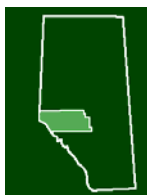


# **Capital Power**

## **AIR QUALITY MONITORING March 2016 Monthly Report**

**Prepared by:**

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





April 19<sup>th</sup>, 2016

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 March 2016 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 SO<sub>2</sub>, NO<sub>2</sub> and PM<sub>2.5</sub>.

**2. Operational times less than 90 percent:**

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

**3. Monitoring Notes:**

**AMS 910 (Genesee)**

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

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

**WEST CENTRAL AIRSHED SOCIETY**

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

**AMS 910  
GENESEE  
MARCH 2016**

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													March 2016		
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 <sub>2</sub> (ppb)	37	707	100.0	0.7	0.0	23.6	0.0	0.0	0.0	0.3	2.0	0	0	0.004	
O <sub>3</sub> (ppb)	36	708	100.0	20.1	0.0	45.3	9.0	13.4	19.4	26.0	33.4	0	-	0.030	
NO (ppb)	37	707	100.0	0.6	0.0	37.8	0.0	0.0	0.0	0.2	1.5	-	-	-	
NO <sub>2</sub> (ppb)	37	707	100.0	4.1	0.3	20.9	1.2	1.8	2.9	5.2	8.7	0	0	0.008	
NO <sub>x</sub> (ppb)	37	707	100.0	4.4	0.0	58.6	0.8	1.4	2.7	5.3	10.3	-	-	-	
Particulate Matter 2.5 microns (µ/m <sup>3</sup> )	6	738	100.0	2.6	0.0	18.7	0.0	0.5	1.9	3.7	6.4	0	0	8.81 ug/m3	
Wind Speed (kph)	0	744	100.0	11.2	0.1	53.0	4.5	7.0	10.0	13.8	18.3	-	-	-	
Temperature - 2m (°C)	0	744	100.0	2.1	-8.7	13.8	-2.5	-0.8	1.1	4.5	8.8	-	-	-	
Temperature - 10m (°C)	0	744	100.0	1.8	-7.8	12.3	-2.5	-1.2	0.9	4.5	8.1	-	-	-	
Delta Temperature (°C)	0	744	100.0	-0.3	-3.4	3.1	-1.5	-1.0	-0.4	0.4	1.2	-	-	-	
Relative Humidity (%)	0	744	100.0	70.0	25.2	94.8	41.5	54.9	74.0	86.4	91.9	-	-	-	
Global Solar Radiation (W/m <sup>2</sup> )	0	744	100.0	127.6	0.0	695.9	0.0	0.0	2.6	210.3	466.0	-	-	-	
Std Dev Wind Direction (deg)	0	744	100.0	17.6	2.8	93.4	7.5	9.9	13.1	19.4	34.5	-	-	-	
Std Dev Wind Speed (kph)	0	744	100.0	2.7	0.5	10.9	1.4	1.8	2.4	3.2	4.3	-	-	-	



**WCAS - Genesee**  
**Summary of Hourly Averages**

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**March 2016**

<b>Maximum Value: 23.57 ppb on Mar 28 12:00</b>		<b>Maximum Daily Average: 4.08 ppb on Mar 7</b>		<b>Hours in Service: 744</b>																													
<b>Minimum Value: 0.0 ppb on Mar 1 01:00</b>		<b>Minimum Daily Average: 0.00 ppb on Mar 21</b>		<b>Hours of Data: 707</b>																													
<b>Maximum Diurnal Average: 2.65 ppb at hour 12</b>		<b>Minimum Diurnal Average: 0.08 ppb at hour 1</b>		<b>Hours of Missing Data: 37</b>																													
<b>Monthly Average: 0.716 ppb</b>		<b>Percentiles: P<sub>1</sub> = 0.0 P<sub>10</sub> = 0.0 Q<sub>1</sub> = 0.0 Median = 0.0 Q<sub>3</sub> = 0.3 P<sub>90</sub> = 2.0 P<sub>99</sub> = 10.6</b>		<b>Hours of Calibration: 37</b>																													
				<b>Percent Operational Time: 100.0</b>																													
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-Mar	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.08						
2-Mar	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	0.02						
3-Mar	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	3.0	9.3	20.1	16.9	2.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	2.25	20.08						
4-Mar	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	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.1	0.04	0.59							
5-Mar	0.4	0.2	Z	0.3	0.2	0.1	0.1	0.2	0.5	0.0	0.5	0.6	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.0	0.7	0.21	0.67						
6-Mar	0.0	0.0	Z	0.1	0.6	0.2	0.0	0.0	0.0	0.0	0.7	0.4	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.13	0.72							
7-Mar	0.0	0.0	Z	1.2	0.5	5.8	10.8	11.1	6.4	1.3	10.2	20.2	4.7	0.5	0.3	1.7	6.6	6.8	3.8	1.2	0.5	0.3	0.0	0.0	4.08	20.15							
8-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.4	0.3	2.2	5.2	5.1	3.8	3.1	2.6	2.1	3.9	1.9	1.36	5.17							
9-Mar	0.5	0.1	Z	0.1	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.58							
10-Mar	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	0.2	0.0	0.0	0.0	0.2	1.2	0.1	0.0	0.07	1.16							
11-Mar	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	0.03							
12-Mar	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	2.3	5.7	5.2	1.9	0.7	0.2	1.0	0.0	0.1	0.3	0.76	5.72							
13-Mar	0.4	0.8	Z	0.5	0.2	0.0	0.0	0.7	4.1	0.6	0.5	4.2	2.2	0.6	1.2	2.6	2.9	1.8	1.4	0.5	0.0	0.4	0.0	0.0	1.14	4.17							
14-Mar	0.0	0.2	Z	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	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.18							
15-Mar	0.0	1.5	Z	2.7	0.4	1.3	2.9	1.8	0.3	5.6	5.4	8.0	1.8	5.5	2.6	0.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.80	7.99							
16-Mar	0.0	0.0	Z	0.0	0.2	0.0	3.2	2.1	0.6	2.0	2.2	0.5	0.3	0.9	1.1	0.7	0.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.65	3.18							
17-Mar	0.0	0.0	Z	0.8	1.0	1.4	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	1.37							
18-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	4.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.37	4.30							
19-Mar	0.2	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	0.01	0.16							
20-Mar	0.2	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.8	8.4	7.8	4.1	4.4	2.6	5.7	5.2	3.1	0.3	1.0	0.8	0.0	0.0	1.93	8.42							
21-Mar	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							
22-Mar	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							
23-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	C	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	--	0.00							
24-Mar	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	0.1	0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.03	0.33							
25-Mar	0.0	0.8	Z	1.5	0.0	0.0	0.0	0.0	1.5	0.0	0.8	6.6	7.5	5.7	0.4	0.4	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.3	1.12	7.53							
26-Mar	0.3	0.6	Z	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.3	1.8	2.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	3.28							
27-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9	3.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.48	5.85							
28-Mar	0.7	0.3	Z	0.3	0.8	0.5	0.1	0.3	0.0	1.4	3.1	23.6	11.6	0.3	1.2	0.9	6.0	7.8	0.5	0.9	0.4	0.1	0.8	0.0	2.68	23.57							
29-Mar	0.0	0.0	Z	0.0	1.8	0.0	0.0	0.0	0.0	4.1	6.4	0.0	0.0	0.0	0.0	2.0	1.3	4.8	1.2	0.0	0.0	0.0	0.0	0.0	0.94	6.44							
30-Mar	0.0	1.2	Z	0.2	0.5	0.0	0.0	5.4	5.9	2.8	0.0	0.0	0.0	1.2	0.0	1.8	1.0	0.8	0.0	0.0	0.4	0.0	0.0	0.0	0.92	5.91							
31-Mar	0.0	0.0	Z	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.5	1.0	0.4	1.0	0.3	0.1	0.0	0.0	0.2	0.29	1.60								
		0.08	0.18	--	0.27	0.21	0.32	0.59	0.70	0.64	0.60	1.22	2.65	1.42	0.86	0.84	1.42	1.81	1.24	0.53	0.26	0.24	0.15	0.19	0.14	Diurnal Average							
		0.71	1.54	--	2.73	1.83	5.82	10.80	11.12	6.39	5.58	10.20	23.57	11.55	5.65	9.29	20.08	16.91	7.76	3.85	3.13	2.57	2.08	3.85	1.93	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 (O<sub>3</sub>) - ppb**  
**March 2016**

Maximum Value: 45.26 ppb on Mar 13 16:00		Maximum Daily Average: 30.46 ppb on Mar 11		Hours in Service: 744																									
Minimum Value: 0.0 ppb on Mar 5 06:00		Minimum Daily Average: 8.92 ppb on Mar 8		Hours of Data: 708																									
Maximum Diurnal Average: 27.04 ppb at hour 16		Minimum Diurnal Average: 13.60 ppb at hour 8		Hours of Missing Data: 36																									
Monthly Average: 20.139 ppb		Percentiles: P <sub>1</sub> = 1.2 P <sub>10</sub> = 9.0 Q <sub>1</sub> = 13.4 Median = 19.4 O <sub>3</sub> = 26.0 P <sub>90</sub> = 33.4 P <sub>99</sub> = 41.6		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-Mar	19.3	Z	18.6	17.4	16.3	15.9	15.5	15.9	18.1	20.4	20.9	22.9	25.7	29.3	32.4	37.6	35.4	32.1	25.2	23.0	21.2	19.1	18.8	17.9	22.57	37.59			
2-Mar	17.3	Z	17.9	17.7	17.8	18.2	18.5	18.7	18.0	16.8	17.1	17.6	20.0	28.3	31.4	34.9	29.8	25.9	23.3	21.4	25.6	26.6	26.6	25.3	22.39	34.90			
3-Mar	24.0	Z	20.2	20.9	20.6	19.1	17.9	17.4	18.6	18.6	18.5	19.0	18.7	13.5	4.7	0.9	0.5	9.8	12.0	4.7	6.1	3.9	5.3	2.5	12.92	23.98			
4-Mar	4.3	Z	5.6	4.9	7.0	8.6	11.0	10.3	10.1	10.8	10.9	14.0	14.7	14.0	15.3	16.8	17.7	15.7	13.6	11.3	9.9	7.5	6.7	7.7	10.80	17.68			
5-Mar	12.8	Z	7.6	4.0	0.2	0.0	0.8	2.7	8.6	21.1	25.4	25.5	29.3	33.1	33.3	33.9	26.5	27.8	27.0	26.0	23.7	19.4	14.9	8.4	17.93	33.90			
6-Mar	11.6	Z	13.7	11.6	11.6	9.4	10.5	11.5	10.6	10.5	10.4	10.2	9.0	7.3	8.7	9.8	12.9	11.5	11.3	12.7	13.3	11.6	10.2	9.9	10.87	13.72			
7-Mar	12.7	Z	8.2	6.4	8.7	1.9	0.0	0.0	9.1	13.4	7.8	3.6	12.8	16.3	17.5	17.5	11.3	9.2	11.7	14.9	15.6	13.5	15.4	16.2	10.59	17.54			
8-Mar	14.0	Z	12.7	12.5	11.3	10.6	10.3	9.5	9.9	7.8	7.2	7.5	9.9	14.0	16.3	15.7	13.2	8.3	3.5	1.9	1.7	1.3	1.2	5.0	8.92	16.31			
9-Mar	12.7	Z	14.6	16.1	13.5	15.6	14.2	19.5	14.4	16.1	16.7	24.1	30.9	36.4	38.4	41.2	42.6	41.5	37.3	33.1	30.5	28.1	23.4	17.1	25.14	42.62			
10-Mar	15.0	Z	10.3	9.1	9.5	9.1	9.7	10.6	11.8	12.8	13.9	16.4	19.9	30.9	26.1	23.0	23.8	19.0	15.4	13.8	12.4	17.6	26.0	27.5	16.68	30.87			
11-Mar	29.7	Z	28.1	23.7	24.1	20.4	22.4	20.9	21.0	23.3	29.9	35.6	36.0	38.6	41.1	40.1	41.4	40.9	38.3	34.4	29.8	27.7	27.0	26.3	30.46	41.41			
12-Mar	25.4	Z	26.6	25.7	24.3	22.3	20.9	18.0	17.9	18.3	20.1	20.7	21.4	22.0	20.9	17.0	15.9	17.5	13.2	13.3	10.5	11.8	9.3	6.1	18.22	26.64			
13-Mar	7.4	Z	4.7	10.7	20.7	22.2	22.0	18.4	13.2	26.3	25.5	18.5	27.3	33.4	43.0	45.3	44.4	42.5	42.3	37.5	37.5	36.3	33.1	27.6	27.83	45.26			
14-Mar	19.8	Z	11.8	10.7	14.0	16.3	18.5	21.6	21.8	20.9	20.1	19.9	21.4	21.8	24.1	24.7	26.6	25.5	26.1	25.2	22.5	21.4	18.0	16.3	20.39	26.59			
15-Mar	10.3	Z	8.6	10.5	15.6	14.6	10.4	12.9	17.2	8.9	7.8	10.6	20.0	16.7	12.0	13.5	14.9	20.8	27.3	25.9	23.8	20.6	20.4	15.0	15.58	27.28			
16-Mar	11.5	Z	20.6	20.3	17.3	16.4	12.1	6.0	6.7	6.8	9.6	14.6	15.5	12.9	11.9	17.0	17.1	21.5	24.8	23.7	21.9	18.1	19.4	21.1	15.94	24.84			
17-Mar	21.7	Z	17.2	14.1	12.9	11.5	9.8	11.1	15.0	15.1	18.0	19.2	18.5	18.2	18.4	18.2	20.2	20.3	23.6	22.7	22.9	23.3	22.1	21.4	18.05	23.56			
18-Mar	21.3	Z	13.4	14.6	17.6	8.5	8.3	10.2	13.6	17.5	22.7	22.2	23.5	31.7	35.1	35.0	36.0	36.6	32.3	28.9	26.1	26.1	23.1	21.0	22.84	36.62			
19-Mar	21.1	Z	23.2	21.6	19.7	18.6	17.6	17.9	19.0	19.9	20.0	21.4	24.4	29.6	33.5	36.8	35.5	34.9	31.9	29.2	27.6	27.6	26.1	22.4	25.19	36.78			
20-Mar	20.9	Z	14.9	11.7	9.9	12.2	12.2	11.7	9.9	8.1	13.7	20.2	24.7	28.7	25.7	25.1	18.7	17.0	17.5	21.9	19.3	17.1	18.3	19.0	17.33	28.69			
21-Mar	18.2	Z	16.2	15.4	15.2	16.2	17.6	17.4	17.9	18.1	18.4	20.1	20.5	20.6	23.2	22.4	23.4	22.5	22.2	25.3	25.7	26.2	26.4	26.2	20.67	26.45			
22-Mar	25.8	Z	24.6	25.3	24.7	24.2	24.7	25.7	26.4	26.3	26.4	26.5	27.4	28.0	30.5	32.1	34.5	31.0	30.9	27.4	27.6	25.6	23.2	21.2	26.95	34.46			
23-Mar	20.6	Z	19.2	18.0	12.6	12.2	5.1	8.2	C	C	C	C	C	31.1	34.9	38.0	35.9	33.6	29.8	27.3	28.2	25.7	22.9	18.8	23.45	37.96			
24-Mar	13.4	Z	7.8	5.7	7.0	6.9	6.6	9.8	12.3	13.9	17.7	17.0	19.5	22.4	16.7	14.2	14.8	14.4	16.4	16.9	17.5	17.2	15.3	14.4	13.82	22.36			
25-Mar	11.6	Z	10.4	7.8	8.2	8.7	10.1	9.1	8.4	10.3	10.5	9.1	9.3	14.6	26.9	29.3	29.6	30.6	28.9	26.6	23.1	22.0	20.9	21.0	16.82	30.60			
26-Mar	19.6	Z	22.6	23.6	18.7	16.4	13.6	14.8	18.3	20.0	24.1	27.2	30.4	29.0	31.6	34.6	36.0	36.8	35.3	30.7	28.8	26.5	25.4	23.9	25.56	36.83			
27-Mar	22.8	Z	20.3	17.9	15.3	13.7	12.7	14.4	18.5	19.5	23.8	28.9	32.1	37.5	36.5	39.8	40.7	40.0	36.2	35.9	32.4	25.6	24.0	22.6	26.57	40.72			
28-Mar	19.6	Z	16.3	14.3	13.8	10.8	9.3	6.0	5.9	15.2	17.1	11.8	29.3	39.4	36.6	32.7	32.5	35.0	38.2	34.0	31.4	23.1	20.9	17.4	22.19	39.36			
29-Mar	17.8	Z	21.3	17.4	9.2	18.5	20.5	21.9	25.8	26.3	23.9	36.0	39.4	41.5	41.9	33.9	35.8	33.3	40.4	32.2	33.5	36.1	34.1	31.4	29.21	41.85			
30-Mar	31.8	Z	24.2	25.5	25.1	23.7	22.1	8.9	8.8	9.9	20.2	23.3	23.1	17.6	26.0	21.3	22.5	24.2	27.7	23.8	19.4	26.7	22.5	20.2	21.68	31.83			
31-Mar	20.7	Z	13.2	19.3	18.4	19.3	20.2	20.3	23.1	24.2	28.5	31.2	33.9	36.5	34.2	35.9	36.3	36.6	32.8	32.9	31.0	27.8	27.6	28.1	27.48	36.64			
		17.89	--	15.95	15.30	14.86	14.26	13.71	13.60	15.00	16.57	18.23	19.83	22.95	25.65	26.73	27.04	26.66	26.34	25.69	23.82	22.60	21.32	20.28	18.67	Diurnal Average			
		31.83	--	28.06	25.69	25.09	24.23	24.66	25.74	26.38	26.32	29.94	36.01	39.37	41.53	42.99	45.26	44.43	42.54	42.29	37.51	37.50	36.25	34.13	31.44	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**  
**March 2016**

Maximum Value: 37.82 ppb on Mar 3 17:00      Maximum Daily Average: 4.38 ppb on Mar 3 Minimum Value: 0.0 ppb on Mar 1 01:00      Minimum Daily Average: 0.00 ppb on Mar 14 Maximum Diurnal Average: 2.62 ppb at hour 12      Minimum Diurnal Average: 0.00 ppb at hour 4 Monthly Average: 0.606 ppb      Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 0.0 Q <sub>3</sub> = 0.2 P <sub>90</sub> = 1.5 P <sub>99</sub> = 6.9																								Hours in Service:	744																								
																								Hours of Data:	707																								
																								Hours of Missing Data:	37																								
																								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-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.9	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.94																							
2-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.1	1.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	1.95																							
3-Mar	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	3.4	12.0	36.2	37.8	4.0	0.0	1.5	0.1	3.0	0.3	2.1	4.38	37.82																							
4-Mar	1.4	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.9	4.3	4.9	5.0	4.7	4.1	1.7	0.7	0.0	0.0	0.0	0.0	0.0	0.7	1.30	4.96																							
5-Mar	0.0	0.0	Z	0.0	1.9	0.5	0.0	0.3	1.6	0.9	1.0	1.0	1.0	0.6	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.47	1.86																							
6-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	1.4	3.3	4.0	2.5	1.5	2.8	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.75	3.96																							
7-Mar	0.0	0.0	Z	0.1	0.0	2.6	7.1	7.1	5.1	0.5	7.0	15.6	3.4	0.4	0.4	1.0	2.2	1.6	0.0	0.0	0.0	0.0	0.0	0.0	2.35	15.62																							
8-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.7	2.9	2.4	1.9	3.9	5.5	4.4	1.4	0.0	0.0	0.0	0.0	0.0	1.12	5.50																							
9-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.7	1.4	1.3	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	1.38																							
10-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.3	1.4	1.5	0.5	1.2	1.0	1.0	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.38	1.48																							
11-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.82																							
12-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.5	1.8	2.8	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.37	2.80																							
13-Mar	1.3	0.7	Z	0.0	0.0	0.0	0.0	0.0	2.5	0.0	0.0	2.0	0.6	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.32	2.47																							
14-Mar	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																							
15-Mar	1.3	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	2.6	3.3	4.8	0.7	2.7	1.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.74	4.85																							
16-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.4	0.7	1.9	1.4	0.4	0.3	0.6	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.29	1.91																							
17-Mar	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																							
18-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.7	0.7	0.3	3.2	3.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.36	3.18																							
19-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.5	0.5	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.53																							
20-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	2.3	4.2	1.1	1.6	1.2	0.3	0.6	0.6	3.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.73	4.19																							
21-Mar	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.09																							
22-Mar	0.0	0.0	Z	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	0.0	0.01	0.12																							
23-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.5	0.3	C	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	--	0.49																							
24-Mar	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	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.33																							
25-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.6	0.5	1.8	7.3	6.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.95	7.31																							
26-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	1.7	1.2	1.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.25	1.66																							
27-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.8	4.3	2.8	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.41	4.31																							
28-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.6	3.7	1.6	2.9	23.2	8.1	0.0	0.1	0.0	2.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	1.99	23.18																							
29-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	3.3	4.6	0.1	0.0	0.0	0.0	1.0	0.5	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.46	4.58																							
30-Mar	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.9	1.5	1.5	0.0	0.0	0.0	0.2	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	1.53																							
31-Mar	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	0.3	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.36																							
																								0.13	0.02	--	0.00	0.06	0.10	0.25	0.35	0.65	0.81	1.34	2.62	1.37	0.88	1.00	1.79	1.92	0.49	0.05	0.05	0.01	0.10	0.02	0.09	Diurnal Average	
																								1.44	0.70	--	0.08	1.86	2.56	7.13	7.08	5.06	4.19	6.97	23.18	8.12	4.96	12.00	36.19	37.82	4.43	1.38	1.55	0.21	3.01	0.28	2.06	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 (NO<sub>2</sub>) - ppb**  
**March 2016**

<b>Maximum Value: 20.94 ppb on Mar 3 17:00</b>		<b>Maximum Daily Average: 8.16 ppb on Mar 7</b>		<b>Hours in Service: 744</b>																																													
<b>Minimum Value: 0.3 ppb on Mar 11 17:00</b>		<b>Minimum Daily Average: 1.17 ppb on Mar 22</b>		<b>Hours of Data: 707</b>																																													
<b>Maximum Diurnal Average: 4.96 ppb at hour 12</b>		<b>Minimum Diurnal Average: 3.24 ppb at hour 14</b>		<b>Hours of Missing Data: 37</b>																																													
<b>Monthly Average: 4.099 ppb</b>		<b>Percentiles: P<sub>1</sub> = 0.5 P<sub>10</sub> = 1.2 Q<sub>1</sub> = 1.8 Median = 2.9 Q<sub>3</sub> = 5.2 P<sub>90</sub> = 8.7 P<sub>99</sub> = 16.2</b>		<b>Hours of Calibration: 37</b>																																													
<b>Percent Operational Time: 100.0</b>																																																	
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-Mar	2.5	2.8	Z	3.2	3.8	3.9	4.6	4.2	3.7	3.1	3.0	2.9	2.8	2.8	2.9	1.7	2.4	3.0	6.1	5.6	5.5	4.9	3.8	3.6	3.61	6.08																							
2-Mar	3.2	3.1	Z	2.6	2.4	2.4	2.2	2.2	2.4	3.6	3.8	4.0	2.9	1.6	1.3	1.0	1.9	2.3	2.5	2.5	2.3	2.1	2.3	2.2	2.47	4.04																							
3-Mar	2.2	2.1	Z	2.2	1.8	2.2	2.0	2.0	2.1	1.7	1.5	2.0	2.4	6.4	14.5	20.9	20.9	10.9	6.1	14.0	11.8	11.5	8.4	11.2	6.99	20.94																							
4-Mar	9.8	6.4	Z	5.0	3.2	2.7	1.9	2.4	2.9	2.9	3.4	4.9	5.9	6.5	8.0	9.2	8.7	7.7	7.3	8.1	8.7	7.9	7.6	9.0	6.09	9.76																							
5-Mar	7.2	5.0	Z	9.6	14.0	14.7	12.5	12.2	8.2	4.0	3.4	3.7	3.2	2.0	3.1	3.3	5.2	3.5	5.9	3.9	4.6	5.7	6.9	7.9	6.50	14.74																							
6-Mar	6.1	4.0	Z	5.1	6.2	7.1	4.8	3.5	4.8	6.1	7.8	9.9	10.3	7.9	7.2	7.1	4.3	4.5	4.7	5.1	4.8	4.6	5.5	6.2	5.98	10.25																							
7-Mar	4.3	3.4	Z	8.5	5.9	13.2	19.2	20.0	9.8	5.7	10.5	16.4	7.2	3.9	3.0	4.2	9.9	12.6	9.8	5.4	4.2	4.4	3.1	3.3	8.16	19.96																							
8-Mar	3.3	3.3	Z	3.1	3.0	3.0	3.1	3.2	3.5	4.3	4.9	5.0	5.3	4.3	4.1	6.4	9.8	12.2	15.6	16.4	15.8	15.1	16.8	13.1	7.60	16.77																							
9-Mar	7.5	5.8	Z	4.6	6.4	4.4	4.2	4.5	4.0	3.9	4.0	3.7	2.4	1.6	1.4	1.3	1.0	1.2	1.9	2.4	2.5	2.7	3.4	4.9	3.46	7.50																							
10-Mar	4.4	5.2	Z	4.7	3.0	3.2	2.5	2.4	2.7	2.8	2.5	2.6	2.6	1.7	2.7	2.4	3.5	4.7	5.3	5.1	8.4	6.4	2.5	1.4	3.59	8.44																							
11-Mar	1.6	1.5	Z	1.9	1.7	5.1	2.0	2.7	2.7	3.5	1.7	0.8	0.9	0.8	0.5	0.4	0.3	0.5	0.8	1.8	1.5	1.8	1.7	2.3	1.67	5.09																							
12-Mar	1.4	1.3	Z	1.4	1.5	1.3	1.3	1.2	1.3	1.6	2.2	3.3	3.0	3.1	5.2	9.1	9.9	6.8	5.8	4.5	7.5	4.8	5.5	7.4	3.93	9.92																							
13-Mar	9.7	10.5	Z	6.2	3.8	2.5	2.3	4.8	13.0	3.1	2.1	7.8	4.8	1.3	0.9	1.3	3.0	3.8	2.7	2.9	1.5	2.2	2.4	3.6	4.19	13.03																							
14-Mar	6.9	10.0	Z	12.2	8.3	4.0	2.3	1.5	1.3	1.3	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.4	1.5	1.9	2.1	2.0	2.6	2.97	12.20																								
15-Mar	6.8	9.9	Z	9.8	6.7	6.6	8.3	7.6	3.7	9.7	11.0	11.8	4.4	7.5	7.5	6.2	4.8	1.7	1.5	1.7	1.5	1.5	1.4	5.8	5.96	11.76																							
16-Mar	10.4	3.6	Z	1.9	4.3	4.9	8.0	10.2	9.4	13.2	12.4	6.7	4.2	5.8	6.8	4.9	4.5	3.6	1.1	0.8	0.9	1.3	0.8	0.7	5.23	13.17																							
17-Mar	0.5	0.7	Z	1.4	3.4	5.4	5.3	3.1	1.9	1.2	0.7	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.7	1.0	1.0	0.8	0.7	0.7	1.40	5.37																							
18-Mar	0.7	0.8	Z	1.1	0.8	1.3	2.1	2.9	3.4	2.7	1.9	5.8	5.9	2.2	1.0	1.4	1.4	1.1	1.7	1.6	1.8	1.8	2.6	3.1	2.13	5.91																							
19-Mar	2.5	2.1	Z	2.2	2.4	2.7	2.7	2.6	2.5	2.5	2.2	2.1	2.1	2.1	2.0	1.8	2.3	2.0	2.2	2.7	2.8	3.0	3.3	2.5	2.39	3.27																							
20-Mar	2.6	2.9	Z	2.8	2.8	2.5	2.2	1.9	5.2	6.9	3.8	3.7	3.1	2.2	3.4	4.1	12.5	9.8	6.7	2.1	2.3	2.0	1.7	1.5	3.86	12.47																							
21-Mar	1.5	1.4	Z	1.6	1.5	1.2	1.1	1.3	1.7	2.1	2.0	1.5	1.3	1.5	1.6	1.6	1.7	1.7	1.7	1.3	1.1	0.9	0.8	0.8	1.44	2.10																							
22-Mar	0.9	1.3	Z	0.9	0.9	1.0	1.0	0.8	0.8	1.2	1.1	1.1	1.0	1.1	1.0	0.9	0.8	0.9	1.2	1.4	1.5	1.8	2.1	2.2	1.17	2.24																							
23-Mar	2.8	2.7	Z	2.9	7.5	6.2	12.5	6.0	C	C	C	C	C	C	1.3	0.4	0.6	1.1	1.0	1.3	1.4	1.8	2.6	2.1	--	12.54																							
24-Mar	1.6	2.3	Z	4.7	4.7	5.8	7.3	6.2	4.9	4.0	2.3	2.6	2.1	2.0	6.0	7.0	7.3	6.4	5.8	5.7	5.3	5.1	5.4	4.9	4.76	7.29																							
25-Mar	6.0	11.0	Z	6.0	5.5	4.5	4.0	3.6	3.6	3.7	4.8	10.5	13.2	10.5	2.4	1.7	2.1	1.3	1.2	1.7	1.7	1.6	2.0	2.4	4.55	13.15																							
26-Mar	2.4	3.0	Z	1.4	2.1	2.3	2.7	2.9	2.8	2.8	3.5	2.1	2.8	5.6	5.2	4.8	6.5	2.8	1.5	2.0	2.3	2.7	2.1	2.0	2.97	6.54																							
27-Mar	2.3	2.4	Z	2.3	2.4	2.4	2.6	2.7	3.0	3.2	8.8	6.8	3.6	1.8	2.3	1.7	1.3	1.5	2.0	1.7	2.0	1.9	1.9	1.9	2.71	8.83																							
28-Mar	1.8	1.3	Z	1.3	1.3	1.4	2.0	8.4	10.8	6.2	6.8	19.2	8.3	1.3	3.3	2.4	8.6	8.1	2.5	3.3	3.0	2.7	2.4	2.4	4.73	19.23																							
29-Mar	2.7	2.6	Z	4.5	10.9	3.7	3.3	2.9	2.8	7.2	10.2	2.5	1.6	1.3	1.6	4.9	4.7	9.4	3.6	10.3	7.0	2.3	3.3	4.1	4.68	10.95																							
30-Mar	2.8	5.4	Z	5.0	3.5	3.6	4.5	15.9	14.7	11.1	2.6	1.9	2.4	5.2	2.0	5.8	4.6	3.8	1.9	2.9	5.6	1.7	5.0	3.7	5.03	15.89																							
31-Mar	2.9	6.9	Z	3.5	2.7	2.4	3.3	3.3	2.5	2.4	2.2	2.0	2.0	1.8	4.7	4.1	4.1	3.9	4.8	4.5	3.6	3.8	3.9	3.6	3.43	6.93																							
																								3.92	4.02	--	3.98	4.14	4.11	4.46	4.81	4.54	4.25	4.28	4.96	3.78	3.24	3.50	3.98	4.85	4.34	3.77	4.03	4.06	3.64	3.68	3.97	Diurnal Average	
																								10.38	11.01	--	12.20	13.97	14.74	19.21	19.96	14.71	13.17	12.44	19.23	13.15	10.48	14.47	20.86	20.94	12.58	15.61	16.40	15.81	15.07	16.77	13.15	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<sub>x</sub>) - ppb**  
**March 2016**

Maximum Value: 58.55 ppb on Mar 3 17:00		Maximum Daily Average: 11.12 ppb on Mar 3		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Mar 11 16:00		Minimum Daily Average: 0.87 ppb on Mar 22		Hours of Data: 707																							
Maximum Diurnal Average: 7.46 ppb at hour 12		Minimum Diurnal Average: 3.25 ppb at hour 23		Hours of Missing Data: 37																							
Monthly Average: 4.403 ppb		Percentiles: P <sub>1</sub> = 0.1 P <sub>10</sub> = 0.8 Q <sub>1</sub> = 1.4 Median = 2.7 Q <sub>3</sub> = 5.3 P <sub>90</sub> = 10.3 P <sub>99</sub> = 26.2		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-Mar	2.1	2.4	Z	2.8	3.3	3.4	4.1	3.8	3.8	3.7	3.9	3.7	3.5	3.6	3.7	1.6	2.3	2.7	5.6	5.1	5.0	4.4	3.3	3.1	3.51	5.64	
2-Mar	2.7	2.5	Z	2.0	1.9	1.8	1.6	1.6	2.1	4.3	4.9	6.0	3.5	1.6	1.0	0.5	1.4	1.8	2.0	1.9	1.7	1.5	1.7	1.6	2.24	5.96	
3-Mar	1.6	1.5	Z	1.6	1.2	1.6	1.4	1.5	1.7	1.5	1.3	2.1	2.6	9.7	26.4	56.8	58.6	14.9	6.1	15.5	11.9	14.5	8.6	13.2	11.12	58.55	
4-Mar	11.2	6.1	Z	4.5	2.7	2.2	1.4	2.0	2.8	3.2	5.3	9.0	10.7	11.4	12.7	13.3	10.4	8.3	7.0	7.7	8.3	7.5	7.2	9.7	7.16	13.26	
5-Mar	7.0	4.6	Z	9.3	15.8	15.2	12.4	12.5	9.7	4.9	4.3	4.6	4.1	2.5	4.1	3.9	5.2	3.3	5.7	3.5	4.2	5.3	7.1	7.9	6.84	15.81	
6-Mar	5.8	3.6	Z	4.7	5.8	6.7	4.3	3.1	5.0	7.4	11.1	13.8	12.8	9.3	9.9	8.5	4.1	4.2	4.2	4.5	4.3	4.1	4.9	5.6	6.42	13.82	
7-Mar	3.7	2.8	Z	8.5	5.5	15.7	26.3	27.0	14.8	6.2	17.4	31.9	10.6	4.2	3.3	5.2	12.1	14.2	9.6	4.9	3.7	3.8	2.6	2.7	10.28	31.87	
8-Mar	2.8	2.8	Z	2.6	2.5	2.5	2.6	2.8	3.3	4.6	6.1	6.6	8.2	6.6	6.0	10.3	15.3	16.7	17.0	16.4	15.6	14.9	16.6	12.9	8.51	16.99	
9-Mar	7.2	5.4	Z	4.2	6.1	4.0	3.7	4.2	4.1	4.5	5.3	5.0	2.9	1.6	1.3	1.1	0.7	0.8	1.4	1.9	2.1	2.3	3.0	4.5	3.36	7.18	
10-Mar	4.0	4.7	Z	4.2	2.5	2.8	2.1	2.0	2.6	3.1	3.8	3.9	4.0	2.2	3.8	3.3	4.5	4.9	4.9	4.7	8.6	5.9	2.0	0.9	3.71	8.60	
11-Mar	1.1	1.0	Z	1.4	1.2	4.6	1.6	2.4	2.6	4.3	1.8	0.7	0.8	0.6	0.2	0.0	0.0	0.1	0.3	1.3	1.1	1.3	1.3	1.8	1.36	4.60	
12-Mar	1.0	0.8	Z	0.9	1.0	0.9	0.9	0.8	1.1	1.6	2.6	3.6	3.3	3.5	6.9	11.9	11.8	7.0	5.4	4.0	7.0	4.3	5.0	6.9	4.02	11.86	
13-Mar	11.0	11.2	Z	6.0	3.3	1.9	1.8	4.4	15.5	2.7	1.9	9.8	5.4	1.0	0.6	1.0	3.1	3.9	2.1	2.3	1.0	1.7	1.9	3.1	4.19	15.46	
14-Mar	6.3	9.4	Z	11.7	7.7	3.4	1.7	1.0	0.7	0.8	0.8	0.7	0.6	0.7	0.7	0.7	0.8	0.9	1.0	1.4	1.6	1.5	2.3	2.48	11.71		
15-Mar	8.0	9.5	Z	9.5	6.3	6.1	8.0	7.3	3.5	12.3	14.2	16.5	5.1	10.2	8.6	6.5	4.7	1.4	1.0	1.1	1.0	0.9	5.3	6.44	16.55		
16-Mar	10.1	3.1	Z	1.4	3.8	4.4	7.9	10.6	10.1	15.1	13.9	7.0	4.4	6.3	7.3	5.1	4.4	3.3	0.7	0.4	0.5	0.9	0.5	0.3	5.28	15.08	
17-Mar	0.1	0.3	Z	1.1	3.0	5.0	4.9	2.8	1.6	0.9	0.3	0.2	0.1	0.1	0.2	0.3	0.1	0.1	0.3	0.6	0.5	0.4	0.3	0.2	1.02	4.97	
18-Mar	0.2	0.3	Z	0.7	0.4	0.8	1.7	2.8	4.1	3.4	2.2	8.9	8.9	2.6	0.9	1.4	1.3	0.7	1.2	1.1	1.4	1.4	2.2	2.6	2.22	8.94	
19-Mar	2.1	1.6	Z	1.6	1.9	2.1	2.2	2.2	2.5	2.7	2.6	2.6	2.6	2.5	2.1	1.7	2.1	1.5	1.6	2.1	2.2	2.4	2.7	2.0	2.16	2.70	
20-Mar	2.1	2.3	Z	2.2	2.2	1.8	1.6	1.5	7.5	11.1	4.8	5.3	4.3	2.5	4.0	4.6	16.3	10.7	6.4	1.5	1.7	1.4	1.1	1.0	4.26	16.31	
21-Mar	0.9	0.8	Z	1.0	0.9	0.7	0.6	0.8	1.3	1.8	1.8	1.4	1.3	1.5	1.7	1.6	1.6	1.4	1.3	0.7	0.6	0.4	0.3	0.3	1.07	1.78	
22-Mar	0.4	0.8	Z	0.4	0.4	0.5	0.6	0.4	0.5	1.3	1.0	1.0	0.9	1.0	0.8	0.8	0.6	0.7	0.9	1.0	1.1	1.4	1.7	1.9	0.87	1.87	
23-Mar	2.4	2.3	Z	2.5	7.1	5.7	12.9	6.1	C	C	C	C	C	C	0.8	0.6	0.8	1.2	1.0	1.1	1.2	1.5	2.3	1.7	--	12.88	
24-Mar	1.2	1.9	Z	4.1	4.2	5.3	6.8	6.0	4.7	3.8	2.0	2.4	1.9	1.7	6.1	7.3	7.4	6.2	5.4	5.2	4.8	4.6	4.9	4.4	4.44	7.38	
25-Mar	5.6	10.6	Z	5.5	5.0	4.0	3.6	3.6	4.1	4.2	6.5	17.7	19.7	15.3	2.4	1.4	1.8	1.0	0.7	1.2	1.2	1.1	1.6	1.9	5.20	19.69	
26-Mar	2.0	2.6	Z	1.0	1.6	1.8	2.3	2.5	2.6	2.6	3.9	2.1	2.9	7.2	6.3	5.7	7.8	2.6	1.0	1.4	1.7	2.1	1.6	1.4	2.90	7.84	
27-Mar	1.7	1.8	Z	1.8	1.8	1.8	2.2	2.6	3.3	4.0	13.1	9.6	4.7	1.7	2.2	1.3	0.9	1.0	1.4	1.1	1.5	1.4	1.4	1.4	2.77	13.07	
28-Mar	1.4	0.9	Z	0.9	0.9	1.0	1.6	10.0	14.4	7.7	9.6	42.1	16.3	1.0	3.4	2.3	11.4	9.8	2.0	2.8	2.6	2.3	2.0	2.0	6.45	42.12	
29-Mar	2.3	2.2	Z	4.2	10.6	3.3	2.9	2.7	2.7	10.4	14.7	2.6	1.4	1.0	1.3	5.9	5.2	10.3	3.2	9.8	6.6	1.8	2.8	3.7	4.86	14.69	
30-Mar	2.4	5.0	Z	4.5	3.1	3.1	4.1	16.8	16.2	12.6	2.4	1.6	2.1	5.3	1.7	6.2	4.6	3.5	1.4	2.4	5.1	1.2	4.4	3.1	4.91	16.77	
31-Mar	2.3	6.4	Z	3.0	2.1	1.8	2.8	2.9	2.1	2.0	1.7	1.6	1.5	1.4	4.9	4.4	4.4	3.8	4.4	3.9	3.1	3.3	3.4	3.1	3.06	6.42	
		3.63	3.59	--	3.54	3.73	3.74	4.28	4.85	5.03	4.95	5.51	7.46	5.04	4.00	4.36	5.65	6.63	4.60	3.43	3.63	3.62	3.28	3.25	3.63	Diurnal Average	
		11.17	11.23	--	11.71	15.81	15.74	26.27	26.98	16.22	15.08	17.38	42.12	19.69	15.29	26.39	56.81	58.55	16.66	16.99	16.36	15.63	14.92	16.65	13.23	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<sub>2.5</sub>) - µg/m<sup>3</sup>**  
**March 2016**

Maximum Value: 18.70 µg/m <sup>3</sup> on Mar 24 07:00		Maximum Daily Average: 8.81 µg/m <sup>3</sup> on Mar 24		Hours in Service: 744																																													
Minimum Value: 0.0 µg/m <sup>3</sup> on Mar 1 13:00		Minimum Daily Average: 0.31 µg/m <sup>3</sup> on Mar 26		Hours of Data: 738																																													
Maximum Diurnal Average: 2.95 µg/m <sup>3</sup> at hour 11		Minimum Diurnal Average: 1.75 µg/m <sup>3</sup> at hour 14		Hours of Missing Data: 6																																													
Monthly Average: 2.572 µg/m <sup>3</sup>		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.5 Median = 1.9 Q <sub>3</sub> = 3.7 P <sub>90</sub> = 6.4 P <sub>99</sub> = 11.1		Hours of Calibration: 6																																													
				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-Mar	2.1	1.8	2.3	2.7	2.7	2.2	1.2	0.6	1.3	1.5	1.4	1.2	0.0	0.0	0.5	0.0	0.4	1.9	2.2	1.1	1.4	1.0	1.1	1.4	1.33	2.73																							
2-Mar	1.2	1.8	2.0	1.4	2.8	3.0	2.6	2.7	2.9	3.3	3.0	4.3	2.8	0.1	0.5	0.4	2.2	1.9	1.9	1.3	0.1	0.4	1.1	0.1	1.82	4.33																							
3-Mar	0.7	2.1	1.4	0.8	0.1	0.2	0.8	1.4	0.3	1.4	2.2	2.0	3.7	7.6	14.2	16.8	16.1	11.3	9.0	8.1	5.2	4.9	3.7	3.4	4.90	16.84																							
4-Mar	4.1	5.3	7.2	6.3	6.5	4.6	2.9	1.7	5.1	6.9	7.3	4.8	4.3	2.7	3.4	3.7	2.0	2.0	2.5	3.2	3.2	2.6	2.7	1.2	4.01	7.32																							
5-Mar	0.6	2.2	4.3	6.2	8.2	4.7	4.5	5.6	3.0	0.5	0.0	1.3	1.5	1.2	1.9	4.4	4.4	0.6	2.9	2.5	0.9	3.9	4.4	5.1	3.11	8.18																							
6-Mar	6.8	6.5	5.5	6.1	2.5	2.5	5.7	5.1	6.3	6.4	7.2	9.0	7.7	6.3	9.1	8.5	4.1	3.9	2.5	5.6	4.0	5.4	6.4	9.3	5.94	9.34																							
7-Mar	7.3	7.5	7.9	4.9	6.4	6.4	6.4	6.2	6.1	7.7	8.7	8.5	11.0	8.2	6.8	7.0	7.6	8.9	8.2	7.6	9.1	8.9	5.6	5.2	7.42	11.02																							
8-Mar	3.4	5.1	2.8	2.1	1.0	1.7	2.1	3.7	3.9	4.1	3.4	3.6	5.2	4.2	4.7	4.7	3.8	5.9	6.3	6.0	6.1	6.5	9.2	12.3	4.65	12.28																							
9-Mar	5.8	4.8	3.1	2.3	2.5	0.0	2.5	2.3	2.0	1.9	0.9	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	0.2	0.6	0.1	0.4	1.28	5.79																							
10-Mar	0.0	0.1	0.0	0.0	0.0	0.7	0.3	0.1	0.3	0.0	0.5	0.2	0.6	0.0	2.2	1.7	1.4	1.8	2.2	2.7	2.7	1.0	0.0	0.4	0.78	2.70																							
11-Mar	0.5	0.8	0.4	1.9	2.0	2.1	1.0	1.5	2.9	3.1	1.3	0.0	0.2	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.7	0.3	0.0	0.1	0.81	3.12																							
12-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	1.2	0.1	0.8	1.3	1.5	1.4	1.3	1.3	1.5	2.1	2.1	2.5	1.1	2.4	1.5	2.2	1.07	2.49																							
13-Mar	3.5	3.8	2.0	3.4	2.4	0.6	1.0	0.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.7	0.4	1.2	1.6	0.97	3.83																							
14-Mar	3.7	5.0	5.9	6.0	5.9	4.2	4.1	3.2	3.6	3.4	3.1	3.0	2.8	2.3	2.8	2.9	3.3	3.6	3.7	4.3	4.7	4.7	4.7	4.0	3.95	5.99																							
15-Mar	2.5	3.5	2.6	2.3	1.6	2.3	2.9	3.3	4.5	3.7	3.0	2.7	2.2	1.5	1.1	0.8	0.6	0.3	2.9	2.5	2.7	2.4	2.4	2.6	2.37	4.45																							
16-Mar	2.4	0.7	0.0	0.0	0.3	0.9	0.8	1.2	1.7	2.1	3.4	5.0	2.6	1.8	1.8	2.1	1.9	4.9	2.5	1.8	2.6	2.0	2.1	1.4	1.91	4.98																							
17-Mar	1.1	1.6	1.0	2.0	2.2	2.6	2.5	1.9	1.4	0.9	0.1	0.2	0.0	0.6	0.2	0.0	0.1	0.1	0.3	0.3	0.3	0.6	0.3	0.1	0.85	2.57																							
18-Mar	0.0	0.0	0.2	0.1	0.0	0.0	0.0	3.5	2.7	2.6	0.5	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.4	2.3	1.9	3.1	2.2	0.83	3.51																							
19-Mar	0.7	0.3	0.0	0.0	0.9	0.8	0.8	1.4	1.8	2.0	2.1	1.1	1.7	1.3	0.6	0.1	1.6	2.6	3.1	1.6	2.4	3.5	3.2	4.2	1.57	4.19																							
20-Mar	4.4	4.0	4.4	3.5	4.3	2.9	1.6	2.3	3.8	6.1	2.9	1.6	2.3	0.3	1.3	1.9	5.4	4.4	2.1	0.5	1.2	1.4	1.0	0.2	2.66	6.12																							
21-Mar	1.9	1.4	1.4	2.3	2.7	2.5	3.3	2.6	3.0	4.3	5.2	4.6	3.7	3.2	2.9	2.5	2.2	2.2	2.6	2.0	2.4	2.1	1.9	2.0	2.71	5.24																							
22-Mar	2.2	2.4	1.4	1.5	1.4	1.7	1.3	2.2	1.9	2.8	2.7	2.0	3.3	2.1	1.2	2.0	2.0	1.7	1.8	3.3	2.6	1.5	3.3	5.2	2.22	5.16																							
23-Mar	6.1	7.6	7.6	7.3	5.8	5.7	6.3	6.8	C	C	C	C	C	C	0.0	0.0	0.6	1.1	0.4	0.0	0.8	2.4	2.6	5.1	3.68	7.62																							
24-Mar	1.4	3.8	5.5	6.1	8.8	13.9	18.7	13.6	9.1	8.8	7.9	8.6	7.4	6.7	7.9	9.6	9.0	10.5	9.2	6.9	7.8	9.3	10.5	10.6	8.81	18.70																							
25-Mar	8.8	5.5	6.5	7.5	7.2	6.5	4.7	4.4	4.0	2.6	4.2	2.9	1.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.6	2.83	8.78																							
26-Mar	0.5	1.2	0.0	0.0	0.4	0.0	0.7	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.9	0.9	1.2	0.6	0.7	0.31	1.20																							
27-Mar	0.0	0.3	0.3	0.7	1.1	1.6	2.1	1.5	0.9	0.2	7.1	8.5	0.4	0.0	0.9	0.0	0.5	0.5	0.8	1.3	3.9	6.0	2.8	2.3	1.82	8.52																							
28-Mar	4.3	1.9	4.4	1.7	1.7	3.6	2.5	5.5	4.9	5.3	5.3	4.2	1.8	0.3	0.6	2.1	1.9	1.0	1.8	1.7	1.9	1.3	1.8	2.4	2.65	5.53																							
29-Mar	1.6	0.8	0.8	1.6	1.9	0.1	0.2	1.0	0.3	1.0	1.8	0.2	0.0	0.0	0.0	0.0	0.9	1.6	0.0	4.5	2.7	1.2	0.9	1.0	1.01	4.54																							
30-Mar	0.6	0.0	1.0	0.8	0.7	0.7	1.2	2.7	3.2	2.6	1.2	0.9	0.4	0.5	0.5	0.6	1.2	0.5	1.0	1.0	4.0	0.3	1.9	1.0	1.20	4.02																							
31-Mar	0.0	0.0	0.0	0.7	0.3	0.0	0.3	0.3	0.6	0.8	0.8	0.1	0.0	0.0	0.0	0.3	0.2	0.1	0.3	1.0	2.0	1.7	1.4	2.1	0.54	2.13																							
																								2.51	2.63	2.64	2.66	2.72	2.54	2.77	2.87	2.81	2.87	2.95	2.73	2.28	1.75	2.13	2.38	2.42	2.43	2.34	2.47	2.60	2.64	2.65	2.91	Diurnal Average	
																								8.78	7.62	7.89	7.51	8.84	13.89	18.70	13.57	9.13	8.82	8.67	8.96	11.02	8.24	14.21	16.84	16.09	11.28	9.19	8.06	9.05	9.28	10.46	12.28	Diurnal Maximum	
C - Calibration																																																	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 ul/m <sup>3</sup> 24-hr 30 ul/m <sup>3</sup>																																																	

# Calibration Data Summary

## West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee

Calibration Date: March 23, 2016

Parameter: NO/NO<sub>2</sub>/NO<sub>x</sub>

Instrument: 42i

Serial Number: 1150790046

Previous Calibration Date: Feb.23/16

Calibration: Routine

Calibration Equipment: SABIO 2010 sn 05200311

Barometric Pressure: 27.40" Hg

Calibration Method: Standard Gas Dilution/ GPT

Cylinder ID: FF9469

Temperature: 21.0° C

Cylinder Concentration: 12.6 ppm No/ NOX

In Service: Jan.14/15

Technician: J.McClintock

Instrument Settings	NO bkg ppb	NO <sub>x</sub> bkg ppb	Pre-reactor bkg ppb	NO Coefficient	NO <sub>x</sub> Coefficient	NO <sub>2</sub> Coefficient	Monitoring Range
Previous	1.8	2.4	na	1.199	1.004	1.000	300 ppb
Current	1.8	2.5	na	1.244	0.999	1.000	300 ppb

NO	Final Zero: 0.0 ppb	Final Span: 225.9 ppb	As Found Correction Factor: 0.999
NO <sub>2</sub>	Final Zero: -1.0 ppb	Final Span: -1.2 ppb	As Found Correction Factor: 0.991
NO <sub>x</sub>	Final Zero: 0.2 ppb	Final Span: 224.0 ppb	As Found Correction Factor: 0.990

Results of Linear Regression			Slope	Intercept	R <sup>2</sup>
NO	R <sub>c</sub> vs C <sub>c</sub>	Previous	99.776770	59.899220	0.999965
		Current	100.238600	10.546850	0.999973
	C <sub>i</sub> vs C <sub>c</sub>	Current	1.000000	-0.000009	0.999974
NO <sub>2</sub>	R <sub>c</sub> vs C <sub>c</sub>	Previous	100.151100	34.395430	0.999965
		Current	100.790200	71.897350	0.999940
	C <sub>i</sub> vs C <sub>c</sub>	Current	1.000000	0.000019	0.999940
NO <sub>x</sub>	R <sub>c</sub> vs C <sub>c</sub>	Previous	100.126700	46.572970	0.999965
		Current	100.964800	-44.272870	0.999975
	C <sub>i</sub> vs C <sub>c</sub>	Current	1.000000	0.000009	0.999974

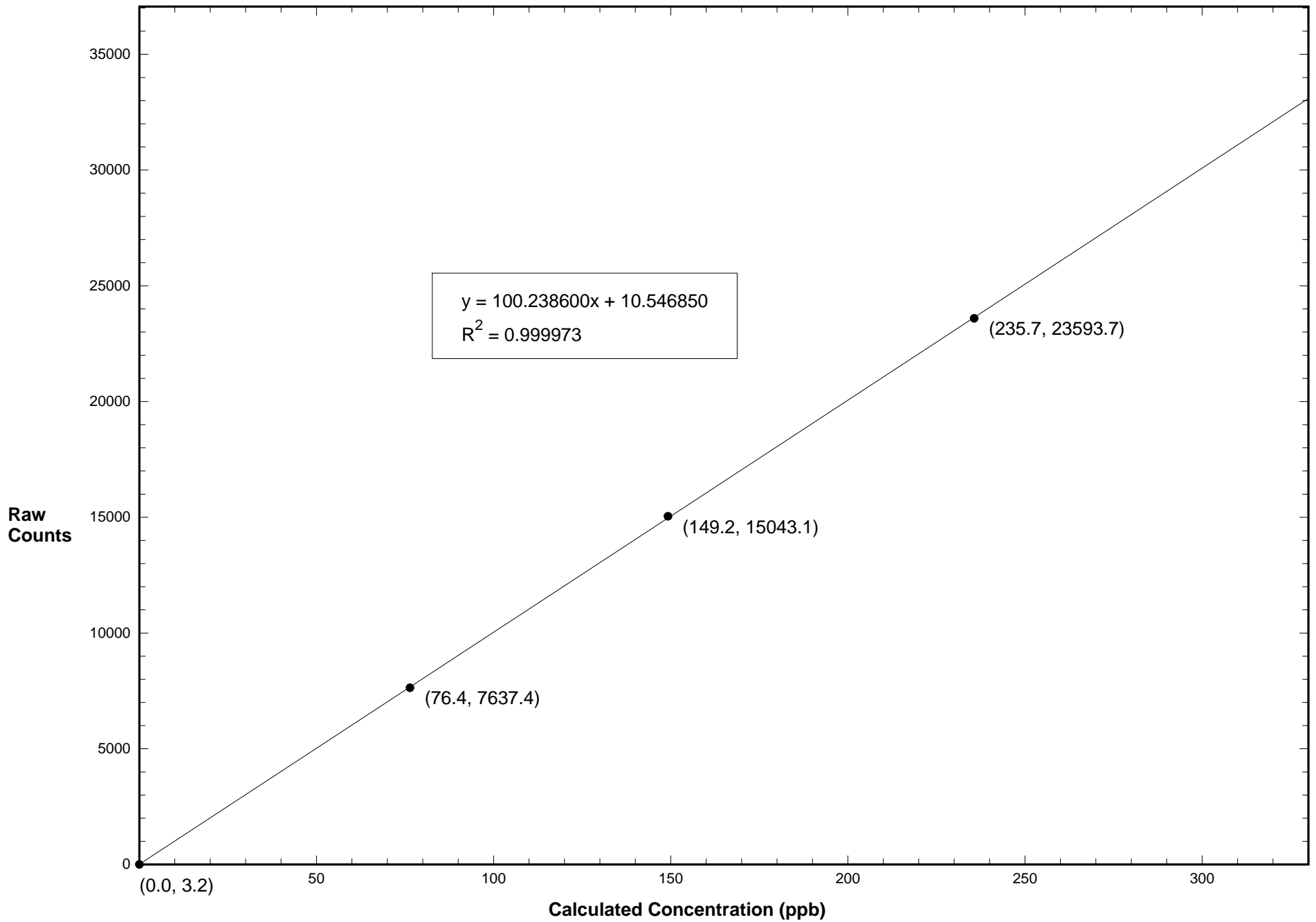
Comments:

**Calibration Data Summary (Page 2)**

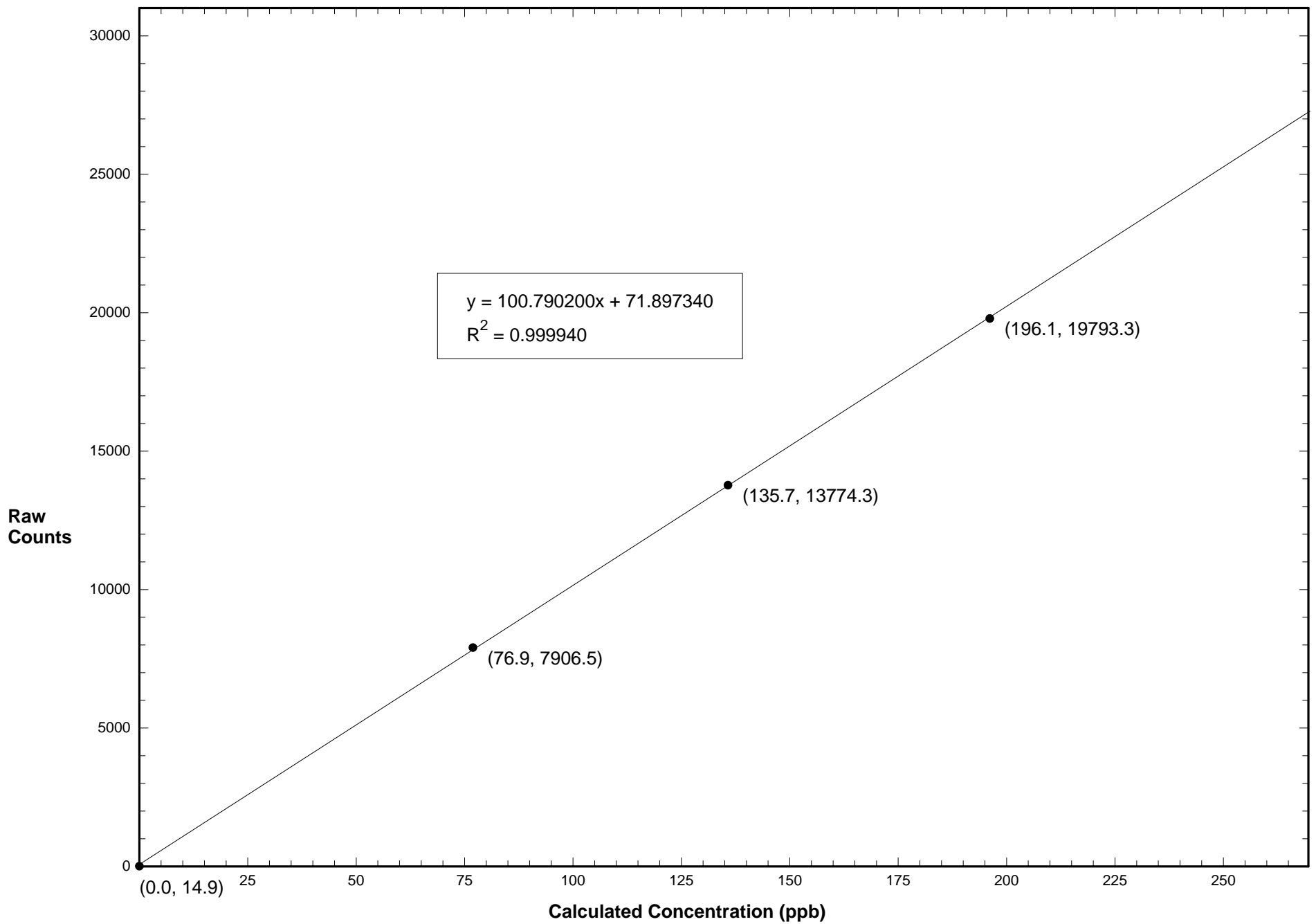
March 23, 2016 - Station 910

NO Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C <sub>c</sub> (ppb)	Raw Count Output R <sub>c</sub>	Indicated Concentration C <sub>i</sub> (ppb)	Correction Factor C <sub>c</sub> /C <sub>i</sub>		
0.09720	5.100	235.7	23593.7	235.3	1.002		
0.06100	5.090	149.2	15043.1	150.0	0.995		
0.03090	5.066	76.4	7637.4	76.1	1.004		
0.00000	5.000	0.0	3.2	-0.1			
NO Calibration					Average Correction Factor:	1.000	
0.09620	5.100	233.3	23540.2	233.6	0.999		
0.06100	5.090	149.2	15002.9	149.0	1.001		
0.03090	5.066	76.4	7604.8	75.8	1.008		
0.00000	5.000	0.0	4.9	0.5			
NO <sub>x</sub> Calibration					Average Correction Factor:	1.003	
Reference Concentration NO (ppb)	Raw Count Output NO	Calculated Concentration NO (ppb)	Calculated Concentration NO <sub>2</sub> , C <sub>c</sub> (ppb)	Raw Count Output R <sub>c</sub>	Indicated Concentration C <sub>i</sub> (ppb)	Correction Factor C <sub>c</sub> /C <sub>i</sub>	Converter Efficiency C <sub>i</sub> /C <sub>c</sub>
231.9	3592.5	35.7	196.1	19793.3	195.7	1.002	0.998
231.9	9646.3	96.1	135.7	13774.3	135.9	0.998	1.002
231.9	15543.8	155.0	76.9	7906.5	77.7	0.989	1.011
			0.0	14.9	-0.6		
						Average Correction Factor:	0.997
NO <sub>2</sub> Gas Phase Titration					Average Converter Efficiency:	1.003	
Parameter	Correction Factor (Previous)	Correction Factor: (Current)	Percent Change of Correction Factor				
NO	0.997	1.002	0.5				
NO <sub>2</sub>	0.998	1.002	0.4				
NO <sub>x</sub>	0.998	0.999	0.1				

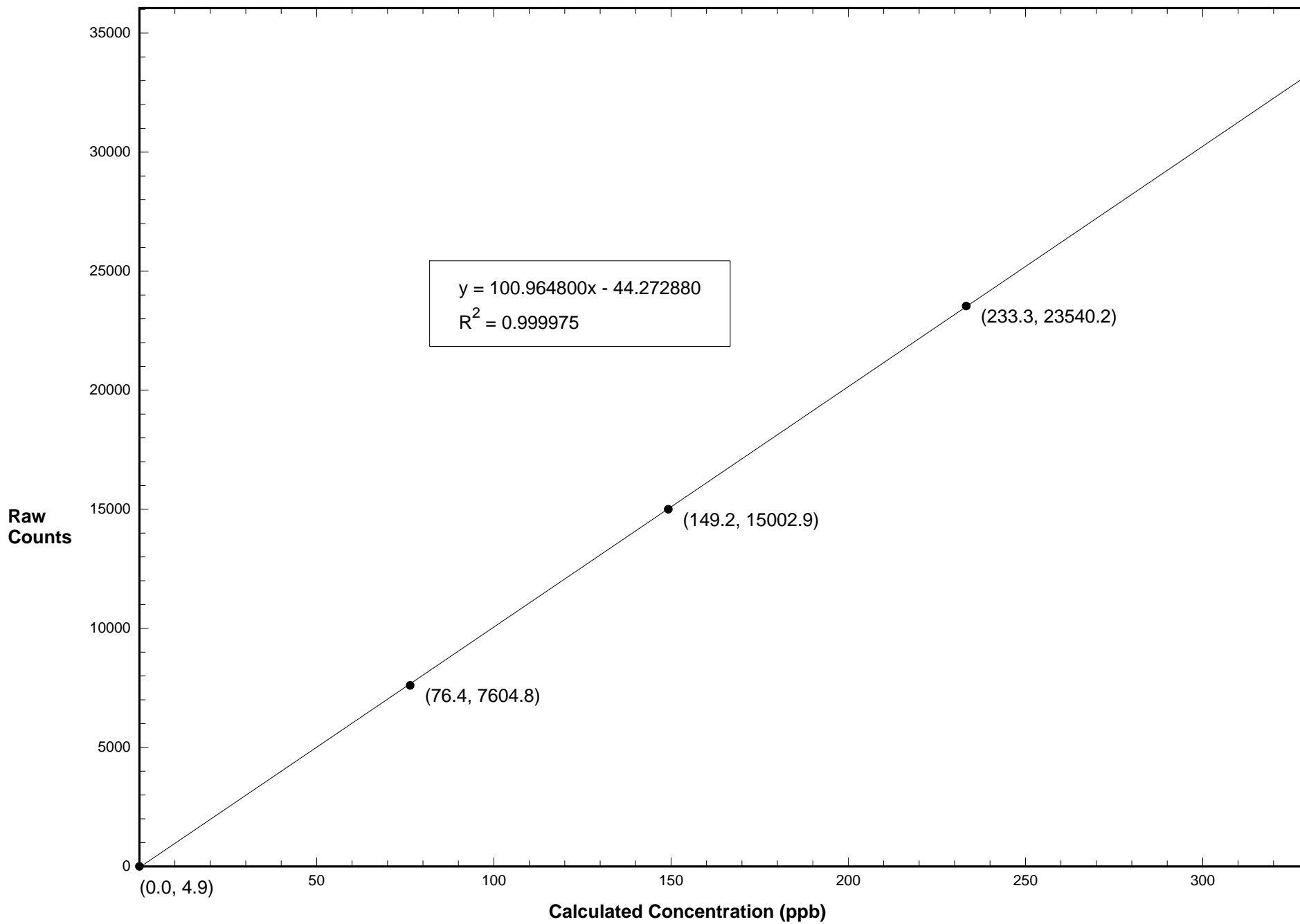
### Station 910 NO March 23, 2016: Linear Regression



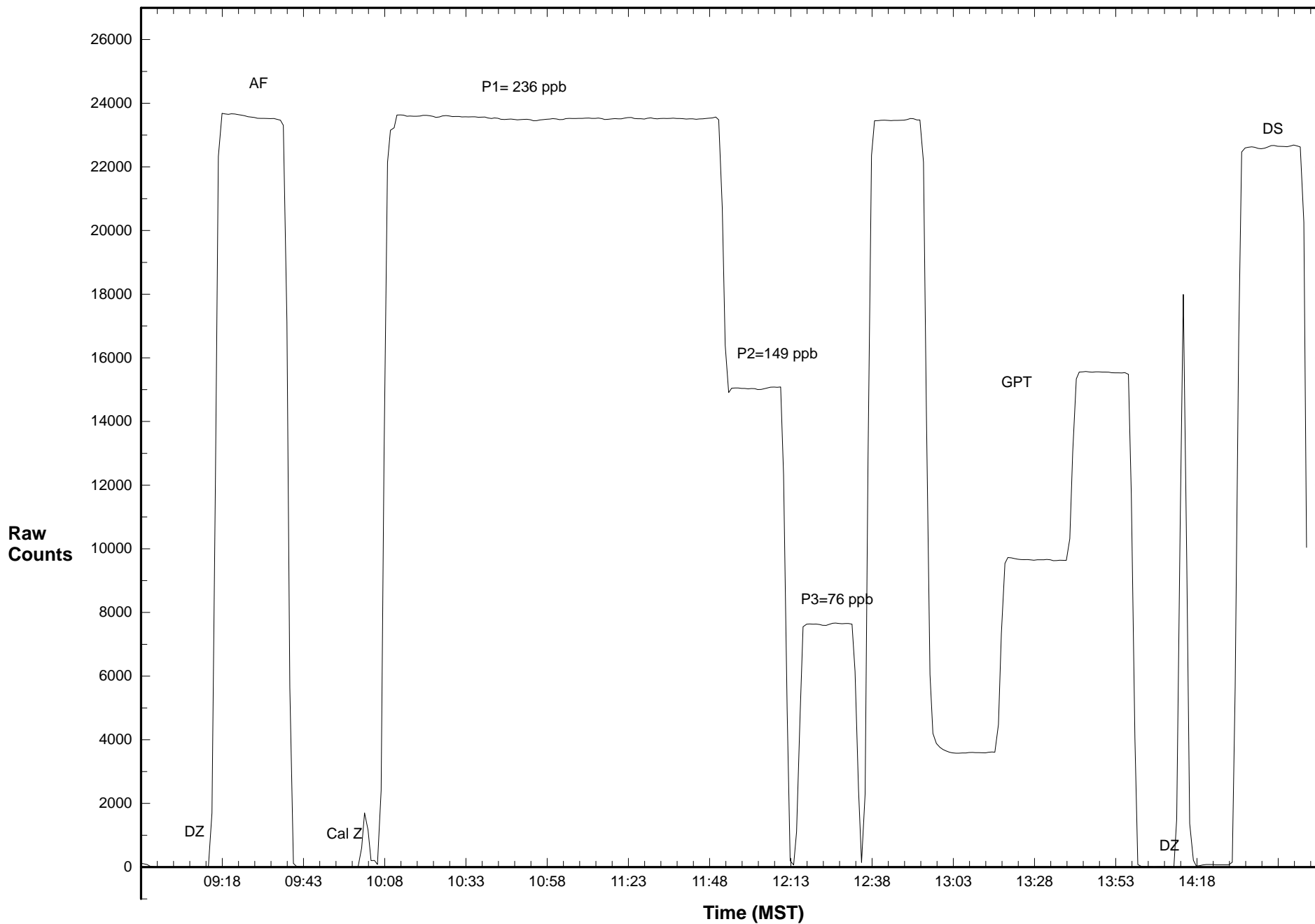
### Station 910 NO2 March 23, 2016: Linear Regression



### Station 910 NOX March 23, 2016: Linear Regression

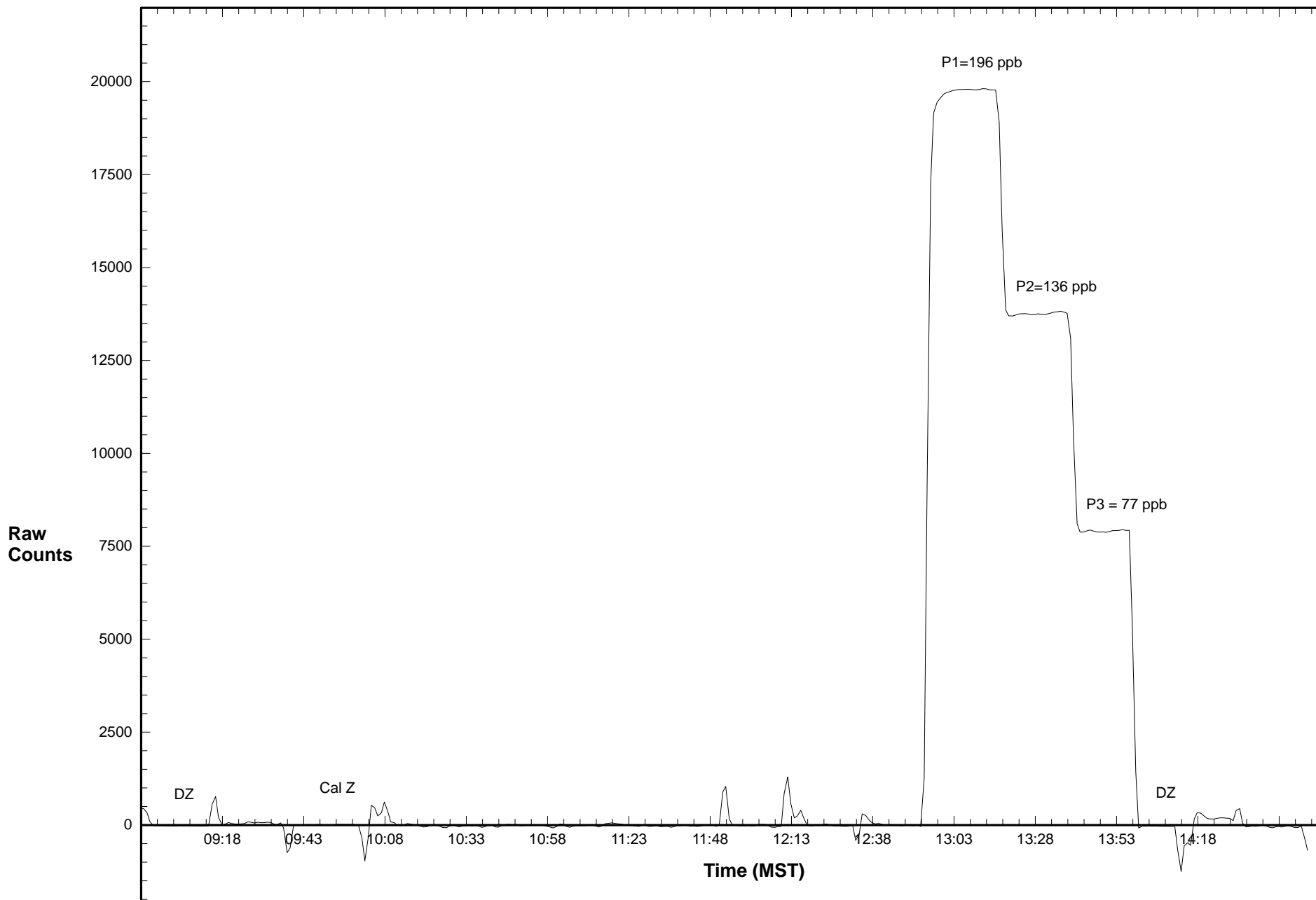


# Station 910 NO March 23, 2016: Calibration Graph

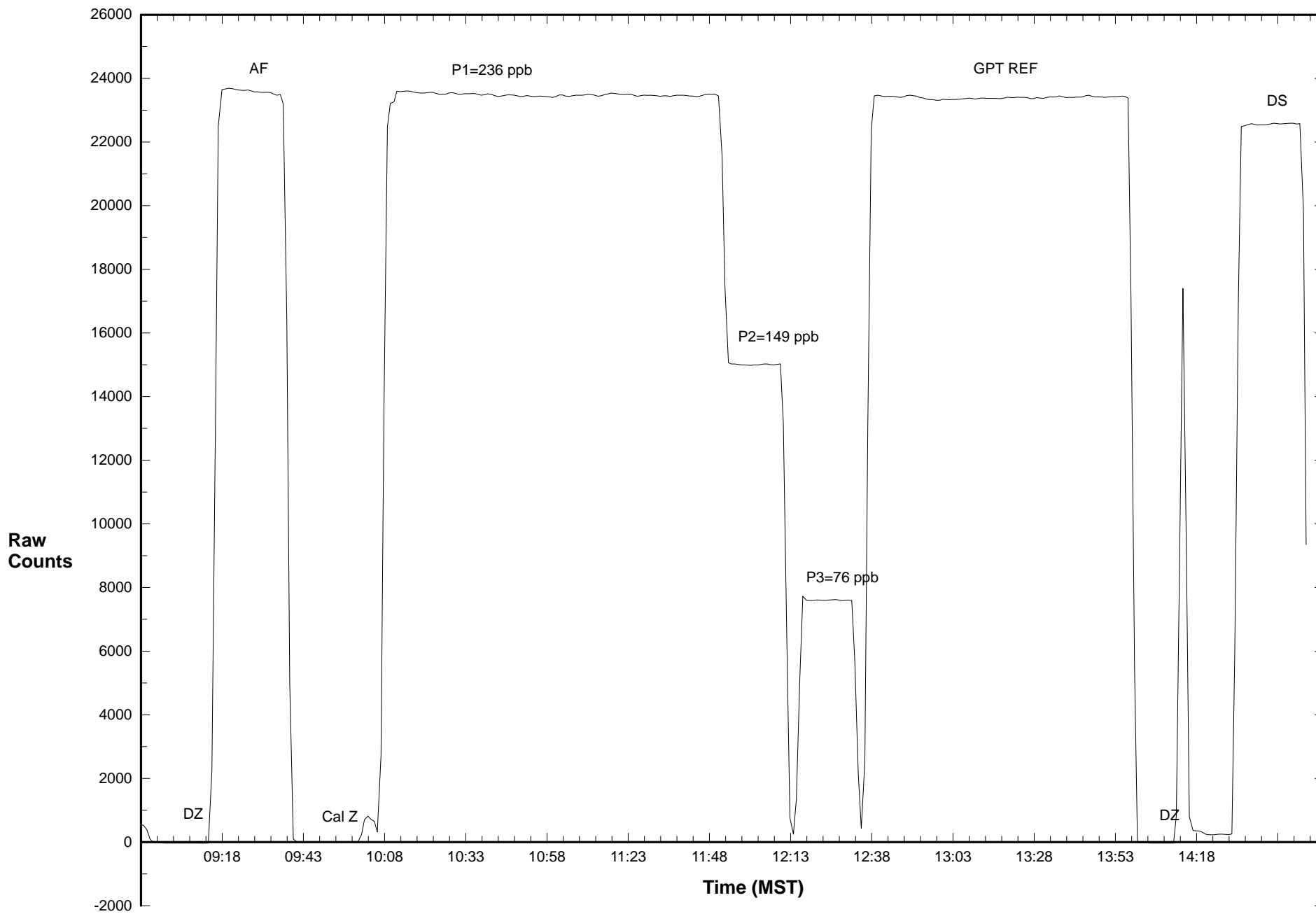




# Station 910 NO2 March 23, 2016: Calibration Graph



# Station 910 NOX March 23, 2016: Calibration Graph



# Calibration Data Summary

## West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee  
 Calibration Date: March 23, 2016  
 Parameter: O<sub>3</sub>

Instrument: Teco 49i

Serial Number: 1150790051

Previous Calibration Date: Feb.23/16

Calibration: Routine

Calibration Equipment: 2B Technology 306 SN 145 Barometric Pressure: 27.40" Hg

Calibration Method: Ozone Generator

Temperature: 21.0° C

Technician: J.McClintock

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	-1.6	1.010	500 ppb
Current	-0.8	0.980	500 ppb

Final Zero: -0.9 ppb

Final Span: 375.1 ppb

As Found Correction Factor: 0.959

Calibration System Flow Rate (LPM)	Calculated Concentration C <sub>c</sub> (ppb)	Raw Count Output R <sub>c</sub>	Indicated Concentration C <sub>i</sub> (ppb)	Correction Factor C <sub>c</sub> /C <sub>i</sub>
3.000	397.0	23886.2	397.5	0.999
3.000	252.0	15097.5	251.3	1.003
3.000	101.0	6035.1	100.6	1.004
3.000	0.0	15.0	0.5	

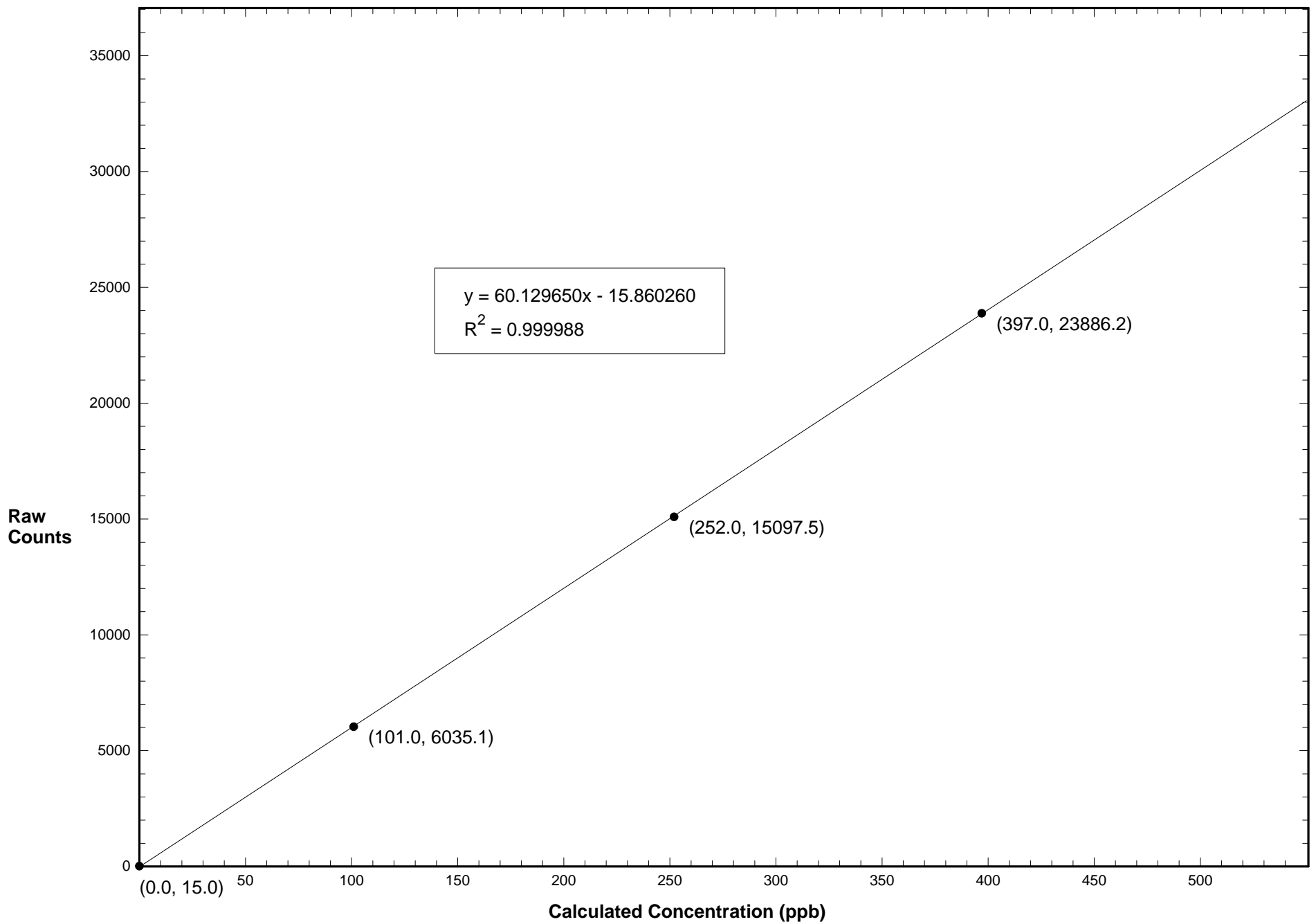
### Results of Linear Regression

R <sub>c</sub> vs C <sub>c</sub>	Slope	Intercept	R <sup>2</sup>
Previous	59.944230	98.285490	0.999930
Current	60.129650	-15.860260	0.999988
C <sub>i</sub> vs C <sub>c</sub>			
Current	1.000000	-0.000026	0.999988

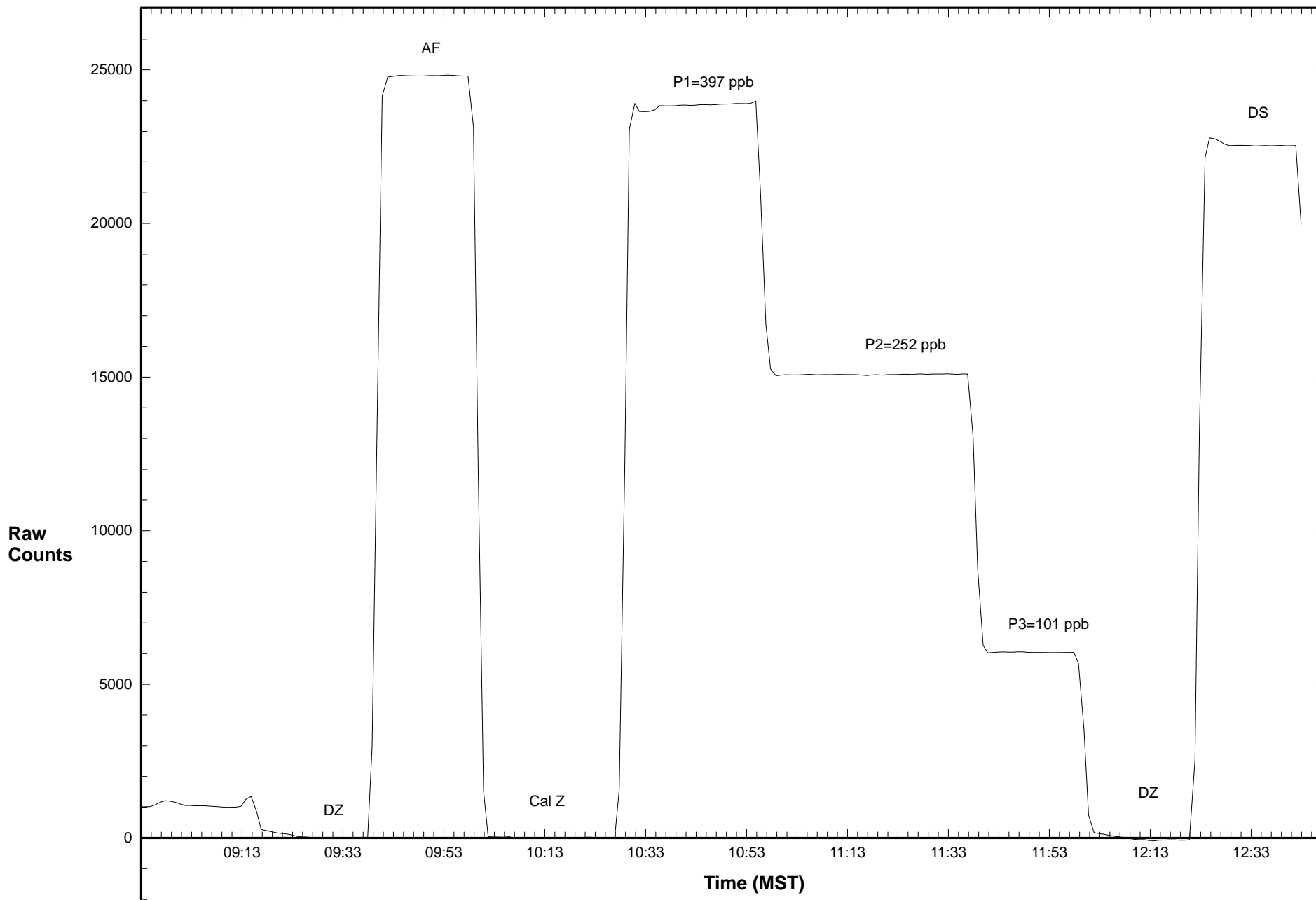
Average Correction Factor: 1.002  
 Previous Correction Factor: 1.003  
 Current Correction Factor: 0.999  
 Percent Change of Correction Factor: -0.4

Comments:

### Station 910 O3 March 23, 2016: Linear Regression



# Station 910 O3 March 23, 2016: Calibration Graph



# Calibration Data Summary

## West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee

Calibration Date: March 23, 2016

Parameter: SO<sub>2</sub>

Instrument: Teco 43 i

Serial Number: JC1433001437

Previous Calibration Date: Feb.23/16

Calibration: Routine

Calibration Equipment: SABIO 2010 sn 05200311

Barometric Pressure: 27.40" Hg

Calibration Method: Standard Gas Dilution

Cylinder ID: FF9469

Temperature: 21.0° C

Cylinder Concentration: 6.2 ppm SO<sub>2</sub>

In Service: Jan.14/15

Technician: J.McClintock

Instrument Settings	SO <sub>2</sub> bkg ppb	SO <sub>2</sub> Coefficient	Monitoring Range
Previous	35.3	1.110	200 ppb
Current	35.9	1.050	200 ppb

Final Zero: 0.4 ppb

Final Span: 104.2 ppb

As Found Correction Factor: 0.971

SO <sub>2</sub> Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C <sub>c</sub> (ppb)	Raw Count Output R <sub>c</sub>	Indicated Concentration C <sub>i</sub> (ppb)	Correction Factor C <sub>c</sub> /C <sub>i</sub>
0.0962	5.100	114.8	17247.7	115.7	0.992
0.0610	5.090	73.4	10716.3	72.1	1.019
0.0309	5.066	37.6	5546.4	37.5	1.002
0.0000	5.000	0.0	12.1	0.5	

### Results of Linear Regression

R <sub>c</sub> vs C <sub>c</sub>	Slope	Intercept	R <sup>2</sup>
Previous	150.686700	65.117210	0.999585
Current	149.690500	-69.180740	0.999587
C <sub>i</sub> vs C <sub>c</sub>			
Current	1.000000	0.000000	0.999587

Average Correction Factor: 1.004

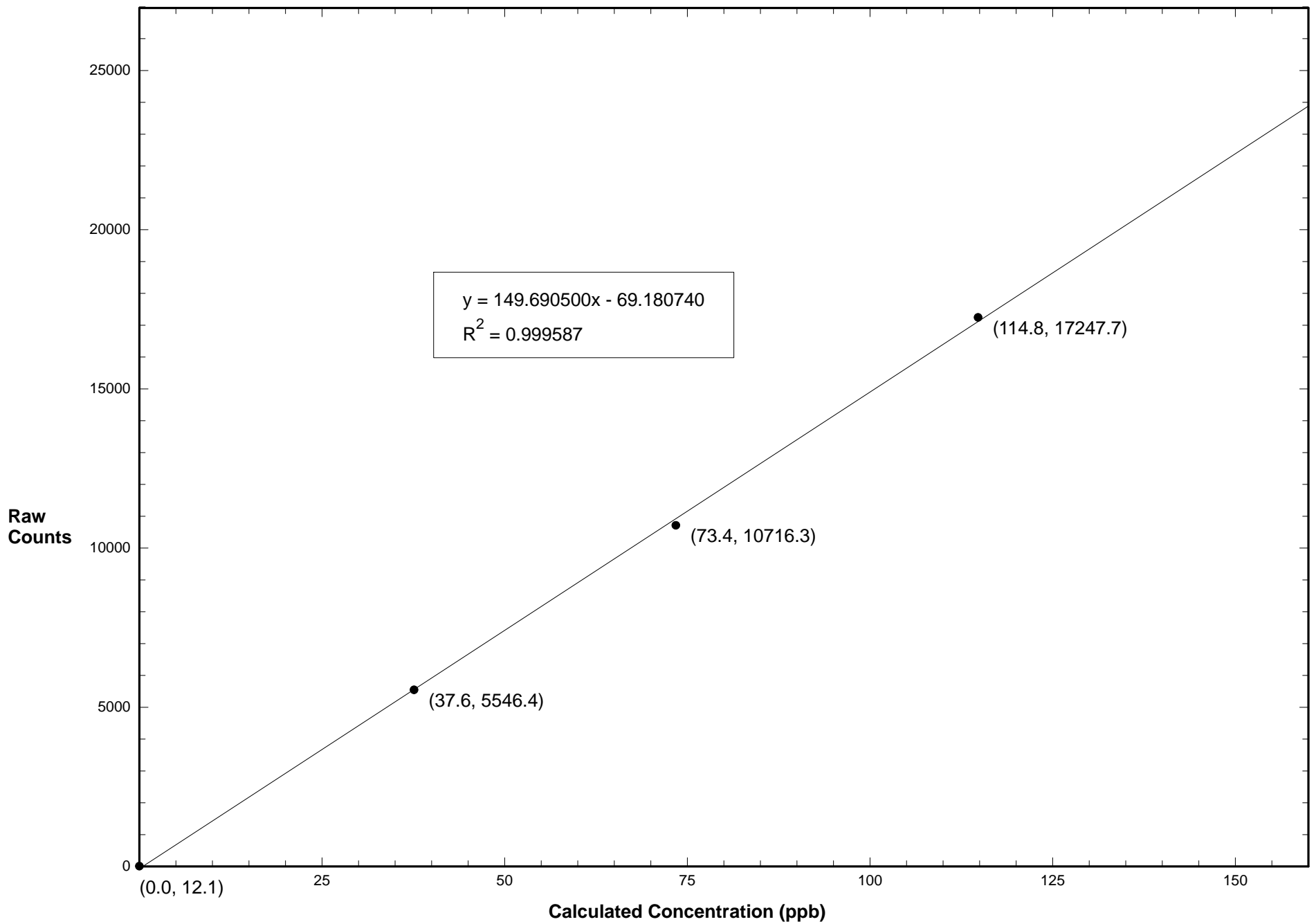
Previous Correction Factor: 1.008

Current Correction Factor: 0.992

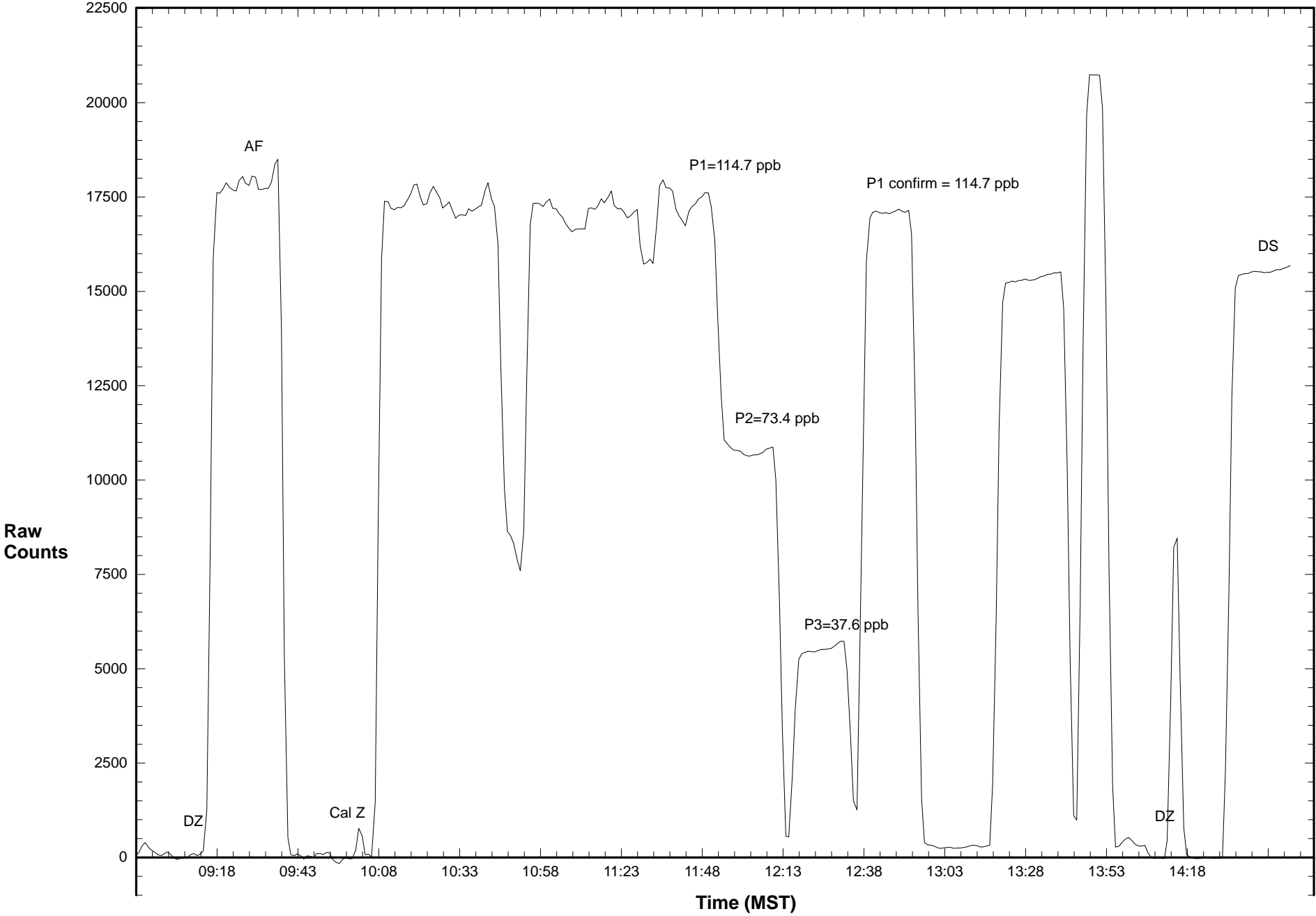
Percent Change of Correction Factor: -1.6

Comments:

# Station 910 SO2 March 23, 2016: Linear Regression



# Station 910 SO2 March 23, 2016: Calibration Graph





**WEST CENTRAL AIRSHED SOCIETY**

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

**AMS 910  
GENESEE  
MARCH 2016**

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**  
**March 2016**

<b>Maximum Value: 13.83 C on Mar 29 16:00</b>		<b>Maximum Daily Average: 9.27 C on Mar 30</b>		<b>Hours in Service: 744</b>																							
<b>Minimum Value: -8.7 C on Mar 18 07:00</b>		<b>Minimum Daily Average: -2.90 C on Mar 22</b>		<b>Hours of Data: 744</b>																							
<b>Maximum Diurnal Average: 6.62 C at hour 16</b>		<b>Minimum Diurnal Average: -1.12 C at hour 7</b>		<b>Hours of Missing Data: 0</b>																							
<b>Monthly Average: 2.119 C</b>		<b>Percentiles: P<sub>1</sub> = -6.2 P<sub>10</sub> = -2.5 Q<sub>1</sub> = -0.8 Median = 1.1 Q<sub>3</sub> = 4.5 P<sub>90</sub> = 8.8 P<sub>99</sub> = 12.4</b>		<b>Hours of Calibration: 0</b>																							
				<b>Percent Operational Time: 100.0</b>																							
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-Mar	-1.9	-5.4	-5.5	-6.2	-6.0	-6.2	-5.6	-5.8	-3.3	-1.6	-0.3	1.6	3.4	4.1	4.7	6.3	4.4	1.6	0.4	0.0	-0.5	-0.9	-1.2	-1.4	-1.05	6.28	
2-Mar	-1.5	-1.6	-1.4	-1.4	-1.4	-1.3	-1.4	-1.5	-1.2	-0.7	-0.1	0.7	1.7	3.0	2.9	2.6	2.5	1.9	1.4	1.0	1.0	1.1	0.9	0.6	0.32	3.02	
3-Mar	0.8	0.9	0.8	0.9	0.7	0.6	0.6	0.4	0.3	0.4	0.7	1.3	1.3	1.3	2.0	2.9	3.0	2.3	0.7	0.0	-0.3	-0.8	-1.8	-2.0	0.70	2.98	
4-Mar	-3.4	-4.2	-4.8	-5.8	-4.0	-3.4	-3.1	-2.9	-2.1	-0.9	0.5	2.0	3.0	4.4	4.1	4.2	3.4	2.3	1.5	1.5	1.2	0.9	0.4	1.3	-0.16	4.41	
5-Mar	1.7	0.6	0.3	0.9	1.1	-0.4	-0.9	-0.3	0.9	4.9	7.2	7.5	8.4	9.6	10.5	10.2	8.5	7.1	6.4	4.8	4.5	2.3	3.9	3.2	4.28	10.48	
6-Mar	0.9	-1.1	-1.6	-1.4	-0.5	-1.3	-2.1	-2.3	-1.5	-0.5	0.6	1.7	1.6	1.7	1.6	1.3	0.8	0.6	0.5	0.5	0.5	0.3	0.3	0.2	0.03	1.69	
7-Mar	0.1	0.2	0.3	0.3	0.0	-0.2	-0.4	-0.5	-0.4	-0.1	0.1	0.2	0.4	1.0	1.2	1.7	0.8	0.3	-0.5	-0.5	-0.3	-0.2	-0.2	-0.3	0.12	1.68	
8-Mar	-0.4	-0.4	-0.6	-0.7	-0.7	-0.8	-0.8	-0.6	-0.5	-0.4	-0.7	-0.2	0.9	2.7	4.2	5.0	5.3	4.1	1.2	-0.3	-0.7	-1.3	-1.2	-1.9	0.46	5.27	
9-Mar	-0.8	-1.6	-1.5	-0.1	-0.2	1.7	-1.0	-0.9	0.3	1.7	4.3	6.9	8.5	9.0	8.9	8.8	8.8	7.8	4.0	1.6	0.4	0.0	-0.4	0.4	2.76	8.99	
10-Mar	0.0	-0.1	-0.7	-1.1	-1.4	-1.4	-1.4	-1.1	-0.3	0.7	3.0	4.5	7.7	12.3	12.3	10.9	10.8	7.3	3.8	3.4	4.8	5.4	6.4	6.7	3.85	12.33	
11-Mar	6.8	4.5	3.3	1.5	2.3	2.0	0.8	1.3	2.9	5.7	8.7	10.2	11.4	11.9	12.2	11.6	11.3	9.5	5.7	5.8	4.6	4.0	3.5	3.5	6.04	12.18	
12-Mar	3.0	3.0	3.6	3.5	3.2	2.6	1.4	0.9	2.3	3.7	5.0	5.5	6.2	6.7	7.5	7.6	7.5	6.8	4.6	4.0	4.0	3.3	2.2	1.8	4.16	7.55	
13-Mar	2.8	2.6	2.5	3.2	3.4	2.6	1.4	1.6	2.0	3.2	5.5	6.6	8.0	8.4	9.3	9.8	9.7	8.7	6.0	4.1	3.6	3.2	2.2	1.8	4.66	9.78	
14-Mar	0.2	-0.4	-0.9	-1.4	-1.7	-2.4	-1.4	-1.5	-1.4	-1.2	-1.1	-0.3	0.5	1.1	1.3	1.8	1.8	0.9	0.4	-0.9	-1.4	-1.2	-0.9	-0.9	-0.46	1.84	
15-Mar	-1.1	-1.4	-1.2	-1.5	-1.7	-1.2	-0.9	-0.8	-0.5	0.5	1.8	2.4	3.6	4.7	6.1	6.5	6.7	6.4	3.0	0.4	-0.6	-1.0	-1.1	-0.8	1.18	6.68	
16-Mar	-0.6	-0.5	-0.2	0.0	0.2	0.1	0.4	0.8	2.0	3.1	4.1	4.8	5.4	6.0	6.5	6.4	5.5	3.5	2.1	1.1	0.3	0.4	-0.2	-1.9	2.05	6.51	
17-Mar	-2.6	-1.9	-2.2	-1.9	-2.1	-1.8	-1.5	-1.4	-1.2	-0.7	-0.3	-0.4	-0.1	0.5	1.1	1.5	1.3	1.1	-1.3	-3.4	-4.3	-5.2	-5.3	-5.5	-1.58	1.48	
18-Mar	-5.7	-6.8	-7.3	-6.8	-7.0	-8.2	-8.7	-6.3	-3.5	-1.3	1.1	2.6	4.2	4.8	5.2	5.4	5.6	4.6	1.8	-1.0	-2.5	-2.3	-2.4	-2.6	-1.54	5.64	
19-Mar	-2.5	-2.5	-2.6	-3.0	-3.5	-3.8	-4.1	-3.0	-1.2	0.4	2.3	3.7	5.6	7.6	8.2	9.3	9.1	8.0	4.9	4.0	3.3	2.9	2.0	-0.3	1.86	9.30	
20-Mar	0.1	-1.0	-2.5	-3.8	-4.5	-3.6	-3.9	-2.9	-0.8	0.7	3.4	6.4	7.7	8.9	8.6	8.8	8.5	7.7	6.4	4.7	3.3	2.0	1.3	0.7	2.34	8.87	
21-Mar	0.3	0.1	-0.3	-0.4	-0.6	-0.8	-1.1	-1.4	-1.4	-1.3	-1.6	-1.7	-1.3	-1.2	-1.0	-1.1	-1.4	-1.9	-2.1	-2.5	-2.9	-3.0	-3.2	-3.5	-1.47	0.28	
22-Mar	-3.6	-3.7	-4.0	-4.4	-4.9	-5.3	-5.7	-5.2	-4.3	-3.3	-2.7	-2.6	-1.2	-0.5	-0.2	-0.1	-0.1	-0.7	-2.2	-3.4	-3.0	-3.1	-3.0	-2.6	-2.90	-0.08	
23-Mar	-2.2	-2.8	-3.4	-3.2	-2.4	-2.8	-2.8	-2.2	-0.7	0.6	2.0	3.8	6.1	7.4	8.3	8.6	8.4	6.7	4.9	3.8	4.1	3.8	3.5	2.1	2.15	8.55	
24-Mar	-0.1	-0.5	-1.6	-1.8	-0.9	-0.5	-0.4	-0.2	0.0	0.1	0.1	0.3	0.5	0.9	0.3	0.1	0.1	-0.7	-0.8	-1.0	-1.1	-1.0	-0.9	-0.8	-0.41	0.85	
25-Mar	-0.8	-0.5	-0.7	-1.6	-1.2	-0.6	-0.3	-0.4	0.9	1.7	3.0	4.6	5.4	6.1	7.0	6.8	7.3	7.3	5.8	3.0	2.7	2.6	3.0	2.4	2.64	7.28	
26-Mar	2.0	2.5	3.1	3.0	1.0	0.1	0.0	1.3	2.9	4.2	6.1	8.1	9.3	9.6	9.9	10.4	10.5	9.4	6.7	4.6	3.1	1.5	0.6	1.0	4.62	10.55	
27-Mar	0.9	-0.1	-0.9	-1.8	-2.0	-2.7	-3.0	-0.2	3.3	4.6	6.7	9.1	10.7	11.9	11.9	11.5	10.9	9.7	8.1	5.7	5.9	4.3	4.0	3.5	4.66	11.89	
28-Mar	2.9	2.1	1.2	-0.1	-0.8	-0.8	0.3	1.3	2.2	4.1	6.4	8.8	10.4	11.5	11.1	10.2	10.8	11.1	9.1	5.9	4.0	2.2	1.0	1.1	4.82	11.54	
29-Mar	1.4	2.7	2.0	1.6	2.1	1.3	1.6	2.1	4.4	6.6	8.4	10.7	12.2	13.1	13.7	13.8	13.1	12.1	11.0	9.1	8.7	8.8	8.7	8.7	7.41	13.83	
30-Mar	8.4	9.1	8.9	8.0	7.6	8.3	8.5	9.0	9.9	11.2	12.1	12.5	11.8	12.2	12.7	12.6	12.2	11.3	10.3	8.7	6.7	3.5	3.5	3.3	9.27	12.66	
31-Mar	2.5	1.9	1.0	1.4	0.9	0.5	0.7	1.4	2.3	3.2	4.3	5.6	7.2	7.6	8.7	10.0	10.8	10.7	9.0	7.3	6.6	4.9	3.6	4.5	4.86	10.76	
		0.25	-0.21	-0.55	-0.78	-0.80	-0.96	-1.12	-0.69	0.39	1.59	2.91	4.09	5.18	6.08	6.46	6.62	6.38	5.39	3.63	2.33	1.80	1.19	0.94	0.72	Diurnal Average	
		8.36	9.12	8.91	7.99	7.64	8.31	8.48	9.02	9.93	11.25	12.08	12.50	12.19	13.15	13.69	13.83	13.09	12.08	11.04	9.05	8.73	8.79	8.74	8.72	Diurnal Maximum	



**WCAS - Genesee**  
**Summary of Hourly Averages**

**External Temperature 10 m (ET\_10) - C**  
**March 2016**

<b>Maximum Value: 12.32 C on Mar 29 16:00</b> <b>Maximum Daily Average: 8.94 C on Mar 30</b>																				<b>Hours in Service: 744</b> <b>Hours of Data: 744</b> <b>Hours of Missing Data: 0</b> <b>Hours of Calibration: 0</b> <b>Percent Operational Time: 100.0</b>																													
<b>Minimum Value: -7.8 C on Mar 18 07:00</b> <b>Minimum Daily Average: -3.95 C on Mar 22</b> <b>Maximum Diurnal Average: 5.40 C at hour 17</b> <b>Minimum Diurnal Average: -1.05 C at hour 7</b> <b>Monthly Average: 1.843 C</b> <b>Percentiles: P<sub>1</sub> = -5.8 P<sub>10</sub> = -2.5 Q<sub>1</sub> = -1.2 Median = 0.9 Q<sub>3</sub> = 4.5 P<sub>90</sub> = 8.1 P<sub>99</sub> = 11.4</b>																																																	
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-Mar	-1.4	-3.7	-3.2	-4.2	-4.3	-4.8	-4.5	-4.3	-3.4	-2.9	-2.1	0.4	2.0	3.1	3.9	4.5	3.5	1.6	0.5	0.0	-0.6	-1.1	-1.4	-1.7	-1.00	4.48																							
2-Mar	-1.9	-1.9	-1.8	-1.8	-1.8	-1.7	-1.9	-2.1	-1.8	-1.5	-1.2	-0.7	0.0	1.1	1.5	1.8	1.8	1.6	1.2	0.6	0.8	0.9	0.6	0.4	-0.33	1.84																							
3-Mar	0.5	0.5	0.5	0.6	0.4	0.3	0.3	0.1	-0.3	-0.6	-0.8	-0.5	-0.1	0.2	0.9	1.9	2.4	2.1	1.3	0.9	0.5	-0.4	-1.9	-1.9	0.29	2.40																							
4-Mar	-2.9	-3.2	-3.6	-4.7	-4.1	-4.1	-3.8	-3.6	-2.9	-1.9	-0.9	-0.1	0.7	1.9	2.7	3.1	2.8	2.4	1.6	1.9	2.5	1.9	1.3	2.8	-0.42	3.07																							
5-Mar	4.1	2.4	2.3	0.9	1.0	-0.4	-0.6	0.1	1.1	4.2	5.9	6.2	7.3	8.5	9.2	9.4	8.8	8.1	8.2	6.9	6.2	4.7	5.0	3.5	4.70	9.36																							
6-Mar	1.7	0.9	-0.4	-0.8	0.3	-0.6	-2.3	-2.7	-2.2	-1.2	-0.3	0.7	0.8	1.0	0.7	0.6	0.2	0.1	0.0	0.0	0.0	-0.2	-0.2	-0.4	-0.19	1.66																							
7-Mar	-0.4	-0.4	-0.2	-0.2	-0.6	-0.8	-1.0	-1.1	-1.0	-0.9	-0.9	-0.8	-0.7	-0.4	-0.1	0.2	-0.1	-0.6	-1.1	-1.2	-0.9	-0.8	-0.9	-1.0	-0.67	0.23																							
8-Mar	-1.1	-1.0	-1.2	-1.4	-1.3	-1.4	-1.4	-1.3	-1.3	-1.4	-1.9	-1.8	-0.8	0.1	0.8	2.0	3.1	2.9	1.5	0.6	0.0	-0.2	1.0	0.8	-0.20	3.11																							
9-Mar	1.1	0.4	0.3	1.1	0.8	3.0	-0.1	-0.6	0.3	0.9	2.3	4.6	6.0	6.7	7.1	7.5	7.5	7.4	5.6	4.2	2.8	2.0	1.3	0.9	3.05	7.53																							
10-Mar	0.2	-0.1	-0.7	-1.4	-1.8	-1.8	-1.9	-1.6	-1.0	-0.2	1.4	3.1	5.9	10.8	11.2	9.9	9.6	7.0	5.1	4.8	6.0	6.9	7.5	7.4	3.59	11.16																							
11-Mar	7.5	6.1	4.7	3.3	4.0	3.8	3.2	2.7	2.8	4.4	7.0	8.0	8.9	9.7	10.6	10.5	10.6	9.9	7.8	6.7	5.2	4.6	3.9	3.9	6.24	10.62																							
12-Mar	3.3	3.0	3.7	3.7	3.4	2.8	1.9	1.1	1.7	2.6	3.5	4.3	5.1	5.7	6.3	6.6	6.7	6.4	5.7	4.8	4.7	3.4	3.3	3.5	4.05	6.69																							
13-Mar	3.8	2.3	2.4	3.2	3.1	2.3	0.9	0.9	1.5	2.9	4.6	5.5	6.7	7.2	8.0	8.5	8.6	8.3	7.6	5.5	4.2	3.6	2.7	2.3	4.43	8.56																							
14-Mar	0.5	-0.1	-1.0	-1.5	-1.8	-2.2	-1.9	-2.1	-2.1	-2.0	-2.0	-1.4	-0.7	-0.2	0.2	0.8	1.0	0.7	0.5	-0.2	-1.0	-0.9	-0.9	-0.9	-0.80	1.02																							
15-Mar	-1.1	-1.5	-1.5	-1.7	-1.9	-1.5	-1.2	-1.3	-1.1	-0.4	0.5	1.2	2.0	3.3	4.7	5.5	6.0	6.0	3.1	0.7	0.3	-0.1	-0.2	0.1	0.83	5.97																							
16-Mar	-0.1	-0.3	-0.1	0.1	0.2	0.1	0.5	0.7	1.3	2.3	3.2	3.7	4.2	4.7	5.3	5.4	4.9	3.1	1.8	1.1	0.3	0.2	-0.7	-2.4	1.64	5.39																							
17-Mar	-2.7	-2.3	-2.4	-2.4	-2.6	-2.2	-1.9	-1.9	-1.9	-1.6	-1.3	-1.3	-1.2	-0.8	-0.4	0.3	0.4	0.5	-1.7	-3.5	-4.3	-4.6	-4.5	-4.8	-2.04	0.49																							
18-Mar	-4.9	-5.8	-6.3	-5.7	-5.9	-7.4	-7.8	-6.9	-5.0	-2.9	-1.0	0.4	1.6	2.5	3.1	3.4	3.7	3.5	2.2	0.5	-0.5	-1.0	-1.4	-1.6	-1.79	3.68																							
19-Mar	-1.7	-1.9	-2.1	-2.5	-3.0	-3.4	-3.8	-3.6	-2.5	-1.5	-0.1	1.4	3.3	5.2	6.4	7.4	7.6	7.6	6.5	5.6	4.5	3.9	3.1	1.8	1.59	7.65																							
20-Mar	0.9	-0.7	-1.4	-1.9	-2.7	-2.7	-3.0	-2.9	-1.6	-0.1	2.3	4.6	6.1	7.4	7.3	7.7	7.7	7.3	6.3	4.8	3.4	1.8	0.9	0.2	2.15	7.73																							
21-Mar	-0.2	-0.4	-0.7	-1.0	-1.1	-1.4	-1.7	-2.0	-2.1	-2.1	-2.4	-2.5	-2.2	-2.1	-2.0	-2.1	-2.3	-2.6	-2.8	-3.2	-3.5	-3.7	-3.8	-4.1	-2.16	-0.20																							
22-Mar	-4.1	-4.2	-4.5	-4.9	-5.3	-5.6	-5.9	-5.9	-5.4	-4.9	-4.4	-3.9	-3.4	-2.9	-2.5	-2.2	-2.0	-2.2	-2.8	-3.6	-3.6	-3.9	-3.8	-3.0	-3.95	-1.97																							
23-Mar	-2.4	-2.4	-2.7	-2.6	-2.0	-2.4	-2.5	-2.9	-2.0	-1.0	0.2	2.2	4.5	5.6	6.5	6.9	7.3	6.4	5.1	4.4	4.3	4.1	3.7	2.6	1.71	7.27																							
24-Mar	0.9	-0.1	-0.7	-1.2	-1.3	-1.0	-0.9	-0.8	-0.6	-0.6	-0.6	-0.5	-0.3	-0.1	-0.4	-0.6	-0.7	-1.4	-1.5	-1.6	-1.6	-1.6	-1.4	-1.4	-0.84	0.94																							
25-Mar	-1.3	-1.0	-1.1	-1.6	-1.4	-1.0	-0.7	-0.7	0.1	0.9	2.1	3.4	4.2	4.8	5.7	6.1	6.6	6.7	6.3	5.2	4.1	3.6	3.5	3.3	2.40	6.71																							
26-Mar	2.6	2.8	3.0	3.1	1.5	0.7	0.8	1.4	2.5	3.4	5.0	6.7	8.0	8.3	8.7	9.2	9.4	8.6	7.0	5.3	4.4	3.4	2.8	2.2	4.61	9.44																							
27-Mar	2.1	1.8	1.1	0.1	-1.2	-2.1	-2.0	-0.2	1.9	3.1	5.2	7.0	8.4	9.7	10.2	10.3	10.2	9.7	9.0	8.3	6.8	4.9	4.3	3.6	4.67	10.27																							
28-Mar	2.8	1.9	1.1	0.0	-0.4	-0.4	0.0	0.8	1.5	3.1	5.0	7.3	8.9	10.1	10.2	9.4	9.7	10.1	9.0	7.9	5.9	4.2	2.9	2.3	4.72	10.17																							
29-Mar	2.5	4.0	3.6	2.6	2.6	1.5	1.7	1.5	3.4	5.4	7.0	9.0	10.5	11.4	12.1	12.3	11.9	11.6	11.2	10.5	10.0	9.6	9.2	9.0	7.24	12.32																							
30-Mar	8.8	9.1	8.8	8.2	7.8	8.2	8.3	8.8	9.4	10.4	10.9	11.1	10.8	11.3	11.7	11.7	11.5	10.9	10.2	8.7	6.6	3.9	4.0	3.6	8.94	11.71																							
31-Mar	2.8	2.2	1.6	1.8	1.3	1.1	0.9	1.1	1.4	2.2	3.2	4.3	5.4	6.0	6.5	7.5	8.7	9.4	9.0	8.2	7.2	6.6	6.7	6.7	4.66	9.40																							
																								0.63	0.21	-0.07	-0.42	-0.59	-0.81	-1.05	-0.95	-0.29	0.58	1.59	2.63	3.61	4.51	5.03	5.33	5.40	4.93	3.98	3.06	2.41	1.80	1.50	1.22	Diurnal Average	
																								8.83	9.09	8.82	8.23	7.76	8.18	8.27	8.81	9.44	10.39	10.88	11.15	10.81	11.35	12.09	12.32	11.93	11.56	11.17	10.50	9.98	9.59	9.24	8.99	Diurnal Maximum	



**WCAS - Genesee**  
**Summary of Hourly Averages**

**Delta Temperature (ET\_D) - C**  
**March 2016**

Maximum Value: 3.08 C on Mar 31 23:00		Maximum Daily Average: 0.42 C on Mar 5		Hours in Service: 744																							
Minimum Value: -3.4 C on Mar 8 15:00		Minimum Daily Average: -1.03 C on Mar 22		Hours of Data: 744																							
Maximum Diurnal Average: 0.73 C at hour 20		Minimum Diurnal Average: -1.56 C at hour 13		Hours of Missing Data: 0																							
Monthly Average: -0.271 C		Percentiles: P <sub>1</sub> = -2.5 P <sub>10</sub> = -1.5 Q <sub>1</sub> = -1.0 Median = -0.4 Q <sub>3</sub> = 0.4 P <sub>90</sub> = 1.2 P <sub>99</sub> = 2.4		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-Mar	0.4	1.6	2.3	2.0	1.7	1.3	1.1	1.5	-0.1	-1.3	-1.8	-1.2	-1.3	-1.0	-0.8	-1.8	-0.8	0.0	0.1	0.0	-0.1	-0.1	-0.3	-0.3	0.05	2.33	
2-Mar	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.6	-0.7	-1.0	-1.4	-1.8	-1.9	-1.3	-0.7	-0.7	-0.3	-0.3	-0.4	-0.2	-0.2	-0.3	-0.2	-0.63	-0.16	
3-Mar	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.7	-1.0	-1.4	-1.7	-1.4	-1.1	-1.1	-0.9	-0.6	-0.2	0.6	0.9	0.7	0.4	0.0	0.1	-0.40	0.90	
4-Mar	0.5	1.0	1.2	1.1	0.0	-0.7	-0.7	-0.7	-0.8	-1.0	-1.4	-2.1	-2.3	-2.5	-1.4	-1.1	-0.5	0.1	0.1	0.4	1.2	1.0	0.9	1.5	-0.27	1.49	
5-Mar	2.5	1.8	2.1	0.0	-0.1	0.0	0.3	0.4	0.2	-0.7	-1.3	-1.4	-1.1	-1.1	-1.3	-0.9	0.3	1.0	1.8	2.1	1.7	2.4	1.0	0.3	0.42	2.48	
6-Mar	0.7	2.0	1.2	0.5	0.7	0.8	-0.2	-0.4	-0.6	-0.7	-0.9	-1.0	-0.7	-0.7	-0.9	-0.6	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6	-0.21	1.98	
7-Mar	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.7	-0.7	-1.0	-1.0	-1.1	-1.3	-1.2	-1.4	-0.9	-0.9	-0.7	-0.7	-0.6	-0.5	-0.7	-0.77	-0.48	
8-Mar	-0.7	-0.6	-0.6	-0.7	-0.6	-0.6	-0.6	-0.7	-0.7	-1.0	-1.2	-1.6	-1.7	-2.6	-3.4	-3.0	-2.1	-1.2	0.3	0.9	0.7	1.1	2.2	2.6	-0.66	2.59	
9-Mar	1.9	2.0	1.9	1.1	1.0	1.2	1.0	0.3	0.0	-0.8	-1.9	-2.2	-2.5	-2.2	-1.7	-1.3	-1.3	-0.4	1.6	2.6	2.4	2.0	1.7	0.5	0.29	2.58	
10-Mar	0.2	0.1	-0.1	-0.2	-0.4	-0.4	-0.5	-0.6	-0.6	-0.9	-1.6	-1.4	-1.8	-1.5	-1.1	-1.0	-1.1	-0.2	1.3	1.4	1.3	1.5	1.1	0.7	-0.25	1.50	
11-Mar	0.6	1.6	1.4	1.8	1.7	1.7	2.3	1.4	-0.1	-1.4	-1.7	-2.2	-2.5	-2.2	-1.6	-1.1	-0.7	0.5	2.1	0.9	0.6	0.6	0.4	0.4	0.19	2.35	
12-Mar	0.3	0.0	0.1	0.1	0.1	0.1	0.5	0.2	-0.5	-1.1	-1.5	-1.2	-1.1	-1.0	-1.1	-1.0	-0.8	-0.3	1.2	0.8	0.7	0.1	1.1	1.7	-0.11	1.65	
13-Mar	1.0	-0.2	0.0	-0.1	-0.2	-0.3	-0.5	-0.7	-0.5	-0.3	-0.9	-1.1	-1.3	-1.1	-1.3	-1.1	-1.1	-0.4	1.6	1.3	0.6	0.4	0.5	0.5	-0.23	1.59	
14-Mar	0.3	0.2	0.0	-0.1	-0.1	0.2	-0.5	-0.5	-0.7	-0.8	-0.8	-1.1	-1.2	-1.3	-1.1	-1.0	-0.7	-0.2	0.1	0.7	0.4	0.2	0.0	0.0	-0.34	0.69	
15-Mar	-0.1	0.0	-0.3	-0.2	-0.2	-0.3	-0.3	-0.4	-0.6	-0.9	-1.2	-1.2	-1.6	-1.4	-1.3	-1.0	-0.7	-0.4	0.0	0.3	0.8	0.9	0.9	0.9	-0.35	0.92	
16-Mar	0.5	0.2	0.1	0.0	0.0	0.0	0.0	-0.1	-0.6	-0.8	-0.9	-1.1	-1.2	-1.3	-1.2	-1.0	-0.6	-0.4	-0.2	0.0	0.0	-0.2	-0.4	-0.5	-0.40	0.51	
17-Mar	-0.1	-0.4	-0.2	-0.4	-0.4	-0.5	-0.4	-0.5	-0.6	-0.9	-1.0	-0.8	-1.1	-1.3	-1.5	-1.2	-0.8	-0.6	-0.4	0.0	0.0	0.5	0.8	0.7	-0.46	0.83	
18-Mar	0.8	1.0	1.0	1.1	1.0	0.9	0.9	-0.6	-1.5	-1.6	-2.2	-2.2	-2.6	-2.3	-2.1	-2.0	-2.0	-1.0	0.4	1.4	2.0	1.4	1.0	1.0	-0.26	2.04	
19-Mar	0.8	0.6	0.5	0.5	0.4	0.3	0.2	-0.6	-1.3	-1.9	-2.4	-2.3	-2.3	-2.3	-1.8	-1.9	-1.4	-0.4	1.6	1.6	1.2	1.1	1.1	2.1	-0.27	2.10	
20-Mar	0.8	0.3	1.0	1.8	1.8	0.9	0.8	0.0	-0.8	-0.9	-1.1	-1.8	-1.5	-1.5	-1.2	-1.0	-0.8	-0.4	-0.1	0.0	0.1	-0.1	-0.4	-0.4	-0.19	1.82	
21-Mar	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6	-0.6	-0.7	-0.8	-0.8	-1.0	-1.0	-1.0	-1.0	-0.9	-0.7	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6	-0.68	-0.46	
22-Mar	-0.5	-0.4	-0.5	-0.5	-0.4	-0.3	-0.2	-0.7	-1.1	-1.6	-1.7	-1.4	-2.1	-2.4	-2.2	-2.1	-1.9	-1.5	-0.6	-0.2	-0.6	-0.8	-0.8	-0.4	-1.03	-0.18	
23-Mar	-0.3	0.4	0.6	0.6	0.3	0.4	0.3	-0.6	-1.3	-1.6	-1.7	-1.5	-1.6	-1.8	-1.7	-1.6	-1.1	-0.2	0.2	0.5	0.2	0.2	0.2	0.5	-0.44	0.63	
24-Mar	1.0	0.3	0.9	0.5	-0.3	-0.5	-0.5	-0.6	-0.6	-0.7	-0.7	-0.7	-0.8	-0.9	-0.7	-0.7	-0.7	-0.7	-0.6	-0.5	-0.5	-0.6	-0.6	-0.6	-0.41	1.00	
25-Mar	-0.5	-0.4	-0.4	0.1	-0.2	-0.4	-0.4	-0.3	-0.8	-0.7	-0.9	-1.2	-1.2	-1.3	-1.3	-0.7	-0.7	-0.5	0.5	2.2	1.4	1.1	0.4	0.9	-0.22	2.17	
26-Mar	0.6	0.3	0.0	0.1	0.5	0.6	0.7	0.1	-0.4	-0.8	-1.2	-1.4	-1.3	-1.3	-1.2	-1.2	-1.1	-0.7	0.4	0.7	1.3	1.9	2.1	1.1	-0.01	2.11	
27-Mar	1.2	1.9	2.0	2.0	0.8	0.6	1.0	0.0	-1.3	-1.5	-1.5	-2.1	-2.3	-2.2	-1.7	-1.2	-0.7	0.0	0.8	2.6	0.9	0.6	0.3	0.1	0.01	2.59	
28-Mar	-0.1	-0.2	-0.1	0.1	0.4	0.4	-0.3	-0.5	-0.6	-0.9	-1.3	-1.5	-1.4	-1.4	-0.9	-0.8	-1.1	-1.0	-0.1	2.0	1.9	2.0	1.9	1.2	-0.10	2.05	
29-Mar	1.1	1.3	1.6	0.9	0.4	0.2	0.1	-0.6	-0.9	-1.1	-1.4	-1.7	-1.7	-1.8	-1.6	-1.5	-1.1	-0.5	0.1	1.4	1.2	0.8	0.5	0.3	-0.17	1.62	
30-Mar	0.5	0.0	-0.1	0.2	0.1	-0.1	-0.2	-0.2	-0.5	-0.8	-1.2	-1.3	-1.0	-1.0	-1.0	-0.9	-0.7	-0.4	-0.2	0.0	-0.2	0.4	0.5	0.3	-0.32	0.48	
31-Mar	0.2	0.3	0.7	0.4	0.4	0.5	0.2	-0.3	-0.9	-1.0	-1.0	-1.4	-1.7	-1.6	-2.2	-2.5	-2.0	-1.3	0.1	0.8	0.6	1.7	3.1	2.2	-0.20	3.08	
		0.38	0.41	0.47	0.36	0.22	0.14	0.07	-0.25	-0.67	-0.99	-1.31	-1.45	-1.56	-1.55	-1.42	-1.27	-0.97	-0.45	0.35	0.73	0.60	0.60	0.55	0.50	Diurnal Average	
		2.48	2.03	2.33	1.99	1.82	1.74	2.35	1.46	0.24	-0.34	-0.71	-0.71	-0.75	-0.71	-0.73	-0.65	0.28	1.03	2.06	2.59	2.38	2.38	3.08	2.59	Diurnal Maximum	



**WCAS - Genesee**  
**Summary of Hourly Averages**

**Wind Speed (WS) - kph**  
**March 2016**

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	13.4	10.0	12.7	15.5	16.6	16.9	17.7	17.0	17.3	10.6	8.5	8.4	2.1	5.7	6.0	8.3	10.1	8.3	7.8	8.9	8.6	8.5	7.1	6.9	3.38	17.66	
Dir	W	WSW	W	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	W	S	ENE	ENE	ESE	E	E	E	E	E	ENE	E	ENE	WSW	WSW	
2 Spd	9.5	10.2	10.2	9.7	7.1	6.6	5.6	6.4	8.1	11.8	9.5	10.5	11.2	14.1	13.8	15.5	13.7	14.0	11.9	12.2	14.4	15.4	17.6	14.4	9.86	17.63	
Dir	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	E	E	ESE	ESE	ESE	SE	SE	SE	ESE	ESE	SE	SE	SE	SE	ESE	SE	
3 Spd	14.4	16.2	11.5	14.5	17.7	12.9	10.8	12.6	16.3	14.4	10.8	6.2	3.0	7.0	12.8	13.2	13.3	10.9	2.0	6.8	7.0	12.0	13.2	15.0	1.78	17.71	
Dir	SE	SE	SE	SSE	SSE	SE	SE	SE	SSE	SSE	S	SSE	WSW	NNW	NW	NW	NNW	NNW	N	NW	NW	NW	NNW	NW	SSE	SSE	
4 Spd	6.0	2.9	1.9	1.8	2.1	6.1	11.4	10.4	8.2	9.2	12.9	17.8	15.6	13.4	12.3	12.0	13.7	11.5	10.2	9.5	9.8	2.0	1.6	7.9	7.08	17.85	
Dir	W	WSW	W	SSW	S	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	ESE	SE	SE	ESE	ESE	SE	SSE	ESE	E	W	SE	SE	
5 Spd	13.2	6.6	10.0	11.0	9.2	2.5	1.3	5.0	5.9	4.9	6.8	5.3	6.3	8.8	8.6	8.0	10.0	3.2	6.3	10.9	10.6	5.8	16.9	24.3	2.83	24.29	
Dir	WSW	W	NNW	NNW	NW	S	SSW	SSE	SE	E	ESE	SSE	ENE	ENE	E	E	NW	SW	W	W	WNW	W	WNW	NW	NW	NW	
6 Spd	15.9	3.6	12.6	15.3	11.2	5.0	7.5	4.2	10.5	11.7	13.9	14.3	14.0	16.3	14.1	10.3	11.3	11.0	14.0	9.7	5.1	7.5	6.4	7.9	5.81	16.27	
Dir	NNW	NW	SW	WSW	WSW	ENE	ENE	E	ENE	ENE	ENE	E	ENE	NE	NE	ENE	ENE	ENE	ENE	ENE	ENE	NE	N	N	NW	NE	NE
7 Spd	8.3	7.7	7.3	9.7	10.0	10.3	11.0	9.2	8.5	8.5	7.4	4.8	4.9	2.7	2.1	5.1	6.8	8.6	8.8	9.6	5.6	6.7	7.0	8.4	1.69	11.04	
Dir	NNW	NW	WNW	WNW	WNW	NW	NW	NW	W	W	WSW	W	WSW	SSW	SSW	ESE	ENE	ESE	E	ESE	E	ENE	ESE	ESE	NW	NW	
8 Spd	9.3	7.4	7.0	8.9	5.3	1.9	1.7	1.8	5.8	7.2	10.1	8.8	7.1	6.1	4.6	4.4	5.5	6.6	6.7	5.0	4.2	4.3	9.3	10.2	3.64	10.17	
Dir	ESE	ESE	ESE	SSE	SSE	WSW	E	S	SW	SW	SW	SW	SW	S	S	ESE	ESE	ESE	ESE	ESE	SE	S	WSW	WSW	S	WSW	
9 Spd	8.6	8.7	7.7	5.8	7.8	11.9	12.3	9.3	11.8	12.2	13.6	10.7	9.6	8.1	7.8	4.0	5.2	5.7	9.5	9.7	8.2	7.3	7.9	9.6	5.68	13.57	
Dir	WSW	WSW	SW	W	WSW	WNW	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	SSW	SSW	SSE	ESE	SE	SE	SSE	SE	ESE	ESE	SSW	SSW	
10 Spd	10.5	12.4	12.0	15.1	18.0	16.9	12.4	13.8	14.3	12.8	12.1	13.4	11.4	12.4	11.6	14.6	14.9	13.9	0.1	8.4	9.8	9.2	12.7	14.9	4.44	18.02	
Dir	ESE	ESE	ESE	ESE	ESE	ESE	E	E	ESE	ESE	ESE	E	E	SSE	N	N	NNW	N	SE	SW	W	W	W	W	E	ESE	
11 Spd	11.0	8.4	7.1	9.4	7.1	4.8	11.1	10.5	10.8	9.8	13.7	10.4	10.2	11.9	9.0	7.9	5.3	10.7	10.8	7.7	7.5	8.2	8.6	15.4	5.24	15.44	
Dir	W	W	WSW	SW	W	W	SW	WSW	SW	SW	WSW	SW	SSW	SW	SW	SSW	SSE	SE	SE	E	E	ESE	E	ESE	SSW	ESE	
12 Spd	13.6	12.2	17.7	18.9	15.1	7.5	7.5	8.9	6.2	8.6	6.2	1.8	3.3	2.0	3.2	5.4	5.7	2.3	6.4	8.6	6.0	3.2	5.5	3.3	5.29	18.93	
Dir	ESE	E	ESE	ESE	ESE	E	E	E	ESE	ESE	ESE	SSE	E	ENE	ENE	NE	ENE	E	N	NNW	NNW	NE	W	NNW	E	ESE	
13 Spd	5.7	22.1	32.5	27.9	20.2	24.0	23.1	19.5	16.6	15.8	23.1	28.8	25.9	24.3	21.4	13.9	10.4	8.2	3.8	8.1	5.1	4.6	6.4	9.2	14.12	32.47	
Dir	W	WNW	NW	WNW	WNW	WNW	WNW	WNW	WNW	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NE	NE	ENE	E	ENE	NE	WNW	NW	
14 Spd	10.1	11.7	12.2	13.0	10.2	8.3	13.0	12.9	13.4	12.9	13.9	16.4	13.7	14.9	10.2	8.8	8.3	7.5	2.5	2.3	1.7	3.5	4.4	7.6	7.77	16.43	
Dir	NE	NE	NE	NE	NNE	N	NNE	NNE	N	NNW	NNW	NNW	NNW	NNW	N	NNE	NNE	N	N	ESE	SSE	SSW	SW	W	N	NNW	
15 Spd	13.3	15.0	17.4	16.3	14.9	17.3	18.7	15.5	14.1	18.3	20.1	16.7	19.0	21.6	32.5	35.5	36.7	30.4	12.2	5.9	2.9	6.9	10.0	9.5	16.07	36.73	
Dir	NW	NW	WNW	WNW	WNW	WNW	NW	WNW	WNW	NW	NW	WNW	WNW	NW	NW	NW	NW	NW	NW	NNE	ENE	NE	WSW	WSW	WNW	NW	NW
16 Spd	11.2	15.3	17.3	18.1	20.7	19.2	23.3	30.8	34.2	46.2	50.1	53.0	42.8	41.4	39.3	38.0	37.0	20.8	17.2	13.2	14.0	22.4	20.0	16.1	26.02	53.05	
Dir	WNW	W	W	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	N	NNW	NNW	NNW	N	N	NW	NW	NW
17 Spd	13.6	18.1	20.2	24.7	22.5	20.4	23.3	24.6	20.2	22.4	22.8	22.5	24.0	25.8	26.2	24.6	19.6	18.6	11.0	8.5	5.5	0.8	2.7	6.6	16.25	26.21	
Dir	NNW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NNW	NE	NE	ENE	S	SW	WSW	NNW	NNW	
18 Spd	7.0	1.9	5.5	9.3	8.7	6.1	6.1	8.8	7.7	3.2	4.9	5.3	4.7	4.7	4.8	4.8	8.5	13.5	14.2	12.5	10.5	11.5	12.1	11.7	5.84	14.25	
Dir	WSW	S	SW	WSW	WSW	SSW	SW	SW	WSW	SW	SW	SW	S	S	SSW	SSE	SE	SE	SSE	SSE	SSE	SE	SE	SE	S	SSE	SSE
19 Spd	14.2	15.7	14.1	13.6	14.7	13.2	12.3	11.4	14.7	10.6	7.9	4.7	4.7	4.2	4.0	6.0	7.1	6.7	6.0	4.5	3.3	2.0	1.4	5.2	7.83	15.68	
Dir	SSE	SSE	SE	SSE	SSE	SE	SE	SE	SSE	SSE	SSE	SSE	SE	S	SE	SE	SE	SE	ESE	SE	SE	E	E	E	NNE	SE	SSE
20 Spd	5.1	4.5	1.8	6.7	7.8	4.5	2.6	0.6	3.4	5.7	7.0	7.7	4.9	9.9	14.1	13.7	14.6	11.4	9.3	9.0	7.8	10.5	11.8	12.1	6.67	14.61	
Dir	ENE	E	NE	NNW	N	N	N	W	WNW	N	NNE	E	ENE	ENE	NE	ENE	NE	NE	ENE	E	ENE	E	ENE	ENE	ENE	ENE	ENE
21 Spd	11.5	13.0	13.7	12.8	11.1	12.2	11.1	13.5	14.9	13.8	11.6	10.7	9.9	11.2	13.0	13.2	11.1	11.3	8.4	9.9	9.4	7.7	7.9	6.6	11.02	14.87	
Dir	ENE	ENE	ENE	ENE	ENE	ENE	E	ENE	ENE	E	ENE	ENE	ENE	NE	ENE	E	E	E	E	E	ESE	E	E	ESE	E	ENE	ENE
22 Spd	5.6	6.6	9.3	6.6	6.1	5.1	5.3	7.8	8.5	9.1	6.8	8.6	8.8	7.8	8.7	10.2	10.2	10.1	7.4	5.6	7.7	8.6	4.6	8.6	6.34	10.21	
Dir	E	ENE	ENE	E	ENE	E	E	ESE	ESE	ESE	ESE	E	ESE	SE	SE	ESE	E	ESE	E	ESE	SE	SSE	S	WSW	ESE	ESE	



**WCAS - Genesee**  
**Summary of Hourly Averages**

**Wind Speed (WS) - kph**  
**March 2016**

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	6.1	7.2	6.7	8.5	6.8	6.0	2.2	1.3	3.4	7.3	8.7	8.4	7.2	10.8	8.9	12.4	12.6	14.9	11.8	9.1	6.8	8.9	7.7	5.8	5.10	14.88	
Dir	W	WSW	WSW	W	W	NW	WNW	S	SSE	SSE	SSE	SE	S	SW	S	SSW	S	SSE	SSE	SSE	SE	SE	SE	NE	S	SSE	
24 Spd	10.1	8.8	8.7	11.8	9.9	9.2	9.0	7.2	6.4	8.9	7.5	5.9	8.8	9.8	11.4	13.4	14.8	14.1	10.7	7.7	4.6	2.6	1.0	3.3	7.58	14.80	
Dir	NNE	NE	N	N	NNE	NNE	NE	ENE	ENE	ENE	ENE	ENE	ENE	ENE	NE	NNE	NNE	NNE	NNE	NNE	NE	ESE	W	WNW	NE	NNE	
25 Spd	6.1	6.5	2.6	8.4	8.0	13.3	11.9	12.0	13.4	13.3	15.9	17.3	16.6	17.3	16.1	12.6	10.9	12.3	7.3	5.8	8.5	11.0	10.0	7.9	8.92	17.30	
Dir	NNW	WNW	SW	SSW	WSW	WSW	WSW	WSW	WSW	W	WNW	WNW	NW	NW	WNW	WNW	WNW	W	SW	S	SW	SW	W	N	W	NW	
26 Spd	7.5	11.3	14.5	13.4	11.4	12.1	10.3	11.8	13.2	15.2	10.8	14.3	16.4	16.0	15.2	12.8	5.9	10.4	7.7	7.7	9.7	8.3	8.5	8.4	5.01	16.36	
Dir	SW	W	W	W	WSW	SW	WSW	WSW	WSW	WSW	W	WNW	WNW	NW	NNW	NNW	N	ENE	E	ESE	ESE	SE	SE	ESE	W	WNW	
27 Spd	8.4	6.8	5.3	4.9	3.7	2.7	7.4	9.7	3.7	3.5	4.3	7.8	9.1	7.6	9.4	15.1	16.4	14.3	2.8	5.2	8.7	7.2	9.4	8.9	5.97	16.45	
Dir	SE	SE	SE	ESE	E	ESE	SW	WSW	SSW	SE	ESE	ESE	ESE	SE	ESE	SSE	SSE	SSE	SSE	NE	E	ESE	ESE	ESE	SE	SSE	
28 Spd	7.2	7.5	6.6	7.4	3.2	8.3	11.8	4.6	11.2	9.0	14.3	10.7	10.7	10.1	15.4	18.3	11.1	11.4	0.9	3.0	4.3	14.4	13.4	13.5	5.90	18.30	
Dir	E	E	E	ENE	ENE	NNW	NNW	NW	WNW	WNW	NW	NW	NW	NNW	NW	NW	NNW	WNW	N	N	SSW	WSW	WSW	WSW	NW	NW	
29 Spd	10.0	11.0	12.2	14.9	18.2	17.2	16.3	13.4	16.6	15.7	17.0	16.3	19.4	20.2	20.0	23.6	22.2	19.9	9.2	7.5	9.3	10.2	11.7	10.8	14.50	23.62	
Dir	WSW	W	W	W	WNW	WNW	W	WSW	W	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	WNW	WNW	W	W	W	W	WNW	NW	
30 Spd	11.4	14.5	16.2	13.5	11.8	16.2	18.4	24.4	27.2	34.0	30.4	28.9	27.9	33.4	28.0	27.6	27.0	24.8	20.9	19.9	15.1	12.5	12.5	17.2	20.23	34.03	
Dir	W	W	WNW	WNW	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	N	N	NW	NW	NW	NW	
31 Spd	15.4	12.3	13.7	15.4	14.6	13.3	10.5	8.8	9.0	9.8	5.3	4.0	3.2	4.5	7.2	7.6	7.5	11.3	14.3	9.8	8.9	7.3	8.7	5.3	1.73	15.45	
Dir	NNW	NW	NW	NW	NW	NNW	NW	NW	N	NNE	NNE	NNE	E	ENE	S	SSE	SE	SE	SSE	SE	SE	SSE	S	WSW	NNW	NNW	
Spd	1.56	1.88	2.74	3.48	3.60	3.83	3.84	3.35	3.56	3.60	4.22	4.29	3.73	4.23	4.97	4.37	4.34	2.92	3.31	2.88	2.30	1.24	0.67	1.83	Diurnal Average		
Dir	NW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NNW	NNW	N	NNE	E	E	ESE	SE	SW	NW	Diurnal Maximum		
Spd	15.89	22.05	32.47	27.93	22.50	23.98	23.29	30.84	34.18	46.21	50.12	53.05	42.85	41.39	39.28	38.02	37.02	30.37	20.90	19.86	15.11	22.41	19.97	24.29	Diurnal Maximum		
Dir	340.81	294.33	307.29	303.21	315.65	285.73	297.04	308.06	309.92	319.83	317.37	316.22	306.20	308.19	308.74	313.06	320.27	322.14	316.30	304.93	354.56	330.63	353.03	321.94	Diurnal Maximum		
Maximum Speed Value: 53.0 kph on Mar 16 12:00																				Minimum Speed Value: 0.1 kph on Mar 10 19:00				Hours in Service: 744			
Maximum Daily Speed Average: 26.02 kph on Mar 16																				Minimum Daily Speed Average: 1.69 kph on Mar 8				Hours of Data: 744			
Maximum Diurnal Speed Average: 4.97 kph at hour 15																				Minimum Diurnal Speed Average: 0.67 kph at hour 23				Hours of Missing Data: 0			
Monthly Average Velocity: 2.170 kph 318.84 deg																				Speed Percentiles: P <sub>1</sub> = 1.4 P <sub>10</sub> = 4.5 Q <sub>1</sub> = 7.0 Median = 10.0 Q <sub>3</sub> = 13.8 P <sub>90</sub> = 18.3 P <sub>99</sub> = 36.8				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	22	20	8	0	0	56																				
NorthEast	9	36	18	0	0	0	63																				
East	19	88	33	0	0	0	140																				
SouthEast	14	65	55	0	0	0	134																				
South	21	13	8	0	0	0	42																				
SouthWest	10	49	15	0	0	0	74																				
West	9	38	52	11	0	0	110																				
NorthWest	5	24	45	31	13	7	125																				
Total	93	335	246	50	13	7	744																				



**WCAS - Genesee**  
**Summary of Hourly Averages**

**Relative Humidity (RH) - %**  
**March 2016**

Maximum Value: 94.82 % on Mar 7 08:00																								Hours in Service: 744		
Maximum Daily Average: 91.81 % on Mar 7																								Hours of Data: 744		
Minimum Value: 25.2 % on Mar 11 17:00																								Hours of Missing Data: 0		
Maximum Diurnal Average: 82.73 % at hour 7																								Hours of Calibration: 0		
Monthly Average: 69.959 %																								Percent Operational Time: 100.0		
Minimum Daily Average: 46.63 % on Mar 11																										
Minimum Diurnal Average: 51.67 % at hour 16																										
Percentiles: P <sub>1</sub> = 28.3 P <sub>10</sub> = 41.5 Q <sub>1</sub> = 54.9 Median = 74.0 Q <sub>3</sub> = 86.4 P <sub>90</sub> = 91.9 P <sub>99</sub> = 94.6																										
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	74.8	78.2	85.4	84.3	84.0	84.3	82.9	84.3	77.2	68.4	63.5	59.7	52.9	54.9	53.4	47.7	54.4	65.4	69.7	73.6	75.8	78.7	80.8	82.1	71.51	85.42
2-Mar	83.7	84.5	84.0	83.9	84.0	84.1	86.5	90.9	92.2	91.2	85.1	78.9	75.9	69.9	68.3	67.8	71.4	77.8	80.8	84.9	85.4	84.3	85.2	86.7	81.97	92.21
3-Mar	87.0	86.7	86.9	86.7	85.9	86.3	87.0	87.7	86.9	84.1	80.2	74.7	74.3	79.6	80.9	79.7	79.0	79.7	86.0	86.6	86.4	87.8	88.1	88.0	84.01	88.12
4-Mar	87.2	90.8	91.5	91.4	92.4	92.3	92.8	93.3	93.6	93.3	92.1	80.1	69.0	61.3	63.4	62.1	67.7	73.3	81.0	84.8	86.4	86.9	86.8	79.6	83.06	93.61
5-Mar	69.0	71.2	77.6	79.3	78.9	80.9	85.2	85.2	81.2	59.7	48.9	49.6	48.5	49.6	47.2	48.8	57.0	61.2	57.9	64.3	61.3	71.7	65.9	66.7	65.28	85.22
6-Mar	75.9	81.9	87.7	88.3	86.1	86.7	89.7	90.9	90.4	88.0	84.8	81.4	82.2	84.5	84.6	87.1	92.0	93.3	93.9	94.2	94.2	94.3	94.3	94.4	88.37	94.40
7-Mar	94.6	94.7	94.8	94.8	94.7	94.6	94.7	94.8	94.7	94.8	94.2	93.2	91.3	88.7	87.0	82.5	82.8	86.4	88.1	91.1	92.6	93.1	93.3	93.3	91.81	94.82
8-Mar	93.4	93.6	93.9	94.0	94.0	94.1	94.4	94.3	94.3	94.0	93.8	92.6	86.6	78.5	76.0	73.9	70.3	71.6	79.8	88.4	90.8	92.3	92.9	90.9	88.27	94.35
9-Mar	85.0	85.4	84.7	79.6	78.4	66.5	77.6	82.8	78.8	70.7	60.6	51.2	42.5	37.1	35.6	33.2	33.3	35.0	49.9	65.8	69.0	70.5	76.1	76.5	63.58	85.36
10-Mar	79.6	80.9	83.3	85.3	87.9	88.6	87.9	86.6	83.3	77.8	72.1	68.6	62.9	49.4	52.3	59.3	54.3	64.2	75.0	79.7	69.7	60.3	51.0	45.2	71.04	88.60
11-Mar	40.1	48.2	52.4	62.1	60.2	59.9	65.9	63.7	61.2	54.2	44.7	39.5	37.0	33.3	27.9	28.8	25.2	30.2	40.4	37.6	46.6	51.3	53.4	55.2	46.63	65.91
12-Mar	58.1	58.8	56.2	55.7	56.8	58.3	63.2	68.7	66.9	60.7	54.4	47.7	49.2	47.3	45.4	48.3	49.8	54.9	66.3	69.3	68.2	70.7	76.0	79.1	59.59	79.08
13-Mar	75.6	74.7	72.8	69.1	71.9	78.2	89.4	88.4	84.6	74.0	57.3	46.8	38.9	33.8	30.1	29.0	28.3	29.1	33.1	41.9	46.0	46.9	50.2	52.2	55.92	89.38
14-Mar	62.6	69.7	80.2	86.2	87.6	90.3	90.9	90.0	87.9	86.1	82.7	77.0	72.2	69.6	68.3	66.3	66.7	70.7	74.3	76.4	86.0	88.1	87.1	85.3	79.25	90.87
15-Mar	79.1	77.6	74.1	72.3	73.1	71.3	71.4	72.7	72.5	67.7	61.7	61.0	62.2	59.2	52.4	46.9	42.5	41.5	59.4	71.7	76.5	80.9	81.7	78.6	67.00	81.70
16-Mar	74.6	70.6	67.4	63.1	60.2	61.3	60.8	56.6	52.3	45.2	38.9	35.4	34.0	32.6	30.1	28.0	30.9	49.6	59.8	63.9	70.0	67.1	68.9	75.9	54.05	75.90
17-Mar	77.7	73.3	70.8	71.4	75.0	73.9	73.5	73.7	72.7	67.7	60.7	58.8	57.4	55.4	53.7	50.4	50.8	51.6	64.7	74.8	76.9	80.2	85.6	85.4	68.16	85.58
18-Mar	84.2	85.8	89.3	89.3	84.5	87.1	89.1	90.3	84.3	76.8	60.2	44.8	37.5	35.8	31.9	32.0	32.0	34.8	46.7	60.9	68.9	72.2	71.1	75.7	65.22	90.25
19-Mar	76.1	74.1	72.9	73.2	74.7	77.0	77.5	72.4	63.1	54.3	48.1	43.8	39.3	33.1	30.6	28.3	29.5	34.5	44.6	49.5	50.5	53.3	57.2	66.0	55.15	77.54
20-Mar	66.1	70.8	77.5	81.3	84.3	81.9	82.8	83.5	77.1	74.0	61.4	46.8	41.3	37.1	40.7	39.9	42.1	45.3	49.4	53.5	59.3	70.5	76.1	78.9	63.39	84.26
21-Mar	80.4	81.6	83.5	85.0	86.2	86.5	86.7	88.6	87.7	85.2	89.4	91.1	90.6	90.0	89.5	89.3	90.0	91.1	91.9	92.3	92.2	92.1	91.8	91.9	88.53	92.34
22-Mar	92.1	92.4	91.9	91.6	91.6	91.7	91.3	90.9	88.0	81.9	71.6	72.0	64.1	55.5	55.1	61.7	63.0	65.4	69.9	79.4	81.4	81.5	82.8	83.7	78.77	92.37
23-Mar	83.6	84.8	88.3	89.8	87.4	88.7	89.4	89.4	78.7	63.6	61.0	62.3	57.7	54.6	51.0	47.3	48.1	56.9	65.4	70.0	69.6	73.4	74.7	77.1	71.36	89.75
24-Mar	86.3	88.4	90.2	92.5	93.7	94.1	94.3	94.0	92.9	91.1	90.3	90.5	90.9	88.4	89.9	91.2	90.9	92.1	92.7	92.9	92.8	92.5	92.4	92.3	91.56	94.31
25-Mar	92.1	89.3	87.9	89.5	92.0	92.2	92.0	91.1	86.8	82.7	80.2	76.2	71.8	68.2	59.3	54.2	49.5	49.5	53.9	67.2	70.9	70.6	68.1	70.5	75.23	92.22
26-Mar	74.9	73.4	70.3	69.7	79.4	85.8	83.8	76.1	62.9	54.2	47.8	44.5	38.4	35.6	33.2	30.4	29.3	37.8	46.4	57.5	63.9	71.8	76.7	76.8	59.20	85.78
27-Mar	75.4	79.9	79.7	84.0	88.0	89.3	90.8	81.1	66.4	58.3	47.7	41.4	38.8	34.3	34.6	32.6	31.4	33.6	39.8	42.0	48.4	66.4	76.4	78.9	59.97	90.82
28-Mar	81.1	84.3	86.8	90.2	92.1	93.3	93.0	91.8	87.0	78.7	67.8	54.8	44.6	37.9	37.0	45.7	43.6	39.6	47.4	57.3	68.3	73.9	80.9	84.9	69.25	93.26
29-Mar	85.1	75.5	75.7	73.8	66.5	63.8	57.5	60.9	52.0	44.4	41.8	36.3	31.2	28.1	26.8	26.8	28.5	32.4	34.5	38.8	43.0	44.5	45.5	46.3	48.32	85.08
30-Mar	49.0	46.2	48.5	52.6	56.9	54.3	53.8	53.5	51.4	47.3	44.2	42.2	43.7	42.9	40.2	40.6	43.5	44.4	50.4	64.1	73.6	86.1	88.3	87.1	54.36	88.26
31-Mar	86.3	87.4	89.1	88.6	89.0	89.2	88.8	86.4	83.5	81.4	76.4	68.5	59.2	49.8	44.0	41.5	42.1	40.8	43.5	52.8	57.8	65.8	73.0	69.3	68.92	89.17
	77.76	78.53	79.84	80.59	81.21	81.51	82.73	82.41	78.48	72.61	66.54	61.59	57.53	54.01	52.13	51.67	52.36	55.98	62.57	68.66	71.70	74.83	76.53	77.24		Diurnal Average
	94.59	94.72	94.81	94.78	94.70	94.62	94.71	94.82	94.66	94.22	93.80	92.64	90.86	90.04	89.89	91.20	91.96	93.29	93.92	94.19	94.20	94.27	94.30	94.40		Diurnal Maximum



**WCAS - Genesee**  
**Summary of Hourly Averages**

**Global Solar Radiation (GSR) - W/m2**  
**March 2016**

Maximum Value: 695.86 W/m2 on Mar 27 13:00      Maximum Daily Average: 207.85 W/m2 on Mar 29																								Hours in Service:	744	
Minimum Value: 0.0 W/m2 on Mar 1 01:00      Minimum Daily Average: 37.64 W/m2 on Mar 24																								Hours of Data:	744	
Maximum Diurnal Average: 457.34 W/m2 at hour 13      Minimum Diurnal Average: 0.00 W/m2 at hour 1																								Hours of Missing Data:	0	
Monthly Average: 127.62 W/m2      Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 2.6 Q <sub>3</sub> = 210.3 P <sub>90</sub> = 466.0 P <sub>99</sub> = 662.3																								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-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	143.1	294.4	409.8	493.6	555.9	537.2	454.3	376.8	190.2	44.0	2.8	0.0	0.0	0.0	0.0	0.0	146.55	555.93
2-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	43.7	116.0	171.9	328.1	357.3	387.4	218.4	138.0	93.5	23.0	0.8	0.0	0.0	0.0	0.0	0.0	78.37	387.36
3-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	40.4	93.9	144.6	200.0	199.5	179.1	238.2	202.2	120.3	60.1	3.7	0.0	0.0	0.0	0.0	0.0	61.96	238.16
4-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	29.7	84.9	290.3	531.4	543.0	493.0	290.6	211.0	128.2	36.1	2.7	0.0	0.0	0.0	0.0	0.0	110.16	542.99
5-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.5	96.8	306.1	359.1	289.4	466.3	479.0	411.1	304.1	51.1	65.9	8.2	0.0	0.0	0.0	0.0	0.0	118.48	478.95
6-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.4	65.4	138.4	199.8	174.9	97.3	141.6	211.3	90.0	34.6	13.4	0.8	0.0	0.0	0.0	0.0	0.0	49.21	211.32
7-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	26.2	63.6	108.9	142.9	172.7	188.1	284.1	245.3	112.1	35.3	2.2	0.0	0.0	0.0	0.0	0.0	57.64	284.05
8-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	25.4	70.2	96.9	184.2	306.8	589.2	490.3	382.6	244.4	94.8	7.1	0.0	0.0	0.0	0.0	0.0	103.92	589.15
9-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	94.7	247.7	480.4	563.0	603.8	585.1	508.7	396.0	256.2	100.6	8.1	0.0	0.0	0.0	0.0	0.0	160.98	603.82
10-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.4	58.2	150.8	433.7	533.3	603.2	585.8	503.8	402.7	316.0	78.4	5.1	0.0	0.0	0.0	0.0	0.0	153.30	603.17
11-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.2	124.9	315.9	487.5	573.4	614.5	595.4	524.4	300.7	214.2	94.8	8.3	0.0	0.0	0.0	0.0	0.0	162.30	614.50
12-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.1	148.1	245.9	270.6	180.7	243.7	231.5	328.8	194.5	130.0	58.1	4.5	0.0	0.0	0.0	0.0	0.0	86.19	328.77
13-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	81.6	214.1	471.7	508.7	587.1	504.6	536.1	421.5	278.7	114.0	13.3	0.0	0.0	0.0	0.0	0.0	156.11	587.14
14-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.8	56.0	71.3	106.7	196.7	244.8	278.7	261.1	249.6	148.0	60.9	12.7	0.0	0.0	0.0	0.0	0.0	70.60	278.66
15-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.5	118.8	183.4	331.4	309.8	491.7	418.7	481.5	377.2	258.5	132.0	17.9	0.0	0.0	0.0	0.0	0.0	130.60	491.73
16-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	51.7	237.6	396.1	506.8	591.8	642.4	624.6	553.7	371.7	158.0	43.9	8.7	0.0	0.0	0.0	0.0	0.0	174.46	642.36
17-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.9	65.7	136.7	162.1	117.1	207.9	319.2	437.6	287.2	150.8	74.2	12.7	0.0	0.0	0.0	0.0	0.0	82.83	437.57
18-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.7	141.5	274.8	433.0	599.6	618.3	655.5	637.7	564.2	446.5	306.0	129.9	20.2	0.0	0.0	0.0	0.0	0.0	201.15	655.47
19-Mar	0.0	0.0	0.0	0.0	0.0	0.0	2.3	82.7	189.9	315.7	468.7	598.1	662.5	642.4	491.7	405.0	239.6	107.8	18.9	0.0	0.0	0.0	0.0	0.0	176.05	662.52
20-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.6	65.7	201.2	300.9	521.7	616.1	652.0	503.0	336.5	265.1	203.5	80.3	16.6	0.0	0.0	0.0	0.0	0.0	156.80	652.04
21-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7	46.6	73.4	87.2	179.2	292.9	293.7	250.1	204.3	118.3	62.3	13.9	0.0	0.0	0.0	0.0	0.0	68.15	293.70
22-Mar	0.0	0.0	0.0	0.0	0.0	0.0	2.1	42.6	129.0	295.0	309.1	357.2	566.8	546.7	501.9	462.7	320.6	160.8	41.4	0.0	0.0	0.0	0.0	0.0	155.66	566.77
23-Mar	0.0	0.0	0.0	0.0	0.0	0.0	2.4	51.9	213.4	331.8	436.2	579.9	659.4	655.3	579.8	452.1	288.0	107.3	15.4	0.0	0.0	0.0	0.0	0.0	182.20	659.35
24-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.7	23.1	36.7	53.0	61.4	82.9	143.4	188.7	80.8	98.6	79.3	38.5	16.1	0.0	0.0	0.0	0.0	0.0	37.64	188.69
25-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.5	66.0	167.7	184.6	286.9	429.7	377.0	463.6	437.6	132.5	145.5	113.3	43.4	0.0	0.0	0.0	0.0	0.0	118.68	463.63
26-Mar	0.0	0.0	0.0	0.0	0.0	0.0	3.9	31.2	102.2	179.2	342.7	519.3	440.7	500.7	408.5	417.9	336.9	137.2	26.9	0.0	0.0	0.0	0.0	0.0	143.64	519.25
27-Mar	0.0	0.0	0.0	0.0	0.0	0.0	20.2	160.9	313.3	457.0	549.4	662.7	695.9	664.8	439.0	318.6	235.8	126.6	40.7	0.0	0.0	0.0	0.0	0.0	195.20	695.86
28-Mar	0.0	0.0	0.0	0.0	0.0	0.0	2.6	41.8	115.4	301.6	489.7	644.6	677.9	651.7	221.8	202.4	306.1	157.7	30.0	0.0	0.0	0.0	0.0	0.0	160.13	677.88
29-Mar	0.0	0.0	0.0	0.0	0.0	0.0	30.4	145.3	270.6	444.5	564.4	649.5	686.3	679.7	595.6	488.6	297.0	98.8	37.7	0.0	0.0	0.0	0.0	0.0	207.85	686.28
30-Mar	0.0	0.0	0.0	0.0	0.0	0.0	1.2	19.8	117.7	252.8	369.2	368.1	242.1	252.6	240.6	206.1	145.5	64.5	21.2	0.0	0.0	0.0	0.0	0.0	95.89	369.24
31-Mar	0.0	0.0	0.0	0.0	0.0	0.0	16.8	95.3	264.1	326.6	353.1	506.7	487.2	352.4	314.1	435.1	318.9	150.2	64.9	1.7	0.0	0.0	0.0	0.0	153.63	506.68
																								Diurnal Average		
																								Diurnal Maximum		





**WCAS - Genesee**  
**Summary of Hourly Standard Deviations**

**Wind Speed (WS) - kph**  
**March 2016**

Maximum Value: 10.92 kph on Mar 13 04:00		Maximum Daily Average: 5.34 kph on Mar 16		Hours in Service: 744																						
Minimum Value: 0.5 kph on Mar 27 05:00		Minimum Daily Average: 1.74 kph on Mar 8		Hours of Data: 744																						
Maximum Diurnal Average: 3.57 kph at hour 15		Minimum Diurnal Average: 2.13 kph at hour 22		Hours of Missing Data: 0																						
Monthly Average: 2.688 kph		Percentiles: P <sub>1</sub> = 0.9 P <sub>10</sub> = 1.4 Q <sub>1</sub> = 1.8 Median = 2.4 Q <sub>3</sub> = 3.2 P <sub>90</sub> = 4.3 P <sub>99</sub> = 7.9		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-Mar	2.4	1.9	1.6	1.1	1.2	1.8	1.1	1.7	1.4	3.7	1.6	2.3	1.4	2.1	1.7	1.7	2.3	1.9	1.8	1.9	1.9	1.8	2.1	1.5	1.82	3.69
2-Mar	2.2	2.2	2.0	2.0	1.6	1.9	1.4	1.5	2.2	2.6	2.6	2.7	2.1	3.1	2.8	3.2	2.7	2.6	2.4	2.4	2.7	3.0	3.1	2.5	2.40	3.23
3-Mar	2.4	3.3	1.9	2.2	4.3	1.9	2.0	3.1	3.3	3.1	3.6	2.5	2.5	2.1	2.8	2.6	2.3	3.9	1.7	1.4	1.9	2.8	1.3	1.2	2.50	4.34
4-Mar	2.7	1.7	1.7	1.7	1.3	3.3	2.9	2.8	1.8	2.0	2.6	3.8	3.5	2.4	2.6	2.7	2.7	2.0	2.2	1.9	1.4	3.4	3.0	4.0	2.50	4.04
5-Mar	1.5	3.8	2.2	2.6	5.5	2.3	2.4	3.8	1.5	1.5	2.9	2.3	2.9	2.3	2.9	2.6	6.4	1.8	2.1	1.7	2.0	2.3	5.8	4.8	2.92	6.44
6-Mar	2.2	3.4	2.1	1.1	4.1	2.9	1.9	1.9	2.9	2.8	3.4	3.5	3.6	3.7	3.8	2.5	2.6	2.5	3.6	5.7	2.4	1.6	1.1	2.5	2.83	5.66
7-Mar	2.1	1.2	2.7	2.3	2.1	2.0	2.2	2.7	2.3	2.5	1.7	2.2	2.5	2.4	3.1	2.3	1.9	2.5	2.1	2.4	1.9	1.7	1.4	2.0	2.17	3.05
8-Mar	2.3	2.6	1.8	1.6	2.7	2.2	2.1	2.2	2.2	1.7	1.9	2.3	2.0	1.6	1.7	1.5	1.9	1.1	1.4	1.2	0.9	0.9	1.0	1.1	1.74	2.67
9-Mar	1.0	1.0	0.6	2.9	2.5	4.5	3.0	2.1	1.5	2.2	2.3	2.1	1.8	1.5	1.3	2.3	1.3	1.9	1.3	1.9	1.0	1.0	1.0	2.2	1.84	4.50
10-Mar	2.5	2.2	3.3	3.4	3.5	3.2	3.2	3.3	3.1	2.9	2.9	2.9	2.5	3.7	5.4	5.1	4.8	2.6	2.9	1.1	2.1	1.6	2.9	2.4	3.06	5.37
11-Mar	3.2	1.2	1.3	1.7	2.7	2.2	1.9	1.4	1.5	2.1	3.3	2.6	3.5	2.4	3.3	2.6	2.6	2.6	2.1	2.1	1.8	2.4	2.2	3.0	2.32	3.54
12-Mar	2.7	2.8	3.4	3.7	3.8	2.2	2.0	1.6	2.4	2.2	1.9	1.9	1.7	2.0	2.3	2.6	2.4	2.2	3.3	3.7	4.5	3.4	4.0	2.5	2.72	4.45
13-Mar	4.0	5.0	6.2	10.9	7.3	5.6	6.2	4.3	4.9	3.7	5.0	6.1	5.0	5.7	5.0	4.0	2.8	3.5	1.7	2.1	1.5	1.1	1.3	2.4	4.39	10.92
14-Mar	2.0	2.3	2.2	2.1	2.4	1.6	2.6	2.4	2.5	2.9	2.7	2.7	3.3	3.0	2.9	3.0	2.2	2.6	1.4	2.0	1.4	1.1	1.4	1.6	2.26	3.29
15-Mar	3.1	2.3	3.9	4.8	3.4	3.2	3.4	2.6	2.8	3.4	4.2	3.8	4.1	5.6	5.8	6.4	5.9	5.5	4.9	1.5	2.0	1.7	2.1	1.4	3.66	6.40
16-Mar	2.0	2.9	3.0	3.6	4.1	3.4	4.7	5.5	5.9	8.4	8.0	8.1	8.3	6.9	7.2	6.5	6.1	9.6	3.5	3.7	5.5	4.3	4.4	2.4	5.34	9.60
17-Mar	2.2	3.6	3.5	5.7	4.9	3.2	4.2	4.1	3.6	4.2	4.0	4.6	5.6	5.3	5.2	4.5	4.1	4.1	2.6	1.8	1.5	1.6	1.2	1.3	3.61	5.66
18-Mar	1.3	1.4	2.4	0.9	1.8	1.2	1.4	2.8	3.6	2.3	2.1	2.8	3.0	3.3	3.8	3.9	3.8	4.5	2.1	1.5	0.8	1.3	1.4	1.4	2.28	4.53
19-Mar	2.4	1.7	2.7	2.3	2.0	1.9	1.5	1.8	2.3	3.0	2.4	3.2	3.1	3.5	2.9	3.5	2.4	1.9	1.2	1.7	0.9	1.8	1.7	1.4	2.22	3.50
20-Mar	1.9	1.9	1.8	1.4	1.2	0.8	2.6	1.4	1.8	1.6	2.7	2.9	2.9	3.4	3.0	3.0	2.9	2.8	2.3	2.9	1.9	2.7	2.6	2.6	2.28	3.42
21-Mar	3.0	2.8	3.0	2.9	2.7	2.6	3.3	2.9	3.3	3.3	2.4	2.4	2.2	2.4	2.7	3.1	2.9	2.9	2.0	3.2	2.4	1.9	2.8	2.0	2.70	3.33
22-Mar	1.9	2.7	2.2	1.9	1.6	1.2	1.4	2.8	1.9	2.0	1.9	2.2	2.4	2.9	2.6	2.5	2.6	2.6	2.0	1.6	1.6	2.3	0.8	2.1	2.07	2.88
23-Mar	1.0	1.3	1.1	1.1	1.3	1.5	1.7	1.5	1.7	1.8	1.7	1.7	2.3	3.2	2.8	3.0	3.0	2.4	1.5	1.2	3.1	1.7	2.9	2.5	1.96	3.22
24-Mar	1.0	1.3	1.4	2.1	1.7	1.6	1.8	2.6	1.9	2.0	1.7	2.1	2.1	2.3	2.1	2.1	2.7	3.2	1.8	1.8	1.1	1.5	1.1	1.1	1.84	3.19
25-Mar	1.2	1.3	1.7	2.0	1.8	2.3	2.0	1.6	2.0	2.9	3.7	3.2	4.2	3.8	4.2	3.1	3.6	2.4	2.3	0.7	1.2	3.7	4.7	3.7	2.64	4.73
26-Mar	3.2	1.6	2.4	1.8	2.2	1.1	1.5	1.9	1.7	2.6	2.8	3.7	4.4	4.0	4.2	4.8	3.3	3.2	1.8	1.7	1.7	1.1	1.4	1.8	2.48	4.75
27-Mar	1.5	1.8	1.4	1.3	0.5	1.6	1.1	1.7	2.0	2.4	2.9	3.5	3.7	3.9	4.1	3.2	2.8	2.7	2.9	1.3	3.5	2.1	2.0	1.9	2.33	4.09
28-Mar	1.5	1.5	1.4	1.3	2.5	3.0	2.7	2.5	2.9	3.0	3.3	3.6	4.0	4.6	5.3	5.0	3.0	3.2	2.3	3.4	3.4	1.4	1.3	2.0	2.85	5.35
29-Mar	2.2	2.7	2.3	4.3	2.3	3.4	3.1	1.6	3.5	3.5	3.9	4.1	5.0	4.9	5.1	5.4	3.9	3.2	2.5	1.0	1.0	2.3	2.0	1.5	3.12	5.42
30-Mar	1.7	2.7	2.6	2.4	2.0	3.2	3.7	4.4	4.5	5.6	5.2	5.4	4.5	5.2	5.2	4.8	4.4	4.0	3.8	6.2	10.7	5.0	2.0	2.8	4.26	10.68
31-Mar	2.8	1.7	1.8	1.6	1.6	1.4	1.5	1.2	1.6	2.5	3.1	2.6	2.8	2.7	3.1	3.1	2.7	3.2	3.2	1.6	1.2	1.2	1.4	4.0	2.24	4.03
																								Diurnal Average		
																								Diurnal Maximum		
2.17 2.25 2.31 2.59 2.66 2.39 2.46 2.51 2.60 2.91 3.04 3.22 3.32 3.42 3.57 3.44 3.20 3.06 2.34 2.19 2.29 2.13 2.18 2.25																										
4.02 5.04 6.24 10.92 7.29 5.56 6.20 5.46 5.91 8.43 8.01 8.08 8.28 6.93 7.16 6.46 6.44 9.60 4.95 6.20 10.68 5.00 5.82 4.78																										
,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**  
**March 2016**

<b>Maximum Value: 93.41 deg on Mar 10 19:00</b>		<b>Maximum Daily Average: 29.97 deg on Mar 5</b>		<b>Hours in Service: 744</b>																							
<b>Minimum Value: 2.8 deg on Mar 8 23:00</b>		<b>Minimum Daily Average: 10.81 deg on Mar 30</b>		<b>Hours of Data: 744</b>																							
<b>Maximum Diurnal Average: 25.02 deg at hour 14</b>		<b>Minimum Diurnal Average: 12.53 deg at hour 4</b>		<b>Hours of Missing Data: 0</b>																							
<b>Monthly Average: 17.565 deg</b>		<b>Percentiles: P<sub>1</sub> = 4.5 P<sub>10</sub> = 7.5 Q<sub>1</sub> = 9.9 Median = 13.1 Q<sub>3</sub> = 19.4 P<sub>90</sub> = 34.5 P<sub>99</sub> = 72.6</b>		<b>Hours of Calibration: 0</b>																							
				<b>Percent Operational Time: 100.0</b>																							
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-Mar	8.7	14.6	6.1	5.1	4.0	6.1	3.9	3.9	3.4	21.5	12.5	13.9	54.0	21.4	16.7	16.6	18.3	15.8	14.0	10.8	11.3	11.1	11.5	10.6	13.15	54.02	
2-Mar	10.5	10.7	9.3	11.3	11.4	14.3	10.8	10.7	12.1	11.8	13.1	14.0	11.4	13.9	10.5	10.3	9.6	9.8	10.7	8.8	11.8	9.5	8.2	7.2	10.90	14.31	
3-Mar	7.9	7.7	10.4	7.7	8.6	7.2	16.6	13.7	7.6	14.8	9.4	26.1	61.5	33.5	10.1	10.5	9.3	14.4	56.2	11.3	15.7	10.8	9.6	7.2	16.15	61.50	
4-Mar	35.3	33.9	45.2	38.8	26.2	22.6	11.5	14.9	11.7	12.0	10.8	16.6	12.1	10.0	11.2	14.3	9.7	8.2	11.1	11.0	7.1	68.5	89.2	41.3	23.87	89.15	
5-Mar	17.5	62.6	27.5	18.2	41.0	42.2	76.0	12.3	14.1	17.4	16.4	35.1	26.9	18.0	16.0	14.7	56.8	72.2	31.5	14.9	21.9	40.7	16.2	9.2	29.97	76.02	
6-Mar	5.9	64.2	10.1	7.5	16.0	45.6	19.5	22.3	11.6	11.0	10.8	14.5	16.3	14.5	13.3	15.7	10.3	12.7	16.0	22.0	32.2	13.2	10.0	12.0	17.80	64.17	
7-Mar	14.7	10.3	14.4	10.8	15.1	10.8	11.4	17.1	13.2	12.5	12.9	33.0	38.1	70.3	79.7	36.0	28.0	18.8	12.4	14.8	14.9	13.9	14.0	9.9	21.95	79.67	
8-Mar	12.0	22.9	21.8	11.2	19.4	54.3	80.7	55.3	25.8	14.8	13.2	16.3	16.6	25.9	27.7	27.6	21.1	10.3	8.3	13.7	18.7	20.1	2.8	4.4	22.71	80.71	
9-Mar	6.7	4.9	14.4	37.6	26.7	37.8	14.2	7.1	6.2	7.5	7.2	9.9	11.8	13.3	13.8	27.4	18.4	15.4	11.0	10.5	9.7	11.3	8.7	12.4	14.33	37.83	
10-Mar	11.2	10.2	9.8	9.9	9.7	10.8	12.5	12.2	12.1	10.9	13.9	11.3	17.0	32.5	50.3	30.8	16.1	19.9	93.4	19.3	23.7	19.5	10.7	9.0	19.87	93.41	
11-Mar	10.6	14.4	12.6	5.4	24.8	49.6	12.1	7.5	9.6	13.6	13.4	17.6	16.4	12.1	19.6	18.5	26.3	11.2	12.5	15.6	11.5	12.4	12.5	9.1	15.37	49.63	
12-Mar	9.6	11.9	9.9	8.9	9.2	13.1	13.4	9.0	14.4	15.9	14.7	45.4	27.3	72.7	34.8	29.9	17.2	35.7	31.2	41.6	54.4	85.4	51.6	38.9	29.00	85.36	
13-Mar	26.6	11.1	7.2	18.2	13.1	11.8	9.8	12.5	21.4	11.0	11.4	10.3	14.0	13.3	13.1	19.1	24.0	11.0	27.9	17.1	18.9	18.7	11.7	12.2	15.23	27.88	
14-Mar	9.7	9.0	8.1	7.5	12.7	12.0	15.9	12.8	17.0	15.2	13.2	12.9	19.5	15.1	18.5	28.7	18.6	11.2	11.1	52.8	29.8	15.3	15.0	25.3	16.96	52.75	
15-Mar	6.8	5.8	8.3	12.5	10.3	9.6	8.9	8.6	10.9	10.8	10.9	14.2	12.5	14.2	10.8	8.2	7.1	12.4	28.0	11.2	36.4	12.1	5.5	15.1	12.13	36.39	
16-Mar	9.6	8.7	9.4	11.3	9.9	9.7	9.8	7.7	7.2	7.0	7.6	7.2	10.5	10.5	10.1	9.7	7.3	28.9	12.1	12.2	17.4	8.8	21.3	16.8	11.28	28.86	
17-Mar	7.1	8.9	7.9	6.8	7.7	6.2	8.6	6.4	8.6	9.8	14.5	15.3	13.1	14.7	13.3	13.4	16.0	17.7	23.5	8.9	10.2	50.8	13.5	10.0	13.04	50.84	
18-Mar	8.4	18.7	27.1	5.8	15.3	11.1	13.1	8.7	15.3	29.6	26.7	37.9	42.1	50.3	56.0	60.5	25.7	17.1	5.8	4.5	5.3	5.8	7.6	6.2	21.03	60.51	
19-Mar	6.9	6.5	8.3	8.9	7.0	6.8	5.7	8.0	8.5	13.7	25.1	49.7	35.6	53.8	53.6	33.0	22.9	17.9	9.4	20.2	15.4	22.6	43.0	13.2	20.65	53.77	
20-Mar	16.7	11.3	46.4	17.4	10.8	13.3	30.9	42.2	29.1	17.6	26.7	23.4	37.4	21.6	12.1	14.6	13.8	11.2	11.2	11.9	11.6	11.2	10.2	10.5	19.30	46.35	
21-Mar	10.3	10.6	11.1	10.3	10.7	10.3	12.4	9.9	10.4	11.6	12.6	10.7	14.7	12.6	10.5	12.6	13.3	13.7	13.3	19.4	15.0	12.3	14.7	13.3	12.35	19.43	
22-Mar	15.8	13.5	8.8	13.3	11.2	10.3	12.4	12.6	10.5	15.3	20.9	17.8	23.0	28.8	20.9	16.1	15.8	13.0	12.2	20.7	8.6	9.3	15.0	17.9	15.16	28.79	
23-Mar	18.4	12.9	8.0	11.8	11.8	29.2	36.3	15.9	18.6	13.8	13.0	16.2	24.8	21.8	26.7	15.1	19.9	12.6	7.3	7.4	38.1	22.9	19.1	24.9	18.61	38.13	
24-Mar	12.0	7.7	19.5	10.1	10.0	14.8	13.5	15.1	12.3	12.5	13.9	14.5	15.1	11.8	10.5	7.3	9.3	8.2	10.4	10.9	19.7	28.2	41.9	25.5	14.78	41.92	
25-Mar	17.6	14.2	44.1	15.0	8.9	6.8	9.7	6.3	8.5	12.8	11.7	11.5	17.5	12.5	17.7	14.1	27.4	11.8	15.2	10.9	22.2	8.6	43.1	29.8	16.59	44.12	
26-Mar	32.3	7.6	7.8	6.6	9.9	4.4	5.4	9.8	6.9	7.6	20.1	16.0	24.8	16.4	19.1	18.5	52.5	16.6	11.8	13.2	10.2	12.3	9.7	11.8	14.64	52.51	
27-Mar	7.6	22.3	32.3	15.3	13.3	30.7	13.3	9.5	27.7	34.6	42.5	27.6	26.3	36.4	30.4	14.5	9.4	8.2	35.9	10.3	24.8	14.0	9.6	13.4	21.26	42.54	
28-Mar	9.9	10.5	13.3	11.2	22.8	13.0	15.0	41.7	13.2	18.3	15.0	26.6	24.4	33.0	25.3	26.1	22.9	17.8	82.9	60.4	35.6	6.4	4.6	6.3	23.18	82.85	
29-Mar	23.3	25.9	13.9	18.8	7.2	8.3	12.9	9.2	9.6	13.5	13.3	16.1	17.9	18.3	18.5	12.9	12.1	9.6	14.8	11.4	8.5	8.5	7.7	7.9	13.33	25.92	
30-Mar	6.1	9.8	8.2	9.0	9.7	9.0	9.2	8.3	7.4	7.5	10.9	11.7	8.3	6.6	10.1	8.3	7.0	7.2	6.5	11.7	53.0	20.2	7.3	6.3	10.81	53.02	
31-Mar	9.4	8.5	5.9	6.3	5.4	7.7	9.1	9.1	19.6	16.0	34.2	55.3	61.3	46.2	25.5	29.7	20.3	14.9	8.9	8.0	12.6	7.8	10.4	26.7	19.13	61.35	
		13.07	15.86	15.72	12.53	13.55	17.41	17.24	14.20	13.05	14.26	15.89	20.93	24.27	25.02	22.78	19.82	18.93	16.30	21.18	16.69	20.21	19.76	17.93	14.98	Diurnal Average	
		35.31	64.17	46.35	38.82	41.05	54.31	80.71	55.28	29.10	34.64	42.54	55.26	61.50	72.71	79.67	60.51	56.80	72.17	93.41	60.40	54.44	85.36	89.15	41.27	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  
MARCH 2016**