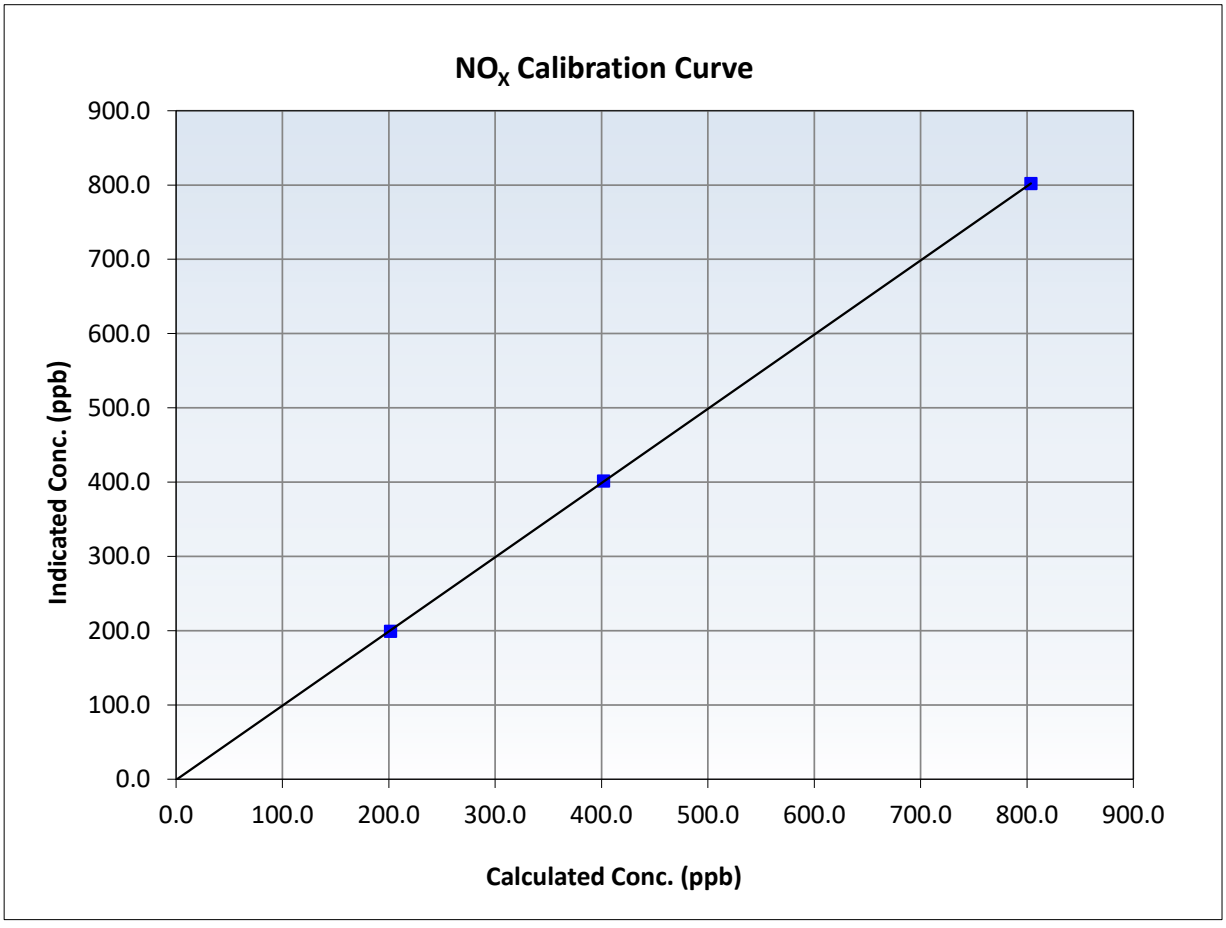
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	February 9, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:55	End Time (MST):	13:58
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
803.7	802.0	1.0021
401.8	401.4	1.0010
201.5	199.2	1.0116

Statistical Evaluation		Limits
Correlation Coefficient	0.999992	≥0.995
Slope	0.999070	0.90 - 1.10
Intercept	-0.846872	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

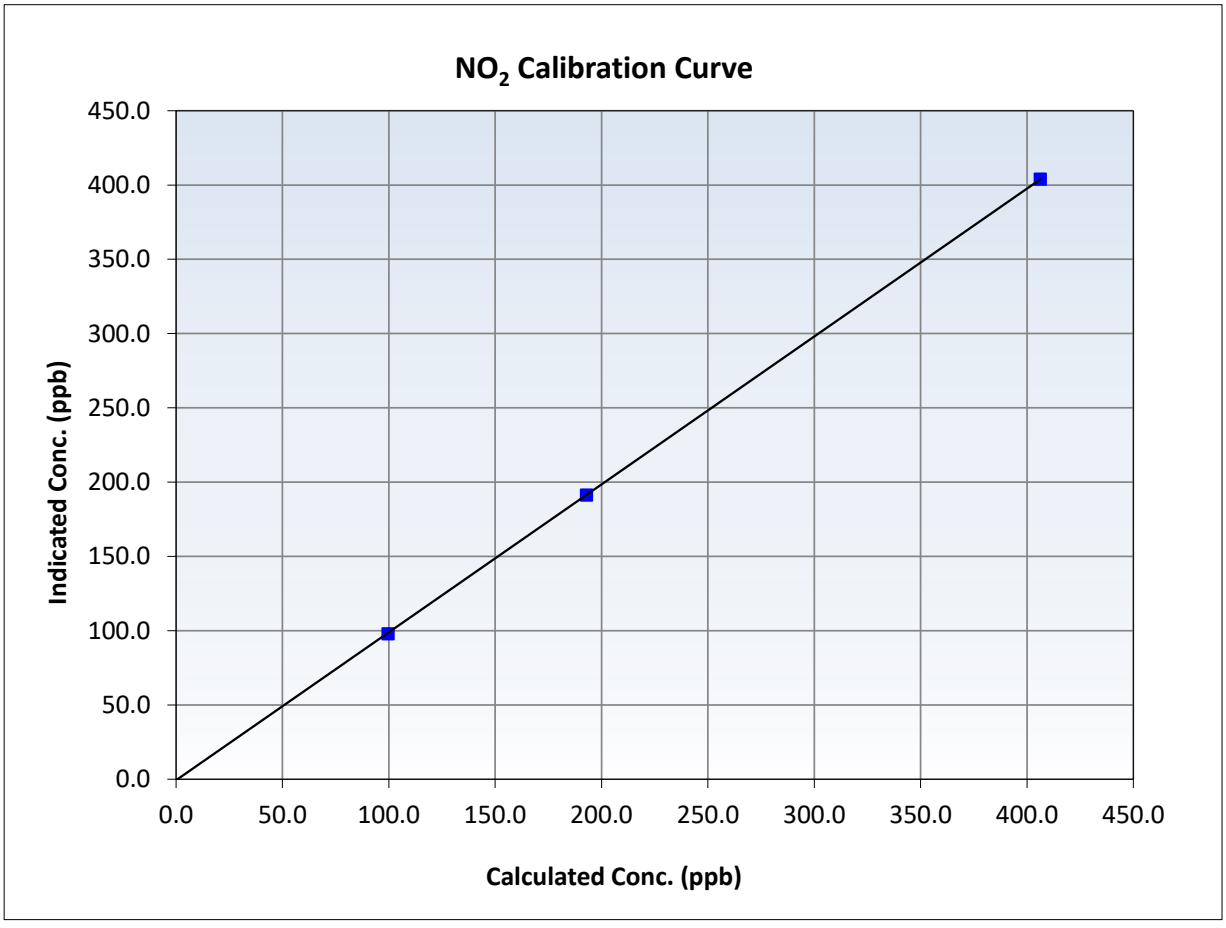
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	February 9, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:55	End Time (MST):	13:58
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	----
406.3	404.0	1.0056
192.9	191.3	1.0082
99.7	98.0	1.0171

Statistical Evaluation		Limits
Correlation Coefficient	0.999994	≥0.995
Slope	0.995616	0.90 - 1.10
Intercept	-0.666279	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

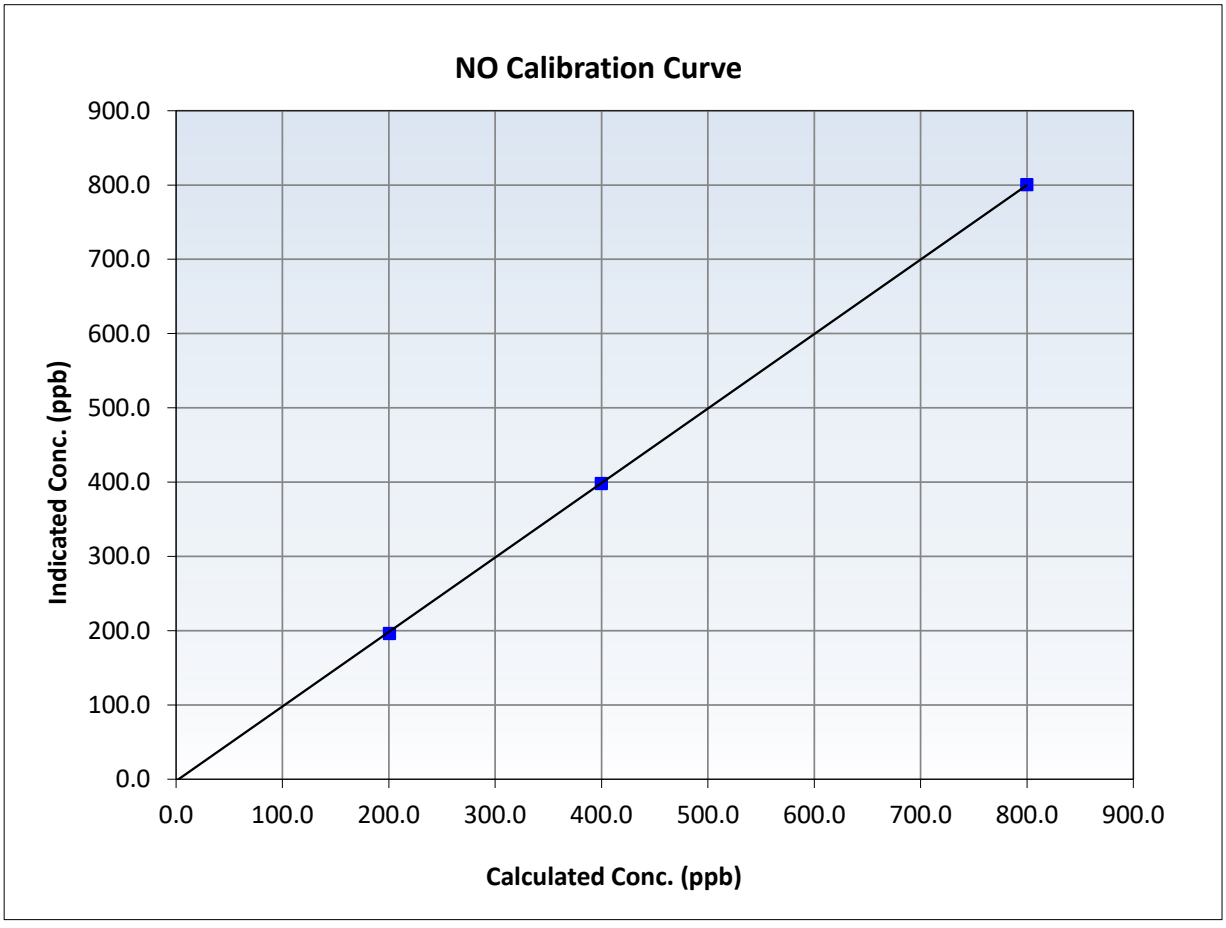
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	February 9, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:55	End Time (MST):	13:58
Analyzer make:	Thermo 42i	Analyzer serial #:	1172750022

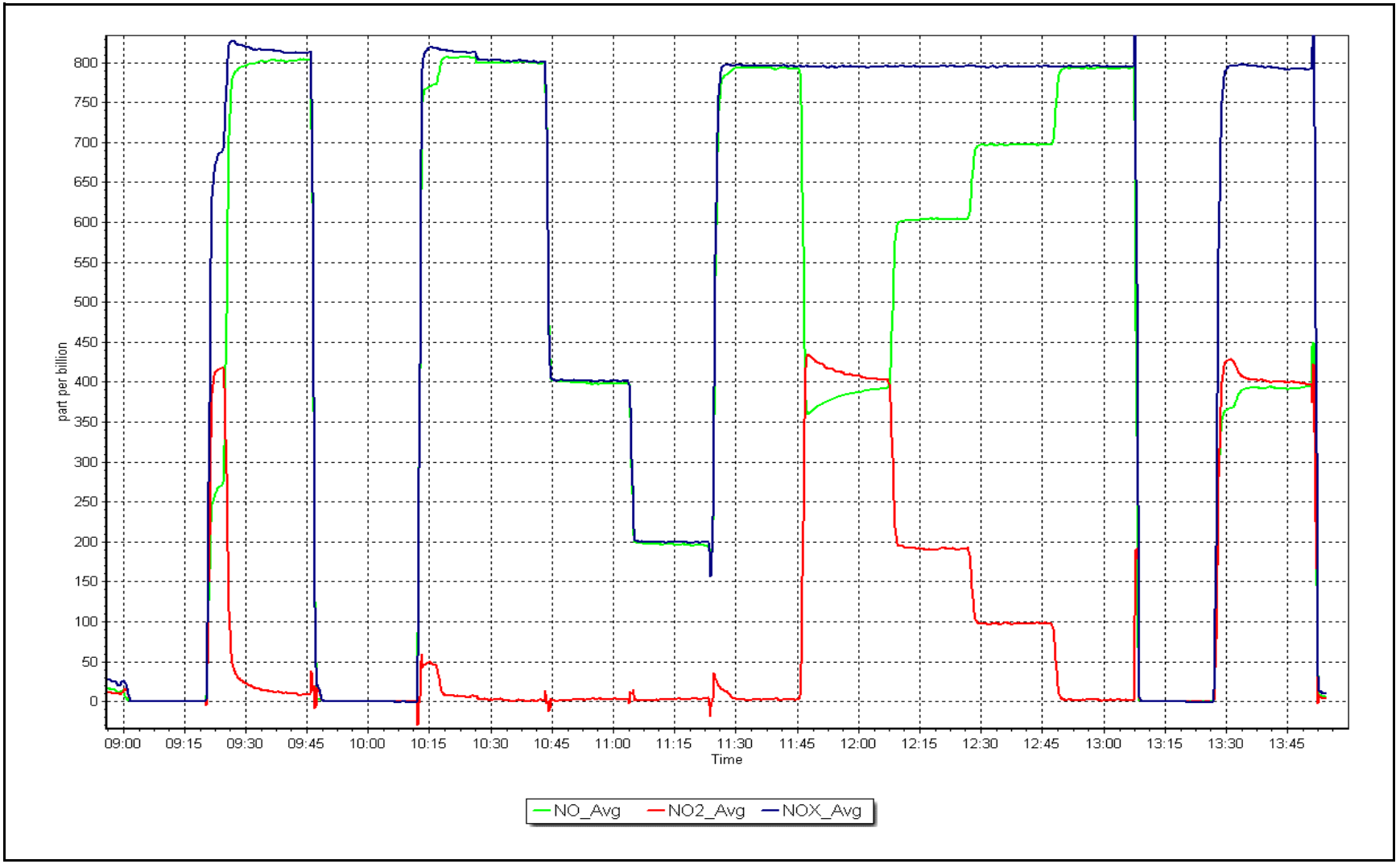
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
799.8	800.6	0.9990
399.9	398.2	1.0041
200.5	196.1	1.0227

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999963	*≥0.995*
Slope	1.002781	*0.90 - 1.10*
Intercept	-2.325856	*+/-20*



NO_X Calibration Plot Date: March 13, 2026 Location: Patricia McInnes



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Patricia McInnes	Station number:	AMS 06
Calibration Date:	March 16, 2026	Last Cal Date:	February 18, 2026
Start time (MST):	9:33	End time (MST):	13:14
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:	1.003686	0.997829	Backgd or Offset:	2.7	3.1
Calibration intercept:	0.480000	0.780000	Coeff or Slope:	1.010	1.011

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	908.6	400.0	399.0	1.004
As found Mid point					
As found Low point					
Baseline Corr As found:	398.6	Previous response	402.0	*% 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	

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	0.2	----
High point	5000	908.1	400.0	399.6	1.001
Mid point	5000	786.8	200.0	200.7	0.997
Low point	5000	688.8	100.0	101.1	0.989
As left zero	5000	800.0	0.0	0.2	----
As left span	5000	907.0	400.0	402.7	0.993
				Average Correction Factor	0.996

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

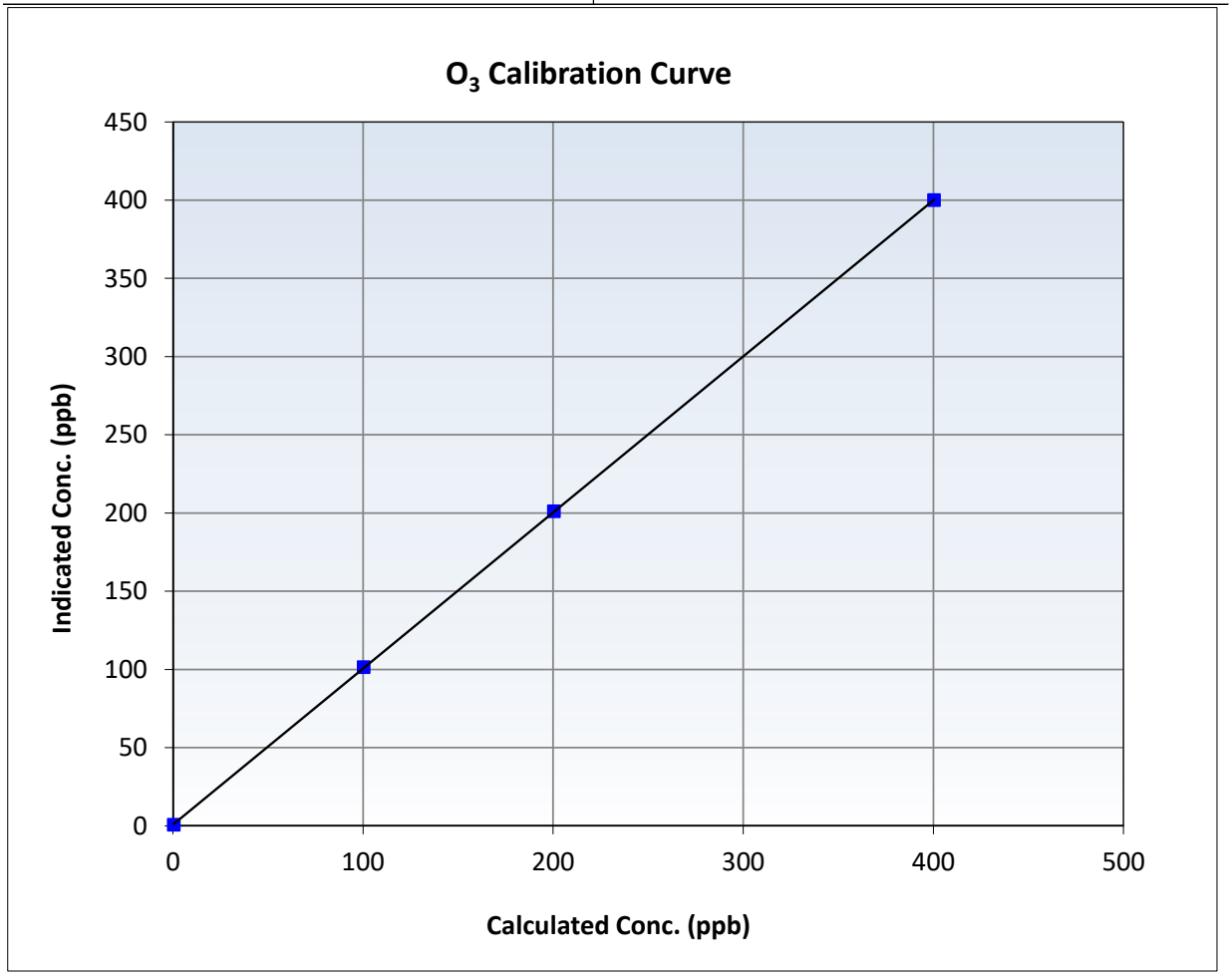
O_3 Calibration Summary

Station Information

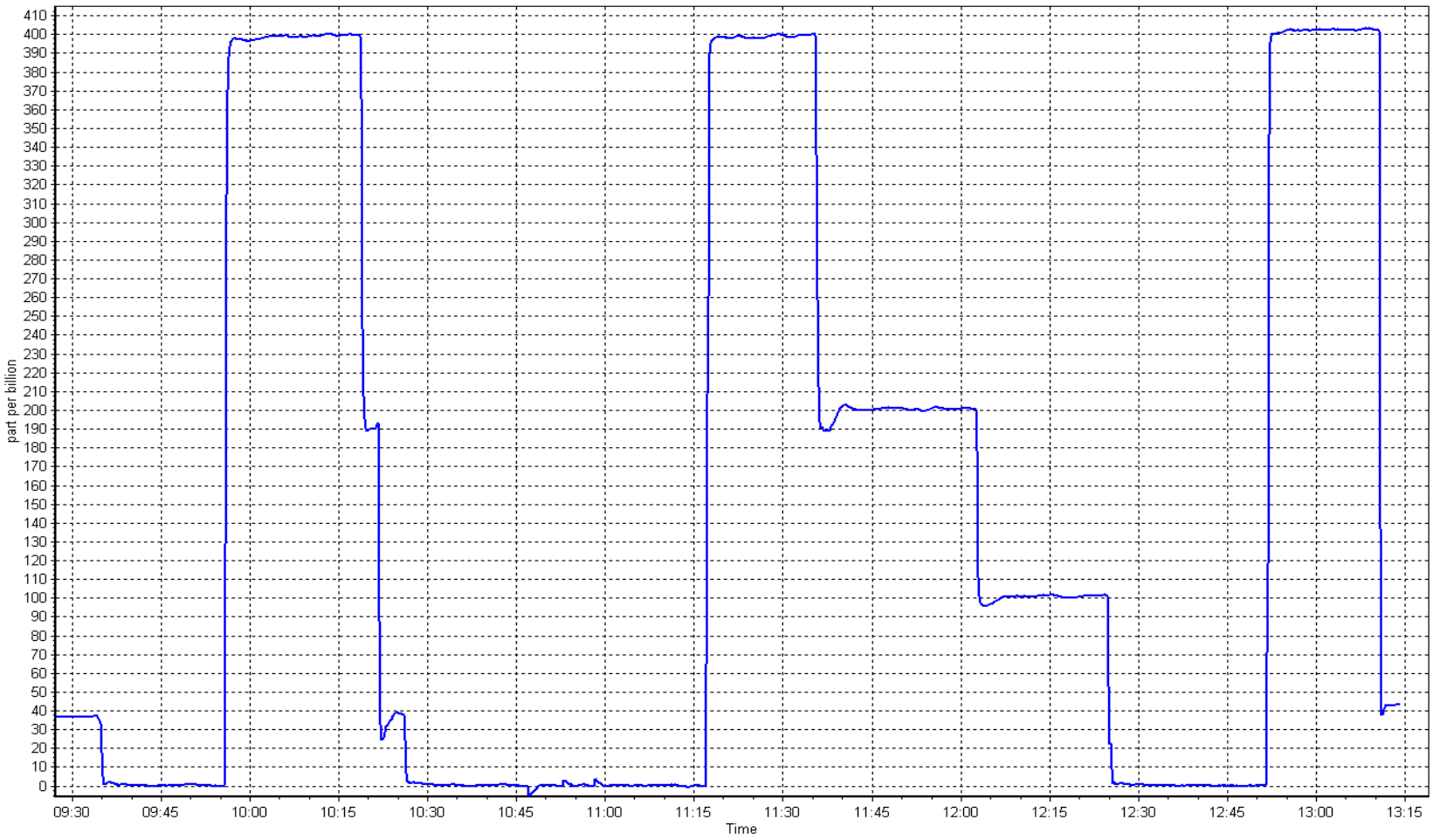
Calibration Date:	March 16, 2026	Previous Calibration:	February 18, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	9:33	End Time (MST):	13:14
Analyzer make:	Teledyne API T400	Analyzer serial #:	7046

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.2	----	Correlation Coefficient	0.999990	*≥0.995*
400.0	399.6	1.0010	Slope	0.997829	*0.90 - 1.10*
200.0	200.7	0.9965			
100.0	101.1	0.9891	Intercept	0.780000	*+/- 5*



O_3 Calibration Plot Date: March 16, 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:	March 27, 2026	Last Cal Date:	February 6, 2026
Start time (MST):	11:29	End time (MST):	12:14
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)	-8.8	-9.43	-8.8	☐	+/- 2 ^{o}C
P (mmHg)	737.2	736.84	737.2	☐	+/- 10 mmHg
Flow (LPM)	4.98	4.927	4.98	☐	+/- 0.25 LPM
PW% (pump)	34	-----	34	☐	>80%
Zero Verification	PM w/o HEPA:	4.30	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: 07-16-2026 — Lot No.: 100128-050-050

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

Date Optical Chamber Cleaned: January 15, 2026

Date Disposable Filter Changed: January 15, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: April 4, 2025

Date RH/T Sensor Cleaned: April 4, 2025

Notes: Verified flow, pressure, temperature and pump power. No adjustment needed. Leak check 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:	March 26, 2026	Last Cal Date:	February 20, 2026
Start time (MST):	8:04	End time (MST):	15:53
NH3 Cal Date:	March 27, 2026	Last Cal Date:	February 20, 2026
Start time (MST):	8:06	End time (MST):	13:28
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:	5.60
NOX Range (ppb):	0 - 1000 ppb		Sample Flow:	335

	Start	*Finish*		*Start*	*Finish*
NO coefficient:	1.000	1.019	Nt coefficient:	0.995	1.010
NOX coefficient:	1.007	1.020	NO bkgrnd:	0.5	0.9
NO2 coefficient:	1.000	1.000	NOX bkgrnd:	0.7	0.5
NH3 coefficient:	0.943	0.965	Nt bkgrnd:	4.4	4.4

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.000221	0.992868
NO_X Cal Offset:	-1.826778	-1.365370
NO Cal Slope:	0.993188	0.998264
NO Cal Offset:	-2.743020	-2.644976
NO_2 Cal Slope:	1.010796	1.007089
NO_2 Cal Offset:	1.133098	0.888551
NH3 Cal Slope:	0.997697	0.996655
NH3 Cal Offset:	0.289568	0.774650
Nt Cal Slope:	1.001373	1.000112
Nt Cal Offset:	-0.019398	0.821525

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	-0.5	0.3	-1.5	----	----
As found span	4935	64.6	803.7	799.8	803.7	810.1	794.5	808.7	0.9921	1.0067
AF GPT span	4830	64.6	820.9	-----	820.9	804.1	-----	809.7	1.0209	-----
new NO cyl rp										

Baseline Corr As Fd	Nt =	810.2	ppb	NO_X =	810.6	ppb	NO =	794.2	ppb
Previous Response	Nt =	804.77	ppb	NO_X =	802.0	ppb	NO =	791.6	ppb

**NO_X Δ (NO to GPT response) = -0.7%

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

*Percent Change $Nt_{(NO)}$ = 0.7%

*Percent Change NO_X = 1.1%

*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	-0.2	-0.5	-1.5	----	----
High point	4935	64.6	803.7	799.8	803.7	797.0	796.7	803.1	1.0084	1.0039
Mid point	4968	32.3	401.8	399.9	401.8	397.5	395.9	400.5	1.0108	1.0100
Low point	4984	16.2	201.5	200.5	201.5	197.2	195.1	197.2	1.0219	1.0279
								Average Correction Factor	1.0137	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%*
As Found zero	----	----	0.0	-0.7	----	----
Calibration zero	----	----	0.0	0.3	----	----
High GPT point (400 ppb O3)	786.6	384.6	405.9	409.7	0.9907	100.9%
Mid GPT point (200 ppb O3)	786.6	590.2	200.3	201.8	0.9924	100.8%
Low GPT point (100 ppb O3)	786.6	688.9	101.6	104.5	0.9720	102.9%
				Average Correction Factor	0.9850	101.5%

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	-1.7	-0.2	-1.4	----	----
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	-1.5	-0.2	-1.3	----	----
High point	3419	81.3	1800.1	0.0	1800.1	1799.2	6.1	1793.1	1.000	1.004
Mid point	3455	45.2	1000.8	0.0	1000.8	1004.3	3.6	1000.6	0.997	1.000
Low point	3477	22.6	500.5	0.0	500.5	503.0	2.0	501.0	0.995	0.999
								Average Correction Factor	0.9973	1.0010

NH3 Previous Converter Efficiency = 94.3 %
NH3 Current Converter Efficiency = 96.5 %

Notes: Changed the inlet filter after as founds. Zero & span adjusted for NOx and TNx. Adjusted NH3 span.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

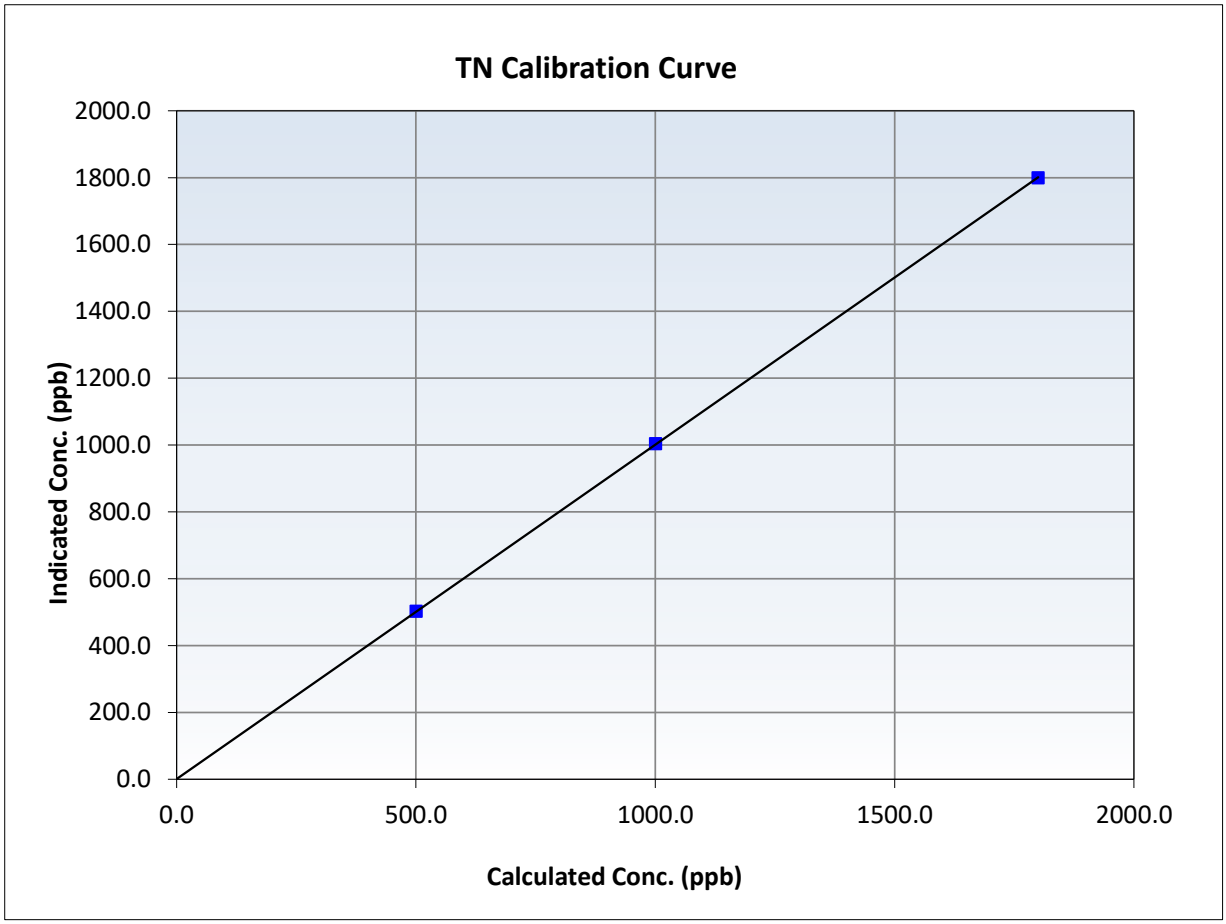
Nt Calibration Summary

Station Information

Calibration Date:	March 27, 2026	Previous Calibration:	February 20, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:04	End Time (MST):	15:53
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	-1.5	----	Correlation Coefficient	0.999990	*≥0.995*
1800.1	1799.2	1.0005	Slope	1.000112	*0.90 - 1.10*
1000.8	1004.3	0.9965	Intercept	0.821525	*+/-20*
500.5	503.0	0.9950			



Wood Buffalo Environmental Association

NH_3 Calibration Summary

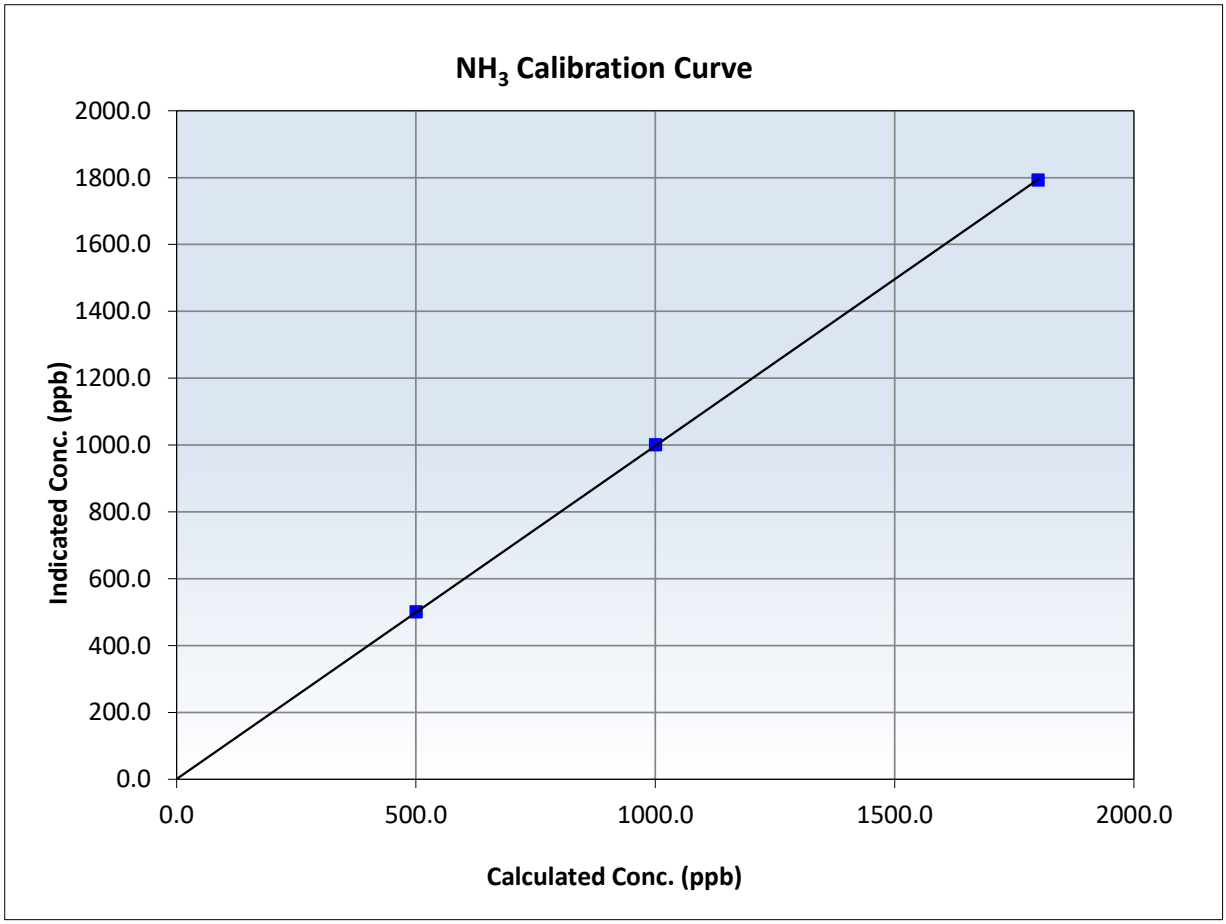
Station Information

Calibration Date:	March 27, 2026	Previous Calibration:	February 20, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:04	End Time (MST):	15:53
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-1.3	----
1800.1	1793.1	1.0039
1000.8	1000.6	1.0002
500.5	501.0	0.9990

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999992	*≥0.995*
Slope	0.996655	*0.90 - 1.10*
Intercept	0.774650	*+/-20*



Wood Buffalo Environmental Association

NO_X Calibration Summary

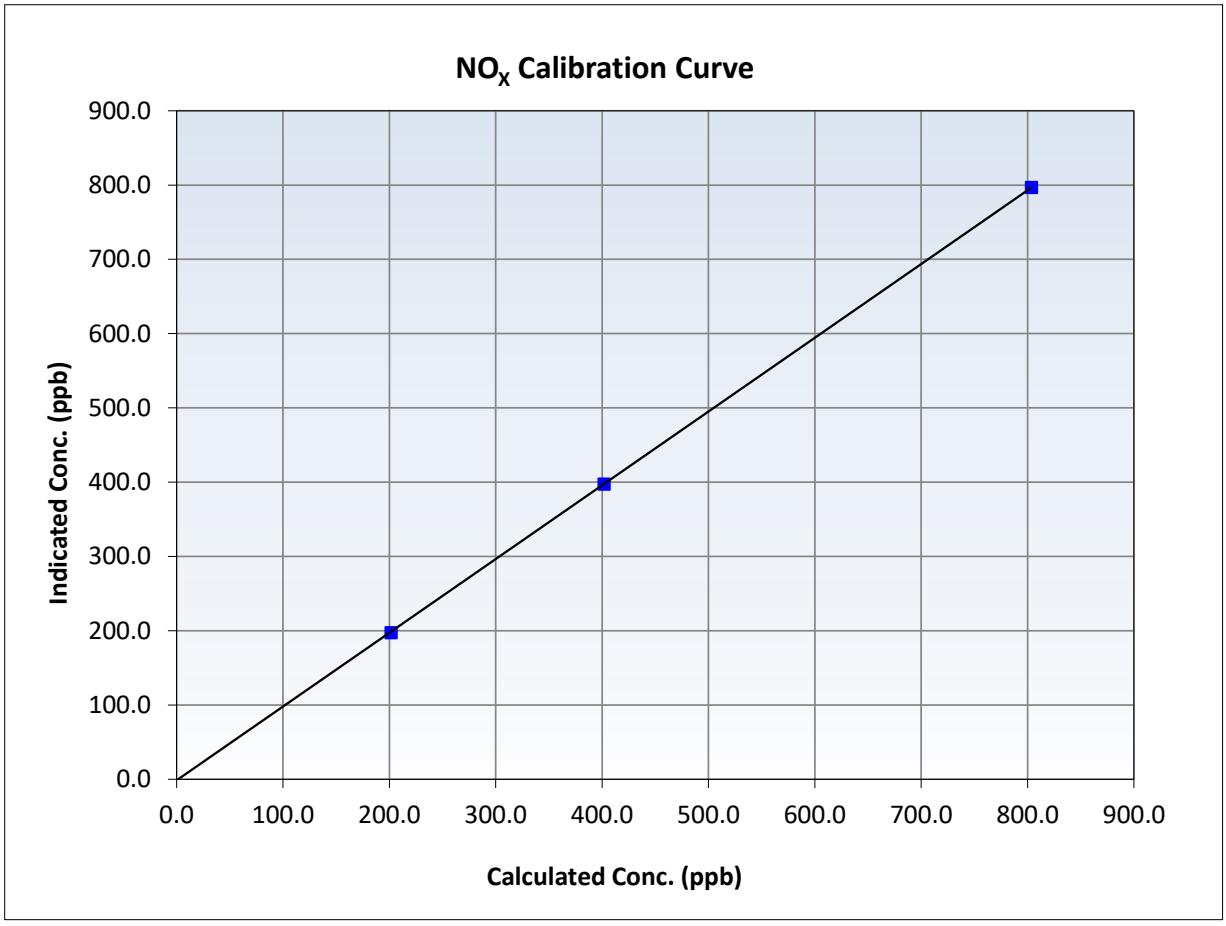
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 20, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:04	End Time (MST):	15:53
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	----
803.7	797.0	1.0084
401.8	397.5	1.0108
201.5	197.2	1.0219

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999989	*≥0.995*
Slope	0.992868	*0.90 - 1.10*
Intercept	-1.365370	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

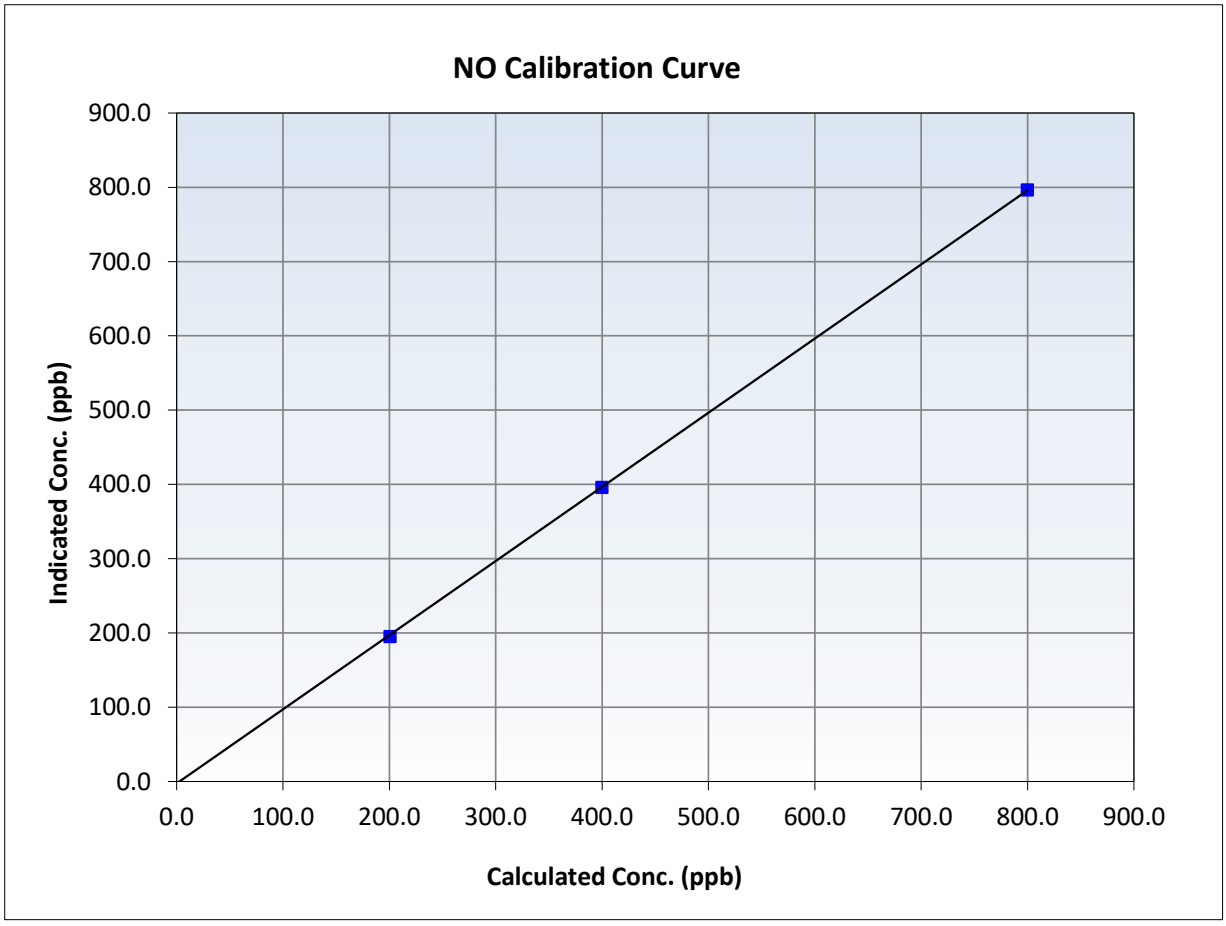
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 20, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:04	End Time (MST):	15:53
Analyzer make:	API T201	Analyzer serial #:	215

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.5	----
799.8	796.7	1.0039
399.9	395.9	1.0100
200.5	195.1	1.0279

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999966	*≥0.995*
Slope	0.998264	*0.90 - 1.10*
Intercept	-2.644976	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

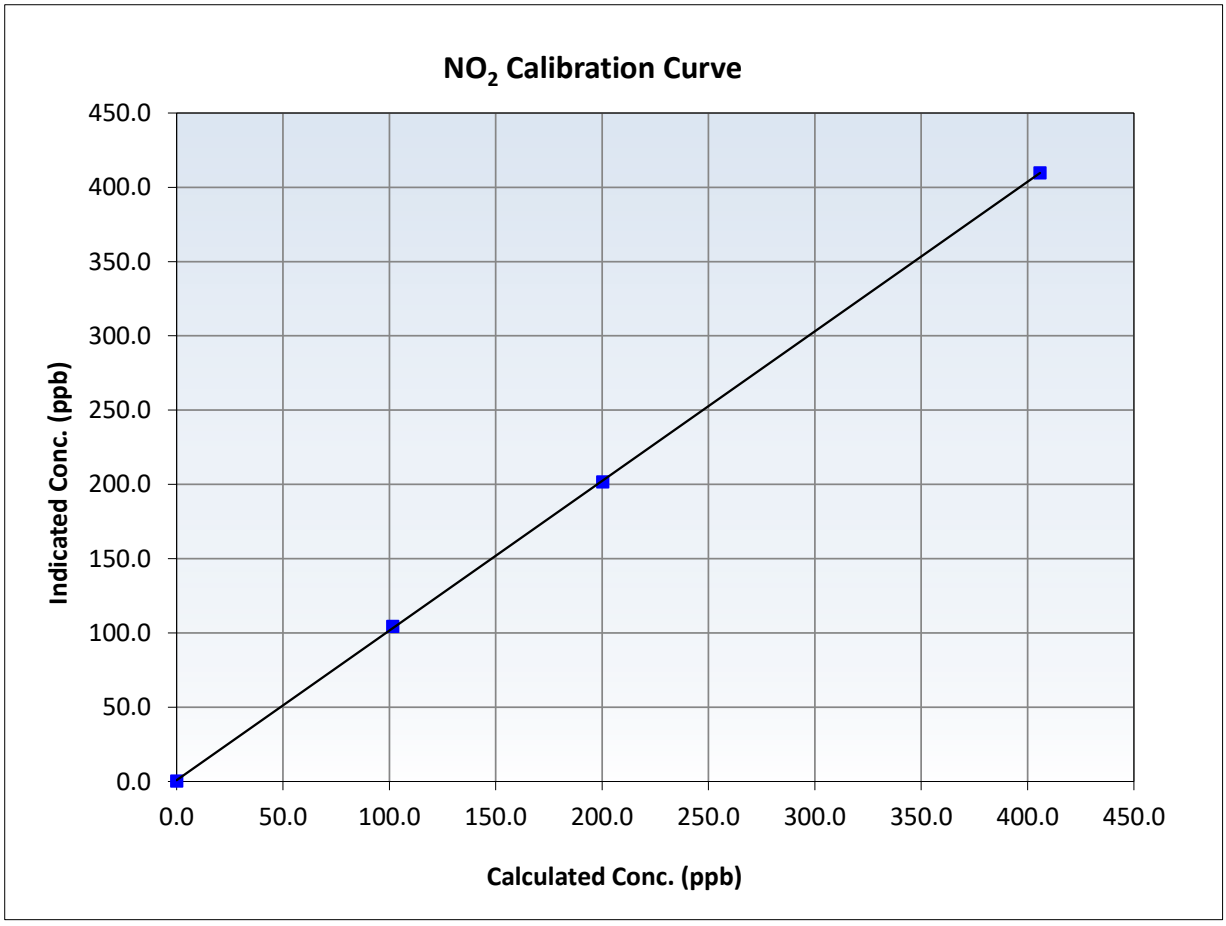
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 20, 2026
Station Name:	Patricia McInnes	Station Number:	AMS 06
Start Time (MST):	8:04	End Time (MST):	15:53
Analyzer make:	API T201	Analyzer serial #:	215

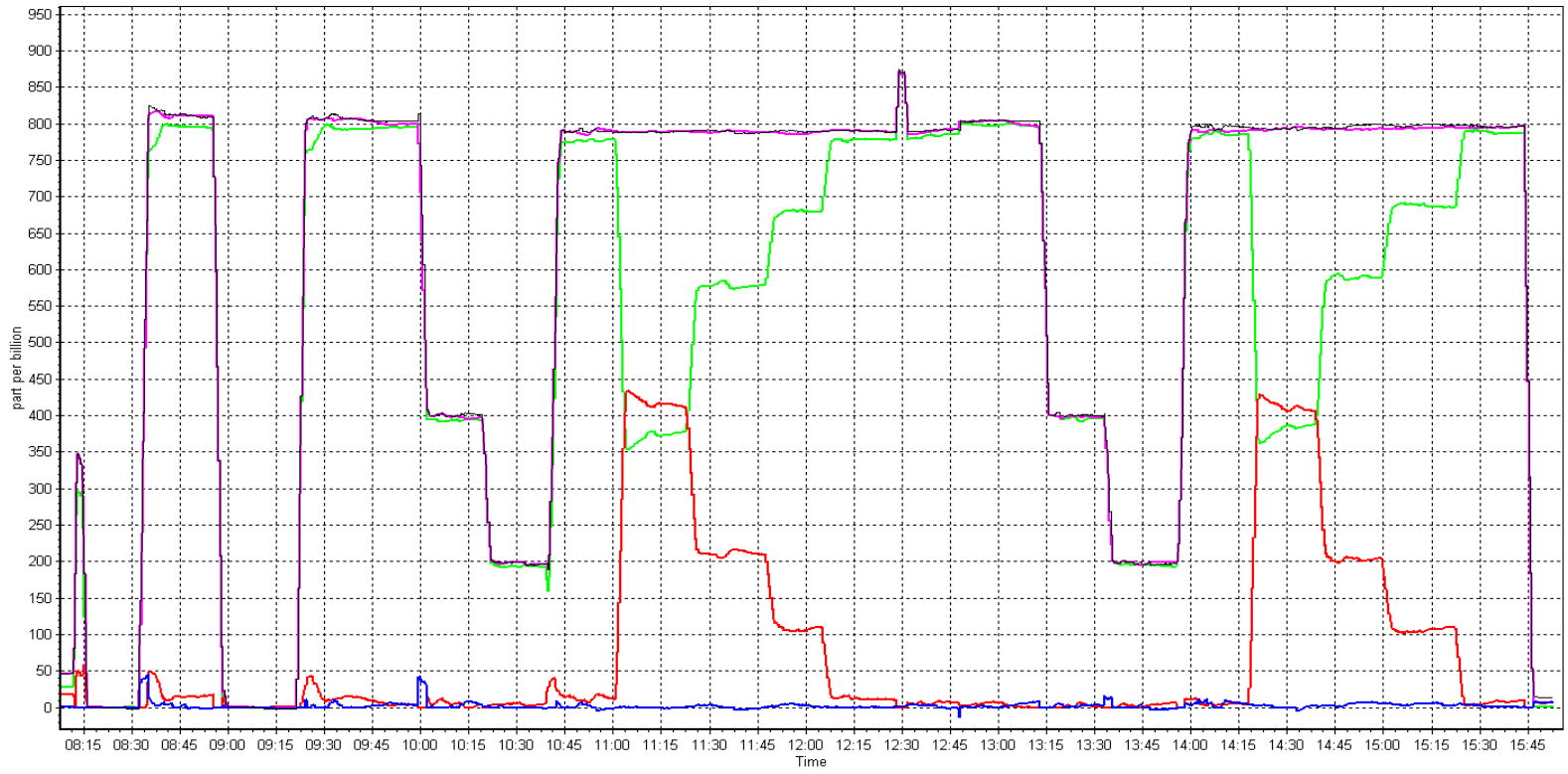
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
405.9	409.7	0.9907
200.3	201.8	0.9924
101.6	104.5	0.9720

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999970	*≥0.995*
Slope	1.007089	*0.90 - 1.10*
Intercept	0.888551	*+/-20*



NO_X Calibration Plot Date: March 26, 2026 Location: Patricia McInnes



NH_3 Calibration Plot Date: March 27, 2026 Location: Patricia McInnes

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS07
ATHABASCA VALLEY
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	March 4, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	10:02	End time (MST):	13:31
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:	1.004283	0.997532	Backgd or Offset:	2.79	2.73
Calibration intercept:	2.223255	2.863374	Coeff or Slope:	0.874	0.874

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	797.9	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	797.8	Previous response	805.6	*% 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	0.3	----
High point	4920	79.9	800.0	798.7	1.002
Mid point	4960	39.9	399.5	405.3	0.986
Low point	4980	20.0	200.2	203.4	0.984
As left zero	5000	0.0	0.0	0.2	----
As left span	4920	79.8	799.0	799.9	0.999
				Average Correction Factor:	0.991

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

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

SO_2 Calibration Summary

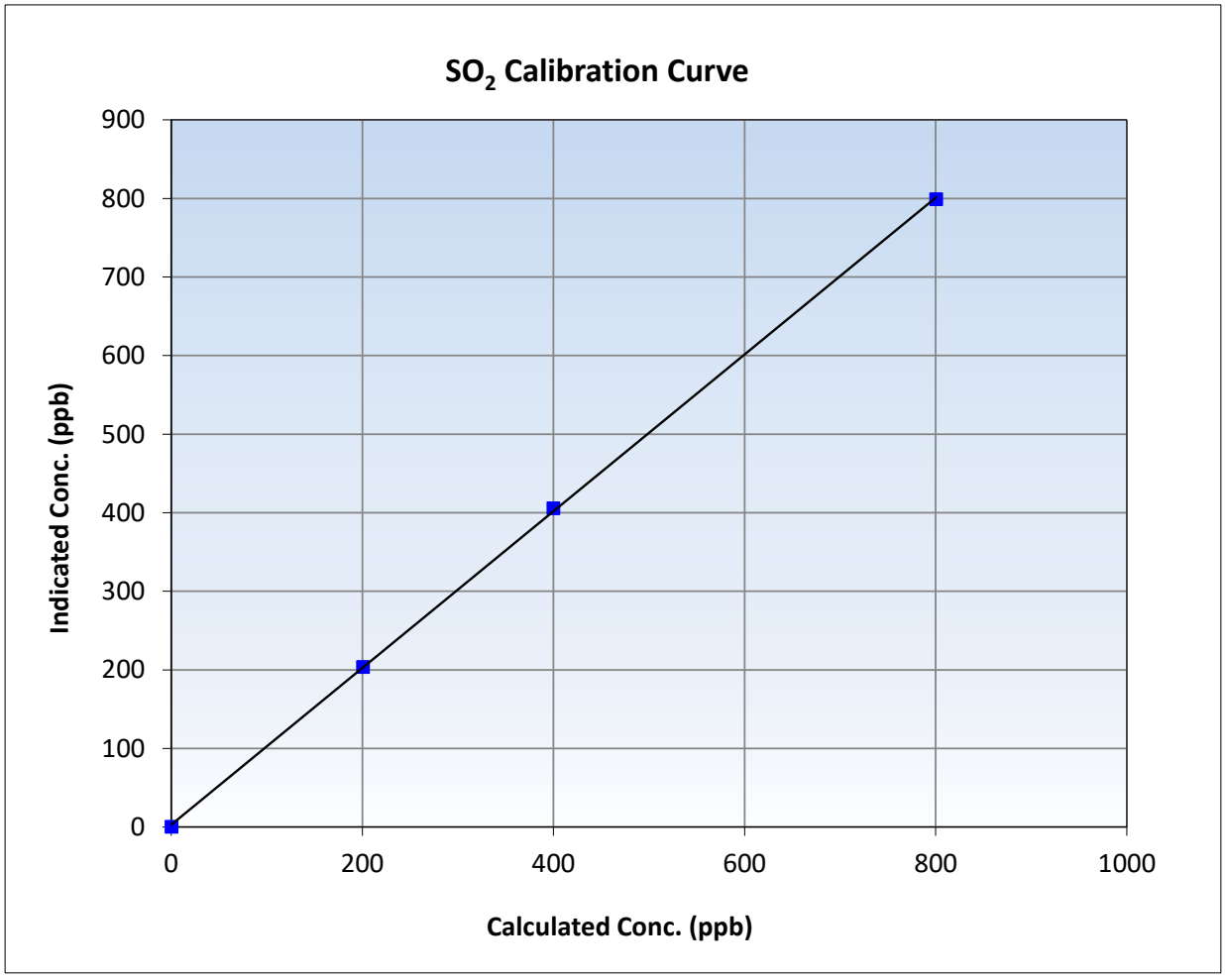
Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 4, 2026
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	10:02	End Time (MST):	13:31
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1507864683

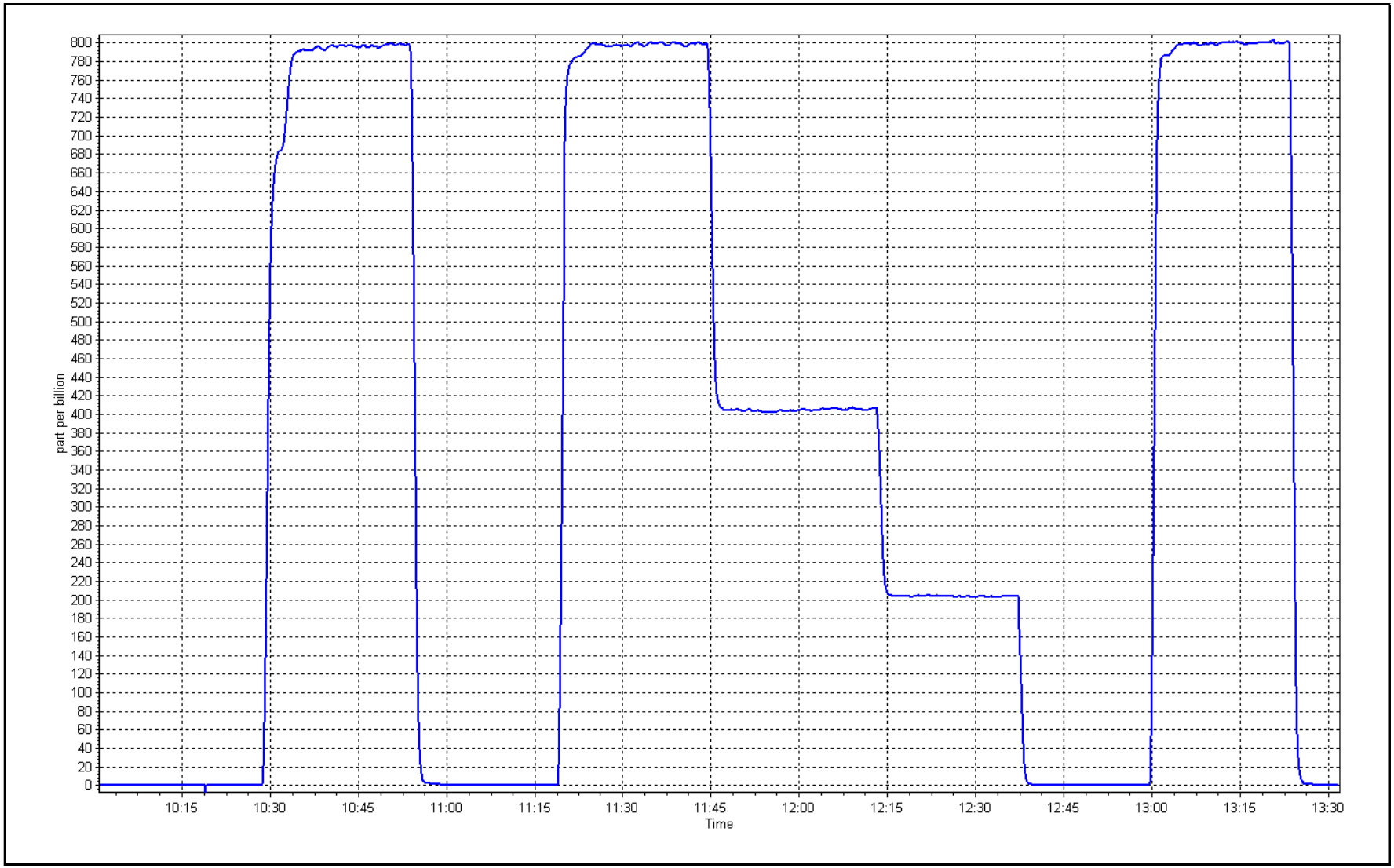
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.0	798.7	1.0016
399.5	405.3	0.9857
200.2	203.4	0.9845

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999921	*≥0.995*
Slope	0.997532	*0.90 - 1.10*
Intercept	2.863374	*+/-30*



SO2 Calibration Plot Date: March 4, 2026 Location: Athabasca Valley



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	March 5, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	10:03	End time (MST):	14:25
Reason:	Routine		

Calibration Standards

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

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.004249	1.004248	Backgd or Offset:	2.6	2.7
Calibration intercept:	0.257817	0.057828	Coeff or Slope:	0.887	0.887

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	4925	75.5	79.3	79.0	1.003
As found Mid point	4962	37.7	39.6	39.9	0.992
As found Low point	4981	18.9	19.8	19.9	0.997
New cylinder response					

Baseline Corr As found:	79.0	Prev response:	79.86	*% change:	-1.1%
Baseline Corr 2nd AF pt:	39.9	AF Slope:	0.996744	AF Intercept:	0.137935
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999961	* = > +/-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	4925	75.5	79.3	79.7	0.995
Mid point	4962	37.7	39.6	39.9	0.993
Low point	4981	18.9	19.9	19.9	0.998
As left zero	5000	0.0	0.0	0.2	----
As left span	4925	75.5	79.3	80.0	0.991
SO2 Scrubber Check	4920	79.2	792.1	0.1	----

Date of last scrubber change:	8-Aug-25	Ave Corr Factor	0.995
Date of last converter efficiency test:	Friday, April 22, 2022		

Notes: Sample inlet filter was changed after multi point as founds. Scrubber check done and passed. No adjustments made.

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

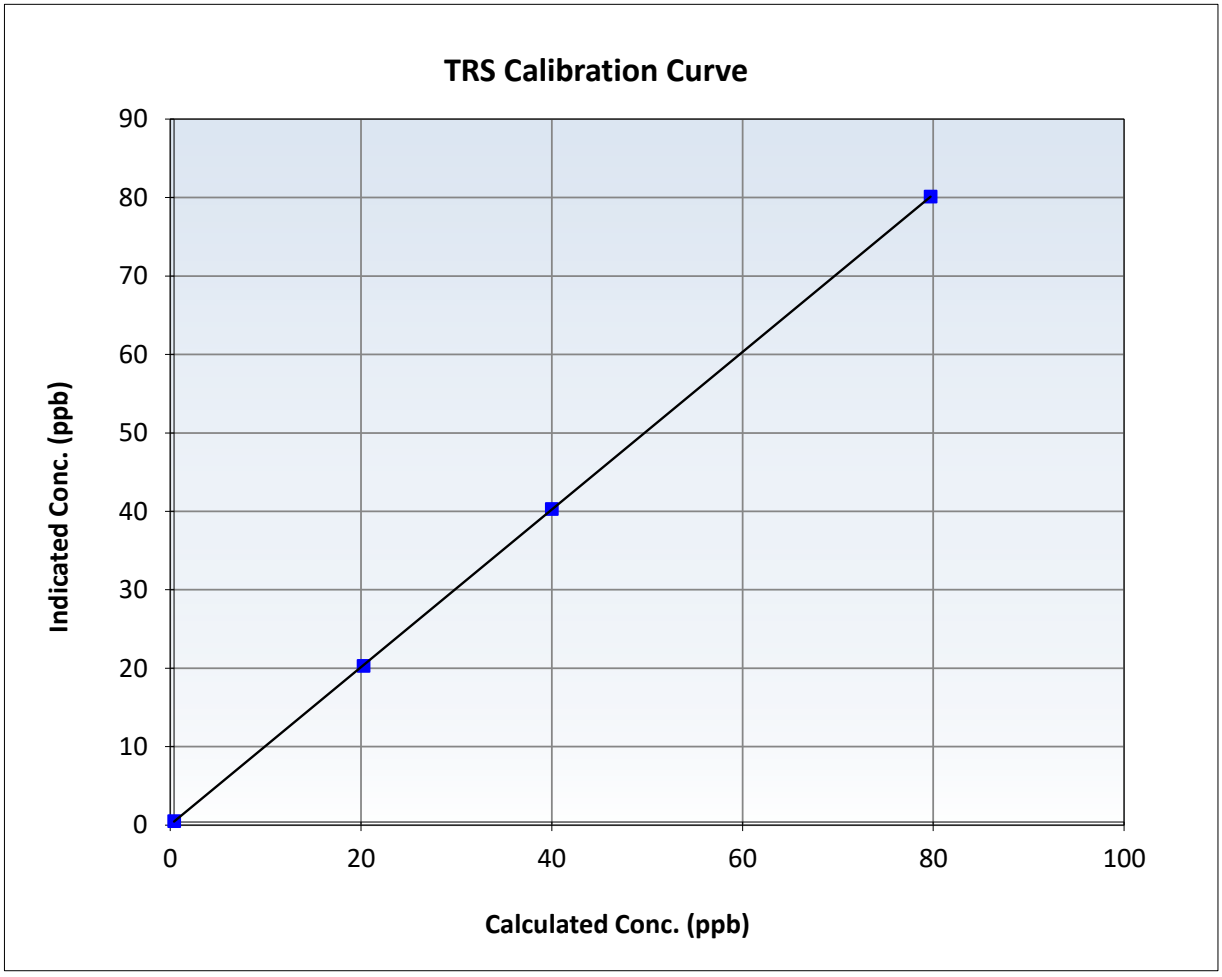
TRS Calibration Summary

Station Information

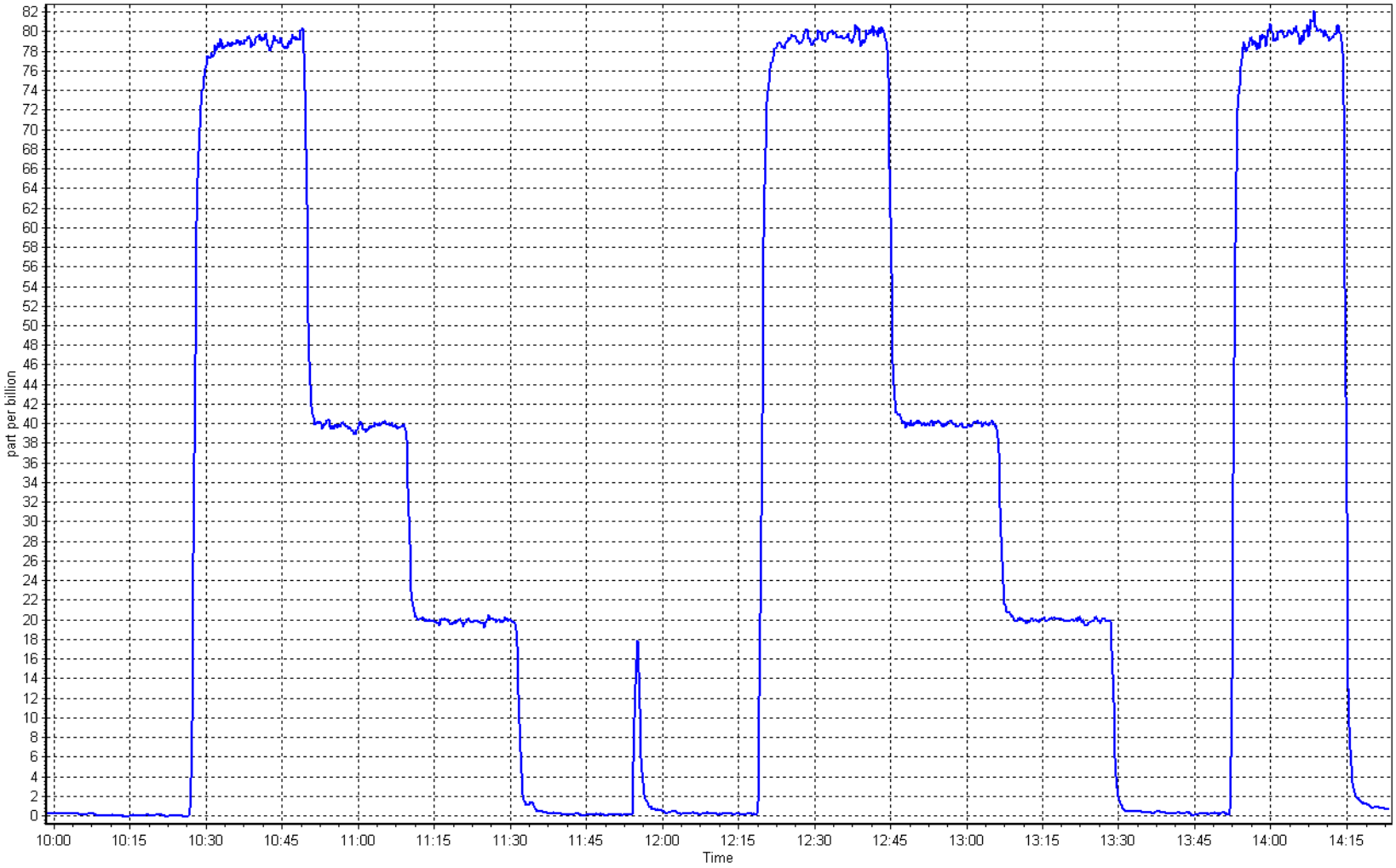
Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	10:03	End Time (MST):	14:25
Analyzer make:	Thermo 43i LTE	Analyzer serial #:	1180540018

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999995	*≥0.995*
79.3	79.7	0.9951	Slope	1.004248	*0.90 - 1.10*
39.6	39.9	0.9927			
19.9	19.9	0.9978	Intercept	0.057828	*+/-3*



TRS Calibration Plot Date: March 5, 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:	March 25, 2026	Last Cal Date:	March 4, 2026
Start time (MST):	9:27	End time (MST):	10:48
Reason:	Cylinder Change		

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:	2.78E-04	2.78E-04	NMHC SP Ratio:	5.49E-05	5.49E-05
CH4 Retention time:	14.4	14.4	NMHC Peak Area:	164069	164069
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	79.9	16.94	16.66	1.017
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.66	Prev response	17.09	*% 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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	16.91	16.48	1.026
				Average Correction Factor	

Notes: H2 cylinder changed. No significant change was observed in zero and span after the cylinder change.

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	9.01	8.91	1.011
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.91	Prev response	9.10	*% change	-2.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *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	79.8	9.00	8.83	1.019
				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	79.9	7.93	7.75	1.023
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.75	Prev response	7.99	*% change	-3.2%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

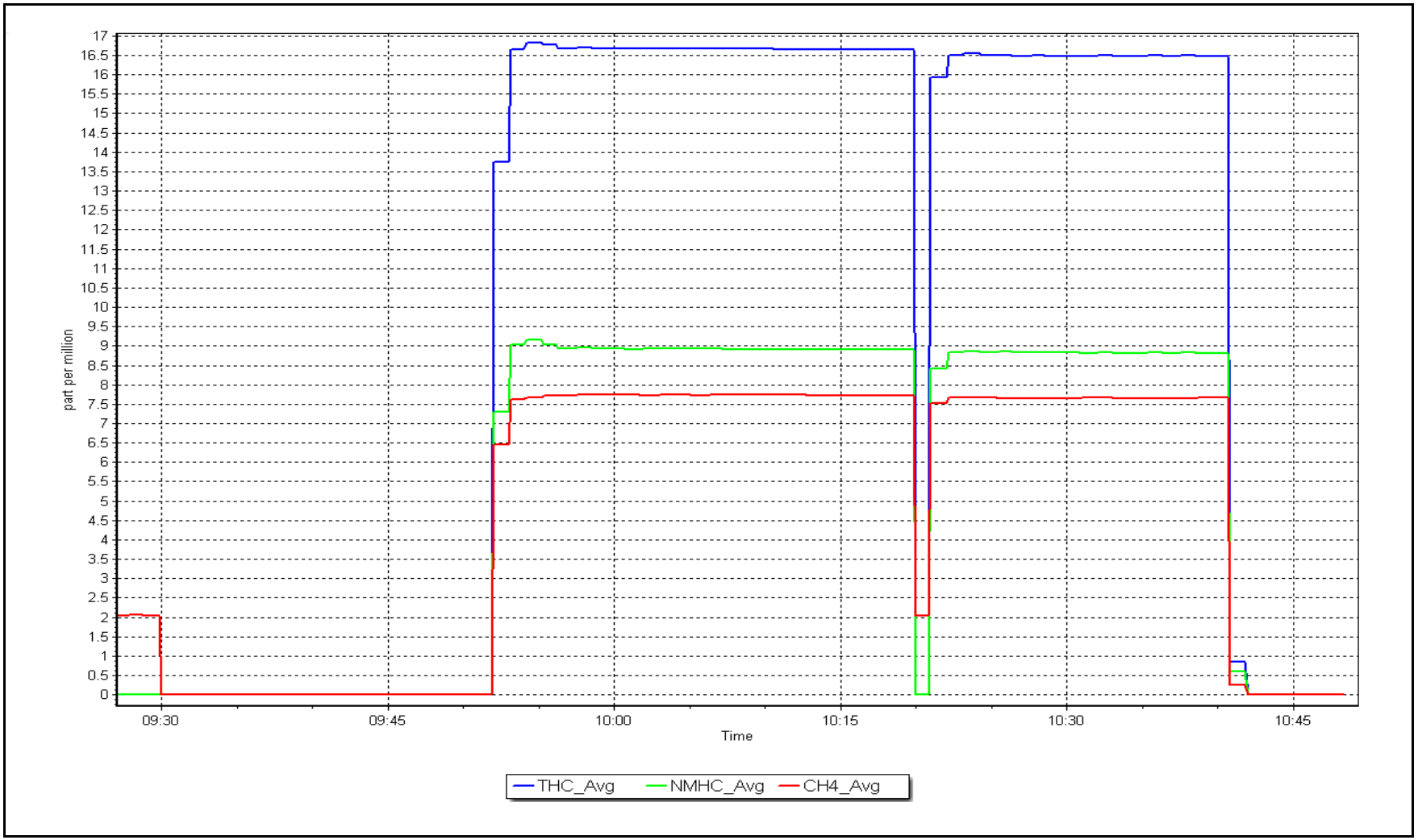
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	7.92	7.65	1.034
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.008717	
THC Cal Offset:	0.011643	
CH4 Cal Slope:	1.007292	
CH4 Cal Offset:	0.008619	
NMHC Cal Slope:	1.009629	
NMHC Cal Offset:	0.003625	

Calibration Performed By: Param Kaur

NMHC Calibration Plot Date: March 25, 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:	March 25, 2026	Last Cal Date:	March 4, 2026
Start time (MST):	9:27	End time (MST):	10:48
Reason:	Cylinder Change		

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:	2.78E-04	2.78E-04	NMHC SP Ratio:	5.49E-05	5.49E-05
CH4 Retention time:	14.4	14.4	NMHC Peak Area:	164069	164069
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	79.9	16.94	16.66	1.017
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.66	Prev response	17.09	*% 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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	16.91	16.48	1.026
				Average Correction Factor	

Notes: H2 cylinder changed. No significant change was observed in zero and span after the cylinder change.

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	9.01	8.91	1.011
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.91	Prev response	9.10	*% change	-2.1%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *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	79.8	9.00	8.83	1.019
				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	79.9	7.93	7.75	1.023
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.75	Prev response	7.99	*% change	-3.2%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

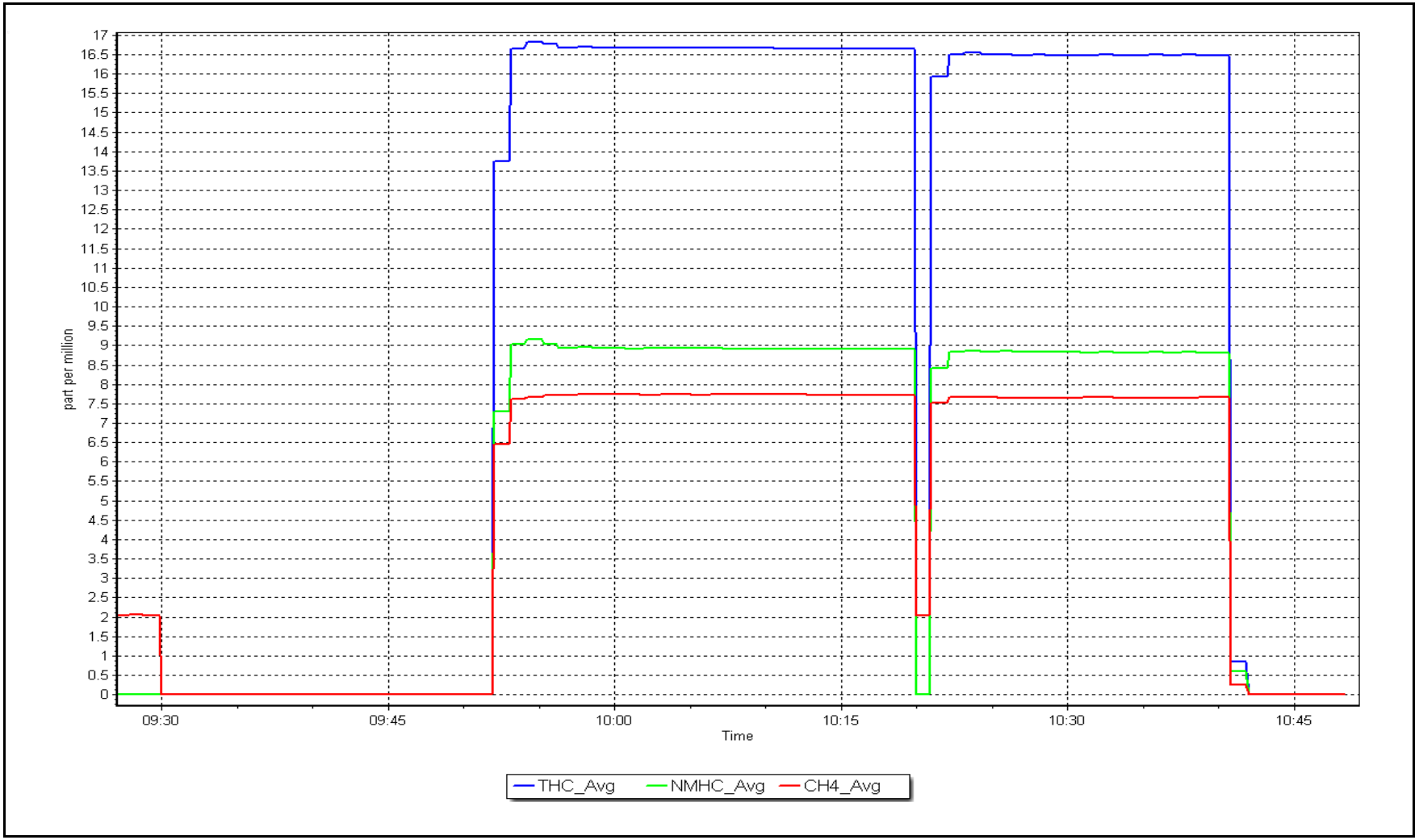
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.8	7.92	7.65	1.034
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.008717	
THC Cal Offset:	0.011643	
CH4 Cal Slope:	1.007292	
CH4 Cal Offset:	0.008619	
NMHC Cal Slope:	1.009629	
NMHC Cal Offset:	0.003625	

Calibration Performed By: Param Kaur

NMHC Calibration Plot Date: March 25, 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:	March 6, 2026
Last Cal Date:	February 19, 2026
Start time (MST):	9:56
End time (MST):	14:40
Reason:	Routine

Calibration Standards

NO Gas Cylinder #:	DT0033919	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 T750	Serial Number:	276
ZAG make/model:	API T751H	Serial Number:	321

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	0.0	0.0	----	----
AF High point	4933	66.8	803.0	800.3	2.7	807.3	798.9	8.4	0.9946	1.0017
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 801.6 ppb	NO = 798.9 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = 0.7%
Baseline Corr 1st pt	NO_X = 807.3 ppb	NO = 798.9 ppb	As Found Statistics	*Percent Change	NO = 0.0%
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 42i Serial Number: 1160120024

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	Finish		Start	Finish
NO coeff or slope:	0.911	0.911	NO bkgnd or offset:	6.4	6.5
NOX coeff or slope:	1.005	1.005	NOX bkgnd or offset:	6.6	7.0
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	185.4	185.7

Calibration Statistics

	Start	Finish
NO_X Cal Slope:	1.000442	1.001268
NO_X Cal Offset:	-1.688023	1.971883
NO Cal Slope:	1.000741	0.998756
NO Cal Offset:	-1.948003	1.971926
NO_2 Cal Slope:	1.005071	1.005424
NO_2 Cal Offset:	1.412028	0.765266

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	-0.1	----	----
High point	4933	66.8	803.0	800.3	2.7	804.5	799.8	4.6	0.9981	1.0006
Mid point	4966	33.4	401.5	400.2	1.3	406.2	404.0	2.2	0.9885	0.9905
Low point	4983	16.7	200.7	200.1	0.7	204.4	203.0	1.3	0.9821	0.9856
As left zero	5000	0.0	0.0	0.0	0.0	-0.3	-0.1	-0.3	----	----
As left span	4933	66.8	803.0	399.3	403.7	806.0	399.3	406.5	0.9962	1.0000
								Average Correction Factor	0.9896	0.9923

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	797.9	398.6	402.0	404.5	0.9938	100.6%
Mid GPT point	797.9	599.8	200.8	203.0	0.9890	101.1%
Low GPT point	797.9	698.5	102.1	104.3	0.9786	102.2%
				Average Correction Factor	0.9871	101.3%

Notes: Adjusted zero.

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

NO_X Calibration Summary

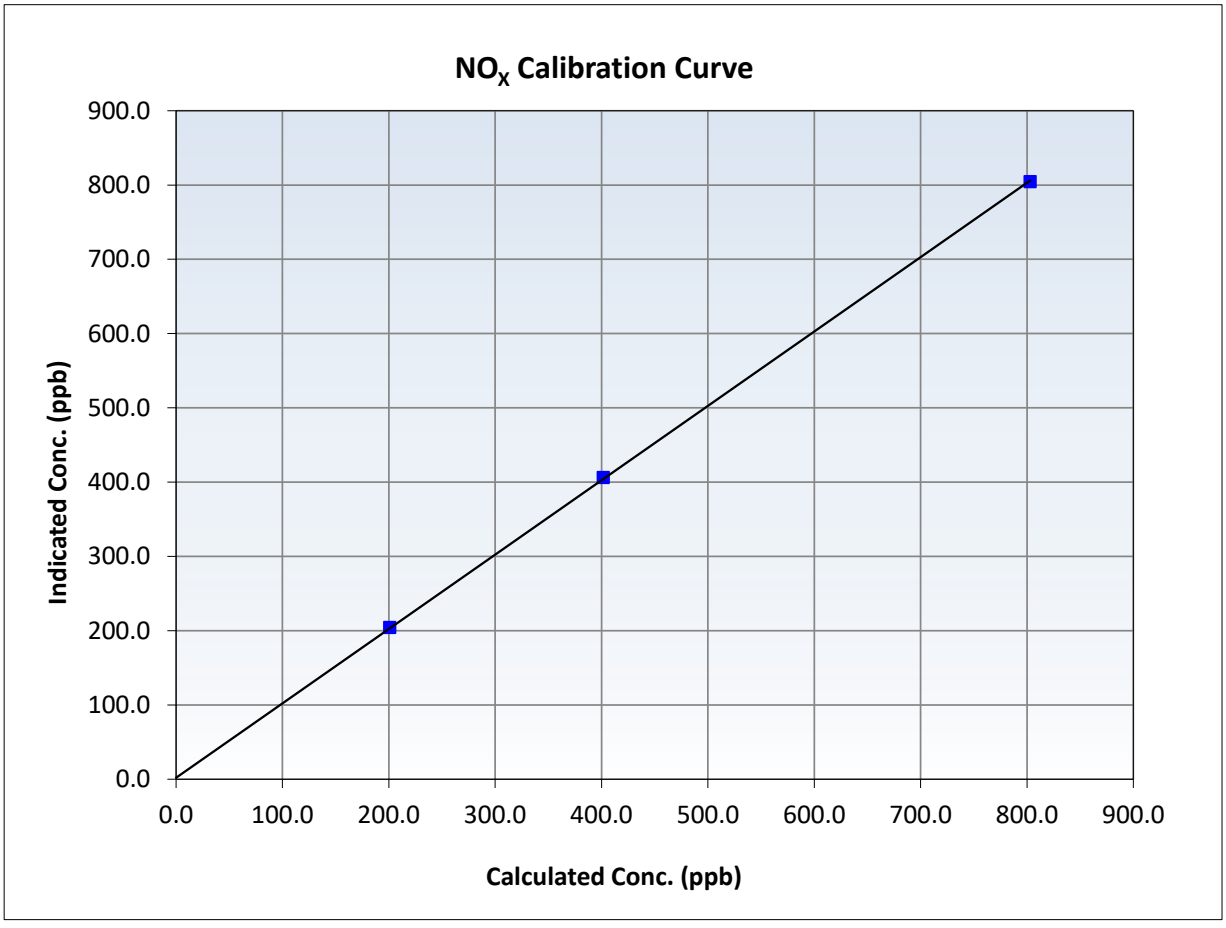
Station Information

Calibration Date:	March 6, 2026	Previous Calibration:	February 19, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	9:56	End Time (MST):	14:40
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
803.0	804.5	0.9981
401.5	406.2	0.9885
200.7	204.4	0.9821

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999961	*≥0.995*
Slope	1.001268	*0.90 - 1.10*
Intercept	1.971883	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

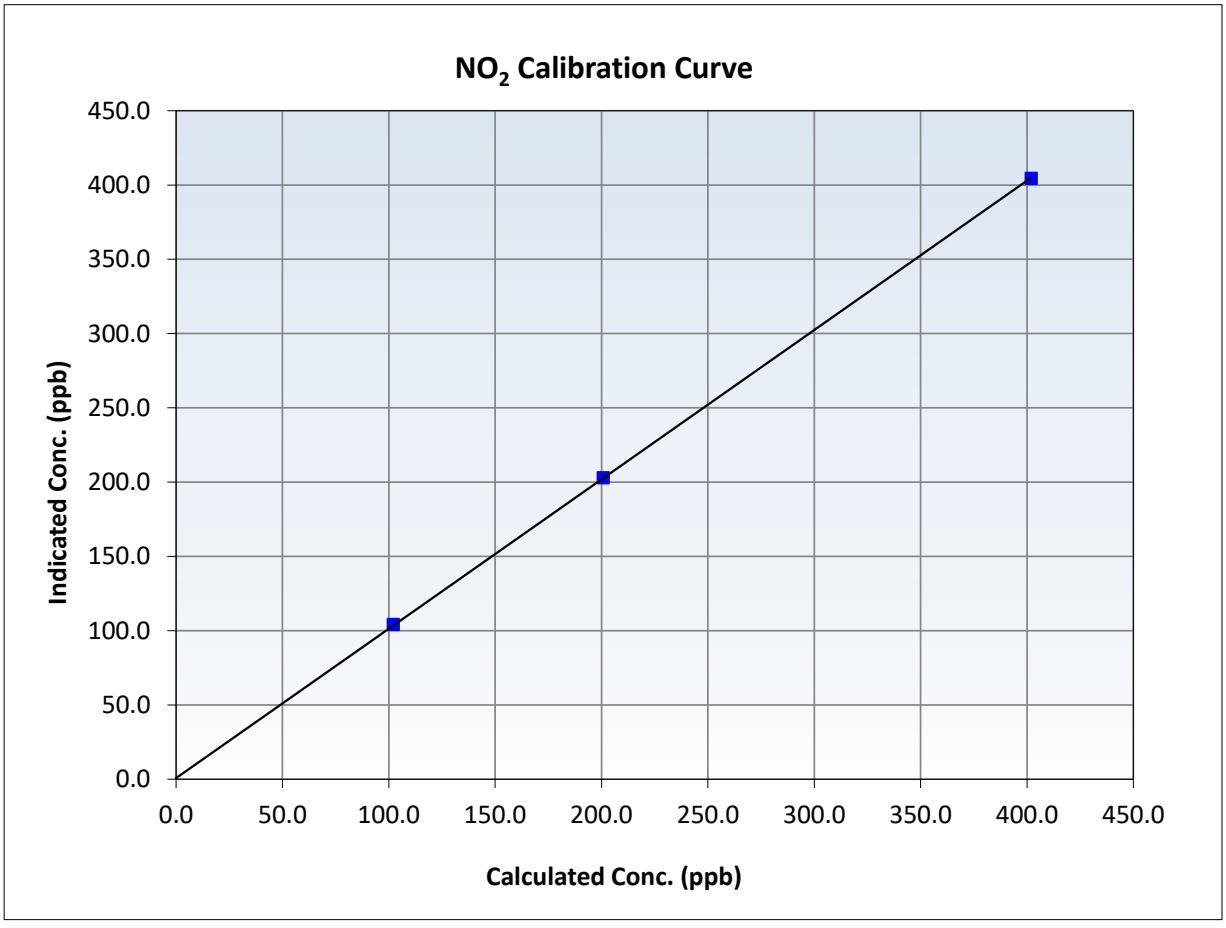
Station Information

Calibration Date:	March 6, 2026	Previous Calibration:	February 19, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	9:56	End Time (MST):	14:40
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	----
402.0	404.5	0.9938
200.8	203.0	0.9890
102.1	104.3	0.9786

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999979	*≥0.995*
Slope	1.005424	*0.90 - 1.10*
Intercept	0.765266	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

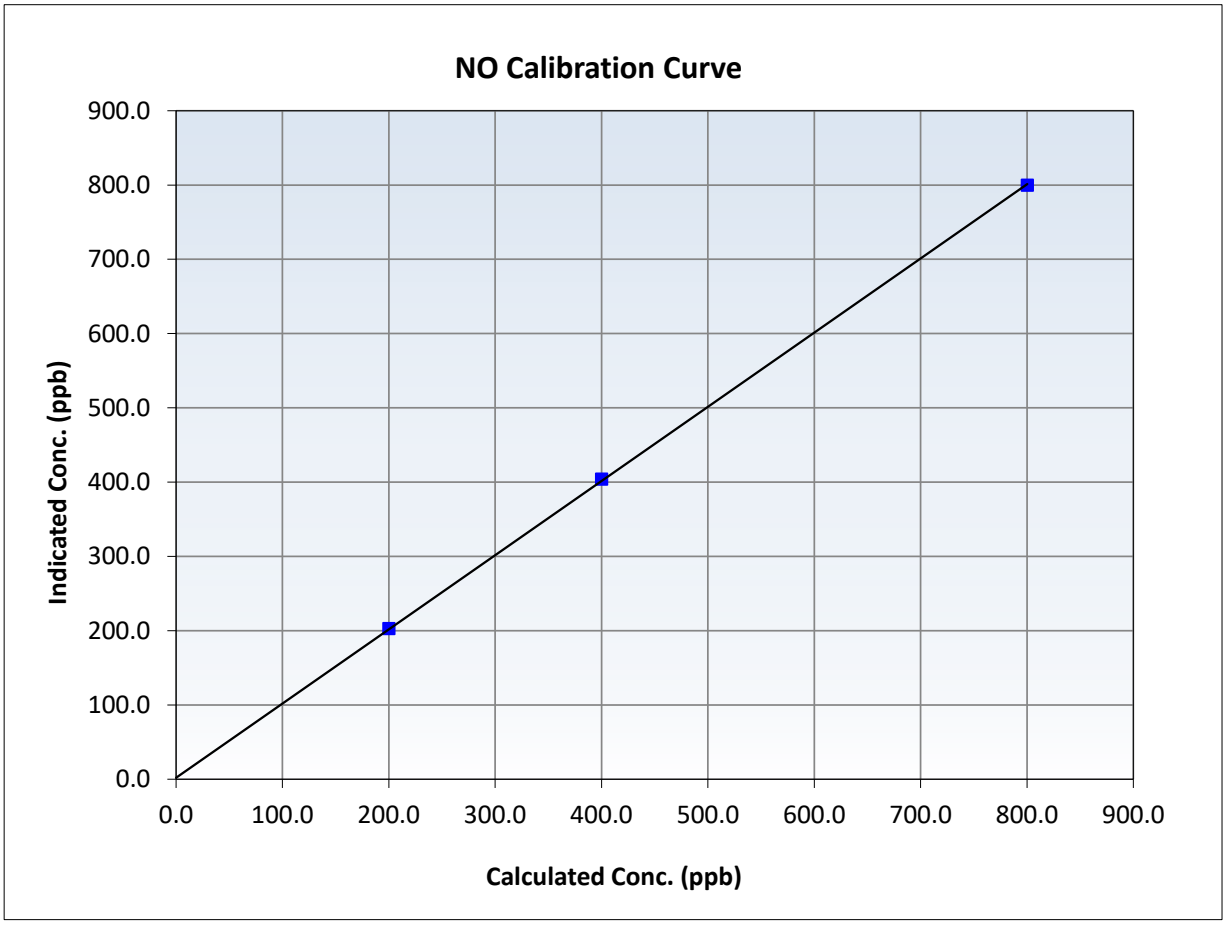
Station Information

Calibration Date:	March 6, 2026	Previous Calibration:	February 19, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	9:56	End Time (MST):	14:40
Analyzer make:	Thermo 42i	Analyzer serial #:	1160120024

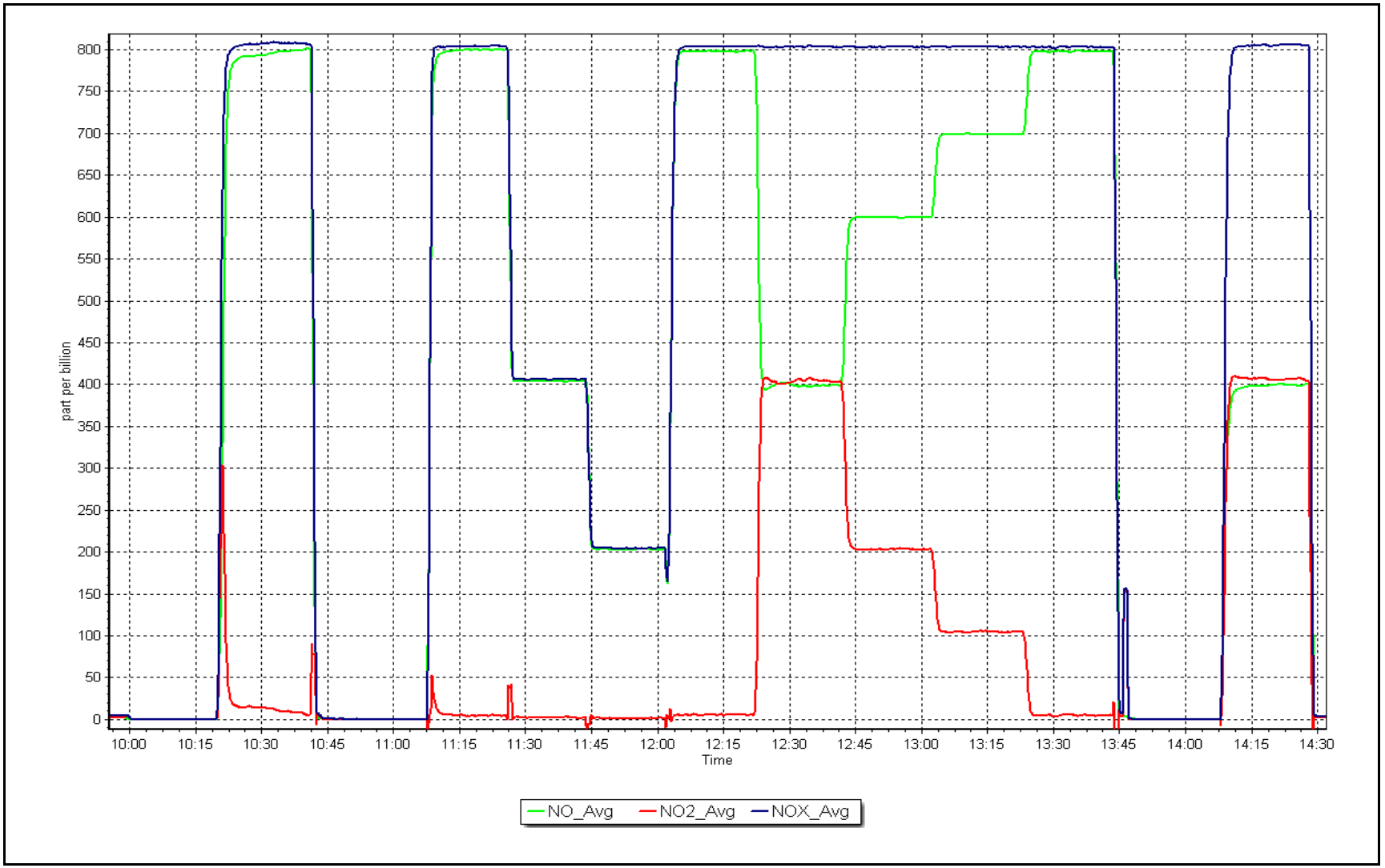
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
800.3	799.8	1.0006
400.2	404.0	0.9905
200.1	203.0	0.9856

Statistical Evaluation		Limits
Correlation Coefficient	0.999962	≥0.995
Slope	0.998756	0.90 - 1.10
Intercept	1.971926	+/-20



NO_X Calibration Plot Date: March 6, 2026 Location: Athabasca Valley



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS07
Calibration Date:	March 9, 2026	Last Cal Date:	February 27, 2026
Start time (MST):	9:06	End time (MST):	11:56
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:	1.004714	1.001600	Backgd or Offset:	-0.2	-0.3
Calibration intercept:	-0.300000	0.520000	Coeff or Slope:	1.002	1.012

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	-0.3	----
As found High point	5000	1705.1	400.0	401.9	0.995
As found Mid point					
As found Low point					
Baseline Corr As found:	402.2	Previous response	401.6	*% 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	

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	-0.1	----
High point	5000	1705.1	400.0	400.7	0.998
Mid point	5000	1172.8	200.0	201.6	0.992
Low point	5000	921.2	100.0	101.0	0.990
As left zero	5000	NA	0.0	-0.1	----
As left span	5000	1582.6	400.0	405.1	0.987
				Average Correction Factor	0.993

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

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

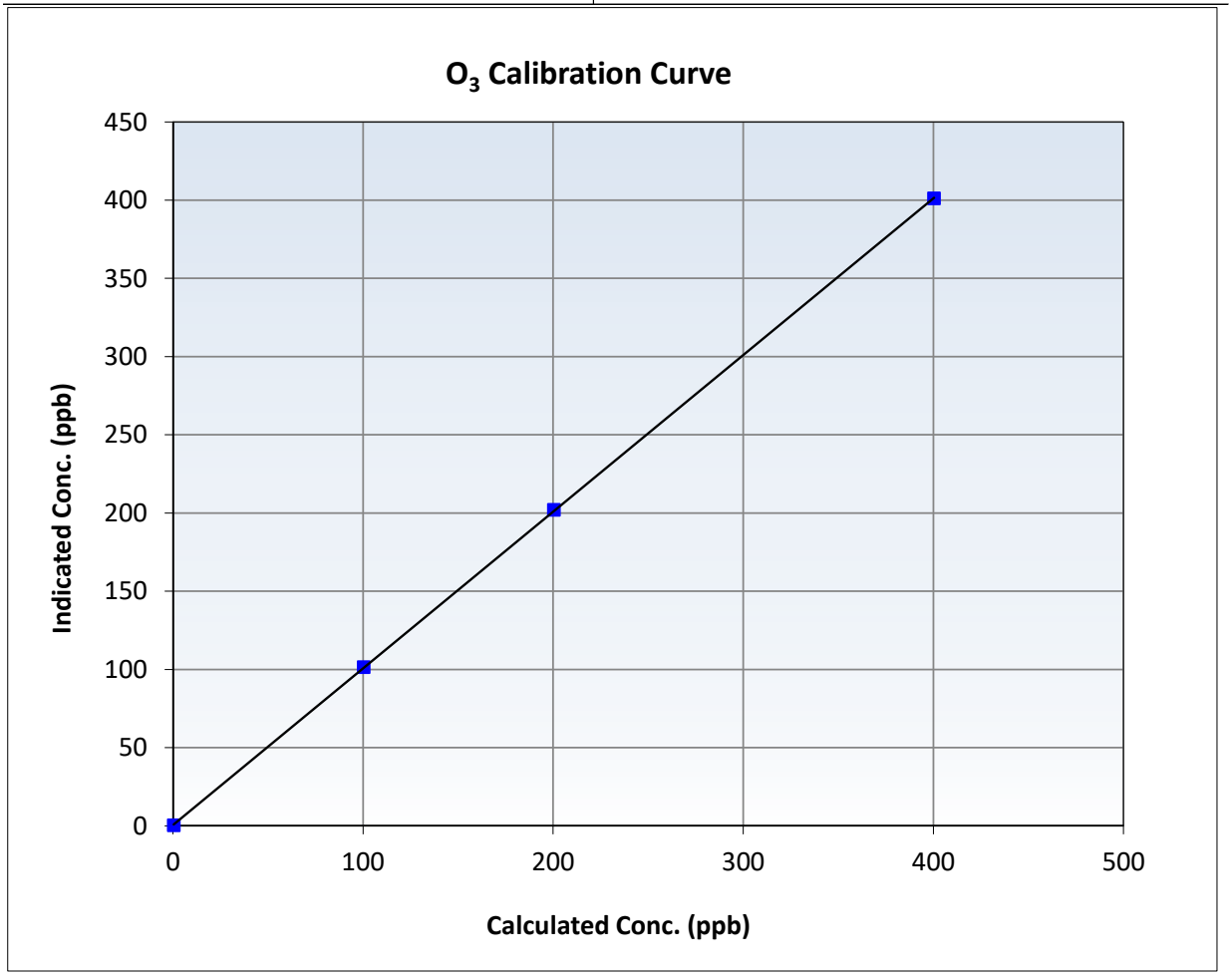
O_3 Calibration Summary

Station Information

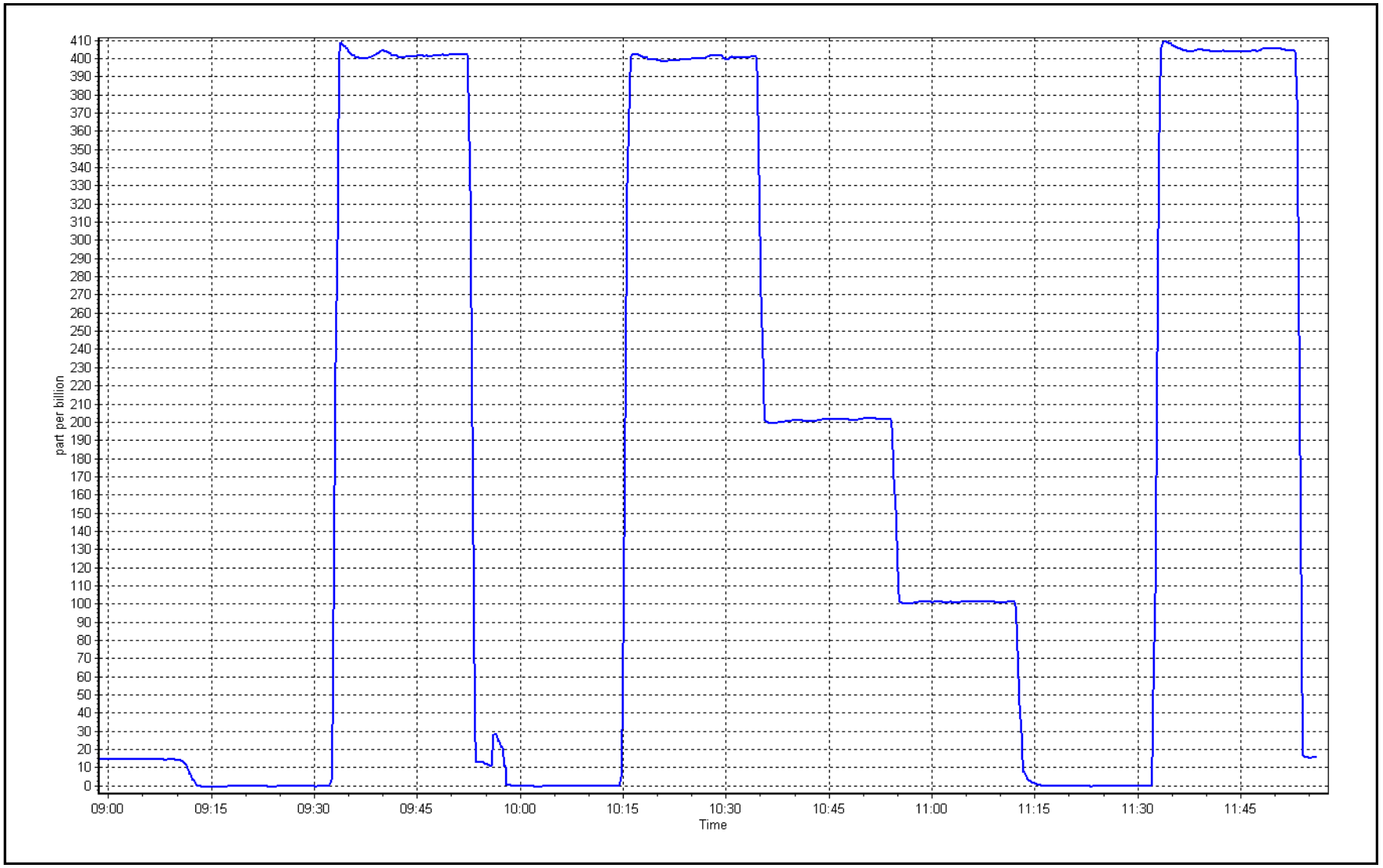
Calibration Date:	March 9, 2026	Previous Calibration:	February 27, 2026
Station Name:	Athabasca Valley	Station Number:	AMS07
Start Time (MST):	9:06	End Time (MST):	11:56
Analyzer make:	Thermo 49i	Analyzer serial #:	1507964700

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.1	----	Correlation Coefficient	0.999985	*≥0.995*
400.0	400.7	0.9983	Slope	1.001600	*0.90 - 1.10*
200.0	201.6	0.9921	Intercept	0.520000	*+/- 5*
100.0	101.0	0.9901			



O_3 Calibration Plot Date: March 9, 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:	March 5, 2026	Last Cal Date:	February 27, 2026
Start time (MST):	10:51	End time (MST):	11:26
Analyzer Make:	API T640	S/N:	2235
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388755
Temp/RH standard:	Alicat FP-25BT	S/N:	388755

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (^{o}C)	-8.10	-9.16	-8.10	☐	+/- 2 ^{o}C
P (mmHg)	732.80	732.65	732.80	☐	+/- 10 mmHg
Flow (LPM)	4.99	4.95	4.99	☐	+/- 0.25 LPM
PW% (pump)	33	-----	33	☐	>80%
Zero Verification	PM w/o HEPA:	9.50	PM w/ HEPA:	0.10	<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: January 22, 2026

Date Disposable Filter Changed: February 27, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: October 9, 2025

Date RH/T Sensor Cleaned: October 9, 2025

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

Calibration by: Param Kaur

Wood Buffalo Environmental Association

CO Calibration Report

Station Information

Station Name:	Athabasca Valley	Station number:	AMS 07
Calibration Date:	March 10, 2026	Last Cal Date:	February 6, 2026
Start time (MST):	9:03	End time (MST):	12:15
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Thermo 48i-TLE		Analyzer serial #:	1408761381	
Analyzer Range:	0 - 50 ppm				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.997610	0.997010	Backgd or Offset:	6.006	5.968
Calibration intercept:	0.200018	0.258016	Coeff or Slope:	1.079	1.079

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	0.1	----
As found High point	4932	67.8	40.0	40.1	1.001
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr As found:	40.01	Prev response:	40.15	*% 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	

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	0.1	----
High point	4932	67.8	40.0	40.1	1.000
Mid point	4966	33.9	20.0	20.4	0.981
Low point	4983	16.9	10.0	10.3	0.965
As left zero	5000	0.0	0.0	0.1	----
As left span	4932	67.8	40.0	40.1	1.000
				Average Correction Factor	0.982

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

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

CO Calibration Summary

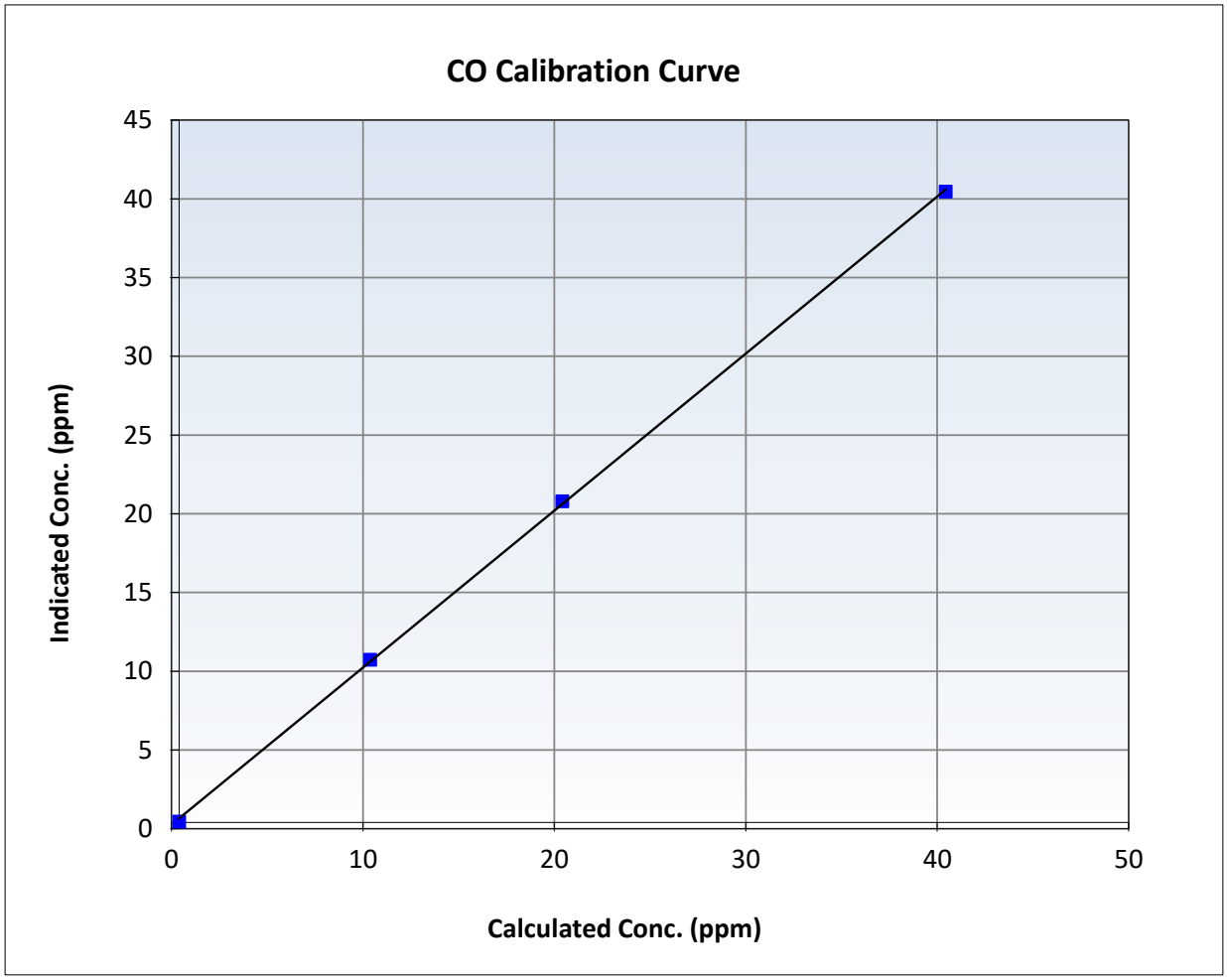
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 6, 2026
Station Name:	Athabasca Valley	Station Number:	AMS 07
Start Time (MST):	9:03	End Time (MST):	12:15
Analyzer make:	Thermo 48i-TLE	Analyzer serial #:	1408761381

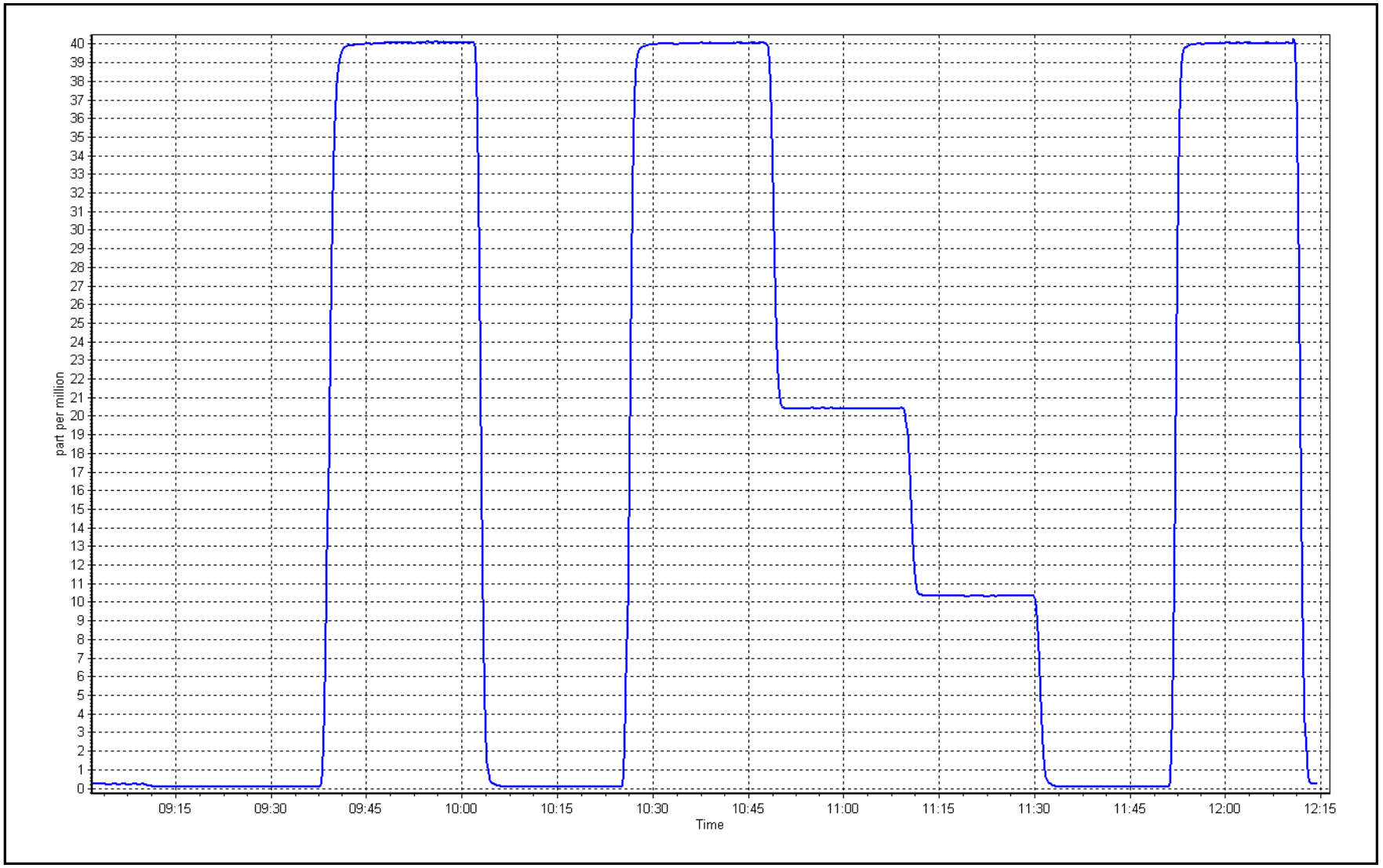
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
40.0	40.1	0.9996
20.0	20.4	0.9815
10.0	10.3	0.9653

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999886	*≥0.995*
Slope	0.997010	*0.90 - 1.10*
Intercept	0.258016	*+/-1.5*



CO Calibration Plot Date: March 10, 2026 Location: Athabasca Valley



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS08
FORT CHIPEWYAN
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	March 17, 2026	Last Cal Date:	February 13, 2026
Start time (MST):	9:02	End time (MST):	11:30
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:	1.001818	0.994151	Backgd or Offset:	4.02	4.02
Calibration intercept:	0.454770	0.516111	Coeff or Slope:	1.058	1.058

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	-0.9	----
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:	793.6	Previous response	802.3	*% 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	-0.4	----
High point	4920	80.3	800.4	795.3	1.006
Mid point	4960	40.2	400.7	400.7	1.000
Low point	4980	20.1	200.4	199.7	1.003
As left zero	5000	0.0	0.0	-0.5	----
As left span	4920	80.3	800.4	794.2	1.008
				Average Correction Factor:	1.003

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

Calibration Performed By: Morgan Voyageur

Wood Buffalo Environmental Association

SO_2 Calibration Summary

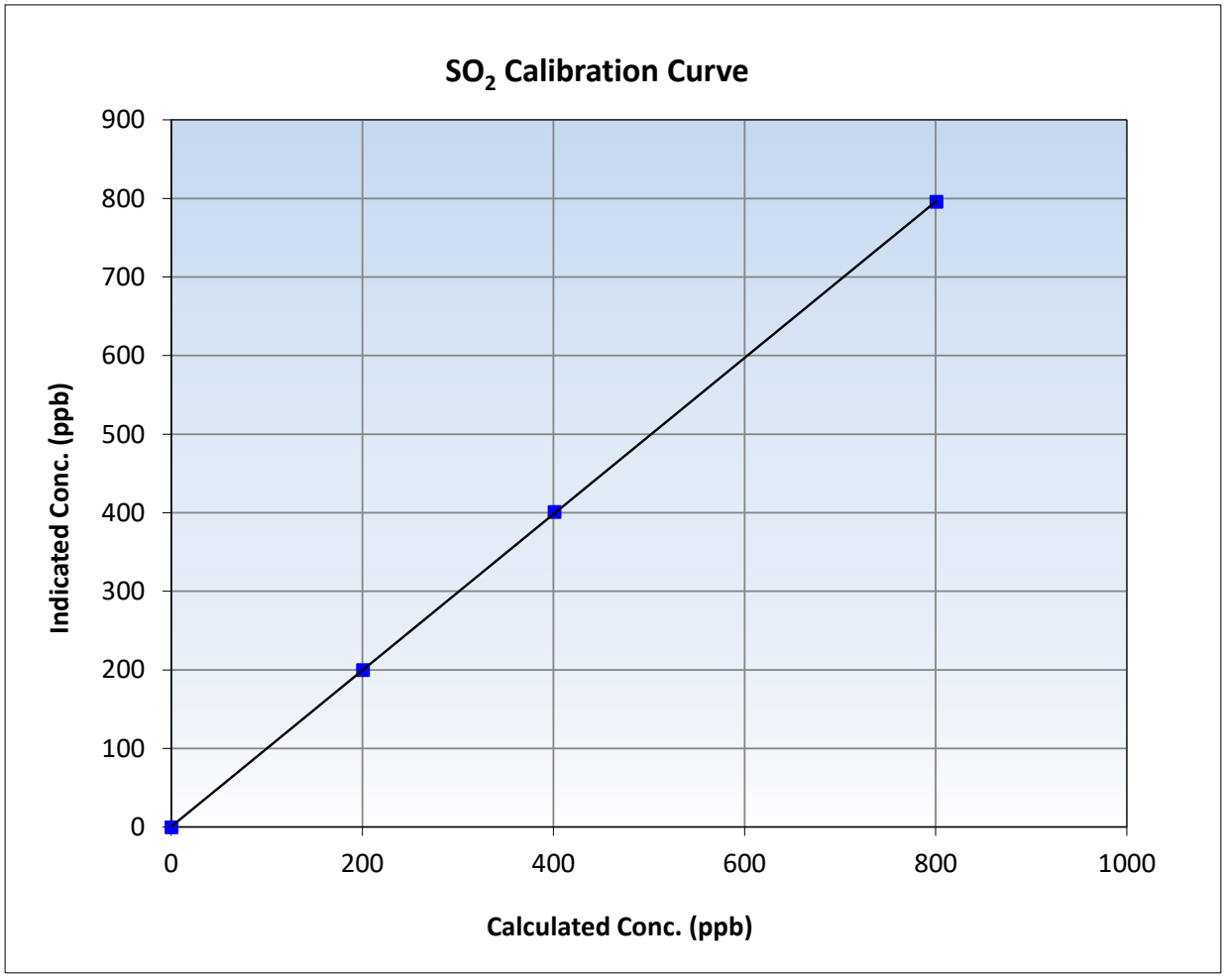
Station Information

Calibration Date:	March 17, 2026	Previous Calibration:	February 13, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:02	End Time (MST):	11:30
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1170050147

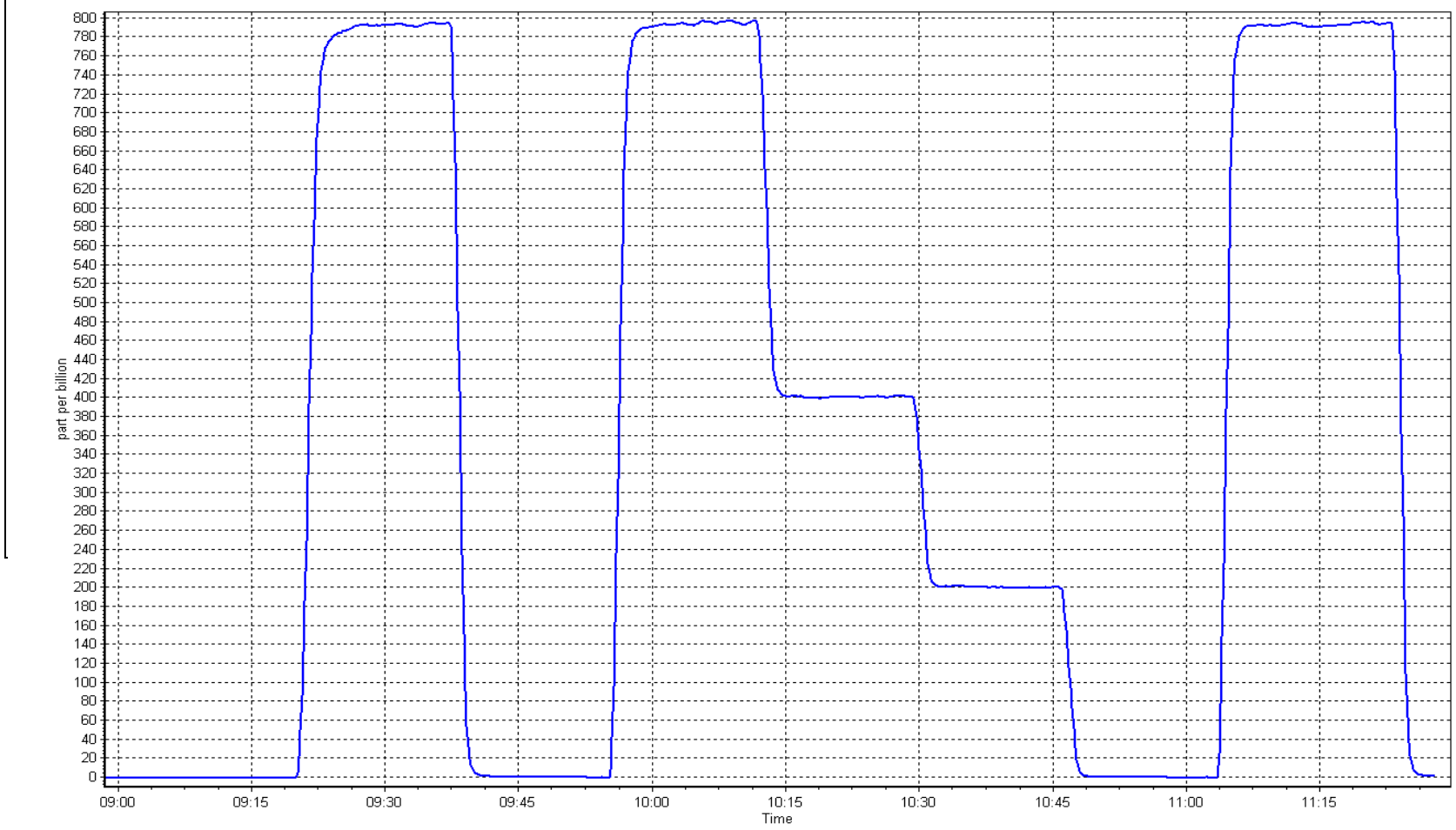
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.4	----
800.4	795.3	1.0064
400.7	400.7	1.0000
200.4	199.7	1.0033

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	0.994151	*0.90 - 1.10*
Intercept	0.516111	*+/-30*



SO2 Calibration Plot Date: March 17, 2026 Location: Fort Chipewyan



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	March 19, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	8:17	End time (MST):	15:30
Reason:	Routine		

Calibration Standards

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

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.989663	0.994949	Backgd or Offset:	3.0	3.0
Calibration intercept:	-0.157758	-0.317733	Coeff or Slope:	1.157	1.157

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4917	82.6	80.0	79.6	1.003
As found Mid point	4959	41.3	40.0	40.0	0.997
As found Low point	4979	20.7	20.0	19.6	1.017
New cylinder response					

Baseline Corr As found:	79.7	Prev response:	78.98	*% change:	0.9%
Baseline Corr 2nd AF pt:	40.1	AF Slope:	0.998240	AF Intercept:	-0.157918
Baseline Corr 3rd AF pt:	19.7	AF Correlation:	0.999962	* = > +/-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	79.3	1.008
Mid point	4959	41.3	40.0	39.6	1.009
Low point	4979	20.7	20.0	19.1	1.049
As left zero	5000	0.0	0.0	0.1	----
As left span	4917	82.6	80.0	78.9	1.013
SO2 Scrubber Check	4920	80.3	803.0	0.0	----
Date of last scrubber change:		May 15, 2025		Ave Corr Factor	1.022
Date of last converter efficiency test:					

Notes: changed inlet filter after as found. No adjustments made.

Calibration Performed By: Morgan Voyageur

Wood Buffalo Environmental Association

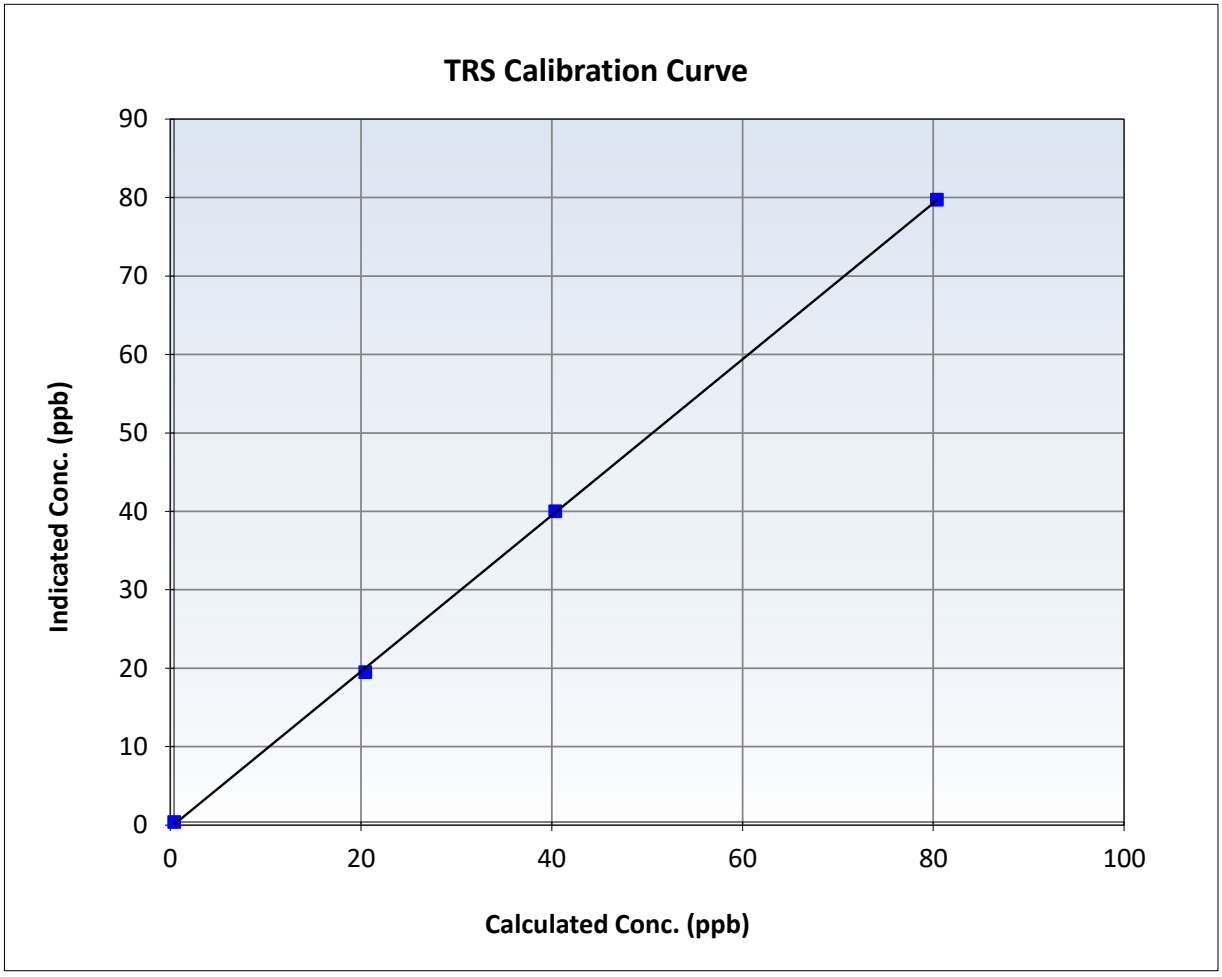
TRS Calibration Summary

Station Information

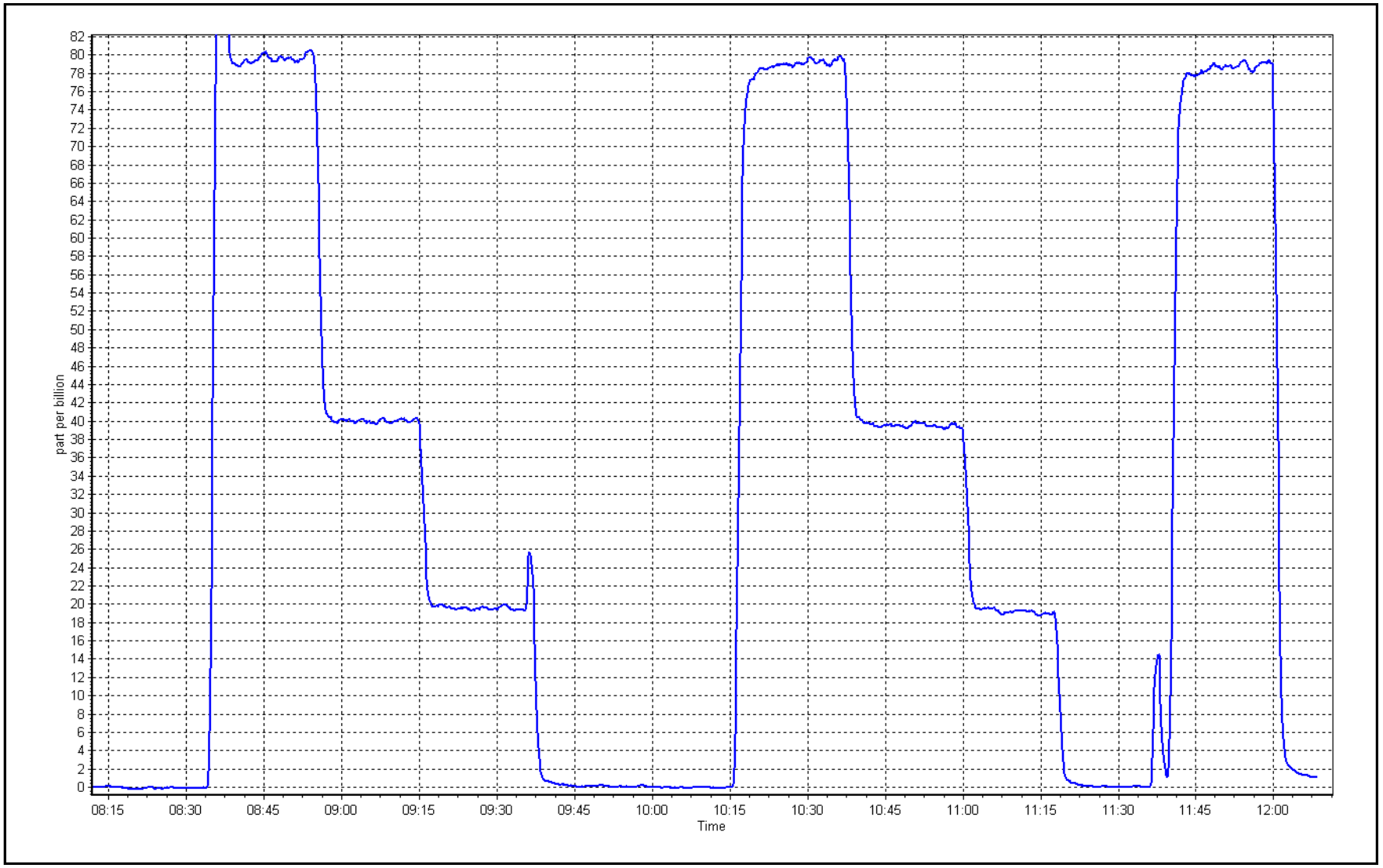
Calibration Date:	March 19, 2026	Previous Calibration:	February 12, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	8:17	End Time (MST):	15:30
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153461

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999886	*≥0.995*
80.0	79.3	1.0084	Slope	0.994949	*0.90 - 1.10*
40.0	39.6	1.0095			
20.0	19.1	1.0492	Intercept	-0.317733	*+/-3*



TRS Calibration Plot Date: March 19, 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:	March 24, 2026
Last Cal Date:	February 13, 2026
Start time (MST):	9:04
End time (MST):	12:59
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	0.6	1.0	-0.4	----	----
AF High point	4933	66.7	801.8	800.4	1.3	837.0	835.0	2.4	0.9586	0.9598
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.5 ppb	NO = 801.4 ppb
Baseline Corr 1st pt	NO_X = 836.4 ppb	NO = 834.0 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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = 3.9%
As found	NO r^2:	*Percent Change	NO = 3.9%
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:	1.087	1.066	NO bkgnd or offset:	4.8	4.8
NOX coeff or slope:	0.997	0.997	NOX bkgnd or offset:	5.2	5.2
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	178.5	175.5

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.000845	0.995382
NO_X Cal Offset:	1.014244	1.754790
NO Cal Slope:	1.001199	0.998370
NO Cal Offset:	-0.025878	0.814744
NO_2 Cal Slope:	1.004950	0.991864
NO_2 Cal Offset:	-0.179382	-0.449987

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	0.8	1.2	-0.3	----	----
High point	4933	66.7	801.8	800.4	1.3	799.2	800.0	-1.2	1.0032	1.0006
Mid point	4967	33.3	400.2	399.6	0.7	401.1	400.0	1.1	0.9979	0.9989
Low point	4983	16.7	200.7	200.4	0.3	202.2	200.2	2.0	0.9927	1.0010
As left zero	5000	0.0	0.0	0.0	0.0	0.9	1.1	-0.2	----	----
As left span	4933	66.7	801.8	400.8	401.0	796.5	400.8	395.7	1.0066	1.0000
							Average Correction Factor		0.9979	1.0002

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	-0.3	----	----
High GPT point	796.7	396.9	401.1	397.2	1.0099	99.0%
Mid GPT point	796.7	599.3	198.7	197.5	1.0062	99.4%
Low GPT point	796.7	697.0	101.0	99.0	1.0205	98.0%
				Average Correction Factor	1.0122	98.8%

Notes: Changed inlet filter after as founds. Made adjustment to span for a more liner equation.

Calibration Performed By: Jermey cardinal

Wood Buffalo Environmental Association

NO_X Calibration Summary

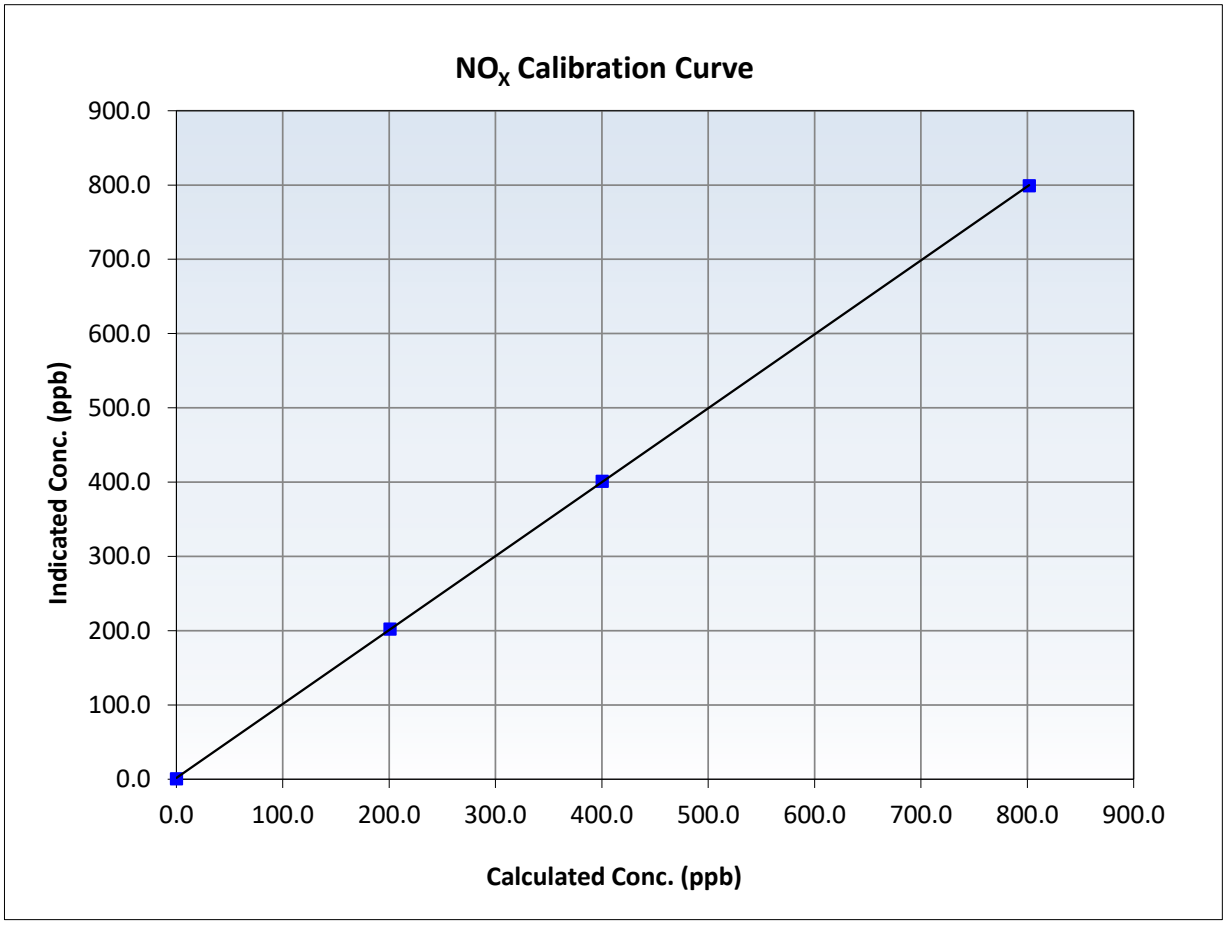
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 13, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:04	End Time (MST):	12:59
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.8	----
801.8	799.2	1.0032
400.2	401.1	0.9979
200.7	202.2	0.9927

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999992	*≥0.995*
Slope	0.995382	*0.90 - 1.10*
Intercept	1.754790	*+/-20*



Wood Buffalo Environmental Association

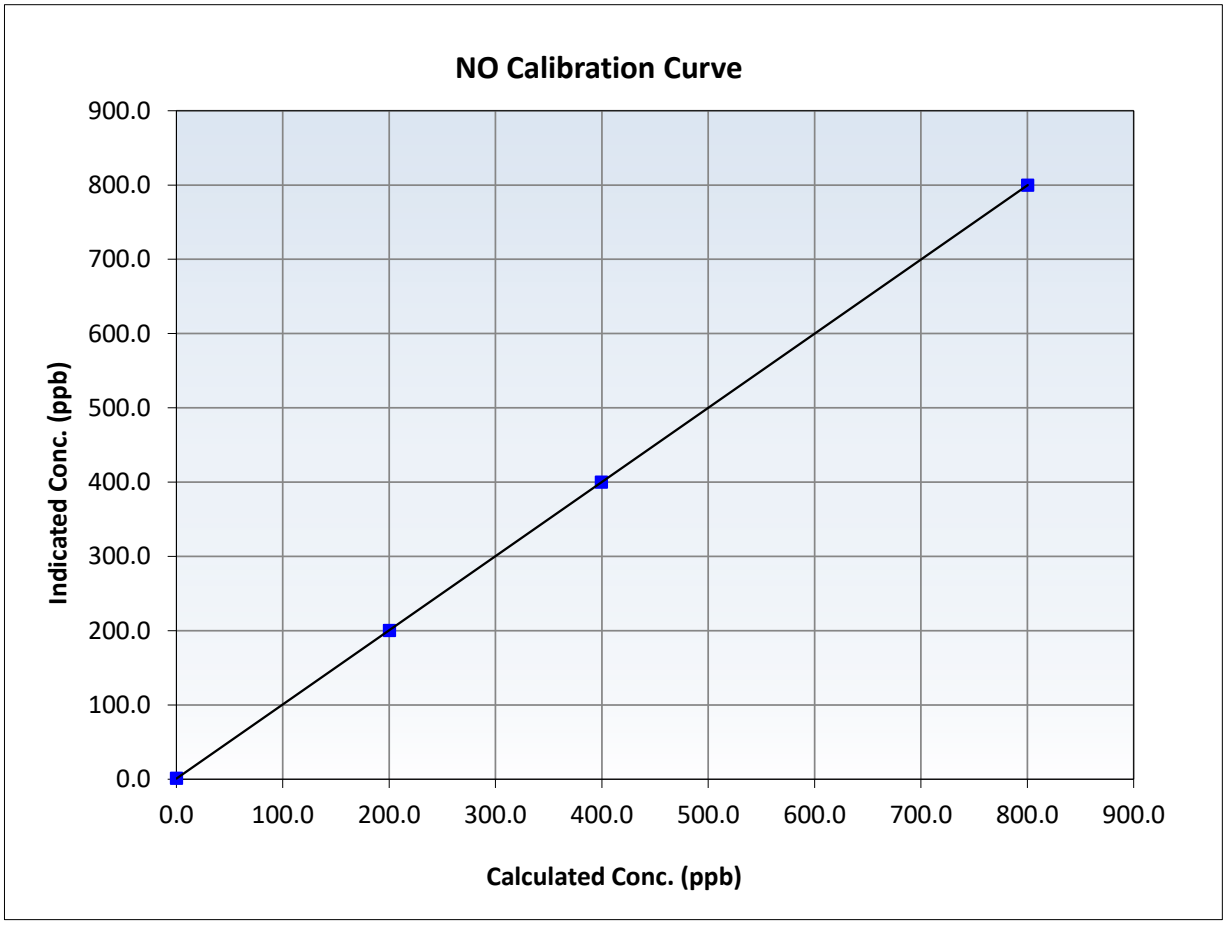
NO Calibration Summary

Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 13, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:04	End Time (MST):	12:59
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	1.2	----	Correlation Coefficient	0.999998	≥0.995
800.4	800.0	1.0006	Slope	0.998370	0.90 - 1.10
399.6	400.0	0.9989			
200.4	200.2	1.0010	Intercept	0.814744	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

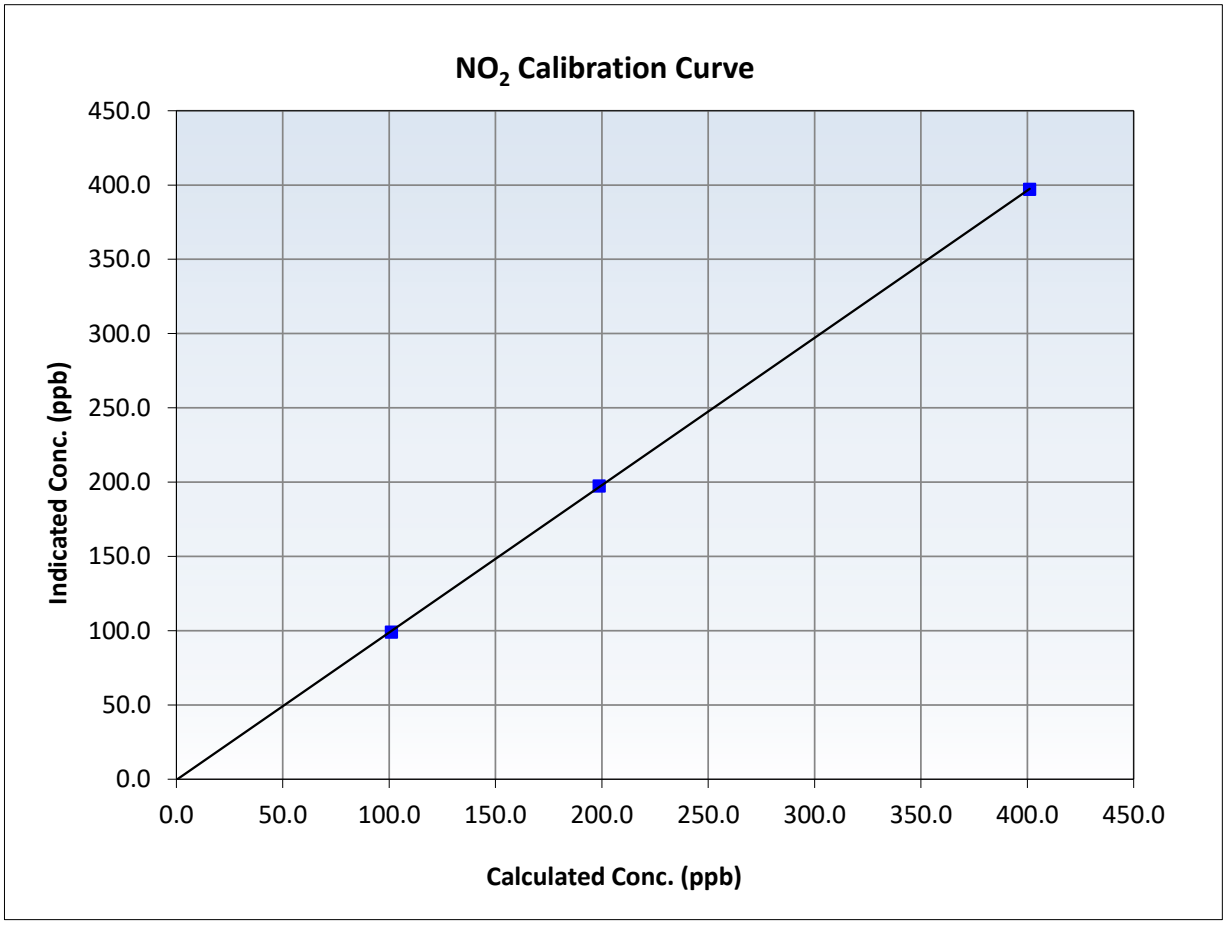
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 13, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:04	End Time (MST):	12:59
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262592

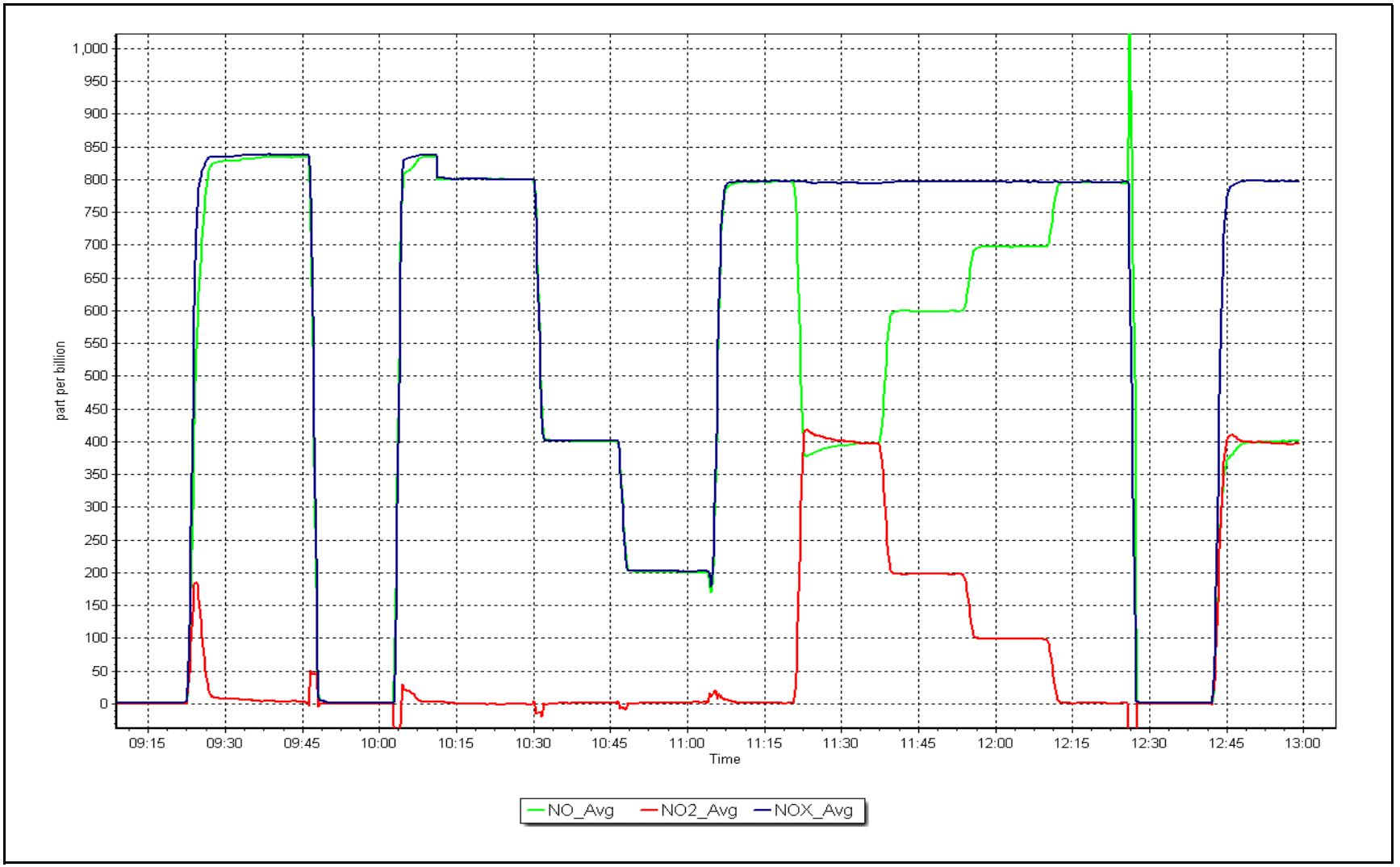
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
401.1	397.2	1.0099
198.7	197.5	1.0062
101.0	99.0	1.0205

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999984	*≥0.995*
Slope	0.991864	*0.90 - 1.10*
Intercept	-0.449987	*+/-20*



NO_X Calibration Plot Date: March 24, 2026 Location: Fort Chipewyan



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Fort Chipewyan	Station number:	AMS 08
Calibration Date:	March 12, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	9:20	End time (MST):	12:05
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:	1.000486	0.993829	Backgd or Offset:	-2.7	-2.7
Calibration intercept:	1.540000	1.780000	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	1.2	----
As found High point	5000	968.7	400.0	399.1	1.005
As found Mid point					
As found Low point					
Baseline Corr As found:	397.9	Previous response	401.7	*% change	-1.0%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	1.1	----
High point	5000	968.7	400.0	398.9	1.003
Mid point	5000	820.5	200.0	201.1	0.995
Low point	5000	720.0	100.0	101.7	0.983
As left zero	5000	0.0	0.0	1.2	----
As left span	5000	968.7	400.0	400.7	0.998
				Average Correction Factor	0.994

Notes: Changed inlet filters after as founds.

Calibration Performed By: Jermey cardinal

Wood Buffalo Environmental Association

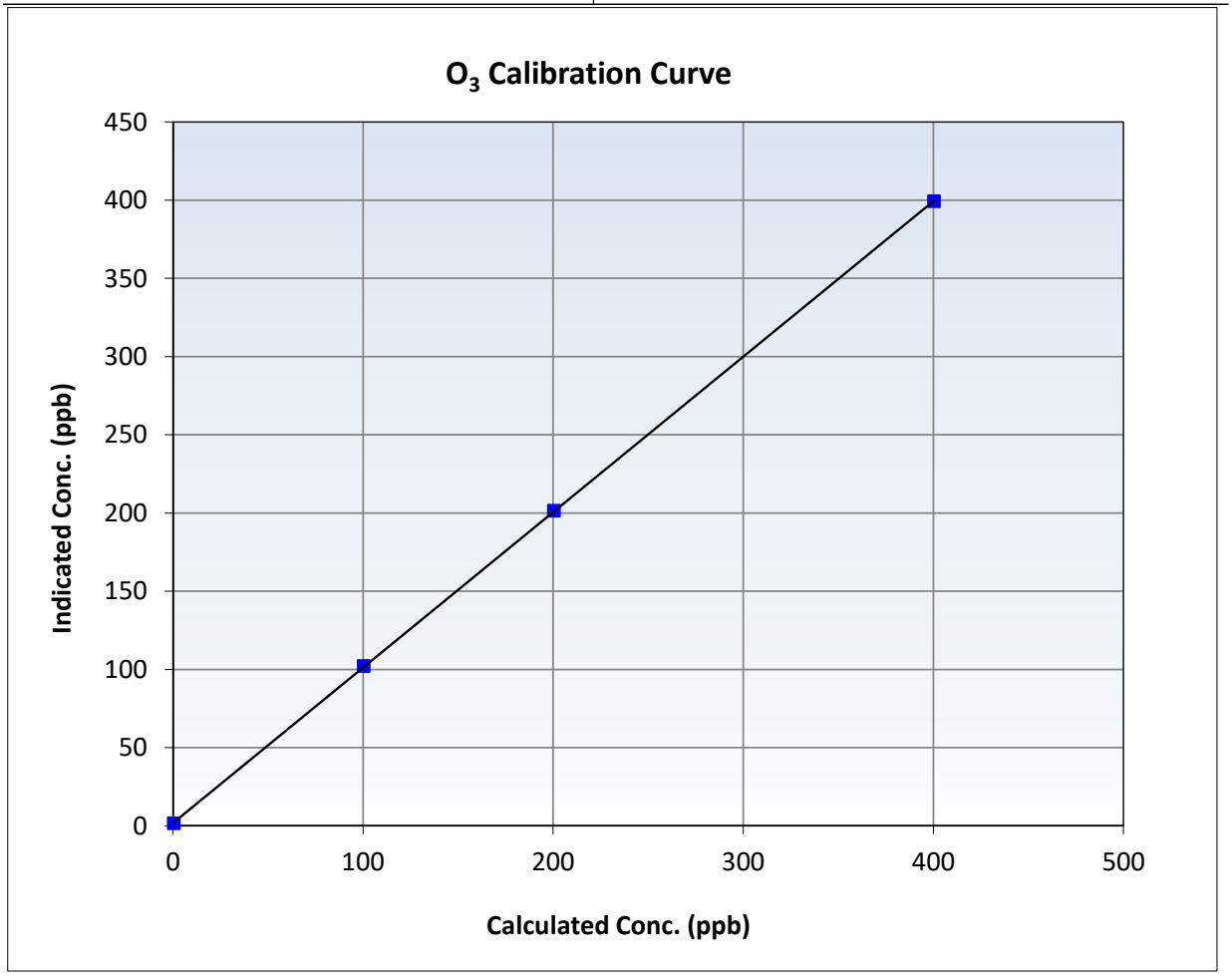
O_3 Calibration Summary

Station Information

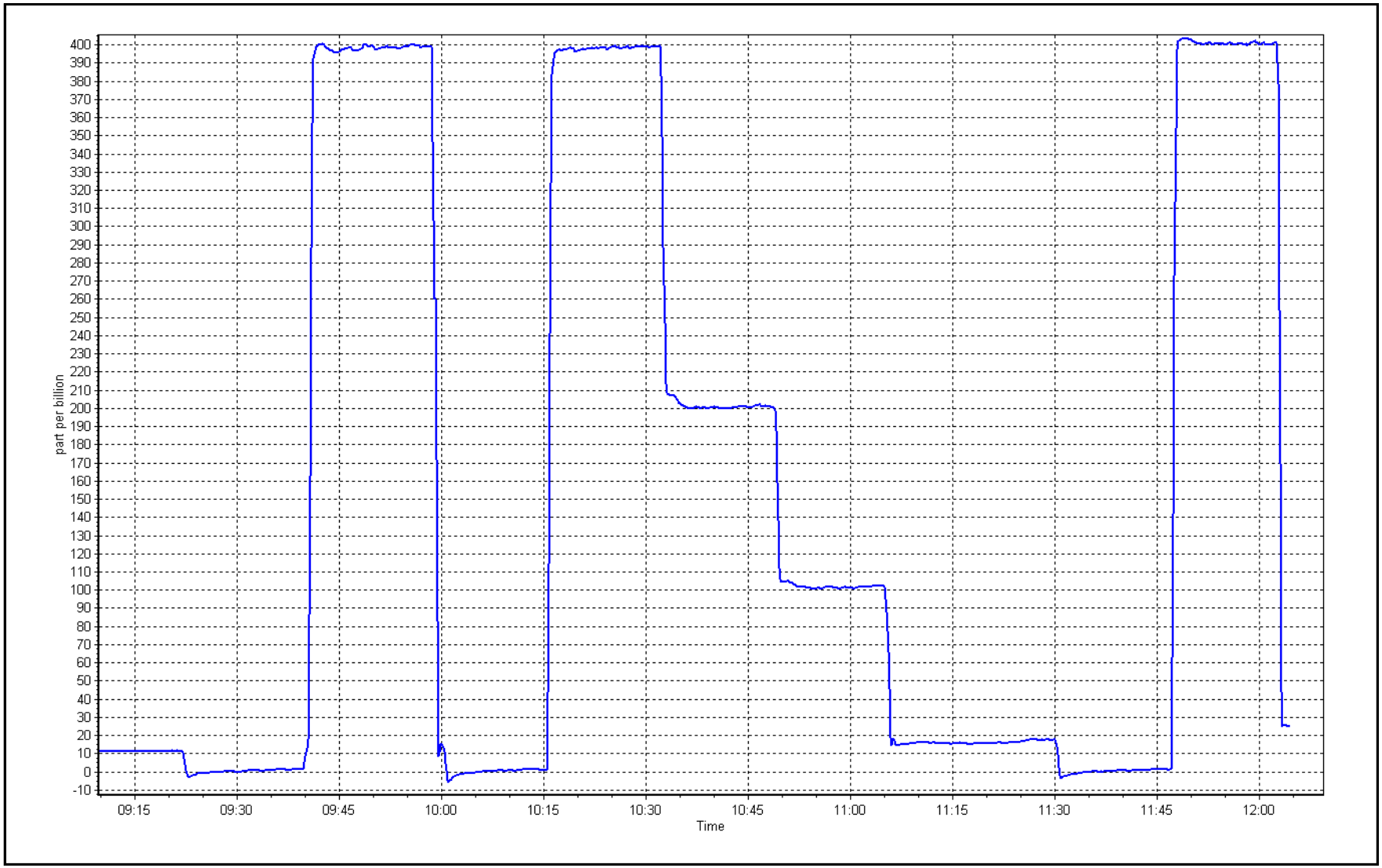
Calibration Date:	March 12, 2026	Previous Calibration:	February 12, 2026
Station Name:	Fort Chipewyan	Station Number:	AMS 08
Start Time (MST):	9:20	End Time (MST):	12:05
Analyzer make:	Thermo 49i	Analyzer serial #:	1152220026

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	1.1	----	Correlation Coefficient	0.999986	≥0.995
400.0	398.9	1.0028	Slope	0.993829	0.90 - 1.10
200.0	201.1	0.9945			
100.0	101.7	0.9833	Intercept	1.780000	+/- 5



O_3 Calibration Plot Date: March 12, 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:	March 23, 2026	Last Cal Date:	February 13, 2026
Start time (MST):	12:59	End time (MST):	15:01
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 (^{o}C)	-22.9	-24.50	-22.9	☐	+/- 2 ^{o}C
P (mmHg)	749.0	750.67	749.0	☐	+/- 10 mmHg
Flow (LPM)	4.99	5.01	4.99	☐	+/- 0.25 LPM
PW% (pump)	37%	NA	37%	☐	>80%
Zero Verification	PM w/o HEPA:	6.40	PM w/ HEPA:	0.00	<0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

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

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test	10.9	10.8	10.8	☐	+/- 0.5

Date Optical Chamber Cleaned: March 23, 2026

Date Disposable Filter Changed: March 23, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: December 3, 2025

Date RH/T Sensor Cleaned: December 3, 2025

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

Calibration by: Morgan Voyageur, Shawn Blair

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS09
BARGE LANDING
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	March 25, 2026	Last Cal Date:	February 9, 2026
Start time (MST):	9:34	End time (MST):	13:42
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:	1.001287	1.007959	Backgd or Offset:	12.2	12.5
Calibration intercept:	-0.738518	-1.397633	Coeff or Slope:	1.036	1.036

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	79.1	799.8	805.0	0.993
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	805.1	Previous response	800.1	*% 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	-0.3	----
High point	4921	79.1	799.8	805.0	0.994
Mid point	4961	39.5	399.4	401.7	0.994
Low point	4980	19.8	200.2	198.6	1.008
As left zero	5000	0.0	0.0	-0.2	----
As left span	4921	79.1	799.8	807.0	0.991
				Average Correction Factor:	0.999

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

SO_2 Calibration Summary

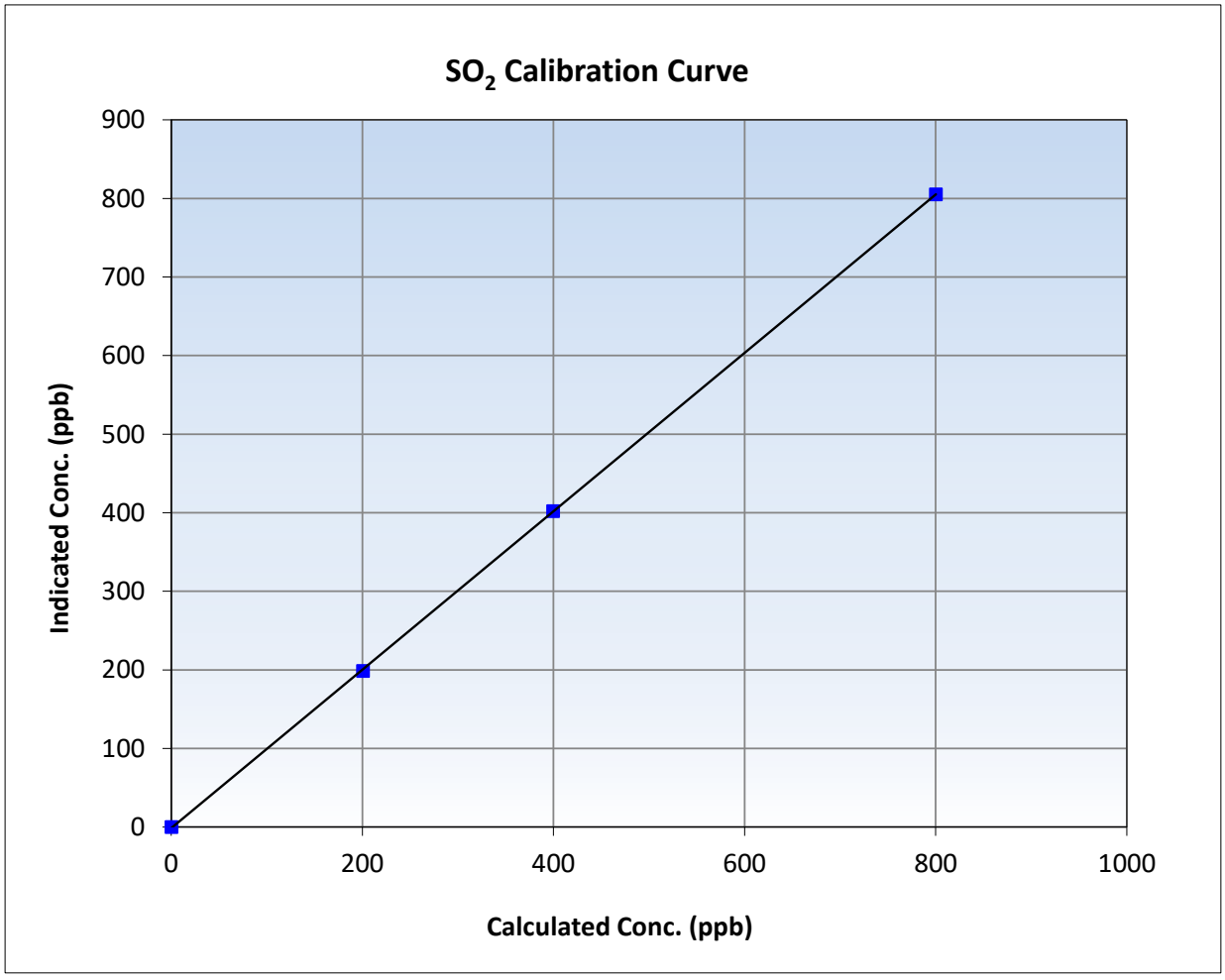
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:34	End Time (MST):	13:42
Analyzer make:	Thermo 43i	Analyzer serial #:	1118148498

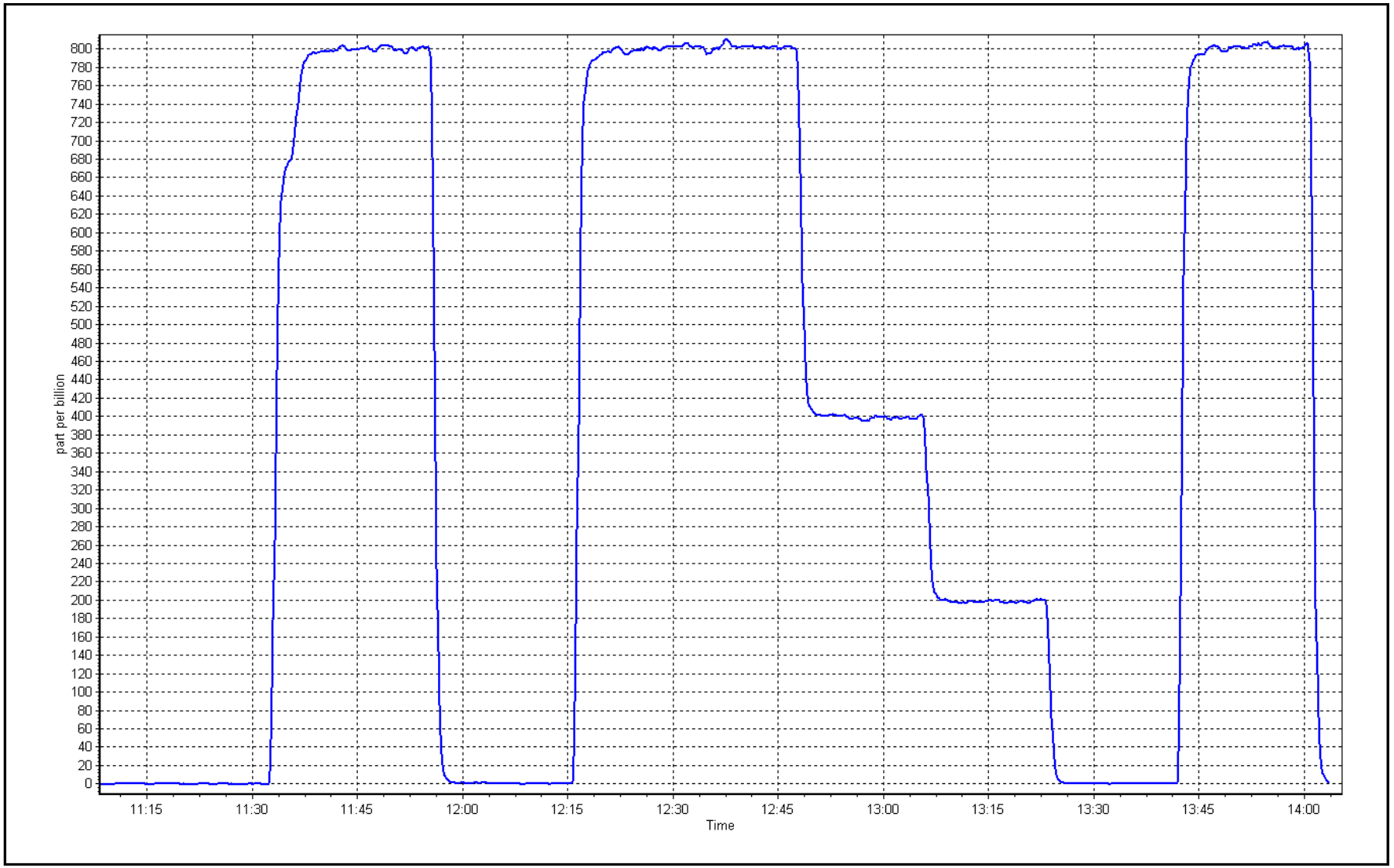
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
799.8	805.0	0.9936
399.4	401.7	0.9942
200.2	198.6	1.0082

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999986	*≥0.995*
Slope	1.007959	*0.90 - 1.10*
Intercept	-1.397633	*+/-30*



SO2 Calibration Plot Date: March 25, 2026 Location: Barge Landing



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	March 10, 2026	Last Cal Date:	February 20, 2026
Start time (MST):	9:57	End time (MST):	15:34
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:	1.001407	1.004260	Backgd or Offset:	1.910	1.910
Calibration intercept:	0.019375	0.019504	Coeff or Slope:	0.740	0.740

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	4923	77.4	80.0	80.0	1.001
As found Mid point	4961	38.7	40.0	40.0	1.001
As found Low point	4981	19.3	20.0	19.9	1.003
New cylinder response					

Baseline Corr As found:	80.0	Prev response:	80.17	*% change:	-0.2%
Baseline Corr 2nd AF pt:	40.0	AF Slope:	0.999693	AF Intercept:	-0.020621
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	1.000000	* = > +/-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	40.2	0.996
Low point	4981	19.3	20.0	20.1	0.993
As left zero	5000	0.0	0.0	0.0	----
As left span	4923	77.4	80.0	80.5	0.994
SO2 Scrubber Check	4920	80.2	802.0	0.0	----

Date of last scrubber change:	8-Jul-25	Ave Corr Factor	0.995
Date of last converter efficiency test:			

Notes: Changed sample inlet filter after as founds. No adjustments made. SOx scrubber check done after third cal point, passed.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

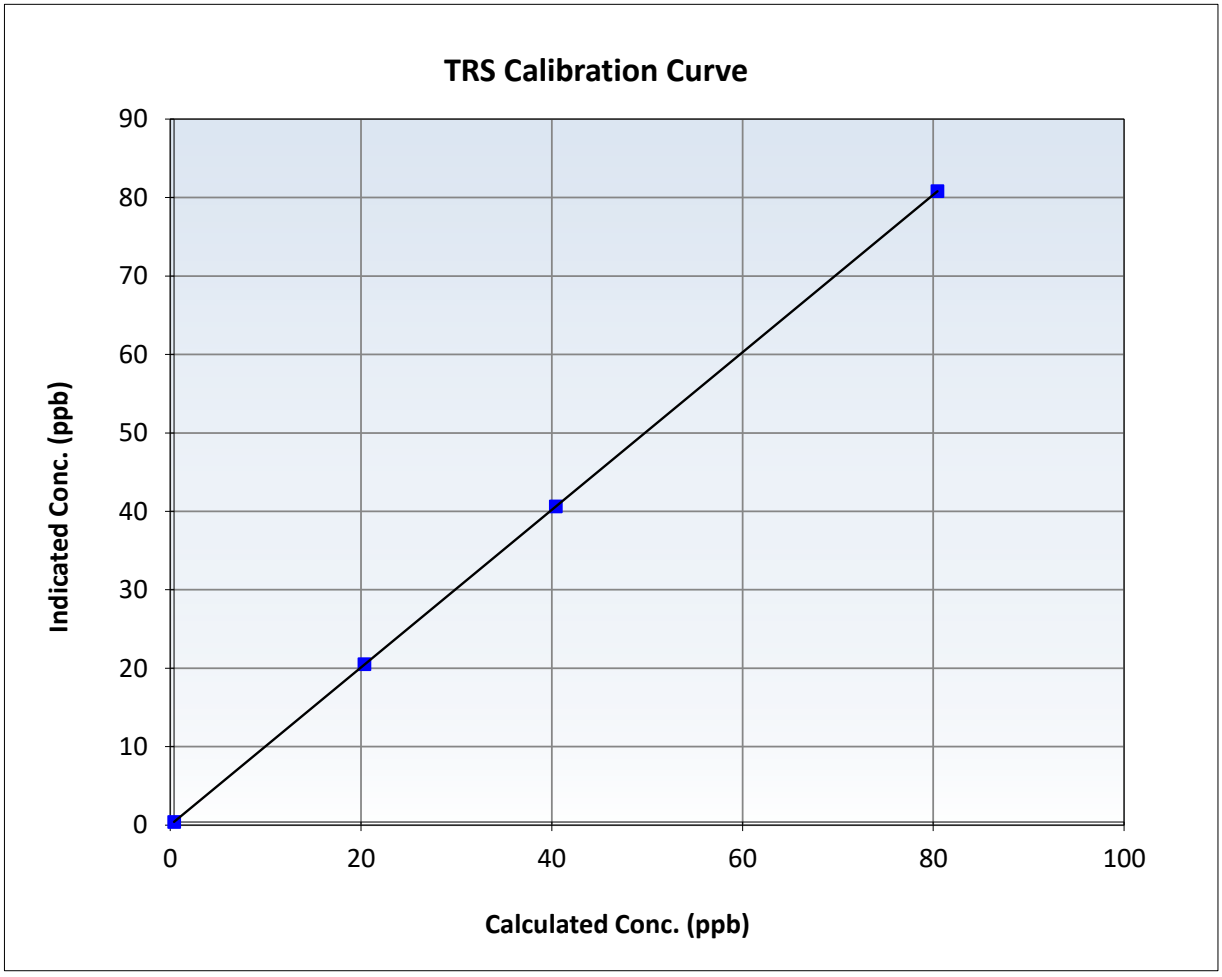
TRS Calibration Summary

Station Information

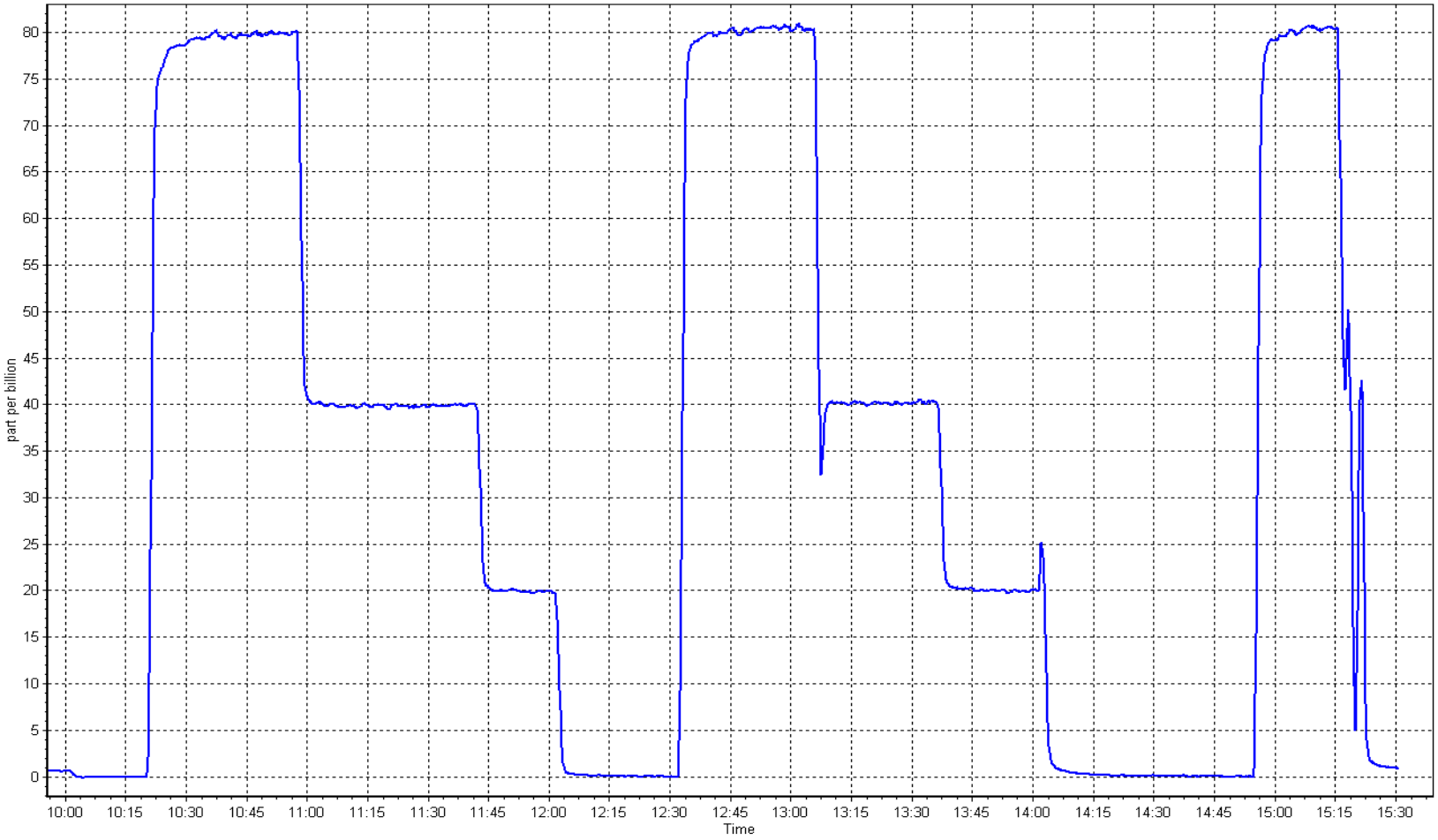
Calibration Date:	March 10, 2026	Previous Calibration:	February 20, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:57	End Time (MST):	15:34
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1203169744

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999999	*≥0.995*
80.0	80.4	0.9955	Slope	1.004260	*0.90 - 1.10*
40.0	40.2	0.9957			
20.0	20.1	0.9930	Intercept	0.019504	*+/-3*



TRS Calibration Plot Date: March 10, 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:	March 25, 2026	Last Cal Date:	February 9, 2026
Start time (MST):	9:34	End time (MST):	13:42
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:	2.36E-04	2.31E-04	NMHC SP Ratio:	5.64E-05	5.47E-05
CH4 Retention time:	14.4	14.4	NMHC Peak Area:	158052	162930
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	17.27	0.979
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.27	Prev response	16.87	*% change	2.3%
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	4921	79.1	16.91	16.87	1.002
Mid point	4961	39.5	8.44	8.35	1.011
Low point	4980	19.8	4.23	4.14	1.023
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	16.91	16.89	1.001
				Average Correction Factor	1.012

Notes: Changed sample inlet filter, hydrogen and nitrogen 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	79.1	8.91	9.15	0.974
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.15	Prev response	8.90	*% change	2.8%
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	4921	79.1	8.91	8.87	1.004
Mid point	4961	39.5	4.45	4.40	1.011
Low point	4980	19.8	2.23	2.18	1.024
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.91	8.89	1.002
				Average Correction Factor	1.013

CH4 As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.1	8.00	8.12	0.985
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.12	Prev response	7.98	*% change	1.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	8.00	8.00	1.000
Mid point	4961	39.5	3.99	3.94	1.013
Low point	4980	19.8	2.00	1.96	1.023
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	8.00	8.00	1.000
				Average Correction Factor	1.012

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	1.001464	0.998977
THC Cal Offset:	-0.059168	-0.048774
CH4 Cal Slope:	1.001318	1.001004
CH4 Cal Offset:	-0.031993	-0.027393
NMHC Cal Slope:	1.001813	0.996798
NMHC Cal Offset:	-0.027776	-0.021982

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

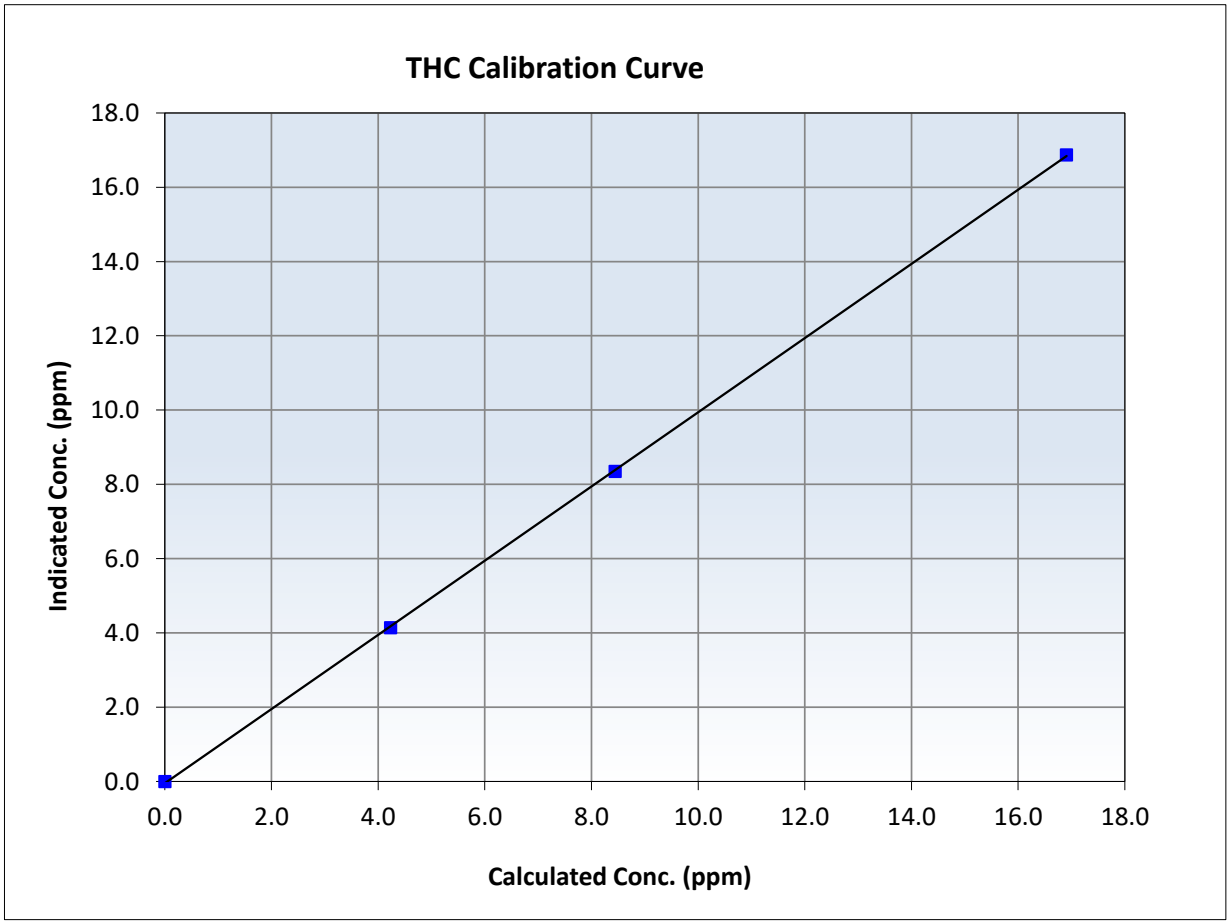
THC Calibration Summary

Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:34	End Time (MST):	13:42
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	0.999961	≥0.995
16.91	16.87	1.0023	Slope	0.998977	0.90 - 1.10
8.44	8.35	1.0111	Intercept	-0.048774	+/-0.5
4.23	4.14	1.0229			



Wood Buffalo Environmental Association

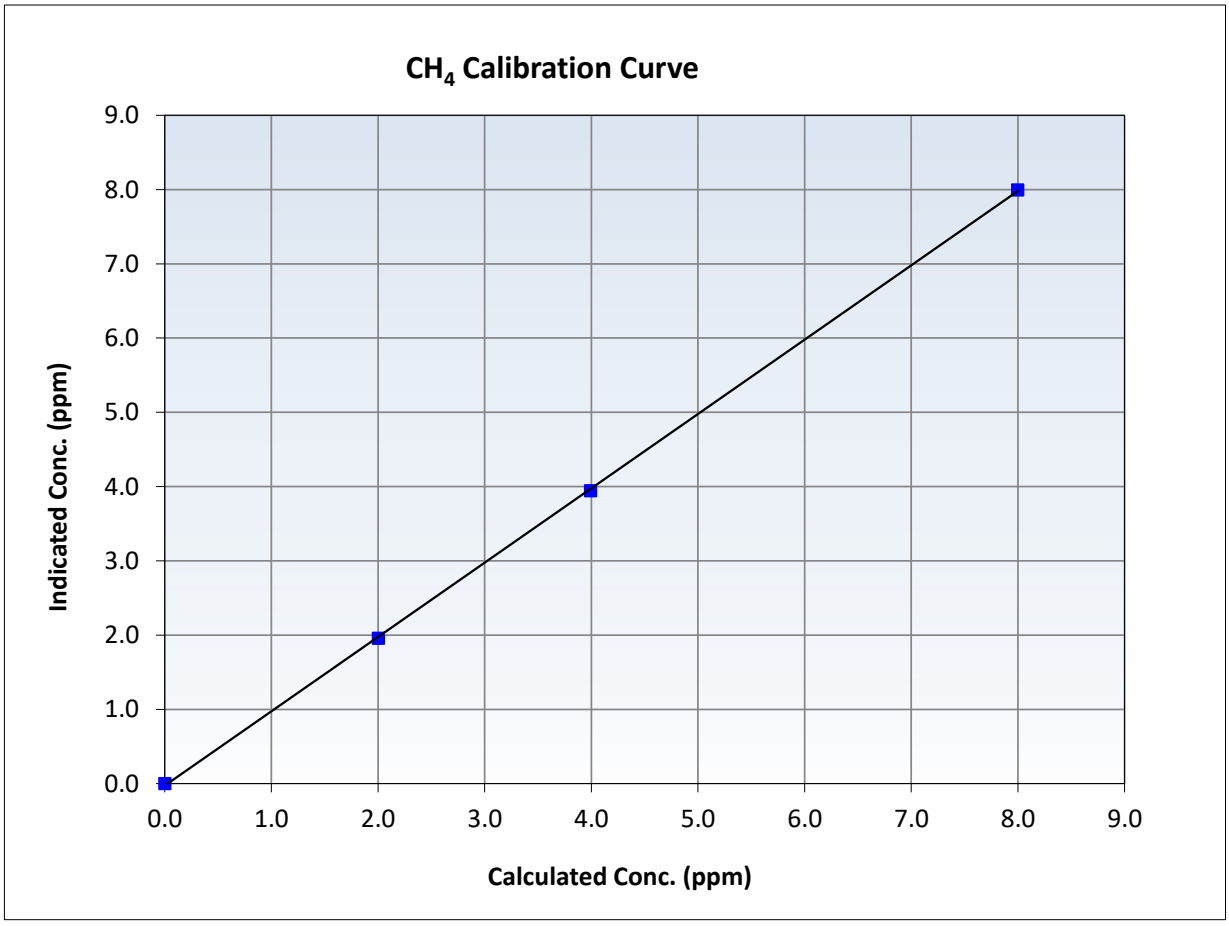
CH_4 Calibration Summary

Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:34	End Time (MST):	13:42
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	0.999939	≥0.995
8.00	8.00	1.0002	Slope	1.001004	0.90 - 1.10
3.99	3.94	1.0126			
2.00	1.96	1.0226	Intercept	-0.027393	+/-0.5



Wood Buffalo Environmental Association

NMHC Calibration Summary

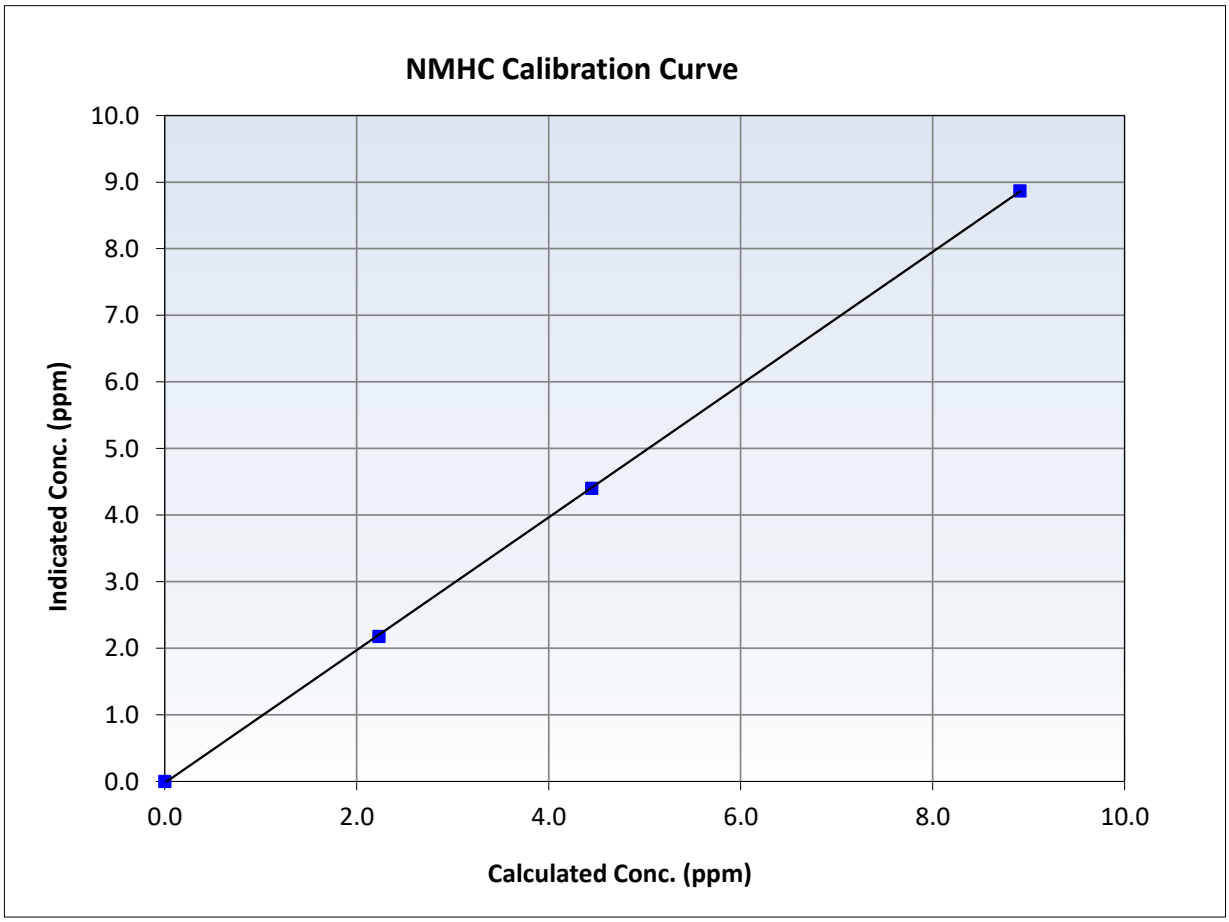
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	9:34	End Time (MST):	13:42
Analyzer make:	Thermo 55i	Analyzer serial #:	1193585650

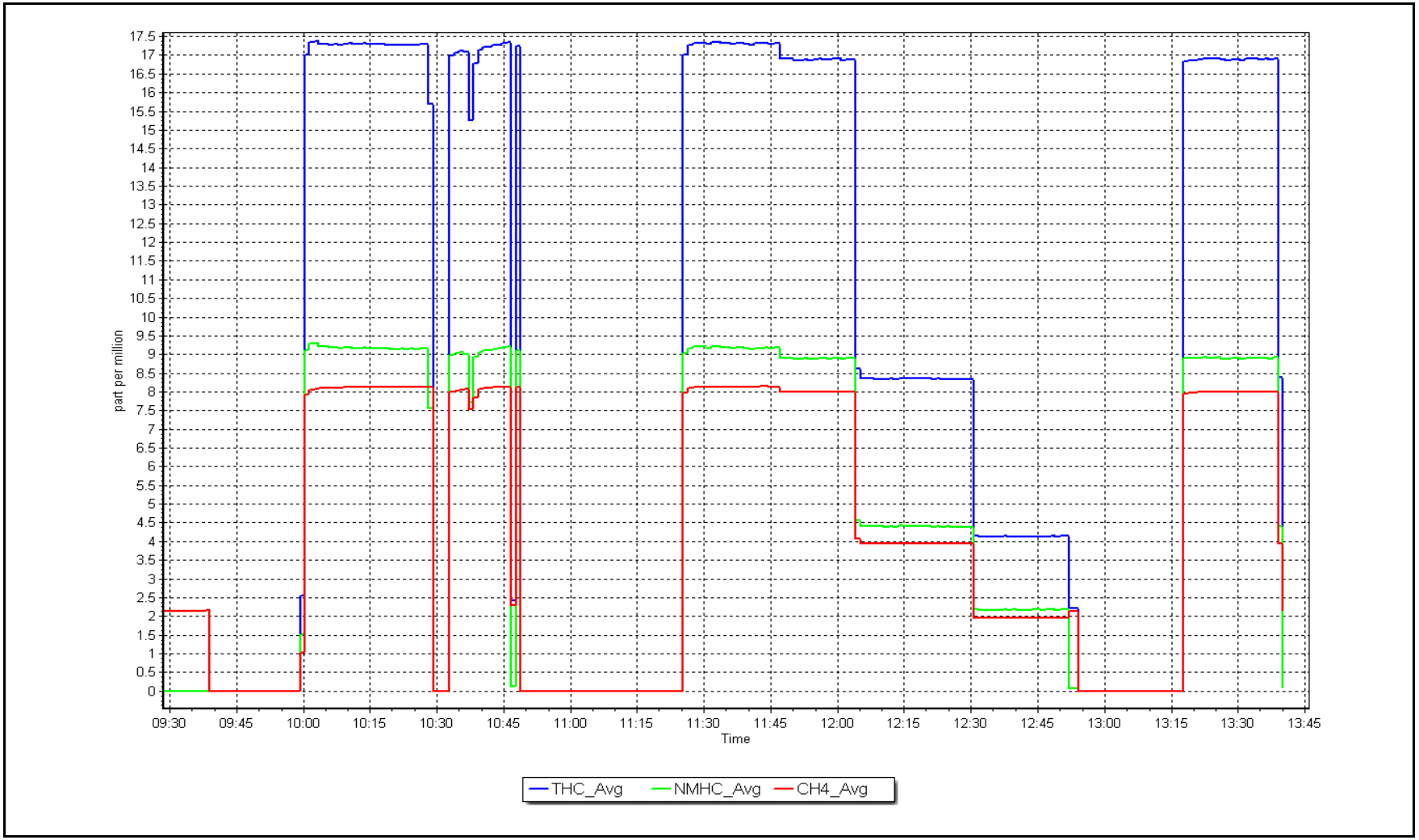
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.91	8.87	1.0045
4.45	4.40	1.0106
2.23	2.18	1.0236

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999972	*≥0.995*
Slope	0.996798	*0.90 - 1.10*
Intercept	-0.021982	*+/-0.5*



NMHC Calibration Plot Date: March 25, 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:	March 4, 2026
Last Cal Date:	February 12, 2026
Start time (MST):	10:12
End time (MST):	15:30
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	-0.3	0.0	-0.3	----	----
AF High point	4915	85.3	808.3	800.8	7.5	826.0	817.0	9.4	0.9782	0.9802
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 808.3 ppb	NO = 800.3 ppb
Baseline Corr 1st pt	NO_X = 826.3 ppb	NO = 817.0 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

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 =	2.2%
*Percent Change	NO =	2.0%

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: Thermo 42i Serial Number: 1426262593

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.141	1.126	NO bkgnd or offset:	10.5	10.3
NOX coeff or slope:	1.002	0.999	NOX bkgnd or offset:	10.8	10.6
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	173.7	175.2

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999330	0.997519
NO_X Cal Offset:	0.538999	-0.532790
NO Cal Slope:	1.000165	1.000877
NO Cal Offset:	-0.623032	-1.434541
NO_2 Cal Slope:	1.008995	0.995164
NO_2 Cal Offset:	-0.095328	-0.746203

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	806.0	801.0	4.6	1.0029	0.9997
Mid point	4957	42.6	403.7	400.0	3.7	402.1	397.8	4.3	1.0040	1.0054
Low point	4979	21.3	201.8	200.0	1.9	200.0	197.1	2.9	1.0091	1.0145
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.1	-0.1	----	----
As left span	4915	85.3	808.3	411.1	397.2	802.0	411.1	391.3	1.0079	1.0000
								Average Correction Factor	1.0053	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	-0.2	----	----
High GPT point	796.2	410.4	393.3	391.2	1.0054	99.5%
Mid GPT point	796.2	595.7	208.0	205.3	1.0132	98.7%
Low GPT point	796.2	694.8	108.9	107.5	1.0131	98.7%
				Average Correction Factor	1.0105	99.0%

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

NO_X Calibration Summary

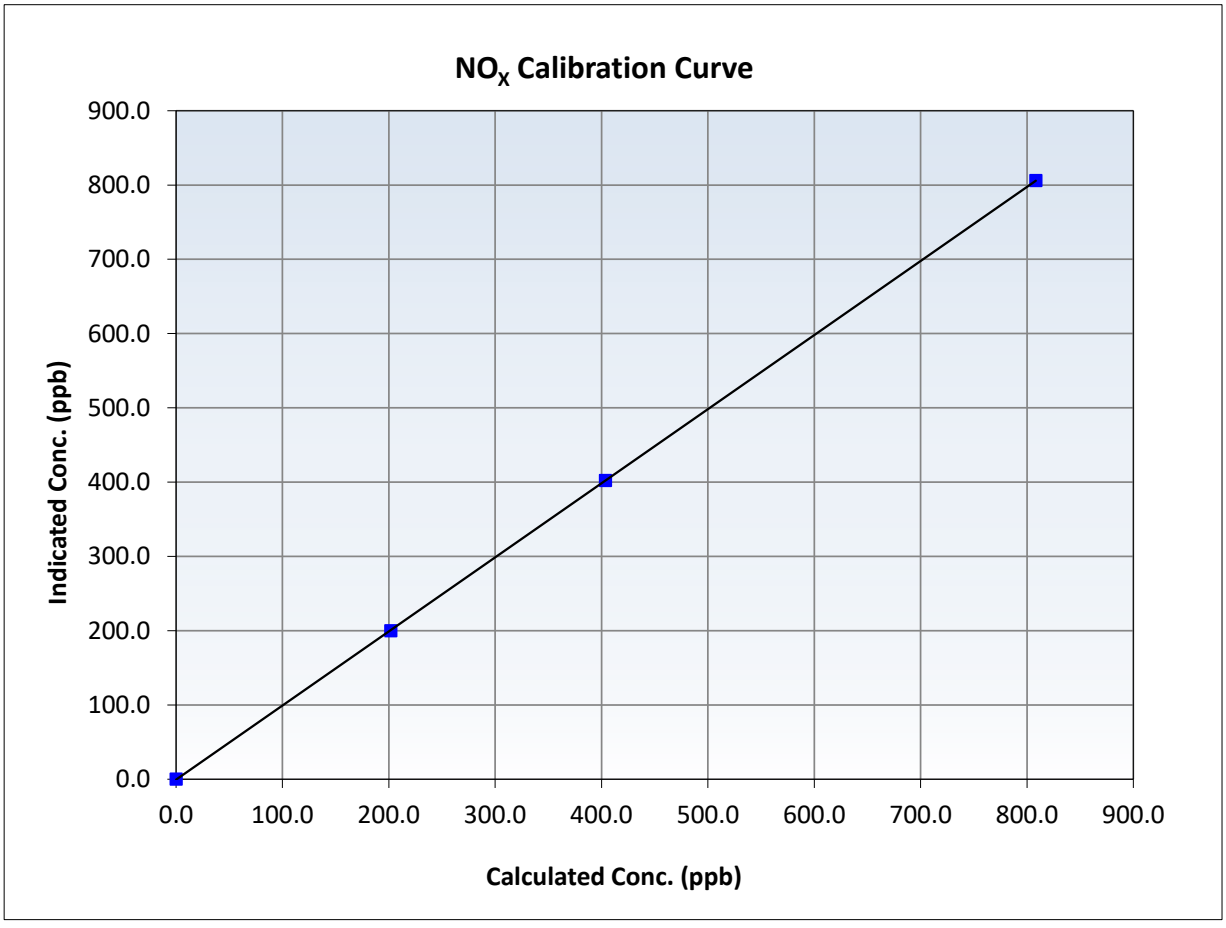
Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 12, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:12	End Time (MST):	15:30
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
808.3	806.0	1.0029
403.7	402.1	1.0040
201.8	200.0	1.0091

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.997519	*0.90 - 1.10*
Intercept	-0.532790	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

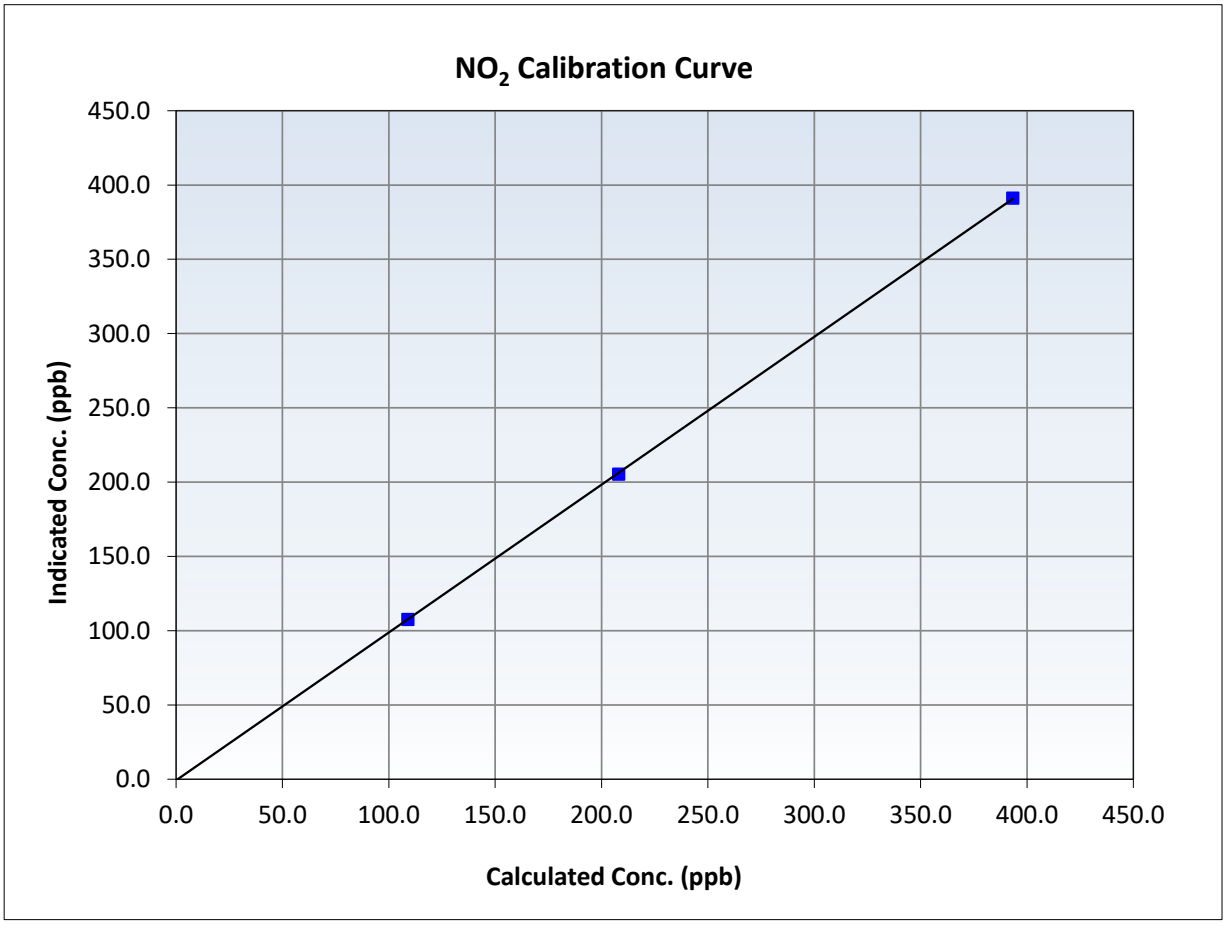
Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 12, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:12	End Time (MST):	15:30
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
393.3	391.2	1.0054
208.0	205.3	1.0132
108.9	107.5	1.0131

Statistical Evaluation		Limits
Correlation Coefficient	0.999982	≥0.995
Slope	0.995164	0.90 - 1.10
Intercept	-0.746203	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

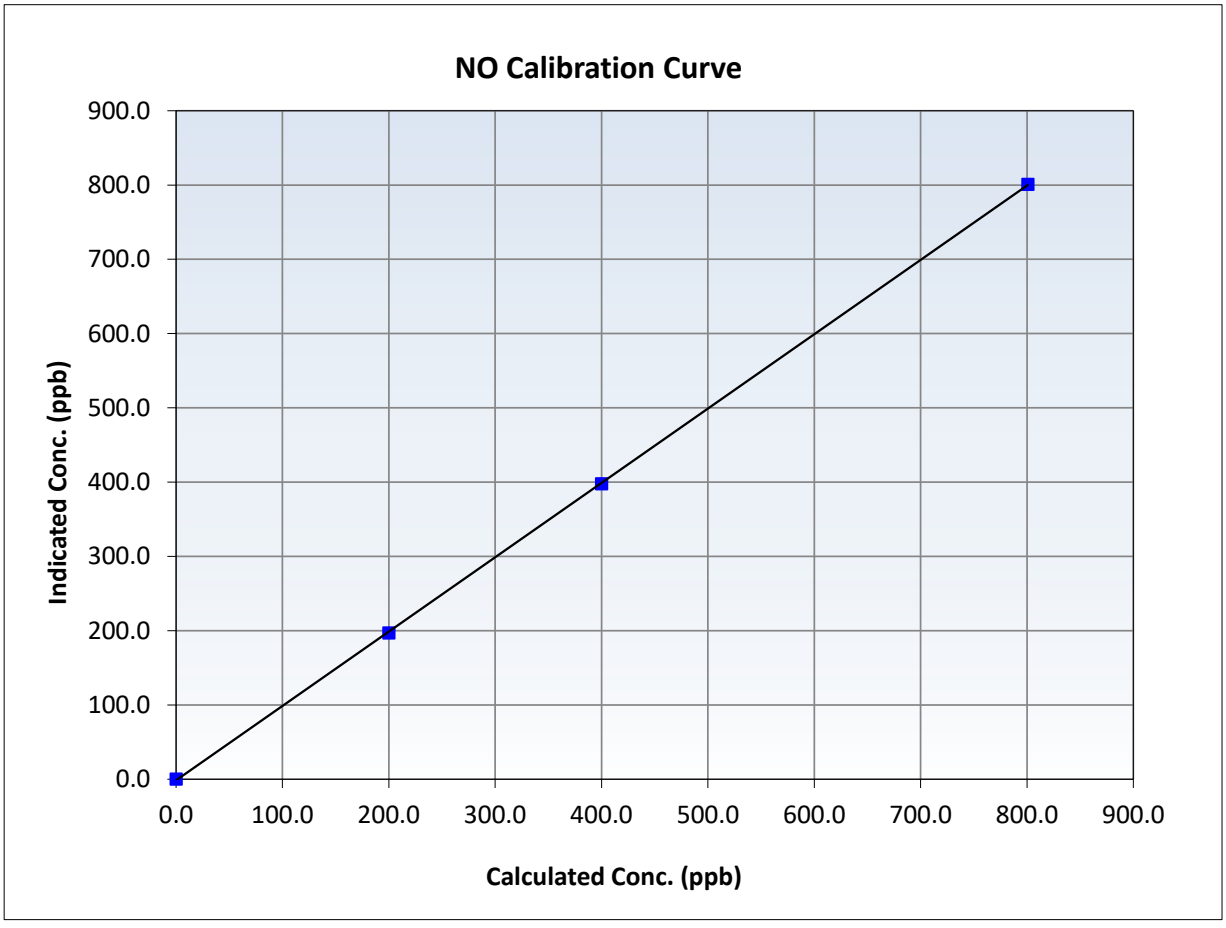
Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 12, 2026
Station Name:	Barge Landing	Station Number:	AMS 09
Start Time (MST):	10:12	End Time (MST):	15:30
Analyzer make:	Thermo 42i	Analyzer serial #:	1426262593

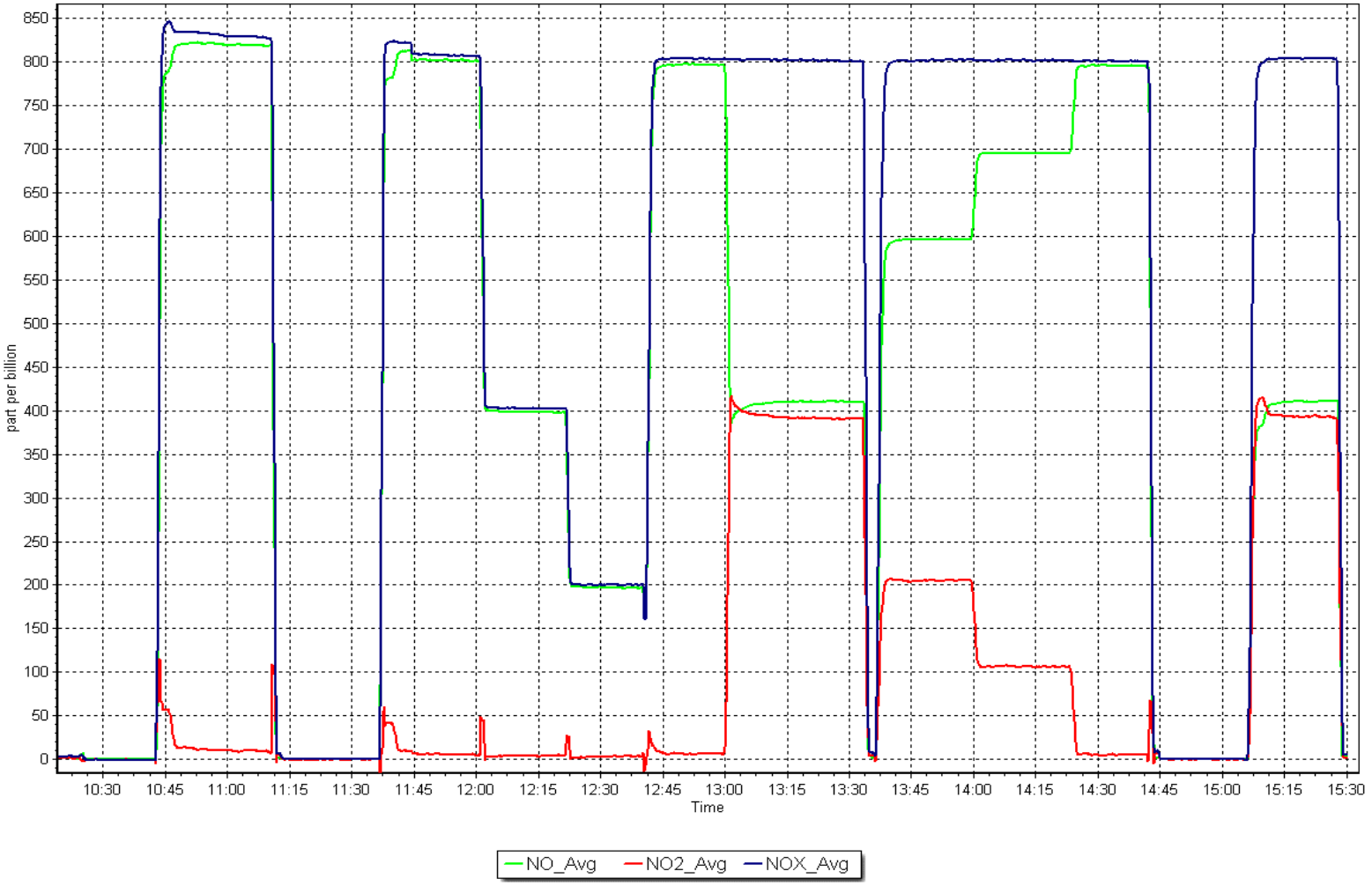
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.8	801.0	0.9997
400.0	397.8	1.0054
200.0	197.1	1.0145

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999978	*≥0.995*
Slope	1.000877	*0.90 - 1.10*
Intercept	-1.434541	*+/-20*



NO_X Calibration Plot Date: March 4, 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:	March 4, 2026	Last Cal Date:	February 26, 2026
Start time (MST):	13:26	End time (MST):	14:54
Analyzer Make:	API T640	S/N:	2237
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25	S/N:	388750
Temp/RH standard:	Alicat FP-25	S/N:	388750

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	-19.4	-20.02	-19.4	☐	+/- 2 °C
P (mmHg)	739.5	738.45	739.5	☐	+/- 10 mmHg
Flow (LPM)	5.00	2.858	5.099	☑	+/- 0.25 LPM
PW% (pump)	34	-----	86	☐	>80%
Zero Verification	PM w/o HEPA:	5.1	PM w/ HEPA:	0.0	<0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

SPAN DUST — Refractive Index: 10.9 — Expiry Date: 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: January 26, 2026

Date Disposable Filter Changed: January 26, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: July 22, 2025

Date RH/T Sensor Cleaned: July 22, 2025

Notes: Large flow adjustment made. Pump may be damaged, planning to replace March 5.

Calibration by: Braiden Boutilier

Wood Buffalo Environmental Association

T640 $PM_{2.5}$ CALIBRATION

Version-01-2024

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	March 5, 2026	Last Cal Date:	March 4, 2026
Start time (MST):	11:50	End time (MST):	13:55
Analyzer Make:	API T640	S/N:	2237
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25	S/N:	388745
Temp/RH standard:	Alicat FP-25	S/N:	388745

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	-9.3	-9.52	-9.3	☐	+/- 2 °C
P (mmHg)	731.9	730.72	731.9	☐	+/- 10 mmHg
Flow (LPM)	5.01	4.443	5.00	☑	+/- 0.25 LPM
PW% (pump)	77	-----	33	☐	>80%
Zero Verification	PM w/o HEPA:	10.3	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: January 26, 2026

Date Disposable Filter Changed: January 26, 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: As found flow low, found leak at coupler. Verified after with leak check, flow measured after leak was sealed was 7.7 LPM, adjusted to 5.00 LPM. Annual maintenance done.

Calibration by: Kelly Baragar

Wood Buffalo Environmental Association

T640 $PM_{2.5}$ CALIBRATION

Version-01-2024

Station Information

Station Name:	Barge Landing	Station number:	AMS 09
Calibration Date:	March 10, 2026	Last Cal Date:	March 5, 2026
Start time (MST):	11:09	End time (MST):	14:50
Analyzer Make:	API T640	S/N:	2237
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25	S/N:	388750
Temp/RH standard:	Alicat FP-25	S/N:	388750

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	-16.4	-17.06	-17.06	☐	+/- 2 °C
P (mmHg)	738.9	738.00	738.00	☐	+/- 10 mmHg
Flow (LPM)	5.00	4.984	4.984	☐	+/- 0.25 LPM
PW% (pump)	36	-----	36	☐	>80%
Zero Verification	PM w/o HEPA:	10.3	PM w/ HEPA:	0.6	<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	5.8	11.7	10.8	☑	+/- 0.5

Date Optical Chamber Cleaned: March 10, 2026

Date Disposable Filter Changed: January 26, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: March 5, 2026

Date RH/T Sensor Cleaned: July 22, 2025

Notes: Pre-maintenance leak check failed. Completed quarterly cleaning after, subsequent leak check passed. Adjusted PMT voltage.

Calibration by: Braiden Boutilier

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS11
LOWER CAMP
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	March 20, 2026	Last Cal Date:	February 11, 2026
Start time (MST):	9:47	End time (MST):	12:52
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:	1.002156	0.998016	Backgd or Offset:	19.5	19.5
Calibration intercept:	-0.712768	-0.512767	Coeff or Slope:	1.047	1.047

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	0.0	----
As found High point	4918	82.1	800.5	796.8	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	796.8	Previous response	801.5	*% 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	

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	4918	82.1	800.5	799.1	1.002
Mid point	4959	41.1	400.7	397.8	1.007
Low point	4980	20.5	199.9	199.2	1.003
As left zero	5000	0.0	0.0	0.2	----
As left span	4918	82.1	800.5	798.5	1.002
				Average Correction Factor:	1.004

Notes: Inlet filter changed after as founds, no adjustment made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

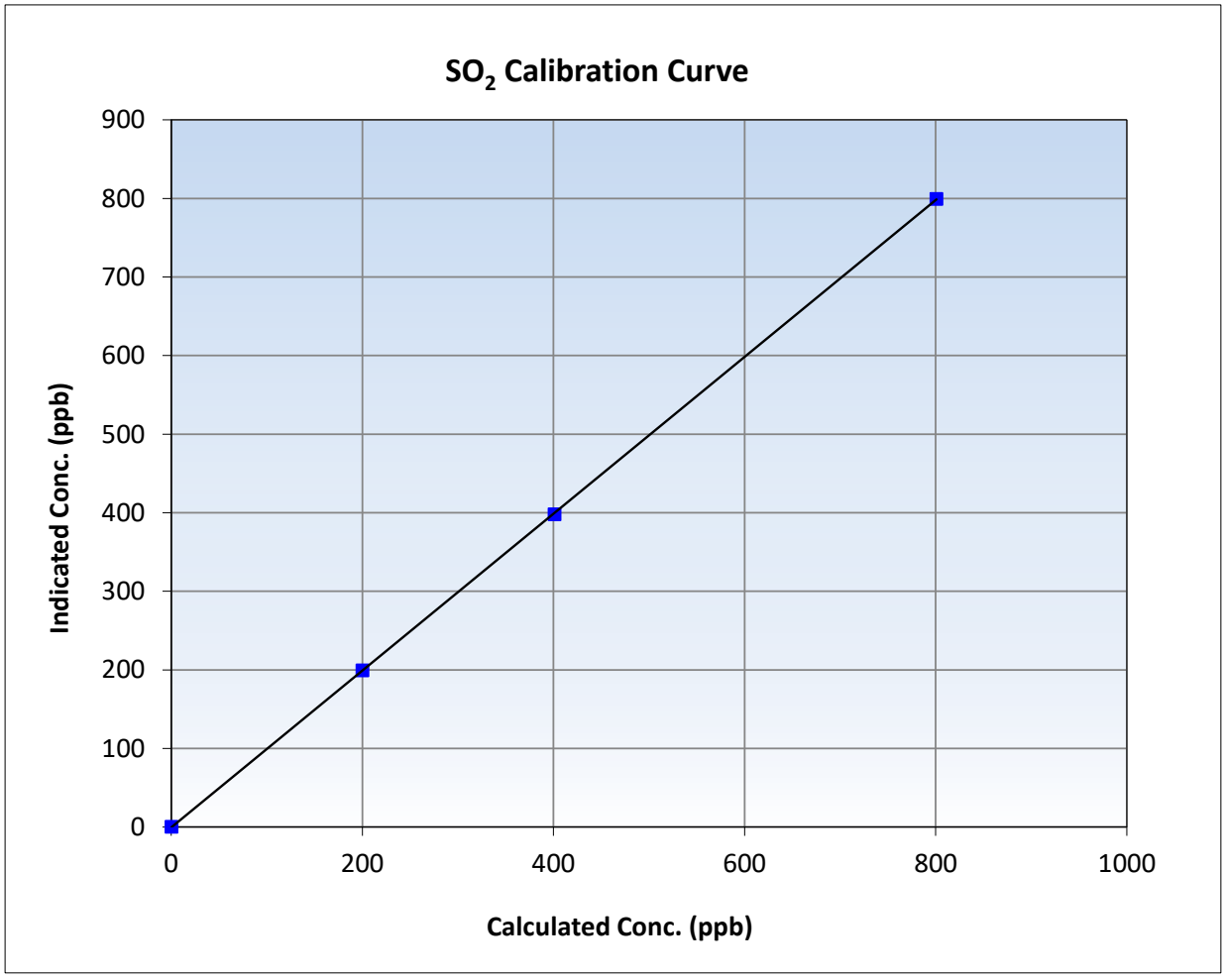
Station Information

Calibration Date:	March 20, 2026	Previous Calibration:	February 11, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:47	End Time (MST):	12:52
Analyzer make:	Thermo 43i	Analyzer serial #:	100841398

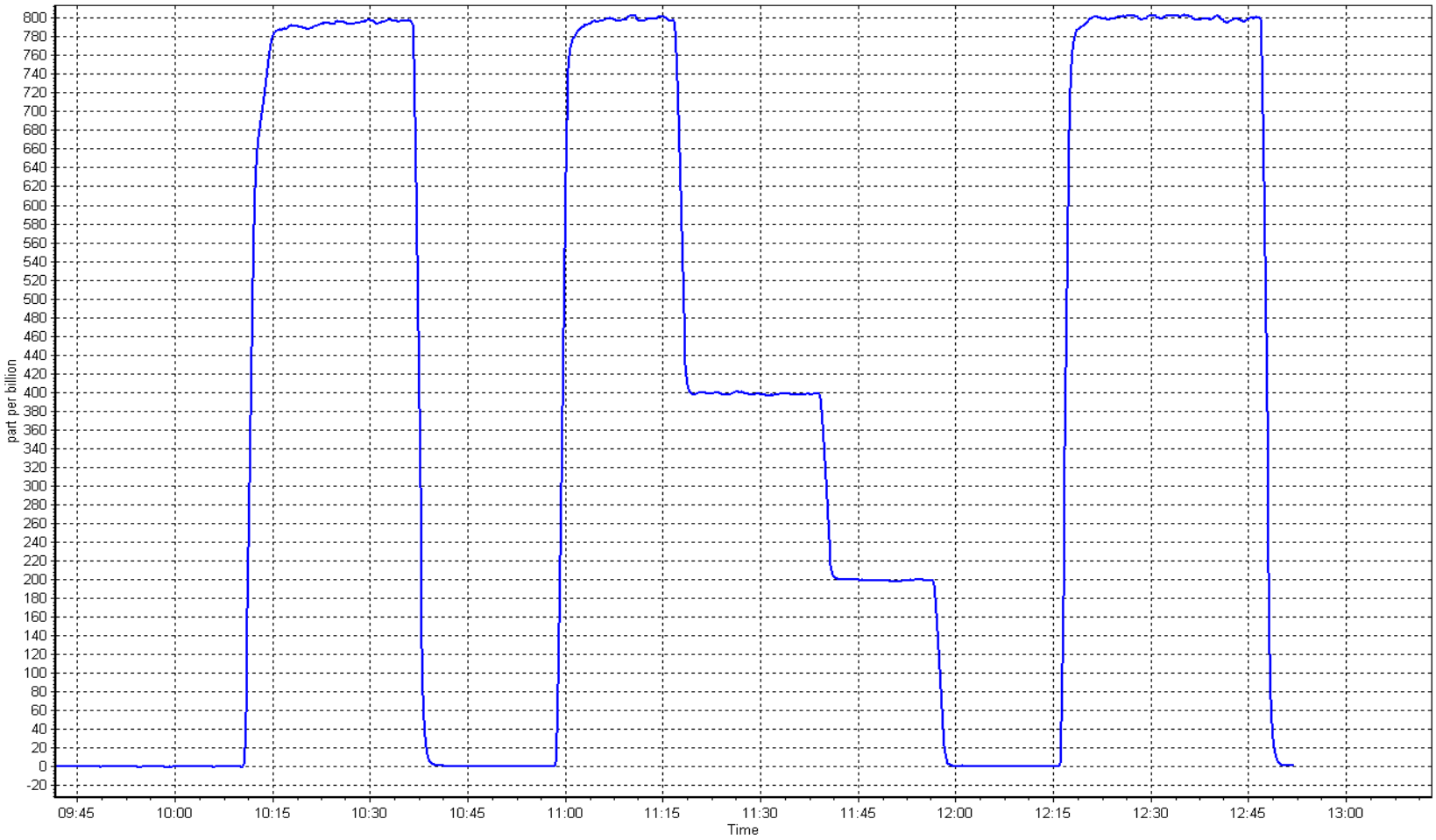
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.5	799.1	1.0017
400.7	397.8	1.0073
199.9	199.2	1.0033

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999990	*≥0.995*
Slope	0.998016	*0.90 - 1.10*
Intercept	-0.512767	*+/-30*



SO2 Calibration Plot Date: March 20, 2026 Location: Lower Camp



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Lower Camp	Station number:	AMS 11
Calibration Date:	March 19, 2026	Last Cal Date:	February 25, 2026
Start time (MST):	9:20	End time (MST):	13:05
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Thermo 43iQ-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:	0.994697	0.999705	Backgd or Offset:	2.5	2.5
Calibration intercept:	0.228831	0.228675	Coeff or Slope:	0.816	0.816

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	4923	82.8	79.9	80.3	0.996
As found Mid point	4967	41.5	40.0	40.3	0.996
As found Low point	4999	20.8	20.0	20.3	0.991
New cylinder response					

Baseline Corr As found:	80.2	Prev response:	79.70	*% change:	0.6%
Baseline Corr 2nd AF pt:	40.2	AF Slope:	1.003421	AF Intercept:	0.148684
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999998	* = > +/-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	4923	82.8	79.9	80.0	0.999
Mid point	4967	41.5	40.0	40.4	0.991
Low point	4999	20.8	20.0	20.3	0.986
As left zero	5000	0.0	0.0	0.1	----
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	0.992
Date of last converter efficiency test:					

Notes: Inlet filter changed after as founds, scrubber check passed, no adjustments made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

H_2S Calibration Summary

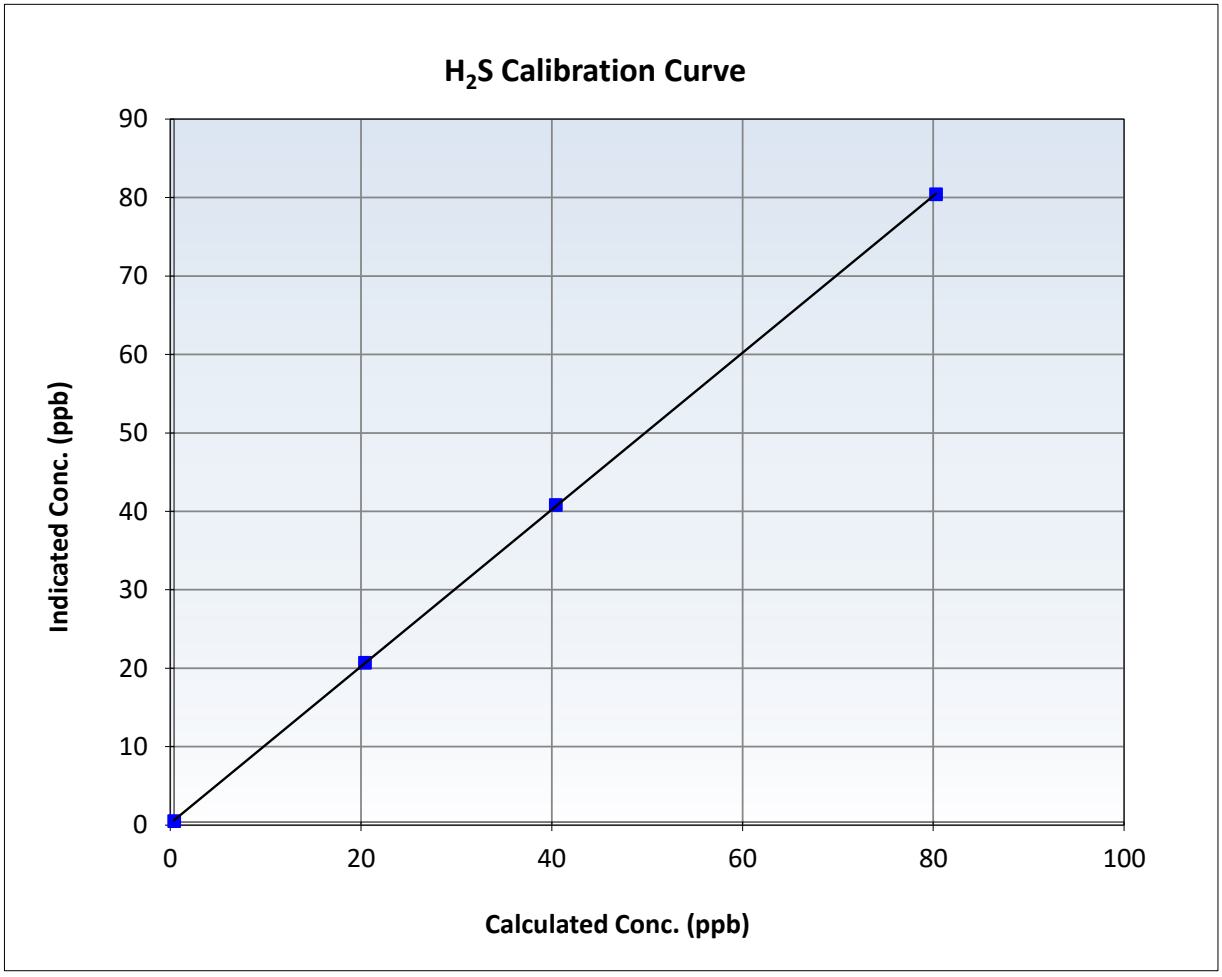
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 25, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:20	End Time (MST):	13:05
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	1203169745

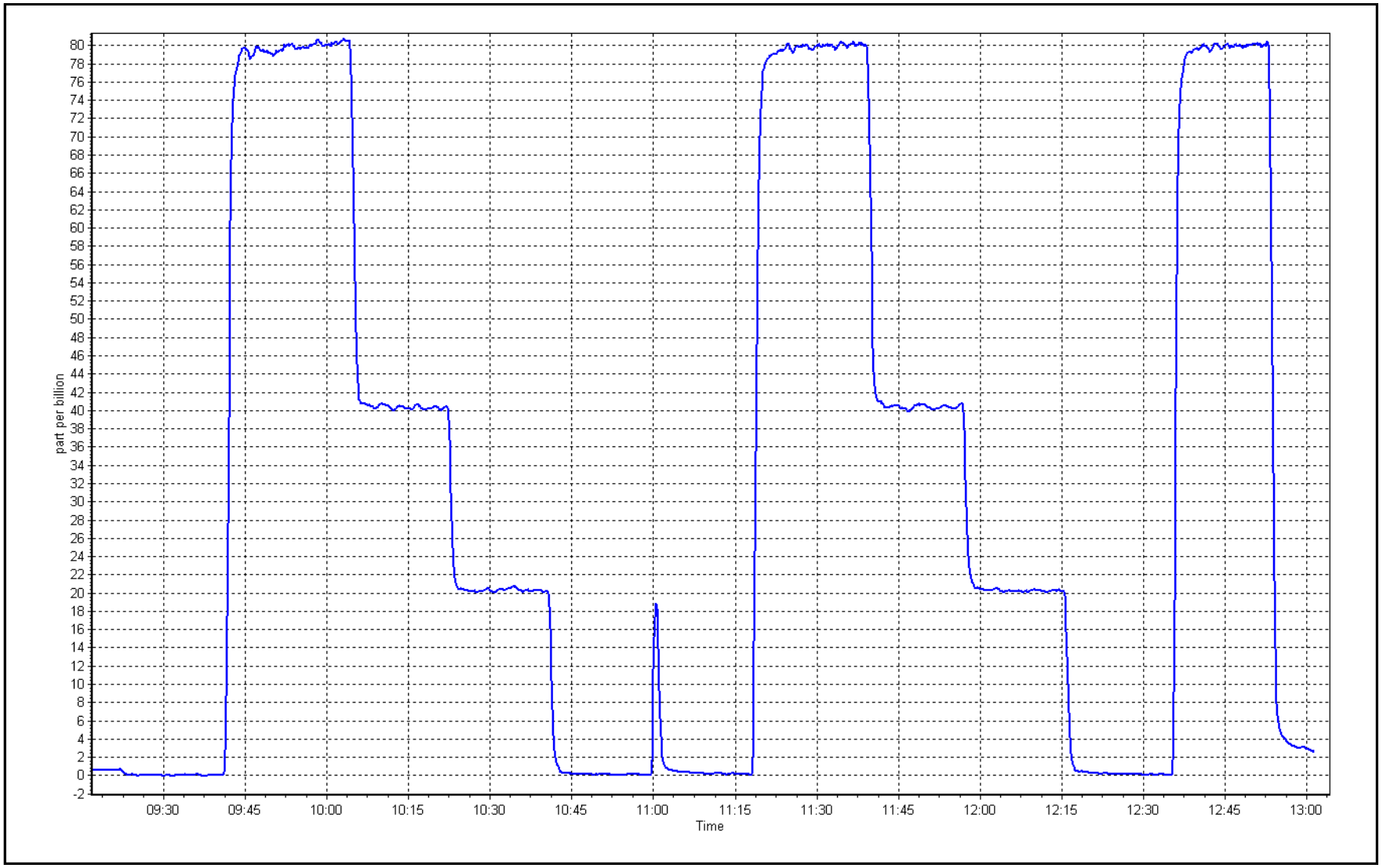
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
79.9	80.0	0.9987
40.0	40.4	0.9906
20.0	20.3	0.9859

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999984	*≥0.995*
Slope	0.999705	*0.90 - 1.10*
Intercept	0.228675	*+/-3*



H_2S Calibration Plot Date: March 19, 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:	March 20, 2026	Last Cal Date:	February 25, 2026
Start time (MST):	9:47	End time (MST):	12:52
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:	2.28E-04	2.28E-04	NMHC SP Ratio:	5.18E-05	5.18E-05
CH4 Retention time:	13.0	13.0	NMHC Peak Area:	179862	179862
Zero Chromatogram:	OFF	OFF	Flat Baseline:	OFF	OFF

THC As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	17.60	17.33	1.016
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.33	Prev response	17.66	*% change	-1.9%
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	4918	82.1	17.60	17.22	1.022
Mid point	4958	41.1	8.81	8.58	1.027
Low point	4980	20.5	4.39	4.31	1.020
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.60	17.25	1.020
				Average Correction Factor	1.023

Notes: Inlet filter changed after as founds, 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	4918	82.1	9.31	9.18	1.015
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.18	Prev response	9.34	*% change	-1.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	9.31	9.14	1.018
Mid point	4958	41.1	4.66	4.56	1.023
Low point	4980	20.5	2.32	2.29	1.015
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.31	9.09	1.024
				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	4918	82.1	8.29	8.15	1.017
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.15	Prev response	8.31	*% change	-2.0%
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	4918	82.1	8.29	8.09	1.025
Mid point	4958	41.1	4.15	4.03	1.031
Low point	4980	20.5	2.07	2.02	1.027
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.29	8.16	1.016
				Average Correction Factor	1.028

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	1.003830	0.978296
THC Cal Offset:	-0.005244	-0.005786
CH4 Cal Slope:	1.004480	0.975257
CH4 Cal Offset:	-0.011124	-0.006087
NMHC Cal Slope:	1.002649	0.981332
NMHC Cal Offset:	0.007081	-0.000299

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

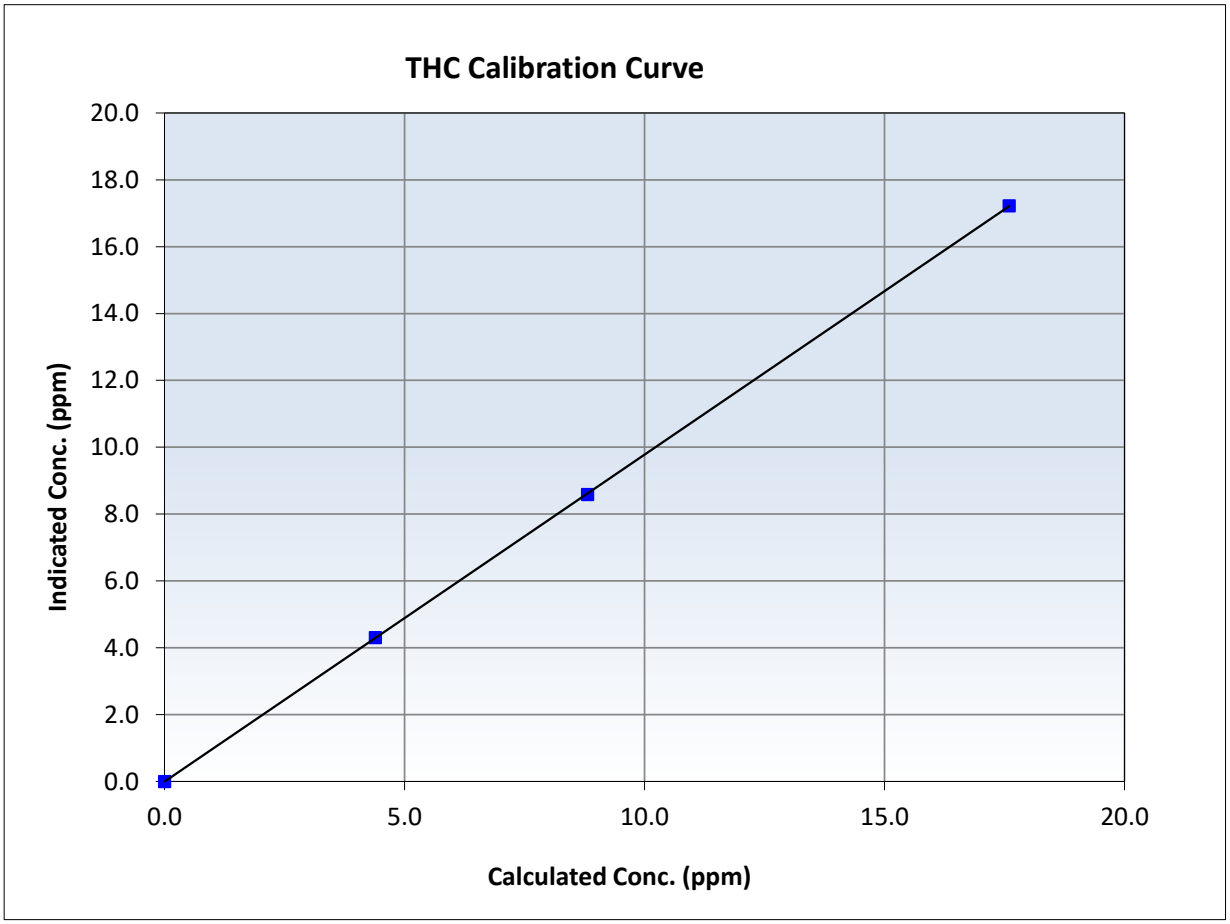
THC Calibration Summary

Station Information

Calibration Date:	March 20, 2026	Previous Calibration:	February 25, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:47	End Time (MST):	12:52
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	0.999992	*≥0.995*
17.60	17.22	1.0218	Slope	0.978296	*0.90 - 1.10*
8.81	8.58	1.0266	Intercept	-0.005786	*+/-0.5*
4.39	4.31	1.0205			



Wood Buffalo Environmental Association

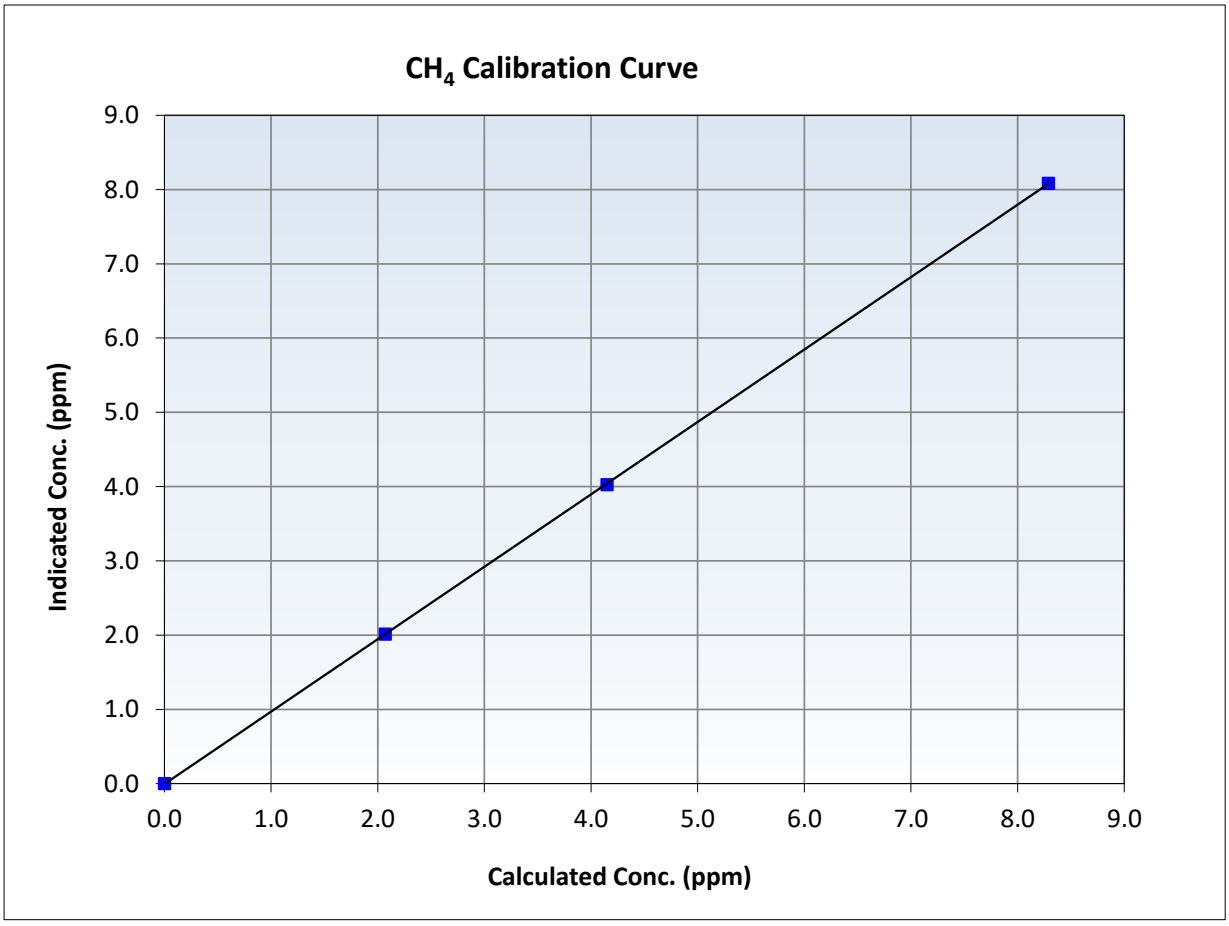
CH_4 Calibration Summary

Station Information

Calibration Date:	March 20, 2026	Previous Calibration:	February 25, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:47	End Time (MST):	12:52
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	0.999990	≥0.995
8.29	8.09	1.0252	Slope	0.975257	0.90 - 1.10
4.15	4.03	1.0311	Intercept	-0.006087	+/-0.5
2.07	2.02	1.0270			



Wood Buffalo Environmental Association

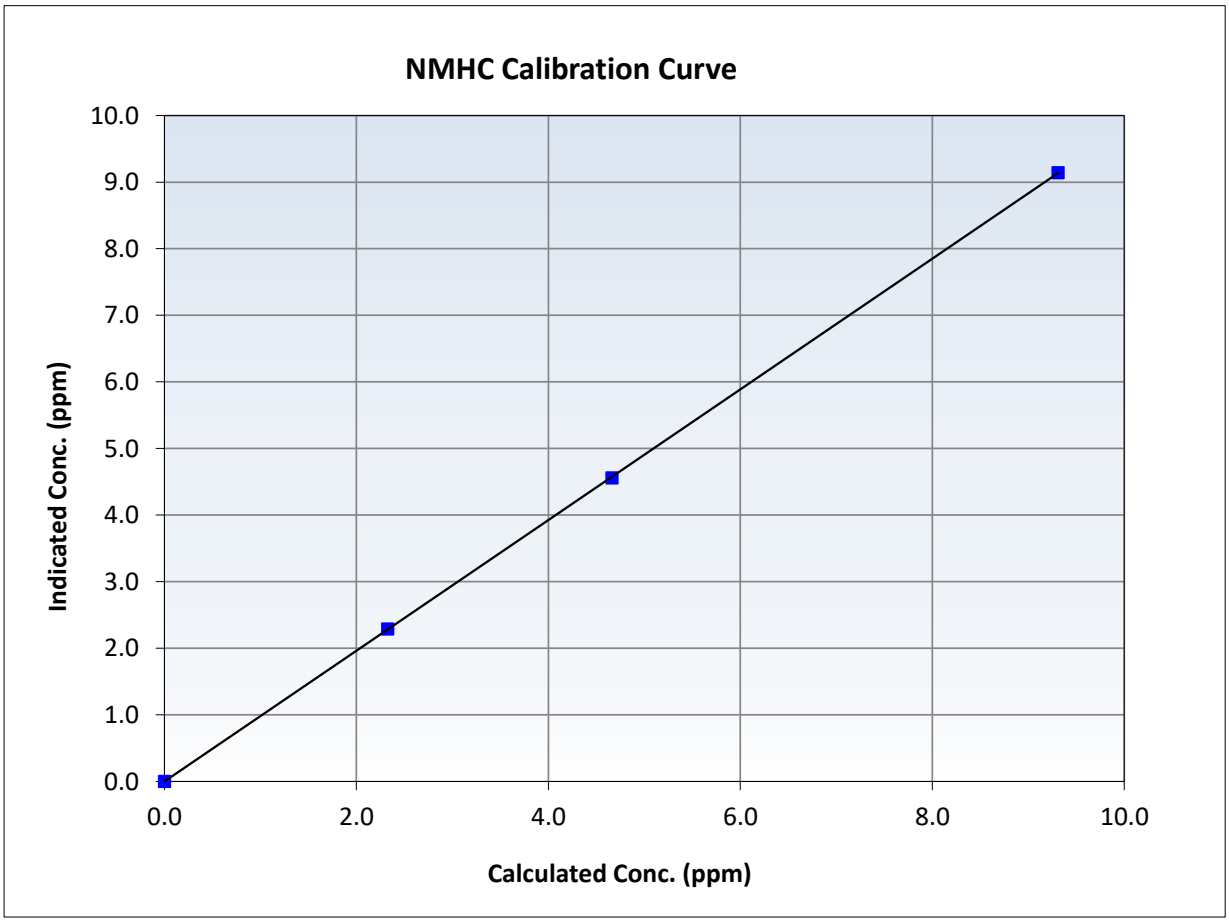
NMHC Calibration Summary

Station Information

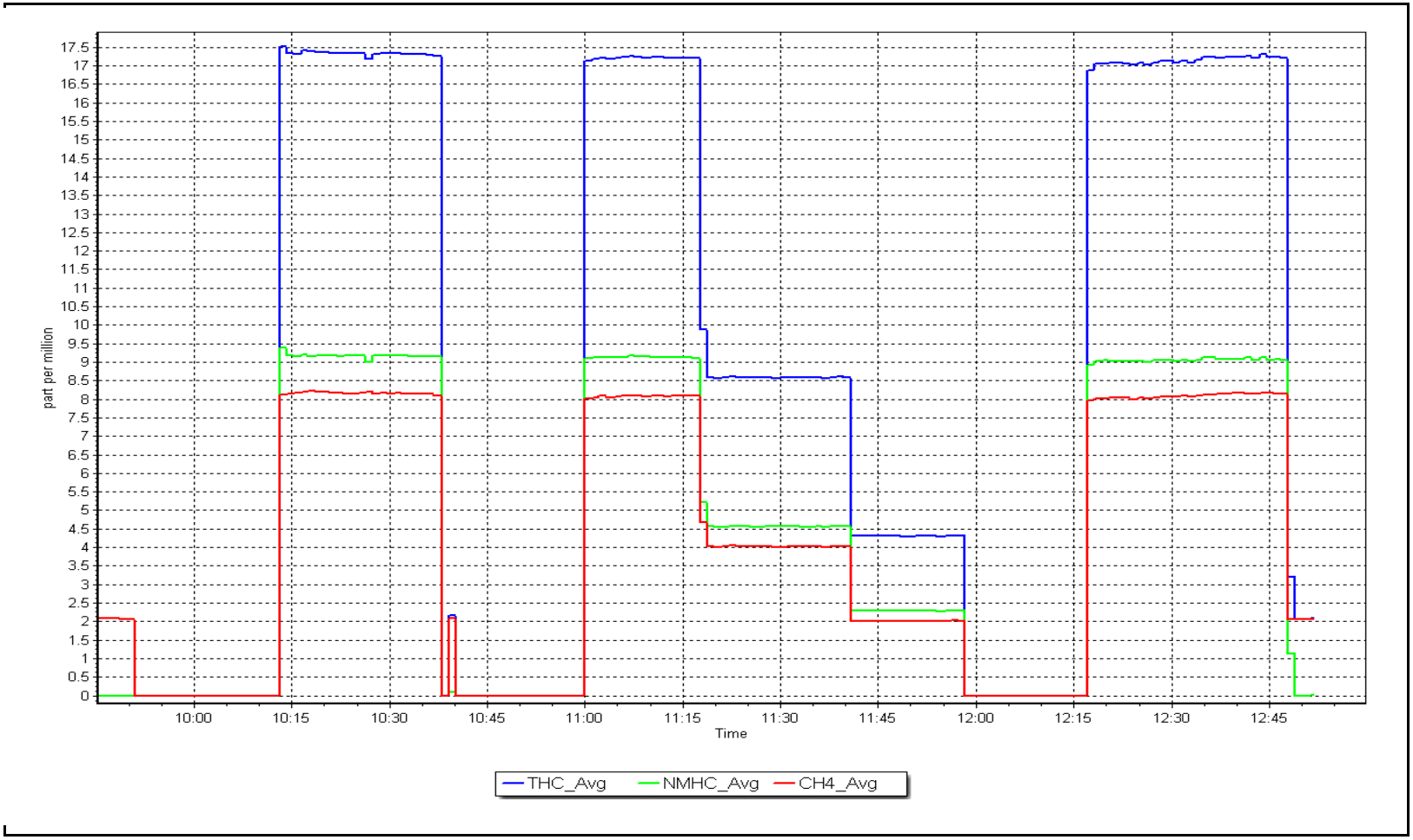
Calibration Date:	March 20, 2026	Previous Calibration:	February 25, 2026
Station Name:	Lower Camp	Station Number:	AMS 11
Start Time (MST):	9:47	End Time (MST):	12:52
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430012

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999992	*≥0.995*
9.31	9.14	1.0185	Slope	0.981332	*0.90 - 1.10*
4.66	4.56	1.0226	Intercept	-0.000299	*+/-0.5*
2.32	2.29	1.0147			



NMHC Calibration Plot Date: March 20, 2026 Location: Lower Camp



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS13
FORT MCKAY SOUTH
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Fort McKay South	Station number:	AMS 13
Calibration Date:	March 5, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	10:31	End time (MST):	13:49
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.55	ppm	Cal Gas Exp Date:	December 29, 2028
Cal Gas Cylinder #:	CC260812			
Removed Cal Gas Conc:	50.55	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne API 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:	1.003674	1.002285	Backgd or Offset:	3.38	3.06
Calibration intercept:	-0.074282	0.181703	Coeff or Slope:	0.992	0.982

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	-0.6	----
As found High point	4921	79.1	799.7	805.8	0.992
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	806.4	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	-0.1	----
High point	4921	79.1	799.7	801.5	0.998
Mid point	4961	39.5	399.3	400.7	0.997
Low point	4980	19.8	200.2	201.0	0.996
As left zero	5000	0.0	0.0	0.0	----
As left span	4921	79.1	799.7	799.0	1.001
				Average Correction Factor:	0.997

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

SO_2 Calibration Summary

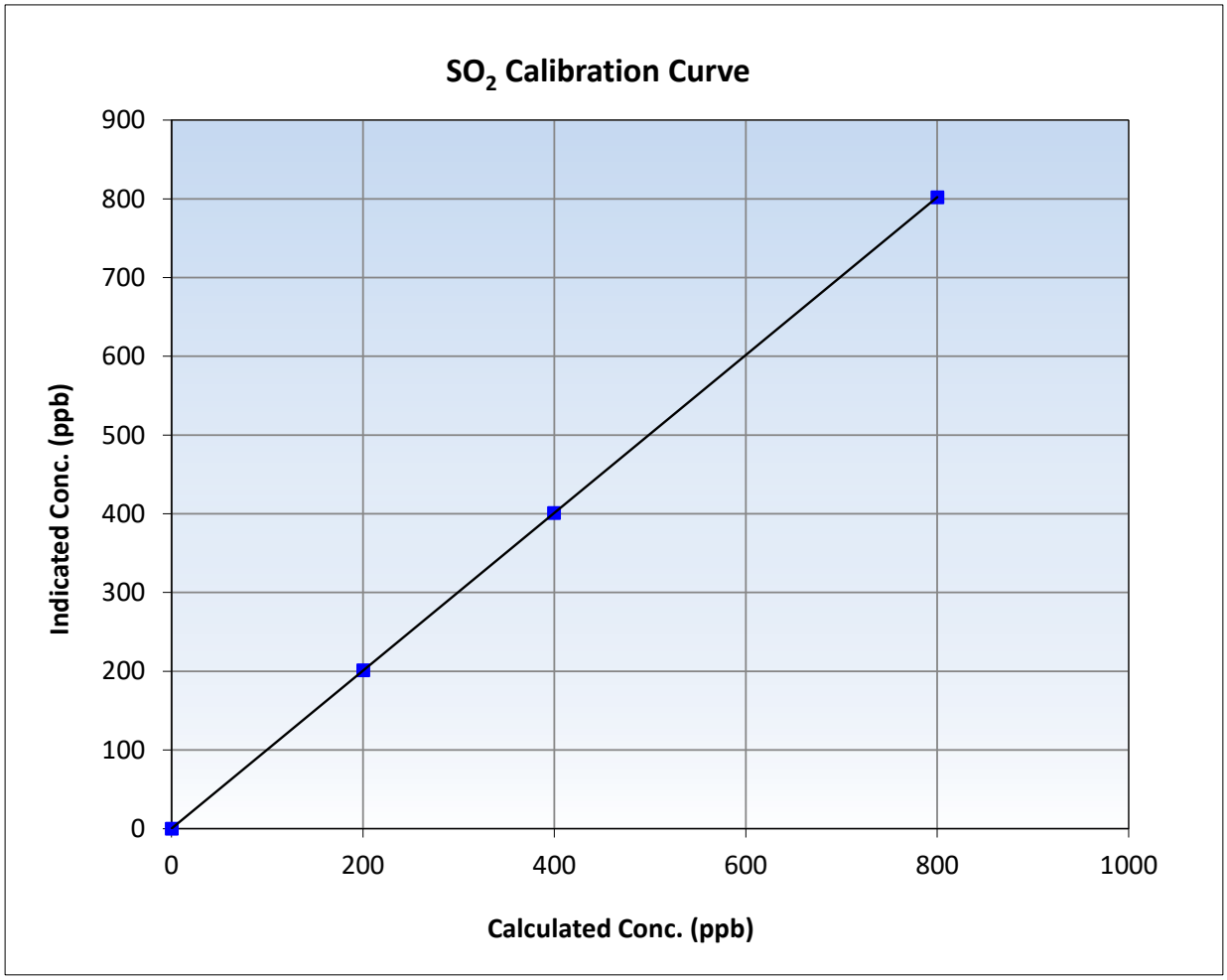
Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:31	End Time (MST):	13:39
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1331259320

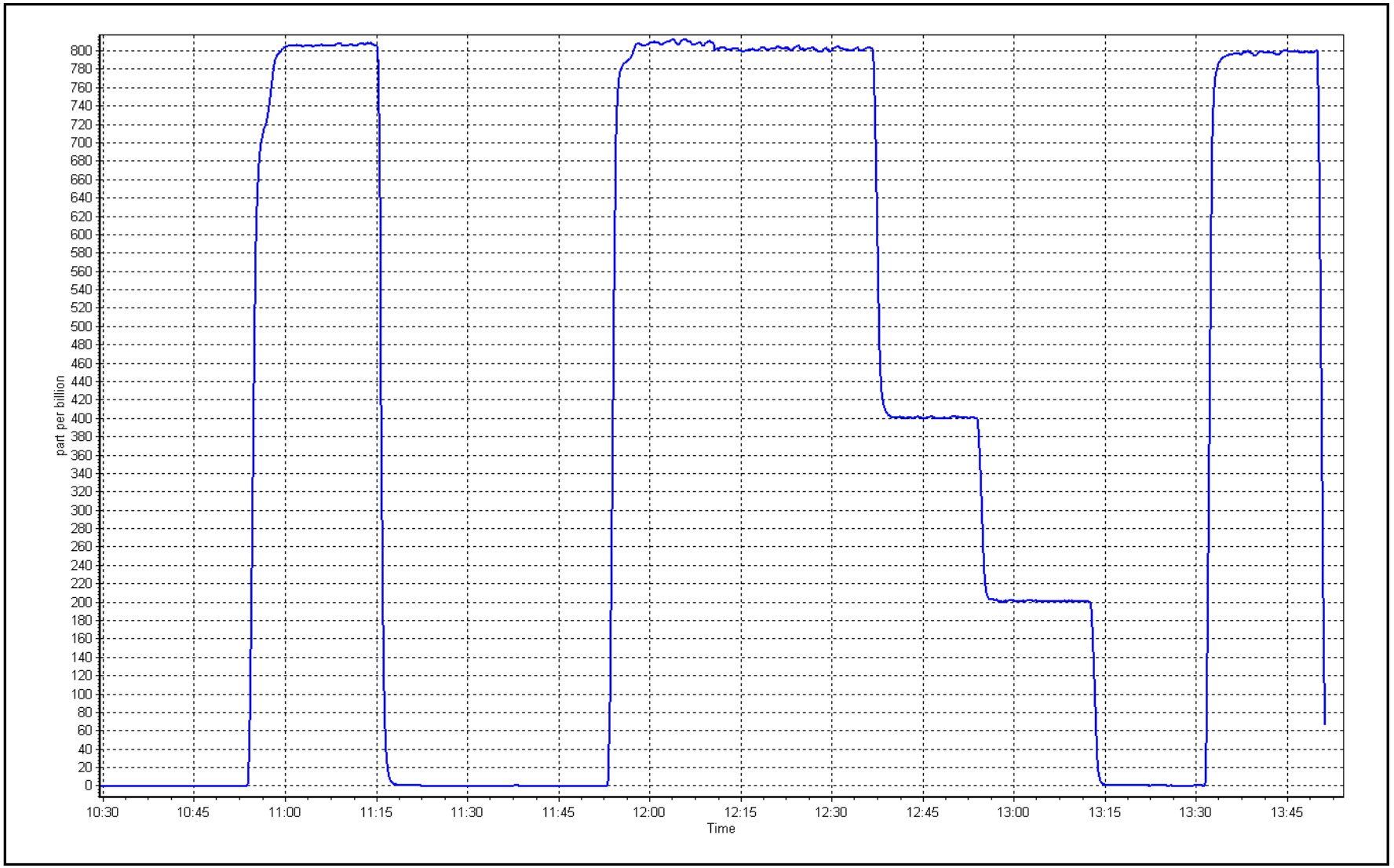
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
799.7	801.5	0.9977
399.3	400.7	0.9965
200.2	201.0	0.9960

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.002285	*0.90 - 1.10*
Intercept	0.181703	*+/-30*



SO2 Calibration Plot Date: March 5, 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:	March 16, 2026	Last Cal Date:	February 5, 2026
Start time (MST):	10:38	End time (MST):	14:28
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:	1118

Analyzer Information

Analyzer make:	Thermo 43i TLE		Analyzer serial #:	1180540017	
Converter make:	CDN-101		Converter serial #:	521	
Analyzer Range	0 - 100 ppb		Converter Temp:	800	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.994364	1.003691	Backgd or Offset:	3.67	3.74
Calibration intercept:	-0.198424	0.001595	Coeff or Slope:	1.10	1.118

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	4918	81.6	79.6	78.2	1.020
As found Mid point	4959	40.8	39.8	38.9	1.026
As found Low point	4980	20.4	19.9	19.2	1.042
New cylinder response					
Baseline Corr As found:	78.1	Prev response:	79.00	*% change:	-1.2%
Baseline Corr 2nd AF pt:	38.8	AF Slope:	0.982025	AF Intercept:	-0.118445
Baseline Corr 3rd AF pt:	19.1	AF Correlation:	0.999964	* = > +/-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	80.0	0.996
Mid point	4959	40.8	39.8	39.9	0.998
Low point	4980	20.4	19.9	19.9	1.000
As left zero	5000	0.0	0.0	0.4	----
As left span	4918	81.6	79.6	80.1	0.994
SO2 Scrubber Check	4921	79.1	791.0	0.1	----
Date of last scrubber change:		7-Aug-25		Ave Corr Factor	0.998
Date of last converter efficiency test:					

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

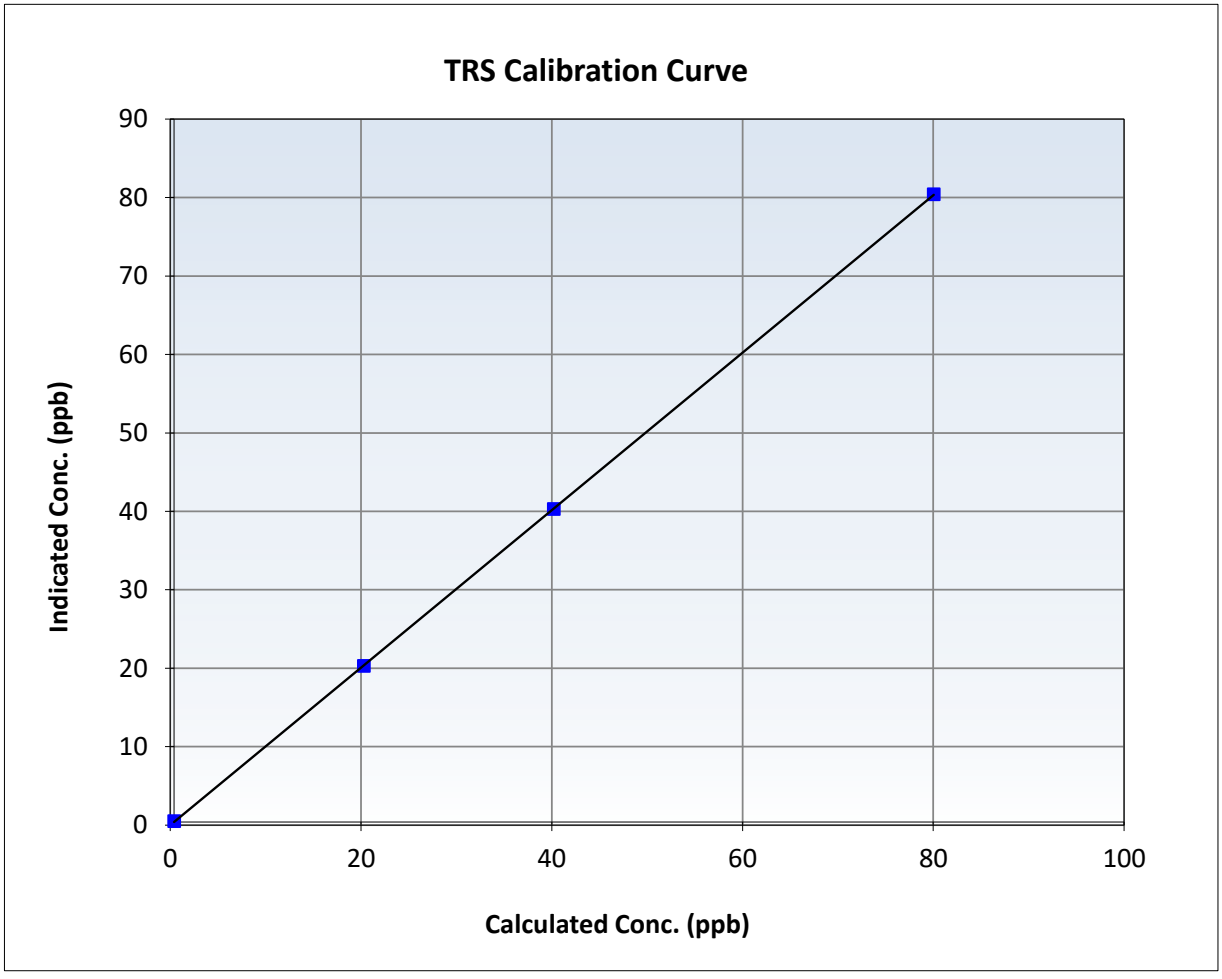
TRS Calibration Summary

Station Information

Calibration Date:	March 16, 2026	Previous Calibration:	February 5, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:38	End Time (MST):	14:28
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	0.999993	*≥0.995*
79.6	80.0	0.9956	Slope	1.003691	*0.90 - 1.10*
39.8	39.9	0.9981	Intercept	0.001595	*+/-3*
19.9	19.9	1.0004			



TRS Calibration Plot Date: March 16, 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:	March 5, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	10:31	End time (MST):	13:49
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC260812	Cal Gas Expiry Date:	Friday, December 29, 2028
CH4 Cal Gas Conc.	503.6 ppm	CH4 Equiv Conc.	1077.5 ppm
C3H8 Cal Gas Conc.	208.7 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	
Removed CH4 Conc.	503.6 ppm	CH4 Equiv Conc.	1077.5 ppm
Removed C3H8 Conc.	208.7 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API 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	3.28E-04	NMHC SP Ratio:	4.63E-05	4.65E-05
CH4 Retention time:	16.60	16.80	NMHC Peak Area:	195983	195067
Zero Chromatogram:	OFF	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	0.01	----
As found High point	4921	79.1	17.05	16.86	1.012
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.85	Prev response	17.00	*% 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	4921	79.1	17.05	17.06	0.999
Mid point	4961	39.5	8.51	8.48	1.004
Low point	4980	19.8	4.27	4.19	1.018
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	17.05	17.25	0.988
				Average Correction Factor	1.007

Notes: Changed inlet filter and N2 after as founds. Adjusted zero 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	4921	79.1	9.08	9.06	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.06	Prev response	9.06	*% change	0.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.1	9.08	9.06	1.002
Mid point	4961	39.5	4.53	4.49	1.010
Low point	4980	19.8	2.27	2.21	1.027
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	9.08	9.07	1.001
				Average Correction Factor	1.013

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	0.01	----
As found High point	4921	79.1	7.97	7.80	1.023
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.79	Prev response	7.95	*% change	-2.1%
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	79.1	7.97	7.99	0.997
Mid point	4961	39.5	3.98	3.99	0.997
Low point	4980	19.8	1.99	1.98	1.009
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.1	7.97	8.18	0.974
				Average Correction Factor	1.001

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.999847	1.001883
THC Cal Offset:	-0.039502	-0.038758
CH4 Cal Slope:	0.999842	1.004185
CH4 Cal Offset:	-0.017939	-0.009377
NMHC Cal Slope:	0.999814	0.999939
NMHC Cal Offset:	-0.021162	-0.030183

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

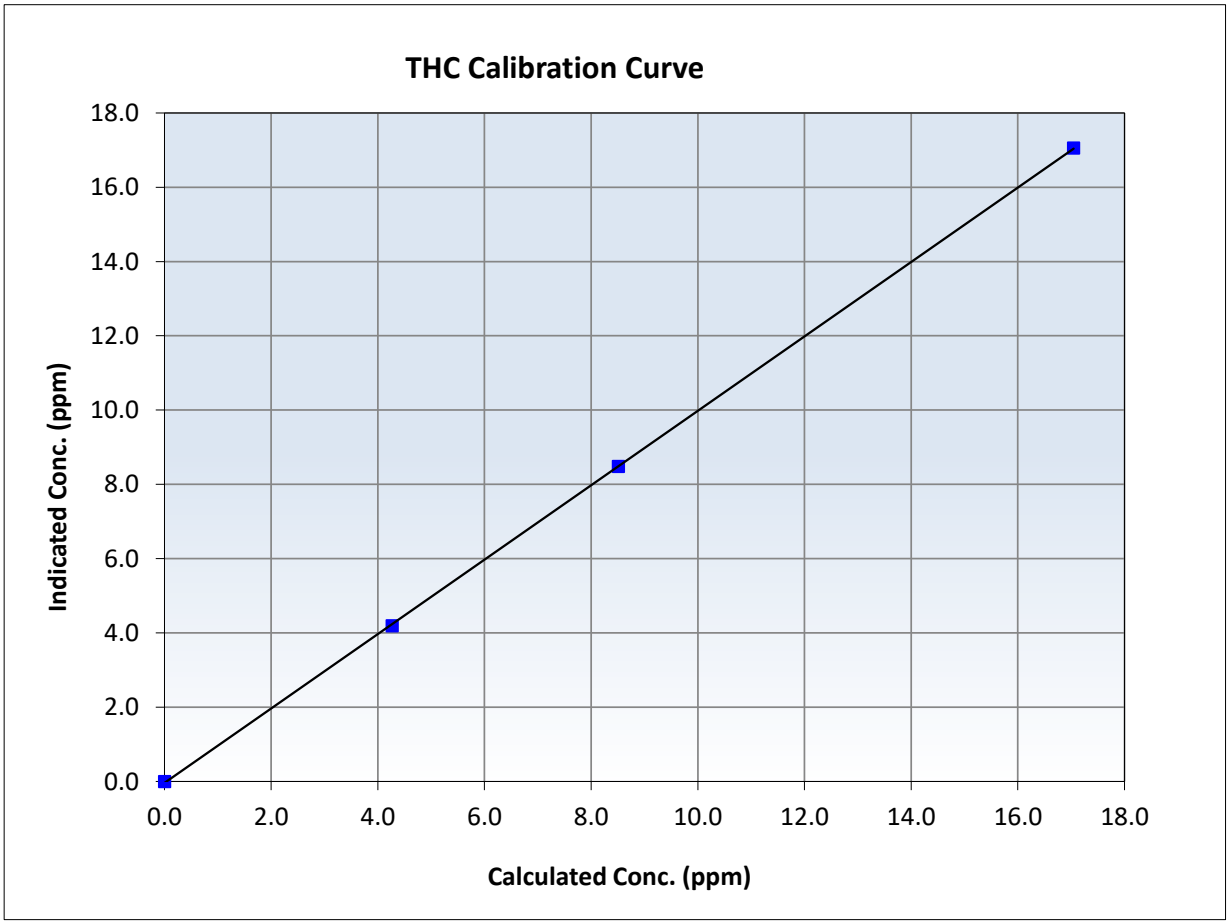
THC Calibration Summary

Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:31	End Time (MST):	13:49
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	0.999975	≥0.995
17.05	17.06	0.9995	Slope	1.001883	0.90 - 1.10
8.51	8.48	1.0036	Intercept	-0.038758	+/-0.5
4.27	4.19	1.0184			



Wood Buffalo Environmental Association

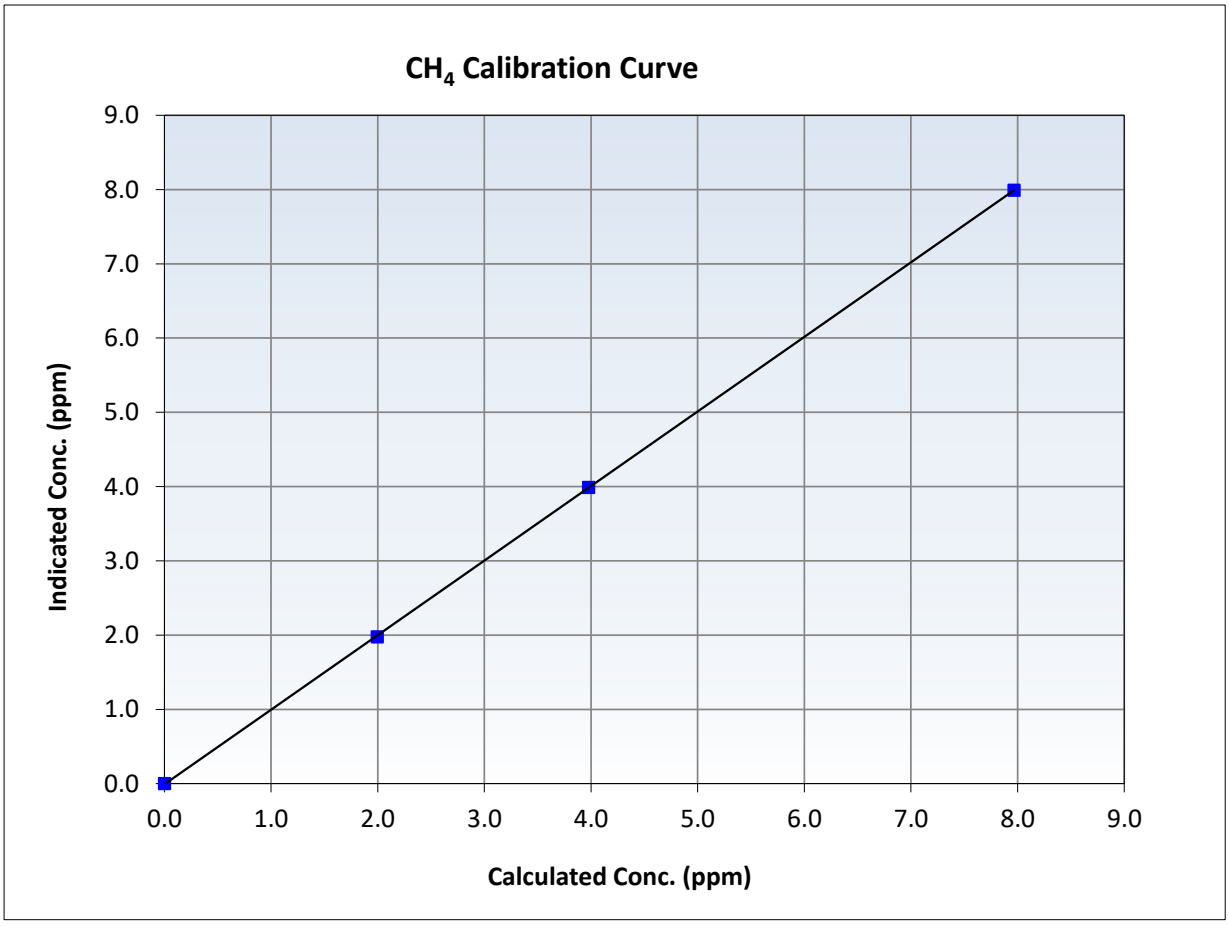
CH_4 Calibration Summary

Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:31	End Time (MST):	13:49
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	0.999989	≥0.995
7.97	7.99	0.9968	Slope	1.004185	0.90 - 1.10
3.98	3.99	0.9968			
1.99	1.98	1.0088	Intercept	-0.009377	+/-0.5



Wood Buffalo Environmental Association

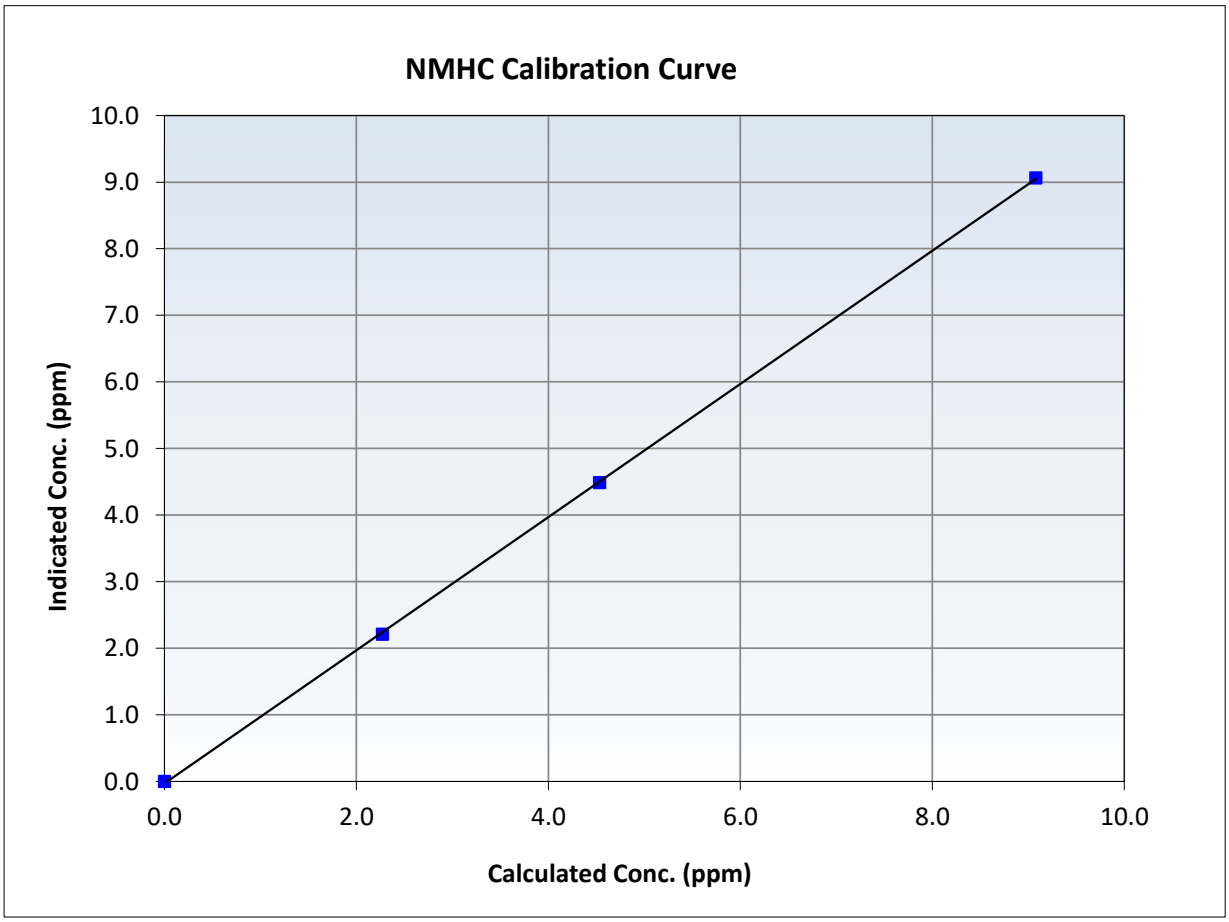
NMHC Calibration Summary

Station Information

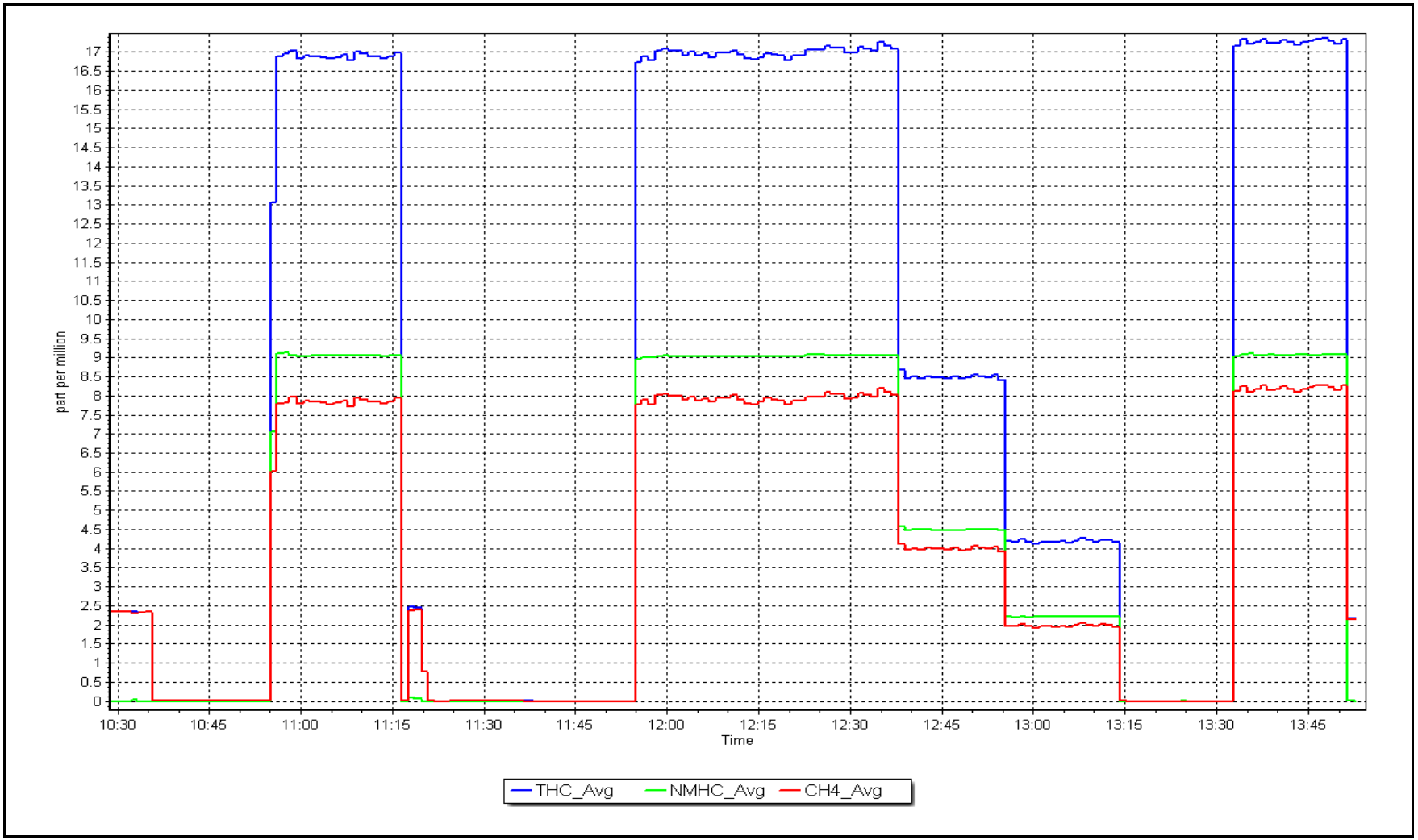
Calibration Date:	March 5, 2026	Previous Calibration:	February 19, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	10:31	End Time (MST):	13:49
Analyzer make:	Thermo 55i	Analyzer serial #:	1181490018

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999949	≥0.995
9.08	9.06	1.0017	Slope	0.999939	0.90 - 1.10
4.53	4.49	1.0104			
2.27	2.21	1.0270	Intercept	-0.030183	+/-0.5



NMHC Calibration Plot Date: March 5, 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:	March 12, 2026
Last Cal Date:	February 23, 2026
Start time (MST):	9:51
End time (MST):	14:02
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 API T700	Serial Number:	2657
ZAG make/model:	Teledyne APIT701	Serial Number:	1118

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	0.1	-0.3	----	----
AF High point	4917	83.5	805.7	799.5	6.2	806.6	800.6	6.1	0.9985	0.9988
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	801.9 ppb	NO =	798.5 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = 0.6%
Baseline Corr 1st pt	NO_X =	806.9 ppb	NO =	800.5 ppb	As Found Statistics	*Percent Change	NO = 0.2%
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: 12300522720

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.131	1.131	NO bkgnd or offset:	3.1	3.0
NOX coeff or slope:	0.991	0.991	NOX bkgnd or offset:	3.5	3.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	162.2	163.2

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998156	0.999035
NO_X Cal Offset:	-2.292088	-2.452223
NO Cal Slope:	1.003137	1.002480
NO Cal Offset:	-3.510762	-3.130787
NO_2 Cal Slope:	0.982569	0.969059
NO_2 Cal Offset:	0.958786	-0.021927

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	4917	83.5	805.7	799.5	6.2	803.9	800.3	3.5	1.0022	0.9990
Mid point	4958	41.8	403.4	400.3	3.1	398.7	395.7	3.0	1.0118	1.0116
Low point	4979	20.9	201.7	200.1	1.5	197.0	194.7	2.2	1.0238	1.0280
As left zero	5000	0.0	0.0	0.0	0.0	-0.1	0.2	-0.3	----	----
As left span	4917	83.5	805.7	401.2	404.5	788.6	401.2	387.4	1.0217	1.0000
							Average Correction Factor		1.0126	1.0129

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	795.3	398.8	402.7	389.8	1.0330	96.8%
Mid GPT point	795.3	598.8	202.7	197.4	1.0267	97.4%
Low GPT point	795.3	697.5	104.0	100.3	1.0367	96.5%
				Average Correction Factor	1.0322	96.9%

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

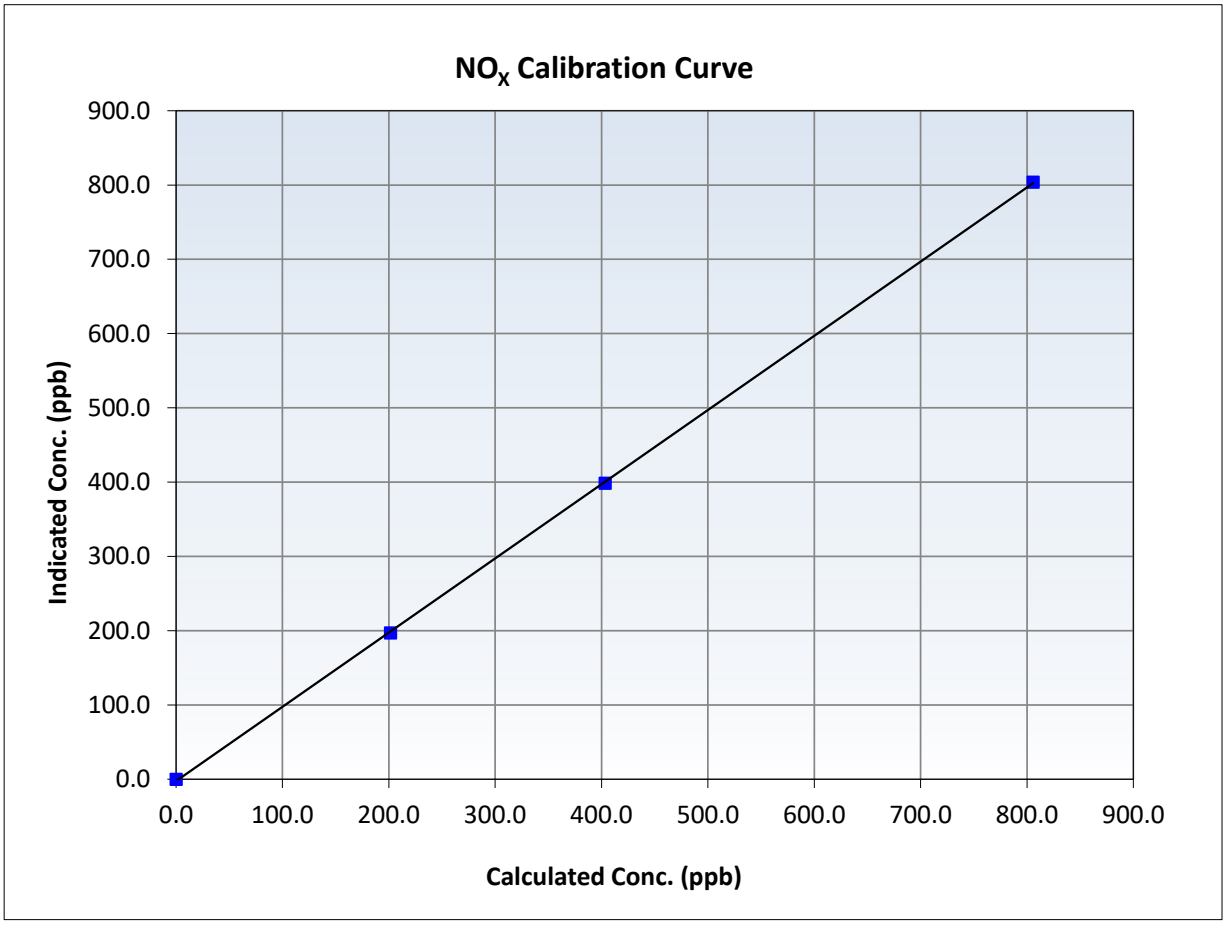
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 23, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:51	End Time (MST):	14:02
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	0.0	----
805.7	803.9	1.0022
403.4	398.7	1.0118
201.7	197.0	1.0238

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999956	*≥0.995*
Slope	0.999035	*0.90 - 1.10*
Intercept	-2.452223	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

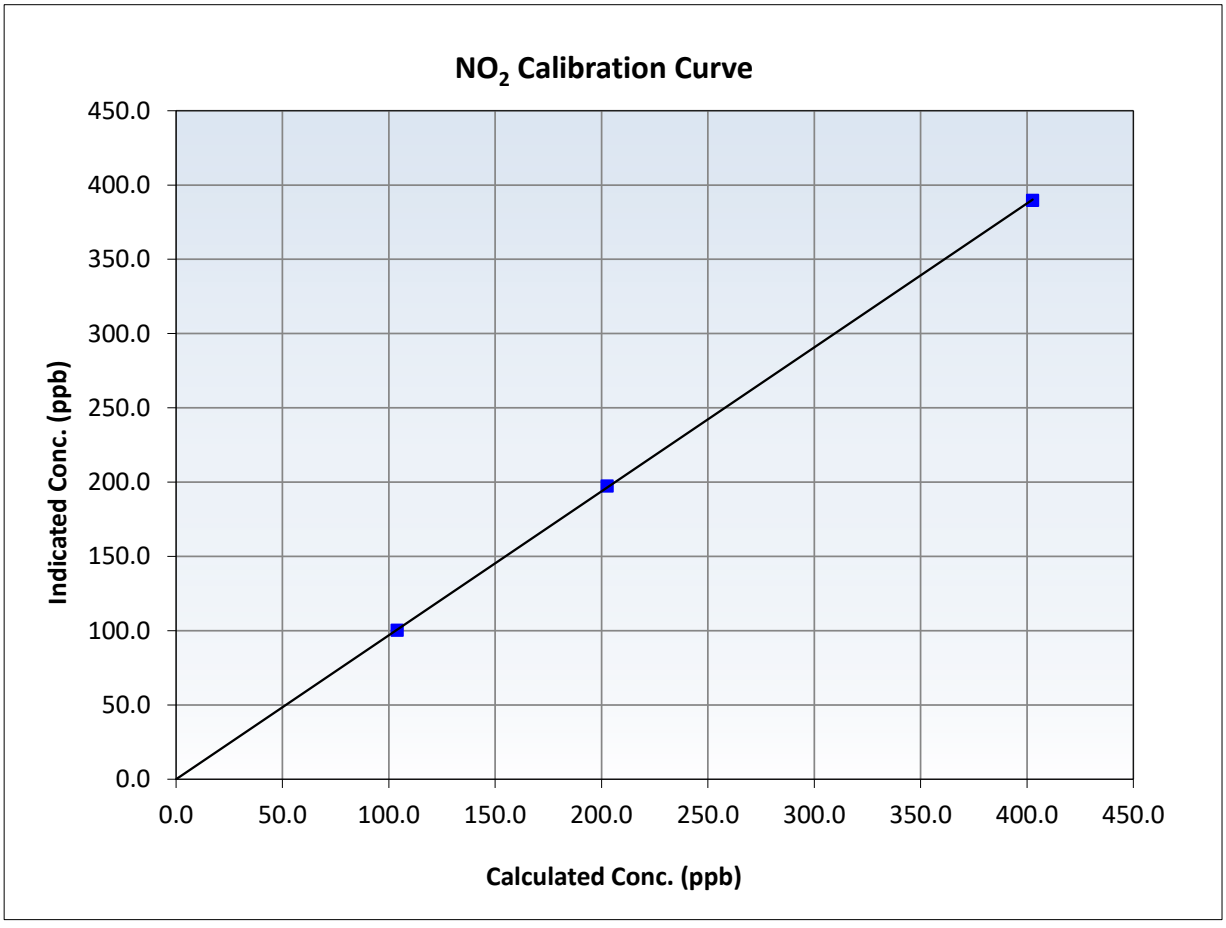
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 23, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:51	End Time (MST):	14:02
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	----
402.7	389.8	1.0330
202.7	197.4	1.0267
104.0	100.3	1.0367

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999983	*≥0.995*
Slope	0.969059	*0.90 - 1.10*
Intercept	-0.021927	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

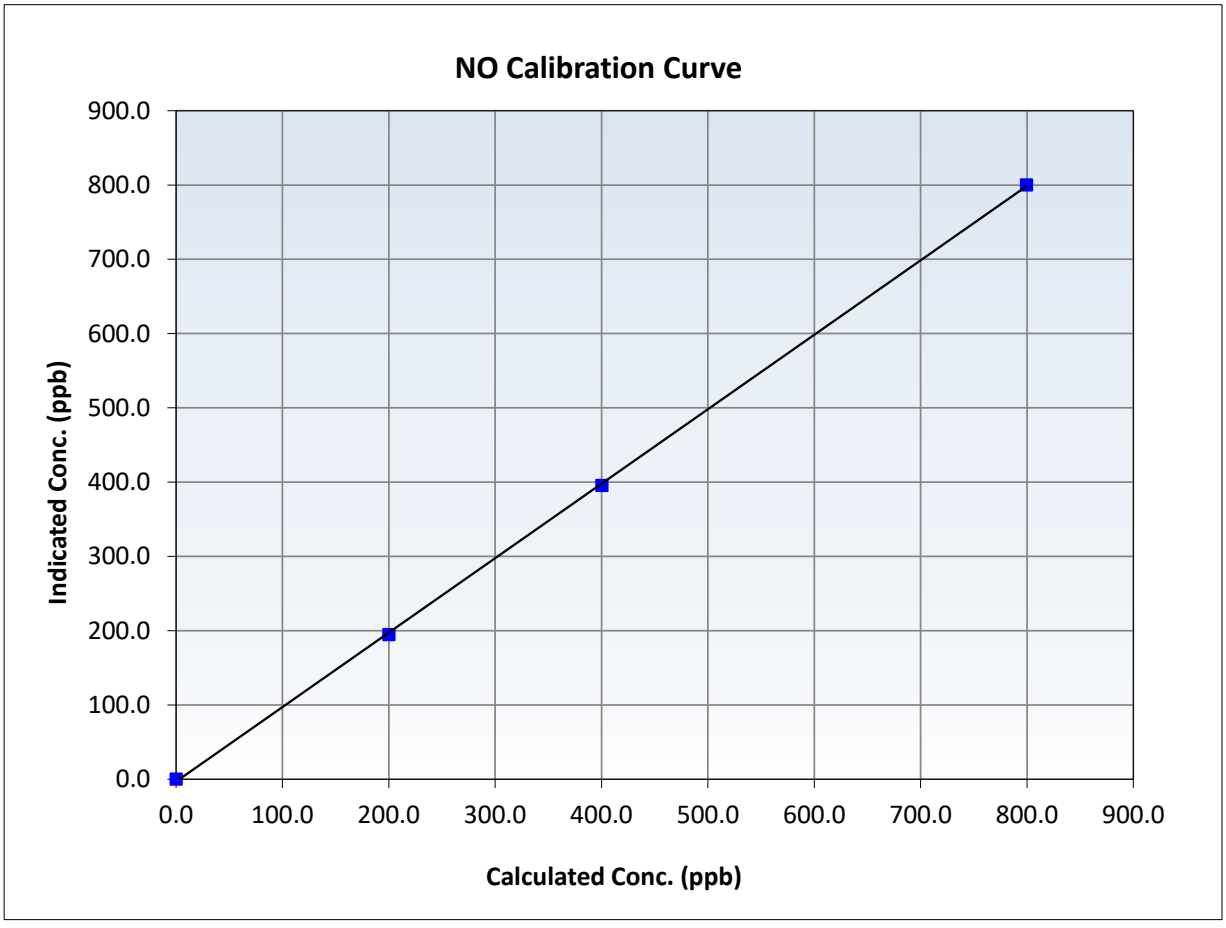
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 23, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	9:51	End Time (MST):	14:02
Analyzer make:	Thermo 42iQ	Analyzer serial #:	12300522720
		14:18	

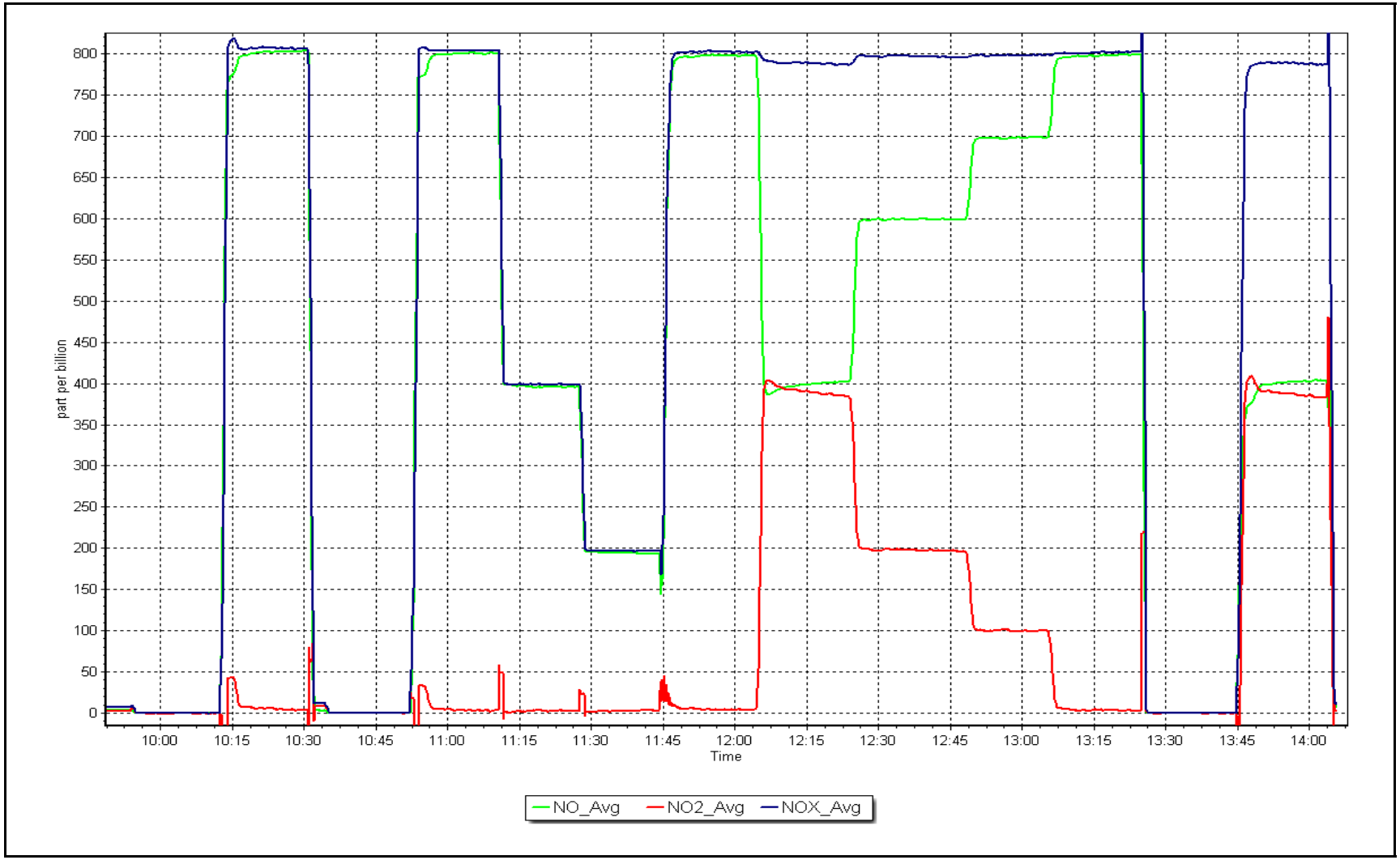
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
799.5	800.3	0.9990
400.3	395.7	1.0116
200.1	194.7	1.0280

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999918	*≥0.995*
Slope	1.002480	*0.90 - 1.10*
Intercept	-3.130787	*+/-20*



NO_X Calibration Plot Date: March 12, 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:	March 6, 2026	Last Cal Date:	February 9, 2026
Start time (MST):	11:05	End time (MST):	14:13
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:	1118

Analyzer Information

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

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.000743	1.001229	Backgd or Offset:	-2.8	-1.8
Calibration intercept:	2.120000	0.760000	Coeff or Slope:	1.025	1.016

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	0.7	----
As found High point	5000	977.8	400.0	404.0	0.992
As found Mid point					
As found Low point					
Baseline Corr As found:	403.3	Previous response	402.4	*% 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	

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	0.4	----
High point	5000	977.4	400.0	401.0	0.998
Mid point	5000	801.7	200.0	201.4	0.993
Low point	5000	685.3	100.0	101.1	0.989
As left zero	5000	800.0	0.0	-0.2	----
As left span	5000	977.6	400.0	402.0	0.995
				Average Correction Factor	0.993

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

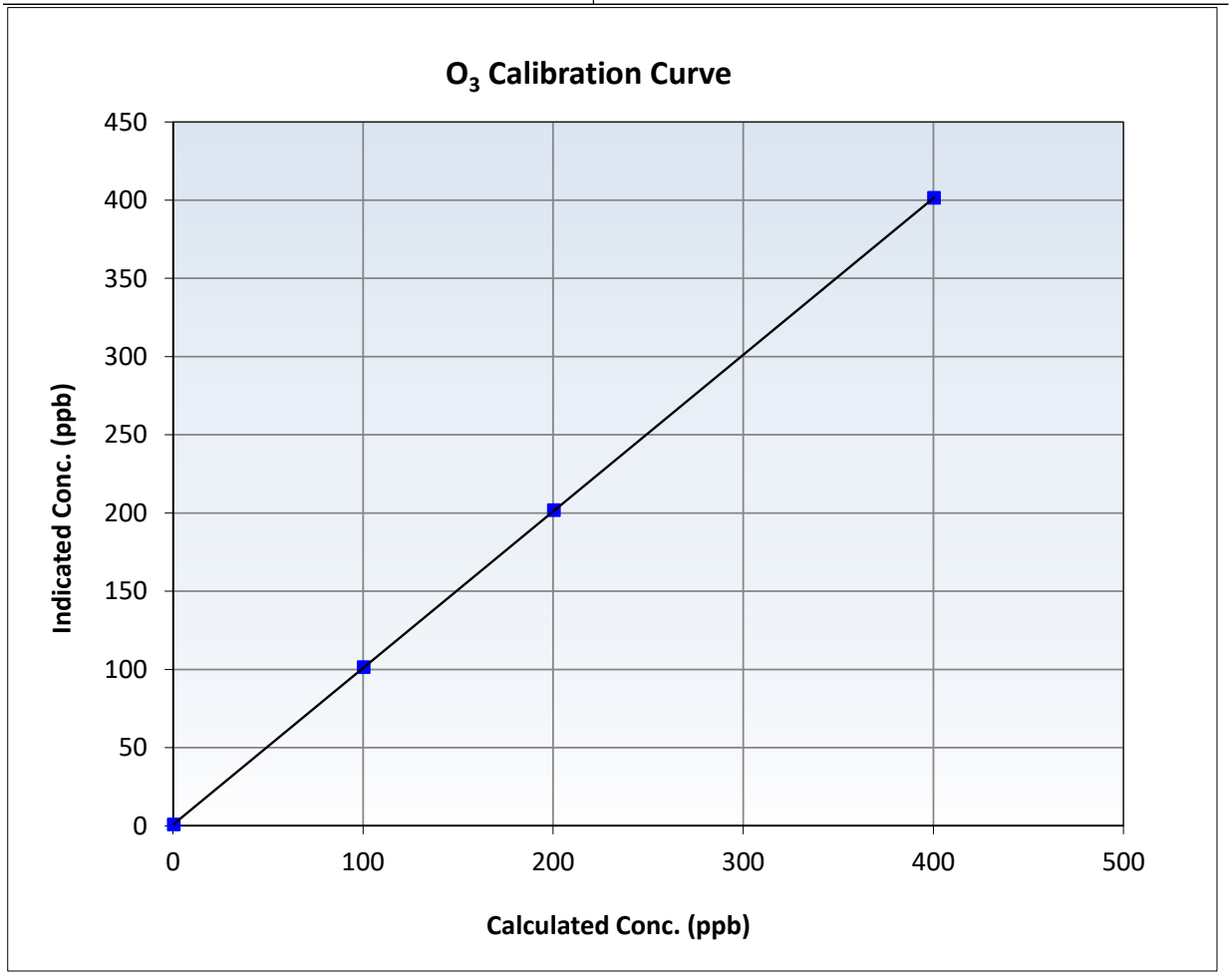
O_3 Calibration Summary

Station Information

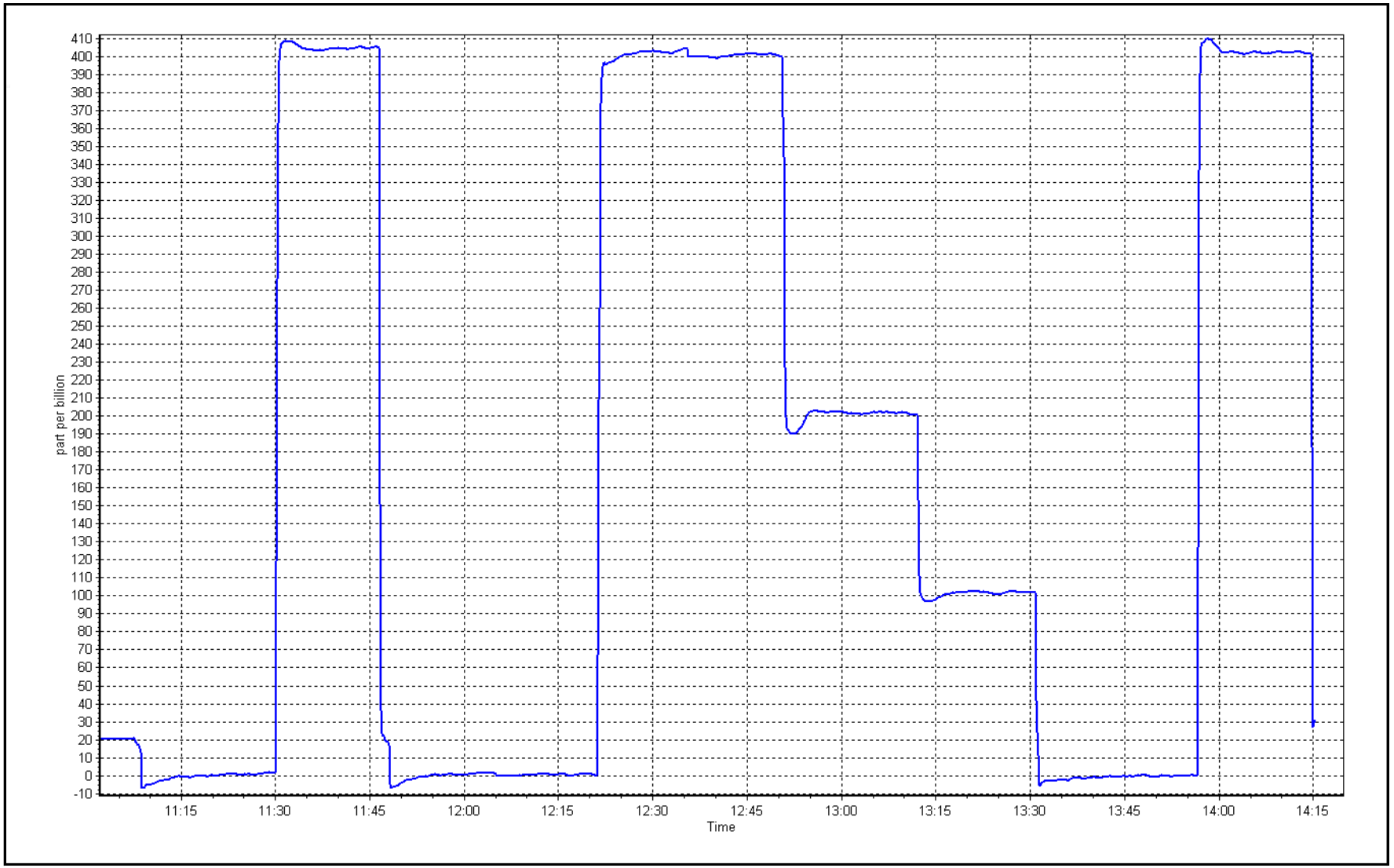
Calibration Date:	March 6, 2026	Previous Calibration:	February 9, 2026
Station Name:	Fort McKay South	Station Number:	AMS 13
Start Time (MST):	11:05	End Time (MST):	14:13
Analyzer make:	Teledyne API T400	Analyzer serial #:	7413

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.4	----	Correlation Coefficient	0.999995	*≥0.995*
400.0	401.0	0.9975	Slope	1.001229	*0.90 - 1.10*
200.0	201.4	0.9930			
100.0	101.1	0.9891	Intercept	0.760000	*+/- 5*



O_3 Calibration Plot Date: March 6, 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:	March 5, 2026	Last Cal Date:	February 26, 2026
Start time (MST):	14:30	End time (MST):	16:00
Analyzer Make:	Teledyne API T640	S/N:	1335
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25	S/N:	388745
Temp/RH standard:	Alicat FP-25	S/N:	388745

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (^{o}C)	-4.30	-4.92	-4.30	☐	+/- 2 ^{o}C
P (mmHg)	730.10	732.35	730.10	☐	+/- 10 mmHg
Flow (LPM vol)	4.99	4.84	4.99	☑	+/- 0.25 LPM
PW% (pump)	43	-----	43	☐	>80%
Zero Verification	PM w/o HEPA:	7.3	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: June 10, 2024 — Lot No.: 100128-050-042

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

Date Optical Chamber Cleaned: December 19, 2025

Date Disposable Filter Changed: December 16, 2025

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

Annual Maintenance

Date Sample Tube Cleaned: June 2, 2025

Date RH/T Sensor Cleaned: June 2, 2025

Notes: Verified temperature, pressure and flow. Flow adjusted. Leak check passed.

Calibration by: Kelly Baragar

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS14
ANZAC
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	March 5, 2026	Last Cal Date:	February 2, 2026
Start time (MST):	8:10	End time (MST):	10:57
Reason:	Routine		

Calibration Standards

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

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	0710321322	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.999176	1.003090	Backgd or Offset:	26.3	26.9
Calibration intercept:	-1.888613	-2.309365	Coeff or Slope:	1.112	1.112

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	0.9	----
As found High point	4920	79.5	800.2	801.0	1.000
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	800.1	Previous response	797.6	*% 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	79.5	800.2	801.7	0.998
Mid point	4960	39.8	400.6	397.4	1.008
Low point	4980	19.9	200.3	197.3	1.015
As left zero	5000	0.0	0.0	-0.2	----
As left span	4920	79.5	800.2	799.8	1.000
				Average Correction Factor:	1.007

Notes: No Maintenance done. Zero adjusted.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

SO_2 Calibration Summary

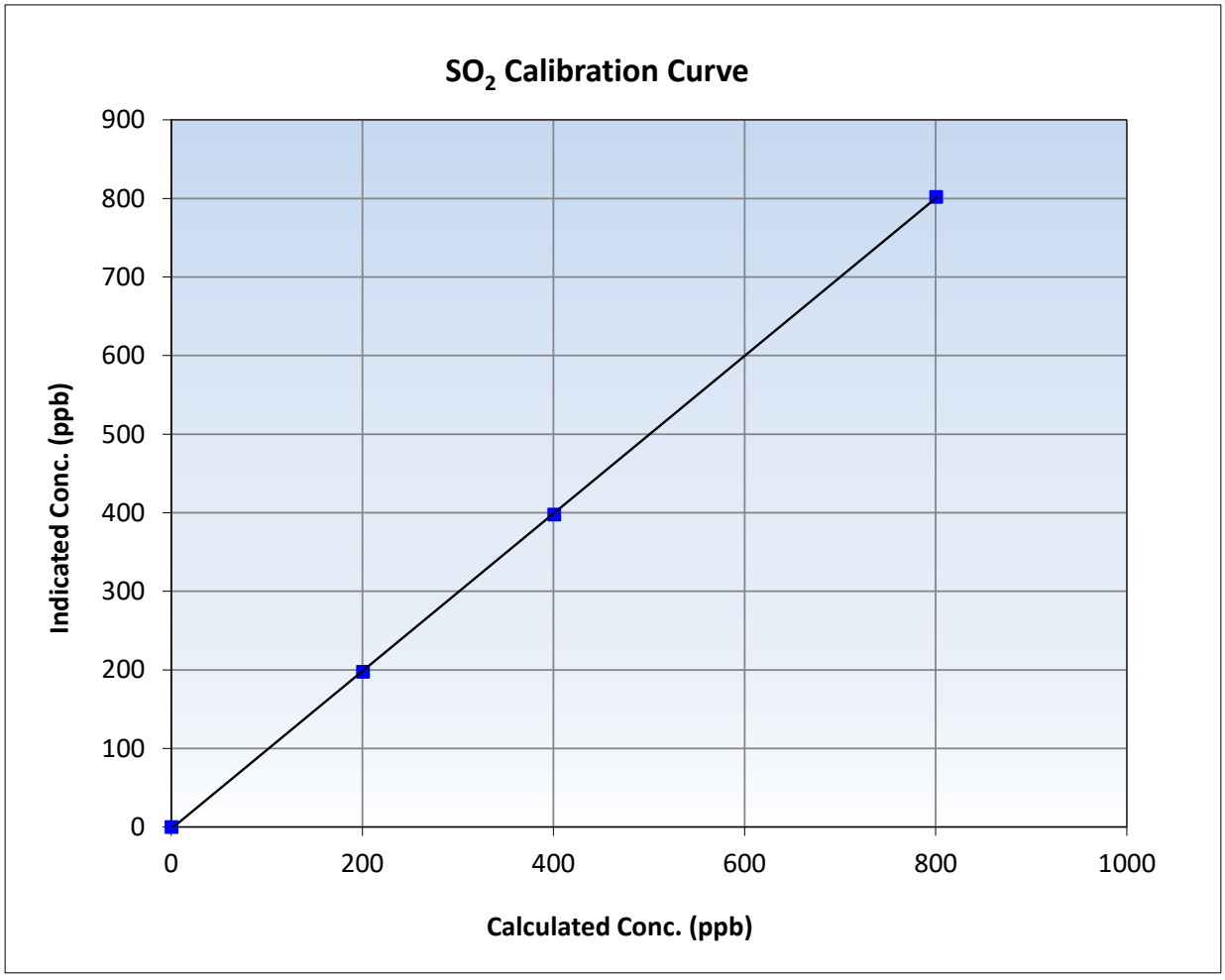
Station Information

Calibration Date:	March 5, 2026	Previous Calibration:	February 2, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	8:10	End Time (MST):	10:57
Analyzer make:	Thermo 43i	Analyzer serial #:	0710321322

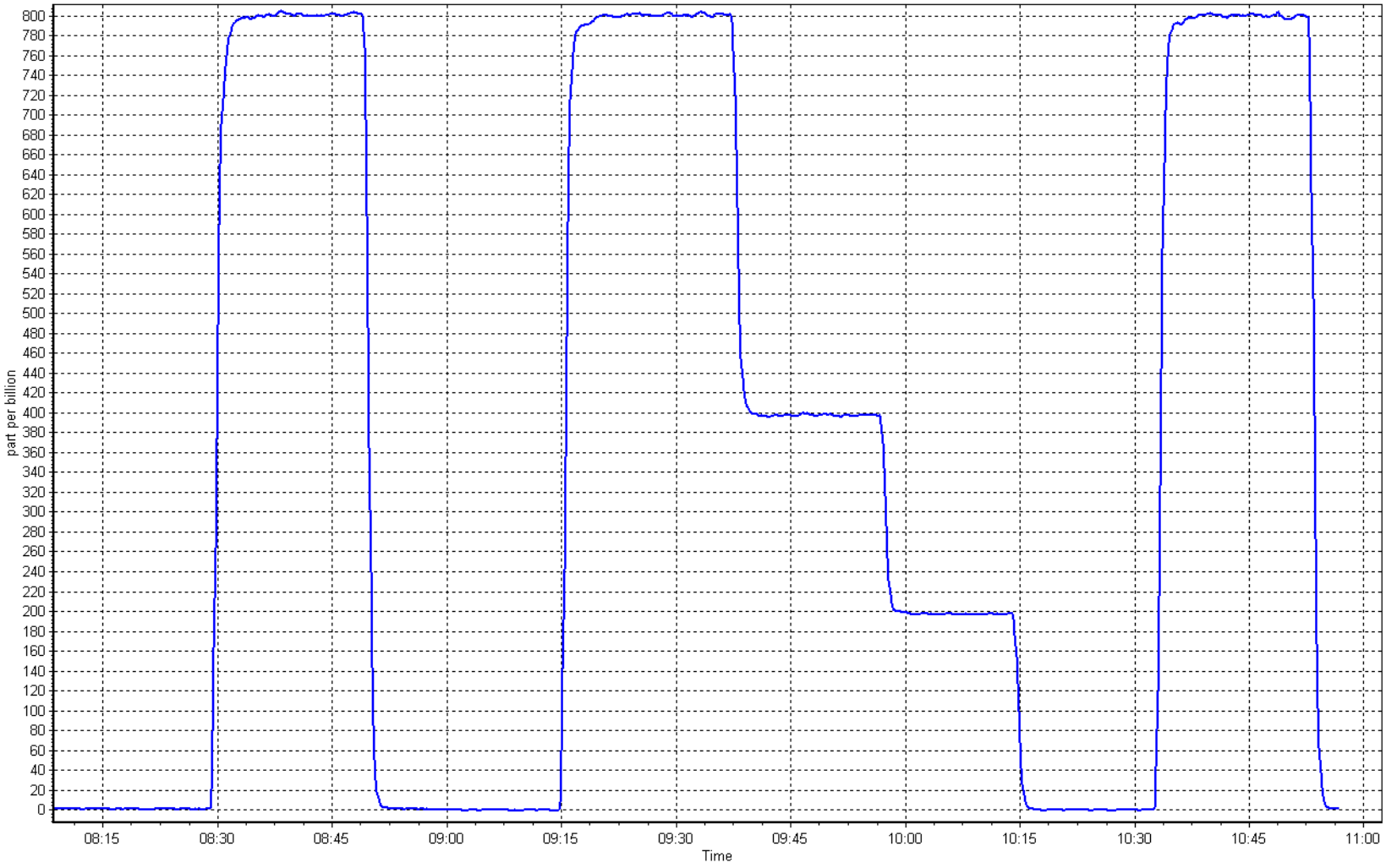
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
800.2	801.7	0.9981
400.6	397.4	1.0080
200.3	197.3	1.0151

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999966	*≥0.995*
Slope	1.003090	*0.90 - 1.10*
Intercept	-2.309365	*+/-30*



SO2 Calibration Plot Date: March 5, 2026 Location: Anzac



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	March 9, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	7:22	End time (MST):	11:49
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.20	ppm	Cal Gas Exp Date:	September 22, 2028
Cal Gas Cylinder #:	DT0034160			
Removed Cal Gas Conc:	5.20	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 #:	631	
Analyzer Range	0 - 100 ppb		Converter Temp:	800	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001320	1.009235	Backgd or Offset:	2.35	2.50
Calibration intercept:	-0.078609	-0.320394	Coeff or Slope:	1.006	1.068

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	4923	76.9	80.0	76.5	1.045
As found Mid point	4961	38.5	40.0	37.9	1.057
As found Low point	4981	19.2	20.0	18.3	1.091
New cylinder response					

Baseline Corr As found:	76.5	Prev response:	80.00	*% change:	-4.6%
Baseline Corr 2nd AF pt:	37.9	AF Slope:	0.959369	AF Intercept:	-0.400214
Baseline Corr 3rd AF pt:	18.3	AF Correlation:	0.999872	* = > +/-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	4923	76.9	80.0	80.5	0.994
Mid point	4961	38.5	40.0	40.2	0.996
Low point	4981	19.2	20.0	19.2	1.040
As left zero	5000	0.0	0.0	0.4	----
As left span	4921	76.9	80.0	80.1	0.999
SO2 Scrubber Check	4921	79.5	794.9	0.0	----

Date of last scrubber change:	28-May-25	Ave Corr Factor	1.010	
Date of last converter efficiency test:	September 16, 2025	103.4%	efficiency	

Notes: Calibrator was changed out. Span adjusted. Sox scrubber checked after calibrator zero at 0.0ppb.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

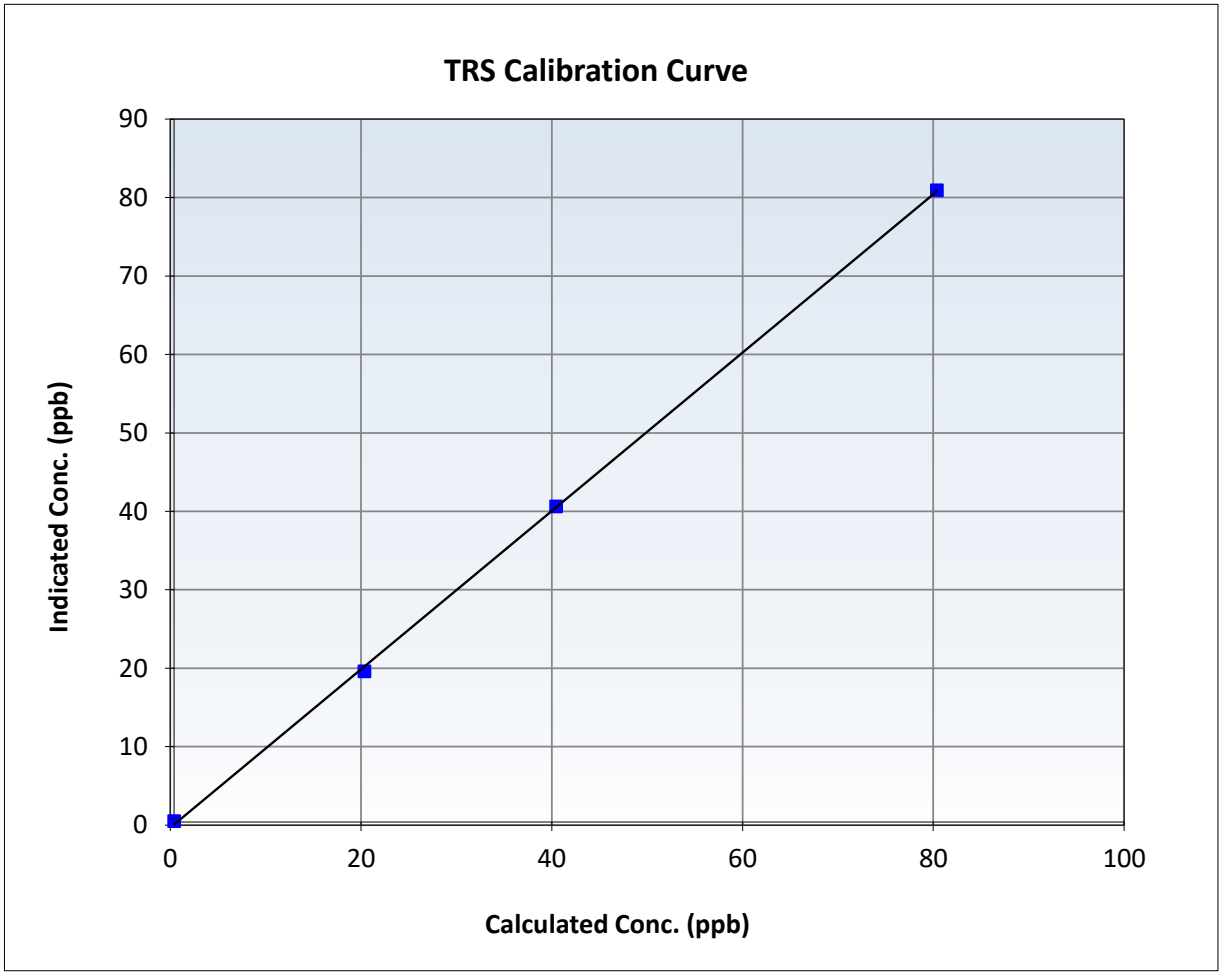
TRS Calibration Summary

Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 12, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	7:22	End Time (MST):	11:49
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	0.1	----	Correlation Coefficient	0.999832	*≥0.995*
80.0	80.5	0.9935	Slope	1.009235	*0.90 - 1.10*
40.0	40.2	0.9961			
20.0	19.2	1.0400	Intercept	-0.320394	*+/-3*



TRS Calibration Plot Date: March 9, 2026 Location: Anzac

Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	March 12, 2026	Last Cal Date:	March 9, 2026
Start time (MST):	7:28	End time (MST):	11:42
Reason:	Maintenance		

Calibration Standards

Cal Gas Concentration:	5.20	ppm	Cal Gas Exp Date:	September 22, 2028
Cal Gas Cylinder #:	DT0034160			
Removed Cal Gas Conc:	5.20	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:	1.009235	1.010802	Backgd or Offset:	2.50	2.25
Calibration intercept:	-0.320394	-0.000254	Coeff or Slope:	1.068	0.965

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	4923	76.9	80.0	82.1	0.973
As found Mid point	4961	38.5	40.0	41.2	0.970
As found Low point	4981	19.2	20.0	19.6	1.014
New cylinder response					

Baseline Corr As found:	82.2	Prev response:	80.40	*% change:	2.2%
Baseline Corr 2nd AF pt:	41.3	AF Slope:	1.031525	AF Intercept:	-0.400491
Baseline Corr 3rd AF pt:	19.7	AF Correlation:	0.999857	* = > +/-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	76.9	80.0	80.8	0.990
Mid point	4961	38.5	40.0	40.6	0.986
Low point	4981	19.2	20.0	20.1	0.993
As left zero	5000	0.0	0.0	0.0	----
As left span	4921	76.9	80.0	80.5	0.994
SO2 Scrubber Check	4921	79.5	794.9	-0.1	----

Date of last scrubber change:	28-May-25	Ave Corr Factor	0.990
Date of last converter efficiency test:	September 16, 2025	103.4%	efficiency

Notes: Nightly Spans are low. Converter and Sox scrubber replaced. Old Converter Serial#631. New Converter Serial#461. Span adjusted. Sox scrubber checked after the calibrator zero.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

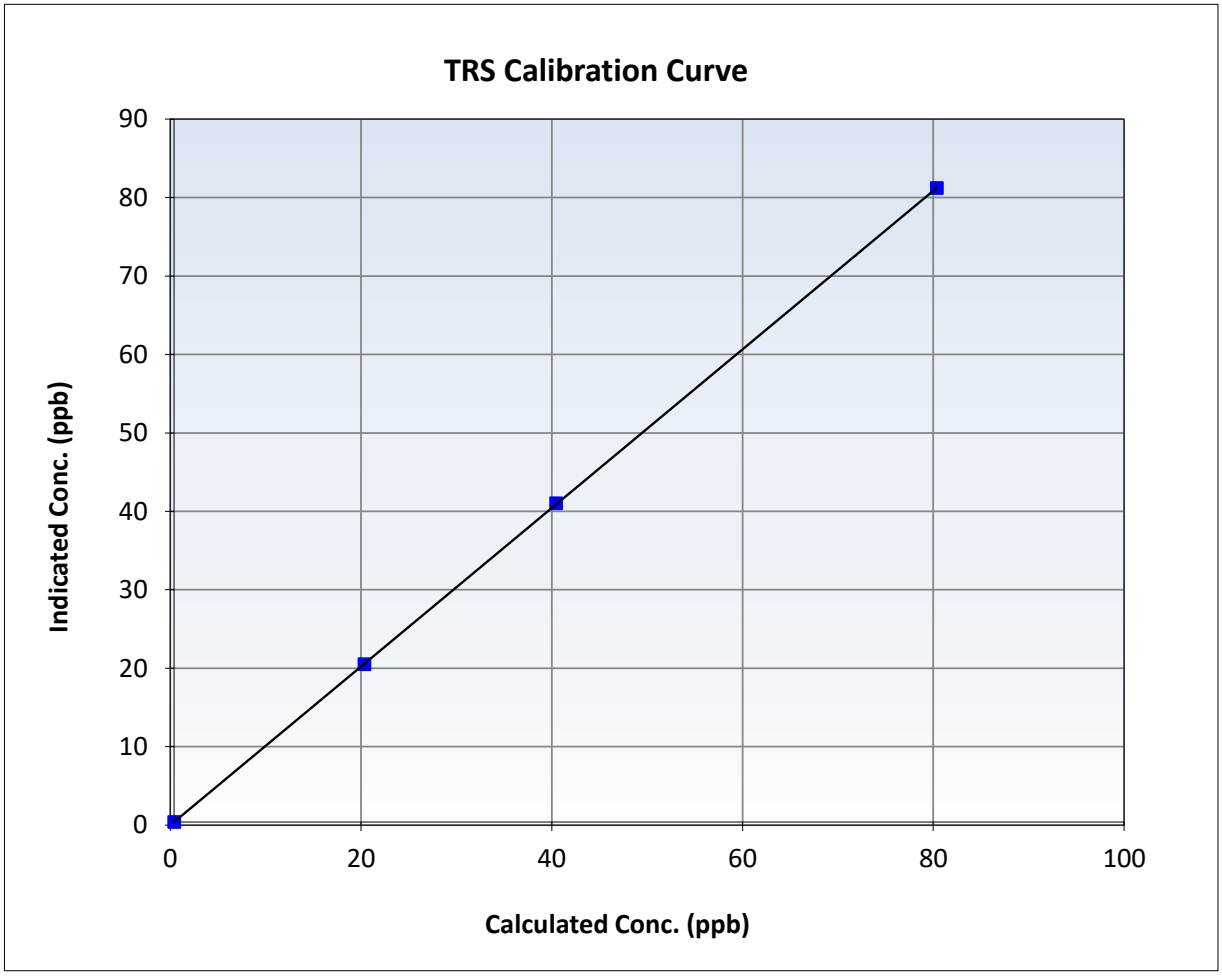
TRS Calibration Summary

Station Information

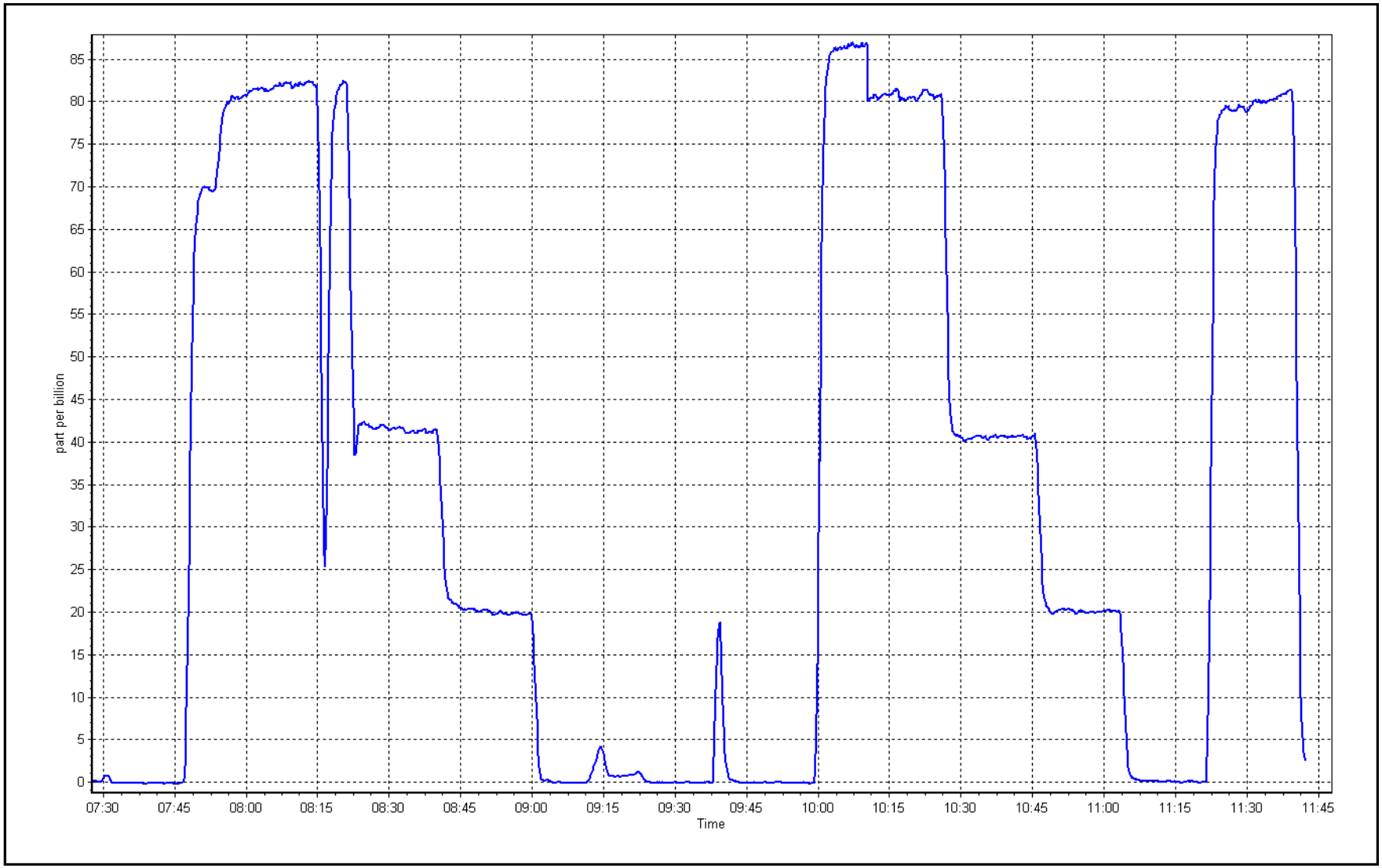
Calibration Date:	March 12, 2026	Previous Calibration:	March 9, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	7:28	End Time (MST):	11:42
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153582

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999993	*≥0.995*
80.0	80.8	0.9898	Slope	1.010802	*0.90 - 1.10*
40.0	40.6	0.9863			
20.0	20.1	0.9934	Intercept	-0.000254	*+/-3*



TRS Calibration Plot Date: March 12, 2026 Location: Anzac



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	March 4, 2026	Last Cal Date:	February 2, 2026
Start time (MST):	8:20	End time (MST):	17:13
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC462030	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
C3H8 Cal Gas Conc.	204.9 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
Removed C3H8 Conc.	204.9 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3060
Zero Air Gen model:	API 701H	Serial Number:	357

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.64E-04	3.68E-04	NMHC SP Ratio:	5.85E-05	5.91E-05
CH4 Retention time:	16.6	16.6	NMHC Peak Area:	153078	151680
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	17.11	0.993
As found Mid point	4960	39.8	8.51	8.08	1.053
As found Low point	4980	19.9	4.25	4.14	1.028
New cylinder response					
Baseline Corr AF:	17.11	Prev response	16.89	*% change	1.3%
Baseline Corr 2nd AF:	8.08	AF Slope:	1.006574	AF Intercept:	-0.156109
Baseline Corr 3rd AF:	4.14	AF Correlation:	0.999005	* = > +/-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	16.96	1.002
Mid point	4960	39.8	8.51	8.34	1.020
Low point	4980	19.9	4.25	4.14	1.029
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	1.017

Notes: NMHC making Grinding noise when going from sample to inject mode. Actuator swapped 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	79.5	8.96	9.08	0.987
As found Mid point	4960	39.8	4.49	4.49	0.999
As found Low point	4980	19.9	2.24	2.22	1.012
New cylinder response					
Baseline Corr AF:	9.08	Prev response	8.90	*% change	1.9%
Baseline Corr 2nd AF:	4.49	AF Slope:	1.014807	AF Intercept:	-0.034140
Baseline Corr 3rd AF:	2.22	AF Correlation:	0.999930	* = > +/-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	8.94	1.002
Mid point	4960	39.8	4.49	4.41	1.016
Low point	4980	19.9	2.24	2.19	1.022
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.5	8.96	8.92	1.005
				Average Correction Factor	1.014

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	8.03	1.000
As found Mid point	4960	39.8	4.02	3.59	1.120
As found Low point	4980	19.9	2.01	1.92	1.047
New cylinder response					
Baseline Corr AF:	8.03	Prev response	7.99	*% change	0.5%
Baseline Corr 2nd AF:	3.59	AF Slope:	0.997464	AF Intercept:	-0.121970
Baseline Corr 3rd AF:	1.92	AF Correlation:	0.996461	* = > +/-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	3.92	1.025
Low point	4980	19.9	2.01	1.94	1.036
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.5	8.04	8.00	1.004
				Average Correction Factor	1.021

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.998471	0.999231
THC Cal Offset:	-0.074579	-0.074982
CH4 Cal Slope:	1.000480	0.999911
CH4 Cal Offset:	-0.044079	-0.045077
NMHC Cal Slope:	0.997281	0.998620
NMHC Cal Offset:	-0.030902	-0.029904

Calibration Performed By: Melissa Lemay / Aswin Sasi Kumar

Wood Buffalo Environmental Association

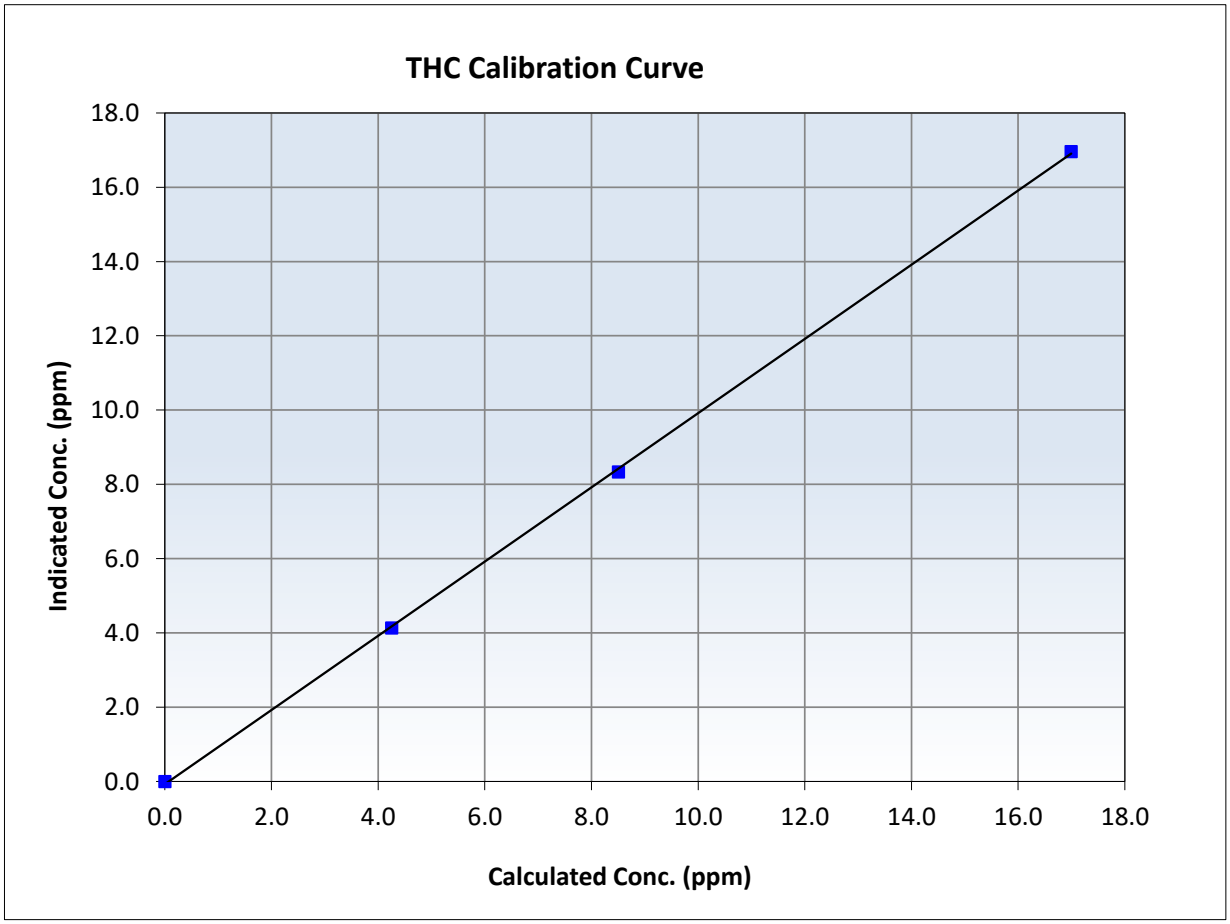
THC Calibration Summary

Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 2, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	8:20	End Time (MST):	17:13
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	0.999884	≥0.995
17.00	16.96	1.0020	Slope	0.999231	0.90 - 1.10
8.51	8.34	1.0205	Intercept	-0.074982	+/-0.5
4.25	4.14	1.0287			



Wood Buffalo Environmental Association

CH_4 Calibration Summary

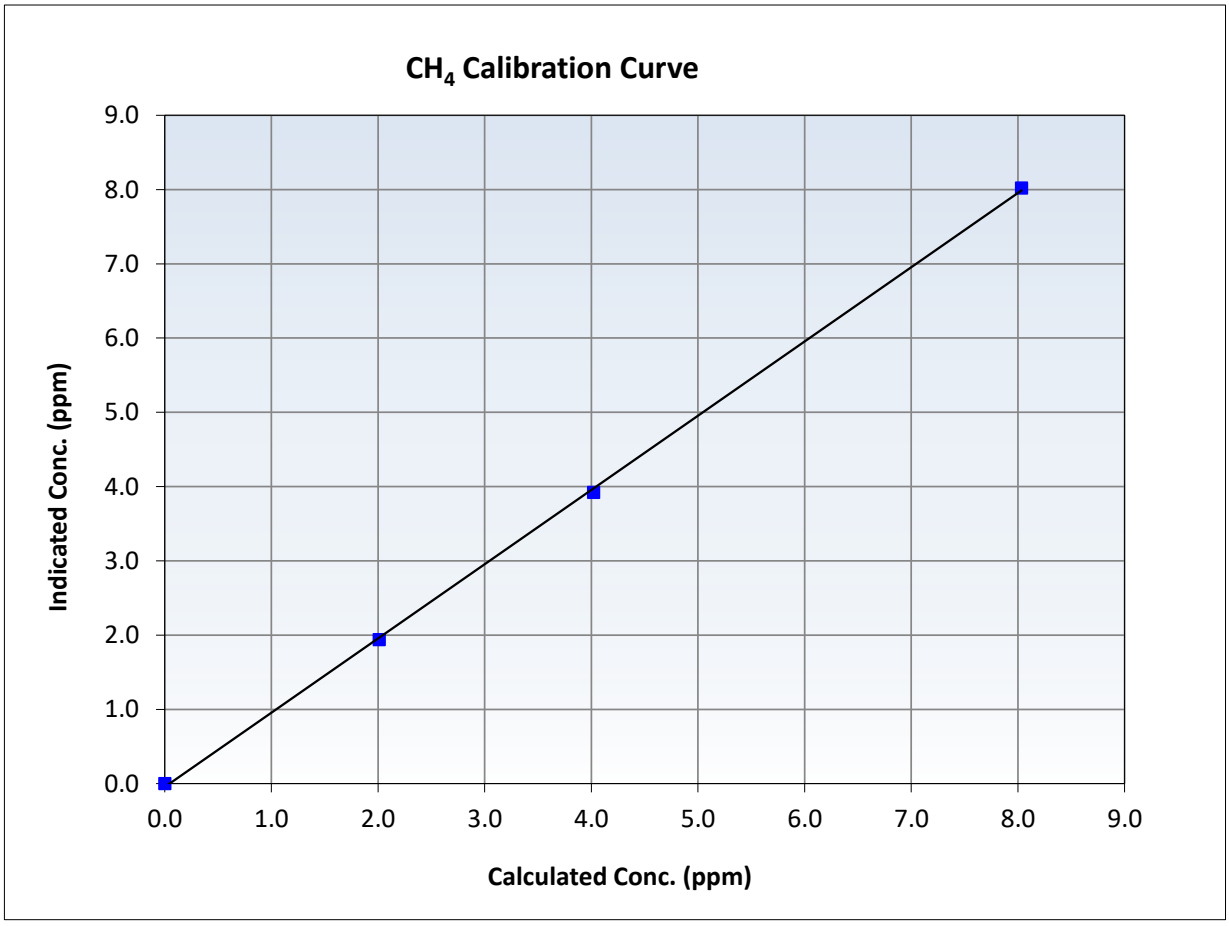
Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 2, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	8:20	End Time (MST):	17:13
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.04	8.02	1.0016
4.02	3.92	1.0251
2.01	1.94	1.0361

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999815	*≥0.995*
Slope	0.999911	*0.90 - 1.10*
Intercept	-0.045077	*+/-0.5*



Wood Buffalo Environmental Association

NMHC Calibration Summary

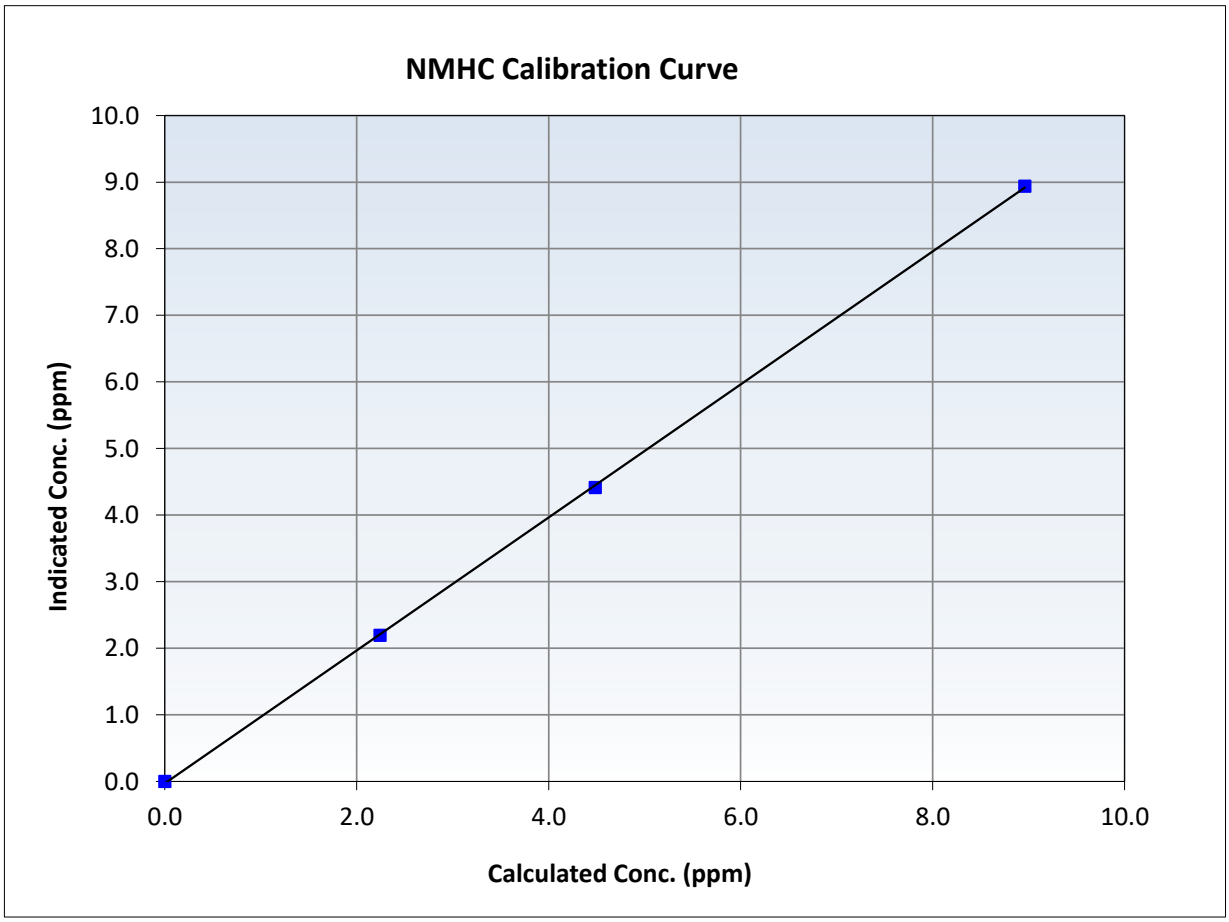
Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 2, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	8:20	End Time (MST):	17:13
Analyzer make:	Thermo 55i	Analyzer serial #:	1331259521

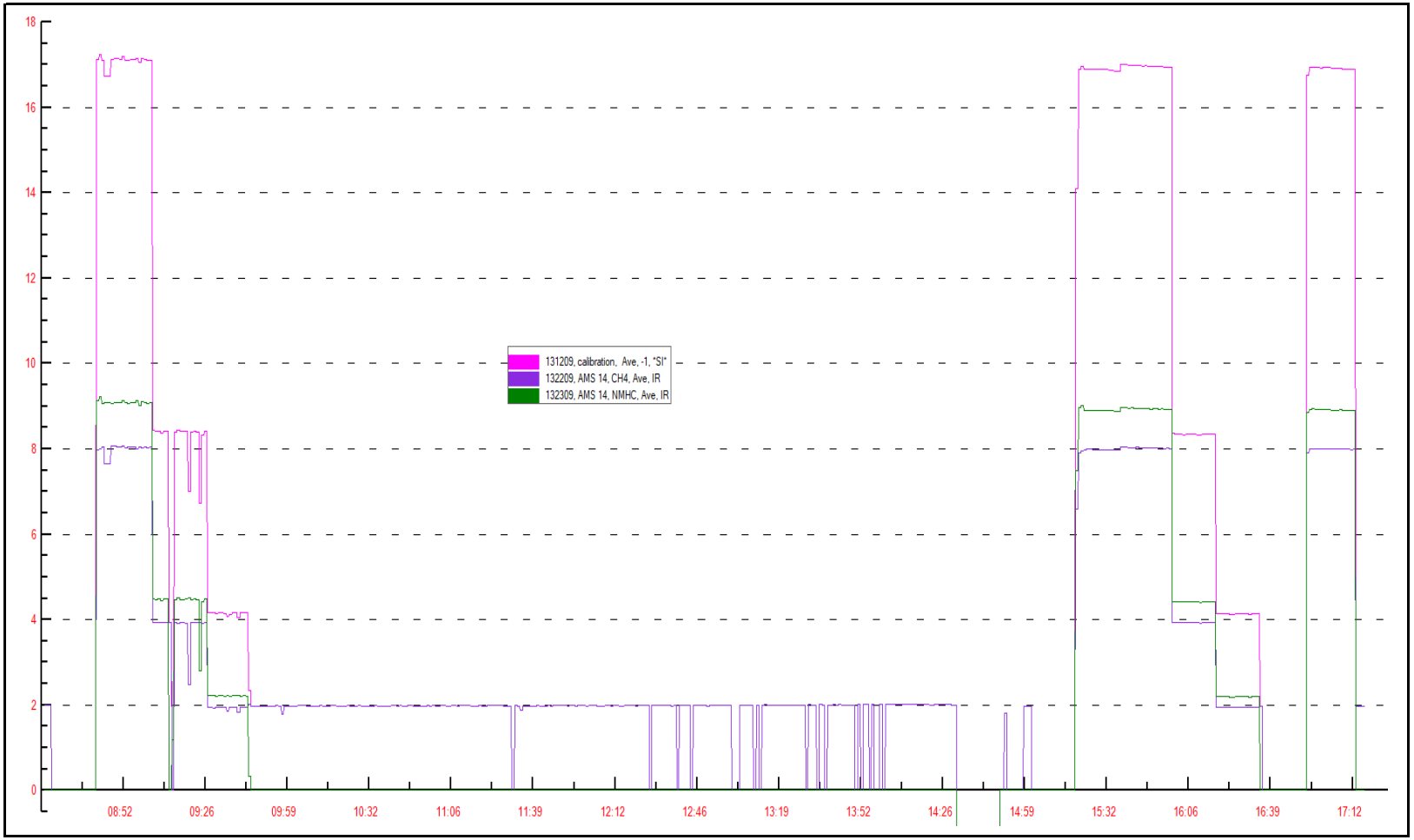
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.96	8.94	1.0023
4.49	4.41	1.0164
2.24	2.19	1.0222

Statistical Evaluation		Limits
Correlation Coefficient	0.999933	≥0.995
Slope	0.998620	0.90 - 1.10
Intercept	-0.029904	+/-0.5



NMHC Calibration Plot Date: March 4, 2026 Location: Anzac



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	March 12, 2026	Last Cal Date:	March 4, 2026
Start time (MST):	6:06	End time (MST):	7:29
Reason:	Cylinder Change		

Calibration Standards

Gas Cert Reference:	CC462030	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
C3H8 Cal Gas Conc.	204.9 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	505.3 ppm	CH4 Equiv Conc.	1068.8 ppm
Removed C3H8 Conc.	204.9 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	3060
Zero Air Gen model:	API 701H	Serial Number:	357

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	3.68E-04	3.68E-04	NMHC SP Ratio:	5.91E-05	5.91E-05
CH4 Retention time:	16.6	16.6	NMHC Peak Area:	151680	151680
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	16.61	1.023
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.61	Prev response	16.91	*% change	-1.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) *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	79.5	17.00	16.80	1.012
				Average Correction Factor	

Notes: Hydrogen and Nitrogen cylinder change.

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	8.75	1.024
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.75	Prev response	8.92	*% 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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.5	8.96	8.81	1.017
				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	79.5	8.04	7.85	1.023
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.85	Prev response	7.99	*% change	-1.7%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

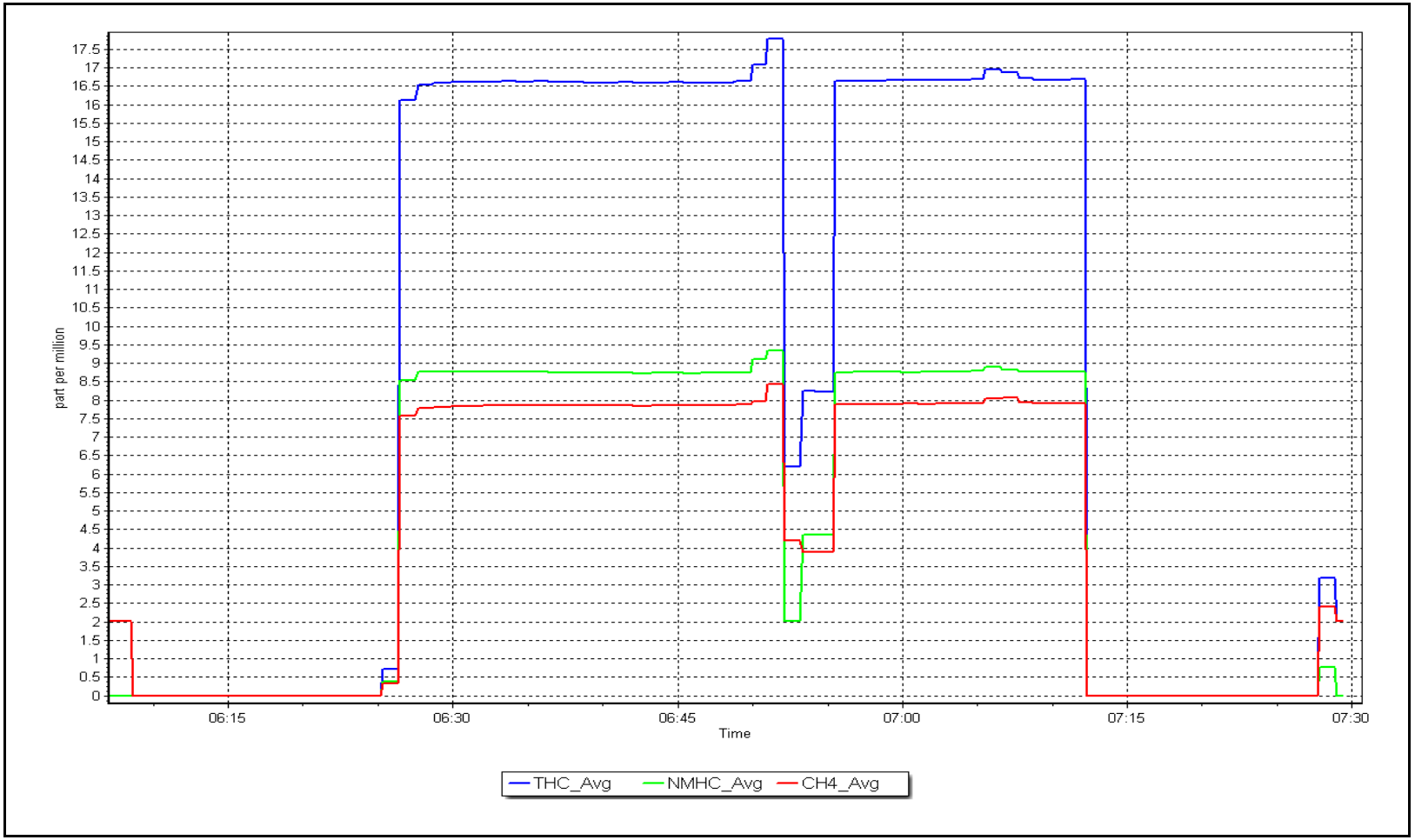
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	79.5	8.04	7.98	1.006
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.999231	
THC Cal Offset:	-0.074982	
CH4 Cal Slope:	0.999911	
CH4 Cal Offset:	-0.045077	
NMHC Cal Slope:	0.998620	
NMHC Cal Offset:	-0.029904	

Calibration Performed By: Melissa Lemay

NMHC Calibration Plot Date: March 12, 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:	March 23, 2026
Last Cal Date:	February 3, 2026
Start time (MST):	7:11
End time (MST):	11:37
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:	3060	
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	0.0	-0.1	0.1	----	----
AF High point	4934	66.2	803.6	799.7	4.0	780.2	774.7	5.5	1.0300	1.0321
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	795.7	ppb	NO =	792.8	ppb	
Baseline Corr 1st pt	NO_X =	780.2	ppb	NO =	774.8	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 =	-2.0%	
*Percent Change	NO =	-2.3%	

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:	1.331	1.375	NO bkgnd or offset:	3.6	3.7
NOX coeff or slope:	0.997	0.996	NOX bkgnd or offset:	3.6	3.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	151.8	151.8

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.990891	0.997948
NO_X Cal Offset:	-0.571229	0.246433
NO Cal Slope:	0.994166	1.001858
NO Cal Offset:	-2.169946	-1.112462
NO_2 Cal Slope:	0.998022	0.997102
NO_2 Cal Offset:	-0.790237	-0.791226

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	0.1	----	----
High point	4934	66.2	803.6	799.7	4.0	802.2	800.6	1.6	1.0018	0.9988
Mid point	4967	33.1	401.8	399.8	2.0	401.3	399.0	2.3	1.0013	1.0021
Low point	4983	16.6	201.5	200.5	1.0	201.4	198.5	2.9	1.0007	1.0103
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	393.8	409.8	800.1	393.8	406.5	1.0044	1.0000
							Average Correction Factor		1.0013	1.0037

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	796.6	387.6	413.0	411.3	1.0041	99.6%
Mid GPT point	796.6	605.1	195.5	194.0	1.0076	99.2%
Low GPT point	796.6	701.5	99.1	96.9	1.0224	97.8%
				Average Correction Factor	1.0114	98.9%

Notes:

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

NO_X Calibration Summary

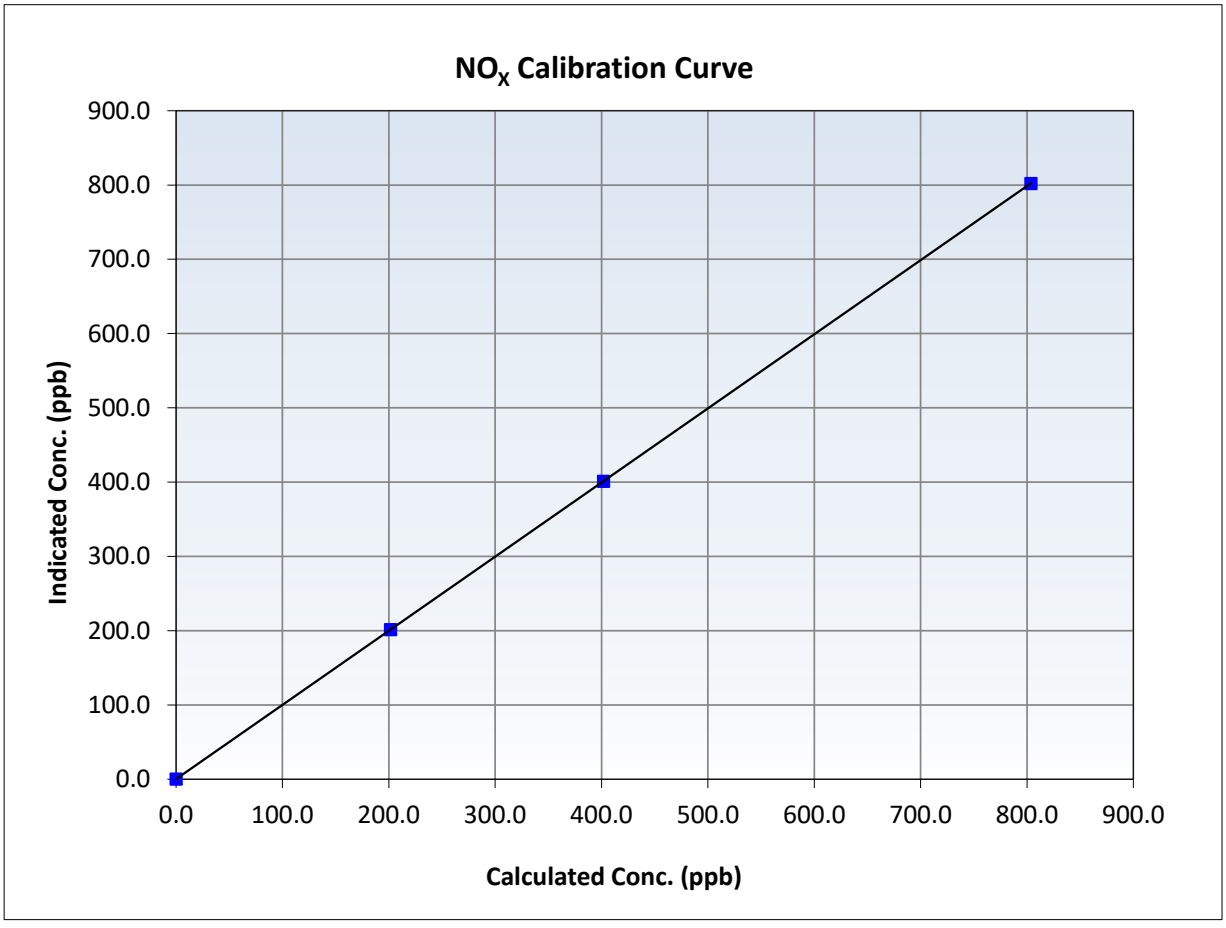
Station Information

Calibration Date:	March 23, 2026	Previous Calibration:	February 3, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	7:11	End Time (MST):	11:37
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
803.6	802.2	1.0018
401.8	401.3	1.0013
201.5	201.4	1.0007

Statistical Evaluation		Limits
Correlation Coefficient	1.000000	≥0.995
Slope	0.997948	0.90 - 1.10
Intercept	0.246433	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

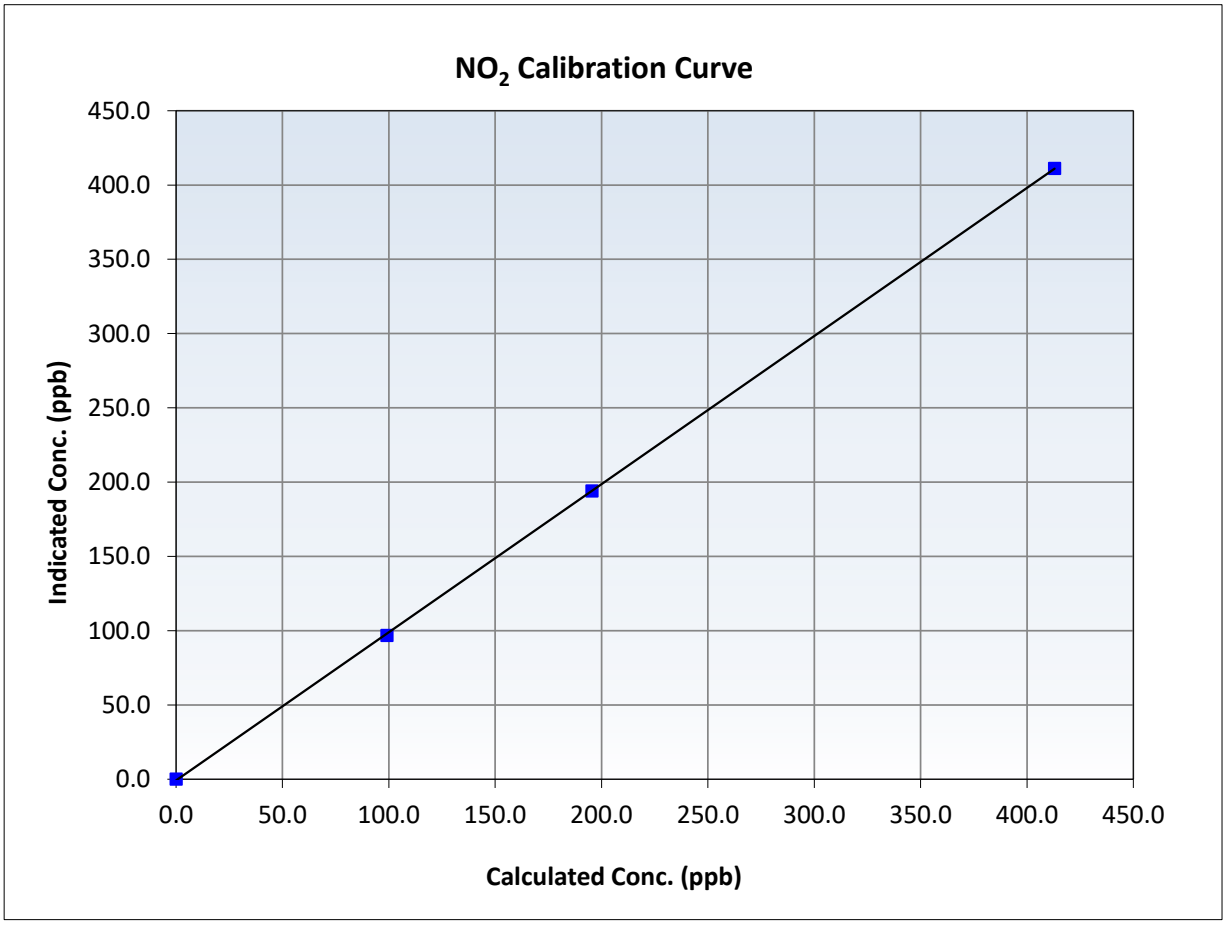
Station Information

Calibration Date:	March 23, 2026	Previous Calibration:	February 3, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	7:11	End Time (MST):	11:37
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	----
413.0	411.3	1.0041
195.5	194.0	1.0076
99.1	96.9	1.0224

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999977	*≥0.995*
Slope	0.997102	*0.90 - 1.10*
Intercept	-0.791226	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

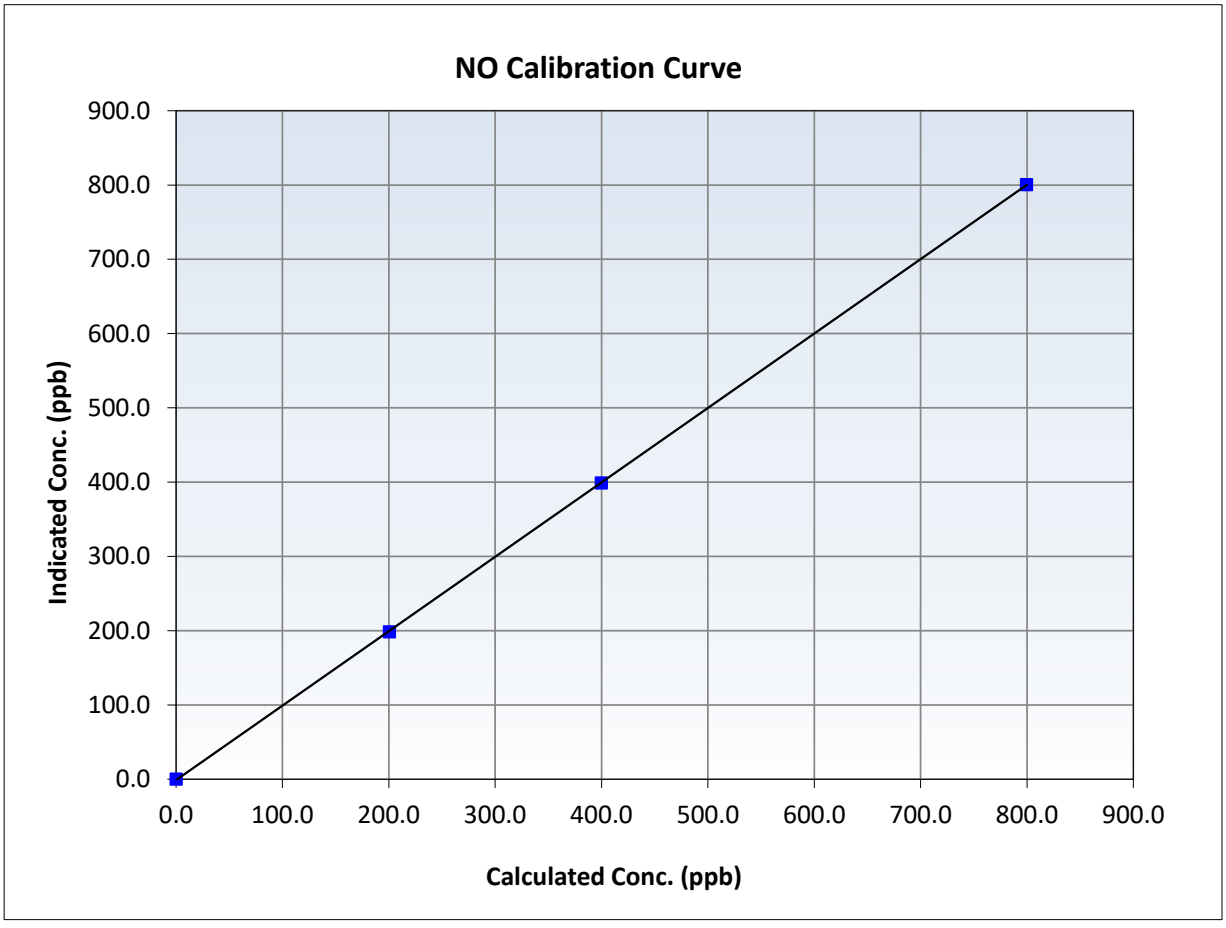
Station Information

Calibration Date:	March 23, 2026	Previous Calibration:	February 3, 2026
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	7:11	End Time (MST):	11:37
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430008

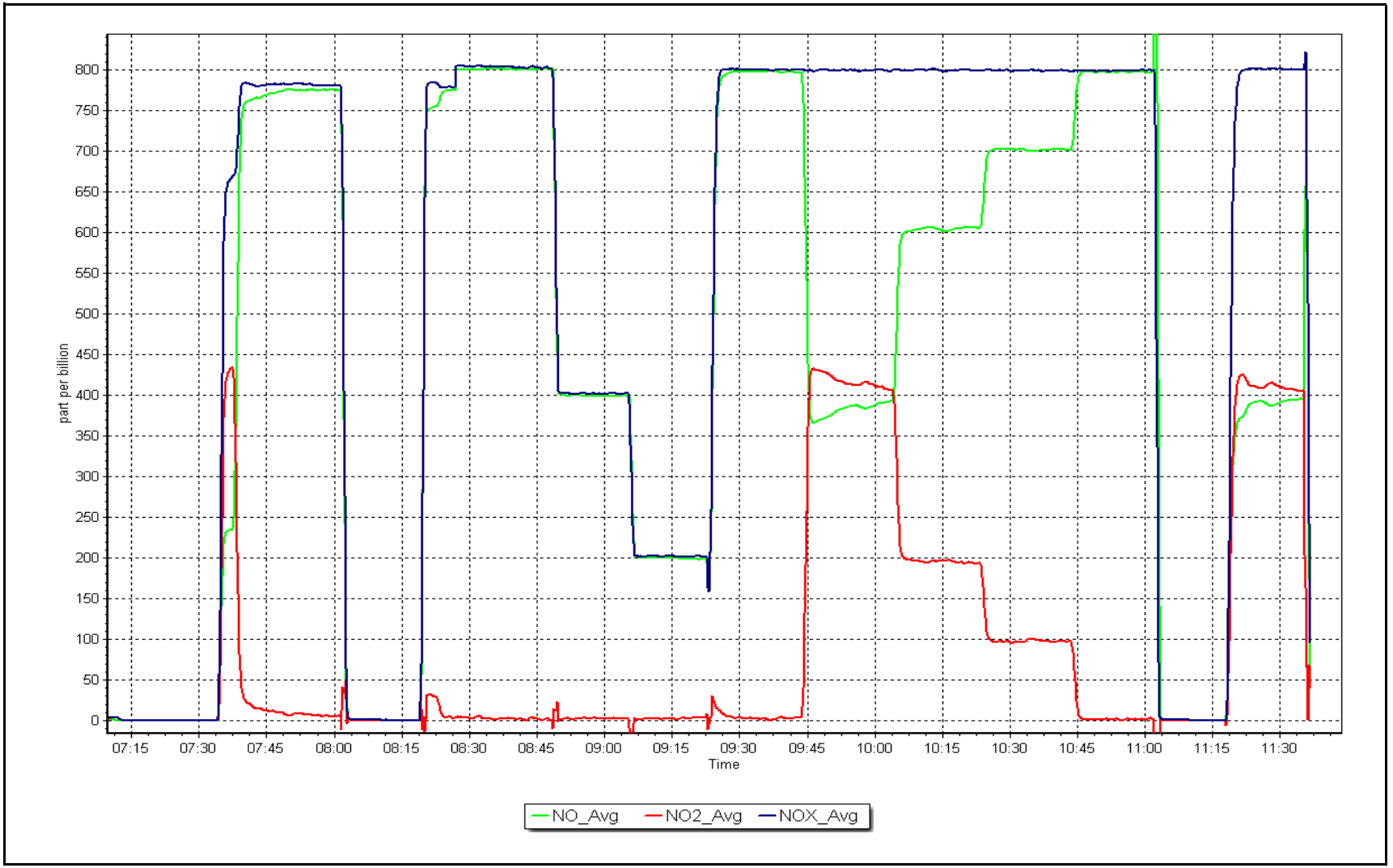
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
799.7	800.6	0.9988
399.8	399.0	1.0021
200.5	198.5	1.0103

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999989	*≥0.995*
Slope	1.001858	*0.90 - 1.10*
Intercept	-1.112462	*+/-20*



NO_X Calibration Plot Date: March 23, 2026 Location: Anzac



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	March 6, 2026	Last Cal Date:	February 6, 2026
Start time (MST):	7:28	End time (MST):	8:42
Reason:	Removal		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	API T750	Serial Number:	281
ZAG Make/Model:	API 751H	Serial Number:	321

Analyzer Information

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

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.993343		Backgd or Offset:	1.1	1.1
Calibration intercept:	0.640000		Coeff or Slope:	1.670	1.670

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	1059.8	400.0	406.6	0.984
As found Mid point	5000	823.5	200.0	203.5	0.983
As found Low point	5000	692.5	100.0	101.6	0.984
Baseline Corr As found:	406.6	Previous response	398.0	*% change	2.1%
Baseline Corr 2nd AF pt:	203.5	AF Slope:	1.016600	AF Intercept:	0.020000
Baseline Corr 3rd AF pt:	101.6	AF Correlation:	1.000000	* = > +/-5% change initiates investigation	

O_3 Calibration Data

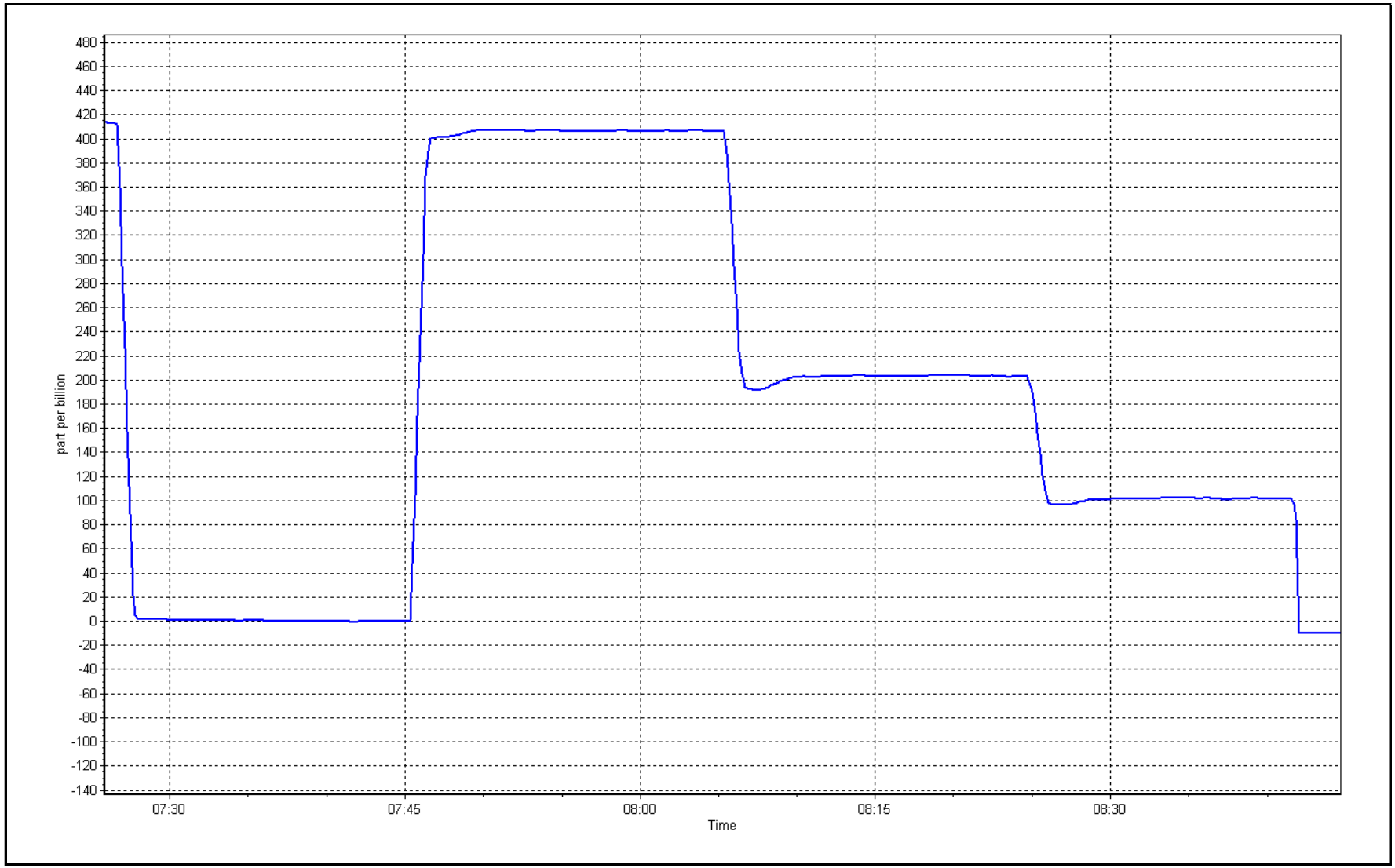
Set Point	Total air flow rate (sccm)	Calibrator Lamp Voltage Drive (mV)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor

Notes: Removal due to unstable nightly zeroes

Calibration Performed By: Melissa Lemay

O_3 Calibration Plot Date: March 6, 2026 Location: Anzac



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Anzac	Station number:	AMS 14
Calibration Date:	March 6, 2026	Last Cal Date:	
Start time (MST):	9:20	End time (MST):	10:54
Reason:	Install		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	API T750	Serial Number:	281
ZAG Make/Model:	API 751H	Serial Number:	321

Analyzer Information

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

	Start	***Finish***		***Start***	***Finish***
Calibration slope:		0.996914	Backgd or Offset:		-1.7
Calibration intercept:		1.640000	Coeff or Slope:		1.523

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

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	0.9	----
High point	5000	1089.5	400.0	400.0	1.000
Mid point	5000	825.1	200.0	201.5	0.993
Low point	5000	692.3	100.0	102.0	0.980
As left zero					
As left span					

Average Correction Factor: 0.991

Notes: Install due to old O3 analyzer not working properly. Calibration done with Portable Calibrator. No as lefts as station calibrator not working properly. Span adjusted

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

O_3 Calibration Summary

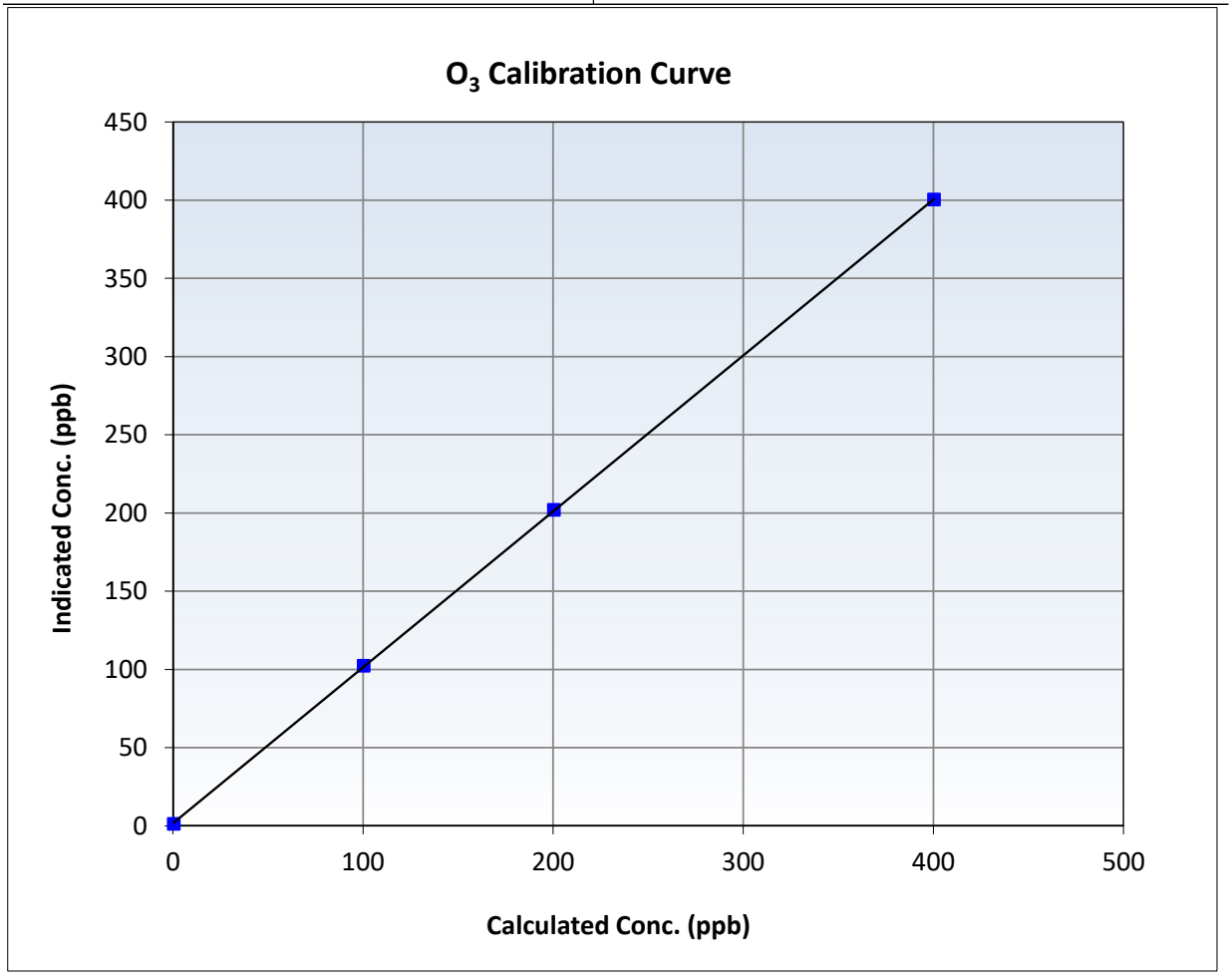
Station Information

Calibration Date:	March 6, 2026	Previous Calibration:	
Station Name:	Anzac	Station Number:	AMS 14
Start Time (MST):	9:20	End Time (MST):	10:54
Analyzer make:	Thermo 49i	Analyzer serial #:	1152220023

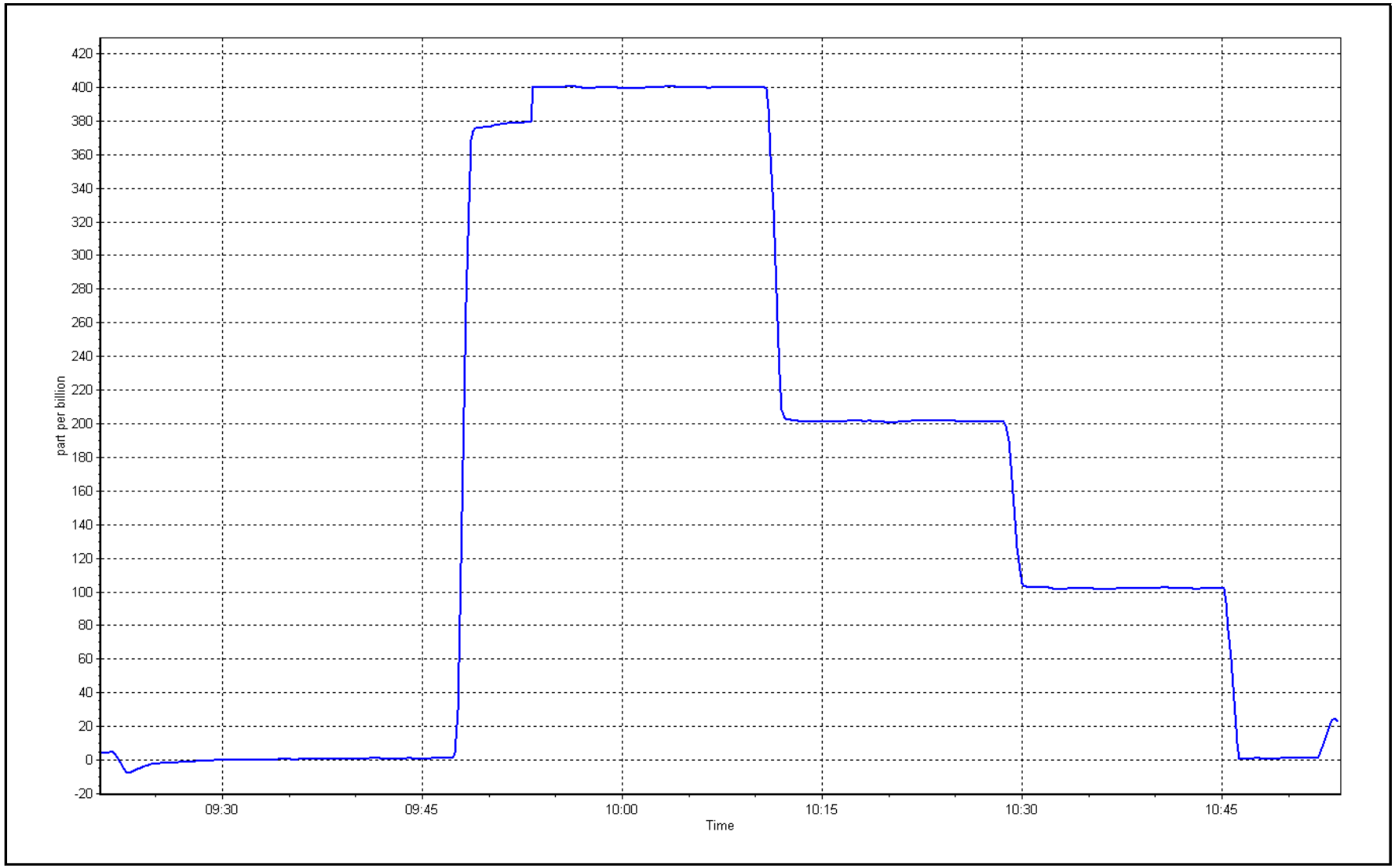
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.9	----
400.0	400.0	1.0000
200.0	201.5	0.9926
100.0	102.0	0.9804

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999984	*≥0.995*
Slope	0.996914	*0.90 - 1.10*
Intercept	1.640000	*+/- 5*



O_3 Calibration Plot Date: March 6, 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:	March 26, 2026	Last Cal Date:	February 2, 2026
Start time (MST):	8:56	End time (MST):	9:49
Analyzer Make:	AP T640	S/N:	825
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388744
Temp/RH standard:	Alicat FP-25BT	S/N:	388744

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (^{o}C)	-17.60	-19.1	-17.60	☐	+/- 2 ^{o}C
P (mmHg)	727.80	729.5	727.80	☐	+/- 10 mmHg
Flow (LPM)	5.06	4.90	5.06	☐	+/- 0.25 LPM
PW% (pump)	35	-----	35	☐	>80%
Zero Verification	PM w/o HEPA:	5.40	PM w/ HEPA:	0.00	<0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

SPAN DUST — Refractive Index: 10.9 — Expiry Date: July 16, 2026 — 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: March 26, 2026

Date Disposable Filter Changed: March 26, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: March 26, 2026

Date RH/T Sensor Cleaned: March 26, 2026

Notes: Flow, PMT and Leak checked before and after optical chamber cleaning. Filter replaced. No adjustments done.

Calibration by: Melissa Lemay

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS17
WAPASU
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	March 9, 2026	Last Cal Date:	February 23, 2026
Start time (MST):	10:30	End time (MST):	13:41
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.12	ppm	Cal Gas Exp Date:	April 9, 2033
Cal Gas Cylinder #:	CC422255			
Removed Cal Gas Conc:	50.12	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:	N/A		Diff between cyl:	
Calibrator Model:	Teledyne API T700		Serial Number:	2449
Zero Air Gen Model:	Teledyne API 701H		Serial Number:	1238

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1218153459	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001405	1.002819	Backgd or Offset:	15.4	15.4
Calibration intercept:	-3.114919	-2.635156	Coeff or Slope:	1.113	1.113

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	799.9	792.7	1.009
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	793.0	Previous response	798.0	*% 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	-0.1	----
High point	4920	79.8	799.9	801.0	0.999
Mid point	4960	39.9	400.0	396.7	1.008
Low point	4980	20.0	200.5	196.2	1.022
As left zero	5000	0.0	0.0	0.0	----
As left span	4920	79.8	799.9	802.4	0.997
				Average Correction Factor:	1.010

Notes: Inlet filter changed after as founds. No adjustments made.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

SO_2 Calibration Summary

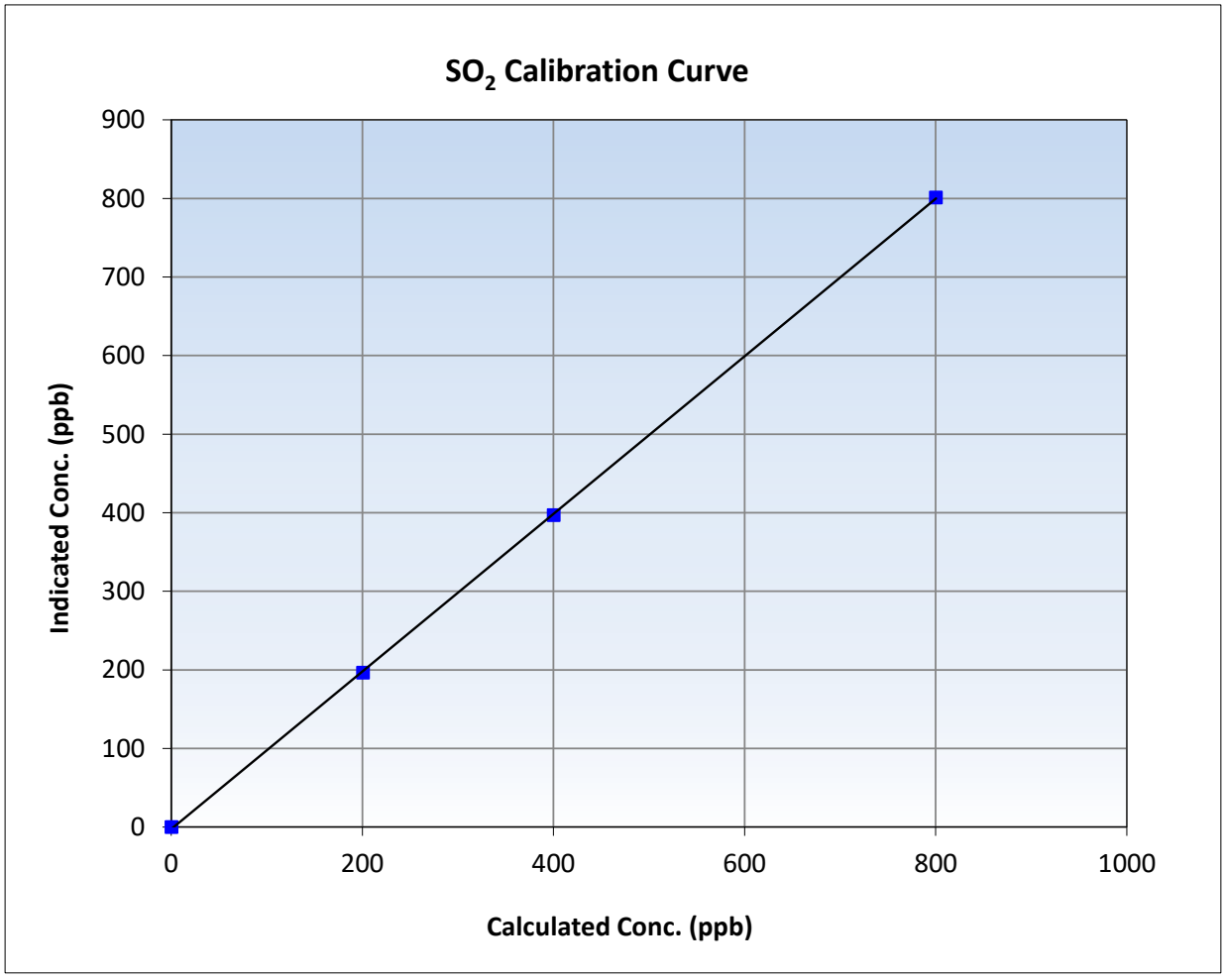
Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 23, 2026
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	10:30	End Time (MST):	13:41
Analyzer make:	Thermo 43i	Analyzer serial #:	1218153459

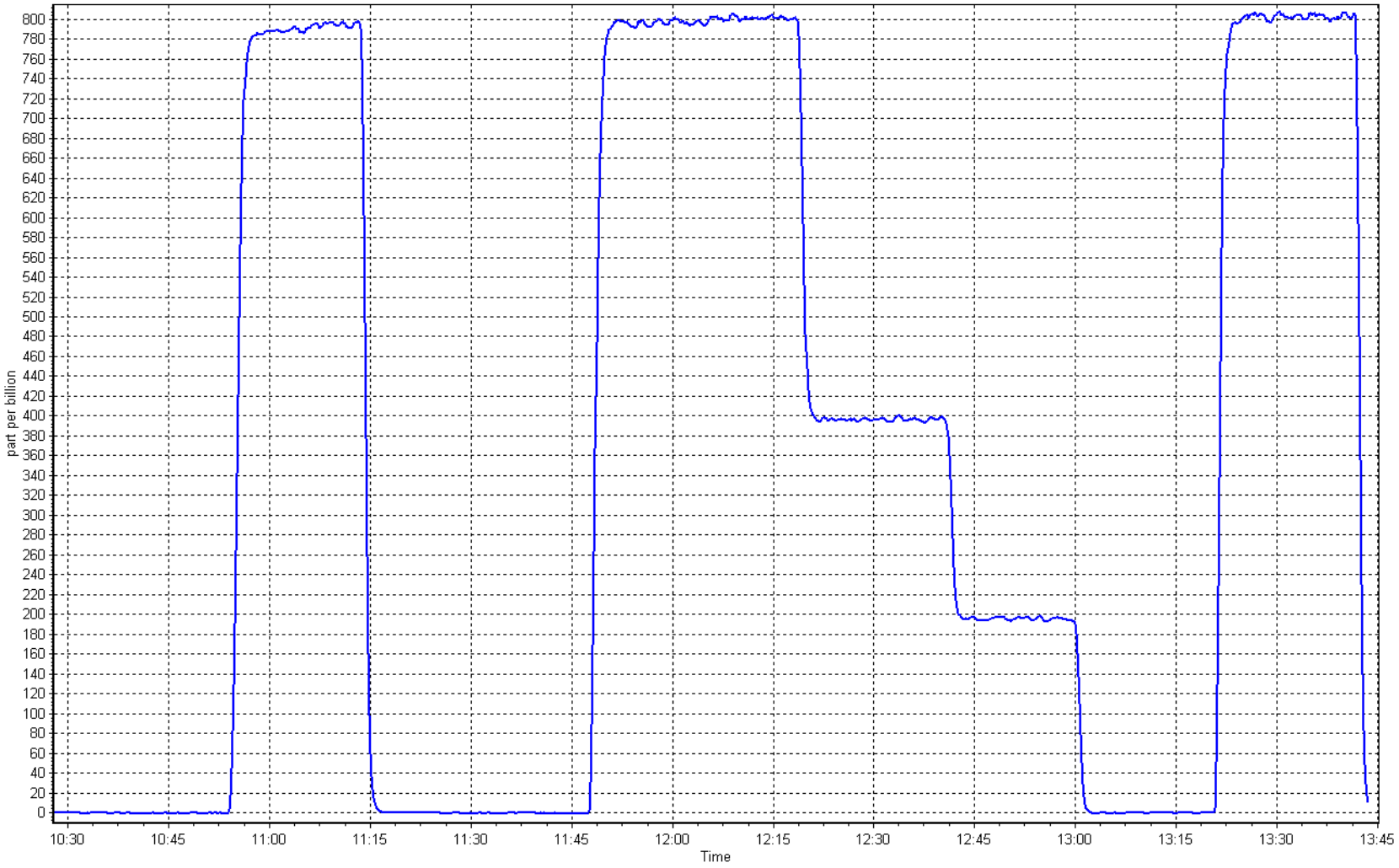
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
799.9	801.0	0.9987
400.0	396.7	1.0082
200.5	196.2	1.0218

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999953	*≥0.995*
Slope	1.002819	*0.90 - 1.10*
Intercept	-2.635156	*+/-30*



SO2 Calibration Plot Date: March 9, 2026 Location: Wapasu



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS 17
Calibration Date:	March 25, 2026	Last Cal Date:	February 9, 2026
Start time (MST):	9:32	End time (MST):	14:03
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:	2449
ZAG Make/Model:	API T701H		Serial Number:	359

Analyzer Information

Analyzer make:	Thermo 43iQ-TL		Analyzer serial #:	12228021057	
Converter make:	Global G150		Converter serial #:	2022-219	
Analyzer Range	0 - 100 ppb		Converter Temp:	325	degC

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.005211	0.998641	Backgd or Offset:	2.9	3.12
Calibration intercept:	-0.119841	0.060186	Coeff or Slope:	1.091	1.037

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	4916	83.9	80.0	83.7	0.960
As found Mid point	4958	41.9	40.0	42.2	0.954
As found Low point	4979	21.0	20.0	21.2	0.959
New cylinder response					

Baseline Corr As found:	83.4	Prev response:	80.34	*% change:	3.7%
Baseline Corr 2nd AF pt:	41.9	AF Slope:	1.042195	AF Intercept:	0.360262
Baseline Corr 3rd AF pt:	20.9	AF Correlation:	0.999988	* = > +/-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	20.0	1.002
As left zero	5000	0.0	0.0	0.1	----
As left span	4916	83.9	80.0	80.1	0.999
SO2 Scrubber Check	4920	79.8	798.0	0.0	----

Date of last scrubber change:	N/A	Ave Corr Factor	1.001
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 zero and span.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

H_2S Calibration Summary

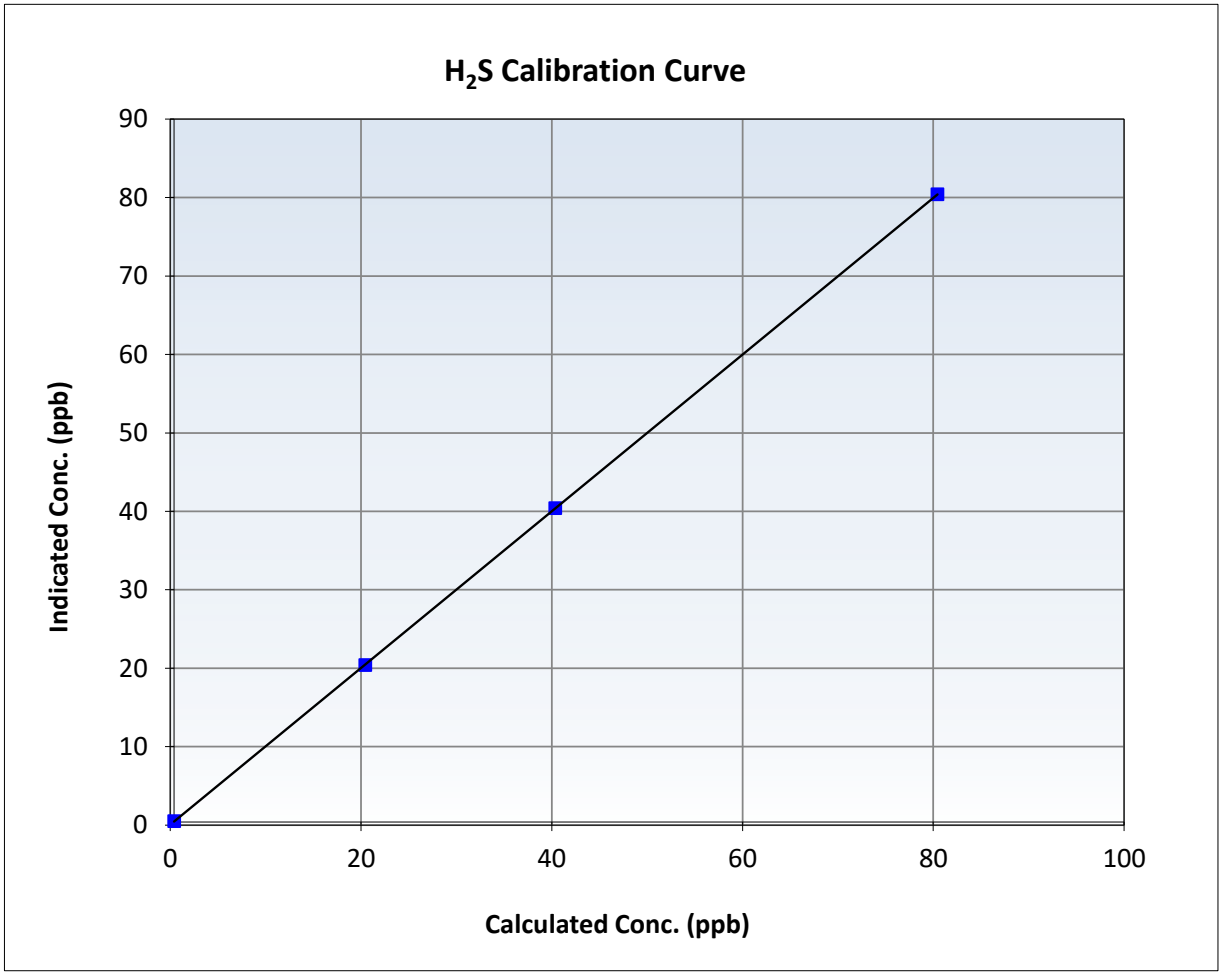
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	9:32	End Time (MST):	14:03
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	12228021057

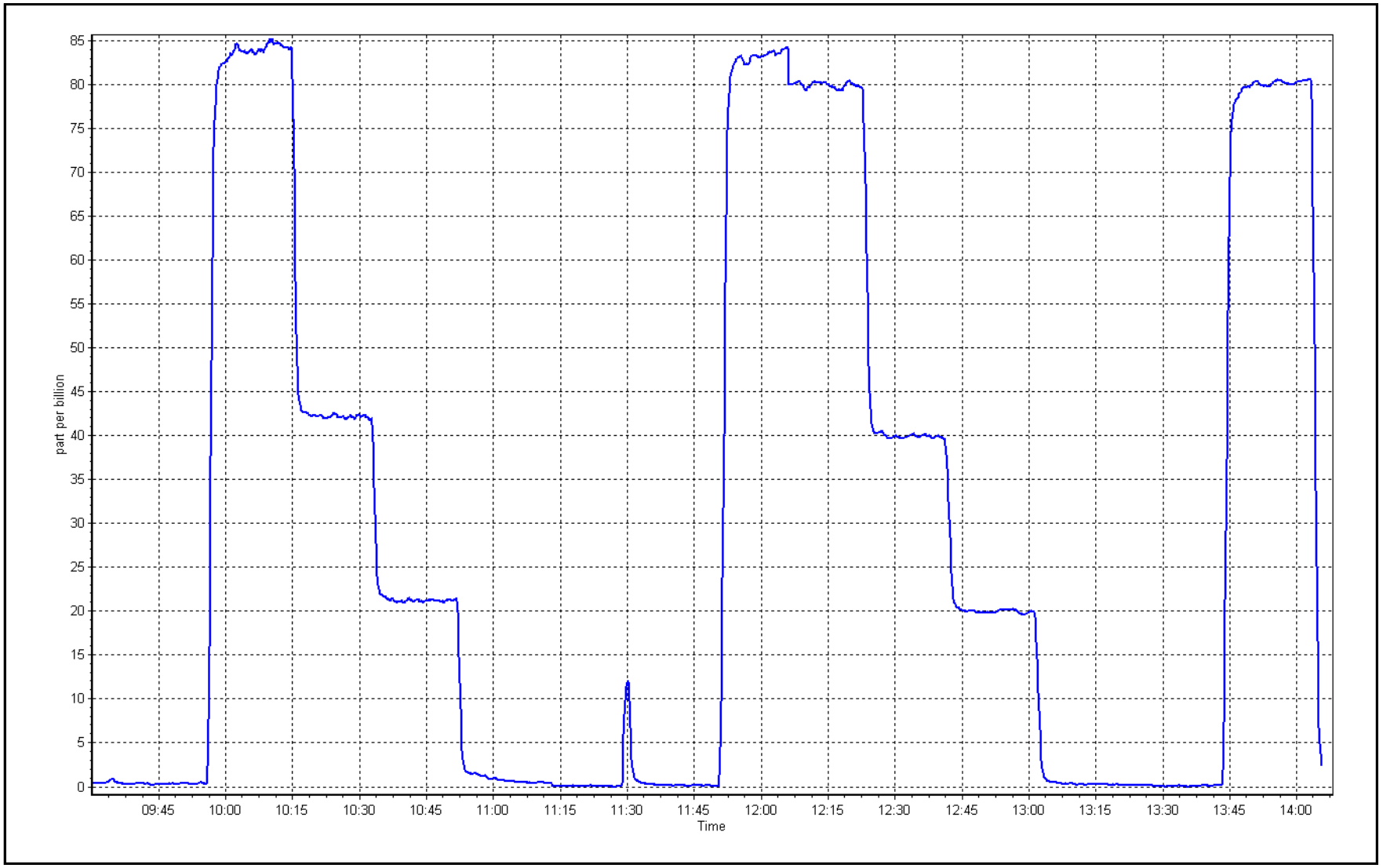
Calibration Data

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	20.0	1.0017

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	0.998641	*0.90 - 1.10*
Intercept	0.060186	*+/-3*



H_2S Calibration Plot Date: March 25, 2026 Location: Wapasu



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	March 9, 2026	Last Cal Date:	February 23, 2026
Start time (MST):	10:30	End time (MST):	13:41
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:	2449	
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:	1.003430	0.999911	Background:	3.530	3.100
Calibration intercept:	-0.009349	-0.071318	Coefficient:	4.434	4.402

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	-0.44	----
As found High point	4920	79.8	16.90	16.67	0.988
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	17.11	Previous response	16.95	*% 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	

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	-0.02	----
High point	4920	79.8	16.90	16.87	1.002
Mid point	4960	39.9	8.45	8.32	1.015
Low point	4980	20.0	4.24	4.13	1.026
As left zero	5000	0.0	0.00	-0.02	----
As left span	4920	79.8	16.90	16.91	0.999
				Average Correction Factor	1.014

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

THC Calibration Summary

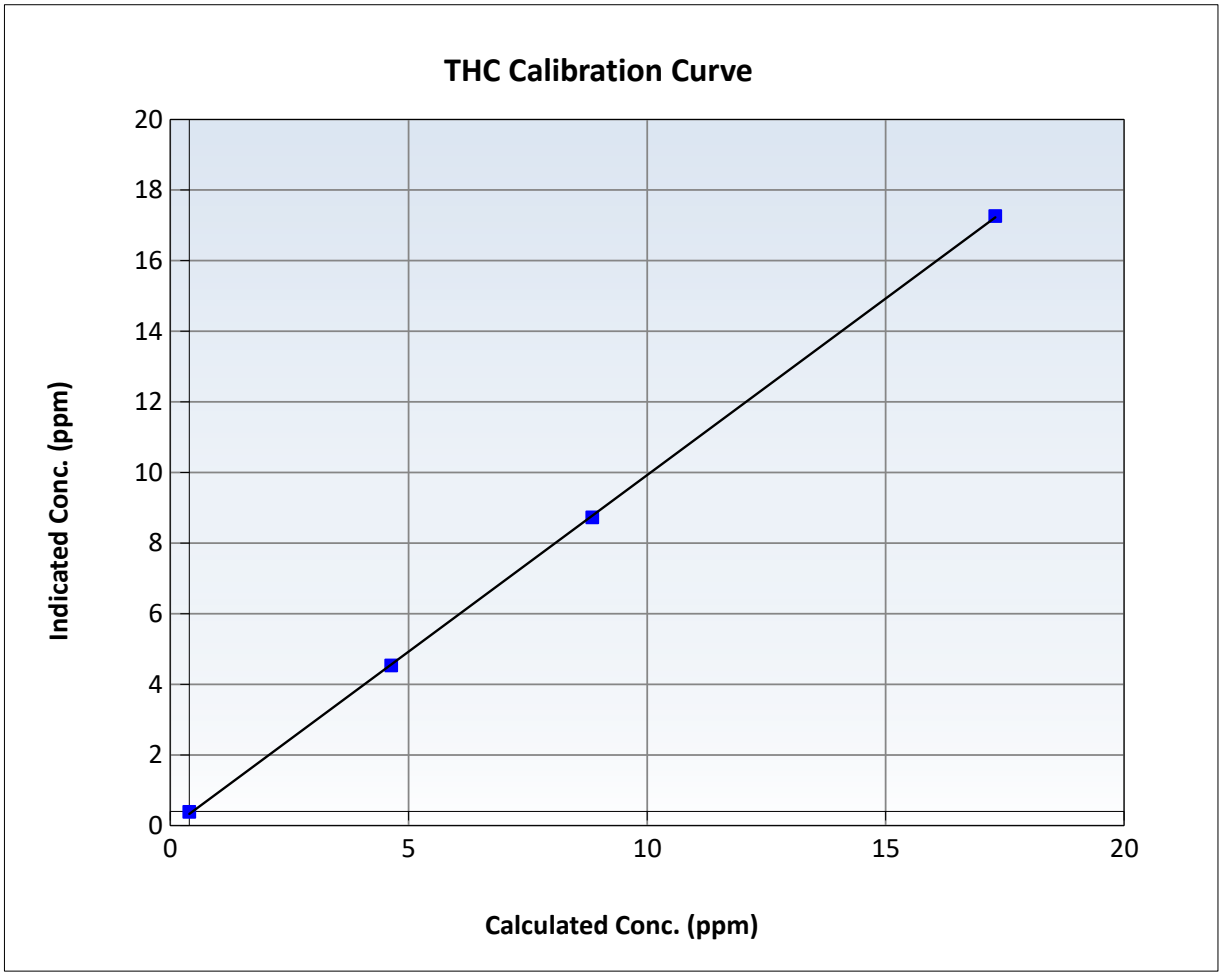
Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 23, 2026
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	10:30	End Time (MST):	13:41
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1218153352

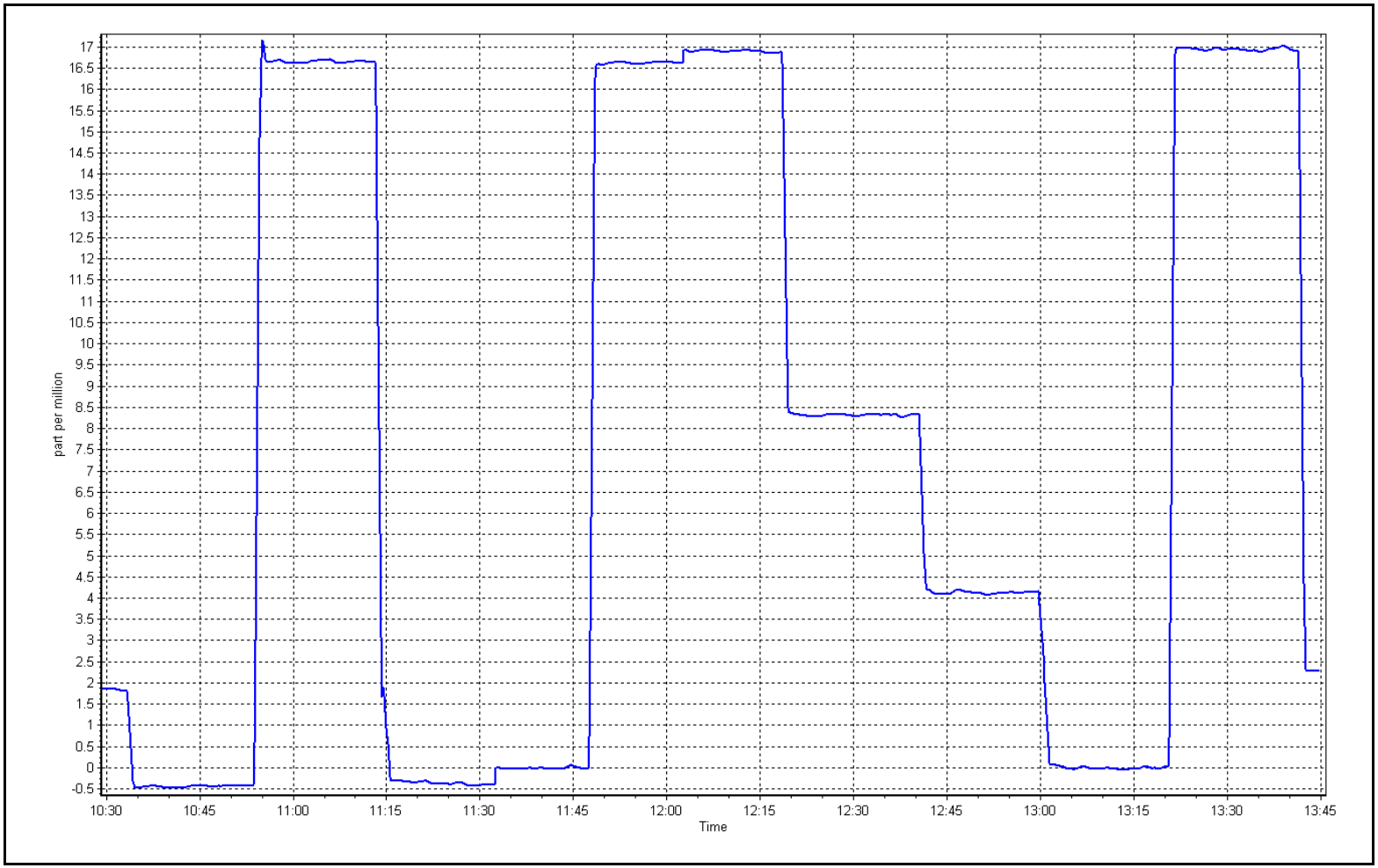
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	-0.02	----
16.90	16.87	1.0022
8.45	8.32	1.0153
4.24	4.13	1.0256

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999946	*≥0.995*
Slope	0.999911	*0.90 - 1.10*
Intercept	-0.071318	*+/-1.5*



THC Calibration Plot Date: March 9, 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:	March 26, 2026
Last Cal Date:	February 20, 2026
Start time (MST):	9:58
End time (MST):	14:09
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:	2449
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	-0.3	0.1	-0.4	----	----
AF High point	4934	65.6	804.3	800.4	3.9	810.9	805.0	6.1	0.9915	0.9944
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.0 ppb	NO = 798.8 ppb
Baseline Corr 1st pt	NO_X = 811.2 ppb	NO = 804.9 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 = 1.0%

*Percent Change NO = 0.8%

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: 1218153460
NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.018	1.018	NO bkgnd or offset:	3.5	3.5
NOX coeff or slope:	0.997	0.997	NOX bkgnd or offset:	3.9	3.9
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	224.1	226.4

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999590	1.008201
NO_X Cal Offset:	-0.983949	-1.263826
NO Cal Slope:	1.000937	1.008262
NO Cal Offset:	-2.284071	-2.323961
NO_2 Cal Slope:	0.998443	1.001055
NO_2 Cal Offset:	-0.074649	-0.294148

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	-0.4	----	----
High point	4934	65.6	804.3	800.4	3.9	810.4	806.0	4.4	0.9925	0.9930
Mid point	4967	32.8	402.1	400.2	2.0	403.1	399.7	3.4	0.9976	1.0012
Low point	4984	16.4	201.0	200.1	1.0	200.6	197.0	3.6	1.0022	1.0156
As left zero	5000	0.0	0.0	0.0	0.0	-0.1	0.2	-0.3	----	----
As left span	4934	65.6	804.3	395.5	408.8	808.9	395.5	413.5	0.9943	1.0000
								Average Correction Factor	0.9975	1.0033

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	-0.4	----	----
High GPT point	804.5	393.3	415.1	415.1	1.0001	100.0%
Mid GPT point	804.5	601.4	207.0	207.4	0.9982	100.2%
Low GPT point	804.5	703.2	105.2	104.9	1.0032	99.7%
				Average Correction Factor	1.0005	99.9%

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

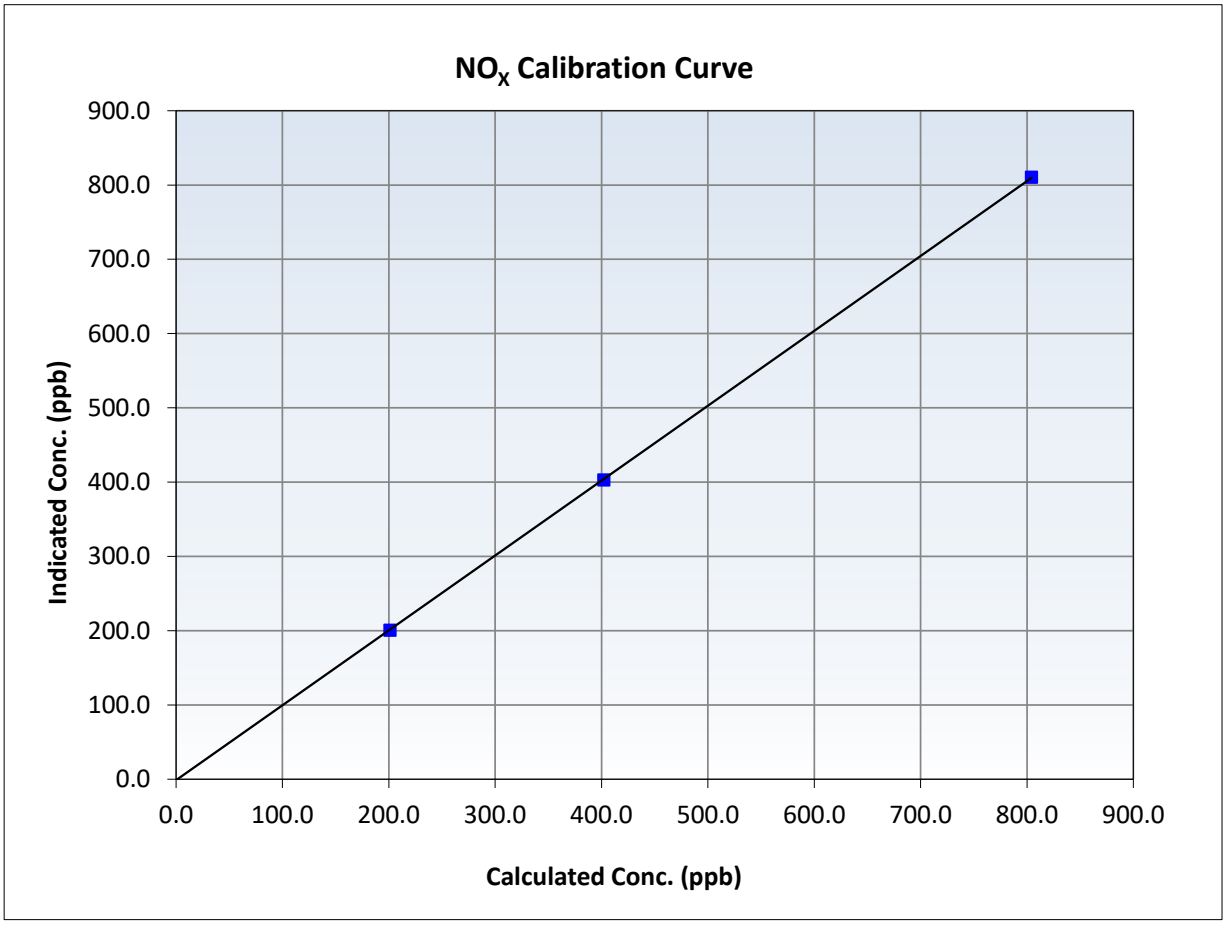
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 20, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	9:58	End Time (MST):	14:09
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	----
804.3	810.4	0.9925
402.1	403.1	0.9976
201.0	200.6	1.0022

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999990	*≥0.995*
Slope	1.008201	*0.90 - 1.10*
Intercept	-1.263826	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

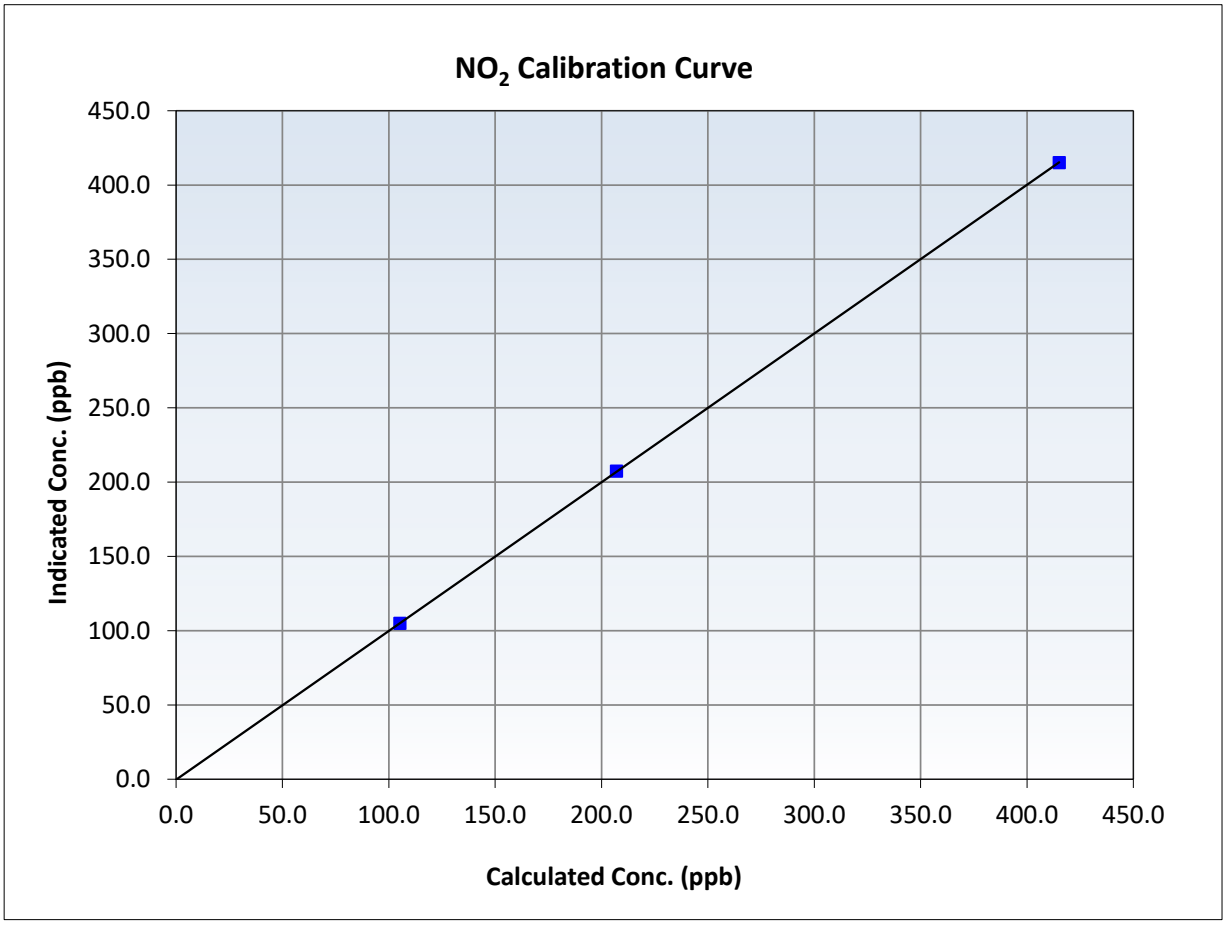
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 20, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	9:58	End Time (MST):	14:09
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.4	----
415.1	415.1	1.0001
207.0	207.4	0.9982
105.2	104.9	1.0032

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	1.001055	*0.90 - 1.10*
Intercept	-0.294148	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

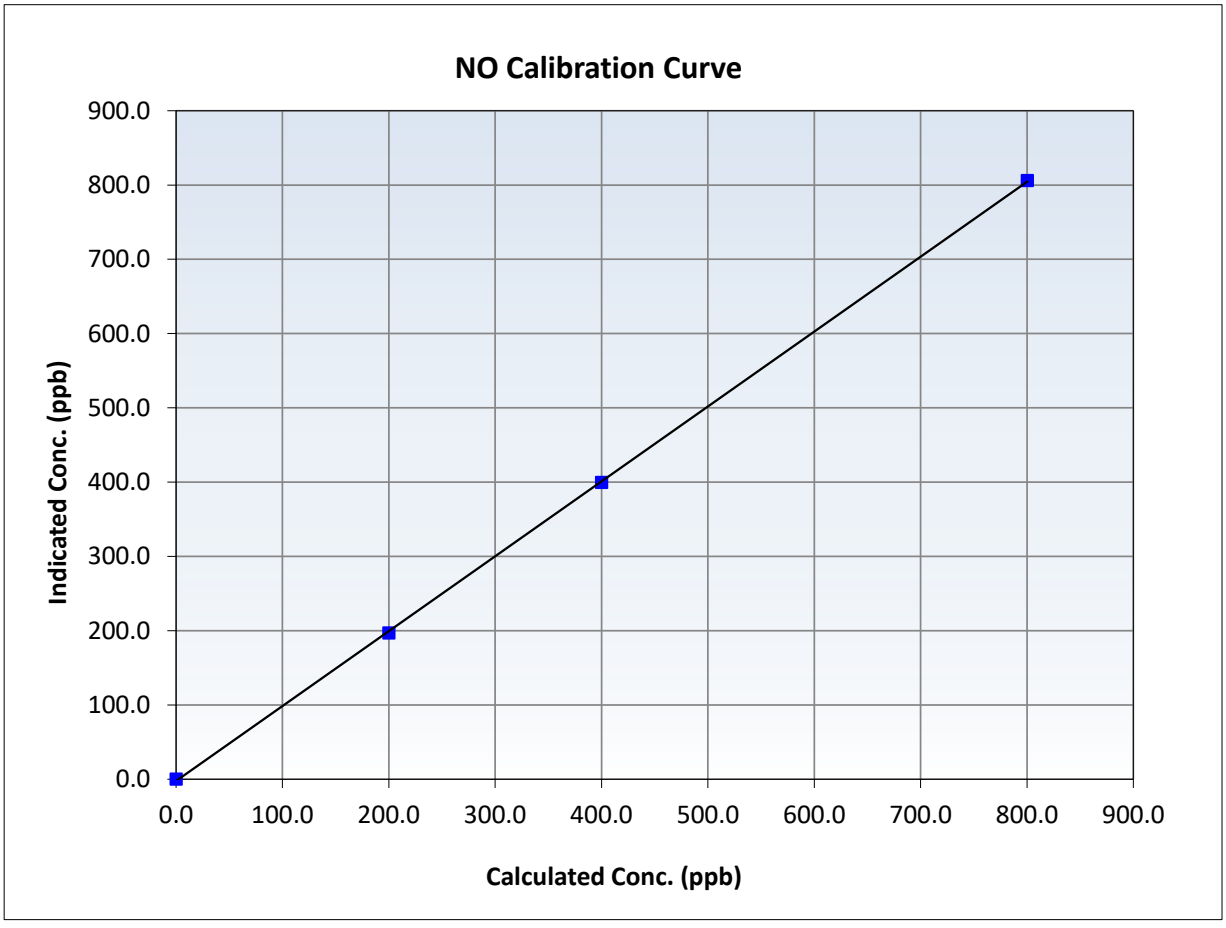
Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	February 20, 2026
Station Name:	Wapasu	Station Number:	AMS 17
Start Time (MST):	9:58	End Time (MST):	14:09
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1218153460

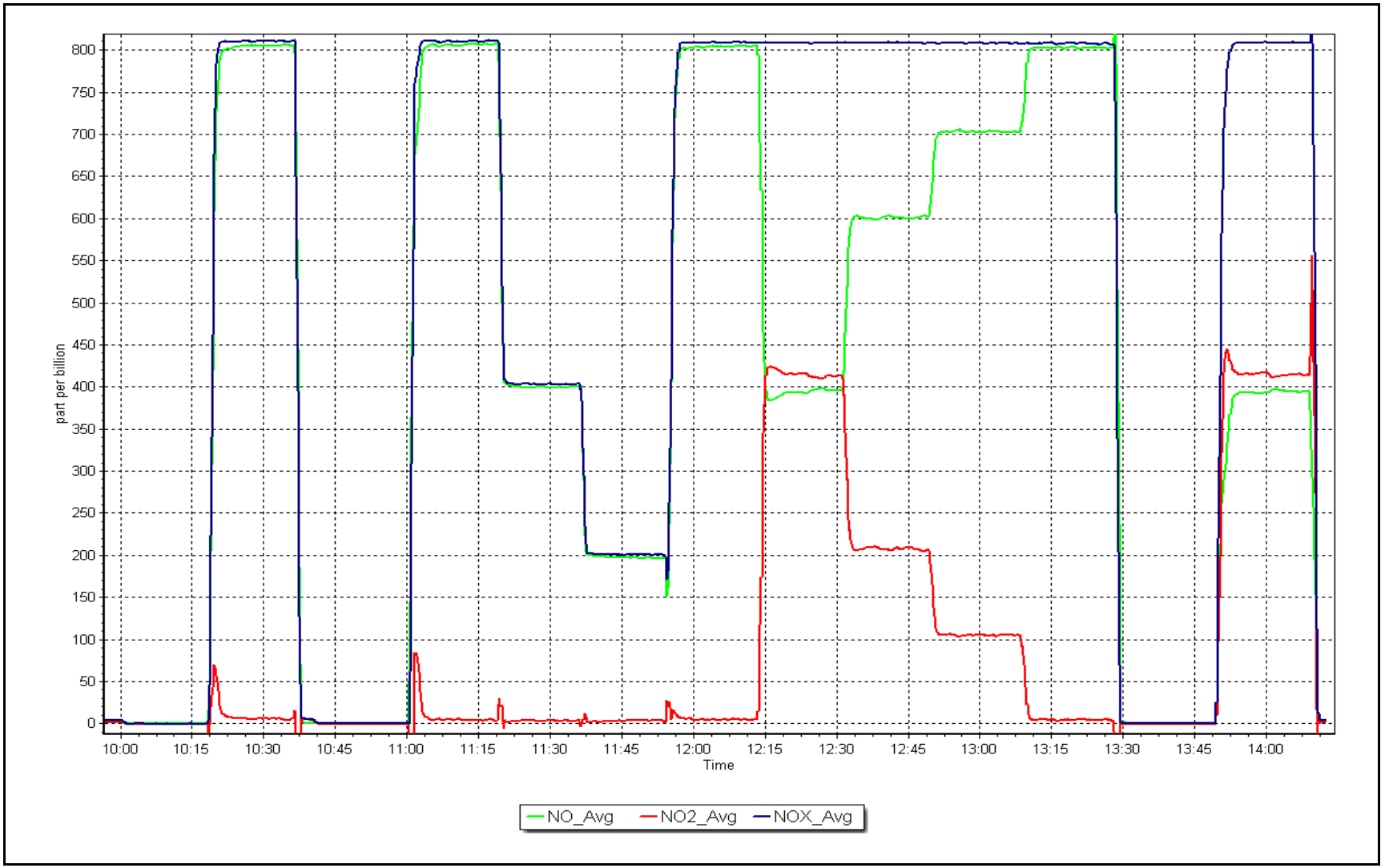
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.4	806.0	0.9930
400.2	399.7	1.0012
200.1	197.0	1.0156

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999955	*≥0.995*
Slope	1.008262	*0.90 - 1.10*
Intercept	-2.323961	*+/-20*



NO_X Calibration Plot Date: March 26, 2026 Location: Wapasu



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Wapasu	Station number:	AMS17
Calibration Date:	March 23, 2026	Last Cal Date:	February 2, 2026
Start time (MST):	10:19	End time (MST):	13:15
Reason:	Routine		

Calibration Standards

O3 generation mode:	Photometer		
Calibrator Make/Model:	API T700	Serial Number:	2449
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:	1.001000	1.005143	Backgd or Offset:	-0.4	-0.4
Calibration intercept:	-0.800000	-0.800000	Coeff or Slope:	1.033	1.033

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	-0.2	----
As found High point	5000	1123.9	400.0	401.2	0.997
As found Mid point					
As found Low point					
Baseline Corr As found:	401.4	Previous response	399.6	*% change	0.4%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	-0.1	----
High point	5000	1123.9	400.0	401.6	0.996
Mid point	5000	924.4	200.0	199.9	1.001
Low point	5000	804.2	100.0	99.0	1.010
As left zero	5000	0.0	0.0	0.1	----
As left span	5000	1123.9	400.0	404.7	0.988
				Average Correction Factor	1.002

Notes: No adjustments made.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

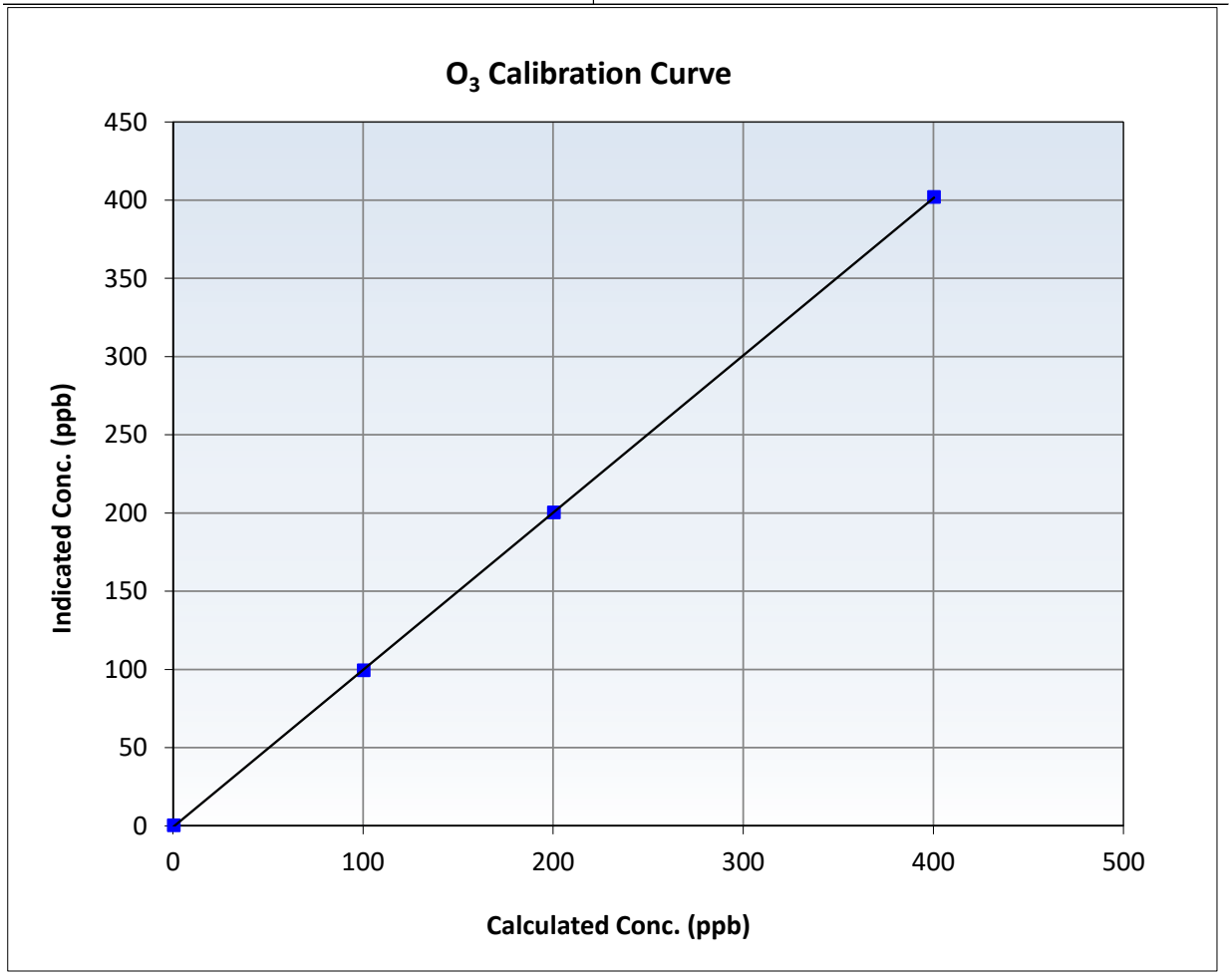
O_3 Calibration Summary

Station Information

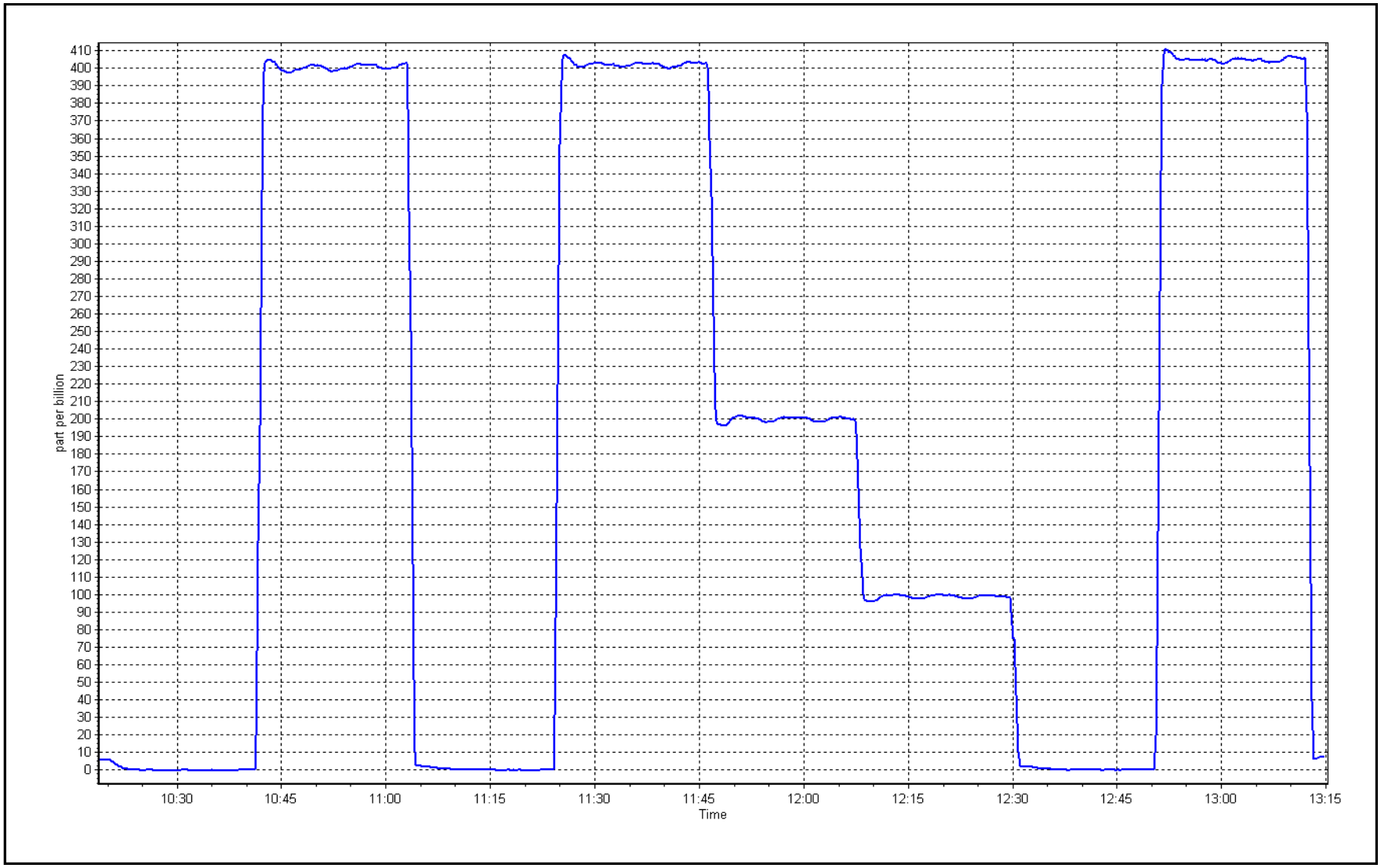
Calibration Date:	March 23, 2026	Previous Calibration:	February 2, 2026
Station Name:	Wapasu	Station Number:	AMS17
Start Time (MST):	10:19	End Time (MST):	13:15
Analyzer make:	Thermo Scientific 49i	Analyzer serial #:	1501663734

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	-0.1	----	Correlation Coefficient	0.999986	≥0.995
400.0	401.6	0.9960	Slope	1.005143	0.90 - 1.10
200.0	199.9	1.0005			
100.0	99.0	1.0101	Intercept	-0.800000	+/- 5



O_3 Calibration Plot Date: March 23, 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:	March 26, 2026	Last Cal Date:	February 23, 2026
Start time (MST):	12:03	End time (MST):	13:27
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)	-14.00	-13.71	-14.00	☐	+/- 2 °C
P (mmHg)	725.50	727.88	725.50	☐	+/- 10 mmHg
Flow (LPM)	5.10	4.97	5.10	☐	+/- 0.25 LPM
PW% (pump)	62	-----	42	☑	>80%
Zero Verification	PM w/o HEPA:	5.00	PM w/ HEPA:	0.00	<0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

SPAN DUST — Refractive Index: 10.9 — Expiry Date: October 6, 2024 — Lot No.: 100128-050-042

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test	10.10	10.90	10.90	☐	+/- 0.5

Date Optical Chamber Cleaned: March 26, 2026

Date Disposable Filter Changed: March 26, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: July 21, 2025

Date RH/T Sensor Cleaned: July 21, 2025

Notes: Verified flow, pressure, temperature and pump power. Pump replaced. No adjustment on PMT. Leak check passed.

Calibration by: Jan Castro

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS18
STONY MOUNTAIN
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	March 9, 2026	Last Cal Date:	February 17, 2026
Start time (MST):	11:50	End time (MST):	16:26
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:	1.000443	1.009410	Backgd or Offset:	26.2	26.7
Calibration intercept:	-0.918009	-1.757555	Coeff or Slope:	0.824	0.824

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	78.1	800.2	806.5	0.993
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	806.1	Previous response	799.6	*% change	0.8%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	4921	78.1	800.2	807.2	0.991
Mid point	4960	39.1	400.6	401.4	0.998
Low point	4981	19.5	199.7	197.4	1.012
As left zero	5000	0.0	0.0	0.5	----
As left span	4921	78.1	800.2	805.4	0.994
				Average Correction Factor:	1.000

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

SO_2 Calibration Summary

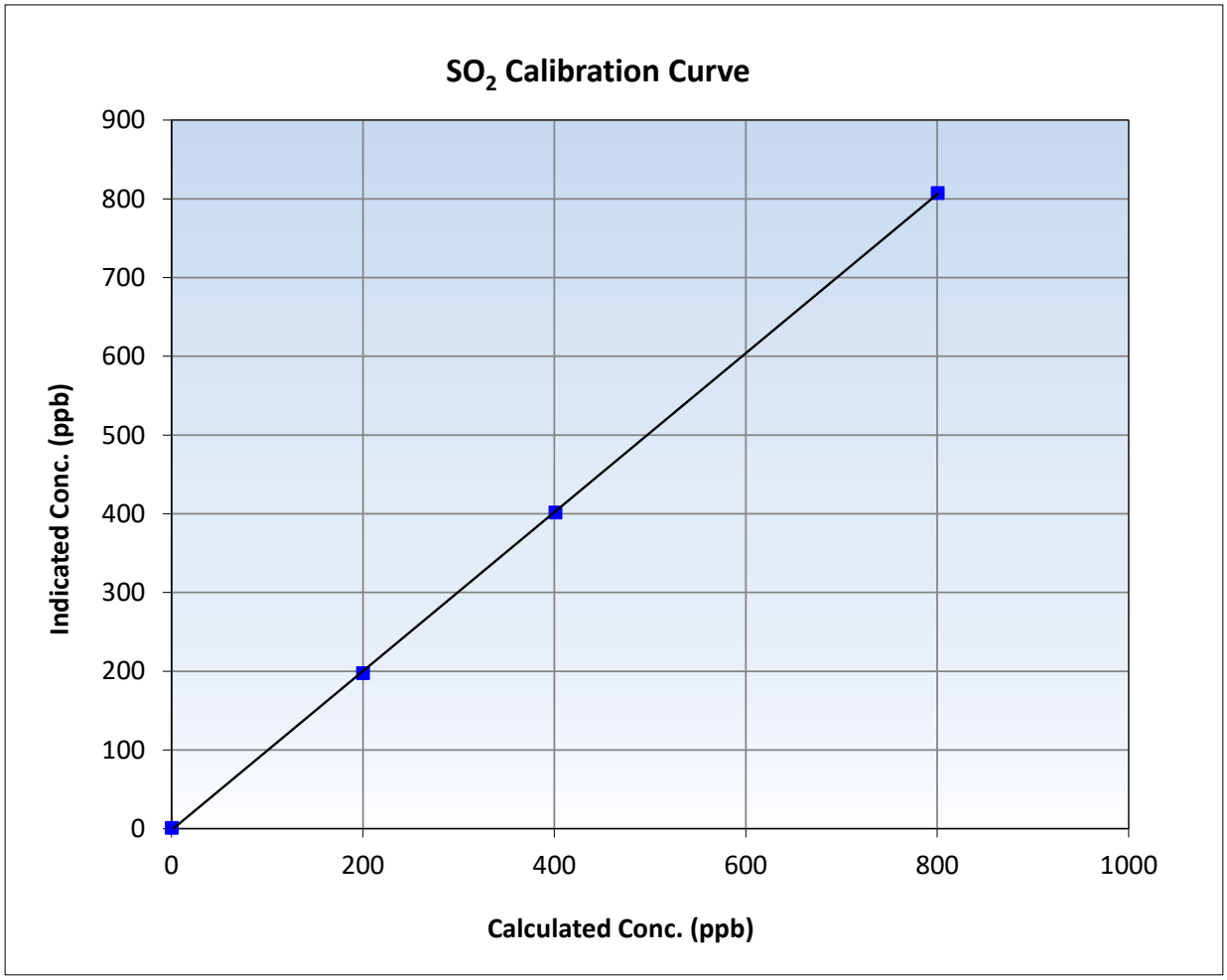
Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 17, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:50	End Time (MST):	16:26
Analyzer make:	Thermo 43i	Analyzer serial #:	JC1501301453

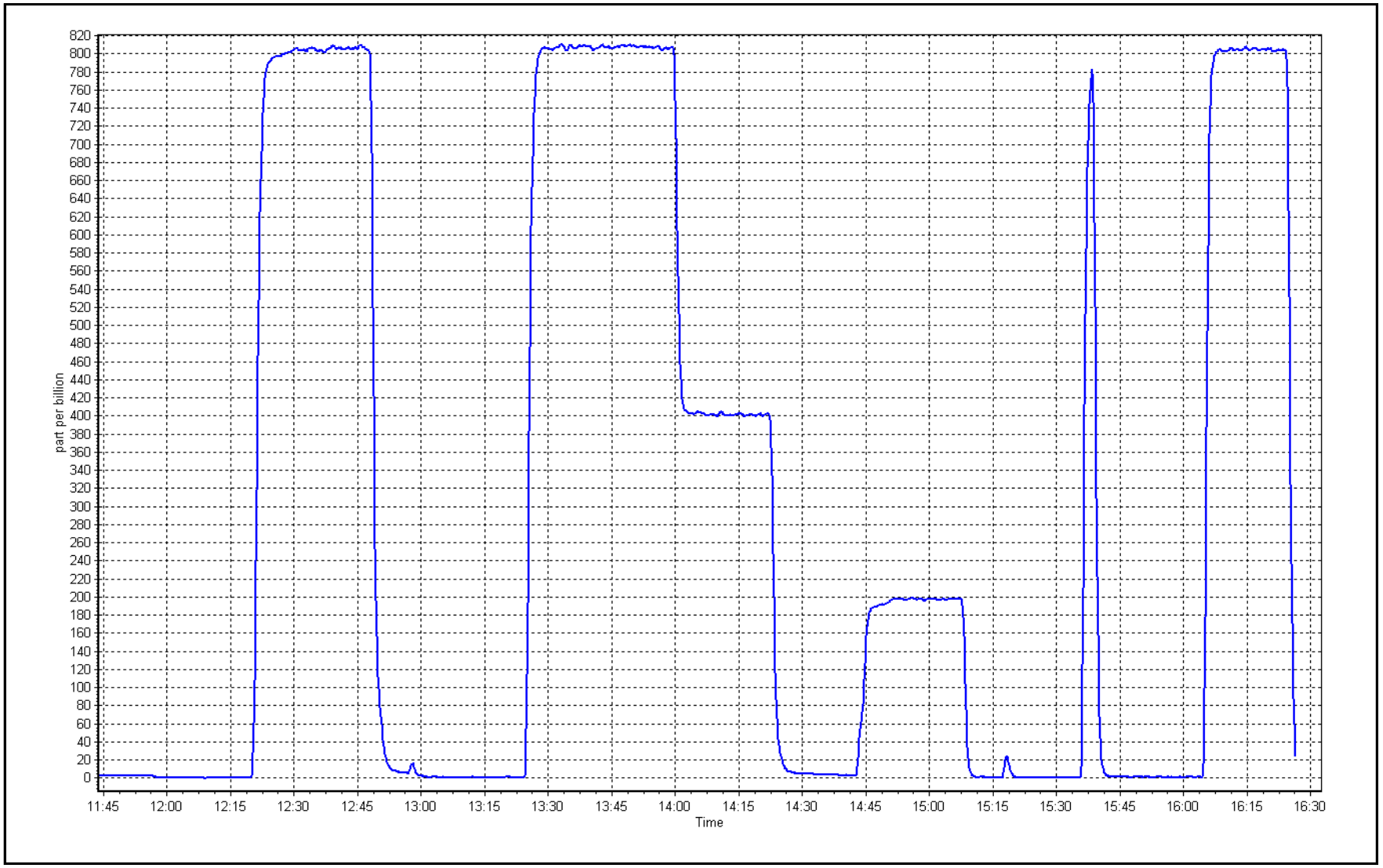
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.7	----
800.2	807.2	0.9913
400.6	401.4	0.9980
199.7	197.4	1.0118

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999958	*≥0.995*
Slope	1.009410	*0.90 - 1.10*
Intercept	-1.757555	*+/-30*



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



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS18
Calibration Date:	March 19, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	11:46	End time (MST):	16:00
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.86	ppm	Cal Gas Exp Date:	May 9, 2027
Cal Gas Cylinder #:	CC523103			
Removed Cal Gas Conc:	4.86	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	2658
ZAG Make/Model:	Teledyne API T701		Serial Number:	4890

Analyzer Information

Analyzer make:	Thermo 43i-TLE		Analyzer serial #:	1218153359
Converter make:	CD Nova CDN-101		Converter serial #:	555
Analyzer Range	0 - 100 ppb		Converter Temp:	800 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.996798	1.002942	Backgd or Offset:	2.86	2.90
Calibration intercept:	0.041041	0.000873	Coeff or Slope:	1.159	1.159

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	4917	82.3	80.0	81.6	0.982
As found Mid point	4958	41.2	40.1	40.9	0.982
As found Low point	4979	20.6	20.0	20.4	0.986
New cylinder response					

Baseline Corr As found:	81.5	Prev response:	79.79	*% change:	2.1%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.019085	AF Intercept:	0.060517
Baseline Corr 3rd AF pt:	20.3	AF Correlation:	0.999998	* = > +/-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	4917	82.3	80.0	80.3	0.996
Mid point	4958	41.2	40.1	40.2	0.996
Low point	4979	20.6	20.0	19.8	1.011
As left zero	5000	0.0	0.0	0.4	----
As left span	4917	82.3	80.0	80.8	0.990
SO2 Scrubber Check	4923	77.1	771.0	0.0	----
Date of last scrubber change:		17-Dec-21		Ave Corr Factor	1.001
Date of last converter efficiency test:					

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

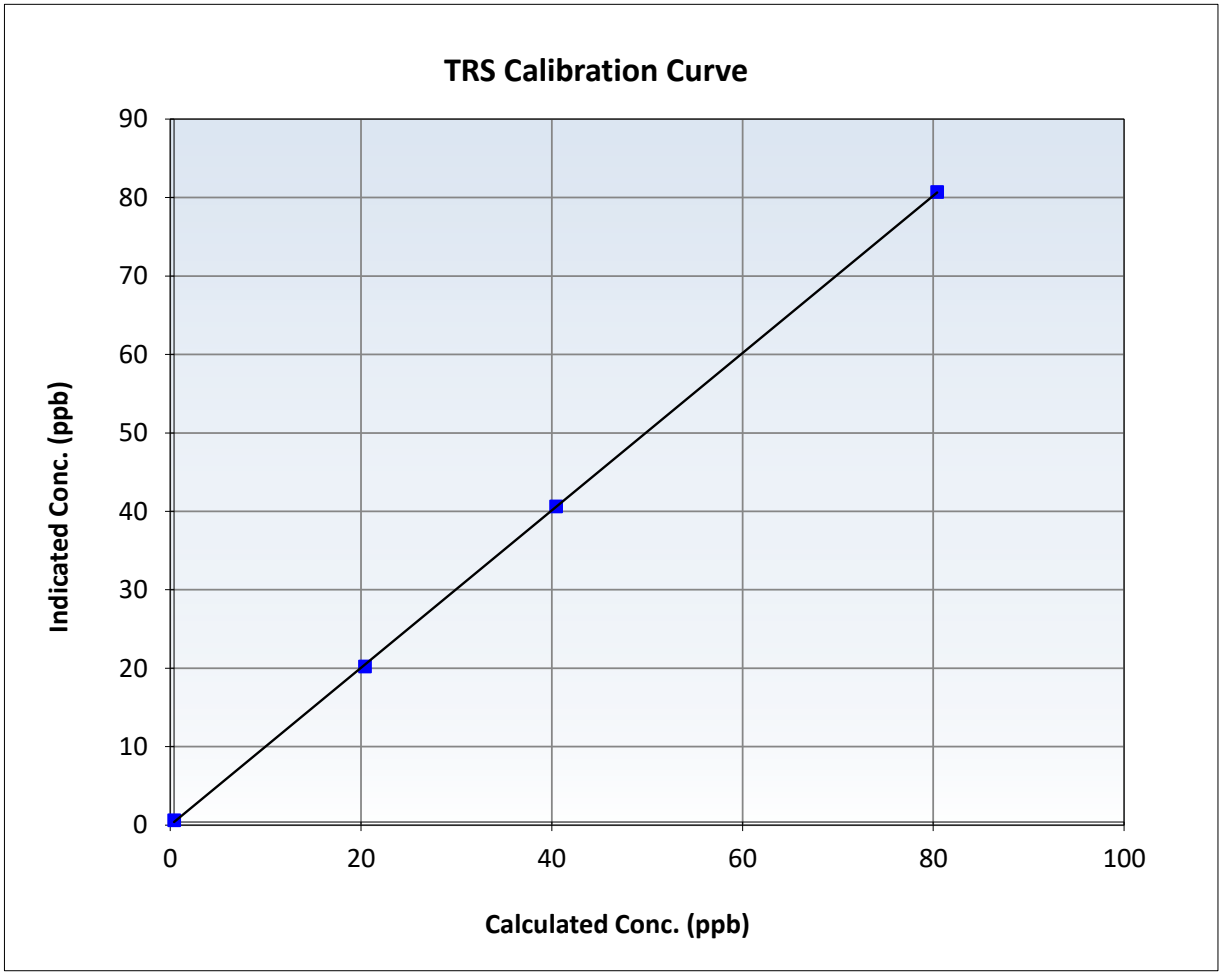
TRS Calibration Summary

Station Information

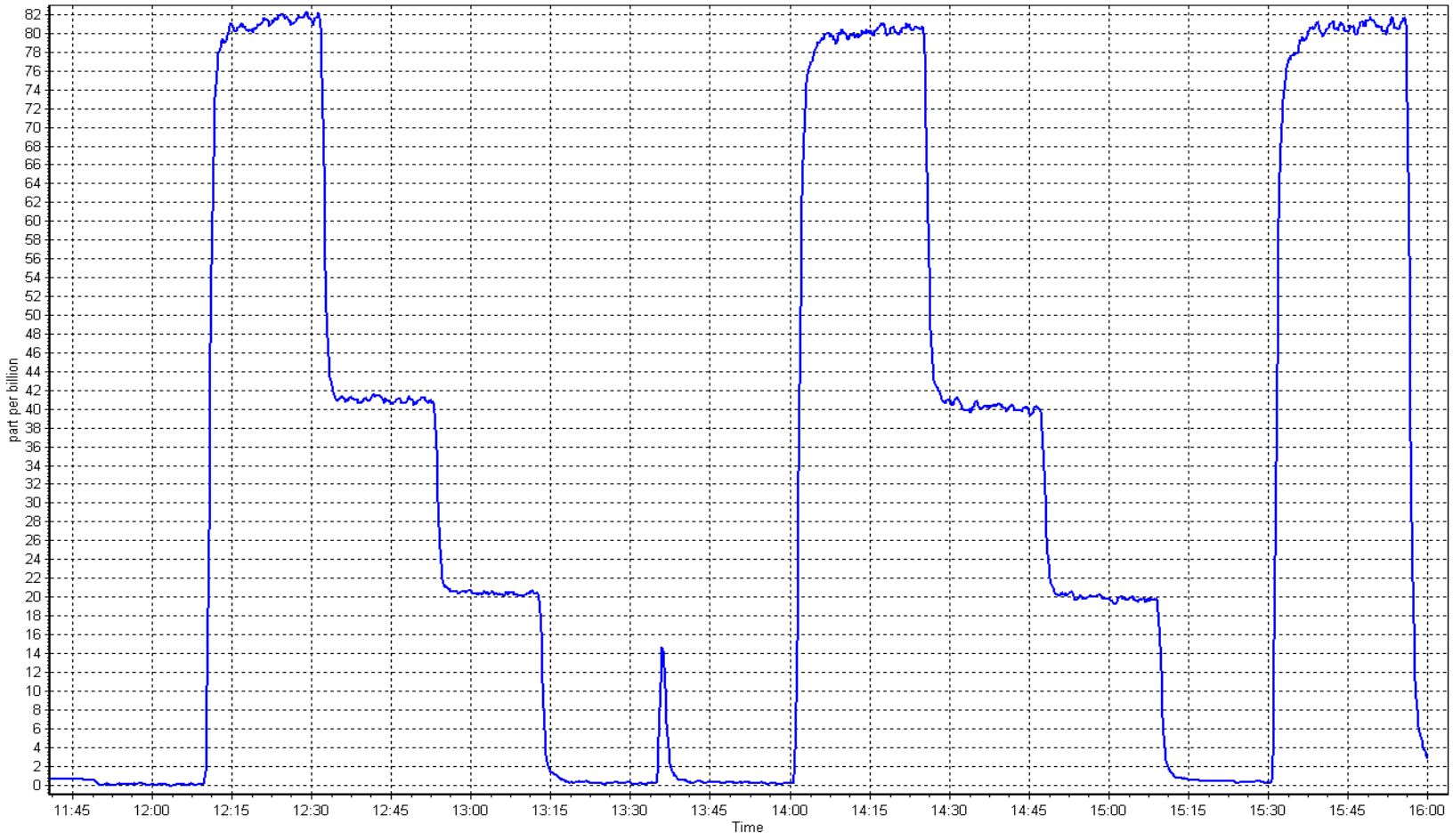
Calibration Date:	March 19, 2026	Previous Calibration:	February 12, 2026
Station Name:	Stony Mountain	Station Number:	AMS18
Start Time (MST):	11:46	End Time (MST):	16:00
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1218153359

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*
80.0	80.3	0.9963	Slope	1.002942	*0.90 - 1.10*
40.1	40.2	0.9963	Intercept	0.000873	*+/-3*
20.0	19.8	1.0114			



TRS Calibration Plot Date: March 19, 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:	March 9, 2026	Last Cal Date:	February 17, 2026
Start time (MST):	11:50	End time (MST):	16:26
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:	3.02E-04	2.85E-04	NMHC SP Ratio:	5.35E-05	5.31E-05
CH4 Retention time:	15.4	15.0	NMHC Peak Area:	166981	168304
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	0.01	----
As found High point	4921	78.1	16.82	17.21	0.978
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.20	Prev response	17.07	*% change	0.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

THC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/(Ic-AFzero)) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.02	----
High point	4921	78.1	16.82	16.89	0.996
Mid point	4960	39.1	8.42	8.50	0.991
Low point	4981	19.5	4.20	4.30	0.976
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.1	16.82	17.47	0.963
				Average Correction Factor	0.988

Notes: N2 cylinder changed after as founds. Adjusted both zero 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	4921	78.1	8.93	9.05	0.987
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.05	Prev response	9.07	*% change	-0.2%
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	4921	78.1	8.93	8.94	0.999
Mid point	4960	39.1	4.47	4.50	0.994
Low point	4981	19.5	2.23	2.27	0.980
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.1	8.93	9.27	0.964
				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	0.01	----
As found High point	4921	78.1	7.89	8.16	0.967
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.15	Prev response	8.01	*% change	1.8%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.02	----
High point	4921	78.1	7.89	7.96	0.992
Mid point	4960	39.1	3.95	4.00	0.986
Low point	4981	19.5	1.97	2.03	0.972
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	78.1	7.89	8.20	0.962
				Average Correction Factor	0.983

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.012531	1.001706
THC Cal Offset:	0.040262	0.055678
CH4 Cal Slope:	1.011679	1.004824
CH4 Cal Offset:	0.025217	0.033625
NMHC Cal Slope:	1.013412	0.999209
NMHC Cal Offset:	0.015045	0.022053

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

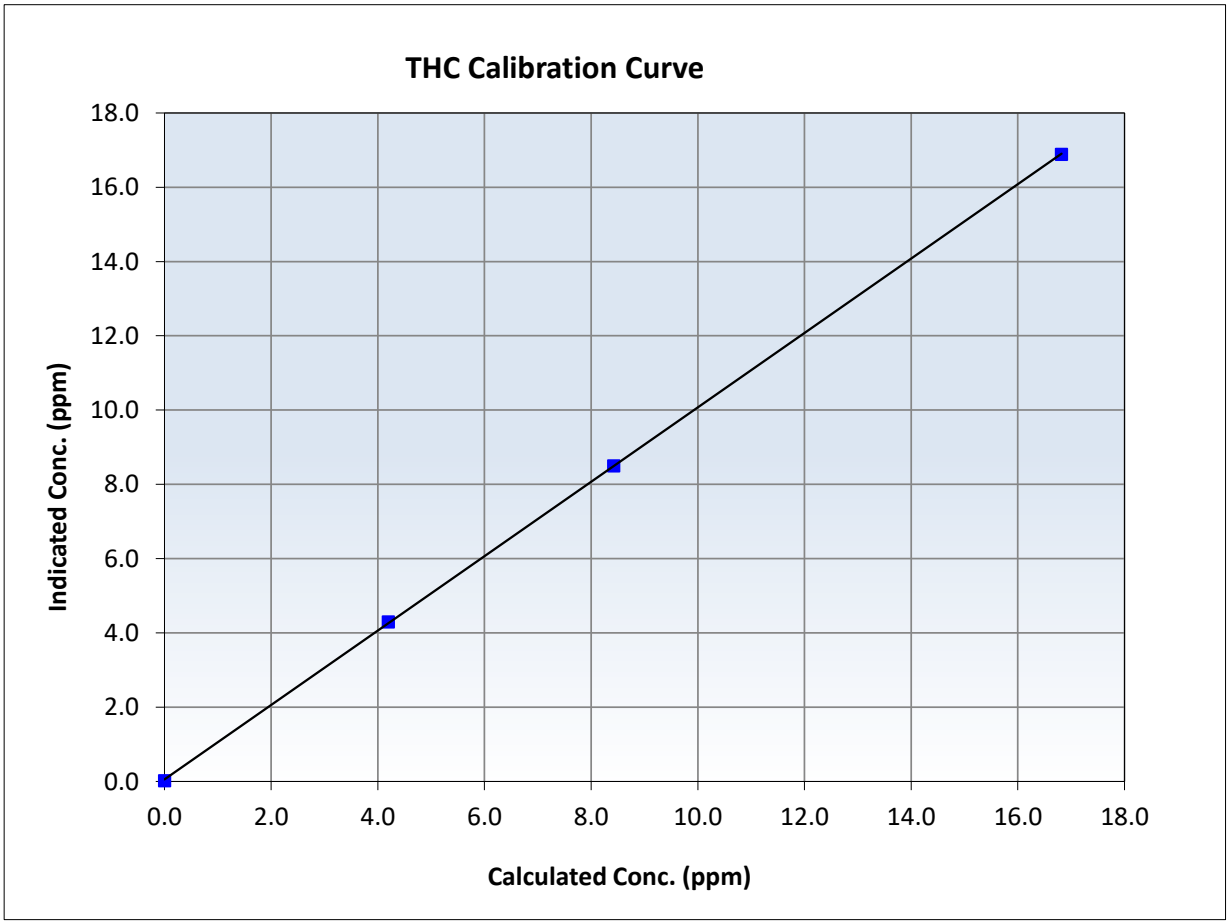
THC Calibration Summary

Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 17, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:50	End Time (MST):	16:26
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	0.02	----	Correlation Coefficient	0.999981	≥0.995
16.82	16.89	0.9959	Slope	1.001706	0.90 - 1.10
8.42	8.50	0.9907	Intercept	0.055678	+/-0.5
4.20	4.30	0.9764			



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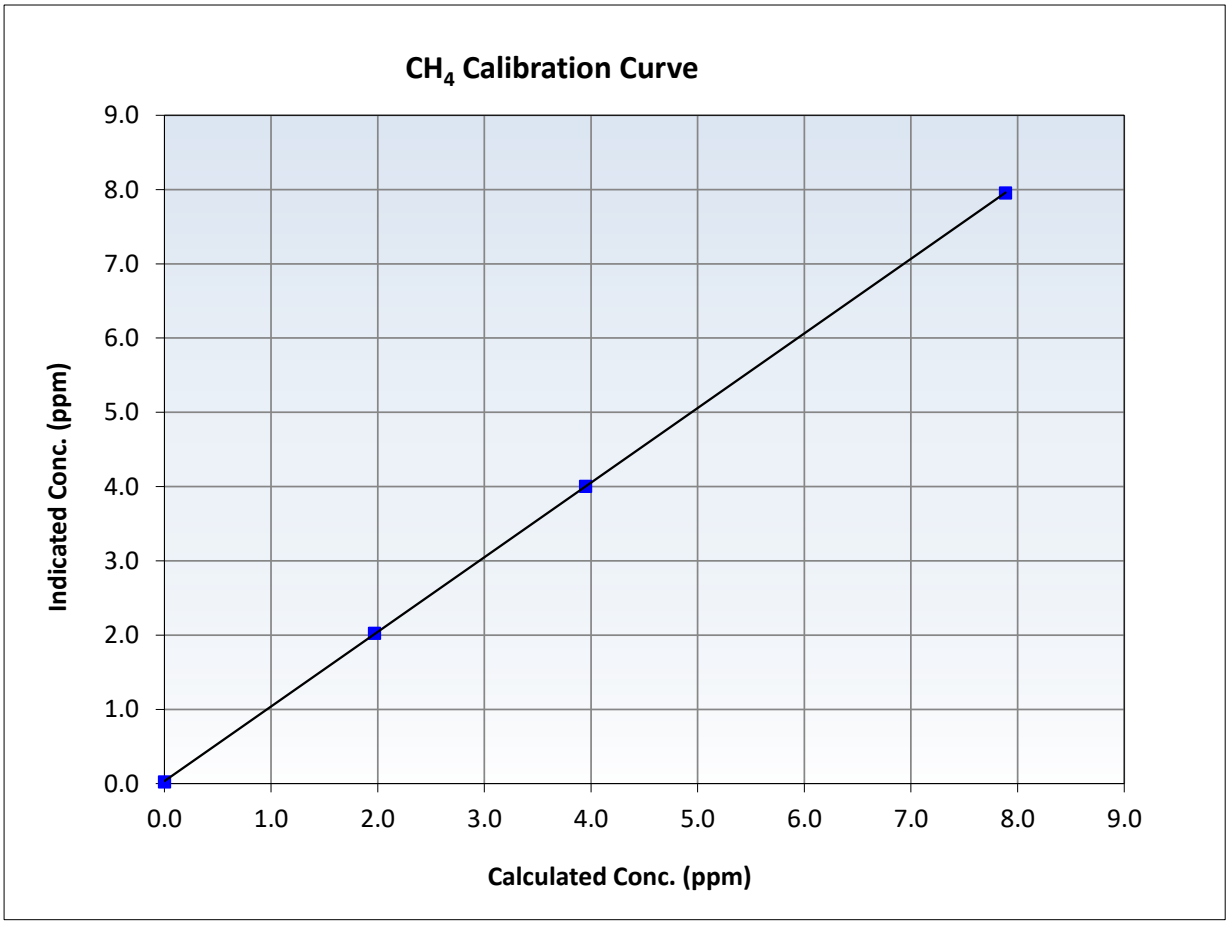
CH_4 Calibration Summary

Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 17, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:50	End Time (MST):	16:26
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	0.02	----	Correlation Coefficient	0.999990	≥0.995
7.89	7.96	0.9916	Slope	1.004824	0.90 - 1.10
3.95	4.00	0.9863	Intercept	0.033625	+/-0.5
1.97	2.03	0.9718			



Wood Buffalo Environmental Association

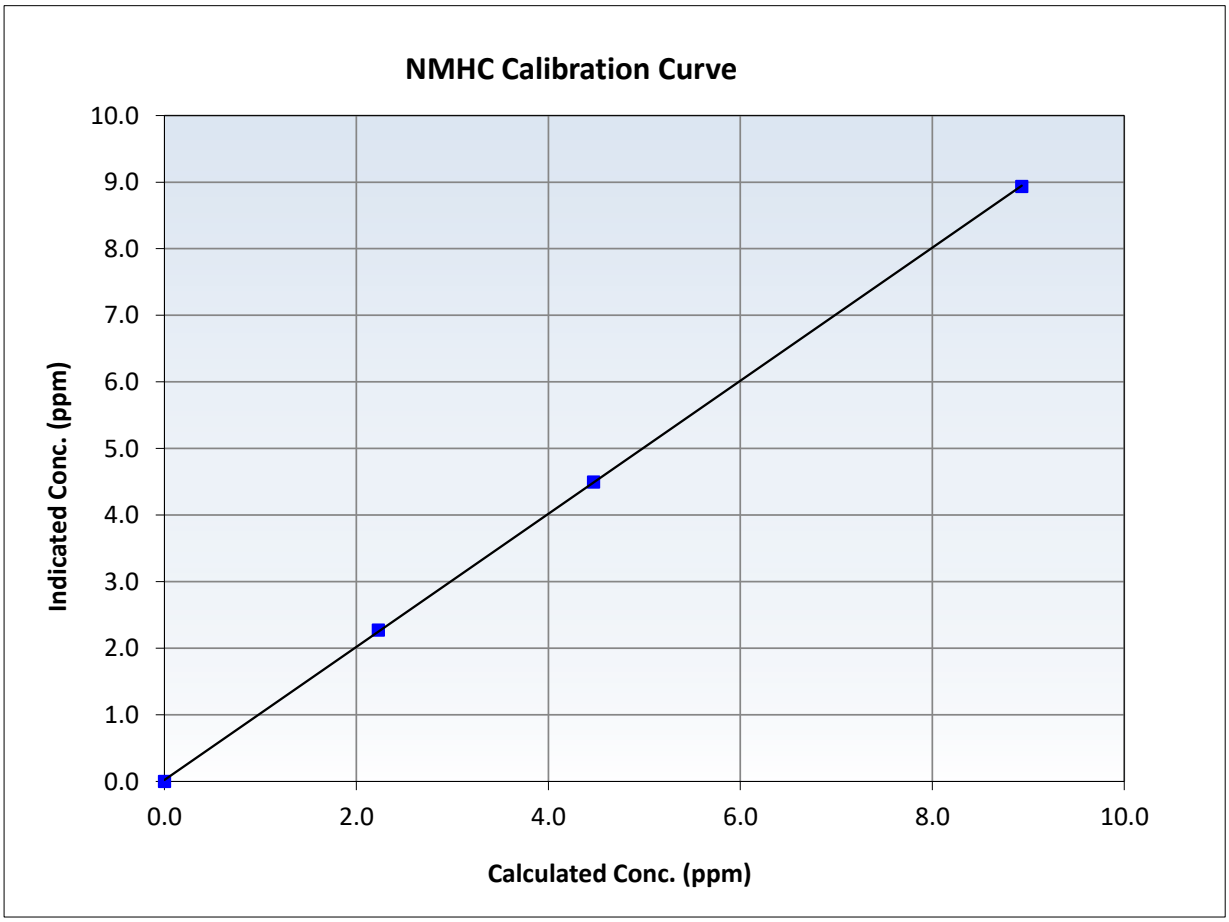
NMHC Calibration Summary

Station Information

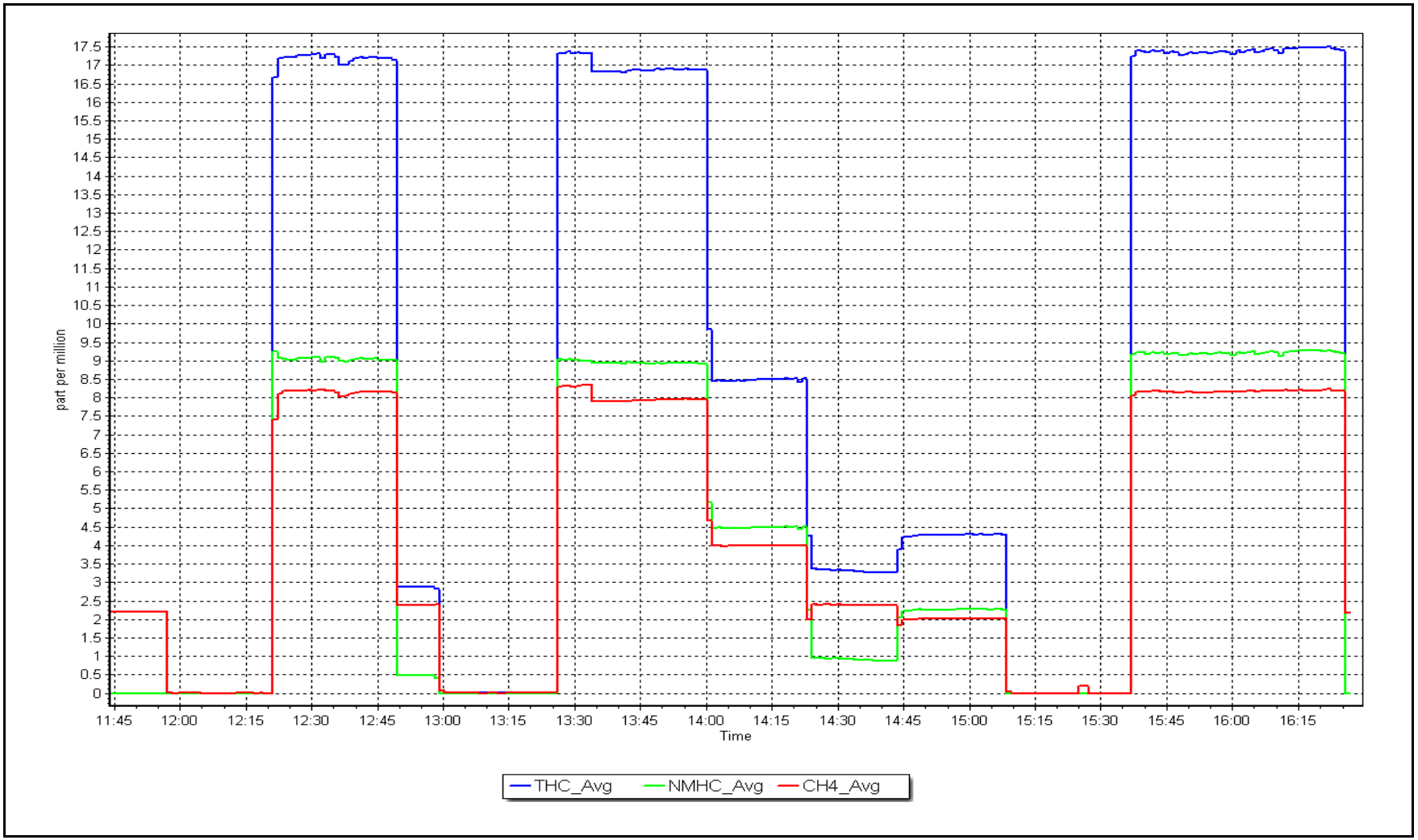
Calibration Date:	March 9, 2026	Previous Calibration:	February 17, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:50	End Time (MST):	16:26
Analyzer make:	Thermo 55i	Analyzer serial #:	1170050130

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999972	≥0.995
8.93	8.94	0.9994	Slope	0.999209	0.90 - 1.10
4.47	4.50	0.9942	Intercept	0.022053	+/-0.5
2.23	2.27	0.9804			



NMHC Calibration Plot Date: March 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:	March 12, 2026
Last Cal Date:	February 25, 2026
Start time (MST):	10:22
End time (MST):	15:44
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	0.1	0.0	0.1	----	----
AF High point	4933	66.6	803.3	800.6	2.7	850.6	846.7	4.0	0.9445	0.9455
AF Mid point										
AF Low point										
New cyl resp										

Previous Respo	4933	NO_X =	801.3 ppb	NO =	798.4 ppb		
Baseline Corr 1st pt		NO_X =	850.5 ppb	NO =	846.7 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

*Percent Change NO_X = 5.8%

*Percent Change NO = 5.7%

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 Scientific 42i Serial Number: 1501663731

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.103	1.041	NO bkgnd or offset:	10.9	10.4
NOX coeff or slope:	1.000	1.000	NOX bkgnd or offset:	11.0	10.5
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	215.1	218.9

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999038	0.999977
NO_X Cal Offset:	-1.148638	-1.428521
NO Cal Slope:	0.999136	1.001095
NO Cal Offset:	-1.469171	-2.729839
NO_2 Cal Slope:	0.995554	1.003177
NO_2 Cal Offset:	-0.588253	0.519107

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	0.5	0.2	0.3	----	----
High point	4933	66.6	803.3	800.6	2.7	803.0	800.3	2.8	1.0003	1.0004
Mid point	4967	33.3	401.6	400.2	1.3	398.5	396.2	2.3	1.0077	1.0102
Low point	4983	16.6	200.2	199.5	0.7	197.3	194.3	2.9	1.0148	1.0270
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.2	0.2	----	----
As left span	4933	66.6	803.3	380.6	422.7	804.4	380.6	423.7	0.9986	1.0000
								Average Correction Factor	1.0076	1.0125

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	0.3	----	----
High GPT point	794.9	374.8	422.8	424.7	0.9954	100.5%
Mid GPT point	794.9	589.9	207.7	208.4	0.9965	100.4%
Low GPT point	794.9	694.2	103.4	104.8	0.9863	101.4%
				Average Correction Factor	0.9927	100.7%

Notes: An investigation was conducted, diagnostics were consistent with previous calibration results except for a slight increase in chamber pressure (from 215 mmHg to 218 mmHg). No issues were identified with the setup, and the flow remained within acceptable limits. Changed sample inlet filter after as founds, span adjusted.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

NO_X Calibration Summary

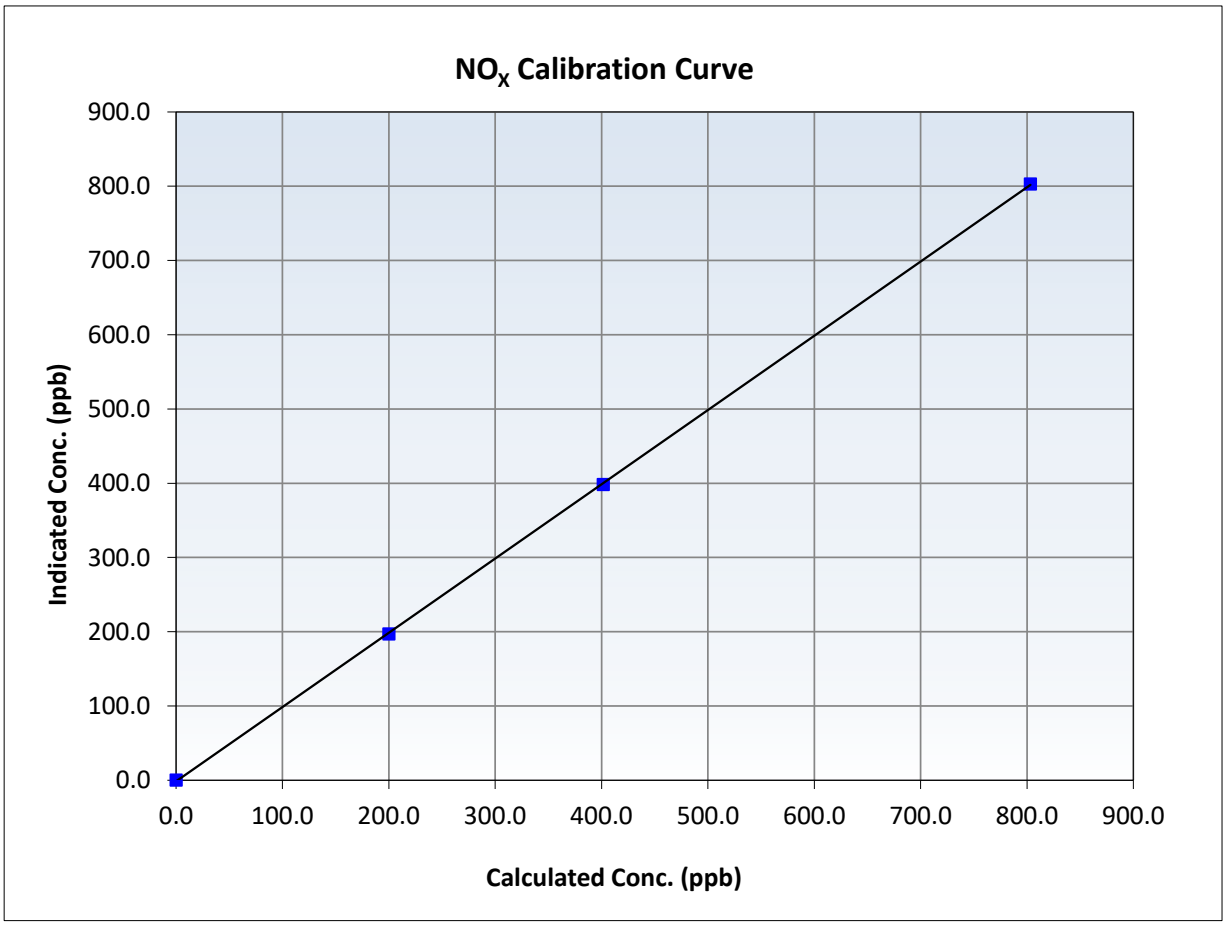
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 25, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	10:22	End Time (MST):	15:44
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.5	----
803.3	803.0	1.0003
401.6	398.5	1.0077
200.2	197.3	1.0148

Statistical Evaluation		Limits
Correlation Coefficient	0.999972	≥0.995
Slope	0.999977	0.90 - 1.10
Intercept	-1.428521	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

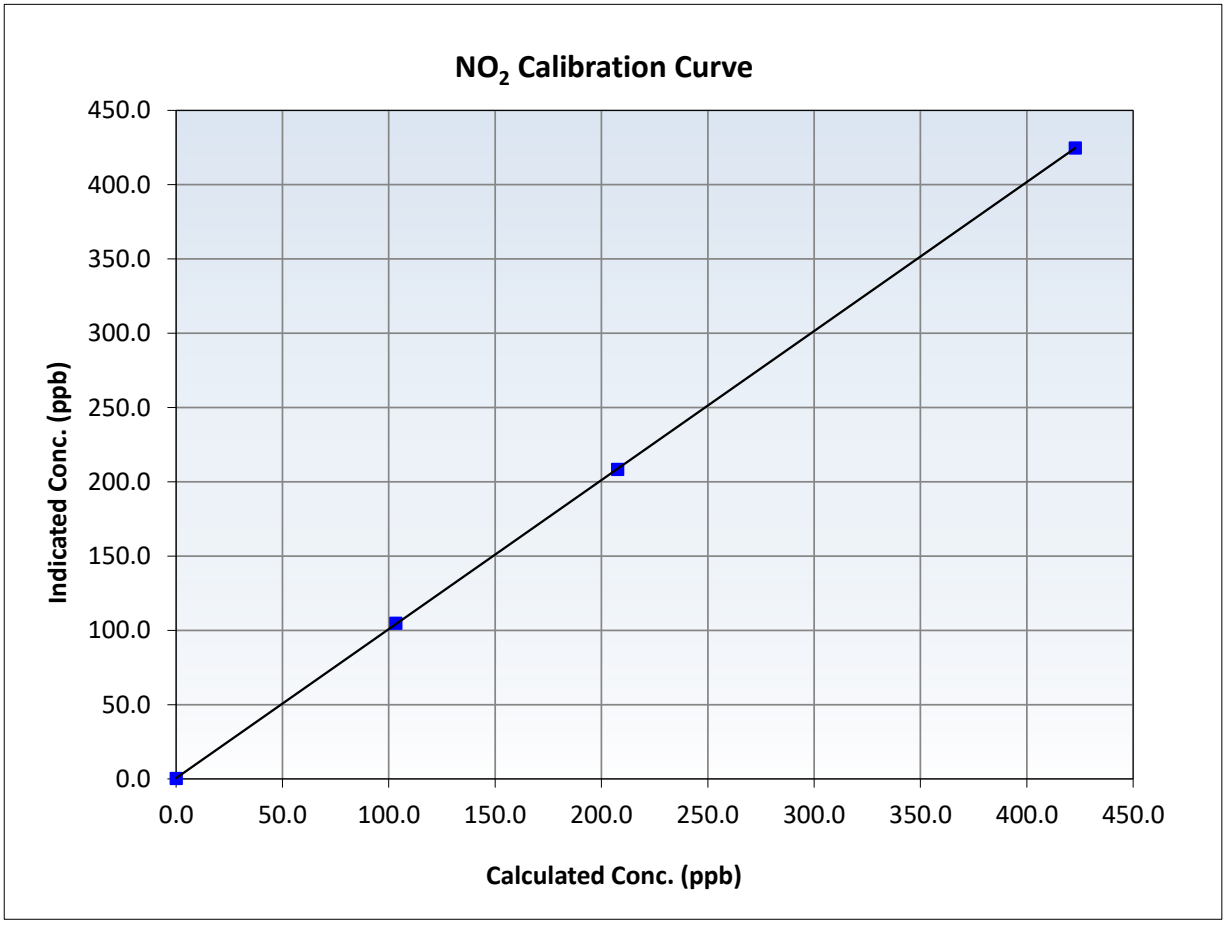
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 25, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	10:22	End Time (MST):	15:44
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
422.8	424.7	0.9954
207.7	208.4	0.9965
103.4	104.8	0.9863

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999994	*≥0.995*
Slope	1.003177	*0.90 - 1.10*
Intercept	0.519107	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

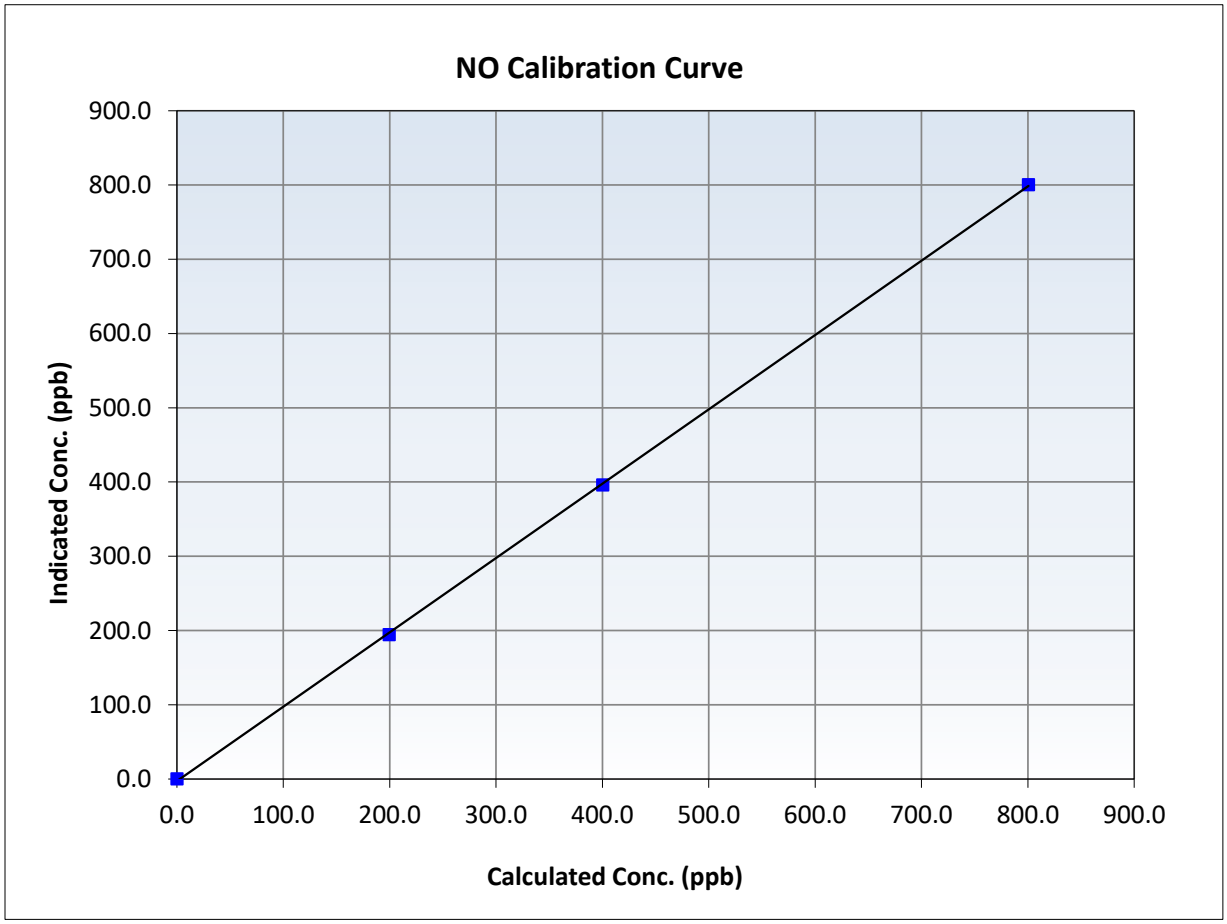
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 25, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	10:22	End Time (MST):	15:44
Analyzer make:	Thermo Scientific 42i	Analyzer serial #:	1501663731

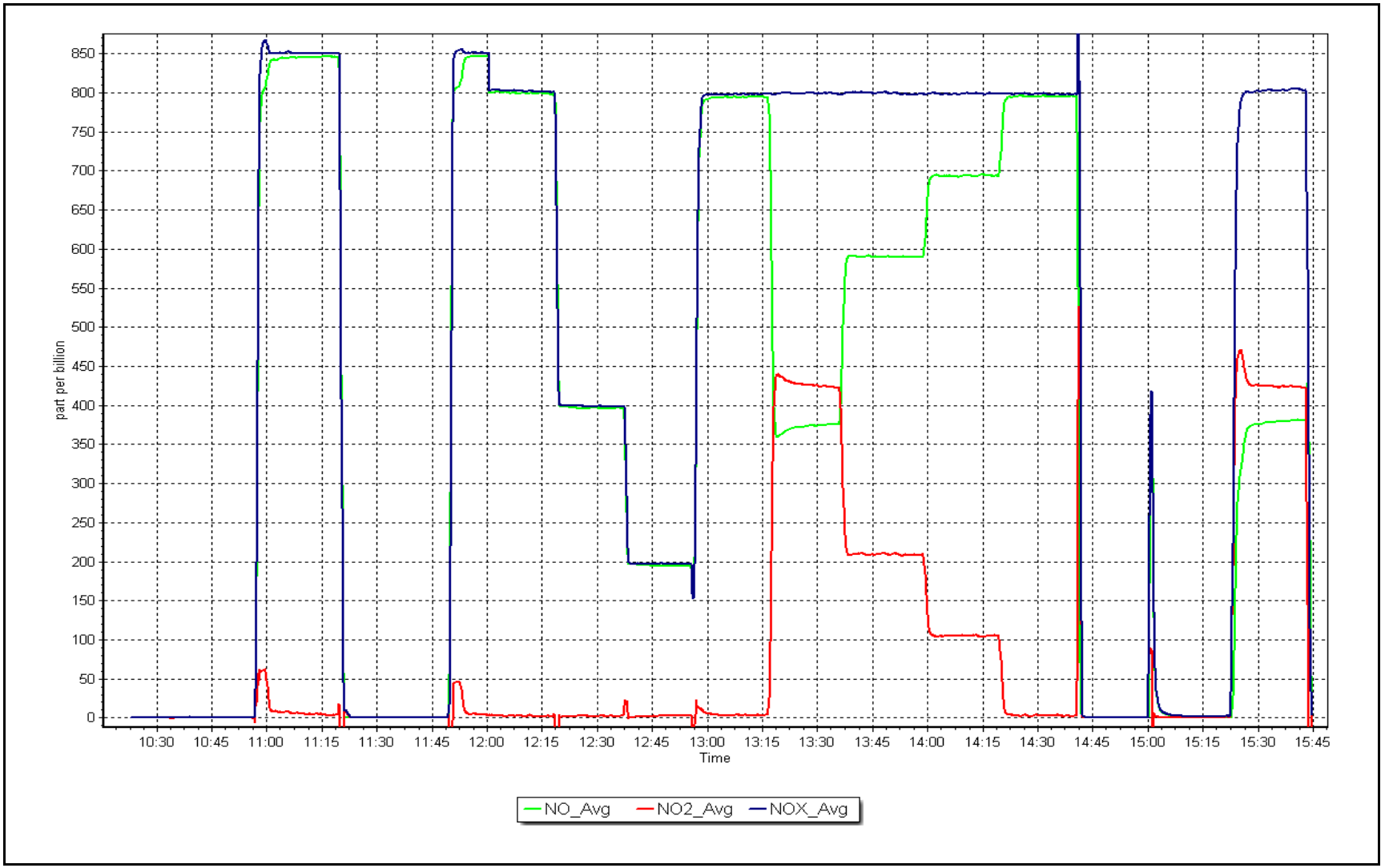
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.6	800.3	1.0004
400.2	396.2	1.0102
199.5	194.3	1.0270

Statistical Evaluation		Limits
Correlation Coefficient	0.999939	≥0.995
Slope	1.001095	0.90 - 1.10
Intercept	-2.729839	+/-20



NO_X Calibration Plot Date: March 12, 2026 Location: Stony Mountain



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	March 4, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	12:55	End time (MST):	16:11
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:	0.994743	0.998257	Backgd or Offset:	3.1	0.9
Calibration intercept:	0.520000	1.880000	Coeff or Slope:	1.023	1.044

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	-1.0	----
As found High point	4888	1141.2	400.0	391.2	1.020
As found Mid point					
As found Low point					
Baseline Corr As found:	392.2	Previous response	398.4	*% change	-1.6%
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	NA	0.0	1.1	----
High point	4888	1138.1	400.0	400.7	0.998
Mid point	4888	884.5	200.0	202.2	0.989
Low point	4888	741.4	100.0	102.3	0.978
As left zero	5000	NA	0.0	1.9	----
As left span	4812	1097.9	400.0	400.6	0.999
				Average Correction Factor	0.988

Notes: Sample inlet filter changed and adjusted zero and span.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

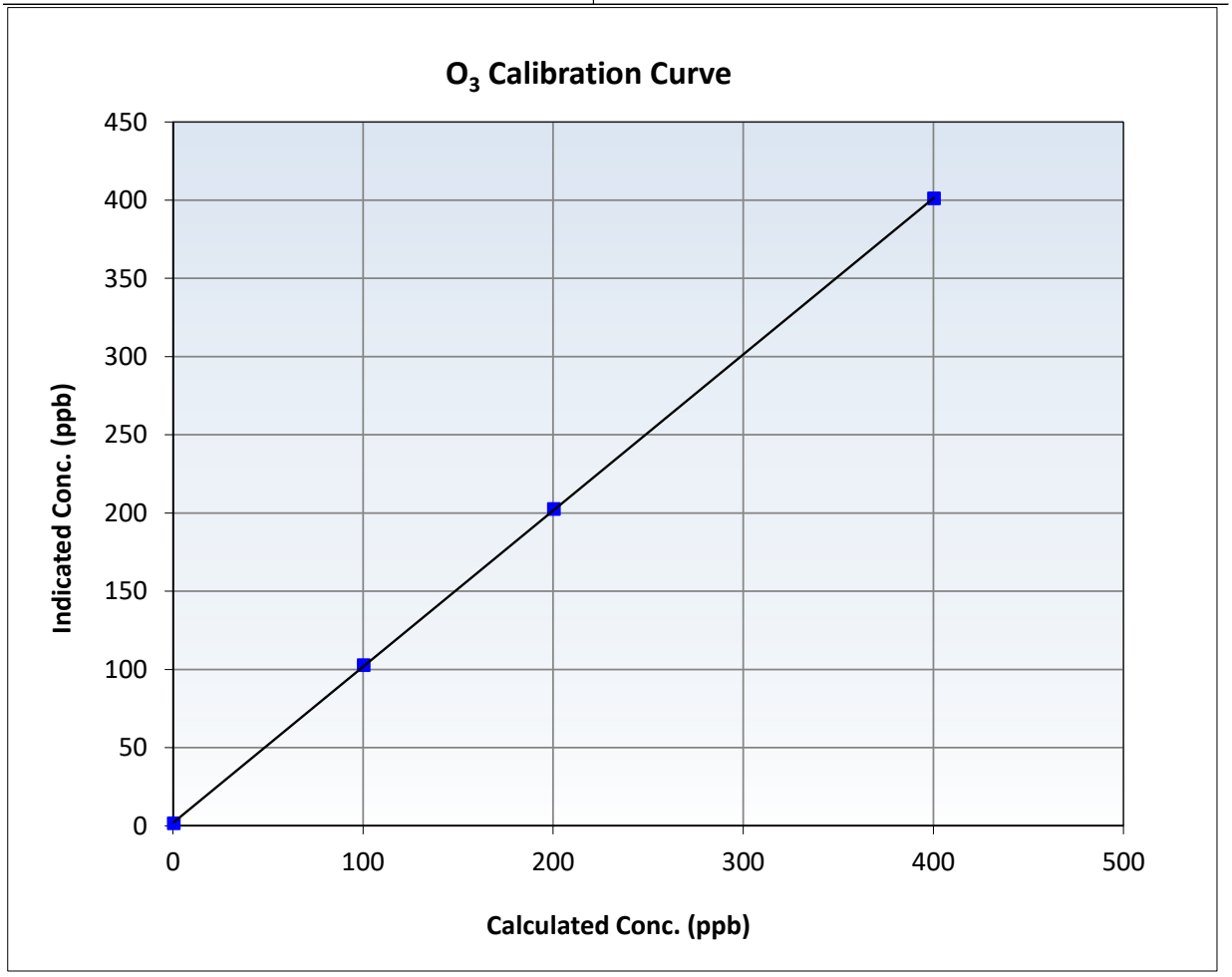
O_3 Calibration Summary

Station Information

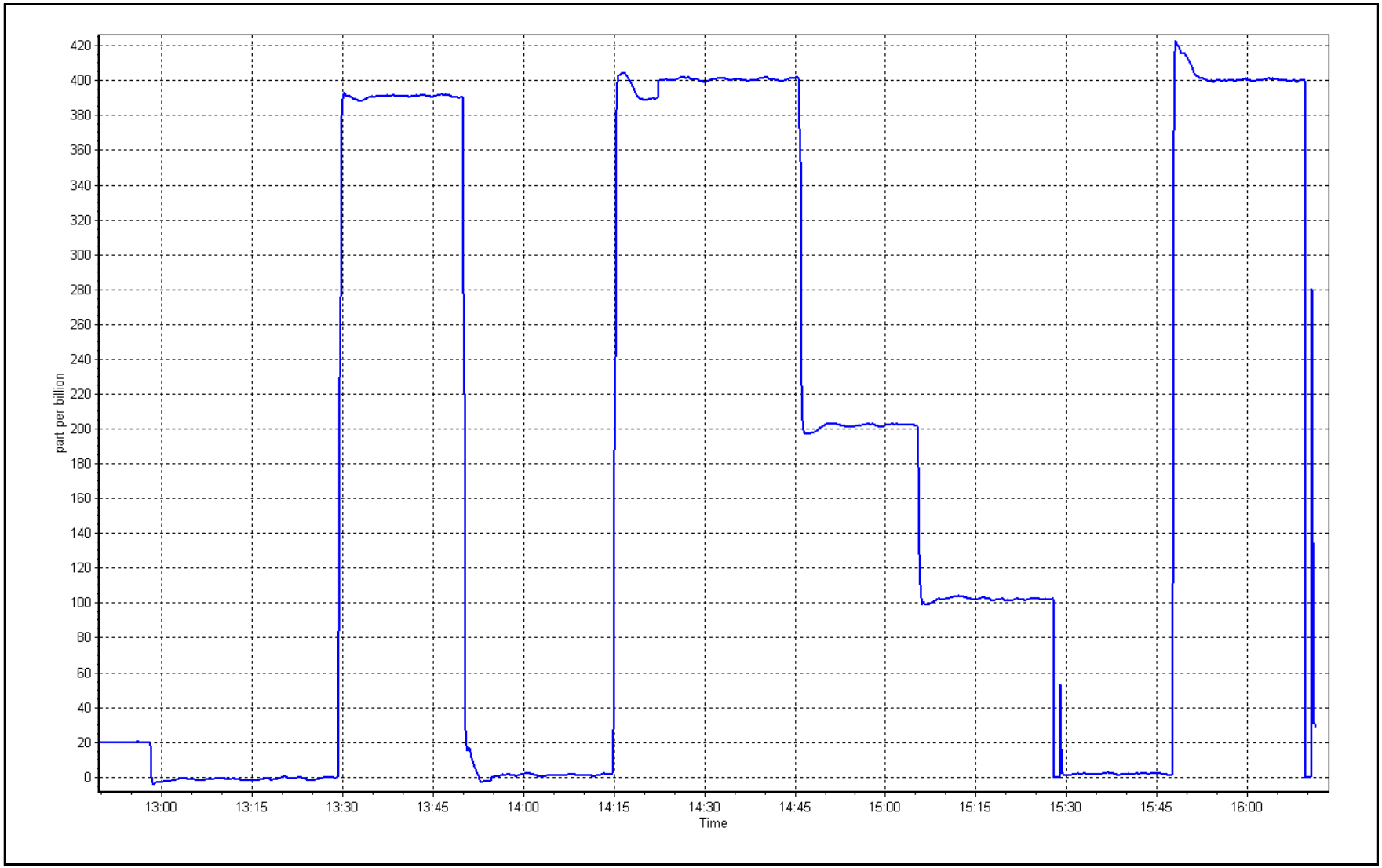
Calibration Date:	March 4, 2026	Previous Calibration:	February 10, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	12:55	End Time (MST):	16:11
Analyzer make:	API T400	Analyzer serial #:	825

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	1.1	----	Correlation Coefficient	0.999981	≥0.995
400.0	400.7	0.9983	Slope	0.998257	0.90 - 1.10
200.0	202.2	0.9891			
100.0	102.3	0.9775	Intercept	1.880000	+/- 5



O_3 Calibration Plot Date: March 4, 2026 Location: Stony Mountain



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Stony Mountain	Station number:	AMS 18
Calibration Date:	March 17, 2026	Last Cal Date:	March 4, 2026
Start time (MST):	11:18	End time (MST):	14:05
Reason:	Maintenance		

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:	0.998257	0.999086	Backgd or Offset:	0.9	2.7
Calibration intercept:	1.880000	0.260000	Coeff or Slope:	1.044	0.985

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

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	4888	1138.1	400.0	399.9	1.000
Mid point	4888	884.5	200.0	200.0	1.000
Low point	4888	741.4	100.0	100.3	0.997
As left zero	5000	NA	0.0	0.6	----
As left span	4812	1097.9	400.0	404.4	0.989
				Average Correction Factor	0.999

Notes: Lamp voltage adjusted. Pump and "blue can" changed out.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

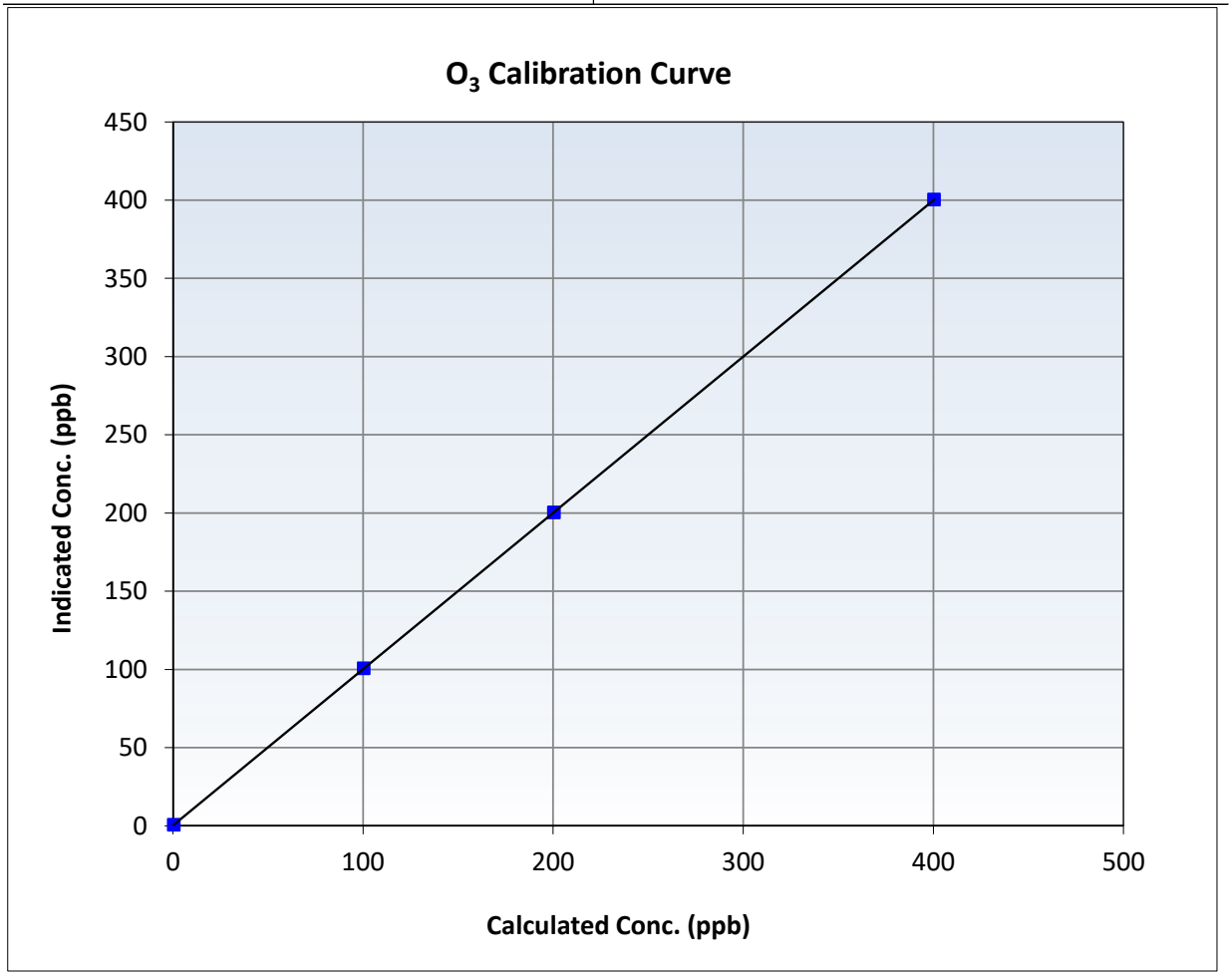
O_3 Calibration Summary

Station Information

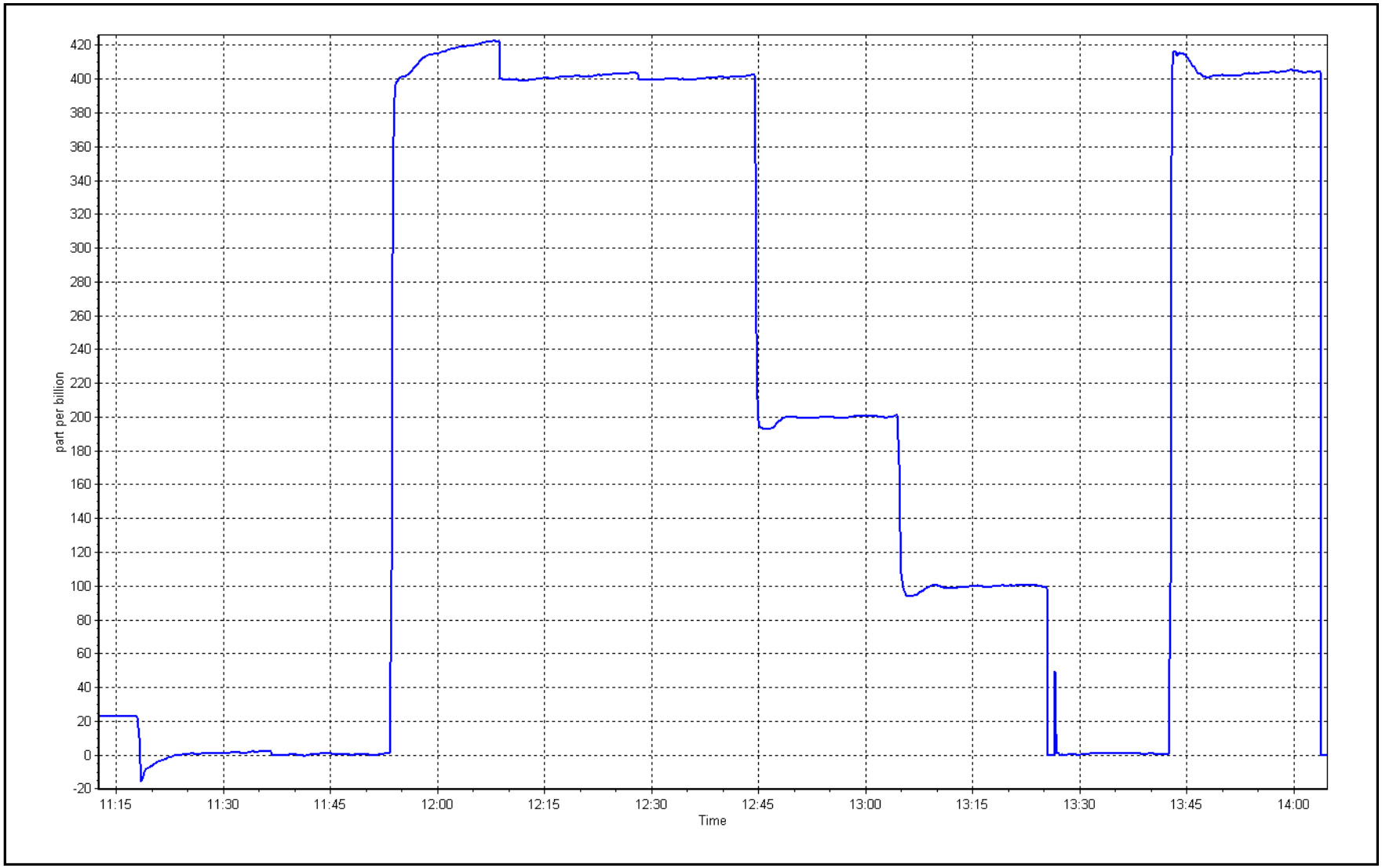
Calibration Date:	March 17, 2026	Previous Calibration:	March 4, 2026
Station Name:	Stony Mountain	Station Number:	AMS 18
Start Time (MST):	11:18	End Time (MST):	14:05
Analyzer make:	API T400	Analyzer serial #:	825

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.2	----	Correlation Coefficient	1.000000	*≥0.995*
400.0	399.9	1.0003	Slope	0.999086	*0.90 - 1.10*
200.0	200.0	1.0000	Intercept	0.260000	*+/- 5*
100.0	100.3	0.9970			



O_3 Calibration Plot Date: March 17, 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:	March 19, 2026	Last Cal Date:	February 25, 2026
Start time (MST):	14:48	End time (MST):	15:08
Analyzer Make:	API T640	S/N:	324
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 (^{o}C)	10.2	9.63	10.2	☐	+/- 2 ^{o}C
P (mmHg)	694.2	694.22	694.2	☐	+/- 10 mmHg
Flow (LPM)	4.98	4.93	4.98	☐	+/- 0.25 LPM
PW% (pump)	48	-----	48	☐	>80%
Zero Verification	PM w/o HEPA:	8.8	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: January 26, 2026

Date Disposable Filter Changed: February 25, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: September 23, 2025

Date RH/T Sensor Cleaned: September 23, 2025

Notes: Flow pressure and temp checked, leak check passed, no adjustments made.

Calibration by: Mohammed Kashif

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS19
FIREBAG
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	March 11, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	11:56	End time (MST):	15:09
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 43i		Serial Number:	1410661308	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.004526	0.999841	Backgd or Offset:	11.5	11.8
Calibration intercept:	-1.138718	-1.299467	Coeff or Slope:	0.987	1.014

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	4922	78.5	800.2	773.8	1.034
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	774.1	Previous response	802.7	*% change	-3.7%
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	-0.2	----
High point	4922	78.5	800.2	798.9	1.002
Mid point	4961	39.2	399.6	399.0	1.002
Low point	4980	19.6	199.8	196.5	1.017
As left zero	4999	0.0	0.0	-0.2	----
As left span	4922	78.4	799.2	803.8	0.994
				Average Correction Factor:	1.007

Notes: Changed sample inlet filter after as founds, span adjusted

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

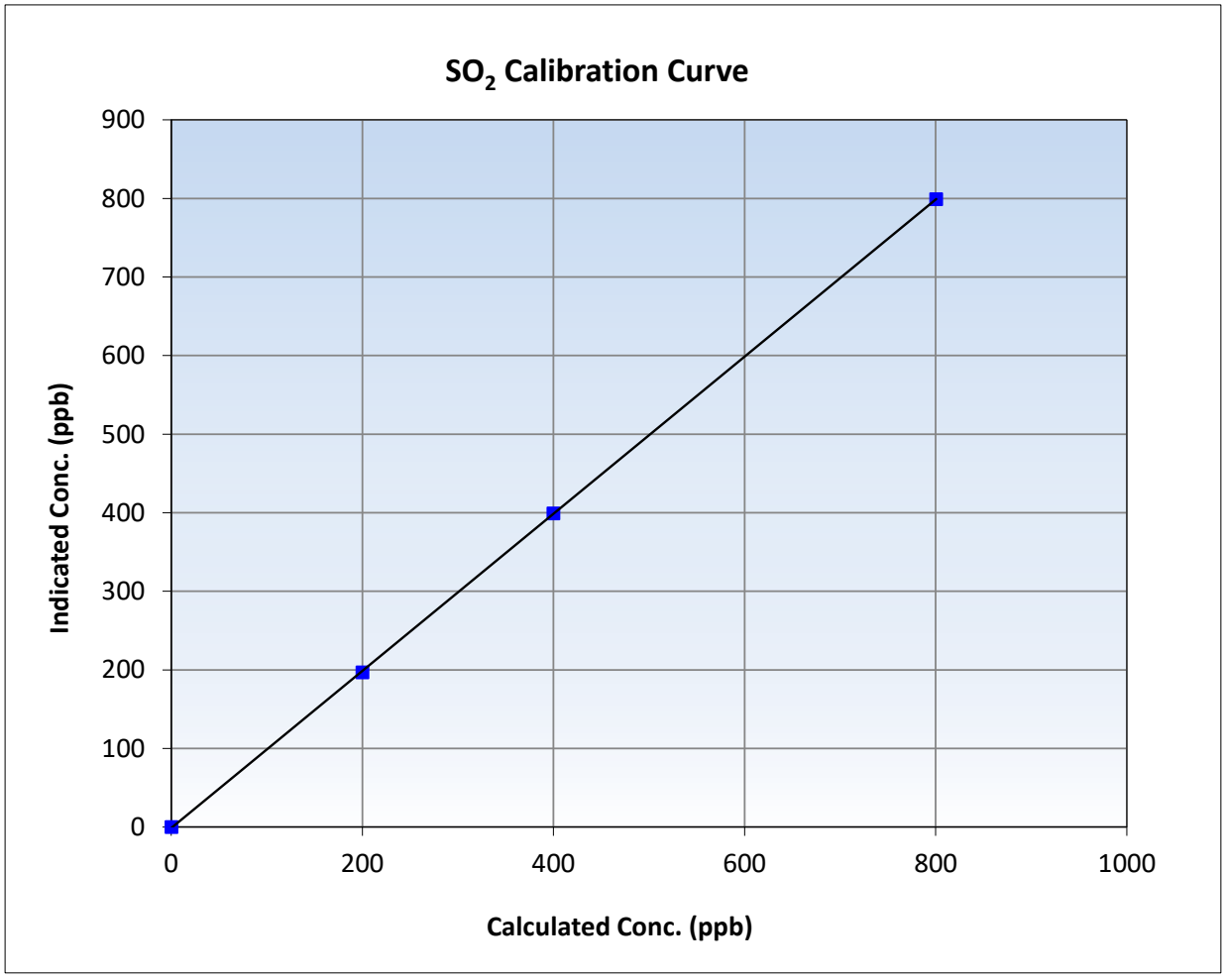
Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 12, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	11:56	End Time (MST):	15:09
Analyzer make:	Thermo 43i	Analyzer serial #:	1410661308

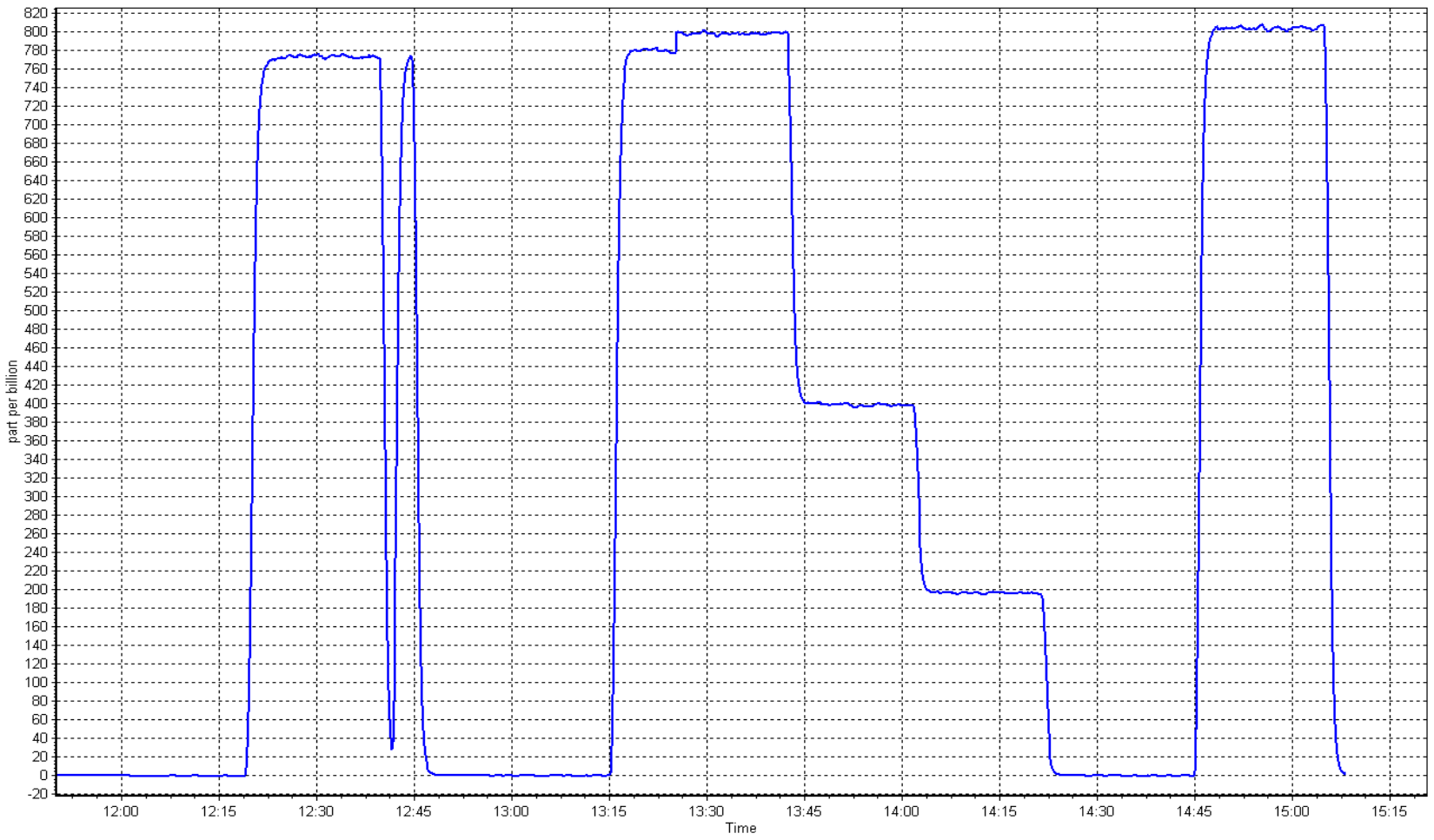
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
800.2	798.9	1.0016
399.6	399.0	1.0015
199.8	196.5	1.0168

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999984	*≥0.995*
Slope	0.999841	*0.90 - 1.10*
Intercept	-1.299467	*+/-30*



SO2 Calibration Plot Date: March 11, 2026 Location: Firebag



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Firebag	Station number:	AMS 19
Calibration Date:	March 17, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	9:46	End time (MST):	14:30
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:	1.002619	1.002905	Backgd or Offset:	3.18	3.25
Calibration intercept:	0.040000	-0.120000	Coeff or Slope:	1.237	1.258

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	4924	75.6	80.0	79.3	1.009
As found Mid point	4962	37.8	40.0	39.4	1.015
As found Low point	4981	18.9	20.0	19.3	1.036
New cylinder response					

Baseline Corr As found:	79.3	Prev response:	80.23	*% change:	-1.2%
Baseline Corr 2nd AF pt:	39.4	AF Slope:	0.993332	AF Intercept:	-0.260000
Baseline Corr 3rd AF pt:	19.3	AF Correlation:	0.999949	* = > +/-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	75.6	80.0	80.2	0.997
Mid point	4962	37.8	40.0	39.9	1.002
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	79.8	1.002
SO2 Scrubber Check	4922	78.5	785.0	0.1	----

Date of last scrubber change:	18-Jan-23	Ave Corr Factor	1.005	
Date of last converter efficiency test:	November 26, 2024	106.2%	efficiency	

Notes: Inlet filter changed after as founds, scrubber check passed after calibrator zero. Span adjusted.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

H2S Calibration Summary

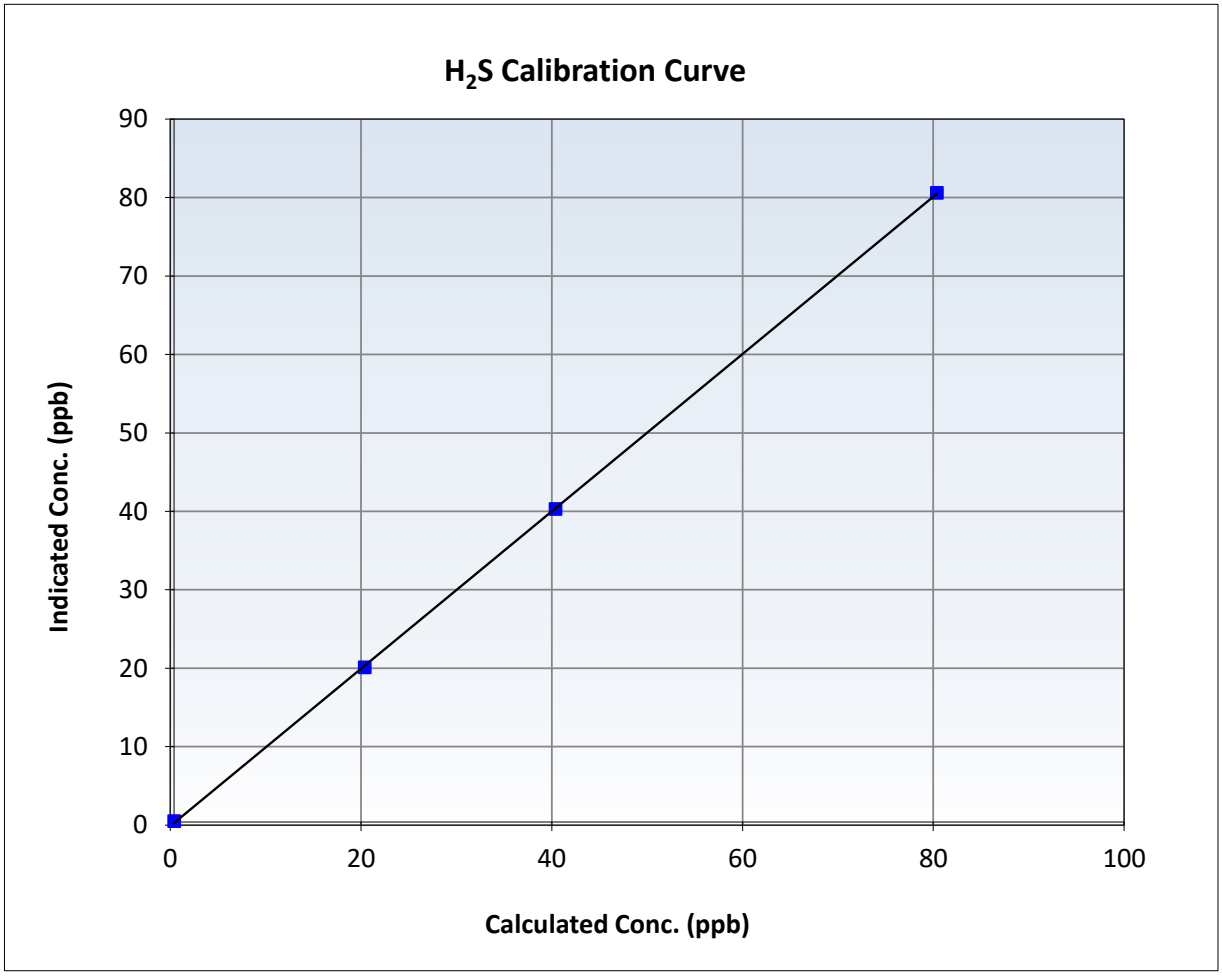
Station Information

Calibration Date:	March 17, 2026	Previous Calibration:	February 10, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	9:46	End Time (MST):	14:30
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680032

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
80.0	80.2	0.9973
40.0	39.9	1.0023
20.0	19.7	1.0150

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999965	*≥0.995*
Slope	1.002905	*0.90 - 1.10*
Intercept	-0.120000	*+/-3*



H2S Calibration Plot Date: March 17, 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:	March 10, 2026
Last Cal Date:	February 25, 2026
Start time (MST):	10:45
End time (MST):	16:50
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 #:	DT0044018	Removed Gas Exp Date:	November 3, 2031
Removed Gas NOX Conc:	48.90 ppm	Removed Gas NO Conc:	48.70 ppm
NOX gas Diff:	-4.4%	NO gas Diff:	-3.4%
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	-0.2	-0.2	0.0	----	----
AF High point	4918	82.1	802.9	799.7	3.3	813.1	806.7	6.4	0.9873	0.9910
AF Mid point										
AF Low point										
New cyl resp	4936	64.4	799.8	797.2	2.6	775.2	777.4	-2.1	0.9834	0.9880

Previous Response	NO_X =	803.1 ppb	NO =	799.2 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = 1.3%
Baseline Corr 1st pt	NO_X =	813.3 ppb	NO =	806.9 ppb	As Found Statistics	*Percent Change	NO = 1.0%
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 42i Serial Number: 1410661309

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	Finish		Start	Finish
NO coeff or slope:	0.904	0.934	NO bkgnd or offset:	4.5	4.7
NOX coeff or slope:	0.994	0.994	NOX bkgnd or offset:	4.5	4.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	160.5	164.8

Calibration Statistics

	Start	Finish
NO_X Cal Slope:	1.002301	1.002231
NO_X Cal Offset:	-1.679797	-1.567993
NO Cal Slope:	1.001802	1.008078
NO Cal Offset:	-1.940049	-2.128005
NO_2 Cal Slope:	0.995533	0.999791
NO_2 Cal Offset:	0.149893	-0.844959

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	800.4	802.1	-1.6	0.9992	0.9939
Mid point	4968	32.2	399.9	398.6	1.3	399.7	400.1	-0.3	1.0005	0.9963
Low point	4984	16.1	200.0	199.3	0.6	196.3	195.7	0.6	1.0186	1.0185
As left zero	5000	0	0.0	0.0	0.0	0.1	0.0	0.1	----	----
As left span	4936	64.4	799.8	408.6	391.2	797.0	408.6	388.4	1.0035	1.0000
								Average Correction Factor	1.0061	1.0029

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	793.0	405.8	389.8	389.4	1.0010	99.9%
Mid GPT point	793.0	595.2	200.4	199.0	1.0069	99.3%
Low GPT point	793.0	679.7	115.9	114.0	1.0165	98.4%
				Average Correction Factor	1.0081	99.2%

Notes: Changed sample inlet filter and swapped cal gas cylinder after as founds. Adjusted span.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

NO_X Calibration Summary

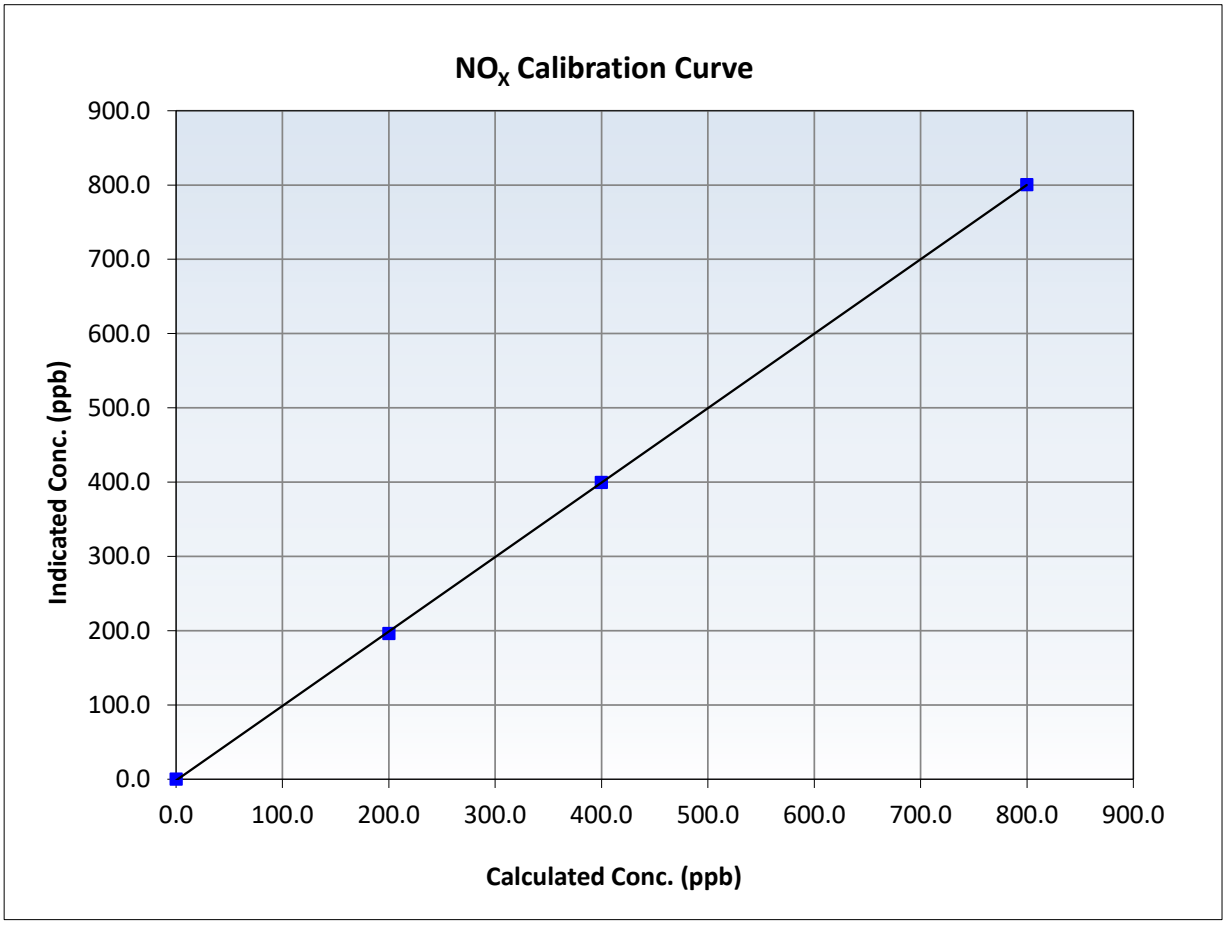
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 25, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	10:45	End Time (MST):	16:50
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	800.4	0.9992
399.9	399.7	1.0005
200.0	196.3	1.0186

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999973	*≥0.995*
Slope	1.002231	*0.90 - 1.10*
Intercept	-1.567993	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

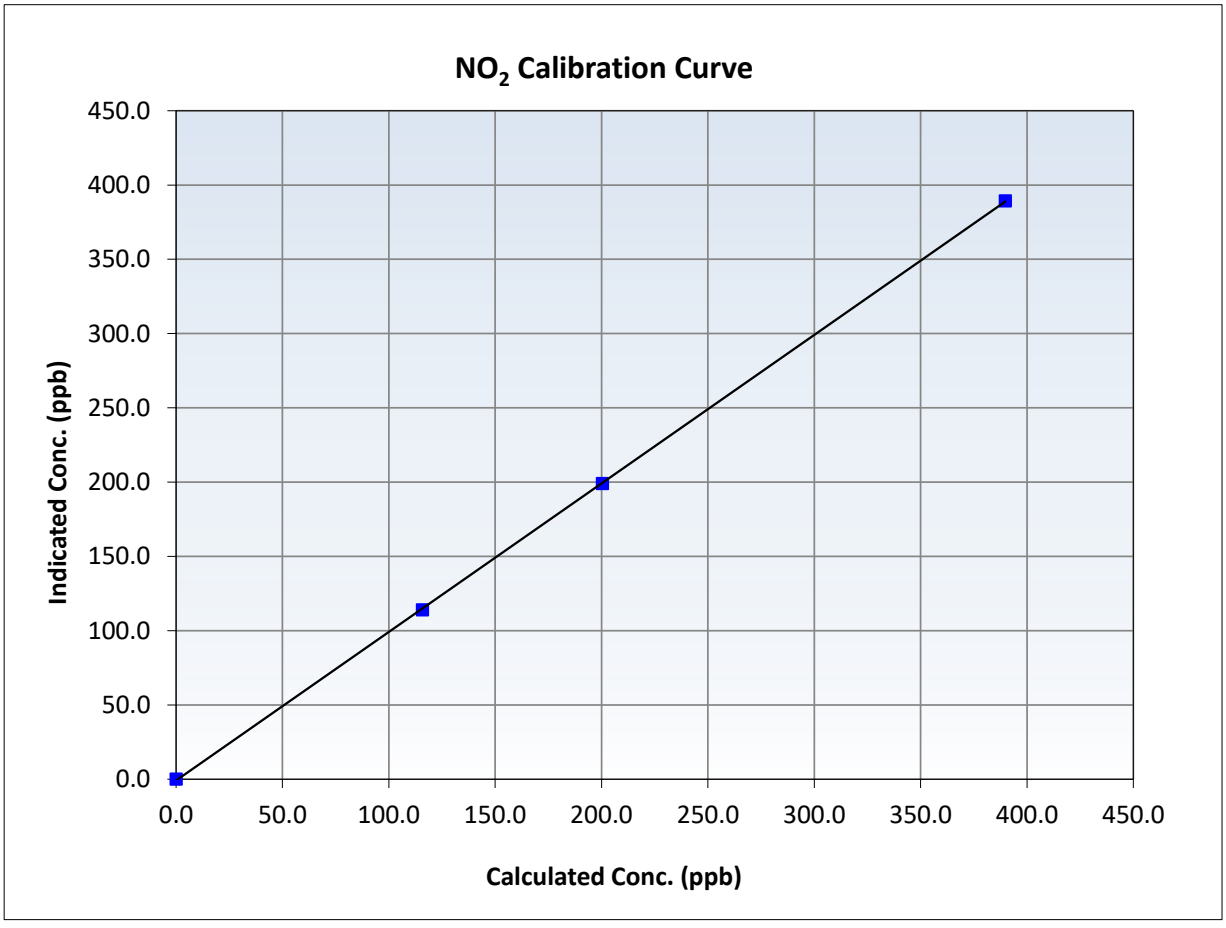
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 25, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	10:45	End Time (MST):	16:50
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	----
389.8	389.4	1.0010
200.4	199.0	1.0069
115.9	114.0	1.0165

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999970	*≥0.995*
Slope	0.999791	*0.90 - 1.10*
Intercept	-0.844959	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

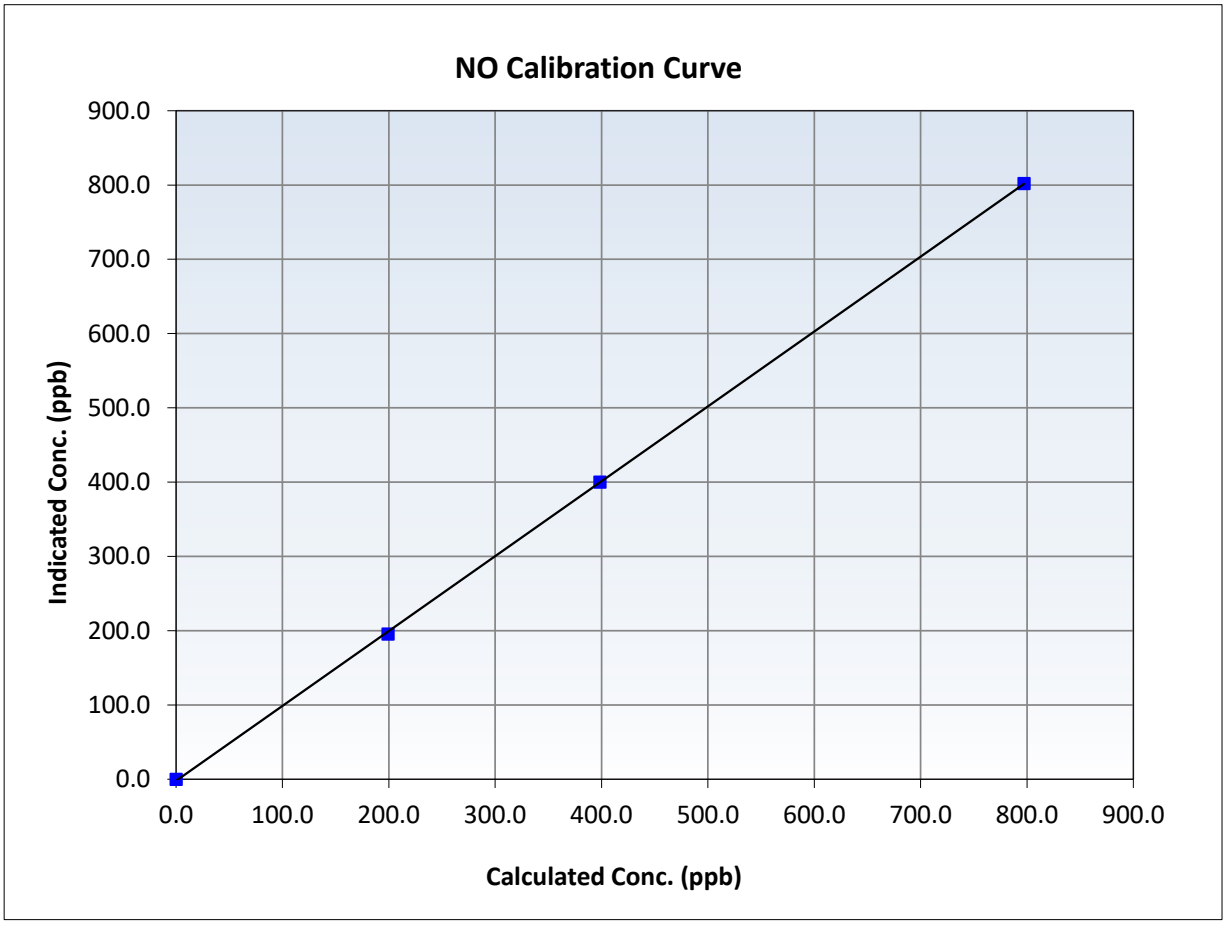
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 25, 2026
Station Name:	Firebag	Station Number:	AMS 19
Start Time (MST):	10:45	End Time (MST):	16:50
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661309

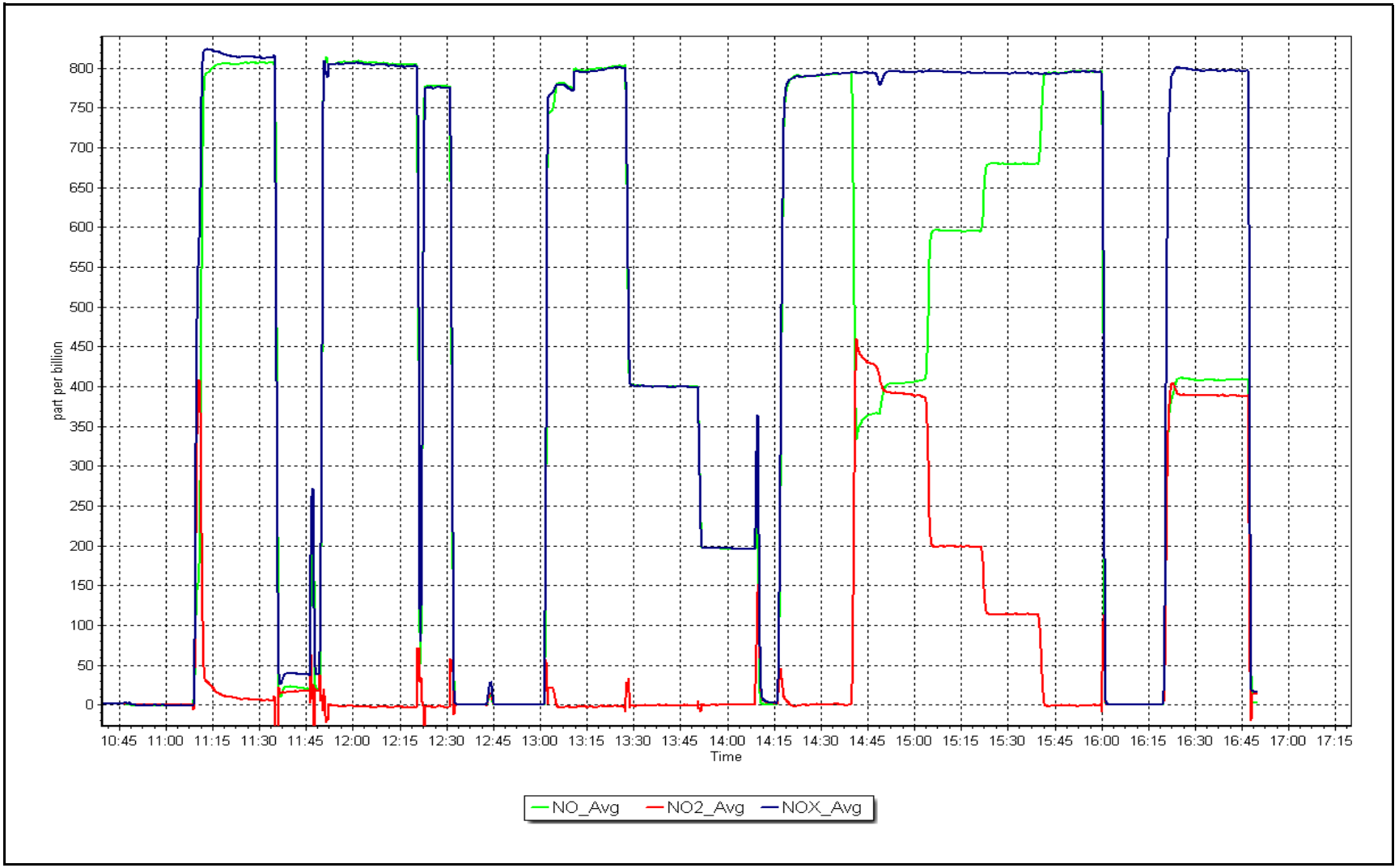
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
797.2	802.1	0.9939
398.6	400.1	0.9963
199.3	195.7	1.0185

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999959	*≥0.995*
Slope	1.008078	*0.90 - 1.10*
Intercept	-2.128005	*+/-20*



NO_X Calibration Plot Date: March 10, 2026 Location: Firebag



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS20
MACKAY RIVER
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	MacKay River	Station number:	AMS 20
Calibration Date:	March 19, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	7:03	End time (MST):	9:44
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:	0.998918	1.000802	Backgd or Offset:	21.0	21.0
Calibration intercept:	0.043693	0.484324	Coeff or Slope:	0.938	0.938

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	802.6	0.997
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	802.4	Previous response	799.3	*% 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	4919	81.4	800.1	801.4	0.998
Mid point	4959	40.7	400.1	400.2	1.000
Low point	4980	20.3	199.5	200.9	0.993
As left zero	5000	0.0	0.0	0.5	----
As left span	4919	81.4	800.1	800.1	1.000
				Average Correction Factor:	0.997

Notes: No Maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

SO_2 Calibration Summary

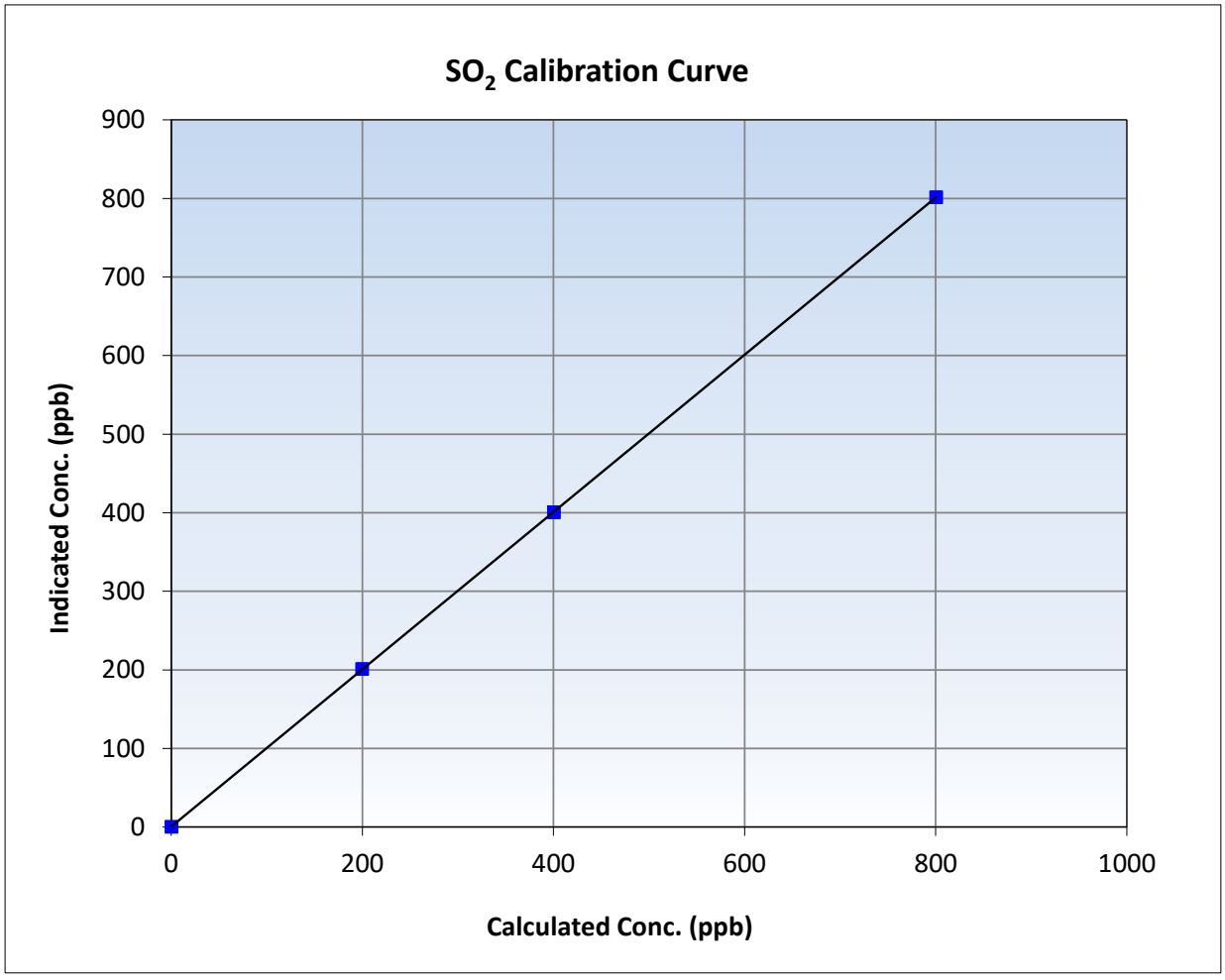
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 4, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:03	End Time (MST):	9:44
Analyzer make:	Thermo 43i	Analyzer serial #:	1501301450

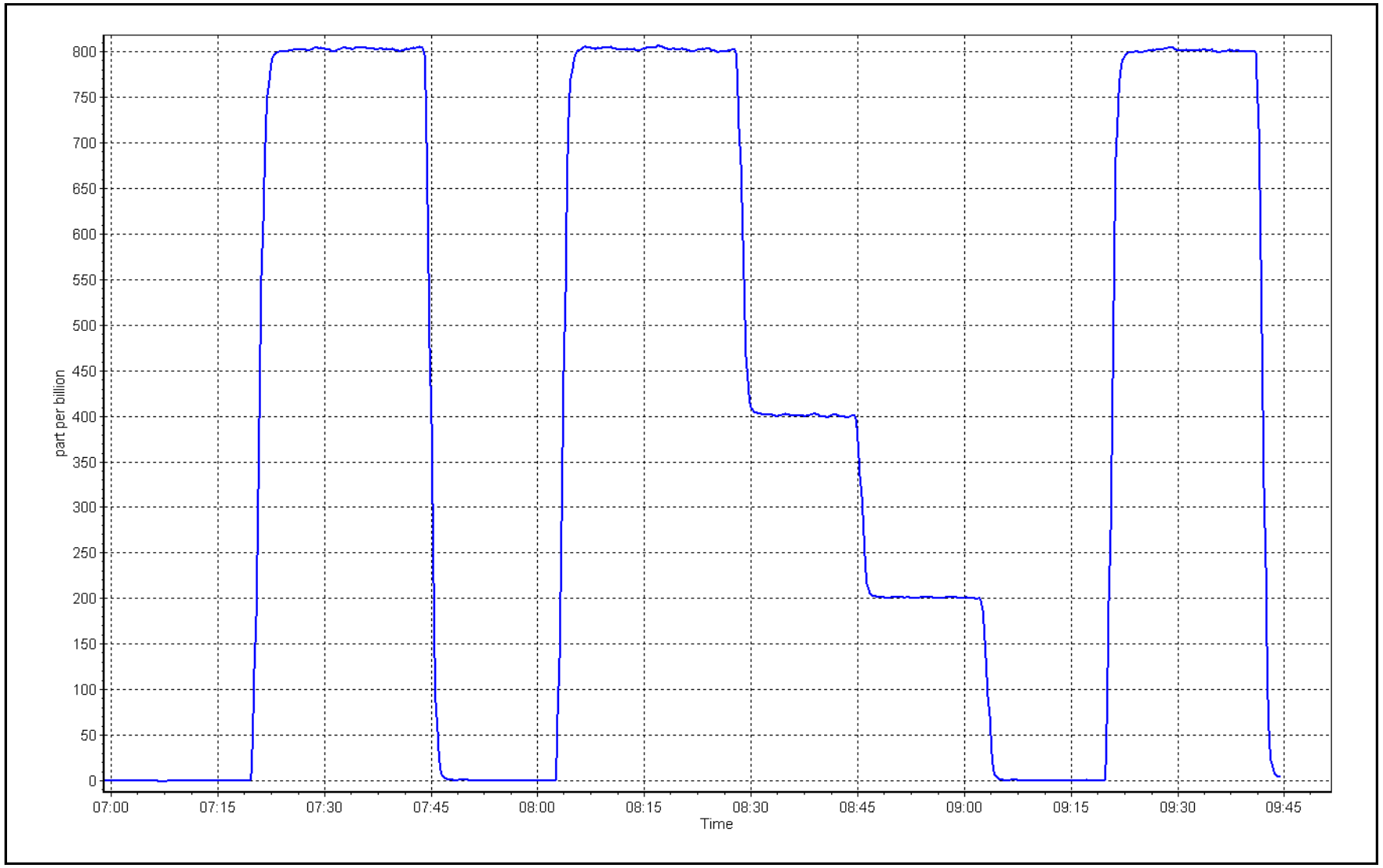
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.1	801.4	0.9984
400.1	400.2	0.9998
199.5	200.9	0.9932

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	1.000802	*0.90 - 1.10*
Intercept	0.484324	*+/-30*



SO2 Calibration Plot Date: March 19, 2026 Location: MacKay River



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	MacKay River	Station number:	AMS 20
Calibration Date:	March 2, 2026	Last Cal Date:	February 3, 2026
Start time (MST):	8:25	End time (MST):	12:55
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:	1.010509	0.992644	Backgd or Offset:	3.77	3.77
Calibration intercept:	0.056179	0.256477	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	0.0	----
As found High point	4919	80.6	80.0	80.2	0.997
As found Mid point	4960	40.3	40.0	40.1	0.998
As found Low point	4980	20.2	20.0	20.2	0.992
New cylinder response					

Baseline Corr As found:	80.2	Prev response:	80.86	*% change:	-0.8%
Baseline Corr 2nd AF pt:	40.1	AF Slope:	1.002508	AF Intercept:	0.036251
Baseline Corr 3rd AF pt:	20.2	AF Correlation:	0.999997	* = > +/-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	4919	80.6	80.0	79.6	1.005
Mid point	4960	40.3	40.0	40.0	1.000
Low point	4980	20.2	20.0	20.2	0.992
As left zero	5000	0.0	0.0	0.4	----
As left span	4919	80.6	80.0	79.2	1.010
SO2 Scrubber Check	4982	81.3	802.8	-0.1	----
Date of last scrubber change:		25-May-23		Ave Corr Factor	0.999
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

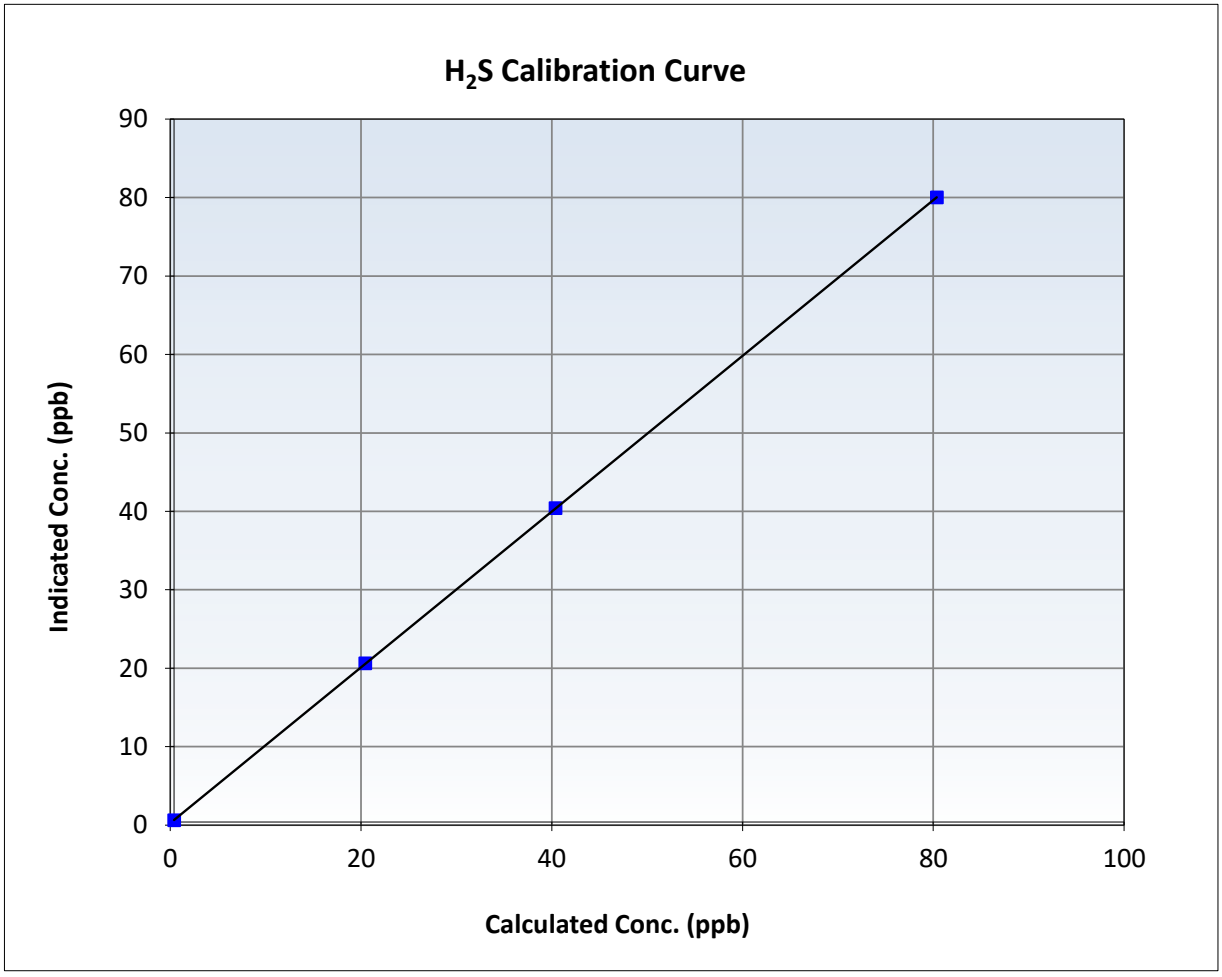
H_2S Calibration Summary

Station Information

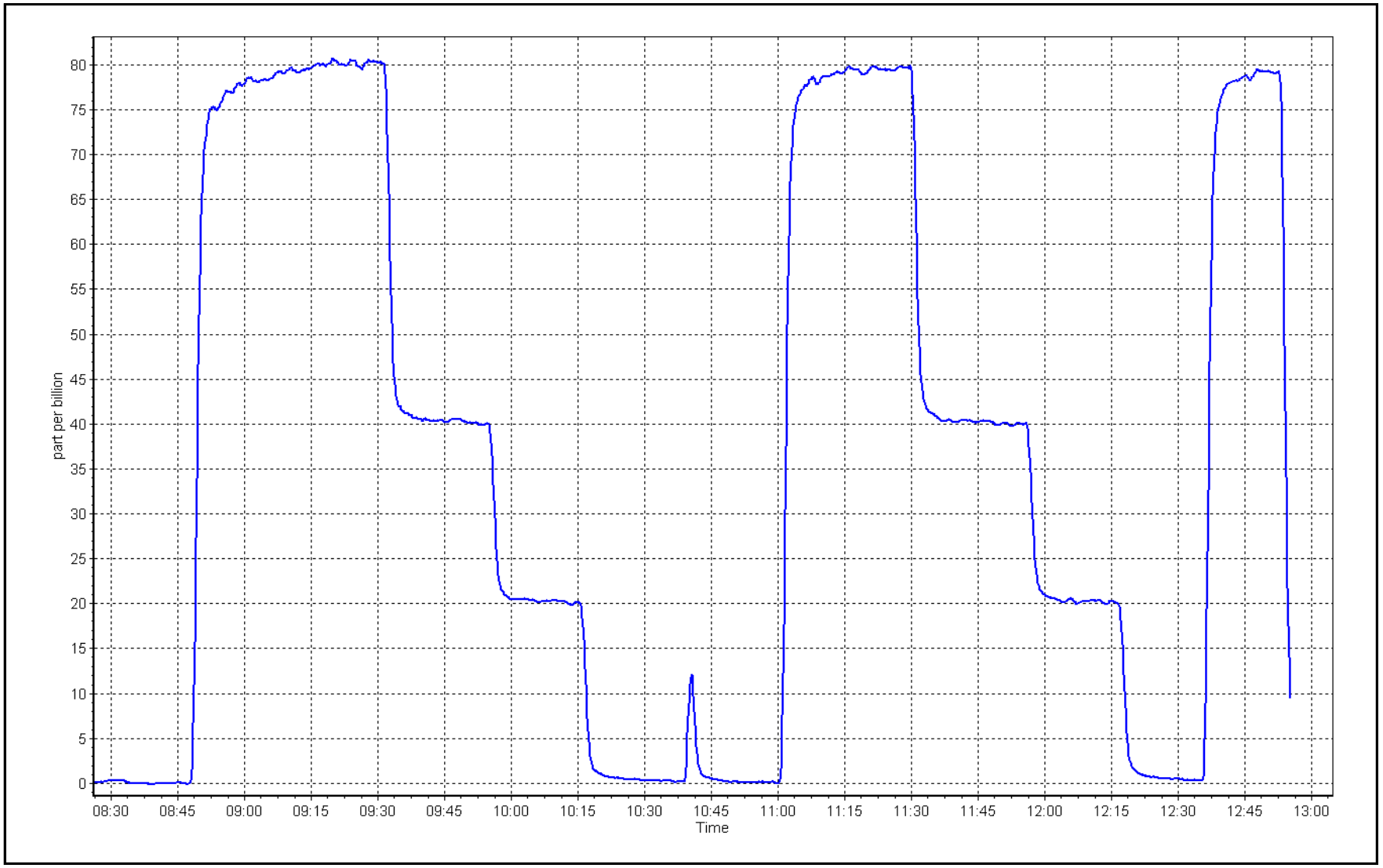
Calibration Date:	March 2, 2026	Previous Calibration:	February 3, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	8:25	End Time (MST):	12:55
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1236656117

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	79.6	1.0045	Slope	0.992644	*0.90 - 1.10*
40.0	40.0	1.0001			
20.0	20.2	0.9920	Intercept	0.256477	*+/-3*



H_2S Calibration Plot Date: March 2, 2026 Location: MacKay River



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	MacKay River	Station number:	AMS 20
Calibration Date:	March 19, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	7:03	End time (MST):	9:44
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:	0.999572	1.002348	Background:	2.930	2.880
Calibration intercept:	-0.050569	-0.029776	Coefficient:	4.896	4.818

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	0.04	----
As found High point	4919	81.4	17.46	17.81	0.982
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	17.78	Previous response	17.40	*% change	2.1%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	-0.02	----
High point	4919	81.4	17.46	17.49	0.999
Mid point	4959	40.7	8.73	8.70	1.004
Low point	4980	20.3	4.35	4.34	1.004
As left zero	5000	0.0	0.00	-0.04	----
As left span	4919	81.4	17.46	17.42	1.002
				Average Correction Factor	1.002

Notes: Span adjusted. No Maintenance done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

THC Calibration Summary

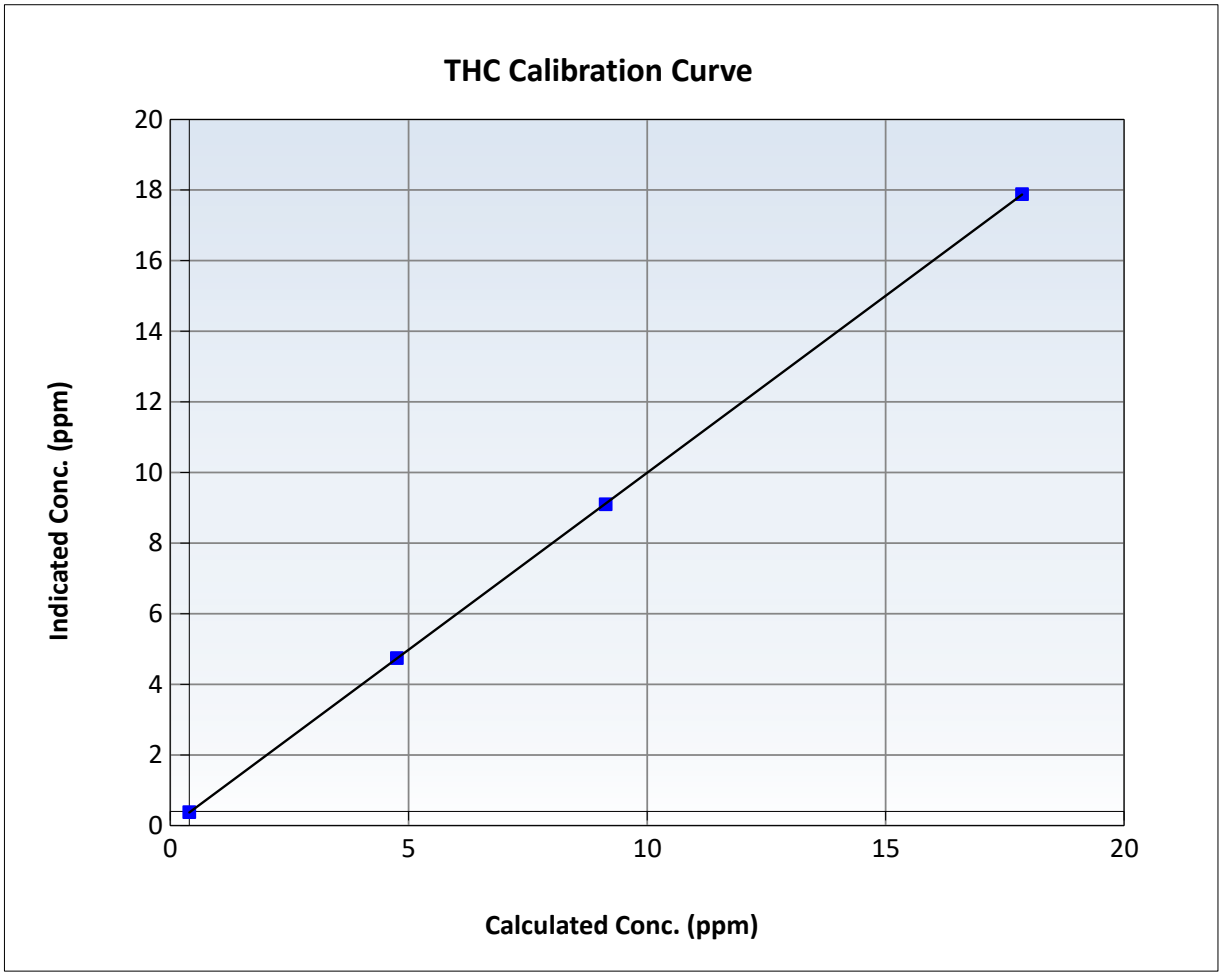
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 4, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:03	End Time (MST):	9:44
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1501663727

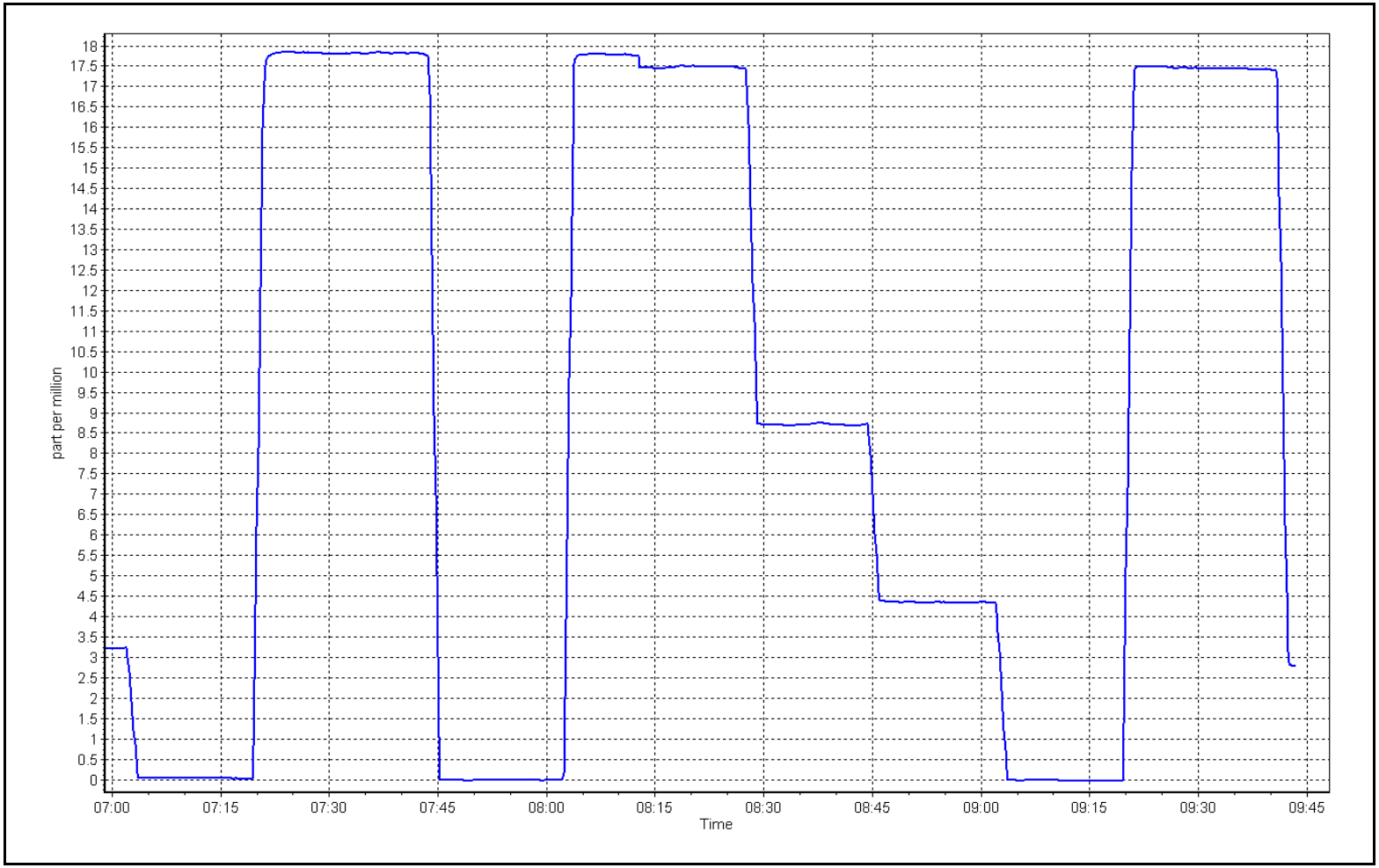
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	-0.02	----
17.46	17.49	0.9987
8.73	8.70	1.0039
4.35	4.34	1.0037

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999995	*≥0.995*
Slope	1.002348	*0.90 - 1.10*
Intercept	-0.029776	*+/-1.5*



THC Calibration Plot Date: March 19, 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:	March 11, 2026
Last Cal Date:	February 2, 2026
Start time (MST):	7:45
End time (MST):	11:22
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	0.0	-0.2	----	----
AF High point	4935	64.6	801.1	799.8	1.3	802.5	796.8	5.7	0.9980	1.0038
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 795.8 ppb	NO = 791.3 ppb
Baseline Corr 1st pt	NO_X = 802.7 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 = 0.9%

*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: 1505164379

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.043	1.043	NO bkgnd or offset:	2.9	2.9
NOX coeff or slope:	1.000	1.000	NOX bkgnd or offset:	3.2	3.2
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	148.3	148.3

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.992221	0.999627
NO_X Cal Offset:	0.934400	0.712726
NO Cal Slope:	0.990105	0.997981
NO Cal Offset:	-0.563823	-0.645620
NO_2 Cal Slope:	1.004468	1.005228
NO_2 Cal Offset:	0.387662	0.363067

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	4935	64.6	801.1	799.8	1.3	801.1	797.8	3.4	1.0000	1.0025
Mid point	4968	32.3	400.5	399.9	0.6	401.7	398.5	3.2	0.9970	1.0034
Low point	4984	16.2	200.9	200.5	0.3	201.9	198.3	3.6	0.9949	1.0113
As left zero	5000	0.0	0.0	0.0	0.0	0.1	0.2	-0.1	----	----
As left span	4935	64.6	801.1	418.6	382.5	797.9	418.6	379.3	1.0040	1.0000
								Average Correction Factor	0.9973	1.0057

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	793.3	419.8	374.8	376.7	0.9949	100.5%
Mid GPT point	793.3	603.8	190.8	192.9	0.9891	101.1%
Low GPT point	793.3	696.2	98.4	99.4	0.9899	101.0%
				Average Correction Factor	0.9913	100.9%

Notes: No Maintenance or adjustments done.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

NO_X Calibration Summary

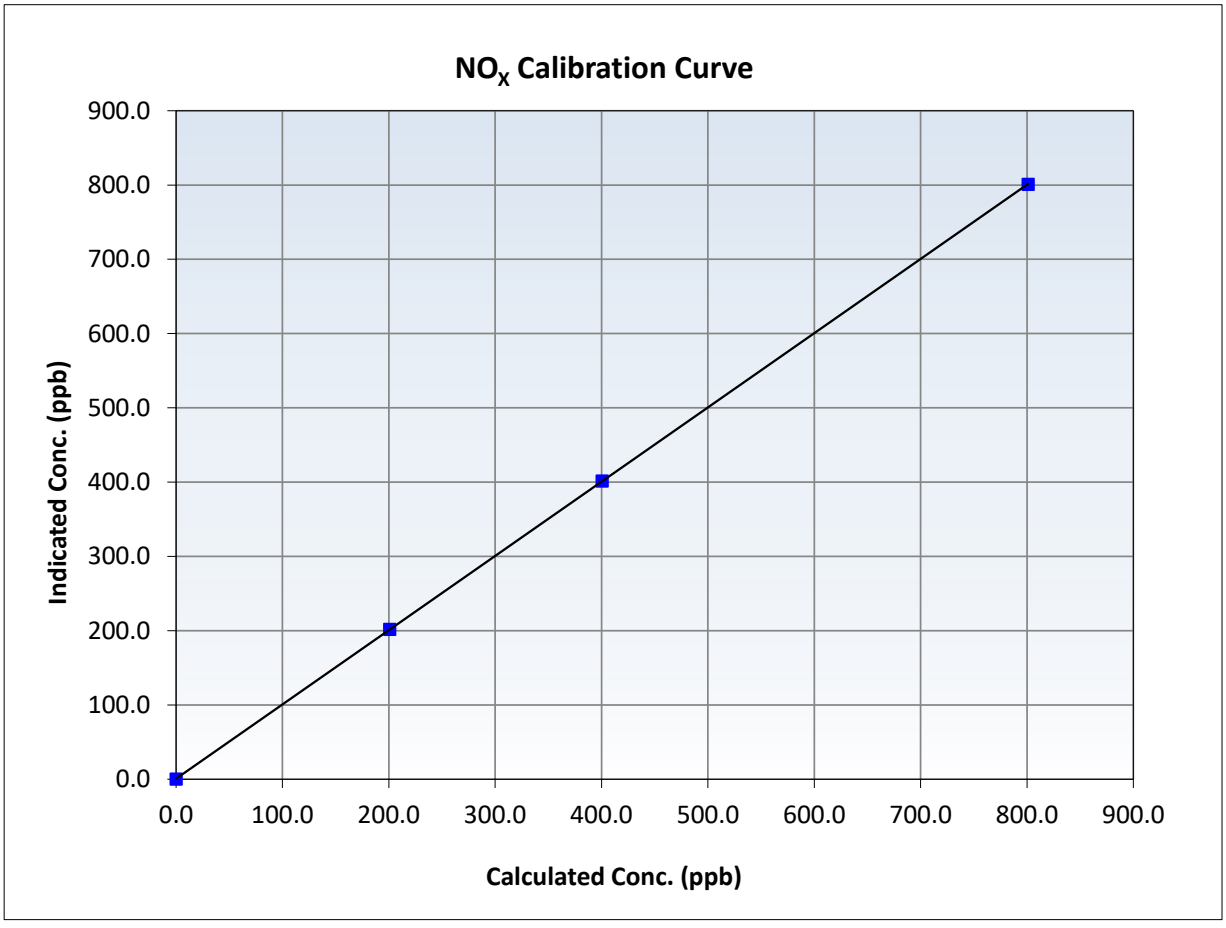
Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 2, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:45	End Time (MST):	11:22
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	0.1	----
801.1	801.1	1.0000
400.5	401.7	0.9970
200.9	201.9	0.9949

Statistical Evaluation		Limits
Correlation Coefficient	0.999997	≥0.995
Slope	0.999627	0.90 - 1.10
Intercept	0.712726	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

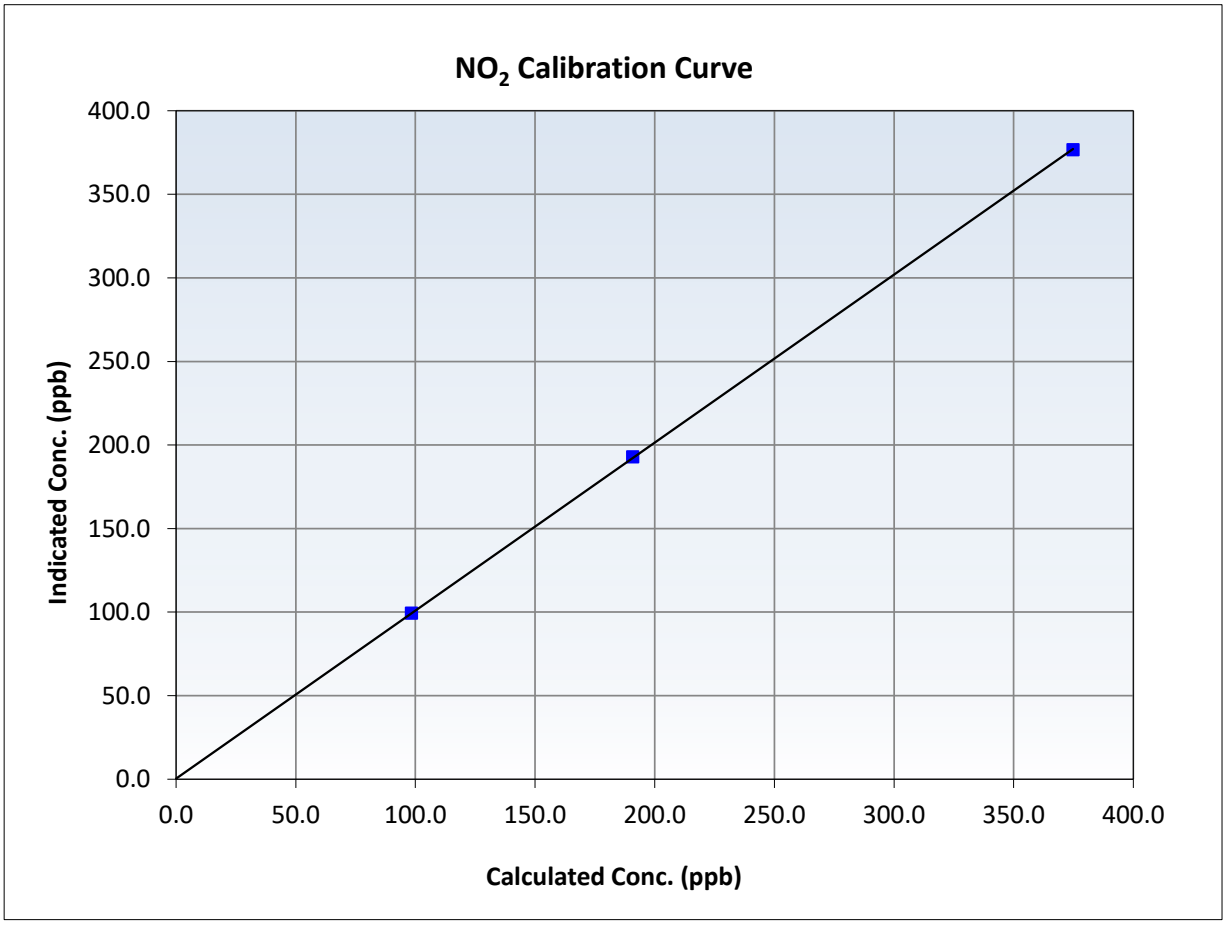
Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 2, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:45	End Time (MST):	11:22
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	-0.1	----
374.8	376.7	0.9949
190.8	192.9	0.9891
98.4	99.4	0.9899

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999988	*≥0.995*
Slope	1.005228	*0.90 - 1.10*
Intercept	0.363067	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

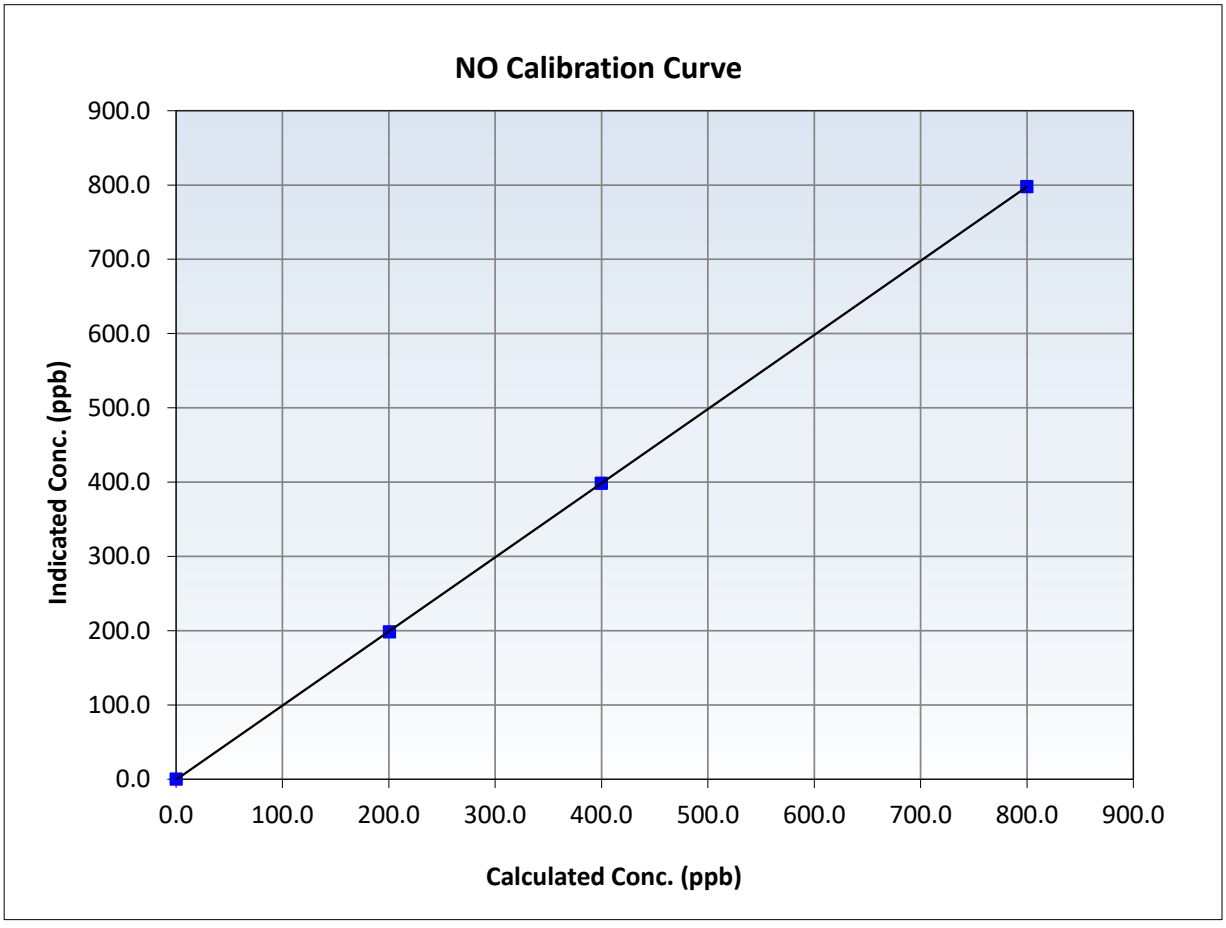
Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 2, 2026
Station Name:	MacKay River	Station Number:	AMS 20
Start Time (MST):	7:45	End Time (MST):	11:22
Analyzer make:	Thermo 42i	6:50:00 AM	1505164379

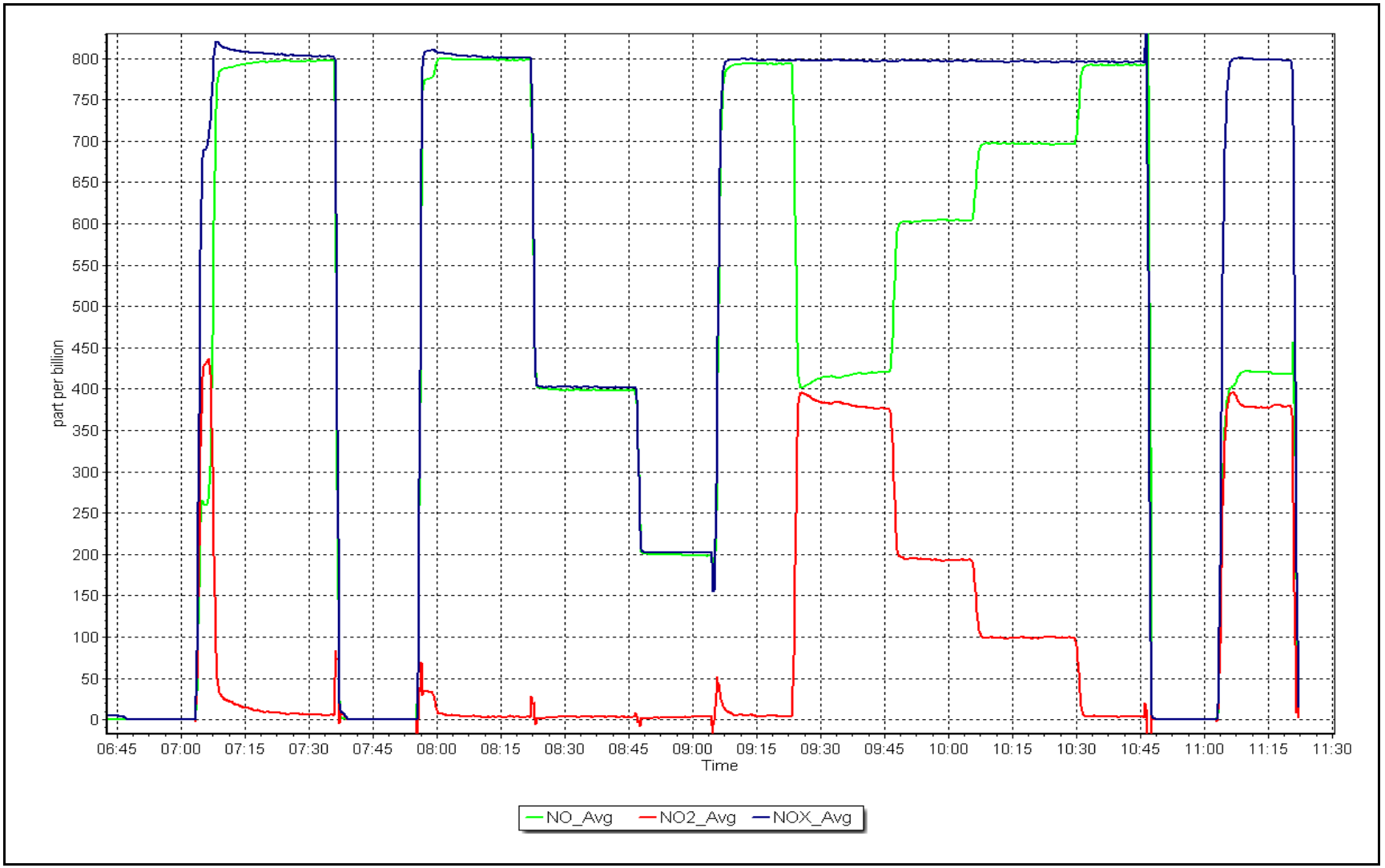
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
799.8	797.8	1.0025
399.9	398.5	1.0034
200.5	198.3	1.0113

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999994	*≥0.995*
Slope	0.997981	*0.90 - 1.10*
Intercept	-0.645620	*+/-20*



NO_X Calibration Plot Date: March 11, 2026 Location: MacKay River



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS21
CONKLIN
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	March 9, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	10:45	End time (MST):	14:12
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:	0.994478	0.999933	Backgd or Offset:	31.3	32.0
Calibration intercept:	2.158324	2.297220	Coeff or Slope:	0.905	0.913

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	793.9	1.008
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	794.1	Previous response	798.1	*% 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	4921	79.5	800.3	802.0	0.998
Mid point	4960	39.8	400.7	402.2	0.996
Low point	4980	19.9	200.4	206.5	0.970
As left zero	5000	0.0	0.0	-0.4	----
As left span	4921	79.5	800.3	804.0	0.995
				Average Correction Factor:	0.988

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

SO_2 Calibration Summary

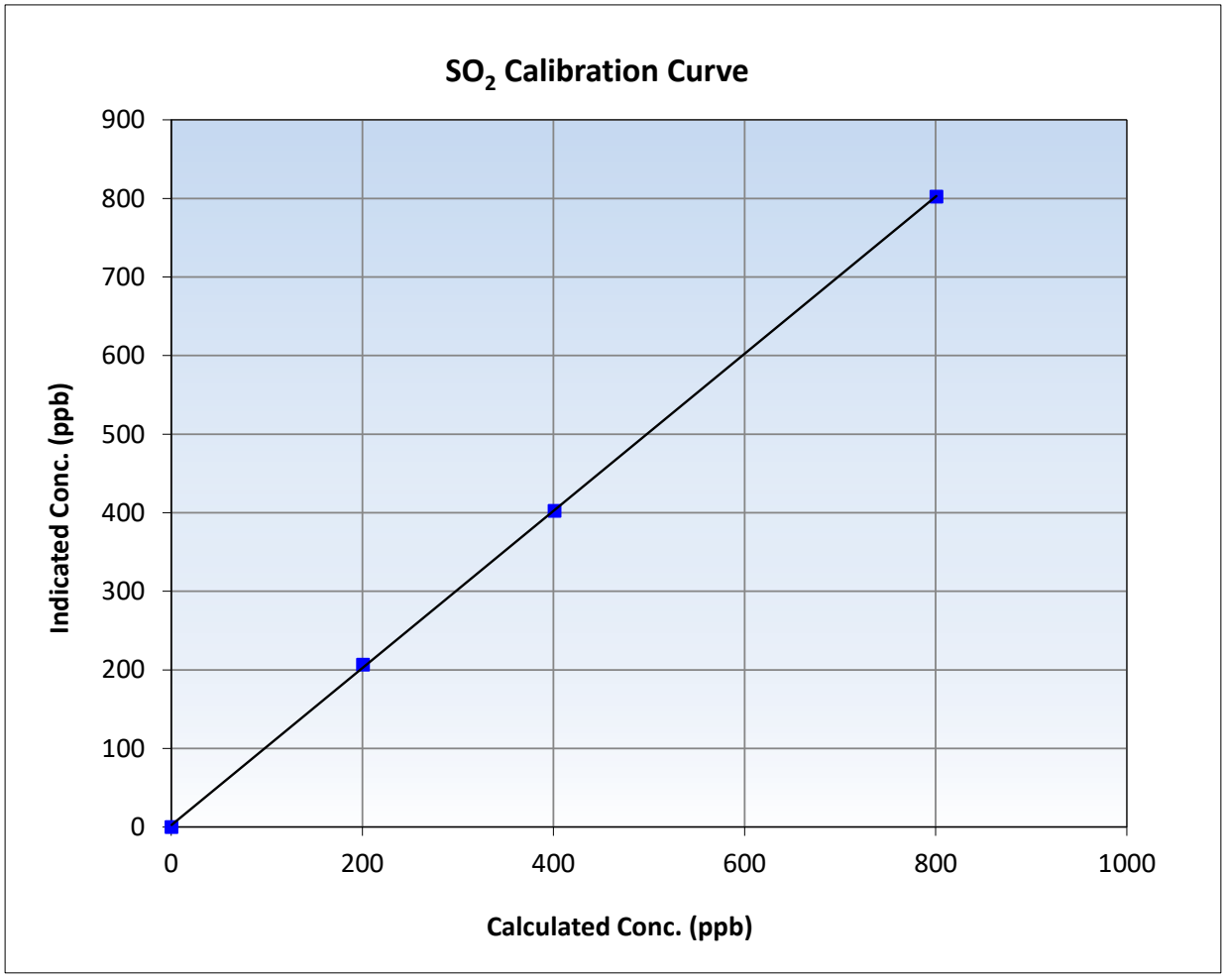
Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 10, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	14:12
Analyzer make:	Thermo 43i	Analyzer serial #:	1428701363

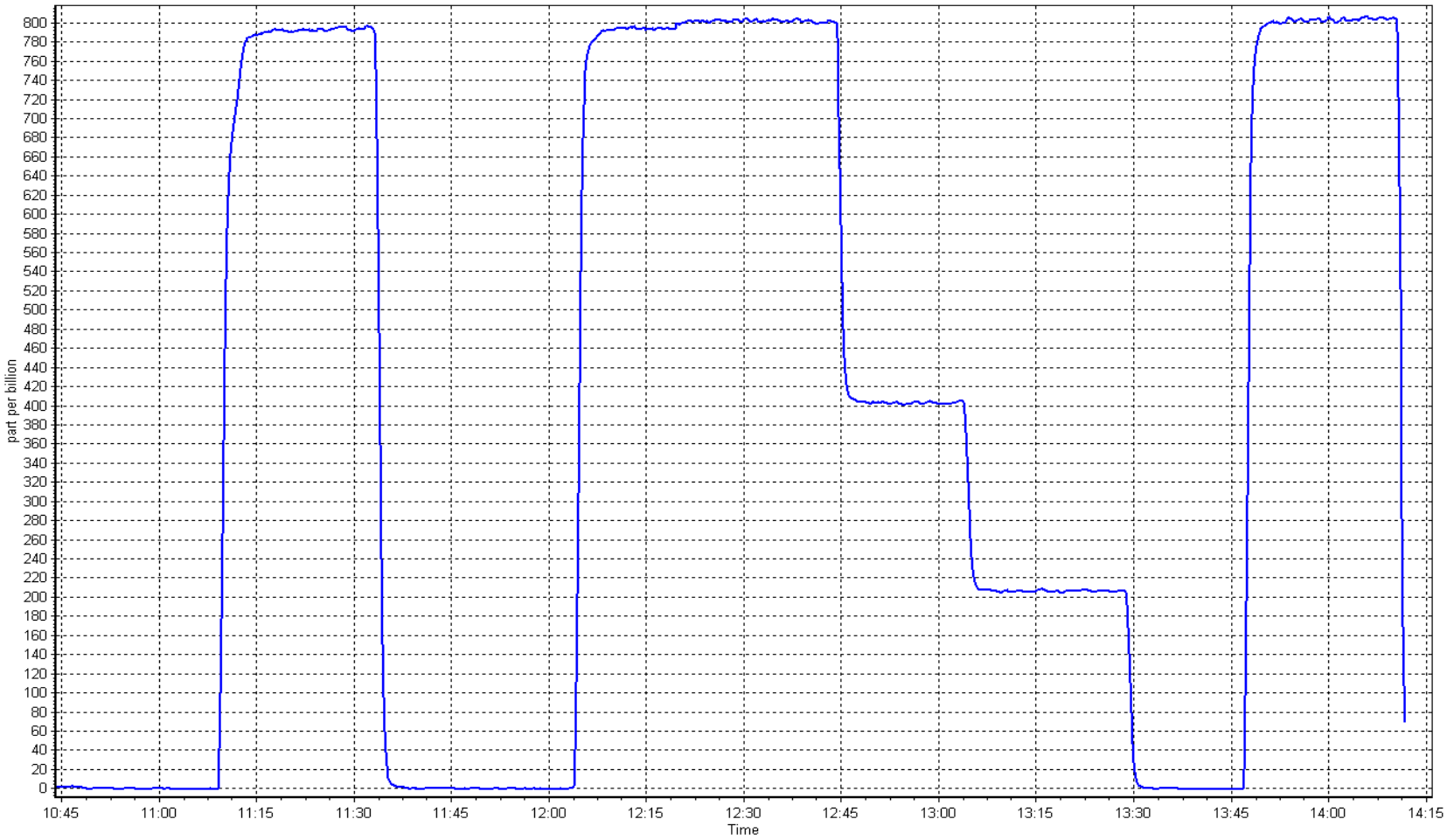
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
800.3	802.0	0.9979
400.7	402.2	0.9963
200.4	206.5	0.9703

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999937	*≥0.995*
Slope	0.999933	*0.90 - 1.10*
Intercept	2.297220	*+/-30*



SO2 Calibration Plot Date: March 9, 2026 Location: Conklin



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	March 11, 2026	Last Cal Date:	February 26, 2026
Start time (MST):	11:35	End time (MST):	16:00
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:	N/A
Removed Gas Cyl #:	N/A		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:	1.004159	1.004872	Backgd or Offset:	3.22	3.17
Calibration intercept:	0.140690	0.040726	Coeff or Slope:	1.471	1.450

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	4921	79.1	80.0	81.1	0.987
As found Mid point	4961	39.5	40.0	40.8	0.980
As found Low point	4980	19.7	19.9	20.7	0.963
New cylinder response					

Baseline Corr As found:	81.1	Prev response:	80.52	*% change:	0.7%
Baseline Corr 2nd AF pt:	40.8	AF Slope:	1.011432	AF Intercept:	0.261207
Baseline Corr 3rd AF pt:	20.7	AF Correlation:	0.999952	* = > +/-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	79.1	80.0	80.4	0.996
Mid point	4961	39.5	40.0	40.4	0.989
Low point	4980	19.7	19.9	20.0	0.997
As left zero	5000	0.0	0.0	0.1	----
As left span	4921	79.1	80.0	80.6	0.993
SO2 Scrubber Check	4921	79.5	794.9	0.2	----

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. Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

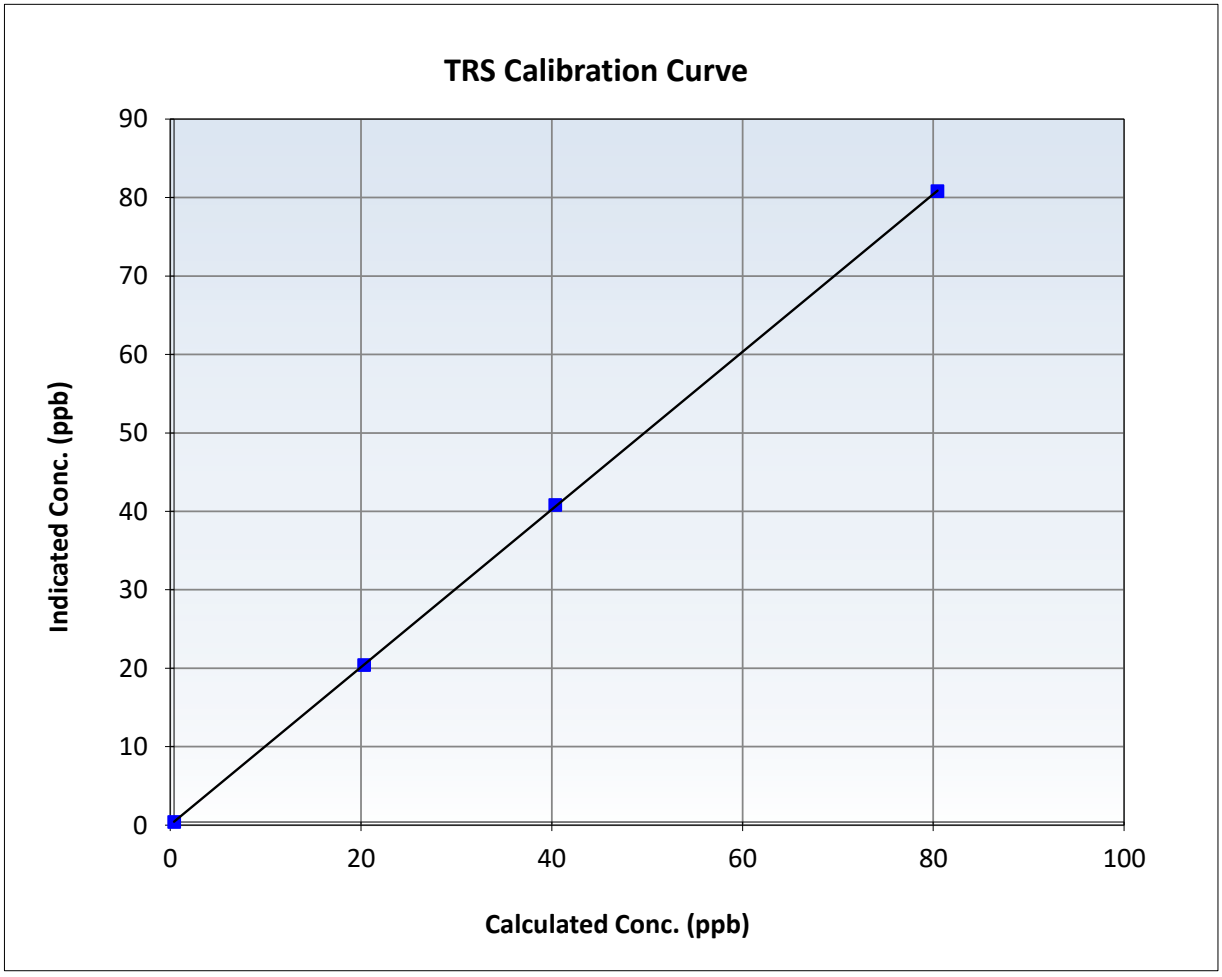
TRS Calibration Summary

Station Information

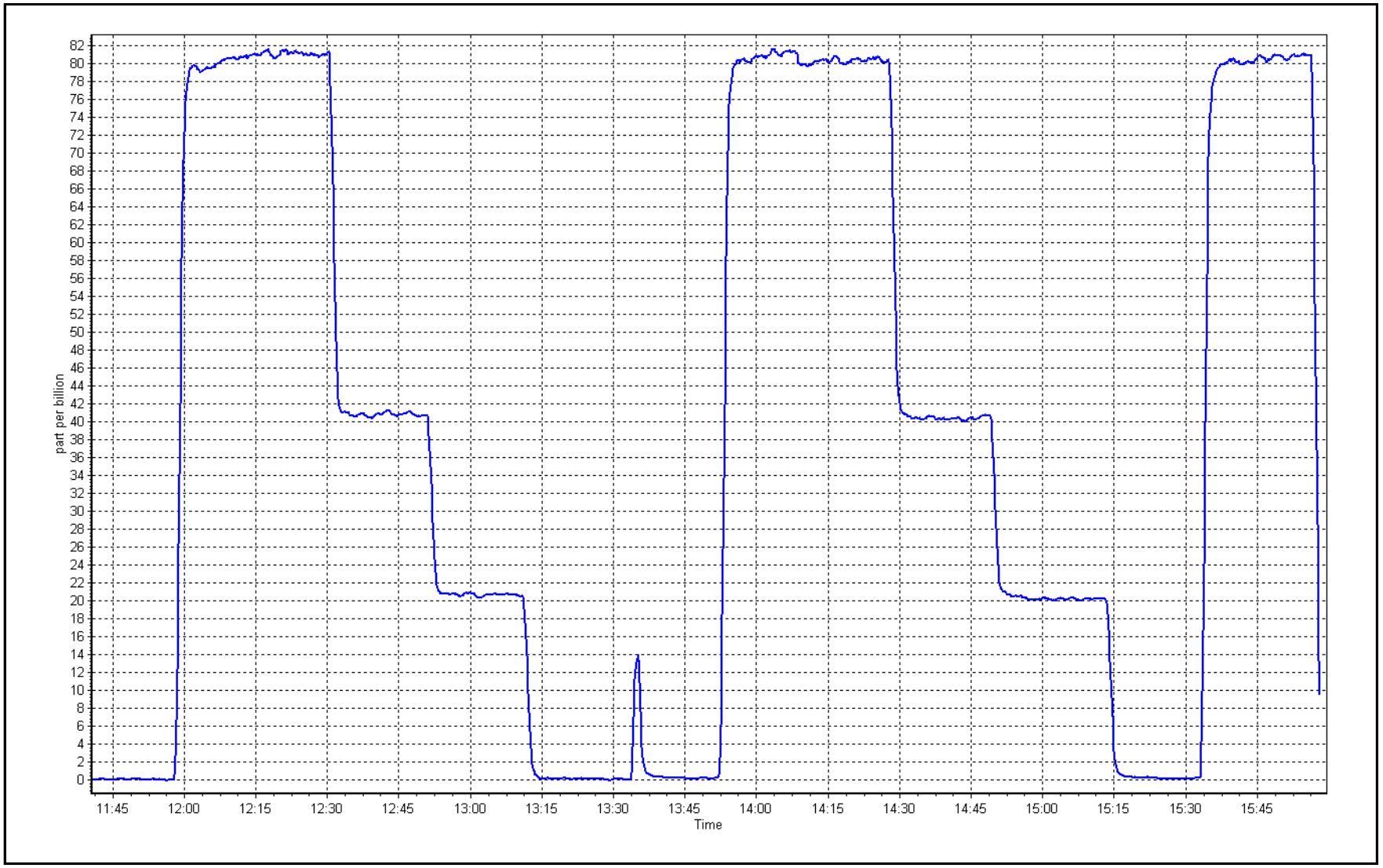
Calibration Date:	March 11, 2026	Previous Calibration:	February 26, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:35	End Time (MST):	16:00
Analyzer make:	Thermo 43i-QTL	Analyzer serial #:	12228021058

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999986	*≥0.995*
80.0	80.4	0.9956	Slope	1.004872	*0.90 - 1.10*
40.0	40.4	0.9894			
19.9	20.0	0.9969	Intercept	0.040726	*+/-3*



TRS Calibration Plot Date: March 11, 2026 Location: Conklin



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	March 9, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	10:45	End time (MST):	14:12
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC340840	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
C3H8 Cal Gas Conc.	205.0 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
Removed C3H8 Conc.	205.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700P	Serial Number:	2656
Zero Air Gen model:	Teledyne API T701H	Serial Number:	355

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.20E-04	2.27E-04	NMHC SP Ratio:	4.89E-05	4.67E-05
CH4 Retention time:	15.0	15.0	NMHC Peak Area:	183348	191901
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	15.66	1.084
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	15.66	Prev response	16.99	*% change	-8.5%
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	4921	79.5	16.97	16.84	1.008
Mid point	4960	39.8	8.50	8.48	1.002
Low point	4980	19.9	4.25	4.35	0.976
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	16.97	16.89	1.005
				Average Correction Factor	0.995

Notes: Changed sample inlet filter after as founds. Adjusted window timings 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	4921	79.5	8.96	7.90	1.134
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.90	Prev response	8.97	*% change	-13.5%
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	4921	79.5	8.96	8.86	1.012
Mid point	4960	39.8	4.49	4.48	1.001
Low point	4980	19.9	2.24	2.31	0.971
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.96	8.92	1.005
				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	4921	79.5	8.01	7.76	1.032
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.76	Prev response	8.02	*% change	-3.3%
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	4921	79.5	8.01	7.98	1.004
Mid point	4960	39.8	4.01	4.00	1.002
Low point	4980	19.9	2.01	2.04	0.982
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.01	7.98	1.004
				Average Correction Factor	0.996

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.998518	0.989759
THC Cal Offset:	0.047679	0.064511
CH4 Cal Slope:	0.999736	0.994486
CH4 Cal Offset:	0.014376	0.018784
NMHC Cal Slope:	0.997187	0.985585
NMHC Cal Offset:	0.033503	0.046526

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

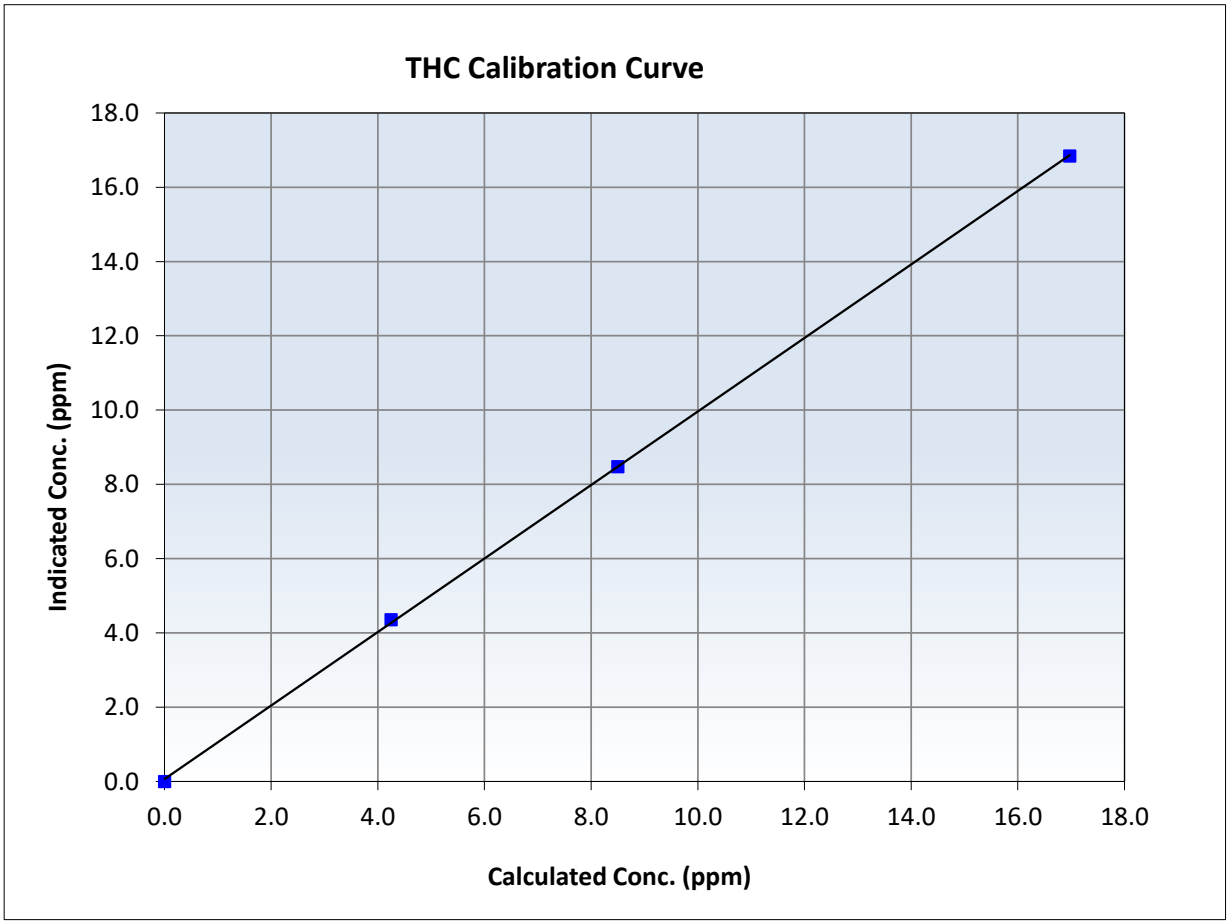
THC Calibration Summary

Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 10, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	14:12
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

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*
16.97	16.84	1.0079	Slope	0.989759	*0.90 - 1.10*
8.50	8.48	1.0021			
4.25	4.35	0.9761	Intercept	0.064511	*+/-0.5*



Wood Buffalo Environmental Association

CH_4 Calibration Summary

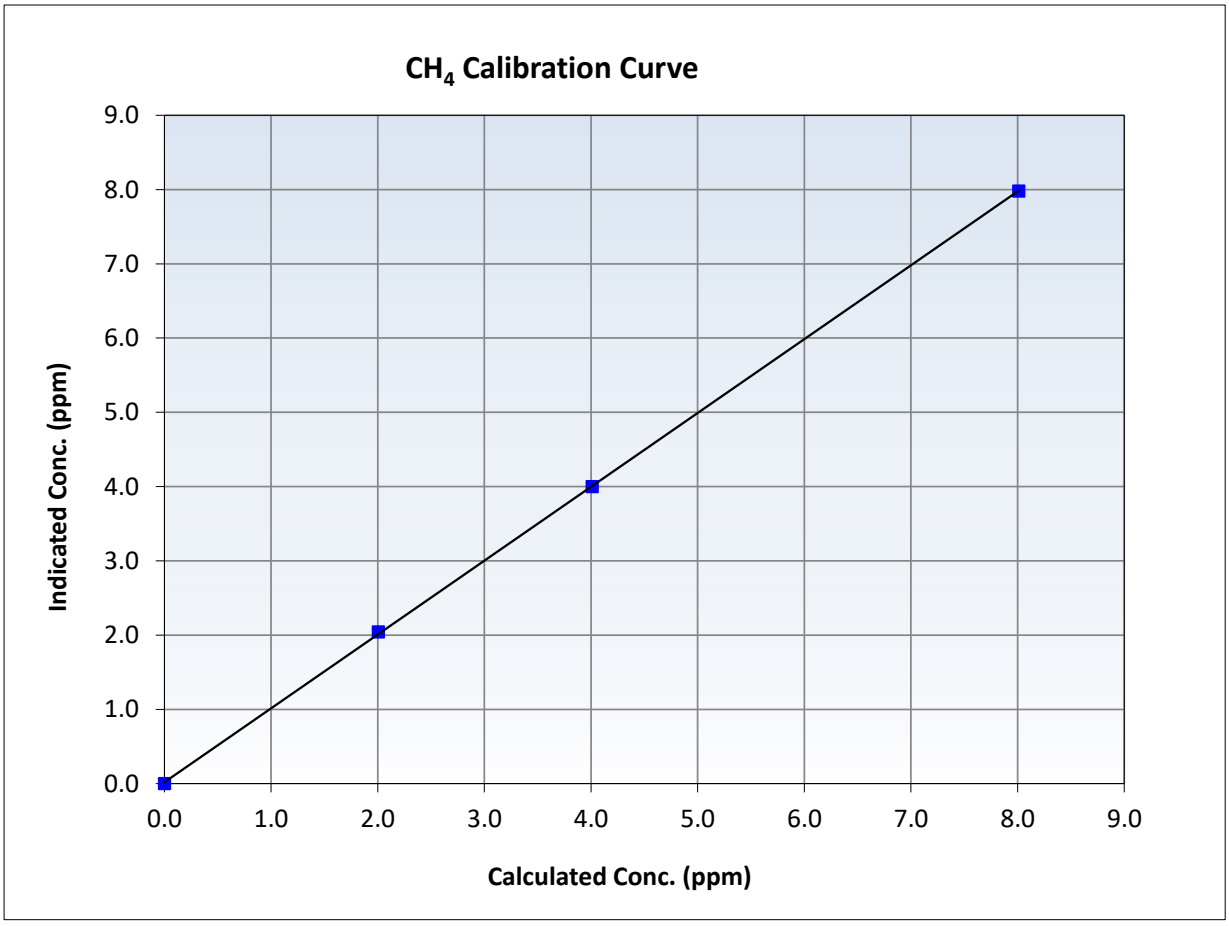
Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 10, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	14:12
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.01	7.98	1.0037
4.01	4.00	1.0024
2.01	2.04	0.9820

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999964	*≥0.995*
Slope	0.994486	*0.90 - 1.10*
Intercept	0.018784	*+/-0.5*



Wood Buffalo Environmental Association

NMHC Calibration Summary

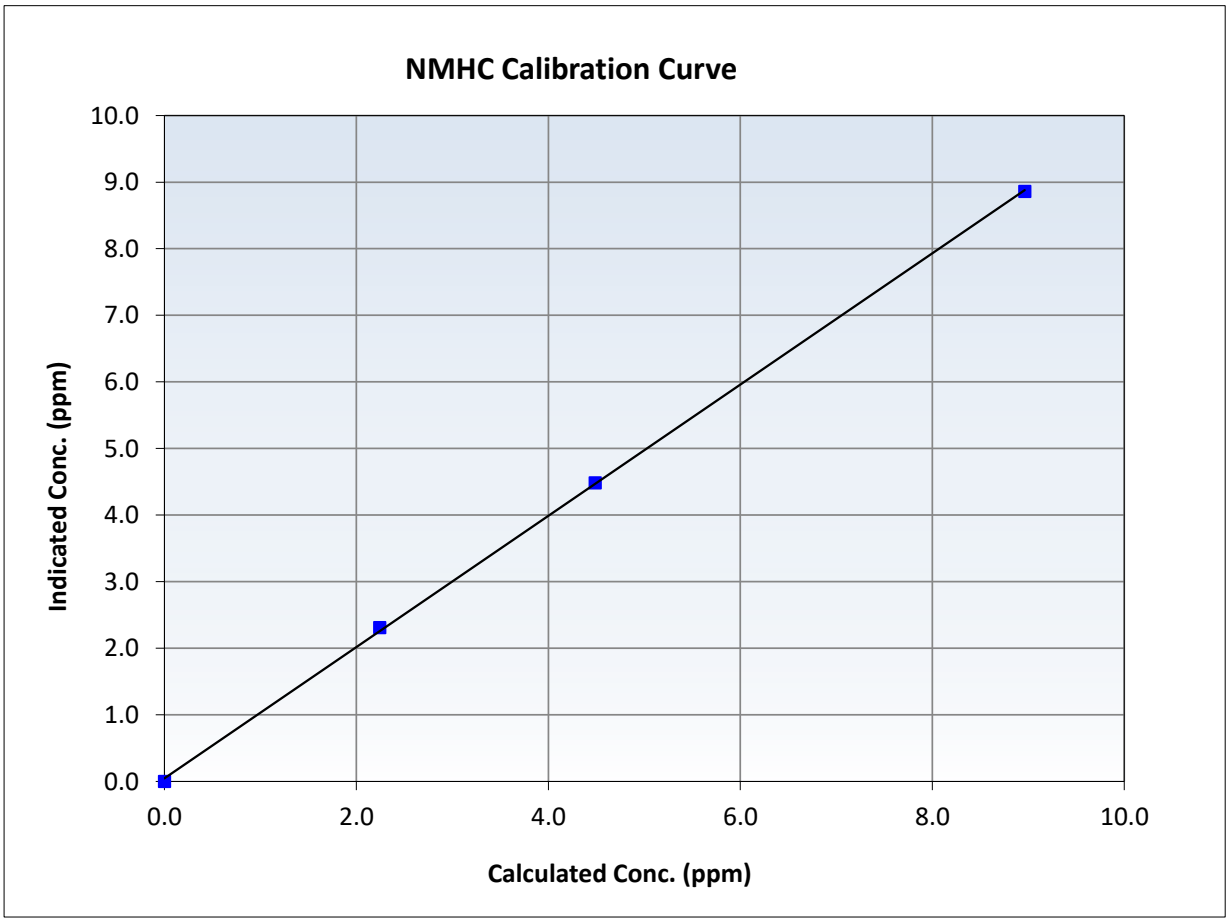
Station Information

Calibration Date:	March 9, 2026	Previous Calibration:	February 10, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	10:45	End Time (MST):	14:12
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

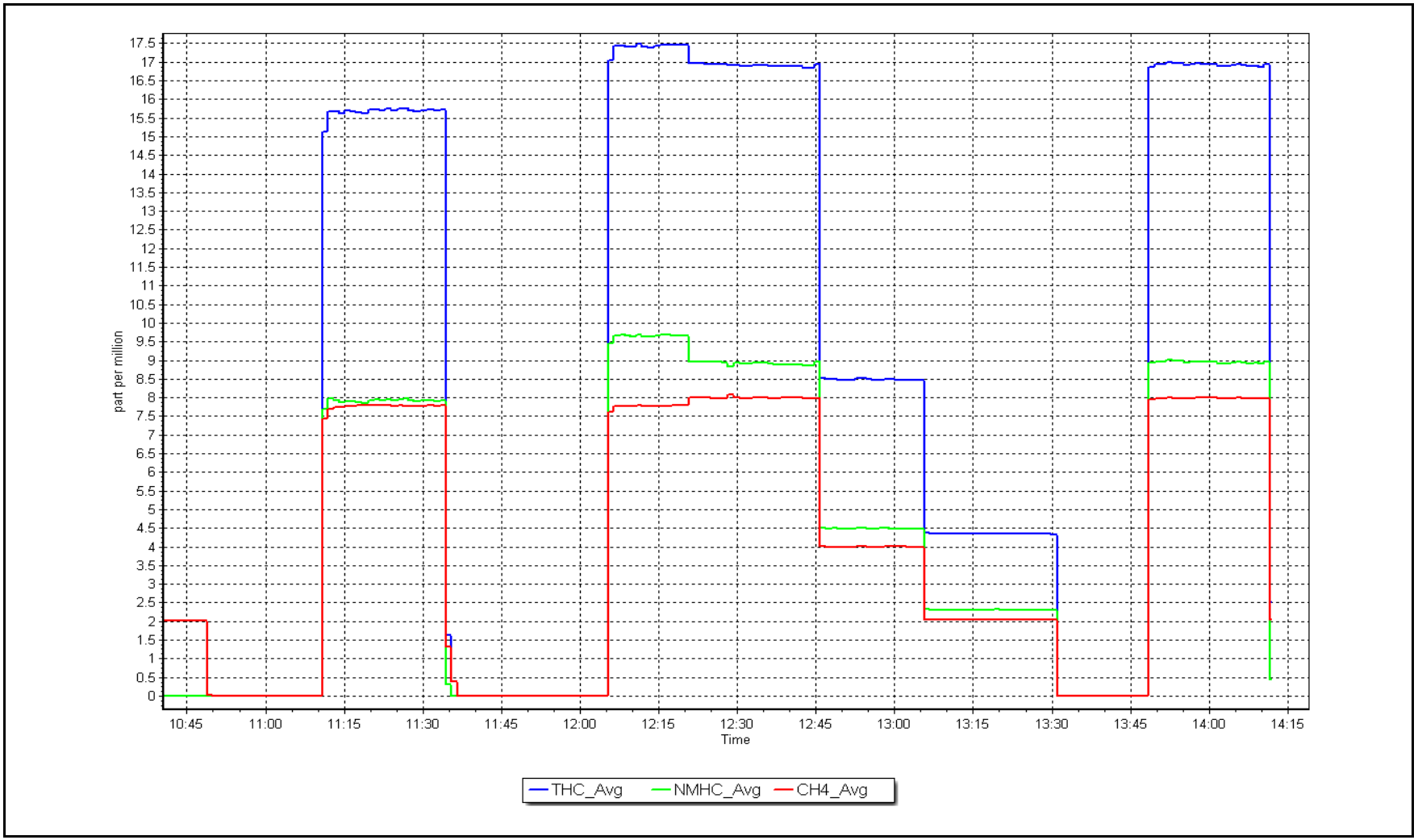
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.96	8.86	1.0116
4.49	4.48	1.0010
2.24	2.31	0.9709

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999870	*≥0.995*
Slope	0.985585	*0.90 - 1.10*
Intercept	0.046526	*+/-0.5*



NMHC Calibration Plot Date: March 9, 2026 Location: Conklin



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	March 26, 2026	Last Cal Date:	March 9, 2026
Start time (MST):	11:19	End time (MST):	15:32
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC340840	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
C3H8 Cal Gas Conc.	205.0 ppm		
Removed Gas Cert:	NA	Removed Gas Expiry:	NA
Removed CH4 Conc.	503.8 ppm	CH4 Equiv Conc.	1067.6 ppm
Removed C3H8 Conc.	205.0 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	Teledyne API T700P	Serial Number:	2656
Zero Air Gen model:	Teledyne API T701H	Serial Number:	355

Analyzer Information

Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	2.27E-04	2.27E-04	NMHC SP Ratio:	4.67E-05	4.67E-05
CH4 Retention time:	15.0	15.0	NMHC Peak Area:	191901	191901
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	16.29	1.042
As found Mid point	4960	39.8	8.50	8.15	1.042
As found Low point	4980	19.9	4.25	4.15	1.023
New cylinder response					
Baseline Corr AF:	16.29	Prev response	16.86	*% change	-3.5%
Baseline Corr 2nd AF:	8.15	AF Slope:	0.958133	AF Intercept:	0.029482
Baseline Corr 3rd AF:	4.15	AF Correlation:	0.999972	* = > +/-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	8.56	0.993
Low point	4980	19.9	4.25	4.38	0.971
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	16.97	16.93	1.003
				Average Correction Factor	0.988

Notes: Pump changed out after MPAV. 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	4921	79.5	8.96	8.23	1.089
As found Mid point	4960	39.8	4.49	4.13	1.086
As found Low point	4980	19.9	2.24	2.10	1.067
New cylinder response					
Baseline Corr AF:	8.23	Prev response	8.88	*% change	-7.9%
Baseline Corr 2nd AF:	4.13	AF Slope:	0.916913	AF Intercept:	0.018712
Baseline Corr 3rd AF:	2.10	AF Correlation:	0.999971	* = > +/-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	8.97	1.000
Mid point	4960	39.8	4.49	4.56	0.985
Low point	4980	19.9	2.24	2.34	0.960
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.96	8.94	1.002
				Average Correction Factor	0.981

CH4 As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4921	79.5	8.01	8.06	0.994
As found Mid point	4960	39.8	4.01	4.02	0.998
As found Low point	4980	19.9	2.01	2.05	0.977
New cylinder response					
Baseline Corr AF:	8.06	Prev response	7.98	*% change	0.9%
Baseline Corr 2nd AF:	4.02	AF Slope:	1.004473	AF Intercept:	0.010770
Baseline Corr 3rd AF:	2.05	AF Correlation:	0.999965	* = > +/-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	8.00	1.001
Mid point	4960	39.8	4.01	4.00	1.003
Low point	4980	19.9	2.01	2.04	0.984
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.5	8.01	7.99	1.003
				Average Correction Factor	0.996

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.989759	0.997611
THC Cal Offset:	0.064511	0.063669
CH4 Cal Slope:	0.994486	0.997553
CH4 Cal Offset:	0.018784	0.011783
NMHC Cal Slope:	0.985585	0.997790
NMHC Cal Offset:	0.046526	0.050888

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

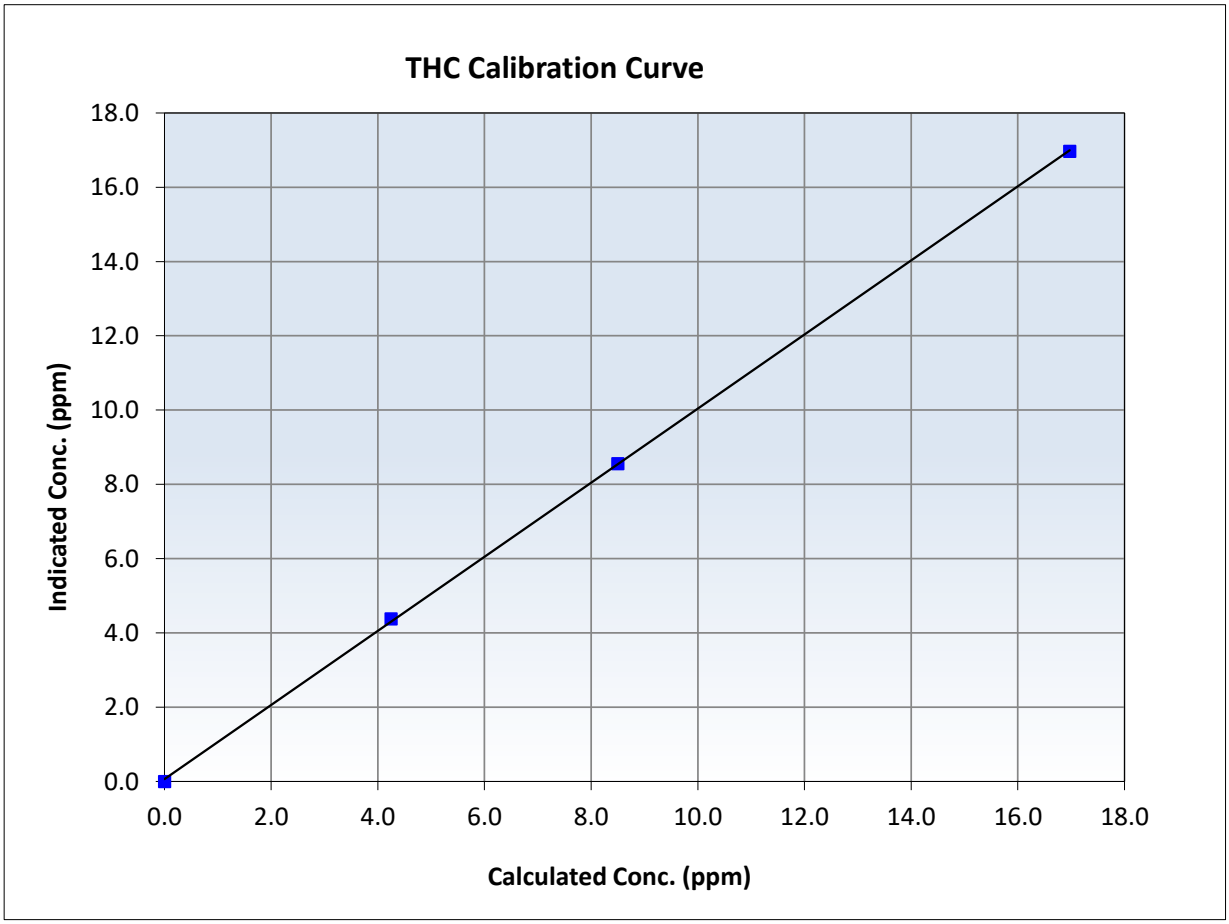
THC Calibration Summary

Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	March 9, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:19	End Time (MST):	15:32
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999934	≥0.995
16.97	16.97	1.0003	Slope	0.997611	0.90 - 1.10
8.50	8.56	0.9928	Intercept	0.063669	+/-0.5
4.25	4.38	0.9712			



Wood Buffalo Environmental Association

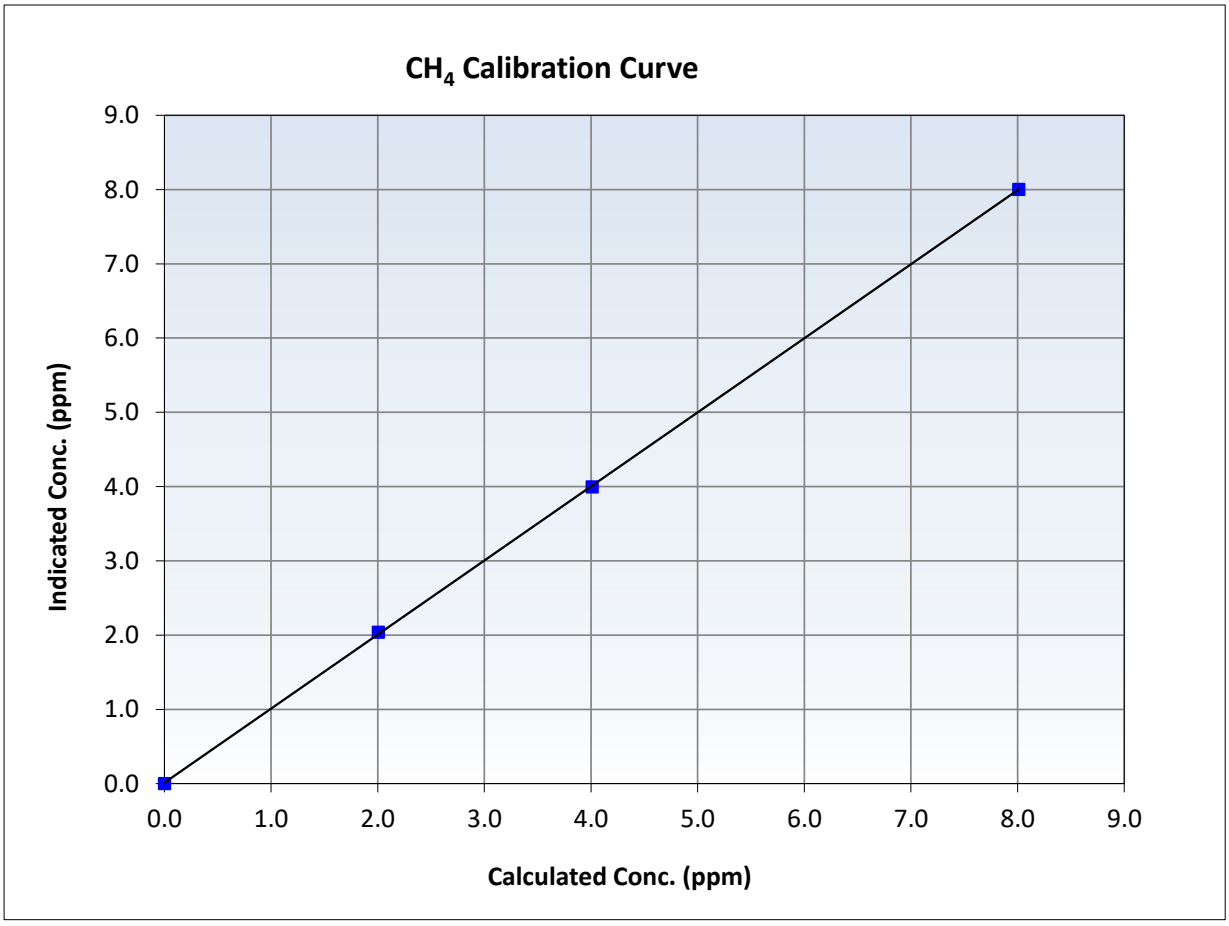
CH_4 Calibration Summary

Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	March 9, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:19	End Time (MST):	15:32
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

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
8.01	8.00	1.0008	Slope	0.997553	0.90 - 1.10
4.01	4.00	1.0034			
2.01	2.04	0.9839	Intercept	0.011783	+/-0.5



Wood Buffalo Environmental Association

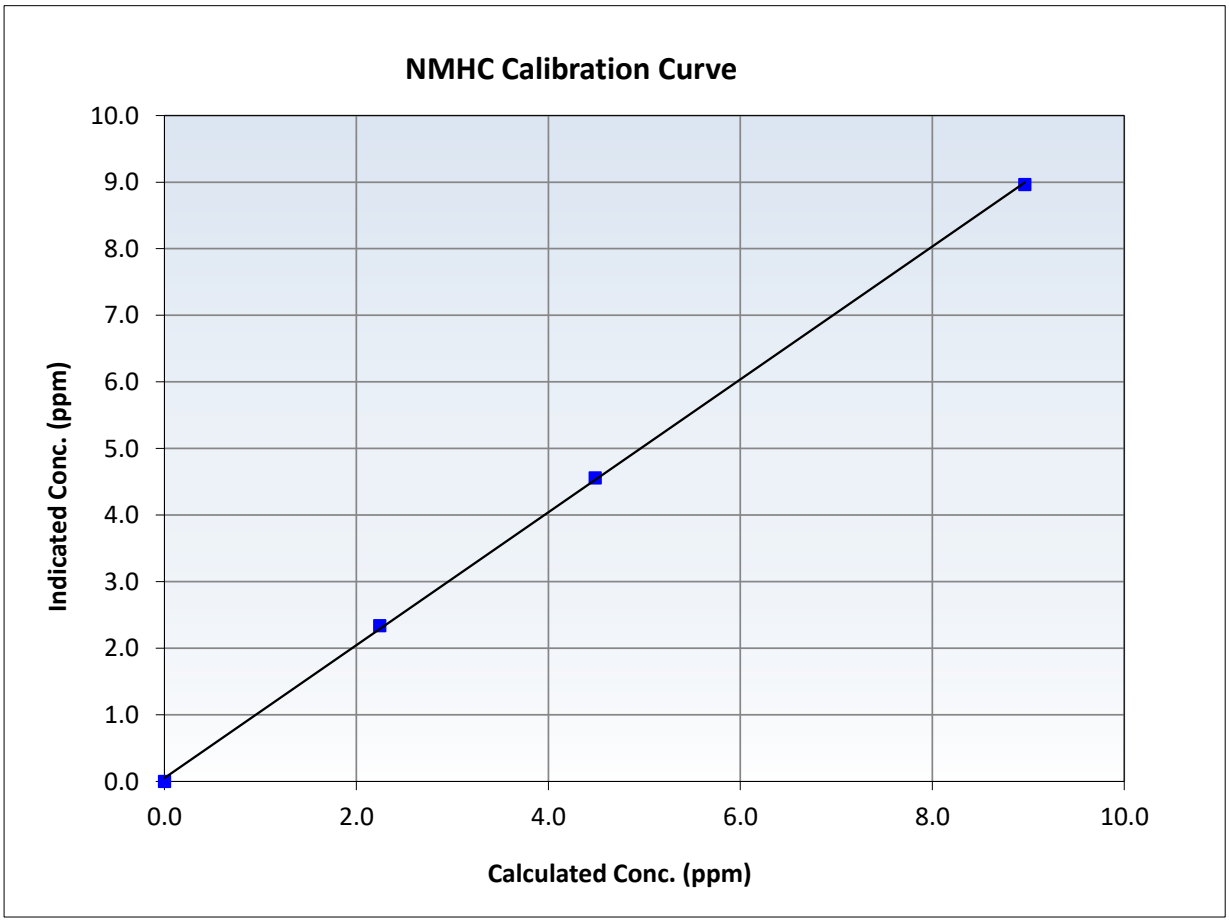
NMHC Calibration Summary

Station Information

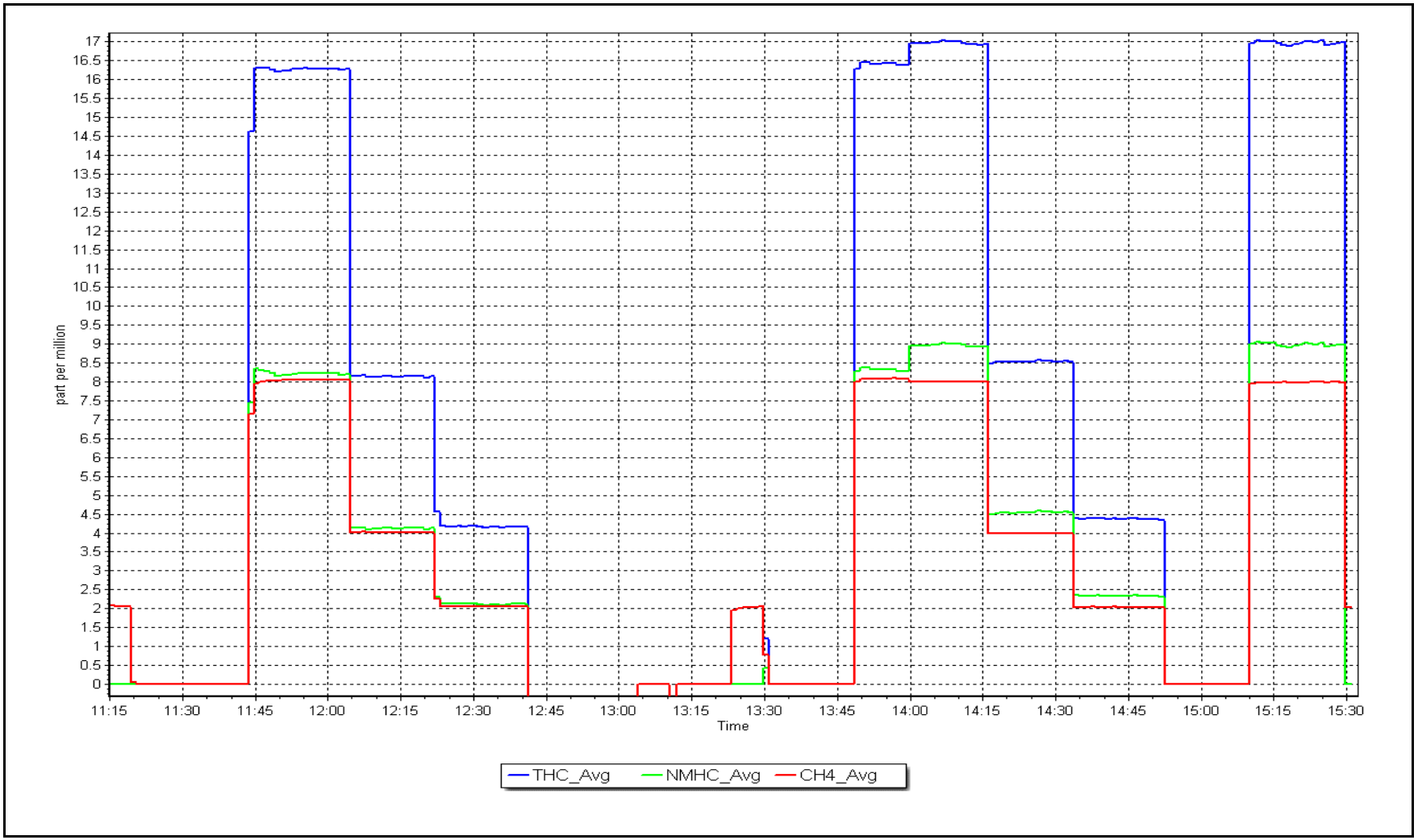
Calibration Date:	March 26, 2026	Previous Calibration:	March 9, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	11:19	End Time (MST):	15:32
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320039

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999851	≥0.995
8.96	8.97	0.9995	Slope	0.997790	0.90 - 1.10
4.49	4.56	0.9846	Intercept	0.050888	+/-0.5
2.24	2.34	0.9597			



NMHC Calibration Plot Date: March 26, 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:	March 16, 2026
Last Cal Date:	February 25, 2026
Start time (MST):	8:56
End time (MST):	13:58
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	0.1	0.1	0.0	----	----
AF High point	4918	82.0	802.0	800.3	1.6	805.0	801.3	3.7	0.9963	0.9989
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 800.2 ppb	NO = 797.1 ppb
Baseline Corr 1st pt	NO_X = 804.9 ppb	NO = 801.2 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

*Percent Change NO_X = 0.6%

*Percent Change NO = 0.5%

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:	0.617	0.617	NO bkgnd or offset:	2.9	2.9
NOX coeff or slope:	0.996	0.996	NOX bkgnd or offset:	3.0	3.0
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	160.6	161.5

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.993856	0.997676
NO_X Cal Offset:	3.128044	3.288068
NO Cal Slope:	0.993622	0.998606
NO Cal Offset:	1.847999	2.028039
NO_2 Cal Slope:	1.001661	1.003884
NO_2 Cal Offset:	-0.753732	-0.376785

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	0.3	0.1	----	----
High point	4918	82.0	802.0	800.3	1.6	802.2	800.7	1.5	0.9997	0.9995
Mid point	4959	41.0	401.0	400.2	0.8	404.0	401.5	2.5	0.9925	0.9967
Low point	4980	20.5	200.5	200.1	0.4	206.7	204.2	2.5	0.9699	0.9797
As left zero	5000	0.0	0.0	0.0	0.0	0.3	0.3	0.0	----	----
As left span	4918	82.0	802.0	390.9	411.1	800.6	390.9	409.8	1.0017	1.0000
								Average Correction Factor	0.9874	0.9920

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	797.0	391.3	407.3	409.1	0.9957	100.4%
Mid GPT point	797.0	592.6	206.0	205.3	1.0036	99.6%
Low GPT point	797.0	694.4	104.2	104.4	0.9985	100.2%
				Average Correction Factor	0.9993	100.1%

Notes: Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

NO_X Calibration Summary

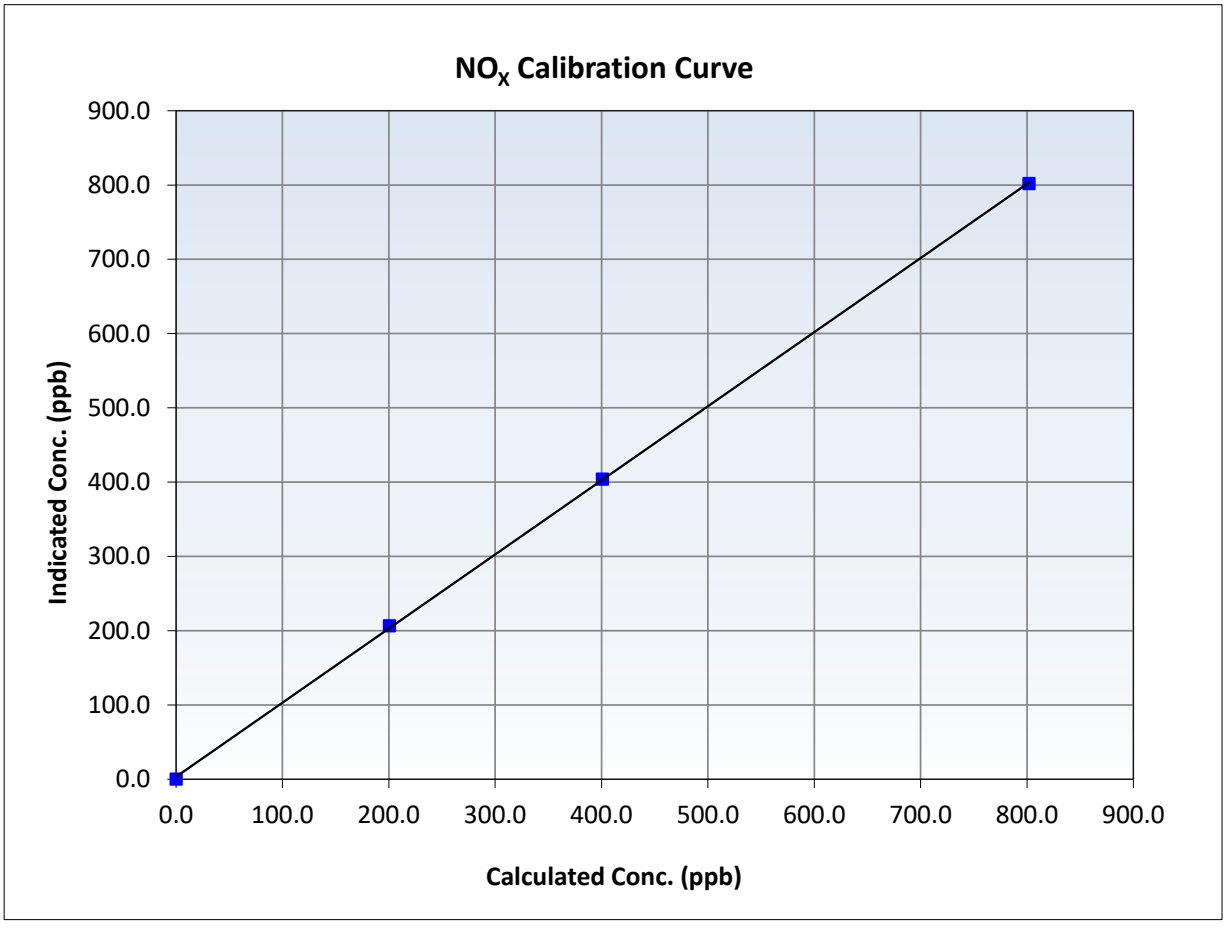
Station Information

Calibration Date:	March 16, 2026	Previous Calibration:	February 25, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	8:56	End Time (MST):	13:58
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	802.2	0.9997
401.0	404.0	0.9925
200.5	206.7	0.9699

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999938	*≥0.995*
Slope	0.997676	*0.90 - 1.10*
Intercept	3.288068	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

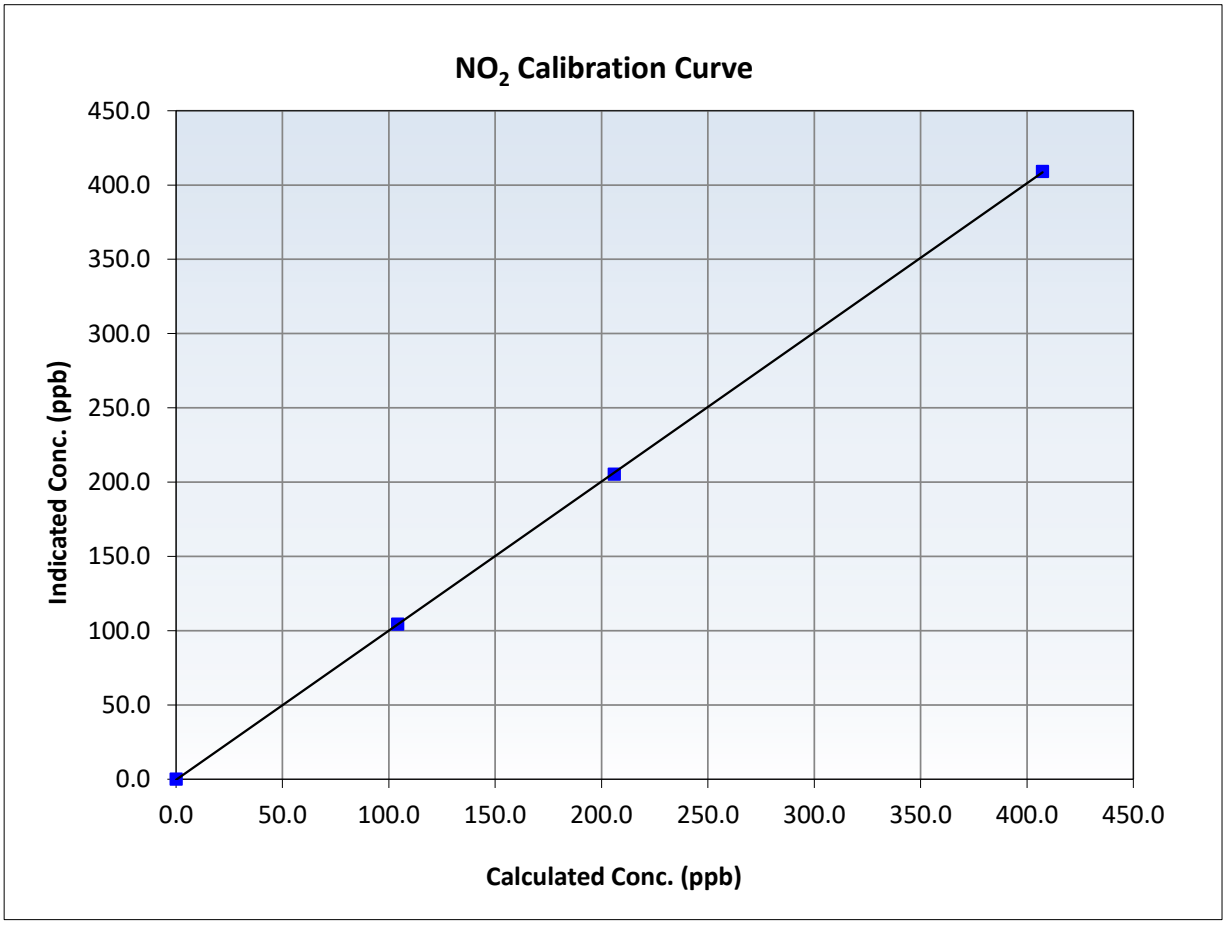
Station Information

Calibration Date:	March 16, 2026	Previous Calibration:	February 25, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	8:56	End Time (MST):	13:58
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
407.3	409.1	0.9957
206.0	205.3	1.0036
104.2	104.4	0.9985

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999979	*≥0.995*
Slope	1.003884	*0.90 - 1.10*
Intercept	-0.376785	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

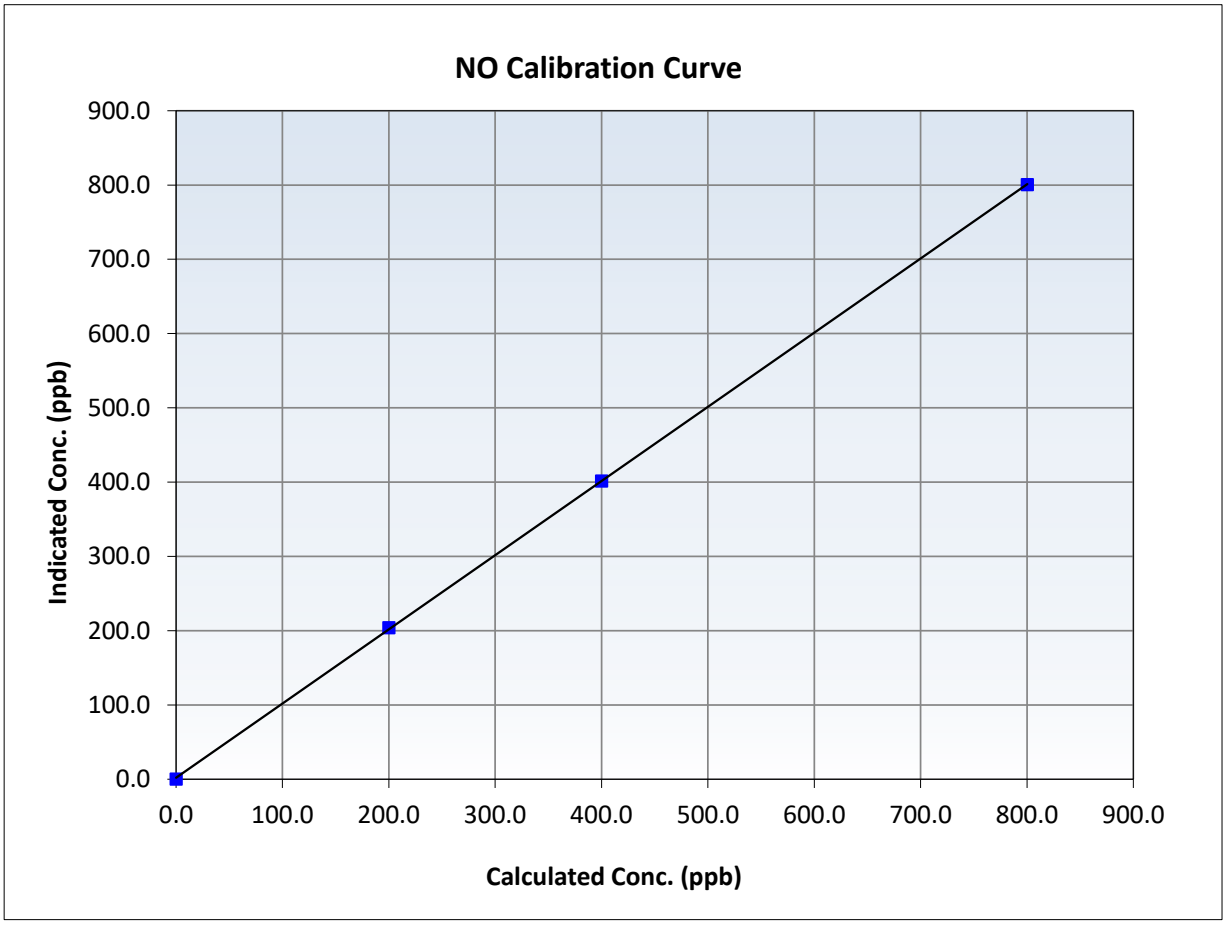
Station Information

Calibration Date:	March 16, 2026	Previous Calibration:	February 25, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	8:56	End Time (MST):	13:58
Analyzer make:	Thermo 42i	Analyzer serial #:	1218153356

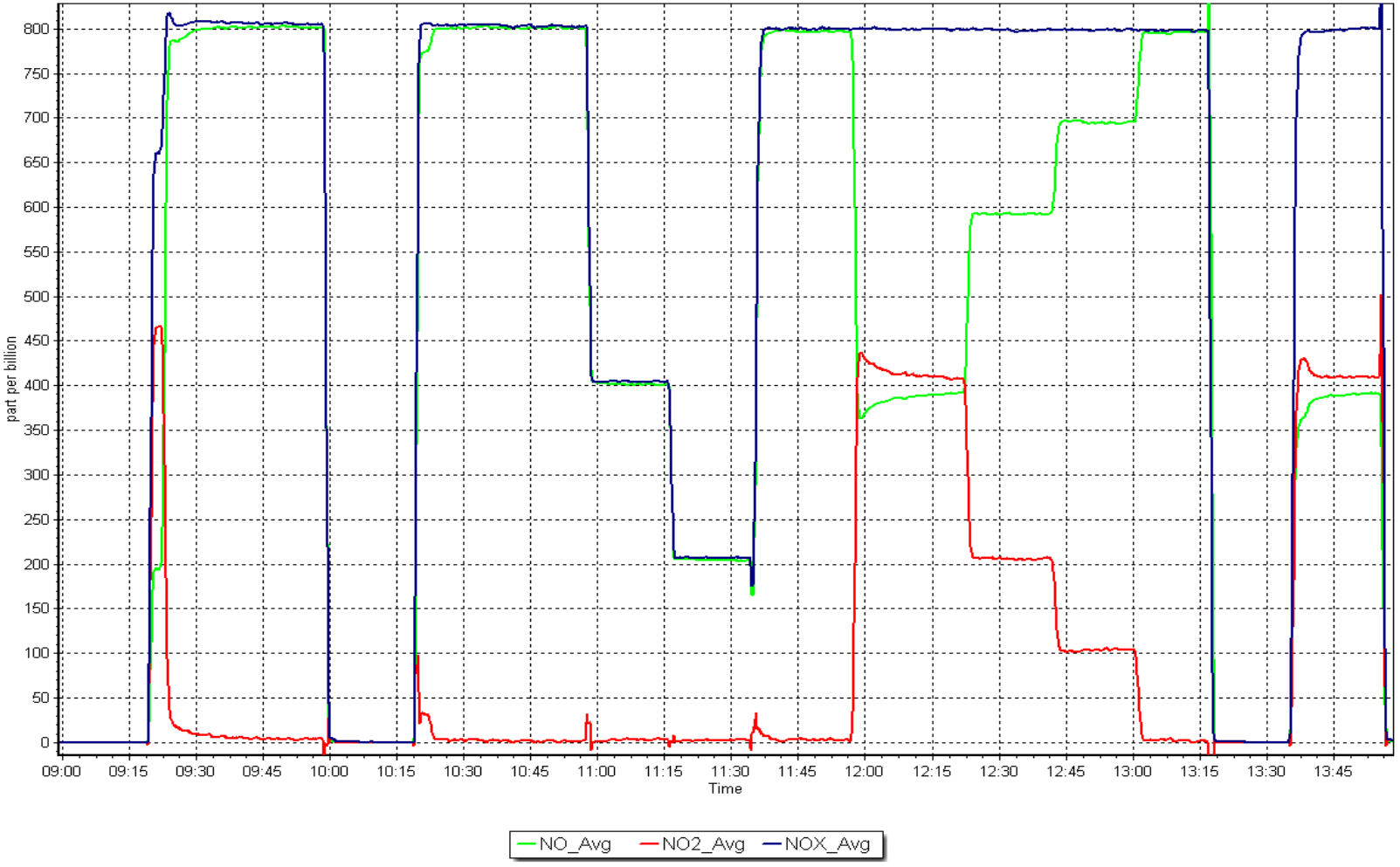
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.3	----
800.3	800.7	0.9995
400.2	401.5	0.9967
200.1	204.2	0.9797

Statistical Evaluation		Limits
Correlation Coefficient	0.999974	≥0.995
Slope	0.998606	0.90 - 1.10
Intercept	2.028039	+/-20



NO_X Calibration Plot Date: March 16, 2026 Location: Conklin



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Conklin	Station number:	AMS 21
Calibration Date:	March 3, 2026	Last Cal Date:	February 13, 2026
Start time (MST):	12:09	End time (MST):	15:20
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:	0.998714	0.999914	Backgd or Offset:	0.2	0.2
Calibration intercept:	0.900000	0.640000	Coeff or Slope:	1.229	1.218

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	0.1	----
As found High point	5000	1036.7	400.0	404.3	0.990
As found Mid point					
As found Low point					
Baseline Corr As found:	404.2	Previous response	400.4	*% 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	

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	0.4	----
High point	5000	1037.8	400.0	400.5	0.999
Mid point	5000	865.1	200.0	200.7	0.997
Low point	5000	748.0	100.0	100.9	0.991
As left zero	5000	800.0	0.0	0.2	----
As left span	5000	1033.9	400.0	405.6	0.986
				Average Correction Factor	0.995

Notes: Sample inlet filter was changed after as founds. Span adjusted.

Calibration Performed By: Aswin Sasi Kumar

Wood Buffalo Environmental Association

O_3 Calibration Summary

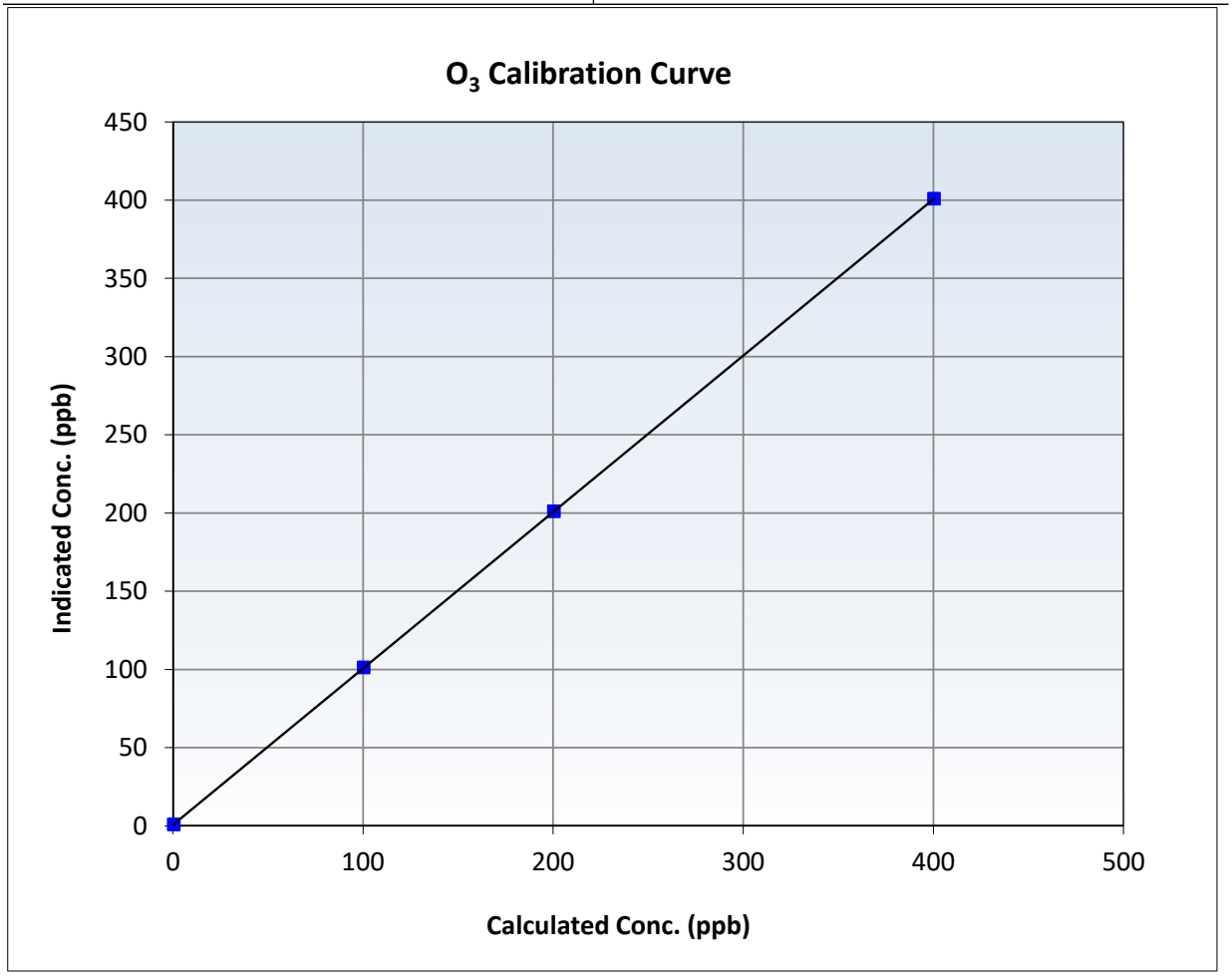
Station Information

Calibration Date:	March 3, 2026	Previous Calibration:	February 13, 2026
Station Name:	Conklin	Station Number:	AMS 21
Start Time (MST):	12:09	End Time (MST):	15:20
Analyzer make:	Thermo 49i	Analyzer serial #:	1300156233

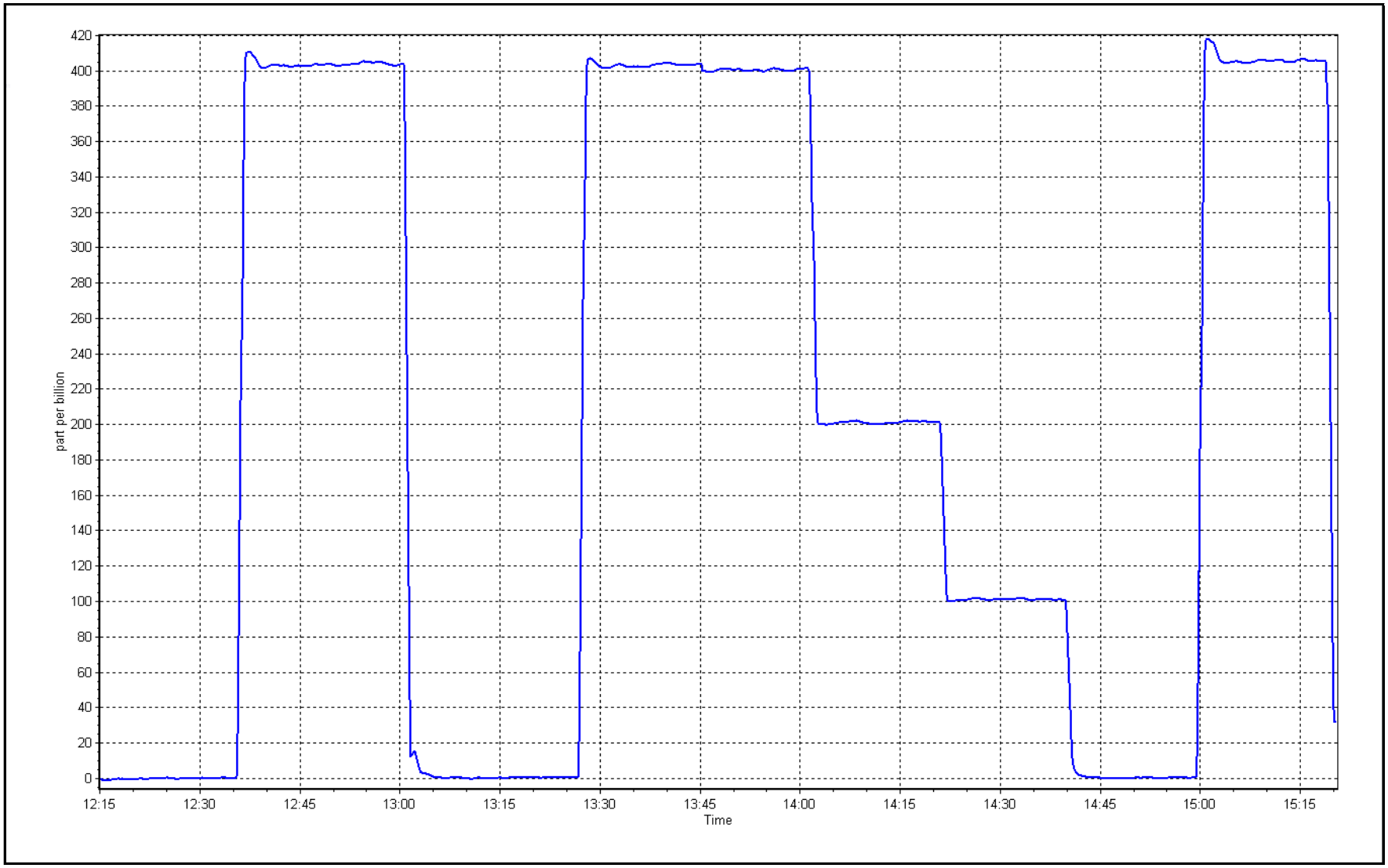
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
400.0	400.5	0.9988
200.0	200.7	0.9965
100.0	100.9	0.9911

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	0.999914	*0.90 - 1.10*
Intercept	0.640000	*+/- 5*



O_3 Calibration Plot Date: March 3, 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:	March 16, 2026	Last Cal Date:	February 26, 2026
Start time (MST):	12:37	End time (MST):	13:27
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)	-3.80	-4.80	-3.80	☐	+/- 2 °C
P (mmHg)	703.00	695.10	703.00	☐	+/- 10 mmHg
Flow (LPM)	5.00	4.95	5.00	☐	+/- 0.25 LPM
PW% (pump)	49	-----	49	☐	>80%
Zero Verification	PM w/o HEPA:	3.90	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: 10.90 — 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: February 26, 2026

Date Disposable Filter Changed: February 26, 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
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	March 11, 2026	Last Cal Date:	February 2, 2026
Start time (MST):	10:52	End time (MST):	15:51
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:	0.999748	0.997493	Backgd or Offset:	28.0	29.2
Calibration intercept:	0.195617	1.035533	Coeff or Slope:	1.029	1.047

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	4920	80.3	800.1	785.2	1.019
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	784.8	Previous response	800.1	*% change	-1.9%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	80.3	800.1	798.2	1.002
Mid point	4960	40.2	400.5	401.9	0.997
Low point	4980	20.1	200.3	201.7	0.993
As left zero	5000	0.0	0.0	-0.1	----
As left span	4920	80.3	800.1	805.0	0.994
				Average Correction Factor:	0.997

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

SO_2 Calibration Summary

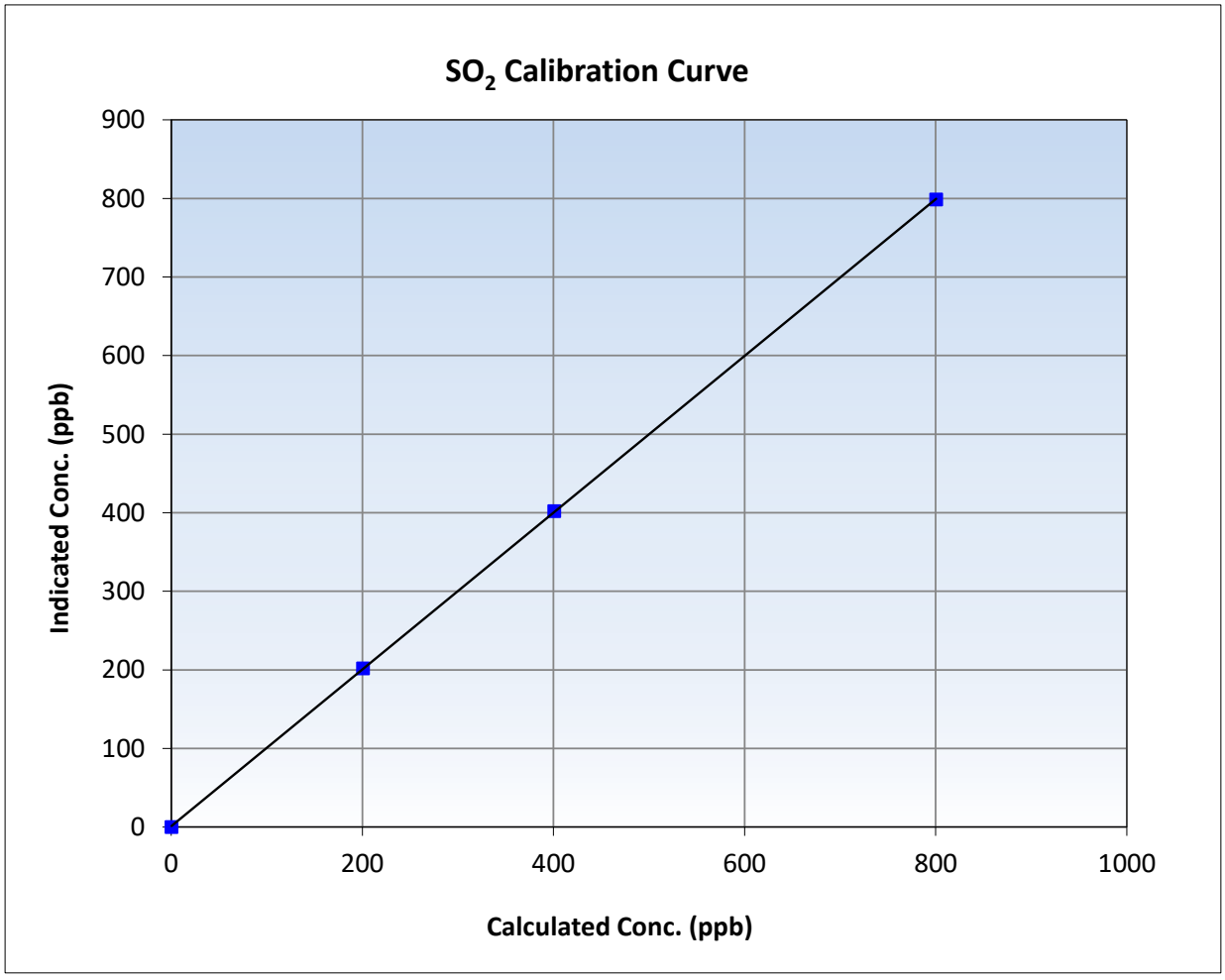
Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 2, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:52	End Time (MST):	15:51
Analyzer make:	Thermo 43i	Analyzer serial #:	1152430006

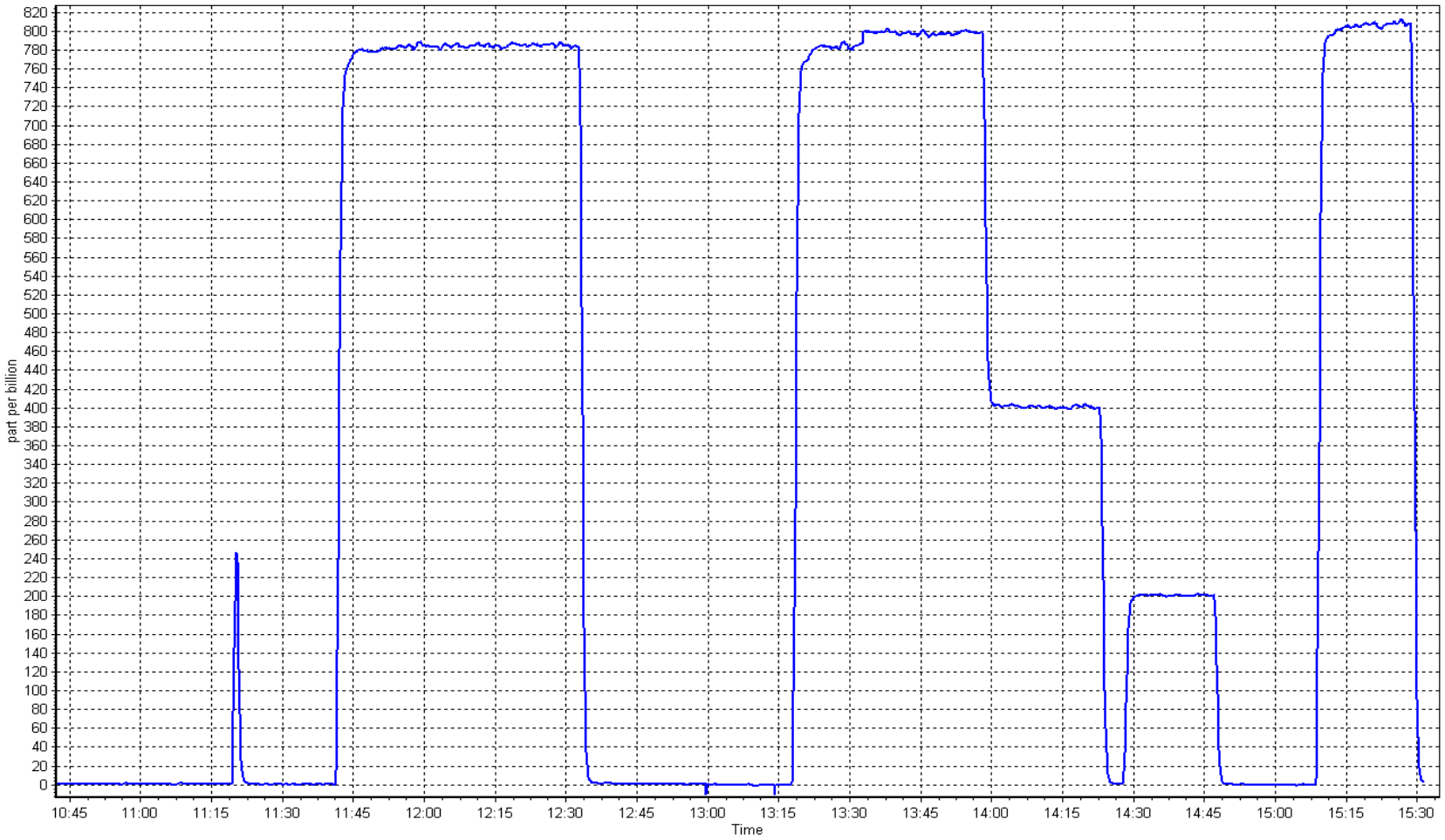
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.3	----
800.1	798.2	1.0023
400.5	401.9	0.9966
200.3	201.7	0.9929

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	0.997493	*0.90 - 1.10*
Intercept	1.035533	*+/-30*



SO2 Calibration Plot Date: March 11, 2026 Location: Janvier



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	March 18, 2026	Last Cal Date:	February 25, 2026
Start time (MST):	8:48	End time (MST):	13:03
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:	0.978243	1.022370	Backgd or Offset:	4.14	4.65
Calibration intercept:	0.420218	-0.098862	Coeff or Slope:	1.253	1.307

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	4920	79.7	80.0	81.2	0.987
As found Mid point	4960	39.8	40.0	40.7	0.984
As found Low point	4980	19.9	20.0	20.3	0.989
New cylinder response					

Baseline Corr As found:	81.1	Prev response:	78.70	*% change:	3.0%
Baseline Corr 2nd AF pt:	40.6	AF Slope:	1.013804	AF Intercept:	0.100874
Baseline Corr 3rd AF pt:	20.2	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	4920	79.7	80.0	81.6	0.981
Mid point	4960	39.8	40.0	41.0	0.975
Low point	4980	19.9	20.0	20.3	0.984
As left zero	5000	0.0	0.0	0.1	----
As left span	4920	79.7	80.0	81.9	0.977
SO2 Scrubber Check	4920	79.8	798.0	0.1	----
Date of last scrubber change:				Ave Corr Factor	0.980
Date of last converter efficiency test:					

Notes: Changed the inlet filter after as founds. Scrubber test performed, no issues. Zero and span adjusted.

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

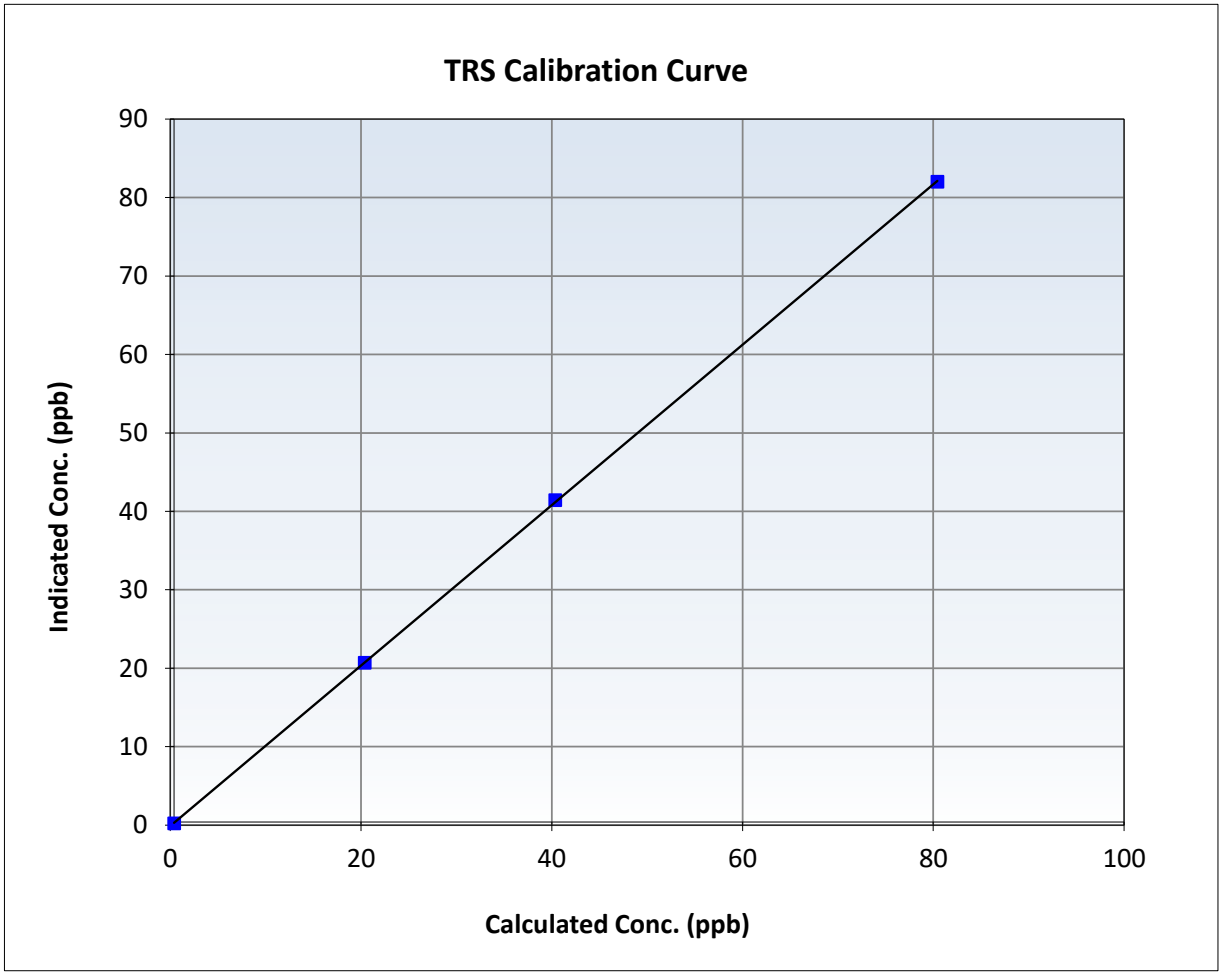
TRS Calibration Summary

Station Information

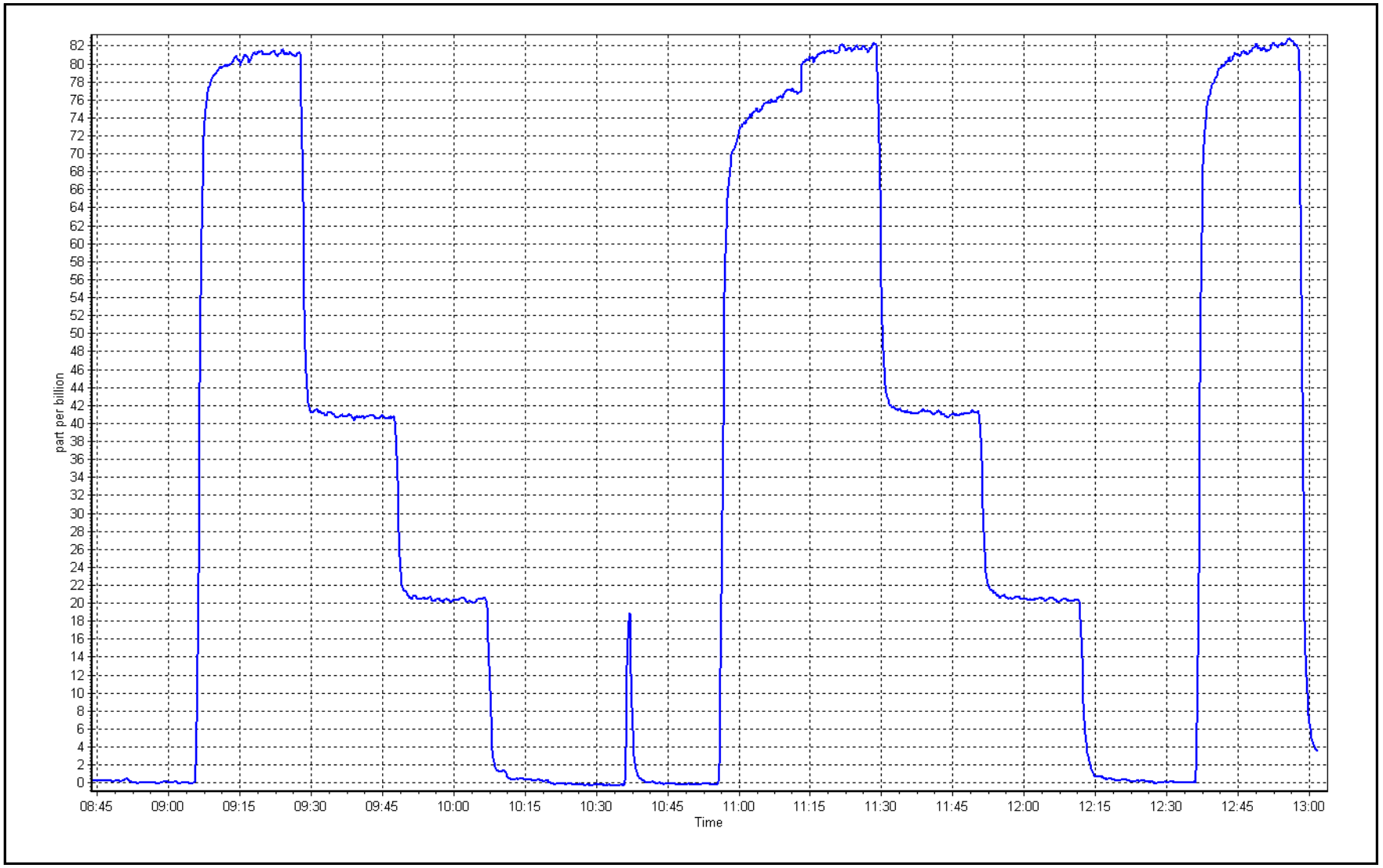
Calibration Date:	March 18, 2026	Previous Calibration:	February 25, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	8:48	End Time (MST):	13:03
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1151680031

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.2	----	Correlation Coefficient	0.999977	*≥0.995*
80.0	81.6	0.9807	Slope	1.022370	*0.90 - 1.10*
40.0	41.0	0.9747			
20.0	20.3	0.9842	Intercept	-0.098862	*+/-3*



TRS Calibration Plot Date: March 18, 2026 Location: Janvier



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	March 11, 2026	Last Cal Date:	February 2, 2026
Start time (MST):	10:52	End time (MST):	15:31
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 700		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:	2.57E-04	2.60E-04	NMHC SP Ratio:	5.91E-05	5.52E-05
CH4 Retention time:	11.6	11.6	NMHC Peak Area:	151698	162383
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	16.74	1.014
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.74	Prev response	16.92	*% 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	4920	80.3	16.98	16.97	1.001
Mid point	4960	40.2	8.50	8.41	1.011
Low point	4980	20.1	4.25	4.21	1.011
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	16.98	16.96	1.001
				Average Correction Factor	1.008

Notes: Changed sample inlet filter after as founds. Adjusted window timings 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	4920	80.3	8.96	8.83	1.015
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.83	Prev response	8.92	*% change	-1.0%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4920	80.3	8.96	8.95	1.001
Mid point	4960	40.2	4.49	4.47	1.003
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	8.96	1.000
				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	4920	80.3	8.02	7.92	1.013
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.92	Prev response	8.00	*% 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	8.02	1.000
Mid point	4960	40.2	4.02	3.94	1.018
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	8.00	1.003
				Average Correction Factor	1.013

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.998380	0.999578
THC Cal Offset:	-0.038893	-0.034300
CH4 Cal Slope:	1.000730	1.000401
CH4 Cal Offset:	-0.027627	-0.029222
NMHC Cal Slope:	0.996314	0.998867
NMHC Cal Offset:	-0.011666	-0.003680

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

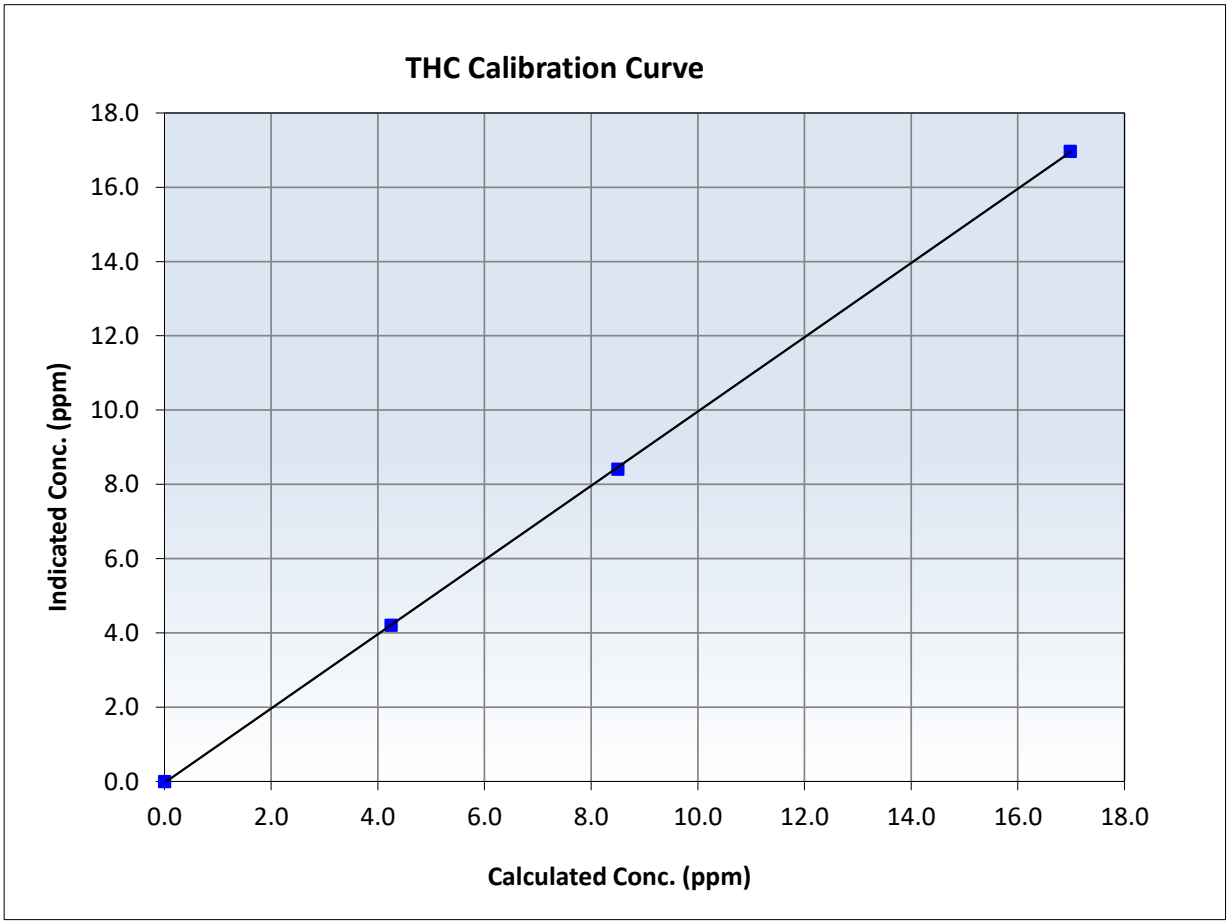
THC Calibration Summary

Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 2, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:52	End Time (MST):	15:31
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	0.999968	*≥0.995*
16.98	16.97	1.0007	Slope	0.999578	*0.90 - 1.10*
8.50	8.41	1.0109	Intercept	-0.034300	*+/-0.5*
4.25	4.21	1.0109			



Wood Buffalo Environmental Association

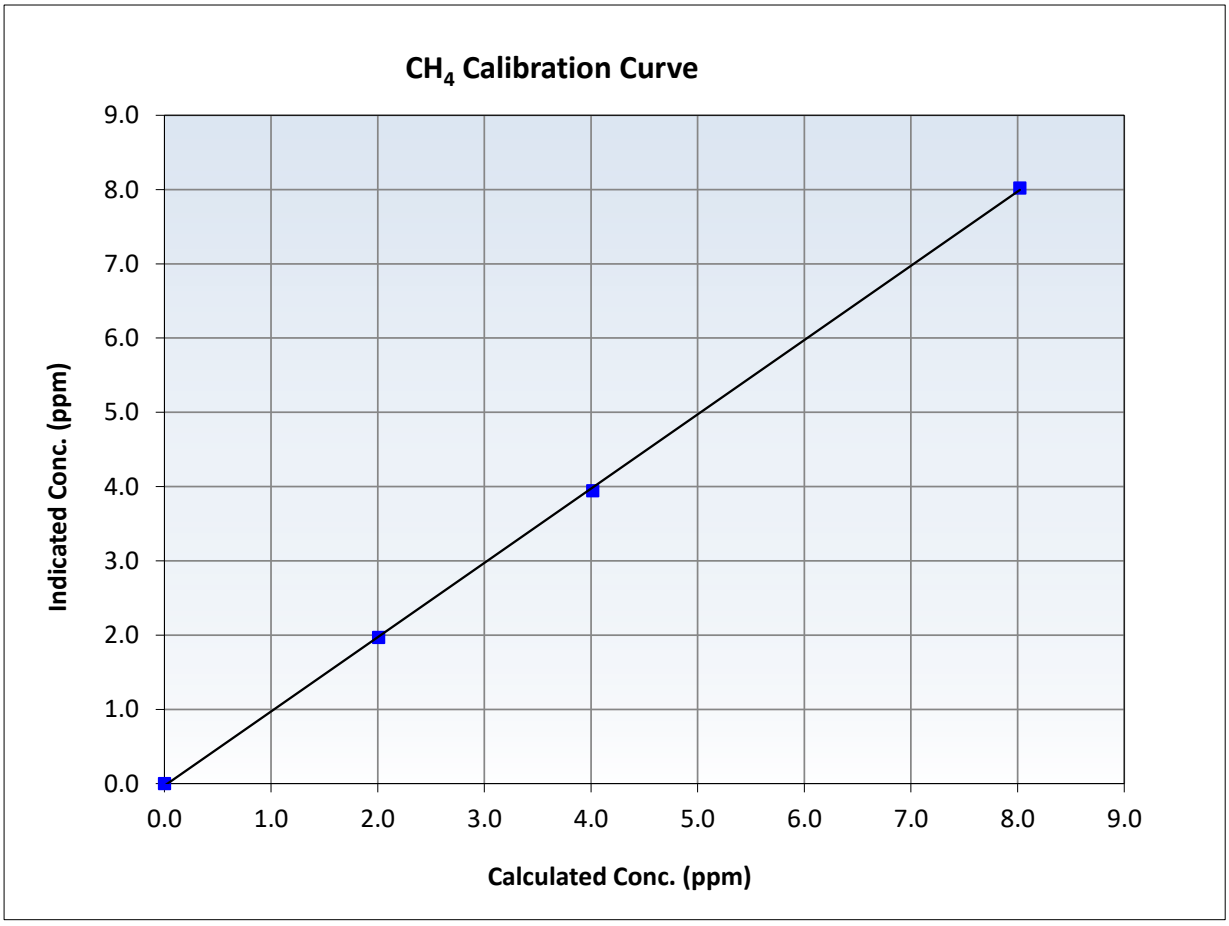
CH_4 Calibration Summary

Station Information

Calibration Date:	March 11, 2026	Previous Calibration:	February 2, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:52	End Time (MST):	15:31
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	0.999901	*≥0.995*
8.02	8.02	1.0002	Slope	1.000401	*0.90 - 1.10*
4.02	3.94	1.0182			
2.01	1.97	1.0193	Intercept	-0.029222	*+/-0.5*



Wood Buffalo Environmental Association

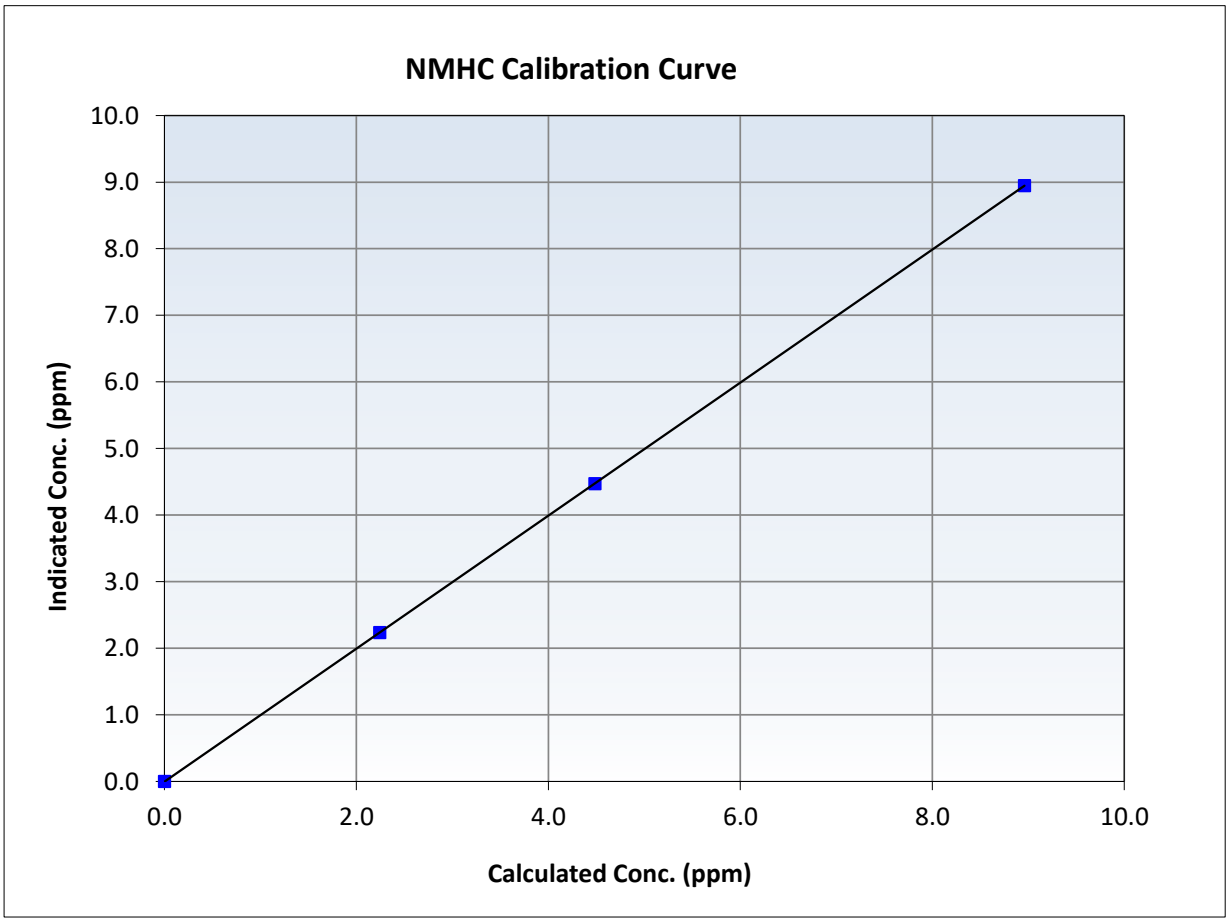
NMHC Calibration Summary

Station Information

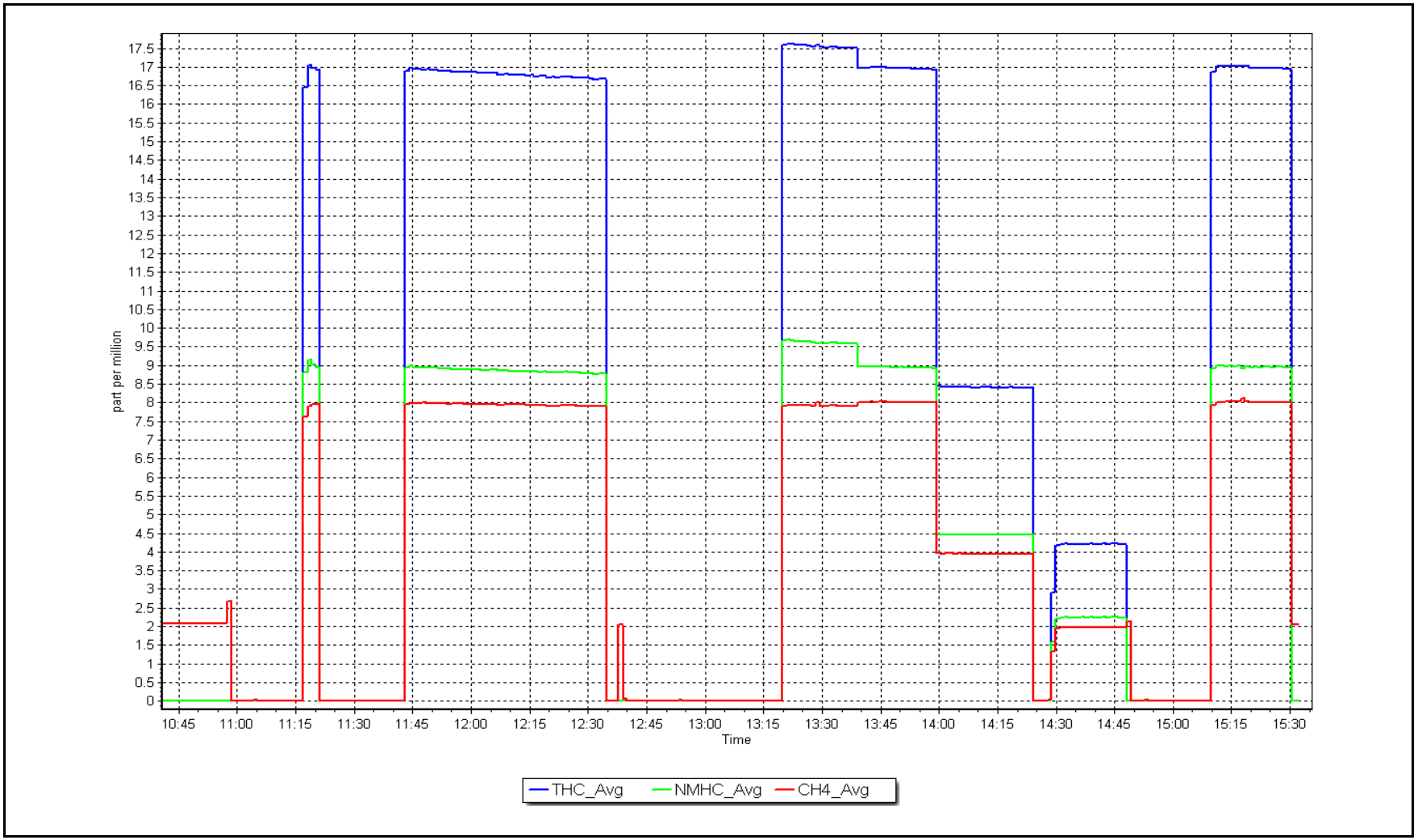
Calibration Date:	March 11, 2026	Previous Calibration:	February 2, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:52	End Time (MST):	15:31
Analyzer make:	Thermo 55i	Analyzer serial #:	1317958219

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999999	≥0.995
8.96	8.95	1.0012	Slope	0.998867	0.90 - 1.10
4.49	4.47	1.0033	Intercept	-0.003680	+/-0.5
2.24	2.24	1.0031			



NMHC Calibration Plot Date: March 11, 2026 Location: Janvier



Wood Buffalo Environmental Association

THC / CH_4 / NMHC Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	March 24, 2026	Last Cal Date:	March 11, 2026
Start time (MST):	9:53	End time (MST):	11:20
Reason:	Cylinder Change		

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 700		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:	2.60E-04	2.60E-04	NMHC SP Ratio:	5.52E-05	5.52E-05
CH4 Retention time:	11.6	11.6	NMHC Peak Area:	162383	162383
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					
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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	16.98	16.91	1.004
				Average Correction Factor	

Notes: Changed H2 cylinder. No as founds due to empty H2 cylinder.

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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	8.96	8.94	1.003
				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					
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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4920	80.3	8.02	7.98	1.005
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.999578	
THC Cal Offset:	-0.034300	
CH4 Cal Slope:	1.000401	
CH4 Cal Offset:	-0.029222	
NMHC Cal Slope:	0.998867	
NMHC Cal Offset:	-0.003680	

Calibration Performed By: Sean Bala

NMHC Calibration Plot Date: March 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:	March 19, 2026
Last Cal Date:	February 27, 2026
Start time (MST):	10:49
End time (MST):	15:18
Reason:	Routine

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	-0.2	-0.2	0.0	----	----
AF High point	4918	82.0	802.0	800.3	1.6	796.4	789.8	6.5	1.0067	1.0131
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 799.3 ppb	NO = 796.0 ppb
Baseline Corr 1st pt	NO_X = 796.6 ppb	NO = 790.0 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 = -0.3%	As Found Statistics	
*Percent Change	NO = -0.8%	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: 1229254994

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.012	1.012	NO bkgnd or offset:	2.7	2.8
NOX coeff or slope:	0.997	0.997	NOX bkgnd or offset:	2.9	2.9
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	177.1	172.3

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.996576	0.990904
NO_X Cal Offset:	0.043982	-0.116174
NO Cal Slope:	0.995919	0.990107
NO Cal Offset:	-1.036167	-1.376336
NO_2 Cal Slope:	1.002152	1.001895
NO_2 Cal Offset:	0.520340	0.241634

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	82.0	802.0	800.3	1.6	794.6	791.8	2.8	1.0093	1.0108
Mid point	4960	41.0	400.9	400.1	0.8	397.0	393.7	3.3	1.0098	1.0162
Low point	4980	20.5	200.5	200.1	0.4	198.6	195.7	2.9	1.0094	1.0223
As left zero	5000	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	----	----
As left span	4918	82.0	802.0	398.6	403.4	793.1	398.6	394.5	1.0112	1.0000
							Average Correction Factor		1.0095	1.0164

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	788.7	396.0	394.3	395.2	0.9978	100.2%
Mid GPT point	788.7	591.0	199.3	200.1	0.9962	100.4%
Low GPT point	788.7	691.0	99.3	100.0	0.9934	100.7%
				Average Correction Factor	0.9958	100.4%

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

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

NO_X Calibration Summary

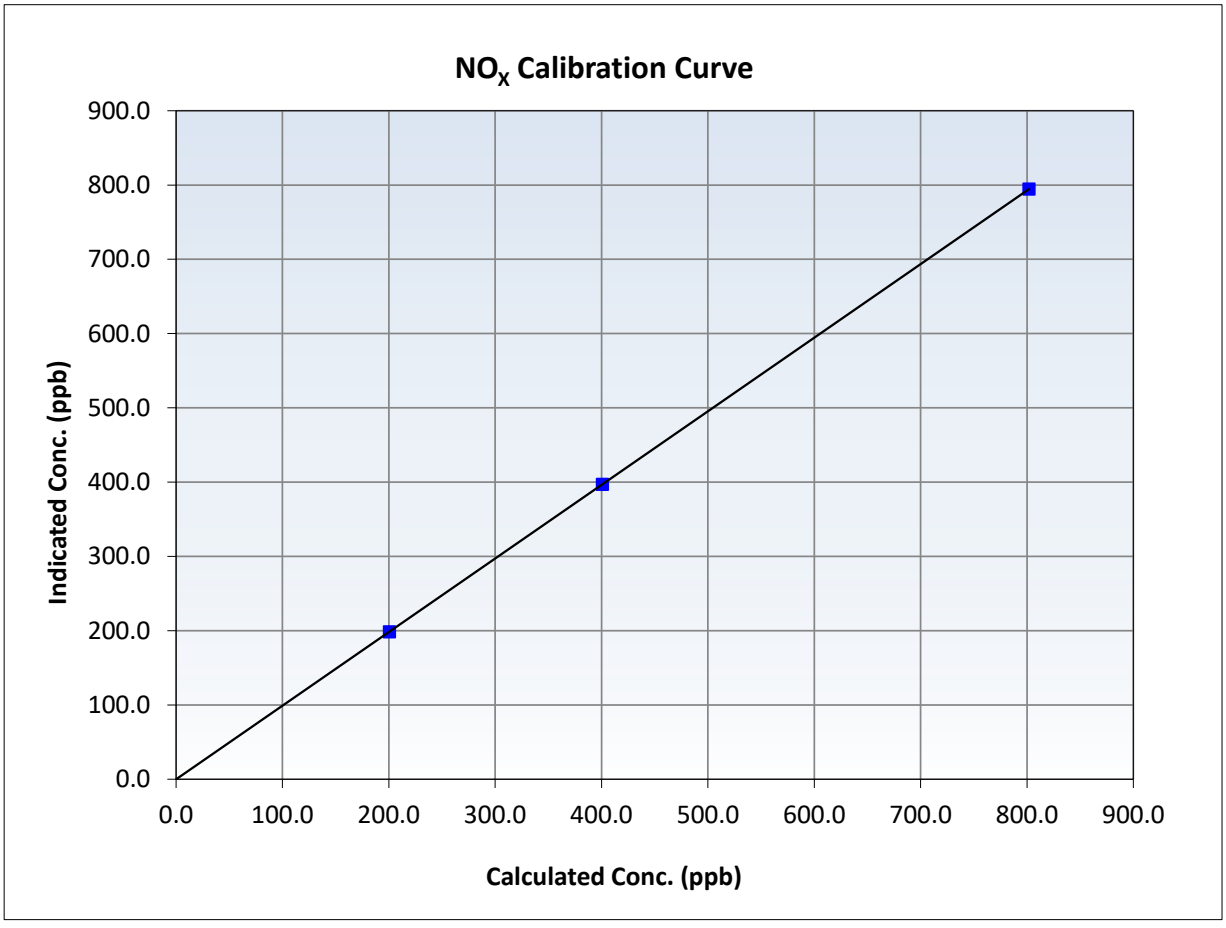
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 27, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:49	End Time (MST):	15:18
Analyzer make:	Thermo 42i	Analyzer serial #:	1229254994

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
802.0	794.6	1.0093
400.9	397.0	1.0098
200.5	198.6	1.0094

Statistical Evaluation		Limits
Correlation Coefficient	1.000000	≥0.995
Slope	0.990904	0.90 - 1.10
Intercept	-0.116174	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

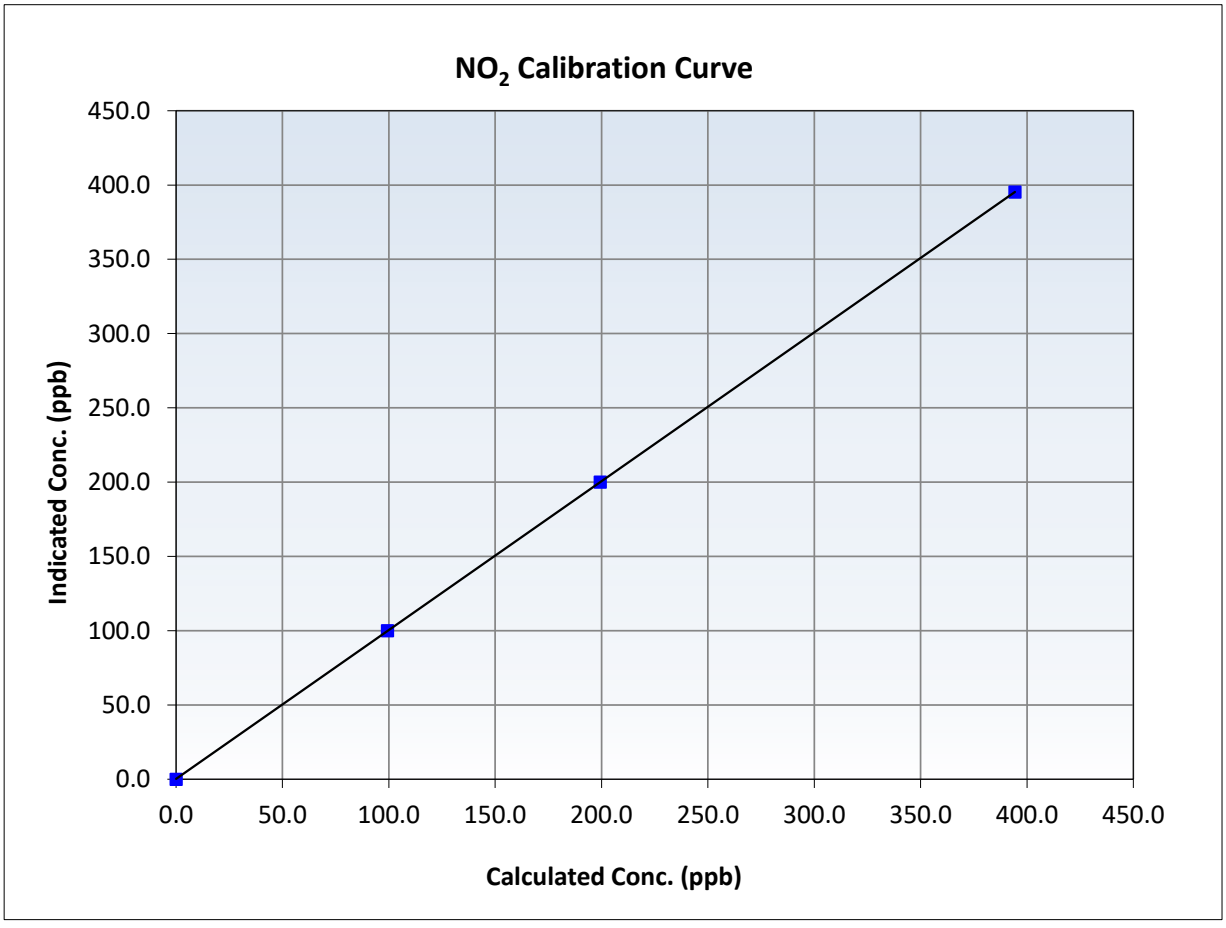
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 27, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:49	End Time (MST):	15:18
Analyzer make:	Thermo 42i	Analyzer serial #:	1229254994

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
394.3	395.2	0.9978
199.3	200.1	0.9962
99.3	100.0	0.9934

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	1.001895	*0.90 - 1.10*
Intercept	0.241634	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

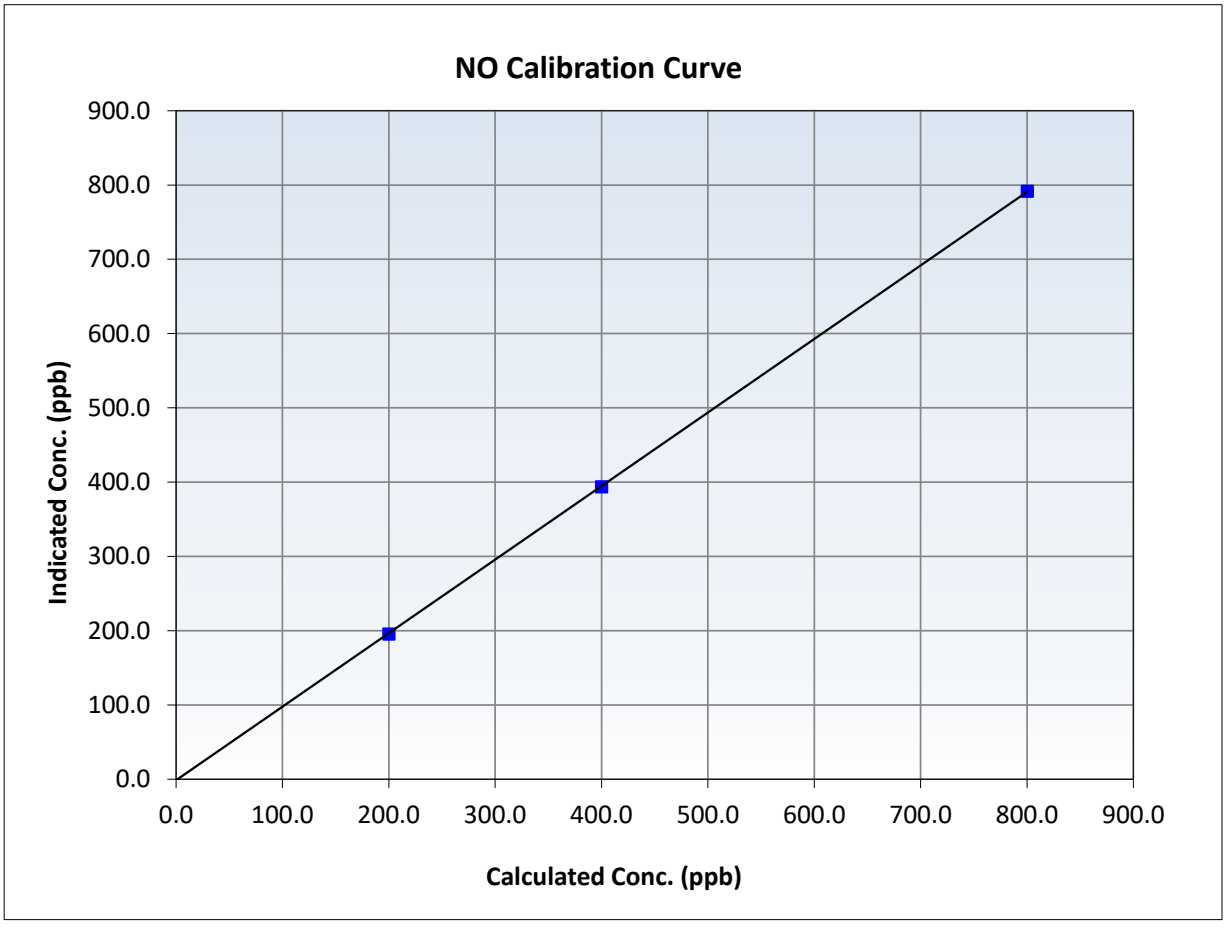
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 27, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	10:49	End Time (MST):	15:18
Analyzer make:	Thermo 42i	Analyzer serial #:	1229254994

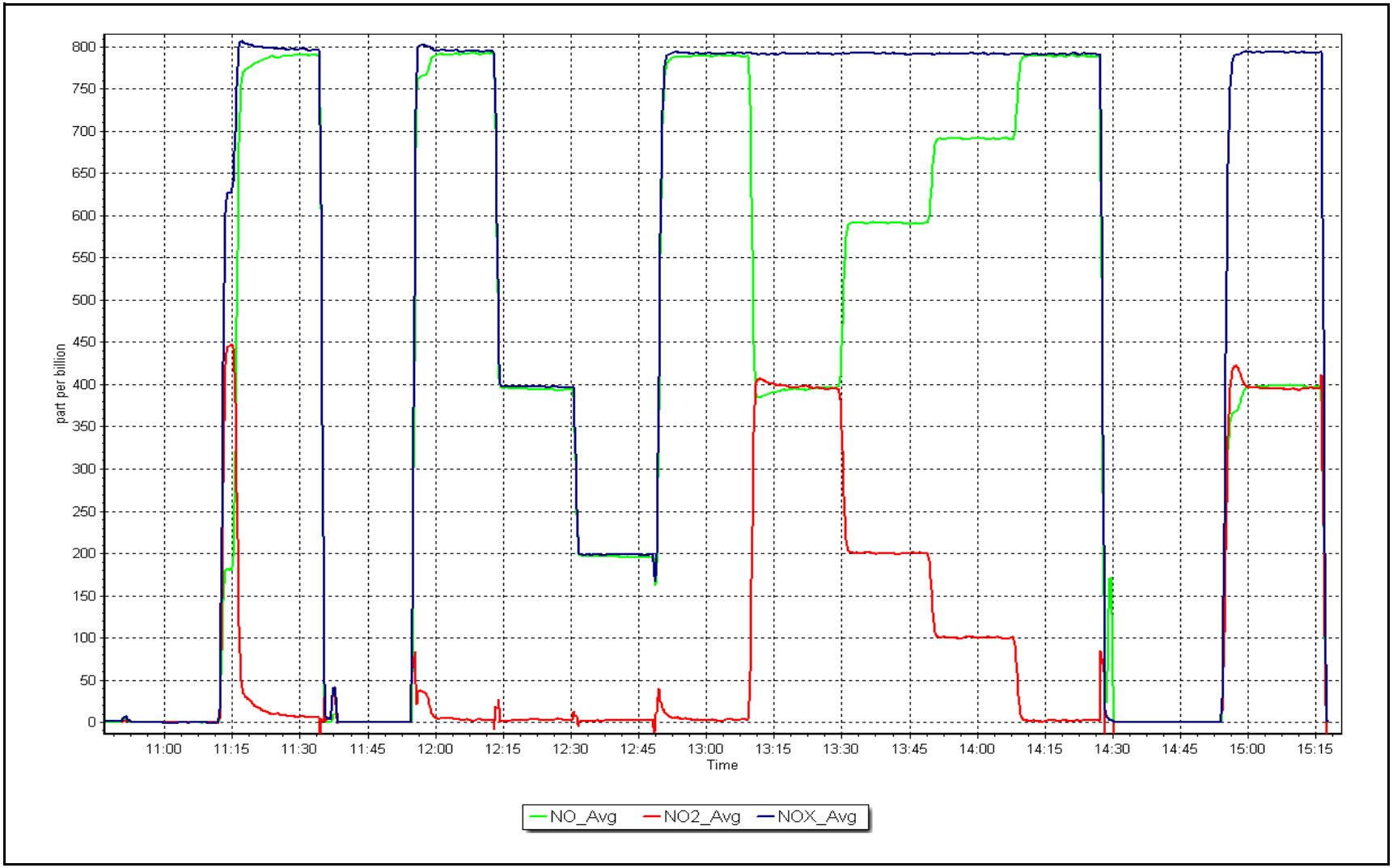
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
800.3	791.8	1.0108
400.1	393.7	1.0162
200.1	195.7	1.0223

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999987	*≥0.995*
Slope	0.990107	*0.90 - 1.10*
Intercept	-1.376336	*+/-20*



NO_X Calibration Plot Date: March 19, 2026 Location: Janvier



Wood Buffalo Environmental Association

O_3 Calibration Report

Station Information

Station Name:	Janvier	Station number:	AMS 22
Calibration Date:	March 16, 2026	Last Cal Date:	February 24, 2026
Start time (MST):	11:16	End time (MST):	14:00
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:	691

Analyzer Information

Analyzer make:	Thermo 49i		Analyzer serial #:	1227254861	
Analyzer Range	0 - 500 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	0.993743	0.991114	Backgd or Offset:	-0.2	-0.2
Calibration intercept:	-0.080000	0.280000	Coeff or Slope:	1.506	1.506

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	0.1	----
As found High point	5000	936.6	400.0	396.1	1.010
As found Mid point					
As found Low point					
Baseline Corr As found:	396.0	Previous response	397.4	*% 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	0.2	----
High point	5000	938.9	400.0	396.6	1.009
Mid point	5000	777.8	200.0	198.8	1.006
Low point	5000	671.5	100.0	99.3	1.007
As left zero	5000	0.0	0.0	0.4	----
As left span	5000	939.1	400.0	400.9	0.998
				Average Correction Factor	1.007

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

Calibration Performed By: Param Kaur

Wood Buffalo Environmental Association

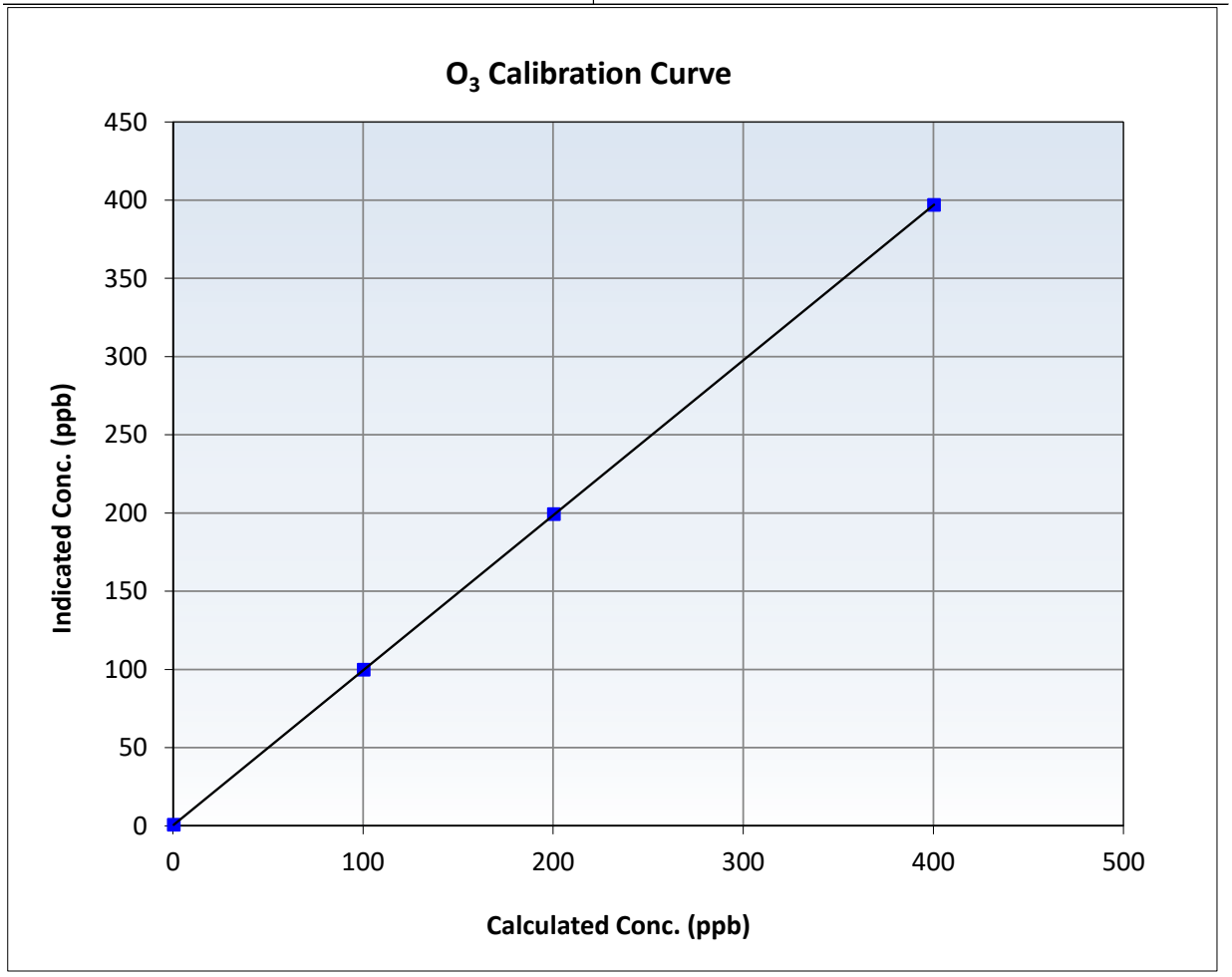
O_3 Calibration Summary

Station Information

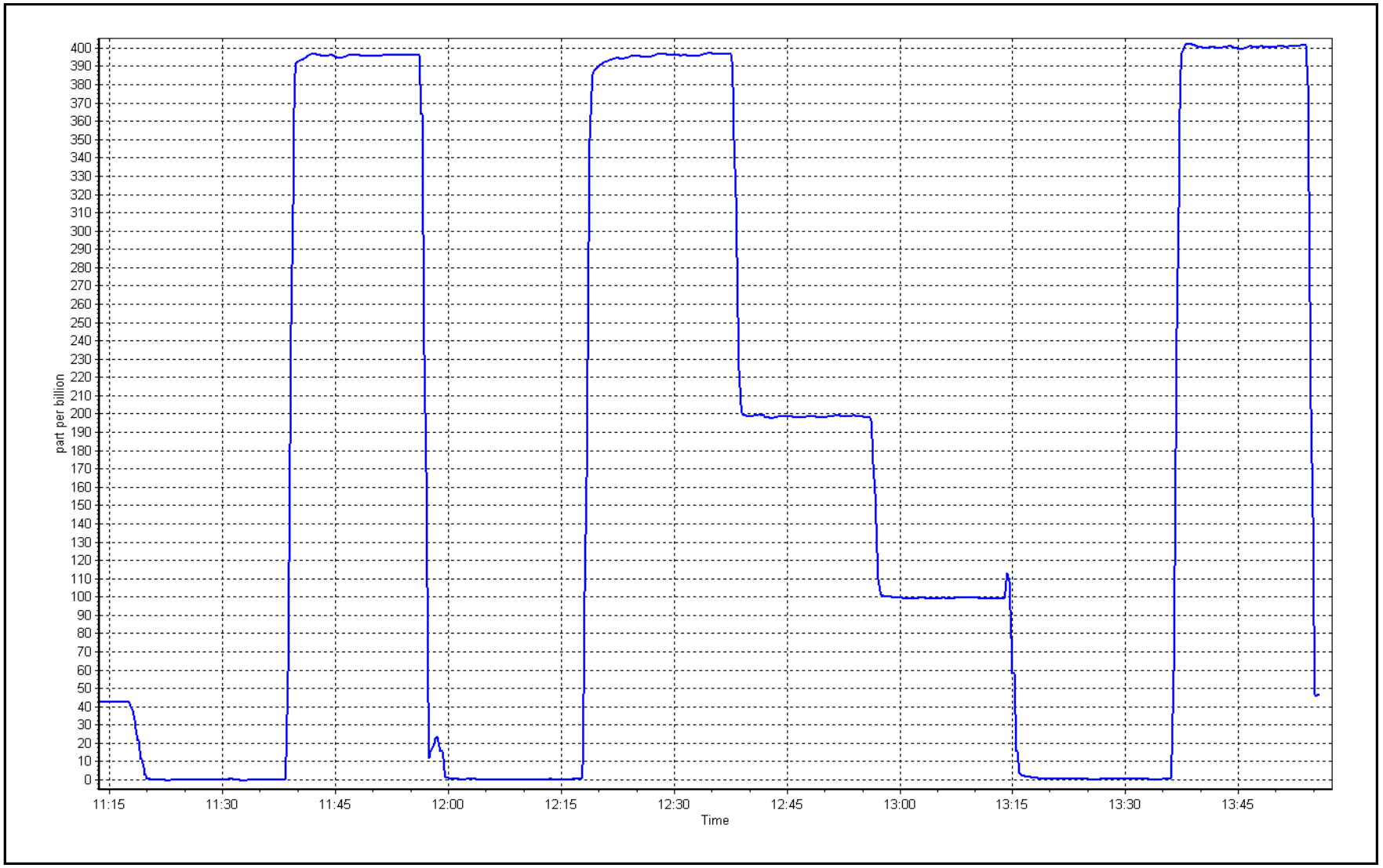
Calibration Date:	March 16, 2026	Previous Calibration:	February 24, 2026
Station Name:	Janvier	Station Number:	AMS 22
Start Time (MST):	11:16	End Time (MST):	14:00
Analyzer make:	Thermo 49i	Analyzer serial #:	1227254861

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.2	----	Correlation Coefficient	0.999999	*≥0.995*
400.0	396.6	1.0086	Slope	0.991114	*0.90 - 1.10*
200.0	198.8	1.0060			
100.0	99.3	1.0070	Intercept	0.280000	*+/- 5*



O_3 Calibration Plot Date: March 16, 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:	March 18, 2026	Last Cal Date:	February 24, 2026
Start time (MST):	9:16	End time (MST):	9:42
Analyzer Make:	Teledyne API T640	S/N:	325
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388755
Temp/RH standard:	Alicat FP-25BT	S/N:	388755

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	-5.6	-6.5	-5.6	☐	+/- 2 °C
P (mmHg)	710.7	711.2	710.7	☐	+/- 10 mmHg
Flow (LPM)	5.00	5.01	5.00	☐	+/- 0.25 LPM
PW% (pump)	38	-----	38	☐	>80%
Zero Verification	PM w/o HEPA:	5.9	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: February 24, 2026

Date Disposable Filter Changed: February 24, 2026

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, and pressure. Leak check passed. No adjustments done.

Calibration by: Param Kaur

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS23
FORT HILLS
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	March 24, 2026	Last Cal Date:	February 11, 2026
Start time (MST):	11:07	End time (MST):	14:52
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:	0.996588	0.999018	Backgd or Offset:	19.1	19.1
Calibration intercept:	-0.579646	-0.279266	Coeff or Slope:	1.070	1.070

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	79.4	799.5	797.7	1.003
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	797.5	Previous response	796.2	*% 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	0.4	----
High point	4921	79.4	799.5	799.3	1.000
Mid point	4960	39.7	399.8	397.2	1.007
Low point	4980	19.8	199.4	199.3	1.000
As left zero	5000	0.0	0.0	0.4	----
As left span	4921	79.4	799.5	800.2	0.999
				Average Correction Factor:	1.002

Notes: Inlet filter changed after as founds. No maintenance or adjustments done.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

SO_2 Calibration Summary

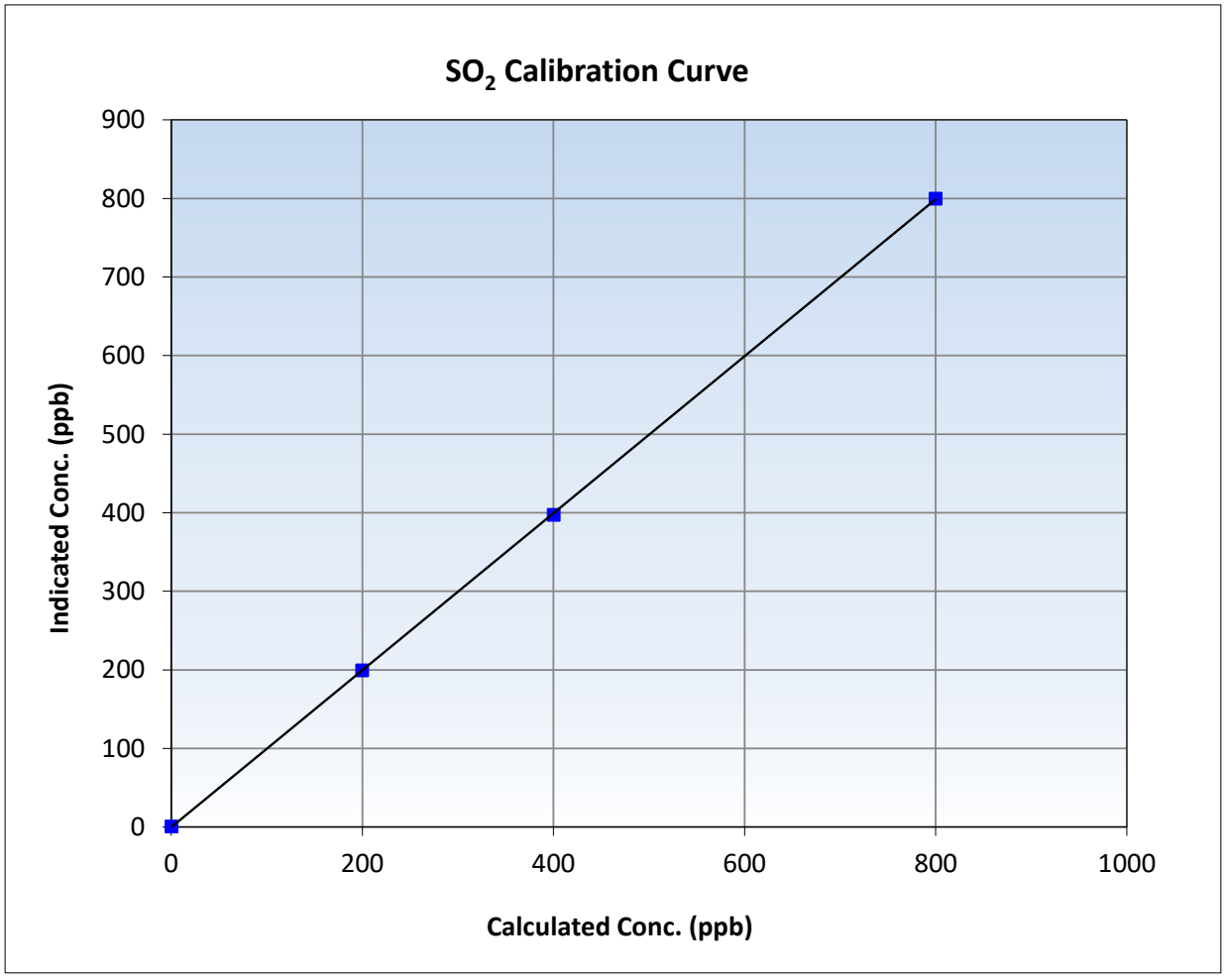
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 11, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	11:07	End Time (MST):	14:52
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290012

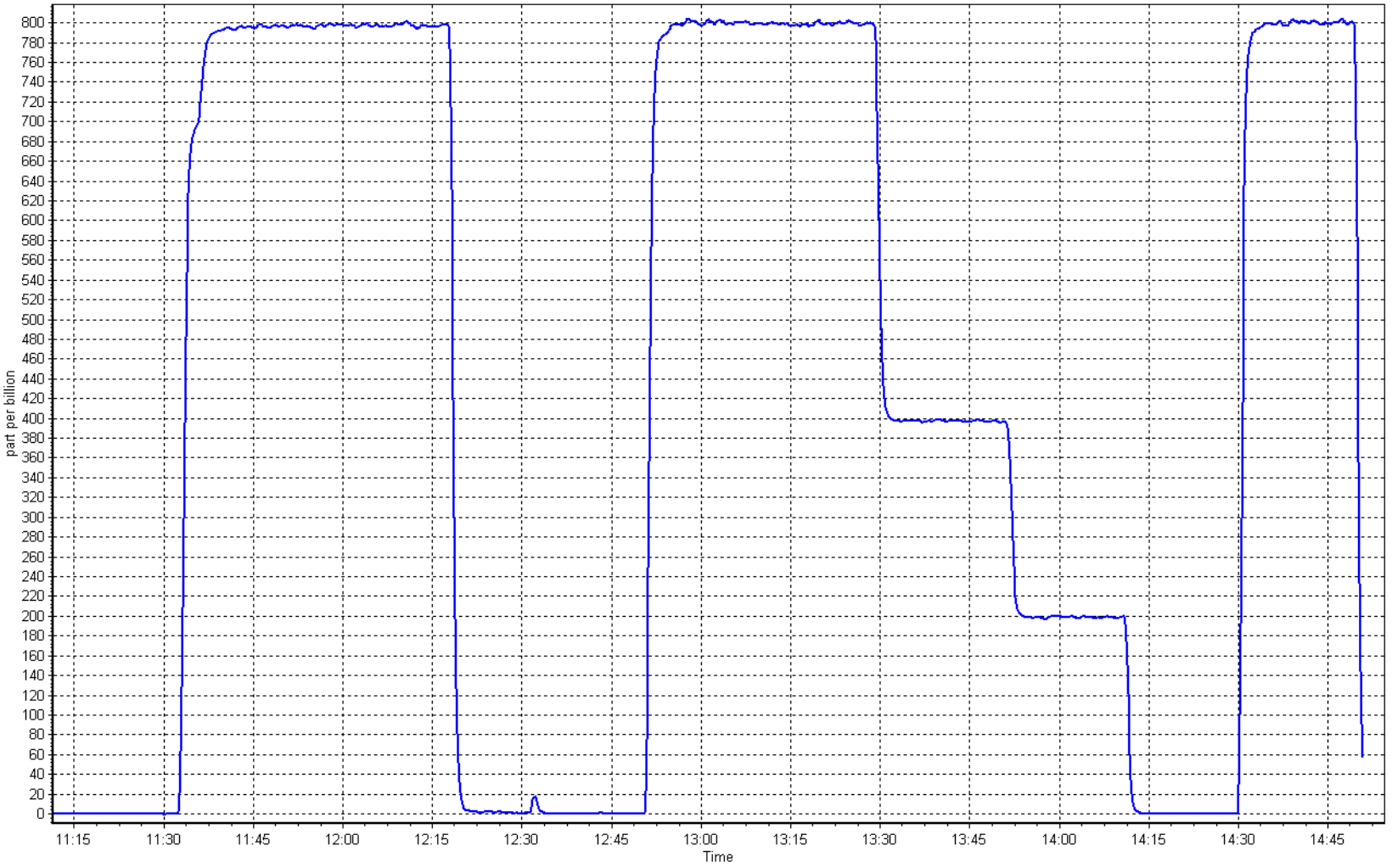
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
799.5	799.3	1.0002
399.8	397.2	1.0066
199.4	199.3	1.0005

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999985	*≥0.995*
Slope	0.999018	*0.90 - 1.10*
Intercept	-0.279266	*+/-30*



SO2 Calibration Plot Date: March 24, 2026 Location: Fort Hills



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	March 27, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	10:19	End time (MST):	12:00
Reason:	As Found		

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:	1.001387		Backgd or Offset:	1.96	1.96
Calibration intercept:	-0.118036		Coeff or Slope:	0.986	0.986

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4917	82.6	80.0	80.5	0.993
As found Mid point	4959	41.3	40.0	39.9	1.002
As found Low point	4979	20.7	20.0	19.9	1.007
New cylinder response					

Baseline Corr As found:	80.5	Prev response:	79.96	*% change:	0.7%
Baseline Corr 2nd AF pt:	39.9	AF Slope:	1.007392	AF Intercept:	-0.178174
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999973		

* = > +/-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					
High point					
Mid point					
Low point					
As left zero					
As left span					
SO2 Scrubber Check					

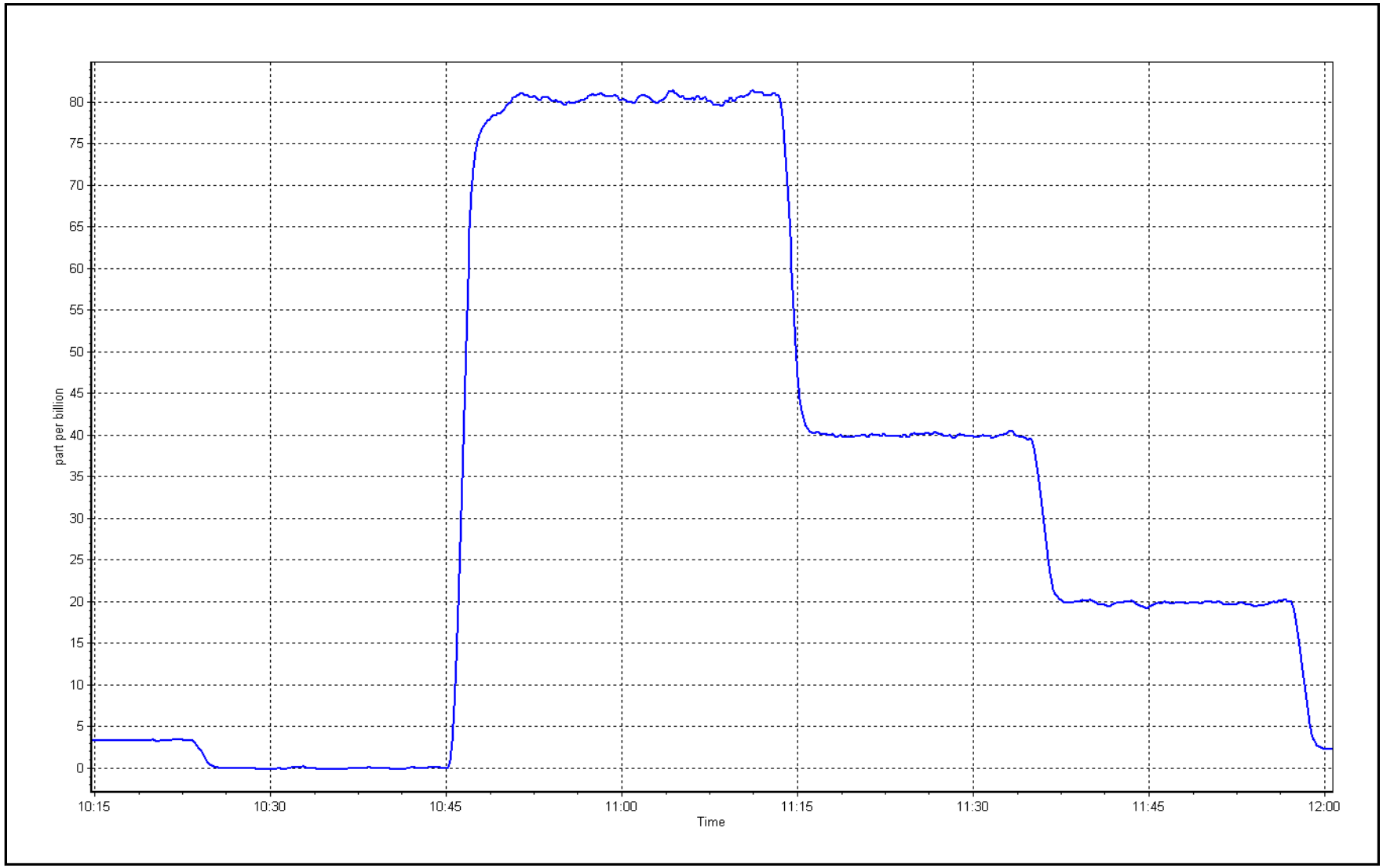
Date of last scrubber change: Ave Corr Factor

Date of last converter efficiency test: March 13, 2024 110.3% efficiency

Notes: As founds only.

Calibration Performed By: Mohammed Kashif

TRS Calibration Plot Date: March 27, 2026 Location: Fort Hills



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Fort Hills	Station number:	AMS 23
Calibration Date:	March 28, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	10:08	End time (MST):	12:51
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:	1.001387	1.003822	Backgd or Offset:	1.96	1.95
Calibration intercept:	-0.118036	0.421737	Coeff or Slope:	0.986	0.986

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *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	80.5	0.993
Mid point	4959	41.3	40.0	40.8	0.980
Low point	4979	20.7	20.0	20.8	0.963
As left zero	5000	0.0	0.0	0.9	----
As left span	4917	82.6	80.0	83.2	0.961
SO2 Scrubber Check	4920	80.3	803.0	0.0	----
Date of last scrubber change:				Ave Corr Factor	0.979
Date of last converter efficiency test:		March 13, 2024		110.3%	efficiency

Notes: The analyzer was left overnight to condition. SOx scrubber checked after the calibrator zero. No adjustments made.

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

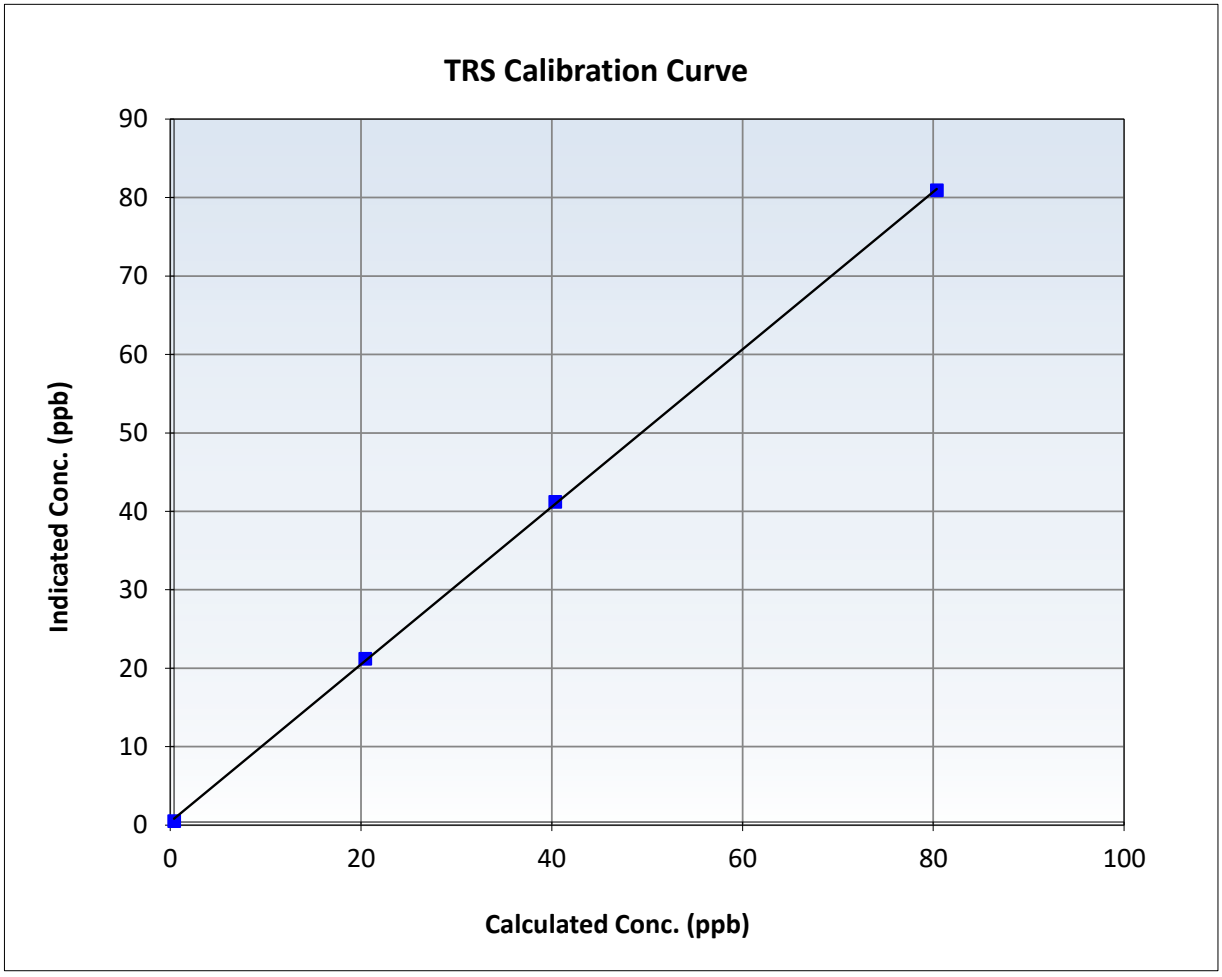
TRS Calibration Summary

Station Information

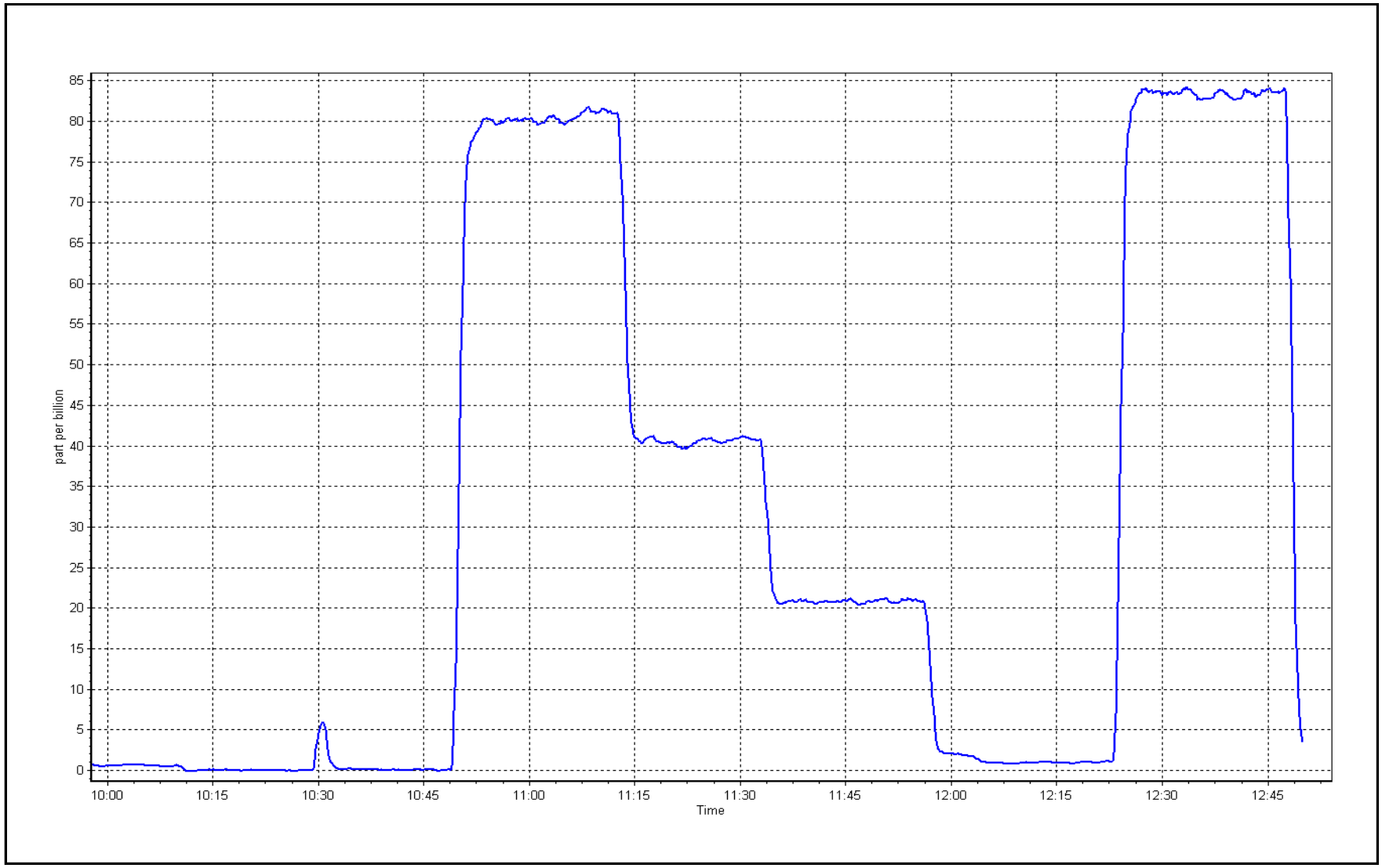
Calibration Date:	March 28, 2026	Previous Calibration:	February 10, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	10:08	End Time (MST):	12:51
Analyzer make:	Thermo 43i TLE	Analyzer serial #:	1300156232

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999923	*≥0.995*
80.0	80.5	0.9933	Slope	1.003822	*0.90 - 1.10*
40.0	40.8	0.9798			
20.0	20.8	0.9634	Intercept	0.421737	*+/-3*



TRS Calibration Plot Date: March 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:	March 24, 2026	Last Cal Date:	February 11, 2026
Start time (MST):	11:07	End time (MST):	14:52
Reason:	Routine		

Calibration Standards

Gas Cert Reference:	CC484463	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	504.3 ppm	CH4 Equiv Conc.	1065.6 ppm
C3H8 Cal Gas Conc.	204.1 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	504.3 ppm	CH4 Equiv Conc.	1065.6 ppm
Removed C3H8 Conc.	204.1 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	5762
Zero Air Gen model:	API T701	Serial Number:	1117

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:	3.71E-04	3.78E-04	NMHC SP Ratio:	5.86E-05	5.87E-05
CH4 Retention time:	15.2	15.8	NMHC Peak Area:	152436	151809
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	4921	79.4	16.92	16.72	1.012
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	16.72	Prev response	16.77	*% 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	4921	79.4	16.92	16.80	1.007
Mid point	4960	39.7	8.46	8.25	1.026
Low point	4980	19.8	4.22	4.12	1.024
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	16.92	16.94	0.999
				Average Correction Factor	1.019

Notes: Inlet filter 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	4921	79.4	8.91	8.87	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.87	Prev response	8.84	*% change	0.3%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4921	79.4	8.91	8.84	1.009
Mid point	4960	39.7	4.46	4.38	1.018
Low point	4980	19.8	2.22	2.21	1.008
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.91	8.88	1.004
				Average Correction Factor	1.012

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	79.4	8.01	7.85	1.020
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.85	Prev response	7.93	*% 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	4921	79.4	8.01	7.97	1.005
Mid point	4960	39.7	4.00	3.87	1.034
Low point	4980	19.8	2.00	1.92	1.043
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.01	8.06	0.994
				Average Correction Factor	1.027

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.995291	0.993528
THC Cal Offset:	-0.070400	-0.058603
CH4 Cal Slope:	0.997222	0.996537
CH4 Cal Offset:	-0.052804	-0.051405
NMHC Cal Slope:	0.993684	0.990696
NMHC Cal Offset:	-0.017596	-0.007198

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

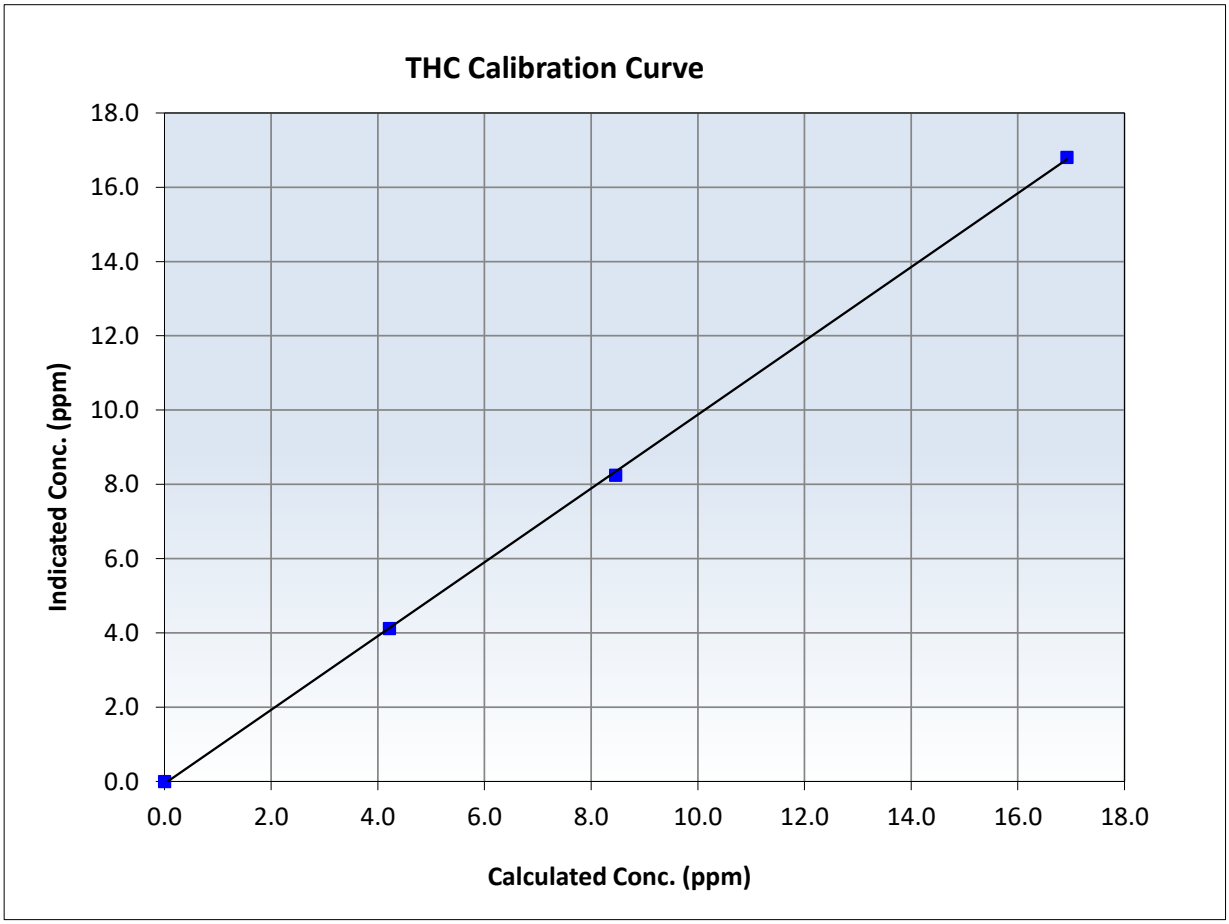
THC Calibration Summary

Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 11, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	11:07	End Time (MST):	14:52
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	0.999897	≥0.995
16.92	16.80	1.0069	Slope	0.993528	0.90 - 1.10
8.46	8.25	1.0256	Intercept	-0.058603	+/-0.5
4.22	4.12	1.0240			



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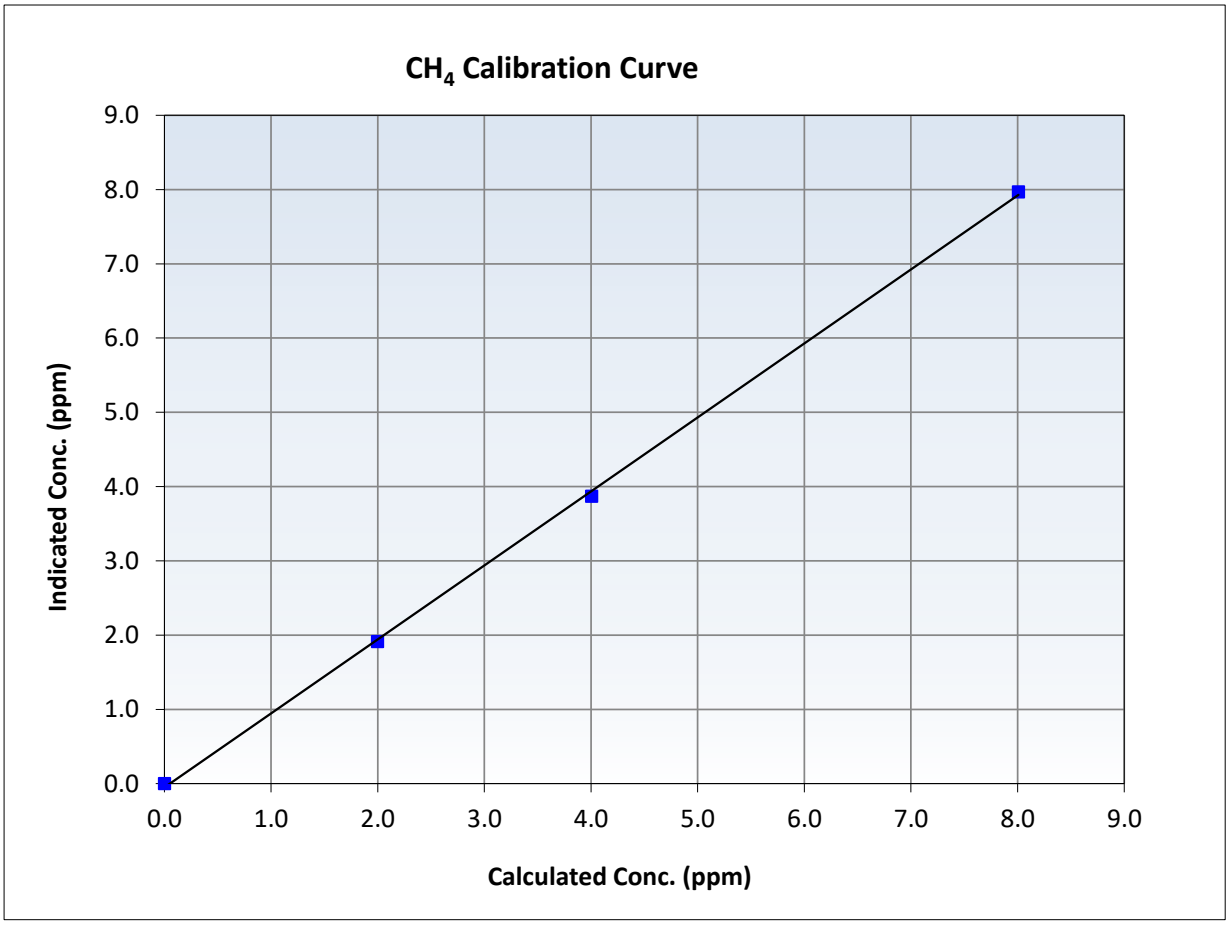
CH_4 Calibration Summary

Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 11, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	11:07	End Time (MST):	14:52
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	0.999734	*≥0.995*
8.01	7.97	1.0050	Slope	0.996537	*0.90 - 1.10*
4.00	3.87	1.0342			
2.00	1.92	1.0429	Intercept	-0.051405	*+/-0.5*



Wood Buffalo Environmental Association

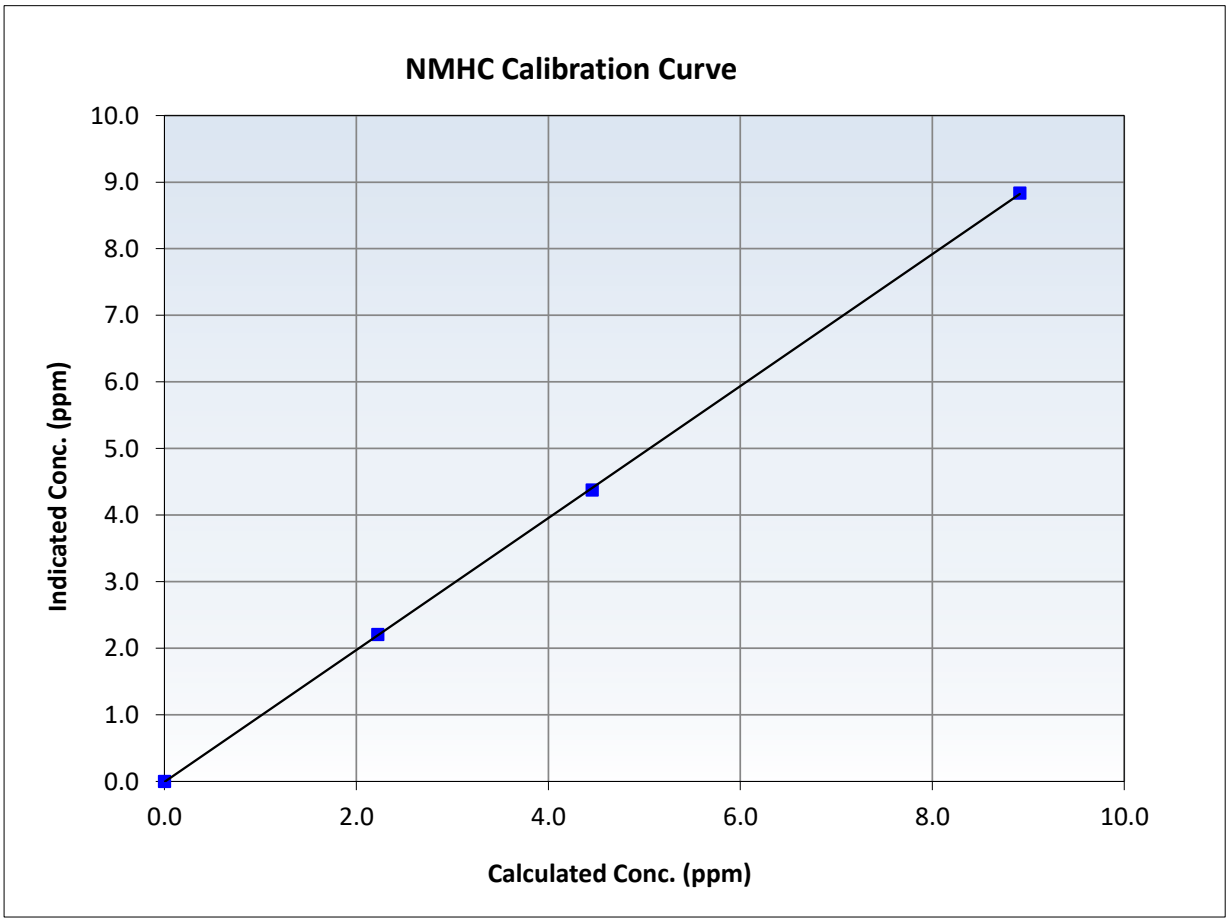
NMHC Calibration Summary

Station Information

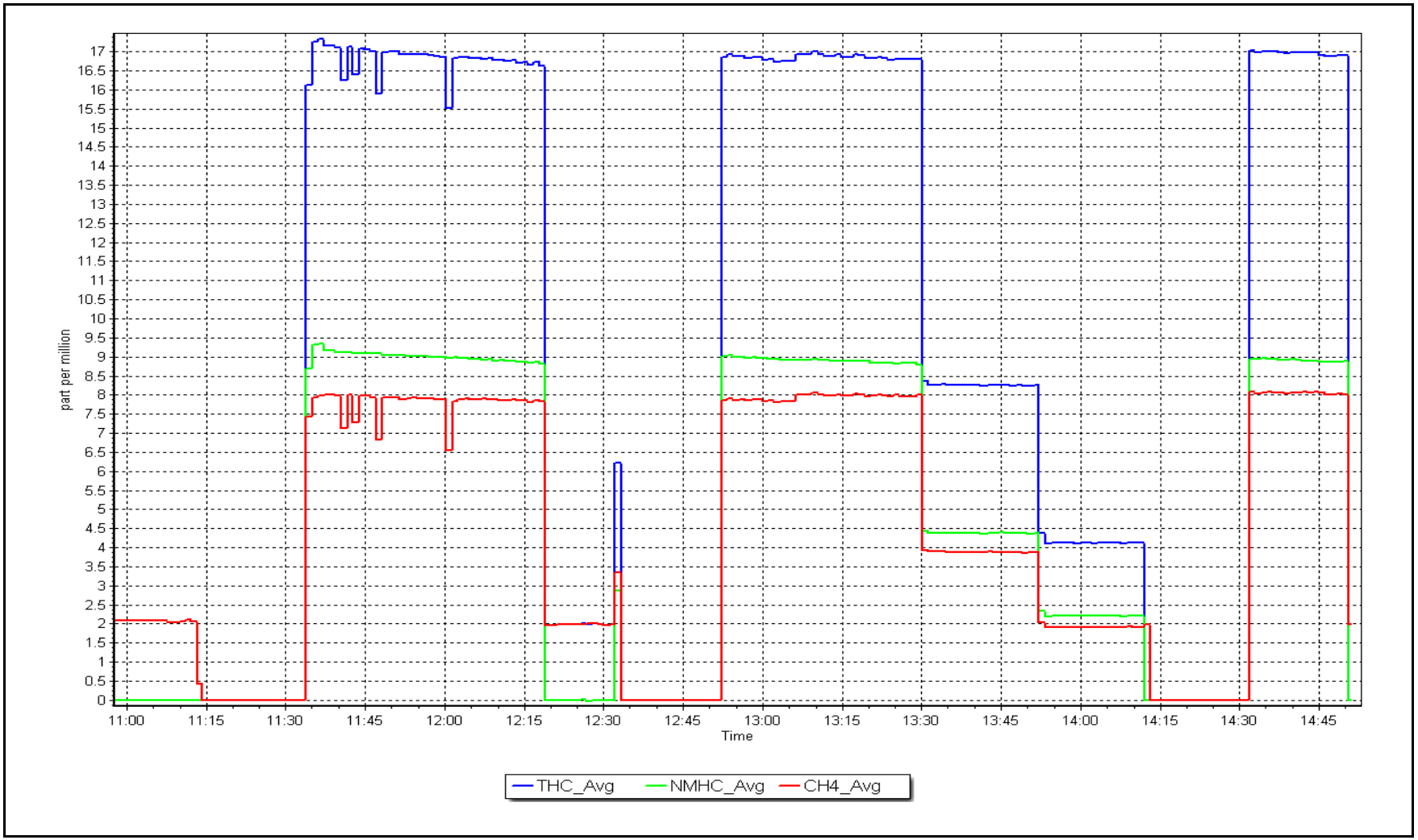
Calibration Date:	March 24, 2026	Previous Calibration:	February 11, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	11:07	End Time (MST):	14:52
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999969	*≥0.995*
8.91	8.84	1.0088	Slope	0.990696	*0.90 - 1.10*
4.46	4.38	1.0182	Intercept	-0.007198	*+/-0.5*
2.22	2.21	1.0076			



NMHC Calibration Plot Date: March 24, 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:	March 26, 2026	Last Cal Date:	March 24, 2026
Start time (MST):	11:28	End time (MST):	18:19
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:	CC484463	Cal Gas Expiry Date:	October 9, 2032
CH4 Cal Gas Conc.	504.3 ppm	CH4 Equiv Conc.	1065.6 ppm
C3H8 Cal Gas Conc.	204.1 ppm		
Removed Gas Cert:		Removed Gas Expiry:	
Removed CH4 Conc.	504.3 ppm	CH4 Equiv Conc.	1065.6 ppm
Removed C3H8 Conc.	204.1 ppm	Diff between cyl (THC):	
Diff between cyl (CH_4):		Diff between cyl (NM):	
Calibrator Model:	API T700	Serial Number:	5762
Zero Air Gen model:	API T701	Serial Number:	1117

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:	3.78E-04	3.77E-04	NMHC SP Ratio:	5.87E-05	6.00E-05
CH4 Retention time:	15.8	15.0	NMHC Peak Area:	151809	148580
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	4921	79.4	16.92	17.06	0.992
As found Mid point	4960	39.7	8.46	8.27	1.023
As found Low point	4980	19.8	4.22	4.16	1.013
New cylinder response					
Baseline Corr AF:	17.06	Prev response	16.75	*% change	1.8%
Baseline Corr 2nd AF:	8.27	AF Slope:	1.008194	AF Intercept:	-0.087138
Baseline Corr 3rd AF:	4.16	AF Correlation:	0.999726	* = > +/-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	16.94	0.999
Mid point	4960	39.7	8.46	8.33	1.016
Low point	4980	19.8	4.22	4.17	1.013
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	16.92	16.98	0.996
				Average Correction Factor	1.009

Notes: Instrument started dipping. Changed the actuator after multipoint as founds. Adjusted the span and ran a zero chromatogram. Chromatograms and diagnostics are looking good.

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	8.99	0.992
As found Mid point	4960	39.7	4.46	4.41	1.011
As found Low point	4980	19.8	2.22	2.22	0.999
New cylinder response					
Baseline Corr AF:	8.99	Prev response	8.82	*% change	1.8%
Baseline Corr 2nd AF:	4.41	AF Slope:	1.007722	AF Intercept:	-0.023564
Baseline Corr 3rd AF:	2.22	AF Correlation:	0.999891	* = > +/-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	8.90	1.001
Mid point	4960	39.7	4.46	4.41	1.010
Low point	4980	19.8	2.22	2.22	1.002
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.91	8.93	0.998
				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	4921	79.4	8.01	8.07	0.992
As found Mid point	4960	39.7	4.00	3.87	1.036
As found Low point	4980	19.8	2.00	1.94	1.029
New cylinder response					
Baseline Corr AF:	8.07	Prev response	7.93	*% change	1.8%
Baseline Corr 2nd AF:	3.87	AF Slope:	1.008492	AF Intercept:	-0.062775
Baseline Corr 3rd AF:	1.94	AF Correlation:	0.999464	* = > +/-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	8.04	0.997
Mid point	4960	39.7	4.00	3.92	1.022
Low point	4980	19.8	2.00	1.95	1.026
As left zero	5000	0.0	0.00	0.00	----
As left span	4921	79.4	8.01	8.06	0.994
				Average Correction Factor	1.015

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	0.993528	1.001456
THC Cal Offset:	-0.058603	-0.051771
CH4 Cal Slope:	0.996537	1.004427
CH4 Cal Offset:	-0.051405	-0.042787
NMHC Cal Slope:	0.990696	0.998555
NMHC Cal Offset:	-0.007198	-0.008585

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

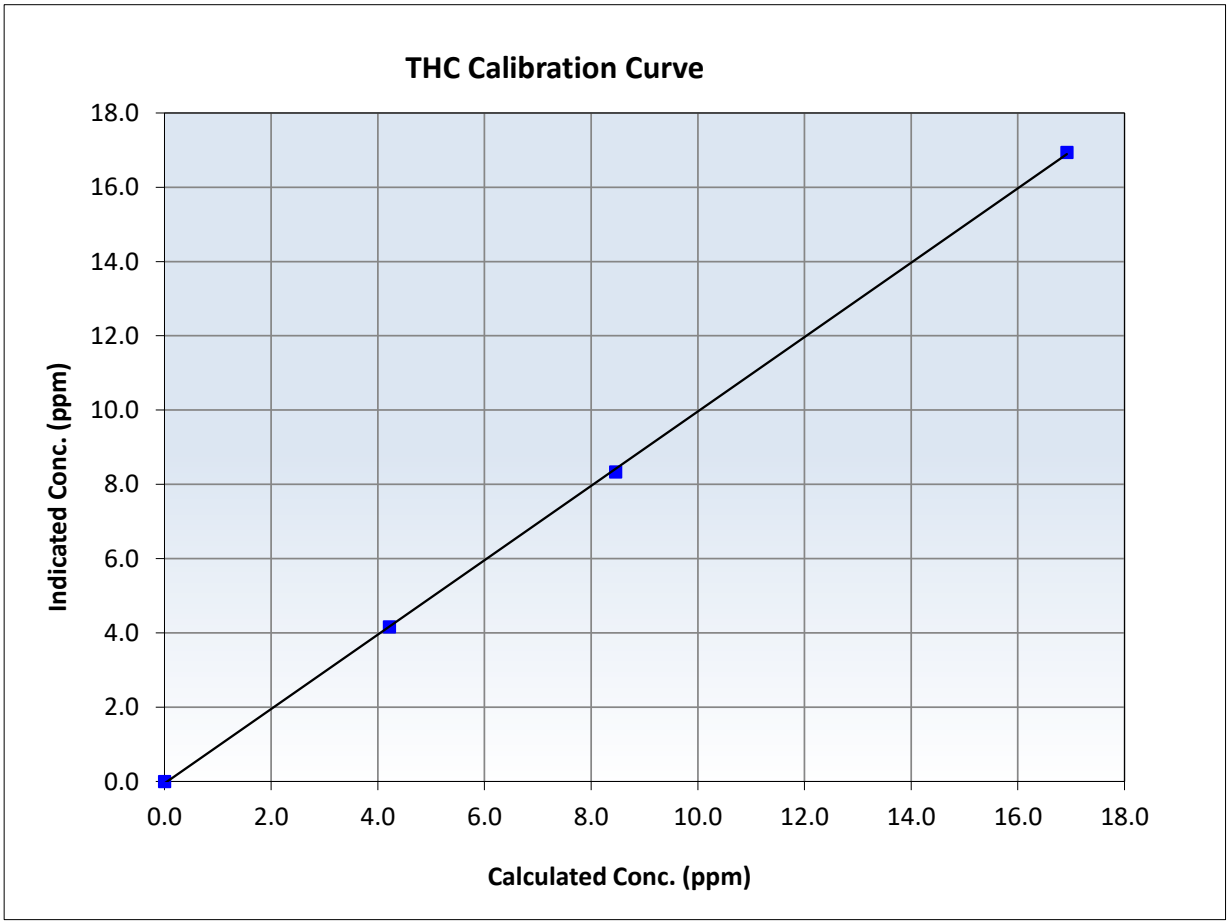
THC Calibration Summary

Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	March 24, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	11:28	End Time (MST):	18:19
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	0.999917	≥0.995
16.92	16.94	0.9988	Slope	1.001456	0.90 - 1.10
8.46	8.33	1.0155	Intercept	-0.051771	+/-0.5
4.22	4.17	1.0132			



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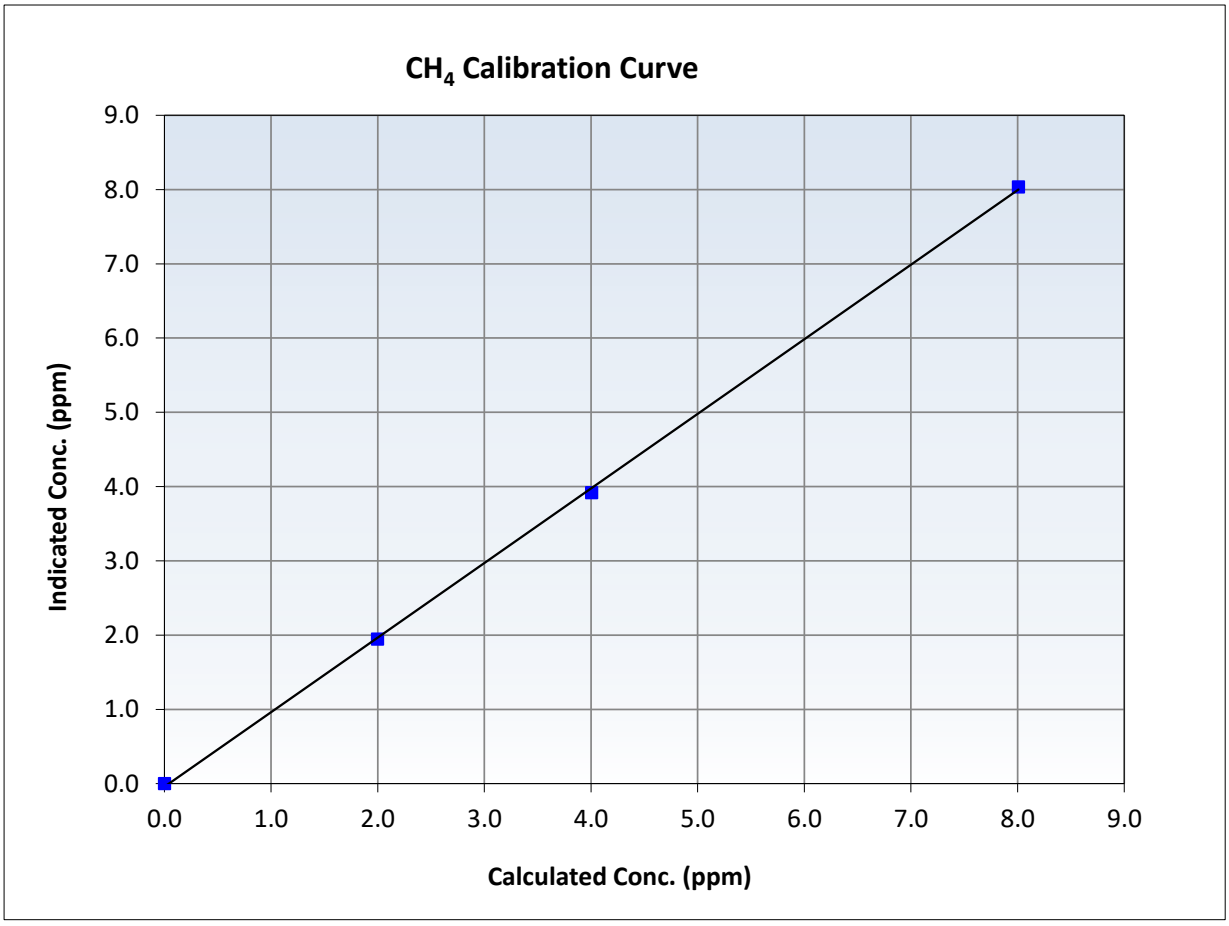
CH_4 Calibration Summary

Station Information

Calibration Date:	March 26, 2026	Previous Calibration:	March 24, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	11:28	End Time (MST):	18:19
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	0.999801	*≥0.995*
8.01	8.04	0.9966	Slope	1.004427	*0.90 - 1.10*
4.00	3.92	1.0220	Intercept	-0.042787	*+/-0.5*
2.00	1.95	1.0257			



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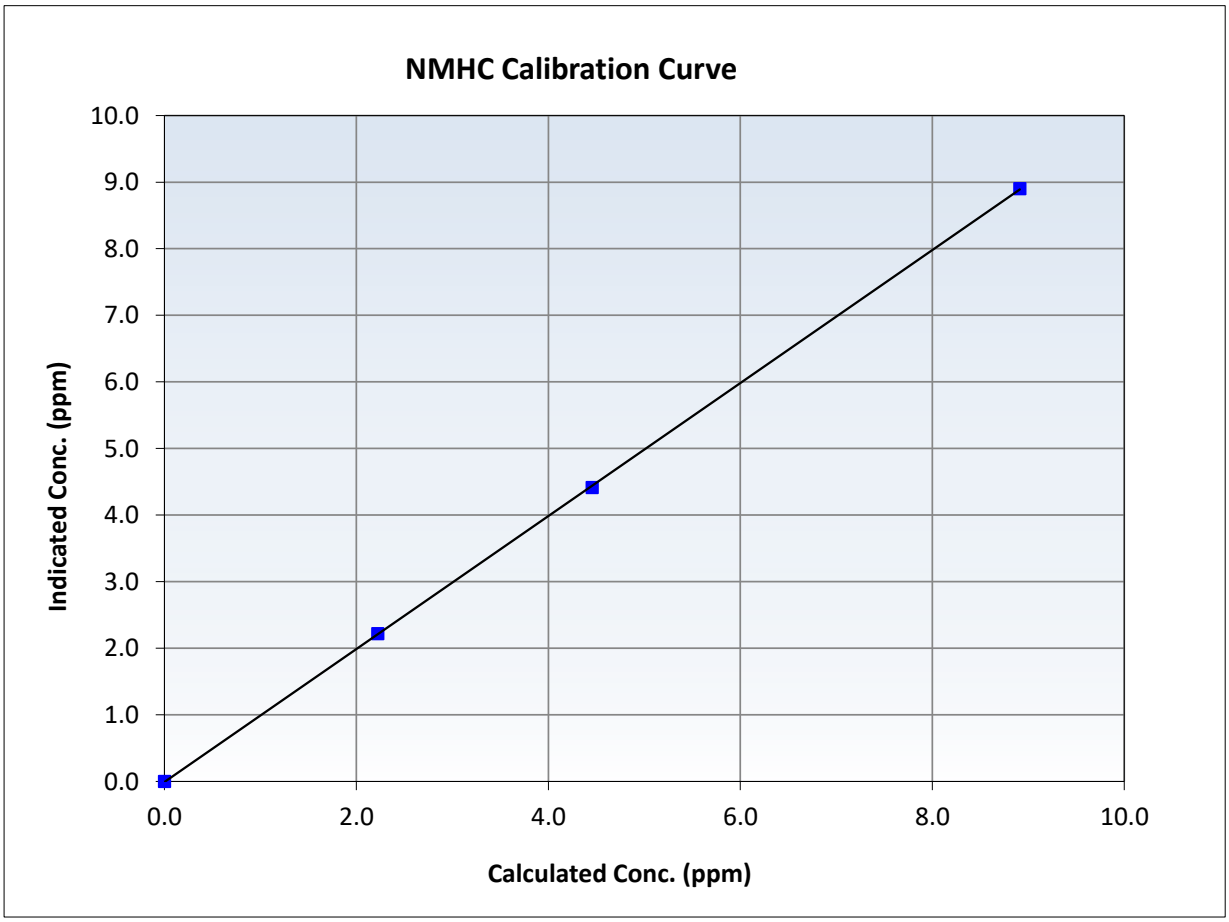
NMHC Calibration Summary

Station Information

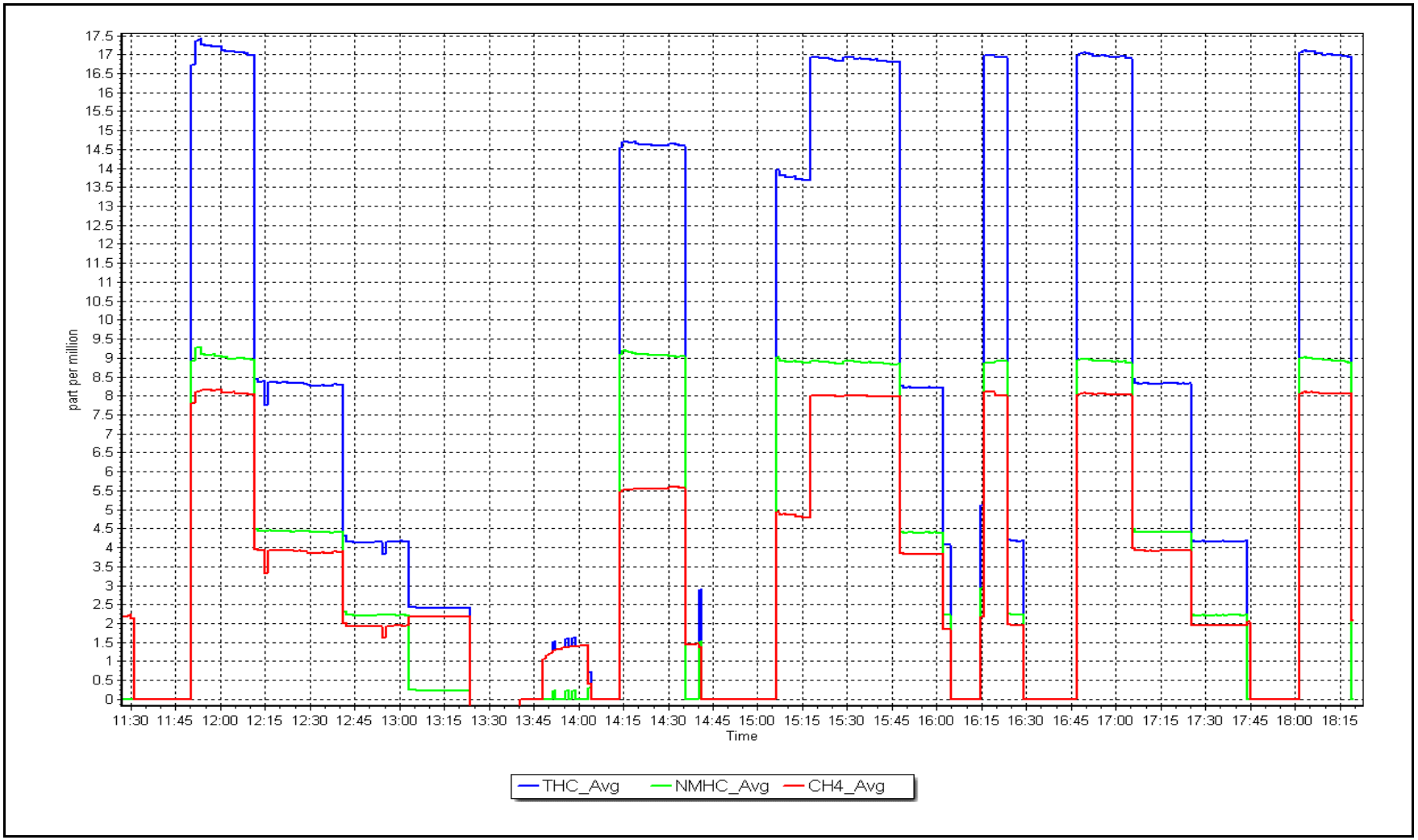
Calibration Date:	March 26, 2026	Previous Calibration:	March 24, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	11:28	End Time (MST):	18:19
Analyzer make:	Thermo 55i	Analyzer serial #:	12227620777

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999976	*≥0.995*
8.91	8.90	1.0010	Slope	0.998555	*0.90 - 1.10*
4.46	4.41	1.0097	Intercept	-0.008585	*+/-0.5*
2.22	2.22	1.0021			



NMHC Calibration Plot Date: March 26, 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:	March 25, 2026
Last Cal Date:	February 9, 2026
Start time (MST):	10:30
End time (MST):	15:44
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:	API 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	-0.1	0.0	-0.1	----	----
AF High point	4934	66.3	799.5	796.9	2.7	832.1	823.8	8.1	0.9607	0.9673
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.9 ppb	NO = 800.6 ppb
Baseline Corr 1st pt	NO_X = 832.2 ppb	NO = 823.8 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

As Found Statistics

As found	NO_X r^2:	*Percent Change	NO_X = 3.4%
As found	NO r^2:	*Percent Change	NO = 2.8%
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: 1152430007

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	Finish		Start	Finish
NO coeff or slope:	0.966	0.924	NO bkgnd or offset:	2.8	2.7
NOX coeff or slope:	0.992	0.992	NOX bkgnd or offset:	2.9	2.8
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	148.4	149.0

Calibration Statistics

	Start	Finish
NO_X Cal Slope:	1.005857	0.999611
NO_X Cal Offset:	-0.354711	-0.193446
NO Cal Slope:	1.007094	1.000440
NO Cal Offset:	-1.893263	-1.371973
NO_2 Cal Slope:	0.996830	1.006146
NO_2 Cal Offset:	-0.033525	-0.558448

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	4934	66.3	799.5	796.9	2.7	799.4	796.9	2.5	1.0002	1.0000
Mid point	4967	33.2	400.4	399.0	1.3	399.2	396.2	3.1	1.0029	1.0072
Low point	4983	16.6	200.2	199.5	0.7	200.1	197.4	2.8	1.0006	1.0109
As left zero	5000	0.0	0.0	0.0	0.0	0.1	0.1	0.0	----	----
As left span	4934	66.3	799.5	396.2	403.3	788.2	396.2	392.0	1.0144	1.0000
							Average Correction Factor		1.0012	1.0060

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	786.3	391.5	397.5	399.4	0.9951	100.5%
Mid GPT point	786.3	591.8	197.2	198.2	0.9947	100.5%
Low GPT point	786.3	687.4	101.6	100.6	1.0095	99.1%
				Average Correction Factor	0.9998	100.0%

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

Calibration Performed By: Mohammed Kashif

Wood Buffalo Environmental Association

NO_X Calibration Summary

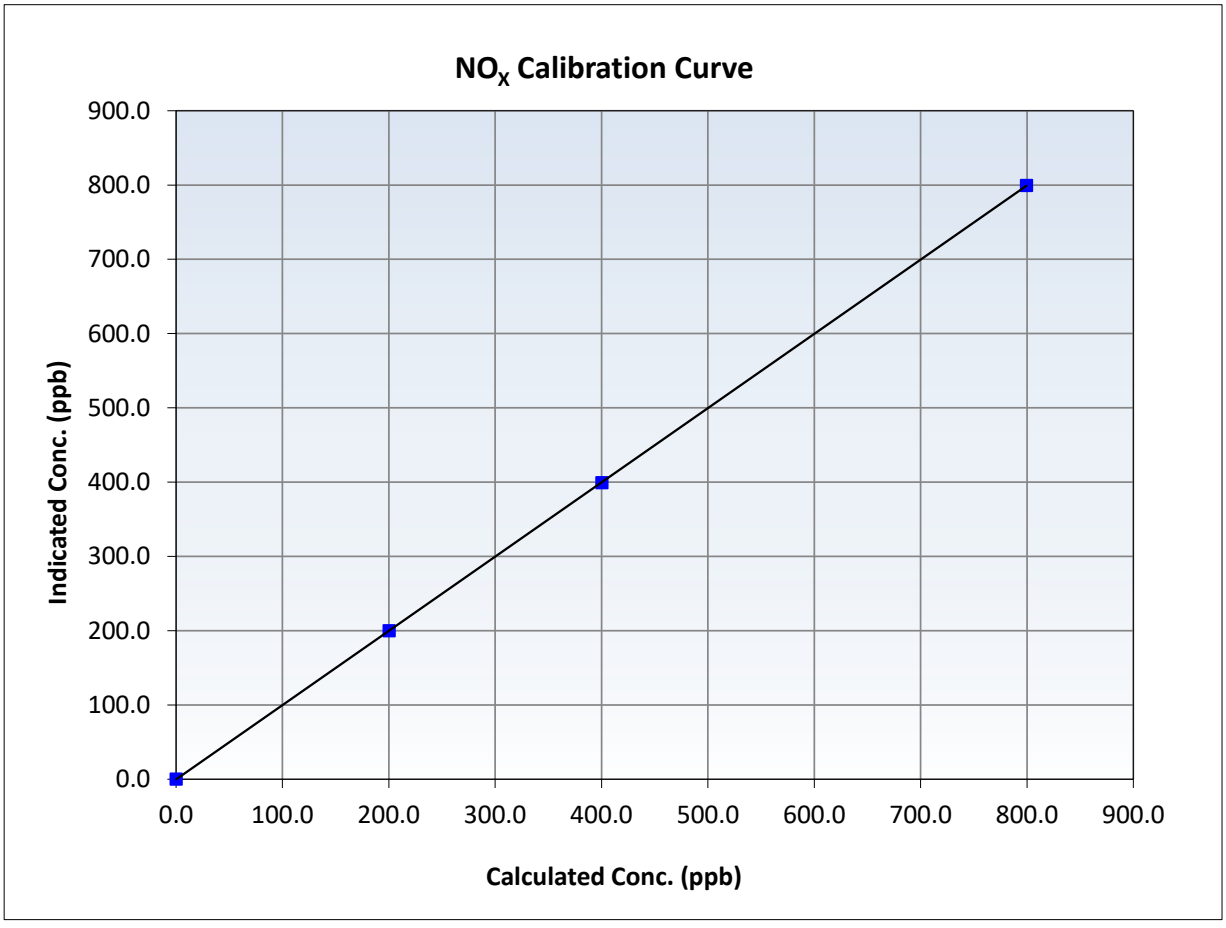
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	10:30	End Time (MST):	15:44
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
799.5	799.4	1.0002
400.4	399.2	1.0029
200.2	200.1	1.0006

Statistical Evaluation		Limits
Correlation Coefficient	0.999997	≥0.995
Slope	0.999611	0.90 - 1.10
Intercept	-0.193446	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

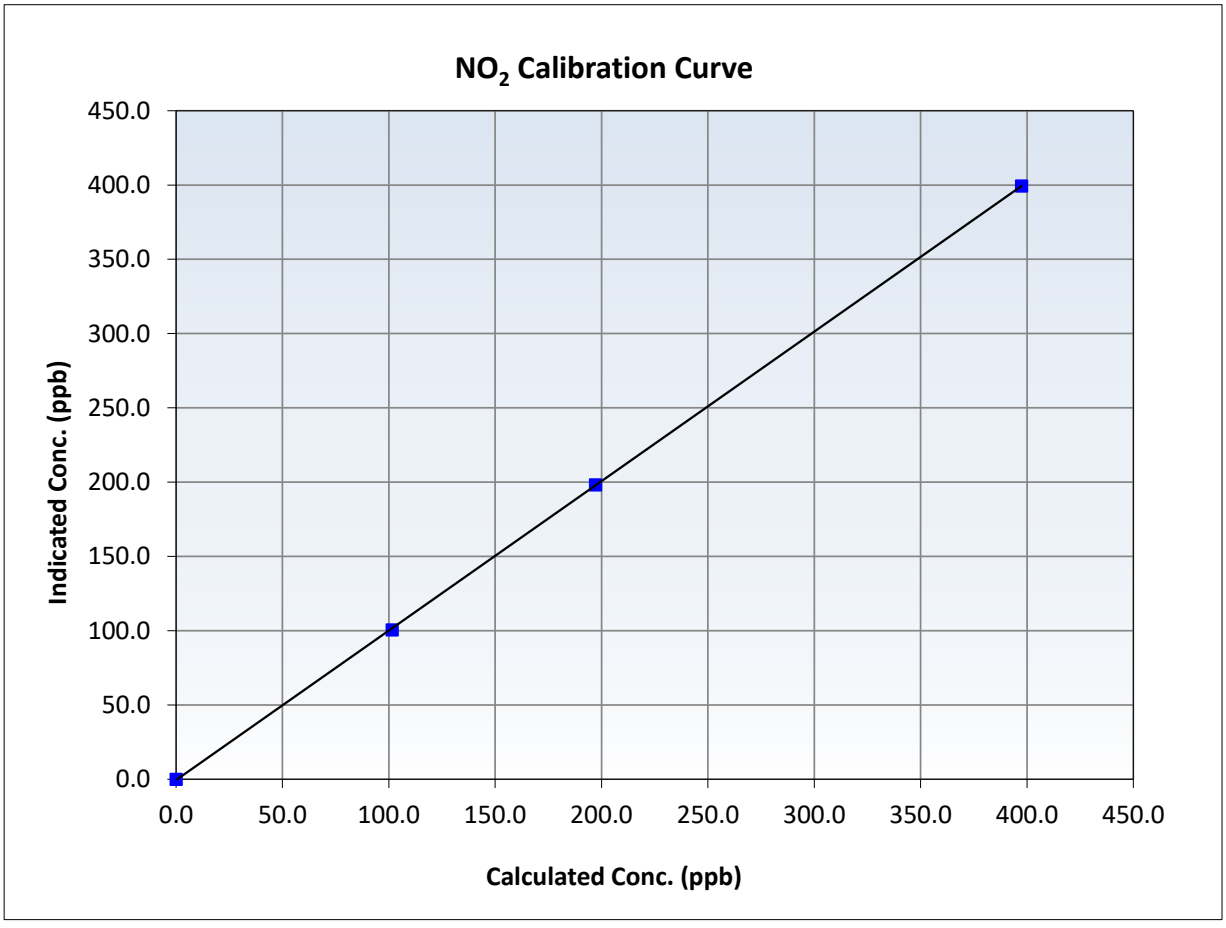
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	10:30	End Time (MST):	15:44
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
397.5	399.4	0.9951
197.2	198.2	0.9947
101.6	100.6	1.0095

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999983	*≥0.995*
Slope	1.006146	*0.90 - 1.10*
Intercept	-0.558448	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

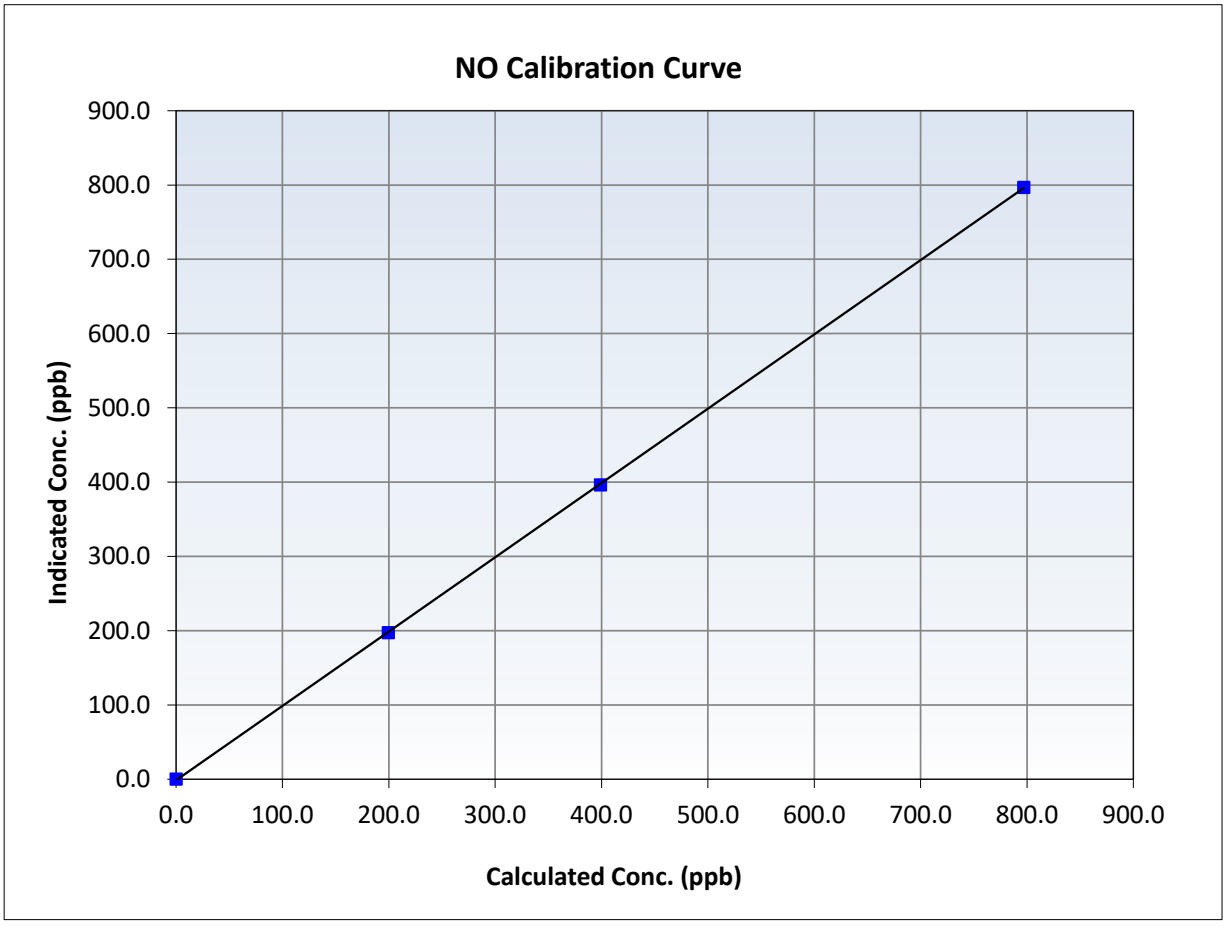
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 9, 2026
Station Name:	Fort Hills	Station Number:	AMS 23
Start Time (MST):	10:30	End Time (MST):	15:44
Analyzer make:	Thermo 42i	Analyzer serial #:	1152430007

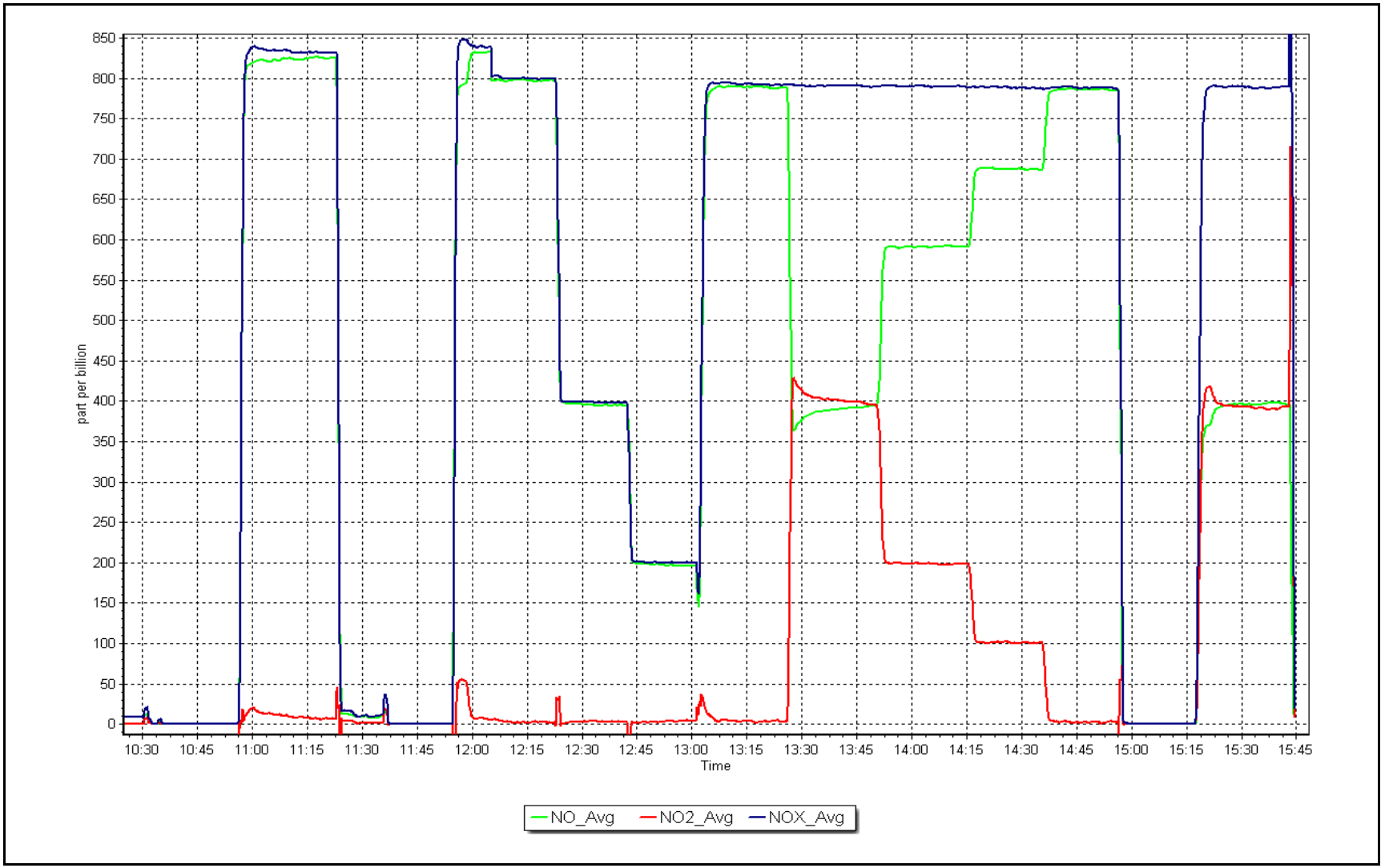
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
796.9	796.9	1.0000
399.0	396.2	1.0072
199.5	197.4	1.0109

Statistical Evaluation		Limits
Correlation Coefficient	0.999981	≥0.995
Slope	1.000440	0.90 - 1.10
Intercept	-1.371973	+/-20



NO_X Calibration Plot Date: March 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:	March 25, 2026	Last Cal Date:	February 11, 2026
Start time (MST):	13:07	End time (MST):	15:08
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 (°C)	-16.2	-16.88	-16.2	☐	+/- 2 °C
P (mmHg)	746	745.33	746	☐	+/- 10 mmHg
Flow (LPM)	4.97	4.986	4.97	☐	+/- 0.25 LPM
PW% (pump)	37	-----	37	☐	>80%
Zero Verification	PM w/o HEPA:	23.7	PM w/ HEPA:	0.0	<0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

SPAN DUST — Refractive Index: 10.9 — Expiry Date: 16-Jul-26 — Lot No.: 100128-050-050

Parameter	As found	Post maintenance	As left	Adjusted	*(Limits)*
PMT Peak Test	9.9	11.2	10.8	☑	+/- 0.5

Date Optical Chamber Cleaned: March 25, 2026

Date Disposable Filter Changed: March 25, 2026

Post- maintenance Zero Verification: PM w/ HEPA: 0 <0.2 ug/m3

Annual Maintenance

Date Sample Tube Cleaned: March 25, 2026

Date RH/T Sensor Cleaned: March 25, 2026

Notes: Leak Check, Flow and PMT checked before and after cleaning. PMT adjusted after cleaning of optical chamber and filter change out.

Calibration by: Mohammed Kashif

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS25
WASKŌW OHCI PIMÂTISIWIN
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Waskow ohci Pimatisiwin	Station number:	AMS 25
Calibration Date:	March 10, 2026	Last Cal Date:	February 3, 2026
Start time (MST):	11:42	End time (MST):	14:45
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:	0.998399	1.001471	Backgd or Offset:	12.5	12.7
Calibration intercept:	-0.752937	-1.152490	Coeff or Slope:	1.085	1.100

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	80.5	800.1	787.3	1.016
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	787.8	Previous response	798.1	*% change	-1.3%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	80.5	800.1	800.5	0.999
Mid point	4960	40.2	399.6	399.0	1.001
Low point	4980	20.1	199.8	197.4	1.012
As left zero	5000	0.0	0.0	-0.3	----
As left span	4920	80.5	800.1	800.2	1.000
				Average Correction Factor:	1.004

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

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

SO_2 Calibration Summary

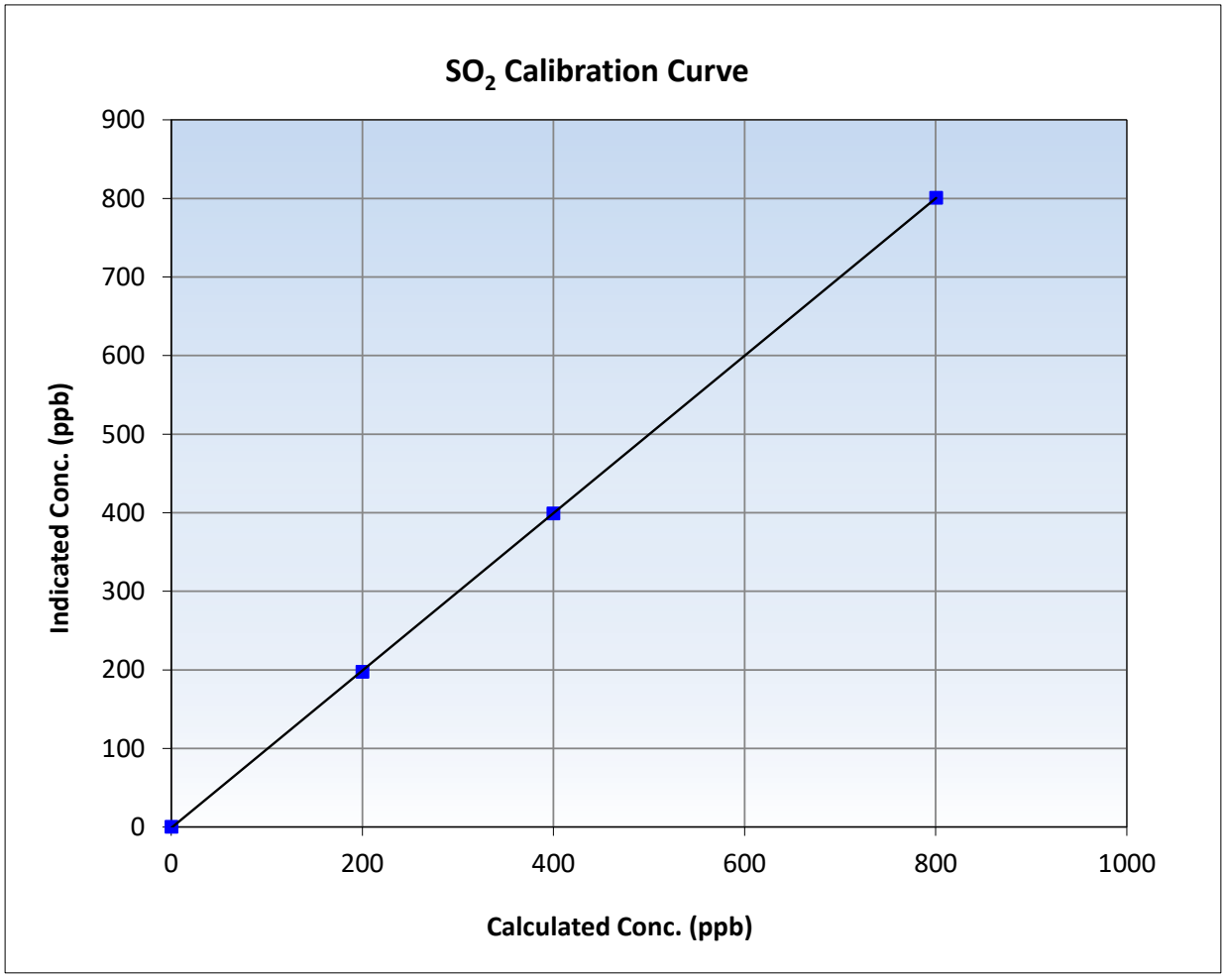
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 3, 2026
Station Name:	Waskow ohci Pimatisiwin	Station Number:	AMS 25
Start Time (MST):	11:42	End Time (MST):	14:45
Analyzer make:	Thermo 43i	Analyzer serial #:	1118148497

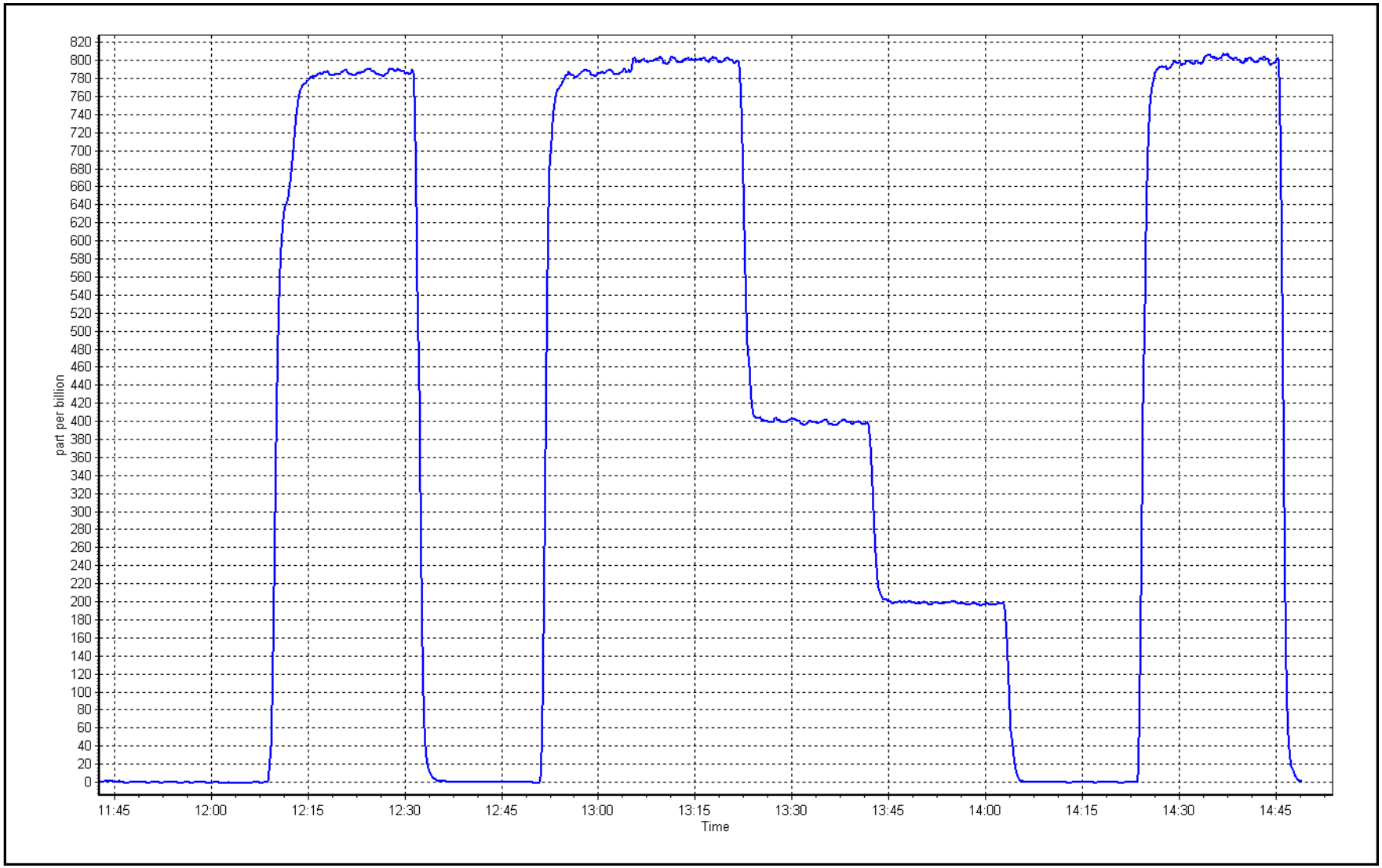
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.1	800.5	0.9995
399.6	399.0	1.0014
199.8	197.4	1.0121

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999989	*≥0.995*
Slope	1.001471	*0.90 - 1.10*
Intercept	-1.152490	*+/-30*



SO2 Calibration Plot Date: March 10, 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:	March 13, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	10:55	End time (MST):	15:21
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	4.97	ppm	Cal Gas Exp Date:	January 3, 2026
Cal Gas Cylinder #:	CC517099			
Removed Cal Gas Conc:	4.97	ppm	Rem Gas Exp Date:	
Removed Gas Cyl #:			Diff between cyl:	
Calibrator Make/Model:	API T700		Serial Number:	747
ZAG Make/Model:	API T701		Serial Number:	261

Analyzer Information

Analyzer make:	Thermo 43i-LTE		Analyzer serial #:	1170050146
Converter make:	Global G-150		Converter serial #:	2024-287
Analyzer Range	0 - 100 ppb		Converter Temp:	325 degC

	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.005218	1.000796	Backgd or Offset:	3.89	3.89
Calibration intercept:	-0.097644	0.182193	Coeff or Slope:	1.152	1.161

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	80.5	80.0	78.4	1.018
As found Mid point	4960	40.3	40.1	39.6	1.006
As found Low point	4980	20.1	20.0	19.8	0.999
New cylinder response					

Baseline Corr As found:	78.6	Prev response:	80.34	*% change:	-2.2%
Baseline Corr 2nd AF pt:	39.8	AF Slope:	0.981234	AF Intercept:	0.042131
Baseline Corr 3rd AF pt:	20.0	AF Correlation:	0.999948	* = > +/-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	80.5	80.0	80.2	0.998
Mid point	4960	40.3	40.1	40.4	0.991
Low point	4980	20.1	20.0	20.2	0.989
As left zero	5000	0.0	0.0	0.1	----
As left span	4920	80.0	800.0	819.4	0.976
SO2 Scrubber Check	4920	80.0	800.0	-0.1	----

Date of last scrubber change:				Ave Corr Factor	0.993
Date of last converter efficiency test:		February 12, 2025		111.0%	efficiency

Notes: Changed the inlet filter and performed an SO2 scrubber check after the as founds. Adjusted the span.

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

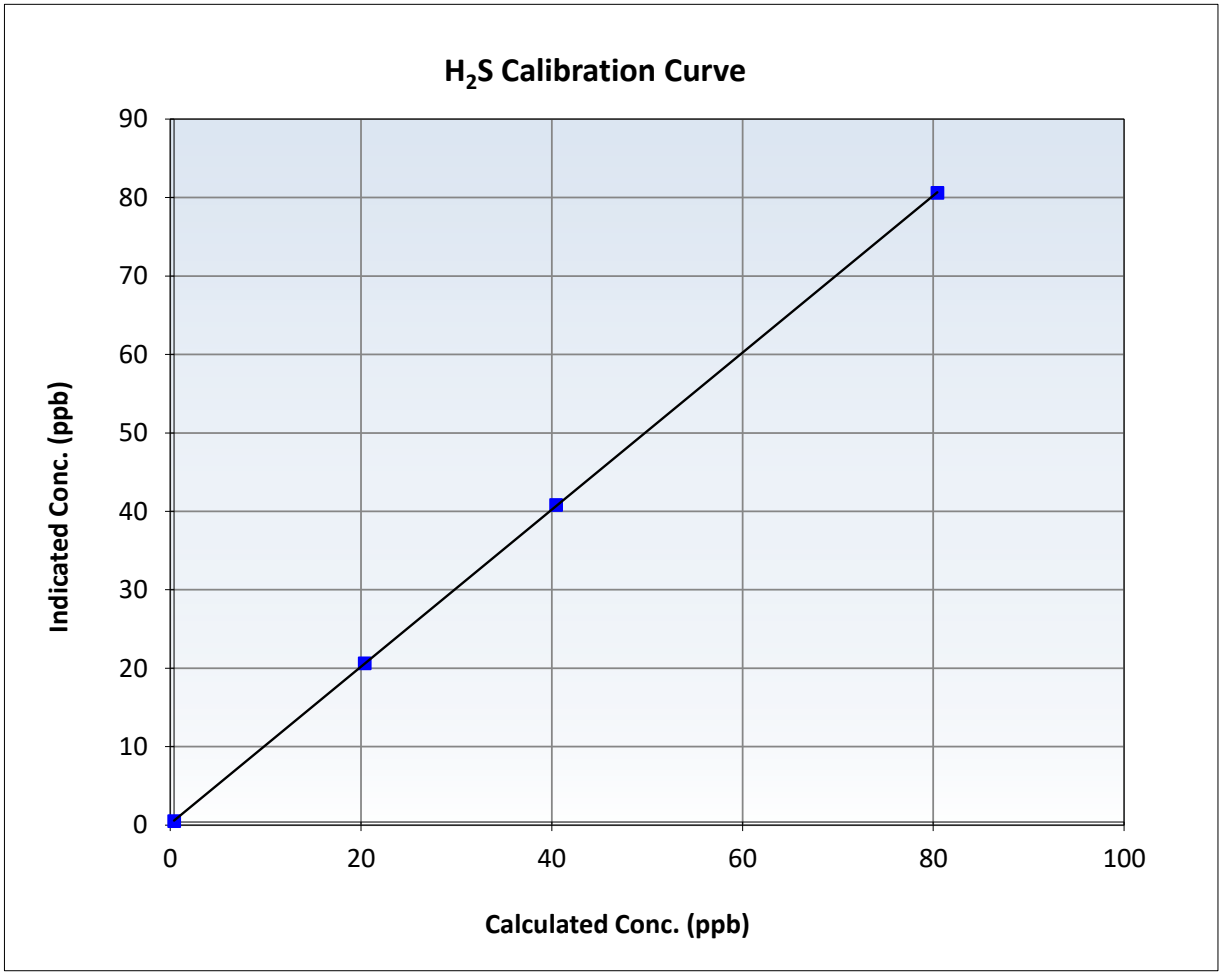
H_2S Calibration Summary

Station Information

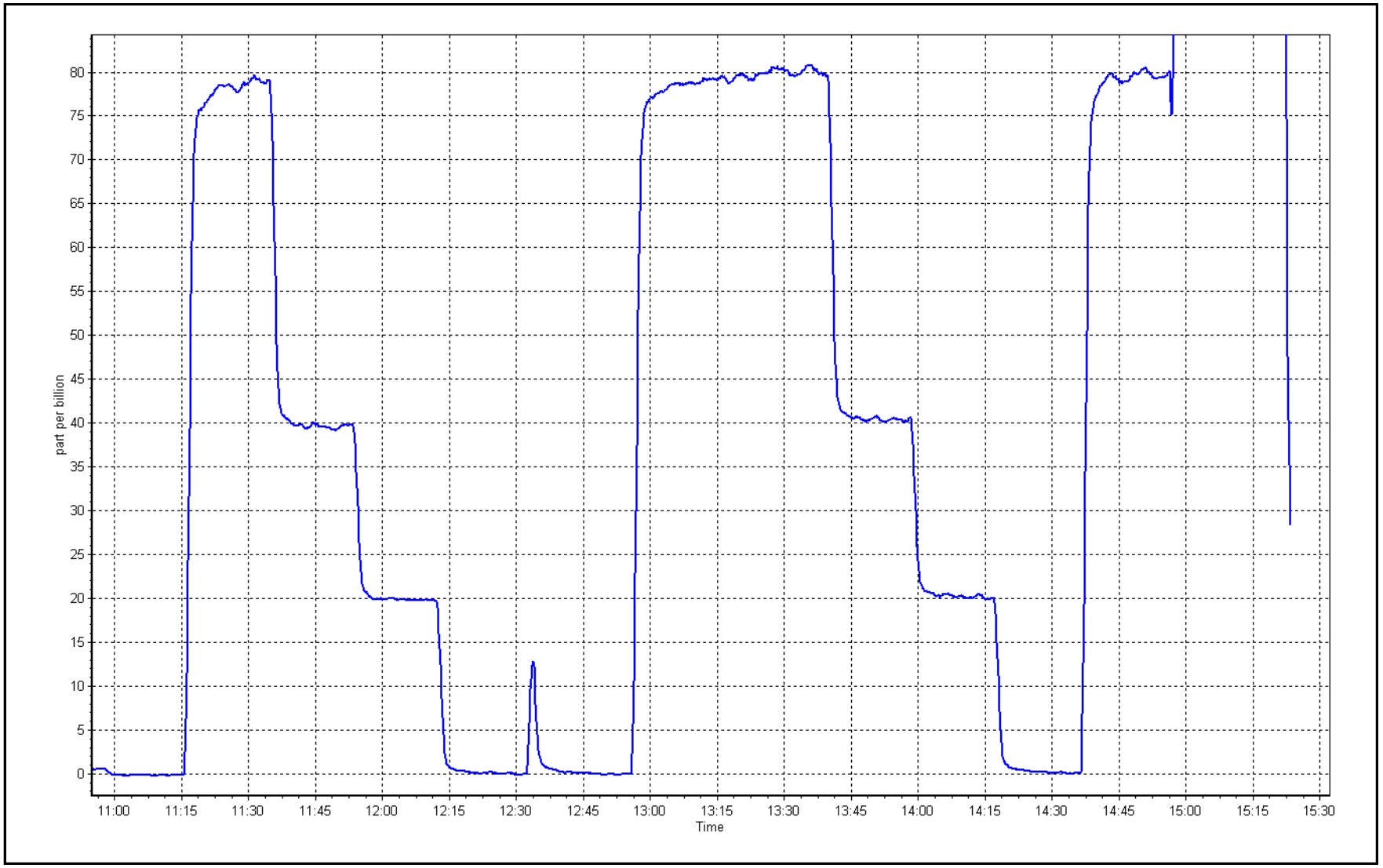
Calibration Date:	March 13, 2026	Previous Calibration:	February 4, 2026
Station Name:	Waskow ohci Pimatisiwin	Station Number:	AMS 25
Start Time (MST):	10:55	End Time (MST):	15:21
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1170050146

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*
80.0	80.2	0.9978	Slope	1.000796	*0.90 - 1.10*
40.1	40.4	0.9915			
20.0	20.2	0.9891	Intercept	0.182193	*+/-3*



H_2S Calibration Plot Date: March 13, 2026 Location: Waskow ohci Pimatisiwin



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS27
JACKFISH 2/3
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Jackfish 2/3	Station number:	AMS 27
Calibration Date:	March 23, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	10:35	End time (MST):	13:27
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.58	ppm	Cal Gas Exp Date:	December 29, 2028
Cal Gas Cylinder #:	SG9133974BAL			
Removed Cal Gas Conc:	50.58	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	API T700		Serial Number:	5252
Zero Air Gen Model:	API 701		Serial Number:	268

Analyzer Information

Analyzer make:	Thermo 43iQ-TL		Serial Number:	12124313138	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001861	1.004207	Backgd or Offset:	11.1	11.0
Calibration intercept:	-0.457640	0.105879	Coeff or Slope:	0.931	0.929

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	800.2	802.3	0.997
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	802.6	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	0.0	----
High point	4921	79.1	800.2	803.4	0.996
Mid point	4960	39.5	399.6	402.0	0.994
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	800.2	805.0	0.994
				Average Correction Factor:	0.996

Notes: Changed the sample inlet filter after as founds. Span adjusted

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

SO_2 Calibration Summary

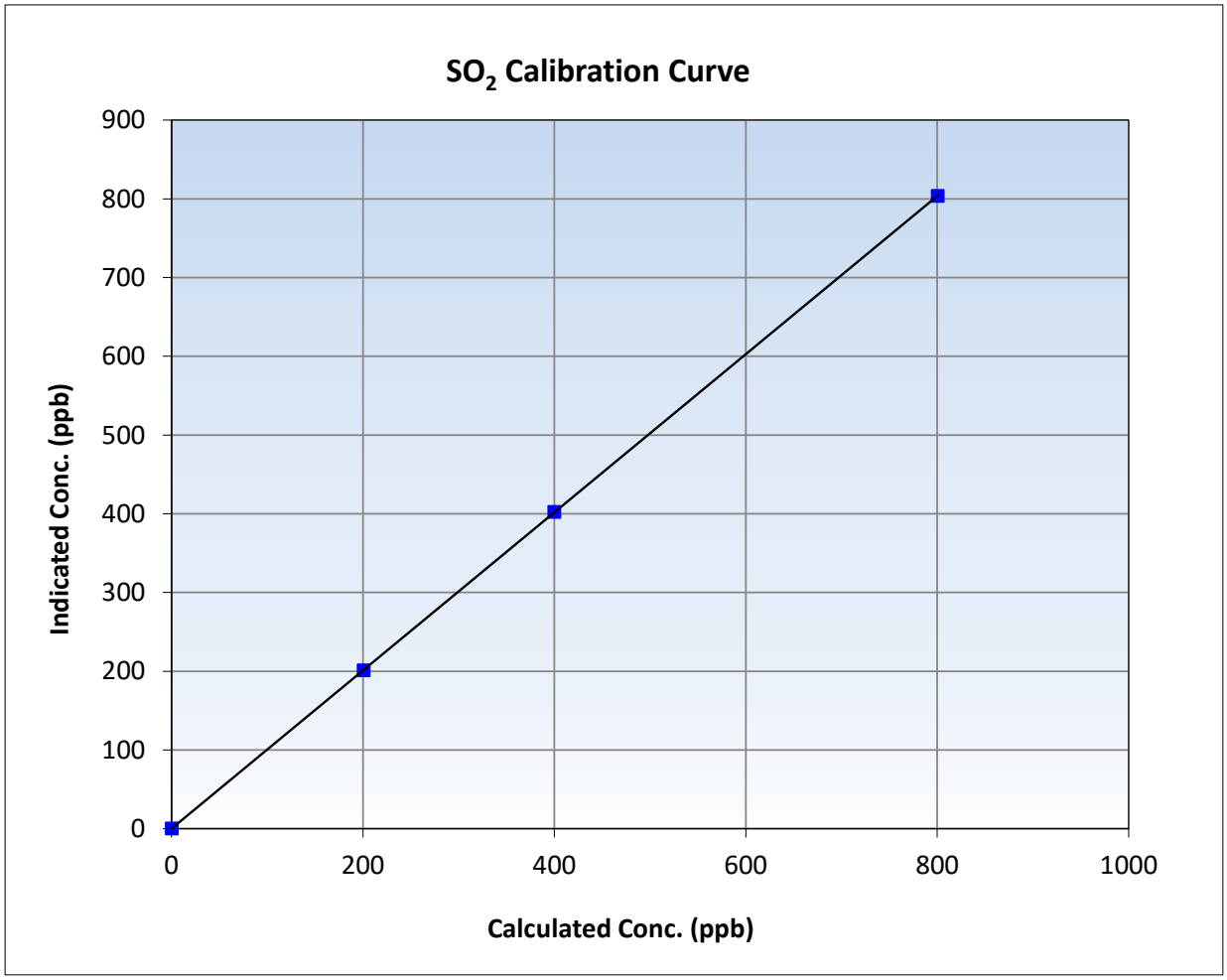
Station Information

Calibration Date:	March 23, 2026	Previous Calibration:	February 4, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	10:35	End Time (MST):	13:27
Analyzer make:	Thermo 43iQ-TL	Analyzer serial #:	12124313138

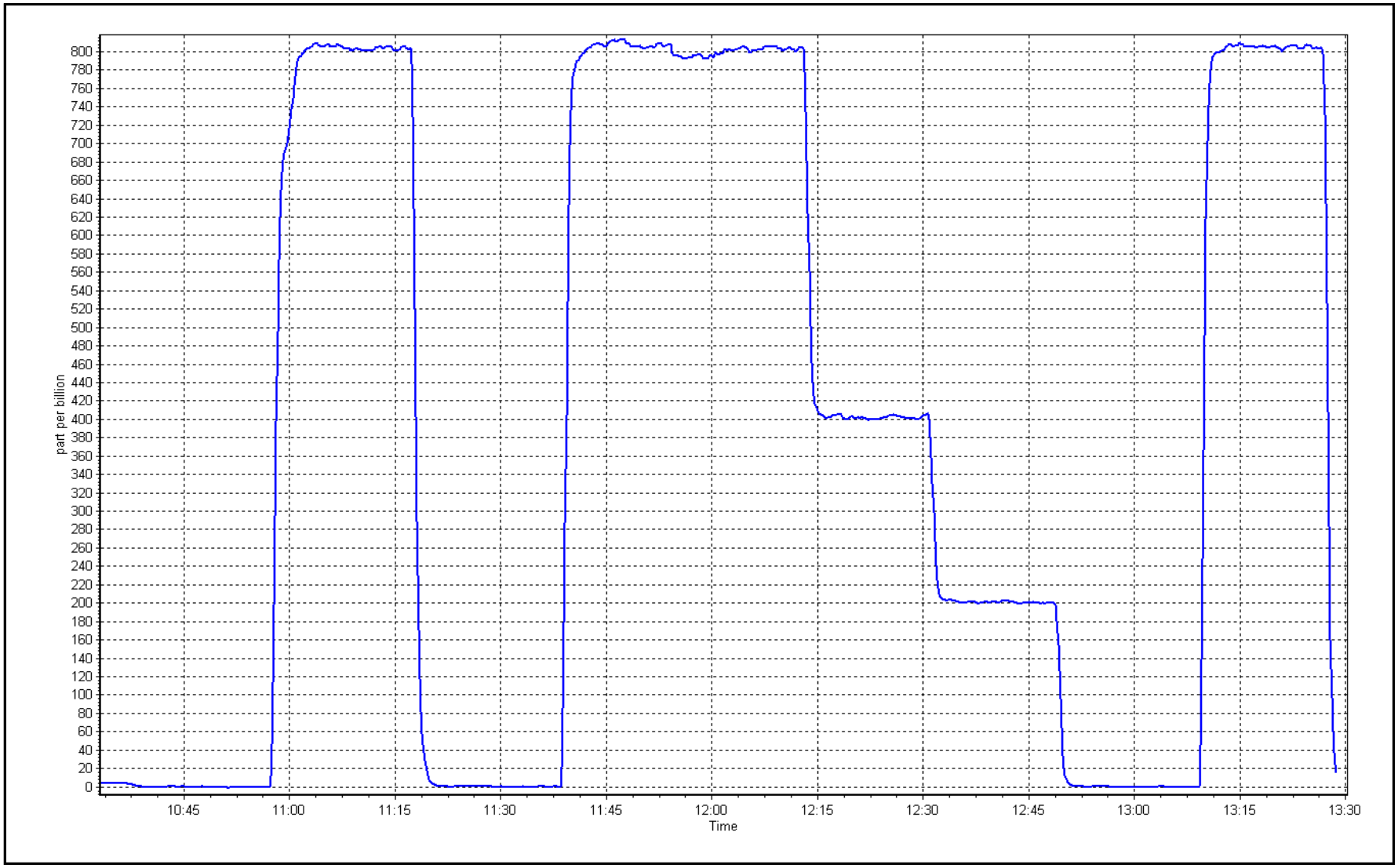
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.2	803.4	0.9960
399.6	402.0	0.9941
200.3	201.0	0.9965

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.004207	*0.90 - 1.10*
Intercept	0.105879	*+/-30*



SO2 Calibration Plot Date: March 23, 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:	March 4, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	11:38	End time (MST):	15:34
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:	1.010524	1.001574	Backgd or Offset:	3.2	3.4
Calibration intercept:	-0.064037	-0.020920	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	0.1	----
As found High point	4918	82.1	80.0	79.7	1.005
As found Mid point	4959	41.1	40.0	39.9	1.006
As found Low point	4979	20.5	20.0	19.8	1.014
New cylinder response					

Baseline Corr As found:	79.6	Prev response:	80.74	*% change:	-1.4%
Baseline Corr 2nd AF pt:	39.8	AF Slope:	0.996146	AF Intercept:	0.019019
Baseline Corr 3rd AF pt:	19.7	AF Correlation:	0.999994	* = > +/-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	4918	82.1	80.0	80.1	0.998
Mid point	4959	41.1	40.0	40.0	1.001
Low point	4979	20.5	20.0	20.0	0.998
As left zero	5000	0.0	0.0	0.0	----
As left span	4918	82.1	80.0	80.4	0.995
SO2 Scrubber Check	4921	79.1	791.0	-0.1	----

Date of last scrubber change:	18-Nov-25	Ave Corr Factor	0.999
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 zero only.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

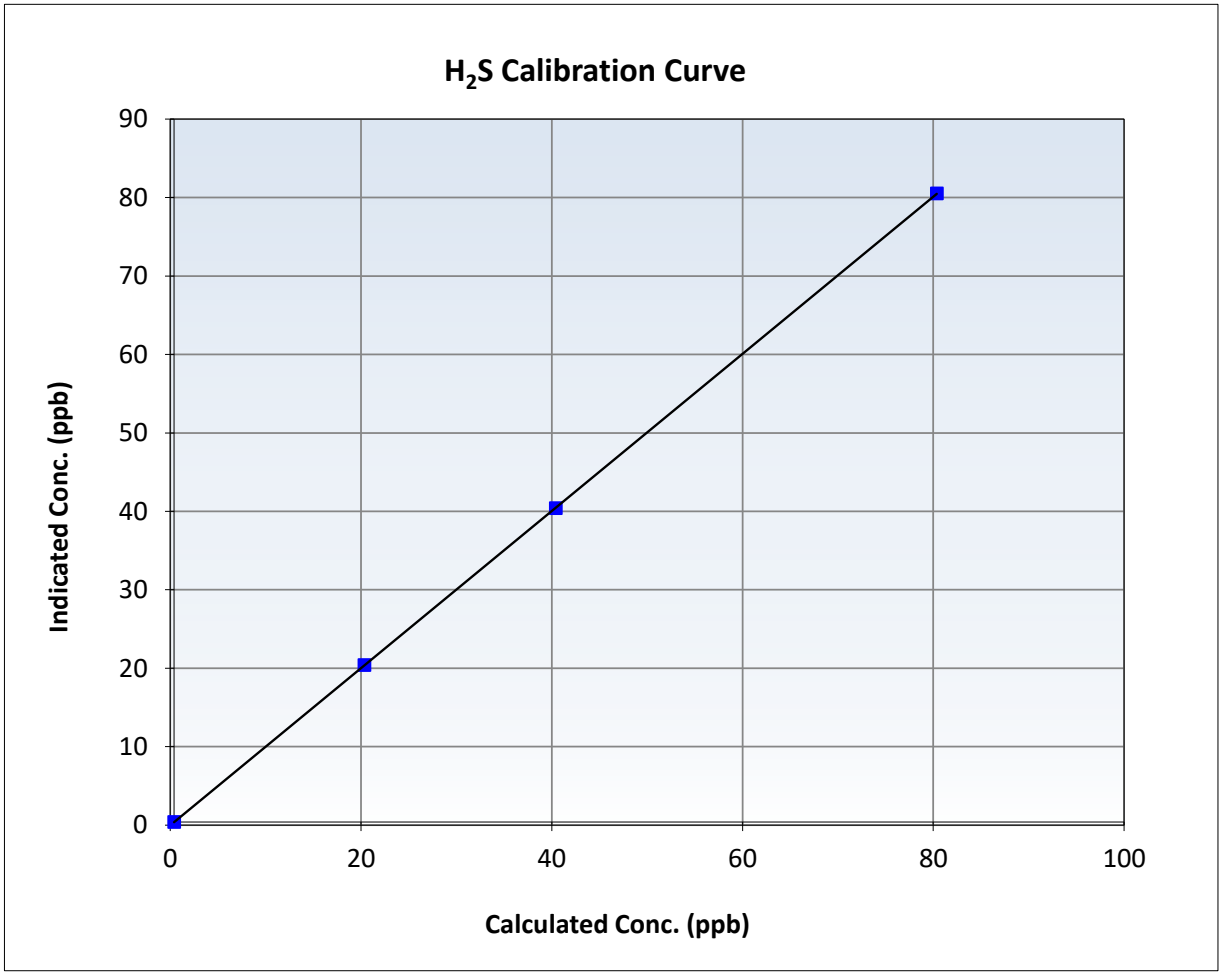
H_2S Calibration Summary

Station Information

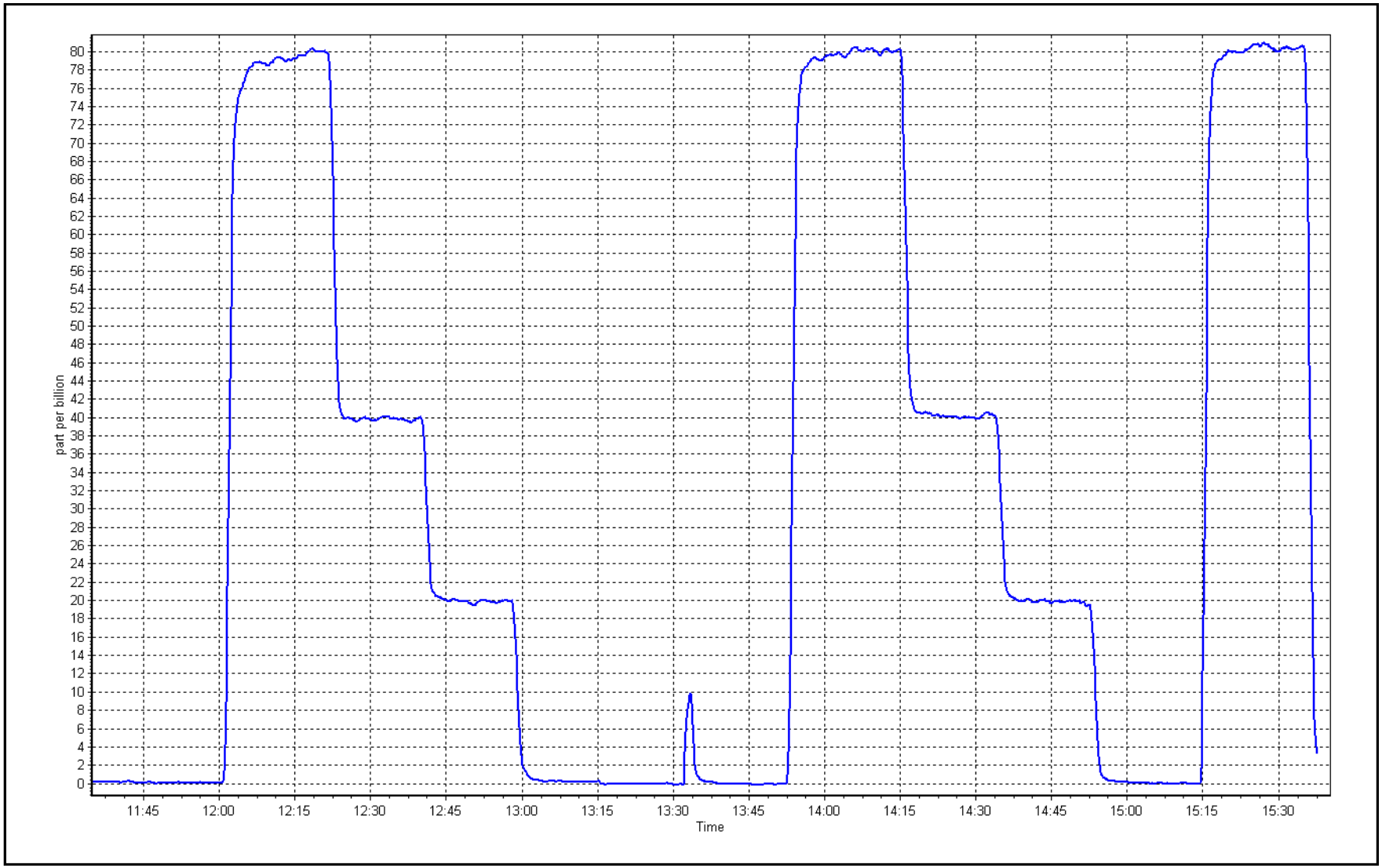
Calibration Date:	March 4, 2026	Previous Calibration:	February 10, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	11:38	End Time (MST):	15:34
Analyzer make:	Thermo 43iQ	Analyzer serial #:	12228021055

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999998	*≥0.995*
80.0	80.1	0.9983	Slope	1.001574	*0.90 - 1.10*
40.0	40.0	1.0008			
20.0	20.0	0.9984	Intercept	-0.020920	*+/-3*



H_2S Calibration Plot Date: March 4, 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:	March 31, 2026
Last Cal Date:	February 9, 2026
Start time (MST):	8:35
End time (MST):	13:01
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 T750	Serial Number:	282
ZAG make/model:	Teledyne API T751H	Serial Number:	321

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	-0.9	-0.7	-0.2	----	----
AF High point	4934	66.4	800.7	799.4	1.3	798.2	794.1	4.1	1.0020	1.0058
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 802.1 ppb	NO = 800.1 ppb
Baseline Corr 1st pt	NO_X = 799.1 ppb	NO = 794.8 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

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 = -0.4%
*Percent Change	NO = -0.7%

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: 1035

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.863	0.863	NO bkgnd or offset:	-4.9	-4.9
NOX coeff or slope:	0.857	0.857	NOX bkgnd or offset:	-3.7	-3.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	4.9	4.9

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.002659	1.000825
NO_X Cal Offset:	-0.717894	-0.016028
NO Cal Slope:	1.003038	1.003131
NO Cal Offset:	-1.717405	-1.315990
NO_2 Cal Slope:	0.999995	0.996092
NO_2 Cal Offset:	-0.220545	-0.588359

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	0.1	----	----
High point	4934	66.4	800.7	799.4	1.3	801.7	801.2	0.3	0.9988	0.9977
Mid point	4967	33.2	400.4	399.7	0.7	399.8	399.0	0.8	1.0014	1.0018
Low point	4983	16.6	200.2	199.9	0.3	200.8	198.0	2.8	0.9971	1.0095
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.3	-0.3	----	----
As left span	4934	66.4	800.7	379.5	421.2	795.7	379.5	416.2	1.0063	1.0000
								Average Correction Factor	0.9991	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	0.1	----	----
High GPT point	793.3	376.9	417.7	415.9	1.0044	99.6%
Mid GPT point	793.3	577.4	217.2	215.4	1.0085	99.2%
Low GPT point	793.3	679.8	114.8	113.1	1.0153	98.5%
				Average Correction Factor	1.0094	99.1%

Notes: Changed sample inlet filter after as founds. No adjustments. 2nd NO reference point was used due to drift.

Calibration Performed By: Sean Bala

Wood Buffalo Environmental Association

NO_X Calibration Summary

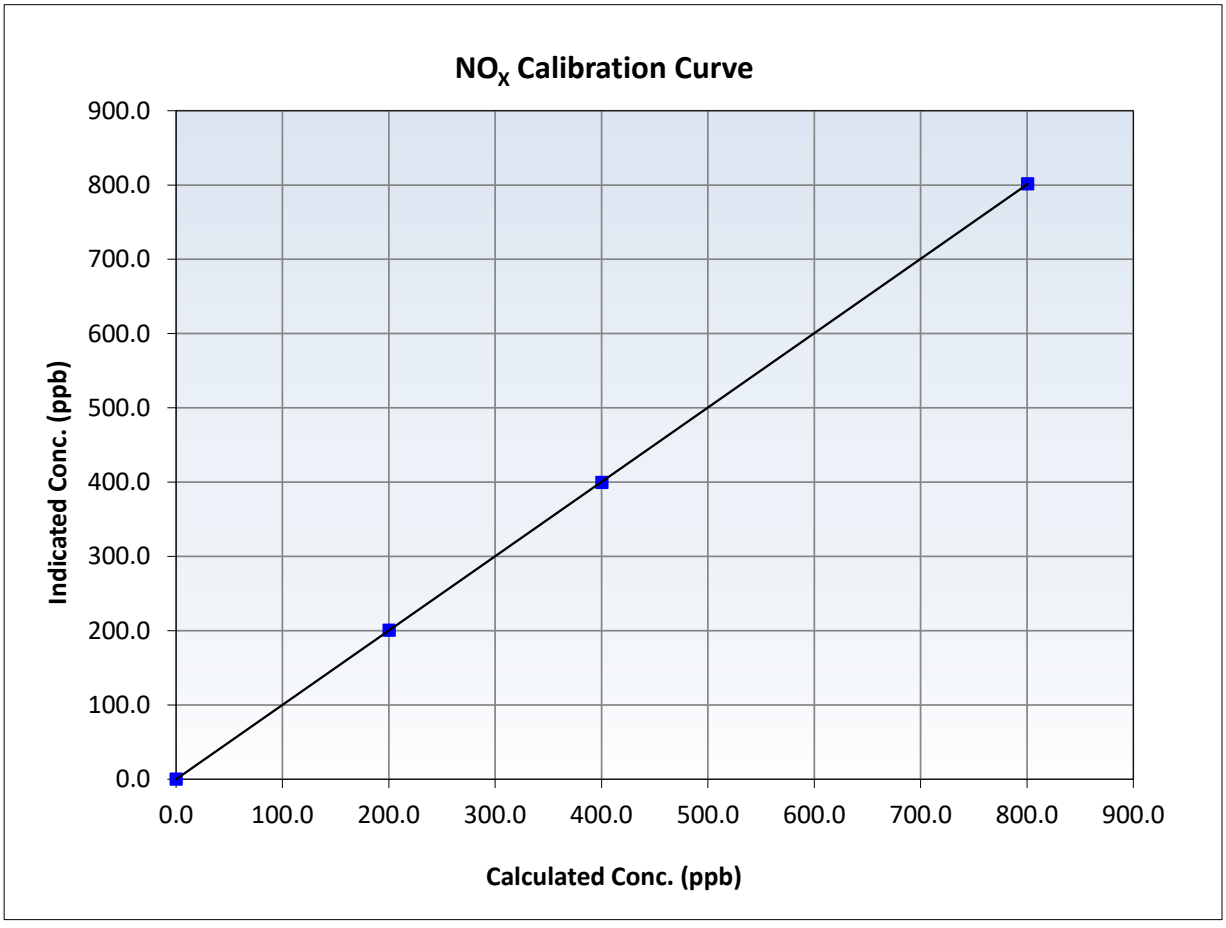
Station Information

Calibration Date:	March 31, 2026	Previous Calibration:	February 9, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	8:35	End Time (MST):	13:01
Analyzer make:	API T200	Analyzer serial #:	1035

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.7	801.7	0.9988
400.4	399.8	1.0014
200.2	200.8	0.9971

Statistical Evaluation		Limits
Correlation Coefficient	0.999997	≥0.995
Slope	1.000825	0.90 - 1.10
Intercept	-0.016028	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

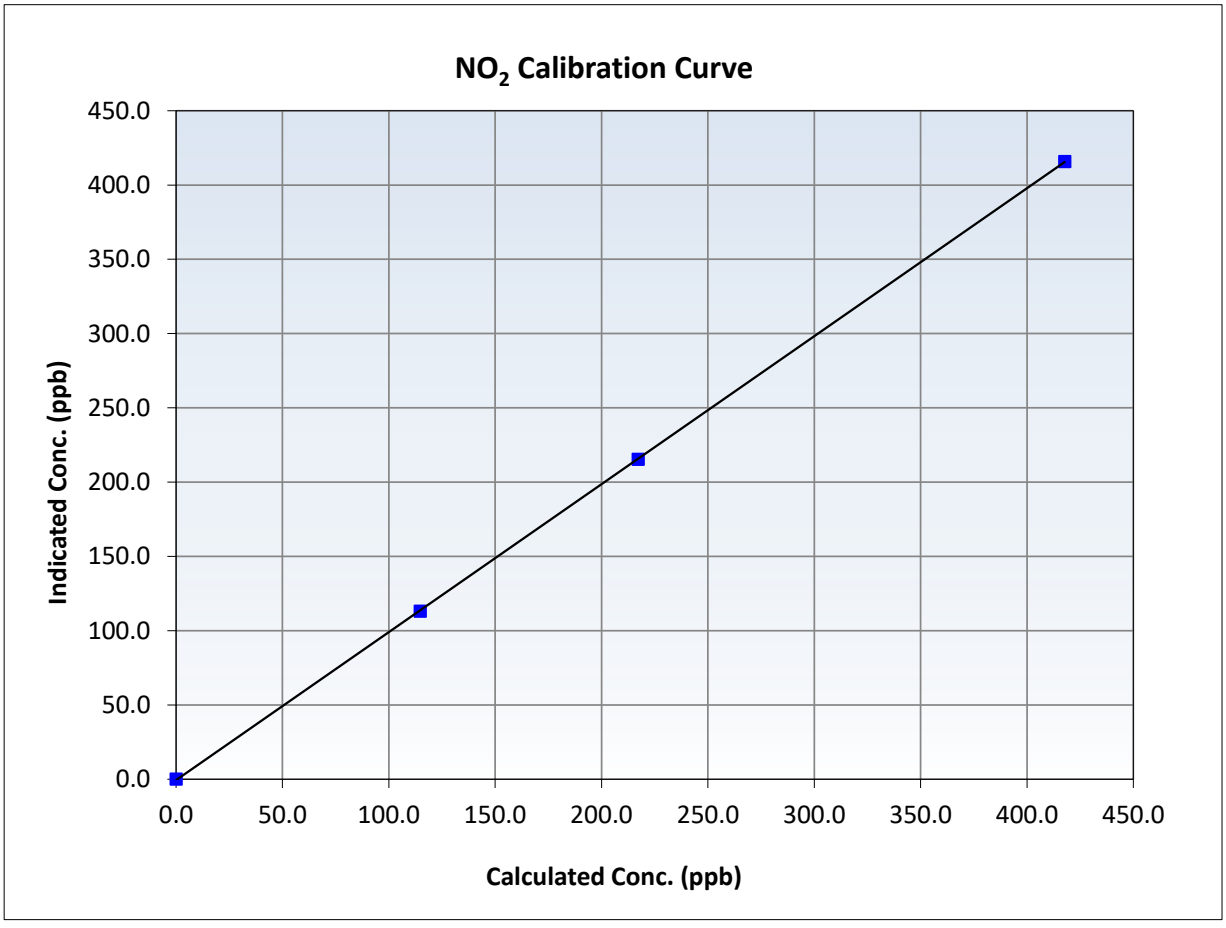
Station Information

Calibration Date:	March 31, 2026	Previous Calibration:	February 9, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	8:35	End Time (MST):	13:01
Analyzer make:	API T200	Analyzer serial #:	1035

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
417.7	415.9	1.0044
217.2	215.4	1.0085
114.8	113.1	1.0153

Statistical Evaluation		Limits
Correlation Coefficient	0.999987	≥0.995
Slope	0.996092	0.90 - 1.10
Intercept	-0.588359	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

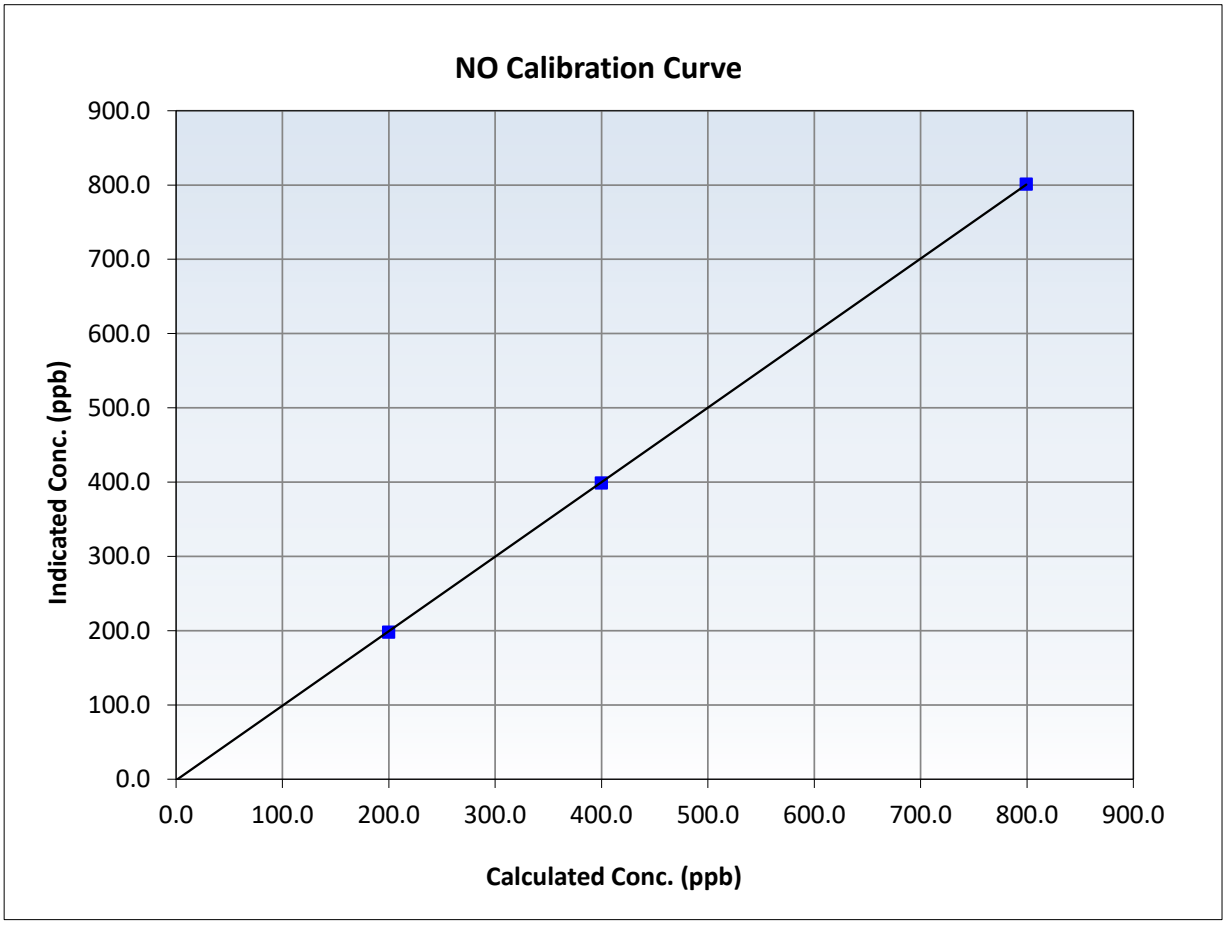
Station Information

Calibration Date:	March 31, 2026	Previous Calibration:	February 9, 2026
Station Name:	Jackfish 2/3	Station Number:	AMS 27
Start Time (MST):	8:35	End Time (MST):	13:01
Analyzer make:	API T200	Analyzer serial #:	1035

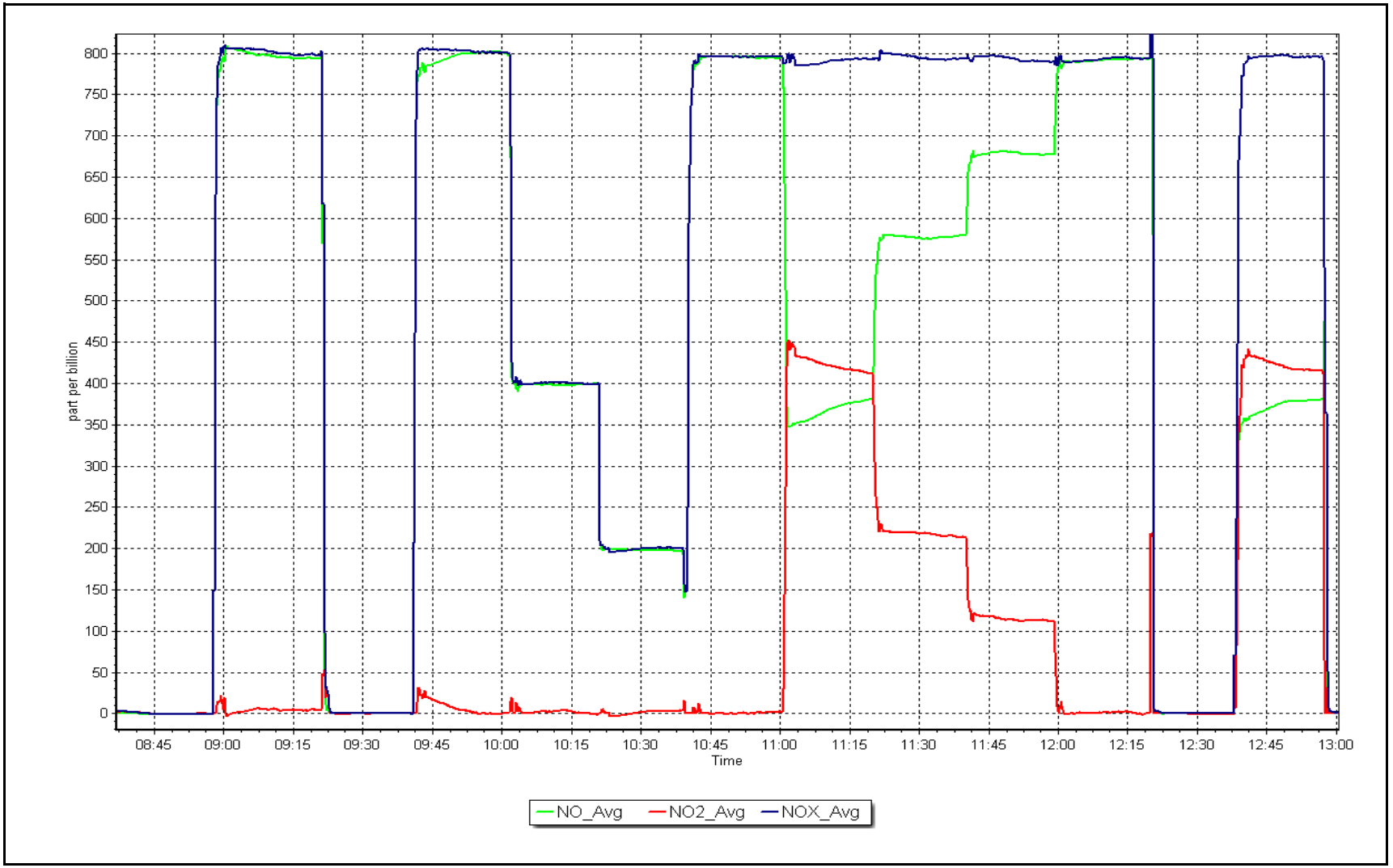
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
799.4	801.2	0.9977
399.7	399.0	1.0018
199.9	198.0	1.0095

Statistical Evaluation		Limits
Correlation Coefficient	0.999989	≥0.995
Slope	1.003131	0.90 - 1.10
Intercept	-1.315990	+/-20



NO_X Calibration Plot Date: March 31, 2026 Location: Jackfish 2/3



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS29
SURMONT 2
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	March 13, 2026	Last Cal Date:	February 3, 2026
Start time (MST):	6:28	End time (MST):	9:05
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:	1.000446	1.001431	Backgd or Offset:	14.6	14.6
Calibration intercept:	-1.080636	-1.300570	Coeff or Slope:	0.950	0.950

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	801.9	0.998
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	801.8	Previous response	799.5	*% 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	0.2	----
High point	4920	80.1	800.2	800.7	0.999
Mid point	4960	40.0	399.6	398.4	1.003
Low point	4980	20.0	199.8	197.1	1.014
As left zero	5000	0.0	0.0	0.4	----
As left span	4920	80.1	800.2	800.4	1.000
				Average Correction Factor:	1.005

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

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

SO_2 Calibration Summary

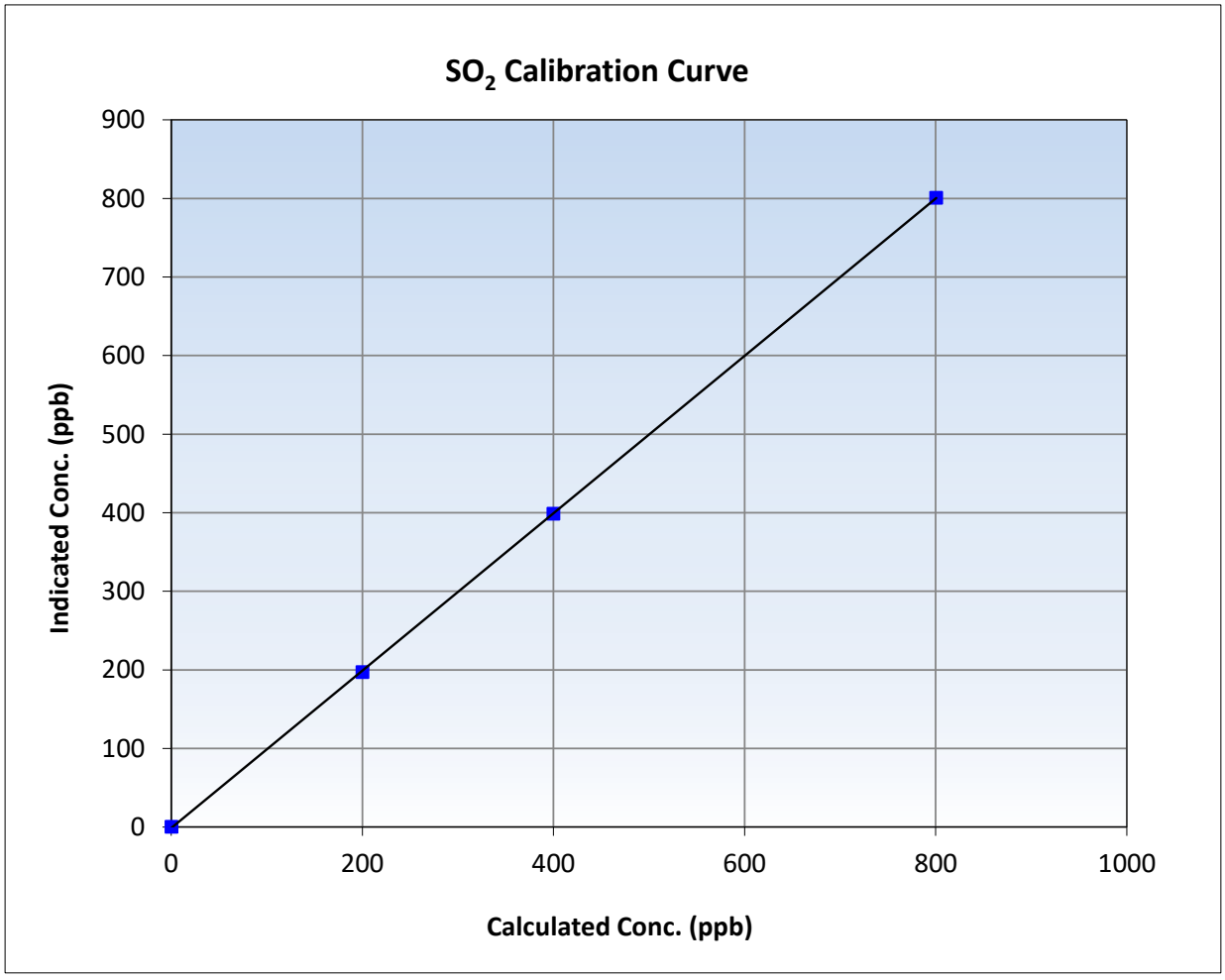
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	February 3, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	6:28	End Time (MST):	9:05
Analyzer make:	Thermo 43i	Analyzer serial #:	1170050150

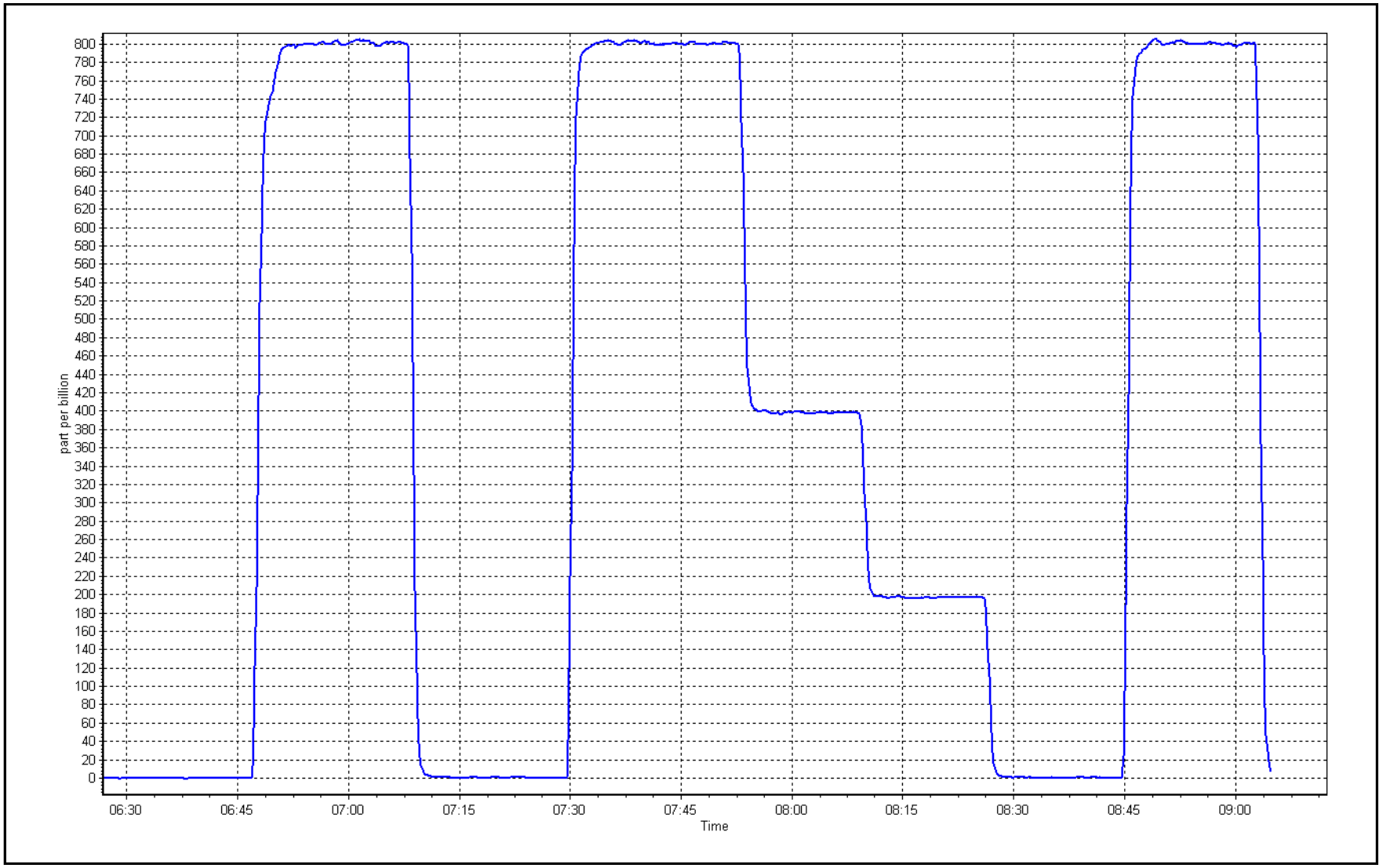
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
800.2	800.7	0.9994
399.6	398.4	1.0030
199.8	197.1	1.0137

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999984	*≥0.995*
Slope	1.001431	*0.90 - 1.10*
Intercept	-1.300570	*+/-30*



SO2 Calibration Plot Date: March 13, 2026 Location: Surmont 2



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	March 25, 2026	Last Cal Date:	February 5, 2026
Start time (MST):	6:20	End time (MST):	10:47
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:	1.005311	0.994309	Backgd or Offset:	1.02	1.02
Calibration intercept:	-0.080481	0.079523	Coeff or Slope:	1.070	1.070

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4916	84.2	80.0	80.2	0.997
As found Mid point	4958	42.1	40.0	40.3	0.992
As found Low point	4979	21.1	20.0	20.1	0.995
New cylinder response					

Baseline Corr As found:	80.2	Prev response:	80.33	*% change:	-0.2%
Baseline Corr 2nd AF pt:	40.3	AF Slope:	1.002739	AF Intercept:	0.059518
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999992	* = > +/-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	79.6	1.005
Mid point	4958	42.1	40.0	39.9	1.002
Low point	4979	21.1	20.0	19.9	1.005
As left zero	5000	0.0	0.0	0.2	----
As left span	4916	84.2	80.0	79.4	1.007
SO2 Scrubber Check	4919	81.3	813.0	-0.1	----
Date of last scrubber change:				Ave Corr Factor	1.004
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

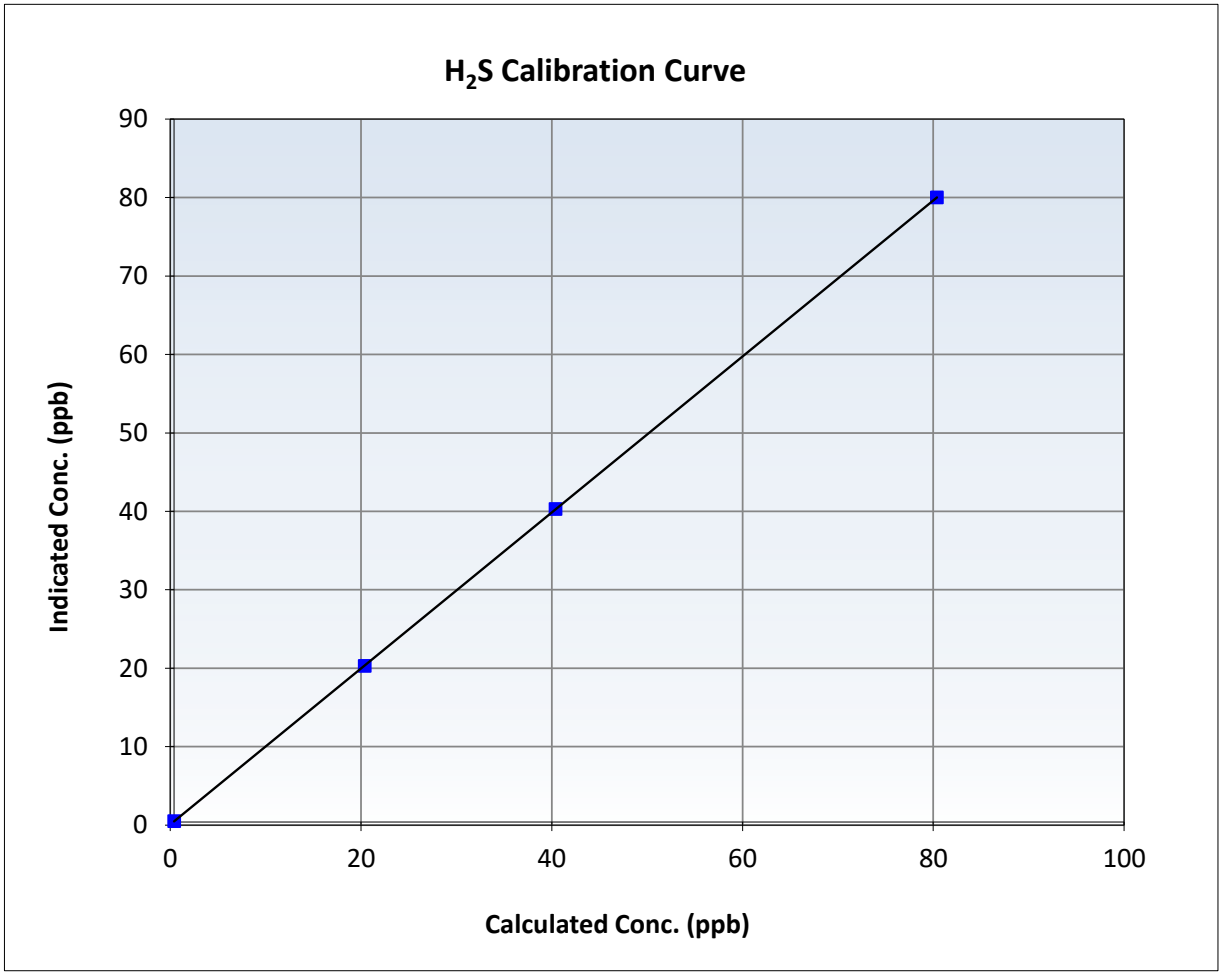
Station Information

Calibration Date:	March 25, 2026	Previous Calibration:	February 5, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	6:20	End Time (MST):	10:47
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1200326170

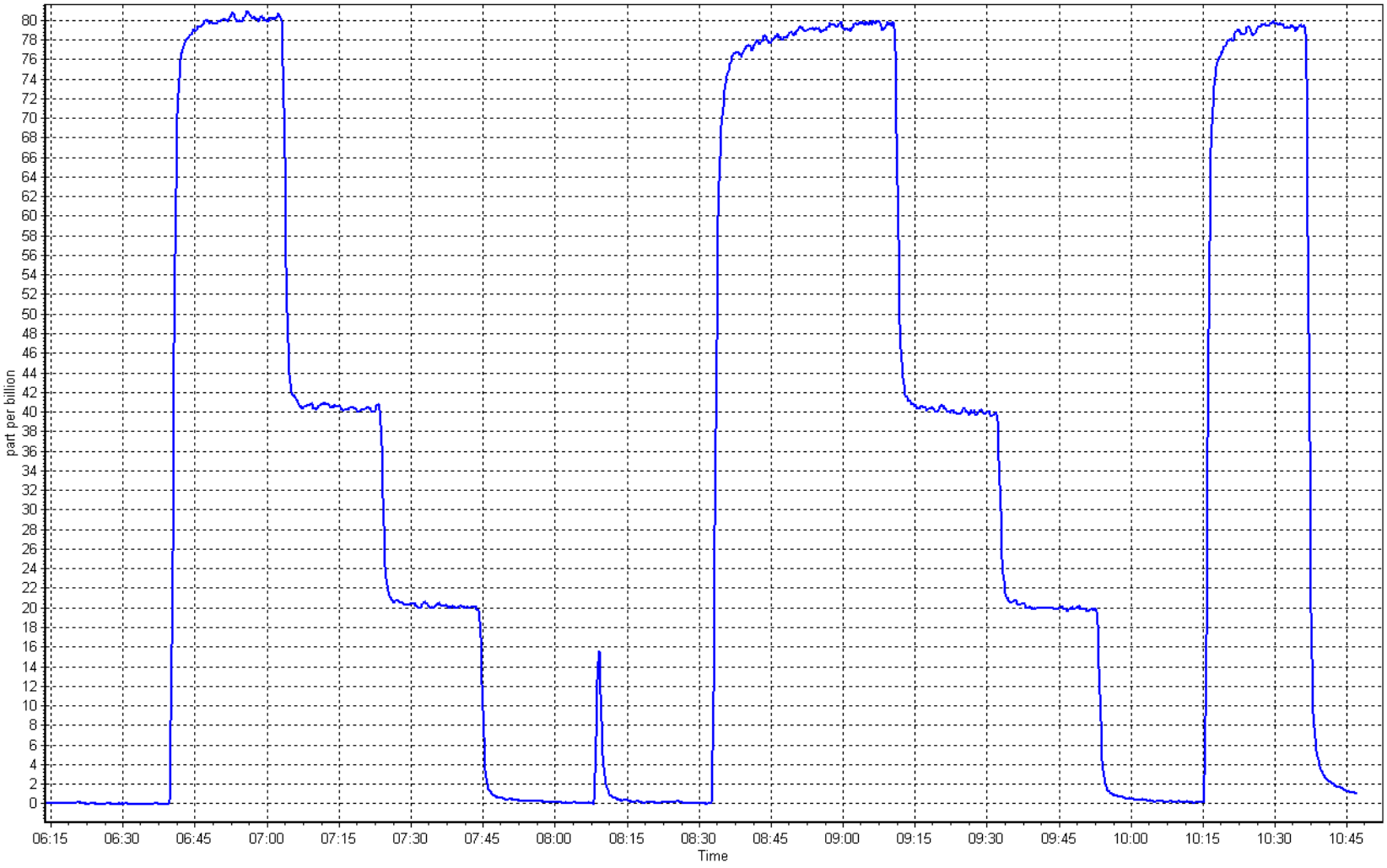
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
80.0	79.6	1.0049
40.0	39.9	1.0024
20.0	19.9	1.0049

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999998	*≥0.995*
Slope	0.994309	*0.90 - 1.10*
Intercept	0.079523	*+/-3*



H2S Calibration Plot Date: March 25, 2026 Location: Surmont 2



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Surmont 2	Station number:	AMS 29
Calibration Date:	March 13, 2026	Last Cal Date:	February 3, 2026
Start time (MST):	6:28	End time (MST):	9:05
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:	0.998610	1.000189	Background:	1.78	1.93
Calibration intercept:	0.011251	0.008454	Coefficient:	4.036	3.944

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	0.11	----
As found High point	4920	80.1	17.09	17.77	0.967
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr As found:	17.67	Previous response	17.08	*% change	3.3%
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	80.1	17.09	17.12	0.998
Mid point	4960	40.0	8.54	8.54	1.000
Low point	4980	20.0	4.27	4.23	1.008
As left zero	5000	0.0	0.00	0.01	----
As left span	4920	80.1	17.09	17.17	0.996
				Average Correction Factor	1.002

Notes: No maintenance done. Adjusted zero and span.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

THC Calibration Summary

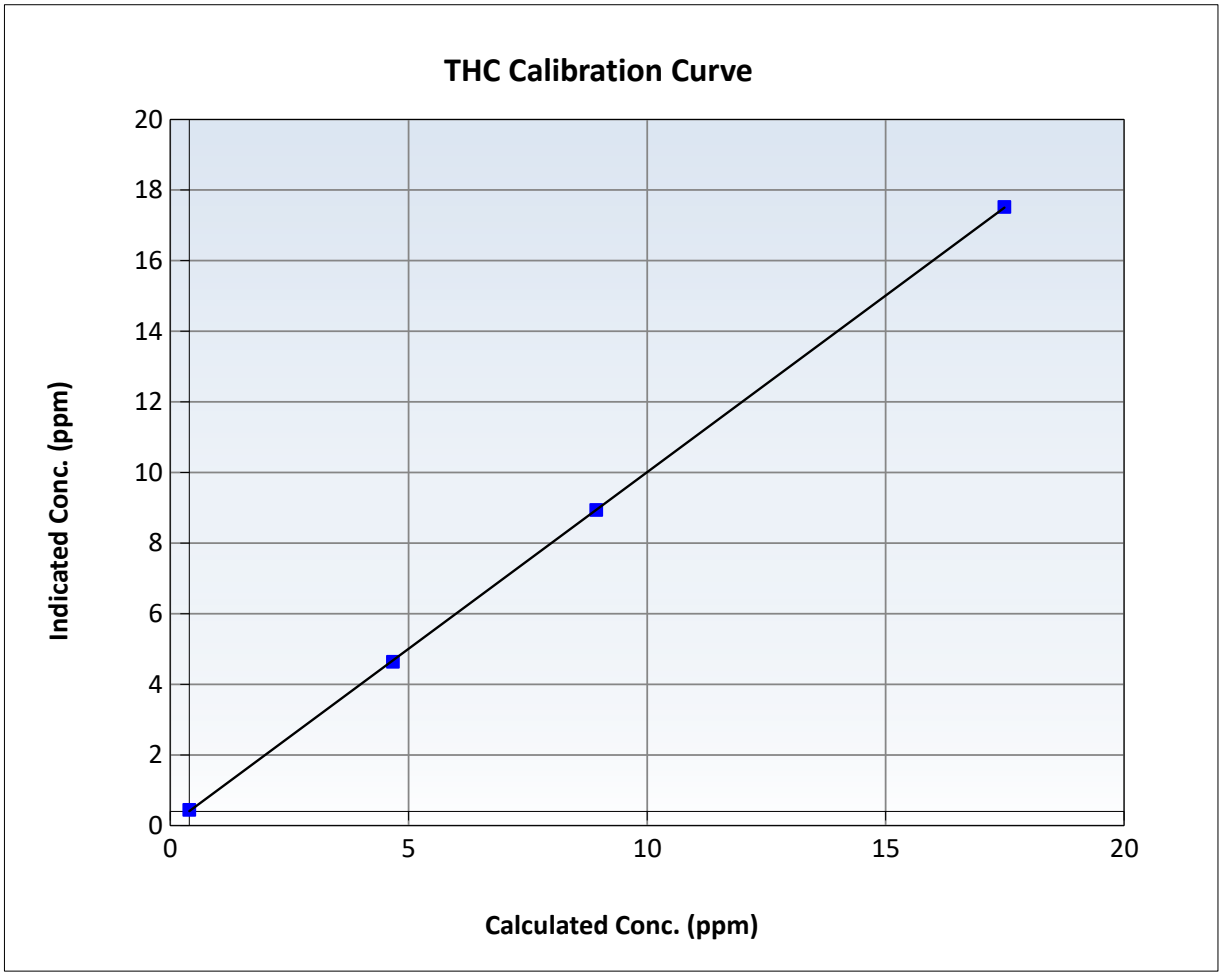
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	February 3, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	6:28	End Time (MST):	9:05
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1180540021

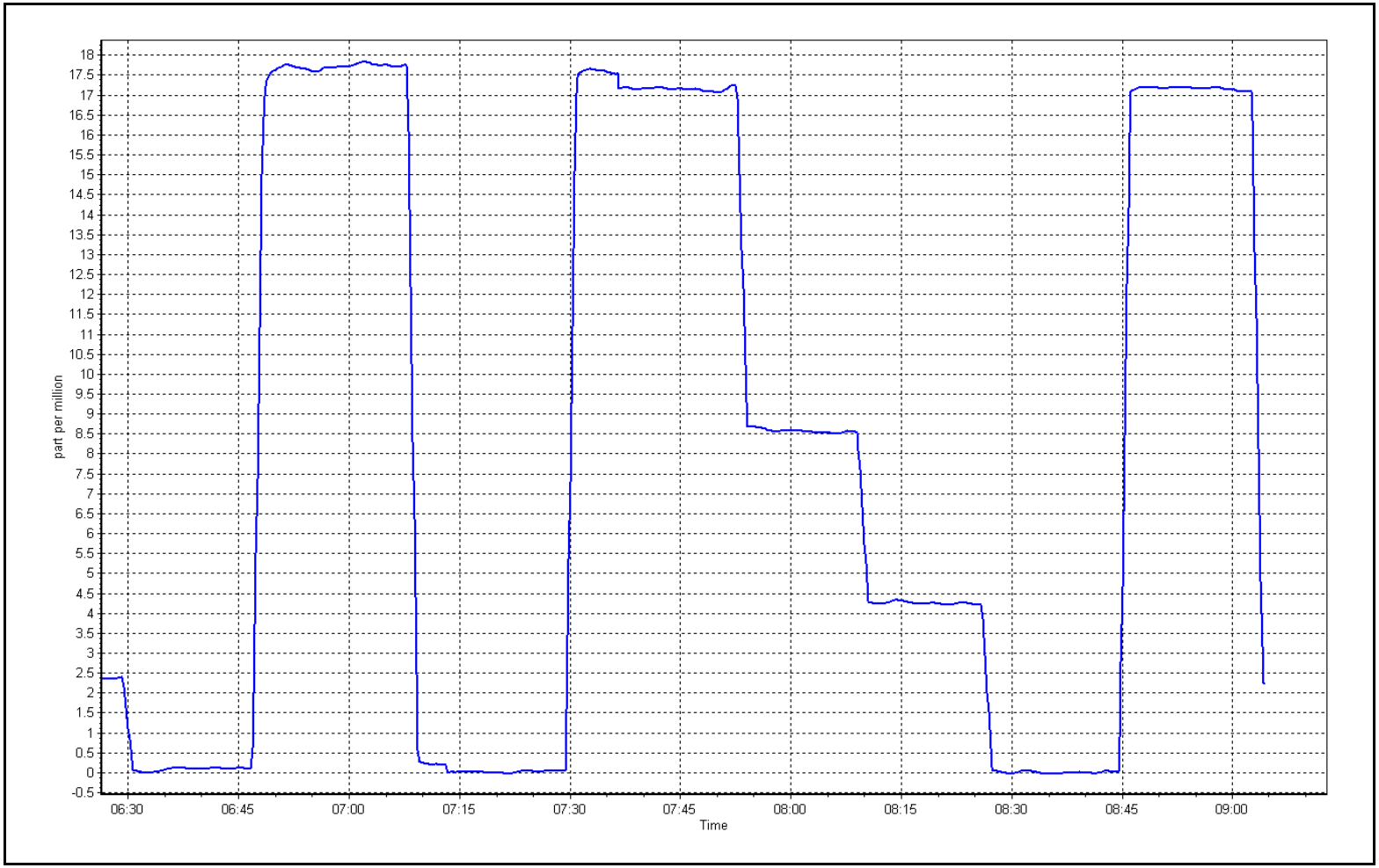
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.05	----
17.09	17.12	0.9985
8.54	8.54	0.9997
4.27	4.23	1.0082

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999978	*≥0.995*
Slope	1.000189	*0.90 - 1.10*
Intercept	0.008454	*+/-1.5*



THC Calibration Plot Date: March 13, 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:	March 20, 2026
Last Cal Date:	February 27, 2026
Start time (MST):	6:12
End time (MST):	10:53
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:	135

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	0.0	----	----
AF High point	4933	66.7	803.1	800.4	2.7	799.2	795.3	3.8	1.0048	1.0065
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X =	801.4 ppb	NO =	798.4 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = -0.3%
Baseline Corr 1st pt	NO_X =	799.3 ppb	NO =	795.3 ppb	As Found Statistics	*Percent Change	NO = -0.4%
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:	0.939	0.939	NO bkgnd or offset:	8.6	8.6
NOX coeff or slope:	0.996	0.996	NOX bkgnd or offset:	8.7	8.7
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	153.4	153.4

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998371	1.000393
NO_X Cal Offset:	-0.428887	-0.989025
NO Cal Slope:	0.999657	1.002043
NO Cal Offset:	-1.789106	-2.449152
NO_2 Cal Slope:	1.002409	0.985307
NO_2 Cal Offset:	-1.186508	1.857864

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	0.0	----	----
High point	4933	66.7	803.1	800.4	2.7	802.4	800.4	1.9	1.0009	1.0001
Mid point	4967	33.3	400.9	399.6	1.3	401.2	398.2	3.0	0.9993	1.0035
Low point	4983	16.7	201.1	200.4	0.7	198.1	194.8	3.3	1.0150	1.0288
As left zero	5000	0	0.0	0.0	0.0	0.0	0.0	-0.1	----	----
As left span	4933	66.7	803.1	420.5	382.6	801.7	420.5	381.3	1.0018	1.0000
							Average Correction Factor		1.0051	1.0108

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	790.8	423.0	370.5	366.0	1.0122	98.8%
Mid GPT point	790.8	618.1	175.4	175.6	0.9987	100.1%
Low GPT point	790.8	703.9	89.6	91.9	0.9746	102.6%
				Average Correction Factor	0.9952	100.5%

Notes: No Adjustments or maintenance done. During the GPT the calibrator reset itself twice when changing points.

Calibration Performed By: Melissa Lemay

Wood Buffalo Environmental Association

NO_X Calibration Summary

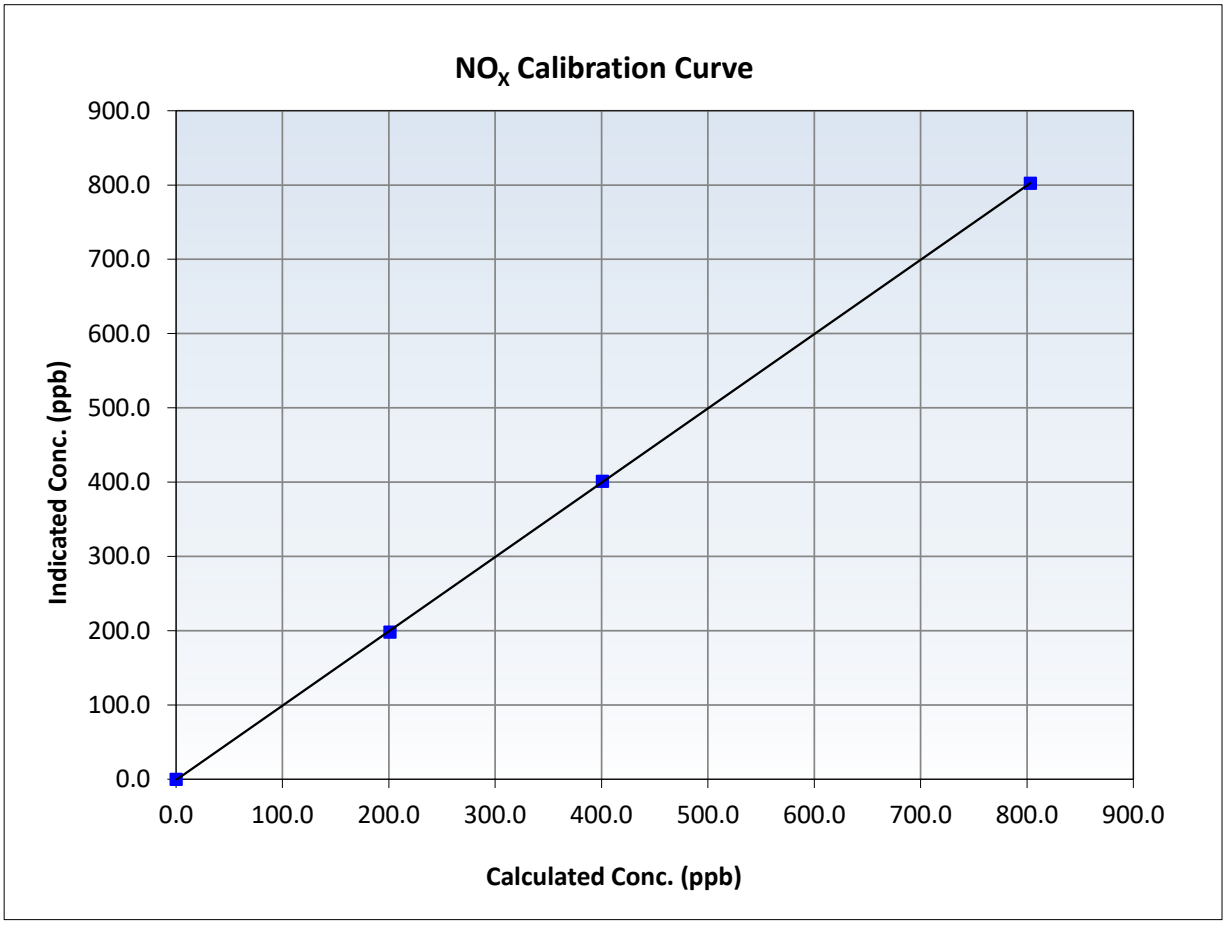
Station Information

Calibration Date:	March 20, 2026	Previous Calibration:	February 27, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	6:12	End Time (MST):	10:53
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	802.4	1.0009
400.9	401.2	0.9993
201.1	198.1	1.0150

Statistical Evaluation		Limits
Correlation Coefficient	0.999982	≥0.995
Slope	1.000393	0.90 - 1.10
Intercept	-0.989025	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

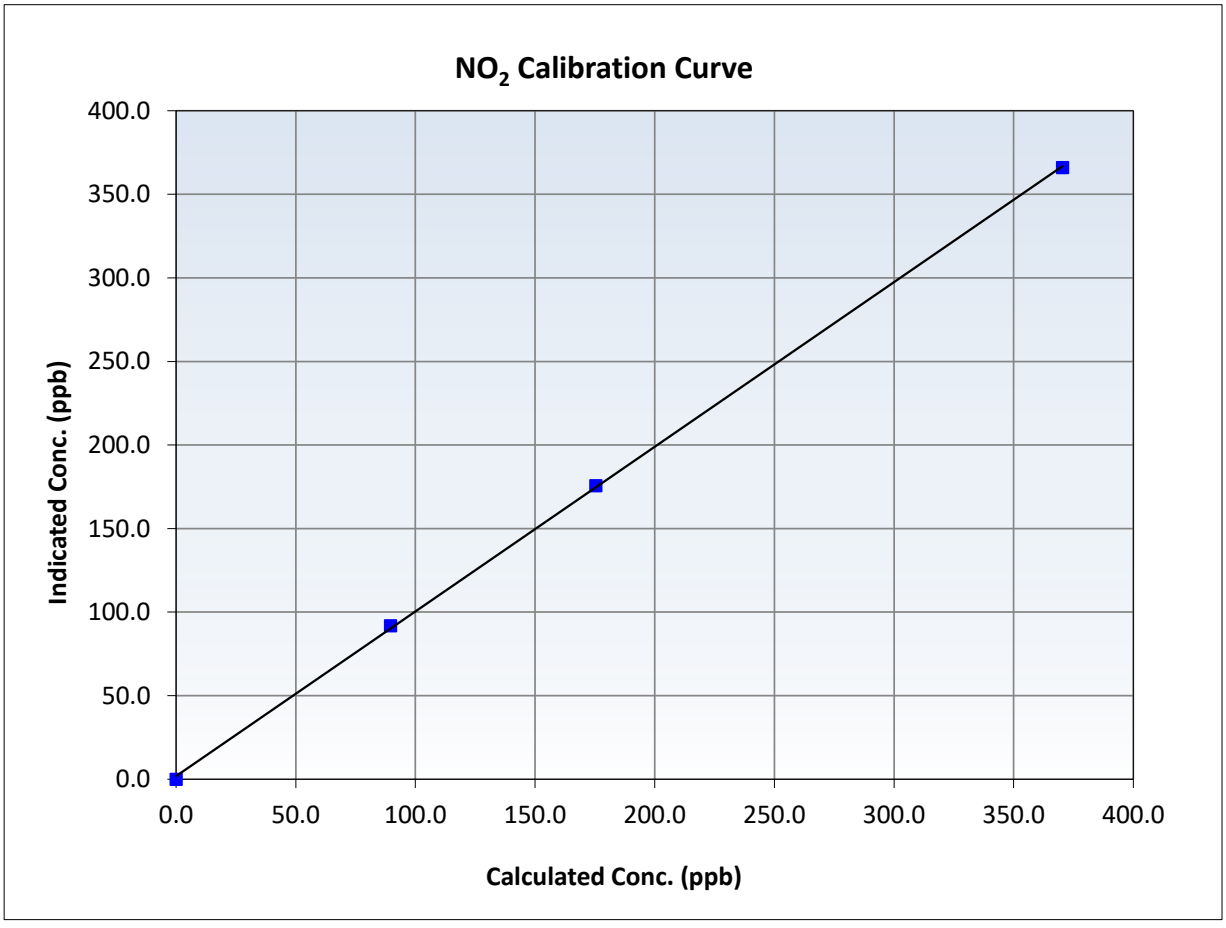
Station Information

Calibration Date:	March 20, 2026	Previous Calibration:	February 27, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	6:12	End Time (MST):	10:53
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	----
370.5	366.0	1.0122
175.4	175.6	0.9987
89.6	91.9	0.9746

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999886	*≥0.995*
Slope	0.985307	*0.90 - 1.10*
Intercept	1.857864	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

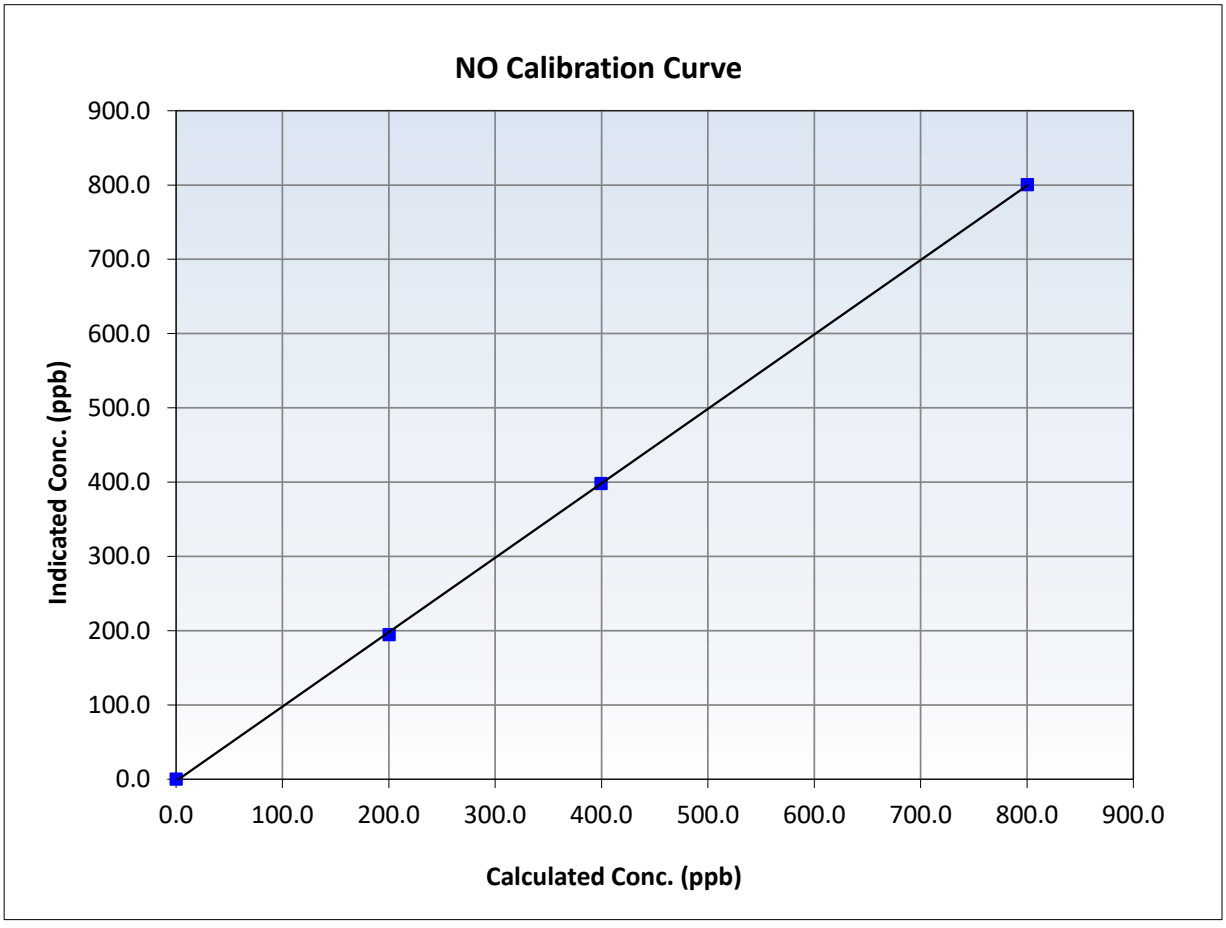
Station Information

Calibration Date:	March 20, 2026	Previous Calibration:	February 27, 2026
Station Name:	Surmont 2	Station Number:	AMS 29
Start Time (MST):	6:12	End Time (MST):	10:53
Analyzer make:	Thermo 42i	Analyzer serial #:	1410661329

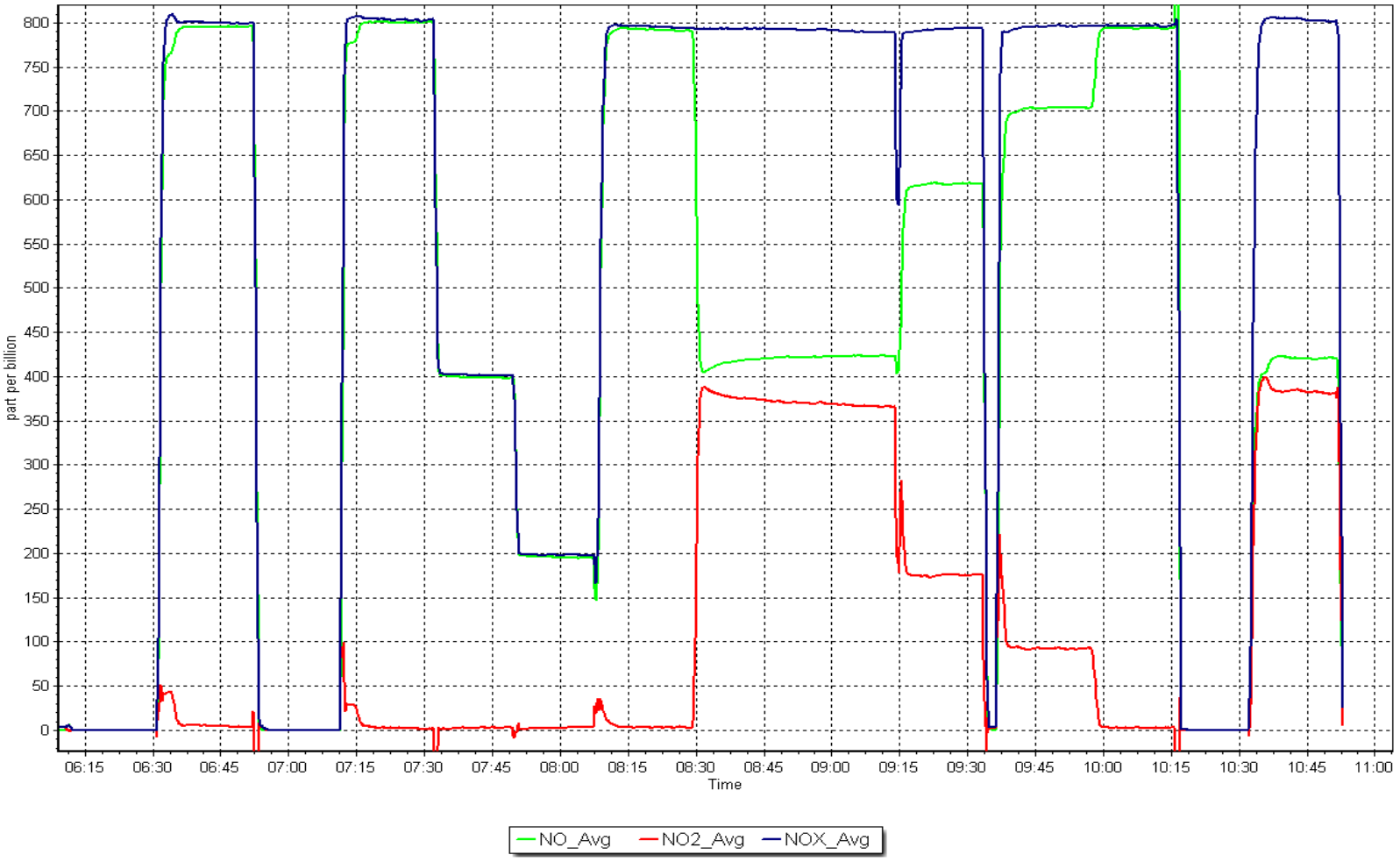
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
800.4	800.4	1.0001
399.6	398.2	1.0035
200.4	194.8	1.0288

Statistical Evaluation		Limits
Correlation Coefficient	0.999943	≥0.995
Slope	1.002043	0.90 - 1.10
Intercept	-2.449152	+/-20



NO_X Calibration Plot Date: March 20, 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:	March 26, 2026	Last Cal Date:	February 27, 2026
Start time (MST):	7:29	End time (MST):	7:51
Analyzer Make:	API T640	S/N:	2236
Particulate Fraction:	PM2.5		
Flow Meter Make/Model:	Alicat FP-25BT	S/N:	388744
Temp/RH standard:	Alicat FP-25BT	S/N:	388744

Monthly Calibration Test

Parameter	As found	Measured	As left	Adjusted	*(Limits)*
T (°C)	-22.5	-24	-22.5	☐	+/- 2 °C
P (mmHg)	724.6	723.80	724.6	☐	+/- 10 mmHg
Flow (LPM)	5.03	4.970	5.03	☑	+/- 0.25 LPM
PW% (pump)	43	-----	43	☐	>80%
Zero Verification	PM w/o HEPA:	7.0	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				☐	+/- 0.5

Date Optical Chamber Cleaned: February 27, 2026

Date Disposable Filter Changed: February 27, 2026

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

Annual Maintenance

Date Sample Tube Cleaned: April 14, 2025

Date RH/T Sensor Cleaned: July 15, 2025

Notes: No adjustments done.

Calibration by: Melissa Lemay

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS30
ELLS RIVER
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	March 4, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	10:11	End time (MST):	13:26
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:	1.002587	1.001686	Backgd or Offset:	10.8	10.8
Calibration intercept:	-1.256407	-1.116258	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	-0.5	----
As found High point	4918	82.1	800.5	798.1	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	798.6	Previous response	801.3	*% change	-0.3%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	4918	82.1	800.5	801.1	0.999
Mid point	4959	41.0	399.8	399.0	1.002
Low point	4979	20.5	199.9	198.1	1.009
As left zero	5000	0.0	0.0	-0.2	----
As left span	4918	82.1	800.5	805.2	0.994
				Average Correction Factor:	1.003

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

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

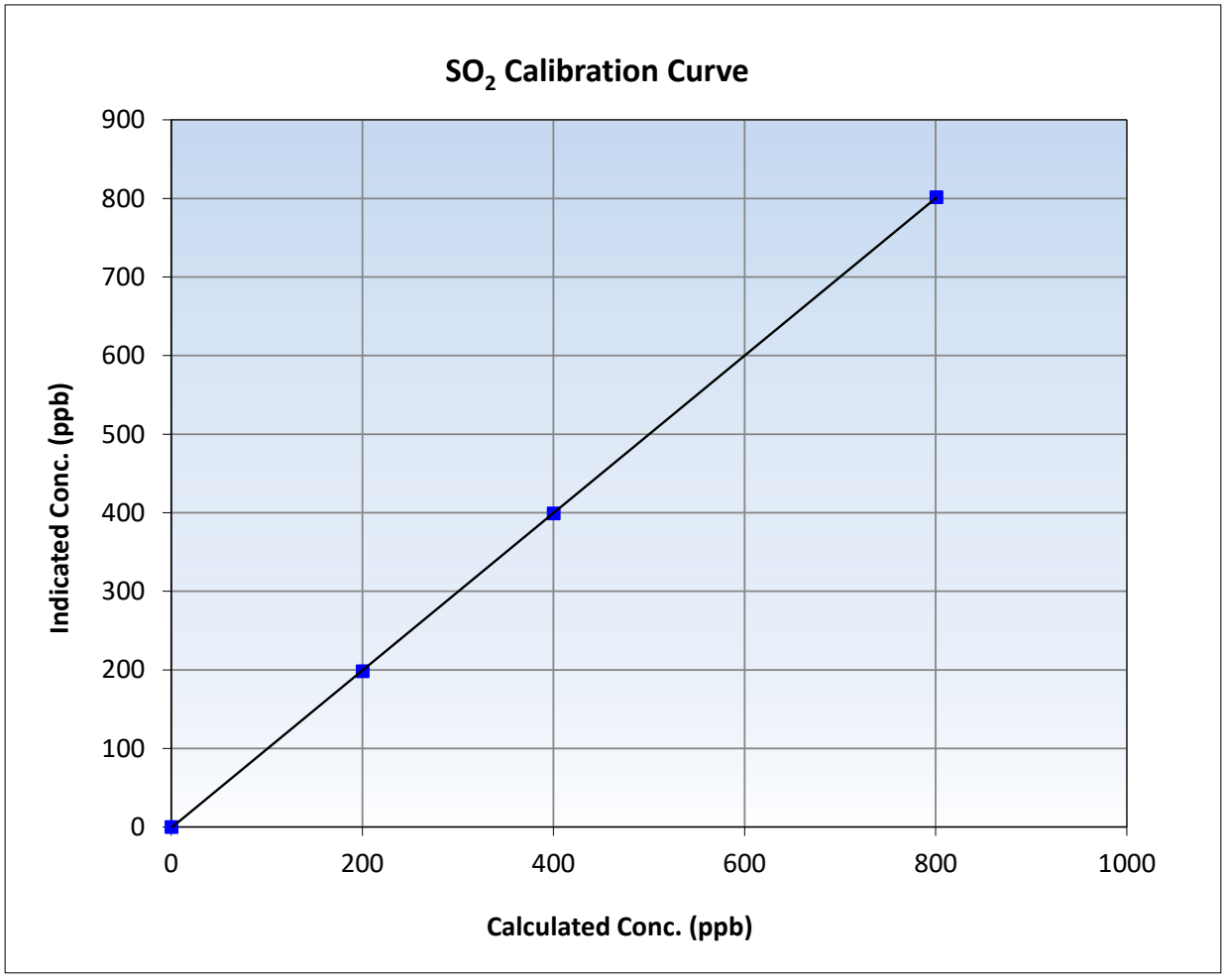
Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 10, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:11	End Time (MST):	13:26
Analyzer make:	Thermo 43i	Analyzer serial #:	1008841397

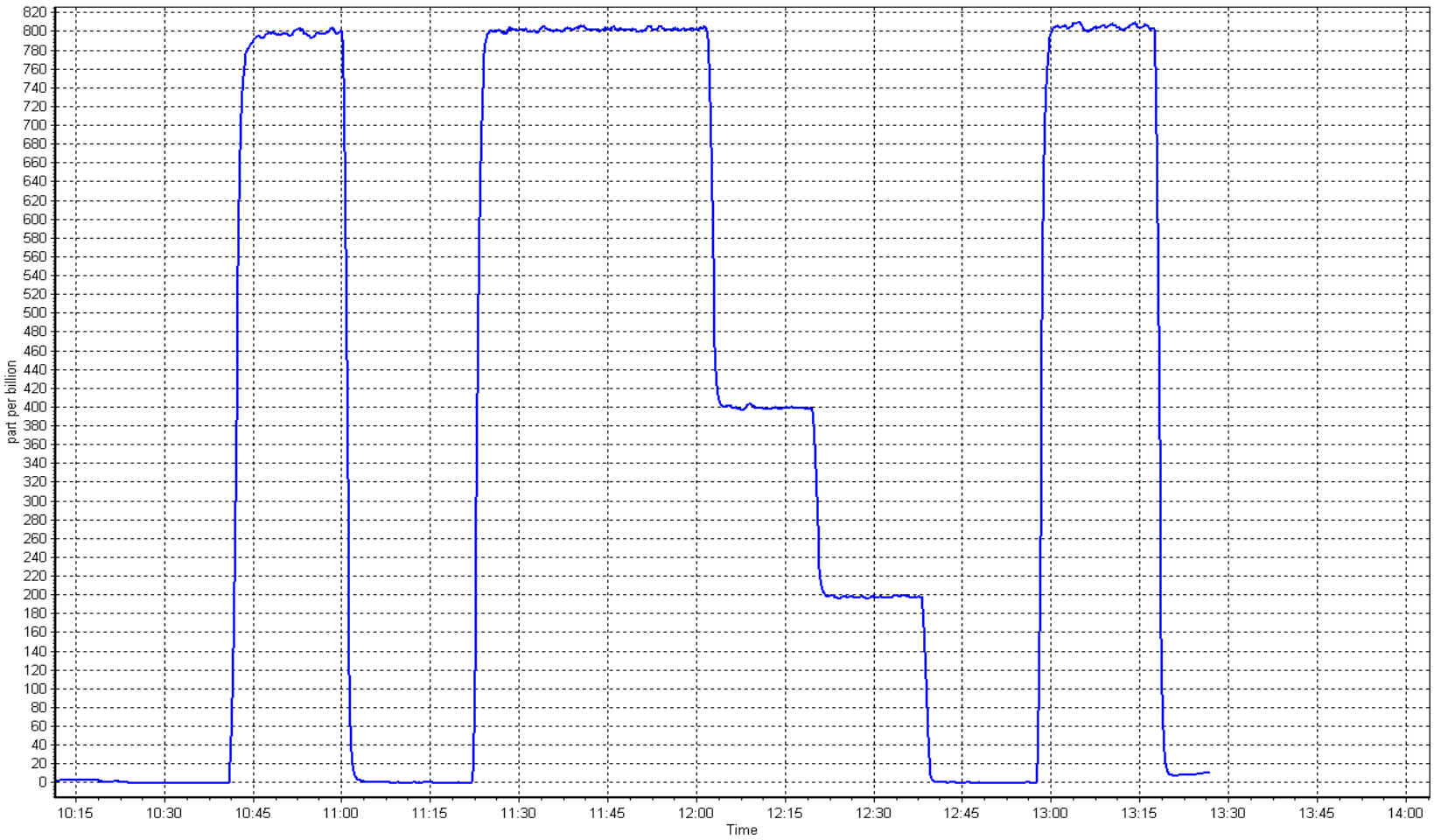
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
800.5	801.1	0.9992
399.8	399.0	1.0019
199.9	198.1	1.0091

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999994	*≥0.995*
Slope	1.001686	*0.90 - 1.10*
Intercept	-1.116258	*+/-30*



SO2 Calibration Plot Date: March 4, 2026 Location: Ells River



Wood Buffalo Environmental Association

TRS Calibration Report

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	March 5, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	11:40	End time (MST):	15:27
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:	1.005189	0.993341	Backgd or Offset:	4.02	4.01
Calibration intercept:	-0.160470	-0.120752	Coeff or Slope:	1.286	1.286

TRS As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	0.0	----
As found High point	4920	80.2	80.0	79.2	1.011
As found Mid point	4960	40.1	40.0	39.4	1.016
As found Low point	4980	20.0	20.0	19.4	1.029
New cylinder response					

Baseline Corr As found:	79.2	Prev response:	80.29	*% change:	-1.4%
Baseline Corr 2nd AF pt:	39.4	AF Slope:	0.990771	AF Intercept:	-0.180795
Baseline Corr 3rd AF pt:	19.4	AF Correlation:	0.999976	* = > +/-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	79.4	1.008
Mid point	4960	40.1	40.0	39.7	1.008
Low point	4980	20.0	20.0	19.5	1.024
As left zero	5000	0.0	0.0	0.0	----
As left span	4920	80.2	80.0	79.9	1.002
SO2 Scrubber Check	4918	82.0	820.0	0.1	----
Date of last scrubber change:		16-Dec-25		Ave Corr Factor	1.013
Date of last converter efficiency test:					

Notes: Sample inlet filter was changed after multipoint as founds. SO2 scrubber check passed. No adjustments made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

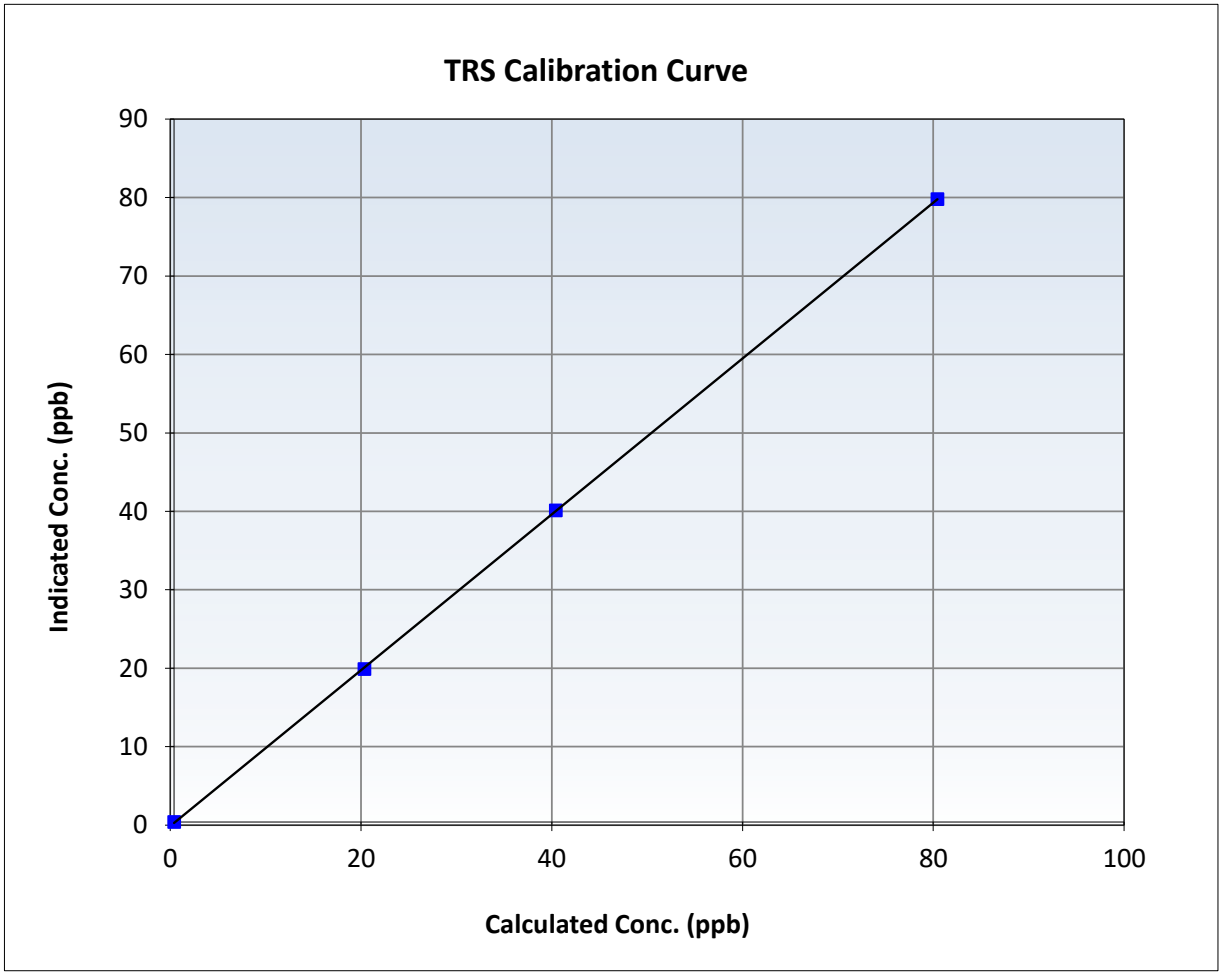
TRS Calibration Summary

Station Information

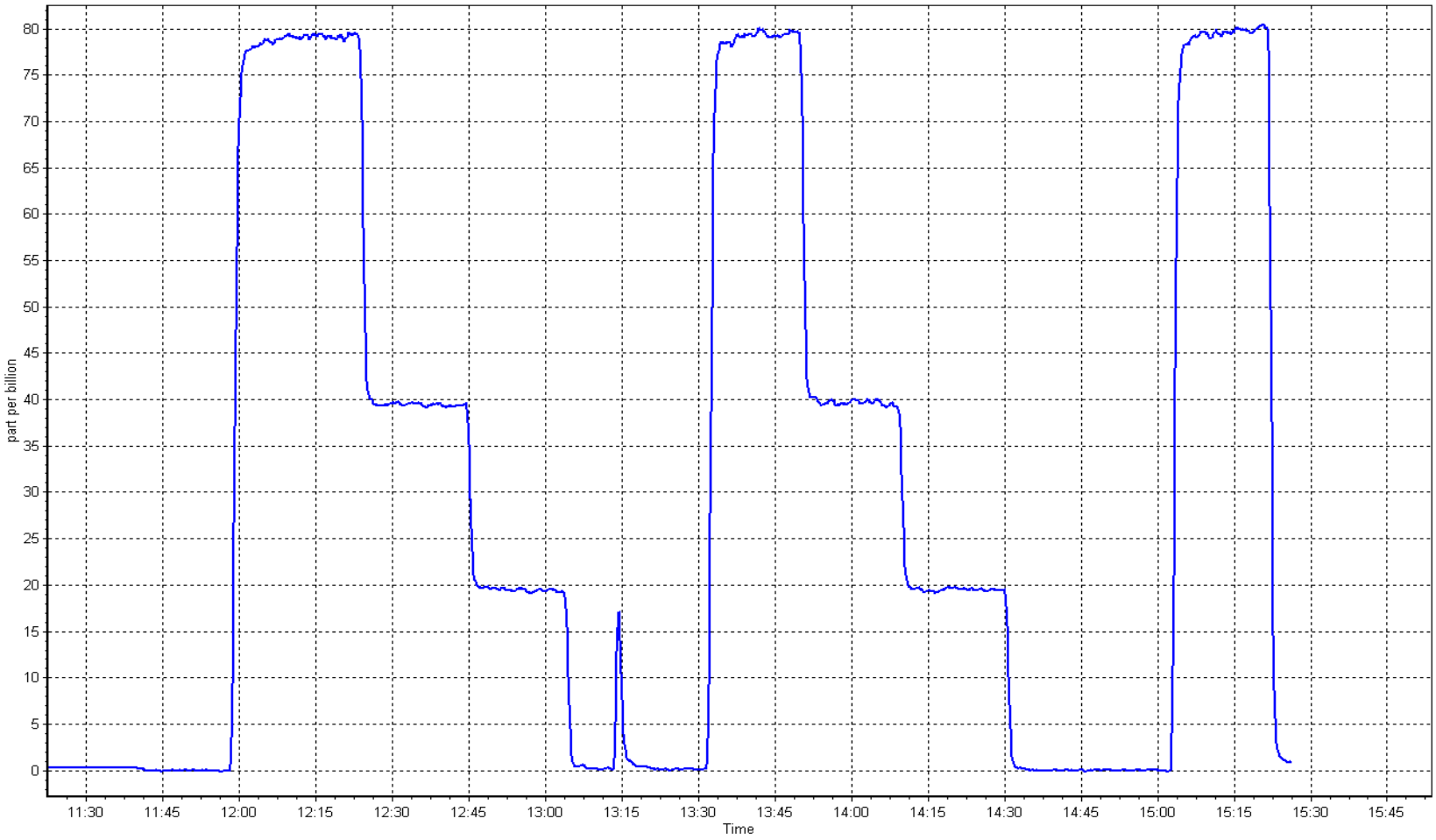
Calibration Date:	March 5, 2026	Previous Calibration:	February 12, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	11:40	End Time (MST):	15:27
Analyzer make:	Thermo 43i-LTE	Analyzer serial #:	1170050152

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.0	----	Correlation Coefficient	0.999982	*≥0.995*
80.0	79.4	1.0080	Slope	0.993341	*0.90 - 1.10*
40.0	39.7	1.0080			
20.0	19.5	1.0236	Intercept	-0.120752	*+/-3*



TRS Calibration Plot Date: March 5, 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:	March 4, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	10:11	End time (MST):	13:26
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:		NA	Removed Gas Expiry:	NA	
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:	3061	
Zero Air Gen model:	API T701H		Serial Number:	358	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1152430011	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	3.22E-04	3.33E-04	NMHC SP Ratio:	5.90E-05	6.12E-05
CH4 Retention time:	18.0	18.2	NMHC Peak Area:	158686	152875
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	4918	82.1	17.51	16.81	1.042
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.81	Prev response	17.50	*% change	-4.1%
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	4918	82.1	17.51	17.41	1.006
Mid point	4959	41.0	8.74	8.68	1.007
Low point	4979	20.5	4.37	4.31	1.014
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.51	17.39	1.007
				Average Correction Factor	1.009

Notes: Sample inlet filter was 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	82.1	9.36	8.95	1.046
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.95	Prev response	9.36	*% change	-5.2%
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	9.29	1.007
Mid point	4959	41.0	4.67	4.64	1.006
Low point	4979	20.5	2.34	2.32	1.008
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.36	9.27	1.009
				Average Correction Factor	1.007

CH4 As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	8.15	7.86	1.037
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.86	Prev response	8.14	*% change	-3.6%
Baseline Corr 2nd AF:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

CH4 Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero	5000	0.0	0.00	0.00	----
High point	4918	82.1	8.15	8.13	1.004
Mid point	4959	41.0	4.07	4.04	1.009
Low point	4979	20.5	2.04	2.00	1.021
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.15	8.12	1.005
				Average Correction Factor	1.011

Calibration Statistics

	Start	*Finish*
THC Cal Slope:	1.000119	0.995074
THC Cal Offset:	-0.014184	-0.016805
CH4 Cal Slope:	1.000669	0.997586
CH4 Cal Offset:	-0.015734	-0.017740
NMHC Cal Slope:	0.999859	0.992860
NMHC Cal Offset:	0.001150	0.000535

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

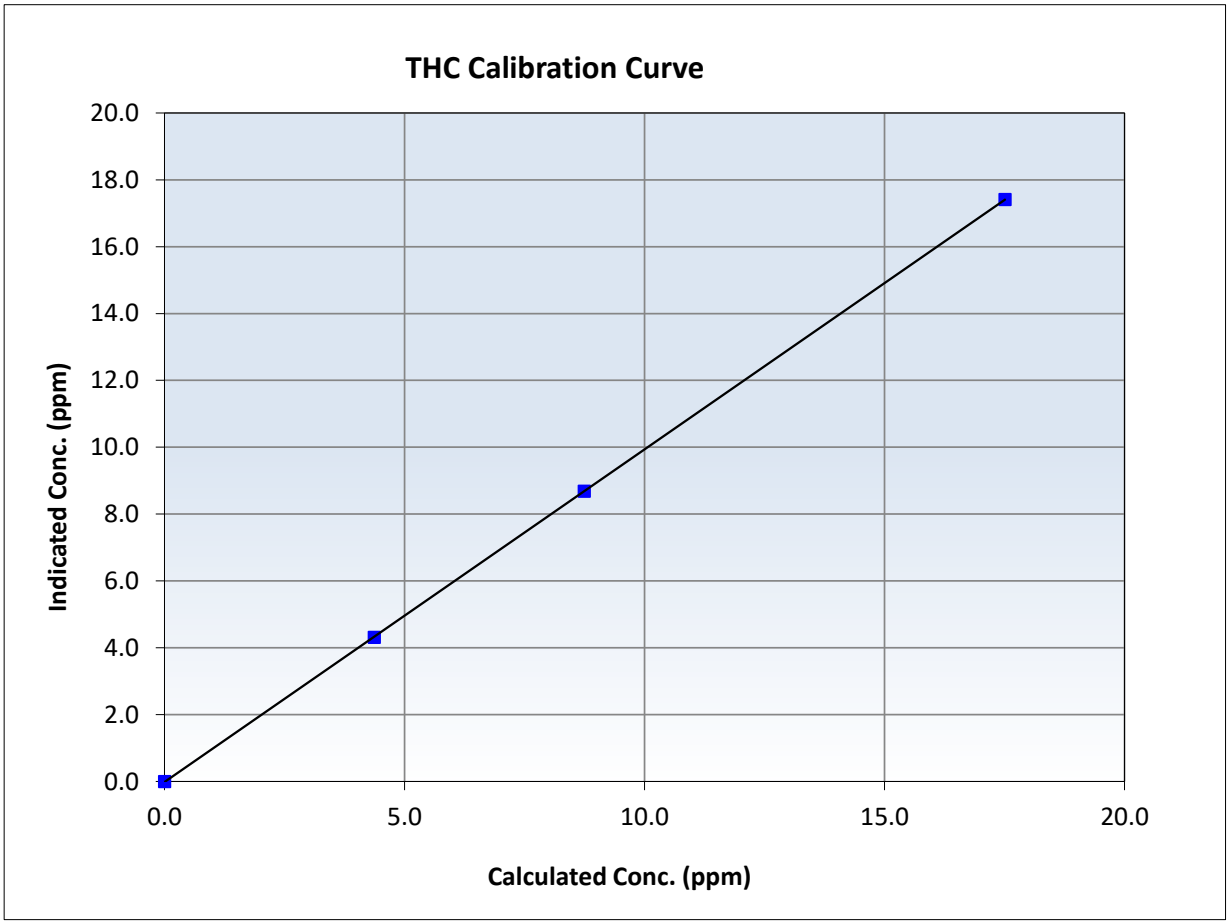
THC Calibration Summary

Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 10, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:11	End Time (MST):	13:26
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	0.999995	≥0.995
17.51	17.41	1.0056	Slope	0.995074	0.90 - 1.10
8.74	8.68	1.0071	Intercept	-0.016805	+/-0.5
4.37	4.31	1.0138			



Wood Buffalo Environmental Association

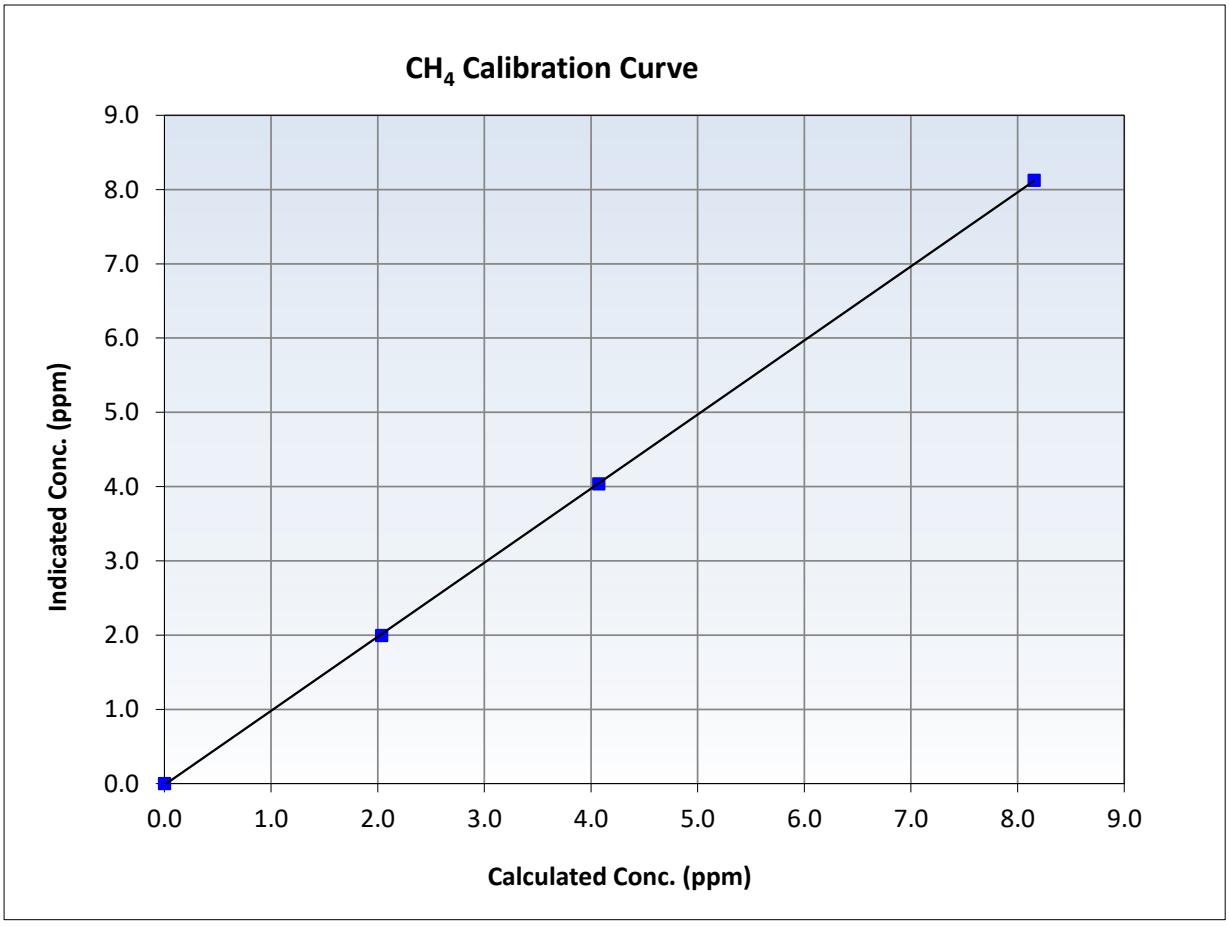
CH_4 Calibration Summary

Station Information

Calibration Date:	March 4, 2026	Previous Calibration:	February 10, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:11	End Time (MST):	13:26
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	0.999978	≥0.995
8.15	8.13	1.0036	Slope	0.997586	0.90 - 1.10
4.07	4.04	1.0087			
2.04	2.00	1.0207	Intercept	-0.017740	+/-0.5



Wood Buffalo Environmental Association

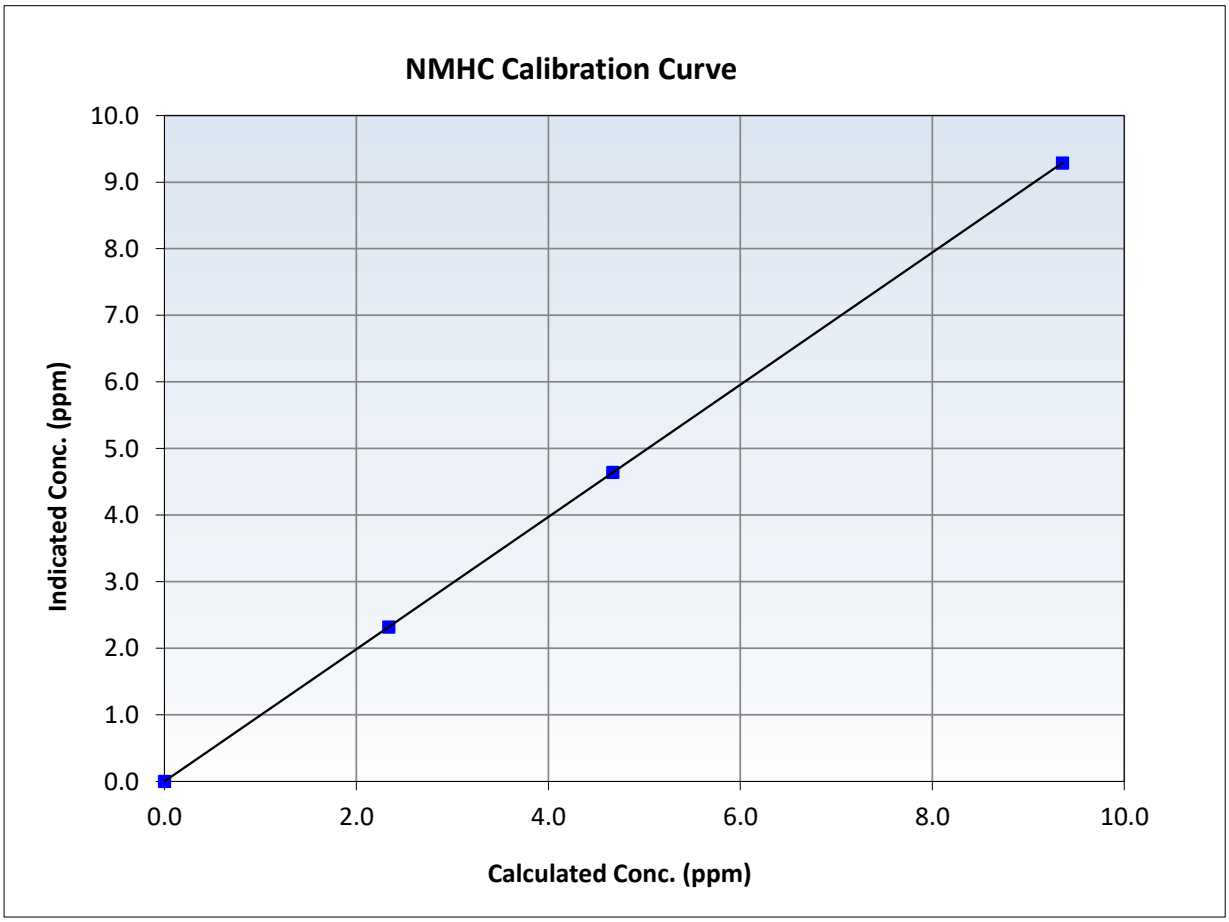
NMHC Calibration Summary

Station Information

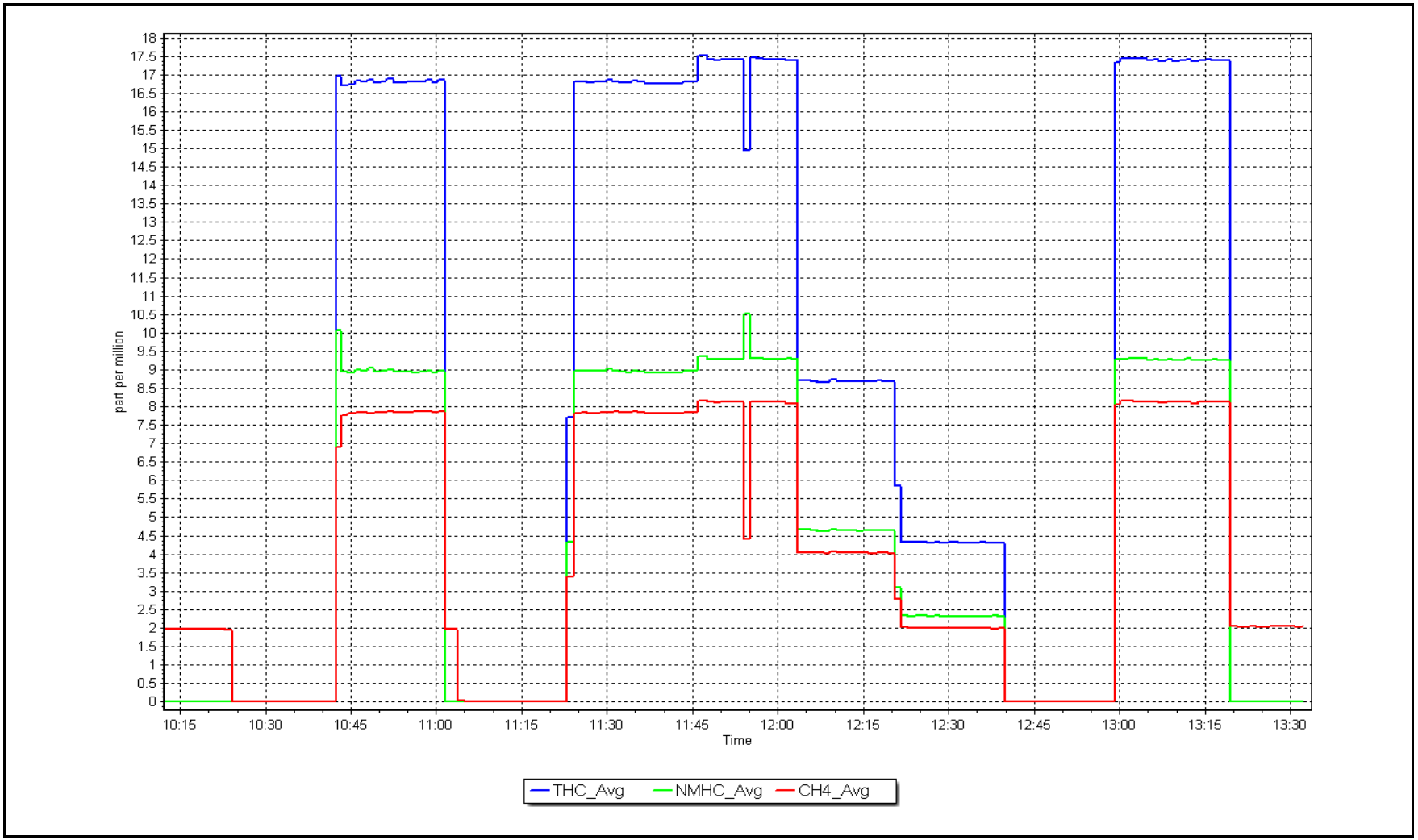
Calibration Date:	March 4, 2026	Previous Calibration:	February 10, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:11	End Time (MST):	13:26
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999999	≥0.995
9.36	9.29	1.0073	Slope	0.992860	0.90 - 1.10
4.67	4.64	1.0061	Intercept	0.000535	+/-0.5
2.34	2.32	1.0079			



NMHC Calibration Plot Date: March 4, 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:	March 5, 2026	Last Cal Date:	March 4, 2026
Start time (MST):	10:16	End time (MST):	11:38
Reason:	Cylinder Change	Swapping out H2 and N2	

Calibration Standards

Gas Cert Reference:		CC350110	Cal Gas Expiry Date:	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:		NA	Removed Gas Expiry:	NA	
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:	3061	
Zero Air Gen model:	API T701H		Serial Number:	358	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1152430011	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	3.22E-04	3.33E-04	NMHC SP Ratio:	5.90E-05	6.12E-05
CH4 Retention time:	18.0	18.2	NMHC Peak Area:	158686	152875
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	4918	82.1	17.51	17.22	1.017
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	17.22	Prev response	17.50	*% change	-1.6%
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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.51	17.21	1.017
				Average Correction Factor	

Notes: Hydrogen and nitrogen cylinders changed

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	9.14	1.024
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	9.14	Prev response	9.36	*% 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					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.36	9.15	1.023
				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	4918	82.1	8.15	8.09	1.008
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.09	Prev response	8.14	*% 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

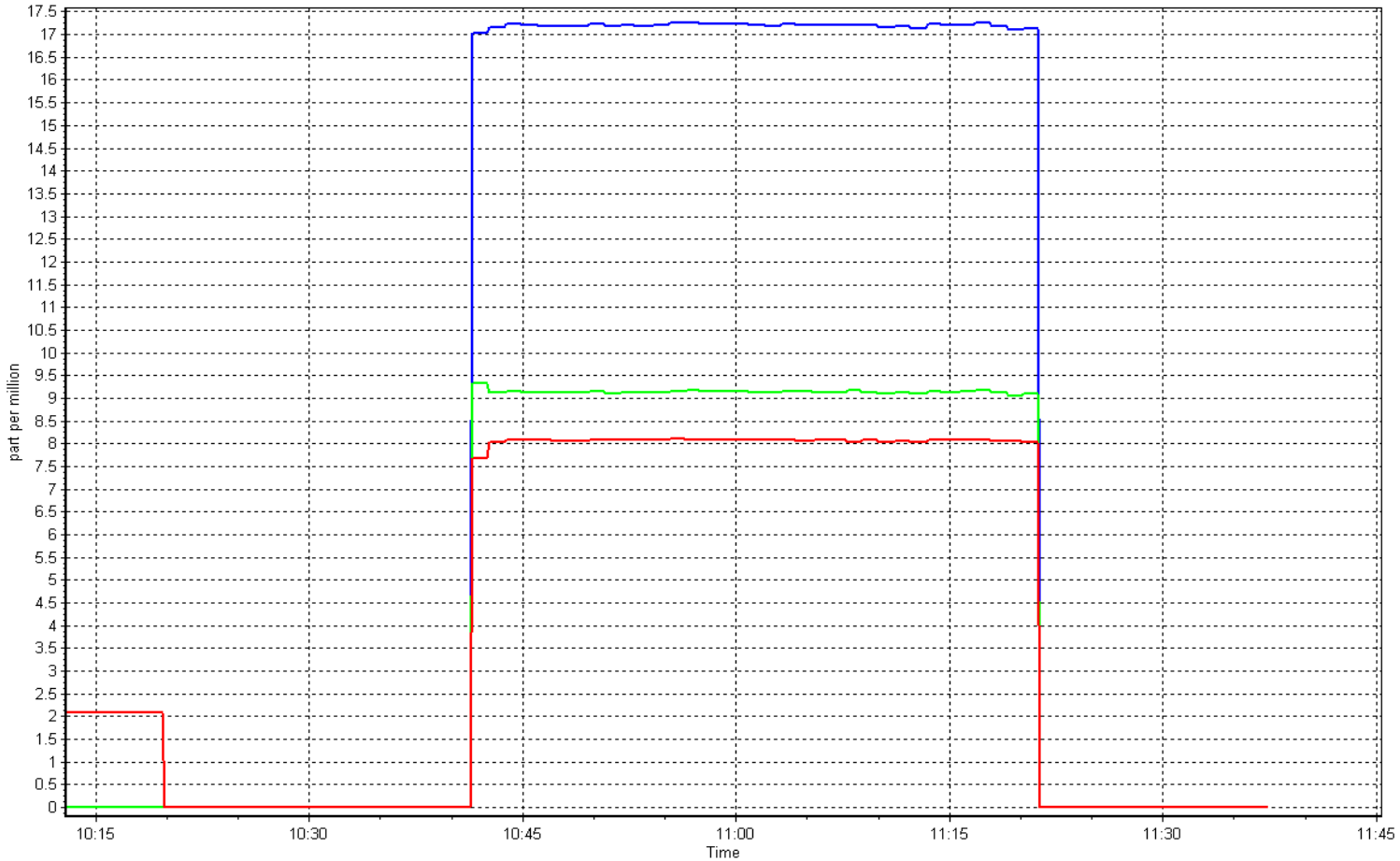
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.15	8.07	1.011
				Average Correction Factor	

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.000119	
THC Cal Offset:	-0.014184	
CH4 Cal Slope:	1.000669	
CH4 Cal Offset:	-0.015734	
NMHC Cal Slope:	0.999859	
NMHC Cal Offset:	0.001150	

Calibration Performed By: Jason Brooks

NMHC Calibration Plot Date: March 5, 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:	March 13, 2026	Last Cal Date:	March 5, 2026
Start time (MST):	9:47	End time (MST):	12:18
Reason:	Maintenance		

Calibration Standards

Gas Cert Reference:		CC350110	Cal Gas Expiry Date:	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:		NA	Removed Gas Expiry:	NA	
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:	3061	
Zero Air Gen model:	API T701H		Serial Number:	358	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1152430011	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	3.22E-04	3.33E-04	NMHC SP Ratio:	5.90E-05	6.12E-05
CH4 Retention time:	18.0	18.2	NMHC Peak Area:	158686	152875
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	4918	82.1	17.51	16.68	1.050
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr AF:	16.68	Prev response	17.50	*% change	-4.9%
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	4918	82.1	17.51	17.21	1.017
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.51	17.21	1.017
				Average Correction Factor	1.017

Notes: 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	4918	82.1	9.36	8.73	1.072
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	8.73	Prev response	9.36	*% change	-7.9%
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	4918	82.1	9.36	8.93	1.048
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.36	8.93	1.048
				Average Correction Factor	1.048

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	7.96	1.025
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr AF:	7.96	Prev response	8.14	*% change	-2.3%
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	4918	82.1	8.15	8.28	0.985
Mid point					
Low point					
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.15	8.28	0.985
				Average Correction Factor	0.985

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.000119	0.982813
THC Cal Offset:	-0.014184	0.000000
CH4 Cal Slope:	1.000669	1.015206
CH4 Cal Offset:	-0.015734	0.000000
NMHC Cal Slope:	0.999859	0.954582
NMHC Cal Offset:	0.001150	0.000000

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

THC Calibration Summary

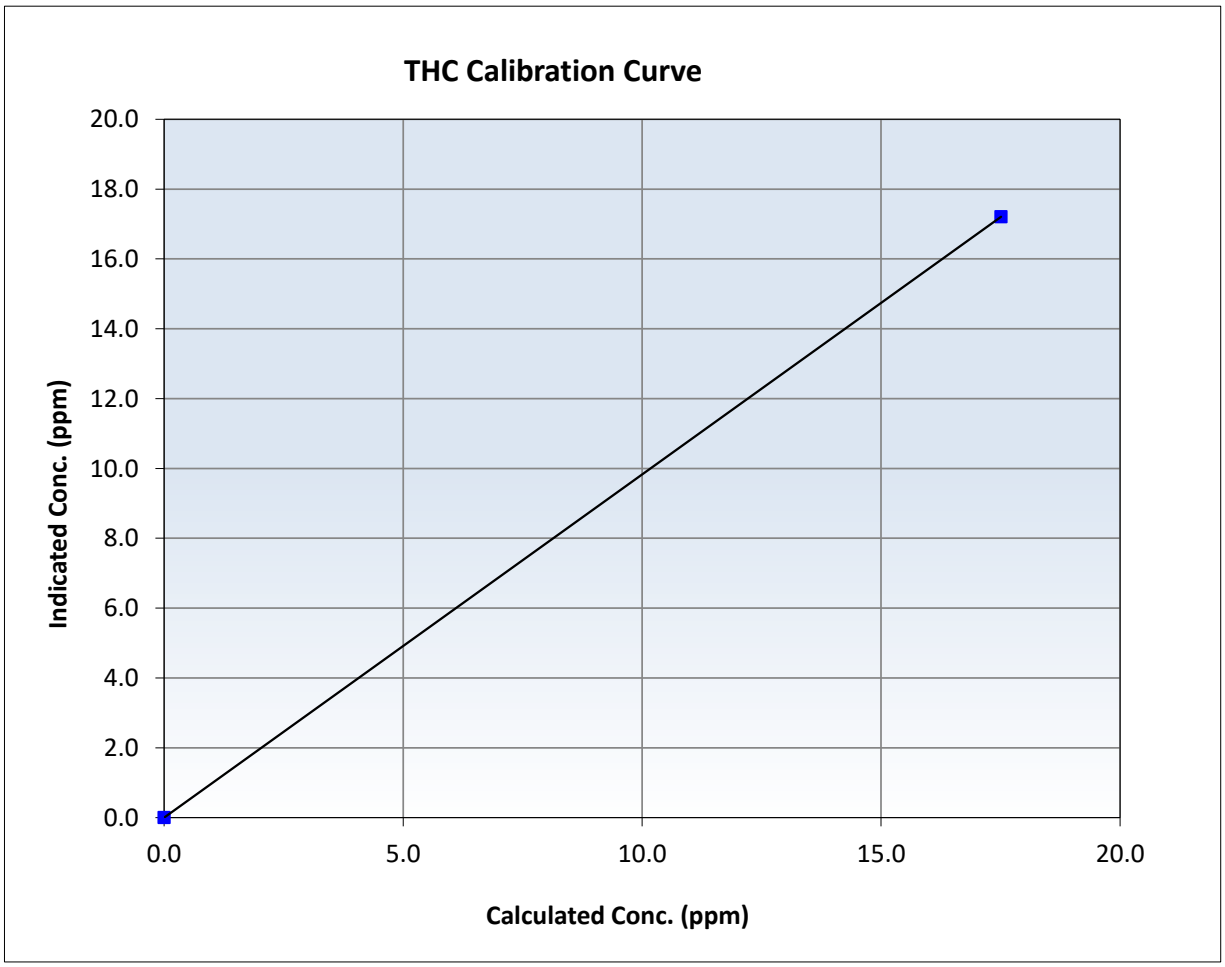
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	March 5, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:47	End Time (MST):	12:18
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
17.51	17.21	1.0175

Statistical Evaluation		Limits
Correlation Coefficient	1.000000	≥0.995
Slope	0.982813	0.90 - 1.10
Intercept	0.000000	+/-0.5



Wood Buffalo Environmental Association

CH_4 Calibration Summary

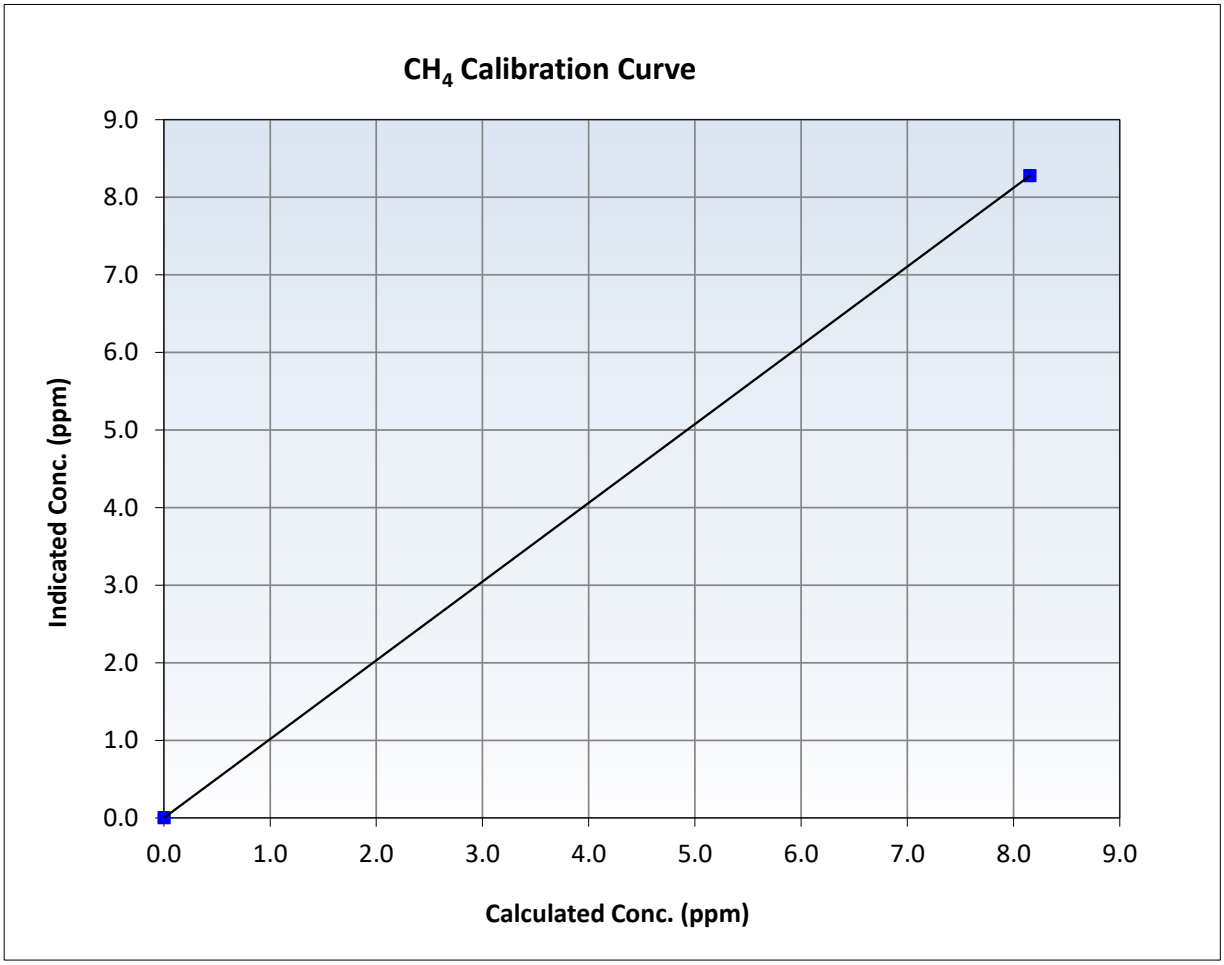
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	March 5, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:47	End Time (MST):	12:18
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.15	8.28	0.9850

Statistical Evaluation		Limits
Correlation Coefficient	1.000000	≥0.995
Slope	1.015206	0.90 - 1.10
Intercept	0.000000	+/-0.5



Wood Buffalo Environmental Association

NMHC Calibration Summary

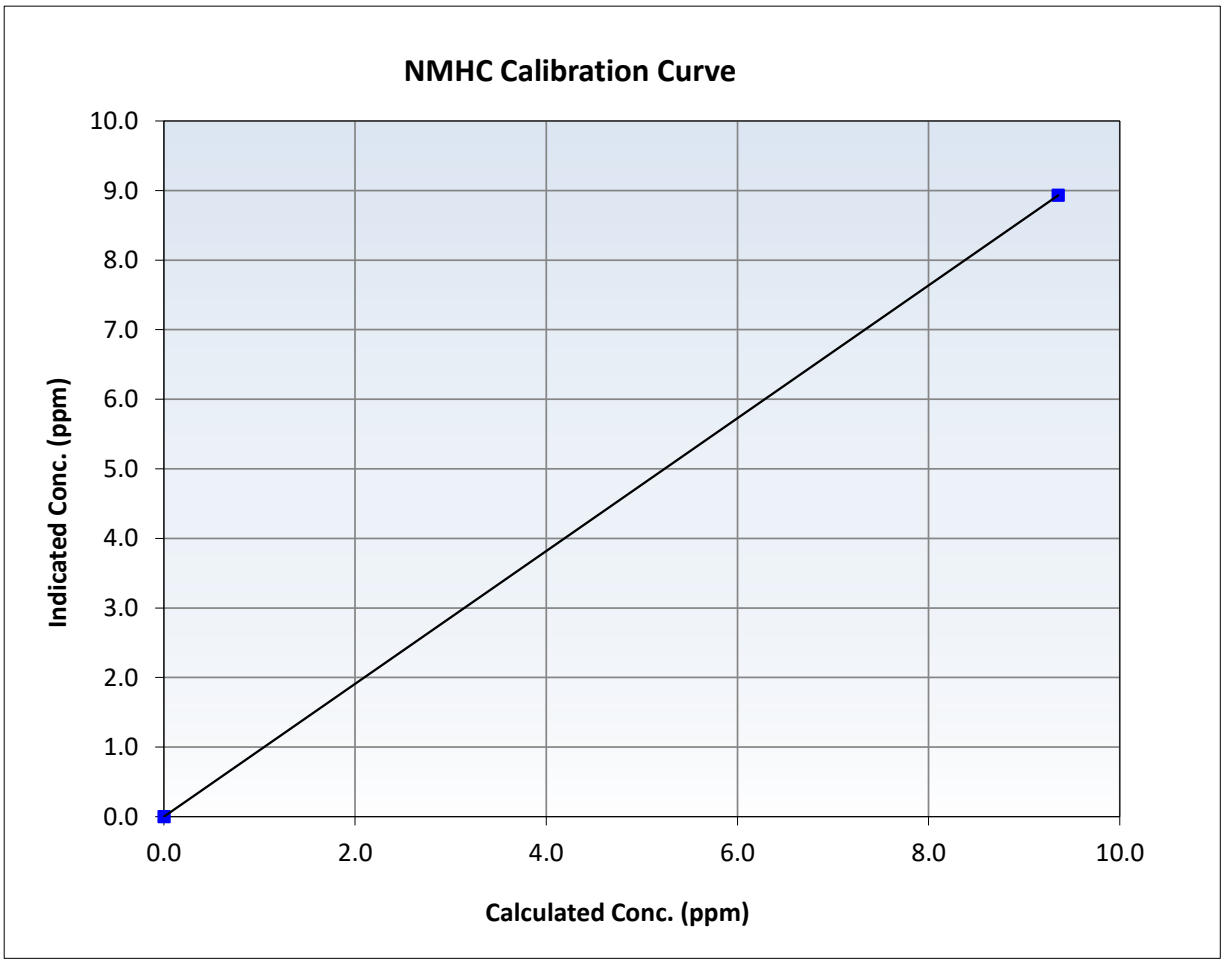
Station Information

Calibration Date:	March 13, 2026	Previous Calibration:	March 5, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:47	End Time (MST):	12:18
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

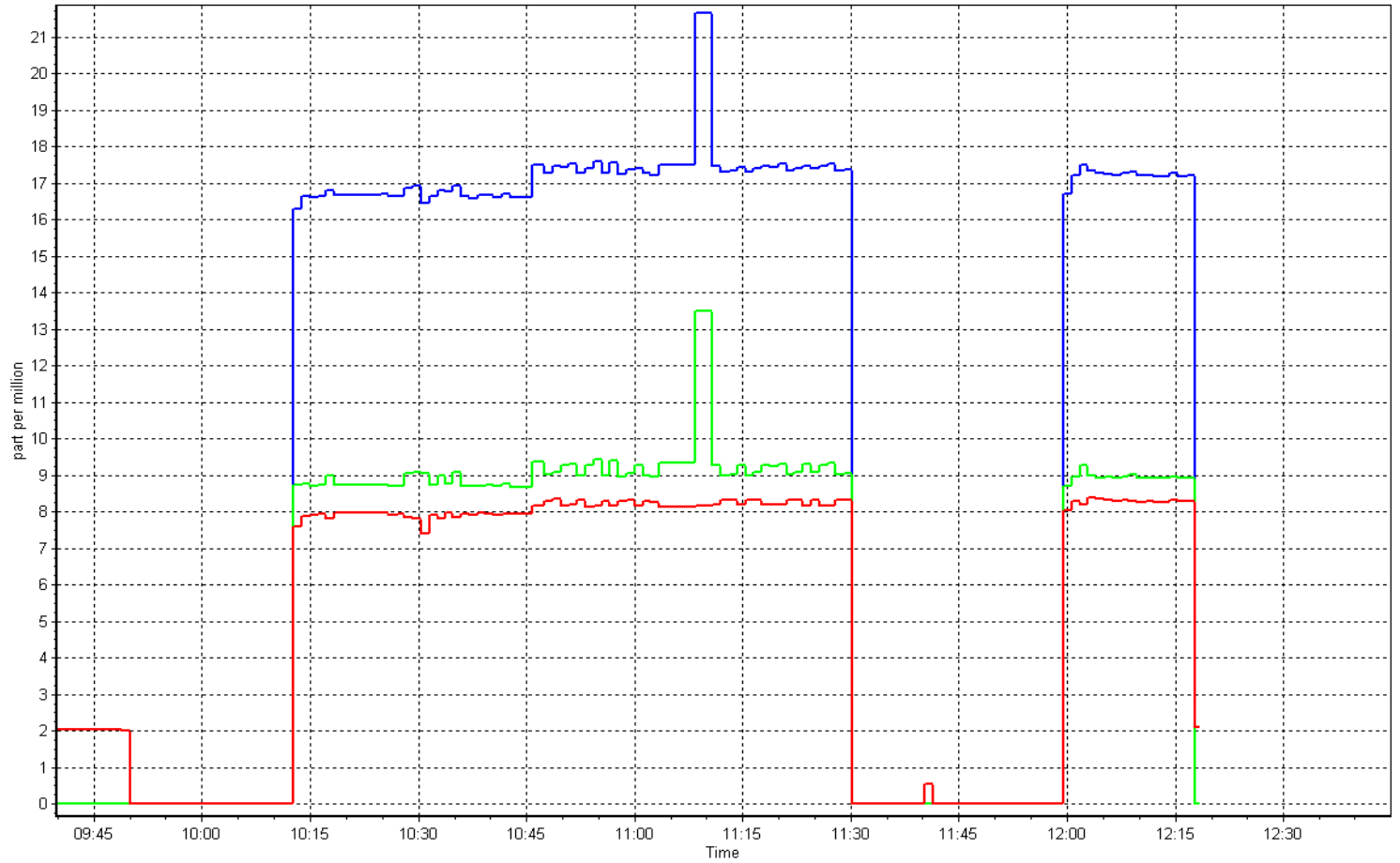
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
9.36	8.93	1.0476

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	0.954582	*0.90 - 1.10*
Intercept	0.000000	*+/-0.5*



NMHC Calibration Plot Date: March 13, 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:	March 23, 2026	Last Cal Date:	March 13, 2026
Start time (MST):	9:47	End time (MST):	11:35
Reason:	Removal		

Calibration Standards

Gas Cert Reference:		CC350110	Cal Gas Expiry Date:	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:		NA	Removed Gas Expiry:	NA	
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:	3061	
Zero Air Gen model:	API T701H		Serial Number:	358	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1152430011	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	3.33E-04		NMHC SP Ratio:	6.12E-05	
CH4 Retention time:	18.2		NMHC Peak Area:	152875	
Zero Chromatogram:	ON		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	5000	0.0	0.00	0.00	----
As found High point	4918	82.1	17.51	16.16	1.084
As found Mid point	4959	41.0	8.74	8.03	1.089
As found Low point	4979	20.5	4.37	4.04	1.082
New cylinder response					
Baseline Corr AF:	16.16	Prev response	17.50	*% change	-8.3%
Baseline Corr 2nd AF:	8.03	AF Slope:	0.922537	AF Intercept:	-0.006904
Baseline Corr 3rd AF:	4.04	AF Correlation:	0.999990	* = > +/-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: Removal Calibration

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	8.39	1.116
As found Mid point	4959	41.0	4.67	4.18	1.117
As found Low point	4979	20.5	2.34	2.11	1.106
New cylinder response					
Baseline Corr AF:	8.39	Prev response	9.36	*% change	-12.5%
Baseline Corr 2nd AF:	4.18	AF Slope:	0.895617	AF Intercept:	0.006123
Baseline Corr 3rd AF:	2.11	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					
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	4918	82.1	8.15	7.78	1.049
As found Mid point	4959	41.0	4.07	3.84	1.060
As found Low point	4979	20.5	2.04	1.93	1.056
New cylinder response					
Baseline Corr AF:	7.78	Prev response	8.14	*% change	-4.7%
Baseline Corr 2nd AF:	3.84	AF Slope:	0.953649	AF Intercept:	-0.013828
Baseline Corr 3rd AF:	1.93	AF Correlation:	0.999966	* = > +/-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					

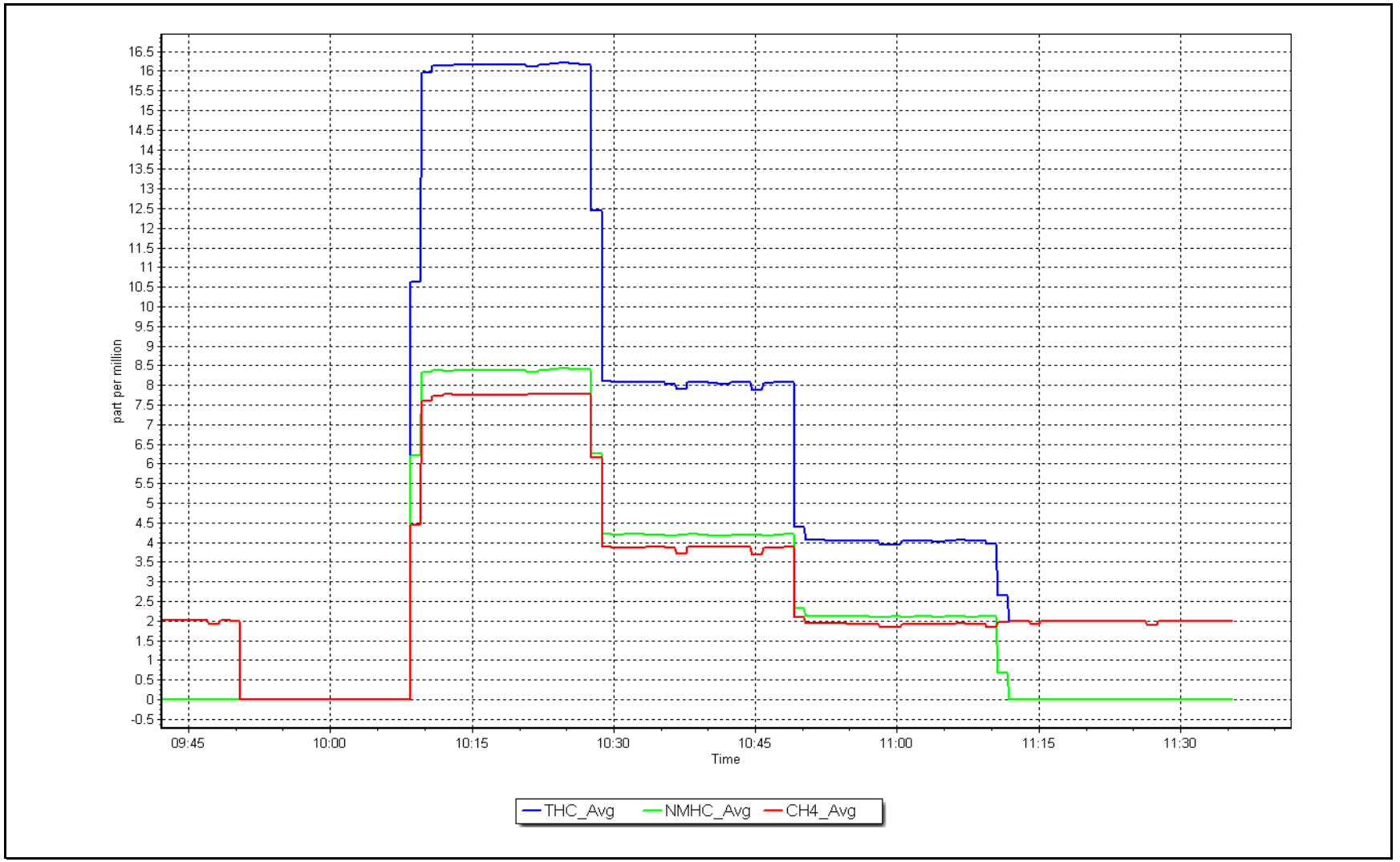
Average Correction Factor

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	1.000119	
THC Cal Offset:	-0.014184	
CH4 Cal Slope:	1.000669	
CH4 Cal Offset:	-0.015734	
NMHC Cal Slope:	0.999859	
NMHC Cal Offset:	0.001150	

Calibration Performed By: Jason Brooks

NMHC Calibration Plot Date: March 23, 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:	March 24, 2026	Last Cal Date:	NA
Start time (MST):	9:00	End time (MST):	11:17
Reason:	Install		

Calibration Standards

Gas Cert Reference:		CC350110	Cal Gas Expiry Date:	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:		NA	Removed Gas Expiry:	NA	
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:	3061	
Zero Air Gen model:	API T701H		Serial Number:	358	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1152430011	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:		3.49E-04	NMHC SP Ratio:		8.39E-05
CH4 Retention time:		18.6	NMHC Peak Area:		111548
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					
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	4918	82.1	17.51	17.46	1.003
Mid point	4959	41.0	8.74	8.64	1.012
Low point	4979	20.5	4.37	4.35	1.005
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	17.51	17.30	1.012
				Average Correction Factor	1.007

Notes: 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	4918	82.1	9.36	9.30	1.007
Mid point	4959	41.0	4.67	4.60	1.016
Low point	4979	20.5	2.34	2.34	1.000
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	9.36	9.18	1.019
				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					
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	4918	82.1	8.15	8.16	0.999
Mid point	4959	41.0	4.07	4.04	1.007
Low point	4979	20.5	2.04	2.02	1.011
As left zero	5000	0.0	0.00	0.00	----
As left span	4918	82.1	8.15	8.12	1.004
				Average Correction Factor	1.006

Calibration Statistics

	Start	*Finish*
THC Cal Slope:		0.996708
THC Cal Offset:		-0.018816
CH4 Cal Slope:		1.001735
CH4 Cal Offset:		-0.016536
NMHC Cal Slope:		0.992424
NMHC Cal Offset:		-0.002680

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

THC Calibration Summary

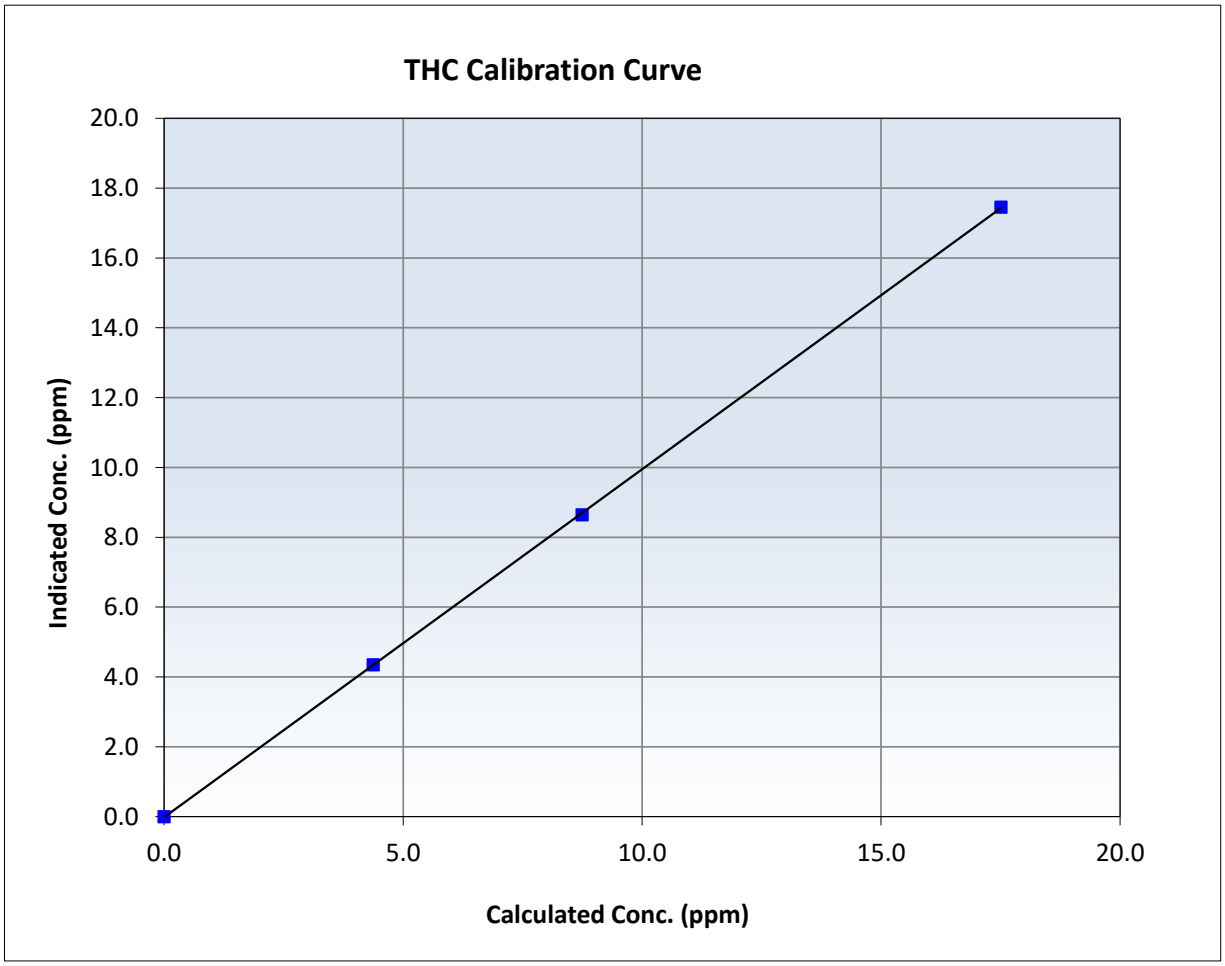
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	NA
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:00	End Time (MST):	11:17
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
17.51	17.46	1.0030
8.74	8.64	1.0119
4.37	4.35	1.0050

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999975	*≥0.995*
Slope	0.996708	*0.90 - 1.10*
Intercept	-0.018816	*+/-0.5*



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CH_4 Calibration Summary

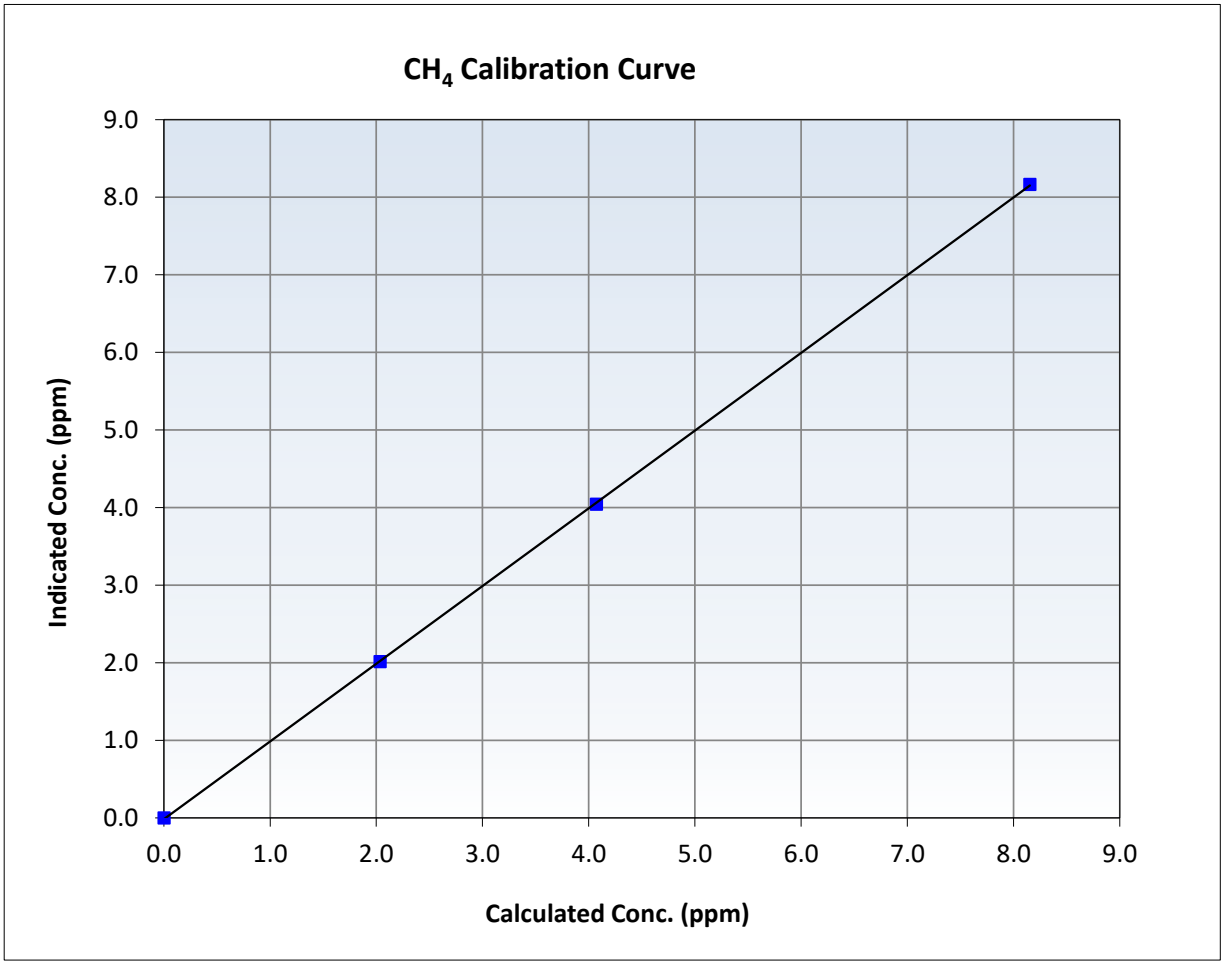
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	NA
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:00	End Time (MST):	11:17
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
8.15	8.16	0.9988
4.07	4.04	1.0075
2.04	2.02	1.0106

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999975	*≥0.995*
Slope	1.001735	*0.90 - 1.10*
Intercept	-0.016536	*+/-0.5*



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NMHC Calibration Summary

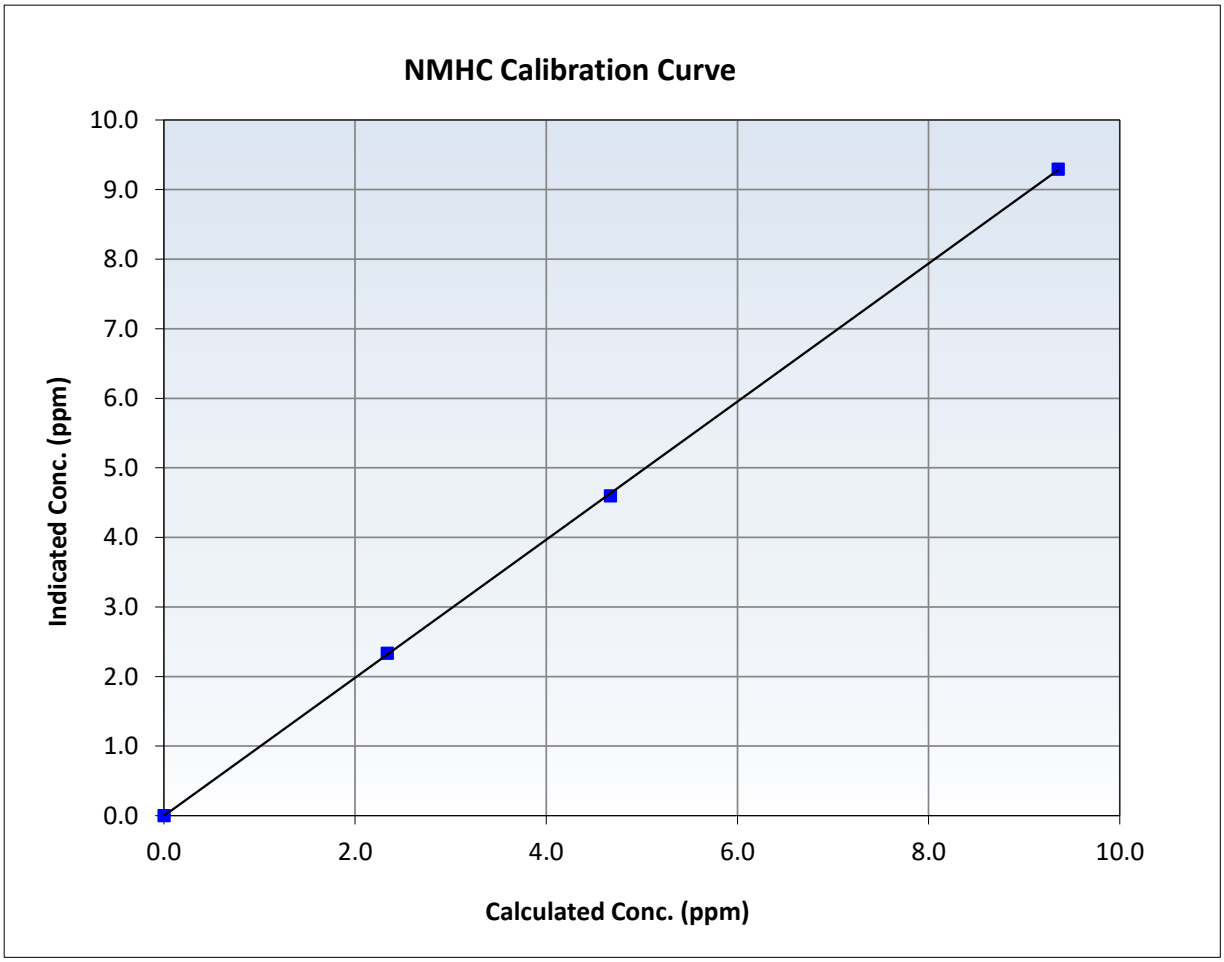
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	NA
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	9:00	End Time (MST):	11:17
Analyzer make:	Thermo 55i	Analyzer serial #:	1152430011

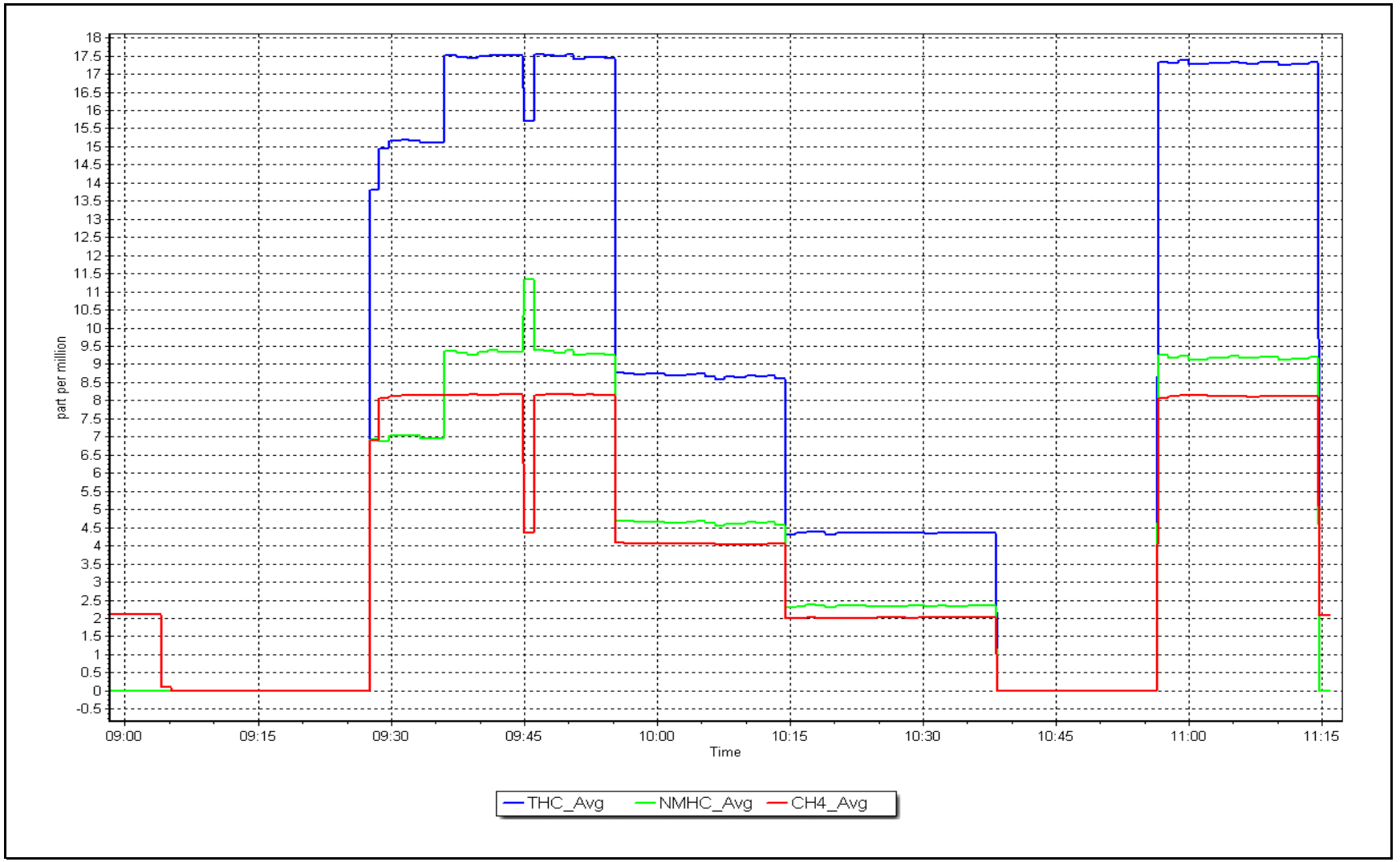
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.00	----
9.36	9.30	1.0066
4.67	4.60	1.0160
2.34	2.34	1.0002

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999962	*≥0.995*
Slope	0.992424	*0.90 - 1.10*
Intercept	-0.002680	*+/-0.5*



NMHC Calibration Plot Date: March 24, 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:	March 25, 2026	Last Cal Date:	March 24, 2026
:	14:30	End time (MST):	15:57
Reason:	Other:	Remote linearity check	

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:		NA	Removed Gas Expiry:	NA	
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:	3061	
Zero Air Gen model:	API T701H		Serial Number:	358	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1152430011	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	3.49E-04	3.49E-04	NMHC SP Ratio:	8.39E-05	8.39E-05
CH4 Retention time:	18.6	18.6	NMHC Peak Area:	111548	111548
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	4918	82.1	17.51	17.12	1.023
As found Mid point	4959	41.0	8.74	8.65	1.011
As found Low point	4979	20.5	4.37	4.36	1.004
New cylinder response					
Baseline Corr AF:	17.12	Prev response	17.43	*% change	-1.9%
Baseline Corr 2nd AF:	8.65	AF Slope:	0.976539	AF Intercept:	0.053361
Baseline Corr 3rd AF:	4.36	AF Correlation:	0.999947	* = > +/-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: Remote linearity check.

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	8.97	1.043
As found Mid point	4959	41.0	4.67	4.59	1.018
As found Low point	4979	20.5	2.34	2.34	1.000
New cylinder response					
Baseline Corr AF:	8.97	Prev response	9.28	*% change	-3.9%
Baseline Corr 2nd AF:	4.59	AF Slope:	0.956145	AF Intercept:	0.061493
Baseline Corr 3rd AF:	2.34	AF Correlation:	0.999749	* = > +/-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	4918	82.1	8.15	8.15	1.000
As found Mid point	4959	41.0	4.07	4.06	1.004
As found Low point	4979	20.5	2.04	2.02	1.008
New cylinder response					
Baseline Corr AF:	8.15	Prev response	8.15	*% change	0.0%
Baseline Corr 2nd AF:	4.06	AF Slope:	1.000206	AF Intercept:	-0.009333
Baseline Corr 3rd AF:	2.02	AF Correlation:	0.999994	* = > +/-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					

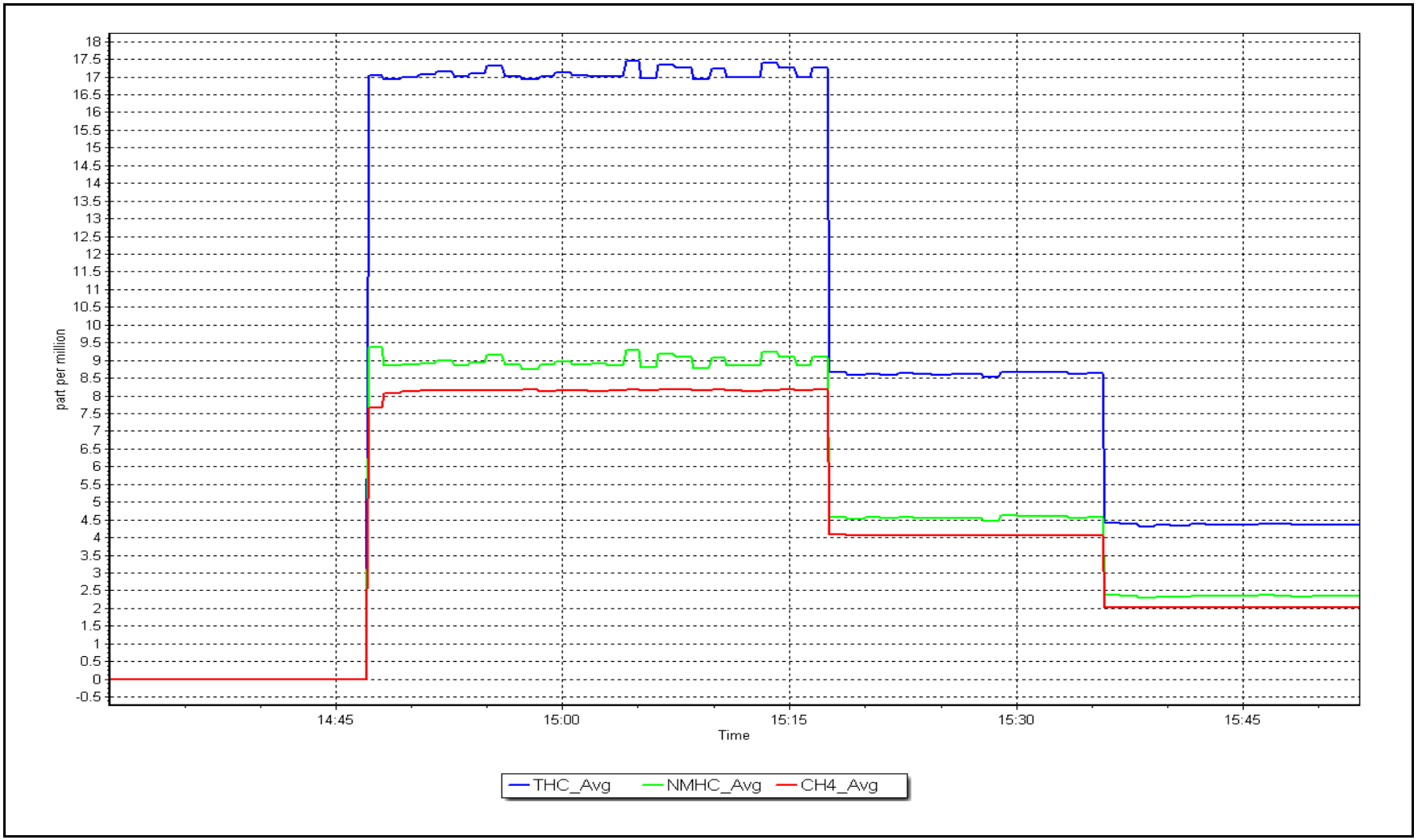
Average Correction Factor

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.996708	
THC Cal Offset:	-0.018816	
CH4 Cal Slope:	1.001735	
CH4 Cal Offset:	-0.016536	
NMHC Cal Slope:	0.992424	
NMHC Cal Offset:	-0.002680	

Calibration Performed By: Jason Brooks/ Aswin Sasi Kumar

NMHC Calibration Plot Date: March 25, 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:	March 31, 2026	Last Cal Date:	March 24, 2026
Start time (MST):	8:46	End time (MST):	10:08
Reason:	Removal		

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:		NA	Removed Gas Expiry:	NA	
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:	3061	
Zero Air Gen model:	API T701H		Serial Number:	358	

Analyzer Information

Analyzer make:	Thermo 55i		Analyzer serial #:	1152430011	
THC Range:	0 - 20 ppm		NMHC/CH4 Range:	0 - 10 ppm	
	Start	***Finish***		***Start***	***Finish***
CH4 SP Ratio:	3.49E-04		NMHC SP Ratio:	8.39E-05	
CH4 Retention time:	18.6		NMHC Peak Area:	111548	
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	4918	82.1	17.51	15.05	1.164
As found Mid point	4959	41.0	8.74	7.51	1.165
As found Low point	4979	20.5	4.37	3.76	1.162
New cylinder response					
Baseline Corr AF:	15.05	Prev response	17.43	*% change	-15.9%
Baseline Corr 2nd AF:	7.51	AF Slope:	0.859121	AF Intercept:	0.000652
Baseline Corr 3rd AF:	3.76	AF Correlation:	0.999999	* = > +/-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 instrument from service.

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	7.08	1.321
As found Mid point	4959	41.0	4.67	3.54	1.321
As found Low point	4979	20.5	2.34	1.79	1.304
New cylinder response					
Baseline Corr AF:	7.08	Prev response	9.28	*% change	-27.6%
Baseline Corr 2nd AF:	3.54	AF Slope:	0.756329	AF Intercept:	0.009226
Baseline Corr 3rd AF:	1.79	AF Correlation:	0.999987	* = > +/-5% change initiates investigation	

NMHC Calibration Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	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	4918	82.1	8.15	7.96	1.024
As found Mid point	4959	41.0	4.07	3.97	1.026
As found Low point	4979	20.5	2.04	1.97	1.033
New cylinder response					
Baseline Corr AF:	7.96	Prev response	8.15	*% change	-2.4%
Baseline Corr 2nd AF:	3.97	AF Slope:	0.976771	AF Intercept:	-0.007774
Baseline Corr 3rd AF:	1.97	AF Correlation:	0.999995	* = > +/-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					

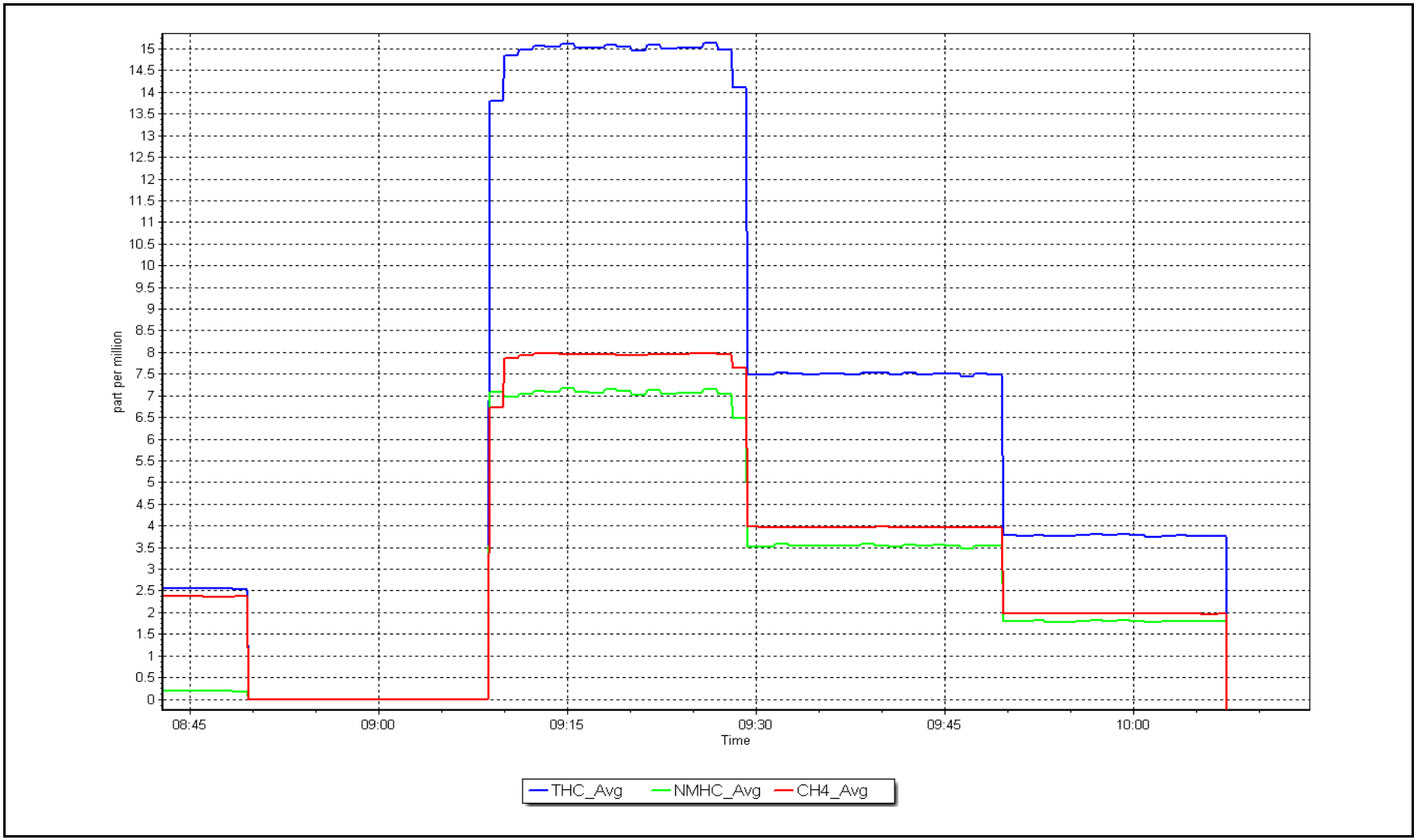
Average Correction Factor

Calibration Statistics

	Start	***Finish***
THC Cal Slope:	0.996708	
THC Cal Offset:	-0.018816	
CH4 Cal Slope:	1.001735	
CH4 Cal Offset:	-0.016536	
NMHC Cal Slope:	0.992424	
NMHC Cal Offset:	-0.002680	

Calibration Performed By: Jason Brooks

NMHC Calibration Plot Date: March 31, 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:	March 31, 2026	Last Cal Date:	N/A
Start time (MST):	10:15	End time (MST):	13:20
Reason:	Install		

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.	ppm	CH4 Equiv Conc.	0.0 ppm
Removed C3H8 Conc.	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 #:	1180320037
THC Range:	0 - 20 ppm	NMHC/CH4 Range:	0 - 10 ppm

	Start	*Finish*		*Start*	*Finish*
CH4 SP Ratio:	N/A	4.35E-04	NMHC SP Ratio:	N/A	6.68E-05
CH4 Retention time:	N/A	16.4	NMHC Peak Area:	N/A	140091
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					
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	4918	82.1	17.51	17.47	1.003
Mid point	4959	41.0	8.74	8.72	1.003
Low point	4979	20.5	4.37	4.40	0.995
As left zero	5000	0.0	0.00	0.00	----
As left span	4919	82.1	17.51	17.62	0.994
				Average Correction Factor	1.000

Notes: Instrument installed, 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					
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	4918	82.1	9.36	9.38	0.997
Mid point	4959	41.0	4.67	4.77	0.980
Low point	4979	20.5	2.34	2.44	0.957
As left zero	5000	0.0	0.00	0.00	----
As left span	4919	82.1	9.35	9.51	0.983
				Average Correction Factor	0.978

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	4918	82.1	8.15	8.08	1.009
Mid point	4959	41.0	4.07	3.95	1.030
Low point	4979	20.5	2.04	1.95	1.043
As left zero	5000	0.0	0.00	0.00	----
As left span	4919	82.1	8.15	8.11	1.006
				Average Correction Factor	1.027

Calibration Statistics

	Start	*Finish*
THC Cal Slope:		0.996750
THC Cal Offset:		0.012608
CH4 Cal Slope:		0.992616
CH4 Cal Offset:		-0.042770
NMHC Cal Slope:		1.000390
NMHC Cal Offset:		0.054978

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

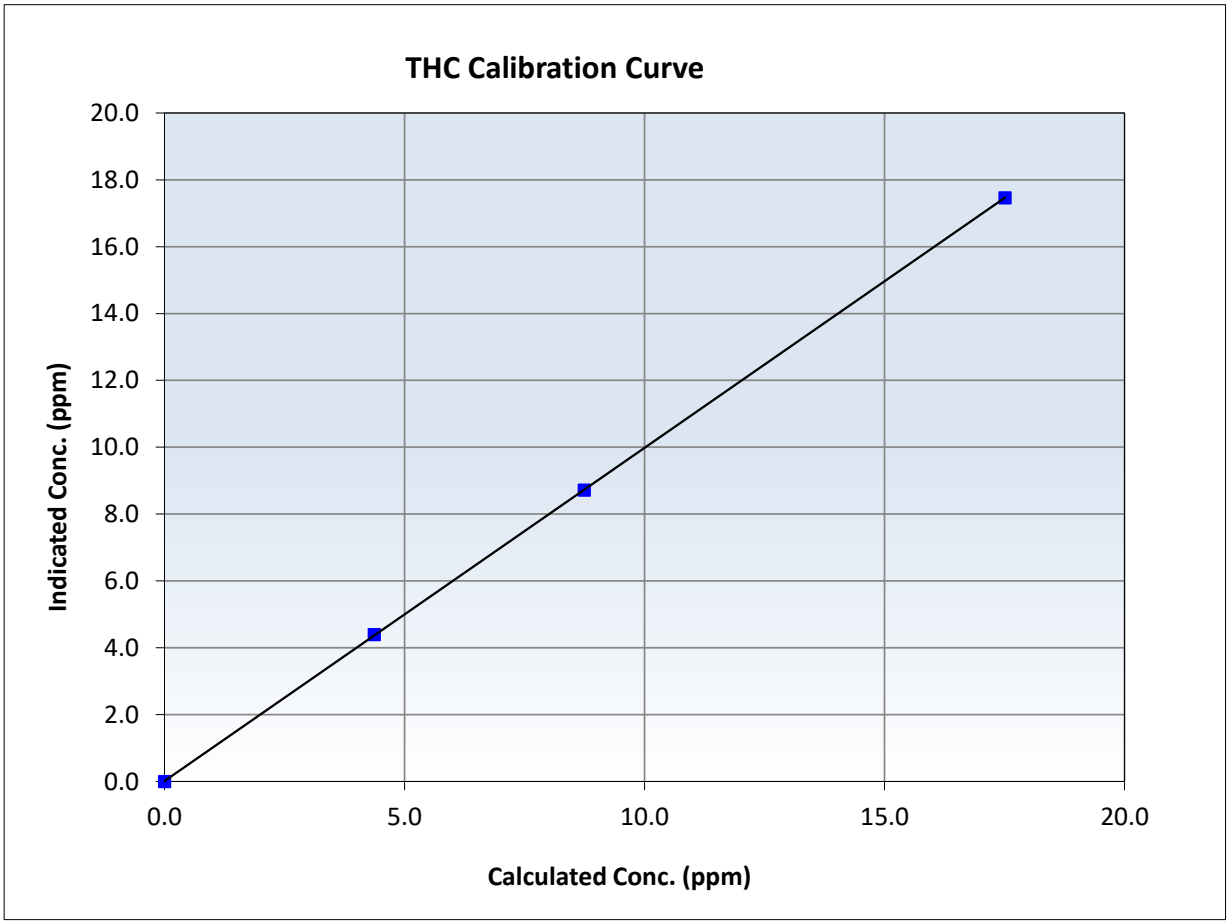
THC Calibration Summary

Station Information

Calibration Date:	March 31, 2026	Previous Calibration:	N/A
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:15	End Time (MST):	13:20
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320037

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*
17.51	17.47	1.0026	Slope	0.996750	*0.90 - 1.10*
8.74	8.72	1.0030	Intercept	0.012608	*+/-0.5*
4.37	4.40	0.9949			



Wood Buffalo Environmental Association

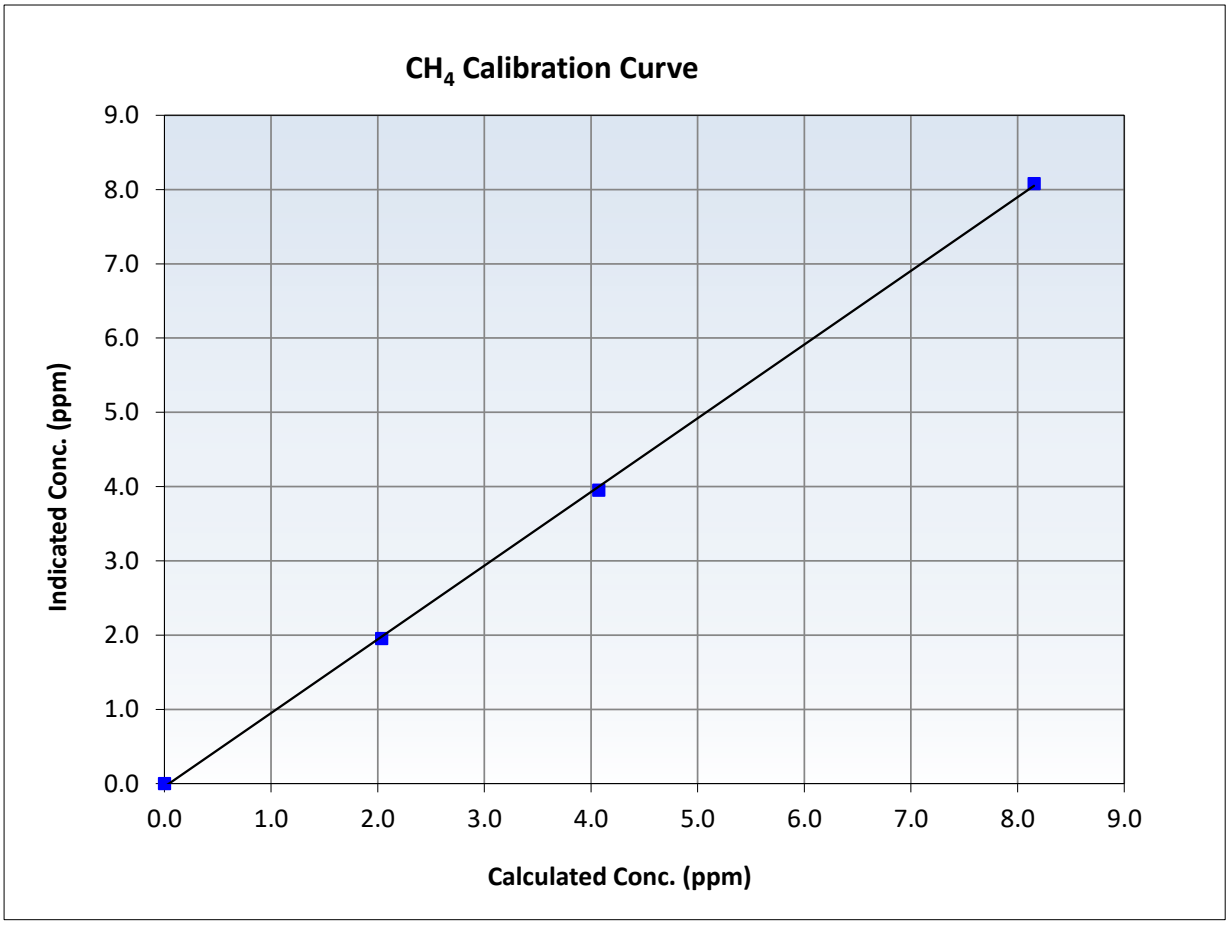
CH_4 Calibration Summary

Station Information

Calibration Date:	March 31, 2026	Previous Calibration:	N/A
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:15	End Time (MST):	13:20
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320037

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.00	0.00	----	Correlation Coefficient	0.999843	≥0.995
8.15	8.08	1.0090	Slope	0.992616	0.90 - 1.10
4.07	3.95	1.0304			
2.04	1.95	1.0426	Intercept	-0.042770	+/-0.5



Wood Buffalo Environmental Association

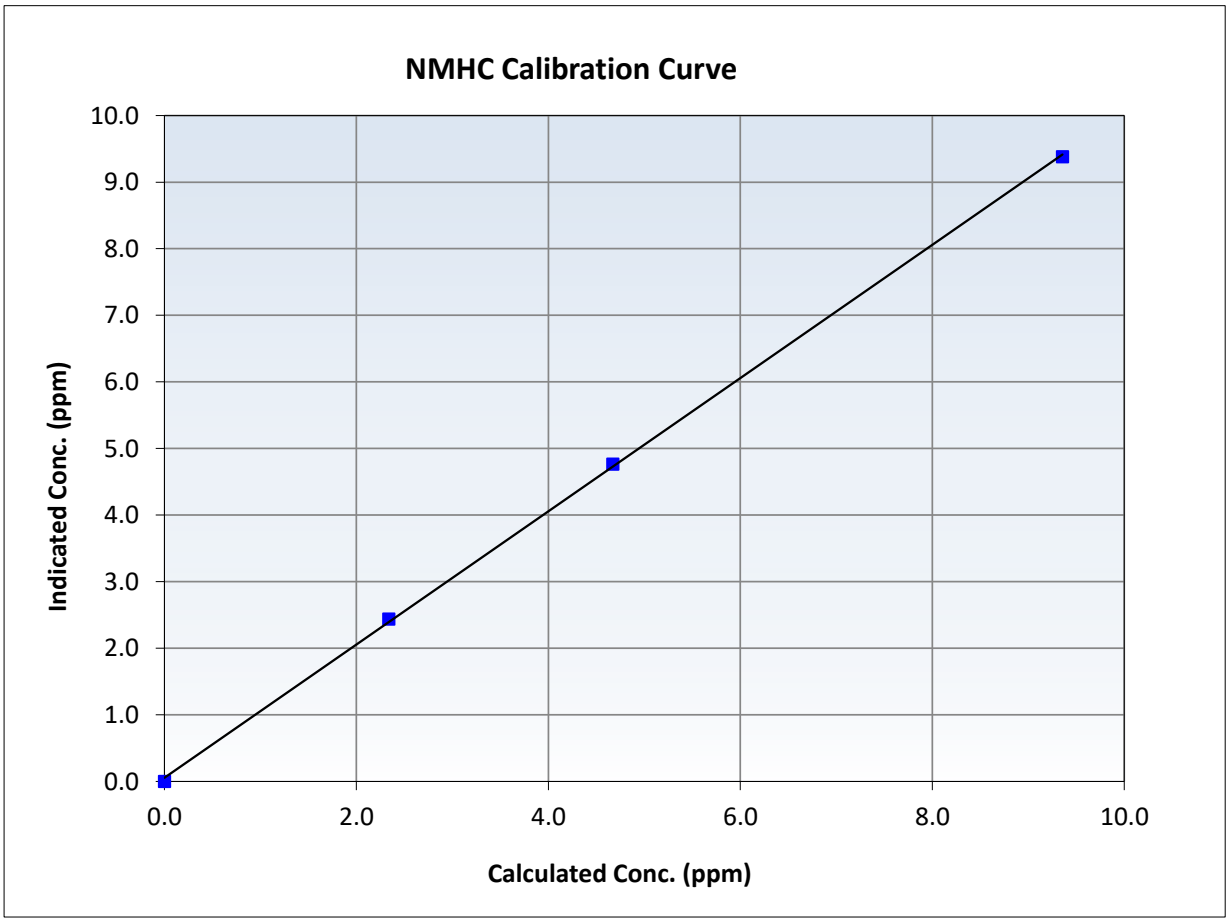
NMHC Calibration Summary

Station Information

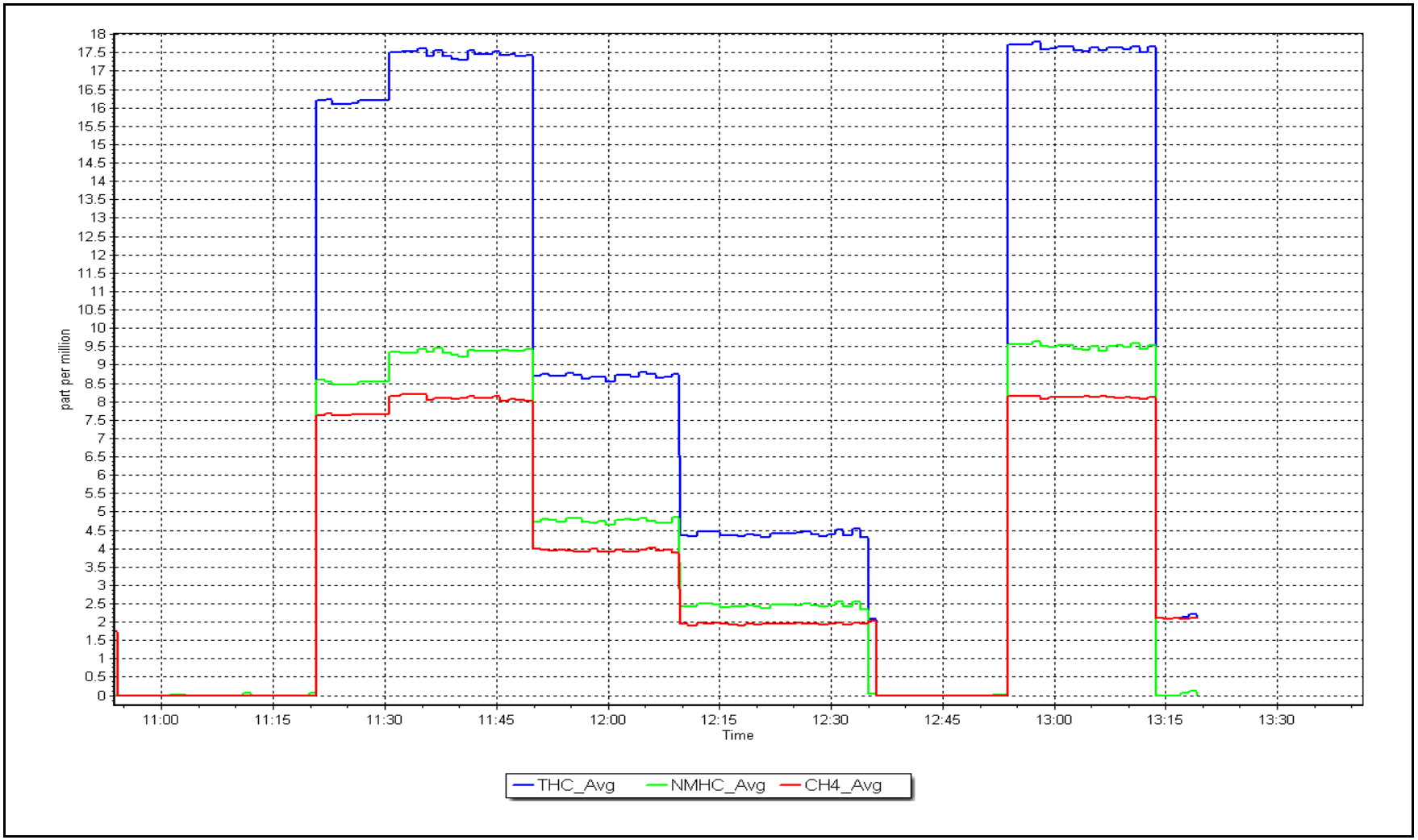
Calibration Date:	March 31, 2026	Previous Calibration:	N/A
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:15	End Time (MST):	13:20
Analyzer make:	Thermo 55i	Analyzer serial #:	1180320037

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.00	0.00	----	Correlation Coefficient	0.999840	*≥0.995*
9.36	9.38	0.9970	Slope	1.000390	*0.90 - 1.10*
4.67	4.77	0.9804	Intercept	0.054978	*+/-0.5*
2.34	2.44	0.9572			



NMHC Calibration Plot Date: March 31, 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:	March 3, 2026
Last Cal Date:	February 11, 2026
Start time (MST):	10:46
End time (MST):	15:53
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:	API T701H	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	0.0	0.2	-0.3	----	----
AF High point	4932	67.7	803.0	800.3	2.7	799.9	793.9	6.1	1.0038	1.0083
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 801.5 ppb	NO = 797.2 ppb
Baseline Corr 1st pt	NO_X = 799.9 ppb	NO = 793.7 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

*Percent Change NO_X = -0.2%

*Percent Change NO = -0.4%

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: 0710321429

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.582	1.582	NO bkgnd or offset:	18.2	17.9
NOX coeff or slope:	0.996	0.996	NOX bkgnd or offset:	18.5	18.2
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	212.8	218.5

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998007	0.994335
NO_X Cal Offset:	0.101748	0.040727
NO Cal Slope:	0.997831	0.993176
NO Cal Offset:	-1.280224	-1.301285
NO_2 Cal Slope:	0.999671	0.991111
NO_2 Cal Offset:	0.109176	1.242464

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	4932	67.7	803.0	800.3	2.7	798.4	794.2	4.1	1.0057	1.0076
Mid point	4966	33.8	400.9	399.5	1.4	399.0	395.1	3.8	1.0047	1.0112
Low point	4983	16.9	200.4	199.8	0.7	198.9	195.1	3.7	1.0077	1.0239
As left zero	5000	0.0	0.0	0.0	0.0	0.0	0.2	-0.2	----	----
As left span	4932	67.7	803.0	393.9	409.1	787.4	393.9	393.5	1.0198	1.0000
							Average Correction Factor		1.0061	1.0142

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	788.2	391.0	399.9	396.2	1.0094	99.1%
Mid GPT point	788.2	538.2	252.7	253.2	0.9981	100.2%
Low GPT point	788.2	656.7	134.2	135.6	0.9897	101.0%
				Average Correction Factor	0.9991	100.1%

Notes: Inlet filter changed after as founds, no adjustments made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

NO_X Calibration Summary

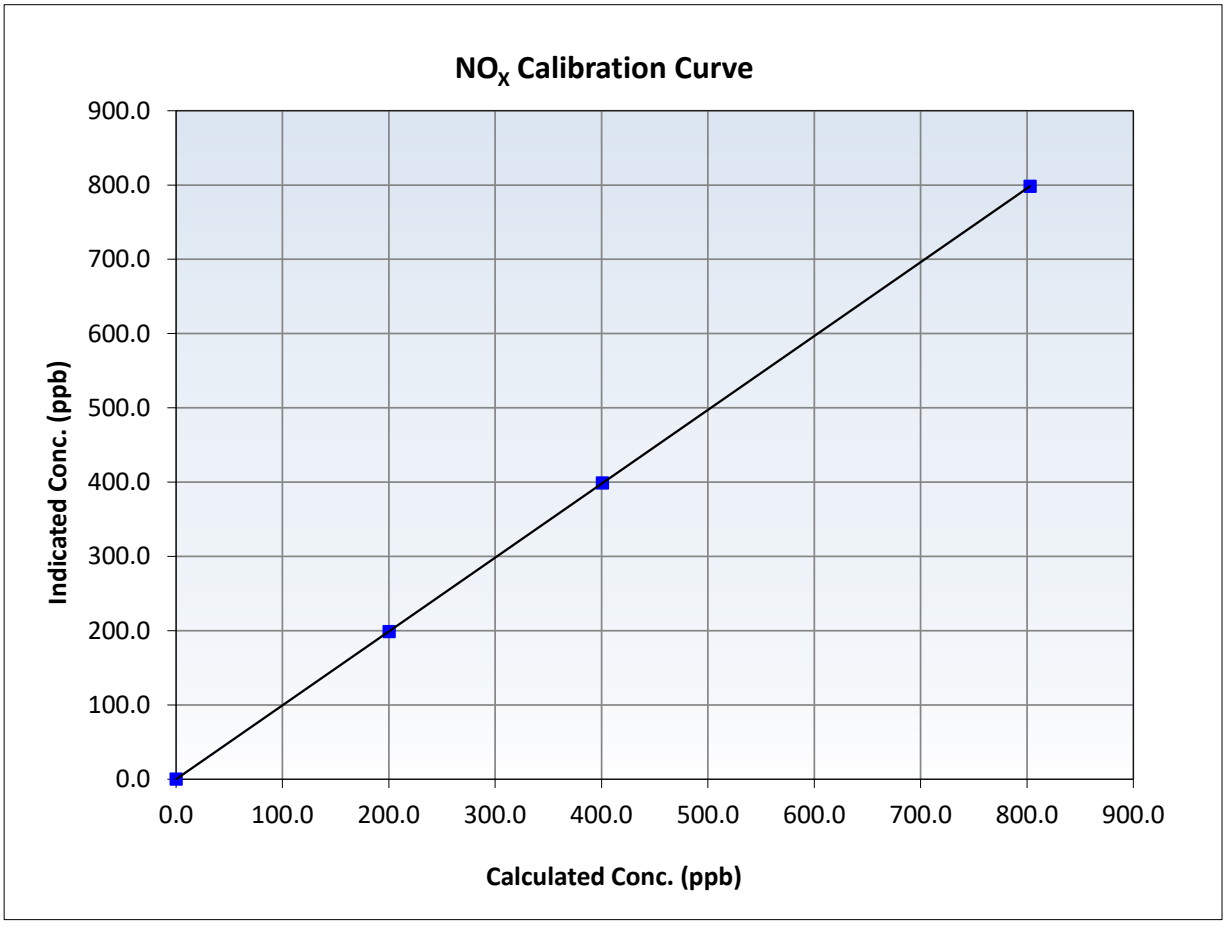
Station Information

Calibration Date:	March 3, 2026	Previous Calibration:	February 11, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:46	End Time (MST):	15:53
Analyzer make:	Thermo 42i	Analyzer serial #:	0710321429

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
803.0	798.4	1.0057
400.9	399.0	1.0047
200.4	198.9	1.0077

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	0.994335	*0.90 - 1.10*
Intercept	0.040727	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

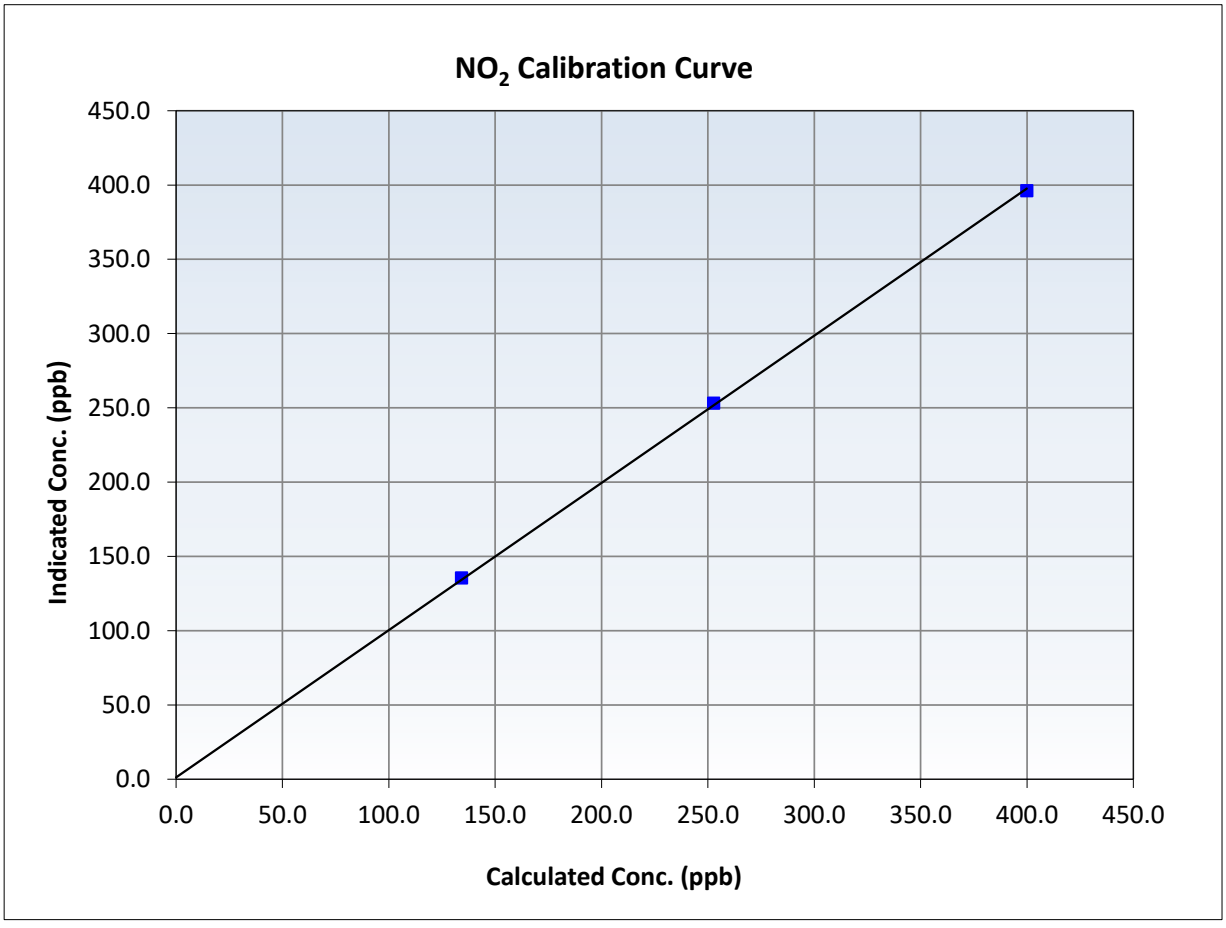
Station Information

Calibration Date:	March 3, 2026	Previous Calibration:	February 11, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:46	End Time (MST):	15:53
Analyzer make:	Thermo 42i	Analyzer serial #:	0710321429

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.2	----
399.9	396.2	1.0094
252.7	253.2	0.9981
134.2	135.6	0.9897

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999906	*≥0.995*
Slope	0.991111	*0.90 - 1.10*
Intercept	1.242464	*+/-20*



Wood Buffalo Environmental Association

NO Calibration Summary

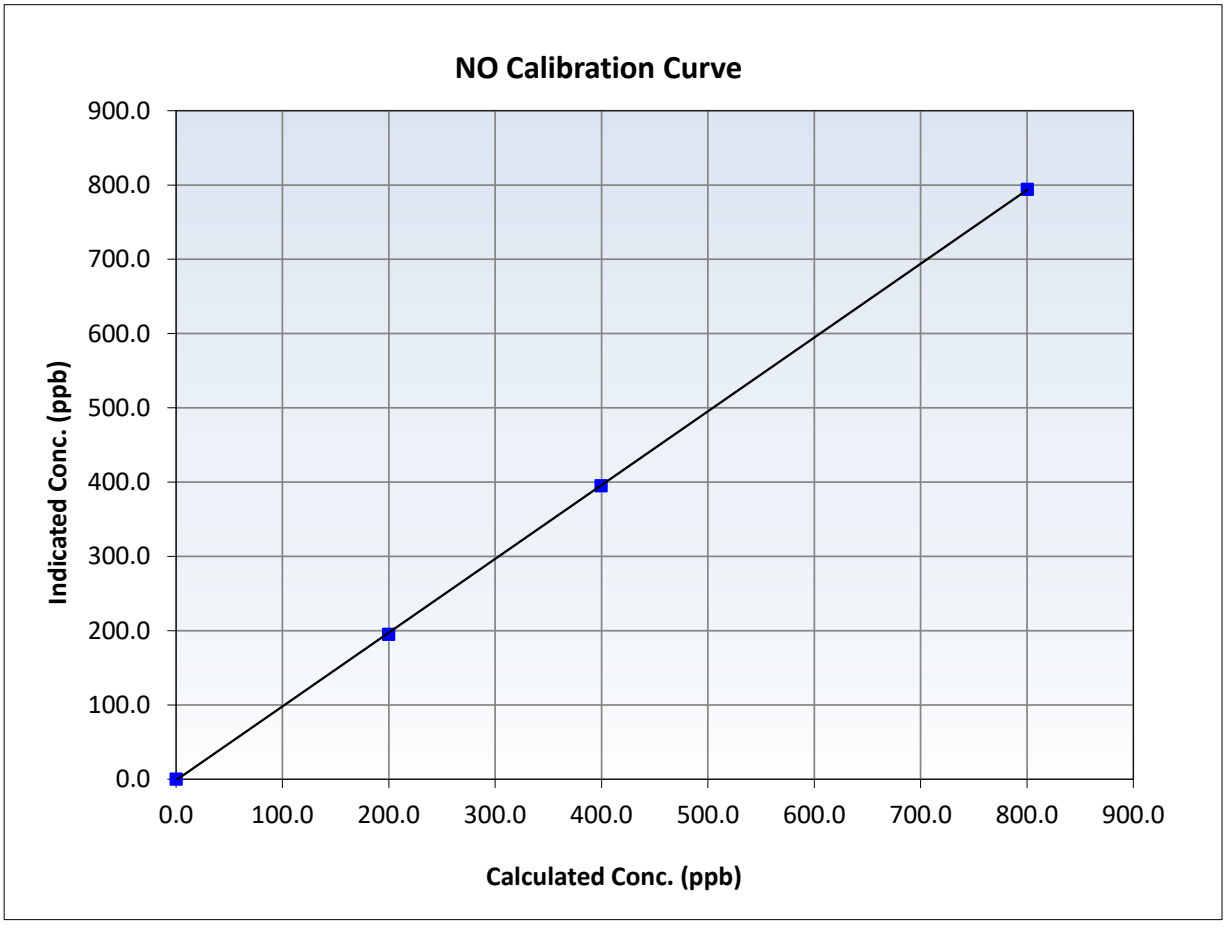
Station Information

Calibration Date:	March 3, 2026	Previous Calibration:	February 11, 2026
Station Name:	Ells River	Station Number:	AMS 30
Start Time (MST):	10:46	End Time (MST):	15:53
Analyzer make:	Thermo 42i	Analyzer serial #:	0710321429

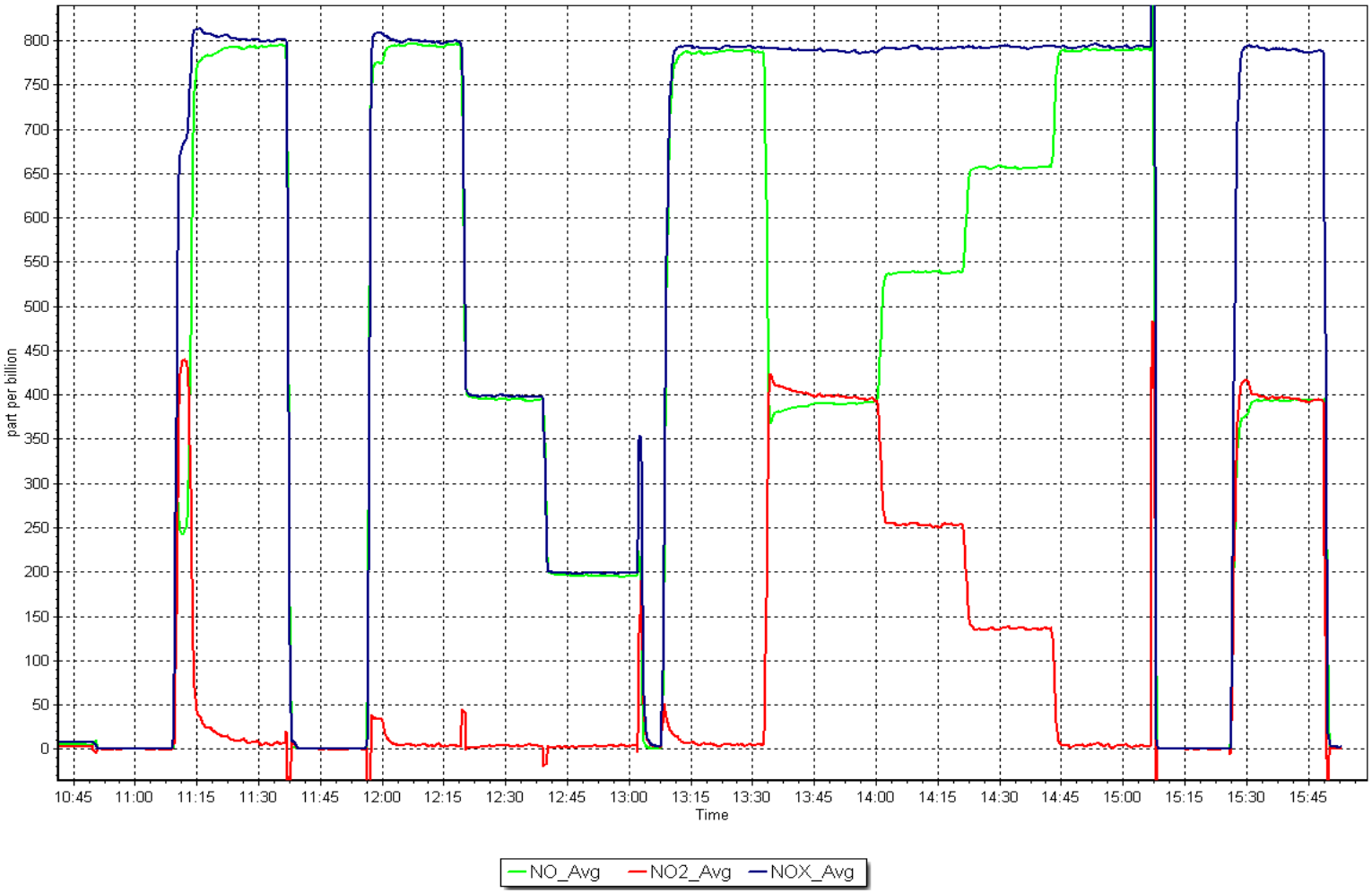
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
800.3	794.2	1.0076
399.5	395.1	1.0112
199.8	195.1	1.0239

Statistical Evaluation		Limits
Correlation Coefficient	0.999978	≥0.995
Slope	0.993176	0.90 - 1.10
Intercept	-1.301285	+/-20



NO_X Calibration Plot Date: March 3, 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:	March 9, 2026	Last Cal Date:	February 13, 2026
Start time (MST):	9:50	End time (MST):	11:07
Analyzer Make:	API T640	S/N:	875
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)	-16.10	-16.88	-16.10	☐	+/- 2 ^{o}C
P (mmHg)	727.80	729.34	727.80	☐	+/- 10 mmHg
Flow (LPM)	5.01	4.95	5.01	☐	+/- 0.25 LPM
PW% (pump)	37	-----	37	☐	>80%

Zero Verification — PM w/o HEPA: 4.60 — PM w/ HEPA: 0.00 — <0.2 ug/m3

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

PM Inlet observation : Inlet Head Clean ☑ Alignment Factor On : ☑

Quarterly Calibration Test

SPAN DUST — Refractive Index: 10.90 — Expiry Date: January 30, 2027 — Lot No.: 100128-050-040

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

Date Optical Chamber Cleaned: March 9, 2026

Date Disposable Filter Changed: March 9, 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: Verified flow, temperature, pump power and pressure. No adjustment made. Leak check passed. Optical chamber cleaned, Filter replaced.

Calibration by: Jason Brooks

Wood Buffalo Environmental Association

T640 $PM_{2.5}$ CALIBRATION

Version-01-2024

Station Information

Station Name:	Ells River	Station number:	AMS 30
Calibration Date:	March 11, 2026	Last Cal Date:	March 9, 2026
Start time (MST):	10:05	End time (MST):	10:33
Analyzer Make:	API T640	S/N:	875
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)	NA	NA	NA	☐	+/- 2 ^{o}C
P (mmHg)	NA	NA	NA	☐	+/- 10 mmHg
Flow (LPM)	NA	NA	NA	☐	+/- 0.25 LPM
PW% (pump)	NA	-----	NA	☐	>80%

Zero Verification — PM w/o HEPA: NA — PM w/ HEPA: NA — <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	8.60	10.90	10.90	☑	+/- 0.5

Date Optical Chamber Cleaned: March 9, 2026

Date Disposable Filter Changed: March 9, 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: PMT span check performed. PMT adjusted, leak check passed

Calibration by: Jason Brooks

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS31
BLACKROD
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	March 24, 2026	Last Cal Date:	February 3, 2026
Start time (MST):	10:37	End time (MST):	13:43
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:	1.007201	0.999805	Backgd or Offset:	41.9	42.7
Calibration intercept:	-0.543382	-0.181800	Coeff or Slope:	1.028	1.036

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	795.4	1.005
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	795.2	Previous response	804.1	*% 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	4921	79.5	798.9	798.5	1.000
Mid point	4960	39.8	400.0	400.0	1.000
Low point	4980	19.9	200.0	199.5	1.003
As left zero	5000	0.0	0.0	-0.1	----
As left span	4921	79.5	798.9	799.4	0.999
				Average Correction Factor:	1.001

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

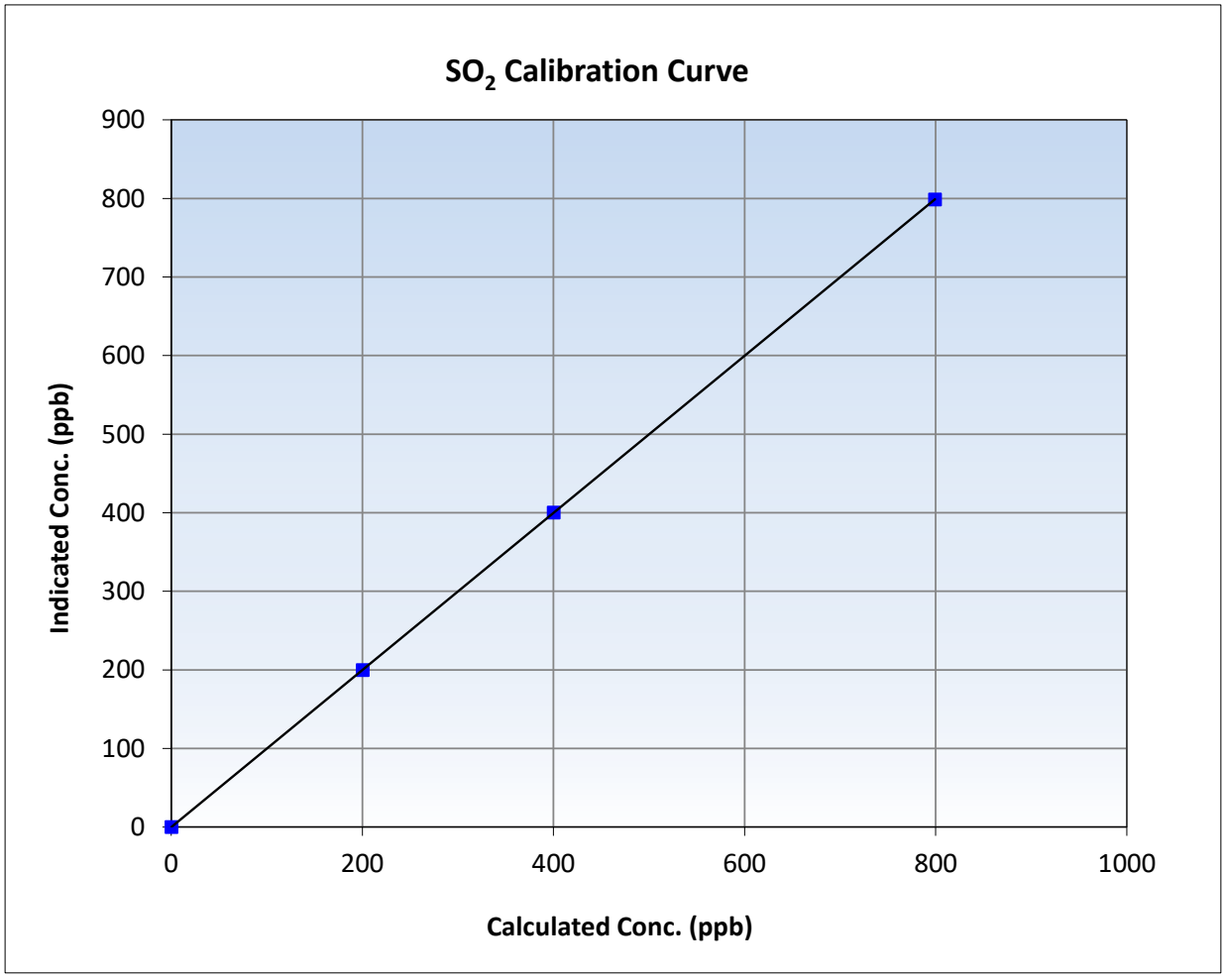
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 3, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	10:37	End Time (MST):	13:43
Analyzer make:	Thermo 43i	Analyzer serial #:	1160290014

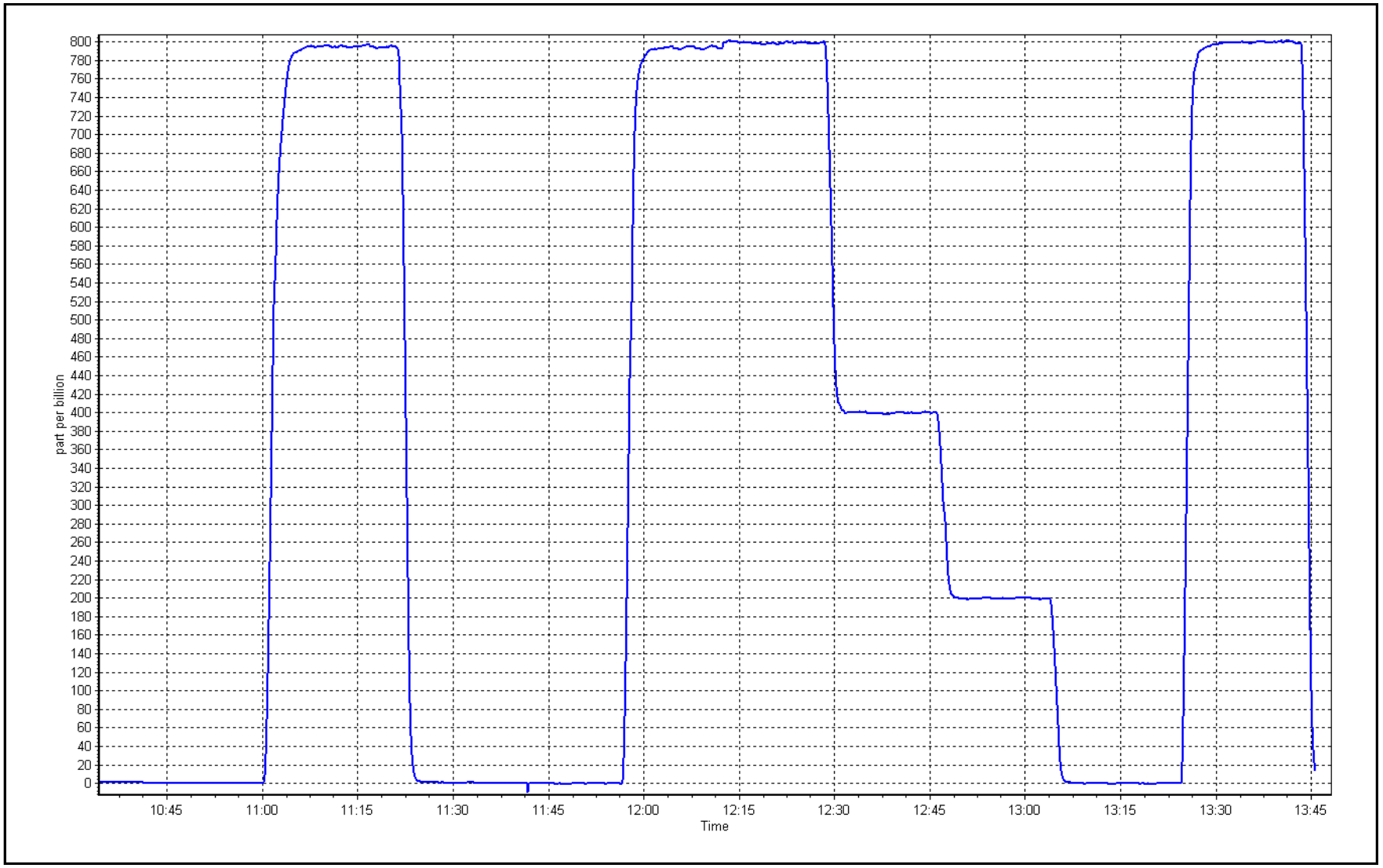
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.1	----
798.9	798.5	1.0005
400.0	400.0	1.0000
200.0	199.5	1.0025

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	0.999805	*0.90 - 1.10*
Intercept	-0.181800	*+/-30*



SO2 Calibration Plot Date: March 24, 2026 Location: Blackrod



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	March 11, 2026	Last Cal Date:	February 12, 2026
Start time (MST):	9:48	End time (MST):	13:52
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.42	ppm	Cal Gas Exp Date:	March 19, 2027
Cal Gas Cylinder #:	DT0016926			
Removed Cal Gas Conc:	5.42	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	1220
ZAG Make/Model:	Teledyne API N701H		Serial Number:	72

Analyzer Information

Analyzer make:	Thermo 43iQTL		Analyzer serial #:	12228021056	
Converter make:	Global		Converter serial #:	2023-266	
Analyzer Range	0 - 100 ppb		Converter Temp:	325	degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.009049	0.991332	Backgd or Offset:	3.04	3.04
Calibration intercept:	-0.080554	0.139789	Coeff or Slope:	1.006	1.006

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	4926	73.8	80.0	79.4	1.008
As found Mid point	4963	36.9	40.0	39.8	1.005
As found Low point	4982	18.5	20.1	19.9	1.008
New cylinder response					

Baseline Corr As found:	79.4	Prev response:	80.65	*% change:	-1.6%
Baseline Corr 2nd AF pt:	39.8	AF Slope:	0.992618	AF Intercept:	0.019765
Baseline Corr 3rd AF pt:	19.9	AF Correlation:	0.999998	* = > +/-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	4926	73.8	80.0	79.4	1.008
Mid point	4963	36.9	40.0	39.9	1.003
Low point	4982	18.5	20.1	20.0	1.003
As left zero	5000	0.0	0.0	0.1	----
As left span	4926	73.8	80.0	78.6	1.018
SO2 Scrubber Check	4921	79.5	794.9	0.0	----
Date of last scrubber change:		27-Aug-25		Ave Corr Factor	1.004
Date of last converter efficiency test:		October 9, 2025			

Notes: Sample inlet filter was changed after multipoint as founds. SO2 scrubber done and passed. No adjustment made.

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

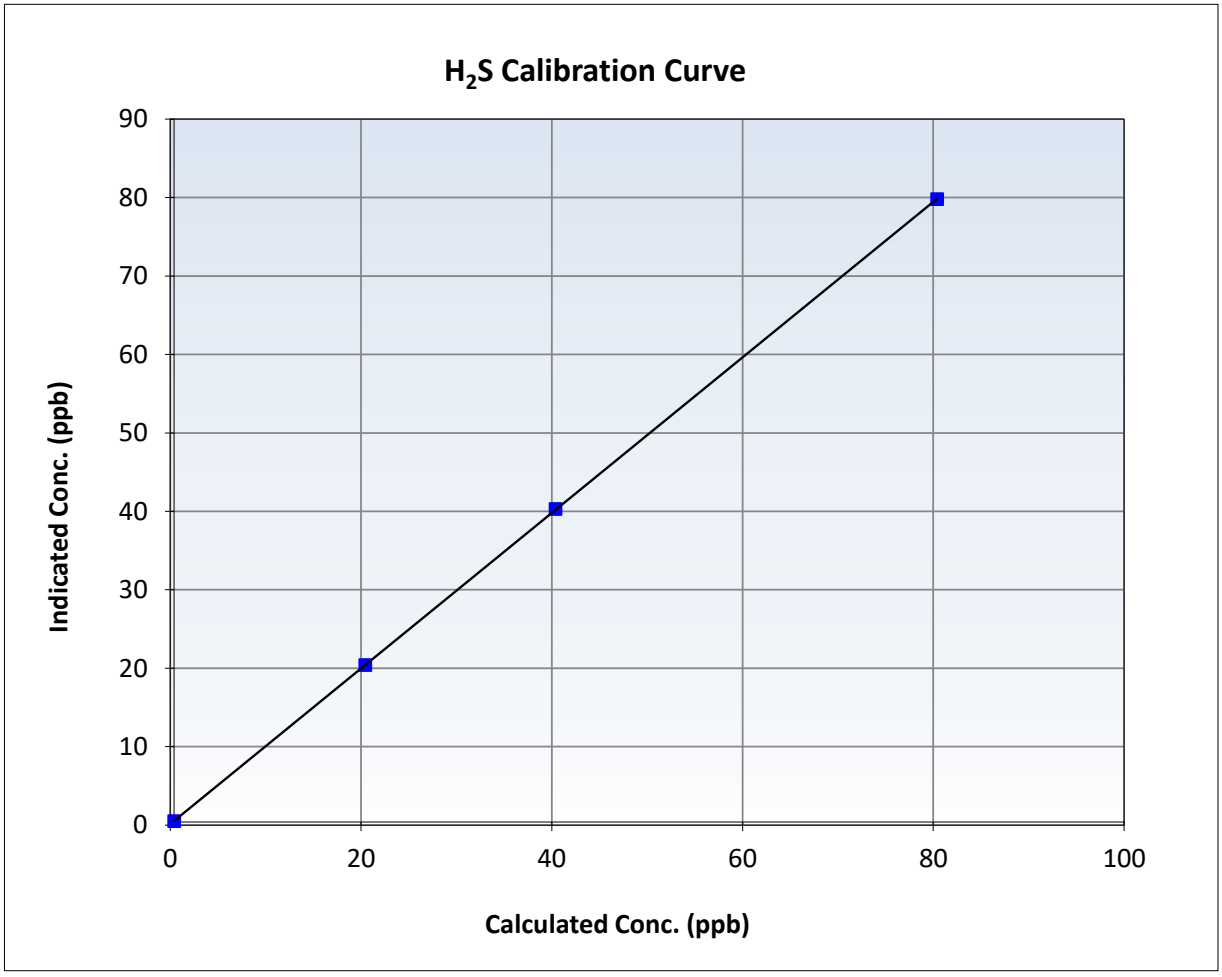
H_2S Calibration Summary

Station Information

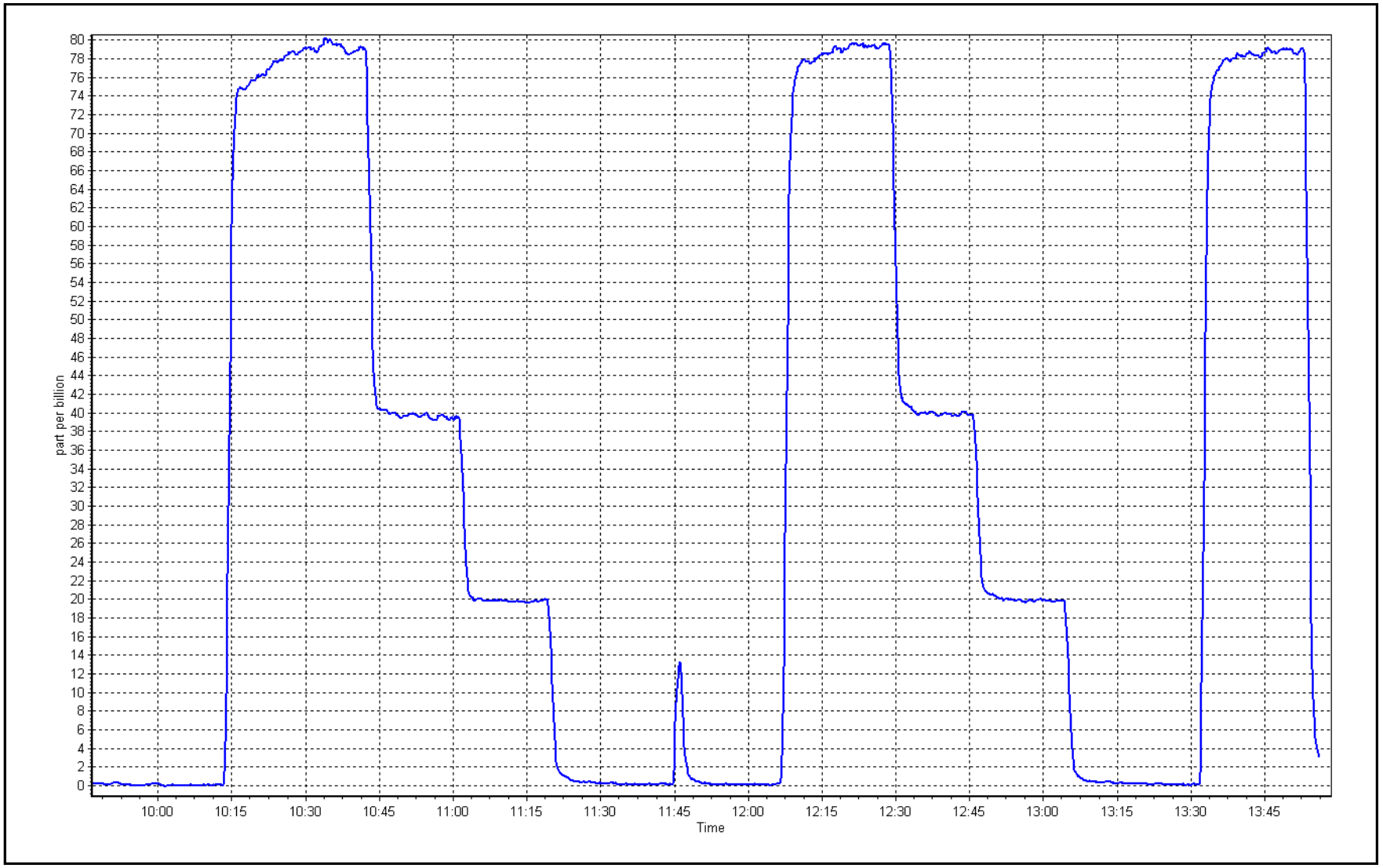
Calibration Date:	March 11, 2026	Previous Calibration:	February 12, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:48	End Time (MST):	13:52
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12228021056

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999995	*≥0.995*
80.0	79.4	1.0076	Slope	0.991332	*0.90 - 1.10*
40.0	39.9	1.0025			
20.1	20.0	1.0026	Intercept	0.139789	*+/-3*



H_2S Calibration Plot Date: March 11, 2026 Location: Blackrod



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Blackrod	Station number:	AMS 31
Calibration Date:	March 24, 2026	Last Cal Date:	February 4, 2026
Start time (MST):	10:37	End time (MST):	13:43
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:	1.004133	1.000395	Background:	1.540	1.990
Calibration intercept:	-0.119843	-0.018069	Coefficient:	3.136	3.143

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	0.44	----
As found High point	4921	79.5	16.82	17.20	1.004
As found Mid point					
As found Low point					
New cylinder response					

Baseline Corr As found:	16.76	Previous response	16.77	*% 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	

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	-0.01	----
High point	4921	79.5	16.82	16.81	1.001
Mid point	4960	39.8	8.42	8.41	1.002
Low point	4980	19.9	4.21	4.19	1.006
As left zero	5000	0.0	0.00	0.02	----
As left span	4921	79.5	16.82	16.89	0.996
				Average Correction Factor	1.003

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

Calibration Performed By: Jan Castro

Wood Buffalo Environmental Association

THC Calibration Summary

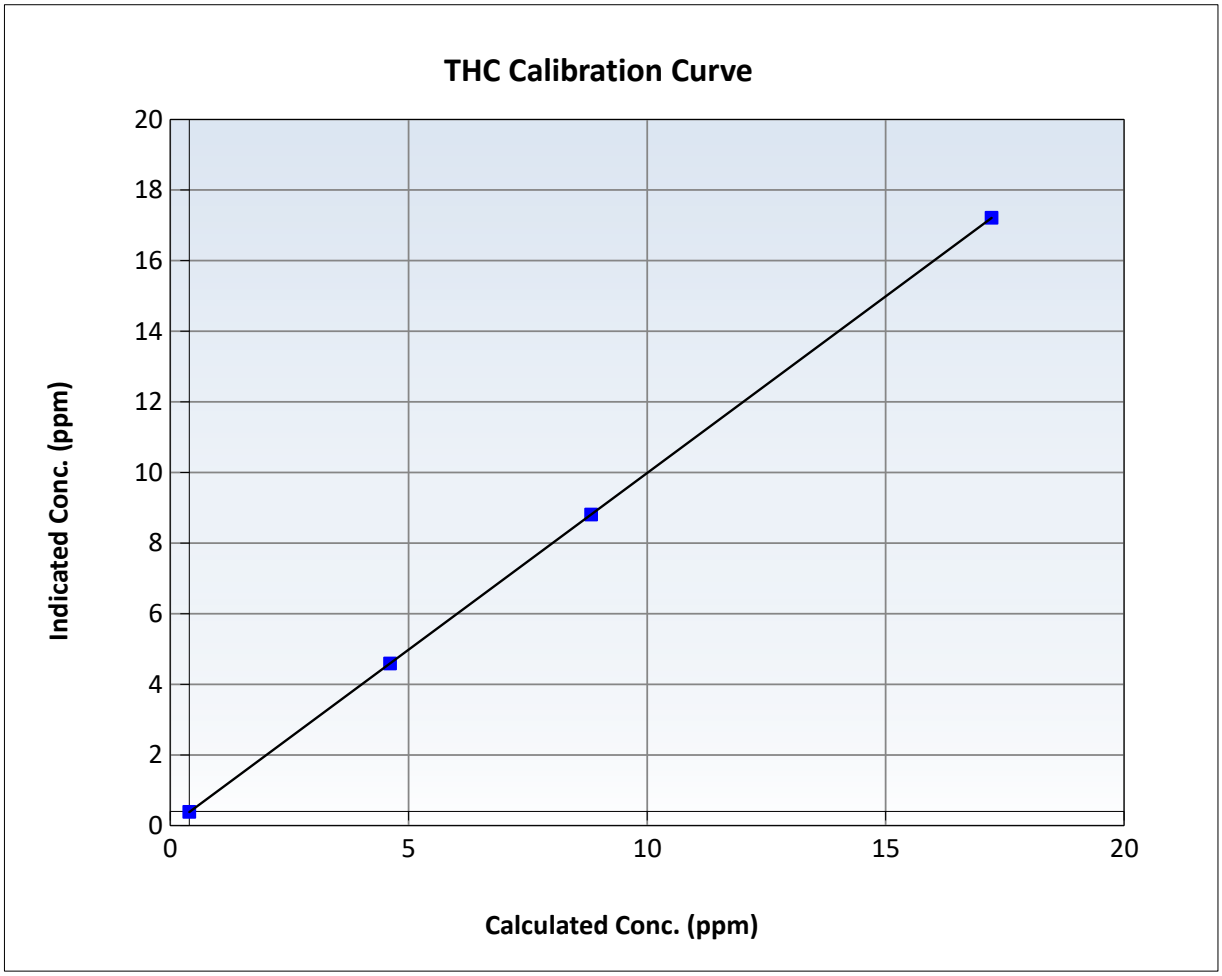
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 4, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	10:37	End Time (MST):	13:43
Analyzer make:	Thermo 51i- LT	Analyzer serial #:	1505164380

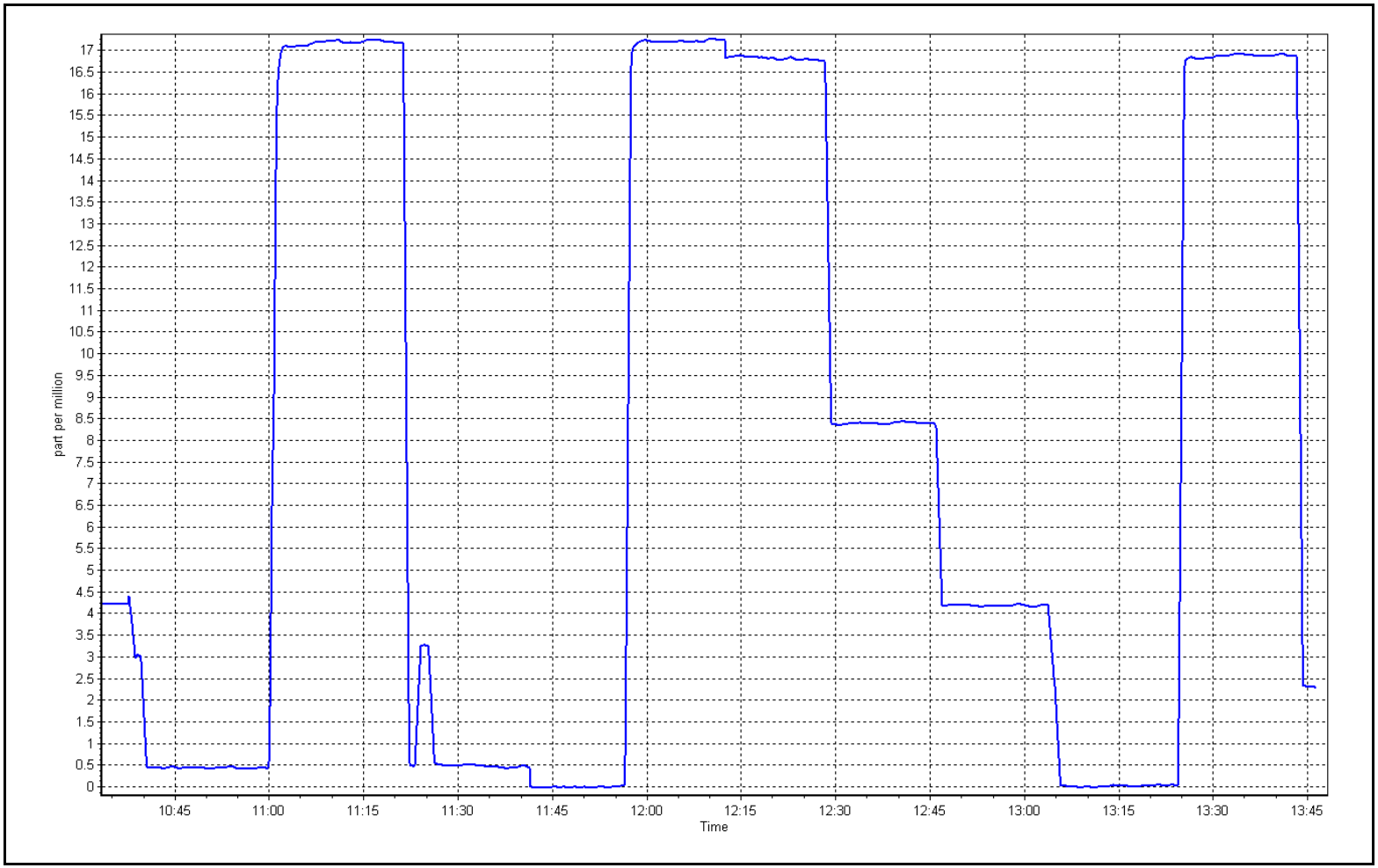
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	-0.01	----
16.82	16.81	1.0005
8.42	8.41	1.0018
4.21	4.19	1.0061

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999999	*≥0.995*
Slope	1.000395	*0.90 - 1.10*
Intercept	-0.018069	*+/-1.5*



THC Calibration Plot Date: March 24, 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:	March 10, 2026
Last Cal Date:	February 11, 2026
Start time (MST):	9:33
End time (MST):	13:42
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	0.1	----	----
AF High point	4932	67.7	803.0	800.3	2.7	812.0	806.2	5.8	0.9889	0.9925
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 802.7 ppb	NO = 799.7 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = 1.1%
Baseline Corr 1st pt	NO_X = 812.0 ppb	NO = 806.3 ppb	As Found Statistics	*Percent Change	NO = 0.8%
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 42i Serial Number: 1173480006

NOX Range (ppb): 0 - 1000 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	0.958	0.958	NO bkgnd or offset:	2.3	2.3
NOX coeff or slope:	0.996	0.996	NOX bkgnd or offset:	2.3	2.3
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	145.6	146.8

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999145	1.007045
NO_X Cal Offset:	0.402041	0.003765
NO Cal Slope:	1.000429	1.006799
NO Cal Offset:	-0.939213	-0.917772
NO_2 Cal Slope:	0.999839	1.003970
NO_2 Cal Offset:	1.223371	-1.014432

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	0.0	0.2	----	----
High point	4932	67.7	803.0	800.3	2.7	808.6	805.3	3.3	0.9930	0.9937
Mid point	4966	33.8	400.9	399.5	1.4	404.0	400.7	3.2	0.9923	0.9971
Low point	4983	16.9	200.4	199.8	0.7	201.4	199.4	2.0	0.9952	1.0018
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	386.9	416.1	801.4	386.9	414.5	1.0020	1.0000
								Average Correction Factor	0.9935	0.9975

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	800.1	388.2	414.6	416.0	0.9967	100.3%
Mid GPT point	800.1	590.0	212.8	211.7	1.0052	99.5%
Low GPT point	800.1	691.3	111.5	109.9	1.0146	98.6%
				Average Correction Factor	1.0055	99.5%

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

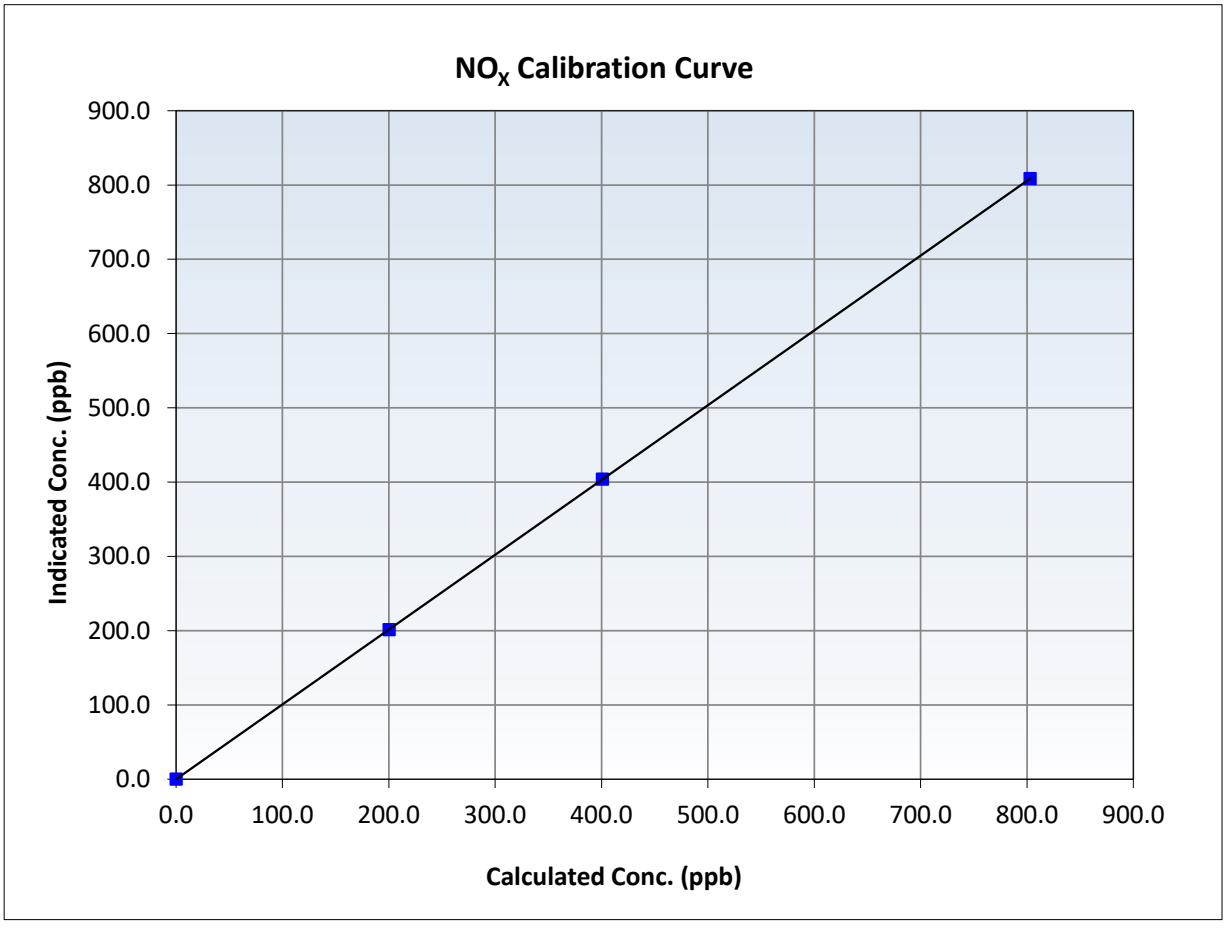
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 11, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:33	End Time (MST):	13:42
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
803.0	808.6	0.9930
400.9	404.0	0.9923
200.4	201.4	0.9952

Statistical Evaluation		Limits
Correlation Coefficient	0.999999	≥0.995
Slope	1.007045	0.90 - 1.10
Intercept	0.003765	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

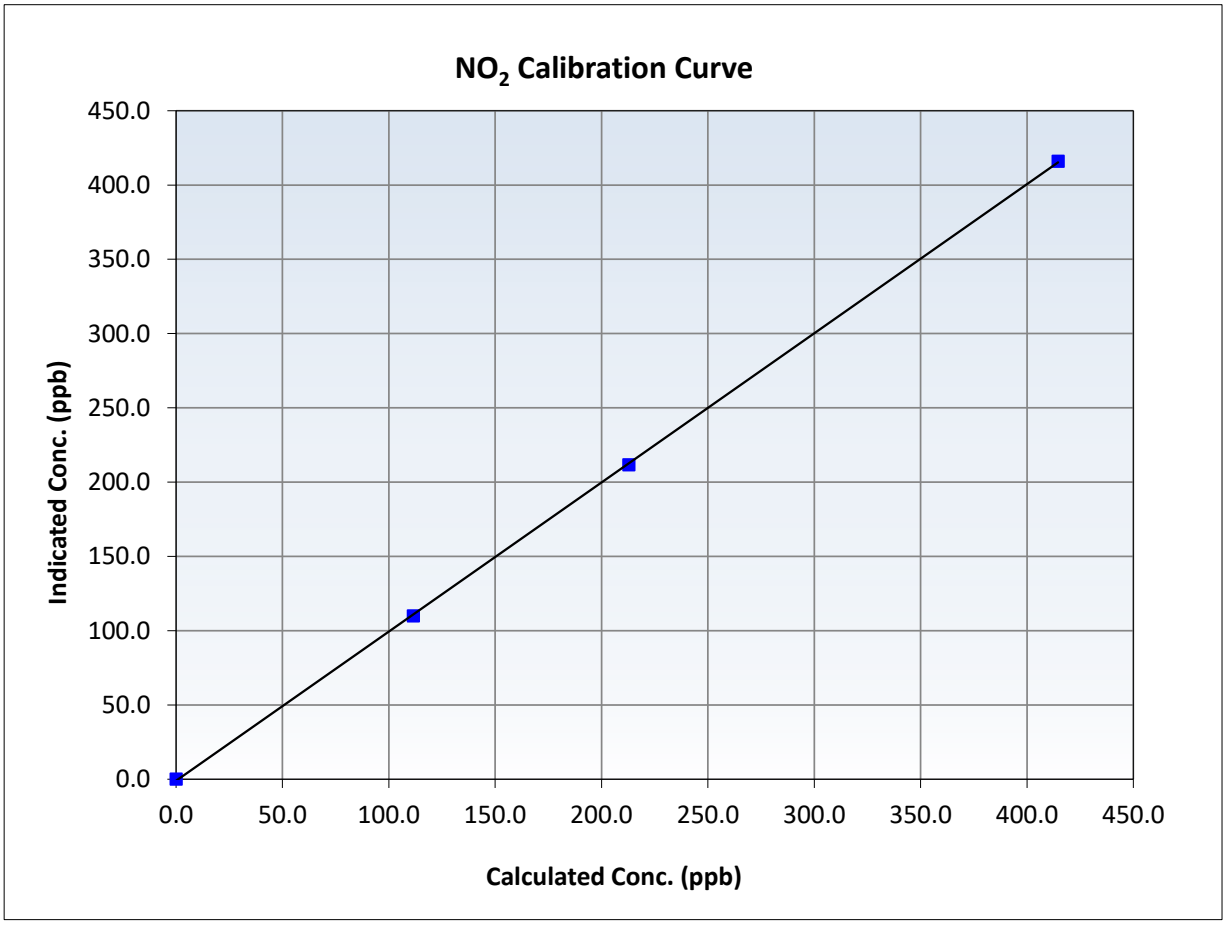
Station Information

Calibration Date:	March 10, 2026	Previous Calibration:	February 11, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:33	End Time (MST):	13:42
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
414.6	416.0	0.9967
212.8	211.7	1.0052
111.5	109.9	1.0146

Statistical Evaluation		Limits
Correlation Coefficient	0.999957	≥0.995
Slope	1.003970	0.90 - 1.10
Intercept	-1.014432	+/-20



Wood Buffalo Environmental Association

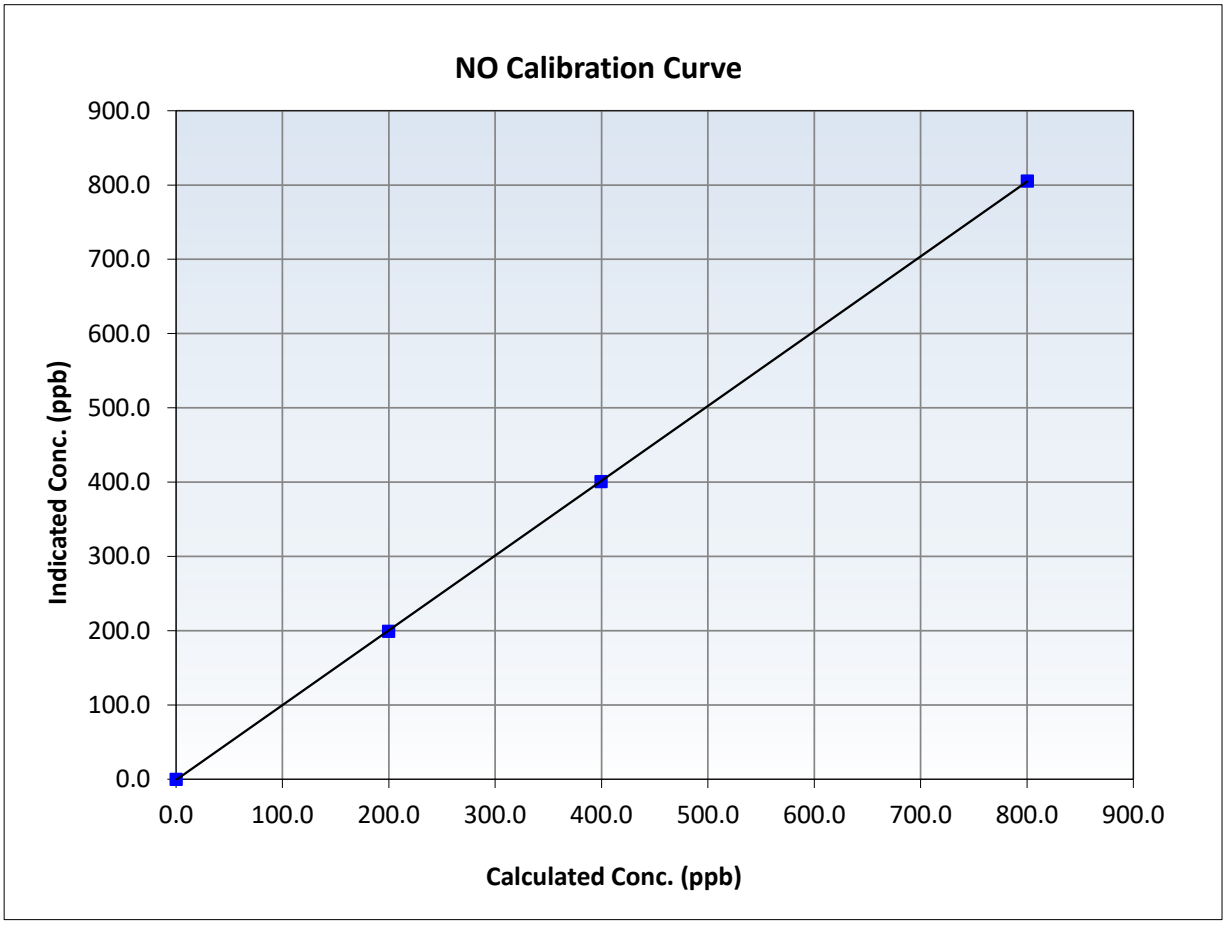
NO Calibration Summary

Station Information

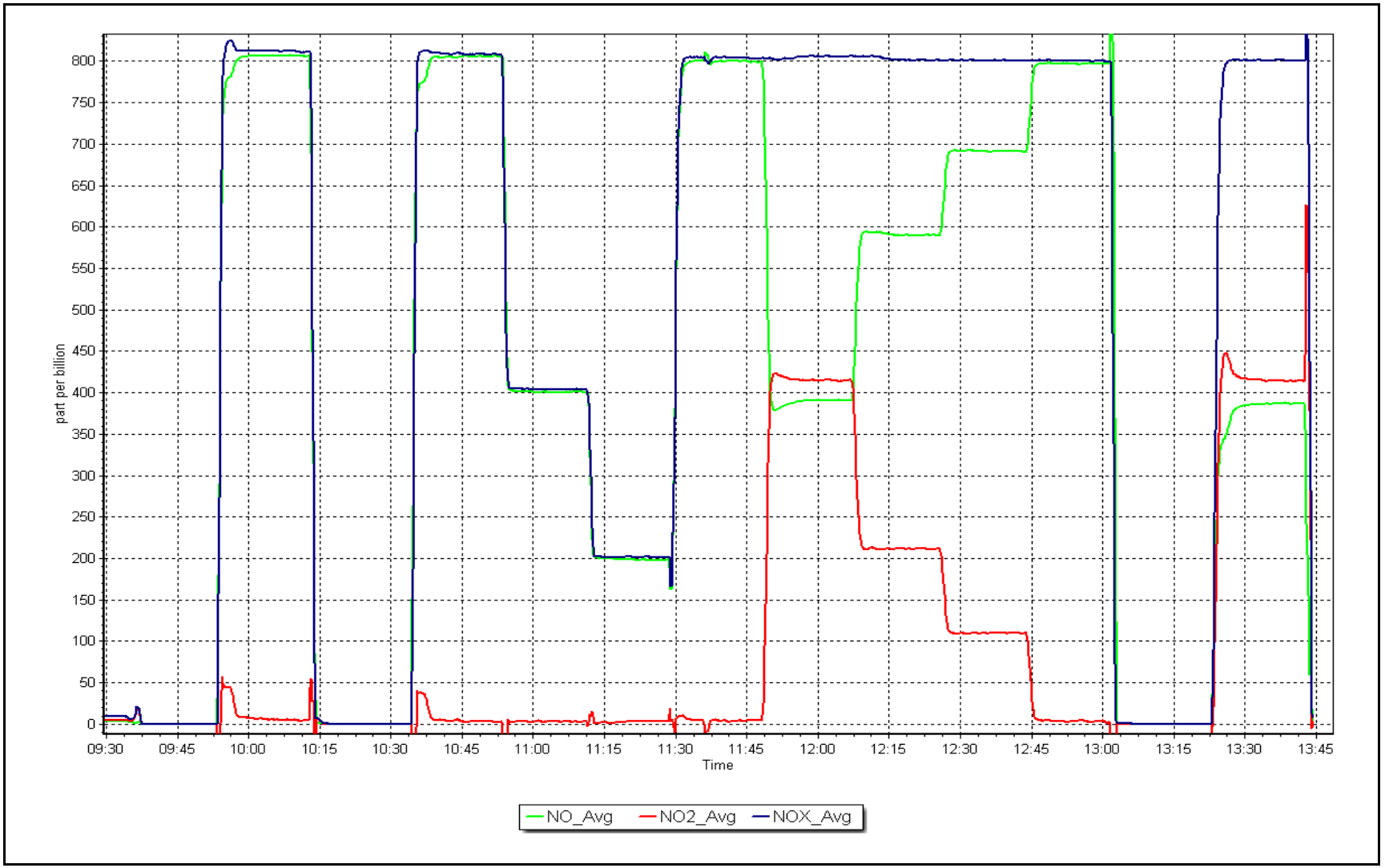
Calibration Date:	March 10, 2026	Previous Calibration:	February 11, 2026
Station Name:	Blackrod	Station Number:	AMS 31
Start Time (MST):	9:33	End Time (MST):	13:42
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		Limits
0.0	0.0	----	Correlation Coefficient	0.999994	≥0.995
800.3	805.3	0.9937	Slope	1.006799	0.90 - 1.10
399.5	400.7	0.9971			
199.8	199.4	1.0018	Intercept	-0.917772	+/-20



NO_X Calibration Plot Date: March 10, 2026 Location: Blackrod



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS33
MONDAY CREEK
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Monday Creek	Station number:	AMS 33
Calibration Date:	March 17, 2026	Last Cal Date:	February 17, 2026
Start time (MST):	10:57	End time (MST):	13:26
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	50.62	ppm	Cal Gas Exp Date:	March 10, 2031
Cal Gas Cylinder #:	EB0008522			
Removed Cal Gas Conc:	50.62	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Model:	Teledyne T700		Serial Number:	3253
Zero Air Gen Model:	Teledyne T701H		Serial Number:	832

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1152430005	
Analyzer Range:	0- 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.005580	1.002496	Backgd or Offset:	32.5	32.5
Calibration intercept:	-0.158121	0.222240	Coeff or Slope:	1.016	1.016

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	799.6	1.002
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	799.4	Previous response	805.1	*% 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	0.4	----
High point	4921	79.1	800.8	802.8	0.997
Mid point	4961	39.5	399.9	401.9	0.995
Low point	4980	19.8	200.5	200.4	1.000
As left zero	5000	0.0	0.0	0.8	----
As left span	4921	79.1	800.8	802.5	0.998
				Average Correction Factor:	0.998

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

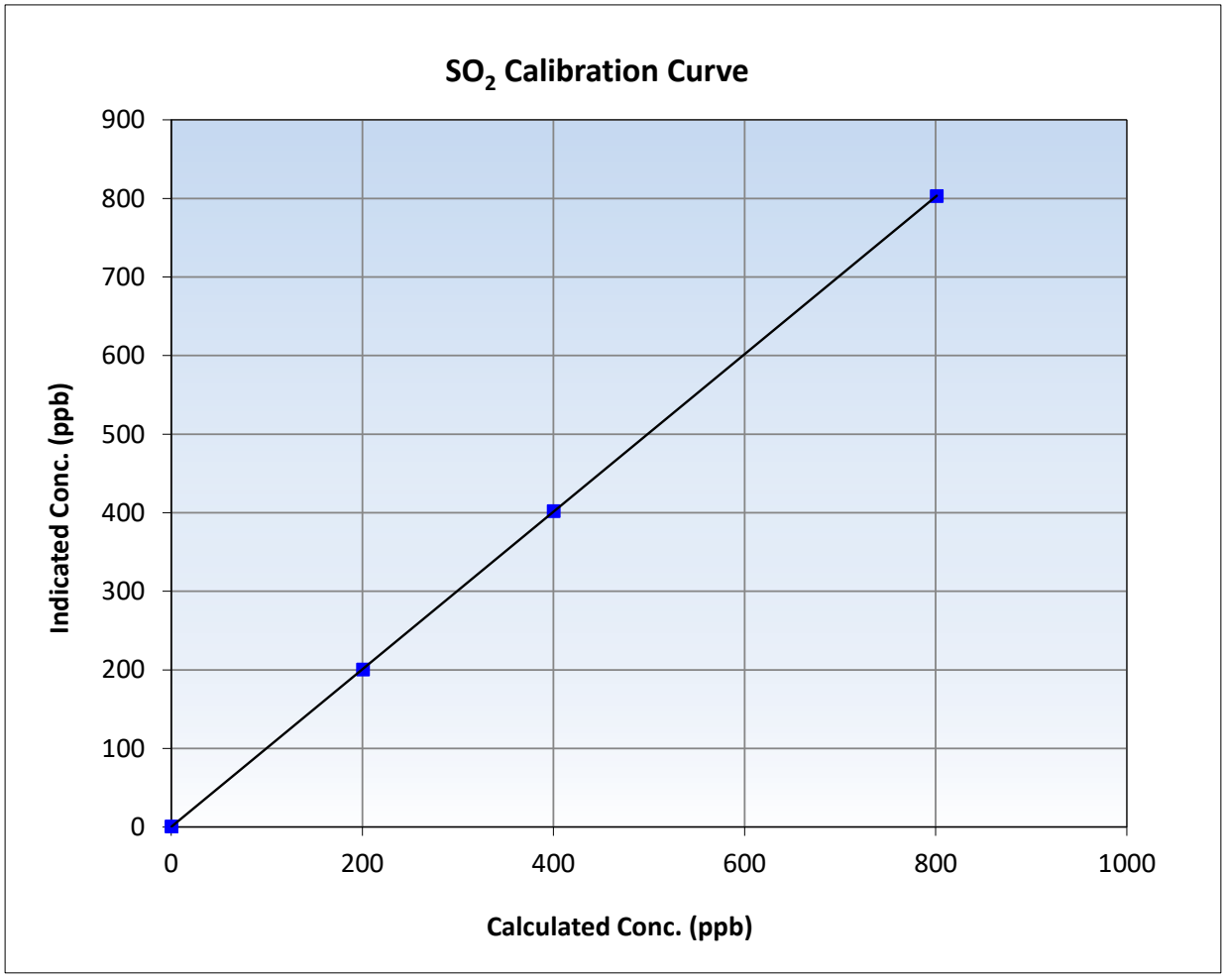
Station Information

Calibration Date:	March 17, 2026	Previous Calibration:	February 17, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:57	End Time (MST):	13:26
Analyzer make:	Thermo 43i	Analyzer serial #:	1152430005

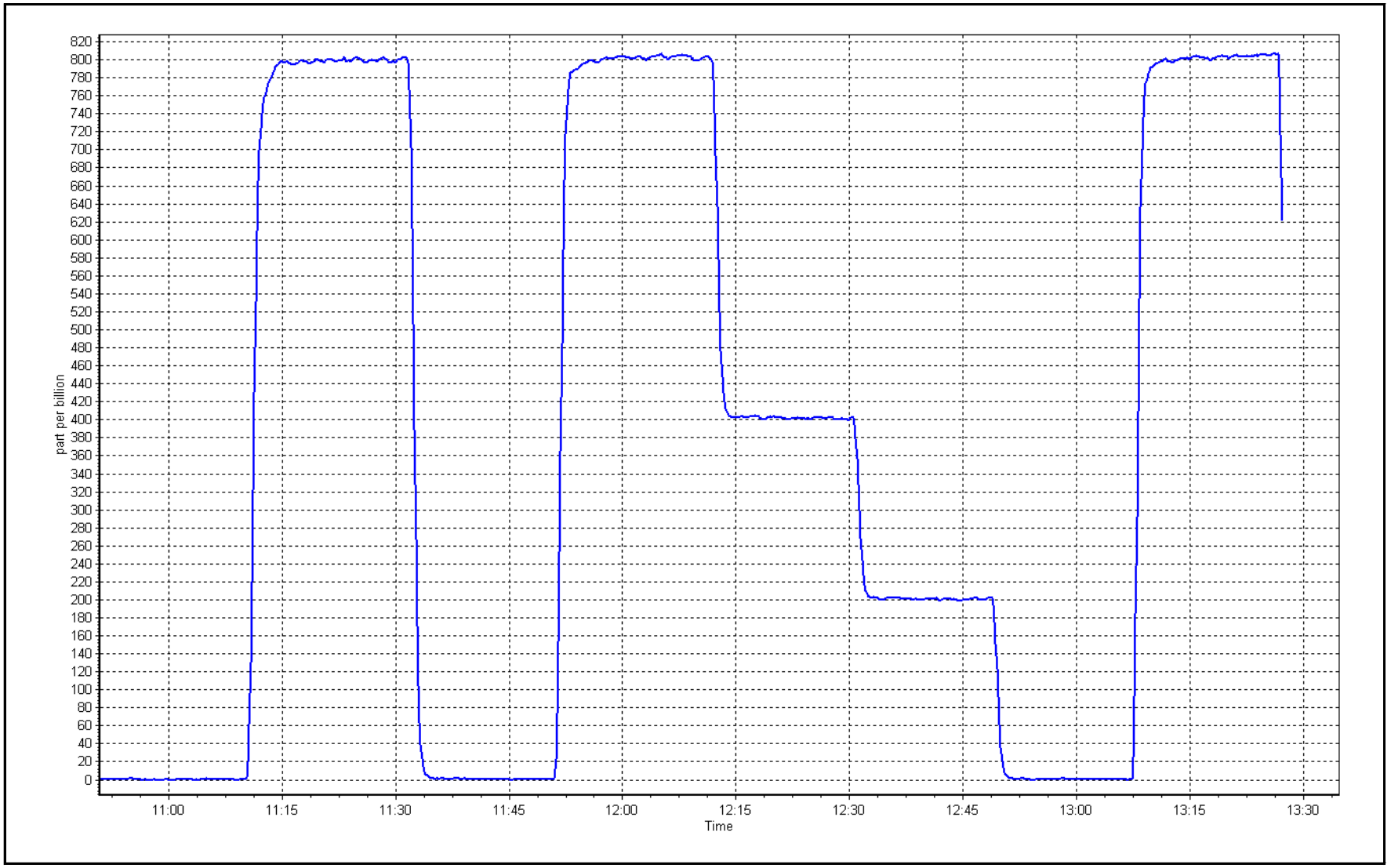
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.4	----
800.8	802.8	0.9975
399.9	401.9	0.9949
200.5	200.4	1.0003

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999996	*≥0.995*
Slope	1.002496	*0.90 - 1.10*
Intercept	0.222240	*+/-30*



SO2 Calibration Plot Date: March 17, 2026 Location: Monday Creek



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Monday Creek	Station number:	AMS 33
Calibration Date:	March 18, 2026	Last Cal Date:	February 27, 2026
Start time (MST):	10:26	End time (MST):	14:44
Reason:	Routine		

Calibration Standards

Cal Gas Concentration:	5.05	ppm	Cal Gas Exp Date:	November 15, 2026
Cal Gas Cylinder #:	DT0014831			
Removed Cal Gas Conc:	5.05	ppm	Rem Gas Exp Date:	NA
Removed Gas Cyl #:	NA		Diff between cyl:	
Calibrator Make/Model:	Teledyne API T700		Serial Number:	3253
ZAG Make/Model:	Teledyne T701H		Serial Number:	832

Analyzer Information

Analyzer make:	Thermo 43iQTL		Analyzer serial #:	12333331547	
Converter make:	Global 150		Converter serial #:	2022-196	
Analyzer Range	0 - 100 ppb		Converter Temp:	325	degC
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.004569	1.001997	Backgd or Offset:	1.79	1.76
Calibration intercept:	0.018387	-0.041603	Coeff or Slope:	1.100	1.081

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	4921	79.2	80.0	82.7	0.965
As found Mid point	4960	39.6	40.0	41.3	0.964
As found Low point	4980	19.8	20.0	20.7	0.957
New cylinder response					

Baseline Corr As found:	82.9	Prev response:	80.37	*% change:	3.0%
Baseline Corr 2nd AF pt:	41.5	AF Slope:	1.035716	AF Intercept:	-0.121658
Baseline Corr 3rd AF pt:	20.9	AF Correlation:	0.999995	* = > +/-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	80.1	0.999
Mid point	4960	39.6	40.0	40.0	1.000
Low point	4980	19.8	20.0	20.1	0.995
As left zero	5000	0.0	0.0	0.0	----
As left span	4921	79.2	80.0	79.9	1.001
SO2 Scrubber Check	4921	79.1	791.0	0.0	----
Date of last scrubber change:		11-Apr-24		Ave Corr Factor	0.998
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: Rene Chamberland

Wood Buffalo Environmental Association

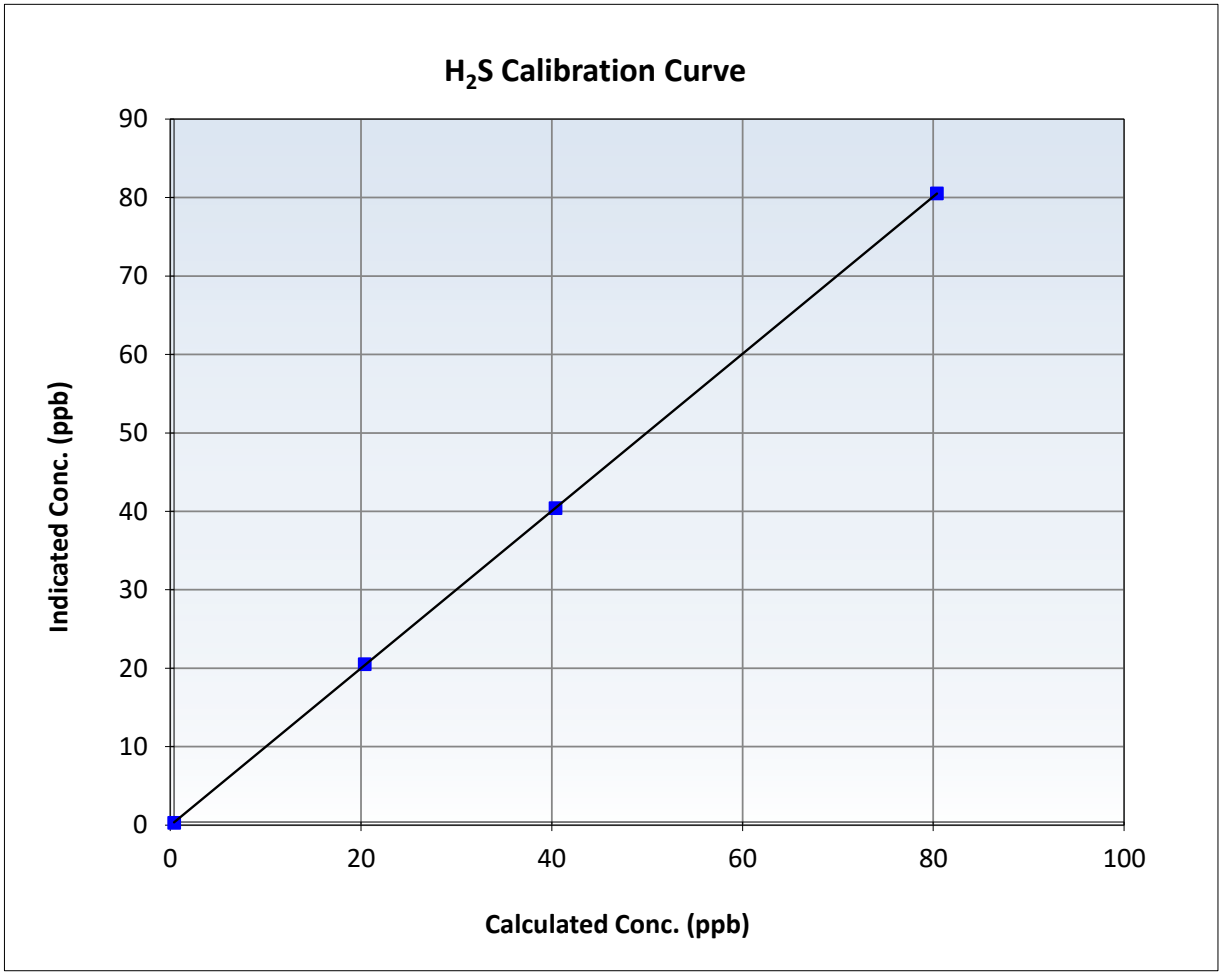
H2S Calibration Summary

Station Information

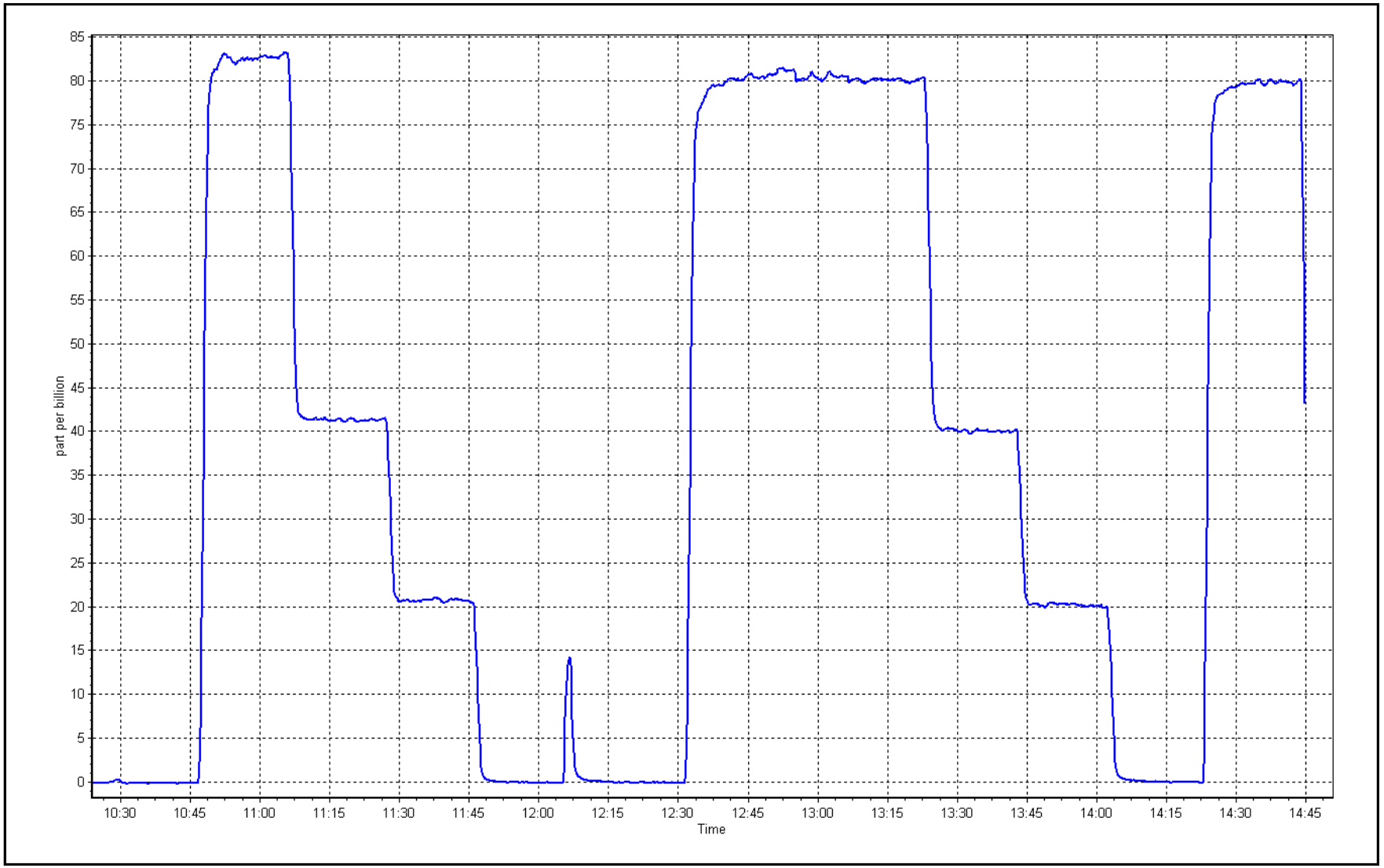
Calibration Date:	March 18, 2026	Previous Calibration:	February 27, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:26	End Time (MST):	14:44
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12333331547

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	-0.1	----	Correlation Coefficient	0.999996	*≥0.995*
80.0	80.1	0.9986	Slope	1.001997	*0.90 - 1.10*
40.0	40.0	1.0000			
20.0	20.1	0.9950	Intercept	-0.041603	*+/-3*



H2S Calibration Plot Date: March 18, 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:	March 24, 2026
Last Cal Date:	February 19, 2026
Start time (MST):	10:06
End time (MST):	14:11
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 T701H	Serial Number:	832

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	806.7	1.7	0.9927	0.9910
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 803.0 ppb	NO = 801.5 ppb
Baseline Corr 1st pt	NO_X = 808.8 ppb	NO = 806.9 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 = 0.7%

*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: 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	160.2

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.999609	1.005474
NO_X Cal Offset:	0.426969	0.766163
NO Cal Slope:	1.003071	1.009217
NO Cal Offset:	-0.573221	0.026305
NO_2 Cal Slope:	1.000550	0.995581
NO_2 Cal Offset:	-1.006359	-1.197715

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	807.6	807.0	0.7	0.9942	0.9909
Mid point	4959	41.1	401.9	400.3	1.6	405.7	404.2	1.5	0.9908	0.9904
Low point	4980	20.5	200.5	199.7	0.8	202.7	201.3	1.4	0.9890	0.9918
As left zero	5000	0.0	0.0	0.0	0.0	0.1	0.1	0.0	----	----
As left span	4918	82.1	802.9	393.3	409.6	806.7	393.3	413.5	0.9953	1.0000
								Average Correction Factor	0.9913	0.9910

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	804.9	397.8	410.4	407.9	1.0061	99.4%
Mid GPT point	804.9	606.0	202.2	199.7	1.0124	98.8%
Low GPT point	804.9	705.4	102.8	99.8	1.0299	97.1%
				Average Correction Factor	1.0161	98.4%

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

Calibration Performed By: Rene Chamberland

Wood Buffalo Environmental Association

NO_X Calibration Summary

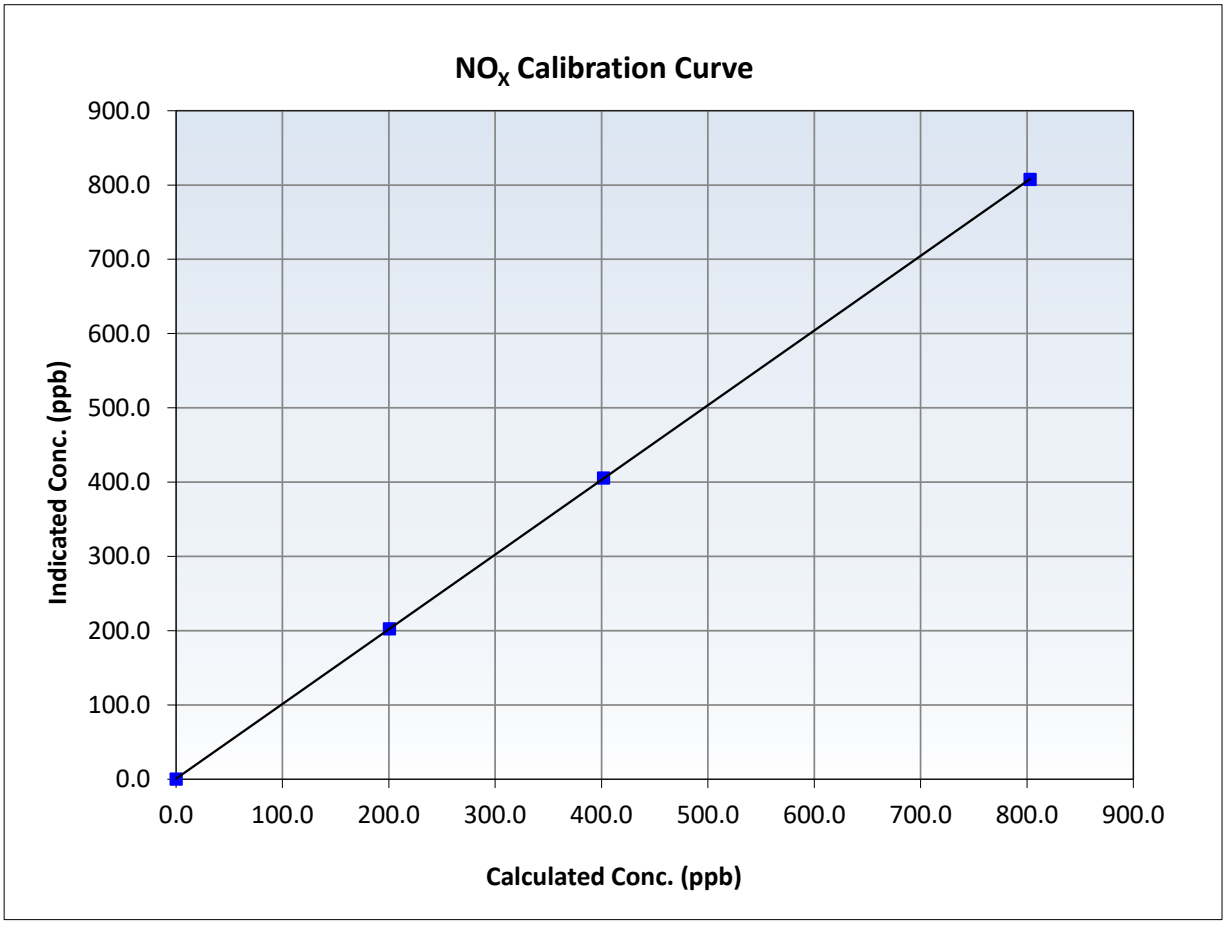
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 19, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:06	End Time (MST):	14:11
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	807.6	0.9942
401.9	405.7	0.9908
200.5	202.7	0.9890

Statistical Evaluation		Limits
Correlation Coefficient	0.999996	≥0.995
Slope	1.005474	0.90 - 1.10
Intercept	0.766163	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

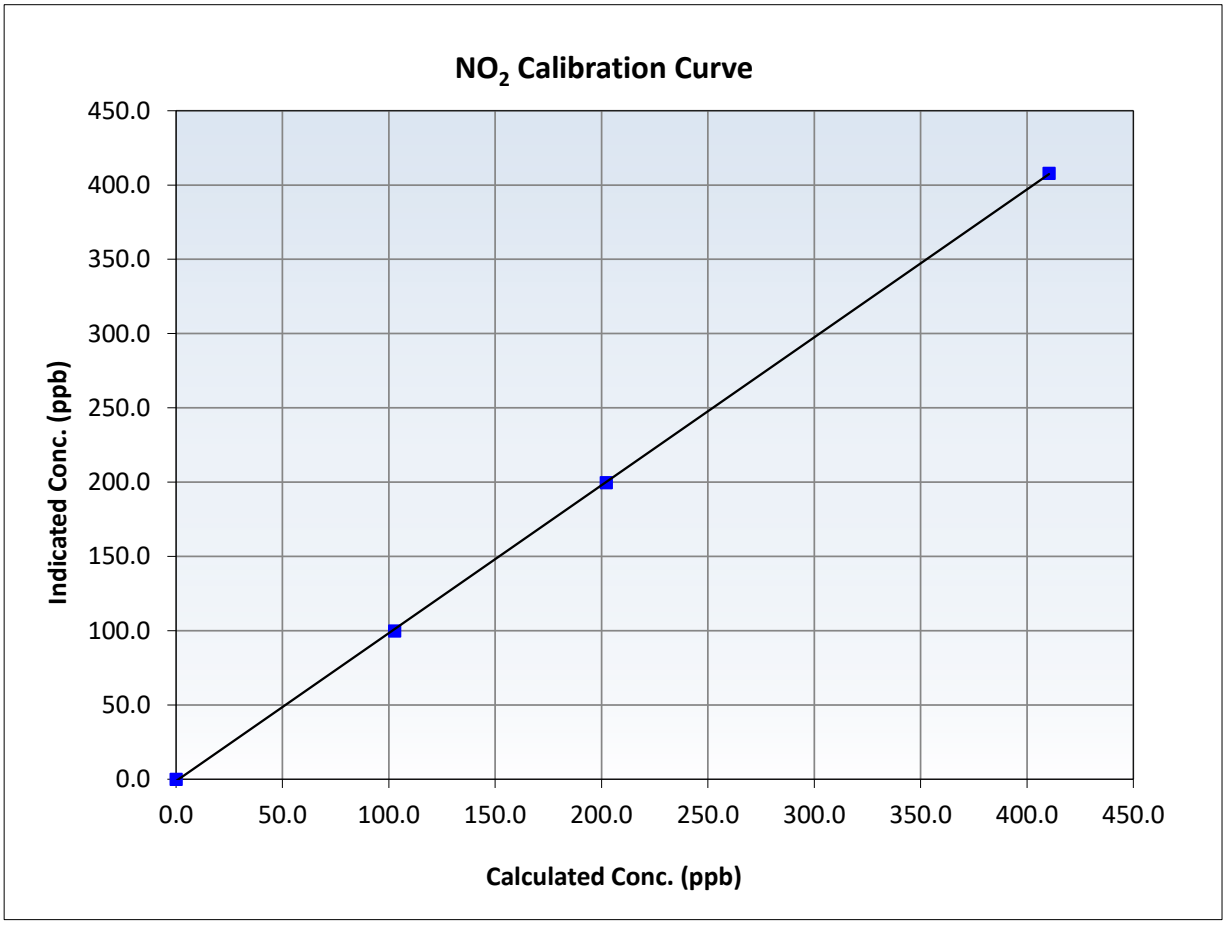
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 19, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:06	End Time (MST):	14:11
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	----
410.4	407.9	1.0061
202.2	199.7	1.0124
102.8	99.8	1.0299

Statistical Evaluation		Limits
Correlation Coefficient	0.999960	≥0.995
Slope	0.995581	0.90 - 1.10
Intercept	-1.197715	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

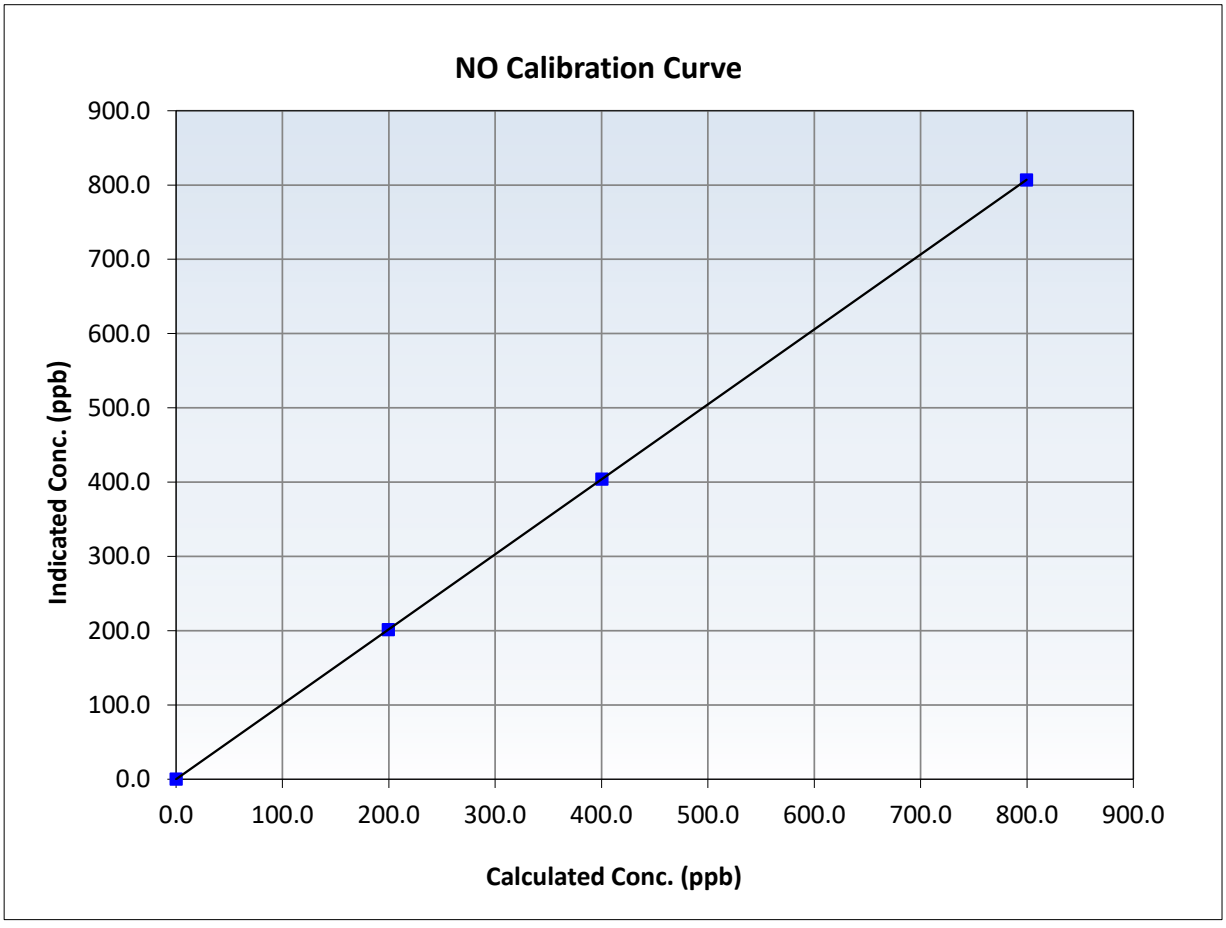
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 19, 2026
Station Name:	Monday Creek	Station Number:	AMS 33
Start Time (MST):	10:06	End Time (MST):	14:11
Analyzer make:	Thermo 42i	Analyzer serial #:	1170050148

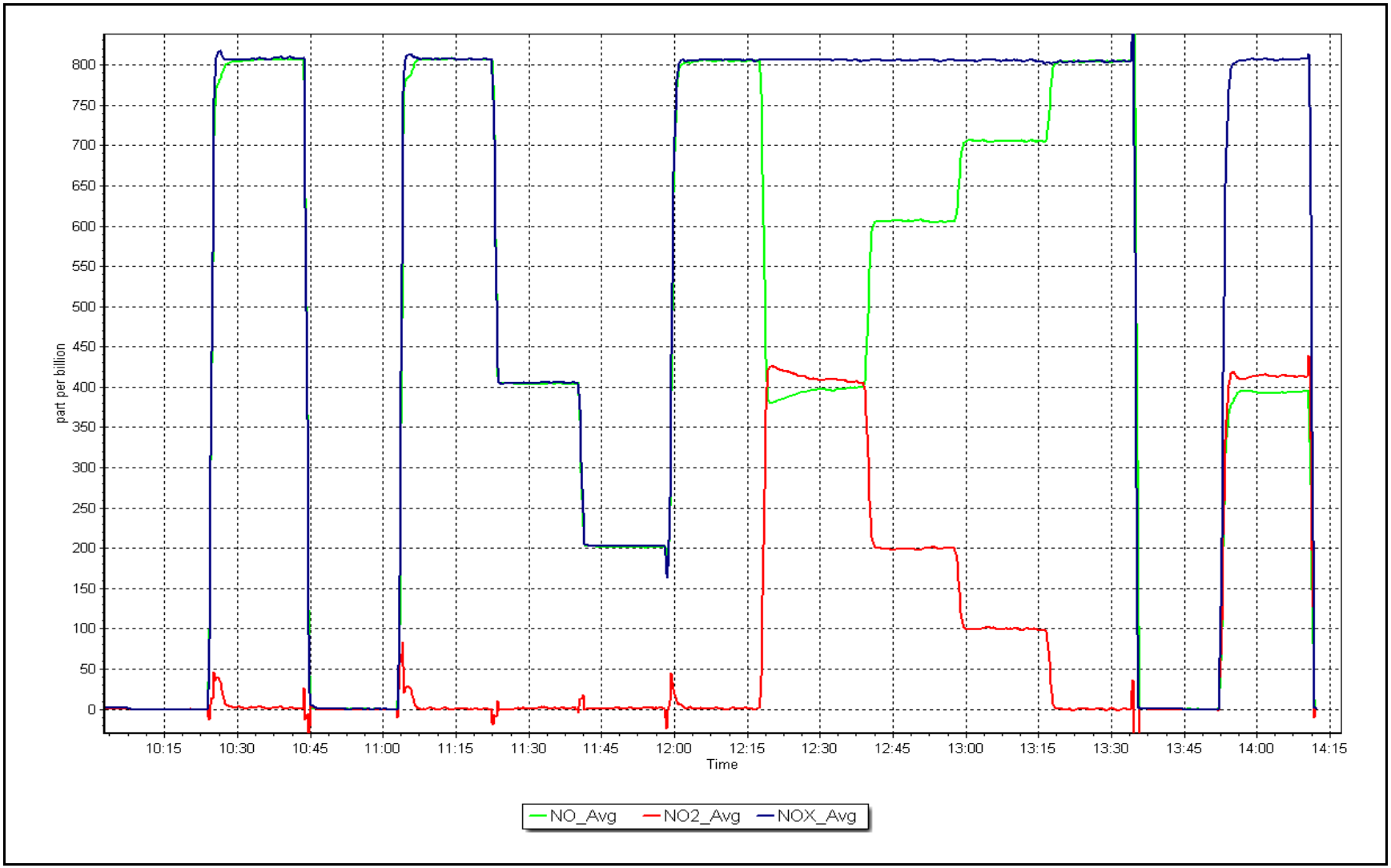
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.1	----
799.6	807.0	0.9909
400.3	404.2	0.9904
199.7	201.3	0.9918

Statistical Evaluation		*Limits*
Correlation Coefficient	1.000000	*≥0.995*
Slope	1.009217	*0.90 - 1.10*
Intercept	0.026305	*+/-20*



NO_X Calibration Plot Date: March 24, 2026 Location: Monday Creek



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS501
LEISMER
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Leismer	Station number:	AMS 501
Calibration Date:	March 30, 2026	Last Cal Date:	February 11, 2026
Start time (MST):	13:21	End time (MST):	14:38
Reason:	Removal		

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:	3252
Zero Air Gen Model:	Teledyne API T701		Serial Number:	4427

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1160290011	
Analyzer Range:	0-1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.000501		Backgd or Offset:	22.2	
Calibration intercept:	0.444011		Coeff or Slope:	1.000	

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	79.2	800.2	797.4	1.003
As found Mid point	4960	39.6	400.2	397.0	1.008
As found Low point	4980	19.8	200.1	200.0	1.000
New cylinder response					
Baseline Corr As found:	797.5	Previous response	801.0	*% change	-0.4%
Baseline Corr 2nd AF pt:	397.1	AF Slope:	0.996073	AF Intercept:	-0.155888
Baseline Corr 3rd AF pt:	200.1	AF Correlation:	0.999991	* = > +/-5% change initiates investigation	

SO_2 Calibration Data

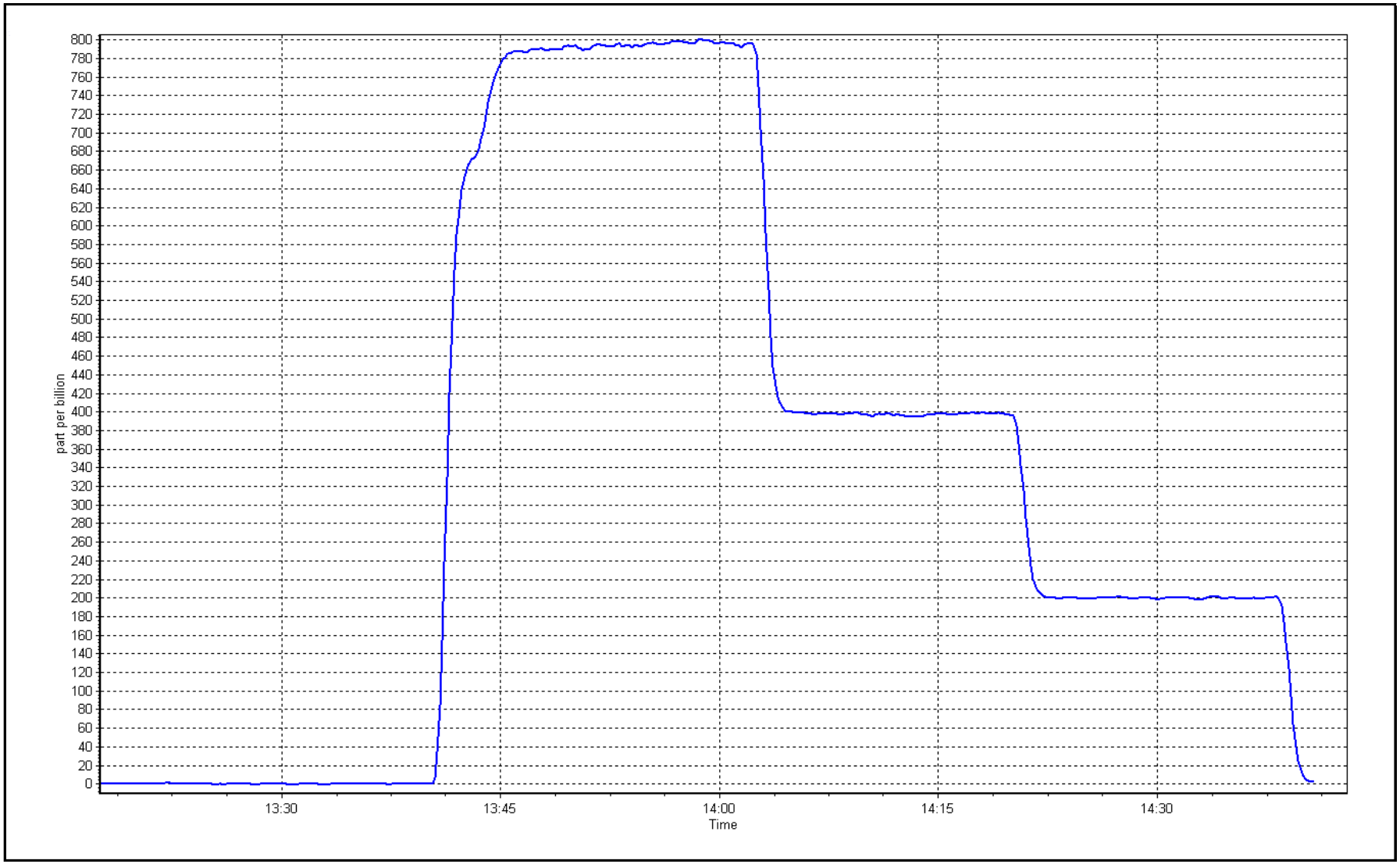
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor:

Notes: Removal calibrations done. End of Monitoring.

Calibration Performed By: Jan Castro

SO2 Calibration Plot Date: March 30, 2026 Location: Leismer



Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Leismer	Station number:	AMS 501
Calibration Date:	March 31, 2026	Last Cal Date:	February 10, 2026
Start time (MST):	10:13	End time (MST):	12:11
Reason:	Removal		

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 T700		Serial Number:	3252
ZAG Make/Model:	Teledyne 701		Serial Number:	4427

Analyzer Information

Analyzer make:	Thermo 43i-TLE		Analyzer serial #:	1180540020
Converter make:	Global G150		Converter serial #:	2022-218
Analyzer Range	0 - 100 ppb		Converter Temp:	325.0 degC

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	0.996736		Backgd or Offset:	3.80	
Calibration intercept:	0.000668		Coeff or Slope:	1.214	

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *Limit = 0.90-1.10*
As found zero	5000	0.0	0.0	-0.1	----
As found High point	4918	81.8	80.0	77.8	1.027
As found Mid point	4959	40.9	40.0	39.0	1.023
As found Low point	4980	20.4	19.9	19.6	1.013
New cylinder response					

Baseline Corr As found:	77.9	Prev response:	79.74	*% change:	-2.4%
Baseline Corr 2nd AF pt:	39.1	AF Slope:	0.972741	AF Intercept:	0.040194
Baseline Corr 3rd AF pt:	19.7	AF Correlation:	0.999985	* = > +/-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					
High point					
Mid point					
Low point					
As left zero					
As left span					
SO2 Scrubber Check	4921	79.2	800.2	0.0	----

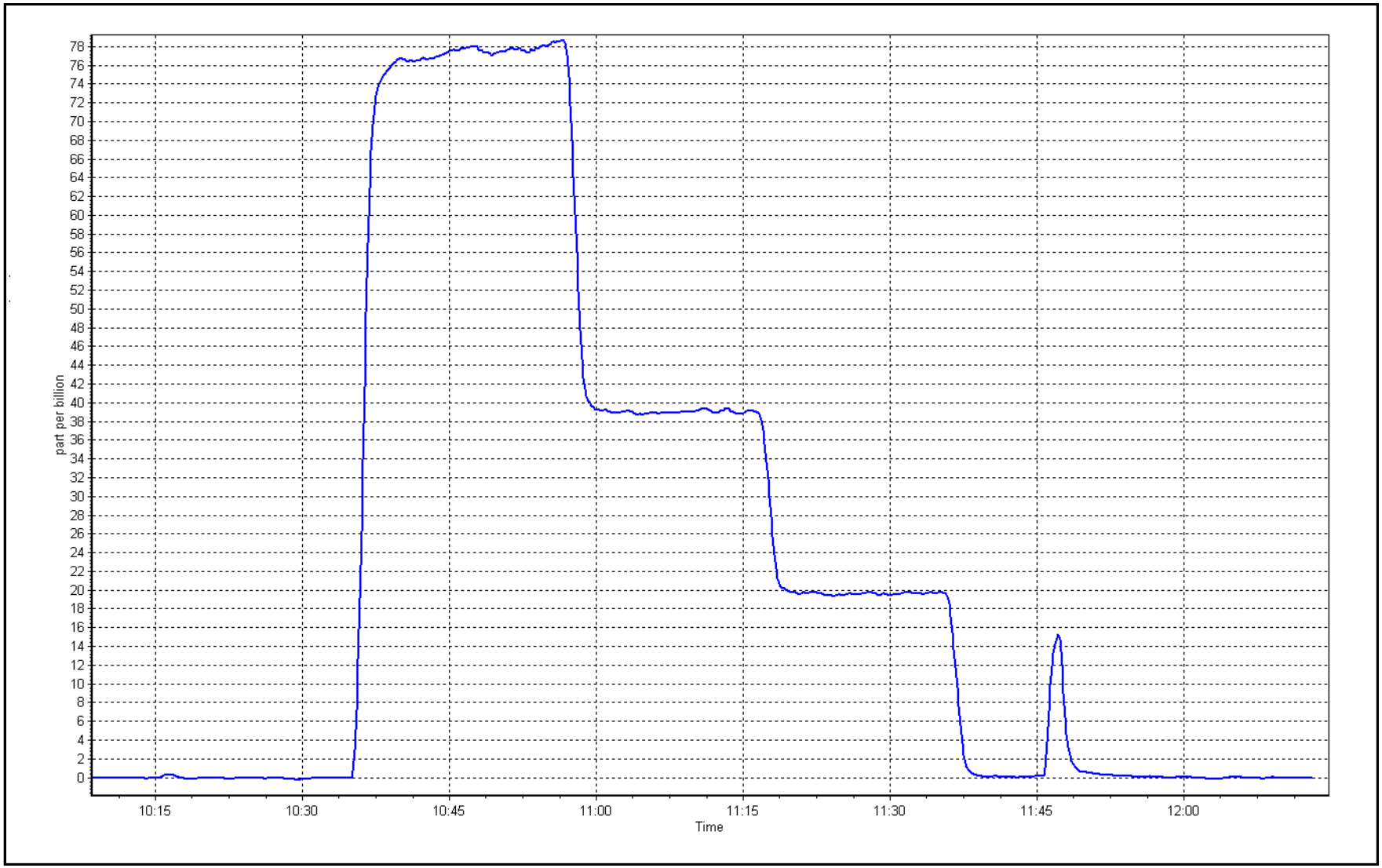
Date of last scrubber change: 20-Nov-25 Ave Corr Factor

Date of last converter efficiency test:

Notes: Removal calibrations done. End of monitoring.

Calibration Performed By: Jan Castro

H2S Calibration Plot Date: March 31, 2026 Location: Leismer



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Leismer
Station number:	AMS 501
Calibration Date:	March 30, 2026
Last Cal Date:	February 26, 2026
Start time (MST):	10:45
End time (MST):	13:21
Reason:	Removal

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:	3252
ZAG make/model:	Teledyne 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	-0.2	-0.2	0.0	----	----
AF High point	4933	66.6	801.9	800.6	1.3	794.4	780.3	14.0	1.0092	1.0257
AF Mid point	4967	33.3	400.9	400.2	0.7	397.5	392.2	5.4	1.0081	1.0200
AF Low point	4983	16.6	199.9	199.5	0.3	200.4	196.1	4.3	0.9964	1.0165
New cyl resp										

Previous Response	NO_X =	801.5	ppb	NO =	799.6	ppb		
Baseline Corr 1st pt	NO_X =	794.6	ppb	NO =	780.5	ppb		
Baseline Corr 2nd pt	NO_X =	397.7	ppb	NO =	392.4	ppb		
Baseline Corr 3rd pt	NO_X =	200.6	ppb	NO =	196.3	ppb		

* = > +/-5% change initiates investigation

As Found Statistics

As found	NO_X r^2: 0.999988	*Percent Change	NO_X =	-0.9%
As found	NO r^2: 0.999988	*Percent Change	NO =	-2.4%
As found	NO_2 r^2: 0.999996	Nx Sl: 0.989835	Nx Int:	0.910
		NO Sl: 0.974458	NO Int:	0.946
		NO2 Sl: 0.980700	NO_2 Int:	-0.323

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	0.0	----	----
As found high GPT point	784.5	364.7	421.1	412.8	1.0202	98.0%
As found mid GPT point	784.5	561.8	224.0	219.4	1.0211	97.9%
As found low GPT point	784.5	669.1	116.7	113.7	1.0267	97.4%

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:	0.980		NO bkgnd or offset:	0.7	
NOX coeff or slope:	0.992		NOX bkgnd or offset:	1.0	
NO2 coeff or slope:	1.000		Reaction cell Press:	142.9	

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	0.998171	
NO_X Cal Offset:	1.012459	
NO Cal Slope:	0.998891	
NO Cal Offset:	-0.108364	
NO_2 Cal Slope:	0.992963	
NO_2 Cal Offset:	0.645795	

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		

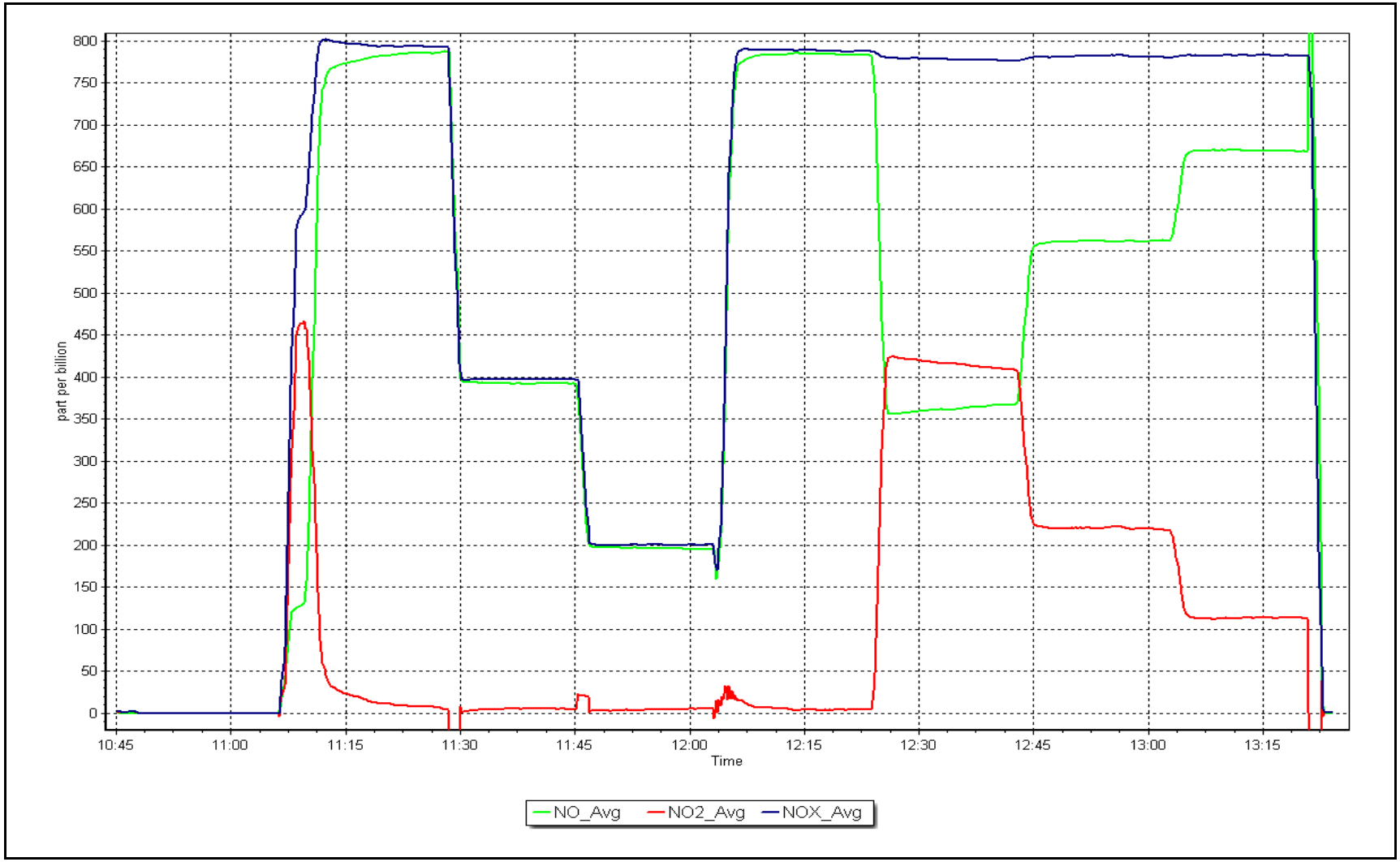
GPT Calibration Data

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 calibrations done. End of Monitoring.

Calibration Performed By: Jan Castro

NO_X Calibration Plot Date: March 30, 2026 Location: Leismer



Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Leismer	Station Number:	AMS 501
Calibration Date:	March 31, 2026	Prev Cal Date:	September 11, 2025
Start Time (MST):	11:40	End Time (MST):	12:08
Tower Height (m):	10.0	Reason:	Removal

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	Y18362
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	58.5	-0.1%
800	77.8	77.8	0.1%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)	1.000000	0.999999	*≥0.9995*
Calculated slope	0.999465	0.999473	*0.98 - 1.02*
Calculated intercept	-0.013446	0.026227	*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	R14654	
As Found Declination (deg east of True North):	13	As Left Declination (deg east of True North):		
Solar noon (MST):	13:29	Calc Declination*:	12.87	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	13.6	1.0%
90	90.3	0.1%
180	179.2	-0.2%
270	270.7	0.2%
350	350.8	0.2%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)	0.999986	0.999945	*≥0.9995*
Calculated slope	1.009838	1.005872	*0.97 - 1.03*
Calculated intercept	-1.669816	-1.982335	*+/- 5*

Notes: Removal calibrations. End of monitoring.

Calibration Performed By: Jan Castro

WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS505
SAWBONES BAY
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Sawbones Bay	Station number:	AMS 505
Calibration Date:	March 20, 2026	Last Cal Date:	February 25, 2026
Start time (MST):	10:19	End time (MST):	13:19
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:	690

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	0710321323	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.001391	0.997685	Backgd or Offset:	23.3	22.4
Calibration intercept:	-0.095541	-0.274881	Coeff or Slope:	1.145	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	-0.1	----
As found High point	4920	79.8	798.8	828.0	0.965
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	828.1	Previous response	799.8	*% change	3.4%
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	0.2	----
High point	4920	79.8	798.8	797.1	1.002
Mid point	4960	39.9	399.4	397.5	1.005
Low point	4980	20.0	200.2	199.3	1.005
As left zero	5000	0.0	0.0	0.0	----
As left span	4920	79.8	798.8	795.7	1.004
				Average Correction Factor:	1.004

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

SO_2 Calibration Summary

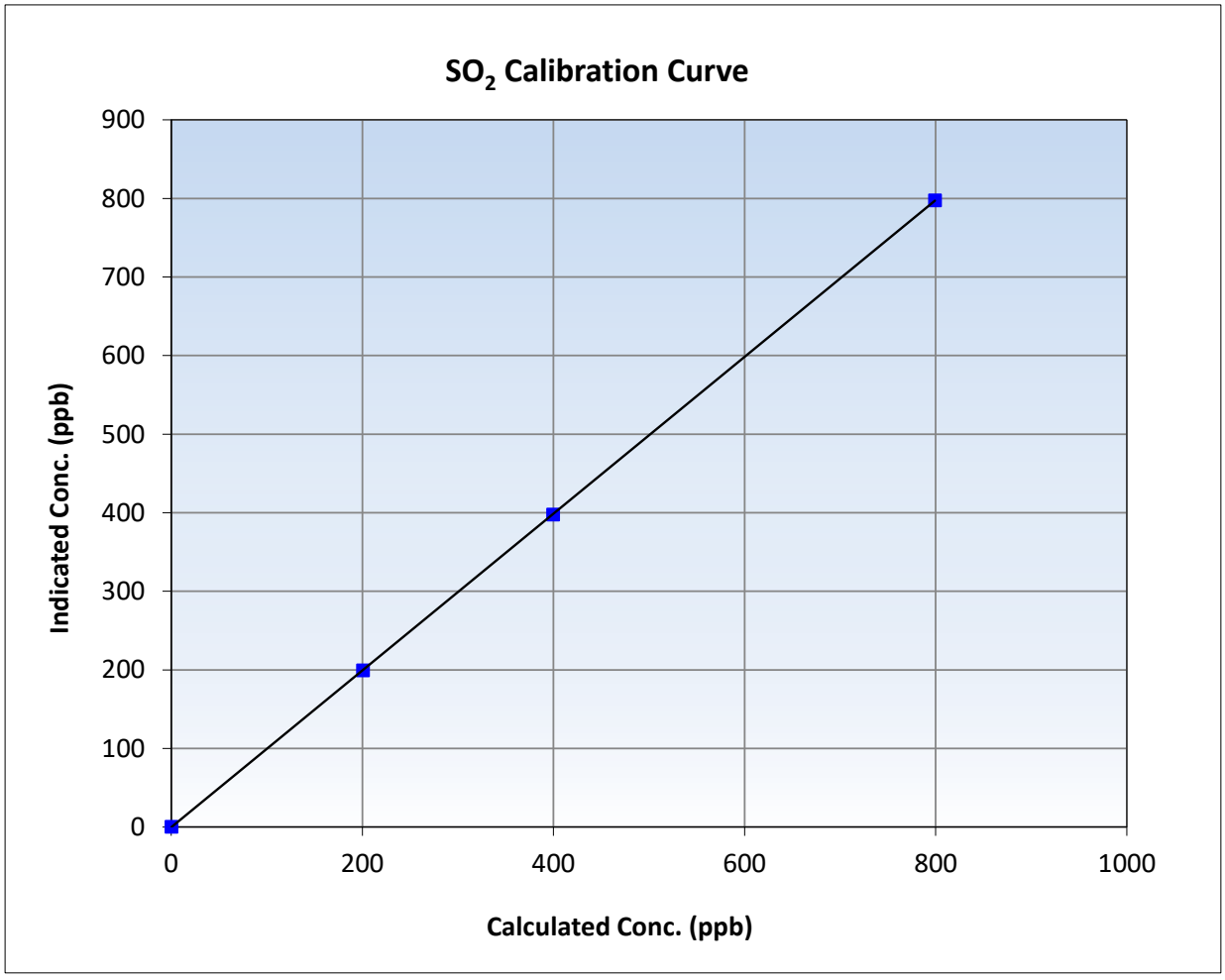
Station Information

Calibration Date:	March 20, 2026	Previous Calibration:	February 25, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:19	End Time (MST):	13:19
Analyzer make:	Thermo 43i	Analyzer serial #:	0710321323

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.2	----
798.8	797.1	1.0022
399.4	397.5	1.0048
200.2	199.3	1.0045

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999997	*≥0.995*
Slope	0.997685	*0.90 - 1.10*
Intercept	-0.274881	*+/-30*



SO2 Calibration Plot Date: March 20, 2026 Location: Sawbones Bay

Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Sawbones Bay	Station number:	AMS 505
Calibration Date:	March 24, 2026	Last Cal Date:	February 24, 2026
Start time (MST):	10:37	End time (MST):	15:15
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:	690

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:	0.996660	1.003952	Backgd or Offset:	1.230	1.190
Calibration intercept:	0.016800	0.036776	Coeff or Slope:	1.109	1.087

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	81.4	0.981
As found Mid point	4962	38.0	40.0	40.8	0.977
As found Low point	4981	19.0	20.0	20.5	0.970
New cylinder response					

Baseline Corr As found:	81.5	Prev response:	79.69	*% change:	2.2%
Baseline Corr 2nd AF pt:	40.9	AF Slope:	1.018821	AF Intercept:	0.016733
Baseline Corr 3rd AF pt:	20.6	AF Correlation:	0.999991	* = > +/-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	4925	76.0	79.9	80.2	0.997
Mid point	4962	38.0	40.0	40.4	0.990
Low point	4981	19.0	20.0	20.0	0.999
As left zero	5000	0.0	0.0	0.1	----
As left span	4925	76.0	79.9	79.8	1.002
SO2 Scrubber Check	4920	79.8	798.0	-0.1	----
Date of last scrubber change:				Ave Corr Factor	0.995
Date of last converter efficiency test:					

Notes: Changed inlet filter after as founds. SO2 scrubber check done and passed. Adjusted span.

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

H2S Calibration Summary

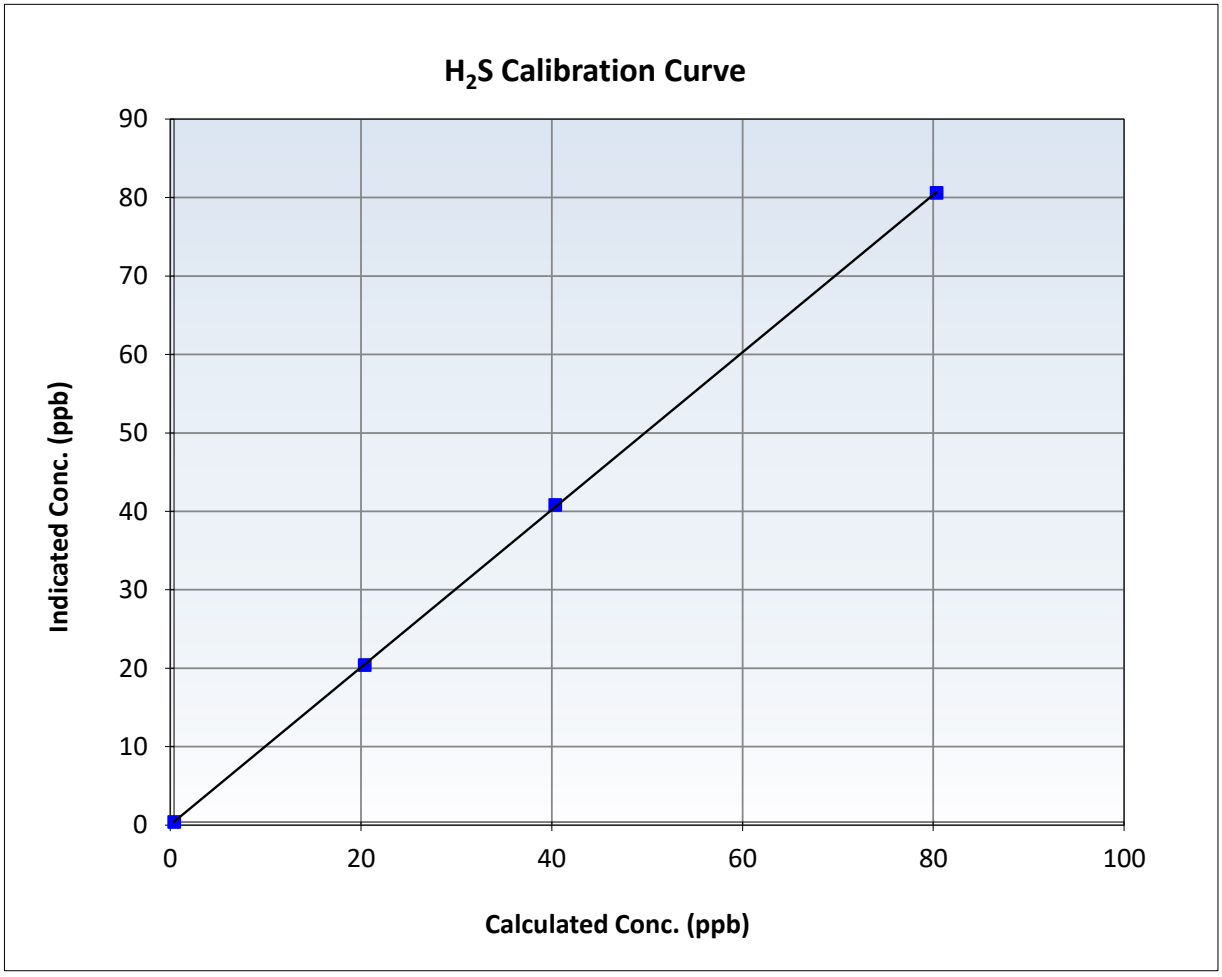
Station Information

Calibration Date:	March 24, 2026	Previous Calibration:	February 24, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:37	End Time (MST):	15:15
Analyzer make:	Thermo 43iQTL	Analyzer serial #:	12113311965

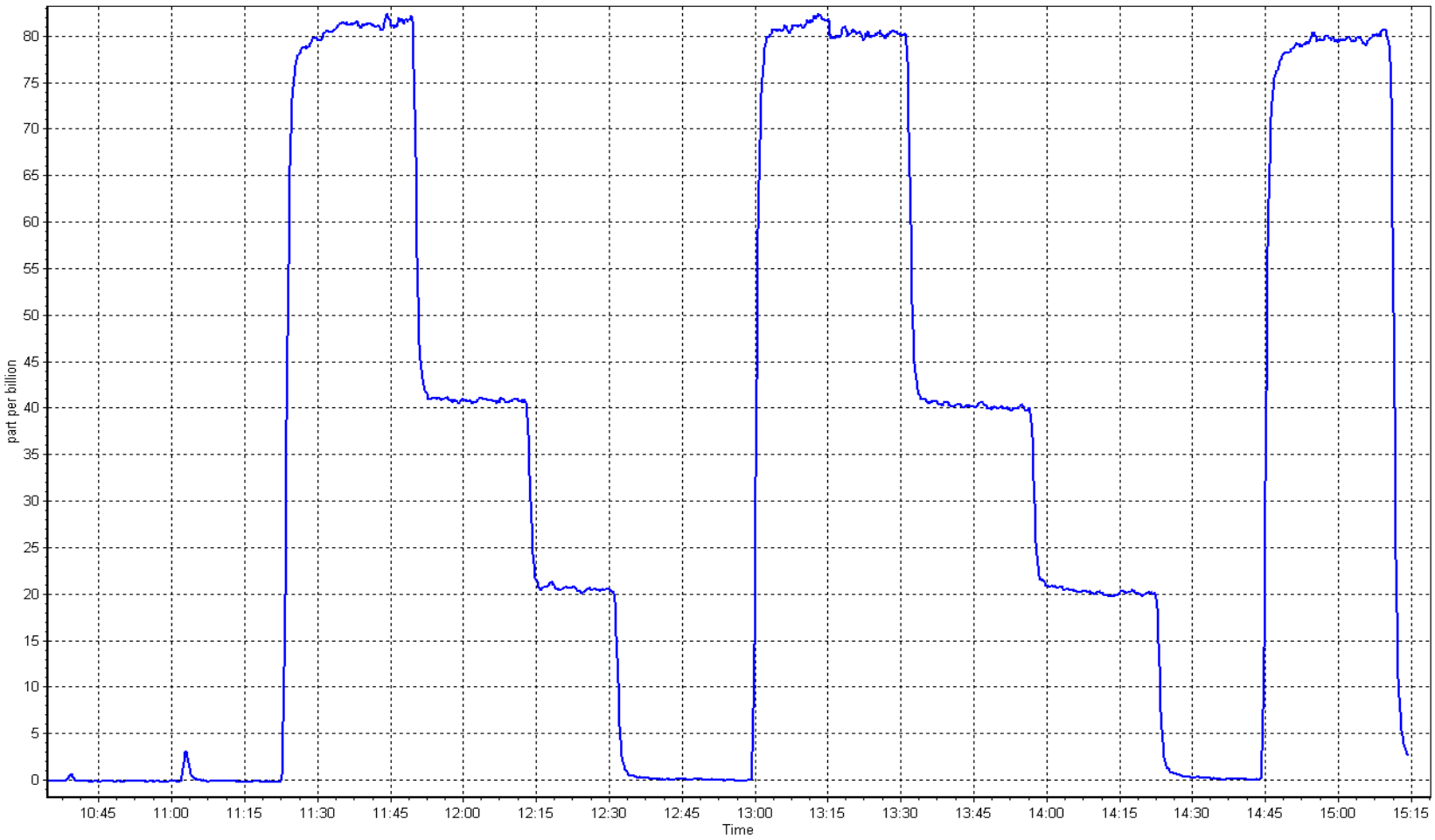
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
79.9	80.2	0.9967
40.0	40.4	0.9895
20.0	20.0	0.9994

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999979	*≥0.995*
Slope	1.003952	*0.90 - 1.10*
Intercept	0.036776	*+/-3*



H2S Calibration Plot Date: March 24, 2026 Location: Sawbones Bay



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Sawbones Bay
Station number:	AMS 505
Calibration Date:	March 19, 2026
Last Cal Date:	February 23, 2026
Start time (MST):	10:18
End time (MST):	14:52
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:	690

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	4933	66.7	801.8	800.4	1.3	795.3	791.3	4.0	1.0080	1.0114
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 801.8 ppb	NO = 800.0 ppb
Baseline Corr 1st pt	NO_X = 795.4 ppb	NO = 791.4 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

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 = -0.8%
*Percent Change	NO = -1.1%

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:	0.957	0.964	NO bkgnd or offset:	0.3	0.3
NOX coeff or slope:	0.957	0.961	NOX bkgnd or offset:	0.6	0.6
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	3.7	3.7

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.000319	1.002429
NO_X Cal Offset:	-0.229570	-0.669377
NO Cal Slope:	1.000545	1.004714
NO Cal Offset:	-0.849887	-1.709469
NO_2 Cal Slope:	1.002141	0.991389
NO_2 Cal Offset:	0.513233	-0.432109

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	4933	66.7	801.8	800.4	1.3	803.0	803.0	-0.1	0.9985	0.9968
Mid point	4967	33.3	400.2	399.6	0.7	401.4	400.0	1.4	0.9971	0.9989
Low point	4983	16.7	200.7	200.4	0.3	199.1	197.2	1.9	1.0083	1.0163
As left zero	5000	0.0	0.0	0.0	0.0	0.2	0.1	0.1	----	----
As left span	4933	66.7	801.8	421.1	380.7	807.0	421.1	385.5	0.9935	1.0000
								Average Correction Factor	1.0013	1.0040

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	809.0	410.6	399.7	396.0	1.0094	99.1%
Mid GPT point	809.0	629.9	180.4	178.4	1.0114	98.9%
Low GPT point	809.0	720.0	90.3	88.6	1.0196	98.1%
				Average Correction Factor	1.0135	98.7%

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

Calibration Performed By: Braiden Boutilier

Wood Buffalo Environmental Association

NO_X Calibration Summary

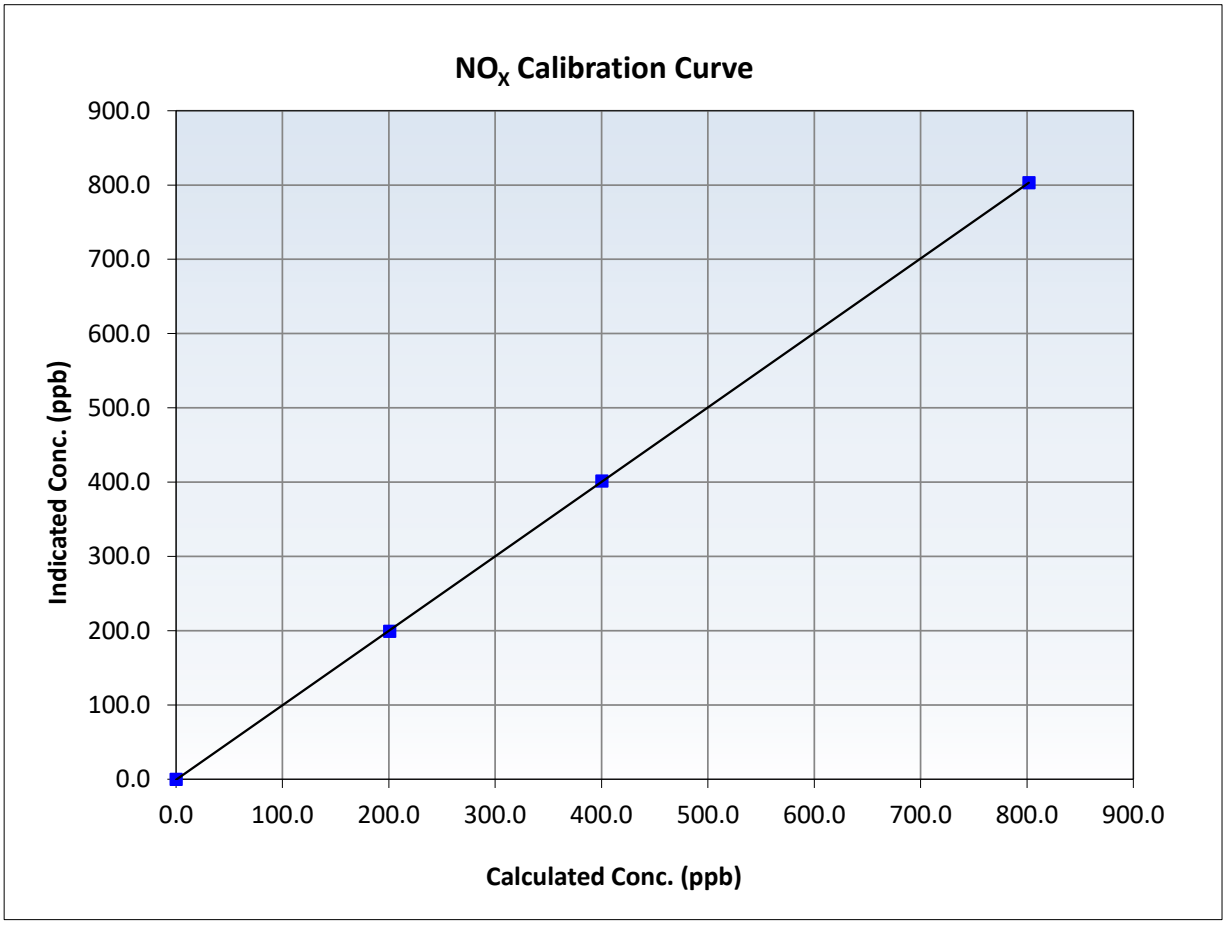
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 23, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:18	End Time (MST):	14:52
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
801.8	803.0	0.9985
400.2	401.4	0.9971
200.7	199.1	1.0083

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.002429	*0.90 - 1.10*
Intercept	-0.669377	*+/-20*



Wood Buffalo Environmental Association

NO_2 Calibration Summary

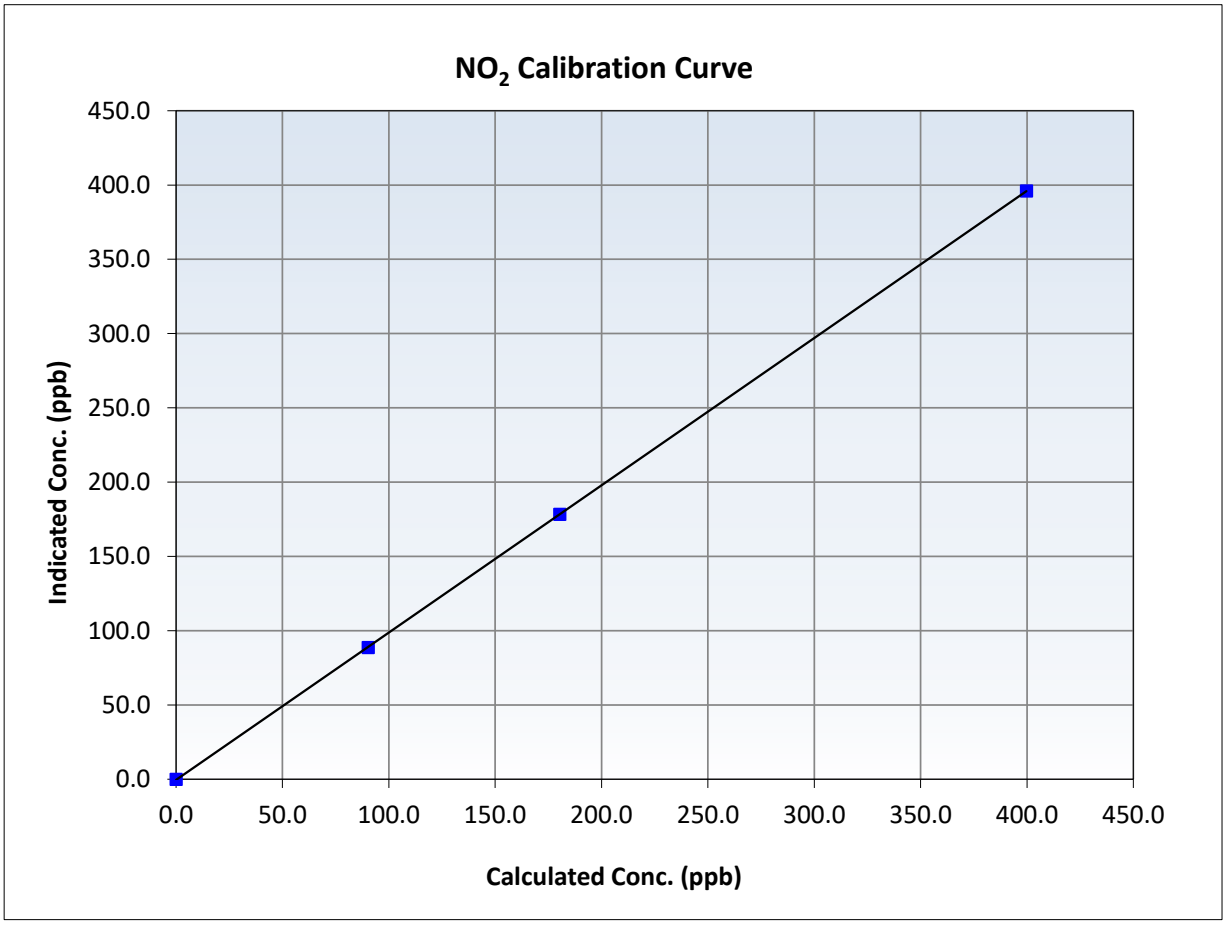
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 23, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:18	End Time (MST):	14:52
Analyzer make:	API T200	Analyzer serial #:	4259

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
399.7	396.0	1.0094
180.4	178.4	1.0114
90.3	88.6	1.0196

Statistical Evaluation		Limits
Correlation Coefficient	0.999994	≥0.995
Slope	0.991389	0.90 - 1.10
Intercept	-0.432109	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

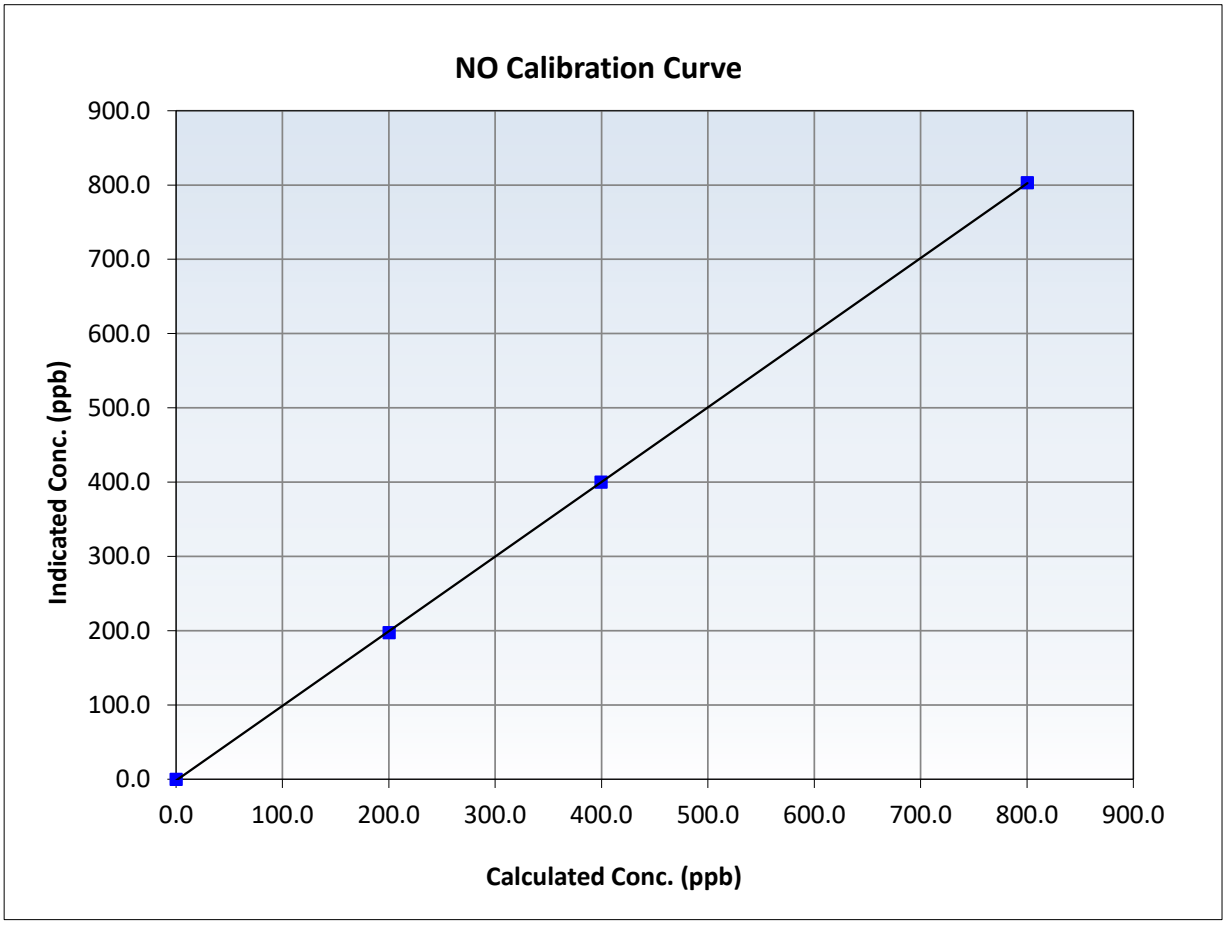
Station Information

Calibration Date:	March 19, 2026	Previous Calibration:	February 23, 2026
Station Name:	Sawbones Bay	Station Number:	AMS 505
Start Time (MST):	10:18	End Time (MST):	14:52
Analyzer make:	API T200	Analyzer serial #:	4259

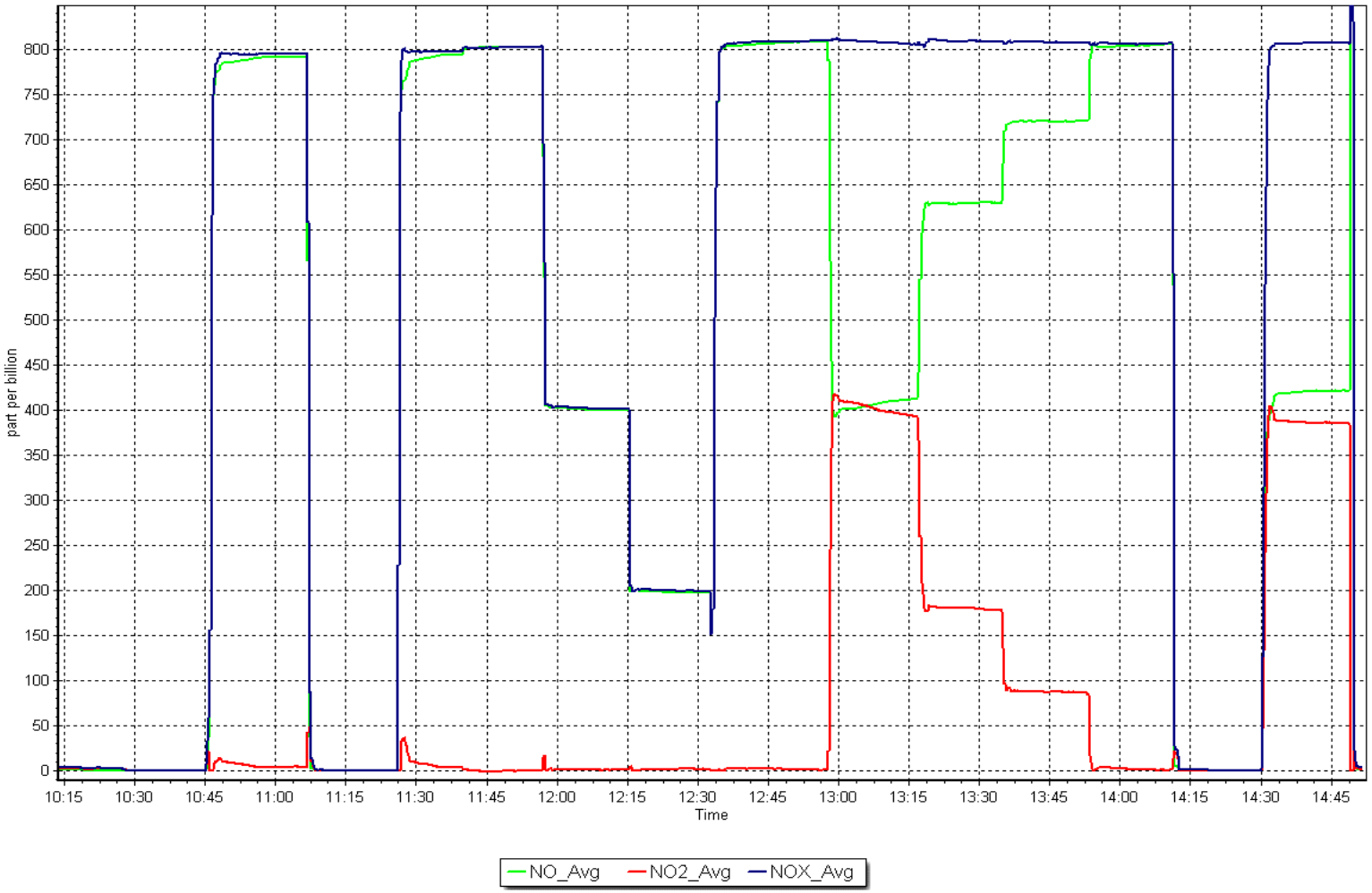
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.4	803.0	0.9968
399.6	400.0	0.9989
200.4	197.2	1.0163

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999974	*≥0.995*
Slope	1.004714	*0.90 - 1.10*
Intercept	-1.709469	*+/-20*



NO_X Calibration Plot Date: March 19, 2026 Location: Sawbones Bay



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS507
KIRBY SOUTH
MARCH 2026

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

April 30, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Kirby South	Station number:	AMS 507
Calibration Date:	March 12, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	11:40	End time (MST):	14:41
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:	1.001634	1.008294	Backgd or Offset:	31.1	31.1
Calibration intercept:	-0.052026	0.168004	Coeff or Slope:	1.134	1.134

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	4921	78.8	799.7	805.1	0.994
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	804.6	Previous response	800.9	*% change	0.5%
Baseline Corr 2nd AF pt:	NA	AF Slope:		AF Intercept:	
Baseline Corr 3rd AF pt:	NA	AF Correlation:		* = > +/-5% change initiates investigation	

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	0.5	----
High point	4921	78.8	799.7	807.0	0.991
Mid point	4961	39.4	399.8	402.1	0.994
Low point	4980	19.7	199.9	202.1	0.989
As left zero	5000	0.0	0.0	0.3	----
As left span	4921	78.8	799.7	808.5	0.989
				Average Correction Factor:	0.991

Notes: Inlet filter changed after as founds, no adjustment made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

SO_2 Calibration Summary

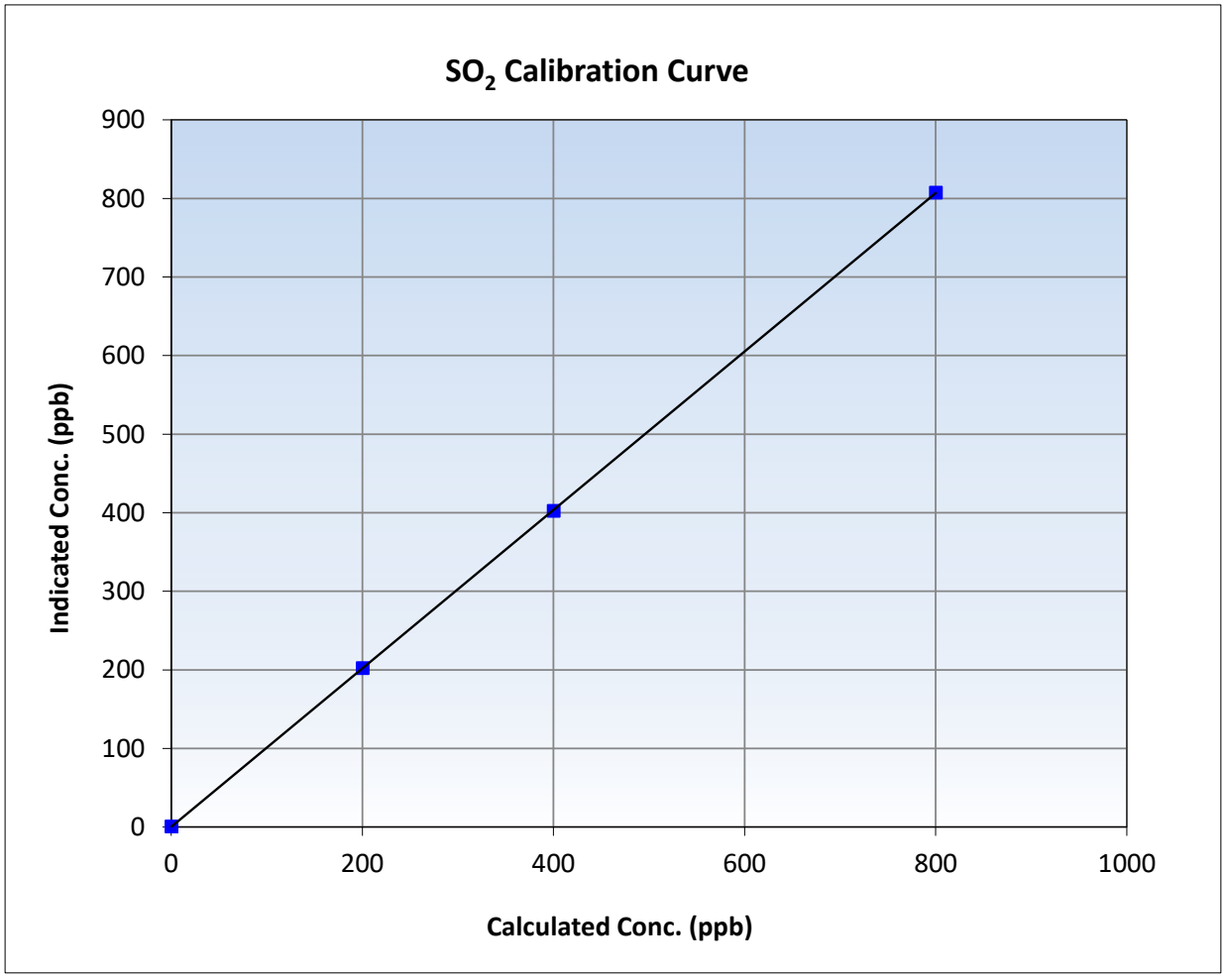
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 19, 2026
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	11:40	End Time (MST):	14:41
Analyzer make:	Thermo 43iQ-TLE	Analyzer serial #:	1182340007

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.5	----
799.7	807.0	0.9909
399.8	402.1	0.9943
199.9	202.1	0.9893

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999995	*≥0.995*
Slope	1.008294	*0.90 - 1.10*
Intercept	0.168004	*+/-30*



SO2 Calibration Plot Date: March 12, 2026 Location: Kirby South

Wood Buffalo Environmental Association

H2S Calibration Report

Station Information

Station Name:	Kirby South	Station number:	AMS 507
Calibration Date:	March 18, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	11:18	End time (MST):	16:25
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:	281
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:	0.964096	1.006815	Backgd or Offset:	1.70	1.72
Calibration intercept:	0.360000	0.040000	Coeff or Slope:	1.072	1.072

H2S As Found Data

Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Baseline Adjusted Correction factor (Cc/(Ic-AFzero)) *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	41.1	0.973
As found Low point	4980	19.8	20.0	20.3	0.985
New cylinder response					

Baseline Corr As found:	82.4	Prev response:	77.48	*% change:	6.0%
Baseline Corr 2nd AF pt:	41.1	AF Slope:	1.031246	AF Intercept:	-0.140000
Baseline Corr 3rd AF pt:	20.3	AF Correlation:	0.999985	* = > +/-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	80.6	0.992
Mid point	4960	39.6	40.0	40.3	0.992
Low point	4980	19.8	20.0	20.1	0.995
As left zero	5000	0.0	0.0	0.2	----
As left span	4921	79.2	80.0	82.5	0.970
SO2 Scrubber Check	4919	80.0	800.2	0.0	----

Date of last scrubber change:		July 25, 2023		Ave Corr Factor	0.993
Date of last converter efficiency test:		September 18, 2025		102.4%	efficiency

Notes: Changed sample inlet filter after as founds. Scrubber check passed, no adjustments made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

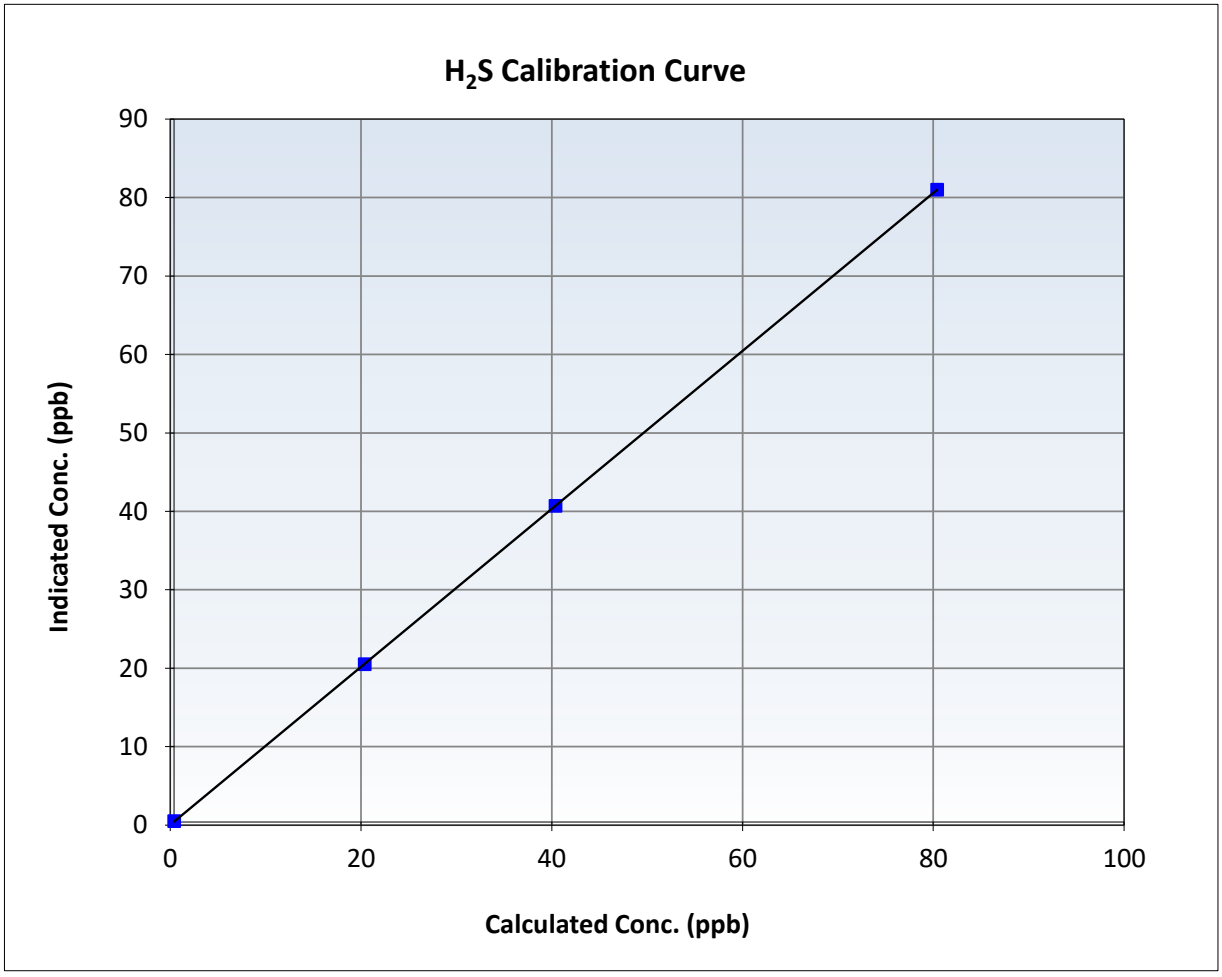
H2S Calibration Summary

Station Information

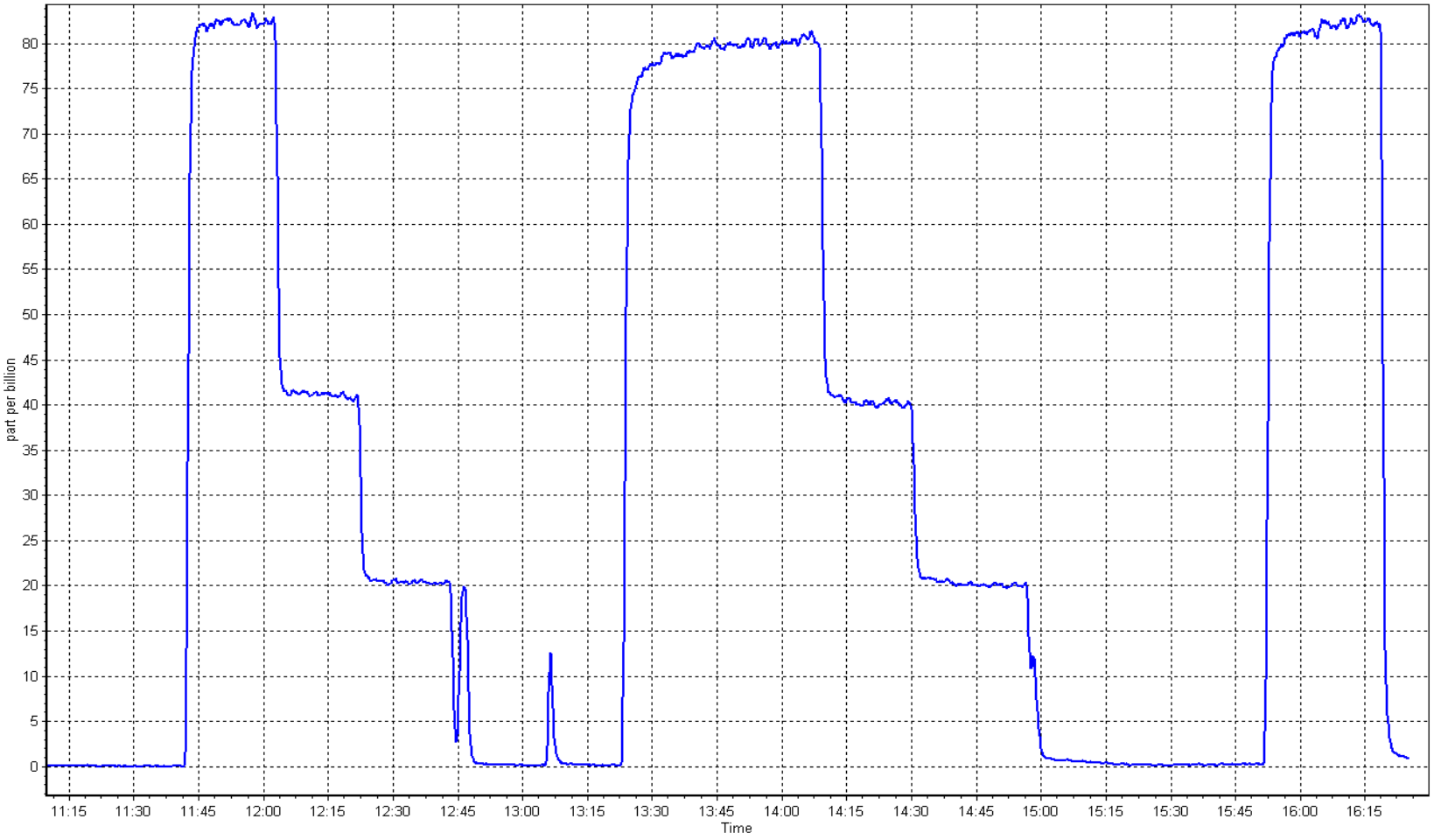
Calibration Date:	March 18, 2026	Previous Calibration:	February 19, 2026
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	11:18	End Time (MST):	16:25
Analyzer make:	Thermo 43i-TLE	Analyzer serial #:	1150840012

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation		*Limits*
0.0	0.1	----	Correlation Coefficient	0.999997	*≥0.995*
80.0	80.6	0.9925	Slope	1.006815	*0.90 - 1.10*
40.0	40.3	0.9925	Intercept	0.040000	*+/-3*
20.0	20.1	0.9949			



H2S Calibration Plot Date: March 18, 2026 Location: Kirby South



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Kirby South	Station number:	AMS 507
Calibration Date:	March 12, 2026	Last Cal Date:	February 19, 2026
Start time (MST):	11:40	End time (MST):	14:41
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:	0.997077	1.004538	Background:	1.98	1.98
Calibration intercept:	0.026567	-0.008231	Coefficient:	3.313	3.313

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	17.01	0.991
As found Mid point					
As found Low point					
New cylinder response					
Baseline Corr As found:	17.02	Previous response	16.84	*% 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	

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	0.02	
High point	4921	78.8	16.87	16.95	0.995
Mid point	4961	39.4	8.43	8.45	0.998
Low point	4980	19.7	4.22	4.20	1.003
As left zero	5000	0.0	0.00	-0.02	----
As left span	4921	78.8	16.87	16.96	0.994
				Average Correction Factor	0.999

Notes: Inlet filter changed after as founds, no adjustments made.

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

THC Calibration Summary

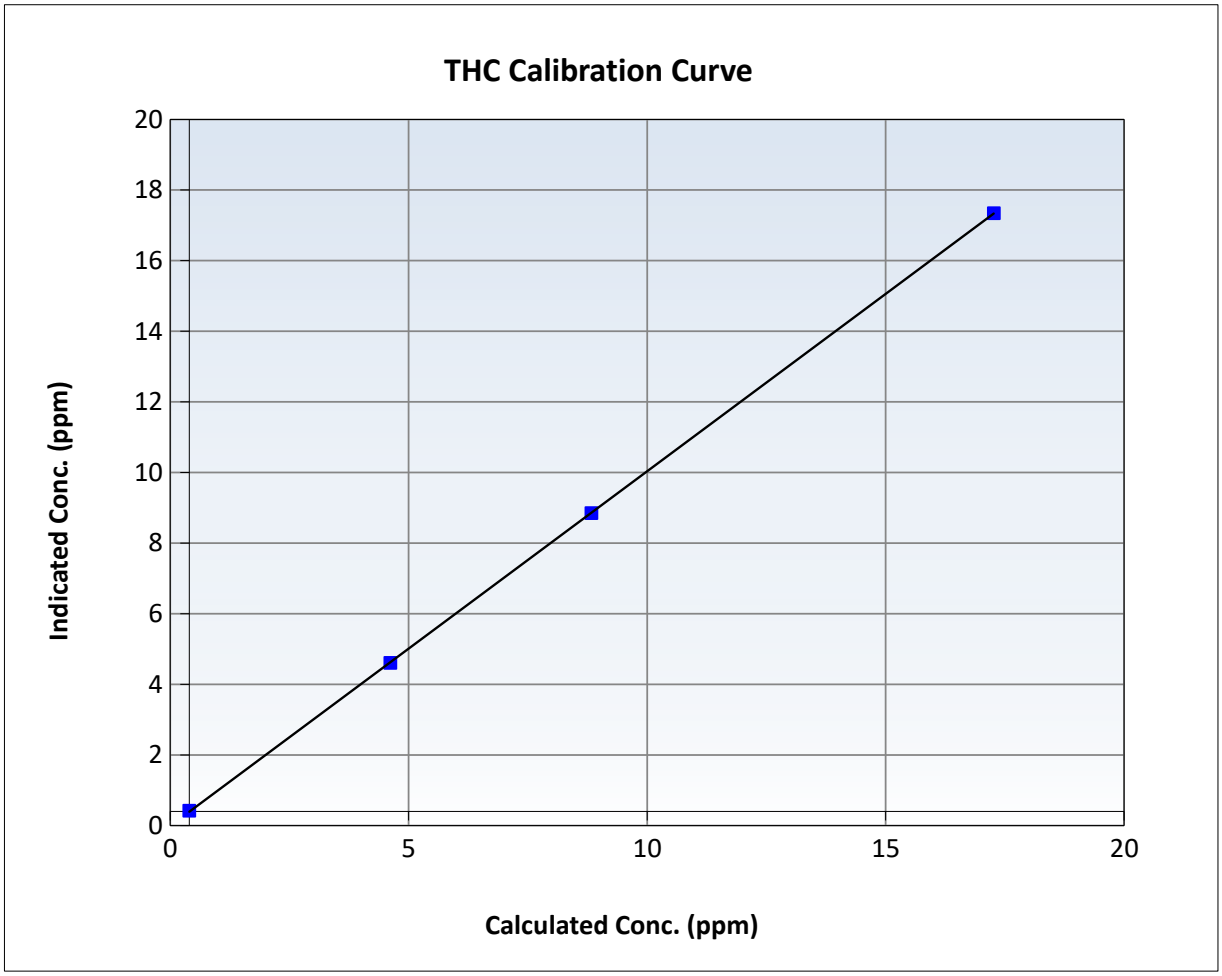
Station Information

Calibration Date:	March 12, 2026	Previous Calibration:	February 19, 2026
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	11:40	End Time (MST):	14:41
Analyzer make:	Thermo 51i-LT	Analyzer serial #:	1182340005

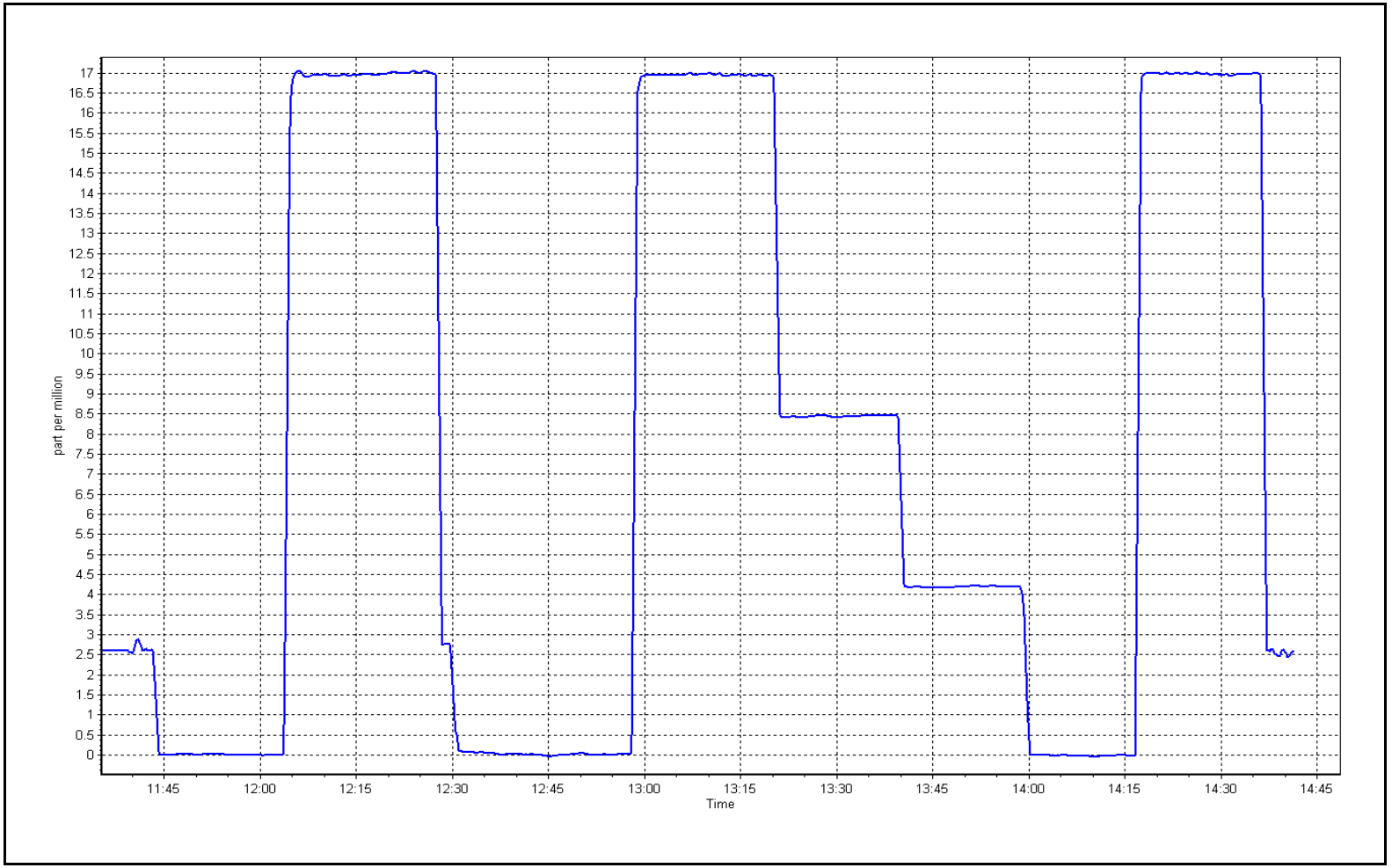
Calibration Data

Calculated Concentration (ppm) (Cc)	Indicated Concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0.00	0.02	----
16.87	16.95	0.9953
8.43	8.45	0.9978
4.22	4.20	1.0030

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999991	*≥0.995*
Slope	1.004538	*0.90 - 1.10*
Intercept	-0.008231	*+/-1.5*



THC Calibration Plot Date: March 12, 2026 Location: Kirby South



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Kirby South
Station number:	AMS 507
Calibration Date:	March 18, 2026
Last Cal Date:	February 20, 2026
Start time (MST):	11:18
End time (MST):	15:56
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	800.5	791.6	8.9	1.0004	1.0107
AF Mid point										
AF Low point										
New cyl resp										

Previous Response	NO_X = 801.7 ppb	NO = 797.7 ppb	* = > +/-5% change initiates investigation	*Percent Change	NO_X = -0.1%
Baseline Corr 1st pt	NO_X = 801.3 ppb	NO = 791.8 ppb	As Found Statistics	*Percent Change	NO = -0.7%
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:	0.724	0.715	NO bkgnd or offset:	7.5	8.0
NOX coeff or slope:	0.991	0.999	NOX bkgnd or offset:	7.5	8.5
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	143.2	142.0

Calibration Statistics

	Start	Finish
NO_X Cal Slope:	1.001556	0.995440
NO_X Cal Offset:	-1.153586	-1.233631
NO Cal Slope:	0.998544	0.990147
NO Cal Offset:	-1.413626	-1.973695
NO_2 Cal Slope:	0.989597	0.990384
NO_2 Cal Offset:	0.998089	1.844260

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	-0.5	0.0	-0.5	----	----
High point	4933	66.8	801.6	800.3	1.3	797.2	791.5	5.7	1.0056	1.0111
Mid point	4967	33.4	400.8	400.1	0.7	397.1	393.0	4.2	1.0093	1.0181
Low point	4983	16.7	200.4	200.1	0.3	197.7	194.3	3.4	1.0137	1.0297
As left zero	5000	0.0	0.0	0.0	0.0	-0.5	0.0	-0.6	----	----
As left span	4933	66.8	801.6	398.7	402.9	784.5	398.7	385.7	1.0218	1.0000
							Average Correction Factor		1.0095	1.0196

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	-0.5	----	----
High GPT point	786.0	400.4	386.9	384.0	1.0076	99.2%
Mid GPT point	786.0	623.1	164.2	166.1	0.9888	101.1%
Low GPT point	786.0	705.7	81.6	84.5	0.9661	103.5%
				Average Correction Factor	0.9875	101.3%

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

Calibration Performed By: Jason Brooks

Wood Buffalo Environmental Association

NO_X Calibration Summary

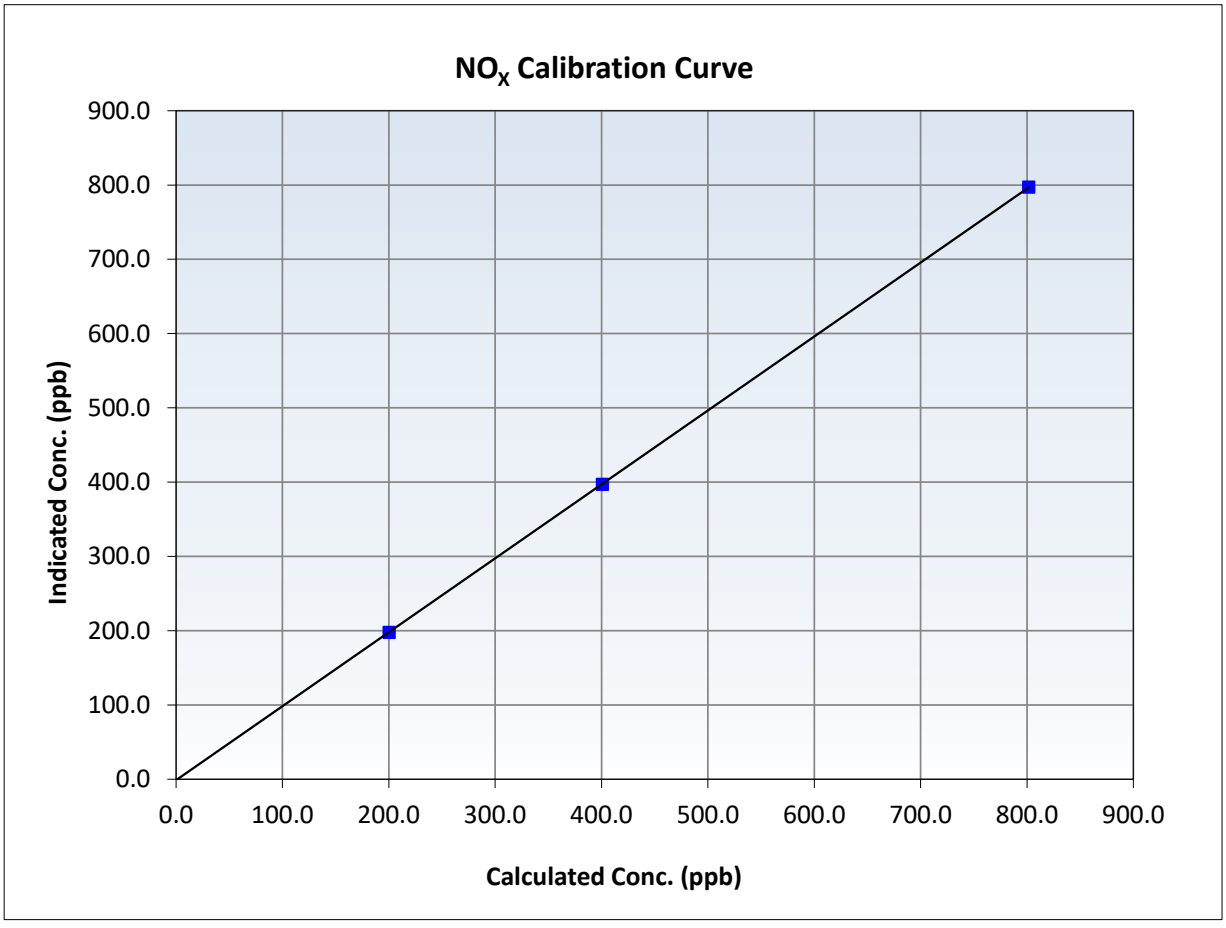
Station Information

Calibration Date:	March 18, 2026	Previous Calibration:	February 20, 2026
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	11:18	End Time (MST):	15:56
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.5	----
801.6	797.2	1.0056
400.8	397.1	1.0093
200.4	197.7	1.0137

Statistical Evaluation		Limits
Correlation Coefficient	0.999996	≥0.995
Slope	0.995440	0.90 - 1.10
Intercept	-1.233631	+/-20



Wood Buffalo Environmental Association

NO_2 Calibration Summary

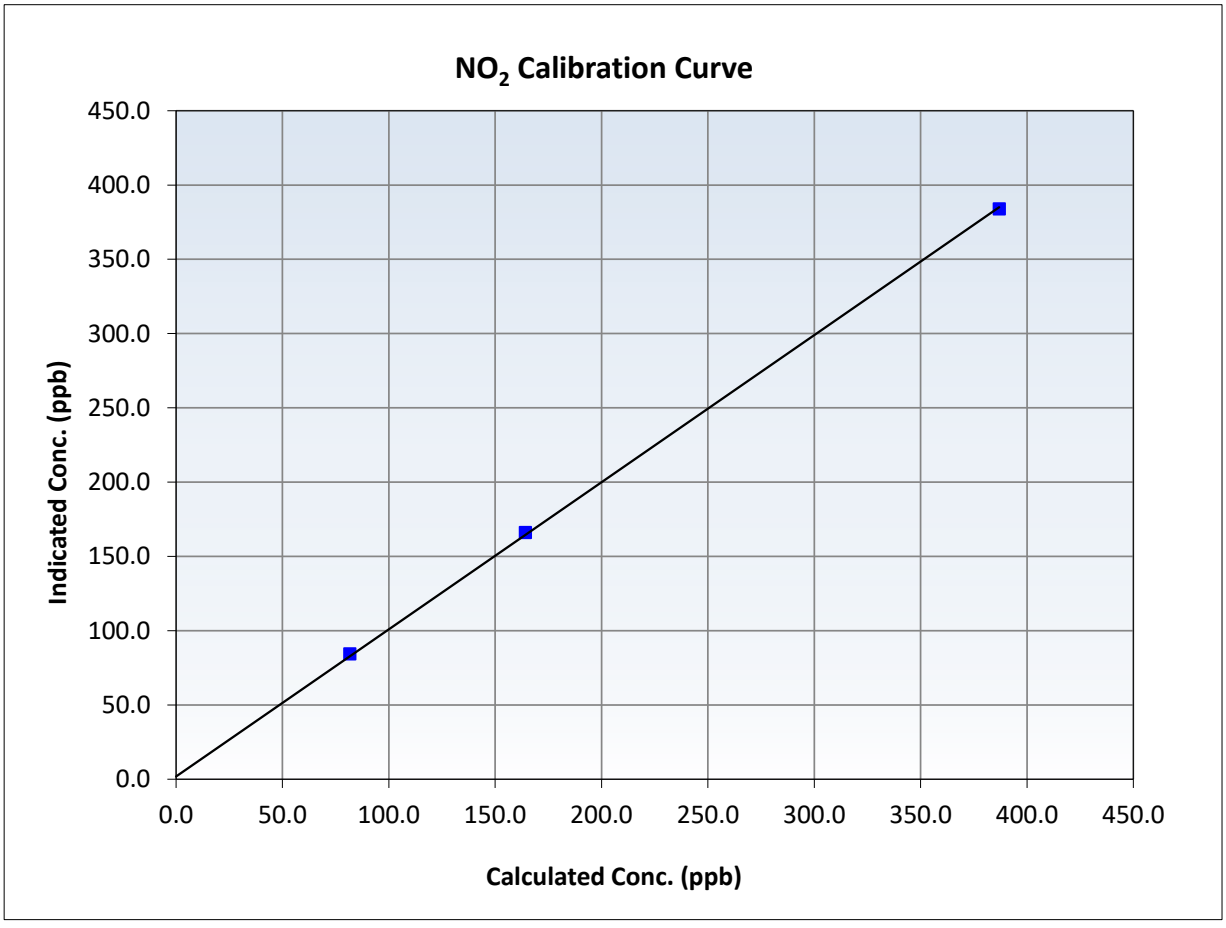
Station Information

Calibration Date:	March 18, 2026	Previous Calibration:	February 20, 2026
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	11:18	End Time (MST):	15:56
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	-0.5	----
386.9	384.0	1.0076
164.2	166.1	0.9888
81.6	84.5	0.9661

Statistical Evaluation		Limits
Correlation Coefficient	0.999848	≥0.995
Slope	0.990384	0.90 - 1.10
Intercept	1.844260	+/-20



Wood Buffalo Environmental Association

NO Calibration Summary

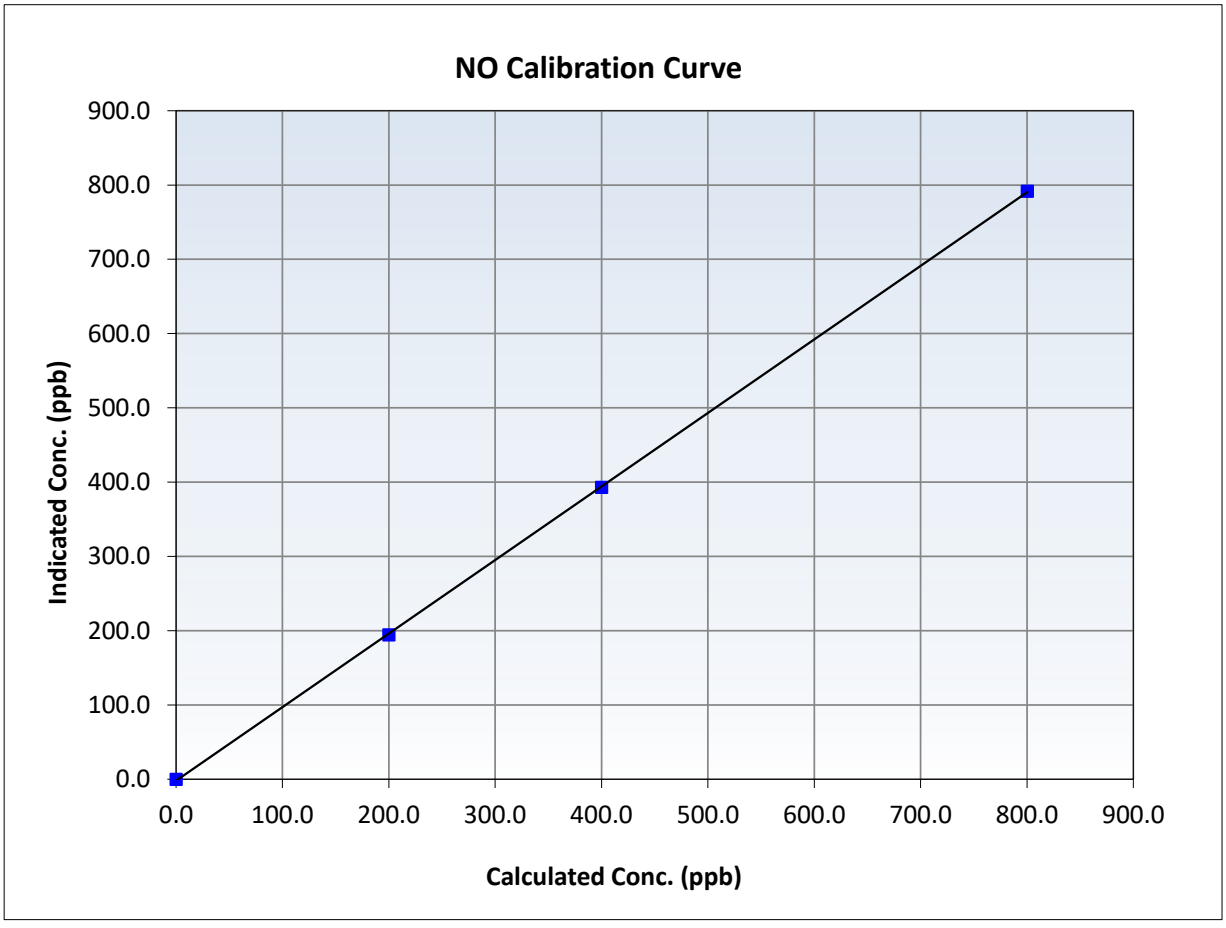
Station Information

Calibration Date:	March 18, 2026	Previous Calibration:	February 20, 2026
Station Name:	Kirby South	Station Number:	AMS 507
Start Time (MST):	11:18	End Time (MST):	15:56
Analyzer make:	Thermo 42i	Analyzer serial #:	1173480006

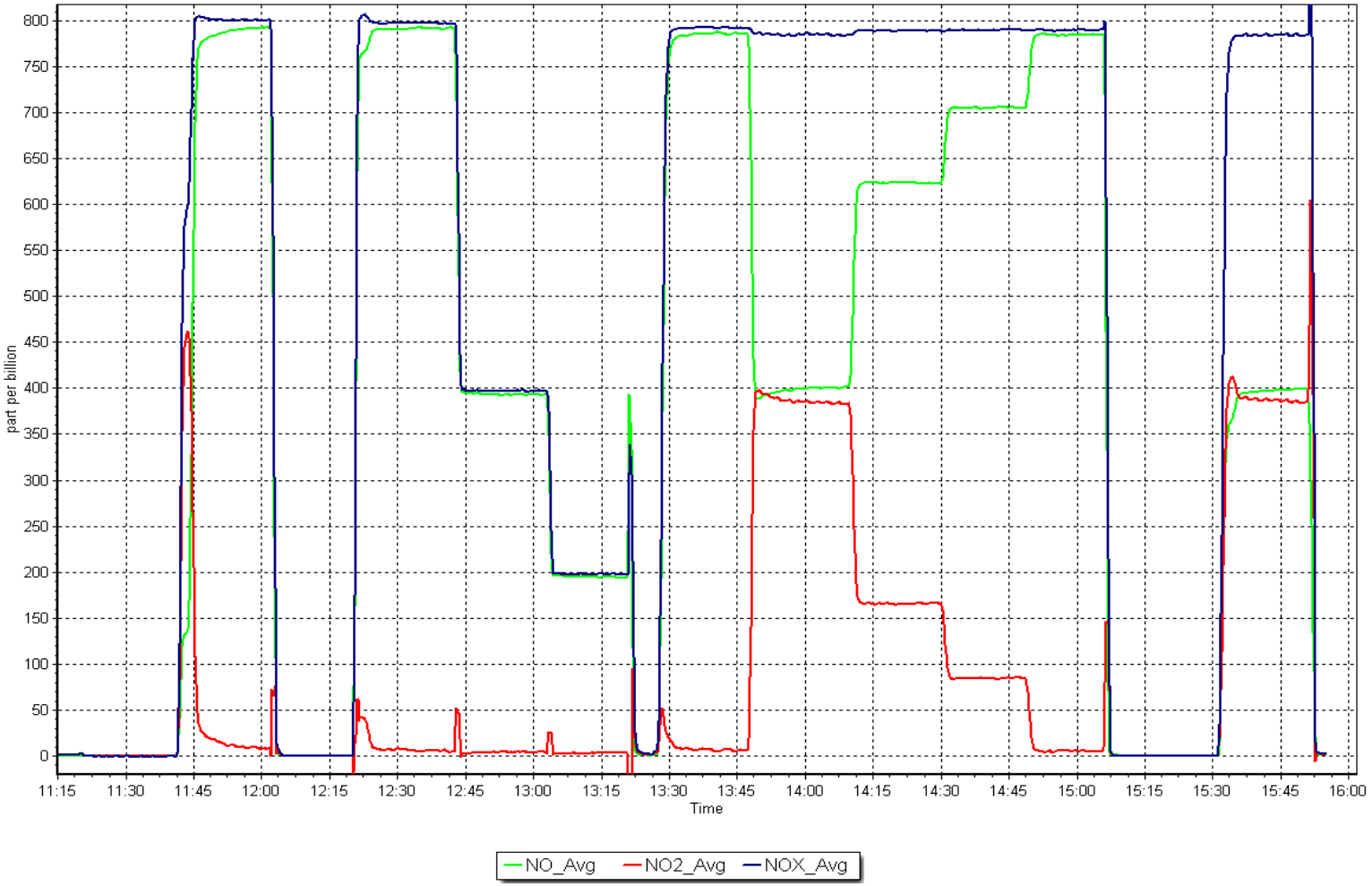
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
0.0	0.0	----
800.3	791.5	1.0111
400.1	393.0	1.0181
200.1	194.3	1.0297

Statistical Evaluation		*Limits*
Correlation Coefficient	0.999971	*≥0.995*
Slope	0.990147	*0.90 - 1.10*
Intercept	-1.973695	*+/-20*



NO_X Calibration Plot Date: March 18, 2026 Location: Kirby South



WOOD BUFFALO ENVIRONMENTAL ASSOCIATION

CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
CALIBRATION REPORT

AMS511
BLACKGOLD
FEBRUARY 2026

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

March 31, 2026

Wood Buffalo Environmental Association

SO_2 Calibration Report

Station Information

Station Name:	Blackgold	Station number:	AMS 511
Calibration Date:	March 30, 2026	Last Cal Date:	February 23, 2026
Start time (MST):	13:13	End time (MST):	14:41
Reason:	Removal		

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 T750		Serial Number:	282
Zero Air Gen Model:	Teledyne API 751H		Serial Number:	321

Analyzer Information

Analyzer make:	Thermo 43i		Serial Number:	1173410001	
Analyzer Range:	0 - 1000 ppb				
	Start	***Finish***		***Start***	***Finish***
Calibration slope:	1.000228		Backgd or Offset:	15.5	15.5
Calibration intercept:	-1.120113		Coeff or Slope:	1.189	1.189

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	4919	81.0	799.8	803.0	0.997
As found Mid point	4959	40.5	399.9	400.5	1.000
As found Low point	4980	20.3	200.4	199.5	1.008
New cylinder response					
Baseline Corr As found:	802.3	Previous response	798.9	*% change	0.4%
Baseline Corr 2nd AF pt:	399.8	AF Slope:	1.003901	AF Intercept:	-0.480837
Baseline Corr 3rd AF pt:	198.8	AF Correlation:	0.999990	* = > +/-5% change initiates investigation	

SO_2 Calibration Data

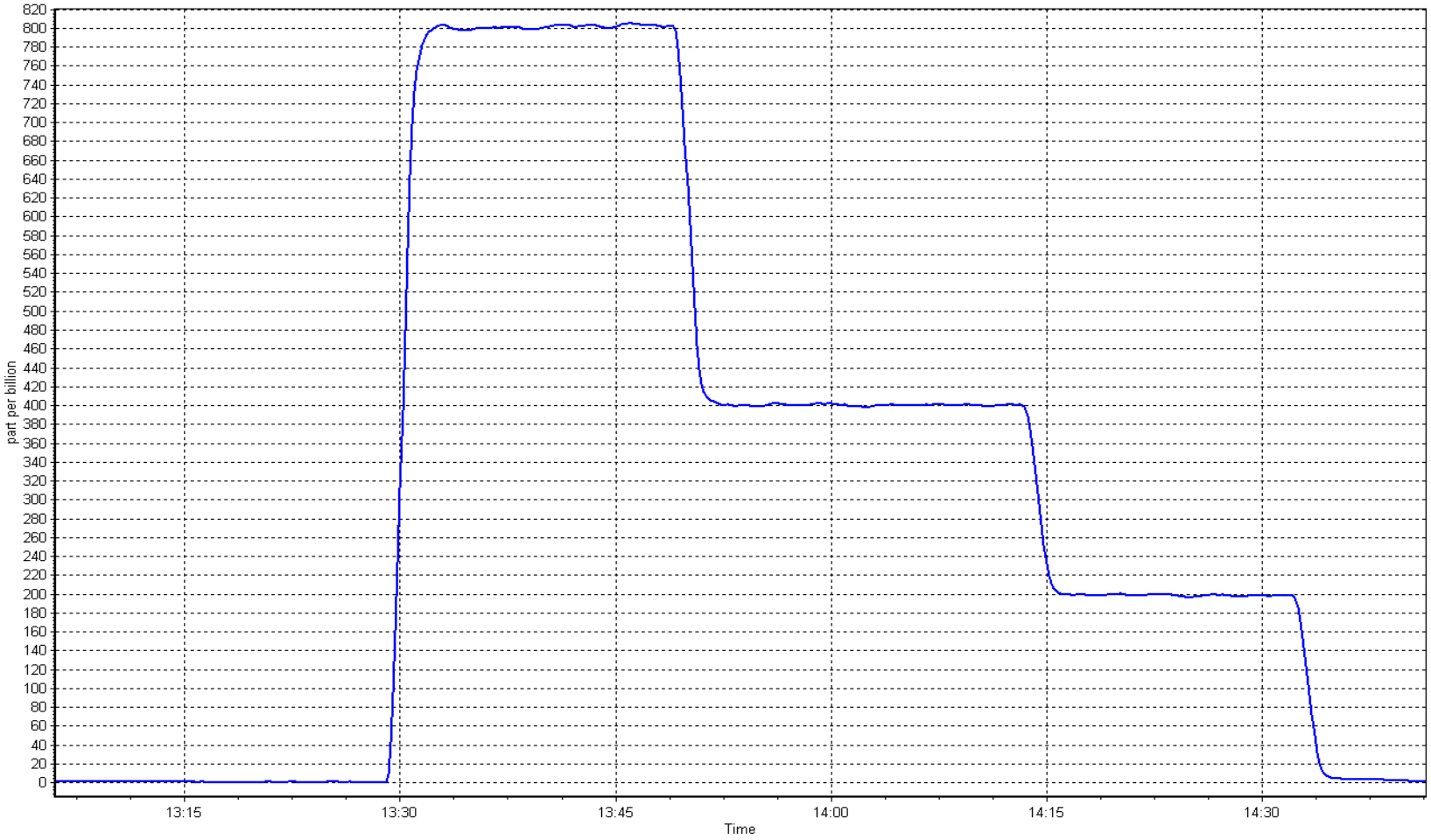
Set Point	Dilution air flow rate (sccm)	Source gas flow rate (sccm)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor:

Notes: Removals completed prior to station removal on March 31.

Calibration Performed By: Braiden Boutilier

SO2 Calibration Plot Date: March 30, 2026 Location: Blackgold



Wood Buffalo Environmental Association

H_2S Calibration Report

Station Information

Station Name:	Blackgold	Station number:	AMS 511
Calibration Date:	March 30, 2026	Last Cal Date:	February 27, 2026
Start time (MST):	10:26	End time (MST):	13:13
Reason:	Removal		

Calibration Standards

Cal Gas Concentration:	5.139	ppm	Cal Gas Exp Date:	January 3, 2026
Cal Gas Cylinder #:	CC511397			
Removed Cal Gas Conc:	5.139	ppm	Rem Gas Exp Date:	N/A
Removed Gas Cyl #:	N/A		Diff between cyl:	
Calibrator Make/Model:	API T750		Serial Number:	282
ZAG Make/Model:	API T751H		Serial Number:	321

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:	0.998058		Backgd or Offset:	4.56	4.56
Calibration intercept:	0.120871		Coeff or Slope:	1.465	1.465

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	4922	77.8	80.0	81.4	0.984
As found Mid point	4961	38.9	40.0	40.5	0.990
As found Low point	4981	19.5	20.0	20.2	0.997
New cylinder response					

Baseline Corr As found:	81.3	Prev response:	79.93	*% change:	1.7%
Baseline Corr 2nd AF pt:	40.4	AF Slope:	1.017500	AF Intercept:	-0.059549
Baseline Corr 3rd AF pt:	20.1	AF Correlation:	0.999982	* = > +/-5% change initiates investigation	

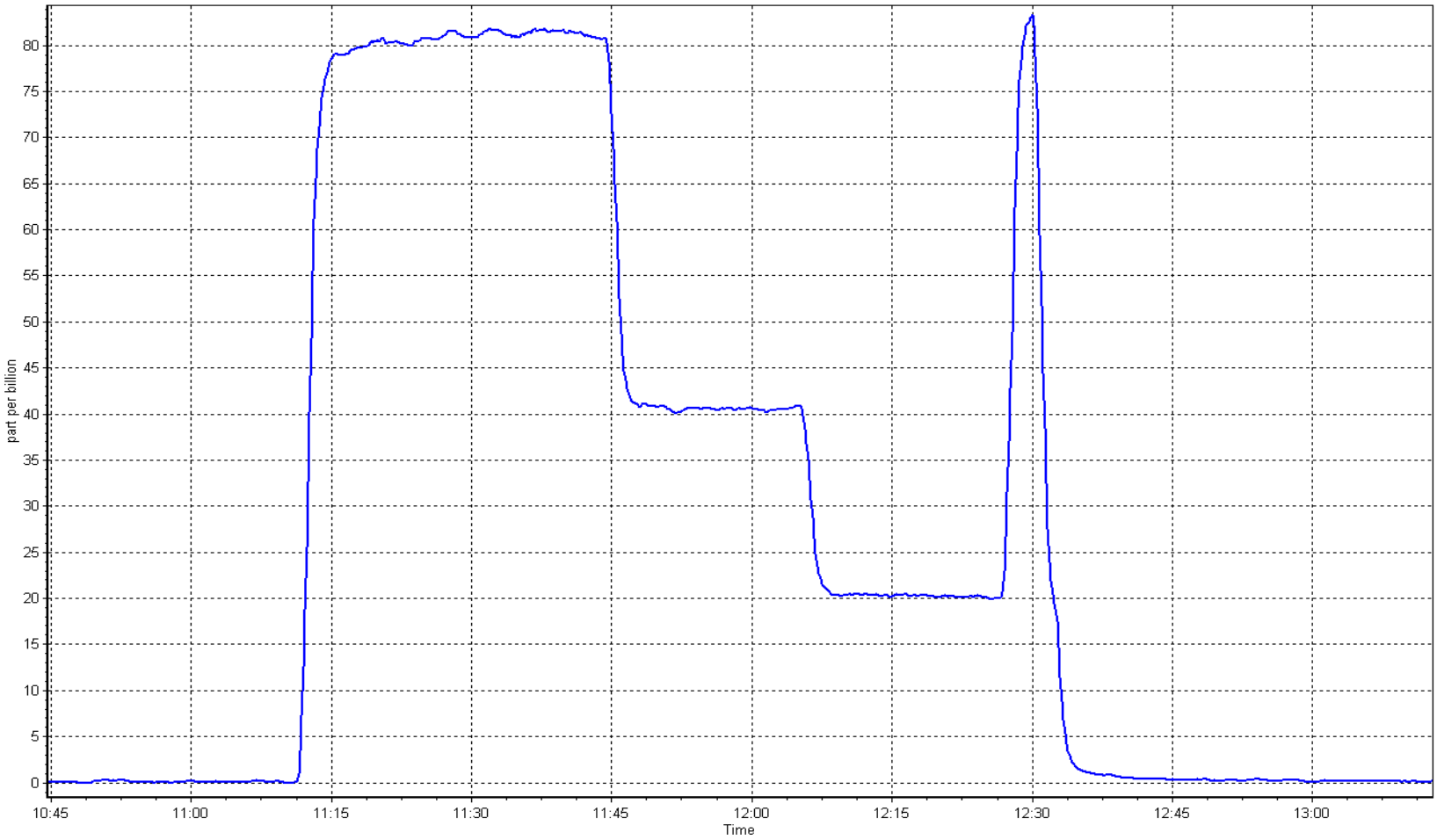
H_2S Calibration Data

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					
High point					
Mid point					
Low point					
As left zero					
As left span					
SO2 Scrubber Check	4919	81.0	810.0		----
Date of last scrubber change:				Ave Corr Factor	
Date of last converter efficiency test:					

Notes: Removals completed prior to station removal on March 31.

Calibration Performed By: Braiden Boutilier

H_2S Calibration Plot Date: March 30, 2026 Location: Blackgold



Wood Buffalo Environmental Association

THC Calibration Report

Station Information

Station Name:	Blackgold	Station number:	AMS 511
Calibration Date:	March 30, 2026	Last Cal Date:	February 23, 2026
Start time (MST):	13:13	End time (MST):	14:40
Reason:	Removal		

Calibration Standards

Gas Cert Reference:	CC303094		Cal Gas Expiry Date:	January 5, 2029	
CH4 Cal Gas Conc.	499.2	ppm	CH4 Equiv Conc.	1056.6	ppm
C3H8 Cal Gas Conc.	202.7	ppm			
Removed Gas Cert:	N/A		Removed Gas Expiry:	N/A	
Removed CH4 Conc.	499.2	ppm	CH4 Equiv Conc.	1056.6	ppm
Removed C3H8 Conc.	202.7	ppm	Diff between cyl:		
Calibrator Make/Model:	Teledyne API T750		Serial Number:	282	
ZAG Make/Model:	Teledyne API 751H		Serial Number:	321	

Analyzer Information

Analyzer make:	Thermo 51i	Analyzer serial #:	12426335705
Analyzer Range:	0 - 20 ppm		

	Start	*Finish*		*Start*	*Finish*
Calibration slope:	1.002204		Background:	0.74	0.74
Calibration intercept:	-0.055886		Coefficient:	2.114	2.114

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	81.0	17.12	18.29	0.936
As found Mid point	4959	40.5	8.56	9.14	0.937
As found Low point	4980	20.3	4.29	4.54	0.947
New cylinder response					
Baseline Corr As found:	18.29	Previous response	17.10	*% change	6.5%
Baseline Corr 2nd AF pt:	9.14	AF Slope:	1.069185	AF Intercept:	-0.017176
Baseline Corr 3rd AF pt:	4.53	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) *Limit = 0.95-1.05*
Calibrator zero					
High point					
Mid point					
Low point					
As left zero					
As left span					

Average Correction Factor

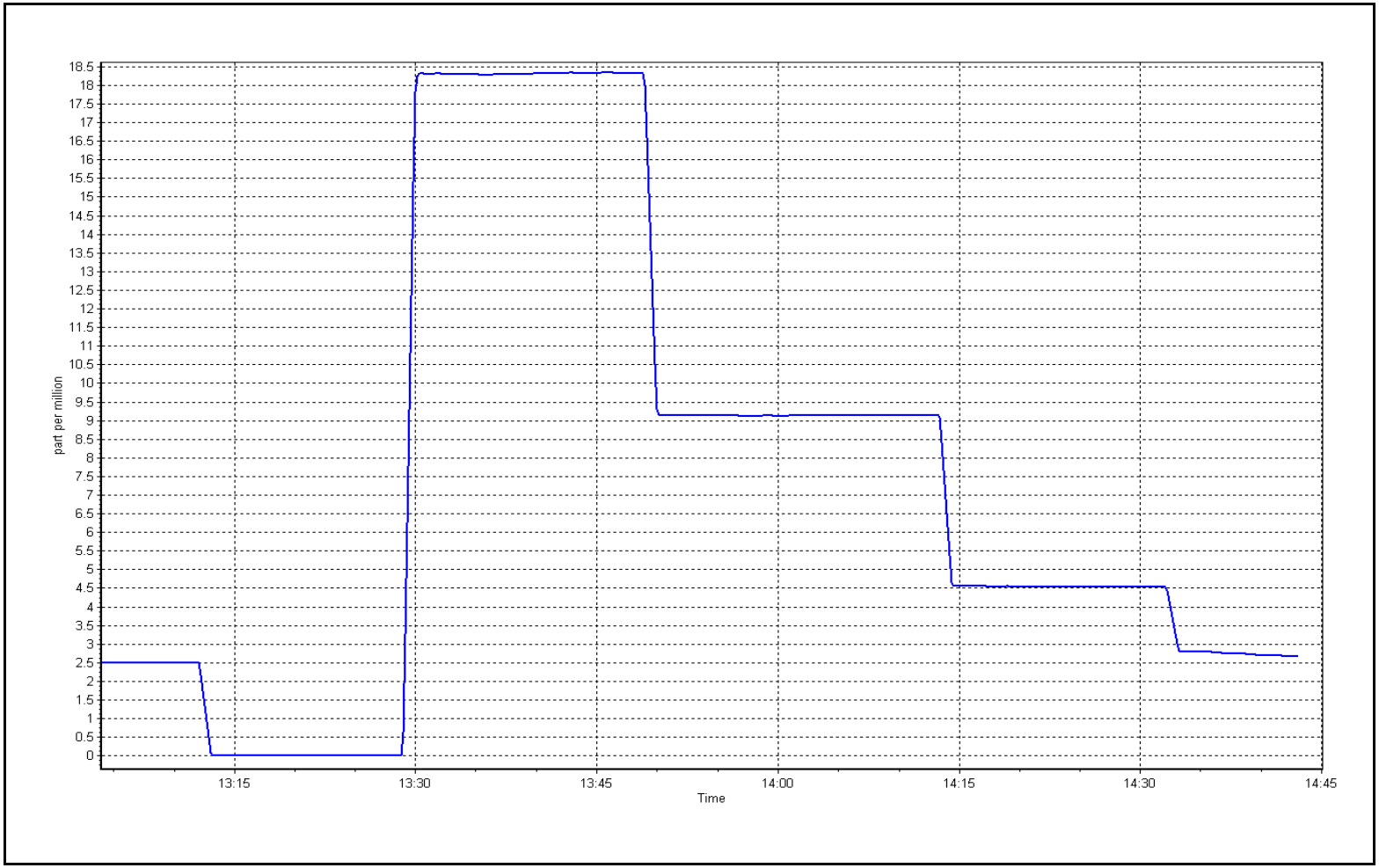
Notes: Removals completed prior to station removal on March 31.

Calibration Performed By: Braiden Boutilier

Version 03-2024

CALS_576

THC Calibration Plot Date: March 30, 2026 Location: Blackgold



Wood Buffalo Environmental Association

NO_X \ NO \ NO_2 Calibration Report

Station Information

Station Name:	Blackgold
Station number:	AMS 511
Calibration Date:	March 30, 2026
Last Cal Date:	February 19, 2026
Start time (MST):	10:26
End time (MST):	13:38
Reason:	Removal

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:	2659
ZAG make/model:	Teledyne API T701	Serial Number:	953

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	4915	84.4	800.7	800.7	0.0	756.1	754.6	1.5	1.0587	1.0608
AF Mid point	4957	42.2	400.4	400.4	0.0	377.9	375.0	2.9	1.0589	1.0671
AF Low point	4978	21.1	200.2	200.2	0.0	187.0	186.9	0.1	1.0694	1.0700
New cyl resp										

Previous Response	NO_X = 801.9 ppb	NO = 800.4 ppb
Baseline Corr 1st pt	NO_X = 756.3 ppb	NO = 754.8 ppb
Baseline Corr 2nd pt	NO_X = 378.1 ppb	NO = 375.2 ppb
Baseline Corr 3rd pt	NO_X = 187.2 ppb	NO = 187.1 ppb

* = > +/-5% change initiates investigation

*Percent Change NO_X = -6.0%

*Percent Change NO = -6.0%

As Found Statistics

As found	NO_X r^2: 0.999992	Nx Sl: 0.945330	Nx Int: -0.968
As found	NO r^2: 0.999988	NO Sl: 0.943032	NO Int: -1.288
As found	NO_2 r^2: 0.999980	NO2 Sl: 0.996056	NO_2 Int: 0.270

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	0.0	----	----
As found high GPT point	751.2	367.3	383.9	382.2	1.0044	99.6%
As found mid GPT point	751.2	557.1	194.1	194.7	0.9969	100.3%
As found low GPT point	751.2	649.5	101.7	101.2	1.0049	99.5%

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 ppb

Instrument Settings

	Start	*Finish*		*Start*	*Finish*
NO coeff or slope:	1.129	1.129	NO bkgnd or offset:	0.2	0.2
NOX coeff or slope:	1.126	1.126	NOX bkgnd or offset:	0.4	0.4
NO2 coeff or slope:	1.000	1.000	Reaction cell Press:	6.2	8.7

Calibration Statistics

	Start	*Finish*
NO_X Cal Slope:	1.003150	
NO_X Cal Offset:	-1.348011	
NO Cal Slope:	1.002193	
NO Cal Offset:	-2.087986	
NO_2 Cal Slope:	1.001288	
NO_2 Cal Offset:	0.201489	

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

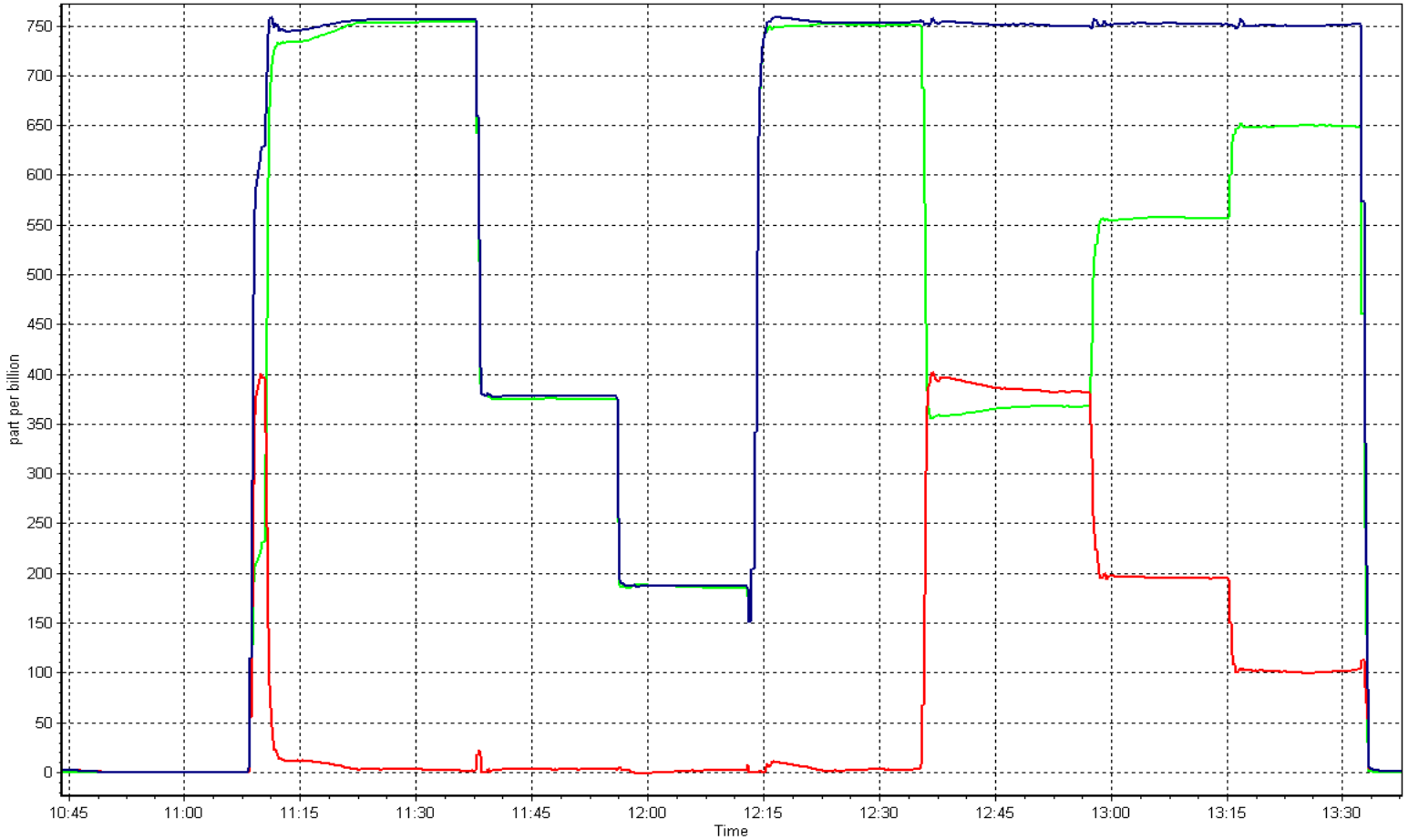
O3 Setpoint (ppb)	Indicated NO Reference concentration (ppb)	Indicated NO Drop concentration (ppb)	Calculated NO2 concentration (ppb) (Cc)	Indicated NO2 concentration (ppb) (Ic)	NO2 Correction factor (Cc/Ic) *Limit = 0.95-1.05*	Converter Efficiency *Limit = 96-104%*
Cal zero						
High GPT point						
Mid GPT point						
Low GPT point						

Average Correction Factor

Notes: Removals completed prior to station removal on March 31.

Calibration Performed By: Braiden Boutilier

NO_X Calibration Plot Date: March 30, 2026 Location: Blackgold



Wood Buffalo Environmental Association

Wind Speed/Direction Calibration Report

Station Information

Station Name:	Blackgold	Station Number:	AMS 511
Calibration Date:	April 1, 2026	Prev Cal Date:	September 26, 2025
Start Time (MST):	9:26	End Time (MST):	10:00
Tower Height (m):	10.0	Reason:	Removal

Wind Speed Calibration

Sensor make/model:	Met One 010C-1	Serial Number:	B10017
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	58.7	0.2%
800	77.8	77.8	0.1%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)	0.999999	0.999998	*≥0.9995*
Calculated slope	0.998949	0.998443	*0.98 - 1.02*
Calculated intercept	-0.013169	0.026636	*+/- 2*

Wind Direction Calibration

Sensor make/model:	Met One 020C-1	Serial Number:	D13603
As Found Declination (deg east of True North):	N/A	As Left Declination (deg east of True North):	14
Solar noon (MST):		Calc Declination*:	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	10.3	0.1%
90	89.8	-0.1%
180	179.7	-0.1%
270	271.3	0.4%
350	349.4	-0.2%

	Start	***Finish***	*Limits*
Correl Coeff (r^2)	0.999968	0.999985	*≥0.9995*
Calculated slope	0.990632	1.000213	*0.97 - 1.03*
Calculated intercept	0.873846	-0.138423	*+/- 5*

Notes: Removal as station is being moved.

Calibration Performed By: Melissa Lemay

End of Report