

Capital Power

AIR QUALITY MONITORING August 2015 Monthly Report

Prepared by:

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





September 15th, 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 August 2015 for Capital Power

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

Network Station is AMS 910 Genesee
Identified as:

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

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

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

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

2. Operational times less than 90 percent:

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

3. Monitoring Notes:

AMS 910 (Genesee)

The SO₂ and NO_x analyzers were taken offline for maintenance, returning uptimes of 99.6%. All other analyzers and meteorological equipment returned uptimes of 100% in August.

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'.

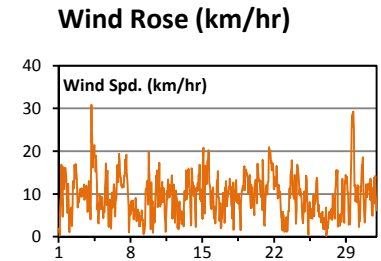
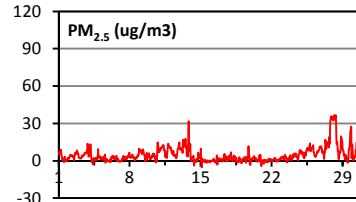
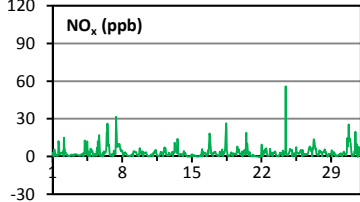
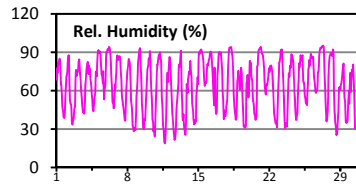
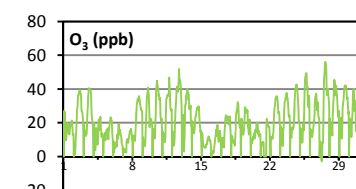
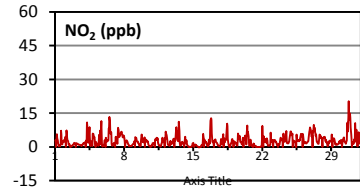
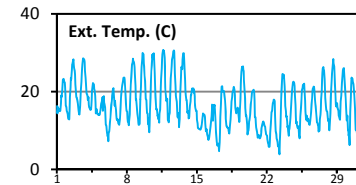
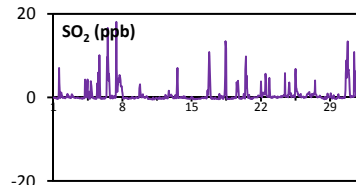
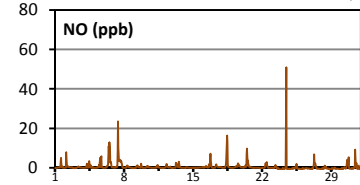
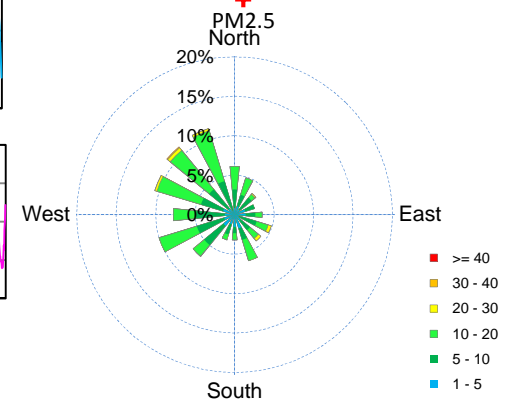
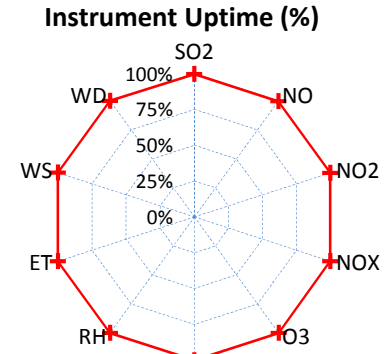
Robert Scotten
Executive Director

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

Patrick Andersen
Environmental Specialist

WCAS - August 2015 Genesee Summary Report

Pollutants		Month Records		24-Hour Records				1-Hour Records			
Name	Conc Unit	Avg. Conc.	Uptime	Maximum		AAAQO Objective	Exceed No.	Maximum		AAAQO Objective	Exceed No.
				Conc	Time			Conc	Time		
SO ₂	ppb	0.7	99.6%	3.3	Aug-7	48	0	18.1	Aug-07 10:00	172	0
NO	ppb	0.6	99.6%	3.1	Aug-7	-	-	50.9	Aug-24 11:00	-	-
NO ₂	ppb	2.8	99.6%	6.7	Aug-31	-	-	20.3	Aug-30 19:00	159	0
NO _x	ppb	3.4	99.6%	7.5	Aug-7	-	-	55.8	Aug-24 11:00	-	-
O ₃	ppb	21	100.0%	31	Aug-12	-	-	56	Aug-27 16:00	82	0
PM _{2.5}	µg/m ³	5	100.0%	20	Aug-28	30	0	37	Aug-28 5:00	80	0



Monthly Summary

- * All data has been slope, intercept, and baseline corrected. Data may change after validation process.
- * The measured ambient concentrations of all parameters are within the AAAQO for the month of August 2015.
- * All compliance parameters are above 90% operational for the month of August 2015.
- * Routine calibration was performed on August 21, 2015.

WEST CENTRAL AIRSHED SOCIETY

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

**AMS 910
GENESEE
AUGUST 2015**

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

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

Summary Report

Continuous air quality/meteorological monitoring measurements

West Central Airshed Society

EPCOR / Genesee Station 910													August 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 ₂ (ppb)	39	702	99.6	0.8	-	0.0	18.1	0.0	0.0	0.0	0.5	2.6	0.003
O ₃ (ppb)	37	707	100.0	21.4	-	0.0	56.1	8.1	12.4	19.4	29.6	37.4	0.031
NO (ppb)	39	702	99.6	0.7	-	0.0	50.9	0.0	0.0	0.1	0.4	1.5	-
NO ₂ (ppb)	39	702	99.6	2.8	-	0.0	20.3	0.4	1.0	2.3	3.7	5.9	0.007
NO _x (ppb)	39	702	99.6	3.4	-	0.0	55.8	0.5	1.1	2.3	3.9	7.1	-
Particulate Matter 2.5 microns (µ/m ³)	0	744	100.0	4.6	-	0.0	36.7	0.0	0.8	2.8	6.4	10.6	19.65 ug/m3
Wind Speed (kph)	0	744	100.0	9.6	-	0.1	30.9	3.4	6.0	9.4	12.4	15.6	-
Temperature - 2m (°C)	0	744	100.0	16.8	-	3.9	30.7	9.8	12.4	16.0	20.9	25.4	-
Temperature - 10m (°C)	0	744	100.0	16.9	-	4.7	29.1	10.2	13.0	16.5	20.3	24.4	-
Delta Temperature (°C)	0	744	100.0	0.1	-	-3.4	4.9	-1.7	-1.2	-0.4	1.2	2.6	-
Relative Humidity (%)	0	744	100.0	63.5	-	18.8	95.2	34.6	46.1	66.3	80.9	89.1	-
Global Solar Radiation (W/m ²)	0	744	100.0	213.7	-	0.0	845.4	0.0	0.0	80.1	413.0	638.6	-
Precipitation (mm)	0	744	100.0	-	0.8	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-
Std Dev Wind Direction (deg)	0	744	100.0	24.0	-	3.8	93.2	8.9	12.0	18.1	29.8	49.5	-
Std Dev Wind Speed (kph)	0	744	100.0	2.9	-	0.4	10.5	1.4	1.9	2.8	3.7	4.6	-



WCAS - Genesee
Summary of Hourly Averages

Sulphur Dioxide (SO₂) - ppb
August 2015

Maximum Value: 18.07 ppb on Aug 7 10:00		Maximum Daily Average: 3.30 ppb on Aug 7		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Aug 1 01:00		Minimum Daily Average: 0.00 ppb on Aug 15		Hours of Data: 702																							
Maximum Diurnal Average: 2.15 ppb at hour 11		Minimum Diurnal Average: 0.10 ppb at hour 5		Hours of Missing Data: 42																							
Monthly Average: 0.833 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.5 P ₉₀ = 2.6 P ₉₉ = 10.9		Hours of Calibration: 39																							
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.5 P ₉₀ = 2.6 P ₉₉ = 10.9		Percent Operational Time: 99.6																									
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-Aug	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	1.1	7.0	3.4	0.2	0.0	1.1	1.2	0.7	0.4	0.3	0.0	0.67	7.00	
2-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.8	0.7	0.0	0.0	0.3	0.1	0.0	0.0	0.0	0.0	0.5	0.7	0.6	0.1	0.19	0.85	
3-Aug	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	0.24	
4-Aug	0.0	0.0	Z	0.0	0.0	4.3	2.9	0.4	0.0	0.3	2.4	4.3	0.9	0.0	0.0	1.4	0.0	0.0	0.0	3.9	2.7	1.8	1.0	0.1	1.15	4.30	
5-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	3.4	0.0	6.0	0.0	4.4	10.1	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1.21	10.10	
6-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	9.6	8.5	16.6	10.0	3.9	5.6	4.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	2.56	16.57	
7-Aug	0.0	0.0	Z	0.3	0.3	0.0	0.2	0.0	6.7	18.1	7.0	1.3	2.6	3.1	4.5	3.7	4.4	5.4	4.7	4.1	2.6	2.6	2.7	1.5	3.30	18.07	
8-Aug	1.1	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	0.1	0.05	1.10		
9-Aug	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	2.2	3.1	1.5	0.9	0.2	0.0	0.0	0.35	3.12	
10-Aug	0.0	0.8	Z	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.3	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.78	
11-Aug	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	0.1	0.0	0.0	0.0	0.0	0.0	0.00	0.10	
12-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.0	0.0	0.0	0.0	0.0	0.3	1.6	0.5	0.6	0.3	0.3	0.6	0.7	0.5	0.28	1.61	
13-Aug	0.4	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.6	0.2	0.0	0.0	2.4	7.0	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.60	7.03	
14-Aug	0.0	0.0	Z	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.03	0.29	
15-Aug	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	
16-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	1.7	0.7	0.6	7.4	10.9	9.8	6.9	1.9	0.0	0.0	1.74	10.88	
17-Aug	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	0.8	0.0	0.0	0.0	0.2	0.05	0.82	
18-Aug	0.4	0.3	Z	0.0	0.0	0.0	0.2	0.5	2.0	5.4	13.5	11.8	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.52	13.48	
19-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.7	2.4	1.5	4.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.67	3.97	
20-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.9	0.8	0.5	0.0	6.7	9.8	2.4	5.2	2.9	0.5	0.3	0.0	0.2	0.6	0.1	0.0	0.0	0.0	1.34	9.81	
21-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	C	C	C	C	C	C	C	C	0.5	0.5	0.3	0.3	0.4	0.3	1.2	--	1.19	
22-Aug	3.9	1.4	Z	1.1	0.8	0.9	0.6	1.1	1.2	0.7	2.1	5.6	3.5	0.8	0.4	0.2	0.2	0.1	0.1	0.2	4.7	2.1	0.1	0.0	1.39	5.64	
23-Aug	0.0	0.1	Z	0.0	0.3	0.1	0.0	0.2	0.3	0.3	0.1	0.0	0.2	0.0	M	0.0	0.2	0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.10	0.31	
24-Aug	0.3	0.2	Z	0.3	0.2	0.2	0.5	0.5	0.3	0.7	5.9	1.1	0.1	0.1	0.2	0.3	0.4	0.3	0.0	1.1	3.6	3.2	0.9	0.6	0.93	5.85	
25-Aug	0.6	1.0	Z	0.3	0.4	0.3	0.3	0.5	0.3	M	M	5.4	6.8	2.2	2.1	1.5	1.3	0.9	0.6	0.7	0.4	0.4	0.2	0.4	1.26	6.79	
26-Aug	0.8	0.2	Z	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.3	0.5	0.8	0.9	0.9	0.7	1.3	1.3	0.9	0.4	0.42	1.29	
27-Aug	0.2	0.2	Z	0.8	0.5	0.6	0.8	0.5	0.9	0.9	1.4	4.1	1.1	0.8	0.6	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.5	0.63	4.08	
28-Aug	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.9	0.4	0.3	0.3	0.1	0.0	0.0	0.10	0.92	
29-Aug	0.3	1.0	Z	0.3	0.1	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.8	0.0	0.0	0.0	0.17	0.99	
30-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	1.8	5.8	8.9	4.7	8.8	13.4	6.7	6.5	6.7	4.4	2.2	3.06	13.42	
31-Aug	0.7	0.0	Z	0.4	0.1	0.2	0.2	0.2	0.3	0.1	10.9	4.0	1.9	6.2	1.5	0.3	0.2	1.9	4.6	1.2	0.5	0.1	0.0	0.0	1.54	10.86	
		0.29	0.17	--	0.12	0.10	0.21	0.22	0.16	0.48	0.96	2.15	2.02	1.37	1.60	1.27	1.11	1.10	1.13	1.33	1.10	1.07	0.73	0.41	0.27	Diurnal Average	
		3.86	1.41	--	1.14	0.82	4.29	2.90	1.06	6.67	18.07	13.48	11.79	16.57	10.03	7.00	8.86	10.10	8.81	13.42	9.76	6.89	6.67	4.39	2.15	Diurnal Maximum	
Z - zerospan		C - Calibration		M - Maintenance																							
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 172 ppb		24-hr 48 ppb																							



WCAS - Genesee
Summary of Hourly Averages

Ozone (O₃) - ppb
August 2015

Maximum Value: 56.13 ppb on Aug 27 16:00 Maximum Daily Average: 31.02 ppb on Aug 12																						Hours in Service: 744 Hours of Data: 707																									
Minimum Value: 0.0 ppb on Aug 27 06:00 Minimum Daily Average: 8.62 ppb on Aug 15 Maximum Diurnal Average: 31.09 ppb at hour 17 Minimum Diurnal Average: 9.48 ppb at hour 7 Monthly Average: 21.432 ppb Percentiles: P ₁ = 2.3 P ₁₀ = 8.1 Q ₁ = 12.4 Median = 19.4 O ₃ = 29.6 P ₉₀ = 37.4 P ₉₉ = 48.6																						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-Aug	26.8	Z	26.6	17.6	10.8	11.7	9.7	11.6	15.0	19.9	14.4	14.6	18.3	19.1	13.0	15.4	18.5	19.4	18.3	19.6	21.3	19.2	16.2	12.9	16.95	26.84																					
2-Aug	13.4	Z	7.9	1.1	2.3	4.8	10.3	16.7	21.2	27.2	30.2	35.4	36.3	36.4	38.3	38.4	39.4	37.7	37.2	34.0	27.3	26.5	25.6	23.2	24.82	39.44																					
3-Aug	21.0	Z	18.9	16.8	14.0	13.2	12.1	12.4	13.3	16.7	23.4	30.7	36.0	38.0	40.5	39.7	40.0	39.6	38.9	35.7	29.4	24.0	21.0	19.1	25.85	40.48																					
4-Aug	17.6	Z	17.7	19.9	7.0	3.6	5.7	16.6	16.8	15.6	12.3	7.0	15.7	19.7	21.9	15.6	18.3	20.2	23.6	16.0	13.6	11.6	13.7	11.8	14.85	23.55																					
5-Aug	10.8	Z	10.0	10.1	13.3	14.0	9.6	13.0	14.5	15.8	15.7	12.4	16.6	10.2	17.0	15.6	17.2	20.3	22.0	23.4	21.5	21.7	20.1	14.8	15.64	23.36																					
6-Aug	9.2	Z	9.1	2.7	5.9	5.7	4.9	6.5	7.1	8.4	5.8	13.0	10.4	12.5	19.3	18.5	12.9	16.1	15.5	13.7	12.5	10.5	7.6	7.0	10.21	19.33																					
7-Aug	6.3	Z	5.1	2.8	3.8	3.7	2.6	4.2	3.7	2.5	8.8	10.4	9.9	9.8	8.1	11.0	12.8	12.9	15.1	14.5	16.1	16.5	12.7	10.3	8.84	16.49																					
8-Aug	10.3	Z	10.5	12.5	12.4	10.6	9.2	11.7	16.5	22.1	27.5	31.3	33.1	34.1	32.5	34.5	35.8	34.2	33.9	31.2	29.1	27.7	27.8	27.3	24.16	35.85																					
9-Aug	23.5	Z	11.4	9.1	8.4	6.8	6.1	7.6	11.3	17.7	27.0	33.8	35.8	38.7	40.7	38.3	37.2	27.4	17.5	22.6	20.7	22.3	22.0	20.8	22.03	40.66																					
10-Aug	18.1	Z	12.6	16.2	16.1	13.9	10.5	12.1	21.6	24.2	37.2	42.6	44.9	42.7	40.5	40.4	35.8	36.7	33.4	34.9	32.5	23.7	21.0	22.5	27.57	44.91																					
11-Aug	21.8	Z	14.7	12.2	13.7	10.7	11.6	8.5	11.1	19.1	27.3	33.8	34.7	36.3	36.5	35.9	37.0	38.3	46.8	39.1	32.9	29.1	27.1	28.0	26.35	46.78																					
12-Aug	27.6	Z	14.8	11.6	11.3	6.5	7.6	11.1	18.6	27.9	31.3	33.7	39.7	41.4	40.5	38.5	41.2	46.8	51.9	46.0	45.5	43.7	42.7	33.5	31.02	51.91																					
13-Aug	28.4	Z	24.2	24.3	24.8	12.2	3.0	10.8	19.3	29.9	31.6	36.0	33.4	37.4	39.9	37.5	37.8	36.9	33.5	28.0	29.2	28.5	30.0	18.7	27.63	39.87																					
14-Aug	17.3	Z	21.0	19.3	13.7	14.4	15.7	13.8	17.2	20.6	23.5	24.2	26.5	27.3	28.7	28.0	29.4	28.0	29.6	24.7	21.6	18.9	14.3	15.3	21.44	29.63																					
15-Aug	9.6	Z	14.3	12.6	9.4	6.7	5.8	5.5	5.8	5.9	5.1	5.7	7.1	7.6	7.2	9.1	10.6	10.5	11.9	11.4	9.4	9.7	9.5	7.6	8.62	14.25																					
16-Aug	3.2	Z	3.5	2.4	2.3	1.6	2.2	3.3	5.9	8.5	10.7	12.6	13.9	16.3	12.3	17.1	18.7	12.3	9.4	8.7	9.6	14.3	15.4	12.2	9.41	18.65																					
17-Aug	9.3	Z	9.8	10.8	11.2	6.4	6.5	5.3	7.5	14.6	19.5	23.0	24.4	23.6	21.5	21.7	21.6	23.9	23.2	18.9	19.7	23.0	23.6	18.2	16.83	24.38																					
18-Aug	14.1	Z	8.8	12.2	11.4	9.7	8.9	8.1	9.4	8.7	6.5	12.1	20.3	24.8	25.8	27.8	28.8	32.2	31.5	26.2	20.8	19.9	17.3	18.5	17.56	32.18																					
19-Aug	21.2	Z	22.4	20.2	16.8	14.2	12.9	13.1	14.3	19.1	23.8	29.2	25.8	26.8	28.0	27.7	26.6	27.3	17.7	15.9	13.0	17.2	21.9	20.3	20.68	29.24																					
20-Aug	14.4	Z	8.3	8.1	7.7	10.8	9.8	12.0	10.4	13.6	11.9	10.7	15.8	14.2	16.2	19.4	19.5	20.3	17.8	13.3	15.2	11.9	13.0	13.2	13.37	20.33																					
21-Aug	13.2	Z	5.6	6.2	7.3	8.4	8.1	8.7	8.2	C	C	C	C	C	C	17.6	22.4	20.6	18.9	17.6	18.0	17.9	17.4	13.8	--	22.36																					
22-Aug	8.1	Z	11.7	10.0	11.2	11.7	10.5	12.5	14.8	21.2	25.6	28.2	31.1	33.9	34.7	35.4	35.9	34.9	34.0	31.4	25.6	25.8	26.3	20.6	23.26	35.87																					
23-Aug	20.0	Z	18.0	16.8	16.9	14.8	7.5	6.2	14.3	18.3	22.9	29.7	32.1	33.4	35.0	34.4	37.7	35.4	34.6	34.7	30.0	25.8	23.4	24.4	24.63	37.70																					
24-Aug	21.3	Z	17.6	12.5	11.2	13.7	17.0	15.9	17.4	16.9	19.0	26.5	31.7	36.2	40.2	41.9	42.7	42.5	40.1	37.5	35.6	29.2	20.7	21.2	26.45	42.68																					
25-Aug	18.9	Z	13.4	16.6	14.5	12.2	8.4	8.4	17.9	19.2	15.3	26.3	36.6	42.3	46.5	48.4	48.8	49.4	40.6	41.4	36.5	31.4	28.9	36.0	28.60	49.42																					
26-Aug	30.9	Z	16.0	13.6	15.9	13.7	11.8	11.6	14.7	15.7	18.0	20.7	22.6	28.7	34.0	36.0	37.2	37.0	31.4	27.2	32.3	30.9	24.3	22.6	23.78	37.23																					
27-Aug	22.2	Z	8.8	6.7	2.4	0.0	0.0	3.0	8.5	8.3	20.9	36.1	45.4	50.8	55.9	56.1	54.5	51.5	41.1	36.3	37.3	40.2	36.8	35.7	28.62	56.13																					
28-Aug	30.2	Z	22.4	19.5	18.0	15.8	12.6	15.1	12.4	23.6	31.8	34.2	42.3	45.5	43.7	37.7	36.1	41.9	39.0	36.7	34.4	26.4	23.5	25.4	29.07	45.53																					
29-Aug	27.0	Z	19.9	20.6	20.8	23.0	17.0	10.6	17.7	28.6	30.5	33.6	37.8	39.5	41.4	42.2	41.3	41.9	39.6	35.5	34.0	35.1	28.9	25.1	30.07	42.18																					
30-Aug	26.5	Z	22.7	21.6	20.1	21.0	11.6	11.6	21.1	25.4	34.9	39.8	39.9	34.7	30.2	26.9	33.2	24.7	14.9	24.1	19.2	14.3	12.4	14.9	23.72	39.89																					
31-Aug	15.8	Z	22.0	23.5	26.0	25.4	24.7	25.4	24.1	26.4	20.9	29.2	32.6	29.0	34.5	34.2	34.8	33.0	28.8	27.6	28.2	25.8	26.2	18.3	26.80	34.82																					
																						18.00	--	14.50	13.24	12.27	10.99	9.48	10.74	13.91	18.06	21.11	25.22	28.36	29.70	30.82	30.35	31.09	30.77	28.77	26.70	24.91	23.32	21.66	19.78	Diurnal Average	
																						30.91	--	26.60	24.28	26.01	25.42	24.69	25.40	24.13	29.91	37.24	42.61	45.37	50.78	55.86	56.13	54.46	51.48	51.91	45.96	45.52	43.74	42.65	36.01	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
August 2015

Maximum Value: 50.92 ppb on Aug 24 11:00		Maximum Daily Average: 3.15 ppb on Aug 7		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Aug 1 01:00		Minimum Daily Average: 0.00 ppb on Aug 26		Hours of Data: 702																							
Maximum Diurnal Average: 4.01 ppb at hour 11		Minimum Diurnal Average: 0.04 ppb at hour 24		Hours of Missing Data: 42																							
Monthly Average: 0.717 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.4 P ₉₀ = 1.5 P ₉₉ = 9.9		Hours of Calibration: 39																							
				Percent Operational Time: 99.6																							
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-Aug	0.0	0.0	Z	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.9	5.1	2.2	0.4	0.2	0.6	0.4	0.1	0.0	0.0	0.0	0.51	5.11	
2-Aug	0.1	0.1	Z	7.9	2.2	0.6	0.7	0.9	0.7	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.70	7.92	
3-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.2	0.6	0.7	0.7	0.5	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.20	0.72	
4-Aug	0.1	0.1	Z	0.1	0.3	2.2	1.2	0.1	0.1	0.3	2.1	3.4	1.0	0.2	0.1	1.3	0.2	0.1	0.0	0.5	0.1	0.0	0.0	0.0	0.59	3.45	
5-Aug	0.1	0.1	Z	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.9	1.6	0.3	5.0	0.5	3.5	5.9	0.7	0.2	0.2	0.1	0.0	0.0	0.0	0.87	5.87	
6-Aug	0.1	0.1	Z	0.0	0.0	0.6	0.7	0.7	1.3	1.7	11.0	6.5	13.1	9.5	2.5	3.0	2.9	0.3	0.2	0.2	0.2	0.2	0.4	0.1	2.41	13.06	
7-Aug	0.2	0.1	Z	0.5	0.3	0.1	0.8	0.7	8.4	23.5	10.3	3.5	3.5	3.2	4.1	3.3	3.2	3.5	2.0	1.1	0.2	0.0	0.0	0.0	3.15	23.53	
8-Aug	0.0	0.0	Z	0.0	0.0	0.1	0.6	1.1	1.1	0.8	0.5	0.4	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.26	1.10	
9-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.6	1.2	1.2	1.0	0.6	0.4	0.3	0.1	0.2	0.1	0.1	2.2	1.4	0.4	0.1	0.0	0.0	0.0	0.42	2.22	
10-Aug	0.1	0.1	Z	0.0	0.0	0.0	0.4	0.8	0.8	1.0	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.23	1.02	
11-Aug	0.1	0.1	Z	0.1	0.1	0.0	0.3	0.9	0.9	1.6	0.4	0.3	0.2	0.2	0.3	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.26	1.55	
12-Aug	0.0	0.0	Z	0.1	0.0	0.5	0.9	2.0	1.6	0.5	0.3	0.2	0.2	0.2	0.2	0.4	0.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.35	1.96	
13-Aug	0.0	0.0	Z	0.1	0.0	0.2	2.6	2.0	1.9	1.0	0.5	0.4	1.0	3.1	1.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.65	3.11	
14-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.42	
15-Aug	0.1	0.1	Z	0.0	0.0	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.14	0.27	
16-Aug	0.4	0.3	Z	0.4	0.3	0.4	0.7	1.0	0.8	0.4	0.3	0.2	0.2	0.2	1.8	0.7	0.9	4.7	7.1	3.8	0.8	0.1	0.0	0.0	1.11	7.13	
17-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.5	1.4	1.9	1.0	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.2	0.2	0.1	0.1	0.43	1.89	
18-Aug	0.2	0.1	Z	0.1	0.0	0.1	0.4	1.4	3.5	7.5	16.3	13.2	2.0	0.5	0.4	0.3	0.3	0.2	0.1	0.2	0.1	0.0	0.0	0.1	2.04	16.35	
19-Aug	0.0	0.1	Z	0.2	0.2	0.2	0.3	0.7	0.8	0.7	0.6	0.5	1.3	2.2	1.4	0.8	1.2	0.9	0.5	0.4	0.3	0.2	0.2	0.2	0.60	2.25	
20-Aug	0.3	0.3	Z	0.2	0.1	0.2	0.5	1.1	1.3	0.4	6.8	9.7	2.4	3.8	2.1	0.8	0.6	0.3	0.4	0.5	0.3	0.3	0.2	0.1	1.42	9.69	
21-Aug	0.1	0.1	Z	0.2	0.0	0.0	0.0	0.0	0.1	C	C	C	C	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.16
22-Aug	0.2	0.0	Z	0.1	0.0	0.0	0.2	1.2	2.3	1.6	1.3	3.0	1.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.50	2.98	
23-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.3	1.0	1.5	1.1	0.5	0.0	0.0	0.0	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	1.50	
24-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.8	50.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.27	50.92	
25-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.1	0.2	0.2	M	M	2.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.13	2.02	
26-Aug	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	
27-Aug	0.0	0.0	Z	0.0	0.0	2.0	6.9	2.9	2.2	2.1	1.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.78	6.88	
28-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	1.1	0.5	0.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	1.09	
29-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.15	
30-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.4	4.0	4.1	1.3	1.8	5.4	0.2	0.0	0.0	0.0	0.0	0.77	5.44	
31-Aug	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.7	0.2	9.3	1.6	0.4	2.4	0.0	0.0	0.0	0.4	1.2	0.0	0.0	0.0	0.0	0.0	0.71	9.29	
																								Diurnal Average			
																								Diurnal Maximum			
																								0.07 0.05 -- 0.32 0.12 0.25 0.63 0.74 1.16 1.71 4.01 1.69 0.97 1.13 0.88 0.75 0.64 0.54 0.66 0.29 0.09 0.04 0.04 0.04			
																								0.45 0.31 -- 7.92 2.19 2.21 6.88 2.88 8.45 23.53 50.92 13.20 13.06 9.55 5.11 4.13 5.87 4.71 7.13 3.80 0.75 0.25 0.41 0.23			
Z - zerospan C - Calibration M - Maintenance																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ppb 24-hr --- ppb																											



WCAS - Genesee
Summary of Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
August 2015

Maximum Value: 20.30 ppb on Aug 30 19:00		Maximum Daily Average: 6.74 ppb on Aug 30		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Aug 10 17:00		Minimum Daily Average: 0.55 ppb on Aug 15		Hours of Data: 702																							
Maximum Diurnal Average: 3.54 ppb at hour 4		Minimum Diurnal Average: 2.02 ppb at hour 17		Hours of Missing Data: 42																							
Monthly Average: 2.824 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.4 Q ₁ = 1.0 Median = 2.3 Q ₃ = 3.7 P ₉₀ = 5.9 P ₉₉ = 12.6		Hours of Calibration: 39																							
				Percent Operational Time: 99.6																							
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-Aug	3.0	2.8	Z	4.1	5.7	3.9	2.6	1.4	0.8	0.3	0.8	0.5	0.3	1.4	7.3	5.7	2.0	1.1	2.5	2.6	2.5	3.0	2.3	3.2	2.60	7.27	
2-Aug	2.8	4.5	Z	7.4	6.2	4.0	3.0	2.7	1.7	0.9	1.3	1.0	0.3	0.0	0.1	0.2	0.6	0.6	0.6	0.9	1.2	1.5	1.8	1.6	1.95	7.40	
3-Aug	1.5	1.0	Z	1.7	1.4	1.5	1.4	1.2	0.9	0.9	1.0	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.8	1.2	1.5	1.6	1.6	1.7	1.14	1.75	
4-Aug	2.0	2.2	Z	2.7	2.4	10.9	9.4	3.3	1.9	2.3	5.0	8.7	4.1	1.2	0.4	2.5	1.0	0.6	0.4	5.9	5.8	5.9	4.0	4.5	3.79	10.85	
5-Aug	3.5	2.0	Z	2.3	1.4	1.2	1.5	0.8	0.6	0.5	2.8	5.3	0.9	7.3	2.1	6.0	11.6	5.2	0.7	0.2	0.4	0.4	0.6	1.4	2.55	11.56	
6-Aug	2.9	3.0	Z	4.0	2.4	2.4	2.4	2.6	3.0	3.0	8.2	8.0	13.3	11.3	5.9	6.6	6.5	1.6	0.8	0.5	0.7	0.7	1.6	1.4	4.03	13.35	
7-Aug	1.8	1.7	Z	4.5	2.8	1.9	2.7	1.4	3.7	8.5	7.3	4.4	4.4	4.9	5.9	5.5	6.2	6.8	5.9	5.5	4.2	4.2	5.1	5.0	4.54	8.54	
8-Aug	3.8	2.4	Z	2.5	2.1	2.8	3.0	2.4	2.0	1.6	1.1	0.8	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.8	1.0	1.2	1.3	1.5	1.42	3.80	
9-Aug	2.3	2.6	Z	4.4	4.1	4.0	3.1	2.5	2.3	2.4	1.7	1.5	0.8	0.5	0.4	0.3	0.4	3.0	5.6	4.3	3.7	2.5	2.1	2.4	2.48	5.58	
10-Aug	1.9	4.2	Z	3.1	2.6	3.2	3.0	2.2	2.3	2.6	1.8	0.9	0.7	0.3	0.3	0.0	0.0	0.1	0.6	0.6	0.6	1.6	1.6	1.5	1.56	4.22	
11-Aug	1.4	1.9	Z	3.4	3.2	3.0	3.6	4.2	2.9	3.8	1.9	1.4	0.7	0.7	0.4	0.4	0.2	0.3	1.0	1.8	3.0	4.1	3.1	2.3	2.11	4.17	
12-Aug	2.7	2.7	Z	3.9	3.3	6.8	5.5	5.3	4.3	2.0	1.0	0.8	1.0	0.6	0.4	0.9	2.7	1.2	1.2	1.4	1.5	1.9	2.1	3.3	2.47	6.83	
13-Aug	3.7	2.6	Z	3.6	2.8	4.4	8.8	7.3	6.9	4.4	2.7	2.5	6.0	11.1	7.1	1.8	0.9	0.6	0.8	1.5	2.1	2.2	1.9	1.9	3.81	11.15	
14-Aug	1.0	1.0	Z	2.1	4.6	2.6	1.5	3.0	1.9	1.0	0.7	0.5	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.2	0.6	1.6	1.6	1.05	4.56	
15-Aug	1.9	0.6	Z	1.0	0.7	1.2	0.8	0.8	0.6	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	0.6	0.7	2.2	0.55	2.18	
16-Aug	5.8	3.7	Z	3.2	2.4	2.3	2.0	2.3	1.7	0.9	0.6	0.3	0.3	0.4	3.2	1.8	1.5	7.4	11.5	12.7	12.0	6.1	2.1	2.1	3.75	12.71	
17-Aug	2.1	2.0	Z	2.9	2.6	3.4	2.8	2.3	2.1	1.8	1.5	1.0	0.6	0.5	0.5	0.6	0.4	0.2	0.7	3.5	2.0	1.3	2.0	2.3	1.70	3.54	
18-Aug	4.9	5.7	Z	3.8	2.0	2.6	2.9	3.0	4.2	6.1	10.3	9.4	3.5	1.5	1.0	0.4	0.2	0.0	0.3	1.0	1.8	2.0	3.4	3.5	3.20	10.33	
19-Aug	2.5	1.4	Z	2.6	2.1	2.1	2.0	1.8	1.5	1.0	0.9	0.5	2.5	5.9	4.7	3.4	4.9	4.8	2.3	2.2	2.3	1.7	1.1	1.1	2.40	5.88	
20-Aug	3.6	4.0	Z	3.5	3.1	3.1	5.0	3.4	3.1	1.1	5.6	9.4	5.0	6.6	4.8	1.9	1.2	0.4	1.5	3.3	1.8	1.2	0.5	0.2	3.19	9.44	
21-Aug	0.1	0.3	Z	1.5	0.8	0.4	0.3	0.2	0.4	C	C	C	C	C	C	C	C	0.0	0.0	0.2	0.1	0.1	0.2	3.5	--	3.52	
22-Aug	9.4	2.3	Z	4.8	2.5	2.1	2.4	2.9	3.6	2.4	1.8	3.9	2.7	0.7	0.6	0.5	0.5	0.6	0.6	1.0	6.3	4.1	2.3	2.8	2.65	9.39	
23-Aug	3.1	3.0	Z	3.0	2.9	2.9	3.1	2.2	2.7	2.2	1.8	1.4	0.9	0.8	M	1.2	1.0	0.8	1.3	2.2	4.0	4.0	3.2	3.0	2.31	4.03	
24-Aug	3.5	3.4	Z	6.0	4.5	3.6	2.2	3.3	3.0	3.6	7.1	3.2	1.7	1.6	1.6	1.5	1.9	2.6	3.6	4.6	6.5	6.9	5.3	5.2	3.76	7.11	
25-Aug	5.2	6.0	Z	2.7	2.8	2.7	2.7	2.1	2.3	M	M	5.5	4.0	2.9	3.2	2.7	2.7	2.6	3.2	2.9	3.8	4.9	5.8	4.6	3.58	5.99	
26-Aug	5.4	5.9	Z	5.7	3.1	1.8	1.9	1.6	1.8	2.2	2.0	1.6	1.8	2.0	2.1	2.4	3.0	4.3	6.8	7.4	8.6	8.0	7.2	5.6	4.00	8.65	
27-Aug	4.6	5.1	Z	6.9	6.5	9.8	7.1	8.7	6.7	5.9	4.8	5.6	2.3	2.4	2.1	1.4	1.4	1.3	2.7	5.5	5.2	4.1	4.9	3.9	4.74	9.83	
28-Aug	4.1	3.8	Z	3.7	4.1	4.3	4.3	4.3	4.6	3.0	2.4	3.1	1.8	2.1	0.9	0.2	0.6	2.2	1.7	2.8	2.4	2.6	2.5	2.4	2.78	4.58	
29-Aug	3.3	5.5	Z	4.0	3.0	2.8	3.8	3.4	2.7	1.3	1.0	1.5	1.1	0.9	1.0	1.1	1.3	1.4	1.6	2.3	2.7	1.5	2.9	3.2	2.32	5.48	
30-Aug	2.7	2.1	Z	2.8	3.2	3.6	4.2	2.9	2.3	2.1	1.9	1.4	2.1	2.9	8.0	10.7	6.7	13.1	20.3	12.0	13.6	14.9	12.9	8.7	6.74	20.30	
31-Aug	5.4	3.0	Z	2.1	1.4	1.2	1.4	2.0	3.5	2.3	10.6	4.2	3.3	7.6	1.9	0.3	0.3	2.5	6.5	3.2	1.5	1.6	1.6	3.1	3.07	10.64	
		3.29	2.98	--	3.54	2.98	3.31	3.24	2.82	2.64	2.43	3.10	2.98	2.25	2.65	2.31	2.05	2.02	2.14	2.77	3.04	3.35	3.14	2.87	2.92	Diurnal Average	
		9.39	5.99	--	7.40	6.53	10.85	9.39	8.69	6.93	8.54	10.64	9.44	13.35	11.27	7.97	10.71	11.56	13.14	20.30	12.71	13.56	14.94	12.92	8.68	Diurnal Maximum	
Z - zerospan		C - Calibration		M - Maintenance																							
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 159 ppb		24-hr 106 ppb																							



WCAS - Genesee
Summary of Hourly Averages

NOx (NO_x) - ppb
August 2015

Maximum Value: 55.83 ppb on Aug 24 11:00		Maximum Daily Average: 7.50 ppb on Aug 7		Hours in Service:	744																																												
Minimum Value: 0.0 ppb on Aug 14 15:00		Minimum Daily Average: 0.64 ppb on Aug 15		Hours of Data:	702																																												
Maximum Diurnal Average: 6.97 ppb at hour 11		Minimum Diurnal Average: 2.50 ppb at hour 17		Hours of Missing Data:	42																																												
Monthly Average: 3.366 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.5 Q ₁ = 1.1 Median = 2.3 Q ₃ = 3.9 P ₉₀ = 7.1 P ₉₉ = 19.8		Hours of Calibration:	39																																												
				Percent Operational Time:	99.6																																												
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-Aug	2.9	2.7	Z	4.1	5.6	3.9	2.8	1.5	0.9	0.5	1.1	0.8	0.5	2.3	12.3	7.8	2.3	1.3	3.0	2.9	2.6	3.0	2.3	3.1	3.05	12.26																							
2-Aug	2.8	4.5	Z	15.1	8.3	4.6	3.6	3.5	2.4	1.4	1.7	1.3	0.6	0.3	0.4	0.5	0.9	0.8	0.7	1.0	1.1	1.4	1.7	1.5	2.61	15.14																							
3-Aug	1.4	0.9	Z	1.6	1.4	1.5	1.6	1.8	1.7	1.7	1.5	1.3	1.2	1.2	1.0	0.8	0.8	0.7	0.9	1.2	1.5	1.6	1.5	1.7	1.34	1.81																							
4-Aug	2.0	2.3	Z	2.8	2.7	12.9	10.4	3.4	1.9	2.6	7.1	12.0	5.0	1.5	0.6	3.9	1.3	0.6	0.3	6.3	5.7	5.8	3.8	4.4	4.31	12.89																							
5-Aug	3.4	2.0	Z	2.3	1.4	1.2	1.8	1.0	0.8	0.7	3.6	6.9	1.2	12.2	2.6	9.4	17.3	5.9	0.9	0.4	0.5	0.5	0.7	1.4	3.39	17.27																							
6-Aug	3.0	3.1	Z	4.1	2.4	3.0	3.1	3.2	4.2	4.6	19.1	14.4	26.3	20.7	8.4	9.5	9.2	1.8	0.9	0.7	0.9	0.9	1.9	1.4	6.37	26.26																							
7-Aug	1.8	1.7	Z	4.8	3.0	1.9	3.3	2.0	12.0	31.5	17.5	7.7	7.8	7.9	9.9	8.6	9.2	10.1	7.6	6.4	4.2	4.1	4.9	4.8	7.50	31.53																							
8-Aug	3.6	2.2	Z	2.4	2.1	2.8	3.4	3.4	3.0	2.3	1.5	1.2	0.6	0.6	0.6	0.6	0.5	0.4	0.5	0.8	0.9	1.1	1.2	1.4	1.62	3.62																							
9-Aug	2.2	2.5	Z	4.3	4.0	3.9	3.7	3.7	3.5	3.5	2.4	1.9	1.1	0.8	0.6	0.5	0.5	5.2	6.8	4.6	3.7	2.4	2.1	2.4	2.89	6.85																							
10-Aug	1.9	4.2	Z	3.0	2.5	3.1	3.3	2.9	3.0	3.5	2.2	1.2	0.9	0.6	0.4	0.2	0.2	0.2	0.7	0.7	0.6	1.6	1.5	1.5	1.74	4.20																							
11-Aug	1.4	1.8	Z	3.3	3.1	3.0	3.6	4.9	3.7	5.2	2.3	1.6	0.9	1.0	0.7	0.6	0.2	0.3	1.0	1.8	2.8	4.0	3.0	2.2	2.28	5.18																							
12-Aug	2.6	2.6	Z	3.9	3.2	7.1	6.3	7.2	5.8	2.4	1.3	1.0	1.2	0.8	0.6	1.2	3.3	1.3	1.1	1.3	1.4	1.7	2.0	3.1	2.72	7.15																							
13-Aug	3.6	2.5	Z	3.6	2.7	4.4	11.1	9.2	8.6	5.3	3.1	2.8	6.9	14.0	8.1	1.9	1.1	0.6	0.8	1.6	2.0	2.1	1.8	1.9	4.33	14.01																							
14-Aug	0.9	0.9	Z	2.0	4.4	2.4	1.6	3.3	2.3	1.1	0.8	0.5	0.3	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.5	1.5	1.6	1.6	1.07	4.41																							
15-Aug	1.9	0.7	Z	0.9	0.6	1.2	0.8	0.8	0.6	0.4	0.3	0.1	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.5	1.1	0.7	0.8	2.3	0.64	2.28																							
16-Aug	6.1	3.8	Z	3.5	2.6	2.7	2.6	3.2	2.4	1.3	0.8	0.5	0.5	0.6	5.0	2.5	2.4	12.0	18.5	16.3	12.5	6.2	2.1	2.1	4.80	18.49																							
17-Aug	2.1	2.0	Z	2.8	2.5	3.4	3.3	3.6	3.9	2.8	2.2	1.6	1.1	1.0	0.9	1.1	0.7	0.4	1.0	3.9	2.1	1.3	2.0	2.2	2.08	3.94																							
18-Aug	4.9	5.6	Z	3.7	1.8	2.5	3.2	4.2	7.5	13.5	26.5	22.4	5.4	1.9	1.4	0.6	0.4	0.1	0.3	1.1	1.7	1.9	3.3	3.5	5.10	26.53																							
19-Aug	2.5	1.4	Z	2.6	2.2	2.2	2.3	2.5	2.2	1.6	1.5	1.1	3.7	7.9	6.0	3.9	5.9	5.4	2.6	2.4	2.5	1.7	1.1	1.2	2.88	7.95																							
20-Aug	3.7	4.1	Z	3.4	3.0	3.0	5.3	4.3	4.2	1.4	12.2	18.9	7.2	10.2	6.8	2.6	1.7	0.6	1.7	3.6	1.9	1.4	0.6	0.3	4.44	18.91																							
21-Aug	0.2	0.3	Z	1.6	0.8	0.4	0.3	0.3	0.6	C	C	C	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.1	3.4	--	3.42																							
22-Aug	9.5	2.2	Z	4.8	2.5	2.1	2.6	4.0	5.8	4.0	3.0	6.8	4.0	0.9	0.6	0.5	0.5	0.6	0.6	1.0	6.3	4.0	2.2	2.7	3.10	9.47																							
23-Aug	3.1	3.0	Z	2.9	2.8	2.7	3.4	3.2	4.1	3.2	2.3	1.3	0.6	0.3	M	0.7	0.5	0.2	0.6	1.4	3.2	3.1	2.2	2.1	2.13	4.09																							
24-Aug	2.5	2.3	Z	4.9	3.5	2.7	1.4	3.1	2.9	4.4	55.8	3.6	1.1	1.0	0.9	0.9	1.3	2.1	3.1	4.0	5.8	6.3	4.7	4.6	5.35	55.83																							
25-Aug	4.7	5.6	Z	2.3	2.4	2.3	2.7	2.3	2.4	M	M	7.5	4.1	2.5	2.8	2.3	2.3	2.2	2.7	2.3	3.2	4.3	5.2	3.9	3.34	7.47																							
26-Aug	4.8	5.3	Z	5.1	2.5	1.3	1.4	1.2	1.4	2.0	1.9	1.4	1.7	1.8	1.6	2.1	2.6	4.0	6.4	6.9	8.0	7.4	6.6	4.9	3.58	8.02																							
27-Aug	3.9	4.5	Z	6.4	6.2	11.8	13.9	11.5	8.8	7.9	5.7	6.3	1.9	2.0	1.6	0.9	0.9	0.8	2.3	5.0	4.6	3.5	4.3	3.3	5.13	13.92																							
28-Aug	3.5	3.2	Z	3.1	3.5	3.8	3.9	4.2	5.6	3.5	2.6	3.6	1.5	1.8	0.5	0.0	0.1	2.0	1.3	2.2	1.8	2.0	2.0	1.8	2.50	5.62																							
29-Aug	2.8	4.9	Z	3.4	2.4	2.2	3.4	3.2	2.8	1.0	0.6	1.3	0.6	0.4	0.5	0.6	0.8	0.9	1.0	1.7	2.1	0.9	2.3	2.6	1.85	4.91																							
30-Aug	2.1	1.5	Z	2.2	2.6	3.0	3.9	3.1	2.2	2.0	1.6	1.0	2.0	3.3	11.9	14.8	8.0	14.9	25.6	12.2	13.0	14.4	12.4	8.1	7.21	25.65																							
31-Aug	4.8	2.5	Z	1.5	0.8	0.7	0.9	1.7	4.2	2.4	19.8	5.7	3.6	9.9	1.8	0.0	0.0	2.9	7.7	2.6	0.9	0.9	1.0	2.4	3.43	19.82																							
																								3.12	2.80	--	3.63	2.89	3.35	3.70	3.46	3.73	4.07	6.97	4.59	3.12	3.65	3.05	2.64	2.50	2.53	3.26	3.12	3.19	2.93	2.66	2.71	Diurnal Average	
																								9.47	5.59	--	15.14	8.30	12.89	13.92	11.50	12.04	31.53	55.83	22.42	26.26	20.67	12.26	14.78	17.27	14.89	25.65	16.34	13.02	14.42	12.37	8.11	Diurnal Maximum	
Z - zerospan C - Calibration M - Maintenance																																																	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ppb 24-hr --- ppb																																																	



WCAS - Genesee
Summary of Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³
August 2015

Maximum Value: 36.71 µg/m ³ on Aug 28 05:00		Maximum Daily Average: 19.65 µg/m ³ on Aug 28																				Hours in Service: 744					
Minimum Value: 0.0 µg/m ³ on Aug 1 13:00		Minimum Daily Average: 0.45 µg/m ³ on Aug 21																				Hours of Data: 744					
Maximum Diurnal Average: 6.95 µg/m ³ at hour 21		Minimum Diurnal Average: 2.64 µg/m ³ at hour 16																				Hours of Missing Data: 0					
Monthly Average: 4.647 µg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.8 Median = 2.8 Q ₃ = 6.4 P ₉₀ = 10.6 P ₉₉ = 33.9																				Hours of Calibration: 0					
																						Percent Operational Time: 100.0					
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	6.0	4.9	6.1	7.7	7.9	8.8	5.5	2.8	1.0	0.3	2.1	0.6	0.0	0.0	3.3	1.4	0.0	0.5	0.1	1.0	0.1	0.9	2.4	2.4	2.74	8.82	
2-Aug	1.4	2.9	3.2	4.9	3.8	4.1	3.8	4.6	4.0	2.9	3.8	2.4	0.5	3.5	5.2	6.5	5.0	5.8	7.2	8.5	6.8	5.8	5.8	2.7	4.38	8.51	
3-Aug	2.3	1.9	1.9	2.0	1.8	2.2	2.9	4.2	3.5	3.7	4.6	4.3	5.2	6.1	6.5	6.0	6.0	5.9	7.2	9.2	13.8	11.1	3.7	3.3	4.97	13.78	
4-Aug	6.1	5.8	5.8	13.3	3.6	1.3	1.1	0.0	0.0	2.2	0.2	0.9	1.4	0.6	0.2	2.4	2.0	2.8	0.7	3.7	9.4	2.9	2.8	2.8	2.87	13.29	
5-Aug	2.7	3.9	1.9	1.3	0.9	1.0	2.9	1.9	1.8	0.8	2.0	3.5	0.2	5.0	0.0	0.0	0.0	1.7	0.3	0.4	0.6	0.0	0.0	0.0	1.37	5.01	
6-Aug	0.0	1.0	0.0	0.0	2.7	1.9	3.4	4.0	2.3	3.7	3.8	1.3	2.3	1.9	1.9	1.4	4.0	2.0	0.0	0.9	1.7	0.5	0.1	0.0	1.70	4.04	
7-Aug	0.0	0.0	0.0	0.0	0.2	0.5	1.6	1.7	2.3	4.0	1.4	1.9	1.1	0.9	3.2	1.2	1.3	1.3	2.2	4.1	4.3	3.1	5.7	6.6	2.02	6.59	
8-Aug	4.1	2.8	2.3	3.0	2.9	3.1	5.0	3.3	2.2	2.2	3.2	0.3	0.1	1.4	2.2	1.6	2.9	2.8	3.4	4.6	3.8	5.5	9.7	6.9	3.31	9.72	
9-Aug	8.0	8.9	8.0	7.6	6.4	5.4	8.0	9.2	8.0	5.6	5.1	4.2	0.0	1.4	2.2	3.8	6.2	0.1	4.8	4.4	3.8	6.1	2.8	3.5	5.14	9.20	
10-Aug	1.3	3.3	1.4	3.8	2.5	3.3	4.5	5.9	4.7	5.8	2.7	4.2	1.8	0.0	3.7	0.0	1.2	10.2	14.7	11.2	6.8	7.6	7.4	8.1	4.83	14.69	
11-Aug	10.1	9.0	9.6	10.1	11.1	11.2	12.5	12.2	12.5	8.9	8.0	8.3	3.0	7.0	2.4	2.6	2.3	8.2	12.2	13.9	11.2	12.1	11.2	10.5	9.16	13.89	
12-Aug	10.0	10.6	9.0	7.2	5.8	7.9	5.0	8.0	4.0	5.2	4.3	4.0	4.7	2.2	1.9	3.5	5.6	8.5	10.2	10.5	12.7	14.8	9.6	9.8	7.29	14.79	
13-Aug	8.9	8.9	10.1	8.7	9.5	6.2	16.9	13.1	12.0	11.3	13.7	15.2	17.7	10.3	12.2	4.0	6.7	3.6	8.0	31.7	12.1	8.3	7.9	13.5	11.27	31.74	
14-Aug	1.2	0.0	1.8	2.0	2.9	1.9	3.0	3.9	0.0	0.4	0.0	0.7	0.0	0.0	0.0	1.9	1.7	0.3	6.5	4.4	2.8	2.9	2.1	1.8	1.76	6.48	
15-Aug	9.7	0.0	0.0	2.0	0.2	0.0	0.6	0.0	0.0	0.3	0.9	0.0	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.61	9.66	
16-Aug	0.0	0.0	0.0	0.1	0.3	0.0	1.8	1.1	0.6	0.0	0.0	0.0	0.0	0.7	4.4	0.0	0.0	1.5	1.8	2.2	2.0	1.9	0.3	0.8	0.81	4.37	
17-Aug	1.3	1.1	1.2	1.5	0.0	1.0	2.6	4.3	5.6	1.8	3.2	0.0	0.0	3.6	0.0	0.0	1.2	3.5	3.0	0.3	4.3	1.9	2.2	6.8	2.10	6.77	
18-Aug	4.0	0.6	2.8	1.9	0.0	1.3	4.3	2.1	3.6	3.4	2.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	3.1	2.1	1.3	0.0	0.3	1.47	4.35	
19-Aug	0.0	0.0	0.6	1.4	0.6	1.2	1.3	2.9	2.7	0.0	1.5	0.0	3.3	0.9	1.8	1.5	3.2	11.6	3.6	3.9	0.0	0.0	0.0	0.0	1.76	11.64	
20-Aug	1.3	2.1	0.9	1.9	2.0	2.6	3.8	2.7	0.8	0.8	2.1	1.6	0.1	0.9	0.0	0.0	0.8	0.0	3.1	4.3	1.2	4.9	1.0	0.0	1.62	4.91	
21-Aug	0.5	0.0	0.0	0.0	0.6	0.0	0.0	0.4	0.8	0.1	0.7	0.0	0.0	0.2	0.0	0.0	0.9	1.7	0.0	0.5	0.6	1.3	1.2	1.2	0.45	1.74	
22-Aug	0.0	0.0	0.4	0.9	0.8	1.2	1.9	2.2	2.5	1.0	0.0	0.0	0.0	0.6	0.0	0.0	0.4	1.5	0.1	0.7	1.6	2.0	3.1	2.5	0.97	3.10	
23-Aug	1.3	2.4	3.4	3.1	2.1	0.8	2.6	4.7	2.7	3.5	2.0	0.0	0.0	1.2	1.1	2.3	0.4	0.4	2.9	2.8	4.4	2.8	1.4	0.5	2.04	4.71	
24-Aug	1.3	1.4	5.0	4.1	2.8	5.6	5.1	6.0	3.4	4.6	5.8	2.7	2.7	2.2	0.4	2.4	4.5	6.4	8.6	6.4	7.0	8.4	5.8	6.6	4.54	8.62	
25-Aug	5.8	7.1	4.6	3.0	2.2	2.0	3.9	6.7	4.1	6.8	8.0	8.9	10.4	9.6	8.2	9.7	10.7	11.0	14.1	7.8	9.9	8.0	10.4	10.3	7.64	14.10	
26-Aug	10.8	10.6	12.6	7.6	6.4	4.4	3.4	3.5	3.1	4.6	5.1	6.3	7.5	7.1	7.1	8.2	9.2	10.3	11.3	10.6	11.3	11.8	10.3	8.4	7.98	12.59	
27-Aug	6.4	7.9	5.9	4.3	1.4	7.4	6.8	16.9	13.9	9.4	13.7	12.0	13.5	15.1	14.4	10.8	19.2	13.5	28.4	32.6	35.9	35.4	33.2	34.0	16.33	35.93	
28-Aug	35.1	34.1	32.3	34.5	36.7	33.9	36.5	34.2	36.4	13.8	13.8	15.3	7.8	8.3	1.4	1.5	5.0	7.1	6.6	8.5	19.8	17.8	16.0	15.1	19.65	36.71	
29-Aug	9.7	8.1	7.5	4.0	5.2	1.6	1.1	4.5	4.0	0.7	2.4	0.6	0.0	0.0	8.9	8.6	12.4	16.3	23.0	26.2	27.4	2.1	13.1	10.4	8.24	27.43	
30-Aug	5.0	0.1	3.2	3.6	2.5	3.1	3.6	8.7	4.5	15.1	1.2	7.9	9.0	2.3	0.6	2.3	0.0	3.4	2.8	0.0	3.8	5.7	7.7	3.0	4.13	15.12	
31-Aug	2.9	0.0	0.0	0.0	0.4	0.0	0.7	3.4	2.3	0.9	1.0	0.2	0.0	0.7	0.0	0.0	0.0	0.7	4.4	0.0	0.0	2.8	1.7	0.0	0.92	4.43	
		5.08	4.50	4.56	4.69	4.07	4.03	5.03	5.77	4.80	3.92	3.89	3.43	3.03	3.05	3.01	2.64	3.65	4.58	6.24	6.95	6.95	6.33	5.77	5.55	Diurnal Average	
		35.10	34.14	32.29	34.47	36.71	33.91	36.49	34.21	36.44	15.12	13.78	15.29	17.66	15.07	14.36	10.80	19.21	16.32	28.39	32.64	35.93	35.42	33.22	33.98	Diurnal Maximum	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 ul/m ³ 24-hr 30 ul/m ³																											

Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee

Calibration Date: August 21, 2015

Parameter: NO/NO₂/NO_x

Instrument: Teco 42C

Serial Number: 42c-70978-367

Previous Calibration Date: June 23, 2015

Calibration: Removal

Calibration Equipment: Sabio 2010 SN 08600312

Barometric Pressure: 27.32" Hg

Calibration Method: Standard Gas Dilution/GPT

Cylinder ID: FF14354

Temperature: 21.0° C

Cylinder Concentration: 12.6 ppm NO

In Service: January 14, 2015

Technician: L. Burns

NO	Final Zero: NA	Final Span: NA	As Found Correction Factor: 1.066
NO ₂	Final Zero: NA	Final Span: NA	As Found Correction Factor: 0.000
NO _x	Final Zero: NA	Final Span: NA	As Found Correction Factor: 1.064

Results of Linear Regression			Slope	Intercept	R ²
NO	R _c vs C _c	Previous	100.683700	-10.213340	0.999997
		Current	1.#INF	-1.#IND	0.000000
	C _i vs C _c	Current	0.000000	0.000000	-1.#IND
NO ₂	R _c vs C _c	Previous	99.002880	49.124370	0.999997
		Current	1.#INF	-1.#IND	0.000000
	C _i vs C _c	Current	0.000000	0.000000	-1.#IND
NO _x	R _c vs C _c	Previous	100.344600	-13.088320	0.999997
		Current	1.#INF	-1.#IND	0.000000
	C _i vs C _c	Current	0.000000	0.000000	-1.#IND

Comments:

Calibration Data Summary (Page 2)

August 21, 2015 - Station 910

NO Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i		
0.08026	4.006	247.5	3.0	0.0	1.#INF		
0.00000	0.000	-1.0	3.0	0.0	-1.#INF		
0.00000	0.000	-1.0	3.0	0.0	-1.#INF		
0.00000	4.000	0.0	3.0	0.0			
NO Calibration					Average Correction Factor: -1.#IND		
0.08026	4.006	247.5	13.4	0.0	1.#INF		
0.00000	0.000	-1.0	13.4	0.0	-1.#INF		
0.00000	0.000	-1.0	13.4	0.0	-1.#INF		
0.00000	4.000	0.0	13.4	0.0			
NO _x Calibration					Average Correction Factor: -1.#IND		
Reference Concentration NO (ppb)	Raw Count Output NO	Calculated Concentration NO (ppb)	Calculated Concentration NO ₂ , C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i	Converter Efficiency C _i /C _c
0.0	0.0	0.0	0.0	15.3	0.0	-1.#IND	-1.#IND
0.0	0.0	0.0	0.0	15.3	0.0	-1.#IND	-1.#IND
0.0	0.0	0.0	0.0	15.3	0.0	-1.#IND	-1.#IND
			0.0	15.3	0.0		
					Average Correction Factor: -1.#IND		
NO ₂ Gas Phase Titration					Average Converter Efficiency: -1.#IND		
Parameter	Correction Factor (Previous)	Correction Factor: (Current)	Percent Change of Correction Factor				
NO	1.000	1.#INF	1.#INF				
NO ₂	1.000	-1.#IND	-1.#IND				
NO _x	0.999	1.#INF	1.#INF				

Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: August 21, 2015
 Parameter: NO/NO₂/NO_x

Instrument: Teco 42i	Serial Number: 1150790046	Previous Calibration Date: NA
Calibration: Install	Calibration Equipment: Sabio 2010 SN 08600312	Barometric Pressure: 27.32" Hg
Calibration Method: Standard Gas Dilution/GPT	Cylinder ID: FF14354	Temperature: 21.0° C
Cylinder Concentration: 12.6 ppm NO	In Service: January 14, 2015	Technician: L. Burns

Instrument Settings	NO bkg ppb	NO _x bkg ppb	Pre-reactor bkg ppb	NO Coefficient	NO _x Coefficient	NO ₂ Coefficient	Monitoring Range
Previous	NA	NA	NA	NA	NA	NA	300 ppb
Current	1.6	1.7	NA	1.107	1.003	1.000	300 ppb

NO	Final Zero: -0.2 ppb	Final Span: 196.6 ppb	As Found Correction Factor: NA
NO ₂	Final Zero: -0.3 ppb	Final Span: 16.4 ppb	As Found Correction Factor: NA
NO _x	Final Zero: -0.3 ppb	Final Span: 212.8 ppb	As Found Correction Factor: NA

Results of Linear Regression			Slope	Intercept	R ²
NO	R _c vs C _c	Previous	NA	NA	NA
		Current	99.797380	41.963550	0.999989
	C _i vs C _c	Current	1.000000	-0.000007	0.999990
NO ₂	R _c vs C _c	Previous	NA	NA	NA
		Current	99.816680	43.606030	0.999967
	C _i vs C _c	Current	1.000000	0.000000	0.999967
NO _x	R _c vs C _c	Previous	NA	NA	NA
		Current	99.948550	47.027410	0.999983
	C _i vs C _c	Current	1.000000	-0.000056	0.999983

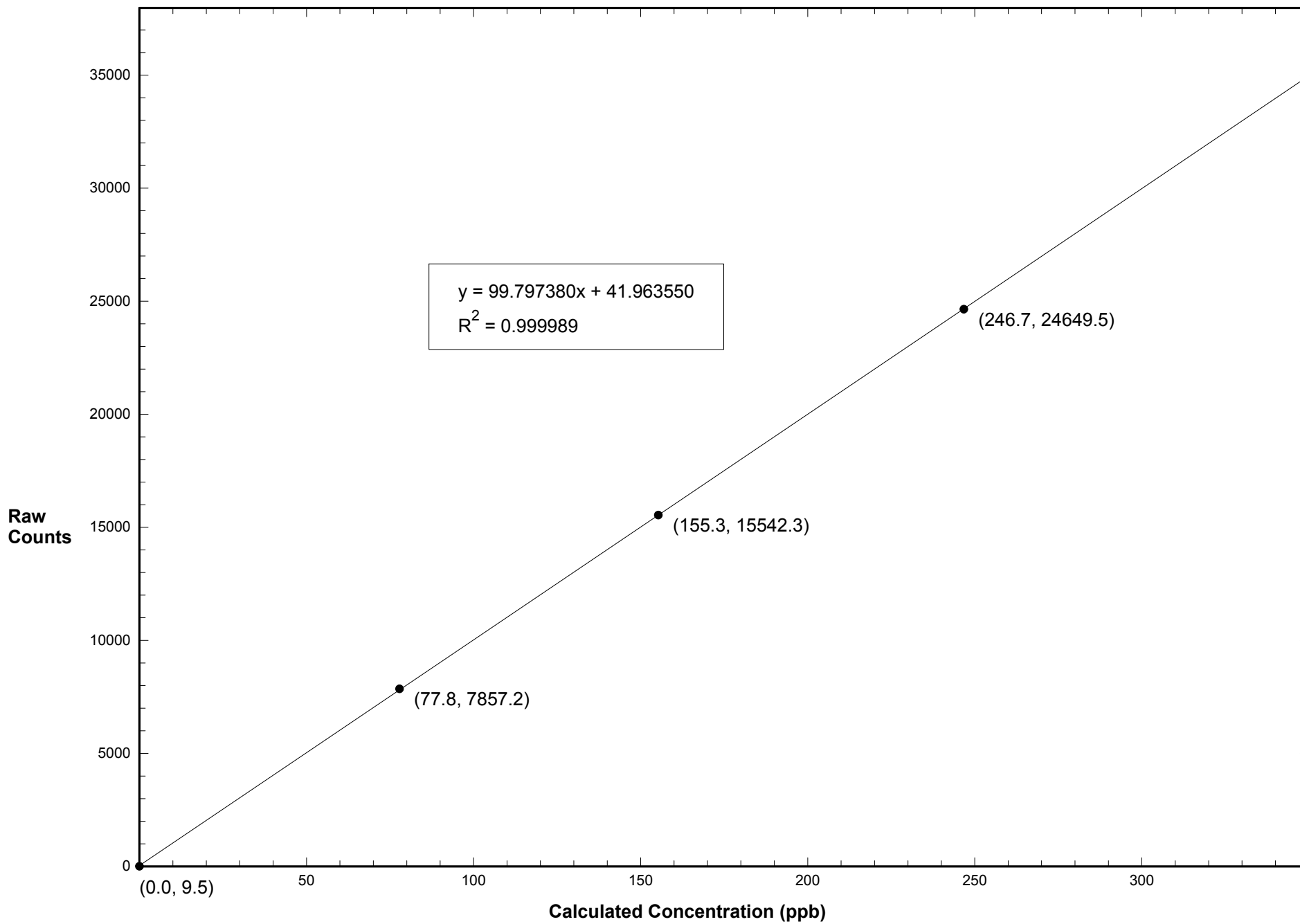
Comments:

Calibration Data Summary (Page 2)

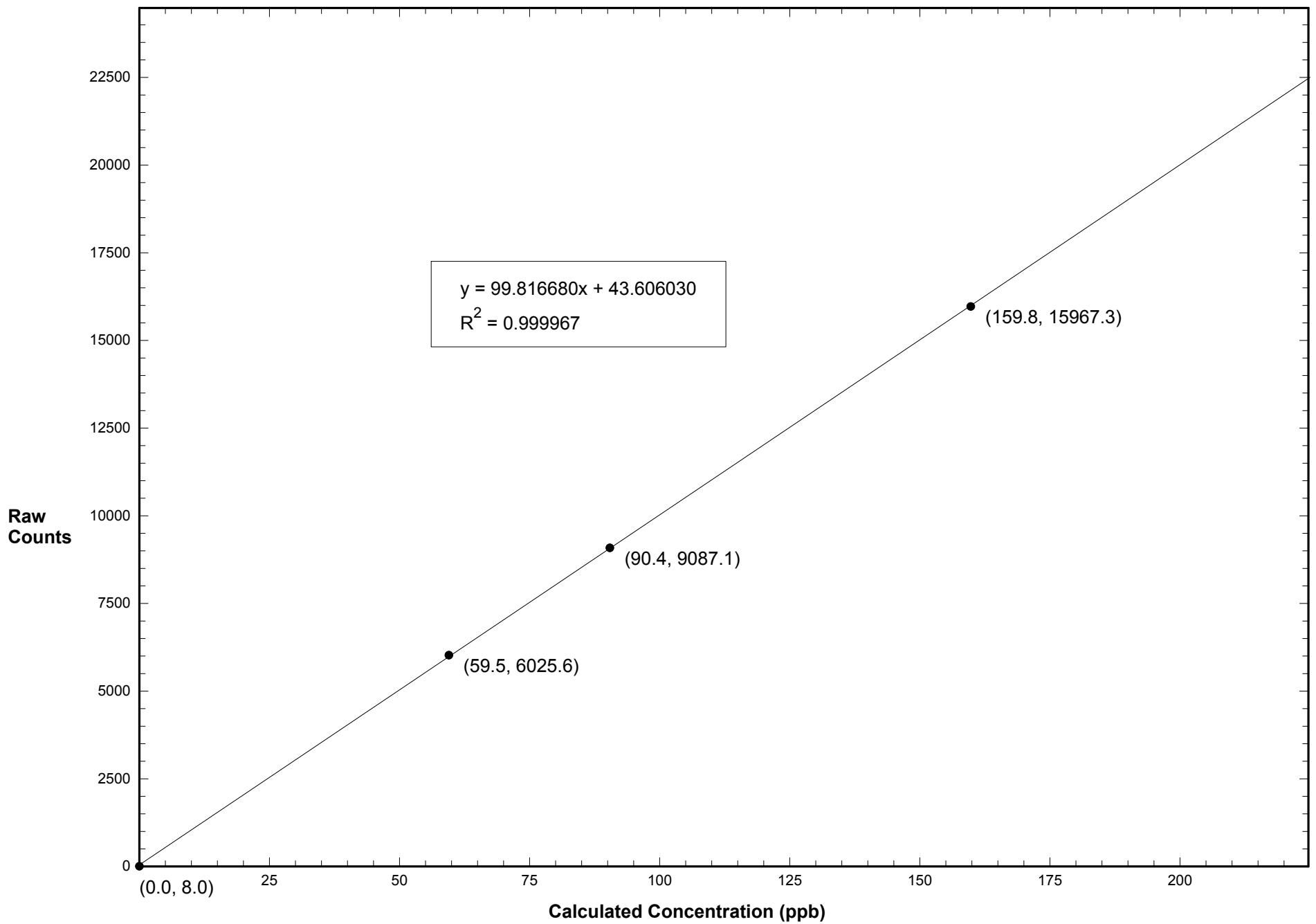
August 21, 2015 - Station 910

NO Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i		
0.08043	4.027	246.7	24649.5	246.6	1.001		
0.05022	4.024	155.3	15542.3	155.3	1.000		
0.02502	4.025	77.8	7857.2	78.3	0.994		
0.00000	4.000	0.0	9.5	-0.3			
NO Calibration					Average Correction Factor:	0.998	
0.08043	4.027	246.7	24677.8	246.4	1.001		
0.05022	4.024	155.3	15591.9	155.5	0.999		
0.02502	4.025	77.8	7876.6	78.3	0.994		
0.00000	4.000	0.0	5.0	-0.4			
NO _x Calibration					Average Correction Factor:	0.998	
Reference Concentration NO (ppb)	Raw Count Output NO	Calculated Concentration NO (ppb)	Calculated Concentration NO ₂ , C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i	Converter Efficiency C _i /C _c
247.4	8786.2	87.6	159.8	15967.3	159.5	1.002	0.998
247.4	15708.7	157.0	90.4	9087.1	90.6	0.998	1.002
247.4	18797.2	187.9	59.5	6025.6	59.9	0.993	1.008
			0.0	8.0	-0.4		
					Average Correction Factor:	0.997	
NO ₂ Gas Phase Titration					Average Converter Efficiency:	1.003	
Parameter	Correction Factor (Previous)	Correction Factor: (Current)	Percent Change of Correction Factor				
NO	0.000	1.001	0.0				
NO ₂	0.000	1.002	0.0				
NO _x	0.000	1.001	0.0				

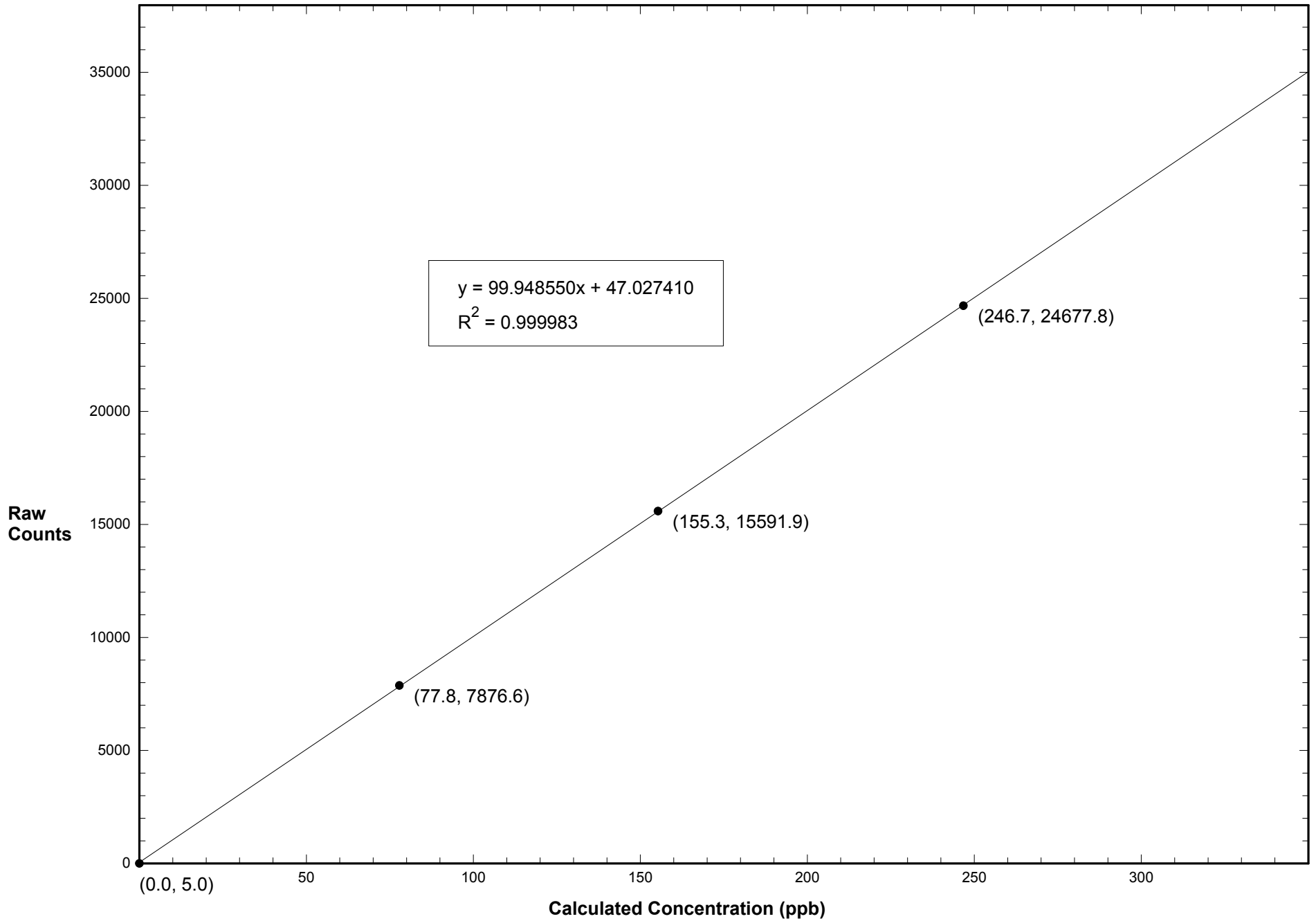
Station 910 NO August 21, 2015: Linear Regression



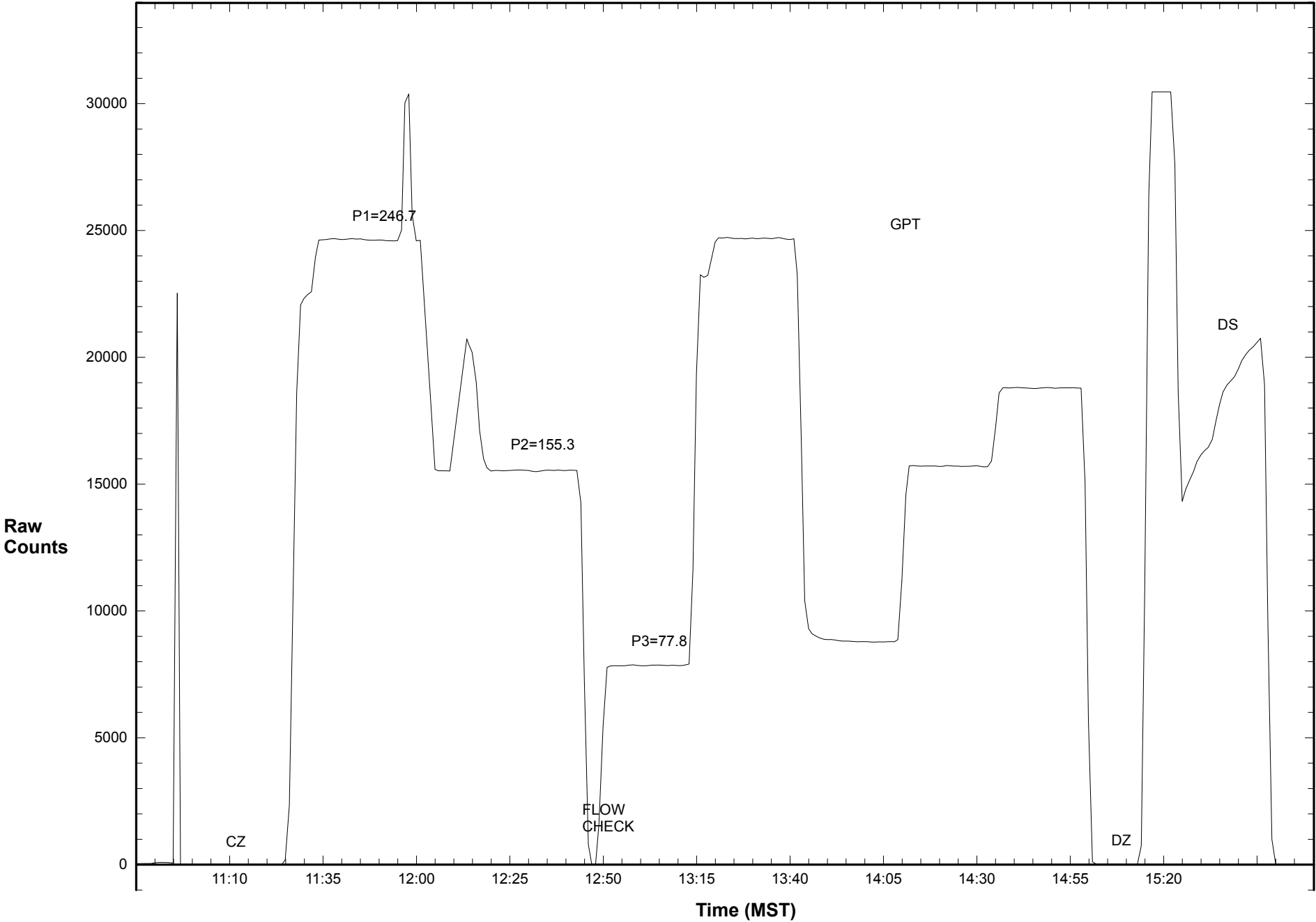
Station 910 NO2 August 21, 2015: Linear Regression



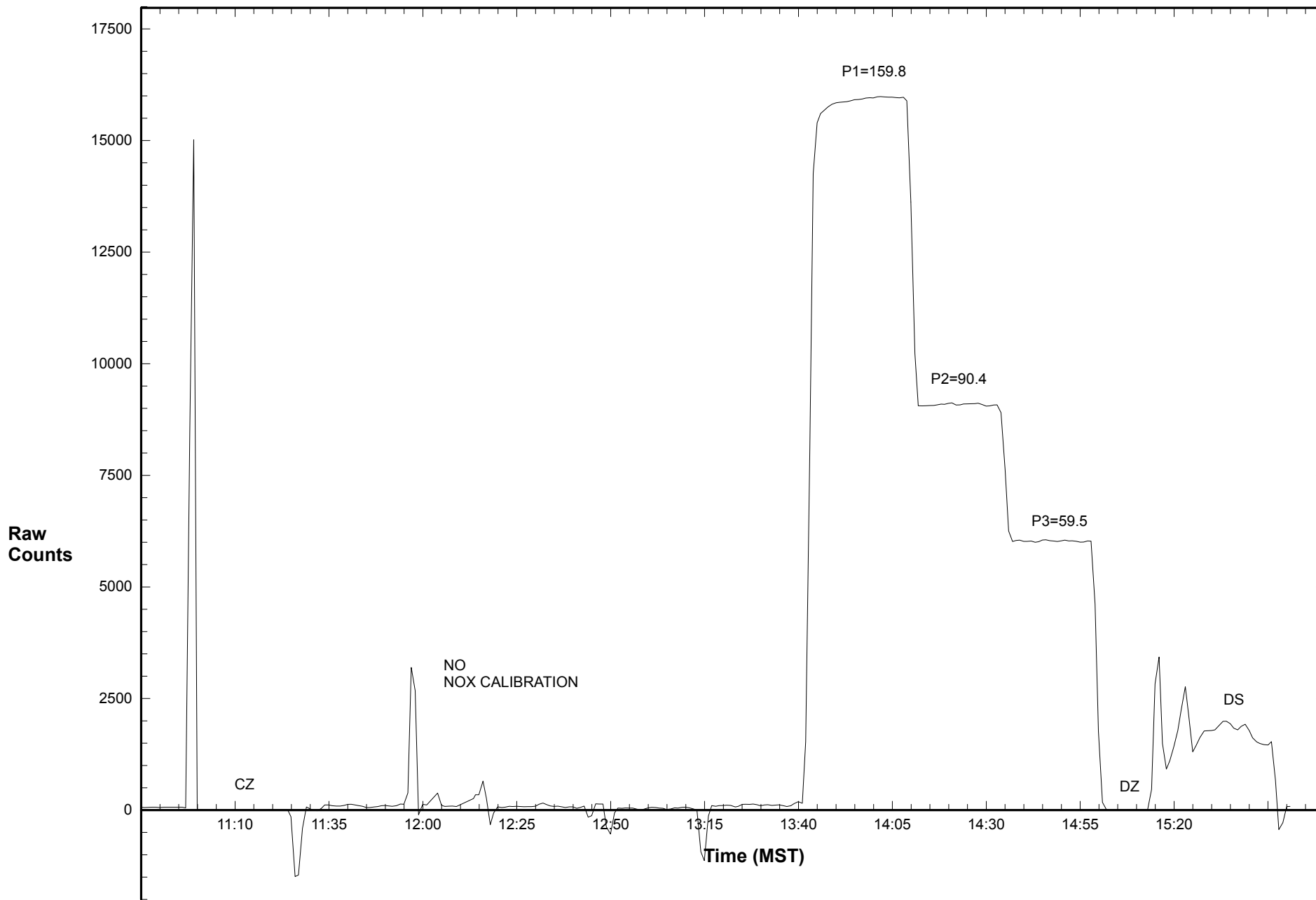
Station 910 NOX August 21, 2015: Linear Regression



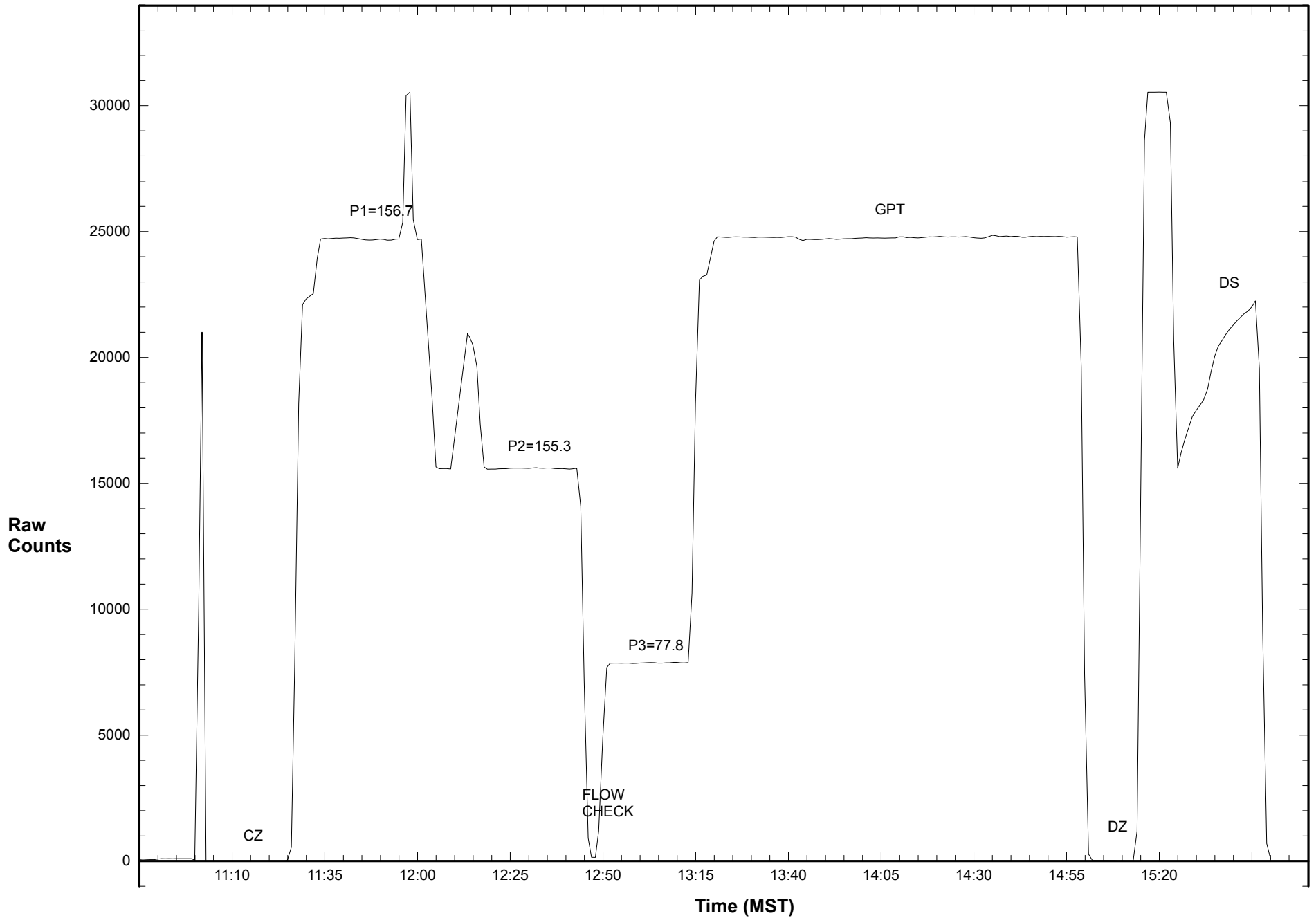
Station 910 NO August 21, 2015: Calibration Graph



Station 910 NO2 August 21, 2015: Calibration Graph



Station 910 NOX August 21, 2015: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: August 21, 2015
 Parameter: O₃

Instrument: Teco 49i

Serial Number: 0708721220

Previous Calibration Date: June 23, 2015

Calibration: Removal

Calibration Equipment: TECO 175 sn 175-51760-291 Barometric Pressure: 27.32" Hg

Calibration Method: Certified Ozone Generator

Temperature: 21.0° C

Technician: L. Burns

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	-0.6	1.011	500 ppb
Current			500 ppb

Final Zero: NA Final Span: NA As Found Correction Factor: 1.053

Calibration System Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
3.000	402.0	0.8	0.0	1.#INF
3.000	203.0	0.8	0.0	1.#INF
3.000	104.0	0.8	0.0	1.#INF
3.000	0.0	0.8	0.0	

Results of Linear Regression			
R _c vs C _c	Slope	Intercept	R ²
Previous	59.841720	78.629070	0.999928
Current	1.#INF	-1.#IND	0.000000
C _i vs C _c			
Current	0.000000	0.000000	-1.#IND

Average Correction Factor: 1.#INF
 Previous Correction Factor: 1.003
 Current Correction Factor: 1.#INF
 Percent Change of Correction Factor: 1.#INF

Comments:

Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: August 21, 2015
 Parameter: O₃

Instrument: Teco 49i

Serial Number: 1150790051

Previous Calibration Date: NA

Calibration: Install

Calibration Equipment: TECO 175 sn 175-51760-291 Barometric Pressure: 27.32" Hg

Calibration Method: Certified Ozone Generator

Temperature: 21.0° C

Technician: L. Burns

Instrument Settings	Background	Coefficient	Monitoring Range
Previous	NA	NA	500 ppb
Current	-1.0	1.085	500 ppb

Final Zero: 1.8 ppb Final Span: 413.2 ppb As Found Correction Factor: NA

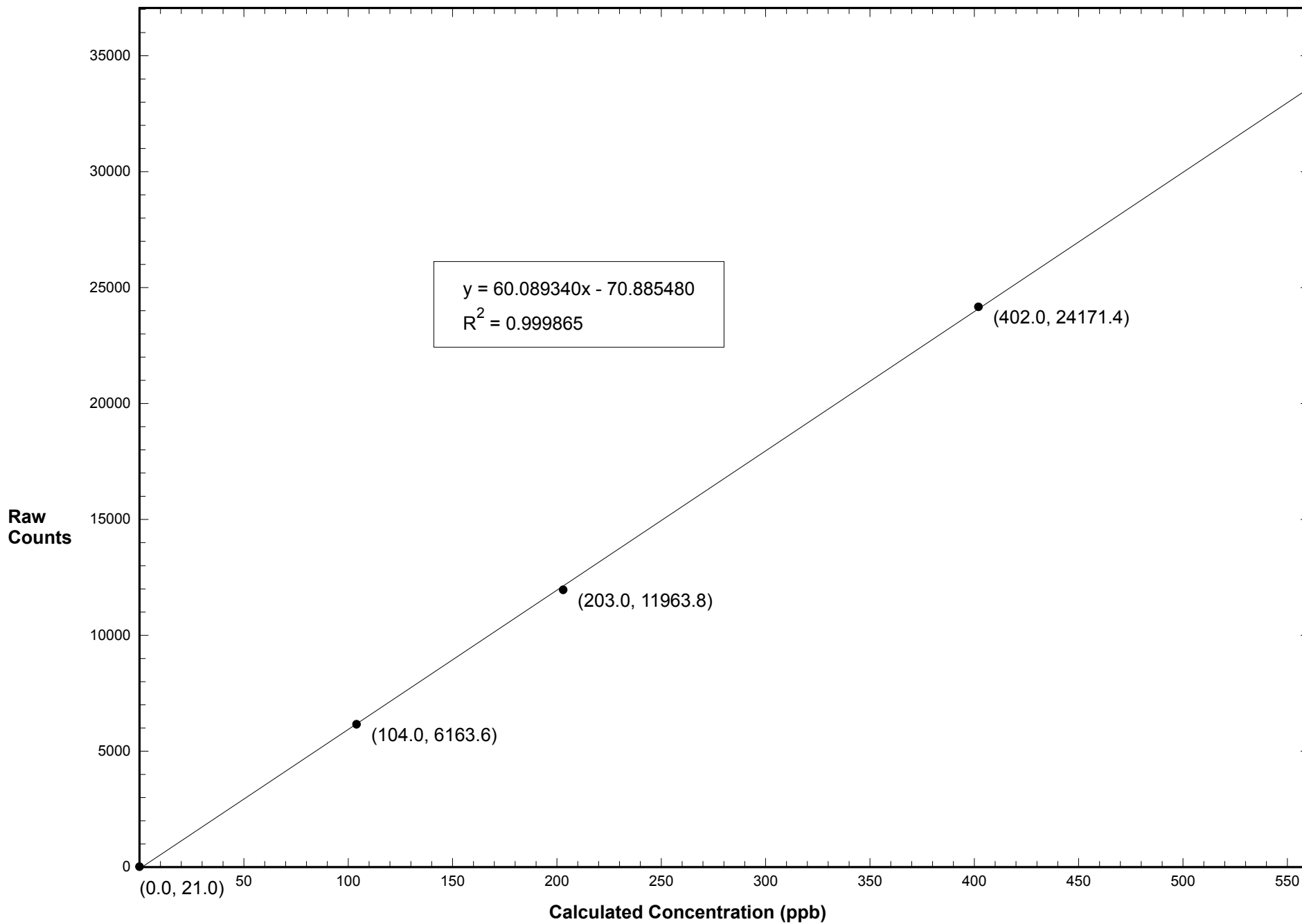
Calibration System Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
3.000	402.0	24171.4	403.4	0.996
3.000	203.0	11963.8	200.3	1.014
3.000	104.0	6163.6	103.8	1.002
3.000	0.0	21.0	1.5	

Results of Linear Regression			
R _c vs C _c	Slope	Intercept	R ²
Previous	NA	NA	NA
Current	60.089340	-70.885480	0.999865
C _i vs C _c	Slope	Intercept	R ²
Current	1.000000	0.000006	0.999865

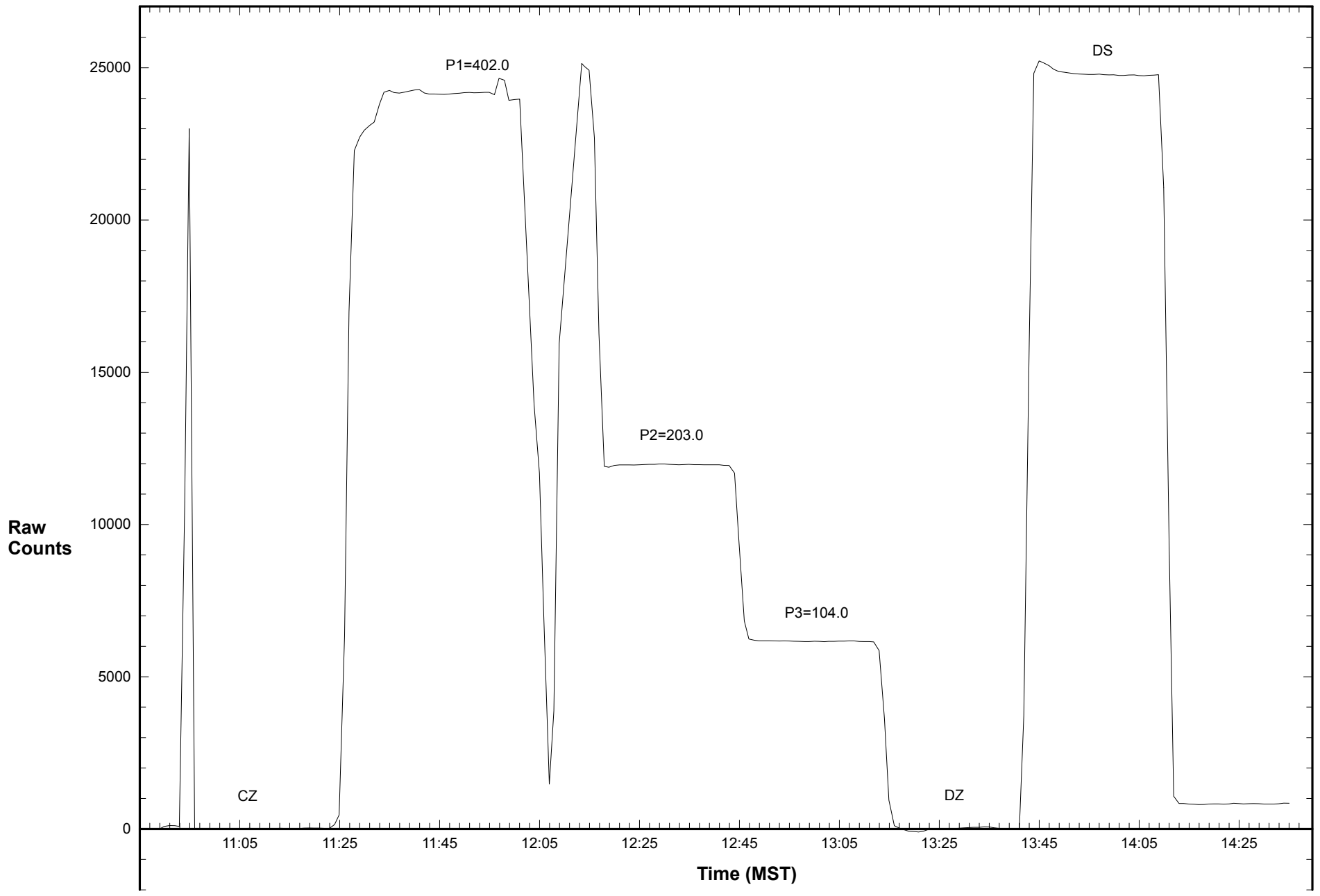
Average Correction Factor: 1.004
 Previous Correction Factor: 0.000
 Current Correction Factor: 0.996
 Percent Change of Correction Factor: 1.5

Comments:

Station 910 O3 August 21, 2015: Linear Regression



Station 910 O3 August 21, 2015: Calibration Graph



Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: August 21, 2015
 Parameter: SO₂

Instrument: Teco 43i	Serial Number: 0708721218	Previous Calibration Date: June 23, 2015
Calibration: Removal	Calibration Equipment: Sabio 2010 SN 08600312	Barometric Pressure: 27.32" Hg
Calibration Method: Standard Gas Dilution	Cylinder ID: FF14354	Temperature: 21.0° C
Cylinder Concentration: 6.34 ppm SO ₂	In Service: January 14, 2015	Technician: L. Burns

Instrument Settings	SO ₂ bkg ppb	SO ₂ Coefficient	Monitoring Range
Previous	13.6	0.875	200 ppb
Current			200 ppb

Final Zero: NA Final Span: NA As Found Correction Factor: 1.020

SO ₂ Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
0.0803	4.006	124.5	-10.0	0.0	1.#INF
0.0000	0.000	-1.0	-10.0	0.0	-1.#INF
0.0000	0.000	-1.0	-10.0	0.0	-1.#INF
0.0000	4.000	0.0	-10.0	0.0	

Results of Linear Regression			
R _c vs C _c	Slope	Intercept	R ²
Previous	150.010000	-3.891383	0.999980
Current	1.#INF	-1.#IND	0.000000
C _i vs C _c			
Current	0.000000	0.000000	-1.#IND

Average Correction Factor: -1.#IND

Previous Correction Factor: 1.002

Current Correction Factor: 1.#INF

Percent Change of Correction Factor: 1.#INF

Comments:

Calibration Data Summary

West Central Airshed Society

Operator: WCAS

Location: Station 910, Genesee
 Calibration Date: August 21, 2015
 Parameter: SO₂

Instrument: Teco 43i	Serial Number: JC1433001437	Previous Calibration Date: NA
Calibration: Install	Calibration Equipment: Sabio 2010 SN 08600312	Barometric Pressure: 27.32" Hg
Calibration Method: Standard Gas Dilution	Cylinder ID: FF14354	Temperature: 21.0° C
Cylinder Concentration: 6.34 ppm SO ₂	In Service: January 14, 2015	Technician: L. Burns

Instrument Settings	SO ₂ bkg ppb	SO ₂ Coefficient	Monitoring Range
Previous	NA	NA	200 ppb
Current	30.5	1.022	200 ppb

Final Zero: 0.2 ppb Final Span: 63.8 ppb As Found Correction Factor: NA

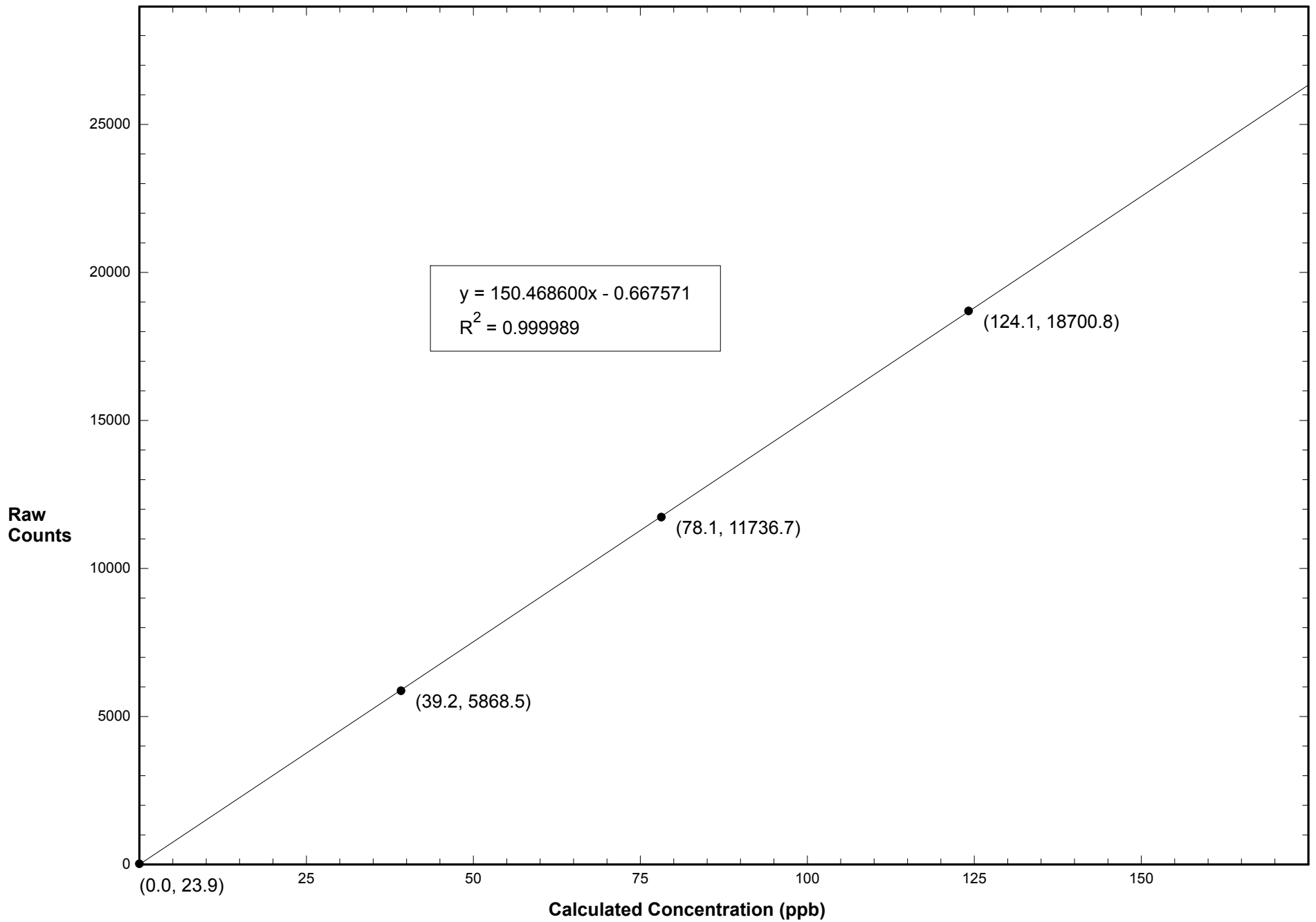
SO ₂ Flow Rate (LPM)	Dilution Flow Rate (LPM)	Calculated Concentration C _c (ppb)	Raw Count Output R _c	Indicated Concentration C _i (ppb)	Correction Factor C _c /C _i
0.0804	4.027	124.1	18700.8	124.3	0.999
0.0502	4.024	78.1	11736.7	78.0	1.002
0.0250	4.025	39.2	5868.5	39.0	1.004
0.0000	4.000	0.0	23.9	0.2	

Results of Linear Regression			
R _c vs C _c	Slope	Intercept	R ²
Previous	NA	NA	NA
Current	150.468600	-0.667571	0.999989
C _i vs C _c			
Current	1.000000	0.000010	0.999989

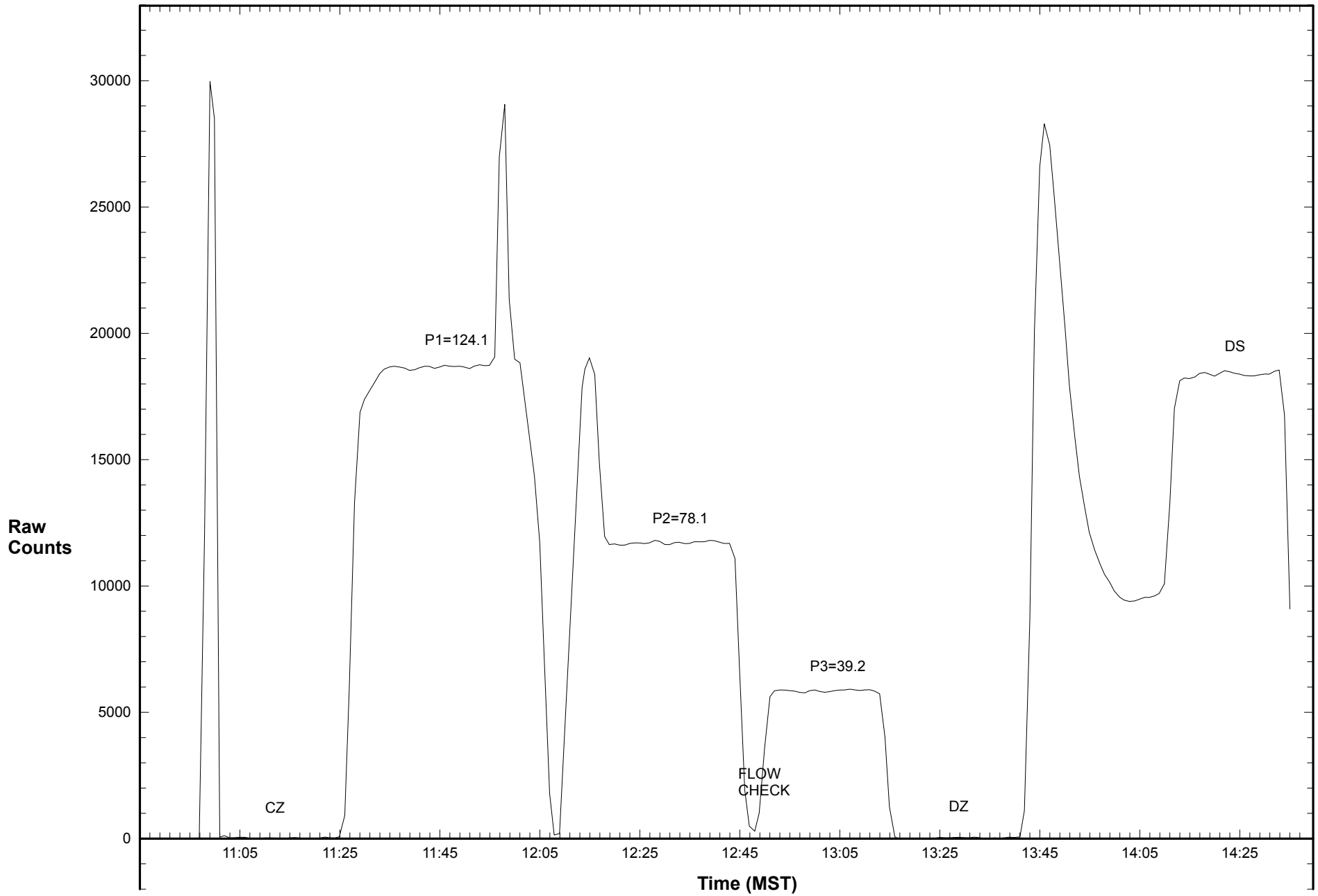
Average Correction Factor: 1.002
 Previous Correction Factor: 0.000
 Current Correction Factor: 0.999
 Percent Change of Correction Factor: 0.2

Comments:

Station 910 SO2 August 21, 2015: Linear Regression



Station 910 SO2 August 21, 2015: Calibration Graph



WEST CENTRAL AIRSHED SOCIETY

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

**AMS 910
GENESEE
AUGUST 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
August 2015

Maximum Value: 30.69 C on Aug 11 15:00 Maximum Daily Average: 21.67 C on Aug 12																								Hours in Service: 744		
Minimum Value: 3.9 C on Aug 23 07:00 Minimum Daily Average: 9.84 C on Aug 21																								Hours of Data: 744		
Maximum Diurnal Average: 23.35 C at hour 16 Minimum Diurnal Average: 10.85 C at hour 6																								Hours of Missing Data: 0		
Monthly Average: 16.845 C Percentiles: P₁ = 6.0 P₁₀ = 9.8 Q₁ = 12.4 Median = 16.0 Q₃ = 20.9 P₉₀ = 25.4 P₉₉ = 29.9																								Hours of Calibration: 0		
																								Percent Operational Time: 100.0		
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	16.3	14.4	16.0	15.0	15.4	15.5	15.1	15.0	15.0	16.9	19.0	18.6	20.3	21.7	23.1	23.3	23.2	22.6	22.4	21.0	19.2	16.5	15.9	15.1	18.19	23.25
2-Aug	14.9	14.3	13.4	13.0	12.9	12.9	15.4	18.6	21.1	23.5	23.1	25.4	26.9	27.1	28.0	28.3	26.9	26.0	25.3	24.4	21.9	19.8	18.5	18.5	20.84	28.32
3-Aug	17.8	17.5	16.8	15.9	14.6	14.0	14.3	16.3	18.2	20.3	22.4	24.4	25.9	27.0	28.5	28.5	28.3	28.2	27.6	25.3	23.5	22.2	20.8	19.5	21.58	28.54
4-Aug	19.1	18.9	17.9	18.6	16.6	16.1	15.7	15.4	15.3	15.4	16.4	17.8	20.2	21.6	22.2	21.9	21.9	20.6	20.4	19.0	17.2	14.4	15.3	15.5	18.05	22.18
5-Aug	14.6	14.2	14.2	14.0	14.3	14.0	14.0	14.5	15.2	16.0	17.1	17.2	17.8	18.6	15.0	17.8	18.8	17.2	16.8	15.9	13.8	11.6	11.1	10.1	15.16	18.84
6-Aug	9.4	8.5	8.8	7.2	9.3	9.9	10.6	12.1	13.3	15.5	16.6	17.4	19.0	19.5	20.4	20.9	19.5	18.3	16.4	17.6	16.6	15.3	13.9	13.0	14.54	20.93
7-Aug	12.6	12.9	12.7	11.9	11.6	11.4	12.4	13.4	15.4	17.9	19.7	20.7	21.3	21.9	22.7	23.4	23.6	23.6	23.1	21.6	19.0	17.5	15.4	15.2	17.54	23.63
8-Aug	14.9	13.1	12.3	11.9	11.4	12.5	14.1	17.3	19.7	21.8	23.7	25.2	26.9	27.5	28.4	27.9	27.6	27.1	26.3	24.4	21.5	17.9	18.0	16.2	20.31	28.43
9-Aug	15.1	14.1	13.0	11.8	11.5	11.4	11.8	15.1	18.0	21.2	24.3	26.4	28.3	29.9	29.9	29.6	27.2	26.5	24.1	22.7	20.2	18.2	17.8	15.9	20.16	29.92
10-Aug	14.4	14.4	11.7	13.1	11.5	9.6	11.4	14.9	18.5	21.9	25.2	26.8	28.3	29.6	28.5	29.3	29.9	28.5	24.7	22.0	19.7	16.3	15.4	15.5	20.04	29.88
11-Aug	15.4	13.6	13.9	12.9	13.1	12.0	14.4	15.3	18.1	21.3	23.4	25.9	28.3	29.6	30.7	30.5	30.6	30.0	28.4	25.2	21.0	18.8	17.7	17.5	21.15	30.69
12-Aug	18.2	15.9	12.7	12.4	12.1	13.9	14.6	18.0	20.9	23.4	25.2	26.5	28.2	28.9	29.5	30.3	30.6	30.2	27.7	24.6	21.5	19.0	18.4	17.4	21.67	30.62
13-Aug	15.7	13.5	13.3	14.4	14.5	10.9	13.0	16.9	19.9	23.6	26.2	26.4	25.7	28.3	29.1	29.8	29.9	28.3	26.3	22.8	20.2	19.1	17.8	17.8	20.97	29.86
14-Aug	16.6	14.6	15.0	14.7	13.1	13.5	15.3	16.4	17.4	19.1	19.1	19.8	20.8	20.2	20.8	19.7	20.4	18.9	16.4	15.8	15.1	15.0	15.0	15.0	17.23	20.83
15-Aug	12.8	11.8	10.6	10.6	10.5	10.4	10.4	10.3	10.2	10.4	10.8	11.5	12.3	13.0	14.4	14.2	14.0	14.1	13.8	13.4	11.7	9.8	10.0	10.3	11.72	14.43
16-Aug	9.0	8.8	8.4	7.6	8.1	8.1	8.8	9.9	10.8	11.8	12.8	13.9	16.6	16.6	12.5	15.2	16.5	16.2	16.6	15.5	12.4	10.3	9.1	7.1	11.78	16.63
17-Aug	6.4	6.1	6.4	6.7	6.0	4.7	7.0	9.5	13.5	16.9	19.2	21.2	21.4	20.0	20.2	20.1	19.8	18.9	17.7	16.2	13.0	11.3	11.0	11.0	13.88	21.38
18-Aug	11.0	10.7	10.7	10.6	9.9	9.3	10.1	11.2	12.8	14.3	15.6	17.4	18.6	19.8	19.9	20.7	21.2	21.0	19.7	17.6	15.8	15.2	14.4	14.9	15.10	21.21
19-Aug	15.1	15.9	15.8	14.7	13.1	12.2	12.5	15.2	18.1	21.8	24.0	26.0	26.4	26.1	26.5	25.5	25.2	22.7	20.0	18.8	15.8	13.7	13.9	13.3	18.84	26.50
20-Aug	11.4	9.0	9.7	10.1	10.8	12.3	12.6	13.6	15.5	16.8	17.6	18.9	19.9	20.1	20.1	20.4	20.4	19.7	17.8	13.4	13.4	11.9	10.8	9.9	14.83	20.45
21-Aug	9.5	8.8	8.2	8.6	8.9	8.3	8.0	8.0	8.2	8.7	9.4	10.8	11.1	11.8	12.1	12.4	12.0	11.6	11.2	11.1	10.1	9.6	9.0	8.8	9.84	12.38
22-Aug	8.7	7.8	6.8	6.6	6.0	5.8	5.9	7.3	9.6	11.8	13.3	14.6	15.1	16.2	16.9	17.5	18.0	17.9	17.5	13.9	11.8	9.9	9.1	7.9	11.50	17.96
23-Aug	7.8	7.0	6.0	6.2	5.6	4.4	3.9	7.2	11.0	14.6	18.0	21.0	23.4	24.5	24.5	23.5	24.4	23.7	21.4	19.4	16.3	15.0	13.5	13.7	14.83	24.48
24-Aug	12.3	10.8	11.1	9.8	8.7	10.2	10.5	12.1	13.0	14.9	17.1	18.9	19.8	21.3	22.3	22.6	22.6	22.2	21.5	19.2	16.6	13.5	11.8	12.3	15.62	22.57
25-Aug	11.1	11.0	10.6	11.1	10.2	8.8	8.0	11.1	13.7	15.6	17.0	19.0	20.3	20.9	21.7	21.8	21.7	22.0	20.5	17.7	14.9	13.8	12.8	13.8	15.38	22.01
26-Aug	12.8	12.5	13.1	12.7	12.3	11.6	11.4	11.7	12.7	13.8	15.1	16.8	18.3	20.3	20.8	21.0	21.3	21.1	20.3	17.7	16.8	16.3	14.0	13.3	15.73	21.34
27-Aug	12.2	11.9	11.4	11.2	9.7	10.0	10.0	12.8	14.1	15.3	18.0	20.1	23.1	24.8	25.9	26.3	25.6	25.5	22.7	21.1	18.3	16.2	15.4	15.1	17.37	26.30
28-Aug	14.9	14.0	13.1	12.5	12.8	10.1	10.1	12.0	14.6	18.4	21.3	22.7	24.6	25.6	27.4	28.4	27.2	26.4	24.8	21.8	19.2	16.6	16.1	16.6	18.79	28.40
29-Aug	17.1	16.0	15.6	15.1	13.8	13.7	13.0	12.8	14.8	17.4	18.9	20.6	22.2	24.3	25.4	25.8	26.1	25.3	23.2	21.8	19.2	18.2	15.9	12.6	18.70	26.09
30-Aug	12.9	13.8	10.1	10.1	8.7	9.2	6.3	10.1	14.9	18.7	21.7	23.6	23.4	23.4	22.5	21.9	21.1	19.7	18.8	15.5	12.4	10.1	10.0	10.0	15.37	23.60
31-Aug	9.2	9.2	8.8	8.1	9.6	10.0	9.6	12.7	15.7	17.4	19.8	19.8	20.7	21.7	22.5	24.4	23.5	23.4	21.2	16.8	16.9	12.6	10.2	7.9	15.49	24.43
																								Diurnal Average		
																								Diurnal Maximum		



WCAS - Genesee
Summary of Hourly Averages

External Temperature 10 m (ET_10) - C
August 2015

Maximum Value: 29.07 C on Aug 12 17:00 Maximum Daily Average: 22.06 C on Aug 12																						Hours in Service: 744																										
Minimum Value: 4.7 C on Aug 23 07:00 Minimum Daily Average: 9.37 C on Aug 21																						Hours of Data: 744																										
Maximum Diurnal Average: 22.01 C at hour 17 Minimum Diurnal Average: 11.57 C at hour 7																						Hours of Missing Data: 0																										
Monthly Average: 16.897 C Percentiles: P₁ = 6.9 P₁₀ = 10.2 Q₁ = 13.0 Median = 16.5 Q₃ = 20.3 P₉₀ = 24.4 P₉₉ = 28.5																						Hours of Calibration: 0																										
																						Percent Operational Time: 100.0																										
Day	Hourly Period Ending At																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	18.8	18.4	18.4	17.3	16.3	16.6	14.9	14.5	14.4	16.0	17.6	17.1	18.7	20.1	21.4	21.9	22.3	22.0	21.8	21.5	20.9	19.3	18.1	16.8	18.53	22.25																						
2-Aug	16.9	16.0	15.4	14.0	14.7	14.4	15.8	17.5	19.3	21.1	21.4	22.9	24.1	24.4	24.7	25.2	24.9	24.6	24.1	23.6	21.7	20.2	19.1	18.8	20.21	25.20																						
3-Aug	18.4	18.0	17.1	15.9	14.6	13.9	13.9	15.1	16.7	18.5	20.3	21.6	23.1	24.3	25.4	26.1	26.3	26.6	26.7	25.4	23.7	22.3	20.9	19.8	20.61	26.66																						
4-Aug	19.7	19.0	19.9	20.2	16.2	15.6	15.2	14.9	14.7	14.8	15.6	16.7	18.5	19.8	20.5	20.1	20.2	19.7	19.7	18.7	17.6	17.0	16.7	16.5	17.82	20.52																						
5-Aug	15.7	15.3	15.5	14.8	14.7	14.3	13.4	13.7	14.3	15.2	15.8	16.2	16.6	17.4	14.4	16.3	17.5	16.3	15.7	15.2	14.5	13.7	13.0	11.9	15.06	17.51																						
6-Aug	10.4	10.9	10.2	8.2	9.6	9.9	10.4	11.4	12.5	14.3	15.4	16.2	17.5	18.0	18.8	19.4	18.5	17.0	15.4	16.8	16.3	14.9	13.7	12.8	14.10	19.38																						
7-Aug	12.4	12.6	12.4	11.9	11.5	11.3	12.0	12.7	14.3	16.2	18.1	19.0	19.4	20.2	20.9	21.7	22.1	22.4	22.3	21.8	20.7	19.4	17.4	16.8	17.06	22.39																						
8-Aug	16.2	15.4	15.3	14.9	14.5	14.2	14.5	16.1	18.0	19.9	21.3	23.2	24.3	25.1	26.0	25.8	26.0	25.9	25.6	24.9	23.3	21.6	20.4	19.5	20.50	25.99																						
9-Aug	16.9	15.1	13.9	13.3	13.0	11.8	11.9	14.0	16.8	20.0	22.6	24.3	26.0	27.2	27.6	27.7	26.7	25.7	23.2	22.5	20.4	19.2	18.5	17.8	19.84	27.65																						
10-Aug	18.1	16.5	13.0	13.9	13.5	12.3	11.4	13.3	16.9	19.6	22.8	24.5	25.6	26.8	26.7	27.5	28.1	27.6	25.6	22.0	20.2	17.9	17.7	18.1	19.99	28.14																						
11-Aug	18.0	15.7	15.2	14.5	14.5	13.5	15.0	15.0	17.1	20.2	22.3	24.2	25.7	26.9	28.1	28.5	28.8	28.8	28.0	26.4	23.9	21.9	20.9	20.5	21.39	28.79																						
12-Aug	19.4	17.1	15.3	14.8	15.5	15.0	15.1	17.2	19.7	21.8	23.1	24.5	25.7	26.6	27.8	28.7	29.1	28.9	27.5	26.2	24.8	23.1	22.5	20.2	22.06	29.07																						
13-Aug	18.4	17.8	16.1	16.7	16.4	15.1	14.2	16.3	18.8	21.5	24.0	25.1	24.6	26.7	27.8	28.4	28.6	27.8	26.9	25.5	23.7	23.2	22.7	19.4	21.91	28.58																						
14-Aug	17.1	16.7	16.2	15.6	14.7	15.1	15.6	15.8	16.5	17.8	18.0	18.5	19.5	19.7	19.4	19.7	19.2	19.4	18.6	16.9	15.9	15.3	14.9	14.9	17.12	19.74																						
15-Aug	13.1	10.9	9.7	10.5	10.3	10.1	10.1	9.9	9.8	9.9	10.2	10.6	11.2	11.8	13.0	13.2	13.1	13.3	13.3	13.0	12.5	11.8	11.5	11.1	11.40	13.30																						
16-Aug	10.2	9.4	8.7	8.0	7.9	8.0	8.2	9.1	9.9	10.8	11.6	12.0	13.2	13.9	11.8	14.0	14.9	15.4	15.7	15.4	14.2	12.5	11.2	9.8	11.49	15.73																						
17-Aug	8.6	8.3	8.6	8.7	8.3	7.6	6.9	8.0	11.6	15.4	17.1	18.8	19.6	19.2	19.4	19.3	19.4	19.0	18.6	18.0	16.7	13.1	11.7	11.1	13.87	19.63																						
18-Aug	10.7	10.2	10.1	9.9	9.6	9.2	9.5	10.0	11.0	12.9	14.2	15.9	17.1	18.0	18.5	19.2	19.7	19.9	19.5	18.0	16.5	15.7	15.8	15.7	14.45	19.91																						
19-Aug	16.0	16.7	16.2	15.2	13.7	12.7	12.5	14.3	16.9	20.1	22.4	23.8	24.8	24.7	25.1	24.6	24.4	23.2	20.6	19.7	18.4	17.9	17.9	16.6	19.09	25.06																						
20-Aug	15.2	10.4	11.0	10.7	11.1	12.7	12.7	13.1	14.7	15.6	16.4	17.4	18.1	18.5	18.7	19.0	19.2	18.8	17.9	14.0	13.6	11.1	9.9	9.2	14.54	19.17																						
21-Aug	8.6	8.4	8.2	8.1	8.4	8.1	7.7	7.5	7.6	8.0	8.6	9.7	10.5	11.0	11.2	11.7	11.4	11.1	10.9	10.9	10.1	9.5	9.0	8.8	9.37	11.71																						
22-Aug	8.7	7.7	7.0	6.8	6.3	5.9	5.8	6.7	8.5	10.3	11.9	13.0	13.6	14.5	15.3	15.8	16.4	16.7	16.6	15.9	14.2	12.6	11.0	9.6	11.29	16.70																						
23-Aug	9.1	8.5	8.2	8.1	8.3	7.0	4.7	6.3	9.4	13.1	16.5	19.2	21.3	22.2	22.6	22.4	22.7	22.7	21.7	20.3	18.3	16.7	15.7	16.4	15.06	22.72																						
24-Aug	15.5	14.3	13.4	11.6	10.5	10.7	10.7	11.7	12.4	13.8	15.8	17.6	18.7	20.1	21.3	21.8	21.9	21.8	21.4	20.0	19.1	17.4	15.1	14.9	16.32	21.94																						
25-Aug	14.1	13.7	12.8	12.4	11.5	11.0	10.1	10.4	12.6	14.3	15.9	17.8	19.3	20.0	20.8	21.0	21.2	21.4	21.2	20.6	19.8	18.3	17.2	17.6	16.45	21.45																						
26-Aug	16.9	15.9	14.4	13.0	12.3	11.6	11.3	11.4	12.0	13.0	14.2	15.6	17.2	18.9	19.7	20.1	20.5	20.6	20.3	19.5	18.9	17.7	16.4	16.1	16.14	20.55																						
27-Aug	15.1	14.8	12.8	12.8	11.6	12.0	11.4	12.3	13.2	13.9	15.7	18.9	21.1	22.8	24.1	25.1	25.1	25.2	23.4	22.8	20.9	19.7	18.4	17.2	17.93	25.16																						
28-Aug	15.9	15.2	15.0	14.5	13.9	13.1	11.0	12.1	13.4	17.3	20.3	21.5	23.4	24.5	26.0	27.0	26.6	26.0	25.1	24.3	21.7	19.6	17.5	17.6	19.27	26.96																						
29-Aug	17.4	16.5	16.3	15.7	14.5	13.8	12.9	12.0	13.8	16.0	17.3	18.8	20.7	22.5	23.8	24.4	25.0	24.7	23.4	22.4	20.6	19.3	18.1	15.4	18.56	24.99																						
30-Aug	15.2	16.0	13.7	13.0	12.0	12.4	9.3	10.0	13.8	17.6	20.5	21.8	21.7	21.9	21.2	20.6	20.3	19.3	18.7	18.2	16.2	14.5	13.0	11.6	16.35	21.90																						
31-Aug	10.6	10.9	10.4	9.9	10.7	10.9	10.8	12.1	14.8	16.4	18.6	18.7	19.7	20.6	21.4	22.5	22.4	22.4	20.9	19.0	17.8	16.0	15.0	12.1	16.03	22.47																						
																								14.76	13.94	13.24	12.74	12.28	11.93	11.57	12.40	14.05	15.97	17.59	18.87	20.02	20.91	21.39	21.89	22.01	21.75	20.97	19.97	18.62	17.18	16.16	15.32	Diurnal Average
																								19.67	19.04	19.89	20.24	16.38	16.55	15.81	17.47	19.73	21.76	23.97	25.10	26.03	27.25	28.08	28.69	29.07	28.88	27.97	26.42	24.78	23.20	22.72	20.49	Diurnal Maximum



WCAS - Genesee
Summary of Hourly Averages

Delta Temperature (ET_D) - C
August 2015

Maximum Value: 4.94 C on Aug 13 23:00		Maximum Daily Average: 1.07 C on Aug 25		Hours in Service: 744																																													
Minimum Value: -3.4 C on Aug 16 13:00		Minimum Daily Average: -0.97 C on Aug 3		Hours of Data: 744																																													
Maximum Diurnal Average: 2.09 C at hour 22		Minimum Diurnal Average: -1.75 C at hour 13		Hours of Missing Data: 0																																													
Monthly Average: 0.054 C		Percentiles: P ₁ = -2.7 P ₁₀ = -1.7 Q ₁ = -1.2 Median = -0.4 Q ₃ = 1.2 P ₉₀ = 2.6 P ₉₉ = 4.3		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-Aug	2.5	4.0	2.4	2.4	0.9	1.0	-0.2	-0.5	-0.6	-1.0	-1.4	-1.5	-1.6	-1.6	-1.8	-1.3	-1.0	-0.6	-0.6	0.4	1.7	2.8	2.2	1.7	0.34	3.98																							
2-Aug	1.9	1.6	2.0	1.0	1.8	1.6	0.5	-1.2	-1.7	-2.4	-1.7	-2.4	-2.8	-2.7	-3.3	-3.1	-2.0	-1.4	-1.2	-0.8	-0.1	0.4	0.6	0.3	-0.63	2.03																							
3-Aug	0.5	0.6	0.3	0.0	0.0	-0.1	-0.4	-1.1	-1.5	-1.8	-2.1	-2.8	-2.7	-2.7	-3.1	-2.4	-2.0	-1.6	-1.0	0.1	0.2	0.0	0.1	0.2	-0.97	0.56																							
4-Aug	0.5	0.2	2.0	1.7	-0.4	-0.4	-0.5	-0.5	-0.5	-0.6	-0.8	-1.1	-1.7	-1.8	-1.6	-1.8	-1.7	-0.9	-0.7	-0.3	0.4	2.6	1.4	1.0	-0.23	2.59																							
5-Aug	1.1	1.1	1.3	0.8	0.4	0.2	-0.5	-0.8	-0.8	-0.9	-1.2	-1.1	-1.1	-1.2	-0.6	-1.5	-1.3	-0.8	-1.0	-0.7	0.7	2.1	1.9	1.8	-0.10	2.06																							
6-Aug	1.0	2.4	1.4	0.9	0.4	0.0	-0.2	-0.7	-0.8	-1.2	-1.2	-1.2	-1.6	-1.4	-1.6	-1.5	-1.0	-1.3	-1.0	-0.8	-0.3	-0.4	-0.2	-0.1	-0.44	2.37																							
7-Aug	-0.2	-0.3	-0.3	0.0	-0.1	-0.1	-0.4	-0.7	-1.1	-1.6	-1.6	-1.7	-1.9	-1.7	-1.8	-1.7	-1.5	-1.2	-0.8	0.2	1.7	1.9	1.9	1.6	-0.47	1.94																							
8-Aug	1.3	2.3	2.9	3.0	3.1	1.8	0.4	-1.1	-1.7	-1.9	-2.3	-2.0	-2.5	-2.3	-2.4	-2.0	-1.7	-1.1	-0.7	0.5	1.8	3.6	2.3	3.3	0.18	3.63																							
9-Aug	1.8	0.9	1.0	1.4	1.5	0.4	0.1	-1.2	-1.2	-1.2	-1.7	-2.1	-2.2	-2.7	-2.2	-1.9	-0.5	-0.7	-0.9	-0.2	0.2	1.0	0.7	2.0	-0.32	1.95																							
10-Aug	3.7	2.0	1.3	0.8	2.0	2.7	0.0	-1.5	-1.5	-2.3	-2.4	-2.3	-2.7	-2.8	-1.8	-1.8	-1.7	-0.9	0.9	0.0	0.5	1.6	2.3	2.6	-0.06	3.66																							
11-Aug	2.6	2.0	1.3	1.5	1.4	1.5	0.5	-0.4	-0.9	-1.0	-1.1	-1.7	-2.6	-2.7	-2.6	-1.9	-1.8	-1.2	-0.4	1.2	2.9	3.0	3.2	3.0	0.24	3.21																							
12-Aug	1.2	1.3	2.6	2.4	3.3	1.0	0.5	-0.8	-1.2	-1.7	-2.0	-2.1	-2.4	-2.3	-1.6	-1.6	-1.5	-1.3	-0.2	1.6	3.3	4.1	4.1	2.8	0.39	4.10																							
13-Aug	2.7	4.3	2.8	2.3	1.9	4.2	1.2	-0.6	-1.1	-2.1	-2.2	-1.3	-1.1	-1.6	-1.4	-1.4	-1.3	-0.4	0.6	2.7	3.6	4.1	4.9	1.6	0.94	4.94																							
14-Aug	0.6	2.1	1.1	0.9	1.6	1.7	0.3	-0.5	-1.0	-1.3	-1.1	-1.3	-1.3	-1.1	-0.8	-1.1	-0.5	-1.0	-0.3	0.4	0.1	0.2	-0.1	-0.2	-0.11	2.06																							
15-Aug	0.3	-0.9	-0.9	-0.1	-0.2	-0.2	-0.3	-0.4	-0.4	-0.5	-0.6	-0.9	-1.1	-1.2	-1.4	-1.0	-0.9	-0.8	-0.5	-0.4	0.7	2.0	1.5	0.7	-0.31	2.00																							
16-Aug	1.2	0.6	0.3	0.3	-0.3	-0.1	-0.5	-0.8	-0.8	-0.9	-1.3	-1.9	-3.4	-2.7	-0.7	-1.2	-1.7	-0.9	-0.9	-0.1	1.8	2.2	2.0	2.6	-0.28	2.62																							
17-Aug	2.2	2.2	2.2	2.0	2.3	2.9	-0.1	-1.4	-1.9	-1.5	-2.2	-2.4	-1.7	-0.8	-0.8	-0.8	-0.7	-0.7	-0.3	0.3	0.5	0.0	0.4	0.1	-0.01	2.87																							
18-Aug	-0.3	-0.5	-0.6	-0.7	-0.2	-0.1	-0.6	-1.1	-1.8	-1.4	-1.4	-1.5	-1.5	-1.8	-1.4	-1.5	-1.5	-1.1	-0.2	0.4	0.7	0.5	1.3	0.7	-0.65	1.33																							
19-Aug	0.9	0.8	0.3	0.4	0.6	0.5	0.0	-0.9	-1.2	-1.7	-1.6	-2.1	-1.6	-1.4	-1.4	-0.8	-0.8	0.6	0.6	0.8	2.5	4.2	4.0	3.3	0.25	4.22																							
20-Aug	3.8	1.4	1.3	0.6	0.3	0.4	0.1	-0.5	-0.8	-1.3	-1.2	-1.4	-1.8	-1.6	-1.4	-1.4	-1.3	-0.9	0.1	0.6	0.2	-0.8	-0.9	-0.7	-0.29	3.78																							
21-Aug	-0.9	-0.4	0.0	-0.4	-0.5	-0.1	-0.3	-0.5	-0.6	-0.7	-0.8	-1.1	-0.6	-0.8	-0.8	-0.7	-0.6	-0.5	-0.3	-0.2	-0.1	-0.1	0.0	0.0	-0.45	0.04																							
22-Aug	0.0	0.0	0.1	0.2	0.3	0.1	-0.1	-0.6	-1.1	-1.4	-1.4	-1.6	-1.5	-1.7	-1.6	-1.6	-1.6	-1.2	-0.9	2.0	2.4	2.7	1.9	1.7	-0.20	2.70																							
23-Aug	1.3	1.5	2.2	1.9	2.6	2.6	0.7	-0.9	-1.6	-1.5	-1.5	-1.8	-2.1	-2.2	-1.9	-1.2	-1.6	-1.0	0.3	0.9	2.0	1.7	2.2	2.7	0.23	2.71																							
24-Aug	3.2	3.5	2.3	1.8	1.8	0.5	0.2	-0.3	-0.7	-1.1	-1.3	-1.2	-1.1	-1.2	-1.0	-0.7	-0.6	-0.4	0.0	0.7	2.5	4.0	3.3	2.6	0.70	3.96																							
25-Aug	2.9	2.7	2.2	1.2	1.2	2.2	2.0	-0.7	-1.1	-1.2	-1.1	-1.2	-1.0	-0.9	-0.8	-0.7	-0.5	-0.6	0.7	2.9	4.9	4.5	4.4	3.8	1.07	4.86																							
26-Aug	4.1	3.5	1.3	0.3	0.1	0.0	-0.1	-0.3	-0.6	-0.8	-0.9	-1.2	-1.1	-1.4	-1.1	-0.9	-0.8	-0.6	0.0	1.8	2.0	1.4	2.4	2.9	0.41	4.13																							
27-Aug	2.9	2.8	1.4	1.6	1.9	2.0	1.4	-0.5	-0.9	-1.4	-2.3	-1.2	-2.0	-2.1	-1.8	-1.2	-0.5	-0.3	0.6	1.7	2.7	3.5	3.0	2.1	0.56	3.49																							
28-Aug	1.0	1.2	1.9	2.0	1.0	2.9	0.9	0.2	-1.1	-1.1	-1.0	-1.2	-1.2	-1.1	-1.3	-1.4	-0.6	-0.4	0.2	2.5	2.6	3.0	1.4	1.0	0.47	2.98																							
29-Aug	0.3	0.5	0.7	0.5	0.7	0.2	-0.1	-0.8	-1.0	-1.4	-1.5	-1.7	-1.5	-1.7	-1.6	-1.4	-1.1	-0.5	0.2	0.6	1.4	1.0	2.1	2.8	-0.14	2.80																							
30-Aug	2.4	2.1	3.6	3.0	3.3	3.2	3.1	-0.2	-1.1	-1.1	-1.2	-1.7	-1.6	-1.5	-1.3	-1.3	-0.7	-0.4	-0.2	2.6	3.8	4.3	2.9	1.5	0.98	4.29																							
31-Aug	1.4	1.7	1.6	1.8	1.1	0.9	1.2	-0.6	-0.9	-0.9	-1.2	-1.1	-0.9	-1.1	-1.1	-1.9	-1.2	-1.0	-0.2	2.2	0.9	3.4	4.8	4.1	0.54	4.79																							
																								1.55	1.52	1.35	1.14	1.09	1.07	0.28	-0.70	-1.07	-1.31	-1.46	-1.60	-1.75	-1.72	-1.55	-1.44	-1.16	-0.81	-0.26	0.76	1.55	2.09	2.01	1.72	Diurnal Average	
																								4.13	4.27	3.65	2.95	3.34	4.22	3.06	0.18	-0.40	-0.51	-0.59	-0.87	-0.63	-0.76	-0.63	-0.65	-0.49	0.55	0.87	2.88	4.86	4.48	4.94	4.14	Diurnal Maximum	



WCAS - Genesee
Summary of Hourly Averages

Wind Speed (WS) - kph
August 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	1.9	1.5	0.2	6.4	8.5	9.7	16.8	10.3	8.4	4.6	16.3	16.1	11.1	12.4	15.2	16.1	15.8	14.2	11.9	8.5	5.5	6.3	12.4	7.3	8.43	16.84
Dir	E	S	SSE	W	NNW	NNW	NNW	NNE	N	NW	NW	NW	NNW	NNW	NNW	NW	NW	NW	NW	NW	WNW	WSW	WSW	WSW	NW	NNW
2 Spd	1.9	1.1	3.3	5.0	6.4	6.8	6.3	2.5	7.4	13.1	11.2	11.5	13.2	16.9	14.1	13.7	17.0	14.8	13.9	11.3	6.8	8.9	9.0	8.0	7.68	17.01
Dir	NW	SSW	SW	SSW	SW	WSW	WSW	S	SSE	S	SSE	SE	SE	SSE	SSE	SE	SE	SE	SE	ESE	E	ESE	ESE	ESE	SSE	SE
3 Spd	9.4	10.4	11.2	9.6	9.3	11.3	9.6	9.4	9.6	11.2	9.9	12.2	8.6	9.8	9.8	10.8	11.9	9.9	9.2	5.8	7.5	10.4	13.0	9.5	9.56	13.02
Dir	ESE	SE	ESE	E	E	ESE	ESE	ESE	ENE	E	ESE	ESE	SE	SE	ESE	SE	SE	ESE	ESE	E	ENE	E	ESE	ESE	ESE	ESE
4 Spd	6.8	6.9	4.0	8.0	30.9	21.9	23.6	16.2	18.4	20.3	19.9	21.4	18.7	18.5	15.2	18.9	14.9	12.6	6.4	7.8	3.6	3.1	6.4	10.0	11.85	30.88
Dir	ESE	E	SE	WNW	NW	NW	WNW	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NW	NW	NW	NW	W	W	N	W	NW	NW	NW
5 Spd	9.4	9.4	8.2	6.5	9.0	9.3	7.5	6.1	4.4	6.6	5.7	5.9	10.8	13.9	17.2	14.3	7.4	14.5	15.4	7.6	2.9	2.3	6.2	8.7	6.42	17.18
Dir	NNW	NNW	NNW	NNW	NNW	NW	N	N	N	NW	WSW	W	NNW	NW	WNW	NW	N	NNE	NNE	NNE	E	SSE	SW	WSW	NNW	NNW
6 Spd	5.0	4.0	1.9	3.6	10.3	6.9	9.2	7.0	10.7	12.3	11.1	5.3	4.7	9.9	8.6	9.1	16.3	16.8	13.4	12.7	14.2	19.4	17.7	15.2	8.99	19.36
Dir	WSW	WNW	S	SW	WSW	WSW	W	W	WNW	WNW	NW	NW	WNW	NW	NNW	NNW	WNW	WSW	WSW	W	W	WNW	WNW	WNW	WNW	WNW
7 Spd	14.4	13.7	11.9	12.0	11.5	12.2	11.9	11.6	11.9	14.3	14.2	18.0	17.5	17.6	19.2	15.2	13.2	12.1	10.0	7.1	1.0	2.5	6.5	7.4	10.24	19.16
Dir	WNW	W	W	WNW	W	W	W	W	WNW	WNW	NW	WNW	WNW	NW	NW	NW	NNW	NNW	N	NNE	ESE	S	SW	SW	WNW	NW
8 Spd	5.2	8.2	8.4	7.2	6.3	8.4	7.5	4.1	6.0	4.6	6.4	5.4	9.1	4.5	3.6	4.5	5.2	6.4	4.2	5.7	2.4	2.6	2.4	4.9	2.18	9.06
Dir	SW	SW	SW	SSW	WNW	W	NW	WSW	SW	SSW	SSE	ESE	SE	ESE	ESE	SSE	E	ENE	SE	SE	SE	ENE	ENE	ENE	S	SE
9 Spd	4.4	5.0	6.2	3.7	4.0	3.1	0.6	2.9	1.2	2.2	4.9	10.7	11.1	11.1	12.8	13.1	8.0	7.5	19.8	15.3	14.7	9.3	6.0	1.7	2.93	19.78
Dir	NE	ENE	NE	E	ENE	NE	E	NE	WNW	N	E	E	E	ESE	ESE	E	E	NNW	NW	NW	NNW	SW	NW	SW	NE	NW
10 Spd	12.8	9.6	6.6	8.3	0.9	2.8	5.7	6.8	3.3	7.6	10.0	10.8	14.4	12.2	15.5	6.9	8.2	10.7	10.9	17.3	9.2	7.0	9.2	7.7	5.90	17.31
Dir	NNW	NW	SSW	W	WSW	SW	SW	WSW	SSW	SW	S	SSE	SSE	SSE	SSE	SSW	SSW	SSE	S	SSE	ESE	S	SSW	SSW	S	SSE
11 Spd	11.5	10.9	12.8	8.1	9.0	11.4	10.8	9.0	5.0	2.8	1.2	4.2	7.6	10.7	8.8	13.4	9.7	9.4	12.2	9.2	9.7	10.9	11.9	10.8	7.33	13.41
Dir	SW	WSW	WSW	SW	WSW	WSW	WSW	WSW	WSW	WNW	NNE	SSE	SSE	S	S	SW	SW	SSW	SSE	SSE	SSE	SSE	SSW	SW	SSW	SW
12 Spd	14.4	13.0	4.2	9.7	8.3	12.2	5.2	4.7	3.3	8.1	10.8	9.6	8.7	7.1	2.0	4.6	1.7	3.8	8.2	5.8	6.2	4.0	6.0	3.0	0.80	14.42
Dir	WSW	W	W	WSW	W	NW	WNW	NW	N	E	E	E	SE	ESE	WSW	WNW	W	E	ENE	NE	NE	NE	NE	NE	NNW	WSW
13 Spd	3.3	5.0	3.0	6.0	2.4	7.7	10.7	8.4	9.4	9.3	15.5	8.7	12.9	11.6	13.3	15.9	15.5	12.8	10.2	10.2	7.0	2.6	3.2	16.0	5.59	16.03
Dir	SSW	SW	SE	SE	SSE	NNW	NNW	NW	WNW	SW	SW	W	NNW	NNW	N	NNE	N	N	N	NNW	NNE	NNW	N	N	NNW	N
14 Spd	14.4	10.4	12.7	10.0	9.5	11.9	9.9	5.9	2.3	11.3	10.6	10.5	11.8	12.5	10.9	14.5	11.3	16.9	8.7	9.4	11.1	8.2	9.8	8.1	8.17	16.87
Dir	N	NNW	NW	WNW	W	NW	NW	WNW	N	NNE	NNE	NNE	NNE	NNE	NNE	NNE	NE	NE	NE	NE	NNE	NNE	NNE	NE	N	NE
15 Spd	4.1	17.4	20.8	9.3	9.4	5.4	12.5	16.6	15.2	13.1	12.3	17.3	17.8	17.1	20.3	18.0	12.6	12.0	11.4	7.3	7.1	6.4	10.3	10.9	11.60	20.81
Dir	WNW	NNW	NE	NNE	NNE	N	N	N	N	NNW	NW	NW	NNW	NNW	NNW	NNW	N	N	N	NNW	NNW	NW	WNW	WNW	NNW	NE
16 Spd	10.9	11.6	5.5	4.6	4.1	7.0	3.1	5.1	7.1	10.1	13.0	13.5	15.4	9.3	9.3	8.1	3.7	7.7	7.9	1.9	2.4	4.9	4.3	7.9	5.90	15.36
Dir	WNW	WNW	WNW	SW	WSW	WSW	SW	WSW	W	W	WSW	SW	SW	WSW	NNW	WNW	WSW	NNW	NW	WNW	SSE	SSW	SW	WSW	W	SW
17 Spd	10.3	8.7	10.0	8.8	3.2	11.5	9.6	13.0	9.0	7.1	8.1	9.5	10.4	10.7	11.6	11.3	13.6	11.2	10.1	10.4	7.1	11.6	4.2	7.0	7.49	13.58
Dir	WSW	WSW	WSW	WSW	W	WSW	WSW	SW	SW	W	SW	SW	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NE	E	WSW	W	WNW
18 Spd	12.7	1.6	10.9	8.4	9.5	10.5	12.8	13.2	8.2	9.5	8.0	7.7	8.3	9.9	8.0	6.5	7.1	1.5	7.8	9.2	10.8	10.6	11.5	11.9	5.27	13.23
Dir	NW	SW	W	W	W	W	WNW	NW	WNW	WNW	WNW	W	NW	W	WNW	W	W	SE	SSE	SSE	SSE	SSE	S	S	W	NW
19 Spd	11.0	15.6	16.5	10.9	13.5	15.4	15.7	15.0	14.9	14.3	14.0	10.1	12.8	13.8	14.1	14.5	9.2	6.8	12.2	6.7	11.5	10.5	8.4	9.4	6.39	16.50
Dir	S	SSW	SSW	SW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	SW	NW	NNW	NNW	NNW	N	NE	N	NNE	N	N	NNW	NW	W	SSW
20 Spd	8.3	5.0	12.3	12.2	13.4	10.2	11.0	7.8	16.5	17.1	15.1	13.8	13.6	12.8	13.3	10.7	9.4	9.5	9.2	13.0	6.2	18.0	12.5	11.0	8.80	17.97
Dir	WNW	WSW	WSW	WSW	WSW	W	WNW	W	NW	NW	NW	WNW	WNW	NW	NNW	NNW	NNW	N	N	NNE	NE	N	NNW	NE	NW	N
21 Spd	3.3	2.6	4.8	7.1	11.3	12.1	10.3	9.8	10.2	12.6	13.0	18.4	21.0	19.4	19.8	20.2	17.2	17.7	15.6	15.6	15.9	17.1	14.5	11.1	12.66	21.00
Dir	ENE	NNE	NNW	N	N	N	N	N	NNW	NNW	NNW	NNW	NNW	NNW	NW	NNW	NNW	NNW	NW	NW	NW	NW	NW	WNW	NNW	NNW
22 Spd	13.9	13.2	11.8	11.8	13.6	16.5	16.6	11.4	8.9	9.8	12.1	11.3	9.3	10.5	9.5	7.5	4.5	4.3	2.8	1.5	5.8	5.3	4.7	3.4	7.63	16.57
Dir	WNW	WNW	W	W	W	WNW	WNW	WNW	W	W	WNW	WNW	WNW	NW	WNW	WNW	W	NW	W	ENE	ENE	ESE	SSE	S	WNW	WNW



WCAS - Genesee
Summary of Hourly Averages

Wind Speed (WS) - kph
August 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	1.1	1.3	3.7	1.3	4.6	2.9	1.1	1.4	4.0	6.0	5.9	10.4	11.3	9.1	14.3	14.8	16.2	17.9	14.2	10.1	9.8	9.6	8.9	12.1	7.72	17.92
Dir	SSW	S	SSE	SE	SSE	S	SE	SSE	SSE	SSE	SSE	SE	S	SSE	SSE	SSE	SE	SSE	SSE	SE	SE	ESE	SE	SSE	SSE	SSE
24 Spd	14.4	8.5	7.3	3.0	5.8	14.6	16.9	16.1	15.2	14.5	12.1	9.7	11.1	11.2	10.3	9.5	8.5	5.8	4.1	3.1	4.3	7.0	10.6	5.9	5.21	16.87
Dir	SSW	SSW	WNW	SW	WSW	NW	NW	NW	NW	NW	NW	NNW	N	NNE	NNE	NE	ENE	ENE	E	ENE	NE	NNE	NNE	NNE	NNW	NW
25 Spd	7.3	9.1	10.7	14.3	13.1	9.1	7.1	2.1	0.4	4.3	7.3	8.1	6.1	4.4	5.4	6.5	5.3	4.2	7.2	8.5	9.8	4.8	8.2	7.6	6.47	14.28
Dir	N	NNW	NNW	NNW	NNW	NNW	NNW	WSW	SSW	WNW	NW	NNW	N	NNE	NNE	N	NE	NNE	N	NW	NW	NW	N	N	NNW	NNW
26 Spd	8.1	8.8	12.5	13.8	13.7	11.8	6.9	5.8	7.5	4.6	5.4	5.1	4.9	4.1	3.3	5.4	5.6	5.9	1.8	2.4	3.2	1.7	4.5	3.6	4.64	13.76
Dir	NNW	NNW	NNW	NNW	NNW	NNW	NNW	WNW	NW	NW	NW	N	NNE	E	ENE	NE	ENE	NE	ENE	NNE	NNE	E	SW	SW	NNW	NNW
27 Spd	4.7	6.8	0.1	1.5	3.4	1.9	2.8	4.1	5.6	5.9	5.7	4.2	6.1	6.4	5.6	3.9	6.9	9.8	7.3	8.9	7.5	4.2	7.7	10.8	3.45	10.78
Dir	W	NNW	NW	NNW	W	WNW	W	WNW	WSW	SW	W	W	SW	SW	S	S	SE	SE	SSE	S	SSW	S	SSW	WSW	SW	WSW
28 Spd	12.8	15.6	14.3	14.9	15.5	2.3	5.2	3.3	4.6	2.5	4.0	5.3	4.9	3.5	6.5	13.6	11.4	8.7	5.0	4.3	3.2	13.1	12.5	14.5	6.48	15.61
Dir	WSW	WSW	WSW	WSW	WSW	ENE	S	SSE	S	SW	WNW	NW	WSW	NNW	SW	SW	W	NW	NNE	S	SSW	SW	WSW	W	WSW	WSW
29 Spd	14.2	12.7	14.0	10.7	10.5	10.1	2.8	4.0	6.5	3.0	7.9	12.2	19.0	24.9	27.7	28.7	25.8	29.3	25.5	16.8	11.7	12.2	8.2	9.5	5.20	29.28
Dir	WNW	WNW	NW	NW	NW	NW	WSW	SW	WSW	ESE	SE	ESE	ESE	ESE	SE	ESE	ESE	SE	SE	SSE	SW	W	WNW	SW	SE	SE
30 Spd	11.4	10.9	8.0	12.0	9.6	8.4	2.3	5.0	3.6	6.2	11.9	10.7	14.6	16.8	16.3	18.6	14.3	10.5	5.6	4.4	3.3	6.2	8.7	12.3	5.97	18.57
Dir	WSW	W	SW	WSW	WSW	WSW	SW	SSW	SSW	SE	SSE	WSW	WNW	WNW	NW	NNW	NNW	N	N	NNW	SW	SW	SW	WSW	W	NNW
31 Spd	12.0	9.2	11.7	11.3	12.4	11.6	11.8	10.9	8.7	13.6	10.1	9.6	6.3	5.0	4.9	11.6	10.8	7.7	13.9	12.0	14.2	10.7	8.9	6.2	7.11	14.24
Dir	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	W	WNW	NW	NNW	NE	S	SSW	SW	W	NNW	NNW	NNW	NNW	NNW	W	W	NNW
Spd	4.53	4.75	4.31	4.92	6.18	6.61	6.28	4.90	4.88	4.58	3.94	3.58	3.21	3.28	3.30	3.47	2.48	2.64	2.49	1.53	1.67	1.10	2.39	3.45	Diurnal Average	
Dir	W	W	W	W	WNW	WNW	WNW	WNW	WNW	WNW	WNW	WNW	NW	NNW	NNW	NNW	NNW	NNE	N	N	N	NW	W	W	Diurnal Maximum	
Spd	14.45	17.42	20.81	14.93	30.88	21.92	23.61	16.65	18.45	20.31	19.93	21.43	21.00	24.93	27.69	28.70	25.75	29.28	25.50	17.31	15.90	19.36	17.70	16.03	Diurnal Maximum	
Dir	193.29	338.03	38.03	248.68	316.31	304.67	300.61	349.88	288.86	296.31	303.40	316.45	334.52	117.55	129.43	114.85	121.17	127.04	135.05	161.36	320.91	290.09	291.48	358.75	Diurnal Maximum	
Maximum Speed Value: 30.9 kph on Aug 4 05:00																		Minimum Speed Value: 0.1 kph on Aug 27 03:00						Hours in Service: 744		
Maximum Daily Speed Average: 12.66 kph on Aug 29																		Minimum Daily Speed Average: 0.80 kph on Aug 27						Hours of Data: 744		
Maximum Diurnal Speed Average: 6.61 kph at hour 6																		Minimum Diurnal Speed Average: 1.10 kph at hour 22						Hours of Missing Data: 0		
Monthly Average Velocity: 3.314 kph 298.29 deg																		Speed Percentiles: P ₁ = 1.1 P ₁₀ = 3.4 Q ₁ = 6.0 Median = 9.4 Q ₃ = 12.4 P ₉₀ = 15.6 P ₉₉ = 24.4						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	14	52	40	0	0	0	106																			
NorthEast	13	27	8	1	0	0	49																			
East	15	22	6	0	0	0	43																			
SouthEast	17	35	23	4	2	0	81																			
South	24	22	13	0	0	0	59																			
SouthWest	27	57	27	0	0	0	111																			
West	18	63	53	1	0	0	135																			
NorthWest	14	56	77	12	1	0	160																			
Total	142	334	247	18	3	0	744																			



WCAS - Genesee
Summary of Hourly Averages

Relative Humidity (RH) - %
August 2015

Maximum Value: 95.17 % on Aug 27 08:00 Maximum Daily Average: 80.30 % on Aug 15																						Hours in Service: 744 Hours of Data: 744				
Minimum Value: 18.8 % on Aug 11 17:00 Minimum Daily Average: 46.92 % on Aug 31 Maximum Diurnal Average: 84.89 % at hour 5 Minimum Diurnal Average: 38.98 % at hour 16 Monthly Average: 63.524 % Percentiles: P ₁ = 23.8 P ₁₀ = 34.6 Q ₁ = 46.1 Median = 66.3 O ₃ = 80.9 P ₉₀ = 89.1 P ₉₉ = 93.8																						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-Aug	68.5	77.6	73.4	79.6	82.4	81.2	83.9	85.1	82.7	73.0	64.8	64.8	56.5	48.4	46.0	43.2	39.7	38.9	38.8	42.1	48.2	57.7	65.0	70.7	63.01	85.06
2-Aug	71.5	75.2	81.0	85.7	87.7	86.7	70.6	52.7	50.9	50.0	49.1	43.4	35.8	33.5	35.7	36.2	38.9	42.9	46.3	47.5	62.5	72.6	76.2	71.5	58.51	87.68
3-Aug	73.5	74.0	75.3	77.2	82.1	84.5	83.5	73.9	70.1	66.7	60.2	54.5	49.6	47.5	43.0	44.5	43.7	42.0	43.6	51.8	64.4	69.1	73.4	77.0	63.54	84.53
4-Aug	80.6	81.4	82.4	73.0	79.7	77.7	77.5	75.8	69.3	65.8	63.1	58.1	52.8	47.5	44.7	44.0	48.0	52.8	56.2	58.1	66.0	75.0	73.4	71.1	65.59	82.39
5-Aug	80.1	89.3	90.8	91.6	90.9	89.5	89.1	90.3	87.2	80.4	72.8	72.0	71.2	65.8	75.3	64.2	53.2	60.0	61.4	64.8	75.2	84.4	89.6	90.2	78.31	91.59
6-Aug	91.5	92.6	91.5	91.9	94.2	93.6	91.9	90.1	82.0	73.2	68.8	59.5	51.1	50.6	49.3	46.2	51.0	58.1	65.0	61.6	67.1	74.3	83.6	86.8	73.56	94.22
7-Aug	87.5	85.8	84.0	85.6	86.3	86.9	85.0	80.4	74.3	67.8	58.5	54.1	51.5	48.6	47.2	42.7	40.7	37.7	36.4	41.8	50.6	60.3	68.4	73.9	64.00	87.47
8-Aug	75.7	79.1	82.9	84.6	82.5	81.8	77.6	63.9	52.6	50.2	45.8	39.6	33.0	30.9	28.8	28.2	30.8	30.6	29.3	30.1	43.2	56.5	58.8	66.8	53.47	84.64
9-Aug	73.8	82.2	86.7	89.0	91.7	93.2	90.8	80.1	69.7	61.0	49.8	42.8	35.5	30.9	30.1	31.2	38.1	36.7	41.3	47.1	54.2	64.4	70.1	76.1	61.12	93.22
10-Aug	79.2	79.4	85.1	84.6	85.1	90.9	84.5	69.3	60.8	54.6	44.7	37.4	35.2	28.3	30.5	26.5	24.3	26.7	39.3	53.3	57.9	72.1	80.2	79.9	58.74	90.87
11-Aug	83.0	86.6	88.2	86.2	84.9	89.8	85.5	82.8	72.2	55.2	48.0	41.3	32.4	29.4	23.8	19.9	18.8	20.9	25.5	34.6	51.1	66.4	73.7	73.6	57.25	89.83
12-Aug	66.6	74.3	82.4	86.1	86.2	80.8	74.5	67.2	55.2	48.1	41.9	37.2	32.8	29.2	24.3	21.5	22.2	22.8	28.5	38.0	46.0	52.0	54.9	58.4	51.29	86.16
13-Aug	65.7	78.0	80.4	78.7	81.1	85.6	91.3	79.2	62.8	49.7	39.3	36.9	41.6	34.4	31.2	28.2	26.5	25.6	29.6	46.1	65.3	63.0	58.5	68.8	56.15	91.31
14-Aug	69.6	74.6	72.7	73.3	83.3	80.4	75.4	70.4	60.9	50.0	46.1	44.4	37.9	33.7	35.5	34.3	37.1	35.5	38.0	55.7	62.0	67.1	70.5	65.0	57.23	83.30
15-Aug	83.8	90.0	88.5	90.0	91.0	92.0	92.2	91.1	89.2	88.4	87.8	83.2	76.9	71.5	63.7	64.0	66.8	66.8	66.0	67.9	76.2	80.9	79.6	79.9	80.30	92.16
16-Aug	83.9	84.4	85.1	89.3	90.5	90.4	89.9	86.3	81.2	73.0	66.2	60.6	51.4	48.4	78.1	56.4	50.0	44.5	41.7	43.8	60.1	72.0	78.6	84.8	70.45	90.54
17-Aug	88.6	90.3	90.2	89.2	88.0	89.6	86.1	78.6	73.9	60.8	52.3	44.0	37.7	44.5	42.9	42.1	40.2	44.1	48.5	49.4	54.1	66.5	76.3	86.0	65.16	90.26
18-Aug	91.3	92.9	93.8	93.6	93.3	93.9	93.0	89.9	86.2	81.2	75.1	60.9	51.4	46.3	43.7	40.9	37.2	37.1	41.3	53.7	67.0	70.8	75.4	72.8	70.11	93.86
19-Aug	69.5	62.6	60.7	66.0	73.6	78.0	73.9	62.7	56.7	46.3	37.3	32.1	32.2	32.8	30.9	31.3	32.8	52.4	66.4	67.1	72.1	67.5	54.7	58.7	54.93	77.96
20-Aug	65.5	83.1	83.2	80.9	81.2	71.3	69.6	67.4	58.4	52.7	50.1	47.4	42.7	41.6	39.9	37.2	38.2	41.4	52.1	78.8	79.9	86.1	90.3	92.1	63.80	92.08
21-Aug	92.3	92.7	93.4	94.2	94.0	90.1	89.4	88.7	87.9	85.2	83.5	76.7	68.4	63.3	60.8	57.0	60.2	63.6	65.3	64.8	67.2	71.2	74.6	77.5	77.58	94.17
22-Aug	74.7	77.6	79.4	78.7	79.8	78.4	76.0	70.9	65.4	57.2	51.1	42.3	40.4	37.1	35.7	34.7	33.9	33.8	31.2	45.4	53.7	62.1	72.3	82.0	58.08	82.01
23-Aug	81.9	85.3	87.5	91.7	91.7	92.1	92.1	76.8	72.0	63.8	54.4	42.3	33.8	30.9	31.4	34.6	33.8	31.9	36.2	44.2	60.9	67.4	73.5	71.0	61.71	92.13
24-Aug	75.4	79.4	77.9	83.6	88.5	87.8	87.4	85.7	82.6	76.9	69.2	58.8	55.0	49.5	41.9	37.0	37.4	40.3	42.9	52.3	59.6	70.0	81.4	77.7	66.59	88.54
25-Aug	80.8	85.0	87.7	83.8	83.5	86.2	87.8	75.8	68.0	65.7	65.6	60.1	56.1	53.5	50.9	49.7	50.6	48.8	57.7	66.4	76.6	77.1	84.1	79.6	70.04	87.79
26-Aug	81.5	87.0	88.7	87.3	85.4	86.2	86.4	86.5	80.4	75.3	70.0	66.6	63.9	59.8	58.3	59.3	59.5	61.2	65.1	74.3	75.2	79.9	87.0	91.6	75.69	91.63
27-Aug	92.7	93.5	93.2	93.9	93.8	94.6	94.5	95.2	94.4	90.4	79.9	71.5	59.3	50.4	44.7	36.0	39.2	38.7	46.6	55.3	71.6	81.9	84.9	87.4	74.31	95.17
28-Aug	88.0	89.1	88.5	89.4	88.8	87.0	92.2	91.9	87.0	61.6	42.9	41.8	35.3	31.9	28.3	25.3	27.3	31.4	36.1	44.1	55.4	62.4	61.0	63.1	60.41	92.17
29-Aug	60.5	64.9	65.2	67.0	71.9	75.8	76.7	81.1	73.5	60.3	54.5	51.2	42.9	35.7	34.7	35.7	35.2	37.1	46.1	52.2	59.6	49.8	60.6	74.0	56.92	81.14
30-Aug	69.9	58.9	70.2	71.8	76.6	71.5	80.3	73.9	61.2	52.3	39.3	30.2	30.5	30.5	30.8	32.6	31.6	36.7	38.4	43.8	53.6	73.0	75.0	74.6	54.47	80.33
31-Aug	78.0	73.7	68.9	67.8	62.0	58.8	59.3	50.0	45.1	40.1	33.3	32.8	29.3	28.9	27.4	23.7	24.0	24.8	29.9	41.6	37.9	53.4	62.4	73.0	46.92	77.98
78.23 81.30 82.55 83.40 84.89 84.72 83.48 77.86 71.41 63.78 56.94 51.24 45.94 42.44 41.60 38.98 39.06 40.84 44.87 52.18 61.11 68.61 73.16 75.98																								Diurnal Average		
92.69 93.46 93.76 94.17 94.22 94.57 94.46 95.17 94.40 90.43 87.75 83.18 76.87 71.50 78.06 64.24 66.83 66.81 66.40 78.80 79.91 86.11 90.32 92.08																								Diurnal Maximum		



WCAS - Genesee
Summary of Hourly Averages

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

Maximum Value: 845.42 W/m2 on Aug 2 13:00 Maximum Daily Average: 287.86 W/m2 on Aug 2																								Hours in Service:	744	
Minimum Value: 0.0 W/m2 on Aug 1 01:00 Minimum Daily Average: 87.95 W/m2 on Aug 21																								Hours of Data:	744	
Maximum Diurnal Average: 644.61 W/m2 at hour 13 Minimum Diurnal Average: 0.00 W/m2 at hour 1																								Hours of Missing Data:	0	
Monthly Average: 213.65 W/m2 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 80.1 Q ₃ = 413.0 P ₉₀ = 638.6 P ₉₉ = 813.8																								Hours of Calibration:	0	
																								Percent Operational Time:	100.0	
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0.0	0.0	0.0	0.0	0.0	0.2	25.1	77.8	125.5	396.3	595.4	571.6	736.9	674.0	795.2	514.7	355.2	217.5	224.0	110.6	14.9	0.0	0.0	0.0	226.45	795.22
2-Aug	0.0	0.0	0.0	0.0	0.0	10.9	135.4	290.9	469.9	596.9	486.5	780.4	845.4	752.7	800.7	681.3	406.3	254.1	233.9	137.6	25.7	0.0	0.0	0.0	287.86	845.42
3-Aug	0.0	0.0	0.0	0.0	0.0	9.9	66.0	248.8	429.6	578.3	699.9	789.2	770.7	728.8	758.5	566.8	428.3	250.9	224.7	76.9	17.8	0.0	0.0	0.0	276.88	789.17
4-Aug	0.0	0.0	0.0	0.0	0.0	0.3	15.7	47.3	52.2	79.9	189.7	313.8	769.2	827.9	716.4	645.8	530.5	204.6	156.9	56.5	14.5	0.0	0.0	0.0	192.54	827.91
5-Aug	0.0	0.0	0.0	0.0	0.0	7.2	110.6	87.2	125.1	129.9	156.9	165.7	395.1	363.1	252.3	688.8	493.6	204.0	263.8	130.7	23.2	0.0	0.0	0.0	149.88	688.81
6-Aug	0.0	0.0	0.0	0.0	0.0	14.0	40.2	93.1	213.5	353.9	383.1	441.3	589.5	508.3	686.1	597.5	276.4	190.1	103.0	122.2	18.5	0.0	0.0	0.0	192.94	686.10
7-Aug	0.0	0.0	0.0	0.0	0.0	6.5	42.6	113.8	378.5	586.0	586.4	604.9	700.0	671.7	712.2	641.9	519.8	248.7	255.6	113.3	13.3	0.0	0.0	0.0	258.13	712.16
8-Aug	0.0	0.0	0.0	0.0	0.0	8.6	120.1	269.2	441.3	579.3	698.7	779.1	824.8	831.4	802.5	520.4	483.5	194.9	225.2	107.4	14.4	0.0	0.0	0.0	287.53	831.40
9-Aug	0.0	0.0	0.0	0.0	0.0	9.3	101.7	269.9	422.2	567.7	687.1	770.4	814.4	814.1	633.0	563.7	170.2	204.6	279.0	86.0	16.4	0.0	0.0	0.0	267.07	814.37
10-Aug	0.0	0.0	0.0	0.0	0.0	6.7	113.7	256.9	424.5	560.1	682.1	657.8	818.1	774.4	551.4	561.2	496.4	191.0	56.8	139.9	16.8	0.0	0.0	0.0	262.82	818.11
11-Aug	0.0	0.0	0.0	0.0	0.0	4.9	37.5	115.5	222.9	444.9	595.4	684.7	794.4	767.1	805.7	546.2	531.0	271.1	218.6	80.4	6.3	0.0	0.0	0.0	255.27	805.68
12-Aug	0.0	0.0	0.0	0.0	0.0	5.0	94.3	246.3	426.0	552.4	676.2	769.7	812.8	740.7	720.9	655.4	528.4	254.6	142.9	77.5	9.3	0.0	0.0	0.0	279.68	812.79
13-Aug	0.0	0.0	0.0	0.0	0.0	3.9	81.5	218.1	387.3	516.6	506.7	337.9	468.6	794.9	623.8	603.8	485.0	202.5	131.7	28.5	2.0	0.0	0.0	0.0	224.69	794.89
14-Aug	0.0	0.0	0.0	0.0	0.0	3.8	48.1	98.5	254.5	477.9	305.0	404.1	410.5	321.9	201.5	364.6	122.0	249.4	50.8	5.6	0.1	0.0	0.0	0.0	138.26	477.86
15-Aug	0.0	0.0	0.0	0.0	0.0	0.0	1.2	6.4	26.8	58.7	73.5	221.9	309.3	374.8	545.8	278.8	233.3	174.4	119.0	75.6	5.4	0.0	0.0	0.0	104.36	545.78
16-Aug	0.0	0.0	0.0	0.0	0.0	1.5	22.9	60.8	122.1	146.4	222.9	310.8	726.5	564.6	447.5	370.1	445.9	219.2	216.7	76.7	3.7	0.0	0.0	0.0	164.93	726.47
17-Aug	0.0	0.0	0.0	0.0	0.0	2.4	84.7	239.2	417.3	508.5	635.4	729.4	642.6	284.8	256.5	282.1	235.3	210.5	115.5	34.3	2.0	0.0	0.0	0.0	195.02	729.43
18-Aug	0.0	0.0	0.0	0.0	0.0	1.9	80.8	241.6	412.0	533.2	611.8	730.9	759.9	785.2	553.7	576.8	466.7	263.4	128.4	53.4	5.0	0.0	0.0	0.0	258.52	785.19
19-Aug	0.0	0.0	0.0	0.0	0.0	0.4	62.1	229.8	308.8	497.1	524.5	673.6	791.5	780.8	672.2	361.2	329.3	156.4	83.5	52.2	2.8	0.0	0.0	0.0	230.25	791.52
20-Aug	0.0	0.0	0.0	0.0	0.0	0.0	18.3	176.5	337.4	538.0	528.5	646.6	779.1	675.9	585.9	589.6	441.9	201.8	65.8	39.3	0.1	0.0	0.0	0.0	234.37	779.12
21-Aug	0.0	0.0	0.0	0.0	0.0	0.0	9.5	38.5	74.5	103.3	181.4	342.2	210.5	245.2	245.6	195.1	194.2	138.0	98.8	33.2	0.6	0.0	0.0	0.0	87.95	342.21
22-Aug	0.0	0.0	0.0	0.0	0.0	0.0	68.6	222.8	396.9	550.3	673.9	743.1	705.7	810.2	740.7	640.8	512.7	241.0	193.7	31.8	0.3	0.0	0.0	0.0	272.18	810.16
23-Aug	0.0	0.0	0.0	0.0	0.0	0.0	64.3	220.1	387.5	538.8	657.4	734.5	798.9	775.1	664.8	437.2	468.4	270.1	126.8	45.1	0.0	0.0	0.0	0.0	257.87	798.89
24-Aug	0.0	0.0	0.0	0.0	0.0	0.0	22.1	154.1	228.1	413.0	570.8	620.7	642.9	641.1	571.6	413.9	330.3	210.0	126.9	34.1	0.0	0.0	0.0	0.0	207.48	642.87
25-Aug	0.0	0.0	0.0	0.0	0.0	0.0	38.9	171.3	310.7	434.8	524.8	635.2	473.3	390.6	376.3	297.2	233.5	216.8	119.7	31.5	0.0	0.0	0.0	0.0	177.27	635.24
26-Aug	0.0	0.0	0.0	0.0	0.0	0.0	17.2	91.5	113.3	204.3	310.3	511.3	540.9	582.2	451.1	369.4	285.3	179.4	92.7	21.2	0.0	0.0	0.0	0.0	157.08	582.24
27-Aug	0.0	0.0	0.0	0.0	0.0	0.0	17.6	83.7	180.0	218.0	380.5	595.1	723.1	714.7	667.8	490.8	288.4	194.7	79.4	43.0	0.0	0.0	0.0	0.0	194.87	723.13
28-Aug	0.0	0.0	0.0	0.0	0.0	0.0	34.0	70.2	205.7	400.9	553.7	677.4	531.2	603.5	664.5	545.3	305.9	196.5	133.8	37.1	0.0	0.0	0.0	0.0	206.66	677.38
29-Aug	0.0	0.0	0.0	0.0	0.0	0.0	7.1	64.8	207.4	446.1	413.1	520.4	488.9	596.0	561.6	505.0	374.1	201.8	31.4	16.2	0.0	0.0	0.0	0.0	184.74	596.00
30-Aug	0.0	0.0	0.0	0.0	0.0	0.0	42.3	156.7	301.3	452.4	584.3	673.0	719.8	597.0	522.6	485.7	251.0	140.2	111.8	30.1	0.0	0.0	0.0	0.0	211.17	719.80
31-Aug	0.0	0.0	0.0	0.0	0.0	0.0	32.5	176.2	307.4	340.9	480.1	433.5	388.4	461.5	392.8	590.9	337.2	199.0	127.6	17.9	0.0	0.0	0.0	0.0	178.57	590.89
																								Diurnal Average		
																								Diurnal Maximum		



WCAS - Genesee
Summary of Hourly Averages

Precipitation (PR) - mm
August 2015

Maximum Value: 0.10 mm on Aug 11 04:00																								Hours in Service: 744		
Maximum Daily Total: 0.20 mm on Aug 15																								Hours of Data: 744		
Minimum Value: 0.0 mm on Aug 1 01:00																								Hours of Missing Data: 0		
Minimum Daily Total: 0.00 mm on Aug 1																								Hours of Calibration: 0		
Maximum Diurnal Total: 0.20 mm at hour 1																								Percent Operational Time: 100.0		
Minimum Diurnal Total: 0.00 mm at hour 3																										
Monthly Total: 0.800 mm																										
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.0 P ₉₉ = 0.1																										
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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.10
12-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.1	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	0.20	0.10
16-Aug	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.10
17-Aug	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.10
18-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.10
19-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	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	0.0	0.0	0.10	0.10
22-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10	0.10
24-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
25-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
29-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
30-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
31-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
0.20 0.10 0.00 0.10 0.00 0.00 0.00 0.10 0.00 0.10 0.00 0.10 0.00 0.00 0.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																								Diurnal Average		
0.10 0.10 0.00 0.10 0.00 0.00 0.00 0.10 0.00 0.10 0.00 0.10 0.00 0.00 0.10 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
August 2015

Maximum Value: 10.53 kph on Aug 4 04:00		Maximum Daily Average: 4.12 kph on Aug 4		Hours in Service: 744																																													
Minimum Value: 0.4 kph on Aug 25 21:00		Minimum Daily Average: 1.91 kph on Aug 26		Hours of Data: 744																																													
Maximum Diurnal Average: 4.34 kph at hour 15		Minimum Diurnal Average: 2.10 kph at hour 23		Hours of Missing Data: 0																																													
Monthly Average: 2.935 kph		Percentiles: P ₁ = 0.8 P ₁₀ = 1.4 Q ₁ = 1.9 Median = 2.8 Q ₃ = 3.7 P ₉₀ = 4.6 P ₉₉ = 6.7		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-Aug	2.7	2.2	1.0	2.2	4.3	5.4	4.2	2.4	1.9	4.1	4.8	4.2	4.0	3.8	5.3	6.1	4.2	3.0	3.1	1.6	1.3	2.0	0.9	3.0	3.24	6.11																							
2-Aug	2.8	1.6	2.2	1.1	2.3	2.2	1.4	2.0	2.2	3.5	3.4	4.5	4.6	5.2	6.0	4.2	3.9	3.3	3.6	3.8	1.7	2.9	1.9	2.4	3.02	5.97																							
3-Aug	2.2	2.2	2.7	2.7	2.5	2.8	2.5	2.5	3.1	3.2	3.5	4.0	4.2	3.4	4.1	3.7	3.0	3.2	2.3	1.6	1.8	3.2	3.2	3.7	2.98	4.20																							
4-Aug	2.4	2.6	1.8	10.5	7.7	4.6	5.1	4.3	4.5	5.0	5.2	4.8	4.6	5.1	5.0	4.0	3.6	3.2	3.3	1.8	3.0	2.5	3.1	1.4	4.12	10.53																							
5-Aug	1.7	1.6	1.5	3.6	1.3	1.7	2.9	2.7	2.6	1.7	1.6	2.7	2.5	5.8	5.5	5.2	3.3	5.9	3.8	1.8	2.1	2.0	2.2	1.6	2.80	5.95																							
6-Aug	3.5	2.3	2.2	2.6	1.9	2.2	3.1	2.2	3.4	3.1	2.6	2.9	3.2	3.8	4.3	4.9	5.3	3.3	2.9	3.3	3.7	3.9	3.5	3.2	3.22	5.34																							
7-Aug	3.0	2.6	2.5	2.5	3.0	2.4	3.2	3.6	3.6	3.4	4.3	5.0	5.2	4.9	5.2	4.8	4.1	3.6	2.6	2.2	1.4	1.3	2.0	0.8	3.22	5.19																							
8-Aug	1.2	1.5	1.1	1.9	0.7	1.5	2.0	2.1	2.2	2.4	3.3	4.6	4.9	4.2	3.6	3.5	3.1	2.9	2.6	1.4	1.5	1.5	2.2	1.7	2.40	4.88																							
9-Aug	2.0	1.4	1.7	1.9	0.9	2.2	1.2	2.0	2.1	2.2	3.3	3.6	4.1	4.6	3.7	3.7	2.3	6.8	3.7	3.0	5.4	6.1	2.5	3.4	3.08	6.76																							
10-Aug	2.0	2.7	1.5	5.8	1.9	3.0	1.8	2.1	2.4	2.5	4.3	3.4	3.9	4.2	5.6	5.1	5.2	4.7	5.4	6.8	5.6	1.8	1.3	1.3	3.52	6.85																							
11-Aug	1.1	3.6	2.7	3.3	3.6	2.7	2.1	1.6	1.7	2.3	2.3	2.8	3.0	3.7	4.6	5.0	4.2	4.3	2.2	1.3	1.4	1.1	1.3	2.2	2.68	4.96																							
12-Aug	1.7	2.1	2.8	3.1	3.8	2.9	4.2	2.6	1.8	3.2	3.5	3.2	4.8	4.8	3.7	4.8	4.2	4.5	3.5	1.3	1.0	2.8	1.6	2.5	3.11	4.82																							
13-Aug	4.0	2.8	2.9	1.3	2.1	3.8	1.4	2.1	2.2	3.9	2.6	2.7	3.2	4.9	4.1	3.5	3.4	3.3	2.4	1.5	1.3	2.8	3.3	3.2	2.86	4.90																							
14-Aug	3.1	1.2	2.0	3.0	1.2	1.2	1.6	3.4	2.5	4.3	3.1	2.8	3.0	3.5	3.1	4.7	2.8	4.2	4.1	1.9	1.9	3.0	2.9	2.9	2.88	4.75																							
15-Aug	4.0	4.9	6.3	2.5	2.6	1.7	2.8	3.0	2.7	3.1	3.0	3.6	4.3	4.2	4.4	4.2	2.8	2.6	3.1	1.5	1.2	1.2	0.9	1.4	3.00	6.32																							
16-Aug	1.1	1.8	3.8	3.2	1.4	1.6	2.2	1.5	1.9	3.0	2.6	2.5	3.3	4.2	4.0	3.1	3.4	3.3	3.0	2.1	1.2	1.9	1.8	2.8	2.53	4.21																							
17-Aug	1.6	1.5	0.7	0.8	2.4	3.1	4.6	2.3	3.4	2.2	3.4	4.3	3.9	4.1	4.1	3.9	3.4	3.0	2.7	2.4	4.0	3.4	2.5	6.1	3.06	6.06																							
18-Aug	5.2	3.3	2.0	3.1	2.1	1.6	2.7	2.9	3.5	2.7	3.2	3.2	3.7	4.3	3.9	3.8	5.1	2.4	2.8	2.0	1.2	1.4	1.3	1.2	2.86	5.16																							
19-Aug	1.6	4.1	3.6	3.8	1.9	2.2	2.0	2.5	2.5	3.0	3.1	3.0	3.9	4.1	4.1	3.8	3.4	3.4	6.9	1.7	2.4	2.6	0.8	1.7	3.00	6.89																							
20-Aug	3.0	1.6	2.3	1.7	1.3	3.5	2.7	2.5	3.7	4.1	3.8	4.2	5.5	4.6	4.7	4.6	4.1	2.3	2.9	5.7	2.2	5.7	2.3	3.5	3.43	5.74																							
21-Aug	2.8	3.4	2.9	3.1	2.1	2.9	2.1	1.9	2.6	3.7	3.4	4.8	4.6	5.0	4.5	4.2	3.9	3.9	4.4	3.6	3.1	4.1	4.1	2.5	3.48	4.99																							
22-Aug	3.1	2.7	2.3	2.0	2.3	2.8	3.1	2.9	2.6	2.6	3.8	4.2	5.2	4.9	4.5	5.1	4.1	3.1	3.1	2.4	1.3	1.1	0.8	1.3	2.96	5.21																							
23-Aug	1.4	1.4	0.7	1.5	1.7	2.1	1.6	1.9	1.7	1.9	2.7	3.3	4.1	3.1	4.3	3.8	3.3	3.3	3.0	1.9	1.5	1.4	2.8	1.9	2.36	4.35																							
24-Aug	1.8	3.1	4.4	2.5	1.5	4.2	2.3	3.3	3.1	2.8	2.9	3.0	3.6	3.4	3.7	2.9	2.4	2.0	1.6	1.2	1.4	2.6	2.1	1.0	2.61	4.41																							
25-Aug	1.5	1.2	1.8	0.9	1.1	2.6	4.6	1.9	1.2	2.6	2.2	2.6	2.8	2.5	2.1	1.8	1.9	2.5	1.1	1.0	0.4	4.3	3.9	2.2	2.11	4.55																							
26-Aug	1.3	1.5	1.4	1.4	1.9	2.4	2.8	1.5	1.7	1.8	2.5	2.6	3.5	2.8	2.9	3.1	1.8	2.0	1.8	1.4	0.6	1.7	0.7	0.8	1.91	3.46																							
27-Aug	2.1	2.2	1.2	1.4	2.6	1.8	1.8	2.6	2.2	1.5	1.8	2.7	4.2	3.9	3.8	2.8	2.4	4.1	1.9	3.2	3.1	2.5	0.7	1.6	2.42	4.15																							
28-Aug	2.1	1.5	1.4	1.3	3.6	2.7	1.1	1.8	1.5	1.8	3.5	3.4	3.3	2.9	6.1	4.7	4.3	2.4	2.0	1.7	2.1	1.8	1.9	3.5	2.60	6.09																							
29-Aug	2.5	3.0	2.1	3.8	4.2	2.4	3.5	3.0	1.7	2.6	3.1	3.8	4.7	5.6	5.9	6.7	6.8	7.2	5.7	5.4	3.0	2.9	3.2	1.3	3.92	7.19																							
30-Aug	1.3	1.8	4.7	2.2	2.7	3.1	2.0	3.1	2.6	2.8	2.9	4.9	4.4	6.2	4.4	4.4	3.4	2.0	1.6	2.5	2.4	1.5	1.7	3.0	2.99	6.21																							
31-Aug	2.4	1.5	1.7	1.1	1.4	1.4	1.3	2.7	2.9	2.5	5.1	2.8	2.8	2.8	3.6	5.6	4.4	4.3	3.6	1.7	2.3	1.1	1.5	2.1	2.60	5.64																							
																								2.33	2.29	2.33	2.64	2.39	2.60	2.58	2.49	2.49	2.89	3.25	3.55	3.96	4.21	4.34	4.25	3.67	3.55	3.13	2.48	2.15	2.48	2.10	2.31	Diurnal Average	
																								5.16	4.94	6.32	10.53	7.71	5.38	5.08	4.26	4.45	5.02	5.19	5.03	5.55	6.21	6.09	6.67	6.79	7.19	6.89	6.85	5.61	6.07	4.05	6.06	Diurnal Maximum	
,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
August 2015

Maximum Value: 93.15 deg on Aug 10 00:00		Maximum Daily Average: 37.72 deg on Aug 12		Hours in Service: 744																						
Minimum Value: 3.8 deg on Aug 1 23:00		Minimum Daily Average: 15.70 deg on Aug 19		Hours of Data: 744																						
Maximum Diurnal Average: 30.90 deg at hour 15		Minimum Diurnal Average: 17.12 deg at hour 5		Hours of Missing Data: 0																						
Monthly Average: 23.994 deg		Percentiles: P ₁ = 4.6 P ₁₀ = 8.9 Q ₁ = 12.0 Median = 18.1 Q ₃ = 29.8 P ₉₀ = 49.5 P ₉₉ = 85.9		Hours of Calibration: 0																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	58.4	73.8	55.8	40.2	14.9	25.7	18.3	16.8	18.1	51.1	15.3	13.8	20.4	17.0	19.4	16.2	16.6	10.9	11.3	10.7	12.0	28.9	3.8	16.9	24.44	73.85
2-Aug	89.1	20.8	24.7	20.2	20.9	13.0	10.4	24.2	20.7	17.4	17.3	20.8	27.5	17.3	22.0	24.7	14.7	12.1	13.6	16.4	14.2	15.9	10.2	13.4	20.89	89.09
3-Aug	11.9	10.8	11.4	14.1	13.9	11.4	10.9	20.0	15.7	20.9	29.9	21.8	32.4	28.6	26.6	25.9	18.2	19.8	19.2	20.9	14.5	16.0	15.3	15.6	18.56	32.38
4-Aug	26.8	19.8	26.5	73.8	9.1	10.0	10.9	12.1	11.8	11.2	14.0	12.7	19.3	19.6	23.2	14.0	16.2	13.4	35.4	11.7	45.7	76.5	21.0	8.6	22.63	76.52
5-Aug	18.9	9.1	7.2	56.8	7.9	9.3	17.1	34.8	40.5	18.6	23.5	43.1	14.2	20.7	12.9	17.8	32.9	15.9	16.4	17.9	32.5	46.7	10.5	7.6	22.20	56.83
6-Aug	35.0	49.1	67.6	17.9	6.9	28.6	16.2	17.1	12.4	16.2	15.8	32.3	48.5	23.9	43.0	30.0	30.2	13.5	9.6	12.5	12.0	10.6	10.1	10.3	23.72	67.59
7-Aug	9.8	9.8	10.6	11.6	10.6	10.0	10.8	12.3	14.7	17.2	20.0	17.5	20.8	18.0	17.3	21.0	22.1	22.2	17.7	18.0	34.0	16.7	23.0	6.8	16.36	34.05
8-Aug	7.5	4.5	7.9	16.6	17.1	11.9	20.0	37.9	21.5	43.9	30.9	77.0	38.3	68.4	65.6	56.1	48.1	39.6	28.7	9.7	10.5	39.9	31.0	20.9	31.40	77.01
9-Aug	29.5	15.2	19.7	34.6	15.4	39.3	56.8	24.4	75.1	53.6	45.4	23.2	27.3	29.0	20.4	18.0	17.2	75.5	8.0	6.2	16.2	53.3	56.6	93.2	35.54	93.15
10-Aug	13.8	60.1	30.4	61.1	67.3	52.9	16.0	16.8	34.7	29.5	22.1	22.3	15.9	29.6	24.4	43.7	36.9	28.5	28.5	26.0	16.3	28.3	10.9	8.7	30.19	67.26
11-Aug	7.7	12.7	12.0	41.2	24.9	16.2	11.1	10.8	19.1	61.6	83.8	39.5	26.3	21.6	43.3	22.5	26.7	29.9	12.4	4.7	4.5	8.7	11.0	27.9	24.17	83.81
12-Aug	9.8	7.2	50.0	17.2	29.6	8.7	45.1	26.1	50.9	27.6	21.1	24.1	34.9	52.4	86.2	67.9	86.5	90.9	14.0	12.5	8.9	58.0	10.4	65.4	37.72	90.90
13-Aug	28.6	24.7	23.6	12.6	30.8	39.6	8.9	16.4	13.2	26.8	12.9	41.2	20.7	22.3	23.2	17.8	19.2	16.9	13.9	22.4	13.1	78.9	71.4	17.4	25.69	78.92
14-Aug	15.5	16.6	6.3	30.4	10.0	8.5	7.4	43.4	87.7	24.0	18.3	20.1	19.7	20.9	15.1	21.7	20.9	15.6	18.9	19.1	10.4	13.4	14.1	15.9	20.59	87.72
15-Aug	76.2	24.3	21.2	14.1	16.6	18.5	11.2	11.6	12.4	16.3	11.4	10.9	12.2	13.9	17.8	19.0	16.2	17.2	13.3	12.4	10.2	24.5	5.2	8.7	17.31	76.23
16-Aug	9.0	9.8	53.5	22.8	18.1	9.6	27.0	17.8	13.2	15.7	18.8	13.1	15.8	51.7	23.9	26.7	56.4	30.5	18.6	76.1	21.1	22.4	21.1	12.2	25.21	76.08
17-Aug	4.7	4.9	3.8	7.3	36.8	11.8	30.4	8.1	13.0	32.2	26.4	35.9	29.5	20.5	19.8	27.3	18.0	16.7	11.9	8.4	48.8	11.8	35.9	72.8	22.37	72.79
18-Aug	22.3	87.1	16.0	15.8	9.7	10.9	10.3	9.3	22.7	17.8	31.0	31.5	37.0	26.3	31.2	39.1	54.2	81.3	24.2	11.5	5.0	8.3	4.6	6.0	25.55	87.12
19-Aug	6.4	12.6	9.4	10.3	6.9	7.0	7.0	9.0	9.4	15.1	17.3	23.0	36.7	22.5	22.6	19.0	32.7	30.7	28.7	14.8	4.7	7.3	11.9	12.0	15.70	36.73
20-Aug	30.4	21.7	6.1	5.6	6.6	21.8	14.9	20.5	13.0	13.4	17.6	21.7	28.3	28.4	26.1	27.7	34.7	23.4	17.5	16.7	31.2	30.7	11.6	35.8	21.06	35.84
21-Aug	64.4	82.3	51.7	19.1	17.5	16.9	15.0	15.7	12.7	13.2	11.3	16.3	11.1	13.3	11.7	10.6	14.0	13.6	15.3	9.2	10.4	10.8	9.2	14.4	19.99	82.29
22-Aug	10.8	9.3	8.4	9.1	7.8	8.8	8.4	11.5	17.7	22.0	18.8	28.0	41.1	32.4	35.4	50.2	63.0	55.2	48.7	35.3	12.0	17.0	10.8	10.7	23.84	62.96
23-Aug	20.0	20.2	7.6	24.7	10.3	47.0	30.2	13.9	19.1	19.9	23.9	18.9	25.9	32.1	19.7	11.9	11.8	10.5	9.3	9.3	9.2	7.3	17.1	14.8	18.11	46.97
24-Aug	5.1	33.7	52.4	57.1	16.9	13.7	6.3	9.5	9.3	11.6	13.4	28.4	22.1	22.2	23.8	20.4	19.3	14.4	18.5	17.8	14.3	27.6	12.4	8.2	19.94	57.12
25-Aug	12.3	11.4	4.9	4.0	6.7	10.0	45.2	28.6	65.1	44.9	21.0	24.2	32.6	32.4	28.4	19.6	20.3	30.5	8.7	10.4	5.5	75.3	36.8	12.9	24.65	75.28
26-Aug	10.6	6.0	4.4	5.2	6.4	8.8	29.2	28.3	15.8	27.3	31.3	45.7	45.3	59.2	64.3	35.6	29.9	14.7	56.3	24.6	18.8	42.5	20.7	18.0	27.04	64.25
27-Aug	33.9	18.8	82.8	64.7	25.0	42.1	55.2	31.5	18.7	17.9	30.1	49.8	42.8	40.1	45.7	49.4	21.0	16.9	6.4	11.0	19.5	59.7	21.2	4.7	33.72	82.80
28-Aug	8.1	5.9	6.9	4.0	15.6	69.9	10.7	25.4	17.5	31.5	52.5	55.8	45.7	69.4	55.9	27.7	40.8	16.6	42.0	40.9	14.5	12.5	10.6	16.9	29.06	69.90
29-Aug	9.9	12.5	7.1	23.0	33.0	11.6	57.4	19.6	14.2	54.1	26.8	21.4	14.1	13.6	12.6	13.1	14.0	12.8	9.9	17.1	30.4	17.1	49.6	15.9	21.28	57.39
30-Aug	13.1	10.9	47.6	11.5	10.5	24.3	68.7	35.7	55.6	29.8	16.6	37.1	19.4	19.6	19.8	17.4	16.8	16.4	11.4	28.2	56.9	12.6	12.2	11.2	25.14	68.74
31-Aug	10.5	11.2	6.7	9.7	6.8	9.1	10.1	12.3	21.4	11.6	30.8	21.3	27.5	40.7	56.8	42.3	24.0	42.6	17.5	13.2	6.8	8.1	10.8	22.4	19.75	56.76
22.91 23.12 24.01 24.40 17.12 20.23 22.49 20.05 25.39 26.25 24.82 28.79 27.53 29.93 30.90 27.55 28.82 27.38 19.54 18.25 18.19 28.63 19.38 20.20																								Diurnal Average		
89.09 87.12 82.80 73.80 67.26 69.90 68.74 43.44 87.72 61.63 83.81 77.01 48.53 69.44 86.16 67.90 86.49 90.90 56.28 76.08 56.86 78.92 71.36 93.15																								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
AUGUST 2015**