

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

AIR QUALITY MONITORING
September 2017
Monthly Report

Prepared by:

West Central Airshed Society
Drayton Valley, Alberta

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	September

TOTAL EMISSIONS FOR MONTH (IN TONNES)

POLLUTANT	INCINERATOR STACK	FLARE	MISCELLANEOUS
SO ₂			

"HOURS" OF EXCEEDED STACK LICENSED LIMITS (CEM)

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

STATIC AMBIENT MONITORING

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

CONTINUOUS AMBIENT MONITORING

PARAMETER	STATION NUMBER	% TIME OPERATIONAL	1-HR AVERAGE		24-HR AVERAGE	
			MAXIMUM CONCENTRATION (ppm)	NO. READINGS > REGULATIONS	MAXIMUM CONCENTRATION (ppm)	NO. READINGS > REGULATIONS
Wind	906	100.0	n/a	n/a	n/a	n/a
TRS	906	100.0	0.026	7	0.005	2
PM _{2.5}	906	100.0	119.2 µg/m ³	27	74.68 µg/m ³	2
H ₂ S	906	100.0	0.024	6	0.004	2

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
SEPTEMBER 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													September 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)	38	682	100.0	1.3	0.0	26.0	0.1	0.2	0.5	1.3	3.4	7	2	0.005	
SO ₂ (ppb)	38	682	100.0	0.1	0.0	1.4	0.0	0.0	0.0	0.0	0.1	0	-	0.000	
H ₂ S (ppb)	38	682	100.0	1.1	0.0	24.0	0.0	0.2	0.4	1.0	3.1	6	2	0.004	
O ₃ (ppb)	37	683	100.0	15.6	0.3	59.5	1.0	2.6	13.2	25.6	34.2	0	-	0.027	
NO (ppb)	41	679	100.0	1.6	0.0	31.6	0.0	0.1	0.5	1.4	4.3	-	-	-	
NO ₂ (ppb)	41	679	100.0	2.1	0.2	11.3	0.7	1.1	1.7	2.7	4.0	0	0	0.004	
NO _x (ppb)	41	679	100.0	3.8	0.1	35.7	0.8	1.4	2.4	4.4	8.3	-	-	-	
Particulate Matter 2.5 microns (µm ³)	0	720	100.0	13.7	0.1	119.2	1.9	3.9	7.0	15.0	27.0	27	2	74.68 ug/m3	
Wind Speed (kph)	0	720	100.0	2.2	0.0	13.3	0.3	0.6	1.3	2.8	5.2	-	-	-	
Temperature (°C)	0	720	100.0	10.1	-1.1	31.8	2.2	4.2	9.3	14.6	19.4	-	-	-	
Relative Humidity (%)	0	720	100.0	70.7	7.3	97.9	30.1	50.5	79.4	93.6	96.0	-	-	-	
Std Dev Wind Direction (deg)	0	720	100.0	57.5	16.8	100.8	32.4	41.7	55.6	72.2	86.3	-	-	-	
Std Dev Wind Speed (kph)	0	720	100.0	2.0	0.2	8.5	0.8	1.1	1.6	2.4	3.5	-	-	-	



WCAS - Hinton
Summary of Hourly Averages

Total Reduced Sulphur (TRS) - ppb
September 2017

Maximum Value: 26.10 ppb on Sep 16 05:00		Maximum Daily Average: 4.86 ppb on Sep 16		Hours in Service: 720																																												
Minimum Value: 0 ppb on Sep 13 15:00		Minimum Daily Average: 0.21 ppb on Sep 22		Hours of Data: 682																																												
Maximum Diurnal Average: 2.66 ppb at hour 9		Minimum Diurnal Average: 0.47 ppb at hour 16		Hours of Missing Data: 38																																												
Monthly Average: 1.305 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.5 Q ₃ = 1.3 P ₉₀ = 3.4 P ₉₉ = 12.3		Hours of Calibration: 38																																												
				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-Sep	0	0	1	Z	9	9	4	2	1	0	0	0	0	1	1	7	3	0	1	1	1	0	0	1.82	9.44																							
2-Sep	0	0	0	Z	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	1	0	0	0.36	2.04																								
3-Sep	0	0	0	Z	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.28	0.56																								
4-Sep	0	0	0	Z	1	1	1	1	3	6	3	1	0	0	0	0	0	0	0	0	0	0	0.80	5.64																								
5-Sep	1	1	0	Z	0	1	2	4	7	3	2	1	1	0	0	0	0	0	0	0	0	0	1.14	6.89																								
6-Sep	2	1	5	Z	2	2	2	4	5	2	2	1	1	2	1	0	0	0	0	0	0	0	1.65	5.48																								
7-Sep	4	2	1	Z	2	1	2	1	3	3	3	1	2	1	2	2	2	2	2	1	2	2	1.95	4.11																								
8-Sep	2	1	2	Z	5	5	4	5	6	6	5	3	1	0	0	0	0	0	1	1	0	0	2.15	6.30																								
9-Sep	3	2	1	Z	3	1	1	0	1	1	0	1	1	1	1	0	0	0	0	1	2	1	0.99	2.93																								
10-Sep	1	0	1	Z	1	1	1	1	2	2	2	1	1	0	1	0	1	2	1	1	4	3	1.47	4.24																								
11-Sep	1	2	2	Z	0	0	0	0	0	0	1	2	1	2	3	4	3	5	5	3	1	1	1.69	5.35																								
12-Sep	0	0	0	Z	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.24	0.99																								
13-Sep	0	1	1	Z	1	0	0	1	C	C	C	C	C	0	0	1	1	1	3	1	0	5	1.07	5.45																								
14-Sep	1	1	5	Z	1	1	1	0	2	3	1	3	0	0	1	1	0	0	0	0	0	1	1.02	4.70																								
15-Sep	0	0	0	Z	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0.65	4.81																								
16-Sep	9	1	1	Z	26	18	13	13	12	6	5	3	2	0	0	0	0	0	0	0	0	0	4.86	26.10																								
17-Sep	0	0	0	Z	2	3	3	3	5	1	3	1	0	0	1	1	0	1	1	2	6	4	2.71	15.63																								
18-Sep	3	1	1	Z	1	1	1	3	8	5	4	2	1	0	1	0	0	0	0	1	0	0	1.87	8.42																								
19-Sep	6	7	8	Z	1	6	6	2	7	C	C	C	4	3	0	0	0	0	2	0	3	6	3.68	8.18																								
20-Sep	5	7	5	Z	0	4	3	2	0	0	0	0	0	1	1	1	1	2	1	1	0	0	1.66	7.32																								
21-Sep	1	1	2	Z	0	0	3	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.58	3.19																								
22-Sep	0	0	0	Z	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.21	0.90																								
23-Sep	0	0	1	Z	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.58	2.28																								
24-Sep	2	4	3	Z	2	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.97	4.30																								
25-Sep	0	0	0	Z	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0.36	0.92																								
26-Sep	0	0	0	Z	1	9	9	7	2	1	1	0	0	0	0	0	0	6	13	3	1	1	2.49	12.69																								
27-Sep	1	1	1	Z	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0.49	1.27																								
28-Sep	1	2	1	Z	1	0	1	2	4	3	0	0	0	0	0	0	0	0	0	1	1	1	0.85	3.67																								
29-Sep	0	0	0	Z	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0.50	1.65																								
30-Sep	1	1	0	Z	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.31	0.87																								
																								1.57	1.31	1.50	--	2.17	2.30	2.20	1.97	2.66	1.73	1.34	1.00	0.73	0.48	0.48	0.47	0.60	0.63	0.84	1.06	0.91	1.02	1.18	1.91	Diurnal Average
																								8.51	7.34	8.18	--	26.10	17.80	13.49	13.00	12.39	6.34	4.64	3.50	3.91	2.67	2.57	3.58	6.55	5.35	6.22	12.69	5.64	5.61	9.19	15.63	Diurnal Maximum
Z - zerospan C - Calibration																																																
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																																																



WCAS - Hinton
Summary of Hourly Averages

Sulphur Dioxide (SO₂) - ppb
September 2017

Maximum Value: 1.42 ppb on Sep 6 15:00		Maximum Daily Average: 0.25 ppb on Sep 10		Hours in Service: 720																																												
Minimum Value: 0.0 ppb on Sep 1 01:00		Minimum Daily Average: 0.00 ppb on Sep 20		Hours of Data: 682																																												
Maximum Diurnal Average: 0.13 ppb at hour 15		Minimum Diurnal Average: 0.01 ppb at hour 5		Hours of Missing Data: 38																																												
Monthly Average: 0.052 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.1 P ₉₉ = 0.6		Hours of Calibration: 38																																												
				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-Sep	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.07																						
2-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.35																						
3-Sep	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	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.20																							
4-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.44																							
5-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	1.0	0.2	0.2	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.13	1.00																							
6-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.5	1.0	1.4	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.20	1.42																							
7-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.07	0.33																							
8-Sep	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	0.01	0.02																							
9-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.27																							
10-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.4	0.5	0.2	0.3	0.1	0.4	0.1	0.2	0.4	0.3	0.6	0.6	0.8	0.5	0.3	0.25	0.76																						
11-Sep	0.1	0.3	0.3	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.6	0.5	0.5	0.7	0.3	0.6	0.2	0.6	0.1	0.0	0.1	0.0	0.23	0.69																							
12-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.0	0.1	0.1	0.05	0.08																							
13-Sep	0.1	0.1	0.1	Z	0.0	0.0	0.0	0.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.06																							
14-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.07																							
15-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.10																							
16-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.09																							
17-Sep	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	0.01	0.03																							
18-Sep	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	0.02	0.05																							
19-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.02																							
20-Sep	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	0.00	0.01																							
21-Sep	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	0.02	0.05																							
22-Sep	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	0.03	0.05																							
23-Sep	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	0.1	0.03	0.05																							
24-Sep	0.0	0.0	0.1	Z	0.0	0.0	0.0	0.1	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	0.04	0.06																							
25-Sep	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.05	0.10																							
26-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.06																							
27-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.03	0.08																							
28-Sep	0.1	0.1	0.1	Z	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.05	0.10																							
29-Sep	0.0	0.0	0.0	Z	0.0	0.1	0.1	0.1	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	0.04	0.12																							
30-Sep	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	0.01	0.03																							
																								0.02	0.03	0.03	--	0.01	0.02	0.02	0.03	0.03	0.05	0.08	0.08	0.11	0.10	0.13	0.08	0.06	0.05	0.05	0.04	0.04	0.05	0.04	0.03	Diurnal Average
																								0.11	0.31	0.28	--	0.06	0.10	0.09	0.12	0.13	0.39	0.51	0.60	1.00	1.03	1.42	0.73	0.58	0.38	0.65	0.56	0.60	0.76	0.50	0.25	Diurnal Maximum
Z - zerospan C - Calibration																																																
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb																																																



WCAS - Hinton
Summary of Hourly Averages

Hydrogen Sulphide (H2S) - ppb
September 2017

Maximum Value: 24.00 ppb on Sep 16 05:00		Maximum Daily Average: 4.07 ppb on Sep 16		Hours in Service: 720																																													
Minimum Value: 0 ppb on Sep 2 16:00		Minimum Daily Average: 0.11 ppb on Sep 12		Hours of Data: 682																																													
Maximum Diurnal Average: 2.29 ppb at hour 9		Minimum Diurnal Average: 0.35 ppb at hour 14		Hours of Missing Data: 38																																													
Monthly Average: 1.114 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.2 Median = 0.4 Q ₃ = 1.0 P ₉₀ = 3.1 P ₉₉ = 9.6		Hours of Calibration: 38																																													
				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-Sep	0	0	1	Z	8	8	3	1	0	0	0	0	0	0	1	1	6	3	0	0	0	0	0	0	1.55	8.50																							
2-Sep	0	0	0	Z	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0.20	1.58																							
3-Sep	0	0	0	Z	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.14	0.57																							
4-Sep	0	0	0	Z	1	0	1	1	2	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.58	4.24																							
5-Sep	1	1	0	Z	0	0	2	4	5	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.74	5.48																							
6-Sep	1	0	4	Z	1	1	1	3	4	1	1	0	0	0	1	0	0	0	0	0	0	0	0	3	0.97	4.10																							
7-Sep	3	1	1	Z	2	1	1	1	3	2	2	1	1	1	1	0	1	1	1	1	1	0	1	2	1.31	3.14																							
8-Sep	2	1	1	Z	3	4	3	3	5	4	4	2	1	0	0	0	0	0	0	0	1	0	0	0	1.43	4.57																							
9-Sep	2	1	0	Z	2	1	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	1	1	1	0.60	2.18																							
10-Sep	1	0	1	Z	1	1	1	1	1	2	1	0	1	0	1	0	0	1	0	1	3	2	2	3	0.99	3.14																							
11-Sep	1	1	2	Z	0	0	0	0	0	0	1	1	1	1	2	3	2	4	4	2	0	1	0	0	1.20	4.38																							
12-Sep	0	0	0	Z	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.11	0.66																							
13-Sep	0	1	1	Z	1	0	0	1	C	C	C	C	C	0	0	1	1	1	2	1	0	5	2	0	0.93	5.01																							
14-Sep	1	1	4	Z	1	1	0	0	2	2	1	3	0	0	1	1	0	0	0	0	0	0	1	0	0.88	4.25																							
15-Sep	0	0	0	Z	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	4	0.52	4.34																							
16-Sep	7	1	1	Z	24	15	12	11	10	5	4	3	1	0	0	0	0	0	0	0	0	0	0	0	4.07	24.00																							
17-Sep	0	0	0	Z	2	3	3	3	5	1	3	1	0	0	1	1	0	1	1	2	5	3	9	15	2.52	15.01																							
18-Sep	2	1	1	Z	1	1	1	3	8	5	4	2	1	0	1	0	0	0	0	1	1	0	2	6	1.82	8.06																							
19-Sep	6	7	8	Z	1	6	6	2	7	C	C	C	4	2	0	0	0	0	2	1	3	6	5	7	3.67	7.93																							
20-Sep	6	7	5	Z	1	4	3	2	0	0	0	0	0	1	1	1	1	2	1	1	0	0	0	2	1.74	7.48																							
21-Sep	1	1	2	Z	0	1	3	0	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0.69	3.08																							
22-Sep	0	0	0	Z	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.35	0.99																							
23-Sep	0	0	1	Z	1	1	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0.70	2.42																							
24-Sep	2	4	3	Z	2	1	4	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.05	4.35																							
25-Sep	0	0	0	Z	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.35	0.77																							
26-Sep	0	0	0	Z	1	8	9	7	2	1	1	0	0	0	0	0	0	0	6	12	3	1	1	2	2.48	12.43																							
27-Sep	1	1	1	Z	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0.50	1.25																							
28-Sep	1	2	2	Z	1	0	1	2	4	3	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.88	3.71																							
29-Sep	0	0	0	Z	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0.46	1.64																							
30-Sep	1	1	0	Z	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.28	0.83																							
																								1.35	1.16	1.31	--	1.94	2.00	1.98	1.75	2.29	1.41	1.07	0.75	0.54	0.35	0.36	0.35	0.50	0.52	0.72	0.91	0.75	0.85	1.04	1.72	Diurnal Average	
																								7.06	7.48	7.93	--	24.00	15.30	11.62	10.77	9.91	5.00	4.01	2.80	3.71	2.48	1.71	2.79	6.03	4.38	6.08	12.43	5.00	5.70	8.68	15.01	Diurnal Maximum	
Z - zerospan C - Calibration																																																	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																																																	



WCAS - Hinton
Summary of Hourly Averages

Ozone (O₃) - ppb
September 2017

Maximum Value: 59.55 ppb on Sep 6 15:00		Maximum Daily Average: 26.89 ppb on Sep 6		Hours in Service: 720																							
Minimum Value: 0.3 ppb on Sep 26 08:00		Minimum Daily Average: 5.46 ppb on Sep 23		Hours of Data: 683																							
Maximum Diurnal Average: 32.74 ppb at hour 16		Minimum Diurnal Average: 3.80 ppb at hour 7		Hours of Missing Data: 37																							
Monthly Average: 15.558 ppb		Percentiles: P₁ = 0.7 P₁₀ = 1.0 Q₁ = 2.6 Median = 13.2 Q₃ = 25.6 P₉₀ = 34.2 P₉₉ = 52.1		Hours of Calibration: 37																							
				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-Sep	13.0	10.1	9.0	Z	8.0	3.6	3.7	4.8	7.5	11.9	11.9	22.5	34.2	37.5	37.6	40.0	37.9	37.5	33.3	17.7	13.6	10.0	10.4	11.0	18.56	40.05	
2-Sep	10.4	10.3	10.4	Z	10.7	10.2	6.7	9.0	24.9	34.1	37.0	38.3	38.8	32.1	42.0	41.5	30.1	23.7	15.2	12.5	8.8	5.7	8.0	9.2	20.42	42.04	
3-Sep	5.2	3.8	1.5	Z	3.3	2.1	3.6	2.0	1.8	2.6	7.1	13.6	23.0	32.4	31.5	36.3	36.9	35.5	28.1	19.1	8.4	4.6	2.5	1.3	13.31	36.92	
4-Sep	1.1	0.8	0.9	Z	0.7	0.7	0.6	1.1	3.7	13.2	22.8	28.7	36.2	39.4	40.6	40.4	39.6	38.8	36.8	33.5	28.2	22.3	14.5	10.4	19.80	40.57	
5-Sep	7.6	3.7	1.9	Z	1.2	1.8	1.2	2.6	11.6	22.6	29.0	34.4	39.5	47.0	55.8	55.6	55.9	54.9	49.0	28.2	12.9	13.0	12.6	6.8	23.87	55.93	
6-Sep	8.9	8.1	4.8	Z	2.9	1.6	2.0	6.7	17.5	27.5	36.4	40.2	44.6	49.0	59.5	59.3	52.7	46.9	39.9	32.5	24.3	20.7	19.2	13.2	26.89	59.55	
7-Sep	7.6	4.6	4.7	Z	3.7	2.7	1.3	1.4	5.3	15.0	27.9	33.8	39.8	40.0	38.8	37.3	36.8	37.0	18.0	2.8	1.2	1.5	0.9	1.2	15.78	40.01	
8-Sep	0.7	0.9	0.9	Z	1.1	0.7	0.6	0.8	1.7	1.9	5.0	4.4	12.3	25.2	28.3	27.3	20.4	15.7	12.9	8.2	6.5	5.1	6.2	11.9	8.65	28.27	
9-Sep	3.1	1.9	2.2	Z	1.1	1.0	1.4	3.8	2.9	7.0	10.1	18.5	23.3	27.3	32.7	36.5	33.9	34.2	30.7	16.8	21.1	25.7	30.3	21.0	16.81	36.52	
10-Sep	17.1	8.8	6.4	Z	4.2	2.1	2.4	5.5	16.1	27.0	28.7	32.4	31.5	34.1	33.7	35.6	35.8	33.8	33.1	30.0	28.0	27.2	28.3	29.9	23.12	35.84	
11-Sep	31.8	33.0	31.8	Z	17.4	12.6	7.8	4.3	7.0	16.2	34.4	33.1	34.5	33.2	31.3	33.1	30.3	30.4	25.4	31.2	28.2	28.9	22.9	21.1	25.21	34.45	
12-Sep	15.0	29.6	35.1	Z	22.2	20.7	12.1	13.0	15.3	19.4	28.4	27.5	30.3	32.9	32.7	34.3	25.1	23.2	21.2	12.3	22.3	23.8	23.5	23.6	23.63	35.13	
13-Sep	21.6	19.1	17.7	Z	18.7	18.8	17.9	15.9	C	C	C	C	C	15.6	19.0	19.4	19.3	16.6	12.1	8.1	6.8	5.2	5.5	6.1	14.63	21.65	
14-Sep	3.2	2.2	1.4	Z	1.3	1.9	1.6	3.0	4.2	6.0	8.4	13.1	20.6	20.5	23.5	22.8	21.6	23.1	22.7	21.6	9.1	6.2	2.3	0.9	10.48	23.52	
15-Sep	0.8	0.9	1.0	Z	1.0	1.4	5.7	4.0	5.6	5.6	7.1	10.9	18.6	25.6	28.0	29.3	30.0	30.7	26.7	21.2	19.6	18.9	9.4	5.3	13.35	30.69	
16-Sep	3.1	1.3	0.9	Z	1.1	1.1	1.3	1.6	2.9	8.7	16.2	20.6	25.6	31.5	34.2	30.1	21.0	20.2	18.8	14.8	14.8	11.6	3.6	1.9	12.48	34.24	
17-Sep	1.4	2.1	1.9	Z	0.8	0.8	0.7	0.8	5.3	20.3	21.4	26.3	32.5	36.9	37.1	39.9	36.8	32.3	29.8	25.0	16.7	4.9	9.5	7.5	16.99	39.85	
18-Sep	5.1	4.4	2.5	Z	1.1	0.7	0.7	1.0	2.4	2.1	4.8	5.3	9.8	33.5	31.8	19.2	19.0	22.2	25.8	15.2	6.8	3.5	5.0	2.6	9.76	33.46	
19-Sep	1.5	1.0	1.5	Z	1.7	1.8	2.0	2.9	2.4	5.1	6.1	7.1	C	C	27.4	27.3	23.9	23.0	25.9	23.6	18.6	16.2	19.8	19.6	12.30	27.43	
20-Sep	22.5	20.7	17.9	Z	13.8	13.4	12.6	15.4	17.3	16.5	13.1	12.6	12.9	16.6	21.0	25.6	25.1	27.6	30.0	29.8	28.5	25.2	24.0	20.7	20.13	30.03	
21-Sep	23.8	20.6	19.7	Z	19.1	17.1	18.9	13.4	8.9	12.6	15.8	17.2	17.4	19.6	21.7	24.9	23.5	19.5	21.0	17.1	7.1	5.0	2.7	3.1	16.08	24.85	
22-Sep	2.5	1.8	1.4	Z	1.3	1.1	1.3	1.0	1.4	4.1	7.4	13.4	17.8	22.1	25.6	31.2	28.9	21.8	16.9	12.4	3.4	1.4	1.4	1.2	9.61	31.21	
23-Sep	2.7	3.2	0.8	Z	0.8	0.8	0.8	1.5	2.8	3.3	4.5	4.9	7.0	10.4	13.9	16.2	15.3	14.5	9.8	5.1	2.4	2.2	1.7	1.0	5.46	16.20	
24-Sep	0.8	0.7	0.7	Z	0.7	0.8	0.7	0.8	1.2	4.9	13.2	25.2	29.0	30.2	29.4	28.2	25.1	18.9	22.0	19.2	11.3	4.9	2.5	1.0	11.79	30.21	
25-Sep	1.1	1.0	0.7	Z	0.7	0.7	0.8	0.8	1.0	3.6	19.6	20.9	23.1	27.1	24.6	25.6	24.1	21.1	16.7	5.2	1.0	1.0	0.9	0.7	9.65	27.10	
26-Sep	0.7	0.6	0.6	Z	0.6	1.1	0.9	0.3	2.1	9.5	12.5	17.6	22.4	24.9	25.3	26.7	27.7	28.5	23.7	23.8	6.8	1.4	1.2	1.9	11.35	28.52	
27-Sep	1.7	1.0	1.0	Z	0.9	0.9	0.8	0.9	2.7	9.6	15.9	19.2	24.3	28.9	29.6	28.6	26.2	20.1	6.0	3.6	1.1	1.4	1.4	0.9	9.85	29.60	
28-Sep	0.8	0.9	0.8	Z	0.7	0.7	0.7	0.8	1.6	6.9	14.7	22.0	26.8	30.8	34.6	34.4	32.9	30.3	15.0	3.2	1.3	1.2	1.2	1.2	11.45	34.56	
29-Sep	0.9	1.3	0.9	Z	0.9	0.8	0.8	1.0	1.3	6.3	15.8	28.8	33.0	37.3	38.8	40.8	40.5	37.0	19.6	2.5	3.6	1.7	1.9	2.3	13.82	40.79	
30-Sep	2.4	12.6	25.9	Z	14.4	7.2	2.3	2.6	8.5	15.4	31.2	36.2	37.3	37.0	36.6	34.9	27.4	24.0	22.2	25.2	28.9	15.9	22.7	13.3	21.05	37.27	
		7.28	7.03	6.90	--	5.21	4.36	3.80	4.09	6.44	11.67	17.46	21.68	26.64	30.31	32.22	32.74	30.12	28.10	23.61	17.39	13.05	10.54	9.87	8.40	Diurnal Average	
		31.77	33.02	35.13	--	22.15	20.68	18.91	15.88	24.92	34.06	37.00	40.24	44.61	48.95	59.55	59.32	55.93	54.85	49.05	33.50	28.88	28.91	30.31	29.93	Diurnal Maximum	
Z - zerospan		C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 82.5 ppb				24-hr -- ppb																					



WCAS - Hinton
Eight Hour Running Averages

Ozone (O₃) - ppb
September 2017

Maximum Value: 49.03 ppb on Sep 6 19:00		Maximum Daily Average: 25.58 ppb on Sep 11		Hours in Service: 720																						
Minimum Value: 0.7 ppb on Sep 26 08:00		Minimum Daily Average: 5.53 ppb on Sep 23		Hours of Data: 711																						
Maximum Diurnal Average: 28.07 ppb at hour 19		Minimum Diurnal Average: 5.46 ppb at hour 9		Hours of Missing Data: 9																						
Monthly Average: 15.198 ppb		Percentiles: P ₁ = 0.8 P ₁₀ = 1.7 Q ₁ = 5.3 Median = 14.6 Q ₃ = 23.0 P ₉₀ = 29.8 P ₉₉ = 45.9		Hours of Calibration: 9																						
				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-Sep	27.3	23.3	19.5	17.1	13.9	10.5	8.7	7.5	6.7	6.9	7.3	9.2	12.5	16.7	21.0	25.4	29.2	32.4	35.1	34.5	31.9	28.5	25.1	21.4	19.65	35.07
2-Sep	18.0	14.6	11.7	10.9	10.4	10.5	10.0	9.7	11.7	15.1	18.9	21.4	24.9	27.6	32.0	36.1	36.7	35.5	32.7	29.5	25.8	22.5	18.2	14.2	20.77	36.75
3-Sep	11.0	8.6	6.8	6.0	5.2	4.7	4.1	3.1	2.6	2.4	3.2	4.5	7.0	10.8	14.2	18.5	22.9	27.0	29.7	30.3	28.5	25.0	21.4	17.0	13.11	30.34
4-Sep	12.6	8.2	4.8	2.8	1.7	1.2	0.9	0.9	1.2	3.0	6.1	9.0	13.4	18.2	23.2	28.1	32.6	35.8	37.6	38.2	37.2	35.0	31.8	28.0	17.15	38.17
5-Sep	24.0	19.6	15.3	12.7	8.8	5.9	4.0	2.9	3.4	6.1	10.0	13.0	17.8	23.5	30.3	37.0	42.5	46.5	49.0	48.3	44.9	40.7	35.3	29.2	23.78	49.02
6-Sep	23.3	17.4	11.9	9.6	8.2	6.5	5.0	5.0	6.2	9.0	13.5	16.8	22.1	28.0	35.2	41.8	46.2	48.6	49.0	48.1	45.5	42.0	37.0	31.2	25.29	49.03
7-Sep	25.5	20.2	15.8	13.5	10.5	7.9	5.4	3.7	3.4	4.9	8.2	11.4	15.9	20.6	25.3	29.7	33.7	36.4	35.2	31.3	26.5	21.7	16.9	12.4	18.16	36.42
8-Sep	7.9	3.4	1.3	1.0	1.0	0.9	0.9	0.8	1.0	1.1	1.7	2.0	3.4	6.5	10.0	13.3	15.6	17.3	18.3	18.8	18.1	15.6	12.8	10.9	7.65	18.79
9-Sep	8.7	7.0	5.7	5.3	4.5	3.9	3.2	2.1	2.0	2.8	3.9	5.7	8.5	11.8	15.7	19.8	23.7	27.1	29.6	29.4	29.1	28.9	28.7	26.7	13.91	29.63
10-Sep	24.6	21.4	18.4	18.6	16.2	12.8	8.9	6.7	6.5	9.1	12.3	14.8	18.2	22.2	26.1	29.9	32.3	33.2	33.8	33.5	33.0	32.1	31.5	30.8	21.95	33.76
11-Sep	30.3	30.2	30.0	30.0	28.5	26.4	23.5	19.8	16.3	13.9	14.2	16.6	18.7	21.3	24.2	27.8	30.8	32.5	31.4	31.2	30.4	29.9	28.8	27.3	25.58	32.53
12-Sep	25.4	25.3	26.5	25.8	25.0	23.8	22.3	21.1	21.1	19.7	18.7	19.8	20.8	22.4	24.9	27.6	28.8	29.3	28.4	26.5	25.5	24.3	23.2	21.9	24.09	29.29
13-Sep	21.4	20.9	20.5	21.7	21.2	20.4	19.6	18.5	18.0	Z	Z	C	C	C	C	C	C	C	17.0	15.7	14.6	13.3	11.6	10.0	--	21.67
14-Sep	7.9	6.1	4.8	4.3	3.5	3.1	2.5	2.1	2.2	2.8	3.8	4.9	7.3	9.7	12.4	14.9	17.1	19.2	21.0	22.1	20.6	18.8	16.2	13.4	10.04	22.06
15-Sep	10.8	8.0	5.3	3.0	1.9	1.2	1.7	2.1	2.8	3.4	4.3	5.1	7.3	10.4	13.2	16.3	19.4	22.5	25.0	26.3	26.4	25.5	23.2	20.2	11.89	26.38
16-Sep	16.9	13.2	10.0	8.4	5.7	3.2	2.0	1.5	1.5	2.5	4.7	6.7	9.8	13.6	17.7	21.2	23.5	24.9	25.3	24.5	23.2	20.7	16.9	13.3	12.95	25.26
17-Sep	10.9	8.6	6.5	5.3	3.3	1.8	1.4	1.2	1.8	4.4	7.2	9.6	13.5	18.0	22.6	27.4	31.4	32.9	34.0	33.8	31.8	27.8	24.4	20.3	15.83	33.96
18-Sep	16.4	12.9	9.4	7.2	5.0	4.4	3.1	2.2	1.8	1.5	1.8	2.3	3.4	7.5	11.3	13.6	15.7	18.2	20.8	22.1	21.7	17.9	14.6	12.5	10.30	22.06
19-Sep	10.3	7.7	4.6	3.1	2.4	2.2	1.7	1.8	1.9	2.5	3.2	3.6	3.9	4.3	8.5	12.6	16.1	19.1	22.4	25.2	24.2	23.2	22.3	21.3	10.35	25.19
20-Sep	21.1	20.9	19.9	19.3	18.6	18.2	17.2	16.6	15.9	15.3	14.6	14.4	14.2	14.6	15.7	17.0	17.9	19.3	21.4	23.6	25.5	26.6	27.0	26.4	19.22	27.00
21-Sep	26.2	25.3	24.1	23.2	21.9	20.7	20.0	18.9	16.8	15.7	15.1	15.4	15.2	15.5	15.8	17.3	19.1	19.9	20.6	20.6	19.3	17.5	15.1	12.4	18.82	26.22
22-Sep	9.8	7.6	5.1	3.4	2.5	2.0	1.8	1.5	1.3	1.7	2.5	3.9	5.9	8.6	11.6	15.4	18.8	21.0	22.2	22.1	20.3	17.7	14.7	10.9	9.68	22.22
23-Sep	7.7	5.3	3.3	2.0	1.6	1.6	1.5	1.5	1.5	2.1	2.4	3.2	4.4	6.0	7.9	9.4	10.8	11.5	11.5	11.0	9.9	8.4	6.5	5.53	11.53	
24-Sep	4.7	3.0	1.8	1.4	1.1	0.9	0.8	0.7	0.8	1.4	3.2	5.9	9.5	13.1	16.7	20.2	23.1	24.9	26.0	25.2	23.0	19.9	16.5	13.1	10.70	25.99
25-Sep	10.1	7.9	5.2	3.2	1.7	1.1	0.9	0.8	0.8	1.2	3.9	6.0	8.8	12.1	15.1	18.2	21.1	23.3	22.9	20.9	18.2	14.9	11.9	8.8	9.95	23.26
26-Sep	5.9	3.3	1.3	0.8	0.7	0.8	0.8	0.7	0.9	2.2	3.9	5.6	8.3	11.3	14.3	17.6	20.8	23.2	24.6	25.4	23.4	20.5	17.5	14.4	10.35	25.39
27-Sep	11.1	7.7	4.8	2.1	1.3	1.2	1.2	1.0	1.2	2.4	4.5	6.4	9.3	12.8	16.4	19.8	22.8	24.1	22.9	20.9	18.0	14.6	11.0	7.6	10.22	24.09
28-Sep	4.4	2.0	1.3	1.0	1.0	0.9	0.8	0.8	0.9	1.7	3.7	6.0	9.3	13.0	17.3	21.5	25.4	28.3	28.3	26.0	22.8	19.1	14.9	10.8	10.88	28.33
29-Sep	6.8	3.2	1.4	1.2	1.1	1.0	1.0	1.0	1.0	1.7	3.8	7.0	11.0	15.5	20.3	25.3	30.2	34.0	34.5	31.2	27.5	23.1	18.5	13.6	13.11	34.48
30-Sep	8.9	5.8	6.6	7.2	8.7	9.5	9.6	9.6	10.5	10.9	11.7	14.7	17.6	21.3	25.6	29.6	32.0	33.1	31.9	30.6	29.5	26.9	25.2	22.5	18.31	33.06
15.00 12.29 10.13 9.04 7.91 6.98 6.14 5.52 5.46 5.75 7.31 9.11 11.75 15.00 18.71 22.44 25.47 27.60 28.07 27.57 25.92 23.47 20.68 17.63																								Diurnal Average		
30.26 30.16 30.00 30.01 28.49 26.41 23.47 21.10 21.14 19.69 18.93 21.36 24.88 27.98 35.17 41.75 46.16 48.59 49.03 48.25 45.53 42.00 36.96 31.19																								Diurnal Maximum		
Z - zerospan		C - Calibration																								



WCAS - Hinton
Summary of Hourly Averages

Nitrogen Oxide (NO) - ppb
September 2017

Maximum Value: 31.58 ppb on Sep 29 09:00		Maximum Daily Average: 6.42 ppb on Sep 29		Hours in Service: 720																							
Minimum Value: 0.0 ppb on Sep 1 01:00		Minimum Daily Average: 0.25 ppb on Sep 2		Hours of Data: 679																							
Maximum Diurnal Average: 5.63 ppb at hour 8		Minimum Diurnal Average: 0.27 ppb at hour 18		Hours of Missing Data: 41																							
Monthly Average: 1.623 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.5 Q ₃ = 1.4 P ₉₀ = 4.3 P ₉₉ = 21.1		Hours of Calibration: 41																							
				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-Sep	0.0	0.2	0.1	Z	0.4	1.9	2.0	1.3	1.6	0.7	1.3	1.0	0.5	0.4	0.2	0.4	0.1	0.0	0.0	1.4	1.3	1.2	0.4	0.0	0.72	2.03	
2-Sep	0.0	0.0	0.0	Z	0.4	0.2	0.9	1.4	0.4	0.2	0.1	0.2	0.1	0.4	0.2	0.0	0.0	0.4	0.3	0.0	0.2	0.1	0.0	0.0	0.25	1.38	
3-Sep	0.0	0.1	0.3	Z	0.3	0.3	0.5	1.6	2.9	3.0	0.9	0.8	0.3	0.1	0.1	0.2	0.3	0.1	0.0	0.4	0.4	0.8	0.4	0.6	0.63	3.05	
4-Sep	0.4	0.8	0.3	Z	1.1	2.0	2.4	2.7	3.3	2.5	1.7	0.6	0.2	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.81	3.33	
5-Sep	0.0	0.6	0.5	Z	0.8	0.8	3.7	3.3	1.2	0.7	0.8	1.8	1.2	0.4	0.3	0.3	0.3	0.0	0.0	0.7	1.0	0.7	0.0	0.0	0.82	3.74	
6-Sep	0.0	0.0	0.0	Z	0.2	0.5	1.1	1.0	0.5	0.5	0.5	0.6	0.8	1.0	1.4	0.4	0.0	0.2	0.0	0.3	0.4	0.6	0.1	0.0	0.44	1.36	
7-Sep	0.0	1.3	0.1	Z	0.1	0.5	3.6	5.4	5.0	0.8	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.5	4.9	5.9	2.5	2.1	0.8	1.49	5.90	
8-Sep	0.7	0.4	0.2	Z	1.5	3.4	6.1	3.6	6.1	7.8	3.0	2.5	1.0	0.4	0.1	0.3	0.2	0.7	0.4	0.3	1.0	0.5	0.6	0.2	1.77	7.77	
9-Sep	0.1	0.2	0.7	Z	0.5	0.8	1.8	1.8	2.0	2.2	0.7	0.6	0.5	0.9	0.2	0.3	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.58	2.19	
10-Sep	0.0	0.3	0.2	Z	2.6	2.7	2.5	4.4	2.3	1.2	1.3	0.4	0.7	0.3	0.6	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.1	0.0	0.93	4.37	
11-Sep	0.0	0.0	0.0	Z	2.0	1.4	2.4	5.4	4.6	3.5	0.7	1.0	0.7	0.9	1.0	0.4	0.9	0.1	0.4	0.0	0.0	0.0	0.0	0.1	1.11	5.45	
12-Sep	0.2	0.0	0.2	Z	1.3	1.0	0.9	0.7	0.4	0.5	0.3	0.6	0.9	0.5	0.5	0.5	0.4	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.42	1.29	
13-Sep	0.0	0.0	0.0	Z	1.4	0.5	0.4	0.4	C	C	C	C	C	C	0.7	0.2	1.1	0.4	0.1	0.1	0.0	0.0	0.5	0.4	--	1.40	
14-Sep	0.4	0.0	0.3	Z	3.0	0.3	3.8	0.5	1.2	1.2	1.3	2.2	0.3	0.2	0.1	0.6	0.2	0.0	0.0	0.4	0.1	0.9	1.2	0.80	3.85		
15-Sep	1.6	2.4	0.7	Z	0.5	0.8	0.1	0.7	0.7	1.4	2.4	3.1	2.0	0.4	0.0	0.0	0.1	0.7	0.6	0.2	1.1	0.1	0.2	0.0	0.86	3.14	
16-Sep	0.0	0.5	1.5	Z	3.4	3.6	4.7	4.5	6.0	2.1	0.8	0.9	0.9	0.3	0.3	0.3	0.6	0.8	0.1	1.1	0.3	0.4	1.0	1.1	1.53	5.97	
17-Sep	1.1	0.9	0.6	Z	4.1	2.0	10.2	11.2	6.0	0.6	0.6	0.9	0.6	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.3	1.1	0.0	0.0	1.77	11.17	
18-Sep	0.0	0.0	0.4	Z	4.8	10.0	11.8	8.7	2.8	6.3	4.4	2.6	0.9	0.1	0.8	0.4	0.6	1.2	0.1	0.1	0.8	1.2	0.1	0.2	2.53	11.79	
19-Sep	0.3	1.9	3.3	Z	0.2	0.4	0.6	0.4	2.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.52	3.35	
20-Sep	0.0	0.0	0.0	Z	0.0	0.0	0.0	0.4	0.7	0.2	1.0	1.2	0.8	0.7	0.5	0.4	0.2	0.1	0.1	0.0	0.1	0.3	0.2	0.0	0.30	1.20	
21-Sep	0.0	0.0	0.0	Z	0.2	0.3	0.4	0.9	1.4	0.9	0.2	0.1	0.4	0.1	0.0	0.1	0.0	0.2	0.1	0.2	0.1	0.3	0.3	0.1	0.28	1.38	
22-Sep	0.1	0.2	0.3	Z	0.3	0.5	5.6	3.0	2.4	1.8	2.7	1.7	0.8	0.4	0.5	0.4	0.7	0.1	0.0	0.1	3.5	1.6	0.5	0.7	1.21	5.64	
23-Sep	1.0	0.7	3.8	Z	6.0	1.2	1.5	0.9	1.3	2.7	0.9	1.2	1.8	1.3	1.1	0.7	0.2	0.0	0.2	1.0	1.2	1.0	1.5	2.3	1.46	5.95	
24-Sep	2.7	2.6	3.4	Z	3.6	1.2	3.7	6.6	8.4	1.8	0.7	0.4	0.3	0.3	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.5	0.2	1.3	1.66	8.39	
25-Sep	0.5	0.3	2.2	Z	5.0	10.3	19.8	26.2	25.9	10.2	0.4	0.5	0.6	0.3	0.5	0.4	0.4	0.4	0.1	6.3	5.4	7.0	8.8	4.9	5.93	26.20	
26-Sep	3.7	2.7	3.5	Z	4.4	8.6	14.1	12.7	4.4	0.5	1.6	1.0	0.6	0.1	0.3	0.0	0.3	0.1	0.0	0.0	6.7	6.0	4.3	0.8	3.32	14.13	
27-Sep	2.0	1.5	2.0	Z	8.5	14.2	21.4	21.2	5.9	1.2	0.8	0.8	0.4	0.4	0.3	0.6	0.5	1.1	2.3	4.2	12.6	6.1	1.3	2.1	4.84	21.43	
28-Sep	2.2	1.6	3.2	Z	8.6	8.0	3.6	6.2	13.6	5.1	0.7	0.7	0.4	0.4	0.2	0.6	0.1	0.1	4.6	6.3	3.9	3.5	3.8	2.3	3.46	13.59	
29-Sep	3.4	1.6	2.8	Z	7.8	21.3	17.1	27.4	31.6	8.1	2.8	0.6	0.8	0.2	0.1	0.2	0.1	0.3	1.7	6.2	5.6	6.7	0.6	0.6	6.42	31.58	
30-Sep	0.6	0.1	0.1	Z	0.6	3.1	3.9	4.2	1.7	1.5	0.6	0.0	0.2	0.0	0.7	0.3	0.0	0.0	1.0	1.2	0.0	0.9	0.3	0.1	0.91	4.25	
		0.71	0.70	1.02	--	2.45	3.39	5.03	5.63	5.04	2.47	1.19	1.00	0.66	0.38	0.37	0.29	0.27	0.27	0.43	1.18	1.75	1.46	0.94	0.67	Diurnal Average	
		3.72	2.68	3.78	--	8.64	21.32	21.43	27.44	31.58	10.24	4.40	3.14	1.97	1.35	1.36	0.72	1.15	1.17	4.57	6.32	12.59	7.00	8.76	4.92	Diurnal Maximum	
Z - zerospan		C - Calibration																									
Alberta Ambient Air Quality Objectives (AAQO):		1-hr --- ppb				24-hr --- ppb																					



WCAS - Hinton
Summary of Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
September 2017

Maximum Value: 11.30 ppb on Sep 29 20:00		Maximum Daily Average: 4.07 ppb on Sep 7		Hours in Service: 720																																													
Minimum Value: 0.2 ppb on Sep 14 18:00		Minimum Daily Average: 1.03 ppb on Sep 19		Hours of Data: 679																																													
Maximum Diurnal Average: 3.47 ppb at hour 21		Minimum Diurnal Average: 1.19 ppb at hour 14		Hours of Missing Data: 41																																													
Monthly Average: 2.119 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.7 Q ₁ = 1.1 Median = 1.7 Q ₃ = 2.7 P ₉₀ = 4.0 P ₉₉ = 7.7		Hours of Calibration: 41																																													
				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-Sep	1.9	2.7	3.0	Z	3.5	4.8	4.4	4.1	3.7	3.5	4.7	2.4	1.4	1.9	2.3	2.8	1.8	0.7	1.2	6.6	6.1	5.1	3.7	2.5	3.25	6.59																							
2-Sep	2.0	1.6	1.7	Z	2.2	1.9	3.1	3.5	1.7	0.9	0.8	1.0	0.8	1.2	1.2	1.1	0.7	1.5	2.3	1.3	1.5	1.0	0.9	1.0	1.52	3.50																							
3-Sep	0.7	0.9	0.6	Z	0.9	0.9	1.0	1.1	1.4	1.9	1.1	1.7	0.9	0.4	0.8	0.8	1.1	1.0	0.5	1.8	2.6	2.0	1.8	1.6	1.20	2.59																							
4-Sep	1.2	1.0	0.4	Z	0.7	0.5	0.6	0.6	1.5	3.3	2.7	1.5	0.6	0.6	0.5	0.5	0.7	0.8	0.8	0.9	1.7	2.5	2.6	1.5	1.20	3.33																							
5-Sep	1.0	1.7	2.1	Z	1.2	1.1	1.3	1.4	2.1	1.6	1.9	2.5	3.1	1.6	1.4	1.7	1.8	1.3	1.6	6.0	7.7	5.2	3.1	4.0	2.45	7.73																							
6-Sep	3.6	2.6	2.9	Z	3.1	3.4	3.2	2.4	2.5	2.1	2.2	2.5	3.1	4.2	5.2	2.8	1.1	1.3	1.4	3.7	5.7	6.0	3.6	2.8	3.12	6.01																							
7-Sep	3.5	4.2	2.5	Z	2.0	2.4	3.2	3.0	4.2	4.5	1.9	1.8	2.0	1.7	2.8	1.8	3.9	4.2	7.8	10.5	9.8	6.9	5.3	3.9	4.07	10.51																							
8-Sep	3.0	1.9	1.4	Z	1.7	2.1	2.2	2.0	3.2	4.5	4.7	5.7	3.4	1.6	1.1	1.7	2.4	3.2	2.7	2.2	2.3	1.9	1.3	1.6	2.52	5.71																							
9-Sep	1.5	1.6	0.6	Z	1.3	1.2	1.9	1.9	2.0	2.8	1.5	1.3	1.3	1.6	1.0	1.3	0.3	0.5	0.6	1.7	0.6	0.5	0.8	0.8	1.25	2.80																							
10-Sep	0.4	1.0	1.5	Z	2.8	2.8	2.7	3.6	2.7	2.2	2.2	0.9	1.5	0.7	1.2	0.6	1.0	1.6	1.8	2.9	3.2	4.0	2.7	1.8	2.00	4.02																							
11-Sep	1.3	1.6	2.0	Z	5.6	4.7	5.8	5.8	4.7	3.8	1.6	2.2	1.6	2.0	2.4	1.0	2.2	1.0	3.7	0.4	0.5	0.8	0.5	0.8	2.43	5.84																							
12-Sep	1.1	0.5	0.5	Z	4.2	4.0	6.0	4.4	2.1	2.0	1.7	2.0	1.4	1.0	1.1	0.8	1.1	1.0	1.1	1.0	0.6	0.7	0.5	0.4	1.70	6.02																							
13-Sep	0.3	0.2	0.8	Z	1.7	2.0	0.9	2.0	C	C	C	C	C	C	0.9	0.7	1.7	1.5	1.0	1.3	1.1	1.1	1.8	1.4	--	2.01																							
14-Sep	1.5	1.0	1.5	Z	1.7	1.1	2.2	1.2	1.1	0.8	1.0	2.2	1.0	0.5	0.6	1.7	0.9	0.2	0.5	0.5	1.9	1.0	2.1	1.5	1.21	2.20																							
15-Sep	1.2	1.2	0.9	Z	0.9	1.2	1.0	1.2	1.3	1.6	1.9	2.2	2.2	0.8	0.6	0.5	0.7	1.0	1.7	1.8	2.1	1.6	2.9	1.7	1.40	2.91																							
16-Sep	1.1	1.3	1.5	Z	2.3	2.3	2.3	1.8	2.4	1.7	1.4	1.4	1.3	1.1	0.9	0.9	1.6	2.2	1.8	3.3	2.1	2.6	4.5	3.3	1.95	4.49																							
17-Sep	2.7	1.7	1.5	Z	1.6	0.8	1.4	1.8	3.4	1.3	1.4	1.7	1.6	0.9	0.6	1.1	1.8	2.3	3.5	3.1	4.4	6.6	2.8	2.0	2.18	6.59																							
18-Sep	2.3	1.4	2.8	Z	2.9	3.0	3.6	3.3	2.6	4.3	4.1	3.9	2.7	0.7	3.1	3.6	2.7	3.0	1.1	1.3	2.9	3.1	1.2	1.4	2.64	4.33																							
19-Sep	1.7	1.9	2.3	Z	1.4	1.4	1.3	1.3	2.1	C	C	C	C	C	0.4	0.6	0.4	0.5	0.3	0.3	0.7	0.6	0.6	0.7	1.03	2.26																							
20-Sep	0.6	0.7	0.4	Z	0.4	0.8	1.6	2.7	2.5	2.0	2.8	2.5	2.8	2.2	2.5	2.3	1.3	1.1	1.1	1.3	1.9	2.6	2.1	1.9	1.75	2.82																							
21-Sep	1.5	2.6	2.5	Z	2.7	3.5	2.4	4.7	5.6	3.5	1.6	0.6	1.6	0.9	0.3	0.5	0.3	0.7	0.7	1.0	2.0	2.8	1.7	1.1	1.95	5.63																							
22-Sep	1.2	0.9	1.0	Z	0.9	1.4	3.6	1.8	1.1	1.7	2.1	1.4	1.0	0.8	0.9	0.7	1.1	1.1	1.0	1.5	2.6	2.2	1.5	1.2	1.42	3.59																							
23-Sep	1.9	2.9	3.5	Z	2.2	1.3	1.7	1.3	1.1	1.6	1.0	1.1	1.9	1.6	1.6	1.7	1.2	1.3	2.1	2.8	2.4	1.9	2.1	1.9	1.82	3.45																							
24-Sep	1.9	2.0	1.3	Z	0.6	0.6	0.7	0.9	1.6	1.5	1.3	0.9	0.7	0.6	0.5	0.6	1.4	3.6	1.6	2.5	2.1	2.6	1.6	1.7	1.42	3.64																							
25-Sep	1.5	0.8	1.2	Z	1.0	1.5	3.1	3.3	3.7	3.1	0.8	1.0	1.2	0.7	2.1	1.3	1.4	2.3	3.6	6.6	6.5	4.7	3.5	2.9	2.51	6.55																							
26-Sep	2.1	1.7	1.7	Z	1.1	1.5	2.1	1.8	1.3	0.8	1.9	1.0	0.9	0.6	0.7	0.6	1.6	2.0	2.0	0.9	7.6	8.1	6.8	4.4	2.31	8.08																							
27-Sep	3.8	3.1	2.8	Z	3.2	3.5	4.1	3.9	2.3	1.7	1.2	1.2	0.9	0.8	0.7	1.1	1.5	3.4	6.1	5.0	5.4	4.0	3.3	2.9	2.87	6.10																							
28-Sep	2.6	2.1	1.8	Z	1.4	1.0	0.6	0.8	2.4	2.8	1.1	1.1	1.2	1.2	1.1	1.8	1.0	2.3	6.3	8.5	7.1	4.6	3.5	2.4	2.56	8.51																							
29-Sep	2.8	2.5	2.1	Z	2.4	3.5	2.6	2.8	4.1	4.7	3.2	1.3	1.6	0.8	0.8	1.2	1.3	2.4	7.6	11.3	8.5	7.5	4.6	3.8	3.63	11.30																							
30-Sep	5.3	2.9	1.1	Z	2.6	7.0	7.2	4.8	2.1	2.7	1.6	0.6	0.8	0.4	1.9	1.0	0.3	1.5	3.1	2.8	0.4	2.4	3.0	2.7	2.53	7.17																							
																								1.92	1.74	1.66	--	2.00	2.24	2.60	2.50	2.50	2.46	1.97	1.77	1.59	1.19	1.37	1.30	1.35	1.68	2.36	3.16	3.47	3.23	2.54	2.05	Diurnal Average	
																								5.31	4.21	3.45	--	5.59	6.97	7.17	5.84	5.63	4.73	4.71	5.71	3.44	4.22	5.18	3.60	3.94	4.17	7.76	11.30	9.79	8.08	6.76	4.37	Diurnal Maximum	
Z - zerospan C - Calibration																																																	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb																																																	



WCAS - Hinton
Summary of Hourly Averages

NOx (NO_x) - ppb
September 2017

Maximum Value: 35.69 ppb on Sep 29 09:00		Maximum Daily Average: 10.08 ppb on Sep 29		Hours in Service: 720																							
Minimum Value: 0.1 ppb on Sep 14 18:00		Minimum Daily Average: 1.55 ppb on Sep 19		Hours of Data: 679																							
Maximum Diurnal Average: 8.18 ppb at hour 8		Minimum Diurnal Average: 1.58 ppb at hour 14		Hours of Missing Data: 41																							
Monthly Average: 3.762 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.8 Q ₁ = 1.4 Median = 2.4 Q ₃ = 4.4 P ₉₀ = 8.3 P ₉₉ = 24.8		Hours of Calibration: 41																							
				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-Sep	1.9	2.9	3.1	Z	3.9	6.7	6.5	5.5	5.3	4.2	6.1	3.4	1.9	2.3	2.6	3.2	1.9	0.7	1.3	8.0	7.4	6.3	4.1	2.5	3.99	8.04	
2-Sep	2.1	1.6	1.8	Z	2.7	2.2	4.1	4.9	2.2	1.0	0.9	1.2	0.8	1.6	1.4	1.1	0.8	1.9	2.6	1.3	1.7	1.1	0.9	1.0	1.78	4.93	
3-Sep	0.7	1.0	0.9	Z	1.1	1.2	1.6	2.7	4.4	5.0	2.0	2.5	1.2	0.5	0.9	1.1	1.5	1.1	0.5	2.2	3.0	2.8	2.2	2.2	1.84	4.95	
4-Sep	1.6	1.8	0.8	Z	1.8	2.5	3.0	3.3	4.9	5.9	4.4	2.2	0.8	0.7	0.5	0.5	0.8	1.0	0.8	0.9	1.9	2.6	2.6	1.4	2.02	5.89	
5-Sep	1.0	2.3	2.6	Z	2.0	1.9	5.1	4.8	3.3	2.2	2.7	4.3	4.3	1.9	1.7	2.0	2.0	1.3	1.5	6.8	8.8	6.0	3.0	4.0	3.29	8.81	
6-Sep	3.6	2.6	2.9	Z	3.3	4.0	4.3	3.4	3.0	2.6	2.6	3.2	3.9	5.2	6.6	3.2	1.1	1.5	1.4	4.1	6.1	6.7	3.8	2.8	3.57	6.67	
7-Sep	3.5	5.5	2.5	Z	2.2	2.8	6.8	8.5	9.2	5.4	2.0	2.0	2.1	1.7	2.9	2.0	4.1	4.3	8.3	15.5	15.7	9.5	7.5	4.7	5.59	15.74	
8-Sep	3.7	2.3	1.6	Z	3.3	5.5	8.4	5.7	9.3	12.4	7.7	8.3	4.5	2.0	1.2	2.0	2.6	3.9	3.1	2.5	3.3	2.4	1.9	1.8	4.32	12.37	
9-Sep	1.7	1.8	1.3	Z	1.8	1.9	3.7	3.8	4.1	5.0	2.2	1.9	1.8	2.5	1.2	1.6	0.3	0.6	0.6	1.8	0.6	0.5	0.8	0.8	1.85	5.04	
10-Sep	0.4	1.3	1.6	Z	5.4	5.6	5.3	8.0	5.0	3.4	3.5	1.3	2.2	1.1	1.8	0.8	1.4	2.0	2.0	3.1	3.4	4.2	2.8	1.9	2.94	8.01	
11-Sep	1.4	1.6	2.0	Z	7.6	6.1	8.3	11.4	9.4	7.3	2.3	3.2	2.4	2.9	3.4	1.4	3.1	1.1	4.1	0.4	0.5	0.8	0.6	0.9	3.57	11.35	
12-Sep	1.3	0.5	0.6	Z	5.5	5.0	7.0	5.2	2.5	2.6	2.0	2.6	2.3	1.6	1.6	1.4	1.4	1.2	1.3	1.0	0.6	0.8	0.5	0.4	2.13	7.01	
13-Sep	0.3	0.2	0.9	Z	3.2	2.5	1.4	2.4	C	C	C	C	C	C	1.6	0.9	2.8	1.9	1.1	1.3	1.1	1.1	2.3	1.9	--	3.16	
14-Sep	1.9	1.0	1.8	Z	4.7	1.5	6.1	1.7	2.4	2.0	2.4	4.5	1.3	0.7	0.7	2.3	1.2	0.1	0.5	0.4	2.3	1.1	3.0	2.6	2.01	6.08	
15-Sep	2.8	3.6	1.6	Z	1.4	2.0	1.1	1.9	2.0	3.0	4.3	5.4	4.2	1.2	0.6	0.5	0.8	1.7	2.3	2.0	3.2	1.8	3.1	1.7	2.28	5.37	
16-Sep	1.2	1.8	3.1	Z	5.8	5.9	7.1	6.3	8.4	3.8	2.2	2.3	2.2	1.4	1.3	1.2	2.3	3.0	2.0	4.4	2.4	3.0	5.6	4.5	3.52	8.39	
17-Sep	3.9	2.7	2.1	Z	5.7	2.9	11.7	13.0	9.4	1.9	2.0	2.7	2.2	1.0	0.6	1.3	1.9	2.4	3.6	3.0	4.7	7.8	2.8	2.0	3.97	13.00	
18-Sep	2.4	1.4	3.2	Z	7.7	13.0	15.4	12.1	5.5	10.7	8.6	6.5	3.6	0.7	3.9	4.0	3.4	4.2	1.2	1.4	3.7	4.3	1.3	1.5	5.20	15.44	
19-Sep	2.1	3.9	5.6	Z	1.6	1.8	1.9	1.7	4.1	C	C	C	C	C	0.3	0.6	0.4	0.5	0.3	0.3	0.7	0.6	0.6	0.7	1.55	5.65	
20-Sep	0.6	0.6	0.4	Z	0.4	0.8	1.6	3.2	3.2	2.3	3.8	3.7	3.6	3.0	3.0	2.7	1.6	1.2	1.2	1.4	2.0	2.9	2.3	1.9	2.06	3.85	
21-Sep	1.5	2.6	2.5	Z	2.9	3.9	2.8	5.6	7.1	4.4	1.8	0.7	2.0	1.0	0.3	0.6	0.4	0.9	0.8	1.3	2.2	3.2	1.9	1.3	2.25	7.07	
22-Sep	1.3	1.1	1.3	Z	1.2	1.9	9.3	4.8	3.6	3.5	4.8	3.1	1.7	1.2	1.4	1.1	1.9	1.2	1.0	1.6	6.1	3.8	2.0	1.9	2.65	9.28	
23-Sep	2.9	3.6	7.3	Z	8.2	2.4	3.1	2.3	2.4	4.3	1.8	2.2	3.7	3.0	2.7	2.4	1.4	1.3	2.3	3.9	3.6	2.9	3.6	4.3	3.29	8.23	
24-Sep	4.6	4.6	4.8	Z	4.2	1.8	4.5	7.6	10.0	3.3	2.0	1.3	1.0	0.9	0.6	0.6	1.4	3.9	1.6	2.4	2.0	3.1	1.8	3.0	3.10	10.04	
25-Sep	2.1	1.1	3.5	Z	6.1	11.8	23.0	29.5	29.6	13.4	1.2	1.5	1.8	1.0	2.6	1.6	1.7	2.7	3.7	12.9	11.9	11.7	12.4	7.9	8.47	29.60	
26-Sep	5.9	4.5	5.2	Z	5.5	10.2	16.3	14.5	5.7	1.3	3.5	2.0	1.5	0.8	1.0	0.6	1.9	2.1	1.9	0.8	14.4	14.1	11.2	5.2	5.65	16.28	
27-Sep	5.9	4.7	4.8	Z	11.7	17.8	25.6	25.1	8.3	2.9	2.0	1.9	1.3	1.2	1.0	1.7	2.0	4.6	8.4	9.2	18.1	10.2	4.6	5.0	7.75	25.64	
28-Sep	4.9	3.7	5.1	Z	10.1	9.1	4.2	7.1	16.0	7.9	1.7	1.7	1.6	1.6	1.4	2.4	1.0	2.4	11.0	14.8	11.1	8.2	7.3	4.7	6.05	16.00	
29-Sep	6.2	4.1	4.9	Z	10.2	24.9	19.8	30.3	35.7	12.9	6.0	1.9	2.4	1.1	1.0	1.3	1.4	2.7	9.4	17.6	14.1	14.3	5.3	4.4	10.08	35.69	
30-Sep	5.9	3.0	1.2	Z	3.2	10.1	11.1	9.1	3.8	4.2	2.2	0.7	0.9	0.4	2.6	1.3	0.3	1.5	4.1	3.9	0.4	3.3	3.3	2.8	3.45	11.08	
		2.64	2.45	2.70	--	4.48	5.66	7.67	8.18	7.58	4.96	3.18	2.79	2.26	1.58	1.74	1.59	1.63	1.96	2.80	4.34	5.24	4.71	3.50	2.73	Diurnal Average	
		6.24	5.50	7.26	--	11.71	24.89	25.64	30.31	35.69	13.37	8.56	8.30	4.50	5.21	6.58	4.05	4.10	4.57	10.96	17.55	18.09	14.26	12.35	7.88	Diurnal Maximum	
Z - zerospan		C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr --- ppb				24-hr --- ppb																					



WCAS - Hinton
Summary of Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³
September 2017

Maximum Value: 119.15 µg/m ³ on Sep 8 09:00	Maximum Daily Average: 74.68 µg/m ³ on Sep 7	Hours in Service: 720
Minimum Value: 0.1 µg/m ³ on Sep 12 00:00	Minimum Daily Average: 0.98 µg/m ³ on Sep 20	Hours of Data: 720
Maximum Diurnal Average: 17.91 µg/m ³ at hour 10	Minimum Diurnal Average: 11.61 µg/m ³ at hour 2	Hours of Missing Data: 0
Monthly Average: 13.693 µg/m ³	Percentiles: P ₁ = 0.6 P ₁₀ = 1.9 Q ₁ = 3.9 Median = 7.0 Q ₃ = 15.0 P ₉₀ = 27.0 P ₉₉ = 108.9	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-Sep	3.1	3.7	3.7	5.8	9.2	10.6	8.4	8.8	11.2	14.1	17.9	18.4	23.3	31.2	33.8	45.7	48.7	47.8	46.1	47.2	44.1	37.8	36.0	33.7	24.59	48.66
2-Sep	32.1	30.6	27.9	26.9	27.3	26.5	27.9	27.2	23.9	23.9	25.8	26.3	23.3	14.2	20.2	24.1	21.5	19.3	19.9	22.1	21.9	21.6	20.1	17.0	23.81	32.12
3-Sep	17.3	17.6	16.1	11.9	16.8	14.3	15.5	15.0	18.0	11.4	10.6	9.9	5.7	3.9	5.8	6.0	6.7	5.8	4.2	5.7	6.7	6.4	6.7	6.9	10.20	18.01
4-Sep	7.5	6.3	4.8	4.8	5.4	5.6	7.3	8.1	21.6	36.0	25.8	15.1	7.6	7.0	6.6	6.7	6.6	7.1	7.1	6.3	6.6	7.2	8.0	7.3	9.67	35.96
5-Sep	8.0	9.2	9.3	8.8	9.2	9.0	10.5	11.9	14.7	12.3	12.9	13.3	16.4	8.5	8.1	9.1	11.1	7.5	8.0	9.4	10.5	10.9	10.4	12.4	10.47	16.43
6-Sep	12.5	12.1	14.9	13.1	13.9	14.7	16.5	21.8	30.2	34.9	36.8	39.3	40.9	38.7	43.2	34.8	26.2	16.4	15.4	17.0	13.3	14.3	14.4	17.9	23.06	43.15
7-Sep	19.6	17.8	17.7	19.1	29.4	32.8	40.7	39.5	66.4	92.3	87.2	92.0	95.1	94.1	97.7	94.0	103.9	104.9	109.1	112.1	111.4	109.2	105.1	101.0	74.68	112.06
8-Sep	96.9	90.1	95.9	102.7	104.3	107.1	106.9	109.5	119.2	117.7	116.3	109.1	77.3	47.5	29.2	25.6	26.0	25.1	26.9	27.0	25.0	23.5	23.7	25.1	69.06	119.15
9-Sep	26.6	27.2	24.0	24.4	26.3	28.5	31.5	28.3	35.5	34.5	27.1	23.9	24.6	23.0	15.4	4.3	1.8	1.7	1.6	2.3	1.2	1.5	0.9	1.1	17.38	35.45
10-Sep	0.8	1.3	1.7	1.6	2.0	1.8	1.7	2.7	4.0	6.3	7.2	2.9	4.6	1.7	4.0	2.0	2.4	4.5	3.5	7.9	8.0	10.4	9.0	8.0	4.17	10.36
11-Sep	4.1	6.2	9.9	2.8	3.0	3.7	3.6	5.0	4.6	5.7	9.1	13.0	9.4	11.5	13.9	6.6	11.0	6.1	15.9	2.3	1.0	3.7	0.9	0.1	6.38	15.92
12-Sep	0.8	1.7	2.1	2.9	6.9	5.2	6.1	5.9	4.8	3.9	3.9	4.3	3.9	3.9	4.1	4.3	4.2	2.9	3.2	6.9	3.1	2.1	2.3	2.4	3.82	6.93
13-Sep	2.6	2.7	4.4	3.8	4.0	5.0	1.4	2.3	3.5	2.0	1.9	2.3	2.6	1.6	2.2	0.9	5.1	5.4	3.0	3.7	3.1	3.2	4.5	2.8	3.08	5.39
14-Sep	3.1	3.3	4.0	4.7	6.5	3.2	5.0	3.4	8.1	8.7	7.4	13.6	4.6	1.9	1.7	13.1	6.1	3.0	3.1	3.3	4.5	4.3	6.9	7.7	5.47	13.65
15-Sep	5.2	5.7	3.4	2.7	2.6	3.6	3.2	3.5	7.0	20.7	21.3	28.6	18.0	5.1	3.6	2.8	2.3	3.0	3.4	4.3	4.1	6.0	7.3	5.4	7.20	28.61
16-Sep	3.4	3.1	4.6	7.5	8.5	7.6	9.6	8.2	17.4	8.8	5.2	5.5	6.2	5.0	4.7	4.1	5.0	5.6	5.5	9.1	8.3	6.6	9.6	6.4	6.90	17.41
17-Sep	12.4	6.7	5.0	4.8	7.1	5.1	6.0	6.8	8.0	7.0	8.7	15.6	20.1	21.3	19.2	22.9	24.3	25.7	25.6	25.2	25.4	28.5	24.2	24.5	15.85	28.50
18-Sep	25.9	23.6	25.9	25.8	36.4	23.5	23.3	24.9	24.3	28.6	26.9	25.8	19.6	3.3	4.2	3.7	3.9	3.9	2.2	1.8	3.2	3.7	2.4	2.9	15.41	36.37
19-Sep	3.2	4.4	4.6	4.3	2.6	2.3	2.5	1.6	2.1	1.9	2.7	2.8	3.5	2.8	0.7	1.0	1.1	1.1	1.0	0.8	1.5	1.3	0.9	1.2	2.15	4.57
20-Sep	0.9	0.9	0.6	0.6	0.6	0.8	0.8	1.5	0.8	0.7	1.4	1.4	1.3	0.9	1.1	1.1	0.5	0.4	0.5	0.7	1.5	1.9	1.2	1.0	0.98	1.94
21-Sep	0.5	1.0	1.1	0.7	1.0	1.4	2.6	3.5	4.7	4.3	4.5	3.8	4.1	4.7	4.5	4.4	4.0	4.1	5.3	6.9	9.3	9.9	9.0	8.6	4.34	9.95
22-Sep	8.3	8.0	7.7	7.5	6.9	9.9	14.9	8.0	5.4	5.9	8.2	8.4	6.8	7.7	8.3	5.8	8.3	9.5	9.4	11.9	17.3	9.8	7.5	6.8	8.66	17.30
23-Sep	9.2	12.4	14.5	14.9	12.0	9.2	9.0	8.6	8.1	7.2	4.8	5.0	5.9	5.3	5.7	6.1	6.0	7.7	10.1	9.5	10.9	9.5	10.3	8.8	8.78	14.93
24-Sep	8.5	6.9	7.5	7.9	7.4	6.5	7.5	8.1	9.7	8.5	7.0	6.6	5.1	4.5	4.0	4.0	4.9	6.1	5.2	6.4	5.5	6.6	5.7	5.1	6.46	9.72
25-Sep	3.3	3.4	3.9	6.0	10.8	9.0	9.2	14.7	11.3	8.7	3.9	4.4	3.9	3.1	4.0	3.6	4.2	5.0	5.2	12.2	10.8	10.2	18.9	9.5	7.46	18.94
26-Sep	6.4	4.9	3.5	5.0	4.4	4.7	6.5	6.1	3.6	2.0	4.5	4.0	3.6	1.9	2.4	1.9	4.8	4.4	4.8	5.4	13.5	14.7	10.1	8.1	5.47	14.68
27-Sep	8.5	6.4	20.7	11.4	14.7	10.5	10.2	9.2	4.0	3.8	4.3	4.6	4.0	3.3	3.1	4.5	5.2	8.7	8.5	9.5	18.8	9.3	6.6	10.1	8.33	20.72
28-Sep	4.4	6.7	6.8	3.7	3.4	3.7	3.4	4.4	7.7	9.5	4.3	5.7	5.2	5.9	5.8	7.5	6.1	7.2	12.9	20.8	15.1	12.6	15.5	17.3	8.15	20.79
29-Sep	16.4	12.1	8.6	18.8	8.3	8.7	9.1	18.4	18.7	10.4	11.9	17.7	16.7	13.2	11.5	11.6	10.4	11.1	16.5	21.0	20.8	21.5	16.4	16.5	14.43	21.49
30-Sep	16.1	12.1	4.1	3.6	2.7	4.6	4.8	3.9	3.8	5.8	4.3	1.7	2.2	0.9	1.3	1.4	1.0	1.7	5.6	4.7	2.6	4.6	7.0	5.6	4.43	16.14

12.26	11.61	11.95	11.94	13.11	12.64	13.52	14.03	16.74	17.91	17.13	17.49	15.51	12.58	12.33	12.12	12.44	12.09	12.96	14.11	14.30	13.77	13.39	12.71	Diurnal Average	
96.87	90.13	95.90	102.73	104.29	107.08	106.91	109.52	119.15	117.72	116.27	109.07	95.08	94.07	97.72	94.03	103.94	104.92	109.08	112.06	111.40	109.18	105.14	100.99	Diurnal Maximum	

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 ul/m³ 24-hr 30 ul/m³

Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: September 13, 2017

Parameter: H₂S

Instrument: Teco 45C

Serial Number: 45C-71671-369

Previous Calibration Date: August 11, 2017

Calibration: Routine

Calibration Equipment: Sabio 2010 SN 11100113

Barometric Pressure: 26.93" Hg

Calibration Method: Standard Gas Dilution

Permeation Device ID: DT0014794, 10.5 ppm H₂S

Temperature: 25.2° 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	1.352	100 ppb
Current	18.7	1.355	100 ppb

Final Zero: 0.0 ppb

Final Span: 52.8 ppb

As Found Correction Factor: 0.994

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
0.039	80.1	24178.8	79.9	1.001
0.021	43.6	13329.9	43.9	0.994
0.011	23.0	6998.6	22.9	1.006
0.000	0.0	117.3	0.0	

Results of Linear Regression

R _c vs C _c	Slope	Intercept	R ²
Previous	299.947700	-42.508610	0.999980
Current	300.889300	123.107600	0.999971
C _i vs C _c			
Current	1.000000	-0.000020	0.999972

Average Correction Factor: 1.000

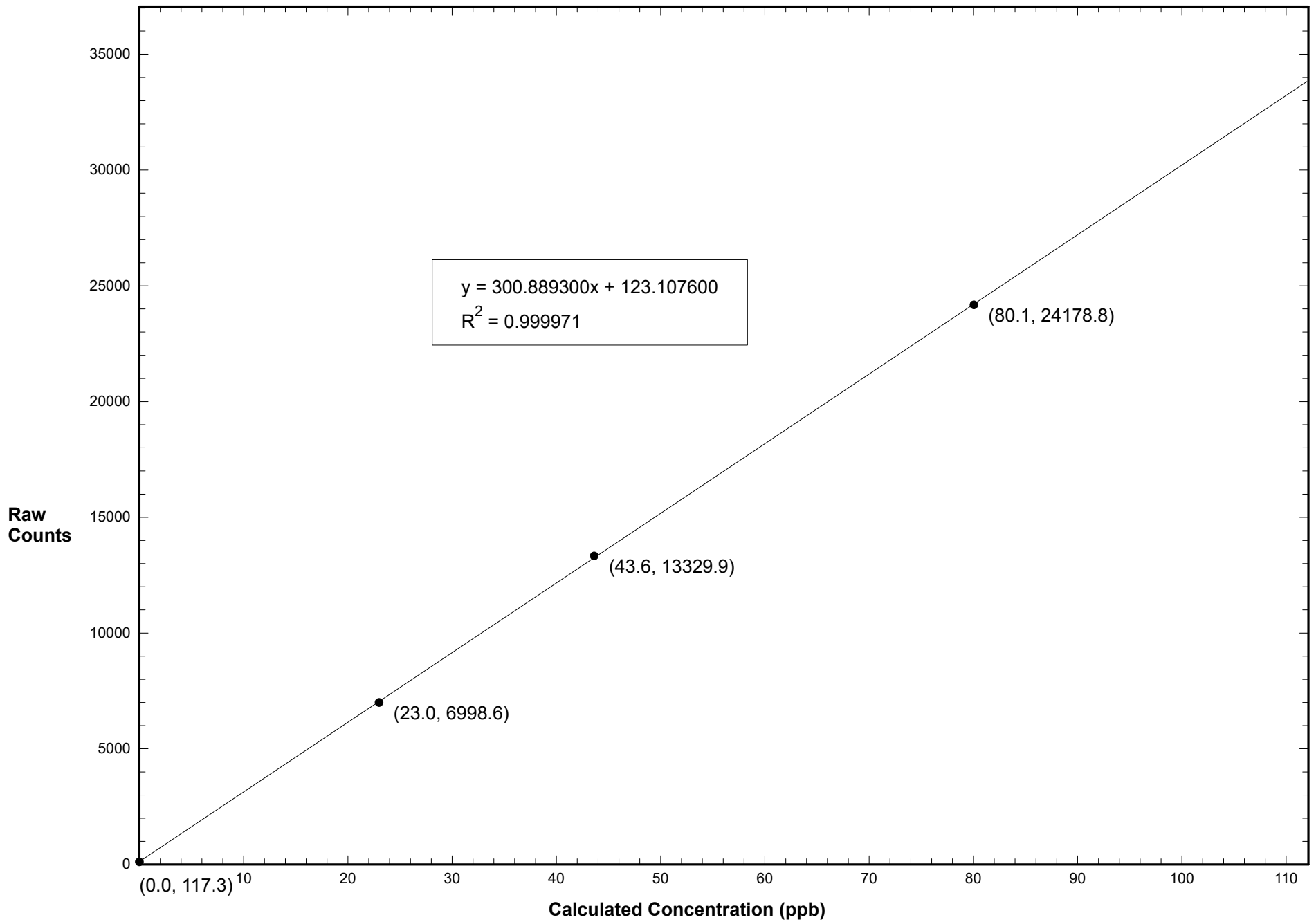
Previous Correction Factor: 1.000

Current Correction Factor: 1.001

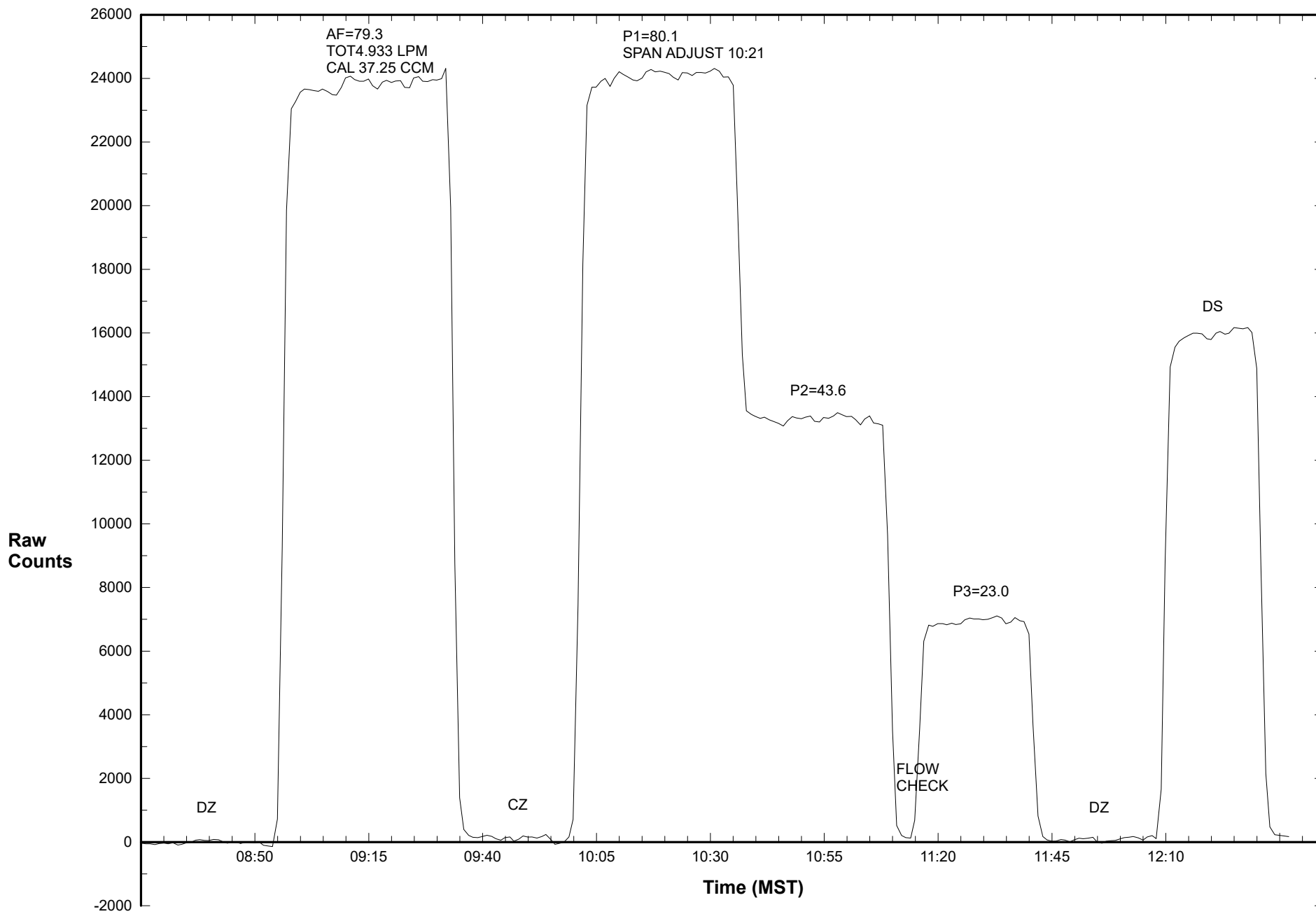
Percent Change of Correction Factor: 0.1

Comments: SAMPLE FLOW = 0.450 LPM

Station 906 H2S September 13, 2017: Linear Regression



Station 906 H2S September 13, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: September 13, 2017

Parameter: NO/NO₂/NO_x

Instrument: Teco 42i

Serial Number: 0905034788

Previous Calibration Date: August 11, 2017

Calibration: Routine

Calibration Equipment: Sabio 2010 SN 08600312

Barometric Pressure: 26.93" Hg

Calibration Method: Standard Gas Dilution/GPT

Cylinder ID: SX17611

Temperature: 25.2° C

Cylinder Concentration: 25.4 ppm NO/25.5 ppm NO_x

In Service: 4/1/2016 EXP 12/2/2017

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	14.8	15.1	NA	1.351	0.990	0.995	500 ppb
Current	15.2	15.7	NA	1.393	0.996	0.995	500 ppb

NO	Final Zero: 0.0 ppb	Final Span: 163.4 ppb	As Found Correction Factor: 1.023
NO ₂	Final Zero: -0.1 ppb	Final Span: 1.1 ppb	As Found Correction Factor: NA
NO _x	Final Zero: -0.1 ppb	Final Span: 164.8 ppb	As Found Correction Factor: 1.039

Results of Linear Regression			Slope	Intercept	R ²
NO	R _c vs C _c	Previous	60.020000	38.348020	0.999974
		Current	59.989620	29.245700	0.999994
	C _i vs C _c	Current	1.000000	0.000030	0.999993
NO ₂	R _c vs C _c	Previous	60.689800	-13.787660	0.999974
		Current	60.306420	7.148499	0.999999
	C _i vs C _c	Current	1.000000	0.000000	0.999999
NO _x	R _c vs C _c	Previous	60.093640	36.389110	0.999974
		Current	59.973240	26.223950	0.999995
	C _i vs C _c	Current	1.000000	0.000000	0.999996

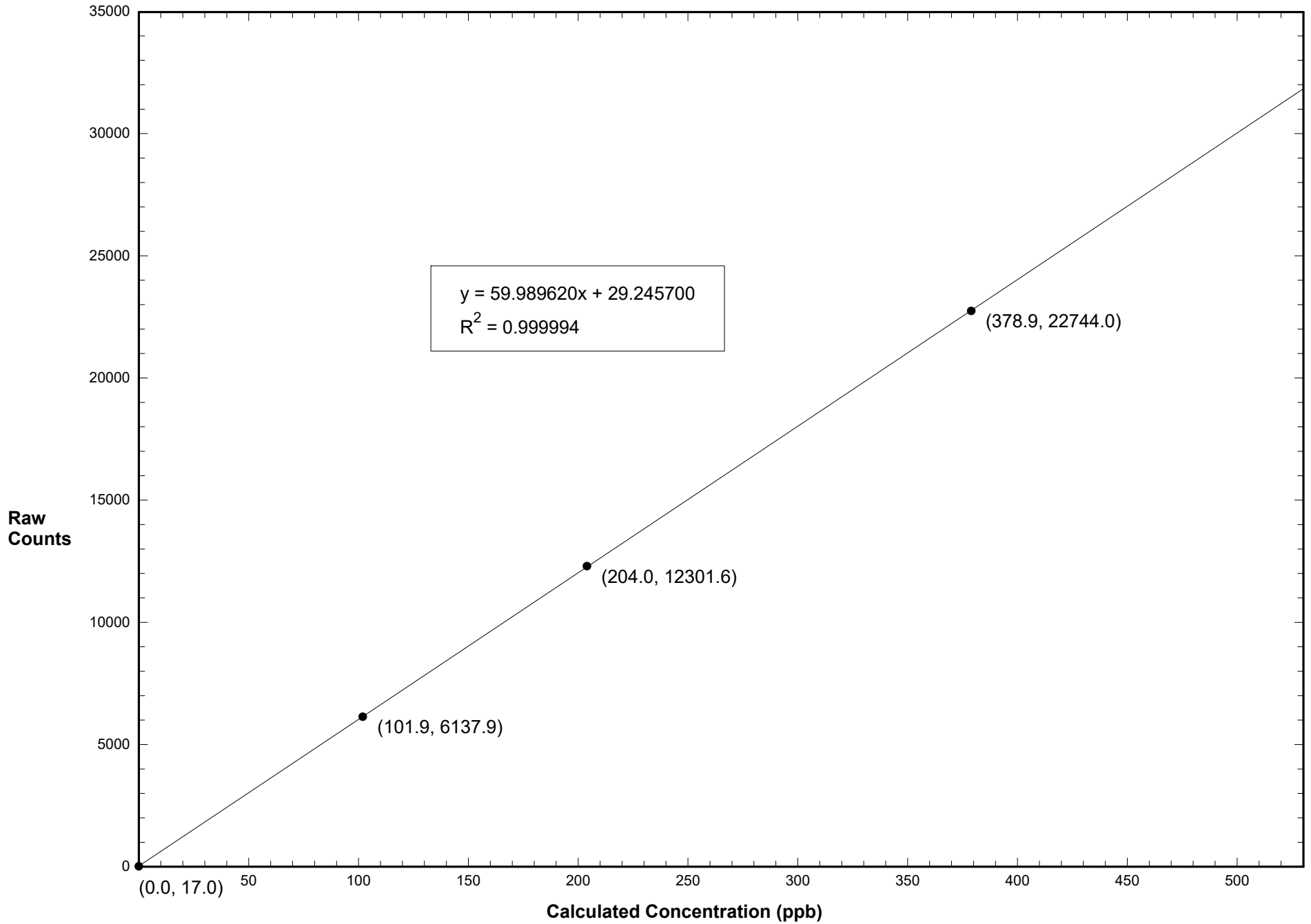
Comments: SAMPLE FLOW = 0.454 LPM

Calibration Data Summary (Page 2)

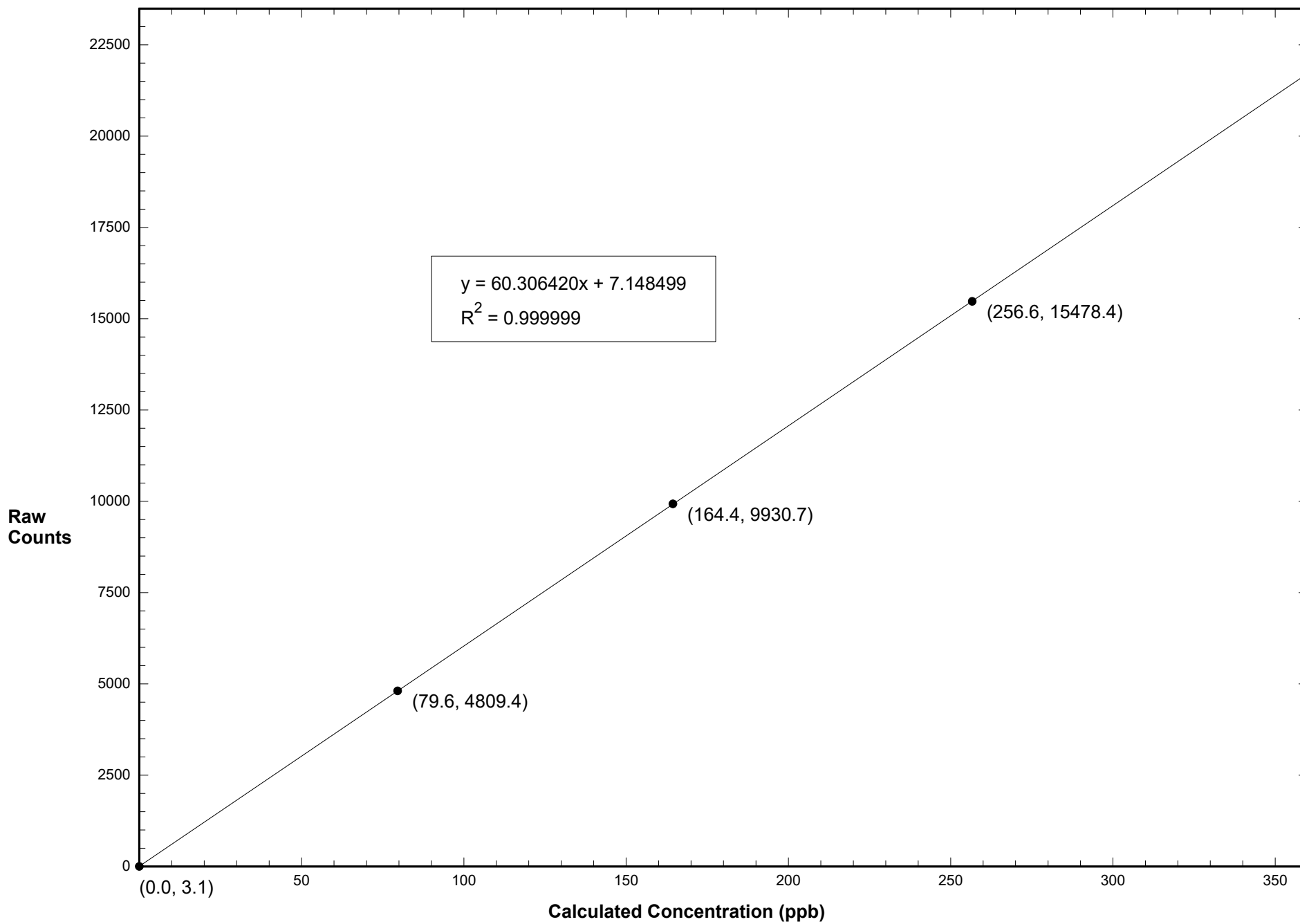
September 13, 2017 - Station 906

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		
0.07624	5.034	378.9	22744.0	378.6	1.001		
0.04084	5.045	204.0	12301.6	204.6	0.997		
0.02034	5.048	101.9	6137.9	101.8	1.001		
0.00000	5.000	0.0	17.0	-0.2			
NO Calibration					Average Correction Factor:	1.000	
0.07624	5.034	380.4	22825.8	380.2	1.001		
0.04084	5.045	204.8	12331.1	205.2	0.998		
0.02034	5.048	102.3	6176.1	102.5	0.998		
0.00000	5.000	0.0	5.9	-0.3			
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
377.2	7261.1	120.6	256.6	15478.4	256.5	1.000	1.000
377.2	12795.4	212.8	164.4	9930.7	164.6	0.999	1.001
377.2	17881.3	297.6	79.6	4809.4	79.6	1.000	1.000
			0.0	3.1	-0.1		
					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	1.001	-0.1				
NO ₂	1.000	1.000	0.0				
NO _x	1.002	1.001	-0.1				

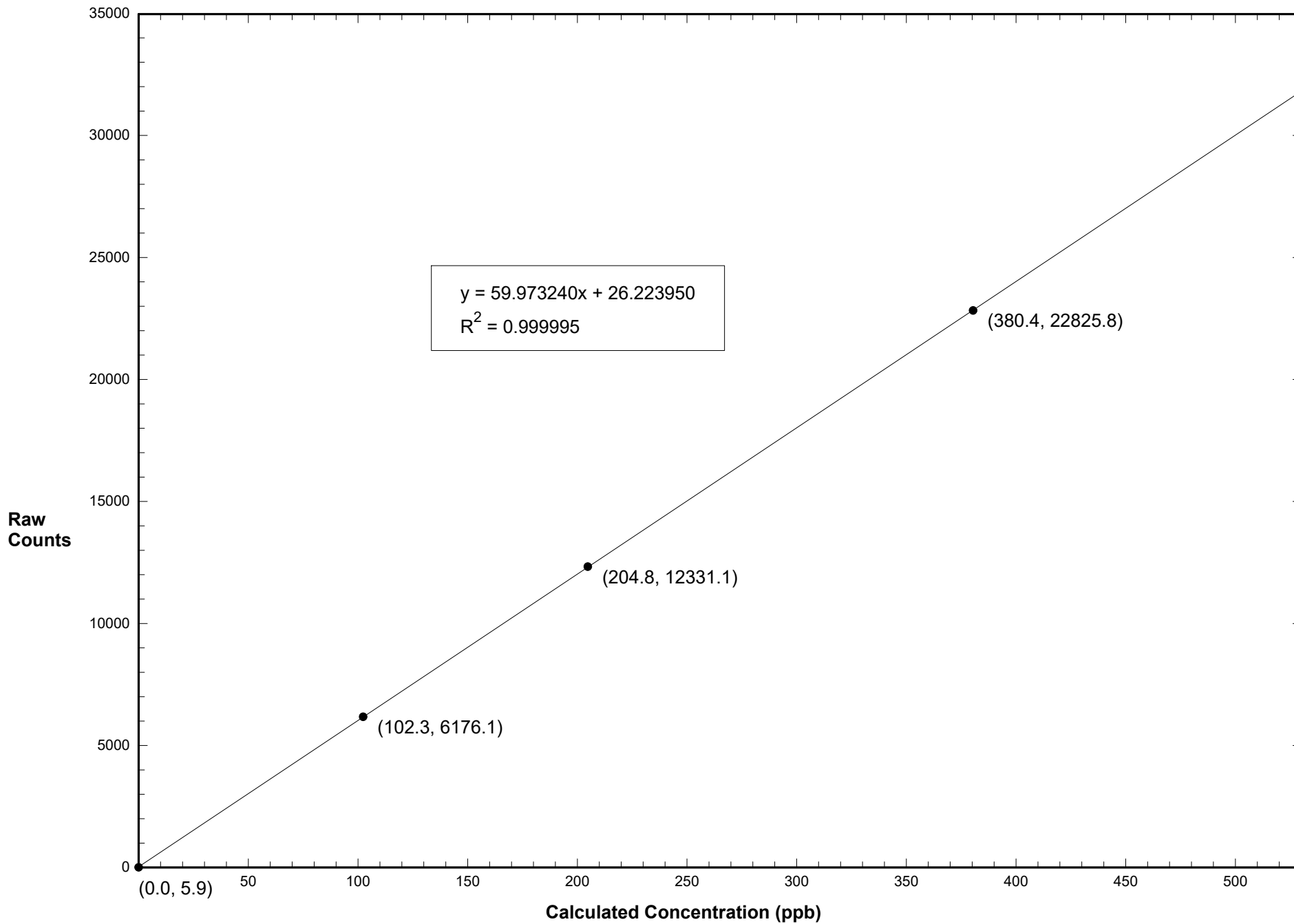
Station 906 NO September 13, 2017: Linear Regression



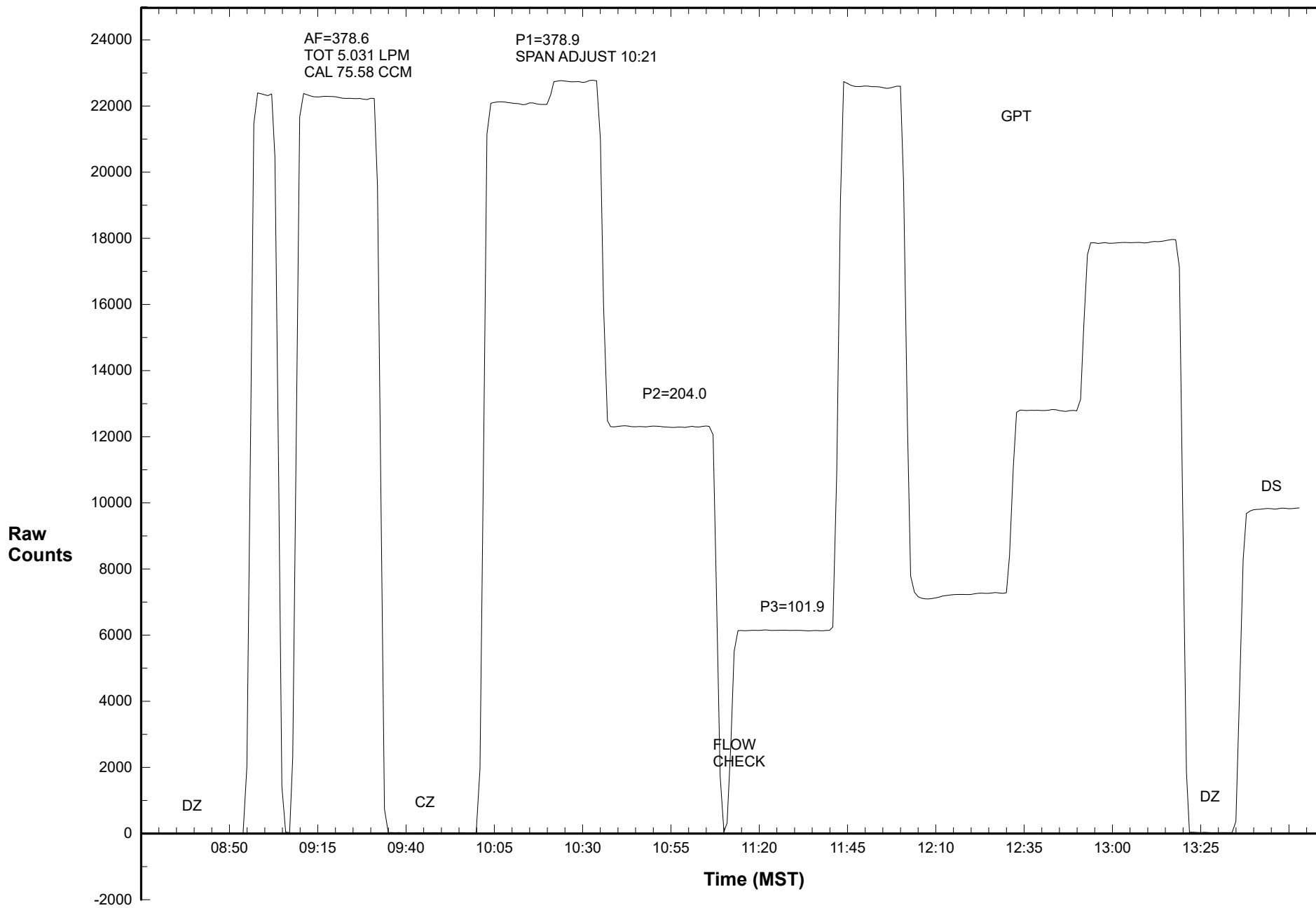
Station 906 NO2 September 13, 2017: Linear Regression



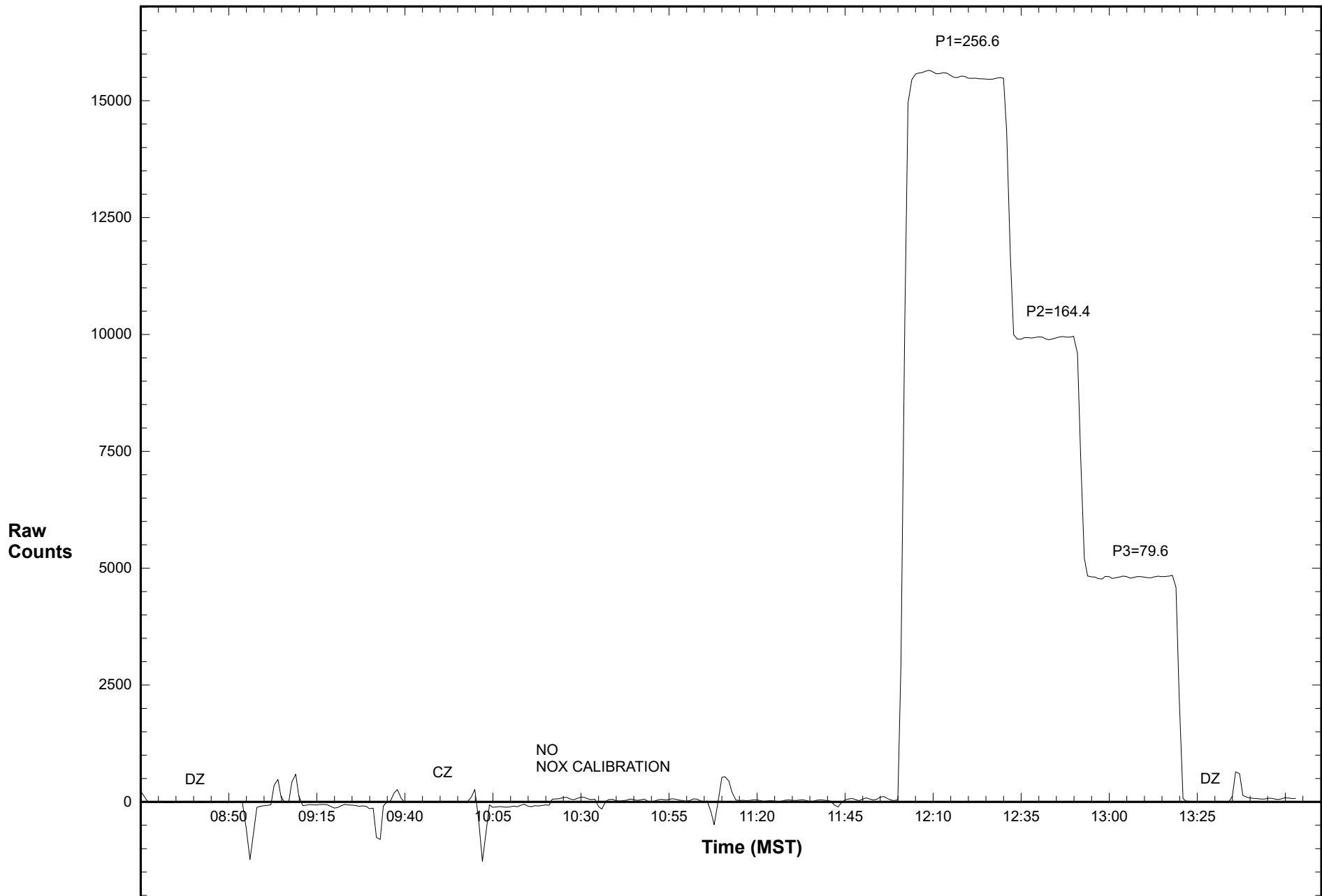
Station 906 NOX September 13, 2017: Linear Regression



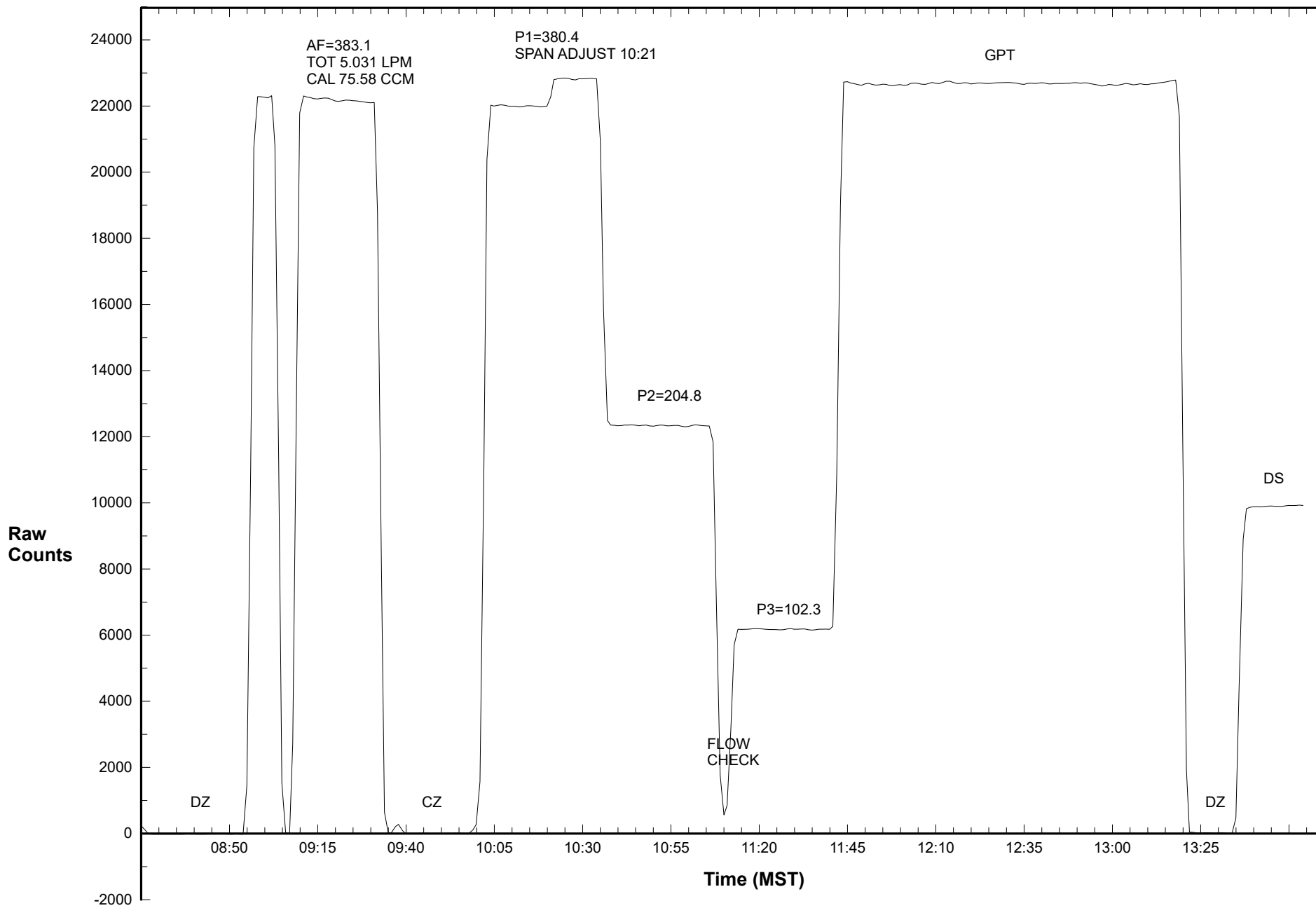
Station 906 NO September 13, 2017: Calibration Graph



Station 906 NO2 September 13, 2017: Calibration Graph



Station 906 NOX September 13, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: September 13, 2017

Parameter: O₃

Instrument: Teco 49i

Serial Number: 1150790050

Previous Calibration Date: August 11, 2017

Calibration: Routine

Calibration Equipment: 2B Tech Model 306 SN142

Barometric Pressure: 26.93" Hg

Calibration Method: Certified Ozone Generator

Temperature: 25.2° C

Technician: L. Burns

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	-0.3	1.022	500 ppb
Current	0.1	1.018	500 ppb

Final Zero: -2.0 ppb

Final Span: 351.5 ppb

As Found Correction Factor: 0.980

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	23985.1	398.2	1.002
3.000	215.0	13046.8	215.9	0.996
3.000	105.0	6465.5	106.3	0.988
3.000	0.0	5.5	-1.4	

Results of Linear Regression

R _c vs C _c	Slope	Intercept	R ²
Previous	59.793640	62.632740	0.999969
Current	60.019530	87.214550	0.999943
C _i vs C _c			
Current	1.000000	0.000000	0.999943

Average Correction Factor: 0.995

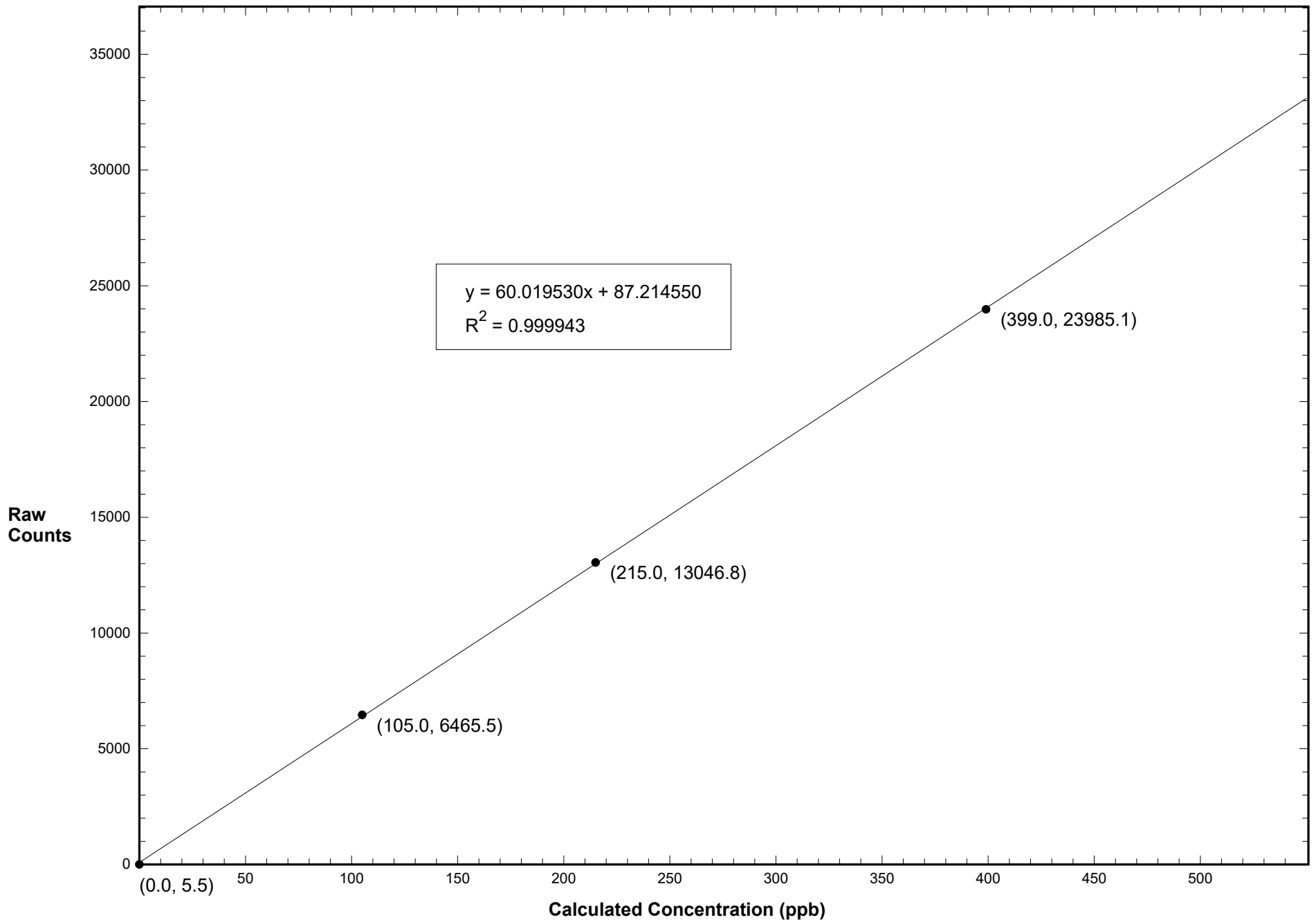
Previous Correction Factor: 1.000

Current Correction Factor: 1.002

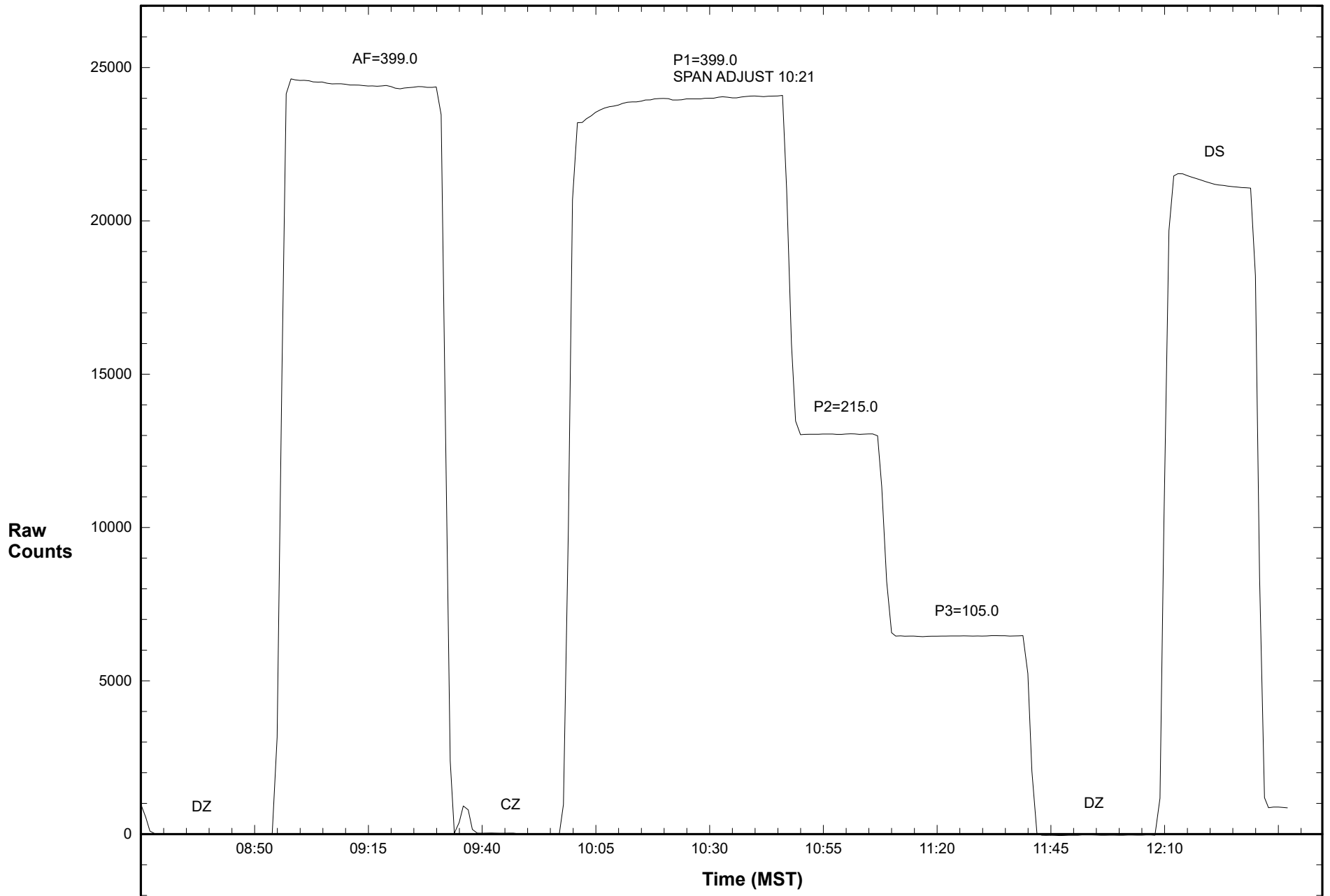
Percent Change of Correction Factor: 0.2

Comments: SAMPLE FLOWS = 0.696 AND 0.673 LPM

Station 906 O3 September 13, 2017: Linear Regression



Station 906 O3 September 13, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: September 13, 2017

Parameter: SO₂

Instrument: TECO 43i

Serial Number: CM12499009

Previous Calibration Date: August 11, 2017

Calibration: Routine

Calibration Equipment: Sabio 2010 SN 08600312

Barometric Pressure: 26.93" Hg

Calibration Method: Standard Gas Dilution

Cylinder ID: SX17611

Temperature: 25.2° C

Cylinder Concentration: 25.4 ppm SO₂

In Service: 4/1/2016 EXP 12/2/2017

Technician: L. Burns

Instrument Settings	SO ₂ bkg ppb	SO ₂ Coefficient	Monitoring Range
Previous	28.1	0.998	500 ppb
Current	28.6	1.024	500 ppb

Final Zero: -0.6 ppm

Final Span: 70.7 ppm

As Found Correction Factor: 1.020

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
0.0762	5.034	378.9	22863.7	378.6	1.001
0.0408	5.045	204.0	12375.0	204.6	0.997
0.0203	5.048	101.9	6181.0	101.9	1.000
0.0000	5.000	0.0	14.2	-0.3	

Results of Linear Regression

R _c vs C _c	Slope	Intercept	R ²
Previous	60.184820	18.850090	0.999963
Current	60.305730	33.473670	0.999991
C _i vs C _c			
Current	1.000000	0.000038	0.999991

Average Correction Factor: 0.999

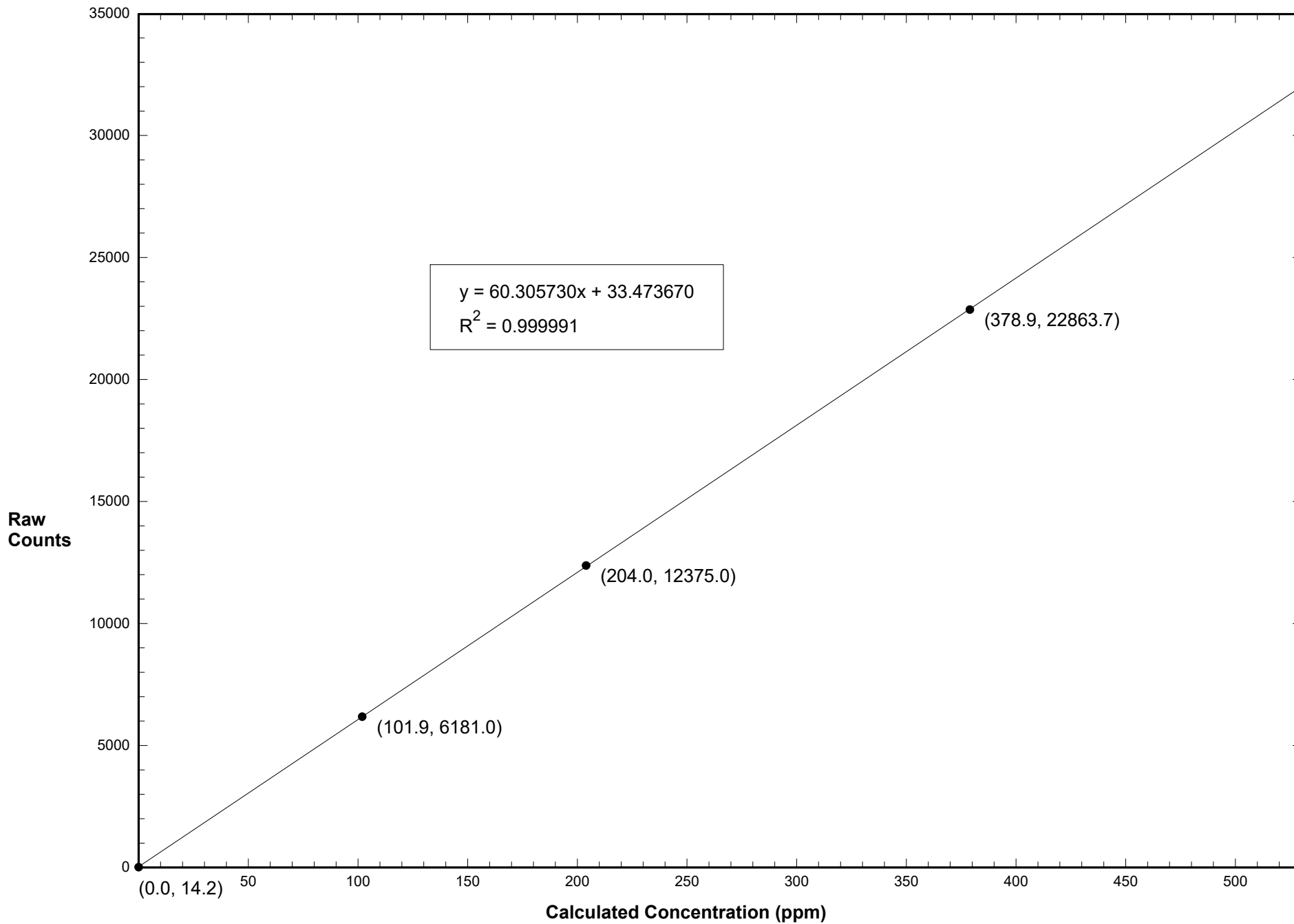
Previous Correction Factor: 1.002

Current Correction Factor: 1.001

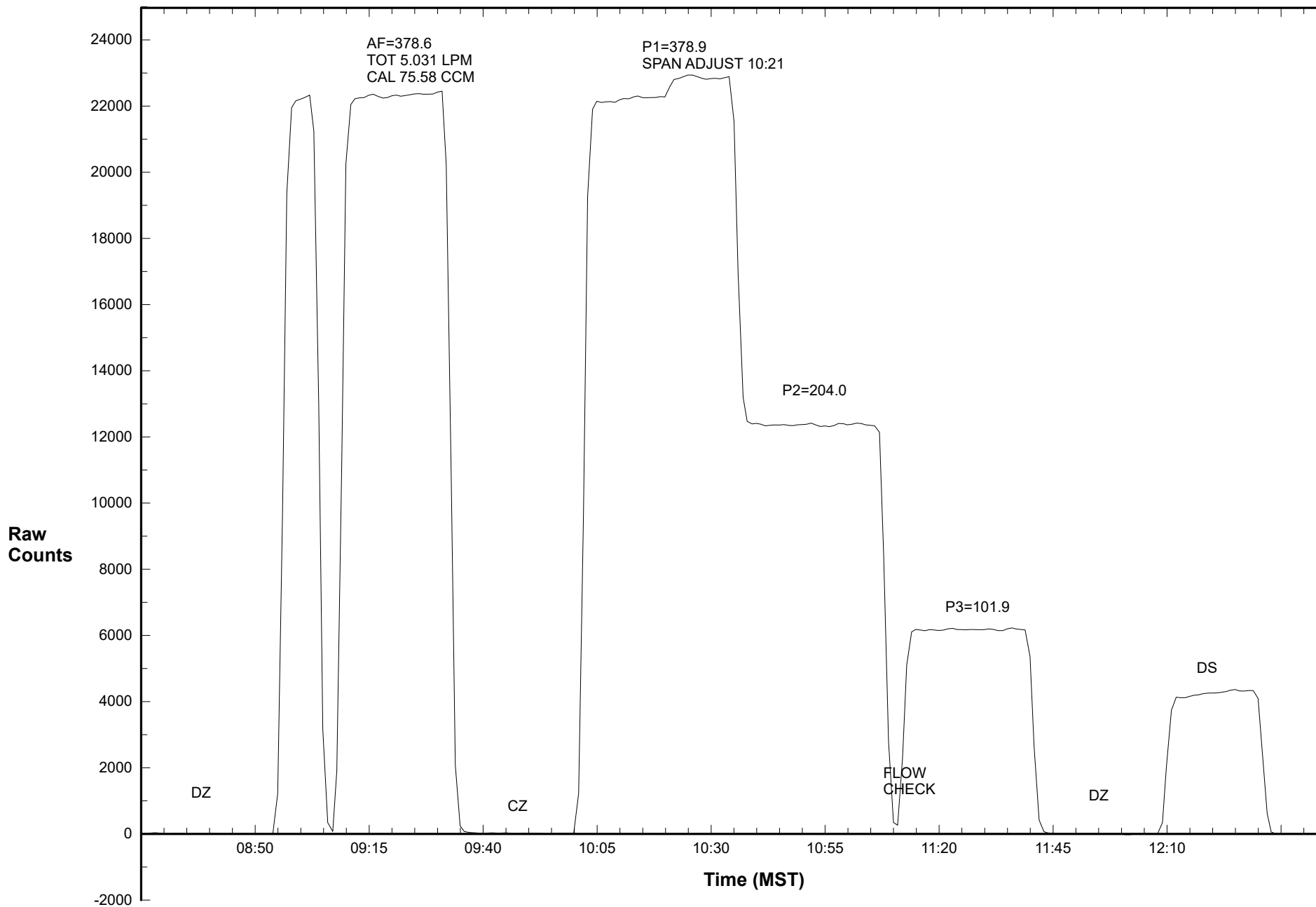
Percent Change of Correction Factor: -0.1

Comments: SAMPLE FLOW = 0.393 LPM

Station 906 SO2 September 13, 2017: Linear Regression



Station 906 SO2 September 13, 2017: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 906, Hinton

Calibration Date: September 13, 2017

Parameter: TRS

Instrument: Teco 43C

Serial Number: 43CTL-60324-326

Previous Calibration Date: August 11, 2017

Calibration: Routine

Calibration Equipment: Sabio 2010 SN 11100113

Barometric Pressure: 26.93" Hg

Calibration Method: Standard Gas Dilution

Permeation Device ID: DT0014794, 10.5 ppm H₂S

Temperature: 25.2° C

Permeation Rate: 0 ng/min

In Service: 10/21/2016 EXP 10/4/2019

Technician: L. Burns

Instrument Settings

H₂S bkg ppb

H₂S Coefficient

Monitoring Range

Previous

1.64

0.794

100 ppb

Current

1.64

0.798

100 ppb

Final Zero: 0.0 ppb

Final Span: 66.8 ppb

As Found Correction Factor: 1.002

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

0.039

80.1

24011.4

80.1

0.999

0.021

43.6

13085.4

43.6

1.000

0.011

23.0

6854.9

22.8

1.008

0.000

0.0

65.6

0.1

Results of Linear Regression

R_c vs C_c

Slope

Intercept

R²

Previous

300.489600

0.845351

0.999970

Current

299.415300

25.330490

0.999985

C_i vs C_c

Current

1.000000

0.000001

0.999984

Average Correction Factor:

1.002

Previous Correction Factor:

1.000

Current Correction Factor:

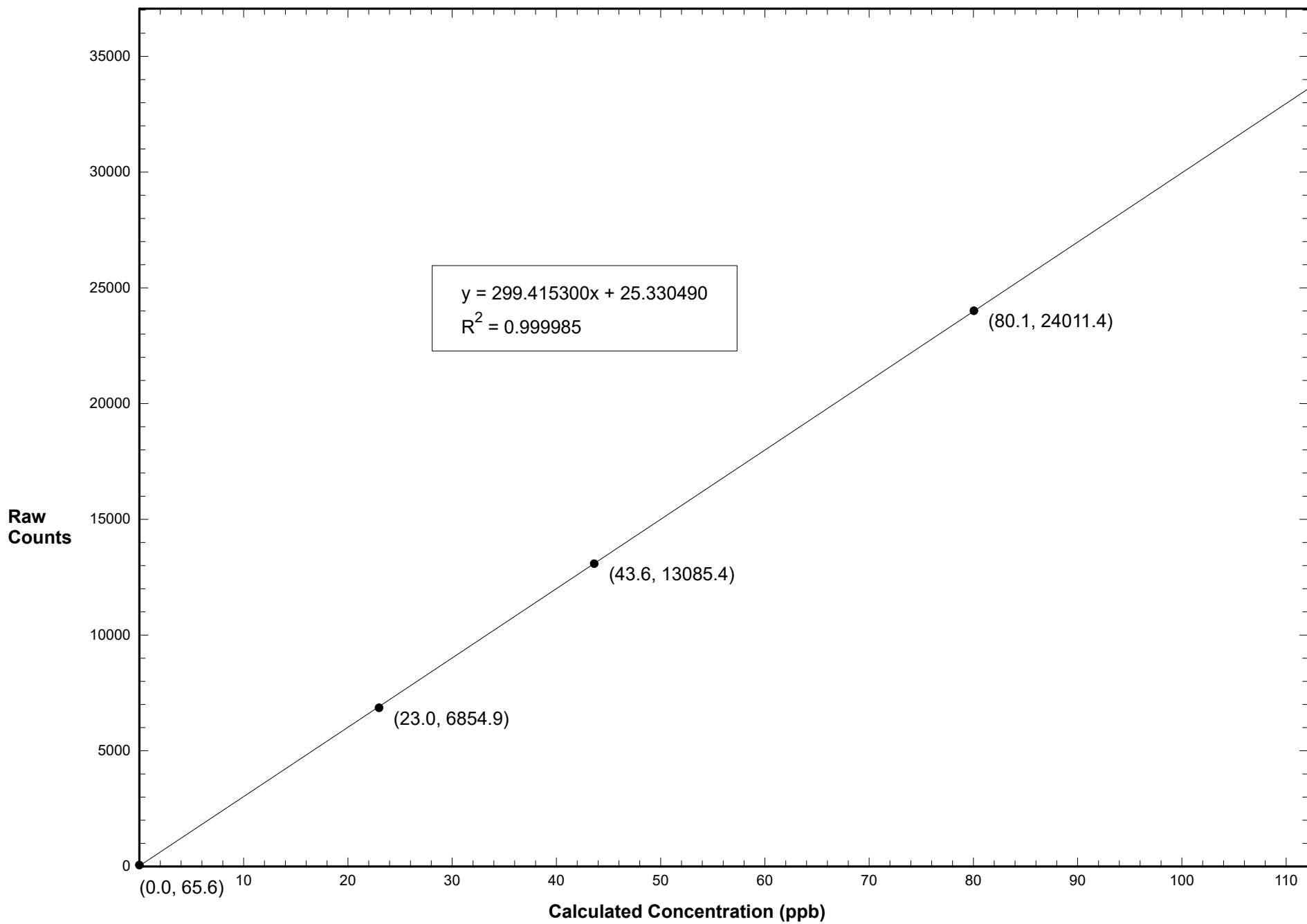
0.999

Percent Change of
Correction Factor:

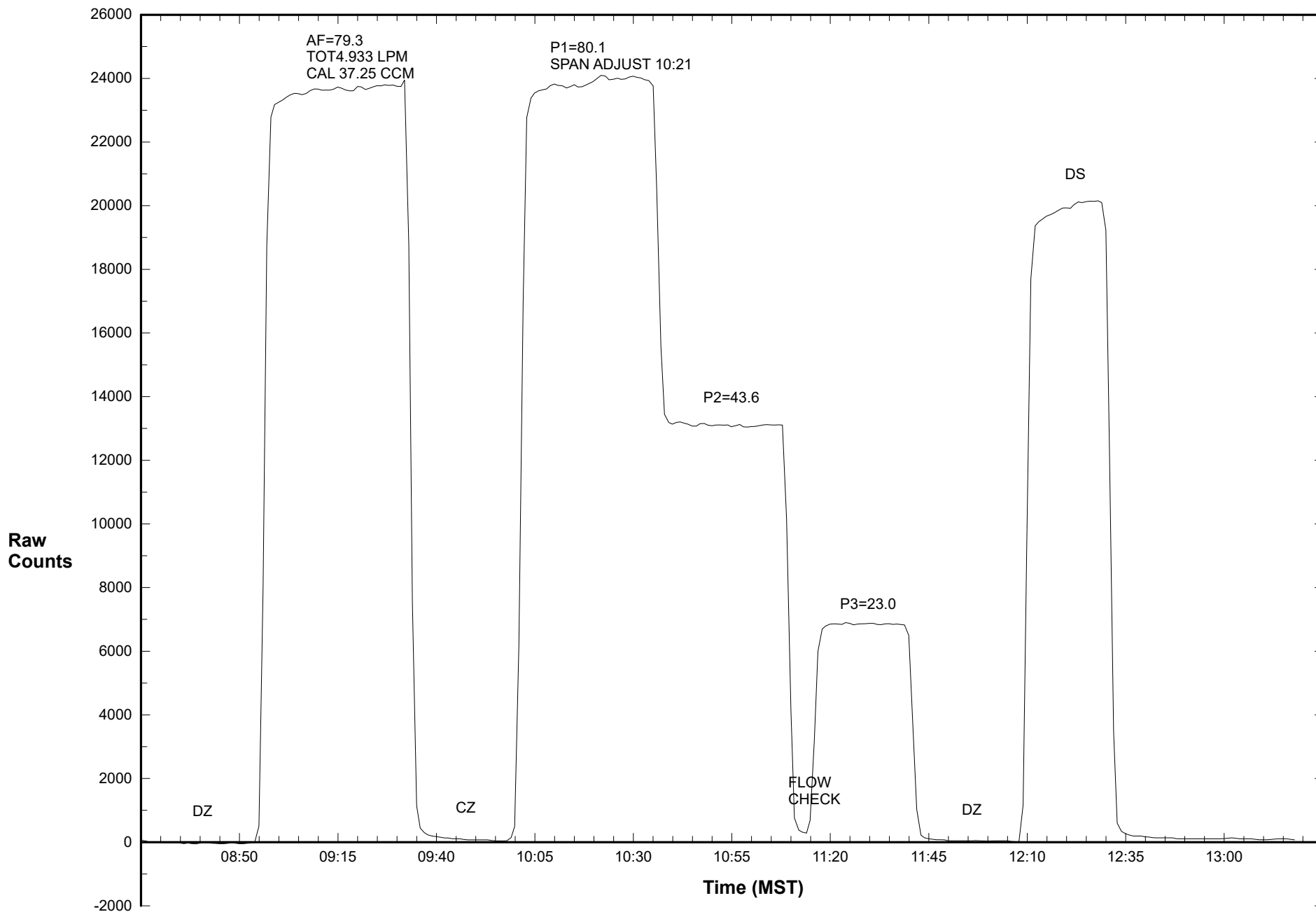
-0.1

Comments: SAMPLE FLOW = 0.340 LPM

Station 906 TRS September 13, 2017: Linear Regression



Station 906 TRS September 13, 2017: Calibration Graph



WEST CENTRAL AIRSHED SOCIETY

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

**AMS 906
HINTON
SEPTEMBER 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
September 2017

Maximum Value: 31.79 C on Sep 6 17:00		Maximum Daily Average: 18.11 C on Sep 6		Hours in Service: 720																							
Minimum Value: -1.1 C on Sep 16 08:00		Minimum Daily Average: 2.51 C on Sep 20		Hours of Data: 720																							
Maximum Diurnal Average: 16.48 C at hour 16		Minimum Diurnal Average: 4.64 C at hour 7		Hours of Missing Data: 0																							
Monthly Average: 10.089 C		Percentiles: P₁ = -0.2 P₁₀ = 2.2 Q₁ = 4.2 Median = 9.3 Q₃ = 14.6 P₉₀ = 19.4 P₉₉ = 29.0		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-Sep	9.1	8.1	8.3	9.3	9.2	9.1	9.0	9.4	10.4	11.6	12.2	15.3	17.2	17.4	17.6	19.8	20.7	20.7	18.5	17.0	15.3	13.7	12.0	11.1	13.42	20.73	
2-Sep	11.0	10.8	11.0	11.1	10.9	10.7	10.7	12.2	15.4	18.6	20.3	22.6	25.6	28.1	25.0	21.3	17.6	15.2	14.1	13.7	13.6	13.3	13.0	12.4	15.76	28.12	
3-Sep	12.1	12.0	11.3	10.4	10.2	9.7	9.2	9.2	10.0	10.9	12.0	13.5	15.4	17.3	17.3	17.6	18.6	19.6	16.8	14.5	12.3	10.3	9.0	7.9	12.79	19.56	
4-Sep	6.9	6.4	6.2	6.1	5.4	5.2	5.5	5.8	8.3	11.9	15.1	17.5	20.5	21.2	22.1	22.9	23.4	23.1	21.1	17.9	15.7	13.2	11.1	9.3	13.41	23.43	
5-Sep	8.1	6.8	5.7	4.8	4.2	3.8	3.5	4.6	9.6	14.6	18.4	21.3	23.4	26.2	28.2	29.0	29.8	29.0	25.8	22.1	18.0	15.2	12.8	11.2	15.67	29.79	
6-Sep	9.9	8.6	7.8	7.1	6.4	5.5	5.3	6.8	12.4	17.7	21.3	24.3	26.4	28.6	29.9	31.1	31.8	30.7	27.8	24.1	21.5	19.0	16.4	14.2	18.11	31.79	
7-Sep	12.1	10.6	9.5	8.9	8.3	7.7	7.6	8.1	11.3	15.1	19.3	22.3	23.8	24.1	24.1	24.3	24.4	23.6	22.0	19.2	17.0	15.4	14.1	13.1	16.08	24.42	
8-Sep	12.2	11.6	11.0	10.5	10.0	10.1	10.1	10.5	12.1	14.5	16.5	16.6	16.5	17.8	17.6	17.4	16.0	15.3	14.8	13.7	13.4	13.2	12.8	12.8	13.64	17.83	
9-Sep	12.5	12.3	11.8	11.5	11.4	11.5	11.3	11.4	12.0	12.8	13.6	14.5	16.2	18.1	19.4	20.3	18.8	17.2	15.0	13.1	11.8	11.0	9.0	8.5	13.54	20.34	
10-Sep	7.6	6.4	5.6	5.0	4.6	4.0	3.8	6.1	11.3	14.7	16.3	16.8	16.7	16.9	17.8	17.4	17.6	16.8	15.7	15.0	14.6	15.1	15.3	15.3	12.36	17.82	
11-Sep	15.6	16.5	16.4	16.1	13.6	11.5	10.2	9.5	12.3	16.9	21.9	22.8	23.6	23.9	24.0	24.3	24.4	22.0	21.0	19.2	17.8	17.2	14.0	13.3	17.83	24.43	
12-Sep	12.1	12.8	12.8	12.0	11.4	11.1	10.5	10.1	10.4	11.8	12.6	12.9	13.4	13.6	13.7	13.7	10.9	10.7	9.9	9.5	8.9	7.3	6.7	6.2	11.05	13.67	
13-Sep	6.1	5.9	5.7	5.6	5.0	4.6	4.1	3.8	2.7	2.6	3.5	4.5	5.6	6.9	7.9	6.1	6.6	6.9	6.4	5.7	5.3	4.6	4.5	4.2	5.20	7.92	
14-Sep	3.3	2.8	2.8	2.1	1.3	0.8	0.8	1.1	2.5	4.1	6.8	9.5	10.2	7.5	8.9	9.7	10.8	11.4	8.3	5.6	4.1	3.3	3.3	1.9	5.12	11.36	
15-Sep	0.8	0.7	0.8	0.3	0.2	0.5	0.9	0.9	1.2	1.7	3.2	5.8	9.2	11.6	12.9	13.8	14.1	13.6	11.9	9.0	7.7	6.6	4.4	2.4	5.59	14.09	
16-Sep	0.9	-0.2	-0.7	-0.9	-1.1	-1.1	-1.0	-1.1	0.0	3.9	9.0	12.2	15.2	16.6	16.5	17.2	15.9	14.4	12.1	11.0	9.6	7.8	6.3	5.4	6.99	17.24	
17-Sep	4.8	3.3	2.2	1.4	1.0	1.0	0.9	2.2	6.2	12.1	13.9	15.1	17.2	18.3	18.2	19.5	17.6	16.7	15.6	13.0	11.2	9.9	9.0	8.1	9.92	19.46	
18-Sep	7.2	7.0	7.0	6.3	5.1	4.0	3.4	4.0	4.2	5.5	8.0	8.3	8.3	6.3	5.6	5.7	5.7	6.2	5.7	4.8	4.2	3.8	3.1	2.8	5.50	8.28	
19-Sep	2.3	1.7	1.6	1.0	0.3	-0.2	-0.3	-0.1	0.9	2.5	3.2	4.3	5.3	6.1	5.4	3.8	3.5	3.8	3.8	3.7	3.6	3.4	3.1	3.0	2.74	6.09	
20-Sep	2.7	2.6	2.6	2.7	2.7	2.7	2.7	2.5	2.2	2.3	2.4	2.5	2.7	2.9	2.7	2.8	2.9	2.6	2.5	2.4	2.2	1.9	2.0	2.1	2.51	2.92	
21-Sep	2.2	2.2	2.1	2.1	2.0	2.2	2.7	3.0	3.1	3.6	3.7	3.9	3.6	4.0	4.5	5.1	5.3	4.9	4.3	4.1	3.5	3.3	3.0	2.7	3.38	5.30	
22-Sep	2.7	2.6	2.5	2.3	2.3	2.0	2.0	1.7	1.8	2.5	3.6	6.8	8.1	9.4	10.9	10.3	8.7	7.7	6.5	5.0	3.4	2.2	1.4	0.9	4.48	10.91	
23-Sep	1.4	1.6	1.7	1.9	1.9	1.7	1.9	2.3	3.0	4.1	5.2	6.0	7.2	8.7	9.9	10.5	10.6	9.9	9.1	7.9	7.4	6.3	5.1	4.0	5.38	10.64	
24-Sep	3.8	3.3	2.1	1.1	0.8	1.3	1.7	2.6	4.2	6.8	9.5	12.1	14.2	14.6	15.0	14.5	14.0	13.4	12.9	12.4	10.0	8.3	6.5	5.2	7.93	15.01	
25-Sep	4.8	4.6	4.8	4.9	5.0	4.6	4.4	4.2	6.0	9.2	12.3	13.1	14.3	16.3	17.2	17.6	17.5	16.8	14.6	11.7	9.3	7.7	6.3	5.1	9.67	17.59	
26-Sep	4.2	3.4	3.2	3.5	4.2	4.4	4.5	5.2	7.3	11.9	14.1	16.5	17.8	19.3	19.1	19.2	18.9	18.6	16.2	14.9	12.9	11.4	9.9	8.2	11.20	19.26	
27-Sep	7.1	6.1	5.2	4.7	4.4	4.2	4.0	3.9	6.8	10.2	14.5	17.0	19.2	20.1	21.0	21.1	20.5	19.4	15.6	12.7	10.5	8.8	7.5	6.3	11.28	21.06	
28-Sep	5.5	4.7	3.7	2.7	1.9	1.3	0.9	0.7	3.8	9.9	13.6	16.6	19.4	21.7	23.1	23.7	23.3	21.4	18.2	14.0	11.2	9.1	7.4	5.9	10.99	23.65	
29-Sep	4.8	4.0	3.4	2.9	2.4	1.9	1.6	1.7	5.3	11.5	16.1	19.4	21.7	22.9	23.5	23.0	22.6	21.3	18.6	14.1	11.6	10.0	8.8	8.4	11.73	23.54	
30-Sep	8.9	9.6	10.0	9.7	8.6	8.7	7.6	7.0	8.0	11.3	14.0	15.1	15.2	11.4	9.1	11.5	11.5	11.0	10.3	8.4	7.3	4.1	4.8	2.3	9.40	15.21	
		6.75	6.29	5.94	5.56	5.12	4.82	4.64	4.97	6.83	9.55	11.86	13.64	15.10	15.93	16.27	16.48	16.13	15.47	13.83	11.98	10.50	9.21	8.09	7.14	Diurnal Average	
		15.56	16.48	16.39	16.13	13.63	11.47	11.34	12.20	15.42	18.59	21.87	24.27	26.44	28.58	29.91	31.08	31.79	30.67	27.75	24.11	21.52	19.01	16.37	15.32	Diurnal Maximum	



WCAS - Hinton Summary of Hourly Averages

Wind Speed (WS) - kph September 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	0.4	0.8	0.6	0.2	0.7	0.8	1.4	1.0	1.1	0.3	0.6	2.4	3.8	2.7	1.6	2.1	2.5	2.2	0.4	0.4	1.3	1.3	1.2	0.9	0.30	3.75	
Dir	SSW	ENE	ENE	SW	E	NE	NE	NE	ENE	N	ENE	NNE	ESE	SSE	WSW	WSW	WSW	WNW	NW	E	ESE	E	E	NE	E	ESE	
2 Spd	0.8	1.5	1.5	2.3	1.1	1.6	0.4	0.6	0.2	3.9	4.8	5.4	3.2	12.4	2.8	5.5	1.8	4.7	3.9	0.9	1.8	0.8	2.4	0.9	0.77	12.43	
Dir	NE	ENE	NE	ENE	ENE	ENE	N	NW	SSE	ENE	ENE	NE	NE	SW	NE	N	N	SSW	SW	WNW	ENE	NE	ENE	NE	ENE	SW	
3 Spd	0.5	0.9	0.1	0.6	0.4	0.9	1.0	0.9	0.8	1.0	1.0	0.4	1.1	0.7	1.6	0.6	3.6	1.3	4.6	0.9	1.0	0.5	0.6	0.5	0.22	4.63	
Dir	SW	S	W	NW	NE	NNW	N	NE	NE	N	N	E	E	WSW	WNW	SSE	SSW	SSW	ENE	E	E	ENE	ENE	SSW	NE	ENE	
4 Spd	0.2	0.2	0.7	0.7	0.6	0.5	0.6	0.6	1.3	1.2	1.2	0.8	3.0	4.1	3.2	3.3	3.4	4.1	4.0	2.3	3.2	0.8	0.4	0.1	1.25	4.15	
Dir	NW	NW	WNW	ESE	SE	NW	NW	NW	NNW	WNW	ENE	ENE	E	E	E	NE	NE	E	ENE	NE	ENE	NE	ENE	NE	ENE	E	
5 Spd	0.3	0.1	0.2	0.3	0.6	1.3	1.2	0.7	1.5	2.3	3.0	3.5	4.1	2.8	2.4	2.9	2.1	2.7	2.5	2.1	0.9	0.7	0.2	0.7	0.72	4.10	
Dir	W	NNE	SW	SW	W	WSW	WSW	WNW	W	W	WSW	SSW	S	SSW	SW	S	SSE	NE	NE	E	ENE	E	W	SW	SSW	S	
6 Spd	0.6	0.9	2.0	2.6	3.1	1.2	2.3	0.9	1.0	2.1	2.5	2.6	3.7	2.4	3.2	1.3	1.8	4.2	3.7	2.6	2.1	0.6	0.9	1.8	0.56	4.22	
Dir	SW	WSW	W	WSW	WSW	WSW	WSW	WNW	W	W	WSW	WSW	SSW	SSW	S	E	NNE	ENE	ENE	E	ESE	E	E	W	SW	ENE	
7 Spd	0.2	0.2	0.9	2.2	1.3	1.7	0.7	0.5	0.2	0.8	2.0	2.4	2.5	2.1	1.6	1.0	1.0	0.4	0.5	0.4	1.2	0.9	0.2	0.4	0.74	2.55	
Dir	E	NNW	WSW	WSW	W	W	WSW	WNW	W	W	W	WNW	W	W	WSW	N	ENE	NNE	E	SE	S	SSW	SW	W	W	W	
8 Spd	0.2	0.5	0.8	0.6	0.5	0.1	1.2	0.7	1.5	0.5	0.5	2.1	1.9	3.4	2.4	2.8	2.3	2.1	0.4	2.0	0.3	2.1	1.1	1.1	0.68	3.42	
Dir	N	ESE	W	SW	WSW	NNW	WSW	W	WSW	W	NNW	ENE	NE	ENE	NNE	NE	NE	ENE	ENE	ENE	SSW	NE	ENE	S	NE	ENE	
9 Spd	0.4	0.6	0.3	0.5	0.9	0.2	0.3	1.1	1.4	1.7	0.8	1.7	1.4	3.1	0.8	4.6	2.9	3.4	0.8	0.9	1.4	3.0	2.8	0.5	0.37	4.59	
Dir	NNW	WSW	ENE	W	NNW	NNW	SSE	E	SSW	SE	NW	SW	NNE	E	W	WSW	NNW	NNE	N	NE	W	WSW	WSW	W	W	WSW	
10 Spd	0.2	0.7	0.7	0.5	0.8	1.6	2.8	1.6	1.6	6.2	6.9	11.0	8.1	13.1	10.0	13.3	10.9	7.9	10.0	10.7	5.6	5.6	4.4	4.6	5.15	13.28	
Dir	NNW	SSE	SW	SSW	ENE	ENE	NE	E	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	SW	WSW	SW	SW	SW
11 Spd	4.7	6.6	4.8	5.8	1.8	1.8	1.2	1.2	0.6	0.8	10.7	10.8	12.1	10.1	7.1	4.6	5.3	3.1	3.0	2.6	1.9	3.2	1.5	2.4	3.58	12.09	
Dir	SW	SW	SW	SSW	ESE	E	E	ENE	E	SW	SW	SW	SW	SW	WSW	W	WSW	W	WSW	WNW	W	SW	ESE	SE	SW	SW	
12 Spd	0.9	1.4	1.2	2.8	3.1	3.2	0.8	0.9	0.6	1.4	3.4	3.4	4.8	5.7	6.0	6.7	2.3	1.6	1.5	1.7	3.7	3.7	2.2	1.3	1.83	6.70	
Dir	ESE	ENE	S	SSW	S	SSW	E	ENE	ENE	NE	NE	E	E	E	E	ESE	NNE	ENE	ENE	ENE	NE	ENE	NE	NE	E	ESE	
13 Spd	1.8	0.6	1.7	2.5	1.7	1.3	0.6	2.2	4.0	3.5	4.9	7.4	7.9	7.4	8.7	1.8	4.6	3.2	1.2	1.1	1.8	1.6	3.5	1.6	3.02	8.68	
Dir	SW	WSW	SW	SW	SW	ENE	S	SW	SW	SW	SSW	SSW	SW	SW	WSW	SSW	SW	WSW	WSW	SW	WSW	SW	SW	SW	SW	SW	SW
14 Spd	0.8	0.6	0.7	2.0	1.4	1.0	1.1	1.2	2.0	2.7	2.1	2.1	2.3	0.5	0.7	3.4	1.7	2.7	5.8	1.7	0.3	1.1	1.5	0.2	0.74	5.80	
Dir	SW	W	WSW	SSW	SSW	W	SW	WNW	WNW	WNW	W	SW	WSW	SSW	WSW	SSW	WSW	N	NE	NNE	SSE	WSW	SW	NE	W	NE	
15 Spd	0.5	0.1	0.4	1.1	0.9	0.9	0.7	1.1	1.2	1.2	0.8	1.4	1.6	2.5	2.8	2.3	1.0	5.7	5.2	3.3	2.8	0.8	0.6	1.5	0.64	5.67	
Dir	E	NNE	NNE	NW	NNW	NNW	NNW	NNW	WNW	NW	NNW	WSW	E	NNE	NNW	N	SW	SE	ESE	ENE	E	ENE	NE	W	NE	SE	
16 Spd	0.7	0.3	0.3	0.8	0.6	0.0	0.4	0.7	0.7	1.4	2.0	1.7	1.9	5.3	7.5	1.2	5.1	4.1	2.5	2.4	1.9	1.7	0.4	0.3	0.22	7.51	
Dir	WNW	N	NE	NNE	E	NNE	WNW	WNW	NNE	WNW	SW	WSW	SW	SSW	S	E	NE	NE	NE	NE	NNE	ENE	NE	NW	E	S	
17 Spd	0.2	0.4	0.7	0.5	0.3	0.8	0.6	0.2	2.0	2.5	4.7	2.0	2.9	2.4	4.4	3.7	2.0	2.1	1.3	0.4	0.2	1.0	0.2	1.35	4.68		
Dir	NNE	E	ENE	W	W	W	WNW	S	SW	WSW	WNW	SSW	SW	WSW	W	SW	SW	SW	WSW	SSW	W	W	N	W	WSW	SSW	
18 Spd	0.2	0.6	0.8	0.5	0.8	0.2	0.8	1.3	0.5	0.1	1.6	2.1	1.3	2.9	3.6	0.4	2.1	0.8	1.1	0.6	0.5	1.8	1.1	0.6	0.35	3.59	
Dir	NW	NNE	ENE	NNW	ESE	NNE	SSE	W	WNW	E	NE	ENE	WNW	WNW	SSW	NNW	SW	S	SW	SW	WSW	S	SW	W	SW	SSW	
19 Spd	1.1	0.9	1.9	1.3	0.5	0.3	0.6	0.6	1.3	1.6	1.9	3.9	1.8	1.9	4.4	3.3	2.3	2.7	3.1	2.0	1.6	0.9	1.4	1.4	1.45	4.43	
Dir	WSW	WSW	SW	WSW	W	W	NW	W	W	W	WSW	SW	WSW	NNW	NNW	NW	NW	WNW	W	WNW	WSW	WSW	WSW	W	W	NNW	
20 Spd	1.6	1.4	1.3	0.4	0.7	0.5	1.0	4.6	6.4	3.9	6.0	6.0	5.4	4.4	4.3	3.8	2.7	3.1	3.7	4.0	5.6	5.9	5.4	2.0	3.38	6.42	
Dir	W	WSW	WNW	W	W	W	W	SW	SW	SW	SW	SSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	SSW	WSW	SW	SW	
21 Spd	3.3	4.1	2.6	5.7	3.9	4.8	2.7	4.9	3.8	1.9	2.0	0.9	3.3	1.3	1.1	1.0	1.2	0.2	1.3	0.8	1.1	1.7	0.4	0.6	2.08	5.68	
Dir	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	W	SW	W	NNW	SW	W	NW	WSW	SW	SW	SW	NNE	NNE	SW	SW	SW
22 Spd	0.6	0.5	0.3	0.2	0.4	0.3	2.6	0.6	1.2	1.3	0.5	0.8	1.0	3.0	3.2	4.1	10.6	2.9	1.7	1.2	0.5	1.7	0.6	0.8	0.80	10.56	
Dir	ENE	ENE	NE	N	NW	NNW	SSW	W	NW	NNW	ENE	NNE	NE	NNE	ENE	S	SE	ENE	NE	E	E	ENE	NE	E	E	SE	



WCAS - Hinton
Summary of Hourly Averages

Wind Speed (WS) - kph
September 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	0.3	0.5	0.8	0.2	2.1	0.3	0.6	0.5	0.9	1.6	1.3	1.0	1.8	1.7	1.6	1.3	1.2	0.7	2.3	0.9	0.3	2.1	1.7	2.4	0.65	2.44	
Dir	SSW	S	SSW	WNW	SW	W	W	WNW	W	WNW	WNW	W	W	W	W	W	NNW	NNE	ENE	ENE	NE	SW	SW	SW	WSW	SW	
24 Spd	0.4	1.4	1.6	0.5	0.7	1.6	0.7	0.3	0.3	0.9	2.0	6.8	7.8	12.7	10.7	10.1	6.0	4.7	4.3	3.9	0.5	0.5	0.2	0.5	3.02	12.73	
Dir	WSW	WSW	SW	SW	WSW	W	WNW	NNW	NE	N	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	NW	ENE	ENE	ENE	SW	SW	
25 Spd	0.4	0.5	0.6	0.1	0.4	0.3	0.5	0.3	0.4	0.5	8.2	7.0	8.1	8.8	4.0	7.6	6.8	5.8	4.0	0.9	0.2	0.2	0.2	0.1	2.42	8.81	
Dir	ENE	NE	NE	SE	ENE	ENE	ESE	SSE	ENE	NNE	SW	SW	SW	SW	SW	SW	SW	SW	SW	SSW	NW	WSW	SE	ENE	SW	SW	
26 Spd	0.2	0.4	0.4	0.1	0.6	1.7	1.3	1.5	1.0	2.2	3.5	5.6	8.7	4.2	3.6	2.9	5.4	5.6	0.7	0.8	1.2	0.4	0.3	0.1	2.02	8.67	
Dir	NNE	WSW	SW	N	SW	SW	SW	SW	WNW	W	WSW	SW	SSW	WSW	SW	WSW	SW	SW	W	SW	S	SSE	WSW	N	SW	SSW	
27 Spd	0.6	0.6	0.3	0.5	0.1	0.6	0.1	0.1	1.7	2.5	2.6	4.6	5.0	7.5	6.5	6.2	5.6	0.6	0.8	0.1	0.1	0.8	0.9	1.2	1.74	7.55	
Dir	SSW	SE	ESE	ESE	W	SE	SW	E	NW	WSW	W	SW	SW	SSW	SSW	SSW	SSW	NNE	SW	SE	SW	WSW	SSW	SW	SSW		
28 Spd	1.4	1.3	0.4	0.2	0.5	0.6	1.2	0.4	0.5	1.1	2.9	3.6	2.9	3.2	1.3	1.0	1.7	1.6	0.8	1.2	0.7	1.3	0.5	0.1	0.63	3.58	
Dir	WSW	WSW	SW	W	WNW	W	W	WNW	WNW	WNW	WNW	SW	W	SW	NNW	ESE	NE	NE	ENE	E	SW	SW	SSW	ESE	W	SW	
29 Spd	0.6	0.7	0.4	0.7	0.2	0.7	0.3	0.2	0.3	1.2	0.9	6.1	7.5	9.5	6.4	6.9	5.6	4.0	0.4	0.3	0.4	0.8	1.0	1.0	1.85	9.50	
Dir	E	SE	ENE	SE	ESE	ENE	E	SE	ENE	ENE	NE	SSW	SSW	SW	SW	SW	SW	SW	SSW	S	SW	SSE	W	WSW	SW	SW	
30 Spd	1.9	1.9	2.8	0.4	0.8	2.1	0.7	1.2	1.9	0.9	1.1	0.5	2.3	4.0	4.0	4.5	1.6	0.1	0.5	3.0	1.9	2.1	4.4	2.4	0.85	4.54	
Dir	SSW	WNW	SW	WSW	SE	S	WSW	NE	ENE	SSW	ENE	N	ENE	W	S	SSW	NW	WNW	NE	S	N	S	SSW	SW	SSW	SSW	
Spd	0.52	0.45	0.60	0.77	0.45	0.33	0.34	0.40	0.71	0.97	1.58	2.50	2.51	3.29	2.23	2.12	1.64	0.58	0.23	0.32	0.21	0.62	0.59	0.55	Diurnal Average		
Dir	SW	SW	SW	SW	SW	WSW	WSW	WSW	WSW	W	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SSE	SSW	S	SSW	SW	SW	Diurnal Maximum	
Spd	4.71	6.59	4.83	5.80	3.85	4.83	2.75	4.94	6.42	6.18	10.69	10.96	12.09	13.11	10.67	13.28	10.90	7.88	10.01	10.69	5.63	5.88	5.42	4.56	Diurnal Maximum		
Dir	232.28	229.92	227.76	204.56	222.09	222.77	43.65	217.76	216.75	238.24	227.31	218.78	229.77	218.02	223.17	223.75	224.80	232.22	223.73	228.98	219.22	205.99	211.73	233.53	Diurnal Maximum		
Maximum Speed Value: 13.3 kph on Sep 10 16:00 Maximum Daily Speed Average: 5.15 kph on Sep 10 Maximum Diurnal Speed Average: 3.29 kph at hour 14																					Minimum Speed Value: 0.0 kph on Sep 16 06:00 Minimum Daily Speed Average: 0.22 kph on Sep 7 Minimum Diurnal Speed Average: 0.21 kph at hour 21		Hours in Service: 720 Hours of Data: 720 Hours of Missing Data: 0				
Monthly Average Velocity: 0.985 kph 225.25 deg All monthly, daily, and diurnal averages have been calculated using vector methods																					Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.6 Median = 1.3 Q ₃ = 2.8 P ₉₀ = 5.2 P ₉₉ = 10.9		Percent Operational Time: 100.0				
Frequency Distribution																											
		Speed Range (kph)																									
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																				
North	37	1	0	0	0	0	38																				
NorthEast	112	3	0	0	0	0	115																				
East	80	3	0	0	0	0	83																				
SouthEast	28	3	0	0	0	0	31																				
South	35	1	0	0	0	0	36																				
SouthWest	162	58	5	0	0	0	225																				
West	134	0	0	0	0	0	134																				
NorthWest	58	0	0	0	0	0	58																				
Total	646	69	5	0	0	0	720																				



WCAS - Hinton
Summary of Hourly Averages

Relative Humidity (RH) - %
September 2017

Maximum Value: 97.87 % on Sep 16 08:00																						Maximum Daily Average: 94.53 % on Sep 20																						Hours in Service: 720					
Minimum Value: 7.3 % on Sep 5 16:00																						Minimum Daily Average: 40.59 % on Sep 11																						Hours of Data: 720					
Maximum Diurnal Average: 90.81 % at hour 7																						Minimum Diurnal Average: 43.67 % at hour 16																						Hours of Missing Data: 0					
Monthly Average: 70.739 %																						Percentiles: P ₁ = 12.5 P ₁₀ = 30.1 Q ₁ = 50.5 Median = 79.4 Q ₃ = 93.6 P ₉₀ = 96.0 P ₉₉ = 97.6																						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-Sep	66.0	70.2	70.1	67.1	67.2	70.5	71.8	70.9	67.6	62.7	61.0	49.9	38.6	36.6	39.3	30.8	29.9	28.1	35.8	42.2	49.8	57.5	64.6	68.5	54.86	71.76																							
2-Sep	68.2	68.1	66.9	65.8	67.4	69.3	70.6	64.4	47.6	35.6	34.2	31.8	26.1	18.0	29.1	40.0	58.1	75.5	88.6	91.8	92.7	93.1	93.4	93.1	62.06	93.43																							
3-Sep	93.4	93.6	93.7	93.9	94.2	94.6	94.8	95.0	94.8	94.6	93.8	81.4	63.3	46.5	50.5	45.0	41.7	39.6	53.3	65.0	75.1	83.8	89.8	91.8	77.65	95.04																							
4-Sep	93.1	93.8	94.3	94.1	94.4	94.9	95.1	95.2	86.5	71.5	55.6	47.5	36.1	32.7	29.2	27.2	26.1	26.7	33.2	42.0	50.5	61.0	70.2	77.7	63.69	95.23																							
5-Sep	83.6	89.8	91.8	93.0	94.1	94.7	95.3	94.8	76.5	50.6	35.9	27.3	21.9	16.2	8.9	7.3	7.7	10.4	18.4	30.2	46.2	55.5	64.9	71.3	53.60	95.26																							
6-Sep	71.8	76.8	80.7	82.8	83.9	88.6	89.2	85.0	61.9	40.7	29.2	23.0	19.2	15.0	10.9	10.2	10.9	13.0	20.5	26.9	32.0	40.8	51.5	61.4	46.92	89.19																							
7-Sep	69.9	75.8	79.4	80.6	81.7	83.2	83.5	81.7	72.9	58.1	43.5	36.1	30.5	31.0	31.7	34.0	35.9	38.8	51.2	64.9	69.2	75.3	80.7	85.3	61.45	85.27																							
8-Sep	87.9	89.1	90.6	90.8	91.6	91.5	91.1	89.8	86.4	78.1	71.3	72.4	75.9	64.0	60.7	60.8	72.1	76.4	79.5	91.1	93.4	93.8	94.1	93.6	82.75	94.07																							
9-Sep	93.6	94.0	94.1	94.3	94.4	94.5	94.6	94.5	94.4	92.3	92.4	84.6	73.9	63.4	55.9	41.2	50.9	55.5	64.5	83.0	88.5	88.5	88.6	91.5	81.79	94.59																							
10-Sep	92.2	94.4	95.2	95.7	95.9	96.1	96.3	93.2	65.4	36.7	28.7	25.2	25.3	23.8	22.8	22.8	22.8	25.5	28.1	32.1	35.5	34.9	36.2	37.2	52.58	96.35																							
11-Sep	36.8	34.2	34.5	34.4	46.5	57.9	63.4	69.1	61.6	46.4	24.1	23.1	21.9	21.8	22.9	22.8	22.7	27.7	30.6	36.5	44.4	47.8	70.3	72.6	40.59	72.57																							
12-Sep	76.4	58.8	50.5	50.5	55.2	56.0	61.3	64.9	66.3	59.2	50.4	49.6	49.1	46.6	46.9	47.8	80.0	79.3	80.3	90.3	88.2	91.1	92.3	93.5	66.02	93.50																							
13-Sep	94.3	94.7	95.0	95.0	93.7	92.6	94.1	93.6	94.3	94.4	92.5	90.7	88.1	84.1	75.5	85.2	79.7	81.3	89.3	92.6	93.9	94.6	94.7	93.0	90.71	95.04																							
14-Sep	94.7	95.9	96.2	96.6	97.1	97.3	97.5	97.6	97.2	95.3	83.1	67.3	58.2	79.9	67.7	59.6	56.4	51.2	65.7	80.4	91.2	93.2	92.4	94.2	83.58	97.58																							
15-Sep	95.5	96.3	96.6	97.0	97.3	97.4	97.5	97.5	97.5	97.4	96.2	81.1	60.6	47.1	41.0	35.9	30.8	28.7	39.7	55.8	61.0	64.3	75.7	86.5	73.93	97.50																							
16-Sep	92.6	94.4	95.1	96.0	96.9	97.5	97.7	97.9	97.7	85.2	49.5	39.1	31.0	23.6	21.2	26.3	38.6	41.3	49.6	54.4	61.4	68.9	76.2	82.2	67.27	97.87																							
17-Sep	86.2	91.3	92.7	94.2	95.2	95.9	96.1	96.1	80.9	45.7	41.2	33.8	26.3	23.1	23.7	18.3	21.7	26.4	26.9	37.9	47.5	59.0	63.3	69.9	58.05	96.13																							
18-Sep	74.6	76.7	77.0	80.6	85.0	90.1	92.0	89.9	88.5	83.0	71.5	70.9	74.7	85.2	85.5	89.1	91.2	83.7	82.4	88.6	93.2	93.3	94.4	95.2	84.85	95.18																							
19-Sep	95.7	96.2	96.6	96.9	97.2	97.4	97.6	97.6	97.6	97.0	93.4	87.1	81.0	74.3	68.8	85.6	94.2	92.9	88.1	87.3	88.9	90.4	92.0	93.4	91.13	97.63																							
20-Sep	94.7	95.9	96.4	96.9	97.1	97.2	97.4	97.2	95.7	95.4	94.8	94.3	94.1	92.6	92.1	91.4	92.6	93.2	92.4	92.6	92.8	94.4	93.6	94.2	94.53	97.35																							
21-Sep	92.9	93.4	94.7	93.8	95.0	94.7	92.9	91.6	93.4	90.2	90.8	93.4	91.2	91.8	88.3	78.2	76.5	79.1	77.7	78.4	90.6	90.8	93.8	95.4	89.52	95.37																							
22-Sep	95.8	96.2	96.4	96.7	97.0	97.1	97.2	97.3	97.5	96.8	88.2	69.6	64.3	59.5	53.2	51.8	61.0	69.1	76.4	83.7	92.8	95.1	96.2	97.0	84.42	97.46																							
23-Sep	97.5	97.6	97.8	97.8	97.7	97.5	97.5	97.5	97.1	92.3	85.1	81.8	74.4	65.2	59.1	56.3	58.7	62.6	68.9	77.1	82.2	84.7	86.4	91.6	83.52	97.80																							
24-Sep	92.2	93.2	95.0	96.3	97.0	97.2	97.2	97.1	96.7	90.1	72.4	54.5	46.9	44.6	43.7	45.9	49.1	51.9	54.5	56.2	69.3	78.7	89.0	92.8	75.06	97.21																							
25-Sep	94.0	94.4	93.9	94.1	93.9	94.6	95.3	95.6	94.2	82.9	58.5	56.3	51.8	43.7	40.9	38.4	38.6	41.6	49.3	62.7	73.9	80.5	87.7	92.0	72.87	95.60																							
26-Sep	93.6	94.9	95.7	95.8	95.3	94.9	94.7	94.0	91.0	67.1	55.5	45.2	37.3	32.3	32.5	32.2	31.1	31.1	42.8	48.8	57.2	64.7	72.1	79.2	65.80	95.80																							
27-Sep	83.7	89.2	91.8	93.0	93.2	94.1	94.2	95.0	90.5	71.6	52.1	43.6	35.9	29.2	26.7	26.9	29.7	36.7	56.4	70.0	76.6	80.9	84.1	89.2	68.09	94.99																							
28-Sep	91.9	93.2	94.4	95.2	96.0	96.6	97.1	97.4	94.3	69.2	52.2	38.3	29.8	23.3	20.2	19.5	23.8	30.5	45.8	63.9	74.0	79.8	84.1	91.0	66.72	97.41																							
29-Sep	93.1	93.9	93.3	93.8	94.6	95.4	95.9	96.2	86.4	60.6	45.7	30.2	23.7	19.9	18.7	18.0	18.8	21.6	30.2	49.8	59.1	66.2	72.0	74.3	60.49	96.24																							
30-Sep	69.4	71.2	83.4	78.2	87.5	81.6	85.5	90.8	84.6	66.3	49.5	43.8	41.0	61.5	70.4	61.2	68.4	66.9	62.3	51.5	50.5	69.2	57.4	72.4	67.68	90.76																							
																								85.52	86.58	87.47	87.70	89.10	90.03	90.81	90.61	85.23	73.57	63.08	55.76	49.74	46.54	44.60	43.67	47.32	49.55	56.08	64.25	70.72	75.72	80.06	84.03	Diurnal Average	
																								97.52	97.63	97.80	97.77	97.74	97.51	97.71	97.87	97.70	97.38	96.20	94.27	94.05	92.58	92.06	91.42	94.18	93.21	92.36	92.59	93.86	95.09	96.20	96.97	Diurnal Maximum	



WCAS - Hinton
Summary of Hourly Standard Deviations

Wind Speed (WS) - kph
September 2017

Maximum Value: 8.53 kph on Sep 11 13:00		Maximum Daily Average: 4.36 kph on Sep 10		Hours in Service: 720																							
Minimum Value: 0.2 kph on Sep 17 01:00		Minimum Daily Average: 1.16 kph on Sep 7		Hours of Data: 720																							
Maximum Diurnal Average: 3.49 kph at hour 14		Minimum Diurnal Average: 1.20 kph at hour 1		Hours of Missing Data: 0																							
Monthly Average: 1.962 kph		Percentiles: P ₁ = 0.4 P ₁₀ = 0.8 Q ₁ = 1.1 Median = 1.6 Q ₃ = 2.4 P ₉₀ = 3.5 P ₉₉ = 7.2		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-Sep	1.4	1.1	2.3	2.2	2.2	1.6	1.5	1.8	1.2	0.6	1.4	1.9	1.9	2.1	2.1	2.3	2.7	2.3	0.9	1.2	1.5	1.3	1.6	1.2	1.68	2.70	
2-Sep	1.6	1.7	1.4	2.0	1.7	1.6	1.5	1.4	2.0	2.4	2.6	3.0	4.4	8.2	4.7	4.6	2.6	3.3	2.8	1.8	1.9	1.6	2.2	1.5	2.59	8.21	
3-Sep	0.8	1.5	0.5	0.8	1.1	0.9	1.2	1.0	1.1	1.1	1.1	1.3	1.7	2.1	1.8	2.4	2.7	2.3	3.4	1.5	1.1	1.2	0.9	1.2	1.45	3.43	
4-Sep	0.9	1.1	1.0	1.5	1.1	0.8	0.7	0.9	1.1	1.3	1.8	2.2	3.5	3.2	3.0	2.8	2.7	2.6	2.8	2.5	2.2	1.1	0.6	1.0	1.77	3.49	
5-Sep	0.5	0.3	0.5	0.6	0.8	1.1	1.2	0.9	1.5	1.8	3.0	3.1	2.9	2.7	2.6	2.6	2.6	1.8	2.1	1.6	1.6	1.2	1.2	0.9	1.64	3.11	
6-Sep	1.0	1.1	1.5	1.2	1.5	1.3	1.3	1.0	1.3	1.7	2.5	2.7	2.8	2.2	2.6	2.0	1.9	2.5	2.6	1.8	1.9	1.9	1.8	1.6	1.83	2.77	
7-Sep	0.6	0.3	1.0	1.6	1.3	1.3	1.2	0.7	0.5	1.2	1.9	1.9	2.1	1.9	1.7	1.2	1.2	0.6	0.7	0.6	1.3	1.3	0.8	1.0	1.16	2.13	
8-Sep	0.7	2.0	1.3	1.1	1.0	1.2	1.4	1.2	1.4	1.3	0.9	1.3	1.6	2.6	1.8	2.1	1.4	1.8	2.0	2.1	1.7	1.7	1.6	1.6	1.53	2.61	
9-Sep	1.2	1.0	0.9	0.8	1.0	1.2	0.9	1.6	3.1	2.5	1.1	1.9	1.7	2.3	2.2	4.4	2.1	2.8	1.4	1.5	1.8	2.9	3.2	2.0	1.89	4.36	
10-Sep	1.7	1.7	1.8	1.4	1.4	1.3	1.9	1.5	3.8	5.3	5.7	6.4	6.4	7.1	7.6	7.9	6.8	6.2	5.8	6.5	4.6	4.6	3.2	3.9	4.36	7.95	
11-Sep	3.3	5.2	4.1	3.5	1.7	1.8	1.7	1.6	1.4	2.6	7.4	8.4	8.5	8.2	6.7	5.0	5.5	3.4	3.6	2.1	2.1	2.9	2.3	2.3	3.98	8.53	
12-Sep	1.9	2.3	2.6	2.2	2.2	2.2	1.5	1.4	1.1	1.4	2.6	2.6	2.8	2.9	3.3	3.4	1.9	1.7	2.1	2.4	3.2	2.6	2.4	1.8	2.28	3.44	
13-Sep	1.5	1.0	1.5	1.5	1.5	1.7	1.8	2.4	2.5	2.3	2.9	3.0	3.4	3.3	4.1	2.2	2.2	1.8	1.3	1.4	1.5	1.4	2.1	1.7	2.08	4.05	
14-Sep	1.2	0.8	0.9	1.4	1.4	1.2	1.7	1.2	1.6	1.7	2.2	2.6	2.0	2.4	2.1	2.1	2.1	2.1	4.5	2.4	1.2	1.2	1.5	0.6	1.75	4.54	
15-Sep	0.9	0.8	0.6	0.9	0.9	1.0	0.8	1.0	1.1	1.2	1.6	1.9	1.8	2.3	2.2	2.1	2.5	3.6	2.9	2.5	2.8	2.3	1.3	1.4	1.67	3.55	
16-Sep	1.2	0.9	0.7	0.9	1.1	0.7	0.8	0.9	0.9	1.3	2.0	2.1	2.2	3.9	3.0	3.0	3.4	2.8	2.0	1.9	1.8	1.6	0.7	0.7	1.69	3.85	
17-Sep	0.2	0.8	0.9	0.7	0.7	0.9	1.2	0.8	2.1	2.9	1.9	2.9	2.4	2.9	2.5	4.4	3.1	2.0	1.9	1.3	1.1	0.7	1.1	0.3	1.64	4.42	
18-Sep	0.8	0.9	1.3	1.0	1.3	1.0	1.7	1.6	0.9	1.2	1.3	1.5	1.8	2.2	2.5	2.0	3.3	2.6	1.5	1.1	1.0	1.9	1.1	0.9	1.51	3.32	
19-Sep	1.5	1.1	1.5	1.5	0.7	0.6	0.8	1.1	1.3	1.8	1.8	2.8	1.9	2.5	2.3	2.1	1.2	1.6	2.6	2.1	1.5	1.3	1.5	1.9	1.62	2.81	
20-Sep	1.8	1.8	1.3	0.8	0.9	0.8	1.3	3.1	2.6	2.8	2.9	2.5	2.5	2.6	2.6	2.4	2.6	2.6	2.9	2.1	2.8	2.8	2.9	1.9	2.22	3.05	
21-Sep	1.8	1.9	1.9	2.4	2.5	3.1	2.3	1.8	2.5	2.1	1.9	1.2	1.9	1.6	1.6	1.8	1.9	1.4	2.0	2.1	1.4	1.5	0.6	0.8	1.83	3.08	
22-Sep	0.8	0.8	0.5	0.4	0.5	0.5	1.3	1.1	1.0	1.2	1.4	1.8	2.0	2.2	2.3	3.2	4.1	2.8	2.0	1.3	0.9	1.4	0.8	1.0	1.47	4.05	
23-Sep	0.6	1.0	1.3	0.8	1.6	0.4	0.8	0.7	1.2	1.4	1.4	1.3	1.8	1.9	1.9	1.7	1.1	0.9	1.4	0.9	0.9	1.5	1.6	1.5	1.23	1.93	
24-Sep	0.7	1.2	1.4	0.8	0.9	1.3	1.0	0.6	0.6	1.0	2.7	4.4	4.8	5.8	5.5	5.1	3.5	2.7	2.9	2.1	1.1	0.9	0.8	0.7	2.18	5.83	
25-Sep	0.7	1.1	1.1	1.0	0.7	0.8	0.9	0.9	1.0	1.9	4.2	3.8	3.9	4.9	3.7	5.1	4.8	4.0	2.6	1.2	0.7	0.6	0.8	0.8	2.13	5.08	
26-Sep	0.7	0.9	0.9	0.7	1.1	1.5	1.4	1.9	1.2	1.7	2.6	3.6	5.0	4.3	4.3	2.9	3.7	3.9	1.3	1.0	1.2	0.7	0.8	0.5	1.98	5.00	
27-Sep	1.4	1.2	0.8	0.8	0.8	1.0	0.6	1.0	1.2	2.6	2.5	3.5	3.9	3.7	3.3	3.5	3.0	1.5	0.9	0.4	0.9	1.1	1.0	1.5	1.75	3.87	
28-Sep	1.1	1.3	0.7	0.4	0.7	0.8	1.2	0.7	0.8	1.6	1.8	3.3	2.9	2.7	1.7	1.6	1.5	1.6	1.1	1.7	1.2	1.3	1.8	1.1	1.44	3.29	
29-Sep	1.3	1.4	1.3	1.5	1.0	1.1	1.0	1.2	0.6	1.3	1.9	3.5	4.7	6.2	5.7	4.8	4.8	4.1	1.6	1.4	1.5	1.7	1.4	1.5	2.35	6.22	
30-Sep	2.3	1.5	2.7	1.2	1.8	1.6	1.3	1.6	2.1	1.5	2.0	1.7	1.9	3.7	3.9	4.3	1.5	1.2	1.9	2.9	2.4	2.0	1.9	2.2	2.12	4.30	
		1.20	1.31	1.34	1.25	1.24	1.21	1.26	1.29	1.49	1.83	2.36	2.80	3.03	3.49	3.17	3.16	2.81	2.48	2.26	1.85	1.69	1.68	1.51	1.37	Diurnal Average	
		3.27	5.23	4.06	3.49	2.51	3.08	2.26	3.05	3.78	5.32	7.38	8.43	8.53	8.24	7.59	7.95	6.80	6.20	5.83	6.55	4.62	4.55	3.23	3.90	Diurnal Maximum	



WCAS - Hinton
Summary of Hourly Standard Deviations

Wind Direction (WD) - deg
September 2017

Maximum Value: 100.75 deg on Sep 25 04:00																							Maximum Daily Average: 70.66 deg on Sep 29																							Hours in Service: 720	
Minimum Value: 16.8 deg on Sep 22 07:00																							Minimum Daily Average: 38.75 deg on Sep 20																							Hours of Data: 720	
Maximum Diurnal Average: 64.42 deg at hour 21																							Minimum Diurnal Average: 49.88 deg at hour 17																							Hours of Missing Data: 0	
Monthly Average: 57.452 deg																							Percentiles: P₁ = 19.3 P₁₀ = 32.4 Q₁ = 41.7 Median = 55.6 Q₃ = 72.2 P₉₀ = 86.3 P₉₉ = 97.8																							Hours of Calibration: 0	
																																														Percent Operational Time: 100.0	
Day	Hourly Period Ending At																								Daily Average	Daily Maximum																					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																							
1-Sep	89.2	76.0	80.9	87.1	90.7	85.0	53.8	76.3	56.5	62.1	91.7	51.3	42.4	55.4	75.9	67.2	56.9	47.1	67.4	71.8	55.3	49.0	63.6	77.7	67.93	91.65																					
2-Sep	65.0	54.3	54.5	56.2	67.2	54.8	97.4	83.7	95.6	40.1	37.1	33.8	81.1	40.4	86.4	51.0	73.8	66.3	36.2	82.8	61.4	82.0	46.9	70.0	63.26	97.37																					
3-Sep	66.6	96.7	93.3	37.6	78.0	32.4	62.6	37.7	45.0	48.9	53.6	75.9	64.8	90.7	55.4	97.4	57.7	78.8	33.6	55.4	51.5	58.8	64.6	89.8	63.61	97.39																					
4-Sep	90.8	92.0	51.0	80.4	85.9	80.7	41.3	52.3	59.6	62.5	78.9	89.0	69.3	55.9	65.8	52.0	47.3	37.4	43.3	59.8	48.9	43.4	37.5	89.7	63.12	92.02																					
5-Sep	61.7	66.8	69.1	59.8	34.2	29.5	41.2	59.1	45.1	48.9	60.6	56.8	58.6	71.9	67.8	71.3	84.5	36.9	43.9	47.1	64.6	66.4	98.9	77.2	59.24	98.90																					
6-Sep	79.9	38.7	16.9	17.3	22.6	26.9	17.4	53.7	55.7	46.6	61.1	61.4	56.5	67.2	58.1	80.4	47.9	34.2	30.6	35.5	56.4	84.6	83.9	41.7	48.97	84.60																					
7-Sep	78.5	51.0	30.3	28.6	40.0	35.7	48.7	41.2	70.0	60.2	48.6	43.5	44.1	48.0	46.1	55.4	42.9	29.2	38.5	56.2	61.6	61.2	95.1	56.8	50.47	95.12																					
8-Sep	76.7	79.5	56.8	66.0	73.7	92.9	52.5	72.5	59.8	78.0	69.3	29.1	53.0	47.6	42.1	44.2	41.4	41.5	81.0	67.4	96.3	51.8	70.8	75.6	63.31	96.28																					
9-Sep	76.7	58.5	85.8	42.7	36.0	70.9	84.7	58.8	85.0	83.4	53.9	68.6	75.4	57.7	95.9	56.5	40.7	47.7	65.2	77.9	55.7	45.9	52.9	84.8	65.06	95.88																					
10-Sep	86.2	90.3	82.5	94.7	76.0	57.9	54.9	50.2	99.1	49.8	52.9	35.6	48.1	30.9	46.9	34.6	37.9	45.3	31.5	34.5	48.0	50.4	45.2	41.6	55.21	99.13																					
11-Sep	38.4	42.8	46.2	30.9	66.4	69.6	80.0	79.2	78.0	98.2	44.1	46.6	43.5	47.1	58.9	60.1	58.9	58.3	63.5	40.6	62.0	54.0	71.6	52.7	57.99	98.15																					
12-Sep	76.7	91.8	83.7	60.6	34.8	37.7	75.3	51.7	74.3	55.0	47.7	55.9	48.5	32.4	37.0	35.2	43.5	59.5	79.7	46.3	53.0	41.5	55.4	63.5	55.85	91.78																					
13-Sep	43.7	51.3	30.9	30.9	63.3	66.3	85.5	50.2	35.1	40.8	34.0	21.0	23.5	23.7	29.1	67.7	25.1	23.6	45.4	64.0	36.6	35.0	32.5	46.4	41.90	85.45																					
14-Sep	64.2	40.7	38.6	46.6	52.1	54.7	57.4	38.7	42.2	34.4	60.9	59.6	55.6	94.7	85.6	37.2	59.4	47.9	39.1	43.3	94.0	67.1	63.8	73.1	56.29	94.71																					
15-Sep	48.1	95.9	46.9	18.9	40.4	29.8	36.1	31.4	34.0	57.2	92.1	79.2	74.4	61.0	55.7	65.7	86.9	42.4	34.4	46.1	69.7	95.7	83.2	36.8	56.74	95.86																					
16-Sep	71.4	81.9	60.9	44.9	66.3	93.8	84.8	60.7	56.6	59.1	57.9	64.8	69.6	53.8	29.3	84.4	42.2	42.8	49.7	50.4	67.8	44.7	59.7	82.5	61.67	93.77																					
17-Sep	50.9	64.6	57.9	44.7	67.0	59.7	71.5	99.6	58.1	59.2	50.2	40.0	79.8	55.1	52.2	61.9	44.6	46.0	37.1	30.0	98.7	94.3	73.4	62.7	60.80	99.62																					
18-Sep	72.4	50.9	78.0	76.6	78.0	80.4	96.2	57.1	69.1	91.4	39.1	38.4	56.5	42.1	51.5	90.9	75.5	91.3	84.4	61.4	84.6	63.7	38.6	57.4	67.73	96.25																					
19-Sep	55.9	53.1	31.9	36.7	35.7	65.5	38.2	47.5	36.5	56.1	45.3	41.0	60.1	70.4	27.2	31.0	25.6	30.3	43.1	32.5	39.8	72.1	46.0	41.2	44.28	72.10																					
20-Sep	50.5	50.9	36.0	39.4	33.8	36.9	41.9	33.6	19.5	39.7	27.1	23.8	24.3	46.5	43.8	42.0	71.9	50.9	52.8	32.9	26.8	25.1	28.5	51.6	38.75	71.88																					
21-Sep	28.7	21.0	41.9	23.2	33.5	28.1	54.1	20.4	31.9	83.8	57.8	49.0	33.5	61.0	67.4	88.4	82.1	92.4	73.5	79.4	65.9	79.3	47.3	21.5	52.71	92.40																					
22-Sep	44.8	45.9	52.5	48.3	35.8	63.6	16.8	47.1	30.3	53.6	88.1	87.7	94.8	50.9	52.6	64.9	24.3	45.3	44.2	64.4	51.6	30.1	57.3	39.7	51.45	94.81																					
23-Sep	55.8	81.4	46.0	80.2	36.4	37.2	29.3	37.8	53.0	43.4	41.5	63.9	52.7	62.6	65.2	65.3	38.7	31.6	21.4	24.1	72.4	29.6	28.3	19.0	46.54	81.37																					
24-Sep	45.1	24.5	45.8	55.6	38.6	30.1	64.9	76.8	59.3	51.3	65.2	37.1	36.7	22.9	27.8	27.0	32.0	30.3	36.2	25.4	49.9	75.1	87.5	53.7	45.78	87.46																					
25-Sep	55.8	77.7	71.4	100.8	70.1	67.3	64.6	94.1	98.2	91.6	29.5	32.4	24.3	30.9	55.7	38.4	40.0	41.8	37.0	86.4	91.5	79.3	79.8	92.0	64.61	100.75																					
26-Sep	87.9	70.6	64.1	75.9	66.8	39.9	51.1	63.9	55.5	45.5	47.2	38.1	29.7	55.8	57.8	52.0	42.7	36.2	46.4	37.7	42.2	78.4	50.5	96.0	55.48	95.96																					
27-Sep	80.1	85.6	81.5	88.9	84.9	84.5	88.0	88.5	32.4	50.5	53.3	46.9	50.7	34.3	36.1	40.3	27.1	85.8	33.9	82.7	97.0	81.0	47.9	67.5	64.54	97.01																					
28-Sep	19.5	48.4	58.5	80.3	45.9	60.0	49.5	68.6	67.6	70.6	41.4	55.0	53.6	52.7	69.1	85.3	46.4	36.4	54.2	75.0	72.3	55.3	80.9	90.5	59.87	90.49																					
29-Sep	69.7	81.0	86.3	71.8	91.9	63.4	74.0	98.9	71.3	54.3	75.1	38.6	41.0	42.0	55.9	43.3	56.7	60.4	92.4	94.1	87.9	92.6	90.5	62.9	70.66	98.87																					
30-Sep	79.0	45.2	57.8	87.8	90.2	77.3	80.5	69.4	74.8	86.3	86.0	82.0	66.9	49.4	81.3	54.7	41.6	94.8	83.6	62.9	69.1	82.9	30.0	40.6	69.76	94.78																					
																							Diurnal Average																								
																							Diurnal Maximum																								

WEST CENTRAL AIRSHED SOCIETY

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

**END OF REPORT
SEPTEMBER 2017**