

# **Capital Power**

## **AIR QUALITY MONITORING February 2015 Monthly Report**

**Prepared by:**

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





March 2<sup>nd</sup>, 2015

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

Dear Mr. Parry:

**Monthly Ambient Air Quality Monitoring Report for February 2015  
For Capital Power**

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

Network Station is                      AMS 910                      Genesee  
Identified as:

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

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

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

There were no readings in excess of guidelines as indicated in Air Monitoring Directive Section III.A.3. (a&b) for SO<sub>2</sub> and NO<sub>2</sub>.

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

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

**3. Monitoring Notes:**

**AMS 910 (Genesee)**

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Scotten'.

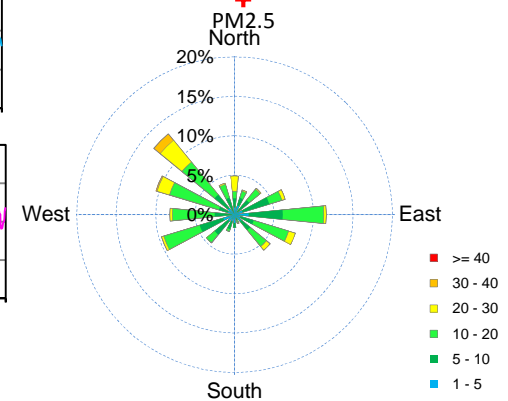
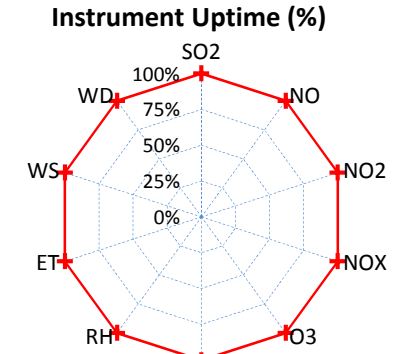
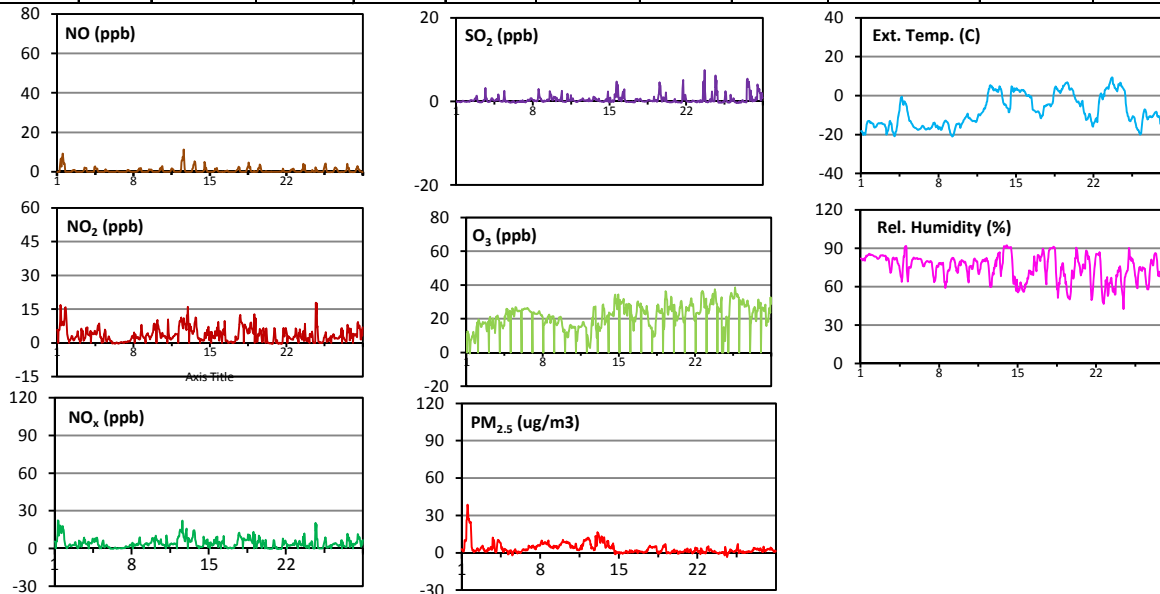
Robert Scotten  
Executive Director

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

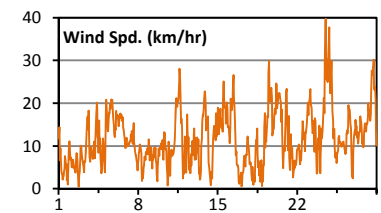
Patrick Andersen  
Environmental Specialist

# WCAS - February 2015 Genesee Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc Unit	Avg. Conc.	Uptime	Maximum		AAAQO Objective	Exceed No.	Maximum		AAAQO Objective	Exceed No.
				Conc	Time			Conc	Time		
SO <sub>2</sub>	ppb	0.4	100.0%	1.2	Feb-28	48	0	7.5	Feb-23 17:00	172	0
NO	ppb	0.7	100.0%	2.2	Feb-12	-	-	11.3	Feb-12 15:00	-	-
NO <sub>2</sub>	ppb	3.7	100.0%	9.3	Feb-1	-	-	17.9	Feb-24 17:00	159	0
NO <sub>x</sub>	ppb	4.4	100.0%	12	Feb-1	-	-	22.4	Feb-01 8:00	-	-
O <sub>3</sub>	ppb	22	100.0%	32	Feb-25	-	-	39	Feb-25 17:00	82	0
PM <sub>2.5</sub>	µg/m <sup>3</sup>	4	100.0%	15	Feb-1	30	0	39	Feb-01 13:00	-	-



Wind Rose (km/hr)



## Monthly Summary

- \* All data has been slope, intercept, and baseline corrected. Data may change after validation process.
- \* The measured ambient concentrations of all parameters are within the AAAQO for the month of February 2015.
- \* All compliance parameters are above 90% operational for the month of February 2015.
- \* Routine calibration was performed on February 24, 2015.

**WEST CENTRAL AIRSHED SOCIETY**

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

**AMS 910  
GENESEE  
FEBRUARY 2015**

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

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

**Summary Report**

*Continuous air quality/meteorological monitoring measurements*

**West Central Airshed Society**

Capital Power / Genesee Station 910													
February 2015													
Parameter	Calibration Hours	Number of Data	Percent Uptime	Mean	Total	Min	Max	----- P10	----- Q1	Percentile Median	----- Q3	----- P90	24 Hour Average Max (ppm)
SO <sub>2</sub> (ppb)	32	640	100.0	0.5	-	0.0	7.5	0.0	0.0	0.1	0.5	1.5	0.001
O <sub>3</sub> (ppb)	32	640	100.0	22.1	-	0.0	38.6	13.6	17.2	22.9	26.7	30.4	0.032
NO (ppb)	33	639	100.0	0.7	-	0.0	11.3	0.0	0.0	0.1	0.8	2.0	-
NO <sub>2</sub> (ppb)	33	639	100.0	3.7	-	0.0	17.9	0.3	1.5	3.0	5.4	8.1	0.009
NO <sub>x</sub> (ppb)	33	639	100.0	4.4	-	0.0	22.4	0.4	1.8	3.5	6.2	9.0	-
Particulate Matter 2.5 microns (μ/m <sup>3</sup> )	0	672	100.0	3.6	-	0.0	38.6	0.1	0.8	2.3	4.9	8.5	14.72 ug/m3
Wind Speed (kph)	0	672	100.0	11.8	-	0.5	39.8	4.0	6.9	10.9	16.0	20.6	-
Temperature - 2m (°C)	0	672	100.0	-7.8	-	-21.1	9.4	-17.1	-14.4	-9.7	-0.2	3.6	-
Temperature - 10m (°C)	0	672	100.0	-7.9	-	-21.2	9.9	-17.4	-14.9	-10.2	0.0	4.3	-
Delta Temperature (°C)	0	672	100.0	-0.1	-	-1.9	3.2	-0.9	-0.7	-0.4	0.3	1.1	-
Relative Humidity (%)	0	672	100.0	74.4	-	42.4	92.3	59.5	68.3	76.0	81.8	85.2	-
Global Solar Radiation (W/m <sup>2</sup> )	0	672	100.0	77.0	-	0.0	539.5	0.0	0.0	0.0	131.1	260.9	-
Precipitation (mm)	0	672	100.0	-	1.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	-
Std Dev Wind Direction (deg)	0	672	100.0	14.6	-	2.6	94.3	6.3	8.3	10.7	15.7	28.4	-
Std Dev Wind Speed (kph)	0	672	100.0	2.5	-	0.4	7.5	1.2	1.6	2.3	3.3	4.2	-



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

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**February 2015**

Maximum Value: 7.53 ppb on Feb 23 17:00		Maximum Daily Average: 1.37 ppb on Feb 24		Hours in Service: 672																							
Minimum Value: 0.0 ppb on Feb 1 01:00		Minimum Daily Average: 0.02 ppb on Feb 1		Hours of Data: 640																							
Maximum Diurnal Average: 1.24 ppb at hour 17		Minimum Diurnal Average: 0.14 ppb at hour 1		Hours of Missing Data: 32																							
Monthly Average: 0.481 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 0.1 Q <sub>3</sub> = 0.5 P <sub>90</sub> = 1.5 P <sub>99</sub> = 4.7		Hours of Calibration: 32																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.16	
2-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.1	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.3	0.5	0.7	0.9	0.5	1.3	1.4	0.3	0.0	0.34	1.42	
3-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.2	0.6	2.0	3.2	0.7	0.8	0.3	0.0	0.0	0.0	0.0	0.35	3.24	
4-Feb	0.0	0.0	Z	0.3	0.4	0.7	0.8	0.7	0.3	0.3	0.2	0.1	0.1	0.2	0.3	0.2	0.6	0.2	0.4	0.7	1.7	1.2	0.2	0.1	0.43	1.70	
5-Feb	0.1	0.1	Z	0.0	0.0	0.0	0.0	0.3	0.4	2.5	1.4	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	0.22	2.52	
6-Feb	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.02	0.16	
7-Feb	0.0	0.3	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.2	0.1	0.1	0.3	0.5	0.7	0.7	0.8	0.5	0.3	0.24	0.75	
8-Feb	0.2	0.3	Z	0.3	0.2	0.1	0.1	0.0	0.0	0.2	0.2	0.7	3.0	2.4	1.2	1.0	0.6	0.7	0.5	0.0	0.2	0.0	0.0	0.0	0.52	2.99	
9-Feb	0.0	0.3	Z	0.0	0.1	0.1	0.2	0.4	0.2	0.4	0.3	0.0	0.7	2.5	1.9	1.7	1.6	0.6	0.3	0.2	0.4	0.8	1.1	0.9	0.64	2.47	
10-Feb	0.7	1.1	Z	0.7	0.8	0.6	0.4	0.2	0.2	0.2	0.4	0.1	0.4	0.8	1.3	2.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.45	2.50	
11-Feb	0.0	0.0	Z	1.8	1.7	0.6	0.1	0.3	0.2	0.1	0.2	1.5	0.6	0.2	0.4	0.8	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.41	1.85	
12-Feb	0.0	0.0	Z	0.0	0.1	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.5	0.8	0.6	0.3	0.2	0.1	0.2	0.1	0.3	0.2	0.2	0.1	0.24	0.77	
13-Feb	0.2	0.5	Z	0.7	0.3	0.2	0.1	0.2	0.1	0.1	0.2	0.4	0.7	1.2	0.7	0.7	0.9	0.5	0.3	0.5	0.3	0.2	0.2	0.3	0.40	1.15	
14-Feb	0.7	0.4	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.4	0.3	0.6	0.0	0.8	2.4	0.6	0.0	0.0	0.28	2.36	
15-Feb	0.2	0.9	Z	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.4	1.8	1.1	1.1	2.2	4.7	1.1	3.7	4.0	1.8	0.2	0.9	0.6	0.6	1.12	4.72	
16-Feb	0.9	0.7	Z	1.1	1.5	2.3	1.2	0.8	2.9	0.7	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	0.53	2.89	
17-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.2	0.2	0.6	0.6	0.5	0.3	0.1	0.2	0.3	0.7	0.4	0.2	0.3	0.1	0.23	0.70
18-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.4	0.1	0.1	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.09	0.38	
19-Feb	0.1	1.1	Z	0.3	0.4	0.1	0.3	0.0	0.0	0.1	0.4	1.5	1.8	4.6	3.7	3.8	1.6	1.2	0.0	0.0	0.0	1.0	0.6	0.9	1.01	4.57	
20-Feb	0.5	0.4	Z	2.2	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.22	2.18	
21-Feb	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	0.4	3.1	5.1	1.8	0.4	1.1	1.6	1.5	0.9	0.69	5.12	
22-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.03	0.24	
23-Feb	0.2	0.0	Z	0.1	0.1	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.1	4.7	0.1	1.1	7.5	2.8	0.2	0.0	0.0	0.0	0.0	0.0	0.76	7.53	
24-Feb	0.0	0.0	Z	0.2	0.5	0.0	0.0	0.0	0.0	2.3	1.1	0.1	C	C	C	C	3.1	6.2	3.2	5.1	1.5	2.4	0.4	0.0	1.37	6.17	
25-Feb	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	0.6	1.7	2.4	1.6	0.0	0.1	0.0	0.0	0.0	0.0	0.28	2.42	
26-Feb	0.0	1.6	Z	0.5	0.3	0.2	0.3	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.19	1.63	
27-Feb	0.0	0.0	Z	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	5.4	4.0	3.5	4.8	3.2	0.0	0.2	2.6	0.5	1.3	1.34	5.41
28-Feb	0.1	0.0	Z	0.5	0.1	0.1	0.1	0.1	1.0	0.4	0.6	0.5	4.0	3.3	2.6	2.6	3.0	2.0	2.0	0.2	0.3	2.1	0.8	0.9	1.19	4.02	
		0.14	0.28	--	0.33	0.28	0.19	0.15	0.17	0.33	0.27	0.19	0.29	0.56	1.11	0.92	1.15	1.24	1.00	0.74	0.32	0.44	0.50	0.26	0.25	Diurnal Average	
		0.93	1.63	--	2.18	1.71	2.34	1.20	0.78	2.89	2.52	1.39	1.78	4.02	4.86	5.41	4.72	7.53	5.12	5.06	1.81	2.43	2.62	1.45	1.29	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**  
**February 2015**

<b>Maximum Value: 38.62 ppb on Feb 25 17:00</b> <b>Maximum Daily Average: 32.02 ppb on Feb 25</b>																						<b>Hours in Service: 672</b>																									
<b>Minimum Value: 0.0 ppb on Feb 1 08:00</b> <b>Minimum Daily Average: 9.03 ppb on Feb 1</b>																						<b>Hours of Data: 640</b>																									
<b>Maximum Diurnal Average: 24.20 ppb at hour 17</b> <b>Minimum Diurnal Average: 19.82 ppb at hour 4</b>																						<b>Hours of Missing Data: 32</b>																									
<b>Monthly Average: 22.113 ppb</b> <b>Percentiles: P<sub>1</sub> = 5.3 P<sub>10</sub> = 13.6 O<sub>1</sub> = 17.2 Median = 22.9 O<sub>3</sub> = 26.7 P<sub>90</sub> = 30.4 P<sub>99</sub> = 35.7</b>																						<b>Hours of Calibration: 32</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-Feb	11.0	Z	12.6	11.2	11.1	10.6	6.6	0.0	0.8	7.0	7.3	8.2	9.6	9.6	11.2	12.3	10.2	6.4	5.4	5.5	7.3	12.2	15.0	16.6	9.03	16.64																					
2-Feb	18.0	Z	19.7	19.4	18.0	17.4	17.0	16.1	15.1	15.0	16.3	17.4	18.1	17.0	17.1	17.2	17.8	18.0	17.6	16.9	14.1	12.4	13.7	16.5	16.78	19.71																					
3-Feb	18.4	Z	20.0	19.9	21.2	16.4	17.1	15.9	14.1	18.8	20.2	18.9	14.5	15.0	15.7	11.6	17.2	21.2	19.9	21.6	22.0	21.1	20.2	19.4	18.27	21.96																					
4-Feb	18.9	Z	16.1	17.0	18.0	16.6	15.9	15.2	14.1	16.0	15.9	16.0	21.4	20.3	22.9	22.8	25.9	24.7	25.7	22.5	18.7	19.3	22.1	24.8	19.59	25.89																					
5-Feb	23.6	Z	23.6	22.4	23.8	26.3	25.6	23.9	21.1	21.3	23.0	25.9	26.6	25.9	25.2	24.4	24.6	24.3	24.7	24.6	24.7	24.3	24.3	24.3	24.40	26.93																					
6-Feb	24.7	Z	25.7	25.1	25.1	25.5	25.6	25.9	26.2	26.1	26.0	25.8	26.0	26.4	26.2	26.3	25.9	25.3	24.9	24.6	24.3	24.2	23.9	23.8	25.37	26.35																					
7-Feb	23.7	Z	23.7	23.6	23.8	23.3	22.9	22.8	23.1	23.1	22.8	22.6	22.9	23.1	23.5	24.1	24.6	24.0	22.8	22.6	22.1	21.8	22.3	21.2	23.07	24.58																					
8-Feb	21.0	Z	16.6	16.5	16.8	17.6	18.6	19.8	18.4	17.6	19.9	21.1	21.1	22.1	22.5	21.3	19.5	17.4	18.8	21.2	21.1	21.2	21.6	21.6	19.71	22.49																					
9-Feb	21.1	Z	19.5	18.8	17.9	17.3	16.6	16.1	17.0	17.4	17.5	19.0	20.8	20.9	21.1	21.2	20.9	19.6	18.0	15.8	14.2	12.3	13.1	12.6	17.76	21.20																					
10-Feb	13.5	Z	9.7	10.3	10.5	12.0	9.3	8.9	9.3	12.5	12.5	14.8	16.0	16.5	16.4	14.9	14.3	15.4	15.6	15.2	14.5	14.8	15.3	15.3	13.37	16.52																					
11-Feb	14.7	Z	12.3	6.8	7.6	10.9	14.1	15.6	14.7	15.0	15.3	15.3	15.1	15.2	15.7	16.6	18.0	18.1	18.0	16.8	15.6	15.5	15.2	14.9	14.66	18.09																					
12-Feb	14.4	Z	10.5	8.4	6.5	4.9	3.8	3.3	2.7	5.3	9.1	14.3	17.2	20.5	16.0	23.4	26.5	27.1	25.8	27.0	27.3	14.3	12.1	8.8	14.32	27.28																					
13-Feb	15.8	Z	17.4	14.5	15.4	13.9	12.6	14.3	14.5	14.5	19.3	22.1	27.8	28.6	26.7	26.1	23.9	16.4	17.8	17.8	19.6	20.7	21.8	22.1	19.28	28.62																					
14-Feb	21.0	Z	23.7	23.4	22.9	22.5	22.7	22.6	22.4	22.2	22.7	24.0	21.3	24.0	31.5	34.3	34.2	29.1	31.5	27.9	25.5	28.1	34.5	32.0	26.26	34.46																					
15-Feb	28.3	Z	31.3	30.0	28.7	29.0	29.7	29.9	30.1	29.7	31.7	24.2	22.7	24.8	26.4	23.8	28.7	27.5	21.8	24.1	27.9	29.0	28.3	26.7	27.58	31.74																					
16-Feb	28.5	Z	28.0	22.4	22.3	20.3	19.0	18.6	12.8	16.6	20.8	19.7	18.4	20.7	21.9	24.3	29.1	30.3	30.4	27.9	27.9	27.9	26.7	27.0	23.55	30.36																					
17-Feb	29.2	Z	27.5	26.7	26.2	25.6	24.7	24.7	22.9	24.0	22.6	23.0	24.7	27.6	25.6	23.6	20.6	17.7	15.6	16.5	16.1	15.7	14.2	14.6	22.15	29.23																					
18-Feb	14.8	Z	12.8	12.7	9.4	9.8	9.5	9.8	11.4	17.4	21.5	24.2	27.8	24.6	28.6	27.6	24.2	24.3	23.5	24.6	24.4	23.4	26.0	24.2	19.84	28.57																					
19-Feb	23.1	Z	14.8	13.7	15.5	31.3	32.3	36.4	35.3	32.2	30.8	23.9	22.3	23.7	26.9	27.2	26.2	25.4	28.4	33.0	32.6	24.4	27.9	28.0	26.76	36.37																					
20-Feb	26.7	Z	28.5	19.3	15.8	23.9	23.6	21.0	18.7	19.9	20.5	21.5	22.3	23.8	26.6	26.5	29.7	30.7	30.2	27.3	23.6	20.4	18.4	17.7	23.34	30.68																					
21-Feb	20.6	Z	20.0	24.3	27.0	24.8	24.9	26.6	26.2	25.5	24.6	27.4	28.1	27.9	30.2	32.1	31.8	27.5	28.2	28.9	26.1	22.2	19.3	18.9	25.79	32.14																					
22-Feb	21.4	Z	22.9	23.4	23.2	23.7	23.2	23.3	22.8	22.8	23.5	23.6	25.3	30.5	35.5	35.6	36.6	35.3	35.5	31.6	26.7	26.4	28.1	31.2	27.48	36.57																					
23-Feb	32.0	Z	27.5	24.6	25.7	23.1	25.1	25.1	28.0	28.5	29.7	31.4	31.5	28.5	33.7	34.8	28.5	32.7	34.1	37.5	36.2	35.9	30.2	29.4	30.16	37.49																					
24-Feb	28.9	Z	27.0	23.9	24.1	24.4	25.9	26.4	24.0	29.5	32.8	C	C	C	C	15.1	9.3	10.6	6.8	14.3	17.0	21.4	19.0	19.7	21.05	32.75																					
25-Feb	20.6	Z	21.2	22.2	26.9	33.4	33.5	35.3	35.0	34.1	33.0	32.3	31.7	32.4	32.1	35.6	38.6	35.3	34.9	34.3	33.2	34.6	33.7	32.6	32.02	38.62																					
26-Feb	32.6	Z	29.8	31.0	30.5	29.4	28.6	28.2	29.2	31.6	31.4	30.3	28.0	27.0	27.3	27.5	28.0	27.3	30.0	30.8	29.9	28.2	27.9	26.2	29.15	32.59																					
27-Feb	21.2	Z	16.5	17.5	21.0	20.7	23.0	23.7	24.7	26.0	25.6	27.0	26.5	20.1	18.6	20.1	24.8	24.4	25.0	31.4	28.2	26.4	29.5	27.1	23.87	31.37																					
28-Feb	29.4	Z	26.3	26.0	26.7	26.4	26.2	24.6	24.3	25.4	27.8	28.3	18.0	15.6	19.9	19.4	18.1	18.2	22.3	26.5	26.2	23.5	32.7	28.7	24.38	32.74																					
																						22.04	--	20.89	19.82	20.06	20.76	20.63	20.49	19.96	21.25	22.28	22.30	22.45	22.71	23.91	23.95	24.20	23.37	23.32	23.89	23.11	22.22	22.74	22.35	Diurnal Average	
																						32.59	--	31.28	30.96	30.46	33.35	33.48	36.37	35.30	34.13	32.95	32.35	31.74	32.41	35.55	35.62	38.62	35.33	35.46	37.49	36.22	35.92	34.46	32.59	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**  
**February 2015**

Maximum Value: 11.32 ppb on Feb 12 15:00		Maximum Daily Average: 2.76 ppb on Feb 1		Hours in Service: 672																							
Minimum Value: 0.0 ppb on Feb 1 01:00		Minimum Daily Average: 0.07 ppb on Feb 20		Hours of Data: 639																							
Maximum Diurnal Average: 2.33 ppb at hour 14		Minimum Diurnal Average: 0.01 ppb at hour 24		Hours of Missing Data: 33																							
Monthly Average: 0.668 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 0.1 Q <sub>3</sub> = 0.8 P <sub>90</sub> = 2.0 P <sub>99</sub> = 6.5		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	0.0	0.0	Z	0.0	0.0	0.0	2.4	5.6	6.6	2.7	7.2	6.8	9.2	7.8	4.6	3.9	4.2	2.2	0.1	0.0	0.0	0.0	0.0	0.0	2.76	9.22	
2-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.9	0.9	0.7	0.8	1.0	0.8	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.28	0.99	
3-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.5	1.2	2.1	2.0	2.0	2.0	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.54	2.14	
4-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.6	2.4	2.7	2.3	1.6	1.5	1.5	1.7	0.6	0.0	0.0	0.1	0.1	0.1	0.0	0.66	2.72	
5-Feb	0.0	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.6	1.3	0.4	0.3	0.4	0.5	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.20	1.26	
6-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.4	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.55	
7-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.8	0.9	0.7	0.8	0.7	0.5	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.22	0.94	
8-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.7	1.0	1.8	1.1	1.2	1.8	2.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.49	1.98	
9-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.9	1.4	1.1	0.8	1.2	1.2	1.2	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.39	1.38	
10-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.9	1.8	0.9	1.4	2.0	2.5	3.0	1.0	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.62	3.03	
11-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.8	1.6	1.7	1.5	1.5	1.1	0.8	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.43	1.74	
12-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	1.5	4.8	5.7	5.8	7.7	6.3	11.3	4.8	2.0	0.6	0.1	0.0	0.0	0.1	0.1	0.0	2.21	11.32	
13-Feb	0.1	0.0	Z	0.0	0.0	0.1	0.0	0.0	0.3	1.4	1.9	3.2	3.5	4.2	5.3	4.9	3.4	1.3	0.1	0.1	0.0	0.0	0.0	0.0	1.30	5.34	
14-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.6	0.7	5.1	3.9	1.7	2.0	1.2	0.6	0.1	0.1	0.1	0.0	0.0	0.0	0.73	5.13	
15-Feb	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.5	0.6	1.7	1.0	1.0	1.5	2.0	0.6	0.5	0.2	0.1	0.1	0.0	0.0	0.0	0.44	1.98	
16-Feb	0.0	0.0	Z	0.1	0.0	0.1	0.1	0.1	0.4	0.2	0.1	0.4	0.4	0.7	0.7	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.17	0.72	
17-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.7	0.9	1.0	1.3	2.1	2.6	2.2	1.4	0.2	0.0	0.0	0.1	0.0	0.0	0.58	2.64	
18-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.5	1.5	2.0	2.8	3.1	4.8	2.7	1.9	2.6	1.0	0.1	0.0	0.0	0.0	0.0	0.0	1.01	4.78	
19-Feb	0.0	0.5	Z	0.2	0.1	0.0	0.0	0.0	0.1	1.1	1.8	1.5	1.8	3.8	3.2	3.1	1.1	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.83	3.84	
20-Feb	0.1	0.0	Z	0.4	0.2	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.07	0.36	
21-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.2	0.0	0.1	0.5	1.6	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.19	1.61	
22-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.8	1.1	1.0	1.1	1.3	1.1	1.6	1.3	0.6	0.1	0.1	0.1	0.0	0.0	0.0	0.46	1.62	
23-Feb	0.0	0.0	Z	0.0	0.1	0.1	0.1	0.1	0.2	0.6	0.9	1.2	1.8	4.0	0.9	1.4	3.6	0.8	0.2	0.1	0.0	0.0	0.1	0.1	0.71	4.03	
24-Feb	0.1	0.1	Z	0.1	0.1	0.0	0.0	0.1	0.7	1.0	0.4	C	C	C	C	C	2.3	0.8	1.3	0.2	0.3	0.2	0.0	0.0	0.42	2.28	
25-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.4	1.4	2.0	3.3	3.8	4.2	2.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.78	4.19	
26-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.6	1.4	1.9	2.3	2.0	2.0	1.6	1.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.62	2.28	
27-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.5	0.6	0.5	0.8	4.2	3.6	2.5	1.8	2.0	0.3	0.0	0.0	0.0	0.0	0.0	0.74	4.16	
28-Feb	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.7	1.4	1.9	1.8	3.0	1.9	1.3	1.2	1.2	0.6	0.3	0.1	0.1	0.1	0.0	0.0	0.68	3.01	
		0.02	0.03	--	0.04	0.02	0.02	0.10	0.22	0.48	0.87	1.43	1.62	2.12	2.33	2.17	1.82	1.43	0.64	0.12	0.03	0.04	0.03	0.01	0.01	Diurnal Average	
		0.10	0.52	--	0.36	0.21	0.09	2.44	5.57	6.64	4.76	7.20	6.83	9.22	7.83	11.32	4.92	4.20	2.22	1.29	0.16	0.29	0.17	0.07	0.07	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**  
**February 2015**

Maximum Value: 17.89 ppb on Feb 24 17:00		Maximum Daily Average: 9.27 ppb on Feb 1		Hours in Service:	672																								
Minimum Value: 0.0 ppb on Feb 6 02:00		Minimum Daily Average: 0.12 ppb on Feb 6		Hours of Data:	639																								
Maximum Diurnal Average: 5.38 ppb at hour 18		Minimum Diurnal Average: 2.47 ppb at hour 12		Hours of Missing Data:	33																								
Monthly Average: 3.737 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.3 Q <sub>1</sub> = 1.5 Median = 3.0 Q <sub>3</sub> = 5.4 P <sub>90</sub> = 8.1 P <sub>99</sub> = 15.5		Hours of Calibration:	33																								
				Percent Operational Time:	100.0																								
Day	Hourly Period Ending At																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Feb	5.8	5.2	Z	5.9	5.6	6.0	9.6	16.9	15.5	7.7	8.9	8.2	9.1	9.6	7.8	8.4	11.4	15.7	15.9	14.7	12.0	6.8	3.9	2.5	9.27	16.91			
2-Feb	1.9	1.4	Z	1.1	1.1	1.5	2.1	2.6	3.2	2.9	2.0	1.5	1.1	1.3	1.7	2.1	2.4	2.7	2.8	2.8	4.4	5.2	3.6	2.2	2.32	5.16			
3-Feb	1.6	1.2	Z	1.6	0.9	6.4	5.2	5.0	5.4	2.0	1.0	1.2	2.0	2.1	2.9	5.4	6.8	4.7	7.0	3.8	3.6	3.7	3.4	3.3	3.49	6.99			
4-Feb	3.3	5.4	Z	4.8	4.1	4.4	4.2	4.0	3.9	3.9	5.3	5.4	4.4	3.8	3.7	4.4	5.7	7.8	5.6	7.4	8.7	6.4	3.3	2.4	4.89	8.71			
5-Feb	2.7	2.0	Z	1.5	0.6	0.2	1.9	3.8	4.7	5.9	5.1	1.6	0.6	0.7	1.3	1.5	2.0	3.0	2.5	1.7	1.2	0.7	0.8	1.0	2.04	5.88			
6-Feb	0.4	0.0	Z	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.4	0.4	0.3	0.3	0.12	0.42			
7-Feb	0.1	0.1	Z	0.6	0.2	0.3	0.5	0.4	0.3	0.3	0.7	0.8	0.6	0.5	0.6	0.6	0.7	1.2	1.5	2.0	3.0	3.3	2.8	2.5	1.04	3.27			
8-Feb	2.1	4.7	Z	4.0	3.6	2.5	2.3	2.1	2.6	2.7	1.8	1.6	2.3	1.6	1.7	3.2	5.7	8.1	6.3	3.6	3.1	2.7	2.2	2.1	3.15	8.11			
9-Feb	2.4	2.3	Z	3.3	3.6	4.0	4.1	4.4	3.3	3.0	2.8	2.2	1.6	2.3	2.6	3.0	3.4	4.1	4.5	5.9	7.8	8.7	7.7	7.4	4.10	8.67			
10-Feb	5.6	8.4	Z	8.3	10.3	8.3	7.3	6.4	5.9	4.6	4.5	2.5	2.2	2.4	3.0	4.6	3.6	3.1	2.9	2.9	3.3	3.0	2.3	2.1	4.67	10.27			
11-Feb	2.6	2.6	Z	10.5	8.3	4.6	2.6	2.0	2.1	1.6	1.4	1.9	1.9	1.9	2.7	2.9	2.9	3.1	3.2	3.7	4.2	3.9	3.9	3.7	3.40	10.46			
12-Feb	3.9	3.8	Z	7.2	7.9	9.4	9.7	9.5	11.4	10.4	9.2	7.7	7.3	6.4	11.0	9.1	8.5	8.2	8.2	6.5	5.7	12.4	12.6	16.0	8.78	15.98			
13-Feb	8.5	7.4	Z	8.6	6.8	7.3	7.0	5.3	5.2	4.4	3.9	5.1	4.9	6.5	8.7	9.8	11.4	11.1	7.2	5.5	3.6	2.6	1.8	1.6	6.26	11.39			
14-Feb	2.1	2.0	Z	1.7	1.7	1.6	1.2	1.1	1.0	1.0	1.1	1.0	4.5	4.3	2.1	3.4	3.3	5.8	3.5	6.2	7.2	7.1	1.1	1.8	2.87	7.24			
15-Feb	3.3	4.8	Z	4.7	5.0	2.9	2.7	2.1	3.1	3.0	2.0	5.3	4.1	3.2	4.0	6.9	3.3	6.6	9.3	5.0	1.0	3.5	5.0	5.3	4.17	9.32			
16-Feb	4.5	3.5	Z	3.3	4.3	6.1	5.7	3.7	9.7	3.7	0.7	0.9	1.0	1.1	0.9	0.4	0.0	0.0	0.1	0.4	0.5	0.5	0.7	0.5	2.27	9.74			
17-Feb	0.2	0.3	Z	0.5	0.2	0.2	0.2	0.5	2.9	1.9	1.5	1.5	1.6	1.8	3.5	5.2	8.2	11.0	12.5	10.8	9.6	9.0	9.0	8.3	4.36	12.48			
18-Feb	7.4	6.5	Z	6.9	8.2	7.5	7.4	6.7	6.0	5.2	4.6	4.1	4.3	6.5	4.4	4.6	8.3	8.9	9.0	7.1	6.1	5.8	5.0	4.2	6.30	9.05			
19-Feb	4.1	12.8	Z	9.4	10.9	2.0	2.9	0.4	0.7	3.1	4.2	3.1	3.5	6.3	5.1	5.8	4.2	3.2	0.2	0.2	1.0	6.7	4.3	3.7	4.25	12.80			
20-Feb	4.6	2.6	Z	6.4	5.4	1.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.5	6.7	6.4	4.4	1.82	6.70			
21-Feb	0.7	0.6	Z	1.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	3.0	6.7	4.4	2.9	4.2	5.9	6.6	5.9	1.85	6.71			
22-Feb	4.3	3.7	Z	3.0	2.8	2.8	2.4	2.3	1.9	1.8	1.7	1.5	1.5	1.5	1.4	2.5	2.8	2.8	2.5	3.9	6.5	5.9	4.4	3.1	2.92	6.53			
23-Feb	1.7	2.4	Z	4.5	3.0	6.1	3.9	4.1	2.1	2.3	1.4	1.6	2.3	5.4	0.9	2.0	8.5	4.7	2.9	0.9	0.9	0.7	1.9	2.2	2.89	8.55			
24-Feb	1.9	1.9	Z	3.9	3.6	4.1	3.2	2.5	5.1	3.2	0.7	C	C	C	C	C	17.9	12.8	17.6	6.9	7.5	2.4	0.5	0.5	5.35	17.89			
25-Feb	0.1	0.0	Z	0.4	0.1	0.0	0.0	0.1	0.4	0.9	2.1	2.5	3.2	3.7	4.8	3.2	0.4	0.6	0.6	1.7	1.7	0.9	1.8	2.3	1.38	4.77			
26-Feb	2.3	3.1	Z	2.6	2.6	3.0	3.5	4.0	3.4	2.1	1.9	2.2	2.1	2.3	2.0	2.0	1.8	1.9	2.0	2.0	3.0	2.9	2.5	3.1	2.53	4.02			
27-Feb	6.0	6.7	Z	5.6	3.4	2.6	2.3	1.7	1.4	1.0	0.7	0.4	0.7	6.4	8.1	6.3	4.7	6.7	6.2	1.1	3.6	6.3	3.0	4.2	3.87	8.10			
28-Feb	2.0	3.0	Z	4.1	3.6	3.5	3.2	3.6	4.0	3.8	2.7	2.6	8.6	9.4	6.6	7.1	7.8	6.2	5.4	1.5	1.5	5.9	3.2	6.9	4.62	9.39			
3.07		3.52	--	4.14	3.85	3.52	3.40	3.40	3.76	2.95	2.58	2.47	2.79	3.37	3.39	3.87	4.96	5.38	5.14	4.00	4.25	4.64	3.71	3.69	Diurnal Average				
8.52		12.80	--	10.46	10.86	9.42	9.73	16.91	15.50	10.43	9.24	8.20	9.13	9.57	11.03	9.79	17.89	15.67	17.63	14.71	12.03	12.38	12.65	15.98	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**  
**February 2015**

Maximum Value: 22.38 ppb on Feb 1 08:00		Maximum Daily Average: 11.97 ppb on Feb 1		Hours in Service: 672																							
Minimum Value: 0.0 ppb on Feb 6 02:00		Minimum Daily Average: 0.22 ppb on Feb 6		Hours of Data: 639																							
Maximum Diurnal Average: 6.39 ppb at hour 17		Minimum Diurnal Average: 3.08 ppb at hour 1		Hours of Missing Data: 33																							
Monthly Average: 4.402 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.4 Q <sub>1</sub> = 1.8 Median = 3.5 Q <sub>3</sub> = 6.2 P <sub>90</sub> = 9.0 P <sub>99</sub> = 17.6		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	5.7	5.1	Z	5.7	5.5	5.8	11.9	22.4	22.1	10.3	16.0	15.0	18.3	17.3	12.3	12.3	15.5	17.8	16.0	14.7	12.0	6.9	3.9	2.5	11.97	22.38	
2-Feb	1.8	1.4	Z	1.1	1.1	1.5	2.0	2.6	3.2	3.5	3.0	2.3	1.7	2.1	2.7	3.0	3.0	2.8	2.8	2.8	4.4	5.1	3.5	2.2	2.60	5.13	
3-Feb	1.5	1.2	Z	1.6	0.9	6.4	5.1	5.1	5.5	2.3	1.5	2.4	4.1	4.2	4.9	7.4	8.8	5.0	7.0	3.9	3.6	3.7	3.4	3.3	4.04	8.78	
4-Feb	3.3	5.4	Z	4.8	4.1	4.4	4.2	4.1	4.0	4.6	7.7	8.1	6.7	5.4	5.2	5.9	7.5	8.4	5.6	7.4	8.8	6.5	3.3	2.4	5.55	8.75	
5-Feb	2.7	2.0	Z	1.6	0.7	0.2	1.9	3.8	4.8	6.5	6.4	2.1	1.0	1.1	1.9	2.2	2.4	3.2	2.5	1.7	1.2	0.8	0.8	1.1	2.28	6.50	
6-Feb	0.5	0.0	Z	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.0	0.5	0.2	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.3	0.3	0.22	0.98	
7-Feb	0.2	0.0	Z	0.6	0.2	0.3	0.6	0.3	0.3	0.5	1.6	1.8	1.5	1.4	1.3	1.3	1.0	1.4	1.5	2.0	2.9	3.3	2.8	2.5	1.29	3.26	
8-Feb	2.1	4.7	Z	4.0	3.6	2.5	2.3	2.0	2.7	3.3	2.5	2.6	4.0	2.8	3.0	5.0	7.6	9.0	6.3	3.5	3.0	2.7	2.1	2.1	3.62	9.00	
9-Feb	2.3	2.2	Z	3.2	3.5	3.9	4.0	4.3	3.4	3.8	4.1	3.3	2.4	3.4	3.8	4.1	4.2	4.4	4.5	5.9	7.7	8.6	7.7	7.4	4.44	8.62	
10-Feb	5.6	8.3	Z	8.3	10.3	8.3	7.3	6.5	6.0	5.5	6.3	3.4	3.6	4.4	5.6	7.6	4.5	3.4	3.0	3.0	3.3	3.0	2.3	2.1	5.29	10.25	
11-Feb	2.6	2.7	Z	10.4	8.3	4.6	2.5	2.0	2.2	2.0	2.3	3.5	3.7	3.5	4.2	4.0	3.6	3.3	3.2	3.6	4.1	3.9	3.9	3.8	3.81	10.42	
12-Feb	3.8	3.8	Z	7.2	7.9	9.4	9.8	9.5	12.8	15.1	14.9	13.5	14.9	12.7	22.3	13.8	10.5	8.8	8.2	6.5	5.7	12.4	12.7	16.0	10.96	22.31	
13-Feb	8.6	7.4	Z	8.5	6.8	7.3	7.0	5.3	5.5	5.7	5.8	8.2	8.4	10.6	14.0	14.7	14.7	12.3	7.3	5.5	3.6	2.6	1.8	1.7	7.53	14.70	
14-Feb	2.1	2.0	Z	1.7	1.7	1.7	1.1	1.2	1.0	1.4	1.7	1.7	9.6	8.2	3.8	5.4	4.5	6.3	3.5	6.3	7.3	7.1	1.1	1.9	3.58	9.65	
15-Feb	3.4	4.8	Z	4.7	5.0	2.9	2.7	2.1	3.2	3.6	2.7	6.9	5.1	4.2	5.5	9.0	4.0	7.2	9.6	5.2	1.2	3.6	5.1	5.4	4.66	9.57	
16-Feb	4.6	3.6	Z	3.5	4.4	6.2	5.8	3.9	10.1	4.0	0.9	1.4	1.5	1.9	1.7	0.7	0.1	0.1	0.2	0.5	0.6	0.6	0.8	0.6	2.51	10.14	
17-Feb	0.2	0.3	Z	0.5	0.3	0.3	0.3	0.5	3.2	2.4	2.3	2.4	2.6	3.2	5.6	7.8	10.4	12.4	12.6	10.9	9.7	9.0	9.0	8.2	4.96	12.65	
18-Feb	7.4	6.6	Z	6.9	8.2	7.6	7.4	6.7	6.6	6.6	6.7	6.9	7.4	11.3	7.0	6.5	11.0	9.9	9.1	7.1	6.2	5.8	5.0	4.2	7.31	11.33	
19-Feb	4.1	13.3	Z	9.5	10.9	2.1	2.9	0.5	0.8	4.2	6.0	4.7	5.4	10.2	8.3	9.0	5.3	3.8	0.5	0.3	1.1	6.8	4.3	3.9	5.13	13.31	
20-Feb	4.8	2.8	Z	6.9	5.6	1.3	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	3.6	6.7	6.4	4.5	1.91	6.87	
21-Feb	0.8	0.7	Z	1.3	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.7	4.6	8.0	4.6	3.0	4.2	5.9	6.6	5.8	2.03	8.01	
22-Feb	4.3	3.7	Z	3.0	2.9	2.8	2.4	2.3	2.2	2.7	2.8	2.6	2.6	2.8	2.6	4.1	4.1	3.3	2.7	4.1	6.7	6.0	4.5	3.1	3.40	6.66	
23-Feb	1.8	2.5	Z	4.5	3.1	6.2	4.0	4.2	2.3	3.0	2.3	2.8	4.1	9.4	1.8	3.4	12.1	5.5	3.0	1.0	1.0	0.7	2.0	2.3	3.62	12.10	
24-Feb	2.0	1.9	Z	4.0	3.6	4.2	3.3	2.7	5.9	4.4	1.3	C	C	C	C	C	20.4	13.8	19.1	7.2	7.8	2.5	0.5	0.4	5.84	20.39	
25-Feb	0.2	0.1	Z	0.4	0.1	0.0	0.0	0.1	0.4	1.4	3.4	4.5	6.5	7.6	9.1	5.6	0.9	0.9	0.7	1.6	1.6	0.8	1.7	2.1	2.16	9.09	
26-Feb	2.1	2.9	Z	2.4	2.4	2.9	3.4	3.9	4.0	3.4	3.7	4.4	4.1	4.3	3.7	3.4	2.6	2.3	2.0	2.0	2.9	2.9	2.4	3.0	3.09	4.39	
27-Feb	6.0	6.7	Z	5.6	3.4	2.6	2.2	1.7	1.6	1.4	1.3	0.9	1.4	10.5	11.7	8.7	6.4	8.7	6.5	1.0	3.6	6.2	3.0	4.1	4.57	11.69	
28-Feb	2.0	2.9	Z	4.0	3.5	3.4	3.1	3.5	4.6	5.1	4.5	4.3	11.5	11.2	7.8	8.2	9.0	6.7	5.6	1.5	1.5	5.9	3.2	6.8	5.21	11.48	
		3.08	3.54	--	4.16	3.86	3.53	3.49	3.62	4.24	3.82	4.01	4.10	4.91	5.70	5.56	5.69	6.39	6.02	5.28	4.03	4.28	4.66	3.72	3.70	Diurnal Average	
		8.56	13.31	--	10.42	10.93	9.41	11.93	22.38	22.05	15.12	16.03	14.97	18.32	17.35	22.31	14.66	20.39	17.85	19.12	14.72	12.03	12.45	12.68	15.96	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>**  
**February 2015**

Maximum Value: 38.60 µg/m <sup>3</sup> on Feb 1 13:00		Maximum Daily Average: 14.72 µg/m <sup>3</sup> on Feb 1		Hours in Service: 672																							
Minimum Value: 0.0 µg/m <sup>3</sup> on Feb 5 04:00		Minimum Daily Average: 0.41 µg/m <sup>3</sup> on Feb 15		Hours of Data: 672																							
Maximum Diurnal Average: 4.38 µg/m <sup>3</sup> at hour 13		Minimum Diurnal Average: 3.17 µg/m <sup>3</sup> at hour 1		Hours of Missing Data: 0																							
Monthly Average: 3.596 µg/m <sup>3</sup>		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.1 Q <sub>1</sub> = 0.8 Median = 2.3 Q <sub>3</sub> = 4.9 P <sub>90</sub> = 8.5 P <sub>99</sub> = 24.7		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	2.9	2.0	1.5	1.1	0.8	3.7	10.1	10.2	9.1	11.1	26.0	26.7	38.6	36.5	26.6	27.4	24.9	24.2	24.1	24.7	11.9	4.9	2.6	1.8	14.72	38.60	
2-Feb	2.2	1.7	0.5	0.9	2.0	1.5	1.3	1.7	2.6	3.7	3.2	1.7	1.5	1.4	2.3	2.6	3.4	4.2	4.7	4.2	5.8	5.0	2.9	3.1	2.66	5.85	
3-Feb	1.6	0.9	1.7	1.5	0.7	2.2	1.4	1.2	3.8	3.9	2.2	3.2	2.6	3.5	4.7	2.7	2.6	2.5	12.3	4.0	10.4	10.0	4.2	0.9	3.53	12.30	
4-Feb	0.6	0.2	1.8	4.9	7.5	10.4	9.7	9.9	9.2	8.2	8.1	8.0	4.6	3.0	4.6	1.6	2.8	0.3	1.3	3.1	3.2	3.1	2.1	2.2	4.59	10.41	
5-Feb	1.8	0.8	1.8	0.0	0.1	0.0	0.4	1.9	1.6	1.9	1.3	0.0	0.0	0.0	0.6	1.3	1.9	2.0	3.0	1.8	0.4	0.9	0.6	0.0	1.00	2.98	
6-Feb	1.2	0.5	0.9	0.6	0.3	0.0	0.3	1.1	1.2	1.6	2.4	2.9	1.9	2.4	2.7	1.6	2.5	3.0	2.1	2.3	2.0	2.5	3.2	5.7	1.87	5.71	
7-Feb	4.2	5.0	4.4	4.4	4.0	5.2	3.9	5.5	5.8	5.1	4.6	4.1	3.2	4.7	2.8	5.3	4.8	5.0	5.5	6.2	6.1	5.8	5.5	5.7	4.86	6.23	
8-Feb	6.5	7.8	9.1	9.9	7.9	6.8	7.6	7.4	7.3	8.7	8.2	7.3	8.3	7.7	6.8	6.6	8.2	9.9	6.5	5.0	6.1	5.0	4.2	4.4	7.23	9.91	
9-Feb	4.7	4.0	5.0	4.2	3.4	5.7	4.6	5.1	5.0	5.4	4.0	5.5	3.3	4.2	3.5	4.8	4.8	6.5	6.5	6.0	6.8	8.1	8.5	8.6	5.34	8.63	
10-Feb	10.5	8.6	8.5	8.8	8.3	8.4	8.9	7.9	9.0	8.0	8.5	7.6	8.3	7.4	7.8	6.5	4.8	3.8	6.0	5.3	4.9	5.2	3.6	4.5	7.13	10.45	
11-Feb	4.4	3.7	4.2	7.3	7.4	5.2	2.3	2.8	2.5	2.1	2.5	1.9	3.5	2.7	4.5	5.9	2.8	4.7	6.7	5.5	7.5	10.4	9.6	9.9	5.00	10.36	
12-Feb	9.8	10.0	11.3	11.5	10.9	10.8	12.2	11.7	11.1	10.2	9.9	6.3	6.9	3.2	4.7	4.5	4.0	3.8	2.1	2.3	2.3	4.5	13.6	11.6	7.87	13.65	
13-Feb	5.2	10.4	16.6	15.8	15.3	13.2	11.8	8.4	8.0	10.5	12.3	13.2	12.4	9.6	7.9	9.3	12.5	10.3	5.9	3.9	4.4	5.0	5.3	9.7	9.87	16.57	
14-Feb	8.6	9.4	5.8	4.0	5.0	4.2	3.4	3.6	4.0	6.3	3.2	7.6	5.3	5.3	0.7	0.0	0.0	1.5	0.0	0.0	0.6	0.2	0.3	0.0	3.29	9.36	
15-Feb	0.6	0.1	0.0	0.0	0.3	0.5	0.0	0.0	0.0	0.2	0.0	0.3	0.0	0.2	0.3	1.7	0.1	1.5	0.7	0.0	0.4	0.7	0.1	2.2	0.41	2.17	
16-Feb	1.2	0.1	1.9	0.4	1.2	1.0	0.2	0.6	0.6	1.1	1.9	0.8	1.8	1.9	2.2	0.1	0.0	1.0	1.6	1.1	0.9	1.2	1.0	0.8	1.03	2.16	
17-Feb	0.9	0.9	0.7	0.6	0.0	0.1	0.1	0.1	0.5	1.1	0.4	0.5	2.6	1.7	3.1	4.4	4.6	5.1	5.9	4.4	4.5	4.8	4.3	3.7	2.29	5.87	
18-Feb	4.8	4.6	4.7	4.4	4.2	5.4	5.2	5.4	5.3	1.0	0.3	0.0	0.3	1.2	0.0	1.0	0.4	1.3	0.7	2.1	2.8	3.3	4.4	5.7	2.86	5.74	
19-Feb	4.8	6.5	4.8	7.1	4.5	1.1	0.0	0.0	0.1	0.1	0.6	0.0	0.0	0.0	0.0	0.2	0.2	1.3	1.7	0.7	0.4	2.4	2.6	0.5	1.65	7.07	
20-Feb	1.6	1.0	1.6	1.5	1.6	1.2	0.0	0.0	0.0	0.5	1.1	1.1	0.2	0.5	0.4	1.0	0.4	0.2	0.5	1.3	1.2	2.8	2.3	1.6	0.99	2.84	
21-Feb	0.8	2.9	3.6	3.3	0.4	1.0	0.5	1.6	2.8	2.9	0.8	1.0	0.4	0.0	0.6	0.1	1.4	1.0	0.7	4.4	3.2	3.6	1.9	3.9	1.79	4.39	
22-Feb	0.9	1.1	0.4	0.7	0.7	1.4	0.0	3.5	3.2	2.4	0.4	0.0	1.3	0.1	0.0	0.0	0.4	0.0	0.8	1.0	4.4	4.1	4.8	5.4	1.54	5.40	
23-Feb	2.2	1.1	2.2	2.6	2.9	1.8	2.1	1.1	0.9	0.9	0.7	0.5	1.7	0.4	0.3	0.7	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.94	2.92	
24-Feb	0.0	0.0	0.0	0.4	0.6	0.3	0.5	0.0	0.4	0.0	0.0	4.9	2.8	0.6	0.0	0.0	0.0	0.0	0.5	0.0	0.1	1.9	2.8	2.6	0.76	4.85	
25-Feb	1.2	2.0	1.5	0.8	0.9	1.0	0.3	1.4	1.0	1.4	2.0	1.4	3.5	5.7	7.1	2.4	0.0	0.2	0.4	2.1	1.2	0.4	0.3	0.1	1.60	7.08	
26-Feb	0.3	1.5	0.1	0.0	0.7	0.0	0.0	0.1	0.8	0.8	0.4	0.3	1.4	1.0	0.8	1.2	1.1	0.8	0.4	0.4	1.1	1.9	2.1	1.7	0.79	2.13	
27-Feb	3.9	3.6	4.0	3.4	3.0	3.3	2.8	2.5	3.6	3.3	2.6	2.7	1.8	1.7	3.7	3.3	1.9	2.1	0.8	1.3	0.6	5.0	2.2	2.3	2.74	5.01	
28-Feb	1.4	1.0	2.3	2.3	2.1	3.1	2.7	3.1	3.1	3.3	2.5	2.6	4.3	3.9	2.5	3.4	2.8	2.3	1.7	0.7	0.6	1.9	1.0	1.5	2.35	4.31	
		3.17	3.26	3.60	3.65	3.46	3.53	3.29	3.49	3.66	3.77	3.94	4.00	4.38	3.94	3.61	3.56	3.34	3.51	3.68	3.36	3.35	3.74	3.43	3.59	Diurnal Average	
		10.45	10.40	16.57	15.82	15.29	13.25	12.17	11.69	11.06	11.12	26.01	26.68	38.60	36.50	26.55	27.35	24.91	24.16	24.08	24.70	11.94	10.36	13.65	11.56	Diurnal Maximum	
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: February 24, 2015  
 Parameter: NO/NO<sub>2</sub>/NO<sub>x</sub>

Instrument: Teco 42C	Serial Number: 42c-70978-367	Previous Calibration Date: January 28, 2015
Calibration: Routine	Calibration Equipment: Sabio 2010 SN 08600312	Barometric Pressure: 27.24" Hg
Calibration Method: Standard Gas Dilution/GPT	Cylinder ID: FF14354	Temperature: 18.4° C
Cylinder Concentration: 12.6 ppm NO	In Service: January 14, 2015	Technician: L. Burns

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	4.4	4.5	NA	0.791	1.009	1.013	300 ppb
Current	4.4	4.8	NA	0.789	1.006	1.013	300 ppb

NO	Final Zero: 0.1 ppb	Final Span: 0.4 ppb	As Found Correction Factor: 1.000
NO <sub>2</sub>	Final Zero: 0.7 ppb	Final Span: 82.7 ppb	As Found Correction Factor: 0.000
NO <sub>x</sub>	Final Zero: 0.4 ppb	Final Span: 82.3 ppb	As Found Correction Factor: 0.995

Results of Linear Regression			Slope	Intercept	R <sup>2</sup>
NO	R <sub>c</sub> vs C <sub>c</sub>	Previous	100.491100	2.287248	0.999946
		Current	100.241600	-13.799740	0.999991
	C <sub>i</sub> vs C <sub>c</sub>	Current	1.000000	-0.000021	0.999991
NO <sub>2</sub>	R <sub>c</sub> vs C <sub>c</sub>	Previous	99.756390	9.683723	0.999946
		Current	99.107410	-32.024490	0.999996
	C <sub>i</sub> vs C <sub>c</sub>	Current	1.000000	0.000025	0.999996
NO <sub>x</sub>	R <sub>c</sub> vs C <sub>c</sub>	Previous	100.400700	38.273650	0.999946
		Current	100.005600	14.294010	1.000000
	C <sub>i</sub> vs C <sub>c</sub>	Current	1.000000	0.000021	1.000000

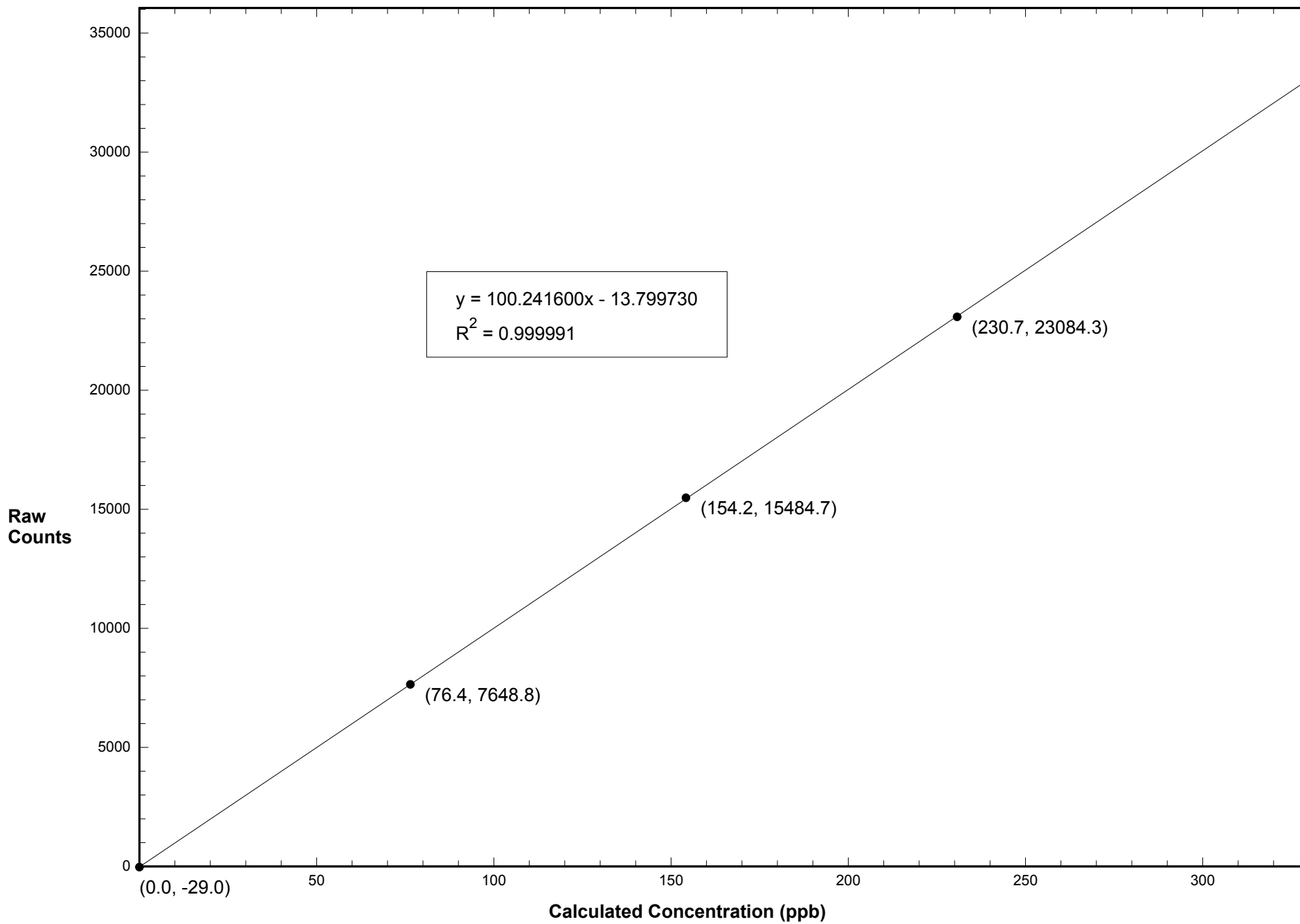
Comments:

**Calibration Data Summary (Page 2)**

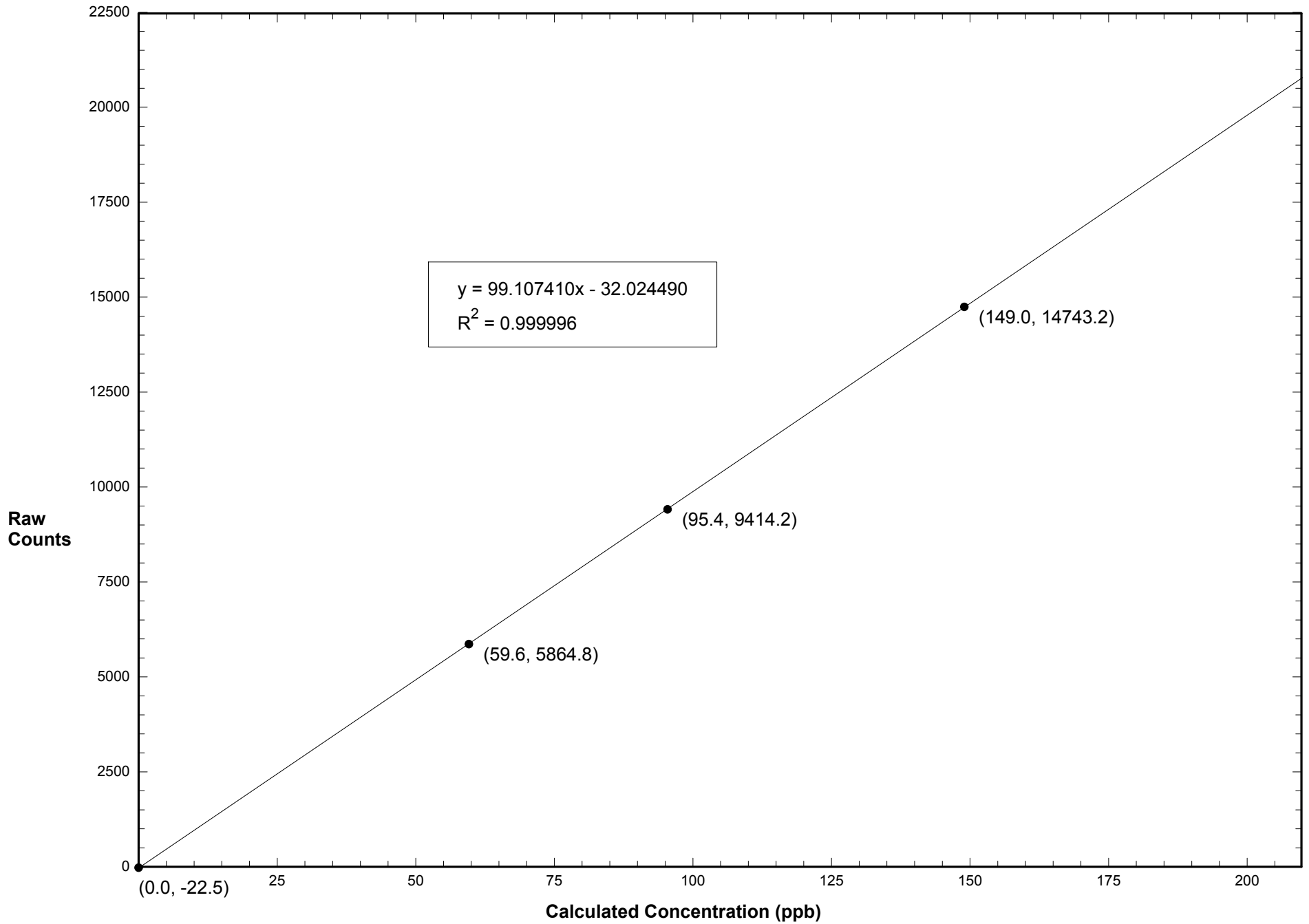
February 24, 2015 - Station 910

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>		
0.07429	3.983	230.7	23084.3	230.4	1.001		
0.04926	3.976	154.2	15484.7	154.6	0.997		
0.02425	3.974	76.4	7648.8	76.4	1.000		
0.00000	4.000	0.0	-29.0	-0.2			
NO Calibration					Average Correction Factor:	0.999	
0.07429	3.983	230.7	23079.8	230.6	1.000		
0.04926	3.976	154.2	15441.8	154.3	1.000		
0.02425	3.974	76.4	7662.7	76.5	0.999		
0.00000	4.000	0.0	8.0	-0.1			
NO <sub>x</sub> Calibration					Average Correction Factor:	1.000	
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>
228.3	7940.7	79.4	149.0	14743.2	149.1	0.999	1.001
228.3	13308.2	132.9	95.4	9414.2	95.3	1.001	0.999
228.3	16900.5	168.7	59.6	5864.8	59.5	1.002	0.998
			0.0	-22.5	0.1		
					Average Correction Factor:	1.001	
NO <sub>2</sub> Gas Phase Titration					Average Converter Efficiency:	0.999	
Parameter	Correction Factor (Previous)	Correction Factor: (Current)	Percent Change of Correction Factor				
NO	1.003	1.001	-0.2				
NO <sub>2</sub>	1.001	0.999	-0.2				
NO <sub>x</sub>	1.002	1.000	-0.2				

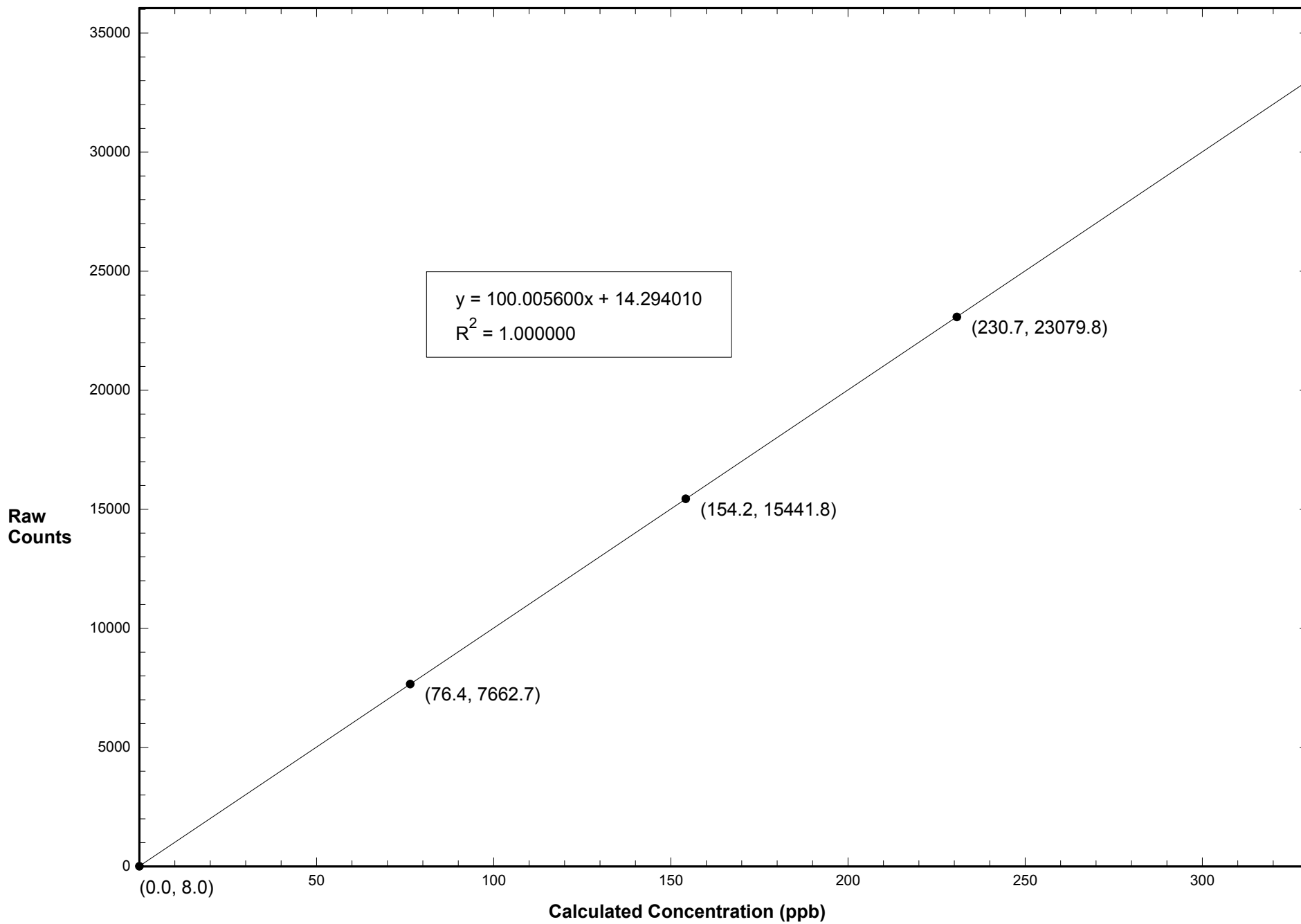
# Station 910 NO February 24, 2015: Linear Regression



# Station 910 NO2 February 24, 2015: Linear Regression

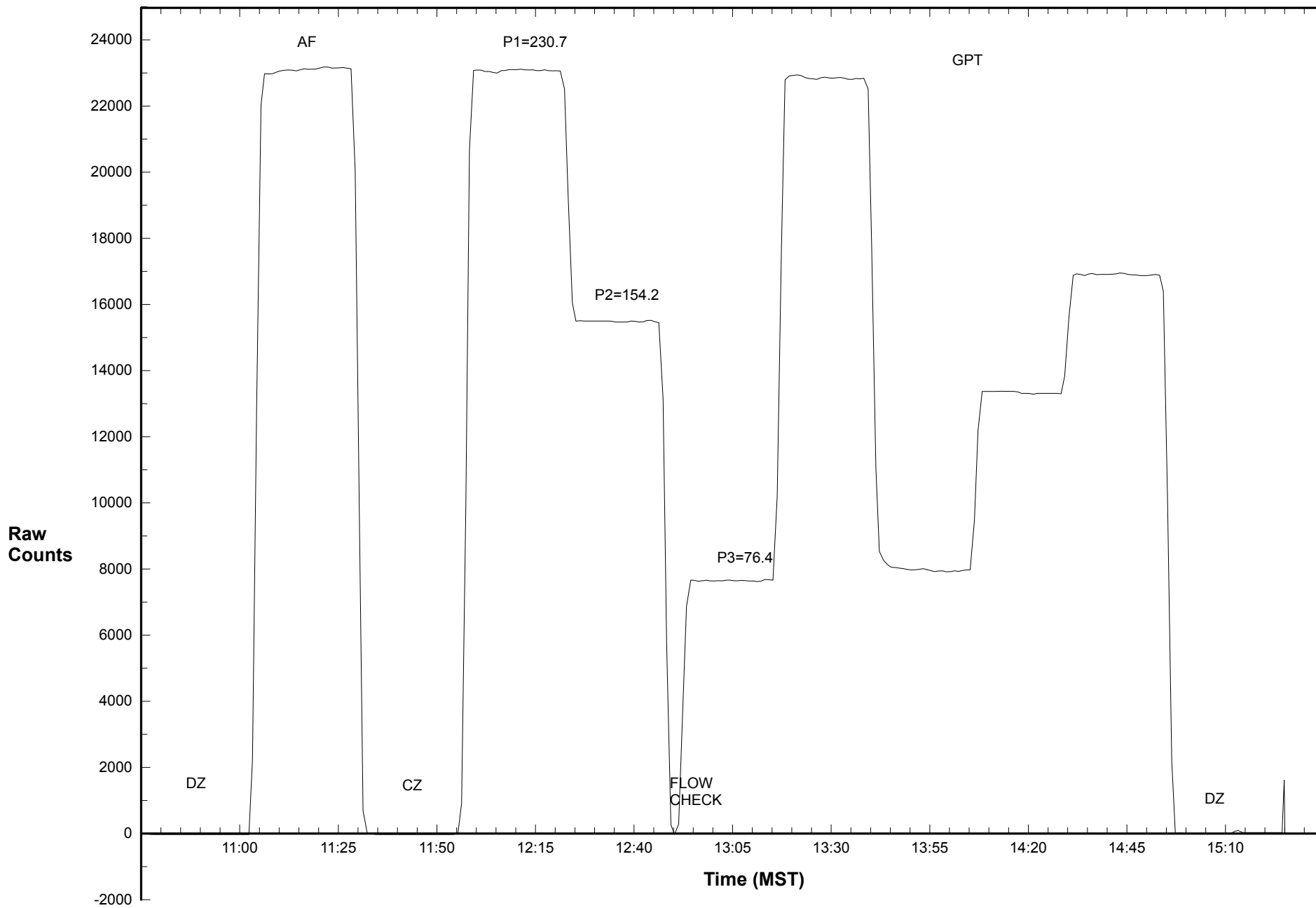


# Station 910 NOX February 24, 2015: Linear Regression

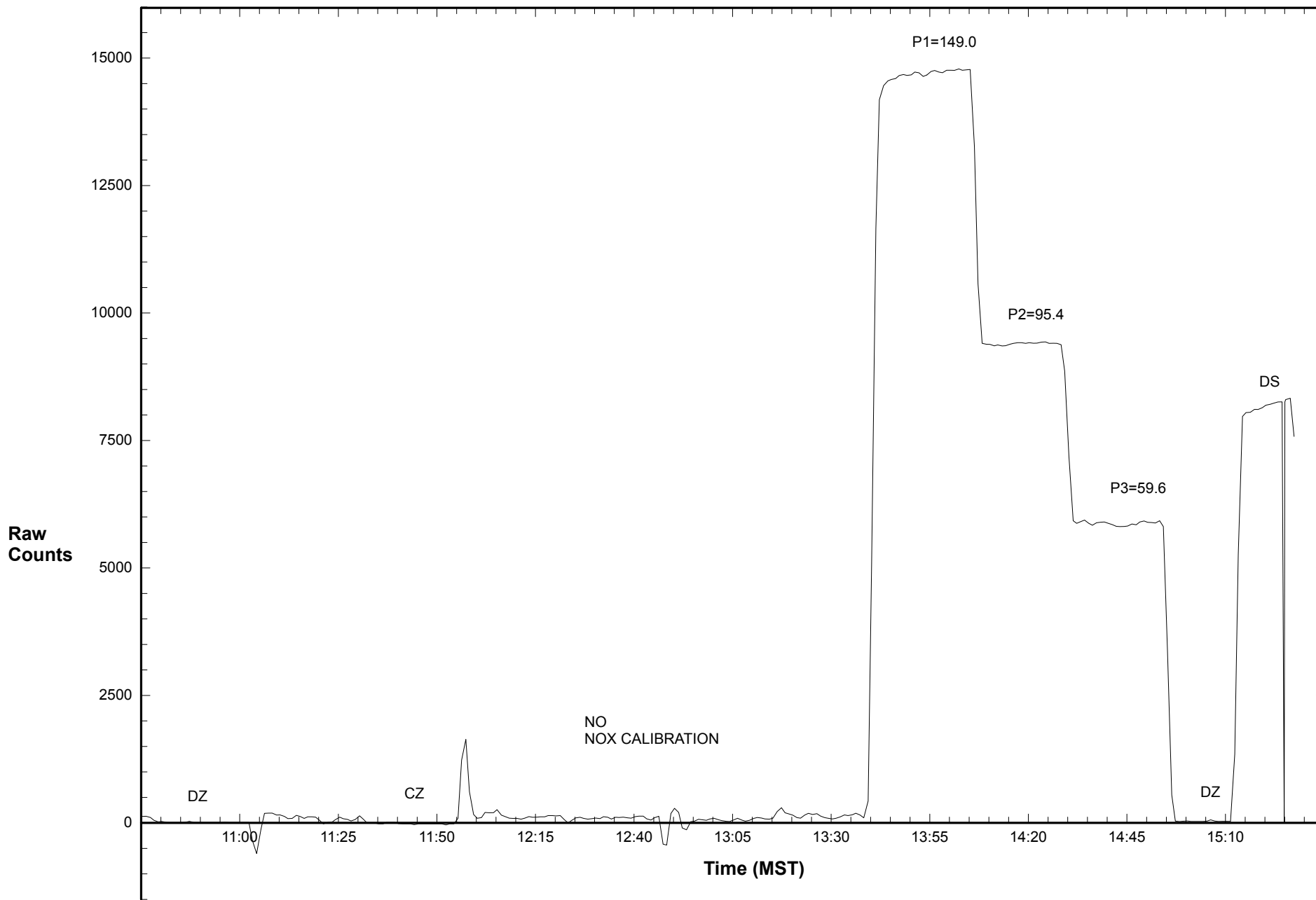




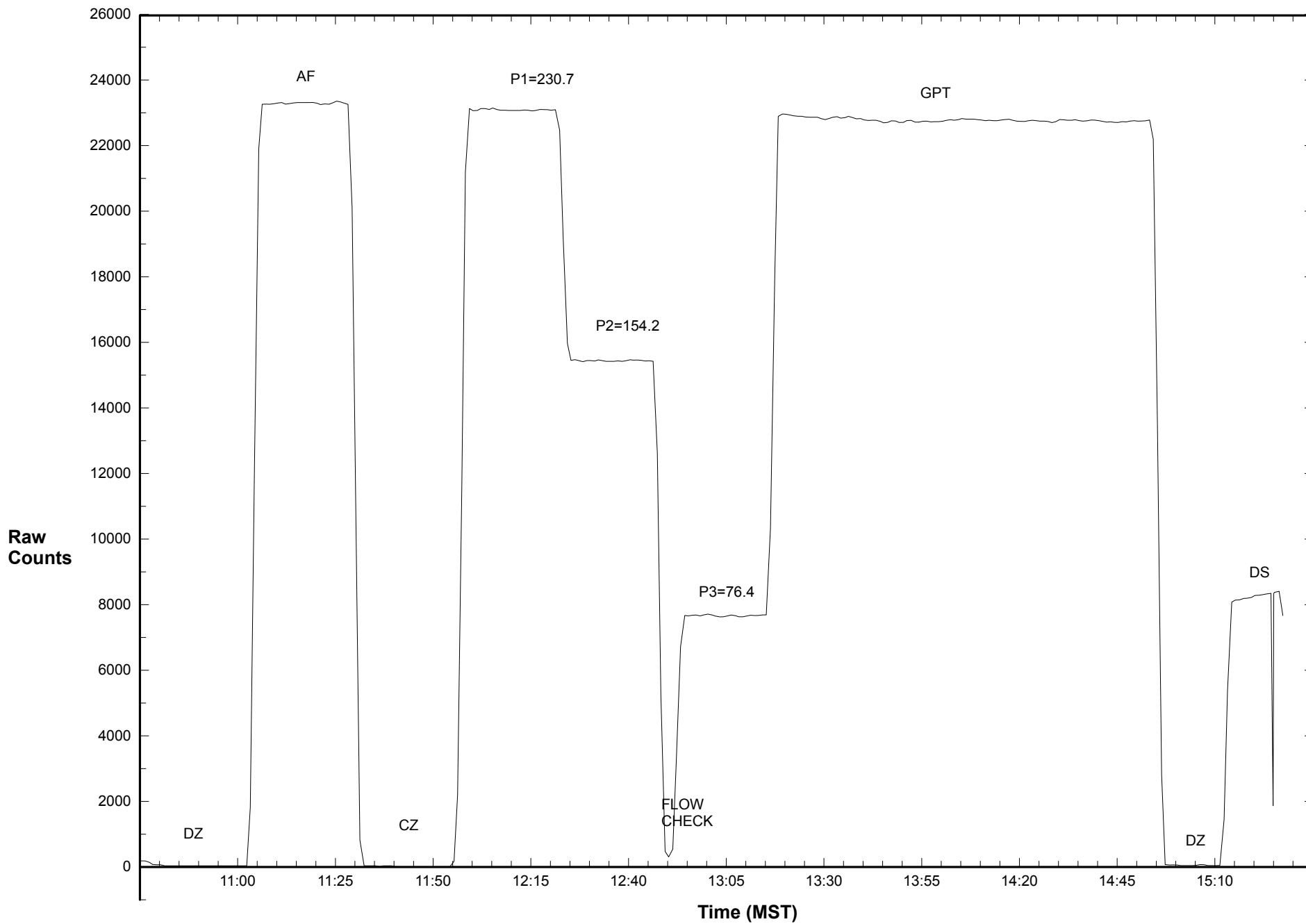
# Station 910 NO February 24, 2015: Calibration Graph



# Station 910 NO2 February 24, 2015: Calibration Graph



# Station 910 NOX February 24, 2015: Calibration Graph



# Calibration Data Summary

## West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee  
 Calibration Date: February 24, 2015  
 Parameter: O<sub>3</sub>

Instrument: Teco 49i

Serial Number: 0708721220

Previous Calibration Date: January 28, 2015

Calibration: Routine

Calibration Equipment: TECO 175 sn 175-51760-291 Barometric Pressure: 27.24" Hg

Calibration Method: Certified Ozone Generator

Temperature: 18.4° C

Technician: L. Burns

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	0.0	1.040	500 ppb
Current	-0.5	1.062	500 ppb

Final Zero: 0.5 ppb                      Final Span: 247.2 ppb                      As Found Correction Factor: 1.023

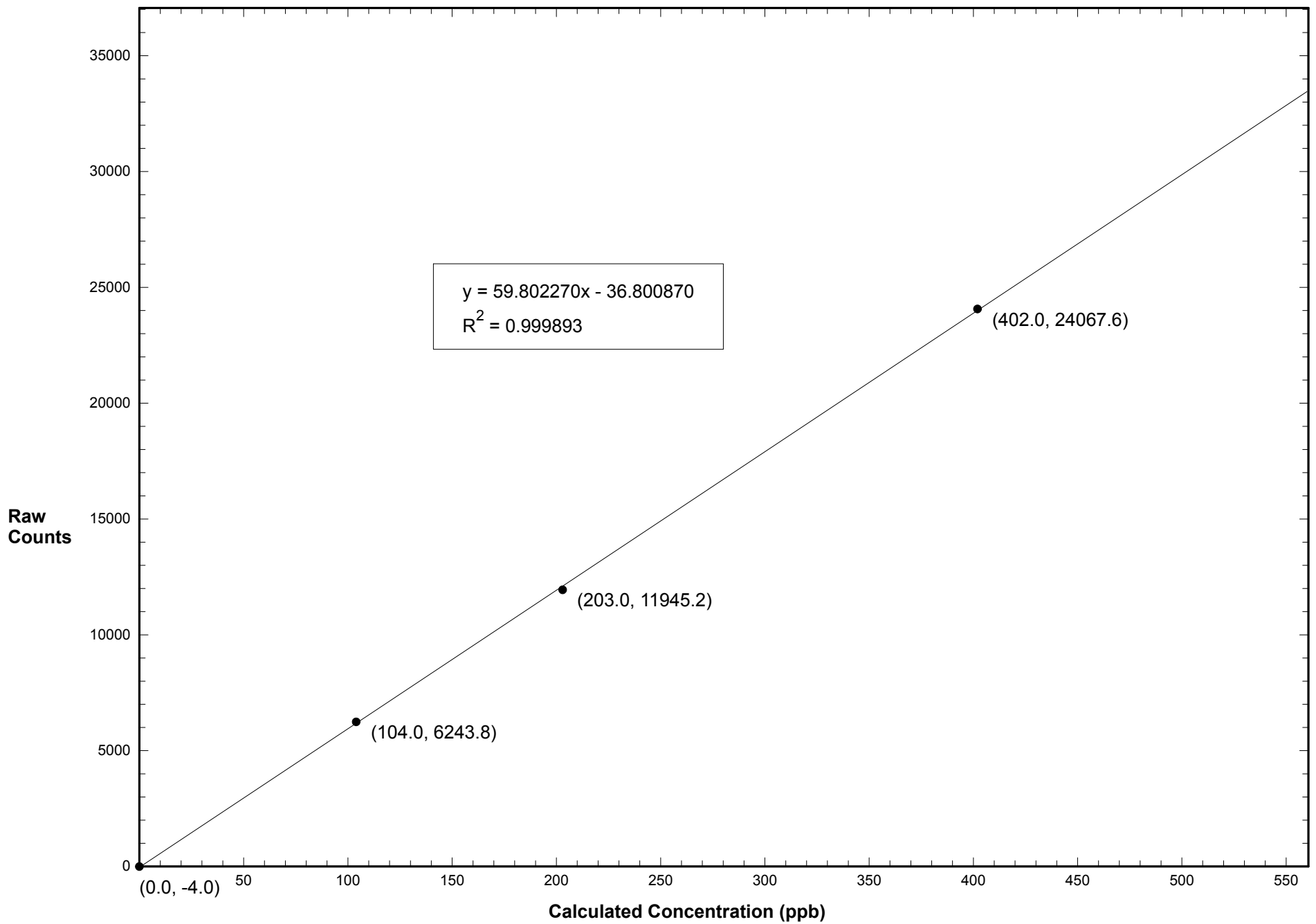
Calibration System Flow Rate (LPM)	Calculated Concentration C <sub>c</sub> (ppb)	Raw Count Output R <sub>c</sub>	Indicated Concentration C <sub>i</sub> (ppb)	Correction Factor C <sub>c</sub> /C <sub>i</sub>
3.000	402.0	24067.6	403.1	0.997
3.000	203.0	11945.2	200.4	1.013
3.000	104.0	6243.8	105.0	0.990
3.000	0.0	-4.0	0.5	

Results of Linear Regression			
R <sub>c</sub> vs C <sub>c</sub>	Slope	Intercept	R <sup>2</sup>
Previous	59.875640	-222.547200	0.999427
Current	59.802270	-36.800870	0.999893
C <sub>i</sub> vs C <sub>c</sub>			
Current	1.000000	-0.000043	0.999893

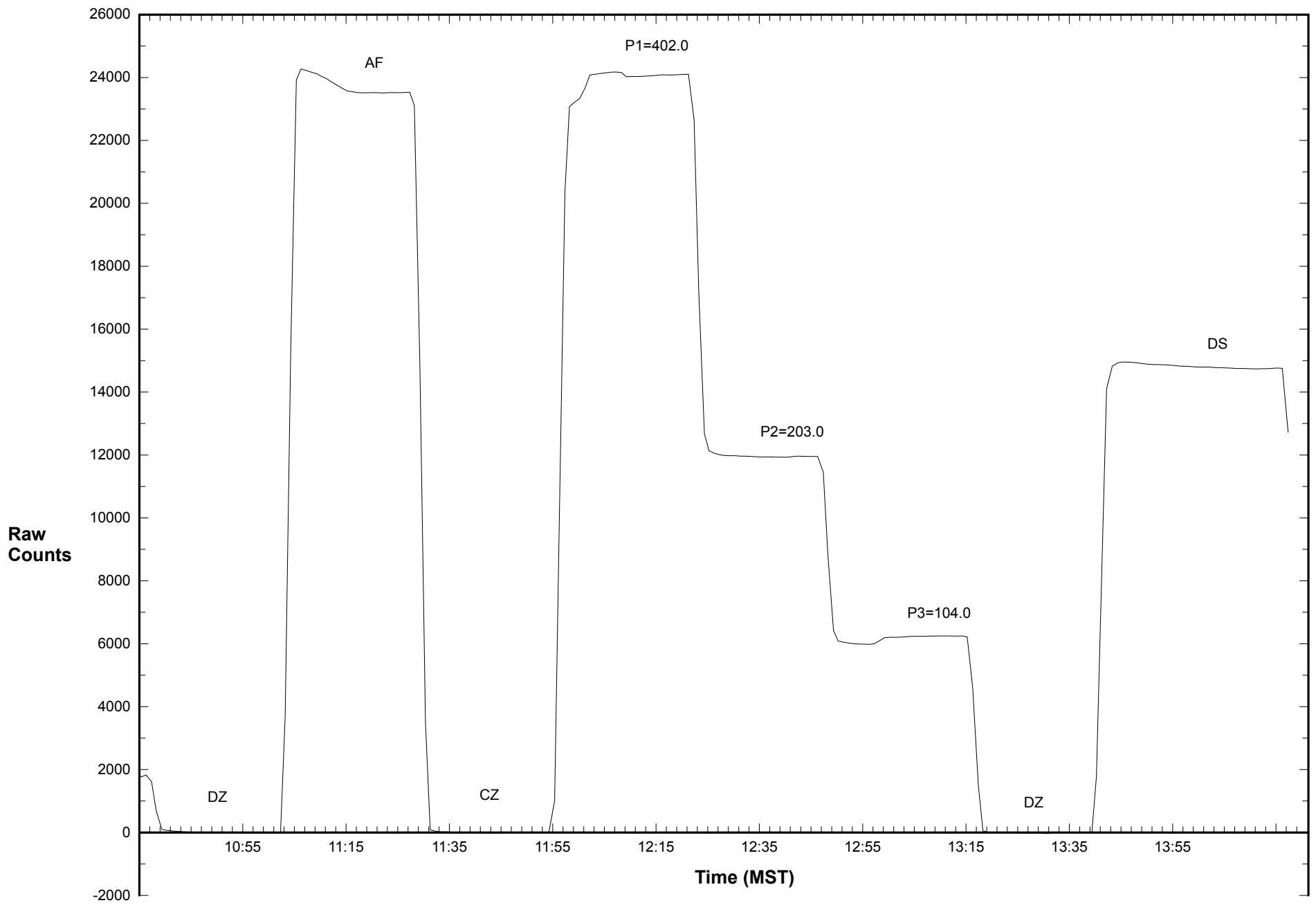
Average Correction Factor: 1.000  
 Previous Correction Factor: 0.993  
 Current Correction Factor: 0.997  
 Percent Change of Correction Factor: 0.4

Comments:

# Station 910 O3 February 24, 2015: Linear Regression



# Station 910 O3 February 24, 2015: Calibration Graph



# Calibration Data Summary

## West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee  
 Calibration Date: February 24, 2015  
 Parameter: SO<sub>2</sub>

Instrument: Teco 43i	Serial Number: 0708721218	Previous Calibration Date: January 28, 2015
Calibration: Routine	Calibration Equipment: Sabio 2010 SN 08600312	Barometric Pressure: 27.24" Hg
Calibration Method: Standard Gas Dilution	Cylinder ID: FF14354	Temperature: 18.4° C
Cylinder Concentration: 6.34 ppm SO <sub>2</sub>	In Service: January 14, 2015	Technician: L. Burns

Instrument Settings	SO <sub>2</sub> bkg ppb	SO <sub>2</sub> Coefficient	Monitoring Range
Previous	13.6	0.877	200 ppb
Current	13.8	0.877	200 ppb

Final Zero: -0.4 ppb                      Final Span: 45.7 ppb                      As Found Correction Factor: 1.006

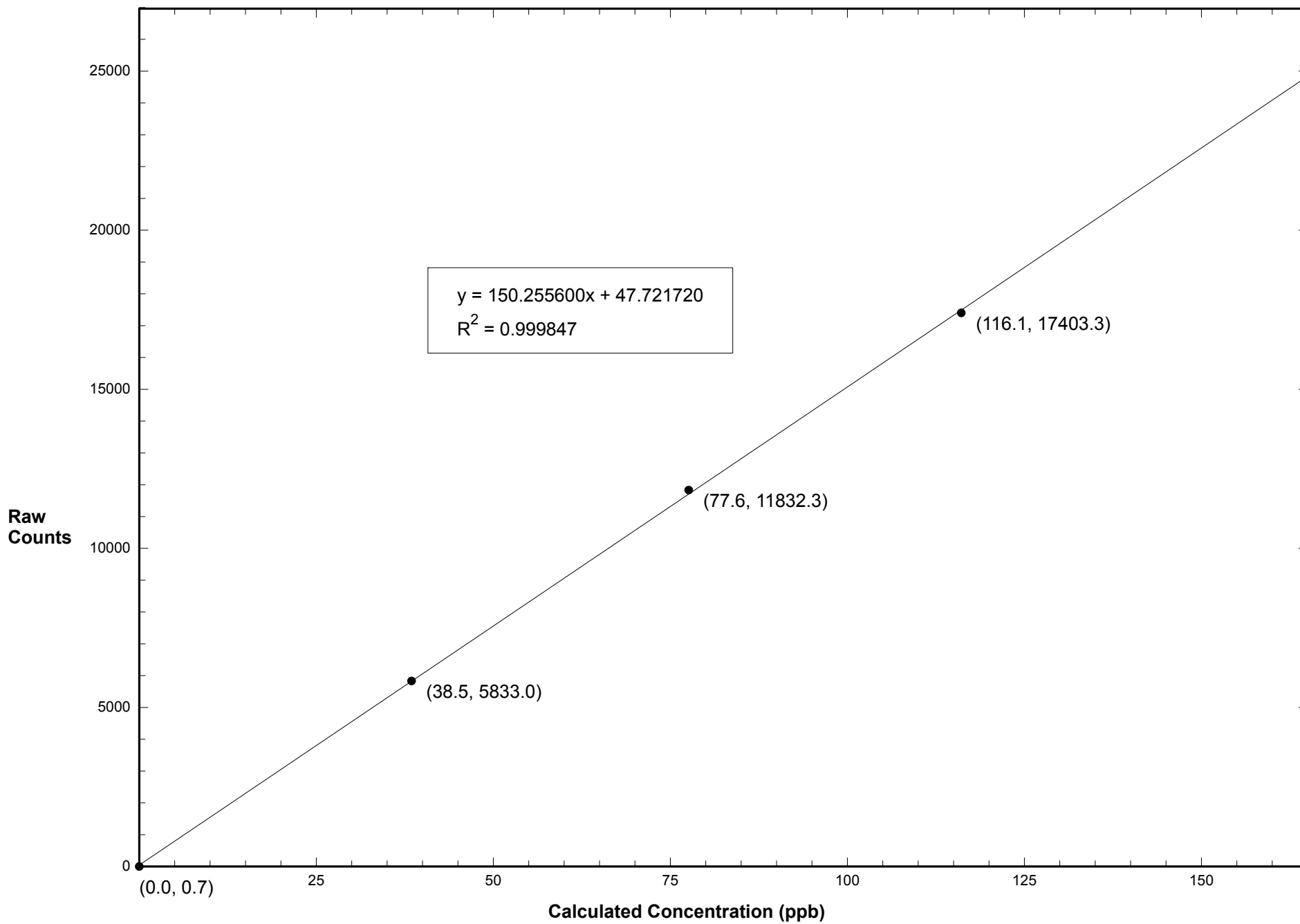
SO <sub>2</sub> Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C <sub>c</sub> (ppb)	Raw Count Output R <sub>c</sub>	Indicated Concentration C <sub>i</sub> (ppb)	Correction Factor C <sub>c</sub> /C <sub>i</sub>
0.0743	3.983	116.1	17403.3	115.5	1.005
0.0493	3.976	77.6	11832.3	78.4	0.989
0.0243	3.974	38.5	5833.0	38.5	0.999
0.0000	4.000	0.0	0.7	-0.3	

Results of Linear Regression			
R <sub>c</sub> vs C <sub>c</sub>	Slope	Intercept	R <sup>2</sup>
Previous	150.481400	50.954690	0.999941
Current	150.255600	47.721720	0.999847
C <sub>i</sub> vs C <sub>c</sub>			
Current	1.000000	-0.000004	0.999847

Average Correction Factor: 0.998  
 Previous Correction Factor: 1.003  
 Current Correction Factor: 1.005  
 Percent Change of Correction Factor: 0.2

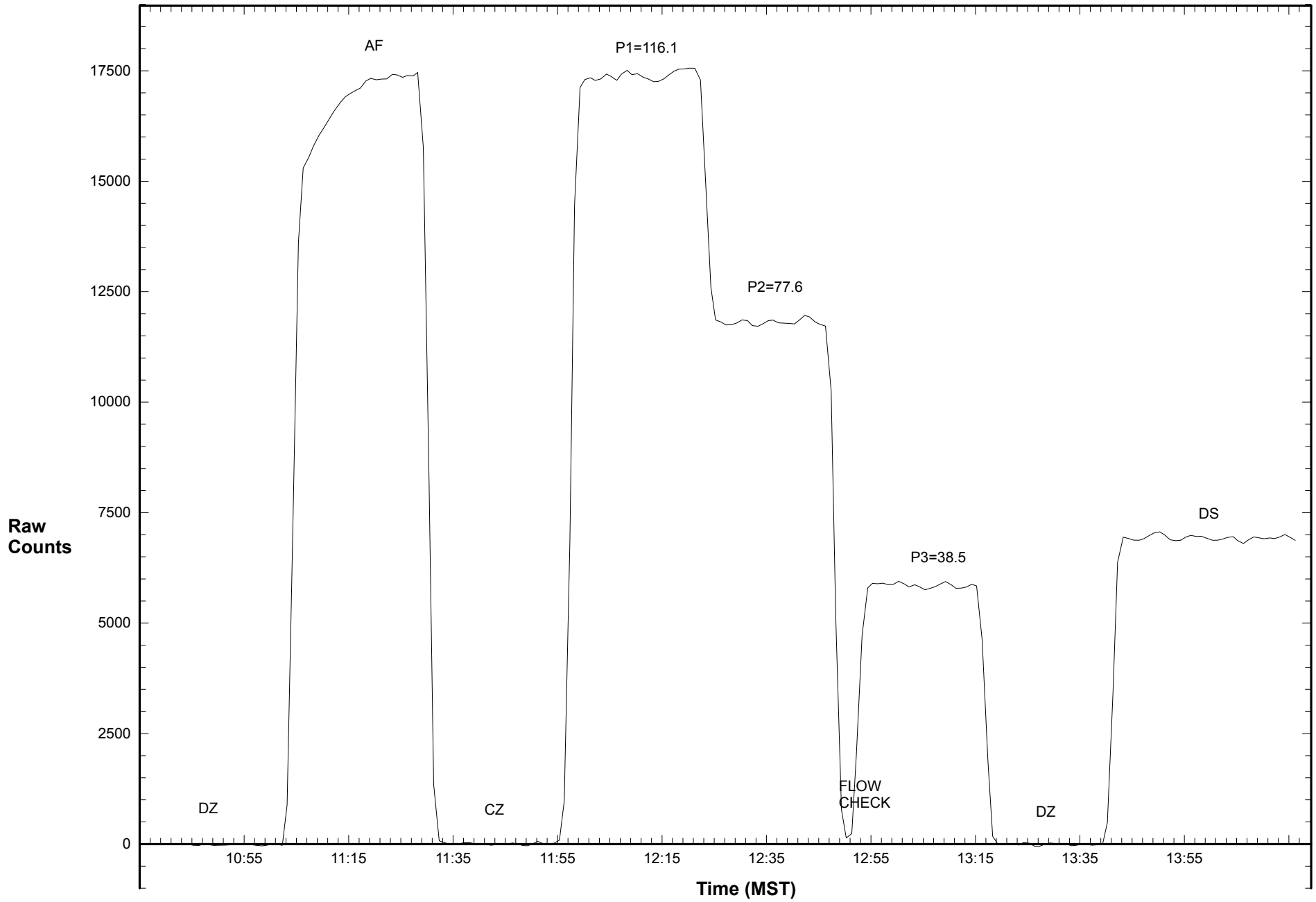
Comments:

# Station 910 SO2 February 24, 2015: Linear Regression





# Station 910 SO2 February 24, 2015: Calibration Graph



**WEST CENTRAL AIRSHED SOCIETY**

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

**AMS 910  
GENESEE  
FEBRUARY 2015**

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

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



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

**External Temperature (ET) - C**  
**February 2015**

Maximum Value: 9.44 C on Feb 23 17:00 Minimum Value: -21.1 C on Feb 9 07:00 Maximum Diurnal Average: -5.16 C at hour 16 Monthly Average: -7.763 C		Maximum Daily Average: 5.33 C on Feb 23 Minimum Daily Average: -17.39 C on Feb 9 Minimum Diurnal Average: -9.42 C at hour 5 Percentiles: P <sub>1</sub> = -20.3 P <sub>10</sub> = -17.1 Q <sub>1</sub> = -14.4 Median = -9.7 Q <sub>3</sub> = -0.2 P <sub>90</sub> = 3.6 P <sub>99</sub> = 6.8		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	-18.3	-18.4	-18.2	-18.8	-19.8	-20.2	-19.8	-19.0	-19.6	-20.0	-17.7	-16.8	-14.9	-14.0	-13.4	-13.0	-13.0	-13.4	-13.0	-13.7	-14.2	-13.7	-13.8	-14.2	-16.29	-12.95
2-Feb	-14.3	-14.3	-14.5	-15.2	-16.1	-16.4	-16.3	-16.3	-16.0	-15.8	-15.3	-14.7	-14.4	-14.3	-14.1	-14.2	-14.3	-14.4	-14.1	-14.0	-14.2	-14.4	-14.4	-14.5	-14.86	-14.03
3-Feb	-14.7	-14.9	-14.9	-14.9	-16.0	-16.1	-17.2	-20.0	-19.4	-18.5	-18.1	-17.2	-15.4	-14.9	-13.2	-13.0	-14.1	-14.4	-14.4	-17.6	-18.3	-18.8	-19.3	-20.0	-16.47	-12.98
4-Feb	-20.9	-20.9	-19.7	-18.7	-18.3	-16.9	-15.2	-13.4	-11.7	-10.0	-9.1	-7.6	-4.9	-3.0	-1.2	-0.8	-0.6	-1.6	-3.4	-4.3	-4.9	-3.0	-3.1	-3.6	-9.03	-0.58
5-Feb	-3.7	-4.2	-4.8	-5.8	-7.6	-8.9	-10.1	-11.2	-12.4	-12.9	-12.9	-13.0	-13.6	-14.2	-14.4	-14.7	-15.4	-15.8	-16.1	-16.3	-16.5	-16.5	-16.7	-16.8	-12.27	-3.66
6-Feb	-16.9	-17.2	-17.3	-17.6	-17.5	-17.4	-17.2	-17.1	-17.1	-17.0	-16.8	-16.3	-15.9	-15.5	-15.7	-15.9	-16.2	-16.7	-17.0	-17.3	-17.4	-17.4	-17.4	-17.1	-16.87	-15.50
7-Feb	-17.0	-16.7	-16.7	-16.9	-17.3	-17.1	-17.1	-16.8	-16.5	-16.3	-15.8	-15.0	-14.8	-14.0	-14.4	-13.9	-14.3	-15.2	-16.2	-16.2	-15.6	-15.2	-15.6	-17.0	-15.89	-13.87
8-Feb	-17.3	-16.4	-16.1	-16.8	-16.5	-17.6	-17.6	-17.3	-16.2	-15.8	-14.9	-14.3	-13.8	-13.2	-13.0	-12.8	-12.8	-13.3	-13.6	-13.7	-14.0	-14.8	-15.7	-17.0	-15.18	-12.78
9-Feb	-17.9	-19.0	-19.7	-20.2	-20.5	-20.6	-21.1	-20.8	-20.4	-19.6	-18.7	-17.4	-16.7	-15.7	-15.2	-14.7	-14.7	-14.7	-14.5	-14.4	-14.3	-14.3	-15.4	-16.7	-17.39	-14.25
10-Feb	-15.9	-15.1	-14.8	-14.1	-13.9	-13.5	-12.8	-12.4	-12.1	-11.8	-11.4	-11.3	-10.7	-10.5	-9.8	-9.2	-10.8	-11.5	-11.5	-11.3	-11.8	-12.0	-12.3	-12.5	-12.20	-9.18
11-Feb	-12.7	-13.0	-13.2	-13.0	-13.0	-13.0	-13.0	-13.1	-13.5	-13.7	-13.4	-12.6	-11.9	-10.8	-10.0	-9.5	-9.5	-10.2	-10.2	-9.8	-9.4	-9.0	-8.7	-8.6	-11.45	-8.64
12-Feb	-8.3	-7.8	-7.0	-6.4	-6.9	-6.4	-5.3	-4.7	-3.7	-2.8	-1.0	1.0	2.1	3.5	3.5	5.1	5.4	5.0	4.6	4.5	4.8	3.6	4.1	2.6	-0.45	5.36
13-Feb	3.0	2.7	3.3	2.9	3.3	2.8	2.1	2.9	2.2	1.7	2.9	3.4	4.7	4.6	3.7	3.5	2.8	1.2	-0.7	-2.3	-3.4	-3.8	-4.5	-4.8	1.42	4.68
14-Feb	-4.5	-4.5	-4.9	-5.8	-6.3	-6.5	-6.4	-6.7	-8.5	-8.6	-7.4	-6.6	-4.3	1.1	4.8	4.8	4.1	2.4	2.3	1.8	3.8	2.9	2.6	3.5	-1.96	4.81
15-Feb	3.6	3.7	2.9	3.0	2.9	2.8	2.7	2.8	1.7	1.8	2.2	2.8	2.9	2.9	2.6	2.8	3.0	2.3	2.4	2.0	1.4	0.8	0.0	-0.1	2.34	3.72
16-Feb	-0.2	0.0	-0.2	0.3	0.2	0.2	-1.1	-1.0	-0.5	-0.5	-1.8	-5.2	-6.9	-7.4	-7.5	-7.7	-7.7	-7.9	-8.3	-8.5	-8.5	-8.3	-8.3	-8.1	-4.36	0.26
17-Feb	-8.1	-8.4	-8.7	-9.3	-10.2	-11.5	-11.7	-10.7	-10.6	-10.1	-10.3	-8.5	-6.4	-5.2	-5.8	-5.5	-5.1	-5.1	-5.3	-4.6	-4.6	-4.6	-4.5	-4.5	-7.47	-4.48
18-Feb	-4.4	-4.5	-4.5	-5.6	-5.2	-4.7	-4.4	-4.1	-2.7	0.0	1.7	2.6	4.0	4.2	4.7	4.0	3.4	3.6	2.9	2.7	2.4	2.1	2.4	1.5	0.09	4.70
19-Feb	1.3	1.8	2.9	3.2	3.1	3.8	5.1	4.8	5.2	5.5	5.7	6.5	6.5	6.5	6.6	7.0	6.5	6.0	5.1	3.6	2.9	2.9	3.5	3.6	4.57	6.96
20-Feb	3.7	3.5	3.1	2.6	2.4	0.8	0.3	-0.3	-1.5	-2.0	-2.4	-2.9	-3.4	-3.5	-3.3	-2.9	-3.4	-4.2	-4.3	-5.6	-5.1	-4.1	-3.7	-3.0	-1.64	3.69
21-Feb	-2.7	-4.9	-7.1	-8.3	-9.4	-9.3	-10.3	-11.7	-12.4	-12.0	-12.4	-12.1	-11.4	-10.7	-10.2	-9.4	-9.5	-10.5	-12.1	-13.2	-13.9	-15.1	-15.9	-16.0	-10.85	-2.69
22-Feb	-14.6	-14.1	-13.9	-13.3	-12.6	-11.7	-13.0	-11.6	-13.7	-11.3	-7.9	-5.1	-3.1	-1.2	0.0	0.7	1.2	0.5	-0.4	-1.5	-1.9	-0.3	0.6	-0.3	-6.19	1.15
23-Feb	2.4	2.9	3.1	3.4	3.9	4.1	4.2	3.9	3.4	4.2	5.4	6.2	6.8	7.8	8.5	9.1	9.4	9.1	6.2	5.8	5.7	5.0	3.7	3.8	5.33	9.44
24-Feb	3.4	3.0	3.1	2.1	2.7	4.5	5.8	5.8	5.5	5.2	6.7	6.3	5.2	4.8	4.6	4.1	3.8	3.4	2.9	2.7	2.4	-0.7	-3.9	-6.3	3.21	6.66
25-Feb	-8.2	-9.2	-10.2	-10.7	-11.4	-12.3	-12.8	-13.2	-13.2	-12.6	-12.3	-11.6	-11.0	-10.6	-10.7	-10.9	-11.1	-11.8	-13.3	-14.4	-15.2	-16.1	-16.6	-17.2	-12.35	-8.16
26-Feb	-17.7	-17.7	-18.2	-19.2	-19.4	-20.0	-20.0	-19.5	-17.7	-14.5	-12.7	-11.1	-9.3	-8.0	-7.4	-7.0	-7.3	-7.7	-8.9	-11.1	-11.2	-12.3	-12.1	-11.5	-13.40	-7.03
27-Feb	-11.2	-10.8	-10.5	-10.8	-10.7	-10.6	-11.2	-10.9	-10.9	-10.5	-10.1	-9.6	-9.3	-8.7	-8.6	-8.4	-8.2	-8.6	-10.2	-10.7	-11.0	-10.3	-11.0	-11.2	-10.16	-8.20
28-Feb	-12.3	-14.6	-14.7	-14.2	-13.8	-11.4	-10.4	-10.7	-11.0	-9.6	-8.5	-6.6	-4.2	-2.6	-1.9	-2.0	-1.4	-2.3	-3.5	-3.9	-4.2	-4.8	-6.9	-7.6	-7.63	-1.35
																								Diurnal Average		
																								Diurnal Maximum		



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

**External Temperature 10 m (ET\_10) - C**  
**February 2015**

<b>Maximum Value: 9.88 C on Feb 23 17:00</b> <b>Maximum Daily Average: 6.11 C on Feb 23</b>																								<b>Hours in Service: 672</b>		
<b>Minimum Value: -21.2 C on Feb 9 08:00</b> <b>Minimum Daily Average: -17.87 C on Feb 9</b>																								<b>Hours of Data: 672</b>		
<b>Maximum Diurnal Average: -5.59 C at hour 16</b> <b>Minimum Diurnal Average: -9.59 C at hour 9</b>																								<b>Hours of Missing Data: 0</b>		
<b>Monthly Average: -7.875 C</b> <b>Percentiles: P<sub>1</sub> = -20.5 P<sub>10</sub> = -17.4 Q<sub>1</sub> = -14.9 Median = -10.2 Q<sub>3</sub> = 0.0 P<sub>90</sub> = 4.3 P<sub>99</sub> = 8.2</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-Feb	-17.2	-17.3	-17.3	-17.8	-18.7	-18.4	-18.0	-18.8	-20.4	-20.9	-17.7	-17.4	-16.0	-14.8	-14.3	-13.6	-13.7	-13.9	-13.7	-13.7	-14.1	-14.2	-14.5	-14.8	-16.29	-13.63
2-Feb	-14.9	-14.9	-15.2	-15.5	-16.4	-16.9	-16.9	-16.9	-16.8	-16.6	-16.1	-15.6	-15.2	-15.0	-14.9	-14.9	-15.0	-14.9	-14.9	-15.0	-14.8	-14.9	-14.9	-15.0	-15.50	-14.82
3-Feb	-15.1	-15.3	-15.4	-15.4	-15.8	-16.0	-16.5	-17.4	-17.6	-17.7	-17.7	-17.1	-15.9	-15.1	-13.5	-13.0	-13.2	-13.2	-13.4	-15.9	-17.0	-17.8	-18.2	-19.1	-15.93	-13.04
4-Feb	-19.6	-19.2	-17.2	-16.2	-15.9	-14.5	-13.5	-13.2	-12.1	-10.3	-9.5	-7.6	-4.6	-2.8	-1.3	-0.9	-1.0	-0.9	-1.2	-2.2	-3.0	-2.6	-3.3	-3.6	-8.19	-0.90
5-Feb	-3.8	-3.9	-4.3	-6.1	-8.0	-9.3	-10.6	-11.8	-13.0	-13.5	-13.6	-13.9	-14.6	-15.0	-15.2	-15.4	-16.0	-16.4	-16.7	-16.9	-17.2	-17.2	-17.3	-17.5	-12.81	-3.82
6-Feb	-17.6	-17.9	-18.1	-18.3	-18.3	-18.1	-17.9	-17.7	-17.7	-17.6	-17.5	-17.2	-17.0	-16.7	-16.7	-16.9	-17.1	-17.4	-17.7	-18.0	-18.1	-18.2	-18.2	-18.1	-17.68	-16.73
7-Feb	-17.9	-17.8	-17.6	-17.6	-17.9	-17.9	-17.9	-17.7	-17.5	-17.3	-16.9	-16.4	-16.1	-15.6	-15.6	-14.9	-15.0	-15.6	-16.2	-16.5	-16.2	-15.9	-15.9	-16.2	-16.66	-14.91
8-Feb	-16.1	-16.1	-16.4	-16.7	-16.4	-16.6	-16.5	-16.7	-17.2	-17.1	-16.3	-15.8	-15.2	-14.7	-14.3	-14.0	-14.1	-14.3	-14.5	-14.5	-14.8	-15.5	-16.3	-17.3	-15.72	-13.96
9-Feb	-17.9	-18.8	-19.7	-20.2	-20.6	-20.6	-20.9	-21.2	-21.0	-20.4	-19.7	-18.7	-17.8	-17.0	-16.4	-15.9	-15.7	-15.4	-15.2	-15.0	-14.9	-14.9	-15.3	-15.7	-17.87	-14.90
10-Feb	-15.7	-15.5	-15.3	-14.7	-14.5	-14.1	-13.3	-13.0	-12.7	-12.4	-12.1	-11.8	-11.4	-11.2	-10.7	-10.3	-11.5	-12.1	-12.1	-12.0	-12.4	-12.6	-12.9	-13.1	-12.81	-10.29
11-Feb	-13.3	-13.6	-13.8	-13.7	-13.7	-13.8	-13.8	-13.8	-14.3	-14.6	-14.4	-13.7	-13.0	-11.9	-10.9	-10.3	-10.2	-10.5	-10.6	-10.3	-9.9	-9.4	-9.4	-9.4	-12.18	-9.39
12-Feb	-9.1	-8.6	-7.5	-6.8	-6.9	-6.8	-5.5	-4.8	-4.0	-3.2	-1.5	0.2	1.8	3.4	4.3	5.7	6.4	6.3	6.1	5.8	6.3	4.8	5.3	3.8	-0.18	6.43
13-Feb	4.0	4.9	4.7	3.6	4.7	3.8	3.0	3.6	2.5	1.8	2.6	3.4	4.3	4.3	3.2	3.1	2.4	0.6	-1.4	-3.2	-4.3	-4.6	-5.4	-5.6	1.50	4.90
14-Feb	-5.1	-5.2	-5.7	-6.5	-7.0	-7.1	-7.2	-7.2	-7.8	-8.0	-7.8	-7.1	-3.5	1.9	4.8	5.7	5.3	4.6	4.4	3.6	4.5	3.8	3.7	3.6	-1.65	5.68
15-Feb	3.6	3.7	3.3	3.1	2.9	2.7	2.7	2.8	1.9	1.7	2.1	2.7	2.9	2.9	2.8	2.7	3.0	2.7	2.7	2.4	1.8	1.1	0.2	-0.3	2.42	3.73
16-Feb	-0.4	0.0	-0.2	0.1	0.1	0.1	-0.7	-0.8	-0.6	-0.8	-2.2	-5.9	-7.6	-8.1	-8.3	-8.4	-8.4	-8.7	-8.9	-9.2	-9.3	-9.2	-9.0	-9.0	-4.81	0.12
17-Feb	-8.9	-8.9	-9.0	-9.3	-9.7	-10.6	-11.4	-11.4	-11.4	-11.2	-11.2	-9.9	-7.8	-6.7	-6.7	-6.4	-5.8	-5.7	-5.9	-5.2	-5.2	-5.1	-5.0	-5.0	-8.06	-5.03
18-Feb	-5.0	-5.0	-4.8	-5.3	-5.1	-4.7	-4.4	-4.0	-2.6	0.1	1.5	2.6	4.0	4.0	4.8	4.7	4.8	4.3	4.0	3.4	3.2	2.9	3.6	2.5	0.39	4.77
19-Feb	2.1	2.1	3.5	3.2	3.6	4.8	5.7	5.5	5.5	5.6	5.7	6.8	6.9	6.9	7.1	7.4	7.1	6.3	5.3	4.2	3.6	3.5	3.4	3.5	4.97	7.40
20-Feb	3.6	3.3	2.9	2.3	2.1	0.4	-0.2	-0.8	-2.0	-2.5	-3.0	-3.6	-4.2	-4.3	-4.0	-3.6	-3.8	-4.0	-4.1	-4.9	-4.5	-4.0	-3.9	-3.3	-1.92	3.56
21-Feb	-3.0	-5.4	-7.6	-8.8	-9.6	-9.5	-10.2	-12.0	-12.8	-12.5	-12.9	-12.5	-12.0	-11.4	-10.7	-10.5	-10.3	-10.2	-11.4	-12.7	-13.5	-14.1	-15.2	-14.5	-10.97	-3.04
22-Feb	-13.6	-13.0	-12.7	-11.6	-11.1	-10.7	-11.4	-10.1	-11.5	-10.1	-8.5	-6.0	-4.2	-2.1	0.1	1.2	2.1	3.0	2.7	0.8	-0.3	0.3	1.0	1.4	-5.18	3.03
23-Feb	3.4	3.5	3.3	3.5	4.1	4.2	4.3	4.0	3.7	4.2	5.4	6.4	7.1	8.3	9.0	9.8	9.9	9.9	8.5	7.8	7.6	8.2	5.3	5.3	6.11	9.88
24-Feb	4.6	4.3	4.5	4.4	4.6	6.2	6.7	6.4	5.7	5.4	6.9	6.6	5.3	4.8	4.6	4.1	3.7	3.2	2.9	2.5	2.2	-1.2	-4.6	-7.0	3.62	6.86
25-Feb	-8.8	-9.8	-10.8	-11.3	-12.0	-12.9	-13.4	-13.9	-13.9	-13.8	-13.5	-13.1	-12.7	-12.5	-12.2	-12.1	-12.4	-13.2	-14.0	-14.8	-15.6	-16.4	-17.1	-17.7	-13.25	-8.79
26-Feb	-18.1	-18.0	-18.6	-19.2	-19.1	-19.6	-19.6	-19.3	-18.1	-15.4	-14.0	-12.5	-10.7	-9.5	-8.9	-8.3	-8.3	-8.4	-8.9	-10.2	-10.8	-11.4	-11.7	-12.0	-13.77	-8.25
27-Feb	-11.7	-11.3	-11.1	-11.4	-11.3	-11.1	-11.5	-11.4	-11.4	-11.1	-10.8	-10.4	-10.0	-9.6	-9.4	-9.1	-8.8	-8.9	-9.5	-9.7	-9.9	-9.9	-10.8	-11.0	-10.46	-8.79
28-Feb	-11.9	-14.8	-14.7	-12.5	-12.1	-11.3	-10.9	-11.1	-11.4	-10.2	-9.1	-7.3	-4.8	-3.2	-2.6	-2.4	-1.9	-2.6	-3.3	-3.7	-4.0	-4.6	-5.7	-6.1	-7.60	-1.91
																								Diurnal Average		
																								Diurnal Maximum		



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

**Delta Temperature (ET\_D) - C**  
**February 2015**

<b>Maximum Value: 3.19 C on Feb 23 22:00</b>		<b>Maximum Daily Average: 1.00 C on Feb 22</b>		<b>Hours in Service: 672</b>																							
<b>Minimum Value: -1.9 C on Feb 25 14:00</b>		<b>Minimum Daily Average: -0.88 C on Feb 25</b>		<b>Hours of Data: 672</b>																							
<b>Maximum Diurnal Average: 0.28 C at hour 20</b>		<b>Minimum Diurnal Average: -0.64 C at hour 14</b>		<b>Hours of Missing Data: 0</b>																							
<b>Monthly Average: -0.107 C</b>		<b>Percentiles: P<sub>1</sub> = -1.4 P<sub>10</sub> = -0.9 Q<sub>1</sub> = -0.7 Median = -0.4 Q<sub>3</sub> = 0.3 P<sub>90</sub> = 1.1 P<sub>99</sub> = 2.3</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-Feb	1.1	1.1	0.9	1.0	1.1	1.8	1.9	0.2	-0.8	-0.8	0.0	-0.5	-1.1	-0.8	-0.8	-0.7	-0.6	-0.5	-0.7	0.0	0.1	-0.5	-0.6	-0.6	0.00	1.86	
2-Feb	-0.6	-0.6	-0.6	-0.3	-0.3	-0.4	-0.6	-0.7	-0.8	-0.8	-0.8	-0.8	-0.8	-0.7	-0.7	-0.7	-0.6	-0.6	-0.8	-1.0	-0.6	-0.4	-0.5	-0.4	-0.63	-0.27	
3-Feb	-0.4	-0.4	-0.5	-0.5	0.1	0.1	0.7	2.6	1.8	0.8	0.4	0.1	-0.5	-0.2	-0.3	-0.1	0.9	1.2	0.9	1.8	1.3	1.0	1.0	0.9	0.53	2.64	
4-Feb	1.3	1.6	2.5	2.4	2.4	2.3	1.7	0.2	-0.3	-0.3	-0.4	0.0	0.3	0.1	-0.1	-0.1	-0.4	0.7	2.2	2.1	1.8	0.4	-0.3	0.0	0.84	2.51	
5-Feb	-0.1	0.3	0.4	-0.4	-0.4	-0.4	-0.5	-0.5	-0.6	-0.6	-0.7	-1.0	-0.9	-0.8	-0.7	-0.7	-0.6	-0.6	-0.6	-0.6	-0.6	-0.7	-0.6	-0.7	-0.52	0.41	
6-Feb	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.7	-0.6	-0.6	-0.7	-0.9	-1.0	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.8	-0.8	-0.8	-0.8	-0.9	-0.80	-0.62	
7-Feb	-0.9	-1.1	-0.9	-0.8	-0.7	-0.8	-0.7	-0.9	-1.0	-1.0	-1.0	-1.3	-1.3	-1.5	-1.2	-1.0	-0.7	-0.4	0.1	-0.3	-0.6	-0.6	-0.3	0.8	-0.76	0.83	
8-Feb	1.1	0.3	-0.3	0.1	0.0	1.0	1.0	0.6	-1.0	-1.2	-1.4	-1.4	-1.3	-1.5	-1.3	-1.1	-1.3	-1.0	-0.9	-0.9	-0.7	-0.7	-0.6	-0.3	-0.54	1.13	
9-Feb	0.0	0.1	0.1	0.0	-0.1	0.0	0.1	-0.4	-0.5	-0.7	-1.0	-1.2	-1.1	-1.3	-1.1	-1.1	-0.9	-0.7	-0.7	-0.6	-0.6	-0.6	0.1	1.0	-0.47	0.99	
10-Feb	0.2	-0.4	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6	-0.5	-0.6	-0.6	-0.5	-0.7	-0.7	-0.8	-1.1	-0.7	-0.6	-0.6	-0.7	-0.6	-0.6	-0.6	-0.6	-0.59	0.17	
11-Feb	-0.6	-0.6	-0.6	-0.7	-0.7	-0.8	-0.7	-0.7	-0.7	-0.9	-1.0	-1.0	-1.1	-1.0	-0.8	-0.8	-0.7	-0.3	-0.5	-0.6	-0.5	-0.4	-0.7	-0.8	-0.71	-0.35	
12-Feb	-0.7	-0.7	-0.5	-0.3	0.0	-0.3	-0.2	-0.1	-0.4	-0.4	-0.5	-0.8	-0.3	-0.1	0.8	0.7	1.1	1.3	1.5	1.3	1.4	1.3	1.2	1.2	0.27	1.49	
13-Feb	1.1	2.2	1.4	0.7	1.4	1.1	0.8	0.7	0.3	0.0	-0.2	-0.1	-0.3	-0.3	-0.4	-0.4	-0.4	-0.6	-0.7	-0.9	-0.9	-0.8	-0.8	-0.8	0.09	2.19	
14-Feb	-0.6	-0.7	-0.8	-0.7	-0.7	-0.6	-0.8	-0.5	0.7	0.6	-0.4	-0.5	0.8	0.8	0.0	0.9	1.2	2.1	2.1	1.8	0.7	0.9	1.1	0.1	0.30	2.13	
15-Feb	0.0	0.0	0.3	0.0	0.0	-0.1	0.0	0.0	0.2	-0.1	-0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.3	0.3	0.4	0.3	0.3	0.1	-0.2	0.08	0.38	
16-Feb	-0.2	0.0	0.1	-0.1	-0.1	-0.1	0.3	0.1	-0.1	-0.3	-0.5	-0.7	-0.7	-0.7	-0.8	-0.7	-0.7	-0.8	-0.7	-0.7	-0.8	-0.9	-0.7	-0.9	-0.44	0.35	
17-Feb	-0.9	-0.5	-0.3	0.0	0.5	0.9	0.3	-0.7	-0.7	-1.1	-1.0	-1.4	-1.4	-1.5	-0.9	-0.9	-0.7	-0.6	-0.6	-0.5	-0.5	-0.5	-0.5	-0.6	-0.58	0.91	
18-Feb	-0.5	-0.5	-0.3	0.3	0.1	-0.1	0.0	0.1	0.1	0.1	-0.2	0.0	0.0	-0.1	0.1	0.7	1.3	0.6	1.0	0.7	0.7	0.7	1.1	1.0	0.29	1.34	
19-Feb	0.8	0.3	0.5	0.0	0.4	1.0	0.6	0.8	0.3	0.0	0.0	0.3	0.4	0.4	0.5	0.4	0.6	0.3	0.1	0.5	0.7	0.5	0.0	-0.1	0.39	1.01	
20-Feb	-0.1	-0.1	-0.2	-0.2	-0.2	-0.4	-0.5	-0.5	-0.5	-0.5	-0.6	-0.7	-0.8	-0.8	-0.7	-0.6	-0.4	0.2	0.2	0.6	0.6	0.1	-0.1	-0.3	-0.27	0.61	
21-Feb	-0.3	-0.5	-0.5	-0.5	-0.2	-0.3	0.1	-0.3	-0.3	-0.6	-0.5	-0.5	-0.5	-0.7	-0.5	-1.1	-0.8	0.3	0.6	0.5	0.4	1.0	0.8	1.5	-0.12	1.45	
22-Feb	1.0	1.1	1.2	1.7	1.4	1.0	1.5	1.5	2.2	1.1	-0.6	-0.9	-1.1	-0.8	0.0	0.5	1.0	2.5	3.0	2.3	1.6	0.6	0.4	1.7	1.00	3.05	
23-Feb	1.1	0.6	0.2	0.1	0.1	0.1	0.0	0.1	0.3	0.0	0.1	0.2	0.3	0.4	0.5	0.7	0.4	0.7	2.2	2.0	2.0	3.2	1.6	1.5	0.77	3.19	
24-Feb	1.1	1.3	1.4	2.3	1.8	1.8	0.8	0.6	0.2	0.2	0.2	0.3	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.2	-0.5	-0.6	-0.6	0.40	2.26	
25-Feb	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.8	-1.2	-1.2	-1.4	-1.7	-1.9	-1.5	-1.2	-1.3	-1.3	-0.8	-0.4	-0.4	-0.4	-0.5	-0.4	-0.88	-0.36
26-Feb	-0.3	-0.3	-0.3	-0.1	0.3	0.4	0.4	0.2	-0.4	-0.9	-1.3	-1.4	-1.3	-1.4	-1.4	-1.3	-1.0	-0.6	0.0	0.9	0.3	0.9	0.4	-0.5	-0.37	0.91	
27-Feb	-0.5	-0.5	-0.6	-0.6	-0.6	-0.5	-0.3	-0.5	-0.4	-0.6	-0.7	-0.8	-0.7	-0.8	-0.8	-0.7	-0.6	-0.3	0.6	1.0	1.0	0.4	0.2	0.1	-0.29	1.04	
28-Feb	0.5	-0.2	-0.1	1.6	1.6	0.0	-0.5	-0.4	-0.4	-0.5	-0.6	-0.7	-0.6	-0.6	-0.6	-0.4	-0.5	-0.2	0.1	0.1	0.2	0.2	1.3	1.5	0.03	1.63	
		0.04	0.01	0.02	0.11	0.19	0.18	0.13	-0.01	-0.17	-0.39	-0.55	-0.63	-0.62	-0.64	-0.52	-0.42	-0.26	0.01	0.25	0.28	0.19	0.11	0.03	0.09	Diurnal Average	
		1.29	2.19	2.51	2.44	2.36	2.33	1.86	2.64	2.17	1.13	0.38	0.29	0.79	0.78	0.76	0.86	1.34	2.50	3.05	2.29	1.98	3.19	1.62	1.68	Diurnal Maximum	



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

**Wind Speed (WS) - kph**  
**February 2015**

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	11.8	14.4	6.6	9.5	7.5	4.0	3.7	3.2	2.1	3.0	2.9	3.9	4.7	7.6	6.5	5.1	5.8	1.9	4.4	1.0	5.8	8.7	11.1	10.2	2.68	14.42
Dir	WSW	WSW	WSW	SW	SW	WSW	WNW	NW	SSW	WSW	NW	NW	W	NW	N	NNE	NE	WSW	WSW	NNE	NE	NNE	NNE	NNE	WNW	WSW
2 Spd	6.8	7.4	6.5	5.2	5.0	6.8	6.4	5.7	4.7	4.5	4.6	3.8	5.5	8.3	8.2	6.7	4.4	1.5	0.5	3.5	3.6	6.9	10.1	10.0	4.12	10.08
Dir	N	N	NNE	NE	ENE	ENE	ENE	ENE	E	ENE	ENE	ENE	NE	NNE	NNE	NNE	NNE	SSW	WSW	NW	NNW	NNW	NNW	NNE	NNW	
3 Spd	8.7	7.0	6.6	5.7	5.2	3.8	6.4	6.3	6.7	8.5	11.6	13.5	16.4	16.9	13.8	18.3	10.3	7.4	6.3	8.8	9.7	8.8	8.5	7.2	7.30	18.25
Dir	NNW	N	N	NW	NW	WNW	WSW	W	W	W	W	WSW	W	W	WNW	NW	NW	WNW	W	SSW	SW	SW	SW	SSW	W	NW
4 Spd	7.0	8.1	11.0	10.5	7.1	11.2	15.4	17.3	20.1	18.7	12.1	11.7	8.4	16.0	11.8	11.8	7.7	5.1	3.6	4.8	9.0	11.8	10.9	6.7	8.32	20.14
Dir	S	SSE	SSE	SSE	SSW	W	WSW	WSW	WSW	WSW	W	W	WSW	WSW	W	WNW	W	WSW	W	WSW	W	NW	NW	WNW	WSW	WSW
5 Spd	6.2	3.9	7.7	18.1	20.8	18.0	16.3	13.4	13.7	15.1	17.9	17.5	19.7	18.6	20.2	20.9	20.5	20.7	17.8	16.5	14.9	12.9	12.1	14.2	14.46	20.90
Dir	NNW	N	N	NE	NE	NE	NE	NE	NE	ENE	ENE	E	E	E	E	ENE	ENE	ENE	ENE	E	E	E	E	E	ENE	ENE
6 Spd	13.8	18.2	16.5	16.9	17.2	16.4	14.6	15.4	16.0	17.3	17.6	16.5	17.4	16.5	15.8	16.7	14.2	13.5	12.7	11.6	9.6	9.5	11.2	11.9	14.80	18.18
Dir	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	ESE	E	E	ESE	E	E	E	ESE	E	E
7 Spd	10.5	9.9	10.2	10.5	10.3	11.0	11.1	11.1	12.7	11.6	13.5	12.3	10.5	13.1	15.4	11.0	9.6	8.9	7.8	7.8	6.5	6.3	4.3	5.7	9.04	15.38
Dir	E	ESE	ESE	ESE	ESE	ESE	E	E	ESE	ESE	SE	ESE	ESE	ESE	ESE	ESE	E	ENE	NE	NE	NE	NE	N	E	E	ESE
8 Spd	6.8	8.3	9.4	10.4	9.7	9.3	8.2	3.3	1.8	3.9	2.5	5.1	5.3	7.5	7.2	6.8	8.6	8.6	8.3	9.4	8.0	10.3	11.5	9.2	2.15	11.54
Dir	NNW	NNW	NNW	NW	NW	NW	NW	NNW	S	SW	S	SE	E	E	E	E	ESE	SE	ESE	SE	SE	SE	SE	SE	E	SE
9 Spd	6.6	8.6	9.6	9.6	8.4	4.7	7.2	6.7	8.0	7.3	9.7	7.9	9.6	6.8	5.7	3.3	1.7	5.0	7.7	9.4	7.7	9.5	9.7	9.6	4.45	9.70
Dir	E	E	E	E	E	E	ENE	ENE	ENE	E	E	E	E	E	ENE	E	NNE	NNW	NNW	NNW	NW	NW	NW	NW	NE	NW
10 Spd	10.6	9.3	10.2	11.4	6.9	6.7	13.2	12.3	13.1	9.3	9.4	8.7	5.9	3.2	0.8	2.7	11.0	8.2	4.0	3.0	7.2	7.7	9.1	7.6	4.35	13.23
Dir	NW	WNW	WNW	NW	W	W	WNW	NW	NW	NW	NW	NW	NW	N	NE	E	NE	ENE	E	E	E	ENE	ENE	ENE	NNW	WNW
11 Spd	7.8	8.4	8.2	9.3	10.2	12.4	16.2	17.6	21.2	20.6	19.2	21.0	20.4	21.3	24.6	28.1	25.7	22.2	15.4	16.4	14.5	9.3	2.4	5.4	14.92	28.05
Dir	ENE	ENE	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SSE	SE	SE	SE	SE	SE	SSE	ESE	SE	SE	SSE
12 Spd	3.5	6.4	12.2	7.0	4.5	3.8	10.4	17.4	13.8	9.6	12.1	4.4	4.9	6.1	3.6	8.0	5.4	9.6	11.2	9.7	7.8	13.0	14.1	6.7	7.27	17.36
Dir	SSE	S	SW	WSW	NW	SW	WSW	WSW	WSW	WSW	WSW	SW	WSW	WSW	WNW	WSW	WSW	WSW	WSW	WSW	W	NW	WNW	WSW	WSW	WSW
13 Spd	11.9	8.4	6.9	10.0	12.0	9.6	8.5	11.5	3.5	4.8	2.1	2.2	4.0	10.1	11.5	15.4	17.3	17.1	18.9	20.8	22.7	22.4	19.5	13.6	5.28	22.74
Dir	WSW	W	W	WSW	WSW	WSW	WSW	WSW	ENE	E	SSE	E	NE	ENE	ENE	E	E	E	E	E	ESE	ESE	ESE	ESE	ESE	ESE
14 Spd	16.0	14.3	15.6	16.9	6.0	5.6	4.9	3.1	2.3	0.8	4.0	3.8	2.3	8.6	11.4	13.7	14.7	13.0	13.5	11.4	17.7	12.2	13.0	15.6	2.46	17.68
Dir	E	ESE	ESE	ESE	ESE	ENE	SE	SE	E	ENE	SSW	SW	WNW	W	W	WNW	NW	NW	NW	W	WNW	W	W	W	WNW	WNW
15 Spd	19.0	15.9	12.7	14.6	16.8	18.8	16.1	16.3	14.2	16.2	13.4	20.8	25.1	21.4	19.3	19.0	18.9	15.2	19.0	20.2	18.6	14.4	14.2	14.6	16.86	25.07
Dir	WNW	WNW	W	W	WNW	WNW	WNW	WNW	W	W	W	WNW	WNW	NW	NW	NW	WNW	NW	WNW	NW	NW	WNW	W	WNW	WNW	WNW
16 Spd	12.0	10.6	14.4	21.0	19.4	18.4	18.5	20.6	23.4	26.5	21.6	19.0	16.7	11.3	7.9	8.7	5.7	5.4	5.5	4.7	1.8	1.2	2.7	2.0	7.92	26.55
Dir	W	W	NW	WNW	WNW	WNW	NW	NW	NW	N	NE	NE	NE	NE	NE	ENE	E	ENE	E	ESE	SE	E	SE	NNW	NW	
17 Spd	3.1	3.8	0.5	1.9	3.5	3.9	4.3	6.3	7.7	6.6	5.1	7.3	8.1	7.9	11.7	12.2	10.1	10.0	7.9	5.8	5.6	6.2	5.0	3.3	5.34	12.23
Dir	SW	SW	S	SE	SE	ESE	ESE	ESE	ESE	ESE	E	E	E	E	ENE	ENE	ENE	ENE	ENE	E	ENE	ENE	NE	ENE	E	ENE
18 Spd	1.9	5.1	1.5	0.9	2.8	3.0	1.6	6.6	9.7	11.4	11.1	14.1	8.2	5.0	6.5	3.1	4.4	3.0	1.6	3.4	6.7	0.6	5.6	1.7	3.55	14.10
Dir	NNE	NNW	N	WSW	SSW	SW	SSW	SSW	WSW	WSW	WSW	SW	W	WNW	WSW	NW	N	SSW	S	S	SSW	NNE	SW	NNE	WSW	SW
19 Spd	5.2	5.5	14.3	17.7	9.6	13.1	11.0	12.6	15.2	17.1	16.7	27.1	29.9	23.0	21.5	20.4	22.8	23.6	21.3	12.5	13.0	13.8	14.0	16.9	15.62	29.88
Dir	SSW	WNW	W	NW	WNW	W	W	W	W	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	WNW	WNW	WNW
20 Spd	18.7	17.4	17.6	24.6	24.4	18.8	19.5	20.6	22.2	21.7	22.4	21.6	21.0	20.1	15.6	18.5	12.6	6.8	4.8	9.4	9.6	8.7	12.2	17.9	14.34	24.65
Dir	WNW	WNW	WNW	WNW	NW	NNW	N	N	N	N	N	N	N	N	N	NNW	N	NNW	NW	WSW	W	WNW	WNW	NW	NNW	WNW
21 Spd	22.4	23.4	17.5	12.9	9.0	14.4	17.0	7.3	4.6	4.4	12.7	9.2	7.2	9.6	5.8	2.6	4.3	4.5	6.6	4.9	6.3	5.6	6.9	8.9	4.94	23.39
Dir	NW	N	NNE	NE	NE	N	N	NNE	NNE	N	NNE	N	NNW	NW	NNW	S	S	SSE	SE	SE	SE	S	S	SW	N	N
22 Spd	9.4	9.4	9.7	10.4	9.2	6.6	5.7	8.8	6.6	9.7	11.3	15.8	14.6	11.5	12.2	12.9	8.8	13.4	13.1	14.4	15.3	18.2	20.2	17.2	11.52	20.16
Dir	SW	SW	SW	SW	SW	WSW	SW	WSW	SW	SW	SW	WSW	SW	SW	SW	SSW	SSW	SSW	SSW	SW	WSW	WSW	WSW	WSW	SW	SW



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

**Wind Speed (WS) - kph**  
**February 2015**

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	19.4	20.6	21.1	23.3	20.5	19.5	18.9	16.0	12.9	13.3	15.9	14.0	8.6	16.5	15.8	11.8	6.5	3.5	4.2	8.5	11.9	9.5	14.8	13.6	13.59	23.32
Dir	W	W	WNW	WNW	WNW	WNW	WNW	WNW	W	W	W	W	W	WNW	WNW	NW	WNW	WNW	WSW	SW	WSW	WSW	WSW	WSW	W	WNW
24 Spd	3.6	7.8	11.4	14.1	11.8	13.4	14.9	18.5	21.2	17.7	28.9	38.9	39.8	31.8	25.6	29.8	24.9	30.4	30.2	37.7	30.5	22.3	28.7	27.6	20.16	39.77
Dir	WSW	WSW	WSW	WSW	WSW	W	W	W	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	N	N	NNE	NW	NW
25 Spd	29.8	21.8	18.0	16.1	11.8	14.1	13.9	9.7	7.3	8.2	8.2	6.0	8.2	8.5	9.1	11.8	12.4	10.8	10.9	10.9	10.3	9.8	10.2	10.5	8.79	29.84
Dir	N	N	N	N	NNE	NE	NE	NE	ENE	ENE	ENE	ENE	E	E	E	E	E	E	E	ESE	ESE	SE	SE	ESE	ENE	N
26 Spd	10.5	11.0	10.1	9.9	9.3	8.4	8.1	9.0	12.8	13.6	12.9	14.4	19.6	17.7	18.5	17.4	15.4	14.1	9.8	3.0	2.7	2.4	8.5	11.9	9.18	19.56
Dir	SE	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	E	ESE	N	NNW	NW	SE	SE
27 Spd	12.6	13.6	12.6	16.1	13.8	14.7	12.0	13.3	10.6	10.9	12.8	13.2	13.5	17.0	15.5	15.5	12.9	10.5	11.4	9.7	10.0	13.4	14.9	15.3	12.52	16.96
Dir	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	N	NW	NW	NNW	NNW	NNW	NW	NW	WNW	W	WNW	WNW	WNW	NW	NW
28 Spd	14.8	13.3	15.3	15.2	15.2	16.7	20.0	18.0	17.4	18.3	15.9	17.4	22.7	27.6	26.6	27.5	27.8	30.2	23.5	23.1	23.9	20.9	13.5	10.1	18.47	30.20
Dir	W	WSW	WSW	WSW	W	W	W	WNW	WNW	WNW	WNW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	WNW	NW
Spd	3.91	2.99	2.72	3.64	3.12	3.74	3.82	3.49	2.75	2.82	2.78	2.87	3.56	3.75	3.17	3.78	3.36	2.14	1.84	1.55	2.46	2.50	3.15	3.20	Diurnal Average	
Dir	NW	NW	WNW	NW	NW	NW	NW	WNW	WNW	WNW	NW	NW	NNW	NNW	N	N	NNE	N	NNW	WNW	WNW	NW	NW	NW		
Spd	29.84	23.39	21.12	24.65	24.40	19.51	20.02	20.64	23.44	26.55	28.95	38.91	39.77	31.77	26.60	29.75	27.76	30.41	30.24	37.71	30.45	22.41	28.74	27.57	Diurnal Maximum	
Dir	4.84	8.92	282.70	297.19	317.04	282.82	273.94	355.56	305.51	321.17	289.22	309.56	317.10	318.58	311.07	309.65	312.39	319.69	309.61	307.76	299.79	113.16	6.30	11.96		
Maximum Speed Value: 39.8 kph on Feb 24 13:00		Minimum Speed Value: 0.5 kph on Feb 2 19:00										Hours in Service: 672														
Maximum Daily Speed Average: 20.16 kph on Feb 24		Minimum Daily Speed Average: 2.15 kph on Feb 18										Hours of Data: 672														
Maximum Diurnal Speed Average: 3.91 kph at hour 1		Minimum Diurnal Speed Average: 1.55 kph at hour 20										Hours of Missing Data: 0														
Monthly Average Velocity: 2.841 kph 319.49 deg		Speed Percentiles: P <sub>1</sub> = 0.9 P <sub>10</sub> = 4.0 Q <sub>1</sub> = 6.9 Median = 10.9 Q <sub>3</sub> = 16.0 P <sub>90</sub> = 20.6 P <sub>99</sub> = 30.2										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	10	15	10	13	2	0	50																			
NorthEast	10	27	14	2	0	0	53																			
East	21	67	49	8	0	0	145																			
SouthEast	10	23	21	11	1	0	66																			
South	8	7	2	0	0	0	17																			
SouthWest	19	36	23	2	0	0	80																			
West	9	31	76	8	1	0	125																			
NorthWest	10	38	47	31	8	2	136																			
Total	97	244	242	75	12	2	672																			



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

**Relative Humidity (RH) - %**  
**February 2015**

<b>Maximum Value: 92.28 % on Feb 14 01:00</b> <b>Maximum Daily Average: 83.48 % on Feb 2</b>																							<b>Hours in Service: 672</b>			
<b>Minimum Value: 42.4 % on Feb 24 11:00</b> <b>Minimum Daily Average: 60.22 % on Feb 15</b>																							<b>Hours of Data: 672</b>			
<b>Maximum Diurnal Average: 78.99 % at hour 6</b> <b>Minimum Diurnal Average: 66.08 % at hour 16</b>																							<b>Hours of Missing Data: 0</b>			
<b>Monthly Average: 74.428 %</b> <b>Percentiles: P<sub>1</sub> = 51.0 P<sub>10</sub> = 59.5 Q<sub>1</sub> = 68.3 Median = 76.0 Q<sub>3</sub> = 81.8 P<sub>90</sub> = 85.2 P<sub>99</sub> = 91.5</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-Feb	82.0	82.0	81.8	81.3	80.4	80.4	81.8	82.0	80.5	80.1	82.7	82.6	84.1	83.7	84.4	84.5	84.6	85.0	85.7	85.0	85.0	85.2	84.6	84.6	83.08	85.69
2-Feb	84.7	84.7	84.5	84.1	83.7	83.7	83.5	83.4	83.5	83.2	82.7	82.2	81.7	81.8	81.7	82.2	82.5	83.2	84.3	84.4	84.4	84.5	84.5	84.3	83.48	84.74
3-Feb	84.3	84.1	84.2	84.0	83.6	84.2	82.9	80.3	82.7	82.2	81.6	81.8	81.1	77.5	75.5	72.1	70.7	71.9	73.5	78.9	81.8	82.7	82.7	82.1	80.27	84.35
4-Feb	81.4	80.8	81.4	82.3	82.4	82.4	80.0	78.6	78.0	77.0	76.5	74.2	71.3	69.1	68.1	66.6	63.8	67.4	73.8	80.0	83.8	83.5	90.1	91.5	77.67	91.48
5-Feb	91.7	91.6	89.1	72.5	66.7	63.9	70.6	74.7	75.3	74.8	74.7	74.6	77.5	79.1	81.2	81.2	81.5	82.6	82.7	82.0	81.7	81.7	82.1	82.1	78.99	91.74
6-Feb	82.0	82.1	81.8	81.6	81.7	81.7	81.7	81.7	81.4	80.5	79.2	77.9	76.2	76.4	75.6	76.0	77.6	78.5	79.1	79.5	79.9	79.9	79.9	79.9	79.73	82.14
7-Feb	79.5	79.4	79.2	79.1	79.7	79.9	79.5	79.7	78.9	75.7	72.2	69.0	66.8	63.5	65.6	64.5	67.5	72.0	74.4	76.4	75.9	75.4	75.5	78.2	74.47	79.91
8-Feb	78.1	78.4	77.8	78.4	77.2	77.1	78.3	77.7	78.7	75.1	68.6	63.4	63.7	58.9	61.4	63.9	63.5	69.0	72.2	72.4	72.9	72.6	73.1	75.3	71.98	78.73
9-Feb	78.6	80.2	81.5	81.7	82.4	82.3	82.3	81.3	81.1	80.3	78.2	75.1	75.0	72.1	73.1	70.8	71.0	75.9	77.3	78.3	79.6	76.9	76.4	79.5	77.96	82.43
10-Feb	80.6	80.4	80.3	79.9	79.6	78.7	79.5	79.4	78.6	77.4	76.0	73.4	71.0	67.5	64.8	63.2	74.8	75.7	75.9	76.2	76.1	74.8	73.7	73.7	75.47	80.64
11-Feb	75.0	77.9	81.0	82.0	81.9	81.3	80.3	79.7	79.9	79.7	76.5	72.7	70.1	69.7	71.5	72.9	74.0	77.3	78.9	79.0	80.0	81.0	79.7	80.2	77.59	81.98
12-Feb	80.3	81.4	81.5	79.8	81.0	82.3	80.6	80.3	80.1	76.8	74.1	67.3	63.4	59.9	63.0	59.8	61.2	66.5	69.7	70.9	69.4	74.4	74.2	76.9	73.11	82.33
13-Feb	79.2	80.6	76.0	82.1	81.1	83.5	85.9	86.2	85.8	86.9	78.4	71.3	68.3	72.4	74.5	76.4	78.6	85.9	91.0	91.6	91.3	90.8	90.3	91.5	82.48	91.64
14-Feb	92.3	92.2	90.6	90.4	90.2	90.6	90.5	90.1	90.2	91.0	89.5	85.2	81.0	72.9	64.6	62.3	62.1	68.0	65.5	63.6	56.6	61.8	65.5	56.8	77.66	92.28
15-Feb	55.5	55.4	58.7	57.0	58.1	59.7	63.5	60.8	60.9	58.4	57.2	57.3	56.1	56.0	57.2	61.3	59.3	62.4	62.3	62.3	64.2	67.1	66.3	68.5	60.22	68.48
16-Feb	72.7	72.1	72.6	71.3	70.4	69.5	71.6	70.7	69.5	68.9	75.4	83.7	79.9	78.4	77.0	73.6	72.1	76.6	81.8	84.7	84.3	83.7	82.0	76.11	84.67	
17-Feb	80.0	82.4	83.2	84.0	86.0	88.4	89.7	88.5	86.6	82.5	74.9	70.6	65.6	61.7	70.9	74.6	79.4	82.4	86.2	88.0	88.8	89.9	90.0	90.0	81.84	90.01
18-Feb	89.8	90.3	89.9	89.9	91.3	91.0	90.7	90.3	88.7	79.2	70.9	64.1	58.1	58.3	51.2	58.0	63.0	61.7	66.3	67.6	70.7	75.4	73.2	77.4	75.29	91.26
19-Feb	78.5	78.3	71.0	68.3	69.4	69.8	62.3	63.8	60.2	55.7	54.7	52.1	51.4	52.3	51.2	50.1	51.7	54.3	60.5	68.0	72.7	71.5	67.6	66.3	62.56	78.45
20-Feb	67.6	72.1	76.4	82.4	81.9	90.3	89.0	87.9	83.4	79.8	79.1	78.2	77.0	75.0	71.2	68.6	70.1	71.5	72.1	77.1	77.5	74.7	75.9	76.7	77.32	90.34
21-Feb	74.1	83.3	88.1	88.1	87.2	86.2	81.5	83.7	83.4	81.2	77.0	70.8	64.0	53.7	49.4	51.0	53.4	59.5	64.9	70.1	73.9	77.6	82.2	85.0	73.71	88.13
22-Feb	85.6	85.4	85.3	85.2	85.1	85.3	84.1	87.0	82.3	80.0	69.0	60.9	56.1	51.4	48.2	48.7	46.4	51.0	54.0	58.8	65.0	62.6	64.0	67.5	68.70	86.98
23-Feb	56.2	52.7	54.7	59.0	62.9	62.4	63.3	65.6	67.0	64.3	59.7	56.8	55.8	59.0	57.9	55.3	53.7	54.0	62.8	69.2	67.7	68.5	72.7	72.7	61.42	72.68
24-Feb	71.6	75.2	73.0	75.9	72.8	64.8	59.7	57.4	53.6	52.8	42.4	48.6	63.2	66.9	68.3	69.7	70.1	71.6	72.2	72.4	75.2	83.7	90.1	87.7	68.29	90.09
25-Feb	81.8	83.1	82.2	79.9	81.5	81.9	81.3	78.5	78.5	75.4	71.8	68.9	66.9	63.1	60.7	59.6	58.8	65.5	69.3	72.5	75.0	74.8	75.5	74.2	73.37	83.09
26-Feb	73.1	72.4	72.1	75.2	74.4	74.3	74.4	73.9	74.0	69.5	64.6	61.9	60.5	58.1	58.1	57.6	59.6	63.1	69.1	73.7	76.9	79.9	81.3	78.9	69.87	81.32
27-Feb	78.9	76.5	76.9	81.1	84.4	85.7	86.3	86.2	85.6	83.5	80.2	74.8	70.1	68.3	70.7	71.6	69.6	67.7	70.9	71.7	70.5	68.3	69.0	70.5	75.80	86.26
28-Feb	70.7	74.4	75.6	74.3	73.0	70.5	67.9	70.7	72.4	70.0	67.3	63.2	65.6	57.3	54.5	54.7	54.9	56.3	59.1	59.7	60.3	62.7	68.1	70.4	65.57	75.57
																							Diurnal Average			
																							Diurnal Maximum			





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

**Global Solar Radiation (GSR) - W/m2**  
**February 2015**

Maximum Value: 539.50 W/m2 on Feb 28 14:00      Maximum Daily Average: 137.64 W/m2 on Feb 26																								Hours in Service:	672	
Minimum Value: 0.0 W/m2 on Feb 1 01:00      Minimum Daily Average: 30.72 W/m2 on Feb 2																								Hours of Data:	672	
Maximum Diurnal Average: 321.44 W/m2 at hour 13      Minimum Diurnal Average: 0.00 W/m2 at hour 1																								Hours of Missing Data:	0	
Monthly Average: 77.035 W/m2      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> = 131.1 P <sub>90</sub> = 260.9 P <sub>99</sub> = 497.7																								Hours of Calibration:	0	
																								Percent Operational Time:	100.0	
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	55.0	131.4	183.4	255.6	236.7	197.8	107.9	69.2	7.0	0.0	0.0	0.0	0.0	0.0	0.0	51.95	255.58
2-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	39.4	88.7	113.7	120.3	122.5	133.2	73.5	38.6	4.6	0.0	0.0	0.0	0.0	0.0	0.0	30.72	133.22
3-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	89.7	163.1	207.3	230.1	240.2	279.3	194.1	159.9	39.6	0.0	0.0	0.0	0.0	0.0	0.0	67.10	279.25
4-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	38.7	124.3	197.4	207.5	192.0	186.9	117.4	155.4	18.9	0.0	0.0	0.0	0.0	0.0	0.0	51.78	207.52
5-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	26.9	91.8	150.2	152.1	108.0	90.7	82.3	39.7	8.3	0.0	0.0	0.0	0.0	0.0	0.0	31.41	152.08
6-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	38.9	108.9	155.7	223.1	244.6	184.6	174.0	80.5	17.4	0.0	0.0	0.0	0.0	0.0	0.0	51.30	244.56
7-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	121.2	248.4	335.0	300.3	432.4	236.9	148.8	89.5	14.4	0.0	0.0	0.0	0.0	0.0	0.0	80.47	432.37
8-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.6	56.7	115.5	192.7	261.1	325.0	302.8	167.0	116.2	24.4	0.0	0.0	0.0	0.0	0.0	0.0	65.42	324.99
9-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	86.6	151.1	151.4	162.7	152.9	156.4	122.8	63.0	15.2	0.0	0.0	0.0	0.0	0.0	0.0	44.70	162.73
10-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	51.7	129.4	256.0	307.7	317.2	312.1	186.6	89.2	18.5	0.0	0.0	0.0	0.0	0.0	0.0	69.79	317.17
11-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.6	55.9	127.5	193.0	255.3	238.1	201.9	172.3	137.8	24.5	0.0	0.0	0.0	0.0	0.0	0.0	59.08	255.34
12-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4	70.4	142.5	247.8	403.7	397.7	259.2	157.9	89.1	22.9	0.0	0.0	0.0	0.0	0.0	0.0	75.44	403.71
13-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.3	99.8	188.8	289.1	385.7	284.6	253.2	204.1	106.8	16.1	0.0	0.0	0.0	0.0	0.0	0.0	76.69	385.68
14-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.1	92.9	154.2	242.7	447.3	444.5	380.5	143.9	127.0	24.6	0.9	0.0	0.0	0.0	0.0	0.0	86.36	447.32
15-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6	76.7	151.6	193.8	236.8	238.2	218.6	172.5	98.2	33.3	0.0	0.0	0.0	0.0	0.0	0.0	59.67	238.20
16-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.5	60.1	116.0	162.2	182.3	183.2	190.2	155.2	86.8	26.8	0.0	0.0	0.0	0.0	0.0	0.0	48.93	190.19
17-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.0	108.0	176.7	248.1	249.0	307.7	239.0	198.3	84.6	30.9	0.3	0.0	0.0	0.0	0.0	0.0	69.32	307.67
18-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	88.3	168.3	337.9	315.9	260.6	221.6	144.4	93.4	27.4	0.0	0.0	0.0	0.0	0.0	0.0	69.92	337.93
19-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.0	136.4	254.2	420.1	460.6	456.6	404.0	261.5	89.5	29.0	0.5	0.0	0.0	0.0	0.0	0.0	105.39	460.55
20-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.2	110.2	150.1	200.3	257.8	283.9	295.9	238.0	131.9	50.2	2.0	0.0	0.0	0.0	0.0	0.0	72.89	295.91
21-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.4	110.4	318.8	447.4	500.4	354.7	376.2	219.5	204.2	66.2	2.3	0.0	0.0	0.0	0.0	0.0	109.52	500.42
22-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	116.3	268.7	394.2	472.2	504.1	498.2	442.5	237.4	204.0	67.4	3.5	0.0	0.0	0.0	0.0	0.0	133.73	504.13
23-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.4	116.7	223.2	260.7	316.0	340.2	387.3	243.2	168.6	46.0	2.8	0.0	0.0	0.0	0.0	0.0	89.17	387.32
24-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.8	168.0	247.5	279.5	293.8	243.9	180.0	135.2	85.6	76.2	7.5	0.0	0.0	0.0	0.0	0.0	73.00	293.80
25-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	44.4	139.0	255.5	314.2	487.5	521.8	458.9	342.6	224.3	79.2	4.6	0.0	0.0	0.0	0.0	0.0	119.67	521.78
26-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	97.4	261.5	393.4	460.6	520.8	487.0	453.0	356.7	181.6	83.7	6.0	0.0	0.0	0.0	0.0	0.0	137.64	520.81
27-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	64.6	134.7	267.4	375.7	506.7	312.7	246.9	193.0	164.8	99.1	8.0	0.0	0.0	0.0	0.0	0.0	98.91	506.70
28-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	52.9	178.1	373.0	403.8	456.2	539.5	359.2	289.1	290.7	96.8	8.1	0.0	0.0	0.0	0.0	0.0	127.01	539.50
																								Diurnal Average		
																								Diurnal Maximum		



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

**Precipitation (PR) - mm**  
**February 2015**

Maximum Value: 0.20 mm on Feb 14 07:00		Maximum Daily Total: 1.10 mm on Feb 14		Hours in Service: 672																						
Minimum Value: 0.0 mm on Feb 1 01:00		Minimum Daily Total: 0.00 mm on Feb 1		Hours of Data: 672																						
Maximum Diurnal Total: 0.20 mm at hour 7		Minimum Diurnal Total: 0.00 mm at hour 1		Hours of Missing Data: 0																						
Monthly Total: 1.200 mm		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> = 0.0 P <sub>90</sub> = 0.0 P <sub>99</sub> = 0.1		Hours of Calibration: 0																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At																								Daily Total	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
2-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
3-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
6-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
7-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
8-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
9-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
10-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
11-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
12-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
13-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
14-Feb	0.0	0.0	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.10	0.20
15-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
16-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
17-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
19-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
20-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
21-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
24-Feb	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	0.0	0.0	0.0	0.10	0.10
25-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
26-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
27-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
28-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
		0.00	0.00	0.10	0.00	0.10	0.10	0.20	0.20	0.20	0.00	0.10	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average
		0.00	0.00	0.10	0.00	0.10	0.10	0.20	0.20	0.20	0.00	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum



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

**Wind Speed (WS) - kph**  
**February 2015**

Maximum Value: 7.50 kph on Feb 24 12:00		Maximum Daily Average: 4.78 kph on Feb 24		Hours in Service: 672																						
Minimum Value: 0.4 kph on Feb 20 19:00		Minimum Daily Average: 1.34 kph on Feb 2		Hours of Data: 672																						
Maximum Diurnal Average: 3.16 kph at hour 13		Minimum Diurnal Average: 2.13 kph at hour 21		Hours of Missing Data: 0																						
Monthly Average: 2.523 kph		Percentiles: P <sub>1</sub> = 0.8 P <sub>10</sub> = 1.2 Q <sub>1</sub> = 1.6 Median = 2.3 Q <sub>3</sub> = 3.3 P <sub>90</sub> = 4.2 P <sub>99</sub> = 6.9		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-Feb	1.1	1.6	2.7	2.0	1.5	2.6	1.9	3.1	2.1	1.2	1.5	2.8	2.2	2.0	1.3	1.0	1.4	1.2	0.9	1.5	1.1	2.0	2.3	1.7	1.77	3.07
2-Feb	1.3	1.4	1.7	1.3	1.5	2.0	1.5	1.8	1.2	1.0	1.1	0.9	1.0	1.3	1.3	1.4	1.2	1.4	0.8	0.8	2.2	1.2	1.5	1.3	1.34	2.22
3-Feb	1.6	1.5	0.9	1.0	0.8	0.8	0.8	1.0	1.5	2.0	2.2	1.4	2.8	2.6	2.6	3.1	2.4	2.7	1.0	1.2	1.2	1.3	1.1	1.0	1.60	3.06
4-Feb	0.8	1.4	0.8	2.4	2.4	3.4	1.8	2.5	2.6	1.9	3.0	3.7	4.6	2.2	2.3	2.2	1.6	1.1	1.2	2.5	1.6	1.7	2.6	1.2	2.14	4.58
5-Feb	1.4	0.9	1.9	3.7	3.3	2.7	3.1	2.8	2.3	3.1	4.3	4.2	4.2	4.7	4.7	5.1	4.6	4.0	4.0	3.2	3.0	2.7	3.4	3.41	5.15	
6-Feb	3.3	5.1	5.1	4.2	4.2	3.6	3.5	4.0	3.9	4.0	3.8	3.8	4.3	4.2	3.9	4.1	3.4	3.6	3.3	2.6	2.2	2.4	2.7	3.2	3.67	5.07
7-Feb	2.5	2.6	2.5	2.5	2.6	2.4	2.6	2.4	2.6	2.2	2.6	2.5	2.1	2.9	2.9	3.7	2.0	2.1	1.7	1.9	1.6	1.3	1.5	1.6	2.30	3.73
8-Feb	1.6	1.0	1.6	1.2	1.1	2.4	2.5	2.1	2.0	1.1	1.9	1.7	2.0	2.1	1.6	1.7	2.0	2.1	1.9	2.6	1.7	1.8	2.2	1.9	1.82	2.57
9-Feb	1.8	1.7	1.7	1.4	1.9	1.6	2.6	1.8	1.7	1.9	4.2	3.1	2.2	2.3	1.7	1.8	1.5	1.1	1.4	1.4	1.6	2.2	1.6	1.0	1.88	4.18
10-Feb	1.2	1.8	1.5	2.3	1.3	1.3	2.6	2.3	2.0	2.8	1.8	1.3	1.9	1.1	1.0	2.7	1.9	1.8	3.5	2.3	1.3	1.7	2.0	2.3	1.91	3.51
11-Feb	2.2	1.7	1.8	2.2	2.5	2.3	2.7	3.1	4.0	4.0	3.4	4.3	3.6	4.5	4.1	3.9	3.2	2.8	2.7	2.2	2.0	3.4	2.0	1.0	2.91	4.47
12-Feb	1.2	1.8	2.0	3.2	2.5	3.5	4.7	3.0	7.5	6.5	7.2	2.5	3.7	2.7	3.0	2.1	3.5	2.6	1.4	0.9	1.7	1.8	2.5	5.2	3.19	7.49
13-Feb	3.6	3.3	3.4	1.5	1.4	3.9	5.0	2.3	2.5	2.2	2.0	2.0	3.9	2.2	2.4	3.2	3.6	4.7	4.3	5.6	4.7	4.6	4.3	3.6	3.34	5.55
14-Feb	4.2	3.8	4.0	4.2	4.1	1.1	2.9	2.0	1.1	1.1	2.9	1.5	3.5	4.2	2.9	4.0	2.2	1.3	2.2	3.5	4.5	1.5	1.7	3.3	2.82	4.54
15-Feb	4.2	3.7	2.3	2.6	3.1	3.4	2.9	4.2	2.4	2.9	2.8	4.2	3.3	2.9	2.3	4.0	3.1	1.7	3.2	2.2	1.9	3.7	2.2	2.3	2.98	4.23
16-Feb	2.2	2.2	2.8	2.6	2.5	2.6	2.6	2.6	3.4	3.6	3.6	3.5	4.4	2.3	2.3	1.8	1.5	1.4	1.5	1.8	1.6	1.1	1.5	1.1	2.35	4.43
17-Feb	1.2	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.4	1.3	1.0	1.4	1.7	1.7	2.0	1.9	2.1	2.8	2.0	1.6	2.8	1.3	1.1	1.6	1.51	2.85
18-Feb	2.2	2.4	2.0	2.0	2.5	2.2	1.5	2.7	1.5	1.6	1.5	1.8	3.6	1.7	2.8	1.6	1.9	2.2	1.9	2.0	2.3	1.9	2.5	2.0	2.10	3.58
19-Feb	5.8	4.6	3.5	4.8	3.2	2.2	2.4	2.0	2.2	3.4	3.0	4.6	5.0	3.5	3.0	3.5	3.6	3.6	5.3	1.4	1.3	1.8	2.5	3.1	3.30	5.84
20-Feb	4.4	3.8	3.3	4.3	4.8	3.7	3.3	3.6	3.7	3.4	3.8	3.2	3.1	3.1	2.7	3.2	2.6	1.8	0.4	1.5	1.0	1.3	3.0	3.2	3.00	4.77
21-Feb	6.8	5.7	2.8	3.2	1.6	4.4	3.5	2.6	2.1	3.2	4.5	3.2	2.3	1.7	2.1	1.4	0.8	0.9	1.0	0.7	1.4	0.9	1.0	1.8	2.48	6.76
22-Feb	1.0	0.8	1.0	0.6	1.7	2.0	2.6	2.3	1.4	1.1	1.3	2.2	1.9	1.3	0.8	1.7	1.3	0.8	1.1	1.9	1.9	2.1	2.7	2.5	1.59	2.67
23-Feb	3.4	3.6	4.0	4.0	3.7	3.4	3.6	2.9	2.0	2.3	2.6	2.9	2.1	2.8	2.6	2.5	1.2	0.9	2.5	2.0	1.5	1.4	1.8	1.2	2.53	4.04
24-Feb	2.7	3.4	1.3	1.4	3.3	3.6	2.5	3.8	4.9	3.8	7.4	7.5	7.2	5.5	5.7	4.8	3.8	5.6	7.0	5.8	6.1	7.4	5.0	5.2	4.78	7.50
25-Feb	5.4	3.8	3.7	3.5	2.1	2.9	2.9	2.2	2.5	2.0	1.7	1.8	2.1	1.9	1.9	2.7	2.5	2.5	2.3	1.7	1.6	1.6	1.6	1.7	2.45	5.44
26-Feb	1.6	1.7	1.6	1.3	1.5	1.2	1.2	1.6	3.4	2.3	2.4	2.3	3.1	2.9	3.1	2.6	2.7	2.3	2.1	1.1	1.1	1.8	3.6	1.7	2.10	3.60
27-Feb	2.8	2.3	4.2	2.6	2.2	2.2	1.5	2.5	1.9	1.9	2.7	1.9	2.6	3.1	2.4	2.4	2.9	2.5	2.3	1.4	1.4	2.8	1.9	1.7	2.35	4.15
28-Feb	1.9	1.6	1.1	1.2	0.8	3.1	2.7	3.5	3.2	3.3	3.3	4.2	3.9	4.4	4.6	4.5	4.7	4.2	3.5	3.0	3.1	3.8	1.6	1.5	3.03	4.67
																								Diurnal Average		
																								Diurnal Maximum		
																								2.62 2.50 2.36 2.43 2.32 2.55 2.58 2.56 2.62 2.54 2.98 2.87 3.16 2.78 2.64 2.78 2.50 2.37 2.37 2.18 2.13 2.25 2.24 2.22		
																								6.76 5.70 5.07 4.83 4.77 4.41 5.03 4.15 7.49 6.47 7.41 7.50 7.19 5.54 5.70 4.79 5.15 5.60 6.97 5.84 6.08 7.36 5.04 5.25		

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ul/m<sup>3</sup> 24-hr 100 ul/m<sup>3</sup>



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

**Wind Direction (WD) - deg**  
**February 2015**

Maximum Value: 94.29 deg on Feb 18 22:00      Maximum Daily Average: 37.59 deg on Feb 18		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																									
Minimum Value: 2.6 deg on Feb 20 20:00 Maximum Diurnal Average: 17.94 deg at hour 13 Monthly Average: 14.584 deg		Minimum Daily Average: 7.79 deg on Feb 28 Minimum Diurnal Average: 12.19 deg at hour 4 Percentiles: P <sub>1</sub> = 3.8 P <sub>10</sub> = 6.3 Q <sub>1</sub> = 8.3 Median = 10.7 Q <sub>3</sub> = 15.7 P <sub>90</sub> = 28.4 P <sub>99</sub> = 66.3																									
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	4.6	5.6	14.2	5.4	9.1	23.1	28.4	30.8	29.0	19.9	30.6	55.0	25.2	17.2	15.9	21.8	16.1	39.7	6.9	62.5	15.1	13.6	8.1	7.8	21.07	62.51	
2-Feb	13.9	12.3	11.4	12.6	14.8	10.5	11.4	11.5	10.4	12.7	10.3	15.5	12.0	7.6	11.9	14.3	16.8	48.5	22.5	9.7	37.0	9.3	8.0	7.9	14.70	48.52	
3-Feb	7.2	13.0	11.5	12.3	17.7	14.4	3.7	10.5	10.9	8.6	8.8	7.1	8.6	8.8	10.7	6.4	15.0	20.0	25.7	9.9	6.3	6.4	5.5	5.2	10.59	25.69	
4-Feb	13.4	4.6	2.6	5.7	19.1	13.8	5.6	5.7	5.8	6.9	23.1	37.2	20.3	14.8	22.9	9.2	21.6	7.7	24.8	30.1	22.3	7.9	8.5	16.6	14.60	37.20	
5-Feb	12.4	23.9	10.7	10.0	8.0	7.8	9.0	10.5	9.3	11.5	11.0	12.5	11.2	12.2	10.5	11.8	10.7	10.4	10.8	12.1	12.0	13.3	12.1	12.6	11.52	23.92	
6-Feb	13.8	12.1	12.8	12.0	12.1	12.4	12.4	12.0	11.4	10.2	11.2	12.9	14.5	12.5	13.4	14.5	13.1	12.7	12.6	12.4	12.1	11.6	12.4	14.0	12.54	14.54	
7-Feb	13.4	13.1	13.6	13.6	11.5	12.7	16.1	13.5	10.8	11.1	9.7	10.4	15.0	13.4	10.2	17.4	13.7	14.3	17.7	19.7	15.5	16.1	27.1	14.6	14.36	27.12	
8-Feb	8.6	8.6	10.2	8.7	5.9	4.9	14.9	48.0	58.1	32.0	36.6	18.1	20.9	26.3	10.9	16.6	12.4	12.9	11.8	10.0	8.8	11.0	6.8	9.0	17.16	58.08	
9-Feb	11.6	7.9	7.3	6.9	7.8	12.7	10.0	13.7	13.9	15.8	13.6	19.7	15.6	22.0	17.2	24.9	49.2	16.9	9.1	8.0	10.4	9.6	14.3	4.4	14.27	49.18	
10-Feb	5.6	9.9	7.6	10.5	9.8	10.8	8.5	7.0	6.6	8.8	9.5	10.3	14.8	27.5	42.2	24.8	10.9	13.3	17.4	18.8	7.7	9.2	10.2	12.3	13.08	42.16	
11-Feb	9.9	9.2	10.3	10.6	13.3	10.1	9.4	9.4	9.2	9.1	8.8	9.0	8.6	10.5	8.5	7.5	6.8	6.0	10.8	6.8	6.0	16.6	13.1	17.3	9.87	17.29	
12-Feb	19.4	6.2	12.0	21.5	37.6	40.6	20.2	11.7	35.7	28.9	34.1	21.7	38.0	32.7	44.5	20.3	22.9	11.5	4.4	3.8	24.4	6.4	18.2	35.5	23.01	44.50	
13-Feb	17.4	19.5	30.7	4.3	5.9	50.1	28.6	7.0	63.5	38.2	37.4	27.5	51.5	10.2	9.6	9.3	11.9	14.5	12.4	12.7	10.1	9.7	10.3	11.9	21.01	63.51	
14-Feb	14.4	12.7	11.9	11.7	37.2	27.2	31.1	26.9	23.1	19.0	26.7	9.7	73.0	32.4	10.5	8.0	7.9	4.8	5.5	29.7	10.6	8.5	6.1	9.9	19.11	73.05	
15-Feb	10.8	9.7	10.2	9.2	8.7	9.5	8.8	8.9	8.9	9.1	10.2	8.6	6.3	6.1	6.0	8.3	8.3	5.5	6.5	5.9	5.9	12.3	7.4	8.0	8.30	12.26	
16-Feb	8.7	9.6	19.6	5.8	7.3	8.4	4.5	5.2	6.4	7.7	29.4	9.4	9.9	11.8	14.7	13.3	16.8	15.0	10.7	11.2	54.5	30.5	18.1	32.8	15.06	54.51	
17-Feb	31.4	12.9	39.9	16.9	18.1	12.9	15.8	9.6	9.6	9.2	11.3	11.9	10.7	12.4	7.9	8.1	8.6	8.8	10.6	12.8	13.9	13.2	13.2	21.8	14.23	39.88	
18-Feb	37.3	28.4	67.5	79.0	32.9	41.3	74.9	8.5	8.9	5.4	5.4	5.0	23.6	31.3	24.6	42.7	31.0	44.5	32.3	29.2	28.0	94.3	49.8	76.2	37.59	94.29	
19-Feb	58.3	50.3	16.7	10.9	21.5	8.3	16.0	7.5	7.3	9.8	10.0	7.5	7.4	6.2	5.8	7.8	7.8	8.4	6.3	5.5	9.2	6.7	8.6	8.3	13.01	58.34	
20-Feb	9.1	10.2	8.9	7.6	13.4	13.0	12.7	16.8	22.0	21.2	15.7	16.8	16.5	15.5	17.5	11.7	8.0	14.2	14.6	2.6	12.5	8.5	12.9	7.4	12.89	21.97	
21-Feb	6.9	24.1	8.6	8.7	13.3	16.8	20.0	13.3	16.4	39.2	8.5	13.3	22.3	9.3	22.7	73.0	11.5	11.5	9.6	6.5	7.8	9.4	6.0	24.4	16.79	72.98	
22-Feb	8.5	7.4	3.7	8.9	5.8	15.7	24.3	8.0	12.7	5.6	9.0	5.0	5.0	5.7	3.9	4.9	13.9	8.6	6.7	6.8	6.3	5.9	6.6	5.9	8.11	24.28	
23-Feb	7.7	8.3	9.5	8.4	9.2	8.7	9.0	8.5	8.3	8.7	8.5	8.9	12.8	8.0	7.6	9.8	7.2	12.2	33.4	9.8	6.9	9.6	5.5	3.8	9.59	33.37	
24-Feb	63.3	12.5	7.0	4.3	14.0	13.5	8.7	10.8	8.1	9.2	10.9	9.0	6.9	6.6	7.1	7.2	6.5	8.0	7.5	7.1	8.4	43.7	21.0	19.6	13.37	63.33	
25-Feb	23.5	18.0	18.2	17.6	20.5	9.2	10.3	13.0	14.1	11.8	9.7	16.4	19.5	16.8	15.0	10.9	9.3	13.1	9.9	8.2	7.3	7.6	8.9	7.7	13.18	23.50	
26-Feb	8.5	12.5	10.2	7.8	9.6	9.0	10.5	10.2	12.8	9.0	9.8	9.1	7.5	9.1	9.8	8.4	8.8	8.0	8.4	35.8	14.2	34.1	27.7	7.8	12.44	35.85	
27-Feb	7.1	7.7	16.8	6.8	7.5	6.0	6.6	9.8	9.9	9.1	9.9	12.6	14.8	8.9	9.6	7.7	10.4	10.7	9.8	8.2	7.3	9.0	7.2	6.2	9.15	16.82	
28-Feb	14.3	5.0	6.1	3.8	4.8	8.6	8.1	10.4	9.8	8.7	9.9	11.1	9.5	7.4	7.8	6.7	8.8	6.4	6.2	5.7	5.5	6.3	3.8	12.1	7.79	14.28	
16.47 13.40 14.63 12.19 14.16 15.43 15.70 12.81 16.18 14.15 15.34 14.68 17.94 14.40 14.24 15.27 13.78 14.58 13.03 14.33 13.79 15.73 12.76 15.04																								Diurnal Average			
63.33 50.26 67.48 79.03 37.62 50.08 74.91 48.01 63.51 39.18 37.36 54.97 73.05 32.74 44.50 72.98 49.18 48.52 33.37 62.51 54.51 94.29 49.83 76.24																								Diurnal Maximum			
,Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ul/m^3    24-hr 100 ul/m^3																											

**WEST CENTRAL AIRSHED SOCIETY**

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

**END OF REPORT  
FEBRUARY 2015**