Peace AirShed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
September 2010

Operations and Reporting

FOCUS
AIR QUALITY MONITORING

PASZA
Peace AirShed Zone Association

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November 1, 2010

Alberta Environment
11th Floor, Oxbridge Place
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Edmonton Alberta T6B 2X3

RE: Peace Airshed Zone Association (PASZA) – September 2010 Ambient Air Report

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **September 2010**.

Continuous Monitoring: **Six (6) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Bonanza (portable) and Valleyview.**

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the "Monthly Summary" and "Continuous Monitoring" pages of the report.

During the month of September the following events were noted:

Henry Pirker Station:

- The measured ambient air quality was within the Alberta Ambient Air Quality Objectives (AAAQO) for the Henry Pirker station.
- All analyzers and sensors at the Henry Pirker station had an operational uptime greater than 90% for the month of September, except the CO analyzer which was less than 90% operational due to the Infrared Source failing in the analyzer, combined with a power failure – **Alberta Environment Reference #241567.**

Evergreen Park Station:

- The measured ambient air quality was within the AAAQO for the Evergreen Park station, with the exception of the $PM_{2.5}$ which had fifteen (15) 1-hour exceedences of the AAAQG and one (1) 24-hour exceedences of the AAAQO:
  - **Sep.11 11:00 133 µg/m^3 AENV Reference #240633**
  - **Sep.11 13:00 118 µg/m^3 AENV Reference #240633**
  - **Sep.25 17:00 100 µg/m^3 AENV Reference #240541**
  - **Sep.26 14:00 87 µg/m^3 AENV Reference #240541**
  - **Sep.28 09:00 122 µg/m^3 AENV Reference #240617**
  - **Sep.28 10:00 378 µg/m^3 AENV Reference #240617**
  - **Sep.28 11:00 439 µg/m^3 AENV Reference #240617**
  - **Sep.28 12:00 441 µg/m^3 AENV Reference #240617**
  - **Sep.28 13:00 381 µg/m^3 AENV Reference #240617**
  - **Sep.28 14:00 413 µg/m^3 AENV Reference #240617**
  - **Sep.28 1500 396 µg/m^3 AENV Reference #240617**
  - **Sep.28 1600 312 µg/m^3 AENV Reference #240617**
  - **Sep.28 17:00 287µg/m^3 AENV Reference #240617**
  - **Sep.28 18:00 136 µg/m^3 AENV Reference #240617**
  - **Sep.29 12:00 85 µg/m^3 AENV Reference #240650**

- **Sep.28 - 24-hour 142.4 µg/m^3 AENV Reference #240617**

♦ All analyzers / sensors at the Evergreen Park station had an operational uptime greater than 90% for the month of September.

Smoky Heights Station:

♦ The measured ambient air quality was within the AAAQO for the Smoky Heights station.
♦ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of September.

Beaverlodge Station:

♦ The measured ambient air quality was within the AAAQO for the Beaverlodge station.
♦ All analyzers / sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of September.

Portable – Bonanza Station:

♦ The measured ambient air quality was within the AAAQO for the Bonanza station.
♦ All analyzers / sensors at the Bonanza station had an operational uptime greater than 90% for the month of September.

Valleyview Station:

♦ The measured ambient air quality was within the AAAQO for the Valleyview station.
♦ All analyzers / sensors at the Valleyview station had an operational uptime of 100% for the month of September.

Passive Monitoring - 43 Stations throughout the PASZA zone:

There were four duplicate sites sampled in the month of September: Bay Tree, Webber Creek, Wapiti and Deer Mountain. The passive sample analyses were performed by MAXXAM Analytics Inc.

A summary of the passive data collected are reported as follows.

- Monthly average concentrations for SO_2 passives ranged from 0.1 ppb to 0.4 ppb, with a mean of 0.2 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.2 ppb to 4.3 ppb, with a mean of 1.0 ppb.
- Monthly average concentrations for O_3 passives ranged from 12.5 ppb to 26.7 ppb, with a mean of 18.9 ppb.

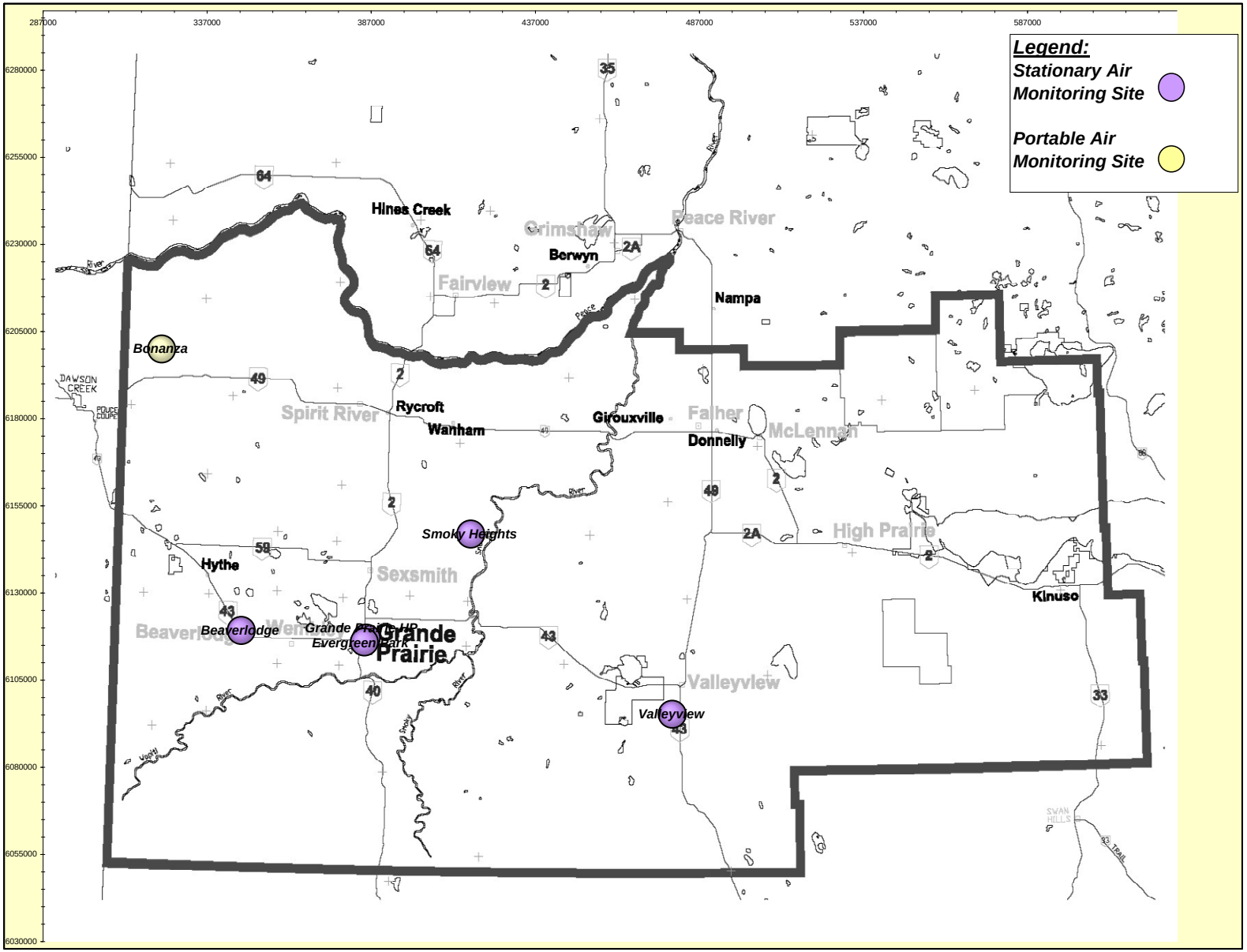
If you have any questions or concerns, please contact Shelly Pruden, PASZA Program Manager at 780.833.4343 or 780.882.4071.

On Behalf of the,
Peace Airshed Zone Association

Shelly Pruden
Program Manager

Sharon Whiteley, B.Sc..
FOCUS AQM Data Specialist

Location of PASZA Continuous Monitoring Stations



PASZA Monthly Continuous Data Summary

Sep-2010	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
Pollutant (units)	Objectives 1-hr	Objectives 24-hr	Station	Monthly Average	Exceedence 1-hr	Exceedence 24-hr	Conc	Day	Conc	Day	Operational Time (%)
SO_2 (ppb)	172	57	Henry Pirker	0.2	0	0	2.3	Sep-28 21:00	0.5	Sep-13	98.2%
SO_2 (ppb)	172	57	Evergreen Park	0.4	0	0	9.3	Sep-28 15:00	3.4	Sep-28	100.0%
SO_2 (ppb)	172	57	Smoky Heights	0.2	0	0	4.3	Sep-06 23:00	0.5	Sep-01	99.7%
SO_2 (ppb)	172	57	Beaverlodge	0.2	0	0	1.7	Sep-06 13:00	0.6	Sep-19	99.4%
SO_2 (ppb)	172	57	Portable-Bonanza	0.2	0	0	2.4	Sep-14 23:00	0.5	Sep-23	100.0%
SO_2 (ppb)	172	57	Valleyview	0.5	0	0	10.9	Sep-04 13:00	2.3	Sep-04	100.0%
NO (ppb)			Henry Pirker	3.0	0	0	61.7	Sep-22 08:00	8.7	Sep-22	98.2%
NO_2 (ppb)	212	106	Henry Pirker	6.8	0	0	28.0	Sep-30 08:00	12.7	Sep-27	98.2%
NO_X (ppb)			Henry Pirker	9.9	0	0	79.3	Sep-22 08:00	20.9	Sep-14	98.2%
NO (ppb)			Beaverlodge	0.5	0	0	16.3	Sep-18 08:00	2.3	Sep-18	99.4%
NO_2 (ppb)	212	106	Beaverlodge	2.5	0	0	15.6	Sep-23 02:00	5.2	Sep-23	99.4%
NO_X (ppb)			Beaverlodge	3.2	0	0	28.8	Sep-18 08:00	6.8	Sep-23	99.4%
NO (ppb)			Portable-Bonanza	1.0	0	0	18.7	Sep-13 07:00	2.4	Sep-13	100.0%
NO_2 (ppb)	212	106	Portable-Bonanza	2.7	0	0	12.2	Sep-19 03:00	5.1	Sep-23	100.0%
NO_X (ppb)			Portable-Bonanza	3.7	0	0	28.8	Sep-13 07:00	7.2	Sep-23	100.0%
O_3 (ppb)	82		Henry Pirker	18.0	0	-	40.1	Sep-29 16:00	31.3	Sep-29	98.2%
O_3 (ppb) - 8-hr			Henry Pirker		0				36.3	Sep-29	
O_3 (ppb)	82		Beaverlodge	22.4	0	-	42.2	Sep-29 16:00	35.6	Sep-29	99.4%
O_3 (ppb) - 8-hr			Beaverlodge		0				39.7	Sep-29	
O_3 (ppb)	82		Portable-Bonanza	20.3	0	-	40.3	Sep-17 17:00	30.0	Sep-26	100.0%
O_3 (ppb) - 8-hr			Portable-Bonanza		0				36.6	Sep-18	
CO (ppm)	13		Henry Pirker	0.17	0	-	0.8	Sep-22 08:00	0.4	Sep-27	87.4%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.5	Sep-30	
THC (ppm)			Henry Pirker	2.03	-	-	2.9	Sep-22 03:00	2.3	Sep-22	96.8%
TRS (ppb)			Henry Pirker	0.2	-	-	1.1	Sep-08 09:00	0.5	Sep-27	97.9%
TRS (ppb)			Evergreen Park	0.4	-	-	2.0	Sep-21 08:00	0.7	Sep-21	100.0%
TRS (ppb)			Smoky Heights	0.3	-	-	1.0	Sep-07 01:00	0.4	Sep-11	99.7%
TRS (ppb)			Portable-Bonanza	0.4	-	-	0.7	Sep-01 08:00	0.6	Sep-28	100.0%
H_2S (ppb)	10	3	Valleyview	0.1	0	0	1.2	Sep-28 17:00	0.1	Sep-27	100.0%

PASZA Monthly Continuous Data Summary – continued

Sep-2010	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
PM2.5 (µg/m3)	80	30	Henry Pirker	5.2	0	0	39.3	Sep-02 11:00	9.6	Sep-14	90.4%
PM2.5 (µg/m3)	80	30	Evergreen Park	13.3	**15**	**1**	441.2	Sep-28 12:00	142.4	Sep-28	97.1%
PM2.5 (µg/m3)	80	30	Smoky Heights	2.4	0	0	29.9	Sep-16 21:00	6.4	Sep-17	95.4%
PM2.5 (µg/m3)	80	30	Beaverlodge	5.9	0	0	13.7	Sep-18 09:00	8.8	Sep-18	99.3%
RH (%)			Henry Pirker	67.1	-	-	91.4	Sep-10 05:00	83.8	Sep-08	98.2%
RH (%)			Evergreen Park	71.9	-	-	98.3	Sep-14 13:00	92.0	Sep-08	100.0%
RH (%)			Beaverlodge	68.0	-	-	96.8	Sep-21 03:00	89.7	Sep-08	99.4%
RH (%)			Valleyview	73.3	-	-	99.8	Sep-12 10:00	92.7	Sep-09	100.0%
SR (W/m^2)			Henry Pirker	106.5	-	-	561.5	Sep-02 15:00	161.9	Sep-16	98.2%
Temp (°C)			Henry Pirker	9.0	-	-	26.3	Sep-03 16:00	16.3	Sep-03	98.2%
Temp (°C)			Evergreen Park	8.8	-	-	25.6	Sep-03 17:00	15.5	Sep-03	100.0%
Temp (°C)			Smoky Heights	8.5	-	-	24.9	Sep-03 18:00	15.9	Sep-03	99.7%
Temp (°C)			Beaverlodge	8.9	-	-	25.4	Sep-03 18:00	16.6	Sep-03	99.4%
Temp (°C)			Portable-Bonanza	9.0	-	-	25.5	Sep-03 13:00	17.8	Sep-03	99.0%
Temp (°C)			Valleyview	8.2	-	-	24.9	Sep-25 14:00	16.9	Sep-25	100.0%
WSPD s (km/hr)			Henry Pirker	8.4	-	-	37.0	Sep-28 12:00	20.4	Sep-28	98.2%
WSPD s (km/hr)			Evergreen Park	5.0	-	-	33.0	Sep-28 12:00	16.6	Sep-28	100.0%
WSPD s (km/hr)			Smoky Heights	11.3	-	-	49.0	Sep-28 12:00	27.4	Sep-28	99.7%
WSPD s (km/hr)			Beaverlodge	10.5	-	-	49.0	Sep-28 13:00	27.3	Sep-28	99.4%
WSPD s (km/hr)			Portable-Bonanza	11.3	-	-	45.0	Sep-28 12:00	27.5	Sep-28	99.0%
WSPD s (km/hr)			Valleyview	4.7	-	-	25.0	Sep-28 15:00	11.7	Sep-28	100.0%
WSPD v (km/hr)			Henry Pirker	3.1	-	-	36.0	Sep-28 12:00	19.2	Sep-28	98.2%
WSPD v (km/hr)			Evergreen Park	2.4	-	-	33.0	Sep-28 12:00	15.7	Sep-28	100.0%
WSPD v (km/hr)			Smoky Heights	5.5	-	-	49.0	Sep-28 12:00	26.0	Sep-28	99.7%
WSPD v (km/hr)			Beaverlodge	3.0	-	-	49.0	Sep-28 13:00	26.4	Sep-28	99.4%
WSPD v (km/hr)			Portable-Bonanza	5.0	-	-	45.0	Sep-28 12:00	26.6	Sep-28	99.0%
WSPD v (km/hr)			Valleyview	1.4	-	-	24.0	Sep-28 15:00	9.4	Sep-28	100.0%
WDIR			Henry Pirker	W	-	-	-	-	-	-	98.2%
WDIR			Evergreen Park	W	-	-	-	-	-	-	100.0%
WDIR			Smoky Heights	WSW	-	-	-	-	-	-	99.7%
WDIR			Beaverlodge	W	-	-	-	-	-	-	99.4%
WDIR			Portable-Bonanza	SW	-	-	-	-	-	-	99.0%
WDIR			Valleyview	WNW	-	-	-	-	-	-	100.0%

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on September 14th (CO), September 22nd (TRS), September 23rd (SO_2, NO_X, & O_3) and September 24th (THC,). On September 15th A/C unit blew the power source – approximately thirteen (13) hours were flagged invalid during this time for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed, other than above noted power failure.
NOx/NO/NO_2	TEI	42C	Spans on September 18th and 21st were outside the target due to temperature fluctuations. Only other issue was the above noted power failure.
O_3	TEI	49C	Spans on September 17th, 19th, 25th, 29th and 30th were outside the target due to temperature fluctuations and the above noted power failure.
CO	TEI	48C	A total of seventy-six (76) hours were flagged invalid due to the Infrared Source failing; two (2) hours were flagged for maintenance (changed span cylinder); and thirteen (13 hours for above noted power failure; all combined resulted in the less than 90% operation for the month of September. **AENV Reference # 241567**.
THC	TEI	51-CLT	Due to the above noted power failure; a total fo twenty-three (23) hours were flagged invalid and the span on September 17th was outside the target.
TRS	TEI	45C/43C	On September 22nd the TRS (43C) analyzer was replaced with the original TRS (45C) analyzer (that had been removed from service for repairs); one (1) hour was flagged invalid during replacement process. A single point was performed on September 23rd to ensure operational integrity and stability of the analyzer. Only other issue was the above noted power failure.
$PM_{2.5}$	R&P	1400AB	A total of sixty-nine (69) hours were flagged invalid: two (2) for baseline drift; nineteen (19) for power failures; one (1) for maintenance and forty-six (46) due to temperature fluctualtions in the station.
RH	Met One	083D	No operational issues observed, other than above noted power failure.
ET	Met One	083D	No operational issues observed, other than above noted power failure.
SR	Met One	096-1	No operational issues observed, other than above noted power failure.
WS / WD	Met One	010C/020C	No operational issues observed, other than above noted power failure.

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on September 29th (SO_2 & TRS).

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	One (1) hour was flagged for maintenance on September 1st. A total of five (5) hours were flagged for baseline drift. A total of fifteen (15) hours were flagged invalid due to loading issues most likely caused by weather. Fifteen (15) 1-hour exceedences of the AAAQG and one (1) 24-hour exceedences of the AAAQO: o Sep.11 11:00 133 µg/m³ AENV Reference #240633 o Sep.11 13:00 118 µg/m³ AENV Reference #240633 o Sep.25 17:00 100 µg/m³ AENV Reference #240541 o Sep.26 14:00 87 µg/m³ AENV Reference #240541 o Sep.28 09:00 122 µg/m³ AENV Reference #240617 o Sep.28 10:00 378 µg/m³ AENV Reference #240617 o Sep.28 11:00 439 µg/m³ AENV Reference #240617 o Sep.28 12:00 441 µg/m³ AENV Reference #240617 o Sep.28 13:00 381 µg/m³ AENV Reference #240617 o Sep.28 14:00 413 µg/m³ AENV Reference #240617 o Sep.28 1500 396 µg/m³ AENV Reference #240617 o Sep.28 1600 312 µg/m³ AENV Reference #240617 o Sep.28 17:00 287µg/m³ AENV Reference #240617 o Sep.28 18:00 136 µg/m³ AENV Reference #240617 o Sep.29 12:00 85 µg/m³ AENV Reference #240650 o Sep.28 - 24-hour 142.4 µg/m³ AENV Reference #240617
ET	Met One/Gill	083D	No operational issues observed.
RH	Met One/Gill		No operational issues observed.
WS / WD	Met One/ Gill		No operational issues observed.

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on September 3rd (TRS & SO_2).

Parameter	Make	Model	Notes
SO_2	TEI	43C	Two (2) hours were flagged for maintenance on September 17th (changing battery on DACS), no other operational issues observed.
TRS	TEI	43C	Two (2) hours were flagged for maintenance on September 17th (changing battery on DACS), no other operational issues observed.
$PM_{2.5}$	R&P	1400AB	A total of thirty-one (31) hours were flagged baseline drift. Two (2) hours were flagged for maintenance on September 17th (to change filter on TEOM and to change battery on DACS).
ET	Met One	083D	Two (2) hours were flagged for maintenance on September 17th (changing battery on DACS), no other operational issues observed.
WS / WD	Met One	010C/020C	Two (2) hours were flagged for maintenance on September 17th (changing battery on DACS), no other operational issues observed.

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on September 15th (SO_2, O_3 & NO_X). There was power failure on September 1st resulting in four (4) hours of invalid data for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43CTL	No operational issues observed other than above noted power failure.
NOx/NO/NO_2	TEI	42C	No operational issues observed other than above noted power failure.
O_3	TEI	49C	No operational issues observed other than above noted power failure.
$PM_{2.5}$	R&P	1400AB	No operational issues observed other than above noted power failure. A small power spike resulted in one (1) hour of invalid data on September 19th.
ET	n/a	n/a	No operational issues observed other than above noted power failure.
RH	n/a	n/a	No operational issues observed other than above noted power failure.
WS / WD	Blue Sky	857	No operational issues observed other than above noted power failure.

PASZA – Bonanza (Portable) Station

General Station Issues

Routine monthly calibrations were performed on September 2nd (SO_2, TRS, NO_X & O_3).

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
TRS	TEI	43C	Spans dropped outside target from September 3rd to 7th due to a configuration error – fixed September 7th. No other operational issues observed.
NOx/NO/NO_2	TEI	42I	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
ET	Met One		No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on September 7th (SO_2 & H_2S).

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
H_2S	TEI	43A	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS	Gill	Met Pak 3	No operational issues observed.
WD	Gill	Met Pak 3	No operational issues observed.

PASZA
Henry Pirker Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.3 ppb on Sep 28 21:00 Maximum Daily Average: 0.5 ppb on Sep 13

Minimum Value: 0 ppb on Sep 1 01:00
Maximum Diurnal Average: 0.3 ppb at hour 10
Monthly Average: 0.21 ppb

Minimum Daily Average: 0.0 ppb on Sep 4
Minimum Diurnal Average: 0.1 ppb at hour 2
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.4

Hours in Service:	720
Hours of Data:	674
Hours of Missing Data:	46
Hours of Calibration:	33
Percent Operational Time:	98.2

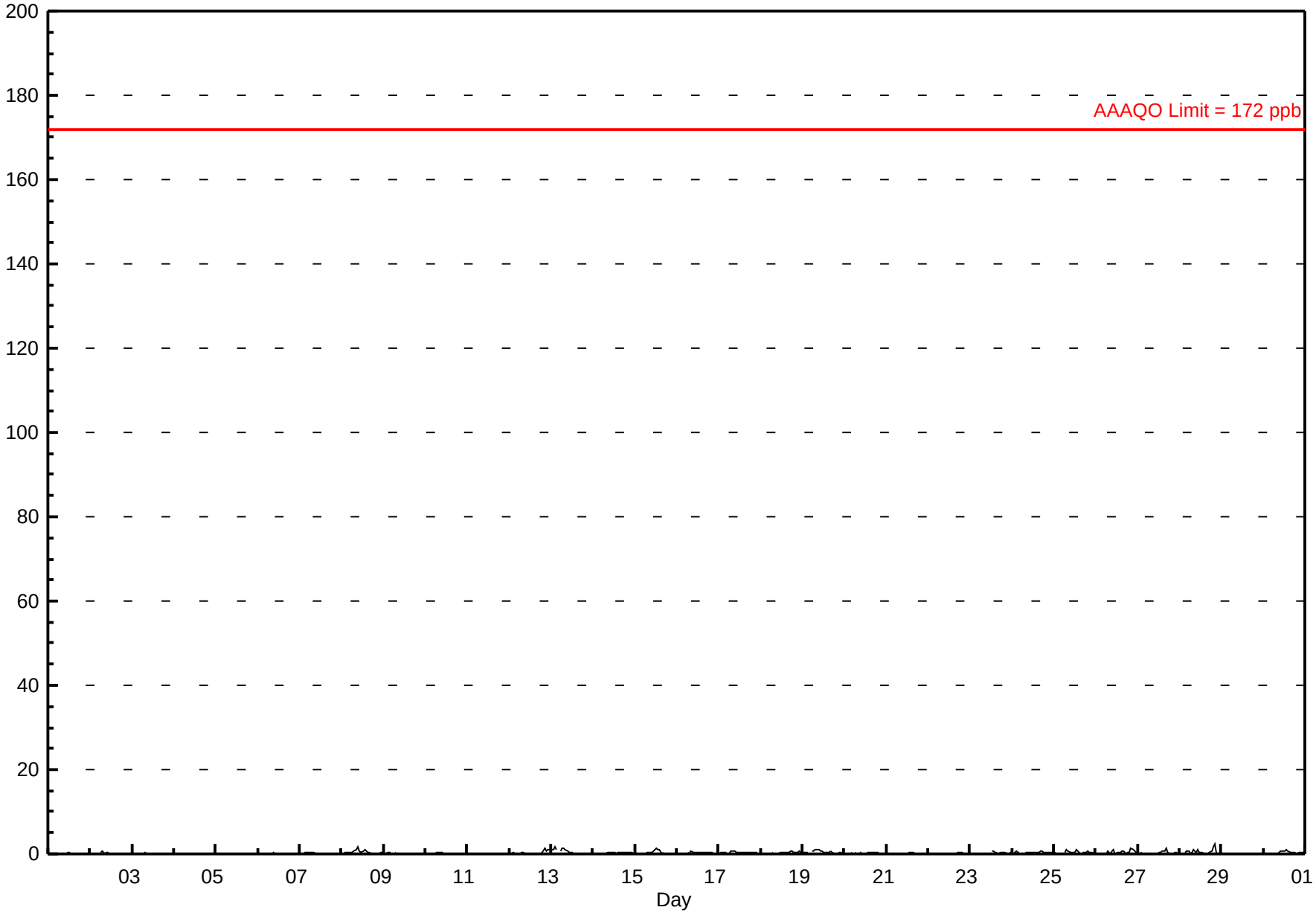
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
2-Sep	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
3-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
4-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
5-Sep	0	0	A	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
6-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
7-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.5
8-Sep	0	0	0	0	0	0	1	1	1	2	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.6
9-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
10-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
12-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.3	1.5
13-Sep	1	1	2	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.7
14-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
15-Sep	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	0	0	P	P	P	P	P	P	P	--	1.3
16-Sep	P	P	P	P	P	P	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
17-Sep	0	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
18-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0.3	0.8
19-Sep	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0.5	1.1
20-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
21-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
22-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Sep	0	0	0	0	0	A	0	C	C	C	C	C	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.6
24-Sep	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.3	0.7
25-Sep	0	0	0	0	0	A	0	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0.3	0.9
26-Sep	0	0	0	0	A	0	0	1	0	1	1	0	0	0	0	1	1	0	0	0	1	1	1	0	0.4	1.4
27-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.2	1.4
28-Sep	0	0	A	0	1	1	0	0	1	0	1	0	0	0	0	0	0	0	1	2	2	0	0	0	0.5	2.3
29-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
30-Sep	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	0.9
	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	Diurnal Average	
	1.0	1.1	1.7	1.0	0.6	0.8	1.2	1.4	1.1	1.6	1.0	1.1	1.3	0.9	0.9	0.8	1.4	0.8	0.8	1.8	2.3	1.0	1.0	0.9	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - September 2010

Maximum Value: 4.0 ppb on Sep 28 21:00

Maximum Daily Average: 1.2 ppb on Sep 28

Minimum Value: 0 ppb on Sep 22 01:00

Minimum Daily Average: 0.2 ppb on Sep 21

Maximum Diurnal Average: 0.8 ppb at hour 21

Minimum Diurnal Average: 0.4 ppb at hour 24

Monthly Average: 0.61 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.7$ $P_{90} = 1.0$ $P_{99} = 2.8$

Hours in Service:	720
Hours of Data:	674
Hours of Missing Data:	46
Hours of Calibration:	33
Percent Operational Time:	98.2

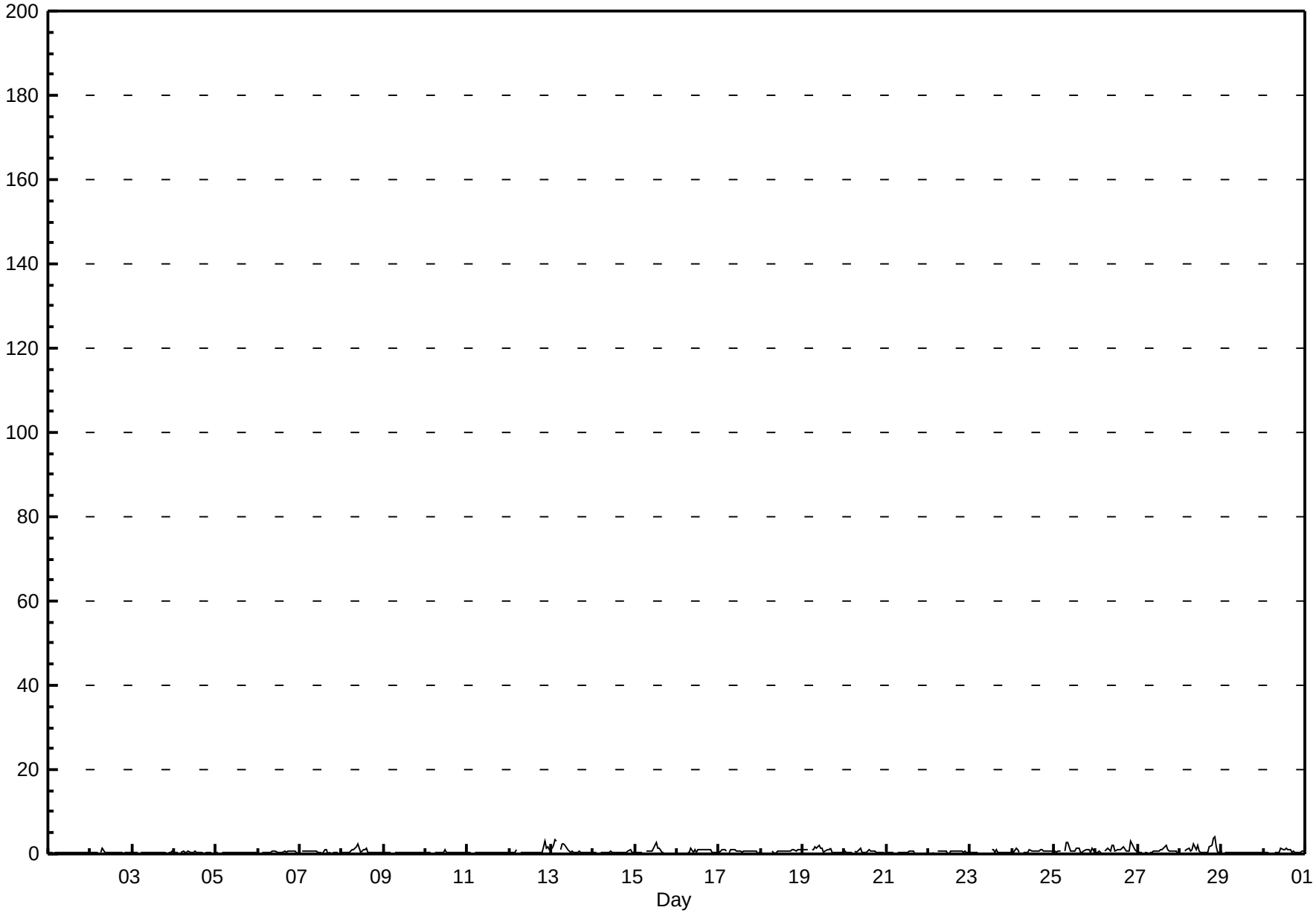
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
2-Sep	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.5
3-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0.4	0.5
4-Sep	0	0	0	A	0	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0.4	0.5
5-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
6-Sep	0	A	0	0	0	1	0	1	1	1	1	0	0	0	0	1	0	1	1	1	1	1	0	0	0.5	0.7
7-Sep	A	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0.5	1.0
8-Sep	0	1	1	1	1	1	1	1	2	3	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0.8	2.5
9-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
10-Sep	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
11-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
12-Sep	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	2	1	0.7	3.0
13-Sep	1	2	3	3	A	1	2	2	2	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	1.1	3.5
14-Sep	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0.5	0.9
15-Sep	0	0	0	0	0	A	1	1	1	1	1	2	3	1	1	0	0	P	P	P	P	P	P	P	--	2.8
16-Sep	P	P	P	P	P	P	0	0	1	0	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0.7	1.4
17-Sep	0	1	1	1	1	A	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0.7	1.1
18-Sep	0	0	0	0	0	A	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
19-Sep	1	1	1	1	A	1	1	2	1	2	2	2	0	1	1	1	1	0	0	0	0	0	0	0	0.9	1.9
20-Sep	1	0	0	0	0	A	1	0	1	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0.5	1.4
21-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.2	0.7
22-Sep	0	0	0	0	A	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0	1	0	0	0.5	0.7
23-Sep	0	0	0	0	0	A	1	C	C	C	C	C	1	1	0	1	0	0	0	0	0	0	0	0	0.5	0.9
24-Sep	0	0	1	1	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4
25-Sep	1	0	1	1	1	A	1	3	3	1	1	1	1	1	1	0	0	1	1	1	1	0	1	0	0.9	2.6
26-Sep	0	0	1	0	A	1	1	1	1	2	2	1	1	1	1	1	2	1	1	1	3	2	1	1	1.0	3.0
27-Sep	1	1	1	A	0	0	0	0	0	1	1	1	1	1	1	2	2	1	1	1	1	1	1	0	0.6	2.2
28-Sep	0	0	A	1	1	1	1	1	3	1	2	1	0	0	0	0	0	2	2	4	4	2	0	0	1.2	4.0
29-Sep	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
30-Sep	1	1	0	0	0	A	1	0	0	0	1	1	1	1	1	1	0	1	0	0	0	0	1	1	0.6	1.4
	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.7	0.8	0.7	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.8	0.6	0.5	0.4	Diurnal Average	
	1.5	2.0	3.5	3.0	1.1	1.2	2.5	2.6	2.6	2.5	2.0	2.0	2.8	1.4	1.3	1.6	2.2	1.6	2.0	3.9	4.0	1.8	1.6	1.0	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

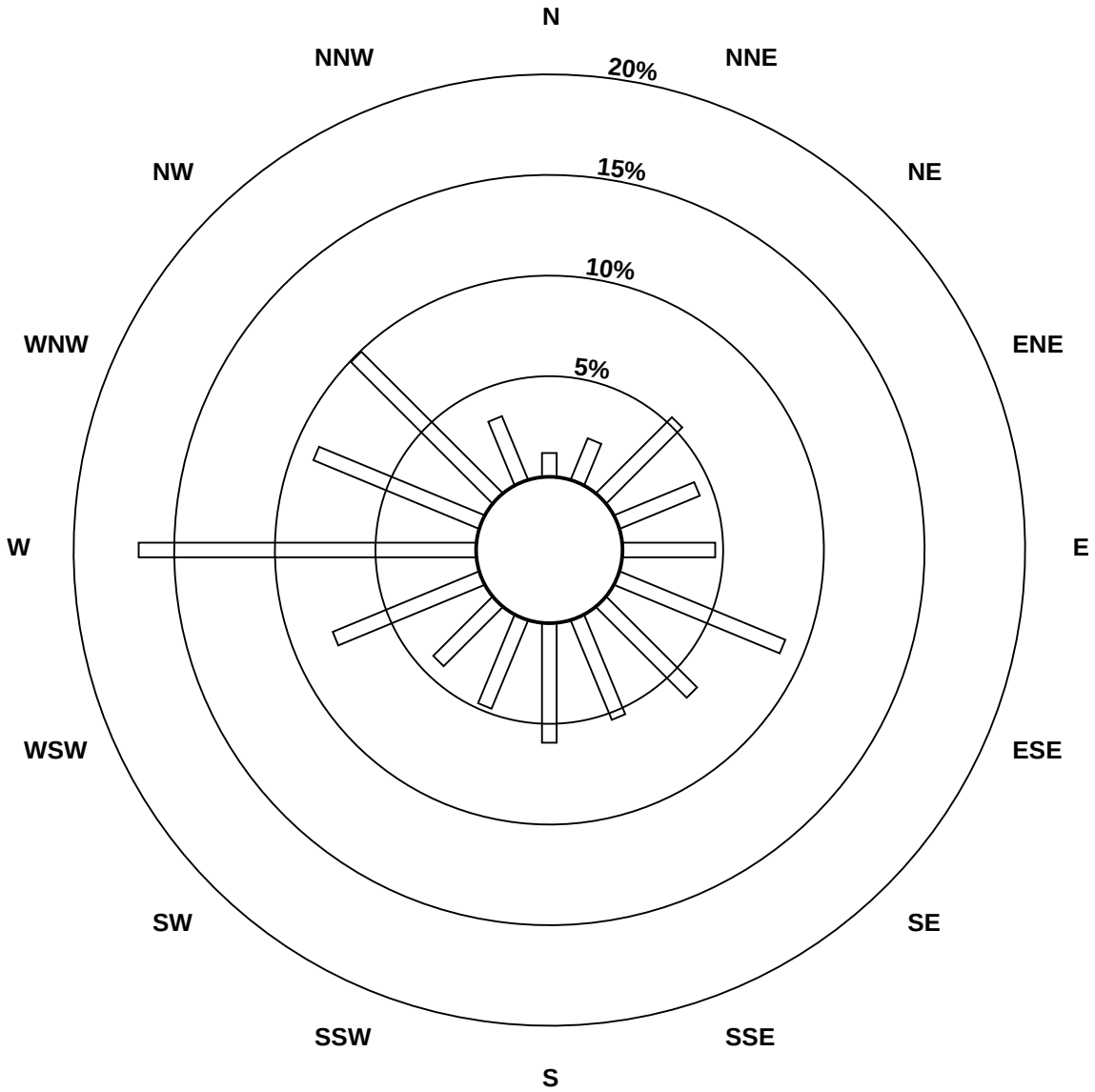
Henry Pirker - September 2010



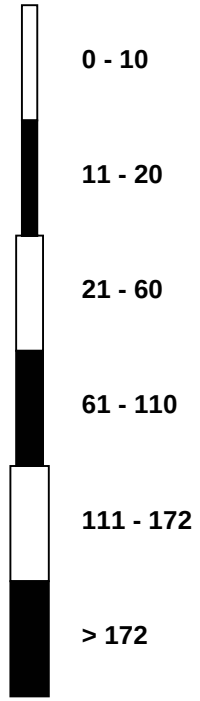
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - September 2010



Pollutant Classes (ppb)



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Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.1 ppb on Sep 8 09:00 Maximum Daily Average: 0.5 ppb on Sep 27

Minimum Value: 0 ppb on Sep 2 01:00 Minimum Daily Average: 0.0 ppb on Sep 20
Maximum Diurnal Average: 0.3 ppb at hour 8 Minimum Diurnal Average: 0.2 ppb at hour 16
Monthly Average: 0.22 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 0.7

Hours in Service:	720
Hours of Data:	666
Hours of Missing Data:	54
Hours of Calibration:	40
Percent Operational Time:	98.1

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
2-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
3-Sep	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
4-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
5-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
6-Sep	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
7-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.4
8-Sep	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
9-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
10-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
11-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
12-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
13-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
14-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
15-Sep	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	P	P	P	P	P	P	P	--	0.5
16-Sep	P	P	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
17-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
18-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
19-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
21-Sep	0	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
22-Sep	0	0	0	0	A	0	0	0	C	C	C	C	C	C	C	N	C	C	0	0	0	0	0	0	--	0.5
23-Sep	0	0	0	0	0	A	C	C	A	0	0	1	1	1	1	1	0	0	0	1	1	0	0	0	0.4	0.7
24-Sep	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0.5	0.8
25-Sep	0	0	0	0	0	A	0	1	0	0	0	1	1	1	0	0	0	0	1	1	1	1	0	0	0.5	0.7
26-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.9
27-Sep	1	0	1	A	1	0	0	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.5	0.8
28-Sep	0	0	A	0	1	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	0.7
29-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	0.5
30-Sep	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6
	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.8	0.7	0.7	0.3	0.5	0.5	0.6	0.8	1.1	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.8	0.8	0.6	0.7	0.7	0.6	0.7	0.9	Diurnal Maximum	

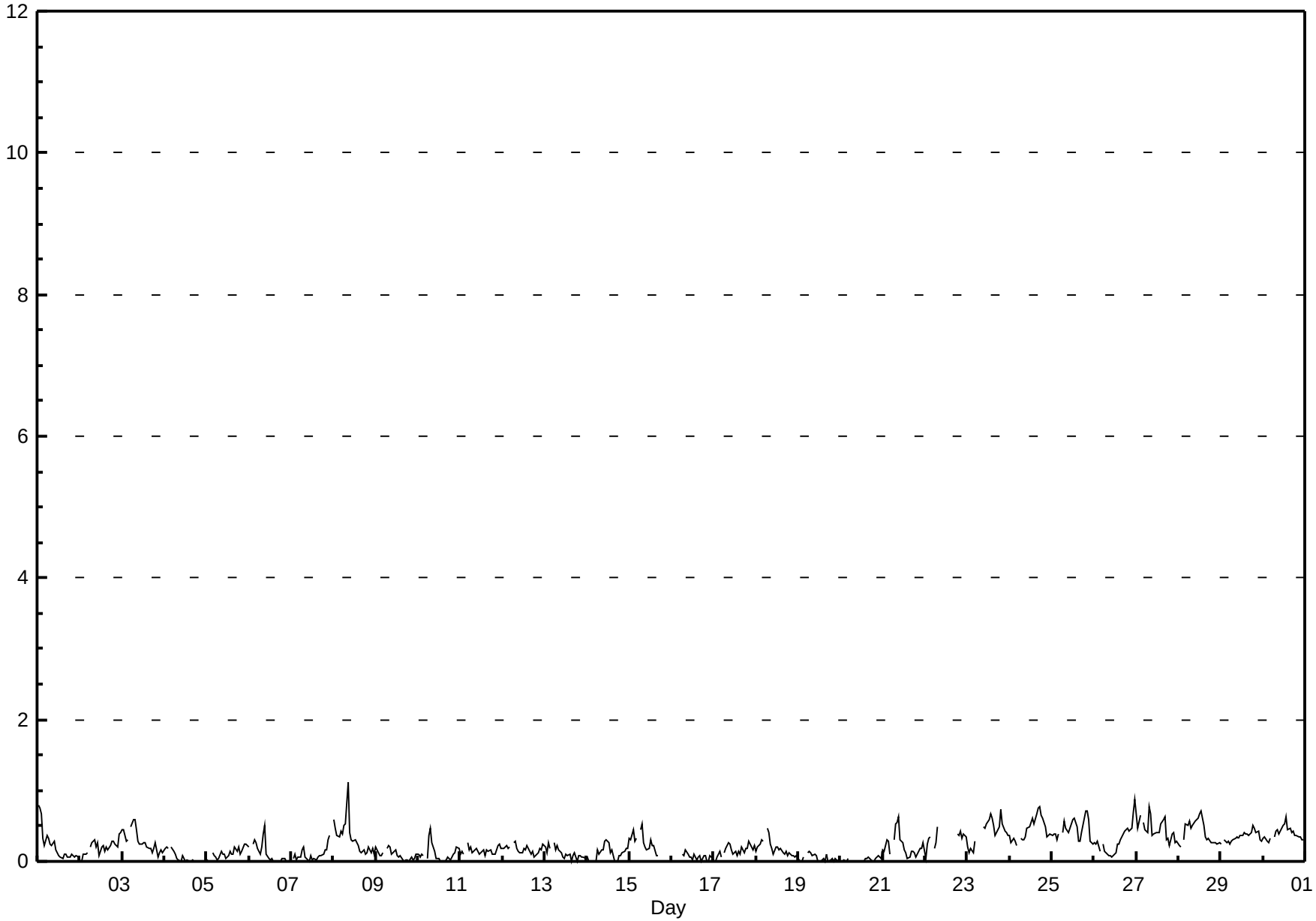
C - Calibration P - Power Failure N - Not Valid A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - September 2010

Maximum Value: 6.5 ppb on Sep 8 09:00

Maximum Daily Average: 1.2 ppb on Sep 8

Minimum Value: 0 ppb on Sep 26 12:00

Minimum Daily Average: 0.6 ppb on Sep 26

Maximum Diurnal Average: 1.1 ppb at hour 9

Minimum Diurnal Average: 0.7 ppb at hour 16

Monthly Average: 0.82 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 0.9$ $P_{90} = 1.1$ $P_{99} = 1.4$

Hours in Service:	720
Hours of Data:	666
Hours of Missing Data:	54
Hours of Calibration:	40
Percent Operational Time:	98.1

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
2-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
3-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
4-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	1.3
5-Sep	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
6-Sep	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
7-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.1
8-Sep	1	1	1	1	1	1	1	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	6.5
9-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.8	1.1
10-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.8	1.1
11-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
12-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
13-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
14-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
15-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	P	P	P	P	P	P	P	--	1.2
16-Sep	P	P	P	P	P	P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
17-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
18-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
19-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
20-Sep	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
21-Sep	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6
22-Sep	1	1	1	1	A	1	1	1	C	C	C	C	C	C	C	N	C	C	1	1	1	1	1	1	--	1.2
23-Sep	1	0	1	1	1	A	C	C	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	0.8	1.6
24-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
25-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
26-Sep	1	0	1	0	A	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0.6	1.4
27-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
28-Sep	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
29-Sep	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
30-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1.1	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	Diurnal Average	
	1.6	1.3	1.7	1.2	1.3	1.3	1.5	1.3	6.5	1.6	1.2	1.0	1.1	1.0	1.2	1.1	1.3	1.1	1.1	1.6	1.1	1.1	1.4	1.4	Diurnal Maximum	

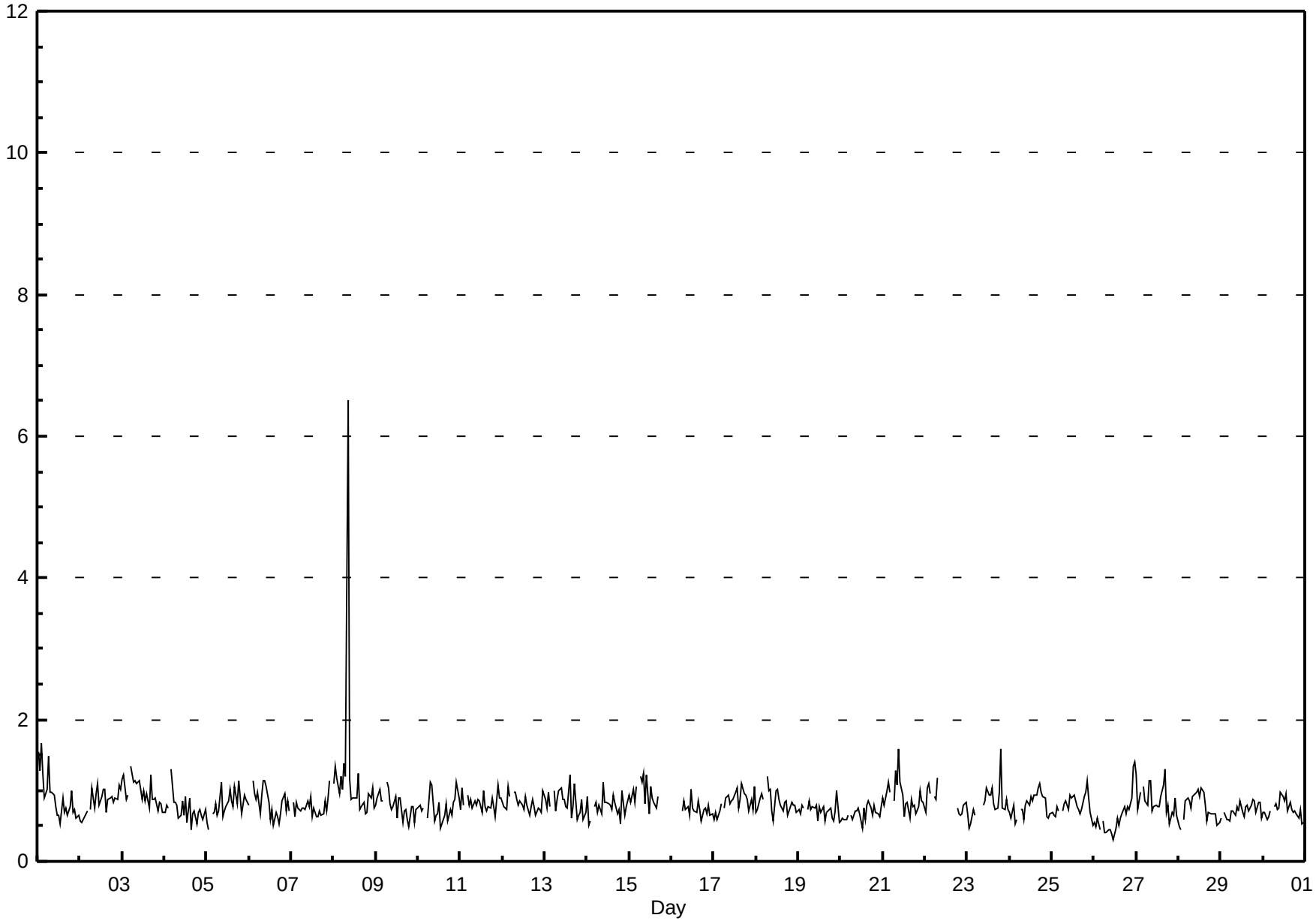
C - Calibration P - Power Failure N - Not Valid A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

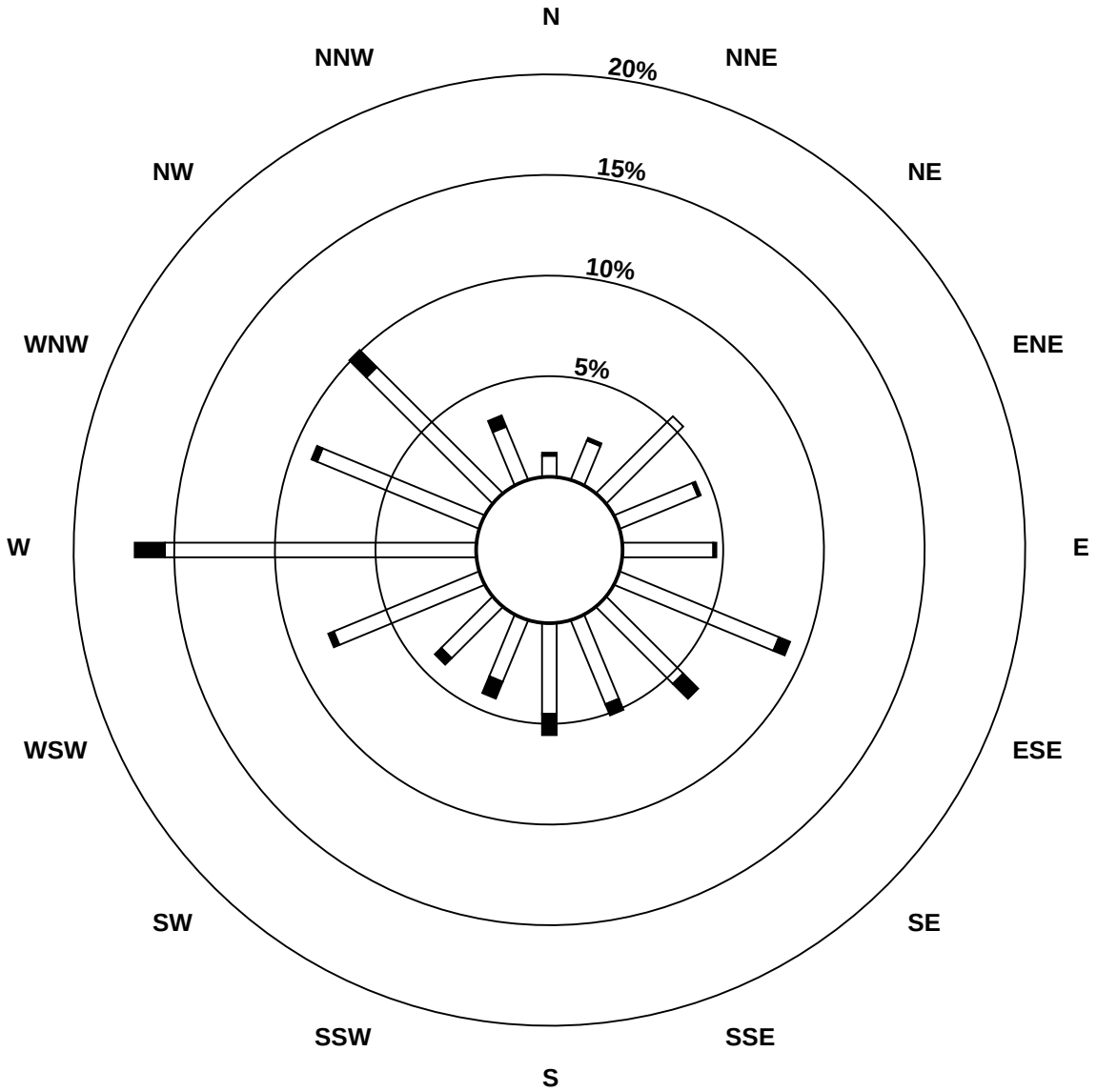
Henry Pirker - September 2010



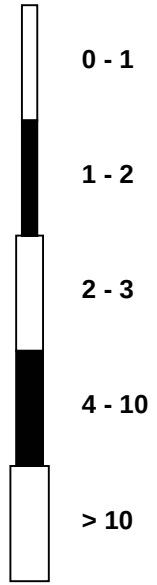
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - September 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 28.0 ppb on Sep 30 08:00
Maximum Daily Average: 12.7 ppb on Sep 27

Minimum Value: 1 ppb on Sep 5 13:00
Minimum Daily Average: 2.1 ppb on Sep 5
Maximum Diurnal Average: 12.0 ppb at hour 7
Minimum Diurnal Average: 3.1 ppb at hour 14
Monthly Average: 6.80 ppb
Percentiles: P_1 = 1.2 P_{10} = 1.9 Q_1 = 2.8 Median = 5.3 Q_3 = 9.4 P_{90} = 14.3 P_{99} = 23.0

Hours in Service:	720
Hours of Data:	670
Hours of Missing Data:	50
Hours of Calibration:	37
Percent Operational Time:	98.2

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-Sep	11	9	8	7	5	8	11	10	9	8	4	4	3	2	3	4	6	2	4	5	8	5	4	3	5.9	10.9
2-Sep	3	4	5	9	9	A	15	16	9	12	10	3	3	3	2	2	2	2	3	6	8	13	16	18	7.6	18.0
3-Sep	9	8	8	7	A	13	10	12	8	5	3	3	3	3	3	3	2	3	5	18	1	2	2	2	5.8	17.9
4-Sep	3	2	2	A	5	7	9	7	4	2	2	2	2	2	1	1	2	2	2	4	4	4	3	2	3.2	8.8
5-Sep	2	2	A	3	2	2	2	1	1	1	1	1	1	1	1	1	2	2	3	3	5	4	4	3	2.1	4.5
6-Sep	3	A	5	6	7	7	6	6	7	10	3	1	2	3	2	1	2	2	2	5	9	9	9	7	5.0	9.6
7-Sep	A	5	4	4	4	6	8	6	4	2	2	2	2	2	2	1	2	1	2	7	14	16	13	A	4.9	16.2
8-Sep	8	6	5	4	5	7	8	8	10	14	8	7	5	4	5	5	5	4	5	6	6	5	4	4	6.1	14.1
9-Sep	5	5	3	3	4	A	10	9	8	6	5	5	4	2	5	6	4	5	5	13	17	12	12	9	6.8	17.3
10-Sep	8	9	8	9	A	11	12	13	11	8	4	3	4	3	2	2	2	3	3	5	13	9	6	6	6.7	13.5
11-Sep	7	6	5	A	7	7	6	8	5	3	2	1	2	1	1	1	2	3	4	8	12	15	17	11	5.6	16.6
12-Sep	10	11	9	6	7	A	15	11	4	3	3	3	3	3	3	3	3	5	6	5	7	6	6	5	5.9	14.9
13-Sep	5	5	4	3	A	7	11	11	6	5	3	4	3	3	4	4	4	7	8	17	14	12	11	12	6.9	16.6
14-Sep	8	8	7	A	6	10	14	16	17	17	12	14	13	9	6	4	5	5	5	13	26	27	24	20	12.4	27.0
15-Sep	15	14	10	10	11	A	15	16	13	7	4	2	2	6	5	4	5	P	P	P	P	P	P	P	--	16.0
16-Sep	P	P	P	P	P	P	11	6	3	2	2	2	2	2	1	1	1	2	3	9	16	13	15	17	6.0	16.6
17-Sep	13	9	12	15	9	A	16	16	12	12	10	3	2	2	2	2	2	2	5	16	28	17	11	11	9.9	27.8
18-Sep	13	14	13	11	12	A	18	16	14	5	4	3	3	2	2	1	2	3	5	8	6	5	6	5	7.5	18.2
19-Sep	5	5	6	5	A	8	7	6	5	4	4	4	4	4	4	4	5	6	4	4	3	3	2	2	4.4	7.7
20-Sep	2	2	2	2	3	A	8	8	6	6	5	5	5	4	8	5	4	4	4	6	8	9	6	7	5.2	9.4
21-Sep	8	8	10	7	7	A	13	12	10	14	14	9	6	5	6	5	3	3	8	11	11	16	21	14	9.5	20.8
22-Sep	9	14	13	14	A	17	16	17	16	10	9	3	2	2	2	3	2	6	11	16	10	13	18	13	10.2	18.2
23-Sep	8	8	11	13	15	A	19	C	C	C	C	C	C	C	C	C	9	9	10	16	21	5	7	5	--	21.2
24-Sep	4	5	6	8	11	A	23	22	19	13	7	5	3	3	4	3	4	7	4	3	5	5	3	4	7.4	22.5
25-Sep	3	4	8	8	7	A	15	19	14	11	9	9	4	3	3	5	11	6	7	11	10	9	2	1	7.8	19.0
26-Sep	2	3	1	2	A	8	5	4	4	3	2	2	2	2	1	2	2	2	3	6	10	14	14	13	4.7	14.4
27-Sep	18	15	13	A	17	16	21	18	16	13	13	5	5	6	8	11	12	8	10	20	21	19	5	3	12.7	21.2
28-Sep	2	2	A	4	6	11	9	5	3	2	2	2	2	2	2	2	2	3	3	4	4	6	5	5	3.8	11.2
29-Sep	5	A	2	1	2	8	6	4	3	5	2	2	2	2	3	3	4	5	6	6	6	6	2	2	3.8	8.3
30-Sep	1	2	6	12	15	A	25	28	23	11	5	4	4	3	2	2	2	5	9	14	8	6	6	5	8.6	28.0
	6.6	6.9	6.9	6.9	7.6	9.0	12.0	11.4	9.0	7.4	5.3	3.9	3.3	3.1	3.2	3.2	3.7	4.0	5.2	9.1	10.7	9.8	8.8	7.5	Diurnal Average	
	17.7	14.5	13.4	14.9	16.7	17.0	24.9	28.0	23.1	16.9	14.1	14.0	13.4	9.0	7.6	10.9	12.3	9.4	10.9	20.2	27.8	27.0	23.9	20.3	Diurnal Maximum	

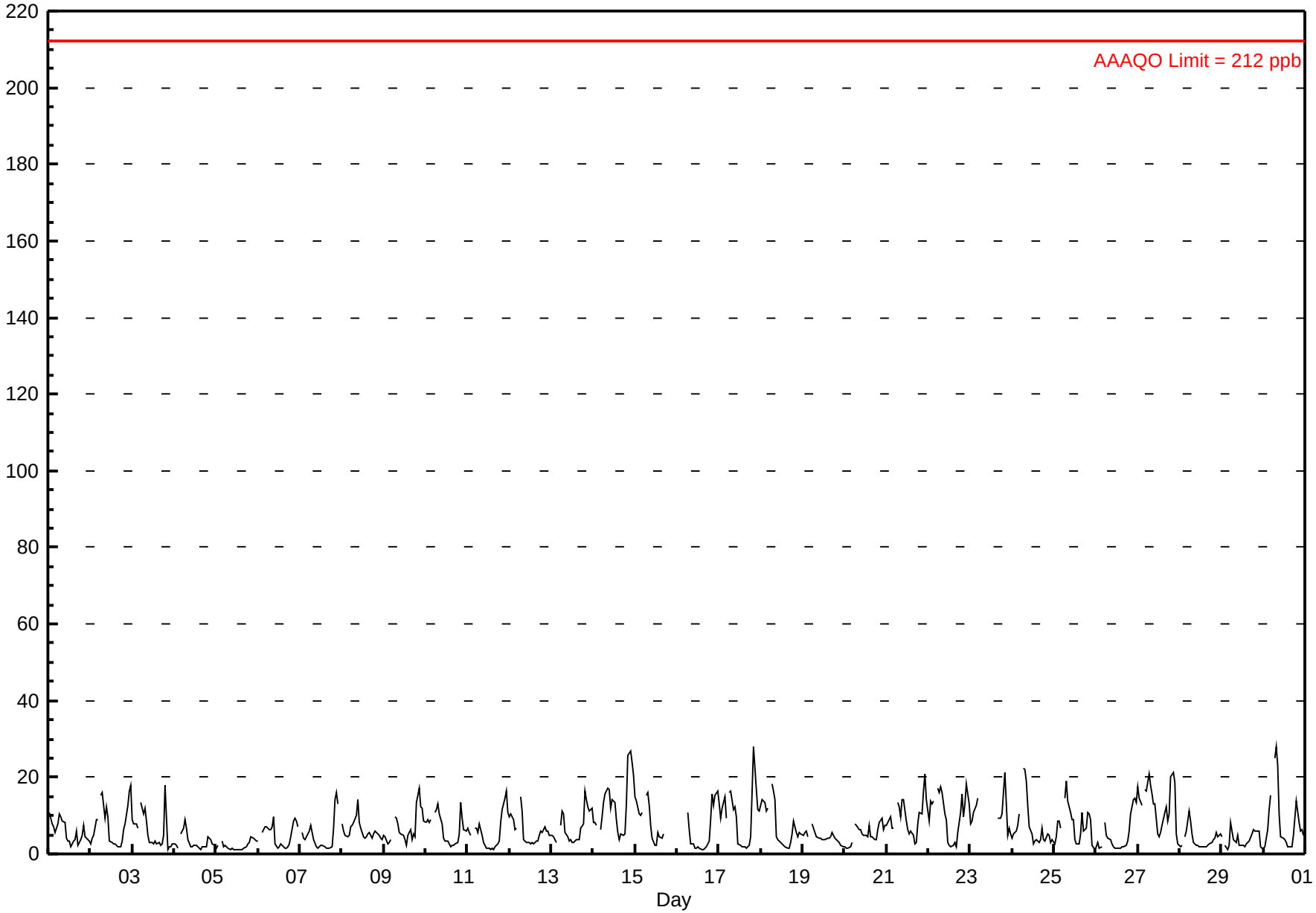
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - September 2010

Maximum Value: 65.7 ppb on Sep 27 17:00

Maximum Daily Average: 20.6 ppb on Sep 27

Minimum Value: 1 ppb on Sep 5 13:00

Minimum Daily Average: 3.3 ppb on Sep 5

Maximum Diurnal Average: 15.2 ppb at hour 8

Minimum Diurnal Average: 5.1 ppb at hour 14

Monthly Average: 9.80 ppb

Percentiles: P_1 = 2.0 P_{10} = 3.0 Q_1 = 4.9 Median = 8.1 Q_3 = 13.2 P_{90} = 19.2 P_{99} = 29.2

Hours in Service:	720
Hours of Data:	670
Hours of Missing Data:	50
Hours of Calibration:	37
Percent Operational Time:	98.2

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-Sep	13	10	10	8	6	10	13	16	10	10	6	5	5	4	8	6	11	8	5	8	11	6	6	4	8.4	15.8
2-Sep	3	5	6	13	11	A	18	18	12	17	16	6	4	5	6	3	3	3	5	10	13	18	21	21	10.4	20.9
3-Sep	10	11	9	9	A	16	12	15	11	6	4	8	4	7	4	5	4	3	9	32	2	3	3	3	8.4	31.7
4-Sep	4	4	2	A	8	10	13	9	6	3	3	3	4	4	2	2	3	3	3	7	6	7	3	3	4.9	13.4
5-Sep	2	3	A	7	3	3	3	3	2	2	2	2	1	2	2	2	3	2	4	4	6	6	5	5	3.3	6.9
6-Sep	5	A	7	7	8	8	8	9	11	13	5	2	4	4	5	3	3	3	4	10	11	11	10	8	7.1	13.4
7-Sep	A	8	5	4	5	8	9	13	6	2	3	4	5	4	4	4	3	2	3	11	19	18	15	A	7.2	18.7
8-Sep	11	7	6	5	6	8	9	10	15	16	13	9	7	6	7	10	7	5	9	8	7	6	6	5	8.3	16.1
9-Sep	6	6	4	4	7	A	12	12	10	8	8	10	6	4	7	11	5	9	7	22	22	15	17	11	9.8	22.3
10-Sep	11	10	9	11	A	15	13	16	14	9	7	5	6	6	3	5	4	5	6	8	22	15	10	8	9.6	22.3
11-Sep	10	8	7	A	9	8	7	11	7	4	3	2	4	2	3	3	4	5	6	12	16	20	20	14	8.2	20.1
12-Sep	12	12	10	8	8	A	17	16	6	5	4	7	3	4	4	5	7	7	14	7	10	8	8	5	8.2	17.4
13-Sep	5	6	4	4	A	10	17	12	9	8	5	9	5	8	17	4	5	9	15	22	19	15	15	15	10.5	22.3
14-Sep	11	9	10	A	9	14	17	17	19	20	13	15	16	13	10	6	7	6	8	23	28	29	27	23	15.3	29.3
15-Sep	19	17	13	11	12	A	16	27	16	9	5	3	6	9	10	8	11	P	P	P	P	P	P	P	--	26.8
16-Sep	P	P	P	P	P	P	15	10	4	4	3	3	3	2	2	2	2	4	7	14	19	17	20	21	8.5	21.1
17-Sep	16	11	13	16	15	A	20	24	14	29	13	6	4	4	3	3	3	3	10	25	31	28	18	15	14.0	31.0
18-Sep	16	16	15	14	13	A	22	19	20	7	9	4	4	4	3	2	3	5	11	13	9	7	8	6	10.0	22.3
19-Sep	8	8	9	7	A	10	9	7	7	7	6	5	5	5	6	5	5	9	7	7	5	4	3	3	6.4	9.8
20-Sep	2	2	2	3	5	A	11	13	8	9	8	8	8	7	20	8	7	8	7	9	10	12	8	9	8.0	20.3
21-Sep	10	10	11	12	10	A	16	15	12	16	16	11	7	7	6	7	6	6	13	15	12	20	24	19	12.3	24.4
22-Sep	11	16	18	15	A	20	19	21	18	14	11	7	3	3	17	9	4	10	15	20	14	24	23	16	14.3	23.9
23-Sep	11	11	12	15	17	A	23	C	C	C	C	C	C	C	C	C	14	24	15	21	29	9	12	7	--	28.9
24-Sep	5	6	11	9	17	A	28	27	28	20	10	9	4	7	7	6	5	12	10	5	7	10	4	4	11.1	27.9
25-Sep	4	8	11	12	11	A	20	21	19	14	16	12	7	5	4	10	14	13	11	14	14	14	5	2	11.4	21.4
26-Sep	4	4	2	3	A	13	8	6	6	4	3	3	3	3	2	3	3	4	5	9	15	24	22	23	7.5	24.3
27-Sep	22	19	15	A	23	21	23	24	18	16	19	12	7	7	14	55	66	11	17	23	24	24	7	4	20.6	65.7
28-Sep	3	3	A	5	9	14	13	8	4	3	3	3	3	3	3	3	4	4	5	5	5	7	7	11	5.7	13.8
29-Sep	12	A	4	2	4	15	12	7	6	9	5	5	6	4	5	5	6	8	12	10	10	12	3	3	7.2	14.7
30-Sep	4	4	12	16	23	A	29	30	30	19	9	8	6	4	4	3	5	9	13	21	11	9	15	7	12.6	30.5
	8.9	8.8	8.9	8.9	10.4	12.0	15.2	15.2	12.0	10.5	7.9	6.5	5.2	5.1	6.5	6.9	7.6	7.0	8.9	13.6	14.1	13.8	12.0	9.9	Diurnal Average	
	21.6	19.4	17.9	16.4	23.5	21.0	29.3	30.5	29.7	28.6	18.5	15.4	15.6	12.9	20.3	55.0	65.7	23.7	17.5	31.7	31.0	29.3	27.3	23.3	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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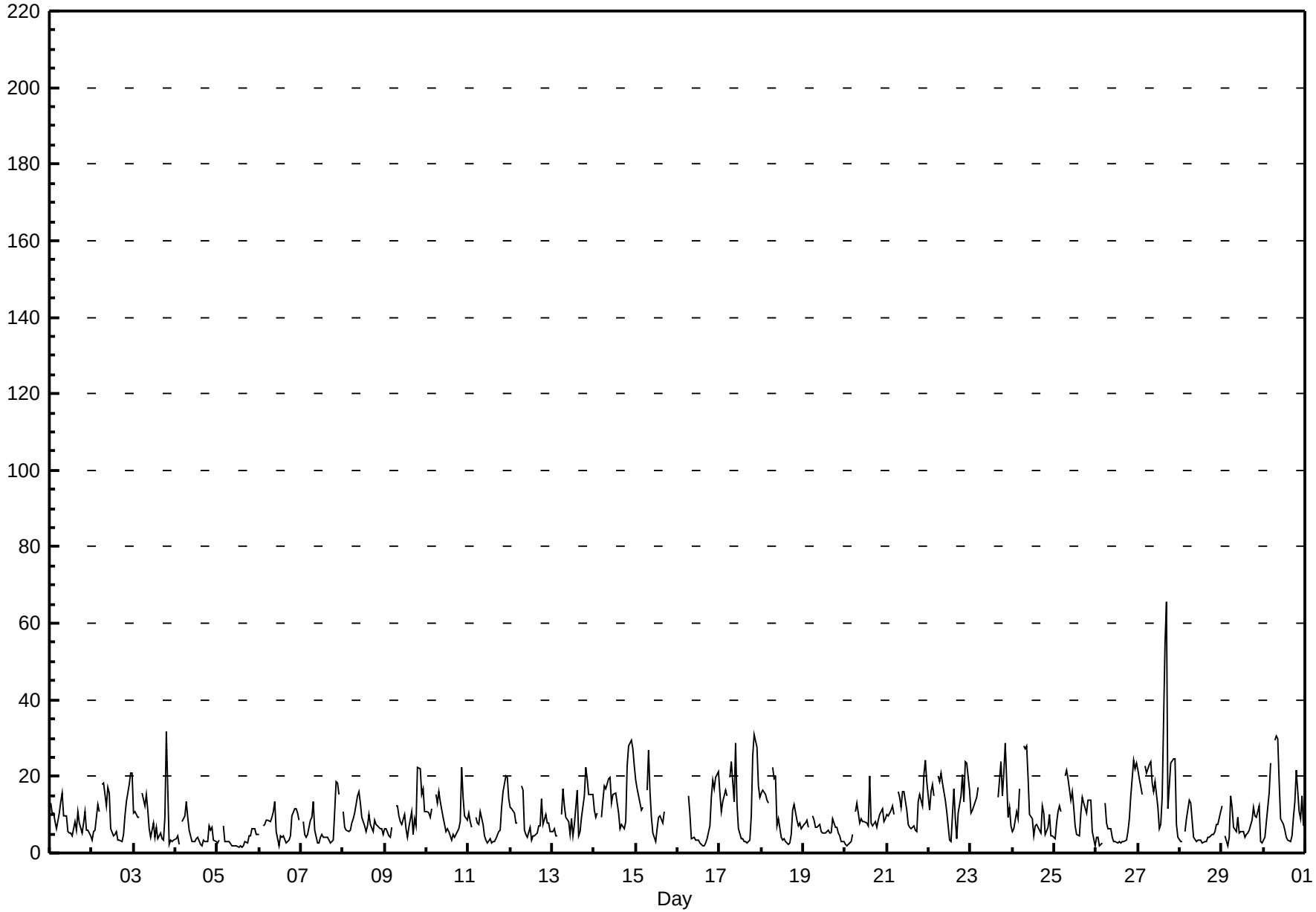
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

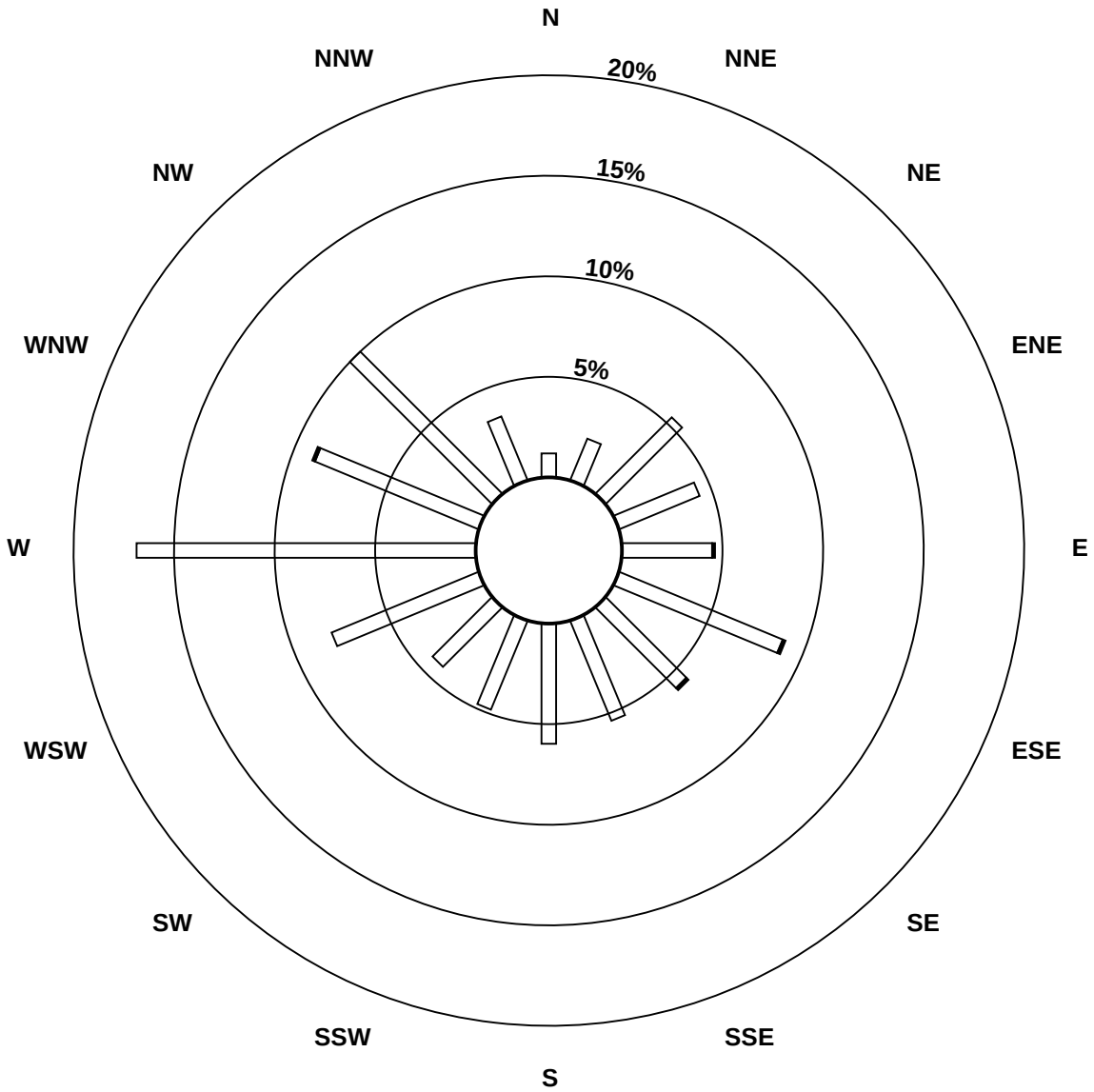
Henry Pirker - September 2010



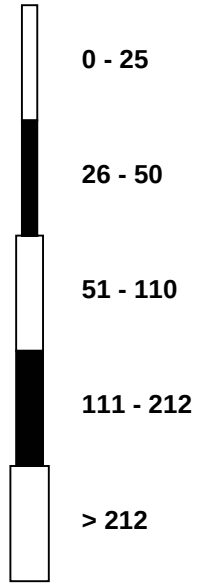
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - September 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 61.7 ppb on Sep 22 08:00
Maximum Daily Average: 8.7 ppb on Sep 22

Minimum Value: 0 ppb on Sep 23 22:00
Minimum Daily Average: 0.2 ppb on Sep 5
Maximum Diurnal Average: 15.1 ppb at hour 8
Minimum Diurnal Average: 0.4 ppb at hour 19
Monthly Average: 2.95 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.3 Median = 0.7 Q_3 = 1.8 P_{90} = 7.5 P_{99} = 36.1

Hours in Service:	720
Hours of Data:	670
Hours of Missing Data:	50
Hours of Calibration:	37
Percent Operational Time:	98.2

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-Sep	1	1	1	0	1	3	6	6	4	2	2	2	1	1	1	1	2	0	0	0	0	0	0	0	1.5	5.9
2-Sep	0	0	0	1	1	A	24	28	6	11	4	1	1	1	1	1	1	0	1	0	0	1	3	7	4.1	27.8
3-Sep	0	0	0	1	A	10	28	33	7	4	2	2	1	1	0	0	0	0	0	1	0	0	0	0	4.0	32.5
4-Sep	0	0	0	A	0	0	0	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.2
5-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
6-Sep	0	A	0	0	1	1	1	2	3	6	1	0	1	1	1	1	1	1	0	0	1	0	1	0	0.9	6.3
7-Sep	A	0	0	0	0	1	2	3	2	1	1	1	1	1	1	1	1	0	0	0	2	10	13	A	1.8	13.5
8-Sep	1	1	1	1	1	2	8	15	12	14	5	4	4	3	2	2	2	1	1	1	0	1	1	0	3.4	14.9
9-Sep	0	0	0	0	1	A	2	3	2	2	2	2	1	0	1	1	1	1	1	1	2	1	1	0	1.2	2.9
10-Sep	0	0	0	1	A	10	29	36	26	11	5	2	1	1	1	1	1	1	0	0	1	0	0	0	5.4	36.2
11-Sep	0	0	0	A	0	0	0	3	2	1	1	0	0	0	0	0	0	1	0	0	1	1	3	0	0.7	2.8
12-Sep	1	1	1	0	0	A	8	9	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1.4	8.6
13-Sep	0	0	0	0	A	0	1	2	2	2	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0.8	2.2
14-Sep	0	0	0	A	0	0	6	18	29	30	18	22	17	10	3	1	1	1	0	0	3	14	10	6	8.3	29.7
15-Sep	14	13	7	4	4	A	33	49	23	11	5	1	1	2	3	2	2	P	P	P	P	P	P	P	--	49.1
16-Sep	P	P	P	P	P	P	2	2	1	1	1	1	0	1	0	0	0	1	1	0	1	1	1	1	0.8	2.0
17-Sep	1	0	1	4	2	A	13	42	20	20	12	2	1	1	1	1	0	0	0	0	4	1	0	0	5.5	42.4
18-Sep	1	5	6	5	7	A	37	29	10	3	3	2	1	1	1	0	0	0	0	0	0	0	0	0	4.9	36.9
19-Sep	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0	0.6	1.3
20-Sep	0	0	0	0	0	A	1	3	2	2	2	2	2	2	5	1	1	1	0	0	1	1	1	0	1.2	5.0
21-Sep	1	2	7	5	2	A	7	18	14	35	30	12	8	7	6	3	1	1	1	1	1	1	3	1	7.1	34.5
22-Sep	0	6	3	8	A	19	29	62	41	12	9	2	1	0	1	1	0	0	1	1	0	0	3	1	8.7	61.7
23-Sep	0	0	0	1	4	A	31	C	C	C	C	C	C	C	C	C	1	1	0	0	0	0	0	0	--	31.4
24-Sep	0	0	0	0	0	A	6	12	18	8	3	2	1	1	1	1	2	3	0	0	0	0	0	0	2.6	18.1
25-Sep	0	0	0	0	0	A	1	2	2	3	5	5	1	1	1	1	2	1	0	2	4	3	0	0	1.4	5.2
26-Sep	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.0
27-Sep	0	0	0	A	0	0	2	12	15	6	8	2	1	1	2	4	14	1	0	3	9	7	0	0	3.9	15.2
28-Sep	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.2
29-Sep	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.3	1.5
30-Sep	0	0	0	0	2	A	14	48	33	6	2	1	1	1	0	0	0	0	0	0	0	0	0	0	4.8	48.0
	0.8	1.2	1.1	1.3	1.1	2.8	9.8	15.1	9.7	6.8	4.4	2.5	1.7	1.4	1.3	0.9	1.2	0.6	0.4	0.6	1.1	1.5	1.5	0.7	Diurnal Average	
	14.0	12.5	7.0	8.4	6.8	19.2	36.9	61.7	40.8	34.5	29.8	22.2	16.8	9.7	6.0	4.5	13.8	3.0	0.9	3.5	9.4	13.7	13.5	7.1	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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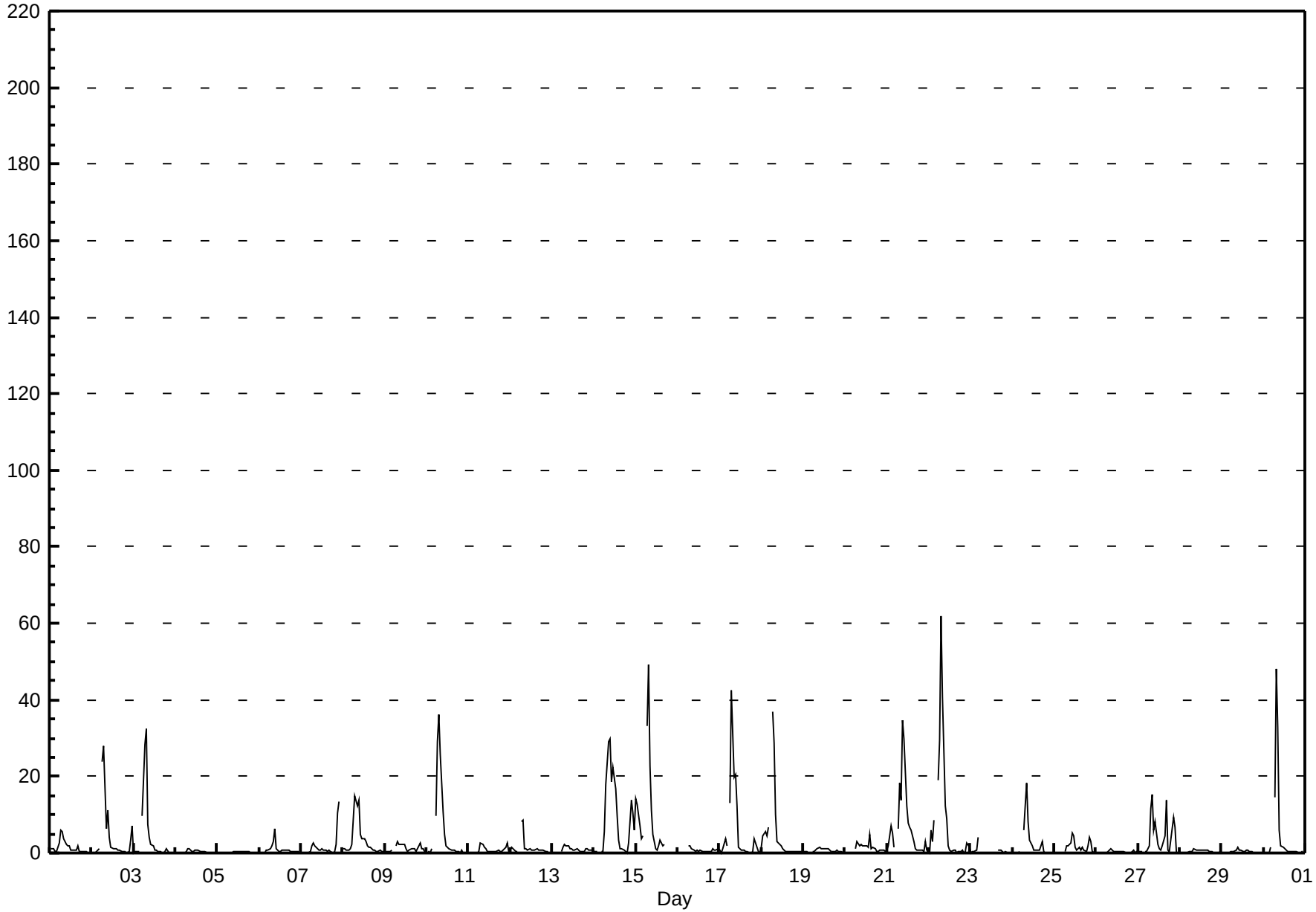
Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - September 2010

Maximum Value: 129.7 ppb on Sep 27 17:00

Maximum Daily Average: 17.3 ppb on Sep 22

Minimum Value: 0 ppb on Sep 24 04:00

Minimum Daily Average: 0.5 ppb on Sep 5

Maximum Diurnal Average: 26.5 ppb at hour 8

Minimum Diurnal Average: 1.8 ppb at hour 1

Monthly Average: 6.56 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.4 Q_1 = 1.0 Median = 2.0 Q_3 = 5.5 P_{90} = 17.9 P_{99} = 73.1

Hours in Service:	720
Hours of Data:	670
Hours of Missing Data:	50
Hours of Calibration:	37
Percent Operational Time:	98.2

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-Sep	3	4	3	1	1	6	14	16	7	3	4	3	2	3	5	4	6	3	1	1	1	1	1	0	3.8	15.8
2-Sep	0	0	0	2	3	A	42	45	11	20	9	4	2	3	4	2	1	1	1	1	1	2	14	14	7.9	44.5
3-Sep	1	2	1	3	A	25	42	58	12	6	4	10	5	2	1	1	1	1	1	7	0	0	0	0	7.9	58.2
4-Sep	0	0	0	A	0	0	2	2	3	1	1	1	2	1	1	1	1	1	1	0	0	0	0	0	0.7	2.6
5-Sep	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	2	0	0	0	0	1	0.5	1.5
6-Sep	0	A	1	1	4	2	4	4	9	9	3	1	3	3	4	3	3	3	2	1	4	2	2	1	2.8	9.2
7-Sep	A	0	0	1	0	2	4	18	3	2	2	3	3	2	2	2	2	1	1	1	14	22	17	A	4.5	21.6
8-Sep	3	2	2	2	2	5	20	24	30	18	11	15	7	6	3	6	3	2	5	1	2	3	4	1	7.4	30.2
9-Sep	2	2	1	1	2	A	5	8	3	8	9	24	2	1	2	4	2	5	1	5	5	3	5	1	4.4	23.6
10-Sep	0	1	0	4	A	24	38	50	51	17	12	4	3	3	1	2	1	1	1	0	2	1	1	1	9.5	50.6
11-Sep	1	1	2	A	0	1	1	4	4	2	2	2	1	1	2	1	1	2	1	1	2	5	7	2	2.0	7.0
12-Sep	2	7	2	1	1	A	23	21	4	4	2	5	1	3	3	3	4	3	11	3	3	4	1	1	4.9	23.0
13-Sep	1	1	0	1	A	2	8	3	3	9	4	8	2	6	8	1	1	1	2	4	2	2	2	3	3.2	9.0
14-Sep	2	2	1	A	2	1	21	24	34	36	21	27	23	14	9	3	2	1	1	2	9	26	22	12	12.8	36.1
15-Sep	17	15	14	6	6	A	49	74	52	15	10	2	3	4	12	8	9	P	P	P	P	P	P	P	--	73.5
16-Sep	P	P	P	P	P	P	4	3	3	2	2	2	2	1	1	1	1	1	2	2	3	4	4	3	2.2	4.0
17-Sep	2	1	5	9	6	A	23	91	26	76	19	6	5	2	1	2	1	1	1	1	8	6	2	1	12.7	90.8
18-Sep	3	8	10	9	13	A	44	43	16	5	9	3	2	3	2	1	1	1	1	3	3	1	4	3	8.1	44.1
19-Sep	3	4	4	2	A	1	3	2	4	5	4	4	4	2	2	3	1	1	1	5	2	1	2	1	2.7	4.8
20-Sep	0	0	1	1	1	A	4	11	4	6	4	6	6	5	23	4	2	3	2	1	2	2	1	1	4.0	22.6
21-Sep	5	5	19	22	5	A	13	26	25	45	39	20	10	10	8	5	3	4	2	3	3	1	6	2	12.3	45.0
22-Sep	1	14	12	19	A	53	60	85	54	26	19	6	1	1	17	9	1	1	1	3	1	6	6	3	17.3	84.9
23-Sep	1	2	2	2	11	A	53	C	C	C	C	C	C	C	C	C	7	5	1	1	2	0	0	0	--	52.7
24-Sep	0	0	0	0	9	A	18	41	48	27	6	4	2	2	2	2	3	4	2	0	1	0	0	0	7.4	48.0
25-Sep	0	0	0	1	2	A	3	4	3	4	12	7	4	2	3	2	4	3	7	7	7	8	1	0	3.6	12.0
26-Sep	0	0	0	0	A	1	1	1	2	2	1	1	1	1	1	1	1	1	0	0	0	8	1	4	1.1	7.5
27-Sep	1	1	2	A	3	1	6	19	23	10	20	11	15	2	11	83	130	2	2	18	21	17	0	0	17.3	129.7
28-Sep	0	0	A	0	0	2	1	1	20	1	1	1	2	1	1	1	2	1	1	1	1	0	0	4	1.7	19.6
29-Sep	0	A	0	0	0	2	2	1	2	3	2	2	2	1	2	2	1	1	1	1	0	1	0	0	1.0	3.3
30-Sep	0	0	0	3	9	A	34	89	70	14	5	9	2	2	1	1	1	1	2	2	1	1	2	1	10.8	88.5
	1.8	2.7	3.1	3.5	3.5	7.6	17.9	26.5	18.1	13.0	8.1	6.6	4.0	3.0	4.5	5.3	6.4	1.8	1.9	2.6	3.5	4.4	3.6	2.1	Diurnal Average	
	17.4	15.3	18.9	21.5	12.9	53.4	59.9	90.8	69.9	75.5	38.6	26.6	23.0	14.4	22.6	82.8	129.7	5.3	10.8	18.0	21.4	26.4	21.6	14.3	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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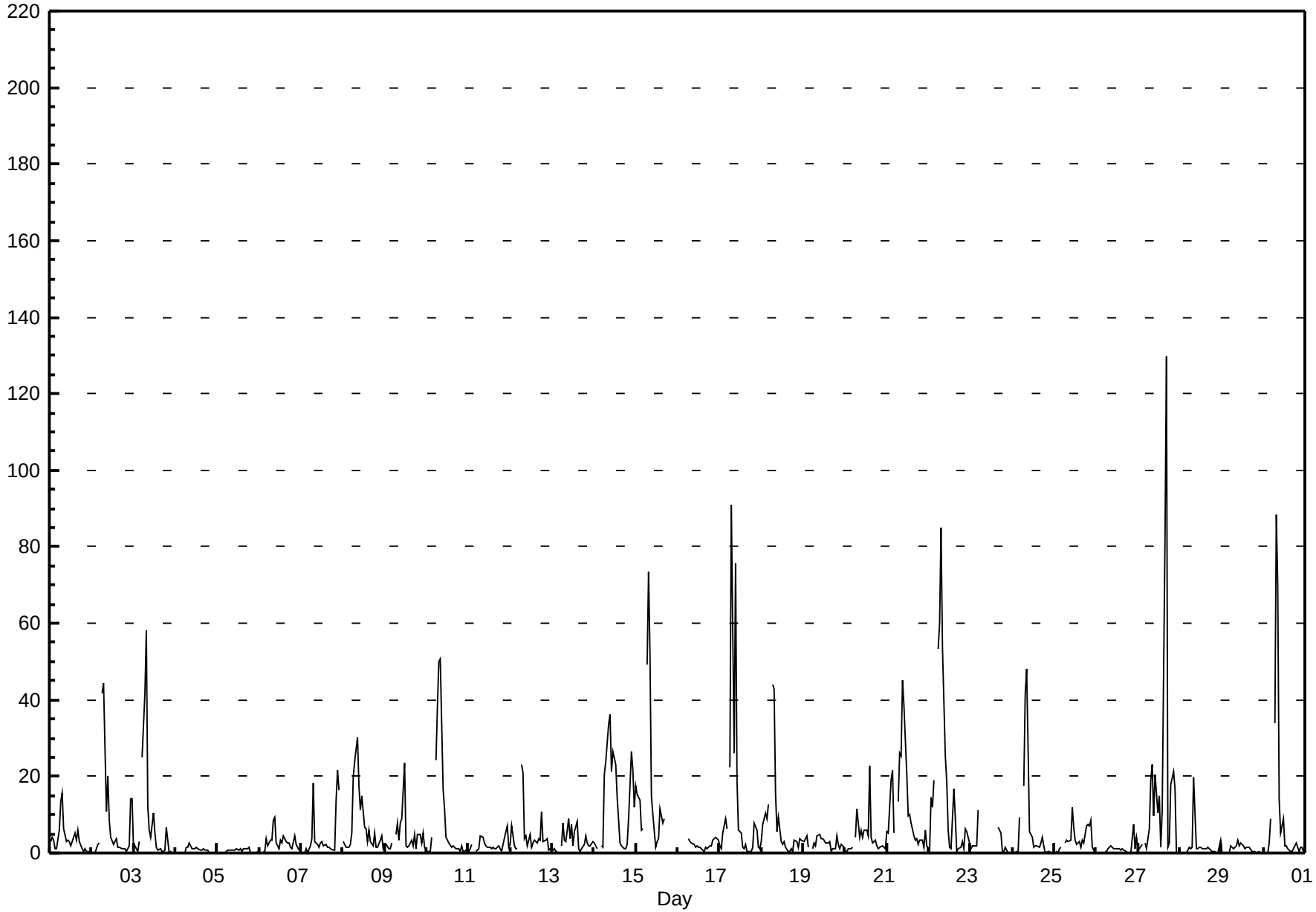
Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - September 2010



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Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 79.3 ppb on Sep 22 08:00
Maximum Daily Average: 20.9 ppb on Sep 14

Minimum Value: 1 ppb on Sep 5 09:00
Minimum Daily Average: 2.3 ppb on Sep 5
Maximum Diurnal Average: 26.7 ppb at hour 8
Minimum Diurnal Average: 4.2 ppb at hour 16
Monthly Average: 9.85 ppb
Percentiles: P_1 = 1.4 P_{10} = 2.3 Q_1 = 3.5 Median = 6.2 Q_3 = 11.9 P_{90} = 21.0 P_{99} = 55.1

Hours in Service:	720
Hours of Data:	670
Hours of Missing Data:	50
Hours of Calibration:	37
Percent Operational Time:	98.2

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-Sep	12	11	9	7	6	11	17	16	13	11	6	5	4	3	4	5	8	3	4	5	8	5	4	3	7.5	16.6
2-Sep	3	4	5	10	10	A	39	44	16	23	14	5	4	4	4	3	3	2	4	7	8	13	20	25	11.8	44.0
3-Sep	9	8	8	8	A	24	39	45	16	9	5	5	3	4	3	3	3	3	5	19	1	2	2	3	9.9	44.6
4-Sep	3	2	2	A	5	7	9	8	5	2	2	3	3	3	2	2	2	2	2	4	4	4	3	2	3.5	9.4
5-Sep	1	2	A	3	2	2	2	2	1	2	2	2	1	2	1	1	2	2	3	3	5	4	4	3	2.3	4.5
6-Sep	3	A	6	6	8	8	7	8	10	16	4	2	3	3	3	2	2	2	3	5	9	10	9	7	5.9	16.0
7-Sep	A	5	4	4	5	7	9	8	6	3	2	2	3	3	2	2	2	2	2	7	16	27	26	A	6.7	26.6
8-Sep	9	7	6	5	6	9	16	23	23	28	13	11	8	7	6	7	7	5	6	7	6	6	5	4	9.5	27.8
9-Sep	5	5	3	3	5	A	12	12	10	8	7	7	5	3	6	8	5	6	5	15	20	13	13	9	8.1	19.9
10-Sep	9	9	8	10	A	21	41	49	36	18	9	5	5	4	2	3	3	3	4	6	14	10	6	6	12.3	49.4
11-Sep	7	6	5	A	7	7	6	10	7	4	3	2	2	2	2	2	2	3	4	8	12	16	19	11	6.5	19.5
12-Sep	11	12	10	7	7	A	23	20	5	4	4	4	3	4	4	4	4	6	7	6	8	6	6	5	7.4	23.2
13-Sep	5	5	4	3	A	8	13	13	7	7	4	5	4	4	5	4	4	7	9	18	15	13	12	13	7.8	17.9
14-Sep	9	9	8	A	7	10	19	34	47	47	31	36	30	19	9	5	6	6	5	13	29	41	35	27	20.9	46.8
15-Sep	29	26	17	14	15	A	49	65	36	19	9	3	3	7	8	6	8	P	P	P	P	P	P	P	--	65.3
16-Sep	P	P	P	P	P	P	13	8	4	3	2	2	2	2	2	2	2	2	4	9	17	14	16	18	6.8	17.8
17-Sep	14	10	13	19	11	A	29	59	32	33	22	4	3	3	3	2	2	2	5	17	32	18	12	11	15.5	59.1
18-Sep	14	19	19	16	19	A	55	45	25	8	7	5	4	3	2	2	2	3	6	9	6	5	6	6	12.4	55.3
19-Sep	5	6	6	5	A	8	7	6	6	6	5	5	5	5	5	5	5	6	4	5	4	3	3	2	5.1	8.2
20-Sep	2	2	2	2	3	A	9	11	8	9	7	7	7	6	13	6	6	5	4	7	9	10	7	8	6.5	12.6
21-Sep	8	10	17	12	8	A	20	30	24	49	44	21	14	12	12	8	4	4	9	11	11	17	24	15	16.7	48.8
22-Sep	9	20	16	22	A	36	46	79	57	23	18	5	3	2	3	4	2	6	12	16	10	14	21	15	19.2	79.3
23-Sep	8	9	11	14	19	A	51	C	C	C	C	C	C	C	C	C	10	10	11	16	22	5	7	5	--	50.9
24-Sep	4	5	6	8	11	A	29	35	37	21	11	7	3	4	4	4	6	10	4	4	5	5	3	4	10.0	37.3
25-Sep	3	4	9	9	7	A	15	21	16	14	14	14	5	4	4	6	12	7	7	13	14	12	3	1	9.3	21.0
26-Sep	2	3	1	2	A	8	5	5	5	4	2	2	2	2	2	2	2	2	3	6	10	15	15	14	5.0	15.0
27-Sep	18	15	13	A	17	17	23	30	31	19	21	8	6	7	10	16	26	9	11	24	31	25	5	3	16.7	31.1
28-Sep	2	2	A	5	6	12	9	6	4	3	3	3	3	3	3	2	3	3	3	4	4	6	5	5	4.3	11.9
29-Sep	5	A	2	1	2	9	7	4	3	6	3	3	3	3	3	4	4	6	7	6	6	6	2	2	4.3	8.8
30-Sep	2	2	6	12	18	A	40	77	57	17	7	6	5	4	3	2	2	5	10	15	9	6	7	5	13.7	76.6
	7.5	8.1	8.0	8.3	8.9	12.0	22.0	26.7	18.8	14.3	9.8	6.5	5.1	4.5	4.5	4.2	5.0	4.6	5.6	9.8	12.0	11.5	10.4	8.3	Diurnal Average	
	29.1	26.3	19.2	22.5	19.1	36.4	55.3	79.3	57.0	48.8	44.0	36.4	30.3	18.9	12.6	15.6	26.1	10.2	11.7	24.0	31.7	40.9	34.5	26.6	Diurnal Maximum	

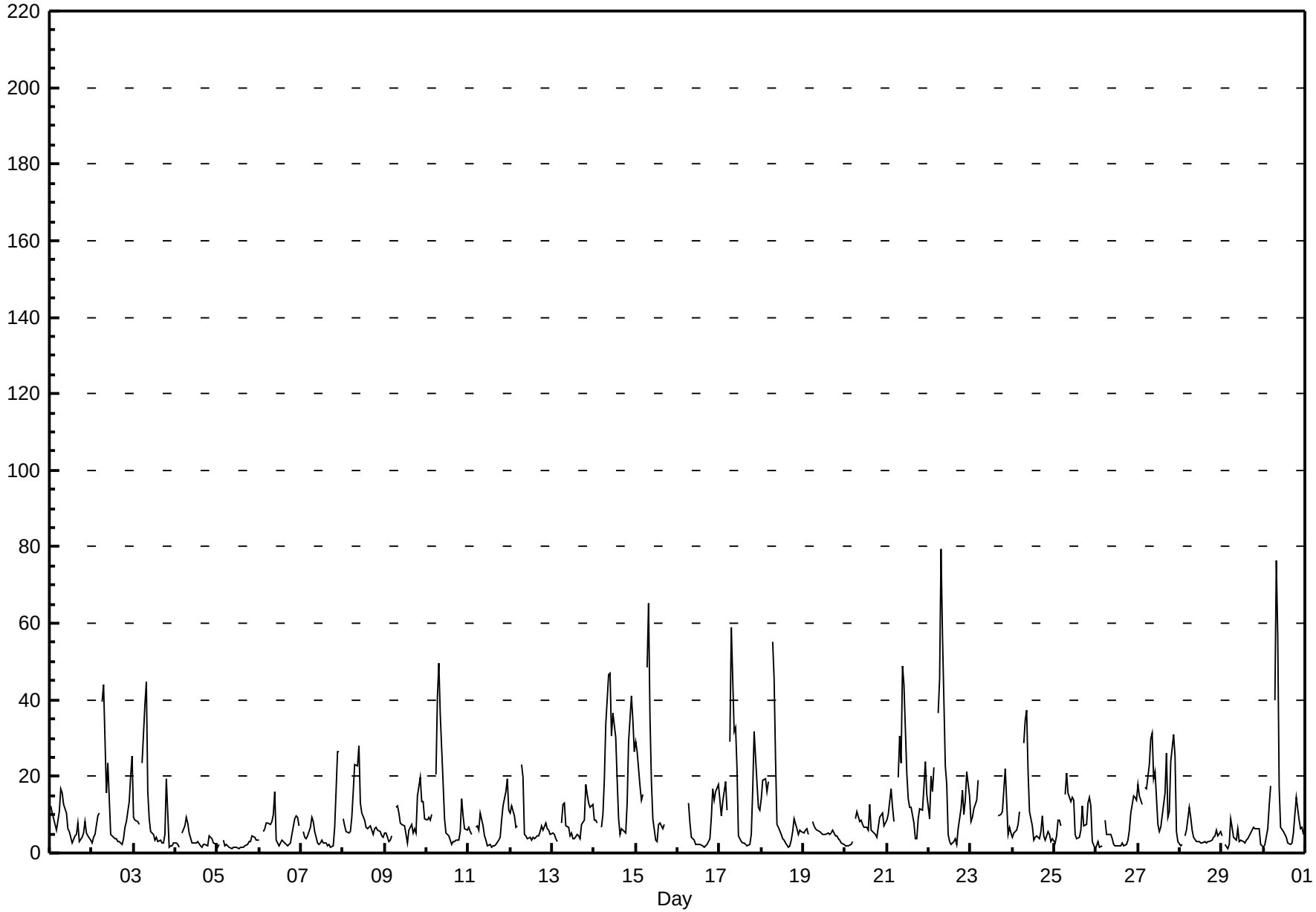
C - Calibration P - Power Failure A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - September 2010



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Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - September 2010

Maximum Value: 171.8 ppb on Sep 27 17:00

Maximum Daily Average: 36.2 ppb on Sep 27

Minimum Value: 2 ppb on Sep 29 04:00

Minimum Daily Average: 3.7 ppb on Sep 5

Maximum Diurnal Average: 40.6 ppb at hour 8

Minimum Diurnal Average: 7.9 ppb at hour 14

Monthly Average: 15.98 ppb

Percentiles: P_1 = 2.3 P_{10} = 4.0 Q_1 = 6.0 Median = 10.5 Q_3 = 18.5 P_{90} = 33.3 P_{99} = 92.7

Hours in Service:	720
Hours of Data:	670
Hours of Missing Data:	50
Hours of Calibration:	37
Percent Operational Time:	98.2

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-Sep	15	13	13	10	7	17	27	32	16	13	9	8	8	7	13	9	16	11	6	8	12	7	7	5	11.9	31.7
2-Sep	3	6	6	15	12	A	60	63	23	34	24	10	7	8	9	5	5	4	6	11	14	20	34	35	17.9	63.0
3-Sep	12	12	10	12	A	37	53	72	24	12	8	19	8	8	5	6	5	4	10	37	2	4	3	3	15.9	72.1
4-Sep	4	5	2	A	8	10	15	11	8	4	4	4	5	5	3	3	4	4	3	7	6	7	4	3	5.6	14.8
5-Sep	2	4	A	7	3	3	4	3	3	3	2	3	2	2	2	3	4	3	6	5	6	7	5	5	3.7	6.9
6-Sep	5	A	7	8	12	11	11	13	20	23	8	3	7	6	9	6	5	5	6	11	14	12	11	9	9.6	22.7
7-Sep	A	8	5	5	6	10	13	26	9	4	4	7	7	6	6	6	5	3	4	11	32	40	32	A	11.4	39.6
8-Sep	14	9	8	7	8	13	28	34	44	34	25	20	14	11	10	16	10	8	14	9	9	9	11	6	15.2	44.0
9-Sep	7	9	6	5	9	A	17	19	14	14	17	31	8	5	9	14	7	14	8	28	26	18	22	12	13.8	31.1
10-Sep	11	11	9	15	A	36	49	64	64	26	19	9	10	8	5	7	6	6	7	9	25	15	10	9	18.7	64.5
11-Sep	11	9	9	A	10	9	9	15	11	7	5	4	6	3	4	4	5	7	6	13	18	24	25	16	10.0	25.0
12-Sep	14	18	13	9	9	A	40	37	9	9	5	12	5	7	6	7	9	10	25	11	14	12	8	7	12.8	40.5
13-Sep	6	7	5	5	A	12	24	16	12	17	9	17	6	13	25	6	6	11	17	25	21	16	18	19	13.5	25.4
14-Sep	14	11	12	A	11	16	38	41	52	56	34	42	38	28	19	9	9	7	8	23	36	53	47	32	27.5	56.1
15-Sep	32	30	26	17	18	A	66	92	68	24	15	4	9	13	21	15	20	P	P	P	P	P	P	P	--	91.5
16-Sep	P	P	P	P	P	P	18	13	6	6	5	6	5	3	3	3	4	4	9	15	22	20	24	25	10.5	25.0
17-Sep	18	12	17	25	21	A	43	114	39	94	31	12	9	6	4	4	3	3	10	26	39	33	19	15	26.0	114.4
18-Sep	18	24	25	21	26	A	63	59	35	12	18	7	6	7	5	3	3	5	12	15	12	8	10	10	17.6	63.4
19-Sep	10	11	13	8	A	11	11	8	11	12	10	9	9	8	9	8	6	10	8	11	8	5	5	4	8.9	12.9
20-Sep	3	2	3	3	5	A	15	25	11	13	11	13	14	11	43	10	9	10	9	9	12	13	10	10	11.5	43.4
21-Sep	14	14	30	33	15	A	26	40	37	61	55	32	17	17	14	11	9	9	15	19	16	22	31	20	24.2	60.7
22-Sep	12	30	30	33	A	73	79	106	71	40	26	14	5	4	34	19	4	11	16	24	15	30	25	19	31.3	106.3
23-Sep	11	12	14	17	28	A	75	C	C	C	C	C	C	C	C	C	22	29	15	22	30	10	12	7	--	74.7
24-Sep	6	7	12	9	22	A	43	69	73	41	16	14	6	9	10	7	7	16	12	5	7	10	5	5	17.8	72.9
25-Sep	4	8	11	13	12	A	22	25	22	17	28	18	11	7	8	12	17	16	18	21	21	22	7	2	14.9	28.0
26-Sep	4	4	2	3	A	14	9	8	8	5	4	4	3	4	3	4	3	4	6	9	15	31	23	28	8.6	31.2
27-Sep	22	20	17	A	26	22	29	36	41	26	39	23	18	9	25	138	172	13	19	42	43	39	8	4	36.2	171.8
28-Sep	3	3	A	6	9	15	14	9	13	4	5	5	5	4	4	4	5	5	5	6	6	8	8	14	7.0	15.3
29-Sep	13	A	4	2	4	17	13	8	8	13	8	8	8	5	7	7	8	9	13	11	10	13	3	3	8.4	16.8
30-Sep	4	4	12	18	32	A	59	118	100	33	15	15	8	6	5	4	5	11	14	22	12	10	16	8	23.1	118.4
	10.4	11.1	11.8	12.2	13.6	19.1	32.4	40.6	29.3	22.7	15.8	12.8	9.1	7.9	11.0	12.0	13.1	8.7	10.5	16.0	17.2	17.8	15.2	11.9	Diurnal Average	
	31.6	30.1	29.8	33.5	31.8	73.0	78.7	118.4	100.0	93.9	54.6	41.9	37.6	27.6	43.4	137.9	171.8	29.2	25.1	41.6	43.3	53.0	47.1	34.6	Diurnal Maximum	

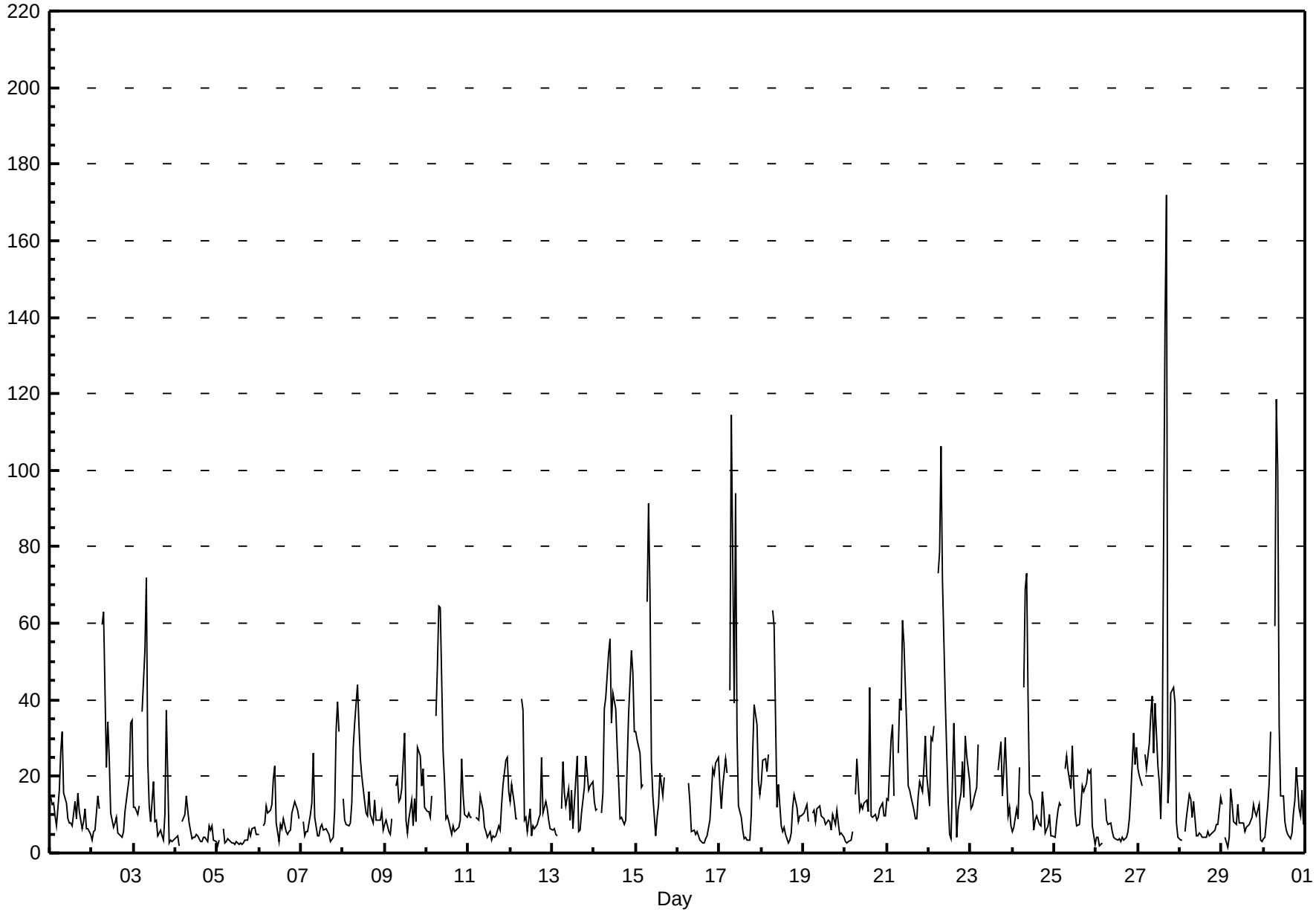
C - Calibration P - Power Failure A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 40.1 ppb on Sep 29 16:00
Maximum Daily Average: 31.3 ppb on Sep 29

Minimum Value: 0 ppb on Sep 10 06:00
Minimum Daily Average: 9.5 ppb on Sep 21
Maximum Diurnal Average: 27.8 ppb at hour 16
Minimum Diurnal Average: 7.8 ppb at hour 7
Monthly Average: 17.96 ppb
Percentiles: P_1 = 0.8 P_{10} = 3.2 Q_1 = 9.5 Median = 18.9 Q_3 = 25.9 P_{90} = 31.1 P_{99} = 37.1

Hours in Service:	720
Hours of Data:	674
Hours of Missing Data:	46
Hours of Calibration:	33
Percent Operational Time:	98.2

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-Sep	3	3	5	7	7	3	2	6	5	6	14	18	22	27	27	25	21	23	23	21	15	14	13	15	13.5	27.2
2-Sep	18	15	13	4	3	A	2	3	8	11	21	27	27	26	27	28	26	27	23	19	16	10	4	3	15.6	27.5
3-Sep	10	9	8	8	A	2	1	3	7	11	15	18	24	34	37	37	35	35	34	20	27	25	23	19	19.3	37.3
4-Sep	18	21	28	A	26	21	19	22	26	34	35	35	35	35	35	34	33	33	33	28	27	26	26	25	28.5	35.1
5-Sep	25	21	A	19	16	14	15	17	20	19	19	19	22	22	22	21	21	21	19	18	15	15	16	15	18.8	24.5
6-Sep	13	A	11	9	7	7	7	7	9	11	21	24	24	22	22	23	24	23	22	19	16	12	7	7	15.1	24.1
7-Sep	A	11	10	11	10	7	5	7	9	17	23	23	25	25	25	25	25	26	25	16	6	1	1	A	15.1	26.0
8-Sep	2	2	4	4	3	3	1	1	3	3	7	8	10	15	17	16	16	23	22	18	17	16	15	15	10.1	22.6
9-Sep	13	12	14	13	12	A	9	8	8	12	16	21	25	27	25	21	26	25	24	13	7	11	9	10	15.7	26.7
10-Sep	7	5	4	2	A	0	1	1	2	4	12	21	22	25	30	34	34	33	32	26	15	18	20	18	15.9	33.8
11-Sep	17	18	18	A	17	14	15	12	17	21	24	27	28	28	28	27	26	25	24	18	12	7	4	7	18.9	27.7
12-Sep	6	4	5	9	8	A	3	5	17	17	17	20	22	22	23	22	23	21	19	19	16	18	17	17	15.2	22.9
13-Sep	16	17	18	20	A	18	13	13	18	19	23	23	24	27	28	28	26	22	18	10	9	12	10	8	18.3	28.5
14-Sep	11	9	10	A	12	7	4	2	3	4	5	5	9	15	27	32	32	30	29	19	3	1	2	2	11.8	31.7
15-Sep	1	1	0	1	1	A	1	1	4	5	13	24	23	17	18	20	18	P	P	P	P	P	P	P	--	23.7
16-Sep	P	P	P	P	P	P	10	14	20	24	27	29	28	28	33	33	31	31	29	21	12	12	9	6	22.0	32.9
17-Sep	6	7	5	2	6	A	1	2	6	10	12	25	30	32	34	37	38	38	35	21	7	17	21	21	18.0	38.3
18-Sep	9	2	1	1	1	A	1	3	11	19	20	24	29	31	32	35	36	36	34	26	29	32	29	27	20.4	36.2
19-Sep	27	24	21	21	A	20	19	20	21	21	21	22	22	22	22	21	20	22	25	26	26	28	29	30	23.0	29.9
20-Sep	30	28	29	29	24	A	15	14	13	15	18	19	19	20	18	20	21	22	20	13	10	8	8	6	18.2	29.6
21-Sep	3	2	1	3	4	A	1	2	4	3	4	7	10	13	17	23	25	25	20	16	17	10	3	6	9.5	25.4
22-Sep	10	2	3	1	A	1	1	2	4	12	15	25	31	35	37	36	38	35	29	21	27	21	5	4	17.1	38.0
23-Sep	11	9	7	5	2	A	1	2	5	11	15	18	C	C	C	C	C	23	23	17	12	28	24	23	13.1	27.6
24-Sep	23	21	19	17	13	A	3	5	8	16	22	26	30	31	29	29	28	26	28	26	25	24	25	24	21.6	31.2
25-Sep	24	22	16	17	18	A	14	9	12	13	15	17	22	25	25	23	15	16	15	9	7	8	20	27	16.9	26.5
26-Sep	24	23	21	19	A	12	15	17	18	22	29	31	32	32	32	31	31	30	28	25	19	13	12	12	22.9	31.9
27-Sep	7	11	12	A	8	5	3	2	3	10	12	19	19	21	18	15	13	13	13	4	1	5	21	28	11.4	27.6
28-Sep	31	30	A	25	20	15	20	25	25	27	27	28	29	31	33	32	29	29	28	26	26	24	24	20	26.3	33.2
29-Sep	23	A	31	31	30	24	27	28	30	28	33	34	36	36	38	40	39	34	32	33	29	27	30	29	31.3	40.1
30-Sep	29	27	20	12	6	A	3	1	5	15	26	31	32	34	36	37	36	32	27	22	26	28	27	27	23.5	36.6
	14.9	13.2	12.4	11.6	11.1	10.3	7.8	8.4	11.3	14.6	18.7	22.3	24.5	26.0	27.4	27.8	27.1	26.8	25.3	19.6	16.3	16.2	15.7	16.1	Diurnal Average	
	30.9	30.3	30.6	30.6	30.4	24.2	26.6	27.5	29.5	34.3	35.0	34.8	35.8	36.4	38.1	40.1	38.6	38.0	34.8	32.6	29.5	31.6	30.4	29.9	Diurnal Maximum	

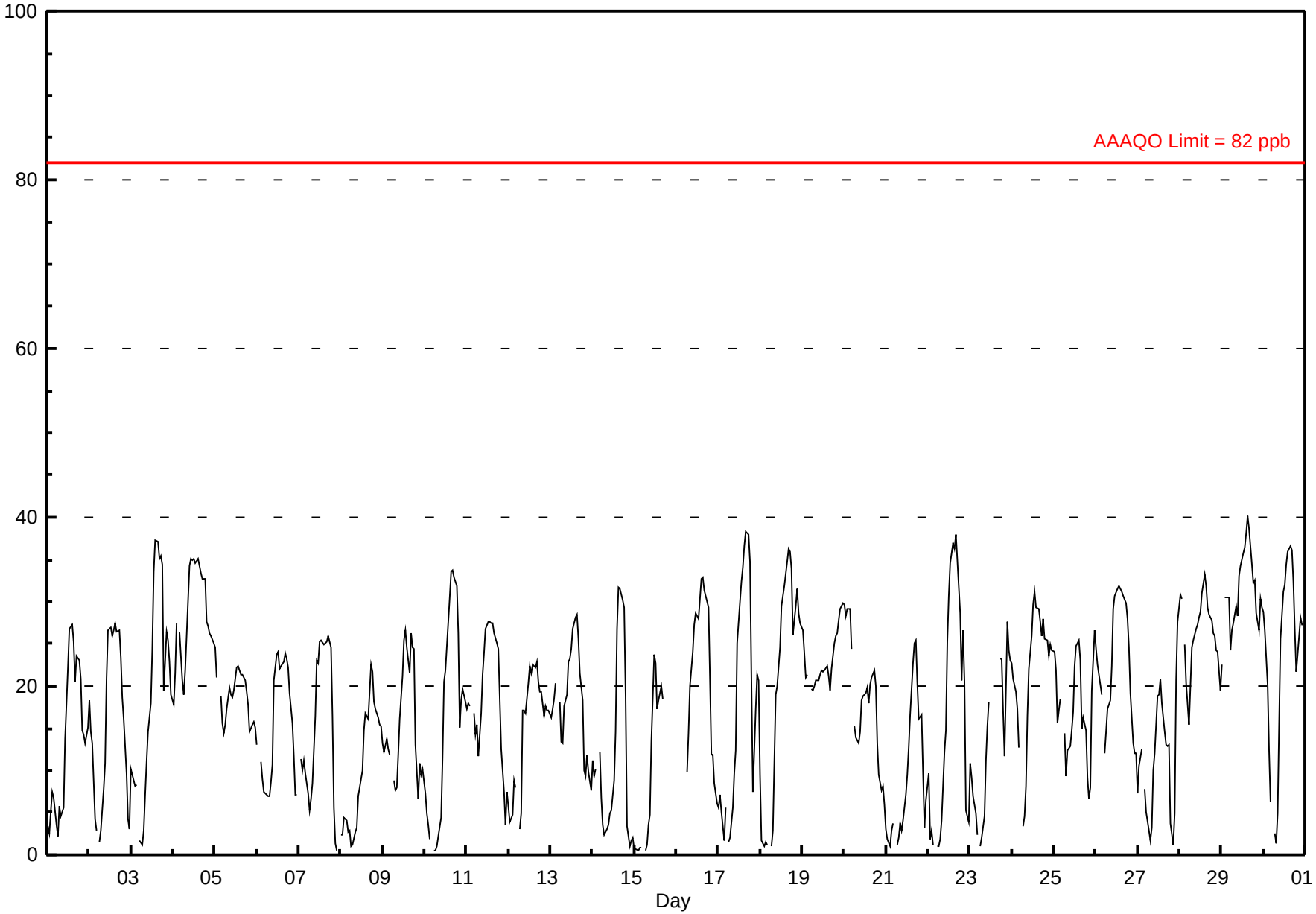
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

PASZA
Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - September 2010

Maximum Value: 42.1 ppb on Sep 29 16:00

Maximum Daily Average: 34.1 ppb on Sep 29

Minimum Value: 1 ppb on Sep 10 06:00

Minimum Daily Average: 12.1 ppb on Sep 8

Maximum Diurnal Average: 30.1 ppb at hour 16

Minimum Diurnal Average: 10.5 ppb at hour 7

Monthly Average: 20.73 ppb

Percentiles: P_1 = 1.2 P_{10} = 6.2 Q_1 = 12.9 Median = 21.9 Q_3 = 28.2 P_{90} = 33.2 P_{99} = 39.6

Hours in Service:	720
Hours of Data:	674
Hours of Missing Data:	46
Hours of Calibration:	33
Percent Operational Time:	98.2

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-Sep	8	4	8	11	10	6	6	8	8	8	16	20	27	30	30	28	24	26	25	24	20	16	15	17	16.4	30.1
2-Sep	20	17	15	12	4	A	2	5	11	17	24	31	29	28	29	29	28	28	27	22	21	14	8	9	18.7	30.9
3-Sep	12	11	10	10	A	4	2	7	10	13	16	22	29	38	39	40	37	38	36	34	28	27	26	21	22.1	39.8
4-Sep	19	27	29	A	29	24	23	24	33	36	36	37	37	36	37	36	35	34	34	31	29	28	28	26	30.8	37.4
5-Sep	25	24	A	20	17	16	17	20	21	21	20	22	23	24	23	22	23	22	21	21	16	17	18	17	20.4	25.5
6-Sep	15	A	13	11	9	10	9	10	11	17	23	26	26	23	24	24	26	25	24	22	19	17	9	9	17.4	26.1
7-Sep	A	12	12	12	11	10	6	8	11	22	25	25	28	28	26	26	27	27	27	22	9	4	1	A	17.3	28.0
8-Sep	4	4	6	5	4	4	2	2	4	4	9	10	12	19	19	19	19	26	25	21	19	18	16	16	12.1	25.9
9-Sep	15	13	15	14	13	A	11	10	12	15	20	26	29	28	27	27	27	27	27	23	10	14	13	13	18.7	28.9
10-Sep	8	8	4	4	A	1	1	1	4	6	15	24	24	29	33	36	36	34	34	30	24	21	22	23	18.5	35.9
11-Sep	21	20	19	A	18	17	19	15	18	23	25	29	29	29	29	29	28	28	27	23	16	13	8	10	21.5	29.2
12-Sep	7	7	9	10	17	A	13	16	19	19	20	24	25	23	27	24	27	25	21	21	19	20	19	19	18.6	27.1
13-Sep	17	18	19	21	A	20	17	16	20	21	27	28	27	29	31	30	29	28	22	15	15	16	15	11	21.4	31.3
14-Sep	14	13	13	A	15	11	8	3	4	5	6	7	13	18	33	34	35	33	32	25	10	2	4	6	15.0	35.0
15-Sep	1	1	1	2	2	A	1	2	6	7	21	27	28	19	22	24	20	P	P	P	P	P	P	P	--	27.9
16-Sep	P	P	P	P	P	P	17	16	24	28	30	31	31	30	34	34	33	32	32	27	19	15	12	11	25.5	34.4
17-Sep	8	10	9	6	9	A	2	4	7	13	17	29	32	34	37	39	40	40	38	29	11	24	26	25	21.2	39.6
18-Sep	23	3	2	2	3	A	1	8	19	20	23	28	31	32	33	37	38	38	37	29	32	33	32	28	23.2	37.6
19-Sep	28	26	23	23	A	21	21	21	22	22	23	23	23	23	24	27	24	25	28	27	28	29	30	32	25.0	31.9
20-Sep	31	29	31	31	28	A	17	17	15	18	20	22	22	22	22	22	24	24	23	17	12	9	10	9	20.8	30.9
21-Sep	5	3	2	6	6	A	2	5	5	4	5	10	11	15	21	25	27	27	26	19	18	15	8	15	12.2	27.4
22-Sep	14	4	7	2	A	2	2	3	7	17	19	29	33	37	39	39	40	40	35	26	29	26	18	9	20.7	39.7
23-Sep	14	14	9	7	6	A	2	3	8	16	18	28	C	C	C	C	C	28	27	22	21	30	26	26	16.8	30.3
24-Sep	24	22	21	19	17	A	9	7	12	22	26	30	31	35	34	32	29	35	31	28	30	27	26	25	24.7	34.7
25-Sep	25	24	19	20	20	A	19	11	15	15	16	19	24	29	28	27	21	19	17	13	9	12	26	28	19.9	29.4
26-Sep	26	24	23	21	A	15	17	21	21	26	31	31	33	33	32	32	32	31	30	27	23	22	18	18	25.6	32.7
27-Sep	11	14	15	A	13	7	6	4	8	12	15	22	23	23	20	17	17	15	17	8	2	15	25	30	14.8	30.2
28-Sep	32	31	A	27	23	18	25	27	27	28	28	30	30	35	35	35	34	31	29	28	28	26	26	26	28.6	35.2
29-Sep	29	A	32	31	32	29	29	30	32	33	34	37	38	38	40	42	41	38	36	35	31	31	32	31	34.1	42.1
30-Sep	30	30	24	15	10	A	7	2	10	20	32	33	36	36	38	38	38	37	29	26	29	30	29	29	26.5	38.0
	17.4	15.3	14.5	13.7	13.9	12.7	10.5	10.8	14.1	17.6	21.4	25.2	27.0	28.4	30.0	30.1	29.5	29.6	28.1	24.0	19.9	19.7	18.8	19.2	Diurnal Average	
	32.1	31.2	31.9	31.5	32.4	29.5	28.9	29.6	32.9	36.4	36.4	36.6	38.3	38.5	40.2	42.1	40.7	39.7	37.6	35.2	32.4	32.5	32.0	31.9	Diurnal Maximum	

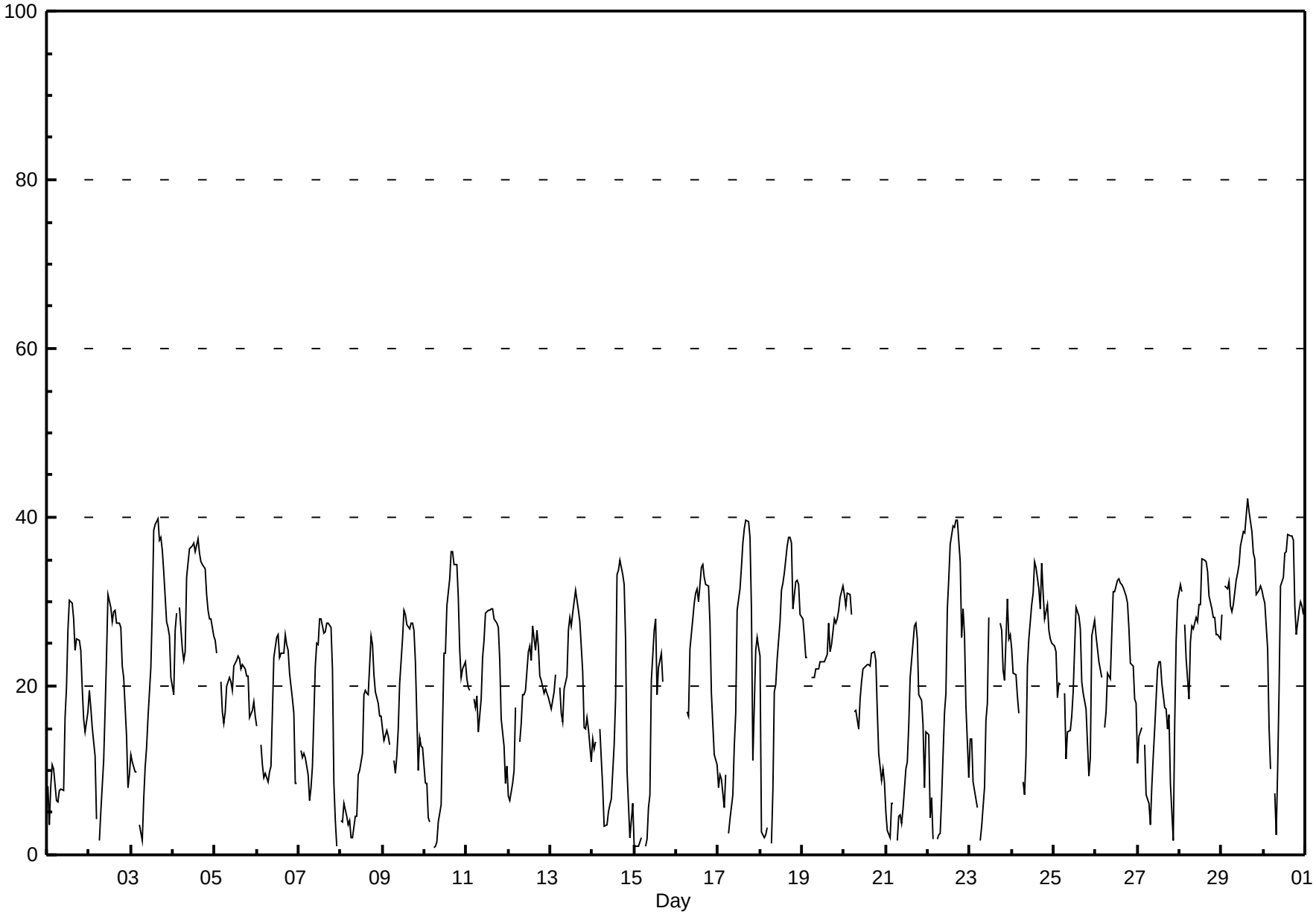
C - Calibration P - Power Failure A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

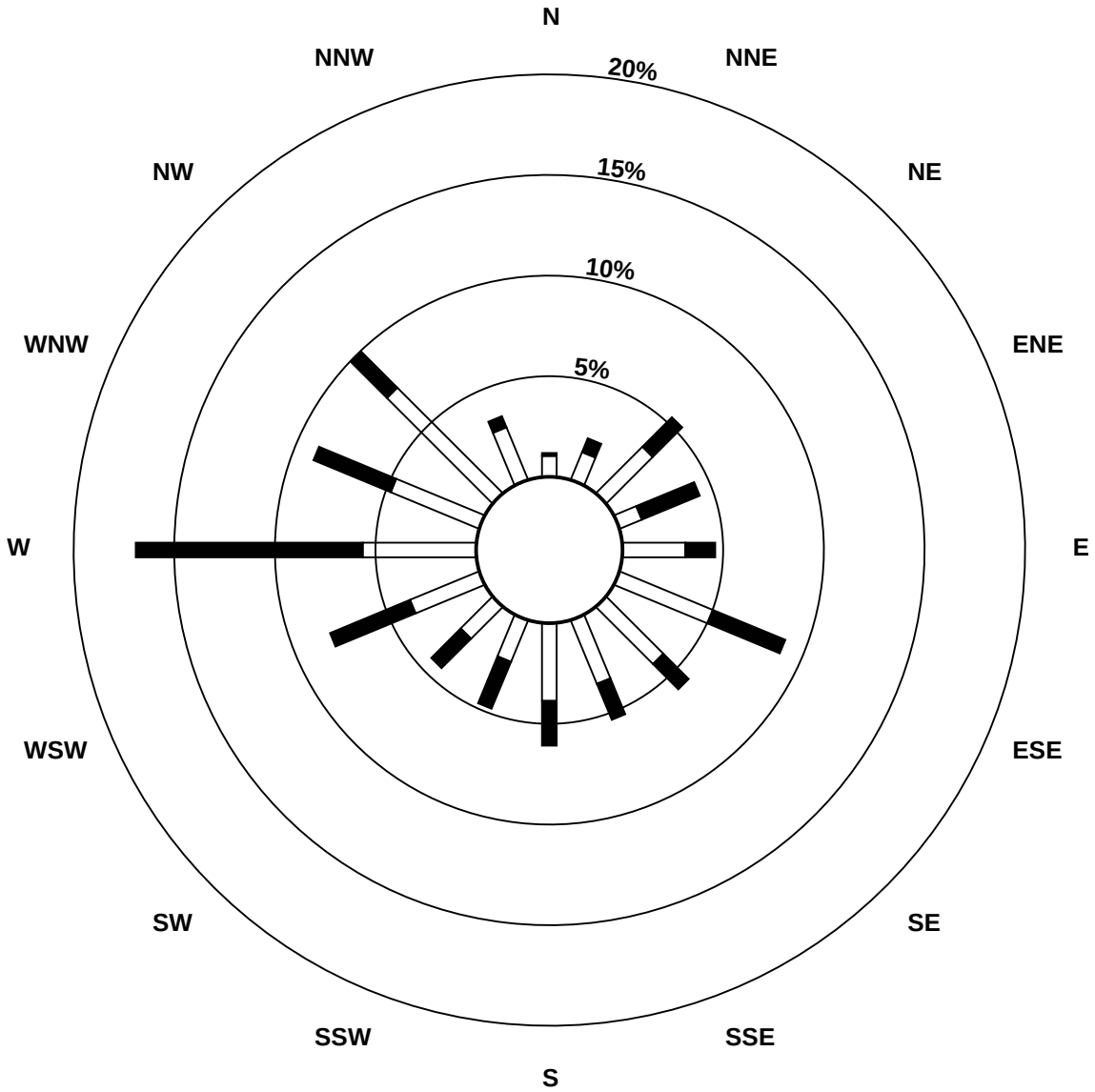
Henry Pirker - September 2010



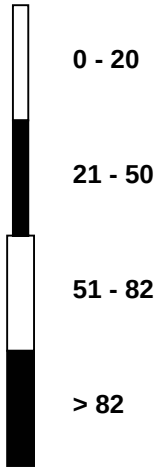
Pollutant Rose

Ozone (O_3) - ppb

Henry Pirker - September 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Henry Pirker - September 2010

Maximum Value: 36.3 ppb on Sep 29 18:00

Minimum Value: 0.7 ppb on Sep 15 08:00

Percentiles: P_1 = 2.0 P_{10} = 5.7 Q_1 = 10.9 Median = 18.0 Q_3 = 23.7 P_{90} = 29.1 P_{99} = 34.4

Hours in Service:	720
Hours of Data:	696
Hours of Missing Data:	24
Hours of Calibration:	8
Percent Operational Time:	97.8

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	10	9	7	5	4	4	4	5	5	5	6	8	9	12	15	18	20	22	23	24	23	21	19	18	23.6
2-Sep	18	17	16	13	12	12	10	8	7	6	7	10	14	15	19	22	24	26	26	25	24	22	19	16	26.3
3-Sep	14	12	10	9	8	6	6	6	6	6	7	8	10	14	19	23	26	29	32	32	32	31	30	27	32.4
4-Sep	25	23	22	23	23	22	22	22	23	25	26	27	28	30	32	34	35	34	34	33	32	31	30	29	34.6
5-Sep	28	26	25	24	22	21	19	18	17	17	17	17	18	19	20	21	21	21	21	21	20	19	18	18	27.7
6-Sep	16	16	15	13	12	11	10	9	8	8	10	12	14	15	17	19	21	23	23	22	21	20	18	16	23.1
7-Sep	15	13	12	11	10	9	9	9	9	9	11	12	14	17	19	21	24	25	25	24	22	19	16	14	24.9
8-Sep	11	8	5	3	3	3	3	3	3	3	3	4	5	6	8	10	12	14	16	17	18	18	18	18	18.2
9-Sep	17	16	15	14	14	13	12	11	11	11	11	12	14	16	18	19	22	23	24	23	21	19	17	16	24.3
10-Sep	13	11	8	7	7	5	4	3	2	2	3	6	8	11	15	19	23	26	29	29	29	28	26	24	29.4
11-Sep	22	21	19	18	18	17	17	16	16	16	17	18	20	21	23	25	26	27	27	26	24	21	18	16	26.6
12-Sep	13	10	8	7	6	6	6	6	7	9	11	12	15	15	18	20	21	21	22	21	21	20	19	19	21.5
13-Sep	18	18	17	18	18	18	17	17	17	17	18	18	19	20	22	24	25	25	25	23	21	19	17	14	25.1
14-Sep	12	11	10	10	10	10	9	8	7	6	5	5	5	6	9	12	16	19	22	24	23	22	18	15	24.0
15-Sep	11	7	4	1	1	1	1	1	1	2	4	7	10	11	13	15	17	19	20	N	N	N	N	N	20.1
16-Sep	N	N	N	N	N	N	N	N	N	N	N	21	22	23	25	28	29	30	30	29	27	25	22	19	30.2
17-Sep	16	13	10	7	6	6	5	4	4	4	6	9	12	15	19	23	27	31	34	33	30	28	27	25	33.6
18-Sep	21	17	12	10	9	8	5	3	3	5	8	11	15	17	21	25	28	30	32	32	32	32	32	31	32.5
19-Sep	30	28	27	26	26	24	23	22	21	20	20	21	21	21	21	22	21	22	22	22	23	24	25	26	30.0
20-Sep	27	28	28	29	28	29	27	24	22	20	18	17	16	17	17	18	19	20	20	19	18	16	15	13	28.7
21-Sep	11	9	6	5	4	4	3	2	2	3	3	4	4	5	7	10	13	15	17	19	19	19	17	15	19.4
22-Sep	13	11	8	6	5	4	3	3	2	3	5	9	11	16	20	24	29	31	33	33	32	30	26	22	33.2
23-Sep	19	16	13	11	8	6	6	5	4	5	6	8	9	9	N	N	N	N	N	N	N	N	21	21	21.5
24-Sep	22	21	21	21	21	20	17	14	12	12	12	13	16	18	21	24	26	28	28	28	28	27	26	26	28.4
25-Sep	25	25	23	22	21	21	19	17	16	14	14	14	15	16	17	19	19	20	20	19	17	15	14	14	25.2
26-Sep	16	16	17	18	20	21	20	19	18	18	19	21	22	24	27	28	30	31	31	30	28	26	24	21	30.8
27-Sep	18	16	14	12	11	10	8	7	6	6	6	8	9	11	13	15	16	16	16	14	12	10	10	12	18.3
28-Sep	14	17	17	20	23	24	24	24	23	22	23	24	25	27	28	29	30	30	30	30	29	28	27	26	29.9
29-Sep	25	24	25	25	26	26	26	28	28	28	29	29	30	31	33	34	36	36	36	36	35	34	33	32	36.3
30-Sep	30	29	28	25	23	22	18	14	11	9	10	12	16	18	23	27	31	33	33	32	31	30	29	28	33.1
	30.4	29.4	28.3	28.7	28.4	28.5	26.5	27.5	28.5	28.5	28.8	29.2	29.9	31.4	32.8	34.4	35.6	36.3	36.2	36.0	35.1	33.9	32.9	31.6	
	Diurnal Maximums																								

N - Not Valid

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Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.78 ppm on Sep 22 08:00 Maximum Daily Average: 0.39 ppm on Sep 27

Minimum Value: 0.0 ppm on Sep 5 08:00 Minimum Daily Average: 0.06 ppm on Sep 5
Maximum Diurnal Average: 0.29 ppm at hour 8 Minimum Diurnal Average: 0.11 ppm at hour 14
Monthly Average: 0.173 ppm Percentiles: P_1 = 0.00 P_{10} = 0.01 Q_1 = 0.08 Median = 0.15 Q_3 = 0.25 P_{90} = 0.33 P_{99} = 0.57

Hours in Service:	720
Hours of Data:	599
Hours of Missing Data:	121
Hours of Calibration:	30
Percent Operational Time:	87.4

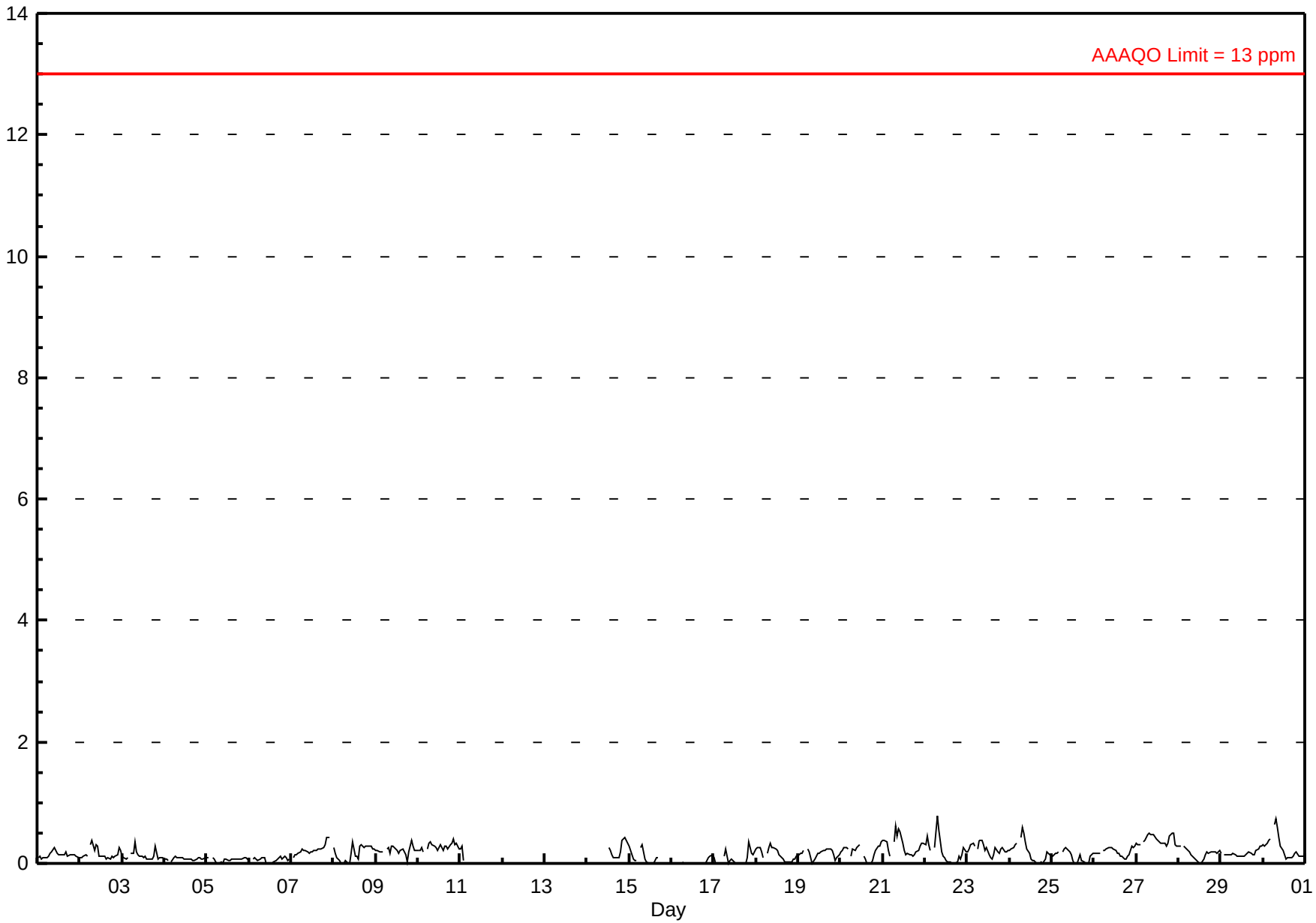
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.14	0.27
2-Sep	0.1	0.1	0.1	0.1	0.1	A	0.3	0.4	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.16	0.37
3-Sep	0.1	0.1	0.1	0.1	A	0.2	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.13	0.35
4-Sep	0.1	0.1	0.1	A	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.08	0.11
5-Sep	0.1	0.1	A	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.06	0.10
6-Sep	0.1	A	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.06	0.11
7-Sep	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	A	0.23	0.43
8-Sep	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.4	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.16	0.36
9-Sep	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.0	0.2	0.4	0.3	0.2	0.2	0.22	0.39
10-Sep	0.2	0.2	0.3	0.2	A	0.2	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.28	0.40
11-Sep	0.2	0.3	0.1	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.28
12-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
13-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
14-Sep	N	N	N	N	N	N	N	N	C	C	C	C	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.4	0.4	0.3	--	0.43
15-Sep	0.3	0.2	0.1	0.1	0.1	A	0.3	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	P	P	P	P	P	P	P	--	0.31
16-Sep	P	P	P	P	P	P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	M	M	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	--	0.15
17-Sep	0.1	0.0	0.0	0.0	0.0	A	0.1	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	0.2	0.1	0.2	0.07	0.35
18-Sep	0.2	0.3	0.3	0.2	0.1	A	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.15	0.33
19-Sep	0.1	0.2	0.2	0.2	A	0.2	0.2	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.16	0.24
20-Sep	0.2	0.2	0.2	0.3	0.2	A	0.1	0.2	0.2	0.3	0.3	0.3	C	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.18	0.35
21-Sep	0.4	0.4	0.4	0.2	0.1	A	0.4	0.6	0.4	0.6	0.5	0.3	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.29	0.62
22-Sep	0.3	0.4	0.3	0.2	A	0.3	0.5	0.8	0.5	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.20	0.78
23-Sep	0.2	0.2	0.3	0.3	0.3	A	0.2	0.4	0.4	0.3	0.2	0.3	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.23	0.38
24-Sep	0.2	0.2	0.3	0.3	0.3	A	0.4	0.6	0.5	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.1	0.19	0.58
25-Sep	0.1	0.1	0.2	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.12	0.25
26-Sep	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.19	0.28
27-Sep	0.3	0.3	0.3	A	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.3	0.39	0.51
28-Sep	0.3	0.3	A	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.29
29-Sep	0.2	A	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.16	0.27
30-Sep	0.3	0.3	0.3	0.4	0.4	A	0.6	0.7	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.26	0.75
	0.19	0.20	0.18	0.17	0.16	0.17	0.23	0.29	0.23	0.21	0.19	0.16	0.13	0.11	0.11	0.12	0.13	0.11	0.12	0.16	0.20	0.20	0.20	0.19	Diurnal Average	
	0.39	0.44	0.36	0.38	0.41	0.38	0.63	0.78	0.60	0.58	0.52	0.40	0.37	0.36	0.34	0.34	0.33	0.29	0.34	0.45	0.50	0.49	0.42	0.35	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance N - Not Valid A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - September 2010

Maximum Value: 3.56 ppm on Sep 23 10:00

Maximum Daily Average: 0.47 ppm on Sep 27

Minimum Value: 0.0 ppm on Sep 15 12:00

Minimum Daily Average: 0.11 ppm on Sep 4

Maximum Diurnal Average: 0.56 ppm at hour 8

Minimum Diurnal Average: 0.17 ppm at hour 14

Monthly Average: 0.268 ppm

Percentiles: P_1 = 0.00 P_{10} = 0.09 Q_1 = 0.14 Median = 0.22 Q_3 = 0.33 P_{90} = 0.49 P_{99} = 1.31

Hours in Service:	720
Hours of Data:	599
Hours of Missing Data:	121
Hours of Calibration:	30
Percent Operational Time:	87.4

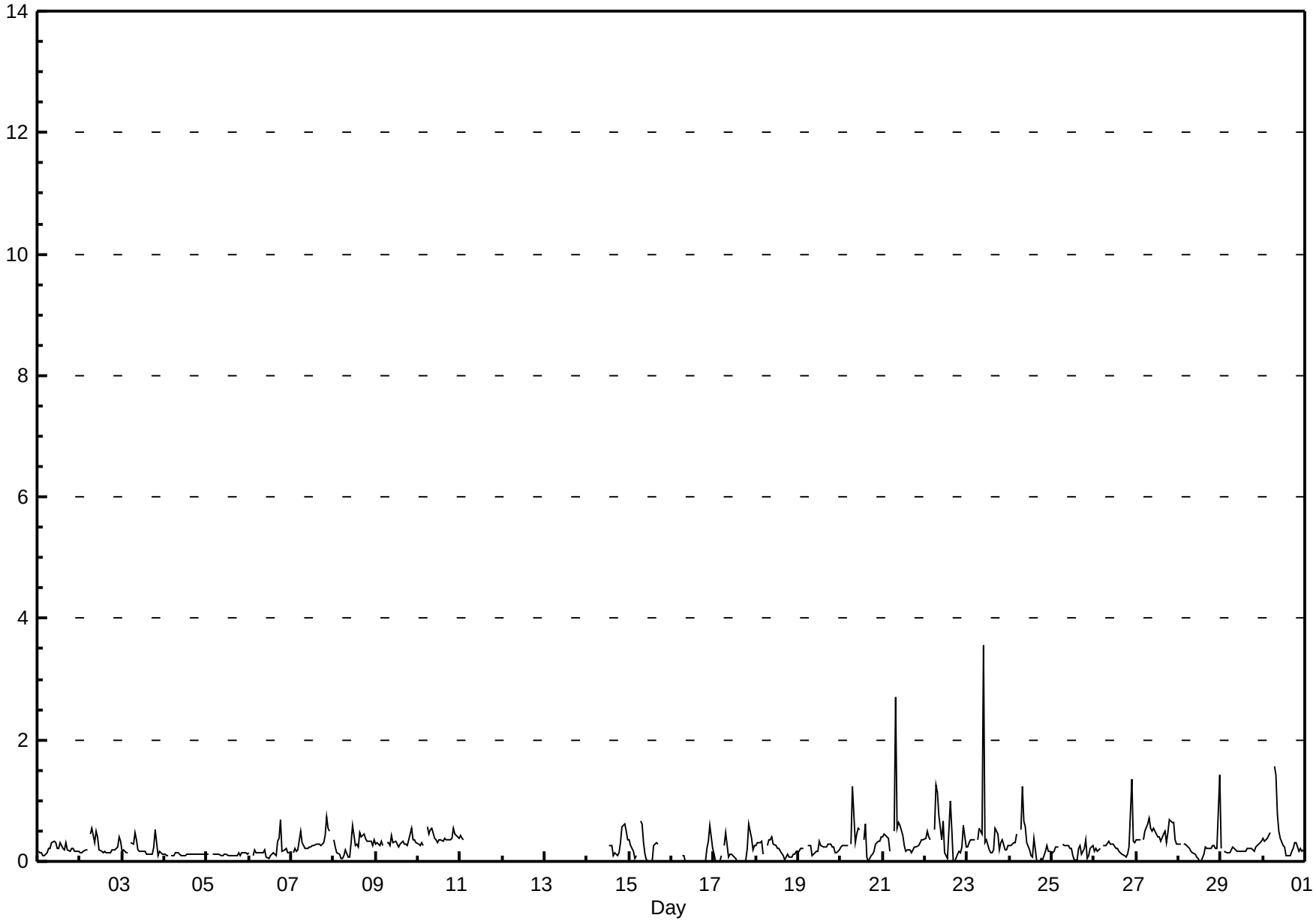
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.34
2-Sep	0.2	0.2	0.2	0.2	0.2	A	0.5	0.6	0.3	0.5	0.4	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.3	0.24	0.55
3-Sep	0.2	0.2	0.2	0.1	A	0.3	0.3	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.5	0.1	0.2	0.2	0.1	0.20	0.53
4-Sep	0.1	0.1	0.1	A	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.15
5-Sep	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.15
6-Sep	0.1	A	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.3	0.4	0.7	0.2	0.2	0.2	0.1	0.1	0.18	0.70
7-Sep	A	0.1	0.2	0.2	0.2	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.7	0.5	0.5	A	0.31	0.73
8-Sep	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.6	0.3	0.3	0.2	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.27	0.60
9-Sep	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.31	0.55
10-Sep	0.3	0.3	0.3	0.3	A	0.6	0.4	0.5	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.39	0.58
11-Sep	0.4	0.4	0.4	A	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.43
12-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
13-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
14-Sep	N	N	N	N	N	N	N	N	C	C	C	C	0.3	0.3	0.3	0.1	0.2	0.1	0.1	0.3	0.6	0.6	0.5	0.4	--	0.61
15-Sep	0.4	0.3	0.2	0.1	0.1	A	0.7	0.6	0.3	0.1	0.0	0.0	0.0	0.0	0.3	0.3	0.3	P	P	P	P	P	P	P	--	0.66
16-Sep	P	P	P	P	P	P	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	M	M	0.0	0.0	0.0	0.0	0.2	0.3	0.6	0.2	--	0.60
17-Sep	0.1	0.0	0.0	0.0	0.1	A	0.3	0.5	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.6	0.4	0.2	0.2	0.13	0.61
18-Sep	0.3	0.3	0.3	0.3	0.1	A	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.20	0.39
19-Sep	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.2	0.21	0.32
20-Sep	0.2	0.2	0.3	0.3	0.3	A	0.3	1.2	0.3	0.4	0.5	0.5	C	0.4	0.6	0.1	0.0	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.33	1.23
21-Sep	0.4	0.4	0.4	0.4	0.2	A	0.5	2.7	0.5	0.6	0.6	0.4	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.44	2.71
22-Sep	0.4	0.5	0.4	0.3	A	0.5	1.3	1.2	0.8	0.4	0.7	0.1	0.1	0.0	1.0	0.5	0.0	0.0	0.1	0.2	0.1	0.2	0.6	0.2	0.42	1.25
23-Sep	0.2	0.3	0.4	0.4	0.4	A	0.4	0.5	0.4	3.6	0.3	0.3	0.2	0.1	0.1	0.2	0.5	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.45	3.56
24-Sep	0.3	0.3	0.3	0.3	0.5	A	0.5	1.2	0.7	0.6	0.3	0.2	0.1	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.2	0.2	0.28	1.23
25-Sep	0.1	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.2	0.3	0.1	0.2	0.3	0.1	0.1	0.2	0.3	0.19	0.34
26-Sep	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	1.3	0.3	0.3	0.27	1.35
27-Sep	0.4	0.3	0.4	A	0.4	0.5	0.6	0.7	0.6	0.5	0.6	0.5	0.4	0.4	0.3	0.4	0.5	0.3	0.5	0.7	0.6	0.7	0.3	0.3	0.47	0.71
28-Sep	0.3	0.3	A	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	1.4	0.24	1.42
29-Sep	0.2	A	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.20	0.34
30-Sep	0.4	0.3	0.4	0.4	0.5	A	1.6	1.4	0.8	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.40	1.56
	0.25	0.25	0.23	0.23	0.21	0.27	0.39	0.56	0.32	0.41	0.27	0.23	0.18	0.17	0.24	0.20	0.19	0.18	0.21	0.25	0.29	0.32	0.28	0.30	Diurnal Average	
	0.43	0.51	0.41	0.43	0.48	0.58	1.56	2.71	0.79	3.56	0.67	0.60	0.40	0.40	1.01	0.53	0.53	0.45	0.70	0.69	0.73	1.35	0.60	1.42	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance N - Not Valid A - Automated Daily Zero Span

Hourly Maximums

Carbon Monoxide (CO) - ppm

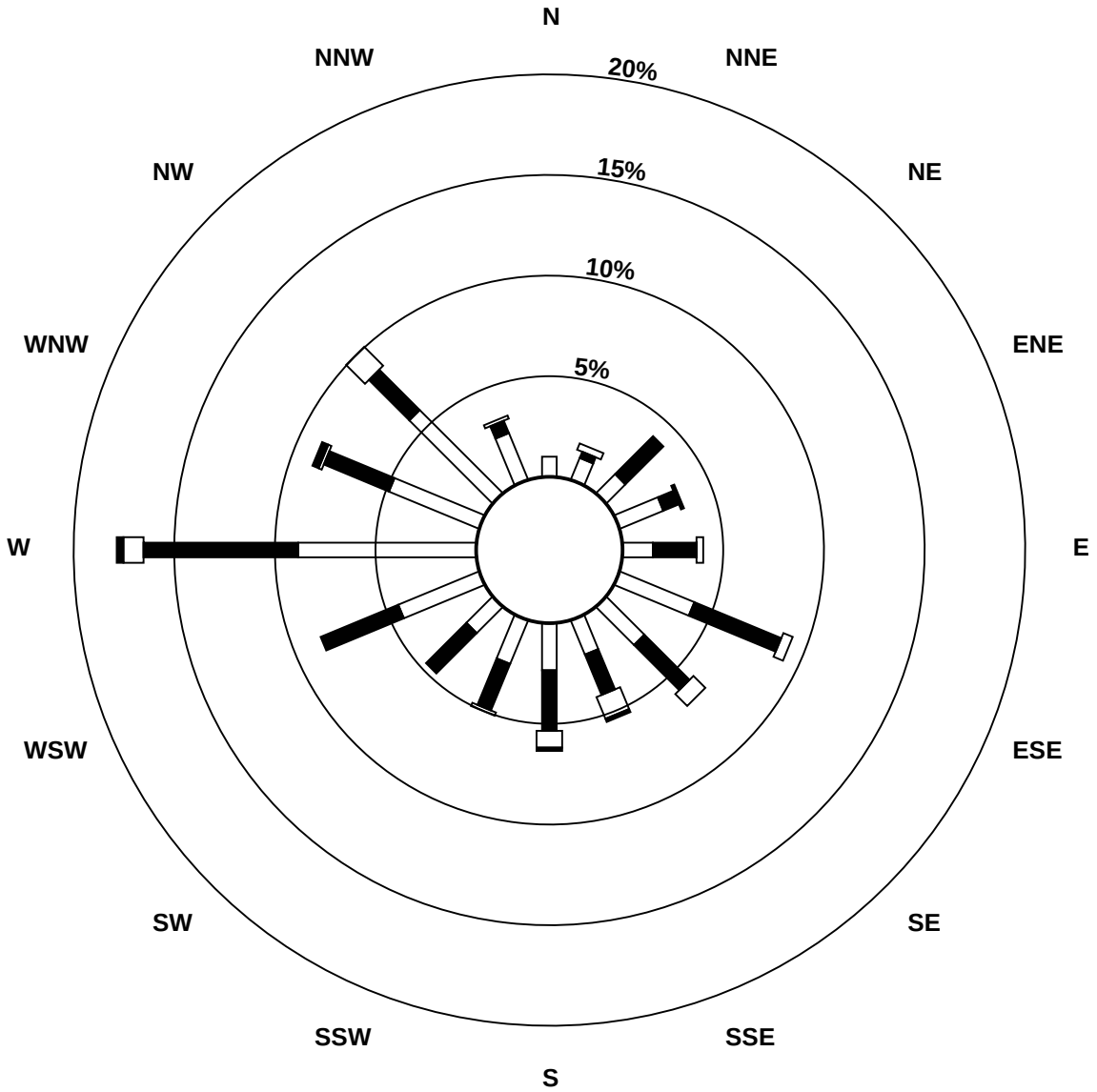
Henry Pirker - September 2010



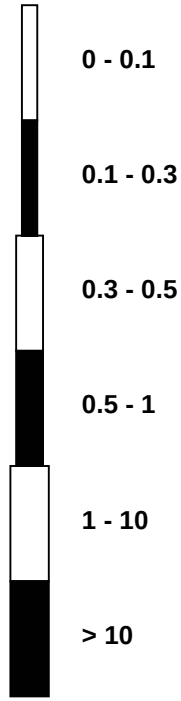
Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - September 2010



Pollutant Classes (ppm)



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Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 8-hr: 0
Maximum Value: 0.50 ppm on Sep 30 10:00

Minimum Value: 0.00 ppm on Sep 15 17:00

Percentiles: P_1 = 0.00 P_{10} = 0.04 Q_1 = 0.09 Median = 0.16 Q_3 = 0.23 P_{90} = 0.32 P_{99} = 0.45

Hours in Service:	720
Hours of Data:	620
Hours of Missing Data:	100
Hours of Calibration:	8
Percent Operational Time:	87.2

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.18
2-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.25
3-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.18
4-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11
5-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09
6-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.09
7-Sep	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.33
8-Sep	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.34
9-Sep	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
10-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.31
11-Sep	0.3	0.3	0.3	0.3	0.2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.30
12-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
13-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
14-Sep	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.25
15-Sep	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	N	N	N	N	N	0.29
16-Sep	N	N	N	N	N	N	N	N	N	N	N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01
17-Sep	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.10
18-Sep	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.25
19-Sep	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
20-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.2	0.24
21-Sep	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.44
22-Sep	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.44
23-Sep	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32
24-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.40
25-Sep	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.20
26-Sep	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.25
27-Sep	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.45
28-Sep	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.38
29-Sep	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.20
30-Sep	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.50
	0.37	0.37	0.38	0.35	0.32	0.32	0.37	0.44	0.48	0.50	0.50	0.47	0.45	0.45	0.43	0.41	0.39	0.36	0.35	0.35	0.37	0.39	0.38	0.38	
	Diurnal Maximums																								

N - Not Valid
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm

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Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.89 ppm on Sep 22 03:00 Maximum Daily Average: 2.25 ppm on Sep 22

Minimum Value: 1.8 ppm on Sep 3 23:00 Minimum Daily Average: 1.91 ppm on Sep 4
Maximum Diurnal Average: 2.15 ppm at hour 8 Minimum Diurnal Average: 1.95 ppm at hour 16
Monthly Average: 2.029 ppm Percentiles: P_1 = 1.85 P_{10} = 1.91 Q_1 = 1.94 Median = 1.99 Q_3 = 2.07 P_{90} = 2.21 P_{99} = 2.48

Hours in Service:	720
Hours of Data:	664
Hours of Missing Data:	56
Hours of Calibration:	33
Percent Operational Time:	96.8

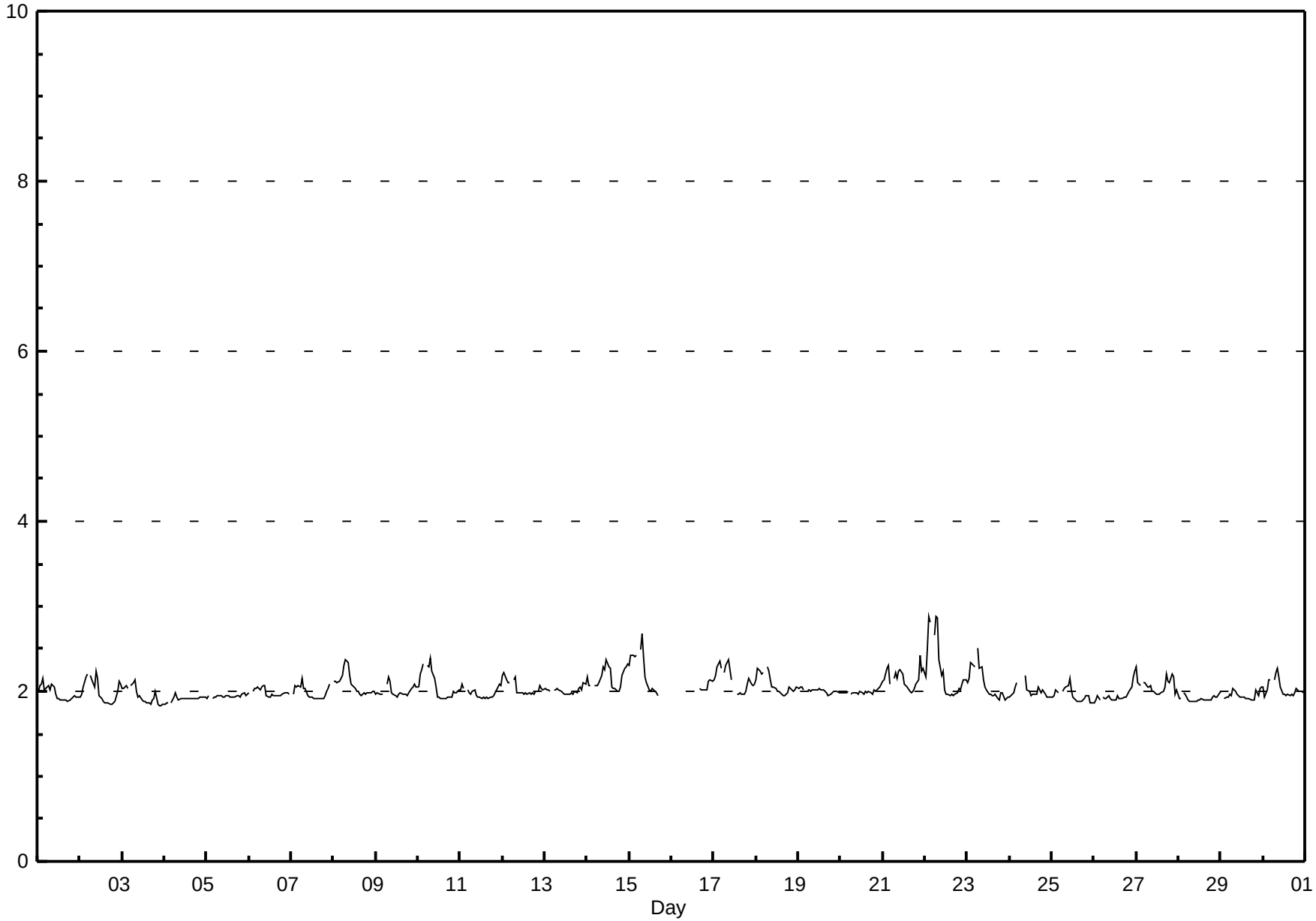
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Sep	2.0	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.98	2.15
2-Sep	1.9	2.0	2.0	2.2	2.2	A	2.2	2.1	2.0	2.2	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.0	2.1	2.1	2.00	2.24
3-Sep	2.0	2.0	2.1	2.0	A	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2.0	1.8	1.8	1.8	1.8	1.95	2.13
4-Sep	1.9	1.9	1.9	A	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.99
5-Sep	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.94	1.98
6-Sep	2.0	A	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.99	2.07
7-Sep	A	2.0	2.1	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	A	1.99	2.15
8-Sep	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.08	2.37
9-Sep	2.0	2.0	2.0	2.0	2.0	A	2.1	2.2	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.00	2.17
10-Sep	2.1	2.2	2.2	2.3	A	2.3	2.3	2.4	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.07	2.38
11-Sep	2.0	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	1.98	2.09
12-Sep	2.2	2.2	2.1	2.1	2.1	A	2.1	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.04	2.23
13-Sep	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.01	2.11
14-Sep	2.2	2.1	2.1	A	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.4	2.3	2.3	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.3	2.3	2.15	2.37
15-Sep	2.3	2.4	2.4	2.4	2.4	A	2.5	2.7	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	P	P	P	P	P	P	P	--	2.68
16-Sep	P	P	P	P	P	P	N	N	N	N	N	N	N	N	M	M	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	--	2.13
17-Sep	2.1	2.2	2.3	2.4	2.3	A	2.2	2.3	2.4	2.3	2.1	A	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.1	2.14	2.38
18-Sep	2.1	2.3	2.2	2.2	2.2	A	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.08	2.29
19-Sep	2.0	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.05
20-Sep	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	1.99	2.08
21-Sep	2.1	2.1	2.3	2.3	2.1	A	2.2	2.2	2.2	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.4	2.2	2.3	2.15	2.42
22-Sep	2.2	2.5	2.9	2.8	A	2.7	2.9	2.9	2.4	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.25	2.89
23-Sep	2.1	2.2	2.3	2.3	2.3	A	2.5	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.08	2.50
24-Sep	1.9	1.9	2.0	2.0	2.1	A	C	C	C	2.2	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.00	2.19
25-Sep	1.9	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.96	2.15
26-Sep	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.2	2.2	1.95	2.23
27-Sep	2.3	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.2	2.2	2.0	2.0	2.07	2.30
28-Sep	1.9	1.9	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.91	1.98
29-Sep	2.0	A	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	1.95	2.05
30-Sep	2.0	1.9	2.0	2.1	2.1	A	2.1	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.28
	2.04	2.07	2.12	2.13	2.08	2.07	2.13	2.15	2.10	2.06	2.03	1.99	1.97	1.97	1.95	1.95	1.95	1.96	1.96	1.99	2.01	2.03	2.03	2.04	Diurnal Average	
	2.30	2.48	2.89	2.81	2.42	2.66	2.88	2.87	2.41	2.29	2.26	2.37	2.28	2.27	2.06	2.04	2.06	2.21	2.11	2.10	2.21	2.42	2.28	2.31	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance N - Not Valid A - Automated Daily Zero Span

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - September 2010



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Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - September 2010

Maximum Value: 3.76 ppm on Sep 21 22:00

Maximum Daily Average: 2.40 ppm on Sep 22

Minimum Value: 1.8 ppm on Sep 3 23:00

Minimum Daily Average: 1.94 ppm on Sep 4

Maximum Diurnal Average: 2.33 ppm at hour 8

Minimum Diurnal Average: 2.02 ppm at hour 18

Monthly Average: 2.146 ppm

Percentiles: P_1 = 1.88 P_{10} = 1.94 Q_1 = 1.98 Median = 2.09 Q_3 = 2.25 P_{90} = 2.39 P_{99} = 3.20

Hours in Service:	720
Hours of Data:	664
Hours of Missing Data:	56
Hours of Calibration:	33
Percent Operational Time:	96.8

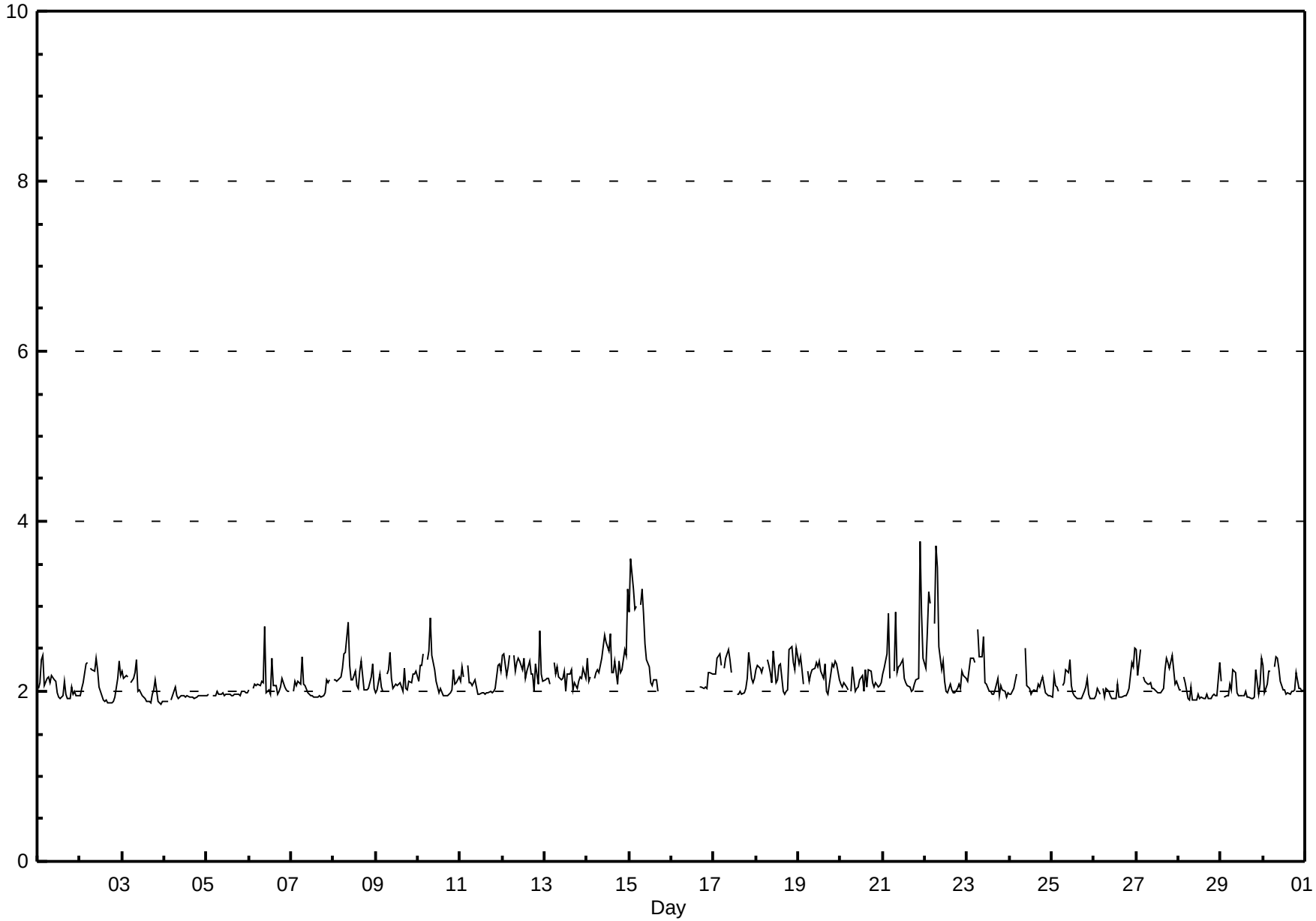
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	2.0	2.1	2.4	2.4	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.0	1.9	1.9	1.9	2.1	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.06	2.42
2-Sep	2.0	2.0	2.1	2.3	2.3	A	2.3	2.3	2.2	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.3	2.2	2.08	2.39
3-Sep	2.2	2.1	2.2	2.2	A	2.1	2.2	2.2	2.4	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.9	1.9	1.8	1.9	2.03	2.38
4-Sep	1.9	1.9	1.9	A	1.9	2.0	2.1	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0	1.94	2.06
5-Sep	1.9	2.0	A	2.0	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	1.99
6-Sep	2.0	A	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.8	2.0	2.0	2.0	2.4	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.09	2.76
7-Sep	A	2.0	2.1	2.1	2.1	2.1	2.4	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	A	2.04	2.41
8-Sep	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.5	2.8	2.3	2.1	2.1	2.2	2.1	2.0	2.2	2.4	2.0	2.0	2.0	2.0	2.2	2.3	2.0	2.20	2.81
9-Sep	2.0	2.0	2.2	2.1	2.0	A	2.2	2.2	2.5	2.2	2.0	2.1	2.1	2.1	2.1	2.0	2.3	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.12	2.45
10-Sep	2.1	2.3	2.3	2.4	A	2.4	2.5	2.9	2.4	2.3	2.1	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.3	2.1	2.1	2.2	2.18	2.86
11-Sep	2.1	2.3	2.2	A	2.3	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.2	2.09	2.33
12-Sep	2.4	2.4	2.2	2.3	2.4	A	2.4	2.2	2.3	2.4	2.4	2.3	2.4	2.2	2.2	2.4	2.2	2.2	2.0	2.3	2.1	2.7	2.2	2.1	2.29	2.70
13-Sep	2.1	2.1	2.2	2.1	A	2.3	2.2	2.3	2.2	2.1	2.2	2.2	2.0	2.2	2.2	2.3	2.0	2.1	2.0	2.1	2.2	2.2	2.3	2.2	2.16	2.35
14-Sep	2.4	2.1	2.2	A	2.2	2.2	2.3	2.2	2.4	2.5	2.7	2.6	2.5	2.7	2.2	2.2	2.3	2.1	2.4	2.2	2.3	2.5	2.4	3.2	2.38	3.20
15-Sep	2.9	3.6	3.2	3.0	3.0	A	3.0	3.2	2.9	2.6	2.4	2.3	2.1	2.1	2.1	2.1	2.0	P	P	P	P	P	P	P	--	3.55
16-Sep	P	P	P	P	P	P	N	N	N	N	N	N	N	N	M	M	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	--	2.23
17-Sep	2.2	2.2	2.4	2.4	2.3	A	2.3	2.4	2.5	2.4	2.2	A	A	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.5	2.1	2.1	2.1	2.20	2.49
18-Sep	2.3	2.3	2.3	2.2	2.3	A	2.4	2.3	2.2	2.1	2.5	2.1	2.1	2.3	2.3	2.0	2.0	2.0	2.0	2.5	2.5	2.3	2.3	2.5	2.25	2.52
19-Sep	2.3	2.4	2.3	2.1	A	2.2	2.1	2.2	2.3	2.3	2.3	2.3	2.4	2.2	2.2	2.3	2.0	2.0	2.2	2.3	2.3	2.4	2.3	2.1	2.24	2.41
20-Sep	2.1	2.1	2.1	2.1	2.0	A	2.0	2.3	2.0	2.0	2.0	2.1	2.2	2.0	2.2	2.1	2.3	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.10	2.29
21-Sep	2.2	2.3	2.4	2.9	2.2	A	2.2	2.9	2.2	2.3	2.3	2.4	2.2	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.2	3.8	2.9	2.4	2.35	3.76
22-Sep	2.3	2.7	3.2	3.0	A	2.8	3.7	3.5	2.5	2.3	2.4	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.2	2.2	2.40	3.71
23-Sep	2.1	2.3	2.4	2.4	2.3	A	2.7	2.4	2.4	2.6	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	1.9	2.1	2.0	2.0	1.9	2.0	2.17	2.72
24-Sep	2.0	2.0	2.0	2.1	2.2	A	C	C	C	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.0	2.0	1.9	1.9	2.06	2.51
25-Sep	1.9	2.2	2.1	2.0	2.0	A	2.1	2.1	2.3	2.2	2.4	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.2	2.0	1.9	1.9	2.04	2.38
26-Sep	1.9	1.9	2.0	2.0	A	2.0	1.9	2.0	2.0	2.0	1.9	1.9	1.9	2.1	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.3	2.3	2.5	2.02	2.51
27-Sep	2.5	2.2	2.5	A	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.3	2.3	2.4	2.3	2.1	2.1	2.17	2.50
28-Sep	2.0	2.0	A	2.2	2.1	1.9	1.9	2.1	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.3	1.98	2.34
29-Sep	2.1	A	1.9	1.9	2.0	2.1	2.0	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.3	2.0	2.1	2.4	2.03	2.40
30-Sep	2.3	2.0	2.1	2.2	2.2	A	2.3	2.4	2.4	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.11	2.40
	2.16	2.21	2.25	2.26	2.19	2.17	2.29	2.33	2.27	2.22	2.15	2.09	2.05	2.06	2.04	2.03	2.03	2.02	2.03	2.10	2.11	2.20	2.15	2.18	Diurnal Average	
	2.94	3.55	3.20	3.04	3.00	2.80	3.71	3.46	2.91	2.76	2.65	2.58	2.48	2.68	2.33	2.36	2.35	2.38	2.36	2.50	2.52	3.76	2.91	3.20	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance N - Not Valid A - Automated Daily Zero Span

Hourly Maximums

Total Hydrocarbons (THC) - ppm

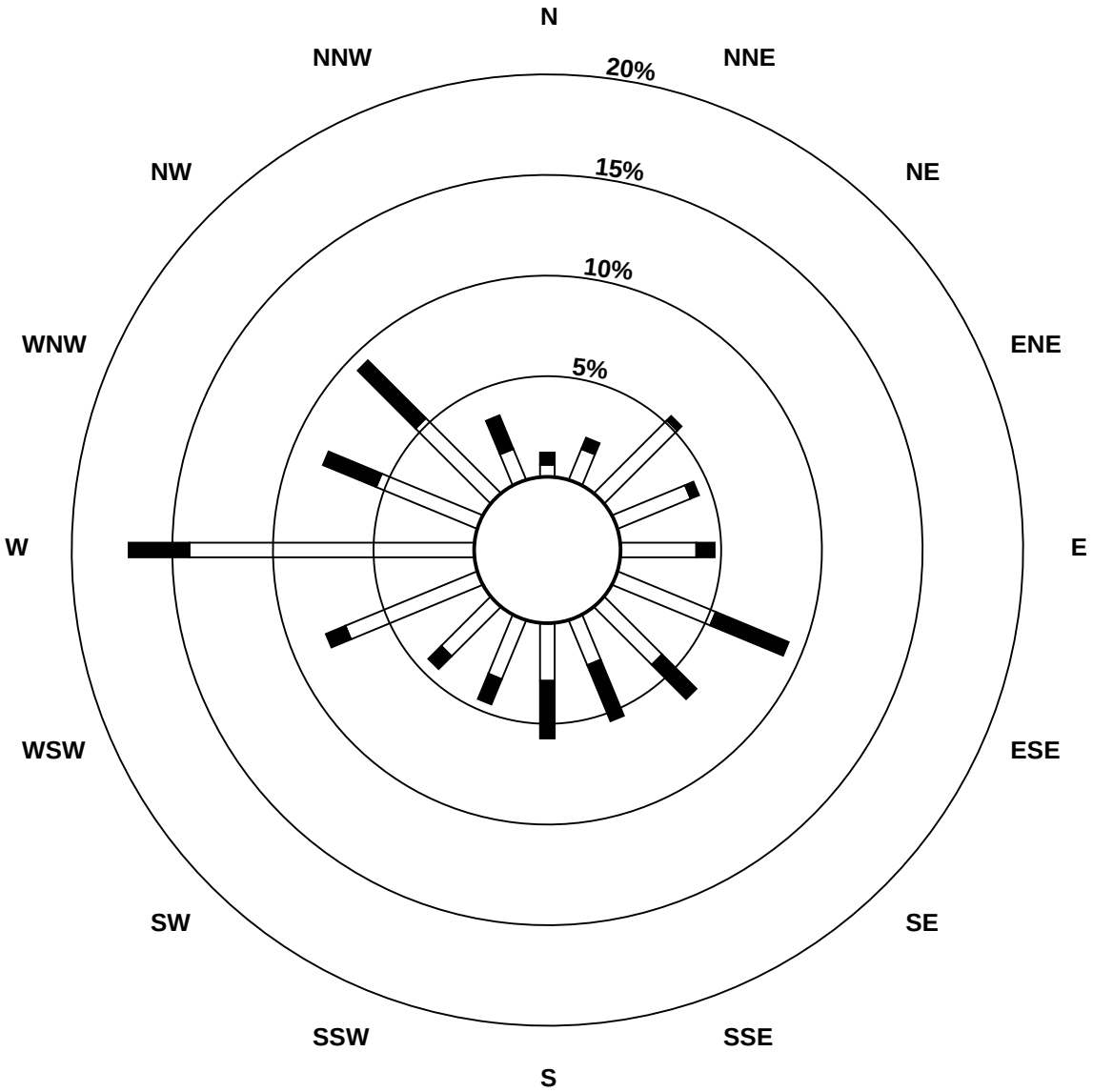
Henry Pirker - September 2010



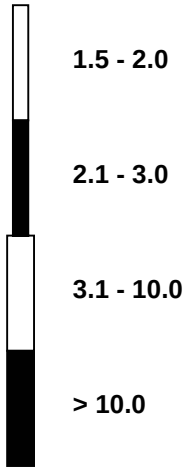
Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - September 2010



Pollutant Classes (ppm)



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Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Henry Pirker - September 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 39.3 $\mu g/m^3$ on Sep 2 11:00
Maximum Daily Average: 9.6 $\mu g/m^3$ on Sep 14

Minimum Value: 0 $\mu g/m^3$ on Sep 4 03:00
Maximum Diurnal Average: 6.6 $\mu g/m^3$ at hour 21
Monthly Average: 5.24 $\mu g/m^3$
Minimum Daily Average: 1.7 $\mu g/m^3$ on Sep 5
Minimum Diurnal Average: 4.2 $\mu g/m^3$ at hour 5
Percentiles: $P_1 = 0.0$ $P_{10} = 1.5$ $Q_1 = 2.9$ Median = 4.7 $Q_3 = 6.7$ $P_{90} = 9.2$ $P_{99} = 19.6$

Hours in Service:	720
Hours of Data:	651
Hours of Missing Data:	69
Hours of Calibration:	0
Percent Operational Time:	90.4

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-Sep	6	8	8	5	4	3	3	3	6	5	3	3	5	1	2	5	4	0	3	4	3	1	1	3	3.7	8.0
2-Sep	2	3	2	3	4	4	4	10	10	15	39	28	4	1	4	3	3	3	3	3	3	4	6	8	7.1	39.3
3-Sep	7	7	5	5	2	6	7	5	5	5	5	8	7	7	6	5	4	5	4	7	11	2	2	1	5.4	10.9
4-Sep	2	3	0	4	2	6	2	0	2	1	2	4	3	1	0	2	2	2	1	1	0	0	1	0	1.8	5.6
5-Sep	1	2	0	4	0	BD	2	4	0	BD	4	2	0	1	2	1	1	3	2	2	2	2	3	0	1.7	4.4
6-Sep	2	2	1	4	0	4	2	4	4	4	4	2	3	3	1	1	3	0	2	2	3	6	5	5	2.8	5.7
7-Sep	2	3	0	6	0	6	2	0	0	7	0	3	3	3	0	0	3	1	0	1	4	1	9	6	2.6	9.0
8-Sep	0	0	2	3	5	6	N	N	N	N	N	N	5	7	9	11	7	6	6	4	5	5	5	4	5.0	10.5
9-Sep	3	3	3	4	3	4	4	5	5	4	9	9	5	3	4	8	8	7	6	4	5	6	3	4	4.9	9.1
10-Sep	5	5	7	5	6	7	6	5	8	9	7	8	4	4	3	4	3	5	3	2	5	6	5	5	5.3	9.3
11-Sep	1	5	4	6	3	3	3	2	7	4	5	1	N	M	M	0	6	3	4	4	5	7	7	8	4.1	7.7
12-Sep	5	4	5	4	5	4	5	5	5	6	6	7	8	8	7	6	5	4	5	5	5	4	5	4	5.4	8.2
13-Sep	3	3	3	3	3	3	4	4	3	3	3	3	3	3	2	3	5	5	5	6	7	7	5	6	4.0	7.0
14-Sep	4	4	5	4	3	3	2	4	4	8	8	13	27	26	20	7	5	8	9	10	13	14	14	16	9.6	27.2
15-Sep	12	11	11	9	8	7	7	11	11	9	8	8	8	9	10	8	6	P	P	P	P	P	P	P	--	12.5
16-Sep	P	P	P	P	P	P	P	P	P	P	5	5	4	4	2	4	4	4	4	3	5	9	8	11	--	10.6
17-Sep	14	8	5	5	5	4	6	6	8	7	9	6	4	3	2	3	4	3	5	7	14	14	8	8	6.6	14.2
18-Sep	6	21	24	16	N	N	N	N	8	5	4	5	4	3	4	5	4	5	6	8	9	6	N	N	8.0	24.4
19-Sep	6	6	5	6	5	4	N	N	N	N	N	6	6	5	5	N	N	N	N	N	N	N	N	N	--	6.1
20-Sep	0	2	2	3	3	4	5	4	3	3	3	2	1	1	3	5	5	6	6	7	6	6	5	4	3.6	6.6
21-Sep	5	3	2	3	3	3	4	5	3	6	10	11	7	7	8	9	7	7	5	8	10	10	10	10	6.4	11.1
22-Sep	8	7	8	6	8	6	7	9	12	12	10	7	5	7	6	7	6	6	8	11	11	9	9	9	8.0	11.7
23-Sep	7	5	6	6	5	5	6	11	13	12	8	8	6	5	5	6	7	4	5	8	11	8	5	5	7.0	13.5
24-Sep	4	4	5	6	6	7	7	6	8	7	6	6	5	4	7	N	N	N	N	N	N	N	4	8	--	8.0
25-Sep	8	5	7	9	11	10	10	P	P	11	7	12	13	N	N	N	N	N	N	N	N	N	N	N	--	13.4
26-Sep	3	5	3	4	6	5	2	2	3	3	2	1	2	3	5	5	6	7	8	8	10	9	11	9	5.0	10.7
27-Sep	7	12	9	8	8	6	6	5	8	5	3	6	5	4	11	7	8	10	6	8	12	15	10	7	7.9	15.3
28-Sep	4	0	2	1	1	3	2	0	0	3	5	4	7	N	8	0	18	4	1	2	1	2	1	1	3.0	18.3
29-Sep	2	2	3	4	3	1	3	1	1	4	3	6	0	2	2	2	3	5	1	3	5	4	2	2	2.6	5.6
30-Sep	2	3	2	4	4	6	7	11	12	8	4	2	1	4	6	4	4	4	2	5	8	6	5	5	4.9	11.7
	4.5	5.1	4.7	5.1	4.2	4.8	4.5	4.9	5.7	6.4	6.5	6.5	5.3	4.8	5.2	4.4	5.2	4.5	4.3	5.1	6.6	6.2	5.8	5.6	Diurnal Average	
	13.8	21.3	24.4	15.7	11.3	9.8	9.5	10.9	13.5	15.1	39.3	27.7	27.2	25.9	19.6	10.5	18.3	9.8	9.2	10.7	14.1	15.3	14.5	15.6	Diurnal Maximum	

P - Power Failure M - Maintenance N - Not Valid BD - Baseline Drift
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

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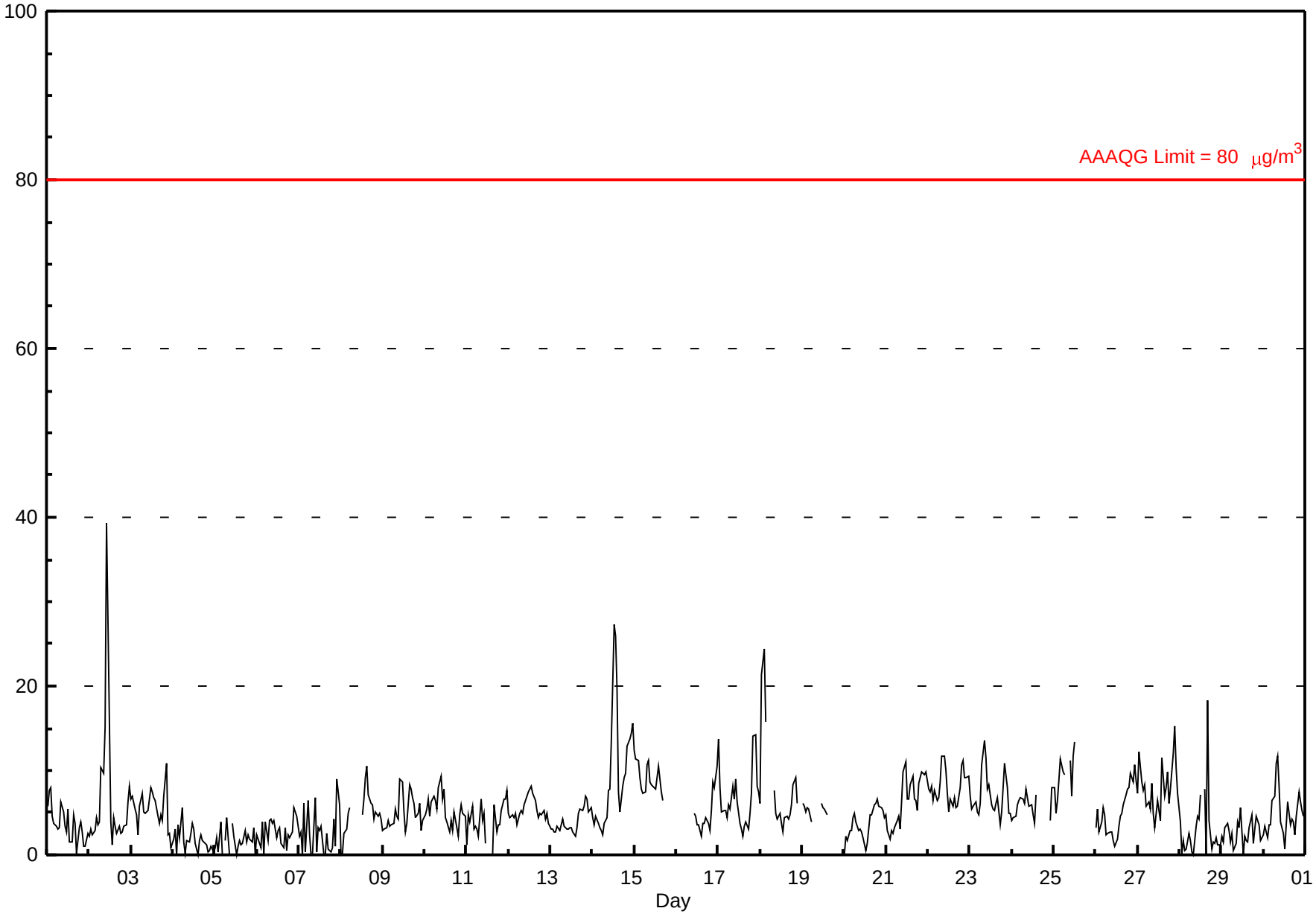
Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Henry Pirker - September 2010



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Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Henry Pirker - September 2010

Maximum Value: 55.9 $\mu g/m^3$ on Sep 2 11:00

Maximum Daily Average: 11.5 $\mu g/m^3$ on Sep 2

Minimum Value: 0 $\mu g/m^3$ on Sep 5 06:00

Minimum Daily Average: 3.8 $\mu g/m^3$ on Sep 5

Maximum Diurnal Average: 9.3 $\mu g/m^3$ at hour 12

Minimum Diurnal Average: 5.7 $\mu g/m^3$ at hour 5

Monthly Average: 7.15 $\mu g/m^3$

Percentiles: $P_1 = 1.3$ $P_{10} = 3.3$ $Q_1 = 4.6$ Median = 6.3 $Q_3 = 8.8$ $P_{90} = 11.8$ $P_{99} = 27.3$

Hours in Service:	720
Hours of Data:	653
Hours of Missing Data:	67
Hours of Calibration:	0
Percent Operational Time:	90.7

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-Sep	8	10	9	6	5	4	4	4	8	8	5	6	7	5	5	10	10	3	4	5	5	4	5	6	5.9	10.1
2-Sep	5	6	5	6	6	6	6	14	12	19	56	55	7	5	8	7	6	6	6	6	6	7	9	10	11.5	55.9
3-Sep	9	9	9	6	4	8	12	12	6	7	7	10	11	13	13	9	7	8	8	11	15	8	3	2	8.6	14.6
4-Sep	3	4	3	4	3	8	8	2	4	4	5	6	6	4	2	5	5	5	5	4	4	2	1	1	4.2	7.9
5-Sep	3	3	3	6	2	0	6	6	2	0	6	6	4	4	5	4	3	4	4	3	3	4	7	4	3.8	6.5
6-Sep	5	7	6	7	4	8	7	9	9	5	5	4	5	5	5	3	6	5	5	5	5	7	6	6	5.9	9.5
7-Sep	6	5	3	9	4	9	7	0	3	8	6	5	4	4	3	3	4	3	4	2	6	5	12	10	5.2	12.0
8-Sep	1	2	3	4	6	6	N	N	N	N	N	N	8	9	12	13	9	9	7	6	7	5	7	7	6.8	13.4
9-Sep	4	5	4	6	4	4	4	7	6	6	11	11	11	6	6	12	12	12	11	9	9	10	8	8	7.7	12.0
10-Sep	9	10	10	9	10	10	11	10	12	14	11	11	11	8	6	8	6	8	8	5	8	9	8	8	9.2	14.4
11-Sep	5	8	7	8	6	7	7	6	9	8	9	7	N	M	M	5	7	4	4	5	6	7	8	8	6.7	9.2
12-Sep	7	5	5	5	5	5	6	6	6	7	7	8	8	9	8	7	6	5	6	5	6	5	5	4	6.1	8.9
13-Sep	3	4	3	4	4	4	5	5	4	3	3	4	4	4	3	4	6	6	6	6	8	7	6	6	4.6	7.6
14-Sep	6	4	5	4	4	4	3	4	5	9	9	21	30	29	24	13	6	10	10	12	13	15	15	16	11.3	30.0
15-Sep	15	12	12	10	9	8	9	12	12	10	10	8	8	11	12	9	7	P	P	P	P	P	P	P	--	15.3
16-Sep	P	P	P	P	P	P	P	P	P	P	6	6	4	5	3	5	4	5	5	4	7	9	9	12	--	12.0
17-Sep	14	13	5	6	6	5	7	8	9	8	10	8	5	4	3	5	5	5	5	10	17	17	11	9	8.1	16.6
18-Sep	11	27	27	20	N	N	N	N	9	6	5	5	5	4	5	6	5	6	6	10	11	7	N	N	9.7	27.3
19-Sep	9	6	6	6	6	5	N	N	N	N	N	7	6	6	5	N	N	N	N	N	N	N	N	N	--	8.5
20-Sep	1	3	2	4	4	5	5	5	3	4	3	3	1	2	4	6	6	7	7	7	7	6	6	5	4.4	7.1
21-Sep	5	4	2	3	3	4	4	5	4	9	12	12	9	7	9	10	8	7	7	9	11	11	10	10	7.3	12.1
22-Sep	9	9	9	7	8	7	7	11	12	13	10	10	6	7	7	7	6	7	9	12	12	10	10	10	9.0	12.7
23-Sep	8	6	6	7	6	5	9	12	15	14	9	9	8	6	6	7	7	6	6	10	11	11	5	5	8.2	15.0
24-Sep	5	5	5	6	7	8	8	7	8	8	6	6	6	5	9	N	N	N	N	N	N	N	7	9	--	9.4
25-Sep	10	9	9	13	14	12	11	P	P	14	10	13	15	N	N	N	N	N	N	N	N	N	N	N	--	14.8
26-Sep	5	6	4	5	6	6	3	4	4	4	2	2	4	4	5	5	6	9	9	10	10	10	11	10	6.1	11.1
27-Sep	8	14	12	9	10	6	7	7	9	8	8	9	6	6	15	13	10	11	10	10	14	17	15	9	10.1	16.7
28-Sep	7	2	3	2	2	3	2	2	0	7	7	6	8	N	10	8	27	12	2	3	3	3	2	3	5.4	27.3
29-Sep	3	3	3	5	5	3	4	1	3	5	5	7	3	6	6	4	4	6	4	4	5	5	4	4	4.3	6.8
30-Sep	4	5	3	5	6	7	9	12	13	13	5	4	2	6	8	6	6	5	3	6	8	7	7	5	6.4	12.8
	6.5	7.1	6.4	6.5	5.7	6.0	6.5	6.7	7.2	8.2	8.9	9.3	7.3	6.8	7.5	7.2	7.3	6.7	6.1	6.9	8.2	8.0	7.5	7.3	Diurnal Average	
	15.3	27.3	27.3	20.2	13.5	12.0	11.8	13.7	15.0	18.8	55.9	55.0	30.0	29.5	23.6	13.4	27.3	12.2	10.6	12.3	16.6	16.7	15.2	16.3	Diurnal Maximum	

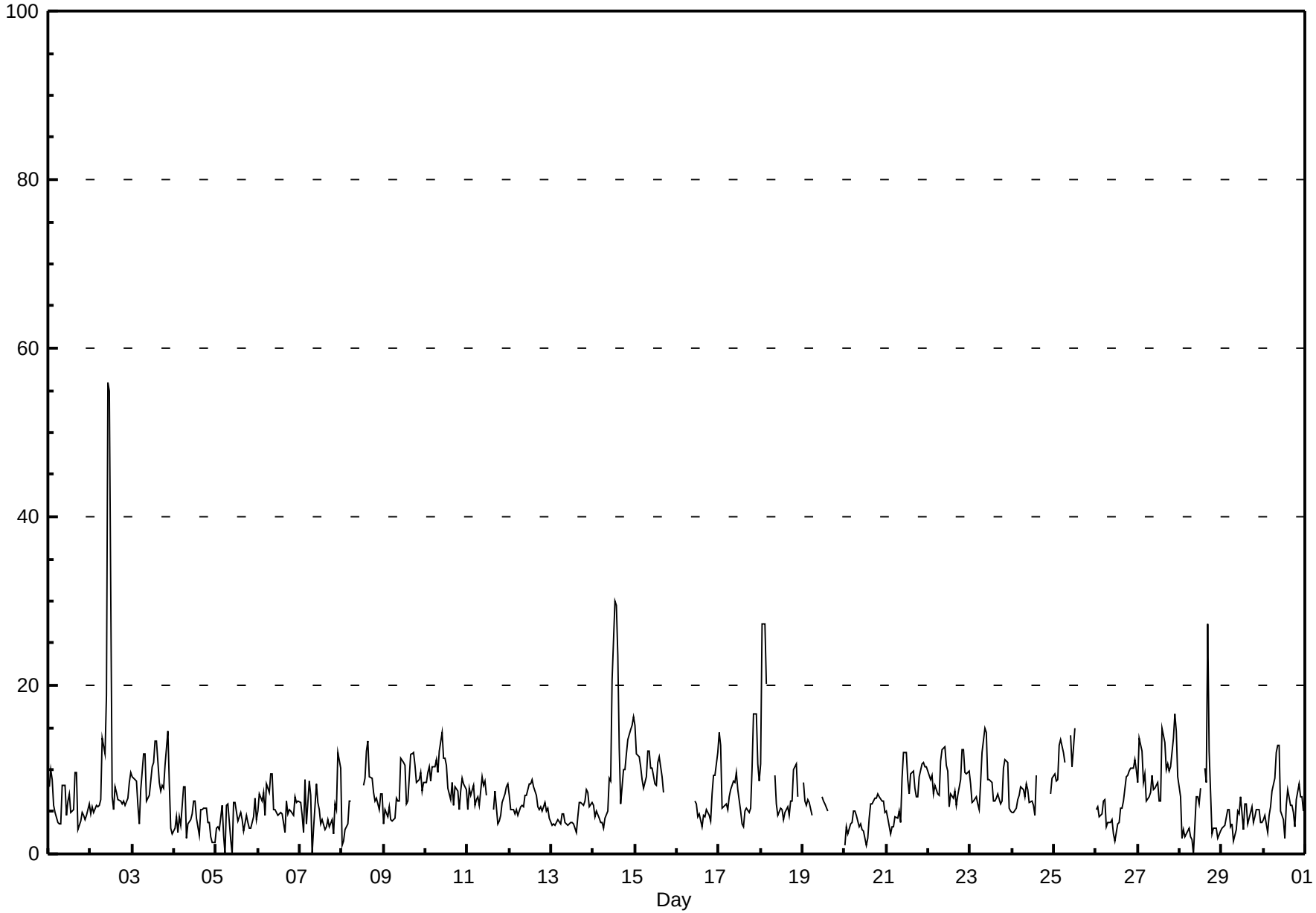
P - Power Failure M - Maintenance N - Not Valid

PASZA
Peace Airshed Zone Association

Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

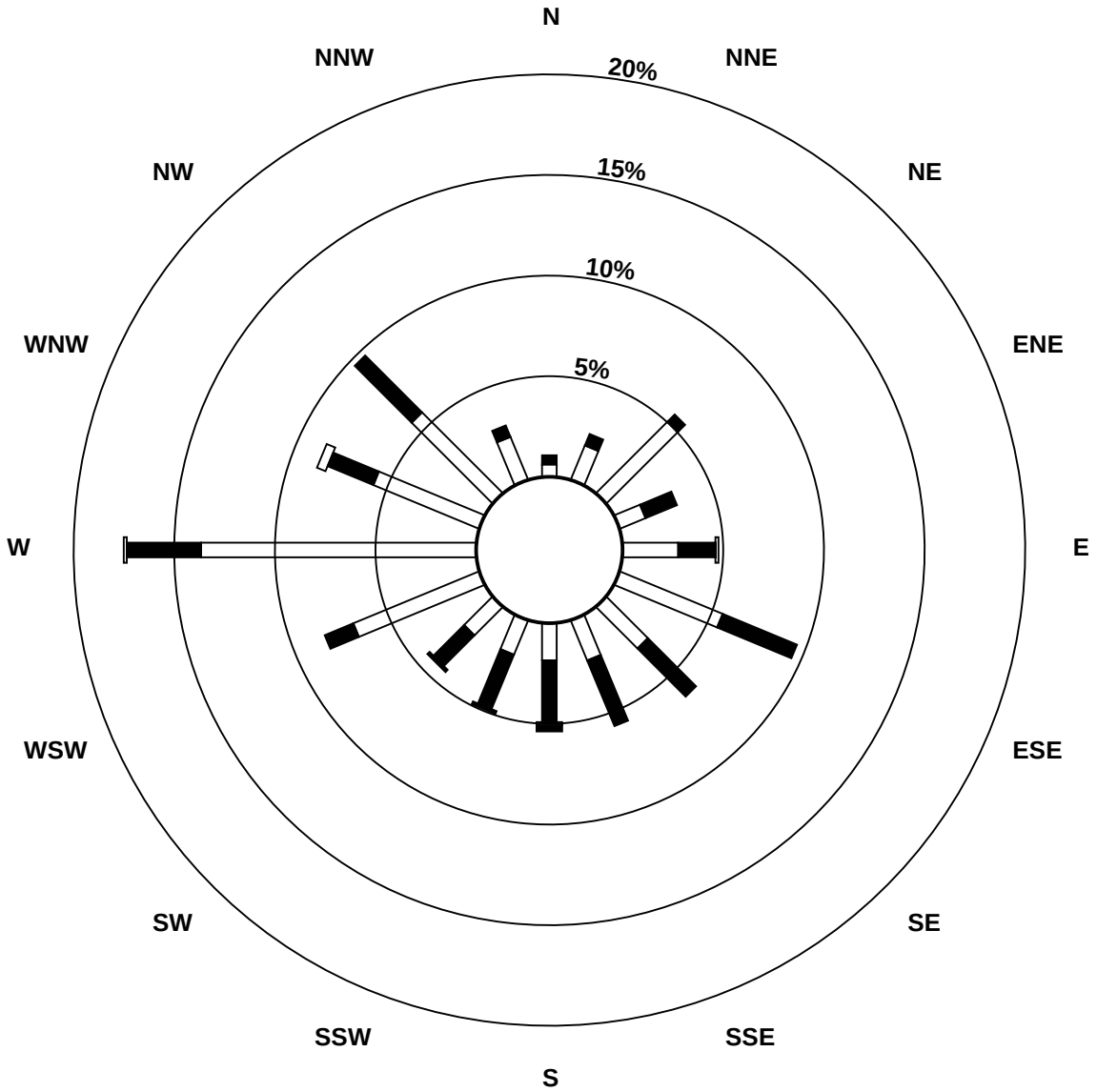
Henry Pirker - September 2010



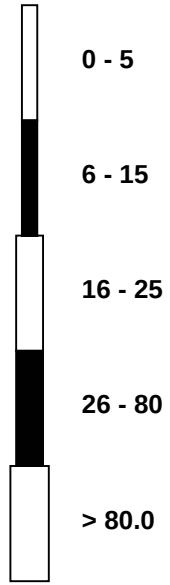
Pollutant Rose

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Henry Pirker - September 2010



Pollutant Classes ($\mu g/m^3$)



PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 26.3 °C on Sep 3 16:00 Maximum Daily Average: 16.3 °C on Sep 3

Minimum Value: -6 °C on Sep 17 06:00 Minimum Daily Average: 2.0 °C on Sep 21
Maximum Diurnal Average: 14.0 °C at hour 16 Minimum Diurnal Average: 4.3 °C at hour 7
Monthly Average: 8.96 °C Percentiles: P_1 = -3.0 P_{10} = 1.7 Q_1 = 5.3 Median = 9.0 Q_3 = 12.4 P_{90} = 15.6 P_{99} = 21.8

Hours in Service:	720
Hours of Data:	707
Hours of Missing Data:	13
Hours of Calibration:	0
Percent Operational Time:	98.2

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-Sep	9	9	9	9	9	9	9	9	10	11	11	13	12	14	14	13	14	14	14	13	11	10	9	8	11.0	14.5
2-Sep	8	7	7	6	5	5	6	7	8	11	14	18	19	20	21	22	22	21	21	19	17	15	13	13	13.6	21.8
3-Sep	13	12	11	11	10	9	8	12	12	14	16	19	22	23	25	26	26	25	24	20	15	12	12	12	16.3	26.3
4-Sep	12	11	11	10	10	9	9	10	12	13	14	15	15	15	15	15	16	15	14	12	10	8	8	8	11.9	15.6
5-Sep	9	8	8	8	7	6	6	7	7	7	7	8	8	10	10	11	10	10	9	8	8	8	8	8	8.2	10.7
6-Sep	8	8	8	8	8	7	7	7	8	10	11	12	12	11	12	14	14	13	13	11	11	10	9	8	10.0	14.5
7-Sep	8	8	8	8	8	8	8	8	8	10	11	11	11	11	12	13	14	14	13	10	7	6	5	4	9.3	13.7
8-Sep	4	3	3	2	2	4	4	4	5	6	7	8	9	11	11	11	11	11	11	10	10	10	10	9	7.4	11.4
9-Sep	9	9	9	9	8	8	8	8	8	9	10	12	13	13	14	13	15	14	14	12	10	9	9	9	10.5	15.2
10-Sep	8	7	6	5	4	3	3	6	7	9	13	15	14	15	17	17	17	16	15	13	10	10	8	7	10.2	17.4
11-Sep	7	6	5	5	4	4	5	6	10	12	13	15	15	16	17	18	16	16	16	13	11	8	7	6	10.4	17.5
12-Sep	5	4	3	3	3	5	4	5	7	7	7	9	10	10	9	9	9	10	10	9	8	7	7	6	7.1	10.2
13-Sep	6	6	6	6	5	5	5	5	6	8	10	9	9	9	11	11	9	8	8	8	8	7	5	4	7.3	11.4
14-Sep	4	3	2	2	2	1	1	1	1	2	3	4	6	8	11	13	13	12	11	9	9	8	8	7	5.9	13.2
15-Sep	6	5	3	2	1	1	1	2	5	6	11	14	14	11	9	8	7	P	P	P	P	P	P	P	--	13.7
16-Sep	P	P	P	P	P	P	4	5	6	6	7	9	8	9	10	10	9	9	8	4	2	0	0	-1	5.8	10.0
17-Sep	-3	-4	-4	-4	-5	-6	-4	-1	1	4	7	9	10	11	12	12	12	12	11	8	6	5	4	2	3.9	12.1
18-Sep	1	-1	-2	-2	-3	-3	-2	-2	1	4	7	9	11	12	13	14	14	13	12	9	8	7	6	4	5.4	13.8
19-Sep	4	3	2	2	1	1	1	3	4	5	5	6	6	7	7	6	5	4	4	3	3	3	3	3	3.8	7.2
20-Sep	2	2	3	3	3	3	3	2	2	2	3	3	4	4	4	5	5	6	4	4	2	1	1	0	3.0	5.8
21-Sep	-1	-2	-3	-2	-2	-2	-3	-3	-3	-1	0	1	2	5	8	9	10	10	9	6	5	3	2	1	2.0	10.2
22-Sep	0	-1	-1	-2	-2	-2	-2	-1	3	5	7	11	13	14	15	14	14	14	13	10	9	7	3	0	5.9	14.7
23-Sep	0	-1	-1	-1	-1	-2	-2	1	5	7	10	13	14	14	15	15	14	13	12	11	10	11	10	9	7.3	15.0
24-Sep	8	7	7	7	5	3	3	5	9	12	14	16	17	17	17	17	16	16	14	12	11	11	12	11	11.1	17.1
25-Sep	11	11	10	10	10	11	11	10	11	12	15	19	21	22	22	20	20	19	17	15	13	12	12	11	14.3	22.3
26-Sep	10	10	9	9	9	9	9	8	10	12	14	15	16	17	17	17	17	17	15	13	11	10	9	8	12.3	17.4
27-Sep	8	9	9	8	8	8	8	8	9	10	13	14	13	13	14	13	13	13	13	12	11	12	13	13	11.1	13.8
28-Sep	13	12	11	12	11	11	12	12	14	15	15	16	17	17	18	18	17	16	15	13	13	11	10	8	13.6	17.6
29-Sep	9	9	10	10	10	9	9	9	11	12	13	14	15	17	18	18	18	17	15	13	10	8	8	8	12.1	18.5
30-Sep	8	7	4	3	2	2	2	2	8	11	14	16	16	17	17	17	17	16	14	12	11	10	9	8	10.1	17.3
	6.4	5.8	5.3	5.0	4.6	4.4	4.3	5.2	6.9	8.4	10.1	11.7	12.4	13.1	13.9	14.0	13.8	13.6	12.7	10.8	9.3	8.4	7.5	6.8	Diurnal Average	
	13.3	12.1	11.3	11.7	11.2	11.2	11.6	12.4	13.9	14.9	16.4	19.3	21.8	23.1	25.3	26.3	25.5	25.2	24.5	20.3	17.1	14.7	13.5	13.4	Diurnal Maximum	

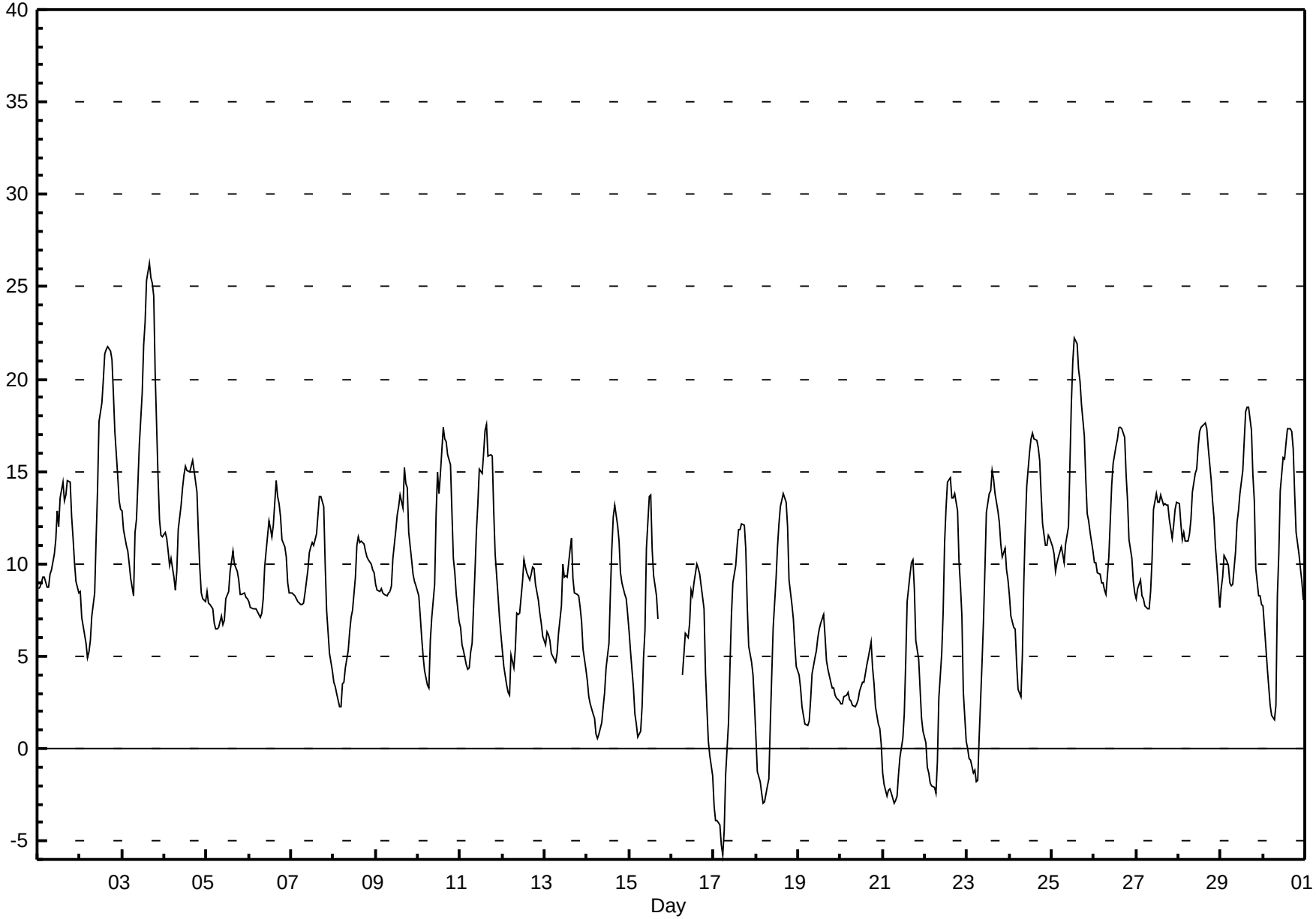
P - Power Failure

PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 91.4 % on Sep 10 05:00 Maximum Daily Average: 83.8 % on Sep 8

Minimum Value: 27 % on Sep 29 16:00 Minimum Daily Average: 45.3 % on Sep 29
Maximum Diurnal Average: 82.6 % at hour 6 Minimum Diurnal Average: 49.9 % at hour 16
Monthly Average: 67.06 % Percentiles: P_1 = 30.7 P_{10} = 39.5 Q_1 = 53.5 Median = 70.4 Q_3 = 82.0 P_{90} = 87.6 P_{99} = 91.0

Hours in Service:	720
Hours of Data:	707
Hours of Missing Data:	13
Hours of Calibration:	0
Percent Operational Time:	98.2

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-Sep	89	90	89	90	90	90	90	88	87	85	81	76	77	71	66	69	71	62	62	67	73	76	78	76	78.9	90.3
2-Sep	73	78	80	86	88	88	85	80	77	70	64	51	49	47	44	43	42	42	45	51	56	64	71	72	64.4	87.8
3-Sep	72	76	80	81	82	85	86	77	75	70	63	56	50	47	37	33	35	38	40	52	70	79	85	85	64.6	86.1
4-Sep	83	77	73	76	72	76	77	74	65	52	45	40	37	37	37	38	38	39	44	52	57	62	65	66	57.7	82.9
5-Sep	66	76	85	87	85	85	83	80	75	79	81	74	69	66	65	63	64	66	69	75	75	74	75	76	74.8	86.6
6-Sep	78	79	80	81	81	82	83	82	79	71	62	55	54	56	54	48	48	49	50	56	58	63	72	79	66.6	82.8
7-Sep	83	86	86	87	88	90	90	90	88	79	70	68	66	66	63	61	56	54	56	69	81	84	88	88	76.6	90.1
8-Sep	88	87	87	87	87	85	87	87	87	88	88	86	84	80	76	78	81	79	80	81	81	82	83	82	83.8	88.2
9-Sep	85	86	86	86	86	87	87	86	88	86	82	76	72	67	64	68	61	62	63	73	79	82	84	85	78.4	88.1
10-Sep	87	89	90	91	91	91	91	89	83	77	65	54	56	51	41	36	35	37	39	48	57	59	63	70	66.3	91.4
11-Sep	70	73	74	77	79	79	78	76	64	57	53	46	42	39	37	36	39	39	41	50	56	64	70	73	58.8	79.1
12-Sep	79	82	84	85	89	89	89	86	84	84	83	76	70	70	75	77	73	70	68	68	70	71	73	76	77.9	89.1
13-Sep	78	77	78	78	80	82	83	82	79	75	68	72	71	72	63	60	70	75	75	75	81	81	86	88	76.1	87.6
14-Sep	89	89	91	91	91	91	91	91	91	91	91	91	88	76	62	52	49	52	53	62	67	71	74	78	77.9	91.1
15-Sep	86	87	87	88	89	89	90	90	83	80	65	51	53	64	65	68	71	P	P	P	P	P	P	P	--	89.9
16-Sep	P	P	P	P	P	P	79	75	68	67	64	58	56	52	44	42	40	39	39	49	58	65	70	71	57.7	79.3
17-Sep	74	78	79	82	81	82	85	74	68	62	58	50	43	37	33	32	30	30	33	41	47	47	50	55	56.3	84.8
18-Sep	71	77	78	78	80	79	80	79	67	60	54	46	40	39	37	32	31	33	33	41	43	44	51	55	55.3	80.1
19-Sep	60	64	69	70	72	74	75	75	73	69	67	63	62	61	59	73	83	85	85	86	87	87	87	87	74.0	87.1
20-Sep	87	87	87	86	87	88	87	86	85	83	82	79	77	75	73	71	68	63	69	79	84	87	89	89	81.1	89.2
21-Sep	90	90	89	90	90	90	89	89	89	90	90	90	89	82	62	53	52	51	55	64	65	71	78	83	78.3	89.8
22-Sep	84	86	88	89	89	88	88	82	71	64	59	49	42	36	31	35	34	35	38	46	48	54	72	79	61.9	89.1
23-Sep	78	80	83	85	84	84	87	79	66	62	54	45	44	41	38	38	42	45	46	49	52	52	56	59	60.3	86.7
24-Sep	62	66	69	70	77	84	83	76	64	54	47	41	37	34	34	34	35	36	47	57	67	66	61	59	56.7	83.6
25-Sep	60	62	67	64	63	62	63	65	63	63	56	50	46	44	45	48	51	54	62	71	78	79	80	82	61.6	82.3
26-Sep	86	87	90	89	90	88	85	79	72	64	52	47	42	39	37	37	37	38	42	47	54	60	63	66	62.2	89.7
27-Sep	68	64	66	77	81	85	86	86	84	73	65	65	67	69	72	77	77	75	73	78	83	79	72	68	74.6	86.1
28-Sep	67	70	72	70	71	69	65	60	56	52	51	46	43	41	39	38	40	43	48	52	54	58	61	68	55.5	72.3
29-Sep	63	59	53	54	52	55	54	55	50	46	43	39	35	33	29	27	28	31	36	37	46	53	52	54	45.3	63.1
30-Sep	56	62	71	76	81	79	80	78	62	56	46	37	37	34	31	30	30	31	35	41	45	46	48	51	51.8	81.4
	76.3	78.1	79.7	81.0	82.0	82.6	82.5	79.8	74.8	70.4	64.9	59.3	56.6	54.2	50.5	49.9	50.3	50.1	52.7	59.2	64.6	67.6	70.8	73.1	Diurnal Average	
	89.5	89.5	90.6	90.9	91.4	91.1	91.1	91.0	91.1	91.0	90.9	90.6	89.3	81.5	76.4	78.4	83.0	85.0	85.4	85.9	86.6	87.3	88.8	89.2	Diurnal Maximum	

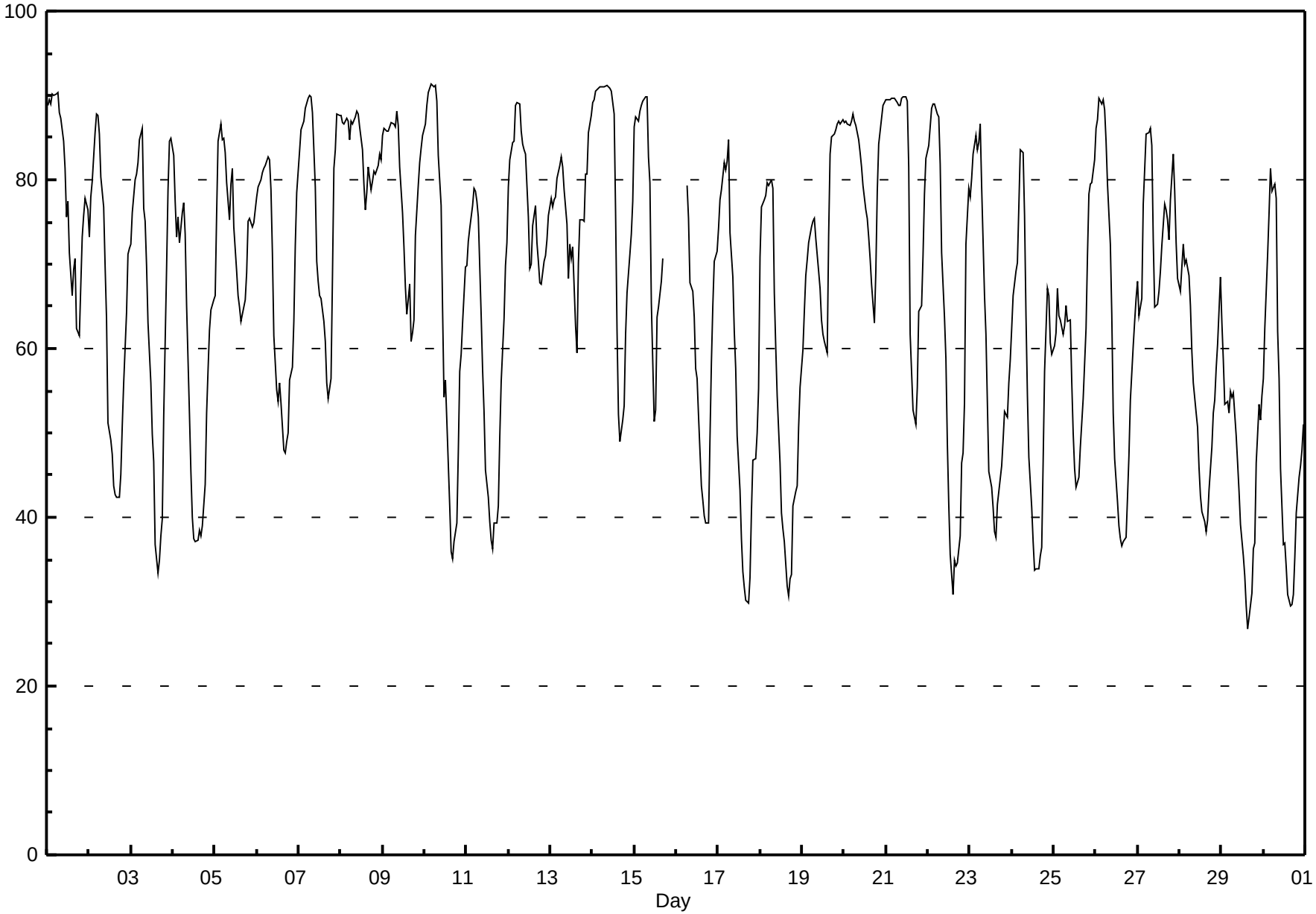
P - Power Failure

PASZA
Peace Airlifted Zoos Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 561.5 W/m^2 on Sep 2 15:00 Maximum Daily Average: 161.9 W/m^2 on Sep 16

Minimum Value: 0 W/m^2 on Sep 1 01:00 Minimum Daily Average: 29.9 W/m^2 on Sep 20
Maximum Diurnal Average: 344.8 W/m^2 at hour 12 Minimum Diurnal Average: 0.0 W/m^2 at hour 1
Monthly Average: 106.50 W/m^2 Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 9.7 Q_3 = 161.0 P_{90} = 392.3 P_{99} = 522.2

Hours in Service:	720
Hours of Data:	707
Hours of Missing Data:	13
Hours of Calibration:	0
Percent Operational Time:	98.2

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	0	0	7	43	52	115	171	292	161	406	248	210	116	103	81	9	0	0	0	0	83.9	406.4
2-Sep	0	0	0	0	0	0	7	56	115	256	344	524	471	520	561	477	164	166	103	16	0	0	0	0	157.6	561.5
3-Sep	0	0	0	0	0	0	32	90	141	263	413	494	492	523	550	341	201	176	83	3	0	0	0	0	158.5	550.5
4-Sep	0	0	0	0	0	0	10	56	258	391	507	514	463	360	439	482	169	130	87	5	0	0	0	0	161.3	514.0
5-Sep	0	0	0	0	0	0	7	51	130	113	183	241	233	331	236	223	103	65	27	3	0	0	0	0	81.1	331.3
6-Sep	0	0	0	0	0	0	4	39	85	180	267	406	150	141	250	483	193	138	58	5	0	0	0	0	100.0	482.9
7-Sep	0	0	0	0	0	0	2	27	106	214	343	271	398	222	288	322	160	139	77	8	0	0	0	0	107.4	398.3
8-Sep	0	0	0	0	0	0	6	20	36	38	70	77	201	201	104	54	80	56	25	2	0	0	0	0	40.4	201.3
9-Sep	0	0	0	0	0	0	2	19	33	111	198	236	236	240	129	157	193	87	66	4	0	0	0	0	71.3	240.4
10-Sep	0	0	0	0	0	0	16	72	91	151	389	362	230	356	504	367	163	146	90	7	0	0	0	0	122.7	503.8
11-Sep	0	0	0	0	0	0	8	73	214	351	451	485	252	392	500	401	95	119	82	5	0	0	0	0	142.9	500.5
12-Sep	0	0	0	0	0	0	10	67	61	67	94	210	136	88	116	110	78	67	27	0	0	0	0	0	47.1	210.4
13-Sep	0	0	0	0	0	0	3	42	130	176	256	129	115	177	223	165	35	31	17	0	0	0	0	0	62.4	256.1
14-Sep	0	0	0	0	0	0	3	38	74	115	148	185	284	490	495	418	146	80	31	0	0	0	0	0	104.5	495.0
15-Sep	0	0	0	0	0	0	4	51	128	195	444	504	451	118	152	106	58	P	P	P	P	P	P	P	--	503.6
16-Sep	P	P	P	P	P	P	1	70	184	192	245	382	194	427	546	363	163	112	37	0	0	0	0	0	161.9	546.1
17-Sep	0	0	0	0	0	0	2	86	209	330	430	505	537	533	488	414	161	104	33	0	0	0	0	0	159.7	536.9
18-Sep	0	0	0	0	0	0	1	38	157	318	422	489	526	521	477	401	159	97	29	0	0	0	0	0	151.5	526.4
19-Sep	0	0	0	0	0	0	0	25	90	110	100	149	143	120	101	47	35	13	2	0	0	0	0	0	39.0	148.8
20-Sep	0	0	0	0	0	0	0	3	25	57	54	85	90	94	66	62	85	82	14	0	0	0	0	0	29.9	93.6
21-Sep	0	0	0	0	0	0	0	24	73	119	157	186	259	422	473	393	156	87	22	0	0	0	0	0	98.9	473.1
22-Sep	0	0	0	0	0	0	0	68	196	307	386	482	497	497	333	186	142	100	35	0	0	0	0	0	134.6	497.4
23-Sep	0	0	0	0	0	0	1	69	193	295	362	431	450	287	321	87	24	20	14	0	0	0	0	0	106.4	449.9
24-Sep	0	0	0	0	0	0	0	51	173	289	399	415	389	271	197	154	80	30	0	0	0	0	0	0	101.9	414.8
25-Sep	0	0	0	0	0	0	0	22	63	102	316	383	454	421	273	81	51	31	13	2	2	0	0	0	92.2	454.0
26-Sep	0	0	0	0	0	0	0	30	168	284	385	451	487	483	430	350	141	75	5	0	0	0	0	0	137.0	487.1
27-Sep	0	0	0	0	0	0	0	15	75	156	304	269	145	115	132	91	62	22	1	0	0	0	0	0	57.7	303.7
28-Sep	0	0	0	0	0	0	0	26	166	240	244	418	494	396	341	348	138	63	10	0	0	0	0	0	120.2	494.1
29-Sep	0	0	0	0	0	0	0	36	156	266	364	340	410	459	416	338	143	63	9	0	0	0	0	0	125.0	459.4
30-Sep	0	0	0	0	0	0	0	29	153	261	363	430	453	453	407	329	139	63	6	0	0	0	0	0	128.6	452.9
	0.0	0.0	0.0	0.0	0.0	0.0	4.2	44.5	124.6	202.1	293.6	344.8	326.8	335.5	326.6	265.3	121.2	85.0	37.3	2.4	0.1	0.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.0	0.0	0.0	32.2	89.6	258.0	390.7	506.8	523.7	536.9	533.0	561.5	482.9	201.5	176.2	103.1	16.4	1.8	0.0	0.0	0.0	Diurnal Maximum	

P - Power Failure

PASZA
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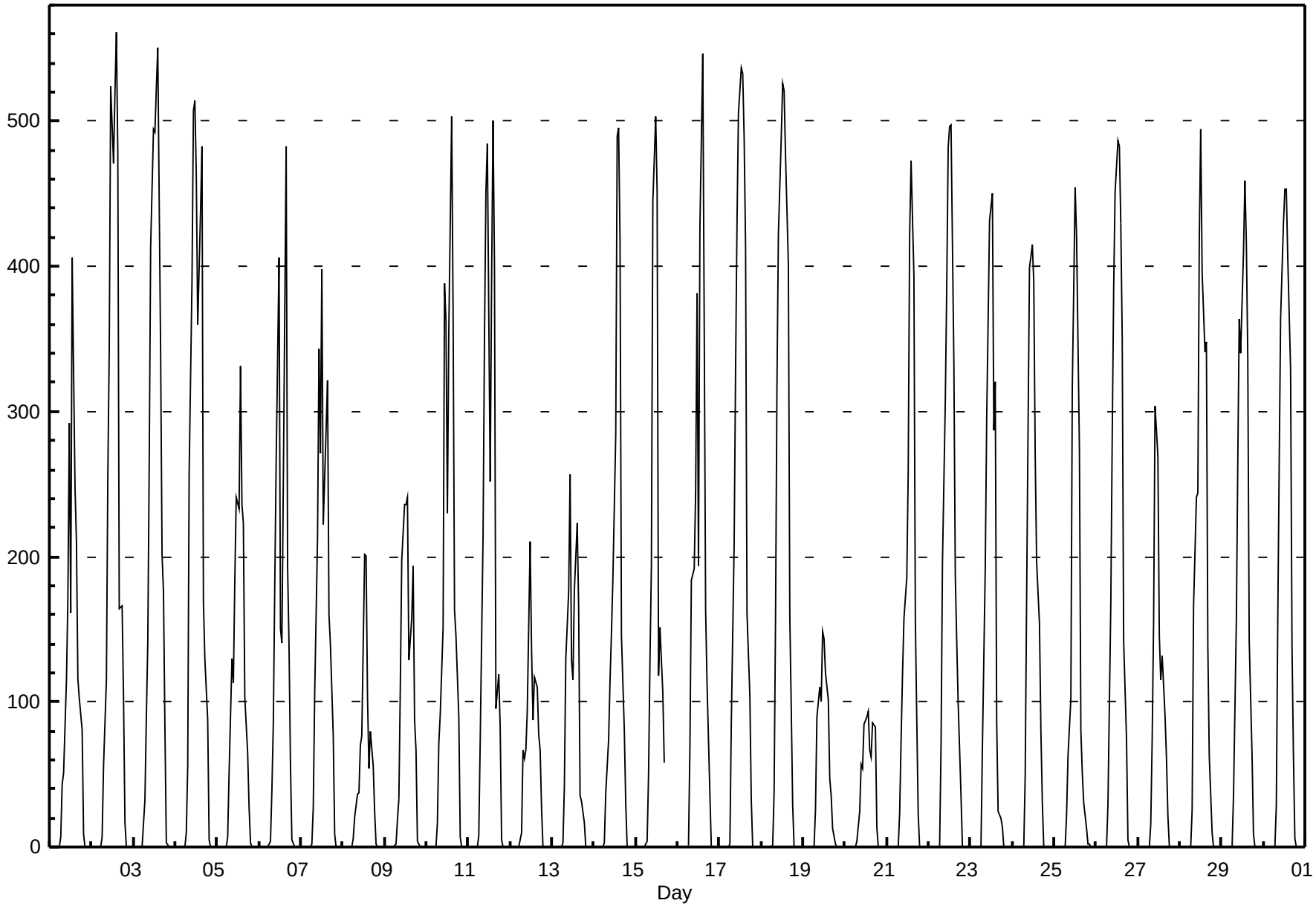
Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	3	2	5	5	8	7	6	8	11	11	10	10	9	5	1	2	1	9	12	11	8	9	7	7	6.5	12.3
Dir	323	321	286	262	254	268	288	269	263	275	267	252	285	307	24	299	30	289	268	270	254	252	245	242	270.0	267.6
2 Spd	8	2	4	5	5	3	4	5	5	5	7	11	13	17	22	25	24	22	15	10	7	3	2	5	7.3	24.9
Dir	249	228	217	151	170	159	143	135	179	191	203	222	231	248	265	263	268	269	272	264	263	196	122	127	243.2	262.8
3 Spd	4	4	5	5	5	1	2	3	6	7	9	8	7	6	6	4	4	7	6	1	28	17	10	8	1.7	28.0
Dir	118	99	113	111	134	79	317	120	109	122	124	113	160	174	238	270	199	172	148	268	299	285	277	239	197.5	299.0
4 Spd	10	10	9	8	11	8	7	9	13	26	27	26	24	26	31	29	21	24	23	12	9	10	11	10	16.1	30.9
Dir	269	279	270	260	261	232	234	233	248	263	260	255	262	266	269	274	258	268	266	252	243	245	244	241	259.9	269.1
5 Spd	13	10	12	12	12	9	12	16	17	14	14	15	18	16	15	15	12	12	11	6	5	5	3	6	11.0	18.2
Dir	258	257	280	307	307	300	291	296	301	318	299	305	304	304	304	308	319	331	331	298	271	270	285	253	299.2	303.5
6 Spd	4	2	3	2	4	6	6	3	3	3	8	6	4	6	6	6	7	7	6	6	4	5	5	4	2.2	7.5
Dir	241	297	331	58	104	118	135	175	160	121	123	130	34	57	80	57	10	24	23	43	12	347	326	312	56.9	123.2
7 Spd	5	7	7	5	5	6	6	8	9	11	13	11	14	14	13	10	10	8	7	5	3	3	3	4	7.5	14.5
Dir	334	307	304	324	312	310	290	305	302	304	288	291	276	285	281	288	279	277	299	326	314	335	325	315	296.4	275.9
8 Spd	4	5	6	6	4	5	4	5	5	4	5	3	4	7	7	7	8	9	8	7	8	8	6	7	3.2	9.1
Dir	318	334	341	346	319	336	330	331	1	35	146	137	92	96	101	95	100	104	112	112	106	98	89	98	74.5	104.4
9 Spd	8	8	8	8	8	8	6	6	5	4	4	3	5	3	1	2	5	3	7	6	5	6	5	4	4.6	8.3
Dir	98	100	93	96	100	106	114	115	119	121	169	219	222	163	256	110	137	92	131	136	112	119	120	124	118.4	97.8
10 Spd	3	1	2	1	1	1	2	2	3	5	9	15	15	12	16	22	22	20	18	12	7	9	8	5	8.2	22.0
Dir	166	156	179	241	205	281	326	307	242	237	261	277	270	282	279	285	278	272	276	278	268	257	271	273	272.4	284.6
11 Spd	4	5	6	5	5	6	8	6	7	13	16	16	15	14	13	14	12	12	10	7	4	3	4	6	8.1	15.6
Dir	227	259	284	316	304	307	291	322	277	268	272	288	284	284	295	305	306	273	245	236	258	268	280	326	283.5	287.7
12 Spd	4	4	5	5	4	2	2	3	9	10	10	9	9	6	10	8	7	3	5	6	5	5	6	6	4.6	9.7
Dir	286	335	345	338	358	38	268	356	77	78	76	73	63	74	92	81	62	56	45	53	49	51	43	51	54.0	76.0
13 Spd	6	6	6	8	6	3	3	4	5	3	2	5	3	2	3	3	8	6	4	4	5	6	5	4	2.8	7.7
Dir	51	51	51	50	52	54	33	81	87	57	59	33	88	110	176	254	172	194	151	132	116	135	122	111	92.2	171.7
14 Spd	4	3	4	4	4	4	2	2	2	3	2	1	3	5	7	4	2	2	3	3	2	1	2	1	2.1	6.6
Dir	115	87	87	117	129	179	29	107	198	159	149	158	178	182	190	192	162	156	154	168	120	133	18	100	147.3	190.3
15 Spd	1	2	4	4	3	2	4	4	5	6	8	10	18	11	17	15	13	P	P	P	P	P	P	P	--	17.7
Dir	262	308	300	317	318	303	296	301	262	250	285	318	310	8	0	9	15	P	P	P	P	P	P	P	--	310.4
16 Spd	P	P	P	P	P	P	7	9	11	11	11	14	15	20	19	19	19	15	13	7	5	3	3	4	11.0	19.5
Dir	P	P	P	P	P	P	284	296	320	311	299	282	307	315	300	312	320	327	328	324	324	306	315	298	310.1	315.0
17 Spd	4	4	4	3	5	3	5	3	4	3	3	6	4	5	3	4	4	2	4	5	5	6	6	4	0.9	6.1
Dir	326	299	313	334	320	279	254	310	319	281	267	211	211	243	263	192	189	189	128	108	91	110	119	106	240.4	119.2
18 Spd	1	2	3	4	2	2	1	2	3	7	6	8	8	6	6	8	6	6	7	6	6	8	6	6	3.3	7.7
Dir	311	289	285	292	300	296	229	236	132	126	112	114	104	106	123	113	100	105	97	64	77	82	62	66	97.8	113.9
19 Spd	6	5	3	6	6	7	7	6	7	7	9	9	8	7	7	6	8	7	10	8	9	8	8	10	6.3	10.4
Dir	68	69	62	46	52	47	50	57	59	59	62	70	69	53	51	122	172	140	116	73	71	62	54	51	70.2	50.5
20 Spd	9	8	9	8	8	10	9	11	11	10	10	9	10	7	8	5	6	4	5	6	5	5	6	3	5.3	10.8
Dir	50	47	45	44	42	33	38	38	35	37	40	44	31	38	30	31	37	56	145	199	233	226	231	175	42.3	34.6
21 Spd	1	2	2	3	3	3	3	3	2	2	3	4	4	5	2	3	5	6	8	5	7	4	5	3	1.8	8.1
Dir	107	312	157	210	1	106	146	74	160	279	263	226	266	290	243	193	175	141	126	121	121	140	162	217	163.8	125.8
22 Spd	3	5	3	3	3	4	3	4	4	4	7	10	11	11	10	9	7	7	8	7	8	5	3	4	4.3	10.9
Dir	203	162	166	150	148	142	138	150	154	176	197	216	211	209	230	189	180	154	123	113	118	123	315	316	176.3	211.1

PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	5	4	3	3	3	3	3	2	3	6	2	3	8	10	11	6	2	9	8	4	5	10	7	7	2.5	10.7
Dir	331	296	311	227	275	331	193	261	176	223	247	111	132	139	132	129	101	264	251	210	228	263	236	244	218.2	132.1
24 Spd	7	5	4	3	2	2	6	3	4	5	6	7	9	12	11	12	10	17	12	11	12	11	13	11	7.5	17.3
Dir	244	233	194	213	179	217	171	179	174	208	215	214	215	212	196	187	179	198	182	175	158	160	160	159	188.5	198.1
25 Spd	10	5	5	7	7	7	6	6	4	7	6	4	10	13	11	9	7	8	6	5	6	6	17	10	2.1	16.7
Dir	167	134	145	125	125	155	141	170	171	170	191	203	214	271	288	276	267	312	334	306	326	340	334	327	247.5	334.2
26 Spd	3	6	7	5	4	8	11	7	13	16	28	30	30	33	30	31	28	22	16	12	6	0	5	5	13.8	33.1
Dir	273	251	167	184	284	236	244	277	268	280	267	264	267	263	263	257	264	270	267	259	238	208	171	163	259.5	262.6
27 Spd	4	4	2	1	4	2	1	3	1	2	4	7	5	4	4	4	8	12	4	3	2	4	5	8	1.6	12.1
Dir	146	127	117	55	14	151	167	308	95	163	278	286	307	307	316	167	179	177	139	19	173	192	208	206	199.2	177.5
28 Spd	9	6	5	8	6	9	15	20	26	33	32	36	35	33	35	36	30	27	24	19	16	9	8	5	19.2	36.3
Dir	213	178	169	230	208	242	249	258	265	264	266	268	268	270	276	276	270	263	256	255	254	244	247	281	261.2	267.7
29 Spd	8	11	20	24	18	14	18	17	18	12	20	22	16	12	13	16	14	12	13	13	7	8	12	11	14.2	23.8
Dir	255	281	269	266	264	272	280	290	292	269	280	277	278	268	264	262	267	273	275	273	294	305	300	291	276.1	265.9
30 Spd	11	7	3	2	3	4	5	4	3	6	6	2	8	7	6	8	9	10	8	8	8	10	11	11	2.2	10.7
Dir	298	316	245	318	262	288	301	287	259	278	280	125	143	141	142	119	129	112	103	95	107	101	101	100	120.3	297.7
Spd	1.7	1.3	1.4	1.1	1.3	1.3	2.3	2.6	2.9	3.9	5.3	5.9	6.3	5.8	6.2	5.9	4.7	5.0	3.2	2.0	1.5	1.1	1.2	0.9	Diurnal Average	
Dir	259.5	290.8	279.1	291.2	293.0	270.8	268.5	285.8	276.0	267.7	263.8	265.3	267.7	270.1	273.8	272.2	264.7	257.7	251.6	246.3	249.9	229.0	256.4	239.6		
Spd	12.5	10.6	20.3	23.8	17.9	14.1	17.6	20.2	25.6	33.0	32.0	36.3	35.3	33.3	35.2	36.2	30.2	27.4	24.1	19.5	28.0	16.8	16.7	11.3	Diurnal Maximum	
Dir	258.4	280.7	268.9	265.9	264.0	271.7	280.3	258.1	264.6	263.6	265.6	267.7	267.8	270.5	275.7	275.6	270.0	263.3	256.5	255.3	299.0	285.0	334.2	291.4		

Maximum Speed Value: 36 km/h on Sep 28 12:00
Minimum Speed Value: 0 km/h on Sep 26 22:00
Maximum Daily Speed Average: 19.2 km/h on Sep 28
Minimum Daily Speed Average: 0.9 km/h on Sep 14
Maximum Diurnal Speed Average: 6.3 km/h at hour 13
Minimum Diurnal Speed Average: 0.9 km/h at hour 24

Monthly Average Velocity: 3.08 km/h 267.04 deg
Speed Percentiles: P_1 = 1.1 P_{10} = 2.6 Q_1 = 3.9 Median = 6.2 Q_3 = 10.0 P_{90} = 15.3 P_{99} = 32.9
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	707
Hours of Missing Data:	13
Percent Operational Time:	98.2

P - Power Failure

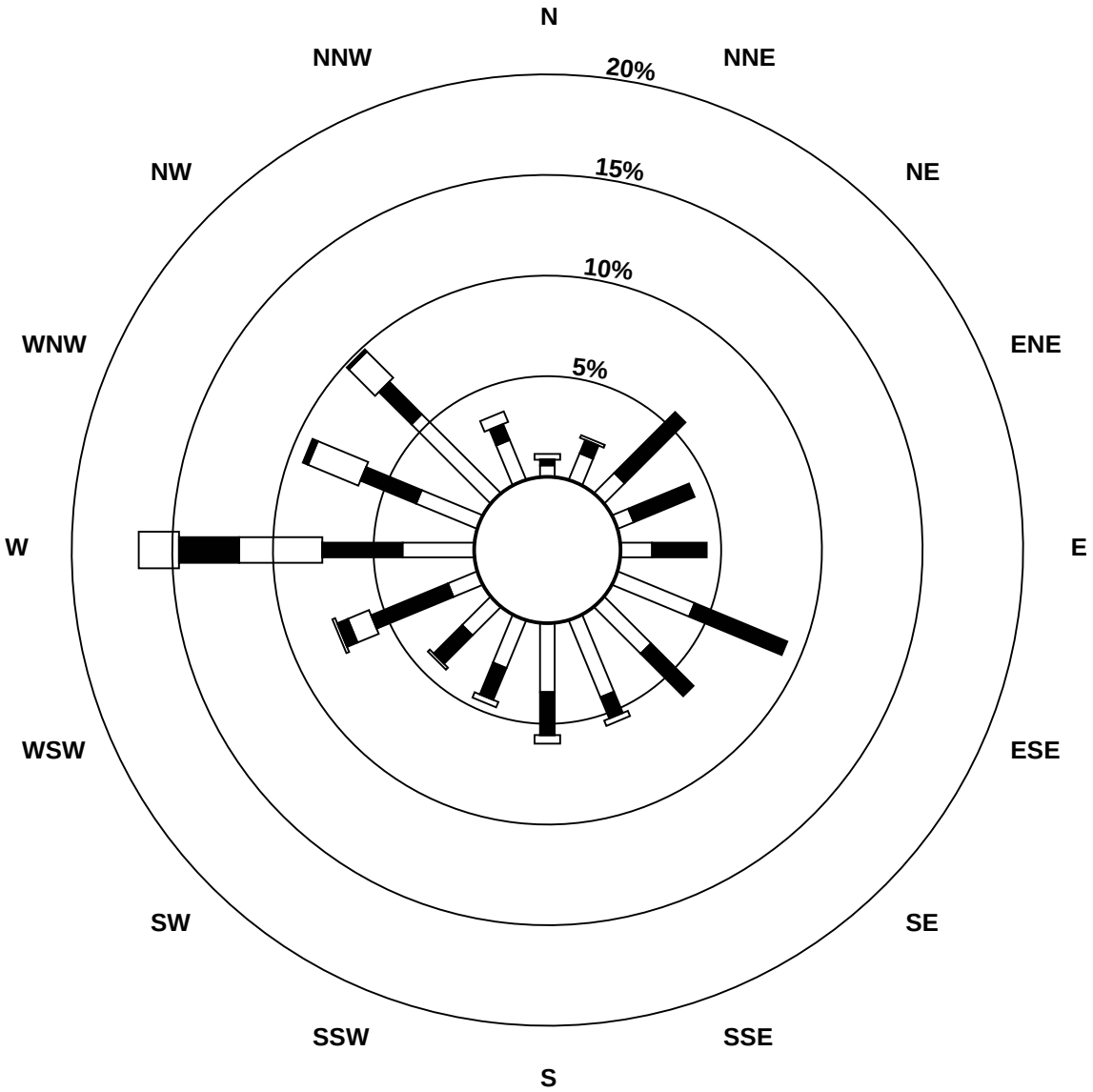
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	9	6	4	0	0	0	19
NorthEast	16	51	0	0	0	0	67
East	23	51	0	0	0	0	74
SouthEast	48	46	0	0	0	0	94
South	44	27	8	0	0	0	79
SouthWest	31	40	3	0	0	0	74
West	39	52	50	26	16	0	183
NorthWest	58	31	25	2	1	0	117
Total	268	304	90	28	17	0	707

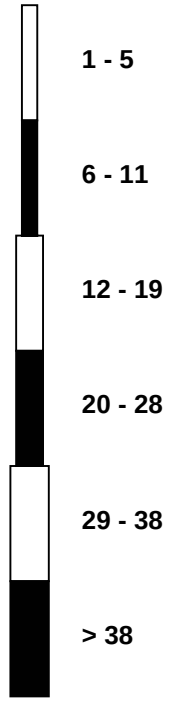
Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - September 2010



Wind Speed Classes (km/h)



PASZA
Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - September 2010

Maximum Speed: 37 km/h on Sep 28 12:00

Maximum Daily Speed Average: 20.4 km/h on Sep 28

Minimum Speed: 1 km/h on Sep 9 15:00

Minimum Daily Speed Average: 3.7 km/h on Sep 14

Maximum Diurnal Speed Average: 12.2 km/h at hour 16

Minimum Diurnal Speed Average: 5.4 km/h at hour 2

Monthly Average Speed: 8.44 km/h

Percentiles: P_1 = 1.8 P_{10} = 3.5 Q_1 = 4.6 Median = 6.5 Q_3 = 10.3 P_{90} = 15.7 P_{99} = 33.0

Hours in Service: 720
Hours of Data: 707
Hours of Missing Data: 13

Percent Operational Time: 98.2

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-Sep	4	3	5	5	8	7	6	8	11	11	10	10	10	8	4	5	4	9	12	11	8	9	7	7	7.6	12.4
2-Sep	8	3	4	5	5	3	4	5	5	5	7	12	14	18	22	25	24	23	15	10	7	5	5	5	10.0	25.1
3-Sep	5	4	5	5	5	3	3	3	6	7	10	9	8	7	7	5	6	8	6	5	28	17	11	8	7.6	28.2
4-Sep	10	11	9	8	11	8	8	9	13	26	28	27	25	26	31	29	22	25	24	12	9	10	11	10	16.7	31.2
5-Sep	13	10	12	12	12	10	12	16	17	14	14	16	18	16	15	16	12	12	11	6	6	6	4	6	11.9	18.5
6-Sep	4	3	3	3	4	6	6	4	4	4	8	7	6	6	6	6	7	7	7	6	4	5	5	4	5.3	8.1
7-Sep	6	7	8	5	5	6	6	8	9	11	13	12	15	14	13	10	11	9	7	5	3	3	3	4	8.0	14.8
8-Sep	5	5	6	6	4	5	5	5	6	5	5	4	5	8	7	7	8	9	8	7	8	8	6	7	6.2	9.2
9-Sep	8	8	8	8	8	8	7	6	5	5	4	4	7	4	1	3	6	4	7	6	5	6	5	4	5.7	8.3
10-Sep	3	2	2	1	1	1	3	2	3	5	9	15	15	12	17	22	22	20	19	12	7	9	9	6	9.1	22.4
11-Sep	6	6	6	5	5	6	8	6	8	13	16	16	15	14	14	15	13	13	10	7	6	4	5	6	9.3	16.0
12-Sep	5	5	5	5	5	4	3	4	9	10	10	9	9	6	10	8	7	4	5	6	5	6	6	6	6.3	9.9
13-Sep	6	7	6	8	6	3	4	4	5	4	4	6	5	5	4	4	8	7	4	5	5	6	5	4	5.2	7.9
14-Sep	5	4	4	4	5	4	3	3	3	4	4	4	5	6	7	5	4	3	3	3	2	2	2	2	3.7	7.2
15-Sep	2	3	4	5	4	3	4	4	5	7	9	11	18	12	17	15	13	P	P	P	P	P	P	P	--	18.5
16-Sep	P	P	P	P	P	P	7	9	12	11	11	14	15	20	19	20	19	16	13	7	5	4	3	4	11.6	19.9
17-Sep	4	4	4	3	5	4	5	4	4	4	4	7	6	7	6	6	6	4	5	5	5	6	6	4	5.0	7.0
18-Sep	3	3	3	4	3	3	2	3	3	7	7	8	8	7	7	8	7	6	7	6	6	8	6	6	5.4	8.4
19-Sep	6	5	3	6	6	7	7	6	7	7	9	9	8	7	7	9	8	7	10	8	9	9	8	11	7.6	10.5
20-Sep	9	9	9	8	9	10	10	11	11	10	10	9	10	8	8	6	6	5	6	6	5	5	6	4	7.9	11.0
21-Sep	2	3	3	5	4	4	4	4	3	4	4	5	5	5	4	4	6	7	8	6	7	5	5	3	4.6	8.3
22-Sep	3	5	4	3	3	4	3	4	4	5	8	11	12	11	10	10	7	7	8	7	8	5	4	4	6.2	11.6
23-Sep	5	5	3	3	4	3	4	3	3	6	4	5	9	11	11	6	3	11	8	4	5	10	7	7	5.9	11.0
24-Sep	8	5	5	4	3	3	6	3	4	6	6	7	10	13	12	12	10	17	12	11	12	11	13	11	8.5	17.5
25-Sep	10	6	5	8	8	7	7	6	5	7	7	4	11	13	11	9	7	9	6	6	6	6	17	10	7.9	17.0
26-Sep	5	7	8	6	6	9	11	11	14	16	28	30	30	33	31	32	29	22	16	12	6	3	5	5	15.6	33.4
27-Sep	4	4	6	4	4	3	2	3	3	3	5	7	5	4	4	5	8	12	6	4	4	5	6	8	5.0	12.2
28-Sep	9	6	6	9	6	9	15	20	26	33	32	37	36	34	36	37	31	28	24	20	17	9	8	5	20.4	36.7
29-Sep	8	11	20	24	18	14	18	17	18	12	20	22	17	13	13	16	14	12	14	13	7	8	12	11	14.7	23.9
30-Sep	11	7	3	2	3	5	5	4	3	6	6	6	9	9	7	9	9	10	8	8	8	10	11	11	7.1	10.8
	6.0	5.4	5.8	6.1	5.9	5.6	6.3	6.6	7.7	8.9	10.4	11.4	12.2	11.9	12.1	12.2	11.2	11.2	10.0	7.8	7.4	6.9	6.8	6.3	Diurnal Average	
	12.6	11.0	20.4	23.9	17.9	14.4	17.8	20.3	25.8	33.1	32.2	36.7	35.6	33.7	35.6	36.6	30.5	27.6	24.2	19.6	28.2	17.3	17.0	11.4	Diurnal Maximum	

P - Power Failure

All monthly, daily, and diurnal averages have been calculated using scalar methods

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - September 2010

Maximum Value: 95.3 deg on Sep 14 12:00

Minimum Value: 3.6 deg on Sep 30 23:00

Percentiles: P_1 = 5.3 P_{10} = 8.1 Q_1 = 10.7 Median = 16.3 Q_3 = 28.9 P_{90} = 50.4 P_{99} = 85.8

Hours in Service:	720
Hours of Data:	707
Hours of Missing Data:	13
Hours of Calibration:	0
Percent Operational Time:	98.2

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	26	55	18	22	11	22	17	16	8	13	16	17	17	61	86	66	76	13	9	12	14	8	10	11	86.2
2-Sep	9	70	33	13	10	23	20	24	22	31	22	17	21	15	14	7	7	8	8	12	20	65	85	16	84.8
3-Sep	45	25	17	18	51	85	58	64	25	22	12	22	30	36	47	50	39	14	20	59	6	14	19	16	85.0
4-Sep	14	21	13	16	11	15	9	6	12	7	10	10	14	11	8	9	16	8	7	11	10	8	8	9	21.2
5-Sep	7	8	9	11	8	9	7	8	8	10	7	13	11	11	10	13	13	9	10	9	18	12	28	15	27.6
6-Sep	22	46	15	49	34	12	27	48	34	45	24	36	41	22	26	30	19	24	24	15	15	20	9	9	48.9
7-Sep	23	14	7	20	10	8	12	8	8	9	13	16	13	11	13	16	17	24	13	15	17	30	24	21	30.0
8-Sep	15	16	11	12	26	26	13	10	27	44	27	39	29	17	15	14	10	9	8	10	12	7	10	8	44.0
9-Sep	6	6	8	7	7	10	9	11	12	20	33	36	42	61	57	50	43	50	16	9	7	7	6	26	61.1
10-Sep	13	33	23	30	33	39	24	23	44	16	14	10	14	11	16	11	10	8	8	8	16	14	37	50	49.8
11-Sep	76	36	25	20	16	16	11	22	21	11	11	12	14	15	23	16	15	16	11	7	45	39	28	16	76.1
12-Sep	32	28	14	12	41	94	45	33	19	11	13	17	17	16	13	10	17	28	17	20	17	16	12	12	93.8
13-Sep	12	12	14	11	17	41	39	21	22	48	74	50	55	88	52	45	12	15	33	23	11	11	9	16	87.6
14-Sep	10	27	14	18	20	30	60	56	53	50	72	95	68	35	25	54	70	41	32	30	32	55	45	68	95.3
15-Sep	41	63	18	15	24	67	19	30	27	20	26	17	19	28	9	10	10	P	P	P	P	P	P	P	66.5
16-Sep	P	P	P	P	P	P	9	11	13	12	16	16	16	11	10	11	12	10	10	8	19	30	46	24	45.8
17-Sep	13	21	17	24	9	41	17	15	17	33	43	39	65	51	63	59	60	85	42	5	7	9	5	22	85.1
18-Sep	63	34	47	18	62	43	82	51	39	17	22	22	20	21	30	29	19	14	8	10	9	7	13	9	82.4
19-Sep	8	12	23	11	14	12	14	16	15	14	17	12	17	14	12	51	11	16	16	10	10	15	12	10	51.2
20-Sep	11	15	14	13	13	11	12	12	10	13	14	17	16	20	20	24	22	29	33	15	12	10	8	17	33.1
21-Sep	42	53	54	62	28	45	37	44	60	79	45	44	42	31	59	58	31	27	13	40	10	13	12	47	78.9
22-Sep	27	10	14	16	13	8	23	17	15	23	23	16	21	18	17	15	26	15	9	5	5	40	20	19	39.7
23-Sep	11	38	17	21	31	31	45	56	22	18	63	62	27	14	14	22	46	46	19	17	9	15	10	13	63.2
24-Sep	12	23	28	32	49	60	11	10	19	26	27	33	20	20	20	10	9	9	14	9	8	8	7	7	59.9
25-Sep	10	34	16	20	14	8	13	10	16	10	27	38	16	20	11	9	15	28	27	29	33	24	11	14	37.7
26-Sep	62	30	16	30	51	16	14	52	12	11	7	7	9	8	11	6	7	6	6	9	17	93	9	12	92.6
27-Sep	27	20	87	79	59	43	68	38	79	57	22	13	19	19	19	81	17	7	50	54	78	55	33	11	86.8
28-Sep	10	26	38	28	24	9	13	6	6	6	7	8	8	9	9	8	8	8	5	5	10	9	11	32	38.3
29-Sep	17	17	6	5	5	12	8	5	7	13	9	8	15	18	18	12	13	16	6	13	21	11	6	7	20.6
30-Sep	7	24	29	44	28	17	24	16	20	14	19	89	26	32	47	28	15	14	6	7	6	5	4	4	89.2
	76.1	70.2	86.8	79.4	61.6	93.8	82.4	64.4	79.2	78.9	74.0	95.3	68.5	87.6	86.2	80.8	75.7	85.1	50.2	58.7	78.1	92.6	84.8	68.3	

P - Power Failure

PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

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Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.3 ppb on Sep 28 15:00 Maximum Daily Average: 3.4 ppb on Sep 28

Minimum Value: 0 ppb on Sep 3 02:00 Minimum Daily Average: 0.0 ppb on Sep 22
Maximum Diurnal Average: 1.1 ppb at hour 14 Minimum Diurnal Average: 0.0 ppb at hour 1
Monthly Average: 0.42 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 1.0 P_{99} = 7.5

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

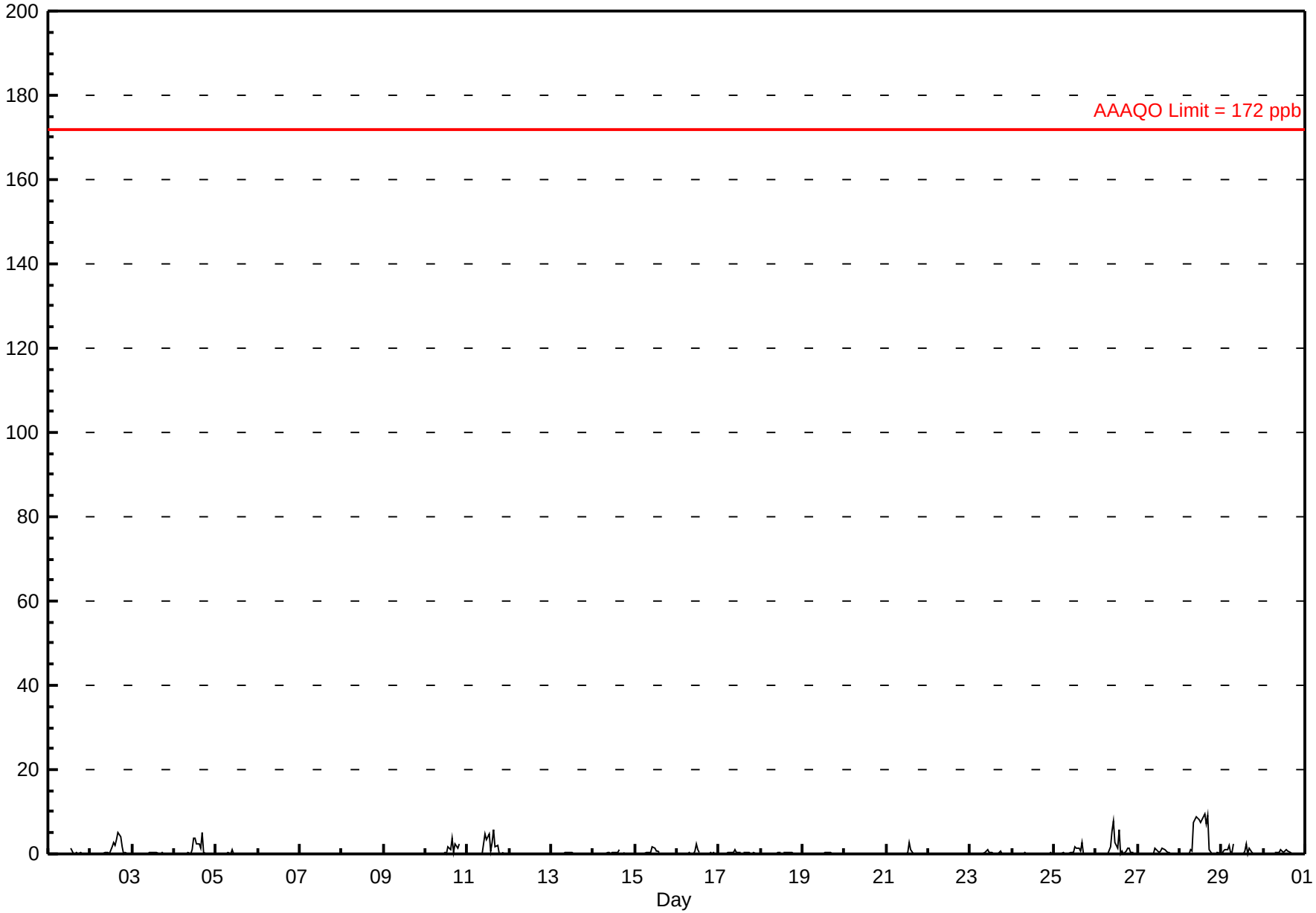
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	0	0	0	0	0	0	0	0	C	1	0	0	0	0	0	0	0	0	0	0	0.2	1.5
2-Sep	0	0	0	0	0	A	0	0	0	0	0	0	2	3	2	3	5	4	2	0	0	0	0	0	1.0	5.2
3-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
4-Sep	0	0	0	A	0	0	0	0	0	0	1	4	4	2	2	1	5	0	0	0	0	0	0	0	0.9	5.1
5-Sep	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
6-Sep	0	A	0	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
7-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.1
8-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.2
9-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1
10-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	4	0	2	1	3	A	0	0	0	0.6	3.7
11-Sep	0	0	0	0	0	0	0	0	0	2	5	3	5	1	3	6	2	2	0	A	0	0	0	0	1.3	5.7
12-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.1
13-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.4
14-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0.2	0.9
15-Sep	0	0	0	0	0	0	0	0	0	0	2	1	1	1	0	A	0	0	0	0	0	0	0	0	0.3	1.7
16-Sep	0	0	0	0	0	0	0	0	0	0	1	2	1	0	A	0	0	0	0	0	0	0	0	0	0.3	2.3
17-Sep	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	1.1
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
19-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
20-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
21-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0.2	2.7
22-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
23-Sep	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	1.1
24-Sep	0	A	0	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
25-Sep	A	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	3	0	0	0	0	0	0	A	0.4	2.7
26-Sep	0	0	0	0	0	0	0	0	2	6	8	3	1	6	0	1	0	1	1	1	0	0	A	0	1.3	7.7
27-Sep	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	0	0	0	0	A	0	0	0.4	1.4
28-Sep	0	0	0	0	0	0	1	1	7	9	9	8	7	8	9	7	9	1	0	0	A	0	0	0	3.4	9.3
29-Sep	0	1	1	1	2	0	0	2	C	C	C	0	0	1	2	0	1	0	0	0	0	0	0	0	0.6	2.4
30-Sep	0	0	0	0	0	A	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.0
	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.8	1.1	0.9	0.9	1.1	0.9	0.9	1.0	0.5	0.2	0.2	0.1	0.1	0.1	0.1	Diurnal Average	
	0.1	0.6	1.0	1.2	2.0	0.4	1.0	2.3	7.3	8.7	8.5	8.1	7.3	8.1	9.3	7.1	9.1	4.2	1.8	2.5	0.4	0.4	0.3	0.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - September 2010



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Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - September 2010

Maximum Value: 26.2 ppb on Sep 28 17:00

Maximum Daily Average: 8.3 ppb on Sep 28

Minimum Value: 0 ppb on Sep 22 22:00

Minimum Daily Average: 0.3 ppb on Sep 22

Maximum Diurnal Average: 4.9 ppb at hour 14

Minimum Diurnal Average: 0.4 ppb at hour 1

Monthly Average: 1.76 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.5$ $P_{90} = 5.3$ $P_{99} = 19.0$

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	34
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-Sep	0	0	0	0	0	0	0	0	1	1	0	0	C	12	1	0	0	0	0	0	0	0	0	0	1.0	12.5
2-Sep	0	0	0	0	0	A	0	0	0	1	1	0	7	12	13	15	16	17	6	0	0	0	0	0	4.0	16.8
3-Sep	0	0	0	0	A	0	0	1	0	0	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0.4	0.6
4-Sep	0	0	0	A	0	0	0	0	2	0	13	18	13	13	21	18	21	9	0	0	1	0	0	0	5.8	21.4
5-Sep	0	0	A	0	0	0	0	2	0	8	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0.8	8.4
6-Sep	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.9
7-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5
8-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0.4	0.6
9-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4
10-Sep	0	0	0	0	0	0	0	0	0	1	0	2	0	8	12	17	4	14	11	15	A	0	0	0	3.9	17.2
11-Sep	0	0	0	0	0	0	0	0	1	10	16	14	14	10	17	25	16	15	0	A	1	0	0	0	6.2	24.6
12-Sep	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.6
13-Sep	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	1	A	0	0	0	0	0	0	0.5	0.8
14-Sep	0	0	0	0	1	0	1	1	1	1	0	1	1	1	2	6	A	0	0	1	0	0	0	0	0.8	6.3
15-Sep	0	0	0	0	0	0	1	1	1	1	8	6	1	1	1	A	0	0	0	0	0	0	0	0	1.1	8.4
16-Sep	0	0	0	0	0	0	1	1	0	0	3	12	11	1	A	0	0	0	0	0	0	1	0	0	1.5	12.3
17-Sep	0	0	1	0	0	1	1	1	2	6	1	1	1	A	2	3	1	1	0	0	0	0	0	0	1.0	5.5
18-Sep	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0.5	0.7
19-Sep	0	0	0	0	0	0	0	0	0	0	0	A	1	0	1	2	1	0	0	0	0	0	0	0	0.4	1.5
20-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
21-Sep	0	0	0	0	A	0	0	0	0	0	0	0	3	10	7	1	0	0	0	0	0	0	0	0	1.1	9.6
22-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
23-Sep	0	0	A	0	0	0	0	0	1	3	3	0	1	0	0	0	0	8	0	0	0	0	0	0	1.0	7.8
24-Sep	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.6
25-Sep	A	0	0	0	0	1	0	0	0	1	1	0	10	20	10	5	8	0	0	0	0	0	1	A	2.8	20.0
26-Sep	0	0	0	0	0	0	0	0	8	10	17	13	17	16	0	6	0	1	2	2	1	0	A	0	4.3	17.3
27-Sep	0	0	0	1	0	0	0	0	0	1	6	2	1	3	2	2	1	1	0	0	0	A	1	0	1.0	6.4
28-Sep	1	0	0	0	0	0	5	5	22	15	16	15	16	19	17	15	26	14	1	0	A	1	1	0	8.3	26.2
29-Sep	1	1	4	2	3	1	2	5	C	C	C	0	0	8	15	0	12	4	1	0	0	0	0	0	3.0	15.4
30-Sep	0	0	0	0	1	A	1	1	1	1	10	1	2	2	1	1	0	0	0	0	0	0	0	0	1.1	10.4
	0.4	0.4	0.5	0.4	0.5	0.4	0.6	0.8	1.7	2.2	3.5	3.2	3.7	4.9	4.4	4.2	3.9	3.1	1.0	0.9	0.4	0.4	0.4	0.4	Diurnal Average	
	0.5	1.3	3.6	2.3	3.2	0.8	4.9	5.3	22.4	15.1	17.3	17.5	16.9	20.0	20.9	24.6	26.2	16.8	11.4	14.7	0.8	0.7	0.8	0.9	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

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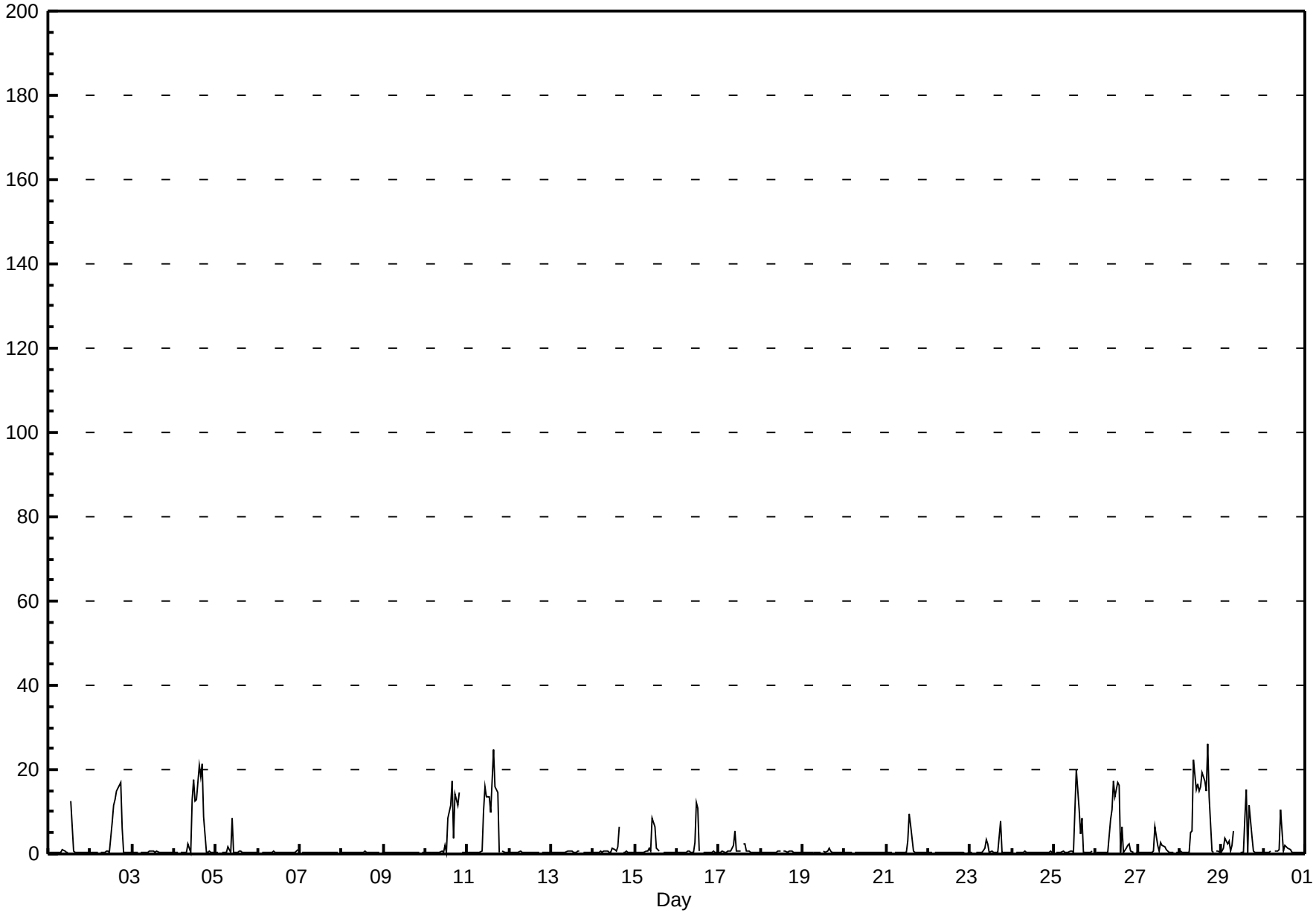
Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

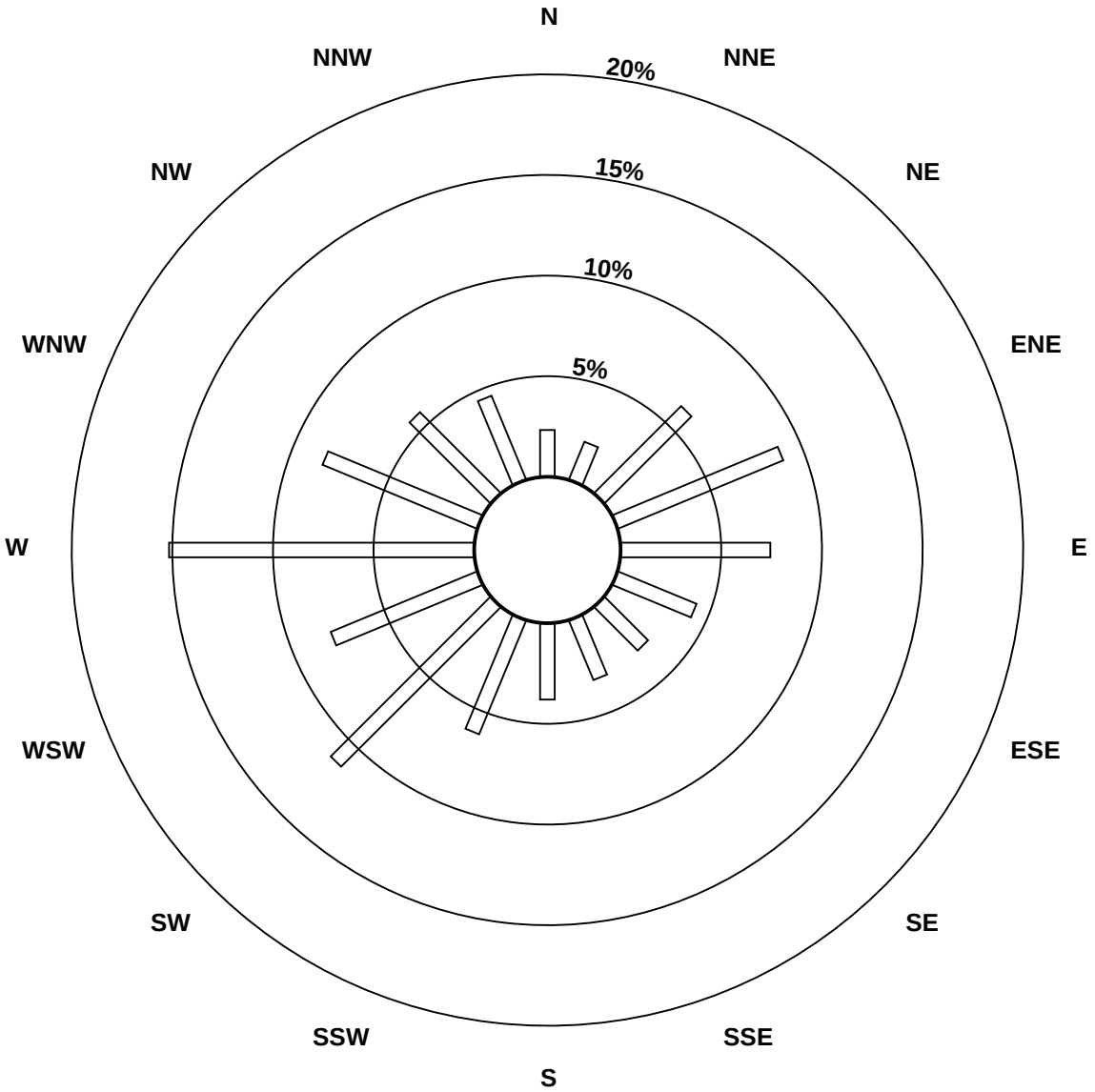
Evergreen Park - September 2010



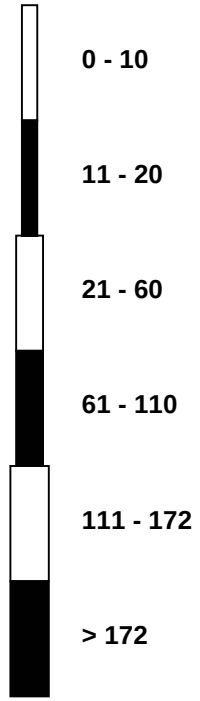
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - September 2010



Pollutant Classes (ppb)



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Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.0 ppb on Sep 21 08:00 Maximum Daily Average: 0.7 ppb on Sep 21

Minimum Value: 0 ppb on Sep 22 08:00 Minimum Daily Average: 0.2 ppb on Sep 22
Maximum Diurnal Average: 0.5 ppb at hour 10 Minimum Diurnal Average: 0.4 ppb at hour 4
Monthly Average: 0.44 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.5$ $P_{90} = 0.6$ $P_{99} = 1.2$

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7
2-Sep	0	0	0	0	0	A	0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0.5	0.9
3-Sep	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
4-Sep	1	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
5-Sep	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
6-Sep	0	A	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.7
7-Sep	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5
8-Sep	1	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.6	1.8
9-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4
10-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	A	0	0	0	0.3	0.7
11-Sep	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	0.5	0.7
12-Sep	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.9
13-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.5
14-Sep	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0.5	1.5
15-Sep	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	1	0	0	1	0	0	0	0	0.4	0.5
16-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.5
17-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
19-Sep	0	0	0	0	0	0	0	0	1	0	0	A	1	1	0	0	1	0	0	0	0	0	0	0	0.4	0.6
20-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
21-Sep	0	0	0	0	A	1	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.0
22-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.7
23-Sep	1	1	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
24-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
25-Sep	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	0.5	0.7
26-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0.6	0.8
27-Sep	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	0.6	1.1
28-Sep	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0.6	1.0
29-Sep	1	0	1	0	1	0	0	1	1	0	C	C	C	1	1	0	0	1	1	1	1	1	1	1	0.5	0.6
30-Sep	1	0	1	0	0	A	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0.5	0.7
	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	1.3	1.8	1.2	0.7	0.9	1.2	1.8	2.0	1.7	1.8	1.5	1.0	0.9	0.8	0.8	0.9	0.8	0.9	0.6	0.7	0.8	0.6	0.6	0.7	Diurnal Maximum	

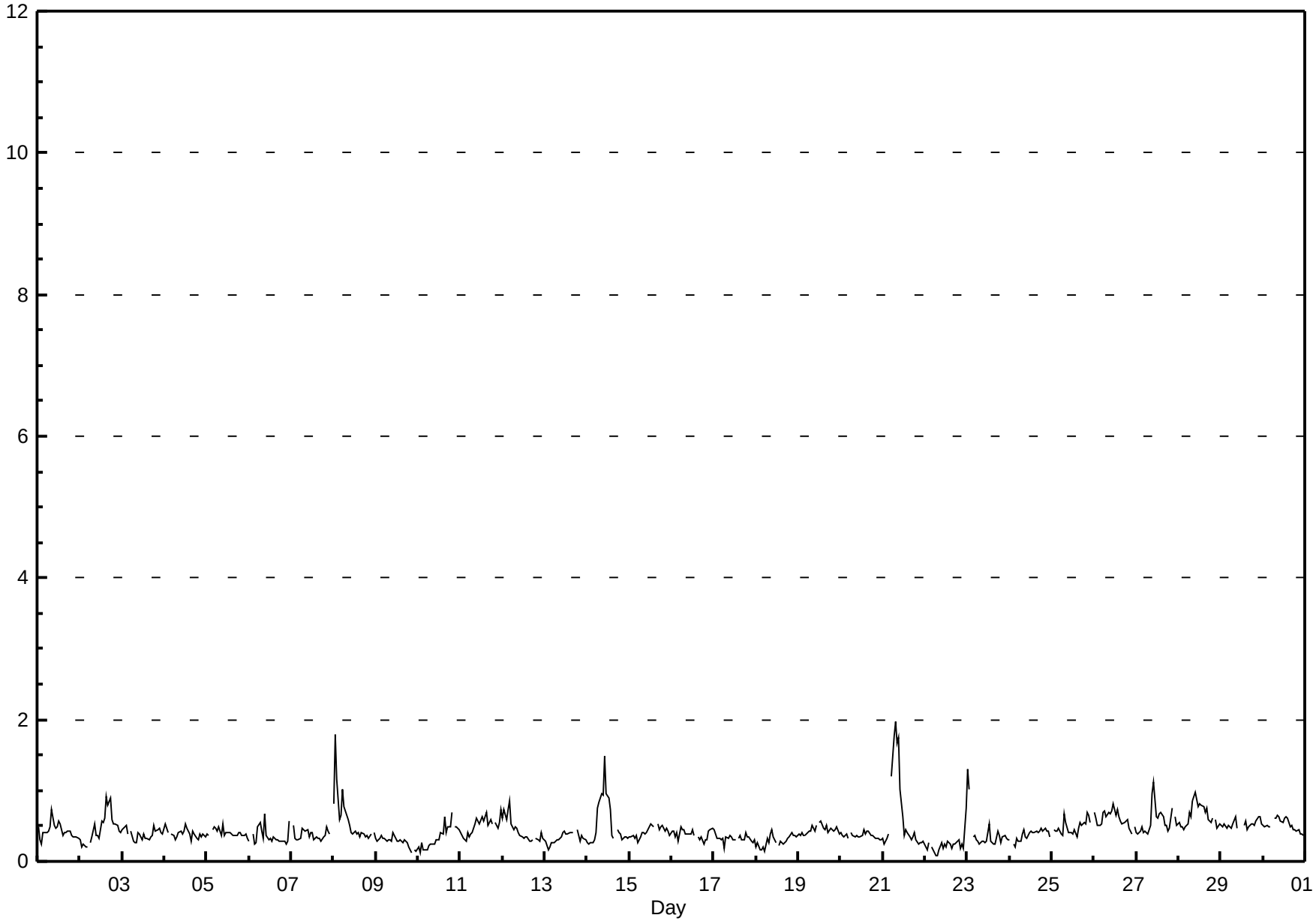
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - September 2010



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Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - September 2010

Maximum Value: 3.3 ppb on Sep 2 18:00

Maximum Daily Average: 1.1 ppb on Sep 21

Minimum Value: 0 ppb on Sep 22 01:00

Minimum Daily Average: 0.6 ppb on Sep 22

Maximum Diurnal Average: 1.0 ppb at hour 10

Minimum Diurnal Average: 0.7 ppb at hour 4

Monthly Average: 0.82 ppb

Percentiles: $P_1 = 0.5$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.7 $Q_3 = 0.9$ $P_{90} = 1.1$ $P_{99} = 2.2$

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	33
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-Sep	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
2-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	1	3	1	1	1	1	1	1	1.0	3.3
3-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
4-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4
5-Sep	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
6-Sep	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.7	1.3
7-Sep	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.6
8-Sep	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	2.5
9-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	1	0.6	0.8
10-Sep	1	0	1	0	0	0	1	1	1	1	1	1	1	1	1	2	1	1	1	2	A	1	1	1	0.8	2.0
11-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.3
12-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.2
13-Sep	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9
14-Sep	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	2.0
15-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.0
16-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.0
17-Sep	1	1	1	1	1	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.7
18-Sep	1	1	1	1	0	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
19-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
20-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
21-Sep	1	1	1	1	A	2	2	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.7
22-Sep	0	0	1	A	1	0	0	1	1	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	0.6	1.5
23-Sep	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.8	2.1
24-Sep	1	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
25-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.1
26-Sep	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.7
27-Sep	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	2.0
28-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.0	1.3
29-Sep	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
30-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
	0.8	0.8	0.7	0.7	0.7	0.8	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.8	Diurnal Average	
	2.2	2.5	1.8	1.1	1.2	1.7	2.2	2.7	2.0	2.2	2.0	1.4	1.3	1.2	1.8	2.2	1.3	3.3	1.1	2.0	1.2	1.1	1.2	1.5	Diurnal Maximum	

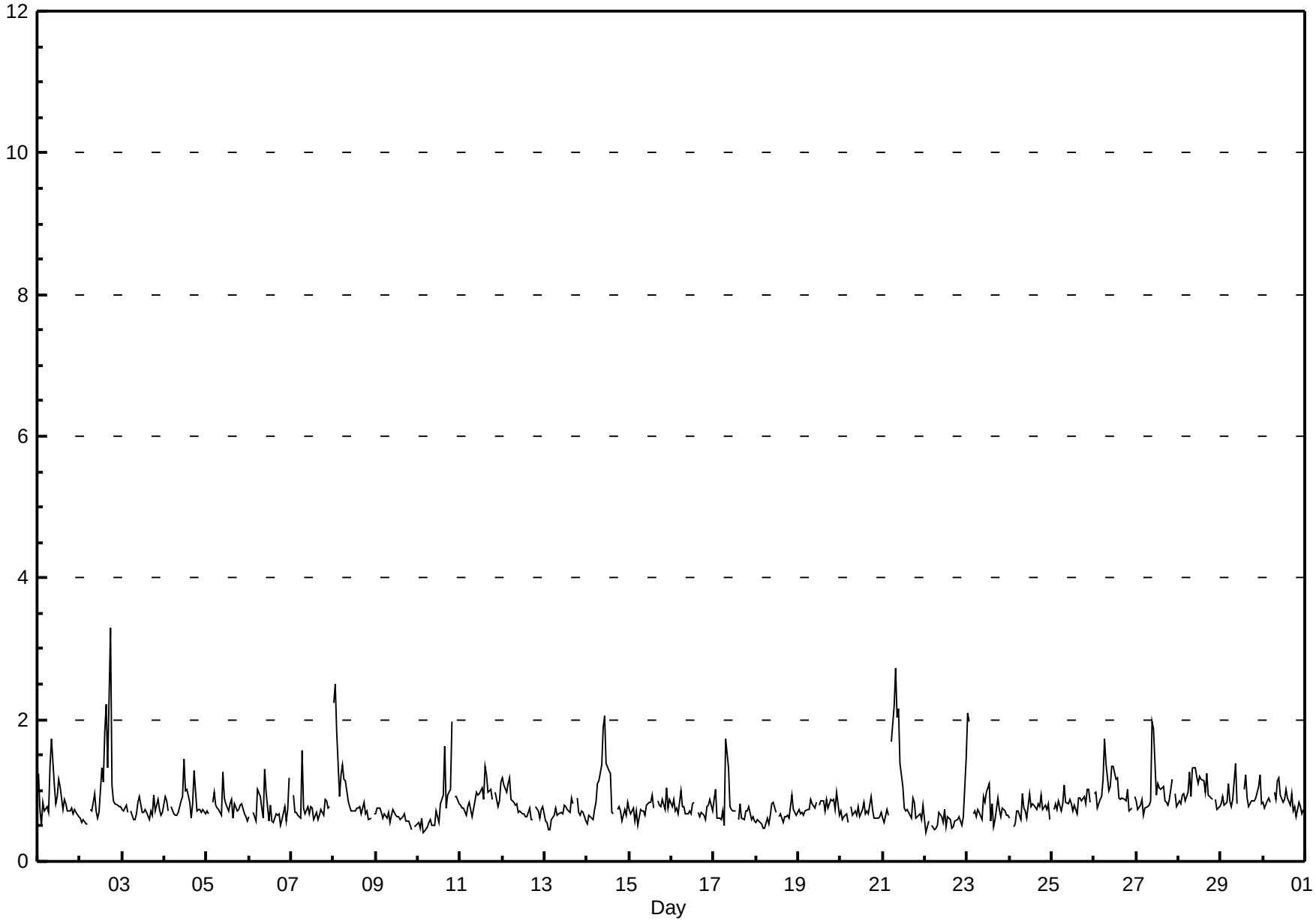
C - Calibration

A - Automated Daily Zero Span

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

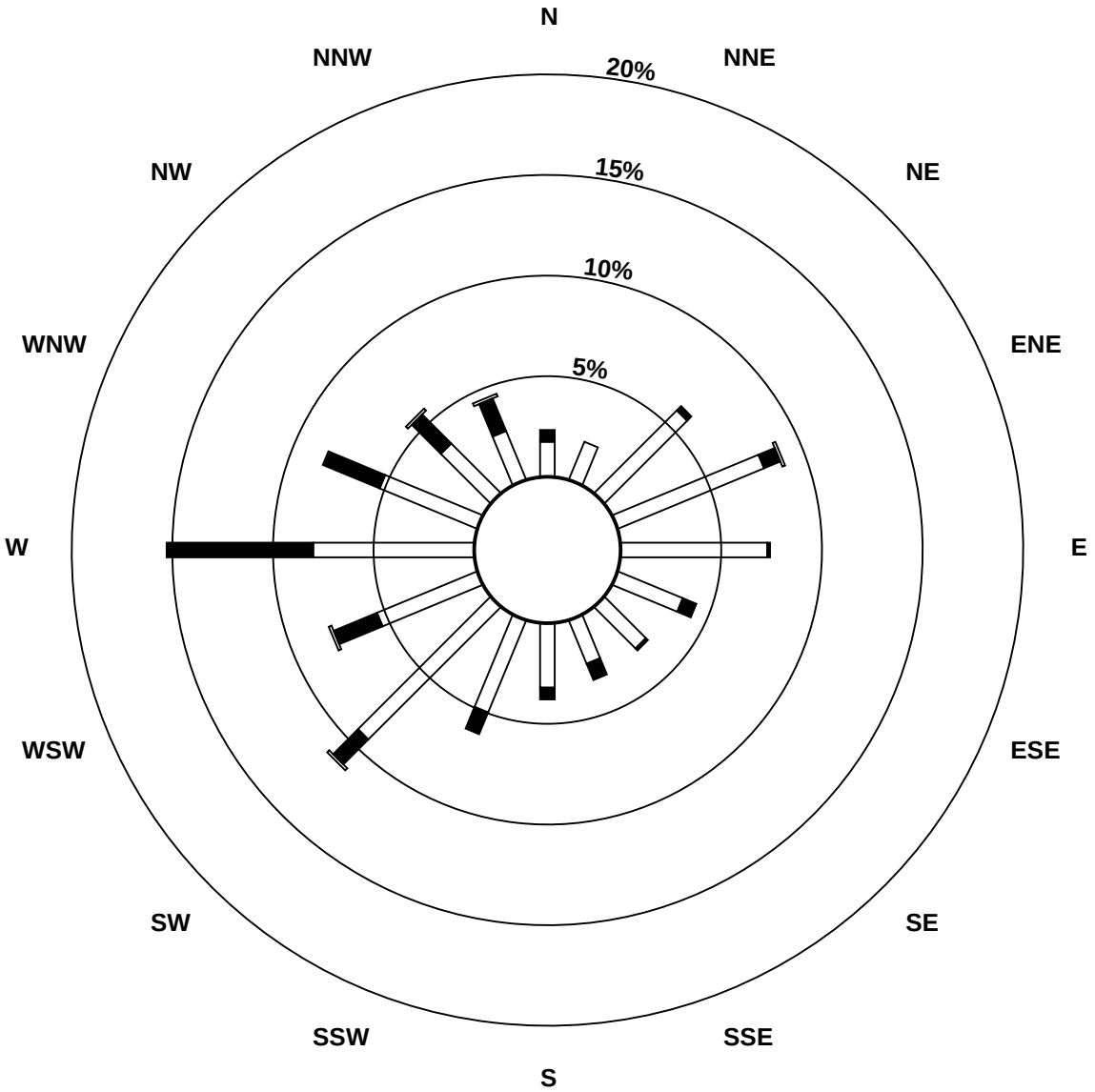
Evergreen Park - September 2010



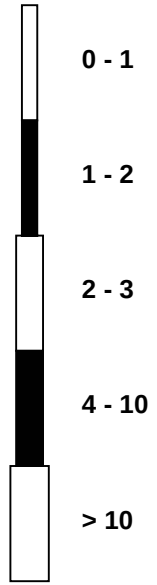
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - September 2010



Pollutant Classes (ppb)



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Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Evergreen Park - September 2010

Number of Exceedences: 1-hr: 15 24-hr: 1
Maximum Value: 441.2 $\mu g/m^3$ on Sep 28 12:00
Maximum Daily Average: 142.4 $\mu g/m^3$ on Sep 28

Minimum Value: 0 $\mu g/m^3$ on Sep 1 17:00
Maximum Diurnal Average: 32.0 $\mu g/m^3$ at hour 11
Monthly Average: 13.28 $\mu g/m^3$
Minimum Daily Average: 1.0 $\mu g/m^3$ on Sep 5
Minimum Diurnal Average: 2.2 $\mu g/m^3$ at hour 1
Percentiles: P_1 = 0.0 P_{10} = 0.4 Q_1 = 1.7 Median = 3.9 Q_3 = 9.3 P_{90} = 22.1 P_{99} = 279.2

Hours in Service:	720
Hours of Data:	699
Hours of Missing Data:	21
Hours of Calibration:	0
Percent Operational Time:	97.1

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-Sep	3	2	2	2	1	2	3	5	2	3	3	4	20	4	M	BD	0	0	0	2	1	0	0	0	2.7	19.8
2-Sep	1	0	1	0	1	1	3	3	3	4	22	17	14	21	17	22	24	15	9	0	0	2	0	0	7.5	23.6
3-Sep	0	0	0	0	0	0	1	5	0	18	29	25	22	14	16	20	24	20	17	19	21	N	N	N	12.0	29.5
4-Sep	0	7	5	4	2	11	11	5	1	2	17	57	70	41	44	48	12	4	2	0	0	0	0	0	14.3	70.2
5-Sep	1	2	2	2	0	0	0	1	0	2	0	0	0	0	1	0	0	1	1	1	2	2	3	2	1.0	2.8
6-Sep	2	3	6	2	2	2	2	3	2	13	6	12	4	2	20	27	6	2	3	3	5	3	2	6	5.8	26.8
7-Sep	2	3	2	2	2	2	3	3	2	1	0	1	1	1	0	41	34	4	18	8	0	0	1	5	5.7	40.6
8-Sep	4	1	0	3	2	1	2	2	6	3	1	2	11	21	5	5	3	2	1	1	3	2	1	1	3.5	20.7
9-Sep	0	0	1	1	1	1	1	2	2	2	5	15	4	9	6	7	78	14	3	1	0	0	1	1	6.5	78.3
10-Sep	3	0	1	4	2	1	4	8	5	5	4	12	6	11	63	42	22	10	6	8	4	2	1	1	9.4	62.6
11-Sep	1	2	1	2	2	1	2	5	8	40	133	65	118	13	53	33	13	15	3	3	6	6	3	3	22.0	133.1
12-Sep	3	2	1	1	2	5	6	5	5	5	3	6	7	4	4	4	3	3	6	2	4	2	1	1	3.5	7.0
13-Sep	0	0	0	1	1	1	1	3	2	5	5	16	2	2	1	3	N	0	8	1	0	1	0	1	2.3	16.0
14-Sep	0	0	2	6	4	1	5	4	8	5	5	6	6	10	11	5	13	21	34	9	7	6	8	11	8.0	33.9
15-Sep	6	6	6	3	4	5	8	12	14	2	9	4	8	15	12	8	3	2	2	1	5	3	4	3	6.1	15.0
16-Sep	3	2	2	2	3	4	14	19	5	9	20	37	25	7	7	13	28	5	3	7	10	8	5	8	10.3	36.6
17-Sep	3	3	4	4	5	3	4	13	13	33	38	14	7	5	5	7	14	8	9	3	2	3	1	2	8.4	37.9
18-Sep	5	6	6	4	4	5	5	7	10	12	11	3	4	4	11	2	3	5	2	3	7	5	5	4	5.6	12.5
19-Sep	3	3	3	2	2	3	5	7	12	3	5	4	5	4	6	9	3	N	N	N	27	N	N	BD	5.9	26.7
20-Sep	0	0	0	5	1	5	2	3	N	BD	BD	0	0	0	0	0	1	0	1	2	1	0	0	0	1.0	5.1
21-Sep	1	2	2	1	1	1	1	2	3	10	9	5	3	10	8	7	7	7	4	6	4	3	5	4	4.4	10.5
22-Sep	4	3	3	3	3	3	3	4	N	N	1	4	16	11	8	5	11	7	2	3	4	3	3	9	5.0	16.0
23-Sep	8	6	5	3	4	2	5	10	13	6	7	5	14	5	11	4	14	16	12	12	6	9	7	5	7.8	15.8
24-Sep	4	3	4	3	3	7	4	13	24	10	9	14	4	6	5	7	3	18	4	10	2	2	0	0	6.6	24.0
25-Sep	0	7	13	5	10	0	1	10	40	17	22	17	40	29	18	43	100	60	14	6	10	11	11	0	20.2	100.1
26-Sep	1	N	N	N	BD	0	0	0	8	16	30	58	59	87	73	63	35	10	7	11	14	2	2	1	23.8	87.4
27-Sep	3	3	5	6	4	1	1	3	3	4	29	11	8	21	14	7	7	5	1	7	6	2	0	0	6.3	29.4
28-Sep	2	0	0	0	3	6	15	28	122	378	439	441	381	413	396	312	287	136	51	6	0	2	0	1	142.4	441.2
29-Sep	2	2	2	7	4	4	27	60	75	22	43	85	34	22	52	26	55	20	45	26	14	18	22	4	27.9	85.5
30-Sep	3	4	3	2	4	8	14	23	39	51	22	6	5	5	3	2	1	1	1	2	1	2	1	0	8.4	50.6
	2.2	2.5	2.8	2.8	2.6	2.9	5.2	8.9	15.3	24.3	32.0	31.5	30.0	26.6	30.0	26.6	27.7	14.1	9.2	5.6	5.6	3.5	3.1	2.7	Diurnal Average	
	7.8	7.4	12.8	6.5	10.2	11.4	27.0	59.5	121.6	378.0	438.7	441.2	380.5	413.2	395.8	311.7	287.0	135.6	51.1	25.9	26.7	17.6	21.7	10.5	Diurnal Maximum	

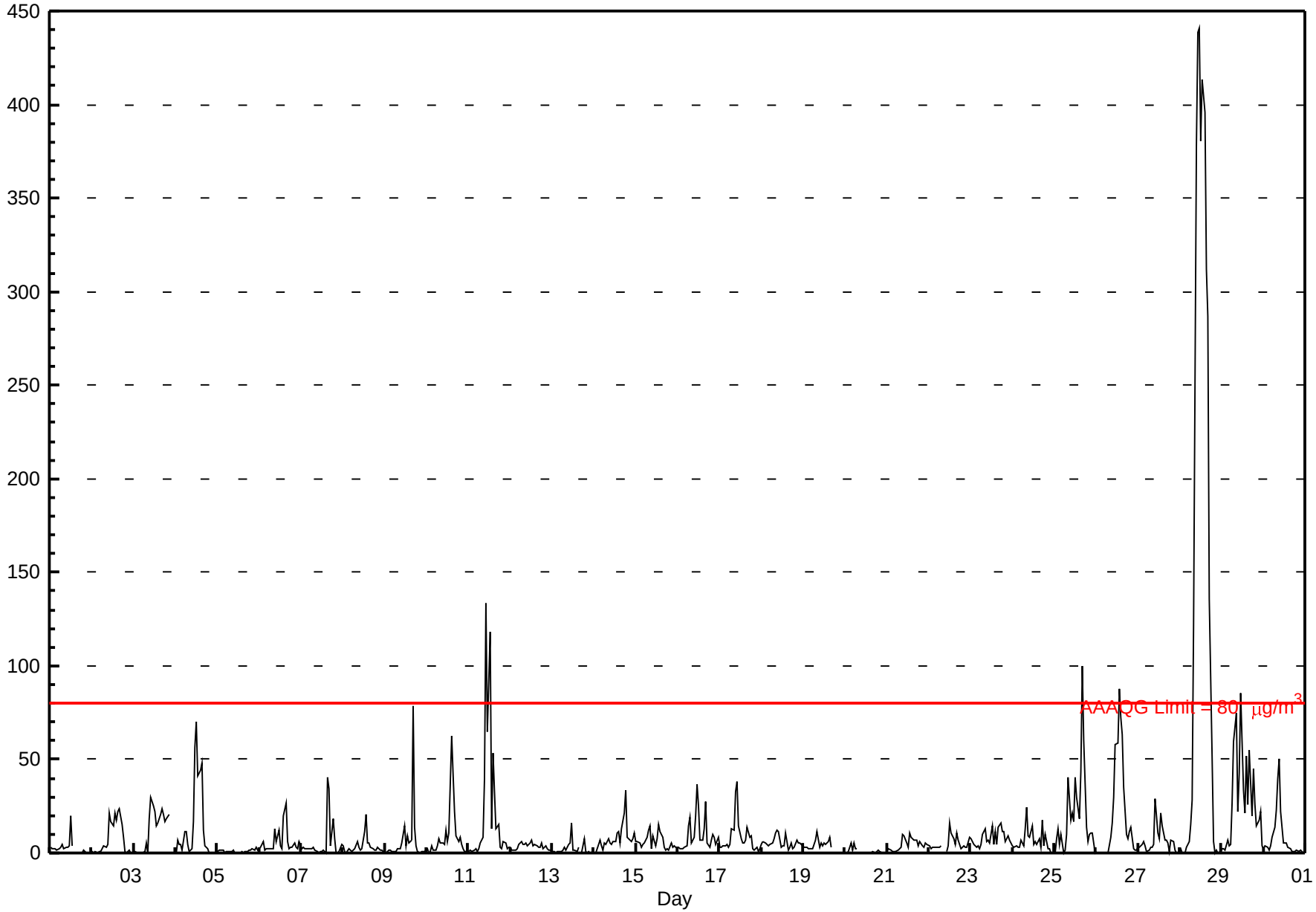
M - Maintenance N - Not Valid BD - Baseline Drift
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

PASZA
Peace Airshed Zone Association

Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Evergreen Park - September 2010



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Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Evergreen Park - September 2010

Maximum Value: 450.0 $\mu g/m^3$ on Sep 28 10:00

Maximum Daily Average: 183.6 $\mu g/m^3$ on Sep 28

Minimum Value: 0 $\mu g/m^3$ on Sep 20 11:00

Minimum Daily Average: 2.9 $\mu g/m^3$ on Sep 5

Maximum Diurnal Average: 56.0 $\mu g/m^3$ at hour 15

Minimum Diurnal Average: 5.2 $\mu g/m^3$ at hour 5

Monthly Average: 25.39 $\mu g/m^3$

Percentiles: P_1 = 0.8 P_{10} = 2.4 Q_1 = 4.1 Median = 8.2 Q_3 = 20.6 P_{90} = 59.6 P_{99} = 450.0

Hours in Service:	720
Hours of Data:	703
Hours of Missing Data:	17
Hours of Calibration:	0
Percent Operational Time:	97.6

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-Sep	4	4	4	3	5	4	4	12	4	5	5	9	46	24	M	7	9	2	4	5	4	2	1	1	7.3	45.8
2-Sep	3	3	3	2	2	3	5	7	7	9	62	41	22	68	39	36	41	38	19	5	11	10	2	2	18.3	67.8
3-Sep	2	3	0	2	2	2	4	13	4	63	57	54	59	24	31	61	60	61	61	56	53	N	N	N	32.0	63.4
4-Sep	6	93	68	18	9	46	22	14	6	13	87	101	116	63	90	209	28	10	7	3	4	1	1	2	42.4	209.0
5-Sep	2	3	3	3	2	2	2	3	2	10	2	1	2	2	2	2	2	2	3	3	4	4	4	3	2.9	9.8
6-Sep	4	8	10	4	4	3	4	5	3	54	14	20	9	4	52	66	15	5	7	6	9	6	8	18	14.1	66.2
7-Sep	4	4	4	4	4	3	4	4	4	3	3	3	3	3	2	129	80	9	29	29	2	1	2	8	14.3	128.9
8-Sep	6	3	2	4	3	3	3	5	9	5	3	4	103	85	10	10	5	4	3	3	9	3	4	2	12.1	102.7
9-Sep	2	3	3	3	3	3	2	4	4	8	10	60	11	29	11	19	232	28	8	3	4	2	3	4	19.2	232.0
10-Sep	4	2	4	7	4	3	8	11	7	8	8	31	9	31	148	80	51	22	17	25	9	4	2	3	20.9	148.2
11-Sep	3	4	3	4	4	3	4	10	13	84	230	188	221	91	219	89	66	39	9	5	11	8	5	5	54.9	230.2
12-Sep	5	4	3	4	4	8	9	7	7	9	6	11	12	6	6	5	6	6	8	7	11	4	4	2	6.4	11.7
13-Sep	2	3	2	2	2	2	4	4	5	11	13	27	5	4	4	9	N	2	26	3	1	2	2	7	6.2	27.0
14-Sep	5	3	6	10	6	4	22	19	10	10	7	11	11	16	30	11	33	37	63	16	9	7	13	14	15.5	63.5
15-Sep	11	7	7	6	6	7	12	14	24	8	16	11	22	41	27	23	13	5	5	3	15	5	6	9	12.6	41.3
16-Sep	7	3	5	5	5	16	20	34	8	25	43	75	54	23	29	49	91	8	8	13	20	15	6	29	24.6	91.3
17-Sep	5	5	8	6	6	6	6	19	17	93	56	29	15	19	12	21	29	25	24	6	7	9	2	4	17.9	93.4
18-Sep	8	9	9	6	5	6	7	10	16	23	21	9	7	9	44	8	6	10	8	7	9	7	7	6	10.6	43.6
19-Sep	5	6	5	3	4	4	7	14	15	10	13	7	10	7	8	18	24	N	N	N	52	N	N	15	12.0	52.0
20-Sep	13	13	2	18	13	17	15	15	N	48	0	0	2	2	2	1	3	1	2	4	2	3	1	1	7.7	48.4
21-Sep	2	3	4	2	2	2	3	4	6	14	23	8	5	19	12	10	12	14	6	11	10	6	13	13	8.6	23.5
22-Sep	10	4	4	4	4	4	5	9	N	N	4	10	29	19	12	11	23	10	6	6	8	8	7	11	9.4	29.3
23-Sep	10	8	6	5	7	4	7	13	30	13	11	19	23	10	19	7	25	38	18	26	9	19	12	9	14.6	37.6
24-Sep	8	6	5	5	8	11	5	28	45	17	16	21	14	14	13	19	19	26	18	14	7	5	2	2	13.8	45.4
25-Sep	2	33	34	11	13	4	12	36	57	29	38	48	83	62	62	93	172	91	38	12	17	15	26	4	41.4	172.4
26-Sep	7	N	N	N	BD	7	11	4	22	25	69	127	137	171	139	101	101	24	20	26	39	6	4	2	52.0	171.2
27-Sep	5	5	7	9	6	3	4	5	5	10	70	27	12	58	23	13	14	14	4	15	9	5	2	2	13.6	69.7
28-Sep	10	3	2	2	5	16	45	55	283	450	450	450	450	450	450	450	372	308	106	30	2	13	3	2	183.6	450.0
29-Sep	9	15	10	16	7	19	45	76	204	48	89	106	84	36	121	46	86	47	130	66	34	35	35	10	57.2	204.1
30-Sep	7	8	7	4	6	13	27	27	57	64	40	16	10	13	6	5	4	9	4	5	4	6	2	2	14.4	63.6
	5.7	9.3	7.8	5.9	5.2	7.8	11.0	16.0	31.2	40.3	48.9	50.9	52.9	46.8	56.0	53.6	56.0	30.9	22.8	14.2	12.7	7.6	6.4	6.6	Diurnal Average	
	12.7	93.3	67.6	17.9	13.2	46.3	44.8	75.9	283.1	450.0	450.0	450.0	450.0	450.0	450.0	450.0	372.4	308.0	129.7	65.9	53.0	35.1	35.1	29.3	Diurnal Maximum	

M - Maintenance N - Not Valid BD - Baseline Drift

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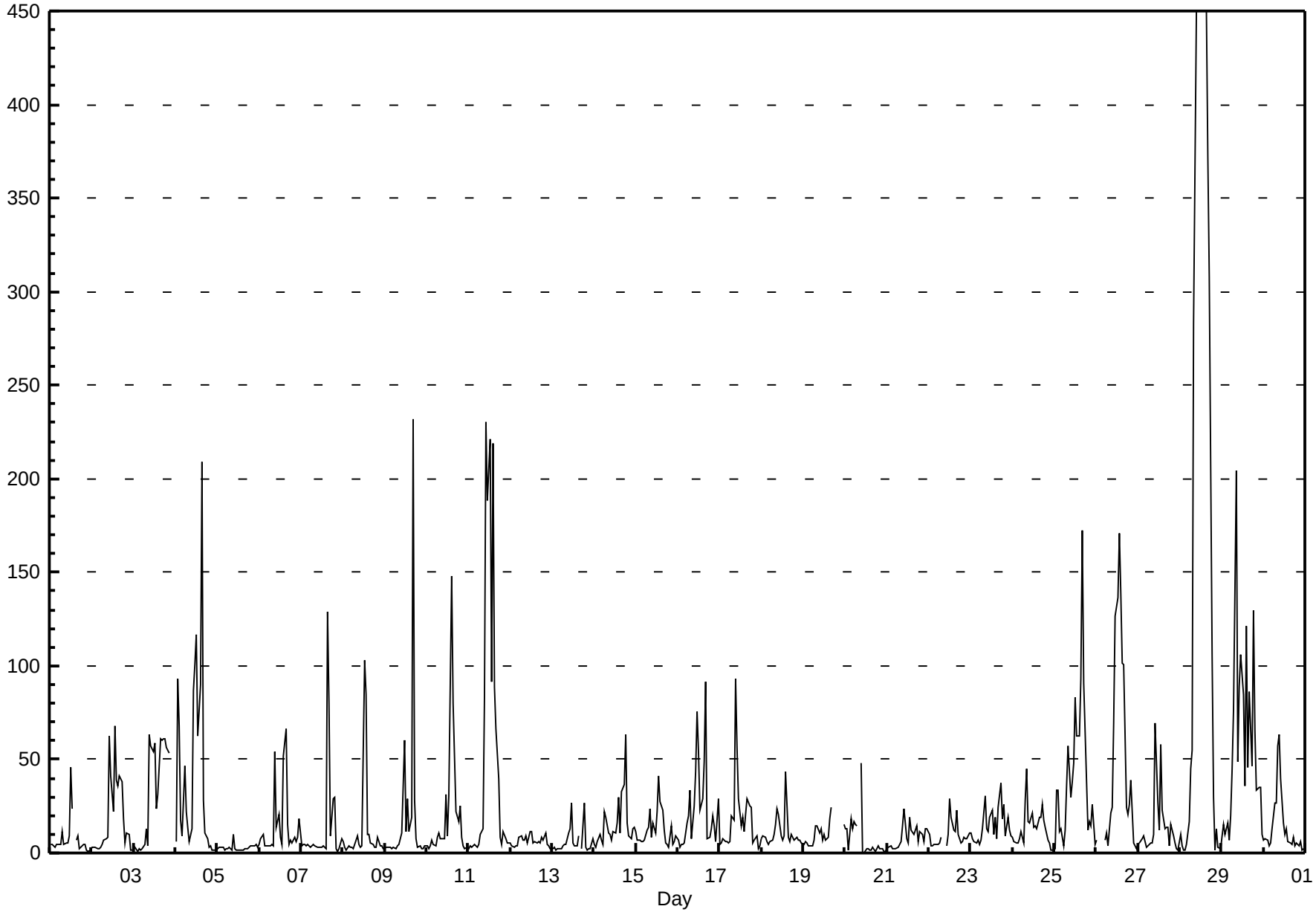
Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

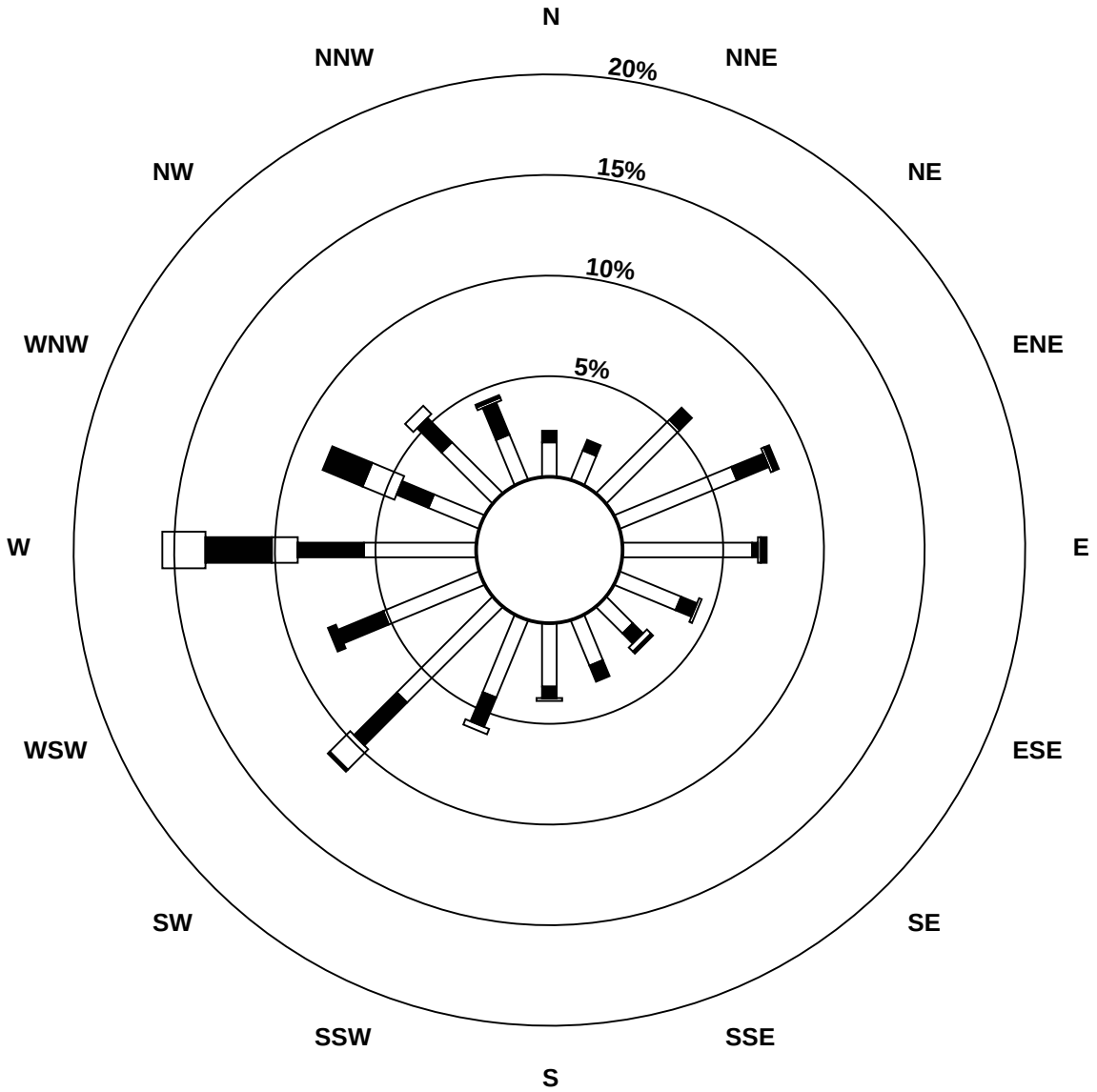
Evergreen Park - September 2010



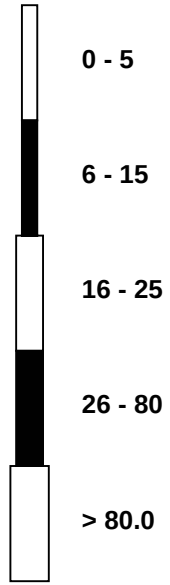
Pollutant Rose

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Evergreen Park - September 2010



Pollutant Classes ($\mu g/m^3$)



PASZA
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Hourly Averages

External Temperature (ET) - °C

Evergreen Park - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.6 °C on Sep 3 17:00 Maximum Daily Average: 15.5 °C on Sep 3

Minimum Value: -4 °C on Sep 17 07:00 Minimum Daily Average: 1.6 °C on Sep 21
Maximum Diurnal Average: 13.9 °C at hour 17 Minimum Diurnal Average: 4.2 °C at hour 7
Monthly Average: 8.75 °C Percentiles: P_1 = -3.1 P_{10} = 1.2 Q_1 = 5.0 Median = 8.8 Q_3 = 12.5 P_{90} = 15.6 P_{99} = 21.9

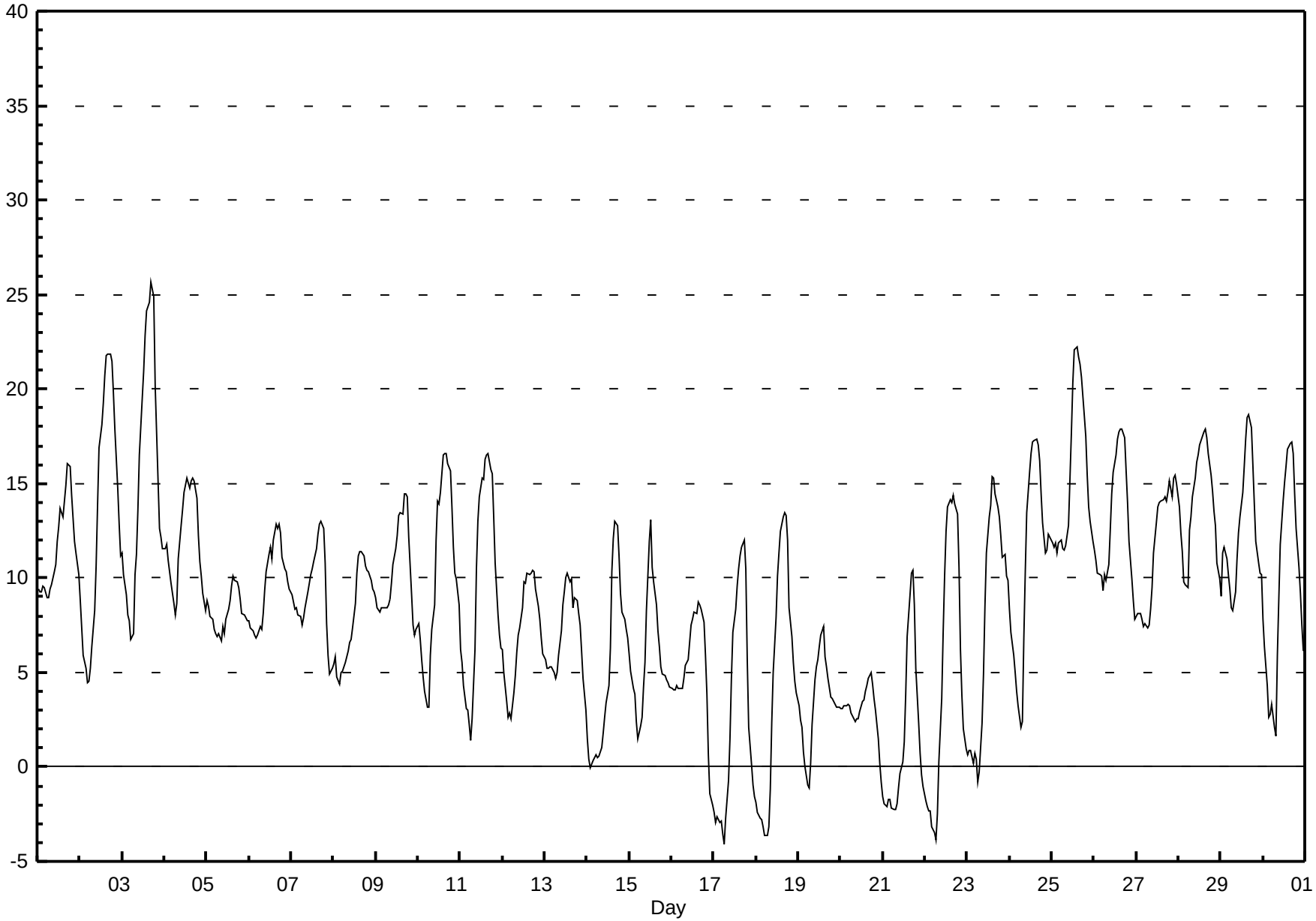
Hours in Service: 720
Hours of Data: 720
Hours of Missing Data: 0
Hours of Calibration: 0
Percent Operational Time: 100.0

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-Sep	9	9	9	10	9	9	9	9	10	10	11	12	13	14	13	14	15	16	16	14	13	12	11	10	11.6	16.0
2-Sep	9	7	6	5	4	4	5	6	8	11	14	17	18	19	21	22	22	22	21	20	18	15	13	11	13.3	21.9
3-Sep	11	10	9	8	8	7	7	10	11	14	16	19	21	23	24	25	26	25	25	20	15	13	12	12	15.5	25.6
4-Sep	12	12	11	10	10	9	8	9	11	13	14	15	15	15	15	15	15	15	14	12	11	10	9	8	12.0	15.3
5-Sep	9	8	8	8	7	7	7	7	7	7	7	8	8	9	10	10	10	10	9	9	8	8	8	8	8.2	10.1
6-Sep	8	7	7	7	7	7	7	7	8	9	10	11	12	11	12	13	13	13	12	11	11	10	10	9	9.7	12.8
7-Sep	9	9	8	8	8	8	8	8	8	9	10	10	11	11	12	12	13	13	13	11	8	6	5	5	9.2	13.0
8-Sep	5	6	5	4	5	5	5	6	6	7	7	7	9	10	11	11	11	11	11	10	10	10	9	9	8.0	11.4
9-Sep	9	8	8	8	8	8	8	9	9	10	11	12	12	13	13	13	14	14	14	12	9	7	7	7	10.3	14.4
10-Sep	8	7	6	5	4	3	3	6	7	9	12	14	14	14	17	17	17	16	16	14	12	10	10	9	10.3	16.6
11-Sep	6	6	4	3	3	2	1	3	6	10	13	14	15	15	16	17	17	16	16	13	11	8	7	6	9.5	16.6
12-Sep	6	5	3	3	3	3	4	5	6	7	7	8	10	10	10	10	10	10	10	9	9	8	7	6	7.1	10.4
13-Sep	6	5	5	5	5	5	5	5	6	7	9	9	10	10	10	10	8	9	9	8	8	6	5	3	7.0	10.2
14-Sep	1	0	0	0	0	1	1	1	1	2	3	3	4	6	10	12	13	13	11	9	8	8	7	7	5.1	13.0
15-Sep	6	5	4	4	2	1	2	3	4	6	8	12	13	11	10	9	7	6	5	5	5	5	4	4	5.9	13.1
16-Sep	4	4	4	4	4	4	4	5	5	6	7	8	8	8	8	9	9	8	8	6	4	1	-1	-2	5.1	8.7
17-Sep	-2	-3	-3	-3	-3	-4	-4	-3	-1	2	5	7	8	10	10	11	12	12	11	6	2	0	-1	-2	2.8	12.0
18-Sep	-2	-2	-3	-3	-3	-4	-4	-3	-1	2	5	8	10	11	12	13	13	13	12	8	7	6	5	4	4.4	13.5
19-Sep	3	3	2	1	0	-1	-1	0	2	5	5	6	6	7	7	6	5	5	4	4	3	3	3	3	3.4	7.4
20-Sep	3	3	3	3	3	3	3	3	2	3	3	3	3	4	4	4	5	5	4	4	3	1	0	-1	3.0	5.0
21-Sep	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	0	0	1	4	7	9	10	10	9	5	2	1	0	-1	1.6	10.4
22-Sep	-2	-2	-2	-2	-3	-3	-4	-3	0	4	7	10	12	14	14	14	14	14	13	11	6	4	2	1	5.0	14.4
23-Sep	1	1	1	0	1	0	-1	0	2	5	9	11	13	14	15	15	14	14	13	12	11	11	10	10	7.6	15.4
24-Sep	8	7	6	5	4	3	2	2	7	10	13	16	17	17	17	17	17	16	14	13	11	11	12	12	10.9	17.3
25-Sep	12	12	12	11	12	12	12	11	12	13	15	18	20	22	22	22	21	21	19	17	15	14	13	12	15.4	22.3
26-Sep	11	11	10	10	10	9	10	10	11	13	14	16	16	17	18	18	18	17	16	14	12	10	9	8	12.9	17.9
27-Sep	8	8	8	8	7	8	7	8	8	9	11	13	14	14	14	14	14	14	15	15	14	15	15	15	11.6	15.5
28-Sep	14	12	11	10	10	9	13	13	14	15	16	17	17	17	18	18	17	17	15	15	14	13	11	10	14.0	17.9
29-Sep	9	11	12	11	10	9	8	8	9	11	12	13	15	16	17	18	19	18	16	14	12	11	10	10	12.5	18.6
30-Sep	8	6	4	3	3	3	2	2	6	9	12	14	15	16	17	17	17	17	14	13	11	9	7	6	9.6	17.2
	6.3	5.8	5.3	4.9	4.6	4.3	4.2	4.8	6.2	7.8	9.5	11.0	12.1	12.7	13.5	13.9	13.9	13.7	12.8	11.1	9.4	8.2	7.3	6.7	Diurnal Average	
	13.7	12.4	11.9	11.3	11.9	12.0	12.6	13.2	14.3	15.3	16.5	19.5	21.0	22.8	24.2	24.6	25.6	25.3	24.9	20.1	17.9	15.3	15.5	15.0	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 98.3 % on Sep 14 13:00 Maximum Daily Average: 92.0 % on Sep 8

Minimum Value: 26 % on Sep 29 16:00 Minimum Daily Average: 43.1 % on Sep 29
Maximum Diurnal Average: 89.2 % at hour 6 Minimum Diurnal Average: 51.3 % at hour 16
Monthly Average: 71.93 % Percentiles: P_1 = 29.3 P_{10} = 39.9 Q_1 = 55.7 Median = 76.2 Q_3 = 90.3 P_{90} = 95.0 P_{99} = 97.3

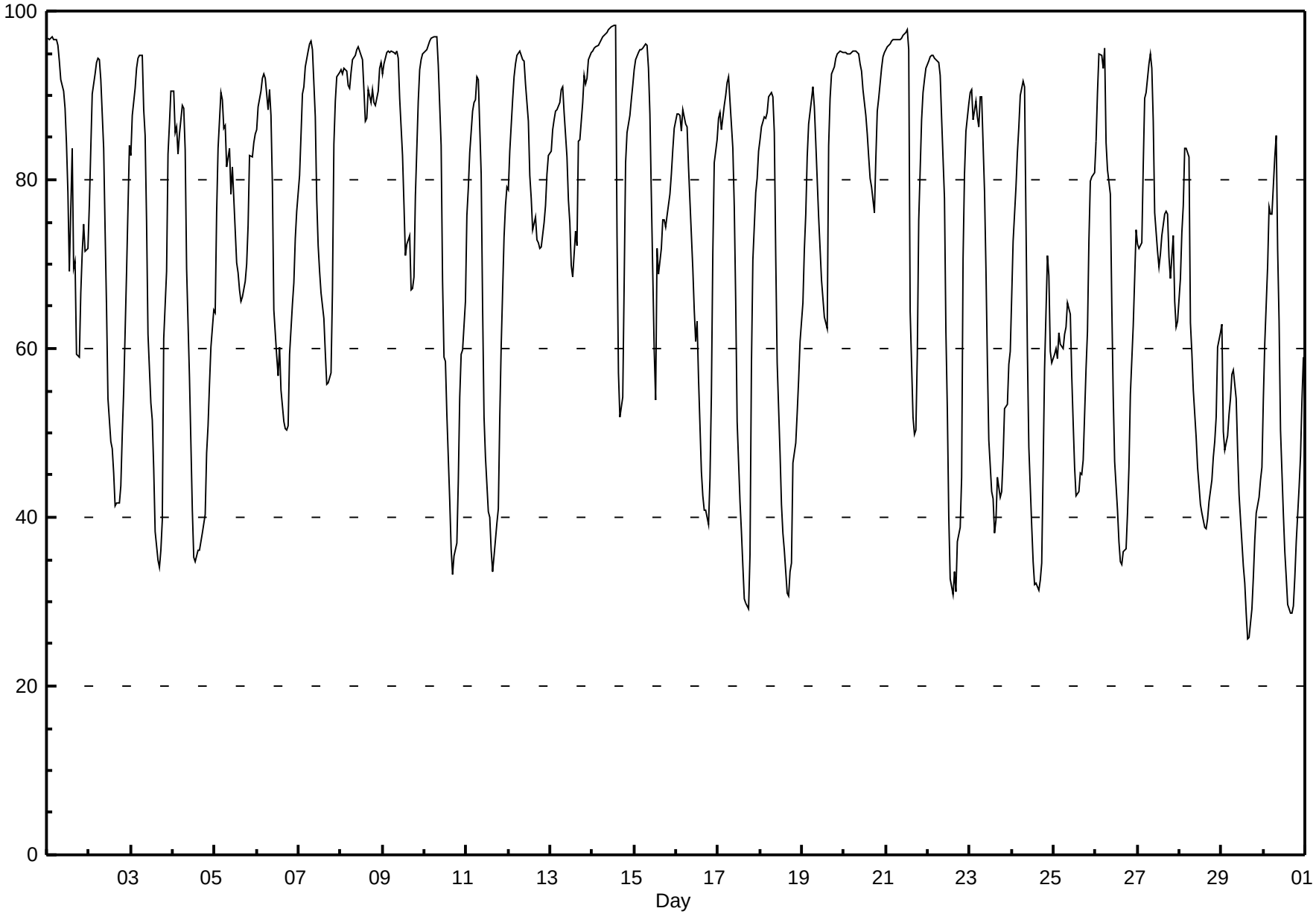
Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	97	97	97	97	97	97	96	94	92	91	88	84	79	69	84	70	70	59	59	67	71	75	72	72	82.1	97.0
2-Sep	77	84	90	92	94	94	94	92	84	74	65	54	49	48	45	41	42	42	44	50	55	69	77	84	68.3	94.3
3-Sep	83	88	91	93	94	95	95	88	85	75	62	53	51	46	38	35	34	36	40	61	69	83	87	91	69.7	94.8
4-Sep	90	86	86	83	85	89	88	84	70	57	49	41	35	35	36	36	37	38	40	48	51	56	60	65	60.2	90.5
5-Sep	64	76	84	90	90	86	86	82	84	78	82	78	70	69	67	66	66	68	70	75	83	83	84	85	77.7	90.4
6-Sep	86	89	91	92	93	92	88	91	88	79	65	59	57	60	55	51	51	50	51	59	65	68	73	76	72.0	92.6
7-Sep	81	85	90	91	93	95	96	96	95	87	78	72	69	67	64	59	56	56	57	67	84	89	92	93	79.7	96.4
8-Sep	93	93	93	93	91	91	93	94	95	95	96	95	94	91	87	87	91	89	91	89	89	91	93	94	92.0	95.7
9-Sep	93	94	95	95	95	95	95	95	95	94	90	83	77	71	72	73	67	67	69	78	89	93	94	95	86.1	95.2
10-Sep	95	95	96	96	97	97	97	97	94	84	68	59	58	52	42	36	33	35	37	44	54	59	60	66	68.9	97.0
11-Sep	76	79	83	88	89	89	92	92	81	65	52	47	41	40	36	34	35	39	41	52	60	73	77	79	64.2	92.1
12-Sep	79	83	90	92	94	95	95	95	94	94	91	87	80	78	74	76	73	73	72	72	75	77	81	83	83.4	95.2
13-Sep	83	86	87	88	88	89	91	91	88	83	78	75	70	68	74	72	85	85	89	92	91	92	94	95	84.8	95.1
14-Sep	95	96	96	96	96	97	97	97	97	98	98	98	98	98	73	57	52	54	68	82	86	88	90	91	87.4	98.3
15-Sep	93	94	95	95	95	96	96	96	93	88	78	60	54	72	69	72	75	75	74	76	78	81	84	86	82.3	96.2
16-Sep	88	88	88	86	88	87	86	82	77	70	65	61	63	56	45	43	41	41	39	45	55	71	82	85	67.9	88.3
17-Sep	87	88	86	89	90	92	92	89	84	77	66	51	42	38	34	30	30	29	36	58	70	78	80	83	66.7	92.2
18-Sep	85	86	87	87	88	90	90	90	86	71	58	48	41	38	36	31	31	34	35	46	49	52	56	61	61.5	90.3
19-Sep	65	72	76	83	87	89	91	89	84	76	72	68	66	64	62	84	90	93	93	94	95	95	95	95	82.4	95.2
20-Sep	95	95	95	95	95	95	95	95	95	94	93	91	88	85	83	80	79	76	82	88	90	93	94	95	90.3	95.3
21-Sep	95	96	96	96	97	97	97	97	97	97	97	97	98	95	64	52	50	50	59	75	87	90	92	93	86.0	97.8
22-Sep	94	95	95	95	94	94	94	92	87	78	62	53	40	33	31	34	31	37	39	45	71	81	86	89	68.7	94.8
23-Sep	90	91	87	89	87	86	90	90	79	70	58	49	43	42	38	40	45	42	43	47	53	53	58	60	63.8	90.6
24-Sep	66	73	79	83	86	90	92	91	75	60	48	39	35	32	32	31	33	35	46	58	71	69	60	58	60.0	91.6
25-Sep	59	60	59	62	61	60	62	63	65	64	57	51	46	43	43	45	45	47	58	62	73	80	80	81	59.4	80.9
26-Sep	85	90	95	95	93	96	84	81	78	65	54	47	41	37	35	34	36	36	41	46	55	63	68	74	63.7	95.5
27-Sep	72	72	73	82	90	90	94	95	93	87	76	72	70	71	73	76	76	76	71	68	73	66	63	63	76.7	94.9
28-Sep	68	74	77	84	84	83	63	59	55	49	46	44	42	41	39	39	40	42	44	47	49	52	60	62	55.9	83.7
29-Sep	63	50	48	50	52	54	57	57	54	48	43	40	34	32	29	26	26	29	33	37	41	42	44	46	43.1	62.8
30-Sep	54	61	70	77	76	76	83	85	72	63	50	40	36	33	30	29	29	29	33	37	44	47	54	59	52.8	85.3
	81.8	83.8	85.8	87.8	88.7	89.2	89.0	88.0	83.9	77.0	69.4	63.2	58.9	56.8	53.0	51.3	51.5	52.1	55.1	62.2	69.2	73.6	76.4	78.6	Diurnal Average	
	96.8	96.7	96.8	97.0	96.7	96.9	97.0	97.2	97.5	97.8	98.0	98.2	98.3	98.3	87.0	87.3	90.6	92.6	93.3	94.5	94.9	95.1	95.2	95.1	Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	2	2	3	4	6	5	5	6	8	8	7	10	11	8	2	6	2	7	8	6	6	6	6	5	5.3	11.0
Dir	329	228	233	259	263	275	284	277	276	277	280	265	270	299	89	306	44	267	265	261	252	251	255	233	269.8	269.8
2 Spd	3	1	0	0	1	1	1	1	3	4	4	7	10	16	15	15	16	13	7	4	3	1	1	1	4.6	16.4
Dir	217	84	202	228	200	209	159	111	208	221	222	233	263	263	259	278	270	282	276	286	259	190	93	100	260.5	270.2
3 Spd	1	1	1	1	1	0	1	2	2	3	4	4	3	4	4	4	2	3	2	2	17	11	8	2	1.2	17.2
Dir	104	64	66	56	91	105	22	68	85	119	130	136	179	205	296	301	220	216	142	306	303	295	263	237	272.1	303.2
4 Spd	4	4	3	4	3	3	2	4	10	15	19	19	19	19	19	16	13	13	14	11	11	12	8	6	10.1	19.2
Dir	309	267	312	275	261	213	232	243	263	265	263	261	264	260	280	280	267	267	268	254	251	257	244	226	263.6	263.6
5 Spd	7	5	6	7	7	6	6	9	9	9	10	9	12	11	10	10	9	7	7	3	3	2	2	3	6.0	11.6
Dir	247	265	280	305	316	310	309	299	320	302	333	313	324	321	322	334	342	352	351	332	217	222	220	219	312.9	324.2
6 Spd	1	1	1	1	1	2	2	1	0	1	5	4	2	4	6	4	5	5	3	2	1	1	1	3	1.4	5.5
Dir	186	51	200	148	152	168	160	201	75	65	136	152	66	73	72	58	31	46	43	46	32	21	9	311	74.3	72.2
7 Spd	3	2	3	3	4	4	3	3	5	6	7	10	11	10	9	10	8	6	4	2	1	1	1	0	4.3	10.5
Dir	311	208	225	250	256	263	278	292	317	315	308	277	285	293	301	283	276	285	290	318	43	16	6	306	287.5	285.0
8 Spd	1	2	2	1	2	2	2	3	2	1	2	1	3	3	2	3	3	3	3	3	3	3	2	2	1.3	3.5
Dir	334	317	350	346	298	328	324	338	65	117	144	52	76	81	73	83	91	102	103	106	108	86	74	89	64.9	338.5
9 Spd	3	2	3	2	2	1	1	1	1	1	2	5	3	1	1	2	2	2	3	1	0	0	1	1	0.9	4.9
Dir	89	84	81	96	91	92	87	94	73	131	217	246	222	1	56	69	85	146	146	149	347	75	61	81	113.2	245.7
10 Spd	0	1	1	2	2	2	2	3	3	4	7	10	7	9	11	12	16	13	11	5	2	4	5	3	5.1	15.9
Dir	175	55	229	218	203	213	212	223	221	243	266	270	287	288	280	291	286	284	276	282	256	256	266	268	272.7	285.8
11 Spd	1	2	0	0	2	0	0	1	3	4	13	11	12	8	11	11	9	10	9	3	1	0	1	2	4.3	12.5
Dir	162	231	285	212	251	250	185	244	292	263	281	282	271	314	283	291	308	268	254	225	223	339	262	254	277.3	281.2
12 Spd	2	1	0	1	1	3	1	0	1	4	5	3	2	5	7	5	5	2	2	3	2	2	2	2	1.9	7.3
Dir	320	295	319	1	344	218	265	18	146	89	74	97	121	73	77	81	66	75	47	59	44	42	34	49	69.7	77.2
13 Spd	2	1	1	1	1	1	0	1	3	2	1	2	1	3	2	2	4	2	1	2	1	0	1	1	0.2	4.1
Dir	44	56	47	81	65	48	22	95	75	74	230	236	305	1	349	218	227	274	172	114	135	182	97	70	66.1	227.1
14 Spd	0	0	0	0	0	1	1	1	2	2	2	1	1	2	2	3	2	1	1	0	0	0	0	0	0.4	2.9
Dir	46	104	38	69	128	96	107	96	162	178	238	307	217	283	236	268	221	274	79	142	342	47	125	241	212.4	268.4
15 Spd	1	0	2	1	1	1	1	3	4	7	7	5	12	7	9	8	7	6	5	3	1	2	1	2	1.6	11.8
Dir	69	223	225	258	222	228	261	249	268	256	267	309	340	46	24	26	41	41	45	48	77	195	175	210	348.6	340.5
16 Spd	2	2	1	2	1	2	3	5	6	9	7	10	9	13	13	13	15	12	9	5	1	0	1	1	5.2	14.7
Dir	218	207	247	253	1	276	298	293	315	344	332	294	298	334	325	331	337	338	345	348	290	58	187	242	323.1	337.2
17 Spd	1	2	1	2	4	3	2	1	5	5	4	4	2	2	1	4	2	1	2	0	0	0	0	2	1.6	4.8
Dir	0	229	270	291	267	253	226	283	283	291	285	276	294	231	268	228	280	227	118	13	309	18	116	57	267.5	283.0
18 Spd	0	0	0	1	0	0	0	0	1	1	3	2	3	4	4	5	5	5	3	2	3	3	3	3	1.9	4.9
Dir	281	119	122	212	31	154	144	95	75	63	73	112	109	98	137	121	97	82	90	66	79	74	61	74	93.4	97.2
19 Spd	4	3	2	2	1	0	0	1	0	4	6	6	5	6	6	3	3	3	4	5	4	5	6	6	3.1	6.3
Dir	82	81	80	55	358	335	52	208	233	72	73	83	76	66	71	168	162	140	99	72	75	73	64	59	79.8	83.3
20 Spd	7	6	6	5	5	7	8	7	8	7	8	7	6	5	4	4	3	2	3	3	1	2	1	0	3.9	8.0
Dir	58	56	52	57	57	52	50	49	52	54	56	52	54	57	54	51	60	109	210	227	222	213	205	65	56.8	56.5
21 Spd	0	0	1	0	1	1	1	1	1	1	2	3	2	3	3	2	3	3	3	1	0	0	1	1	0.6	3.0
Dir	89	82	196	81	69	111	221	58	338	240	244	212	230	279	312	241	210	152	131	54	279	222	206	216	209.8	131.4
22 Spd	1	1	0	1	0	0	0	1	1	0	4	6	8	7	7	5	3	1	2	2	1	0	1	1	1.5	8.1
Dir	78	188	125	218	30	200	106	48	41	83	212	221	232	224	231	217	240	101	163	130	36	4	7	325	217.8	231.9

PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	0	2	1	2	4	3	3	3	5	3	0	3	4	5	5	2	2	7	6	3	5	2	4	1	1.6	6.9
Dir	314	247	249	255	283	258	213	215	255	268	19	120	149	133	139	67	358	284	280	221	231	259	242	290	239.6	283.5
24 Spd	3	1	1	1	1	2	1	2	3	4	5	8	9	10	9	8	7	14	7	5	6	6	7	5	4.8	14.3
Dir	209	147	99	83	217	222	77	230	215	211	210	240	220	225	225	218	207	225	203	198	176	187	184	188	210.8	224.6
25 Spd	4	4	2	4	5	3	2	2	2	2	5	3	2	5	7	5	7	3	2	3	2	3	12	9	1.8	11.8
Dir	187	199	185	187	189	183	158	190	228	230	219	211	246	290	314	284	271	269	346	338	344	352	354	344	271.4	353.9
26 Spd	2	4	5	7	2	4	12	4	6	12	15	21	21	21	21	22	17	12	7	4	1	1	0	0	8.8	22.2
Dir	300	244	205	230	333	254	255	262	267	276	272	277	281	273	278	260	272	274	265	244	218	178	137	167	267.9	260.2
27 Spd	1	1	1	1	1	1	1	1	1	2	4	4	3	2	3	2	3	8	7	1	2	8	7	8	1.8	8.2
Dir	188	59	83	43	89	170	36	314	65	236	276	331	312	325	311	193	200	206	199	312	232	246	252	231	243.5	245.5
28 Spd	6	1	2	1	3	3	13	16	21	30	32	33	30	31	28	27	25	25	23	17	11	9	3	1	15.7	32.8
Dir	224	165	171	112	191	244	256	258	269	271	271	269	268	268	270	268	269	269	270	272	254	247	214	227	265.3	269.3
29 Spd	3	11	16	16	13	10	8	6	7	10	12	13	10	8	10	9	9	6	7	4	2	2	4	4	8.2	16.5
Dir	278	280	271	266	268	272	256	270	265	293	285	269	284	273	275	277	277	291	292	286	345	299	283	282	276.4	271.0
30 Spd	1	1	2	0	3	2	1	1	1	4	4	1	5	4	4	4	6	5	4	3	2	3	3	3	1.2	5.7
Dir	144	251	217	209	230	263	247	208	264	284	310	110	150	164	186	136	122	116	103	97	88	81	83	79	137.5	122.2
Spd	0.4	0.7	0.9	1.2	1.3	1.3	1.5	1.6	2.4	3.4	4.0	5.1	5.0	4.3	4.4	4.5	3.8	3.6	2.5	1.4	1.4	1.3	0.9	0.6	Diurnal Average	
Dir	250.0	252.1	251.6	262.4	263.2	256.5	264.8	271.9	278.6	278.4	274.9	268.0	274.2	282.8	286.5	281.6	282.9	273.3	270.0	275.8	260.9	256.8	262.5	252.7		
Spd	6.8	11.2	16.5	16.3	13.3	9.6	12.5	16.3	20.8	29.5	31.9	32.8	30.4	30.8	28.4	27.0	24.8	24.6	23.2	16.8	17.2	11.5	11.8	9.0	Diurnal Maximum	
Dir	57.5	280.3	271.0	266.4	267.5	272.1	255.9	257.6	268.9	271.2	271.0	269.3	268.1	268.3	269.7	268.3	269.5	268.8	270.3	271.6	303.2	257.3	353.9	344.3		

Maximum Speed Value: 33 km/h on Sep 28 12:00
Maximum Daily Speed Average: 15.7 km/h on Sep 28
Maximum Diurnal Speed Average: 5.1 km/h at hour 12

Minimum Speed Value: 0 km/h on Sep 21 00:00
Minimum Daily Speed Average: 0.2 km/h on Sep 14
Minimum Diurnal Speed Average: 0.4 km/h at hour 1

Monthly Average Velocity: 2.37 km/h 273.61 deg

Speed Percentiles: $P_1 = 0.2$ $P_{10} = 0.6$ $Q_1 = 1.3$ Median = 2.9 $Q_3 = 6.2$ $P_{90} = 10.4$ $P_{99} = 26.1$

All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Percent Operational Time:	100.0

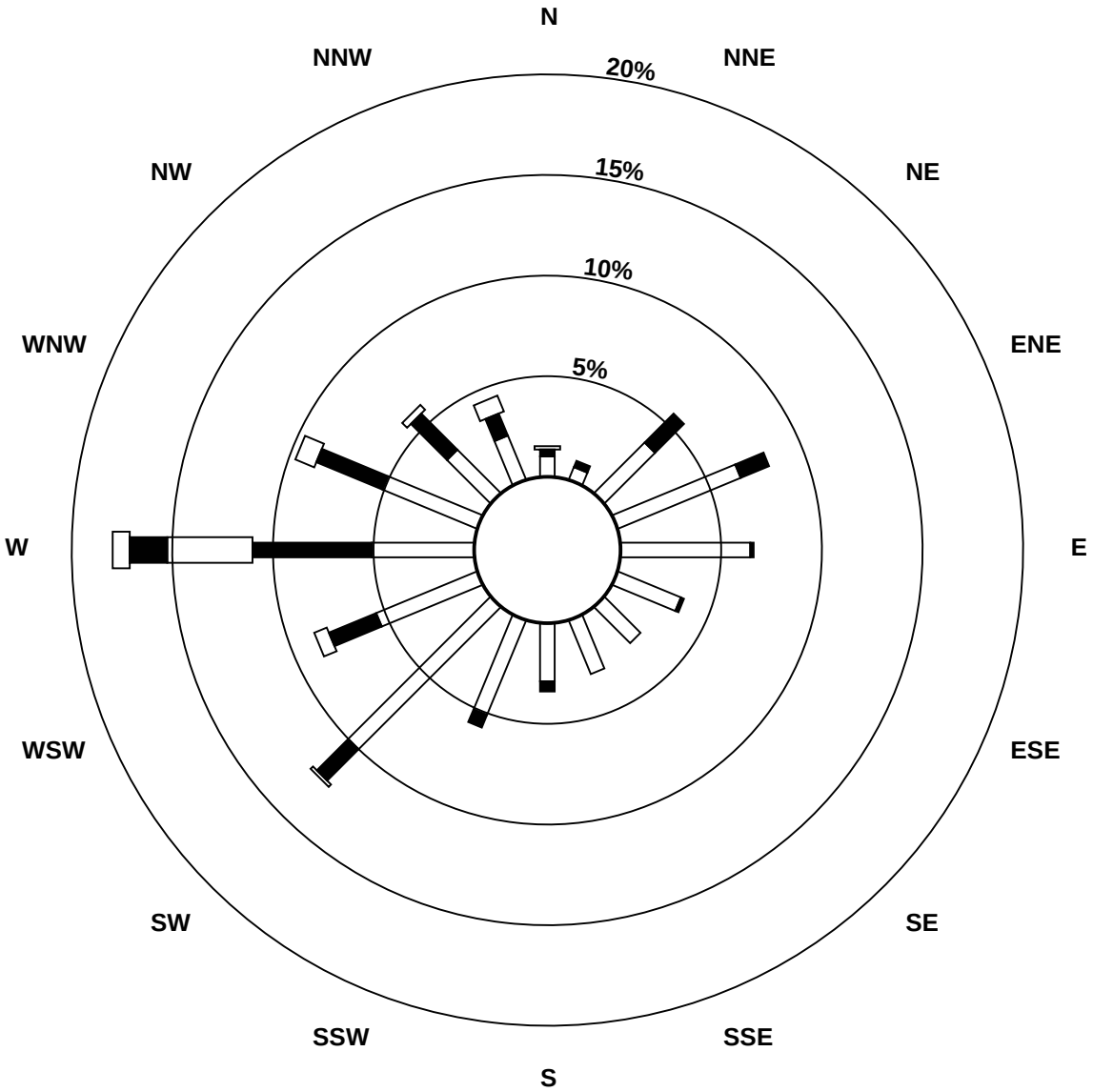
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	33	7	3	0	0	0	43
NorthEast	59	22	0	0	0	0	81
East	97	9	0	0	0	0	106
SouthEast	43	2	0	0	0	0	45
South	45	6	0	0	0	0	51
SouthWest	113	24	1	0	0	0	138
West	70	56	37	13	6	0	182
NorthWest	40	27	7	0	0	0	74
Total	500	153	48	13	6	0	720

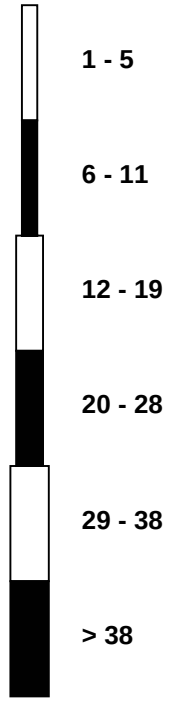
Wind Rose

Wind Speed (WS) (km/h)

Evergreen Park - September 2010



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - September 2010

Maximum Speed: 33 km/h on Sep 28 12:00

Maximum Daily Speed Average: 16.6 km/h on Sep 28

Minimum Speed: 1 km/h on Sep 18 02:00

Minimum Daily Speed Average: 1.7 km/h on Sep 14

Maximum Diurnal Speed Average: 8.5 km/h at hour 14

Minimum Diurnal Speed Average: 2.6 km/h at hour 2

Monthly Average Speed: 5.03 km/h

Percentiles: $P_1 = 0.8$ $P_{10} = 1.2$ $Q_1 = 1.8$ Median = 3.3 $Q_3 = 6.3$ $P_{90} = 11.2$ $P_{99} = 26.4$

Hours in Service: 720

Hours of Data: 720

Hours of Missing Data: 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-Sep	2	3	3	4	6	5	6	6	9	8	8	10	11	10	2	8	3	7	8	7	6	6	6	5	6.2	11.4
2-Sep	3	1	1	1	1	1	1	2	3	4	4	7	10	16	16	16	17	14	7	5	3	2	2	2	5.8	16.8
3-Sep	2	2	1	1	2	1	1	2	2	3	5	5	4	5	6	5	2	3	2	3	18	12	8	2	4.0	17.7
4-Sep	4	4	3	4	3	3	2	4	10	16	19	19	20	19	20	17	14	14	15	12	11	12	8	6	10.8	19.8
5-Sep	7	5	6	7	7	6	6	9	10	10	10	10	12	12	10	11	9	8	7	3	3	2	2	3	7.3	12.4
6-Sep	1	1	1	2	2	3	2	2	1	2	6	5	4	4	6	5	6	5	3	2	1	1	1	3	3.0	6.0
7-Sep	3	3	3	3	4	4	4	4	5	7	7	10	11	11	10	11	8	6	5	2	1	1	1	1	5.2	10.9
8-Sep	2	2	2	2	2	2	2	4	2	2	3	1	3	3	3	3	3	3	3	3	3	3	2	3	2.5	3.7
9-Sep	3	2	3	2	2	1	1	2	1	2	3	5	4	3	2	2	3	3	3	2	1	1	1	1	2.2	5.4
10-Sep	1	1	1	2	2	2	2	3	3	4	7	11	8	9	12	13	16	14	12	5	2	4	5	4	5.9	16.4
11-Sep	2	2	3	1	2	1	1	1	3	5	13	12	13	8	12	12	10	11	9	3	2	2	2	2	5.4	13.0
12-Sep	3	2	1	1	1	3	2	1	2	5	5	4	3	5	8	6	5	2	2	3	2	2	2	2	3.0	7.6
13-Sep	2	2	1	1	1	1	1	2	3	2	2	3	3	4	2	4	4	2	2	2	1	1	2	1	2.1	4.4
14-Sep	1	1	1	1	1	1	1	1	2	2	2	2	3	3	4	4	3	2	2	1	1	1	1	1	1.7	3.8
15-Sep	1	1	2	2	2	2	1	3	4	7	7	7	13	8	9	8	7	6	6	3	1	2	2	2	4.4	12.6
16-Sep	2	2	2	2	1	2	3	5	7	9	8	11	9	14	13	14	15	12	9	5	1	1	2	1	6.4	15.4
17-Sep	1	3	2	3	5	3	2	2	5	5	4	5	4	5	4	5	4	3	3	1	1	1	1	2	3.0	5.2
18-Sep	1	1	1	1	1	1	1	1	1	2	3	4	4	5	6	6	6	5	3	2	3	3	3	3	2.8	5.6
19-Sep	4	3	2	2	1	1	1	1	1	4	6	7	5	6	6	3	3	4	5	5	5	6	6	6	3.9	6.5
20-Sep	7	6	6	6	5	7	8	7	8	7	8	7	6	5	5	4	3	2	3	3	2	2	1	1	5.0	8.2
21-Sep	1	1	2	1	2	2	2	2	1	2	3	3	3	4	4	3	4	3	3	2	1	1	1	1	2.1	3.9
22-Sep	1	2	1	1	1	1	1	1	2	2	4	6	9	8	8	5	4	2	3	2	1	1	1	1	2.8	8.8
23-Sep	1	2	2	2	4	3	3	3	5	4	2	3	4	5	5	3	2	7	6	3	5	3	4	2	3.5	7.4
24-Sep	3	1	1	1	2	2	1	2	3	4	5	9	10	10	9	8	7	14	7	6	6	6	7	5	5.4	14.4
25-Sep	5	5	3	5	5	3	2	2	2	2	5	4	3	6	8	6	7	4	4	3	3	4	12	9	4.6	12.2
26-Sep	4	4	5	8	3	5	12	5	7	12	15	21	21	21	21	23	17	13	7	4	2	2	1	1	9.8	22.6
27-Sep	1	2	3	2	2	1	1	2	1	2	4	5	4	3	4	3	4	8	7	2	2	8	7	8	3.6	8.3
28-Sep	6	3	2	2	3	4	13	16	21	30	32	33	31	31	29	27	25	25	23	17	11	9	4	2	16.6	33.1
29-Sep	4	11	17	16	13	10	8	6	8	10	12	14	11	8	10	9	10	6	7	4	3	2	4	4	8.7	16.7
30-Sep	2	2	2	1	3	2	1	2	1	4	5	3	6	5	5	6	6	6	4	3	2	3	3	3	3.3	6.2
	2.7	2.6	2.7	3.0	2.9	2.8	3.1	3.4	4.5	5.9	7.3	8.1	8.4	8.5	8.5	8.2	7.6	7.1	5.9	3.9	3.6	3.4	3.4	2.9	Diurnal Average	
	6.9	11.4	16.7	16.4	13.4	9.8	12.7	16.4	21.0	29.8	32.2	33.1	30.6	31.0	28.6	27.3	25.0	24.8	23.3	16.9	17.7	12.1	12.2	9.2	Diurnal Maximum	

All monthly, daily, and diurnal averages have been calculated using scalar methods

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Evergreen Park - September 2010

Maximum Value: 96.9 deg on Sep 14 03:00

Minimum Value: 4.4 deg on Sep 30 23:00

Percentiles: P_1 = 6.0 P_{10} = 11.2 Q_1 = 15.8 Median = 26.6 Q_3 = 57.2 P_{90} = 76.8 P_{99} = 91.7

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	20	41	31	10	8	16	13	13	8	14	16	14	16	40	35	49	58	39	13	7	9	10	10	6	57.5
2-Sep	14	37	75	74	54	55	62	73	36	26	25	24	19	12	13	11	12	14	15	21	47	86	57	56	86.4
3-Sep	49	55	64	77	78	93	46	31	24	40	29	42	59	50	44	59	60	38	53	96	12	22	24	67	95.8
4-Sep	17	25	29	16	30	69	63	30	12	10	10	11	15	12	13	15	15	19	12	8	9	7	7	5	69.2
5-Sep	18	13	11	19	16	17	17	16	22	24	19	21	20	20	22	20	21	15	15	45	10	13	46	28	45.8
6-Sep	28	48	69	52	65	61	50	70	74	75	33	48	72	23	26	42	34	25	20	10	13	20	29	12	75.0
7-Sep	11	46	39	30	12	14	25	16	18	19	26	20	16	20	28	24	26	32	25	62	61	60	54	84	83.9
8-Sep	70	17	38	58	32	21	23	27	28	69	47	47	34	31	34	26	23	21	14	14	18	13	14	15	69.9
9-Sep	13	18	11	21	16	24	22	23	39	66	35	25	36	86	43	31	60	29	19	36	84	81	23	65	86.0
10-Sep	78	66	61	29	21	12	30	12	13	25	20	22	19	18	24	24	14	13	12	11	17	15	11	65	77.5
11-Sep	70	47	91	97	51	82	84	77	29	62	14	20	16	24	24	24	22	16	11	11	47	81	77	53	96.8
12-Sep	37	61	78	45	65	52	59	80	52	23	25	31	54	25	19	31	23	29	26	13	16	13	14	10	79.5
13-Sep	11	15	33	57	72	29	89	79	38	53	87	58	86	32	34	82	19	39	31	20	24	81	74	64	88.8
14-Sep	88	92	97	83	68	47	33	32	26	43	54	79	77	62	65	46	74	79	62	92	81	90	88	88	96.9
15-Sep	60	95	49	41	56	66	31	20	18	8	20	40	25	22	15	16	15	18	15	25	25	24	50	28	94.9
16-Sep	16	15	83	54	69	53	20	25	20	18	28	27	21	26	19	22	18	17	11	18	39	84	68	62	84.5
17-Sep	46	39	69	45	18	16	11	40	22	20	36	59	85	78	81	44	73	74	27	74	88	68	77	14	87.9
18-Sep	89	86	87	81	92	83	84	88	39	78	44	61	46	53	51	36	30	29	16	9	8	11	9	13	91.6
19-Sep	6	7	20	21	59	75	78	77	85	22	18	21	22	17	22	37	27	26	30	20	18	19	14	16	84.6
20-Sep	14	16	16	17	20	13	11	13	13	15	13	17	18	17	20	22	20	28	16	11	75	26	22	94	94.2
21-Sep	68	77	68	73	41	56	90	48	83	61	55	43	57	46	58	74	62	26	21	57	86	71	34	67	90.1
22-Sep	65	76	87	49	81	71	72	48	20	82	20	23	24	25	24	26	70	40	14	24	40	63	26	53	87.4
23-Sep	81	57	37	27	13	35	16	13	16	27	83	43	37	26	25	26	56	21	22	12	18	45	29	57	83.4
24-Sep	54	54	61	59	61	15	76	26	16	17	27	20	20	15	15	14	15	7	14	11	12	10	12	16	76.2
25-Sep	17	13	29	62	9	15	48	27	14	35	13	27	53	54	30	30	14	32	76	35	34	37	18	16	76.4
26-Sep	56	40	11	15	53	33	12	74	17	12	13	12	13	12	11	11	11	9	14	19	66	85	71	81	84.7
27-Sep	66	76	69	73	55	67	71	69	43	49	31	31	30	25	26	58	62	10	11	62	54	11	10	6	75.6
28-Sep	7	71	26	74	42	51	9	7	8	7	8	8	7	7	7	8	8	8	5	6	11	9	67	65	73.8
29-Sep	68	15	10	6	7	11	14	25	18	14	14	11	22	24	20	20	16	17	13	20	53	35	14	25	68.1
30-Sep	72	89	66	92	13	21	80	88	59	26	34	76	44	50	55	47	30	16	9	9	9	9	4	7	91.6
	88.7	94.9	96.9	96.8	91.6	92.7	90.1	87.9	84.6	81.7	87.3	78.9	85.9	86.0	81.5	81.7	73.5	79.2	76.4	95.8	87.9	90.0	87.6	94.2	

PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.3 ppb on Sep 6 23:00 Maximum Daily Average: 0.5 ppb on Sep 1

Minimum Value: 0 ppb on Sep 4 20:00 Minimum Daily Average: 0.0 ppb on Sep 9
Maximum Diurnal Average: 0.4 ppb at hour 23 Minimum Diurnal Average: 0.1 ppb at hour 17
Monthly Average: 0.20 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.4$ $P_{99} = 1.9$

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	34
Percent Operational Time:	99.7

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-Sep	0	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	3	3	0.5	2.9
2-Sep	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1
3-Sep	0	0	0	0	A	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
4-Sep	0	1	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	1.0
5-Sep	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
6-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0.3	4.3
7-Sep	0	0	A	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
8-Sep	0	A	1	2	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.4	2.0
9-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.1
10-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4
11-Sep	0	0	0	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	2.3
12-Sep	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	1.2
13-Sep	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
14-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
15-Sep	0	0	0	0	A	0	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0.3	1.6
16-Sep	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.3	0.9
17-Sep	0	0	A	0	0	0	0	0	0	M	M	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
18-Sep	0	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
19-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
20-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
21-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
22-Sep	0	A	0	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
23-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.4
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.5
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	A	1	0	0.3	2.5
26-Sep	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	A	2	1	0	0.3	1.7
27-Sep	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.7
28-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.4
29-Sep	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	1.0
30-Sep	0	0	2	2	1	1	0	1	1	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0.5	2.3
	0.2	0.1	0.2	0.3	0.2	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.4	0.3	Diurnal Average	
	1.1	1.0	1.5	2.3	0.9	2.3	0.5	0.6	1.2	0.6	1.0	1.1	1.6	0.8	0.6	0.4	0.4	0.4	2.5	1.3	0.6	1.7	4.3	2.9	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

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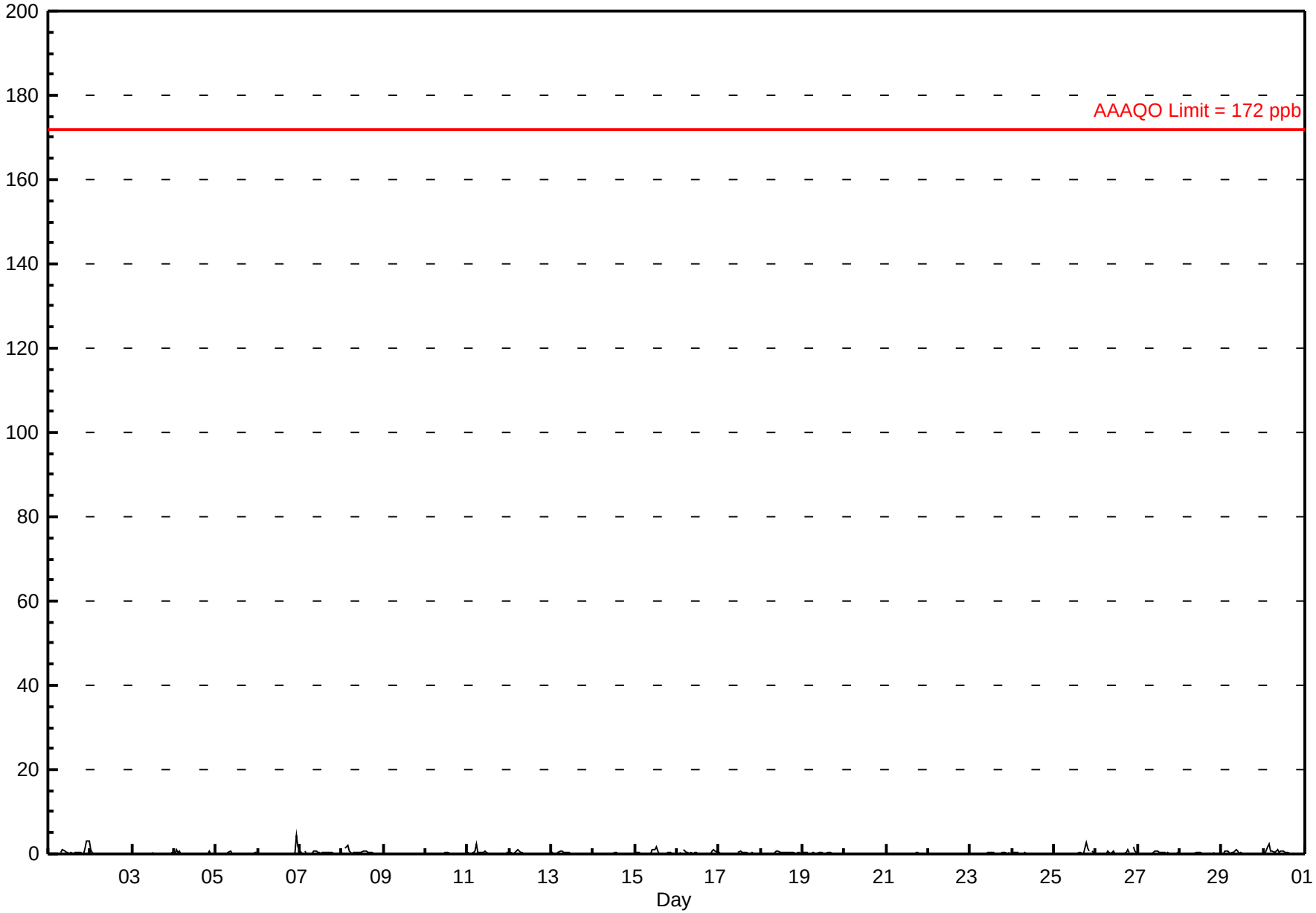
Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - September 2010

Maximum Value: 7.8 ppb on Sep 6 23:00

Maximum Daily Average: 1.5 ppb on Sep 1

Minimum Value: 0 ppb on Sep 6 16:00

Minimum Daily Average: 0.3 ppb on Sep 9

Maximum Diurnal Average: 1.1 ppb at hour 23

Minimum Diurnal Average: 0.5 ppb at hour 15

Monthly Average: 0.70 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.6$ $P_{90} = 1.2$ $P_{99} = 4.9$

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	34
Percent Operational Time:	99.7

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-Sep	0	0	0	0	0	0	A	1	3	1	1	0	0	1	1	1	1	1	1	0	0	5	8	8	1.5	7.7
2-Sep	6	1	0	0	0	A	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0.7	6.3
3-Sep	0	0	0	0	A	0	0	0	C	C	C	1	0	0	1	0	0	0	0	0	1	0	1	2	0.5	1.6
4-Sep	1	4	1	2	0	A	0	0	1	0	0	0	0	0	0	0	1	1	0	0	3	0	0	0	0.8	3.6
5-Sep	0	1	1	1	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	1.4
6-Sep	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	3	0.9	7.8
7-Sep	1	1	A	2	0	0	0	0	2	1	1	1	0	1	1	1	1	1	1	0	0	0	0	1	0.8	2.2
8-Sep	1	A	2	4	4	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1.1	4.5
9-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5
10-Sep	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	A	1	0.5	1.3
11-Sep	1	0	0	1	2	7	1	0	1	1	1	1	1	1	0	1	0	0	0	0	1	A	1	1	1.0	6.9
12-Sep	1	1	0	1	2	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	A	1	0	1	0.7	2.4
13-Sep	0	0	1	0	1	2	2	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.6	1.8
14-Sep	0	0	0	0	0	A	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.8
15-Sep	0	1	1	1	A	0	1	0	0	1	3	2	2	2	1	0	0	0	0	1	1	0	1	0	0.8	2.6
16-Sep	0	0	1	A	3	2	1	1	1	1	1	1	0	0	1	0	1	0	0	0	2	2	1	1	0.9	3.0
17-Sep	1	0	A	0	0	0	0	1	0	M	M	1	1	1	1	1	1	1	1	1	0	0	0	0	0.6	1.0
18-Sep	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.1
19-Sep	1	1	1	1	A	1	1	1	0	1	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0.5	0.7
20-Sep	0	0	1	A	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
21-Sep	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.5	1.2
22-Sep	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.6
23-Sep	A	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	1	1	0	0	A	0.5	1.1
24-Sep	2	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	2.1
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	4	5	2	A	3	0	1.0	5.0
26-Sep	0	0	0	0	0	0	1	4	0	1	1	1	0	0	0	0	0	1	3	1	A	4	2	1	1.0	4.3
27-Sep	0	0	0	1	0	0	0	0	0	1	1	2	1	1	1	1	0	1	0	A	0	0	0	0	0.6	1.7
28-Sep	0	0	0	0	1	1	0	0	0	1	1	1	1	0	0	0	0	1	A	2	0	0	0	0	0.6	1.9
29-Sep	0	0	3	2	1	0	1	2	2	2	0	0	0	0	0	1	0	A	0	1	0	0	0	0	0.8	2.9
30-Sep	1	0	5	4	2	2	1	1	1	1	1	1	1	1	1	0	A	0	0	0	0	0	1	1	1.0	4.5
	0.8	0.6	0.8	0.9	0.9	0.9	0.5	0.7	0.7	0.6	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.6	0.8	1.1	0.8	Diurnal Average	
	6.3	3.6	4.5	4.4	4.5	6.9	1.6	4.3	2.6	1.6	2.6	2.2	2.2	1.7	1.1	1.2	1.5	1.1	4.4	5.0	3.0	5.3	7.8	7.7	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

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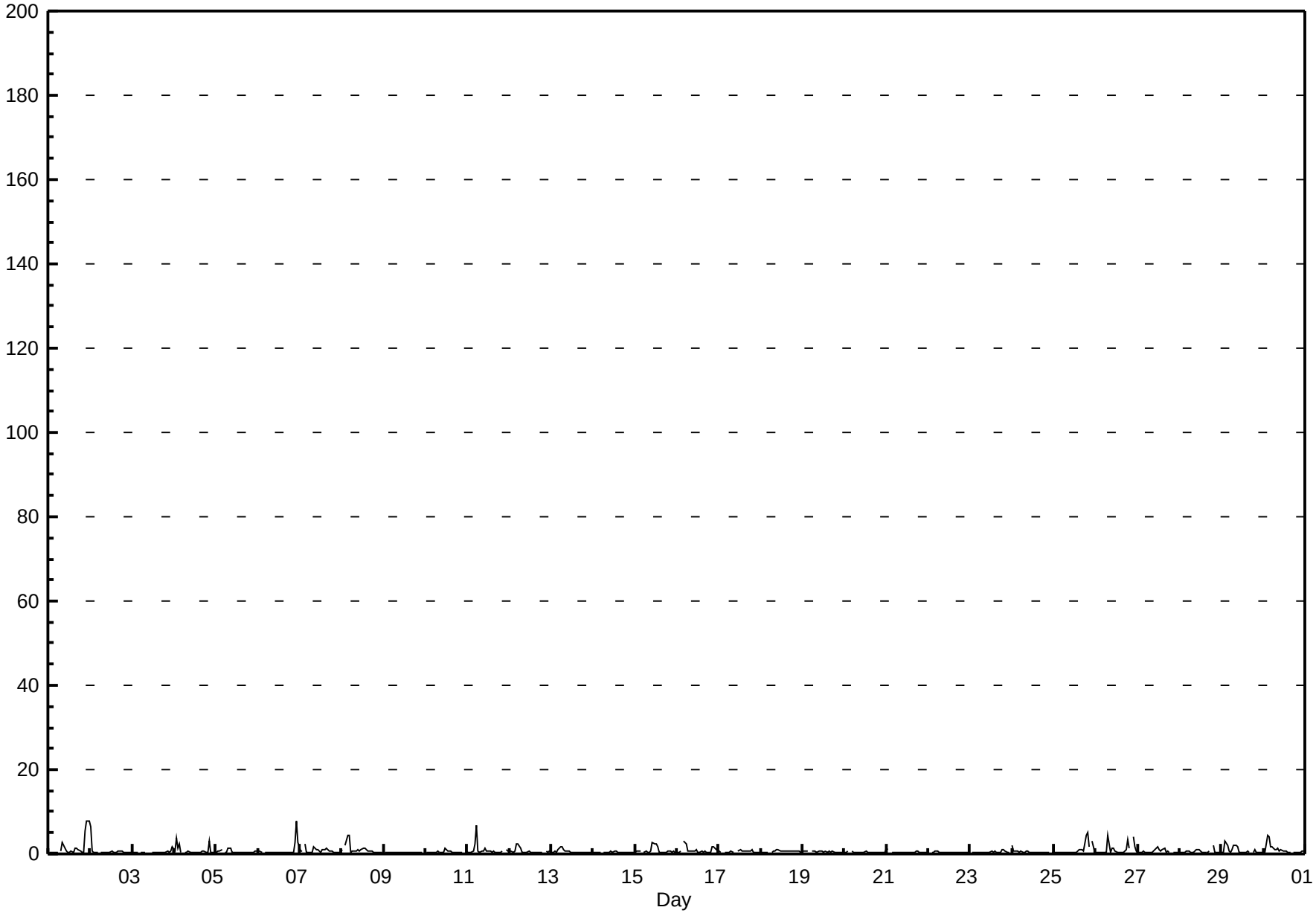
Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

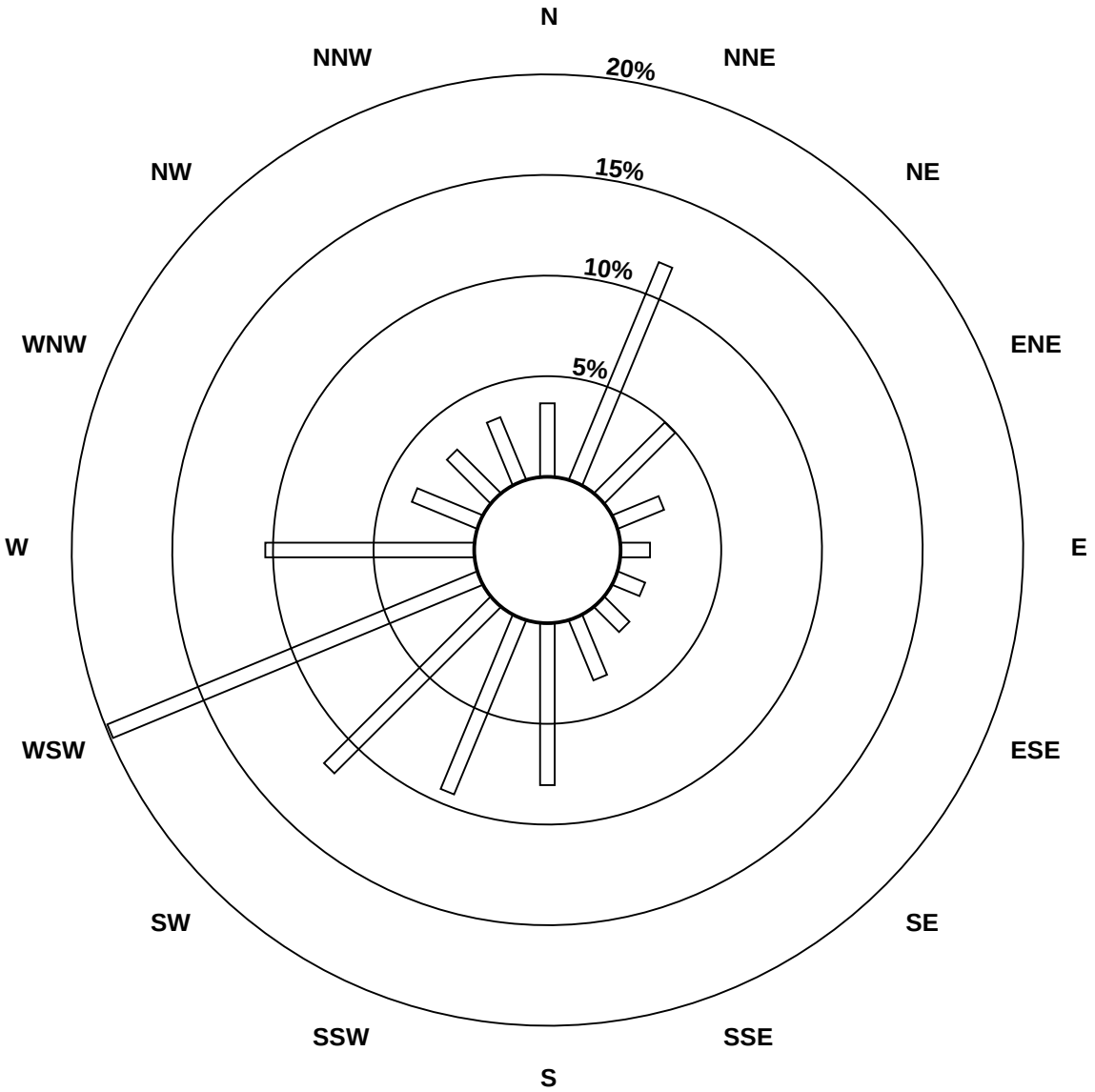
Smoky Heights - September 2010



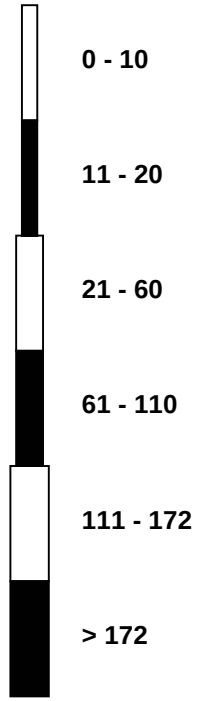
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - September 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.0 ppb on Sep 7 01:00 Maximum Daily Average: 0.4 ppb on Sep 11

Minimum Value: 0 ppb on Sep 23 06:00 Minimum Daily Average: 0.2 ppb on Sep 23
Maximum Diurnal Average: 0.4 ppb at hour 7 Minimum Diurnal Average: 0.3 ppb at hour 16
Monthly Average: 0.32 ppb Percentiles: P_1 = 0.1 P_{10} = 0.2 Q_1 = 0.2 Median = 0.3 Q_3 = 0.4 P_{90} = 0.4 P_{99} = 0.7

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	34
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
2-Sep	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.6
3-Sep	1	1	1	1	A	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
4-Sep	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
5-Sep	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
6-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
7-Sep	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
8-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
9-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.5
10-Sep	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	A	1	0.4	0.7
11-Sep	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.7
12-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.4
13-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
14-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
15-Sep	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
16-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
17-Sep	0	0	A	0	0	0	0	0	0	M	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
18-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
19-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
20-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
21-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
22-Sep	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
23-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.3
24-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.3
25-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.5
26-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.5
27-Sep	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.4	0.8
28-Sep	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	1	1	0	1	0	0.4	0.5
29-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.5
30-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4
	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	1.0	0.6	0.6	0.5	0.6	0.5	0.8	0.8	0.7	0.7	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.7	0.5	0.6	0.6	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

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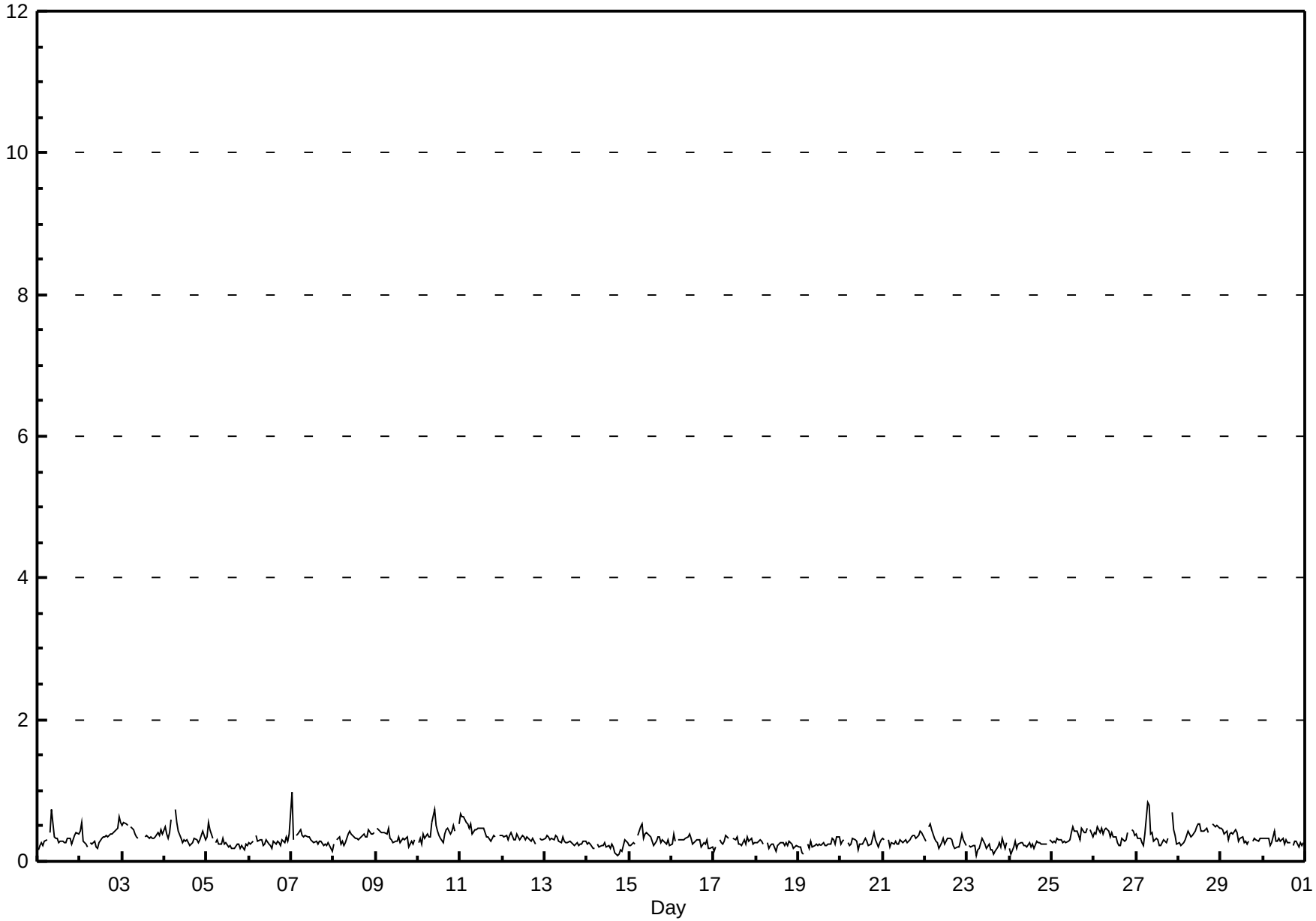
Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - September 2010



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Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - September 2010

Maximum Value: 1.7 ppb on Sep 27 08:00

Maximum Daily Average: 0.9 ppb on Sep 11

Minimum Value: 0 ppb on Sep 23 16:00

Minimum Daily Average: 0.6 ppb on Sep 23

Maximum Diurnal Average: 0.8 ppb at hour 7

Minimum Diurnal Average: 0.7 ppb at hour 16

Monthly Average: 0.72 ppb

Percentiles: $P_1 = 0.5$ $P_{10} = 0.6$ $Q_1 = 0.6$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 0.9$ $P_{99} = 1.2$

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	34
Percent Operational Time:	99.7

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-Sep	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
2-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
3-Sep	1	1	1	1	A	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
4-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
5-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
6-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.7	0.8
7-Sep	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.7
8-Sep	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
9-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.2
10-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.0
11-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.2
12-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	0.9
13-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
14-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	0.6	0.8
15-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.0
16-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	0.8
17-Sep	1	1	A	1	1	1	1	1	1	M	M	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
18-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
19-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
20-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
21-Sep	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
22-Sep	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
23-Sep	A	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	A	0.6	0.9
24-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.9
25-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.0
26-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.0
27-Sep	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.7
28-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0
29-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	1.0
30-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	0.7	0.8
	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	Diurnal Average	
	1.7	1.2	1.0	1.0	1.0	0.9	1.4	1.7	1.1	1.0	1.0	0.9	1.0	1.0	0.8	0.9	0.9	1.0	0.9	1.2	1.3	1.0	1.2	1.1	Diurnal Maximum	

C - Calibration M - Maintenance A - Automated Daily Zero Span

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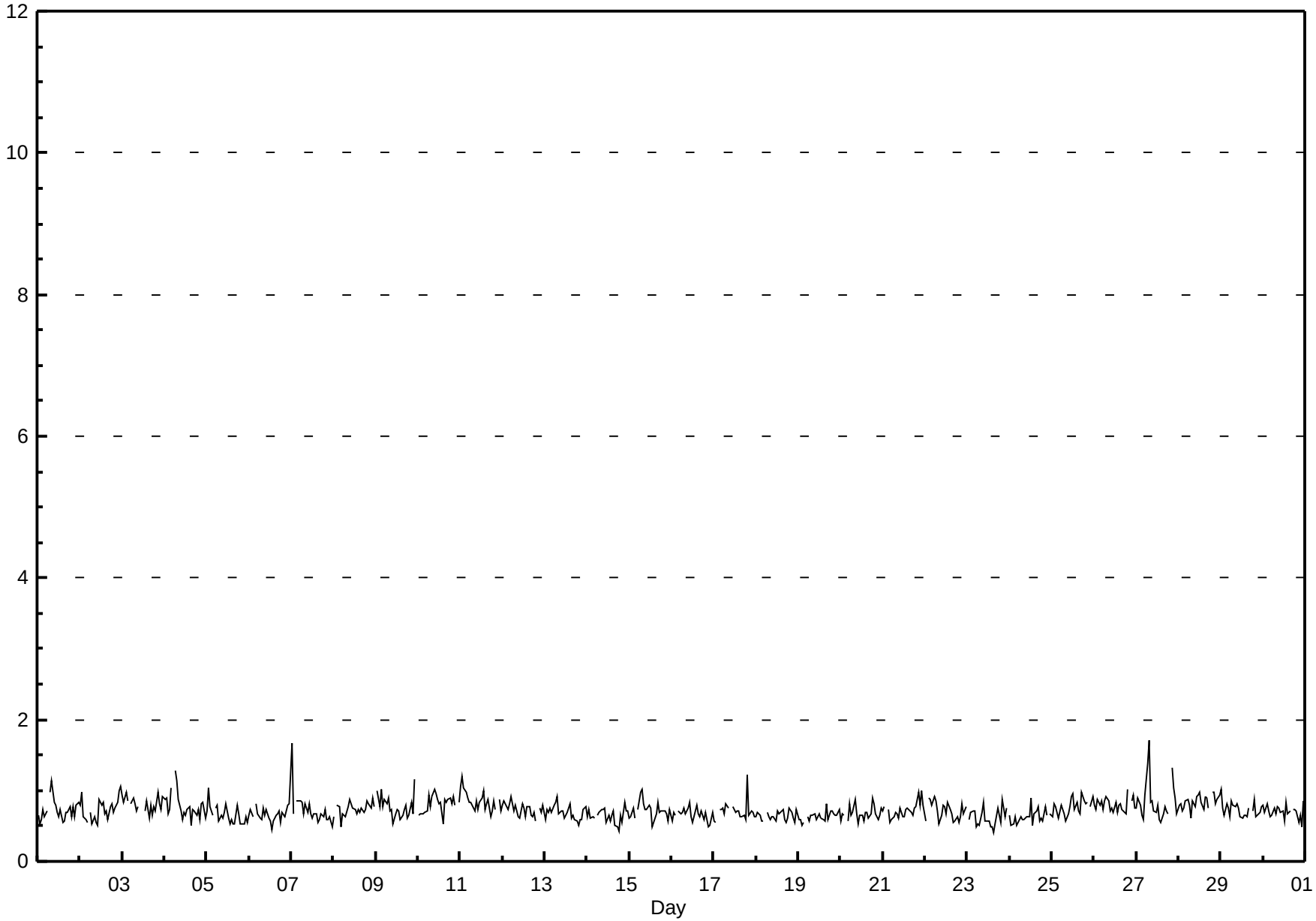
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

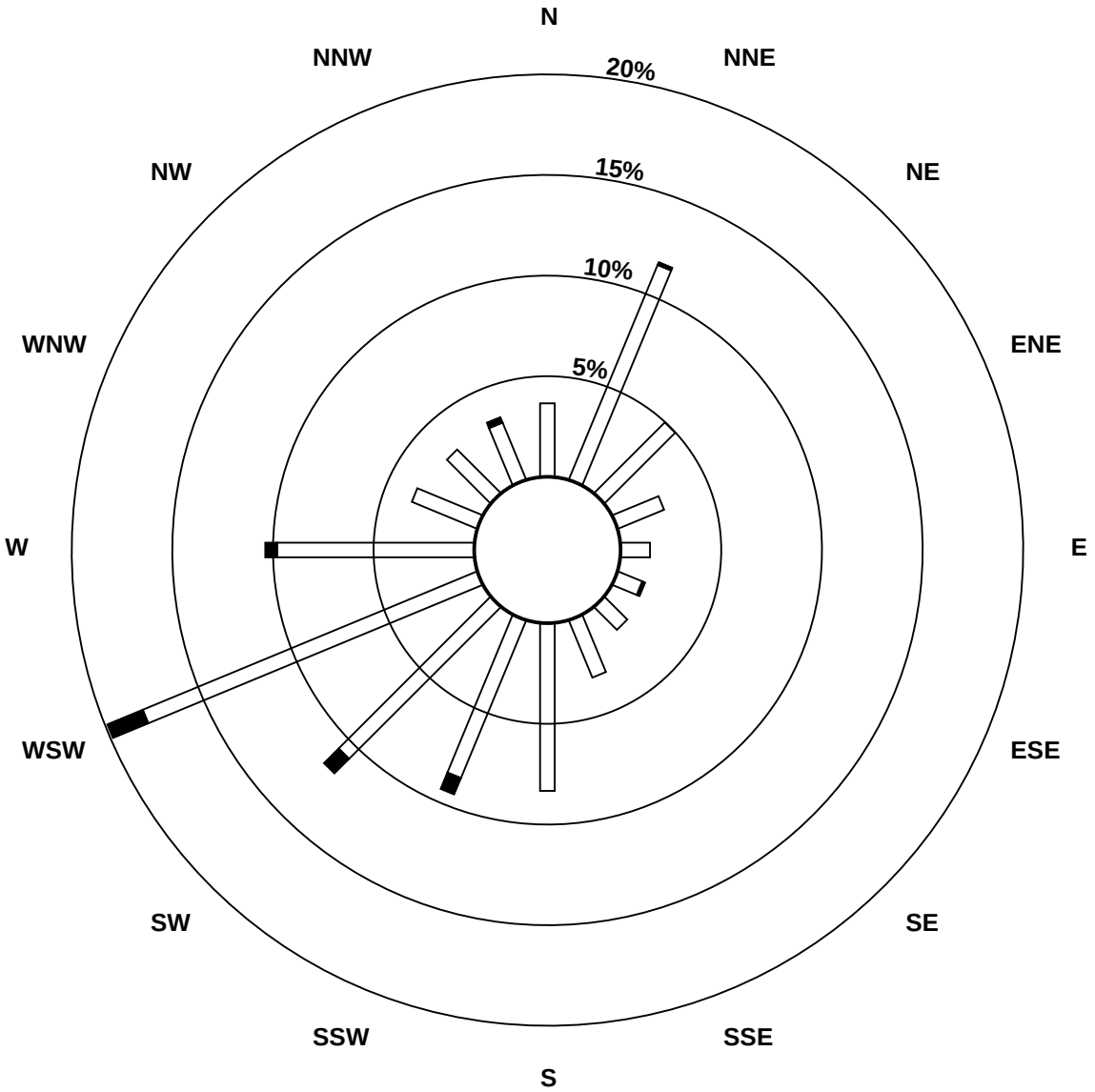
Smoky Heights - September 2010



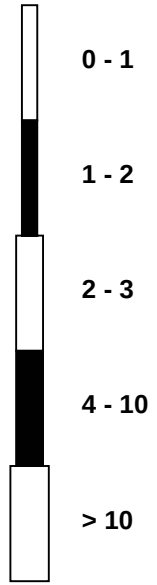
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - September 2010



Pollutant Classes (ppb)



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Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Smoky Heights - September 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 29.9 $\mu g/m^3$ on Sep 16 21:00
Maximum Daily Average: 6.4 $\mu g/m^3$ on Sep 17

Minimum Value: 0 $\mu g/m^3$ on Sep 1 02:00
Minimum Daily Average: 0.7 $\mu g/m^3$ on Sep 7
Maximum Diurnal Average: 4.7 $\mu g/m^3$ at hour 21
Minimum Diurnal Average: 1.3 $\mu g/m^3$ at hour 1
Monthly Average: 2.35 $\mu g/m^3$
Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.5$ Median = 1.8 $Q_3 = 3.2$ $P_{90} = 5.0$ $P_{99} = 13.4$

Hours in Service:	720
Hours of Data:	687
Hours of Missing Data:	33
Hours of Calibration:	0
Percent Operational Time:	95.4

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-Sep	0	0	3	3	2	1	3	6	2	4	2	4	BD	3	0	0	4	4	0	6	6	BD	0	0	2.5	6.3
2-Sep	0	0	0	0	0	2	2	0	1	2	4	3	0	2	4	0	1	5	2	1	3	3	1	0	1.6	5.3
3-Sep	1	0	BD	5	BD	4	2	3	0	0	0	0	0	BD	5	0	1	3	6	14	14	9	2	3	3.5	14.2
4-Sep	0	BD	BD	0	0	0	0	1	0	BD	BD	BD	0	0	0	3	0	3	3	0	2	0	1	0	0.8	3.3
5-Sep	3	8	5	2	BD	0	0	2	1	0	0	0	1	0	2	1	2	0	1	1	3	2	0	3	1.6	7.9
6-Sep	0	1	1	1	0	2	2	2	1	0	BD	1	0	BD	0	0	1	1	4	6	4	3	4	3	1.8	6.4
7-Sep	0	1	5	3	2	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.6
8-Sep	0	0	1	3	BD	2	4	4	7	4	4	5	3	4	3	5	9	0	4	1	7	3	1	0	3.2	8.8
9-Sep	0	3	2	0	0	0	0	2	3	0	2	0	0	0	0	2	1	1	1	1	BD	BD	BD	2	1.0	3.4
10-Sep	4	0	0	4	0	BD	0	1	8	22	BD	BD	13	BD	BD	1	BD	1	2	2	3	2	1	1	3.7	21.8
11-Sep	2	0	1	1	1	1	1	4	6	1	0	0	BD	0	2	0	1	5	4	2	7	6	4	2	2.2	7.3
12-Sep	4	3	0	3	6	0	0	4	6	7	6	3	0	0	3	0	0	1	2	1	1	2	2	1	2.3	6.5
13-Sep	0	0	1	0	1	1	1	2	3	2	3	1	0	BD	0	0	0	3	0	4	7	6	4	1	1.7	6.5
14-Sep	0	0	BD	BD	0	BD	0	17	6	BD	2	1	0	2	0	2	2	2	8	19	10	9	6	3	4.5	18.8
15-Sep	0	0	0	0	3	2	5	8	8	4	5	4	6	6	0	0	BD	0	0	2	1	1	2	1	2.5	8.5
16-Sep	0	1	0	2	2	0	3	10	1	3	2	BD	0	0	0	0	0	0	1	5	30	13	2	2	3.4	29.9
17-Sep	0	1	2	2	2	0	4	27	5	M	M	14	9	7	5	5	6	8	8	8	6	5	10	5	6.4	27.3
18-Sep	3	3	8	4	4	4	5	4	4	3	4	3	3	2	2	3	3	3	4	5	4	4	3	4	3.7	8.5
19-Sep	4	3	4	3	3	3	4	3	2	2	2	3	3	2	2	1	2	5	4	2	2	1	2	1	2.6	4.7
20-Sep	1	1	2	2	2	2	2	1	1	2	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1.1	2.1
21-Sep	1	1	0	0	0	0	0	1	1	2	2	1	2	1	1	0	2	2	2	3	3	3	3	2	1.5	2.9
22-Sep	2	3	4	3	4	2	2	3	1	2	2	1	2	1	1	1	1	2	2	2	2	4	4	1	2.2	4.5
23-Sep	2	2	3	2	2	2	2	4	4	3	3	3	2	2	2	2	4	17	5	3	6	3	4	4	3.5	16.6
24-Sep	4	4	3	4	3	3	3	4	4	4	2	1	0	1	0	0	1	0	0	3	1	0	0	0	1.9	3.9
25-Sep	0	0	0	0	0	0	0	2	1	0	2	0	2	3	1	2	4	2	2	2	0	1	2	1	1.1	3.7
26-Sep	0	2	0	1	1	0	0	0	1	2	0	0	0	0	1	1	2	1	2	4	3	1	1	2	1.1	3.6
27-Sep	1	2	1	2	1	2	1	1	3	0	2	2	2	3	4	3	2	5	5	5	7	5	2	0	2.5	6.6
28-Sep	0	0	0	0	1	0	0	0	1	1	1	1	1	2	1	2	2	3	2	3	2	2	2	2	1.2	2.9
29-Sep	2	2	1	2	2	2	2	2	3	1	0	2	0	0	2	2	0	2	3	6	3	9	3	3	2.2	9.3
30-Sep	3	4	4	3	4	4	5	4	6	5	5	3	3	2	2	2	2	1	4	3	1	1	3	2	3.2	5.5
	1.3	1.6	1.8	1.9	1.7	1.5	1.9	4.2	3.1	2.9	2.1	2.1	1.9	1.7	1.6	1.3	1.9	2.7	2.7	3.8	4.7	3.5	2.5	1.7	Diurnal Average	
	4.0	7.9	8.5	5.0	6.0	4.5	5.3	27.3	8.5	21.8	5.6	13.5	13.2	7.2	5.0	4.9	8.8	16.6	8.1	18.8	29.9	13.4	10.0	5.4	Diurnal Maximum	

M - Maintenance BD - Baseline Drift

Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

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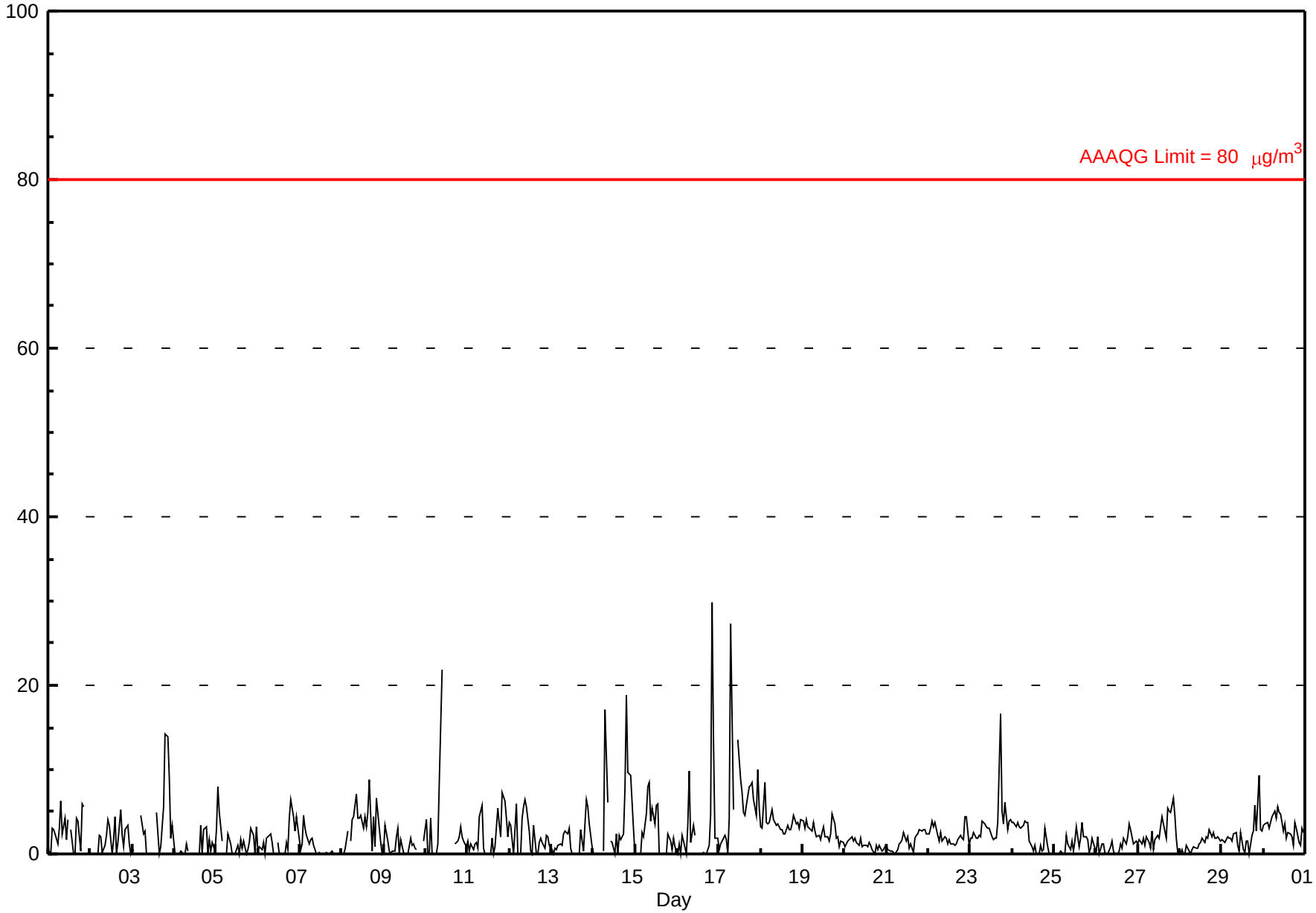
Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Smoky Heights - September 2010



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Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Smoky Heights - September 2010

Maximum Value: 150.8 $\mu g/m^3$ on Sep 16 21:00

Maximum Daily Average: 16.5 $\mu g/m^3$ on Sep 3

Minimum Value: 0 $\mu g/m^3$ on Sep 4 02:00

Minimum Daily Average: 2.2 $\mu g/m^3$ on Sep 20

Maximum Diurnal Average: 15.4 $\mu g/m^3$ at hour 21

Minimum Diurnal Average: 3.7 $\mu g/m^3$ at hour 1

Monthly Average: 7.41 $\mu g/m^3$

Percentiles: $P_1 = 0.1$ $P_{10} = 2.2$ $Q_1 = 3.2$ Median = 5.0 $Q_3 = 8.7$ $P_{90} = 14.3$ $P_{99} = 35.6$

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

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-Sep	3	0	5	4	4	3	6	10	14	17	21	15	11	25	30	21	17	14	13	15	15	1	0	0	11.0	29.7
2-Sep	1	5	4	1	4	9	7	6	6	11	9	13	7	11	11	12	10	12	8	7	14	7	5	1	7.5	13.7
3-Sep	6	5	4	16	9	11	9	16	7	9	9	7	15	10	17	17	13	16	23	62	72	28	9	9	16.5	71.6
4-Sep	2	0	0	4	4	4	4	8	6	5	2	8	8	5	12	12	7	9	39	5	5	5	3	3	6.7	38.9
5-Sep	6	13	8	3	0	1	8	8	9	6	7	6	11	8	9	6	9	4	8	6	17	8	3	15	7.4	16.9
6-Sep	4	4	5	3	3	4	4	10	7	23	17	24	9	3	5	4	11	10	11	10	11	4	6	6	8.3	24.0
7-Sep	2	6	7	7	5	4	4	3	5	6	9	7	9	10	8	9	9	6	8	10	1	5	2	2	5.9	10.3
8-Sep	3	3	4	15	13	4	6	9	13	11	12	32	11	14	12	11	17	15	11	9	10	8	2	1	10.2	32.1
9-Sep	3	6	5	2	1	2	1	4	42	4	8	7	9	9	12	9	9	6	8	5	3	0	0	12	6.9	42.0
10-Sep	11	11	14	15	1	0	2	3	19	42	27	12	39	15	17	10	11	7	7	6	6	5	3	4	11.9	41.6
11-Sep	5	3	3	4	6	5	3	6	10	9	7	7	8	13	23	9	15	15	9	5	32	28	27	7	10.7	31.7
12-Sep	8	7	2	6	11	1	14	16	9	11	13	8	8	7	11	7	4	8	6	4	3	3	5	3	7.3	15.9
13-Sep	3	2	2	2	3	3	3	4	6	8	8	6	4	4	8	15	7	15	3	11	24	10	6	2	6.7	24.1
14-Sep	1	0	2	3	5	1	6	31	24	7	6	7	10	9	6	11	7	10	27	44	13	14	14	7	11.0	44.3
15-Sep	3	9	5	3	6	7	9	9	11	12	15	10	12	10	3	2	1	0	1	6	10	3	9	5	6.7	15.3
16-Sep	3	5	3	11	7	1	11	16	9	12	9	10	3	6	6	6	9	6	4	13	151	73	6	6	16.1	150.8
17-Sep	3	9	5	6	7	5	15	72	10	M	M	19	10	10	7	7	10	16	16	15	15	6	39	17	14.5	71.8
18-Sep	5	7	14	14	7	8	9	6	6	6	5	5	4	4	4	5	4	4	16	16	5	5	5	6	7.0	15.9
19-Sep	5	4	5	4	4	4	5	4	3	3	3	4	4	3	3	3	6	6	5	3	3	2	3	3	4.0	6.2
20-Sep	2	2	3	3	3	3	3	2	2	3	2	2	3	2	3	2	2	1	3	1	2	2	2	2	2.2	3.2
21-Sep	3	2	1	1	1	1	2	3	2	3	6	3	3	3	2	3	5	4	3	4	3	4	4	4	3.0	6.2
22-Sep	4	4	5	5	5	4	3	4	3	3	4	4	3	3	2	2	2	3	5	3	4	8	8	2	3.8	8.4
23-Sep	3	3	4	4	4	3	4	6	6	5	4	5	4	4	3	4	8	57	9	5	11	5	6	5	7.1	57.0
24-Sep	5	5	5	5	5	7	5	6	7	5	3	2	2	2	3	3	3	1	2	6	5	2	4	3	4.0	6.8
25-Sep	2	3	5	3	6	3	2	5	4	3	4	3	5	6	3	4	7	7	5	4	2	2	4	8	4.1	7.5
26-Sep	3	7	3	4	3	2	1	2	3	3	2	2	2	2	3	2	4	3	4	8	4	4	3	3	3.1	7.7
27-Sep	2	4	4	4	3	5	5	3	5	3	4	4	4	6	6	5	6	9	8	8	10	9	5	2	5.1	9.6
28-Sep	2	3	2	2	4	3	2	3	3	2	2	3	3	7	3	4	4	4	3	4	3	3	3	3	3.2	7.1
29-Sep	3	3	3	3	3	4	3	3	4	3	2	8	2	2	5	4	1	4	5	17	6	37	6	4	5.6	37.0
30-Sep	6	6	6	5	5	7	7	6	10	7	6	4	6	3	4	4	3	3	7	5	3	3	7	4	5.1	10.0
	3.7	4.7	4.6	5.3	4.8	3.9	5.4	9.4	8.8	8.4	7.8	8.2	7.7	7.1	8.0	7.2	7.4	9.2	9.3	10.6	15.4	9.7	6.6	4.9	Diurnal Average	
	11.0	12.8	14.3	15.8	13.2	11.1	14.9	71.8	42.0	41.6	27.5	32.1	38.5	25.2	29.7	21.5	16.8	57.0	38.9	61.8	150.8	72.7	39.1	17.1	Diurnal Maximum	

M - Maintenance

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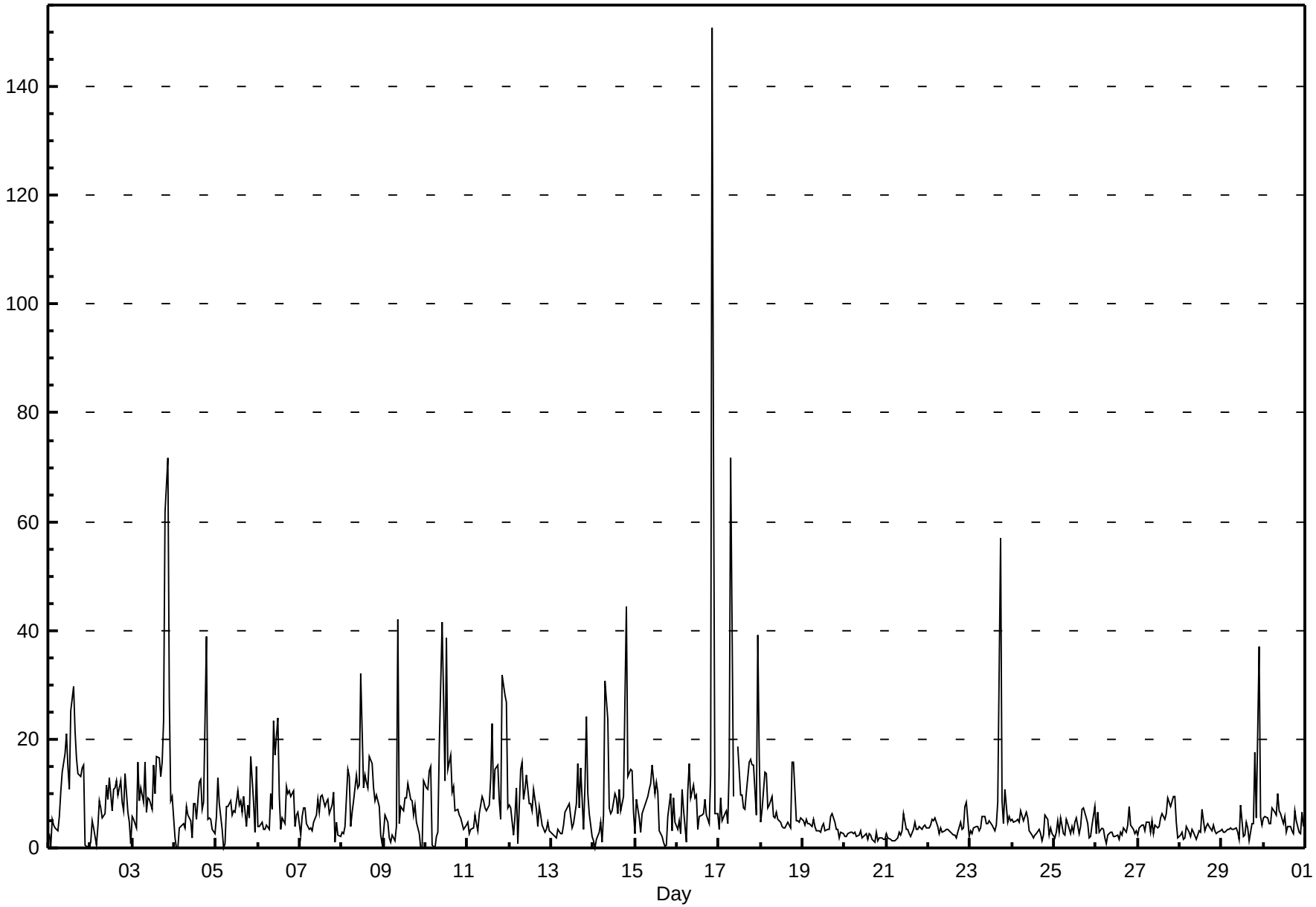
Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

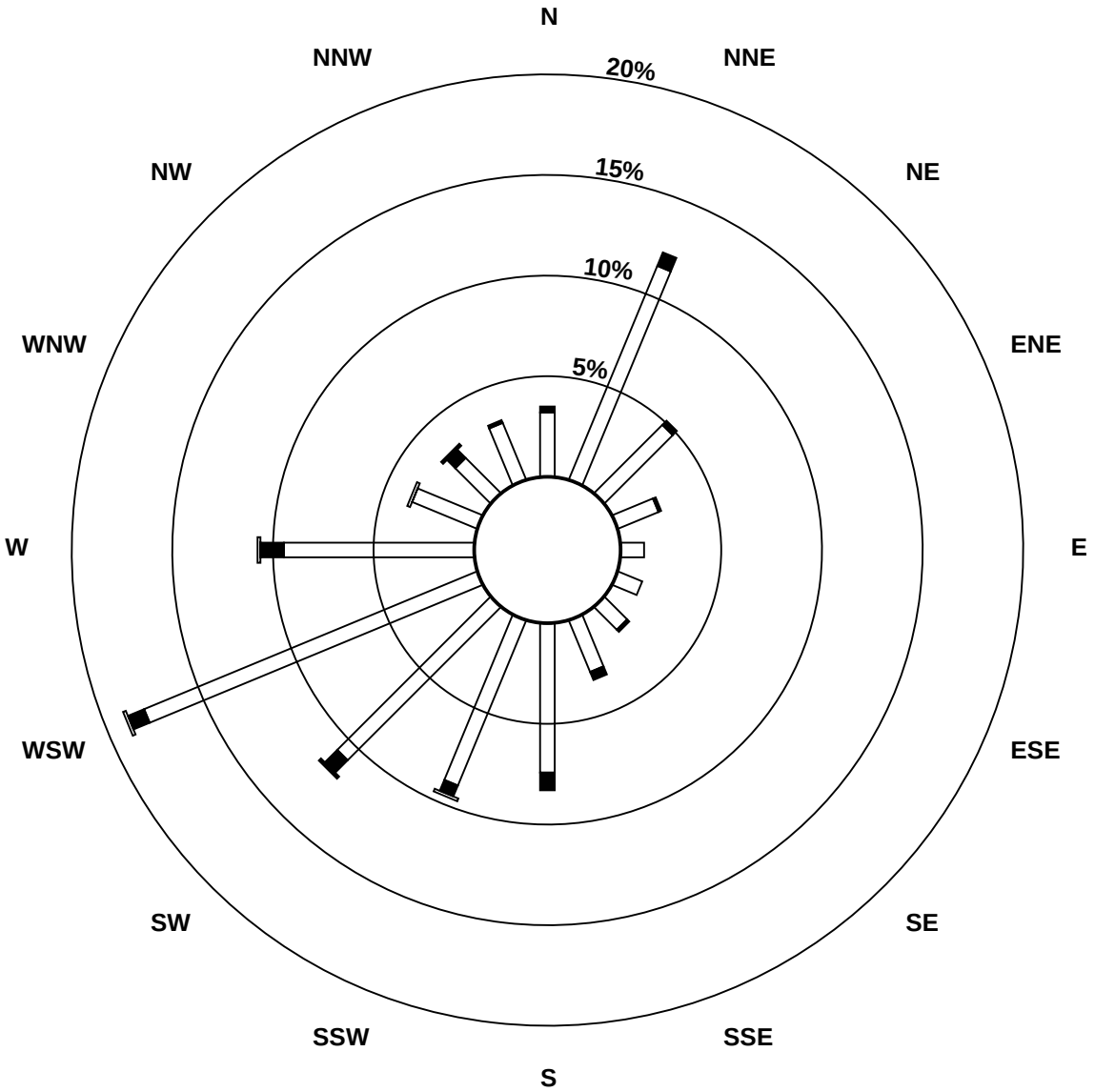
Smoky Heights - September 2010



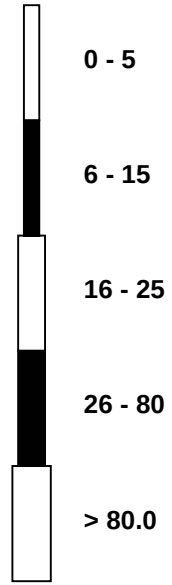
Pollutant Rose

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Smoky Heights - September 2010



Pollutant Classes ($\mu g/m^3$)



Hourly Averages

External Temperature (ET) - °C

Smoky Heights - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.9 °C on Sep 3 18:00 Maximum Daily Average: 15.9 °C on Sep 3

Minimum Value: -8 °C on Sep 17 07:00 Minimum Daily Average: 1.3 °C on Sep 17
Maximum Diurnal Average: 14.1 °C at hour 16 Minimum Diurnal Average: 3.6 °C at hour 7
Monthly Average: 8.53 °C Percentiles: P_1 = -5.6 P_{10} = 1.2 Q_1 = 4.8 Median = 8.7 Q_3 = 12.2 P_{90} = 15.8 P_{99} = 21.2

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

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-Sep	10	9	9	9	9	9	9	9	10	12	12	13	15	14	15	15	15	15	16	14	12	12	11	9	11.9	15.8
2-Sep	8	7	7	6	5	5	6	7	8	9	11	14	18	19	20	22	22	22	21	19	16	14	12	11	12.9	22.0
3-Sep	10	10	9	9	8	8	9	11	13	15	17	19	22	23	24	25	25	25	24	20	17	14	13	11	15.9	24.9
4-Sep	11	11	11	10	9	8	8	9	11	13	14	15	15	16	16	16	16	15	13	12	10	9	7	6	11.7	16.0
5-Sep	6	7	7	7	6	5	4	6	7	7	8	8	8	9	9	10	9	10	10	9	9	8	7	7	7.6	9.6
6-Sep	7	6	6	6	6	5	6	7	8	10	10	11	11	12	12	13	14	14	12	11	10	10	10	10	9.5	13.7
7-Sep	10	10	9	9	8	8	8	8	8	9	9	9	10	11	11	12	12	12	12	10	6	5	5	4	8.9	12.3
8-Sep	4	3	3	3	1	1	2	3	5	6	7	10	12	13	13	13	12	12	12	11	10	10	10	9	7.7	13.1
9-Sep	9	9	9	9	9	8	8	8	10	10	10	11	13	13	14	14	13	13	13	12	9	7	5	5	10.0	14.1
10-Sep	6	6	5	6	5	4	4	4	5	7	9	13	15	17	16	16	17	17	16	13	10	8	7	5	9.5	16.9
11-Sep	4	4	4	3	3	4	2	3	6	11	13	14	15	16	16	17	17	16	16	13	11	9	10	8	9.8	17.1
12-Sep	7	7	6	5	7	6	5	5	6	7	8	9	11	10	11	11	11	12	10	8	7	7	7	7	8.0	11.7
13-Sep	7	6	6	5	4	4	4	4	6	7	8	10	11	12	12	12	12	11	10	7	6	6	6	6	7.6	12.2
14-Sep	6	5	3	2	1	-1	-1	0	2	3	6	9	10	11	12	13	13	14	12	8	6	6	6	4	6.3	13.7
15-Sep	3	2	2	0	0	0	0	2	3	5	10	13	12	10	7	7	6	5	5	5	4	4	4	4	4.8	13.2
16-Sep	4	4	4	4	4	3	0	1	4	6	7	7	7	9	9	9	9	9	7	3	0	-2	-4	-5	4.1	9.0
17-Sep	-5	-6	-7	-7	-6	-7	-8	-6	-2	M	M	7	9	10	11	11	11	11	10	5	1	-1	-2	-2	1.3	11.3
18-Sep	-1	-3	-3	-4	-4	-3	-3	-1	2	5	7	10	12	13	14	14	14	13	12	8	7	7	5	4	5.2	14.4
19-Sep	3	3	2	2	1	1	2	2	3	4	4	6	7	8	9	10	9	7	5	4	4	3	3	3	4.4	9.6
20-Sep	3	3	3	3	3	3	3	2	2	3	3	3	4	4	5	5	5	7	5	1	0	-1	-1	-1	2.8	6.8
21-Sep	-2	-2	-3	-3	-3	-3	-4	-4	-3	-1	0	2	5	7	8	8	9	9	8	4	2	0	1	0	1.4	8.8
22-Sep	-2	-2	-2	-3	-2	-3	-3	-2	0	2	6	10	12	13	14	15	14	13	11	8	6	3	3	4	4.8	14.6
23-Sep	2	-1	0	-1	-2	-3	-3	-2	0	3	6	10	13	15	15	16	15	14	12	11	9	10	10	8	6.5	15.5
24-Sep	8	7	5	5	5	4	2	3	6	10	13	15	16	17	17	17	17	16	15	15	13	12	12	12	10.8	17.0
25-Sep	12	12	12	12	11	11	10	10	11	12	15	20	21	22	22	21	20	19	17	15	14	14	13	12	15.1	22.0
26-Sep	11	10	10	10	10	9	10	9	10	12	14	16	17	17	17	18	18	17	15	12	10	10	8	8	12.4	17.9
27-Sep	8	7	8	8	9	8	8	8	9	11	13	15	16	15	15	14	14	14	13	12	11	11	12	14	11.3	15.7
28-Sep	13	12	11	11	11	10	11	12	13	15	16	17	18	18	18	18	18	17	15	13	12	11	9	7	13.6	18.2
29-Sep	6	5	8	9	8	8	6	6	9	11	12	13	14	15	17	17	18	17	15	11	11	9	7	5	10.7	17.9
30-Sep	3	2	4	3	2	2	2	3	6	8	11	14	15	16	17	17	17	16	13	11	11	10	7	7	9.1	17.1
	5.7	5.1	4.8	4.6	4.2	3.9	3.6	4.3	5.8	8.0	9.7	11.4	12.7	13.5	13.8	14.1	14.1	13.7	12.5	10.2	8.5	7.4	6.8	6.2	Diurnal Average	
	13.1	12.2	12.0	11.7	11.4	11.3	11.3	11.9	13.0	14.7	16.8	19.7	21.6	23.2	24.0	24.6	24.6	24.9	24.3	20.2	17.1	14.2	13.0	13.6	Diurnal Maximum	

M - Maintenance

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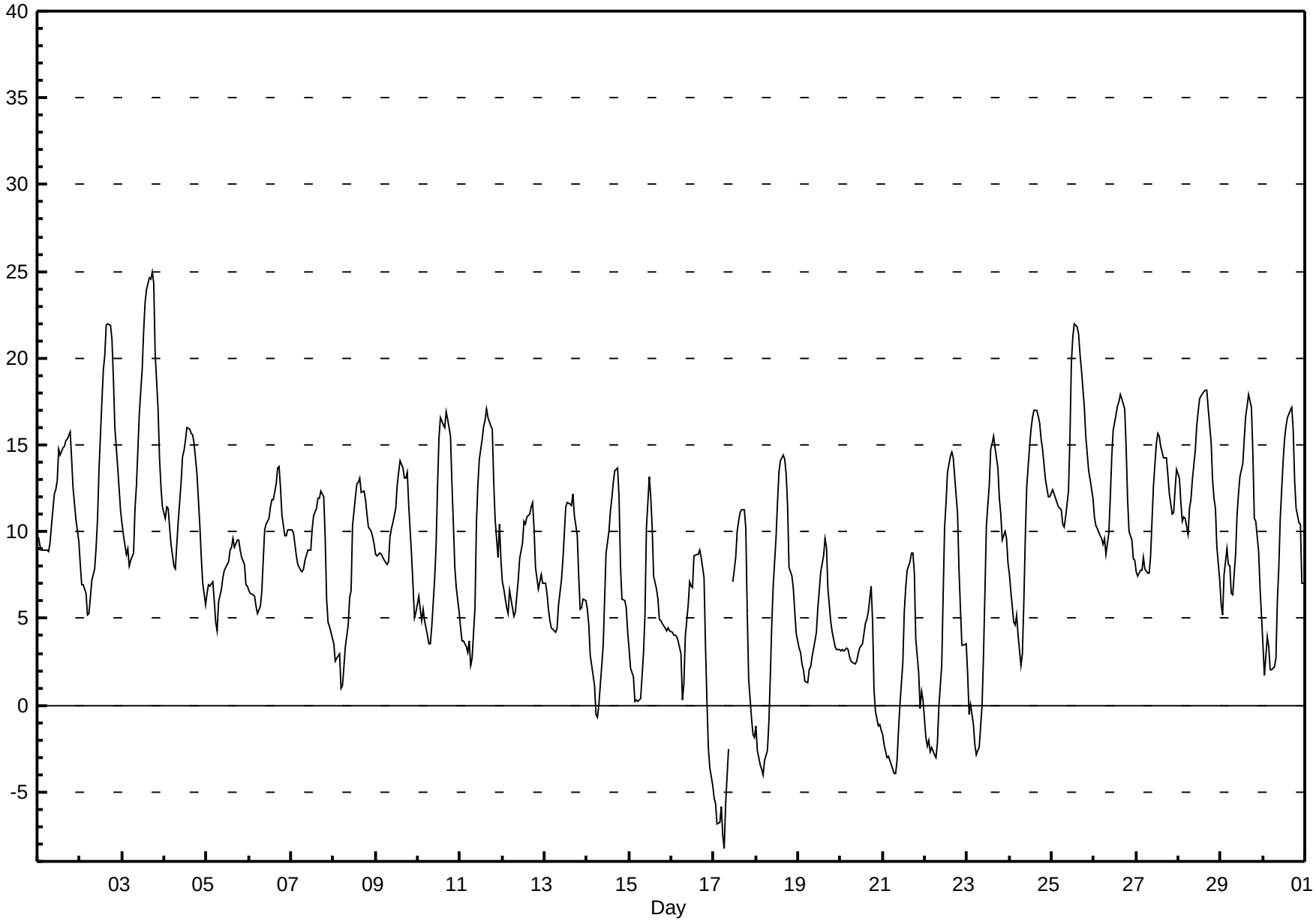
Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - September 2010



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Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	4	4	1	1	2	4	3	7	7	3	8	9	12	11	14	15	18	13	11	6	10	14	15	14	8.0	18.2
Dir	309	279	341	293	253	250	238	253	255	264	263	263	234	294	278	244	250	245	261	232	214	250	253	257	255.1	249.8
2 Spd	10	5	10	10	8	9	10	10	9	8	8	8	17	30	27	28	31	26	21	16	6	9	10	7	12.2	30.5
Dir	237	200	184	199	205	203	197	186	192	199	175	142	218	243	242	250	255	254	245	238	241	276	249	253	231.3	255.2
3 Spd	7	6	5	6	7	7	7	9	7	5	11	12	16	15	12	15	16	11	7	3	19	34	22	13	8.2	34.3
Dir	262	247	221	221	219	224	224	188	179	171	155	146	139	162	177	206	238	224	172	179	272	266	268	207	215.5	265.7
4 Spd	9	20	22	18	17	13	12	14	14	24	36	36	34	34	35	30	29	24	21	25	20	16	14	11	21.8	36.3
Dir	216	251	249	243	229	216	234	233	239	240	241	240	237	237	243	257	249	247	246	244	251	231	232	226	240.9	240.2
5 Spd	10	12	10	11	12	11	12	12	16	20	17	16	15	15	11	13	13	11	8	7	2	6	6	3	10.2	20.0
Dir	223	245	243	279	292	277	269	259	265	287	270	287	295	286	295	310	301	304	320	305	204	206	248	305	278.5	286.7
6 Spd	3	2	3	1	2	1	3	4	2	3	6	7	7	7	6	5	6	3	4	6	6	7	8	9	2.0	9.1
Dir	207	243	257	302	102	249	269	236	232	183	93	101	52	67	63	20	61	21	23	12	13	333	340	339	22.0	338.7
7 Spd	9	9	10	8	8	5	8	10	11	14	16	21	23	21	19	18	12	12	9	6	5	5	5	4	8.6	22.8
Dir	336	339	342	333	316	295	266	256	234	241	237	238	230	249	259	259	257	263	280	309	332	355	359	14	268.6	230.4
8 Spd	5	2	5	5	2	5	3	4	6	6	7	8	8	6	5	5	5	0	5	3	5	3	4	3	3.6	8.0
Dir	342	43	24	358	98	21	57	83	23	34	39	40	19	54	13	30	75	70	243	210	46	44	66	26	34.4	39.9
9 Spd	4	5	4	5	4	5	6	5	4	6	5	3	2	1	3	1	3	5	4	4	4	4	2	4	2.9	6.0
Dir	31	40	27	32	25	29	32	35	32	50	44	99	70	29	80	47	109	77	75	94	282	347	1	273	40.5	49.8
10 Spd	3	2	3	3	4	7	5	6	7	7	7	8	5	16	25	20	21	29	24	17	16	12	10	10	9.8	28.6
Dir	229	236	208	231	222	219	205	171	212	199	115	228	307	263	256	269	270	257	265	260	259	266	264	257	252.1	257.2
11 Spd	10	11	15	10	11	11	9	7	10	18	21	18	18	18	23	19	15	12	7	6	5	3	5	6	10.2	23.2
Dir	262	258	261	249	243	234	199	205	211	231	242	244	254	255	260	269	280	311	327	328	323	269	348	355	258.0	260.4
12 Spd	8	8	5	5	9	8	7	3	7	9	10	11	11	11	13	10	10	11	9	5	5	6	7	7	7.5	12.6
Dir	8	3	14	24	0	5	15	107	30	36	34	39	46	55	74	49	42	26	28	20	20	16	24	19	31.1	73.5
13 Spd	7	8	9	9	8	9	9	9	8	8	7	7	8	6	10	8	3	10	8	6	5	4	3	3	3.0	10.3
Dir	12	13	7	5	7	5	10	16	26	27	35	37	49	128	150	71	138	172	165	197	218	184	167	203	45.6	150.4
14 Spd	4	3	4	5	3	2	3	1	4	9	5	7	11	10	9	4	4	2	4	5	5	2	6	6	3.8	11.5
Dir	218	233	247	252	254	286	289	288	165	184	195	172	190	186	173	162	214	232	162	238	281	279	254	268	211.1	189.7
15 Spd	6	5	5	6	9	7	8	7	7	4	4	8	15	16	16	14	13	9	5	3	7	9	9	6	2.2	16.4
Dir	271	236	221	237	223	217	207	202	182	158	16	1	347	5	20	19	5	13	4	247	203	218	224	246	304.6	19.6
16 Spd	7	6	7	2	6	5	5	6	9	10	9	17	17	18	22	21	20	17	9	5	5	5	5	1	8.7	22.1
Dir	249	258	290	262	327	332	255	215	300	302	296	337	333	317	313	317	326	323	358	341	308	304	321	329	313.5	312.8
17 Spd	3	2	5	4	2	2	5	5	4	M	M	8	10	6	9	7	8	8	5	3	3	3	4	4	3.3	9.5
Dir	260	303	261	203	212	136	197	230	194	M	M	130	155	171	243	224	231	254	210	215	274	306	320	284	221.1	154.8
18 Spd	5	3	3	4	2	1	4	6	7	8	9	7	7	5	6	8	13	15	11	8	9	9	9	9	6.3	14.7
Dir	278	329	13	12	71	316	20	24	40	42	62	45	51	69	80	61	55	50	52	35	33	34	19	30	41.1	50.4
19 Spd	8	9	9	10	10	12	12	14	16	17	16	14	12	15	12	11	12	18	8	10	11	10	10	12	10.4	18.0
Dir	15	12	12	8	10	17	23	24	27	26	24	29	34	31	34	48	88	129	85	51	53	38	27	21	35.1	129.5
20 Spd	12	13	13	11	14	14	15	15	14	14	14	14	12	11	12	10	8	5	3	7	9	10	11	10	8.6	14.9
Dir	27	27	29	32	19	17	19	16	19	23	24	19	20	10	12	11	1	33	304	264	274	263	269	260	7.4	16.4
21 Spd	7	7	7	7	7	7	4	4	4	1	6	8	10	11	13	12	11	11	6	3	3	4	4	7	6.3	12.8
Dir	249	251	218	191	202	232	203	241	236	199	166	202	213	191	194	211	215	237	199	195	278	284	200	227	214.8	193.5
22 Spd	6	11	11	10	8	10	10	8	10	10	11	15	17	15	17	15	17	14	6	2	1	3	6	8	8.9	17.1
Dir	228	215	215	203	188	185	196	199	190	181	172	230	236	239	223	207	183	183	168	236	256	296	274	280	209.9	236.2

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Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	6	6	2	1	2	6	5	7	8	8	9	7	8	11	12	11	6	5	14	12	8	14	14	13	5.8	14.2
Dir	290	272	199	70	214	185	192	208	179	178	169	155	139	150	169	174	183	278	262	262	264	234	238	244	211.0	237.9
24 Spd	13	11	10	9	8	7	8	2	5	9	15	20	22	16	16	15	12	12	14	21	20	17	19	19	12.2	22.0
Dir	244	246	230	249	228	245	230	229	182	178	182	207	215	186	186	175	168	168	185	194	186	176	176	179	196.7	215.4
25 Spd	17	17	15	14	15	14	11	9	6	10	12	15	21	23	20	19	14	6	9	8	6	7	13	10	7.3	23.1
Dir	174	173	174	173	177	167	165	186	221	207	206	206	215	229	258	251	262	325	357	23	15	12	327	300	215.6	229.0
26 Spd	1	9	14	12	14	16	22	17	27	25	31	39	42	39	35	34	34	30	20	11	15	13	11	3	20.3	42.0
Dir	207	202	190	183	214	228	248	243	242	259	260	258	260	256	260	257	255	254	250	264	247	255	247	229	249.0	260.4
27 Spd	4	6	6	7	6	1	2	5	3	4	5	7	8	10	10	9	12	16	6	5	5	5	6	14	5.4	16.0
Dir	165	198	239	230	249	228	334	20	360	302	245	222	227	240	248	203	184	191	226	214	238	207	229	199	219.7	190.7
28 Spd	13	12	12	15	12	9	16	27	27	40	44	49	47	42	42	43	40	39	33	21	22	20	17	10	26.0	48.9
Dir	197	194	200	199	206	219	232	241	248	253	255	258	259	259	257	256	257	250	247	237	234	235	235	248	245.9	258.1
29 Spd	11	12	15	18	15	16	15	17	21	25	31	28	24	25	25	21	24	23	17	10	16	17	12	10	18.4	31.4
Dir	246	246	244	240	251	258	255	250	253	257	262	258	255	264	262	235	233	234	233	245	260	265	263	258	251.5	262.1
30 Spd	11	14	18	17	17	17	18	5	7	7	6	5	7	8	9	9	11	12	10	11	11	9	5	5	4.4	17.7
Dir	244	244	244	249	259	268	267	228	171	142	143	111	127	147	162	157	135	137	114	106	106	111	29	80	188.9	266.9
Spd	3.9	4.3	4.5	4.1	4.0	3.8	4.2	4.1	4.4	5.1	5.8	6.6	7.6	8.5	9.2	8.4	7.9	7.0	5.1	4.2	4.7	5.3	5.2	4.1	Diurnal Average	
Dir	252.0	249.0	242.6	239.9	244.8	247.1	245.8	235.8	240.3	246.8	241.6	246.4	246.3	248.1	250.5	252.2	250.6	246.7	249.6	247.8	256.6	258.6	264.2	258.0		
Spd	16.8	20.2	22.1	18.3	17.4	16.7	21.7	26.9	27.3	40.1	44.1	48.9	47.0	42.4	42.4	42.8	40.4	38.9	32.6	24.8	21.7	34.3	21.6	18.7	Diurnal Maximum	
Dir	173.6	250.9	248.6	243.0	229.1	268.1	248.2	241.2	241.7	253.1	254.7	258.1	258.8	259.4	257.2	256.3	256.9	249.6	247.0	244.2	234.4	265.7	267.7	178.6		

Maximum Speed Value: 49 km/h on Sep 28 12:00
Minimum Speed Value: 0 km/h on Sep 8 18:00
Maximum Daily Speed Average: 26.0 km/h on Sep 28
Minimum Daily Speed Average: 2.0 km/h on Sep 9
Maximum Diurnal Speed Average: 9.2 km/h at hour 15
Minimum Diurnal Speed Average: 3.8 km/h at hour 6

Monthly Average Velocity: 5.46 km/h 248.65 deg
Speed Percentiles: P_1 = 1.0 P_{10} = 3.3 Q_1 = 5.4 Median = 8.8 Q_3 = 14.1 P_{90} = 20.3 P_{99} = 41.8
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Percent Operational Time:	99.7

M - Maintenance

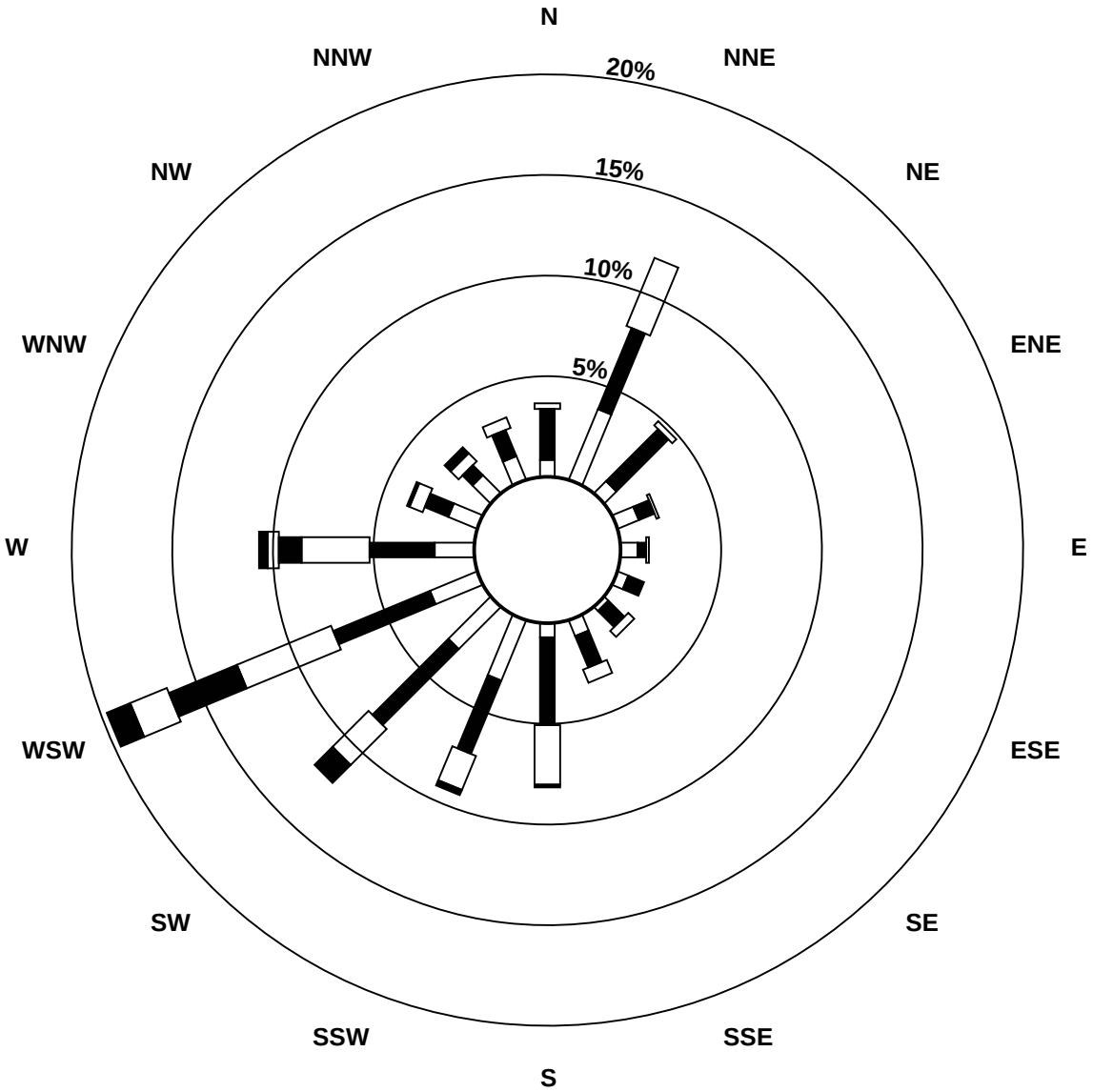
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	20	42	15	0	0	0	77
NorthEast	18	49	18	0	0	0	85
East	16	10	2	0	0	0	28
SouthEast	2	16	5	0	0	0	23
South	17	51	33	3	0	0	104
SouthWest	40	68	51	21	7	0	187
West	25	45	43	25	12	12	162
NorthWest	18	20	11	3	0	0	52
Total	156	301	178	52	19	12	718

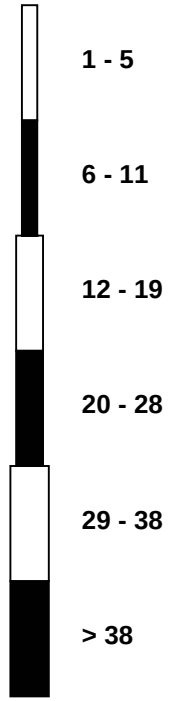
Wind Rose

Wind Speed (WS) (km/h)

Smoky Heights - September 2010



Wind Speed Classes (km/h)



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Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - September 2010

Maximum Speed: 49 km/h on Sep 28 12:00

Maximum Daily Speed Average: 27.4 km/h on Sep 28

Minimum Speed: 2 km/h on Sep 21 10:00

Minimum Daily Speed Average: 4.4 km/h on Sep 9

Maximum Diurnal Speed Average: 16.9 km/h at hour 15

Minimum Diurnal Speed Average: 7.8 km/h at hour 1

Monthly Average Speed: 11.27 km/h

Percentiles: P_1 = 2.5 P_{10} = 4.1 Q_1 = 5.9 Median = 9.3 Q_3 = 14.2 P_{90} = 20.7 P_{99} = 42.0

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Percent Operational Time:	99.7

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-Sep	5	5	6	4	3	4	3	7	7	4	9	10	12	16	15	15	19	13	11	7	11	14	15	14	9.4	18.5
2-Sep	10	6	10	10	8	10	10	10	9	9	8	8	21	30	28	29	31	27	21	16	7	10	11	7	14.4	30.8
3-Sep	7	6	5	6	7	7	7	9	7	5	11	13	16	16	13	16	16	12	8	4	21	35	22	15	11.9	34.6
4-Sep	10	20	22	18	18	13	13	14	15	24	36	37	35	35	36	31	29	24	21	25	20	16	14	11	22.3	36.7
5-Sep	10	12	10	12	13	11	12	12	16	20	18	16	15	15	12	13	14	12	8	7	4	6	8	4	11.6	20.2
6-Sep	4	2	4	2	4	3	3	5	3	5	7	7	7	7	7	6	7	5	5	6	6	7	8	9	5.4	9.2
7-Sep	9	9	10	8	8	5	8	10	12	14	17	22	23	22	19	18	13	12	10	6	5	5	5	5	11.4	23.1
8-Sep	5	4	5	5	5	5	5	5	6	7	8	8	8	7	5	5	5	3	5	5	5	3	4	3	5.2	8.2
9-Sep	4	5	5	5	4	5	6	5	5	6	5	4	3	4	4	3	3	5	4	5	5	5	3	4	4.4	6.2
10-Sep	4	3	4	4	5	7	5	6	7	8	7	12	11	18	26	21	21	29	24	17	16	12	11	10	11.9	28.8
11-Sep	11	11	15	11	11	11	9	7	10	18	22	19	18	19	24	21	16	12	7	6	5	5	7	7	12.6	23.9
12-Sep	8	8	5	5	9	8	7	5	8	9	10	11	11	12	13	10	10	11	9	5	5	6	7	7	8.3	13.0
13-Sep	7	8	9	9	8	9	9	9	9	8	8	8	9	8	11	10	5	10	8	6	6	4	3	3	7.6	10.8
14-Sep	4	3	4	5	4	2	3	3	4	9	6	8	12	12	10	7	7	4	5	5	5	3	6	6	5.7	11.8
15-Sep	6	6	5	6	9	8	8	7	7	6	7	9	16	17	17	14	14	10	5	4	7	9	9	7	8.8	17.1
16-Sep	7	7	7	5	7	5	6	6	10	11	10	17	17	19	22	22	20	17	9	5	6	5	5	3	10.5	22.5
17-Sep	4	3	5	4	3	3	5	5	5	M	M	8	11	7	10	9	9	8	5	3	3	3	4	4	5.6	11.2
18-Sep	5	3	3	4	5	3	4	6	7	8	9	8	8	7	8	9	13	15	11	8	9	9	9	9	7.6	14.8
19-Sep	8	9	9	10	10	12	12	14	16	17	16	14	12	15	13	11	15	19	8	10	11	10	10	12	12.1	18.8
20-Sep	12	13	13	11	14	14	15	15	14	15	14	14	12	11	12	10	9	6	4	7	9	10	11	10	11.4	15.0
21-Sep	7	7	8	7	7	7	4	4	5	2	7	8	11	12	14	13	12	11	6	4	3	4	5	7	7.3	13.6
22-Sep	6	12	11	10	8	10	10	8	10	10	11	16	17	16	17	17	17	14	6	3	2	3	6	8	10.4	17.5
23-Sep	7	6	4	2	2	6	5	7	8	8	10	8	8	12	12	11	7	6	14	12	8	14	14	13	8.5	14.3
24-Sep	14	11	11	10	8	8	8	3	6	9	15	21	22	17	16	16	12	12	15	21	20	18	19	19	13.7	22.4
25-Sep	17	17	16	14	15	14	11	9	7	10	12	15	21	24	21	19	15	7	10	8	7	7	14	11	13.3	23.6
26-Sep	4	9	14	12	14	16	22	18	28	25	31	39	42	40	35	34	34	30	20	11	15	13	11	6	21.8	42.2
27-Sep	5	6	7	8	7	4	3	5	3	5	5	7	8	10	10	9	12	16	7	6	5	5	7	14	7.3	16.4
28-Sep	13	13	12	15	12	9	17	27	27	40	44	49	47	43	43	43	41	39	33	22	22	21	17	10	27.4	49.2
29-Sep	11	12	16	19	15	17	15	17	21	25	32	28	25	25	25	22	25	23	17	10	16	17	12	10	19.0	31.6
30-Sep	11	14	18	17	17	17	18	8	7	8	7	6	8	9	10	10	11	12	10	11	11	9	5	6	10.8	17.8
	7.8	8.4	9.1	8.6	8.7	8.4	8.8	8.9	9.9	11.9	13.8	15.0	16.3	16.8	16.9	15.8	15.3	14.1	10.9	8.8	9.2	9.6	9.4	8.4	Diurnal Average	
	16.9	20.4	22.2	18.5	17.5	16.8	22.1	27.0	27.6	40.3	44.4	49.2	47.3	42.8	42.6	43.0	40.7	38.9	32.7	24.9	21.8	34.6	22.3	18.7	Diurnal Maximum	

M - Maintenance

All monthly, daily, and diurnal averages have been calculated using scalar methods

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - September 2010

Maximum Value: 90.4 deg on Sep 9 16:00

Minimum Value: 1.9 deg on Sep 30 03:00

Percentiles: P_1 = 3.5 P_{10} = 5.9 Q_1 = 8.3 Median = 12.9 Q_3 = 22.7 P_{90} = 41.0 P_{99} = 77.9

Hours in Service:	720
Hours of Data:	718
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	26	19	84	75	50	14	53	20	14	52	36	28	15	47	14	13	10	12	11	25	14	4	4	7	83.9
2-Sep	8	34	14	8	8	9	8	6	11	14	17	18	42	11	11	15	8	10	9	17	26	16	13	20	41.6
3-Sep	23	11	19	14	24	14	10	11	12	31	12	12	16	23	23	17	11	25	19	39	68	8	14	31	67.6
4-Sep	11	7	4	8	9	6	8	9	10	8	9	8	8	10	10	11	9	11	8	6	6	5	5	9	11.4
5-Sep	9	5	4	11	7	5	9	9	13	7	12	12	12	12	23	11	9	15	13	18	76	19	38	49	76.0
6-Sep	37	39	58	60	67	70	31	24	58	59	23	22	15	31	28	50	35	53	23	10	11	5	6	6	70.5
7-Sep	6	8	5	7	8	14	9	13	17	8	7	8	9	13	13	15	15	11	17	11	12	30	14	16	29.8
8-Sep	19	76	8	13	75	11	42	30	10	18	21	12	16	31	22	20	12	86	13	51	12	18	28	19	85.5
9-Sep	12	18	20	9	12	10	14	11	19	12	22	53	58	76	52	90	26	11	13	36	15	34	53	19	90.4
10-Sep	43	25	40	45	21	13	21	15	14	18	20	63	59	47	13	8	11	8	7	2	4	5	6	11	62.8
11-Sep	8	10	3	41	18	20	13	12	7	8	9	11	16	14	14	24	17	20	14	7	52	48	40	41	52.4
12-Sep	11	10	27	17	12	11	10	57	35	10	9	13	19	17	15	13	10	9	6	6	8	6	6	5	56.8
13-Sep	6	5	6	6	9	10	7	6	12	15	17	16	26	37	20	42	57	12	8	17	23	24	17	24	56.5
14-Sep	9	25	12	10	34	38	24	84	19	9	31	27	15	30	36	72	76	72	38	15	19	49	8	7	83.9
15-Sep	10	19	9	10	16	21	12	10	13	57	58	31	14	16	13	13	13	16	20	37	7	11	9	29	58.3
16-Sep	15	26	19	79	37	13	41	13	33	21	39	9	10	18	11	18	15	17	11	20	41	20	16	83	82.6
17-Sep	28	71	14	24	53	57	21	29	16	M	M	22	37	32	31	39	33	23	29	33	6	10	9	17	71.2
18-Sep	13	62	38	16	65	72	14	6	10	12	14	28	31	46	55	39	14	9	5	10	9	15	10	13	71.9
19-Sep	7	7	8	8	7	6	7	5	6	5	5	8	9	8	9	15	41	19	21	8	9	8	9	6	40.6
20-Sep	7	5	6	7	7	5	5	6	6	8	10	7	11	10	11	13	20	20	49	11	4	7	6	7	49.3
21-Sep	10	13	18	7	16	13	19	32	16	57	26	20	20	20	20	21	21	15	28	25	28	13	29	12	56.7
22-Sep	8	11	8	12	12	7	10	6	8	7	8	26	12	19	16	21	13	7	6	46	55	18	13	5	55.5
23-Sep	7	10	59	79	58	13	20	12	11	9	12	26	13	17	10	12	17	29	17	12	9	11	7	8	79.4
24-Sep	6	8	11	11	8	16	32	38	36	19	12	15	10	13	13	13	7	5	10	8	9	6	5	4	37.8
25-Sep	5	7	8	6	6	4	6	11	14	13	11	14	10	13	13	7	11	31	17	12	26	16	22	19	30.9
26-Sep	82	25	10	6	10	9	11	12	9	6	6	7	6	8	7	8	7	5	3	10	5	8	9	77	81.7
27-Sep	26	17	27	33	45	79	52	13	25	40	35	25	17	8	8	21	9	13	25	26	28	32	28	7	79.3
28-Sep	5	15	9	5	9	21	12	6	5	5	6	6	6	8	7	7	7	4	3	5	5	10	5	11	21.4
29-Sep	7	11	17	11	10	4	5	6	4	6	6	10	11	10	12	15	11	5	6	10	4	3	7	12	16.7
30-Sep	11	3	2	4	4	5	5	60	21	18	26	31	21	35	36	29	16	6	8	9	5	11	19	36	60.0
	81.7	75.5	83.9	79.4	74.9	79.3	52.9	83.9	57.6	58.5	58.3	62.8	59.3	76.1	55.2	90.4	76.1	85.5	49.3	51.2	76.0	49.2	53.2	82.6	

M - Maintenance

PASZA
Beaverlodge Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.7 ppb on Sep 6 13:00 Maximum Daily Average: 0.6 ppb on Sep 19

Minimum Value: 0 ppb on Sep 11 19:00 Minimum Daily Average: 0.0 ppb on Sep 28
Maximum Diurnal Average: 0.3 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 4
Monthly Average: 0.18 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.1 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 1.0

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	47
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	A	0	0	0	0	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
2-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
3-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.7
4-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
5-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
6-Sep	0	0	0	0	0	0	A	A	0	0	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0.3	1.7
7-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
8-Sep	0	0	0	0	1	0	A	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0.3	1.0
9-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
10-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.1	0.5
11-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
12-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.6
13-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
14-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Sep	0	0	0	0	A	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
16-Sep	0	0	0	0	A	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
17-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0.3	0.6
19-Sep	1	1	1	1	A	2	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0.6	1.5
20-Sep	0	1	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
21-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
22-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
23-Sep	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
24-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
25-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
26-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
27-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
28-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
29-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4
30-Sep	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0.3	1.3
	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Diurnal Average	
	0.7	0.7	0.8	0.8	1.0	1.5	0.9	0.9	1.1	1.0	1.1	0.7	1.7	0.7	0.7	1.3	0.5	0.3	1.1	0.5	0.5	0.4	0.6	0.6	Diurnal Maximum	

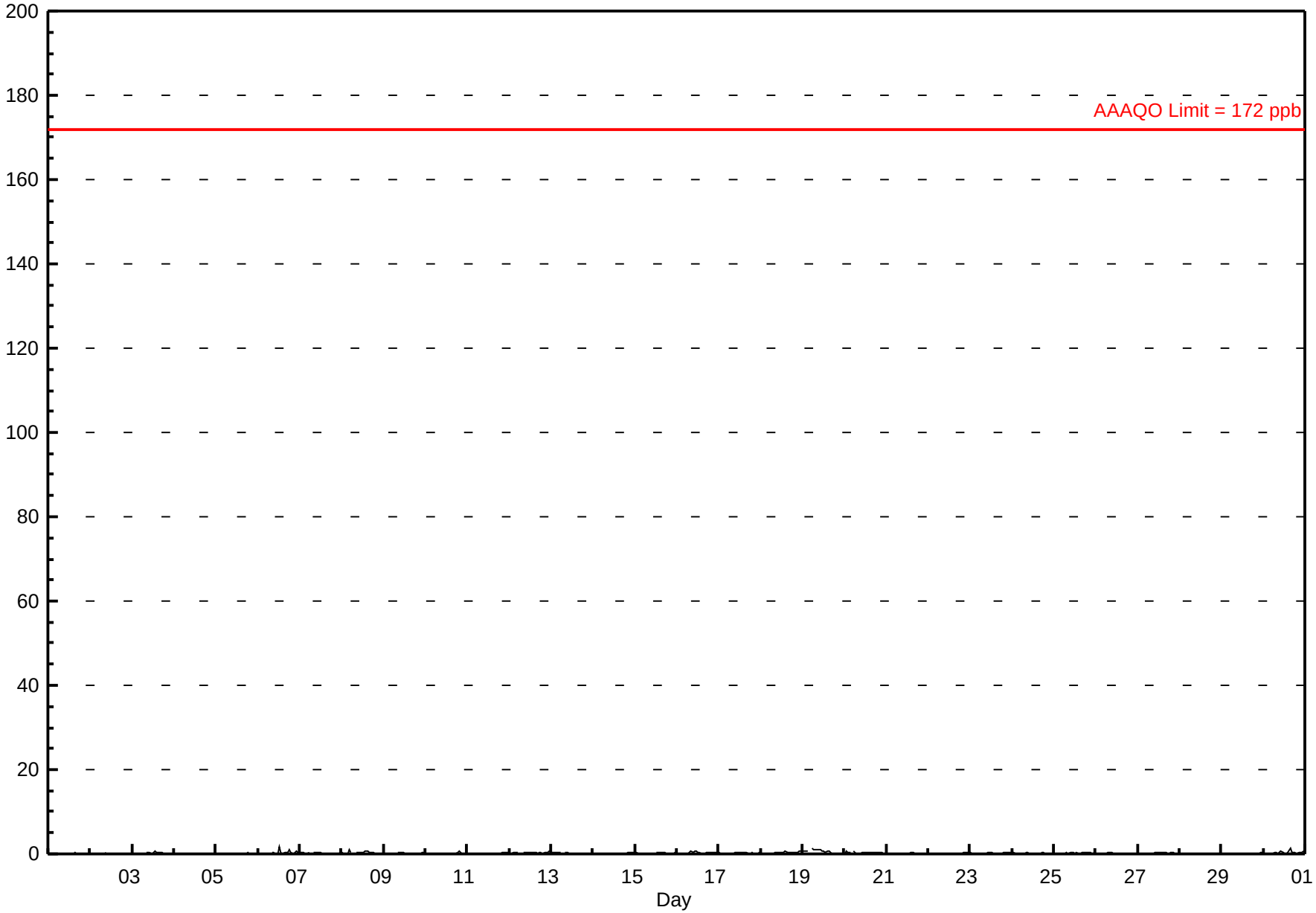
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - September 2010

Maximum Value: 26.8 ppb on Sep 6 13:00

Maximum Daily Average: 1.7 ppb on Sep 6

Minimum Value: 0 ppb on Sep 29 10:00

Minimum Daily Average: 0.1 ppb on Sep 4

Maximum Diurnal Average: 1.3 ppb at hour 13

Minimum Diurnal Average: 0.2 ppb at hour 4

Monthly Average: 0.37 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.2 Median = 0.2 Q_3 = 0.3 P_{90} = 0.6 P_{99} = 1.6

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	47
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	A	0	0	0	0	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
2-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
3-Sep	0	0	0	0	0	0	A	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.4
4-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
5-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
6-Sep	0	0	0	0	0	0	A	A	0	0	0	0	27	2	0	0	0	1	1	1	0	1	1	1	1.7	26.8
7-Sep	0	0	0	0	0	0	A	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
8-Sep	0	0	0	0	5	1	A	A	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0.7	5.5
9-Sep	0	0	0	0	0	0	A	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
10-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.2	0.7
11-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
12-Sep	0	0	0	1	0	1	A	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.0
13-Sep	0	0	0	1	1	1	A	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
14-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
15-Sep	0	0	0	0	A	0	0	0	C	C	C	C	1	0	1	1	1	1	0	0	0	0	0	0	0.4	0.9
16-Sep	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0.4	1.1
17-Sep	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
18-Sep	0	0	0	0	A	0	0	0	0	0	0	1	1	0	1	1	0	0	0	1	1	1	1	1	0.5	0.9
19-Sep	1	1	1	1	A	2	1	1	1	1	2	1	1	1	1	1	1	0	0	0	0	0	0	0	0.8	1.9
20-Sep	1	1	0	0	A	1	1	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0.5	1.0
21-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
22-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
23-Sep	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0.3	1.1
24-Sep	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0.4	1.8
25-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0.3	0.8
26-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
27-Sep	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0.3	0.7
28-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
29-Sep	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	0.6
30-Sep	0	0	0	0	A	0	0	0	0	0	1	1	0	0	1	2	0	0	0	0	1	0	1	1	0.5	2.3
	0.3	0.3	0.3	0.2	0.6	0.3	0.3	0.3	0.4	0.4	0.4	0.4	1.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	1.0	1.0	1.0	0.9	5.5	1.9	1.2	1.2	1.4	1.5	1.6	1.2	26.8	2.0	0.9	2.3	0.9	1.2	1.8	0.6	1.1	0.8	0.8	0.9	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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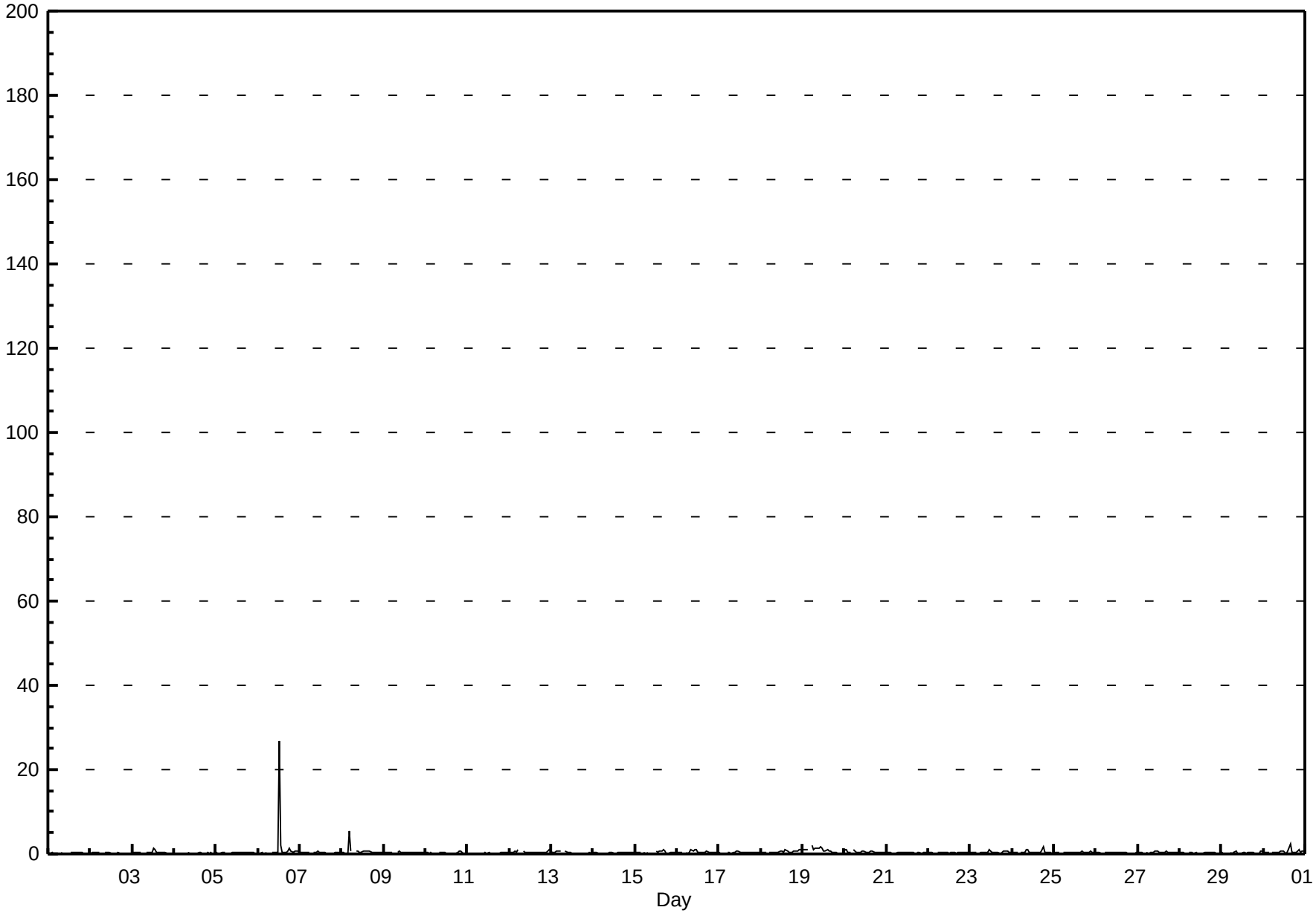
Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

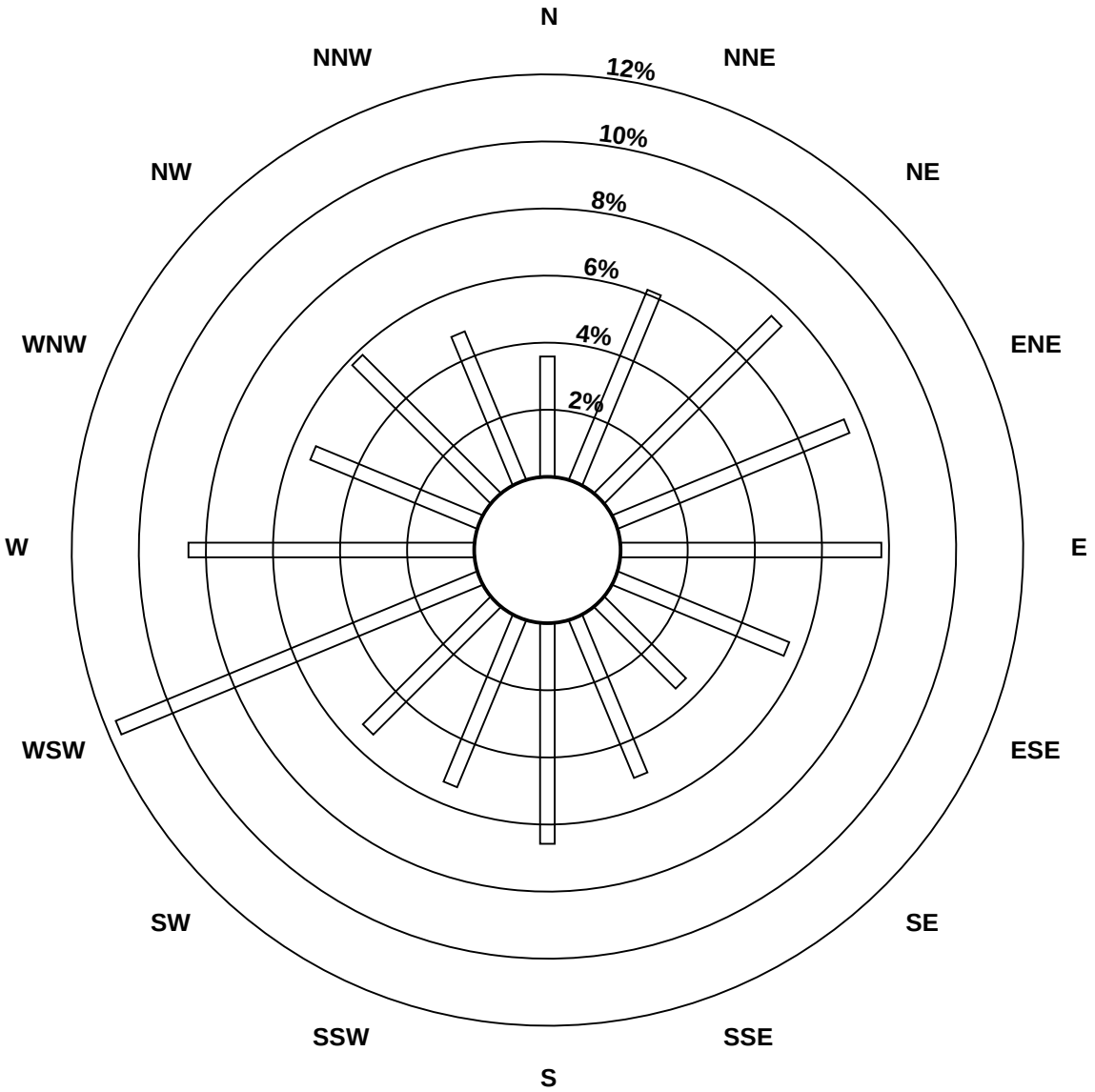
Beaverlodge - September 2010



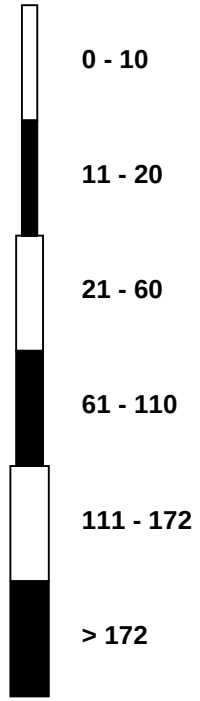
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - September 2010



Pollutant Classes (ppb)



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Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 15.6 ppb on Sep 23 02:00 Maximum Daily Average: 5.2 ppb on Sep 23

Minimum Value: 0 ppb on Sep 29 03:00 Minimum Daily Average: 0.7 ppb on Sep 4
Maximum Diurnal Average: 5.4 ppb at hour 8 Minimum Diurnal Average: 1.0 ppb at hour 15
Monthly Average: 2.54 ppb Percentiles: $P_1 = 0.3$ $P_{10} = 0.6$ $Q_1 = 1.0$ Median = 1.9 $Q_3 = 3.4$ $P_{90} = 5.4$ $P_{99} = 10.7$

Hours in Service:	720
Hours of Data:	667
Hours of Missing Data:	53
Hours of Calibration:	49
Percent Operational Time:	99.4

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-Sep	3	4	5	4	A	5	5	4	3	P	P	P	P	1	1	1	0	1	1	2	1	1	1	2	2.4	5.4
2-Sep	3	5	5	6	5	6	A	A	4	2	2	1	1	0	0	0	1	1	1	1	2	1	4	3	2.5	5.9
3-Sep	2	2	2	2	5	4	A	A	6	4	4	3	2	1	1	1	1	1	3	3	1	1	1	1	2.4	6.2
4-Sep	1	1	1	1	1	2	A	A	1	1	0	0	1	0	0	0	0	0	0	1	1	1	0	1	0.7	1.8
5-Sep	1	1	1	1	1	1	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1.1	3.1
6-Sep	3	2	2	3	2	2	A	A	5	3	1	1	1	1	1	1	1	1	1	2	2	3	3	5	2.0	4.8
7-Sep	7	5	8	4	4	5	A	A	4	2	2	1	1	0	0	0	0	1	1	4	3	2	2	2	2.6	7.7
8-Sep	6	8	6	7	5	6	A	A	6	4	4	4	3	2	3	3	3	2	2	2	2	2	2	2	3.9	7.6
9-Sep	2	2	2	2	2	2	A	A	4	3	2	1	2	2	1	1	1	1	1	5	4	3	6	6	2.5	6.1
10-Sep	6	4	3	3	3	5	A	A	7	5	3	1	0	0	0	1	0	0	1	3	3	3	2	2	2.5	6.5
11-Sep	2	2	2	2	4	6	A	A	2	1	1	0	0	0	0	0	0	1	2	5	3	3	2	4	2.0	5.7
12-Sep	7	6	11	4	4	5	A	A	4	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3	2.8	11.4
13-Sep	3	3	1	3	2	2	A	A	3	2	1	0	0	0	1	1	1	1	2	4	3	2	2	2	1.7	3.6
14-Sep	3	3	4	6	6	6	A	A	5	4	3	3	2	2	1	1	1	2	3	3	3	2	2	2	2.9	6.2
15-Sep	2	3	4	5	A	6	5	4	C	C	C	C	C	C	3	2	2	1	2	1	1	1	2	2	--	5.7
16-Sep	1	2	3	3	A	5	6	7	4	1	2	1	1	1	1	1	1	1	1	1	2	4	5	4	2.5	7.5
17-Sep	8	7	9	7	A	12	10	7	4	4	2	1	1	1	1	1	1	1	2	2	2	2	2	3	3.7	11.6
18-Sep	3	2	5	10	A	11	11	12	10	6	4	4	2	2	1	1	1	1	1	2	2	1	1	2	4.1	12.1
19-Sep	2	2	2	3	A	5	4	4	3	2	2	2	2	2	2	2	2	3	2	2	1	1	1	1	2.2	4.6
20-Sep	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	0	1	1	3	4	3	3	3	3	1.5	3.6
21-Sep	2	3	4	5	A	10	8	6	5	3	2	3	2	2	1	1	1	1	2	4	4	3	3	3	3.4	10.2
22-Sep	4	4	2	3	A	4	6	6	3	2	2	1	1	0	1	1	1	1	6	2	2	2	2	2	2.5	6.5
23-Sep	4	16	15	8	A	11	12	8	4	4	3	3	2	1	1	2	1	1	3	3	6	4	4	4	5.2	15.6
24-Sep	5	5	4	3	A	5	6	7	5	2	1	1	0	2	1	1	2	2	2	3	2	2	2	2	2.7	6.7
25-Sep	3	2	3	2	A	5	7	6	4	4	3	2	1	1	1	1	1	2	1	2	2	2	1	1	2.4	6.8
26-Sep	2	1	2	2	A	3	2	1	1	1	1	1	0	0	1	0	0	1	2	2	3	3	2	2	1.4	3.4
27-Sep	1	3	4	2	A	4	5	5	9	8	5	5	4	3	4	4	5	6	5	4	7	5	4	3	4.5	8.6
28-Sep	1	2	2	2	A	2	1	1	2	1	2	1	3	1	1	0	0	1	1	1	1	1	1	0	1.3	2.7
29-Sep	0	0	0	0	A	3	2	5	6	2	1	1	1	0	0	0	1	1	2	1	3	3	3	2	1.6	6.0
30-Sep	1	1	1	1	A	3	2	6	4	7	5	2	1	0	0	1	1	1	3	2	3	2	2	2	2.2	6.9
	3.0	3.4	3.9	3.5	3.4	4.8	5.4	5.4	4.1	2.9	2.2	1.6	1.3	1.0	1.0	1.0	1.1	1.2	2.0	2.4	2.4	2.2	2.3	2.4	Diurnal Average	
	7.8	15.6	15.0	9.9	5.6	11.6	11.6	12.1	9.5	7.8	4.8	4.7	3.9	3.2	3.6	4.2	5.0	5.7	6.1	5.3	6.6	4.9	6.1	5.7	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

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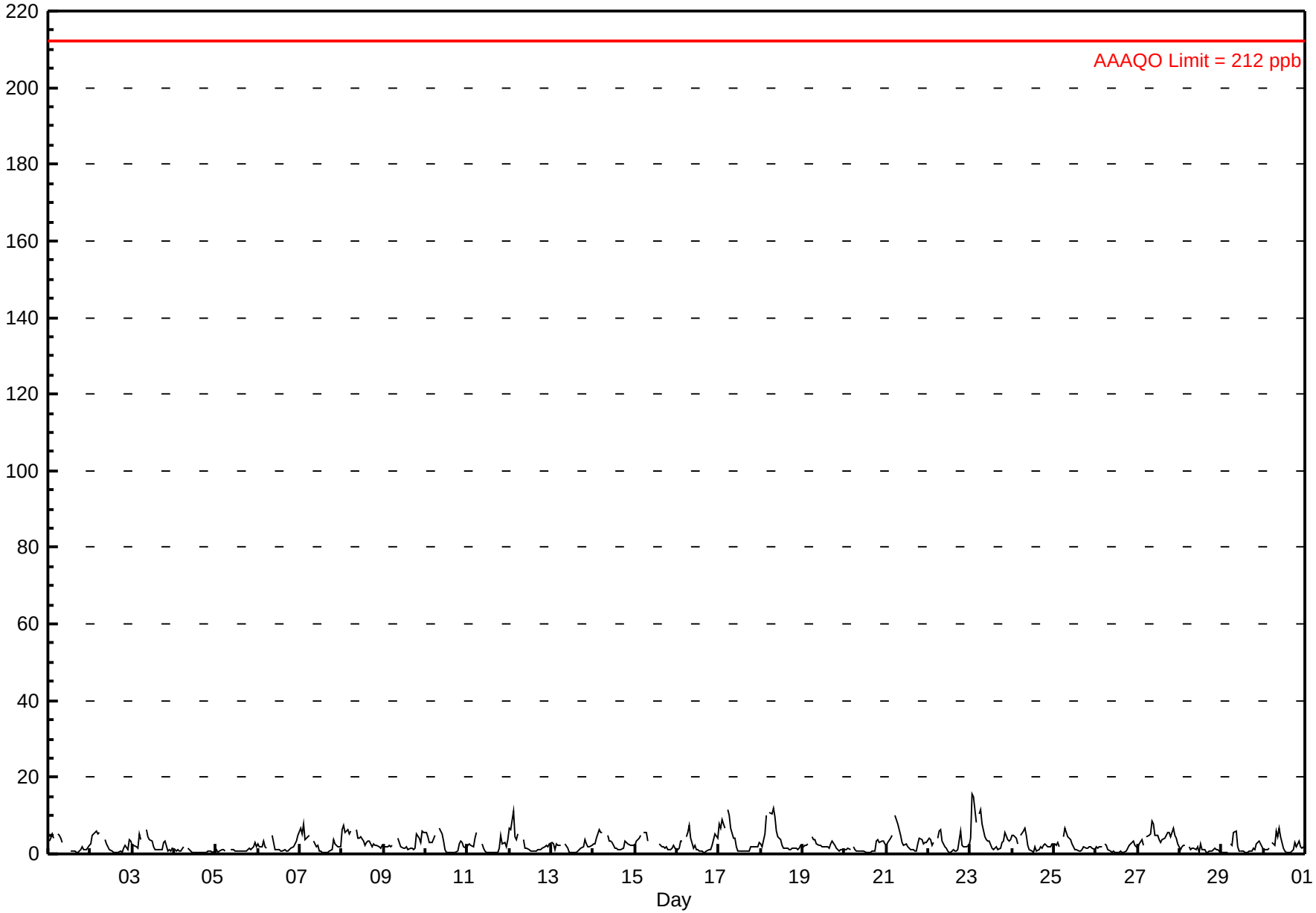
Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - September 2010



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Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - September 2010

Maximum Value: 135.9 ppb on Sep 29 09:00

Maximum Daily Average: 10.0 ppb on Sep 29

Minimum Value: 0 ppb on Sep 29 03:00

Minimum Daily Average: 1.5 ppb on Sep 4

Maximum Diurnal Average: 10.8 ppb at hour 9

Minimum Diurnal Average: 1.8 ppb at hour 15

Monthly Average: 4.53 ppb

Percentiles: P_1 = 0.6 P_{10} = 1.0 Q_1 = 1.8 Median = 3.0 Q_3 = 5.7 P_{90} = 8.3 P_{99} = 22.5

Hours in Service:	720
Hours of Data:	667
Hours of Missing Data:	53
Hours of Calibration:	49
Percent Operational Time:	99.4

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-Sep	4	6	7	7	A	8	6	7	4	P	P	P	P	1	1	2	1	1	3	4	2	3	2	3	3.9	8.2
2-Sep	4	8	8	7	7	8	A	A	6	4	2	2	1	1	1	1	1	2	1	3	5	3	5	7	3.9	8.0
3-Sep	3	3	2	3	9	11	A	A	9	6	5	4	3	2	2	2	2	2	8	14	1	3	1	3	4.4	14.2
4-Sep	2	2	3	1	1	4	A	A	3	1	1	1	2	1	1	1	1	1	1	2	1	1	1	1	1.5	3.8
5-Sep	2	1	1	1	2	2	A	A	2	1	1	1	1	1	1	1	1	1	2	2	2	7	6	3	1.9	6.6
6-Sep	3	2	3	5	2	2	A	A	6	6	2	1	1	1	1	1	1	1	1	2	3	3	5	7	2.8	7.1
7-Sep	7	7	10	5	6	7	A	A	4	3	4	1	1	1	1	1	1	1	2	7	4	4	5	3	3.8	10.3
8-Sep	9	10	8	9	8	6	A	A	7	5	5	6	5	3	4	5	5	2	3	3	3	2	2	2	5.1	10.1
9-Sep	2	2	2	3	2	3	A	A	5	5	2	2	2	2	1	2	2	1	4	10	5	5	7	7	3.5	10.1
10-Sep	6	6	4	4	4	6	A	A	8	7	4	3	1	1	1	1	1	1	2	7	7	7	3	2	3.9	8.0
11-Sep	4	4	3	3	6	6	A	A	4	2	1	1	1	1	1	1	1	1	7	12	5	4	3	6	3.5	11.5
12-Sep	10	10	15	7	5	11	A	A	6	2	2	2	2	2	1	2	2	2	2	3	2	3	3	4	4.4	15.2
13-Sep	4	3	2	4	3	2	A	A	3	2	1	1	1	1	1	2	2	2	3	6	4	3	3	2	2.5	5.8
14-Sep	3	3	7	8	8	7	A	A	6	4	4	3	2	2	2	1	1	3	6	5	3	3	3	3	4.0	8.4
15-Sep	3	7	7	8	A	9	9	5	C	C	C	C	C	C	4	3	4	2	3	2	3	2	7	2	--	8.9
16-Sep	2	3	5	5	A	8	10	11	8	4	31	2	2	1	1	1	1	1	2	2	4	6	9	6	5.4	30.5
17-Sep	12	11	15	11	A	21	13	10	6	6	3	1	1	1	1	1	1	1	6	3	3	3	3	4	5.9	21.2
18-Sep	3	2	14	16	A	15	23	20	14	8	5	4	4	2	2	2	1	1	3	3	3	2	2	3	6.7	23.0
19-Sep	3	4	3	3	A	7	4	4	3	3	2	3	2	3	2	2	5	5	3	2	4	1	2	2	3.1	7.1
20-Sep	3	1	2	1	A	4	1	1	1	1	1	1	1	1	1	1	1	1	5	6	6	7	5	3	2.4	7.3
21-Sep	5	6	5	5	A	12	9	9	6	4	3	3	3	2	1	3	1	4	4	6	7	4	3	4	4.7	11.6
22-Sep	5	5	3	3	A	5	8	9	6	3	2	2	1	1	2	1	2	3	16	6	2	2	3	3	4.1	16.4
23-Sep	9	28	26	12	A	20	20	10	6	5	4	7	3	2	2	5	3	4	5	5	10	8	5	5	8.9	27.9
24-Sep	7	6	6	3	A	7	8	9	9	7	2	1	1	54	2	3	4	3	5	5	4	3	3	3	6.7	54.1
25-Sep	7	4	5	3	A	6	9	11	7	7	6	2	2	2	2	2	3	3	3	2	3	2	2	2	4.1	10.5
26-Sep	3	3	2	3	A	5	3	2	1	1	1	3	3	1	3	1	1	5	3	3	4	7	5	2	2.8	6.8
27-Sep	2	7	7	6	A	8	8	9	17	16	6	6	5	4	4	7	7	8	6	6	11	9	5	4	7.2	16.8
28-Sep	3	3	3	4	A	5	2	11	8	8	8	2	14	8	6	1	1	4	2	2	4	3	3	1	4.5	14.1
29-Sep	1	0	0	0	A	6	5	27	136	7	6	1	6	1	1	1	1	1	5	3	6	5	6	3	10.0	135.9
30-Sep	2	2	1	2	A	5	3	21	11	14	18	3	1	2	1	1	2	2	6	3	6	3	2	2	4.9	21.4
	4.4	5.3	6.0	5.1	4.8	7.6	8.3	10.4	10.8	5.1	4.8	2.5	2.5	3.5	1.8	1.9	1.9	2.3	4.1	4.5	4.3	3.9	3.8	3.5	Diurnal Average	
	12.0	27.9	26.5	16.3	9.2	21.2	23.0	27.1	135.9	15.9	30.5	6.6	14.1	54.1	5.8	7.2	6.9	8.0	16.4	14.2	11.3	8.8	8.9	7.2	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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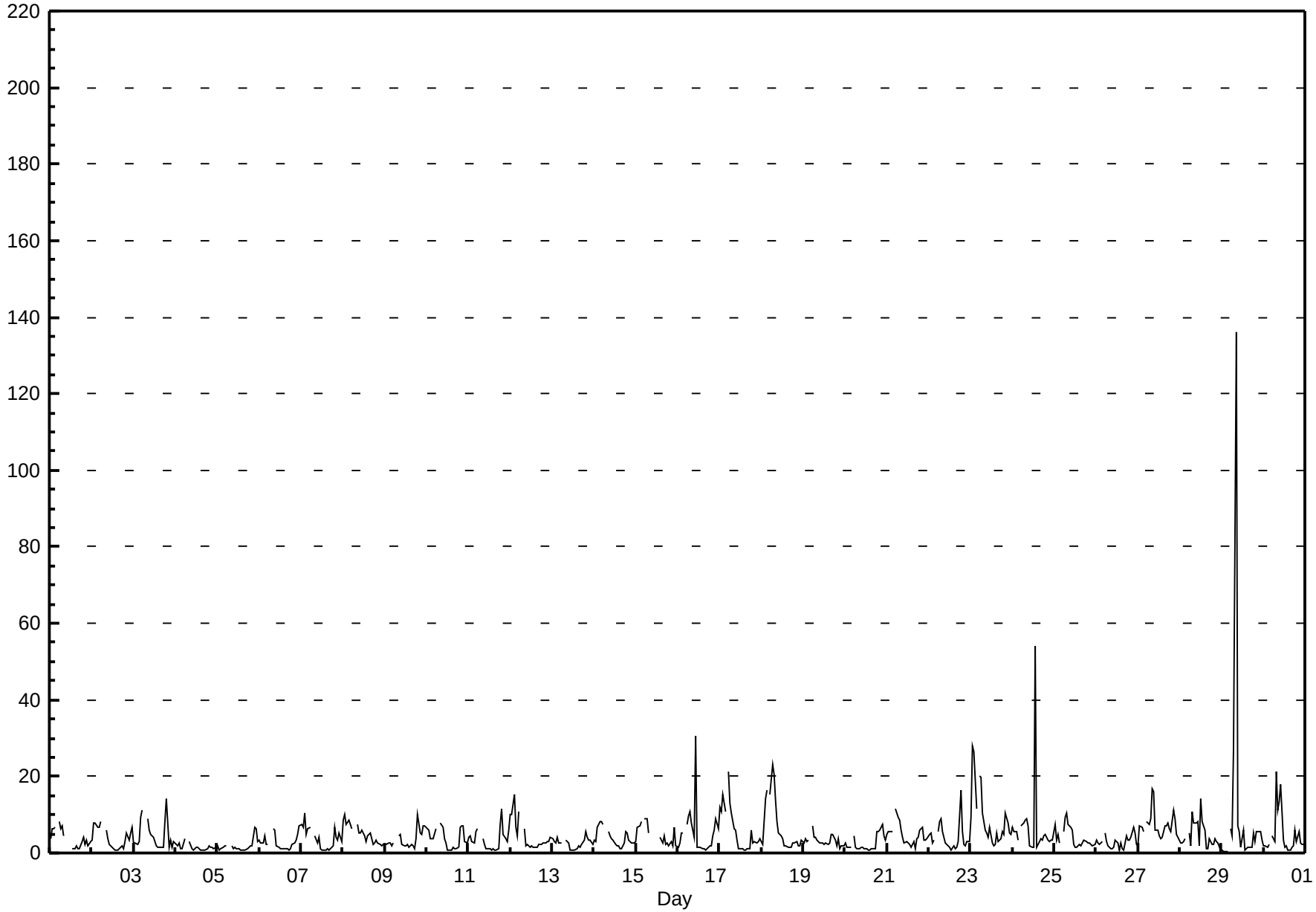
Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

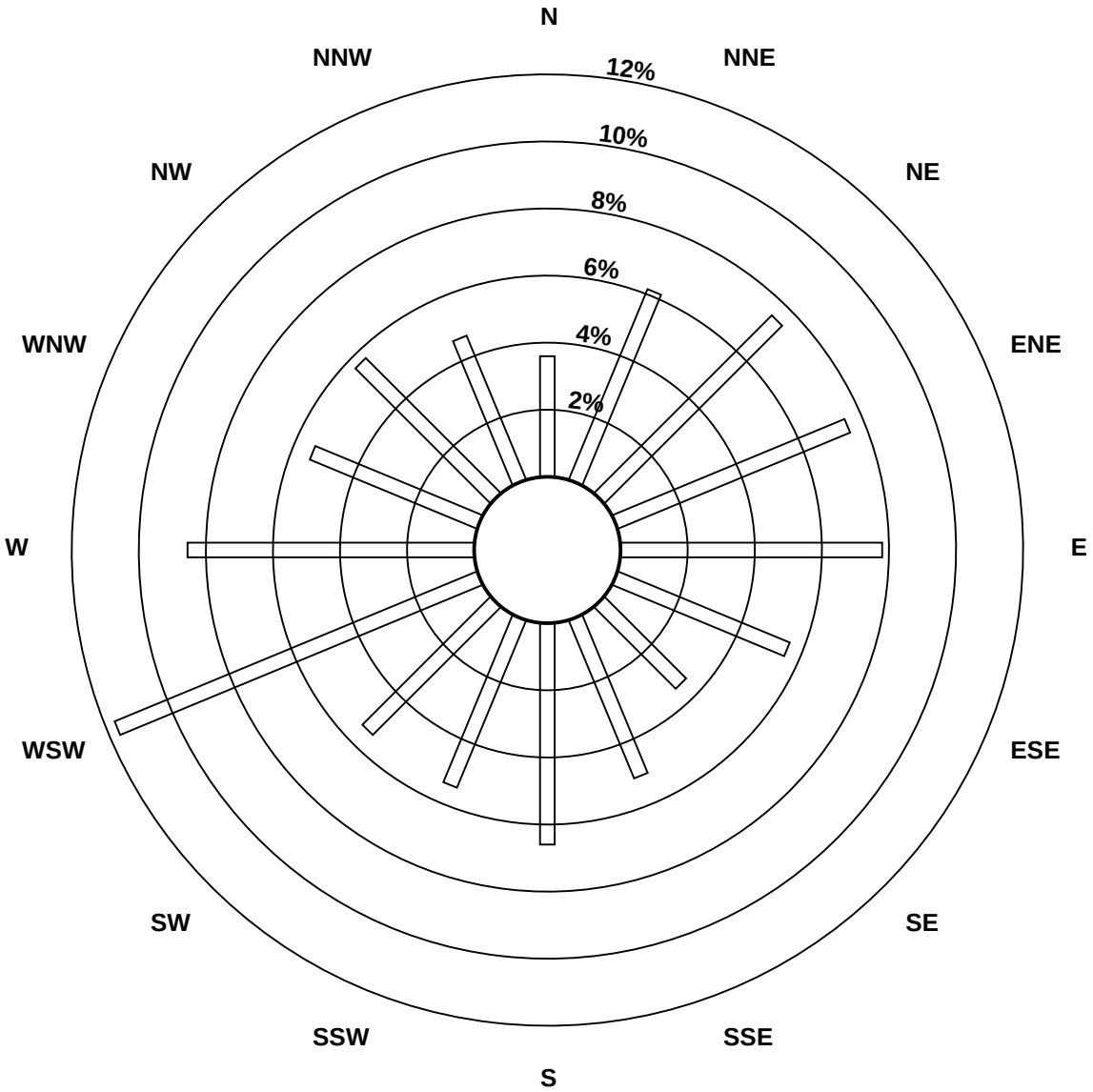
Beaverlodge - September 2010



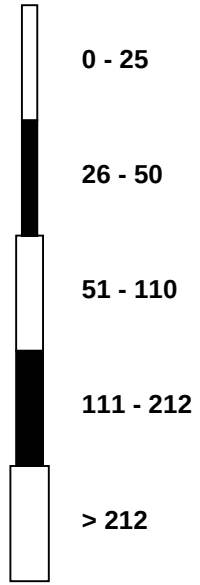
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - September 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 16.3 ppb on Sep 18 08:00
Maximum Daily Average: 2.3 ppb on Sep 18

Minimum Value: 0 ppb on Sep 2 00:00
Maximum Diurnal Average: 2.7 ppb at hour 8
Monthly Average: 0.53 ppb
Minimum Daily Average: 0.1 ppb on Sep 20
Minimum Diurnal Average: 0.0 ppb at hour 24
Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 1.4 P_{99} = 6.5

Hours in Service:	720
Hours of Data:	667
Hours of Missing Data:	53
Hours of Calibration:	49
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	0	0	A	0	0	0	1	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
2-Sep	0	0	0	0	0	0	A	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
3-Sep	0	0	0	0	0	0	A	A	7	7	4	2	1	0	0	0	0	0	0	0	0	0	0	0	1.0	6.9
4-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
5-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
6-Sep	0	0	0	0	0	0	A	A	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
7-Sep	0	0	0	0	0	0	A	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
8-Sep	1	1	0	3	3	4	A	A	7	2	2	2	1	1	0	1	1	0	0	0	0	0	0	0	1.3	7.2
9-Sep	0	0	0	0	0	0	A	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.0
10-Sep	0	0	0	0	0	0	A	A	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	4.9
11-Sep	0	0	0	0	0	0	A	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
12-Sep	0	0	1	0	0	1	A	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
13-Sep	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
14-Sep	0	0	0	1	0	0	A	A	3	3	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0.7	2.8
15-Sep	0	0	0	0	A	0	1	2	C	C	C	C	C	C	1	0	0	0	0	0	0	0	0	0	--	1.8
16-Sep	0	0	0	0	A	0	1	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.5
17-Sep	0	0	1	0	A	5	1	5	4	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	6.0
18-Sep	0	0	0	1	A	0	7	16	16	5	3	2	1	0	0	0	0	0	0	0	0	0	0	0	2.3	16.3
19-Sep	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
20-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
21-Sep	0	0	0	0	A	3	3	4	4	3	2	3	2	2	1	0	0	0	0	0	0	0	0	0	1.2	4.1
22-Sep	0	0	0	0	A	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
23-Sep	0	1	2	0	A	4	7	5	4	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	1.4	6.5
24-Sep	0	0	0	0	A	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.1
25-Sep	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4
26-Sep	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
27-Sep	0	0	0	0	A	0	0	1	5	6	3	2	1	1	1	1	1	1	0	0	0	0	0	0	0.9	6.3
28-Sep	0	0	0	0	A	0	0	2	1	1	2	0	2	1	1	0	0	0	0	0	0	0	0	0	0.5	2.0
29-Sep	0	0	0	0	A	0	0	3	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	3.0
30-Sep	0	0	0	0	A	0	0	1	2	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0.6	4.6
	0.0	0.1	0.2	0.2	0.2	0.6	1.3	2.7	2.6	2.0	1.3	0.8	0.6	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	Diurnal Average	
	0.5	1.4	1.6	2.6	2.5	5.3	7.1	16.3	16.3	6.6	3.6	2.9	2.4	1.5	1.4	0.6	0.7	0.6	0.3	0.2	0.2	0.1	0.2	0.2	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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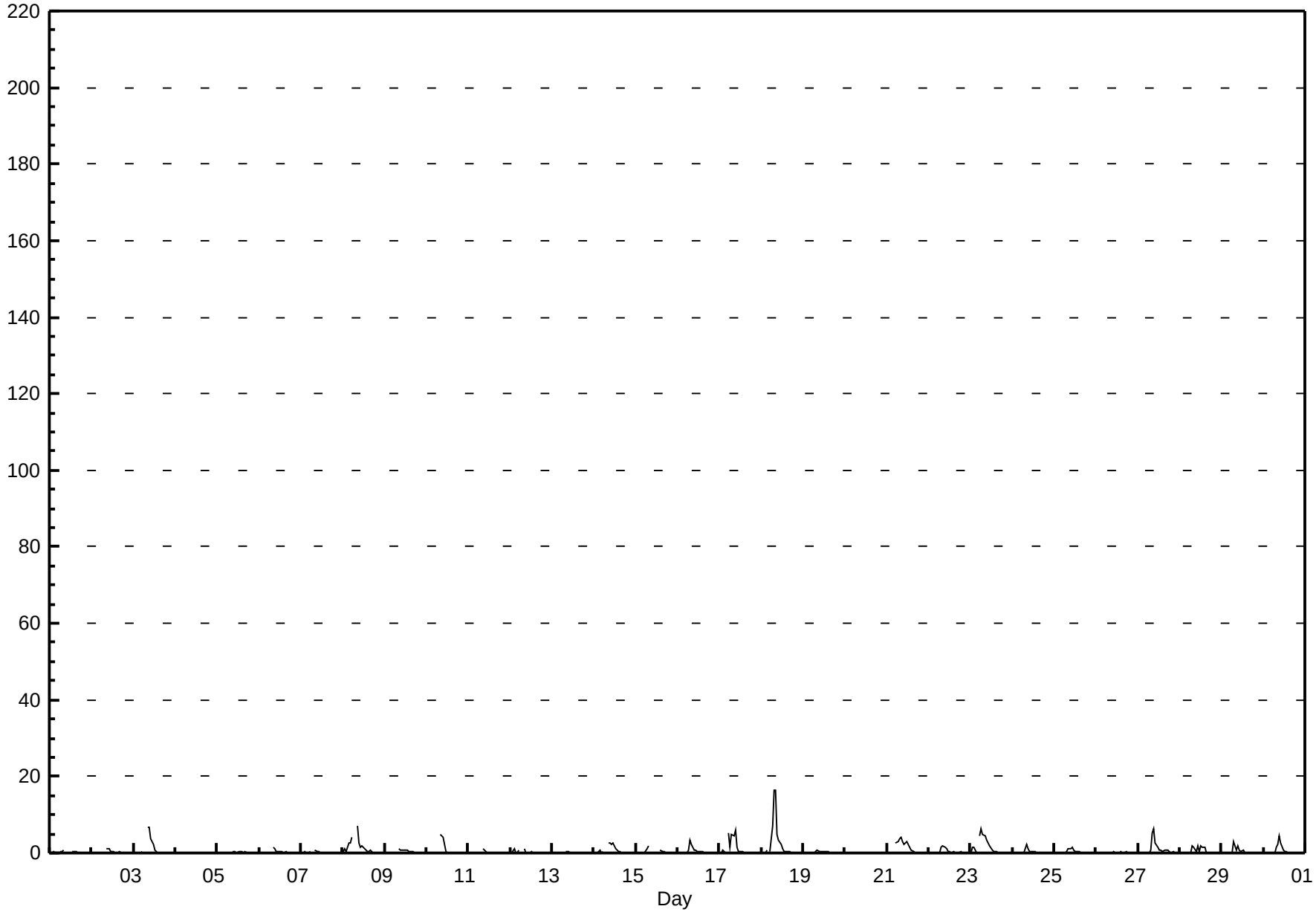
Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - September 2010

Maximum Value: 32.9 ppb on Sep 18 07:00

Maximum Daily Average: 5.3 ppb on Sep 18

Minimum Value: 0 ppb on Sep 9 22:00

Minimum Daily Average: 0.2 ppb on Sep 13

Maximum Diurnal Average: 6.9 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 24

Monthly Average: 1.49 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.3 $Q_3 = 0.8$ $P_{90} = 3.7$ $P_{99} = 24.8$

Hours in Service:	720
Hours of Data:	667
Hours of Missing Data:	53
Hours of Calibration:	49
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	1	0	A	0	1	1	1	P	P	P	P	1	0	1	0	0	0	0	0	0	0	0	0.5	1.0
2-Sep	0	0	0	0	0	0	A	A	2	2	2	1	1	0	1	0	1	1	0	0	0	0	0	0	0.5	2.3
3-Sep	0	0	0	0	0	3	A	A	14	12	6	4	5	1	0	0	0	0	1	1	0	0	0	0	2.1	13.8
4-Sep	0	0	0	0	0	0	A	A	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0.3	0.6
5-Sep	0	0	0	0	0	0	A	A	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.7
6-Sep	0	0	0	0	0	0	A	A	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.2
7-Sep	0	0	1	0	0	1	A	A	1	2	1	0	0	1	0	0	0	0	0	1	0	0	4	2	0.7	3.5
8-Sep	2	4	2	8	7	8	A	A	10	5	3	4	2	1	1	1	1	0	0	0	0	0	0	0	2.7	10.2
9-Sep	0	0	0	0	0	0	A	A	2	2	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0.6	2.2
10-Sep	0	0	0	0	1	1	A	A	6	6	3	2	0	3	0	1	0	0	0	0	0	0	0	0	1.1	6.4
11-Sep	0	0	0	0	0	1	A	A	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0.4	1.5
12-Sep	0	1	4	0	0	4	A	A	3	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.7	3.7
13-Sep	0	0	0	0	0	0	A	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
14-Sep	0	0	0	3	1	0	A	A	3	3	3	3	3	1	3	0	0	0	0	0	0	0	0	0	1.2	3.4
15-Sep	0	0	0	1	A	1	7	5	C	C	C	C	C	C	14	1	3	1	0	0	0	0	0	0	--	13.6
16-Sep	0	0	0	0	A	0	4	6	5	2	6	1	1	1	1	2	0	0	0	0	0	0	0	0	1.3	6.0
17-Sep	0	0	5	0	A	25	7	8	8	9	4	0	1	0	0	0	0	0	1	0	0	0	0	0	3.0	25.2
18-Sep	0	0	2	9	A	2	33	29	28	7	4	3	2	1	1	0	0	0	0	0	0	0	0	0	5.3	32.9
19-Sep	0	0	0	0	A	0	0	1	1	1	1	1	0	1	1	0	0	0	0	0	1	0	0	0	0.4	0.9
20-Sep	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
21-Sep	1	1	0	0	A	9	7	9	5	4	3	3	4	2	1	2	0	1	0	0	0	0	0	0	2.3	9.1
22-Sep	0	0	0	0	A	0	1	3	3	2	2	2	1	0	1	0	0	0	1	0	0	0	0	0	0.7	3.4
23-Sep	0	5	9	0	A	28	24	7	7	4	3	4	1	1	1	0	0	0	0	0	0	0	0	0	4.3	28.4
24-Sep	0	0	0	0	A	0	0	3	5	4	2	2	13	3	0	0	0	0	0	0	0	0	0	0	1.5	12.7
25-Sep	0	0	0	0	A	0	0	1	3	2	3	1	1	1	1	1	0	0	0	0	0	0	0	0	0.6	2.9
26-Sep	0	0	0	0	A	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0.4	2.1
27-Sep	0	0	0	0	A	0	1	2	27	25	4	2	1	1	1	1	1	1	2	1	1	1	0	0	3.2	26.5
28-Sep	0	0	0	0	A	0	0	14	9	5	9	6	6	6	6	0	0	1	0	0	0	0	0	0	2.8	13.8
29-Sep	0	0	0	0	A	0	0	19	6	7	8	4	6	0	0	0	0	0	0	0	0	0	0	0	2.3	18.9
30-Sep	0	0	0	0	A	0	0	11	8	11	12	2	1	5	0	0	0	0	0	0	0	0	0	0	2.2	11.9
	0.2	0.5	0.9	0.8	0.8	2.9	5.1	6.9	5.6	4.4	2.9	1.7	1.9	1.1	1.3	0.5	0.5	0.4	0.4	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	1.9	5.4	9.1	8.9	7.4	28.4	32.9	29.2	27.9	24.9	11.9	6.2	12.7	5.8	13.6	1.6	3.2	2.1	2.2	0.6	1.3	0.7	3.5	2.0	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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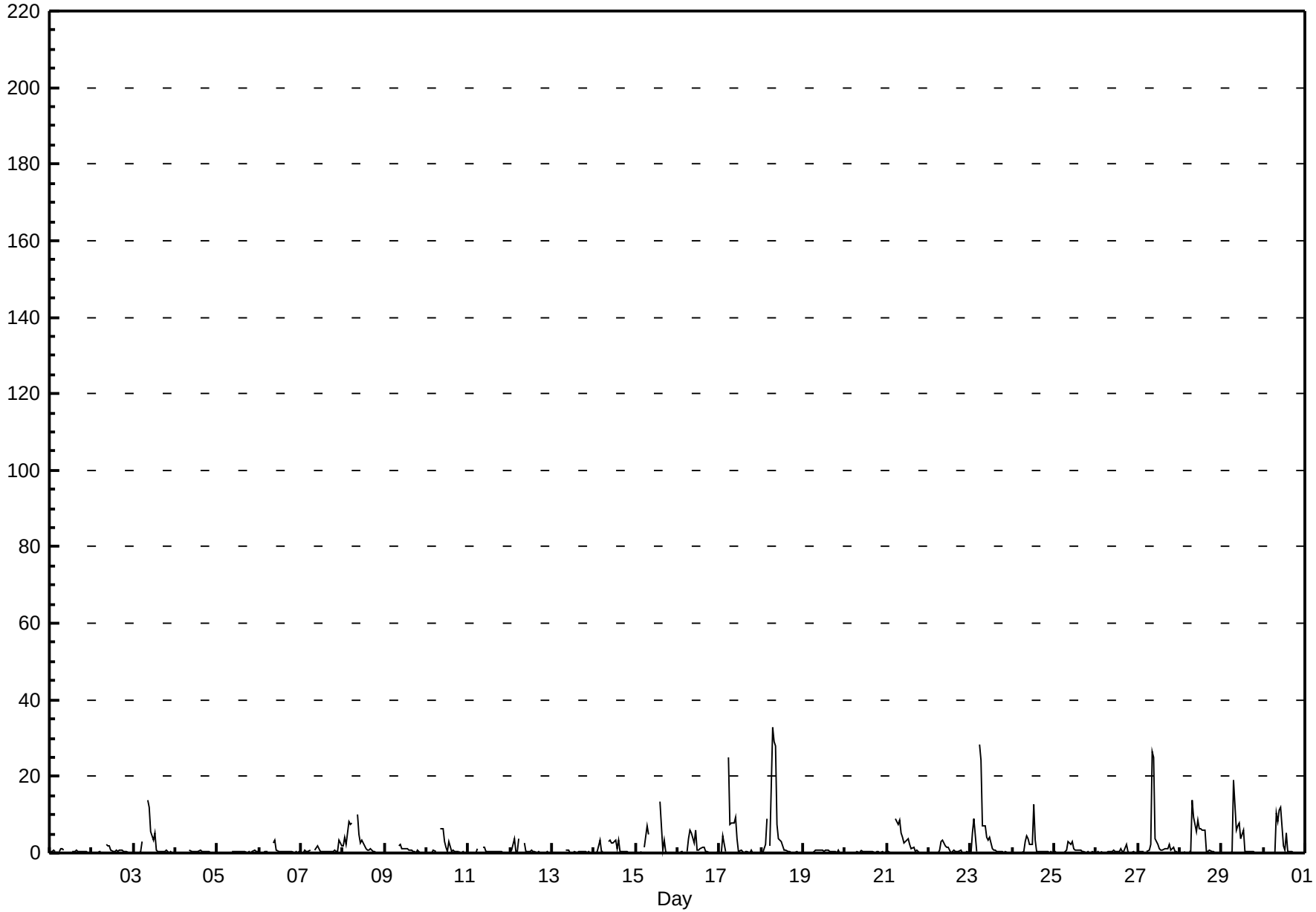
Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - September 2010



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Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 28.8 ppb on Sep 18 08:00 Maximum Daily Average: 6.8 ppb on Sep 23

Minimum Value: 0 ppb on Sep 29 02:00 Minimum Daily Average: 0.8 ppb on Sep 4
Maximum Diurnal Average: 8.3 ppb at hour 8 Minimum Diurnal Average: 1.3 ppb at hour 16
Monthly Average: 3.15 ppb Percentiles: P_1 = 0.4 P_{10} = 0.7 Q_1 = 1.2 Median = 2.2 Q_3 = 3.9 P_{90} = 6.5 P_{99} = 16.9

Hours in Service:	720
Hours of Data:	667
Hours of Missing Data:	53
Hours of Calibration:	49
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	3	4	6	4	A	6	5	5	4	P	P	P	P	1	1	1	1	1	1	2	1	1	1	2	2.6	5.7
2-Sep	3	5	5	6	5	6	A	A	5	4	3	2	1	1	1	1	1	1	1	2	2	1	4	3	2.7	6.0
3-Sep	2	2	2	2	5	4	A	A	13	11	8	5	3	2	1	1	1	1	3	4	1	1	1	1	3.4	13.2
4-Sep	1	1	1	1	1	2	A	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.9
5-Sep	1	1	1	1	1	1	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1.2	3.3
6-Sep	3	2	2	3	2	2	A	A	7	4	2	1	1	1	1	1	1	1	1	2	2	3	3	5	2.3	6.5
7-Sep	7	5	8	4	4	5	A	A	4	2	3	1	1	1	0	1	0	1	1	4	3	2	2	2	2.8	7.9
8-Sep	7	9	6	9	8	10	A	A	13	7	6	6	5	3	3	4	4	2	3	2	2	2	2	2	5.3	13.5
9-Sep	2	2	2	2	2	2	A	A	5	4	3	2	3	3	2	2	2	1	2	5	4	3	6	6	2.9	6.2
10-Sep	6	4	3	3	3	5	A	A	12	9	5	2	1	1	1	1	1	1	1	3	3	3	2	2	3.1	11.5
11-Sep	2	2	2	2	4	6	A	A	4	2	1	1	0	0	0	1	1	1	2	5	3	3	2	4	2.1	5.8
12-Sep	7	7	13	5	4	6	A	A	5	2	2	1	1	1	1	1	1	1	1	2	2	2	2	3	3.0	12.5
13-Sep	3	3	1	3	2	2	A	A	3	2	1	1	0	0	1	1	1	2	2	4	3	2	2	2	1.8	3.6
14-Sep	3	3	4	7	6	6	A	A	7	6	6	5	3	2	2	1	1	2	3	3	3	2	2	2	3.6	7.4
15-Sep	2	3	4	5	A	6	7	5	C	C	C	C	C	C	4	2	2	2	2	1	1	1	2	2	--	6.8
16-Sep	1	2	4	4	A	5	6	11	6	2	3	2	2	1	1	1	1	1	1	1	2	4	5	4	3.0	11.2
17-Sep	8	7	10	7	A	17	12	12	9	10	4	1	1	1	1	1	1	1	2	2	2	2	2	3	5.0	17.3
18-Sep	3	2	6	11	A	11	18	29	26	11	8	6	3	2	2	2	1	1	1	2	2	1	1	2	6.6	28.8
19-Sep	2	2	2	3	A	5	4	4	3	3	3	2	2	2	2	2	3	4	3	2	1	1	1	1	2.5	4.8
20-Sep	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	3	4	3	4	3	3	1.6	3.9
21-Sep	3	3	4	5	A	13	11	10	9	6	5	6	5	3	2	2	1	1	3	4	4	3	3	3	4.7	13.2
22-Sep	4	4	2	3	A	4	6	8	5	3	3	1	1	1	1	1	1	1	7	2	2	2	2	2	3.0	8.4
23-Sep	4	17	17	8	A	15	18	13	9	7	6	5	2	2	2	2	1	2	3	3	6	4	4	4	6.8	18.4
24-Sep	5	5	4	3	A	5	6	8	7	3	2	1	1	2	1	1	2	2	2	3	2	2	2	3	3.2	8.3
25-Sep	3	3	3	2	A	5	7	6	6	5	4	3	2	1	1	1	1	2	2	2	2	2	1	1	2.8	7.0
26-Sep	2	1	2	2	A	3	2	1	1	1	1	1	1	0	1	1	0	1	2	2	3	4	2	2	1.5	3.6
27-Sep	1	3	4	3	A	5	5	6	14	14	8	6	5	4	4	5	6	7	6	5	7	5	4	3	5.7	14.4
28-Sep	1	2	3	2	A	2	1	3	3	2	4	1	5	3	3	1	1	1	1	1	2	1	1	0	1.9	4.8
29-Sep	0	0	0	0	A	3	2	9	7	4	2	1	1	0	1	1	1	1	2	1	3	3	3	2	2.1	8.7
30-Sep	1	1	1	1	A	3	2	8	7	12	7	2	1	1	1	1	1	1	3	2	4	2	2	2	2.9	11.8
	3.1	3.5	4.1	3.7	3.7	5.5	6.8	8.3	6.8	5.0	3.5	2.5	1.9	1.4	1.3	1.3	1.3	1.4	2.2	2.5	2.5	2.3	2.4	2.5	Diurnal Average	
	8.1	17.5	17.0	11.2	8.0	17.3	18.4	28.8	26.1	14.4	7.7	6.5	4.9	3.9	4.3	5.0	5.9	6.5	6.6	5.5	7.1	5.2	6.2	5.7	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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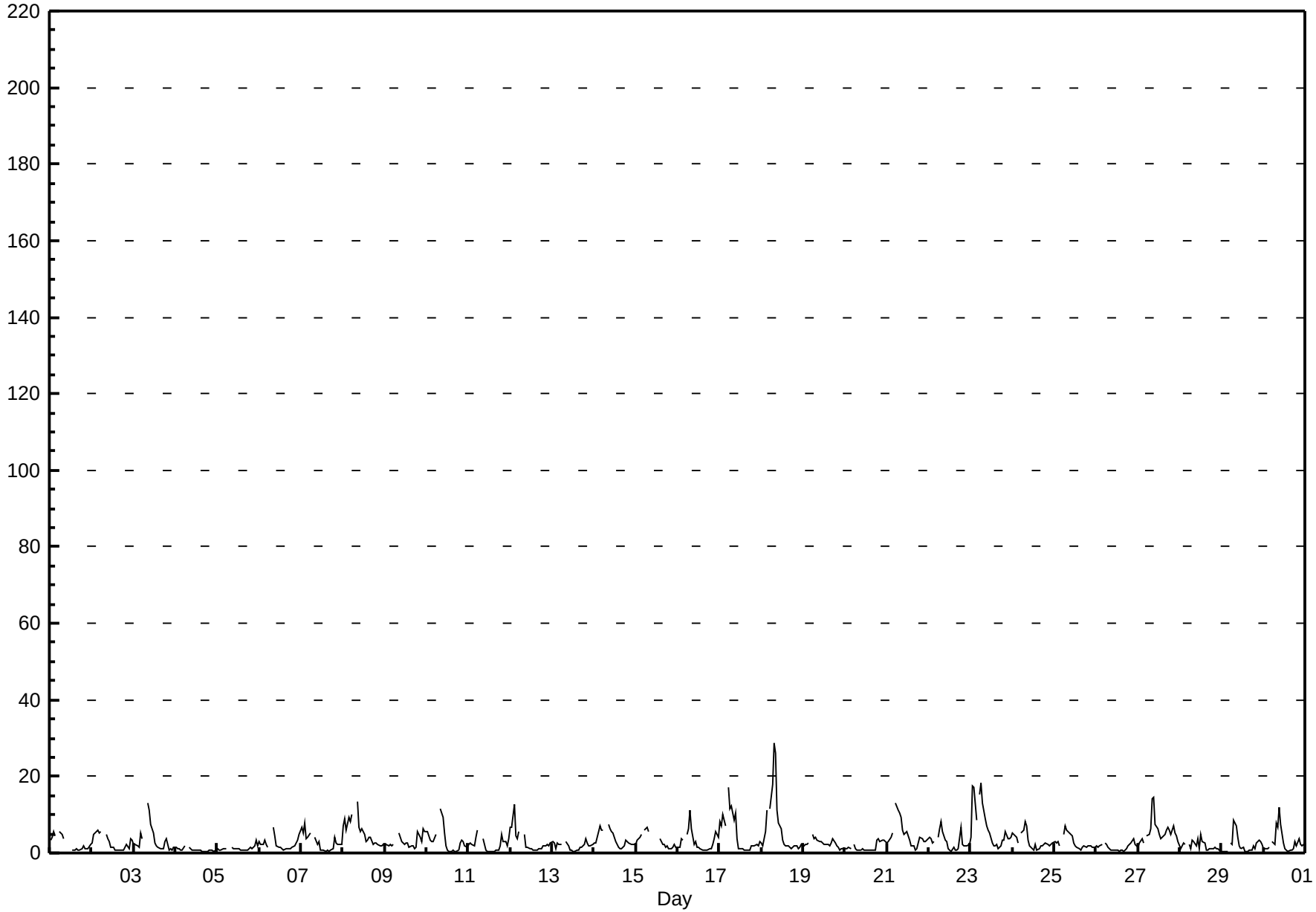
Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - September 2010



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Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - September 2010

Maximum Value: 146.4 ppb on Sep 29 09:00

Maximum Daily Average: 13.1 ppb on Sep 23

Minimum Value: 0 ppb on Sep 29 03:00

Minimum Daily Average: 1.8 ppb on Sep 4

Maximum Diurnal Average: 16.4 ppb at hour 9

Minimum Diurnal Average: 2.4 ppb at hour 17

Monthly Average: 5.92 ppb

Percentiles: P_1 = 0.8 P_{10} = 1.4 Q_1 = 2.1 Median = 3.5 Q_3 = 6.8 P_{90} = 11.2 P_{99} = 44.2

Hours in Service:	720
Hours of Data:	667
Hours of Missing Data:	53
Hours of Calibration:	49
Percent Operational Time:	99.4

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-Sep	4	7	7	7	A	8	7	8	5	P	P	P	P	2	2	2	2	1	4	5	2	3	2	3	4.3	8.5
2-Sep	4	8	8	7	7	8	A	A	8	6	4	3	2	1	1	1	2	3	1	3	5	3	5	7	4.4	8.4
3-Sep	3	3	2	3	10	14	A	A	23	18	10	7	8	3	2	2	2	2	9	15	2	4	1	3	6.5	22.6
4-Sep	3	2	3	1	1	4	A	A	4	1	1	1	2	1	2	1	1	1	1	2	1	1	1	1	1.8	3.9
5-Sep	2	1	1	1	2	2	A	A	2	2	2	1	1	1	1	1	1	1	2	2	2	7	7	3	2.1	7.3
6-Sep	4	3	3	5	2	2	A	A	9	9	2	2	2	1	1	1	1	1	2	2	3	3	5	7	3.3	9.4
7-Sep	8	7	11	5	6	7	A	A	5	3	5	1	1	1	1	2	1	2	2	7	4	4	9	5	4.5	11.0
8-Sep	10	12	10	15	14	14	A	A	17	10	8	9	6	3	5	6	6	3	3	3	3	2	2	2	7.5	17.0
9-Sep	2	2	3	3	2	3	A	A	6	7	3	3	3	3	2	3	2	1	4	11	5	5	7	7	4.0	10.8
10-Sep	6	6	4	4	5	7	A	A	14	13	7	4	1	1	1	2	1	1	2	7	7	8	3	2	4.9	14.3
11-Sep	4	5	3	3	6	7	A	A	5	4	2	2	1	1	2	1	1	1	8	12	5	4	3	6	3.8	11.8
12-Sep	10	11	19	7	5	14	A	A	9	2	3	2	3	2	2	2	2	2	2	3	3	3	3	4	5.1	19.0
13-Sep	4	3	2	4	3	3	A	A	4	3	1	1	1	1	1	2	2	3	3	6	4	4	3	2	2.7	5.7
14-Sep	3	3	7	10	9	8	A	A	8	7	6	6	5	3	5	2	2	3	6	5	3	3	3	3	5.0	9.8
15-Sep	3	7	7	9	A	9	16	10	C	C	C	C	C	C	10	4	6	3	3	2	3	2	7	2	--	15.9
16-Sep	2	3	5	5	A	8	13	16	13	7	37	2	2	2	2	2	1	1	2	2	5	6	9	7	6.7	36.9
17-Sep	12	11	19	11	A	47	18	18	14	15	7	1	1	2	1	1	1	1	7	3	3	3	3	4	8.9	47.0
18-Sep	3	2	17	26	A	17	52	48	41	16	9	8	5	3	3	2	2	2	3	3	4	2	2	3	11.9	52.1
19-Sep	3	4	3	3	A	7	4	5	4	3	3	3	3	4	3	3	6	5	4	2	5	1	2	2	3.5	7.4
20-Sep	3	1	2	1	A	4	1	1	1	2	2	1	1	1	1	2	1	1	6	6	6	8	5	3	2.7	8.0
21-Sep	6	6	6	6	A	21	17	17	11	8	5	6	5	4	3	4	1	5	5	6	7	4	4	4	7.0	21.1
22-Sep	5	6	3	3	A	6	9	10	9	5	4	3	2	1	3	1	2	3	17	6	2	2	3	3	4.7	17.2
23-Sep	10	32	35	12	A	48	45	16	13	9	7	11	4	3	3	6	3	4	6	5	11	8	5	5	13.1	48.4
24-Sep	7	6	6	4	A	7	8	12	14	11	4	3	2	59	2	3	4	4	5	5	4	3	3	4	7.8	59.2
25-Sep	8	4	5	3	A	6	10	11	10	9	9	3	2	2	3	3	3	4	3	3	3	3	2	2	4.8	11.3
26-Sep	3	3	2	3	A	5	3	2	1	1	2	4	3	1	4	1	1	7	3	3	4	7	5	2	3.2	7.1
27-Sep	2	8	7	6	A	9	8	12	43	41	9	9	6	5	5	9	8	10	7	6	13	10	5	4	10.5	43.4
28-Sep	3	3	3	4	A	5	2	19	16	13	15	7	18	10	9	2	1	4	3	3	4	3	3	1	6.6	18.6
29-Sep	1	1	0	1	A	7	5	40	146	12	12	5	8	1	1	2	2	2	6	3	6	6	6	4	12.0	146.4
30-Sep	2	2	2	2	A	5	3	32	20	25	27	5	2	5	1	1	2	2	6	3	6	3	3	2	7.0	32.1
	4.6	5.6	6.8	5.8	5.5	10.5	13.1	16.4	16.4	9.4	7.5	4.1	3.6	4.4	2.7	2.5	2.4	2.7	4.4	4.8	4.5	4.1	4.1	3.6	Diurnal Average	
	12.4	31.7	35.4	25.8	14.1	48.4	52.1	48.5	146.4	41.3	36.9	11.1	18.2	59.2	9.8	8.8	8.1	9.5	17.2	14.9	13.1	9.7	9.2	7.3	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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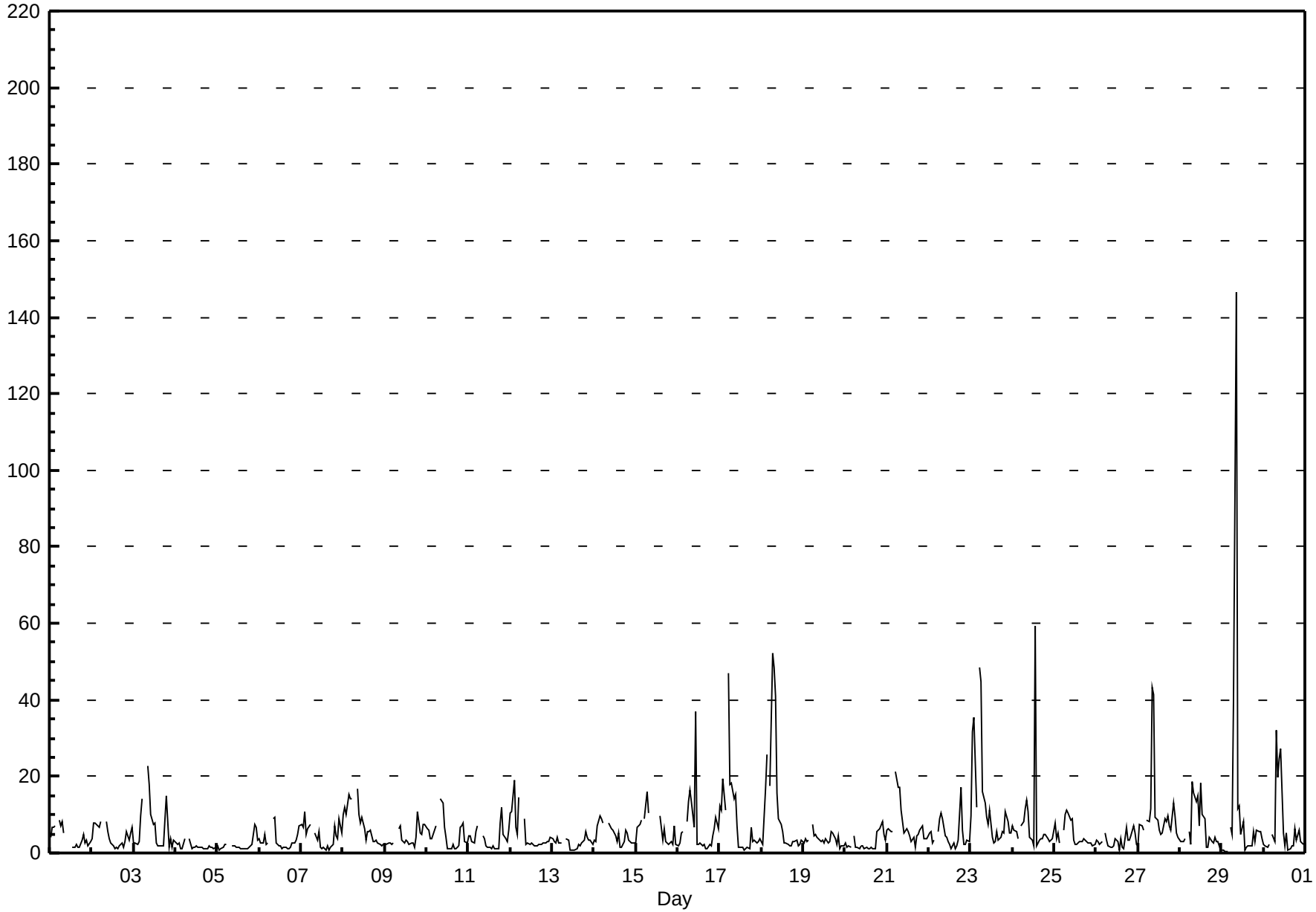
Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - September 2010



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Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 42.2 ppb on Sep 29 16:00
Maximum Daily Average: 35.6 ppb on Sep 29

Minimum Value: 1 ppb on Sep 8 06:00
Minimum Daily Average: 11.5 ppb on Sep 8
Maximum Diurnal Average: 30.0 ppb at hour 16
Minimum Diurnal Average: 12.8 ppb at hour 5
Monthly Average: 22.39 ppb
Percentiles: P_1 = 2.4 P_{10} = 9.9 Q_1 = 16.2 Median = 22.6 Q_3 = 29.3 P_{90} = 33.9 P_{99} = 39.2

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	47
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	10	9	5	9	A	11	10	12	16	P	P	P	P	25	25	25	26	24	23	20	18	18	17	15	16.7	25.6
2-Sep	15	13	12	11	12	11	A	A	14	16	17	22	24	25	26	25	25	25	24	22	21	23	17	15	19.0	26.0
3-Sep	16	16	16	17	10	13	A	A	8	9	15	21	28	32	36	36	37	35	32	26	26	24	23	20	22.6	37.0
4-Sep	22	26	26	28	30	28	A	A	32	34	35	35	34	33	33	33	33	33	32	30	29	26	25	24	30.0	35.1
5-Sep	20	21	20	17	15	17	A	A	19	18	20	23	22	21	19	19	21	19	19	16	16	15	11	14	18.2	22.6
6-Sep	9	10	11	7	9	13	A	A	11	16	21	22	24	27	28	25	25	24	21	18	19	17	14	10	17.3	27.8
7-Sep	7	8	5	9	9	8	A	A	9	14	20	25	24	25	25	24	24	23	20	16	16	12	12	10	15.7	25.2
8-Sep	5	3	4	2	3	1	A	A	3	8	10	10	12	16	17	16	16	21	21	19	19	17	16	16	11.5	20.7
9-Sep	16	15	14	13	13	12	A	A	12	11	12	14	16	16	27	27	27	29	28	19	18	18	13	11	17.2	28.6
10-Sep	9	9	10	11	9	8	A	A	5	8	11	21	27	31	35	34	34	34	31	27	26	23	25	23	20.5	35.0
11-Sep	20	18	18	17	15	13	A	A	18	20	26	27	27	28	27	27	27	27	25	21	23	21	21	16	21.9	27.8
12-Sep	12	10	5	15	16	12	A	A	15	20	20	19	21	23	24	24	23	22	20	20	20	19	18	17	17.9	24.3
13-Sep	16	17	22	18	18	18	A	A	20	25	29	31	33	33	33	33	30	29	26	22	22	23	22	22	24.7	33.4
14-Sep	18	18	14	4	8	7	A	A	10	11	15	17	26	30	33	34	34	32	28	23	24	25	27	27	21.1	34.4
15-Sep	27	24	18	15	A	9	6	7	8	10	18	21	C	C	C	C	18	20	22	23	23	22	19	20	17.4	27.3
16-Sep	20	20	17	15	A	13	8	9	17	22	22	24	26	28	32	33	31	32	31	30	25	24	18	21	22.5	32.7
17-Sep	16	15	9	11	A	6	2	6	10	11	21	31	32	34	36	37	38	38	35	34	33	32	31	29	23.9	38.4
18-Sep	29	29	21	10	A	9	10	2	6	17	21	26	33	35	37	36	36	35	33	31	30	34	34	31	25.5	36.8
19-Sep	32	28	26	25	A	21	21	20	22	23	23	24	24	24	25	26	23	19	24	25	25	28	29	28	24.6	32.0
20-Sep	26	26	28	25	A	18	18	18	18	19	21	22	22	23	24	26	24	23	19	16	15	14	12	11	20.3	28.3
21-Sep	13	13	5	7	A	2	2	4	7	10	11	11	15	18	22	26	30	29	26	23	20	21	19	17	15.2	30.1
22-Sep	17	15	16	15	A	14	12	12	16	19	23	31	31	33	33	34	38	37	29	31	33	34	33	34	25.7	37.9
23-Sep	27	9	5	7	A	8	2	5	9	15	18	23	26	31	33	34	35	34	29	29	26	27	25	22	20.9	35.3
24-Sep	21	21	21	23	A	20	17	16	21	26	28	33	35	35	35	34	32	33	30	26	28	28	27	26	26.8	35.1
25-Sep	26	26	25	26	A	25	22	23	18	20	26	27	29	29	28	27	26	23	23	20	19	21	30	30	24.7	30.3
26-Sep	24	21	20	19	A	30	29	30	32	34	37	39	39	39	38	38	37	36	33	33	29	26	28	29	31.2	39.3
27-Sep	32	27	20	25	A	23	19	18	10	14	20	20	21	22	22	20	18	13	12	12	9	12	12	16	18.1	31.6
28-Sep	23	21	19	20	A	35	34	31	31	32	32	34	33	34	34	34	33	31	31	29	27	29	30	32	29.9	34.9
29-Sep	33	34	34	34	A	32	31	28	31	34	36	37	37	40	41	42	42	39	38	39	37	34	33	32	35.6	42.2
30-Sep	32	32	31	28	A	27	27	22	22	23	28	34	37	39	39	39	38	36	33	32	31	33	33	32	31.7	39.3
	19.8	18.5	16.6	16.1	12.8	15.4	15.9	15.5	15.6	18.6	21.9	25.0	27.2	28.6	29.8	30.0	29.3	28.5	26.6	24.5	23.5	23.2	22.5	21.6	Diurnal Average	
	33.1	33.9	34.3	34.4	29.8	34.9	34.3	30.7	32.2	34.2	36.8	39.2	39.3	39.8	41.1	42.2	41.8	39.2	37.8	38.5	36.8	34.1	33.6	33.6	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

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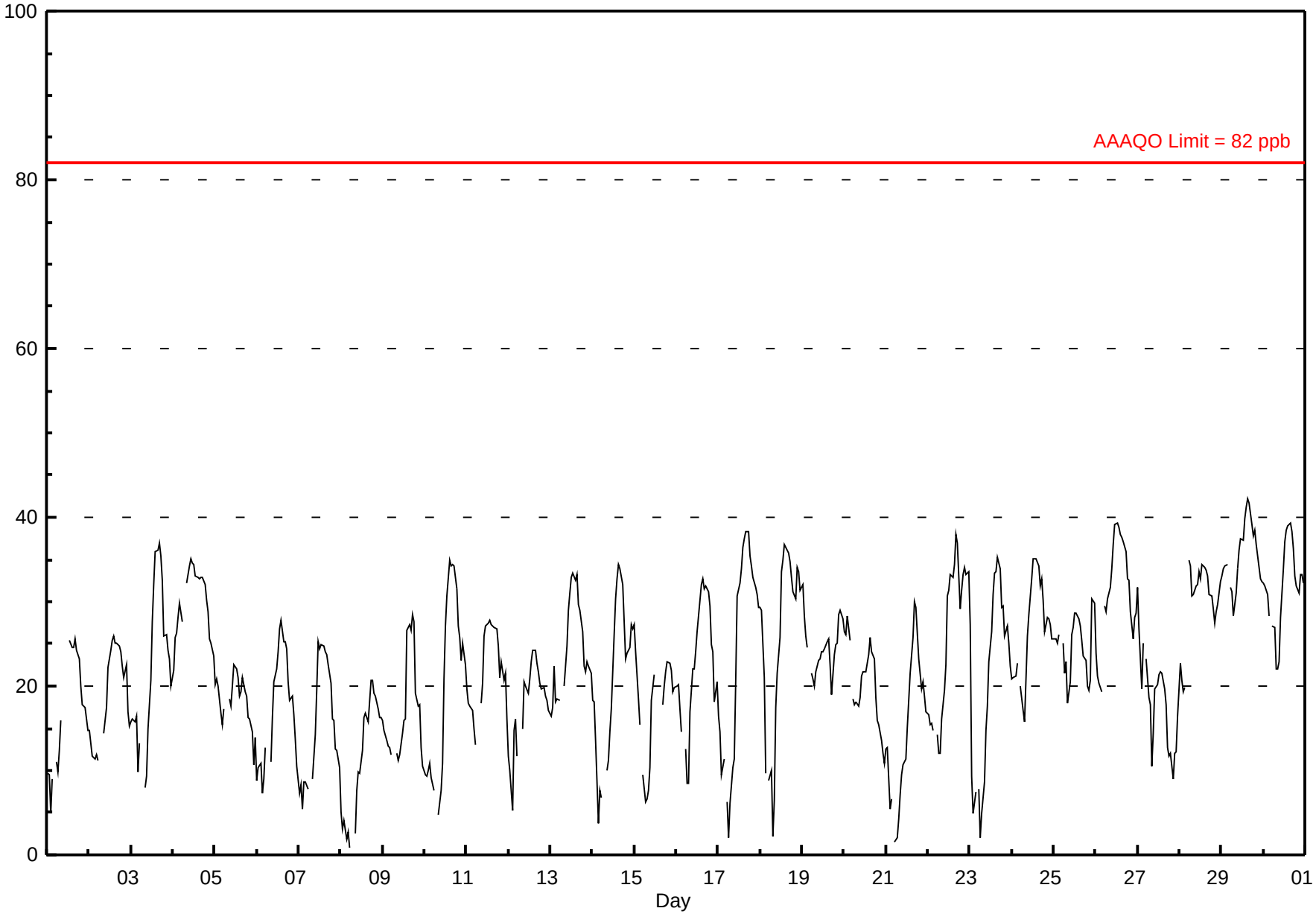
Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - September 2010

Maximum Value: 43.8 ppb on Sep 29 17:00

Maximum Daily Average: 37.4 ppb on Sep 29

Minimum Value: 3 ppb on Sep 8 06:00

Minimum Daily Average: 14.6 ppb on Sep 8

Maximum Diurnal Average: 31.7 ppb at hour 15

Minimum Diurnal Average: 15.1 ppb at hour 5

Monthly Average: 24.90 ppb

Percentiles: P_1 = 6.6 P_{10} = 12.9 Q_1 = 18.8 Median = 25.1 Q_3 = 32.0 P_{90} = 35.7 P_{99} = 40.7

Hours in Service:	720
Hours of Data:	669
Hours of Missing Data:	51
Hours of Calibration:	47
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	13	16	7	14	A	13	13	15	18	P	P	P	P	27	26	27	27	26	27	23	20	20	19	17	19.4	27.5
2-Sep	18	18	13	14	14	16	A	A	16	19	20	27	26	27	28	26	26	26	25	24	24	24	20	18	21.3	27.9
3-Sep	17	17	17	18	14	16	A	A	11	13	17	25	29	35	38	38	39	38	36	29	27	27	26	23	25.0	39.2
4-Sep	28	29	29	31	32	30	A	A	37	36	37	36	36	34	34	34	34	34	34	32	31	27	26	25	32.1	36.9
5-Sep	22	22	21	19	17	19	A	A	20	20	22	24	23	23	20	21	22	20	20	18	17	17	14	16	20.0	23.9
6-Sep	11	13	14	11	11	15	A	A	16	19	23	23	27	28	29	27	27	27	22	19	20	19	15	14	19.6	29.2
7-Sep	9	10	8	9	10	9	A	A	11	20	24	27	27	26	26	25	24	24	23	19	19	15	15	13	17.9	27.0
8-Sep	13	9	8	5	8	3	A	A	4	14	14	16	15	17	19	18	19	23	23	21	20	19	17	17	14.6	23.0
9-Sep	17	16	15	14	13	13	A	A	14	13	14	16	17	20	30	29	29	30	29	23	19	19	15	12	18.9	30.5
10-Sep	11	12	12	13	11	8	A	A	7	10	17	28	29	36	36	36	36	36	34	30	28	28	28	26	23.2	36.2
11-Sep	23	22	19	20	18	15	A	A	19	22	28	28	29	29	29	28	28	28	28	24	25	22	23	21	24.0	29.2
12-Sep	17	12	11	18	18	19	A	A	22	22	22	22	23	25	26	26	24	23	22	21	21	20	19	19	20.6	25.7
13-Sep	18	19	28	23	20	20	A	A	23	30	30	34	35	36	35	36	35	31	30	25	23	24	24	23	27.2	35.6
14-Sep	21	21	20	8	9	10	A	A	11	14	17	20	31	33	34	35	35	34	31	28	26	27	29	28	23.7	35.2
15-Sep	28	27	25	18	A	11	9	9	11	13	23	23	C	C	C	C	19	21	23	24	25	25	23	21	19.9	28.0
16-Sep	21	21	20	18	A	14	14	15	21	24	24	26	30	31	36	34	32	33	33	31	30	27	24	24	25.4	35.8
17-Sep	23	19	19	16	A	17	5	8	12	17	28	33	33	36	38	39	40	40	39	37	34	34	32	30	27.3	39.7
18-Sep	30	30	29	19	A	19	21	4	17	20	25	33	37	36	38	38	38	36	35	33	33	35	35	34	29.3	38.1
19-Sep	33	31	28	26	A	23	22	21	23	24	25	25	25	26	26	27	28	24	26	27	26	30	31	29	26.4	33.3
20-Sep	29	28	30	29	A	20	19	19	19	21	23	23	23	25	28	28	26	25	22	18	17	16	14	12	22.3	30.3
21-Sep	14	14	9	8	A	5	5	8	10	11	12	13	17	20	25	29	32	32	29	25	22	22	21	19	17.4	32.0
22-Sep	19	16	17	16	A	16	14	15	20	21	31	32	33	35	34	37	41	39	36	33	35	35	36	35	27.9	40.7
23-Sep	35	21	10	12	A	15	9	7	13	17	20	29	29	33	38	36	38	37	33	31	31	30	28	26	25.0	37.9
24-Sep	23	22	24	25	A	21	20	18	27	28	30	35	37	36	37	36	35	36	33	28	30	29	29	27	28.9	36.9
25-Sep	27	28	27	29	A	27	24	25	29	26	28	30	30	30	30	28	28	25	25	22	21	28	32	33	27.4	32.5
26-Sep	30	25	22	26	A	31	31	33	34	36	39	40	40	40	40	39	38	38	35	35	33	31	32	32	33.8	40.4
27-Sep	33	33	26	31	A	25	24	26	24	21	23	23	23	23	23	22	20	16	14	14	13	16	15	23	22.2	33.1
28-Sep	25	22	21	23	A	37	36	33	32	33	34	35	35	36	35	35	34	33	32	30	30	31	33	33	31.7	36.7
29-Sep	35	35	35	35	A	33	33	32	34	36	38	39	39	42	43	43	44	41	40	40	40	36	35	33	37.4	43.8
30-Sep	33	33	32	31	A	28	28	27	28	31	31	37	39	40	40	41	40	39	35	33	33	35	34	33	34.0	40.9
	22.5	21.4	19.9	19.3	15.1	18.3	19.1	18.6	19.4	21.7	24.8	27.6	29.2	30.5	31.7	31.5	31.2	30.5	29.1	26.6	25.7	25.5	24.7	23.9	Diurnal Average	
	34.8	34.9	35.3	35.0	32.5	36.7	35.8	33.3	36.9	36.0	39.5	40.4	40.4	41.7	42.9	43.2	43.8	40.7	39.9	40.4	39.8	36.4	35.5	35.0	Diurnal Maximum	

C - Calibration P - Power Failure A - Automated Daily Zero Span

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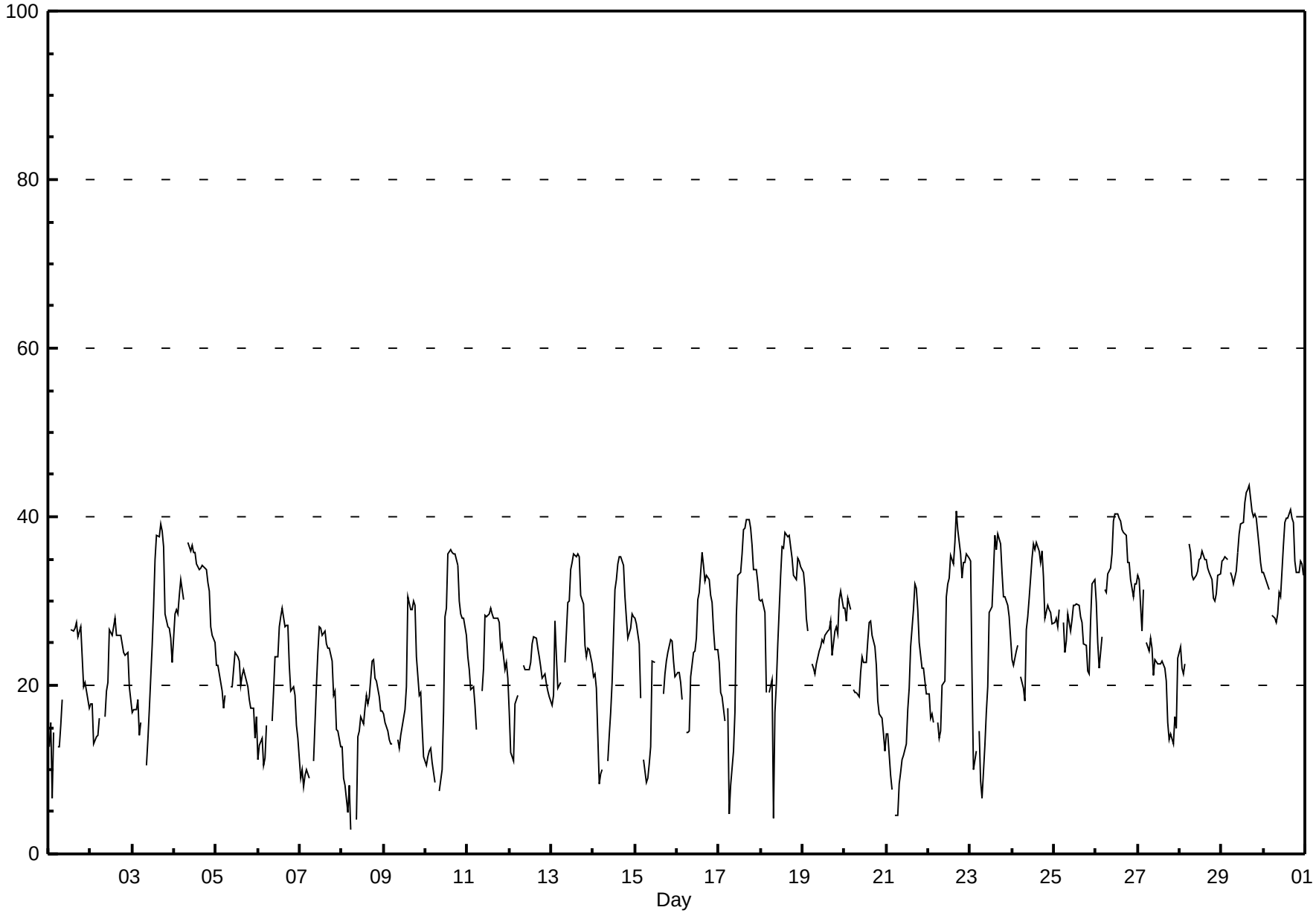
Hourly Maximums

Ozone (O_3) - ppb

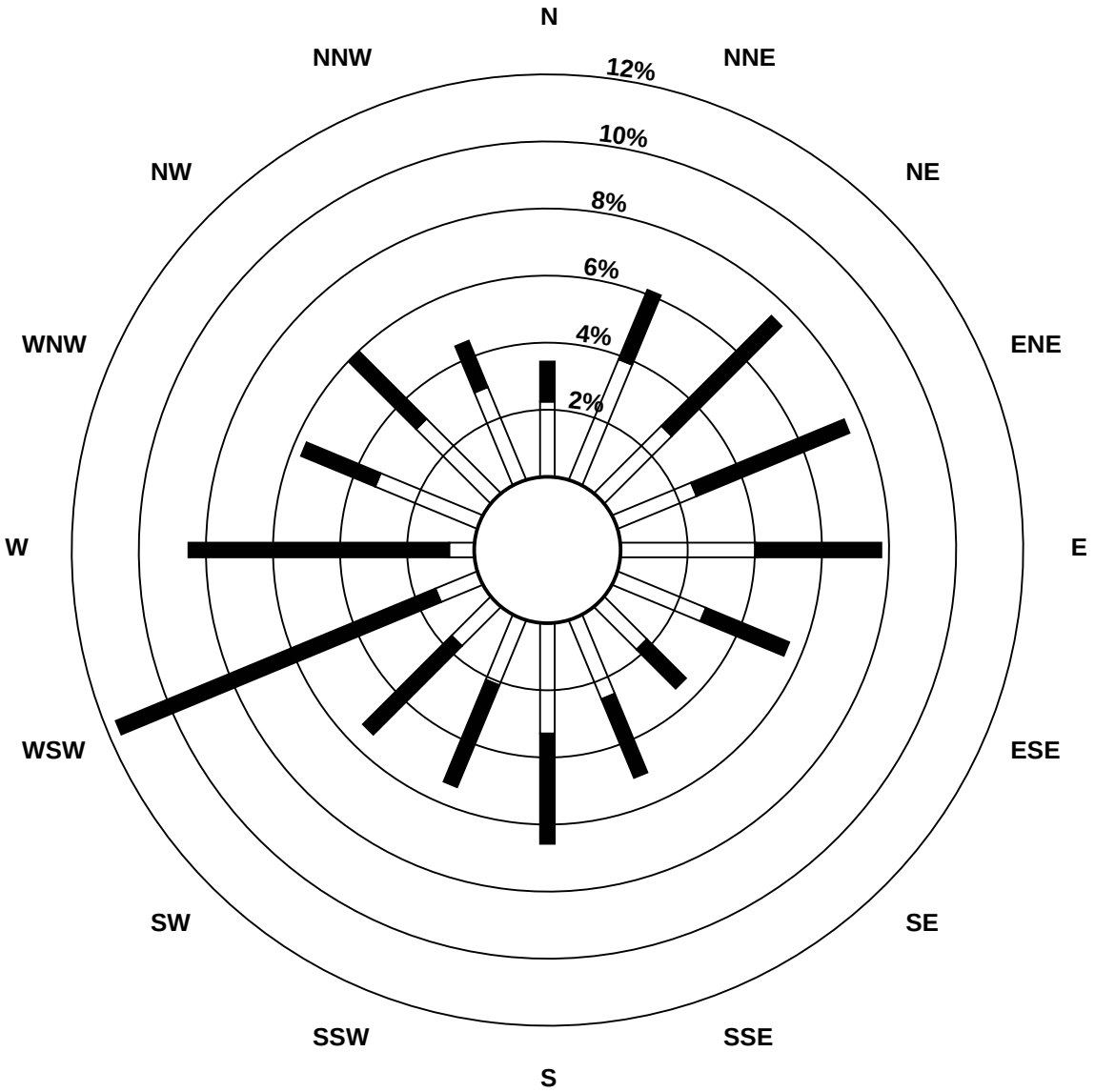
Beaverlodge - September 2010



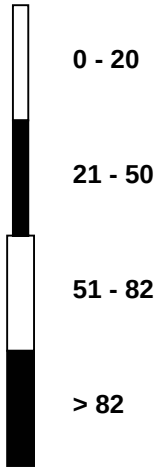
Pollutant Rose

Ozone (O_3) - ppb

Beaverlodge - September 2010



Pollutant Classes (ppb)



PASZA
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Eight Hour Running Averages

Ozone (O_3) - ppb

Beaverlodge - September 2010

Maximum Value: 39.7 ppb on Sep 29 20:00

Minimum Value: 2.5 ppb on Sep 8 09:00

Percentiles: P_1 = 5.4 P_{10} = 11.4 Q_1 = 16.3 Median = 22.1 Q_3 = 28.0 P_{90} = 32.8 P_{99} = 37.4

Hours in Service:	720
Hours of Data:	705
Hours of Missing Data:	15
Hours of Calibration:	9
Percent Operational Time:	99.2

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	16	14	12	11	10	9	9	9	10	10	N	N	N	N	N	N	N	N	25	24	23	22	21	20	24.6
2-Sep	19	17	16	15	14	13	13	12	12	13	14	15	18	20	21	21	23	24	25	25	24	24	23	22	24.6
3-Sep	20	19	18	18	16	15	15	15	13	12	12	13	16	19	21	23	27	30	32	33	33	32	30	28	32.8
4-Sep	26	25	24	24	25	25	26	27	28	30	31	32	33	34	34	34	34	34	33	33	32	31	30	29	33.9
5-Sep	27	26	24	23	21	20	19	18	18	18	18	19	20	20	20	20	20	21	20	20	19	18	17	16	27.3
6-Sep	15	14	13	12	11	10	10	10	10	11	13	15	18	20	21	22	24	25	25	24	23	22	20	19	24.5
7-Sep	16	14	12	11	10	9	8	8	8	9	11	14	17	20	20	21	23	24	24	23	22	20	18	17	23.8
8-Sep	14	12	10	8	6	5	4	3	2	3	4	6	7	10	11	11	13	15	16	17	18	18	18	18	18.2
9-Sep	18	17	17	16	15	14	14	14	13	12	12	12	13	14	15	17	19	21	23	23	24	24	22	20	23.9
10-Sep	18	16	13	12	11	10	10	9	9	8	8	10	13	17	20	21	25	28	31	32	32	31	29	28	31.8
11-Sep	26	24	22	21	20	18	18	17	16	17	18	20	22	24	25	25	26	27	27	26	26	25	24	23	27.1
12-Sep	21	19	16	15	15	13	12	12	12	14	16	17	18	20	20	21	22	22	22	22	22	21	21	20	22.1
13-Sep	19	18	19	19	18	18	18	19	19	20	21	24	26	28	29	30	31	31	31	30	29	27	26	25	31.3
14-Sep	23	22	20	18	16	14	13	11	10	9	9	11	14	18	20	22	25	28	29	30	30	29	28	27	30.1
15-Sep	27	26	24	23	23	21	18	15	13	11	11	11	11	12	N	N	N	N	N	N	N	21	21	21	26.6
16-Sep	21	21	21	19	19	18	16	15	14	14	15	16	18	20	23	26	27	29	30	30	30	30	28	26	30.5
17-Sep	25	22	20	17	16	14	12	9	9	8	10	12	15	18	23	27	30	33	35	36	36	36	35	34	35.9
18-Sep	33	32	30	27	26	23	20	16	12	11	11	13	16	19	22	27	30	32	34	35	34	34	34	33	34.5
19-Sep	32	32	31	30	30	28	26	25	23	23	22	22	22	23	23	24	24	24	24	24	24	24	25	25	32.5
20-Sep	26	26	27	27	27	26	24	23	22	21	20	19	19	20	21	22	22	23	23	22	21	20	19	17	27.4
21-Sep	15	14	12	11	11	9	7	6	6	5	6	7	8	10	12	15	18	20	22	24	24	25	24	23	24.5
22-Sep	21	20	18	17	17	16	15	14	14	15	16	18	20	22	25	28	30	32	33	33	34	34	34	34	33.8
23-Sep	32	29	26	23	21	18	13	9	6	7	9	11	13	16	20	24	27	29	31	32	31	31	30	29	32.4
24-Sep	27	25	24	23	23	22	21	20	20	21	22	23	25	26	29	31	32	33	33	33	32	31	30	29	33.4
25-Sep	28	27	26	26	26	26	25	25	23	23	23	23	24	24	25	25	26	27	26	26	24	23	24	24	28.0
26-Sep	24	24	23	23	24	25	25	25	26	28	30	33	34	35	36	37	38	38	37	36	35	34	32	31	37.8
27-Sep	30	29	28	27	26	26	25	23	20	18	18	18	18	18	18	19	20	19	18	17	16	15	13	13	30.5
28-Sep	14	15	16	17	18	21	24	26	27	29	31	33	33	33	33	33	33	33	33	32	32	31	30	30	33.2
29-Sep	30	31	31	32	32	33	33	32	32	32	32	33	33	34	36	37	39	39	40	40	40	39	38	37	39.7
30-Sep	35	35	34	32	32	31	30	28	27	26	25	26	28	29	30	33	35	36	37	37	36	35	35	34	36.9
	35.5	34.6	33.7	32.4	32.4	32.8	33.0	32.4	32.1	32.1	32.4	32.9	33.7	34.9	36.0	37.4	38.7	39.4	39.6	39.7	39.7	38.9	37.9	36.7	
	Diurnal Maximums																								

N - Not Valid

PASZA
Peace Airshed Zone Association

Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Beaverlodge - September 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 13.7 $\mu g/m^3$ on Sep 18 09:00
Maximum Daily Average: 8.8 $\mu g/m^3$ on Sep 18

Minimum Value: 2 $\mu g/m^3$ on Sep 25 04:00
Minimum Daily Average: 4.2 $\mu g/m^3$ on Sep 5
Maximum Diurnal Average: 6.3 $\mu g/m^3$ at hour 9
Minimum Diurnal Average: 5.7 $\mu g/m^3$ at hour 21
Monthly Average: 5.93 $\mu g/m^3$
Percentiles: P_1 = 2.7 P_{10} = 3.8 Q_1 = 4.8 Median = 5.9 Q_3 = 6.9 P_{90} = 8.1 P_{99} = 10.4

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	0
Percent Operational Time:	99.3

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-Sep	6	6	6	6	7	5	6	6	5	P	P	P	P	3	5	6	5	7	6	6	4	5	5	4	5.6	7.1
2-Sep	4	5	6	6	6	6	7	7	5	5	5	5	3	5	7	4	6	6	4	6	6	5	5	6	5.4	7.4
3-Sep	3	6	6	5	7	6	6	5	8	7	7	11	7	3	7	6	9	7	10	8	3	6	5	6	6.4	11.4
4-Sep	6	6	3	5	4	6	5	4	4	3	5	7	3	5	6	5	5	6	5	3	5	3	3	4	4.7	7.1
5-Sep	3	3	4	5	5	5	4	4	3	4	3	3	4	3	4	4	5	6	6	5	5	5	5	5	4.2	5.8
6-Sep	3	5	6	6	6	6	6	6	6	7	6	6	6	8	4	3	6	7	6	7	6	6	7	5	5.7	7.7
7-Sep	6	7	7	6	6	6	6	7	9	7	4	6	7	6	2	4	7	6	7	5	6	3	4	3	5.7	9.4
8-Sep	4	6	4	4	5	3	6	6	5	5	5	6	5	6	7	9	8	7	7	7	6	7	7	8	5.9	8.7
9-Sep	7	7	7	7	7	7	8	9	8	9	8	7	7	8	5	5	4	6	6	8	9	9	8	8	7.3	9.0
10-Sep	7	7	8	7	7	8	8	7	7	7	9	7	7	8	4	5	5	5	5	5	6	6	5	5	6.4	9.3
11-Sep	6	6	5	6	7	7	7	6	4	5	5	4	4	5	7	4	4	4	4	5	6	7	6	6	5.4	7.4
12-Sep	7	6	7	5	6	6	7	7	7	7	8	8	8	9	8	9	9	7	7	6	5	6	6	7	7.1	9.5
13-Sep	7	5	5	6	5	6	6	5	6	5	4	3	4	5	4	7	6	7	5	5	6	6	5	5	5.4	7.0
14-Sep	5	6	6	7	6	4	5	5	3	4	6	6	5	4	4	5	6	5	7	7	8	8	9	9	5.9	9.5
15-Sep	8	8	7	8	9	10	8	5	6	9	10	8	9	9	9	9	7	4	4	5	2	3	4	5	6.9	9.9
16-Sep	5	4	5	4	4	4	4	5	7	8	6	7	7	7	7	3	5	6	6	4	4	6	6	5	5.4	8.4
17-Sep	6	5	6	7	6	6	6	6	8	10	7	5	5	5	8	6	5	5	6	7	7	7	7	5	6.3	10.1
18-Sep	8	9	8	10	10	9	9	13	14	11	9	7	8	8	7	9	9	8	10	9	7	7	7	6	8.8	13.7
19-Sep	6	6	8	6	6	8	8	7	6	4	5	6	7	6	5	7	7	7	8	N	3	4	4	4	6.1	8.2
20-Sep	6	5	6	5	5	4	4	5	5	4	4	3	4	6	5	4	6	5	5	4	6	6	7	7	5.0	7.0
21-Sep	5	6	7	6	5	4	5	5	5	4	3	5	7	4	4	6	7	5	5	7	6	5	5	5	5.2	7.1
22-Sep	6	6	8	7	6	7	8	7	6	6	6	5	6	6	5	7	5	5	5	6	5	5	7	6	6.0	7.8
23-Sep	5	6	5	6	6	7	6	6	7	6	6	6	7	5	6	4	5	7	6	8	8	8	8	9	6.4	8.9
24-Sep	9	7	7	8	8	7	6	4	6	5	5	3	6	6	4	8	6	5	5	4	5	5	2	3	5.6	8.5
25-Sep	8	11	4	2	4	7	8	9	6	7	4	4	5	5	9	5	7	10	7	5	3	4	3	3	5.9	11.3
26-Sep	4	5	4	5	3	4	4	4	6	5	4	4	5	5	4	6	6	6	5	4	6	7	7	8	5.0	7.7
27-Sep	7	4	6	5	4	6	5	7	6	6	8	9	7	9	10	10	10	9	9	8	9	6	7	8	7.3	10.5
28-Sep	7	6	3	2	4	5	4	3	5	4	6	7	6	7	4	5	6	3	5	6	5	6	5	5	5.1	7.4
29-Sep	5	3	5	6	3	5	4	7	8	6	6	5	5	5	5	6	3	6	6	5	5	4	6	7	5.3	7.8
30-Sep	6	6	7	6	5	8	7	6	7	7	6	7	8	6	5	5	5	6	8	8	7	7	6	7	6.4	8.3
	5.9	6.0	5.9	5.7	5.7	6.0	6.2	6.1	6.3	6.2	5.9	5.9	6.0	5.9	5.7	5.8	6.1	6.1	6.1	6.0	5.7	5.7	5.7	5.8	Diurnal Average	
	8.5	11.3	8.1	9.7	10.0	9.7	9.0	12.6	13.7	11.1	9.9	11.4	8.8	9.5	10.5	10.1	9.5	10.2	10.4	9.1	9.4	8.8	9.5	9.5	Diurnal Maximum	

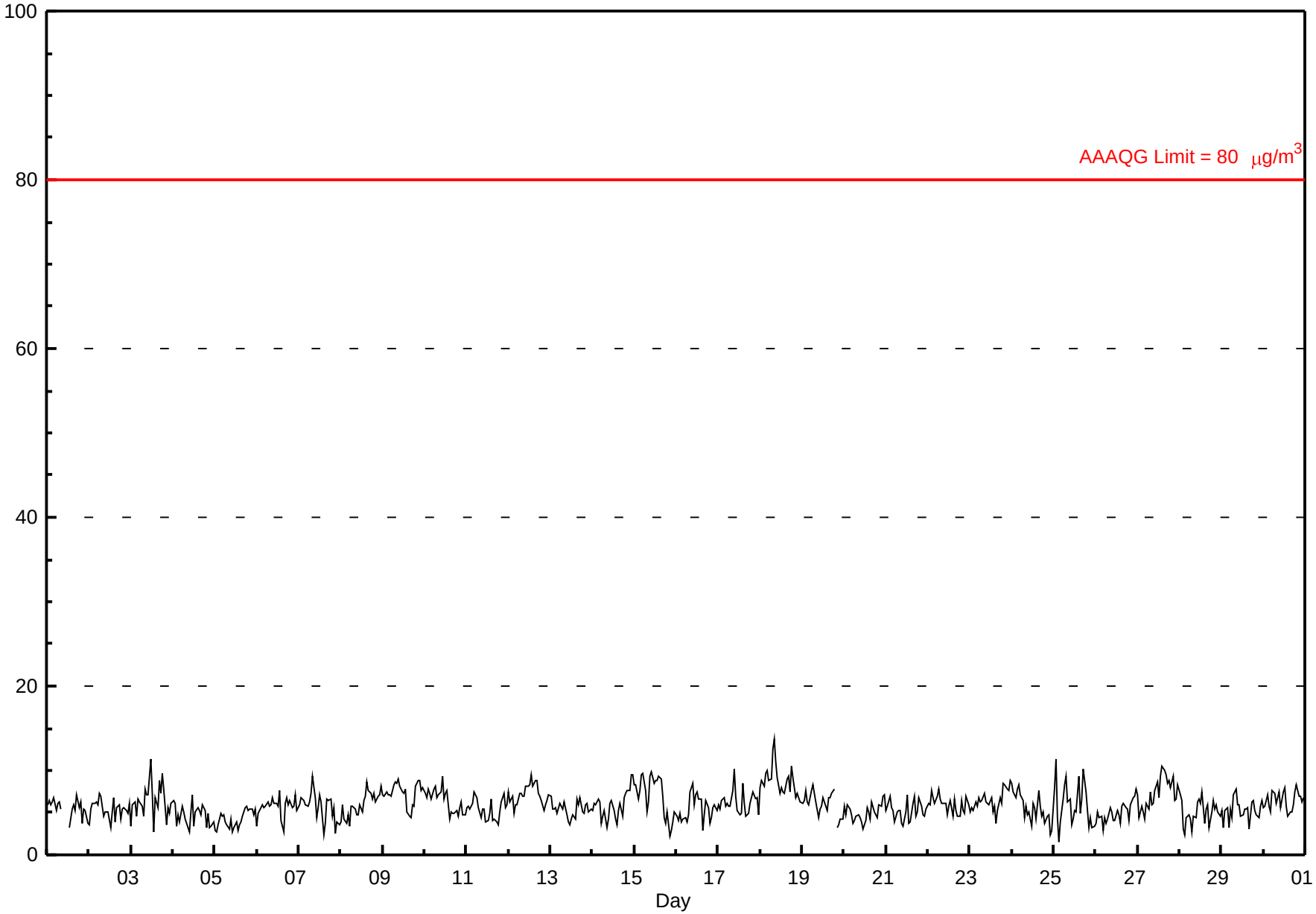
P - Power Failure N - Not Valid
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

PASZA
Peace Airshed Zone Association

Hourly Averages

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Beaverlodge - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Beaverlodge - September 2010

Maximum Value: 14.4 $\mu g/m^3$ on Sep 18 08:00

Maximum Daily Average: 9.8 $\mu g/m^3$ on Sep 18

Minimum Value: 3 $\mu g/m^3$ on Sep 25 04:00

Minimum Daily Average: 4.9 $\mu g/m^3$ on Sep 5

Maximum Diurnal Average: 7.3 $\mu g/m^3$ at hour 9

Minimum Diurnal Average: 6.5 $\mu g/m^3$ at hour 21

Monthly Average: 6.94 $\mu g/m^3$

Percentiles: $P_1 = 3.6$ $P_{10} = 4.8$ $Q_1 = 5.8$ Median = 6.8 $Q_3 = 7.9$ $P_{90} = 9.2$ $P_{99} = 11.4$

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	0
Percent Operational Time:	99.3

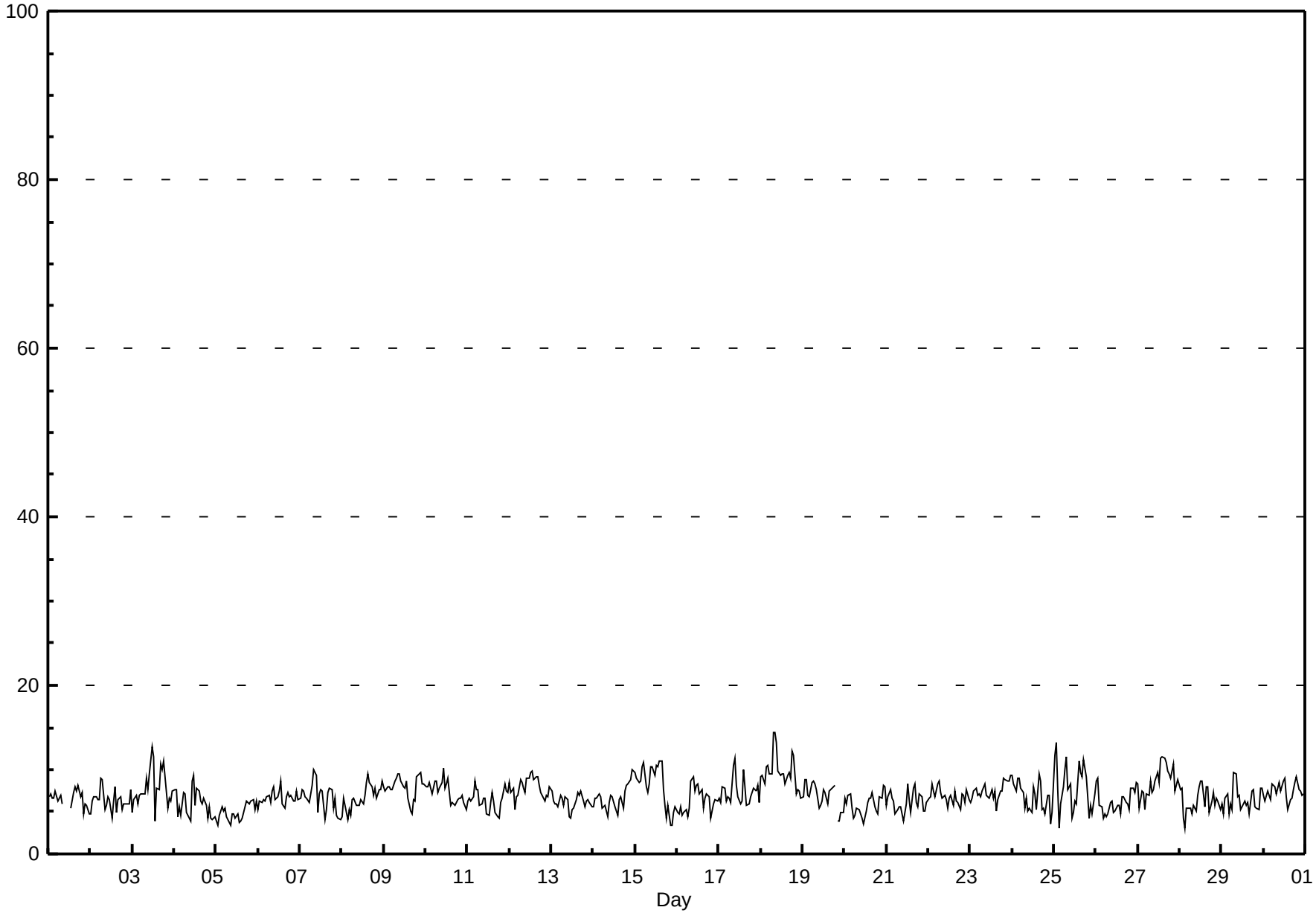
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	7	7	7	7	7	6	7	7	6	P	P	P	P	5	7	8	7	8	7	7	5	6	6	5	6.6	8.2
2-Sep	5	6	7	7	7	6	9	9	5	6	7	7	4	6	8	5	6	7	5	6	6	6	6	8	6.4	9.0
3-Sep	5	7	7	6	7	7	7	7	9	8	10	13	11	4	8	8	11	10	11	9	5	7	6	7	7.9	12.7
4-Sep	8	8	4	6	5	7	7	5	5	4	9	9	6	8	7	6	6	7	6	4	6	4	4	4	6.0	9.3
5-Sep	4	3	5	6	5	5	4	4	3	5	5	4	5	4	4	4	5	6	6	6	6	7	5	6	4.9	6.5
6-Sep	5	6	6	7	6	7	7	6	7	8	6	7	7	9	6	5	7	7	7	7	6	6	8	6	6.7	8.6
7-Sep	7	8	8	7	7	6	7	8	10	9	5	7	8	7	4	5	7	8	8	5	7	5	4	4	6.7	10.1
8-Sep	4	7	6	4	5	5	6	7	6	6	6	6	6	7	8	10	8	8	7	8	7	8	8	9	6.7	9.5
9-Sep	8	8	8	8	8	8	9	9	9	9	9	8	8	9	7	5	5	7	6	9	10	10	8	8	8.0	9.7
10-Sep	8	8	8	8	7	9	9	7	8	9	10	8	8	9	6	6	6	6	6	7	7	7	6	5	7.4	10.2
11-Sep	6	7	6	7	9	8	8	6	6	7	7	5	5	6	7	6	5	4	4	6	7	8	7	7	6.4	8.6
12-Sep	8	7	8	5	7	7	9	8	8	7	9	9	10	10	9	9	9	8	7	7	6	7	7	8	7.9	9.9
13-Sep	7	6	6	6	6	7	7	6	7	6	4	4	5	5	6	7	7	7	6	6	6	6	6	6	6.1	7.5
14-Sep	6	7	7	7	7	5	6	6	4	6	7	7	6	5	5	6	7	5	7	8	8	9	10	10	6.7	10.0
15-Sep	10	9	8	9	10	11	8	7	8	10	10	9	10	10	11	11	8	6	4	6	3	3	5	6	8.1	11.1
16-Sep	5	5	6	4	5	5	4	5	9	9	7	8	8	7	8	5	7	7	7	4	5	6	7	6	6.2	9.1
17-Sep	7	6	8	8	6	7	7	6	11	11	8	7	6	6	10	8	6	6	7	7	8	7	8	6	7.3	11.4
18-Sep	9	9	8	10	11	10	10	14	14	13	10	9	10	9	8	9	10	9	12	12	7	8	7	7	9.8	14.4
19-Sep	7	9	9	7	7	8	9	8	8	5	6	6	8	7	6	7	8	8	8	N	4	4	5	5	6.9	8.8
20-Sep	7	6	7	7	5	4	5	5	5	5	4	4	5	6	7	7	7	6	5	5	7	7	8	8	5.9	8.1
21-Sep	6	7	8	7	6	5	5	6	6	5	4	6	8	6	5	8	8	6	6	7	7	5	5	6	6.1	8.3
22-Sep	7	7	8	7	7	8	9	7	7	7	7	5	7	7	6	7	6	6	5	7	7	6	8	6	6.8	8.6
23-Sep	6	7	7	8	7	7	7	8	8	7	7	7	8	7	7	5	7	8	8	9	9	9	9	9	7.4	9.3
24-Sep	9	8	7	9	9	8	7	5	7	5	5	5	8	7	5	10	9	5	6	5	7	7	4	5	6.7	9.6
25-Sep	12	13	8	3	6	8	10	12	8	8	4	5	6	6	11	10	9	11	9	7	4	6	5	7	7.8	13.3
26-Sep	9	9	6	6	4	5	4	5	6	6	5	5	6	6	5	7	7	6	6	5	8	8	7	8	6.2	8.9
27-Sep	8	5	7	7	5	7	7	9	7	8	9	10	8	11	12	11	11	10	10	9	11	7	8	9	8.6	11.6
28-Sep	8	8	4	3	5	5	5	5	6	5	7	8	9	9	6	8	8	5	6	7	6	7	6	5	6.3	8.7
29-Sep	6	5	7	7	5	6	5	10	10	7	7	5	6	6	6	6	5	7	8	6	5	5	8	8	6.4	9.7
30-Sep	7	6	7	7	6	8	8	7	8	8	7	9	9	7	5	6	7	8	8	9	8	8	7	7	7.4	9.2
	7.0	7.1	6.9	6.6	6.5	6.9	7.0	7.1	7.3	7.2	6.9	6.9	7.3	7.1	7.0	7.3	7.2	7.1	7.0	6.9	6.5	6.6	6.6	6.8	Diurnal Average	
	11.7	13.3	8.8	10.4	10.6	10.9	10.1	14.4	14.3	13.3	10.3	12.7	11.5	11.4	11.6	11.3	10.9	11.2	12.1	11.6	10.8	9.7	10.0	9.9	Diurnal Maximum	

P - Power Failure N - Not Valid

Hourly Maximums

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

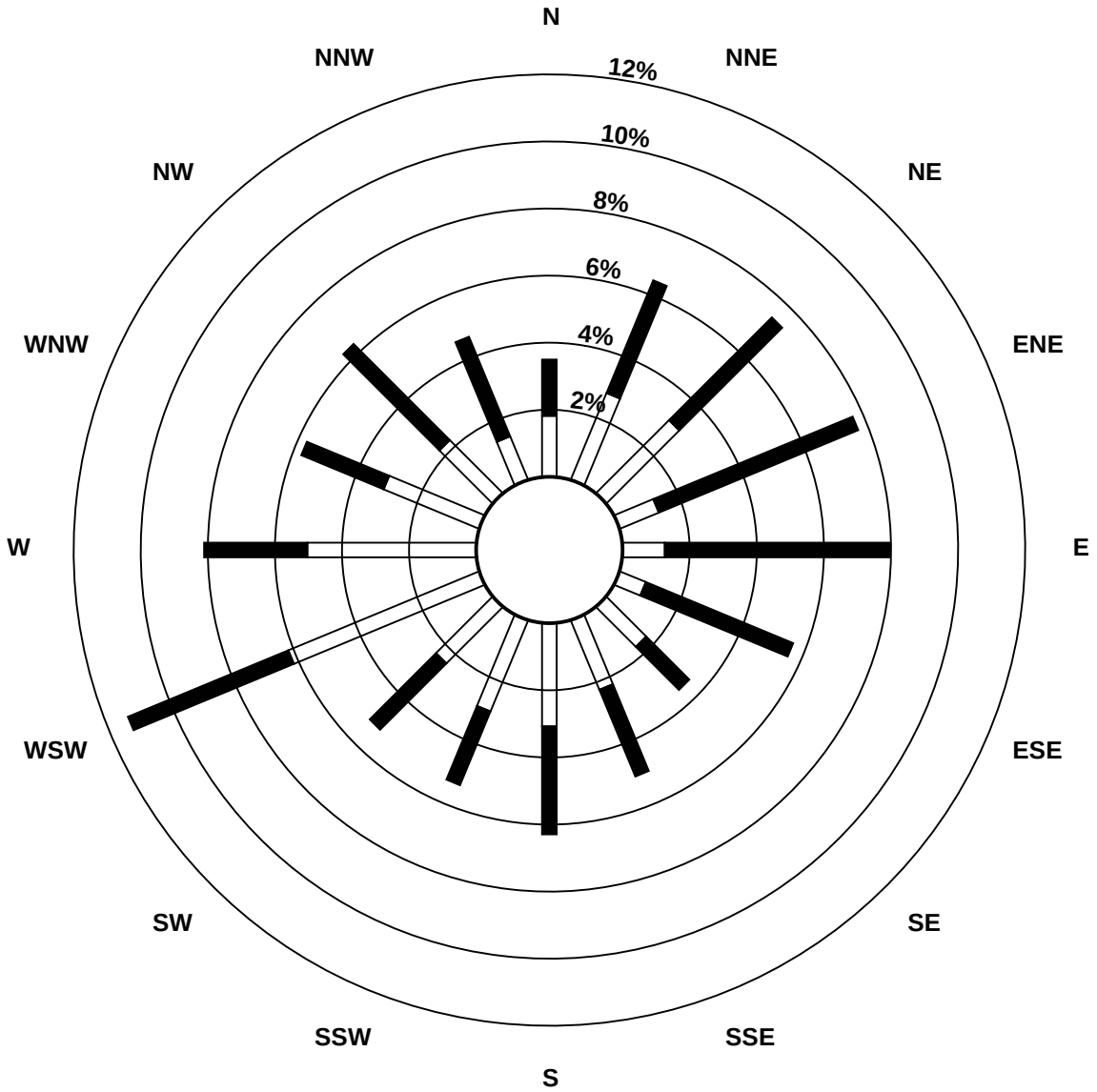
Beaverlodge - September 2010



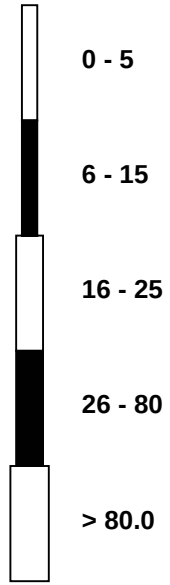
Pollutant Rose

Particulate Matter 2.5 ($PM_{2.5}$) - $\mu g/m^3$

Beaverlodge - September 2010



Pollutant Classes ($\mu g/m^3$)



PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.4 ^{o}C on Sep 3 18:00 Maximum Daily Average: 16.6 ^{o}C on Sep 3

Minimum Value: -5 ^{o}C on Sep 17 07:00 Minimum Daily Average: 2.7 ^{o}C on Sep 21
Maximum Diurnal Average: 13.6 ^{o}C at hour 16 Minimum Diurnal Average: 4.5 ^{o}C at hour 7
Monthly Average: 8.88 ^{o}C Percentiles: P_1 = -2.8 P_{10} = 2.6 Q_1 = 5.7 Median = 8.9 Q_3 = 11.7 P_{90} = 15.3 P_{99} = 22.6

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

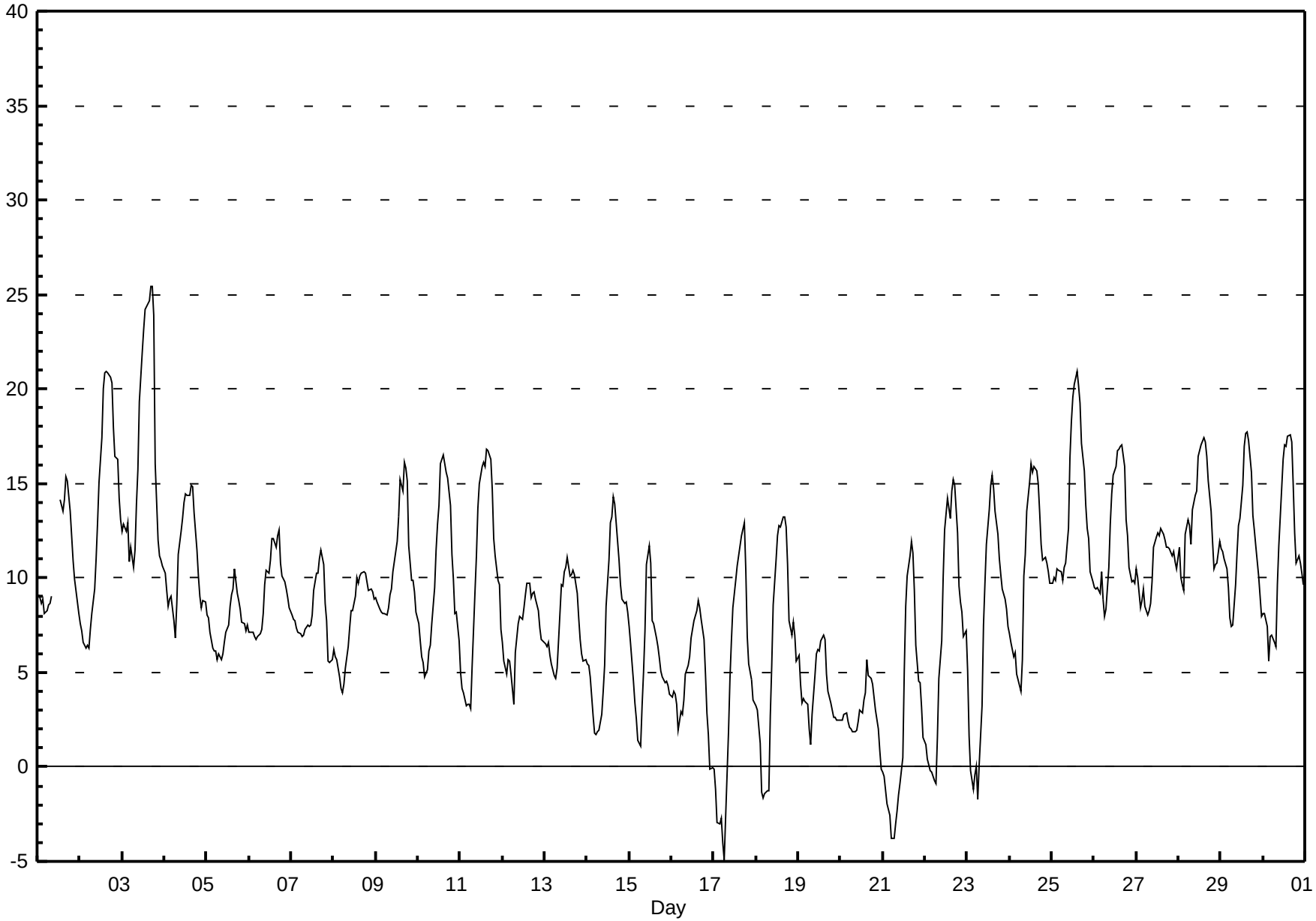
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	9	9	9	9	8	8	9	9	9	P	P	P	P	14	14	14	15	15	14	12	11	10	9	8	10.7	15.3
2-Sep	8	7	7	6	6	6	7	8	9	11	13	15	17	20	21	21	21	21	20	18	16	16	14	13	13.5	20.9
3-Sep	13	13	12	13	11	12	11	12	14	16	19	22	23	24	24	25	25	25	24	16	12	11	11	11	16.6	25.4
4-Sep	10	9	9	9	9	8	7	9	11	12	13	14	14	14	14	15	15	13	11	10	9	8	9	9	11.0	14.9
5-Sep	8	8	7	6	6	6	6	6	6	6	7	7	8	9	9	9	10	9	9	8	8	8	7	8	7.5	10.5
6-Sep	7	7	7	7	7	7	7	7	8	10	10	10	11	12	12	12	12	13	11	10	10	9	9	8	9.3	12.5
7-Sep	8	8	8	7	7	7	7	7	7	7	7	7	8	9	10	10	11	11	11	9	8	6	5	6	8.0	11.5
8-Sep	6	6	6	5	4	4	4	5	6	7	8	8	9	10	10	10	10	10	10	10	9	9	9	9	7.8	10.3
9-Sep	9	9	8	8	8	8	8	8	9	9	10	11	12	13	15	15	16	16	15	12	10	10	9	8	10.8	16.1
10-Sep	8	7	6	6	5	5	6	6	8	9	11	13	14	16	16	16	16	15	14	11	10	8	8	7	10.0	16.5
11-Sep	5	4	4	3	3	3	3	5	9	11	14	15	16	16	16	17	17	16	15	12	11	10	10	7	10.1	16.8
12-Sep	7	6	5	6	6	5	3	6	7	8	8	8	8	9	10	10	9	9	9	9	8	7	7	7	7.3	9.7
13-Sep	6	6	7	6	5	5	5	5	7	10	10	10	11	11	10	10	10	10	9	8	7	6	6	6	7.7	11.1
14-Sep	5	5	5	3	2	2	2	2	3	4	5	8	11	13	13	14	14	12	11	10	9	9	9	8	7.4	14.3
15-Sep	7	7	5	3	3	1	1	3	5	7	11	12	11	8	8	7	6	6	5	5	4	5	4	4	5.7	11.7
16-Sep	4	4	4	3	2	3	3	4	5	5	6	7	7	8	8	9	8	8	7	5	3	2	0	0	4.7	8.8
17-Sep	0	-1	-3	-3	-3	-4	-5	-3	2	5	7	8	10	11	11	12	12	13	10	7	5	5	4	3	4.3	12.9
18-Sep	3	3	1	-1	-2	-1	-1	-1	3	5	9	11	12	13	13	13	13	13	11	8	7	8	7	6	6.3	13.2
19-Sep	6	4	3	4	3	3	2	1	3	5	6	6	6	7	7	7	5	4	3	3	3	3	3	2	4.1	7.0
20-Sep	2	2	3	3	2	2	2	2	2	2	2	3	3	4	4	6	5	5	4	4	3	2	1	0	2.8	5.7
21-Sep	0	-1	-2	-2	-3	-4	-4	-3	-2	-1	-1	0	5	8	10	11	12	11	9	6	5	4	3	2	2.7	11.9
22-Sep	1	0	0	0	0	-1	-1	2	5	7	10	13	13	14	13	15	15	15	12	10	9	8	7	7	7.2	15.2
23-Sep	5	2	0	-1	0	0	-2	0	3	7	10	12	14	15	15	15	14	12	11	10	9	9	8	7	7.3	15.4
24-Sep	7	7	6	6	5	5	4	6	10	11	13	15	16	16	16	16	15	13	12	11	11	11	10	10	10.5	16.1
25-Sep	10	10	10	10	10	10	10	11	11	13	16	18	20	20	21	20	19	17	16	14	13	12	10	10	13.8	20.9
26-Sep	10	9	10	9	10	9	8	8	11	13	14	15	16	17	17	17	17	16	13	12	11	10	10	10	12.1	17.0
27-Sep	11	10	8	9	9	8	8	8	9	10	12	12	12	12	13	12	12	12	12	12	11	11	11	10	10.6	12.6
28-Sep	12	10	10	9	12	13	13	12	14	14	15	16	17	17	17	17	16	15	14	12	10	11	11	12	13.3	17.4
29-Sep	12	11	11	10	9	8	7	8	10	11	13	13	15	17	18	18	17	16	13	13	12	10	9	8	12.0	17.8
30-Sep	8	8	7	6	7	7	7	6	10	12	13	16	17	17	18	18	17	15	12	11	11	11	10	10	11.4	17.6
	6.9	6.3	5.7	5.3	5.1	4.9	4.5	5.3	7.0	8.5	10.1	11.3	12.3	13.1	13.4	13.6	13.6	12.9	11.6	9.9	8.8	8.3	7.7	7.1	Diurnal Average	
	12.5	12.8	12.4	12.9	12.3	13.1	12.7	11.8	13.9	15.7	19.3	21.9	23.1	24.2	24.3	24.6	25.4	25.4	23.9	17.9	16.4	16.3	14.2	13.1	Diurnal Maximum	

P - Power Failure

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 96.8 % on Sep 21 03:00 Maximum Daily Average: 89.7 % on Sep 8

Minimum Value: 24 % on Sep 17 18:00 Minimum Daily Average: 42.3 % on Sep 29
Maximum Diurnal Average: 84.6 % at hour 7 Minimum Diurnal Average: 48.5 % at hour 16
Monthly Average: 68.00 % Percentiles: P_1 = 27.1 P_{10} = 38.2 Q_1 = 51.9 Median = 70.8 Q_3 = 84.7 P_{90} = 92.1 P_{99} = 96.3

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	94	93	95	94	95	94	94	92	90	P	P	P	P	62	69	65	59	61	70	72	73	74	76	79	80.0	95.1
2-Sep	79	80	82	83	81	81	78	78	72	71	68	60	55	45	43	43	42	43	44	51	55	55	64	69	63.4	82.7
3-Sep	72	69	69	66	76	72	78	77	68	66	53	42	35	33	35	34	32	30	32	64	81	86	86	87	60.1	87.0
4-Sep	82	81	82	79	76	79	83	77	59	52	45	41	39	40	40	38	38	43	50	56	61	66	65	67	60.0	83.4
5-Sep	74	82	90	88	88	84	83	80	85	87	80	76	77	72	70	68	63	70	72	77	82	83	86	83	79.2	89.7
6-Sep	88	87	86	89	89	85	85	87	81	72	65	63	58	52	49	53	50	49	59	65	66	70	75	79	70.9	89.0
7-Sep	81	82	83	89	93	95	95	94	93	90	87	85	84	78	69	66	64	63	67	75	78	90	92	93	82.8	94.6
8-Sep	92	94	94	95	95	96	94	93	91	86	84	88	87	84	86	85	88	88	87	89	90	89	89	89	89.7	95.6
9-Sep	88	89	91	92	92	92	93	92	90	88	84	77	72	67	52	54	51	48	52	70	82	84	87	91	78.3	93.0
10-Sep	93	94	95	94	94	92	86	86	82	78	71	62	53	42	33	34	35	36	42	53	56	64	64	71	67.1	94.6
11-Sep	78	82	83	86	85	85	88	80	67	61	48	41	37	36	36	34	34	34	39	48	50	57	59	69	59.0	88.0
12-Sep	75	80	83	82	85	89	92	89	87	85	83	84	81	75	71	70	78	76	76	76	74	76	77	78	80.2	92.5
13-Sep	79	79	80	83	84	86	87	85	80	67	66	61	58	55	58	57	62	63	70	76	81	82	84	87	73.7	86.9
14-Sep	89	90	91	95	95	96	96	96	96	92	88	76	63	53	50	45	46	53	58	65	67	69	66	69	75.2	96.4
15-Sep	71	76	83	89	91	95	96	92	84	75	61	57	59	72	72	76	76	76	79	78	79	80	82	84	78.6	96.0
16-Sep	85	83	84	88	94	91	91	84	74	71	70	66	58	53	45	41	42	41	44	51	59	65	74	75	67.9	93.7
17-Sep	78	83	89	91	91	92	94	86	69	64	56	42	35	31	29	27	25	24	29	39	46	49	52	53	57.2	94.0
18-Sep	55	56	64	78	80	80	80	82	69	56	47	39	32	31	30	29	29	30	35	47	48	42	46	52	51.5	82.2
19-Sep	52	61	67	69	72	73	78	78	73	69	66	63	62	60	58	60	83	92	92	92	92	92	92	93	74.5	92.5
20-Sep	92	92	92	92	92	94	93	92	90	90	86	83	82	78	74	65	69	71	75	80	86	91	95	96	85.4	95.9
21-Sep	96	96	97	97	96	96	96	96	96	96	96	96	79	61	56	52	43	45	52	63	71	67	72	78	79.0	96.8
22-Sep	79	82	84	85	84	85	85	74	67	62	54	40	36	33	37	33	28	30	37	48	49	48	51	49	56.7	85.4
23-Sep	60	77	85	92	90	88	92	85	72	57	50	47	41	36	32	34	39	45	50	53	56	58	62	67	61.2	92.2
24-Sep	69	71	74	74	79	81	82	75	60	56	48	41	36	36	35	35	38	47	58	65	62	62	63	65	58.8	82.3
25-Sep	65	64	65	64	65	65	68	66	70	64	52	50	49	48	44	46	51	62	70	80	84	85	90	93	65.1	93.5
26-Sep	95	96	94	91	77	78	79	75	67	59	51	43	40	38	37	37	37	39	49	50	58	63	62	62	61.5	95.7
27-Sep	57	62	72	77	77	83	89	86	88	83	76	76	76	78	78	81	83	87	86	86	87	86	87	87	80.4	89.5
28-Sep	77	82	82	82	63	56	57	64	56	52	51	43	40	38	37	37	39	45	50	57	62	59	55	49	55.6	82.1
29-Sep	49	48	49	49	52	57	59	59	52	46	40	37	35	29	27	25	27	32	34	33	36	41	47	51	42.3	59.2
30-Sep	54	57	60	68	66	67	68	67	58	51	45	34	30	28	27	27	29	33	40	44	41	41	43	45	46.8	67.8
	76.6	78.9	81.6	83.3	83.3	83.6	84.6	82.3	76.2	70.5	64.4	59.2	54.8	51.5	49.3	48.5	49.3	51.8	56.7	63.5	67.1	69.2	71.5	73.7	Diurnal Average	
	96.4	96.3	96.8	96.7	96.3	96.3	96.4	96.4	96.2	96.3	96.4	96.2	87.5	84.0	86.0	85.2	88.2	92.4	92.1	92.0	92.5	92.4	94.5	95.9	Diurnal Maximum	

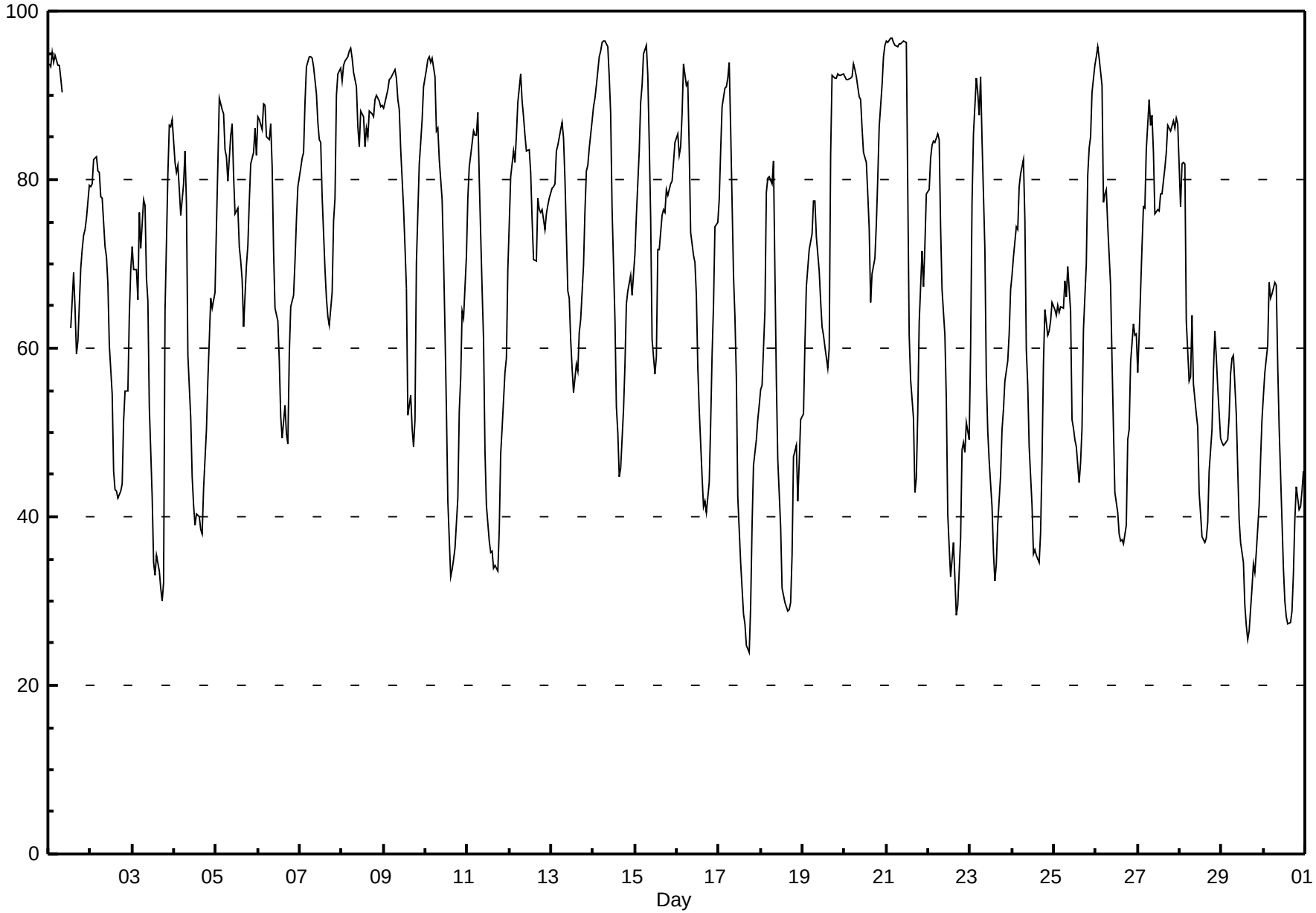
P - Power Failure

PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	4	3	3	4	6	7	6	6	9	P	P	P	P	14	10	15	17	16	11	8	11	9	9	3	7.8	17.1
Dir	2	313	303	320	247	269	255	256	282	P	P	P	P	281	277	260	265	252	271	256	248	236	220	180	263	265
2 Spd	3	2	3	4	4	4	3	2	3	2	6	11	19	28	27	29	30	19	23	17	8	3	4	4	8.3	29.6
Dir	139	150	131	124	151	98	92	119	180	183	189	195	224	246	256	252	253	254	260	258	230	224	184	101	237	253
3 Spd	5	5	7	6	2	2	3	0	1	6	6	4	2	6	10	9	8	8	5	23	18	8	9	10	3.1	22.8
Dir	94	91	108	117	119	60	58	360	126	217	146	69	121	212	223	224	204	189	190	286	280	235	216	248	220	286
4 Spd	10	6	6	9	9	9	6	9	31	35	36	35	39	38	36	28	32	34	28	19	16	12	14	9	20.9	39.4
Dir	230	247	227	234	235	228	201	216	237	242	240	240	237	236	240	248	250	239	245	243	244	231	239	265	239	237
5 Spd	6	11	14	12	10	14	16	18	14	13	14	14	15	14	13	14	15	11	9	6	6	1	5	2	10.2	17.6
Dir	270	285	301	308	291	290	287	290	295	296	303	309	307	312	306	319	308	331	318	21	38	356	242	210	303	290
6 Spd	3	4	3	1	6	6	4	2	7	6	8	9	8	7	7	13	9	11	11	9	8	7	6	9	5.2	12.7
Dir	44	39	34	336	45	43	91	178	126	115	94	80	79	47	45	41	41	15	30	27	10	342	340	324	42	41
7 Spd	8	9	5	8	9	9	10	8	8	11	13	13	15	16	18	11	10	8	7	6	5	6	4	4	7.9	18.1
Dir	328	329	332	293	309	299	303	314	305	313	285	272	263	266	267	256	271	295	293	302	343	28	15	14	295	267
8 Spd	2	4	5	4	3	6	4	2	7	9	5	4	1	2	8	8	7	11	9	9	9	10	10	11	3.5	11.4
Dir	2	334	328	339	342	340	331	322	327	358	11	165	20	41	108	103	104	102	106	106	92	90	87	92	68	92
9 Spd	10	11	10	9	8	8	9	8	9	7	7	7	6	2	3	4	3	3	4	6	7	5	4	3	4.5	11.2
Dir	89	92	97	92	78	88	97	98	118	144	164	176	205	166	229	292	356	239	171	110	78	98	108	127	113	92
10 Spd	2	1	2	2	3	3	2	2	3	4	4	12	16	22	32	29	30	26	20	11	5	3	8	2	8.4	31.8
Dir	104	175	54	58	50	57	95	75	67	203	216	244	249	260	264	263	262	265	263	267	254	250	273	310	261	264
11 Spd	2	2	2	3	4	3	1	1	4	11	21	21	23	24	21	17	17	15	13	6	7	11	11	3	8.3	24.4
Dir	125	86	126	122	178	181	197	141	198	224	260	268	270	262	266	275	269	284	270	258	306	309	328	328	268	262
12 Spd	8	13	12	13	12	5	1	7	5	10	11	16	16	15	17	15	12	7	4	6	7	11	11	11	8.4	17.0
Dir	317	325	336	356	359	355	59	21	9	70	64	73	57	52	52	59	71	69	37	17	16	18	21	27	32	52
13 Spd	12	13	12	12	12	10	9	7	5	4	8	6	6	5	11	9	7	7	9	3	4	7	6	5	5.9	12.8
Dir	26	27	35	31	35	27	26	15	23	91	107	88	89	72	76	77	172	173	145	105	76	57	71	67	59	27
14 Spd	3	3	2	3	4	4	3	3	2	1	1	3	5	4	6	4	5	8	6	5	5	4	4	3	2.9	7.9
Dir	93	76	217	167	196	151	155	108	131	169	186	152	174	170	173	128	165	174	142	91	90	80	79	81	141	174
15 Spd	2	1	2	1	1	3	3	1	4	8	13	18	22	19	19	14	12	11	8	6	5	3	5	7	5.7	21.5
Dir	89	348	359	251	145	58	38	27	301	291	308	319	325	328	356	333	359	10	355	7	47	128	190	190	338	325
16 Spd	6	2	1	4	3	5	6	6	9	12	11	15	16	17	18	19	17	15	11	5	4	2	4	5	7.4	18.9
Dir	179	159	161	183	77	348	290	310	310	312	298	298	317	317	314	310	324	318	328	334	6	288	340	9	315	310
17 Spd	4	4	2	3	1	1	2	3	2	3	5	6	4	6	4	5	4	2	4	7	8	7	4	5	0.9	7.9
Dir	349	326	253	38	17	218	87	58	95	183	214	201	202	169	189	227	254	106	54	41	61	79	90	85	109	61
18 Spd	4	4	3	1	3	1	1	0	2	4	1	5	9	10	13	13	13	13	10	12	16	17	16	9	6.2	16.7
Dir	92	111	196	52	41	311	261	8	226	267	255	149	98	67	72	78	89	77	72	52	63	75	69	26	74	75
19 Spd	11	8	2	5	8	10	12	15	14	11	14	17	16	16	19	18	11	5	8	10	8	16	18	18	10.7	18.5
Dir	60	48	71	13	47	39	24	22	19	25	47	56	77	62	51	60	104	184	120	86	48	51	47	42	52	51
20 Spd	17	19	18	15	19	18	17	18	21	21	20	15	15	12	10	9	7	4	3	5	5	5	3	4	10.7	21.4
Dir	36	32	40	43	33	36	34	33	33	39	43	37	27	28	31	49	36	66	187	211	226	219	201	68	37	33
21 Spd	4	3	1	6	4	6	3	4	2	2	4	3	2	3	6	10	9	13	9	2	1	3	5	3	2.1	13.1
Dir	60	43	106	55	313	291	303	280	281	211	204	173	115	167	138	163	212	244	229	189	82	230	197	170	208	244
22 Spd	2	3	4	4	3	3	4	3	3	7	10	19	17	14	16	13	13	12	9	8	7	3	5	3	4.3	18.8
Dir	148	83	98	87	99	106	91	88	131	187	201	230	231	224	205	172	163	166	136	80	73	83	58	30	171	230

PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	5	1	1	2	6	2	1	4	4	3	3	12	13	11	11	6	25	13	9	7	6	6	3	2	2.8	24.9
Dir	337	318	320	45	43	318	327	62	68	150	121	121	171	145	134	186	243	240	239	242	220	240	221	116	195	243
24 Spd	6	4	3	2	2	3	3	3	4	9	10	15	20	15	13	17	13	17	15	13	14	15	13	9	8.7	19.8
Dir	187	179	160	173	122	100	108	87	160	189	197	209	210	198	193	193	199	190	153	159	144	156	153	142	177	210
25 Spd	6	4	8	10	5	4	2	5	3	3	7	8	14	13	19	18	11	10	8	11	13	15	11	6	1.5	18.7
Dir	121	123	159	163	160	122	77	321	17	75	195	208	212	212	248	252	284	351	1	17	23	2	340	28	277	248
26 Spd	5	8	3	9	18	13	11	6	22	26	34	41	38	35	38	33	31	21	7	7	2	5	3	4	16.0	41.0
Dir	251	178	175	227	245	254	264	284	248	252	246	254	250	260	247	244	253	261	253	250	184	53	73	70	250	254
27 Spd	4	4	2	8	4	1	1	1	2	6	5	3	4	4	2	8	11	9	7	5	2	3	1	5	0.6	11.0
Dir	55	36	259	39	72	231	337	107	287	308	294	287	203	204	180	153	167	154	23	24	159	195	83	213	147	167
28 Spd	12	1	9	1	17	30	37	27	29	41	36	44	49	48	43	41	39	30	25	17	13	17	13	26	26.4	48.7
Dir	240	153	211	198	252	252	249	241	250	256	260	262	261	266	263	264	261	259	255	251	241	258	246	263	256	261
29 Spd	28	33	36	33	22	11	17	15	13	22	27	24	18	15	28	33	31	26	16	16	13	10	12	12	20.6	35.5
Dir	256	257	256	262	266	277	268	263	284	270	270	275	288	264	241	244	253	243	245	267	292	295	297	270	263	256
30 Spd	12	5	5	3	6	8	7	3	3	5	5	3	7	6	5	10	15	13	8	10	16	17	18	17	3.7	17.5
Dir	266	322	337	19	316	321	332	341	342	310	293	19	153	167	140	111	99	101	82	93	105	103	101	97	88	101
Spd	0.9	1.6	1.0	1.1	1.6	2.2	2.2	2.2	3.0	4.7	5.7	6.3	7.5	7.7	7.5	6.9	7.9	6.0	3.6	1.8	0.9	0.8	0.7	1.1	Diurnal Average	
Dir	329	348	307	349	319	312	301	316	282	262	256	254	251	258	256	253	252	248	253	288	17	47	56	40		
Spd	27.6	33.4	35.5	32.6	21.8	30.1	36.6	27.4	31.0	41.1	36.4	43.8	48.7	48.3	43.1	40.7	38.9	34.2	27.9	22.8	17.6	17.3	17.8	25.6	Diurnal Maximum	
Dir	256	257	256	262	266	252	249	241	237	256	240	262	261	266	263	264	261	239	245	286	280	103	47	263		

Maximum Speed Value: 49 km/h on Sep 28 13:00
Minimum Speed Value: 0 km/h on Sep 18 08:00
Maximum Daily Speed Average: 26.4 km/h on Sep 28
Minimum Daily Speed Average: 0.6 km/h on Sep 14
Maximum Diurnal Speed Average: 7.9 km/h at hour 17
Minimum Diurnal Speed Average: 0.7 km/h at hour 23

Monthly Average Velocity: 2.97 km/h 266.7 deg
Speed Percentiles: P_1 = 0.7 P_{10} = 2.3 Q_1 = 3.9 Median = 7.6 Q_3 = 13.1 P_{90} = 19.5 P_{99} = 40.5
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

P - Power Failure

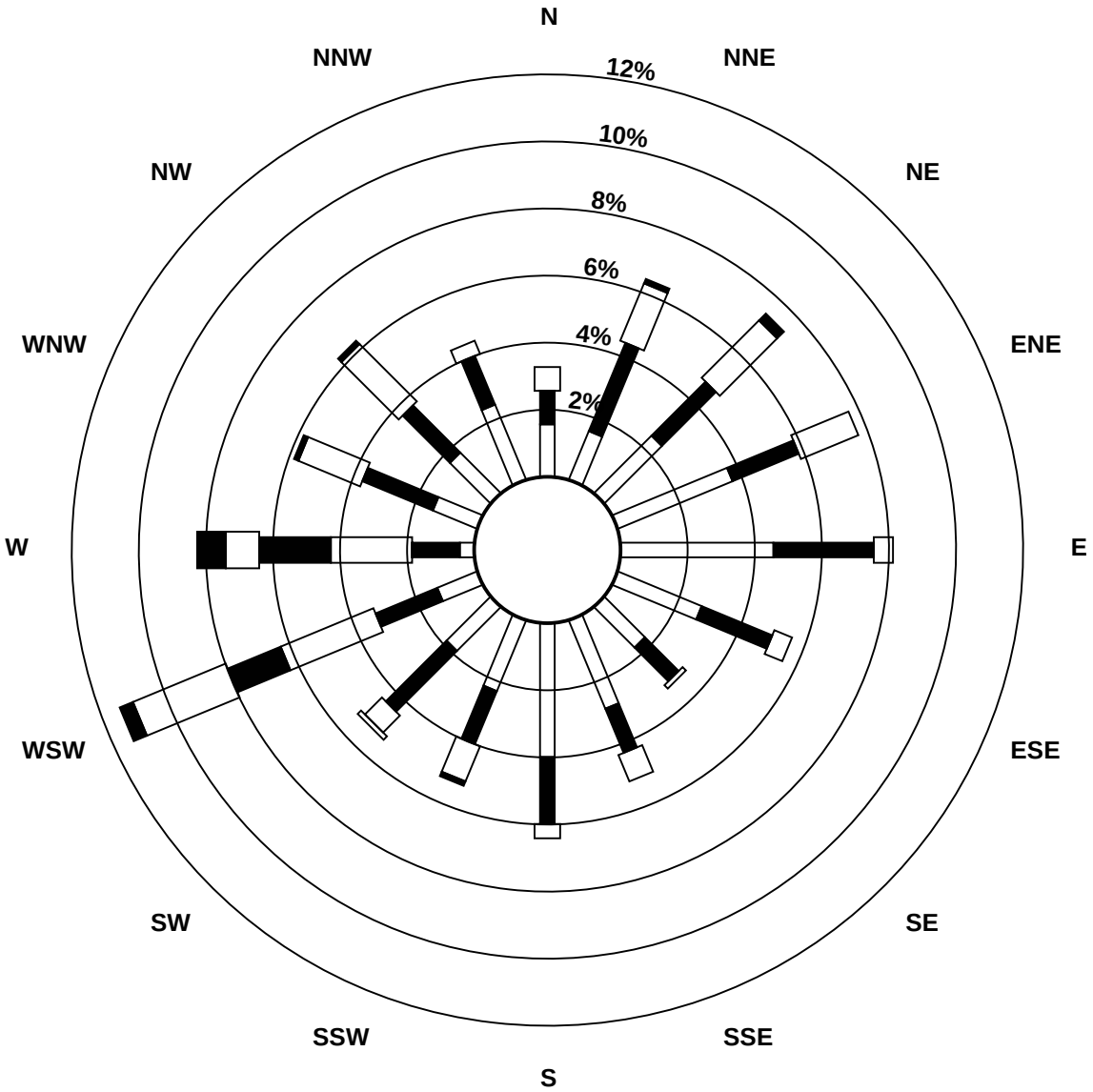
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	26	18	11	1	0	0	56
NorthEast	32	32	35	4	0	0	103
East	54	43	17	0	0	0	114
SouthEast	32	17	7	0	0	0	56
South	47	28	10	0	0	0	85
SouthWest	18	34	18	8	11	2	91
West	16	21	40	23	17	9	126
NorthWest	23	31	29	2	0	0	85
Total	248	224	167	38	28	11	716

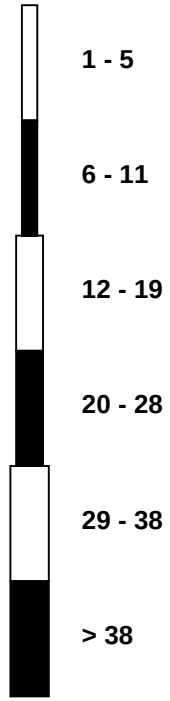
Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - September 2010



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - September 2010

Maximum Speed: 49 km/h on Sep 28 13:00

Maximum Daily Speed Average: 27.3 km/h on Sep 28

Minimum Speed: 1 km/h on Sep 27 08:00

Minimum Daily Speed Average: 4.3 km/h on Sep 14

Maximum Diurnal Speed Average: 16.8 km/h at hour 15

Minimum Diurnal Speed Average: 6.9 km/h at hour 3

Monthly Average Speed: 10.46 km/h

Percentiles: P_1 = 1.8 P_{10} = 3.2 Q_1 = 4.6 Median = 7.9 Q_3 = 13.4 P_{90} = 19.7 P_{99} = 40.7

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	5	4	3	5	6	7	6	6	9	P	P	P	P	14	11	16	17	16	12	8	12	9	9	5	9.0	17.3
2-Sep	4	2	3	5	5	5	4	3	3	3	6	11	20	28	28	29	30	20	23	17	8	4	5	5	11.3	29.8
3-Sep	5	5	7	6	4	4	4	4	3	7	7	4	5	7	11	9	9	9	5	24	18	10	9	10	7.7	24.4
4-Sep	10	6	6	9	9	10	6	9	31	35	37	35	40	39	36	28	32	34	28	19	16	12	14	9	21.3	39.6
5-Sep	6	11	14	12	10	14	16	18	14	13	14	15	16	14	14	14	16	12	9	6	6	3	5	3	11.4	17.7
6-Sep	3	4	4	3	6	6	5	3	7	7	8	10	8	8	8	13	9	12	11	9	8	7	7	9	7.2	13.0
7-Sep	8	9	5	8	9	9	10	8	8	11	13	14	16	17	18	12	10	8	7	6	6	6	5	5	9.5	18.4
8-Sep	3	4	7	5	6	7	6	3	7	9	6	5	2	3	9	8	7	11	9	9	9	10	10	11	6.9	11.4
9-Sep	10	11	10	10	8	8	9	8	10	8	7	8	7	4	5	5	4	4	4	6	7	5	4	3	6.8	11.3
10-Sep	2	2	3	3	3	3	3	2	3	4	4	12	16	23	32	30	30	26	20	11	5	4	8	6	10.7	32.4
11-Sep	3	3	3	3	4	4	3	4	5	11	21	22	24	25	22	19	17	15	13	7	7	11	11	6	11.0	25.0
12-Sep	9	13	12	13	12	7	4	7	6	10	11	17	16	15	17	15	12	7	5	6	7	11	11	11	10.6	17.1
13-Sep	12	13	12	12	12	10	9	7	5	5	9	7	7	6	11	9	8	7	9	3	4	7	6	5	8.1	12.8
14-Sep	3	3	3	3	4	4	3	3	2	2	3	4	5	5	7	6	6	8	6	5	5	4	4	3	4.3	7.9
15-Sep	2	2	4	2	2	3	3	2	4	8	14	19	22	19	20	14	12	11	9	7	5	3	5	7	8.3	21.9
16-Sep	6	2	2	4	5	5	6	7	9	12	12	15	16	17	19	19	18	16	12	5	5	3	5	6	9.4	19.5
17-Sep	5	5	4	4	2	2	2	3	3	3	6	7	6	8	7	6	5	3	5	7	8	7	4	5	4.8	7.9
18-Sep	4	4	3	2	3	2	4	1	2	4	4	7	10	11	14	13	14	14	10	12	16	17	17	10	8.3	16.8
19-Sep	12	9	3	5	8	10	12	15	14	11	14	17	16	16	19	19	13	5	9	11	8	16	18	18	12.4	18.7
20-Sep	17	19	18	15	19	18	17	18	21	21	20	16	15	13	11	9	8	5	3	5	5	7	5	4	12.8	21.5
21-Sep	4	5	4	7	8	6	4	4	2	3	5	4	4	4	7	10	11	13	9	3	2	4	5	4	5.5	13.4
22-Sep	3	3	4	4	4	4	4	3	5	8	10	19	17	15	16	13	13	12	9	8	7	3	5	4	8.0	19.0
23-Sep	6	4	3	4	6	6	5	4	4	4	4	13	13	12	12	7	25	13	9	7	6	6	3	3	7.4	25.2
24-Sep	6	4	3	2	2	3	4	4	4	10	10	15	20	16	13	17	13	17	15	13	14	15	13	9	10.1	20.3
25-Sep	7	5	8	10	5	5	3	6	5	3	7	9	15	13	19	18	12	10	8	11	14	16	12	6	9.5	19.0
26-Sep	5	8	3	9	19	13	12	8	22	27	35	41	39	35	38	34	32	21	8	7	3	5	3	4	17.9	41.3
27-Sep	4	6	6	9	6	2	3	1	3	6	6	3	4	4	3	8	11	10	7	6	3	4	4	6	5.1	11.1
28-Sep	13	3	9	6	17	30	37	28	29	41	36	44	49	49	43	41	39	30	26	17	13	17	13	26	27.3	49.0
29-Sep	28	34	36	33	22	12	17	15	13	22	28	24	18	16	29	33	32	26	16	16	13	10	12	12	21.5	35.6
30-Sep	12	6	7	4	6	8	8	6	4	5	6	4	8	7	8	10	15	13	8	11	16	17	18	17	9.2	17.6
	7.3	7.0	6.9	7.2	7.8	7.6	7.6	7.0	8.5	10.8	12.5	14.5	15.6	15.4	16.8	16.2	16.0	13.6	10.8	9.4	8.5	8.4	8.3	7.8	Diurnal Average	
	27.8	33.6	35.6	32.6	21.9	30.4	37.0	27.5	31.2	41.3	36.6	44.2	49.0	48.6	43.4	40.9	39.2	34.3	27.9	24.4	18.0	17.3	17.9	25.7	Diurnal Maximum	

P - Power Failure

All monthly, daily, and diurnal averages have been calculated using scalar methods

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - September 2010

Maximum Value: 95.4 deg on Sep 12 07:00

Minimum Value: 2.4 deg on Sep 30 23:00

Percentiles: P_1 = 3.2 P_{10} = 5.6 Q_1 = 8.7 Median = 15.1 Q_3 = 32.6 P_{90} = 58.6 P_{99} = 86.6

Hours in Service:	720
Hours of Data:	716
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	41	59	25	23	12	6	7	7	7	P	P	P	P	17	15	18	9	10	18	14	6	9	12	54	59.2
2-Sep	49	43	28	24	19	34	49	44	23	46	17	14	12	12	15	9	7	14	5	9	46	59	43	22	58.8
3-Sep	12	10	10	21	62	84	61	89	84	38	35	43	68	42	22	16	18	17	18	51	12	41	16	15	88.9
4-Sep	7	45	26	5	15	9	12	10	7	5	6	6	6	7	7	11	9	4	4	4	8	5	4	19	44.7
5-Sep	8	7	11	8	6	6	4	5	8	15	12	10	12	10	14	9	19	15	13	13	7	64	9	40	63.8
6-Sep	31	16	40	70	9	12	52	32	9	18	17	16	20	34	23	11	16	14	6	7	6	14	12	4	69.8
7-Sep	5	4	30	12	8	5	4	6	9	8	11	8	11	11	11	13	18	17	14	12	30	18	29	38	38.2
8-Sep	71	39	40	57	78	54	59	54	9	21	29	25	89	55	19	14	11	7	5	5	5	5	6	4	89.5
9-Sep	5	5	5	10	6	6	4	8	10	22	14	22	22	73	73	49	70	59	23	27	7	9	16	18	73.3
10-Sep	17	38	58	60	24	10	43	34	27	20	33	13	11	12	11	9	5	6	6	4	23	74	20	76	75.7
11-Sep	55	67	44	30	16	46	71	78	26	12	15	15	13	14	13	23	18	14	7	14	17	6	4	84	83.6
12-Sep	28	34	19	10	11	58	95	13	45	10	10	9	9	8	8	11	7	7	18	10	7	3	3	4	95.4
13-Sep	4	3	10	4	5	10	7	7	26	29	23	33	24	35	16	12	27	16	15	31	18	7	5	11	34.8
14-Sep	13	54	60	24	16	29	18	30	59	59	80	54	28	46	37	60	58	8	15	19	12	16	17	17	80.1
15-Sep	28	55	63	80	57	57	17	63	14	12	11	14	11	11	11	12	15	13	12	11	18	31	18	9	80.2
16-Sep	10	31	64	12	56	21	12	6	10	13	15	15	15	11	14	14	14	15	12	10	50	76	46	32	75.7
17-Sep	57	75	59	49	65	88	38	17	29	28	22	40	64	47	60	42	49	82	19	5	8	8	19	13	87.5
18-Sep	11	27	38	87	34	63	72	80	69	31	83	43	29	24	26	20	20	11	10	3	5	5	10	22	86.9
19-Sep	32	30	68	47	19	18	3	3	9	14	9	9	11	9	8	11	40	28	25	18	11	5	6	6	68.5
20-Sep	6	3	4	7	4	5	5	4	4	6	6	9	7	12	23	15	18	22	17	9	20	71	72	8	72.3
21-Sep	8	64	78	26	64	15	58	37	59	41	34	43	57	68	34	21	39	12	6	39	69	55	8	24	78.4
22-Sep	55	15	13	17	26	23	17	35	54	21	20	9	12	15	10	11	11	7	20	6	5	54	30	35	54.5
23-Sep	54	75	92	86	6	66	94	15	11	41	49	17	11	14	25	22	11	8	10	5	13	20	47	42	93.7
24-Sep	10	15	27	51	30	20	48	40	25	16	16	16	14	13	12	6	11	11	4	6	9	4	9	13	51.4
25-Sep	37	48	14	16	18	22	41	23	51	43	19	19	14	16	11	7	26	13	16	7	6	15	19	28	51.0
26-Sep	29	18	36	16	12	20	14	45	7	9	7	7	7	8	7	6	8	5	14	11	64	18	14	16	64.0
27-Sep	12	63	75	31	50	49	90	67	78	10	20	28	31	18	20	10	9	18	25	22	43	56	76	35	89.5
28-Sep	12	58	12	85	31	7	8	5	8	4	6	8	6	7	7	6	6	8	7	5	6	8	12	5	84.5
29-Sep	6	6	3	4	6	15	8	7	11	6	7	8	10	17	9	7	7	4	8	6	11	11	9	15	17.5
30-Sep	14	21	48	41	23	10	8	78	47	18	24	69	40	38	54	16	9	5	4	9	3	3	2	3	78.2
	71.1	75.3	92.1	86.9	77.9	87.5	95.4	88.9	83.9	59.2	82.7	69.4	89.5	73.3	72.6	60.2	70.2	81.6	25.5	51.5	69.4	75.7	76.3	83.6	

P - Power Failure

PASZA
Portable – Bonanza Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.4 ppb on Sep 14 23:00 Maximum Daily Average: 0.5 ppb on Sep 23

Minimum Value: 0 ppb on Sep 2 01:00 Minimum Daily Average: 0.1 ppb on Sep 4
Maximum Diurnal Average: 0.4 ppb at hour 10 Minimum Diurnal Average: 0.2 ppb at hour 20
Monthly Average: 0.24 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.4$ $P_{99} = 1.1$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
Percent Operational Time:	100.0

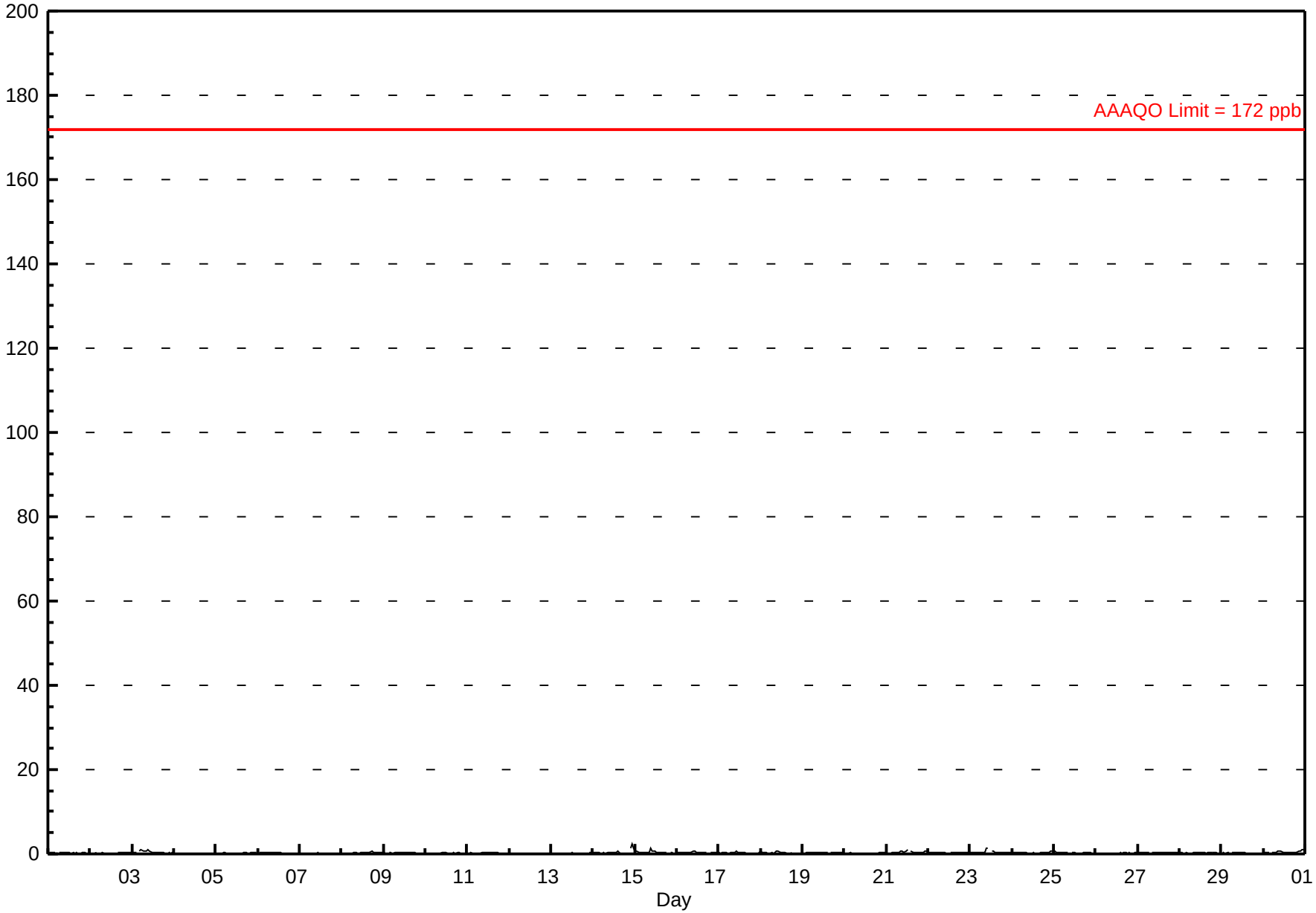
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
2-Sep	0	0	0	0	A	0	0	0	0	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	--	0.5
3-Sep	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
4-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
5-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
6-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.4
7-Sep	0	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	0.3
8-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.6
9-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
10-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.4
12-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.2
13-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.3
14-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	1	2	1	0.4	2.4
15-Sep	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0.4	1.3
16-Sep	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.6
17-Sep	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.5
18-Sep	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.7
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.3
21-Sep	0	0	0	0	0	0	0	0	1	1	0	1	1	A	1	0	0	0	0	0	0	0	1	1	0.4	0.9
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
23-Sep	0	0	0	0	0	0	0	0	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.3
24-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.5
25-Sep	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
26-Sep	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
27-Sep	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
28-Sep	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
29-Sep	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
30-Sep	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	1.1
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	Diurnal Average	
	0.7	0.5	0.4	0.4	0.7	0.9	0.6	0.6	0.8	1.3	1.2	0.8	0.9	0.7	0.8	0.5	0.4	0.6	0.4	0.3	0.8	1.3	2.4	1.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - September 2010

Maximum Value: 4.2 ppb on Sep 14 23:00

Maximum Daily Average: 0.8 ppb on Sep 14

Minimum Value: 0 ppb on Sep 7 01:00

Minimum Daily Average: 0.2 ppb on Sep 7

Maximum Diurnal Average: 0.7 ppb at hour 10

Minimum Diurnal Average: 0.4 ppb at hour 4

Monthly Average: 0.49 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.5$ $P_{90} = 0.9$ $P_{99} = 1.4$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
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-Sep	0	0	1	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.9
2-Sep	0	0	0	0	A	0	0	0	1	C	C	C	C	C	C	C	0	0	0	0	0	0	0	1	--	1.0
3-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0	0	0	0	0.8	1.5
4-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
5-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.4	0.9
6-Sep	A	0	0	0	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0.4	0.8
7-Sep	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	0.7
8-Sep	0	0	0	A	0	0	0	0	1	0	0	1	1	1	1	0	0	1	1	1	0	1	1	1	0.5	0.9
9-Sep	0	0	A	0	0	0	0	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0.4	0.8
10-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	0.5
11-Sep	A	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	A	0.5	0.8
12-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.3
13-Sep	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0.4	1.3
14-Sep	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	1	0	A	3	4	2	0.8	4.2
15-Sep	1	1	1	1	1	0	1	0	1	3	2	1	1	0	0	0	0	0	0	A	0	0	0	0	0.7	2.8
16-Sep	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	0	0	A	0	0	0	0	0	0.6	1.0
17-Sep	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	A	0	0	0	0	0	1	0.4	0.8
18-Sep	1	1	1	0	0	0	0	0	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0.5	1.2
19-Sep	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	A	0	0	0	0	0	0	0	0	0.4	0.8
20-Sep	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.8
21-Sep	0	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	0	0	1	0	1	1	1	1	0.8	1.4
22-Sep	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	1	0	0	0	0.5	0.9
23-Sep	1	1	0	1	0	0	0	0	1	2	1	A	1	1	0	1	1	1	0	0	1	0	0	0	0.8	2.5
24-Sep	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	1	1	0.5	0.9
25-Sep	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9
26-Sep	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.7
27-Sep	0	0	1	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.5	0.9
28-Sep	0	0	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9
29-Sep	0	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
30-Sep	0	1	0	1	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0.7	1.3
	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.5	Diurnal Average	
	1.1	0.9	0.9	0.8	1.4	1.5	1.3	0.9	1.5	2.8	1.9	1.4	1.4	1.5	1.4	1.0	0.9	0.9	1.4	0.8	1.1	2.9	4.2	1.7	Diurnal Maximum	

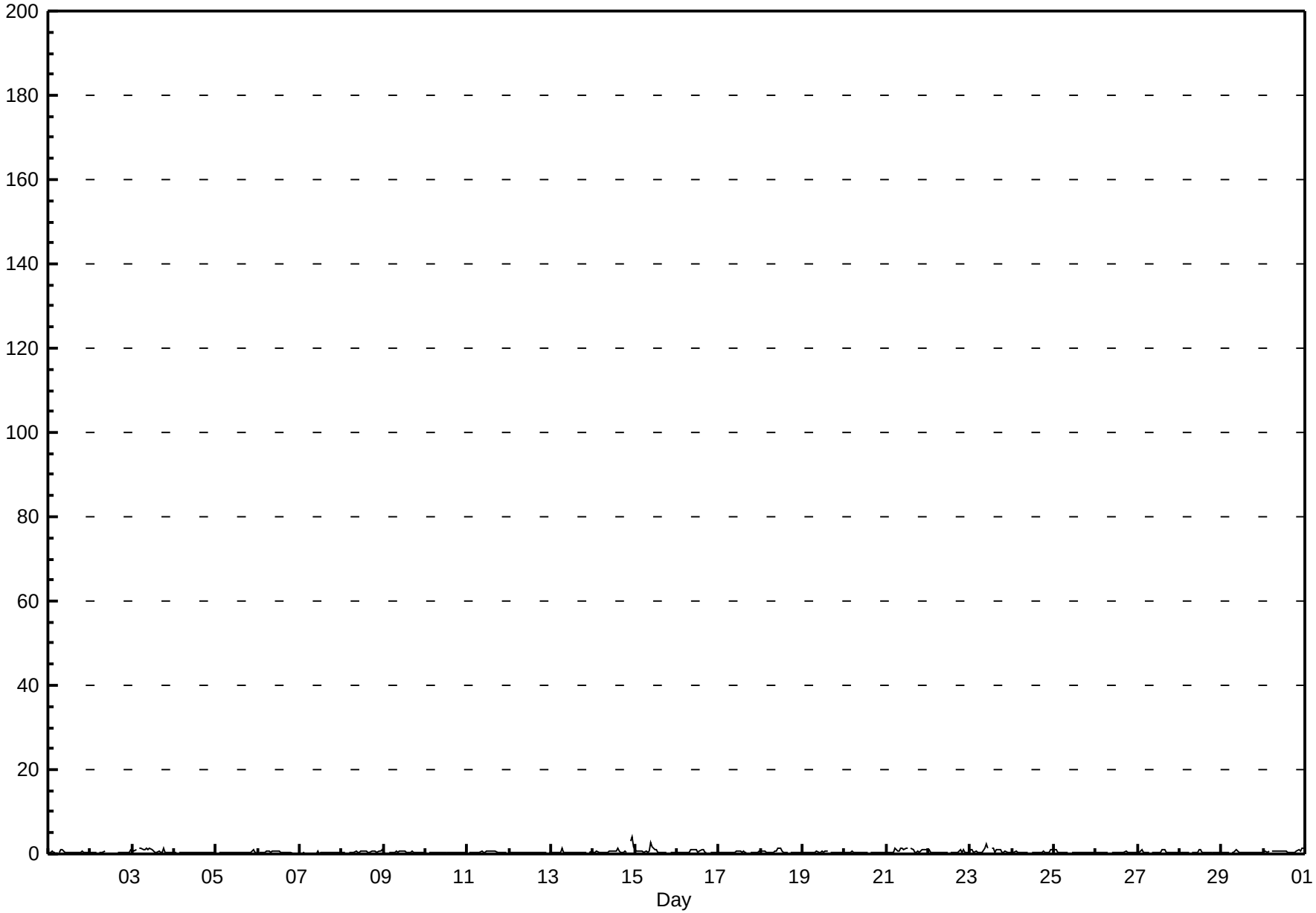
C - Calibration

A - Automated Daily Zero Span

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

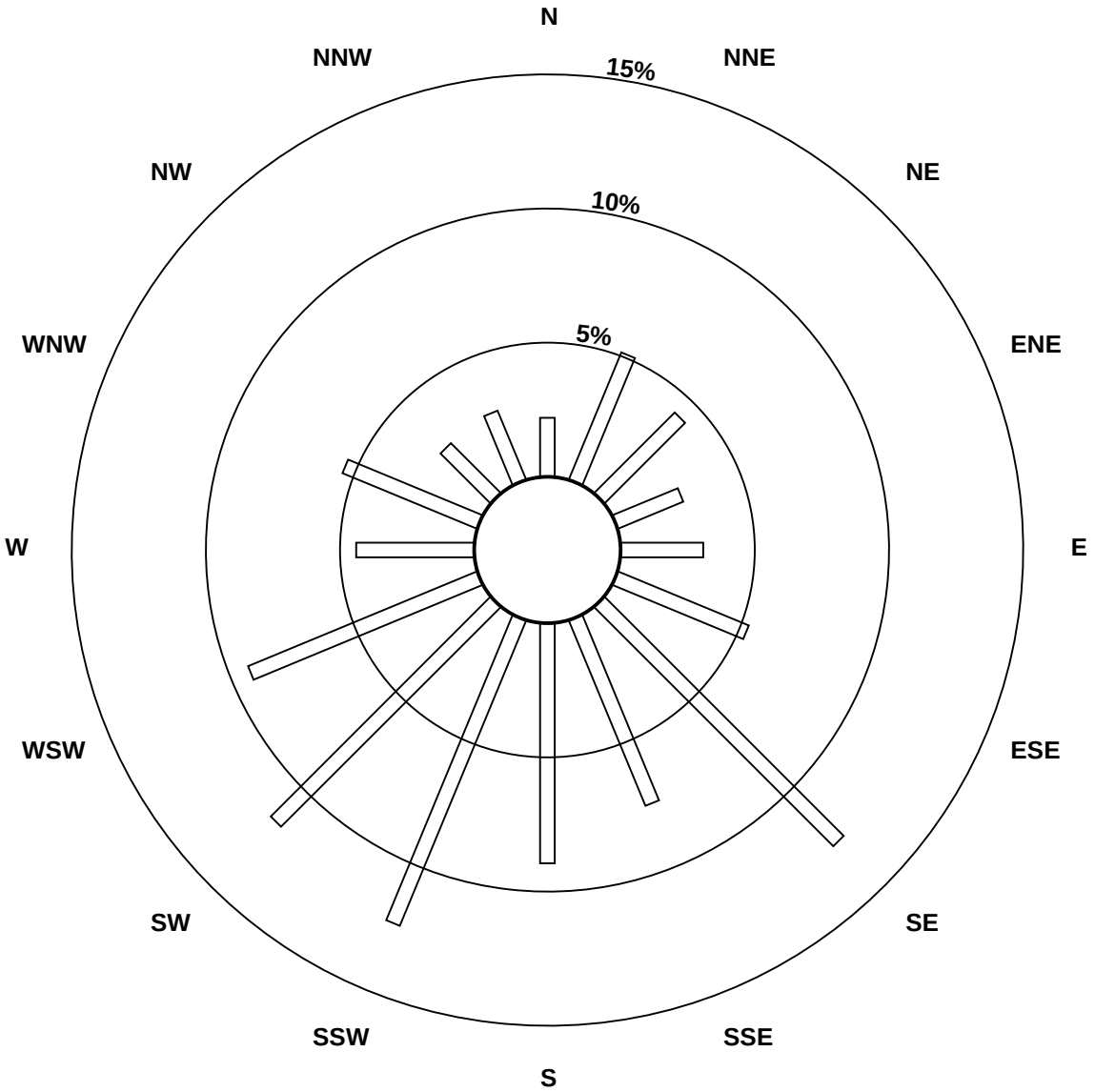
Portable-Bonanza - September 2010



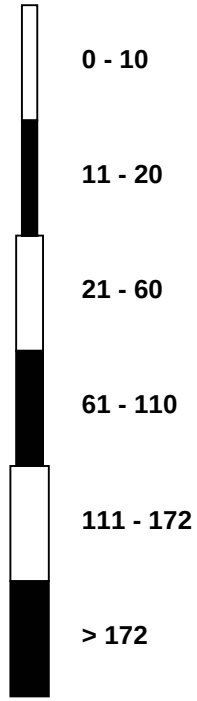
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - September 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.7 ppb on Sep 1 08:00 Maximum Daily Average: 0.6 ppb on Sep 28

Minimum Value: 0 ppb on Sep 8 00:00 Minimum Daily Average: 0.3 ppb on Sep 20
Maximum Diurnal Average: 0.4 ppb at hour 21 Minimum Diurnal Average: 0.4 ppb at hour 17
Monthly Average: 0.39 ppb Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.3 Median = 0.4 Q_3 = 0.4 P_{90} = 0.5 P_{99} = 0.7

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	39
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-Sep	0	0	0	1	1	A	1	1	1	1	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0.5	0.7
2-Sep	0	0	0	0	A	0	0	0	0	C	C	C	C	C	C	C	1	1	1	1	1	1	0	1	--	0.6
3-Sep	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
4-Sep	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
5-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0.4	0.7
6-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.5
7-Sep	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
8-Sep	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
9-Sep	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
10-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
11-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0.4	0.5
12-Sep	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.5
13-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5
14-Sep	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.5
15-Sep	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.5
16-Sep	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
17-Sep	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5
18-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4
19-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.4
20-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
21-Sep	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0.3	0.5
22-Sep	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
23-Sep	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
24-Sep	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
25-Sep	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0.5	0.6
26-Sep	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.5	0.5
27-Sep	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.6
28-Sep	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0.6	0.7
29-Sep	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
30-Sep	1	1	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	0.6	0.7	0.6	0.6	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.6	0.6	0.5	0.7	0.7	0.6	0.6	0.6	Diurnal Maximum	

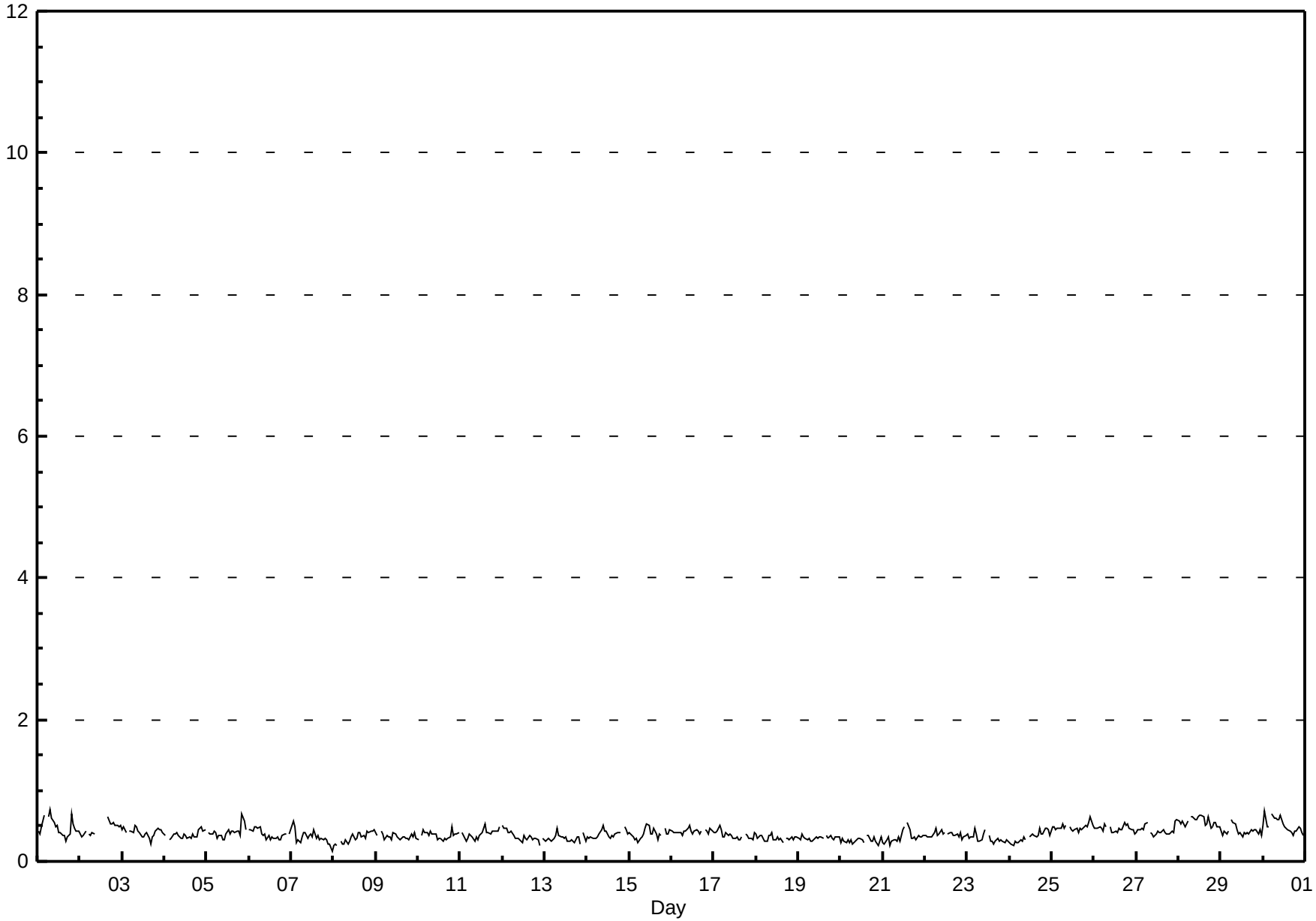
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - September 2010

Maximum Value: 1.4 ppb on Sep 1 08:00

Maximum Daily Average: 0.9 ppb on Sep 28

Minimum Value: 0 ppb on Sep 8 00:00

Minimum Daily Average: 0.6 ppb on Sep 20

Maximum Diurnal Average: 0.8 ppb at hour 23

Minimum Diurnal Average: 0.7 ppb at hour 19

Monthly Average: 0.73 ppb

Percentiles: P_1 = 0.5 P_{10} = 0.6 Q_1 = 0.6 Median = 0.7 Q_3 = 0.8 P_{90} = 0.9 P_{99} = 1.2

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	39
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-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
2-Sep	1	1	1	1	A	1	1	1	1	C	C	C	C	C	C	C	1	1	1	1	1	1	1	1	--	1.1
3-Sep	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
4-Sep	1	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
5-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	1.2
6-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0
7-Sep	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.1
8-Sep	0	1	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
9-Sep	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
10-Sep	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
11-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	1.0
12-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0
13-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.2
14-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	0.9
15-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	0.9
16-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.0
17-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9
18-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	0.9
19-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	1.0
20-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.6	0.8
21-Sep	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.0
22-Sep	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
23-Sep	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	0.7	0.8
24-Sep	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
25-Sep	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
26-Sep	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
27-Sep	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4
28-Sep	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
29-Sep	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
30-Sep	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	Diurnal Average	
	1.0	1.3	1.0	1.0	1.2	1.0	1.2	1.4	1.1	1.3	1.0	1.2	0.9	0.9	1.0	1.0	0.9	1.0	0.8	0.9	1.2	1.1	1.4	1.0	Diurnal Maximum	

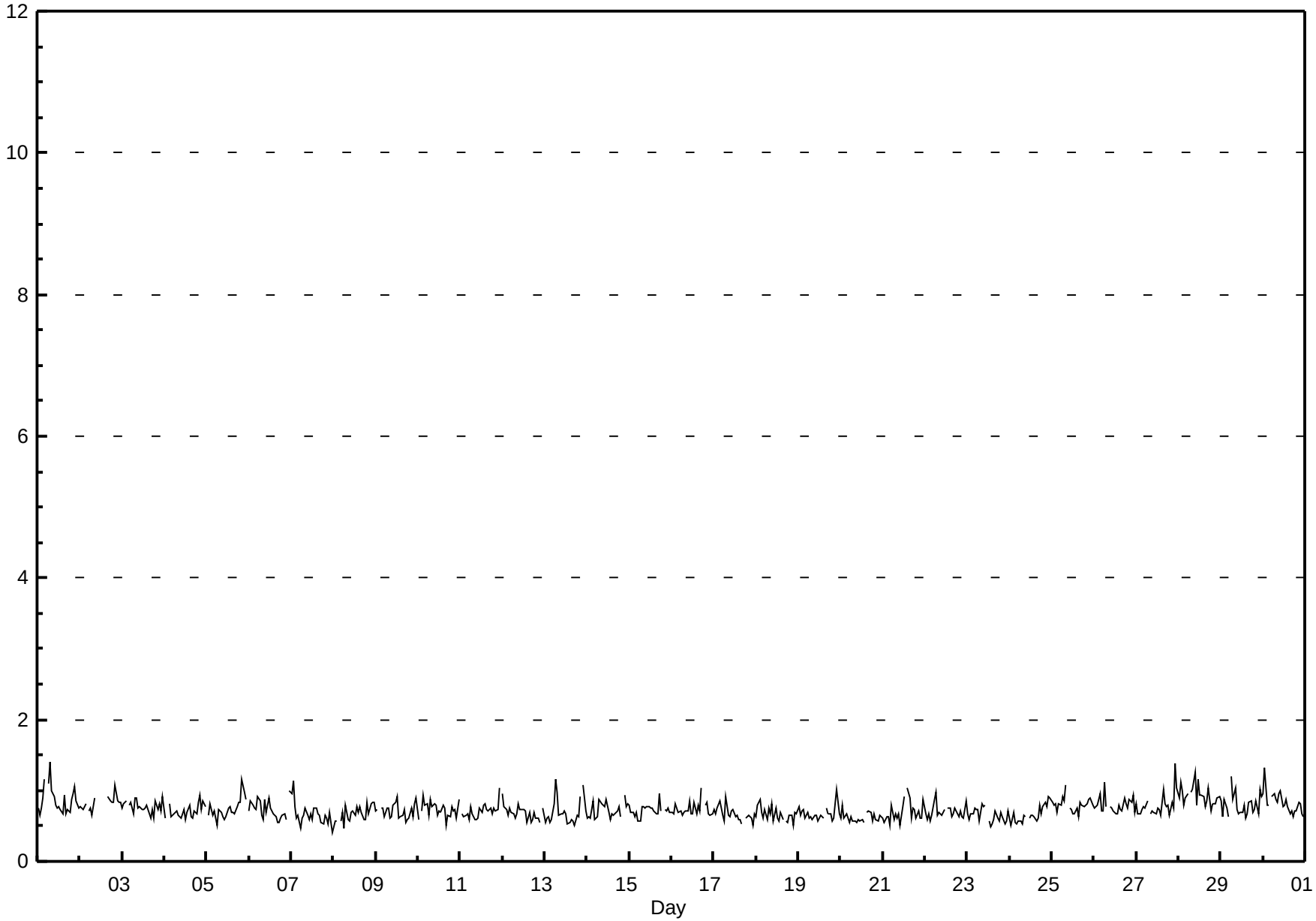
C - Calibration

A - Automated Daily Zero Span

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

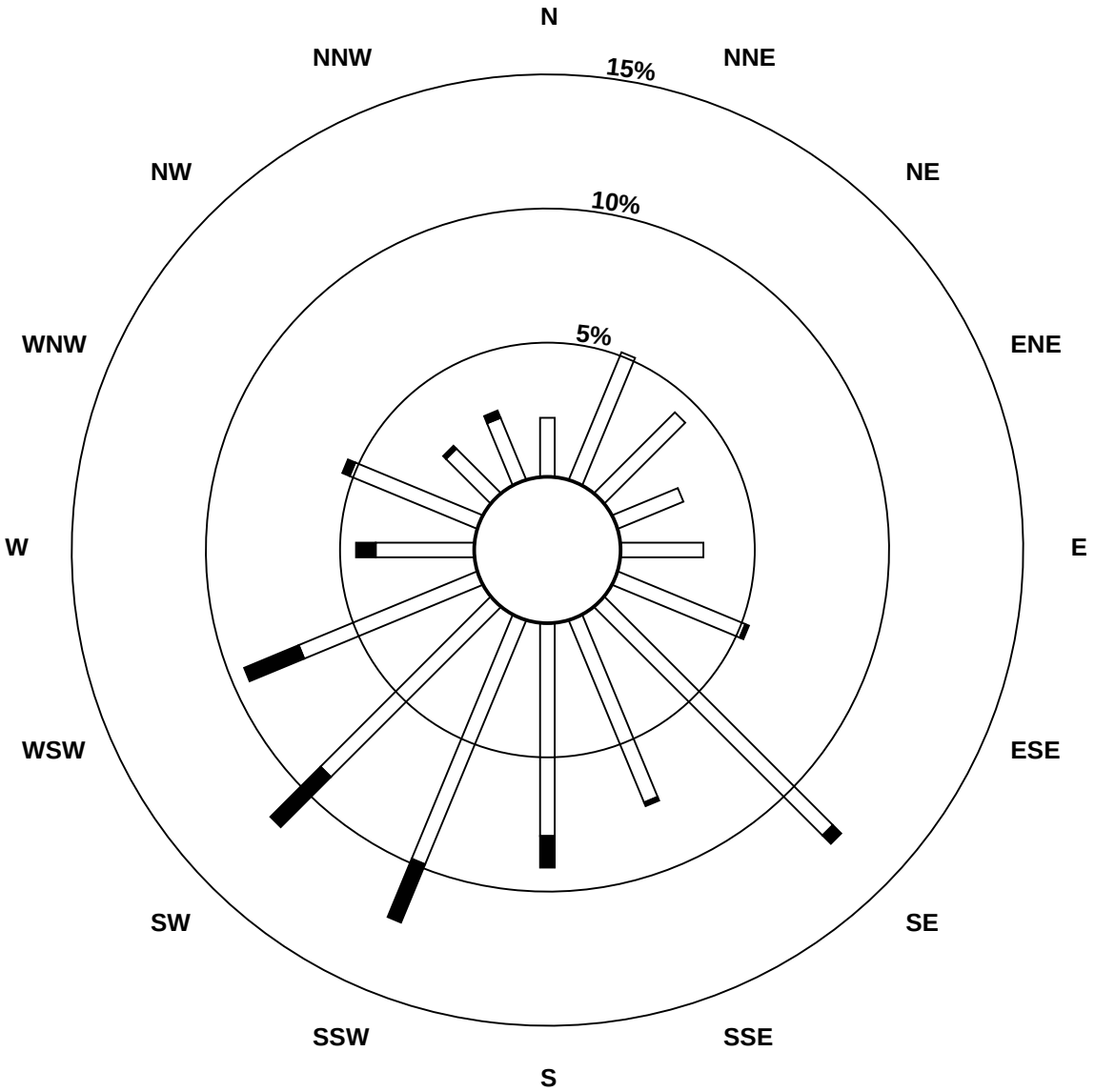
Portable-Bonanza - September 2010



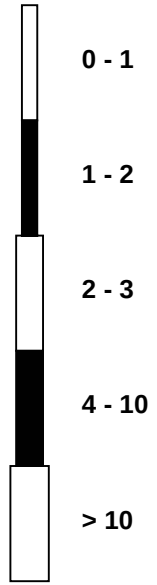
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - September 2010



Pollutant Classes (ppb)



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Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12.2 ppb on Sep 19 03:00
Maximum Daily Average: 5.1 ppb on Sep 23

Minimum Value: 0 ppb on Sep 17 16:00
Minimum Daily Average: 0.9 ppb on Sep 28
Maximum Diurnal Average: 4.8 ppb at hour 7
Minimum Diurnal Average: 1.2 ppb at hour 15
Monthly Average: 2.70 ppb
Percentiles: $P_1 = 0.1$ $P_{10} = 0.7$ $Q_1 = 1.1$ Median = 1.9 $Q_3 = 3.9$ $P_{90} = 5.8$ $P_{99} = 9.9$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
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-Sep	5	7	6	7	7	A	7	6	6	3	3	2	2	1	1	1	1	1	4	6	4	2	1	1	3.7	7.2
2-Sep	2	1	1	2	A	4	2	3	3	C	C	C	C	C	C	C	1	1	2	3	2	2	2	2	--	3.8
3-Sep	2	2	3	A	5	4	5	5	4	4	3	2	1	1	1	1	1	1	2	1	1	1	1	1	2.4	5.3
4-Sep	1	1	A	3	2	1	2	2	2	2	1	1	1	1	1	0	1	1	1	3	4	1	2	2	1.5	4.4
5-Sep	2	A	3	3	2	2	2	2	2	1	1	0	1	1	1	1	1	1	1	1	3	3	3	3	1.8	3.4
6-Sep	A	5	4	5	7	10	6	4	5	3	2	1	1	1	1	1	1	1	2	3	3	3	5	A	3.3	10.3
7-Sep	9	7	6	4	3	3	2	2	2	2	2	2	2	3	1	4	3	2	2	2	2	2	2	2	2.9	8.9
8-Sep	3	5	4	A	9	5	5	4	3	2	2	3	3	4	5	3	2	3	3	3	3	3	3	3	3.7	8.6
9-Sep	3	3	A	5	3	3	6	5	5	3	4	2	2	2	2	2	2	4	3	6	3	3	3	3	3.3	5.8
10-Sep	5	A	6	6	5	5	5	4	5	5	5	3	2	1	1	1	1	1	1	2	3	2	3	2	3.2	6.4
11-Sep	A	5	3	3	4	5	5	4	2	2	1	0	0	0	0	1	1	1	1	4	6	5	7	A	2.7	6.5
12-Sep	6	5	4	6	7	6	6	3	2	1	1	1	1	1	1	1	1	1	1	5	7	3	A	5	3.2	7.2
13-Sep	6	6	4	6	5	6	10	3	2	2	3	3	1	1	1	1	1	1	3	4	2	A	5	5	3.5	9.9
14-Sep	6	5	7	7	7	8	9	6	5	4	4	2	2	1	1	2	2	2	5	6	A	6	6	6	4.6	8.6
15-Sep	6	5	6	5	4	7	4	4	3	2	3	2	1	1	1	1	2	1	2	A	4	1	1	1	2.9	6.6
16-Sep	2	1	1	4	4	4	4	5	3	2	1	1	1	0	1	1	2	1	A	4	7	5	6	4	2.7	7.2
17-Sep	4	5	5	5	6	7	8	7	2	2	1	0	0	0	0	0	0	A	4	4	2	2	5	4	3.2	7.6
18-Sep	5	4	9	6	6	7	5	4	4	5	4	1	0	1	1	0	A	2	2	2	2	1	0	0	3.0	8.5
19-Sep	1	1	12	5	6	6	8	6	4	2	1	0	0	0	0	A	1	1	1	0	1	1	1	3	2.7	12.2
20-Sep	1	1	0	1	2	1	1	2	1	2	1	1	0	0	A	2	1	1	3	4	3	2	2	2	1.4	3.6
21-Sep	3	3	6	10	8	8	8	7	5	3	2	1	1	A	2	1	1	1	6	5	6	4	4	3	4.3	10.1
22-Sep	2	2	2	3	3	4	7	7	2	1	1	1	A	2	1	1	1	1	11	9	10	5	4	4	3.6	10.7
23-Sep	6	7	7	9	7	10	9	7	6	7	8	A	6	4	2	2	5	4	2	1	2	1	1	1	5.1	9.8
24-Sep	2	1	1	1	2	2	2	3	2	1	A	2	1	1	1	1	2	1	2	1	2	1	1	1	1.4	2.6
25-Sep	2	2	1	2	1	1	2	1	1	A	2	1	1	1	1	1	1	1	2	2	2	1	1	1	1.4	2.1
26-Sep	1	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1.1	1.8
27-Sep	2	2	2	2	1	2	2	A	4	3	4	3	2	3	2	1	1	1	1	1	1	1	1	1	1.8	4.0
28-Sep	1	1	1	1	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.2
29-Sep	1	1	1	1	1	A	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.7
30-Sep	1	1	1	1	A	2	4	4	3	3	2	1	1	2	2	1	1	2	4	4	11	2	2	2	2.5	10.8
	3.1	3.2	3.8	4.0	4.2	4.5	4.8	3.9	3.2	2.6	2.2	1.4	1.3	1.2	1.2	1.2	1.3	1.4	2.5	3.0	3.4	2.3	2.6	2.4	Diurnal Average	
	8.9	7.2	12.2	10.1	8.6	10.3	9.9	7.3	6.5	7.3	7.6	3.0	6.2	4.1	5.1	3.8	5.0	4.1	10.7	8.6	10.8	5.7	6.5	6.1	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

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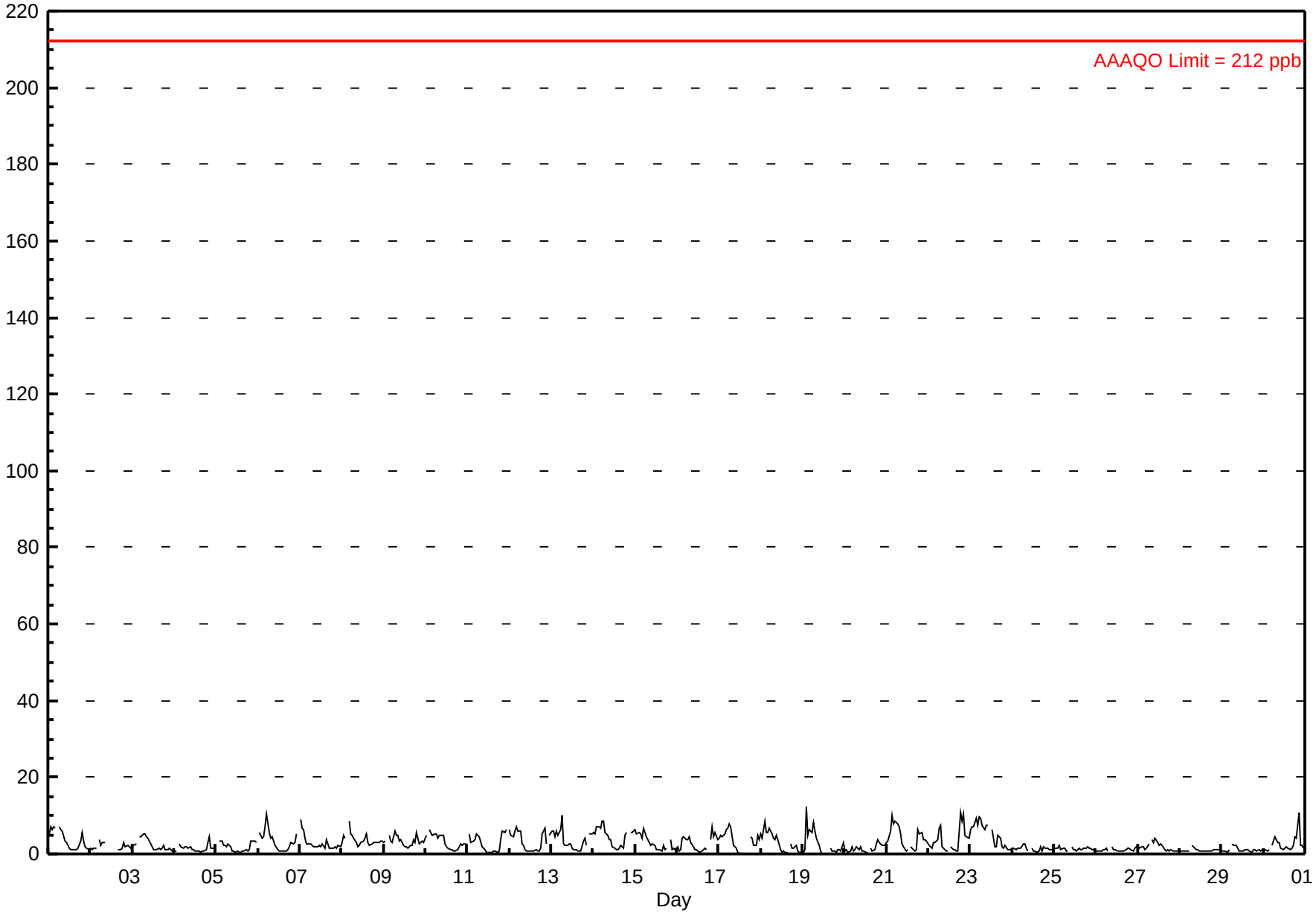
Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - September 2010

Maximum Value: 73.7 ppb on Sep 13 07:00

Maximum Daily Average: 9.9 ppb on Sep 22

Minimum Value: 0 ppb on Sep 17 17:00

Minimum Daily Average: 2.5 ppb on Sep 26

Maximum Diurnal Average: 12.3 ppb at hour 7

Minimum Diurnal Average: 3.4 ppb at hour 14

Monthly Average: 6.02 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 1.5$ $Q_1 = 2.5$ Median = 4.5 $Q_3 = 7.8$ $P_{90} = 12.3$ $P_{99} = 23.4$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
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-Sep	7	11	10	10	7	A	15	10	10	5	4	4	2	2	2	3	2	2	9	12	5	3	2	1	6.0	15.1
2-Sep	3	2	3	2	A	7	7	8	21	C	C	C	C	C	C	C	2	4	6	8	2	5	5	3	--	21.3
3-Sep	3	3	6	A	6	7	8	18	16	7	5	6	5	5	5	9	7	4	10	1	2	2	2	1	6.0	17.9
4-Sep	2	1	A	4	2	4	3	3	2	21	4	1	1	1	3	1	5	2	2	7	14	2	3	3	4.0	20.6
5-Sep	3	A	6	5	4	4	5	4	3	2	1	1	1	1	1	2	2	2	2	1	7	5	4	4	3.2	7.1
6-Sep	A	7	7	9	20	16	14	14	12	6	4	4	2	1	2	1	1	2	3	4	4	4	8	A	6.5	20.0
7-Sep	14	8	8	6	5	4	6	5	3	3	2	3	8	12	2	20	17	2	2	4	4	2	3	3	6.0	20.1
8-Sep	7	12	6	A	13	6	8	5	7	3	3	4	5	7	8	14	6	8	6	8	4	4	4	6	6.7	14.2
9-Sep	4	4	A	7	9	9	11	10	7	6	10	4	3	2	3	8	4	12	6	15	7	5	4	5	6.7	14.9
10-Sep	11	A	8	7	6	7	8	6	6	6	6	10	15	3	6	7	3	1	6	2	4	3	4	5	6.0	14.7
11-Sep	A	7	5	6	5	15	9	9	6	5	2	1	1	1	1	1	4	1	1	6	10	9	14	A	5.3	15.5
12-Sep	8	6	5	8	8	9	12	4	4	3	2	1	3	3	2	5	4	2	2	12	15	8	A	6	5.7	14.7
13-Sep	11	11	5	10	6	15	74	5	3	4	3	3	2	5	16	3	3	4	10	10	6	A	7	6	9.7	73.7
14-Sep	7	6	8	11	8	14	23	7	6	5	5	3	3	2	5	4	10	4	21	16	A	7	10	11	8.6	23.4
15-Sep	9	6	7	7	6	12	7	7	14	5	8	5	3	2	3	3	9	4	3	A	5	2	6	4	5.9	14.0
16-Sep	3	1	3	18	13	8	6	8	5	7	3	5	2	3	2	4	6	6	A	12	23	11	12	7	7.4	22.5
17-Sep	6	6	5	10	10	12	14	18	3	3	6	1	1	1	0	0	0	A	15	12	7	12	18	9	7.3	17.8
18-Sep	8	5	12	10	14	15	11	5	5	6	7	8	3	4	3	4	A	12	5	3	7	3	3	1	6.6	14.8
19-Sep	1	4	19	17	11	17	17	14	9	8	1	1	1	1	1	A	3	3	2	1	2	2	1	10	6.5	19.4
20-Sep	1	4	0	5	9	2	6	5	4	5	4	2	2	2	A	3	2	5	9	10	4	4	3	2	4.1	9.5
21-Sep	5	6	12	16	12	23	13	15	9	4	3	2	5	A	3	7	2	3	25	10	20	5	4	4	9.0	25.2
22-Sep	3	2	2	9	8	19	24	14	4	4	2	3	A	8	3	6	3	2	30	16	35	7	10	12	9.9	35.2
23-Sep	13	8	11	15	9	19	13	15	11	11	11	A	8	6	9	5	9	12	8	7	5	3	4	1	9.3	19.5
24-Sep	2	2	1	2	3	3	5	5	7	4	A	6	1	2	2	6	5	4	12	7	9	2	2	2	4.0	12.0
25-Sep	2	2	5	4	2	6	3	6	5	A	5	4	4	2	6	3	4	5	3	4	4	3	2	3	3.8	6.4
26-Sep	2	1	1	1	3	3	5	1	A	3	2	3	2	1	2	1	2	4	4	3	5	2	3	3	2.5	5.3
27-Sep	3	2	2	2	1	2	5	A	7	4	8	5	4	5	3	2	2	1	1	2	3	2	1	1	3.1	8.3
28-Sep	1	1	1	3	2	1	A	4	5	5	3	2	2	4	5	3	2	2	5	2	2	2	3	1	2.5	5.4
29-Sep	1	1	1	2	4	A	6	13	15	5	9	9	4	8	9	5	1	1	4	4	1	2	1	2	4.7	15.1
30-Sep	1	2	1	2	A	10	21	9	7	16	4	6	3	3	9	3	6	10	9	15	25	6	5	4	7.7	25.0
	5.0	4.8	5.7	7.5	7.3	9.6	12.3	8.5	7.4	5.8	4.6	3.9	3.5	3.4	4.2	4.7	4.3	4.3	7.6	7.5	8.2	4.4	5.0	4.3	Diurnal Average	
	13.6	12.0	19.4	18.0	20.0	22.7	73.7	17.9	21.3	20.6	11.2	10.0	14.7	12.5	15.7	20.1	16.5	11.9	30.1	16.4	35.2	11.6	17.8	11.6	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

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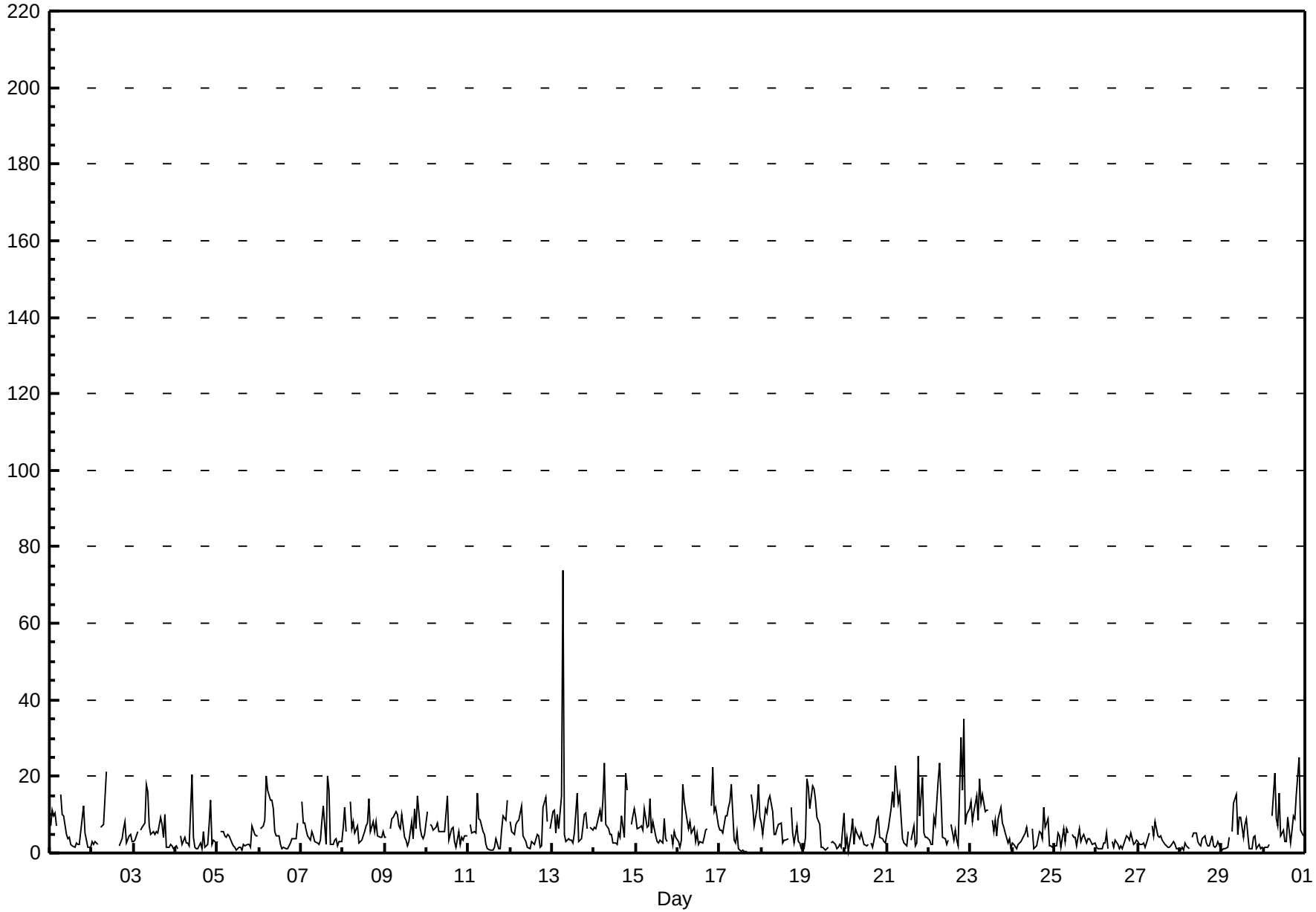
Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

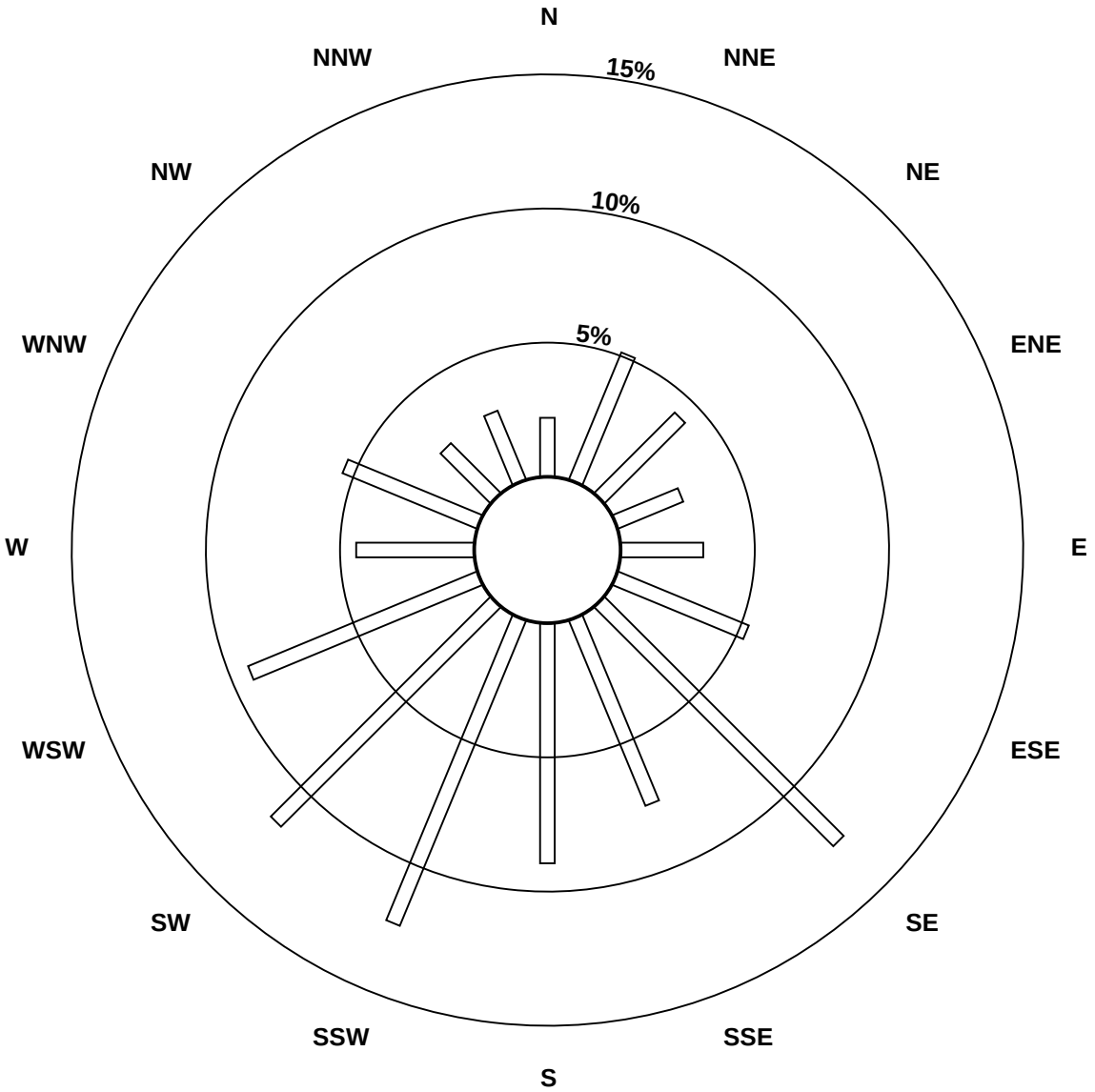
Portable-Bonanza - September 2010



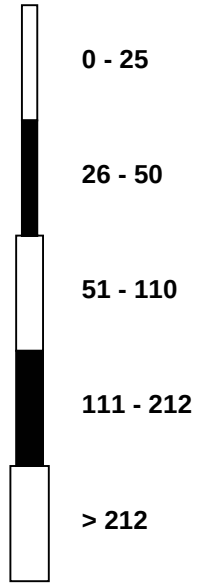
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - September 2010



Pollutant Classes (ppb)



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Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.7 ppb on Sep 13 07:00
Maximum Daily Average: 2.4 ppb on Sep 13

Minimum Value: 0 ppb on Sep 19 22:00
Minimum Daily Average: 0.2 ppb on Sep 5
Maximum Diurnal Average: 2.9 ppb at hour 7
Minimum Diurnal Average: 0.2 ppb at hour 24
Monthly Average: 0.97 ppb
Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.2 Median = 0.4 Q_3 = 0.9 P_{90} = 2.4 P_{99} = 9.8

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	0	0	2	2	1	A	1	1	1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0.6	2.3
2-Sep	0	0	0	0	A	1	0	1	6	C	C	C	C	C	C	C	0	1	1	1	0	0	0	0	--	6.1
3-Sep	0	0	0	A	0	1	1	3	3	2	2	1	0	0	1	1	1	1	1	0	0	0	0	0	0.8	3.4
4-Sep	0	0	A	0	0	0	0	1	1	3	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0.4	2.8
5-Sep	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.6
6-Sep	A	0	0	0	1	3	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	1	A	0.6	2.7
7-Sep	2	1	2	0	0	0	0	0	0	0	0	1	1	3	1	8	4	0	0	0	0	0	0	0	1.0	7.7
8-Sep	0	2	0	A	8	2	10	6	4	2	1	2	2	2	2	2	1	1	1	1	0	0	0	0	2.1	9.9
9-Sep	0	1	A	0	0	1	2	2	2	1	3	1	1	0	0	1	1	2	1	3	0	0	0	0	1.1	3.1
10-Sep	0	A	2	2	1	1	5	4	6	9	7	2	1	1	1	1	0	0	1	0	0	0	0	0	2.0	8.8
11-Sep	A	0	0	0	0	4	1	3	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	A	0.7	3.7
12-Sep	0	0	0	2	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	A	0	0.7	3.8
13-Sep	0	0	0	2	1	16	19	4	3	2	2	2	1	0	1	0	0	0	0	1	0	A	0	0	2.4	18.7
14-Sep	0	0	0	0	0	3	11	4	4	5	5	1	1	0	0	0	0	0	1	1	A	0	0	0	1.7	11.4
15-Sep	0	0	0	0	0	4	2	4	4	2	2	2	0	0	0	0	1	0	0	A	0	0	0	0	1.1	4.2
16-Sep	0	0	0	2	0	1	1	2	2	1	1	1	0	0	1	1	1	1	A	0	4	1	2	0	1.0	4.1
17-Sep	0	0	0	2	3	3	9	9	2	2	1	0	0	0	0	0	0	A	1	2	1	1	0	0	1.6	9.1
18-Sep	0	0	0	0	1	2	1	2	3	5	3	1	0	0	0	0	A	1	0	0	0	0	0	0	0.8	4.6
19-Sep	0	0	13	2	1	1	2	2	2	1	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1.1	12.9
20-Sep	0	0	0	0	1	0	1	1	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	1.2
21-Sep	0	0	0	3	1	12	4	5	5	3	2	1	1	A	1	0	0	0	3	1	0	0	0	0	1.8	11.6
22-Sep	0	0	0	1	0	3	5	3	1	1	0	1	A	0	0	0	0	0	6	2	10	0	0	0	1.5	9.8
23-Sep	0	0	0	1	0	4	3	8	7	4	6	A	4	2	1	1	1	1	1	1	1	0	0	0	2.1	8.5
24-Sep	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	1	0	0	1	0	0	0	0	0.4	1.2
25-Sep	0	0	0	0	0	0	0	1	0	A	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.8
26-Sep	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
27-Sep	0	0	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
28-Sep	0	0	0	0	0	0	A	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.7
29-Sep	0	0	0	0	0	A	1	1	2	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0.5	2.2
30-Sep	0	0	0	0	A	1	1	1	1	2	1	0	0	1	0	0	0	0	1	1	1	0	0	0	0.6	1.9
	0.2	0.3	0.8	0.7	0.8	2.3	2.9	2.5	2.2	1.9	1.5	0.7	0.6	0.6	0.5	0.7	0.6	0.4	0.7	0.7	0.8	0.3	0.3	0.2	Diurnal Average	
	1.7	1.8	12.9	2.6	8.3	15.6	18.7	8.7	6.6	8.8	6.6	2.5	3.9	3.1	1.6	7.7	3.5	1.8	6.2	3.1	9.8	1.1	1.8	0.5	Diurnal Maximum	

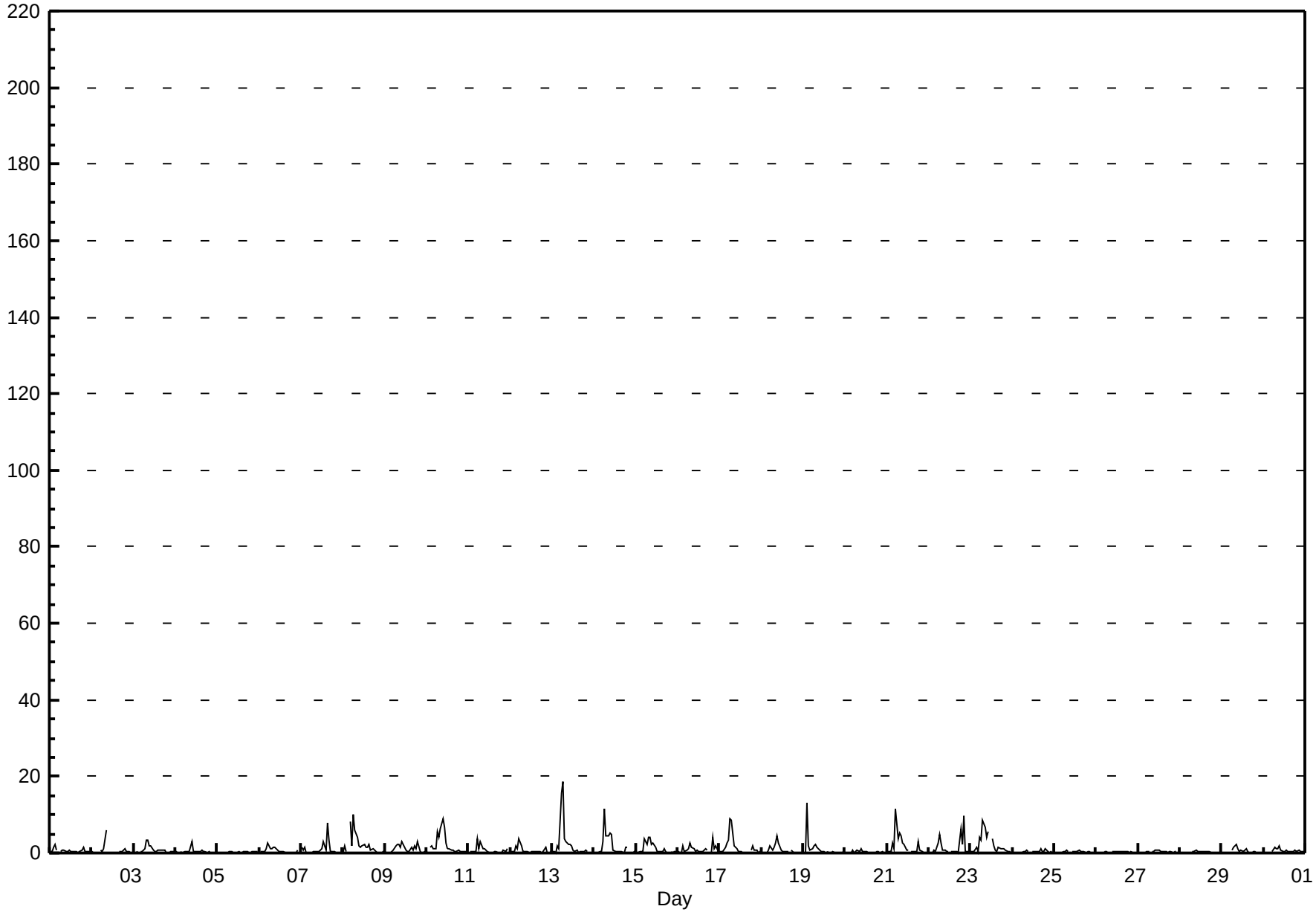
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - September 2010

Maximum Value: 246.0 ppb on Sep 13 07:00

Maximum Daily Average: 16.3 ppb on Sep 13

Minimum Value: 0 ppb on Sep 20 03:00

Minimum Daily Average: 0.8 ppb on Sep 5

Maximum Diurnal Average: 21.8 ppb at hour 7

Minimum Diurnal Average: 1.0 ppb at hour 1

Monthly Average: 6.35 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.3 Q_1 = 0.7 Median = 2.5 Q_3 = 6.4 P_{90} = 13.6 P_{99} = 46.4

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
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-Sep	1	1	4	5	4	A	6	1	1	0	1	4	2	2	1	2	1	1	4	11	1	1	1	1	2.4	11.4
2-Sep	3	0	2	1	A	9	9	12	121	C	C	C	C	C	C	C	1	7	13	9	0	7	0	1	--	120.6
3-Sep	0	0	4	A	4	6	19	26	33	6	3	3	7	5	7	7	11	9	15	1	0	1	0	1	7.4	33.5
4-Sep	1	0	A	1	0	3	1	2	1	44	5	1	0	0	2	21	6	2	1	6	0	0	0	0	4.3	44.2
5-Sep	0	A	0	0	0	0	0	1	1	0	0	0	1	0	0	1	1	1	0	0	6	1	2	1	0.8	5.7
6-Sep	A	0	3	4	12	19	8	6	7	6	3	3	1	0	1	0	0	0	0	0	0	0	5	A	3.6	19.0
7-Sep	5	2	5	1	0	0	0	1	2	2	1	4	16	19	3	41	35	2	0	3	2	0	1	2	6.2	40.7
8-Sep	1	41	1	A	21	9	24	12	12	3	2	2	5	4	4	21	7	7	5	6	1	1	0	2	8.2	40.9
9-Sep	1	2	A	1	4	8	21	17	7	6	30	3	4	1	3	14	2	14	5	16	6	1	0	2	7.2	29.8
10-Sep	2	A	5	7	3	6	11	15	10	11	10	17	12	7	14	6	3	0	11	3	2	2	1	1	6.9	17.0
11-Sep	A	2	1	3	2	31	13	13	11	14	3	2	0	0	0	1	2	0	0	0	8	2	18	A	5.8	31.3
12-Sep	1	1	1	7	3	30	8	2	2	2	1	1	3	3	2	3	3	0	0	3	8	1	A	1	3.7	29.8
13-Sep	3	2	1	12	5	47	246	13	4	4	4	3	1	2	13	2	2	2	2	4	3	A	0	1	16.3	246.0
14-Sep	0	0	0	6	1	13	84	15	8	7	10	1	2	1	2	2	6	1	15	12	A	2	5	6	8.7	84.2
15-Sep	0	0	2	2	1	13	7	37	37	8	6	6	1	1	1	1	6	2	0	A	2	0	9	2	6.2	37.2
16-Sep	1	0	1	21	3	11	7	18	2	4	2	5	2	3	2	3	6	5	A	2	42	17	20	5	7.9	42.4
17-Sep	2	1	1	7	6	15	32	40	3	3	7	1	1	1	0	0	0	A	6	23	8	10	1	3	7.5	40.2
18-Sep	2	0	1	1	4	7	7	2	8	6	6	5	2	3	2	2	A	7	1	1	1	2	2	0	3.2	8.2
19-Sep	0	0	56	26	4	8	8	12	5	5	1	1	1	1	2	A	0	3	0	0	0	0	0	5	6.1	55.5
20-Sep	0	1	0	1	5	1	5	4	2	3	2	3	1	1	A	0	0	1	4	5	1	4	0	0	1.9	5.1
21-Sep	0	1	1	10	5	182	17	37	11	4	4	3	4	A	3	6	9	1	45	7	7	1	0	0	15.6	182.2
22-Sep	0	0	0	12	4	47	45	8	4	4	5	5	A	4	3	8	2	1	49	19	101	2	2	4	14.3	101.4
23-Sep	5	1	1	5	1	34	13	26	36	9	12	A	7	5	6	4	8	6	11	15	21	7	4	0	10.4	35.6
24-Sep	0	0	0	0	2	2	2	3	6	8	A	4	2	5	5	5	12	4	12	25	8	0	3	0	4.7	25.2
25-Sep	0	0	0	2	0	3	5	13	3	A	5	5	4	5	4	5	2	7	0	3	3	0	0	0	3.1	12.8
26-Sep	0	1	0	0	1	1	7	0	A	3	1	5	2	0	1	0	1	2	6	2	6	0	0	0	1.8	6.8
27-Sep	0	0	0	1	0	2	2	A	3	3	8	9	4	3	1	3	1	1	2	2	1	2	1	0	2.1	9.4
28-Sep	0	1	0	1	1	1	A	3	3	14	3	1	6	6	4	2	3	3	1	0	0	1	2	0	2.4	13.6
29-Sep	0	0	0	1	0	A	10	11	21	7	8	14	3	7	21	3	0	0	2	4	0	0	1	0	4.9	20.8
30-Sep	0	0	0	1	A	10	16	12	14	16	14	5	1	4	5	3	1	3	9	8	6	4	7	4	6.2	16.0
	1.0	2.2	3.2	5.0	3.6	18.5	21.8	12.4	12.9	7.2	5.7	4.2	3.3	3.4	4.0	6.0	4.5	3.1	7.6	6.6	8.5	2.5	3.0	1.6	Diurnal Average	
	4.8	40.9	55.5	25.9	21.1	182.2	246.0	40.2	120.6	44.2	29.8	17.0	15.6	19.5	20.8	40.7	35.3	13.7	48.6	25.2	101.4	17.2	19.5	6.4	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

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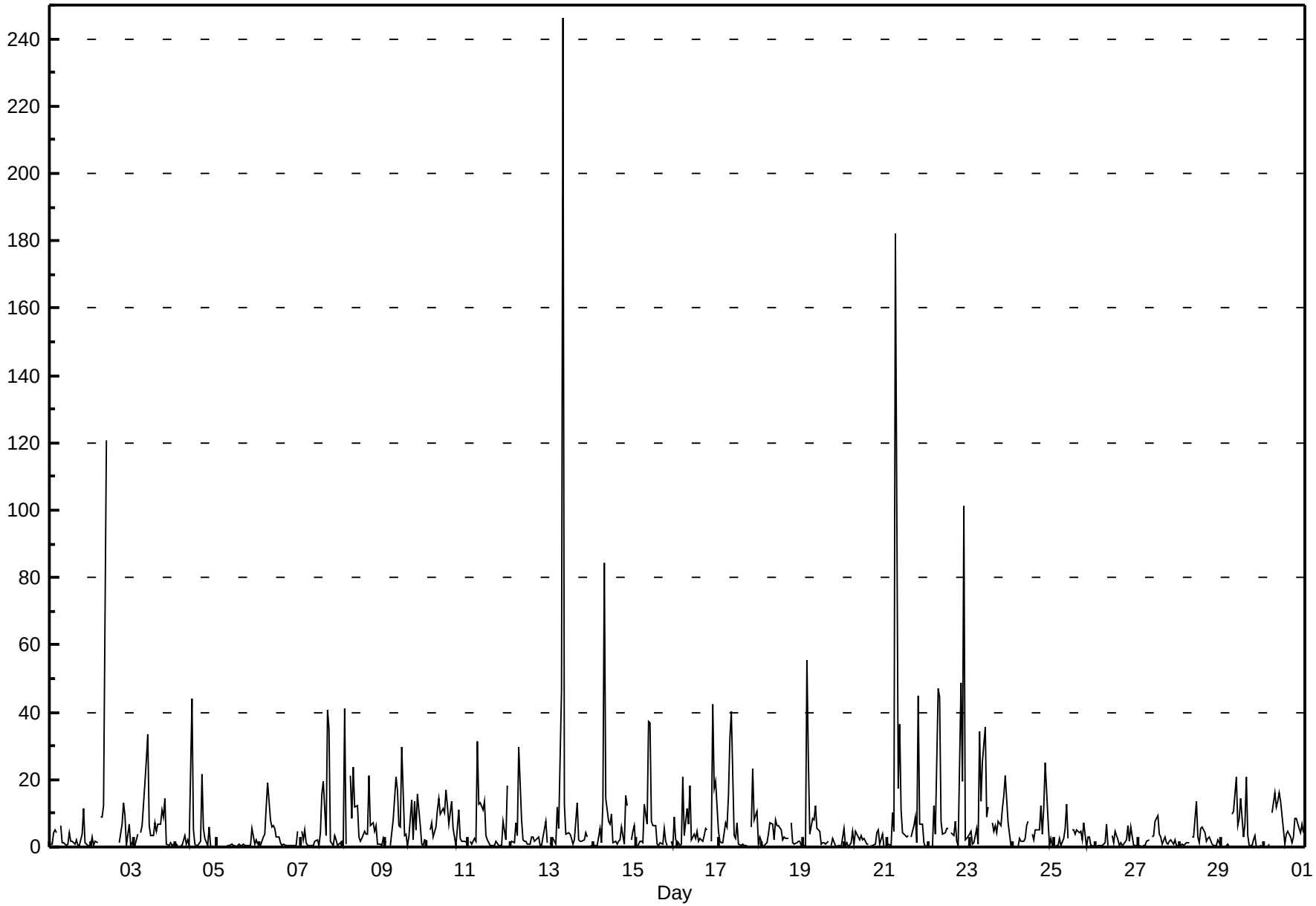
Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - September 2010



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Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 28.8 ppb on Sep 13 07:00 Maximum Daily Average: 7.2 ppb on Sep 23

Minimum Value: 0 ppb on Sep 17 16:00 Minimum Daily Average: 1.1 ppb on Sep 28
Maximum Diurnal Average: 7.8 ppb at hour 7 Minimum Diurnal Average: 1.6 ppb at hour 15
Monthly Average: 3.66 ppb Percentiles: P_1 = 0.3 P_{10} = 0.9 Q_1 = 1.3 Median = 2.4 Q_3 = 5.0 P_{90} = 7.8 P_{99} = 16.1

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
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-Sep	6	8	8	9	8	A	8	7	7	4	3	3	2	2	1	1	1	2	4	7	4	2	2	1	4.3	9.3
2-Sep	2	1	2	2	A	4	3	4	9	C	C	C	C	C	C	C	2	2	2	4	2	3	2	2	--	9.2
3-Sep	2	2	3	A	5	5	7	9	8	6	5	3	2	2	2	2	2	2	3	1	1	2	1	1	3.2	8.8
4-Sep	1	1	A	3	2	2	2	2	2	5	2	1	1	1	1	1	1	1	1	3	5	2	2	2	1.8	4.7
5-Sep	2	A	3	3	2	2	2	3	2	1	1	0	1	1	1	1	1	1	1	1	4	4	4	3	1.9	3.8
6-Sep	A	6	5	5	8	13	7	5	6	5	3	1	1	1	1	1	1	1	2	3	3	3	6	A	3.9	13.1
7-Sep	11	7	8	4	3	3	3	2	2	2	2	3	3	6	2	12	6	2	2	2	2	2	2	2	3.8	11.5
8-Sep	3	7	4	A	17	7	15	10	7	4	4	5	5	6	7	5	3	4	4	4	3	3	3	4	5.8	17.0
9-Sep	3	4	A	5	4	4	8	7	7	5	7	4	3	2	2	4	3	5	4	9	3	3	3	3	4.4	9.0
10-Sep	5	A	8	8	6	6	11	8	11	14	11	5	3	2	2	2	1	1	2	2	3	3	3	3	5.2	13.9
11-Sep	A	6	3	4	4	9	6	7	3	3	1	1	1	1	1	1	1	1	1	4	7	6	8	A	3.4	9.0
12-Sep	7	5	5	8	9	10	8	3	3	2	1	1	1	1	1	1	1	1	1	6	9	3	A	5	3.9	10.0
13-Sep	6	6	5	8	6	22	29	6	5	5	5	4	2	1	2	1	1	1	4	5	3	A	5	5	5.9	28.8
14-Sep	6	5	7	8	7	11	20	10	9	9	9	2	2	1	1	2	3	2	6	7	A	6	6	7	6.4	20.2
15-Sep	6	5	6	6	5	10	6	8	7	4	5	4	1	1	1	1	3	1	2	A	4	1	2	1	4.0	10.3
16-Sep	2	1	1	6	5	4	5	7	5	3	1	1	1	1	1	2	3	2	A	4	11	6	7	4	3.6	11.4
17-Sep	5	5	5	7	9	10	17	16	4	3	3	1	0	0	0	0	0	A	5	6	3	3	5	4	4.9	16.8
18-Sep	5	4	9	6	6	9	6	6	7	10	7	2	1	1	1	0	A	3	2	2	3	1	1	0	3.9	9.7
19-Sep	1	1	25	7	7	7	10	8	6	3	1	0	0	0	0	A	1	1	1	1	1	1	1	3	3.8	25.4
20-Sep	1	1	0	1	2	1	2	2	1	3	1	1	1	1	A	2	1	1	3	4	3	2	2	2	1.7	4.1
21-Sep	3	3	6	13	9	20	12	12	10	5	4	2	2	A	3	2	1	1	9	6	6	4	4	4	6.1	20.2
22-Sep	2	2	2	4	3	7	11	10	2	2	1	1	A	2	1	1	1	1	17	11	20	5	5	5	5.1	20.2
23-Sep	7	7	8	11	8	14	13	16	13	12	13	A	10	6	3	2	6	5	3	2	3	1	1	1	7.2	15.9
24-Sep	2	1	1	1	2	2	3	3	2	1	A	2	1	1	1	1	3	1	2	3	2	1	1	1	1.7	3.1
25-Sep	2	2	1	2	1	2	2	2	1	A	2	2	2	1	2	2	1	2	2	2	2	1	1	1	1.6	2.2
26-Sep	1	1	1	1	1	1	2	1	A	2	2	2	1	1	1	1	1	1	2	2	1	1	2	2	1.3	2.2
27-Sep	2	2	2	2	1	2	3	A	4	3	5	4	3	3	2	1	1	1	1	1	1	1	1	1	2.0	4.8
28-Sep	1	1	1	1	1	1	A	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.5
29-Sep	1	1	1	1	1	A	3	3	5	2	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1.5	4.5
30-Sep	1	1	1	1	A	3	6	5	4	5	2	2	2	2	2	1	2	3	5	5	12	3	3	2	3.1	11.8
	3.4	3.5	4.6	4.8	5.1	6.8	7.8	6.4	5.3	4.4	3.7	2.1	1.9	1.7	1.6	1.9	1.8	1.8	3.2	3.7	4.2	2.5	2.9	2.6	Diurnal Average	
	10.7	7.5	25.4	12.9	17.0	21.9	28.8	15.9	13.2	13.9	13.2	5.0	10.2	5.8	6.8	11.5	6.4	5.5	17.1	11.2	20.2	5.9	7.6	6.5	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

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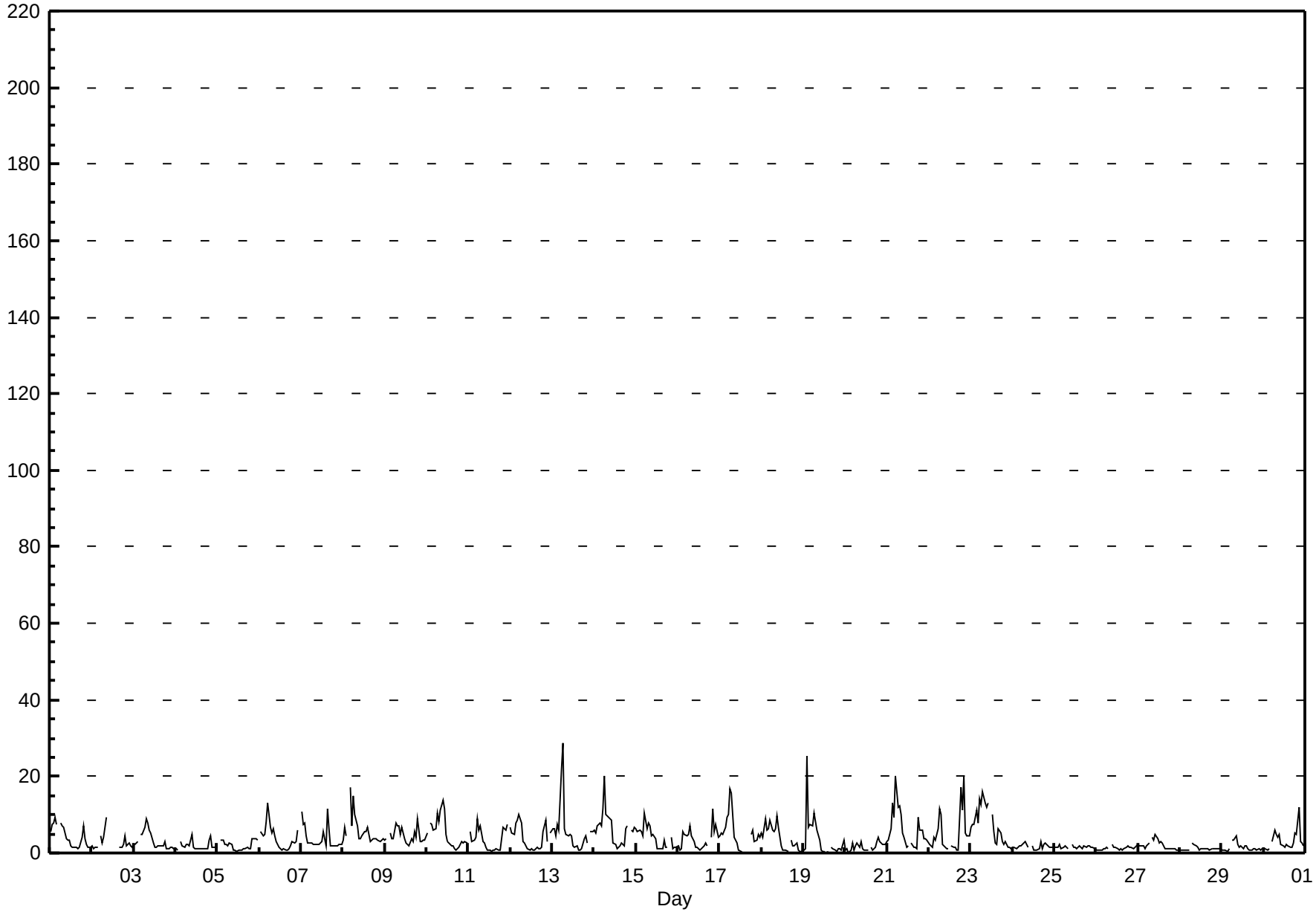
Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - September 2010



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Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - September 2010

Maximum Value: 318.9 ppb on Sep 13 07:00

Maximum Daily Average: 25.8 ppb on Sep 13

Minimum Value: 0 ppb on Sep 17 17:00

Minimum Daily Average: 3.8 ppb on Sep 5

Maximum Diurnal Average: 33.6 ppb at hour 7

Minimum Diurnal Average: 5.9 ppb at hour 24

Monthly Average: 11.95 ppb

Percentiles: P_1 = 0.7 P_{10} = 1.9 Q_1 = 3.4 Median = 7.0 Q_3 = 13.7 P_{90} = 24.3 P_{99} = 74.6

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
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-Sep	8	12	14	16	12	A	22	12	11	5	4	8	4	3	2	5	3	3	11	23	7	4	2	2	8.2	22.8
2-Sep	6	2	4	3	A	12	16	18	132	C	C	C	C	C	C	C	3	10	20	17	3	12	5	4	--	131.7
3-Sep	3	4	10	A	9	12	27	44	49	13	8	8	12	8	10	16	19	12	25	2	2	3	2	2	13.0	49.0
4-Sep	3	1	A	4	3	7	3	5	2	64	9	2	1	2	4	10	11	3	3	14	15	2	3	3	7.5	64.4
5-Sep	3	A	6	6	5	4	5	5	3	2	1	1	2	2	1	3	2	3	3	2	12	5	6	5	3.8	12.3
6-Sep	A	7	10	13	32	35	20	19	18	10	7	7	3	1	2	1	1	2	3	4	4	4	12	A	9.8	35.3
7-Sep	16	10	12	7	5	4	6	5	4	4	3	8	24	29	5	57	52	3	3	6	5	2	3	5	11.6	57.2
8-Sep	7	51	6	A	33	14	30	17	19	5	5	6	10	11	12	36	12	16	10	15	5	5	4	8	14.6	50.9
9-Sep	5	6	A	7	13	17	31	27	13	12	40	7	7	2	5	22	6	24	11	31	13	6	4	7	13.8	39.9
10-Sep	12	A	12	15	9	13	17	19	15	17	16	27	27	8	19	12	6	2	17	5	5	5	6	6	12.6	27.3
11-Sep	A	8	6	7	7	47	20	17	15	18	6	2	1	1	1	2	6	1	1	6	17	10	32	A	10.5	46.7
12-Sep	9	7	6	14	10	38	21	7	6	5	3	2	6	6	4	8	7	2	2	15	23	10	A	6	9.3	38.0
13-Sep	13	13	6	21	11	61	319	18	6	8	7	6	4	7	29	4	5	5	12	15	9	A	7	7	25.8	318.9
14-Sep	7	7	8	16	9	27	108	21	14	10	15	4	4	3	7	6	16	5	37	29	A	10	14	18	17.1	107.7
15-Sep	10	6	8	9	7	25	12	44	51	12	14	10	4	3	4	3	15	5	3	A	6	2	14	6	11.9	51.2
16-Sep	4	1	4	39	17	20	13	26	7	10	4	10	4	5	4	7	11	12	A	14	59	26	28	12	14.7	58.7
17-Sep	6	7	6	17	16	27	46	58	6	5	13	2	1	1	0	1	0	A	20	36	12	22	18	12	14.5	57.8
18-Sep	10	5	12	11	18	22	18	7	13	12	14	13	5	7	6	6	A	19	6	3	7	5	4	1	9.7	22.0
19-Sep	1	5	75	42	15	26	25	27	15	12	2	3	2	2	3	A	3	6	2	1	2	2	2	16	12.6	74.9
20-Sep	1	5	0	7	14	3	11	9	6	9	6	5	3	3	A	3	2	6	13	15	4	7	3	3	6.0	14.8
21-Sep	5	6	12	26	17	198	30	52	20	7	6	4	9	A	5	14	5	4	71	17	27	6	4	4	24.0	197.8
22-Sep	3	2	2	19	12	66	66	22	8	8	6	7	A	12	6	13	5	2	76	28	137	10	13	16	23.5	137.4
23-Sep	19	9	12	20	10	53	26	41	45	20	23	A	16	10	15	7	17	18	16	19	20	8	7	1	18.7	52.5
24-Sep	3	2	1	2	4	4	6	7	13	11	A	10	2	6	6	10	15	5	24	26	17	2	4	2	8.0	25.8
25-Sep	2	2	6	7	2	8	7	12	8	A	8	9	6	4	11	8	6	12	3	7	6	3	2	3	6.1	12.4
26-Sep	2	2	1	2	3	4	12	1	A	5	2	7	4	1	3	2	3	6	10	4	11	2	3	3	4.0	12.2
27-Sep	3	2	2	3	2	4	7	A	9	8	11	13	8	7	4	3	3	2	2	3	4	4	1	1	4.7	13.1
28-Sep	1	2	1	3	3	3	A	6	8	11	6	3	7	10	9	4	3	5	5	2	2	2	5	1	4.4	10.9
29-Sep	1	1	1	3	4	A	13	21	35	8	18	24	6	12	29	8	2	1	6	8	1	2	2	2	9.0	34.9
30-Sep	1	2	1	3	A	20	37	20	19	32	18	11	4	7	14	5	8	13	17	24	31	9	10	8	13.6	37.0
	5.9	6.7	8.8	12.1	10.7	27.6	33.6	20.2	19.7	12.3	9.8	7.7	6.7	6.3	7.9	9.9	8.5	7.2	14.8	13.4	16.1	6.5	7.6	5.9	Diurnal Average	
	18.5	50.9	74.9	42.3	33.0	197.8	318.9	57.8	131.7	64.4	39.9	27.0	27.3	29.3	29.3	57.2	51.6	24.4	76.1	35.6	137.4	26.0	32.2	17.7	Diurnal Maximum	

C - Calibration

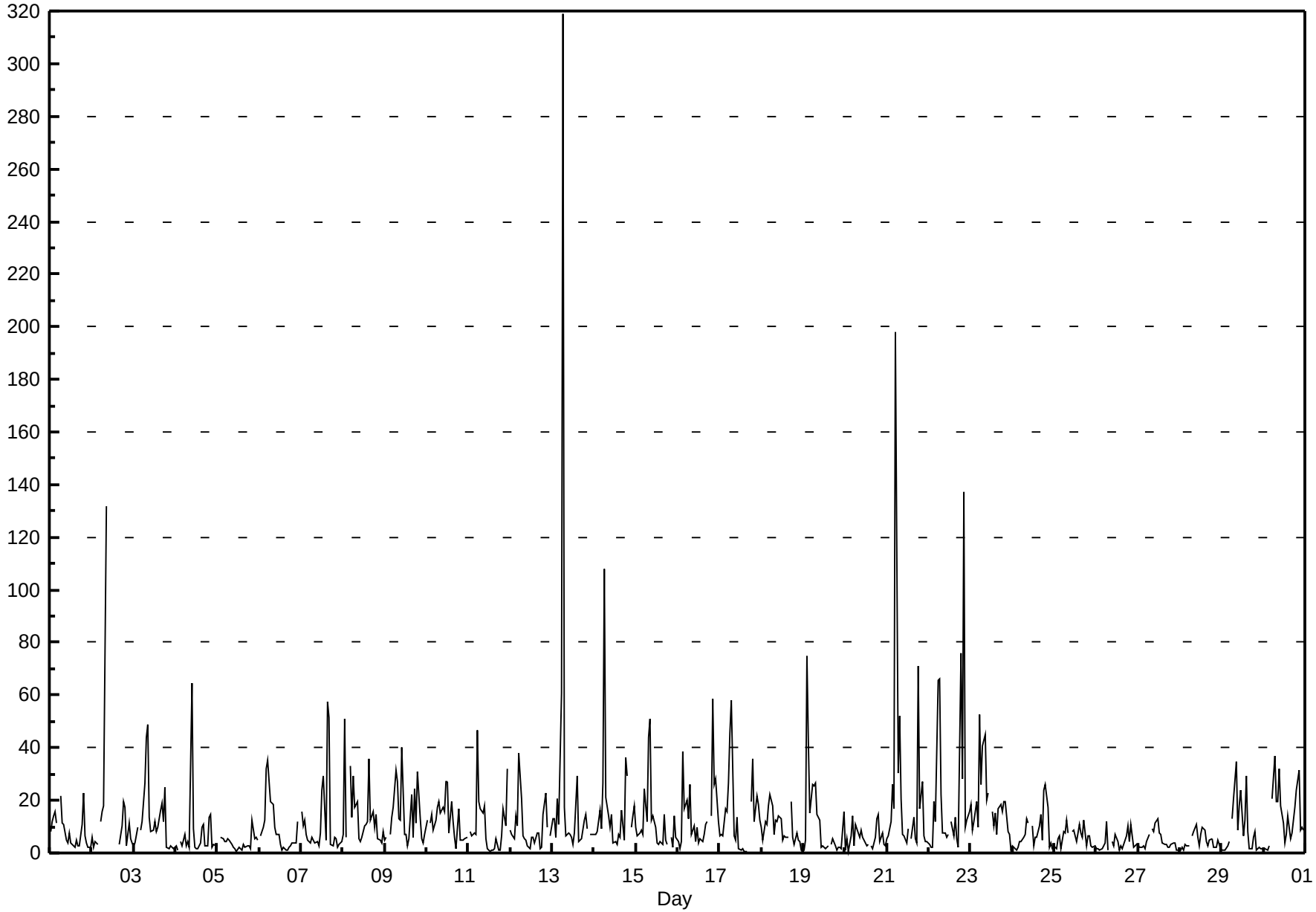
A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable-Bonanza - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 40.3 ppb on Sep 17 17:00
Maximum Daily Average: 30.0 ppb on Sep 26

Minimum Value: 0 ppb on Sep 13 06:00
Maximum Diurnal Average: 28.1 ppb at hour 16
Monthly Average: 20.34 ppb
Minimum Daily Average: 9.4 ppb on Sep 8
Minimum Diurnal Average: 13.0 ppb at hour 7
Percentiles: P_1 = 1.6 P_{10} = 7.3 Q_1 = 13.3 Median = 21.4 Q_3 = 27.8 P_{90} = 31.2 P_{99} = 36.9

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
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-Sep	8	6	5	2	4	A	9	10	16	21	22	24	27	29	29	34	35	34	26	15	18	16	17	18	18.5	35.4
2-Sep	18	16	17	19	A	19	21	20	22	C	C	C	C	C	C	C	25	22	20	17	18	16	18	17	--	25.3
3-Sep	15	15	15	A	14	14	12	10	13	15	21	33	35	34	36	35	34	29	25	32	30	27	26	28	23.7	35.6
4-Sep	30	30	A	29	30	31	27	28	29	30	31	30	30	29	28	27	26	24	25	18	17	21	23	22	26.8	31.4
5-Sep	18	A	16	17	16	16	22	22	24	26	27	26	25	23	21	20	19	19	19	17	11	11	11	10	18.9	27.0
6-Sep	A	8	7	7	7	6	8	12	13	15	17	19	21	21	22	22	22	19	17	12	12	10	8	A	13.8	21.6
7-Sep	4	6	6	8	10	11	13	14	14	16	16	14	14	13	14	14	15	14	12	11	11	9	8	8	11.5	16.3
8-Sep	6	4	3	A	1	2	1	3	6	9	11	11	11	11	10	16	18	19	16	15	12	12	11	11	9.4	18.5
9-Sep	9	7	A	8	10	12	9	9	10	11	10	12	15	16	16	16	16	16	16	11	13	13	14	13	12.3	16.4
10-Sep	10	A	3	1	1	1	0	2	3	4	6	14	18	22	28	29	27	27	24	18	17	19	19	18	13.5	28.7
11-Sep	A	12	16	13	10	9	9	8	20	22	22	24	24	25	26	26	27	26	22	15	11	12	8	A	17.6	26.8
12-Sep	9	6	5	2	3	2	7	12	14	16	17	19	21	22	21	21	22	21	19	12	9	13	A	12	13.3	22.4
13-Sep	9	9	9	7	3	0	2	4	6	13	18	23	25	28	31	30	30	30	25	17	23	A	18	13	16.2	31.0
14-Sep	12	14	10	9	6	3	2	3	6	7	14	27	28	31	31	30	28	29	23	18	A	20	17	14	16.6	31.0
15-Sep	13	15	7	9	7	3	7	6	7	12	14	19	22	25	28	28	27	29	27	A	13	26	24	23	17.0	28.7
16-Sep	20	24	21	14	13	8	8	7	17	25	29	30	31	32	33	33	32	30	A	22	13	14	11	14	20.9	33.0
17-Sep	8	8	6	7	6	5	5	10	17	24	30	34	33	34	36	39	40	A	34	20	25	30	26	27	21.9	40.3
18-Sep	25	26	20	19	15	8	11	11	14	21	28	36	37	37	38	38	A	37	33	29	29	32	32	31	26.4	37.7
19-Sep	29	27	10	17	15	15	12	14	18	22	25	27	28	29	30	A	29	28	29	30	29	29	23	17	23.2	29.7
20-Sep	17	17	19	19	16	17	15	13	15	19	26	26	27	28	A	28	29	27	20	17	20	19	20	19	20.5	28.8
21-Sep	15	11	5	4	6	7	6	8	11	19	21	29	28	A	28	31	31	30	21	15	18	18	18	20	17.4	31.1
22-Sep	22	23	23	19	20	20	19	19	24	28	27	27	A	29	30	30	30	29	15	15	15	17	18	19	22.4	30.3
23-Sep	11	10	5	2	3	4	3	3	6	8	9	A	12	19	28	27	14	20	27	27	25	26	26	27	14.8	28.3
24-Sep	28	28	28	27	26	26	24	24	27	32	A	33	34	34	34	33	31	33	31	31	29	28	28	28	29.4	33.8
25-Sep	28	27	28	26	27	27	26	27	26	A	25	25	25	24	23	22	24	23	21	20	21	24	28	30	25.0	30.1
26-Sep	32	33	33	28	30	30	29	30	A	31	31	32	33	33	33	34	32	29	24	27	27	28	26	25	30.0	33.6
27-Sep	23	23	25	25	28	21	20	A	23	24	21	22	24	22	20	24	25	25	24	24	25	25	26	27	23.8	27.8
28-Sep	29	30	31	31	31	29	A	28	28	28	28	29	30	30	30	29	29	27	24	23	21	22	20	24	27.5	31.3
29-Sep	27	26	26	27	25	A	23	24	27	30	31	31	33	33	35	35	35	34	27	27	26	24	27	26	28.6	35.3
30-Sep	24	21	23	26	A	27	27	27	29	29	31	33	34	34	36	38	37	35	31	30	23	29	31	32	29.8	37.7
	17.7	17.2	15.0	15.1	13.6	13.3	13.0	14.1	16.7	19.8	21.7	25.3	25.9	26.7	27.6	28.1	27.2	26.3	23.5	20.2	19.4	20.3	20.2	20.5	Diurnal Average	
	31.7	33.3	32.7	31.3	31.3	31.4	29.4	30.2	29.4	31.6	31.3	36.2	37.0	37.2	37.7	38.5	40.3	37.0	33.6	31.6	30.3	31.7	32.1	31.9	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

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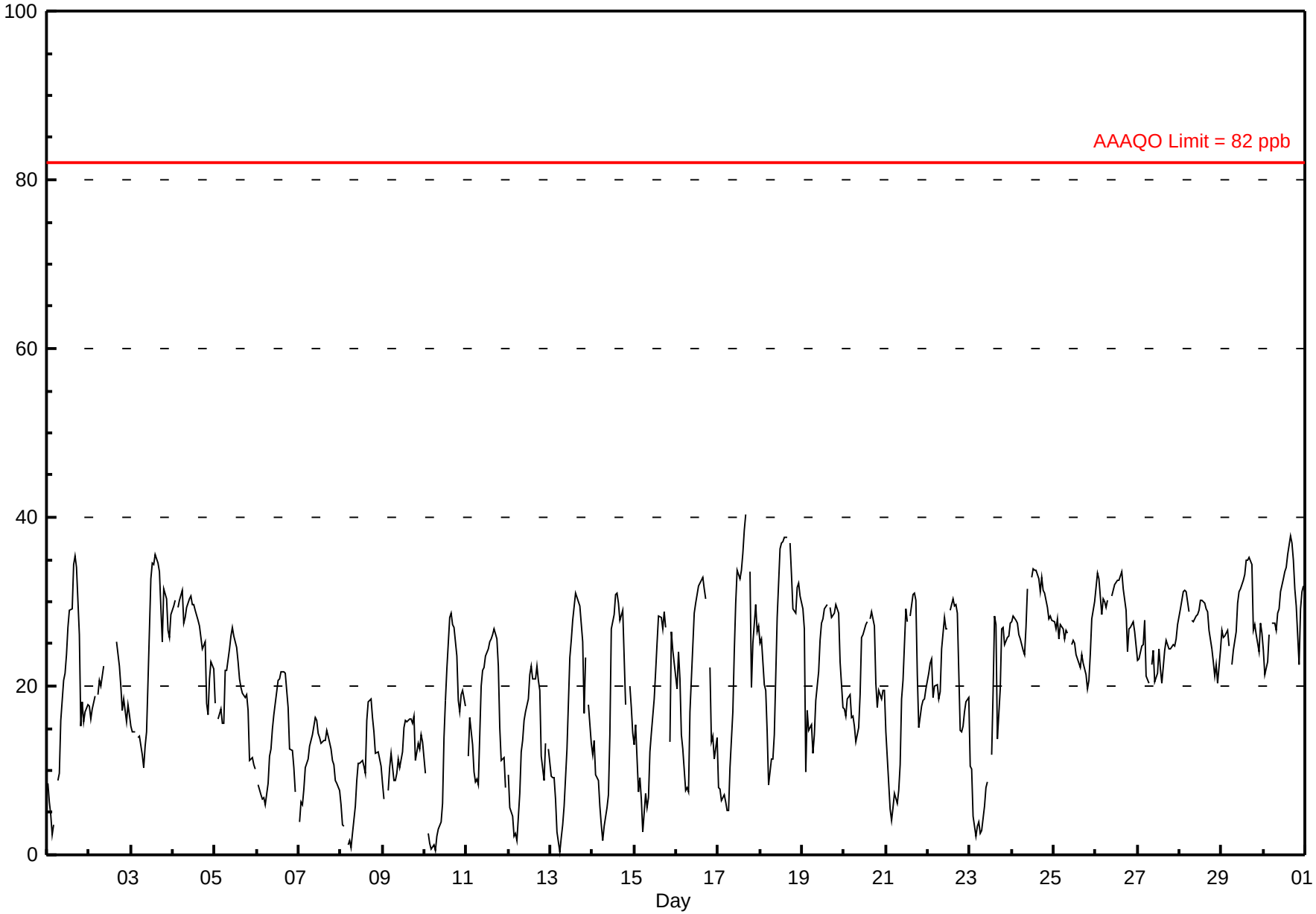
Hourly Averages

Ozone (O_3) - ppb

Portable-Bonanza - September 2010



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Hourly Maximums

Ozone (O_3) - ppb

Portable-Bonanza - September 2010

Maximum Value: 42.1 ppb on Sep 17 16:00

Maximum Daily Average: 33.1 ppb on Sep 30

Minimum Value: 2 ppb on Sep 13 06:00

Minimum Daily Average: 12.0 ppb on Sep 8

Maximum Diurnal Average: 30.5 ppb at hour 16

Minimum Diurnal Average: 16.5 ppb at hour 7

Monthly Average: 23.67 ppb

Percentiles: P_1 = 4.3 P_{10} = 11.1 Q_1 = 16.8 Median = 25.2 Q_3 = 30.6 P_{90} = 33.8 P_{99} = 39.5

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	38
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	14	14	11	6	5	A	12	14	21	27	25	27	29	31	33	37	38	36	36	20	21	18	19	19	22.3	37.6
2-Sep	19	18	20	20	A	21	22	23	25	C	C	C	C	C	C	C	28	24	23	20	20	19	20	19	--	28.3
3-Sep	17	16	17	A	15	16	15	14	17	17	29	36	38	38	38	38	36	33	28	36	33	31	29	30	26.9	38.1
4-Sep	32	32	A	31	39	34	31	31	31	33	33	31	32	31	30	29	29	27	30	26	22	23	25	25	29.8	38.6
5-Sep	22	A	18	20	19	20	25	24	27	27	29	28	26	25	23	22	21	21	21	20	17	16	15	15	21.8	29.2
6-Sep	A	11	13	9	9	10	10	16	16	17	20	21	23	23	23	24	24	21	19	15	16	13	12	A	16.6	23.9
7-Sep	7	10	10	11	12	13	16	17	16	19	19	16	16	15	15	15	17	16	14	13	12	11	10	10	13.7	19.0
8-Sep	8	8	6	A	4	4	3	5	8	11	14	14	15	13	13	19	20	22	19	17	14	15	13	13	12.0	21.9
9-Sep	10	10	A	12	13	14	12	12	14	14	13	14	18	18	17	19	18	18	19	15	15	15	16	15	14.9	19.2
10-Sep	15	A	6	4	3	3	2	5	5	5	12	19	20	26	32	31	30	29	27	23	20	22	22	22	16.7	31.7
11-Sep	A	20	19	18	16	18	13	19	23	25	24	25	26	28	28	28	28	29	24	22	18	17	11	A	21.8	28.8
12-Sep	14	10	9	4	5	5	14	15	16	18	19	21	24	25	23	24	25	25	22	19	16	15	A	18	16.8	25.3
13-Sep	13	12	11	12	7	2	5	6	9	17	23	27	28	31	34	33	32	31	31	29	27	A	19	18	19.9	34.3
14-Sep	15	17	14	14	10	7	4	6	9	10	27	29	31	33	34	32	31	33	30	23	A	23	22	18	20.6	33.5
15-Sep	16	19	18	12	12	6	10	9	11	16	17	22	25	28	31	30	30	31	31	A	20	31	30	31	21.2	31.3
16-Sep	23	27	25	18	18	13	11	11	25	29	31	32	33	34	35	35	34	33	A	27	26	20	16	18	25.0	35.3
17-Sep	16	13	10	11	13	8	13	17	21	28	35	36	34	36	39	42	42	A	41	30	32	34	33	30	26.8	42.1
18-Sep	28	28	28	24	21	15	15	16	17	25	36	40	39	39	39	40	A	39	37	32	32	34	34	32	30.0	39.9
19-Sep	31	30	20	21	20	21	18	18	26	25	28	29	31	31	32	A	31	31	34	35	31	32	28	23	27.2	34.8
20-Sep	19	19	21	21	20	19	18	16	17	24	29	29	30	29	A	30	31	30	26	24	23	21	21	22	23.4	30.5
21-Sep	20	16	9	11	10	10	10	10	18	23	26	32	31	A	31	33	33	32	29	24	24	20	20	23	21.6	33.2
22-Sep	25	25	25	25	24	25	24	24	26	30	30	30	A	32	32	32	32	31	26	22	26	25	23	23	26.8	32.1
23-Sep	17	15	7	6	6	7	5	6	9	11	13	A	15	26	30	29	30	31	29	29	29	28	28	29	19.0	30.9
24-Sep	29	30	30	29	29	28	27	26	30	34	A	35	36	36	36	35	34	35	33	33	32	30	30	30	31.6	35.9
25-Sep	30	29	30	30	30	30	28	29	28	A	27	28	27	26	25	25	27	27	24	22	24	26	31	34	27.7	33.5
26-Sep	34	37	36	31	32	33	33	33	A	33	33	35	34	34	36	36	34	32	28	29	30	29	29	28	32.7	36.5
27-Sep	26	25	26	31	32	29	23	A	26	27	26	26	28	26	22	26	27	27	27	26	27	27	28	29	26.8	31.5
28-Sep	32	32	34	34	33	31	A	30	30	30	31	31	32	32	33	31	31	29	27	25	23	26	24	28	30.0	34.4
29-Sep	29	29	29	29	27	A	26	28	29	32	33	34	35	35	39	38	37	37	34	32	29	29	30	29	31.7	38.9
30-Sep	28	24	26	29	A	30	31	30	31	33	34	35	36	36	39	40	40	39	35	35	31	32	33	34	33.1	39.9
	21.1	20.6	18.9	18.8	17.3	16.8	16.5	17.6	20.0	22.9	25.5	27.9	28.2	29.2	30.1	30.5	30.0	29.3	27.8	24.9	23.8	23.5	23.2	23.8	Diurnal Average	
	34.3	36.5	36.1	34.4	38.6	33.7	32.6	33.2	31.4	33.8	35.9	39.9	38.6	39.2	39.5	42.1	42.0	39.2	41.3	36.3	33.1	34.2	34.4	33.7	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

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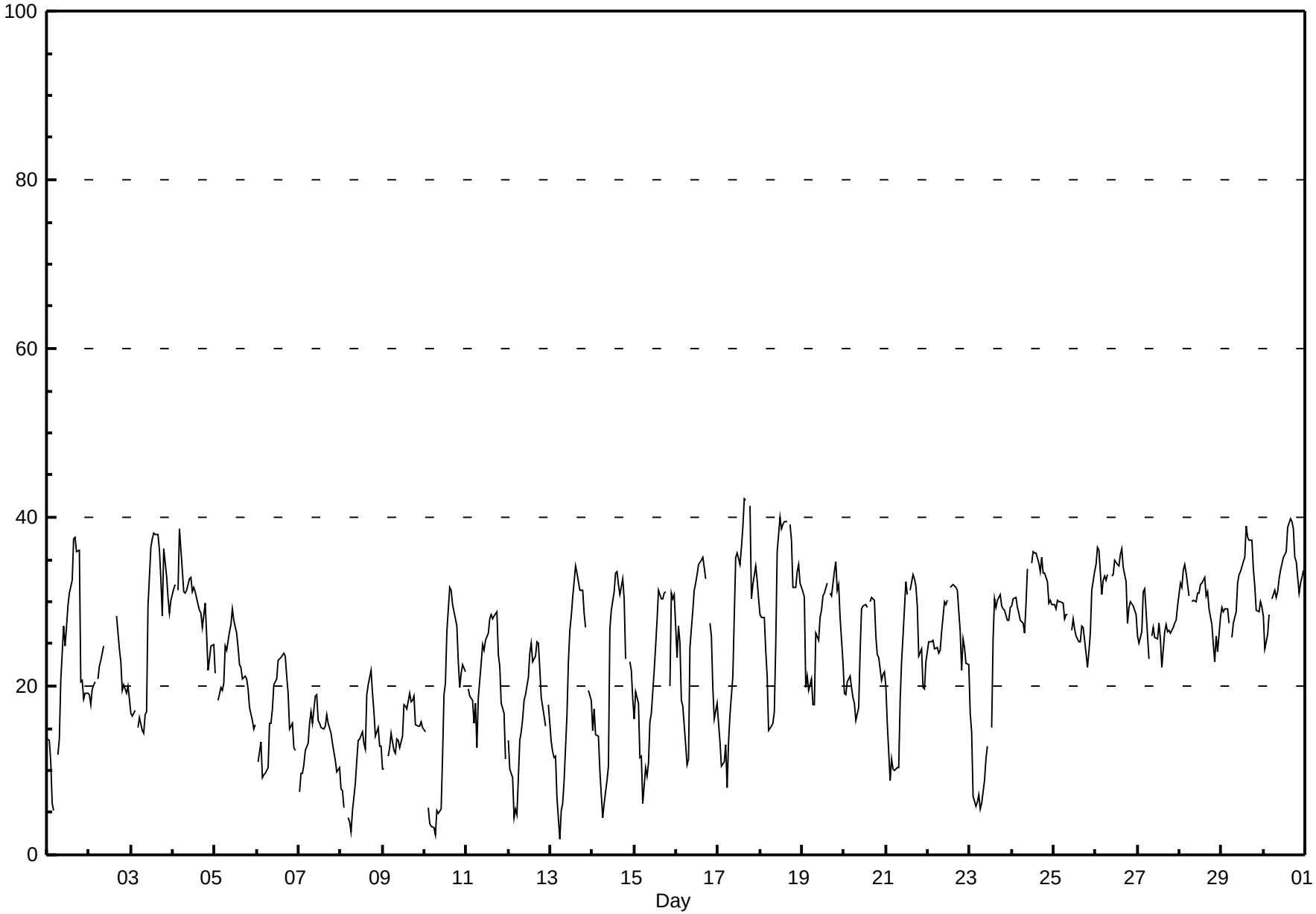
Hourly Maximums

Ozone (O_3) - ppb

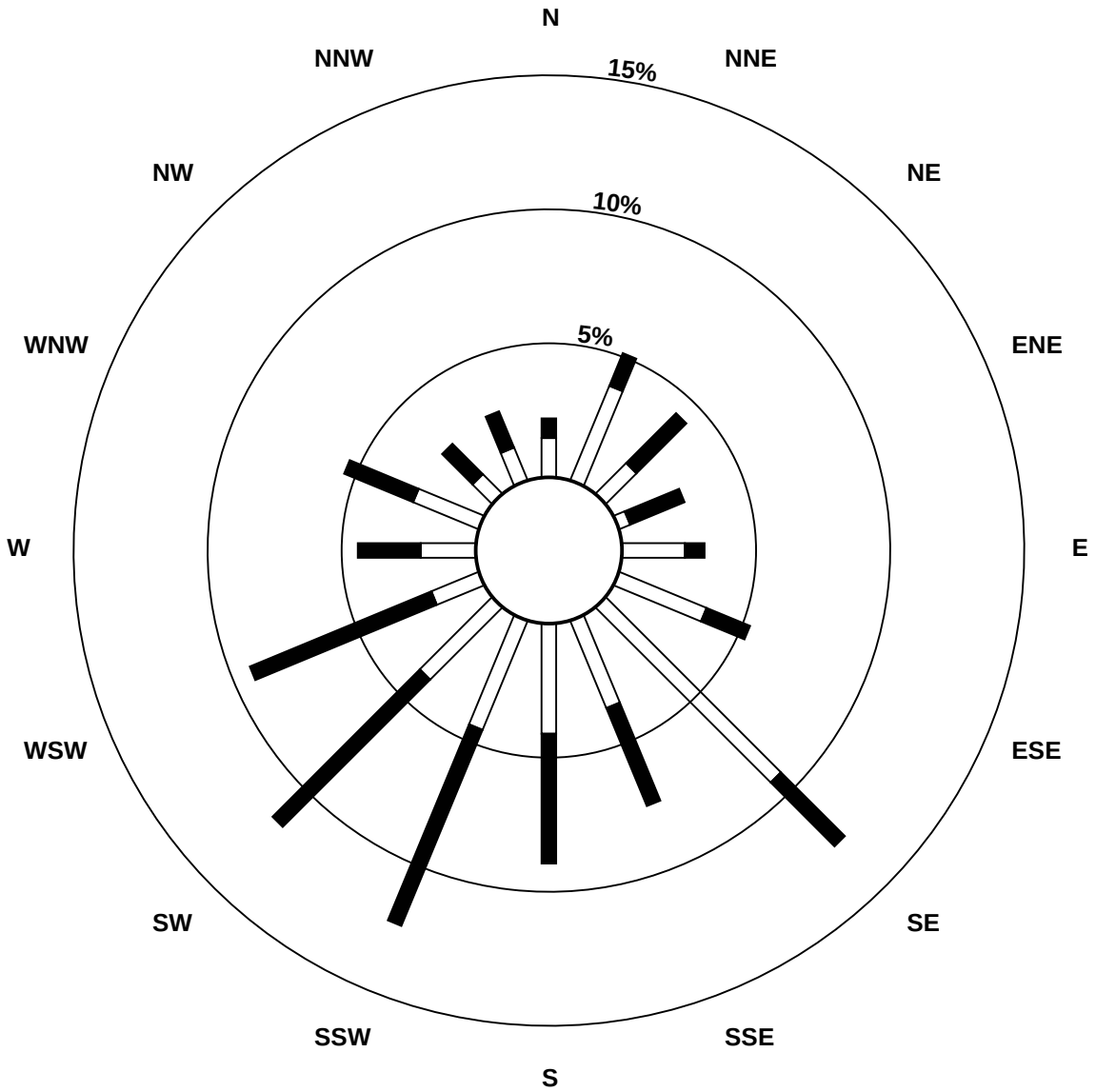
Portable-Bonanza - September 2010



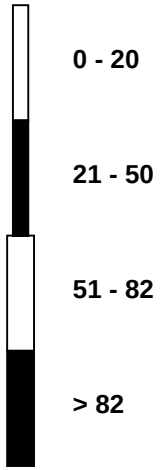
Pollutant Rose

Ozone (O_3) - ppb

Portable-Bonanza - September 2010



Pollutant Classes (ppb)



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Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Portable-Bonanza - September 2010

Maximum Value: 36.6 ppb on Sep 18 19:00

Minimum Value: 1.7 ppb on Sep 10 09:00

Percentiles: P_1 = 3.3 P_{10} = 8.5 Q_1 = 14.0 Median = 21.4 Q_3 = 26.8 P_{90} = 30.0 P_{99} = 34.6

Hours in Service:	720
Hours of Data:	709
Hours of Missing Data:	11
Hours of Calibration:	11
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	15	13	11	9	8	7	7	6	7	9	12	15	18	20	22	25	28	29	30	29	28	26	25	22	29.9
2-Sep	20	18	17	17	17	18	18	18	19	20	N	N	N	N	N	N	N	N	N	N	N	20	20	19	20.2
3-Sep	18	17	16	16	15	15	14	14	13	13	14	16	19	21	24	27	30	32	32	32	32	31	30	29	32.5
4-Sep	28	28	29	29	29	29	29	29	29	29	30	30	30	29	29	29	29	28	27	26	24	23	23	22	29.6
5-Sep	21	20	19	19	19	18	18	18	19	20	21	22	23	24	24	24	23	22	21	20	19	17	16	15	24.3
6-Sep	14	13	11	9	9	8	8	8	8	9	10	12	14	16	17	19	20	20	20	19	18	17	15	14	20.3
7-Sep	12	10	8	8	7	8	8	9	10	12	13	14	14	14	14	14	14	14	14	13	13	12	12	11	14.5
8-Sep	10	9	7	7	6	5	3	3	3	3	5	5	7	8	9	10	12	13	14	14	14	15	15	14	14.9
9-Sep	13	12	11	10	10	10	9	9	9	10	10	10	11	12	12	13	14	15	15	15	15	15	14	14	15.4
10-Sep	13	13	11	10	8	6	4	3	2	2	2	4	6	9	12	16	19	21	24	24	24	24	23	21	24.2
11-Sep	20	18	17	16	15	14	12	11	12	13	14	15	17	19	21	24	24	25	25	24	22	21	18	17	25.0
12-Sep	15	12	9	8	6	5	5	6	6	8	9	11	13	16	18	19	20	21	21	20	18	17	17	16	20.8
13-Sep	14	12	11	10	9	7	6	5	5	5	6	9	11	15	18	22	25	27	28	27	27	27	25	22	27.8
14-Sep	20	17	15	14	11	10	8	7	6	6	6	8	11	15	18	22	25	27	28	27	27	26	24	21	28.4
15-Sep	19	17	15	14	13	11	9	8	8	7	8	9	11	14	17	19	22	24	26	27	25	26	25	24	26.5
16-Sep	23	23	22	21	21	18	16	14	14	14	15	17	19	22	25	29	30	31	31	30	28	25	22	20	31.4
17-Sep	16	13	12	10	9	8	7	7	8	10	13	16	20	23	27	31	34	35	35	33	32	32	30	29	35.5
18-Sep	27	27	25	25	23	21	19	17	16	15	16	18	21	25	28	31	34	36	37	36	34	34	33	32	36.6
19-Sep	31	30	27	26	24	22	19	17	16	15	17	19	20	22	24	26	27	28	29	29	29	29	28	27	31.5
20-Sep	25	24	22	21	20	18	17	17	16	17	18	18	20	21	22	24	26	27	26	25	24	23	22	21	27.2
21-Sep	20	18	16	14	12	11	9	8	7	8	10	13	16	17	20	24	27	28	28	26	25	24	23	21	28.4
22-Sep	20	19	20	20	20	21	21	21	21	22	22	23	23	25	26	28	29	29	27	25	24	22	21	20	28.7
23-Sep	17	15	14	12	11	9	7	5	4	4	5	5	6	8	12	16	17	18	21	22	23	24	24	24	24.2
24-Sep	26	27	27	27	27	27	27	26	26	27	27	27	28	30	31	32	33	33	33	33	32	31	31	30	33.0
25-Sep	30	29	28	28	27	27	27	27	27	27	26	26	26	25	25	24	24	24	23	23	22	22	23	24	29.6
26-Sep	25	26	27	29	30	31	31	31	31	30	30	31	31	31	32	32	32	32	31	30	30	29	28	27	32.2
27-Sep	26	25	25	25	25	25	24	24	24	24	23	23	22	22	22	22	23	23	23	24	24	24	25	25	26.1
28-Sep	26	26	27	28	29	29	30	30	30	29	29	29	29	29	29	29	29	29	29	28	27	26	24	24	30.0
29-Sep	24	23	24	24	25	25	25	25	25	26	27	27	28	29	31	32	33	34	33	32	32	30	29	28	33.5
30-Sep	27	25	25	25	25	25	25	25	26	27	28	29	30	30	31	33	34	35	35	34	33	32	32	31	34.6
	31.5	30.2	28.9	28.6	29.8	30.6	30.7	30.8	30.6	30.3	30.0	30.6	30.9	31.2	31.8	32.8	33.9	35.8	36.6	35.6	34.4	33.6	32.8	31.8	
	Diurnal Maximums																								

N - Not Valid

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Hourly Averages

External Temperature (ET) - ^{o}C

Portable-Bonanza - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.5 ^{o}C on Sep 3 13:00 Maximum Daily Average: 17.8 ^{o}C on Sep 3

Minimum Value: -6 ^{o}C on Sep 17 06:00 Minimum Daily Average: 3.4 ^{o}C on Sep 16
Maximum Diurnal Average: 14.2 ^{o}C at hour 17 Minimum Diurnal Average: 4.5 ^{o}C at hour 7
Monthly Average: 9.01 ^{o}C Percentiles: P_1 = -3.4 P_{10} = 2.1 Q_1 = 5.6 Median = 9.3 Q_3 = 12.7 P_{90} = 15.3 P_{99} = 24.7

Hours in Service:	720
Hours of Data:	713
Hours of Missing Data:	7
Hours of Calibration:	0
Percent Operational Time:	99.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	9	9	9	9	9	9	9	9	10	10	10	12	13	14	15	17	17	17	16	14	13	13	12	12	12.0	17.2
2-Sep	11	10	10	11	10	10	11	12	13	N	N	N	N	N	N	N	21	20	20	18	17	15	16	15	--	20.9
3-Sep	15	14	15	14	14	14	13	14	17	18	21	25	26	26	25	25	25	25	21	14	12	12	11	11	17.8	25.5
4-Sep	11	11	11	10	10	9	8	9	11	13	13	13	15	15	15	15	15	14	11	9	9	9	8	8	11.3	15.5
5-Sep	7	7	6	6	6	6	5	5	5	6	6	7	8	8	9	9	9	9	9	9	8	8	8	7	7.2	9.4
6-Sep	7	6	6	6	7	7	7	8	9	10	11	12	12	13	12	12	12	12	11	11	10	9	9	9	9.4	12.8
7-Sep	8	8	8	8	7	7	7	7	7	7	7	8	8	9	9	9	10	10	9	9	8	8	8	8	8.1	9.8
8-Sep	7	5	4	4	3	2	1	3	5	7	8	9	11	12	12	12	13	12	12	11	11	10	10	10	8.1	12.9
9-Sep	10	9	9	8	8	8	7	8	9	10	11	12	13	13	13	13	14	14	14	12	10	9	9	9	10.4	14.4
10-Sep	8	6	5	5	5	4	4	5	7	9	11	14	14	16	17	17	16	16	14	11	10	9	8	7	9.9	16.8
11-Sep	5	4	6	4	3	2	2	3	8	10	12	14	15	15	15	16	17	16	14	11	9	9	9	7	9.4	16.5
12-Sep	6	5	5	6	6	6	7	7	8	8	9	10	11	12	11	12	13	11	10	9	8	8	7	5	8.2	12.7
13-Sep	4	3	3	2	1	1	1	1	2	4	7	11	13	13	13	13	15	15	12	8	7	6	5	4	6.8	15.5
14-Sep	3	3	2	1	1	0	1	2	4	5	10	12	13	15	15	15	13	14	13	9	8	6	5	4	7.3	15.4
15-Sep	4	4	2	2	1	0	2	2	3	6	5	7	7	6	6	7	7	6	6	5	3	5	4	4	4.4	7.3
16-Sep	4	4	3	3	2	1	0	0	2	4	5	5	6	7	7	8	8	8	7	4	1	-1	-2	-2	3.4	8.2
17-Sep	-3	-4	-5	-5	-5	-6	-6	-3	-1	2	6	8	10	11	12	13	13	14	13	5	3	4	3	3	3.5	14.3
18-Sep	2	2	1	-1	-2	-2	-3	-2	0	4	9	13	14	15	15	15	15	14	11	7	5	7	7	6	6.3	15.4
19-Sep	6	5	2	1	0	-1	-1	1	4	5	7	8	9	10	9	9	10	9	8	7	6	5	5	4	5.3	9.9
20-Sep	4	4	3	3	3	3	3	3	3	4	4	6	7	7	7	7	7	7	5	5	4	3	2	1	4.3	7.3
21-Sep	-2	-3	-3	-3	-3	-2	-3	-2	1	3	4	7	9	10	11	12	12	13	12	5	5	5	5	5	4.0	12.9
22-Sep	4	4	3	1	1	0	1	4	6	9	11	13	14	14	15	15	15	15	11	7	6	4	3	4	7.5	15.2
23-Sep	1	1	-1	-1	-2	-1	-2	-1	2	4	6	9	13	16	16	15	13	14	13	12	10	10	10	10	6.9	15.7
24-Sep	9	8	8	8	7	7	7	7	9	12	14	15	16	16	16	16	16	15	13	12	11	11	12	12	11.5	16.3
25-Sep	12	11	13	12	13	13	12	14	15	14	16	17	18	18	17	16	15	14	13	12	12	11	11	10	13.8	18.1
26-Sep	11	12	11	10	10	9	8	8	10	12	14	15	16	17	17	17	17	16	13	13	12	12	11	11	12.7	17.4
27-Sep	10	10	11	11	11	9	9	9	9	10	10	12	13	12	13	14	14	14	14	14	14	14	13	13	11.8	14.5
28-Sep	13	13	13	13	12	12	12	12	13	14	15	16	17	17	17	18	17	16	14	13	11	11	9	10	13.7	18.0
29-Sep	11	10	10	10	8	7	7	7	8	11	12	13	14	15	16	17	17	15	13	12	11	9	9	8	11.2	16.7
30-Sep	7	6	7	7	7	6	6	6	8	10	12	15	17	18	20	20	20	17	14	12	11	10	10	9	11.4	20.2
	6.8	6.3	5.8	5.4	5.1	4.7	4.5	5.2	6.9	8.3	9.9	11.6	12.7	13.4	13.7	14.0	14.2	13.8	12.3	10.0	8.9	8.3	7.8	7.3	Diurnal Average	
	14.7	14.4	14.5	14.2	14.2	14.3	13.4	14.0	16.6	17.8	21.2	24.7	25.5	25.5	25.3	25.4	25.3	24.7	21.0	18.4	17.1	14.8	15.7	14.9	Diurnal Maximum	

N - Not Valid

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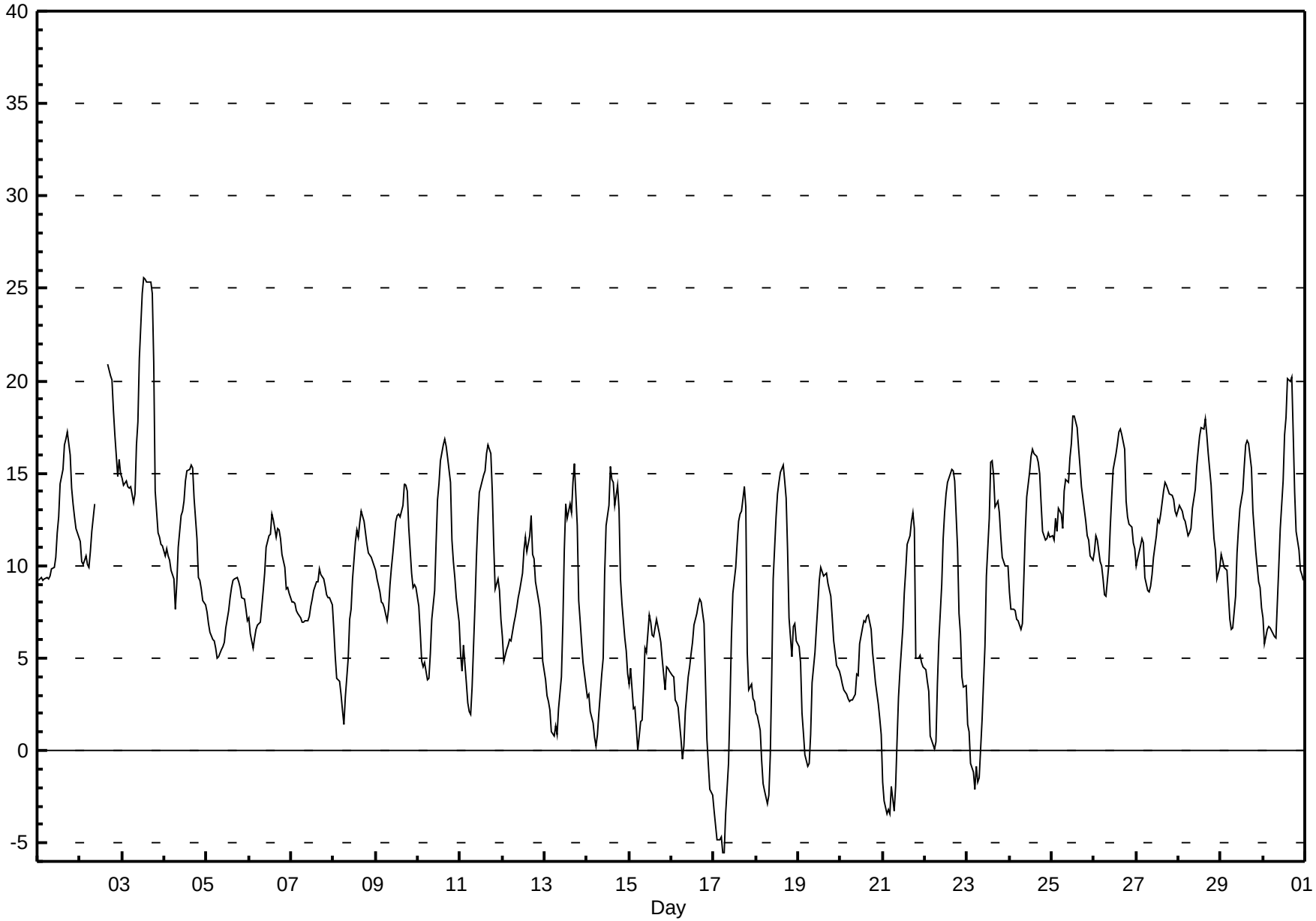
Hourly Averages

External Temperature (ET) - ^{o}C

Portable-Bonanza - September 2010



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Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Bonanza - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	4	2	3	4	4	5	4	6	5	4	2	5	8	10	9	9	9	10	12	9	9	14	15	12	5.8	14.8
Dir	126	116	204	222	195	273	270	268	292	342	332	230	235	230	240	274	265	247	236	224	190	200	199	191	229	199
2 Spd	11	8	9	9	9	8	11	9	14	N	N	N	N	N	N	N	29	27	18	10	12	9	10	12	--	29.1
Dir	186	150	154	159	161	158	150	153	188	N	N	N	N	N	N	N	249	248	248	200	193	142	155	145	--	249
3 Spd	12	12	11	12	12	11	10	7	7	4	5	3	3	9	11	12	11	10	23	33	20	10	15	16	8.6	32.6
Dir	139	138	134	137	136	143	139	123	136	141	116	101	193	219	206	205	193	185	234	243	223	185	209	198	186	243
4 Spd	16	21	19	19	15	18	12	12	17	29	29	26	28	30	32	29	28	20	12	7	5	11	12	15	17.3	31.7
Dir	195	206	198	205	196	206	215	212	228	234	240	235	231	226	228	227	229	213	310	128	211	277	273	286	226	228
5 Spd	18	18	11	15	15	18	19	19	18	19	16	14	18	15	16	17	15	11	8	8	6	4	6	3	12.6	18.7
Dir	308	301	296	288	281	290	296	293	292	300	317	298	294	299	280	291	292	296	307	277	234	209	199	126	292	293
6 Spd	6	5	5	5	6	6	5	5	3	2	6	5	1	4	2	10	11	12	9	5	8	5	1	2	2.0	11.9
Dir	176	128	112	121	121	124	125	74	142	307	30	47	56	27	46	338	332	341	351	332	326	338	294	246	20	341
7 Spd	4	3	4	8	8	11	12	12	18	19	19	16	15	15	15	16	14	10	8	7	9	8	7	8	8.1	18.6
Dir	225	252	259	298	293	299	289	255	239	240	238	240	231	222	211	206	201	184	156	152	148	150	140	138	224	240
8 Spd	5	4	5	5	3	1	3	4	4	5	3	5	6	6	4	7	6	6	4	3	4	5	6	3	2.4	6.8
Dir	133	122	129	130	139	176	209	184	174	267	309	351	2	19	25	112	89	93	96	79	93	101	110	75	100	112
9 Spd	5	5	3	5	9	11	3	3	4	5	7	5	5	4	6	4	7	6	6	5	6	7	12	11	4.5	11.6
Dir	45	40	48	118	127	127	158	209	92	108	130	131	189	229	234	139	125	100	84	69	103	110	122	123	119	122
10 Spd	4	6	4	4	2	3	2	2	1	1	1	7	17	15	15	22	25	24	19	14	11	10	8	8	8.3	24.6
Dir	167	143	198	191	40	36	224	239	351	279	259	208	219	231	240	240	240	244	239	232	210	203	205	215	227	240
11 Spd	4	5	6	3	3	4	6	5	7	14	19	20	20	17	15	13	11	14	13	7	2	5	4	5	6.3	20.4
Dir	170	186	194	166	84	126	108	134	200	222	242	254	263	262	278	289	292	286	273	316	52	221	226	178	250	254
12 Spd	4	3	2	2	0	2	6	6	8	11	13	12	11	12	9	5	6	7	4	4	5	6	6	4	4.5	12.7
Dir	220	147	112	355	334	270	13	27	29	33	40	45	79	70	67	84	64	325	263	3	14	33	22	23	40	40
13 Spd	1	6	3	2	1	2	1	4	5	4	2	2	4	3	4	3	11	8	4	5	9	7	9	9	2.2	11.0
Dir	335	56	90	100	248	148	199	207	218	232	239	327	16	71	62	279	46	58	106	110	140	142	137	130	109	46
14 Spd	7	8	3	5	1	3	0	2	2	3	2	4	3	2	2	3	4	2	4	7	9	9	7	8	3.3	9.2
Dir	135	132	136	131	242	117	234	297	294	276	147	169	189	151	38	108	110	112	157	147	140	134	132	133	139	134
15 Spd	9	9	7	7	3	3	7	3	8	14	15	13	18	19	16	9	10	15	13	9	6	7	6	4	4.5	18.9
Dir	134	143	201	170	190	181	195	229	236	287	296	333	351	343	359	27	321	289	285	272	256	263	215	223	293	343
16 Spd	5	9	2	9	2	5	7	7	11	17	17	18	22	19	24	24	21	17	11	6	3	6	5	4	8.2	23.9
Dir	221	198	130	12	89	198	222	279	286	311	313	302	303	292	309	313	312	299	279	273	186	168	155	139	294	313
17 Spd	2	3	2	4	4	3	4	4	7	4	4	5	3	3	3	3	5	1	4	6	9	8	7	7	2.6	8.5
Dir	132	142	195	180	186	178	178	181	186	188	183	198	236	196	199	292	292	125	36	85	111	107	127	134	158	111
18 Spd	4	4	2	3	3	1	4	2	3	3	7	10	12	12	10	12	13	11	8	9	9	12	11	12	6.2	13.4
Dir	125	127	122	101	80	131	229	264	192	349	21	92	71	77	76	56	68	79	64	50	52	71	79	68	73	68
19 Spd	10	9	10	5	7	5	5	5	9	10	13	16	18	18	16	15	19	18	19	18	13	16	14	13	12.3	19.2
Dir	57	35	15	24	19	25	16	27	12	21	31	38	42	45	59	62	45	45	49	40	40	38	32	23	38	45
20 Spd	13	13	16	14	12	12	14	11	11	15	16	12	8	7	6	5	6	5	4	3	7	9	9	7	6.1	15.9
Dir	31	22	22	24	12	1	7	5	9	17	4	24	9	344	292	309	323	331	266	188	167	179	178	182	9	4
21 Spd	4	5	2	6	6	8	4	7	6	4	6	5	4	6	7	10	7	3	4	8	10	12	11	11	4.8	12.3
Dir	123	128	138	121	135	123	138	135	139	235	235	242	226	216	201	242	206	225	131	118	132	139	143	145	160	139
22 Spd	10	8	7	6	6	7	7	6	7	14	21	22	25	22	20	15	14	11	2	4	6	6	7	7	7.3	25.1
Dir	154	156	149	145	133	126	144	163	179	212	236	235	253	242	250	236	256	270	344	141	155	145	127	134	212	253

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Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Bonanza - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	1	5	0	0	4	6	3	3	2	3	4	5	6	2	16	12	5	10	14	11	11	13	14	10	4.4	16.1
Dir	172	138	36	35	293	178	194	218	148	320	12	34	348	319	175	161	279	199	198	187	169	189	202	191	190	175
24 Spd	8	10	10	11	12	13	12	12	11	17	18	22	20	20	20	15	11	17	12	13	13	14	13	13	12.9	22.3
Dir	160	148	147	143	148	161	150	147	159	190	201	206	207	197	193	179	157	169	157	144	141	143	147	146	169	206
25 Spd	13	12	13	9	12	12	11	20	22	22	24	22	27	33	31	24	18	10	7	9	11	15	9	10	14.1	32.6
Dir	151	148	158	145	174	163	144	188	191	187	197	199	212	233	240	241	247	224	174	188	181	226	202	154	199	233
26 Spd	14	19	21	16	10	15	14	15	22	24	25	30	33	32	31	28	32	22	15	11	10	12	9	7	18.1	33.3
Dir	178	207	207	203	191	199	204	207	218	221	230	238	244	238	244	238	239	237	228	196	190	191	166	162	221	244
27 Spd	6	8	11	9	11	11	6	7	8	12	10	8	10	9	11	20	23	17	15	14	16	17	18	18	11.2	23.0
Dir	140	142	141	185	191	198	181	145	151	143	143	172	171	157	157	193	201	199	187	195	191	195	214	213	182	201
28 Spd	24	20	20	17	16	20	21	20	23	32	39	45	44	40	42	39	40	38	30	23	18	16	14	18	26.6	45.0
Dir	210	209	207	217	209	214	216	216	227	234	237	240	244	245	248	244	246	243	235	226	217	211	223	219	231	240
29 Spd	29	30	26	29	25	16	15	15	13	23	33	34	31	23	21	19	20	24	16	19	17	15	17	15	21.4	33.7
Dir	223	234	236	238	237	231	220	216	209	239	244	242	247	248	231	244	260	259	247	241	238	221	214	226	237	242
30 Spd	15	12	13	12	11	10	9	8	7	7	4	3	1	2	3	1	4	10	10	9	12	15	16	18	5.6	17.6
Dir	247	248	236	212	201	188	181	180	185	200	221	267	342	337	58	14	129	140	139	134	122	123	123	122	171	122
Spd	4.8	4.6	4.3	3.9	3.9	4.4	3.8	4.1	5.3	6.5	6.9	7.3	8.3	8.0	8.1	7.7	7.6	6.8	5.0	4.2	5.3	5.7	6.0	5.7	Diurnal Average	
Dir	181	179	186	188	187	189	197	204	213	238	246	243	249	246	240	241	249	242	234	204	175	171	172	167		
Spd	29.2	30.2	26.0	28.6	25.5	20.2	20.8	20.2	23.3	31.9	38.7	45.0	43.6	40.0	41.5	38.5	39.7	37.6	29.8	32.6	19.7	16.9	18.0	18.4	Diurnal Maximum	
Dir	223	234	236	238	237	214	216	188	227	234	237	240	244	245	248	244	246	243	235	243	223	195	214	219		

Maximum Speed Value: 45 km/h on Sep 28 12:00
Minimum Speed Value: 0 km/h on Sep 23 03:00
Maximum Daily Speed Average: 26.6 km/h on Sep 28
Minimum Daily Speed Average: 2.0 km/h on Sep 14
Maximum Diurnal Speed Average: 8.3 km/h at hour 13
Minimum Diurnal Speed Average: 3.8 km/h at hour 7

Monthly Average Velocity: 4.95 km/h 215.6 deg
Speed Percentiles: P_1 = 0.8 P_{10} = 3.0 Q_1 = 4.9 Median = 9.2 Q_3 = 14.7 P_{90} = 20.5 P_{99} = 38.4
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	713
Hours of Missing Data:	7
Percent Operational Time:	99.0

N - Not Valid

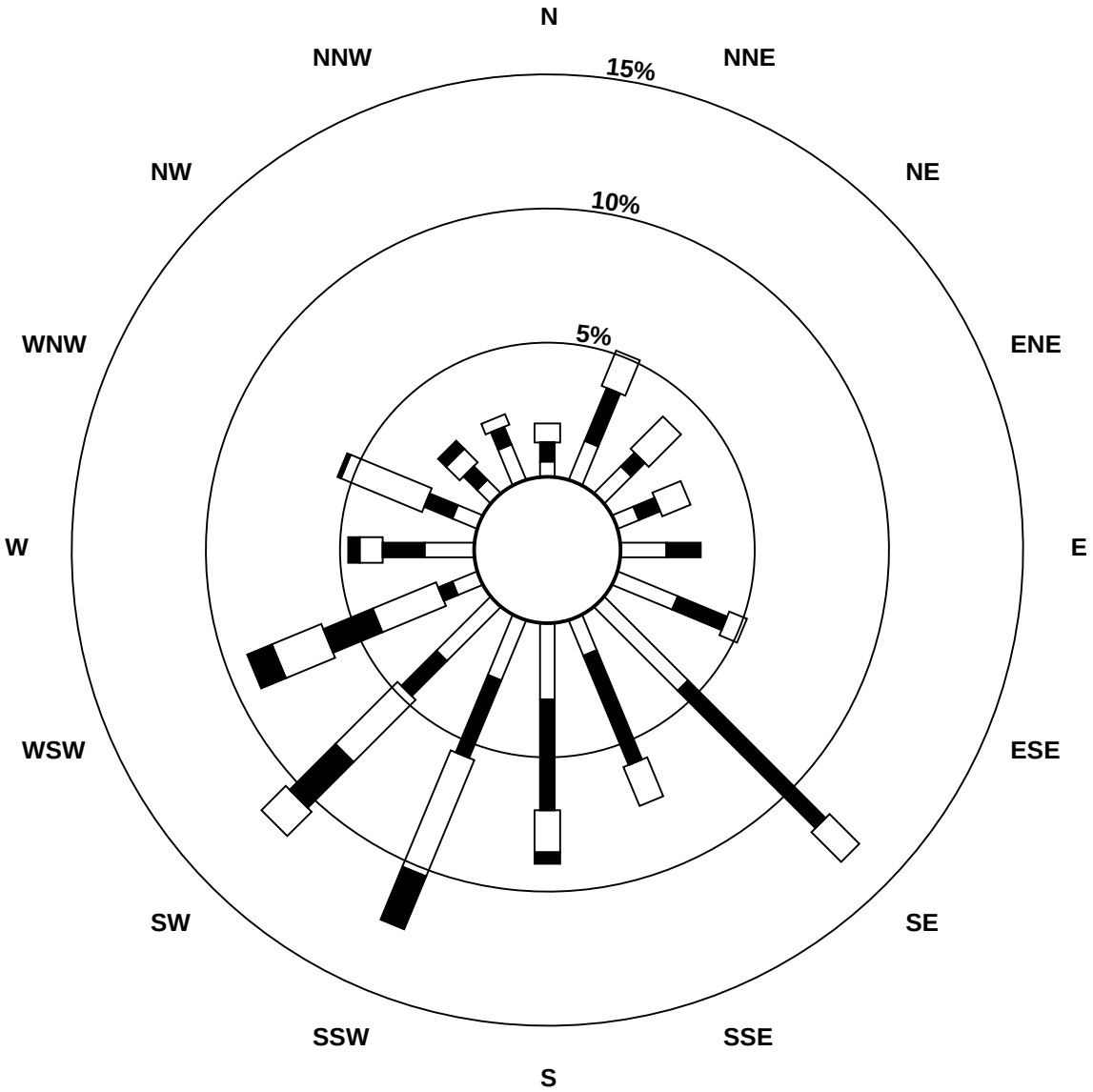
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	12	17	13	0	0	0	42
NorthEast	18	20	19	1	0	0	58
East	23	17	8	0	0	0	48
SouthEast	39	78	31	0	0	0	148
South	33	54	34	10	0	0	131
SouthWest	27	27	50	37	24	6	171
West	16	15	25	9	1	1	67
NorthWest	14	11	19	4	0	0	48
Total	182	239	199	61	25	7	713

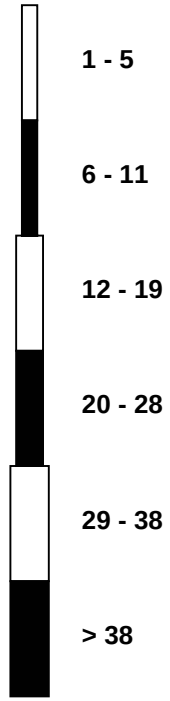
Wind Rose

Wind Speed (WS) (km/h)

Portable-Bonanza - September 2010



Wind Speed Classes (km/h)



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Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable-Bonanza - September 2010

Maximum Speed: 45 km/h on Sep 28 12:00

Maximum Daily Speed Average: 27.5 km/h on Sep 28

Minimum Speed: 2 km/h on Sep 13 05:00

Minimum Daily Speed Average: 4.8 km/h on Sep 8

Maximum Diurnal Speed Average: 15.5 km/h at hour 13

Minimum Diurnal Speed Average: 8.3 km/h at hour 5

Monthly Average Speed: 11.27 km/h

Percentiles: P_1 = 2.1 P_{10} = 4.0 Q_1 = 5.6 Median = 9.4 Q_3 = 15.0 P_{90} = 20.7 P_{99} = 38.6

Hours in Service:	720
Hours of Data:	713
Hours of Missing Data:	7
Percent Operational Time:	99.0

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-Sep	5	4	3	5	5	6	5	6	6	4	2	6	9	10	9	11	10	11	12	10	9	14	15	12	7.8	14.8
2-Sep	11	8	9	9	9	9	11	9	14	N	N	N	N	N	N	N	29	27	18	10	12	9	10	12	--	29.5
3-Sep	12	12	11	12	12	11	11	7	7	5	5	4	6	10	12	13	12	11	26	33	20	12	15	17	12.3	33.0
4-Sep	16	21	19	19	15	18	12	12	17	29	29	27	29	31	32	29	28	21	16	7	11	11	12	16	19.8	32.0
5-Sep	18	18	11	15	15	18	19	19	18	19	16	15	18	15	16	17	16	12	8	8	6	4	6	4	13.8	18.8
6-Sep	6	6	5	5	6	6	5	7	4	5	7	6	5	5	6	10	12	12	9	5	8	5	2	3	6.3	12.3
7-Sep	5	3	4	8	8	11	13	13	18	19	19	16	15	15	15	16	14	10	8	8	9	8	7	8	11.2	18.8
8-Sep	5	5	5	5	4	2	4	4	4	6	4	5	6	6	4	7	7	7	4	3	4	5	6	4	4.8	7.1
9-Sep	5	5	4	5	9	11	4	4	5	5	7	6	6	5	6	5	7	6	6	5	6	7	12	11	6.3	11.6
10-Sep	6	8	4	5	3	3	3	2	2	2	2	8	17	16	16	23	25	24	19	14	11	10	8	9	9.9	25.0
11-Sep	5	5	6	3	4	4	7	5	7	14	20	21	20	18	16	15	12	15	13	8	3	5	4	6	9.8	20.8
12-Sep	4	4	4	4	3	2	6	6	8	11	13	12	11	12	10	5	8	7	5	4	6	6	6	5	6.8	12.8
13-Sep	2	6	4	3	2	2	3	4	5	4	3	4	6	5	5	5	11	9	5	5	9	7	9	9	5.3	11.2
14-Sep	7	8	5	5	3	3	2	3	2	3	3	5	6	5	4	4	4	3	4	7	9	9	7	8	5.0	9.3
15-Sep	9	9	7	7	4	3	7	4	8	14	16	14	18	19	16	9	11	15	13	9	7	8	6	5	9.8	19.0
16-Sep	6	9	6	9	5	6	7	7	11	17	17	18	23	20	24	24	21	18	11	6	3	6	5	5	11.9	24.4
17-Sep	3	3	2	4	4	3	4	4	7	4	5	6	7	6	6	6	6	3	5	6	9	8	7	7	5.2	8.7
18-Sep	4	4	3	3	3	3	4	2	4	6	8	12	13	13	11	13	14	12	9	9	9	12	11	12	8.1	13.9
19-Sep	10	10	10	6	7	6	5	6	10	10	13	16	18	18	16	16	19	18	19	19	13	16	14	13	12.8	19.3
20-Sep	13	13	16	14	12	12	14	11	12	15	16	13	9	8	7	8	6	6	4	4	7	9	9	7	10.2	16.2
21-Sep	5	5	3	7	7	8	5	7	7	7	8	7	6	7	8	10	8	4	4	8	10	12	11	11	7.3	12.3
22-Sep	10	8	7	6	7	7	7	6	7	14	21	23	26	23	20	16	15	12	4	4	6	7	7	7	11.4	25.6
23-Sep	2	6	3	3	4	7	6	4	3	3	4	5	6	4	16	12	10	11	14	11	11	13	14	11	7.6	16.4
24-Sep	8	10	10	11	12	13	12	12	12	17	19	23	21	20	21	15	12	17	12	13	13	14	14	13	14.3	22.6
25-Sep	14	13	13	10	13	13	11	21	23	22	25	22	28	33	31	24	19	11	7	9	11	16	9	11	16.9	33.1
26-Sep	14	20	22	16	10	15	14	15	22	24	25	31	33	32	31	29	32	23	15	11	11	12	9	8	19.8	33.5
27-Sep	6	8	11	11	11	11	7	7	8	13	10	8	10	9	11	20	23	17	15	15	16	17	18	18	12.5	23.0
28-Sep	24	20	20	17	17	20	21	20	23	32	39	45	44	40	42	39	40	38	30	23	18	16	14	19	27.5	45.2
29-Sep	29	30	26	29	26	16	16	15	13	23	33	34	31	23	22	20	20	24	16	19	17	15	17	15	22.1	34.0
30-Sep	15	12	13	12	11	10	9	9	7	7	4	4	4	4	4	3	7	10	10	9	12	15	16	18	9.5	17.6
	9.4	9.7	8.9	8.9	8.3	8.7	8.3	8.4	9.8	12.3	13.5	14.4	15.5	14.9	15.1	14.7	15.2	13.7	11.4	10.1	9.9	10.3	10.0	10.0	Diurnal Average	
	29.3	30.3	26.0	28.7	25.5	20.3	20.8	20.5	23.4	31.9	38.9	45.2	43.7	40.2	41.7	38.7	39.8	37.7	30.0	33.0	20.3	17.0	18.0	18.5	Diurnal Maximum	

N - Not Valid

All monthly, daily, and diurnal averages have been calculated using scalar methods

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable-Bonanza - September 2010

Maximum Value: 96.3 deg on Sep 30 16:00

Minimum Value: 1.6 deg on Sep 30 22:00

Percentiles: P_1 = 3.1 P_{10} = 4.9 Q_1 = 6.8 Median = 12.3 Q_3 = 26.5 P_{90} = 50.0 P_{99} = 86.6

Hours in Service:	720
Hours of Data:	713
Hours of Missing Data:	7
Hours of Calibration:	0
Percent Operational Time:	99.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	25	81	29	25	14	32	31	19	30	26	48	23	19	22	25	34	24	21	13	15	10	9	3	6	81.1
2-Sep	14	8	7	7	9	12	7	10	9	N	N	N	N	N	N	N	9	7	9	16	6	12	6	6	15.5
3-Sep	4	4	4	4	4	6	7	22	18	36	51	60	72	49	27	24	23	16	34	10	19	30	7	7	71.5
4-Sep	9	4	5	4	7	6	6	8	8	7	7	8	10	10	7	9	7	15	48	21	61	8	6	16	60.8
5-Sep	6	6	9	8	9	8	7	6	6	7	10	8	10	12	10	13	11	13	19	13	24	26	23	54	54.1
6-Sep	26	13	22	9	8	10	14	41	49	71	37	40	95	64	69	8	11	14	6	8	5	40	77	29	95.4
7-Sep	37	16	14	9	5	4	8	15	7	7	5	5	8	7	8	6	6	10	9	10	7	8	10	6	37.4
8-Sep	46	29	27	24	59	69	23	21	19	34	29	25	17	15	42	18	19	20	14	16	13	13	6	24	69.4
9-Sep	8	7	44	15	6	7	53	27	27	18	16	24	22	35	19	36	13	20	13	15	9	4	3	3	53.3
10-Sep	48	47	34	45	82	53	40	41	89	39	60	25	11	14	21	13	10	8	5	7	6	6	5	11	88.7
11-Sep	16	21	13	37	59	43	11	21	10	11	12	12	17	17	23	29	19	17	4	23	76	12	30	36	76.0
12-Sep	30	38	66	72	80	38	14	8	9	6	6	9	14	15	24	39	52	17	38	19	14	6	6	50	80.5
13-Sep	57	15	29	80	52	34	65	17	14	19	50	57	59	86	67	58	11	19	35	27	4	7	3	6	86.0
14-Sep	6	6	70	39	61	72	90	27	38	38	64	47	74	87	68	62	42	48	15	5	5	5	8	5	90.3
15-Sep	4	6	21	15	35	27	5	43	14	13	14	22	9	7	14	14	35	10	10	7	15	24	19	18	43.3
16-Sep	19	11	73	8	65	29	6	21	10	11	14	13	10	14	10	13	11	12	8	12	45	20	13	31	72.6
17-Sep	56	44	35	16	7	30	17	12	13	34	31	40	85	78	69	65	38	86	19	7	13	15	3	6	86.1
18-Sep	30	30	64	46	49	66	12	25	28	78	21	36	27	27	20	16	17	13	10	3	5	5	7	5	77.7
19-Sep	8	12	5	40	8	15	22	23	15	10	8	6	7	6	9	8	6	4	7	7	4	4	8	5	40.1
20-Sep	7	5	4	6	10	4	6	6	6	9	11	15	26	32	36	58	29	27	17	34	12	3	3	38	57.6
21-Sep	20	32	63	44	43	10	33	7	14	51	37	46	52	45	44	20	41	38	16	3	5	4	6	5	62.7
22-Sep	9	9	6	8	10	5	14	10	12	11	11	16	12	14	15	27	14	13	62	27	20	18	9	7	62.0
23-Sep	73	45	96	89	36	22	53	45	63	39	34	18	19	73	12	9	75	35	5	6	5	8	5	6	96.2
24-Sep	11	5	6	5	5	5	8	5	11	10	10	9	11	10	9	9	11	12	12	7	6	5	7	6	12.4
25-Sep	12	17	16	17	17	15	10	11	12	8	5	9	10	9	5	5	8	25	10	8	13	11	19	12	25.2
26-Sep	14	10	7	7	15	14	19	14	3	9	8	10	6	7	10	11	6	8	14	13	14	18	7	25	24.6
27-Sep	8	7	5	33	14	9	27	12	10	6	9	14	13	7	8	13	4	8	6	4	6	6	4	4	33.2
28-Sep	5	4	8	9	8	4	3	7	6	4	5	5	5	6	5	6	5	4	5	4	5	3	8	6	9.3
29-Sep	4	5	4	4	3	4	10	5	6	8	6	8	9	12	13	14	9	5	5	7	5	6	3	6	14.5
30-Sep	6	6	6	6	14	4	5	5	14	12	23	75	80	66	55	96	87	6	4	5	2	2	2	2	96.3
	73.2	81.1	96.2	89.0	82.5	72.4	90.3	44.9	88.7	77.7	64.2	75.2	95.4	86.6	68.9	96.3	87.4	86.1	62.0	33.5	76.0	40.1	76.9	54.1	

N - Not Valid

PASZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 10.9 ppb on Sep 4 13:00 Maximum Daily Average: 2.3 ppb on Sep 4

Minimum Value: 0 ppb on Sep 1 04:00 Minimum Daily Average: 0.0 ppb on Sep 6
Maximum Diurnal Average: 1.1 ppb at hour 19 Minimum Diurnal Average: 0.1 ppb at hour 24
Monthly Average: 0.46 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 1.0 P_{99} = 5.7

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Sep	A	0	0	0	0	0	1	0	0	0	0	1	2	6	3	0	0	2	4	0	0	0	0	0	0.8	5.5
2-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	3	7	9	0	0	0	0	0	1.1	8.5
3-Sep	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0.4	0.9
4-Sep	A	0	0	0	0	0	0	0	2	6	5	5	11	6	2	3	4	4	4	0	0	0	0	0	2.3	10.9
5-Sep	A	0	0	0	0	0	2	0	0	0	2	0	1	2	1	0	0	0	0	0	0	0	0	0	0.4	2.0
6-Sep	A	0	0	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
7-Sep	A	0	0	0	0	0	0	0	0	0	0	C	C	C	C	1	0	0	0	0	0	0	0	0	0.1	1.0
8-Sep	A	0	0	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
9-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	1	4	2	0	1	0	0	0	0	0	0	0.3	3.6
10-Sep	A	0	0	0	0	0	0	0	0	0	2	4	1	1	0	0	0	0	2	1	0	0	0	0	0.6	3.8
11-Sep	A	0	0	0	0	0	0	0	0	3	1	0	2	0	0	0	0	5	1	0	0	0	0	0	0.7	5.2
12-Sep	A	0	0	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
13-Sep	A	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	0.2
14-Sep	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
15-Sep	A	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.2
16-Sep	A	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.0
17-Sep	A	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	0	0	0	0	0	0	0.3	1.3
18-Sep	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0.3	0.7
19-Sep	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
20-Sep	A	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	0.4
21-Sep	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
22-Sep	A	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	0.2
23-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.2	1.1
24-Sep	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
25-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	1	1	0	0	0	0	0.4	3.0
26-Sep	A	0	0	0	0	0	0	0	1	8	6	4	1	2	1	5	4	1	1	0	0	0	0	0	1.6	8.2
27-Sep	A	0	0	0	0	0	0	0	0	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0.5	1.8
28-Sep	A	0	0	0	0	0	0	0	0	0	5	2	3	4	1	2	5	4	10	1	3	1	0	0	1.9	9.6
29-Sep	A	0	0	0	0	0	0	0	0	1	0	2	1	0	1	1	4	0	0	0	0	0	0	0	0.5	3.8
30-Sep	A	0	0	0	0	0	0	0	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	5.7
	--	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.9	0.9	1.0	1.0	1.0	0.7	0.8	0.9	0.9	1.1	0.2	0.2	0.1	0.1	0.1	Diurnal Average	
	--	0.3	0.2	0.2	0.2	0.3	1.5	0.3	1.9	8.2	6.3	5.4	10.9	5.8	3.6	5.5	5.5	7.0	9.6	1.4	3.2	0.7	0.5	0.2	Diurnal Maximum	

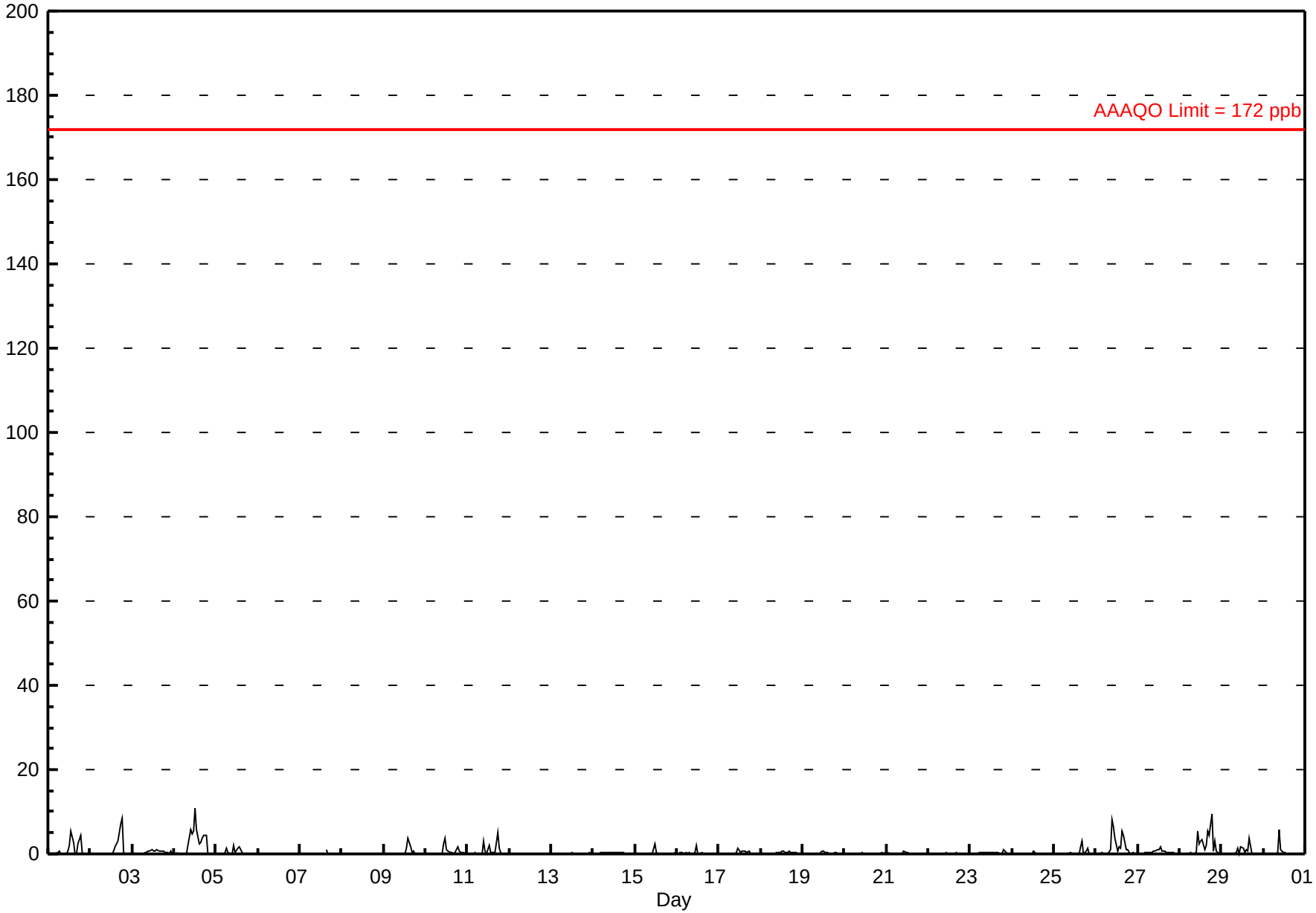
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - September 2010

Maximum Value: 44.0 ppb on Sep 4 13:00

Maximum Daily Average: 9.8 ppb on Sep 4

Minimum Value: 0 ppb on Sep 30 02:00

Minimum Daily Average: 0.4 ppb on Sep 13

Maximum Diurnal Average: 4.9 ppb at hour 13

Minimum Diurnal Average: 0.5 ppb at hour 2

Monthly Average: 2.13 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.6 $Q_3 = 0.9$ $P_{90} = 6.6$ $P_{99} = 21.0$

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Sep	A	0	1	0	0	1	1	1	1	1	1	4	9	20	12	1	1	15	13	1	1	0	0	0	3.7	19.7
2-Sep	A	0	1	0	1	1	1	1	1	1	1	1	1	6	16	10	22	20	21	1	1	1	0	1	4.6	22.1
3-Sep	A	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0	0.9	1.7
4-Sep	A	1	1	0	0	0	0	1	9	9	17	20	44	22	9	33	21	20	16	0	0	0	0	0	9.8	44.0
5-Sep	A	0	0	0	0	8	9	1	0	0	15	1	9	10	7	1	0	0	0	0	0	0	0	1	3.0	15.4
6-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
7-Sep	A	0	0	0	0	0	0	0	0	0	0	C	C	C	C	2	1	0	0	0	0	0	0	0	0.5	2.0
8-Sep	A	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.6
9-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	18	13	15	4	5	0	0	0	0	0	0	2.7	17.7
10-Sep	A	1	0	1	1	0	1	1	1	1	10	16	7	9	2	2	1	3	7	3	1	1	1	1	2.9	16.4
11-Sep	A	1	1	1	1	1	1	1	1	23	3	2	19	4	4	1	1	15	5	0	1	0	1	1	3.7	22.7
12-Sep	A	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0.5	0.9
13-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
14-Sep	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0.7	0.9
15-Sep	A	0	0	0	1	0	0	1	0	0	1	10	1	1	0	0	1	0	0	0	1	0	1	0	0.9	10.4
16-Sep	A	1	1	1	1	1	1	1	1	0	7	14	1	0	1	0	1	1	1	1	1	1	1	1	1.5	14.3
17-Sep	A	1	1	1	1	1	1	1	1	1	1	4	2	4	2	2	1	4	1	1	1	1	0	1	1.2	4.1
18-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
19-Sep	A	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0.7	1.3
20-Sep	A	1	1	0	1	1	0	0	1	1	2	0	0	1	0	0	0	0	1	0	0	1	0	1	0.6	2.2
21-Sep	A	1	1	1	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0.6	1.2
22-Sep	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	0.6	1.2
23-Sep	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	2	1	0	0	1.0	8.5
24-Sep	A	0	0	0	1	0	1	1	0	1	1	1	9	1	0	1	0	1	0	1	1	0	1	0	0.9	8.8
25-Sep	A	0	0	0	1	0	0	0	0	1	1	1	0	0	0	13	12	0	3	2	0	0	0	0	1.8	13.5
26-Sep	A	0	0	2	0	0	0	0	7	17	17	21	4	11	10	17	16	2	3	1	0	1	1	1	5.8	21.1
27-Sep	A	1	0	0	1	1	1	1	1	1	1	2	2	4	2	1	1	1	1	1	1	1	1	1	1.1	4.2
28-Sep	A	1	1	1	1	1	1	1	1	5	14	12	14	12	9	14	17	17	27	4	13	7	1	1	7.3	26.6
29-Sep	A	0	1	1	0	1	0	1	6	6	0	14	13	1	9	5	19	1	1	1	0	1	0	1	3.5	19.3
30-Sep	A	0	0	0	1	0	1	1	2	12	5	1	1	1	1	1	1	1	0	0	1	1	1	0	1.3	12.2
	--	0.5	0.5	0.5	0.5	0.8	0.8	0.6	1.2	3.0	3.6	4.6	4.9	4.6	3.6	4.2	4.2	3.8	3.6	1.1	1.0	0.7	0.5	0.5	Diurnal Average	
	--	0.9	0.9	2.0	0.9	8.4	8.9	0.9	9.2	22.7	17.0	21.1	44.0	22.0	15.7	32.9	22.1	20.2	26.6	8.5	12.7	6.6	1.7	0.8	Diurnal Maximum	

C - Calibration

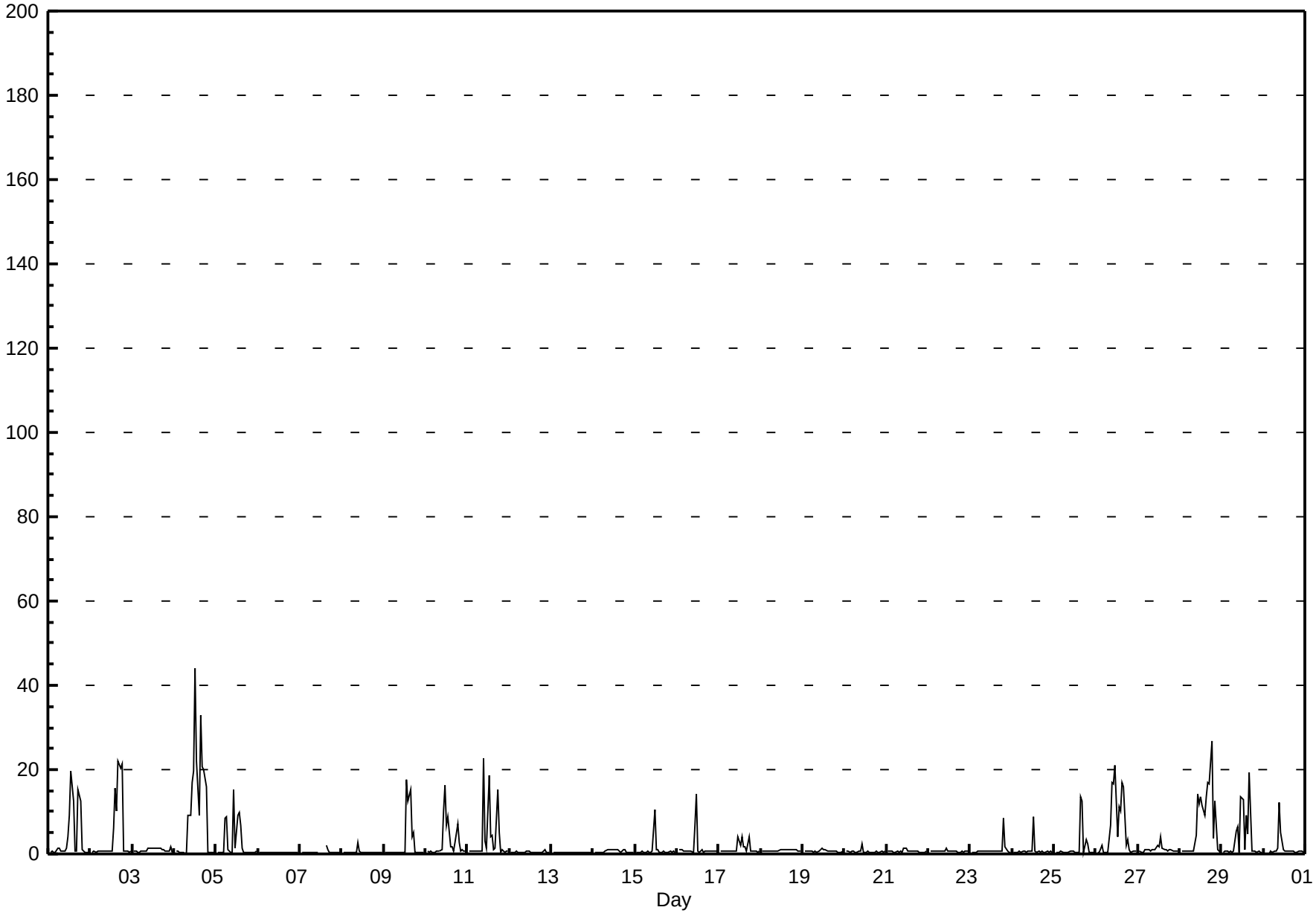
A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

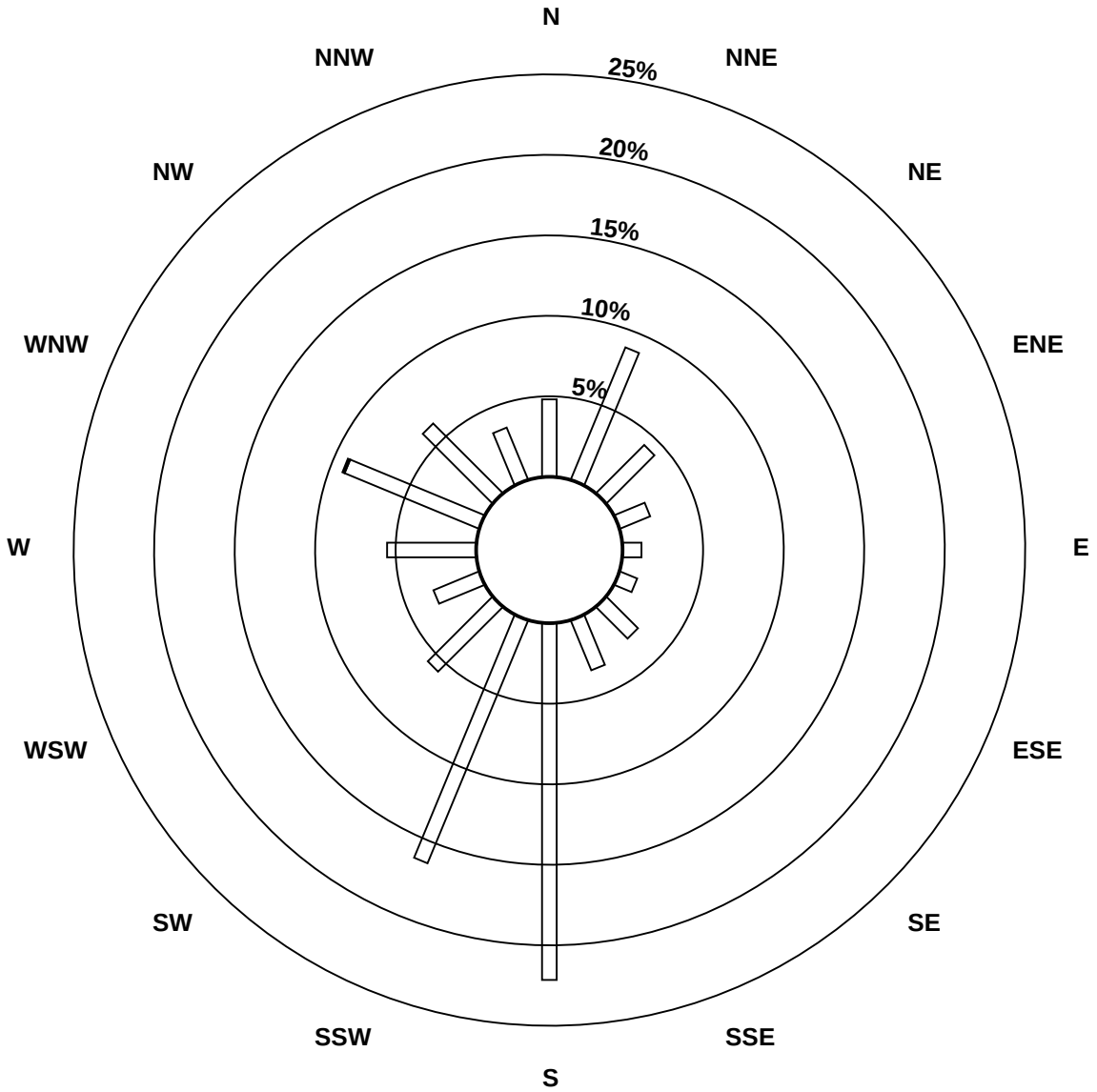
Valleyview - September 2010



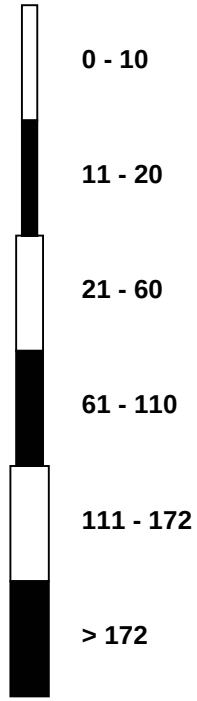
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Valleyview - September 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.2 ppb on Sep 28 17:00 Maximum Daily Average: 0.1 ppb on Sep 27

Minimum Value: 0 ppb on Sep 1 08:00 Minimum Daily Average: 0.0 ppb on Sep 19
Maximum Diurnal Average: 0.1 ppb at hour 2 Minimum Diurnal Average: 0.0 ppb at hour 11
Monthly Average: 0.06 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.1 P_{99} = 0.2

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Sep	A	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	0.2
2-Sep	A	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	0.2
3-Sep	A	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	0.2
4-Sep	A	0	0	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
5-Sep	A	0	0	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
6-Sep	A	0	0	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
7-Sep	A	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
8-Sep	A	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	0.2
9-Sep	A	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	0.1
10-Sep	A	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	0.4
11-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
12-Sep	A	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	0.1
13-Sep	A	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	0.2
14-Sep	A	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	0.2
15-Sep	A	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	0.2
16-Sep	A	0	0	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
17-Sep	A	0	0	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
18-Sep	A	0	0	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
19-Sep	A	0	0	0	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-Sep	A	0	0	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
21-Sep	A	0	0	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
22-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
23-Sep	A	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	0.3
24-Sep	A	0	0	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
25-Sep	A	0	0	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
26-Sep	A	0	0	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
27-Sep	A	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	0.3
28-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.1	1.2
29-Sep	A	0	0	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
30-Sep	A	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	0.2
--	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1		Diurnal Average	
--	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.1	0.2	1.2	0.2	0.2	0.4	0.2	0.2	0.2	0.3		Diurnal Maximum	

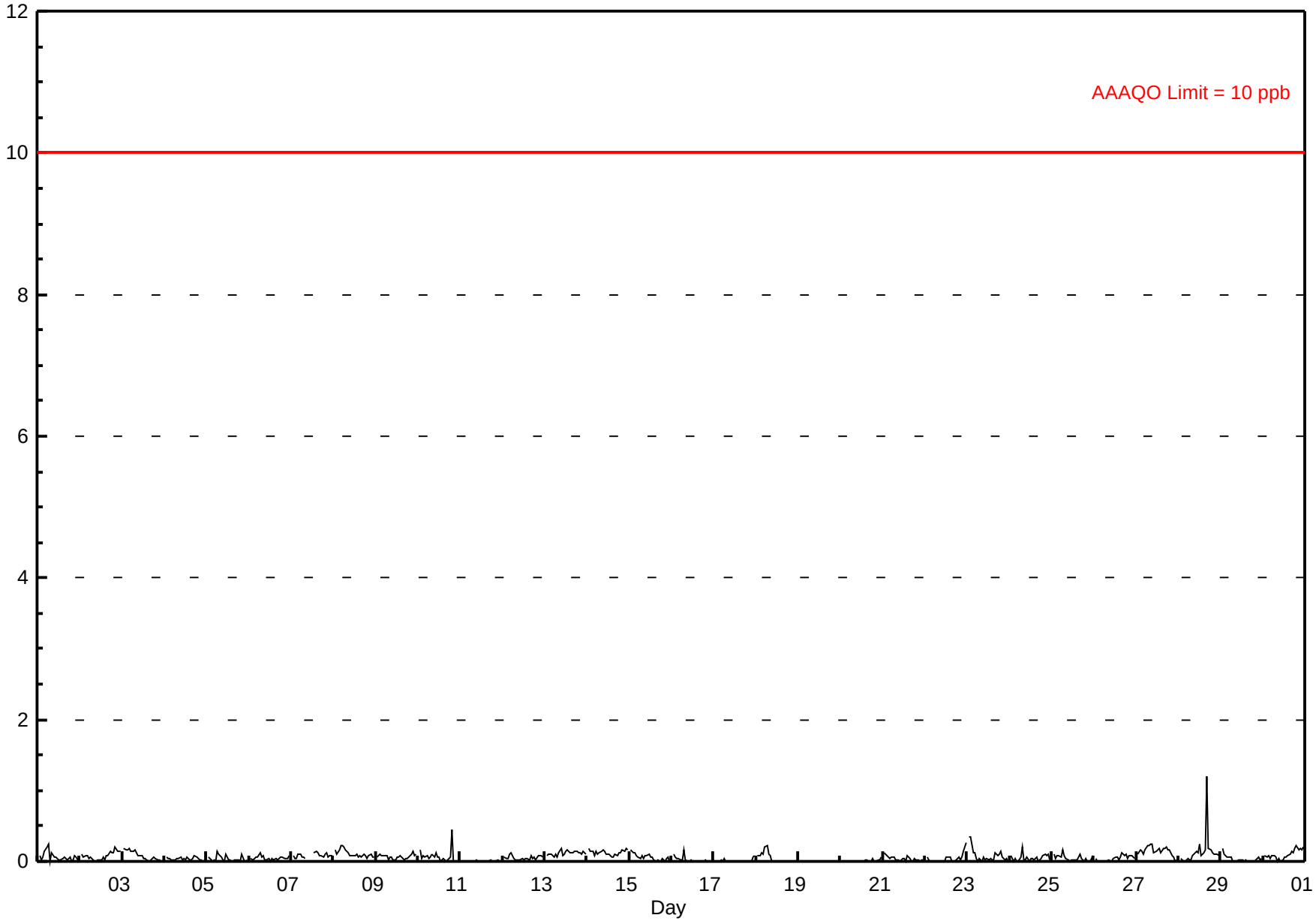
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - September 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - September 2010

Maximum Value: 23.8 ppb on Sep 28 17:00

Maximum Daily Average: 1.5 ppb on Sep 28

Minimum Value: 0 ppb on Sep 19 15:00

Minimum Daily Average: 0.2 ppb on Sep 19

Maximum Diurnal Average: 1.1 ppb at hour 17

Minimum Diurnal Average: 0.3 ppb at hour 23

Monthly Average: 0.39 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 0.9$

Hours in Service:	720
Hours of Data:	686
Hours of Missing Data:	34
Hours of Calibration:	34
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Sep	A	0	0	0	1	1	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	1.3
2-Sep	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
3-Sep	A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
4-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
5-Sep	A	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2
6-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
7-Sep	A	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
8-Sep	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.6
9-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
10-Sep	A	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0.4	1.9
11-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	0.5
12-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.5
13-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.4	0.5
14-Sep	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
15-Sep	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
16-Sep	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
17-Sep	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
18-Sep	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
19-Sep	A	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	0.5
20-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
21-Sep	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
22-Sep	A	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0.4	0.9
23-Sep	A	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.9
24-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
25-Sep	A	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.9
26-Sep	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
27-Sep	A	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0.5	1.0
28-Sep	A	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	24	1	0	0	0	0	0	0	1.5	23.8
29-Sep	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
30-Sep	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0.4	0.5
	--	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	1.1	0.3	0.3	0.4	0.3	0.3	0.3	0.4	Diurnal Average	
	--	0.6	1.0	1.0	0.8	0.9	1.3	1.0	0.7	0.5	0.9	1.2	2.8	0.7	0.5	0.9	23.8	0.5	0.5	1.9	0.5	0.5	0.5	0.9	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

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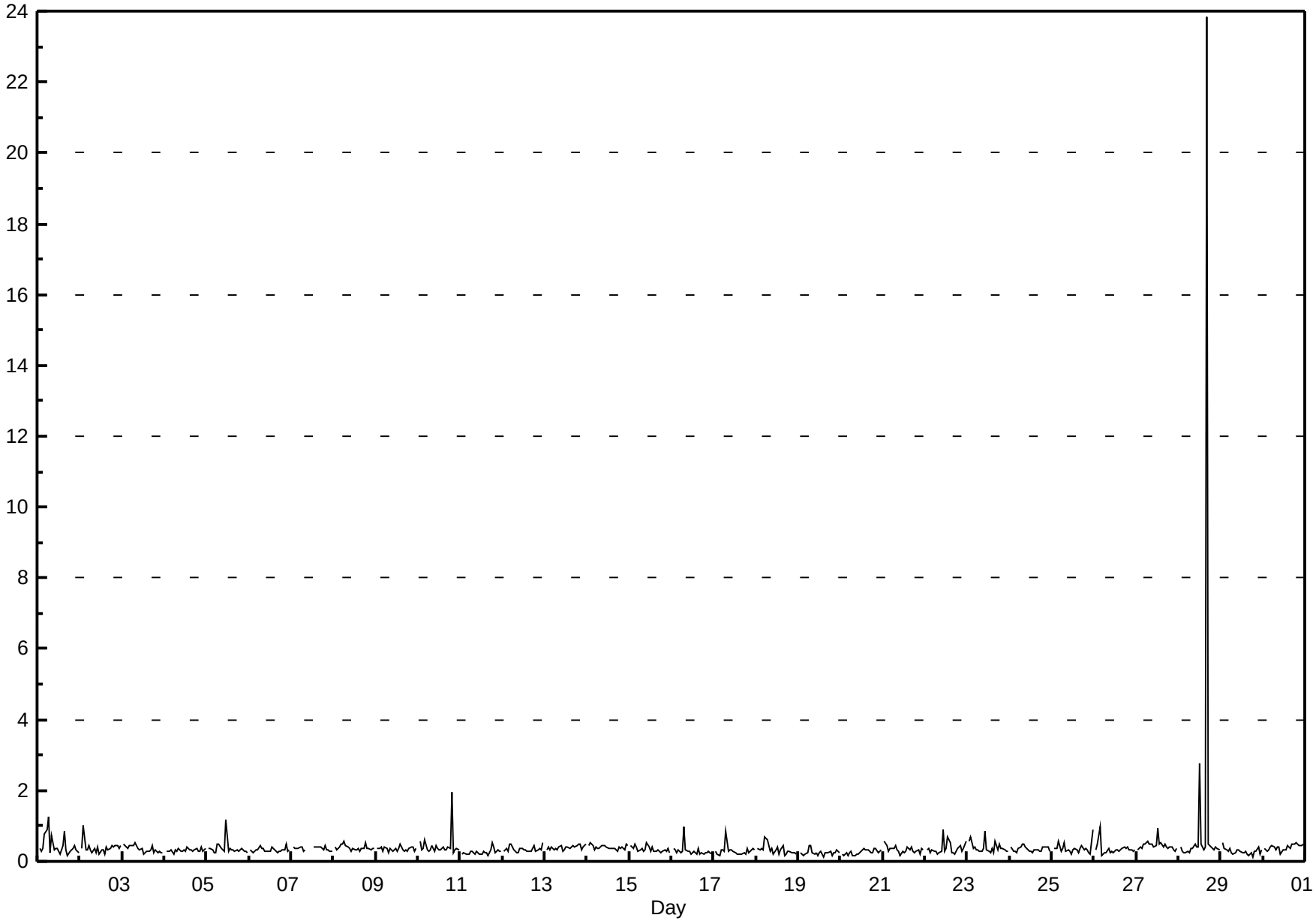
Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

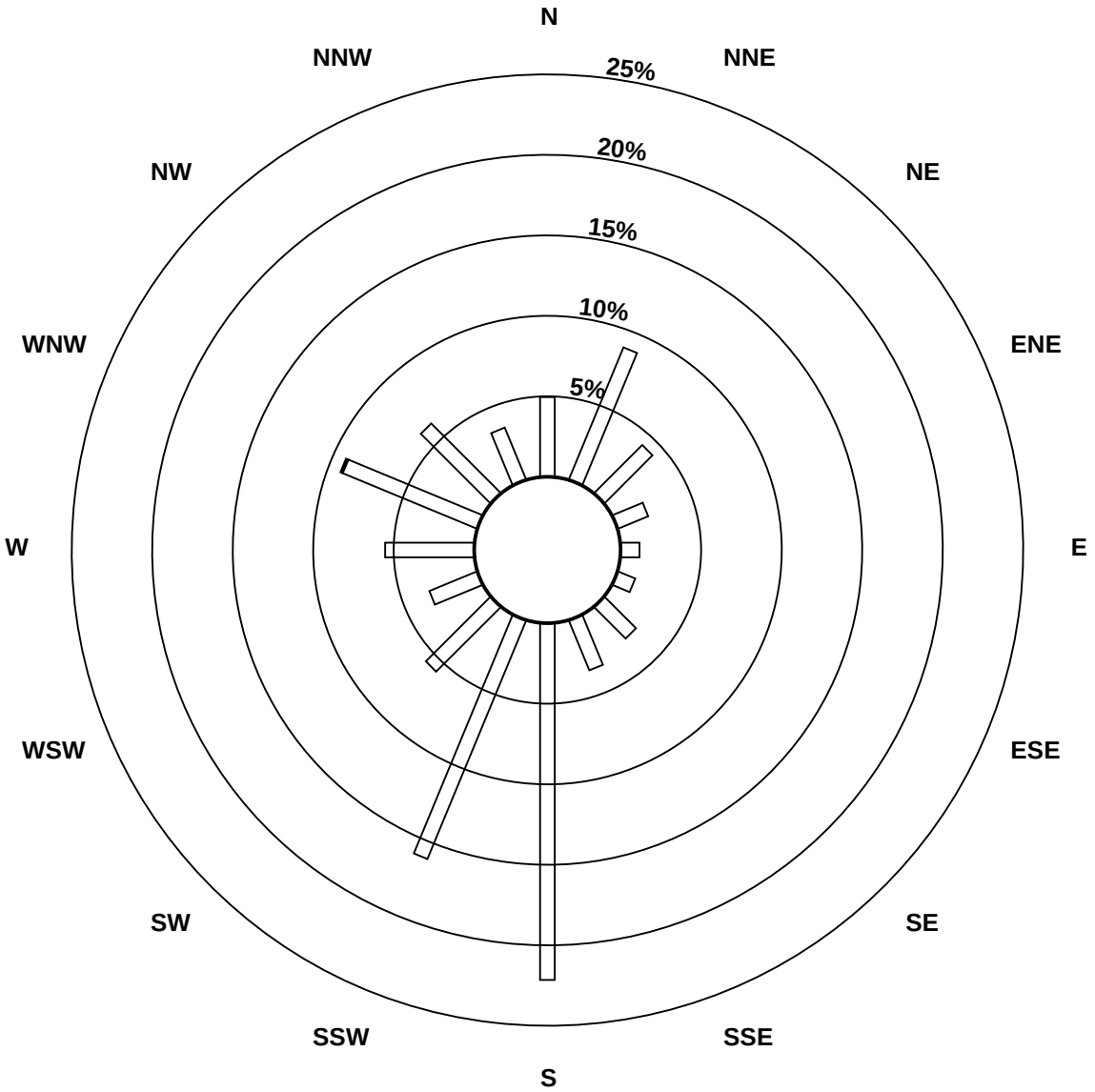
Valleyview - September 2010



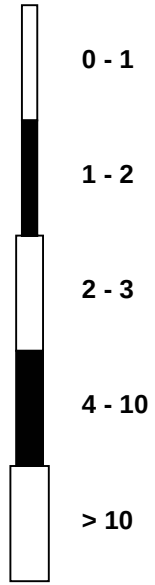
Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Valleyview - September 2010



Pollutant Classes (ppb)



Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.9 ^{o}C on Sep 25 14:00
Maximum Daily Average: 16.9 ^{o}C on Sep 25

Minimum Value: -7 ^{o}C on Sep 17 06:00
Maximum Diurnal Average: 13.6 ^{o}C at hour 16
Monthly Average: 8.24 ^{o}C
Minimum Daily Average: 1.6 ^{o}C on Sep 17
Minimum Diurnal Average: 3.5 ^{o}C at hour 7
Percentiles: P_1 = -4.9 P_{10} = 0.9 Q_1 = 3.8 Median = 8.0 Q_3 = 12.3 P_{90} = 15.8 P_{99} = 23.1

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

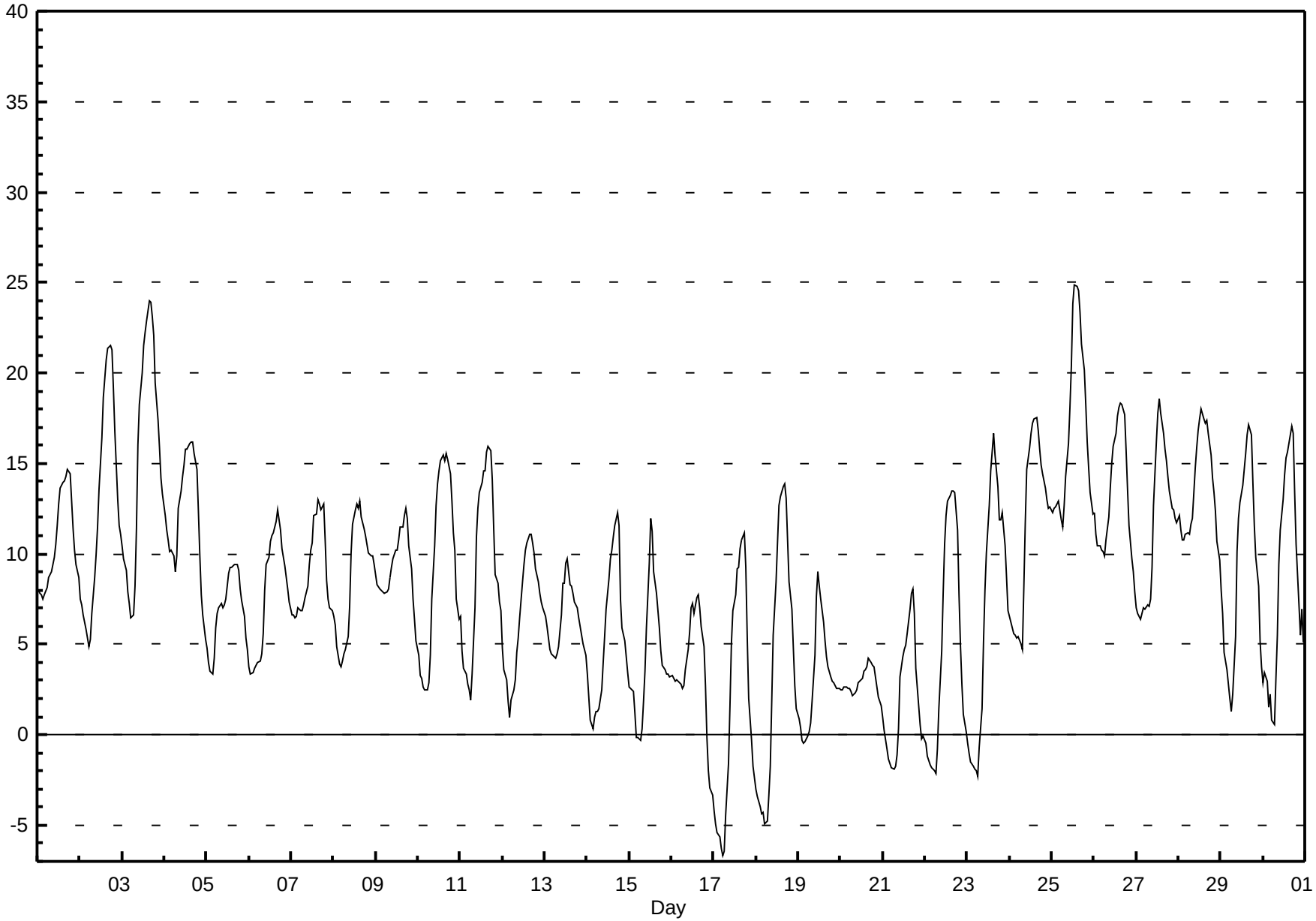
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	8	8	8	8	8	8	9	9	9	10	11	12	13	14	14	14	14	15	14	13	11	10	9	9	10.7	14.7
2-Sep	8	7	7	6	5	5	5	7	9	10	11	14	16	19	20	21	21	21	21	19	17	13	12	11	12.7	21.5
3-Sep	10	10	9	8	7	6	7	8	11	16	18	20	22	22	23	24	24	23	22	19	17	16	14	13	15.5	24.0
4-Sep	12	11	11	10	10	10	9	10	13	14	14	15	16	16	16	16	16	16	15	12	10	8	7	5	12.1	16.2
5-Sep	5	4	4	3	4	6	7	7	7	7	7	8	9	9	9	9	9	9	9	8	7	7	5	5	6.9	9.4
6-Sep	4	3	3	4	4	4	4	4	6	8	9	10	11	11	11	12	12	12	11	10	9	9	8	7	7.8	12.4
7-Sep	7	7	6	7	7	7	7	7	8	8	9	10	11	12	12	13	13	12	13	11	8	7	7	7	9.0	13.0
8-Sep	7	6	5	4	4	4	5	5	5	7	10	12	12	13	12	13	12	11	11	11	10	10	10	9	8.6	12.9
9-Sep	9	8	8	8	8	8	8	8	9	9	10	10	10	11	11	12	12	13	12	10	9	8	6	5	9.2	12.5
10-Sep	4	3	3	3	2	2	3	4	8	10	13	14	15	15	15	15	16	15	14	13	11	10	8	6	9.3	15.6
11-Sep	7	5	4	3	3	2	2	3	7	11	12	13	14	15	15	16	16	16	14	11	9	8	7	7	9.2	16.0
12-Sep	5	4	3	2	1	2	2	3	5	5	6	8	9	10	11	11	11	11	10	9	8	8	7	7	6.6	11.1
13-Sep	7	6	5	5	4	4	4	5	5	7	8	8	9	10	8	8	8	7	7	6	6	6	5	4	6.4	9.8
14-Sep	3	2	1	0	1	1	1	1	2	4	5	7	9	10	10	11	12	12	12	8	6	5	4	3	5.5	12.2
15-Sep	3	3	2	1	0	0	0	0	2	4	6	9	12	11	9	8	7	6	5	4	4	3	3	3	4.3	12.0
16-Sep	3	3	3	3	3	3	3	3	4	5	6	7	7	7	8	8	7	6	5	3	0	-2	-3	-3	3.6	7.7
17-Sep	-4	-5	-5	-6	-6	-7	-6	-4	-2	2	5	7	8	9	9	10	11	11	9	5	2	0	-2	-2	1.6	11.1
18-Sep	-3	-3	-4	-4	-4	-5	-5	-3	-2	2	5	8	11	13	13	14	14	13	11	8	7	5	3	1	3.9	13.9
19-Sep	1	0	0	0	0	0	0	1	2	4	8	9	8	7	6	5	4	4	3	3	3	3	3	3	3.2	9.0
20-Sep	2	2	3	3	3	3	2	2	2	2	3	3	3	3	4	4	4	4	4	4	3	2	2	2	2.9	4.2
21-Sep	1	0	-1	-1	-2	-2	-2	-2	-1	0	3	4	5	5	6	7	8	8	7	4	2	1	0	0	2.0	8.0
22-Sep	0	-1	-1	-2	-2	-2	-2	-1	1	5	8	11	12	13	13	13	13	13	11	8	5	3	1	0	5.0	13.5
23-Sep	0	-1	-2	-2	-2	-2	-2	-1	1	5	8	10	13	15	16	17	15	14	12	12	12	10	9	7	6.8	16.6
24-Sep	7	6	6	6	5	5	5	5	8	12	15	16	17	17	17	18	17	16	15	14	14	13	13	13	11.6	17.5
25-Sep	12	13	13	13	13	12	11	13	14	16	18	20	24	25	25	25	23	22	20	18	16	15	13	12	16.9	24.9
26-Sep	12	11	10	10	10	10	10	11	12	14	15	16	17	18	18	18	18	18	16	14	12	10	9	8	13.2	18.3
27-Sep	7	7	6	7	7	7	7	7	7	9	13	16	18	19	18	17	16	15	14	14	12	12	12	12	11.6	18.6
28-Sep	12	11	11	11	11	11	11	12	12	15	16	17	17	18	17	17	17	17	15	14	13	12	11	10	13.7	18.0
29-Sep	8	7	5	4	3	2	1	2	5	10	12	13	14	15	16	17	17	17	14	12	10	8	5	4	9.1	17.1
30-Sep	3	3	3	2	2	1	1	3	5	9	11	13	14	15	16	17	17	17	13	10	7	6	7	5	8.4	17.0
	5.2	4.7	4.1	3.8	3.7	3.6	3.5	4.3	5.9	8.0	9.9	11.3	12.5	13.2	13.3	13.6	13.5	13.1	12.0	10.3	8.7	7.5	6.5	5.8	Diurnal Average	
	12.3	12.5	12.6	12.8	12.9	11.9	11.4	12.7	14.3	16.1	18.3	20.4	23.8	24.9	24.8	24.6	23.9	23.2	22.1	19.5	17.4	15.9	14.2	13.3	Diurnal Maximum	

PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - September 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99.8 % on Sep 12 10:00 Maximum Daily Average: 92.7 % on Sep 9

Minimum Value: 27 % on Sep 18 16:00 Minimum Daily Average: 52.4 % on Sep 25
Maximum Diurnal Average: 92.3 % at hour 7 Minimum Diurnal Average: 50.3 % at hour 16
Monthly Average: 73.31 % Percentiles: P_1 = 29.1 P_{10} = 39.0 Q_1 = 56.9 Median = 78.9 Q_3 = 92.5 P_{90} = 96.8 P_{99} = 99.8

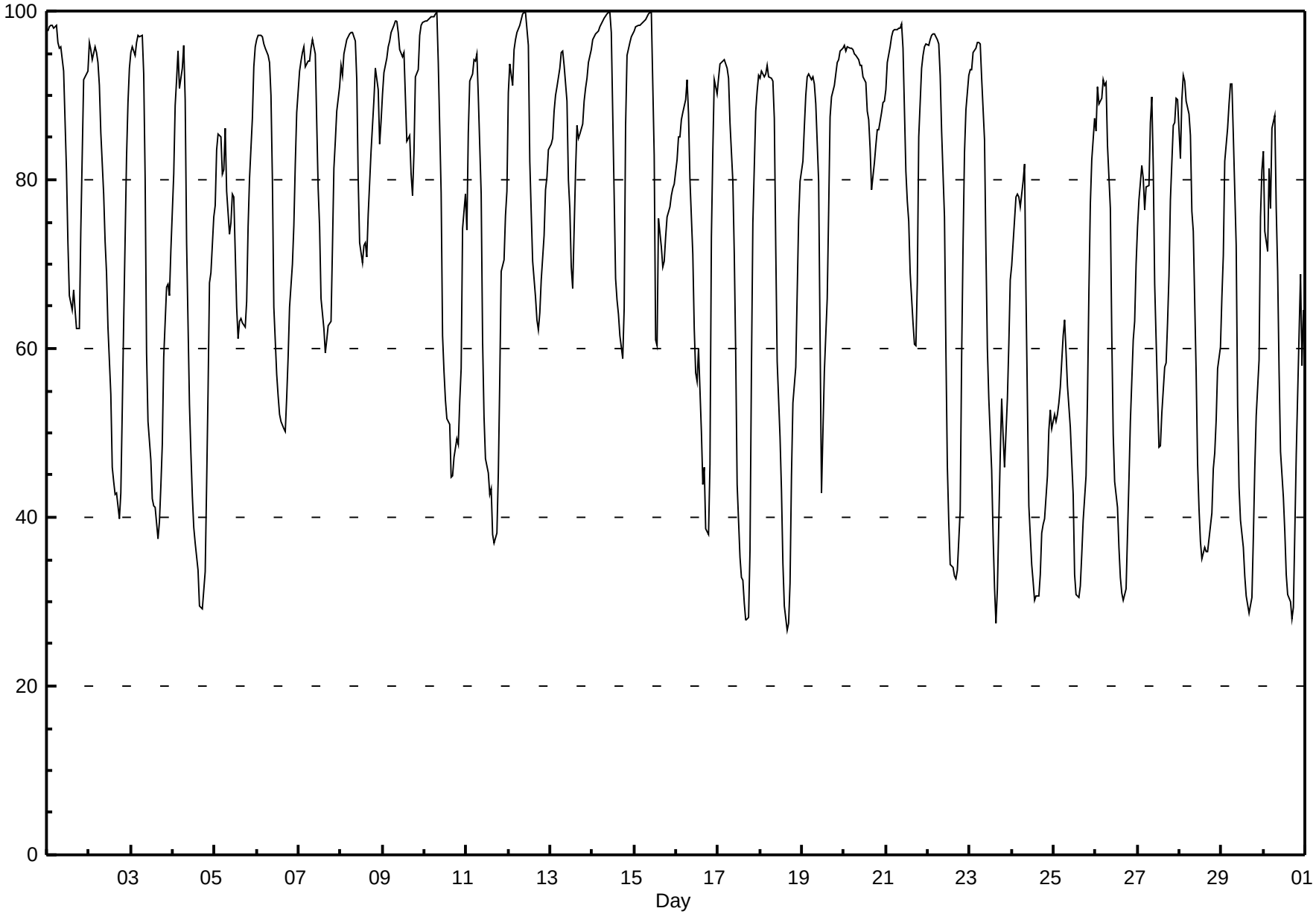
Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Sep	98	98	98	98	98	98	96	96	96	93	87	81	73	66	65	67	65	62	62	74	83	92	92	93	84.6	98.3
2-Sep	96	95	94	96	95	94	91	86	78	73	69	63	55	46	44	43	43	40	43	53	63	83	89	93	71.8	96.3
3-Sep	95	96	95	96	97	97	97	93	80	60	51	47	42	41	41	37	39	44	49	59	67	68	66	72	67.9	97.2
4-Sep	81	89	92	95	91	93	96	89	72	53	48	43	39	37	34	29	29	29	34	44	55	68	69	76	61.8	96.0
5-Sep	77	84	85	85	81	81	86	79	74	75	78	78	65	61	63	63	63	62	66	74	80	87	93	96	76.5	95.7
6-Sep	97	97	97	97	96	96	95	94	90	80	65	57	54	52	51	51	50	54	59	65	70	74	82	88	75.4	97.1
7-Sep	93	94	95	96	93	94	94	96	97	95	87	79	74	66	62	59	61	63	63	72	81	85	88	91	82.4	96.6
8-Sep	93	92	95	97	97	97	97	97	97	92	80	73	70	72	73	71	76	83	86	90	93	91	84	87	86.8	97.5
9-Sep	90	93	94	96	97	98	98	99	99	97	95	95	95	90	85	85	81	78	83	92	93	97	98	99	92.7	98.8
10-Sep	99	99	99	99	99	99	100	100	94	79	61	57	54	52	51	45	45	47	49	49	54	58	74	78	72.5	99.8
11-Sep	74	86	92	93	94	94	95	90	78	61	52	47	45	43	43	38	37	38	45	56	69	71	76	79	66.5	94.9
12-Sep	90	94	91	95	97	98	98	99	100	100	100	96	82	76	70	66	63	62	64	68	73	79	80	84	84.4	99.8
13-Sep	84	85	88	90	91	93	95	95	94	89	80	77	70	67	81	87	85	85	87	89	91	92	94	95	86.8	95.4
14-Sep	97	97	97	98	98	98	99	99	100	100	100	97	78	68	66	64	62	59	65	86	95	96	97	97	88.0	99.8
15-Sep	98	98	98	98	98	99	99	99	100	100	100	83	61	60	75	72	70	70	73	76	77	78	79	79	85.0	99.8
16-Sep	82	85	85	87	88	90	92	88	80	71	62	57	56	60	50	44	46	39	38	46	73	83	92	90	70.2	91.9
17-Sep	92	94	94	94	94	93	92	87	80	71	59	44	35	33	33	30	28	28	36	57	75	88	90	92	67.5	94.2
18-Sep	92	93	92	93	94	92	92	92	87	72	58	50	43	35	29	27	27	32	45	54	58	67	75	80	65.7	93.6
19-Sep	82	86	90	92	93	92	92	91	89	80	61	43	50	57	66	76	87	90	91	93	94	94	95	96	82.6	95.7
20-Sep	96	95	96	96	96	95	95	95	94	94	94	92	92	88	87	84	79	82	84	86	86	88	89	89	90.4	95.9
21-Sep	91	94	96	97	98	98	98	98	98	98	96	81	77	75	69	63	60	60	68	85	93	95	96	96	86.7	98.4
22-Sep	96	97	97	97	97	97	96	92	86	76	60	46	40	34	34	33	33	34	41	59	72	83	88	92	70.0	97.3
23-Sep	93	93	95	96	96	96	96	92	85	72	60	54	46	38	32	27	31	47	54	50	46	54	60	68	65.9	96.4
24-Sep	70	73	78	78	78	77	80	82	66	54	41	34	32	30	31	31	33	38	39	40	45	50	53	50	53.5	81.8
25-Sep	52	51	52	54	56	62	63	60	56	51	47	43	33	31	31	32	36	40	45	54	67	77	82	87	52.4	87.3
26-Sep	86	91	89	90	92	91	92	84	77	62	50	44	41	36	33	31	30	32	38	44	51	61	63	70	61.6	91.8
27-Sep	74	78	82	80	76	79	79	87	90	82	68	55	48	49	52	58	58	63	69	78	86	87	90	90	73.2	89.8
28-Sep	83	89	92	92	89	88	85	76	74	57	47	41	37	35	36	36	36	37	40	46	48	52	58	60	59.8	92.3
29-Sep	66	71	82	86	89	91	91	85	72	53	43	40	36	33	31	30	29	30	38	46	52	59	76	81	58.8	91.4
30-Sep	83	74	71	81	77	86	88	77	69	57	48	42	38	33	31	30	28	29	38	47	62	69	58	65	57.6	87.6
	86.7	88.6	90.1	91.4	91.1	91.9	92.3	89.8	85.0	76.5	68.2	61.2	55.4	52.2	51.6	50.3	50.3	52.0	56.4	64.4	71.8	77.5	80.9	83.8	Diurnal Average	
	98.8	98.8	99.0	99.1	99.3	99.4	99.6	99.8	99.7	99.8	99.8	97.4	95.0	89.8	87.1	86.5	87.4	89.8	91.2	92.6	94.7	97.1	98.3	98.6	Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %

Valleyview - September 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	1	1	1	1	1	2	4	5	4	6	8	8	11	11	10	7	8	7	6	3	2	2	2	2	4.0	11.1
Dir	192	215	222	240	218	273	302	315	298	294	296	296	287	289	306	329	321	298	288	244	209	175	203	197	291	289
2 Spd	2	3	3	4	4	4	3	5	5	4	5	5	5	8	9	8	8	11	5	2	2	3	2	4	3.4	11.0
Dir	174	189	184	182	188	191	179	185	184	179	189	190	188	268	271	280	271	285	275	229	233	180	186	189	225	285
3 Spd	3	2	1	1	1	1	0	1	2	6	6	9	9	8	9	7	6	7	6	6	2	10	13	3	3.2	13.2
Dir	193	192	187	187	205	221	249	273	179	182	182	176	175	175	176	172	157	164	158	163	200	305	303	340	190	303
4 Spd	1	2	1	1	2	2	2	3	4	11	11	11	11	13	13	14	14	14	9	2	3	3	3	3	5.5	14.4
Dir	176	200	213	212	208	176	191	188	262	283	287	276	287	280	276	299	295	290	289	271	252	190	200	192	274	295
5 Spd	4	3	3	2	2	3	8	11	12	10	7	7	10	13	12	11	9	8	6	1	2	2	2	1	4.9	13.2
Dir	187	178	186	196	218	248	291	308	314	316	303	321	300	302	297	311	336	340	327	297	261	180	188	183	301	302
6 Spd	1	2	1	2	2	1	1	1	2	1	3	3	3	2	4	5	5	6	4	3	3	3	1	1	0.9	5.6
Dir	186	180	186	168	168	178	189	191	163	144	127	79	73	13	357	31	36	27	23	356	321	324	326	229	39	27
7 Spd	1	2	2	1	0	1	1	2	2	3	3	2	1	2	2	2	4	3	2	2	3	3	3	2	0.3	3.7
Dir	180	177	174	193	251	196	228	192	195	195	192	257	265	257	2	67	23	4	11	343	6	358	10	12	334	23
8 Spd	1	2	1	0	0	0	2	4	3	4	3	0	4	4	5	4	5	2	1	0	0	3	2	1	0.8	4.7
Dir	25	127	326	355	222	194	63	33	16	26	39	94	149	185	179	195	196	207	217	116	85	107	152	128	133	196
9 Spd	1	3	4	3	4	5	4	4	3	3	1	1	2	3	3	5	4	3	1	2	2	2	1	2	1.4	5.4
Dir	21	16	9	9	12	22	24	34	46	75	144	206	259	279	292	308	325	320	355	223	250	166	240	183	348	308
10 Spd	1	0	1	1	1	1	1	2	2	2	5	9	10	12	13	13	12	6	6	6	6	5	1	3	3.9	12.8
Dir	193	171	191	236	236	212	195	192	185	169	272	288	304	316	312	302	335	309	288	279	270	273	181	190	291	312
11 Spd	2	3	3	2	2	2	2	3	3	6	13	13	10	9	7	10	10	8	4	3	0	3	3	2	3.6	12.6
Dir	230	180	176	180	187	212	210	198	174	295	301	320	302	313	315	298	307	285	277	245	171	228	209	196	283	301
12 Spd	1	3	1	1	1	1	3	4	1	2	3	8	10	9	10	7	6	6	4	3	3	2	4	2	3.4	10.4
Dir	176	228	298	126	31	357	20	39	111	32	22	19	33	34	35	59	55	50	55	34	35	21	21	15	36	35
13 Spd	2	4	1	3	3	2	1	1	2	0	2	2	2	3	2	2	5	5	5	4	4	3	2	2	0.9	5.2
Dir	17	18	4	356	21	37	35	34	32	192	177	207	272	231	143	223	192	190	189	187	188	185	178	185	188	192
14 Spd	1	1	1	1	1	1	4	3	1	1	0	2	2	3	4	4	3	1	1	0	1	1	0	1	1.4	4.2
Dir	193	235	197	189	190	199	176	176	152	185	204	88	153	177	190	172	195	208	181	137	171	179	220	209	179	172
15 Spd	1	1	1	2	2	1	1	1	1	2	2	3	5	15	13	15	14	13	13	9	5	3	2	1	3.9	14.6
Dir	212	194	196	202	213	208	213	209	199	189	180	33	352	4	30	21	18	14	16	15	27	37	18	331	16	4
16 Spd	0	1	1	1	1	1	2	4	8	13	12	11	16	16	15	16	14	9	6	2	2	2	1	2	5.2	16.2
Dir	154	242	11	324	209	224	208	302	321	337	337	311	343	341	320	324	356	30	26	14	195	184	180	195	335	324
17 Spd	0	1	2	1	0	1	1	2	2	2	2	1	5	3	4	2	3	1	1	1	0	1	1	1	0.7	4.9
Dir	186	208	193	204	203	234	214	196	184	170	140	350	313	219	341	250	274	210	94	87	333	190	181	204	229	313
18 Spd	1	1	1	0	0	2	1	0	1	3	1	2	1	3	4	3	3	5	6	4	2	1	3	4	0.9	6.0
Dir	203	194	208	195	51	1	46	70	272	161	206	248	293	139	125	107	66	52	51	65	64	348	353	344	65	51
19 Spd	3	3	4	3	1	2	0	1	3	3	3	12	8	5	10	8	5	6	7	7	6	7	8	7	3.0	11.9
Dir	358	3	351	7	12	14	297	66	35	39	115	137	161	180	136	131	82	60	50	53	40	31	32	29	70	137
20 Spd	7	8	7	7	8	8	10	10	10	11	9	13	12	12	10	9	7	6	2	2	4	3	2	1	6.9	12.7
Dir	29	27	27	21	19	20	22	21	21	21	17	12	5	6	11	17	29	18	20	331	310	260	240	301	15	12
21 Spd	2	1	1	2	2	1	1	1	1	1	3	4	4	5	4	4	3	3	2	1	2	2	2	3	1.8	4.8
Dir	306	275	190	201	192	182	263	125	348	207	192	203	195	189	199	157	142	150	139	160	201	197	192	190	188	189
22 Spd	2	1	2	2	3	2	2	4	4	4	4	4	5	4	5	6	4	3	2	1	1	1	0	1	2.5	6.0
Dir	191	190	199	197	197	204	196	190	182	182	188	192	189	188	177	175	179	149	105	35	309	356	305	207	184	175

PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - September 2010

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	1	0	1	2	2	1	2	2	3	2	2	1	3	1	3	2	1	1	1	4	6	2	2	3	1.5	6.0
Dir	227	194	229	197	198	214	189	185	184	169	185	184	173	144	170	218	229	180	247	264	294	233	213	198	210	294
24 Spd	3	3	2	3	4	3	2	2	4	3	5	8	5	6	7	7	5	6	7	9	7	7	8	9	4.8	9.0
Dir	191	185	191	182	187	191	193	190	186	182	244	260	254	235	186	182	175	177	182	190	188	184	187	189	196	190
25 Spd	4	5	5	5	4	1	2	4	5	6	7	7	6	7	14	14	9	7	1	2	5	4	2	5	2.9	13.7
Dir	188	189	192	179	190	295	172	189	191	190	189	189	201	232	259	273	302	320	191	331	15	356	320	340	237	273
26 Spd	4	3	5	2	3	2	3	3	2	8	13	14	15	15	16	17	16	11	5	2	3	3	3	2	5.8	16.7
Dir	4	339	311	226	188	191	193	208	240	279	289	295	303	300	291	284	292	296	314	259	233	169	179	192	286	284
27 Spd	1	1	1	1	2	3	1	1	1	2	1	1	5	1	5	8	3	2	7	8	9	6	6	5	1.1	8.7
Dir	206	309	158	222	349	352	329	93	47	39	23	275	261	337	359	353	357	257	192	193	197	197	194	206	234	197
28 Spd	4	3	3	6	7	5	4	4	3	10	21	23	24	23	24	22	20	19	14	11	11	5	3	3	9.4	24.2
Dir	216	171	181	187	190	187	187	202	203	262	280	291	290	294	304	295	287	290	282	269	272	241	200	203	275	304
29 Spd	3	2	2	2	2	2	3	3	3	8	11	10	12	11	8	3	4	2	2	1	2	1	3	3	3.0	11.9
Dir	200	216	200	198	202	227	206	199	181	301	308	294	305	304	302	289	272	237	170	221	231	120	188	190	272	305
30 Spd	5	3	4	3	3	3	3	3	3	2	2	1	1	1	3	2	1	1	2	1	1	2	2	1	1.1	4.5
Dir	189	210	233	179	202	170	157	174	164	166	32	211	26	78	46	61	60	289	136	104	317	176	186	304	172	189
Spd	0.8	0.7	0.7	1.0	1.0	0.6	0.6	0.6	0.6	1.6	2.7	3.2	3.8	4.3	3.8	3.7	3.4	2.7	1.1	0.8	1.2	0.8	0.9	1.0	Diurnal Average	
Dir	198	193	213	193	196	215	215	218	239	282	283	288	293	297	301	304	319	317	315	261	265	233	221	208		
Spd	6.9	7.7	7.3	7.4	7.9	8.4	9.5	10.9	11.6	12.9	20.9	23.3	24.1	23.5	24.2	21.9	20.4	19.3	13.8	11.0	11.3	10.1	13.2	8.6	Diurnal Maximum	
Dir	29	27	27	21	19	20	22	308	314	337	280	291	290	294	304	295	287	290	282	269	272	305	303	189		

Maximum Speed Value: 24 ppb on Sep 28 15:00
Maximum Daily Speed Average: 9.4 ppb on Sep 28
Maximum Diurnal Speed Average: 4.3 ppb at hour 14

Minimum Speed Value: 0 ppb on Sep 19 07:00
Minimum Daily Speed Average: 0.3 ppb on Sep 14
Minimum Diurnal Speed Average: 0.6 ppb at hour 6

Monthly Average Velocity: 1.38 ppb 281.9 deg

Speed Percentiles: $P_1 = 0.3$ $P_{10} = 0.9$ $Q_1 = 1.6$ Median = 2.9 $Q_3 = 5.7$ $P_{90} = 10.2$ $P_{99} = 20.1$

All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Percent Operational Time:	100.0

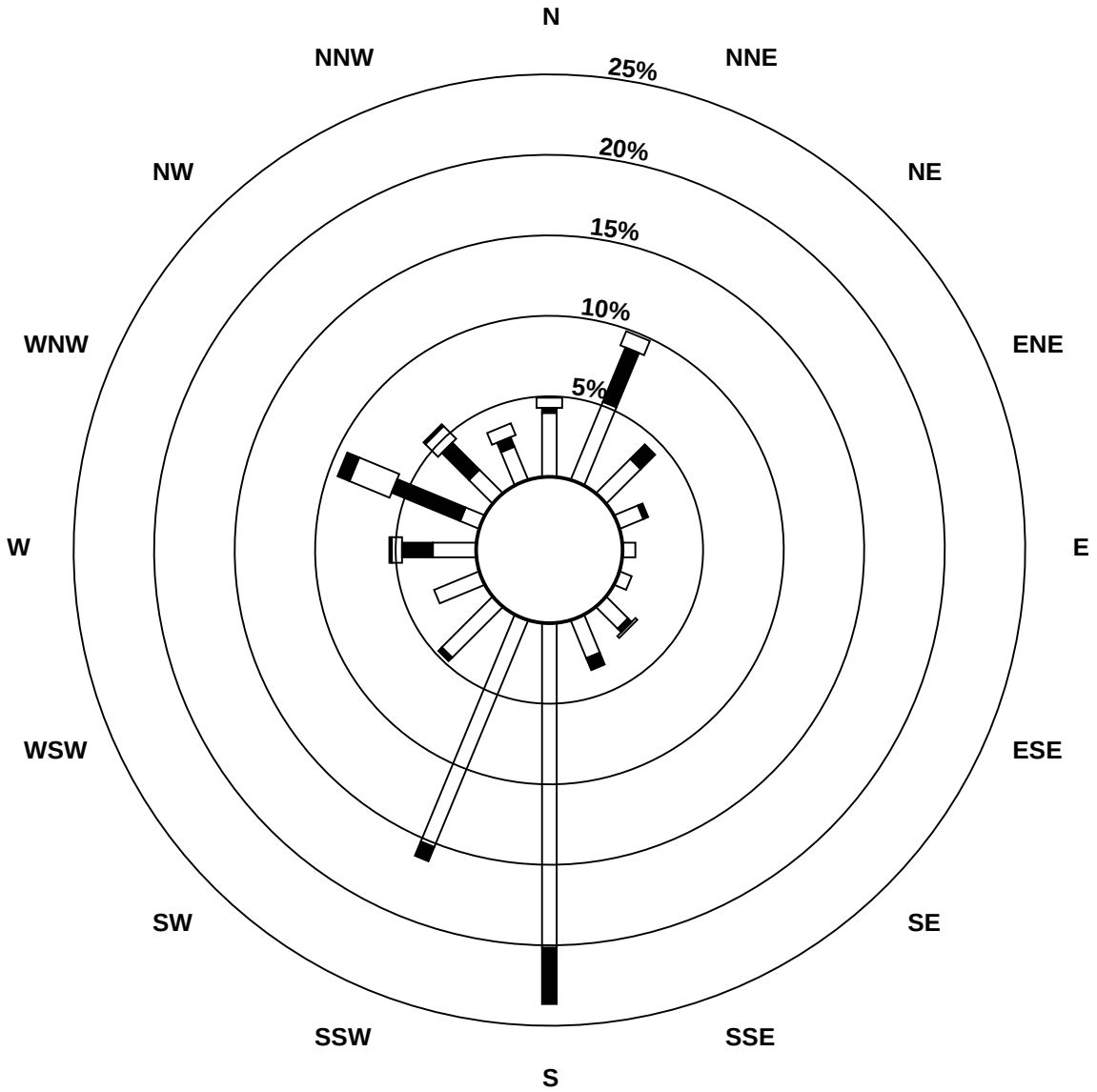
Frequency Distribution

Direction	Speed Range (ppb) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	58	17	11	0	0	0	86
NorthEast	43	22	1	0	0	0	66
East	16	1	0	0	0	0	17
SouthEast	28	3	1	0	0	0	32
South	212	41	0	0	0	0	253
SouthWest	94	3	0	0	0	0	97
West	33	21	17	5	0	0	76
NorthWest	32	36	22	3	0	0	93
Total	516	144	52	8	0	0	720

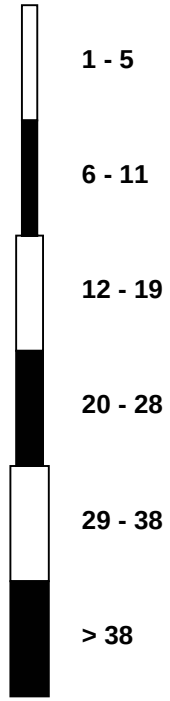
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - September 2010



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - September 2010

Maximum Speed: 25 km/h on Sep 28 15:00

Maximum Daily Speed Average: 11.7 km/h on Sep 28

Minimum Speed: 1 km/h on Sep 16 01:00

Minimum Daily Speed Average: 1.9 km/h on Sep 14

Maximum Diurnal Speed Average: 8.9 km/h at hour 15

Minimum Diurnal Speed Average: 2.4 km/h at hour 6

Monthly Average Speed: 4.68 km/h

Percentiles: P_1 = 0.8 P_{10} = 1.3 Q_1 = 1.9 Median = 3.2 Q_3 = 6.0 P_{90} = 10.9 P_{99} = 20.3

Hours in Service: 720
Hours of Data: 720
Hours of Missing Data: 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-Sep	2	2	1	1	1	2	4	5	4	7	8	9	11	12	11	7	9	7	7	3	2	2	3	2	5.1	11.7
2-Sep	3	3	3	4	4	4	3	5	5	4	5	5	6	9	10	9	8	11	5	2	2	3	3	4	5.0	11.2
3-Sep	3	2	2	2	1	1	1	1	2	6	6	9	9	8	10	8	6	7	6	6	2	11	14	4	5.4	13.6
4-Sep	2	2	2	2	4	2	2	3	5	11	12	12	12	14	13	15	15	14	9	2	3	3	3	3	6.9	15.1
5-Sep	4	3	3	2	2	3	8	11	12	11	8	8	11	14	13	12	9	8	6	2	2	2	2	2	6.6	13.7
6-Sep	2	2	2	2	2	2	1	2	3	2	4	4	4	4	5	5	5	6	4	3	3	3	1	1	3.0	5.8
7-Sep	2	2	2	1	1	1	1	2	2	3	3	3	2	4	4	4	4	3	2	2	3	3	4	2	2.6	4.4
8-Sep	2	2	1	1	1	1	2	4	4	5	3	2	5	4	5	4	5	2	1	1	1	3	2	1	2.5	4.8
9-Sep	2	3	4	3	4	5	4	4	3	3	1	1	3	4	3	6	4	3	1	2	3	2	2	2	3.0	6.1
10-Sep	1	1	1	1	1	1	1	2	2	2	6	9	11	12	13	13	12	6	7	6	7	5	1	3	5.3	13.5
11-Sep	3	3	3	3	2	2	2	3	4	8	13	13	10	9	7	11	10	8	4	3	2	4	4	3	5.6	13.1
12-Sep	2	3	2	1	2	1	3	4	2	3	3	8	10	10	11	8	6	6	4	3	3	2	4	2	4.3	10.8
13-Sep	2	4	2	3	3	2	1	1	2	1	2	3	3	3	3	2	5	5	5	4	4	3	2	2	2.9	5.3
14-Sep	1	1	1	1	1	1	4	4	2	1	1	2	2	4	4	4	3	2	1	1	1	1	1	1	1.9	4.4
15-Sep	1	1	1	2	2	2	2	1	1	2	2	4	6	16	13	15	15	13	13	9	6	4	2	2	5.6	16.2
16-Sep	1	1	1	1	1	1	2	4	8	13	13	12	17	16	16	17	15	9	6	2	2	2	1	2	6.8	16.6
17-Sep	1	1	2	1	1	1	1	2	3	3	3	4	6	4	5	4	4	2	2	1	1	1	1	1	2.2	6.4
18-Sep	1	1	1	1	1	2	2	1	1	3	2	2	3	4	5	4	5	5	6	4	2	1	3	4	2.8	6.1
19-Sep	3	3	4	3	1	3	1	1	3	3	4	12	8	6	10	8	6	6	8	7	7	8	8	7	5.5	12.3
20-Sep	7	8	7	7	8	8	10	10	10	11	9	13	12	12	10	9	7	6	2	2	4	3	2	2	7.5	12.8
21-Sep	2	1	1	2	2	2	1	2	2	2	3	5	4	5	5	4	3	3	2	1	2	2	2	3	2.6	5.0
22-Sep	2	2	2	2	3	2	2	4	4	4	5	4	5	5	6	6	4	3	2	1	1	1	1	1	3.1	6.2
23-Sep	1	1	1	2	2	2	2	2	3	3	3	3	3	3	4	2	1	1	2	5	6	3	2	3	2.5	6.1
24-Sep	3	3	3	3	4	3	2	2	4	4	7	8	6	7	7	7	5	6	7	9	7	7	8	9	5.5	9.0
25-Sep	5	5	5	5	4	2	2	4	5	6	7	7	7	8	14	14	9	7	3	3	6	5	2	6	5.8	14.0
26-Sep	5	4	5	4	3	2	3	3	3	9	13	15	16	15	17	17	16	11	5	3	4	3	3	2	7.5	17.1
27-Sep	1	1	1	2	2	3	2	2	2	2	2	4	5	3	5	8	5	3	7	8	9	6	6	5	3.8	8.8
28-Sep	5	3	3	6	7	5	4	5	3	11	21	24	25	24	25	22	21	20	14	11	11	6	3	3	11.7	24.6
29-Sep	3	2	2	3	2	3	3	3	3	8	11	11	12	12	8	4	5	3	2	1	3	3	3	3	4.8	12.4
30-Sep	5	3	4	4	3	3	4	3	3	3	3	2	3	3	4	2	2	2	2	1	1	2	3	2	2.8	4.6
	2.5	2.5	2.4	2.5	2.6	2.4	2.7	3.3	3.7	5.1	6.1	7.3	7.9	8.4	8.9	8.4	7.5	6.3	4.9	3.8	3.7	3.4	3.2	2.8	Diurnal Average	
	7.0	7.8	7.4	7.4	7.9	8.5	9.6	11.2	11.9	13.2	21.2	23.7	24.5	24.0	24.6	22.2	20.7	19.5	14.0	11.0	11.4	11.4	13.6	8.6	Diurnal Maximum	

All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - September 2010

Maximum Value: 93.7 deg on Sep 17 01:00

Minimum Value: 4.9 deg on Sep 24 01:00

Percentiles: P_1 = 6.1 P_{10} = 9.4 Q_1 = 14.1 Median = 23.6 Q_3 = 45.6 P_{90} = 67.2 P_{99} = 89.6

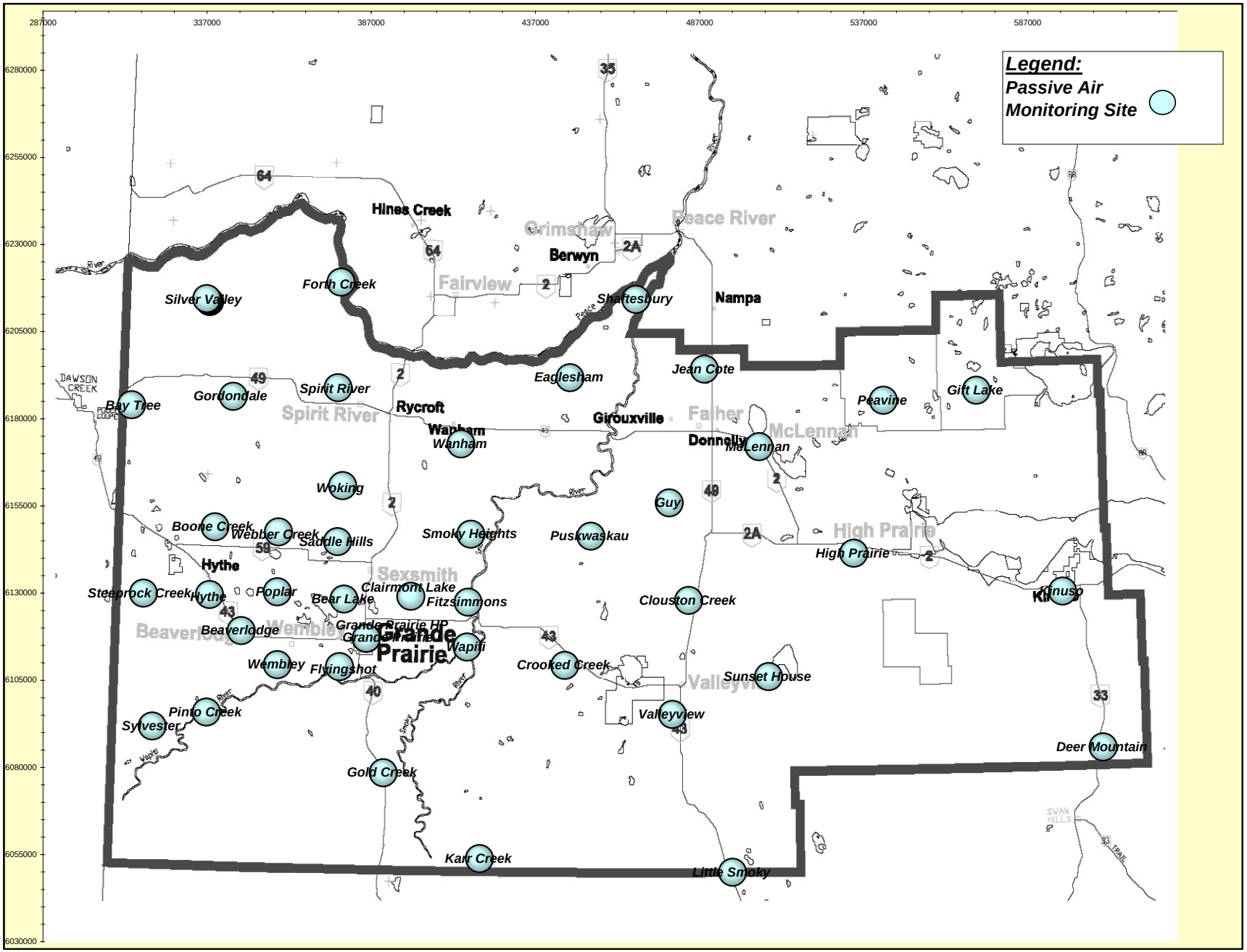
Hours in Service:	720
Hours of Data:	720
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Sep	33	65	52	49	57	48	33	14	17	12	14	12	18	20	28	24	19	20	17	28	15	20	14	17	65.3
2-Sep	23	7	11	10	7	6	12	8	12	15	15	14	18	42	22	25	28	12	15	31	49	27	34	6	49.0
3-Sep	14	7	58	70	26	43	65	65	71	14	12	15	14	15	14	17	17	13	11	11	28	53	14	80	79.8
4-Sep	58	51	57	64	52	16	32	19	32	12	19	17	19	21	29	20	13	11	12	28	30	38	13	9	63.6
5-Sep	6	15	15	14	14	21	13	13	13	16	39	28	23	16	16	21	22	13	22	66	28	28	17	60	66.1
6-Sep	59	18	44	20	27	37	58	38	61	66	52	46	49	68	43	42	40	16	8	16	6	8	48	40	68.1
7-Sep	23	14	11	54	70	30	36	22	17	19	23	52	80	69	80	59	21	25	17	23	16	10	13	9	80.4
8-Sep	60	44	64	92	78	83	47	14	30	18	29	85	37	32	21	15	11	26	25	63	78	18	16	30	91.9
9-Sep	26	8	10	10	8	10	11	16	30	28	51	30	36	29	34	30	27	24	24	53	55	34	43	29	55.3
10-Sep	32	80	48	37	42	32	23	17	34	51	32	18	20	14	18	15	17	21	14	8	7	12	84	26	84.3
11-Sep	48	20	19	17	21	17	16	15	19	62	16	15	23	23	18	14	16	13	18	13	86	31	29	48	85.9
12-Sep	79	23	79	72	75	63	38	30	77	51	30	17	12	18	16	23	26	17	20	7	11	14	11	39	79.2
13-Sep	50	8	83	15	20	39	41	49	72	86	37	45	67	35	55	34	9	9	8	13	9	12	15	7	85.6
14-Sep	46	60	31	28	28	37	17	20	46	72	79	50	45	31	23	24	28	47	37	78	76	65	77	76	79.2
15-Sep	28	18	32	15	21	34	45	31	59	28	27	48	44	33	13	10	10	9	7	11	13	36	46	57	59.1
16-Sep	67	44	59	59	53	46	21	23	18	11	25	28	16	12	17	12	21	11	9	59	16	41	70	40	70.3
17-Sep	94	23	17	26	73	36	51	26	21	40	53	92	55	57	48	60	43	70	39	53	78	53	76	51	93.7
18-Sep	74	62	35	91	79	13	64	71	73	21	90	55	83	55	46	56	51	33	13	23	27	37	8	25	90.6
19-Sep	16	18	12	10	67	46	86	60	15	24	52	13	20	25	15	12	27	21	15	13	12	9	8	9	85.8
20-Sep	9	8	8	7	7	7	8	8	9	9	12	9	10	13	11	12	13	12	21	17	18	13	24	49	48.5
21-Sep	28	57	59	25	56	59	76	62	59	56	46	28	15	15	28	33	39	30	11	78	13	16	20	6	77.6
22-Sep	22	25	12	13	6	8	10	9	15	12	15	31	25	36	23	17	17	16	24	46	74	66	91	45	91.4
23-Sep	37	86	34	17	16	18	19	15	20	26	56	76	39	71	65	54	38	80	74	37	8	30	15	16	85.6
24-Sep	5	21	11	10	14	6	16	25	12	22	45	29	39	35	15	12	12	9	8	6	7	8	7	7	45.2
25-Sep	11	8	8	10	11	66	69	9	6	8	9	8	26	34	16	12	14	10	74	80	26	29	44	32	80.0
26-Sep	33	34	12	58	17	23	9	23	46	16	14	16	13	15	16	14	11	10	21	37	49	26	24	11	57.9
27-Sep	24	74	79	40	69	32	50	59	47	39	48	76	32	72	16	7	61	51	8	9	8	18	11	20	79.3
28-Sep	24	43	25	7	7	15	21	14	26	29	11	10	12	12	11	11	9	9	11	5	7	34	9	15	43.2
29-Sep	6	27	16	23	40	42	14	16	34	22	15	21	16	15	24	59	35	17	31	43	32	81	33	20	81.1
30-Sep	12	22	13	21	17	30	36	37	45	68	51	92	89	75	62	66	86	80	24	45	86	31	55	55	92.4
	93.7	85.6	82.7	91.9	79.1	83.1	85.8	70.7	77.4	85.6	90.0	92.4	88.7	74.5	80.4	65.5	86.4	80.1	74.3	80.0	86.2	81.1	91.4	79.8	

PASZA

Monthly Passive Data Summary

Location of PASZA Passive Monitoring Stations



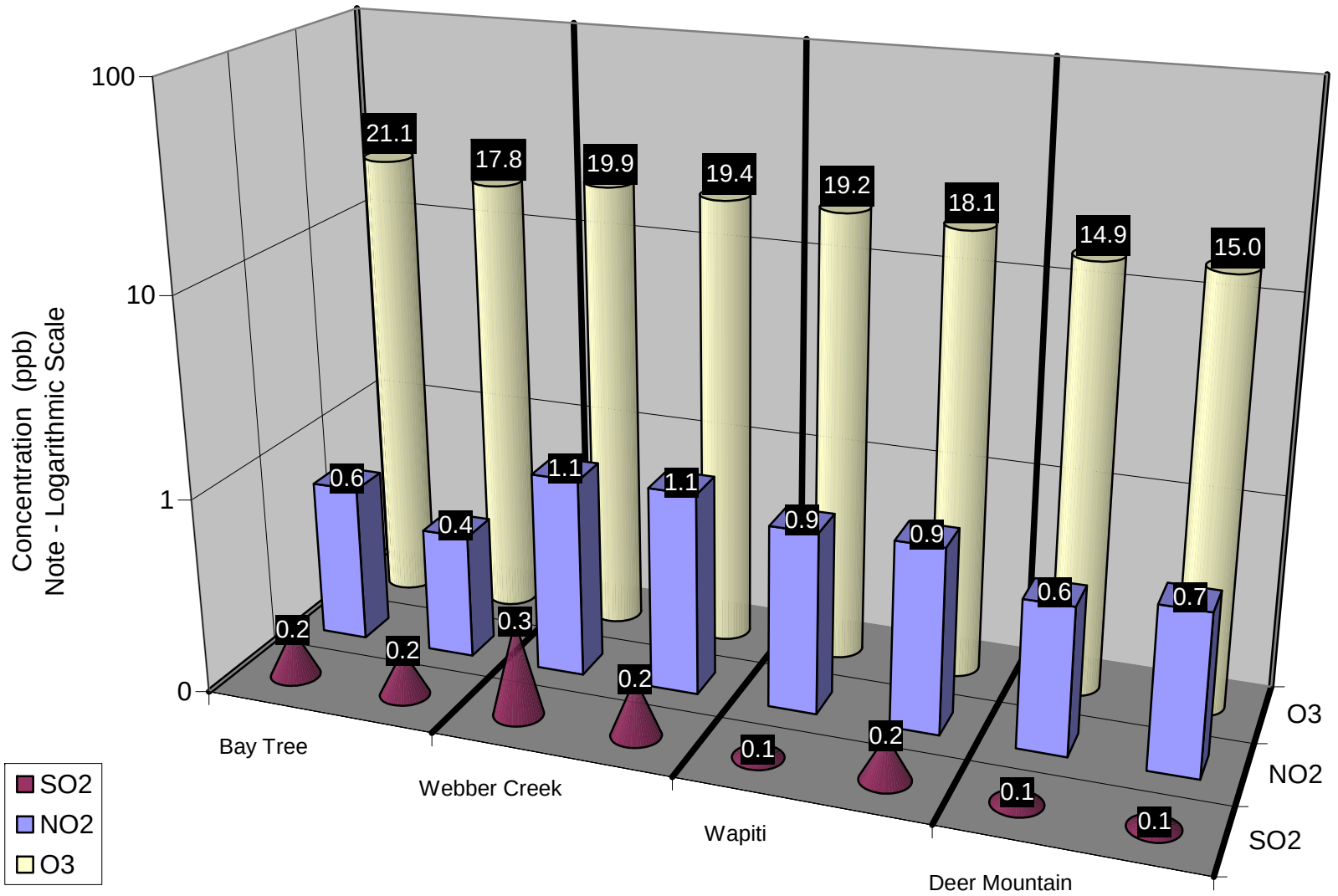
PASZA Passive Results for September 2010

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
2a	Bay Tree	**0.2**	**21.1**	**0.6**	
2b	Bay Tree	**0.2**	**17.8**	**0.4**	
11a	Webber Creek	**0.3**	**19.9**	**1.1**	
11b	Webber Creek	**0.2**	**19.4**	**1.1**	
33a	Wapiti	**0.1**	**19.2**	**0.9**	
33b	Wapiti	**0.2**	**18.1**	**0.9**	
48a	Deer Mountain	**0.1**	**14.9**	**0.6**	
48b	Deer Mountain	**0.1**	**15.0**	**0.7**	
1	Silver Valley	**0.2**	**21.9**	**0.8**	08-27-081-11 W6M
2	Bay Tree	**0.2**	**19.5**	**0.5**	13-16-078-13 W6M
3	Fourth Creek	**0.2**	**26.2**	**0.6**	04-13-082-07 W6M
4	Gordondale	**0.2**	**22.7**	**0.9**	04-34-078-10 W6M
5	Boone Creek	**0.1**	**17.7**	**0.7**	16-36-074-11 W6M
7	Steeprock Creek	**0.2**	**21.9**	**0.5**	09-35-072-13 W6M
9	Spirit River	**0.2**	**19.8**	**1.5**	08-12-079-07 W6M
10	Woking	**0.2**	**21.1**	**0.8**	01-13-076-07 W6M
11	Webber Creek	**0.3**	**19.7**	**1.1**	09-36-074-09 W6M
12	Hythe	**0.1**	**16.4**	**1.1**	14-36-072-11 W6M
14	Sylvester	**0.1**	**16.3**	**0.7**	08-06-069-12 W6M
16	Beaverlodge	**0.2**	**22.2**	**1.2**	15-36-071-10 W6M
17	Poplar	**0.2**	**19.0**	**1.3**	13-06-073-08 W6M
18	Saddle Hills	**0.2**	**21.2**	**0.7**	04-25-074-07 W6M
19	Wanham	**0.3**	**23.3**	**0.9**	16-22-077-03 W6M
20	Shaftesbury	**0.1**	**23.3**	**0.7**	04-03-082-23 W5M
21	Eaglesham	**0.2**	**15.3**	**0.9**	16-21-079-25 W5M
23	Bear Lake	**0.1**	**17.2**	**1.3**	15-31-072-06 W6M

PASZA Passive Results for September 2010 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	**0.1**	**16.0**	**1.7**	12-31-070-08 W6M
25	Pinto Creek	**0.1**	**16.2**	**0.7**	04-24-069-11 W6M
26	Flyingshot	**0.2**	**16.6**	**1.0**	15-36-070-07 W6M
27	Grande Prairie I	**0.2**	**16.6**	**3.2**	08-15-071-06 W6M
28	Clairmont Lake	**0.2**	**21.3**	**1.2**	09-06-073-04 W6M
29	Smoky Heights	**0.4**	**21.9**	**1.0**	04-06-075-02 W6M
30	Fitzsimmons	**0.2**	**18.4**	**0.9**	15-36-072-03 W6M
32	Gold Creek	**0.2**	**12.8**	**0.9**	06-33-067-05 W6M
33	Wapiti	**0.1**	**18.7**	**0.9**	02-25-071-03 W6M
34	Puskwaskau	**0.1**	**14.5**	**0.2**	15-35-074-25 W5M
35	Jean Cote	**0.2**	**26.2**	**1.4**	12-35-079-21 W5M
36	Guy	**0.1**	**18.3**	**0.9**	03-04-076-22 W5M
37	Crooked Creek	**0.1**	**18.9**	**0.8**	16-01-071-26 W5M
38	Karr Creek	**0.1**	**12.5**	**0.5**	10-16-065-02 W6M
39	Clouston Creek	**0.1**	**20.9**	**1.2**	12-01-073-22 W5M
40	McLennan	**0.3**	**18.8**	**1.0**	03-29-077-19 W5M
41	Valleyview	**0.2**	**20.6**	**0.6**	09-30-069-22 W5M
42	Sunset House	**0.3**	**26.7**	**0.4**	05-32-070-19 W5M
43	High Prairie	**0.1**	**18.3**	**0.5**	16-13-074-17 W5M
44	Peavine	**0.2**	**16.8**	**0.2**	03-05-079-15 W5M
45	Gift Lake	**0.1**	**13.9**	**0.4**	10-07-079-12 W5M
46	Little Smoky	**0.1**	**13.2**	**1.1**	12-01-065-21 W5M
47	Kinuso	**0.1**	**15.8**	**0.3**	12-10-073-10 W5M
48	Deer Mountain	**0.1**	**14.9**	**0.6**	15-22-068-09 W5M
49	Grande Prairie HP	**0.2**	**20.0**	**4.3**	17-26-071-06 W6M

*BDL = Below Detection Level



Duplicate Summary Chart

Passive Summary for September 2010

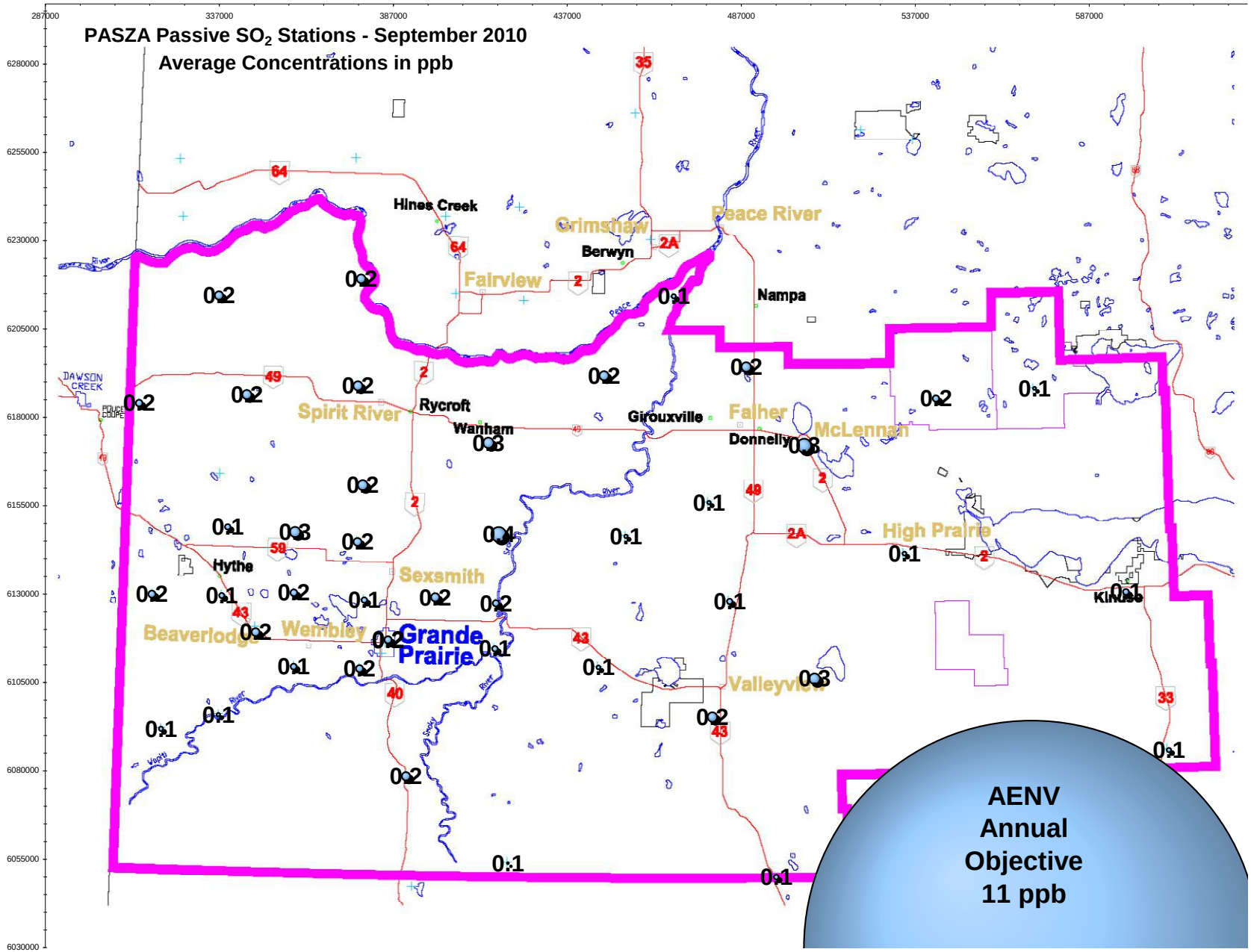
Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for September 2010 (PASZA Zone)		
Mean	**0.2**	**18.9**	**1.0**
Standard Deviation	**0.1**	**3.5**	**0.7**
Minimum	**0.1**	**12.5**	**0.2**
Minimum At	**Karr Creek (#38)**	**Karr Creek (#38)**	**Puskwaskau (#34)**
Maximum	**0.4**	**26.7**	**4.3**
Maximum At	**Smoky Heights (#29)**	**Sunset House (#42)**	**Grande Prairie HP (#49)**

Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)

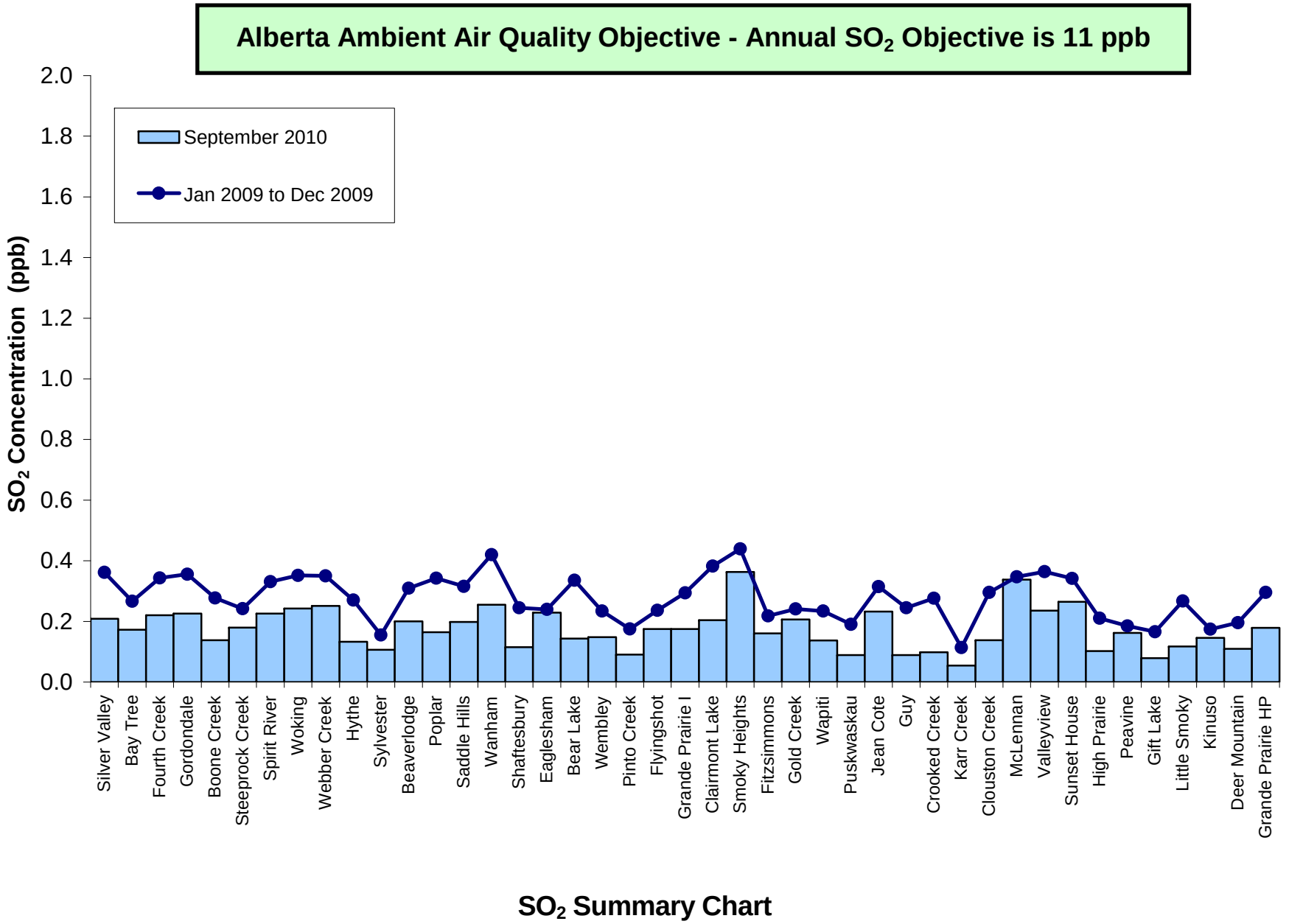
	SO_2	O_3	NO_2
PASZA Beaverlodge station	**0.2**	**22.4**	**2.5**
PASZA Beaverlodge passive	**0.2**	**22.2**	**1.2**

Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

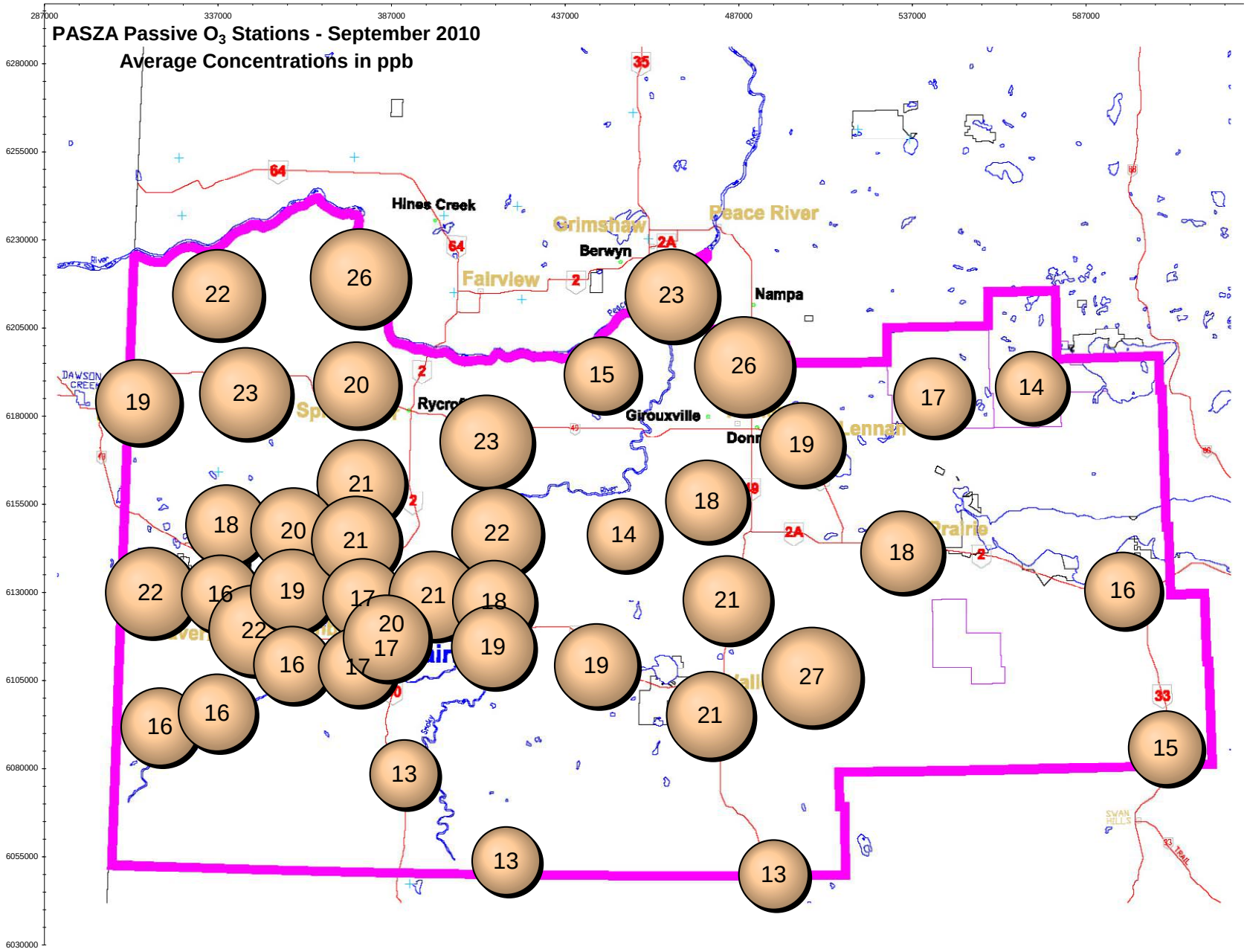
	SO_2	O_3	NO_2
PASZA Henry Pirker station	**0.2**	**18.0**	**6.8**
PASZA Grande Prairie passive	**0.2**	**20.0**	**4.3**



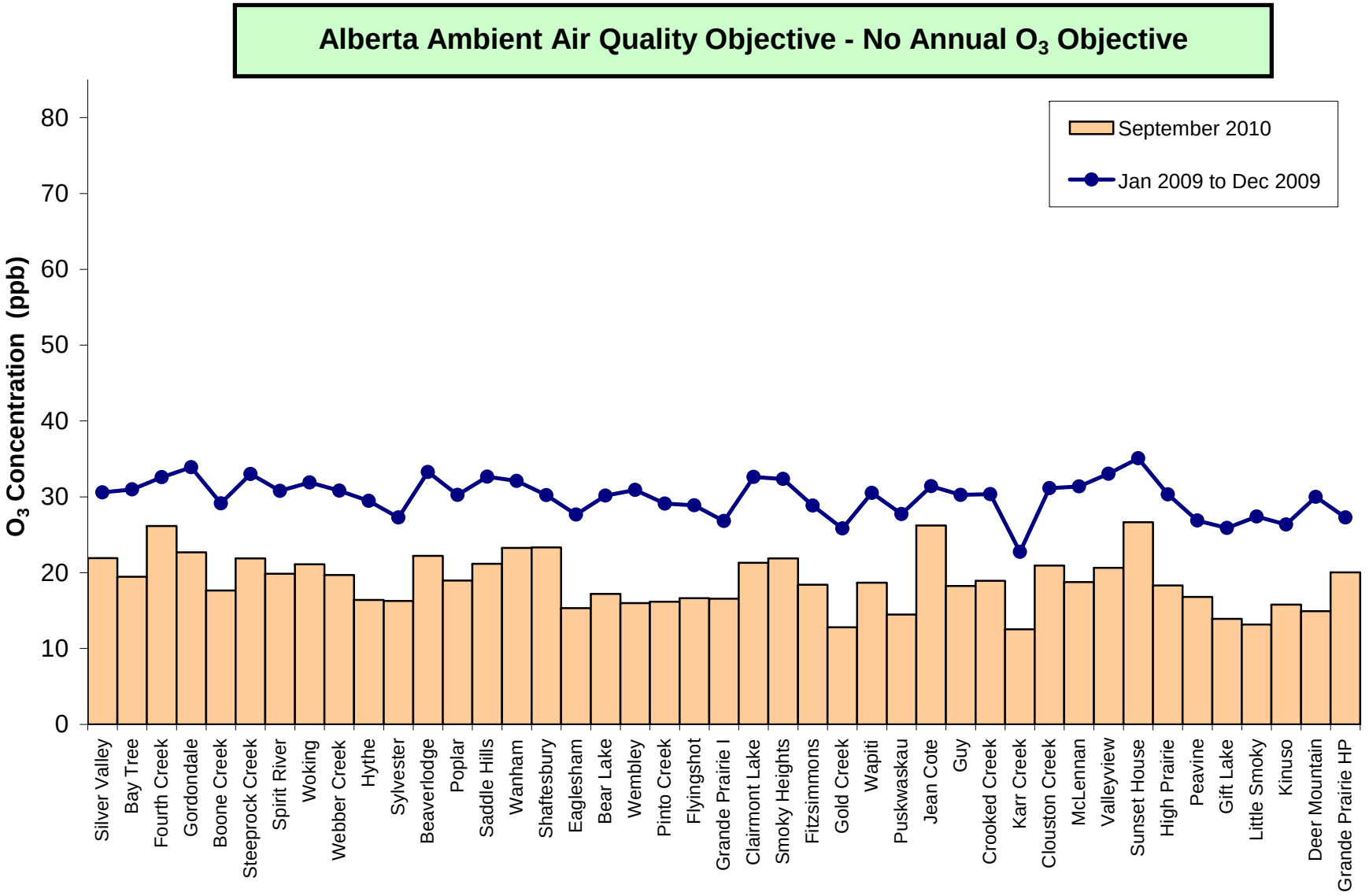
SO_2 Bubble Chart



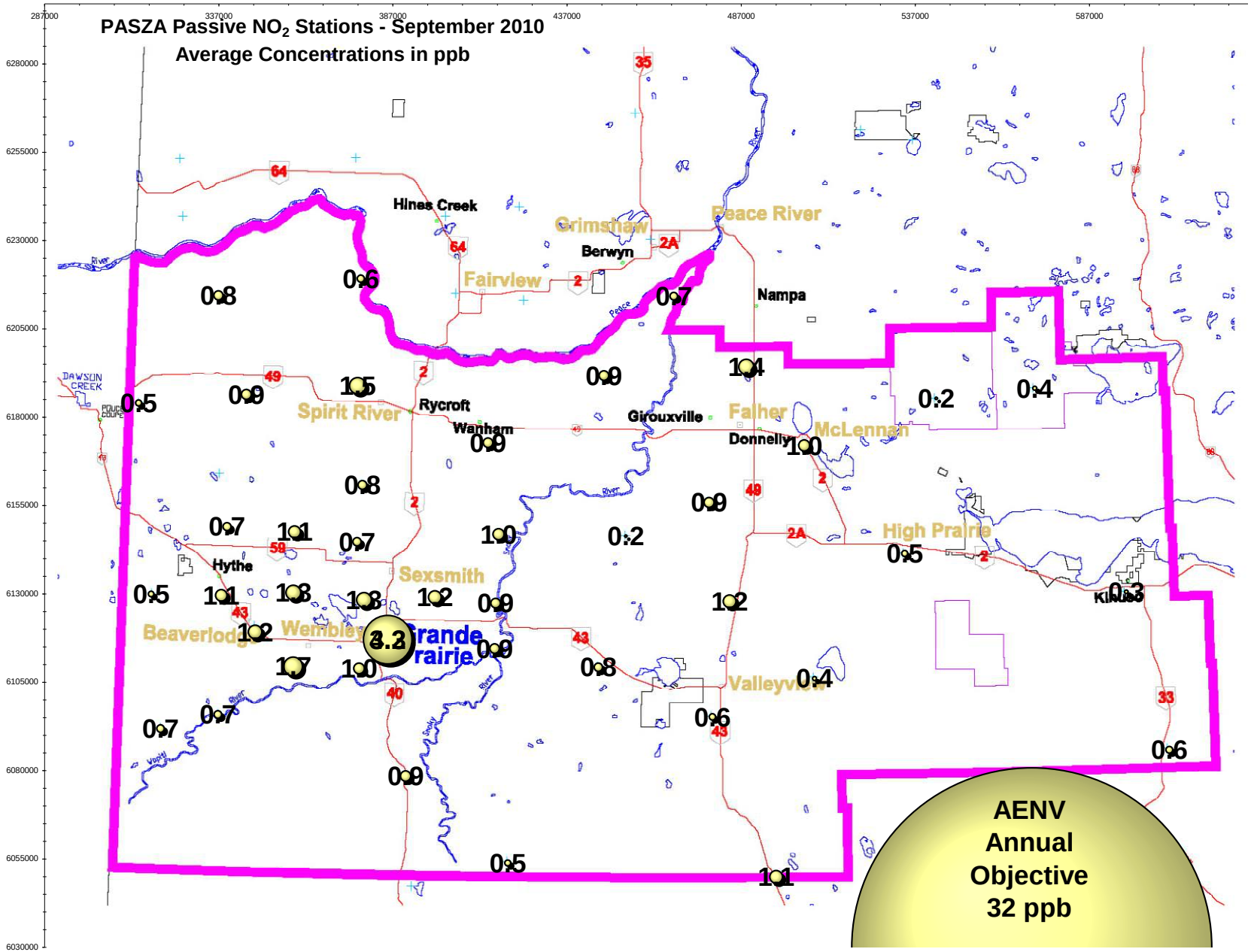
SO_2 Summary Chart



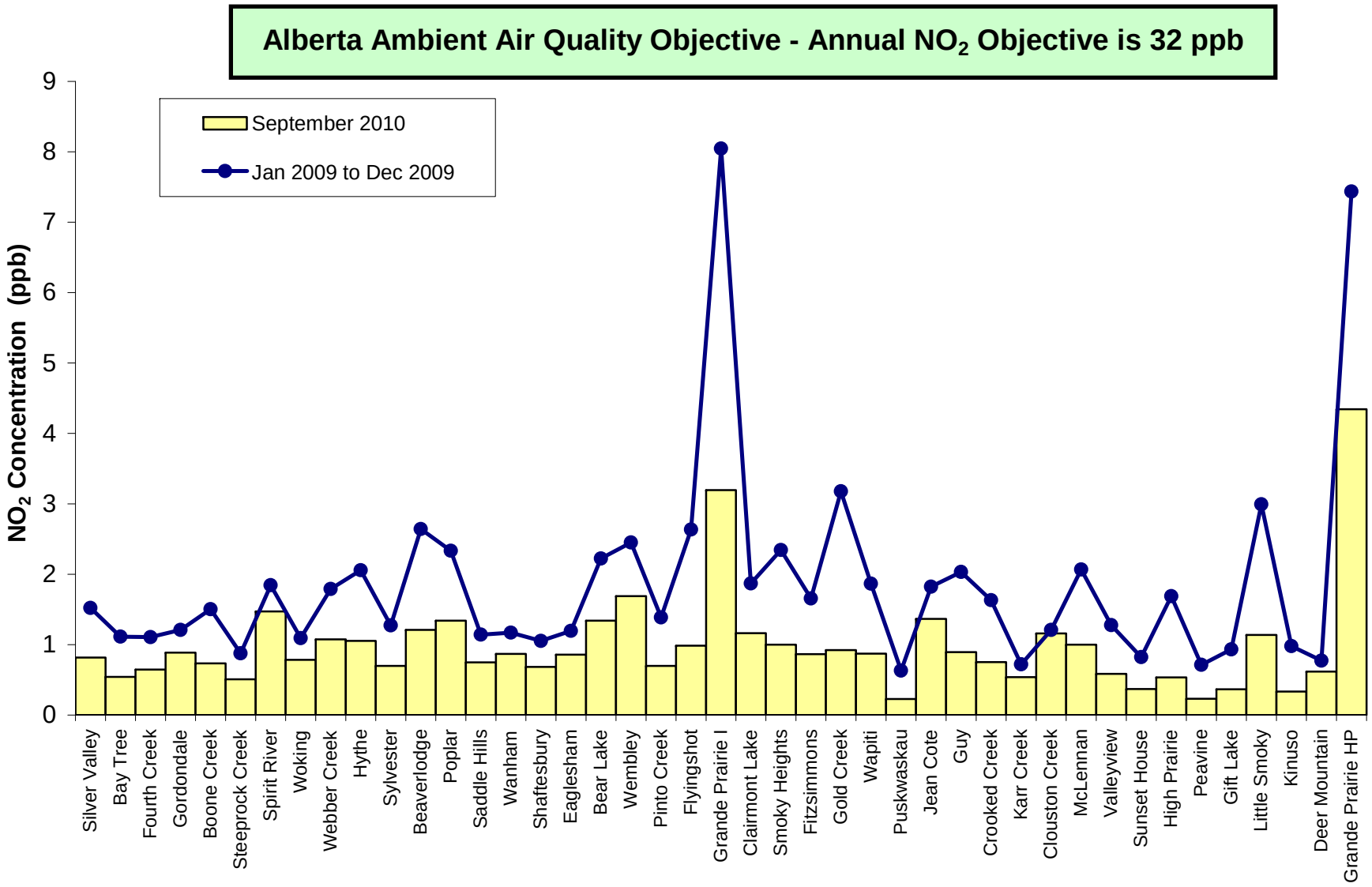
O_3 Bubble Chart



O_3 Summary Chart



NO_2 Bubble Chart



NO_2 Summary Chart

PASZA

ALBERTA ENVIRONMENT
INCIDENCE REPORTS

September 2010

Air Monitoring Directive Non-Compliance Report

Alberta Environment
Environmental Service Response Centre
111 Twin Atria Building
4999 – 98th Avenue
Edmonton, Alberta T6B 2X3
Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	241567	**Reported To (AENV Contact):**	
Date & Time Incident Reported to AENV:		**Reported By:**	
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	
Location(s) of Incident:	Henry Pirker Grande Prairie		
Start Date & Time of Incident:	Sept. 11,2010 05:00	**End Date & Time of Incident:**	Sept. 16,2010 17:00 mst

Details of Non-Compliance:

Sept. 11 05:00 to Sept. 14 09:00 Bad data due to I/R source failure.
Sept. 15 18:00 to Sept. 16 07:00 Due to power failure & recovery.
Sept. 16 15:00 to 17:00 mst Due to maintenance.

Immediate Actions Taken:

Sept. 11 to 14th: I/R source was ordered, received & was replaced & unit was calibrated on 14th.
Sept. 15th to 16th: A/C Heater unit failure causing power failure. Temporary A/C unit installed.
Sept. 16th 15:00 to 17:00 Temp A/C unit blows breaker causing multiple analyzers to fail. A/C plug moved to different breaker. Allow temp to stabilize, relight THC & change CO span cylinder.

Follow-up Details:

Heater A/C unit has now been replaced & station temp has stabilized. Any further power failures should be external to the site.

Actions Taken to Prevent Reoccurrence (if any):

Not Applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Grover Christiansen	Date Report Submitted:	2010-11-01
7-Day Letter Due Date:			

Air Monitoring Directive Exceedence Report

Alberta Environment
Environmental Service Response Centre
111 Twin Atria Building
4999 – 98th Avenue
Edmonton, Alberta T6B 2X3
Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	**240063**	**Reported To (AENV Contact):**	Lacey
Date & Time Incident Reported to AENV:	**September 11, 2010**	**Reported By:**	Focus-Brad Moyles
Reported on Behalf of:	**PASZA**	**Approval Number (if applicable):**	Not applicable
Location(s) of Incident:	**Evergreen Park / South Grande Prairie Area**		
Start Date & Time of Incident:	**September 11, 2010 @ 10:00 MST.**	**End Date & Time of Incident:**	**September 11, 2010 @ 13:00 MST.**

Reason or Nature of Incident:

The $PM_{2.5}$ analyzer (TEOM) within the Evergreen Park station, currently located South of Grande Prairie at LSD 5-6-071-05 W6, exceeded the AENV hourly average $PM_{2.5}$ hourly guideline (80 µg/m^3); Also exceeded the AENV 24 hour average $PM_{2.5}$ hourly guideline (30 µg/m^3) as detailed below:

September 11, 2010	10:00–11:00 MST	$PM_{2.5}$= 133.1µg/m^3	WS= 51.8 km/h	WD=281.2 deg
September 11, 2010	12:00–13:00 MST	$PM_{2.5}$= 118.2µg/m^3	WS= 40.7 km/h	WD=271.4 deg

Immediate Actions Taken:

Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.

Investigation Details:

Operation of the PM2.5 analyzer appear normal during the time of this report.

Actions Taken to Prevent Reoccurrence (if any):

Not applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Brad Moyles	Date Report Submitted:	September 13, 2010
7-Day Letter Due Date:	September 18, 2010		

Air Monitoring Directive Exceedence Report

Alberta Environment
Environmental Service Response Centre
111 Twin Atria Building
4999 – 98th Avenue
Edmonton, Alberta T6B 2X3
Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	**240541**	**Reported To (AENV Contact):**	
Date & Time Incident Reported to AENV:	Sep 25th & 26th 2010	**Reported By:**	Focus – Kelly Baragar
Reported on Behalf of:	**PASZA**	**Approval Number (if applicable):**	Not applicable
Location(s) of Incident:	**Evergreen Park / South Grande Prairie Area**		
Start Date & Time of Incident:	September 25, 2010 @ 16:00 MST.	**End Date & Time of Incident:**	September 26, 2010 @ 15:00 MST.

Reason or Nature of Incident:

The $PM_{2.5}$ analyzer (TEOM) within the Evergreen Park station, currently located South of Grande Prairie at LSD 5-6-071-05 W6, exceeded the AENV hourly average $PM_{2.5}$ hourly guideline (80 µg/m^3) as detailed below:

Sept 25, 2010 17:00 MST $PM_{2.5}$= 100.1 µg/m^3 WS= 6.7 km/h WD=271 deg (W)
Sept 26, 2010 14:00 MST $PM_{2.5}$= 87.4 µg/m^3 WS= 37.1 km/h WD=273 deg (W)

Immediate Actions Taken:

Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.

Investigation Details:

Operation of the $PM_{2.5}$ analyzer appears normal during the time of the incident.

Actions Taken to Prevent Reoccurrence (if any):

Not applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Kelly Baragar	Date Report Submitted:	September 29, 2010
7-Day Letter Due Date:	October 4, 2010		

Air Monitoring Directive Exceedence Report

Alberta Environment
Environmental Service Response Centre
111 Twin Atria Building
4999 – 98th Avenue
Edmonton, Alberta T6B 2X3
Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	**240617**	**Reported To (AENV Contact):**	Lacey/Steven
Date & Time Incident Reported to AENV:	September 28, 2010	**Reported By:**	Focus - Lee Loran
Reported on Behalf of:	**PASZA**	**Approval Number (if applicable):**	Not applicable
Location(s) of Incident:	**Evergreen Park / South Grande Prairie Area**		
Start Date & Time of Incident:	September 28, 2010 @ 08:00 MST.	**End Date & Time of Incident:**	September 28, 2010 @ 24:00 MST.

Reason or Nature of Incident:

The $PM_{2.5}$ analyzer (TEOM) within the Evergreen Park station, currently located South of Grande Prairie at LSD 5-6-071-05 W6, exceeded the AENV hourly average $PM_{2.5}$ hourly guideline (80 µg/m^3) as detailed below:

Sept 28, 2010 08:00–09:00 MST	$PM_{2.5}$= 121.6 µg/m^3	WS= 20.8 km/h	WD=268.9 deg
Sept 28, 2010 09:00–10:00 MST	$PM_{2.5}$= 378.0 µg/m^3	WS= 29.5 km/h	WD=271.2 deg
Sept 28, 2010 10:00–11:00 MST	$PM_{2.5}$= 438.7 µg/m^3	WS= 31.9 km/h	WD=271.0 deg
Sept 28, 2010 11:00–12:00 MST	$PM_{2.5}$= 441.2 µg/m^3	WS= 32.8 km/h	WD=269.3 deg
Sept 28, 2010 12:00–13:00 MST	$PM_{2.5}$= 380.5 µg/m^3	WS= 30.4 km/h	WD=268.1 deg
Sept 28, 2010 13:00–14:00 MST	$PM_{2.5}$= 413.2 µg/m^3	WS= 30.8 km/h	WD=268.3 deg
Sept 28, 2010 14:00–15:00 MST	$PM_{2.5}$= 395.8 µg/m^3	WS= 28.3 km/h	WD=269.7 deg
Sept 28, 2010 15:00–16:00 MST	$PM_{2.5}$= 311.7 µg/m^3	WS= 27.0 km/h	WD=268.3 deg
Sept 28, 2010 16:00–17:00 MST	$PM_{2.5}$= 286.9 µg/m^3	WS= 24.8 km/h	WD=269.5 deg
Sept 28, 2010 17:00–18:00 MST	$PM_{2.5}$= 135.5 µg/m^3	WS= 24.6 km/h	WD=268.8 deg

24-hour average (30 µg/m^3):
Sept 28, 2010 00:00–24:00 MST $PM_{2.5}$= 142.3 µg/m^3

Immediate Actions Taken:

Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.

Investigation Details:

A technician was onsite during the incident and observed strong gusty Westerly winds contributing to the reading. All diagnostics of the analyzer during the incident were normal.

Actions Taken to Prevent Reoccurrence (if any):

Not applicable			
Additional Actions Required (if any):			
Not applicable			
Report Completed By:	Lee Loran	Date Report Submitted:	September 29, 2010
7-Day Letter Due Date:	October 4, 2010		

Air Monitoring Directive Exceedence Report

Alberta Environment
Environmental Service Response Centre
111 Twin Atria Building
4999 – 98th Avenue
Edmonton, Alberta T6B 2X3
Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	**240650**	**Reported To (AENV Contact):**	Lacey
Date & Time Incident Reported to AENV:	September 29, 2010	**Reported By:**	Focus – Courtney Thompson
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	Not applicable
Location(s) of Incident:	Evergreen Park / South Grande Prairie Area		
Start Date & Time of Incident:	September 29, 2010 @ 11:00 MST.	**End Date & Time of Incident:**	September 29, 2010 @ 12:00 MST.

Reason or Nature of Incident:

The $PM_{2.5}$ analyzer (TEOM) within the Evergreen Park station, currently located South of Grande Prairie at LSD 5-6-071-05 W6, exceeded the AENV hourly average $PM_{2.5}$ hourly guideline (80 µg/m^3) as detailed below:

Sept. 29, 2010 12:00 MST $PM_{2.5}$= 85.5 µg/m^3 WS= 13.3 km/h WD=268.6 deg

Immediate Actions Taken:

Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.

Investigation Details:

Operation of the $PM_{2.5}$ analyzer appears normal during the time of this report.

Actions Taken to Prevent Reoccurrence (if any):

Not applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	C. Thompson	Date Report Submitted:	September 29, 2010
7-Day Letter Due Date:	October 5, 2010		

September 2010 Calibration Reports

PASZA - Henry Pirker Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, CO, THC, TRS

PASZA – Evergreen Park Station with the following calibrations:
SO_2, TRS

PASZA – Smoky Heights Station with the following calibrations:
SO_2, TRS

PASZA – Beaverlodge Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3

PASZA – Kinuso (Portable) Station with the following calibrations:
SO_2, TRS, NO, NO_2, NO_x & O_3,

PASZA – Valleyview Station with the following calibrations:
SO_2 & H_2S

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	7:45	End Time (MST)	12:52
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	51.5 ppb	Cal Gas Cert Date	4/6/2012
		Cal Gas Cylinder #	SGAL3245
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.020950	Calculated slope	1.005695
Calculated intercept	-2.835923	Calculated intercept	-2.011506

Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.6		8.9	
Coefficient	.799		.825	
Pressure	638.3	mm Hg	635.4	mm Hg
Flow	0.480	lpm	0.477	lpm
Lamp Voltage	44797	Hz	44356	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.0	0.2	N/A
4991	39.83	407.7	406.6	1.0028
4991	19.89	204.4	205.9	0.9928
4991	9.93	102.3	105.6	0.9682
4991	0.00	0.0	0.2	As Found Zero
4991	39.83	407.7	389.2	As Found Span
			Average Correction Factor	0.9879

Calculated value of As Found Response: 394.2 ppb Percent Change of As Found: 3.3%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	239.8	ppb	252.1	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

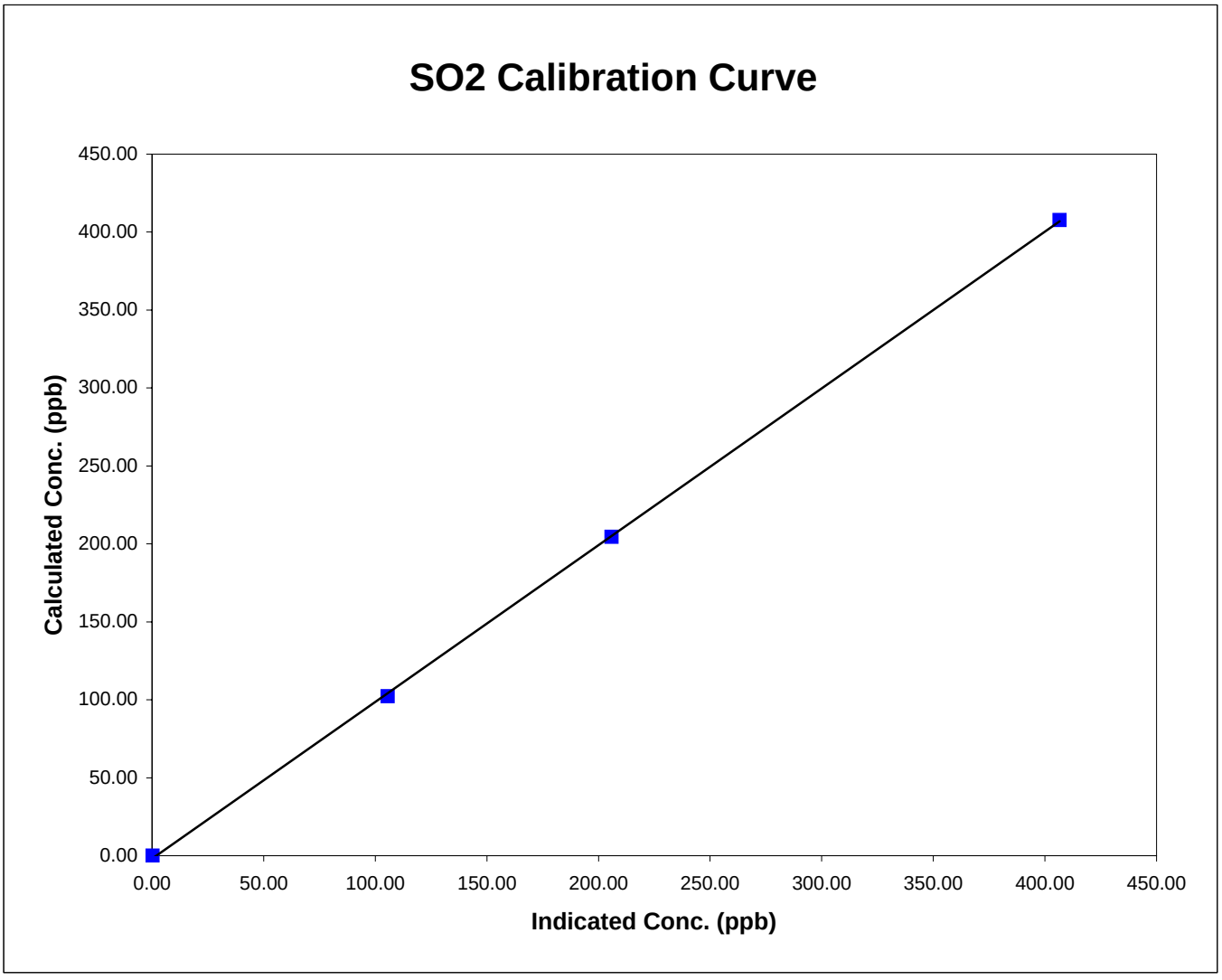
FOCUS AIR QUALITY MONITORING

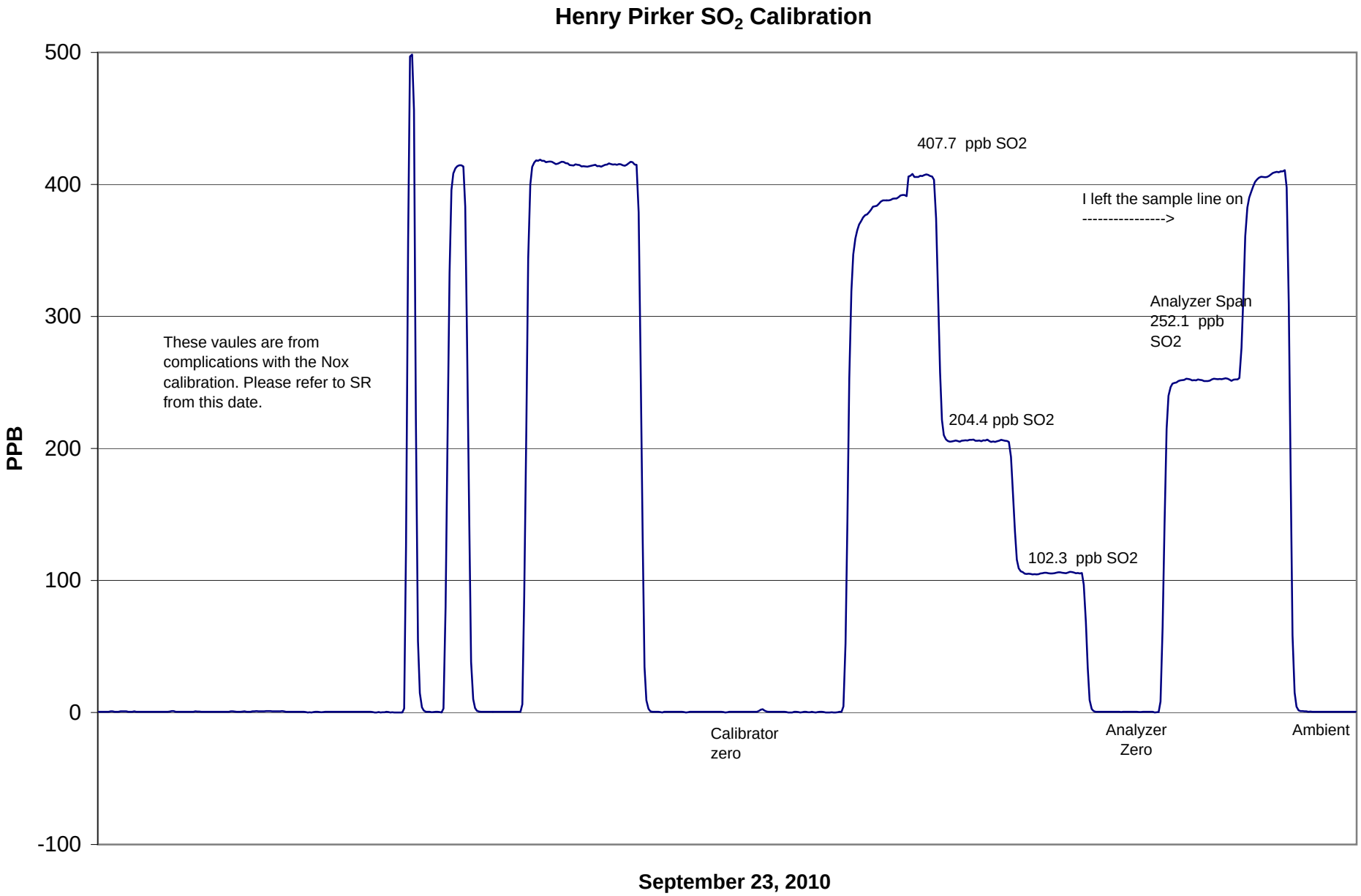
Station Information

Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:45	End Time (MST)	12:52
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
407.7	406.6	1.0028	Correlation Coefficient	0.999912
204.4	205.9	0.9928		
102.3	105.6	0.9682	Slope	1.005695
			Intercept	-2.011506




Henry Pirker SO2 Calibration
500
400
300
200
100
0
-100
PPB
These vaules are from complications with the Nox calibration. Please refer to SR from this date.
407.7 ppb SO2
I left the sample line on ---------->
Analyzer Span 252.1 ppb SO2
204.4 ppb SO2
102.3 ppb SO2
Calibrator zero
Analyzer Zero
Ambient
September 23, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 22, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	8:18	End Time (MST)	15:48
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.15 ppb	Cal Gas Expiry Date	7/31/2008
		Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.027547	Calculated slope	0.999747
Calculated intercept	-0.378477	Calculated intercept	-0.217363

Analyzer make	TEI 45C	Analyzer serial # 630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	1.013		1.014	
Background	9.9		10.0	
Pressure	652.2	mm Hg	650.4	mm Hg
Flow	0.456	ccm	0.455	ccm
Lamp Voltage	821	V	828	V

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.00	0.12	N/A
4991	79.83	81.08	81.34	0.9968
4991	39.87	40.81	40.95	0.9966
4991	9.93	10.23	10.61	0.9634
4991	0.00	0.00	-0.35	As Found Zero
4991	79.78	81.03	81.34	As Found Span
			Average Correction Factor	0.9856

Calculated value of As Found Response: 83.6 ppb Percent Change of As Found: -3.1%

	before calibration		after calibration	
Auto zero	-0.29	ppb	0.10	ppb
Auto span	32.32	ppb	29.24	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

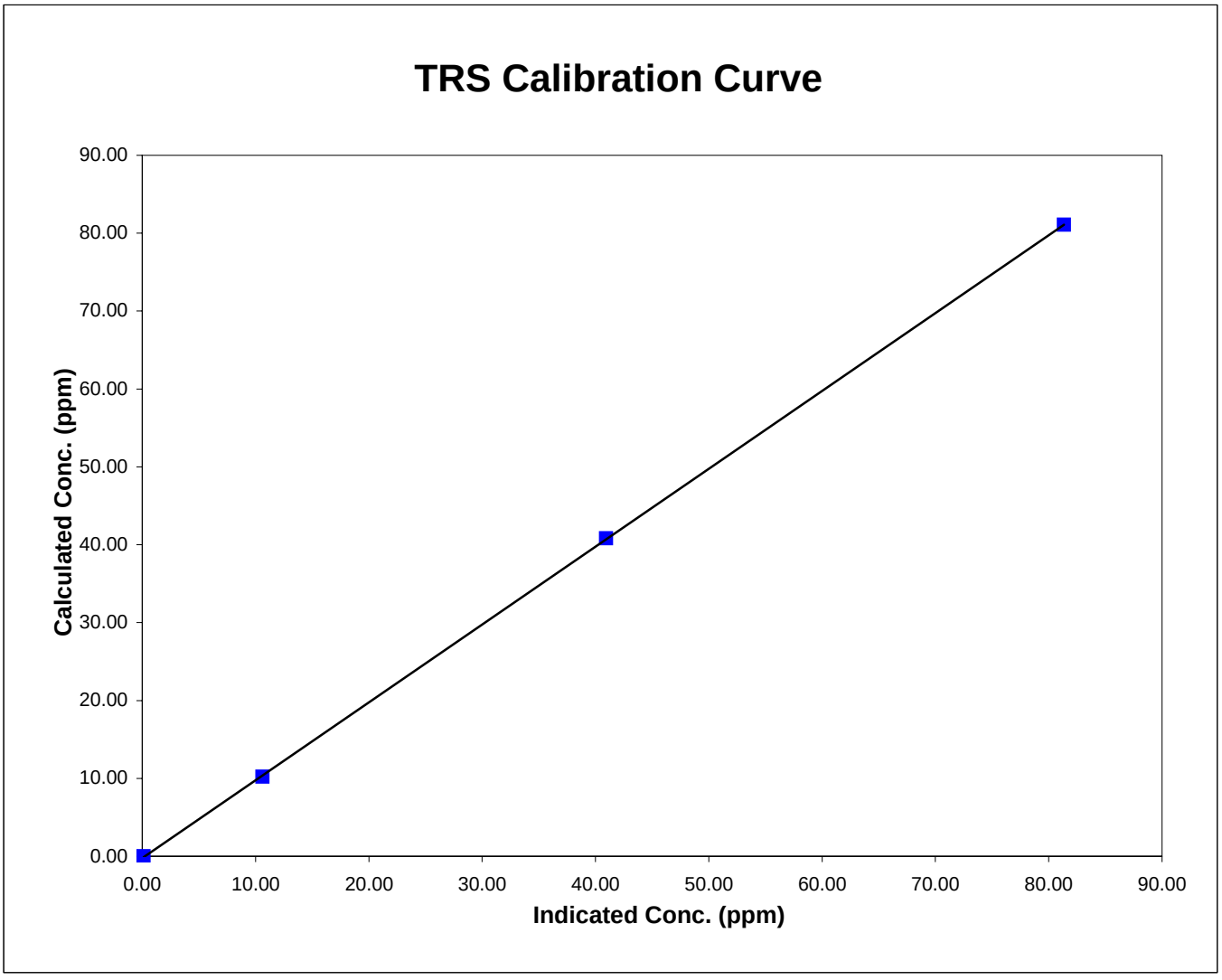
FOCUS AIR QUALITY MONITORING

Station Information

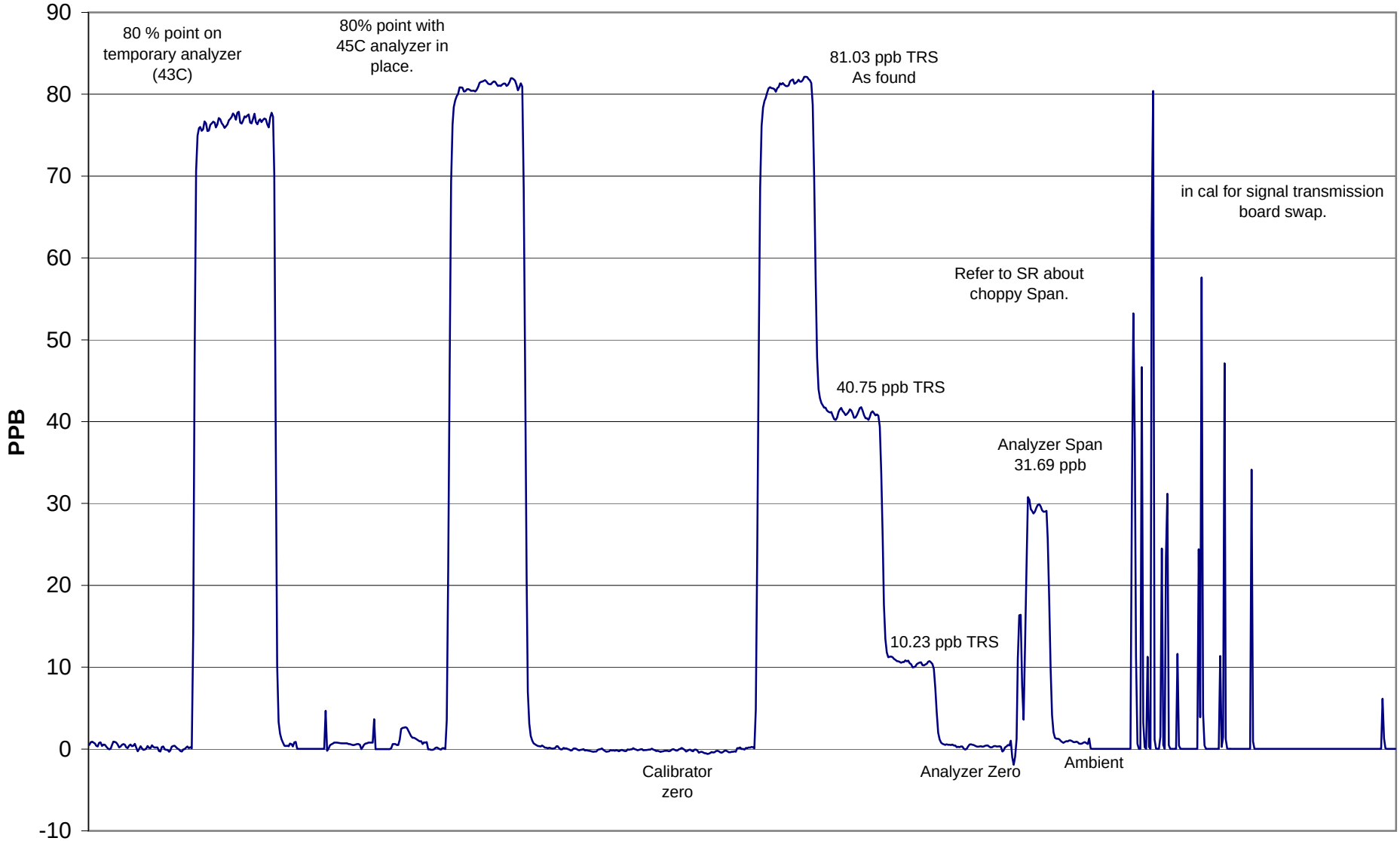
Calibration Date	September 22, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:18	End Time (MST)	15:48
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.116	N/A		
81.076	81.338	0.9968	Correlation Coefficient	0.999988
40.814	40.952	0.9966		
10.226	10.615	0.9634	Slope	0.999747
			Intercept	-0.217363



Henry Pirker TRS Calibration



September 22, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	9:50		End Time (MST)	15:50	
Barometric Pressure	0.918	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3474	
NO Cal Gas Conc	50.8	ppm	Cal Gas Expiry Date	April 6, 2012	
NOx Cal Gas Conc	50.8	ppm	Cal Gas Serial #	SGAL3245	

DACS Information

DACS make: Focus AP1000 DACS serial No.:

Parameter		NO2	NOx	NO
Before	Data Slope	0.996055	1.004274	1.003781
	Data Offset	-0.548906	-2.346133	-2.801321
After	Data Slope	0.999311	1.008475	1.009402
	Data Offset	0.212535	-2.316570	-2.272702
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model: TEI 42C Analyzer serial #: 508011073

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	10.4	mV	10.6	mV
NOx bkgnd	12.0	mV	10.9	mV
NO coefficient	0.776		0.791	
NOx coefficient	1.000		1.000	
NO2 conv temp	318.0	Deg C	318.0	Deg C
PMT Temp	-2.4	Deg C	-2.5	Deg C
PMT Volt	-786.0	mV	-786.0	mV
R Cell Press	176.1	in Hg	173.4	in Hg
Sample Flow	0.740	ccm	0.754	ccm

Notes:

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: September 23, 2010 Station Location: Henry Pirker

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4991	0.00	0.0	0.0	0.0	0.1	0.0	0.0	N/A	N/A
1	4991	39.83	402.2	402.2	0.0	400.1	399.7	0.2	1.0053	1.0063
2	4991	19.89	201.6	201.6	0.0	203.0	202.7	0.3	0.9932	0.9948
3	4991	9.93	100.9	100.9	0.0	104.8	104.8	0.0	0.9623	0.9624
AFZ	4991	0.00	0.0	0.0	0.0	-1.2	0.0	-1.3	0.0000	0.0000
AFS	4991	39.83	402.2	402.2	0.0	393.5	393.3	0.3	1.0221	1.0227
							Average Correction Factor		0.9869	0.9879

As Found Concentrations: NO_X= 392.4 NO= 390.5 As Found Percent Change NO_X= -2.4% NO= -2.9%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.85 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.1	0.0	0.0	N/A	N/A	N/A	N/A
NO point	397.5	397.5	0.0	397.8	397.5	0.2	0.9993	1.0000	N/A	N/A
300	397.5	105.6	291.9	397.4	105.6	292.0	1.0003	1.0000	0.9997	100.0%
200	397.5	194.2	203.3	397.3	194.2	203.3	1.0005	1.0000	0.9999	100.0%
100	397.5	289.6	107.9	396.7	289.6	107.3	1.0019	1.0000	1.0050	99.5%
					Average Correction Factor		1.0009	1.0000	1.0016	99.8%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.0	ppb	0.9	0.5	0.0	ppb
Auto span	168.4	169.5	1.2	ppb	181.9	180.6	1.5	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

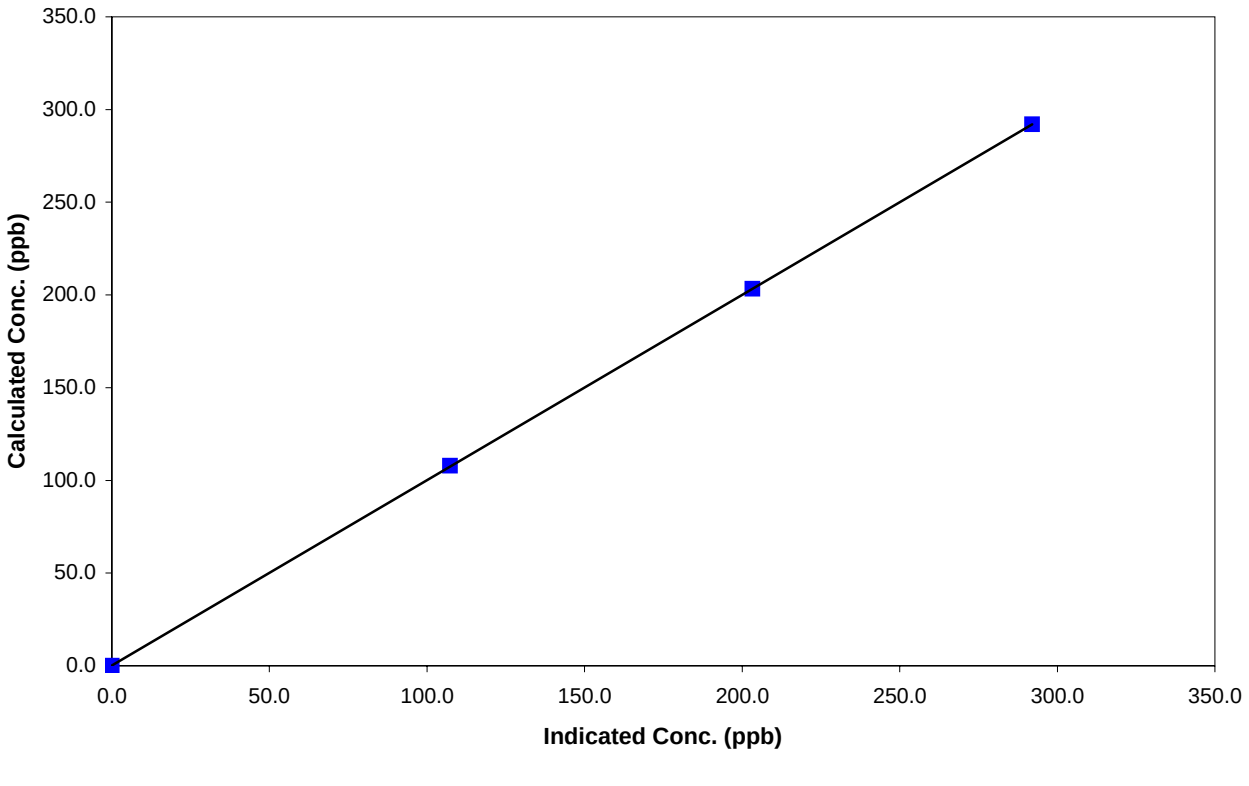
Station Information

Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:50	End Time (MST)	15:50
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
291.9	292.0	0.9997	Correlation Coefficient	0.999995
203.3	203.3	0.9999		
107.9	107.3	1.0050	Slope	0.999311
			Intercept	0.212535

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

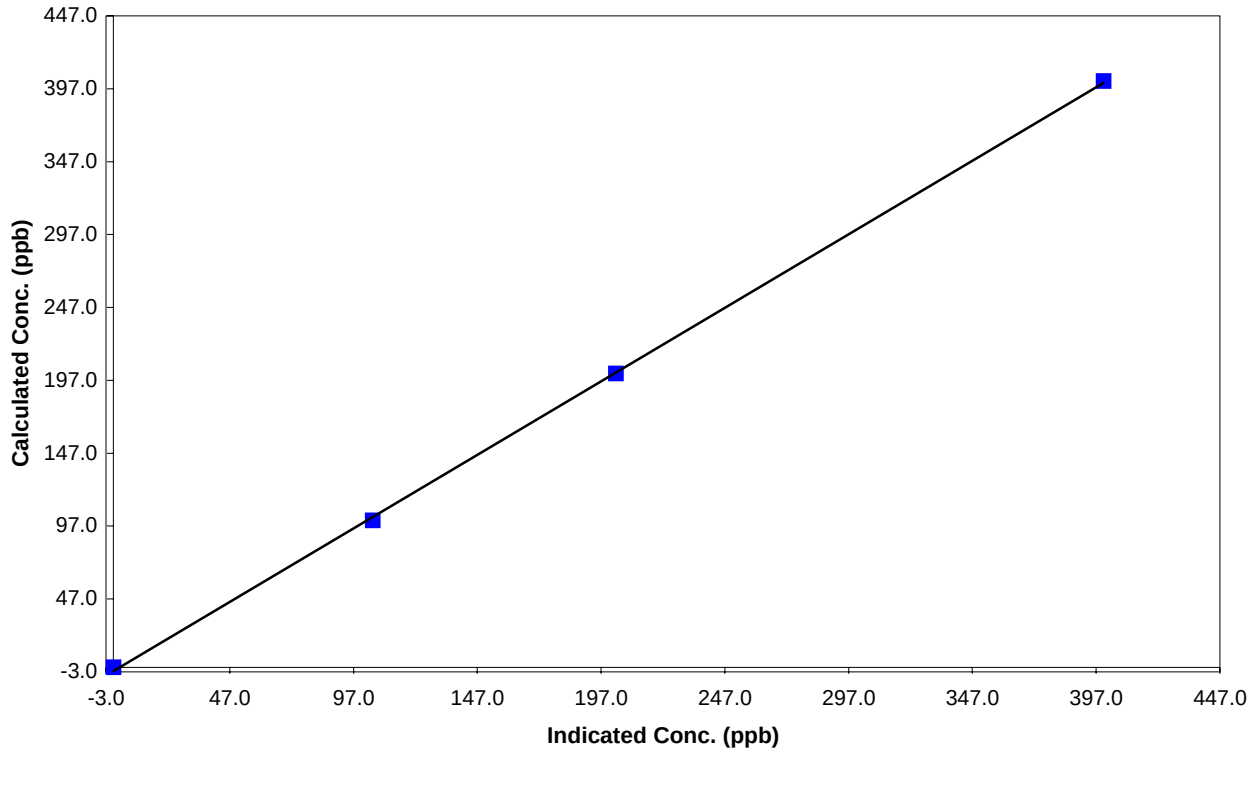
Station Information

Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:50	End Time (MST)	15:50
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
402.2	400.1	1.0053	Correlation Coefficient	0.999851
201.6	203.0	0.9932		
100.9	104.8	0.9623	Slope	1.008475
			Intercept	-2.316570

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

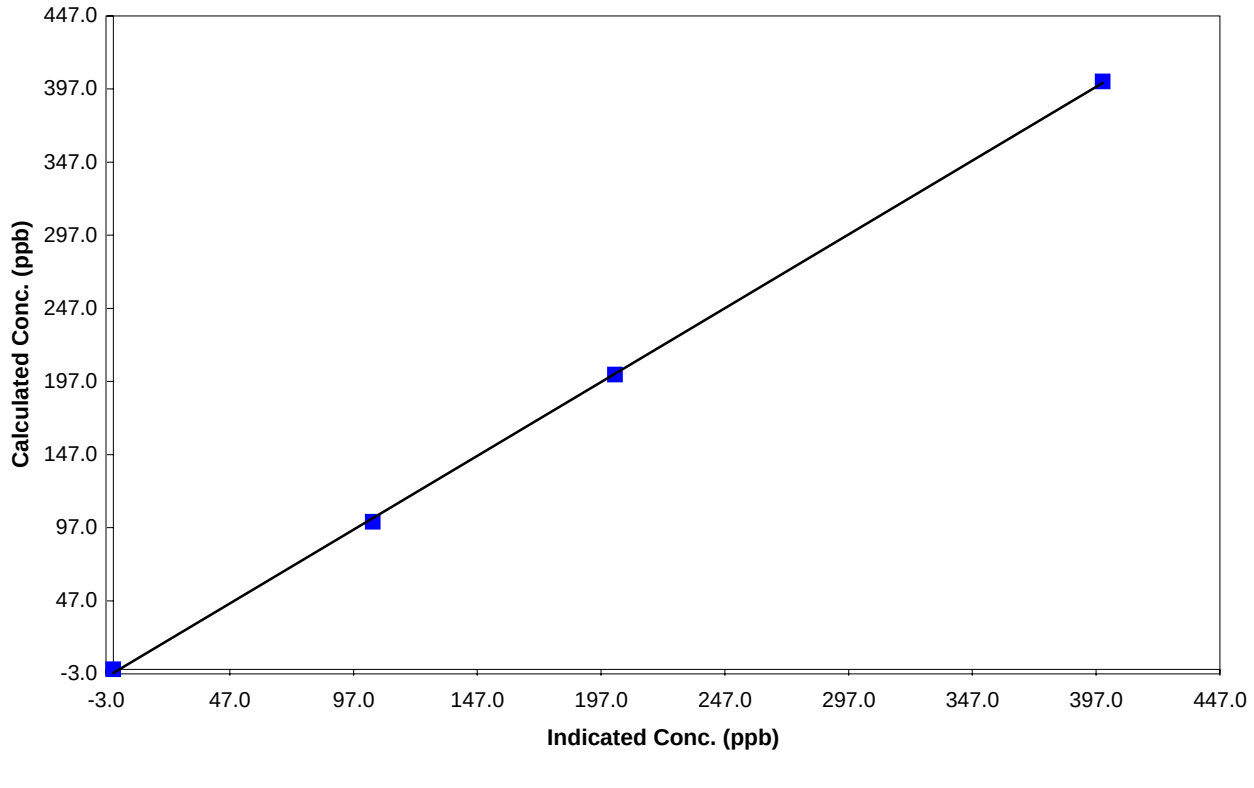
Station Information

Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:50	End Time (MST)	15:50
Analyzer make	TEI 42C	Analyzer serial #	508011073

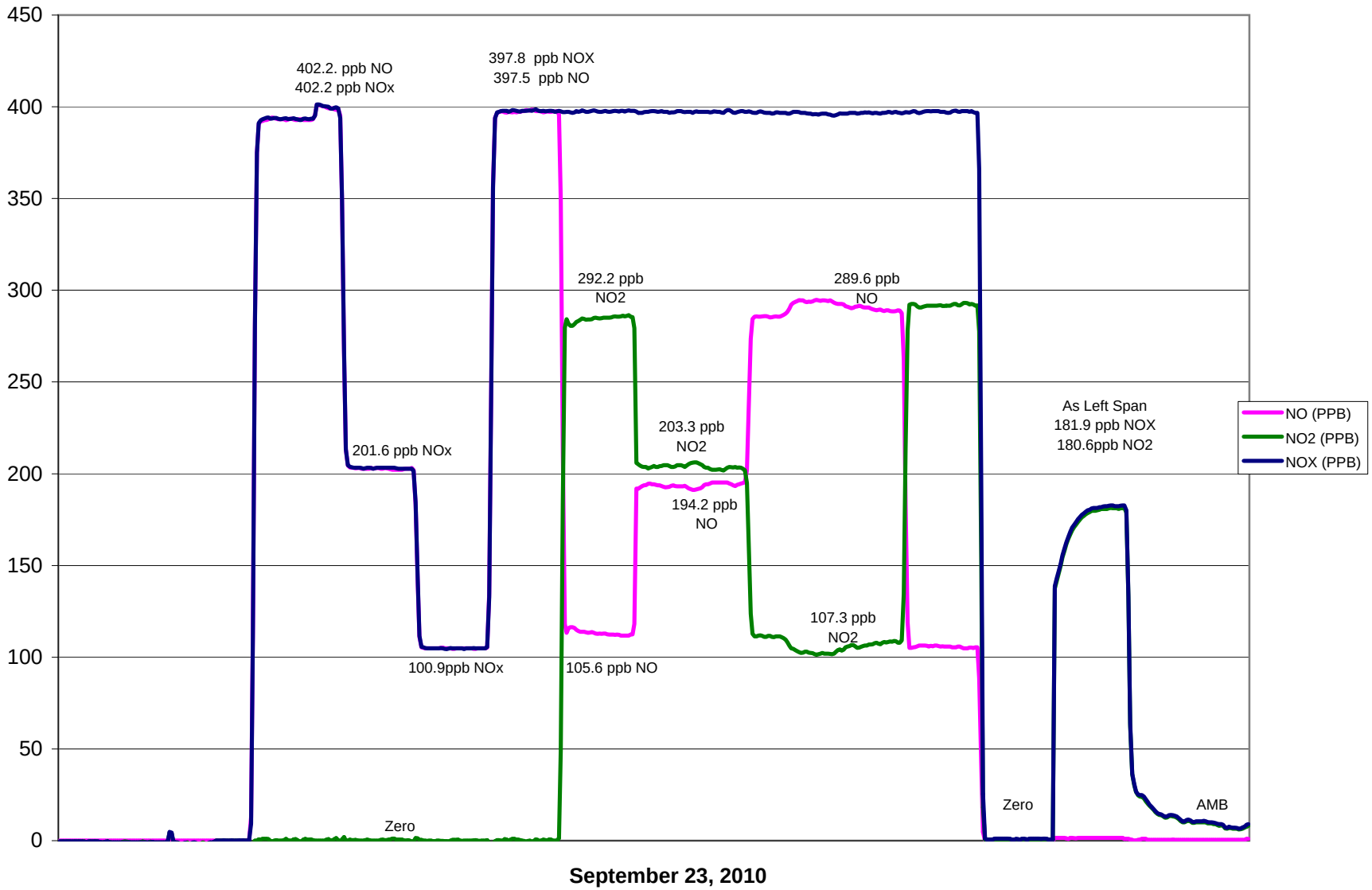
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
402.2	399.7	1.0063	Correlation Coefficient	0.999843
201.6	202.7	0.9948		
100.9	104.8	0.9624	Slope	1.009402
			Intercept	-2.272702

NO Calibration Curve



Henry Pirker NO_X Calibration



September 23, 2010

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine ☒	Install ☐	Removal ☐	Other: ☐
Start Time (MST)		End Time (MST)	14:37
Barometric Pressure	0.918 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	0.998725	Calculated slope	0.982260
Calculated intercept	0.589144	Calculated intercept	-1.000003
Analyzer make	TECO 49C	Analyzer serial #	607415761

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.6	ppb	-0.6	ppb
slope	1.030		1.030	
O3 Lamp temp	71.1	Deg C	71	Deg C
Intensities	86317/74935	mV	84531/73328	mV
Pressure	678.3	inches Hg	698.9	inches Hg
Flow A	0.714	ccm	0.722	ccm
Flow B	0.729	ccm	0.737	ccm

Calibration Data

Referenced concentration (ppb)	Dilution air flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0	4991	0.0	0.0	N/A
300	4991	291.9	299.0	0.9763
200	4991	203.3	205.2	0.9909
100	4991	107.9	113.9	0.9476
0	4991	0.0	0.0	As found zero
300	4991	291.9	299.0	As found span
			Average Correction Factor	0.9716

Calculated value of As Found Response: 299.2 ppm Percent Change of As Found: 2.5%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	153.0	ppb	152.4	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

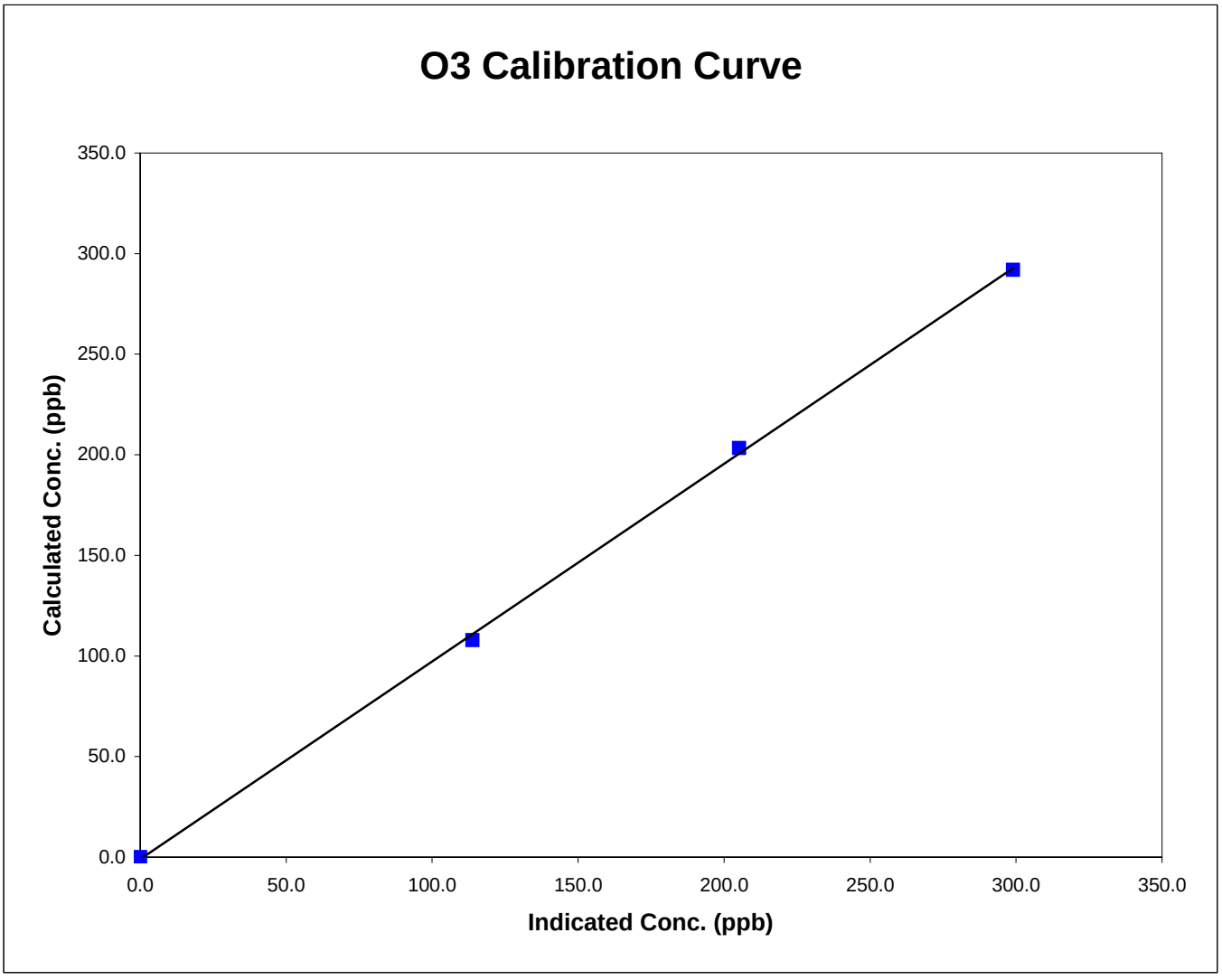
FOCUS AIR QUALITY MONITORING

Station Information

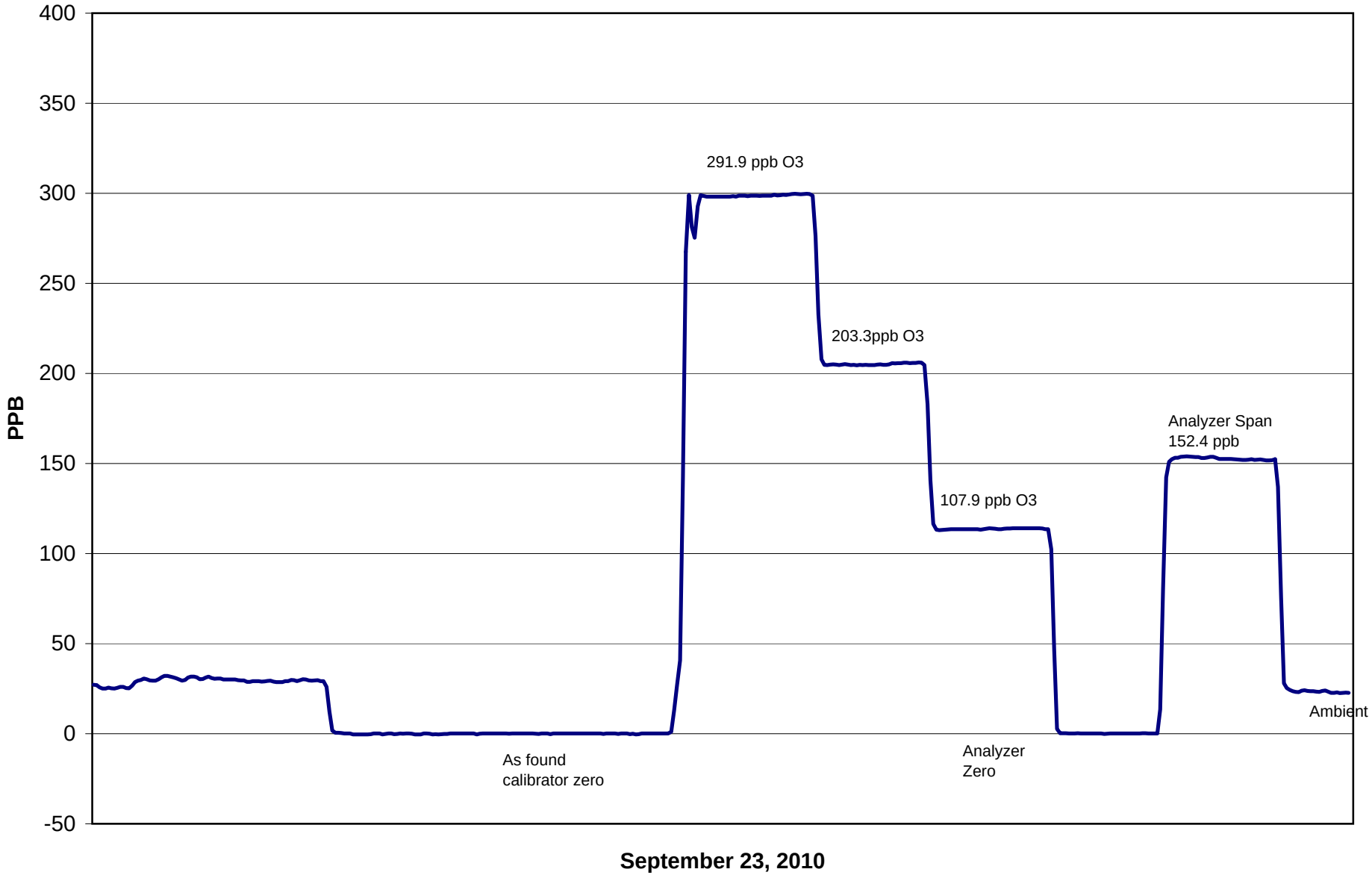
Calibration Date	September 23, 2010	Previous Calibration	August 19, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	0:00	End Time (MST)	14:37
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	NA		
291.9	299.0	0.9763	Correlation Coefficient	0.999623
203.3	205.2	0.9909		
107.9	113.9	0.9476	Slope	0.982260
			Intercept	-1.000003



Henry Pirker O_3 Calibration



Calibration Report

Parameter **CO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 14, 2010	Previous Calibration	August 17, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	8:55	End Time (MST)	11:10
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.018502	Calculated slope	1.021734
Calculated intercept	-0.072281	Calculated intercept	-0.248982
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.062		1.062	
CO zero setting	9.651		9.847	
Sample pressure	692.1	mm Hg	690.2	mm Hg
Sample Flow	1.151	LPM	1.15	LPM

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.00	0.16	N/A
4991	39.84	23.76	23.45	1.0130
4991	19.90	11.91	11.94	0.9976
4991	9.95	5.97	6.17	0.9667
4991	0.00	0.00	0.16	As Found Zero
4991	39.84	23.76	23.45	As Found Span
			Average Correction Factor	0.9924

Calculated value of As Found Response: 23.653 ppm Percent Change of As Found: 0.4%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.43	ppm	19.10	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **CO**

Air Monitoring Network **PASZA**

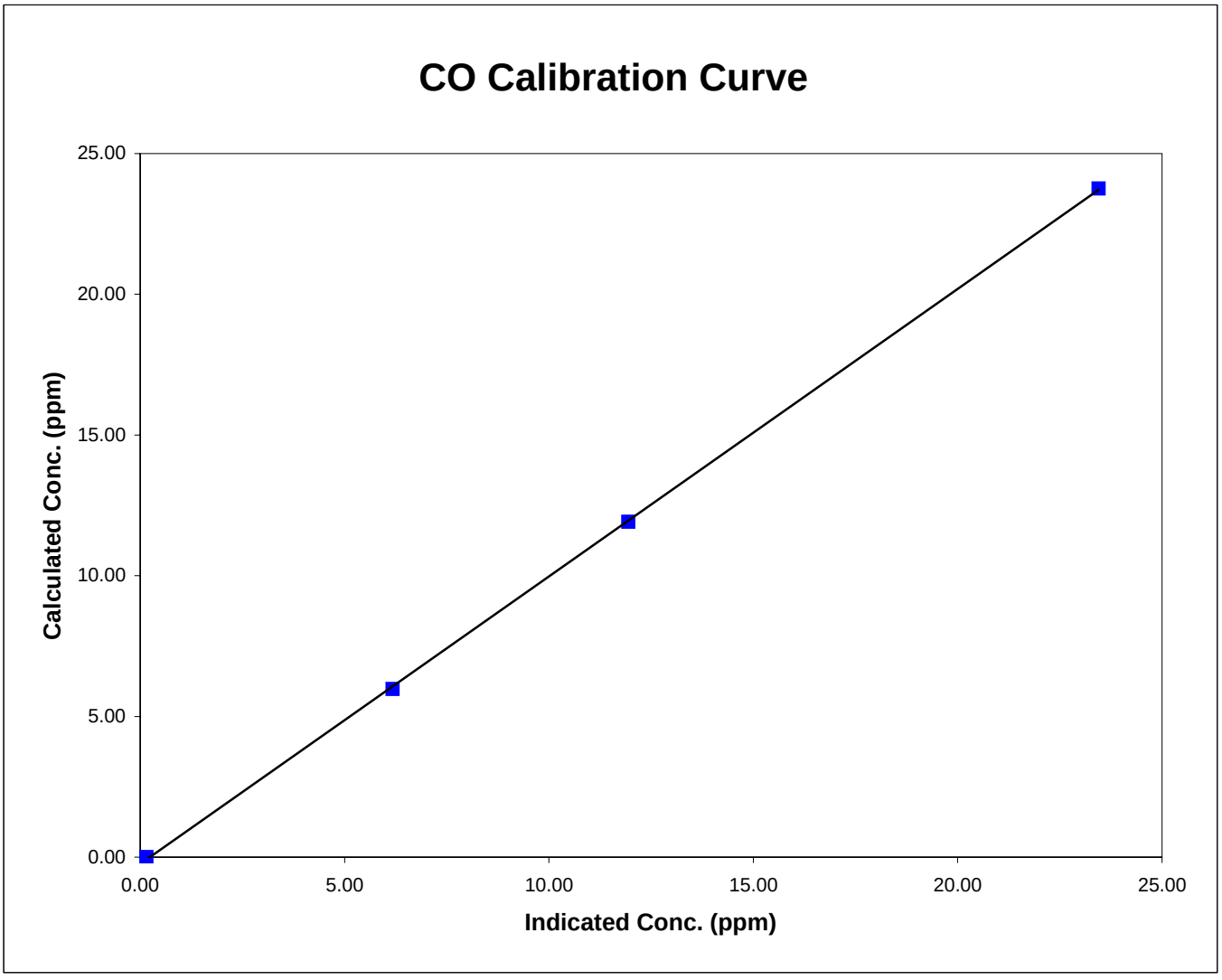
FOCUS AIR QUALITY MONITORING

Station Information

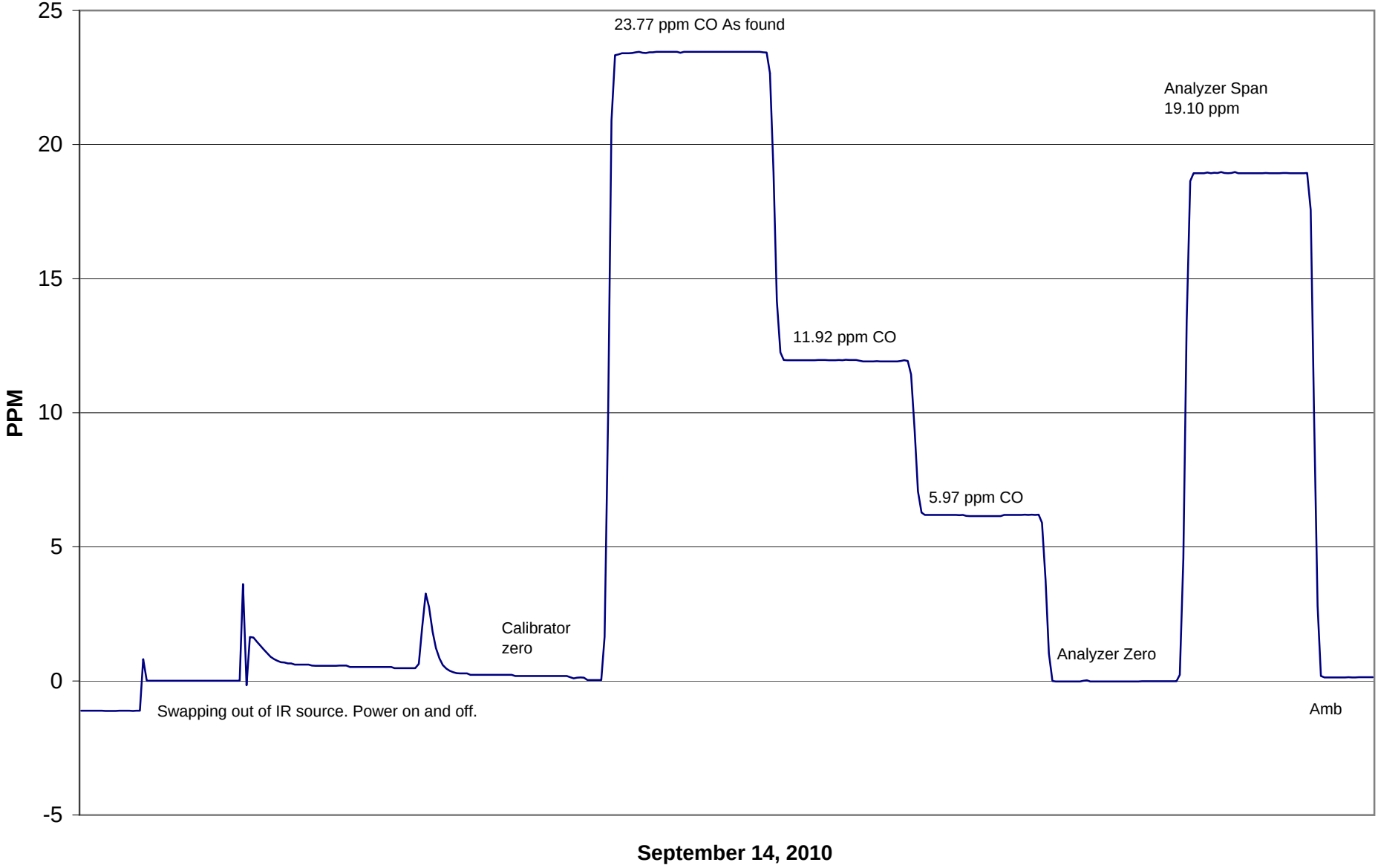
Calibration Date	September 14, 2010	Previous Calibration	August 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:55	End Time (MST)	11:10
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.159	N/A		
23.757	23.453	1.0130	Correlation Coefficient	0.999938
11.914	11.942	0.9976		
5.969	6.175	0.9667	Slope	1.021734
			Intercept	-0.248982



Henry Pirker CO Calibration



Calibration Report

Parameter **THC**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 24, 2010	Previous Calibration	August 17, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	6:45	End Time (MST)	8:58
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	701 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	2/4/2010
Cal Gas CH4 equiv	1523.25 ppm	Cal Gas Cylinder #	ALM 004476
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.005432	Calculated slope	1.012534
Calculated intercept	0.127320	Calculated intercept	0.169067
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.50	psi	6.50	psi
THC span counts	9619	capture	9613	capture
THC zero counts	443	capture	448	capture

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.00	-0.17	N/A
4991	69.73	20.99	20.58	1.0196
4991	29.90	9.07	8.72	1.0403
4991	9.92	3.02	2.87	1.0523
4991	0.00	0.00	-0.17	As Found Zero
4991	69.50	21.01	20.58	As Found Span
			Average Correction Factor	1.0374

Calculated value of As Found Response: 20.997 ppm Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	0.10	ppm	-0.02	ppm
Auto span	25.45	ppm	23.32	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **THC**

Air Monitoring Network **PASZA**

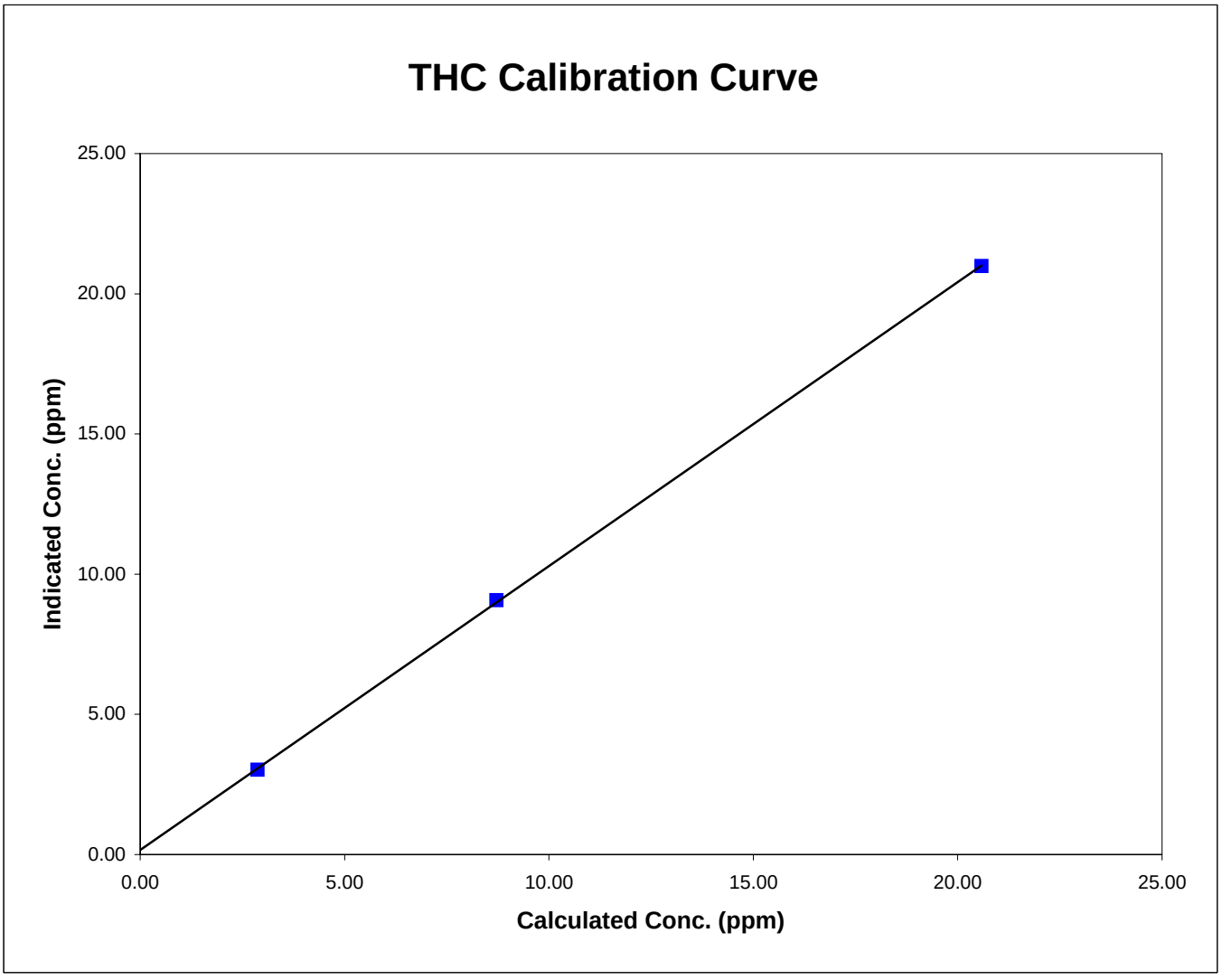
FOCUS AIR QUALITY MONITORING

Station Information

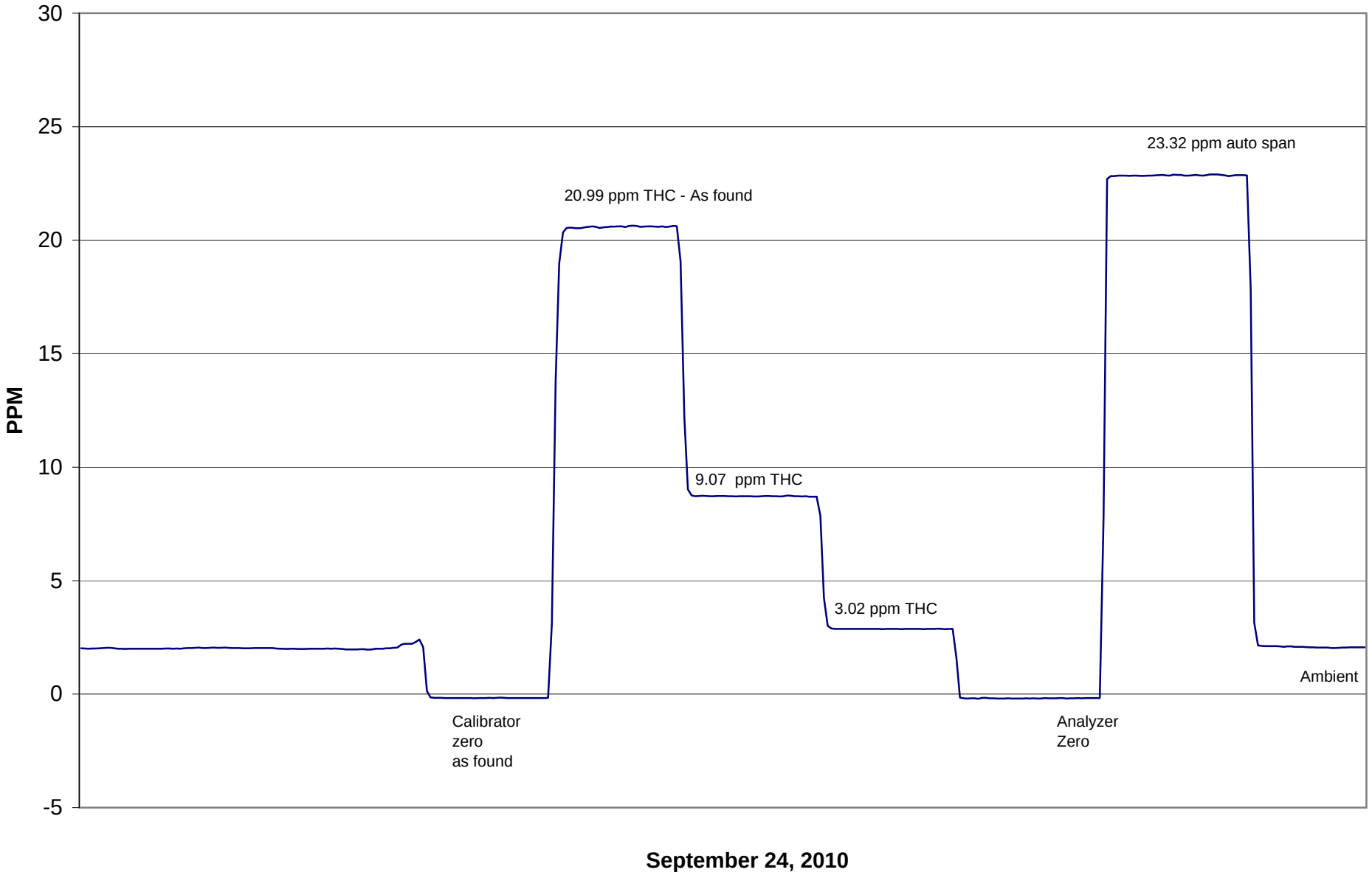
Calibration Date	September 24, 2010	Previous Calibration	August 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	6:45	End Time (MST)	8:58
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.172	N/A		
20.988	20.584	1.0196	Correlation Coefficient	0.999966
9.071	8.720	1.0403		
3.022	2.871	1.0523	Slope	1.012534
			Intercept	0.169067



Henry Pirker THC Calibration



Calibration Report

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	September 29, 2010	Previous Calibration	August 20, 2010
Station Number	2	Station Location	Evergreen Park

Reason: Routine | Install | Removal | Other:

Start Time (MST)	8:20	End Time (MST)	11:10
Barometric Pressure	0.929 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	51.5 ppm	Cal Gas Expiry Date	4/6/2012
Correction factor	0.031579	Cal Gas Cylinder #	SGAL3245
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	0.994377	Calculated slope	0.997398
Calculated intercept	-2.880386	Calculated intercept	-2.209584

Analyzer make: Teco 43i | Analyzer serial #: 701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	10.9		10.9	
coefficient	1.051		1.051	
Lamp Voltage	825	volts	825	volts
Chamber Temp	45.2	Deg C	44.9	Deg C
Perm Gas Temp	44.99	Deg C	45	Deg C
Pressure	671.9	mm Hg	671.9	mm Hg
Sample Flow	0.455	ccm	0.454	ccm
Lamp Intensity	90	%	90	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.00	0.0	N/A
4991	39.85	407.94	410.0	0.9949
4991	19.91	204.63	208.6	0.9810
4991	9.96	102.57	107.2	0.9570
	0.0			
4991	0.0	0.00	0.0	As Found Zero
4991	39.85	407.94	410.0	As Found Span
			Average Correction Factor	0.9776

Calculated value of As Found Response: 404.812 ppm Percent Change of As Found: 0.8%

	before calibration		after calibration	
Auto zero	0.7	ppm	0.1	ppm
Auto span	286.9	ppm	286.0	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

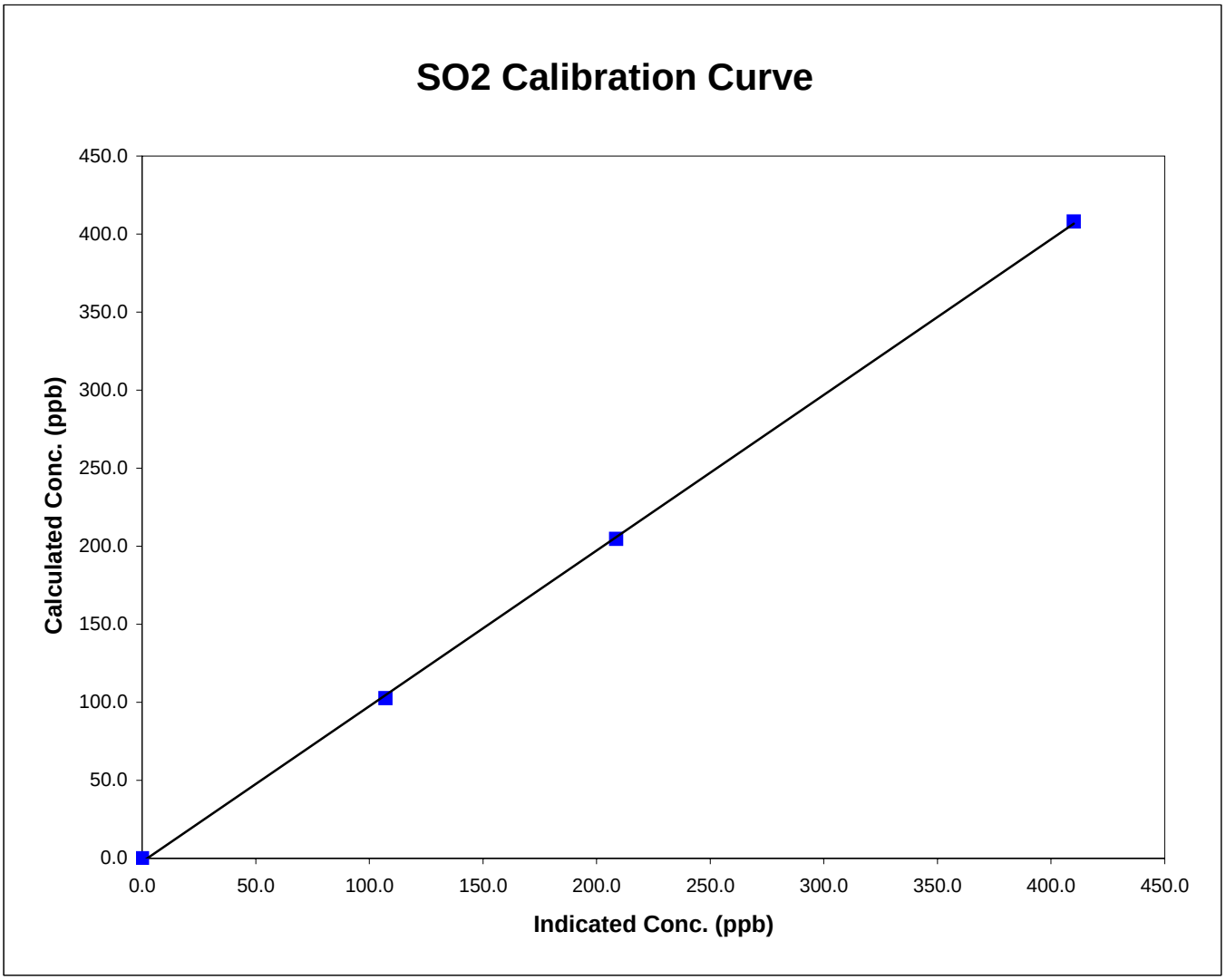
FOCUS AIR QUALITY MONITORING

Station Information

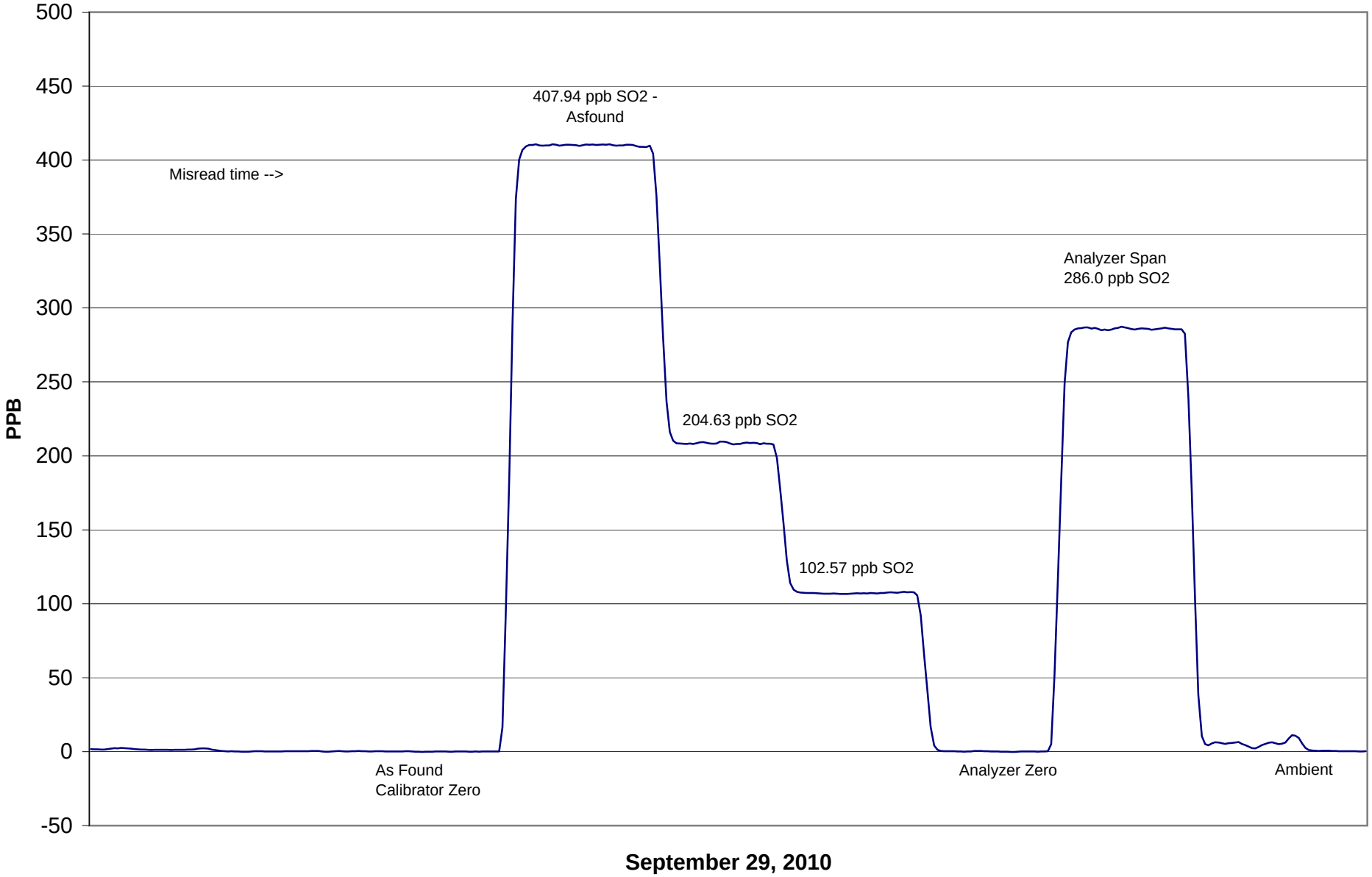
Calibration Date	September 29, 2010	Previous Calibration	August 20, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:20	End Time (MST)	11:10
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
407.9	410.0	0.9949	Correlation Coefficient	0.999868
204.6	208.6	0.9810		
102.6	107.2	0.9570	Slope	0.997398
			Intercept	-2.209584



Evergreen Park SO_2 Calibration



September 29, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 29, 2010	Previous Calibration	August 20, 2010
Station Number	2	Station Location	Evergreen Park

Reason: Routine | Install | Removal | Other:

Start Time (MST)	10:05	End Time (MST)	12:28
Barometric Pressure	0.929 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.15 ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.031579	Cal Gas Cylinder #	ALM 013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	1.005684	Calculated slope	0.994842
Calculated intercept	-0.701182	Calculated intercept	-0.418101

Analyzer make	TEI Model 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.7	ppb	16	ppb
coefficient	0.859		0.859	
Lamp Voltage	808	volts	807	volts
Chamber Temp	44.8	Deg C	44	Deg C
Perm Gas Temp	45.01	Deg C	44.99	Deg C
Pressure	652.5	mm Hg	646.2	mm Hg
Sample Flow	0.482	ccm	0.479	ccm
Lamp Intensity	45,343	mv	45,621	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.00	0.3	N/A
4991	79.79	81.04	81.8	0.9904
4991	39.87	40.81	41.5	0.9824
4991	9.95	10.25	10.8	0.9523
4990	0.00	0.00	0.3	As Found Zero
4991	79.79	81.04	81.8	As Found Span
			Average Correction Factor	0.9751

Calculated value of As Found Response: 81.25 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	-0.5	ppm	-0.3	ppm
Auto span	62.0	ppm	63.2	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

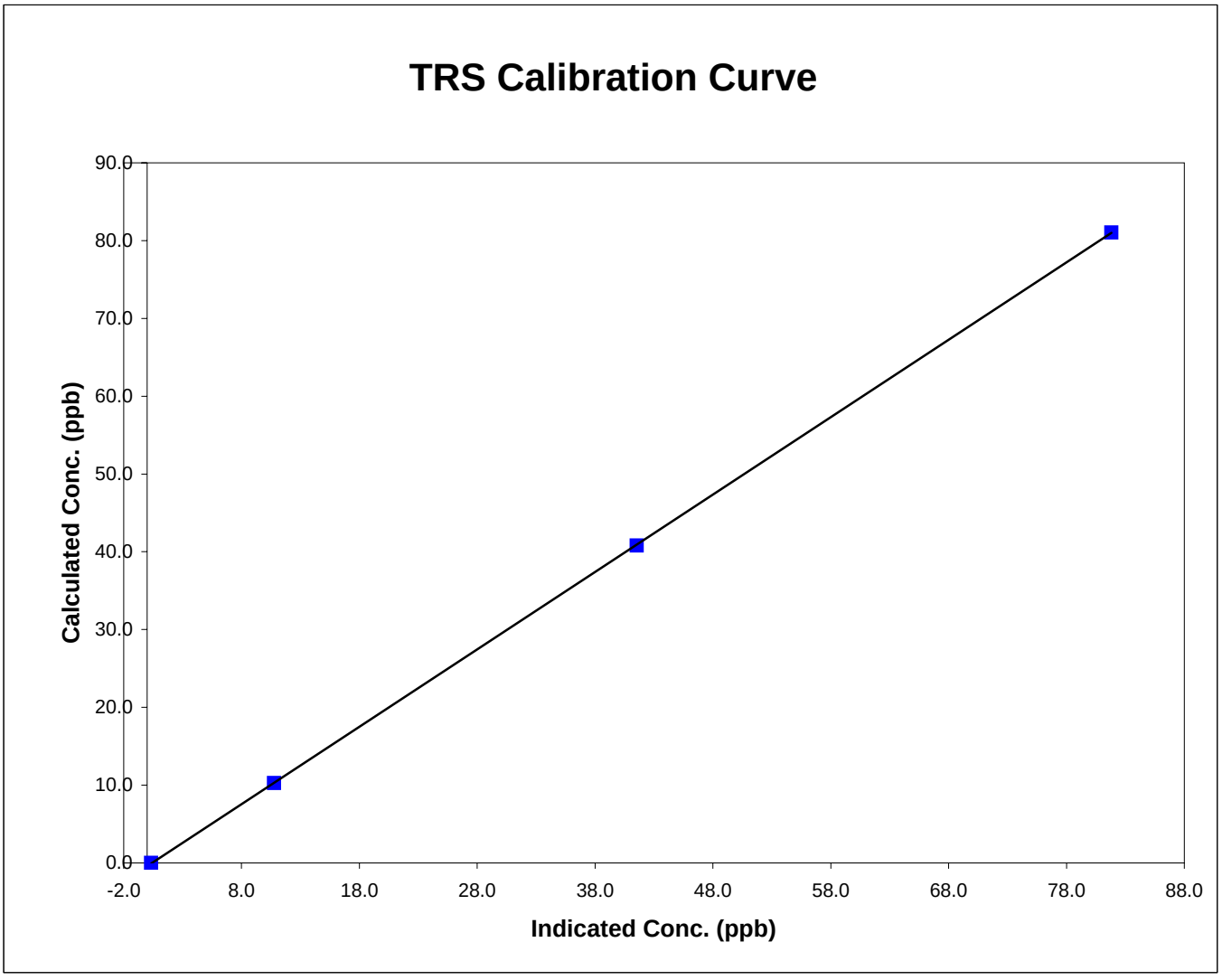
FOCUS AIR QUALITY MONITORING

Station Information

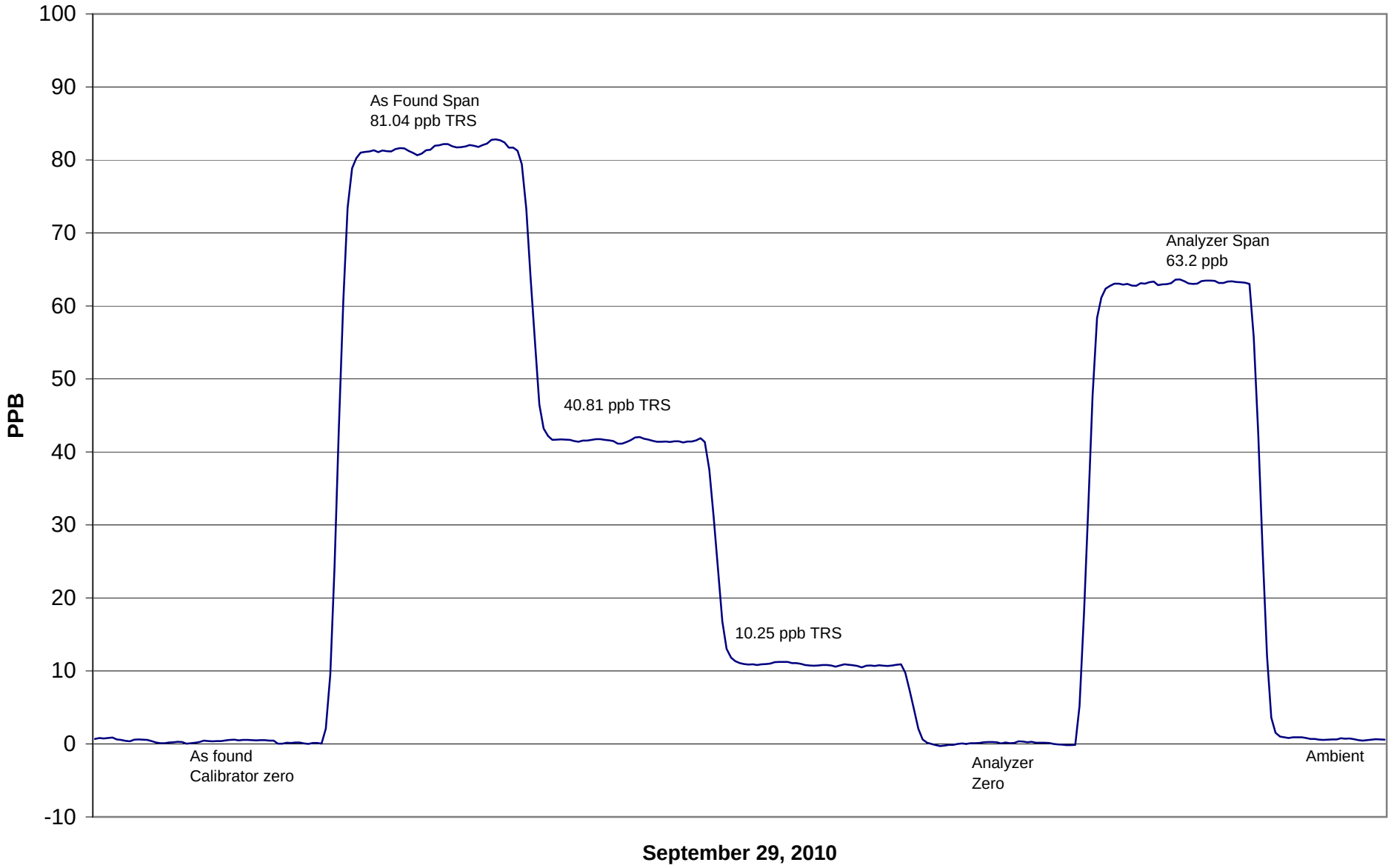
Calibration Date	September 29, 2010	Previous Calibration	August 20, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:05	End Time (MST)	12:28
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
81.0	81.8	0.9904	Correlation Coefficient	0.999995
40.8	41.5	0.9824		
10.2	10.8	0.9523	Slope	0.994842
			Intercept	-0.418101



Evergreen Park TRS Calibration



Calibration Report

Parameter **SO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 3, 2010	Previous Calibration	August 8, 2010
Station Number	3	Station Location	Smoky Heights

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	8:40	End Time (MST)	10:59
Barometric Pressure	0.923 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	51.5 ppm	Cal Gas Cert Date	7/23/2010
Correction factor	0.031375	Cal Gas Cylinder #	SGAL 3245
DACS make	Focus AP1000	DACS serial No.	45272
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.007220	Calculated slope	1.014801
Calculated intercept	-3.173965	Calculated intercept	-0.863433

Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.6		9	
coefficient	0.676		0.707	
Lamp Voltage	923	volts	919	volts
Chamber Temp	44.9	Deg C	45.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	669.6	mm Hg	665.1	mm Hg
Sample Flow	0.442	ccm	.44o	ccm
Lamp Intensity	88	%	89	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.00	0.4	N/A
4989	39.84	408.00	402.6	1.0133
4989	19.91	204.71	202.9	1.0089
4989	9.95	102.51	102.2	1.0028
4989	0.0	0.00	0.4	As Found Zero
4989	39.84	408.00	393.3	As Found Span
			Average Correction Factor	1.0083

Calculated value of As Found Response: 392.590 ppm Percent Change of As Found: 3.8%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.4	ppb
Auto span	311.6	ppb	314.5	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

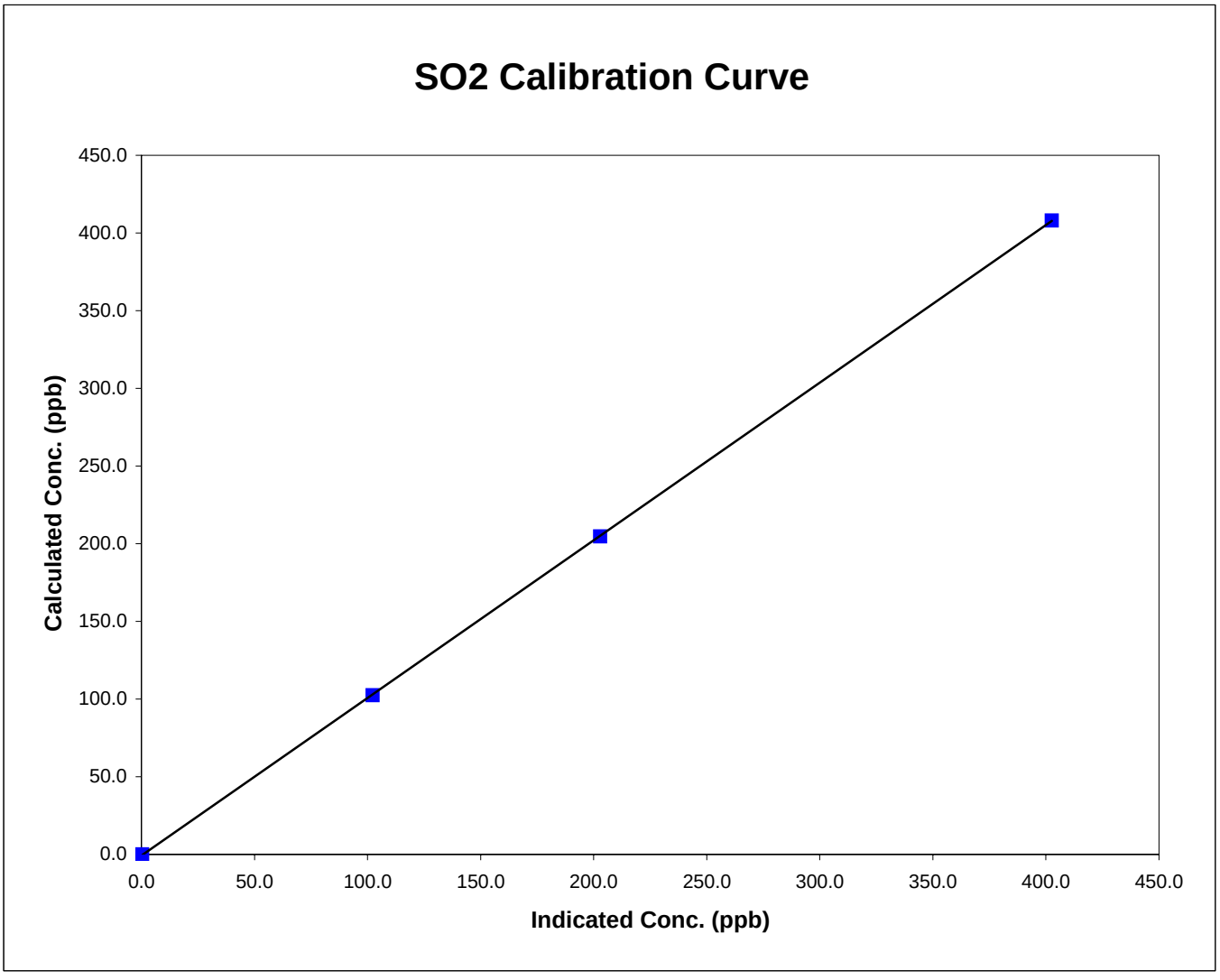
FOCUS AIR QUALITY MONITORING

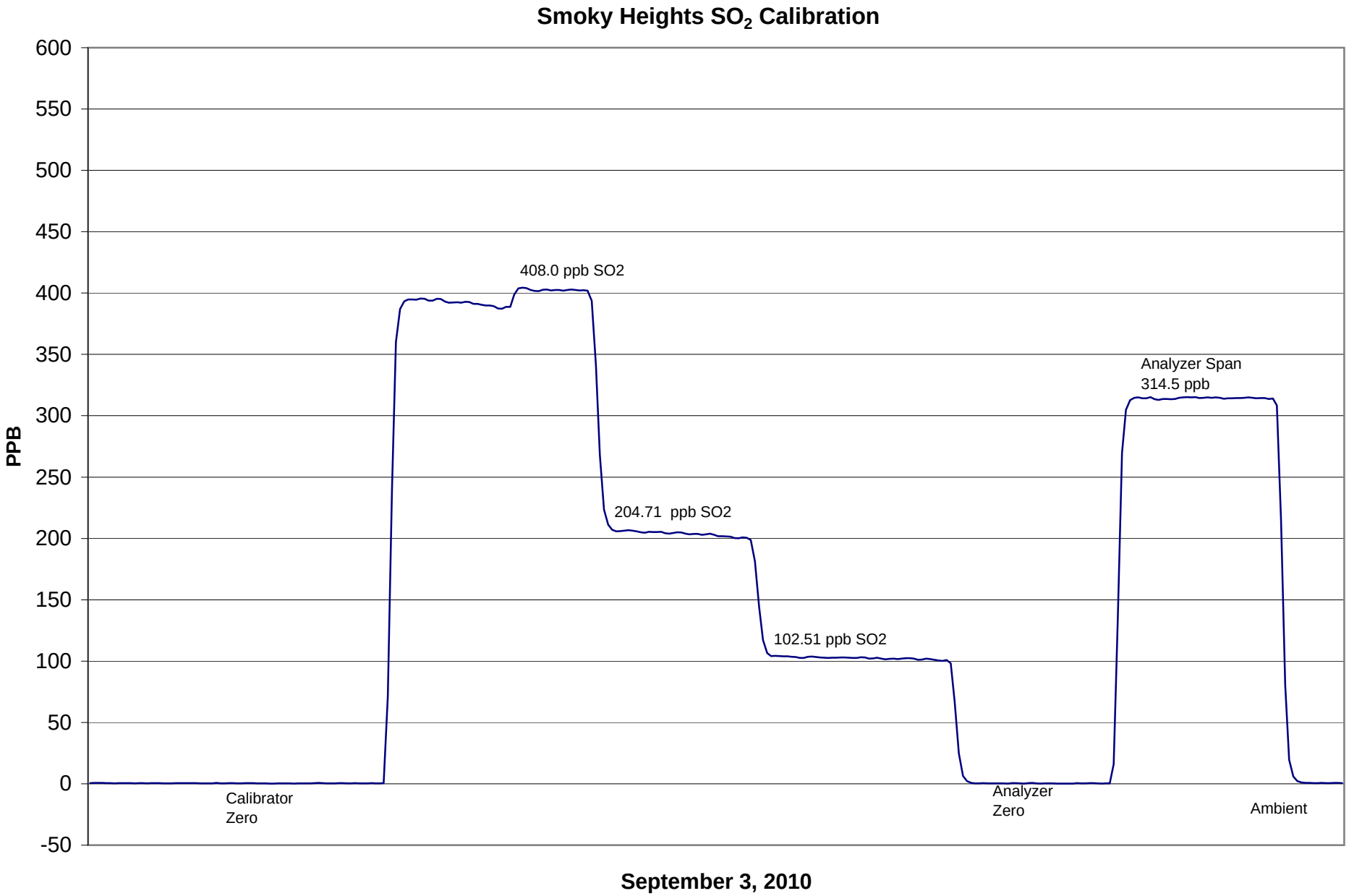
Station Information

Calibration Date	September 3, 2010	Previous Calibration	August 8, 2010
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	8:40	End Time (MST)	10:59
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A		
408.0	402.6	1.0133	Correlation Coefficient	0.999994
204.7	202.9	1.0089		
102.5	102.2	1.0028	Slope	1.014801
			Intercept	-0.863433




Smoky Heights SO2 Calibration
600
550
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
408.0 ppb SO2
204.71 ppb SO2
102.51 ppb SO2
Analyzer Span
314.5 ppb
Calibrator
Zero
Analyzer
Zero
Ambient
September 3, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 3, 2010	Previous Calibration	August 8, 2010
Station Number	3	Station Location	Smoky Heights
Reason: Routine	Install	Removal	Other:

Start Time (MST)	9:50	End Time (MST)	12:18
Barometric Pressure	0.923 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.15 ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.031375	Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	1.025244	Calculated slope	1.056541
Calculated intercept	-0.338848	Calculated intercept	-0.554914

Analyzer make: TEI Model 43C Analyzer serial #: 0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	14	ppb	14.1	ppb
coefficient	0.995		0.995	
Lamp Voltage	761	volts	762	volts
Chamber Temp	43.8	Deg C	43,7	Deg C
Perm Gas Temp	45	Deg C	44.98	Deg C
Pressure	486.7	mm Hg	485.7	mm Hg
Sample Flow	0.709	ccm	,707	ccm
Lamp Intensity	32,591	mv	32,450	mv

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.00	0.1	N/A
4990	79.77	81.03	76.9	1.0541
4990	39.85	40.80	39.8	1.0259
4990	9.94	10.24	10.4	0.9846
4990	0.0	0.00	0.1	As Found Zero
4990	79.77	81.03	76.9	As Found Span
			Average Correction Factor	1.0215

Calculated value of As Found Response: 78.41 ppm Percent Change of As Found: 3.2%

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.3	ppm
Auto span	40.8	ppm	43.0	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

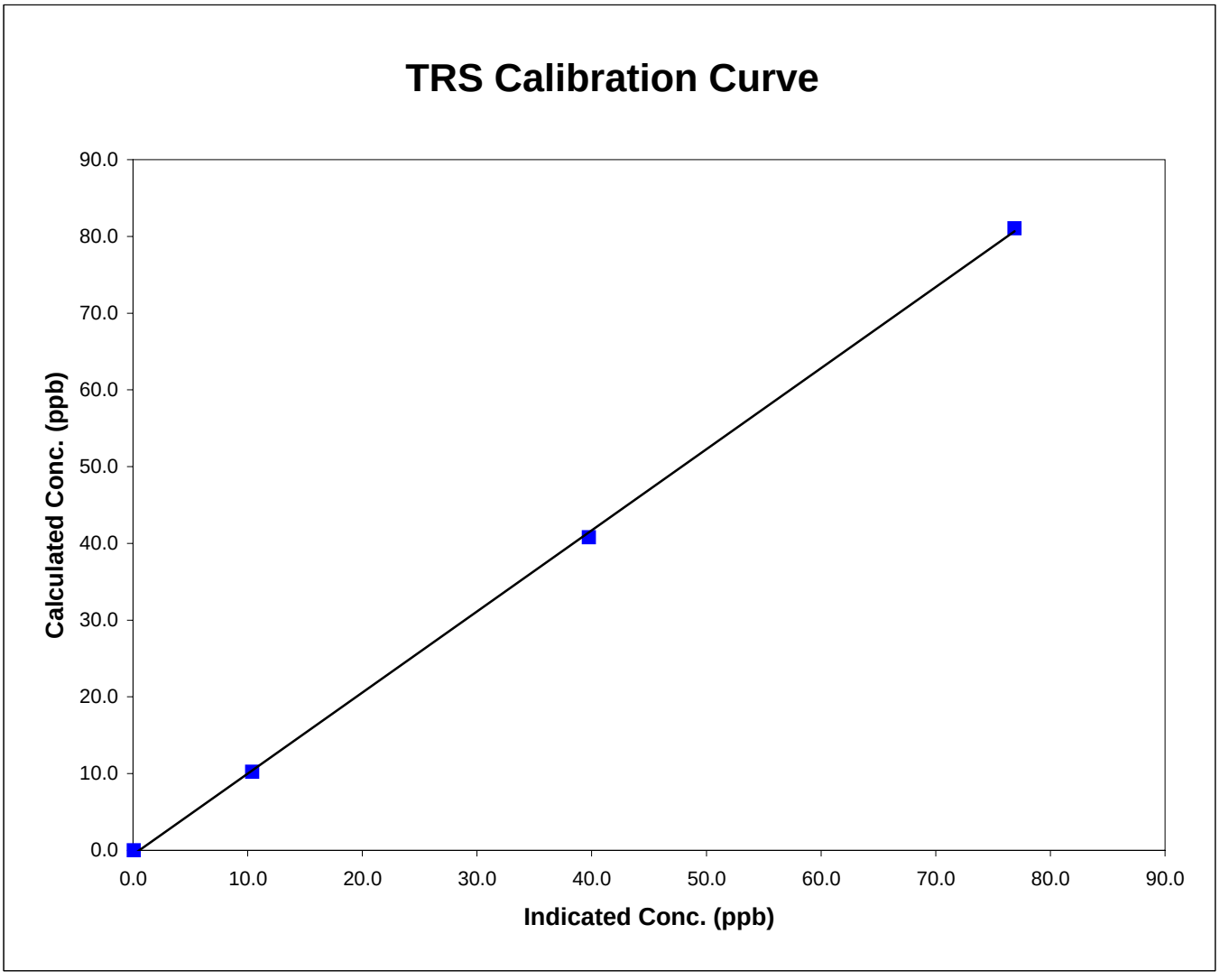
FOCUS AIR QUALITY MONITORING

Station Information

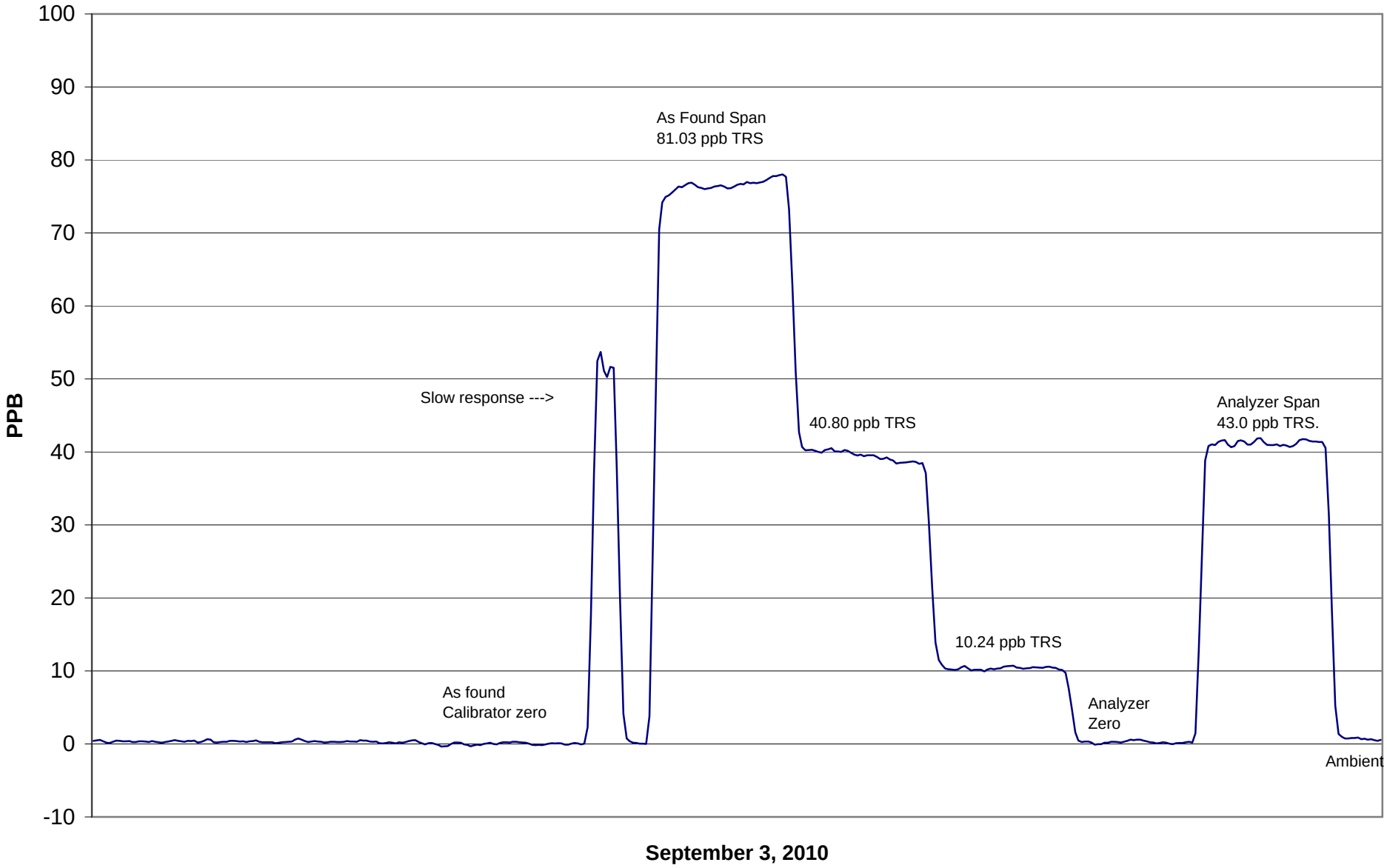
Calibration Date	September 3, 2010	Previous Calibration	August 8, 2010
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:50	End Time (MST)	12:18
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
81.0	76.9	1.0541	Correlation Coefficient	0.999785
40.8	39.8	1.0259		
10.2	10.4	0.9846	Slope	1.056541
			Intercept	-0.554914



Smoky Heights TRS Calibration



Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	Beaverlodge

Reason: **Routine** | Install | Removal | Other:

Start Time (MST)	8:50	End Time (MST)	12:11
Barometric Pressure	0.918 atm	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	10.06 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	CC 114395		
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.011316	Calculated slope	1.004276
Calculated intercept	-0.255174	Calculated intercept	-0.421404

Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.49		2.41	
Coefficient	0.904		0.872	
PMT	-813.3	V	-812.9	V
UV Lamp Voltage	1066	V	1062	V
Chamber Temp	45.4	Deg C	45.1	Deg C
Pressure	667	mm Hg	663.4	mm Hg
Sample Flow	0.529	LPM	0.527	LPM
Lamp Intesity	86%	%	85%	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.1	N/A
4988	39.82	79.7	79.6	1.0014
4988	19.90	40.0	40.5	0.9867
4988	9.93	20.0	20.5	0.9746
4988	0.00	0.0	0.1	As found zero
4988	39.82	79.7	82.6	As found span
			Average Correction Factor	0.9876

Calculated value of As Found Response: 83.114 ppm Percent Change of As Found: -4.3%

	before calibration		after calibration	
Auto zero	-0.3	ppb	-0.3	ppb
Auto span	59.7	ppb	57.7	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

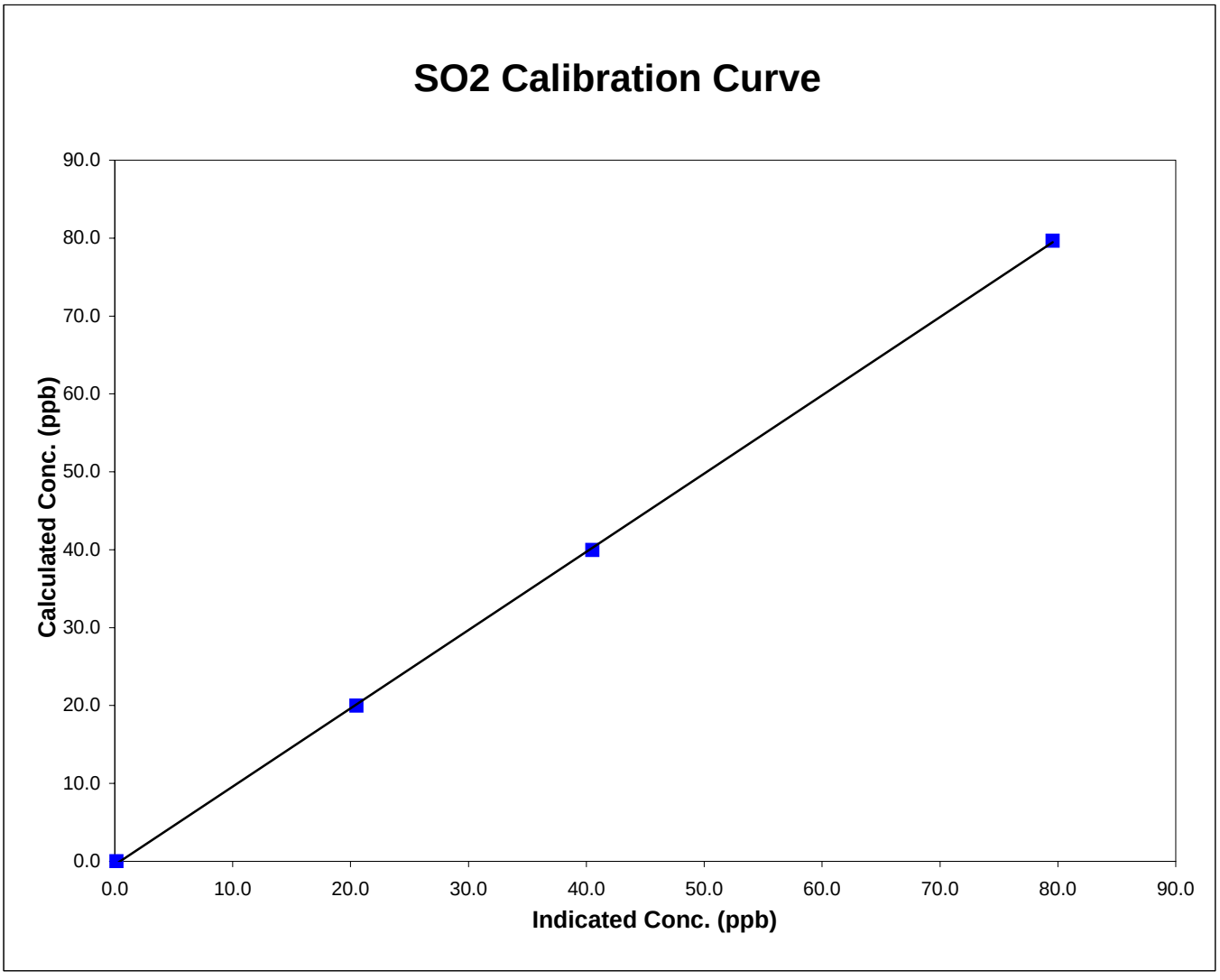
FOCUS AIR QUALITY MONITORING

Station Information

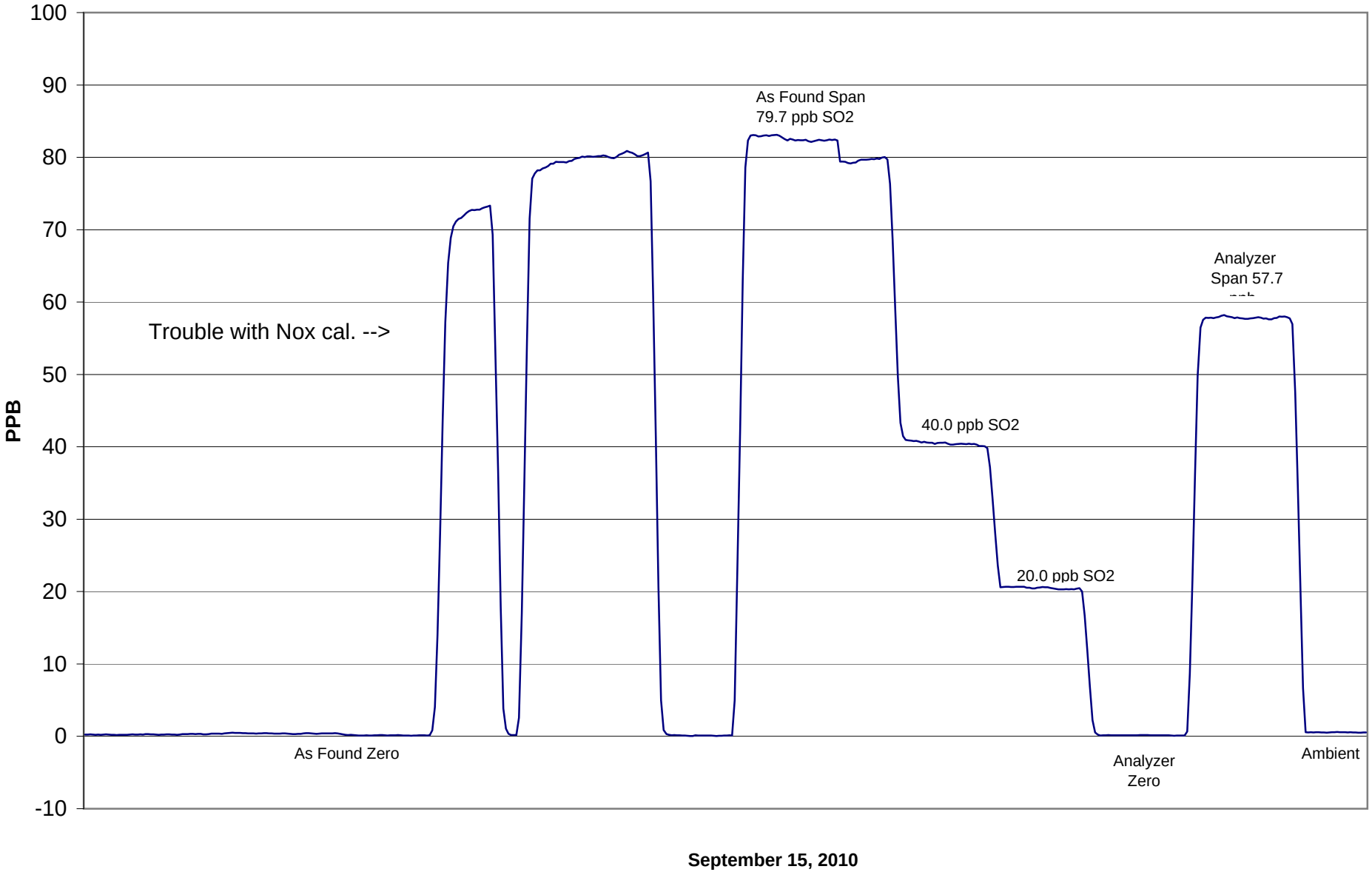
Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:50	End Time (MST)	12:11
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
79.7	79.6	1.0014	Correlation Coefficient	0.999932
40.0	40.5	0.9867		
20.0	20.5	0.9746	Slope	1.004276
			Intercept	-0.421404



Beaverlodge SO_2 Calibration



September 15, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	BeaverLodge

Reason: **Routine** Installation Removal Other:

Start Time (MST)	8:50		End Time (MST)	14:52	
Barometric Pressure	0.918	Atm	Station Temperature	23.0	Deg C
Calibrator	Environics		Serial Number	2844	
NO Cal Gas Conc	50.1	ppm	Cal Gas Expiry Date		
NOx Cal Gas Conc	50.2	ppm	Cal Gas Serial #	CC-114395	

DACS Information

DACS make: AP1000 DACS serial No.:

Parameter		NO2	NOx	NO
Before	Data Slope	0.996918	1.006108	1.003460
	Data Offset	0.949432	-2.513441	-1.829574
After	Data Slope	0.969831	1.002429	1.003231
	Data Offset	-1.964922	-2.066563	-0.977019
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model: TEI 42i Analyzer serial #: 906535068

Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	2.6	mV	2.8	mV
NOx bkgnd	2.9	mV	3.0	mV
NO coefficient	1.591		1.663	
NOx coefficient	0.993		0.986	
NO2 conv temp	327.1	Deg C	323.9	Deg C
PMT Temp	-3.1	Deg C	-2.9	Deg C
PMT Volt	-676.4	mV	-676.4	mV
R Cell Press	194.7	in Hg	190.9	in Hg
Sample Flow	0.690	ccm	0.673	ccm

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: September 15, 2010 Station Location: BeaverLodge

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4989	0.00	0.0	0.0	0.0	0.0	-0.1	-0.1	N/A	N/A
1	4988	39.82	397.6	396.8	0.8	397.4	395.9	1.4	1.0004	1.0024
2	4988	19.90	199.5	199.1	0.4	202.6	200.2	1.8	0.9844	0.9944
3	4988	9.93	99.7	99.5	0.2	103.3	101.1	2.0	0.9654	0.9847
AFZ	4988	0.00	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0000	0.0000
AFS	4988	39.84	397.8	397.0	0.8	384.5	384.6	-0.4	1.0344	1.0321
							Average Correction Factor		0.9834	0.9938

As Found Concentrations: NO_X= 382.0 NO= 382.9 As Found Percent Change NO_X= -4.0% NO= -3.5%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	-0.1	-0.1	0.0	0.0	-0.1	-0.1	N/A	N/A	N/A	N/A
NO point	391.7	391.7	0.0	398.6	391.7	6.7	0.9827	1.0000	N/A	N/A
300	391.7	117.9	273.8	400.8	117.9	282.6	0.9773	1.0000	0.9686	103.2%
200	391.7	203.6	188.0	400.5	203.6	196.6	0.9779	1.0000	0.9565	104.6%
100	391.7	289.9	101.7	399.7	289.9	110.0	0.9798	1.0000	0.9247	108.1%
					Average Correction Factor		0.9783	1.0000	0.9499	105.3%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	-0.1	-0.2	-0.1	ppb
Auto span	202.3	192.5	1.9	ppb	226.1	223.6	1.8	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

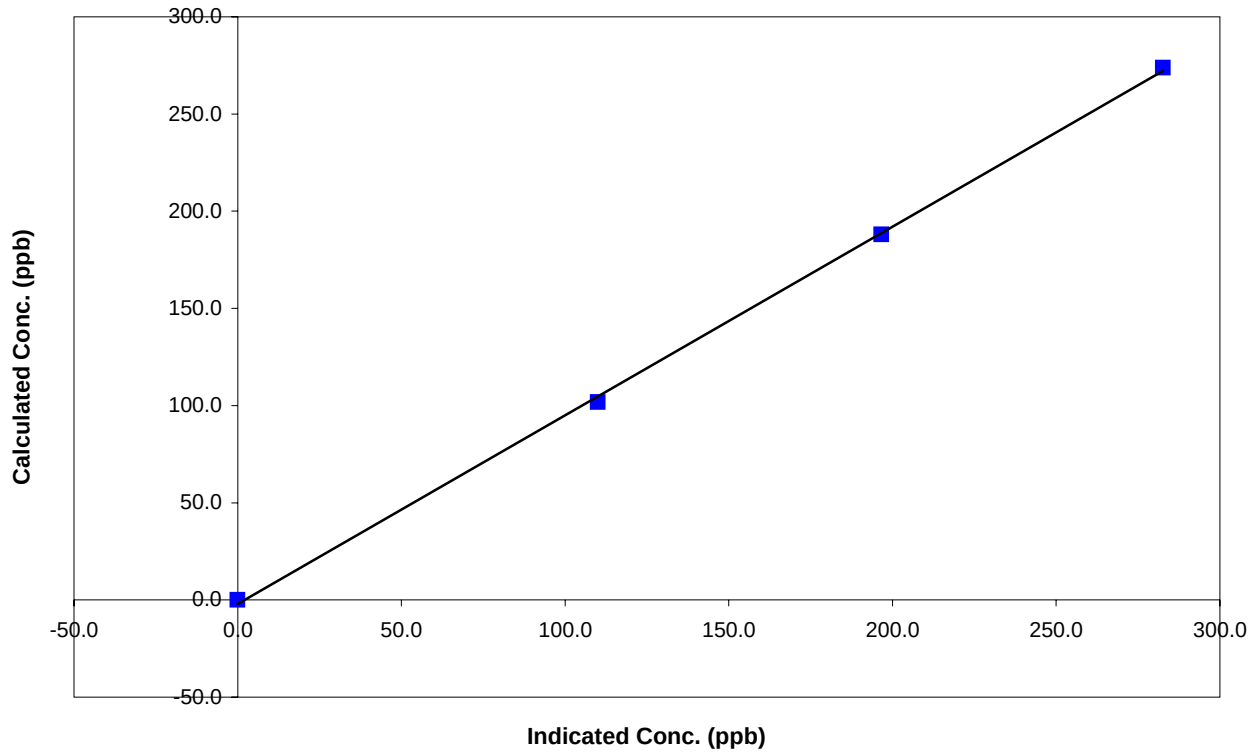
Station Information

Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:50	End Time (MST)	14:52
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
273.8	282.6	0.9686	Correlation Coefficient	0.999608
188.0	196.6	0.9565		
101.7	110.0	0.9247	Slope	0.969831
			Intercept	-1.964922

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

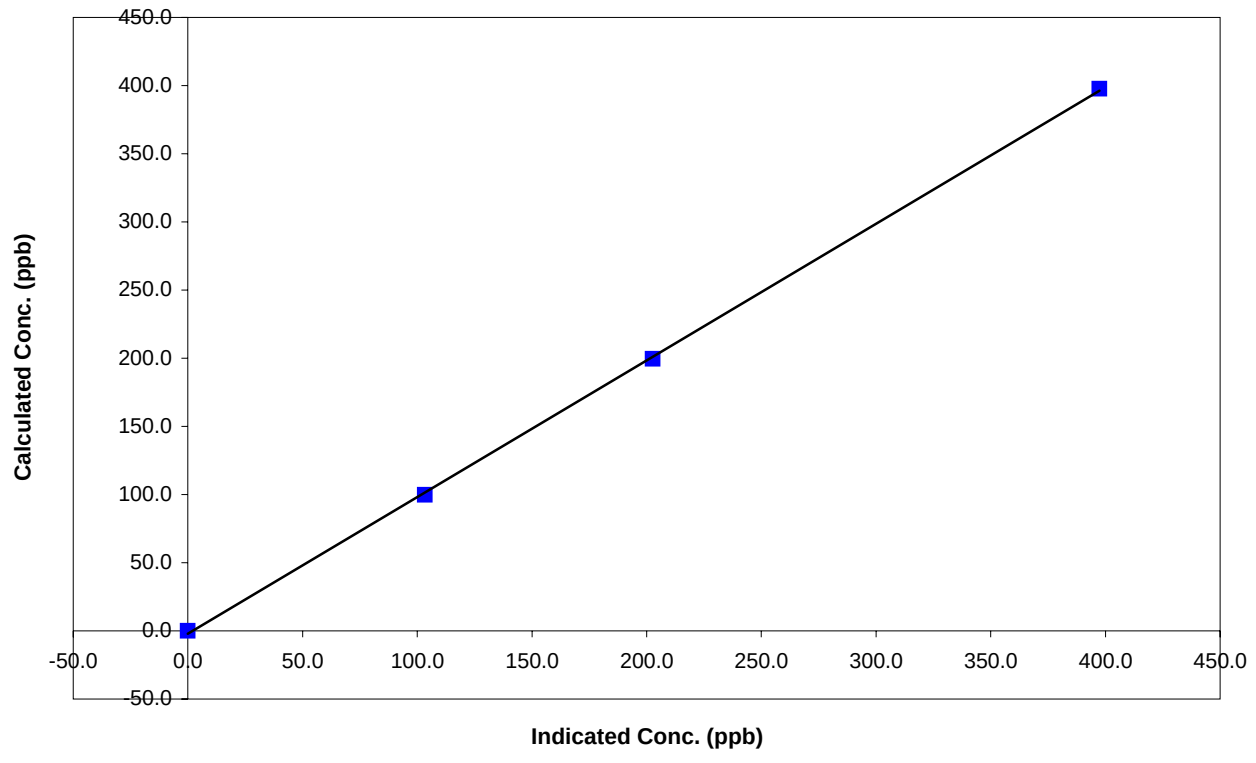
Station Information

Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:50	End Time (MST)	14:52
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
397.6	397.4	1.0004	Correlation Coefficient	0.999867
199.5	202.6	0.9844		
99.7	103.3	0.9654	Slope	1.002429
			Intercept	-2.066563

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

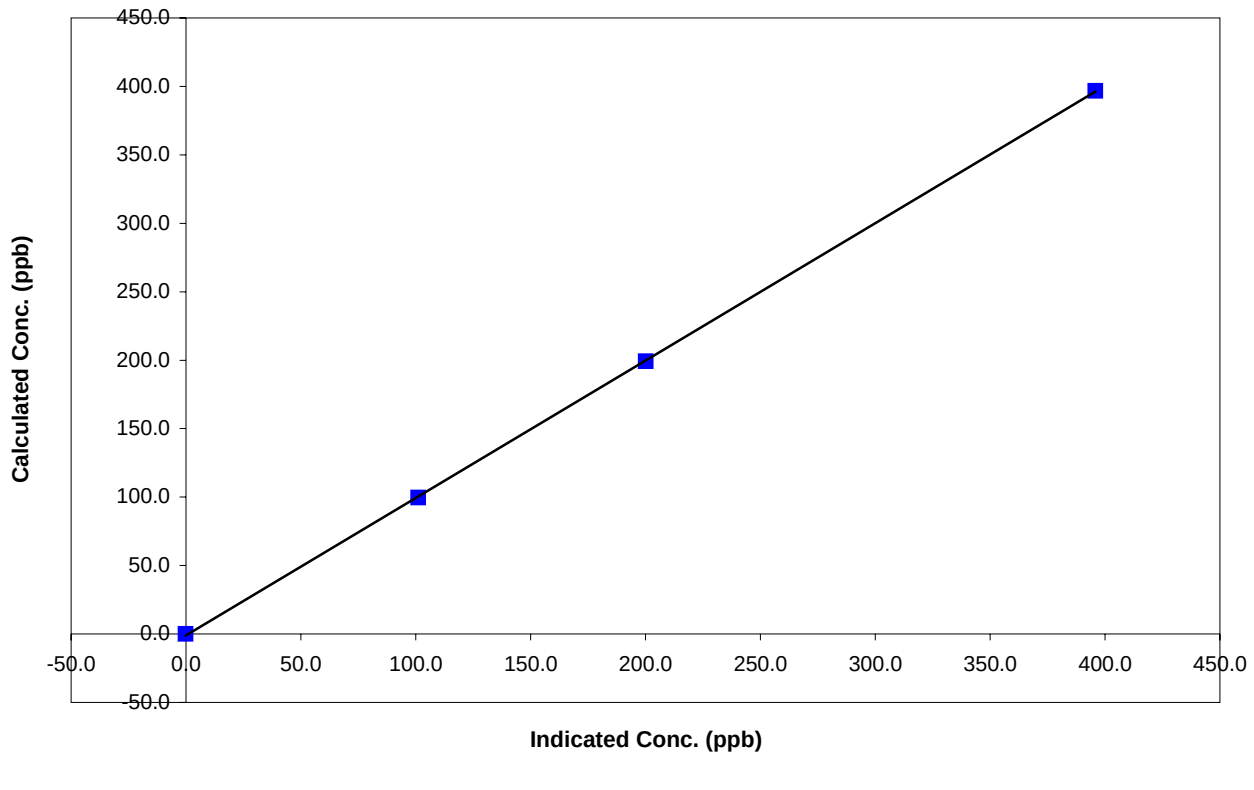
Station Information

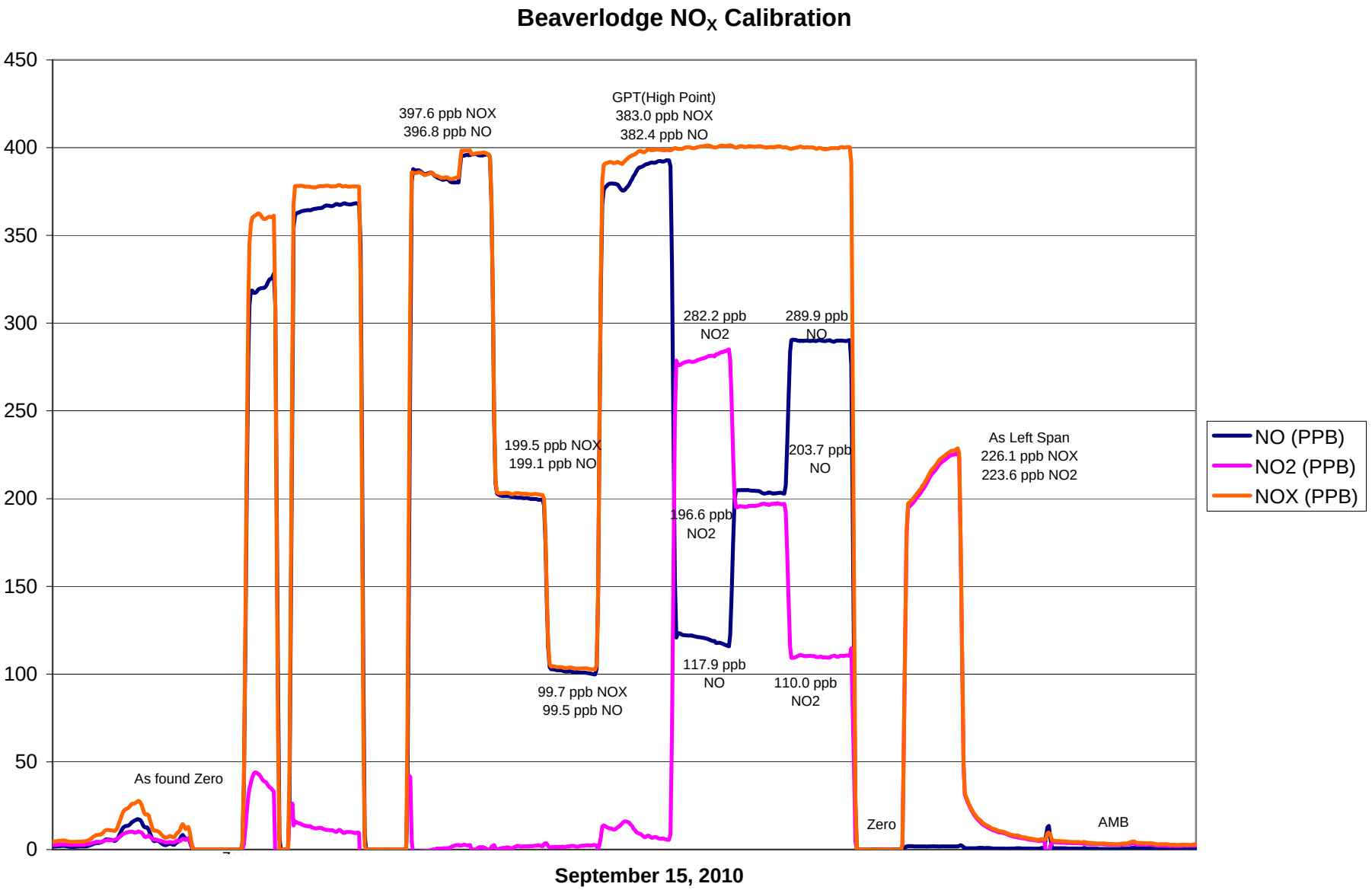
Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:50	End Time (MST)	14:52
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
396.8	395.9	1.0024	Correlation Coefficient	0.999966
199.1	200.2	0.9944		
99.5	101.1	0.9847	Slope	1.003231
			Intercept	-0.977019

NO Calibration Curve




Beaverlodge NOX Calibration
450
400
350
300
250
200
150
100
50
0
397.6 ppb NOX
396.8 ppb NO
GPT(High Point)
383.0 ppb NOX
382.4 ppb NO
282.2 ppb
NO2
289.9 ppb
NO
199.5 ppb NOX
199.1 ppb NO
203.7 ppb
NO
196.6 ppb
NO2
As Left Span
226.1 ppb NOX
223.6 ppb NO2
99.7 ppb NOX
99.5 ppb NO
117.9 ppb
NO
110.0 ppb
NO2
As found Zero
Zero
AMB
NO (PPB)
NO2 (PPB)
NOX (PPB)
September 15, 2010

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	Beaverlodge

Reason: [Routine] [Install] [Removal] [Other:]

Start Time (MST)	12:30	End Time (MST)	15:44
Barometric Pressure	0.918 atm	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.025936	Calculated slope	0.998736
Calculated intercept	1.208428	Calculated intercept	0.029288

Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.70	ppb	-1.40	ppb
slope	1.008		1.008	
Lamp temp	56.5	mV	56.5	mV
Lamp Intensity A/B	66098/66903	mV	66140/66963	mV
Pressure	656.2	mm Hg	658.8	mm Hg
Flow A	0.687	ccm	0.688	ccm
Flow B	0.632	ccm	0.634	ccm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	-0.4	N/A
4990	0.00	273.8	274.1	0.9989
4990	0.00	188.0	187.9	1.0009
4990	0.00	101.7	102.5	0.9921
4990	0.00	0.0	-0.4	As found zero
4990	0.00	257.1	274.1	As found span
			Average Correction Factor	0.9973

Calculated value of As Found Response: 282.7 ppm Percent Change of As Found: 10.0%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.5	ppb
Auto span	114.3	ppb	118.7	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

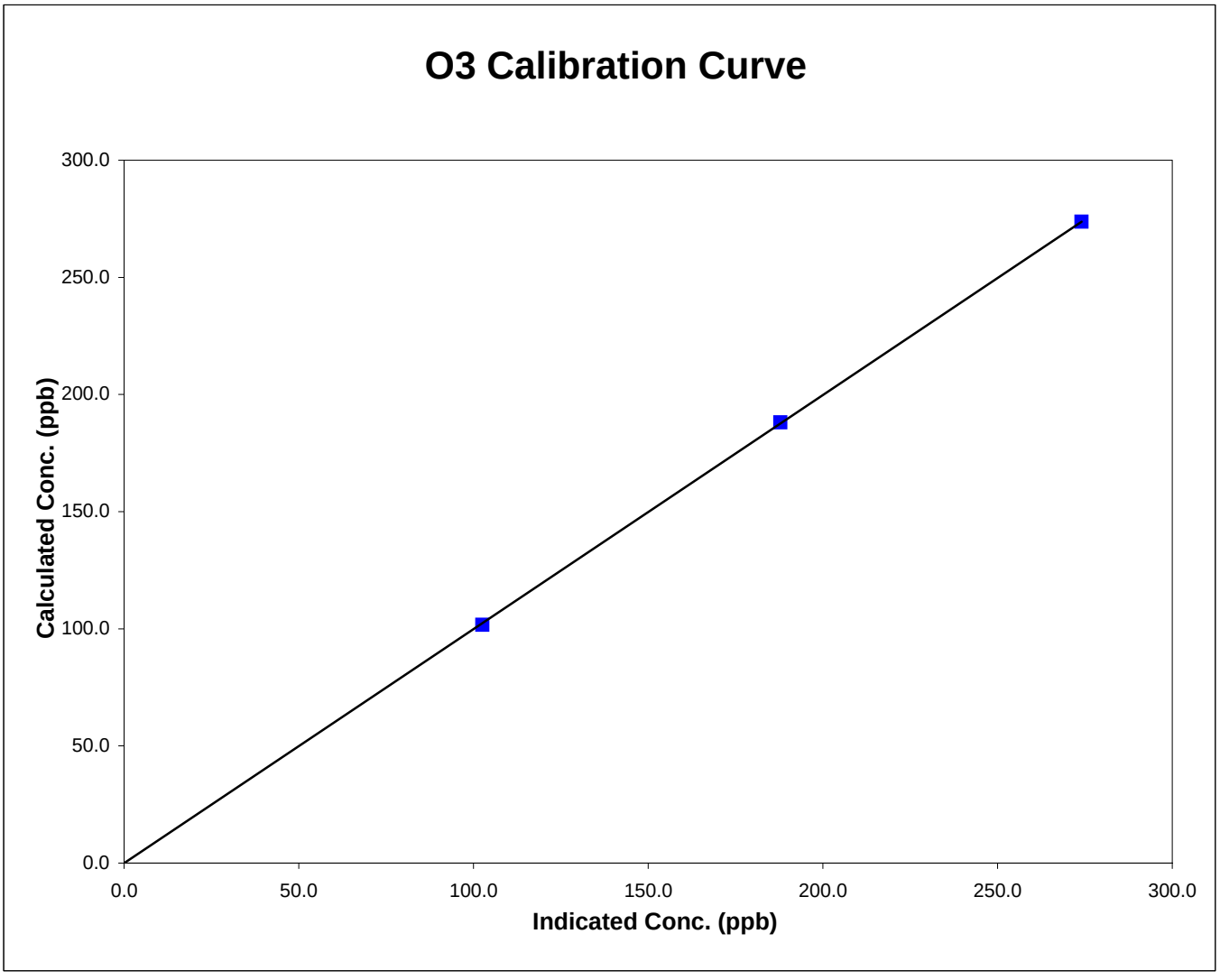
FOCUS AIR QUALITY MONITORING

Station Information

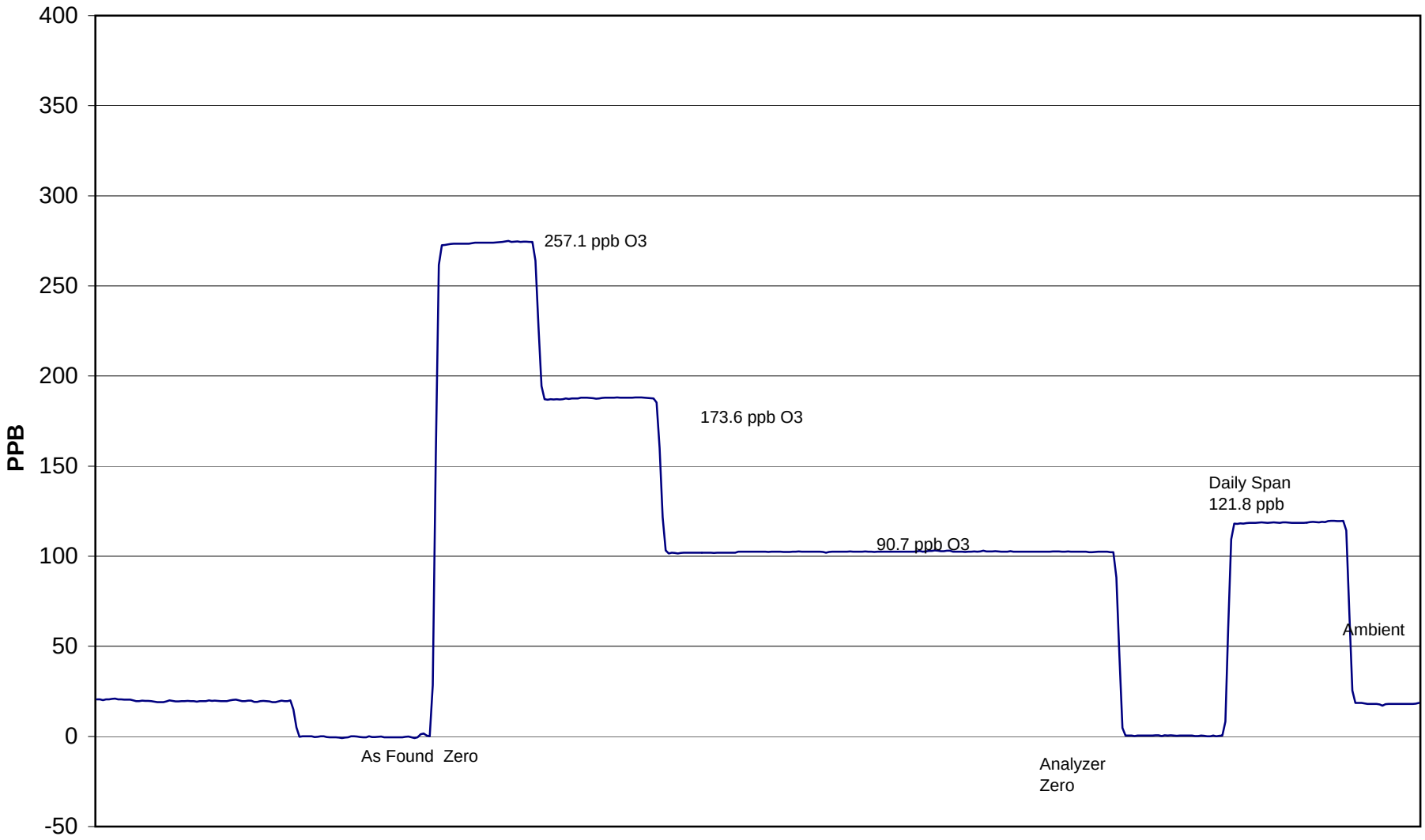
Calibration Date	September 15, 2010	Previous Calibration	August 6, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:30	End Time (MST)	15:44
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	NA		
273.8	274.1	0.9989	Correlation Coefficient	0.999982
188.0	187.9	1.0009		
101.7	102.5	0.9921	Slope	0.998736
			Intercept	0.029288



Beaverlodge O_3 Calibration



September 15, 2010

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover - Bonanza

Reason: Routine | Install | Removal | Other:

Start Time (MST)	9:30	End Time (MST)	12:02
Barometric Pressure	27.66 inches Hg	Station Temperature	15.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	51.5 ppm	Cal Gas Expiry Date	4/6/2012
Gas Cert Reference	SGAL3245		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.002573	Calculated slope	1.000989
Calculated intercept	-1.606929	Calculated intercept	-1.332158

Analyzer make	TEI 43C		Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	9.5		9.4	
Coefficient	0.994		0.98	
UV Lamp Voltage	792	V	792	V
Chamber Temp	44.5	C	44.4	C
Perm Gas Temp	45	C	45	C
Pressure	678.1	mm Hg	674.4	mm Hg
Sample Flow	0.490	LPM	0.488	LPM
Lamp Intesity	47358	Hz	47311	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.00	0.0	-0.3	N/A
4991	39.84	407.8	407.9	0.9998
4991	19.90	204.5	206.5	0.9906
4991	9.93	102.3	105.1	0.9728
4991	0.00	0.0	-0.3	As found zero
4991	39.84	407.8	412.4	As found span
			Average Correction Factor	0.9877

Calculated value of As Found Response: 412.156 ppm Percent Change of As Found: -1.1%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	256.9	ppm	260.2	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

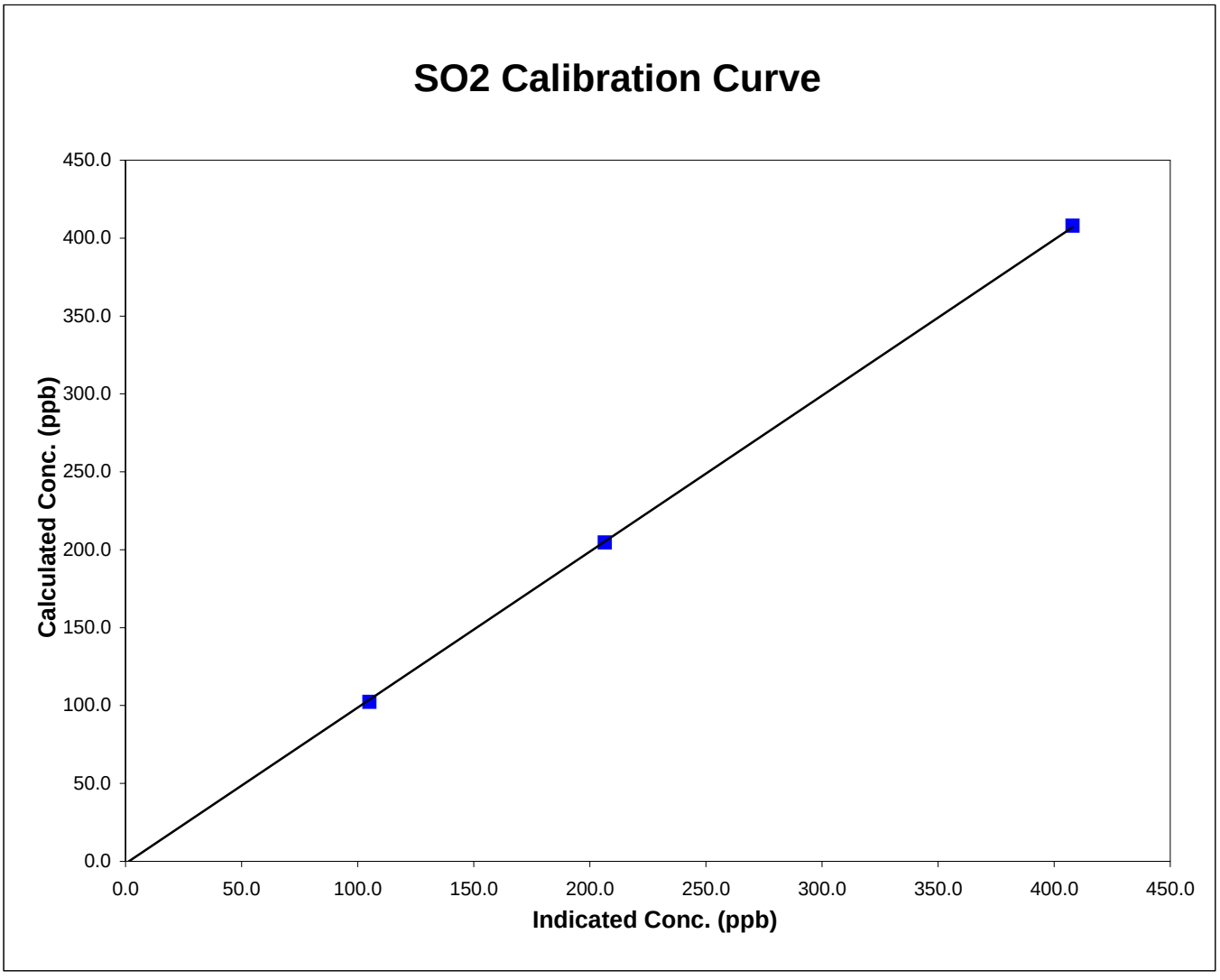
FOCUS AIR QUALITY MONITORING

Station Information

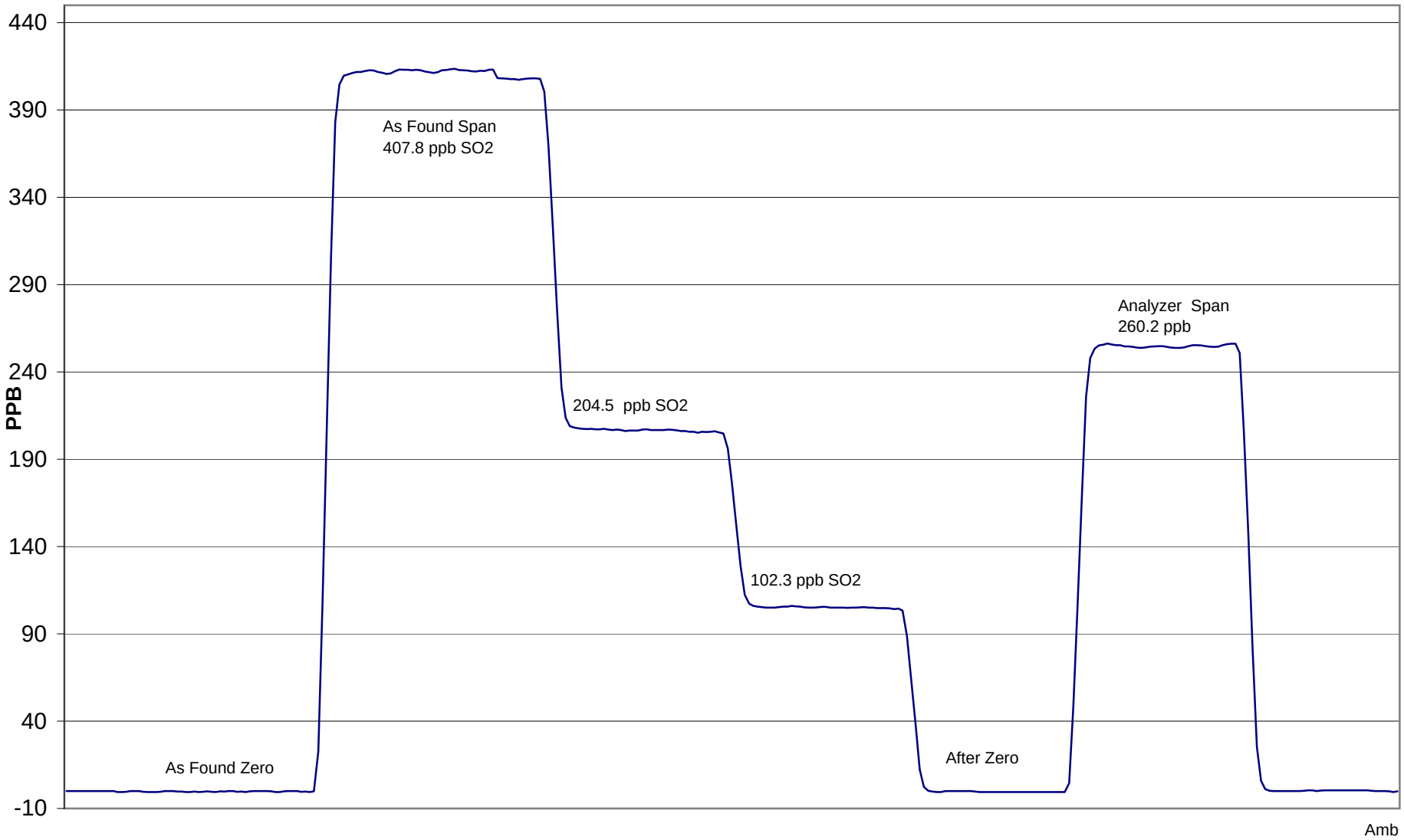
Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover - Bonanza
Start Time (MST)	9:30	End Time (MST)	12:02
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
407.8	407.9	0.9998	Correlation Coefficient	0.999927
204.5	206.5	0.9906		
102.3	105.1	0.9728	Slope	1.000989
			Intercept	-1.332158



Bonanza SO_2 Calibration



September 2, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover-Bonanza
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:15	End Time (MST)	15:53
Barometric Pressure	27.5 inches Hg	Station Temperature	15.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	5.15 ppm	Cal Gas Expiry Date	11/15/2005
Gas Cert Reference	ALM013295		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 5 volt	DACS channel #	8
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.016186	Calculated slope	1.017123
Calculated intercept	0.328666	Calculated intercept	0.887626
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	10.8	ppb	10.8	ppb
Coefficient	1.397		1.397	
Lamp Voltage	787	V	788	V
Chamber Temp	43.9	C	43.8	C
Perm gas Temp	45.01	C	45.00	C
Pressure	658.9	mmHg	661.2	mmHg
Sample Flow	.439	ccm	.440	ccm
Lamp Intensity	39184.0	Hz	39244.0	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.0	-1.1	N/A
4991	79.74	81.0	78.6	1.0302
4991	39.80	40.7	39.4	1.0335
4991	9.93	10.2	9.3	1.0976
4991	0.00	0.0	-1.1	As found zero
4991	79.74	81.0	78.6	As found span
			Average Correction Factor	1.0538

Calculated value of As Found Response: 81.34 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	-0.6	ppm	-0.1	ppm
Auto span	64.8	ppm	63.1	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

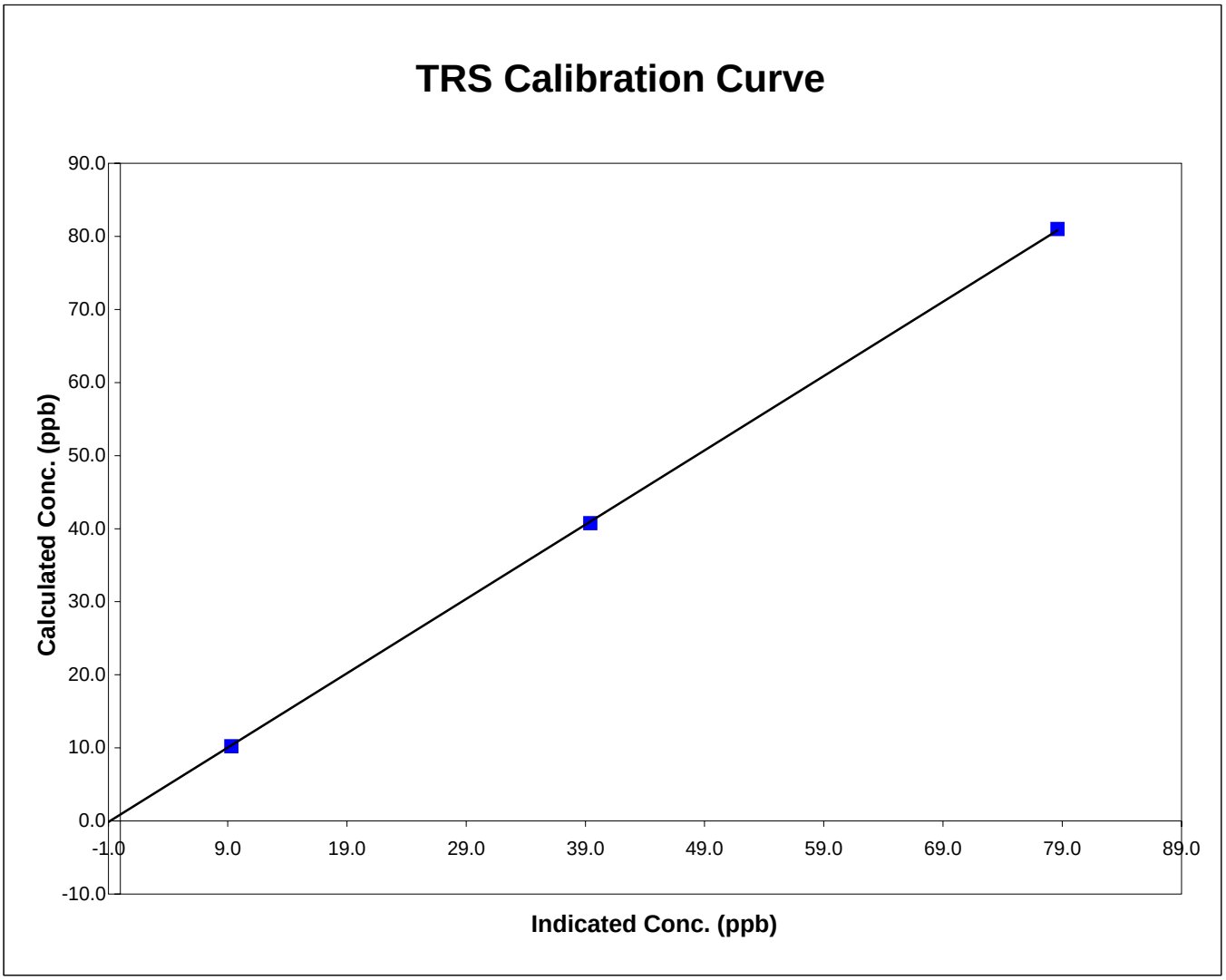
FOCUS AIR QUALITY MONITORING

Station Information

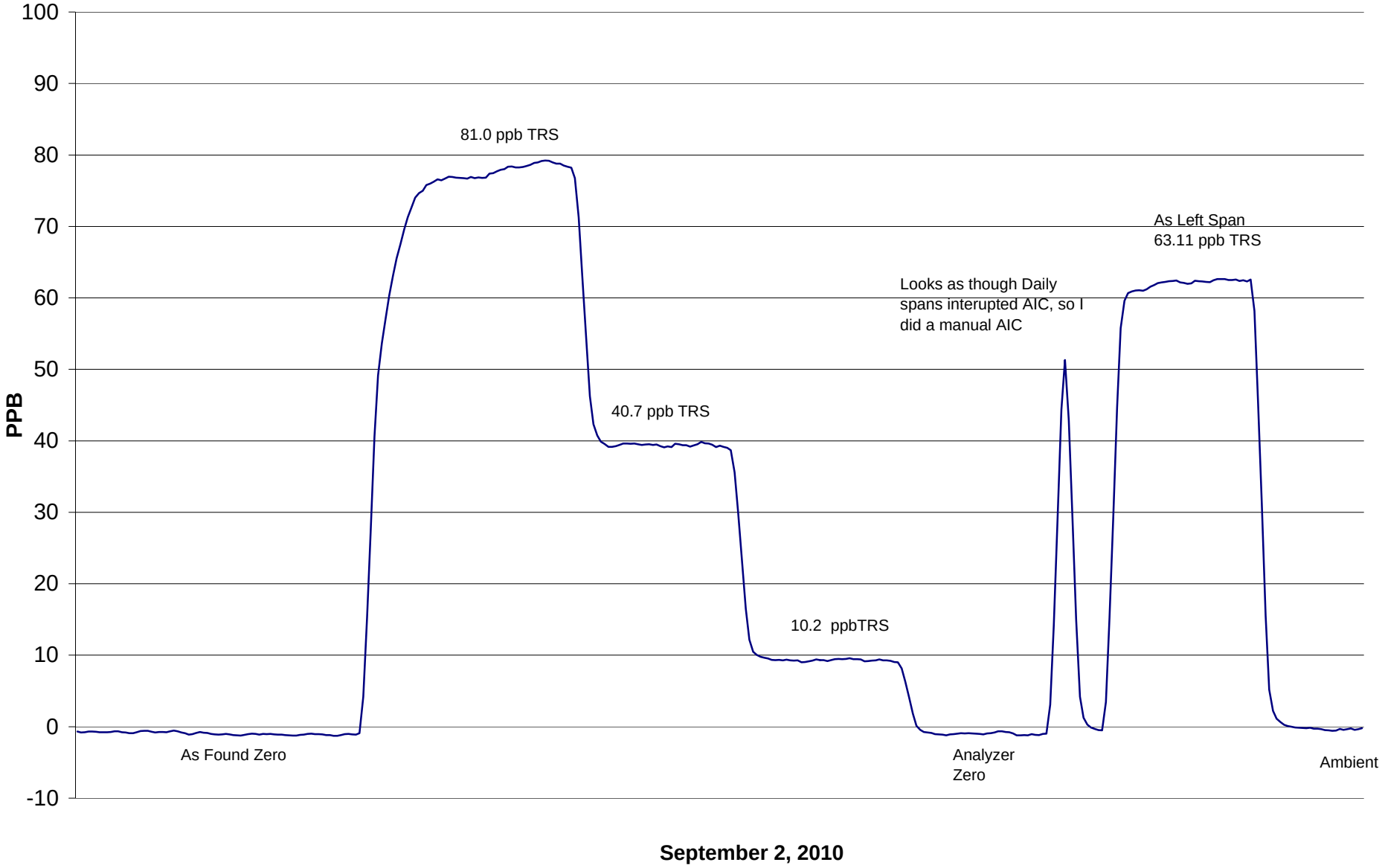
Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover-Bonanza
Start Time (MST)	13:15	End Time (MST)	15:53
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.1	N/A		
81.0	78.6	1.0302	Correlation Coefficient	0.999961
40.7	39.4	1.0335		
10.2	9.3	1.0976	Slope	1.017123
			Intercept	0.887626



Bonanza TRS Calibration



Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover Bonanza

Reason: **Routine** Installation Removal Other:

Start Time (MST)	9:30		End Time (MST)	13:27	
Barometric Pressure	0.927	Atm	Station Temperature	15.7	Deg C
Calibrator	Environics 6100		Serial Number	3474	
NO Cal Gas Conc	50.8	ppm	Cal Gas Expiry Date	April 6, 2012	
NOx Cal Gas Conc	50.8	ppm	Cal Gas Serial #	SGAL 3245	

DACS Information

DACS make: Focus AP1000 DACS serial No.: 52662

Parameter		NO2	NOx	NO
Before	Data Slope	0.994882	1.004256	1.008797
	Data Offset	-0.076064	-3.210647	-3.562769
After	Data Slope	0.995269	1.006883	1.011265
	Data Offset	1.096609	-2.962987	-3.479726
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model: TEI 42i Analyzer serial #: 701120011

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	5.2	mV	5.2	mV
NOx bkgnd	5.6	mV	5.6	mV
NO coefficient	0.956		0.956	
NOx coefficient	0.997		0.997	
NO2 conv temp	326.8	Deg C	324.5	Deg C
PMT Temp	-3.1	Deg C	-2.9	Deg C
PMT Volt	-829.9	mV	-829.9	mV
R Cell Press	166.9	in Hg	166.9	in Hg
Sample Flow	0.481	ccm	0.477	ccm

Notes:

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: September 2, 2010 Station Location: Rover Bonanza

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4989	0.00	0.0	0.0	0.0	0.3	0.5	-1.3	N/A	N/A
1	4989	39.84	402.5	402.5	0.0	401.2	399.8	-1.7	1.0032	1.0065
2	4989	19.91	201.9	201.9	0.0	205.1	204.7	-1.4	0.9846	0.9865
3	4989	9.96	101.2	101.2	0.0	105.9	106.4	-1.2	0.9553	0.9510
AFZ	4989	0.00	0.0	0.0	0.0	0.3	0.5	-0.6	0.0000	0.0000
AFS	4989	39.85	402.6	402.6	0.0	401.2	399.8	-1.7	1.0034	1.0068
							Average Correction Factor		0.9810	0.9813

As Found Concentrations: NO_X= 397.6 NO= 395.7 As Found Percent Change NO_X= -1.2% NO= -1.7%

GPT Calibration Data

Dilution Flow 4988 ccm Source Gas Flow 39.84 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.5	0.5	0.0	0.3	0.5	-1.3	N/A	N/A	N/A	N/A
NO point	399.0	399.0	0.0	400.0	399.0	-2.1	0.9976	1.0000	N/A	N/A
300	399.0	118.7	280.3	401.0	118.7	280.4	0.9952	1.0000	0.9998	100.0%
200	399.0	208.2	190.9	401.4	208.2	190.8	0.9941	1.0000	1.0005	100.0%
100	399.0	296.9	102.1	401.4	296.9	101.7	0.9941	1.0000	1.0034	99.7%
					Average Correction Factor		0.9945	1.0000	1.0012	99.9%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.4	-0.9	0.7	ppb	0.0	-0.9	0.5	ppb
Auto span	275.6	274.9	2.9	ppb	289.6	284.8	3.1	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

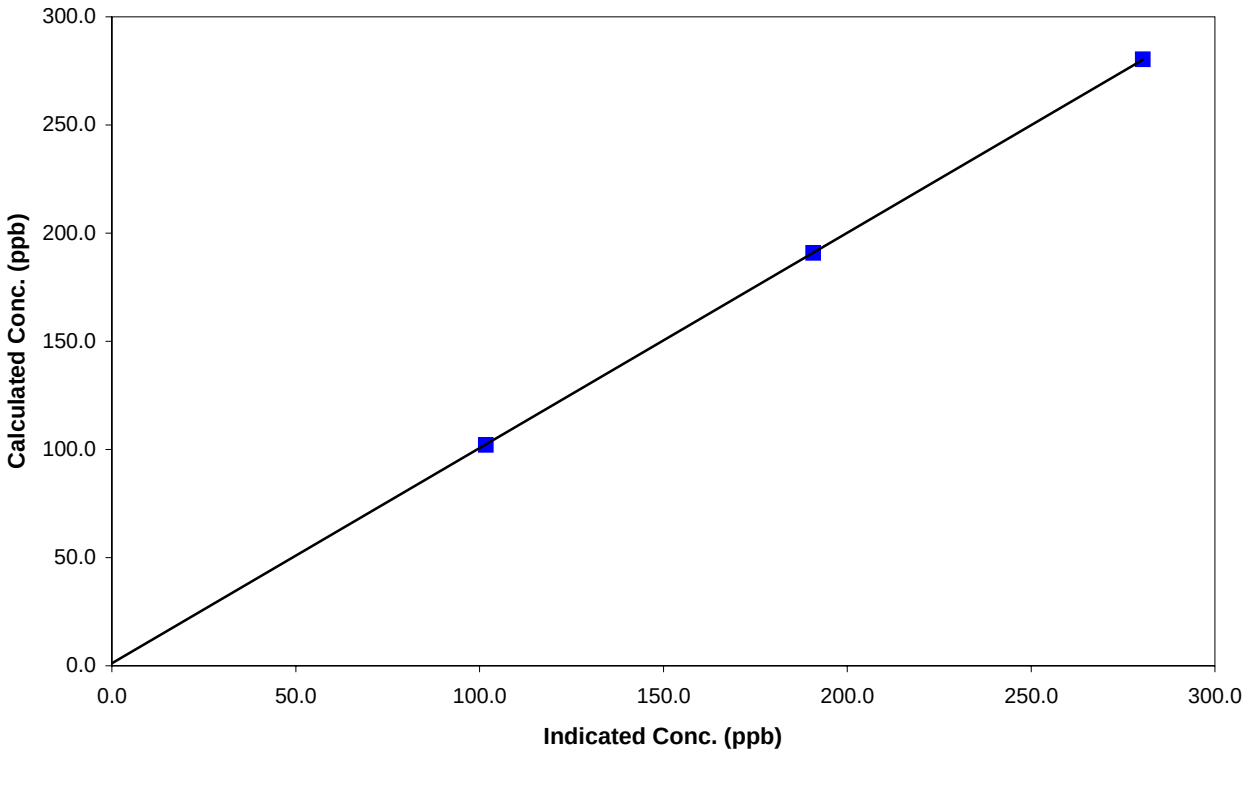
Station Information

Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:30	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.3	N/A		
280.3	280.4	0.9998	Correlation Coefficient	0.999996
190.9	190.8	1.0005		
102.1	101.7	1.0034	Slope	0.995269
			Intercept	1.096609

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

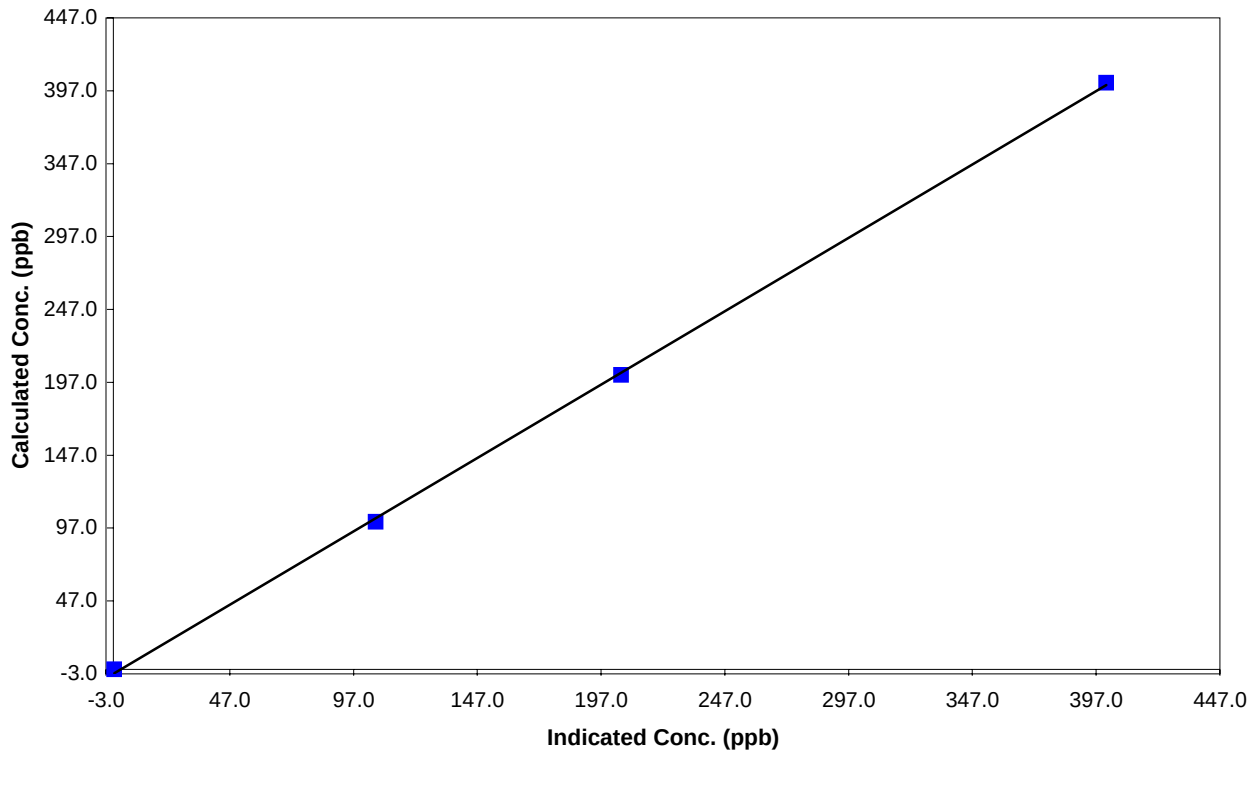
Station Information

Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:30	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
402.5	401.2	1.0032	Correlation Coefficient	0.999797
201.9	205.1	0.9846		
101.2	105.9	0.9553	Slope	1.006883
			Intercept	-2.962987

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

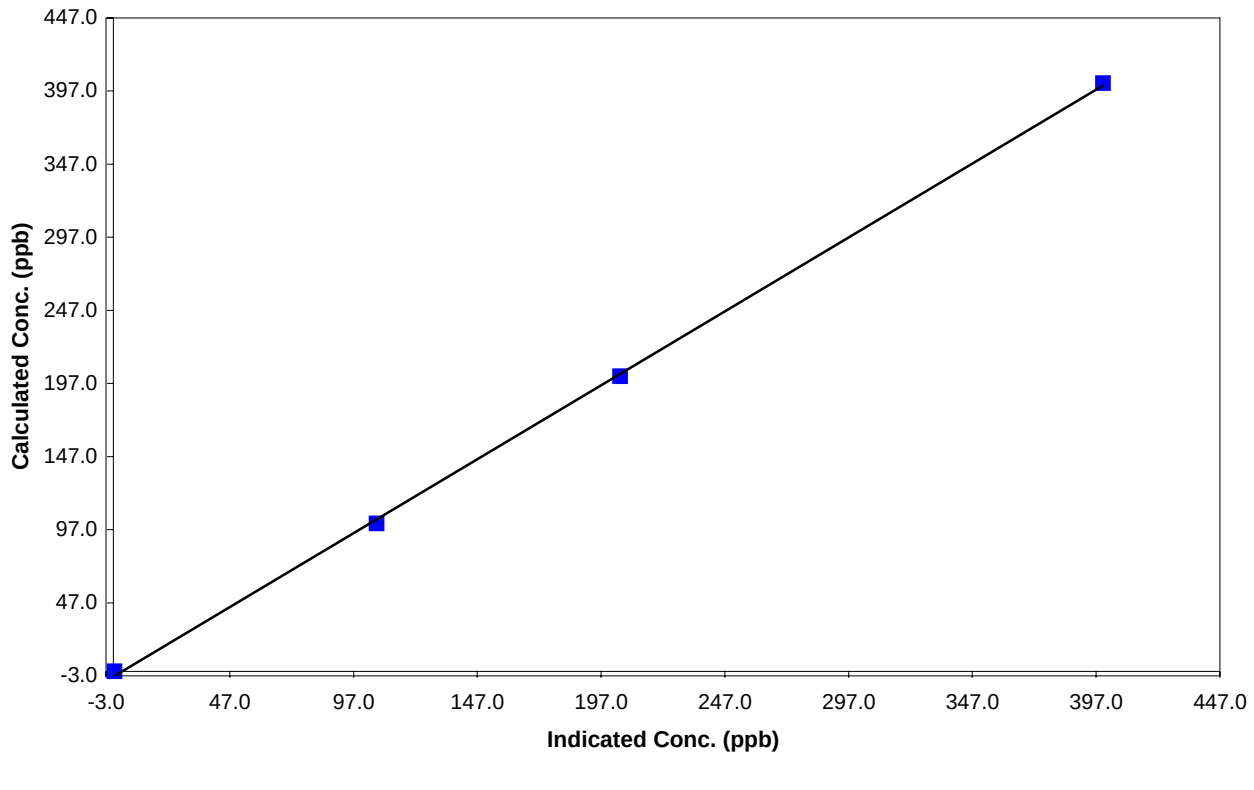
Station Information

Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:30	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

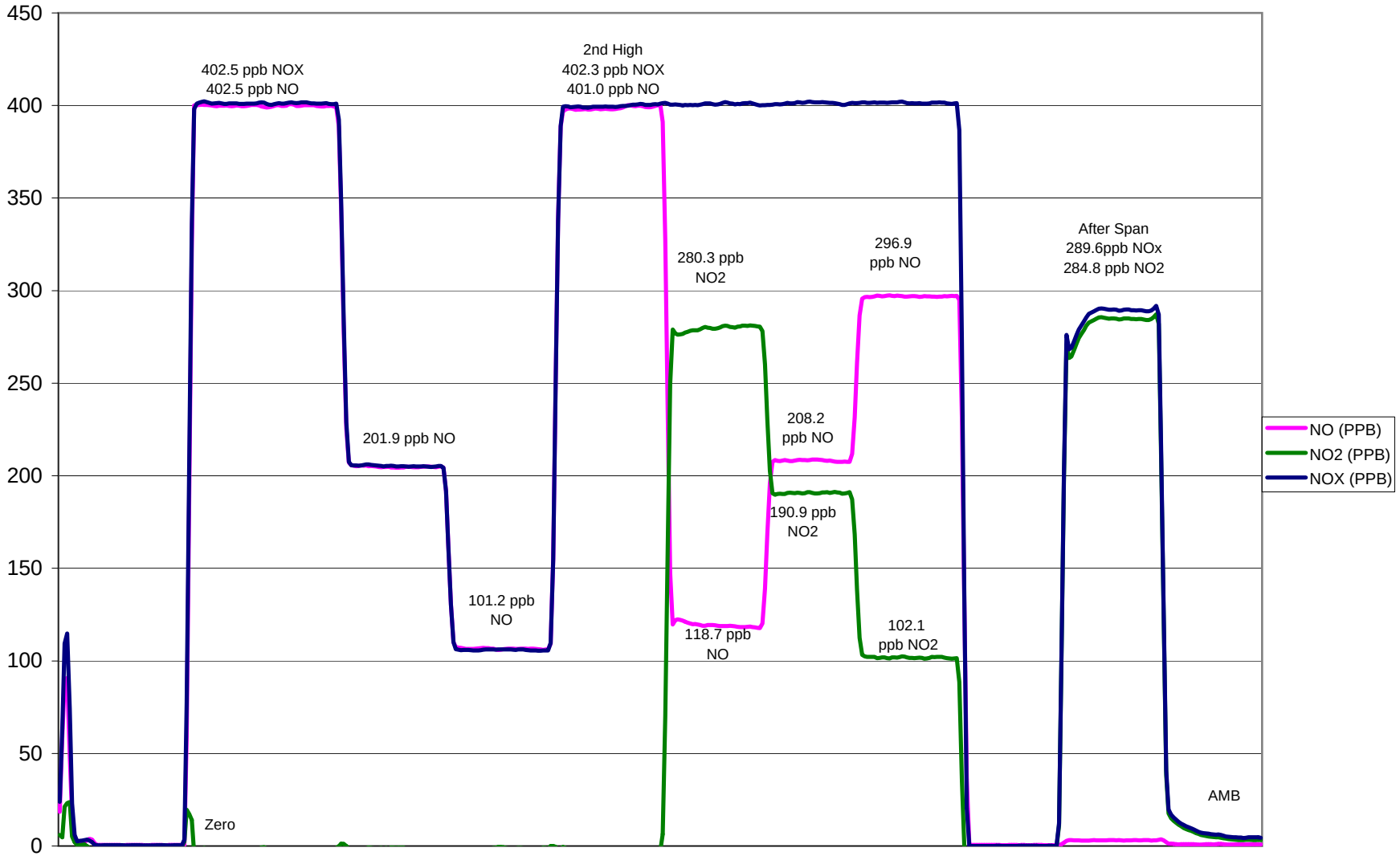
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A		
402.5	399.8	1.0065	Correlation Coefficient	0.999748
201.9	204.7	0.9865		
101.2	106.4	0.9510	Slope	1.011265
			Intercept	-3.479726

NO Calibration Curve



Bonanza NO_X Calibration



September 2, 2010

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	12:00	Station Location	Rover - Bonanza

Reason: [Routine] [Install] [Removal] remove [Other:]

Start Time (MST)	12:05	End Time (MST)	14:25
Barometric Pressure	0.927 atm	Station Temperature	15.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0-5	DACS channel #	7
	Before		After
Calculated slope	0.993292	Calculated slope	0.990502
Calculated intercept	-2.146401	Calculated intercept	-0.557857
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-13.7	ppb	-13.7	ppb
Span	1.460		1.460	
Cell A intensity	74184	Hz	73572	Hz
Cell B intensity	90203	Hz	89437	Hz
Pressure	697.50	in Hg	697.30	in Hg
CellA Flow	0.720	ccm	0.720	ccm
Cell B Flow	0.686	cmm	0.686	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.1	N/A
4990	0.30	280.3	283.5	0.9887
4990	0.20	190.9	192.8	0.9900
4990	0.10	102.1	104.6	0.9759
4990	0.00	0.0	0.1	As found zero
4990	0.30	280.3	283.5	As found span
			Average Correction Factor	0.9849

Calculated value of As Found Response: 313.7 ppm Percent Change of As Found: 11.9%

	before calibration		after calibration	
Auto zero	2.1	ppb	-0.2	ppb
Auto span	297.1	ppb	291.6	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

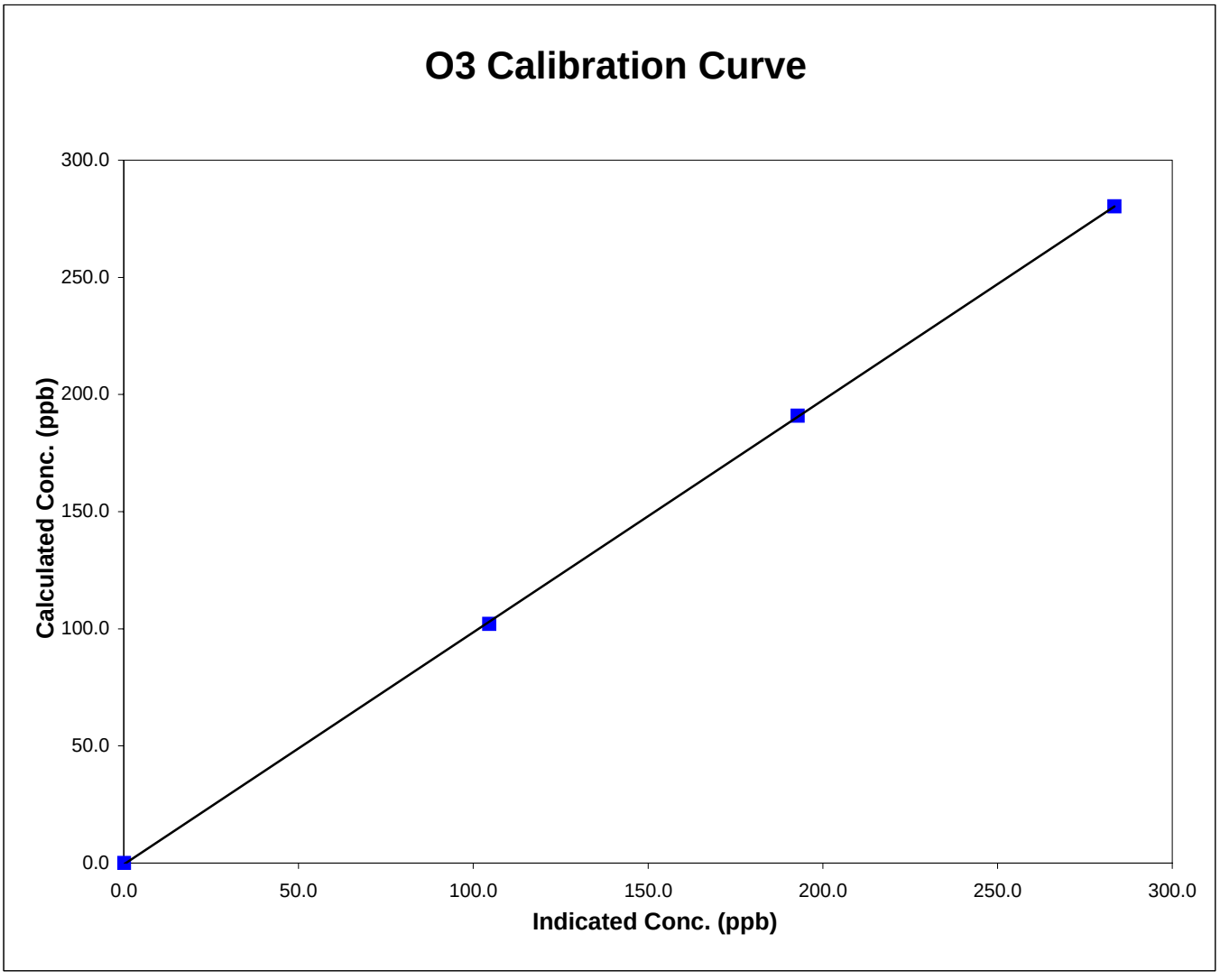
FOCUS AIR QUALITY MONITORING

Station Information

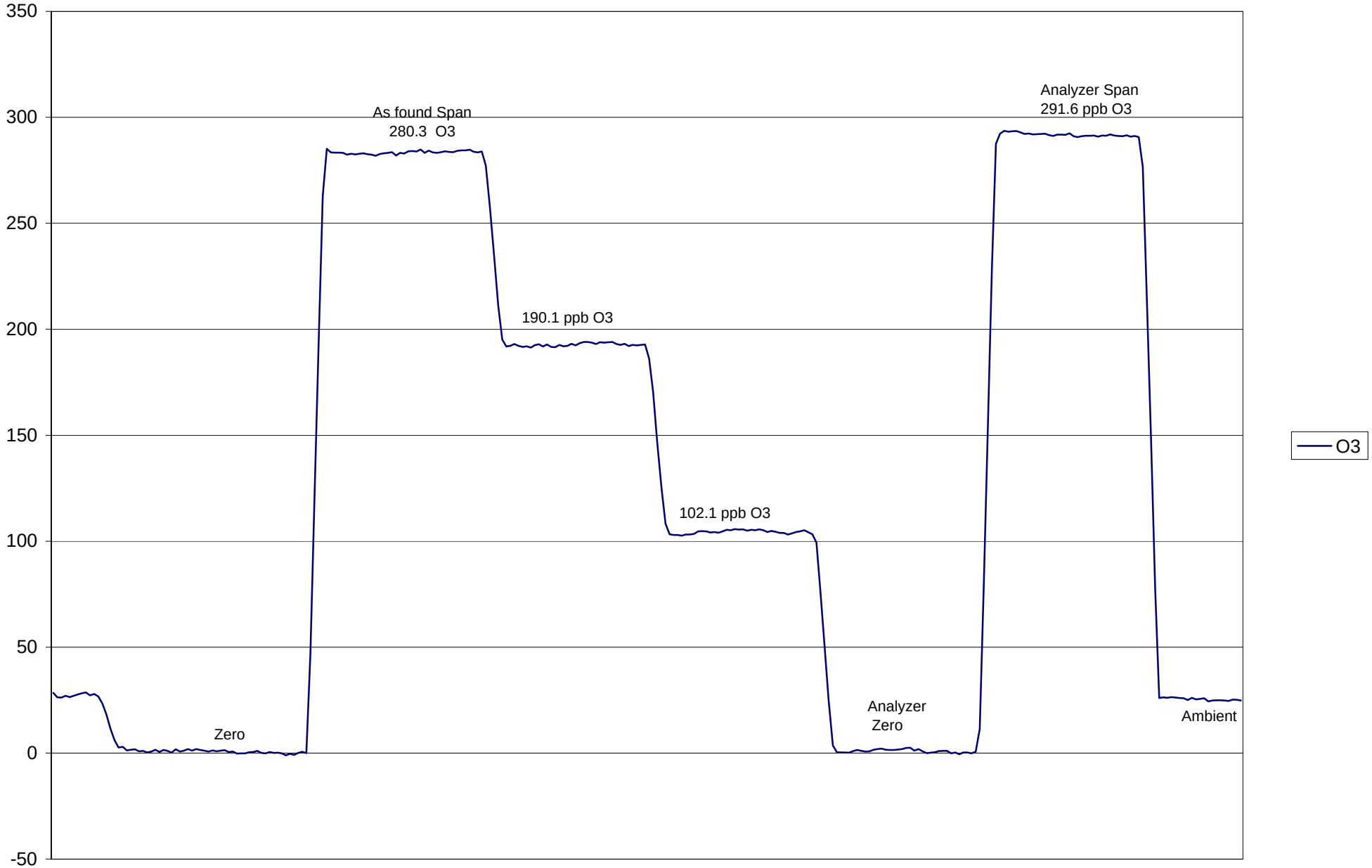
Calibration Date	September 2, 2010	Previous Calibration	August 10, 2010
Station Number	0.5	Station Location	Rover - Bonanza
Start Time (MST)	12:05	End Time (MST)	14:25
Analyzer make/model	TEI Model 49C	Analyzer serial #	609-716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
280.3	283.5	0.9887	Correlation Coefficient	0.999968
190.9	192.8	0.9900		
102.1	104.6	0.9759	Slope	0.990502
			Intercept	-0.557857



Bonanza O_3 Calibration



September 2, 2010

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 7, 2010	Previous Calibration	August 7, 2010
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:27	End Time (MST)	14:52
Barometric Pressure	702.00 mm	Station Temperature	14.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	51.5 ppm	Cal Gas Cert Date	7/23/2010
Gas Cert Reference	SGAL3245		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.004247	Calculated slope	1.009661
Calculated intercept	-2.555537	Calculated intercept	-2.980186
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	24		25	
Coefficient	0.851		0.851	
UV Lamp Voltage	933	LPM	930	LPM
Chamber Temp	44.1	V	44.2	V
Perm Gas Temp	35	C	35	C
Pressure	613.9	in Hg	613.2	in Hg
Sample Flow	0.470	LPM	0.470	LPM
Lamp Intensity	47415	Hz	47664	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4991	0.00	0.0	-0.1	N/A
4991	39.85	407.9	405.1	1.0069
4991	19.89	204.4	207.6	0.9845
4991	9.94	102.4	107.0	0.9568
4989	0.00	0.0	-0.1	As found zero
4989	39.88	408.4	405.1	As found span
			Average Correction Factor	0.9827

Calculated value of As Found Response: 404.395 ppm Percent Change of As Found: 1.0%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	155.5	ppm	155.3	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

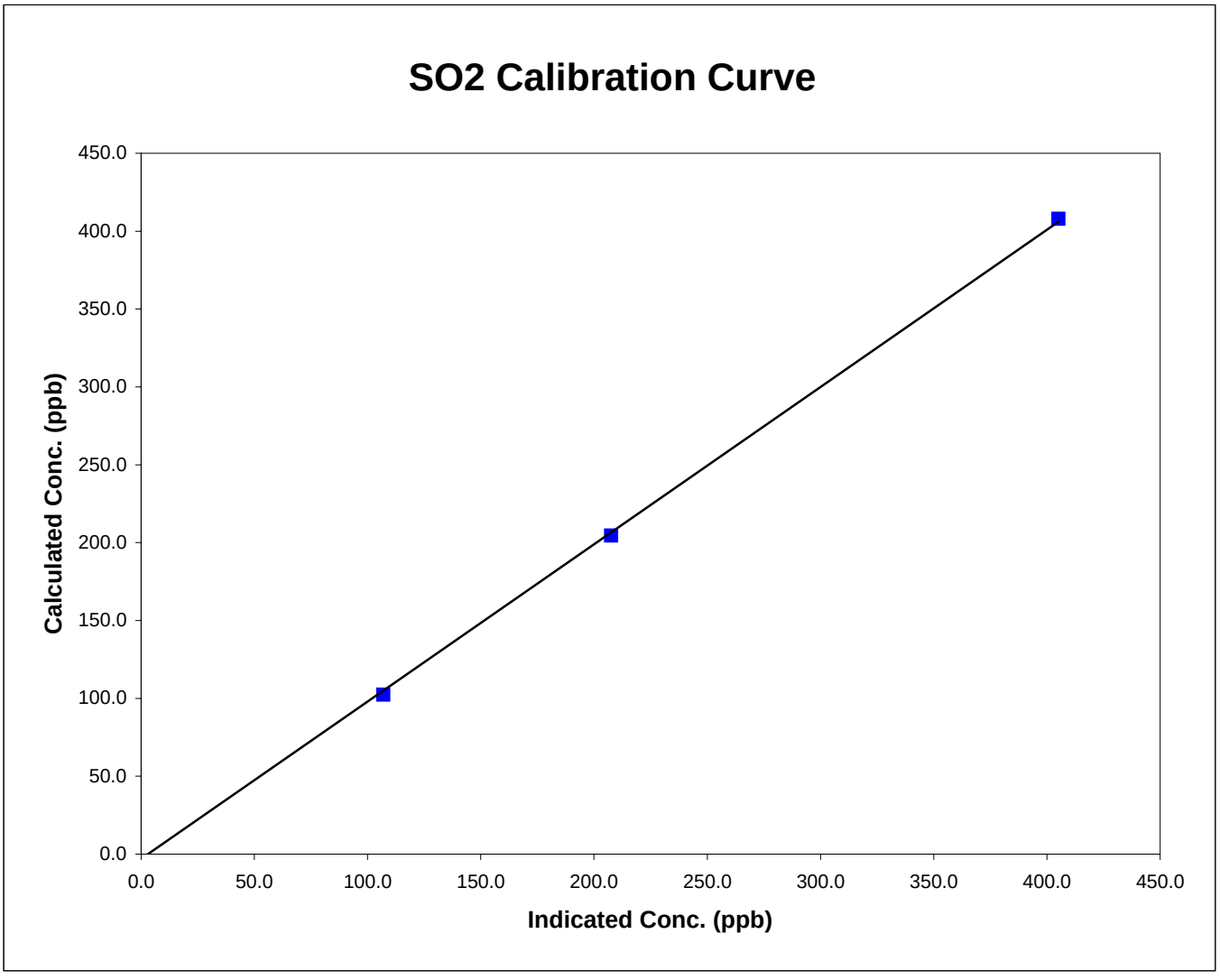
FOCUS AIR QUALITY MONITORING

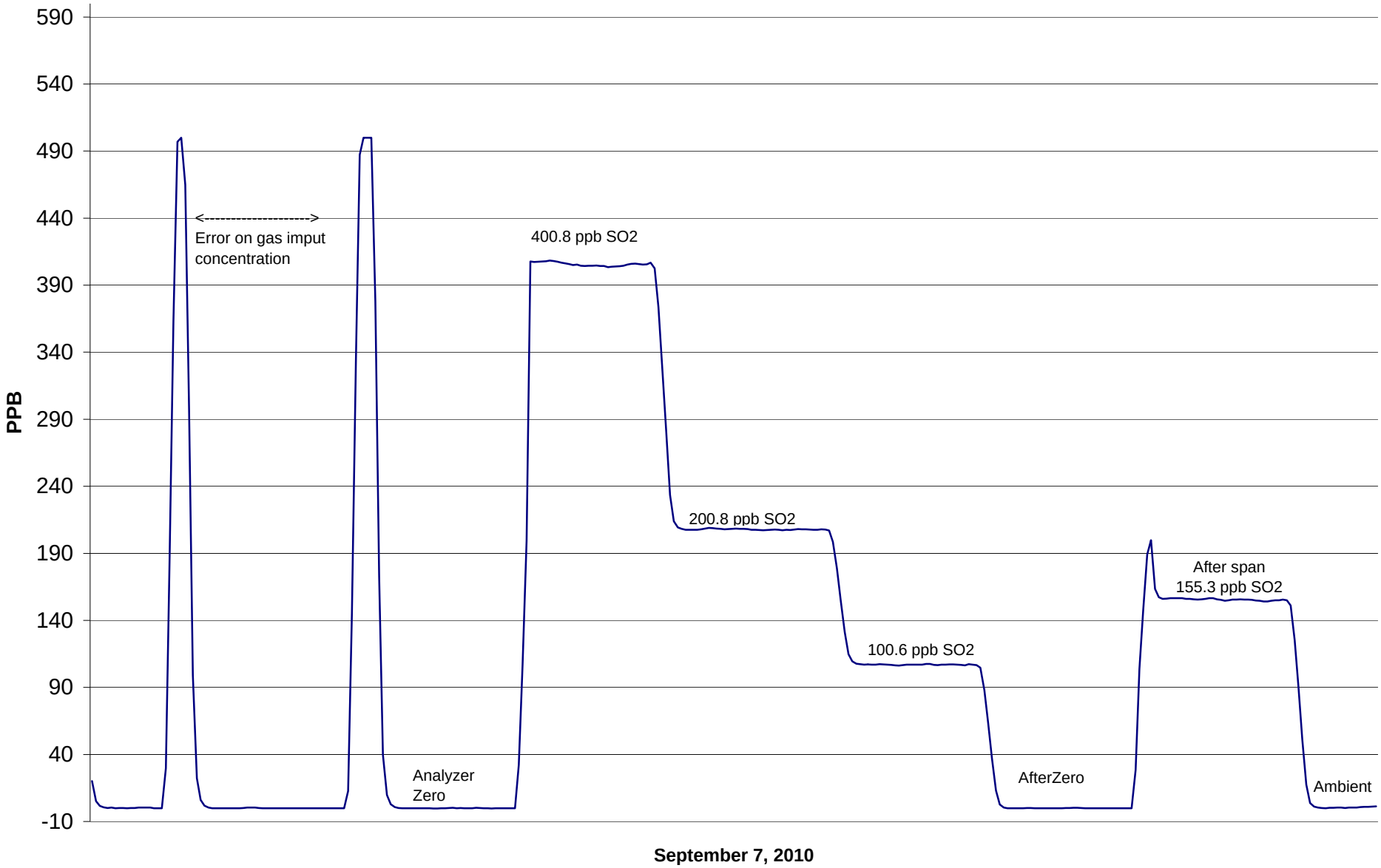
Station Information

Calibration Date	September 7, 2010	Previous Calibration	August 7, 2010
Station Number	6	Station Location	Valleyview
Start Time (MST)	11:27	End Time (MST)	14:42
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
407.9	405.1	1.0069	Correlation Coefficient	0.999725
204.4	207.6	0.9845		
102.4	107.0	0.9568	Slope	1.009661
			Intercept	-2.980186




Valleyview SO2 Calibration
590
540
490
440
390
340
290
240
190
140
90
40
-10
PPB
<---------->
Error on gas imput concentration
400.8 ppb SO2
200.8 ppb SO2
100.6 ppb SO2
After span 155.3 ppb SO2
Analyzer Zero
AfterZero
Ambient
September 7, 2010

Calibration Report

Parameter **H2S**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	September 7, 2010	Previous Calibration	August 7, 2010
Station Number	5	Station Location	Valleyview

Reason: **Routine** | Install | Removal | Other:

Start Time (MST)	10:00	End Time (MST)	12:41
Barometric Pressure	702.00 mm	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	5.15 ppm	Cal Gas Expiry Date	4/4/2009
Gas Cert Reference	ALM013295		
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 10 volt	DACS channel #	9
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.018204	Calculated slope	1.015884
Calculated intercept	-0.123175	Calculated intercept	-0.379369

Analyzer make	TEI Model 43i - APSCB		Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	4.7	ppb	4.8	ppb
Coefficient	1.056		1.056	
Lamp Voltage	786	V	783	V
Chamber Temp	45.2	c	45.2	c
Perm Oven Temp	45.00	c	45.01	c
Pressure	659	mm Hg	656	mm Hg
Sample Flow	.313	ccm	.312	ccm
Lamp Intensity	92.0	%	92.0	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.1	N/A
4988	79.75	81.0	80.1	1.0120
4988	39.83	40.8	40.6	1.0047
4988	9.93	10.2	10.7	0.9584
4989	0.00	0.0	0.1	As found zero
4989	79.75	81.0	80.1	As found span
			Average Correction Factor	0.9917

Calculated value of As Found Response: 81.28 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	70.6	ppm	73.9	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PASZA**

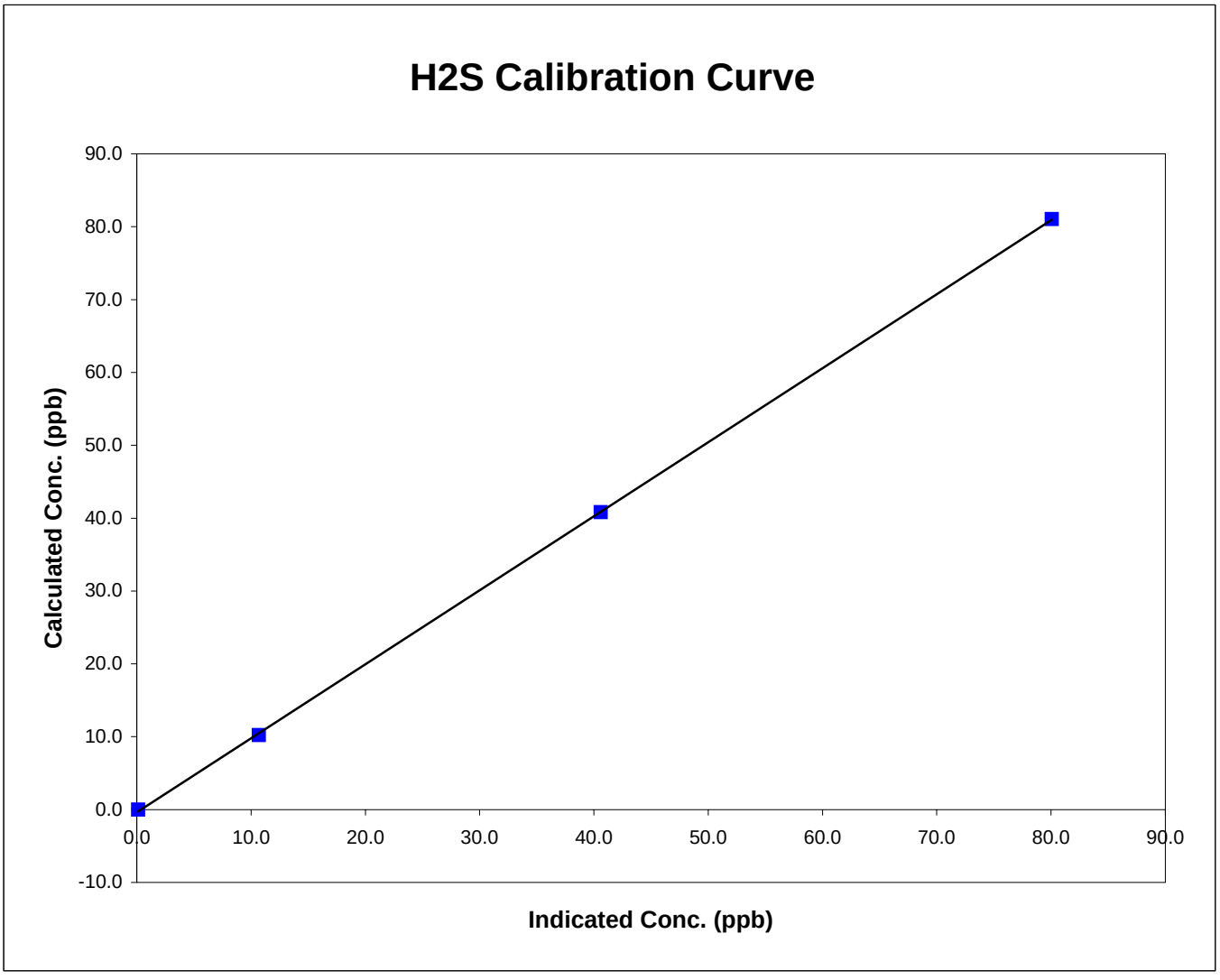
FOCUS AIR QUALITY MONITORING

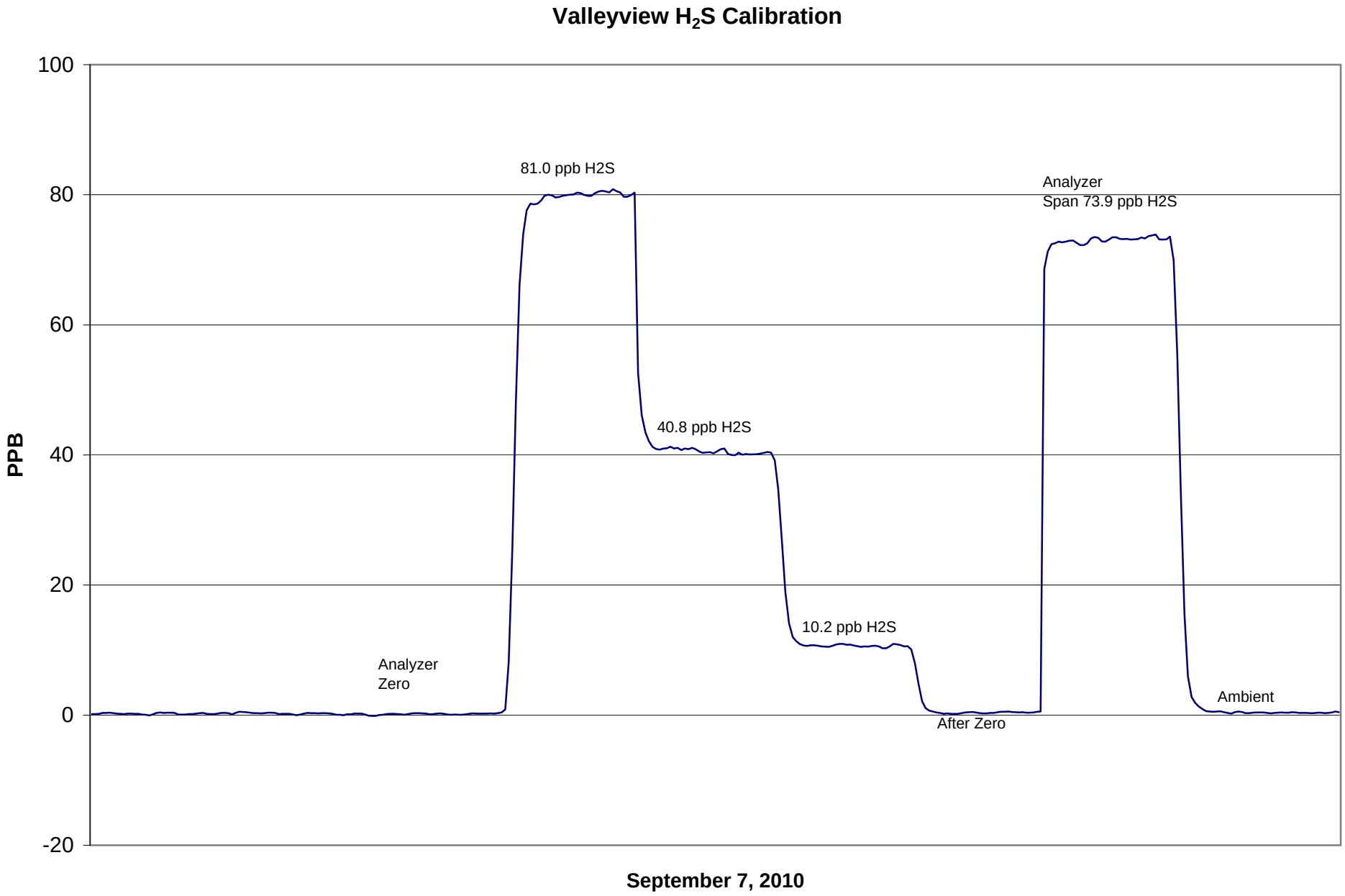
Station Information

Calibration Date	September 7, 2010	Previous Calibration	August 7, 2010
Station Number	5	Station Location	Valleyview
Start Time (MST)	10:00	End Time (MST)	12:41
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
81.0	80.1	1.0120	Correlation Coefficient	0.999969
40.8	40.6	1.0047		
10.2	10.7	0.9584	Slope	1.015884
			Intercept	-0.379369




Valleyview H2S Calibration
100
80
60
40
20
0
-20
PPB
81.0 ppb H2S
40.8 ppb H2S
10.2 ppb H2S
Analyzer
Zero
Analyzer
Span 73.9 ppb H2S
After Zero
Ambient
September 7, 2010