







**WEST CENTRAL AIRSHED SOCIETY**

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

**AMS 910  
GENESEE  
OCTOBER 2014**

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

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

**Summary Report**

Continuous air quality/meteorological monitoring measurements

**West Central Airshed Society**

EPCOR / Genesee Station 910													October 2014
Parameter	Calibration Hours	Number of Data	Percent Uptime	Mean	Total	Min	Max	----- P10	----- Q1	Percentile Median	----- Q3	----- P90	24 Hour Average Max (ppm)
SO <sub>2</sub> (ppb)	36	708	100.0	0.9	-	0.0	21.0	0.0	0.0	0.0	0.5	2.6	0.005
O <sub>3</sub> (ppb)	36	708	100.0	19.6	-	0.0	39.5	6.0	12.4	20.7	27.0	31.1	0.031
NO (ppb)	37	707	100.0	0.8	-	0.0	19.9	0.0	0.0	0.2	0.9	2.1	-
NO <sub>2</sub> (ppb)	37	707	100.0	3.7	-	0.0	21.1	0.8	1.5	2.8	4.7	8.0	0.007
NO <sub>x</sub> (ppb)	37	707	100.0	4.4	-	0.0	32.4	0.8	1.7	3.0	5.2	9.2	-
Particulate Matter 2.5 microns (µ/m <sup>3</sup> )	0	721	96.9	2.0	-	0.0	15.4	0.0	0.5	1.6	2.9	4.5	7.87 ug/m3
Wind Speed (kph)	0	744	100.0	12.6	-	0.1	43.6	4.4	7.3	11.3	16.1	22.7	-
Temperature - 2m (°C)	0	744	100.0	7.2	-	-6.5	22.6	0.5	2.8	6.8	11.2	15.1	-
Temperature - 10m (°C)	0	744	100.0	7.5	-	-6.4	21.8	0.4	3.1	7.8	11.4	15.0	-
Delta Temperature (°C)	0	744	100.0	0.3	-	-2.4	4.8	-1.1	-0.7	0.0	1.2	2.5	-
Relative Humidity (%)	0	744	100.0	67.1	-	24.9	94.1	41.3	52.7	67.7	84.5	91.3	-
Global Solar Radiation (W/m <sup>2</sup> )	0	744	100.0	85.0	-	0.0	543.5	0.0	0.0	0.0	120.1	327.3	-
Precipitation (mm)	0	744	100.0	-	2.8	0.0	1.4	0.0	0.0	0.0	0.0	0.0	-
Std Dev Wind Direction (deg)	0	744	100.0	16.8	-	3.1	94.6	7.4	9.1	12.1	17.7	30.6	-
Std Dev Wind Speed (kph)	0	744	100.0	2.9	-	0.5	10.6	1.2	1.7	2.4	3.5	5.2	-



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

**Sulphur Dioxide (SO<sub>2</sub>) - ppb**  
**October 2014**

Maximum Value: 20.96 ppb on Oct 5 12:00		Maximum Daily Average: 4.68 ppb on Oct 5		Hours in Service: 744																										
Minimum Value: 0.0 ppb on Oct 1 08:00		Minimum Daily Average: 0.02 ppb on Oct 19		Hours of Data: 708																										
Maximum Diurnal Average: 2.20 ppb at hour 17		Minimum Diurnal Average: 0.25 ppb at hour 7		Hours of Missing Data: 36																										
Monthly Average: 0.850 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 0.0 Q <sub>3</sub> = 0.5 P <sub>90</sub> = 2.6 P <sub>99</sub> = 9.2		Hours of Calibration: 36																										
				Percent Operational Time: 100.0																										
Day	Hourly Period Ending At																								Daily Average	Daily Maximum				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
1-Oct	0.1	0.2	Z	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.3	3.4	3.7	1.5	2.1	0.0	1.1	0.9	3.0	0.85	3.66					
2-Oct	4.2	4.4	Z	5.0	8.9	6.0	4.7	5.9	4.8	2.9	2.5	4.1	4.1	2.3	3.9	3.2	4.5	3.5	0.0	0.0	0.0	0.0	0.3	0.4	3.29	8.89				
3-Oct	0.0	0.0	Z	0.1	0.6	0.9	1.0	0.8	0.7	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.1	0.2	0.0	0.1	0.34	1.04				
4-Oct	0.2	0.1	Z	0.4	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	1.0	3.5	5.4	9.1	10.0	1.7	0.9	1.2	0.5	1.3	1.2	1.60	10.01				
5-Oct	0.9	1.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	1.0	9.2	21.0	16.3	15.3	10.0	8.7	7.7	14.6	1.9	0.0	0.0	0.0	0.0	0.0	4.68	20.96				
6-Oct	0.0	0.2	Z	0.0	0.0	0.0	0.0	2.1	1.6	0.0	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	0.2	0.1	0.27	2.05					
7-Oct	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.3	0.5	1.0	1.5	15.8	11.4	0.2	0.8	6.9	3.1	2.3	1.4	1.7	2.4	1.1	1.1	0.5	2.26	15.80				
8-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.8	7.1	4.4	2.2	2.4	1.9	3.3	2.1	0.9	1.18	7.07					
9-Oct	0.3	0.0	Z	1.2	0.5	1.2	0.9	0.6	0.7	0.3	0.3	0.7	0.6	0.4	0.3	0.3	0.2	0.0	0.0	0.0	0.2	0.2	0.0	0.39	1.17					
10-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.2	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	1.4	0.12	1.37					
11-Oct	1.6	0.7	Z	2.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.9	1.5	1.7	0.0	0.2	1.5	0.5	0.2	0.3	0.3	0.59	2.31					
12-Oct	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.9	2.0	0.2	1.1	4.2	5.6	0.3	0.1	0.0	0.3	0.1	0.0	0.72	5.64				
13-Oct	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.6	0.5	0.0	0.2	0.1	0.1	0.11	0.64					
14-Oct	0.4	0.0	Z	0.5	0.1	0.0	0.2	0.3	0.9	0.7	0.2	0.2	0.4	5.7	6.9	2.7	2.0	0.0	0.2	0.0	0.0	0.8	0.8	0.99	6.93					
15-Oct	0.6	0.0	Z	0.2	0.0	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	0.0	0.0	0.0	0.0	0.0	0.05	0.56					
16-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.1	0.06	0.39					
17-Oct	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.34					
18-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	7.9	7.9	2.8	2.6	4.5	4.7	1.6	0.0	0.0	1.63	7.95				
19-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.02	0.19					
20-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.5	0.16	3.52					
21-Oct	0.7	0.0	Z	0.7	0.0	0.0	0.1	0.0	0.0	0.0	0.4	0.7	0.7	0.9	4.8	9.6	8.7	9.2	9.4	7.4	3.2	1.4	1.5	1.4	2.65	9.55				
22-Oct	1.2	0.4	Z	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	0.08	1.15				
23-Oct	0.0	0.0	Z	0.0	0.0	0.1	0.1	0.3	0.4	C	C	C	C	C	0.0	2.0	1.8	0.0	0.0	0.8	0.2	0.5	0.3	5.4	0.66	5.40				
24-Oct	2.4	0.0	Z	0.0	1.4	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.5	0.0	1.7	2.6	0.5	0.7	0.0	0.0	0.3	0.1	0.4	0.49	2.58				
25-Oct	0.2	0.4	Z	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.1	0.2	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.2	0.1	0.19	0.44				
26-Oct	0.0	0.0	Z	0.0	0.9	0.4	0.4	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.0	1.0	2.0	2.9	0.41	2.88				
27-Oct	2.6	2.6	Z	1.8	1.2	1.1	0.1	0.3	0.1	1.9	2.7	0.1	0.0	0.0	3.4	1.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.85	3.35				
28-Oct	0.0	0.0	Z	0.1	0.4	0.1	0.0	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.0	0.0	0.07	0.36				
29-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.9	2.8	2.8	3.1	2.8	2.5	1.8	0.6	0.3	0.1	0.1	0.81	3.09				
30-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.36				
31-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2	8.8	1.9	0.1	0.1	1.3	1.3	0.4	0.0	0.0	0.0	0.0	0.75	8.82				
		0.51	0.33	--	0.40	0.46	0.37	0.25	0.36	0.33	0.30	0.60	1.53	1.29	1.35	1.50	2.01	2.20	1.99	0.89	0.82	0.54	0.44	0.38	0.73	Diurnal Average				
		4.21	4.44	--	5.01	8.89	6.01	4.65	5.95	4.81	2.95	9.20	20.96	16.35	15.29	10.02	9.55	9.12	14.59	9.45	7.40	4.68	3.29	2.12	5.40	Diurnal Maximum				
Z - zerospan																														
C - Calibration																														
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 172 ppb		24-hr 48 ppb																										



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

**Ozone (O<sub>3</sub>) - ppb**  
**October 2014**

<b>Maximum Value: 39.52 ppb on Oct 20 18:00</b> <b>Maximum Daily Average: 31.04 ppb on Oct 11</b>																						<b>Hours in Service: 744</b>																										
<b>Minimum Value: 0.0 ppb on Oct 29 18:00</b> <b>Minimum Daily Average: 4.27 ppb on Oct 31</b>																						<b>Hours of Data: 708</b>																										
<b>Maximum Diurnal Average: 25.52 ppb at hour 15</b> <b>Minimum Diurnal Average: 14.76 ppb at hour 8</b>																						<b>Hours of Missing Data: 36</b>																										
<b>Monthly Average: 19.638 ppb</b> <b>Percentiles: P<sub>1</sub> = -0.1 P<sub>10</sub> = 6.0 Q<sub>1</sub> = 12.4 Median = 20.7 O<sub>3</sub> = 27.0 P<sub>90</sub> = 31.1 P<sub>99</sub> = 35.8</b>																						<b>Hours of Calibration: 36</b>																										
																						<b>Percent Operational Time: 100.0</b>																										
Day	Hourly Period Ending At																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Oct	23.7	Z	16.2	13.9	9.7	7.7	7.3	7.6	10.4	16.3	27.3	31.5	32.7	25.2	27.2	15.6	24.7	22.8	22.4	23.6	23.4	8.0	3.9	1.3	17.50	32.69																						
2-Oct	1.7	Z	4.9	4.7	0.8	2.1	3.5	2.7	4.2	7.2	6.9	7.7	10.5	10.5	8.5	10.9	10.1	12.9	20.4	19.2	18.1	15.7	10.9	10.0	8.88	20.42																						
3-Oct	10.3	Z	9.8	11.9	11.0	10.6	10.6	9.0	7.8	8.0	15.8	19.1	21.4	20.8	20.7	19.9	18.7	18.3	16.4	10.9	8.3	8.9	12.4	10.7	13.53	21.38																						
4-Oct	10.2	Z	8.7	11.8	8.2	9.4	8.7	15.7	14.2	10.6	12.3	16.6	24.4	25.1	25.7	27.0	19.2	14.3	24.0	24.3	29.4	29.3	29.2	27.9	18.53	29.39																						
5-Oct	28.2	Z	28.3	27.5	28.0	26.7	27.0	18.5	20.4	25.6	21.5	17.1	18.6	22.0	27.9	29.6	26.9	13.9	30.1	35.5	29.9	26.2	18.3	19.0	24.64	35.50																						
6-Oct	18.8	Z	18.0	12.0	16.9	16.3	18.2	15.7	13.8	17.0	18.8	19.9	20.4	20.0	24.6	27.6	28.6	34.6	35.2	32.5	30.1	25.5	20.5	27.2	22.28	35.24																						
7-Oct	26.9	Z	29.3	30.1	31.0	31.0	28.9	26.4	22.3	24.8	25.9	20.0	24.0	33.9	32.8	27.0	29.9	28.6	28.9	21.7	21.6	23.6	22.6	26.3	26.85	33.89																						
8-Oct	28.1	Z	25.2	26.4	26.3	25.4	23.8	22.2	24.4	28.1	27.6	27.0	27.4	29.4	28.4	21.3	15.0	14.3	13.2	14.9	13.5	8.5	7.9	7.2	21.11	29.41																						
9-Oct	5.4	Z	4.2	1.9	0.6	2.0	3.2	2.4	9.5	11.3	18.9	22.8	27.5	28.1	28.8	31.9	34.8	31.5	29.2	27.2	23.9	22.0	22.8	23.7	17.98	34.78																						
10-Oct	21.4	Z	16.2	16.1	16.5	9.7	12.0	13.0	13.1	15.0	18.1	23.9	27.1	31.0	34.5	35.0	30.9	27.0	24.2	23.3	20.6	21.1	30.0	22.4	21.84	35.00																						
11-Oct	17.9	Z	20.9	21.8	31.5	35.2	34.7	32.2	33.9	33.9	35.7	35.9	38.3	35.2	33.8	27.0	30.9	33.6	32.4	26.4	30.4	31.0	31.3	30.0	31.04	38.28																						
12-Oct	27.1	Z	29.1	28.9	28.5	27.9	28.3	30.1	30.7	29.4	31.4	21.3	27.8	26.0	33.6	33.1	29.0	25.6	31.9	29.8	23.7	24.7	28.6	23.5	28.26	33.57																						
13-Oct	21.6	Z	19.6	19.9	21.5	22.5	23.0	20.3	19.6	22.5	24.2	29.0	33.2	34.0	33.2	33.7	33.0	29.7	27.5	25.9	25.8	22.6	21.6	19.9	25.38	33.97																						
14-Oct	18.8	Z	16.1	13.0	15.6	13.7	14.7	15.5	18.5	19.7	23.0	24.7	27.2	23.6	19.1	19.5	21.1	27.8	27.5	24.6	25.6	23.5	23.4	24.5	20.90	27.77																						
15-Oct	23.7	Z	22.5	22.1	10.6	24.2	17.2	9.0	11.4	20.7	18.6	16.5	19.0	20.4	28.8	31.9	29.4	25.0	22.6	23.6	21.4	16.5	16.5	13.7	20.24	31.94																						
16-Oct	13.3	Z	6.8	11.5	8.8	5.4	3.4	6.1	10.4	15.2	21.7	29.8	30.8	33.6	33.4	33.2	32.1	29.3	27.4	24.9	22.4	22.9	22.5	18.9	20.16	33.59																						
17-Oct	15.0	Z	12.2	11.2	9.3	8.5	8.7	8.9	10.2	13.4	16.5	19.2	21.6	25.3	26.9	25.9	21.5	22.7	24.3	24.9	24.0	22.3	22.9	20.7	18.10	26.88																						
18-Oct	18.3	Z	18.8	20.3	19.0	22.0	19.6	19.0	18.2	21.1	31.4	32.1	35.3	39.2	32.9	31.2	27.9	34.0	31.5	26.4	20.7	23.8	30.6	30.1	26.23	39.22																						
19-Oct	27.1	Z	30.9	30.4	26.1	25.6	22.5	27.5	19.9	22.5	22.2	26.2	27.2	27.2	24.7	26.2	24.7	17.8	16.7	16.0	14.8	15.1	16.4	15.4	22.74	30.91																						
20-Oct	18.4	Z	22.2	24.4	25.7	25.2	25.1	22.8	25.9	30.1	17.9	28.4	35.3	36.0	36.2	38.6	38.4	39.5	38.7	32.4	29.9	34.9	31.4	24.8	29.66	39.52																						
21-Oct	27.7	Z	25.7	23.4	24.2	22.9	25.3	18.0	18.0	15.2	16.5	26.2	31.8	33.2	27.1	20.0	18.4	18.3	16.2	11.8	17.2	21.6	22.5	21.3	21.84	33.21																						
22-Oct	20.4	Z	15.4	12.4	17.1	17.2	17.2	11.2	13.7	19.3	25.2	29.5	27.9	27.9	27.9	29.3	27.1	24.5	22.7	21.9	19.4	25.7	27.6	27.5	22.09	29.45																						
23-Oct	21.5	Z	23.4	22.3	20.7	22.0	18.0	12.4	14.0	C	C	C	C	C	36.7	31.6	31.6	30.6	33.6	26.8	24.1	29.6	26.8	14.9	24.48	36.70																						
24-Oct	19.7	Z	25.7	25.5	21.8	24.4	24.8	24.6	20.0	23.0	31.5	30.6	33.8	33.7	32.9	32.5	30.4	31.7	27.6	29.6	25.1	24.3	26.9	25.3	27.19	33.77																						
25-Oct	20.6	Z	20.2	20.0	20.6	18.9	19.7	16.3	17.5	18.5	21.9	28.2	26.7	27.6	28.3	26.8	26.0	27.0	27.8	25.4	24.1	23.6	23.0	22.2	23.08	28.31																						
26-Oct	21.4	Z	21.8	20.1	16.5	16.7	16.3	17.4	17.0	18.7	19.4	19.2	18.4	15.9	15.6	15.3	15.9	15.7	12.5	8.4	5.5	4.8	0.2	0.5	14.49	21.82																						
27-Oct	0.3	Z	0.4	0.3	2.0	3.7	9.3	10.4	11.1	11.8	10.5	17.8	20.7	20.4	18.2	20.6	19.0	17.0	16.2	15.9	12.8	11.4	9.5	10.3	11.72	20.73																						
28-Oct	9.5	Z	6.1	4.8	3.3	1.9	2.8	4.1	5.6	7.9	10.2	13.6	15.5	16.5	19.4	19.6	16.9	13.7	11.8	11.1	8.9	8.4	8.5	6.9	9.88	19.64																						
29-Oct	5.9	Z	6.7	5.2	5.8	6.8	6.0	4.4	4.5	7.3	8.3	9.7	10.6	10.9	7.5	5.9	3.1	0.0	0.0	0.0	0.0	0.0	1.5	4.5	4.99	10.91																						
30-Oct	4.6	Z	4.0	3.6	5.8	7.2	8.3	9.2	6.6	5.6	7.4	9.4	9.2	12.3	14.1	15.1	15.9	14.8	14.6	13.7	13.6	12.8	11.7	9.9	9.97	15.94																						
31-Oct	8.3	Z	5.8	5.7	5.3	5.3	4.6	4.5	3.6	1.4	0.5	0.2	0.2	0.0	2.0	3.5	3.1	0.0	0.0	3.6	9.0	10.1	9.3	12.4	4.27	12.40																						
17.28																								--	16.62	16.23	15.78	16.07	15.89	14.76	15.18	17.37	19.56	21.77	24.15	24.83	25.52	24.72	23.68	22.46	22.83	21.17	19.91	19.30	19.07	17.84	Diurnal Average	
28.23																								--	30.91	30.41	31.53	35.16	34.70	32.20	33.88	33.92	35.67	35.86	38.28	39.22	36.70	38.57	38.42	39.52	38.66	35.50	30.36	34.87	31.39	30.13	Diurnal Maximum	
Z - zerospan      C - Calibration																																																
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82.5 ppb      24-hr -- ppb																																																



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

**Nitrogen Oxide (NO) - ppb**  
**October 2014**

Maximum Value: 19.88 ppb on Oct 31 14:00		Maximum Daily Average: 2.92 ppb on Oct 2		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Oct 1 02:00		Minimum Daily Average: 0.20 ppb on Oct 25		Hours of Data: 707																							
Maximum Diurnal Average: 2.02 ppb at hour 12		Minimum Diurnal Average: 0.12 ppb at hour 7		Hours of Missing Data: 37																							
Monthly Average: 0.810 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 0.2 Q <sub>3</sub> = 0.9 P <sub>90</sub> = 2.1 P <sub>99</sub> = 9.9		Hours of Calibration: 37																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.8	2.1	1.8	0.6	0.2	0.3	0.3	0.3	3.0	1.7	1.2	0.3	0.3	0.0	1.0	0.8	4.0	0.82	4.05	
2-Oct	5.0	4.6	Z	2.2	10.8	8.1	2.6	5.9	4.4	1.9	1.4	3.0	3.0	2.1	3.8	2.7	3.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.92	10.81	
3-Oct	0.1	0.1	Z	0.1	0.0	0.0	0.1	0.6	1.5	3.0	1.2	0.7	0.8	0.9	1.5	1.0	1.3	0.7	0.1	0.1	0.1	0.0	0.0	0.0	0.60	3.01	
4-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.8	1.1	1.0	0.6	0.9	1.8	2.2	4.7	3.5	0.2	0.0	0.0	0.0	0.0	0.0	0.74	4.71	
5-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.6	1.5	6.6	15.0	10.3	9.0	5.1	4.9	1.7	2.8	0.1	0.1	0.0	0.0	0.0	0.0	2.51	15.00	
6-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	1.2	1.3	0.3	0.3	0.4	0.6	0.9	0.4	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.1	0.0	0.32	1.34	
7-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.8	1.3	2.2	11.3	10.5	0.4	0.5	2.3	0.5	0.2	0.1	0.3	0.1	0.1	0.1	0.0	1.33	11.35	
8-Oct	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.5	0.7	1.1	1.0	0.5	2.1	2.9	1.8	0.3	0.1	0.1	0.1	0.1	0.0	0.52	2.87	
9-Oct	0.0	0.0	Z	0.0	0.3	0.2	0.1	1.2	1.8	2.9	2.4	2.0	1.6	1.7	1.5	1.2	0.6	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.83	2.94	
10-Oct	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.2	1.3	2.5	2.1	1.1	0.9	0.8	0.6	0.6	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.5	0.50	2.54	
11-Oct	0.6	0.2	Z	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.8	0.6	1.0	0.9	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.24	1.04	
12-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	1.5	1.0	1.6	0.5	0.9	1.9	1.0	0.2	0.2	0.2	0.1	0.1	0.1	0.43	1.88	
13-Oct	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.8	1.6	2.3	1.4	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.44	2.31	
14-Oct	0.1	0.0	Z	0.1	0.0	0.0	0.0	0.1	0.8	1.6	1.7	1.6	1.6	6.4	4.9	1.9	1.4	0.4	0.3	0.1	0.1	0.1	0.1	0.1	1.02	6.39	
15-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.2	0.9	0.4	0.6	0.7	0.7	0.8	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.21	0.86	
16-Oct	0.0	0.1	Z	0.0	0.0	0.0	0.0	0.2	0.9	1.4	1.0	0.7	0.9	0.4	0.4	0.4	0.4	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.33	1.43	
17-Oct	0.0	0.0	Z	0.0	0.0	0.1	0.0	0.2	0.9	1.7	2.3	2.2	1.7	1.5	1.1	0.7	0.5	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.59	2.32	
18-Oct	0.1	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.8	1.6	0.8	1.0	0.8	0.5	2.9	3.0	2.4	0.5	0.3	0.1	0.1	0.1	0.1	0.0	0.66	3.03	
19-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.4	0.9	0.9	0.9	0.9	0.5	0.6	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.28	0.90	
20-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.1	0.4	3.8	1.6	0.8	0.6	0.7	0.8	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.45	3.77	
21-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.3	0.6	1.4	1.5	1.3	0.9	1.8	3.7	2.7	0.8	0.2	0.1	0.1	0.1	0.0	0.0	0.67	3.68	
22-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	1.2	1.1	1.1	0.9	1.0	0.5	0.5	0.6	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.34	1.20	
23-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	1.1	C	C	C	C	C	C	1.3	1.4	0.8	0.5	0.4	0.4	0.3	0.3	0.4	--	1.36	
24-Oct	0.7	0.1	Z	0.1	0.6	0.1	0.1	0.1	0.4	0.7	0.5	0.6	0.3	0.7	0.4	1.2	1.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.39	1.21	
25-Oct	0.1	0.1	Z	0.1	0.1	0.0	0.1	0.1	0.4	0.8	0.9	0.5	0.3	0.3	0.3	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.20	0.86	
26-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.4	2.3	5.2	0.44	5.17	
27-Oct	6.6	8.7	Z	2.9	1.5	1.1	0.3	0.2	0.2	0.8	1.5	0.3	0.2	0.2	1.5	0.5	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	1.20	8.74	
28-Oct	0.1	0.2	Z	0.2	0.2	0.2	0.2	0.3	1.2	1.9	2.5	2.1	1.7	1.9	0.7	0.7	0.4	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.65	2.51	
29-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.1	0.6	0.7	0.9	1.3	1.5	1.7	4.0	4.4	4.6	3.6	1.8	6.3	7.3	5.5	1.0	0.2	1.98	7.31	
30-Oct	0.2	0.1	Z	0.2	0.1	0.1	0.1	0.0	0.4	0.9	1.3	1.1	1.4	1.1	0.9	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	1.36	
31-Oct	0.0	0.0	Z	0.0	0.0	0.0	0.0	0.0	0.2	3.4	4.6	4.9	10.0	19.9	4.6	1.3	1.5	5.0	4.0	0.4	0.2	0.2	0.1	0.0	2.61	19.88	
		0.44	0.46	--	0.19	0.44	0.32	0.12	0.38	0.83	1.25	1.57	2.02	1.90	1.96	1.44	1.44	1.28	0.91	0.34	0.33	0.32	0.29	0.19	0.37	Diurnal Average	
		6.57	8.74	--	2.85	10.81	8.06	2.55	5.88	4.37	3.37	6.59	15.00	10.46	19.88	5.10	4.88	4.71	4.96	3.98	6.27	7.31	5.48	2.32	5.17	Diurnal Maximum	
Z - zerospan		C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr --- ppb				24-hr --- ppb																					





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

**Nitrogen Dioxide (NO<sub>2</sub>) - ppb**  
**October 2014**

Maximum Value: 21.12 ppb on Oct 5 18:00		Maximum Daily Average: 7.31 ppb on Oct 21		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Oct 1 13:00		Minimum Daily Average: 1.37 ppb on Oct 25		Hours of Data: 707																							
Maximum Diurnal Average: 5.26 ppb at hour 18		Minimum Diurnal Average: 2.77 ppb at hour 14		Hours of Missing Data: 37																							
Monthly Average: 3.660 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.8 Q <sub>1</sub> = 1.5 Median = 2.8 Q <sub>3</sub> = 4.7 P <sub>90</sub> = 8.0 P <sub>99</sub> = 16.0		Hours of Calibration: 37																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Oct	2.5	1.8	Z	2.9	2.8	3.3	3.7	4.0	3.3	2.1	0.6	0.0	0.0	0.5	1.4	7.6	7.2	6.8	3.1	4.5	0.9	3.7	3.7	8.1	3.24	8.12	
2-Oct	9.1	9.9	Z	10.5	14.4	12.8	11.1	12.1	10.1	6.3	6.6	7.5	6.2	3.7	5.8	4.5	6.6	5.5	0.0	0.0	0.1	1.1	3.9	2.3	6.52	14.37	
3-Oct	1.2	2.7	Z	1.4	1.8	2.3	3.9	4.5	4.5	5.2	2.3	1.5	1.6	2.6	2.5	4.3	5.2	4.6	6.1	11.8	12.8	10.5	5.3	6.1	4.56	12.78	
4-Oct	4.8	4.3	Z	3.0	2.2	2.3	1.8	1.1	0.5	2.0	1.5	1.0	0.6	2.8	5.0	7.6	13.8	17.3	8.1	5.0	2.7	2.8	3.8	4.9	4.30	17.27	
5-Oct	3.4	3.1	Z	2.3	1.2	1.2	1.0	1.3	2.1	3.3	9.6	17.6	16.2	14.4	10.1	8.6	9.9	21.1	5.3	0.6	1.4	2.9	4.5	4.5	6.33	21.12	
6-Oct	3.1	2.3	Z	3.9	2.8	2.7	2.6	7.6	5.3	0.4	0.1	0.1	1.2	2.7	0.2	0.0	0.0	0.0	0.0	0.2	2.0	4.7	3.9	1.6	2.05	7.59	
7-Oct	0.8	0.9	Z	1.5	0.7	0.6	0.9	4.0	7.0	4.2	4.2	14.0	10.8	0.6	1.6	9.1	4.6	4.0	2.9	8.7	8.3	3.9	3.8	2.3	4.33	14.03	
8-Oct	1.0	1.5	Z	1.3	0.7	0.5	0.6	1.4	1.2	1.0	1.3	1.7	1.8	1.6	2.1	6.9	12.2	10.4	9.1	8.6	8.1	12.7	9.4	7.0	4.43	12.67	
9-Oct	6.1	5.2	Z	11.3	7.6	9.7	8.3	6.5	4.6	3.6	3.9	4.2	3.5	3.6	3.5	2.9	1.9	2.4	3.2	3.5	4.7	5.9	5.0	3.4	4.98	11.31	
10-Oct	3.6	3.7	Z	4.3	3.6	2.8	3.5	3.7	3.3	3.4	2.5	1.6	1.6	1.3	0.9	1.2	2.1	2.4	3.5	4.4	6.2	4.0	2.3	8.4	3.23	8.42	
11-Oct	10.4	9.4	Z	9.0	2.7	3.9	0.8	1.1	0.5	0.4	0.4	0.4	0.0	1.5	1.8	2.7	2.5	1.0	1.4	5.2	1.5	1.7	1.4	1.4	2.65	10.44	
12-Oct	1.5	0.9	Z	1.4	1.1	1.2	1.0	0.3	0.2	0.2	0.0	3.2	1.4	3.2	0.2	1.3	6.0	8.8	2.8	2.1	5.8	2.8	2.0	1.4	2.11	8.84	
13-Oct	2.1	2.7	Z	2.4	2.0	1.7	1.5	1.8	2.8	3.3	3.9	2.2	0.9	0.5	0.8	0.4	0.7	1.7	2.8	3.1	3.1	4.4	2.8	2.7	2.19	4.41	
14-Oct	2.6	2.7	Z	5.3	2.8	3.3	5.7	4.1	5.8	4.8	3.5	3.3	2.4	8.4	10.2	5.4	4.4	0.8	1.1	2.8	4.2	2.2	1.5	1.3	3.85	10.17	
15-Oct	2.7	2.8	Z	3.6	3.1	2.0	2.1	2.4	5.6	3.0	2.6	2.9	3.4	5.2	2.2	0.6	0.7	2.0	2.4	3.2	3.0	2.6	3.2	2.5	2.78	5.58	
16-Oct	3.0	4.4	Z	4.4	7.8	5.1	3.4	2.5	2.5	2.5	2.0	1.5	1.5	0.9	1.0	1.1	0.9	1.7	2.6	4.1	3.4	1.5	1.3	2.0	2.65	7.79	
17-Oct	1.1	1.4	Z	3.1	2.2	2.5	3.1	3.1	2.2	2.9	2.7	3.0	2.8	2.6	2.2	2.9	4.1	3.4	3.4	3.0	4.0	4.9	4.1	4.9	3.04	4.90	
18-Oct	4.1	3.4	Z	3.4	2.3	1.8	2.2	2.8	2.9	3.2	1.3	1.9	1.3	0.5	6.6	9.4	11.8	5.9	6.5	8.5	9.2	5.5	1.9	1.4	4.24	11.81	
19-Oct	1.6	1.6	Z	2.1	1.3	1.5	1.5	2.2	3.0	3.6	3.3	3.2	3.3	2.8	4.6	3.5	4.0	5.5	6.1	5.6	6.2	5.8	5.2	5.1	3.59	6.17	
20-Oct	3.9	3.0	Z	2.4	2.0	2.7	2.4	1.9	2.5	3.1	5.5	3.1	2.7	2.6	3.0	2.5	2.3	2.9	3.2	5.3	5.5	2.7	4.5	10.0	3.46	9.98	
21-Oct	3.9	0.5	Z	4.3	1.5	2.3	4.4	3.3	2.6	3.1	4.9	5.0	4.1	3.7	9.0	15.4	15.2	16.6	17.9	20.0	12.8	6.7	5.7	5.4	7.31	20.04	
22-Oct	5.3	5.7	Z	5.2	3.9	2.9	4.0	6.0	7.0	3.0	2.1	1.5	2.8	2.6	2.4	2.8	3.9	4.1	4.8	5.3	4.9	2.8	1.2	2.6	3.78	7.02	
23-Oct	3.3	2.5	Z	2.2	1.8	1.6	2.2	6.0	6.7	C	C	C	C	C	C	6.8	6.5	5.7	2.4	5.9	7.9	4.3	6.6	13.7	--	13.73	
24-Oct	6.0	0.3	Z	2.0	3.6	1.2	1.0	0.9	1.9	2.0	0.4	0.6	0.0	0.7	0.0	2.7	4.9	2.5	5.1	3.7	4.8	3.4	0.9	2.7	2.23	6.02	
25-Oct	2.6	1.5	Z	2.8	1.6	1.3	1.4	1.7	2.5	1.9	2.0	1.4	1.8	0.7	0.6	0.9	1.2	0.9	0.7	0.8	0.8	1.2	0.5	0.6	1.37	2.83	
26-Oct	0.6	0.5	Z	1.8	3.2	2.4	1.8	0.9	0.7	0.5	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.0	2.4	4.0	6.7	7.0	9.1	8.6	2.25	9.13	
27-Oct	8.6	9.1	Z	7.6	5.2	5.1	0.7	1.2	0.8	5.1	7.5	0.8	0.0	0.0	4.7	2.4	0.8	0.7	0.9	1.1	1.7	2.0	3.0	1.2	3.05	9.14	
28-Oct	1.8	1.6	Z	3.6	5.1	7.1	5.5	5.7	4.5	4.0	3.2	2.4	2.1	2.3	2.0	1.6	2.2	3.0	2.6	2.8	3.0	3.3	2.4	1.8	3.20	7.14	
29-Oct	1.4	1.4	Z	1.9	1.4	1.3	1.9	2.6	2.4	2.2	2.4	2.3	2.0	2.5	5.3	5.9	8.4	12.0	13.7	15.1	15.8	14.4	8.3	3.3	5.55	15.79	
30-Oct	2.0	1.5	Z	2.8	2.2	1.8	3.1	2.4	2.7	2.6	2.6	2.9	2.6	1.5	0.9	1.2	1.4	1.4	1.3	1.7	1.7	1.3	1.4	1.6	1.93	3.06	
31-Oct	1.8	1.7	Z	2.0	1.5	1.3	1.3	1.5	1.8	3.8	5.0	4.9	5.7	7.3	4.7	2.8	3.5	8.0	8.2	5.3	2.6	2.6	2.2	1.7	3.54	8.19	
		3.42	3.03	--	3.73	3.10	2.99	2.85	3.24	3.34	2.89	2.95	3.20	2.82	2.77	3.18	4.04	4.80	5.26	4.30	5.03	5.02	4.36	3.71	4.01	Diurnal Average	
		10.44	9.90	--	11.31	14.37	12.79	11.08	12.11	10.12	6.33	9.60	17.64	16.23	14.38	10.17	15.39	15.18	21.12	17.86	20.04	15.79	14.38	9.42	13.73	Diurnal Maximum	
Z - zerospan		C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 159 ppb					24-hr 106 ppb																				



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

**NOx (NO<sub>x</sub>) - ppb**  
**October 2014**

Maximum Value: 32.43 ppb on Oct 5 12:00		Maximum Daily Average: 9.34 ppb on Oct 2		Hours in Service: 744																							
Minimum Value: 0.0 ppb on Oct 2 19:00		Minimum Daily Average: 1.50 ppb on Oct 25		Hours of Data: 707																							
Maximum Diurnal Average: 5.94 ppb at hour 18		Minimum Diurnal Average: 2.91 ppb at hour 7		Hours of Missing Data: 37																							
Monthly Average: 4.360 ppb		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.8 Q <sub>1</sub> = 1.7 Median = 3.0 Q <sub>3</sub> = 5.2 P <sub>90</sub> = 9.2 P <sub>99</sub> = 22.9		Hours of Calibration: 37																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Oct	2.5	1.8	Z	2.8	2.8	3.3	3.7	4.8	5.4	3.9	1.1	0.2	0.1	0.7	1.7	10.5	8.8	7.8	3.4	4.7	0.9	4.7	4.5	12.1	4.01	12.07	
2-Oct	14.0	14.3	Z	12.5	24.9	20.6	13.5	17.8	14.4	8.2	7.9	10.4	9.0	5.7	9.5	7.1	9.9	7.7	0.0	0.0	0.1	1.1	3.9	2.3	9.34	24.93	
3-Oct	1.2	2.7	Z	1.4	1.8	2.3	3.9	5.0	5.9	8.1	3.5	2.1	2.3	3.4	4.0	5.1	6.4	5.2	6.0	11.8	12.7	10.4	5.3	6.0	5.08	12.71	
4-Oct	4.8	4.3	Z	3.0	2.2	2.3	1.9	1.1	0.7	2.7	2.7	2.0	1.2	3.7	6.7	9.6	18.2	20.5	8.2	5.0	2.7	2.8	3.8	4.9	5.00	20.49	
5-Oct	3.4	3.1	Z	2.2	1.2	1.1	1.0	1.4	2.9	4.8	16.1	32.4	26.3	23.2	15.1	13.3	11.4	23.7	5.2	0.5	1.3	2.8	4.4	4.4	8.74	32.43	
6-Oct	3.0	2.2	Z	3.9	2.8	2.7	2.6	8.8	6.6	0.7	0.3	0.3	1.6	3.3	0.4	0.0	0.0	0.0	0.0	0.2	2.0	4.7	3.9	1.6	2.24	8.78	
7-Oct	0.8	0.9	Z	1.4	0.7	0.7	0.9	3.9	7.7	5.5	6.3	25.1	21.0	0.9	1.9	11.2	4.9	4.0	2.9	8.9	8.3	3.9	3.8	2.2	5.56	25.08	
8-Oct	1.0	1.5	Z	1.3	0.6	0.5	0.5	1.4	1.4	1.4	1.8	2.4	2.9	2.5	2.5	8.9	14.8	12.0	9.1	8.5	8.0	12.6	9.4	6.9	4.87	14.84	
9-Oct	6.0	5.1	Z	11.2	7.8	9.8	8.3	7.6	6.3	6.5	6.2	6.1	5.0	5.1	4.9	3.9	2.2	2.5	3.1	3.4	4.6	5.8	5.0	3.4	5.65	11.24	
10-Oct	3.5	3.6	Z	4.2	3.5	2.7	3.4	3.9	4.6	6.0	4.6	2.7	2.4	1.9	1.3	1.5	2.5	2.5	3.4	4.3	6.1	4.0	2.2	8.8	3.64	8.82	
11-Oct	11.0	9.7	Z	9.1	2.7	3.9	0.8	1.1	0.5	0.7	0.6	0.5	0.0	2.1	2.1	3.4	3.1	0.9	1.3	5.0	1.4	1.6	1.3	1.3	2.79	11.04	
12-Oct	1.4	0.8	Z	1.2	0.9	1.1	0.8	0.2	0.3	0.3	0.1	4.6	2.1	4.6	0.3	1.9	7.5	9.5	2.7	2.1	5.9	2.8	1.9	1.4	2.37	9.52	
13-Oct	2.1	2.7	Z	2.3	2.0	1.7	1.5	1.9	3.5	4.9	6.1	3.6	1.5	0.7	0.9	0.5	0.7	1.6	2.7	2.9	3.0	4.3	2.8	2.7	2.46	6.11	
14-Oct	2.6	2.6	Z	5.3	2.7	3.3	5.6	4.1	6.5	6.3	5.2	4.8	3.9	14.6	14.8	6.9	5.4	0.8	1.1	2.9	4.3	2.3	1.5	1.4	4.73	14.76	
15-Oct	2.7	2.9	Z	3.7	3.1	2.0	2.2	2.6	6.4	3.3	3.2	3.6	4.1	5.9	2.5	0.8	0.7	2.0	2.4	3.1	2.9	2.6	3.2	2.5	2.97	6.40	
16-Oct	3.0	4.4	Z	4.3	7.7	5.0	3.3	2.6	3.3	3.9	2.9	2.1	2.4	1.3	1.3	1.4	1.1	1.9	2.6	4.1	3.4	1.5	1.2	2.0	2.90	7.71	
17-Oct	1.1	1.3	Z	3.1	2.1	2.6	3.1	3.3	3.0	4.5	4.9	5.1	4.4	3.9	3.2	3.5	4.4	3.5	3.3	3.0	4.0	4.8	4.1	4.9	3.54	5.13	
18-Oct	4.0	3.4	Z	3.4	2.2	1.8	2.2	2.7	3.7	4.7	2.0	2.8	1.8	0.6	9.0	11.9	13.9	5.8	6.2	8.3	9.1	5.4	1.9	1.3	4.70	13.92	
19-Oct	1.6	1.5	Z	1.9	1.2	1.4	1.4	2.1	3.2	4.4	4.1	4.0	4.1	3.1	5.0	3.7	4.1	5.5	6.1	5.6	6.2	5.7	5.1	5.1	3.74	6.17	
20-Oct	3.9	3.0	Z	2.3	2.0	2.7	2.4	1.9	2.6	3.4	9.1	4.6	3.4	2.9	3.3	2.8	2.3	2.7	3.0	5.0	5.2	2.5	4.3	9.9	3.72	9.90	
21-Oct	3.8	0.3	Z	4.2	1.4	2.3	4.3	3.2	2.9	3.7	6.2	6.4	5.3	4.5	10.7	18.8	17.6	17.1	17.7	19.8	12.6	6.7	5.7	5.4	7.86	19.84	
22-Oct	5.3	5.6	Z	5.2	3.9	2.9	4.0	6.1	8.2	4.1	3.3	2.4	3.8	3.0	2.8	3.2	4.2	4.1	4.8	5.2	4.8	2.8	1.1	2.5	4.05	8.15	
23-Oct	3.2	2.5	Z	2.1	1.8	1.6	2.2	6.2	8.2	C	C	C	C	C	C	6.6	6.6	5.4	1.9	5.5	7.6	4.0	6.5	13.7	--	13.73	
24-Oct	6.4	0.3	Z	1.9	4.1	1.2	1.0	0.9	2.1	2.6	0.8	1.1	0.0	1.2	0.0	3.7	5.9	2.6	5.1	3.8	4.8	3.3	0.9	2.6	2.45	6.39	
25-Oct	2.5	1.5	Z	2.8	1.6	1.3	1.4	1.7	2.8	2.6	2.8	1.7	2.1	1.0	0.9	1.2	1.3	0.9	0.7	0.8	0.7	1.2	0.5	0.6	1.50	2.83	
26-Oct	0.6	0.5	Z	1.7	3.2	2.4	1.8	0.9	0.8	0.7	0.8	0.5	0.2	0.1	0.2	0.2	0.1	0.0	2.4	3.9	6.8	7.2	11.3	13.6	2.60	13.62	
27-Oct	15.0	17.7	Z	10.2	6.6	6.1	0.8	1.3	0.8	5.8	8.9	1.0	0.0	0.1	6.1	2.8	1.0	0.7	0.9	1.1	1.8	2.1	3.1	1.3	4.15	17.70	
28-Oct	1.9	1.8	Z	3.7	5.2	7.2	5.6	5.8	5.6	5.8	5.7	4.4	3.9	4.2	2.7	2.3	2.6	3.0	2.5	2.7	3.0	3.5	2.4	1.7	3.79	7.21	
29-Oct	1.3	1.3	Z	1.8	1.3	1.3	1.8	2.6	3.0	2.9	3.2	3.6	3.4	4.1	9.3	10.3	12.9	15.5	15.3	21.3	23.0	19.8	9.2	3.5	7.46	23.01	
30-Oct	2.2	1.7	Z	3.0	2.3	1.8	3.2	2.4	3.1	3.5	3.9	4.0	3.9	2.6	1.8	1.7	1.6	1.4	1.2	1.6	1.6	1.2	1.4	1.6	2.29	4.01	
31-Oct	1.7	1.7	Z	1.9	1.5	1.3	1.2	1.5	2.0	7.1	9.6	9.8	15.7	27.2	9.3	4.1	4.9	12.9	12.1	5.6	2.8	2.7	2.3	1.7	6.12	27.23	
		3.79	3.44	--	3.84	3.48	3.25	2.91	3.58	4.14	4.10	4.47	5.15	4.60	4.60	4.46	5.26	5.85	5.94	4.43	5.19	5.21	4.55	3.80	4.30	Diurnal Average	
		14.98	17.70	--	12.53	24.93	20.63	13.48	17.82	14.37	8.16	16.14	32.43	26.33	27.23	15.05	18.84	18.18	23.68	17.71	21.25	23.01	19.76	11.25	13.73	Diurnal Maximum	
Z - zerospan		C - Calibration																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr --- ppb					24-hr --- ppb																				



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

**PM2.5 (PM<sub>2.5</sub>) - µg/m<sup>3</sup>**  
**October 2014**

Maximum Value: 15.37 µg/m <sup>3</sup> on Oct 29 20:00		Maximum Daily Average: 7.87 µg/m <sup>3</sup> on Oct 29		Hours in Service: 744																						
Minimum Value: 0.0 µg/m <sup>3</sup> on Oct 1 11:00		Minimum Daily Average: 0.11 µg/m <sup>3</sup> on Oct 25		Hours of Data: 721																						
Maximum Diurnal Average: 2.96 µg/m <sup>3</sup> at hour 20		Minimum Diurnal Average: 1.27 µg/m <sup>3</sup> at hour 6		Hours of Missing Data: 23																						
Monthly Average: 2.034 µg/m <sup>3</sup>		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.5 Median = 1.6 Q <sub>3</sub> = 2.9 P <sub>90</sub> = 4.5 P <sub>99</sub> = 11.7		Hours of Calibration: 0																						
				Percent Operational Time: 96.9																						
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Oct	1.1	1.0	1.2	1.4	1.9	1.3	1.8	1.5	1.7	0.8	0.0	0.0	0.0	2.7	1.7	1.7	0.0	1.5	0.0	2.2	0.7	1.5	1.3	1.8	1.19	2.66
2-Oct	1.4	1.4	1.1	1.1	0.8	1.3	1.7	1.6	1.3	1.0	1.2	1.0	0.7	0.1	1.6	1.2	1.6	1.6	0.0	1.1	0.9	0.5	0.3	0.5	1.04	1.71
3-Oct	0.8	0.5	0.1	0.3	0.0	0.0	0.0	0.7	0.7	1.2	0.0	0.0	0.0	0.6	0.1	1.7	1.3	1.1	0.9	5.5	5.8	5.4	4.0	4.8	1.49	5.82
4-Oct	4.7	3.8	4.7	2.6	2.4	2.7	2.1	0.7	1.4	1.6	0.4	0.0	0.0	0.5	0.0	1.0	2.0	1.8	2.2	1.5	1.3	0.1	1.4	1.0	1.66	4.69
5-Oct	1.4	1.2	1.0	1.9	1.8	1.6	1.4	2.4	2.0	2.8	2.0	2.6	2.6	2.7	2.1	2.5	1.8	3.2	2.0	1.0	0.1	2.5	8.2	5.8	2.35	8.22
6-Oct	4.6	3.0	1.5	2.0	2.2	1.8	4.5	5.2	3.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	1.0	0.9	1.3	1.2	1.4	1.6	3.7	3.5	1.78	5.17
7-Oct	2.4	1.8	1.3	0.8	1.6	1.5	1.2	2.8	4.0	2.5	3.0	2.6	2.6	1.5	1.9	0.3	1.8	2.0	2.8	8.0	5.8	4.3	4.3	3.7	2.69	7.97
8-Oct	2.8	2.8	0.4	0.1	0.0	0.0	0.0	0.8	1.1	0.4	1.0	1.2	1.3	2.3	4.2	1.9	3.3	3.5	3.0	3.4	3.0	2.6	5.0	4.0	1.99	4.97
9-Oct	2.0	2.3	3.1	0.6	3.0	4.1	2.6	3.6	3.6	2.3	4.2	3.9	4.4	4.6	4.3	4.5	3.7	4.3	4.6	4.5	4.9	5.5	4.3	4.1	3.70	5.54
10-Oct	4.2	3.6	3.0	2.6	2.7	0.0	4.3	4.9	5.0	4.8	2.3	0.8	0.1	0.0	0.2	0.3	1.0	0.8	1.8	3.7	4.9	4.8	2.1	2.5	2.51	5.00
11-Oct	3.5	4.0	5.8	1.2	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	1.1	1.4	2.3	0.8	0.0	0.5	0.6	0.93	5.79
12-Oct	0.4	1.3	0.6	0.8	0.8	0.4	0.8	0.6	0.9	0.9	0.2	0.5	0.4	0.0	0.0	0.0	0.2	1.4	0.6	0.5	2.4	2.7	1.0	1.2	0.76	2.67
13-Oct	0.6	0.5	0.0	0.6	0.5	0.1	0.0	0.0	2.8	2.2	0.2	0.3	0.0	0.0	0.0	0.0	0.2	1.6	2.7	3.2	2.0	3.4	1.6	2.5	1.04	3.43
14-Oct	3.2	2.8	3.4	4.6	2.5	2.1	1.4	1.4	2.6	4.4	3.2	2.4	3.0	2.3	4.0	4.8	2.0	0.9	3.2	1.3	0.9	1.3	1.4	0.1	2.47	4.76
15-Oct	4.5	1.8	2.0	1.0	1.0	0.9	1.6	4.9	5.0	3.9	2.1	1.3	1.0	2.4	2.3	1.3	1.1	2.6	3.0	3.4	1.6	1.9	3.2	1.9	2.32	4.97
16-Oct	3.4	2.6	2.5	2.1	3.1	0.3	UO	1.4	5.0	3.9	2.6	1.9	1.8	2.8	2.7	0.9	3.1	3.3	3.4	2.6	2.9	1.5	1.9	0.0	2.42	5.00
17-Oct	0.0	0.9	0.7	2.6	0.2	1.6	3.3	3.5	3.1	3.0	2.7	0.8	0.0	0.1	0.0	1.0	0.4	0.0	0.0	0.0	0.8	0.8	2.8	2.1	1.27	3.53
18-Oct	2.2	2.6	2.4	1.6	1.8	1.8	2.2	1.9	3.4	2.2	0.0	2.5	0.0	0.0	0.5	1.9	1.8	1.3	0.9	2.1	2.5	2.1	1.4	0.9	1.68	3.42
19-Oct	1.1	0.8	1.7	0.8	0.7	0.1	0.5	1.3	2.0	2.0	1.5	0.3	0.5	0.0	1.1	0.0	1.3	2.3	1.8	0.5	3.1	2.2	1.8	2.7	1.25	3.08
20-Oct	1.7	2.0	1.7	0.9	1.4	1.3	0.9	1.0	2.2	3.1	3.9	0.2	0.9	1.6	1.4	2.7	2.4	1.9	1.4	4.5	4.9	2.6	3.2	4.0	2.16	4.94
21-Oct	3.2	2.8	0.5	2.2	0.6	0.9	1.9	1.7	0.9	3.0	5.0	1.3	0.0	0.6	1.0	0.0	3.1	1.2	2.3	4.4	2.9	1.5	0.5	1.3	1.78	5.04
22-Oct	2.6	2.0	0.1	1.9	1.9	0.5	0.3	2.1	0.0	1.9	0.3	0.6	1.1	1.8	1.5	3.3	3.8	4.0	4.8	2.8	2.5	1.1	0.0	0.0	1.70	4.77
23-Oct	0.3	0.3	0.0	0.0	0.0	0.0	0.4	1.9	2.8	1.3	1.0	1.6	0.0	0.0	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	--	2.79
24-Oct	UO	UO	UO	UO	UO	UO	UO	UO	0.0	0.0	0.0	UO	UO	UO	UO	0.0	0.0	0.0	1.8	0.9	0.0	3.2	0.9	0.0	--	3.18
25-Oct	0.0	0.0	0.0	0.0	0.0	0.0	UO	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.11	1.99
26-Oct	1.7	0.0	3.6	3.6	3.1	2.2	2.2	1.9	2.1	1.0	3.0	5.2	4.2	2.9	2.9	1.8	0.0	3.9	0.5	1.6	0.2	0.0	3.3	0.0	2.11	5.15
27-Oct	2.3	0.0	2.9	0.6	0.8	0.9	1.3	0.5	0.7	0.0	1.2	0.0	0.3	0.3	0.0	0.9	0.6	0.1	0.6	3.8	3.3	1.1	1.1	0.6	0.99	3.79
28-Oct	1.3	0.7	0.3	0.8	1.4	1.5	0.9	1.3	1.3	0.0	1.8	0.0	2.8	3.3	3.5	4.5	2.8	3.2	0.0	1.6	3.6	3.3	4.7	4.5	2.05	4.67
29-Oct	4.0	4.4	3.5	3.6	3.4	4.1	3.8	4.5	6.2	7.7	8.1	6.8	4.5	9.2	8.8	11.8	13.5	13.9	14.3	15.4	14.1	11.9	7.2	4.2	7.87	15.37
30-Oct	4.1	3.4	3.4	3.8	5.2	4.8	10.8	5.9	5.2	5.0	7.2	9.7	7.9	1.6	1.7	1.1	0.0	0.0	0.3	1.0	0.4	1.5	3.0	0.0	3.62	10.75
31-Oct	0.9	0.3	0.6	0.7	0.7	1.4	1.0	1.8	2.4	2.9	3.5	5.7	7.2	9.4	5.8	6.4	6.2	8.0	6.3	5.1	3.1	1.3	2.8	2.4	3.58	9.38
																								Diurnal Average		
																								Diurnal Maximum		
																								2.21 1.82 1.77 1.55 1.53 1.27 1.82 2.07 2.40 2.12 2.05 1.77 1.58 1.77 1.84 1.92 2.03 2.38 2.26 2.96 2.69 2.41 2.56 2.04		
																								4.68 4.39 5.79 4.61 5.21 4.85 10.75 5.92 6.25 7.67 8.13 9.72 7.87 9.38 8.75 11.76 13.54 13.88 14.32 15.37 14.12 11.85 8.22 5.84		
UO - Unstable Operation Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 ul/m <sup>3</sup> 24-hr 30 ul/m <sup>3</sup>																										

**WEST CENTRAL AIRSHED SOCIETY**

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

**AMS 910  
GENESEE  
OCTOBER 2014**

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

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



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

**External Temperature (ET) - C**  
**October 2014**

Maximum Value: 22.61 C on Oct 10 15:00		Maximum Daily Average: 12.89 C on Oct 11		Hours in Service: 744																							
Minimum Value: -6.5 C on Oct 28 06:00		Minimum Daily Average: -0.90 C on Oct 28		Hours of Data: 744																							
Maximum Diurnal Average: 12.34 C at hour 15		Minimum Diurnal Average: 3.24 C at hour 8		Hours of Missing Data: 0																							
Monthly Average: 7.167 C		Percentiles: P <sub>1</sub> = -5.0 P <sub>10</sub> = 0.5 Q <sub>1</sub> = 2.8 Median = 6.8 Q <sub>3</sub> = 11.2 P <sub>90</sub> = 15.1 P <sub>99</sub> = 20.1		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Oct	6.6	6.5	3.8	2.9	1.8	0.6	0.8	2.0	5.5	9.2	13.3	14.5	15.1	7.8	7.9	7.7	7.0	7.0	6.3	5.5	4.7	4.4	3.0	2.1	6.08	15.07	
2-Oct	1.6	0.9	0.8	0.6	0.3	0.5	0.3	0.3	1.0	1.1	1.5	2.6	4.2	5.7	6.5	6.1	6.3	5.3	3.2	1.2	0.0	-0.7	-2.3	-3.5	1.82	6.49	
3-Oct	-4.1	-4.4	-4.9	-4.2	-4.3	-5.0	-3.8	-2.8	-0.4	1.8	5.6	7.8	9.2	9.6	10.8	10.9	11.1	11.1	8.5	8.4	8.1	8.0	8.9	8.3	3.92	11.14	
4-Oct	7.7	7.4	7.9	8.9	8.2	8.6	8.4	9.4	9.8	10.3	12.1	14.9	17.6	17.9	18.0	18.2	16.1	14.3	13.8	11.5	13.1	12.9	13.3	12.7	12.20	18.21	
5-Oct	11.5	10.4	9.6	9.0	9.1	8.7	8.6	5.6	9.1	12.2	14.1	15.8	16.9	17.1	17.4	17.9	17.0	15.1	13.0	12.8	11.0	10.5	10.2	10.5	12.22	17.86	
6-Oct	10.2	10.9	9.8	9.1	9.5	9.6	10.9	12.4	13.3	14.4	15.1	15.8	16.3	16.3	16.5	16.4	15.9	14.0	10.9	9.1	8.7	7.4	4.2	5.7	11.76	16.51	
7-Oct	5.7	8.6	8.0	7.6	8.0	8.0	7.5	8.3	8.8	10.1	11.2	12.4	12.9	12.8	12.9	13.4	12.5	11.5	9.7	9.7	9.7	8.9	8.0	7.5	9.73	13.41	
8-Oct	7.0	6.7	6.0	5.8	5.6	5.1	4.3	4.3	5.3	7.2	9.4	10.2	12.1	14.5	13.3	12.5	11.6	10.1	6.8	6.7	5.9	3.9	4.7	5.7	7.69	14.47	
9-Oct	3.9	3.3	3.6	2.8	2.3	3.9	3.5	2.6	5.1	7.2	10.8	13.2	15.3	16.8	17.6	18.0	17.4	14.9	11.2	10.0	8.6	8.0	7.6	6.8	8.93	18.02	
10-Oct	6.4	5.7	4.4	3.7	3.1	1.1	2.4	4.7	7.4	10.8	15.1	17.9	20.4	22.1	22.6	22.2	20.6	17.0	12.9	11.7	10.9	12.5	17.5	16.0	12.05	22.61	
11-Oct	13.4	12.1	13.3	12.6	11.7	12.2	10.4	9.8	10.8	13.1	14.6	15.3	17.1	17.8	17.1	17.4	15.5	13.7	12.5	10.1	9.4	10.5	9.9	8.9	12.89	17.84	
12-Oct	6.6	8.7	7.4	7.7	8.5	8.5	8.9	9.3	10.4	11.9	12.4	14.3	15.1	15.7	15.9	16.1	15.5	12.1	11.8	7.7	5.4	4.6	7.8	3.7	10.24	16.10	
13-Oct	3.1	4.2	1.9	1.8	2.5	2.2	2.5	1.1	5.4	8.8	11.8	14.7	16.4	16.9	16.1	15.4	14.8	13.7	13.1	12.6	12.5	11.7	10.2	8.7	9.26	16.91	
14-Oct	7.7	7.1	6.9	5.4	5.6	6.1	6.3	5.7	9.3	10.9	13.6	14.9	16.9	18.1	17.9	16.0	13.5	11.8	10.5	9.0	8.7	6.4	5.4	3.7	9.89	18.09	
15-Oct	2.1	1.9	4.2	3.4	1.5	3.5	2.0	1.9	3.6	6.3	6.8	7.2	8.1	8.4	7.4	6.9	6.5	6.2	5.8	5.5	5.3	5.0	5.1	5.0	4.99	8.43	
16-Oct	5.0	4.7	4.7	4.3	4.3	3.6	2.1	1.5	3.2	5.5	7.6	9.2	11.7	10.9	11.0	11.1	10.6	8.6	6.5	5.5	4.8	4.0	3.9	3.7	6.17	11.69	
17-Oct	2.4	1.6	1.8	1.5	0.3	0.4	1.0	1.1	3.2	5.9	8.4	10.5	11.5	13.2	14.0	12.9	11.6	10.5	10.1	10.0	9.0	8.5	8.8	8.2	6.94	13.96	
18-Oct	7.9	7.6	7.2	7.5	7.4	7.8	6.5	5.7	7.2	11.3	15.6	17.1	18.8	20.2	20.5	20.3	18.8	15.1	13.4	11.6	9.5	8.3	8.5	7.1	11.69	20.50	
19-Oct	5.2	6.4	6.1	5.5	3.7	3.8	2.3	4.5	5.7	8.9	11.5	13.4	14.2	14.1	13.6	13.4	12.7	11.5	10.5	9.7	8.5	7.2	6.0	5.3	8.49	14.18	
20-Oct	5.6	6.6	4.9	6.5	7.3	7.7	7.3	7.0	10.8	12.6	13.2	17.1	19.0	19.3	19.4	20.1	19.4	16.8	15.6	12.7	13.2	15.7	15.3	13.9	12.79	20.09	
21-Oct	11.8	9.4	7.0	6.6	7.5	7.0	8.4	5.2	6.2	7.3	9.2	11.8	13.9	14.9	14.5	14.3	13.9	12.3	9.4	7.5	5.7	4.6	4.5	4.3	9.05	14.86	
22-Oct	3.4	2.2	1.9	0.5	2.3	0.9	1.3	0.7	3.0	6.8	10.5	13.6	14.1	13.8	14.3	14.8	14.1	11.5	10.1	10.0	8.2	10.2	10.0	11.4	7.89	14.77	
23-Oct	7.3	6.2	5.6	5.4	4.5	4.2	1.9	1.1	5.5	7.5	10.3	13.9	16.3	17.5	16.9	14.4	13.3	9.2	7.5	6.6	5.9	7.8	6.8	6.2	8.41	17.49	
24-Oct	5.6	6.2	6.4	6.2	6.1	5.7	5.0	3.4	2.9	4.9	8.2	9.8	10.7	11.5	11.8	12.1	11.3	8.8	7.1	6.7	3.6	1.3	2.6	3.6	6.73	12.14	
25-Oct	-0.3	-1.2	-1.3	-1.7	-1.0	-3.1	-1.2	-1.9	-0.1	2.4	5.0	6.6	6.1	7.0	7.6	7.6	7.6	7.4	7.1	6.6	5.8	5.0	4.6	3.8	3.27	7.64	
26-Oct	3.4	3.5	3.3	3.1	2.1	1.3	0.3	0.6	0.9	1.4	2.4	3.0	2.6	2.4	1.4	2.2	2.2	2.0	1.4	1.8	1.7	1.6	1.5	1.5	1.98	3.53	
27-Oct	1.3	1.2	1.2	1.1	1.0	1.0	0.7	0.6	0.8	1.0	1.4	2.0	1.9	2.1	2.7	3.0	1.8	0.1	-1.5	-2.1	-3.2	-3.9	-4.5	-4.1	0.23	2.96	
28-Oct	-4.3	-5.2	-5.7	-5.9	-6.5	-6.5	-6.0	-5.2	-4.2	-2.3	-0.1	2.1	3.2	5.1	5.0	4.9	4.5	3.3	1.8	1.3	0.5	0.1	-0.6	-0.8	-0.90	5.07	
29-Oct	-0.6	-0.4	-1.1	-0.6	-0.4	-0.3	-0.9	-0.5	-0.9	0.7	1.2	2.0	3.2	4.2	4.2	3.9	2.6	0.5	-0.1	0.6	0.6	0.4	0.5	0.3	0.80	4.20	
30-Oct	0.0	-0.2	-0.9	-1.4	-0.4	0.1	0.0	-0.3	-0.5	-0.1	0.7	1.2	1.7	2.9	3.9	3.6	2.8	2.4	2.1	2.4	3.1	4.0	4.4	4.0	1.49	4.43	
31-Oct	3.3	2.8	2.7	2.7	2.7	2.7	2.3	2.3	2.5	3.0	2.9	2.9	3.5	3.9	3.8	3.7	4.0	4.0	4.3	4.5	4.7	4.8	4.8	5.0	3.50	4.96	
		4.72	4.56	4.08	3.82	3.68	3.55	3.35	3.24	4.86	6.84	8.89	10.58	11.80	12.27	12.34	12.17	11.38	9.73	8.24	7.32	6.57	6.24	6.14	5.65	Diurnal Average	
		13.39	12.07	13.33	12.60	11.68	12.23	10.86	12.45	13.26	14.41	15.58	17.94	20.41	22.12	22.61	22.17	20.61	17.04	15.61	12.76	13.15	15.70	17.53	16.04	Diurnal Maximum	



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

**External Temperature 10 m (ET\_10) - C**  
**October 2014**

<b>Maximum Value: 21.79 C on Oct 10 16:00</b>		<b>Maximum Daily Average: 13.98 C on Oct 20</b>		<b>Hours in Service: 744</b>																							
<b>Minimum Value: -6.4 C on Oct 28 05:00</b>		<b>Minimum Daily Average: -1.36 C on Oct 28</b>		<b>Hours of Data: 744</b>																							
<b>Maximum Diurnal Average: 11.47 C at hour 16</b>		<b>Minimum Diurnal Average: 4.01 C at hour 8</b>		<b>Hours of Missing Data: 0</b>																							
<b>Monthly Average: 7.500 C</b>		<b>Percentiles: P<sub>1</sub> = -4.4 P<sub>10</sub> = 0.4 Q<sub>1</sub> = 3.1 Median = 7.8 Q<sub>3</sub> = 11.4 P<sub>90</sub> = 15.0 P<sub>99</sub> = 19.4</b>		<b>Hours of Calibration: 0</b>																							
				<b>Percent Operational Time: 100.0</b>																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Oct	7.0	6.8	5.5	4.6	2.9	1.9	1.7	2.0	4.1	7.7	11.3	12.6	13.4	7.4	7.8	7.0	6.5	6.7	6.1	5.4	4.6	4.1	2.7	1.8	5.91	13.38	
2-Oct	1.2	0.5	0.4	0.3	0.1	0.2	0.0	-0.2	0.3	0.5	0.7	1.5	2.8	4.3	5.2	5.2	5.5	5.0	3.8	2.7	2.3	2.1	0.8	-1.1	1.84	5.48	
3-Oct	-2.3	-2.1	-2.6	-2.5	-2.6	-3.0	-2.4	-2.1	-1.6	0.4	4.3	6.2	7.6	8.3	9.0	10.1	10.5	11.2	10.1	9.3	8.5	8.4	9.3	9.0	4.21	11.19	
4-Oct	8.5	8.3	8.5	9.4	8.2	8.9	9.0	9.6	9.9	9.9	11.3	13.9	16.5	17.2	17.4	17.5	16.4	15.5	15.4	14.3	14.3	13.3	13.4	12.9	12.47	17.48	
5-Oct	11.7	10.6	10.1	9.5	9.4	9.0	9.0	6.6	8.3	11.3	13.0	14.5	15.5	15.8	16.3	16.7	16.5	15.5	15.0	14.5	13.3	12.8	11.0	11.1	12.38	16.69	
6-Oct	10.8	11.5	10.7	9.3	9.8	10.0	11.1	12.4	13.1	13.8	14.3	14.8	15.2	15.3	15.6	15.6	15.3	14.1	12.6	11.4	11.0	9.8	7.3	7.7	12.19	15.61	
7-Oct	7.3	8.7	8.4	8.0	8.2	8.3	8.0	8.1	8.4	9.3	10.2	11.2	11.7	11.7	12.0	12.2	12.0	11.6	11.2	10.4	9.9	9.0	7.9	7.3	9.63	12.25	
8-Oct	6.6	6.2	5.6	5.5	5.4	5.0	4.3	4.1	4.9	6.5	8.0	8.9	10.2	12.3	12.5	11.5	11.1	10.5	9.1	9.4	8.6	8.3	6.6	6.0	7.80	12.51	
9-Oct	5.3	4.2	4.8	3.9	2.7	4.4	4.1	3.0	4.7	6.0	9.6	11.9	13.8	15.1	16.1	17.0	17.2	16.2	14.8	13.6	11.9	11.2	10.6	10.2	9.68	17.16	
10-Oct	8.9	7.4	5.7	5.6	5.4	4.1	5.0	6.3	6.7	8.8	12.9	16.3	19.0	20.9	21.8	21.8	20.9	18.8	16.6	15.2	14.1	14.3	17.9	16.5	12.95	21.79	
11-Oct	15.2	13.9	13.7	12.8	11.8	12.3	11.4	10.3	10.9	12.2	13.8	14.4	15.8	16.7	16.3	16.5	15.3	14.1	13.0	11.9	10.8	10.6	10.0	9.5	13.05	16.67	
12-Oct	8.3	9.0	8.2	8.2	8.5	8.6	8.8	9.4	10.1	11.3	11.8	13.1	13.8	14.5	14.8	15.2	15.0	13.9	13.3	10.8	8.4	8.0	8.9	6.6	10.77	15.19	
13-Oct	5.7	6.0	4.4	4.4	4.7	4.8	4.9	4.0	4.8	7.7	10.6	13.3	14.9	15.5	15.6	15.6	15.1	14.3	13.5	12.9	12.6	11.9	10.9	9.8	9.91	15.57	
14-Oct	8.8	7.9	7.6	7.7	8.5	7.3	7.9	7.3	9.4	10.2	12.5	13.9	15.4	16.8	16.8	15.1	13.0	11.7	10.8	10.0	9.8	8.1	8.3	7.1	10.50	16.78	
15-Oct	6.9	3.1	6.0	6.2	2.9	4.4	2.6	2.2	3.3	5.9	6.1	6.4	7.4	7.8	6.8	5.5	5.5	5.5	5.2	4.9	4.7	4.5	4.6	4.5	5.12	7.80	
16-Oct	4.5	4.6	4.4	4.4	4.6	3.9	2.9	2.8	3.1	4.4	6.8	8.0	9.3	9.4	9.8	10.1	10.1	9.3	8.2	7.2	6.0	5.1	4.9	3.9	6.14	10.07	
17-Oct	2.5	1.9	2.5	2.3	1.5	1.9	2.4	2.5	2.9	5.2	7.4	9.4	10.4	12.0	12.9	12.7	12.1	11.7	11.4	11.0	11.1	10.6	10.0	9.7	7.42	12.93	
18-Oct	9.6	8.9	8.6	9.2	9.3	9.7	8.6	7.8	7.3	10.1	14.5	15.9	17.6	19.0	19.5	19.3	18.7	17.9	16.6	15.3	13.1	11.2	11.1	10.1	12.88	19.50	
19-Oct	8.6	8.9	9.4	8.8	6.7	6.7	5.6	6.6	6.2	8.1	10.6	12.7	13.7	14.0	13.7	13.8	13.5	12.0	11.3	10.8	9.6	8.9	8.0	7.4	9.82	14.02	
20-Oct	8.7	9.0	8.1	9.2	9.5	9.7	9.5	9.1	11.0	13.2	12.5	15.3	18.0	18.7	18.9	19.6	19.9	19.4	18.2	15.5	16.1	16.7	15.6	14.2	13.98	19.91	
21-Oct	12.0	10.9	9.6	8.2	8.0	8.4	9.0	6.5	6.6	6.3	8.2	10.8	12.7	13.6	13.6	13.5	13.5	13.0	11.7	9.7	8.3	7.4	6.9	6.9	9.81	13.62	
22-Oct	6.0	4.7	4.1	2.9	4.9	3.9	3.2	2.3	4.2	6.9	10.1	12.7	13.3	13.9	14.3	15.2	14.7	13.4	12.5	12.7	11.3	12.2	11.5	11.7	9.28	15.21	
23-Oct	9.6	7.9	7.9	7.9	6.6	6.7	4.6	4.1	5.7	7.0	9.7	13.0	15.3	16.5	16.2	14.4	13.3	12.2	11.4	9.3	9.5	8.6	7.9	6.4	9.65	16.54	
24-Oct	5.4	5.9	6.1	5.9	5.8	5.5	5.1	4.2	2.9	4.1	7.3	8.7	9.5	10.3	10.7	11.2	10.8	9.7	8.7	7.8	6.0	4.0	4.3	4.2	6.83	11.22	
25-Oct	1.3	0.9	0.9	0.8	0.9	0.4	1.3	0.4	0.3	1.4	3.7	5.5	5.4	5.9	6.7	6.7	7.1	7.0	6.8	6.4	5.7	4.9	4.3	3.6	3.68	7.14	
26-Oct	3.1	3.2	2.9	2.7	2.1	1.3	0.2	0.2	0.3	0.7	1.4	2.0	1.9	1.8	0.9	1.7	1.9	1.7	1.1	1.5	0.9	0.7	1.1	1.2	1.52	3.18	
27-Oct	1.0	0.9	0.8	0.7	0.6	0.6	0.3	0.2	0.3	0.4	0.6	1.1	1.1	1.3	1.9	2.1	1.6	0.7	-0.3	-0.9	-2.0	-2.5	-3.0	-3.2	0.18	2.14	
28-Oct	-3.6	-4.4	-5.1	-5.8	-6.4	-6.3	-6.3	-5.5	-4.8	-3.2	-1.4	0.7	1.8	3.1	3.7	3.9	3.7	2.9	1.6	0.9	0.1	-0.3	-0.8	-1.1	-1.36	3.88	
29-Oct	-1.0	-0.9	-1.0	-1.0	-0.8	-0.7	-0.8	-0.8	-0.8	-0.1	0.3	0.9	1.9	2.9	3.2	2.9	2.1	1.4	0.8	0.5	0.3	0.0	0.0	-0.1	0.37	3.20	
30-Oct	-0.4	-0.5	-0.9	-1.4	-0.8	-0.4	-0.7	-1.1	-1.3	-1.1	-0.4	0.1	0.4	1.5	2.5	2.7	2.3	1.8	1.6	1.9	2.7	3.6	4.2	3.8	0.83	4.22	
31-Oct	3.1	2.5	2.4	2.4	2.5	2.5	2.1	2.2	2.2	2.3	2.1	2.2	2.6	3.1	3.2	3.2	3.5	3.7	4.0	4.2	4.4	4.4	4.4	4.6	3.08	4.61	
		5.81	5.37	5.09	4.85	4.55	4.51	4.27	4.01	4.63	6.05	7.87	9.41	10.57	11.18	11.47	11.47	11.12	10.41	9.55	8.72	7.99	7.48	7.12	6.52	Diurnal Average	
		15.17	13.87	13.68	12.78	11.82	12.32	11.36	12.41	13.14	13.84	14.54	16.30	19.02	20.90	21.76	21.79	20.85	19.36	18.18	15.54	16.06	16.70	17.88	16.46	Diurnal Maximum	



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

**Delta Temperature (ET\_D) - C**  
**October 2014**

Maximum Value: 4.82 C on Oct 15 01:00      Maximum Daily Average: 1.37 C on Oct 22																				Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0							
Minimum Value: -2.4 C on Oct 16 13:00      Minimum Daily Average: -0.64 C on Oct 30 Maximum Diurnal Average: 1.41 C at hour 21      Minimum Diurnal Average: -1.21 C at hour 13 Monthly Average: 0.334 C      Percentiles: P <sub>1</sub> = -1.9 P <sub>10</sub> = -1.1 Q <sub>1</sub> = -0.7 Median = 0.0 Q <sub>3</sub> = 1.2 P <sub>90</sub> = 2.5 P <sub>99</sub> = 3.6																											
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-Oct	0.5	0.3	1.7	1.7	1.2	1.3	0.9	0.1	-1.3	-1.5	-2.0	-1.9	-1.7	-0.4	-0.1	-0.7	-0.5	-0.2	-0.2	-0.1	-0.1	-0.3	-0.3	-0.3	-0.17	1.75	
2-Oct	-0.4	-0.4	-0.3	-0.3	-0.2	-0.3	-0.3	-0.4	-0.6	-0.6	-0.8	-1.1	-1.4	-1.4	-1.3	-0.9	-0.8	-0.3	0.6	1.5	2.3	2.8	3.1	2.3	0.03	3.09	
3-Oct	1.8	2.3	2.3	1.7	1.6	1.9	1.4	0.7	-1.1	-1.4	-1.3	-1.6	-1.6	-1.3	-1.8	-0.7	-0.7	0.1	1.6	0.9	0.4	0.4	0.4	0.7	0.29	2.33	
4-Oct	0.8	0.9	0.7	0.5	0.0	0.3	0.6	0.2	0.0	-0.4	-0.8	-0.9	-1.1	-0.7	-0.6	-0.7	0.3	1.2	1.6	2.8	1.2	0.4	0.1	0.2	0.27	2.80	
5-Oct	0.2	0.2	0.4	0.5	0.3	0.3	0.3	1.0	-0.8	-0.8	-1.1	-1.3	-1.4	-1.3	-1.2	-1.2	-0.5	0.3	2.0	1.8	2.3	2.3	0.7	0.6	0.16	2.32	
6-Oct	0.5	0.7	0.9	0.2	0.3	0.4	0.3	0.0	-0.1	-0.6	-0.8	-1.0	-1.1	-1.0	-0.9	-0.8	-0.6	0.1	1.6	2.3	2.3	2.4	3.0	2.1	0.43	3.04	
7-Oct	1.6	0.1	0.4	0.4	0.2	0.3	0.5	-0.1	-0.4	-0.8	-1.1	-1.2	-1.1	-1.0	-0.9	-1.2	-0.5	0.1	1.5	0.7	0.2	0.1	0.0	-0.2	-0.11	1.59	
8-Oct	-0.4	-0.5	-0.4	-0.3	-0.2	0.0	0.1	-0.2	-0.4	-0.7	-1.3	-1.3	-1.9	-2.1	-0.8	-0.9	-0.5	0.4	2.2	2.7	2.7	4.4	1.9	0.2	0.12	4.40	
9-Oct	1.3	0.9	1.3	1.1	0.4	0.5	0.6	0.4	-0.4	-1.2	-1.2	-1.3	-1.5	-1.7	-1.5	-1.0	-0.2	1.3	3.6	3.6	3.3	3.2	3.0	3.4	0.74	3.64	
10-Oct	2.5	1.7	1.3	1.9	2.3	2.9	2.7	1.6	-0.7	-2.0	-2.1	-1.6	-1.4	-1.2	-0.8	-0.4	0.2	1.7	3.6	3.5	3.2	1.8	0.3	0.4	0.89	3.63	
11-Oct	1.8	1.8	0.3	0.2	0.1	0.1	0.9	0.5	0.1	-0.9	-0.8	-0.9	-1.3	-1.2	-0.7	-0.9	-0.2	0.4	0.5	1.7	1.3	0.1	0.1	0.6	0.16	1.79	
12-Oct	1.7	0.2	0.7	0.5	0.0	0.1	0.0	0.1	-0.3	-0.5	-0.7	-1.1	-1.3	-1.2	-1.1	-0.9	-0.5	1.7	1.5	3.1	3.0	3.4	1.1	2.8	0.52	3.42	
13-Oct	2.6	1.7	2.5	2.6	2.2	2.6	2.4	2.9	-0.6	-1.1	-1.2	-1.5	-1.5	-1.4	-0.5	0.1	0.3	0.7	0.4	0.3	0.1	0.2	0.6	1.1	0.65	2.92	
14-Oct	1.1	0.8	0.7	2.2	2.9	1.2	1.6	1.6	0.0	-0.7	-1.0	-1.0	-1.4	-1.3	-1.1	-0.8	-0.5	-0.1	0.3	1.0	1.1	1.7	2.9	3.3	0.60	3.34	
15-Oct	4.8	1.2	1.8	2.9	1.4	0.8	0.5	0.3	-0.4	-0.3	-0.7	-0.8	-0.7	-0.6	-0.5	-1.4	-1.0	-0.7	-0.6	-0.7	-0.6	-0.5	-0.5	-0.5	0.13	4.82	
16-Oct	-0.5	-0.2	-0.3	0.0	0.3	0.2	0.7	1.2	-0.2	-1.1	-0.7	-1.2	-2.4	-1.5	-1.2	-1.0	-0.5	0.7	1.7	1.7	1.2	1.1	1.0	0.2	-0.03	1.68	
17-Oct	0.1	0.3	0.7	0.7	1.1	1.5	1.4	1.3	-0.3	-0.7	-1.0	-1.1	-1.1	-1.2	-1.0	-0.2	0.4	1.3	1.3	1.0	2.2	2.1	1.2	1.5	0.48	2.16	
18-Oct	1.7	1.2	1.4	1.7	1.9	2.0	2.1	2.1	0.1	-1.1	-1.0	-1.2	-1.2	-1.1	-1.0	-1.0	-0.1	2.8	3.1	3.7	3.6	2.9	2.6	2.9	1.18	3.70	
19-Oct	3.4	2.6	3.3	3.3	3.0	2.9	3.3	2.1	0.4	-0.8	-0.9	-0.7	-0.5	-0.1	0.1	0.3	0.8	0.5	0.8	1.1	1.0	1.7	2.1	2.2	1.32	3.37	
20-Oct	3.0	2.4	3.2	2.7	2.2	2.0	2.2	2.0	0.2	0.5	-0.7	-1.8	-1.0	-0.6	-0.5	-0.4	0.5	2.5	2.6	2.8	2.9	1.0	0.3	0.3	1.18	3.19	
21-Oct	0.3	1.5	2.6	1.6	0.5	1.4	0.5	1.3	0.3	-1.0	-1.0	-1.0	-1.2	-1.2	-0.9	-0.7	-0.4	0.7	2.3	2.2	2.5	2.8	2.4	2.5	0.75	2.76	
22-Oct	2.7	2.5	2.2	2.4	2.6	3.1	1.9	1.5	1.1	0.1	-0.4	-0.9	-0.8	0.1	0.0	0.4	0.6	1.9	2.4	2.6	3.1	1.9	1.5	0.3	1.37	3.11	
23-Oct	2.3	1.8	2.3	2.5	2.1	2.5	2.7	3.0	0.2	-0.4	-0.6	-0.9	-1.0	-0.9	-0.6	0.0	0.0	3.0	3.8	2.8	3.5	0.8	1.0	0.2	1.24	3.82	
24-Oct	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	0.7	0.1	-0.7	-0.9	-1.1	-1.2	-1.3	-1.0	-0.9	-0.5	1.0	1.6	1.1	2.3	2.6	1.7	0.6	0.10	2.65	
25-Oct	1.6	2.0	2.2	2.4	1.9	3.4	2.5	2.3	0.4	-0.9	-1.3	-1.1	-0.8	-1.0	-0.9	-0.8	-0.5	-0.3	-0.3	-0.3	-0.1	-0.1	-0.3	-0.2	0.42	3.41	
26-Oct	-0.2	-0.3	-0.4	-0.3	0.0	0.0	-0.1	-0.4	-0.5	-0.8	-1.0	-1.0	-0.7	-0.6	-0.5	-0.5	-0.3	-0.3	-0.2	-0.3	-0.8	-0.9	-0.3	-0.3	-0.44	0.02	
27-Oct	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.5	-0.6	-0.8	-0.9	-0.7	-0.8	-0.9	-0.8	-0.2	0.5	1.2	1.2	1.2	1.4	1.5	0.9	-0.05	1.53
28-Oct	0.7	0.8	0.6	0.1	0.1	0.2	-0.3	-0.3	-0.6	-0.9	-1.2	-1.4	-1.4	-2.0	-1.2	-1.1	-0.8	-0.4	-0.2	-0.4	-0.4	-0.4	-0.1	-0.3	-0.46	0.80	
29-Oct	-0.4	-0.5	0.0	-0.4	-0.4	-0.4	0.1	-0.3	0.1	-0.8	-1.0	-1.2	-1.3	-1.3	-1.0	-1.0	-0.4	0.8	0.9	-0.1	-0.3	-0.3	-0.4	-0.4	-0.41	0.86	
30-Oct	-0.4	-0.4	-0.1	0.0	-0.5	-0.6	-0.7	-0.7	-0.8	-0.9	-1.1	-1.1	-1.3	-1.3	-1.4	-0.9	-0.5	-0.6	-0.5	-0.5	-0.4	-0.4	-0.2	-0.1	-0.64	0.00	
31-Oct	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.3	-0.1	-0.2	-0.6	-0.7	-0.7	-0.8	-0.8	-0.6	-0.5	-0.4	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.3	-0.40	-0.09	
																								Diurnal Average			
																								Diurnal Maximum			
1.09 0.80 1.00 1.02 0.86 0.96 0.91 0.77 -0.23 -0.78 -1.01 -1.15 -1.21 -1.07 -0.85 -0.68 -0.26 0.67 1.30 1.40 1.41 1.23 0.97 0.86																											
4.82 2.57 3.26 3.27 3.01 3.41 3.26 2.99 1.14 0.53 -0.36 -0.65 -0.51 0.07 0.06 0.43 0.82 2.97 3.82 3.70 3.63 4.40 3.09 3.37																											



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

**Wind Speed (WS) - kph**  
**October 2014**

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	14.9	16.0	14.2	14.9	14.4	12.8	15.0	15.1	14.6	13.7	17.7	16.7	11.8	30.9	24.8	33.4	22.9	23.6	25.1	19.7	21.6	35.0	37.2	33.9	17.15	37.17
Dir	W	W	W	WSW	WSW	WSW	WSW	WSW	WSW	SW	WSW	SW	SW	W	NNW	NNW	NW	WNW	WNW	NW	WNW	WNW	NW	NW	WNW	NW
2 Spd	32.1	30.1	24.5	23.1	26.6	28.1	27.8	28.8	29.7	28.7	32.7	30.4	27.7	34.3	33.2	30.6	28.3	23.8	15.0	11.1	10.0	8.3	9.3	11.5	23.80	34.26
Dir	NW	NW	NW	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NW	NW	WNW	W	WSW	NW	NW
3 Spd	10.8	7.7	10.5	8.8	8.4	2.9	3.9	5.8	4.9	6.5	14.9	16.6	14.6	13.9	15.8	14.3	10.8	10.0	8.9	7.5	4.6	3.3	9.0	8.3	7.07	16.63
Dir	WSW	SW	WSW	WSW	WSW	SSE	SSE	S	SE	SE	SSE	S	SSE	SE	SE	SE	SSE	S	SSE	SE	SSE	SW	WSW	WSW	S	S
4 Spd	9.2	10.2	10.2	7.0	6.5	5.5	8.9	16.1	12.2	14.4	18.0	18.7	18.7	18.8	22.7	14.0	14.1	7.3	8.8	10.2	12.1	14.4	17.7	18.5	11.70	22.73
Dir	SW	WSW	WSW	W	WSW	W	WSW	W	WSW	WSW	WSW	WSW	WNW	NW	NW	NW	NW	W	WNW	W	W	WNW	WNW	WNW	W	NW
5 Spd	15.8	15.5	14.3	14.3	16.2	16.0	16.2	9.7	11.9	15.8	14.9	16.4	22.5	19.1	15.1	14.1	16.2	6.6	6.1	6.3	3.5	4.2	9.9	9.1	11.88	22.51
Dir	WNW	WNW	W	W	W	W	W	SW	WSW	W	WNW	WNW	NW	WNW	WNW	NW	NNW	NW	NNW	NW	WSW	WSW	WSW	WSW	WNW	NW
6 Spd	7.4	10.5	9.1	9.5	13.4	11.6	14.6	19.2	29.6	39.0	43.1	43.6	41.6	41.9	38.4	37.2	35.2	23.7	13.0	10.7	10.3	8.9	11.2	11.9	19.16	43.62
Dir	WSW	W	SW	SW	WSW	WSW	WSW	WNW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NW	WNW	WNW	WNW	WSW	W	NW	NW
7 Spd	12.4	14.9	14.5	15.0	13.5	12.6	12.7	14.1	12.1	12.2	11.3	9.8	10.9	11.7	9.6	5.9	6.2	3.9	0.4	2.6	6.5	9.5	9.5	8.8	7.05	15.05
Dir	W	W	W	W	W	W	W	W	W	W	W	W	W	W	WSW	WSW	WSW	WSW	SE	E	ENE	NE	NE	NE	W	W
8 Spd	8.2	7.0	9.4	10.6	12.7	11.6	11.9	12.7	15.7	17.3	11.4	6.4	10.1	8.0	3.8	12.2	9.6	11.5	2.1	4.8	4.3	2.5	2.6	6.2	4.09	17.34
Dir	ENE	ESE	ESE	ESE	ESE	ESE	ESE	SE	SE	SSE	SSE	ESE	SE	SSE	NW	NNW	NNW	NNW	WNW	WSW	WSW	W	SSW	WSW	SE	SSE
9 Spd	2.1	1.3	3.0	2.3	1.9	5.8	4.6	3.4	3.7	9.4	8.9	6.8	12.0	15.4	13.4	17.1	17.1	12.5	10.3	8.2	7.0	7.6	8.9	7.3	7.40	17.14
Dir	SSE	SSE	SE	E	SSE	ENE	ESE	ESE	SE	SE	SE	SE	SE	SSE	SE	SSE	SSE	SE	SE	SE	SE	S	S	S	SE	SSE
10 Spd	5.1	4.6	4.8	2.8	6.0	6.1	9.4	12.3	11.3	10.8	11.3	9.1	8.5	12.2	17.6	18.5	17.7	14.7	9.3	8.6	6.2	11.2	15.6	17.6	6.67	18.50
Dir	E	E	SSE	SSW	SW	SW	WSW	WSW	WSW	SSW	SSW	S	SE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	SSE	WSW	W	WNW	S	SSE
11 Spd	11.2	7.7	15.8	18.5	11.1	11.7	10.2	7.1	11.9	14.0	18.1	18.2	17.4	21.5	22.8	31.8	20.9	12.9	11.5	8.8	11.6	15.9	17.0	11.5	13.85	31.84
Dir	NW	W	WNW	NW	W	WNW	SW	SW	SW	WSW	W	WNW	W	WNW	NW	NW	NW	WNW	WNW	WNW	W	W	WNW	W	WNW	NW
12 Spd	12.5	12.9	13.5	15.1	12.8	14.9	11.1	13.5	16.5	23.2	20.6	32.7	27.0	29.8	23.8	21.3	19.5	9.5	8.8	7.4	8.9	9.2	13.7	8.5	15.25	32.73
Dir	W	W	W	W	W	WNW	W	W	W	WNW	WNW	NW	WNW	WNW	WNW	WNW	NW	NW	WNW	WSW	WSW	WSW	W	WSW	WNW	NW
13 Spd	11.4	14.0	9.4	11.7	9.3	9.8	8.4	7.1	8.8	2.8	4.5	9.1	12.7	15.5	16.3	16.6	15.2	10.0	11.9	10.9	9.2	8.5	9.4	6.3	6.18	16.58
Dir	WSW	WSW	SW	WSW	WSW	WSW	SW	SW	SSW	SSW	SE	SSE	SSE	SSE	SSE	SE	SE	ESE	ESE	ESE	E	E	E	E	SSE	SSE
14 Spd	3.8	4.4	1.4	0.8	7.1	5.9	4.0	6.5	9.8	15.3	11.9	12.3	14.2	17.7	26.5	32.1	28.4	17.9	12.7	8.1	7.8	9.4	8.5	4.2	9.78	32.09
Dir	NE	NE	SSE	WNW	W	WSW	WSW	W	WNW	WNW	W	WNW	WNW	NW	NW	NW	NW	NW	NW	W	WNW	WSW	W	WSW	WNW	NW
15 Spd	3.7	6.6	5.6	1.7	4.6	3.3	1.6	2.8	4.2	6.4	7.1	8.3	9.2	8.5	10.2	7.6	8.7	8.2	6.9	5.6	3.5	1.3	6.5	8.2	2.87	10.22
Dir	N	SSW	SW	E	S	SE	ESE	ESE	SE	ESE	ENE	ENE	ENE	ENE	SE	ESE	ENE	NE	ENE	ENE	NE	W	WNW	W	E	SE
16 Spd	3.9	2.4	1.1	4.7	0.1	1.4	4.1	4.3	5.7	10.0	14.1	18.1	16.8	20.8	18.4	18.6	15.3	10.0	8.6	9.5	10.4	10.1	11.5	12.0	8.45	20.83
Dir	W	NW	WNW	W	N	S	S	SE	ESE	SE	SE	SSE	SE	SSE	SSE	SSE	SE	SE	ESE	ESE	SE	SE	SE	ESE	SE	SSE
17 Spd	11.3	11.1	10.2	9.7	7.6	8.8	9.5	9.1	6.4	13.2	18.0	18.3	19.3	23.6	24.5	21.9	13.9	8.4	9.1	7.9	8.3	6.2	3.9	5.3	10.87	24.47
Dir	E	E	ESE	E	E	ESE	ESE	SE	ESE	SE	SE	SSE	SE	SE	SSE	SSE	SE	ESE	SE	SE	SE	SE	SE	SW	SE	SSE
18 Spd	9.3	7.8	1.9	7.4	12.2	10.4	12.8	13.6	13.9	13.6	13.4	16.3	15.3	16.6	16.8	14.6	9.4	4.3	3.0	5.9	7.9	12.9	15.5	13.7	9.01	16.84
Dir	SW	WSW	WSW	SW	SW	WSW	WSW	WSW	SW	SW	WSW	WNW	WNW	WNW	NW	NNW	N	NNE	WSW	SW	SW	WSW	WSW	WSW	W	NW
19 Spd	11.9	12.9	6.9	10.8	12.9	7.4	5.9	6.9	7.5	6.2	6.3	8.8	13.9	12.7	7.7	13.4	10.0	9.9	8.2	10.2	6.5	5.1	6.5	5.6	5.15	13.85
Dir	WSW	WSW	WSW	WSW	WSW	SW	SW	SSW	SW	SSW	SSE	SSE	SSE	SSE	ESE	ESE	ESE	ESE	E	E	ESE	ESE	SSE	SW	S	SSE
20 Spd	11.7	12.0	11.1	16.8	20.2	19.2	16.1	11.4	8.5	5.8	2.8	7.4	5.9	2.3	2.2	5.6	2.0	4.7	6.4	5.4	10.0	14.4	20.0	18.7	7.32	20.20
Dir	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	WSW	W	SSE	SSW	S	S	ESE	SE	E	E	E	S	WSW	WNW	WNW	WNW	WSW	WSW
21 Spd	20.8	12.5	5.9	10.9	11.1	8.9	11.9	11.3	6.2	4.9	3.6	11.2	1.4	4.0	5.8	2.9	1.2	0.6	4.7	5.7	7.2	8.9	6.3	8.7	5.29	20.75
Dir	NW	NW	W	W	WSW	W	WNW	WSW	WSW	SW	WSW	NW	ESE	SSW	SW	WSW	SW	S	SE	SSE	SSW	SW	SSW	SW	WSW	NW
22 Spd	5.1	4.2	5.6	6.1	7.0	5.4	4.8	5.7	10.8	13.5	16.4	23.1	16.9	17.4	9.1	8.3	12.7	11.6	6.6	9.4	9.6	8.4	13.3	17.3	7.14	23.06
Dir	SSW	SSW	SW	SSW	SW	SSW	SE	SSE	SE	SE	SE	SSE	SE	SSE	SSE	SE	SE	SSE	SE	S	SSW	W	W	WNW	SSE	SSE





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

**Wind Speed (WS) - kph**  
**October 2014**

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	7.7	2.8	4.8	8.8	15.7	5.3	2.5	2.7	12.0	15.7	19.4	21.7	25.8	33.9	24.1	19.6	15.9	12.2	8.1	8.1	11.0	16.3	11.2	15.3	11.27	33.91	
Dir	NW	E	SSW	SW	WSW	W	SW	NW	W	WSW	WSW	W	W	W	NW	NNW	NW	NW	WSW	NW	NW	NW	NW	W	W	W	
24 Spd	16.0	18.5	18.6	15.4	18.7	13.4	12.9	11.7	8.7	17.0	20.8	20.6	20.1	19.7	21.7	16.6	11.4	9.9	7.0	11.0	10.7	13.0	13.0	14.0	14.34	21.75	
Dir	W	W	WNW	WNW	WNW	W	W	W	WSW	WSW	W	WNW	W	WNW	WNW	WNW	NW	NW	W	WNW	W	WSW	W	WNW	W	WNW	
25 Spd	9.4	13.7	11.6	11.0	12.6	8.9	6.8	5.0	4.1	6.0	11.5	19.6	19.1	22.8	22.4	22.0	21.7	20.5	20.9	16.8	12.2	12.3	15.1	14.6	8.52	22.77	
Dir	WSW	WSW	WSW	WSW	WSW	WSW	SW	SW	SE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	ESE	
26 Spd	13.9	12.4	11.3	9.3	10.6	13.8	13.8	12.9	15.0	15.0	15.3	18.2	20.6	23.4	21.3	22.1	20.6	19.2	18.7	22.6	22.9	23.7	25.3	24.1	15.06	25.32	
Dir	ENE	ENE	ENE	NNE	N	N	N	NNW	NW	NNW	NNW	NNW	NNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	
27 Spd	26.5	27.9	26.5	26.8	26.6	26.5	24.3	21.5	22.6	19.3	19.0	19.6	14.2	11.8	13.5	9.6	4.9	5.2	4.0	4.7	4.4	5.3	4.8	4.5	12.48	27.91	
Dir	WNW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NNW	NNW	NNW	NNW	NW	N	ENE	ENE	ESE	ESE	SSE	S	SE	ESE	NW	NW	
28 Spd	4.5	5.4	5.8	6.6	8.3	7.4	8.2	8.8	10.6	11.0	15.0	19.5	19.4	17.3	18.7	17.4	11.8	10.6	10.3	10.4	10.9	7.8	6.6	3.3	9.92	19.47	
Dir	E	E	ENE	ENE	ENE	E	E	E	E	ESE	ESE	SE	SE	ESE	SE	SE	ESE	E	E	E	E	E	ESE	NNE	ESE	SE	
29 Spd	6.3	3.1	1.5	1.3	5.1	6.6	5.7	4.0	3.1	9.9	2.4	3.4	1.5	1.2	5.6	8.8	9.0	4.4	6.6	5.2	4.7	5.4	7.5	8.6	3.30	9.91	
Dir	N	NNE	ENE	WNW	NNW	NNW	NW	N	WNW	NNW	NNE	E	W	NNE	NNE	NE	NE	NE	NE	ENE	ESE	ENE	E	ESE	NE	NNW	
30 Spd	7.2	8.6	8.6	9.1	13.1	13.9	15.6	18.9	18.3	20.1	21.5	25.2	25.9	30.5	28.6	26.2	32.1	30.9	29.4	27.3	25.9	26.2	22.7	19.4	20.70	32.09	
Dir	E	ESE	ESE	ESE	SE	ESE	ESE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE
31 Spd	17.3	13.1	8.5	9.0	8.8	9.5	7.2	3.7	1.8	7.1	9.4	17.3	15.7	13.9	14.5	13.7	13.9	12.3	11.7	15.8	15.0	13.4	11.5	10.6	6.58	17.31	
Dir	SE	ESE	E	ENE	ENE	NE	ENE	ENE	NNE	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	WNW	NW	NW	NNW	NNW	NNW	NNW	SE
Spd	5.15	5.17	4.81	5.67	6.59	4.95	4.75	4.96	4.71	4.83	4.61	4.45	3.57	4.31	4.18	3.82	2.94	1.65	0.65	0.99	2.16	3.92	5.20	5.73	Diurnal Average		
Dir	WNW	W	W	W	W	W	W	WSW	W	W	WSW	W	W	W	NNW	NW	NNW	N	NNE	SSW	WSW	W	W	W	Diurnal Maximum		
Spd	32.12	30.06	26.53	26.77	26.61	28.13	27.83	28.81	29.68	39.02	43.14	43.62	41.62	41.93	38.41	37.18	35.24	30.88	29.40	27.33	25.92	35.03	37.17	33.87	Diurnal Maximum		
Dir	310.54	312.36	308.07	315.99	305.08	311.51	310.18	303.79	308.98	320.76	322.78	318.25	319.08	319.16	324.73	335.41	332.31	145.09	141.16	136.05	138.92	308.76	314.61	317.88	Diurnal Maximum		
Maximum Speed Value: 43.6 kph on Oct 6 12:00																		Minimum Speed Value: 0.1 kph on Oct 16 05:00						Hours in Service:		744	
Maximum Daily Speed Average: 23.80 kph on Oct 2																		Minimum Daily Speed Average: 2.87 kph on Oct 29						Hours of Data:		744	
Maximum Diurnal Speed Average: 6.59 kph at hour 5																		Minimum Diurnal Speed Average: 0.65 kph at hour 19						Hours of Missing Data:		0	
Monthly Average Velocity: 3.845 kph 274.03 deg																		Speed Percentiles: P <sub>1</sub> = 1.3 P <sub>10</sub> = 4.4 Q <sub>1</sub> = 7.3 Median = 11.3 Q <sub>3</sub> = 16.1 P <sub>90</sub> = 22.7 P <sub>99</sub> = 36.0						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	7	7	9	0	1	0	24																				
NorthEast	6	17	2	0	0	0	25																				
East	15	52	12	7	0	0	86																				
SouthEast	24	42	53	18	5	0	142																				
South	14	21	8	1	0	0	44																				
SouthWest	13	65	30	0	0	0	108																				
West	14	37	96	14	1	0	162																				
NorthWest	4	20	50	49	24	6	153																				
Total	97	261	260	89	31	6	744																				



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

**Relative Humidity (RH) - %**  
**October 2014**

Maximum Value: 94.15 % on Oct 16 10:00      Maximum Daily Average: 88.82 % on Oct 31																							Hours in Service: 744 Hours of Data: 744			
Minimum Value: 24.9 % on Oct 23 15:00      Minimum Daily Average: 47.34 % on Oct 12 Maximum Diurnal Average: 80.12 % at hour 8      Minimum Diurnal Average: 48.98 % at hour 15 Monthly Average: 67.125 %      Percentiles: P <sub>1</sub> = 28.3 P <sub>10</sub> = 41.3 Q <sub>1</sub> = 52.7 Median = 67.7 Q <sub>3</sub> = 84.5 P <sub>90</sub> = 91.3 P <sub>99</sub> = 93.5																							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-Oct	76.8	76.0	80.9	84.7	88.0	89.6	90.4	89.1	82.4	68.9	49.6	41.0	36.1	68.4	70.0	68.2	66.1	61.9	65.4	64.2	70.6	64.5	62.2	63.4	69.94	90.36
2-Oct	66.0	71.9	71.6	72.7	73.1	71.8	72.3	73.1	67.6	65.1	60.1	56.5	50.5	44.0	41.6	41.6	40.7	42.1	48.4	54.6	59.8	63.5	70.9	78.1	60.73	78.06
3-Oct	79.5	81.0	82.6	81.7	79.8	83.4	84.3	81.6	78.5	74.2	55.1	43.6	39.3	39.8	39.6	41.4	44.2	43.9	52.1	59.2	61.0	63.7	61.9	67.1	63.27	84.31
4-Oct	75.1	82.4	85.9	84.1	86.3	88.6	90.1	88.9	89.1	90.1	85.4	71.1	50.5	46.9	42.8	43.6	52.7	59.3	60.7	67.0	59.3	57.4	54.5	55.4	69.46	90.10
5-Oct	59.8	63.8	66.6	69.1	68.9	71.0	71.0	79.5	75.7	61.2	55.2	48.6	41.9	42.7	42.7	41.6	42.0	48.3	52.5	51.1	59.7	65.5	71.1	70.2	59.16	79.53
6-Oct	72.4	70.7	82.2	86.2	85.1	85.3	83.2	73.1	67.0	57.9	48.7	43.6	39.3	36.8	34.2	33.5	33.7	37.1	45.3	52.8	54.4	57.4	71.3	68.7	59.16	86.17
7-Oct	68.0	56.4	56.3	56.5	55.2	54.9	57.5	55.4	55.2	55.4	52.8	48.7	45.9	45.9	45.8	42.3	46.3	50.7	58.6	59.0	59.9	69.0	79.1	84.7	56.64	84.69
8-Oct	88.9	90.9	91.5	91.3	90.3	88.7	89.1	89.0	86.1	81.1	68.9	59.7	55.2	46.2	48.4	56.1	60.7	66.4	77.5	79.2	80.8	85.3	87.7	89.5	77.02	91.48
9-Oct	89.1	91.3	92.2	92.7	93.0	93.6	91.6	90.7	91.5	85.5	70.3	59.3	53.0	48.7	47.9	45.6	46.5	52.7	65.1	75.0	81.6	86.5	83.4	81.5	75.35	93.59
10-Oct	84.2	85.7	88.8	91.0	91.9	91.6	93.3	92.6	89.1	79.1	62.6	46.3	38.6	31.2	27.7	28.5	32.7	39.1	52.1	58.0	63.2	58.2	37.5	40.8	62.66	93.31
11-Oct	51.3	58.0	56.7	57.3	60.0	52.1	59.2	65.1	63.8	56.9	46.8	42.9	34.9	28.7	29.9	27.8	32.0	37.7	41.5	50.7	55.2	47.0	47.6	51.9	48.12	65.06
12-Oct	61.9	54.1	58.3	58.5	55.4	54.6	53.3	51.1	48.1	43.9	41.9	36.1	34.6	31.3	30.3	30.2	31.4	38.1	39.9	48.3	60.7	63.3	48.5	62.6	47.34	63.28
13-Oct	69.1	62.7	66.2	71.5	69.2	67.6	67.3	69.0	74.3	57.5	47.8	38.4	31.6	29.8	31.3	33.3	35.2	39.8	42.1	45.0	45.7	49.4	54.3	60.5	52.44	74.34
14-Oct	63.5	66.9	69.3	74.0	75.1	69.3	70.1	73.0	61.3	55.4	48.1	44.2	39.5	36.9	36.3	46.1	54.4	57.9	61.0	64.6	63.2	71.0	75.2	76.5	60.53	76.54
15-Oct	81.3	82.8	83.6	81.4	83.8	87.0	87.1	89.2	89.2	84.8	81.1	80.7	75.6	72.4	81.3	87.2	88.5	90.3	91.0	92.2	92.7	92.9	93.5	93.4	85.96	93.47
16-Oct	93.4	93.5	93.5	93.6	93.7	93.1	92.6	93.1	94.0	94.1	92.4	82.5	68.2	63.7	63.3	63.0	64.8	71.4	80.9	84.4	87.1	89.3	90.7	89.7	84.43	94.15
17-Oct	89.8	91.4	92.0	92.1	92.8	93.4	93.4	93.3	93.8	93.5	84.5	67.7	59.9	50.9	47.1	49.4	57.4	61.2	62.3	61.8	66.0	68.3	65.0	67.3	74.76	93.75
18-Oct	67.8	69.7	70.1	71.6	71.1	67.5	71.7	74.1	74.2	61.7	44.2	37.6	34.2	30.0	28.3	29.1	32.0	39.1	43.7	50.8	58.9	60.1	57.5	60.3	54.40	74.21
19-Oct	68.9	63.3	59.7	64.7	69.4	69.6	74.5	74.3	75.5	67.7	60.1	49.9	46.0	45.9	49.8	50.8	53.1	60.3	62.4	65.7	70.1	74.4	78.8	82.7	64.06	82.68
20-Oct	77.0	69.7	72.6	68.6	64.7	63.1	62.4	67.5	60.7	49.8	56.2	43.8	33.0	33.2	33.5	32.8	35.4	37.9	40.4	50.6	53.5	41.7	42.5	47.4	51.58	77.03
21-Oct	59.0	66.3	73.9	78.5	75.5	80.1	75.0	81.6	77.9	82.4	77.0	64.4	52.9	47.9	49.0	51.7	54.2	57.2	69.4	79.2	83.2	85.6	86.4	86.8	70.62	86.77
22-Oct	86.7	89.9	91.4	91.9	92.4	90.7	91.8	92.1	92.2	82.9	60.8	42.5	40.9	41.3	43.3	39.9	42.6	49.5	54.1	57.0	60.7	51.9	49.5	44.3	65.83	92.38
23-Oct	57.6	64.8	67.0	67.6	68.0	66.0	74.8	78.1	70.4	63.0	56.0	41.2	31.9	25.3	24.9	26.8	33.2	42.9	45.4	55.7	57.5	47.6	49.4	61.0	53.17	78.07
24-Oct	68.2	63.6	61.5	61.7	62.4	63.3	64.1	67.1	71.5	72.8	53.0	42.2	36.2	32.9	27.4	26.2	29.6	32.1	37.6	37.7	44.4	53.3	50.3	44.8	50.17	72.82
25-Oct	55.5	63.0	64.2	64.6	64.4	70.8	70.7	72.2	71.9	65.9	58.7	48.5	50.3	49.6	46.1	47.1	48.1	48.0	46.8	50.6	53.8	56.9	58.5	62.0	57.85	72.23
26-Oct	65.1	65.2	66.0	67.3	69.9	71.3	77.6	79.0	80.2	81.4	77.8	74.5	78.6	82.8	90.5	89.5	86.1	87.8	91.0	90.2	89.5	87.2	84.7	84.0	79.89	90.99
27-Oct	81.8	80.1	79.2	79.4	79.6	79.8	82.0	83.1	80.8	77.3	74.4	71.0	71.5	71.6	67.6	66.6	72.3	79.0	84.6	88.5	89.8	91.4	91.7	92.4	79.82	92.42
28-Oct	92.9	93.3	92.7	92.3	91.9	91.5	91.8	92.0	92.1	91.8	90.6	84.6	73.6	65.1	62.6	62.6	66.3	74.1	80.9	84.2	87.4	88.5	90.1	91.1	84.34	93.29
29-Oct	91.9	92.0	92.1	92.5	92.5	92.2	92.3	92.3	92.6	91.0	87.6	82.7	77.2	71.8	74.1	76.2	79.8	83.8	88.3	88.2	88.5	89.0	89.7	90.0	87.02	92.63
30-Oct	90.6	91.4	91.8	92.7	93.3	93.1	93.1	93.1	93.0	92.2	89.1	83.9	80.6	77.5	73.5	74.8	79.2	82.3	83.1	84.5	85.2	85.9	84.6	84.6	86.37	93.31
31-Oct	86.0	87.0	88.3	89.1	89.2	89.5	89.9	90.7	91.0	90.8	90.7	90.1	89.2	86.4	87.4	88.7	88.2	89.1	89.5	89.1	88.9	88.7	88.8	85.4	88.82	90.99
74.81 75.43 77.05 78.09 78.25 78.20 79.28 80.12 78.41 73.40 65.40 57.04 51.32 49.21 48.98 49.76 52.55 56.81 61.73 65.79 68.78 69.50 69.57 71.55																							Diurnal Average			
93.43 93.48 93.54 93.63 93.73 93.59 93.42 93.31 94.01 94.15 92.38 90.14 89.24 86.42 90.55 89.52 88.46 90.30 91.04 92.24 92.71 92.89 93.47 93.43																							Diurnal Maximum			



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

**Global Solar Radiation (GSR) - W/m2**  
**October 2014**

Maximum Value: 543.54 W/m2 on Oct 16 13:00      Maximum Daily Average: 142.55 W/m2 on Oct 6																								Hours in Service:	744	
Minimum Value: 0.0 W/m2 on Oct 1 01:00      Minimum Daily Average: 17.22 W/m2 on Oct 31																								Hours of Data:	744	
Maximum Diurnal Average: 346.15 W/m2 at hour 13      Minimum Diurnal Average: 0.00 W/m2 at hour 1																								Hours of Missing Data:	0	
Monthly Average: 84.998 W/m2      Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 0.0 Q <sub>3</sub> = 120.1 P <sub>90</sub> = 327.3 P <sub>99</sub> = 500.4																								Hours of Calibration:	0	
																								Percent Operational Time:	100.0	
Day	Hourly Period Ending At																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.1	223.0	369.5	475.1	390.0	447.8	96.7	119.3	266.1	131.8	37.8	0.8	0.0	0.0	0.0	0.0	0.0	109.75	475.06
2-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.6	85.4	50.5	144.8	304.3	496.5	534.0	479.4	286.0	223.8	71.2	3.3	0.0	0.0	0.0	0.0	0.0	113.29	534.01
3-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.3	76.1	165.1	246.9	249.3	249.5	183.9	315.2	118.9	118.3	61.5	0.5	0.0	0.0	0.0	0.0	0.0	77.02	315.23
4-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1	47.9	127.6	283.7	411.5	494.7	260.4	269.0	224.0	116.6	54.4	2.7	0.0	0.0	0.0	0.0	0.0	96.02	494.70
5-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.1	187.9	327.6	438.8	510.3	540.4	431.2	368.3	341.4	161.7	40.0	0.0	0.0	0.0	0.0	0.0	0.0	141.49	540.43
6-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0	117.9	337.1	449.0	520.9	526.4	472.1	417.6	327.9	198.6	34.4	0.3	0.0	0.0	0.0	0.0	0.0	142.55	526.41
7-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.6	68.0	224.0	324.6	432.1	357.7	206.5	143.8	194.2	67.7	11.8	0.0	0.0	0.0	0.0	0.0	0.0	85.17	432.10
8-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.7	101.4	224.7	271.7	273.5	434.9	457.8	136.3	193.0	98.7	45.9	0.0	0.0	0.0	0.0	0.0	0.0	94.81	457.76
9-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	41.6	131.1	285.4	348.5	350.3	430.2	447.0	381.8	300.1	167.5	44.2	0.0	0.0	0.0	0.0	0.0	0.0	121.99	446.95
10-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.0	178.2	311.6	426.3	501.1	528.8	499.5	418.9	301.8	164.3	36.5	0.0	0.0	0.0	0.0	0.0	0.0	141.87	528.81
11-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	66.6	255.9	323.6	385.3	484.5	439.9	217.5	329.7	118.5	27.7	0.0	0.0	0.0	0.0	0.0	0.0	110.72	484.45
12-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.3	164.7	191.4	208.9	483.0	507.3	478.6	402.9	288.1	154.8	27.0	0.0	0.0	0.0	0.0	0.0	0.0	121.99	507.33
13-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	153.9	282.1	389.0	453.1	419.4	354.5	194.1	109.5	76.3	8.9	0.0	0.0	0.0	0.0	0.0	0.0	102.90	453.14
14-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	71.6	203.0	305.4	307.6	473.2	450.6	369.6	257.6	124.8	10.0	0.0	0.0	0.0	0.0	0.0	0.0	107.69	473.17
15-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9	28.6	66.7	86.7	99.2	82.3	71.3	53.9	91.1	38.4	4.8	0.0	0.0	0.0	0.0	0.0	0.0	26.24	99.21
16-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.3	145.3	244.9	247.7	322.4	543.5	279.0	196.5	173.7	108.9	24.1	0.0	0.0	0.0	0.0	0.0	0.0	96.06	543.54
17-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.1	133.1	240.9	376.5	358.9	333.1	350.0	312.1	133.3	42.7	6.3	0.0	0.0	0.0	0.0	0.0	0.0	96.21	376.50
18-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	128.6	238.8	378.8	441.3	463.1	422.1	357.4	210.6	123.3	12.9	0.0	0.0	0.0	0.0	0.0	0.0	115.88	463.11
19-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.7	74.3	132.0	174.2	193.3	190.1	97.1	63.6	46.5	20.3	6.7	0.0	0.0	0.0	0.0	0.0	0.0	42.50	193.30
20-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.6	84.8	97.7	232.9	452.8	297.0	209.6	186.7	192.0	98.0	17.8	0.0	0.0	0.0	0.0	0.0	0.0	79.16	452.83
21-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	57.6	80.3	120.5	255.5	292.4	241.9	158.0	134.4	97.9	21.2	0.0	0.0	0.0	0.0	0.0	0.0	60.93	292.41
22-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.1	88.8	193.8	336.1	384.1	261.1	111.9	106.7	94.6	86.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0	70.21	384.12
23-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.5	108.0	82.2	223.0	338.7	437.9	407.2	230.2	61.4	88.8	10.8	0.0	0.0	0.0	0.0	0.0	0.0	83.24	437.90
24-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.1	74.2	171.9	337.6	395.7	419.6	398.5	258.4	149.9	120.2	12.6	0.0	0.0	0.0	0.0	0.0	0.0	97.77	419.58
25-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	64.0	157.9	194.2	169.2	84.9	161.2	139.0	131.8	26.8	2.1	0.0	0.0	0.0	0.0	0.0	0.0	47.23	194.18
26-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	56.8	108.9	144.3	112.3	83.4	55.0	61.3	66.9	23.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	29.85	144.29
27-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	37.2	52.6	115.8	141.7	73.7	98.0	113.6	105.8	46.8	6.0	0.0	0.0	0.0	0.0	0.0	0.0	32.97	141.69
28-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.9	93.5	110.1	237.4	374.5	277.5	351.1	154.3	120.2	83.7	5.9	0.0	0.0	0.0	0.0	0.0	0.0	75.54	374.53
29-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	67.8	101.5	100.8	166.6	275.4	203.0	182.5	146.9	56.8	3.5	0.0	0.0	0.0	0.0	0.0	0.0	54.40	275.38
30-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.0	55.6	102.8	104.0	139.0	215.1	251.4	94.4	32.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	42.29	251.43
31-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.4	43.2	47.9	39.6	85.6	65.5	37.2	43.3	36.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	17.22	85.58
																								Diurnal Average		
																								Diurnal Maximum		



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

**Precipitation (PR) - mm**  
**October 2014**

Maximum Value: 1.40 mm on Oct 6 12:00		Maximum Daily Total: 2.70 mm on Oct 6		Hours in Service: 744																						
Minimum Value: 0.0 mm on Oct 1 01:00		Minimum Daily Total: 0.00 mm on Oct 2		Hours of Data: 744																						
Maximum Diurnal Total: 1.40 mm at hour 12		Minimum Diurnal Total: 0.00 mm at hour 1		Hours of Missing Data: 0																						
Monthly Total: 2.800 mm		Percentiles: P <sub>1</sub> = 0.0 P <sub>10</sub> = 0.0 Q <sub>1</sub> = 0.0 Median = 0.0 Q <sub>3</sub> = 0.0 P <sub>90</sub> = 0.0 P <sub>99</sub> = 0.0		Hours of Calibration: 0																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At																								Daily Total	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Oct	0.0	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	0.0	0.10	0.10
2-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.9	1.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.70	1.40
7-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
9-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
11-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
12-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
17-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
18-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
19-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
22-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
24-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Oct	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.90	1.40	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average
		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.90	1.40	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum



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

**Wind Speed (WS) - kph**  
**October 2014**

Maximum Value: 10.61 kph on Oct 23 13:00		Maximum Daily Average: 4.86 kph on Oct 2		Hours in Service: 744																							
Minimum Value: 0.5 kph on Oct 16 05:00		Minimum Daily Average: 1.84 kph on Oct 29		Hours of Data: 744																							
Maximum Diurnal Average: 4.31 kph at hour 14		Minimum Diurnal Average: 2.10 kph at hour 20		Hours of Missing Data: 0																							
Monthly Average: 2.875 kph		Percentiles: P <sub>1</sub> = 0.7 P <sub>10</sub> = 1.2 Q <sub>1</sub> = 1.7 Median = 2.4 Q <sub>3</sub> = 3.5 P <sub>90</sub> = 5.2 P <sub>99</sub> = 8.1		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Oct	2.5	2.4	1.6	0.9	1.6	1.1	1.3	1.5	2.0	2.6	3.0	2.7	9.2	9.0	6.9	7.0	7.5	5.0	5.9	6.0	5.5	9.9	7.7	6.6	4.56	9.89	
2-Oct	6.0	6.9	4.5	4.2	4.6	5.4	4.9	6.1	5.6	5.4	6.5	6.0	5.4	7.0	5.8	5.6	6.6	7.9	3.0	1.6	1.2	1.4	2.0	2.8	4.86	7.87	
3-Oct	2.5	2.2	1.2	1.6	2.0	1.0	1.1	1.0	1.3	2.0	3.0	2.5	2.6	2.3	2.7	2.4	2.6	1.2	1.6	1.7	1.5	2.4	1.3	1.0	1.86	2.99	
4-Oct	2.8	0.9	1.7	2.5	3.3	2.0	2.3	3.3	2.0	1.9	3.0	3.4	3.9	6.7	5.1	4.3	5.8	0.8	0.9	1.6	2.0	3.0	3.3	3.3	2.90	6.66	
5-Oct	3.1	3.0	2.3	2.4	2.7	2.5	2.7	1.9	3.7	3.4	3.7	4.3	4.5	4.4	3.3	4.4	4.3	3.3	2.1	1.2	2.0	2.9	1.7	1.4	2.97	4.48	
6-Oct	2.1	1.8	3.0	1.6	2.0	3.3	5.2	3.8	5.8	8.4	7.6	7.8	6.8	8.2	7.1	6.9	7.3	6.5	2.7	1.5	2.2	2.0	2.4	1.0	4.46	8.41	
7-Oct	1.5	2.5	2.4	2.2	2.1	2.1	1.6	2.1	2.6	2.3	2.5	3.4	3.3	3.2	2.5	3.1	1.4	1.0	0.8	1.8	1.8	2.8	1.9	1.6	2.18	3.40	
8-Oct	2.0	1.8	2.4	2.2	3.1	3.2	2.4	2.7	2.9	3.7	3.5	2.4	2.9	3.3	3.7	2.1	1.7	1.6	3.4	1.0	1.5	2.4	1.6	3.1	2.54	3.75	
9-Oct	2.0	2.0	0.7	1.9	2.4	1.9	2.6	0.9	1.6	2.2	3.8	2.0	2.9	2.9	2.8	2.9	3.2	1.9	1.6	1.3	0.7	1.3	1.5	1.5	2.02	3.83	
10-Oct	1.3	1.2	0.9	0.7	2.0	2.1	3.8	1.0	1.7	1.8	1.9	2.7	3.8	4.0	3.0	2.7	2.6	2.4	1.0	1.1	1.1	3.0	3.5	3.4	2.19	3.97	
11-Oct	2.8	3.5	5.8	10.2	2.9	4.2	2.8	3.0	2.8	4.0	5.4	4.5	5.0	6.0	5.0	6.4	6.2	3.5	3.3	2.0	3.5	3.2	3.5	2.6	4.25	10.19	
12-Oct	2.3	2.9	2.4	2.7	3.3	3.2	2.7	3.2	3.9	5.2	6.0	6.2	5.3	6.2	5.9	5.4	4.3	2.1	1.2	0.9	1.8	3.2	2.8	2.5	3.57	6.23	
13-Oct	1.5	1.7	3.7	1.0	1.4	1.1	1.1	1.2	1.0	3.4	2.1	3.1	2.8	2.9	2.3	2.7	3.0	2.4	3.4	2.8	2.2	2.1	2.0	3.5	2.27	3.73	
14-Oct	1.2	1.8	1.9	2.4	2.1	3.8	2.4	2.8	5.3	4.0	3.1	2.7	2.7	5.2	5.7	5.7	6.3	2.7	2.3	1.6	1.7	1.5	0.9	2.2	3.00	6.31	
15-Oct	3.0	3.0	1.2	1.9	2.2	1.4	2.0	2.1	1.1	1.5	1.8	2.0	2.4	2.9	3.1	2.1	2.0	2.0	1.6	2.4	0.9	1.5	1.2	1.0	1.94	3.07	
16-Oct	2.4	2.1	2.8	2.4	0.5	1.1	0.9	1.7	1.4	2.4	3.5	2.9	4.8	3.8	3.2	2.9	2.4	1.9	1.1	1.3	1.5	1.5	2.3	2.4	2.22	4.79	
17-Oct	1.7	1.9	1.6	1.8	1.5	1.4	1.9	1.6	1.9	3.7	2.9	3.5	4.0	4.4	3.9	4.6	3.5	1.2	1.7	1.0	0.6	1.4	1.9	2.2	2.33	4.62	
18-Oct	1.5	1.4	1.9	1.2	1.4	1.0	1.5	1.7	1.9	2.3	3.5	3.4	3.5	4.4	5.0	3.2	2.7	2.2	2.4	1.3	2.4	2.7	1.1	1.7	2.31	5.02	
19-Oct	1.9	1.3	2.6	2.3	2.0	3.2	0.8	1.2	1.9	3.0	2.3	3.1	3.2	2.1	2.6	2.8	3.1	3.5	1.8	2.2	2.5	1.9	0.7	2.1	2.26	3.47	
20-Oct	2.5	6.3	2.8	2.3	1.3	2.0	3.6	3.5	1.7	2.3	1.6	2.2	1.8	1.7	2.2	2.1	2.3	0.9	1.3	1.8	3.2	4.3	3.6	3.2	2.52	6.32	
21-Oct	3.2	3.3	4.0	5.3	3.9	2.2	3.6	2.9	2.7	2.4	1.6	2.2	2.2	2.0	1.6	1.7	1.3	1.0	1.3	1.3	1.0	1.6	1.4	1.0	2.27	5.27	
22-Oct	2.2	0.9	1.9	2.2	1.6	0.6	0.5	1.2	2.4	1.9	5.1	4.7	3.4	4.5	2.4	1.7	2.1	1.5	2.4	3.3	2.0	2.2	2.4	2.5	2.32	5.10	
23-Oct	4.5	1.7	2.9	2.5	1.3	5.2	1.4	2.3	3.5	3.9	4.7	6.0	10.6	6.5	6.8	5.1	2.5	1.4	1.6	1.6	2.0	2.4	1.3	3.7	3.56	10.61	
24-Oct	3.8	3.5	4.2	3.6	4.7	3.3	2.2	1.7	2.2	2.6	4.7	5.4	4.7	4.5	5.6	4.0	3.0	2.6	1.1	2.1	1.6	1.5	2.3	1.8	3.20	5.61	
25-Oct	2.9	1.1	1.1	1.5	0.9	1.0	0.9	1.1	1.5	2.4	3.9	4.5	4.2	5.4	4.9	5.0	5.3	5.0	5.1	4.2	2.9	2.9	3.4	3.5	3.11	5.40	
26-Oct	3.0	3.0	3.0	1.5	2.1	2.1	1.6	1.6	2.1	2.8	2.5	3.4	3.4	3.8	4.4	4.0	3.4	3.3	3.7	4.2	3.8	3.9	4.4	4.5	3.15	4.51	
27-Oct	5.2	5.1	4.9	4.9	4.8	5.0	4.2	4.6	4.3	3.6	3.2	4.5	2.8	2.9	3.0	2.0	2.2	2.0	0.8	0.8	1.1	0.8	1.2	1.0	3.12	5.21	
28-Oct	0.8	1.0	1.0	1.2	1.8	2.0	1.7	1.9	2.5	2.4	2.8	3.8	3.5	3.8	3.6	3.7	2.9	2.6	2.3	2.3	2.3	1.8	1.6	1.7	2.29	3.85	
29-Oct	1.7	1.4	1.6	2.2	1.3	1.5	1.8	1.9	1.9	2.1	2.8	2.7	2.0	1.9	2.8	2.0	2.0	1.1	1.3	1.2	1.6	1.7	1.7	1.9	1.84	2.81	
30-Oct	1.6	1.9	1.7	1.9	2.6	2.7	3.2	3.8	4.2	4.2	4.9	4.1	4.8	5.3	5.7	6.1	5.3	6.5	5.6	5.4	4.9	4.8	6.7	3.1	4.22	6.75	
31-Oct	3.1	2.4	2.7	2.0	1.7	2.1	1.8	1.4	1.7	2.5	2.1	5.3	3.5	2.4	4.8	5.6	2.9	2.0	3.4	2.5	3.3	2.8	2.6	3.1	2.83	5.61	
		2.54	2.45	2.46	2.50	2.29	2.41	2.28	2.29	2.62	3.11	3.52	3.79	4.07	4.31	4.12	3.88	3.61	2.68	2.32	2.10	2.14	2.59	2.45	2.48	Diurnal Average	
		6.04	6.92	5.79	10.19	4.82	5.35	5.17	6.14	5.83	8.41	7.57	7.84	10.61	9.04	7.14	6.99	7.52	7.87	5.93	5.96	5.49	9.89	7.66	6.64	Diurnal Maximum	
,Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ul/m <sup>3</sup> 24-hr 100 ul/m <sup>3</sup>																											



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

**Wind Direction (WD) - deg**  
**October 2014**

Maximum Value: 94.57 deg on Oct 29 04:00		Maximum Daily Average: 34.30 deg on Oct 29		Hours in Service: 744																							
Minimum Value: 3.1 deg on Oct 1 06:00		Minimum Daily Average: 9.85 deg on Oct 2		Hours of Data: 744																							
Maximum Diurnal Average: 22.16 deg at hour 3		Minimum Diurnal Average: 12.47 deg at hour 18		Hours of Missing Data: 0																							
Monthly Average: 16.780 deg		Percentiles: P <sub>1</sub> = 3.9 P <sub>10</sub> = 7.4 Q <sub>1</sub> = 9.1 Median = 12.1 Q <sub>3</sub> = 17.7 P <sub>90</sub> = 30.6 P <sub>99</sub> = 85.3		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Oct	7.7	7.5	6.4	8.5	6.2	3.1	3.8	5.5	6.3	11.1	10.5	12.0	43.0	12.8	9.6	10.1	12.5	12.8	11.1	15.0	12.0	12.5	8.0	8.1	10.66	42.97	
2-Oct	8.3	10.1	9.3	8.4	8.1	9.7	8.4	8.9	11.6	9.5	9.8	10.4	12.1	9.5	10.1	10.4	10.9	11.5	7.3	8.8	6.6	8.8	19.0	9.1	9.85	19.00	
3-Oct	15.1	11.3	4.2	7.7	6.4	27.7	30.9	27.6	22.1	17.1	10.9	9.3	13.9	12.4	11.3	12.0	11.0	7.8	8.0	7.3	23.4	38.6	9.1	12.9	14.92	38.60	
4-Oct	12.2	6.3	14.9	40.9	19.8	36.3	11.1	10.3	17.7	7.1	6.8	13.8	14.7	18.5	9.9	14.5	9.5	13.1	5.4	9.6	9.7	9.0	9.7	9.4	13.76	40.87	
5-Oct	9.7	9.2	10.3	8.7	9.1	8.7	9.0	10.8	18.5	11.6	12.0	15.1	12.4	15.6	14.0	22.1	9.8	25.2	9.9	15.7	23.8	29.4	5.9	7.6	13.50	29.43	
6-Oct	14.4	8.1	11.4	19.0	5.9	7.9	13.7	15.7	7.8	8.9	8.7	8.7	9.0	8.6	9.1	11.2	9.7	10.8	7.9	18.9	15.2	28.1	13.2	10.4	11.76	28.09	
7-Oct	11.3	8.4	7.7	7.8	8.3	9.0	7.7	8.4	15.7	12.0	15.1	23.9	20.3	16.4	14.3	31.7	12.8	9.7	54.7	33.0	22.5	13.2	9.5	11.4	16.05	54.74	
8-Oct	16.5	18.7	12.7	11.4	12.1	11.5	11.8	9.1	9.0	9.8	14.3	21.0	16.8	33.2	61.0	10.0	8.7	5.5	76.9	16.9	25.0	69.8	78.2	41.5	25.06	78.17	
9-Oct	49.0	78.2	17.8	53.8	88.4	25.1	36.0	34.1	13.6	8.4	21.3	19.1	14.7	14.5	13.8	12.0	9.8	6.2	6.9	7.0	9.0	9.1	4.8	19.4	23.83	88.40	
10-Oct	20.8	17.6	10.5	13.2	21.7	13.7	11.2	6.7	8.7	13.9	10.3	17.8	27.1	18.7	11.8	9.5	8.1	5.7	5.1	7.8	15.0	15.1	12.0	12.9	13.12	27.07	
11-Oct	11.5	36.8	13.1	17.0	15.4	18.7	20.6	12.3	7.3	15.9	14.4	15.1	15.6	16.1	15.0	11.2	8.7	12.1	18.0	19.3	9.4	10.6	10.5	12.8	14.89	36.76	
12-Oct	8.9	12.1	9.7	9.1	12.8	11.4	11.1	11.2	12.8	10.9	12.7	11.6	15.1	12.3	14.2	14.3	9.5	12.5	10.7	36.6	24.9	26.2	10.3	30.8	14.65	36.63	
13-Oct	5.5	7.4	25.3	4.2	3.5	3.9	9.4	8.3	8.3	54.5	24.0	17.4	15.5	15.2	12.7	8.6	8.8	10.3	17.0	11.7	13.0	11.8	9.1	13.0	13.27	54.54	
14-Oct	22.6	32.9	68.0	93.5	47.2	45.7	42.1	42.2	56.1	12.9	15.2	12.4	11.2	16.0	12.4	9.7	9.4	6.1	10.0	25.0	26.4	18.2	13.4	50.3	29.13	93.47	
15-Oct	62.6	31.8	14.2	80.1	21.4	14.3	61.2	58.5	17.2	11.4	19.7	13.2	13.4	12.6	15.1	15.8	16.6	10.4	15.4	17.9	27.0	85.7	12.6	13.8	27.59	85.71	
16-Oct	51.3	70.3	92.6	35.9	77.3	14.2	19.8	21.1	9.6	9.8	11.5	10.4	21.3	12.3	11.1	9.9	8.4	11.9	5.9	6.9	7.4	7.2	10.4	10.7	22.80	92.58	
17-Oct	8.1	10.8	7.4	7.7	9.4	10.4	8.3	10.0	12.8	12.6	9.1	10.5	10.9	11.2	10.2	7.8	8.6	7.7	9.1	6.5	6.1	11.9	11.7	33.4	10.51	33.44	
18-Oct	14.9	9.8	58.8	8.9	7.1	6.5	6.7	4.5	4.2	6.9	20.8	12.2	13.7	16.2	17.1	13.2	16.8	14.4	66.3	19.7	22.4	18.4	3.7	6.6	16.24	66.29	
19-Oct	7.5	4.6	19.4	11.8	5.9	13.3	12.0	8.6	12.0	28.4	25.7	21.2	12.5	8.3	17.7	9.7	12.5	11.0	21.8	10.0	11.5	14.3	12.1	35.4	14.45	35.35	
20-Oct	13.6	34.4	19.9	7.3	4.7	3.9	6.4	11.5	12.2	45.9	30.7	19.7	23.9	29.5	35.7	16.4	58.6	18.7	10.9	34.1	17.0	8.0	7.6	9.6	20.01	58.55	
21-Oct	11.1	11.8	57.5	29.6	25.1	21.7	23.6	27.2	39.4	31.6	39.7	15.5	70.8	25.4	20.0	23.5	27.7	41.3	10.4	12.0	10.7	9.1	9.5	7.8	25.08	70.79	
22-Oct	10.8	11.5	17.8	14.9	8.5	12.2	17.7	8.9	10.6	8.2	8.6	10.7	13.1	10.6	16.2	13.9	10.2	6.2	21.0	8.7	16.1	16.6	13.7	15.8	12.60	21.01	
23-Oct	86.1	27.0	30.3	9.9	3.8	65.6	58.1	66.8	21.4	15.7	13.8	20.2	17.8	10.3	15.4	12.8	6.6	6.9	34.0	19.5	11.4	7.0	8.0	9.0	24.05	86.15	
24-Oct	13.1	10.5	11.6	11.7	10.0	12.3	9.8	8.1	12.9	8.8	12.9	13.5	15.3	15.2	15.7	19.6	23.1	17.9	23.5	10.7	19.5	9.5	15.3	7.2	13.66	23.46	
25-Oct	30.8	5.8	3.4	7.5	3.2	5.5	13.3	18.4	18.2	15.9	12.2	11.5	11.6	11.5	13.9	13.4	12.3	11.8	12.7	12.3	12.3	13.5	11.8	10.4	12.22	30.83	
26-Oct	11.3	13.2	12.0	20.6	12.0	12.9	17.4	17.5	8.2	10.1	12.7	10.7	8.1	7.9	7.3	8.1	8.0	7.4	7.3	6.7	7.1	7.4	7.4	7.8	10.38	20.59	
27-Oct	8.1	7.6	7.8	7.3	7.3	7.4	7.8	7.4	7.8	11.5	9.3	9.5	12.2	14.2	15.4	20.3	28.0	23.7	18.0	17.8	20.1	13.3	24.4	7.5	13.08	28.00	
28-Oct	11.6	7.2	7.6	8.5	6.9	9.7	11.5	11.5	12.8	10.6	12.7	10.4	12.7	14.9	12.7	12.2	16.8	13.0	11.5	14.6	11.6	12.4	21.0	50.8	13.55	50.77	
29-Oct	12.7	28.9	75.8	94.6	19.0	18.3	19.7	31.2	68.5	12.3	61.1	40.6	72.5	91.8	33.8	20.0	12.0	17.7	15.4	17.7	14.3	19.7	14.3	11.4	34.30	94.57	
30-Oct	15.0	12.6	10.6	10.2	10.3	9.9	9.4	9.2	10.5	10.1	10.8	8.2	10.0	9.8	12.4	11.6	9.0	9.9	8.2	9.1	9.9	8.3	12.8	8.7	10.27	14.96	
31-Oct	10.4	8.7	19.1	13.3	15.4	12.1	13.9	30.6	74.6	16.7	13.3	10.4	9.4	9.0	9.9	13.4	8.7	7.2	15.9	7.7	8.8	10.9	9.9	9.2	14.93	74.59	
		19.11	18.42	22.16	22.03	16.52	15.57	17.53	18.12	18.34	15.16	16.48	14.71	19.05	17.11	16.09	13.84	13.65	12.47	17.95	14.99	15.14	18.50	13.51	16.29	Diurnal Average	
		86.15	78.18	92.58	94.57	88.40	65.56	61.18	66.75	74.59	54.54	61.05	40.58	72.45	91.79	60.96	31.71	58.55	41.32	76.91	36.63	26.99	85.71	78.17	50.77	Diurnal Maximum	
,Alberta Ambient Air Quality Objectives (AAAQO): 1-hr --- ul/m^3 24-hr 100 ul/m^3																											

**WEST CENTRAL AIRSHED SOCIETY**

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

**END OF REPORT  
OCTOBER 2014**