

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

AIR QUALITY MONITORING
June 2017
Monthly Report

Prepared by:

West Central Airshed Society
Drayton Valley, Alberta

July 15, 2017

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

Dear Mr. Whitney:

**Monthly Ambient Air Quality Monitoring Report for June 2017
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 Gary Redmond, 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 two 1-hour PM_{2.5} readings, and one 24-hour PM_{2.5} reading in June in excess of the AAAQO, as indicated in Air Monitoring Directive Section III.A.3. (a). There were no other exceedances recorded.

2. Operational times less than 90 percent:

All analyzers and meteorological equipment returned operational times greater than 90%.

3. Monitoring Notes:

AMS 906 (Hinton)

All pollutant parameters returned uptimes of 99.9% for the month of June. Data was invalidated for one hour when station internal temperatures exceeded normal operating temperatures (>30°C). All meteorological equipment and the PM_{2.5} analyzer returned uptime of 100% for the month of June.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Pat Andersen', written in a cursive style.

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
	2017	June

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	99.9	0.008	0	0.002	0
PM _{2.5}	906	100.0	128.8 µg/m ³	2	35.37 µg/m ³	1
H ₂ S	906	99.9	0.003	0	0.001	0

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
JUNE 2017**

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													June 2017		24 Hour Average Max (ppm)
Parameter	Calibration Hours	Number of Data	Percent Uptime	Mean	Min	Max	Percentile					Exceedences			
							P10	Q1	Median	Q3	P90	1-hour	24-hour		
TRS (ppb)	34	685	99.9	1.0	0.0	8.0	0.2	0.2	0.4	1.1	2.3	0	0	0.002	
SO ₂ (ppb)	34	685	99.9	0.4	0.0	7.6	0.0	0.0	0.0	0.3	1.1	0	-	0.001	
H ₂ S (ppb)	34	685	99.9	0.4	0.0	3.0	0.0	0.1	0.2	0.4	0.9	0	0	0.001	
O ₃ (ppb)	34	685	99.9	25.3	0.8	59.4	5.8	13.1	27.0	35.8	42.5	0	-	0.033	
NO (ppb)	35	684	99.9	1.2	0.0	21.2	0.0	0.1	0.6	1.2	3.0	-	-	-	
NO ₂ (ppb)	35	684	99.9	3.4	0.2	15.2	0.9	1.7	2.8	4.6	6.6	0	0	0.005	
NO _x (ppb)	35	684	99.9	4.6	0.0	29.8	1.0	2.1	3.6	5.8	9.4	-	-	-	
Particulate Matter 2.5 microns (µm ³)	0	720	100.0	8.9	0.1	128.8	2.3	4.1	6.3	9.5	16.3	2	1	35.37 ug/m3	
Wind Speed (kph)	0	720	100.0	2.9	0.0	14.7	0.5	1.0	2.0	3.8	7.0	-	-	-	
Temperature (°C)	0	720	100.0	13.9	2.8	28.9	6.4	9.7	13.5	17.8	22.1	-	-	-	
Relative Humidity (%)	0	720	100.0	57.3	9.8	96.1	23.1	35.0	57.6	80.2	89.7	-	-	-	
Std Dev Wind Direction (deg)	0	720	100.0	56.3	15.0	107.0	32.5	42.3	54.4	68.4	84.6	-	-	-	
Std Dev Wind Speed (kph)	0	720	100.0	2.5	0.3	8.2	1.1	1.4	2.0	3.4	4.7	-	-	-	



WCAS - Hinton
Summary of Hourly Averages

Total Reduced Sulphur (TRS) - ppb
June 2017

Maximum Value: 8.05 ppb on Jun 26 10:00 Minimum Value: 0 ppb on Jun 23 16:00 Maximum Diurnal Average: 2.53 ppb at hour 8 Monthly Average: 0.954 ppb		Maximum Daily Average: 1.87 ppb on Jun 29 Minimum Daily Average: 0.20 ppb on Jun 10 Minimum Diurnal Average: 0.37 ppb at hour 16 Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.4 Q ₃ = 1.1 P ₉₀ = 2.3 P ₉₉ = 6.8		Hours in Service: 720 Hours of Data: 685 Hours of Missing Data: 35 Hours of Calibration: 34 Percent Operational Time: 99.9																						
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-Jun	1	1	0	Z	0	0	2	1	1	0	1	0	1	1	1	0	1	0	1	1	0	0	0	0	0.59	2.33
2-Jun	0	0	0	Z	1	1	1	1	0	0	0	1	1	0	0	1	1	0	0	1	2	3	2	0	0.85	3.29
3-Jun	0	0	0	Z	0	0	0	1	1	1	1	0	1	1	2	1	1	1	1	0	0	0	0	0.61	1.52	
4-Jun	0	1	0	Z	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.39	1.40	
5-Jun	1	1	2	Z	1	2	5	5	6	2	0	1	0	0	0	1	0	0	0	0	0	0	1	1.33	6.20	
6-Jun	3	2	2	Z	1	1	6	7	2	2	2	0	0	0	0	0	0	1	0	0	0	0	0	1.40	7.37	
7-Jun	1	2	3	Z	2	1	6	7	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1.37	6.85	
8-Jun	0	0	0	Z	1	1	3	8	2	0	0	0	0	0	0	0	0	0	0	0	2	3	0	1.08	7.95	
9-Jun	0	0	2	Z	1	2	2	1	2	1	0	0	0	0	1	0	1	1	0	0	0	2	4	2	1.06	3.99
10-Jun	0	1	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.20	0.59	
11-Jun	1	1	0	Z	0	0	0	0	1	1	0	1	0	2	2	0	0	0	0	0	0	0	0	0.59	2.38	
12-Jun	0	0	0	Z	0	0	1	1	1	2	1	0	0	0	0	0	1	0	0	0	0	0	1	0.52	1.53	
13-Jun	0	0	0	Z	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.32	1.75	
14-Jun	0	0	0	Z	1	1	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.58	4.01	
15-Jun	0	0	0	Z	2	4	7	5	2	2	0	1	1	1	0	0	0	0	1	2	1	1	2	1.44	7.23	
16-Jun	0	1	3	Z	2	2	3	1	2	1	0	1	1	1	0	0	0	0	0	0	0	1	0	0.95	3.21	
17-Jun	2	2	0	Z	1	1	3	4	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.99	4.43	
18-Jun	0	0	0	Z	0	0	1	2	1	1	1	0	0	1	1	1	1	1	2	2	1	0	0	0.77	2.47	
19-Jun	0	0	0	Z	0	1	1	1	1	1	3	1	1	0	0	1	2	1	3	3	1	0	1	1.06	3.46	
20-Jun	1	1	1	Z	0	0	0	0	1	2	2	2	2	1	2	0	1	1	1	0	1	2	0	0.98	2.18	
21-Jun	0	1	1	Z	1	1	5	5	2	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0.97	5.20	
22-Jun	0	1	0	Z	1	3	4	0	T	C	C	C	C	0	1	0	1	1	1	0	0	1	1	1.18	5.81	
23-Jun	7	3	3	Z	4	3	4	5	1	0	0	0	0	1	0	0	0	0	0	0	3	2	1	1.80	7.22	
24-Jun	0	2	1	Z	2	5	3	2	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1.03	4.96	
25-Jun	0	0	0	Z	1	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.64	2.35	
26-Jun	0	0	0	Z	1	2	2	3	3	8	5	0	0	0	0	1	0	0	0	0	0	0	0	1.17	8.05	
27-Jun	1	0	1	Z	1	1	1	2	3	2	2	4	2	2	1	0	0	0	0	0	0	0	2	1.26	4.29	
28-Jun	3	6	1	Z	0	1	0	1	1	0	0	0	0	0	1	0	0	0	1	1	1	1	1	1.02	5.94	
29-Jun	7	7	6	Z	2	1	1	5	4	1	1	0	0	0	1	1	1	1	1	0	0	0	2	1.87	7.08	
30-Jun	1	2	2	Z	1	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.65	2.83	
																								Diurnal Average		
																								Diurnal Maximum		
Z - zerospan C - Calibration T - Exceeds Temperature Limits Alberta Ambient Air Quality Objectives (AAQO): 1-hr 10 ppb 24-hr 3 ppb																										



WCAS - Hinton
Summary of Hourly Averages

Sulphur Dioxide (SO₂) - ppb
June 2017

Maximum Value: 7.63 ppb on Jun 6 11:00		Maximum Daily Average: 1.13 ppb on Jun 20		Hours in Service: 720																																													
Minimum Value: 0.0 ppb on Jun 1 15:00		Minimum Daily Average: 0.00 ppb on Jun 9		Hours of Data: 685																																													
Maximum Diurnal Average: 1.07 ppb at hour 11		Minimum Diurnal Average: 0.02 ppb at hour 24		Hours of Missing Data: 35																																													
Monthly Average: 0.364 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.3 P ₉₀ = 1.1 P ₉₉ = 4.3		Hours of Calibration: 34																																													
				Percent Operational Time: 99.9																																													
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-Jun	0.2	0.1	0.1	Z	0.1	0.2	0.2	0.3	1.0	0.3	1.3	0.3	1.1	0.5	0.0	0.1	0.3	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.27	1.26																							
2-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.1	0.1	0.3	2.4	3.0	0.5	0.1	1.9	2.8	0.5	0.5	1.4	1.1	0.3	0.1	0.1	0.67	3.05																							
3-Jun	0.1	0.0	0.1	Z	0.1	0.0	0.1	0.1	0.0	0.1	0.5	0.4	0.9	3.4	3.6	0.9	0.7	1.2	0.4	0.0	0.0	0.0	0.0	0.0	0.55	3.58																							
4-Jun	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	0.01																							
5-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	1.9	1.1	0.9	0.9	1.5	1.1	0.7	1.4	0.1	0.0	0.0	0.0	0.47	1.87																							
6-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	2.1	1.4	7.6	1.1	0.7	0.3	1.1	0.6	0.8	1.6	0.1	0.0	0.1	0.1	0.0	0.0	0.78	7.63																							
7-Jun	0.1	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.3	0.5	3.6	0.2	0.2	0.2	0.1	0.0	0.1	0.2	1.0	0.3	0.1	0.1	0.0	0.0	0.32	3.56																							
8-Jun	0.0	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.60																							
9-Jun	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																							
10-Jun	0.0	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.07																							
11-Jun	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	0.1	0.0	0.0	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.1	0.06	0.20																							
12-Jun	0.2	0.2	0.2	Z	0.2	0.1	0.2	0.1	0.2	0.2	0.5	0.5	0.5	1.1	0.5	1.7	0.9	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.33	1.65																							
13-Jun	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	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	0.03	0.11																							
14-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.05																							
15-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	0.7	1.2	1.7	0.8	0.1	0.0	0.4	0.7	0.4	0.2	0.3	0.0	0.0	0.0	0.0	0.29	1.69																							
16-Jun	0.1	0.4	0.7	Z	0.2	0.1	0.0	0.9	1.5	1.0	0.4	1.0	0.9	1.0	0.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	1.46																							
17-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.7	0.4	0.1	0.2	0.4	0.6	0.5	0.3	0.9	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.19	0.90																							
18-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.1	1.2	1.3	0.9	0.1	0.8	1.6	1.9	1.5	2.3	4.3	2.3	3.4	0.1	0.1	0.1	0.1	0.96	4.28																							
19-Jun	0.1	0.0	0.1	Z	0.1	0.1	0.0	0.1	0.2	0.2	1.3	2.1	0.9	0.4	0.1	2.4	2.5	3.2	3.5	4.3	1.0	0.2	0.2	0.1	1.01	4.31																							
20-Jun	0.1	0.0	0.0	Z	0.0	0.0	0.0	0.0	5.1	4.0	2.7	3.7	2.0	2.0	5.0	0.1	0.1	0.4	0.2	0.1	0.1	0.0	0.1	0.0	1.13	5.11																							
21-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.4	3.2	0.2	0.2	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	0.18	3.21																							
22-Jun	0.0	0.0	0.0	Z	0.0	0.1	0.3	0.3	T	C	C	C	C	0.4	0.8	0.5	0.9	2.0	0.3	0.2	0.1	0.1	0.1	0.0	0.34	1.97																							
23-Jun	0.1	0.1	0.0	Z	0.0	0.0	0.1	0.3	0.1	0.2	1.2	1.1	1.7	1.4	0.9	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.34	1.70																							
24-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.4	3.3	0.7	0.4	0.5	0.2	0.1	0.2	0.4	0.0	0.0	0.1	0.0	0.1	0.1	0.29	3.31																							
25-Jun	0.1	0.1	0.1	Z	0.0	0.0	0.0	0.1	0.7	2.3	2.8	3.7	1.2	0.7	0.2	0.1	0.1	0.3	0.5	0.5	0.3	0.1	0.0	0.0	0.61	3.72																							
26-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.2	0.7	3.9	0.7	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.26	3.94																							
27-Jun	0.0	0.1	0.5	Z	0.2	0.0	0.0	0.1	0.3	0.4	1.0	1.1	2.7	4.9	6.1	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.79	6.08																							
28-Jun	0.1	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.03	0.10																							
29-Jun	0.0	0.0	0.1	Z	0.0	0.0	0.0	0.1	0.0	0.2	0.3	0.2	0.3	0.5	1.3	1.8	1.5	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.34	1.82																							
30-Jun	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.8	1.2	0.7	0.0	0.7	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	1.15																							
																								0.04	0.04	0.07	--	0.03	0.03	0.04	0.11	0.59	0.52	1.07	0.81	0.70	0.76	0.87	0.64	0.57	0.58	0.37	0.37	0.11	0.05	0.03	0.02	Diurnal Average	
																								0.20	0.44	0.70	--	0.19	0.17	0.27	0.88	5.11	4.01	7.63	3.74	3.05	4.87	6.08	3.94	2.82	4.28	3.55	4.31	1.11	0.28	0.21	0.12	Diurnal Maximum	
Z - zerospan																								C - Calibration				T - Exceeds Temperature Limits																					
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb																																																	



WCAS - Hinton
Summary of Hourly Averages

Hydrogen Sulphide (H2S) - ppb
June 2017

Maximum Value: 3.32 ppb on Jun 29 01:00		Maximum Daily Average: 0.74 ppb on Jun 29		Hours in Service: 720																							
Minimum Value: 0 ppb on Jun 4 17:00		Minimum Daily Average: 0.07 ppb on Jun 10		Hours of Data: 685																							
Maximum Diurnal Average: 0.96 ppb at hour 8		Minimum Diurnal Average: 0.11 ppb at hour 16		Hours of Missing Data: 35																							
Monthly Average: 0.360 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.9 P ₉₉ = 2.7		Hours of Calibration: 34																							
				Percent Operational Time: 99.9																							
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-Jun	0	0	0	Z	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.26	0.95	
2-Jun	0	0	0	Z	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.37	1.31
3-Jun	0	0	0	Z	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.29	0.53	
4-Jun	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.15	0.39	
5-Jun	0	0	1	Z	1	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.49	2.29	
6-Jun	1	1	1	Z	1	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.45	2.57	
7-Jun	0	1	1	Z	0	0	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.30	2.09	
8-Jun	0	0	0	Z	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.36	2.71	
9-Jun	0	0	0	Z	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0.39	1.54	
10-Jun	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.07	0.26	
11-Jun	0	0	0	Z	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0.24	0.96	
12-Jun	0	0	0	Z	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.54	
13-Jun	0	0	0	Z	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.11	0.64	
14-Jun	0	0	0	Z	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.20	1.55	
15-Jun	0	0	0	Z	1	2	3	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0.47	2.92	
16-Jun	0	0	1	Z	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	1.10	
17-Jun	1	1	0	Z	1	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.43	1.83	
18-Jun	0	0	0	Z	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.34	0.99	
19-Jun	0	0	0	Z	0	0	0	0	1	1	1	0	0	0	0	0	1	0	1	1	0	0	0	0	0.43	1.23	
20-Jun	0	0	0	Z	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	1	1	0	0	0.36	0.83	
21-Jun	0	0	1	Z	1	0	2	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.37	2.17	
22-Jun	0	0	0	Z	0	2	2	0	T	C	C	C	C	0	0	0	0	0	0	0	0	0	2	0.49	2.42		
23-Jun	3	2	1	Z	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.72	3.13	
24-Jun	0	1	0	Z	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.36	1.99	
25-Jun	0	0	0	Z	1	1	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.30	1.17	
26-Jun	0	0	0	Z	0	1	1	1	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.47	3.05	
27-Jun	0	0	0	Z	1	0	0	1	1	1	1	2	1	0	1	0	0	0	0	0	0	0	1	2	0.52	2.01	
28-Jun	1	3	0	Z	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0.43	2.74	
29-Jun	3	3	3	Z	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.74	3.32	
30-Jun	0	1	1	Z	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.25	1.21	
		0.44	0.50	0.42	--	0.56	0.59	0.96	0.96	0.66	0.40	0.30	0.22	0.17	0.18	0.18	0.11	0.15	0.13	0.17	0.17	0.17	0.24	0.29	0.30	Diurnal Average	
		3.32	3.19	2.92	--	2.01	1.99	2.92	2.71	2.29	3.05	1.74	1.53	0.83	0.96	0.79	0.43	0.66	0.50	1.23	1.09	1.12	1.31	1.54	2.42	Diurnal Maximum	
Z - zerospan		C - Calibration				T - Exceeds Temperature Limits																					
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 10 ppb				24-hr 3 ppb																					



WCAS - Hinton
Summary of Hourly Averages

Ozone (O₃) - ppb
June 2017

Maximum Value: 59.39 ppb on Jun 7 19:00		Maximum Daily Average: 33.21 ppb on Jun 3		Hours in Service:	720																																												
Minimum Value: 0.8 ppb on Jun 12 05:00		Minimum Daily Average: 11.90 ppb on Jun 11		Hours of Data:	685																																												
Maximum Diurnal Average: 37.51 ppb at hour 16		Minimum Diurnal Average: 7.75 ppb at hour 6		Hours of Missing Data:	35																																												
Monthly Average: 25.283 ppb		Percentiles: P ₁ = 1.3 P ₁₀ = 5.8 Q ₁ = 13.1 Median = 27.0 Q ₃ = 35.8 P ₉₀ = 42.5 P ₉₉ = 54.5		Hours of Calibration:	34																																												
				Percent Operational Time:	99.9																																												
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-Jun	11.6	9.3	8.5	Z	3.2	3.7	16.9	33.6	36.7	44.0	44.8	45.5	44.7	44.5	44.4	44.9	44.1	43.7	43.4	41.4	41.0	37.3	31.8	27.3	32.44	45.48																							
2-Jun	27.6	24.3	18.0	Z	4.8	3.2	11.5	33.4	41.0	43.2	43.2	43.0	42.5	45.4	44.9	42.4	42.5	41.7	44.0	41.3	39.8	37.1	24.8	21.9	33.10	45.35																							
3-Jun	16.2	14.2	11.4	Z	4.1	3.8	4.4	5.4	8.5	10.5	21.1	37.7	50.0	53.0	54.4	55.6	56.0	56.0	55.7	56.0	50.8	48.2	47.5	43.2	33.21	56.02																							
4-Jun	35.5	30.3	21.0	Z	11.1	8.3	13.0	17.2	29.5	37.3	41.0	30.6	25.9	35.1	35.3	41.3	41.5	42.7	37.1	33.6	36.4	30.3	30.3	26.6	30.03	42.70																							
5-Jun	27.8	22.2	19.3	Z	8.6	9.1	7.8	15.6	17.3	28.6	34.3	35.6	37.2	38.1	38.5	40.0	41.9	41.6	43.3	38.9	32.6	24.7	17.5	13.0	27.54	43.25																							
6-Jun	10.1	7.3	6.3	Z	4.2	4.1	8.8	18.6	26.0	33.8	39.5	44.2	47.5	47.2	48.1	49.2	49.3	47.8	44.1	43.4	38.8	18.8	10.9	12.8	28.74	49.30																							
7-Jun	12.5	11.4	7.6	Z	2.7	1.5	6.2	20.9	29.6	38.0	43.7	46.9	47.2	48.3	52.1	54.1	53.7	54.8	59.4	53.5	49.0	34.5	17.8	17.4	33.17	59.39																							
8-Jun	10.9	8.8	5.2	Z	2.6	1.6	3.4	14.9	23.3	36.7	39.3	41.4	44.1	48.3	47.5	49.2	49.0	45.5	31.3	26.2	21.2	20.9	19.7	16.2	26.40	49.19																							
9-Jun	11.5	18.0	18.4	Z	12.3	20.0	22.6	22.6	21.1	22.6	22.7	18.4	19.0	20.8	19.6	29.0	28.7	26.1	30.4	35.7	33.6	31.5	34.1	35.3	24.09	35.72																							
10-Jun	37.1	37.5	37.0	Z	36.4	34.7	33.3	30.5	29.1	27.7	27.3	26.1	25.7	26.3	27.3	27.6	27.9	28.1	27.9	26.9	23.2	22.0	21.2	21.8	28.80	37.46																							
11-Jun	17.6	16.3	17.7	Z	13.3	11.6	12.4	9.8	8.4	7.6	10.6	16.4	21.7	18.2	15.9	13.3	13.2	15.3	9.5	7.3	7.8	6.0	2.3	1.4	11.90	21.74																							
12-Jun	1.4	0.9	0.8	Z	0.8	1.0	1.0	3.8	12.7	15.5	24.1	31.9	34.7	35.8	38.3	39.7	39.8	30.7	27.2	24.9	24.8	34.7	21.3	18.8	20.20	39.83																							
13-Jun	10.3	9.6	6.9	Z	2.8	2.4	8.0	14.2	19.7	27.5	25.7	27.1	30.1	32.7	35.2	37.7	42.7	42.5	37.0	36.6	33.1	26.8	20.6	14.9	23.65	42.67																							
14-Jun	8.6	7.0	4.7	Z	1.2	2.9	2.7	4.7	10.7	16.1	23.2	31.7	34.5	34.0	35.7	33.9	35.3	35.7	31.6	31.1	30.9	15.7	9.2	6.9	19.48	35.74																							
15-Jun	4.1	2.4	2.1	Z	2.2	2.7	6.8	13.3	22.2	34.1	41.2	41.7	41.8	41.3	42.3	42.7	43.0	43.3	40.6	37.2	35.3	31.7	30.9	27.1	27.39	43.30																							
16-Jun	28.8	30.5	28.5	Z	23.6	23.5	19.1	22.0	21.6	22.6	22.7	24.7	28.7	26.6	25.4	27.3	23.5	23.5	17.0	14.2	8.4	5.6	3.6	8.2	20.86	30.55																							
17-Jun	17.9	13.0	9.6	Z	3.7	3.1	4.0	13.8	20.7	33.1	36.8	37.7	39.7	40.8	41.1	41.0	39.8	40.9	39.1	37.6	34.7	33.8	25.7	19.4	27.26	41.15																							
18-Jun	12.6	8.7	8.7	Z	6.5	2.8	6.4	15.8	33.4	35.0	37.8	39.6	39.6	40.8	41.8	43.1	42.0	40.3	38.4	35.6	35.6	33.4	28.9	23.3	28.26	43.05																							
19-Jun	19.0	14.2	8.5	Z	2.8	1.8	3.4	6.9	13.4	15.6	19.2	30.1	33.7	32.9	33.0	32.3	32.3	32.7	31.6	30.0	29.6	30.8	19.8	16.2	21.30	33.67																							
20-Jun	11.4	7.6	6.1	Z	3.0	1.8	4.0	13.1	25.9	32.1	31.5	32.6	35.5	36.9	34.8	43.3	32.8	35.0	30.2	27.7	32.8	28.4	17.9	9.3	23.20	43.28																							
21-Jun	6.3	15.3	26.0	Z	7.3	8.6	7.9	15.9	31.7	39.9	40.0	39.3	40.1	37.9	37.8	36.5	35.8	35.2	32.7	31.7	33.0	34.1	29.5	31.4	28.43	40.13																							
22-Jun	30.6	28.9	27.0	Z	25.1	20.6	16.4	22.3	T	C	C	C	C	26.3	24.0	27.5	27.4	28.7	28.2	30.5	30.6	25.9	19.4	10.4	24.99	30.59																							
23-Jun	9.5	10.3	7.9	Z	2.6	3.3	8.2	13.1	18.8	26.1	28.7	29.9	30.8	33.7	33.6	32.8	30.7	27.6	33.9	31.8	29.2	22.4	13.1	10.9	21.26	33.93																							
24-Jun	8.8	7.5	5.1	Z	3.3	5.9	9.4	15.9	18.8	32.1	38.1	41.7	43.6	44.6	42.3	41.7	42.5	41.5	40.4	39.8	36.6	32.6	30.2	33.3	28.51	44.65																							
25-Jun	37.4	35.1	30.0	Z	13.4	9.6	11.7	16.4	22.8	27.0	32.9	32.7	38.6	40.5	36.4	36.3	35.8	36.2	37.9	39.5	34.6	30.3	16.3	13.2	28.90	40.51																							
26-Jun	11.5	10.5	5.8	Z	3.4	3.2	2.6	6.4	7.2	15.2	29.1	27.9	28.9	38.8	45.7	45.1	47.3	43.7	38.5	37.1	38.9	40.7	38.5	34.6	26.12	47.29																							
27-Jun	25.0	32.1	37.0	Z	20.5	14.0	9.4	11.7	19.1	28.0	26.8	27.9	29.0	30.0	29.6	28.6	27.8	26.8	25.1	24.7	25.0	26.7	25.7	23.8	24.96	37.05																							
28-Jun	24.7	23.4	25.3	Z	17.6	15.7	10.4	8.1	15.3	20.5	23.3	28.1	26.7	19.1	19.4	24.3	30.8	30.1	21.5	14.5	10.5	9.8	6.7	8.2	18.88	30.82																							
29-Jun	5.4	3.9	3.4	Z	5.1	5.3	6.8	7.8	8.9	15.0	21.0	27.9	30.8	32.4	33.2	34.0	31.8	33.6	31.0	25.6	26.5	25.4	18.2	12.1	19.35	33.98																							
30-Jun	8.0	7.0	3.7	Z	1.9	2.5	4.6	8.4	19.5	27.2	29.7	30.0	33.2	35.8	32.2	31.2	26.8	19.8	16.5	8.9	9.9	4.2	4.1	3.3	16.02	35.84																							
																								16.66	15.58	13.91	--	8.34	7.75	9.44	15.21	21.14	27.33	31.01	33.39	35.37	36.20	36.32	37.51	37.18	36.38	34.15	32.11	30.48	26.81	21.25	18.73	Diurnal Average	
																								37.42	37.46	37.05	--	36.39	34.68	33.30	33.55	41.04	44.00	44.78	46.94	50.04	52.97	54.37	55.60	55.96	56.02	59.39	56.01	50.85	48.22	47.55	43.19	Diurnal Maximum	
Z - zerospan																								C - Calibration				T - Exceeds Temperature Limits																					
Alberta Ambient Air Quality Objectives (AAQO): 1-hr 82.5 ppb 24-hr -- ppb																																																	



WCAS - Hinton
Eight Hour Running Averages

Ozone (O₃) - ppb
June 2017

Maximum Value: 54.69 ppb on Jun 3 21:00 Maximum Daily Average: 33.09 ppb on Jun 2 Minimum Value: 1.0 ppb on Jun 12 07:00 Minimum Daily Average: 14.67 ppb on Jun 11 Maximum Diurnal Average: 35.75 ppb at hour 19 Minimum Diurnal Average: 12.41 ppb at hour 8 Monthly Average: 24.997 ppb Percentiles: P ₁ = 3.7 P ₁₀ = 9.0 Q ₁ = 16.0 Median = 24.9 Q ₃ = 33.7 P ₉₀ = 39.9 P ₉₉ = 51.9																								Hours in Service:	720																							
																								Hours of Data:	711																							
																								Hours of Missing Data:	9																							
																								Hours of Calibration:	4																							
																								Percent Operational Time:	99.3																							
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-Jun	33.2	28.1	23.3	20.1	14.7	10.2	9.6	12.4	16.0	20.9	26.1	28.5	33.7	38.8	42.3	43.7	44.6	44.6	44.4	43.9	43.4	42.5	40.9	38.7	31.03	44.60																						
2-Jun	36.7	34.3	31.1	29.6	24.4	19.6	16.7	17.5	19.5	22.2	25.8	27.9	32.6	37.9	42.1	43.2	43.4	43.2	43.3	43.1	42.7	41.7	39.2	36.6	33.09	43.36																						
3-Jun	33.4	29.9	25.8	23.6	18.5	13.8	10.9	8.5	7.4	6.9	8.2	11.9	17.7	23.8	30.1	36.3	42.3	48.0	52.3	54.6	54.7	54.1	53.2	51.7	29.90	54.69																						
4-Jun	49.1	45.9	41.6	39.5	33.8	28.1	23.2	19.5	18.6	19.6	22.5	23.5	28.7	31.5	34.5	36.0	36.7	36.2	36.6	37.9	37.3	36.7	34.8	32.37	49.13																							
5-Jun	33.1	30.5	28.3	27.5	23.6	20.6	17.3	15.8	14.3	15.2	17.3	19.6	23.2	26.8	30.7	33.7	36.8	38.4	39.5	39.9	39.4	37.7	35.1	31.7	28.16	39.92																						
6-Jun	27.7	23.4	18.8	15.9	11.9	8.9	7.7	8.5	10.8	14.6	19.3	22.4	27.8	33.2	38.1	41.9	44.8	46.6	47.2	47.1	46.0	42.5	37.8	33.3	28.17	47.19																						
7-Jun	28.7	24.1	19.5	16.1	11.0	8.5	7.8	9.0	11.4	15.2	20.4	23.7	29.3	35.1	40.8	45.0	48.0	50.1	52.1	52.9	53.1	51.4	47.1	42.5	30.95	53.11																						
8-Jun	37.2	31.4	24.6	20.5	13.9	9.2	7.1	6.8	8.5	12.5	17.4	20.4	25.6	31.4	36.9	41.2	44.4	45.5	44.5	42.6	39.8	36.3	32.9	28.7	27.48	45.53																						
9-Jun	24.1	20.6	19.0	18.0	16.7	16.6	17.0	17.9	19.3	19.9	20.6	20.3	21.1	21.2	20.8	21.6	22.6	23.0	24.0	26.2	28.0	29.3	31.1	31.9	22.13	31.92																						
10-Jun	33.0	34.4	35.2	35.1	35.5	36.0	35.9	35.2	34.1	32.7	31.3	30.6	29.3	28.2	27.5	27.1	27.0	27.0	27.1	27.2	26.9	26.4	25.6	24.9	30.55	35.99																						
11-Jun	23.6	22.1	20.8	20.0	18.6	17.1	15.8	14.1	12.8	11.5	10.5	11.3	12.3	13.1	13.6	14.0	14.6	15.6	15.4	14.3	12.6	11.0	9.3	7.9	14.67	23.59																						
12-Jun	6.4	4.6	3.5	3.0	2.0	1.2	1.0	1.4	3.0	5.1	8.4	11.3	15.6	19.9	24.6	29.1	32.5	34.4	34.8	33.9	32.7	32.5	30.4	27.8	16.63	34.78																						
13-Jun	24.1	21.4	18.9	18.0	14.9	10.3	8.4	7.7	9.1	11.6	14.3	15.9	19.3	23.1	26.5	29.5	32.3	34.2	35.6	36.8	37.2	36.4	34.6	31.8	23.00	37.18																						
14-Jun	27.5	23.1	19.0	16.5	12.0	8.6	6.0	4.5	4.8	6.2	8.8	11.7	15.8	19.7	23.8	27.5	30.6	33.0	34.1	34.0	33.5	31.2	27.9	24.6	20.18	34.06																						
15-Jun	20.7	16.5	12.8	10.2	6.1	4.2	3.9	4.8	7.4	11.9	17.5	20.5	25.5	30.3	34.7	38.4	41.0	42.1	42.1	41.5	40.7	39.5	38.1	36.1	24.44	42.15																						
16-Jun	34.4	32.8	31.3	30.4	28.8	27.6	25.9	25.2	24.1	23.0	22.2	22.5	23.1	23.5	24.3	25.0	25.2	25.3	24.6	23.3	20.7	18.1	15.4	13.0	24.56	34.38																						
17-Jun	12.3	11.0	10.1	9.5	8.8	8.4	8.5	9.3	9.7	12.6	16.5	19.1	23.6	28.3	33.0	36.4	38.8	39.7	40.0	40.0	39.4	38.5	36.6	33.9	23.49	40.01																						
18-Jun	30.5	26.5	22.7	20.5	16.5	12.1	9.3	8.8	11.8	15.5	19.7	22.2	26.3	31.0	35.5	38.9	40.0	40.6	40.7	40.2	39.7	38.8	37.2	34.7	27.47	40.69																						
19-Jun	31.8	28.6	24.8	23.3	18.6	14.1	10.4	8.1	7.3	7.5	9.0	11.7	15.5	19.4	23.1	26.3	28.6	30.8	32.3	32.3	31.8	31.5	29.9	27.9	21.86	32.32																						
20-Jun	25.3	22.1	18.9	17.4	13.6	9.4	7.2	6.7	8.8	12.3	15.9	18.0	22.1	26.5	30.3	34.1	34.9	35.3	35.1	34.5	34.2	33.1	31.0	26.8	23.06	35.29																						
21-Jun	23.4	21.0	20.5	19.4	15.8	12.9	11.5	12.5	16.1	19.6	21.6	23.8	27.9	31.6	35.3	37.9	38.4	37.8	36.9	36.0	35.1	34.6	33.6	32.9	26.51	38.41																						
22-Jun	32.3	31.5	30.8	30.6	29.5	27.6	25.7	24.4	23.4	Z	Z	T	T	T	T	T	C	C	27.0	27.5	27.9	27.8	27.3	25.1	--	32.27																						
23-Jun	22.9	20.6	18.1	16.3	12.3	9.1	7.5	7.8	9.2	11.4	14.4	16.3	19.9	23.7	26.8	29.3	30.8	31.0	31.6	31.9	31.7	30.3	27.7	25.0	21.05	31.86																						
24-Jun	22.2	19.7	16.1	13.9	10.2	7.8	7.3	8.0	9.4	12.9	17.6	20.7	25.7	30.5	34.6	37.9	40.8	42.0	42.3	42.1	41.2	39.7	38.2	37.1	25.74	42.30																						
25-Jun	36.5	35.7	34.4	33.6	30.3	27.0	24.4	22.0	19.9	18.7	19.1	20.8	24.0	27.8	30.9	33.4	35.0	36.2	36.8	37.7	37.2	35.9	33.4	30.5	30.04	37.66																						
26-Jun	27.4	24.2	20.2	17.5	13.0	9.1	7.2	6.2	5.6	6.3	9.6	11.9	15.1	19.5	24.9	29.7	34.7	38.3	39.5	40.6	41.9	42.1	41.2	39.9	23.57	42.13																						
27-Jun	37.1	35.7	35.5	35.3	32.6	28.8	24.7	21.4	20.5	20.0	18.5	19.7	20.7	22.7	25.3	27.4	28.5	28.3	28.1	27.7	27.2	26.8	26.3	25.7	26.85	37.13																						
28-Jun	25.3	24.9	24.9	24.9	23.9	22.3	20.1	17.9	16.5	16.1	15.9	17.4	18.5	19.0	20.1	22.1	24.0	25.2	25.0	23.3	21.3	20.1	18.5	16.5	21.00	25.31																						
29-Jun	13.3	10.1	7.8	6.8	6.1	5.4	5.4	5.4	5.9	7.5	10.0	12.2	15.4	18.8	22.1	25.4	28.3	30.6	31.8	31.6	31.0	30.1	28.3	25.5	17.29	31.84																						
30-Jun	22.5	19.2	15.8	14.4	10.9	7.6	5.7	5.2	6.8	9.7	13.4	15.5	19.4	23.6	27.0	29.9	30.8	29.8	28.2	25.6	22.6	18.7	15.2	11.7	17.88	30.77																						
																								Diurnal Average	27.85	25.12	22.47	20.92	17.61	14.74	12.97	12.41	13.06	14.45	16.96	19.01	22.46	26.12	29.56	32.42	34.47	35.63	35.75	35.62	35.04	33.87	31.98	29.64
																								Diurnal Maximum	49.13	45.91	41.57	39.51	35.54	35.99	35.88	35.20	34.06	32.67	31.29	30.63	33.73	38.84	42.27	45.00	48.01	50.11	52.30	54.59	54.69	54.09	53.24	51.69
Z - zerospan																								C - Calibration				T - Exceeds Temperature Limits																				



WCAS - Hinton
Summary of Hourly Averages

Nitrogen Oxide (NO) - ppb
June 2017

Maximum Value: 21.22 ppb on Jun 12 07:00		Maximum Daily Average: 3.09 ppb on Jun 12		Hours in Service: 720																																													
Minimum Value: 0.0 ppb on Jun 5 03:00		Minimum Daily Average: 0.11 ppb on Jun 9		Hours of Data: 684																																													
Maximum Diurnal Average: 4.85 ppb at hour 7		Minimum Diurnal Average: 0.15 ppb at hour 1		Hours of Missing Data: 36																																													
Monthly Average: 1.225 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.6 Q ₃ = 1.2 P ₉₀ = 3.0 P ₉₉ = 11.2		Hours of Calibration: 35																																													
				Percent Operational Time: 99.9																																													
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-Jun	0.5	0.1	0.2	Z	2.9	5.7	1.5	1.2	0.7	0.8	1.2	0.9	1.4	1.6	0.9	0.6	0.6	0.3	0.3	0.3	0.3	0.1	0.1	0.0	0.97	5.75																							
2-Jun	0.0	0.0	0.6	Z	0.8	8.2	10.2	0.7	0.6	0.6	0.7	1.0	1.2	0.5	0.2	0.6	1.0	0.5	0.2	0.4	0.2	0.1	0.1	0.1	1.23	10.17																							
3-Jun	0.1	0.2	0.0	Z	4.8	7.1	4.0	5.2	5.5	5.9	3.6	1.0	0.5	1.1	1.0	0.6	0.5	0.6	0.3	0.2	0.1	0.1	0.0	0.1	1.85	7.09																							
4-Jun	0.1	0.0	0.0	Z	0.5	0.7	1.3	3.0	1.2	0.3	0.3	0.7	0.8	0.4	0.3	1.3	0.7	0.8	0.3	0.2	0.0	0.1	0.1	0.1	0.57	3.00																							
5-Jun	0.0	0.0	0.0	Z	4.9	0.6	1.0	1.3	2.2	2.1	1.0	1.2	0.9	0.8	0.4	0.8	0.5	0.4	0.4	1.0	1.1	0.2	0.5	0.0	0.94	4.92																							
6-Jun	0.0	0.0	0.0	Z	0.1	2.2	5.0	2.2	1.6	1.2	2.6	0.3	0.3	0.5	0.6	0.7	1.0	0.7	0.6	0.4	0.3	0.7	0.4	0.6	0.96	5.05																							
7-Jun	0.4	0.1	0.1	Z	4.4	19.4	12.0	0.9	1.1	1.1	2.6	0.6	0.6	0.7	1.2	0.8	0.9	0.9	0.6	0.5	0.4	0.4	2.5	0.3	2.28	19.44																							
8-Jun	0.1	0.2	0.4	Z	2.2	11.3	10.8	1.9	3.3	0.9	1.0	1.8	0.9	1.4	1.2	1.4	1.5	0.7	1.0	0.7	0.3	0.2	0.1	0.1	1.88	11.26																							
9-Jun	0.0	0.4	0.0	Z	0.1	0.2	0.3	0.1	0.5	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.52																							
10-Jun	0.0	0.0	0.0	Z	0.1	0.1	0.2	0.3	0.2	0.6	0.6	1.0	1.0	1.3	0.6	0.7	0.5	0.4	0.7	0.2	0.3	0.2	0.2	0.2	0.41	1.25																							
11-Jun	0.1	0.0	0.0	Z	0.5	1.9	0.4	1.2	0.8	0.8	1.5	2.0	0.8	0.3	0.2	0.2	0.4	0.5	0.5	1.4	1.1	1.7	2.2	5.9	1.07	5.85																							
12-Jun	0.9	0.6	1.6	Z	10.7	10.7	21.2	7.1	1.0	2.2	1.9	1.3	0.7	1.2	1.8	1.0	0.8	0.6	0.7	0.6	2.7	0.2	0.9	0.7	3.09	21.22																							
13-Jun	0.2	0.2	0.1	Z	3.9	6.9	8.2	2.9	1.1	0.8	1.5	1.2	0.5	0.7	1.9	1.1	1.0	1.4	0.4	0.3	0.3	0.1	0.0	0.0	1.52	8.22																							
14-Jun	0.1	0.2	0.2	Z	4.9	7.2	6.6	3.3	4.0	3.0	1.3	0.7	0.6	0.6	0.5	1.7	0.7	0.3	0.3	0.3	0.3	0.4	0.4	0.2	1.64	7.23																							
15-Jun	0.2	0.6	0.9	Z	4.1	4.2	2.6	2.0	1.8	1.1	1.1	0.7	1.1	0.6	0.6	1.6	0.8	0.8	0.4	0.2	0.2	0.1	0.0	0.1	1.11	4.18																							
16-Jun	0.1	0.0	0.0	Z	0.1	0.2	0.6	1.9	1.7	1.6	1.5	1.1	0.7	1.2	1.4	1.0	0.2	1.8	0.4	0.2	1.4	0.2	0.3	0.0	0.77	1.93																							
17-Jun	0.0	0.0	0.1	Z	3.5	6.4	7.4	3.4	3.1	1.3	1.0	1.1	0.6	0.6	0.8	0.5	0.7	0.4	0.4	0.2	0.2	0.1	0.7	0.3	1.42	7.35																							
18-Jun	0.1	0.5	0.1	Z	1.5	5.4	4.8	7.2	1.6	1.1	0.7	0.4	0.7	0.8	0.7	0.6	0.9	1.3	0.7	0.5	0.2	0.1	0.2	0.2	1.31	7.17																							
19-Jun	0.0	0.1	0.1	Z	2.5	14.2	11.4	12.5	5.7	3.1	2.9	1.7	1.2	0.9	1.1	1.2	1.1	1.1	0.5	0.5	0.5	0.3	0.3	0.3	2.75	14.18																							
20-Jun	0.1	0.9	0.1	Z	2.7	5.7	8.8	2.3	3.4	1.6	1.1	2.1	0.9	1.4	1.9	0.3	1.1	1.5	0.3	0.2	0.1	0.2	1.1	0.5	1.66	8.79																							
21-Jun	1.5	0.4	0.0	Z	3.4	3.3	5.2	9.6	2.6	0.2	0.2	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.18	9.59																							
22-Jun	0.0	0.0	0.0	Z	0.5	0.1	0.6	0.2	T	C	C	C	C	C	4.8	1.1	1.3	3.1	0.4	0.0	0.0	0.1	0.0	0.1	--	4.83																							
23-Jun	0.1	0.1	0.0	Z	0.9	2.8	2.5	3.7	2.1	1.8	2.1	0.3	1.5	0.6	0.5	0.2	1.0	0.9	0.0	0.0	0.0	0.0	0.4	0.1	0.94	3.73																							
24-Jun	0.0	0.2	0.2	Z	1.7	0.8	0.6	1.6	3.1	1.9	2.2	0.5	0.1	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.57	3.05																							
25-Jun	0.0	0.0	0.2	Z	0.6	0.8	1.0	1.2	1.3	1.7	1.2	1.4	0.1	0.3	0.3	0.3	0.7	0.7	0.7	0.2	0.0	0.0	0.0	0.0	0.55	1.67																							
26-Jun	0.0	0.0	0.1	Z	1.6	5.5	7.8	4.2	4.6	6.3	3.3	0.5	0.6	0.5	0.6	1.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.61	7.85																							
27-Jun	0.0	0.0	0.1	Z	0.4	0.8	1.1	2.4	1.4	0.4	0.7	0.6	1.3	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.54	2.41																							
28-Jun	0.0	0.0	0.0	Z	0.0	0.3	3.4	1.7	0.2	0.2	0.2	1.7	1.6	1.9	2.7	0.1	0.0	0.0	0.0	0.0	0.1	0.5	0.0	0.0	0.64	3.44																							
29-Jun	0.0	0.2	0.4	Z	0.4	0.6	0.6	1.6	2.5	3.6	1.9	1.2	1.2	0.5	1.0	0.8	0.7	0.6	0.0	0.0	0.4	0.0	0.1	0.2	0.80	3.64																							
30-Jun	0.0	0.0	0.1	Z	1.9	5.2	4.4	2.7	2.9	1.6	1.5	0.7	0.2	0.3	0.7	0.0	1.8	0.6	0.6	2.3	0.9	2.3	1.0	3.9	1.54	5.21																							
																								0.15	0.17	0.19	--	2.22	4.61	4.85	2.99	2.14	1.64	1.43	0.97	0.77	0.78	0.97	0.68	0.69	0.70	0.37	0.36	0.38	0.27	0.39	0.46	Diurnal Average	
																								1.52	0.93	1.58	--	10.65	19.44	21.22	12.50	5.70	6.26	3.64	2.10	1.56	2.08	4.83	1.67	1.76	3.11	1.04	2.26	2.68	2.28	2.48	5.85	Diurnal Maximum	
Z - zerospan																								C - Calibration				T - Exceeds Temperature Limits																					
Alberta Ambient Air Quality Objectives (AAQO): 1-hr --- ppb 24-hr --- ppb																																																	



WCAS - Hinton
Summary of Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
June 2017

Maximum Value: 15.21 ppb on Jun 6 22:00 Maximum Daily Average: 5.42 ppb on Jun 7																				Hours in Service: 720 Hours of Data: 684 Hours of Missing Data: 36 Hours of Calibration: 35 Percent Operational Time: 99.9						
Minimum Value: 0.2 ppb on Jun 22 01:00 Minimum Daily Average: 1.63 ppb on Jun 10 Maximum Diurnal Average: 5.24 ppb at hour 7 Minimum Diurnal Average: 1.94 ppb at hour 16 Monthly Average: 3.362 ppb Percentiles: P ₁ = 0.3 P ₁₀ = 0.9 Q ₁ = 1.7 Median = 2.8 Q ₃ = 4.6 P ₉₀ = 6.6 P ₉₉ = 11.7																										
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-Jun	9.0	6.6	5.9	Z	5.8	7.6	5.6	5.6	3.1	2.5	2.9	2.0	3.7	4.0	2.4	1.3	2.0	0.5	0.7	0.9	0.9	0.8	1.7	1.2	3.34	9.02
2-Jun	0.9	1.4	2.2	Z	3.4	6.0	8.5	3.9	1.8	1.7	1.8	3.5	3.8	1.5	0.7	2.1	2.8	1.5	1.5	4.7	4.1	4.1	4.5	4.4	3.08	8.46
3-Jun	4.2	5.5	5.3	Z	8.8	6.8	6.3	7.1	10.8	9.6	6.7	2.5	2.1	3.6	3.5	2.0	1.8	2.5	1.1	0.5	0.6	0.9	0.7	1.3	4.09	10.77
4-Jun	4.0	2.7	3.3	Z	6.6	6.7	5.1	6.1	3.8	1.7	2.1	3.5	2.5	1.6	1.4	1.8	2.5	2.2	1.9	2.0	1.2	1.5	2.1	4.4	3.07	6.71
5-Jun	2.2	1.0	3.6	Z	6.0	4.1	2.9	3.1	4.2	4.1	1.9	2.8	2.2	1.9	1.6	2.4	1.9	1.8	2.1	3.0	5.6	5.8	4.8	2.3	3.10	5.98
6-Jun	1.8	2.2	3.5	Z	2.4	3.9	6.9	5.6	4.1	3.9	7.1	1.4	1.2	1.3	1.9	1.7	2.7	2.8	2.6	2.0	4.1	15.2	13.1	8.9	4.37	15.21
7-Jun	6.9	6.6	5.4	Z	9.4	10.2	9.9	3.8	3.9	3.5	6.4	2.0	2.0	1.9	3.3	3.9	3.5	3.8	3.5	2.6	2.2	8.9	14.3	6.7	5.42	14.28
8-Jun	6.1	5.3	4.6	Z	3.6	4.7	5.7	6.4	8.6	3.8	4.6	3.9	3.4	4.0	4.0	4.2	4.2	2.4	6.1	5.9	4.6	3.1	4.2	3.2	4.63	8.60
9-Jun	1.6	2.0	5.0	Z	5.1	7.5	6.0	1.8	4.0	1.0	0.7	0.7	0.8	0.9	0.7	0.6	1.7	0.4	1.1	0.3	0.4	0.8	1.5	2.9	2.07	7.48
10-Jun	2.4	2.0	1.0	Z	1.6	1.9	1.7	2.1	1.8	2.3	1.6	1.9	2.0	1.6	1.2	1.3	1.1	0.9	1.5	1.2	1.9	1.3	1.8	1.5	1.63	2.39
11-Jun	2.8	2.2	2.2	Z	2.4	3.5	2.0	4.4	2.4	2.2	2.1	2.9	1.3	1.2	0.7	0.4	0.7	1.3	1.2	1.5	1.6	2.7	3.4	3.0	2.09	4.40
12-Jun	1.4	0.9	0.9	Z	1.9	2.5	3.9	2.9	2.5	3.2	3.2	2.7	1.6	2.4	2.9	2.5	1.7	1.5	3.2	3.2	5.0	2.2	6.2	8.5	2.92	8.47
13-Jun	9.4	7.3	6.5	Z	6.6	5.6	7.8	7.3	4.0	2.7	4.2	4.0	2.4	3.0	3.5	2.3	2.0	1.8	1.4	1.4	2.1	2.2	1.3	0.8	3.89	9.36
14-Jun	1.6	1.9	1.8	Z	3.8	7.5	7.1	5.5	6.4	4.9	3.2	2.0	1.9	2.1	1.2	2.6	2.0	1.1	1.1	1.4	1.2	5.5	3.6	3.8	3.18	7.47
15-Jun	4.1	3.6	3.0	Z	3.7	3.1	2.9	3.9	3.7	2.9	2.2	2.1	2.3	1.5	1.8	2.7	2.2	2.0	2.0	2.4	3.8	4.6	2.8	5.2	2.98	5.19
16-Jun	2.6	2.9	3.6	Z	4.4	4.1	5.0	3.8	3.1	2.0	1.7	1.7	1.3	1.5	2.3	1.6	0.6	2.3	1.2	1.1	3.0	2.3	2.1	1.2	2.41	5.03
17-Jun	2.4	1.6	1.7	Z	4.3	5.2	4.8	4.5	5.1	2.0	1.7	1.6	1.4	1.3	1.6	1.5	2.1	1.1	1.7	1.7	4.1	3.5	6.2	8.1	3.00	8.09
18-Jun	3.4	4.0	2.1	Z	5.0	7.6	5.4	6.1	3.4	2.4	1.9	1.1	1.5	2.0	2.0	1.6	2.6	4.7	3.9	4.8	1.0	0.6	2.1	3.1	3.15	7.59
19-Jun	2.2	3.1	5.0	Z	6.7	6.0	7.1	9.2	12.9	8.7	8.5	4.0	2.6	2.4	2.3	3.5	3.8	4.1	3.7	5.6	5.0	2.2	5.5	5.1	5.17	12.95
20-Jun	5.8	4.9	4.8	Z	5.2	5.9	5.5	3.4	7.0	5.3	3.8	3.8	2.2	2.8	3.7	0.8	5.2	5.1	1.7	0.7	0.6	4.3	6.9	6.7	4.18	7.03
21-Jun	6.7	4.3	1.1	Z	11.5	8.2	7.1	10.3	6.2	0.7	0.3	0.5	0.5	0.3	0.3	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	2.64	11.47
22-Jun	0.2	0.3	0.4	Z	0.7	1.3	6.1	0.8	T	C	C	C	C	C	4.4	2.2	2.7	3.4	2.4	0.7	0.9	7.5	6.3	5.1	--	7.49
23-Jun	3.0	2.0	2.9	Z	7.1	5.2	3.8	5.8	3.0	1.8	2.9	1.8	3.2	1.9	2.2	1.9	3.7	4.3	1.6	3.7	2.5	4.5	7.7	6.0	3.59	7.65
24-Jun	4.8	4.1	5.5	Z	6.6	3.3	1.6	3.5	5.7	4.4	5.5	1.8	1.4	1.2	0.9	0.7	1.1	1.3	0.9	1.6	2.5	2.4	3.5	2.4	2.90	6.57
25-Jun	2.0	2.4	6.3	Z	4.9	4.4	3.7	3.2	3.0	4.1	3.7	5.5	2.5	2.4	1.6	1.0	1.5	1.7	1.4	1.8	2.4	2.8	8.7	6.5	3.37	8.71
26-Jun	4.8	2.9	5.1	Z	6.7	5.9	6.1	6.9	8.1	13.7	11.8	3.0	3.1	2.2	2.6	5.6	2.0	1.4	1.3	1.1	1.1	0.9	0.8	1.0	4.27	13.74
27-Jun	2.4	1.5	6.0	Z	5.7	5.0	3.6	4.1	3.1	1.5	2.7	1.7	2.8	3.9	3.5	0.7	0.4	0.5	0.4	0.3	0.6	0.3	0.3	1.2	2.26	6.03
28-Jun	1.7	2.0	0.4	Z	0.3	1.3	7.7	5.7	1.4	0.7	1.8	3.8	3.7	6.3	5.0	0.9	0.7	1.2	2.8	5.1	6.4	8.9	5.5	4.3	3.37	8.95
29-Jun	2.0	2.9	4.1	Z	4.3	3.9	1.8	2.5	2.7	3.9	2.4	1.9	2.1	1.7	2.8	2.8	3.6	3.1	1.1	1.1	2.8	2.1	4.2	5.9	2.85	5.91
30-Jun	5.3	5.0	5.1	Z	4.0	5.9	5.7	5.1	3.9	2.6	3.1	1.7	0.7	1.3	2.2	1.0	5.1	6.5	7.1	11.7	5.7	8.2	8.3	9.2	4.98	11.71
																								Diurnal Average		
																								Diurnal Maximum		
																								9.36 7.27 6.46 -- 11.47 10.25 9.88 10.31 12.95 13.74 11.77 5.54 3.75 6.28 5.00 5.63 5.22 6.49 7.15 11.71 6.39 15.21 14.28 9.21		
Z - zerospan C - Calibration T - Exceeds Temperature Limits Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb																										



WCAS - Hinton
Summary of Hourly Averages

NOx (NO_x) - ppb
June 2017

Maximum Value: 29.76 ppb on Jun 7 06:00 Maximum Daily Average: 7.95 ppb on Jun 19																				Hours in Service: 720 Hours of Data: 684 Hours of Missing Data: 36 Hours of Calibration: 35 Percent Operational Time: 99.9						
Minimum Value: 0.0 ppb on Jun 27 17:00 Minimum Daily Average: 2.05 ppb on Jun 10 Maximum Diurnal Average: 10.13 ppb at hour 7 Minimum Diurnal Average: 2.41 ppb at hour 19 Monthly Average: 4.594 ppb Percentiles: P ₁ = 0.1 P ₁₀ = 1.0 Q ₁ = 2.1 Median = 3.6 Q ₃ = 5.8 P ₉₀ = 9.4 P ₉₉ = 19.9																										
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-Jun	9.6	6.8	6.2	Z	8.8	13.4	7.1	6.8	3.8	3.3	4.2	2.9	5.2	5.6	3.2	1.9	2.6	0.9	1.0	1.2	1.2	1.0	1.9	1.2	4.33	13.35
2-Jun	0.9	1.4	2.8	Z	4.3	14.3	18.7	4.7	2.4	2.4	2.5	4.5	5.0	2.0	0.9	2.7	3.8	2.0	1.7	5.2	4.3	4.1	4.6	4.5	4.33	18.69
3-Jun	4.3	5.7	5.3	Z	13.6	13.9	10.3	12.4	16.3	15.5	10.3	3.5	2.7	4.6	4.5	2.6	2.3	3.1	1.4	0.7	0.8	1.0	0.8	1.4	5.96	16.34
4-Jun	4.1	2.7	3.3	Z	7.1	7.4	6.4	9.2	5.0	1.9	2.4	4.1	3.2	2.0	1.7	3.1	3.2	2.9	2.3	2.2	1.2	1.6	2.2	4.5	3.65	9.18
5-Jun	2.2	1.0	3.6	Z	10.9	4.7	3.9	4.5	6.5	6.2	2.9	4.1	3.1	2.7	2.0	3.3	2.4	2.3	2.5	4.1	6.8	6.0	5.3	2.3	4.06	10.94
6-Jun	1.8	2.2	3.5	Z	2.6	6.2	12.0	7.8	5.7	5.2	9.7	1.8	1.5	1.8	2.5	2.4	3.7	3.6	3.2	2.5	4.5	16.0	13.5	9.6	5.36	15.98
7-Jun	7.3	6.8	5.5	Z	13.8	29.8	21.9	4.7	5.1	4.6	9.0	2.6	2.6	2.5	4.6	4.8	4.4	4.8	4.1	3.1	2.6	9.4	16.8	7.1	7.74	29.76
8-Jun	6.2	5.6	5.1	Z	5.8	16.0	16.5	8.4	12.0	4.7	5.6	5.7	4.4	5.5	5.3	5.5	5.8	3.0	7.2	6.6	4.9	3.3	4.3	3.2	6.55	16.49
9-Jun	1.6	2.4	5.0	Z	5.2	7.7	6.4	1.9	4.5	1.1	0.8	0.8	0.9	1.0	0.8	0.6	2.0	0.3	1.0	0.2	0.3	0.7	1.5	2.9	2.17	7.69
10-Jun	2.4	2.0	1.0	Z	1.7	2.0	1.8	2.4	2.0	2.9	2.2	2.9	3.0	2.9	1.8	2.0	1.6	1.4	2.3	1.4	2.2	1.5	2.0	1.7	2.05	3.01
11-Jun	2.9	2.3	2.2	Z	2.9	5.4	2.4	5.7	3.3	3.0	3.6	4.9	2.1	1.5	0.9	0.5	1.1	1.8	1.7	2.9	2.8	4.4	5.7	8.9	3.17	8.94
12-Jun	2.4	1.5	2.5	Z	12.6	13.2	25.2	10.0	3.6	5.4	5.1	4.1	2.3	3.7	4.7	3.5	2.5	2.1	4.0	3.8	7.7	2.4	7.1	9.2	6.03	25.16
13-Jun	9.6	7.5	6.6	Z	10.5	12.5	16.1	10.2	5.2	3.5	5.7	5.3	2.9	3.8	5.4	3.4	3.0	3.2	1.8	1.7	2.4	2.3	1.4	0.8	5.43	16.06
14-Jun	1.7	2.1	2.0	Z	8.8	14.8	13.8	8.8	10.5	7.9	4.6	2.7	2.5	2.7	1.7	4.3	2.7	1.4	1.4	1.7	1.4	6.0	4.1	4.0	4.84	14.76
15-Jun	4.3	4.2	3.9	Z	7.9	7.4	5.5	5.9	5.5	4.0	3.3	2.8	3.4	2.1	2.4	4.3	3.0	2.8	2.5	2.6	4.0	4.7	2.8	5.4	4.12	7.85
16-Jun	2.8	2.9	3.7	Z	4.5	4.4	5.7	5.8	4.8	3.6	3.3	2.8	2.1	2.6	3.7	2.7	0.8	4.0	1.6	1.4	4.4	2.6	2.4	1.2	3.21	5.79
17-Jun	2.4	1.6	1.8	Z	7.8	11.7	12.2	8.0	8.3	3.2	2.7	2.7	2.0	1.9	2.4	1.9	2.8	1.5	2.0	1.9	4.3	3.6	6.9	8.4	4.44	12.18
18-Jun	3.5	4.5	2.2	Z	6.5	13.0	10.1	13.3	5.1	3.6	2.6	1.5	2.3	2.8	2.7	2.2	3.5	6.0	4.7	5.3	1.2	0.7	2.3	3.3	4.48	13.34
19-Jun	2.2	3.2	5.1	Z	9.2	20.3	18.6	21.8	18.7	11.9	11.4	5.7	3.8	3.3	3.4	4.7	4.9	5.2	4.2	6.1	5.6	2.4	5.8	5.5	7.95	21.76
20-Jun	6.0	5.9	5.0	Z	8.0	11.6	14.4	5.8	10.4	6.9	4.9	6.0	3.1	4.2	5.6	1.1	6.4	6.7	2.0	0.9	0.7	4.4	8.0	7.2	5.87	14.37
21-Jun	8.2	4.7	1.1	Z	14.9	11.5	12.3	20.0	8.8	0.9	0.6	1.0	0.7	0.3	0.2	0.5	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	3.79	19.96
22-Jun	0.1	0.2	0.4	Z	1.2	1.4	6.7	1.0	T	C	C	C	C	C	9.4	3.4	4.1	6.6	2.9	0.7	0.8	7.7	6.4	5.3	--	9.39
23-Jun	3.1	2.1	2.9	Z	8.1	8.0	6.3	9.6	5.2	3.6	5.0	2.1	4.8	2.5	2.7	2.1	4.7	5.2	1.4	3.6	2.1	4.2	8.1	6.2	4.50	9.60
24-Jun	4.8	4.3	5.8	Z	8.3	4.1	2.1	5.1	8.8	6.2	7.8	2.3	1.5	1.3	0.8	0.6	1.0	1.6	0.7	1.4	2.3	2.2	3.6	2.3	3.44	8.84
25-Jun	2.0	2.4	6.5	Z	5.5	5.3	4.8	4.5	4.3	5.8	4.9	7.0	2.6	2.7	1.9	1.3	2.2	2.4	2.1	2.0	2.3	2.7	8.6	6.5	3.94	8.63
26-Jun	4.8	2.9	5.3	Z	8.3	11.4	14.0	11.2	12.8	20.1	15.1	3.5	3.6	2.7	3.2	6.8	2.3	1.1	1.0	0.8	0.8	0.6	0.7	0.9	5.83	20.09
27-Jun	2.5	1.6	6.1	Z	6.1	5.9	4.7	6.5	4.5	1.9	3.5	2.3	4.1	6.0	4.5	0.4	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.9	2.68	6.55
28-Jun	1.6	1.9	0.3	Z	0.3	1.6	11.2	7.5	1.6	0.9	1.9	5.5	5.2	8.2	7.7	0.9	0.7	1.3	2.7	5.1	6.5	9.5	5.6	4.2	4.00	11.18
29-Jun	2.0	3.1	4.5	Z	4.7	4.5	2.5	4.2	5.3	7.5	4.4	3.1	3.3	2.2	3.8	3.6	4.3	3.7	0.9	1.0	3.2	2.0	4.2	6.1	3.65	7.52
30-Jun	5.3	5.0	5.3	Z	5.9	11.1	10.1	7.9	6.8	4.3	4.6	2.4	0.9	1.6	2.9	0.9	6.8	7.2	7.8	14.0	6.6	10.5	9.4	13.1	6.54	14.04
																								Diurnal Average		
																								Diurnal Maximum		
																								3.75 3.35 3.82 -- 7.20 9.81 10.13 7.85 6.79 5.25 5.00 3.46 2.92 2.99 3.25 2.61 2.96 2.94 2.41 2.81 2.95 3.92 4.87 4.60		
																								9.56 7.48 6.64 -- 14.92 29.76 25.16 21.76 18.73 20.09 15.15 7.01 5.25 8.24 9.39 6.83 6.84 7.17 7.76 14.04 7.73 15.98 16.84 13.10		
Z - zerospan C - Calibration T - Exceeds Temperature Limits																										
Alberta Ambient Air Quality Objectives (AAQO): 1-hr --- ppb 24-hr --- ppb																										



WCAS - Hinton
Summary of Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³
June 2017

Maximum Value: 128.81 µg/m³ on Jun 26 07:00																						Maximum Daily Average: 35.37 µg/m³ on Jun 26																						Hours in Service: 720	
Minimum Value: 0.1 µg/m³ on Jun 9 12:00																						Minimum Daily Average: 2.06 µg/m³ on Jun 10																						Hours of Data: 720	
Maximum Diurnal Average: 17.31 µg/m³ at hour 6																						Minimum Diurnal Average: 5.18 µg/m³ at hour 19																						Hours of Missing Data: 0	
Monthly Average: 8.904 µg/m³																						Percentiles: P₁ = 0.3 P₁₀ = 2.3 Q₁ = 4.1 Median = 6.3 Q₃ = 9.5 P₉₀ = 16.3 P₉₉ = 59.1																						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-Jun	8.2	8.6	9.6	9.3	11.3	13.1	12.3	8.7	7.4	5.2	5.7	5.1	7.8	6.0	4.6	3.0	2.8	2.2	2.5	2.3	2.8	2.4	1.9	2.1	6.04	13.08																			
2-Jun	2.2	3.0	3.7	3.7	5.0	8.2	10.8	6.6	4.4	6.3	4.6	6.4	6.6	3.6	2.9	4.1	5.5	5.6	4.5	6.1	5.1	6.4	6.0	5.5	5.29	10.83																			
3-Jun	7.7	6.3	5.4	5.2	6.5	9.1	14.5	21.4	30.5	24.1	19.8	9.8	11.2	7.2	8.3	9.9	7.1	4.4	4.7	4.0	9.3	2.9	2.4	4.9	9.85	30.53																			
4-Jun	3.6	3.3	3.4	7.7	10.3	33.2	8.0	5.6	6.9	6.1	5.7	5.3	3.8	4.5	4.9	4.2	2.7	3.0	2.9	2.6	2.9	4.3	7.7	6.27	33.23																				
5-Jun	4.5	3.7	4.4	5.4	4.7	5.6	6.3	8.5	9.0	9.2	6.8	6.6	6.1	5.6	4.6	7.0	5.1	4.5	4.5	5.0	6.4	7.4	8.0	5.4	6.01	9.16																			
6-Jun	5.7	4.7	4.3	5.0	4.2	6.3	12.3	12.7	11.5	12.8	14.3	6.2	6.7	7.9	8.0	9.5	8.1	8.4	8.0	9.2	9.2	11.1	12.2	9.7	8.67	14.34																			
7-Jun	11.7	12.9	13.1	14.7	14.7	25.3	29.4	12.4	13.1	18.6	22.2	11.2	8.7	18.0	11.1	13.3	12.2	10.4	8.6	7.2	8.9	10.4	20.7	17.2	14.42	29.42																			
8-Jun	15.2	17.1	31.1	27.5	33.2	60.9	65.6	50.4	32.2	16.8	20.3	15.4	16.8	21.3	15.0	14.8	15.6	8.6	8.3	7.8	9.2	9.4	7.3	6.8	21.94	65.59																			
9-Jun	6.7	5.3	8.7	6.0	6.4	4.5	4.5	1.2	2.5	0.3	0.2	0.1	0.2	0.5	0.3	0.7	2.3	0.2	0.4	0.5	0.6	0.7	1.2	1.8	2.33	8.71																			
10-Jun	0.6	1.4	0.5	3.2	0.5	0.4	0.4	0.5	0.6	0.8	0.9	1.1	1.6	1.9	2.2	2.6	3.4	4.1	4.2	3.7	3.8	3.7	3.7	3.5	2.06	4.24																			
11-Jun	5.0	4.9	3.9	4.0	4.2	4.3	4.1	4.0	6.3	6.3	6.8	9.5	2.9	2.8	3.0	2.8	3.6	5.5	4.0	6.8	5.6	7.3	8.4	10.8	5.28	10.82																			
12-Jun	5.4	6.0	6.9	7.1	11.7	10.6	16.6	7.4	7.6	9.7	9.3	6.9	5.8	6.7	5.8	5.9	8.5	10.9	16.4	27.0	26.1	8.1	8.5	6.0	10.03	27.04																			
13-Jun	5.7	5.7	7.8	7.0	8.7	12.8	16.4	12.0	8.0	8.9	10.3	8.0	6.0	6.7	8.9	7.7	7.3	5.7	5.7	5.2	6.4	6.3	7.0	6.3	7.94	16.39																			
14-Jun	6.8	6.7	6.6	8.2	10.7	10.0	10.0	7.3	9.0	9.5	8.6	7.3	9.5	8.2	7.0	3.8	2.6	3.2	2.7	1.7	3.1	6.0	4.8	5.8	6.62	10.68																			
15-Jun	6.5	6.6	5.4	5.2	5.9	5.3	5.5	7.7	7.8	5.7	6.4	3.5	3.7	4.0	5.3	4.9	4.1	3.3	3.0	2.5	3.4	4.4	2.9	2.2	4.80	7.81																			
16-Jun	1.1	2.9	3.5	3.4	5.6	6.7	12.5	5.8	6.0	4.8	3.8	4.9	4.7	5.0	4.6	3.8	3.1	1.7	0.9	1.6	3.1	3.2	3.1	1.8	4.06	12.46																			
17-Jun	5.3	3.4	2.5	3.2	9.6	6.8	8.1	10.7	12.8	5.7	6.6	6.2	5.7	7.5	6.8	4.2	4.8	3.5	3.6	3.9	3.9	4.8	16.0	15.2	6.70	15.97																			
18-Jun	20.0	15.7	9.0	10.8	13.7	21.5	22.6	18.0	6.6	5.8	5.3	4.1	4.5	5.8	6.2	6.5	6.4	8.7	7.3	10.0	12.4	7.5	8.1	12.3	10.37	22.57																			
19-Jun	15.7	9.6	10.1	32.8	28.0	114.1	34.1	29.1	29.6	27.9	26.1	14.3	8.4	4.8	4.2	6.6	6.3	6.1	5.1	7.7	4.4	2.3	12.5	8.2	18.67	114.08																			
20-Jun	7.1	6.8	6.5	7.4	8.3	7.0	7.8	6.9	13.4	15.4	9.9	8.2	7.1	7.8	14.8	8.4	3.1	6.2	3.0	3.0	2.4	8.5	4.4	4.8	7.42	15.42																			
21-Jun	7.0	3.5	2.3	4.8	8.4	8.5	8.3	14.1	9.6	12.3	3.8	3.8	6.9	4.7	8.0	16.7	7.3	7.6	4.9	3.4	3.5	3.9	10.1	3.2	6.94	16.71																			
22-Jun	1.9	1.9	0.9	1.1	0.6	1.0	5.6	1.3	2.0	4.3	5.1	7.7	8.0	9.1	5.7	5.6	6.2	8.0	7.8	19.9	16.6	4.8	6.7	6.9	5.78	19.94																			
23-Jun	4.0	3.0	6.1	6.6	7.1	14.9	14.4	9.8	3.9	3.4	4.3	6.3	5.2	4.8	8.1	5.1	2.7	3.7	3.3	3.0	1.9	4.2	10.2	5.8	5.92	14.89																			
24-Jun	6.1	5.5	6.8	6.9	7.5	6.2	4.8	8.0	9.8	9.4	10.5	5.9	8.3	13.0	12.5	10.5	16.0	8.8	6.7	4.6	5.9	22.1	12.3	7.2	8.98	22.14																			
25-Jun	5.9	6.2	8.8	14.8	30.9	19.0	21.3	23.1	13.0	17.4	23.9	18.1	17.3	9.3	6.2	5.5	6.9	7.3	6.9	10.7	27.4	44.6	31.0	27.5	16.80	44.63																			
26-Jun	40.2	50.2	44.0	45.1	59.4	76.4	128.8	69.8	34.5	45.0	59.8	30.2	11.2	8.4	43.9	35.7	8.4	9.6	5.2	5.2	4.8	17.4	12.5	3.3	35.37	128.81																			
27-Jun	5.5	3.5	6.9	6.0	4.6	3.3	2.9	3.6	3.0	1.3	2.8	2.3	4.5	6.2	4.2	0.7	0.3	0.3	0.3	0.4	0.5	0.5	0.6	3.4	2.82	6.89																			
28-Jun	2.5	2.1	1.1	0.7	0.9	1.1	2.2	2.5	0.9	0.4	0.9	1.6	1.4	1.9	2.8	3.6	2.8	4.1	4.1	3.7	4.5	5.5	4.6	6.9	2.62	6.88																			
29-Jun	6.3	4.7	6.0	5.9	11.7	11.8	8.5	14.5	6.5	5.1	4.7	4.1	4.9	5.3	6.8	7.0	8.1	7.0	5.5	5.9	6.1	5.8	6.7	7.5	6.93	14.49																			
30-Jun	8.1	9.7	10.8	10.3	10.6	11.5	14.3	12.0	9.8	8.8	8.1	6.0	6.9	5.9	7.4	5.6	10.7	9.0	10.1	12.7	11.5	14.7	14.2	15.7	10.18	15.71																			
																								Diurnal Average																					
																								Diurnal Maximum																					
																								7.74 7.49 8.00 9.31 11.49 17.31 17.10 13.27 10.57 10.27 10.60 7.55 6.79 6.80 7.79 7.35 6.19 5.71 5.18 6.27 7.05 7.97 8.41 7.51																					
																								40.25 50.21 43.97 45.13 59.35 114.08 128.81 69.82 34.49 44.96 59.84 30.16 17.32 21.29 43.88 35.68 15.95 10.91 16.35 27.04 27.44 44.63 31.05 27.51																					
Alberta Ambient Air Quality Objectives (AAQO): 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: June 22, 2017
 Parameter: H₂S

Instrument: Teco 45C Serial Number: 45C-71671-369 Previous Calibration Date: May 24, 2017
 Calibration: Routine Calibration Equipment: Sabio 2010 SN 08600312 Barometric Pressure: 27.09" Hg
 Calibration Method: Standard Gas Dilution Permeation Device ID: DT0014794, 10.5 ppm H₂S Temperature: 22.4° C
 Permeation Rate: 0 ng/min In Service: 10/21/2016 EXP 10/4/2019 Technician: L. Burns

Instrument Settings	H ₂ S bkg ppb	H ₂ S Coefficient	Monitoring Range
Previous	18.8	1.362	200 ppb
Current	18.4	1.352	200 ppb

Final Zero: -0.6 ppb Final Span: 118.0 ppb As Found Correction Factor: 1.005

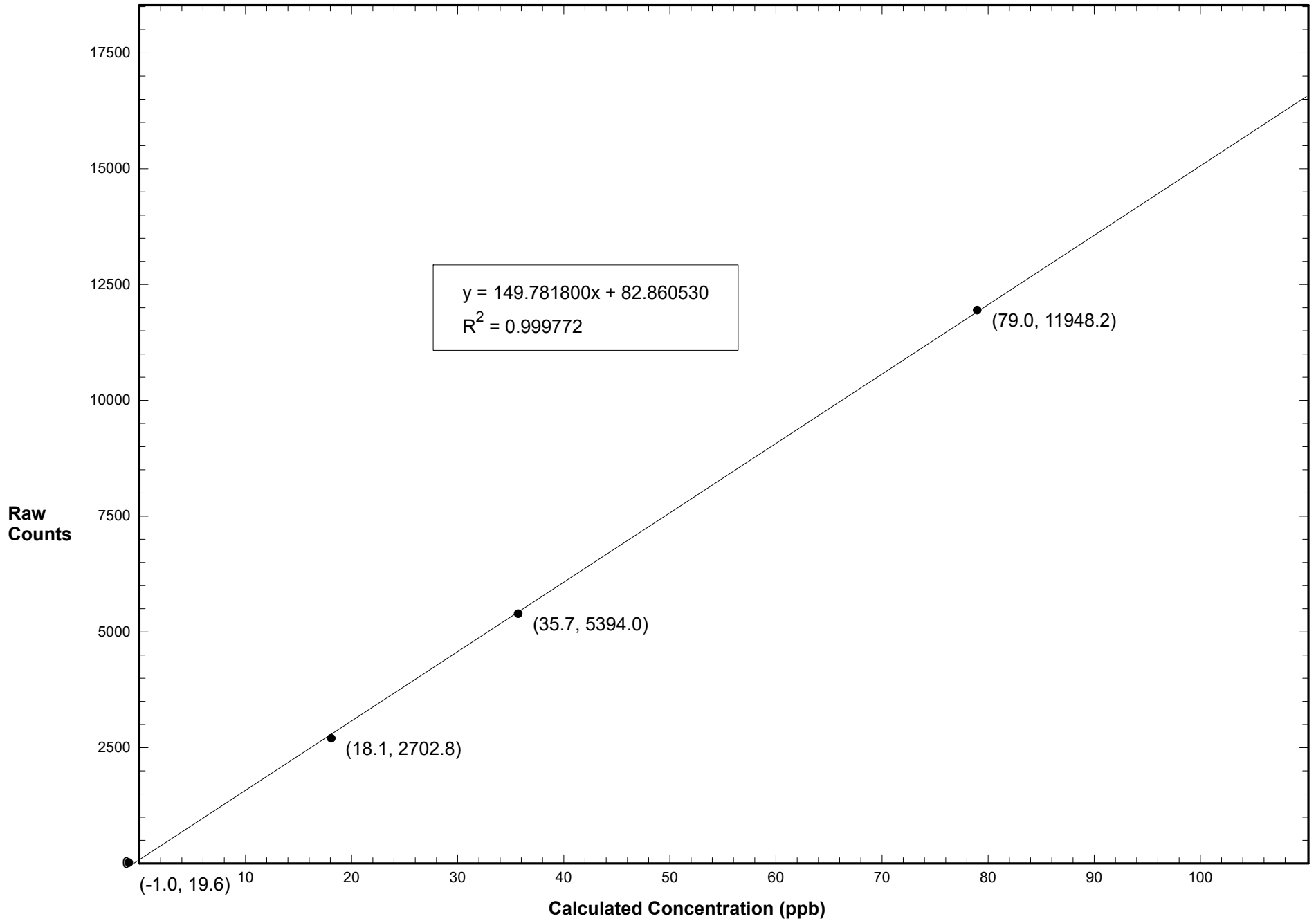
Calibration System Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
0.046	79.0	11948.2	79.2	0.997
0.021	35.7	5394.0	35.5	1.007
0.010	18.1	2702.8	17.5	1.034
0.000	-1.0	19.6	-0.4	

Results of Linear Regression			
R _c vs C _c	Slope	Intercept	R ²
Previous	151.327500	-7.052245	0.999971
Current	149.781800	82.860530	0.999772
C _i vs C _c			
Current	1.000000	0.000000	0.999772

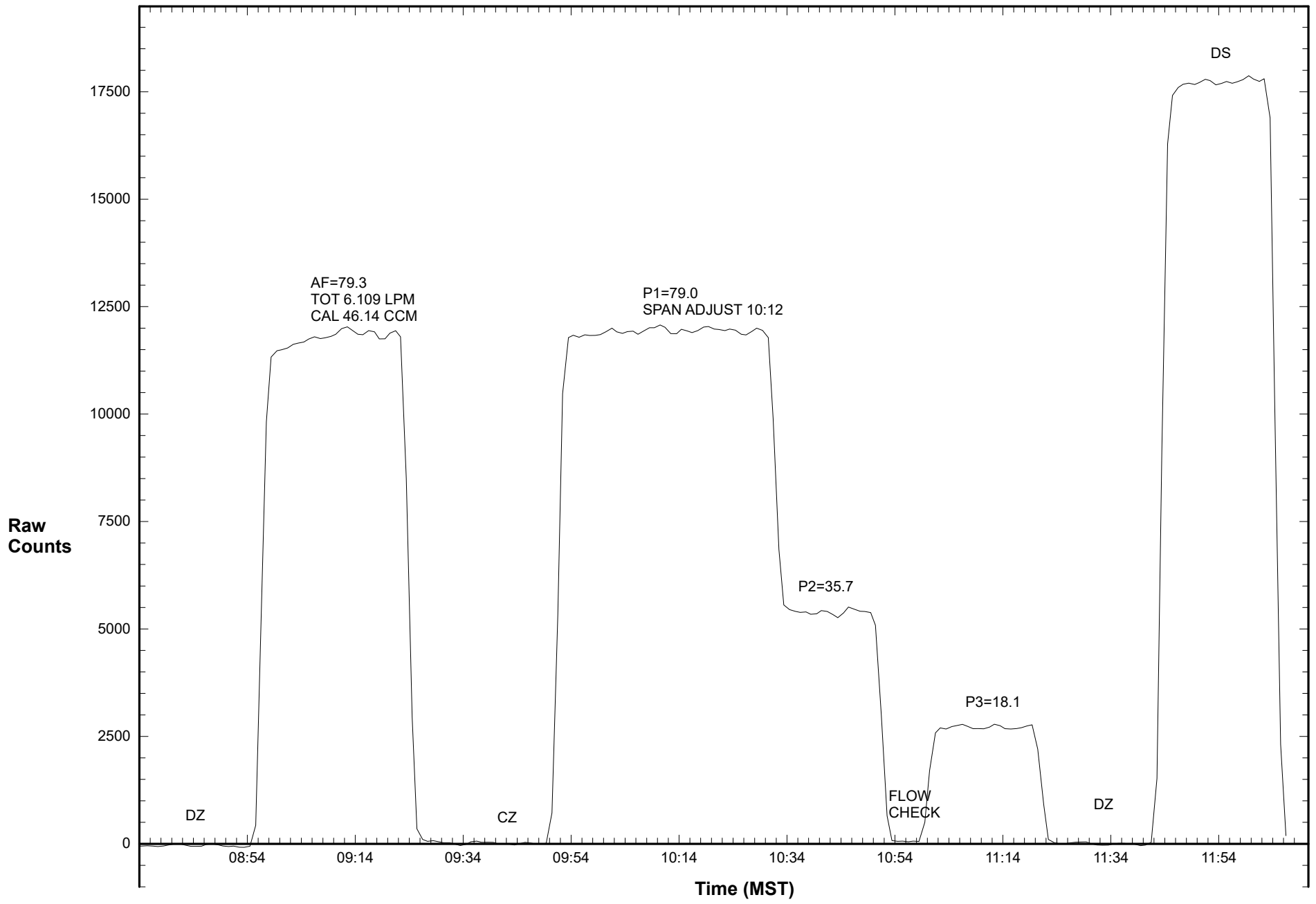
Average Correction Factor: 1.012
 Previous Correction Factor: 1.001
 Current Correction Factor: 0.997
 Percent Change of Correction Factor: -0.4

Comments: SAMPLE FLOW = 0.456 LPM

Station 906 H2S June 22, 2017: Linear Regression



Station 906 H2S June 22, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: June 22, 2017

Parameter: NO/NO₂/NO_x

Instrument: Teco 42i

Serial Number: 0905034788

Previous Calibration Date: May 24, 2017

Calibration: Routine

Calibration Equipment: Sabio 2010 SN 08600312

Barometric Pressure: 27.09" Hg

Calibration Method: Standard Gas Dilution/GPT

Cylinder ID: FF24195

Temperature: 22.4° C

Cylinder Concentration: 12.0 ppm NO

In Service: 6/2/2016 EXP 1/20/2019

Technician: L. Burns

Instrument Settings	NO bkg ppb	NO _x bkg ppb	Pre-reactor bkg ppb	NO Coefficient	NO _x Coefficient	NO ₂ Coefficient	Monitoring Range
Previous	14.7	14.7	NA	1.341	0.997	0.995	200 ppb
Current	15.1	15.0	NA	1.394	0.987	0.995	200 ppb

NO	Final Zero: -0.1 ppb	Final Span: 164.6 ppb	As Found Correction Factor: 1.039
NO ₂	Final Zero: 0.1 ppb	Final Span: -0.1 ppb	As Found Correction Factor: NA
NO _x	Final Zero: 0.0 ppb	Final Span: 164.3 ppb	As Found Correction Factor: 1.030

Results of Linear Regression			Slope	Intercept	R ²
NO	R _c vs C _c	Previous	149.829500	16.797990	0.999983
		Current	149.527700	12.673160	0.999998
	C _i vs C _c	Current	1.000000	0.000019	0.999998
NO ₂	R _c vs C _c	Previous	150.402200	-6.969470	0.999983
		Current	150.185100	15.449320	0.999999
	C _i vs C _c	Current	1.000000	0.000011	0.999999
NO _x	R _c vs C _c	Previous	150.060300	21.585280	0.999983
		Current	149.722900	19.263040	0.999991
	C _i vs C _c	Current	1.000000	-0.000022	0.999992

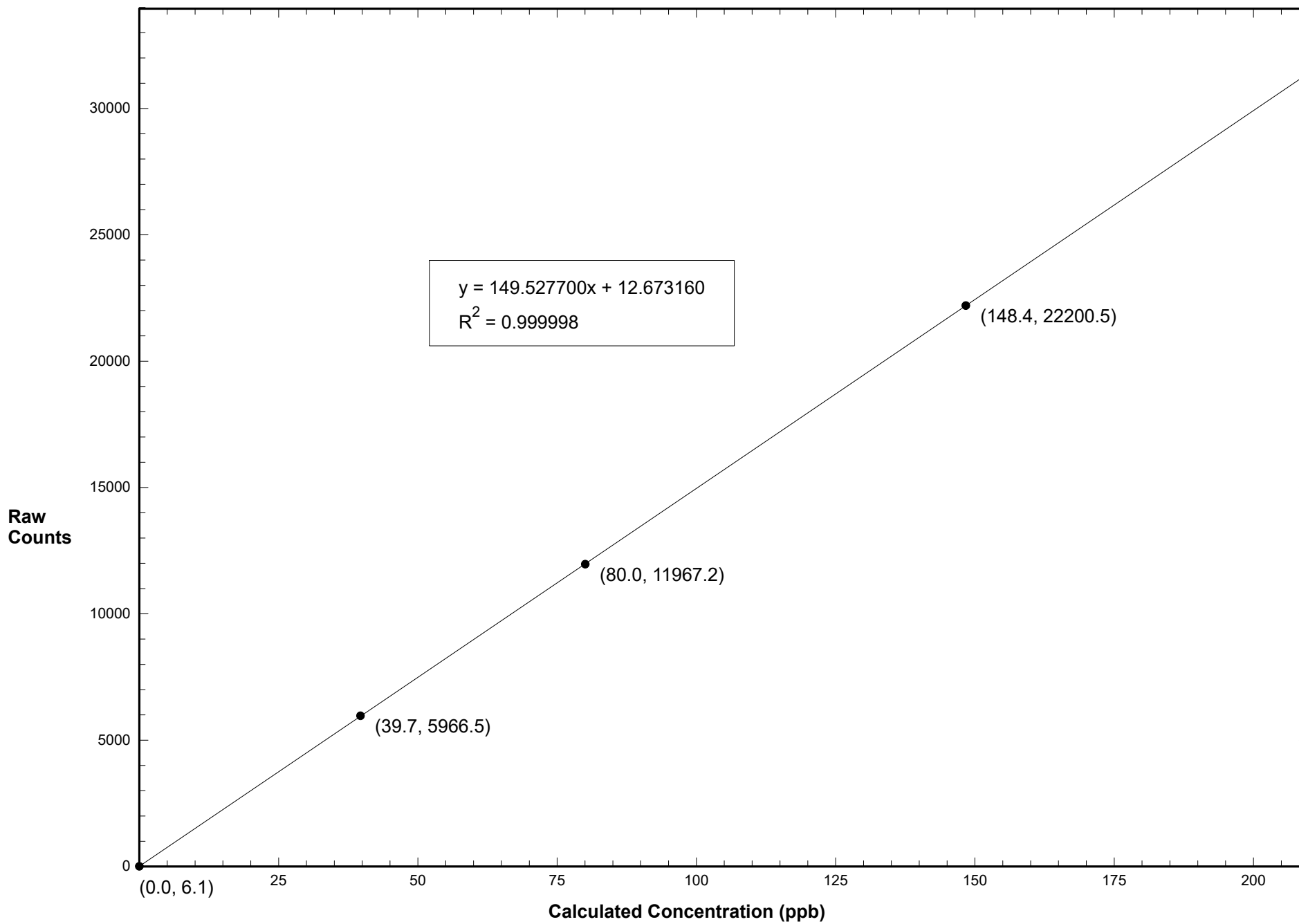
Comments: SAMPLE FLOW = 0.473 LPM

Calibration Data Summary (Page 2)

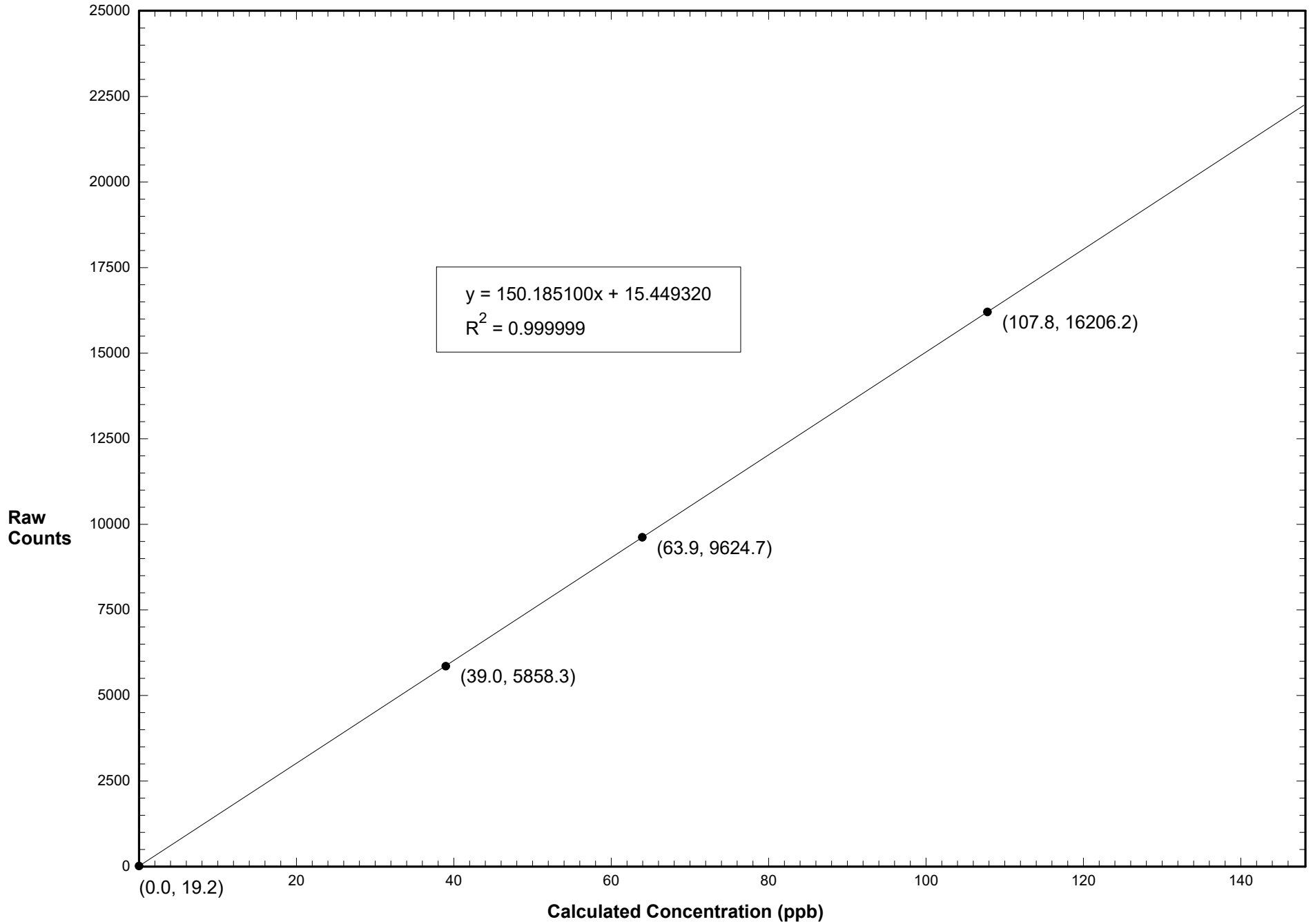
June 22, 2017 - Station 906

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		
0.07585	6.059	148.4	22200.5	148.4	1.000		
0.04042	6.019	80.0	11967.2	79.9	1.001		
0.01998	6.020	39.7	5966.5	39.8	0.997		
0.00000	6.000	0.0	6.1	0.0			
NO Calibration					Average Correction Factor:	0.999	
0.07585	6.059	148.4	22242.5	148.4	1.000		
0.04042	6.019	80.0	11970.7	79.8	1.003		
0.01998	6.020	39.7	5994.5	39.9	0.995		
0.00000	6.000	0.0	11.3	-0.1			
NO _x Calibration					Average Correction Factor:	0.999	
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
149.4	6226.8	41.6	107.8	16206.2	107.8	1.000	1.000
149.4	12785.6	85.4	63.9	9624.7	64.0	0.999	1.001
149.4	16519.8	110.4	39.0	5858.3	38.9	1.002	0.998
			0.0	19.2	0.0		
						Average Correction Factor:	1.000
NO ₂ Gas Phase Titration						Average Converter Efficiency:	1.000
Parameter	Correction Factor (Previous)	Correction Factor: (Current)	Percent Change of Correction Factor				
NO	1.002	1.000	-0.2				
NO ₂	1.000	1.000	0.0				
NO _x	1.002	1.000	-0.2				

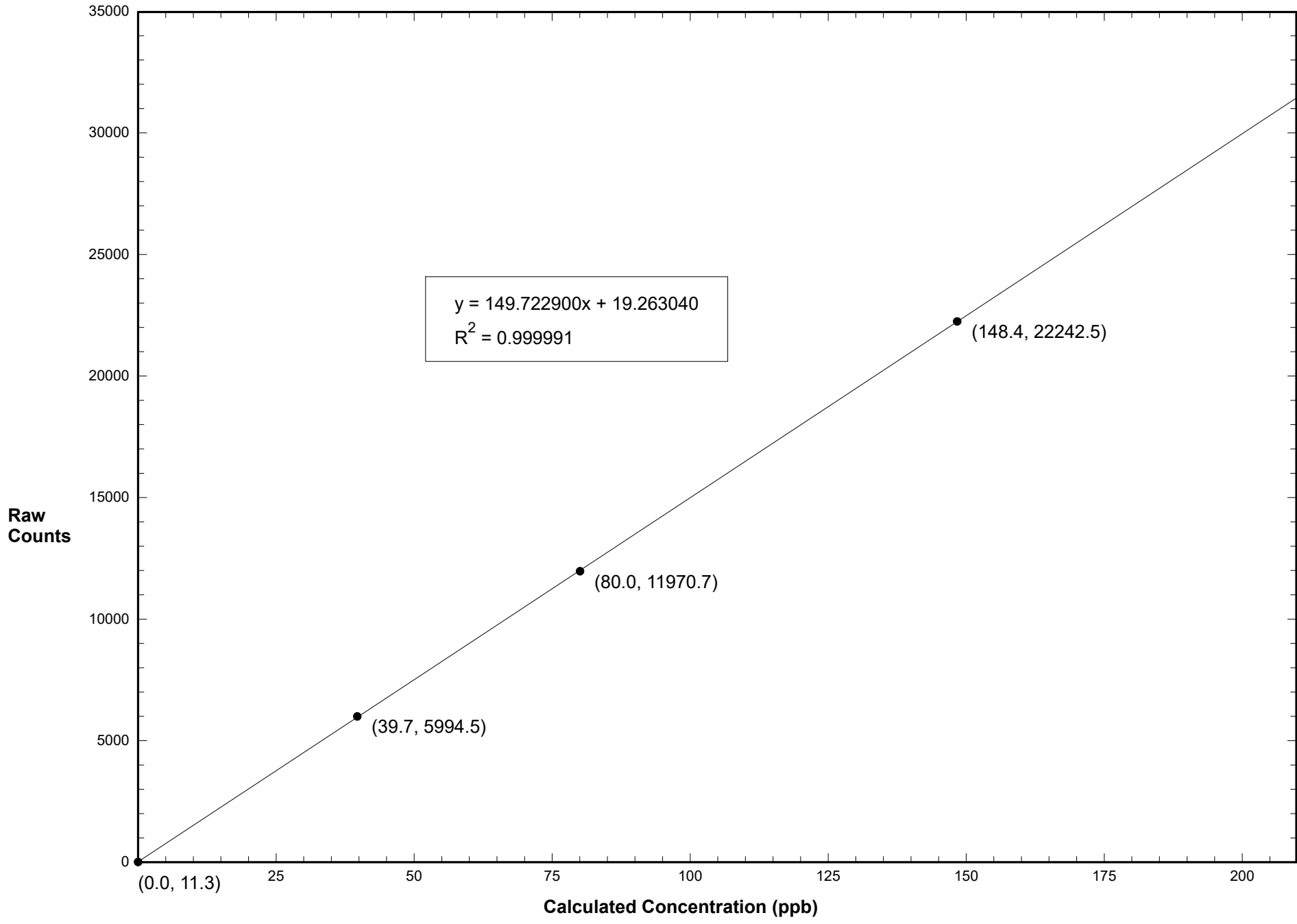
Station 906 NO June 22, 2017: Linear Regression



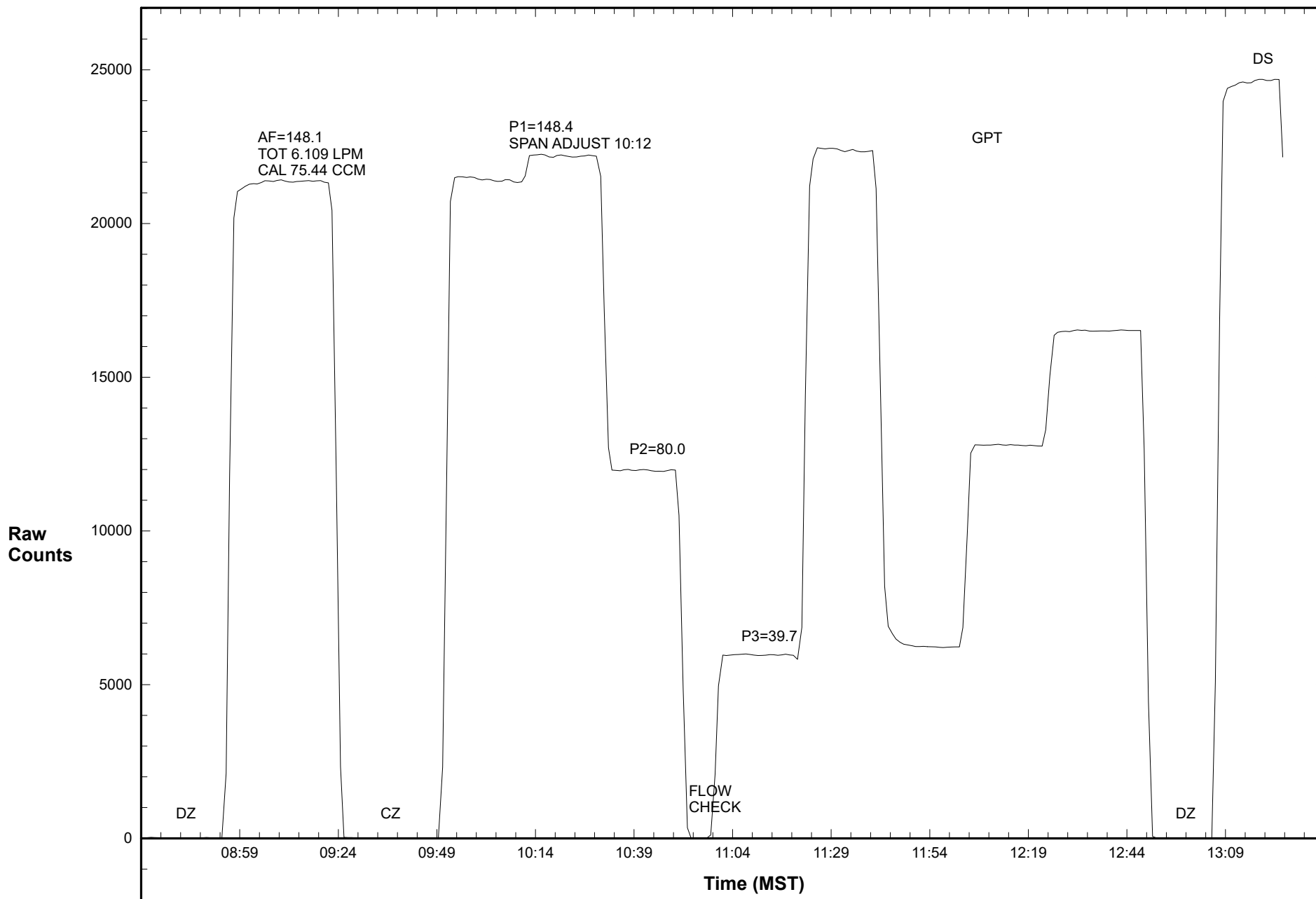
Station 906 NO2 June 22, 2017: Linear Regression



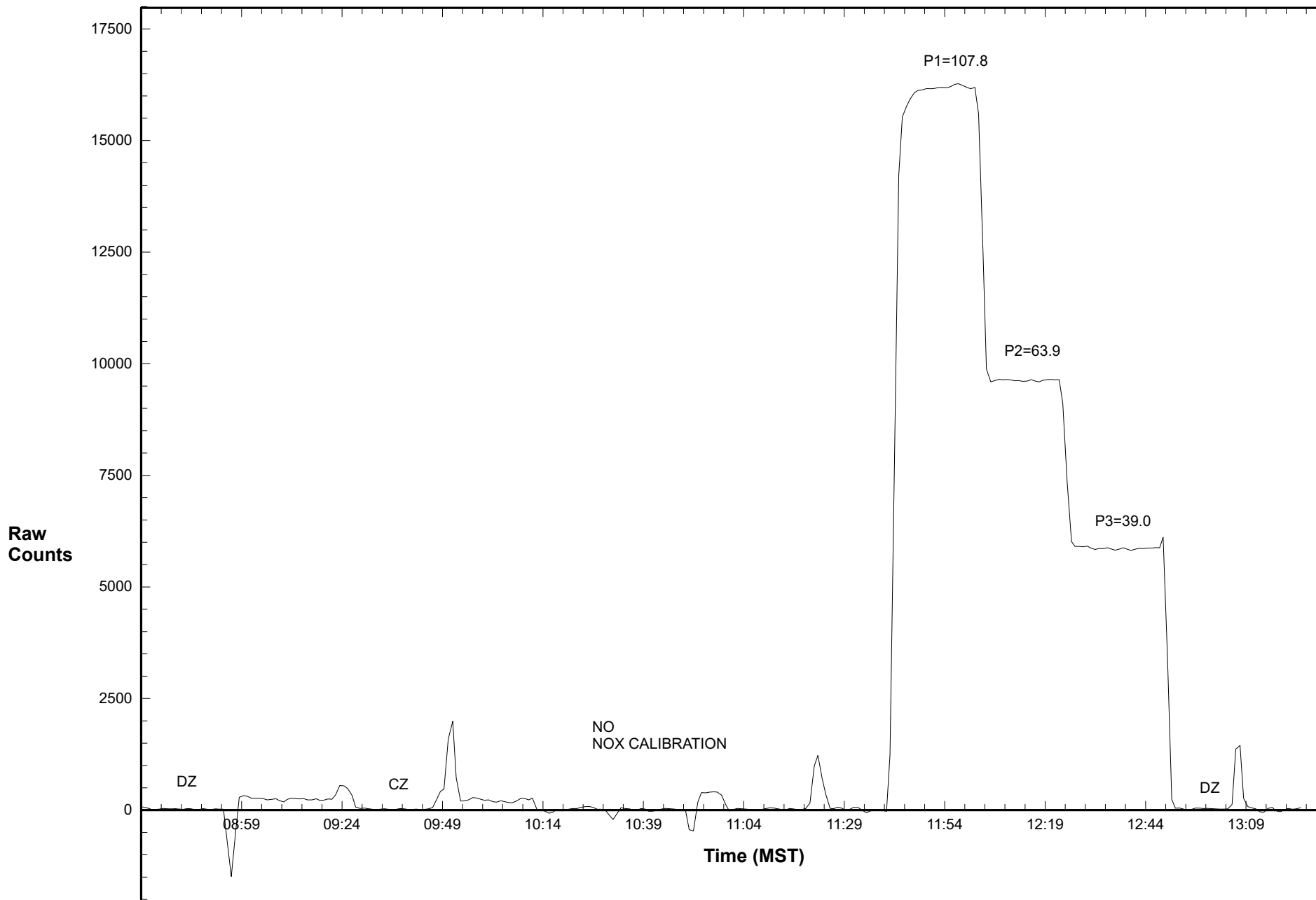
Station 906 NOX June 22, 2017: Linear Regression



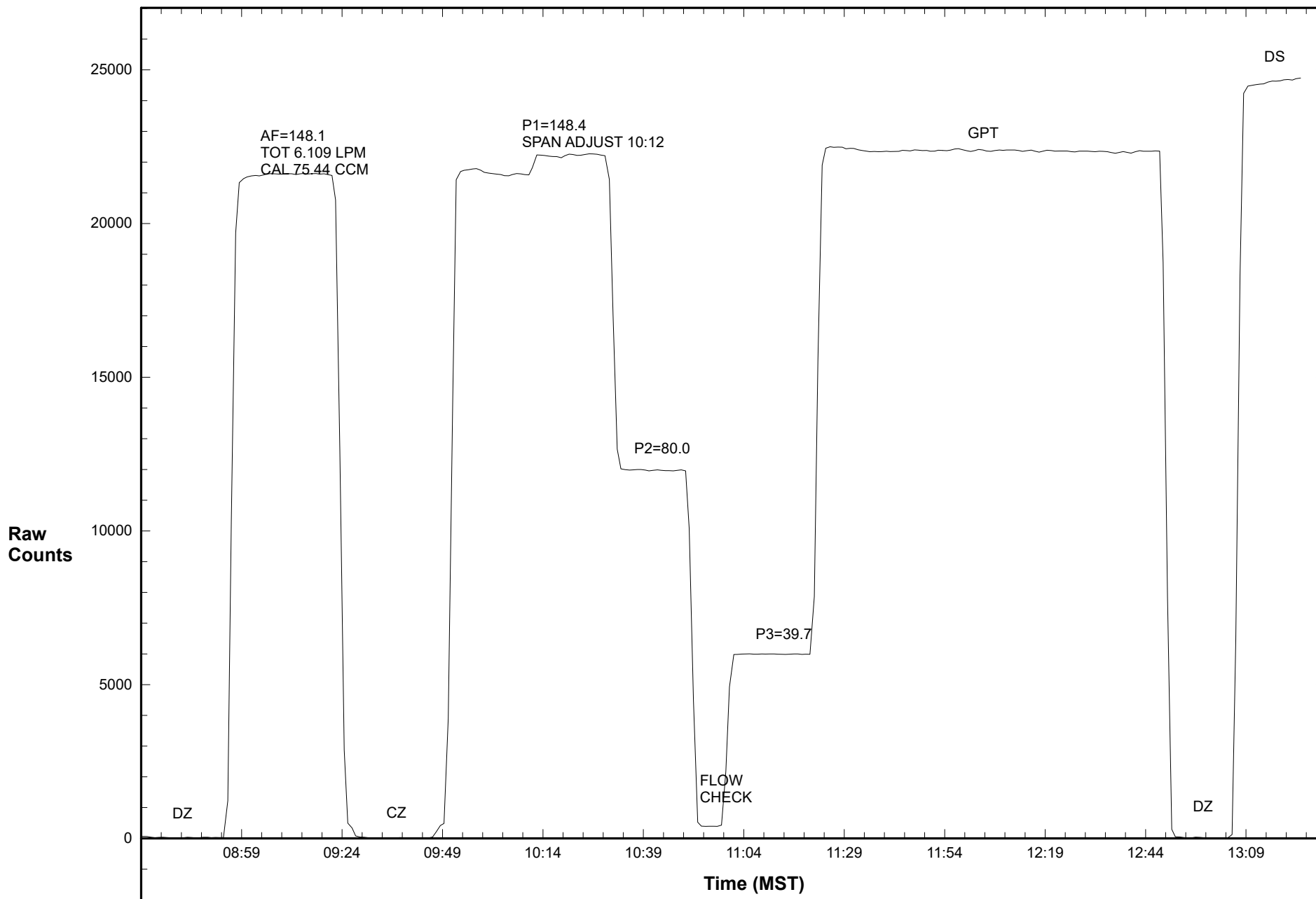
Station 906 NO June 22, 2017: Calibration Graph



Station 906 NO2 June 22, 2017: Calibration Graph



Station 906 NOX June 22, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: June 22, 2017

Parameter: O₃

Instrument: Teco 49i

Serial Number: 1150790050

Previous Calibration Date: May 24, 2017

Calibration: Routine

Calibration Equipment: 2B Tech Model 306 SN142

Barometric Pressure: 27.09" Hg

Calibration Method: Certified Ozone Generator

Temperature: 22.4° C

Technician: L. Burns

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	0.0	1.011	500 ppb
Current	0.0	1.017	500 ppb

Final Zero: -2.0 ppb

Final Span: 361.1 ppb

As Found Correction Factor: 0.983

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	399.0	24021.1	398.1	1.002
3.000	215.0	13076.9	216.0	0.995
3.000	105.0	6492.6	106.4	0.987
3.000	0.0	4.9	-1.5	

Results of Linear Regression

R _c vs C _c	Slope	Intercept	R ²
Previous	59.889790	45.835190	0.999975
Current	60.100220	95.861250	0.999930
C _i vs C _c			
Current	1.000000	-0.000006	0.999929

Average Correction Factor: 0.995

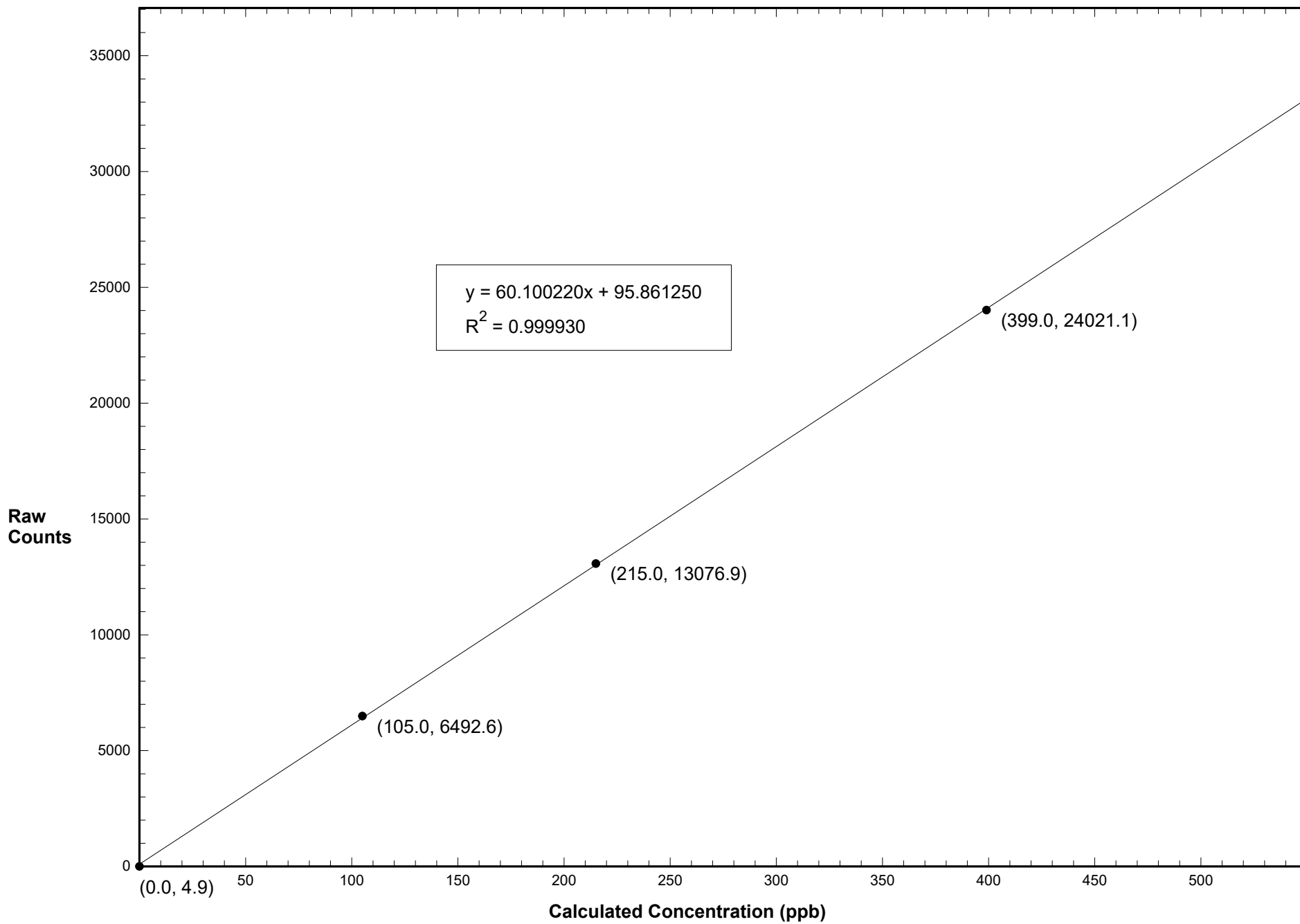
Previous Correction Factor: 1.000

Current Correction Factor: 1.002

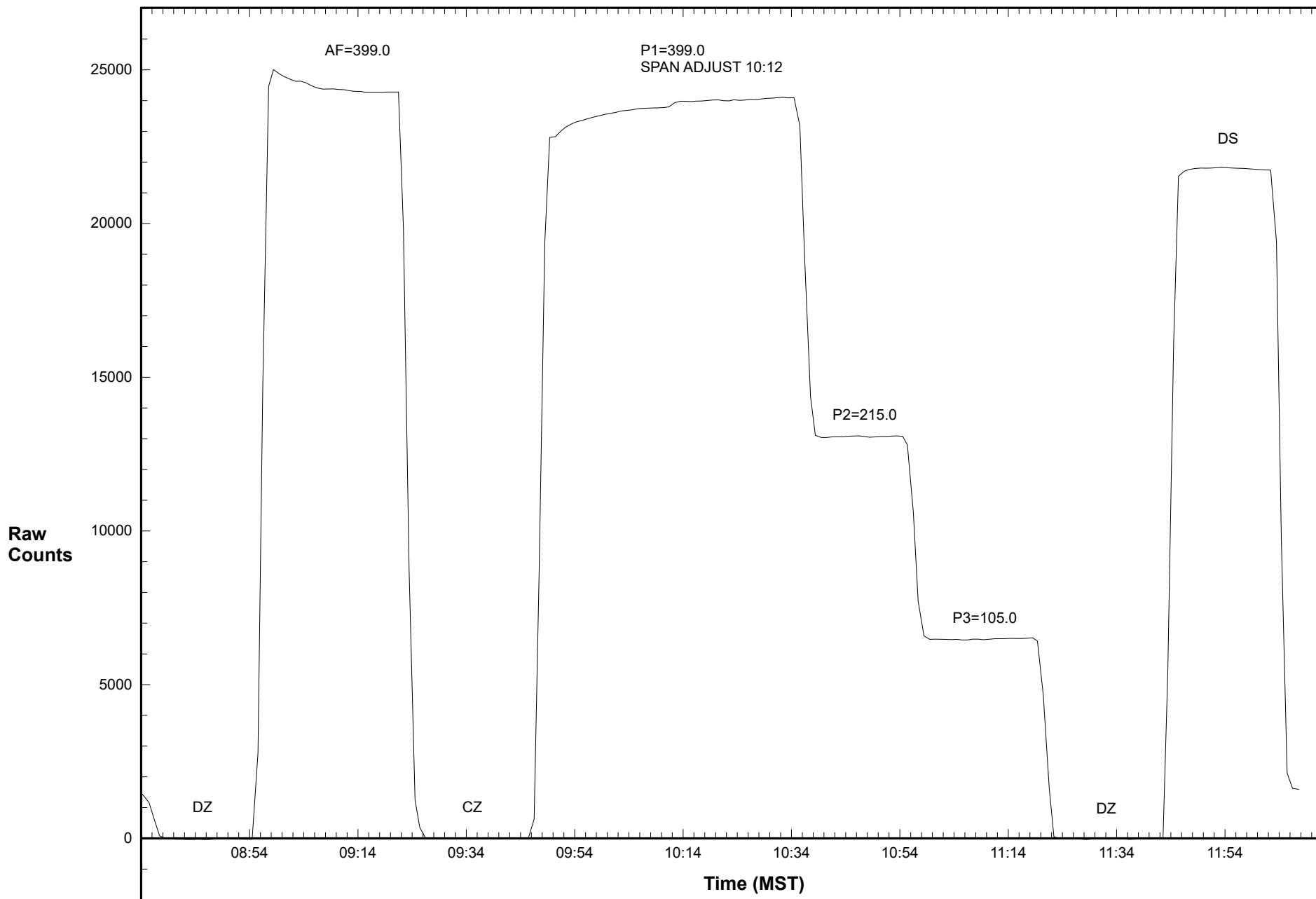
Percent Change of Correction Factor: 0.2

Comments: SAMPLE FLOWS = 0.711 AND 0.691 LPM

Station 906 O3 June 22, 2017: Linear Regression



Station 906 O3 June 22, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: June 22, 2017

Parameter: SO₂

Instrument: TECO 43i

Serial Number: CM12499009

Previous Calibration Date: May 24, 2017

Calibration: Routine

Calibration Equipment: Sabio 2010 SN 08600312

Barometric Pressure: 27.09" Hg

Calibration Method: Standard Gas Dilution

Cylinder ID: FF24195

Temperature: 22.4° C

Cylinder Concentration: 5.78 ppm SO₂

In Service: 6/2/2016 EXP 1/20/2019

Technician: L. Burns

Instrument Settings	SO ₂ bkg ppb	SO ₂ Coefficient	Monitoring Range
Previous	27.4	1.037	100 ppb
Current	28.4	1.075	100 ppb

Final Zero: -0.1 ppm

Final Span: 76.7 ppm

As Found Correction Factor: 1.044

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
0.0759	6.059	71.5	21585.9	71.5	0.999
0.0404	6.019	38.6	11593.0	38.5	1.002
0.0200	6.020	19.1	5697.2	19.0	1.006
0.0000	6.000	0.0	-21.0	0.1	

Results of Linear Regression

R _c vs C _c	Slope	Intercept	R ²
Previous	300.410600	-5.523044	0.999977
Current	302.550600	-53.981090	0.999989
C _i vs C _c			
Current	1.000000	0.000000	0.999989

Average Correction Factor: 1.002

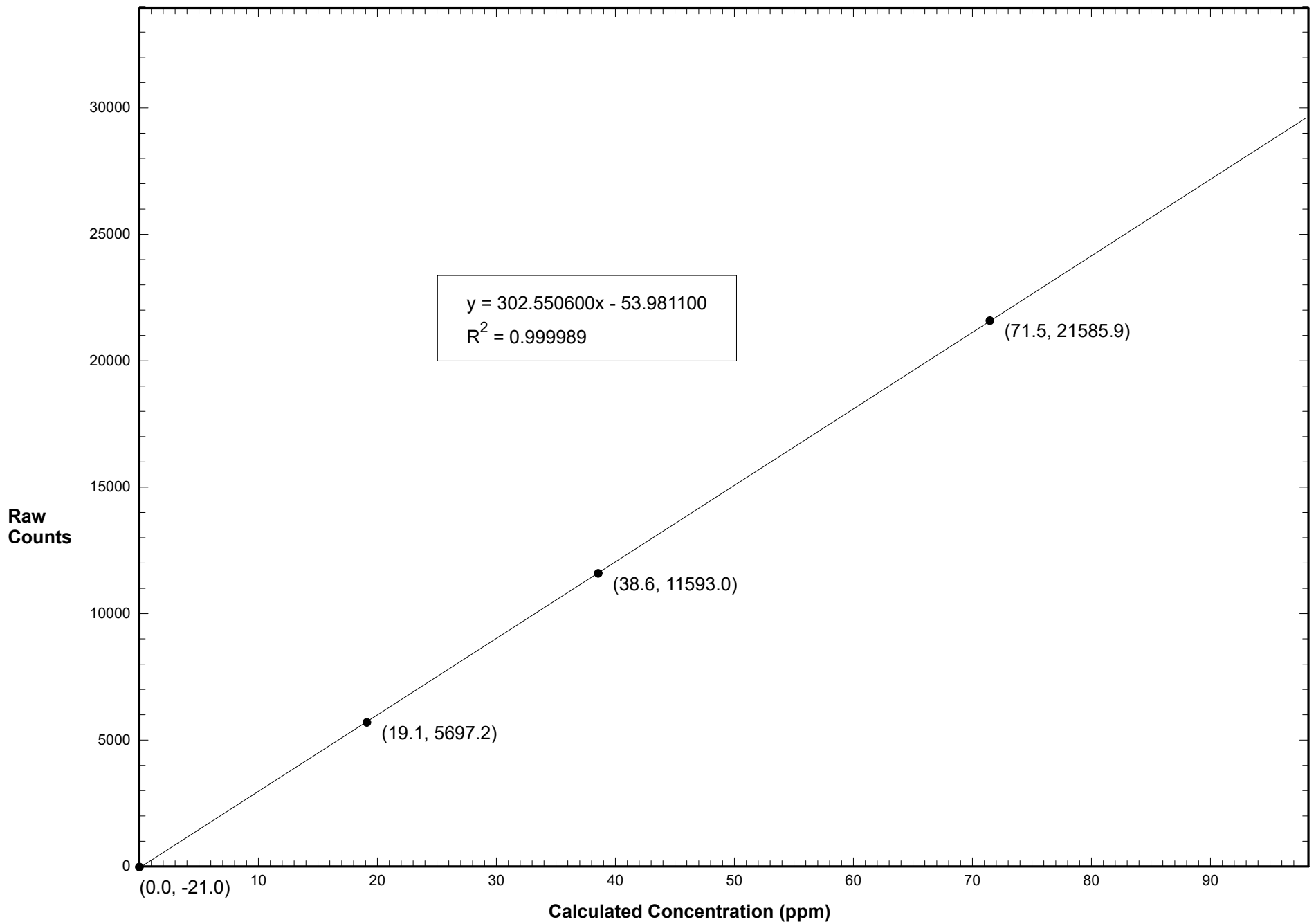
Previous Correction Factor: 1.001

Current Correction Factor: 0.999

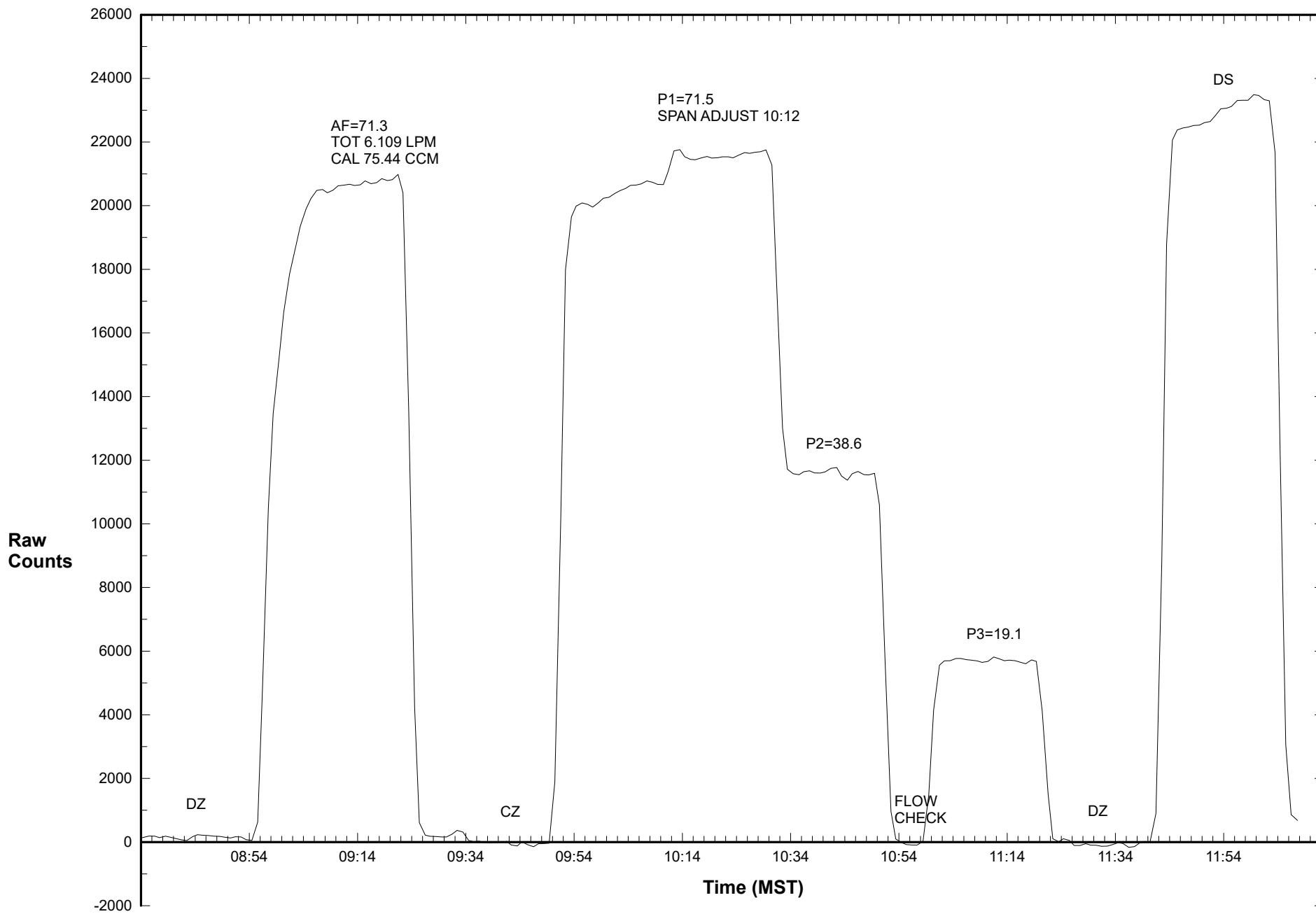
Percent Change of Correction Factor: -0.2

Comments: SAMPLE FLOW = 0.377 LPM

Station 906 SO2 June 22, 2017: Linear Regression



Station 906 SO2 June 22, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton
 Calibration Date: June 22, 2017
 Parameter: TRS

Instrument: Teco 43C Serial Number: 43CTL-60324-326 Previous Calibration Date: May 24, 2017
 Calibration: Routine Calibration Equipment: Sabio 2010 SN 08600312 Barometric Pressure: 27.09" Hg
 Calibration Method: Standard Gas Dilution Permeation Device ID: DT0014794, 10.5 ppm H2S Temperature: 22.4° C
 Permeation Rate: 0 ng/min In Service: 10/21/2016 EXP 10/4/2019 Technician: L. Burns

Instrument Settings	H ₂ S bkg ppb	H ₂ S Coefficient	Monitoring Range
Previous	1.87	0.803	100 ppb
Current	1.74	0.756	100 ppb

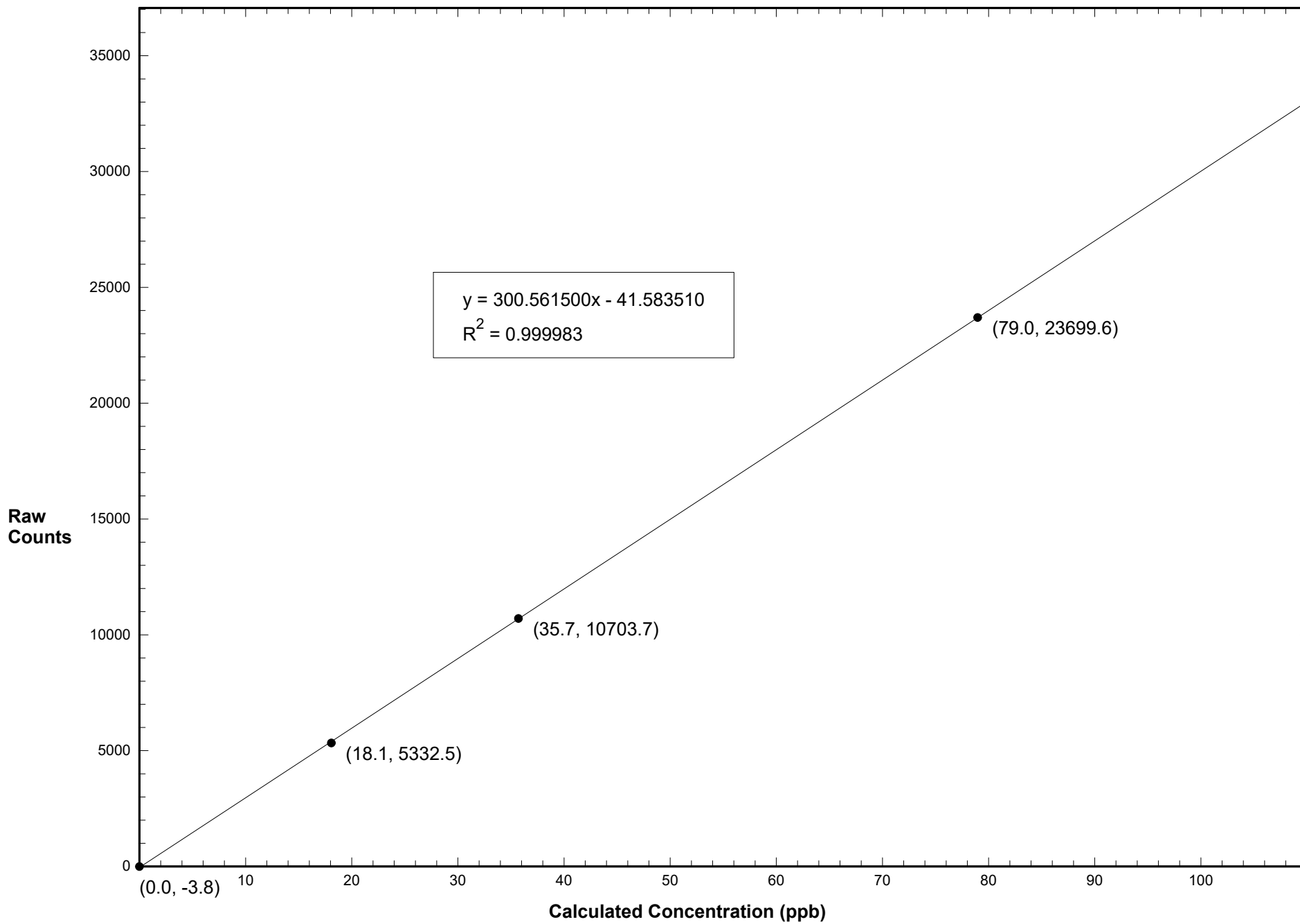
Final Zero: 0.0 ppb Final Span: 64.9 ppb As Found Correction Factor: 0.955

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
0.046	79.0	23699.6	79.0	1.000
0.021	35.7	10703.7	35.8	0.999
0.010	18.1	5332.5	17.9	1.011
0.000	0.0	-3.8	0.1	

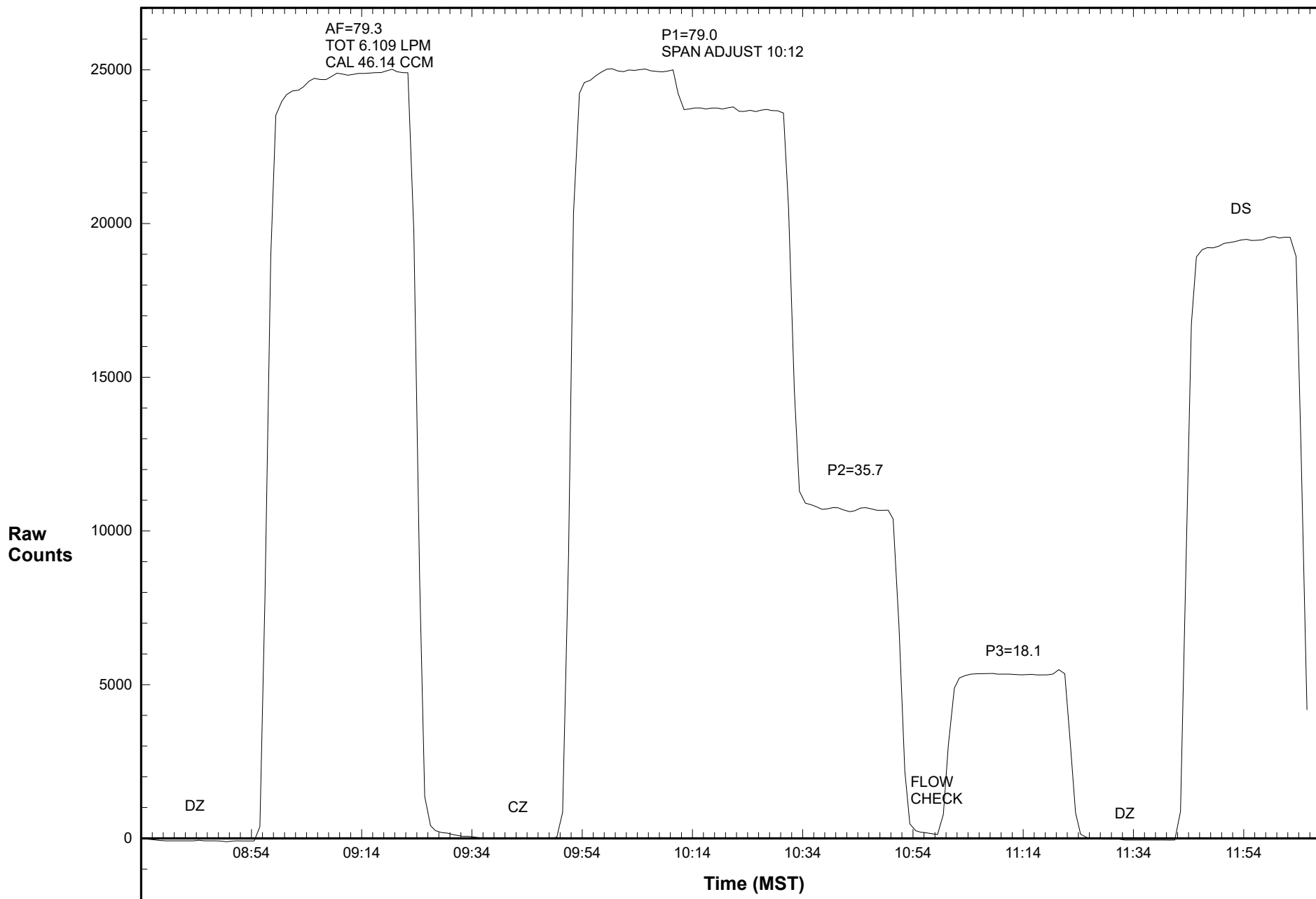
Results of Linear Regression				Average Correction Factor:	1.003
R _c vs C _c	Slope	Intercept	R ²	Previous Correction Factor:	1.001
Previous	301.132200	-23.553180	0.999987	Current Correction Factor:	1.000
Current	300.561500	-41.583510	0.999983	Percent Change of Correction Factor:	-0.1
C _i vs C _c					
Current	1.000000	-0.000001	0.999983		

Comments: SAMPLE FLOW = 0.335 LPM

Station 906 TRS June 22, 2017: Linear Regression



Station 906 TRS June 22, 2017: Calibration Graph



WEST CENTRAL AIRSHED SOCIETY

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

**AMS 906
HINTON
JUNE 2017**

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
June 2017

Maximum Value: 28.87 C on Jun 25 18:00		Maximum Daily Average: 20.21 C on Jun 25		Hours in Service: 720																																													
Minimum Value: 2.8 C on Jun 6 05:00		Minimum Daily Average: 8.45 C on Jun 10		Hours of Data: 720																																													
Maximum Diurnal Average: 19.34 C at hour 15		Minimum Diurnal Average: 7.26 C at hour 5		Hours of Missing Data: 0																																													
Monthly Average: 13.916 C		Percentiles: P₁ = 3.6 P₁₀ = 6.4 Q₁ = 9.7 Median = 13.5 Q₃ = 17.8 P₉₀ = 22.1 P₉₉ = 27.0		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-Jun	11.0	9.5	9.1	7.9	6.8	7.9	12.6	15.5	18.4	19.3	21.4	22.0	22.4	22.8	23.2	23.4	23.0	22.5	22.2	20.9	18.2	16.4	14.7	12.7	16.83	23.41																							
2-Jun	12.1	11.9	11.3	10.5	9.9	9.1	11.1	14.4	16.0	16.7	17.0	17.6	18.3	20.0	20.0	19.1	19.6	18.6	17.4	16.6	15.5	13.7	10.4	8.4	14.79	19.97																							
3-Jun	6.8	6.0	5.1	4.1	3.6	3.8	5.0	6.5	8.3	9.6	12.4	17.6	21.8	22.7	22.8	22.7	22.5	21.4	19.6	17.1	15.0	13.1	10.8	13.39	22.90																								
4-Jun	9.4	7.6	5.9	4.5	3.7	4.0	5.1	8.2	10.7	12.7	13.3	10.0	10.1	12.7	14.4	14.5	14.7	15.4	15.2	14.0	11.9	9.9	9.8	9.7	10.31	15.41																							
5-Jun	9.2	8.4	8.1	7.0	6.1	5.6	5.6	9.3	11.9	14.5	15.9	16.9	17.8	18.4	19.5	20.1	20.5	21.1	21.2	19.5	18.1	14.0	10.9	8.5	13.66	21.24																							
6-Jun	7.1	5.6	4.8	3.5	2.8	3.4	6.1	10.7	14.7	17.3	19.8	21.8	22.8	23.4	23.9	24.5	24.4	24.4	23.0	21.6	19.9	17.0	14.4	12.6	15.40	24.49																							
7-Jun	11.1	9.9	8.2	7.3	6.0	6.1	8.5	12.6	16.7	19.7	22.0	24.2	24.7	25.4	25.0	24.1	24.1	24.1	23.3	22.6	20.5	17.9	15.3	13.2	17.19	25.43																							
8-Jun	11.9	10.9	9.5	8.5	7.8	8.1	9.5	12.0	14.9	18.5	20.4	20.9	22.7	23.2	23.9	24.4	23.0	17.8	16.0	16.0	14.9	14.3	13.9	13.7	15.69	24.37																							
9-Jun	13.4	13.0	13.1	12.9	12.7	12.1	10.9	10.0	10.4	11.2	11.4	11.4	11.1	9.9	9.4	8.2	8.2	8.2	7.2	6.3	5.8	5.8	5.8	5.5	9.75	13.44																							
10-Jun	5.2	4.8	4.4	4.2	3.9	3.8	3.6	3.9	4.3	4.9	6.1	7.8	9.7	11.7	12.5	13.0	14.0	14.2	14.4	13.0	11.5	10.8	10.6	10.4	8.45	14.42																							
11-Jun	9.9	9.0	8.7	8.2	8.0	7.9	8.5	8.6	8.9	8.9	9.2	10.9	12.8	13.4	13.5	14.3	14.5	14.9	14.0	13.5	12.9	11.7	9.8	8.6	10.86	14.95																							
12-Jun	8.2	7.5	6.2	5.4	5.1	5.9	7.0	9.2	12.3	15.7	19.1	20.2	21.9	22.9	23.4	24.2	24.7	21.5	19.6	18.3	17.5	17.0	15.3	14.1	15.10	24.72																							
13-Jun	11.7	9.9	8.8	8.5	8.5	8.3	11.8	12.5	13.2	13.2	12.9	13.3	13.9	15.3	15.9	15.1	16.3	17.1	16.8	16.2	15.4	13.1	11.9	11.0	12.95	17.05																							
14-Jun	10.3	10.0	9.4	9.0	8.8	9.2	9.8	10.4	11.1	11.7	12.9	14.0	14.9	15.4	17.2	13.5	15.7	16.3	14.4	12.8	11.6	9.7	8.9	8.6	11.90	17.17																							
15-Jun	7.7	6.8	5.6	4.8	4.2	4.3	6.4	9.9	13.2	16.1	16.8	18.6	18.9	18.2	18.4	19.0	19.4	19.2	19.4	18.0	16.7	15.5	14.2	13.9	13.55	19.42																							
16-Jun	13.5	13.7	13.6	13.0	12.1	12.0	12.0	15.0	15.9	16.8	16.9	18.7	19.9	18.4	16.0	17.9	14.2	11.5	12.9	12.2	11.5	10.8	9.8	8.2	14.02	19.90																							
17-Jun	8.4	6.4	5.1	3.6	3.0	3.3	5.6	9.8	13.0	15.3	16.2	17.0	18.2	19.1	18.9	17.5	17.7	17.0	16.5	15.9	15.4	14.4	12.3	10.3	12.50	19.10																							
18-Jun	7.8	7.0	6.1	5.3	5.7	6.4	7.7	10.3	14.8	15.2	16.0	16.6	18.2	19.3	19.9	20.6	20.5	20.4	19.5	18.4	17.4	15.8	13.6	11.5	13.91	20.60																							
19-Jun	9.7	8.4	6.8	5.5	4.5	4.5	7.0	9.9	11.3	12.9	14.5	16.9	18.4	17.9	18.6	19.5	19.7	20.0	19.2	19.1	18.3	17.2	14.7	13.6	13.66	19.99																							
20-Jun	12.8	12.0	11.5	10.7	10.4	10.6	11.6	13.6	17.1	18.5	18.5	21.0	22.2	22.0	20.7	13.0	10.8	12.5	14.2	13.5	12.5	10.8	8.5	6.5	13.99	22.22																							
21-Jun	5.7	6.0	6.4	4.9	3.2	3.3	5.5	10.3	13.8	14.2	15.1	15.3	15.1	15.4	16.8	14.6	15.2	14.0	13.6	12.9	12.2	11.7	10.5	9.9	11.07	16.80																							
22-Jun	9.1	8.7	8.0	8.2	8.1	7.6	7.9	8.5	9.4	10.8	12.2	12.2	13.0	12.9	13.0	13.8	14.4	15.0	14.6	14.5	13.1	12.2	10.6	9.1	11.13	15.04																							
23-Jun	8.4	7.7	7.2	6.9	6.4	6.5	8.5	11.8	13.7	15.4	16.9	17.2	17.3	19.0	19.2	17.7	16.8	16.3	16.1	15.8	14.4	13.4	12.2	11.5	13.18	19.20																							
24-Jun	10.4	9.1	8.1	6.8	6.0	5.6	7.8	11.4	14.7	17.7	19.0	19.9	21.2	21.7	22.1	22.1	23.1	23.3	22.9	21.3	19.5	16.8	15.9	15.5	15.91	23.26																							
25-Jun	16.0	15.8	14.7	11.5	10.0	9.7	10.6	13.6	17.0	19.5	22.1	23.5	23.9	25.9	26.3	28.4	28.7	28.9	28.5	27.5	25.5	22.0	18.6	17.0	20.21	28.87																							
26-Jun	15.5	14.3	13.2	12.6	11.6	11.2	11.4	12.5	13.8	16.2	18.8	22.1	23.2	26.0	27.5	28.2	28.4	24.7	19.7	19.0	17.4	15.7	12.7	10.9	17.77	28.40																							
27-Jun	10.4	9.5	8.6	7.9	7.4	7.4	7.6	9.6	13.1	15.7	14.8	15.2	17.1	18.0	17.3	15.8	14.8	14.7	14.9	14.7	14.4	14.3	13.5	13.2	12.92	18.04																							
28-Jun	13.5	13.3	12.0	10.9	9.2	9.0	9.8	9.9	10.1	10.9	9.8	9.3	10.8	11.2	12.6	13.0	14.8	14.6	14.2	13.1	12.4	12.3	11.9	11.5	11.67	14.78																							
29-Jun	10.5	9.7	9.0	9.1	8.9	9.2	9.3	10.2	13.2	15.3	17.0	19.3	20.6	21.9	23.1	23.0	23.7	23.9	22.5	20.4	19.8	18.7	17.4	16.8	16.35	23.91																							
30-Jun	15.5	15.1	14.5	14.0	13.2	13.0	13.6	15.8	19.3	21.1	22.7	24.4	25.8	26.0	25.1	24.4	24.6	23.3	22.1	20.9	19.8	18.4	17.0	15.6	19.39	25.97																							
																								10.40	9.59	8.76	7.92	7.26	7.28	8.58	10.86	13.17	14.84	16.04	17.19	18.28	19.00	19.34	18.98	19.08	18.60	17.90	16.94	15.71	14.21	12.62	11.43	Diurnal Average	
																								15.96	15.84	14.68	14.03	13.21	12.99	13.64	15.83	19.29	21.05	22.72	24.39	25.77	25.97	27.49	28.37	28.73	28.87	28.46	27.49	25.48	22.04	18.62	16.98	Diurnal Maximum	



WCAS - Hinton
Summary of Hourly Averages

Wind Speed (WS) - kph
June 2017

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	0.8	0.2	1.0	0.3	0.2	0.2	0.6	3.7	3.3	9.4	7.9	8.2	8.4	7.4	5.7	3.7	2.9	2.4	2.2	1.9	0.5	0.7	0.6	0.8	2.48	9.44	
Dir	ESE	ESE	ENE	NE	NNE	WSW	W	SW	WSW	SW	SW	SW	SW	SW	WSW	W	W	WNW	WNW	WNW	NNW	WNW	NNE	NNE	WSW	SW	
2 Spd	0.8	1.9	0.8	0.6	0.8	0.4	1.1	4.5	12.9	14.7	13.7	6.5	6.3	10.8	6.8	4.5	8.8	14.4	11.4	6.4	1.7	2.1	1.5	1.6	4.80	14.75	
Dir	NE	ENE	ESE	NE	NNE	NE	ENE	SW	SW	SW	SW	WSW	SW	SW	WSW	WSW	SW	SW	SW	SW	W	SW	NE	ENE	SW	SW	
3 Spd	1.7	1.4	1.0	0.7	0.7	0.5	0.9	0.7	0.9	2.0	2.8	5.0	1.1	5.5	5.6	5.1	3.6	4.1	3.1	2.7	1.4	4.4	2.5	0.8	0.63	5.55	
Dir	NE	ENE	E	ENE	ENE	NE	NNE	WNW	NE	NE	NE	NE	W	WSW	WSW	WSW	W	WSW	W	WNW	N	NE	NNE	SSW	NW	WSW	
4 Spd	3.2	1.3	0.3	0.0	0.5	0.9	1.2	2.1	3.4	2.7	3.2	1.1	2.9	2.5	1.4	7.0	8.1	5.6	3.9	3.2	3.9	0.3	2.1	3.2	1.24	8.14	
Dir	SW	SSW	SSW	N	NE	N	E	NE	ENE	NNE	NE	SE	NE	NE	ENE	SE	SE	SE	ENE	NE	N	WSW	SSW	SSW	E	SE	
5 Spd	4.8	0.9	1.7	1.5	2.1	1.1	0.8	1.5	2.3	2.9	2.7	1.4	2.2	1.8	2.7	1.1	0.5	1.9	0.6	4.8	4.0	0.9	0.3	1.7	0.58	4.82	
Dir	SW	WNW	SW	WSW	SW	W	W	W	W	SSW	SSE	WSW	E	SSW	NNW	NW	NNE	NNE	W	ESE	SE	NE	N	W	SW	SW	
6 Spd	1.1	1.0	0.5	0.2	0.7	0.9	1.0	1.0	1.1	2.1	1.5	1.7	1.9	1.0	2.1	0.7	3.2	1.5	2.0	1.7	0.3	0.3	1.4	1.2	0.24	3.15	
Dir	W	W	W	NW	W	WNW	WNW	WNW	WNW	NW	WSW	NNW	NNE	NW	WSW	SE	SSE	ENE	NE	ENE	NE	E	E	E	NW	SSE	
7 Spd	1.2	1.0	1.2	0.6	0.4	0.4	1.0	1.8	1.8	1.3	2.2	2.9	2.9	2.9	6.5	6.7	7.5	7.6	8.1	5.4	1.9	0.7	1.0	0.8	2.08	8.14	
Dir	SSW	SW	W	SW	NE	NNW	NW	WNW	WNW	NNW	E	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	E	ENE	ENE	
8 Spd	0.5	0.2	0.1	0.2	0.6	0.4	0.7	0.9	1.1	3.1	3.5	7.3	4.0	5.7	5.0	7.4	9.3	3.7	1.5	1.4	2.1	0.3	0.5	0.8	1.88	9.31	
Dir	NNE	E	WSW	N	NW	N	WNW	NW	ENE	NE	ENE	SE	E	E	E	E	ESE	SE	E	ESE	WSW	NW	WSW	E	E	ESE	
9 Spd	0.6	1.1	1.0	0.4	0.6	3.2	3.1	1.9	1.8	2.3	1.8	1.4	2.2	3.1	2.4	3.5	2.9	2.1	2.3	3.0	2.4	1.4	1.7	3.3	1.68	3.54	
Dir	NE	S	ESE	WSW	SW	WSW	W	WSW	NW	WNW	WNW	WNW	WNW	NW	WNW	WNW	WNW	WNW	NW	WNW	W	W	WSW	W	WNW	W	
10 Spd	7.4	7.1	8.7	6.3	6.9	6.4	8.1	6.1	6.9	8.4	8.4	8.8	7.0	9.1	9.6	10.3	10.8	10.5	10.6	7.9	8.7	8.6	10.2	9.2	8.40	10.82	
Dir	SW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
11 Spd	3.0	3.4	3.0	3.1	3.4	6.3	3.8	2.0	0.6	1.4	0.2	3.6	5.8	2.3	1.4	1.2	1.8	3.7	1.9	2.7	2.9	1.3	1.4	0.7	0.89	6.28	
Dir	SW	SW	SW	SW	SW	SSW	SW	SW	N	NNE	WSW	SW	SW	WNW	WNW	NNW	NNE	ENE	NNE	NE	ENE	ENE	NE	ENE	SW	SSW	
12 Spd	1.7	0.7	0.6	1.1	0.9	0.4	0.7	0.7	1.5	1.6	2.1	7.8	8.4	8.6	9.8	3.6	1.5	3.8	1.4	0.5	2.7	1.0	1.3	0.8	1.11	9.82	
Dir	ENE	ENE	NE	ENE	ENE	ENE	NNW	NW	W	NNW	SW	SW	SW	SW	SSW	WSW	NNW	NE	NE	NE	ENE	ENE	SSW	SSE	SW	SSW	
13 Spd	0.6	0.8	0.3	0.8	0.3	0.1	0.6	1.7	1.7	1.8	2.6	2.5	1.9	2.7	3.6	1.8	5.2	5.3	3.4	2.7	3.0	0.3	0.7	0.4	1.44	5.26	
Dir	S	SSW	E	NNE	NNW	SW	NE	NE	NNE	NE	ENE	ENE	NNE	NNE	E	E	ESE	E	ENE	ENE	E	NNE	NW	N	ENE	E	
14 Spd	0.2	0.5	0.3	0.1	0.6	1.5	1.0	0.9	1.0	1.7	1.4	3.2	3.2	3.6	3.4	6.1	1.0	3.5	2.8	1.4	0.8	1.0	1.5	0.4	0.65	6.09	
Dir	ENE	NNW	WNW	NNE	NNE	SW	W	W	S	ENE	NE	NNE	NE	NE	NNE	S	NE	NNE	NE	ENE	N	SW	SSW	SSE	NE	S	
15 Spd	0.1	0.7	0.7	1.6	2.0	1.0	1.0	1.1	1.7	2.1	4.2	3.2	3.2	3.1	2.9	0.9	3.1	7.7	4.6	1.7	2.7	1.7	1.7	3.5	2.03	7.70	
Dir	SSE	SW	SSW	SW	SW	NW	W	NW	NW	WNW	SSW	W	WSW	SW	SSW	S	SW	SSW	SW	WSW	SW	SW	SW	SSW	SW	SSW	
16 Spd	6.3	6.2	4.5	2.5	1.4	2.0	0.9	5.1	5.0	8.7	8.8	6.5	3.9	5.5	8.9	7.1	3.1	4.7	0.3	0.6	0.4	0.3	0.7	1.2	3.34	8.90	
Dir	SSW	SW	SW	SW	SW	WSW	WNW	SW	WSW	SW	SW	SW	W	SW	SW	SW	NNW	SE	E	WSW	WSW	W	WNW	W	SW	SW	
17 Spd	2.8	1.5	1.2	1.2	0.1	0.6	0.5	0.9	0.8	6.0	10.4	10.4	8.7	6.7	9.7	11.1	9.8	9.8	8.5	7.7	5.2	3.8	1.2	1.3	4.78	11.12	
Dir	WSW	WSW	SW	WSW	SW	NW	NNW	NW	WNW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SE	SSW	SW	SW	
18 Spd	0.5	0.7	0.3	0.3	0.3	0.5	0.8	0.6	5.5	5.2	9.2	13.6	10.5	7.8	5.4	5.3	3.7	5.0	2.6	1.9	1.9	3.4	1.2	0.6	2.81	13.56	
Dir	NNE	E	NNW	NNW	ENE	ENE	W	NNW	SW	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	W	NW	NE	NE	WSW	SW	SW	
19 Spd	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.9	1.3	0.8	3.8	6.8	8.0	6.7	6.9	6.1	2.5	2.8	5.3	4.0	0.6	0.8	1.96	8.02	
Dir	WNW	NNE	NE	N	N	N	NE	NE	N	N	N	NW	SW	SSW	SW	SW	SW	SW	WSW	WSW	SSW	SSW	ENE	ENE	SW	SW	
20 Spd	0.8	1.4	1.1	1.0	0.7	0.7	1.7	3.1	0.8	4.1	4.3	3.9	5.0	8.9	5.8	4.7	2.2	4.7	0.7	1.3	1.6	0.6	2.5	0.5	1.14	8.87	
Dir	N	NE	NE	NE	NE	NNE	ENE	ENE	SSW	SW	SW	WSW	WSW	SW	W	NW	SSW	SW	NW	N	W	SW	E	E	WSW	SW	
21 Spd	0.9	2.9	2.1	2.0	1.0	1.3	0.9	2.1	3.1	5.1	5.6	5.0	5.1	4.8	5.2	4.8	3.7	3.9	3.2	3.5	3.2	3.4	1.7	2.8	2.57	5.59	
Dir	E	S	SW	SE	SW	SW	NW	SSW	WSW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	WNW	NNW	NNW	WNW	WNW	
22 Spd	3.2	1.4	1.9	3.0	1.5	0.9	1.5	2.2	2.3	2.1	2.3	3.3	3.4	2.2	7.8	4.1	6.7	3.5	3.4	1.5	0.9	3.8	2.2	1.0	1.66	7.84	
Dir	NNW	W	WNW	W	W	WSW	W	WNW	NW	WNW	NW	NNE	NNW	W	SSW	S	SSW	SSW	SW	NW	W	SSW	SW	WSW	WSW	SSW	



WCAS - Hinton
Summary of Hourly Averages

Wind Speed (WS) - kph
June 2017

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	1.0	0.7	1.5	1.1	1.0	1.1	1.6	1.9	4.2	6.3	3.5	1.1	6.8	4.8	2.9	1.6	3.0	1.6	0.6	3.4	1.6	0.9	1.2	0.6	1.57	6.81	
Dir	W	WSW	W	WSW	W	W	WSW	W	SW	SSW	SSW	WSW	S	SSW	ENE	E	SSE	SSW	WSW	SW	SW	WSW	ESE	S	SSW	S	
24 Spd	0.6	2.0	0.5	1.7	2.4	1.3	1.1	2.2	2.2	2.2	3.4	2.8	1.5	1.1	1.4	0.5	0.5	2.2	2.7	4.5	2.0	1.2	2.0	3.3	0.18	4.50	
Dir	W	SW	W	SW	SW	WSW	WNW	W	WNW	W	SSW	SSE	E	NE	N	SSE	E	NE	NE	ENE	ENE	NNE	NE	ENE	NE	ENE	
25 Spd	2.7	3.1	3.4	0.9	1.0	1.1	0.9	1.5	2.2	1.9	1.4	0.6	0.9	3.8	6.7	5.6	9.5	11.2	10.2	7.9	2.2	0.7	0.5	0.4	1.85	11.21	
Dir	ESE	S	SSE	WNW	W	WSW	WNW	WNW	WNW	W	WNW	WNW	NNW	NE	ENE	E	ESE	ESE	SE	SE	E	N	WNW	WSW	ESE	ESE	
26 Spd	0.4	0.1	0.3	1.4	0.5	0.3	0.8	1.2	0.8	0.3	2.6	3.0	3.4	4.2	4.6	5.8	8.0	3.4	3.5	1.1	3.3	2.6	1.4	3.1	0.08	8.01	
Dir	NE	N	ESE	ENE	NW	NW	NNW	SW	NW	NE	NE	NNE	NE	E	SSW	SW	SSW	W	NW	E	NE	NNE	NE	SE	NNE	SSW	
27 Spd	1.7	1.0	7.7	6.9	6.1	2.4	0.8	0.9	2.5	3.5	3.5	3.4	3.8	7.5	5.7	4.3	4.4	3.8	2.2	2.6	2.7	2.7	1.3	1.5	2.67	7.65	
Dir	S	WSW	SSW	SSW	SSW	SW	WNW	W	W	W	W	W	W	SW	WSW	NW	NW	NW	WNW	NW	NW	WNW	W	WSW	WSW	SSW	
28 Spd	2.4	1.7	5.7	6.4	3.7	2.2	3.2	1.6	1.8	1.6	0.8	2.6	6.2	6.1	3.6	1.0	2.3	1.2	1.4	2.3	2.6	3.8	2.1	2.7	1.87	6.41	
Dir	W	WNW	NNW	NNW	NW	WSW	S	SW	WSW	WNW	N	SSW	SW	SW	SW	N	NW	WSW	WSW	SW	SW	SSW	SW	SW	WSW	NNW	
29 Spd	0.9	0.8	0.8	0.6	2.6	0.9	1.2	1.6	1.9	3.5	3.9	3.9	5.3	4.0	5.3	3.2	1.8	3.5	1.2	1.1	1.6	0.7	1.2	1.1	1.78	5.27	
Dir	WSW	W	W	W	SW	W	W	WNW	WNW	SW	SW	SW	SSW	SW	SW	SW	WSW	SW	W	NNE	ENE	SSW	SW	SSW	SW	SSW	
30 Spd	0.4	0.7	0.5	1.6	0.5	1.2	1.1	1.1	3.9	7.1	6.7	3.8	2.7	1.2	1.7	2.1	3.0	1.1	0.6	0.0	0.6	0.4	1.5	0.5	0.76	7.07	
Dir	SSW	WSW	WSW	SSW	W	SSW	SW	WNW	SW	SSW	SSW	SW	NNE	ENE	NE	N	SE	NE	E	SE	WSW	ENE	NE	SE	SSW	SSW	
Spd	0.82	0.96	0.97	0.83	0.90	0.97	0.79	1.17	1.81	2.36	2.44	2.27	2.23	2.77	2.59	1.70	1.88	1.53	0.74	0.33	0.40	0.62	0.28	0.69	Diurnal Average		
Dir	SW	SW	SW	WSW	WSW	WSW	WSW	W	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	SW	SW	WSW	WSW	SW	SSW	Diurnal Maximum	
Spd	7.45	7.14	8.71	6.86	6.93	6.41	8.08	6.07	12.87	14.75	13.75	13.56	10.46	10.78	9.82	11.12	10.82	14.36	11.45	7.95	8.67	8.64	10.22	9.22	Diurnal Maximum		
Dir	233.99	236.87	231.42	211.19	230.12	224.86	226.07	230.56	220.58	224.48	222.06	213.90	219.14	226.54	209.59	219.84	219.11	221.79	225.36	130.19	220.06	219.98	222.35	223.60	Diurnal Maximum		
Maximum Speed Value: 14.7 kph on Jun 2 10:00																		Minimum Speed Value: 0.0 kph on Jun 30 20:00						Hours in Service:		720	
Maximum Daily Speed Average: 8.40 kph on Jun 10																		Minimum Daily Speed Average: 0.08 kph on Jun 6						Hours of Data:		720	
Maximum Diurnal Speed Average: 2.77 kph at hour 14																		Minimum Diurnal Speed Average: 0.28 kph at hour 23						Hours of Missing Data:		0	
Monthly Average Velocity: 1.295 kph 229.45 deg																		Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.5 Q ₁ = 1.0 Median = 2.0 Q ₃ = 3.8 P ₉₀ = 7.0 P ₉₉ = 11.0						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	51	0	0	0	0	0	51																				
NorthEast	111	2	0	0	0	0	113																				
East	55	10	1	0	0	0	66																				
SouthEast	19	9	0	0	0	0	28																				
South	29	5	0	0	0	0	34																				
SouthWest	121	89	7	0	0	0	217																				
West	122	6	0	0	0	0	128																				
NorthWest	77	6	0	0	0	0	83																				
Total	585	127	8	0	0	0	720																				



WCAS - Hinton
Summary of Hourly Averages

Relative Humidity (RH) - %
June 2017

Maximum Value: 96.14 % on Jun 12 05:00 Maximum Daily Average: 91.57 % on Jun 9																						Hours in Service: 720 Hours of Data: 720																											
Minimum Value: 9.8 % on Jun 26 17:00 Minimum Daily Average: 38.37 % on Jun 25 Maximum Diurnal Average: 85.20 % at hour 6 Minimum Diurnal Average: 36.21 % at hour 15 Monthly Average: 57.313 % Percentiles: P₁ = 15.0 P₁₀ = 23.1 Q₁ = 35.0 Median = 57.6 Q₃ = 80.2 P₉₀ = 89.7 P₉₉ = 95.3																						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-Jun	69.7	76.3	77.3	82.3	87.8	84.0	64.8	54.5	46.4	34.6	26.4	24.9	24.8	23.1	23.0	22.9	22.6	23.9	24.0	28.0	40.3	47.5	62.3	78.7	47.92	87.75																							
2-Jun	79.4	80.8	84.4	88.9	90.2	90.9	73.4	49.4	37.2	32.1	31.6	31.0	27.3	22.6	22.4	23.4	20.7	21.7	22.7	24.2	28.4	34.8	50.7	59.8	47.00	90.89																							
3-Jun	67.9	71.0	75.7	80.3	83.1	83.8	80.2	77.4	69.2	67.4	55.1	34.0	19.6	15.6	15.1	14.2	13.6	12.8	14.7	16.0	23.0	34.4	40.3	49.0	46.38	83.81																							
4-Jun	54.1	62.1	70.7	77.0	80.9	81.3	79.6	66.7	55.3	47.9	44.5	76.9	88.3	72.8	66.2	55.5	51.7	49.7	54.7	61.5	68.9	82.7	82.5	82.4	67.25	88.28																							
5-Jun	85.3	91.8	91.4	92.3	93.3	93.8	94.0	85.9	76.3	48.9	34.5	30.6	27.2	25.3	25.3	22.5	18.6	17.8	15.2	20.0	25.1	40.7	55.8	68.2	53.31	94.04																							
6-Jun	73.9	79.8	81.4	87.9	91.3	87.5	75.2	55.1	41.3	33.5	24.8	20.1	18.2	16.9	17.7	15.8	15.0	16.2	19.3	23.5	30.2	44.5	56.9	62.8	45.37	91.30																							
7-Jun	68.3	71.4	78.7	81.1	86.1	87.8	78.2	57.4	41.7	31.5	23.5	21.3	24.1	23.5	23.9	28.4	30.9	32.8	36.8	36.1	38.2	49.1	61.6	71.2	49.31	87.78																							
8-Jun	76.7	79.8	86.2	89.9	91.8	91.2	86.2	77.2	65.3	52.3	48.4	44.6	43.0	42.1	40.8	39.1	41.0	65.9	81.8	82.0	91.0	92.3	93.0	93.2	70.62	93.25																							
9-Jun	93.6	93.8	93.5	93.8	94.0	92.8	91.2	93.2	91.9	91.1	89.9	89.7	86.7	85.7	87.4	87.4	88.2	88.9	91.5	93.1	94.7	95.3	95.3	95.1	91.57	95.31																							
10-Jun	93.2	91.9	92.4	93.3	92.8	90.7	89.7	90.0	88.3	86.5	82.8	77.7	72.8	64.0	59.3	56.0	52.4	50.8	48.8	53.2	58.7	60.9	61.0	59.9	73.62	93.30																							
11-Jun	66.5	75.0	76.4	80.9	82.2	85.2	81.2	80.2	84.7	89.7	89.7	80.5	66.5	67.6	74.1	73.0	69.3	66.4	75.8	80.6	81.3	85.9	91.0	92.6	79.03	92.63																							
12-Jun	94.3	94.9	95.3	95.9	96.1	96.0	95.6	93.9	70.2	57.6	43.2	33.0	27.8	25.3	22.2	21.0	21.7	38.4	44.9	49.6	47.1	39.8	53.9	52.3	58.75	96.14																							
13-Jun	64.4	70.2	78.1	80.8	81.6	84.8	68.7	63.4	59.9	52.6	54.0	54.3	53.9	49.3	48.2	50.3	44.8	41.4	46.2	47.2	52.1	64.1	69.3	74.4	60.58	84.84																							
14-Jun	79.1	80.1	83.3	85.0	89.0	87.9	87.7	88.0	84.2	81.1	73.4	64.3	57.8	57.7	49.0	67.2	58.7	52.8	61.6	66.5	63.1	76.3	80.4	82.8	73.21	88.96																							
15-Jun	88.5	91.7	92.4	93.5	93.9	93.3	84.9	68.5	55.5	38.6	27.3	24.0	23.6	24.9	24.6	23.3	22.9	22.2	24.3	29.4	31.9	36.6	41.4	42.8	49.99	93.91																							
16-Jun	44.5	42.8	44.1	46.4	50.5	51.4	56.1	45.4	42.0	36.5	35.9	30.7	29.2	31.5	38.9	31.7	58.2	74.4	73.5	76.3	82.7	86.5	89.3	88.3	53.62	89.30																							
17-Jun	75.0	84.2	87.7	90.4	92.4	92.4	84.5	65.6	52.7	29.6	22.1	20.7	18.0	16.9	17.3	19.3	20.2	22.1	24.7	26.3	29.9	40.7	50.7	50.7	45.89	92.45																							
18-Jun	66.1	72.7	77.2	80.1	79.5	80.2	77.1	65.2	41.7	38.7	31.7	28.6	25.9	22.8	20.8	19.8	19.7	18.9	21.1	23.8	27.9	28.2	35.1	44.4	43.62	80.23																							
19-Jun	54.7	62.5	71.9	77.7	82.4	83.3	73.2	61.2	58.1	55.2	53.2	43.2	38.6	41.9	41.0	38.9	36.7	34.4	36.2	35.9	37.5	40.8	53.1	59.7	52.98	83.26																							
20-Jun	64.4	70.1	75.9	86.3	89.2	90.2	85.6	72.5	52.5	43.9	42.5	35.7	29.8	27.4	32.5	63.4	82.4	70.5	67.0	67.1	52.7	57.1	72.2	82.7	63.07	90.23																							
21-Jun	84.9	73.3	59.4	65.8	76.3	74.9	74.0	53.8	32.1	27.1	24.2	23.9	23.0	23.6	21.4	23.1	23.9	25.9	29.5	33.5	32.3	31.9	41.1	46.0	42.71	84.92																							
22-Jun	54.3	59.6	68.1	65.6	67.0	75.5	75.5	70.4	65.1	58.3	55.6	55.8	52.0	54.4	56.1	53.0	48.7	44.5	46.5	45.6	49.8	52.6	61.7	75.0	58.77	75.53																							
23-Jun	78.8	78.3	80.5	82.8	85.4	86.5	75.3	62.0	53.4	41.6	33.2	33.4	31.5	26.1	26.4	34.3	40.1	47.5	39.5	41.1	50.5	56.8	64.8	68.2	54.91	86.51																							
24-Jun	74.2	79.4	80.9	85.2	85.2	88.0	76.7	61.7	53.2	38.4	28.4	25.9	23.1	21.7	22.4	20.8	18.6	19.4	20.2	23.4	30.6	40.7	42.9	43.7	46.03	87.98																							
25-Jun	40.3	41.5	45.2	63.5	70.5	73.5	69.6	57.2	44.3	35.3	28.0	27.4	27.1	25.1	22.0	17.5	15.0	16.0	17.6	19.9	25.2	35.1	48.8	55.4	38.37	73.52																							
26-Jun	62.8	68.0	72.4	73.9	78.1	79.6	79.8	74.7	71.8	64.4	56.2	45.8	40.0	28.3	16.5	11.0	9.8	18.8	40.8	45.0	49.4	51.9	71.5	83.3	53.91	83.30																							
27-Jun	89.0	83.2	72.7	77.1	80.1	85.6	89.1	80.1	63.2	44.6	44.1	41.4	34.3	29.5	30.1	38.7	45.0	45.5	45.1	45.3	43.9	42.9	46.5	47.4	56.02	89.08																							
28-Jun	45.2	47.8	61.9	68.6	89.6	92.0	87.1	88.9	87.9	87.5	89.0	84.9	80.2	83.7	83.2	85.4	73.4	70.8	75.7	83.4	89.9	89.4	90.6	90.8	80.29	92.03																							
29-Jun	92.3	93.4	94.2	94.5	94.8	94.7	94.4	93.7	84.1	71.3	60.7	47.9	39.1	34.4	30.6	28.4	29.8	26.5	33.2	42.1	42.3	46.8	54.3	58.0	61.74	94.81																							
30-Jun	65.3	67.5	72.1	74.6	78.2	77.1	75.0	69.3	49.6	37.6	34.3	29.4	24.4	22.7	27.8	28.6	30.5	44.1	50.3	56.3	60.6	65.8	70.0	73.8	53.54	78.16																							
																								71.55	74.50	77.38	81.18	84.44	85.20	80.12	70.74	60.64	51.85	46.27	42.73	39.26	36.88	36.21	37.08	37.44	39.30	42.69	45.81	49.19	54.70	62.60	67.76	Diurnal Average	
																								94.29	94.86	95.34	95.89	96.14	96.03	95.61	93.93	91.89	91.08	89.86	89.70	88.28	85.68	87.43	87.44	88.23	88.88	91.53	93.15	94.66	95.31	95.29	95.06	Diurnal Maximum	



WCAS - Hinton
Summary of Hourly Standard Deviations

Wind Speed (WS) - kph
June 2017

Maximum Value: 8.19 kph on Jun 2 14:00		Maximum Daily Average: 4.42 kph on Jun 10		Hours in Service: 720																							
Minimum Value: 0.3 kph on Jun 6 21:00		Minimum Daily Average: 1.56 kph on Jun 6		Hours of Data: 720																							
Maximum Diurnal Average: 4.23 kph at hour 15		Minimum Diurnal Average: 1.47 kph at hour 7		Hours of Missing Data: 0																							
Monthly Average: 2.534 kph		Percentiles: P ₁ = 0.5 P ₁₀ = 1.1 Q ₁ = 1.4 Median = 2.0 Q ₃ = 3.4 P ₉₀ = 4.7 P ₉₉ = 7.0		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-Jun	1.1	1.3	1.3	1.1	1.2	1.2	1.7	3.1	3.2	4.7	5.0	6.0	6.6	6.0	5.6	3.8	3.0	2.2	2.2	2.9	2.4	1.3	1.3	1.3	2.90	6.64	
2-Jun	1.7	2.0	1.4	0.9	1.1	0.9	1.9	4.6	6.6	7.7	7.7	5.9	6.1	8.2	8.0	4.8	7.2	8.1	6.9	4.6	2.2	1.8	1.8	1.7	4.33	8.19	
3-Jun	1.6	1.5	1.6	1.2	1.2	0.9	1.0	0.9	1.2	1.4	2.3	3.1	4.1	5.2	5.7	5.3	3.9	4.2	3.2	2.3	2.5	3.6	2.8	1.6	2.59	5.73	
4-Jun	1.5	1.4	1.5	1.2	0.9	1.1	1.6	1.7	2.1	2.4	2.6	2.3	2.2	2.0	2.5	3.2	4.0	4.8	2.8	2.9	3.6	1.6	1.9	2.5	2.26	4.75	
5-Jun	3.6	1.4	1.7	1.3	2.0	1.2	1.1	1.9	2.0	2.6	2.9	2.6	3.0	2.9	1.9	2.2	2.9	2.3	1.7	2.6	2.4	1.3	1.0	1.5	2.09	3.59	
6-Jun	1.2	1.0	0.9	0.3	1.0	1.0	1.0	1.4	1.4	1.7	1.8	2.0	2.0	2.5	2.6	2.8	2.6	2.3	2.1	2.2	0.3	0.7	1.3	1.7	1.56	2.81	
7-Jun	1.3	1.4	1.2	1.1	0.8	0.6	1.1	1.5	1.5	1.5	2.2	2.6	2.4	3.0	4.1	4.0	3.8	3.9	4.0	3.8	2.1	1.0	1.1	1.4	2.14	4.07	
8-Jun	1.2	1.2	1.0	0.8	0.9	0.8	0.8	0.9	1.9	2.3	3.5	4.3	3.4	3.7	3.8	4.3	7.2	6.5	2.3	1.9	2.2	1.3	1.2	1.1	2.44	7.15	
9-Jun	1.0	2.5	1.9	0.8	1.1	2.9	2.9	2.1	2.2	2.0	1.5	1.3	1.9	1.6	2.6	2.6	2.6	1.7	2.0	2.1	1.7	1.8	2.2	2.8	1.99	2.88	
10-Jun	4.2	4.5	4.4	4.4	4.4	3.8	4.0	3.9	3.7	3.9	4.2	4.2	3.9	4.7	5.1	5.6	4.5	5.5	5.5	4.7	4.4	3.7	4.5	4.5	4.42	5.59	
11-Jun	3.6	2.1	2.1	1.8	2.0	3.2	2.2	1.9	0.9	1.1	1.7	3.8	3.7	2.4	1.8	1.1	1.9	2.1	1.7	2.1	2.3	1.6	1.1	0.9	2.04	3.84	
12-Jun	1.6	1.0	1.2	1.2	1.3	1.1	1.5	1.1	2.0	1.6	3.6	4.4	5.7	6.1	5.5	4.1	2.9	3.3	1.6	1.0	2.3	1.6	2.1	1.5	2.46	6.05	
13-Jun	1.7	1.3	1.0	0.9	1.0	0.6	1.1	1.5	1.7	1.8	1.7	1.9	1.9	2.0	4.1	3.4	3.8	3.4	2.7	2.3	2.2	0.7	0.9	0.5	1.83	4.06	
14-Jun	1.5	0.8	0.6	0.3	2.0	1.6	1.3	1.2	1.5	1.5	1.8	2.3	2.6	2.8	3.1	5.1	1.7	2.8	2.5	1.9	1.4	1.2	1.6	1.6	1.86	5.11	
15-Jun	1.4	1.4	1.2	1.7	1.9	1.3	1.3	1.3	1.5	2.6	3.6	3.3	3.5	3.4	2.9	2.2	3.3	4.2	3.7	1.8	2.5	1.7	1.5	1.3	2.27	4.23	
16-Jun	3.3	4.0	4.2	2.5	1.7	1.7	1.4	4.6	5.1	5.9	5.8	5.3	3.4	5.7	5.8	5.8	2.4	2.9	2.1	1.2	1.5	1.7	1.3	1.5	3.36	5.90	
17-Jun	1.9	1.2	1.4	1.5	1.1	1.0	0.8	1.2	2.4	4.8	5.8	6.2	6.3	6.5	7.4	6.2	6.1	4.8	4.8	3.9	3.6	2.5	1.6	1.5	3.52	7.43	
18-Jun	1.1	1.2	0.9	0.7	0.9	0.9	1.2	1.7	4.6	4.8	5.9	7.2	6.5	6.4	5.2	5.1	4.0	4.6	3.2	2.7	2.0	2.7	1.6	1.6	3.19	7.18	
19-Jun	0.5	0.3	0.4	0.4	0.6	0.6	0.6	0.9	0.5	1.0	1.3	1.8	3.2	4.0	5.0	5.2	5.0	4.7	3.3	2.7	3.0	3.5	0.9	1.2	2.11	5.21	
20-Jun	1.0	1.2	1.2	1.2	0.9	1.0	1.6	1.8	1.5	4.7	4.4	4.8	5.2	6.9	6.0	4.5	3.8	2.7	1.5	1.6	2.1	1.7	1.6	1.6	2.69	6.93	
21-Jun	1.6	2.0	1.9	1.5	1.6	1.6	1.2	2.9	3.4	3.6	3.7	3.2	3.8	4.2	4.5	3.3	3.2	2.3	1.7	2.1	1.9	2.4	1.5	1.8	2.54	4.55	
22-Jun	1.6	1.9	2.0	2.7	1.9	1.3	1.9	2.1	1.8	1.8	1.8	3.3	2.7	3.7	4.0	4.2	4.7	3.4	3.0	1.6	2.3	2.4	1.9	1.4	2.47	4.72	
23-Jun	1.1	1.0	1.5	1.1	1.0	1.1	1.9	1.9	3.3	3.2	3.3	2.0	2.8	3.3	3.0	3.0	3.9	3.4	2.6	2.1	1.5	1.2	2.0	1.5	2.22	3.94	
24-Jun	1.1	1.3	1.2	1.5	2.1	1.4	1.2	1.8	1.7	1.9	3.0	3.6	2.8	2.6	2.0	2.3	2.7	2.7	2.5	2.4	1.9	1.2	1.7	2.0	2.02	3.57	
25-Jun	2.9	3.2	3.2	1.2	1.1	1.6	1.1	1.4	1.7	1.7	1.8	1.5	1.3	3.0	3.2	3.9	5.5	5.8	5.5	6.8	2.3	1.3	1.3	1.4	2.65	6.79	
26-Jun	1.0	1.0	1.7	1.6	1.6	1.6	1.1	1.3	1.1	1.3	2.4	2.4	2.7	3.1	6.5	5.4	5.9	3.2	2.8	3.4	4.0	3.7	3.1	4.2	2.74	6.45	
27-Jun	3.4	3.2	4.2	3.6	4.3	2.4	1.2	1.4	2.3	3.3	3.6	4.0	4.1	6.7	6.1	3.1	2.2	2.8	1.8	1.9	1.4	2.3	1.5	1.7	3.01	6.67	
28-Jun	2.4	1.8	3.6	3.7	2.3	2.5	1.9	2.1	1.9	1.7	1.3	3.4	3.6	3.5	2.5	1.4	1.9	2.2	2.1	2.3	2.0	1.9	1.6	1.9	2.32	3.75	
29-Jun	1.3	1.1	1.1	0.9	2.2	1.3	1.4	1.5	1.5	3.6	3.3	3.3	3.6	3.2	4.1	3.8	2.7	3.3	1.8	1.4	1.8	1.8	1.4	1.6	2.22	4.12	
30-Jun	1.4	1.0	1.0	1.1	1.3	2.5	1.2	1.1	2.8	2.8	4.2	4.0	2.9	2.7	2.0	1.4	2.2	1.2	0.8	0.4	1.1	0.9	1.6	0.7	1.76	4.19	
		1.79	1.67	1.74	1.47	1.57	1.49	1.47	1.89	2.30	2.83	3.25	3.54	3.60	4.06	4.23	3.76	3.72	3.58	2.82	2.51	2.22	1.87	1.70	1.72	Diurnal Average	
		4.22	4.51	4.37	4.38	4.40	3.79	4.03	4.61	6.59	7.73	7.68	7.18	6.64	8.19	8.00	6.20	7.19	8.14	6.86	6.79	4.42	3.70	4.49	4.54	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
June 2017

Maximum Value: 106.96 deg on Jun 1 21:00 Maximum Daily Average: 72.29 deg on Jun 26																								Hours in Service: 720 Hours of Data: 720		
Minimum Value: 15.0 deg on Jun 16 00:00 Minimum Daily Average: 28.37 deg on Jun 10																								Hours of Missing Data: 0 Hours of Calibration: 0		
Maximum Diurnal Average: 62.14 deg at hour 2 Minimum Diurnal Average: 50.44 deg at hour 18																								Percent Operational Time: 100.0		
Monthly Average: 56.340 deg Percentiles: P₁ = 23.3 P₁₀ = 32.5 Q₁ = 42.3 Median = 54.4 Q₃ = 68.4 P₉₀ = 84.6 P₉₉ = 99.3																										
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-Jun	63.7	93.7	53.2	89.5	96.3	82.3	82.0	52.8	54.4	28.2	43.1	49.8	49.7	52.1	61.0	57.6	61.3	51.0	53.4	72.0	107.0	68.5	73.5	71.0	65.29	106.96
2-Jun	71.0	69.9	83.5	57.0	65.0	72.5	94.9	45.2	29.0	29.4	34.4	55.4	56.5	46.9	53.7	58.0	48.9	32.1	35.3	43.5	67.3	46.6	58.5	80.6	55.63	94.91
3-Jun	66.2	68.1	76.5	69.7	57.8	81.8	42.4	57.4	52.5	49.9	39.0	42.1	92.9	57.8	60.9	57.0	62.1	62.3	58.5	49.2	60.6	50.0	59.5	91.9	61.08	92.92
4-Jun	36.2	63.6	90.6	98.1	57.0	53.8	65.7	44.1	36.1	48.3	44.1	92.9	45.7	45.8	76.1	33.8	30.2	63.5	42.9	51.3	43.9	96.5	56.3	36.9	56.39	98.14
5-Jun	37.5	57.8	38.8	27.2	50.5	56.6	54.2	66.5	52.7	63.6	88.7	89.3	86.5	88.5	45.6	92.5	94.0	62.5	100.2	36.9	40.2	71.6	66.3	33.6	62.57	100.23
6-Jun	32.4	40.4	57.2	42.9	29.0	38.2	47.5	61.4	67.4	56.4	76.5	71.4	67.9	90.2	68.0	99.4	57.5	84.8	59.4	52.7	20.5	72.6	62.5	66.6	59.29	99.39
7-Jun	55.3	67.3	53.2	78.8	60.4	64.9	68.6	43.4	48.6	75.0	78.8	67.6	56.7	65.2	40.9	42.1	30.2	29.0	27.6	41.0	52.8	48.8	33.8	69.5	54.15	78.76
8-Jun	84.7	90.0	90.5	71.8	57.2	66.8	41.9	39.2	73.5	51.7	57.0	37.3	55.7	39.4	48.3	34.8	42.8	79.3	77.8	88.6	44.0	85.7	93.3	47.0	62.41	93.28
9-Jun	42.7	92.3	52.7	65.3	47.7	30.4	52.9	46.3	54.3	41.3	42.4	42.8	39.7	32.5	44.8	42.1	49.7	41.2	41.8	38.8	31.4	49.0	52.1	46.2	46.69	92.34
10-Jun	31.5	36.3	27.0	36.4	33.3	28.6	24.7	38.7	29.6	23.5	25.9	23.5	31.6	28.6	29.2	28.0	22.1	30.0	26.9	31.1	24.7	22.6	22.6	24.5	28.37	38.68
11-Jun	61.4	41.1	34.3	21.0	32.4	24.3	30.8	43.3	51.0	27.6	93.5	57.5	41.1	56.5	60.7	38.4	47.3	33.7	48.0	40.2	48.8	63.6	41.2	39.5	44.88	93.50
12-Jun	53.3	53.8	67.7	51.8	66.1	75.7	96.9	46.9	64.3	64.2	86.7	32.5	47.4	46.6	37.0	65.7	78.3	49.7	61.5	68.4	48.0	70.9	79.4	89.6	62.59	96.94
13-Jun	97.4	87.7	88.0	44.9	77.3	86.5	72.8	38.4	42.3	54.5	32.5	41.8	48.3	42.1	63.3	76.2	48.8	44.0	48.3	45.7	38.5	56.5	59.0	32.6	56.98	97.37
14-Jun	47.0	56.7	59.1	90.7	84.0	78.1	55.4	59.7	89.6	45.8	62.0	41.2	46.9	47.1	51.6	56.3	87.1	51.4	55.3	73.9	69.5	73.9	71.2	97.8	64.64	97.76
15-Jun	94.5	94.0	76.2	62.3	36.8	54.9	58.7	59.1	54.9	60.3	63.5	57.3	64.0	68.8	66.0	98.2	65.6	27.8	45.0	53.7	52.0	51.4	34.5	15.0	58.94	98.16
16-Jun	24.7	35.1	56.8	53.9	60.2	41.0	56.6	53.9	58.2	44.3	42.0	55.6	58.9	61.3	42.9	47.0	47.0	50.0	79.5	71.5	95.3	78.9	68.4	57.5	55.86	95.27
17-Jun	45.7	35.0	77.4	66.5	82.2	58.6	69.1	63.0	83.8	51.2	33.7	35.2	41.2	55.9	46.0	33.1	38.4	28.2	29.4	29.2	35.1	33.2	84.2	60.4	50.65	84.17
18-Jun	69.3	85.1	82.1	72.1	74.5	65.1	77.7	81.0	49.0	57.5	38.0	28.6	40.4	51.9	57.1	63.1	60.7	57.7	70.0	67.6	55.9	48.9	57.1	77.2	61.98	85.12
19-Jun	46.1	42.5	33.6	45.4	34.9	40.3	38.1	79.9	65.9	38.1	42.4	92.1	49.1	42.2	37.4	49.9	40.8	44.9	69.9	56.4	31.1	58.8	65.4	65.9	50.46	92.09
20-Jun	68.9	34.3	47.4	50.5	53.1	59.2	54.2	31.9	81.7	75.0	64.8	68.1	57.9	49.4	55.8	57.1	88.9	39.9	76.3	66.5	58.4	94.0	53.7	82.8	61.24	93.95
21-Jun	88.1	53.2	48.8	42.4	80.2	68.3	71.8	86.3	63.4	44.3	43.6	41.5	45.0	53.2	49.3	42.7	51.1	43.4	30.4	30.5	36.3	40.7	39.8	32.3	51.11	88.12
22-Jun	26.4	67.2	53.7	56.4	63.5	55.6	59.0	48.6	49.7	46.0	54.4	60.6	48.4	65.0	32.8	81.9	45.9	71.7	61.2	46.7	74.9	32.7	59.2	70.9	55.52	81.93
23-Jun	38.1	46.9	46.3	36.1	33.9	37.3	42.8	52.1	49.8	38.6	69.6	82.2	30.8	58.7	75.7	85.7	69.4	75.6	97.0	35.8	46.9	56.5	75.7	94.5	57.33	96.97
24-Jun	62.5	44.2	77.2	66.9	44.7	48.7	43.9	46.0	48.2	55.3	70.9	85.6	97.7	87.6	77.9	101.4	100.9	68.8	47.6	32.0	40.2	36.3	49.7	38.0	61.34	101.41
25-Jun	66.0	79.0	64.8	65.5	71.8	56.0	53.7	39.6	42.0	50.0	70.8	88.2	60.7	39.9	30.0	49.2	34.9	31.6	29.2	58.0	78.0	87.5	76.4	88.3	58.80	88.34
26-Jun	79.3	101.7	91.7	80.5	90.2	88.9	55.4	62.5	61.3	99.7	58.0	53.6	47.9	53.8	76.7	58.0	47.1	49.3	45.8	106.4	76.4	78.9	89.3	82.6	72.29	106.38
27-Jun	96.1	86.1	31.6	26.2	47.5	51.7	51.1	62.7	52.1	53.8	55.0	56.7	57.7	51.4	54.4	41.1	27.8	39.0	38.1	32.0	28.2	39.5	50.9	45.8	49.02	96.13
28-Jun	48.8	47.5	31.5	32.2	24.8	51.1	60.3	70.4	55.4	59.8	65.4	90.7	34.2	37.1	52.8	58.2	55.9	76.3	74.1	59.6	37.1	28.9	59.8	29.8	51.74	90.74
29-Jun	58.4	46.3	53.3	38.5	42.7	39.6	49.4	46.6	46.2	57.4	59.6	62.3	52.7	58.6	59.4	82.3	68.6	57.3	57.9	44.6	51.0	73.5	63.7	79.6	56.23	82.31
30-Jun	84.7	47.5	55.6	43.6	72.2	93.7	48.8	42.3	48.5	25.3	39.9	66.8	68.6	82.8	55.4	31.9	41.2	37.1	38.4	81.4	59.5	89.8	52.0	54.7	56.74	93.72
59.27 62.14 60.01 56.14 57.57 58.36 57.37 53.64 55.18 50.54 55.88 59.01 54.06 55.23 53.69 58.76 54.82 50.44 54.22 53.51 51.78 60.20 60.29 60.09																								Diurnal Average		
97.37 101.66 91.70 98.14 96.25 93.72 96.94 86.32 89.62 99.67 93.50 92.94 97.71 90.23 77.89 101.41 100.85 84.79 100.23 106.38 106.96 96.47 93.28 97.76																								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
JUNE 2017**