

Hinton Pulp
A division of West Fraser Mills Limited
Hinton, Alberta

AIR QUALITY MONITORING
February 2015
Monthly Report

Prepared by:

West Central Airshed Society
Drayton Valley, Alberta





March 2nd, 2015

Hinton Pulp
A Division of West Fraser Mills Ltd.
Mr. Phil Whitney
760 Switzer Drive
Hinton, Alberta
T7V 1V7

Dear Mr. Whitney:

**Monthly Ambient Air Quality Monitoring Report for February 2015
For Hinton Pulp – A Division of West Fraser Mills Ltd.**

Enclosed are the reports for the continuous ambient air quality monitoring station of the West Central Airshed Society network.

Network Station is AMS 906 Hinton
Identified as:

The person responsible for this reporting is Robert Scotten Executive Director of West Central Airshed Society.

The following operational notes are included as required by the Air Monitoring Directive:

1. Concentrations in excess of the Clean Air (Maximum Levels) Regulation:

There were thirteen (13) readings occurring in February 2015 in excess of the one – hour average guidelines as indicated in Air Monitoring Directive Section III.A.3. (a) for H₂S. The maximum one-hour average reading was 18.38 ppb, occurring February 3rd. There were five (5) readings in February 2015 in excess of the twenty–four hour average guidelines as indicated in Air Monitoring Directive Section III.A.3. (a) for H₂S. The maximum 24-hour average reading was 5.03 ppb.

2. Operational times less than 90 percent:

There were no operational times less than 90 percent in the month of February.

3. Monitoring Notes:

AMS 906 (Hinton)

PM_{2.5} analyzer experienced unstable operation, returning an uptime of 99.7 percent. All other analyzers and meteorological equipment returned uptimes of 100 percent.

If additional information is required please contact Patrick Andersen at (780) 514-3533 or (403) 505-1041.

Sincerely,



Robert Scotten
Executive Director



Patrick Andersen
Environmental Specialist

Forest Products Industry Monthly Report Summary

Hinton
Plant Name/Location

Hinton Pulp - A Division of West Fraser Mills Ltd.
Company

License Number	Report Date	
	Year	Month
	2015	FEBRUARY

TOTAL EMISSIONS FOR MONTH (IN TONNES)

POLLUTANT	INCINERATOR STACK	FLARE	MISCELLANEOUS
SO ₂			

"HOURS" OF EXCEEDED STACK LICENSED LIMITS (CEM)

POLLUTANT	STACK TYPE	1-HR AVG CONCENTRATION	1-HR AVG MASS EMISSION	24-HR AVG MASS EMISSION	STACK TOP TEMP.	% TIME STACK MONITOR OPERATIONAL
SO ₂						

STATIC AMBIENT MONITORING

PARAMETER	NO. OF STATIONS	PEAK READING	AVG. OF NETWORK	NO. OF STATIONS OVER GUIDELINES
T.S.				
H ₂ S				

CONTINUOUS AMBIENT MONITORING

PARAMETER	STATION NUMBER	% TIME OPERATIONAL	1-HR AVERAGE		24-HR AVERAGE	
			MAXIMUM CONCENTRATION (ppm)	NO. READINGS > REGULATIONS	MAXIMUM CONCENTRATION (ppm)	NO. READINGS > REGULATIONS
Wind	906	100.0	n/a	n/a	n/a	n/a
TRS	906	100.0	0.018	13	0.005	5
PM _{2.5}	906	99.7	34.7 µg/m ³	0	15.83 µg/m ³	0

18.38 5.03

SIGNATURE OF COMPANY REPRESENTATIVE

FOR ALBERTA ENVIRONMENT USE ONLY

WEST CENTRAL AIRSHED SOCIETY

**CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT
CONTINUOUS AIR QUALITY**

**AMS 906
HINTON
FEBRUARY 2015**

Operations and Data Collection by:
West Central Airshed Society
Drayton Valley, Alberta

QA/QC, Data Validation and Reporting by:
West Central Airshed Society
Drayton Valley, Alberta

Summary Report

Continuous air quality/meteorological monitoring measurements

West Central Airshed Society

Hinton Pulp / Hinton Station 906												24 Hour Average Max (ppm)
February 2015												
Parameter	Calibration Hours	Number of Data	Percent Uptime	Mean	Min	Max	P10	Q1	Percentile Median	Q3	P90	
TRS (ppb)	33	639	100.0	1.4	0.0	18.0	0.2	0.3	0.4	1.1	4.3	0.005
SO ₂ (ppb)	33	639	100.0	0.2	0.0	3.8	0.0	0.0	0.1	0.3	0.5	0.001
O ₃ (ppb)	34	638	100.0	20.3	0.2	48.5	1.7	8.4	21.1	30.3	38.5	0.037
NO (ppb)	34	638	100.0	8.8	0.0	174.5	0.1	0.9	2.6	7.2	23.0	-
NO ₂ (ppb)	34	638	100.0	11.5	0.3	49.1	3.0	5.9	9.8	14.8	22.2	0.022
NO _x (ppb)	34	638	100.0	20.3	0.3	220.9	3.4	7.4	12.5	22.3	48.3	-
Particulate Matter 2.5 microns (μ/m ³)	0	670	99.7	7.4	0.0	34.7	2.9	4.3	6.4	10.0	13.5	15.83 ug/m3
Wind Speed (kph)	0	672	100.0	4.1	0.1	14.7	0.7	1.5	3.4	6.1	8.2	-
Temperature (°C)	0	672	100.0	-5.8	-21.0	10.3	-16.3	-11.9	-5.9	0.9	4.4	-
Relative Humidity (%)	0	672	100.0	69.6	25.2	91.5	42.4	59.9	75.9	81.3	86.1	-
Std Dev Wind Direction (deg)	0	672	100.0	43.0	17.4	106.0	21.8	26.7	35.5	53.6	81.2	-
Std Dev Wind Speed (kph)	0	672	100.0	2.4	0.3	6.4	1.1	1.4	2.2	3.0	4.3	-



WCAS - Hinton
Summary of Hourly Averages

Total Reduced Sulphur (TRS) - ppb
February 2015

Maximum Value: 18.38 ppb on Feb 3 15:00		Maximum Daily Average: 5.03 ppb on Feb 16		Hours in Service: 672																						
Minimum Value: 0 ppb on Feb 24 15:00		Minimum Daily Average: 0.25 ppb on Feb 25		Hours of Data: 639																						
Maximum Diurnal Average: 2.31 ppb at hour 6		Minimum Diurnal Average: 0.56 ppb at hour 17		Hours of Missing Data: 33																						
Monthly Average: 1.436 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.4 Q ₃ = 1.1 P ₉₀ = 4.3 P ₉₉ = 13.5		Hours of Calibration: 33																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	2	2	3	Z	6	6	5	7	10	17	10	9	8	10	11	3	1	0	0	0	0	0	0	0	4.87	16.88
2-Feb	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.28	0.34
3-Feb	0	0	0	Z	0	0	1	1	1	1	1	8	12	5	18	6	2	8	6	4	2	2	4	6	3.96	18.38
4-Feb	4	9	16	Z	10	10	7	6	6	5	10	2	0	1	5	5	4	7	2	1	2	1	1	1	4.93	16.38
5-Feb	1	1	1	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.35	1.14
6-Feb	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.30	0.36
7-Feb	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.35	0.42
8-Feb	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.33	0.38
9-Feb	0	0	0	Z	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0.42	0.57
10-Feb	0	0	0	Z	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.41	0.52
11-Feb	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.43	0.58
12-Feb	0	0	0	Z	0	0	1	1	1	1	4	3	2	2	1	0	1	1	1	1	1	1	1	1	1.02	4.03
13-Feb	0	0	0	Z	1	2	2	1	2	2	4	0	1	1	1	1	0	0	0	0	0	0	0	0	0.90	4.27
14-Feb	0	1	0	Z	1	2	2	3	5	6	0	0	2	2	0	0	4	6	6	2	2	1	2	2	2.19	5.97
15-Feb	5	6	14	Z	6	2	3	3	6	13	9	7	4	2	1	0	0	0	0	0	0	3	7	5	4.11	13.97
16-Feb	3	10	12	Z	7	12	5	8	8	5	7	6	2	0	1	0	0	0	0	1	1	1	1	1	5.03	13.74
17-Feb	7	4	2	Z	1	1	3	6	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.27	6.64
18-Feb	0	1	1	Z	1	1	1	1	1	0	1	0	0	0	0	C	C	C	C	C	1	0	1	0	0.48	1.03
19-Feb	0	0	1	Z	2	2	3	3	3	1	2	0	1	2	1	1	1	0	0	0	0	1	0	0	1.12	3.23
20-Feb	0	0	0	Z	3	1	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.52	2.71
21-Feb	0	0	0	Z	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.57	3.00
22-Feb	1	1	1	Z	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.27	0.95
23-Feb	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3	2	0.47	2.51
24-Feb	1	0	0	Z	3	2	2	3	3	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0.89	3.18
25-Feb	1	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.25	0.60
26-Feb	0	0	0	Z	0	0	0	0	0	0	0	2	3	2	1	1	0	0	0	0	0	0	0	0	0.62	2.75
27-Feb	0	0	0	Z	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	0.46	1.31
28-Feb	4	9	4	Z	8	18	12	3	1	2	3	4	1	0	0	0	0	0	0	0	1	1	1	1	3.16	17.85
1.19 1.76 2.11 -- 1.93 2.31 1.92 1.78 1.83 2.24 2.04 1.69 1.44 1.15 1.66 0.84 0.56 0.94 0.79 0.71 0.63 0.70 1.30 1.36																								Diurnal Average		
6.64 10.29 16.38 -- 9.62 17.85 12.28 8.16 10.15 16.88 10.20 9.43 11.52 9.73 18.38 6.04 4.33 7.53 6.48 5.69 2.38 2.70 11.88 13.74																								Diurnal Maximum		
Z - zerospan C - Calibration																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										



WCAS - Hinton
Summary of Hourly Averages

Sulphur Dioxide (SO₂) - ppb
February 2015

Maximum Value: 3.75 ppb on Feb 12 15:00																				Maximum Daily Average: 0.79 ppb on Feb 12					Hours in Service: 672																								
Minimum Value: 0.0 ppb on Feb 1 01:00																				Minimum Daily Average: 0.00 ppb on Feb 20					Hours of Data: 639																								
Maximum Diurnal Average: 0.50 ppb at hour 15																				Minimum Diurnal Average: 0.11 ppb at hour 5					Hours of Missing Data: 33																								
Monthly Average: 0.230 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 1.6					Hours of Calibration: 33																								
																									Percent Operational Time: 100.0																								
Day	Hourly Period Ending At																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	0.0	0.1	0.1	Z	0.0	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.08	0.25																							
2-Feb	0.0	0.1	0.1	Z	0.0	0.0	0.0	0.1	0.2	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.3	0.2	0.2	0.1	0.2	0.1	0.25	0.59																							
3-Feb	0.2	0.1	0.1	Z	0.1	0.1	0.3	0.7	0.6	0.5	0.3	0.3	0.5	0.3	0.3	0.3	0.1	1.0	1.3	0.9	0.5	0.4	0.1	0.2	0.40	1.27																							
4-Feb	0.0	0.0	0.1	Z	0.3	0.4	0.5	0.8	0.7	0.2	0.0	0.0	0.0	0.3	0.8	1.0	0.2	0.0	0.2	0.1	0.1	0.1	0.0	0.1	0.26	0.96																							
5-Feb	0.2	0.1	0.2	Z	0.0	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.5	0.4	0.3	0.2	0.2	0.4	0.4	0.26	0.61																							
6-Feb	0.5	0.6	0.6	Z	0.6	0.5	0.4	0.3	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.3	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.36	0.62																							
7-Feb	0.1	0.2	0.1	Z	0.1	0.2	0.2	0.3	0.2	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.1	0.2	0.23	0.39																							
8-Feb	0.1	0.0	0.0	Z	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.6	1.4	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.2	0.1	0.33	1.41																							
9-Feb	0.1	0.1	0.1	Z	0.2	0.3	0.6	0.5	0.7	0.9	0.9	0.9	0.8	1.0	1.2	1.0	0.8	0.7	0.9	0.7	0.5	0.4	0.3	0.3	0.60	1.20																							
10-Feb	0.2	0.1	0.1	Z	0.1	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.13	0.24																							
11-Feb	0.2	0.2	0.2	Z	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.19	0.25																							
12-Feb	0.2	0.2	0.2	Z	0.2	0.2	0.2	0.3	0.3	0.4	0.6	1.4	2.4	3.3	3.8	0.7	0.4	0.5	0.5	0.6	0.3	0.6	0.6	0.3	0.79	3.75																							
13-Feb	0.3	0.3	0.2	Z	0.2	0.2	0.4	0.4	0.5	0.5	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.23	0.52																							
14-Feb	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.1	1.5	0.3	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.15	1.47																							
15-Feb	0.1	0.1	0.1	Z	0.2	0.3	0.3	0.5	0.3	0.5	0.5	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.16	0.51																							
16-Feb	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.9	0.3	0.3	0.1	0.1	0.1	0.3	0.5	0.4	0.2	0.1	0.15	0.85																							
17-Feb	0.1	0.1	0.2	Z	0.2	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.20																							
18-Feb	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	C	0.0	0.1	0.3	0.2	0.3	0.3	1.3	0.1	0.15	1.34																							
19-Feb	0.0	0.0	0.4	Z	0.2	0.1	0.1	0.1	0.0	0.2	0.3	0.2	0.9	1.4	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	1.38																							
20-Feb	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00																							
21-Feb	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.3	0.2	0.3	0.1	0.2	0.08	0.33																							
22-Feb	0.1	0.0	0.1	Z	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.09	0.19																							
23-Feb	0.2	0.1	0.2	Z	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.09	0.19																							
24-Feb	0.0	0.1	0.4	Z	0.2	0.2	0.2	0.3	0.2	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.3	0.1	0.14	0.63																							
25-Feb	0.5	0.1	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.1	0.1	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.3	0.3	0.5	0.14	0.48																							
26-Feb	0.5	0.5	0.3	Z	0.1	0.1	0.1	0.0	0.1	0.1	0.5	3.5	1.0	1.2	1.8	2.0	0.5	0.3	0.5	0.3	0.2	0.2	0.1	0.0	0.60	3.50																							
27-Feb	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.1	0.9	0.8	0.2	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.14	0.89																							
28-Feb	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.1	0.4	0.5	0.6	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.17	0.62																							
																								0.13	0.11	0.14	--	0.11	0.11	0.15	0.19	0.19	0.21	0.24	0.40	0.39	0.49	0.50	0.36	0.20	0.22	0.23	0.21	0.20	0.20	0.21	0.14	Diurnal Average	
																								0.54	0.62	0.57	--	0.57	0.46	0.59	0.79	0.74	0.87	0.92	3.50	2.45	3.29	3.75	1.96	0.76	1.01	1.27	0.94	0.49	0.63	1.34	0.48	Diurnal Maximum	
Z - zerospan																								C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb																																																	



WCAS - Hinton
Summary of Hourly Averages

Ozone (O₃) - ppb
February 2015

Maximum Value: 48.47 ppb on Feb 24 14:00		Maximum Daily Average: 36.54 ppb on Feb 22		Hours in Service: 672																						
Minimum Value: 0.2 ppb on Feb 5 03:00		Minimum Daily Average: 5.57 ppb on Feb 13		Hours of Data: 638																						
Maximum Diurnal Average: 29.33 ppb at hour 15		Minimum Diurnal Average: 14.12 ppb at hour 8		Hours of Missing Data: 34																						
Monthly Average: 20.264 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 1.7 Q ₁ = 8.4 Median = 21.1 Q ₃ = 30.3 P ₉₀ = 38.5 P ₉₉ = 46.2		Hours of Calibration: 34																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	2.5	1.7	1.8	Z	0.9	0.8	0.7	0.9	1.2	2.3	4.2	6.7	9.5	13.2	13.6	14.9	11.7	10.5	16.1	13.9	13.3	14.6	23.8	31.7	9.15	31.71
2-Feb	32.6	30.9	28.0	Z	28.7	28.4	25.5	22.6	20.8	23.1	18.5	19.2	20.7	21.1	20.5	18.7	16.6	13.2	14.5	12.2	9.5	9.8	11.5	12.9	19.97	32.56
3-Feb	17.0	17.1	15.3	Z	17.4	12.9	2.1	1.1	1.3	3.0	5.9	9.2	10.6	14.6	15.5	20.8	22.5	2.6	1.3	1.3	1.5	1.2	1.2	1.5	8.56	22.45
4-Feb	1.1	1.2	1.2	Z	1.1	1.4	1.8	1.7	1.7	6.3	13.7	30.3	33.4	34.5	35.7	36.1	38.5	35.9	9.5	13.5	15.1	11.7	18.7	5.2	15.18	38.47
5-Feb	2.8	0.5	0.2	Z	6.0	15.8	21.1	22.7	27.9	31.6	32.0	33.6	31.8	32.2	31.3	29.9	29.1	27.7	28.6	30.0	29.4	28.8	28.0	26.4	23.80	33.59
6-Feb	24.3	22.7	23.9	Z	25.3	25.5	25.7	25.3	25.4	26.1	27.2	27.1	29.3	29.0	29.7	29.3	28.3	27.6	25.4	23.9	24.6	23.1	24.9	22.6	25.91	29.70
7-Feb	21.6	21.2	22.5	Z	23.8	22.5	22.1	19.2	19.3	21.4	22.4	20.4	21.7	22.1	20.8	19.4	16.7	16.6	17.7	19.7	22.1	20.3	18.0	17.3	20.38	23.75
8-Feb	16.5	12.2	13.0	Z	15.8	16.1	17.1	16.1	9.1	12.7	16.7	19.6	21.2	22.3	23.3	23.4	22.8	20.7	21.8	20.5	18.4	16.3	8.7	4.6	16.92	23.44
9-Feb	2.5	3.1	2.8	Z	2.0	4.4	5.4	4.5	8.1	11.0	14.5	16.4	13.6	16.2	16.6	13.1	14.5	13.8	12.5	14.5	12.6	11.7	11.9	11.1	10.29	16.64
10-Feb	9.1	7.7	6.7	Z	6.7	5.4	3.1	4.5	4.5	8.1	10.5	11.4	12.0	11.1	13.1	12.2	11.0	9.4	7.8	9.0	8.4	11.4	9.6	6.3	8.65	13.06
11-Feb	5.7	6.6	5.4	Z	8.6	8.0	8.1	9.1	9.1	9.1	11.3	11.7	13.7	13.9	12.0	9.9	10.8	7.4	5.4	4.2	1.9	1.2	1.3	2.0	7.67	13.90
12-Feb	1.4	1.7	2.2	Z	1.0	0.7	0.4	0.4	0.9	2.8	26.4	34.0	31.9	32.3	30.5	25.5	15.1	7.5	1.6	0.7	0.6	0.8	1.0	0.5	9.57	33.97
13-Feb	1.2	1.1	0.4	Z	4.4	1.7	2.0	0.5	0.9	1.5	16.5	28.7	10.9	6.5	4.9	3.1	6.1	3.7	6.2	7.0	3.4	6.5	6.0	5.1	5.57	28.73
14-Feb	1.3	14.2	29.1	Z	23.3	17.9	15.9	13.2	21.7	23.1	26.9	31.5	35.9	37.5	39.8	43.9	44.8	41.9	31.4	24.3	5.0	1.1	1.5	1.8	22.92	44.84
15-Feb	2.9	1.5	3.5	Z	0.8	0.9	0.7	0.8	1.4	2.3	3.6	8.2	9.7	10.5	28.4	33.7	29.5	28.8	26.4	25.4	26.0	19.7	15.7	5.2	12.42	33.68
16-Feb	3.3	3.9	6.2	Z	6.4	7.3	5.6	4.5	5.3	12.4	20.4	27.4	27.2	33.3	34.2	30.4	32.7	28.1	11.5	2.3	1.4	1.7	3.5	8.5	13.80	34.21
17-Feb	1.3	0.9	1.0	Z	0.9	1.6	2.8	10.7	16.9	23.4	27.2	30.7	32.7	35.0	36.6	36.4	39.1	38.0	36.4	33.3	31.2	33.7	33.2	31.8	23.26	39.14
18-Feb	31.6	29.8	30.2	Z	20.4	19.0	8.4	10.2	6.8	16.2	22.8	C	C	C	C	C	C	14.8	4.2	1.6	12.5	36.0	35.8	42.8	--	42.83
19-Feb	37.1	25.8	34.1	Z	36.2	35.9	33.7	21.0	15.3	20.5	38.0	40.9	37.2	36.7	40.9	40.8	44.1	46.3	43.6	41.3	33.6	12.0	17.7	28.1	33.08	46.35
20-Feb	40.0	36.2	28.5	Z	33.7	30.3	21.6	23.1	21.7	15.1	30.0	36.0	38.1	40.1	39.4	40.4	39.2	34.6	33.9	35.2	39.1	36.4	33.0	30.9	32.89	40.39
21-Feb	30.3	24.1	19.5	Z	35.7	24.7	23.6	24.4	29.6	27.3	30.4	31.6	34.0	35.2	36.1	35.1	28.8	25.8	14.4	5.5	1.9	2.3	3.1	1.6	22.84	36.10
22-Feb	3.3	5.9	11.6	Z	31.9	39.7	40.5	39.5	40.4	39.7	40.3	41.9	42.6	43.2	43.4	43.8	42.7	41.9	41.5	42.3	42.1	41.7	39.8	40.7	36.54	43.77
23-Feb	40.4	39.6	38.5	Z	38.5	37.8	37.8	37.4	36.9	38.0	38.5	40.1	40.8	41.2	40.7	40.0	38.8	35.5	33.5	35.4	27.1	12.1	29.9	28.2	35.94	41.25
24-Feb	29.7	35.5	35.7	Z	27.3	25.7	18.7	3.4	9.5	28.1	15.5	33.8	47.5	48.5	47.4	45.9	46.4	45.8	44.5	42.7	41.2	40.6	36.4	37.6	34.24	48.47
25-Feb	37.7	30.9	28.8	Z	29.8	28.8	29.1	24.8	22.4	25.5	29.9	26.9	27.1	29.0	28.8	27.5	27.7	27.9	26.4	27.4	28.1	26.9	27.0	25.1	27.98	37.67
26-Feb	24.3	26.1	27.3	Z	25.5	22.3	21.6	21.2	20.4	21.0	24.7	24.3	27.1	29.7	30.2	26.2	22.4	22.0	23.9	23.7	21.6	22.8	27.3	25.3	24.39	30.20
27-Feb	23.0	21.3	21.9	Z	26.8	27.7	20.2	10.6	7.7	19.7	28.9	27.2	29.8	31.0	32.2	35.2	36.1	38.4	29.2	3.8	3.7	5.3	4.4	8.9	21.43	38.36
28-Feb	10.1	14.8	15.7	Z	12.3	16.2	15.2	22.0	25.0	32.2	31.5	32.5	34.9	44.9	46.2	46.3	46.1	43.4	28.1	8.3	5.8	3.5	3.8	8.8	23.81	46.28
																								Diurnal Average		
																								Diurnal Maximum		
16.24 15.65 16.24 -- 17.55 17.11 15.38 14.12 14.69 17.99 22.44 25.97 26.85 28.33 29.33 28.96 28.22 25.36 21.33 18.67 17.18 16.19 17.02 16.88																										
40.40 39.58 38.53 -- 38.47 39.68 40.46 39.53 40.40 39.75 40.32 41.90 47.55 48.47 47.44 46.28 46.38 46.35 44.48 42.67 42.11 41.67 39.78 42.83																										
Z - zerospan C - Calibration																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82.5 ppb 24-hr -- ppb																										



WCAS - Hinton
Summary of Hourly Averages

Nitrogen Oxide (NO) - ppb
February 2015

Maximum Value: 174.49 ppb on Feb 3 19:00 Maximum Daily Average: 47.97 ppb on Feb 3		Hours in Service: 672 Hours of Data: 638 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0																									
Minimum Value: 0.0 ppb on Feb 14 18:00 Maximum Diurnal Average: 17.65 ppb at hour 8 Monthly Average: 8.839 ppb		Minimum Daily Average: 0.69 ppb on Feb 22 Minimum Diurnal Average: 2.83 ppb at hour 2 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.9 Median = 2.6 Q ₃ = 7.2 P ₉₀ = 23.0 P ₉₉ = 54.4																									
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	1.6	2.1	1.2	Z	7.8	7.3	13.9	28.3	32.7	39.2	33.4	20.6	20.2	13.5	11.3	7.0	6.9	7.9	2.1	2.6	1.4	1.5	0.5	0.2	11.44	39.18	
2-Feb	0.1	0.2	1.0	Z	0.8	1.5	1.8	3.1	4.8	2.3	6.5	6.1	6.5	6.8	7.1	7.6	6.9	6.8	5.0	3.9	3.7	1.2	0.7	0.5	3.69	7.63	
3-Feb	0.2	0.2	1.3	Z	0.1	1.3	25.1	75.7	77.2	61.9	46.9	38.8	56.6	20.7	19.3	6.8	3.1	143.0	174.5	129.2	84.2	69.3	31.2	36.8	47.97	174.49	
4-Feb	19.2	9.9	18.1	Z	48.7	69.5	86.0	122.0	122.3	46.6	27.9	3.5	3.3	3.7	3.7	2.3	0.4	0.7	23.7	10.0	11.2	7.0	1.1	14.2	28.49	122.27	
5-Feb	22.0	17.8	27.8	Z	4.4	3.0	1.7	2.8	4.2	2.7	3.0	2.8	3.5	3.0	4.8	3.5	4.3	4.5	3.4	1.6	1.3	1.0	0.8	0.6	5.42	27.83	
6-Feb	0.7	1.2	1.3	Z	0.5	1.2	2.0	2.9	2.1	3.2	3.2	5.9	3.1	3.9	2.9	3.2	3.2	2.9	4.3	3.3	2.1	2.0	0.7	1.4	2.49	5.89	
7-Feb	1.1	0.9	1.5	Z	0.4	1.5	1.7	4.0	4.9	5.1	6.6	10.0	8.7	8.0	8.7	9.6	7.2	5.2	3.3	2.6	1.5	1.3	1.2	0.9	4.17	10.01	
8-Feb	0.6	2.8	0.7	Z	0.9	1.6	1.9	2.6	6.3	6.0	5.5	5.4	5.8	5.9	4.8	4.6	4.2	3.5	2.3	2.0	1.1	1.4	1.9	1.9	3.20	6.31	
9-Feb	6.1	2.7	5.1	Z	5.1	4.6	7.1	7.0	3.1	11.4	11.7	9.5	15.6	9.6	9.2	16.8	7.2	6.3	5.7	2.6	2.9	3.2	0.8	1.1	6.72	16.78	
10-Feb	1.4	1.1	1.2	Z	0.9	0.6	5.9	4.6	7.2	6.1	8.0	10.4	10.1	12.6	7.5	8.9	9.8	9.2	5.6	4.2	2.9	1.4	0.7	1.2	5.28	12.57	
11-Feb	1.4	0.5	1.1	Z	1.8	4.1	4.8	3.0	4.7	11.2	9.0	15.0	10.4	8.7	9.6	12.6	6.9	6.6	8.3	6.4	20.0	12.8	8.8	3.5	7.44	20.05	
12-Feb	3.0	2.0	2.4	Z	5.8	12.5	21.2	35.4	37.7	38.1	5.1	1.4	2.8	2.5	2.3	6.9	19.4	38.0	44.8	59.7	26.4	60.6	58.4	28.6	22.39	60.65	
13-Feb	16.8	12.8	17.9	Z	16.8	24.3	42.6	56.9	76.1	70.2	11.6	1.6	25.7	29.7	33.3	49.7	14.7	18.3	6.2	3.6	9.1	2.0	2.0	1.5	23.63	76.09	
14-Feb	7.0	0.6	0.9	Z	0.1	0.1	0.2	4.5	0.5	1.2	2.9	2.6	0.4	1.7	0.5	0.1	0.0	0.0	0.1	1.6	17.1	26.4	17.3	18.6	4.54	26.45	
15-Feb	8.6	3.8	5.3	Z	17.5	43.2	44.7	69.6	43.0	66.0	66.4	31.3	25.3	15.4	5.2	2.6	3.9	3.3	6.2	2.6	1.6	0.0	0.2	5.2	20.47	69.58	
16-Feb	1.3	1.2	1.4	Z	1.0	0.9	1.7	3.6	2.3	1.1	1.3	1.9	3.1	2.4	1.4	3.2	2.0	2.0	11.2	35.3	51.6	51.6	14.7	1.4	8.59	51.64	
17-Feb	11.9	13.9	26.0	Z	15.9	6.8	5.5	1.3	1.8	1.2	1.6	1.3	1.2	1.1	1.0	0.9	0.6	0.4	0.4	0.1	0.1	0.2	0.2	0.0	4.06	25.96	
18-Feb	0.1	0.0	0.0	Z	0.1	0.1	2.9	1.8	2.6	1.6	1.2	C	C	C	C	C	C	10.1	19.3	22.0	31.3	0.1	0.2	0.1	--	31.28	
19-Feb	0.1	1.2	0.1	Z	0.1	0.1	0.1	13.9	7.0	20.2	1.3	1.3	1.9	1.8	0.9	0.2	0.0	0.0	0.0	0.0	0.8	4.3	3.7	0.7	2.60	20.25	
20-Feb	0.0	0.5	2.3	Z	0.1	0.3	1.0	0.9	1.0	3.0	2.6	1.5	2.2	1.7	3.3	2.7	1.0	2.0	1.2	0.6	0.4	0.4	0.2	0.1	1.25	3.26	
21-Feb	0.1	0.7	0.9	Z	0.1	0.3	1.6	3.0	1.4	3.0	2.3	2.7	3.6	1.8	1.1	2.5	6.8	3.7	9.7	21.8	30.5	23.2	12.2	17.4	6.54	30.49	
22-Feb	5.1	1.7	0.3	Z	0.1	0.1	0.1	0.1	0.3	0.5	1.0	0.8	0.8	1.0	0.9	0.8	0.7	0.5	0.4	0.2	0.1	0.2	0.2	0.1	0.69	5.13	
23-Feb	0.0	0.0	0.1	Z	0.1	0.1	0.6	0.6	0.6	0.6	1.1	0.9	0.8	0.8	1.0	1.2	1.3	2.2	1.2	0.4	0.5	7.8	0.2	1.2	1.01	7.82	
24-Feb	2.6	0.2	0.2	Z	0.3	2.5	19.3	35.7	14.9	5.3	19.1	3.5	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	4.54	35.69	
25-Feb	0.1	0.3	0.4	Z	0.3	0.7	1.0	1.6	4.0	3.3	3.8	5.4	4.9	5.6	5.9	6.4	3.6	2.8	2.9	2.1	1.4	0.5	0.4	0.4	2.52	6.41	
26-Feb	0.2	0.1	0.7	Z	1.0	0.9	1.1	1.4	4.7	4.3	4.4	6.5	5.2	2.6	2.7	6.7	6.7	5.6	1.9	0.7	1.2	0.9	0.3	1.1	2.66	6.68	
27-Feb	0.2	0.6	1.2	Z	0.2	0.0	1.0	8.1	9.8	7.6	2.2	4.5	2.6	2.1	1.9	2.1	2.0	0.1	5.9	26.1	17.5	13.1	6.9	2.1	5.12	26.05	
28-Feb	0.6	0.2	0.2	Z	0.0	0.0	0.2	0.2	1.3	0.8	2.4	3.1	4.0	0.2	0.1	0.1	0.1	1.0	7.6	16.4	23.2	23.2	8.4	3.3	4.20	23.16	
		4.00	2.83	4.31	--	4.68	6.76	10.60	17.65	17.08	15.14	10.44	7.34	8.46	6.17	5.57	6.25	4.56	10.24	12.76	12.92	12.32	11.32	6.22	5.16	Diurnal Average	
		21.96	17.83	27.83	--	48.74	69.54	86.03	121.98	122.27	70.23	66.38	38.76	56.58	29.66	33.25	49.66	19.36	143.02	174.49	129.21	84.17	69.33	58.39	36.83	Diurnal Maximum	
Z - zerospan C - Calibration																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ppb 24-hr --- ppb																											



WCAS - Hinton
Summary of Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
February 2015

Maximum Value: 49.11 ppb on Feb 3 19:00		Maximum Daily Average: 22.40 ppb on Feb 3		Hours in Service: 672																																													
Minimum Value: 0.3 ppb on Feb 24 17:00		Minimum Daily Average: 3.76 ppb on Feb 22		Hours of Data: 638																																													
Maximum Diurnal Average: 16.01 ppb at hour 20		Minimum Diurnal Average: 7.30 ppb at hour 15		Hours of Missing Data: 34																																													
Monthly Average: 11.521 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 3.0 Q ₁ = 5.9 Median = 9.8 Q ₃ = 14.8 P ₉₀ = 22.2 P ₉₉ = 36.9		Hours of Calibration: 34																																													
				Percent Operational Time: 100.0																																													
Day	Hourly Period Ending At																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	10.1	10.7	10.3	Z	12.3	11.5	11.6	14.2	14.0	16.3	14.1	12.8	13.7	14.0	15.8	12.4	13.7	16.8	9.2	9.3	9.9	10.4	6.9	3.6	11.90	16.85																							
2-Feb	2.9	3.3	5.3	Z	5.2	6.6	8.0	10.5	11.5	7.0	12.0	10.9	8.1	8.6	9.0	11.0	13.4	17.8	12.4	12.2	15.2	13.4	11.1	9.4	9.76	17.75																							
3-Feb	6.9	6.1	8.1	Z	5.1	10.2	23.3	30.9	29.7	25.5	19.3	16.7	23.1	12.0	15.2	9.8	9.4	45.0	49.1	43.1	35.4	32.5	28.2	30.7	22.40	49.11																							
4-Feb	23.6	18.1	18.1	Z	27.5	31.7	37.1	44.7	43.0	28.6	22.2	6.5	4.6	6.5	8.3	6.8	2.2	4.0	36.3	28.7	25.0	19.7	8.5	22.9	20.64	44.69																							
5-Feb	24.9	25.5	26.0	Z	10.4	7.6	7.9	11.3	10.2	8.0	9.5	7.6	9.3	8.5	10.0	9.8	10.0	10.3	9.8	7.7	7.2	7.3	7.8	8.3	11.08	25.95																							
6-Feb	10.0	11.4	9.9	Z	7.8	7.6	7.8	8.1	8.6	8.3	7.4	8.1	6.2	6.5	5.6	5.8	7.1	7.9	10.6	11.9	10.5	11.7	8.7	11.3	8.65	11.89																							
7-Feb	10.2	10.5	9.5	Z	7.1	9.2	9.6	13.2	13.5	9.9	9.2	10.4	8.5	7.7	8.6	9.4	12.5	13.3	13.7	11.6	8.7	10.0	10.3	10.2	10.29	13.66																							
8-Feb	9.7	13.5	11.0	Z	9.4	9.9	9.8	10.2	17.1	13.1	8.4	6.1	5.6	5.6	5.0	6.1	8.4	10.5	8.6	9.7	11.2	12.8	19.9	20.7	10.54	20.72																							
9-Feb	22.0	20.8	19.2	Z	18.7	17.7	20.1	22.7	19.1	17.8	14.5	12.6	16.9	13.3	12.4	17.6	15.6	16.0	18.4	14.3	15.8	15.7	13.7	12.9	16.86	22.72																							
10-Feb	13.9	14.8	14.7	Z	13.4	15.0	17.9	17.0	17.1	12.8	10.3	9.8	9.6	12.1	9.6	10.6	11.9	14.1	15.6	14.5	13.9	10.5	11.7	15.0	13.29	17.93																							
11-Feb	15.9	13.9	14.8	Z	11.5	12.5	12.3	10.8	11.3	12.5	9.6	10.2	8.7	8.4	10.4	12.9	11.7	14.8	16.9	17.7	20.5	20.1	18.8	17.3	13.63	20.51																							
12-Feb	17.6	17.1	16.5	Z	16.4	17.5	17.1	18.7	17.9	15.9	9.0	5.8	9.6	8.5	10.2	14.9	25.5	33.7	30.1	28.8	20.0	20.2	20.0	13.4	17.58	33.70																							
13-Feb	12.2	10.1	6.4	Z	9.6	14.1	18.4	19.6	20.8	22.1	18.7	7.0	24.2	22.0	22.2	24.4	12.3	12.3	9.3	7.9	11.4	9.8	10.0	8.8	14.51	24.44																							
14-Feb	11.7	6.6	4.6	Z	1.9	6.5	9.8	17.5	8.1	5.2	5.9	4.1	1.1	3.8	1.4	0.6	0.6	7.3	9.1	26.8	29.5	24.9	21.5	9.08	29.45																								
15-Feb	16.7	16.2	10.6	Z	20.0	22.8	20.6	22.6	16.2	22.3	22.9	19.2	21.3	17.3	11.8	9.5	12.9	11.8	13.7	14.1	7.2	4.5	6.8	16.4	15.55	22.92																							
16-Feb	12.4	11.2	9.9	Z	9.6	9.5	13.4	12.7	9.5	4.7	3.6	3.9	6.5	4.7	4.5	9.5	7.1	12.2	25.9	33.9	31.4	28.8	16.2	8.6	12.59	33.87																							
17-Feb	17.7	16.1	15.8	Z	10.6	8.2	8.0	5.3	10.6	7.7	7.8	6.9	6.0	4.8	3.9	4.3	3.0	4.3	4.8	6.5	7.2	5.0	5.1	5.3	7.61	17.70																							
18-Feb	4.4	4.8	3.4	Z	5.4	6.1	11.6	12.3	13.5	8.1	5.4	C	C	C	C	C	C	22.5	33.1	31.0	25.4	6.1	7.3	1.3	--	33.07																							
19-Feb	4.8	12.0	7.3	Z	3.6	3.5	5.6	18.4	21.0	20.0	3.9	3.5	6.8	7.3	3.4	1.0	0.8	1.0	1.9	1.4	7.7	28.2	21.8	10.2	8.48	28.20																							
20-Feb	0.6	3.4	10.7	Z	3.3	5.8	14.0	12.5	12.2	13.6	5.8	4.3	4.2	3.8	4.4	5.0	4.5	8.6	7.3	4.5	3.0	4.8	4.3	4.4	6.31	13.99																							
21-Feb	3.0	8.4	11.1	Z	3.3	9.4	11.0	13.3	6.4	9.4	5.9	4.8	3.8	3.2	2.4	5.0	11.8	12.8	22.2	30.3	30.6	25.2	20.0	18.0	11.79	30.63																							
22-Feb	13.6	11.2	6.3	Z	5.2	2.8	2.4	3.6	2.6	3.2	2.8	1.7	1.8	1.8	1.9	1.9	2.7	3.4	3.6	2.5	2.6	2.7	3.9	2.3	3.76	13.63																							
23-Feb	1.9	2.2	2.5	Z	2.3	2.6	2.7	3.2	3.9	2.5	2.5	1.5	1.7	1.6	2.2	2.7	3.6	6.2	7.3	4.4	8.4	21.1	6.0	4.9	4.26	21.10																							
24-Feb	5.9	2.6	2.5	Z	8.2	9.7	17.9	35.7	26.2	15.7	30.2	13.1	0.9	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.7	1.0	4.3	2.4	7.82	35.75																							
25-Feb	2.6	2.4	3.2	Z	3.1	4.3	4.4	8.4	11.0	8.8	7.6	7.3	7.9	7.9	8.2	9.5	8.4	6.6	7.4	6.9	7.6	8.0	8.2	10.5	6.96	11.02																							
26-Feb	10.3	8.2	7.1	Z	7.4	9.9	9.9	10.1	11.0	10.4	5.8	7.2	7.5	4.9	5.3	10.4	11.2	13.1	11.9	9.3	10.4	9.0	6.3	9.3	8.96	13.05																							
27-Feb	9.2	9.9	7.4	Z	4.7	4.2	11.4	21.1	21.9	11.6	3.1	6.5	3.8	3.7	4.2	2.8	3.7	1.4	10.7	36.7	33.5	28.7	26.9	21.4	12.54	36.72																							
28-Feb	17.4	11.2	9.7	Z	11.8	10.1	11.7	14.6	13.5	4.1	5.8	7.1	7.4	1.0	0.7	0.6	0.8	3.3	21.0	39.8	37.6	36.6	31.8	23.9	13.97	39.77																							
																								11.14	10.80	10.06	--	9.10	10.24	12.68	15.83	15.05	12.33	10.11	7.99	8.48	7.41	7.30	7.96	8.33	11.59	14.94	16.01	15.90	15.48	13.19	12.31	Diurnal Average	
																								24.88	25.52	25.95	--	27.51	31.67	37.13	44.69	43.01	28.61	30.16	19.22	24.17	22.04	22.22	24.44	25.46	44.96	49.11	43.09	37.65	36.63	31.77	30.68	Diurnal Maximum	
Z - zerospan																								C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb																																																	



WCAS - Hinton
Summary of Hourly Averages

NOx (NO_x) - ppb
February 2015

Maximum Value: 220.92 ppb on Feb 3 19:00		Maximum Daily Average: 70.14 ppb on Feb 3		Hours in Service: 672																																													
Minimum Value: 0.3 ppb on Feb 24 17:00		Minimum Daily Average: 4.44 ppb on Feb 22		Hours of Data: 638																																													
Maximum Diurnal Average: 33.42 ppb at hour 8		Minimum Diurnal Average: 12.85 ppb at hour 15		Hours of Missing Data: 34																																													
Monthly Average: 20.332 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 3.4 Q ₁ = 7.4 Median = 12.5 Q ₃ = 22.3 P ₉₀ = 48.3 P ₉₉ = 86.5		Hours of Calibration: 34																																													
				Percent Operational Time: 100.0																																													
Day	Hourly Period Ending At																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	11.7	12.8	11.5	Z	20.0	18.8	25.4	42.4	46.6	55.4	47.4	33.3	33.9	27.5	27.1	19.4	20.6	24.7	11.3	11.9	11.3	11.9	7.3	3.8	23.31	55.40																							
2-Feb	3.0	3.4	6.3	Z	6.0	8.0	9.9	13.6	16.3	9.4	18.4	17.0	14.6	15.5	16.1	18.6	20.3	24.5	17.4	16.1	18.9	14.6	11.8	10.0	13.46	24.55																							
3-Feb	7.1	6.3	9.3	Z	5.2	11.5	48.4	106.4	106.7	87.2	66.1	55.4	79.6	32.6	34.4	16.6	12.5	187.5	220.9	171.9	119.2	101.6	59.4	67.4	70.14	220.92																							
4-Feb	42.8	28.0	36.2	Z	76.1	101.0	122.8	166.0	164.1	75.0	50.0	10.0	7.9	10.3	12.1	9.1	2.6	4.7	59.9	38.8	36.2	26.7	9.7	37.1	49.01	166.03																							
5-Feb	46.8	43.4	53.8	Z	14.9	10.6	9.6	14.1	14.4	10.7	12.6	10.4	12.8	11.5	14.8	13.3	14.3	14.9	13.2	9.3	8.5	8.4	8.6	8.8	16.51	53.76																							
6-Feb	10.7	12.6	11.2	Z	8.3	8.9	9.8	11.0	10.7	11.6	10.6	13.9	9.3	10.4	8.5	9.0	10.3	10.8	14.9	15.2	12.6	13.8	9.4	12.6	11.14	15.19																							
7-Feb	11.2	11.4	11.0	Z	7.5	10.7	11.2	17.2	18.4	15.0	15.8	20.4	17.2	15.6	17.2	18.9	19.7	18.5	16.9	14.2	10.3	11.3	11.5	11.1	14.45	20.36																							
8-Feb	10.3	16.2	11.7	Z	10.3	11.5	11.7	12.8	23.5	19.1	13.9	11.5	11.4	11.5	9.8	10.7	12.7	14.0	10.9	11.7	12.3	14.2	21.8	22.6	13.74	23.46																							
9-Feb	28.1	23.5	24.3	Z	23.8	22.3	27.2	29.7	22.2	29.1	26.2	22.1	32.5	22.9	21.7	34.3	22.8	22.4	24.1	16.9	18.7	18.9	14.5	14.0	23.57	34.32																							
10-Feb	15.2	15.9	15.9	Z	14.3	15.5	23.8	21.5	24.3	18.9	18.3	20.2	19.6	24.6	17.1	19.5	21.6	23.3	21.2	18.7	16.8	11.9	12.4	16.1	18.55	24.60																							
11-Feb	17.2	14.4	15.8	Z	13.3	16.6	17.2	13.8	16.0	23.6	18.6	25.1	19.0	17.1	19.9	25.5	18.6	21.4	25.1	24.1	40.5	32.9	27.6	20.7	21.05	40.51																							
12-Feb	20.6	19.1	18.9	Z	22.1	29.9	38.3	54.0	55.5	54.0	14.1	7.2	12.5	11.0	12.5	21.7	44.8	71.6	74.7	88.4	46.4	80.6	78.2	41.9	39.90	88.37																							
13-Feb	28.9	22.9	24.2	Z	26.3	38.4	60.8	76.3	96.6	92.1	30.4	8.5	49.8	51.6	55.4	73.9	27.0	30.5	15.5	11.5	20.5	11.8	12.0	10.3	38.06	96.62																							
14-Feb	18.7	7.3	5.4	Z	2.0	6.6	10.0	22.0	8.7	6.4	8.8	6.7	1.4	5.5	1.9	0.7	0.6	0.5	7.4	10.7	43.8	55.9	42.1	40.0	13.62	55.87																							
15-Feb	25.3	20.0	15.8	Z	37.4	65.8	65.2	92.0	59.1	88.1	89.1	50.4	46.6	32.7	17.0	12.1	16.8	15.2	19.9	16.7	8.9	4.6	7.0	21.6	35.96	91.98																							
16-Feb	13.7	12.4	11.3	Z	10.6	10.4	15.1	16.2	11.8	5.8	4.9	5.8	9.6	7.1	5.9	12.7	9.1	14.1	37.2	69.1	82.9	80.2	30.8	10.1	21.17	82.91																							
17-Feb	29.5	29.9	41.7	Z	26.4	15.0	13.5	6.6	12.3	8.9	9.4	8.2	7.2	6.0	4.8	5.2	3.6	4.7	5.3	6.6	7.3	5.2	5.4	5.3	11.66	41.70																							
18-Feb	4.5	4.9	3.4	Z	5.5	6.2	14.5	14.0	16.0	9.7	6.6	C	C	C	C	C	C	32.6	52.4	53.0	56.6	6.2	7.5	1.4	--	56.62																							
19-Feb	4.9	13.2	7.4	Z	3.7	3.6	5.7	32.3	28.0	40.2	5.2	4.8	8.7	9.1	4.2	1.3	0.8	1.0	1.9	1.4	8.5	32.5	25.5	10.8	11.07	40.15																							
20-Feb	0.6	3.9	12.9	Z	3.4	6.1	14.9	13.3	13.2	16.7	8.4	5.8	6.4	5.5	7.6	7.7	5.5	10.6	8.5	5.1	3.3	5.1	4.5	4.5	7.55	16.66																							
21-Feb	3.0	9.1	11.9	Z	3.3	9.8	12.6	16.2	7.7	12.4	8.3	7.6	7.3	5.0	3.5	7.5	18.6	16.5	31.9	52.1	61.1	48.3	32.2	35.4	18.31	61.06																							
22-Feb	18.8	12.9	6.6	Z	5.4	2.9	2.5	3.6	2.9	3.6	3.9	2.6	2.6	2.7	2.8	2.7	3.4	3.9	3.9	2.7	2.7	2.9	4.1	2.3	4.44	18.76																							
23-Feb	1.9	2.2	2.6	Z	2.4	2.7	3.2	3.8	4.5	3.1	3.5	2.4	2.5	2.3	3.1	3.9	4.9	8.4	8.5	4.8	9.0	28.9	6.2	6.1	5.26	28.89																							
24-Feb	8.5	2.8	2.7	Z	8.5	12.2	37.2	71.3	41.0	21.1	49.2	16.6	1.1	0.5	0.4	0.5	0.3	0.5	0.4	0.4	0.8	1.1	4.4	2.6	12.35	71.32																							
25-Feb	2.7	2.6	3.7	Z	3.3	5.1	5.3	10.0	15.0	12.2	11.4	12.7	12.9	13.5	14.1	15.9	12.0	9.4	10.3	9.0	9.0	8.6	8.6	10.9	9.49	15.90																							
26-Feb	10.5	8.3	7.8	Z	8.4	10.8	11.0	11.5	15.7	14.7	10.3	13.7	12.8	7.6	8.0	17.1	17.9	18.6	13.9	9.9	11.7	9.8	6.7	10.4	11.62	18.64																							
27-Feb	9.4	10.5	8.7	Z	4.8	4.2	12.4	29.2	31.7	19.2	5.3	10.9	6.4	5.8	6.2	4.9	5.8	1.4	16.6	62.7	50.9	41.8	33.8	23.5	17.66	62.71																							
28-Feb	18.0	11.4	9.9	Z	11.8	10.1	11.9	14.7	14.8	4.9	8.2	10.2	11.4	1.2	0.8	0.6	0.9	4.3	28.6	56.1	60.8	59.7	40.2	27.2	18.16	60.75																							
																								15.13	13.62	14.35	--	13.76	16.97	23.25	33.42	32.06	27.43	20.53	15.32	16.92	13.57	12.85	14.20	12.88	21.80	27.60	28.89	28.18	26.77	19.40	17.45	Diurnal Average	
																								46.82	43.36	53.76	--	76.13	101.00	122.83	166.03	164.08	92.05	89.08	55.41	79.58	51.64	55.39	73.95	44.78	187.49	220.92	171.89	119.20	101.57	78.18	67.44	Diurnal Maximum	
Z - zerospan C - Calibration																																																	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ppb 24-hr --- ppb																																																	



WCAS - Hinton
Summary of Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³
February 2015

Maximum Value: 34.65 µg/m ³ on Feb 28 08:00		Maximum Daily Average: 15.83 µg/m ³ on Feb 11		Hours in Service: 672																							
Minimum Value: 0.0 µg/m ³ on Feb 13 12:00		Minimum Daily Average: 3.27 µg/m ³ on Feb 22		Hours of Data: 670																							
Maximum Diurnal Average: 9.67 µg/m ³ at hour 22		Minimum Diurnal Average: 6.01 µg/m ³ at hour 5		Hours of Missing Data: 2																							
Monthly Average: 7.436 µg/m ³		Percentiles: P ₁ = 0.8 P ₁₀ = 2.9 Q ₁ = 4.3 Median = 6.4 Q ₃ = 10.0 P ₉₀ = 13.5 P ₉₉ = 18.5		Hours of Calibration: 0																							
				Percent Operational Time: 99.7																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	4.0	4.9	4.2	5.5	6.3	4.7	5.7	6.9	6.9	10.7	13.2	11.0	11.5	12.5	16.5	8.8	8.2	9.2	8.0	9.3	9.8	8.3	6.8	4.8	8.24	16.45	
2-Feb	3.2	3.5	3.8	3.6	3.3	3.7	4.6	5.0	5.0	5.5	5.9	6.5	5.9	5.0	5.0	4.9	5.5	7.9	6.2	6.6	5.9	5.8	5.5	5.4	5.14	7.89	
3-Feb	5.0	4.8	5.9	6.1	4.7	5.0	6.0	8.9	9.2	8.2	9.8	14.1	24.0	8.9	16.6	8.3	7.4	16.7	16.8	11.5	9.7	9.4	6.2	8.0	9.63	24.02	
4-Feb	7.2	5.0	4.4	6.1	4.8	7.0	9.9	10.3	9.5	6.6	11.3	2.0	1.0	2.9	4.6	7.1	3.7	2.8	8.7	3.9	5.8	7.7	5.5	7.0	6.03	11.28	
5-Feb	7.9	5.9	6.1	6.0	5.1	4.2	4.2	2.4	1.8	2.6	2.1	2.5	3.1	3.5	5.4	5.9	6.1	5.3	4.3	4.3	3.8	3.6	3.7	3.9	4.32	7.93	
6-Feb	4.1	4.7	4.5	4.9	5.0	5.7	5.8	6.1	7.3	7.7	5.9	6.3	7.3	5.5	6.4	7.9	8.4	8.8	9.0	8.1	7.7	9.4	11.2	10.1	6.99	11.17	
7-Feb	9.1	7.4	6.8	6.2	6.5	7.3	7.6	8.3	8.2	8.5	7.5	8.3	8.2	8.1	9.2	9.1	9.0	10.1	10.7	10.5	9.7	9.4	9.6	10.4	8.57	10.66	
8-Feb	12.0	13.1	9.2	8.0	7.9	8.7	10.2	10.6	10.1	10.3	10.9	9.1	7.3	8.6	8.5	11.4	17.3	18.9	14.7	15.8	14.7	16.5	16.5	14.0	11.85	18.94	
9-Feb	13.3	12.7	11.2	10.6	11.6	10.3	11.6	11.0	10.7	10.7	12.7	12.1	11.7	11.8	11.3	13.3	12.5	13.5	11.8	12.8	13.1	14.0	11.6	12.8	12.02	13.97	
10-Feb	12.7	10.8	11.8	10.6	10.9	10.9	12.2	10.8	11.4	11.6	11.1	9.9	10.9	15.3	15.8	15.7	12.4	15.1	14.5	14.3	14.8	11.2	13.0	15.1	12.61	15.77	
11-Feb	14.5	15.7	15.8	14.8	13.3	13.5	15.1	15.1	17.0	18.5	16.8	17.2	14.9	16.6	16.1	15.3	15.3	15.9	14.8	12.8	15.8	23.3	18.2	13.6	15.83	23.30	
12-Feb	12.4	12.4	13.0	13.3	12.9	12.4	12.5	11.8	14.2	19.5	11.5	4.6	5.1	6.4	6.1	4.0	6.5	6.9	9.6	13.5	5.7	9.1	13.9	5.1	10.09	19.45	
13-Feb	8.2	6.6	2.0	2.9	2.5	5.1	6.4	4.2	7.2	10.1	9.0	0.0	3.5	6.4	7.9	8.3	5.6	3.3	3.9	5.5	4.9	11.0	10.3	13.2	6.17	13.22	
14-Feb	11.8	6.1	1.5	2.4	1.9	2.6	2.9	4.2	4.3	7.8	1.5	0.7	0.2	1.6	1.3	0.7	2.1	3.0	6.5	5.9	13.1	10.1	8.2	11.5	4.67	13.14	
15-Feb	10.1	8.6	8.7	9.2	5.7	4.2	7.4	6.1	8.0	15.0	13.9	11.1	7.5	5.0	2.1	2.7	3.9	6.0	6.0	3.9	3.3	2.4	3.7	6.4	6.71	14.98	
16-Feb	4.9	4.7	4.6	3.9	3.4	3.6	3.8	3.1	3.0	4.1	5.4	0.8	3.2	2.1	2.3	3.2	2.7	3.0	7.1	9.2	9.5	14.3	6.5	2.2	4.62	14.34	
17-Feb	3.6	4.6	7.4	5.6	4.4	2.3	1.8	2.5	4.3	4.3	0.8	2.9	4.3	4.4	5.3	6.1	4.6	5.1	4.6	6.3	6.9	6.6	7.5	11.1	4.89	11.11	
18-Feb	8.5	7.7	8.3	7.3	7.3	7.6	6.3	7.5	8.6	6.6	8.5	7.9	7.1	4.9	3.5	4.0	5.8	6.9	13.9	1.9	8.2	3.7	7.0	3.3	6.78	13.91	
19-Feb	3.1	2.8	5.2	4.8	4.3	5.3	6.5	5.8	6.4	7.2	5.1	3.9	7.2	6.8	4.9	2.8	2.9	2.0	2.9	2.6	3.0	10.7	5.4	3.5	4.80	10.71	
20-Feb	2.5	3.7	3.7	4.3	4.5	4.2	6.9	4.6	4.9	7.1	3.7	3.7	3.5	2.9	3.3	2.9	2.7	3.7	4.4	4.4	10.7	23.6	18.0	16.7	6.27	23.55	
21-Feb	11.6	9.0	8.6	3.5	2.6	5.9	6.7	4.2	3.5	3.7	3.7	3.4	2.0	1.8	2.1	2.3	3.8	5.0	5.0	12.7	7.2	5.0	4.9	5.5	5.15	12.66	
22-Feb	5.2	4.4	4.2	3.9	2.6	1.7	2.3	2.3	3.1	2.9	3.5	3.3	2.0	1.8	2.2	1.8	2.5	2.5	4.0	3.0	3.9	4.4	5.0	6.0	3.27	6.02	
23-Feb	5.6	5.7	6.3	6.0	6.1	6.8	4.8	6.1	6.9	6.3	5.3	4.8	4.0	2.9	3.8	3.7	3.7	5.2	4.7	3.5	4.2	8.6	3.6	3.5	5.09	8.58	
24-Feb	4.5	2.1	3.0	3.3	6.4	5.1	5.7	14.0	6.8	5.9	12.0	6.2	1.6	2.2	4.1	5.0	4.7	4.5	5.0	6.9	5.3	4.6	7.0	4.8	5.45	14.03	
25-Feb	4.4	5.0	4.0	3.3	4.4	4.0	4.3	4.2	5.4	5.3	7.7	6.4	10.4	16.6	16.7	14.4	13.9	4.8	3.3	6.5	10.8	8.7	10.1	8.2	7.62	16.69	
26-Feb	11.2	11.7	9.5	7.2	7.2	5.5	7.5	8.4	10.0	9.2	9.0	13.5	10.6	6.4	6.9	11.0	8.9	13.0	14.5	7.1	9.0	9.1	7.0	6.7	9.17	14.50	
27-Feb	6.8	7.4	7.2	7.0	6.6	6.1	7.1	8.2	9.4	8.2	5.8	7.6	6.0	5.0	5.6	5.0	5.6	4.0	6.2	10.8	8.1	8.8	6.7	2.6	6.74	10.84	
28-Feb	3.8	0.0	0.0	UC	UC	17.5	10.6	34.7	18.5	9.1	6.6	7.0	9.1	5.2	5.1	5.3	5.2	5.1	10.0	16.3	12.8	11.4	11.3	8.6	9.68	34.65	
		7.55	6.82	6.46	6.30	6.01	6.47	7.02	8.12	7.92	8.33	7.86	6.67	6.89	6.46	7.09	6.82	6.83	7.43	8.25	8.21	8.48	9.67	8.70	8.00	Diurnal Average	
		14.45	15.68	15.77	14.75	13.26	17.46	15.12	34.65	18.51	19.45	16.77	17.16	24.02	16.62	16.69	15.74	17.29	18.94	16.83	16.33	15.81	23.55	18.21	16.65	Diurnal Maximum	
UO - Unstable Operation Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 ul/m ³ 24-hr 30 ul/m ³																											

Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: February 18, 2015

Parameter: NO/NO₂/NO_x

Instrument: Teco 42i

Serial Number: CM13040041

Previous Calibration Date: January 20, 2015

Calibration: Routine

Calibration Equipment: SABIO 2010 sn # 04300810

Barometric Pressure: 26.54" Hg

Calibration Method: Std. Gas Dilution / GPT

Cylinder ID: FF 47744

Temperature: 20.0° C

Cylinder Concentration: 12.4 ppm NO 12.5 ppm NO_x

In Service: December 10, 2013

Technician: Dean Yustak

Instrument Settings	NO bkg ppb	NO _x bkg ppb	Pre-reactor bkg ppb	NO Coefficient	NO _x Coefficient	NO ₂ Coefficient	Monitoring Range
Previous	4.5	4.9	na	0.744	1.011	0.997	300 ppb
Current	4.4	4.7	na	0.731	1.012	0.997	300 ppb

NO	Final Zero: 0.4 ppb	Final Span: 193.1 ppb	As Found Correction Factor: 1.003
NO ₂	Final Zero: 0.1 ppb	Final Span: 2.4 ppb	As Found Correction Factor: NA
NO _x	Final Zero: 0.3 ppb	Final Span: 194.7 ppb	As Found Correction Factor: 1.003

Results of Linear Regression			Slope	Intercept	R ²
NO	R _c vs C _c	Previous	99.894210	6.133317	0.999981
		Current	99.485350	-33.820810	0.999965
	C _i vs C _c	Current	1.000000	0.000018	0.999964
NO ₂	R _c vs C _c	Previous	100.290600	3.247578	0.999981
		Current	99.795070	-15.641260	0.999983
	C _i vs C _c	Current	1.000000	0.000001	0.999982
NO _x	R _c vs C _c	Previous	100.282300	-4.820201	0.999981
		Current	99.864590	-28.551140	0.999972
	C _i vs C _c	Current	1.000000	0.000000	0.999972

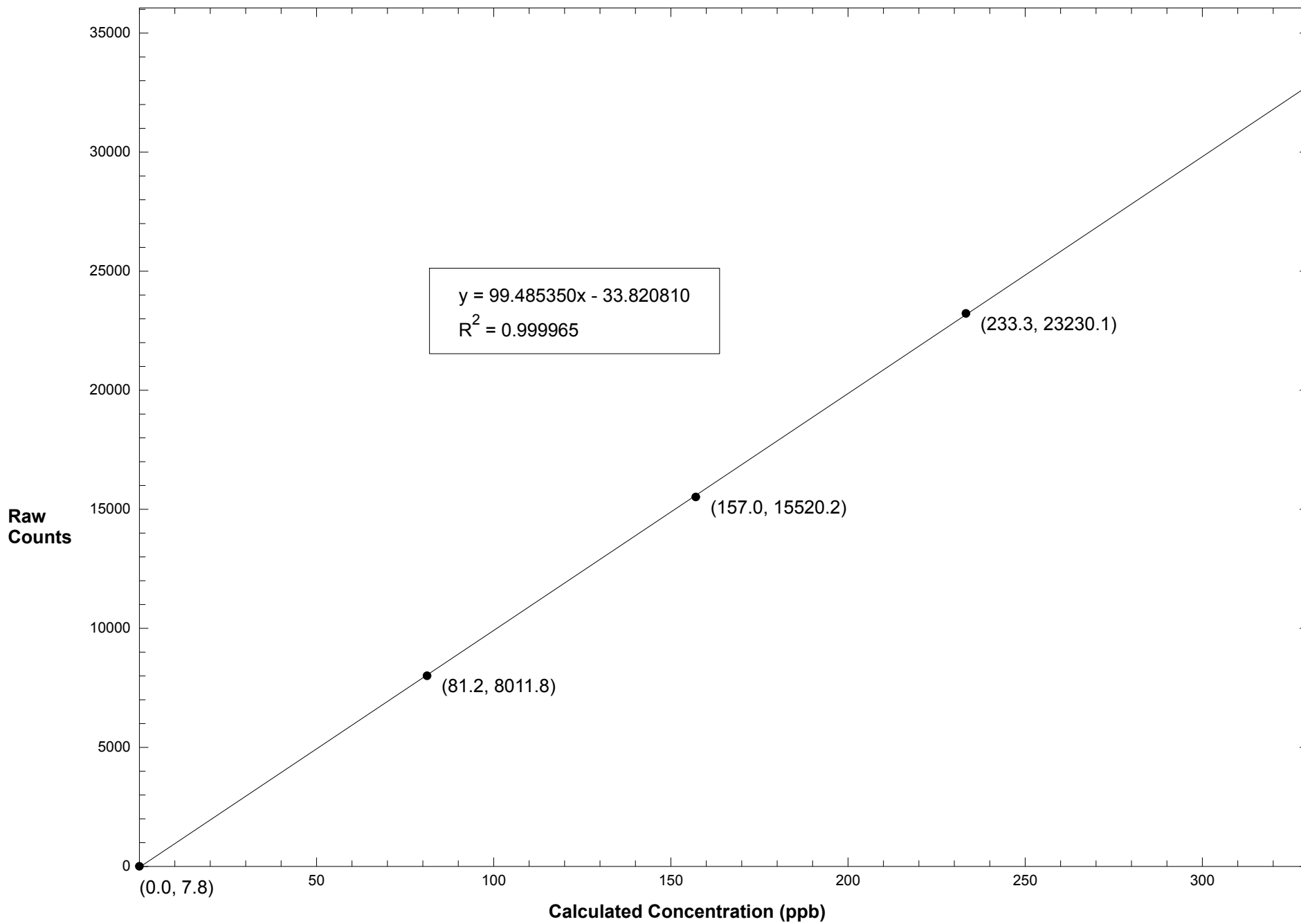
Comments:

Calibration Data Summary (Page 2)

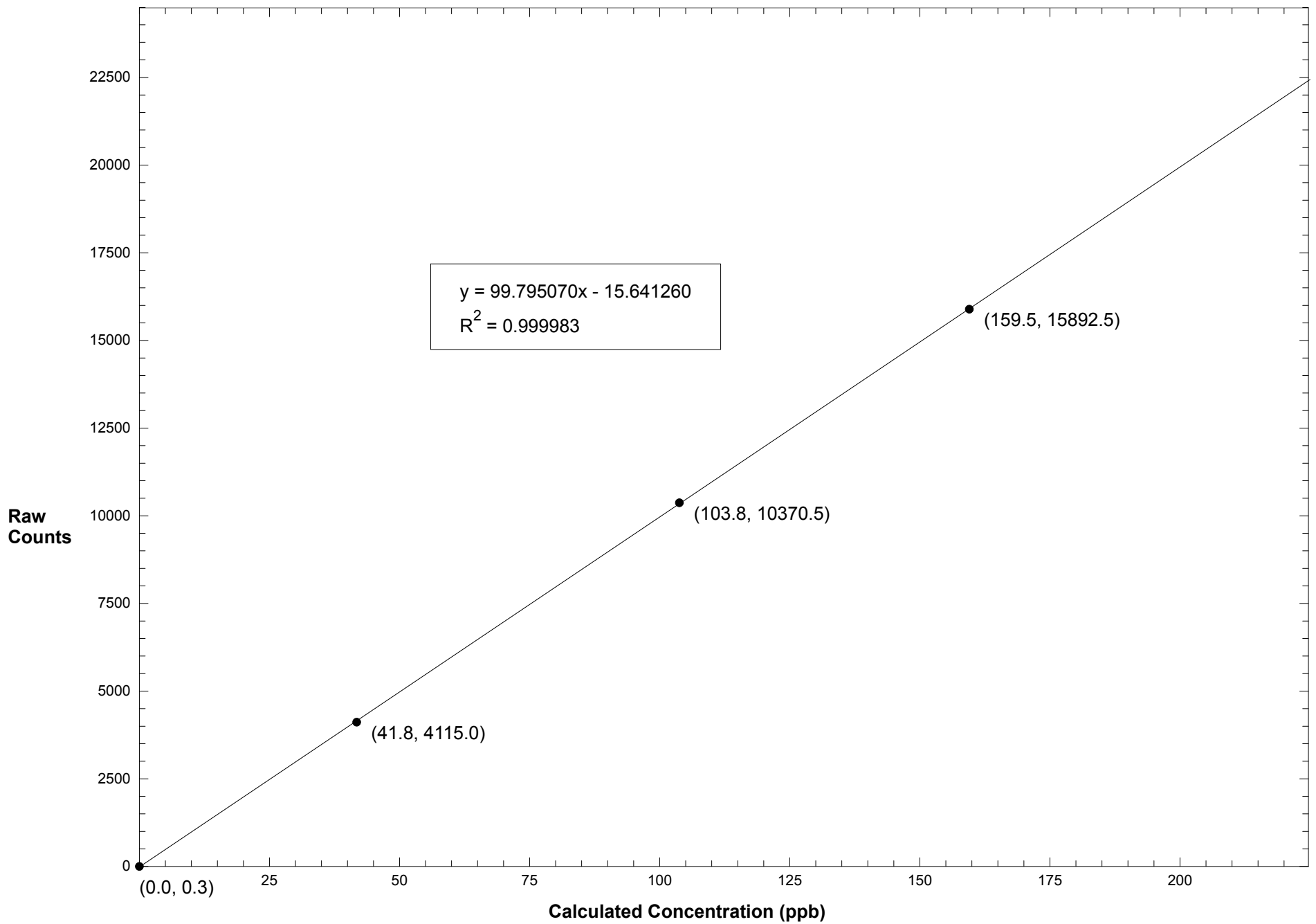
February 18, 2015 - Station 906

NO Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i		
0.07712	4.022	233.3	23230.1	233.8	0.998		
0.05167	4.028	157.0	15520.2	156.3	1.004		
0.02653	4.027	81.2	8011.8	80.9	1.004		
0.00000	3.955	0.0	7.8	0.4			
NO Calibration					Average Correction Factor:	1.002	
0.07712	4.022	235.2	23506.6	235.7	0.998		
0.05167	4.028	158.3	15716.2	157.7	1.004		
0.02653	4.027	81.8	8118.8	81.6	1.003		
0.00000	3.955	0.0	7.9	0.4			
NO _x Calibration					Average Correction Factor:	1.002	
Reference Concentration NO (ppb)	Raw Count Output NO	Calculated Concentration NO (ppb)	Calculated Concentration NO ₂ , C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i	Converter Efficiency C _i /C _c
232.1	7190.2	72.6	159.5	15892.5	159.4	1.001	0.999
232.1	12735.4	128.4	103.8	10370.5	104.1	0.997	1.003
232.1	18905.6	190.4	41.8	4115.0	41.4	1.009	0.991
			0.0	0.3	0.2		
						Average Correction Factor:	1.002
NO ₂ Gas Phase Titration						Average Converter Efficiency:	0.998
Parameter	Correction Factor (Previous)	Correction Factor: (Current)	Percent Change of Correction Factor				
NO	1.001	0.998	-0.3				
NO ₂	1.000	1.001	0.1				
NO _x	1.001	0.998	-0.3				

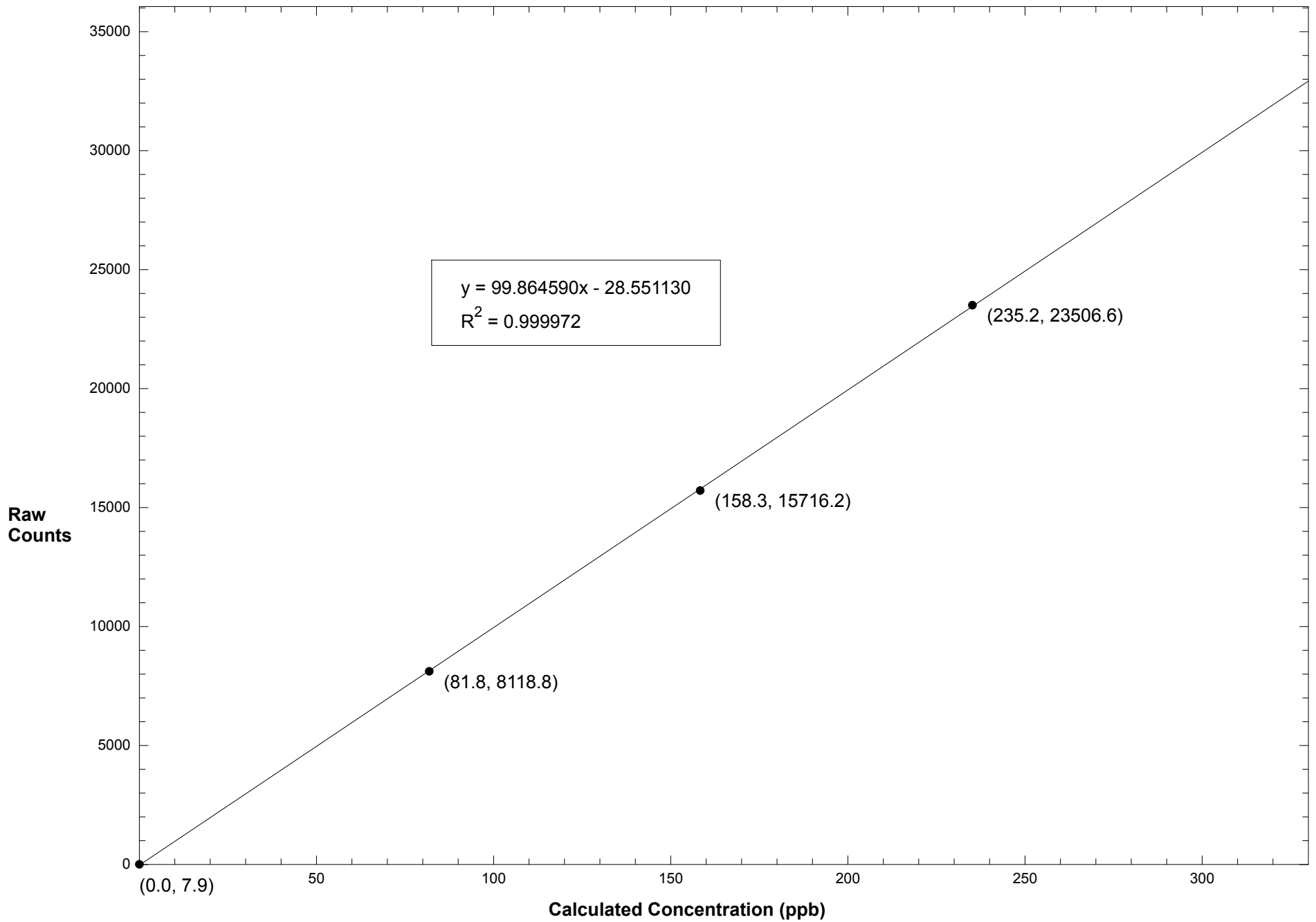
Station 906 NO February 18, 2015: Linear Regression



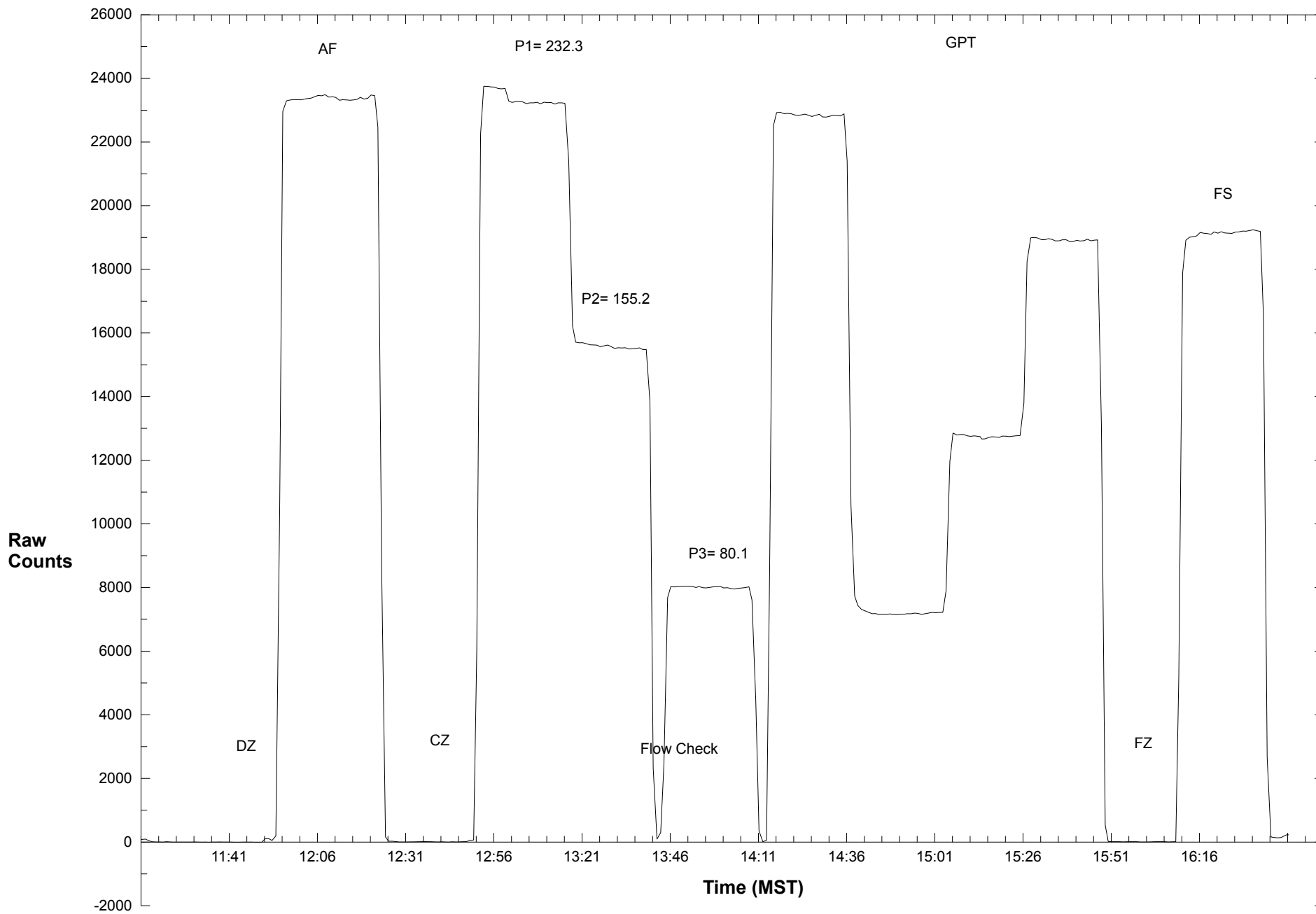
Station 906 NO2 February 18, 2015: Linear Regression



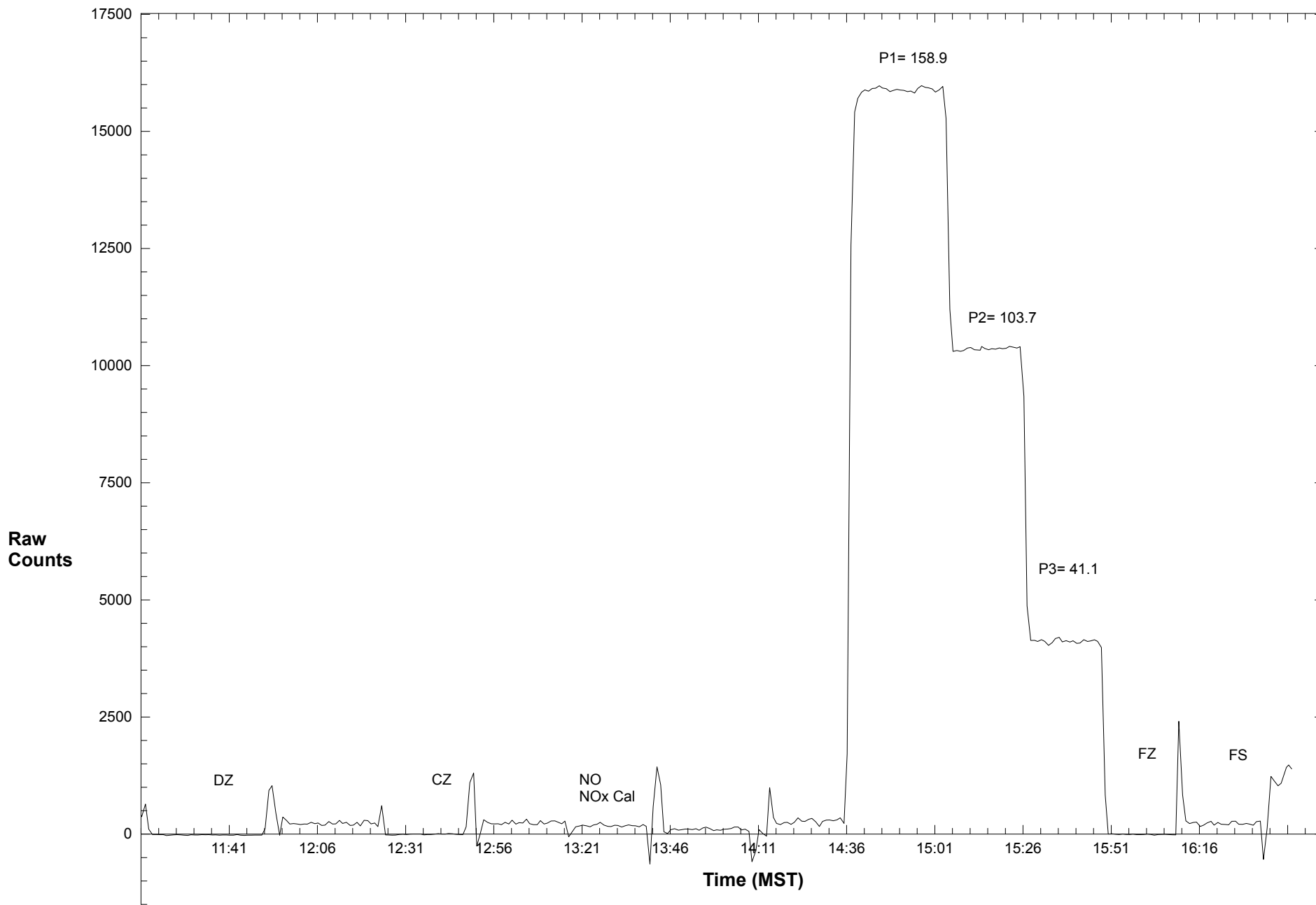
Station 906 NOX February 18, 2015: Linear Regression



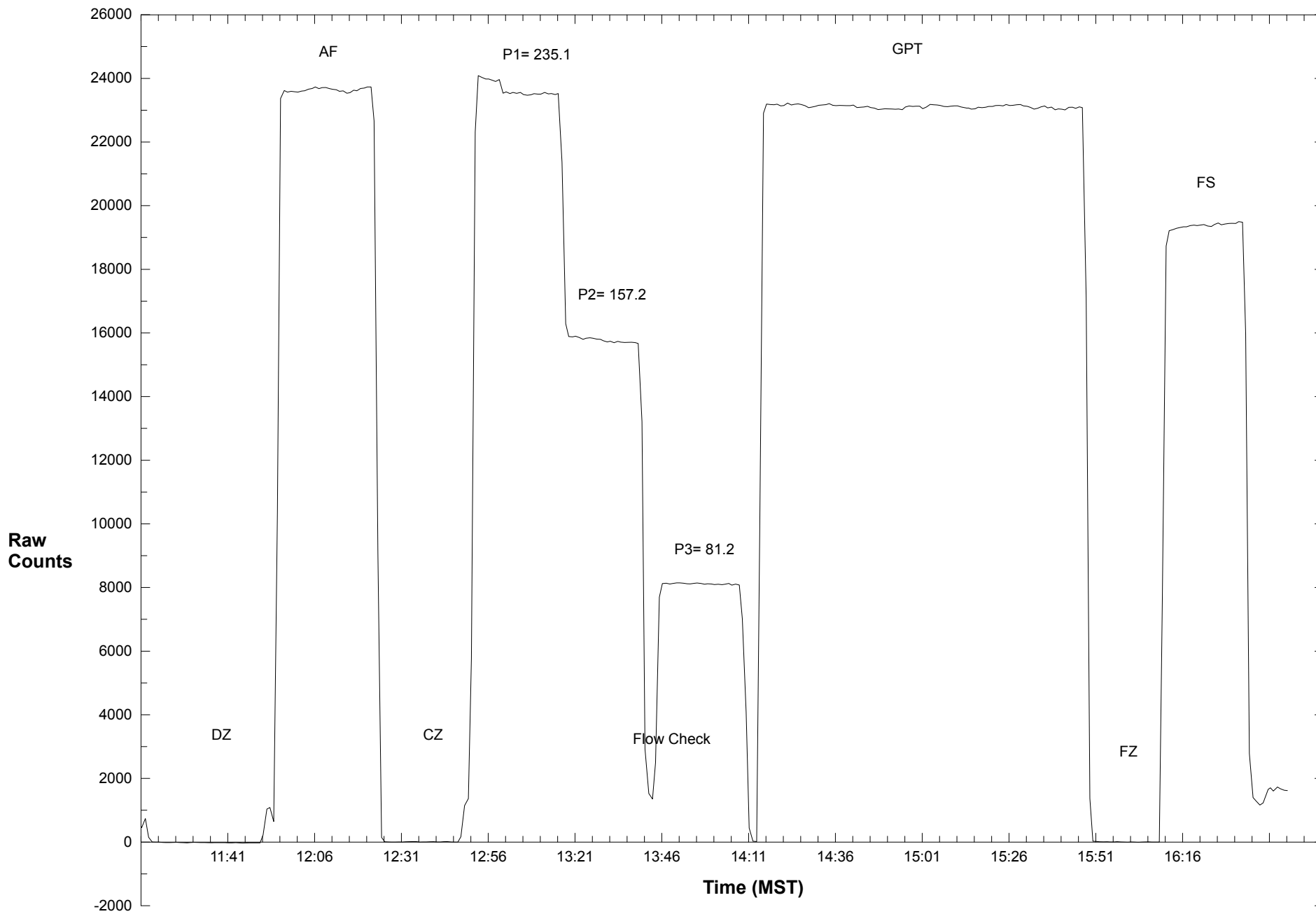
Station 906 NO February 18, 2015: Calibration Graph



Station 906 NO2 February 18, 2015: Calibration Graph



Station 906 NOX February 18, 2015: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: February 18, 2015

Parameter: O₃

Instrument: Teco 49i

Serial Number: 1136451325

Previous Calibration Date: January 20, 2015

Calibration: Routine

Calibration Equipment: 2B Tech 306 sn#142

Barometric Pressure: 26.54" Hg

Calibration Method: Certified Ozone Generator

Temperature: 20.0° C

Technician: Dean Yustak

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	-0.5	1.125	500 ppb
Current	-0.2	1.201	500 ppb

Final Zero: -2.4 ppb

Final Span: 346.6 ppb

As Found Correction Factor: 0.963

Calibration System Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
3.000	403.0	24091.5	402.4	1.002
3.000	253.0	15193.5	253.1	1.000
3.000	99.3	6174.0	101.7	0.976
3.000	0.0	1.5	-1.8	

Results of Linear Regression

R _c vs C _c	Slope	Intercept	R ²
Previous	59.788540	52.339660	0.999973
Current	59.597380	111.649500	0.999896
C _i vs C _c			
Current	1.000000	-0.000032	0.999897

Average Correction Factor: 0.993

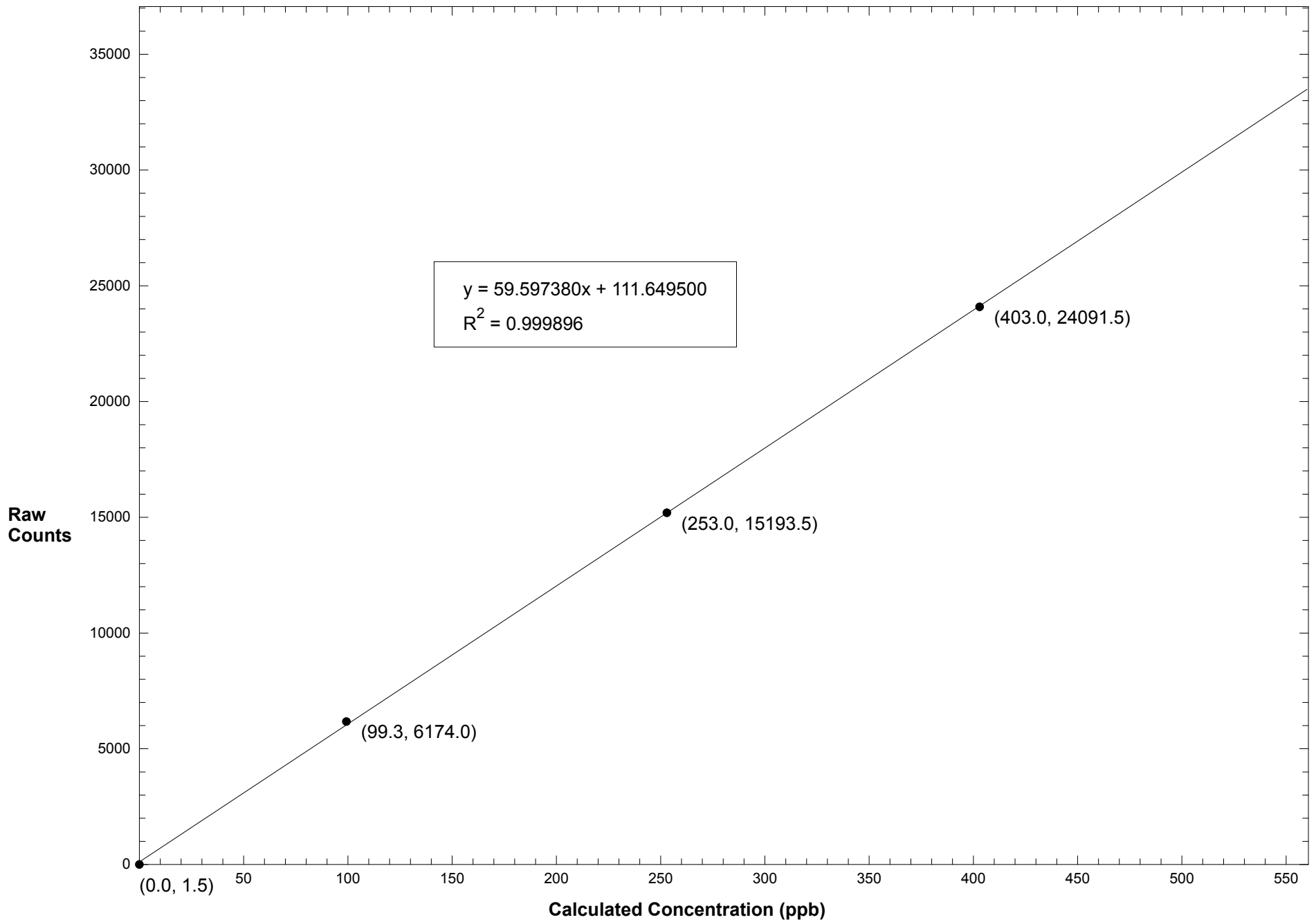
Previous Correction Factor: 1.002

Current Correction Factor: 1.002

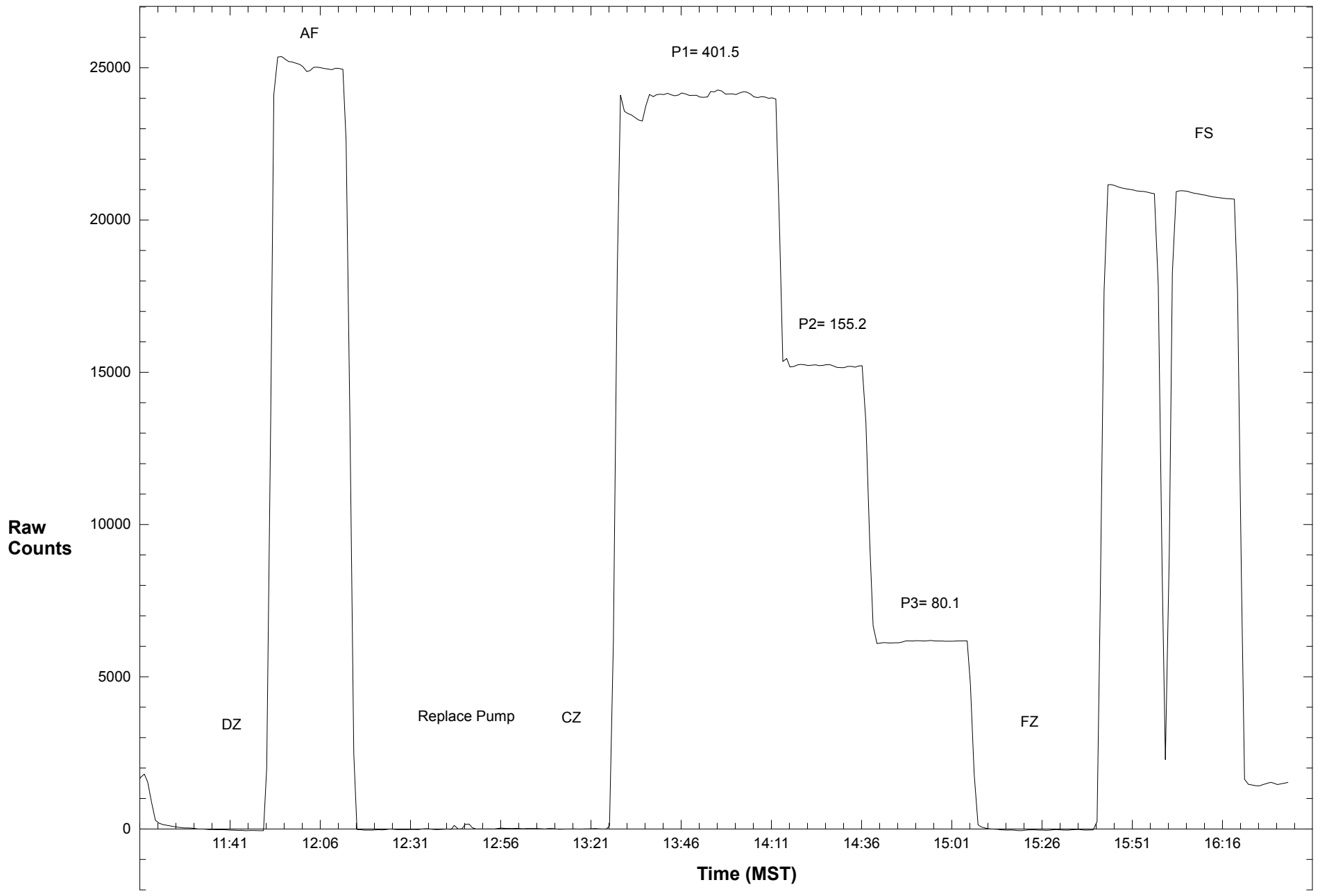
Percent Change of Correction Factor: 0.0

Comments:

Station 906 O3 February 18, 2015: Linear Regression



Station 906 O3 February 18, 2015: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton
 Calibration Date: February 18, 2015
 Parameter: SO₂

Instrument: Teco 43i	Serial Number: CM 12499009	Previous Calibration Date: January 20, 2015
Calibration: Routine	Calibration Equipment: SABIO 2010 sn # 04300810	Barometric Pressure: 26.54" Hg
Calibration Method: Std.Gas Dilution	Cylinder ID: FF 47744	Temperature: 20.0° C
Cylinder Concentration: 5.93 ppm SO ₂	In Service: December 10, 2013	Technician: Dean Yustak

Instrument Settings	SO ₂ bkg ppb	SO ₂ Coefficient	Monitoring Range
Previous	25.8	0.974	200 ppb
Current	25.5	0.973	200 ppb

Final Zero: 0.1 ppm Final Span: 87.5 ppm As Found Correction Factor: 1.016

SO ₂ Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C _c (ppm)	Raw Count Output R _c	Indicated Concentration C _i (ppm)	Correction Factor C _c /C _i
0.0771	4.022	111.6	16750.6	111.3	1.002
0.0517	4.028	75.1	11352.6	75.4	0.996
0.0265	4.027	38.8	5865.2	38.9	0.998
0.0000	3.955	0.0	-0.2	-0.1	

Results of Linear Regression			
R _c vs C _c	Slope	Intercept	R ²
Previous	150.895900	9.633924	0.999976
Current	150.267200	21.748090	0.999975
C _i vs C _c			
Current	1.000000	-0.000006	0.999975

Average Correction Factor: 0.999

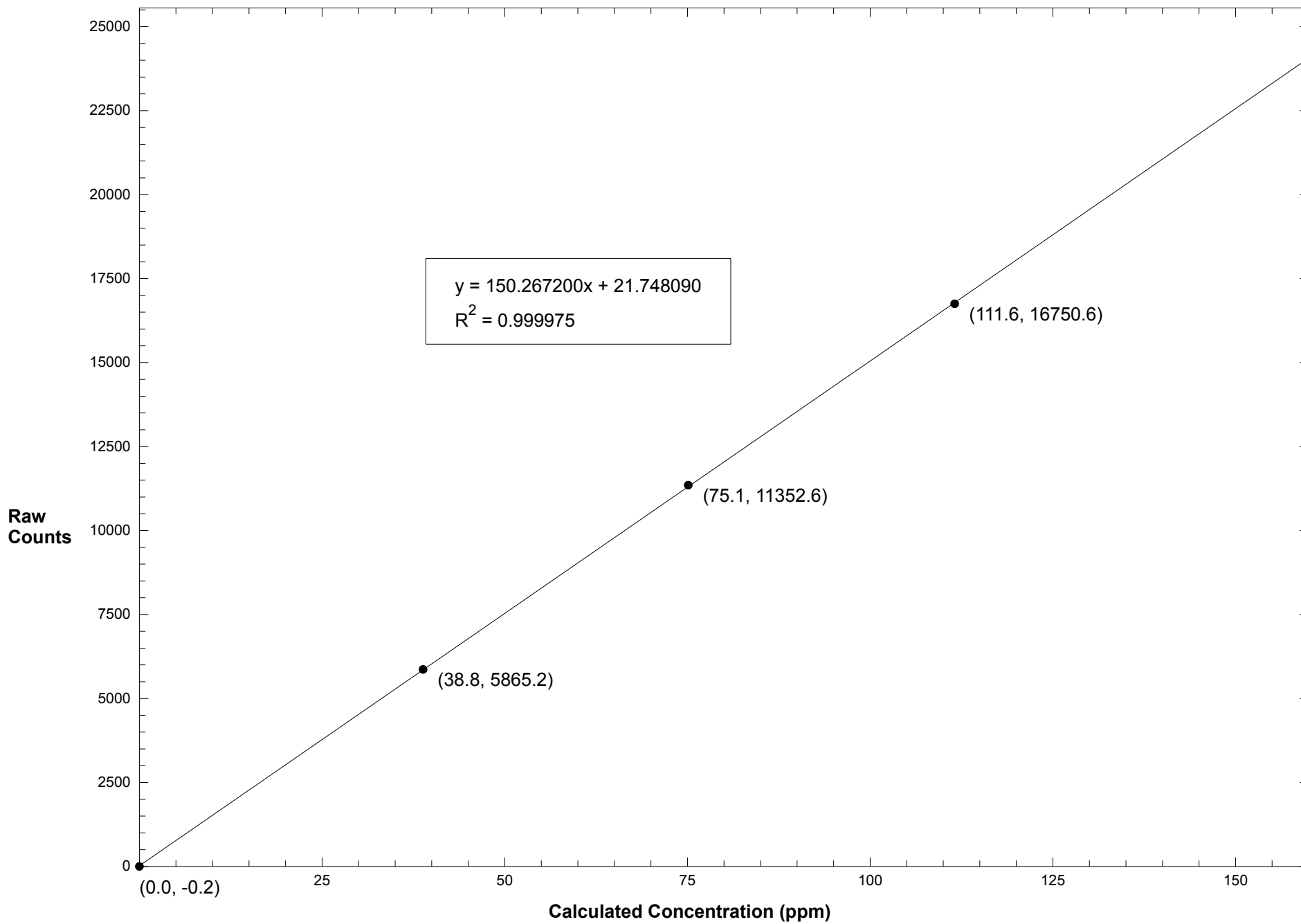
Previous Correction Factor: 1.001

Current Correction Factor: 1.002

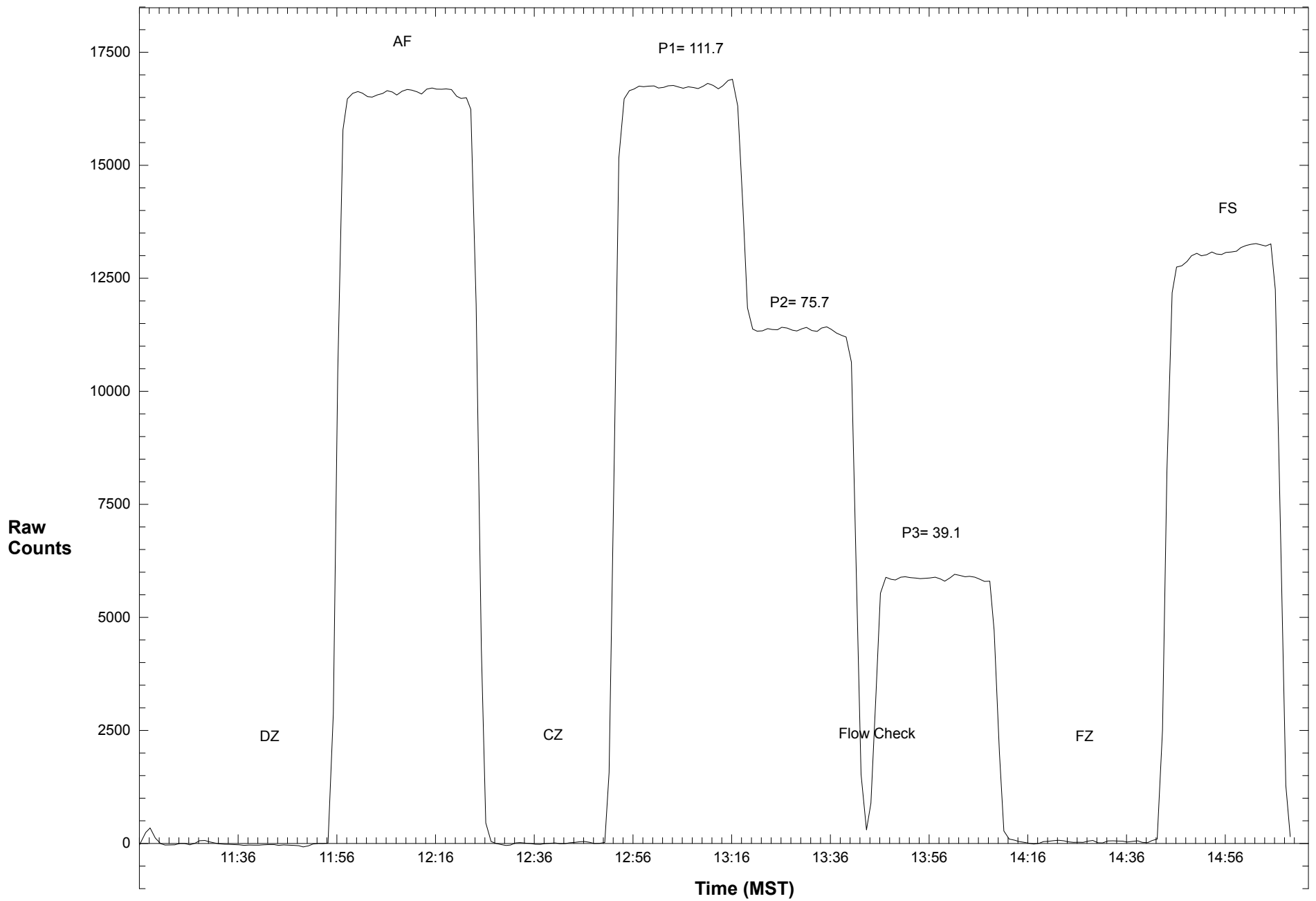
Percent Change of Correction Factor: 0.1

Comments:

Station 906 SO2 February 18, 2015: Linear Regression



Station 906 SO2 February 18, 2015: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton
 Calibration Date: February 18, 2015
 Parameter: TRS

Instrument: Teco 43C	Serial Number: 43CTL - 60324 - 326	Previous Calibration Date: January 20, 2015
Calibration: Routine	Calibration Equipment: SABIO 2010 sn # 04300810	Barometric Pressure: 26.54" Hg
Calibration Method: Std.Gas Dilution	Permeation Device ID: SV14360, 4.89 ppm H2S	Temperature: 21.0° C
Permeation Rate: 0 ng/min	In Service: February 5, 2013	Technician: Dean Yustak

Instrument Settings	H ₂ S bkg ppb	H ₂ S Coefficient	Monitoring Range
Previous	1.95	0.773	100 ppb
Current	1.71	0.764	100 ppb

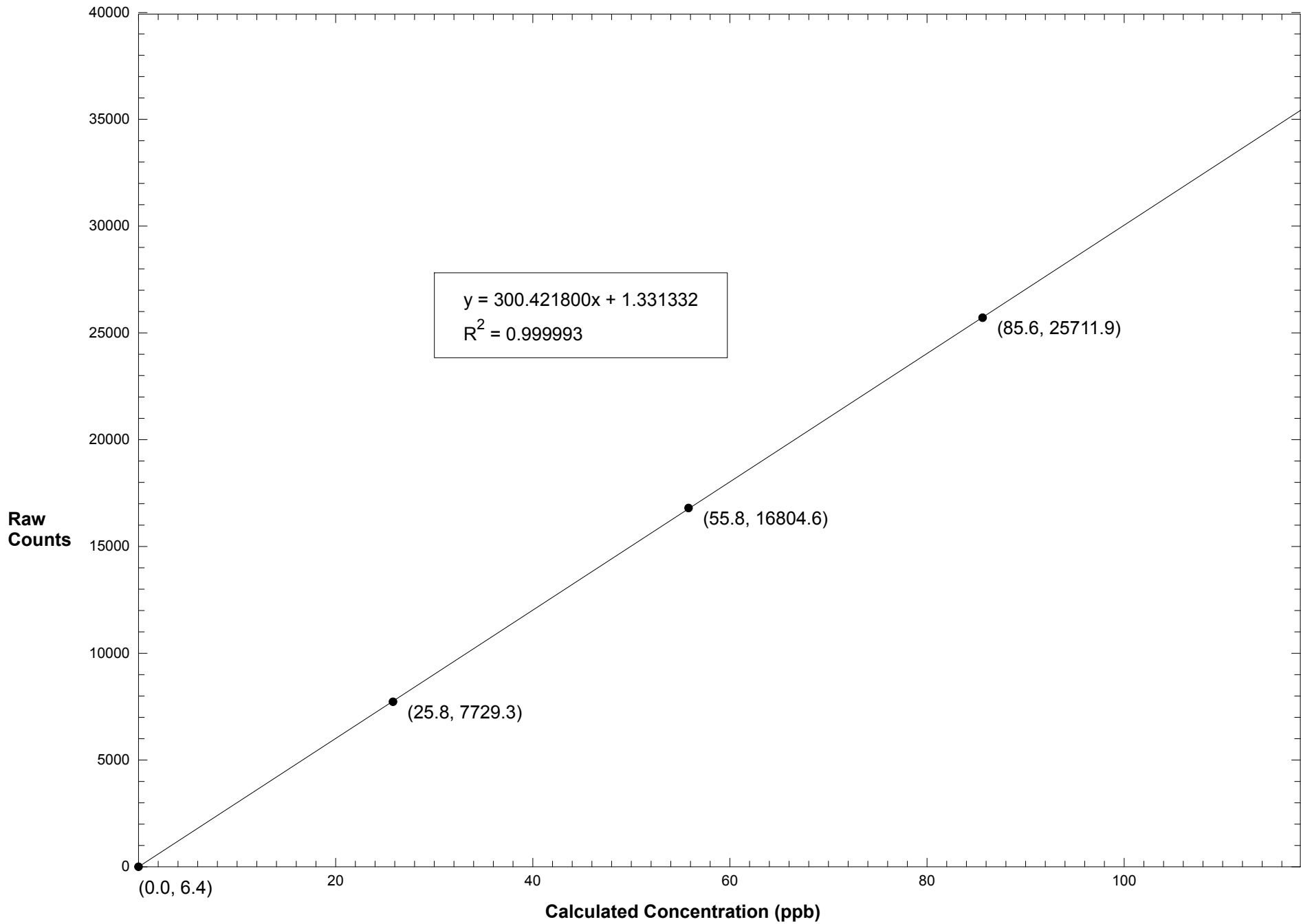
Final Zero: 0.0 ppb Final Span: 64.3 ppb As Found Correction Factor: 0.999

Calibration System Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
0.072	85.6	25711.9	85.6	1.001
0.047	55.8	16804.6	55.9	0.998
0.021	25.8	7729.3	25.7	1.003
0.000	0.0	6.4	0.0	

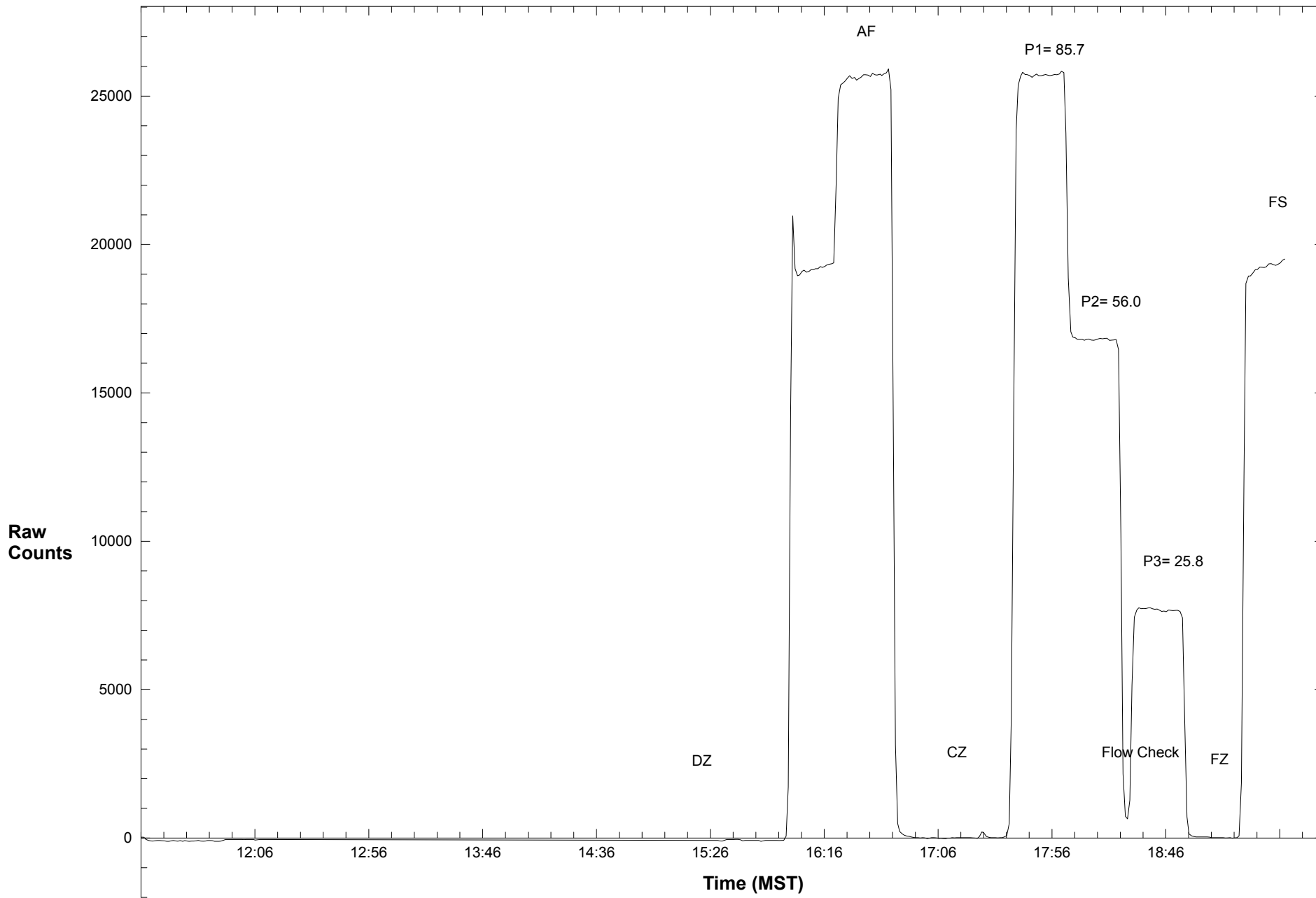
Results of Linear Regression				Average Correction Factor:	1.001
R _c vs C _c	Slope	Intercept	R ²	Previous Correction Factor:	0.998
Previous	301.747600	-89.011630	0.999962	Current Correction Factor:	1.001
Current	300.421800	1.331332	0.999993	Percent Change of Correction Factor:	0.3
C _i vs C _c					
Current	1.000000	0.000000	0.999994		

Comments:

Station 906 TRS February 18, 2015: Linear Regression



Station 906 TRS February 18, 2015: Calibration Graph



WEST CENTRAL AIRSHED SOCIETY

**CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT
METEOROLOGICAL DATA**

**AMS 906
HINTON
FEBRUARY 2015**

Operations and Data Collection by:
West Central Airshed Society
Drayton Valley, Alberta

QA/QC, Data Validation and Reporting by:
West Central Airshed Society
Drayton Valley, Alberta



WCAS - Hinton
Summary of Hourly Averages

External Temperature (ET) - C
February 2015

Maximum Value: 10.30 C on Feb 23 17:00 Maximum Daily Average: 4.59 C on Feb 19		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																									
Minimum Value: -21.0 C on Feb 4 03:00 Minimum Daily Average: -17.33 C on Feb 6 Maximum Diurnal Average: -1.46 C at hour 16 Minimum Diurnal Average: -8.73 C at hour 8 Monthly Average: -5.767 C Percentiles: P ₁ = -20.1 P ₁₀ = -16.3 Q ₁ = -11.9 Median = -5.9 Q ₃ = 0.9 P ₉₀ = 4.4 P ₉₉ = 8.6																											
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	-17.9	-18.5	-18.9	-19.0	-19.6	-20.1	-19.9	-19.4	-18.8	-17.6	-16.8	-14.7	-13.1	-11.0	-10.0	-9.7	-9.3	-9.4	-10.1	-10.7	-11.0	-11.3	-11.9	-12.3	-14.63	-9.31	
2-Feb	-12.6	-12.8	-13.1	-13.5	-13.7	-14.2	-14.5	-14.6	-14.7	-14.8	-14.6	-14.3	-13.7	-12.9	-12.6	-12.4	-12.5	-12.9	-13.3	-13.8	-14.0	-14.1	-14.3	-14.4	-13.67	-12.36	
3-Feb	-14.6	-14.7	-14.8	-15.0	-15.2	-15.3	-16.4	-18.7	-20.7	-20.5	-18.5	-15.7	-11.0	-9.5	-8.4	-6.6	-8.5	-11.4	-14.4	-16.8	-18.1	-19.8	-20.0	-20.5	-15.21	-6.55	
4-Feb	-20.9	-20.8	-21.0	-20.4	-19.7	-19.3	-18.8	-18.6	-15.7	-12.7	-6.4	-1.9	0.2	2.5	3.5	3.3	1.8	0.3	-0.8	-1.9	-2.3	-4.1	-4.4	-5.5	-8.48	3.53	
5-Feb	-6.4	-7.0	-6.8	-6.2	-5.3	-4.4	-4.5	-5.5	-6.5	-8.4	-10.4	-11.6	-12.2	-12.6	-13.5	-14.6	-15.3	-16.1	-16.9	-17.4	-17.9	-18.3	-18.5	-18.4	-11.44	-4.41	
6-Feb	-18.5	-18.5	-18.6	-18.9	-19.0	-19.1	-19.3	-19.4	-19.4	-19.2	-18.8	-17.7	-16.6	-16.1	-15.2	-15.0	-14.7	-15.2	-15.7	-16.1	-16.3	-16.3	-16.2	-16.1	-17.33	-14.73	
7-Feb	-16.1	-16.5	-16.8	-16.9	-17.5	-18.2	-18.5	-18.7	-18.8	-18.0	-16.8	-15.7	-12.8	-9.2	-6.5	-4.1	-4.7	-6.7	-8.7	-10.5	-11.3	-11.5	-12.1	-12.3	-13.28	-4.09	
8-Feb	-12.9	-13.5	-13.0	-12.5	-12.7	-12.8	-12.9	-12.9	-13.2	-12.7	-12.0	-9.6	-7.3	-5.8	-5.7	-5.6	-6.5	-8.2	-9.5	-10.9	-12.0	-12.9	-14.0	-15.2	-11.01	-5.63	
9-Feb	-15.9	-16.4	-17.2	-17.7	-17.8	-17.8	-17.0	-16.8	-16.5	-16.0	-15.2	-14.4	-13.7	-13.1	-12.3	-11.5	-11.7	-11.8	-12.0	-12.0	-12.2	-12.2	-12.1	-12.2	-14.40	-11.48	
10-Feb	-12.0	-12.0	-12.0	-12.1	-11.9	-11.6	-11.4	-11.4	-11.5	-11.5	-10.9	-9.8	-9.3	-8.8	-7.9	-7.7	-7.6	-7.9	-8.3	-8.6	-8.9	-9.4	-9.6	-9.6	-10.06	-7.61	
11-Feb	-9.7	-9.8	-9.8	-9.9	-10.1	-10.3	-10.4	-10.5	-10.5	-10.2	-9.7	-8.8	-8.0	-7.5	-6.8	-6.6	-6.7	-6.8	-7.3	-8.6	-9.7	-10.1	-9.5	-9.2	-9.02	-6.59	
12-Feb	-8.9	-8.7	-8.3	-8.2	-9.0	-9.9	-10.3	-10.5	-10.2	-9.2	2.6	8.1	8.5	8.7	8.9	9.0	7.8	6.0	3.5	2.4	1.9	1.4	0.5	-0.7	-1.02	9.01	
13-Feb	-1.7	-2.2	-2.3	-2.7	-1.4	-1.1	-0.4	-1.9	-2.2	-1.0	6.0	9.3	6.9	5.5	5.5	5.2	5.3	4.4	3.6	2.9	1.9	2.0	1.3	1.1	1.83	9.25	
14-Feb	1.0	1.3	1.7	1.2	0.9	0.5	-0.3	-0.1	-0.2	1.1	3.4	4.7	6.3	6.7	6.9	6.4	5.7	3.8	2.3	0.0	-2.2	-3.1	-3.7	-4.3	1.67	6.94	
15-Feb	-4.0	-3.5	-3.3	-3.8	-5.1	-6.0	-7.0	-7.5	-8.0	-6.5	-4.1	-1.1	1.6	1.9	3.1	3.0	2.9	1.2	0.7	0.4	-0.3	-1.8	-2.5	-3.1	-2.20	3.07	
16-Feb	-2.9	-2.8	-2.4	-2.4	-2.4	-2.6	-2.4	-2.7	-3.1	-2.7	-1.4	1.5	2.0	2.9	2.8	3.2	2.1	1.4	-0.9	-2.7	-3.8	-4.7	-4.9	-4.5	-1.39	3.23	
17-Feb	-5.7	-7.0	-7.8	-8.5	-8.5	-9.0	-8.8	-8.0	-5.9	-4.5	-3.1	-2.0	-1.0	0.0	0.9	2.1	3.5	3.5	3.3	2.9	2.5	2.5	2.4	2.0	-2.25	3.51	
18-Feb	1.3	0.5	0.0	-1.2	-1.1	-1.8	-2.7	-2.7	-2.8	-1.7	0.4	2.2	3.8	5.8	6.5	6.3	5.4	4.8	3.4	2.0	3.3	6.7	6.5	5.4	2.10	6.72	
19-Feb	4.4	3.1	4.7	4.5	4.4	4.3	4.0	2.5	1.6	3.9	7.3	8.2	7.8	7.5	7.6	6.4	6.1	5.5	4.6	3.6	2.7	2.1	1.8	1.6	4.59	8.15	
20-Feb	2.5	2.1	1.8	1.6	1.5	0.9	0.4	0.3	0.6	0.9	0.4	0.6	0.1	-0.1	0.1	-0.2	-0.1	-0.4	-1.5	-2.1	-2.7	-3.0	-3.1	-3.2	-0.09	2.52	
21-Feb	-3.3	-3.5	-3.8	-3.6	-3.5	-3.8	-3.8	-4.3	-5.0	-4.8	-4.5	-3.7	-1.8	-1.4	-0.6	-1.0	-1.2	-1.2	-2.5	-4.4	-5.9	-7.5	-8.9	-9.8	-3.92	-0.62	
22-Feb	-9.9	-9.4	-9.2	-7.5	-6.1	-4.7	-4.3	-4.1	-3.8	-3.3	-1.6	-0.2	1.8	2.3	3.8	4.5	4.8	4.3	4.0	4.0	4.0	4.0	3.5	2.8	-0.85	4.82	
23-Feb	2.3	2.0	1.6	1.4	1.4	1.1	1.0	0.6	0.7	0.8	2.2	4.0	6.0	7.8	8.7	9.6	10.3	9.3	8.3	7.9	5.8	2.9	4.8	4.4	4.37	10.30	
24-Feb	4.7	6.4	6.7	5.7	4.7	3.5	3.0	1.4	2.0	6.1	5.7	6.3	7.0	6.9	6.5	6.1	5.5	4.3	3.2	1.8	0.9	1.0	0.6	0.7	4.20	6.98	
25-Feb	0.6	-1.5	-3.5	-4.4	-6.3	-7.3	-8.0	-8.1	-8.0	-7.7	-6.5	-5.8	-5.2	-5.0	-5.0	-5.4	-6.1	-6.5	-6.7	-7.0	-7.8	-8.4	-8.8	-9.2	-6.15	0.55	
26-Feb	-9.5	-9.7	-9.9	-9.9	-10.3	-10.4	-10.6	-10.7	-10.8	-9.9	-7.6	-5.7	-3.5	-2.4	-0.9	-1.2	-2.2	-2.9	-3.4	-3.9	-4.8	-5.7	-6.4	-7.0	-6.63	-0.90	
27-Feb	-7.2	-7.3	-7.4	-7.7	-8.2	-8.6	-8.8	-9.4	-9.7	-8.7	-8.0	-7.6	-6.9	-6.2	-5.5	-4.8	-4.2	-5.4	-7.2	-9.1	-11.2	-12.8	-14.2	-14.5	-8.36	-4.19	
28-Feb	-14.8	-14.9	-15.2	-16.0	-16.6	-16.1	-15.8	-12.7	-11.7	-10.5	-9.3	-6.3	-3.9	-1.9	-1.4	-0.3	0.1	-1.1	-2.4	-4.4	-6.2	-8.7	-10.4	-11.5	-8.82	0.14	
		-7.44	-7.69	-7.80	-7.98	-8.15	-8.36	-8.51	-8.73	-8.68	-7.83	-6.01	-4.34	-3.14	-2.32	-1.70	-1.46	-1.79	-2.67	-3.73	-4.74	-5.56	-6.18	-6.57	-6.98	Diurnal Average	
		4.75	6.39	6.65	5.69	4.68	4.28	4.00	2.50	2.04	6.14	7.30	9.25	8.53	8.68	8.88	9.64	10.30	9.27	8.34	7.87	5.76	6.72	6.45	5.44	Diurnal Maximum	



WCAS - Hinton
Summary of Hourly Averages

Wind Speed (WS) - kph
February 2015

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	1.1	1.2	0.7	0.7	0.4	0.9	0.8	0.5	0.7	1.1	2.7	0.8	2.2	0.4	2.6	4.1	3.3	4.1	7.5	6.9	7.6	5.7	6.3	6.1	2.53	7.59
Dir	NNW	NW	NW	N	NE	WNW	NNW	N	W	NE	ENE	NE	E	NW	ENE	NE	NE	ENE	ENE	ENE	NE	NE	ENE	ENE	NE	ENE
2 Spd	5.9	6.9	5.9	6.5	6.8	7.0	5.4	5.8	6.1	6.9	4.6	4.5	4.7	2.8	4.3	3.7	2.8	3.4	4.9	4.4	3.7	2.3	2.2	2.2	4.71	7.04
Dir	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	ENE
3 Spd	2.2	1.6	2.7	2.8	1.0	0.6	0.5	0.7	0.9	1.3	0.8	1.1	0.3	1.6	1.9	0.5	0.4	0.5	0.7	0.6	0.7	0.7	0.5	0.9	0.56	2.80
Dir	NE	NNE	NE	NE	NNW	ENE	ESE	ESE	E	NE	NNE	NW	W	WSW	WNW	WNW	W	SE	SSE	E	ESE	NE	NE	NE	NE	NE
4 Spd	0.8	0.6	1.4	1.1	1.0	0.4	0.2	1.0	1.2	1.8	2.3	9.0	11.9	8.6	8.6	5.3	3.4	3.4	3.9	2.7	1.2	4.1	2.5	1.8	2.17	11.91
Dir	NW	NW	W	E	ESE	SE	N	ENE	WNW	WNW	W	SW	SW	SW	SW	WSW	WSW	SW	S	SSW	SW	ENE	NE	S	SW	SW
5 Spd	1.2	0.3	0.6	0.9	2.7	4.9	4.7	6.5	7.3	7.8	7.5	9.1	5.6	6.6	7.6	8.8	8.7	8.4	8.9	7.0	6.1	7.1	6.2	6.2	5.76	9.11
Dir	SE	WSW	NE	ENE	ENE	ENE	NE	NE	NE	NE	NE	NE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	ENE
6 Spd	5.4	4.5	5.6	6.9	7.4	7.7	7.5	8.1	8.2	7.4	7.3	5.7	5.8	5.9	5.8	6.8	5.6	6.3	6.8	5.6	5.7	3.4	3.9	3.4	6.07	8.18
Dir	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
7 Spd	4.6	8.0	8.2	7.7	9.2	9.6	8.2	6.5	6.1	5.9	5.9	4.5	4.6	5.9	3.9	5.8	6.1	10.2	7.3	9.9	11.0	4.8	2.9	2.2	6.60	11.02
Dir	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	ENE	NE	ENE	ENE	ENE	NE	ENE	ENE	ENE
8 Spd	2.1	1.9	1.3	3.6	5.7	7.0	6.7	5.4	2.9	4.9	5.6	6.0	7.0	6.8	9.0	9.1	8.9	9.6	10.2	8.9	7.2	5.6	2.3	0.6	5.71	10.19
Dir	E	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	ENE	ENE	ENE
9 Spd	0.6	1.0	1.4	0.9	0.6	2.0	3.8	1.5	2.1	3.6	3.7	5.4	6.0	4.6	3.9	5.2	5.4	2.9	3.0	2.8	3.5	1.9	1.0	1.0	2.96	5.95
Dir	E	ENE	ENE	ENE	ESE	ENE	ENE	NE	NE	NE	ENE	ENE	ENE	ENE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NNE	NE	ENE	ENE
10 Spd	1.2	1.2	3.0	1.9	2.9	0.3	2.3	2.4	3.2	3.5	2.4	4.4	7.1	4.2	4.6	4.1	4.4	5.4	4.9	4.7	5.8	7.3	7.3	6.4	3.90	7.35
Dir	ENE	ENE	ENE	ENE	ENE	W	NE	ENE	ENE	NE	ENE	ENE	ENE	NE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
11 Spd	5.8	6.9	6.2	6.4	4.9	4.6	6.0	6.8	6.6	6.2	5.8	5.6	6.2	6.6	5.6	5.0	5.3	2.6	3.0	1.3	1.6	0.3	1.8	1.6	4.67	6.95
Dir	ENE	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NE	NE	ENE	NE	NE	ENE	ENE	ENE
12 Spd	2.6	2.8	1.3	1.5	1.7	1.5	1.4	1.0	1.9	2.5	3.0	2.6	7.9	5.2	5.6	5.4	6.2	2.0	1.7	1.5	1.1	0.2	0.6	1.1	0.72	7.95
Dir	ENE	ENE	ENE	ENE	ENE	E	ENE	ENE	ENE	ENE	W	W	WSW	WSW	SW	SW	SSW	SSE	ENE	E	ESE	SSE	E	E	S	WSW
13 Spd	1.3	1.4	0.6	0.3	0.8	1.6	2.2	0.6	1.1	0.5	5.7	7.7	1.0	1.4	2.4	2.2	3.4	3.3	5.8	6.4	5.5	7.7	4.4	1.7	1.33	7.71
Dir	E	ENE	SE	NNE	WNW	W	WSW	N	ESE	WSW	SW	SW	SSW	E	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	SE	SE	E	SW
14 Spd	1.5	4.1	9.5	1.9	1.4	1.6	2.1	2.8	2.3	1.9	5.7	6.7	3.0	3.9	3.4	5.9	6.0	2.4	2.5	1.0	0.4	1.0	0.3	0.8	2.55	9.50
Dir	WSW	SW	SW	W	W	WSW	W	SW	WSW	W	SW	SW	W	W	W	WNW	WNW	W	WSW	NNW	SE	WSW	E	SSE	WSW	SW
15 Spd	0.8	1.3	1.6	1.7	0.8	0.8	0.6	0.3	1.0	0.2	0.6	1.6	0.7	0.9	2.9	3.3	1.9	1.3	2.2	7.5	4.0	1.1	1.9	1.2	0.74	7.48
Dir	S	WSW	SW	SSW	S	S	NE	SW	WSW	ENE	SSW	E	SSE	NNW	NE	ESE	NE	WSW	S	SSW	SW	W	W	SSW	SSW	SSW
16 Spd	1.2	1.6	2.1	1.5	1.6	0.6	2.3	1.1	2.1	1.1	1.7	1.8	1.9	1.3	1.6	3.5	6.0	3.1	1.6	0.7	0.1	0.3	1.2	0.6	0.42	5.99
Dir	WNW	WSW	WSW	W	W	WSW	SW	WNW	WNW	W	NW	W	W	WSW	SSW	ENE	ENE	NE	E	ESE	W	SW	W	W	WNW	ENE
17 Spd	0.3	0.3	0.2	0.2	0.1	0.9	0.6	1.6	2.8	2.8	3.7	5.0	5.4	7.6	7.8	6.0	8.0	6.6	7.7	3.2	3.6	6.0	6.7	2.8	3.60	7.99
Dir	S	WSW	E	E	NNE	WNW	W	W	W	W	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW	SW
18 Spd	3.4	3.0	3.5	2.0	2.1	2.6	2.3	2.6	2.1	2.1	2.6	4.0	6.0	3.9	4.7	3.0	1.9	0.6	0.6	1.3	2.5	8.1	5.4	2.6	2.42	8.10
Dir	SW	WSW	WSW	WNW	WNW	WNW	NW	NW	WNW	WNW	WNW	WSW	SW	WSW	SW	WSW	W	N	ESE	ENE	WSW	SW	WSW	NNW	WSW	SW
19 Spd	1.4	0.6	5.5	2.3	3.0	1.9	1.9	1.3	1.5	3.3	3.8	10.1	5.7	4.7	5.4	3.7	6.2	4.9	4.6	3.5	1.4	1.8	1.1	1.6	2.66	10.11
Dir	ESE	SSW	SW	WSW	WSW	W	WSW	WSW	W	SW	WSW	SW	WSW	WSW	WSW	WNW	NW	NW	WNW	WNW	WNW	SSE	W	NNW	W	SW
20 Spd	3.4	1.0	0.9	2.4	2.2	3.1	5.0	6.9	5.2	1.0	6.3	4.8	6.6	6.3	5.9	5.6	3.5	3.7	3.4	3.4	6.6	4.7	2.0	0.6	1.49	6.86
Dir	NW	NNE	SSW	SW	WSW	WSW	SW	SW	SW	W	ENE	ENE	E	E	E	ENE	NE	NE	NE	NE	ENE	ENE	NE	NE	ENE	SW
21 Spd	1.1	2.0	1.4	1.1	2.0	1.1	1.5	2.5	3.5	3.0	3.8	3.2	2.7	2.0	1.6	2.8	3.1	1.3	0.9	0.3	1.5	1.0	0.2	0.7	0.78	3.78
Dir	N	S	ENE	NNW	SW	SW	SSW	E	ENE	NE	NE	ENE	SSE	SSE	ENE	S	SE	E	ENE	SE	SW	SW	ENE	ENE	ESE	NE
22 Spd	0.5	1.0	2.0	3.0	4.1	8.3	8.4	9.5	9.5	9.4	10.3	12.3	12.0	14.2	12.7	13.0	14.1	12.1	10.9	10.5	11.8	13.0	11.3	10.0	9.00	14.23
Dir	NNE	NNW	NW	WNW	W	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW



WCAS - Hinton
Summary of Hourly Averages

Wind Speed (WS) - kph
February 2015

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	10.3	8.9	9.8	9.1	11.4	11.1	12.4	10.9	10.2	12.0	11.8	14.7	13.8	12.6	13.4	13.6	14.2	9.3	8.8	7.2	1.8	1.0	3.7	2.4	9.60	14.75
Dir	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SW	W	NNW	WSW	W	SW	SW
24 Spd	3.7	8.0	9.0	4.6	2.8	5.2	1.0	1.4	3.6	5.7	1.2	2.5	6.1	7.7	7.7	11.3	11.1	9.2	7.2	6.5	5.4	5.9	4.2	4.0	3.65	11.27
Dir	WSW	SW	SW	SW	WSW	SSW	W	S	SW	SSW	E	NW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	WNW	WNW	SW	WSW	WNW	NNW
25 Spd	2.0	4.3	5.2	5.7	6.3	5.7	7.3	4.5	5.4	4.4	5.1	5.6	6.1	7.0	7.3	6.8	6.7	6.6	4.9	5.2	7.3	7.9	7.2	8.2	5.73	8.21
Dir	WSW	NE	NE	NE	NE	NE	ENE	NE	ENE	NE	NE	ENE	NE	NE	NE	NE	ENE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE
26 Spd	6.4	7.7	6.4	4.2	3.9	3.4	4.4	4.0	5.6	4.3	3.9	1.0	2.0	2.3	0.6	5.6	6.4	6.1	3.3	3.6	7.1	6.1	3.0	2.1	3.85	7.70
Dir	ENE	ENE	ENE	NE	NE	NE	NE	NE	ENE	NE	ENE	WNW	WNW	WNW	NNW	ENE	NE	ENE	NE	NE	ENE	ENE	ENE	ESE	ENE	ENE
27 Spd	0.4	0.7	2.1	1.0	1.3	0.7	0.7	0.9	0.2	0.9	1.1	3.9	2.2	1.1	4.0	1.9	0.8	2.4	0.2	1.9	2.6	2.2	1.9	2.5	0.77	4.01
Dir	WSW	ESE	ENE	NNE	N	N	ENE	SE	N	SW	SSE	SSW	SSW	ESE	SW	SSE	NNW	NW	S	S	SSW	SSW	SW	SW	SSW	SW
28 Spd	1.3	1.6	0.6	1.3	0.7	1.5	2.5	3.5	3.8	2.1	2.2	2.4	4.4	6.5	5.2	5.6	4.7	2.3	0.3	0.5	1.8	0.9	0.2	0.7	1.69	6.45
Dir	WSW	W	NW	W	WNW	W	WNW	WSW	WSW	W	W	WSW	SW	NW	NW	NW	NNW	NNW	NE	SW	S	SSE	S	S	WNW	NW
Spd	0.55	0.69	0.51	0.88	0.84	0.62	0.76	0.73	0.64	0.78	0.61	0.76	0.52	0.25	0.13	0.88	1.02	1.43	1.49	1.45	1.70	1.39	0.66	0.75	Diurnal Average	
Dir	ENE	ENE	ESE	NE	ENE	E	ENE	E	ENE	ENE	ENE	SSW	SSW	W	E	NE	NE	NE	ENE	ENE	ENE	ENE	E			
Spd	10.32	8.85	9.78	9.07	11.36	11.08	12.45	10.87	10.22	12.02	11.78	14.75	13.83	14.23	13.38	13.64	14.22	12.08	10.86	10.46	11.77	12.96	11.25	10.02	Diurnal Maximum	
Dir	223.52	227.96	228.55	228.64	223.78	221.47	219.02	219.34	221.72	220.69	222.27	220.44	223.61	222.77	217.11	215.05	214.18	221.43	221.46	223.46	225.20	221.07	224.92	220.22		
Maximum Speed Value: 14.7 kph on Feb 23 12:00																		Minimum Speed Value: 0.1 kph on Feb 17 05:00						Hours in Service: 672		
Maximum Daily Speed Average: 9.60 kph on Feb 23																		Minimum Daily Speed Average: 0.42 kph on Feb 3						Hours of Data: 672		
Maximum Diurnal Speed Average: 1.70 kph at hour 21																		Minimum Diurnal Speed Average: 0.13 kph at hour 15						Hours of Missing Data: 0		
Monthly Average Velocity: 0.702 kph 70.712 deg																		Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.7 Q ₁ = 1.5 Median = 3.4 Q ₃ = 6.1 P ₉₀ = 8.2 P ₉₉ = 13.3						Percent Operational Time: 100.0		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (kph)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	20	1	0	0	0	0	21																			
NorthEast	124	111	0	0	0	0	235																			
East	64	38	1	0	0	0	103																			
SouthEast	20	0	0	0	0	0	20																			
South	29	1	0	0	0	0	30																			
SouthWest	63	54	22	0	0	0	139																			
West	73	2	0	0	0	0	75																			
NorthWest	35	12	2	0	0	0	49																			
Total	428	219	25	0	0	0	672																			



WCAS - Hinton
Summary of Hourly Averages

Relative Humidity (RH) - %
February 2015

Maximum Value: 91.51 % on Feb 14 08:00 Maximum Daily Average: 81.18 % on Feb 5																							Hours in Service: 672 Hours of Data: 672			
Minimum Value: 25.2 % on Feb 22 16:00 Minimum Daily Average: 38.19 % on Feb 23 Maximum Diurnal Average: 77.67 % at hour 8 Minimum Diurnal Average: 55.86 % at hour 15 Monthly Average: 69.646 % Percentiles: P₁ = 27.6 P₁₀ = 42.4 Q₁ = 59.9 Median = 75.9 Q₃ = 81.3 P₉₀ = 86.1 P₉₉ = 90.6																							Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0			
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	79.4	79.2	78.4	79.0	78.2	77.5	78.3	78.5	79.5	80.3	79.6	80.7	80.5	79.9	79.5	81.8	84.0	84.4	83.7	84.0	84.2	83.8	83.2	83.1	80.86	84.36
2-Feb	82.8	82.8	82.4	81.9	81.7	81.1	81.2	81.1	80.9	80.3	80.4	80.6	80.3	79.6	78.4	79.0	79.0	79.8	81.6	81.7	81.6	81.6	81.7	81.7	80.96	82.76
3-Feb	81.3	81.6	81.3	80.9	81.2	80.9	80.2	78.7	77.1	76.4	76.8	77.2	76.8	75.7	78.1	76.5	78.3	80.9	81.5	80.3	79.8	78.0	78.1	77.5	78.96	81.56
4-Feb	77.0	76.9	76.8	77.2	78.2	78.6	78.6	79.1	82.0	84.6	84.9	71.3	60.6	52.7	48.2	50.4	57.3	61.0	62.8	66.7	68.4	78.8	84.7	86.8	71.82	86.81
5-Feb	86.7	87.9	87.6	87.5	88.4	88.0	87.0	87.2	86.4	83.4	81.5	79.8	81.4	80.1	78.1	78.3	76.3	74.5	73.5	74.3	74.9	74.7	75.2	75.4	81.18	88.44
6-Feb	75.6	75.8	75.9	75.7	75.2	74.6	74.4	74.1	73.9	72.9	71.1	69.5	67.5	68.0	66.9	65.5	67.6	72.0	74.4	75.7	75.5	75.5	75.8	74.7	72.83	75.88
7-Feb	76.6	75.8	75.4	75.5	75.9	77.4	75.3	75.7	75.6	72.3	67.5	68.9	65.5	63.2	62.9	61.8	67.1	73.5	76.9	76.7	75.5	75.8	78.7	79.5	72.87	79.48
8-Feb	80.7	82.4	81.8	79.4	77.6	76.5	78.1	78.7	79.1	78.0	74.8	65.5	59.6	56.4	58.6	61.1	64.9	70.9	74.5	77.3	79.0	80.5	81.2	82.7	74.13	82.68
9-Feb	82.5	81.6	80.9	80.3	80.2	80.0	79.5	79.3	79.1	77.7	75.6	73.8	72.5	70.9	71.8	73.8	77.6	79.9	80.8	81.2	81.0	81.4	80.5	80.3	78.42	82.48
10-Feb	80.3	80.3	80.3	80.2	79.4	79.4	79.6	78.9	79.3	79.4	77.6	76.0	74.9	73.9	74.9	76.9	76.8	77.4	76.6	78.7	80.6	79.9	81.1	81.3	78.48	81.33
11-Feb	81.3	81.8	81.6	81.7	82.4	82.9	83.2	82.9	82.5	81.2	78.5	74.5	70.6	69.3	69.7	71.5	72.5	73.5	76.1	80.1	83.2	85.0	84.5	83.1	78.90	84.96
12-Feb	81.8	80.5	79.7	79.9	81.3	83.8	84.2	84.5	84.0	80.6	66.5	51.2	48.4	47.4	46.8	46.0	52.8	63.3	75.4	79.0	82.7	84.5	86.2	88.4	72.46	88.39
13-Feb	89.6	90.5	91.1	91.2	89.9	87.1	83.8	84.6	87.0	86.1	64.4	48.8	58.6	67.2	69.1	71.3	73.3	75.2	79.0	82.8	86.7	89.1	90.0	90.6	80.29	91.24
14-Feb	91.0	91.2	88.8	88.6	90.2	90.7	91.2	91.5	90.7	89.3	77.8	66.3	55.6	44.6	41.5	35.1	35.2	44.8	45.8	57.0	71.2	75.6	78.9	81.0	71.41	91.51
15-Feb	80.5	81.1	81.3	82.6	85.7	87.1	88.0	88.5	88.5	89.0	86.6	75.5	62.1	61.8	52.6	54.6	56.6	74.0	79.9	81.3	80.3	86.9	88.8	89.5	78.44	89.46
16-Feb	89.6	89.8	89.1	88.8	88.6	88.7	88.3	86.8	88.5	88.3	80.6	61.0	57.0	49.2	49.0	48.0	54.6	56.2	66.2	74.9	79.6	82.3	84.5	81.7	75.46	89.81
17-Feb	83.6	86.9	87.8	87.9	87.5	87.3	87.1	87.1	76.7	67.9	58.7	52.2	48.5	44.5	41.7	40.3	37.1	38.1	39.8	42.8	45.2	44.9	45.5	48.2	61.14	87.92
18-Feb	50.2	53.7	55.4	62.5	62.6	64.7	69.2	69.4	70.0	66.0	59.8	52.7	45.0	40.0	37.8	39.6	45.2	48.3	54.8	62.2	55.9	36.2	37.3	52.0	53.77	69.98
19-Feb	59.9	64.9	46.5	47.2	48.5	48.5	49.1	53.5	55.8	48.7	37.1	30.5	34.3	35.5	34.4	41.4	39.1	38.8	45.0	51.5	55.5	60.3	60.9	60.5	47.81	64.91
20-Feb	59.9	62.3	64.1	67.3	71.1	77.4	84.2	87.9	86.0	85.0	79.0	72.1	73.7	68.6	66.7	67.7	68.7	70.0	80.1	84.7	84.8	85.8	86.1	86.9	75.84	87.91
21-Feb	86.6	86.7	85.7	78.7	72.0	75.9	81.5	85.9	85.2	84.6	80.6	76.9	65.2	63.1	59.4	58.5	58.3	60.0	68.3	76.0	80.5	84.5	85.7	86.3	76.08	86.74
22-Feb	86.2	85.4	84.5	76.9	66.0	52.7	49.8	48.1	46.6	44.9	39.8	35.5	30.5	28.4	26.5	25.2	25.9	27.5	28.5	28.4	28.3	28.5	30.0	33.1	44.05	86.23
23-Feb	35.6	36.8	39.0	40.2	39.7	41.3	42.2	43.4	43.2	42.3	37.7	33.1	29.5	27.9	27.8	27.6	27.7	31.0	34.6	43.8	55.4	49.5	50.9	38.19	55.44	
24-Feb	50.2	44.0	43.2	46.5	50.9	54.4	55.8	65.4	59.5	37.4	39.4	32.6	26.9	27.3	30.3	31.0	37.4	42.5	57.0	67.1	66.3	72.4	65.4	47.07	72.37	
25-Feb	62.7	74.8	82.9	81.3	83.1	83.7	83.2	85.6	86.0	85.0	81.0	79.1	76.4	73.7	72.2	72.7	74.6	72.9	73.0	74.0	75.6	75.8	75.9	76.1	77.56	86.00
26-Feb	76.7	76.7	77.0	77.8	78.4	78.7	78.9	79.5	79.7	76.8	68.0	64.2	60.0	57.1	52.7	55.6	59.2	61.0	59.6	62.1	64.4	67.3	74.5	80.5	69.44	80.49
27-Feb	81.9	82.0	76.7	72.9	72.3	75.0	78.0	80.6	83.1	76.6	64.5	63.6	58.0	54.5	52.6	49.8	47.1	48.5	55.5	66.9	73.6	77.1	80.5	81.3	68.86	83.06
28-Feb	81.4	81.9	81.3	81.4	80.8	81.4	81.5	78.3	72.4	67.7	61.7	52.6	45.1	43.1	39.1	36.1	33.8	37.6	42.1	52.4	59.3	67.9	73.1	75.9	62.83	81.93
76.13 76.97 76.29 76.11 75.97 76.26 76.85 77.67 77.08 74.38 68.99 63.07 59.45 57.26 55.86 56.31 57.91 61.16 64.73 68.78 71.36 72.97 74.44 75.51																							Diurnal Average			
91.04 91.18 91.06 91.24 90.24 90.69 91.25 91.51 90.65 89.32 86.56 80.74 81.36 80.14 79.52 81.84 83.98 84.36 83.66 84.69 86.67 89.14 90.00 90.61																							Diurnal Maximum			



WCAS - Hinton
Summary of Hourly Standard Deviations

Wind Speed (WS) - kph
February 2015

Maximum Value: 6.35 kph on Feb 23 13:00		Maximum Daily Average: 4.64 kph on Feb 22		Hours in Service: 672																																													
Minimum Value: 0.3 kph on Feb 16 21:00		Minimum Daily Average: 1.12 kph on Feb 3		Hours of Data: 672																																													
Maximum Diurnal Average: 3.19 kph at hour 13		Minimum Diurnal Average: 1.86 kph at hour 1		Hours of Missing Data: 0																																													
Monthly Average: 2.417 kph		Percentiles: P ₁ = 0.7 P ₁₀ = 1.1 Q ₁ = 1.4 Median = 2.2 Q ₃ = 3.0 P ₉₀ = 4.3 P ₉₉ = 6.0		Hours of Calibration: 0																																													
				Percent Operational Time: 100.0																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	0.9	1.0	0.7	1.0	0.9	0.9	0.9	0.8	1.2	1.2	1.3	1.1	1.4	0.7	1.6	1.9	1.9	2.5	2.9	3.2	3.2	3.0	3.0	2.2	1.64	3.24																							
2-Feb	2.0	2.6	2.4	2.8	2.5	2.2	2.3	2.2	2.1	2.3	2.1	2.0	2.0	1.5	1.5	1.8	1.6	2.0	2.4	2.4	2.0	1.7	1.6	1.6	2.08	2.85																							
3-Feb	1.7	1.4	1.7	1.6	0.9	0.9	0.8	0.9	1.1	1.0	0.9	1.3	0.9	1.8	1.0	0.8	0.5	0.6	1.2	1.2	1.2	1.0	1.0	1.2	1.12	1.75																							
4-Feb	1.0	0.8	1.4	1.2	1.2	1.2	1.3	1.2	1.5	1.6	2.3	4.5	4.7	4.0	5.5	4.0	3.5	3.1	1.9	2.9	2.5	2.4	2.3	0.9	2.38	5.52																							
5-Feb	1.7	1.3	1.1	1.2	2.0	2.9	3.0	3.8	4.2	4.8	4.4	4.5	3.5	3.9	4.2	4.3	4.3	3.9	3.7	3.6	3.2	3.4	2.7	2.5	3.26	4.84																							
6-Feb	2.5	2.6	2.8	3.0	3.2	3.0	2.7	2.6	2.7	2.9	3.2	3.1	3.1	3.0	2.7	2.9	2.4	2.7	2.8	2.6	2.2	1.6	1.5	1.6	2.65	3.24																							
7-Feb	2.7	3.2	2.9	2.9	3.5	3.6	4.2	3.5	3.4	3.2	2.7	2.4	3.4	3.3	2.9	3.1	3.5	4.5	4.0	4.7	4.3	2.3	1.9	1.6	3.24	4.70																							
8-Feb	1.4	1.2	1.6	1.9	2.1	2.6	2.5	1.7	1.5	2.0	1.7	2.4	2.8	3.0	3.3	3.6	3.5	3.3	3.3	3.1	2.2	1.9	1.5	0.7	2.28	3.59																							
9-Feb	0.8	1.0	1.3	1.2	0.8	1.6	1.9	1.7	1.7	1.9	2.3	3.0	2.8	2.4	1.8	2.0	2.5	2.6	1.9	1.5	1.9	1.9	1.7	1.2	1.81	2.95																							
10-Feb	1.1	1.1	1.6	1.8	2.0	0.9	1.4	1.6	2.0	2.0	1.4	1.7	3.2	2.7	2.7	2.8	2.0	2.4	2.2	1.9	2.1	2.9	2.9	2.4	2.02	3.20																							
11-Feb	2.4	2.2	1.9	1.9	2.0	2.3	2.4	2.5	2.2	2.3	2.1	2.6	2.5	2.5	2.3	2.1	2.4	1.8	2.1	1.5	1.4	0.8	1.3	1.2	2.04	2.61																							
12-Feb	1.5	1.6	1.3	1.2	1.9	1.7	1.3	1.3	1.6	2.1	3.3	3.4	6.2	4.6	4.0	2.9	3.9	2.8	1.5	1.2	1.7	0.9	1.2	1.3	2.27	6.23																							
13-Feb	1.4	1.7	1.5	1.8	1.5	1.7	2.0	1.4	1.4	1.8	5.3	4.0	2.3	2.3	2.1	2.0	2.6	2.0	2.3	2.3	2.1	2.9	2.7	2.1	2.22	5.27																							
14-Feb	1.8	2.8	3.1	2.0	1.4	1.4	1.7	3.1	2.1	1.7	3.0	4.8	3.1	4.1	3.8	3.0	3.6	2.0	2.2	1.4	1.0	1.6	1.3	1.3	2.38	4.76																							
15-Feb	1.5	1.1	1.2	1.3	1.1	1.2	0.8	1.2	1.4	0.9	1.5	1.3	1.6	1.2	2.1	1.9	2.0	1.9	2.3	2.9	3.5	1.2	1.5	1.6	1.59	3.53																							
16-Feb	1.2	1.3	2.0	1.4	1.3	1.0	2.0	1.1	0.9	0.9	1.5	1.7	1.9	2.3	1.6	1.9	2.6	2.0	1.2	0.9	0.3	0.7	0.9	0.9	1.40	2.56																							
17-Feb	1.1	1.2	0.7	0.9	0.9	1.0	0.9	1.2	2.4	2.6	2.8	3.3	3.6	4.3	4.0	4.1	4.4	3.8	4.3	3.3	3.0	4.1	3.6	2.3	2.66	4.38																							
18-Feb	2.4	2.3	2.5	1.6	1.6	1.4	1.3	1.4	1.1	1.4	1.6	3.0	3.8	3.2	3.7	2.6	1.9	1.5	1.3	1.2	4.7	3.6	4.8	3.7	2.39	4.81																							
19-Feb	2.5	1.6	3.2	3.0	3.0	2.6	2.8	1.6	1.6	2.6	4.2	5.0	4.7	4.3	4.9	2.8	3.9	2.4	2.6	2.2	1.5	1.5	1.3	2.8	2.86	5.04																							
20-Feb	2.3	1.8	1.3	2.0	2.3	2.8	3.1	2.5	2.7	2.0	2.7	2.2	3.0	3.3	3.0	2.5	2.2	1.8	2.2	2.1	3.1	2.2	1.6	0.8	2.30	3.29																							
21-Feb	1.2	1.9	1.3	1.9	1.7	1.3	1.6	2.6	1.8	1.7	1.9	1.8	1.6	1.7	1.6	1.6	1.2	1.2	1.2	0.9	1.7	1.1	0.8	0.9	1.51	2.60																							
22-Feb	1.2	1.2	1.6	1.7	3.1	5.0	4.8	5.0	5.1	5.0	5.2	5.7	5.9	6.0	5.4	6.3	5.6	5.0	4.9	5.0	5.1	6.0	5.9	5.6	4.64	6.27																							
23-Feb	5.3	4.5	4.9	5.0	4.7	4.5	5.2	4.7	4.4	5.1	5.4	6.3	6.4	6.0	5.5	5.7	5.8	3.7	3.6	3.4	2.2	1.4	2.7	2.5	4.54	6.35																							
24-Feb	2.9	5.8	5.2	4.1	3.7	5.3	2.3	1.8	3.3	3.4	1.4	2.7	4.0	4.9	5.2	6.2	5.5	3.9	4.1	4.6	3.4	3.8	3.1	3.7	3.93	6.17																							
25-Feb	2.8	3.1	3.0	3.1	3.5	3.2	3.4	2.4	2.2	2.5	2.7	2.6	3.1	3.3	3.7	3.6	3.0	2.7	2.3	2.3	3.0	3.0	2.7	2.6	2.92	3.72																							
26-Feb	2.9	2.2	2.2	2.0	1.9	1.8	2.4	2.1	1.8	1.8	1.6	1.3	1.6	1.4	1.3	3.0	3.4	2.9	2.3	2.8	2.5	2.3	2.1	0.9	2.11	3.36																							
27-Feb	1.1	1.1	1.2	1.3	1.2	1.0	1.0	1.1	0.8	1.1	1.8	2.4	2.4	2.0	2.8	2.6	2.1	2.1	0.5	1.4	1.5	1.0	1.3	1.3	1.50	2.77																							
28-Feb	1.0	1.1	0.9	1.2	0.9	1.3	1.1	2.1	2.3	2.5	2.3	2.3	3.7	3.6	3.4	3.1	3.2	2.0	1.7	1.4	2.0	0.9	1.0	1.2	1.92	3.68																							
																								1.86	1.96	2.01	2.01	2.04	2.15	2.19	2.11	2.17	2.30	2.59	2.94	3.19	3.12	3.14	3.03	3.03	2.62	2.46	2.42	2.45	2.19	2.14	1.87	Diurnal Average	
																								5.35	5.85	5.17	4.97	4.75	5.34	5.17	5.04	5.12	5.08	5.43	6.28	6.35	6.05	5.54	6.27	5.81	4.95	4.95	4.95	5.14	6.03	5.87	5.56	Diurnal Maximum	
,Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ul/m^3 24-hr 100 ul/m^3																																																	



WCAS - Hinton
Summary of Hourly Standard Deviations

Wind Direction (WD) - deg
February 2015

Maximum Value: 106.04 deg on Feb 13 13:00 Maximum Daily Average: 62.62 deg on Feb 13																							Hours in Service:	672																							
Minimum Value: 17.4 deg on Feb 20 08:00 Minimum Daily Average: 25.07 deg on Feb 8																							Hours of Data:	672																							
Maximum Diurnal Average: 49.35 deg at hour 1 Minimum Diurnal Average: 34.77 deg at hour 17																							Hours of Missing Data:	0																							
Monthly Average: 42.971 deg Percentiles: P ₁ = 18.7 P ₁₀ = 21.8 Q ₁ = 26.7 Median = 35.5 Q ₃ = 53.6 P ₉₀ = 81.2 P ₉₉ = 99.8																							Hours of Calibration:	0																							
																							Percent Operational Time:	100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																							
1-Feb	24.0	32.9	28.7	54.4	61.4	33.3	41.1	49.0	92.3	47.7	28.0	54.0	27.3	81.8	35.9	25.7	31.0	32.5	19.9	26.6	22.4	28.4	28.0	19.0	38.55	92.35																					
2-Feb	19.0	18.8	22.2	23.1	21.3	18.3	21.5	21.0	20.2	19.4	27.2	27.8	22.3	31.7	22.0	30.9	29.8	35.7	29.3	28.8	26.6	34.7	35.1	33.2	25.83	35.68																					
3-Feb	36.2	41.4	33.5	28.0	29.9	67.8	49.8	42.4	50.8	44.4	53.9	87.3	97.8	56.1	23.2	71.5	48.5	38.3	69.2	74.8	84.8	68.3	82.1	50.2	55.42	97.79																					
4-Feb	83.8	40.2	66.3	64.3	48.8	100.0	94.9	70.3	79.4	49.7	47.2	26.8	21.6	25.7	33.3	45.5	48.3	47.0	26.0	78.0	98.4	29.8	58.8	20.9	54.37	100.03																					
5-Feb	93.2	100.9	99.7	70.4	38.0	33.8	38.1	37.7	34.5	40.1	35.6	30.7	39.5	38.2	34.8	30.5	29.8	25.9	21.7	30.1	30.5	28.0	24.1	22.1	42.00	100.89																					
6-Feb	25.3	31.6	28.9	26.8	23.4	21.0	20.6	19.2	19.0	21.5	26.9	36.2	34.8	31.2	29.7	23.9	27.7	23.4	25.0	26.7	21.0	26.9	23.6	24.5	25.79	36.19																					
7-Feb	30.5	22.5	20.8	23.2	20.6	21.3	31.3	31.4	41.7	38.7	27.4	31.7	54.9	40.9	56.3	41.2	30.5	26.3	34.8	29.8	19.7	31.8	43.9	44.1	33.13	56.28																					
8-Feb	30.8	37.3	60.8	28.5	22.1	21.3	20.6	18.9	30.7	23.7	20.3	24.4	26.8	29.3	23.3	24.1	23.3	19.3	18.0	19.3	17.8	18.0	21.9	21.3	25.07	60.81																					
9-Feb	31.5	49.2	38.1	74.7	49.0	52.2	23.8	62.8	47.7	36.8	35.7	33.9	32.5	23.2	25.5	33.4	29.7	27.9	35.5	21.9	31.9	34.2	50.7	53.7	38.98	74.67																					
10-Feb	31.3	36.9	24.4	37.9	32.5	86.6	39.0	30.0	34.7	37.6	30.3	23.6	25.8	40.0	36.0	36.4	21.1	24.0	25.7	25.5	20.4	24.1	24.0	23.7	32.14	86.56																					
11-Feb	24.9	20.3	19.9	19.7	22.9	29.7	23.9	23.1	21.4	23.5	24.2	29.4	25.9	23.1	24.5	25.2	26.3	44.7	30.6	60.6	51.6	76.4	45.5	29.5	31.11	76.35																					
12-Feb	24.4	26.0	57.6	45.2	48.3	59.3	54.7	63.0	48.3	64.6	57.2	70.3	45.5	53.5	39.8	36.2	32.8	67.0	45.7	47.1	86.1	91.4	94.6	61.6	55.01	94.58																					
13-Feb	54.2	77.5	104.0	92.0	84.8	67.8	52.0	92.5	73.5	99.9	38.3	26.1	106.0	81.5	84.4	54.3	54.3	41.1	27.0	22.5	22.2	20.9	36.1	89.6	62.62	106.04																					
14-Feb	67.3	33.0	22.7	52.3	49.6	52.7	38.6	81.3	37.2	35.7	23.7	46.9	53.6	56.8	52.5	30.0	31.9	38.4	40.6	72.5	99.0	76.7	91.9	88.4	53.05	99.05																					
15-Feb	91.7	38.6	28.1	44.2	34.0	62.9	45.9	95.1	66.9	93.2	101.2	47.8	72.9	66.1	43.9	36.7	43.4	92.7	70.7	21.8	54.9	50.5	51.6	90.4	60.22	101.20																					
16-Feb	49.7	40.9	57.9	45.7	36.4	36.6	35.4	54.2	24.7	21.5	43.3	50.9	55.1	85.4	41.5	24.5	23.0	33.0	33.8	46.0	73.5	63.7	24.0	53.8	43.94	85.44																					
17-Feb	92.2	90.4	79.6	80.0	98.8	49.7	58.1	36.2	46.9	42.5	40.5	40.5	38.7	31.8	27.0	40.8	30.1	31.4	30.5	53.1	49.8	35.8	27.4	42.4	49.76	98.83																					
18-Feb	39.3	39.0	38.1	35.0	45.2	27.5	27.6	30.0	27.1	33.3	27.5	42.6	34.1	43.3	40.8	49.2	51.0	99.3	92.7	58.6	99.6	19.4	50.0	64.3	46.44	99.63																					
19-Feb	88.4	92.4	33.1	55.9	47.8	56.4	48.3	78.5	71.7	50.5	51.4	29.1	46.3	50.7	49.6	41.3	31.1	24.4	25.0	34.9	65.5	50.5	64.5	68.0	52.30	92.40																					
20-Feb	33.2	81.1	82.6	60.3	46.6	49.7	34.4	17.4	22.6	68.9	23.7	26.8	26.8	32.2	30.9	28.5	35.7	29.4	36.5	35.7	29.5	23.9	33.0	27.9	38.21	82.59																					
21-Feb	48.2	65.8	52.1	90.4	50.9	41.7	56.5	71.0	24.8	32.7	31.8	28.7	35.3	45.1	70.1	33.6	26.6	65.6	50.3	84.4	44.1	42.7	90.2	54.2	51.54	90.40																					
22-Feb	77.6	59.0	45.8	32.3	41.3	29.9	30.2	27.5	26.5	28.3	27.7	24.5	28.8	20.8	22.8	24.7	20.0	21.4	23.0	23.6	22.8	20.7	26.9	26.4	30.53	77.59																					
23-Feb	27.5	27.3	25.8	29.0	21.5	21.0	20.1	20.5	23.2	21.2	22.8	21.8	24.4	25.6	21.5	19.4	19.5	20.3	20.1	23.1	69.3	84.4	36.2	61.3	29.46	84.36																					
24-Feb	44.3	42.2	24.4	83.5	93.7	80.0	84.7	77.3	76.3	32.7	71.9	63.8	35.8	33.2	37.9	30.8	26.5	21.1	27.9	30.5	36.1	42.4	45.0	48.7	49.60	93.72																					
25-Feb	76.9	41.9	35.0	36.3	33.3	32.3	28.4	32.8	24.4	31.3	29.2	26.0	30.0	30.0	30.5	33.5	30.3	29.6	27.0	26.0	23.7	22.0	21.2	19.2	31.28	76.94																					
26-Feb	26.2	18.4	18.6	27.3	30.4	33.2	34.0	35.0	18.7	24.2	25.8	75.7	55.0	31.3	82.2	26.8	32.7	25.8	41.2	38.3	20.6	21.5	37.5	31.6	33.83	82.21																					
27-Feb	73.4	86.7	32.8	64.2	40.9	56.6	46.9	83.0	86.6	57.2	81.4	34.8	84.3	93.8	64.9	85.3	94.3	33.7	92.9	43.1	33.8	31.4	36.2	22.8	60.87	94.35																					
28-Feb	36.7	31.0	69.7	53.8	52.6	41.5	24.2	32.9	29.3	52.5	53.8	60.9	60.7	30.3	38.4	32.2	44.3	57.2	84.6	89.7	45.5	42.0	86.9	100.8	52.15	100.77																					
49.35																							47.26	44.69	49.22	43.79	45.86	40.16	47.65	42.89	41.90	39.56	40.11	44.38	44.02	40.11	36.29	34.77	38.44	39.47	41.89	46.49	40.73	46.09	46.20	Diurnal Average	
93.19																							100.89	104.03	92.05	98.83	100.03	94.92	95.13	92.35	99.85	101.20	87.34	106.04	93.76	84.43	85.25	94.35	99.35	92.92	89.71	99.63	91.41	94.58	100.77	Diurnal Maximum	
,Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ul/m^3 24-hr 100 ul/m^3																																															

WEST CENTRAL AIRSHED SOCIETY

**CONTINUOUS AMBIENT AIR QUALITY
MONITORING PROGRAM
MONTHLY REPORT**

**END OF REPORT
FEBRUARY 2015**