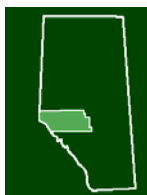


Capital Power

AIR QUALITY MONITORING October 2015 Monthly Report

Prepared by:

**West Central Airshed Society
Drayton Valley, Alberta**





November 9th, 2015

Capital Power
Mr. Kevin Parry
Box 20, Site 2, RR 1
Warburg, AB
T0C 2T0

Dear Mr. Parry:

Monthly Ambient Air Quality Monitoring Report for October 2015 for Capital Power

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

Network Station is AMS 910 Genesee
Identified as:

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

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

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

There were no readings in excess of guidelines as indicated in Air Monitoring Directive Section III.A.3. (a&b) for SO₂, NO₂ and PM_{2.5}.

2. Operational times less than 90 percent:

There were no operational times less than 90 percent in October.

3. Monitoring Notes:

AMS 910 (Genesee)

All analyzers and meteorological equipment returned uptimes of 100% in October.

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 'R. Scotten'.

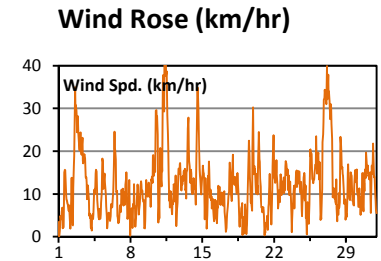
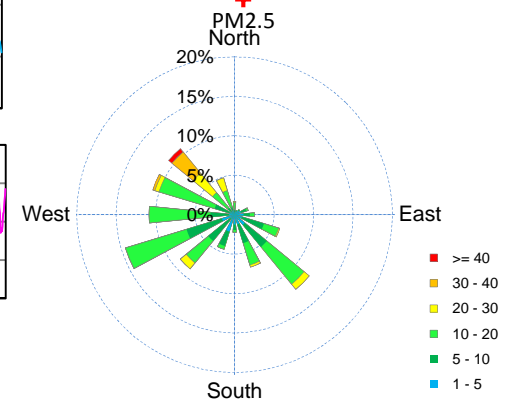
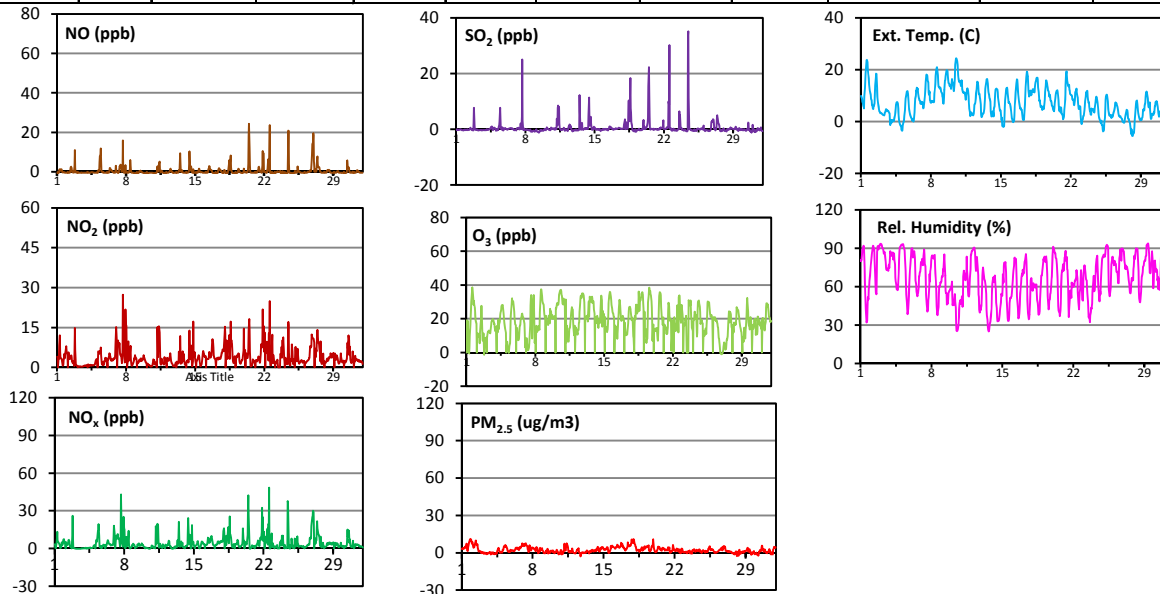
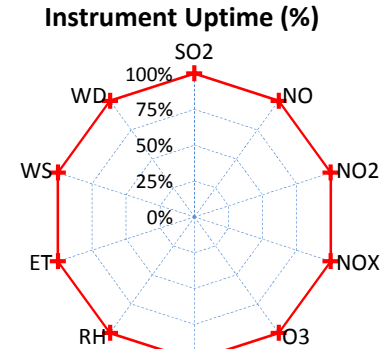
Robert Scotten
Executive Director

A handwritten signature in black ink, appearing to read 'Patrick Andersen'.

Patrick Andersen
Environmental Specialist

WCAS - October 2015 Genesee Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc Unit	Avg. Conc.	Uptime	Maximum		AAAQO Objective	Exceed No.	Maximum		AAAQO Objective	Exceed No.
				Conc	Time			Conc	Time		
SO ₂	ppb	0.6	100.0%	3.4	Oct-18	48	0	35.1	Oct-24 12:00	172	0
NO	ppb	0.5	100.0%	< 0.1	#N/A	-	-	24.4	Oct-20 12:00	-	-
NO ₂	ppb	4.1	100.0%	8.6	Oct-7	-	-	27.3	Oct-07 17:00	159	0
NO _x	ppb	4.6	100.0%	10	Oct-7	-	-	48.5	Oct-22 14:00	-	-
O ₃	ppb	19	100.0%	31	Oct-10	-	-	39	Oct-01 15:00	82	0
PM _{2.5}	µg/m ³	2	100.0%	6	Oct-17	30	0	11	Oct-01 21:00	80	0



Monthly Summary

- * All data has been slope, intercept, and baseline corrected. Data may change after validation process.
- * The measured ambient concentrations of all parameters are within the AAAQO for the month of October 2015.
- * All compliance parameters are above 90% operational for the month of October 2015.
- * Routine calibration was performed on October 23, 2015.

WEST CENTRAL AIRSHED SOCIETY

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

**AMS 910
GENESEE
OCTOBER 2015**

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

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

Summary Report

Continuous air quality/meteorological monitoring measurements

West Central Airshed Society

EPCOR / Genesee Station 910													October 2015		
Parameter	Calibration Hours	Number of Data	Percent Uptime	Mean	Min	Max	Percentile					Exceedences		24 Hour Average Max (ppm)	
							P10	Q1	Median	Q3	P90	1-hour	24-hour		
SO ₂ (ppb)	35	709	100.0	0.8	0.0	35.1	0.0	0.0	0.0	0.3	1.7	0	0	0.004	
O ₃ (ppb)	36	708	100.0	19.4	0.0	38.7	8.4	13.8	19.1	25.9	31.1	0	-	0.031	
NO (ppb)	37	707	100.0	0.8	0.0	24.4	0.0	0.0	0.0	0.3	2.0	-	-	-	
NO ₂ (ppb)	37	707	100.0	4.1	0.3	27.3	0.9	1.8	3.1	5.1	9.1	0	0	0.009	
NO _x (ppb)	37	707	100.0	4.7	0.0	48.5	0.5	1.5	2.8	5.5	10.4	-	-	-	
Particulate Matter 2.5 microns (µm ³)	0	744	100.0	2.4	0.0	11.1	0.0	0.5	1.8	3.7	5.3	0	0	6.02 ug/m3	
Wind Speed (kph)	0	744	100.0	12.2	0.1	48.6	4.3	7.1	11.1	15.0	21.1	-	-	-	
Temperature - 2m (°C)	0	744	100.0	7.3	-5.6	24.4	0.6	3.0	6.9	11.3	15.1	-	-	-	
Temperature - 10m (°C)	0	744	100.0	7.7	-3.7	23.6	1.2	3.6	7.1	11.2	15.5	-	-	-	
Delta Temperature (°C)	0	744	100.0	0.4	-2.9	4.3	-1.2	-0.7	0.3	1.4	2.2	-	-	-	
Relative Humidity (%)	0	744	100.0	66.6	25.1	93.7	42.3	54.5	68.0	80.8	88.3	-	-	-	
Global Solar Radiation (W/m ²)	0	744	100.0	97.0	0.0	600.0	0.0	0.0	0.0	147.4	385.8	-	-	-	
Std Dev Wind Direction (deg)	0	744	100.0	16.1	2.4	92.9	6.8	8.6	11.5	18.2	30.0	-	-	-	
Std Dev Wind Speed (kph)	0	744	100.0	2.8	0.3	14.6	1.2	1.7	2.4	3.5	4.8	-	-	-	



WCAS - Genesee
Summary of Hourly Averages

Sulphur Dioxide (SO₂) - ppb
October 2015

Maximum Value: 35.12 ppb on Oct 24 12:00		Maximum Daily Average: 3.52 ppb on Oct 18		Hours in Service: 744																													
Minimum Value: 0.0 ppb on Oct 1 01:00		Minimum Daily Average: 0.00 ppb on Oct 3		Hours of Data: 709																													
Maximum Diurnal Average: 3.53 ppb at hour 12		Minimum Diurnal Average: 0.12 ppb at hour 4		Hours of Missing Data: 35																													
Monthly Average: 0.817 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.3 P ₉₀ = 1.7 P ₉₉ = 13.9		Hours of Calibration: 35																													
				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-Oct	0.0	0.0	Z	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	0.0	0.0	0.0	0.0	0.00	0.07						
2-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.0	0.1	0.0	0.0	0.0	0.0	2.4	7.7	1.4	0.0	0.0	0.0	0.0	0.53	7.66						
3-Oct	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	0.0	0.0	0.00	0.00						
4-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.7	0.6	1.0	0.5	0.0	0.0	0.3	0.6	0.6	0.5	0.2	0.2	0.26	1.00						
5-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.1	1.4	2.8	7.8	3.7	0.1	0.2	0.6	0.0	0.7	0.0	0.0	0.0	0.0	0.3	0.4	0.5	0.85	7.76							
6-Oct	0.2	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.2	0.4	0.3	0.3	0.2	0.3	0.2	0.4	0.3	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.15	0.41							
7-Oct	0.0	0.0	Z	0.2	0.5	0.4	0.3	0.5	0.4	0.0	0.1	0.3	2.1	0.0	1.9	4.5	25.0	3.1	0.0	0.0	0.3	0.0	0.0	0.0	1.72	24.99							
8-Oct	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	0.0	0.00	0.00							
9-Oct	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	0.1	0.01	0.14							
10-Oct	0.0	0.0	Z	0.2	0.7	0.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.1	0.1	0.1	0.2	0.4	0.0	0.0	0.0	0.15	0.68							
11-Oct	0.5	0.0	Z	0.0	3.8	1.4	7.8	8.5	7.7	8.0	2.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.1	0.0	1.79	8.45								
12-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.4	1.2	0.8	1.7	0.9	0.4	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.30	1.70							
13-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	6.4	0.3	0.7	0.0	2.1	2.3	0.1	0.0	0.0	0.1	0.3	1.07	12.31								
14-Oct	0.3	0.3	Z	0.3	0.3	0.3	0.2	0.2	0.1	5.1	11.4	4.1	1.3	3.2	4.5	2.4	0.0	0.0	0.0	0.3	0.0	0.8	1.0	0.7	1.60	11.37							
15-Oct	0.6	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.05	0.57								
16-Oct	0.1	0.0	Z	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	1.0	0.7	0.9	0.7	0.2	0.3	0.2	0.3	0.1	0.0	0.1	0.1	0.24	1.03							
17-Oct	0.0	0.0	Z	0.3	0.2	0.2	0.1	0.2	0.3	0.4	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.5	1.8	0.32	1.78							
18-Oct	2.8	3.5	Z	1.2	2.5	0.9	0.2	0.2	0.3	3.0	10.2	10.3	2.9	7.3	18.3	7.5	6.0	2.4	1.4	0.0	0.0	0.0	0.0	3.52	18.34								
19-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.1	3.4	0.18	3.37								
20-Oct	1.0	0.6	Z	0.2	0.4	0.4	1.1	1.1	2.3	4.2	15.5	22.2	12.8	4.8	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.3	2.92	22.24								
21-Oct	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.2	0.7	0.6	0.5	0.5	0.6	0.4	3.2	0.2	0.34	3.24								
22-Oct	0.0	0.0	Z	0.3	0.0	0.2	0.3	0.7	0.8	0.5	1.0	10.0	8.8	30.2	0.7	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.2	0.0	2.36	30.21							
23-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	6.5	0.8	5.0	0.4	0.6	0.3	0.0	0.2	0.1	0.0	0.0	0.73	6.46							
24-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.6	35.1	11.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.49	35.12							
25-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.1	0.4	0.4	0.1	0.0	0.2	1.0	0.14	1.00							
26-Oct	1.3	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	0.8	2.7	2.5	3.1	2.9	3.6	0.73	3.62							
27-Oct	3.4	2.1	Z	0.5	0.1	0.0	0.2	0.5	3.4	5.0	3.7	2.9	2.1	2.0	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.20	5.02							
28-Oct	0.3	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.1	0.0	0.2	0.7	0.3	0.3	0.4	0.3	0.3	0.1	0.15	0.73							
29-Oct	0.2	0.0	Z	0.2	0.0	0.2	0.9	0.6	0.0	0.0	0.1	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.12	0.89							
30-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.4	2.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.29	2.42							
31-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.4	0.8	0.0	0.0	0.0	0.0	0.09	0.75							
		0.34	0.21	--	0.12	0.28	0.15	0.36	0.45	0.56	1.03	2.96	3.53	1.83	1.93	1.10	0.72	1.17	0.35	0.24	0.45	0.24	0.21	0.41	0.35	Diurnal Average							
		3.44	3.54	--	1.17	3.82	1.43	7.75	8.45	7.66	8.03	33.58	35.12	12.81	30.21	18.34	7.49	24.99	3.09	2.35	7.66	2.52	3.15	3.37	3.62	Diurnal Maximum							
Z - zerospan		C - Calibration																															
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 172 ppb				24-hr 48 ppb																											



WCAS - Genesee
Summary of Hourly Averages

Ozone (O₃) - ppb
October 2015

Maximum Value: 38.71 ppb on Oct 1 15:00 Maximum Daily Average: 30.82 ppb on Oct 10																						Hours in Service: 744 Hours of Data: 708																											
Minimum Value: 0.0 ppb on Oct 1 07:00 Minimum Daily Average: 11.28 ppb on Oct 27 Maximum Diurnal Average: 27.56 ppb at hour 16 Minimum Diurnal Average: 13.42 ppb at hour 8 Monthly Average: 19.443 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 8.4 Q ₁ = 13.8 Median = 19.1 Q ₃ = 25.9 P ₉₀ = 31.1 P ₉₉ = 36.8																						Hours of Missing Data: 36 Hours of Calibration: 36 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-Oct	19.1	Z	19.0	16.3	13.6	5.4	0.0	2.6	9.9	16.5	21.5	25.8	31.4	37.8	38.7	37.2	31.9	28.2	30.6	28.4	26.3	23.2	19.2	18.6	21.80	38.71																							
2-Oct	17.0	Z	10.0	11.4	9.3	10.3	11.1	9.4	5.5	11.6	17.0	19.0	27.7	27.7	13.6	7.9	7.0	11.3	4.7	0.0	3.6	8.4	8.0	8.2	11.29	27.70																							
3-Oct	8.8	Z	8.7	10.4	12.5	12.5	12.1	13.1	12.7	12.0	11.4	14.7	16.5	18.4	18.8	19.5	19.9	19.7	18.1	16.8	17.2	14.8	12.6	14.1	14.58	19.85																							
4-Oct	15.2	Z	15.6	15.8	11.8	19.5	13.8	14.5	17.0	18.3	22.0	23.5	25.1	27.3	27.8	27.6	28.2	26.7	24.4	20.2	17.3	15.9	14.8	13.1	19.79	28.20																							
5-Oct	11.6	Z	4.8	6.4	2.5	1.8	1.1	0.0	2.1	4.1	5.6	13.3	21.7	26.1	28.7	32.2	29.9	30.4	30.0	28.1	24.3	20.1	18.7	16.6	15.65	32.16																							
6-Oct	16.2	Z	14.3	14.5	11.4	8.7	7.4	7.3	8.4	12.0	15.3	16.7	19.2	19.9	21.3	22.9	23.1	21.9	20.6	20.4	19.2	17.0	11.2	3.1	15.30	23.09																							
7-Oct	5.5	Z	8.5	8.5	3.7	2.0	1.2	1.7	2.9	5.3	9.2	16.1	28.0	32.2	34.1	30.3	8.3	21.3	28.7	27.7	34.0	24.8	5.7	8.5	15.15	34.07																							
8-Oct	9.7	Z	15.9	15.8	12.2	12.8	14.3	13.4	15.7	13.7	13.4	23.7	31.8	36.3	37.5	36.9	33.4	30.7	29.6	29.1	28.3	25.2	22.7	20.5	22.72	37.50																							
9-Oct	20.2	Z	21.8	20.1	19.4	18.0	16.5	16.3	17.4	21.9	17.7	17.2	25.9	22.9	24.4	21.9	20.3	22.2	20.1	20.6	20.5	20.1	20.5	21.7	20.33	25.94																							
10-Oct	21.1	Z	26.3	26.0	28.1	29.3	28.3	28.2	28.8	30.2	34.1	35.7	36.4	36.9	37.1	36.1	33.9	33.8	28.8	29.0	28.4	31.9	30.3	30.4	30.82	37.07																							
11-Oct	28.8	Z	31.4	18.9	5.9	15.8	10.2	8.0	6.6	6.4	9.4	14.0	14.6	16.7	19.4	22.7	25.6	26.8	25.7	25.5	18.5	14.7	10.3	12.3	16.89	31.42																							
12-Oct	15.9	Z	15.0	12.6	12.7	10.8	11.6	10.6	13.7	13.4	17.3	18.0	24.0	29.1	32.3	33.7	32.1	33.4	35.1	33.8	35.0	34.3	33.8	29.7	23.39	35.05																							
13-Oct	21.4	Z	20.4	20.1	20.5	21.7	21.6	21.7	18.3	23.7	30.3	21.1	27.2	33.2	30.6	31.9	31.2	29.8	33.1	32.0	29.4	30.5	29.6	25.6	26.30	33.20																							
14-Oct	23.1	Z	21.1	19.3	18.8	17.4	17.3	21.7	19.8	15.6	14.5	18.1	19.7	17.4	18.2	26.8	31.7	33.6	30.9	15.3	24.8	23.1	21.2	22.8	21.41	33.65																							
15-Oct	20.7	Z	21.0	14.8	12.9	15.1	13.4	12.2	13.9	17.3	23.1	30.4	33.2	35.4	35.9	35.7	33.0	31.1	28.3	26.0	24.3	23.5	23.3	21.1	23.72	35.91																							
16-Oct	21.0	Z	16.0	15.3	15.0	13.4	15.3	12.1	8.1	15.1	19.4	22.2	26.2	31.2	29.9	28.0	24.5	18.9	18.7	19.0	20.4	21.7	20.9	20.6	19.70	31.16																							
17-Oct	18.8	Z	17.8	13.5	11.0	10.2	10.7	10.7	10.5	12.9	17.3	21.0	24.8	26.8	27.0	27.0	25.8	24.2	21.0	19.2	20.8	19.8	14.7	9.6	18.05	27.04																							
18-Oct	8.4	Z	15.7	21.6	19.8	26.3	28.5	25.3	23.2	27.9	24.1	26.5	36.1	31.8	24.7	31.9	30.6	31.6	33.3	35.0	34.5	35.9	34.1	29.3	27.65	36.13																							
19-Oct	25.9	Z	24.3	13.9	11.6	14.1	8.7	5.7	7.6	8.1	16.4	29.6	33.4	36.3	38.3	36.4	36.5	34.3	34.1	30.4	26.5	18.7	7.0	16.0	22.34	38.35																							
20-Oct	16.7	Z	12.9	13.1	14.2	12.6	14.2	14.4	14.6	13.6	8.0	7.0	12.3	27.1	33.4	34.8	35.8	35.0	33.9	27.1	21.1	20.8	18.9	16.2	19.90	35.78																							
21-Oct	20.9	Z	16.6	15.8	16.3	13.8	14.4	14.5	11.0	15.0	11.2	14.8	24.7	29.6	27.2	22.1	19.7	18.7	20.0	17.6	1.0	9.1	2.3	15.3	16.14	29.56																							
22-Oct	19.1	Z	13.6	20.9	19.3	12.6	17.1	12.9	15.3	14.3	28.0	20.9	21.7	12.0	32.7	33.9	32.8	26.6	21.3	17.7	26.9	28.1	24.4	22.2	21.50	33.89																							
23-Oct	19.6	Z	15.3	15.6	16.3	18.2	20.1	19.1	21.8	C	C	C	C	C	31.0	30.7	28.8	29.6	27.8	30.8	20.5	20.4	14.7	13.5	21.88	31.01																							
24-Oct	12.8	Z	18.8	19.0	22.2	24.3	21.5	22.6	20.1	21.1	9.5	11.8	24.5	29.8	30.7	30.9	29.1	27.1	24.1	16.8	17.5	18.9	19.3	17.6	21.29	30.86																							
25-Oct	17.4	Z	7.4	12.5	9.7	10.0	12.7	14.2	14.2	10.9	15.8	22.6	29.3	30.2	29.7	29.8	29.8	27.3	22.9	22.1	21.0	21.9	22.1	20.8	19.75	30.25																							
26-Oct	20.4	Z	21.1	20.4	19.4	20.4	21.1	20.2	19.2	18.5	19.0	18.4	17.0	15.3	14.8	8.7	8.3	6.2	4.5	0.0	0.0	0.0	0.0	0.0	12.73	21.05																							
27-Oct	0.0	Z	1.2	3.6	4.8	6.0	4.5	5.0	1.6	2.2	4.9	7.7	7.6	9.6	13.7	18.1	24.3	17.7	23.0	24.1	23.2	22.4	18.6	15.4	11.28	24.35																							
28-Oct	13.9	Z	16.5	12.0	12.1	17.9	16.9	16.4	17.5	16.5	20.4	26.8	26.2	25.9	25.3	25.0	23.5	20.7	18.3	16.9	15.5	13.8	12.6	12.0	18.37	26.83																							
29-Oct	9.3	Z	9.3	7.8	6.3	12.7	14.8	9.4	8.3	13.4	15.0	22.0	28.4	32.3	29.3	24.0	17.7	16.3	15.0	13.5	14.8	21.0	19.5	14.9	16.31	32.32																							
30-Oct	13.8	Z	15.3	16.5	14.2	16.3	18.4	19.7	17.9	20.0	10.3	15.4	14.0	10.7	12.3	21.3	17.7	19.8	17.4	16.8	16.0	17.1	17.3	13.9	16.18	21.35																							
31-Oct	19.0	Z	20.4	19.4	20.2	19.0	15.7	13.2	13.1	16.4	18.4	26.7	29.2	29.2	27.3	28.6	27.4	23.7	21.1	21.0	20.2	18.5	18.1	18.7	21.08	29.23																							
																								16.50	--	16.00	15.22	13.80	14.47	14.01	13.42	13.44	14.93	16.65	20.03	24.60	26.50	27.28	27.56	25.87	25.11	24.04	21.97	21.00	20.50	17.62	16.86	Diurnal Average	
																								28.80	--	31.42	26.04	28.07	29.27	28.45	28.16	28.77	30.21	34.07	35.66	36.38	37.78	38.71	37.18	36.46	35.02	35.05	35.00	34.96	35.87	34.08	30.43	Diurnal Maximum	
Z - zerospan C - Calibration																																																	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82.5 ppb 24-hr -- ppb																																																	



WCAS - Genesee
Summary of Hourly Averages

Nitrogen Oxide (NO) - ppb
October 2015

Maximum Value: 24.35 ppb on Oct 20 12:00		Maximum Daily Average: 2.84 ppb on Oct 26		Hours in Service: 744																						
Minimum Value: 0.0 ppb on Oct 1 01:00		Minimum Daily Average: 0.00 ppb on Oct 3		Hours of Data: 707																						
Maximum Diurnal Average: 3.55 ppb at hour 11		Minimum Diurnal Average: 0.03 ppb at hour 6		Hours of Missing Data: 37																						
Monthly Average: 0.847 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.3 P ₉₀ = 2.0 P ₉₉ = 18.1		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-Oct	0.0	0.0	Z	0.0	0.0	0.1	1.4	0.6	1.2	1.4	1.3	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.31	1.40
2-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	1.4	2.5	2.7	1.8	0.1	0.0	0.0	0.2	0.0	0.0	3.3	11.1	2.1	0.0	0.0	0.0	1.09	11.10
3-Oct	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	0.0	0.00	0.00
4-Oct	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	0.0	0.00	0.00
5-Oct	0.0	0.0	Z	0.0	0.9	0.8	0.3	5.0	7.8	8.7	11.9	5.4	0.5	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.80	11.86
6-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.5	1.9	2.0	1.1	0.9	0.9	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	3.1	0.52	3.12
7-Oct	0.0	0.0	Z	0.0	0.0	0.0	1.6	3.0	2.4	3.6	3.4	2.0	0.1	0.3	1.3	15.9	1.0	0.0	0.0	0.0	0.0	3.4	0.0	1.65	15.94	
8-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.8	1.2	6.0	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.40	6.01	
9-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.4	0.3	0.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.74	
10-Oct	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	
11-Oct	0.0	0.0	Z	0.0	2.8	0.0	1.9	3.1	4.3	5.2	0.9	0.0	0.0	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.83	5.21	
12-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	1.7	0.3	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.15	1.65	
13-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.8	0.6	0.5	9.4	4.5	0.2	0.6	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.75	9.37	
14-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	4.0	10.4	2.9	0.6	1.6	2.8	0.9	0.0	0.0	0.0	1.3	0.0	0.0	0.0	1.07	10.42	
15-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.1	1.7	1.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	1.67	
16-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.1	2.0	3.0	2.7	1.6	0.9	1.0	0.8	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	2.99	
17-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.5	1.7	1.9	1.6	1.0	0.7	0.8	0.6	0.2	0.0	0.0	0.0	0.0	0.0	0.1	1.0	0.44	1.86	
18-Oct	0.7	0.0	Z	0.0	0.0	0.0	0.0	0.6	1.6	4.7	6.0	1.0	4.7	8.3	2.3	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.34	8.30	
19-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.2	1.6	1.3	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.21	1.65	
20-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.0	4.0	18.3	24.4	11.9	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.74	24.35	
21-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.6	0.6	2.4	2.6	1.0	0.2	0.0	0.5	0.1	0.0	0.0	3.4	10.6	1.2	9.6	0.0	1.43	10.61	
22-Oct	0.0	0.2	Z	0.0	0.0	0.0	0.9	1.3	6.3	0.6	6.4	6.2	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.98	23.64	
23-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	C	C	C	C	C	C	0.6	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	--	0.58	
24-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	20.9	20.7	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.98	20.88	
25-Oct	0.0	0.0	Z	0.6	0.0	0.0	0.0	0.0	2.8	1.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	2.79	
26-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.8	0.8	0.1	0.4	5.6	9.0	13.9	14.8	19.6	2.84	19.58	
27-Oct	18.5	5.6	Z	1.5	0.6	0.0	0.7	4.4	7.8	4.0	2.8	2.3	2.5	2.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.35	18.49	
28-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.5	0.9	1.1	1.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	1.07	
29-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.56	
30-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	5.9	2.2	1.9	2.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.61	5.88	
31-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.5	0.8	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.81	
		0.62	0.19	--	0.07	0.14	0.03	0.12	0.39	1.05	2.01	3.55	3.32	1.43	1.42	0.66	0.31	0.63	0.04	0.12	0.69	0.71	0.49	0.98	0.77	Diurnal Average
		18.49	5.61	--	1.46	2.79	0.83	1.94	4.96	7.78	8.75	20.88	24.35	11.91	23.64	8.30	2.28	15.94	0.98	3.30	11.10	10.61	13.90	14.78	19.58	Diurnal Maximum
Z - zerospan		C - Calibration																								
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr --- ppb				24-hr --- ppb																				



WCAS - Genesee
Summary of Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
October 2015

Maximum Value: 27.34 ppb on Oct 7 17:00		Maximum Daily Average: 8.59 ppb on Oct 7		Hours in Service: 744																									
Minimum Value: 0.3 ppb on Oct 20 16:00		Minimum Daily Average: 0.45 ppb on Oct 3		Hours of Data: 707																									
Maximum Diurnal Average: 5.59 ppb at hour 11		Minimum Diurnal Average: 2.84 ppb at hour 16		Hours of Missing Data: 37																									
Monthly Average: 4.134 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.9 Q ₁ = 1.8 Median = 3.1 Q ₃ = 5.1 P ₉₀ = 9.1 P ₉₉ = 17.1		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-Oct	4.0	3.7	Z	3.2	3.1	8.2	12.1	5.8	3.8	3.3	3.3	3.1	2.2	0.6	0.8	1.2	2.8	5.0	3.4	4.8	6.0	7.2	8.0	6.4	4.44	12.05			
2-Oct	5.0	4.5	Z	5.7	4.6	3.4	3.2	3.5	3.3	4.3	4.5	3.8	2.1	2.0	1.5	2.3	2.1	0.5	6.9	14.9	6.5	1.1	0.7	0.7	3.78	14.88			
3-Oct	0.6	0.5	Z	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.5	0.7	0.6	0.6	0.6	0.9	0.9	0.45	0.92			
4-Oct	0.9	0.6	Z	1.1	0.9	0.4	0.4	0.5	0.9	0.9	0.7	0.7	0.8	0.9	0.8	0.7	0.7	0.8	0.9	1.0	1.4	2.0	2.8	3.0	1.04	3.04			
5-Oct	3.1	3.1	Z	2.7	6.0	5.8	5.0	6.1	6.0	5.8	7.5	4.5	1.6	1.1	1.5	0.9	2.2	0.8	1.2	2.4	2.2	3.6	3.3	3.4	3.46	7.46			
6-Oct	3.3	3.2	Z	3.2	2.7	3.2	4.3	5.3	5.0	3.9	3.1	2.8	2.4	3.1	2.9	2.5	2.8	3.0	3.6	3.3	3.3	5.0	8.9	15.1	4.18	15.13			
7-Oct	12.7	10.0	Z	6.9	10.1	8.3	8.1	9.2	8.6	5.3	4.5	4.8	4.2	1.6	3.3	6.8	27.3	13.4	5.0	4.7	1.9	2.7	21.8	16.3	8.59	27.34			
8-Oct	15.5	5.9	Z	1.8	6.8	9.8	2.4	2.6	3.8	5.0	8.0	3.1	1.6	0.7	0.7	0.9	1.3	1.9	2.2	3.4	2.9	4.6	3.7	3.7	4.02	15.54			
9-Oct	3.4	2.5	Z	1.7	1.6	1.7	1.9	2.4	2.8	2.2	3.0	3.4	2.5	3.3	2.4	2.6	3.3	3.0	4.6	3.6	3.7	3.2	2.4	2.0	2.75	4.63			
10-Oct	1.9	1.3	Z	1.5	1.4	1.2	0.8	0.9	0.8	0.8	0.6	0.4	0.3	0.4	0.3	0.5	1.2	1.8	3.0	2.8	2.7	1.1	2.0	1.2	1.26	2.98			
11-Oct	1.7	1.2	Z	2.9	15.1	3.8	12.8	15.4	15.4	13.2	7.6	1.7	1.0	1.8	3.3	2.1	1.6	1.8	1.4	0.9	2.6	3.9	3.3	2.3	5.08	15.43			
12-Oct	1.7	1.8	Z	3.6	3.5	2.8	2.5	2.4	2.7	3.8	4.0	5.3	4.3	2.1	1.9	1.4	1.3	0.9	0.5	0.4	0.4	0.4	0.7	1.2	2.16	5.32			
13-Oct	1.7	1.9	Z	2.2	1.7	1.5	1.5	2.1	5.9	2.5	1.9	11.8	6.3	1.3	2.7	1.6	3.9	6.0	2.3	3.7	5.0	2.3	1.6	0.9	3.15	11.85			
14-Oct	1.6	1.7	Z	2.1	2.5	2.4	2.7	1.9	2.9	10.5	13.8	6.6	3.0	5.4	8.2	4.5	0.4	0.5	2.2	17.3	4.5	3.9	5.8	3.7	4.70	17.27			
15-Oct	3.0	1.4	Z	2.1	2.7	3.1	3.3	3.8	4.7	4.4	3.2	1.4	0.7	0.4	0.8	1.1	2.0	3.0	5.5	6.1	5.5	5.4	4.1	3.9	3.11	6.15			
16-Oct	3.8	4.2	Z	3.3	3.1	3.1	3.1	3.3	3.1	4.6	5.8	5.1	4.1	3.6	4.1	4.6	7.3	9.7	10.7	9.2	7.4	4.4	3.4	3.3	4.98	10.66			
17-Oct	3.2	3.1	Z	2.3	2.9	3.7	3.4	3.6	3.0	3.7	3.8	3.5	3.2	3.2	3.8	4.2	5.5	5.7	6.2	6.8	6.1	6.0	8.4	12.6	4.69	12.60			
18-Oct	15.3	12.6	Z	5.8	10.1	4.9	3.2	7.5	9.9	7.3	12.2	11.1	3.2	8.8	17.2	9.4	10.2	8.8	6.5	3.6	1.8	1.5	1.8	3.7	7.66	17.18			
19-Oct	4.2	3.7	Z	3.2	4.1	3.8	4.6	4.1	4.2	5.3	4.9	2.6	1.8	1.7	1.4	1.7	2.2	2.8	2.7	3.0	4.1	6.2	14.6	6.4	4.06	14.57			
20-Oct	6.6	6.4	Z	5.4	3.7	5.0	3.7	3.5	4.7	6.9	13.9	18.2	14.1	5.8	0.6	0.3	0.4	0.8	0.7	1.7	3.0	2.8	2.0	2.3	4.89	18.21			
21-Oct	1.7	1.9	Z	2.6	2.7	2.4	2.2	2.3	2.9	4.0	4.1	3.6	2.6	1.7	2.2	5.3	8.7	8.8	7.5	9.9	21.8	11.8	15.6	6.0	5.75	21.75			
22-Oct	8.9	13.1	Z	6.1	5.9	9.7	5.3	8.7	7.3	9.7	2.5	12.8	12.8	25.0	2.4	0.7	0.7	5.5	5.9	12.2	2.2	1.6	4.7	3.0	7.25	24.98			
23-Oct	1.8	2.4	Z	1.7	2.0	1.6	1.6	2.3	2.8	C	C	C	C	C	C	5.0	4.8	5.1	7.7	3.6	10.3	7.4	11.3	6.5	--	11.33			
24-Oct	3.2	2.4	Z	3.7	1.5	1.2	1.7	1.2	1.4	1.7	17.2	15.9	5.6	0.9	1.4	0.6	3.2	2.4	2.9	8.7	6.1	2.1	1.3	1.2	3.80	17.17			
25-Oct	3.1	2.4	Z	7.6	7.8	5.1	2.4	2.3	2.3	7.0	3.6	2.5	1.5	1.4	1.7	1.9	2.3	2.5	2.8	2.6	2.3	1.7	1.7	2.0	3.07	7.75			
26-Oct	2.4	1.7	Z	1.4	1.4	1.9	2.0	2.2	2.3	2.4	2.7	2.7	2.8	3.5	3.5	7.7	8.1	7.3	8.0	12.4	11.5	11.4	11.0	10.8	5.28	12.40			
27-Oct	10.7	9.2	Z	7.1	5.9	3.9	6.6	5.9	12.4	14.0	12.4	10.1	9.1	8.8	7.2	5.2	2.3	9.8	2.3	1.5	1.3	1.4	2.8	5.2	6.74	14.04			
28-Oct	2.3	2.4	Z	1.9	1.7	1.7	1.9	2.3	2.8	3.4	3.4	2.4	3.0	3.5	4.0	3.5	3.8	5.3	4.9	4.1	3.7	3.8	5.0	4.7	3.28	5.32			
29-Oct	5.4	4.7	Z	3.9	5.1	3.4	2.7	3.9	4.5	3.7	3.6	2.8	2.0	1.3	1.6	1.8	2.3	3.6	5.4	3.8	2.6	1.9	1.8	2.4	3.23	5.38			
30-Oct	2.6	2.1	Z	2.4	2.4	1.8	2.1	2.5	2.9	3.2	9.3	7.1	9.3	12.0	10.3	4.5	7.9	2.9	2.4	1.9	1.5	2.0	2.4	6.0	4.42	12.04			
31-Oct	3.2	1.4	Z	1.7	2.3	4.3	2.6	3.1	3.3	2.9	2.5	2.5	2.9	2.2	2.7	2.1	2.1	2.0	2.1	2.4	2.2	2.0	2.0	1.3	2.43	4.32			
		4.47	3.78	--	3.27	4.06	3.65	3.56	3.90	4.42	4.88	5.59	5.23	3.70	3.61	3.18	2.84	4.04	4.06	3.94	5.08	4.42	3.70	5.14	4.58	Diurnal Average			
		15.54	13.10	--	7.62	15.13	9.80	12.78	15.43	15.41	14.04	17.17	18.21	14.10	24.98	17.18	9.35	27.34	13.38	10.66	17.27	21.75	11.80	21.79	16.27	Diurnal Maximum			
Z - zerospan		C - Calibration																											
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 159 ppb		24-hr 106 ppb																									



WCAS - Genesee
Summary of Hourly Averages

NOx (NO_x) - ppb
October 2015

Maximum Value: 48.52 ppb on Oct 22 14:00		Maximum Daily Average: 10.04 ppb on Oct 7		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Oct 3 04:00		Minimum Daily Average: 0.08 ppb on Oct 3		Hours of Data: 707																							
Maximum Diurnal Average: 9.05 ppb at hour 11		Minimum Diurnal Average: 2.88 ppb at hour 4		Hours of Missing Data: 37																							
Monthly Average: 4.651 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.5 Q ₁ = 1.5 Median = 2.8 Q ₃ = 5.5 P ₉₀ = 10.4 P ₉₉ = 31.9		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-Oct	3.4	3.1	Z	2.6	2.6	8.3	13.4	6.2	4.9	4.7	4.5	4.0	2.5	0.3	0.4	0.8	2.5	4.8	2.9	4.2	5.4	6.6	7.4	5.8	4.42	13.36	
2-Oct	4.4	3.9	Z	5.1	4.1	2.9	2.7	3.2	4.7	6.8	7.0	5.6	2.2	1.8	1.3	2.5	1.9	0.1	10.2	25.9	8.6	0.9	0.4	0.3	4.63	25.95	
3-Oct	0.2	0.1	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	0.2	0.1	0.1	0.2	0.5	0.4	0.08	0.48	
4-Oct	0.4	0.2	Z	0.6	0.5	0.0	0.0	0.1	0.6	0.7	0.4	0.5	0.7	0.8	0.7	0.5	0.4	0.4	0.4	0.5	0.9	1.5	2.3	2.6	0.67	2.58	
5-Oct	2.6	2.7	Z	2.3	6.9	6.6	5.4	11.0	13.8	14.6	19.3	9.9	2.1	1.1	1.6	0.6	2.1	0.3	0.7	1.9	1.8	3.1	2.8	3.0	5.04	19.34	
6-Oct	2.9	2.7	Z	2.8	2.3	2.7	3.9	5.7	6.8	5.9	4.2	3.7	3.3	3.6	3.3	2.4	2.6	2.6	3.0	2.8	2.8	4.4	9.6	18.2	4.45	18.25	
7-Oct	12.7	10.0	Z	6.4	9.8	7.9	7.7	10.8	11.6	7.6	8.0	8.2	6.2	1.7	3.6	8.1	43.2	14.3	4.5	4.2	1.3	2.2	25.2	16.0	10.04	43.19	
8-Oct	15.2	5.6	Z	1.3	6.3	9.3	1.9	2.3	4.6	6.1	14.0	4.3	1.7	0.2	0.2	0.5	0.8	1.4	1.5	2.8	2.2	4.0	3.1	3.1	4.01	15.23	
9-Oct	2.8	1.9	Z	1.1	1.0	1.0	1.3	2.0	3.1	2.4	3.2	4.1	2.5	3.2	2.1	2.4	3.0	2.5	4.1	3.0	3.1	2.6	1.8	1.4	2.41	4.12	
10-Oct	1.4	0.8	Z	0.9	0.8	0.6	0.3	0.3	0.4	0.4	0.2	0.0	0.0	0.0	0.0	0.1	0.7	1.2	2.4	2.2	2.1	0.5	1.3	0.6	0.75	2.35	
11-Oct	1.0	0.6	Z	2.7	17.9	3.8	14.7	18.5	19.7	18.3	8.4	1.6	0.8	1.8	3.9	2.3	1.5	1.4	0.8	0.4	2.1	3.3	2.7	1.8	5.66	19.72	
12-Oct	1.1	1.3	Z	3.1	3.0	2.3	2.0	2.0	2.5	3.8	4.1	6.1	6.0	2.4	2.2	1.4	1.5	0.4	0.0	0.0	0.0	0.0	0.2	0.7	2.01	6.10	
13-Oct	1.2	1.4	Z	1.8	1.3	1.1	1.0	1.7	6.7	3.0	2.3	21.2	10.8	1.5	3.3	1.6	4.7	5.8	1.8	3.3	4.6	1.8	1.1	0.5	3.63	21.21	
14-Oct	1.1	1.3	Z	1.7	2.1	2.0	2.3	1.5	2.8	14.5	24.2	9.5	3.6	6.9	11.0	5.4	0.1	0.1	1.7	18.6	4.2	3.4	5.4	3.3	5.51	24.22	
15-Oct	2.5	0.9	Z	1.7	2.3	2.7	2.9	3.7	5.6	6.0	4.4	1.7	0.6	0.2	0.6	0.9	1.8	2.7	5.1	5.7	5.1	4.9	3.6	3.4	3.01	6.01	
16-Oct	3.4	3.8	Z	2.9	2.7	2.7	2.7	3.1	4.2	6.5	8.7	7.7	5.7	4.5	5.0	5.4	7.9	9.4	10.1	8.6	6.9	3.8	2.8	2.6	5.29	10.12	
17-Oct	2.6	2.5	Z	1.7	2.3	3.1	2.8	3.3	3.4	5.3	5.6	5.1	4.1	3.9	4.5	4.7	5.7	5.1	5.6	6.2	5.5	5.3	8.5	13.6	4.80	13.65	
18-Oct	16.0	12.1	Z	5.2	9.7	4.3	2.5	7.0	10.5	8.9	16.9	17.1	4.2	13.4	25.5	11.6	11.0	8.5	5.9	3.0	1.2	1.0	1.2	3.1	8.68	25.48	
19-Oct	3.6	3.1	Z	2.7	3.6	3.2	4.0	3.8	4.4	6.9	6.1	2.8	1.9	1.6	0.9	1.2	1.7	2.3	2.1	2.4	3.5	6.0	16.2	6.2	3.93	16.22	
20-Oct	6.5	6.0	Z	5.3	3.3	4.6	3.3	3.2	5.7	10.9	32.0	42.5	26.0	9.2	0.4	0.0	0.1	0.4	0.3	1.2	2.6	2.4	1.6	1.9	7.36	42.45	
21-Oct	1.4	1.5	Z	2.3	2.4	2.1	1.9	2.0	3.5	4.6	6.5	6.2	3.5	1.8	2.1	5.7	8.8	8.3	7.0	13.2	32.3	13.0	25.2	5.9	7.01	32.32	
22-Oct	8.8	13.3	Z	5.9	5.5	9.6	4.8	9.5	8.6	16.0	3.1	19.2	19.0	48.5	2.0	0.2	0.2	5.0	5.4	12.2	1.7	1.0	4.1	2.4	8.94	48.52	
23-Oct	1.3	1.9	Z	1.2	1.5	1.1	1.2	2.0	2.9	C	C	C	C	C	C	5.2	3.9	3.9	6.4	2.4	10.3	6.3	10.4	5.5	--	10.37	
24-Oct	2.3	1.5	Z	2.8	0.6	0.4	0.9	0.4	0.7	1.4	37.8	36.3	9.5	0.5	1.0	0.0	2.7	1.7	2.2	8.0	5.4	1.5	0.6	0.6	5.17	37.76	
25-Oct	2.5	1.8	Z	8.1	7.1	4.5	1.9	1.8	2.2	9.7	4.7	3.0	1.5	1.3	1.7	1.7	1.9	2.0	2.2	2.1	1.8	1.2	1.2	1.5	2.92	9.65	
26-Oct	1.9	1.2	Z	0.9	0.9	1.4	1.5	1.7	1.9	2.3	2.9	2.7	2.7	3.6	3.5	8.5	8.8	7.4	8.3	17.9	20.4	25.1	25.6	30.2	7.87	30.21	
27-Oct	29.0	14.7	Z	8.4	6.4	3.8	6.5	6.5	16.7	21.7	16.2	12.7	11.3	11.1	9.3	6.4	2.2	9.6	1.9	1.1	0.8	0.9	2.3	4.7	8.88	28.96	
28-Oct	1.9	2.0	Z	1.5	1.3	1.2	1.4	1.8	2.8	4.2	4.4	2.9	3.8	4.5	4.9	3.7	3.5	4.8	4.4	3.6	3.1	3.3	4.5	4.2	3.20	4.86	
29-Oct	4.8	4.2	Z	3.4	4.6	2.9	2.2	3.4	4.4	3.9	3.9	3.3	1.8	1.0	1.2	1.3	1.9	3.0	4.7	3.3	2.0	1.3	1.2	1.9	2.85	4.84	
30-Oct	2.1	1.5	Z	1.8	1.8	1.2	1.5	2.0	2.5	2.9	15.0	9.2	11.0	14.3	11.5	4.3	7.6	2.3	1.9	1.4	1.0	1.5	1.9	6.2	4.63	15.01	
31-Oct	2.8	0.9	Z	1.2	1.7	3.8	2.1	2.6	3.1	3.4	3.3	3.0	3.1	2.1	2.7	1.9	1.6	1.5	1.5	1.9	1.7	1.5	1.4	0.8	2.16	3.79	
		4.64	3.49	--	2.88	3.75	3.26	3.24	3.98	5.33	6.78	9.05	8.47	5.07	4.90	3.67	2.94	4.39	3.65	3.53	5.29	4.66	3.70	5.68	4.92	Diurnal Average	
		28.96	14.74	--	8.42	17.91	9.57	14.70	18.55	19.72	21.74	37.76	42.45	25.97	48.52	25.48	11.63	43.19	14.33	10.17	25.95	32.32	25.14	25.63	30.21	Diurnal Maximum	
Z - zerospan		C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr --- ppb										24-hr --- ppb															



WCAS - Genesee
Summary of Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³
October 2015

Maximum Value: 11.13 µg/m ³ on Oct 1 21:00		Maximum Daily Average: 6.02 µg/m ³ on Oct 17		Hours in Service: 744																							
Minimum Value: 0.0 µg/m ³ on Oct 2 23:00		Minimum Daily Average: 0.10 µg/m ³ on Oct 3		Hours of Data: 744																							
Maximum Diurnal Average: 3.40 µg/m ³ at hour 10		Minimum Diurnal Average: 1.57 µg/m ³ at hour 15		Hours of Missing Data: 0																							
Monthly Average: 2.380 µg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 1.8 Q ₃ = 3.7 P ₉₀ = 5.3 P ₉₉ = 10.5		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-Oct	3.3	3.6	3.1	3.6	3.8	3.2	3.9	4.5	4.1	5.3	4.8	7.2	4.9	1.7	1.4	4.6	5.8	8.6	8.8	10.1	11.1	10.9	10.7	8.3	5.73	11.13	
2-Oct	7.3	8.6	6.1	4.8	4.1	4.6	5.9	6.9	8.5	9.8	7.7	6.1	6.2	6.9	4.1	2.0	1.0	1.1	1.2	1.5	1.1	0.9	0.0	0.1	4.43	9.83	
3-Oct	0.2	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.4	0.0	0.0	0.0	0.3	0.10	0.72	
4-Oct	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	2.7	3.4	4.0	2.4	1.2	0.5	0.0	0.4	0.7	0.5	0.3	0.74	4.00	
5-Oct	1.0	2.4	2.4	4.2	5.3	4.7	4.7	6.2	4.9	5.2	4.7	3.2	1.8	1.3	0.6	0.8	1.3	0.9	0.7	2.4	1.4	1.8	2.0	2.0	2.74	6.24	
6-Oct	1.7	2.0	2.0	1.1	1.2	1.6	2.6	3.6	3.9	3.7	3.2	4.2	3.7	2.7	3.9	2.2	4.1	4.6	3.4	4.9	4.6	5.3	5.7	7.7	3.49	7.68	
7-Oct	6.9	5.3	5.9	6.8	6.9	5.4	6.7	7.5	6.0	6.0	5.9	5.0	3.1	2.1	0.5	2.6	6.0	3.7	3.0	1.6	2.4	2.6	4.2	3.8	4.58	7.50	
8-Oct	4.2	3.5	3.4	2.9	2.7	3.5	2.9	1.3	4.5	3.2	4.3	3.0	0.6	0.0	0.2	0.5	1.2	4.0	1.6	2.2	2.2	3.3	3.7	2.1	2.54	4.46	
9-Oct	1.4	1.1	0.0	0.0	0.0	0.0	0.0	1.6	1.1	0.2	0.8	3.3	0.0	1.4	0.0	1.0	0.0	0.0	1.7	1.4	1.5	1.8	1.1	0.4	0.82	3.28	
10-Oct	1.9	0.7	1.0	0.0	0.0	0.6	0.3	0.6	2.1	2.5	1.2	0.8	0.0	0.0	0.0	0.1	0.0	0.0	2.1	2.3	1.4	0.0	0.0	0.0	0.73	2.47	
11-Oct	0.1	0.8	2.3	7.5	3.0	1.6	2.2	4.3	7.7	6.5	6.4	4.2	1.6	0.8	1.3	1.5	0.1	0.2	1.5	1.4	0.2	3.4	2.2	0.5	2.55	7.69	
12-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	1.5	2.8	2.2	2.7	3.7	1.3	0.2	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.5	0.4	0.66	3.69	
13-Oct	0.0	0.2	0.3	0.0	0.4	0.1	0.0	1.5	1.9	1.7	1.1	0.7	0.6	0.0	0.5	1.4	1.3	0.6	1.9	1.0	1.5	2.5	1.8	1.0	0.92	2.50	
14-Oct	1.8	1.1	2.1	2.2	1.9	1.7	1.3	3.2	3.1	3.2	4.7	1.8	2.1	3.0	1.0	3.8	3.0	2.8	3.4	4.6	3.8	4.5	4.6	3.2	2.83	4.68	
15-Oct	2.6	3.0	2.6	2.3	2.6	3.2	2.9	4.0	4.5	4.2	2.7	0.2	0.4	0.0	0.6	2.3	2.5	5.7	4.1	5.6	5.8	4.9	4.7	4.9	3.18	5.82	
16-Oct	4.2	4.1	4.1	3.3	3.7	4.8	4.8	4.5	6.5	6.1	5.0	5.3	4.4	3.9	4.7	4.9	5.0	8.2	7.7	7.1	7.0	4.8	4.9	3.6	5.11	8.16	
17-Oct	3.2	3.5	3.0	1.8	2.7	2.8	2.9	4.3	4.9	8.3	6.3	6.1	5.1	5.5	5.9	5.7	6.4	8.0	10.6	8.3	9.3	7.9	11.0	10.8	6.02	10.96	
18-Oct	8.9	7.4	6.4	4.8	4.7	2.2	1.5	2.1	2.2	2.5	2.3	2.4	1.0	0.7	2.4	1.6	3.1	3.1	4.5	3.9	1.7	2.5	2.3	4.0	3.26	8.89	
19-Oct	5.1	5.3	3.3	4.1	4.4	4.6	5.4	4.5	4.7	5.5	6.1	1.6	2.0	1.4	1.0	2.5	2.4	5.0	4.7	5.8	6.5	11.0	5.0	3.1	4.37	11.02	
20-Oct	2.3	0.8	0.5	0.6	0.8	1.1	1.7	2.5	4.8	5.1	4.1	4.8	4.2	3.3	2.3	3.3	2.0	1.7	2.9	3.9	4.1	3.8	3.7	2.4	2.78	5.06	
21-Oct	2.9	1.7	2.6	2.8	2.1	2.0	2.2	2.0	4.6	3.6	2.7	4.3	0.0	0.0	1.1	0.4	1.1	1.3	1.4	3.5	6.3	3.4	3.4	2.1	2.39	6.34	
22-Oct	1.3	2.3	2.6	1.3	2.0	3.6	1.9	1.6	1.2	2.9	0.9	1.0	0.0	2.8	0.0	0.3	0.4	3.5	3.0	1.1	0.1	0.2	0.1	0.2	1.43	3.58	
23-Oct	0.8	0.4	0.9	0.9	0.0	0.9	0.0	1.2	1.0	1.0	1.3	1.9	0.0	0.3	0.0	0.0	0.4	0.0	2.1	1.8	1.8	2.6	2.9	1.9	1.01	2.90	
24-Oct	1.8	0.7	1.7	1.7	2.4	1.9	1.7	1.3	2.2	1.4	2.6	2.5	1.1	0.5	0.4	1.1	0.0	0.6	1.8	2.3	1.9	1.1	0.9	0.8	1.43	2.64	
25-Oct	0.3	1.6	0.6	0.6	0.6	1.3	0.8	2.8	3.6	3.7	4.7	5.4	2.3	1.9	2.7	2.5	2.1	3.0	2.4	1.8	1.6	1.2	0.0	0.2	1.98	5.35	
26-Oct	0.5	0.0	0.5	0.4	0.4	0.7	0.9	1.3	1.7	2.3	2.1	2.7	2.9	2.4	3.6	4.3	3.1	1.9	4.3	5.4	3.5	4.6	5.2	4.7	2.47	5.42	
27-Oct	2.7	1.4	1.6	1.2	1.8	0.8	1.5	0.8	0.5	1.4	0.9	0.9	0.4	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.74	2.68	
28-Oct	0.0	1.1	0.0	0.0	0.9	0.4	0.0	0.0	1.9	2.5	0.0	0.0	0.0	0.4	0.2	0.6	1.2	0.8	0.0	0.8	1.5	0.6	1.4	1.1	0.64	2.53	
29-Oct	1.5	1.3	2.1	2.5	4.0	4.1	1.0	1.0	2.1	3.0	0.1	1.3	0.0	0.0	0.0	0.0	0.2	0.4	0.0	1.4	0.0	0.0	0.0	0.0	1.09	4.08	
30-Oct	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.7	2.2	1.6	1.2	2.4	5.8	5.2	3.2	1.7	3.0	0.6	1.2	2.6	1.6	0.9	1.47	5.78	
31-Oct	0.0	0.3	0.0	0.6	0.3	0.9	1.5	0.8	2.9	1.1	1.2	0.0	0.0	0.0	0.3	0.0	0.0	2.7	3.3	4.8	4.3	3.7	4.3	4.4	1.57	4.77	
		2.19	2.08	2.00	2.00	2.02	2.00	1.99	2.46	3.21	3.40	2.98	2.72	1.76	1.62	1.57	1.91	1.92	2.43	2.79	2.97	2.84	2.99	2.86	2.42	Diurnal Average	
		8.89	8.63	6.39	7.45	6.94	5.39	6.73	7.50	8.52	9.83	7.69	7.24	6.15	6.89	5.91	5.66	6.37	8.64	10.58	10.14	11.13	11.02	10.96	10.79	Diurnal Maximum	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 ul/m ³ 24-hr 30 ul/m ³																											

Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: October 23, 2015
 Parameter: NO/NO₂/NO_x

Instrument: Teco 42 i	Serial Number: 0708 721218	Previous Calibration Date: September 24, 2015
Calibration: Routine	Calibration Equipment: SABIO 2010 sn 04300810	Barometric Pressure: 27.40" Hg
Calibration Method: Standard Gas Dilution/ GPT	Cylinder ID: FF16109	Temperature: 18.5° C
Cylinder Concentration: 12.6 ppm NO / NO _x	In Service: January 14,2015	Technician: Dean Yustak

Instrument Settings	NO bkg ppb	NO _x bkg ppb	Pre-reactor bkg ppb	NO Coefficient	NO _x Coefficient	NO ₂ Coefficient	Monitoring Range
Previous	1.7	1.9	na	1.127	1.001	1.000	300 ppb
Current	1.8	1.9	na	1.139	1.000	1.000	300 ppb

NO	Final Zero: -0.2 ppb	Final Span: 224.4 ppb	As Found Correction Factor: 0.992
NO ₂	Final Zero: 0.1 ppb	Final Span: 0.3 ppb	As Found Correction Factor: NA
NO _x	Final Zero: -0.3 ppb	Final Span: 224.2 ppb	As Found Correction Factor: 0.991

Results of Linear Regression			Slope	Intercept	R ²
NO	R _c vs C _c	Previous	99.995710	-78.594010	0.999916
		Current	99.738820	19.571240	0.999997
	C _i vs C _c	Current	1.000000	0.000007	0.999997
NO ₂	R _c vs C _c	Previous	99.920840	10.079040	0.999916
		Current	98.708260	-6.826327	0.999937
	C _i vs C _c	Current	1.000000	-0.000003	0.999937
NO _x	R _c vs C _c	Previous	99.957310	-80.423360	0.999916
		Current	99.792420	18.726050	0.999996
	C _i vs C _c	Current	1.000000	-0.000028	0.999996

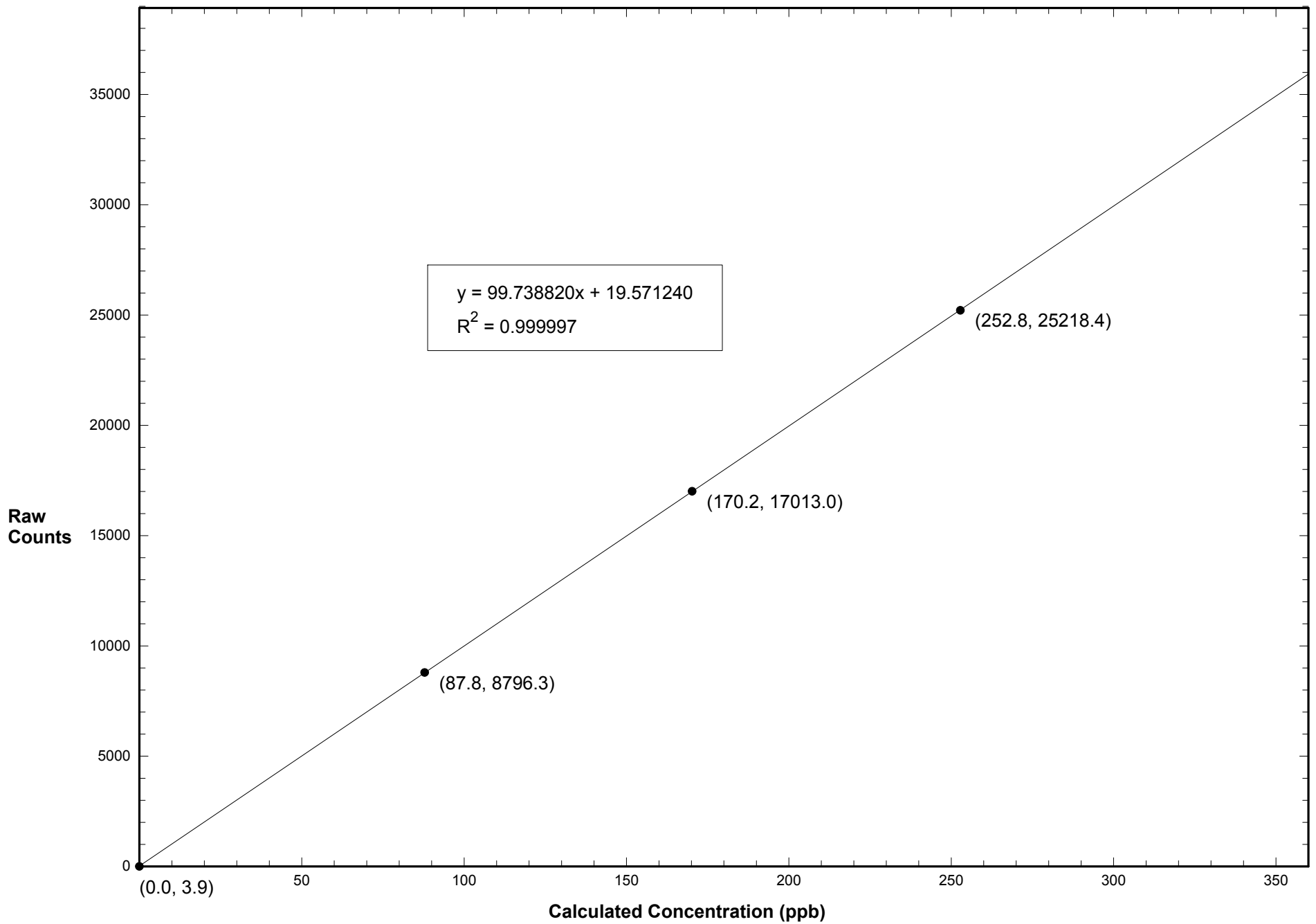
Comments:

Calibration Data Summary (Page 2)

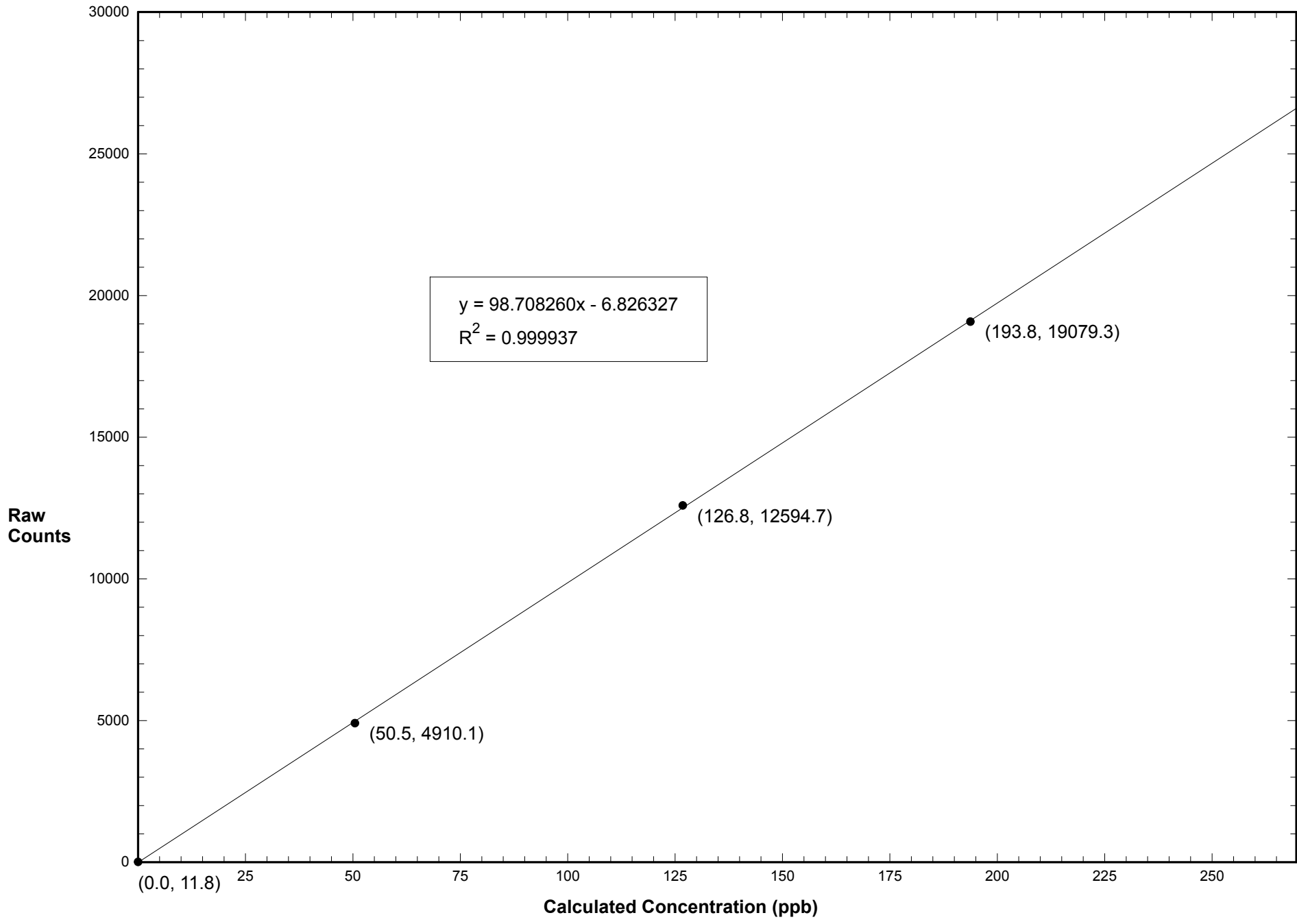
October 23, 2015 - Station 910

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		
0.06208	3.032	252.8	25218.4	252.6	1.001		
0.04154	3.034	170.2	17013.0	170.4	0.999		
0.02130	3.034	87.8	8796.3	88.0	0.998		
0.00000	3.052	0.0	3.9	-0.2			
NO Calibration					Average Correction Factor:	0.999	
0.06208	3.032	252.8	25226.4	252.6	1.001		
0.04154	3.034	170.2	17029.8	170.5	0.999		
0.02130	3.034	87.8	8797.2	88.0	0.999		
0.00000	3.052	0.0	2.2	-0.2			
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
224.3	3068.2	30.6	193.8	19079.3	193.4	1.002	0.998
224.3	9746.4	97.5	126.8	12594.7	127.7	0.993	1.007
224.3	17358.9	173.8	50.5	4910.1	49.8	1.013	0.987
			0.0	11.8	0.2		
					Average Correction Factor:	1.003	
NO ₂ Gas Phase Titration					Average Converter Efficiency:	0.997	
Parameter	Correction Factor (Previous)	Correction Factor: (Current)	Percent Change of Correction Factor				
NO	0.997	1.001	0.4				
NO ₂	1.000	1.002	0.2				
NO _x	0.997	1.001	0.4				

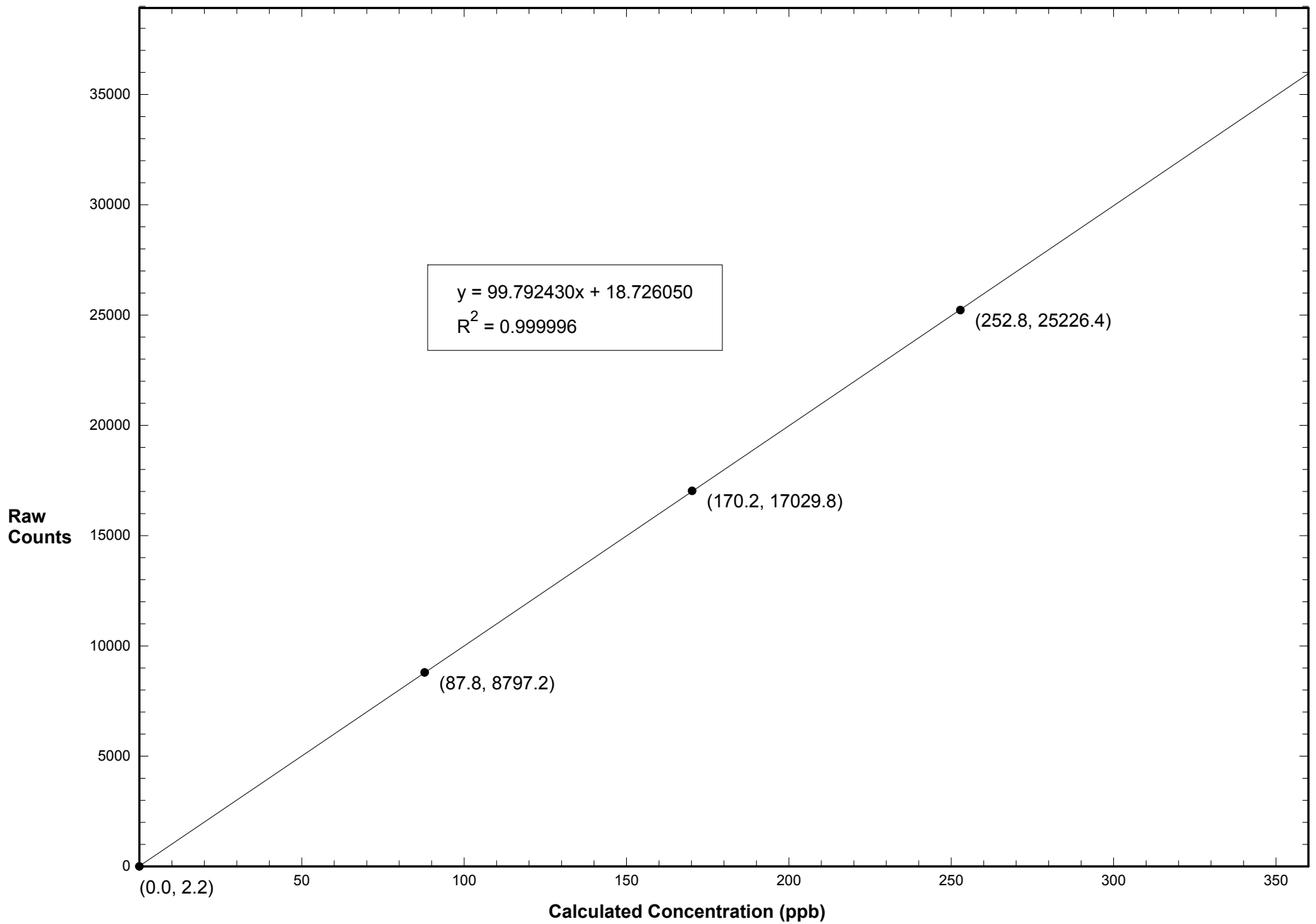
Station 910 NO October 23, 2015: Linear Regression



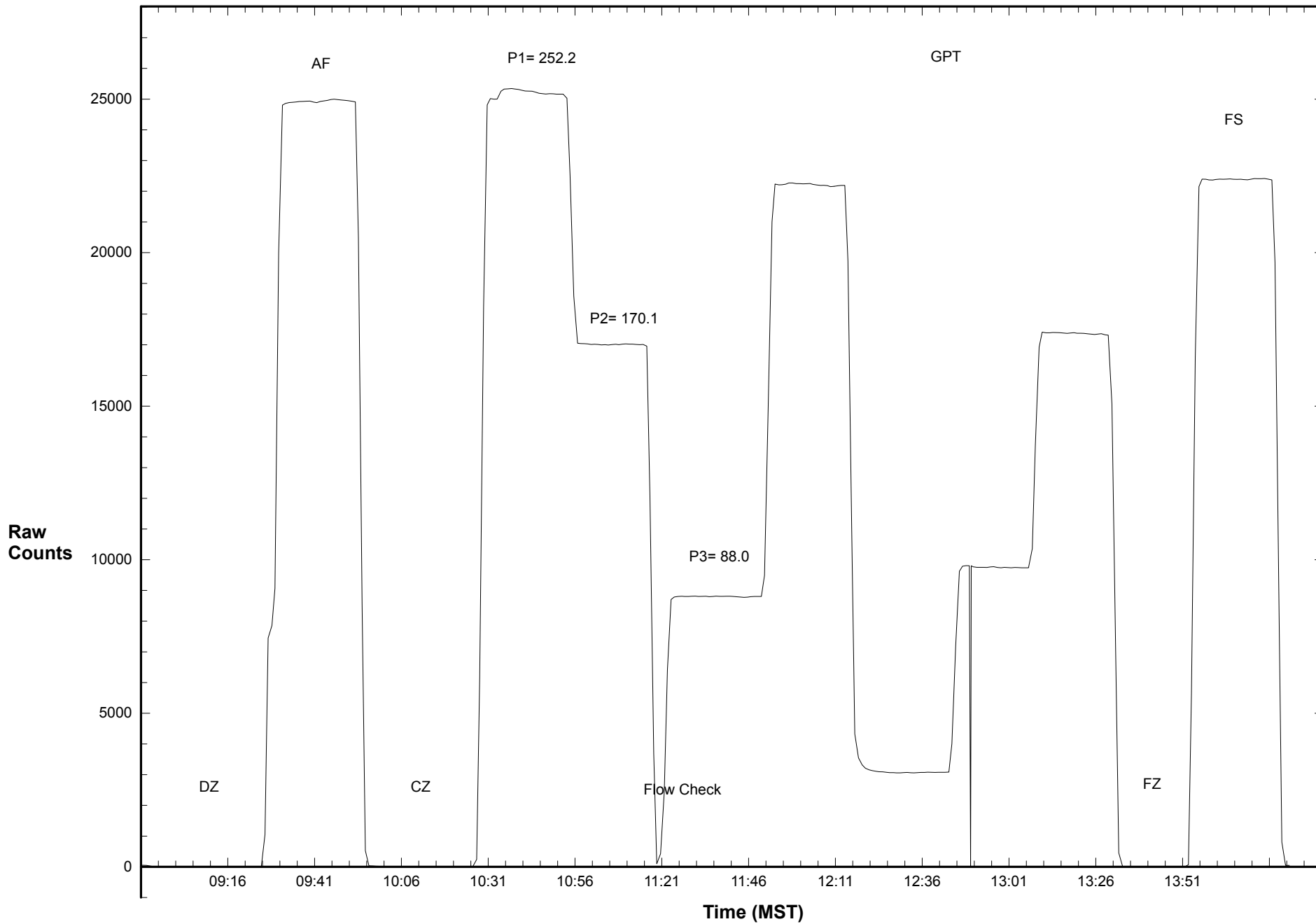
Station 910 NO2 October 23, 2015: Linear Regression



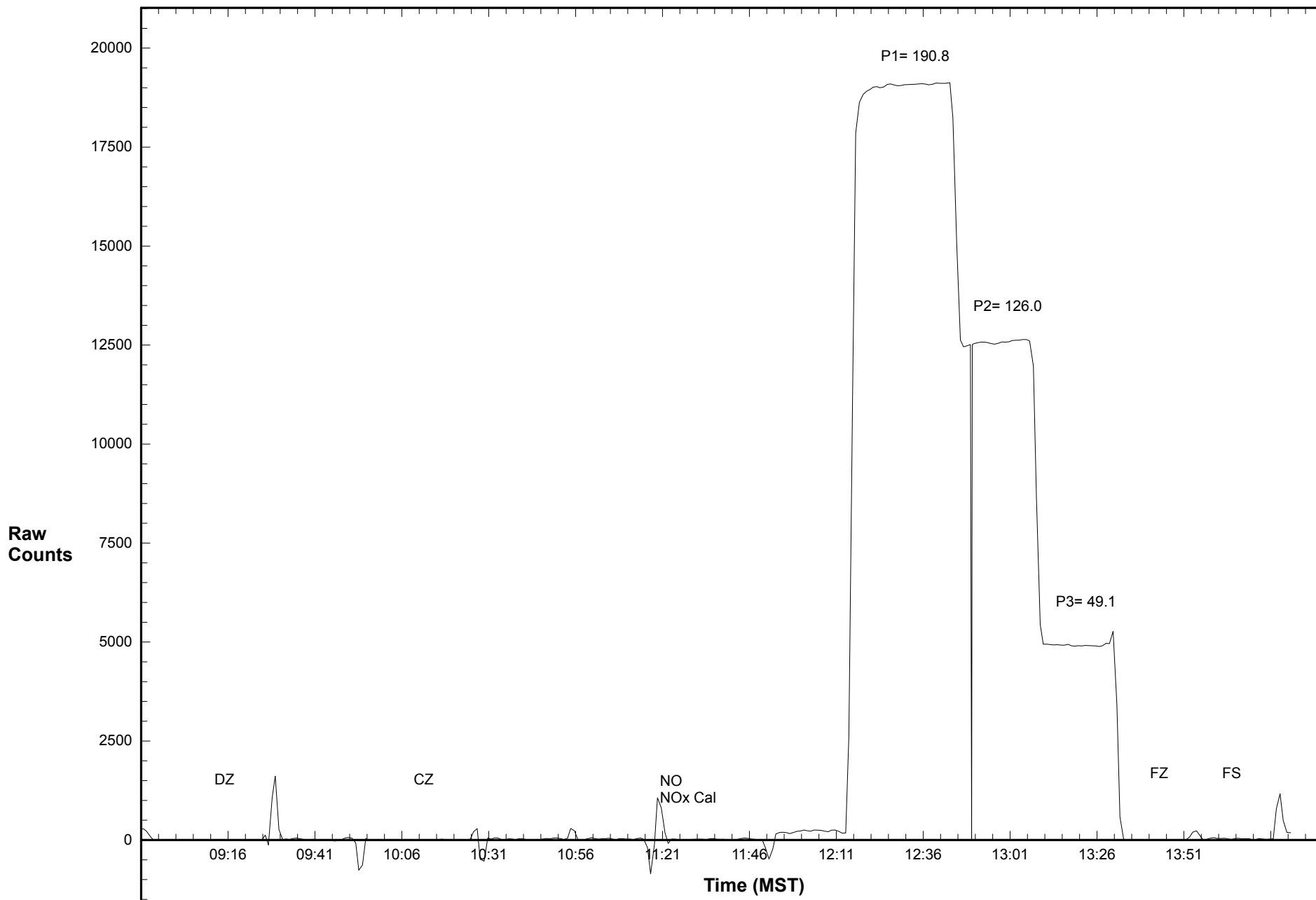
Station 910 NOX October 23, 2015: Linear Regression



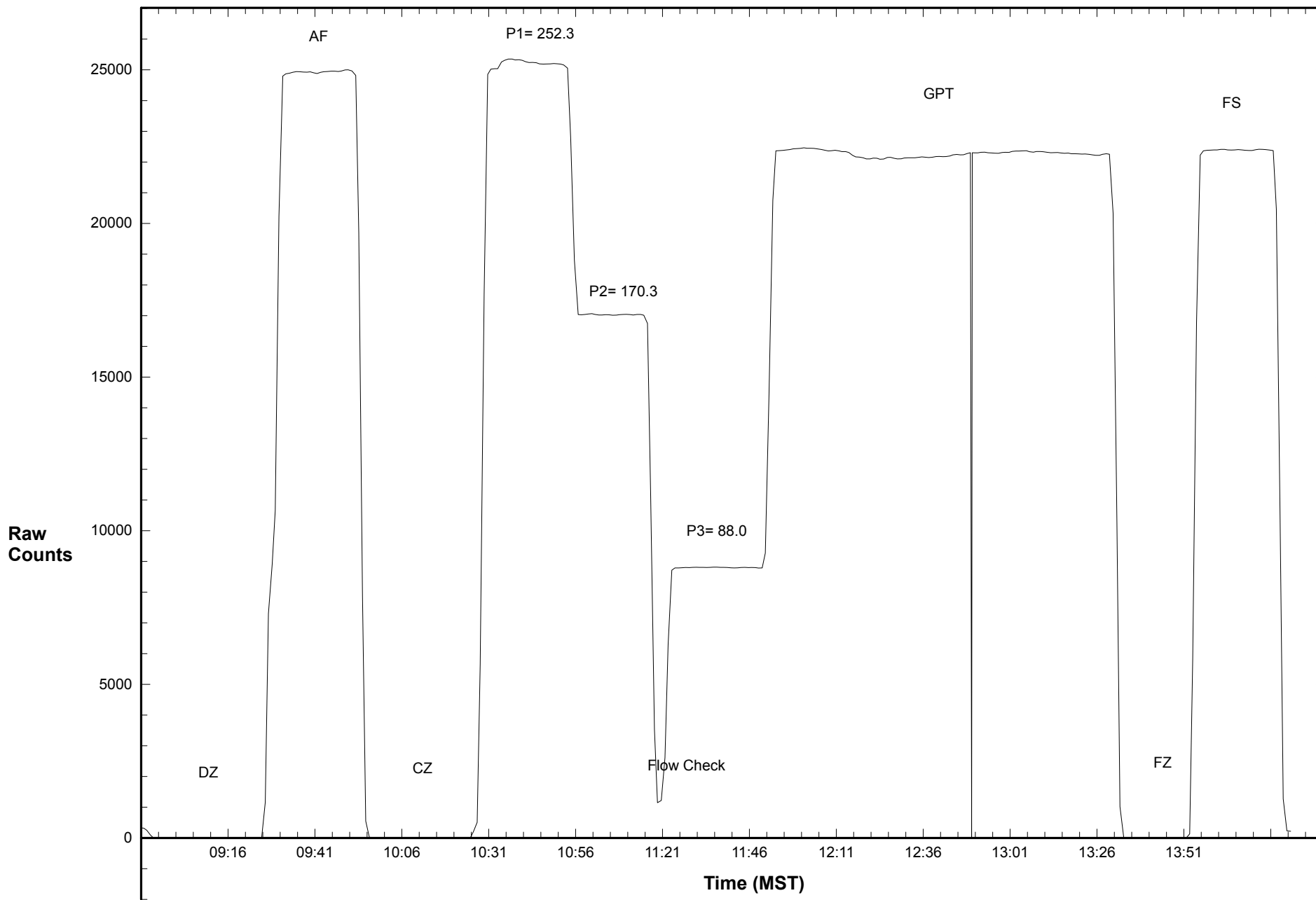
Station 910 NO October 23, 2015: Calibration Graph



Station 910 NO2 October 23, 2015: Calibration Graph



Station 910 NOX October 23, 2015: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: October 23, 2015
 Parameter: O₃

Instrument: Teco 49i

Serial Number: 0708721220

Previous Calibration Date: September 24, 2015

Calibration: Routine

Calibration Equipment: 2B Technology 306 SN 135

Barometric Pressure: 27.40" Hg

Calibration Method: Certified Ozone Calibrator

Temperature: 18.5° C

Technician: Dean Yustak

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	0.1	0.998	500 ppb
Current	0.0	0.976	500 ppb

Final Zero: -1.3 ppb

Final Span: 395.1 ppb

As Found Correction Factor: 0.972

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	398.0	23853.7	398.1	1.000
3.000	250.0	14979.5	249.9	1.001
3.000	100.0	6010.7	100.1	0.999
3.000	0.0	14.6	0.0	

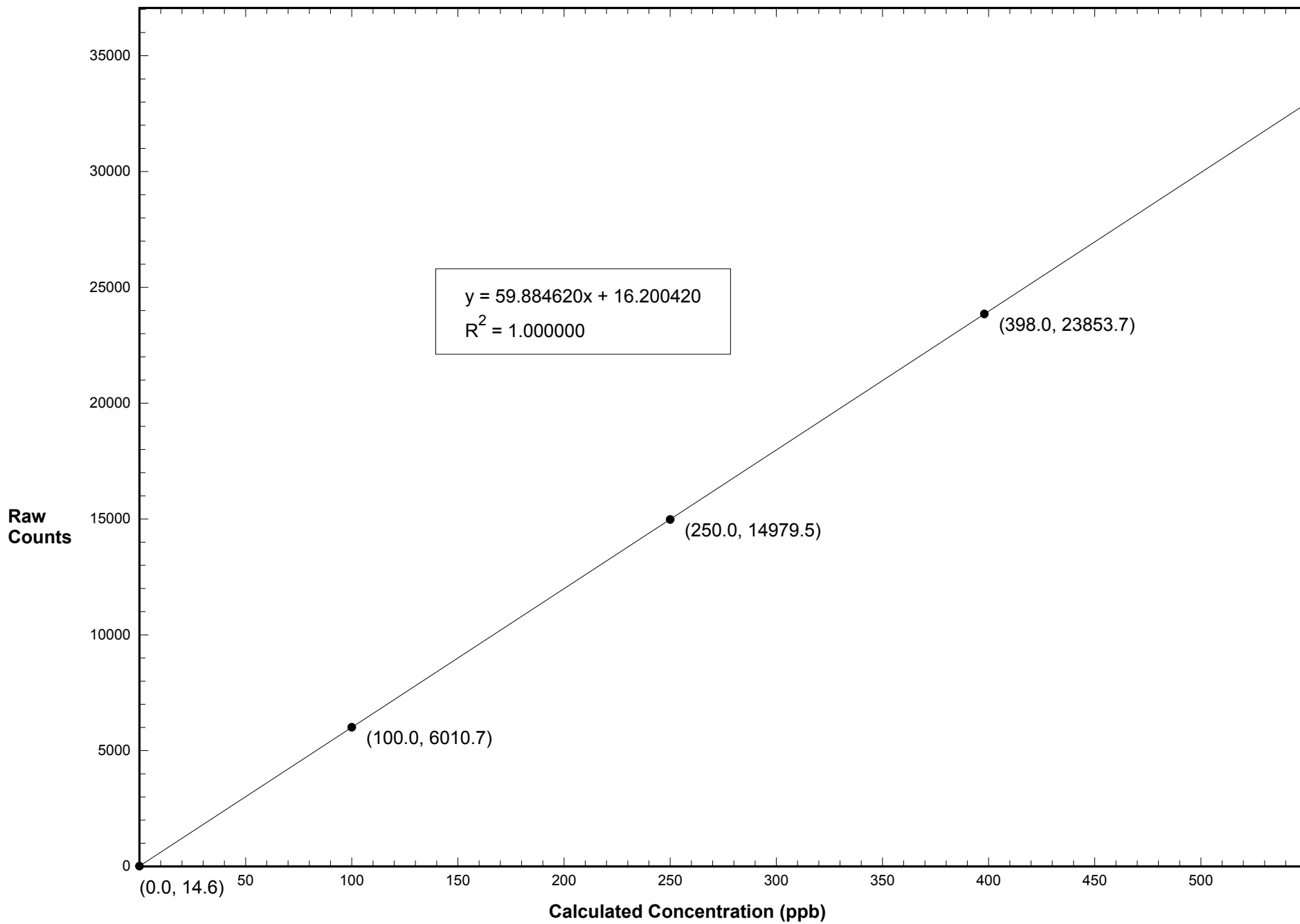
Results of Linear Regression

R _c vs C _c	Slope	Intercept	R ²
Previous	60.259240	-101.785200	0.999887
Current	59.884620	16.200420	1.000000
C _i vs C _c			
Current	1.000000	0.000000	1.000000

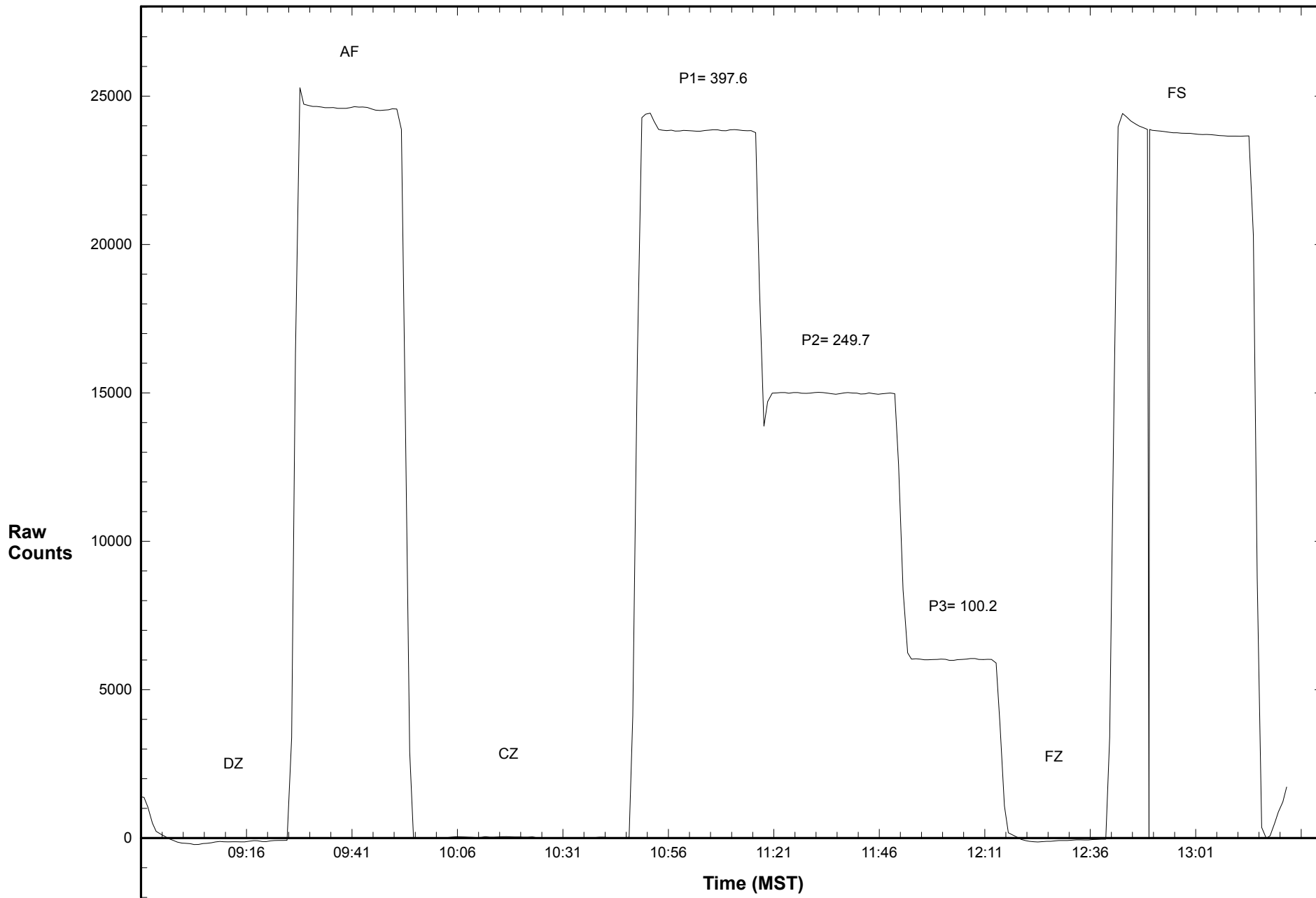
Average Correction Factor: 1.000
 Previous Correction Factor: 0.997
 Current Correction Factor: 1.000
 Percent Change of Correction Factor: 0.3

Comments:

Station 910 O3 October 23, 2015: Linear Regression



Station 910 O3 October 23, 2015: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: October 23, 2015
 Parameter: SO₂

Instrument: Teco 43 i	Serial Number: 0708721218	Previous Calibration Date: September 24, 2015
Calibration: Routine	Calibration Equipment: SABIO 2010 sn 04300810	Barometric Pressure: 27.40" Hg
Calibration Method: Standard Gas Dilution	Cylinder ID: FF16109	Temperature: 18.5° C
Cylinder Concentration: 6.11 ppm SO ₂	In Service: Jan 14, 2014	Technician: Dean Yustak

Instrument Settings	SO ₂ bkg ppb	SO ₂ Coefficient	Monitoring Range
Previous	33.3	1.061	200 ppb
Current	34.1	1.108	200 ppb

Final Zero: 0.1 ppb Final Span: 103.8 ppb As Found Correction Factor: 1.023

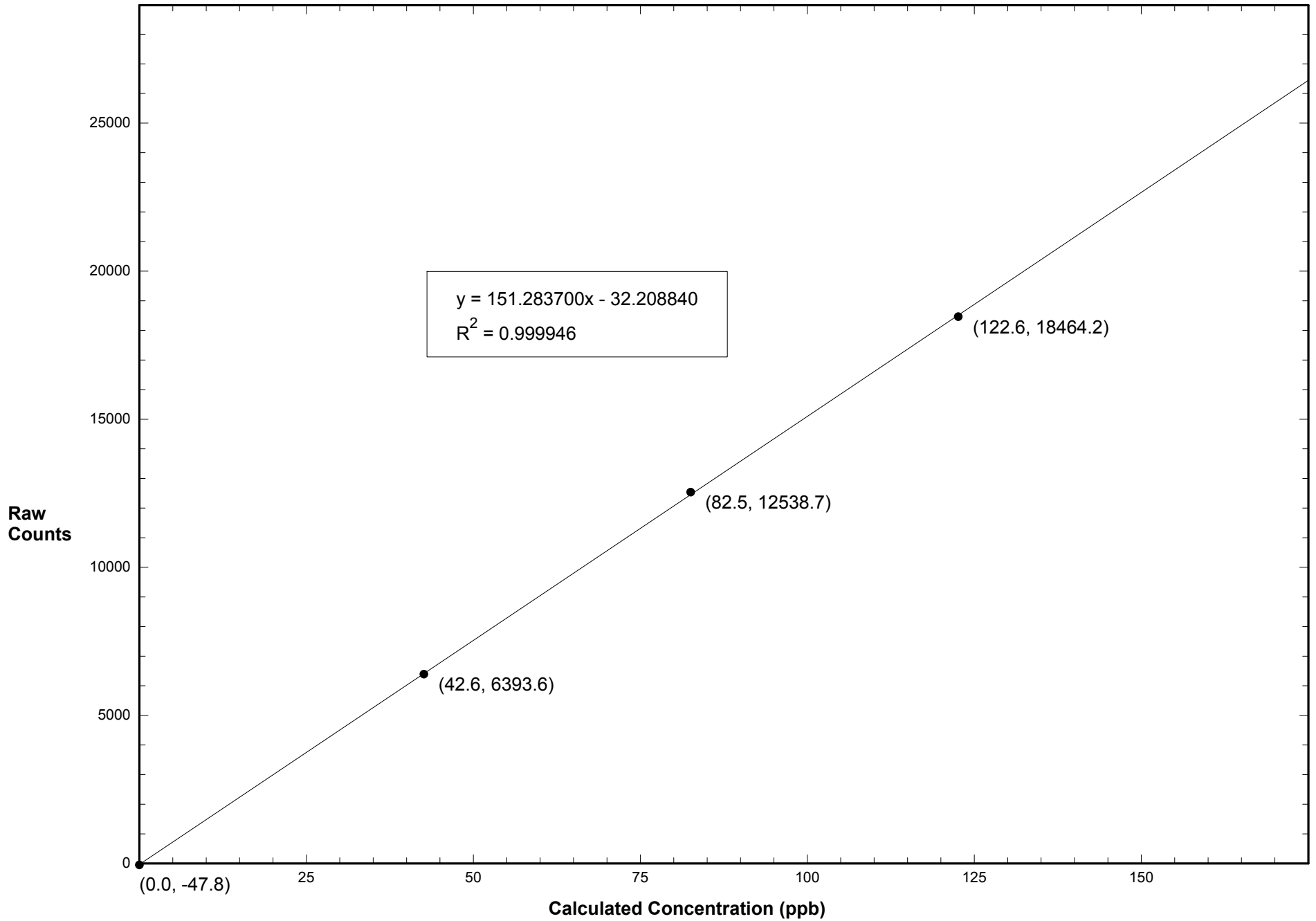
SO ₂ Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
0.0621	3.032	122.6	18464.2	122.3	1.003
0.0415	3.034	82.5	12538.7	83.1	0.993
0.0213	3.034	42.6	6393.6	42.5	1.003
0.0000	3.052	0.0	-47.8	-0.1	

Results of Linear Regression			
R _c vs C _c	Slope	Intercept	R ²
Previous	151.293600	-109.696100	0.999739
Current	151.283700	-32.208840	0.999946
C _i vs C _c			
Current	1.000000	0.000015	0.999946

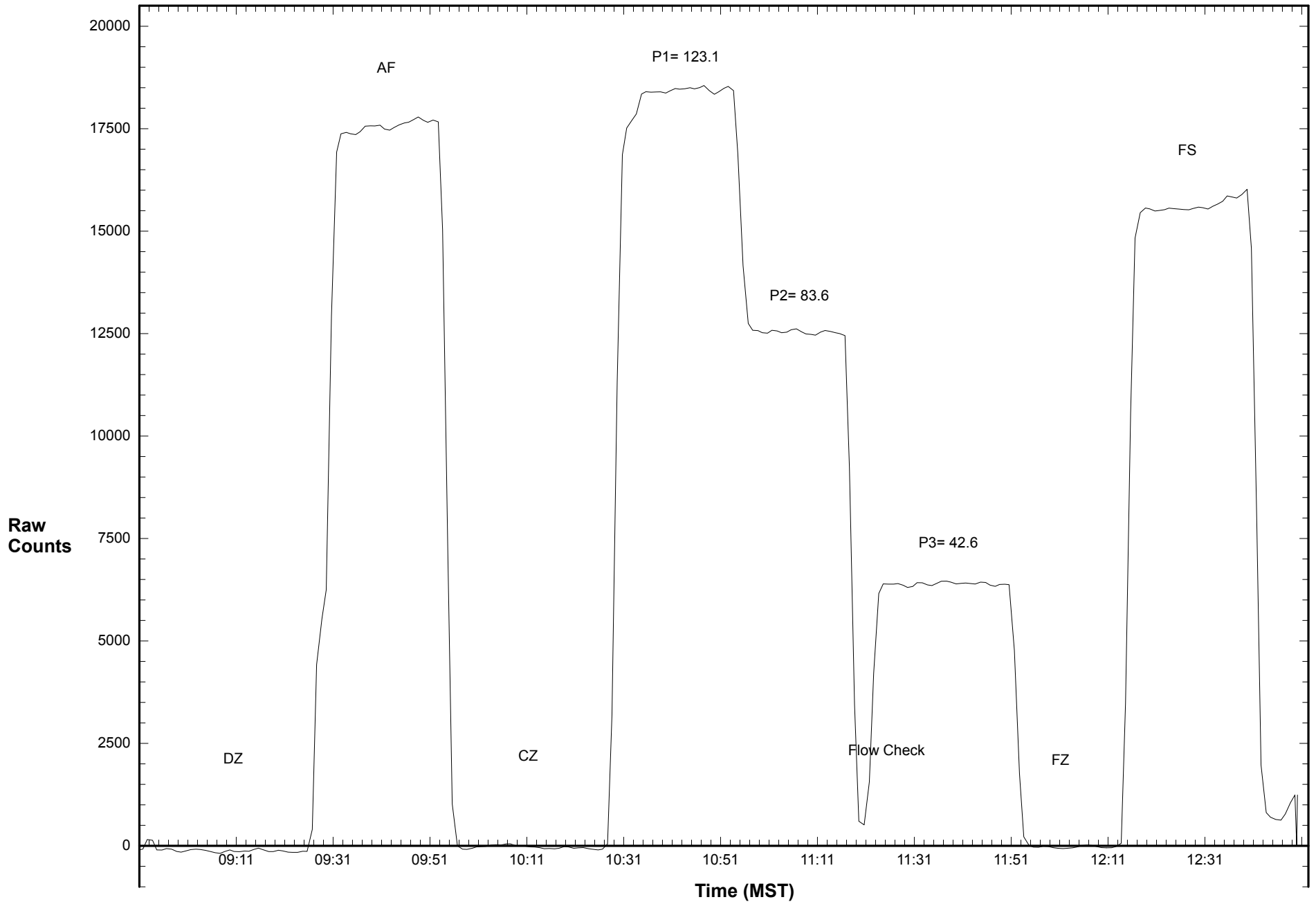
Average Correction Factor: 1.000
 Previous Correction Factor: 0.995
 Current Correction Factor: 1.003
 Percent Change of Correction Factor: 0.8

Comments:

Station 910 SO2 October 23, 2015: Linear Regression



Station 910 SO2 October 23, 2015: Calibration Graph



WEST CENTRAL AIRSHED SOCIETY

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

**AMS 910
GENESEE
OCTOBER 2015**

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

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



WCAS - Genesee
Summary of Hourly Averages

External Temperature (ET) - C
October 2015

Maximum Value: 24.43 C on Oct 10 13:00		Maximum Daily Average: 17.31 C on Oct 10		Hours in Service: 744																							
Minimum Value: -5.6 C on Oct 28 05:00		Minimum Daily Average: 0.75 C on Oct 28		Hours of Data: 744																							
Maximum Diurnal Average: 13.27 C at hour 14		Minimum Diurnal Average: 3.35 C at hour 7		Hours of Missing Data: 0																							
Monthly Average: 7.327 C		Percentiles: P₁ = -3.8 P₁₀ = 0.6 Q₁ = 3.0 Median = 6.9 Q₃ = 11.3 P₉₀ = 15.1 P₉₉ = 22.1		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-Oct	9.9	9.5	8.8	7.5	7.4	6.0	5.8	5.0	9.8	12.9	15.8	18.6	21.8	23.6	23.8	22.8	20.1	18.3	16.7	14.2	13.0	12.0	10.8	10.3	13.52	23.76	
2-Oct	8.8	8.2	6.3	6.3	4.8	4.8	6.1	6.0	7.2	10.8	14.1	16.8	18.5	18.3	13.0	9.1	7.9	7.0	5.7	4.5	4.1	3.7	3.3	3.3	8.27	18.53	
3-Oct	3.3	3.2	3.0	2.8	2.5	2.5	2.6	2.4	2.7	3.3	3.7	4.3	4.8	4.6	4.4	4.0	4.2	4.1	3.7	3.6	3.2	0.3	-1.4	-0.3	2.98	4.79	
4-Oct	0.5	-0.5	0.2	0.6	0.5	0.3	0.2	0.7	1.5	2.3	3.9	5.0	6.5	7.4	7.5	6.8	5.1	2.3	0.4	-0.5	-1.0	-1.3	-1.7	2.27	7.54		
5-Oct	-1.6	-3.1	-3.6	-3.5	-1.6	-0.4	-0.2	0.5	2.2	4.4	6.7	8.9	10.2	10.9	11.7	11.7	11.2	9.7	8.0	5.1	3.7	3.0	2.5	1.8	4.09	11.71	
6-Oct	1.5	1.2	0.6	0.9	0.4	0.1	0.0	0.8	3.5	6.5	8.7	9.8	11.9	11.8	13.0	12.3	12.7	11.0	9.4	8.8	8.4	8.0	7.4	6.8	6.49	13.01	
7-Oct	7.6	7.1	6.8	7.5	7.2	5.1	5.2	7.0	8.3	9.6	12.6	15.7	17.2	18.1	17.9	17.6	15.8	15.0	11.2	10.3	11.6	8.2	8.0	7.3	10.75	18.08	
8-Oct	7.6	7.2	8.0	7.6	7.9	7.6	7.4	7.5	10.9	12.3	14.4	17.0	19.4	20.5	21.0	20.0	17.9	15.1	13.4	13.4	13.1	12.7	13.2	12.4	12.81	21.02	
9-Oct	11.5	11.3	11.0	9.6	9.4	7.1	6.9	9.1	12.2	15.8	16.0	17.6	19.1	19.6	19.8	19.5	17.7	16.2	15.1	14.6	13.9	13.7	13.8	13.3	13.91	19.84	
10-Oct	12.6	15.1	16.4	14.6	15.2	14.4	12.2	11.7	14.8	16.9	21.9	24.0	24.4	24.1	23.9	22.5	20.6	18.4	16.3	15.2	15.1	15.5	15.1	14.3	17.31	24.43	
11-Oct	13.7	15.9	15.2	12.5	11.5	11.2	11.0	11.3	11.0	11.0	10.4	8.4	9.8	10.7	12.3	12.8	12.5	11.1	8.7	7.0	5.0	3.7	2.1	2.7	10.06	15.88	
12-Oct	3.6	3.4	3.0	2.6	2.6	2.3	3.1	4.3	6.4	6.6	7.3	8.7	11.0	12.4	14.1	15.4	14.9	13.8	11.7	10.4	10.7	9.4	8.6	6.7	8.04	15.38	
13-Oct	2.5	1.7	1.8	2.6	2.8	3.3	3.2	4.0	4.8	8.8	12.6	13.6	15.1	16.1	16.4	16.4	14.7	12.7	11.3	10.3	9.1	8.9	7.6	3.9	8.50	16.43	
14-Oct	3.0	2.0	2.0	2.8	3.9	3.3	2.0	5.0	5.9	8.6	10.8	12.2	12.7	12.7	12.6	12.4	11.4	9.0	7.4	6.5	5.4	4.2	4.3	4.4	6.86	12.74	
15-Oct	2.7	0.5	1.5	-1.5	-1.8	-1.9	-2.1	-1.5	1.9	5.5	8.3	10.8	12.2	12.8	13.0	12.4	10.8	8.5	7.1	7.5	7.1	7.0	6.4	5.7	5.53	13.03	
16-Oct	3.7	2.4	1.4	0.7	-0.1	-0.3	0.1	0.2	2.2	6.3	8.8	11.2	13.6	15.8	16.3	16.2	14.5	10.4	9.2	8.1	6.5	5.8	4.9	5.3	6.81	16.33	
17-Oct	4.4	4.7	4.5	2.2	1.1	0.6	0.6	0.6	2.8	6.5	10.2	13.6	16.2	17.9	19.3	18.9	17.3	14.4	11.8	9.6	9.9	10.2	11.9	11.6	9.20	19.27	
18-Oct	10.7	10.2	11.6	11.4	12.4	12.5	11.6	11.5	11.2	13.1	14.3	15.1	15.9	16.8	16.9	16.9	16.2	13.2	11.3	9.6	7.9	8.2	6.6	5.5	12.11	16.91	
19-Oct	5.6	5.9	5.7	4.4	4.9	5.9	5.5	4.9	7.2	8.5	11.4	13.9	15.9	15.8	14.7	13.9	13.1	12.0	11.7	10.6	9.6	10.3	9.3	8.0	9.53	15.86	
20-Oct	7.9	7.3	6.3	5.9	5.4	4.6	4.5	3.9	5.2	7.0	8.9	10.2	11.0	11.8	12.0	12.1	11.5	9.4	8.0	5.6	4.0	5.0	5.5	3.5	7.35	12.09	
21-Oct	5.4	4.3	2.9	2.7	2.3	0.8	1.5	2.0	4.6	7.3	8.5	13.4	17.9	19.3	17.5	15.7	14.3	13.6	13.6	14.2	12.3	11.9	10.6	10.3	9.45	19.34	
22-Oct	10.3	10.1	10.0	8.5	8.4	8.6	8.0	6.4	6.3	8.1	11.1	11.4	11.9	12.7	11.0	9.6	9.2	7.0	4.8	4.9	5.8	6.0	5.8	2.4	8.26	12.73	
23-Oct	0.6	-0.9	-0.4	0.5	1.0	2.0	2.1	2.4	4.5	6.0	7.9	9.7	11.2	11.1	11.8	11.9	9.7	8.5	7.2	7.4	5.7	3.9	4.3	3.0	5.45	11.85	
24-Oct	2.6	5.0	4.7	4.4	4.5	4.8	4.1	3.6	3.4	5.2	6.9	8.1	9.1	9.6	9.0	7.6	7.0	4.9	3.0	1.8	1.0	0.6	0.3	-0.4	4.62	9.65	
25-Oct	-0.6	0.3	-1.3	-1.4	-3.1	-3.9	-3.6	-3.1	-0.3	1.3	4.7	8.4	9.6	10.4	10.4	9.6	7.9	5.5	3.9	2.9	2.2	2.4	2.6	2.2	2.79	10.41	
26-Oct	2.4	1.4	2.4	1.9	1.8	3.0	3.6	3.8	4.4	5.6	7.1	7.4	7.1	7.1	6.5	5.6	4.9	4.2	3.2	2.1	1.9	1.8	2.1	1.8	3.88	7.38	
27-Oct	1.5	1.2	1.1	0.6	0.0	-0.1	-0.4	-0.5	-0.3	0.8	1.6	2.7	3.4	3.9	4.6	4.3	3.3	1.4	0.8	0.9	-0.2	-0.4	-1.5	-2.5	1.09	4.56	
28-Oct	-4.8	-3.0	-4.7	-5.5	-5.6	-4.2	-4.7	-3.8	-2.0	0.5	3.6	5.4	6.9	7.9	8.1	7.1	5.3	3.6	2.5	1.8	1.4	0.8	1.0	0.5	0.75	8.11	
29-Oct	0.7	0.5	1.2	1.5	2.5	4.5	4.9	4.1	4.5	6.2	7.3	9.5	10.7	11.6	11.1	10.4	8.8	7.1	5.6	5.5	6.0	7.4	4.5	1.5	5.73	11.58	
30-Oct	0.9	1.1	2.6	3.1	2.5	2.7	2.6	3.7	3.3	6.0	6.0	7.5	7.5	7.8	7.7	6.3	5.5	4.3	3.4	1.9	2.0	3.9	3.6	4.0	4.16	7.85	
31-Oct	3.8	3.5	2.6	2.5	2.9	3.3	0.4	0.0	1.2	3.8	6.2	8.8	8.6	8.2	8.4	8.6	7.3	6.2	5.9	5.6	4.4	3.4	2.3	1.7	4.55	8.76	
		4.59	4.41	4.24	3.75	3.66	3.56	3.35	3.67	5.20	7.34	9.40	11.21	12.62	13.27	13.22	12.61	11.45	9.70	8.19	7.23	6.56	6.14	5.62	4.82	Diurnal Average	
		13.72	15.88	16.40	14.62	15.19	14.36	12.22	11.72	14.77	16.94	21.94	23.95	24.43	24.12	23.94	22.80	20.57	18.38	16.71	15.24	15.12	15.51	15.15	14.34	Diurnal Maximum	



WCAS - Genesee
Summary of Hourly Averages

External Temperature 10 m (ET_10) - C
October 2015

Maximum Value: 23.61 C on Oct 10 14:00		Maximum Daily Average: 18.44 C on Oct 10		Hours in Service: 744																							
Minimum Value: -3.7 C on Oct 28 05:00		Minimum Daily Average: 1.04 C on Oct 28		Hours of Data: 744																							
Maximum Diurnal Average: 12.34 C at hour 15		Minimum Diurnal Average: 4.22 C at hour 8		Hours of Missing Data: 0																							
Monthly Average: 7.706 C		Percentiles: P ₁ = -2.1 P ₁₀ = 1.2 Q ₁ = 3.6 Median = 7.1 Q ₃ = 11.2 P ₉₀ = 15.5 P ₉₉ = 22.5		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-Oct	12.1	11.5	11.2	9.3	9.9	9.1	7.9	6.3	8.8	11.9	14.8	17.6	20.7	22.4	22.8	22.5	20.7	19.7	18.7	17.1	15.5	14.3	12.9	12.6	14.59	22.85	
2-Oct	11.2	9.4	9.1	7.9	6.1	6.9	7.3	6.3	5.8	9.8	12.9	15.6	17.3	17.1	12.3	8.5	7.1	6.1	4.8	4.0	3.4	2.9	2.6	2.7	8.21	17.26	
3-Oct	2.7	2.7	2.4	2.3	2.4	2.4	2.4	2.1	2.1	2.6	2.8	3.2	3.5	3.5	3.4	3.2	3.5	3.6	3.4	3.3	3.0	1.9	1.4	1.2	2.70	3.63	
4-Oct	1.0	0.8	0.2	0.3	0.1	0.4	-0.1	0.0	0.3	0.8	1.6	2.3	3.5	4.6	5.1	5.4	5.5	4.9	3.5	2.0	0.8	0.2	-0.1	-0.1	1.78	5.48	
5-Oct	-0.4	-0.7	-1.7	-2.0	-1.1	-0.4	-0.3	0.2	1.6	3.4	5.4	7.4	8.7	9.6	10.4	10.8	10.6	9.9	9.1	7.1	5.7	4.8	4.0	3.7	4.41	10.81	
6-Oct	3.1	2.6	2.6	2.4	1.4	0.6	0.5	0.8	2.6	5.3	7.4	8.5	10.2	10.8	11.8	11.8	12.5	11.9	11.2	10.4	9.5	9.3	8.9	8.1	6.84	12.49	
7-Oct	7.7	7.4	6.9	7.5	7.2	6.1	5.6	6.8	7.9	8.7	11.3	14.4	15.9	16.8	17.1	16.8	15.9	15.9	14.7	13.1	14.5	10.6	10.2	9.7	11.19	17.05	
8-Oct	8.6	7.7	8.7	8.9	8.7	9.3	8.0	7.8	9.7	11.4	13.4	16.1	18.2	19.3	19.9	19.9	18.9	17.2	15.7	15.1	14.7	14.5	14.3	14.2	13.33	19.87	
9-Oct	13.3	13.4	13.2	12.3	12.2	10.8	9.6	10.1	11.6	14.9	15.3	16.8	19.0	19.6	20.4	20.2	19.7	19.1	17.8	16.3	15.9	15.4	15.4	14.9	15.29	20.35	
10-Oct	15.0	16.7	17.1	16.3	16.6	15.9	14.8	15.1	16.0	17.6	21.3	23.0	23.5	23.6	23.5	22.5	21.6	20.7	19.1	18.0	17.0	16.5	15.9	15.3	18.44	23.61	
11-Oct	14.8	16.0	15.1	12.0	11.6	11.1	10.9	11.0	10.6	10.5	9.9	7.4	9.2	10.1	11.6	12.0	12.0	11.2	10.1	10.1	7.5	6.0	3.7	4.2	10.35	16.03	
12-Oct	4.7	4.9	4.6	5.0	4.8	4.4	4.6	4.8	6.2	6.3	6.8	8.0	9.9	11.1	13.0	14.5	14.7	14.1	12.5	11.3	11.1	9.9	9.5	8.2	8.55	14.66	
13-Oct	4.3	3.8	4.0	4.1	4.3	4.7	4.5	4.9	5.0	7.5	11.6	12.3	13.9	15.0	15.5	15.7	14.6	13.3	12.2	11.3	10.1	9.3	8.5	6.4	9.03	15.69	
14-Oct	5.3	4.5	4.5	4.3	4.3	4.5	4.1	5.9	5.4	7.8	9.8	11.1	11.6	11.7	11.6	11.6	11.0	9.7	8.6	7.8	7.0	6.2	5.9	5.1	7.47	11.67	
15-Oct	3.9	2.2	3.3	0.6	0.4	0.1	-0.4	-0.8	0.7	3.7	7.2	9.0	10.3	11.0	11.4	11.4	10.8	9.9	9.0	8.1	7.4	7.1	6.8	6.3	5.80	11.38	
16-Oct	5.6	4.7	2.6	1.7	1.2	1.3	1.9	1.3	0.3	4.3	7.3	9.3	12.1	14.1	14.9	15.2	14.7	13.1	12.0	10.6	9.0	8.2	8.2	7.8	7.56	15.22	
17-Oct	7.7	7.2	6.1	2.9	1.6	1.4	1.0	0.8	1.8	5.2	8.7	12.1	14.5	16.4	17.9	18.5	17.9	16.3	14.8	13.9	13.9	13.2	13.3	11.8	9.97	18.48	
18-Oct	11.3	11.2	12.2	11.9	12.6	12.6	12.2	11.9	11.5	12.6	13.4	14.0	14.8	15.7	16.0	16.3	16.1	14.9	13.2	11.7	10.3	10.9	9.7	7.7	12.68	16.31	
19-Oct	6.4	6.9	6.1	4.4	4.5	5.8	5.0	4.9	6.4	7.5	10.6	13.0	14.2	14.7	14.4	13.9	13.3	12.7	12.1	11.3	10.5	10.4	8.8	7.6	9.38	14.71	
20-Oct	7.1	6.7	5.9	5.8	5.7	5.0	4.7	4.4	5.0	6.3	8.1	9.1	9.9	10.6	11.0	11.2	11.2	10.4	9.9	8.0	5.5	6.1	6.0	5.4	7.46	11.23	
21-Oct	6.7	6.4	4.3	4.1	3.8	3.5	3.4	3.8	3.4	6.5	7.2	12.0	16.8	18.7	18.0	16.9	15.8	15.1	15.5	15.5	13.0	12.0	10.6	10.4	10.13	18.68	
22-Oct	10.9	11.0	10.8	9.1	8.7	8.4	8.1	7.9	6.7	7.6	9.9	10.4	10.9	11.7	10.9	9.6	9.2	8.2	6.8	6.9	7.3	7.1	6.5	4.7	8.73	11.70	
23-Oct	2.8	1.6	1.4	1.4	2.0	2.3	3.2	3.0	4.1	5.2	6.7	8.6	10.0	10.0	10.7	11.1	10.2	9.5	9.0	8.9	8.4	7.5	6.9	4.2	6.20	11.09	
24-Oct	2.8	5.5	4.7	4.3	4.2	4.6	3.7	3.4	3.0	4.2	5.7	6.8	7.6	8.2	8.1	7.1	7.1	6.2	5.0	3.5	2.8	2.1	1.7	1.3	4.73	8.18	
25-Oct	1.0	1.7	1.4	1.0	-0.9	-2.1	-2.0	-2.0	-1.2	0.2	3.2	6.7	7.8	8.7	8.9	8.7	7.9	6.2	4.7	3.6	2.9	3.1	3.1	2.8	3.15	8.93	
26-Oct	2.7	1.8	2.7	2.2	2.1	3.3	3.7	3.8	4.1	5.0	6.3	6.7	6.6	6.4	6.0	4.9	3.9	3.7	3.0	1.3	1.1	1.1	1.3	1.2	3.53	6.65	
27-Oct	1.3	1.0	0.7	0.1	-0.4	-0.5	-0.8	-1.0	-0.8	-0.1	0.5	1.4	2.1	2.8	3.5	3.6	3.3	2.5	2.1	1.9	1.7	0.9	0.4	-0.8	1.06	3.61	
28-Oct	-2.6	-1.6	-2.0	-3.7	-3.7	-2.8	-3.4	-3.0	-2.1	-0.4	2.5	4.0	5.3	6.3	6.8	6.5	5.5	4.2	2.9	2.0	1.4	0.9	1.0	0.8	1.04	6.75	
29-Oct	0.4	0.2	0.7	1.3	2.2	4.3	4.6	3.7	3.9	5.2	5.9	7.3	9.7	10.7	10.7	10.3	9.5	8.7	7.6	6.9	7.0	7.7	6.0	4.0	5.77	10.74	
30-Oct	3.1	2.7	4.3	4.4	3.6	4.6	4.5	5.1	4.4	5.8	5.3	6.6	6.8	7.4	7.4	6.0	5.4	4.8	4.4	3.8	3.7	4.4	3.9	4.3	4.87	7.41	
31-Oct	4.2	4.2	3.6	3.6	3.9	3.9	2.2	1.6	1.5	2.8	4.7	7.6	7.7	7.6	7.8	8.2	7.1	6.0	5.6	5.3	4.5	3.6	2.7	1.9	4.65	8.16	
		5.76	5.60	5.38	4.70	4.51	4.56	4.24	4.22	4.72	6.44	8.31	9.94	11.36	12.14	12.34	12.09	11.52	10.64	9.65	8.71	7.94	7.36	6.77	6.05	Diurnal Average	
		14.98	16.68	17.14	16.25	16.58	15.92	14.80	15.10	15.99	17.63	21.31	22.96	23.49	23.61	23.47	22.48	21.58	20.70	19.14	18.00	17.03	16.50	15.87	15.27	Diurnal Maximum	



WCAS - Genesee
Summary of Hourly Averages

Delta Temperature (ET_D) - C
October 2015

Maximum Value: 4.34 C on Oct 17 20:00		Maximum Daily Average: 1.37 C on Oct 9		Hours in Service: 744																							
Minimum Value: -2.9 C on Oct 4 13:00		Minimum Daily Average: -0.48 C on Oct 4		Hours of Data: 744																							
Maximum Diurnal Average: 1.46 C at hour 20		Minimum Diurnal Average: -1.25 C at hour 12		Hours of Missing Data: 0																							
Monthly Average: 0.378 C		Percentiles: P ₁ = -2.0 P ₁₀ = -1.2 Q ₁ = -0.7 Median = 0.3 Q ₃ = 1.4 P ₉₀ = 2.2 P ₉₉ = 3.3		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-Oct	2.2	2.0	2.4	1.8	2.5	3.2	2.1	1.2	-1.0	-1.0	-1.0	-1.0	-1.1	-1.1	-0.9	-0.3	0.5	1.4	1.9	2.9	2.5	2.3	2.0	2.2	1.07	3.15	
2-Oct	2.4	1.2	2.8	1.6	1.3	2.1	1.2	0.3	-1.4	-1.0	-1.1	-1.2	-1.2	-1.1	-0.8	-0.7	-0.8	-0.9	-0.8	-0.5	-0.7	-0.7	-0.6	-0.6	-0.05	2.80	
3-Oct	-0.6	-0.6	-0.6	-0.5	-0.1	-0.1	-0.1	-0.3	-0.5	-0.7	-0.9	-1.0	-1.3	-1.1	-1.0	-0.8	-0.7	-0.5	-0.3	-0.3	-0.3	1.5	2.8	1.5	-0.26	2.81	
4-Oct	0.4	1.2	0.0	-0.3	-0.5	0.0	-0.2	-0.7	-1.1	-1.6	-2.2	-2.7	-2.9	-2.8	-2.5	-2.0	-1.4	-0.2	1.2	1.6	1.3	1.2	1.2	1.5	-0.48	1.64	
5-Oct	1.1	2.4	1.8	1.5	0.5	0.0	-0.1	-0.3	-0.6	-0.9	-1.3	-1.5	-1.5	-1.3	-1.3	-0.9	-0.5	0.2	1.1	2.0	2.0	1.8	1.6	1.8	0.32	2.40	
6-Oct	1.5	1.4	2.0	1.4	0.9	0.4	0.5	0.0	-0.9	-1.1	-1.3	-1.3	-1.7	-1.0	-1.2	-0.5	-0.2	0.9	1.8	1.6	1.1	1.2	1.5	1.3	0.34	2.00	
7-Oct	0.1	0.2	0.1	0.0	-0.1	1.0	0.4	-0.1	-0.4	-0.9	-1.2	-1.3	-1.3	-1.3	-0.8	-0.7	0.2	0.9	3.5	2.8	2.9	2.4	2.2	2.4	0.44	3.46	
8-Oct	1.0	0.5	0.7	1.3	0.8	1.6	0.6	0.3	-1.1	-0.9	-1.0	-0.9	-1.2	-1.1	-1.1	-0.2	1.1	2.0	2.2	1.7	1.6	1.7	1.1	1.7	0.51	2.22	
9-Oct	1.8	2.0	2.2	2.6	2.8	3.8	2.7	1.0	-0.6	-0.9	-0.7	-0.7	-0.1	0.0	0.5	0.7	2.0	2.9	2.7	1.6	1.9	1.7	1.6	1.6	1.37	3.76	
10-Oct	2.4	1.6	0.7	1.6	1.4	1.5	2.6	3.4	1.2	0.7	-0.6	-1.0	-0.9	-0.5	-0.4	0.0	1.0	2.3	2.9	2.8	1.9	1.0	0.7	0.9	1.12	3.36	
11-Oct	1.0	0.1	-0.1	-0.5	0.1	-0.1	-0.1	-0.2	-0.4	-0.5	-0.5	-1.0	-0.6	-0.6	-0.7	-0.7	-0.5	0.1	1.4	3.0	2.5	2.3	1.5	1.5	0.30	3.05	
12-Oct	1.1	1.5	1.6	2.4	2.3	2.1	1.4	0.5	-0.2	-0.3	-0.5	-0.7	-1.1	-1.2	-1.2	-0.9	-0.2	0.3	0.8	0.8	0.4	0.6	0.9	1.5	0.50	2.37	
13-Oct	1.8	2.1	2.2	1.5	1.5	1.4	1.3	0.9	0.2	-1.3	-0.9	-1.2	-1.2	-1.1	-0.9	-0.6	-0.1	0.6	0.9	1.0	1.0	0.4	0.8	2.5	0.52	2.49	
14-Oct	2.3	2.4	2.4	1.5	0.3	1.1	2.1	0.9	-0.5	-0.8	-1.0	-1.1	-1.1	-1.1	-0.9	-0.7	-0.4	0.7	1.2	1.2	1.6	2.0	1.5	0.7	0.60	2.44	
15-Oct	1.1	1.6	1.9	2.1	2.2	2.0	1.7	0.7	-1.2	-1.8	-1.1	-1.8	-1.9	-1.8	-1.6	-1.0	0.0	1.4	1.9	0.6	0.2	0.2	0.3	0.6	0.26	2.21	
16-Oct	1.9	2.2	1.2	1.0	1.2	1.6	1.8	1.1	-1.8	-2.0	-1.5	-1.9	-1.5	-1.7	-1.5	-1.0	0.2	2.7	2.7	2.5	2.5	2.3	3.3	2.5	0.74	3.29	
17-Oct	3.3	2.6	1.7	0.7	0.6	0.8	0.4	0.2	-1.0	-1.3	-1.5	-1.5	-1.7	-1.4	-1.4	-0.4	0.5	1.9	3.0	4.3	3.9	3.0	1.3	0.2	0.76	4.34	
18-Oct	0.5	1.0	0.6	0.4	0.1	0.1	0.5	0.3	0.4	-0.6	-0.9	-1.1	-1.1	-1.1	-0.9	-0.6	-0.1	1.7	1.9	2.0	2.4	2.7	3.1	2.1	0.57	3.09	
19-Oct	0.7	0.9	0.3	0.0	-0.3	-0.1	-0.5	0.0	-0.8	-1.1	-0.8	-0.8	-1.6	-1.1	-0.3	0.0	0.3	0.7	0.4	0.7	0.8	0.1	-0.5	-0.4	-0.14	0.95	
20-Oct	-0.7	-0.6	-0.4	-0.2	0.3	0.5	0.2	0.4	-0.2	-0.6	-0.8	-1.0	-1.0	-1.2	-1.0	-0.8	-0.2	1.0	1.8	2.3	1.5	1.1	0.4	1.9	0.11	2.34	
21-Oct	1.3	2.0	1.4	1.4	1.4	2.6	1.9	1.7	-1.2	-0.8	-1.2	-1.4	-1.1	-0.6	0.5	1.2	1.5	1.5	1.9	1.3	0.7	0.1	0.0	0.1	0.67	2.60	
22-Oct	0.6	0.9	0.8	0.6	0.4	-0.1	0.1	1.5	0.4	-0.5	-1.2	-1.0	-1.0	-1.0	-0.1	0.0	0.0	1.2	2.0	2.0	1.5	1.1	0.7	2.3	0.46	2.26	
23-Oct	2.2	2.5	1.7	0.9	1.1	0.3	1.1	0.6	-0.3	-0.8	-1.1	-1.0	-1.2	-1.1	-1.1	-0.7	0.5	1.0	1.8	1.5	2.7	3.6	2.7	1.2	0.74	3.57	
24-Oct	0.1	0.4	0.0	-0.2	-0.3	-0.2	-0.3	-0.2	-0.4	-1.0	-1.2	-1.3	-1.4	-1.5	-0.8	-0.5	0.1	1.2	1.9	1.7	1.7	1.5	1.3	1.7	0.11	1.91	
25-Oct	1.6	1.4	2.7	2.4	2.2	1.8	1.6	1.1	-0.9	-1.1	-1.4	-1.6	-1.8	-1.7	-1.4	-0.8	-0.1	0.7	0.7	0.7	0.7	0.7	0.5	0.6	0.35	2.69	
26-Oct	0.3	0.4	0.2	0.3	0.2	0.2	0.1	-0.1	-0.2	-0.6	-0.8	-0.7	-0.5	-0.7	-0.5	-0.7	-1.0	-0.5	-0.2	-0.7	-0.8	-0.8	-0.7	-0.6	-0.34	0.37	
27-Oct	-0.2	-0.2	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.8	-1.0	-1.2	-1.3	-1.1	-1.0	-0.6	-0.1	1.1	1.2	1.0	1.9	1.2	1.9	1.7	-0.03	1.90
28-Oct	2.3	1.4	2.7	1.8	1.9	1.4	1.3	0.8	-0.1	-0.9	-1.1	-1.3	-1.6	-1.6	-1.3	-0.6	0.3	0.5	0.5	0.1	0.1	0.1	0.0	0.3	0.29	2.71	
29-Oct	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.3	-0.4	-0.6	-0.9	-1.3	-2.2	-1.0	-0.8	-0.4	-0.1	0.6	1.6	2.0	1.4	1.0	0.3	1.5	2.5	0.05	2.49	
30-Oct	2.2	1.5	1.7	1.3	1.1	1.9	1.9	1.4	1.1	-0.2	-0.7	-0.9	-0.6	-0.4	-0.3	-0.2	-0.1	0.5	1.1	2.0	1.6	0.5	0.3	0.3	0.69	2.16	
31-Oct	0.4	0.8	1.0	1.1	1.0	0.6	1.8	1.6	0.3	-1.0	-1.5	-1.1	-0.9	-0.6	-0.6	-0.4	-0.1	-0.2	-0.3	-0.3	0.0	0.2	0.3	0.3	0.10	1.77	
		1.15	1.18	1.13	0.93	0.84	0.99	0.88	0.55	-0.47	-0.88	-1.08	-1.25	-1.24	-1.12	-0.87	-0.51	0.07	0.92	1.45	1.46	1.36	1.20	1.14	1.22	Diurnal Average	
		3.33	2.57	2.80	2.61	2.77	3.76	2.72	3.36	1.21	0.68	-0.46	-0.69	-0.11	-0.03	0.55	1.18	1.99	2.88	3.46	4.34	3.94	3.57	3.29	2.51	Diurnal Maximum	



WCAS - Genesee
Summary of Hourly Averages

Wind Speed (WS) - kph
October 2015

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	3.5	0.1	1.3	2.6	4.9	4.0	4.2	5.9	6.8	2.0	2.1	2.2	8.2	15.0	15.7	15.5	13.5	9.6	8.6	8.6	7.7	7.6	6.9	6.0	5.06	15.67
Dir	SSW	S	E	SSW	WSW	NNW	N	SSW	SW	SSW	SE	SE	SE	SSE	SE	SSE	SSE	SSE	SE	ESE	ESE	ESE	ESE	ESE	SSE	SSE
2 Spd	7.4	6.0	3.1	1.9	4.7	8.7	13.8	5.7	2.7	2.6	11.5	16.7	18.8	24.5	34.9	29.5	30.8	29.6	27.9	24.4	28.2	26.5	24.1	21.7	13.87	34.95
Dir	ESE	E	NE	ESE	SSW	SW	WSW	WSW	S	W	NW	NNW	N	NNW	NW	NW	NW	NNW	NW	WNW	NW	NW	NW	NW	NW	NW
3 Spd	20.7	20.1	24.2	24.4	20.0	19.2	21.1	23.2	17.8	17.1	18.6	19.0	19.3	18.4	16.1	13.9	14.0	12.6	8.7	11.5	12.0	10.6	8.6	4.9	16.31	24.38
Dir	NNW	NNW	NNW	NNW	NNW	NNW	NNW	N	N	NNW	NNW	NNW	NNW	NNW	N	N	N	N	N	NNW	N	NNW	N	N	NNW	NNW
4 Spd	5.5	4.3	4.9	2.0	2.2	1.5	4.9	5.2	4.2	5.3	10.0	11.0	10.0	11.8	14.8	15.7	15.2	12.1	8.6	6.5	5.9	4.7	4.1	6.5	5.84	15.67
Dir	NE	NE	NE	ESE	SE	ENE	WSW	WSW	SW	SSE	SSE	SSE	SE	SE	SSE	SSE	SSE	SE	SE	SE	SSE	SE	SSE	SE	SE	SSE
5 Spd	4.3	4.2	5.2	8.0	10.1	14.4	18.3	17.4	11.1	12.3	14.1	14.8	12.6	10.8	9.7	7.2	4.6	1.9	2.8	4.6	5.5	5.7	4.9	4.3	6.29	18.27
Dir	SE	NW	SW	WSW	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NNW	NNW	E	SE	S	S	SSW	SSW	SSW	WNW	WNW
6 Spd	3.7	4.8	7.7	6.8	6.8	6.9	8.4	10.5	13.3	16.5	24.6	20.5	20.4	18.1	11.1	10.4	10.7	4.9	4.6	3.2	4.4	3.4	6.0	7.3	7.79	24.58
Dir	SSE	SE	SE	ESE	E	E	E	E	ESE	SE	SE	SE	SE	SE	ESE	E	SE	SE	SE	E	NNE	NNE	NNW	NW	ESE	SE
7 Spd	7.2	5.8	9.0	11.0	8.3	9.1	11.3	7.3	9.5	10.4	9.0	7.5	12.2	13.6	15.1	13.6	4.3	4.1	5.0	4.3	9.2	13.3	4.5	0.3	7.63	15.06
Dir	WNW	W	W	W	W	WSW	WSW	W	WSW	SW	WSW	W	WNW	W	WNW	NNW	WNW	W	W	WSW	WSW	WSW	NW	ENE	W	WNW
8 Spd	3.2	5.2	4.6	6.7	2.0	3.7	7.7	6.8	12.3	7.4	7.0	2.4	3.7	5.3	7.0	9.1	12.2	11.3	7.7	5.2	6.3	7.6	9.2	11.6	4.56	12.27
Dir	SSW	WSW	SW	SW	NW	WSW	SW	SW	WSW	WSW	WNW	WNW	S	SSW	SSE	SSE	SE	SSE	SSE	SE	SE	SSW	WSW	WSW	SSW	WSW
9 Spd	13.0	12.3	10.5	10.8	8.9	8.7	8.1	8.6	2.0	1.9	3.8	7.7	13.3	11.1	12.0	9.4	9.9	11.9	12.6	11.9	9.3	9.3	9.8	7.0	7.85	13.27
Dir	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	W	S	SSE	SSE	SSE	SSE	SSW	S	S	SW	SW	SW	WSW	WSW	WSW	WSW	SW	SSE
10 Spd	13.5	13.1	14.1	12.6	19.0	19.1	14.2	15.0	15.5	15.1	22.6	29.5	29.5	27.0	28.1	23.9	11.3	3.3	7.3	4.3	10.7	20.8	16.5	13.7	16.13	29.54
Dir	SW	W	W	WSW	WSW	WSW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	WSW	WSW	SSW	SW	SW	SW	SW	WSW	SW	SW
11 Spd	11.8	17.7	15.3	35.7	37.8	35.1	29.2	40.8	48.6	48.5	47.4	37.6	38.7	33.6	28.4	23.9	20.5	15.4	8.4	10.7	6.8	10.7	10.5	8.9	23.96	48.63
Dir	WSW	W	W	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	WNW	NW	WSW	WSW	WSW	WSW	NW	NW
12 Spd	6.0	5.3	7.8	7.7	9.7	12.3	11.4	8.3	8.8	14.3	10.1	2.5	6.1	7.0	8.0	13.8	15.8	16.0	14.7	16.9	17.2	13.4	12.0	10.8	8.86	17.22
Dir	SSW	S	SSW	SSW	SSW	SSW	SW	SW	W	WNW	NW	NNW	WNW	SSW	SW	W	WSW	W	W	W	W	W	W	W	WSW	W
13 Spd	13.0	12.2	14.2	13.1	15.2	15.5	15.4	15.8	10.9	11.1	8.9	15.1	15.6	20.7	25.3	27.8	21.3	17.8	16.4	13.0	12.6	15.6	14.8	10.9	14.01	27.83
Dir	SW	SW	SW	WSW	WSW	WSW	WSW	WSW	W	WSW	W	WNW	WNW	WNW	WNW	WNW	NW	WNW	WNW	W	W	WNW	W	WSW	W	WNW
14 Spd	10.0	10.9	10.1	13.7	13.5	11.2	11.3	11.4	7.5	14.0	19.1	28.8	34.5	34.9	28.7	25.8	23.8	15.6	14.2	13.4	10.9	9.9	11.6	14.1	13.23	34.86
Dir	SW	SW	WSW	SW	SW	SW	SW	W	WSW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	WNW	W	WNW	WNW	WNW	NW
15 Spd	14.5	16.7	15.0	14.8	13.4	4.0	8.2	13.7	9.2	7.4	1.9	5.0	8.2	14.2	13.8	17.6	15.8	9.1	9.3	11.0	8.6	9.5	6.6	8.4	5.51	17.57
Dir	W	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	S	SSE	SE	SSE	SSE	SSE	SSE	SE	ESE	ESE	ESE	ESE	ESE	ESE	S	SSE
16 Spd	8.9	6.9	4.6	3.6	3.8	8.6	5.9	8.5	4.2	5.0	3.1	7.0	6.7	11.9	11.2	10.8	11.7	9.6	7.4	9.6	9.9	10.4	9.6	7.4	6.03	11.93
Dir	SE	ESE	ENE	S	SSW	WSW	SW	WSW	SSW	SW	SW	SSE	ESE	SE	SE	SE	SE	SE	SE	ESE	SE	SE	SSE	S	SSE	SE
17 Spd	9.3	7.3	9.9	10.6	5.7	4.0	2.6	1.1	2.0	4.1	5.5	7.0	8.0	9.5	10.6	15.1	17.3	14.9	13.4	9.9	8.3	8.4	15.3	19.2	5.26	19.15
Dir	SSE	ESE	E	E	ENE	NE	ENE	SSE	SE	SSE	SE	SE	SE	SE	ESE	SE	SE	SE	SE	SSE	SSE	SW	W	NW	SE	NW
18 Spd	12.8	14.0	13.0	12.2	14.0	13.4	12.0	11.6	10.0	12.7	14.9	12.0	10.6	8.6	3.6	2.4	4.6	4.4	4.9	6.6	7.1	7.9	0.4	4.6	6.79	14.89
Dir	WNW	W	WNW	W	WNW	WNW	W	WNW	W	WNW	NW	WNW	WNW	NNW	NW	ENE	E	ESE	SE	SW	SW	SW	SSW	ENE	WNW	NW
19 Spd	1.6	2.3	0.8	1.5	7.5	4.9	2.2	0.6	2.7	5.9	10.4	15.7	18.3	22.4	18.7	13.9	12.6	8.0	10.5	7.5	6.1	20.6	30.2	22.3	3.12	30.23
Dir	ESE	E	ESE	E	NNE	NNE	SSE	WSW	SSW	SSE	SSE	S	S	SSE	SSE	SSE	SE	SE	ESE	SE	SE	NW	NW	NW	SSE	NW
20 Spd	14.6	16.6	15.4	15.9	12.0	10.2	14.6	10.6	12.1	9.9	18.8	21.3	24.5	18.1	17.5	13.5	11.7	7.1	6.8	7.0	5.7	6.6	6.9	6.2	11.43	24.46
Dir	WNW	WNW	WNW	WNW	W	W	WNW	W	WNW	WNW	NW	NW	NW	WNW	W	W	WNW	W	WSW	SW	SSW	SW	SW	SW	WNW	NW
21 Spd	4.8	0.3	1.7	0.9	3.2	3.3	2.8	4.9	3.1	1.6	6.9	7.8	10.6	14.6	11.0	9.0	5.2	2.9	4.8	11.3	16.5	19.2	23.8	20.4	2.26	23.75
Dir	WSW	NE	E	SSE	SSW	WSW	SSW	SW	SW	E	SE	ESE	SE	SSE	SSE	SSE	SSE	S	W	WNW	NW	WNW	NW	NW	WSW	NW
22 Spd	14.0	13.4	12.6	14.0	14.9	17.9	14.5	12.2	10.7	6.6	8.1	10.9	9.9	8.1	12.6	14.6	12.9	9.7	11.8	11.2	12.9	11.3	13.8	10.2	10.33	17.87
Dir	NW	NW	NW	W	WNW	WNW	NW	NW	W	W	W	WNW	NW	NW	WSW	SSW	SW	WSW	WSW	W	W	W	WNW	WSW	W	WNW



WCAS - Genesee
Summary of Hourly Averages

Wind Speed (WS) - kph
October 2015

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
23 Spd	11.5	11.0	16.4	17.6	17.0	16.2	14.4	15.7	15.0	10.9	14.3	9.8	12.5	12.9	9.9	9.7	4.9	1.1	4.0	7.7	7.9	9.8	11.9	6.6	10.42	17.64	
Dir	WSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	WNW	WNW	WNW	WNW	W	W	WNW	NNW	WNW	W	WNW	WNW	NW	W	W	WSW	WSW
24 Spd	10.6	12.1	12.0	14.5	15.5	11.6	14.8	12.4	14.2	15.4	15.2	15.2	11.6	10.3	10.5	12.8	6.3	4.8	7.8	9.1	11.5	13.9	14.9	14.4	11.56	15.53	
Dir	WSW	WNW	WNW	WNW	W	W	W	W	W	W	WNW	WNW	WNW	WNW	W	WNW	WNW	WSW	SW	WSW	WSW	WSW	WSW	WSW	W	W	WSW
25 Spd	8.4	12.0	4.3	5.6	0.6	5.2	8.1	6.3	4.5	3.0	7.5	12.3	20.4	18.7	19.6	19.4	16.1	13.6	13.2	12.5	13.0	13.5	14.8	15.6	8.22	20.42	
Dir	WSW	W	WNW	WNW	SSW	SSW	SW	SSW	S	SSE	SE	SE	SE	SE	SE	SE	SE	SE	SE	ESE	ESE	ESE	SE	ESE	SE	SE	SE
26 Spd	16.9	16.1	23.5	16.3	14.8	18.4	19.2	19.7	15.3	13.4	17.5	11.6	3.9	5.1	4.2	9.4	11.1	22.1	24.0	26.7	31.9	32.4	34.3	33.3	0.71	34.33	
Dir	SE	SE	SE	SE	ESE	SE	SE	SE	SE	ESE	SE	SE	ESE	ESE	SE	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	WSW	NW	WSW
27 Spd	34.2	31.9	31.0	39.9	32.1	33.2	37.9	32.5	34.0	31.6	29.6	27.5	31.0	30.1	26.4	22.9	16.2	9.2	10.9	11.4	9.8	8.8	10.8	8.2	24.18	39.87	
Dir	NW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	W	WNW	WNW	WNW	WNW	W	NW	NW	NW
28 Spd	7.7	13.4	6.7	3.6	7.3	5.2	5.2	10.2	6.8	8.0	15.7	23.3	21.4	19.5	16.0	16.4	14.7	14.2	11.4	9.7	7.7	8.7	8.7	4.0	8.67	23.35	
Dir	WSW	WSW	WSW	SSW	SW	SSW	SE	SE	SE	ESE	SE	SSE	SE	SE	SE	SE	SE	SE	ESE	ESE	E	ESE	SE	ESE	SE	SE	SSE
29 Spd	5.5	4.6	4.8	10.1	14.8	16.9	12.1	10.9	8.9	8.6	11.8	15.0	14.3	14.2	11.6	8.3	8.7	7.6	7.3	11.6	13.1	15.5	13.3	12.8	10.20	16.91	
Dir	SSE	SSW	WSW	WSW	WSW	W	WSW	WSW	WSW	W	SW	SW	SW	WSW	WSW	W	SW	SW	SW	WSW	W	W	WSW	SW	WSW	W	W
30 Spd	14.2	15.8	10.6	9.6	9.6	7.0	7.0	11.3	7.2	9.3	5.1	7.5	8.2	9.9	14.7	14.9	7.0	5.9	12.6	10.6	14.9	15.8	13.7	19.7	8.84	19.69	
Dir	WSW	WSW	WSW	SW	SW	SSW	SW	WSW	WSW	W	NW	NNW	NW	N	NW	NW	WNW	WSW	W	WSW	W	W	WNW	WNW	W	W	WNW
31 Spd	17.4	15.9	14.9	16.7	14.2	14.5	13.4	13.9	15.0	8.7	5.5	14.1	16.6	14.7	17.7	21.8	19.0	13.9	14.1	13.8	9.6	8.3	6.3	5.5	2.72	21.82	
Dir	W	W	W	W	W	W	WSW	WSW	WSW	WSW	SSE	SE	SE	SE	ESE	ESE	ESE	E	ENE	ENE	ENE	ENE	ENE	ENE	ENE	SSE	ESE
Spd	5.86	6.56	6.03	7.40	7.35	7.44	7.71	7.76	6.97	6.08	4.86	4.02	3.70	3.37	3.46	2.62	1.71	1.24	2.32	3.39	4.61	6.46	7.20	6.32	Diurnal Average		
Dir	WSW	W	W	W	W	W	W	W	W	W	WNW	W	W	W	W	W	SW	WSW	WSW	W	W	W	WNW	W	Diurnal Maximum		
Spd	34.24	31.86	31.01	39.87	37.81	35.07	37.85	40.82	48.63	48.50	47.40	37.61	38.70	34.86	34.95	29.50	30.79	29.60	27.94	26.71	31.95	32.38	34.33	33.35	Diurnal Maximum		
Dir	305.07	301.79	307.32	312.40	315.54	310.35	317.97	304.79	305.60	309.84	321.16	319.49	321.77	314.76	322.65	324.45	321.98	328.15	312.69	306.43	307.33	304.37	306.13	306.75	Diurnal Maximum		
Maximum Speed Value: 48.6 kph on Oct 11 09:00		Minimum Speed Value: 0.1 kph on Oct 1 02:00										Hours in Service: 744															
Maximum Daily Speed Average: 24.18 kph on Oct 11		Minimum Daily Speed Average: 0.71 kph on Oct 1										Hours of Data: 744															
Maximum Diurnal Speed Average: 7.76 kph at hour 8		Minimum Diurnal Speed Average: 1.24 kph at hour 18										Hours of Missing Data: 0															
Monthly Average Velocity: 5.134 kph 269.15 deg		Speed Percentiles: P ₁ = 0.9 P ₁₀ = 4.3 Q ₁ = 7.1 Median = 11.1 Q ₃ = 15.0 P ₉₀ = 21.1 P ₉₉ = 37.1										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	6	5	15	7	0	0	33																				
NorthEast	10	3	1	0	0	0	14																				
East	14	17	4	1	0	0	36																				
SouthEast	23	67	53	13	0	0	156																				
South	20	16	9	1	0	0	46																				
SouthWest	21	74	39	6	3	0	143																				
West	11	54	114	1	0	0	180																				
NorthWest	7	23	36	31	33	6	136																				
Total	112	259	271	60	36	6	744																				



WCAS - Genesee
Summary of Hourly Averages

Relative Humidity (RH) - %
October 2015

Maximum Value: 93.66 % on Oct 29 10:00 Maximum Daily Average: 82.82 % on Oct 2																							Hours in Service: 744																									
Minimum Value: 25.1 % on Oct 13 16:00 Minimum Daily Average: 42.52 % on Oct 10																							Hours of Data: 744																									
Maximum Diurnal Average: 79.31 % at hour 7 Minimum Diurnal Average: 48.16 % at hour 15																							Hours of Missing Data: 0																									
Monthly Average: 66.569 % Percentiles: P₁ = 28.4 P₁₀ = 42.3 Q₁ = 54.5 Median = 68.0 Q₃ = 80.8 P₉₀ = 88.3 P₉₉ = 93.0																							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-Oct	80.0	80.8	80.5	85.7	89.3	89.1	90.9	91.9	89.1	74.9	61.9	51.1	42.4	34.0	31.9	33.8	43.8	51.6	49.9	59.1	59.2	64.4	68.3	72.9	65.69	91.86																						
2-Oct	76.7	81.2	83.6	86.8	88.8	91.9	91.6	89.2	89.1	81.2	68.7	61.3	55.6	53.9	69.6	87.3	91.7	89.4	89.1	90.7	92.1	92.0	92.7	93.4	82.82	93.37																						
3-Oct	93.6	93.3	92.0	90.1	90.1	89.3	87.5	85.6	87.1	86.1	83.2	79.2	74.5	72.9	72.9	74.1	73.4	72.3	76.2	77.1	74.5	81.9	87.7	86.9	82.56	93.55																						
4-Oct	84.6	84.0	86.3	85.6	86.8	81.2	86.1	85.6	80.9	77.4	67.1	64.1	61.1	58.0	57.6	57.2	57.5	62.7	74.3	83.9	88.4	90.4	91.2	91.9	76.83	91.86																						
5-Oct	92.4	92.9	92.1	92.6	93.2	92.3	91.0	89.4	88.0	82.3	72.9	63.4	53.9	47.8	43.3	38.6	41.1	45.8	55.0	63.2	70.2	73.9	77.2	84.2	72.35	93.21																						
6-Oct	89.0	89.8	89.9	87.0	82.8	85.2	87.0	87.8	83.0	74.7	64.7	61.8	56.2	54.7	52.6	54.5	55.0	59.6	68.1	68.0	70.4	72.2	74.9	79.3	72.84	89.94																						
7-Oct	77.5	80.0	81.7	76.8	78.9	84.1	88.8	84.9	77.6	75.6	64.9	53.8	46.3	43.7	40.5	42.2	49.5	51.4	59.9	69.9	64.0	72.0	75.3	79.8	67.46	88.84																						
8-Oct	82.6	84.3	83.1	84.0	82.2	81.7	84.5	84.8	76.8	70.2	64.2	54.0	44.9	37.7	37.8	40.5	44.1	53.6	60.4	59.8	61.4	63.5	62.9	64.2	65.13	84.80																						
9-Oct	67.2	68.3	67.8	73.7	72.2	80.8	85.2	78.7	68.8	56.6	54.9	54.9	46.0	47.7	46.5	50.4	54.9	56.1	56.9	57.0	57.9	59.0	59.5	59.4	61.69	85.22																						
10-Oct	63.9	52.3	45.4	49.2	45.4	46.2	52.0	54.2	48.5	43.4	31.1	26.1	25.3	26.1	26.2	29.4	33.4	36.2	45.4	48.2	49.5	46.6	47.4	49.0	42.52	63.94																						
11-Oct	52.4	44.3	46.5	68.0	72.4	71.0	70.3	65.2	65.0	66.0	69.4	83.6	73.0	65.9	56.7	52.8	52.2	53.9	61.5	67.0	73.6	84.9	85.0	87.9	66.19	87.94																						
12-Oct	87.9	88.1	89.2	89.8	90.4	90.4	88.6	86.8	75.0	72.3	81.6	83.3	79.4	76.2	69.0	53.8	52.0	42.3	39.7	45.1	41.6	43.9	45.2	51.0	69.27	90.42																						
13-Oct	68.8	72.8	75.0	70.1	68.2	65.7	64.5	62.7	61.0	54.1	41.7	37.6	33.9	28.4	26.5	25.1	26.1	28.4	30.7	32.8	36.3	38.8	42.8	57.1	47.88	75.01																						
14-Oct	62.3	66.1	67.1	67.4	63.5	66.2	68.7	60.2	57.9	47.6	43.3	36.0	32.9	32.9	33.3	33.3	34.2	38.1	41.7	44.0	47.4	54.5	54.0	52.8	50.23	68.67																						
15-Oct	58.0	69.7	63.2	76.2	78.7	78.7	78.1	79.2	71.3	59.1	49.8	40.5	35.6	33.2	33.3	34.6	38.7	47.4	51.1	50.7	51.7	52.1	54.7	57.9	55.97	79.21																						
16-Oct	64.9	69.4	72.3	76.5	82.4	82.7	79.9	80.9	81.6	65.5	52.5	49.2	43.2	35.2	35.2	36.0	39.0	48.8	55.1	58.4	62.9	67.3	70.1	68.6	61.56	82.68																						
17-Oct	73.2	71.0	70.1	74.2	79.7	79.7	81.8	85.4	84.3	73.6	59.6	48.6	40.1	36.0	34.5	34.7	38.2	47.6	56.9	65.0	66.8	64.5	58.0	56.7	61.67	85.40																						
18-Oct	57.3	62.6	59.8	61.4	60.0	59.2	61.7	61.3	61.6	54.6	49.7	47.2	44.0	38.9	37.9	39.1	40.8	49.1	58.8	62.8	68.6	68.7	71.6	74.0	56.28	74.03																						
19-Oct	79.0	81.7	80.1	83.5	82.4	80.0	79.2	83.6	82.3	73.2	66.5	52.7	45.2	42.3	43.9	49.3	50.2	54.4	54.7	60.8	65.9	67.8	80.9	90.0	67.90	90.03																						
20-Oct	91.1	90.0	88.8	87.4	85.9	86.1	82.7	81.7	79.4	75.9	65.5	55.3	44.9	41.4	40.0	39.8	36.9	41.4	47.0	58.5	71.4	72.6	71.7	77.4	67.20	91.13																						
21-Oct	73.2	72.4	78.4	82.9	83.3	88.0	80.1	81.5	83.3	73.4	73.1	60.0	44.6	36.2	41.9	49.8	54.8	57.0	53.9	51.3	63.3	59.6	62.5	60.4	65.21	88.03																						
22-Oct	60.1	61.0	60.4	64.8	64.7	65.2	66.9	73.0	70.8	66.7	55.5	51.7	47.7	42.3	50.3	55.4	58.7	64.8	73.0	64.6	57.7	50.2	49.1	59.6	59.76	73.02																						
23-Oct	70.5	75.2	76.7	75.4	71.0	67.9	65.4	65.0	59.2	54.6	48.3	42.6	35.9	36.6	34.7	32.3	37.6	40.3	43.4	42.6	47.0	56.7	59.2	64.4	54.26	76.71																						
24-Oct	68.5	56.3	57.3	61.4	68.6	73.1	79.7	83.0	84.3	76.7	67.3	60.9	54.6	50.4	48.5	56.6	54.1	62.6	73.1	77.2	81.4	83.1	83.1	84.6	68.60	84.60																						
25-Oct	84.9	84.3	83.3	85.5	89.1	91.3	92.1	92.6	92.4	91.8	89.2	72.1	57.6	53.4	52.4	54.8	59.0	68.4	77.2	81.1	82.9	83.5	78.7	78.9	78.19	92.61																						
26-Oct	76.7	80.3	77.0	77.8	77.9	74.5	71.4	71.8	71.1	68.4	62.8	62.7	74.2	82.1	84.7	89.2	87.8	80.3	83.9	90.0	89.5	89.5	88.0	87.7	79.14	90.02																						
27-Oct	83.8	79.6	76.2	73.8	76.7	75.7	73.8	75.2	73.2	70.7	68.2	65.5	61.9	58.5	55.3	54.7	56.4	62.5	66.8	64.8	66.8	65.0	73.6	75.8	68.95	83.82																						
28-Oct	84.1	81.5	83.0	87.6	90.0	88.8	88.4	89.7	87.9	82.5	72.1	56.0	50.6	47.9	47.8	50.3	56.3	63.3	67.4	69.8	71.2	75.7	76.1	78.4	72.77	89.99																						
29-Oct	79.9	80.4	80.2	83.1	84.5	92.0	92.6	93.1	93.6	93.7	91.8	85.6	78.0	70.7	70.5	71.5	76.1	80.9	87.6	84.3	77.3	58.8	63.4	77.4	81.12	93.66																						
30-Oct	79.9	80.5	74.3	71.5	74.0	73.3	72.0	64.8	67.4	58.0	66.5	59.4	57.6	59.2	63.4	83.3	90.1	90.8	90.9	89.1	91.0	83.9	78.0	70.5	74.56	91.01																						
31-Oct	67.5	66.1	69.4	69.2	66.3	63.7	75.9	80.8	76.9	71.0	66.9	58.5	51.3	53.3	54.4	52.6	56.2	61.9	66.1	67.4	72.0	75.6	80.8	85.4	67.05	85.37																						
																							75.22	75.49	75.19	77.39	78.05	78.55	79.31	79.02	76.40	70.05	63.70	57.37	51.36	48.32	48.16	50.22	52.89	56.86	61.80	64.65	66.90	68.15	69.78	72.82	Diurnal Average	
																							93.55	93.29	92.14	92.59	93.21	92.31	92.63	93.09	93.60	93.66	91.79	85.55	79.37	82.07	84.74	89.21	91.66	90.76	90.91	90.75	92.07	92.02	92.68	93.37	Diurnal Maximum	



WCAS - Genesee
Summary of Hourly Averages

Global Solar Radiation (GSR) - W/m2
October 2015

Maximum Value: 600.03 W/m2 on Oct 4 13:00 Maximum Daily Average: 158.35 W/m2 on Oct 5																								Hours in Service:	744	
Minimum Value: 0.0 W/m2 on Oct 1 01:00 Minimum Daily Average: 25.74 W/m2 on Oct 26																								Hours of Data:	744	
Maximum Diurnal Average: 412.04 W/m2 at hour 13 Minimum Diurnal Average: 0.00 W/m2 at hour 1																								Hours of Missing Data:	0	
Monthly Average: 97.014 W/m2 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 147.4 P ₉₀ = 385.8 P ₉₉ = 535.7																								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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.0	190.9	336.3	453.5	538.1	577.3	566.5	444.3	303.7	133.2	73.5	18.0	0.0	0.0	0.0	0.0	0.0	153.60	577.32
2-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	173.5	324.0	435.6	488.1	525.2	405.3	90.2	34.4	23.4	4.6	0.0	0.0	0.0	0.0	0.0	0.0	105.79	525.22
3-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	47.6	97.8	152.2	224.5	362.4	229.5	151.7	97.3	60.3	15.3	0.0	0.0	0.0	0.0	0.0	0.0	60.77	362.38
4-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	40.5	68.5	151.9	326.7	514.4	600.0	546.9	442.2	328.5	177.3	40.8	0.0	0.0	0.0	0.0	0.0	134.93	600.03
5-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	142.5	249.6	386.1	493.5	558.7	573.0	527.9	429.7	265.9	136.0	36.0	0.0	0.0	0.0	0.0	0.0	158.35	573.04
6-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.1	57.3	208.8	297.4	340.1	294.0	435.1	222.2	254.7	138.4	99.7	23.5	0.0	0.0	0.0	0.0	0.0	0.0	98.80	435.09
7-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.2	38.4	130.7	324.4	503.7	486.2	483.1	244.7	237.5	77.1	26.1	0.0	0.0	0.0	0.0	0.0	0.0	107.00	503.71
8-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40.7	207.6	162.4	357.3	527.9	541.1	498.7	397.2	217.6	90.3	17.6	0.0	0.0	0.0	0.0	0.0	0.0	127.44	541.13
9-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	69.1	223.0	317.7	199.4	283.2	257.6	162.4	92.8	113.8	60.9	14.0	0.0	0.0	0.0	0.0	0.0	0.0	74.74	317.65
10-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.6	97.7	207.6	429.4	528.0	515.9	418.6	410.6	240.1	93.0	13.7	0.0	0.0	0.0	0.0	0.0	0.0	123.84	527.96
11-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	62.2	106.8	81.6	109.8	207.7	148.7	193.4	187.4	124.9	27.5	0.0	0.0	0.0	0.0	0.0	0.0	52.87	207.65
12-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.7	66.2	56.0	108.1	147.9	335.9	348.7	392.3	266.4	125.8	19.7	0.0	0.0	0.0	0.0	0.0	0.0	78.86	392.26
13-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.8	123.8	341.1	446.8	510.5	524.1	477.0	386.9	266.6	96.4	12.3	0.0	0.0	0.0	0.0	0.0	0.0	133.97	524.08
14-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	105.5	218.2	408.0	493.4	505.1	467.8	375.5	249.5	113.3	13.5	0.0	0.0	0.0	0.0	0.0	0.0	123.70	505.13
15-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.3	189.4	326.3	430.8	495.9	505.1	454.9	363.9	230.3	99.3	13.8	0.0	0.0	0.0	0.0	0.0	0.0	131.59	505.05
16-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0	180.1	313.7	418.7	477.4	491.3	448.2	352.3	220.8	99.8	10.9	0.0	0.0	0.0	0.0	0.0	0.0	127.26	491.33
17-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.0	176.9	313.9	420.7	481.2	485.9	439.5	318.8	201.0	94.1	6.3	0.0	0.0	0.0	0.0	0.0	0.0	124.13	485.89
18-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	56.0	257.1	295.3	391.7	421.8	435.5	299.8	193.3	95.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	102.79	435.49
19-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.9	58.0	109.4	209.6	243.1	437.6	301.0	86.6	58.0	26.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	64.26	437.64
20-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.8	157.6	291.3	396.7	456.6	463.2	427.1	264.9	171.2	87.1	5.6	0.0	0.0	0.0	0.0	0.0	0.0	114.72	463.24
21-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	151.4	135.3	274.8	409.6	437.5	365.7	147.6	85.9	20.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	86.03	437.53
22-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	81.9	167.1	361.6	268.1	323.5	319.6	46.9	34.1	54.9	7.4	0.0	0.0	0.0	0.0	0.0	0.0	69.59	361.62
23-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.6	128.5	218.6	338.4	311.4	380.2	355.5	225.2	157.2	52.9	2.3	0.0	0.0	0.0	0.0	0.0	0.0	91.53	380.15
24-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	95.3	263.9	367.6	426.8	449.2	416.1	141.7	72.1	63.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0	96.13	449.22
25-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6	194.9	218.1	353.3	415.1	430.7	386.5	220.4	138.4	55.2	1.9	0.0	0.0	0.0	0.0	0.0	0.0	102.34	430.70
26-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	29.1	96.1	163.1	86.1	67.5	74.0	49.2	30.3	19.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	25.74	163.12
27-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	70.7	263.0	274.3	351.4	448.3	388.1	210.5	123.5	55.4	1.5	0.0	0.0	0.0	0.0	0.0	0.0	91.25	448.32
28-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	130.6	252.2	349.7	412.9	424.2	359.2	200.2	100.8	34.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	95.07	424.18
29-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	51.2	113.1	156.4	294.8	220.6	195.8	102.9	60.3	31.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.17	294.84
30-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	38.9	68.5	174.8	185.5	87.7	69.0	51.1	28.2	17.7	0.4	0.0	0.0	0.0	0.0	0.0	0.0	30.30	185.50
31-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.6	66.8	212.5	331.6	374.2	252.4	142.5	138.2	105.9	20.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	68.91	374.15
																								Diurnal Average		
																								Diurnal Maximum		



WCAS - Genesee
Summary of Hourly Standard Deviations

Wind Speed (WS) - kph
October 2015

Maximum Value: 14.62 kph on Oct 19 22:00		Maximum Daily Average: 5.90 kph on Oct 11		Hours in Service: 744																						
Minimum Value: 0.3 kph on Oct 1 02:00		Minimum Daily Average: 1.95 kph on Oct 16		Hours of Data: 744																						
Maximum Diurnal Average: 4.03 kph at hour 14		Minimum Diurnal Average: 2.07 kph at hour 19		Hours of Missing Data: 0																						
Monthly Average: 2.791 kph		Percentiles: P ₁ = 0.8 P ₁₀ = 1.2 Q ₁ = 1.7 Median = 2.4 Q ₃ = 3.5 P ₉₀ = 4.8 P ₉₉ = 7.8		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-Oct	0.9	0.3	1.2	1.7	3.3	4.2	2.8	2.4	1.6	2.2	2.0	2.3	5.6	4.9	3.8	3.1	2.1	1.8	2.3	1.5	1.0	1.1	1.0	1.4	2.27	5.59
2-Oct	1.6	3.9	1.7	1.5	1.7	1.5	2.1	3.3	1.8	2.1	3.5	4.3	3.9	5.2	6.2	5.0	6.4	7.4	6.6	4.8	5.6	5.3	4.5	3.7	3.90	7.41
3-Oct	4.4	3.6	6.1	5.2	5.0	4.2	5.1	5.0	3.7	3.6	3.9	4.2	3.7	3.7	3.1	2.5	2.9	3.2	1.4	2.2	2.5	2.1	1.0	1.0	3.47	6.14
4-Oct	1.0	1.3	1.5	1.9	1.9	1.3	1.4	1.7	1.4	3.5	3.7	4.1	4.0	3.7	4.0	3.5	2.7	2.3	1.4	1.2	1.1	1.2	1.0	1.3	2.18	4.14
5-Oct	1.7	1.5	1.0	1.5	4.3	2.6	3.3	3.1	2.7	2.6	3.2	3.3	4.2	4.1	3.6	3.1	1.7	1.6	1.3	0.8	0.8	0.9	0.6	1.2	2.27	4.30
6-Oct	1.0	1.3	1.2	1.2	1.1	1.4	1.5	2.1	2.7	5.5	4.6	3.8	4.0	3.8	2.9	2.6	3.1	2.3	1.2	1.9	1.4	1.5	1.2	1.7	2.30	5.52
7-Oct	3.0	3.1	1.8	2.0	1.8	2.3	1.7	2.4	2.3	2.3	2.0	2.7	3.3	4.2	3.6	4.0	2.3	2.3	1.4	2.9	2.0	3.2	2.4	2.2	2.55	4.21
8-Oct	2.7	3.1	2.3	2.7	2.4	2.9	2.1	2.3	3.6	2.5	1.8	2.9	2.9	3.5	3.3	2.8	1.8	1.4	1.6	1.3	1.9	1.9	1.3	1.7	2.37	3.60
9-Oct	0.8	1.0	1.2	3.0	3.8	1.5	3.8	3.3	2.0	1.8	1.6	2.7	2.8	2.9	2.7	1.3	2.8	1.7	2.1	2.5	1.8	1.9	1.2	1.2	2.14	3.82
10-Oct	2.9	2.8	3.2	2.9	3.1	2.3	2.0	1.2	1.7	2.1	4.9	4.8	5.7	5.8	5.1	4.7	4.3	2.8	1.6	1.1	6.0	4.2	4.0	2.0	3.38	6.04
11-Oct	2.1	4.1	4.8	7.9	7.2	7.3	6.5	10.5	9.6	11.2	11.1	8.3	8.1	8.9	6.4	5.3	5.1	4.6	1.4	1.5	1.7	2.6	3.1	2.3	5.90	11.15
12-Oct	1.0	1.5	1.7	1.1	2.0	0.9	1.7	1.0	1.6	4.2	6.0	2.5	3.2	4.6	3.3	3.8	4.8	4.7	3.4	2.5	3.4	2.5	2.1	1.7	2.72	6.04
13-Oct	1.7	2.0	1.8	2.0	1.8	1.4	1.5	1.9	3.2	2.1	4.8	3.4	4.3	5.4	5.7	6.0	4.7	3.2	2.6	1.9	2.2	2.9	2.3	2.1	2.95	5.97
14-Oct	1.3	2.6	1.8	2.3	1.7	1.4	1.4	1.9	3.8	3.0	5.1	6.3	6.7	7.0	5.6	5.2	4.5	3.9	2.7	3.3	1.6	1.6	1.3	2.1	3.26	7.00
15-Oct	2.1	1.3	1.7	0.9	1.3	4.3	2.6	1.3	2.3	2.4	2.2	2.3	4.4	4.5	3.8	3.7	3.9	1.2	1.2	1.9	1.6	2.0	2.0	2.1	2.38	4.52
16-Oct	2.0	2.4	1.2	2.2	3.0	1.6	2.0	2.0	1.1	1.9	2.1	2.2	3.4	3.1	2.7	2.6	2.3	1.3	1.0	1.4	1.9	1.1	1.0	1.2	1.95	3.42
17-Oct	1.7	1.1	2.3	2.4	1.5	1.2	1.5	1.3	1.6	1.4	1.9	2.3	2.8	2.6	3.1	3.1	2.6	1.6	1.2	1.3	1.1	4.1	4.7	3.3	2.15	4.70
18-Oct	2.9	1.5	2.1	2.1	3.3	2.5	1.7	2.1	1.7	3.1	3.5	2.9	3.5	4.4	4.0	2.0	1.2	1.0	0.8	2.3	1.3	1.8	1.0	1.9	2.27	4.40
19-Oct	1.6	2.0	1.3	2.2	2.8	2.5	2.1	2.1	1.6	1.3	2.8	2.9	3.9	3.8	3.3	3.0	3.7	1.5	2.5	1.9	1.9	14.6	8.3	3.9	3.23	14.62
20-Oct	3.0	3.2	2.8	2.8	2.6	2.5	3.0	2.8	3.2	3.1	6.1	4.1	3.9	3.6	4.0	2.9	2.9	2.0	2.0	2.6	1.3	1.2	1.0	1.0	2.82	6.07
21-Oct	1.5	1.7	1.7	1.4	1.3	2.6	1.7	1.4	2.0	1.9	3.1	3.3	2.7	2.7	2.0	1.3	1.3	1.8	2.3	4.6	2.4	3.4	3.9	3.9	2.32	4.57
22-Oct	2.5	2.2	2.3	2.1	2.5	2.7	2.7	2.6	1.7	2.2	3.2	2.4	3.2	2.5	5.0	2.7	2.6	1.1	1.5	1.5	2.3	2.0	3.1	1.4	2.42	5.02
23-Oct	2.4	1.6	2.0	1.3	1.0	1.5	1.2	1.5	1.8	4.3	2.6	2.5	3.8	3.5	3.6	3.5	2.3	1.8	2.5	1.1	1.0	2.0	1.1	3.2	2.21	4.25
24-Oct	3.4	2.1	2.5	3.1	3.1	2.5	2.5	2.6	2.0	2.4	3.3	3.5	3.1	3.2	2.6	4.0	2.0	1.5	1.0	1.5	1.3	1.4	0.8	1.2	2.36	4.02
25-Oct	2.4	1.8	2.9	3.2	1.2	2.2	1.9	1.8	1.0	1.9	2.0	3.9	3.8	3.6	4.4	3.8	3.4	2.8	2.0	2.0	2.0	2.4	2.3	3.3	2.58	4.35
26-Oct	3.2	3.6	3.6	2.5	3.6	4.1	4.1	4.2	3.1	3.8	3.3	3.5	2.1	2.6	2.6	2.0	2.4	6.8	4.0	5.0	6.9	5.7	6.3	7.2	4.00	7.16
27-Oct	7.3	6.6	6.5	6.4	5.4	6.4	6.8	5.9	6.0	5.9	5.8	5.1	4.8	4.4	4.6	3.9	3.4	1.9	1.6	1.2	2.7	3.8	2.4	3.1	4.66	7.29
28-Oct	3.4	2.0	1.1	0.9	1.1	1.2	1.6	2.2	1.3	2.1	4.0	3.6	3.6	3.9	3.4	3.5	3.3	2.1	1.9	2.0	1.2	2.2	3.3	1.2	2.33	4.03
29-Oct	1.2	0.7	1.2	1.8	2.1	3.0	1.7	2.3	2.8	3.5	1.9	2.3	2.4	2.5	2.2	2.1	1.0	1.0	0.7	1.2	2.5	3.1	2.8	1.4	1.98	3.46
30-Oct	1.1	1.0	1.5	1.9	1.7	1.8	1.3	2.0	2.9	2.2	3.3	1.6	5.1	3.6	2.9	3.6	1.8	1.0	3.8	2.2	2.3	2.9	2.6	3.9	2.42	5.15
31-Oct	3.1	2.2	2.6	1.8	2.3	2.2	2.3	2.3	1.7	2.1	1.4	4.2	3.2	2.9	3.7	5.2	4.8	3.7	3.5	3.0	3.9	2.6	1.6	1.4	2.81	5.16
																								Diurnal Average		
																								Diurnal Maximum		
2.29 2.23 2.28 2.45 2.60 2.58 2.50 2.66 2.56 3.02 3.57 3.50 3.94 4.03 3.79 3.41 3.05 2.49 2.07 2.13 2.28 2.88 2.42 2.26																										
7.29 6.56 6.45 7.91 7.22 7.25 6.81 10.52 9.57 11.15 11.12 8.32 8.11 8.89 6.37 5.97 6.41 7.41 6.64 4.98 6.94 14.62 8.30 7.16																										
,Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ul/m^3 24-hr 100 ul/m^3																										



WCAS - Genesee
Summary of Hourly Standard Deviations

Wind Direction (WD) - deg
October 2015

Maximum Value: 92.89 deg on Oct 8 00:00		Maximum Daily Average: 27.19 deg on Oct 1		Hours in Service: 744																							
Minimum Value: 2.4 deg on Oct 24 23:00		Minimum Daily Average: 9.95 deg on Oct 27		Hours of Data: 744																							
Maximum Diurnal Average: 20.91 deg at hour 11		Minimum Diurnal Average: 11.54 deg at hour 20		Hours of Missing Data: 0																							
Monthly Average: 16.138 deg		Percentiles: P ₁ = 4.0 P ₁₀ = 6.8 Q ₁ = 8.6 Median = 11.5 Q ₃ = 18.2 P ₉₀ = 30.0 P ₉₉ = 75.6		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-Oct	10.2	45.2	48.0	14.9	48.9	72.5	70.8	47.2	8.6	47.5	31.9	47.1	33.6	18.8	17.5	12.0	7.9	11.4	11.2	11.5	7.9	10.6	8.4	9.1	27.19	72.54	
2-Oct	7.2	47.4	42.3	60.4	19.4	8.4	5.8	27.3	20.0	54.8	13.2	15.9	21.0	22.6	13.4	9.2	10.6	9.3	13.8	9.0	8.4	8.2	8.4	8.4	19.35	60.42	
3-Oct	10.0	9.3	11.7	12.1	12.6	13.2	10.7	13.8	15.7	13.3	12.9	15.3	18.0	15.6	18.5	19.1	18.0	17.9	12.1	9.9	15.0	5.1	6.9	13.5	13.35	19.12	
4-Oct	14.9	17.7	21.5	33.9	39.8	68.5	20.8	14.7	30.5	24.3	23.6	22.5	24.2	24.0	17.1	11.4	13.3	8.9	8.2	7.5	12.2	4.6	9.5	4.4	19.92	68.52	
5-Oct	10.6	43.9	8.1	6.6	14.4	9.7	10.1	8.9	11.8	11.4	13.5	13.4	17.4	25.0	21.5	25.8	34.3	16.8	12.4	13.5	7.3	13.0	5.2	13.2	15.32	43.89	
6-Oct	8.4	7.7	6.8	14.6	11.7	13.7	10.2	9.6	11.2	18.2	9.7	10.3	12.8	9.9	19.1	14.1	14.0	21.2	16.1	45.6	25.8	32.3	19.6	20.4	15.95	45.64	
7-Oct	23.8	32.8	21.0	13.2	16.7	14.1	8.1	27.9	27.3	9.8	16.6	31.9	16.8	21.1	21.8	20.0	29.1	16.8	32.8	13.5	2.7	17.7	55.9	92.9	24.34	92.89	
8-Oct	54.6	19.9	18.3	10.9	62.0	46.7	10.3	14.5	15.1	34.5	24.3	73.0	49.5	33.3	40.2	11.4	6.6	6.3	7.0	13.4	13.8	22.2	10.3	6.2	25.17	73.00	
9-Oct	5.8	7.8	10.9	7.9	13.5	9.7	23.4	13.8	80.8	28.6	26.4	21.6	11.6	6.7	16.7	8.9	14.1	6.9	8.0	6.1	9.4	6.4	9.6	10.0	15.19	80.79	
10-Oct	12.1	9.5	10.3	11.2	6.9	6.2	5.1	5.4	4.6	5.8	8.1	9.0	10.4	14.1	12.4	7.9	12.8	32.3	16.6	34.6	22.3	10.3	13.8	10.3	12.17	34.62	
11-Oct	15.8	10.6	10.9	15.4	8.7	7.4	8.7	8.6	9.2	9.0	9.5	7.6	8.4	9.4	9.2	11.1	15.8	10.4	13.9	7.3	29.8	7.2	14.3	8.3	11.11	29.79	
12-Oct	13.7	13.4	11.1	13.9	7.8	5.8	9.8	6.9	14.3	16.1	46.6	67.1	29.1	33.2	27.6	15.7	11.6	12.4	9.2	6.8	9.5	8.9	8.7	21.4	17.53	67.08	
13-Oct	6.7	7.3	5.7	6.4	5.4	5.7	6.3	7.5	20.6	12.2	37.4	13.3	15.6	14.7	12.4	10.2	10.0	8.4	9.4	7.4	9.1	8.8	9.2	7.4	10.70	37.40	
14-Oct	5.0	5.5	8.3	6.3	3.4	4.8	9.2	16.0	31.7	10.6	14.1	11.2	9.5	9.5	9.7	10.0	9.1	10.6	8.0	7.6	8.4	18.1	8.0	11.1	10.23	31.75	
15-Oct	17.5	10.1	9.5	7.1	4.9	63.4	11.9	4.6	11.4	12.0	80.4	27.8	25.7	26.1	20.3	14.9	7.0	7.7	6.6	7.6	9.8	9.1	19.0	13.7	17.84	80.37	
16-Oct	7.7	33.1	26.5	24.4	16.0	13.0	6.8	13.3	11.2	19.9	41.9	20.2	30.4	20.1	15.2	11.7	8.3	6.4	5.7	7.0	8.8	7.2	13.0	7.6	15.64	41.95	
17-Oct	9.9	13.4	6.7	8.1	11.8	13.5	23.9	25.0	30.6	24.2	20.4	19.7	19.1	22.1	15.1	11.7	7.2	5.6	5.2	7.1	4.5	23.3	23.0	13.2	15.17	30.62	
18-Oct	22.9	6.9	13.1	10.1	9.1	8.7	8.4	8.9	9.3	12.1	13.6	18.7	24.6	46.2	81.7	57.4	15.5	21.1	15.9	16.9	6.4	5.7	47.7	8.3	20.39	81.73	
19-Oct	26.0	28.3	35.2	37.5	26.3	36.6	30.0	85.3	28.1	9.2	8.5	8.7	9.0	9.0	8.6	8.9	9.8	12.5	9.2	8.9	15.6	48.1	9.5	6.7	21.47	85.29	
20-Oct	11.3	8.5	9.9	8.5	11.5	11.2	10.6	14.9	12.6	17.4	13.2	10.2	9.5	16.4	14.5	12.8	10.1	15.9	25.1	20.7	15.5	9.0	9.4	10.3	12.88	25.13	
21-Oct	19.1	77.9	67.7	30.4	16.1	52.0	34.7	26.4	38.2	21.0	13.0	18.7	21.7	11.6	7.4	6.2	15.8	10.5	26.3	18.1	10.5	13.3	6.0	5.9	23.70	77.92	
22-Oct	7.3	11.5	11.1	6.2	8.9	10.5	6.2	6.1	22.9	21.8	30.2	15.2	25.4	26.8	30.8	17.7	8.7	6.2	5.8	4.4	8.7	8.8	11.0	16.9	13.73	30.83	
23-Oct	7.3	5.2	5.7	2.9	3.8	8.2	6.2	7.3	7.8	13.7	14.2	14.2	20.1	20.1	27.8	33.0	37.5	80.6	48.3	7.8	11.6	16.0	3.2	33.7	18.18	80.57	
24-Oct	23.6	9.0	8.6	8.4	11.7	11.9	9.9	9.5	7.7	9.9	14.7	14.0	21.4	24.9	14.5	10.3	16.2	32.6	6.2	4.6	5.0	6.1	2.4	4.0	11.96	32.63	
25-Oct	8.6	7.2	30.5	51.8	62.4	20.7	16.6	13.9	13.4	11.8	12.7	14.6	11.5	11.7	14.0	10.9	9.5	9.0	7.6	7.5	8.5	8.7	8.6	10.4	15.92	62.39	
26-Oct	12.3	11.5	7.3	8.7	11.4	10.4	10.8	9.9	9.5	14.2	10.8	12.9	18.3	14.9	60.5	8.0	11.2	14.6	9.6	7.9	7.7	7.4	8.0	8.1	12.74	60.51	
27-Oct	8.3	8.4	7.9	7.2	7.8	7.2	7.7	7.2	7.6	8.8	9.1	10.0	7.9	8.5	8.4	8.0	6.6	18.5	7.4	5.8	10.8	20.3	9.5	30.0	9.95	29.97	
28-Oct	14.5	5.0	11.1	13.5	10.9	9.5	18.5	10.2	16.3	10.6	9.8	10.1	13.2	12.3	16.3	10.1	8.7	7.3	10.3	9.7	11.4	18.3	9.4	10.2	11.55	18.53	
29-Oct	17.1	15.6	14.1	12.4	8.1	12.4	13.5	25.9	27.0	18.8	7.1	9.3	8.2	9.5	9.8	14.0	6.3	6.7	9.6	5.5	10.1	8.5	19.2	9.5	12.42	27.02	
30-Oct	5.7	3.1	8.3	10.0	8.4	19.9	17.8	11.8	14.0	11.5	28.7	23.9	48.6	46.9	11.9	8.6	22.7	14.5	15.7	10.9	8.2	11.5	9.9	10.7	15.97	48.58	
31-Oct	12.1	7.6	11.1	5.3	8.5	7.9	10.7	11.4	5.8	11.2	32.3	10.7	10.1	11.3	10.5	11.2	12.8	12.1	17.7	13.6	39.1	14.4	14.5	15.6	13.23	39.15	
		13.87	17.44	16.76	15.50	16.42	19.46	14.63	16.57	18.54	17.55	20.91	19.93	19.43	19.23	20.14	14.27	13.59	15.20	13.25	11.54	12.06	13.20	13.26	14.56	Diurnal Average	
		54.60	77.92	67.71	60.42	62.39	72.54	70.78	85.29	80.79	54.79	80.37	73.00	49.48	46.90	81.73	57.38	37.50	80.57	48.28	45.64	39.15	48.12	55.88	92.89	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
OCTOBER 2015**