Peace AirShed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
October 2010

Operations and Reporting

FOCUS
AIR QUALITY MONITORING

PASZA
Peace AirShed Zone Association

P.O. Box 21135
Grande Prairie, AB
T8V 6W7
Phone: (780) 539-2298

November 29, 2010

Alberta Environment
11th Floor, Oxbridge Place
9820-106 Street
Edmonton Alberta T6B 2X3

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

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

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 thirty-one (31) 1-hour exceedences of the AAAQG and four (4) 24-hour exceedences of the AAAQO:
  - **Oct.6 16:00 89 µg/m^3 AENV Reference #240880**
  - **Oct.6 17:00 94 µg/m^3 AENV Reference #240880**
  - **Oct.6 18:00 87 µg/m^3 AENV Reference #240880**
  - **Oct.6 19:00 158 µg/m^3 AENV Reference #240880**
  - **Oct.8 13:00 125 µg/m^3 AENV Reference #240959**
  - **Oct.10 12:00 180 µg/m^3 AENV Reference #240999**
  - **Oct.10 13:00 391 µg/m^3 AENV Reference #240999**
  - **Oct.10 14:00 418 µg/m^3 AENV Reference #240999**
  - **Oct.10 15:00 274 µg/m^3 AENV Reference #240999**
  - **Oct.10 16:00 83 µg/m^3 AENV Reference #240999**
  - **Oct.11 11:00 81 µg/m^3 AENV Reference #241009**
  - **Oct.11 12:00 123 µg/m^3 AENV Reference #241009**
  - **Oct.14 13:00 153µg/m^3 AENV Reference #241111**
  - **Oct.14 14:00 188 µg/m^3 AENV Reference #241111**
  - **Oct.15 08:00 95 µg/m^3 AENV Reference #241152**
  - **Oct.15 09:00 120 µg/m^3 AENV Reference #241152**
  - **Oct.15 10:00 235 µg/m^3 AENV Reference #241152**

- **Oct.15 11:00 419 µg/m^3 AENV Reference #241152**
- **Oct.15 12:00 252 µg/m^3 AENV Reference #241152**
- **Oct.15 13:00 212 µg/m^3 AENV Reference #241152**
- **Oct.15 14:00 201 µg/m^3 AENV Reference #241152**
- **Oct.15 15:00 275 µg/m^3 AENV Reference #241152**
- **Oct.15 16:00 435 µg/m^3 AENV Reference #241152**
- **Oct.15 17:00 205 µg/m^3 AENV Reference #241152**
- **Oct.17 11:00 181 µg/m^3 AENV Reference #241209**
- **Oct.17 12:00 247 µg/m^3 AENV Reference #241209**
- **Oct.17 13:00 137 µg/m^3 AENV Reference #241209**
- **Oct.17 14:00 81 µg/m^3 AENV Reference #241209**
- **Oct.18 12:00 121 µg/m^3 AENV Reference #240650**
- **Oct.19 12:00 199 µg/m^3 AENV Reference #241274**
- **Oct.19 13:00 137 µg/m^3 AENV Reference #241274**
- **Oct.10 - 24-hour 62.8 µg/m^3 AENV Reference #241004**
- **Oct.15 - 24-hour 110.9 µg/m^3 AENV Reference #241152**
- **Oct.17 - 24-hour 43.3 µg/m^3 AENV Reference #241209**
- **Oct.19 - 24-hour 30.1 µg/m^3 AENV Reference #241274**

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

Smoky Heights Station:

- The measured ambient air quality was within the AAAQO for the Smoky Heights station, with the exception of the $PM_{2.5}$ which had three (3) 1-hour exceedences of the AAAQG:
  - **Oct.9 18:00 329 µg/m^3 AENV Reference #240992**
  - **Oct.19 19:00 163 µg/m^3 AENV Reference #241294**
  - **Oct.19 20:00 182 µg/m^3 AENV Reference #241294**
- All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of October.

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 October.

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 October.

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 October.

Passive Monitoring - 43 Stations throughout the PASZA zone:

There were four duplicate sites sampled in the month of October: Gordondale, Poplar, Flyingshot, and Jean Cote. The O_3 sample at Silver Valley was reported damaged by the lab; therefore there

are no results for said sample. 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 0.5 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.5 ppb to 7.5 ppb, with a mean of 1.2 ppb.
- Monthly average concentrations for O_3 passives ranged from 14.5 ppb to 29.4 ppb, with a mean of 21.2 ppb.

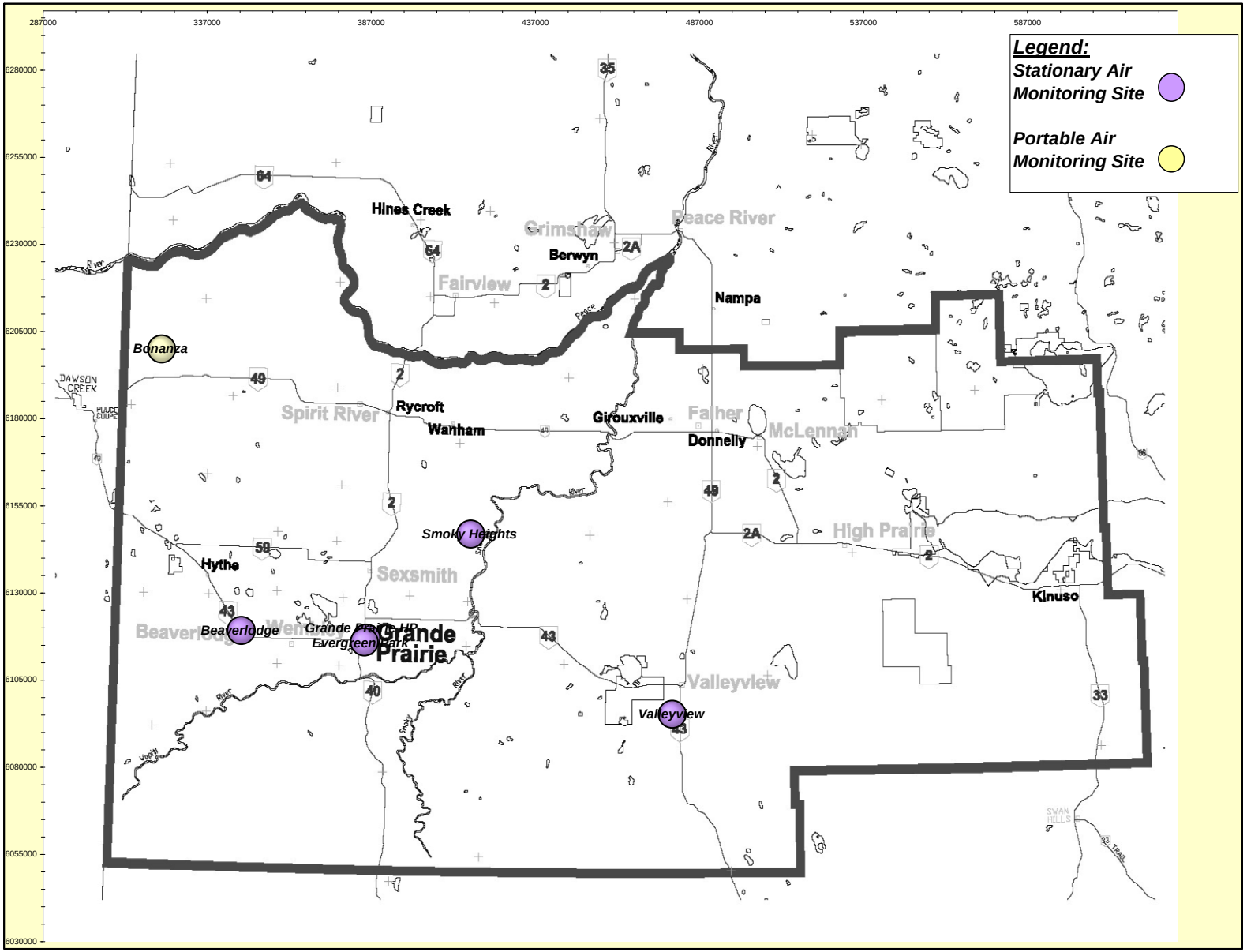
If you have any questions or concerns, please contact Shelly Pruden, PASZA Program Manager at 780.833.4343 or 780.882.4071.

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

Oct-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	0.3	0	0	2.5	Oct-01 09:00	0.9	Oct-01	100.0%
SO_2 (ppb)	172	57	Evergreen Park	0.4	0	0	9.8	Oct-15 10:00	1.8	Oct-15	98.3%
SO_2 (ppb)	172	57	Smoky Heights	0.4	0	0	5.0	Oct-05 01:00	1.2	Oct-05	99.3%
SO_2 (ppb)	172	57	Beaverlodge	0.2	0	0	1.5	Oct-08 23:00	0.5	Oct-01	99.3%
SO_2 (ppb)	172	57	Portable-Bonanza	0.3	0	0	1.9	Oct-01 10:00	1.1	Oct-01	100.0%
SO_2 (ppb)	172	57	Valleyview	0.9	0	0	33.1	Oct-15 20:00	6.6	Oct-15	100.0%
NO (ppb)			Henry Pirker	5.2	0	0	106.9	Oct-20 09:00	31.9	Oct-28	100.0%
NO_2 (ppb)	212	106	Henry Pirker	9.1	0	0	48.0	Oct-18 09:00	17.3	Oct-30	100.0%
NO_X (ppb)			Henry Pirker	14.3	0	0	140.0	Oct-18 09:00	43.3	Oct-28	100.0%
NO (ppb)			Beaverlodge	0.4	0	0	8.0	Oct-28 19:00	1.9	Oct-28	99.3%
NO_2 (ppb)	212	106	Beaverlodge	3.0	0	0	17.9	Oct-28 19:00	6.3	Oct-20	99.3%
NO_X (ppb)			Beaverlodge	3.5	0	0	26.4	Oct-28 19:00	8.2	Oct-28	99.3%
NO (ppb)			Portable-Bonanza	0.7	0	0	17.8	Oct-07 07:00	2.8	Oct-28	100.0%
NO_2 (ppb)	212	106	Portable-Bonanza	2.5	0	0	11.7	Oct-07 08:00	5.3	Oct-01	100.0%
NO_X (ppb)			Portable-Bonanza	3.2	0	0	27.1	Oct-07 07:00	7.4	Oct-28	100.0%
O_3 (ppb)	82		Henry Pirker	19.9	0	-	44.4	Oct-17 15:00	33.3	Oct-10	100.0%
O_3 (ppb) - 8-hr			Henry Pirker		0				42.2	Oct-17	
O_3 (ppb)	82		Beaverlodge	25.6	0	-	44.5	Oct-17 15:00	36.7	Oct-17	99.3%
O_3 (ppb) - 8-hr			Beaverlodge		0				42.6	Oct-17	
O_3 (ppb)	82		Portable-Bonanza	24.1	0	-	43.1	Oct-08 16:00	33.9	Oct-12	100.0%
O_3 (ppb) - 8-hr			Portable-Bonanza		0				39.9	Oct-08	
CO (ppm)	13		Henry Pirker	0.16	0	-	1.2	Oct-28 07:00	0.4	Oct-28	100.0%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.6	Oct-29	
THC (ppm)			Henry Pirker	2.06	-	-	3.0	Oct-29 10:00	2.3	Oct-29	100.0%
TRS (ppb)			Henry Pirker	0.3	-	-	2.7	Oct-29 09:00	0.6	Oct-29	100.0%
TRS (ppb)			Evergreen Park	0.5	-	-	2.3	Oct-29 09:00	0.7	Oct-07	98.3%
TRS (ppb)			Smoky Heights	0.3	-	-	0.7	Oct-27 22:00	0.4	Oct-17	99.3%
TRS (ppb)			Portable-Bonanza	0.4	-	-	2.1	Oct-31 07:00	0.6	Oct-31	100.0%
H_2S (ppb)	10	3	Valleyview	0.1	0	0	1.0	Oct-01 09:00	0.2	Oct-07	100.0%

PASZA Monthly Continuous Data Summary – continued

Oct-2010	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
PM2.5 (µg/m3)	80	30	Henry Pirker	6.8	0	0	33.4	Oct-01 22:00	11.4	Oct-01	98.0%
PM2.5 (µg/m3)	80	30	Evergreen Park	18.3	**31**	**4**	434.7	Oct-15 16:00	110.9	Oct-15	96.4%
PM2.5 (µg/m3)	80	30	Smoky Heights	4.9	**3**	0	329.2	Oct-09 18:00	25.9	Oct-19	99.3%
PM2.5 (µg/m3)	80	30	Beaverlodge	7.3	0	0	19.1	Oct-24 08:00	11.6	Oct-01	98.9%
RH (%)			Henry Pirker	62.1	-	-	91.6	Oct-21 10:00	88.4	Oct-23	100.0%
RH (%)			Evergreen Park	62.6	-	-	98.5	Oct-21 10:00	96.9	Oct-23	98.3%
RH (%)			Beaverlodge	62.9	-	-	96.6	Oct-21 06:00	93.8	Oct-23	99.3%
RH (%)			Valleyview	61.1	-	-	98.7	Oct-28 14:00	95.6	Oct-28	100.0%
SR (W/m^2)			Henry Pirker	62.9	-	-	515.1	Oct-03 13:00	123.9	Oct-01	100.0%
Temp (°C)			Henry Pirker	6.5	-	-	23.7	Oct-07 17:00	15.0	Oct-09	100.0%
Temp (°C)			Evergreen Park	7.1	-	-	24.3	Oct-07 17:00	15.5	Oct-09	98.3%
Temp (°C)			Smoky Heights	6.2	-	-	23.5	Oct-07 17:00	14.7	Oct-07	99.5%
Temp (°C)			Beaverlodge	6.7	-	-	22.4	Oct-06 14:00	15.0	Oct-07	99.3%
Temp (°C)			Portable-Bonanza	6.8	-	-	24.4	Oct-07 15:00	15.2	Oct-07	100.0%
Temp (°C)			Valleyview	6.8	-	-	22.7	Oct-07 16:00	14.4	Oct-09	100.0%
WSPD s (km/hr)			Henry Pirker	9.9	-	-	46.0	Oct-10 14:00	22.7	Oct-10	98.9%
WSPD s (km/hr)			Evergreen Park	6.9	-	-	36.0	Oct-10 14:00	18.3	Oct-10	98.3%
WSPD s (km/hr)			Smoky Heights	14.9	-	-	59.0	Oct-10 16:00	31.2	Oct-10	94.5%
WSPD s (km/hr)			Beaverlodge	12.3	-	-	59.0	Oct-10 13:00	30.8	Oct-10	99.3%
WSPD s (km/hr)			Portable-Bonanza	15.1	-	-	56.0	Oct-10 14:00	33.9	Oct-10	97.6%
WSPD s (km/hr)			Valleyview	6.5	-	-	27.0	Oct-10 15:00	14.6	Oct-10	100.0%
WSPD v (km/hr)			Henry Pirker	3.6	-	-	45.0	Oct-10 14:00	21.7	Oct-10	98.9%
WSPD v (km/hr)			Evergreen Park	3.7	-	-	36.0	Oct-10 14:00	17.9	Oct-15	98.3%
WSPD v (km/hr)			Smoky Heights	8.4	-	-	59.0	Oct-10 16:00	28.3	Oct-10	94.5%
WSPD v (km/hr)			Beaverlodge	4.6	-	-	59.0	Oct-10 13:00	26.1	Oct-10	99.3%
WSPD v (km/hr)			Portable-Bonanza	9.2	-	-	55.0	Oct-10 14:00	30.6	Oct-10	97.6%
WSPD v (km/hr)			Valleyview	2.4	-	-	27.0	Oct-10 15:00	12.8	Oct-10	100.0%
WDIR			Henry Pirker	WSW	-	-	-	-	-	-	98.9%
WDIR			Evergreen Park	W	-	-	-	-	-	-	98.3%
WDIR			Smoky Heights	WSW	-	-	-	-	-	-	94.5%
WDIR			Beaverlodge	WSW	-	-	-	-	-	-	99.3%
WDIR			Portable-Bonanza	SSW	-	-	-	-	-	-	97.6%
WDIR			Valleyview	SW	-	-	-	-	-	-	100.0%

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on October 5th (TRS, CO & THC), October 6th (SO_2, NO_X & O_3) and October 12th ($PM_{2.5}$).

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
NOx/NO/NO_2	TEI	42C	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
CO	TEI	48C	Spans drop October 13th & 14th due to cylinder pressure.
THC	TEI	51-CLT	Spans drop October 24th to 28th due to span cylinder running out – manual spans were performed to ensure analyzer stability.
TRS	TEI	45C/43C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	A total of fifteen (15) hours were flagged invalid due to baseline drift.
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	Eight (8) hours were flagged invalid due to flatlining (freezing conditions).

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on October 12th (SO_2 & TRS). A DACS/Communication error resulted in thirteen (13) hours of invalid data for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed, other than above noted DACS error.
TRS	TEI	43C	No operational issues observed, other than above noted DACS error.
$PM_{2.5}$	R&P	1400AB	One (1) hour was flagged for baseline drift. Thirteen (13) hours were flagged invalid due to loading issues caused by adverse weather conditions. Thirty-one (31) 1-hour exceedences of the AAAQG and four (4) 24-hour exceedences of the AAAQO during the month of October.
ET	Met One/Gill	083D	No operational issues observed, other than above noted DACS error.
RH	Met One/Gill		No operational issues observed, other than above noted DACS error.
WS / WD	Met One/ Gill		No operational issues observed, other than above noted DACS error.

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on October 8th (TRS & SO_2). Two power failures (October 8th & October 30th) resulted in a total of five (5) hours of invalid data for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43C	Spans were outside target from October 5th to 8th and October 11th to 13th – due to perm tube failing - perm tube was replaced on October 13th. Only other issues are the above noted power failures.
TRS	TEI	43C	No operational issues observed, other than above noted power failures.
$PM_{2.5}$	R&P	1400AB	No operational issues observed, other than above noted power failures. There were three (3) 1-hour exceedences of the AAAQG during the month of October.
ET	Met One	083D	No operational issues observed, other than above noted power failures.
WS / WD	Met One	010C/020C	A total of thirty-seven (37) hours were flagged invalid due to flatlining (freezing conditions). Only other issues are the above noted power failures.

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on October 7th (SO_2, O_3 & NO_X). One (1) hour was attributed to a DACS error on October 1st. A power failure caused a computer error on October 24th – 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 DACS/computer errors.
NOx/NO/NO_2	TEI	42C	No operational issues observed other than above noted DACS/computer errors.
O_3	TEI	49C	No operational issues observed other than above noted DACS/computer errors.
$PM_{2.5}$	R&P	1400AB	No operational issues observed other than above noted DACS/computer errors. An additional three (3) hours were flagged invalid due to power spikes.
ET	n/a	n/a	No operational issues observed other than above noted DACS/computer errors.
RH	n/a	n/a	No operational issues observed other than above noted DACS/computer errors.
WS / WD	Blue Sky	857	No operational issues observed other than above noted DACS/computer errors.

PASZA – Bonanza (Portable) Station

General Station Issues

Routine monthly calibrations were performed on October 14th (SO_2, TRS, NO_X & O_3).

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
TRS	TEI	43C	No 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	Eighteen (18) hours were flagged invalid due to flatlining (freezing conditions).

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on October 19th (SO_2 & H_2S).

Parameter	Make	Model	Notes
SO_2	TEI	43i	Spans on October 20th & 22nd less than target range – reason unknown but suspect power bumps.
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 Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.5 ppb on Oct 1 09:00 Maximum Daily Average: 0.9 ppb on Oct 1

Minimum Value: 0 ppb on Oct 2 03:00 Minimum Daily Average: 0.0 ppb on Oct 5
Maximum Diurnal Average: 0.4 ppb at hour 9 Minimum Diurnal Average: 0.2 ppb at hour 3
Monthly Average: 0.25 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.5$ $P_{99} = 1.7$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	0	0	0	1	A	2	2	2	3	2	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0.9	2.5
2-Oct	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	0.3
3-Oct	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	2	1	1	0.4	1.6
4-Oct	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	0.7
5-Oct	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-Oct	0	0	0	0	0	A	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
7-Oct	0	0	0	0	0	A	0	1	1	1	1	0	0	1	1	2	2	1	1	1	1	0	0	0	0.6	2.0
8-Oct	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
9-Oct	0	0	0	A	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
10-Oct	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
11-Oct	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
12-Oct	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
13-Oct	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
14-Oct	0	0	0	1	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
15-Oct	0	1	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
16-Oct	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
17-Oct	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	0.2
18-Oct	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0.2	1.1
19-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0.2	0.7
20-Oct	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	1.0
21-Oct	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	2	1	0	0	0	A	0	0	0	0.4	1.9
22-Oct	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0.2	0.6
23-Oct	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0.3	1.1
24-Oct	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.6
25-Oct	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0.3	1.0
26-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
27-Oct	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
28-Oct	0	0	0	0	0	A	1	0	0	0	0	1	0	0	0	1	0	0	1	1	1	1	0	0	0.4	1.4
29-Oct	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
30-Oct	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	0.7
31-Oct	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	0.5	0.7	0.4	1.1	1.2	2.2	2.2	1.8	2.5	1.6	1.3	1.0	0.8	0.9	1.3	1.9	2.0	1.1	1.0	1.0	1.1	1.6	1.0	0.7	Diurnal Maximum	

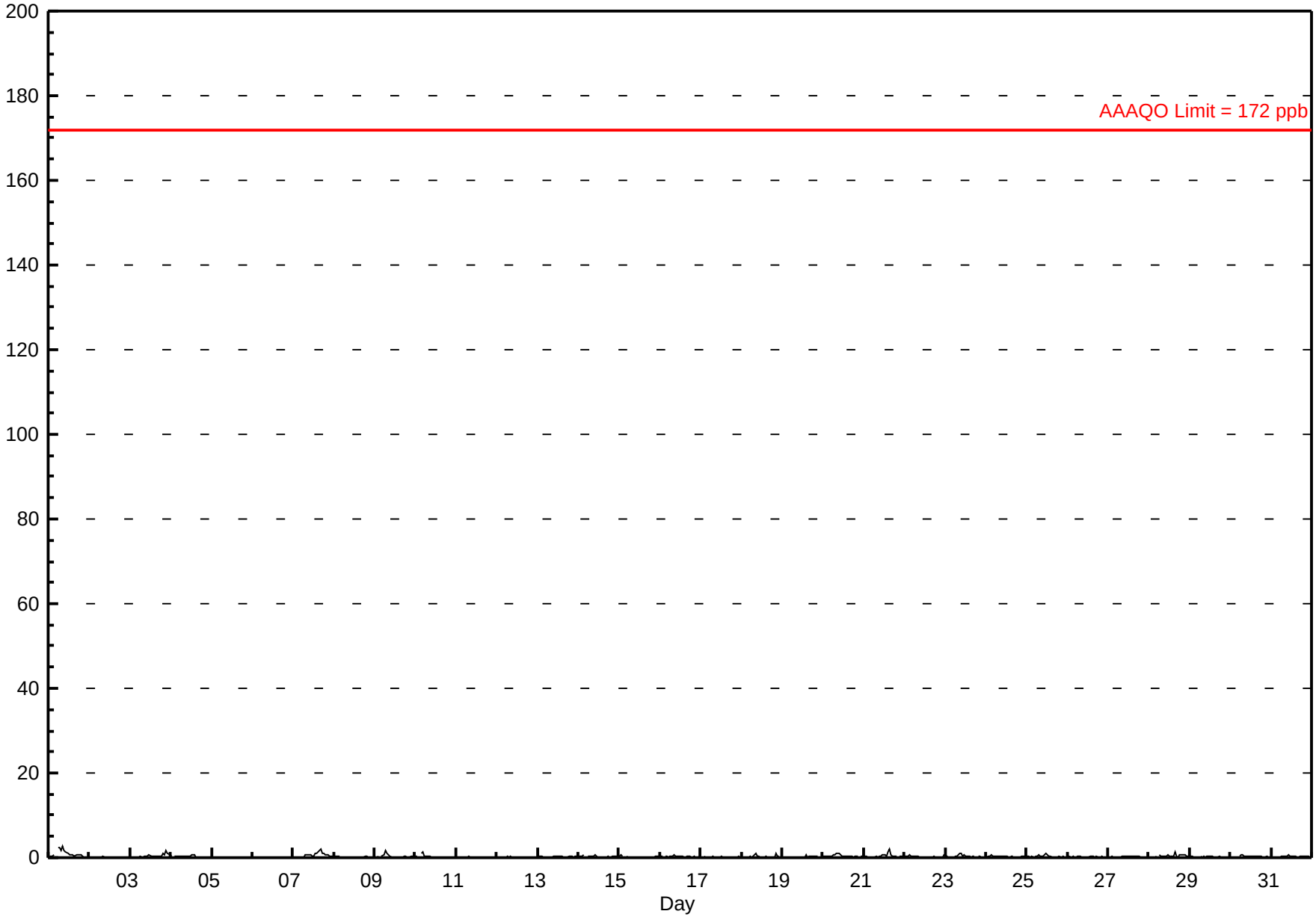
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - October 2010

Maximum Value: 4.8 ppb on Oct 21 16:00

Maximum Daily Average: 1.3 ppb on Oct 1

Minimum Value: 0 ppb on Oct 6 05:00

Minimum Daily Average: 0.2 ppb on Oct 5

Maximum Diurnal Average: 0.8 ppb at hour 9

Minimum Diurnal Average: 0.4 ppb at hour 3

Monthly Average: 0.61 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.8$ $P_{90} = 1.1$ $P_{99} = 2.7$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	1	1	1	1	A	3	3	2	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0	1.3	3.2
2-Oct	0	0	0	A	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
3-Oct	0	0	A	0	0	0	1	0	0	1	1	1	1	1	1	0	1	1	1	2	2	2	2	2	0.9	2.4
4-Oct	1	A	0	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.6	0.9
5-Oct	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	0.4
6-Oct	0	1	1	0	0	A	1	C	C	C	C	0	0	0	1	1	0	0	0	0	0	0	1	0	0.4	1.2
7-Oct	0	0	0	0	0	A	0	1	1	1	2	1	1	1	1	3	3	1	1	1	1	1	1	1	1.0	3.2
8-Oct	1	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.4	0.8
9-Oct	0	0	1	A	1	2	2	2	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0.7	2.0
10-Oct	1	1	A	2	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.4
11-Oct	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
12-Oct	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
13-Oct	0	1	1	0	0	A	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1	0.5	0.7
14-Oct	1	1	1	1	A	1	1	1	1	1	2	1	0	1	1	1	1	1	0	1	0	1	1	1	0.7	1.5
15-Oct	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.6	1.1
16-Oct	1	1	A	1	1	0	0	1	1	0	1	1	1	1	0	0	1	0	0	1	0	0	0	1	0.6	1.1
17-Oct	1	A	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0.4	0.7
18-Oct	A	0	0	0	0	1	0	1	1	1	1	0	0	0	1	0	0	0	0	0	2	1	0	A	0.7	2.4
19-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1	A	0	0.5	1.4
20-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	1	A	1	0	0.8	1.4
21-Oct	0	1	0	0	0	0	1	1	1	1	1	1	1	1	3	5	1	1	1	0	A	1	0	0	0.8	4.8
22-Oct	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0.5	1.4
23-Oct	1	1	0	0	0	0	0	1	2	2	1	1	0	0	1	0	0	1	A	1	1	0	0	0	0.7	1.8
24-Oct	0	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	A	1	0	1	0	1	1	0.6	0.8
25-Oct	1	0	0	1	0	1	1	1	1	1	1	1	1	0	0	0	A	0	0	1	0	1	0	0	0.7	1.4
26-Oct	1	0	0	1	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.8
27-Oct	1	1	0	0	0	A	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	0.9
28-Oct	0	0	0	0	0	A	1	1	1	1	1	1	1	0	1	2	0	1	1	1	1	1	1	1	0.8	1.8
29-Oct	1	1	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7
30-Oct	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	0	0	0.7	1.4
31-Oct	0	0	0	A	1	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0.6	1.2
	0.5	0.5	0.4	0.6	0.5	0.6	0.6	0.8	0.8	0.7	0.8	0.7	0.6	0.5	0.7	0.7	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	Diurnal Average	
	1.0	1.3	0.9	1.9	2.4	2.7	2.8	2.4	3.2	2.2	2.1	1.4	1.4	1.2	3.0	4.8	3.2	1.4	1.5	2.4	2.4	2.4	2.4	1.9	Diurnal Maximum	

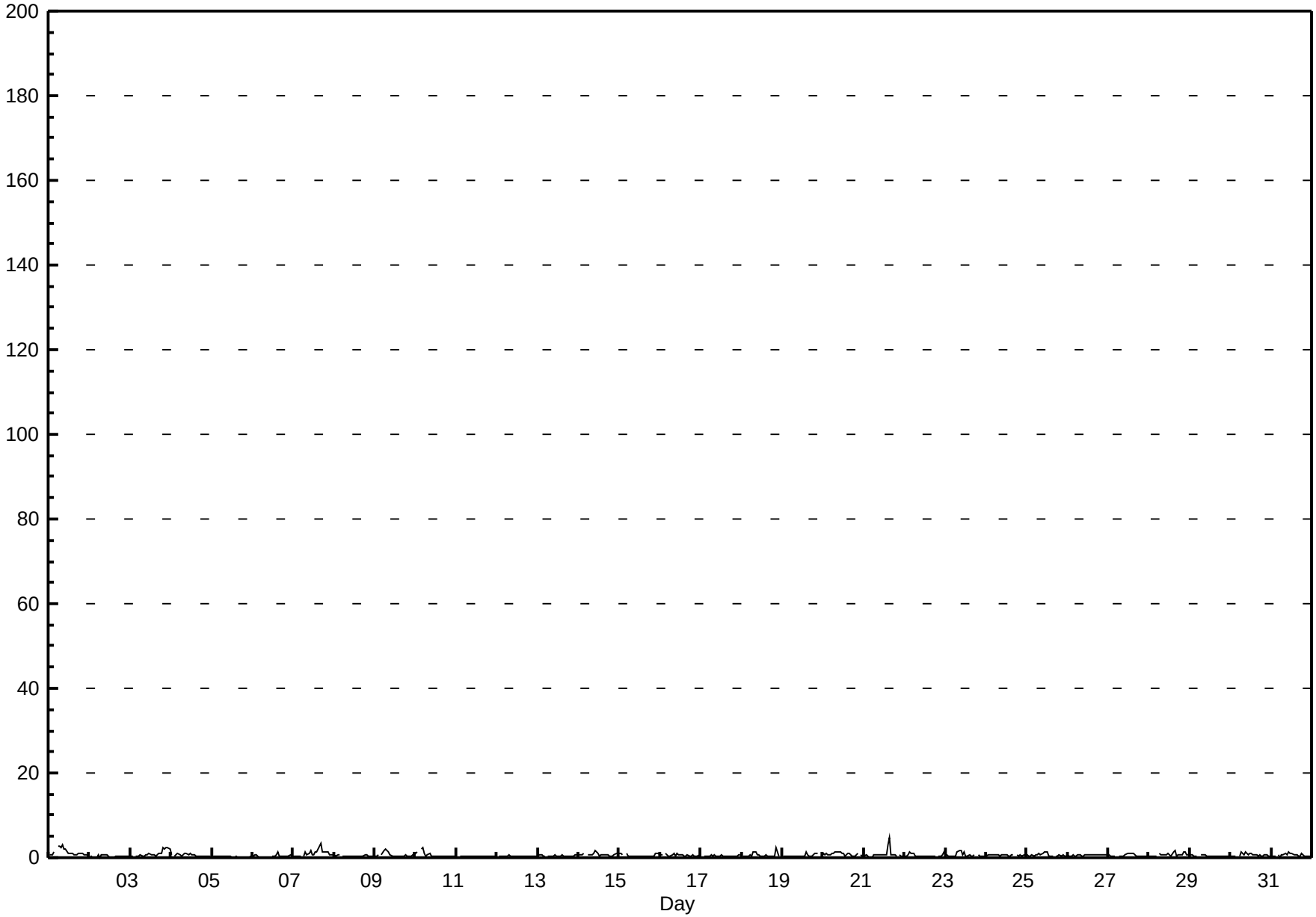
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - October 2010



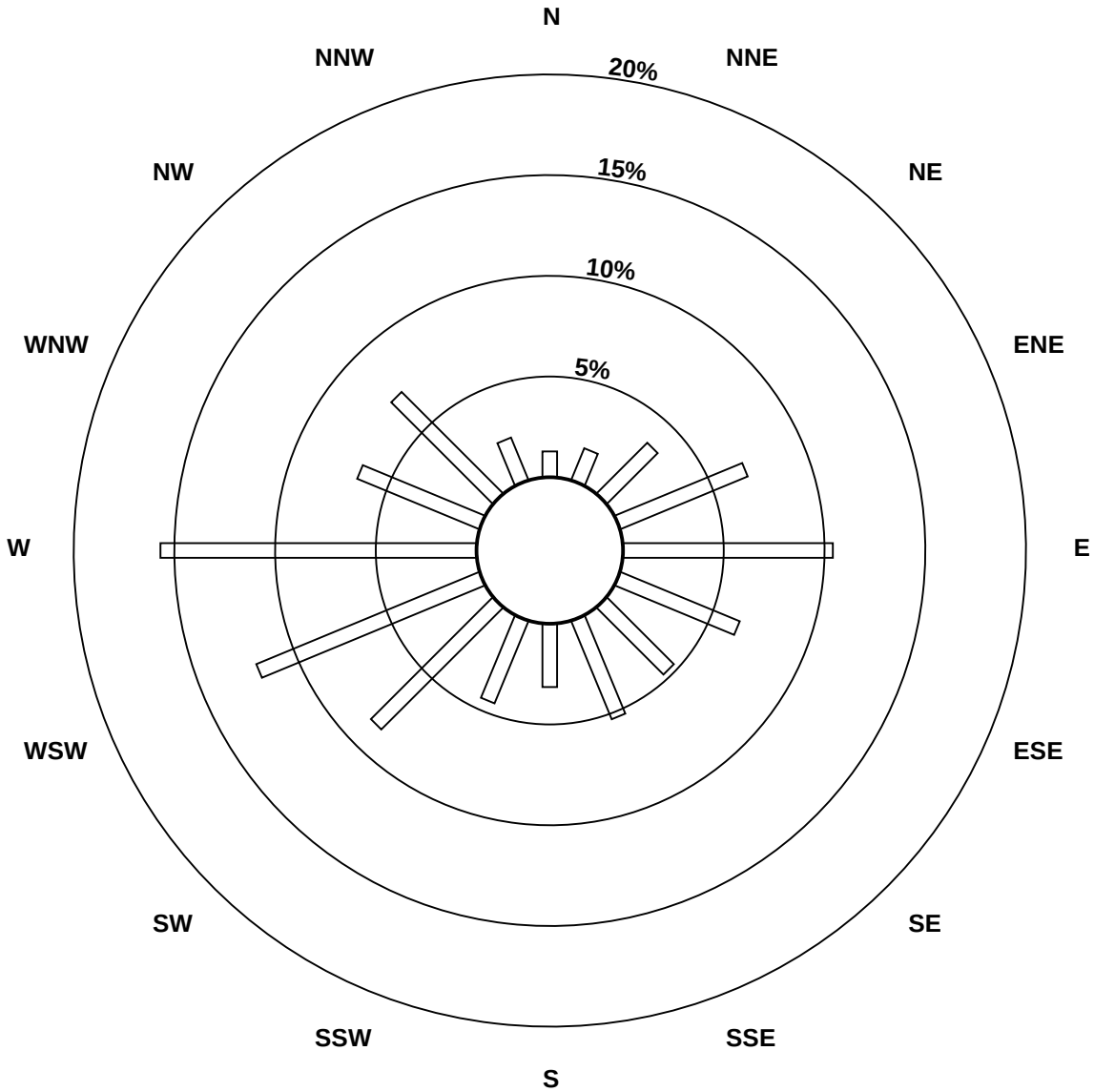
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - October 2010



Pollutant Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.7 ppb on Oct 29 09:00
Maximum Daily Average: 0.6 ppb on Oct 29

Minimum Value: 0 ppb on Oct 3 00:00
Maximum Diurnal Average: 0.4 ppb at hour 9
Monthly Average: 0.28 ppb

Minimum Daily Average: 0.2 ppb on Oct 15
Minimum Diurnal Average: 0.2 ppb at hour 16
Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.4$ $P_{99} = 0.8$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
2-Oct	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
3-Oct	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	0.3
4-Oct	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
5-Oct	A	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
6-Oct	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
7-Oct	1	0	0	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.5	1.0
8-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
9-Oct	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
10-Oct	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	0.3
11-Oct	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
12-Oct	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	0.3
13-Oct	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
14-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
15-Oct	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
16-Oct	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
17-Oct	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	0.4
18-Oct	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.8
19-Oct	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
20-Oct	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.9
21-Oct	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.6
22-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.3
23-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.3
24-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.3
25-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.3
26-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
27-Oct	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
28-Oct	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.4	0.7
29-Oct	1	1	1	1	1	A	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.7
30-Oct	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
31-Oct	1	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	0.5	0.6	0.6	0.5	0.6	0.5	0.6	1.5	2.7	1.4	0.8	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.7	0.6	0.7	0.5	0.5	Diurnal Maximum	

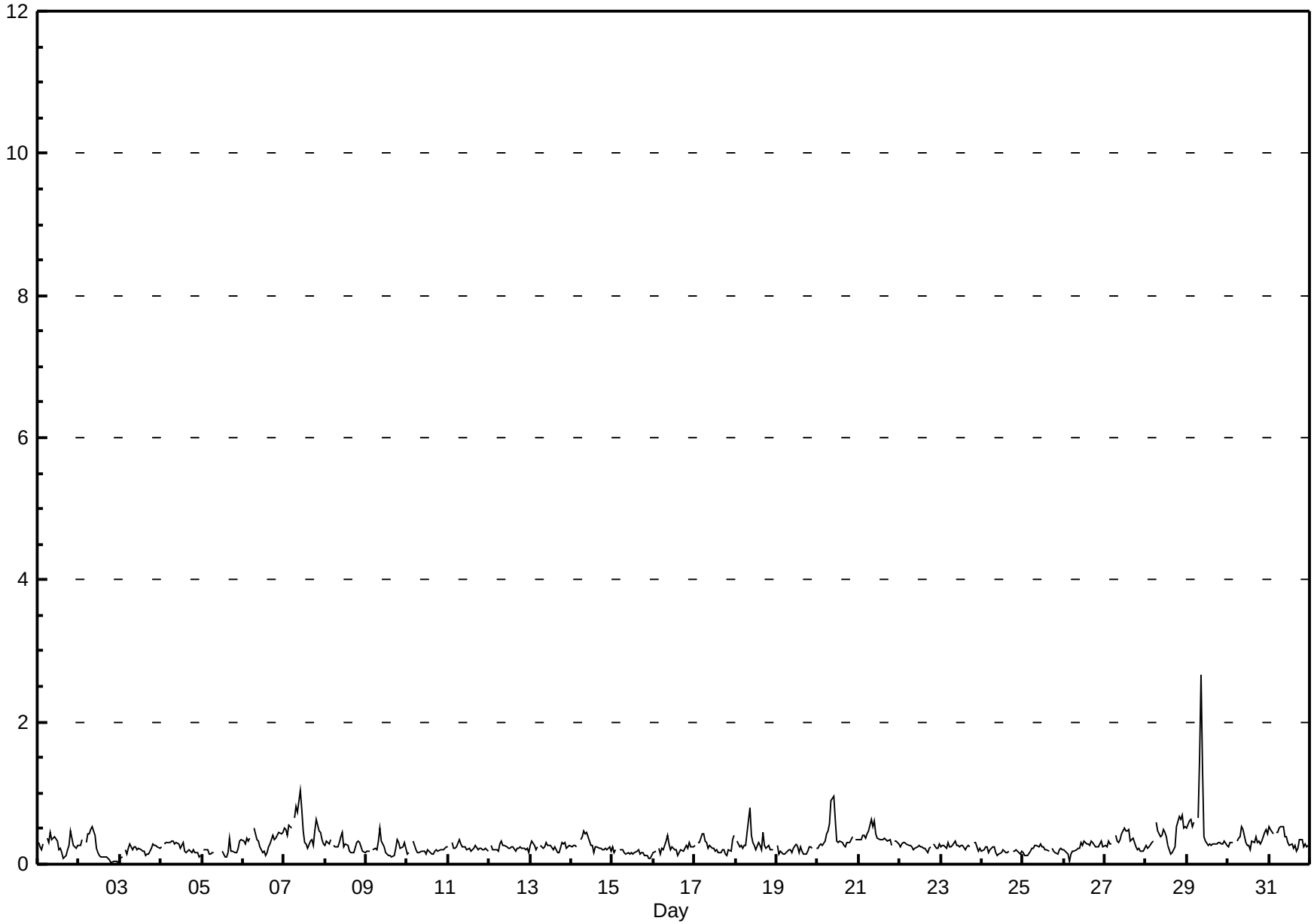
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - October 2010

Maximum Value: 3.1 ppb on Oct 29 09:00

Maximum Daily Average: 1.0 ppb on Oct 29

Minimum Value: 0 ppb on Oct 2 20:00

Minimum Daily Average: 0.5 ppb on Oct 15

Maximum Diurnal Average: 0.9 ppb at hour 9

Minimum Diurnal Average: 0.6 ppb at hour 16

Monthly Average: 0.66 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.5$ Median = 0.6 $Q_3 = 0.7$ $P_{90} = 0.8$ $P_{99} = 1.3$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0.6	0.8
2-Oct	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0.6	1.0
3-Oct	0	1	A	1	0	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	0.5	0.7
4-Oct	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	0	0	0.6	0.8
5-Oct	A	1	1	1	0	1	0	1	C	C	C	C	0	0	1	1	1	1	0	0	0	1	1	1	0.6	1.1
6-Oct	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
7-Oct	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	1.9
8-Oct	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0.7	1.1
9-Oct	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	0.6	0.9
10-Oct	1	0	A	1	1	1	1	1	0	1	0	1	1	0	1	1	1	1	0	1	0	1	1	1	0.6	0.8
11-Oct	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	0	0.6	0.8
12-Oct	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
13-Oct	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	0.8
14-Oct	1	1	1	0	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.6	1.0
15-Oct	1	1	1	A	1	1	1	1	1	1	0	1	0	1	0	0	0	1	0	0	0	0	1	0	0.5	0.7
16-Oct	0	1	A	1	1	0	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
17-Oct	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	1	1	0.6	1.0
18-Oct	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	0.7	1.3
19-Oct	1	1	0	0	0	0	1	1	1	0	1	1	1	1	1	0	0	0	0	1	1	1	A	1	0.6	0.8
20-Oct	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	2.1
21-Oct	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
22-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	0.7	0.9
23-Oct	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	0.6	0.8
24-Oct	0	1	1	1	1	1	1	1	1	0	0	0	1	1	0	0	1	A	1	1	0	1	0	0	0.5	0.6
25-Oct	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	1	1	1	1	0.6	0.7
26-Oct	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
27-Oct	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0.7	0.9
28-Oct	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
29-Oct	1	1	1	1	1	A	1	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.1
30-Oct	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	1.0
31-Oct	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	1.0
	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	Diurnal Average	
	1.0	1.0	0.9	1.0	0.9	0.8	1.2	2.8	3.1	2.3	1.5	1.1	0.8	0.9	0.9	0.7	1.1	0.9	1.0	1.1	1.3	1.1	1.0	1.0	Diurnal Maximum	

C - Calibration

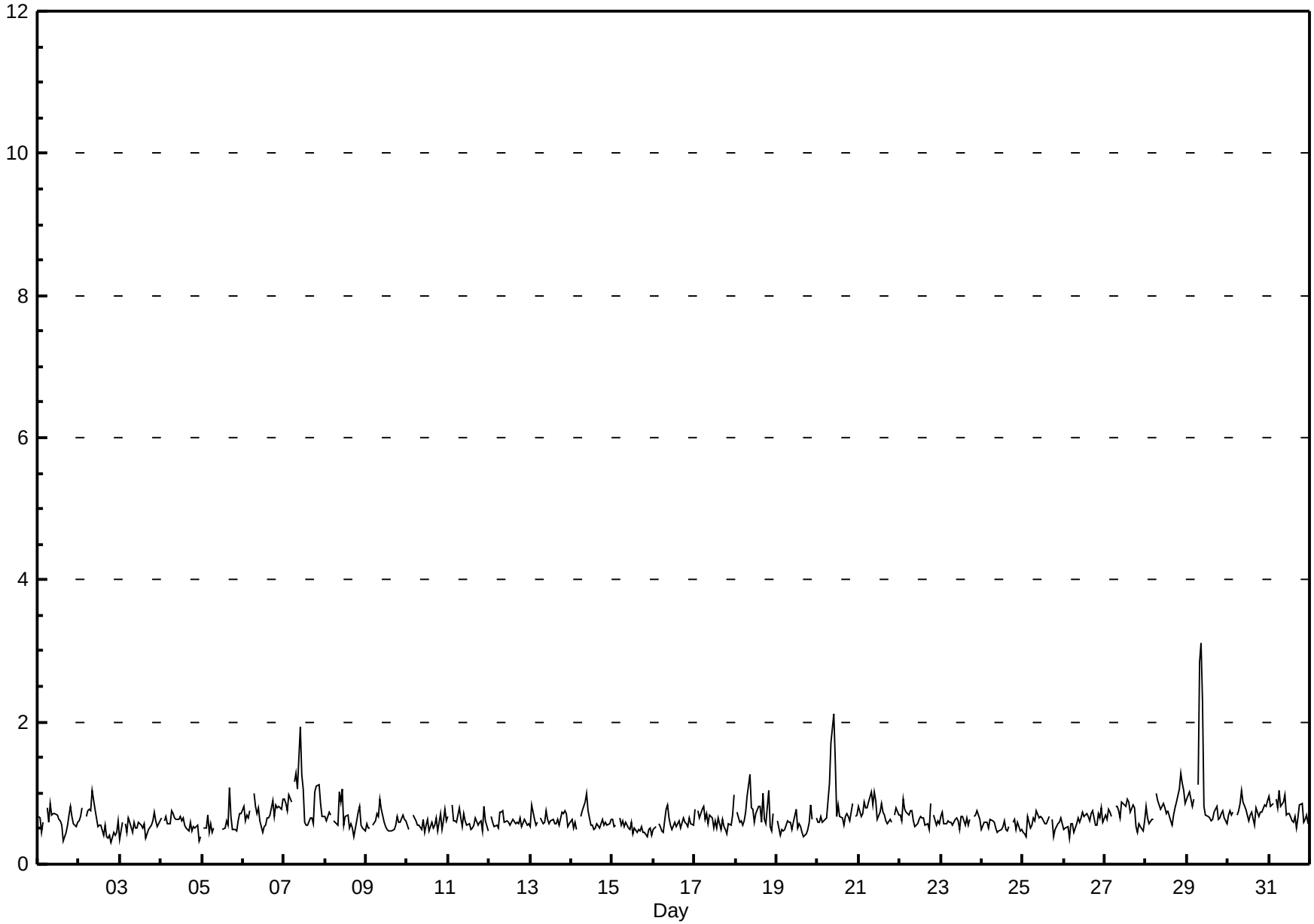
A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - October 2010



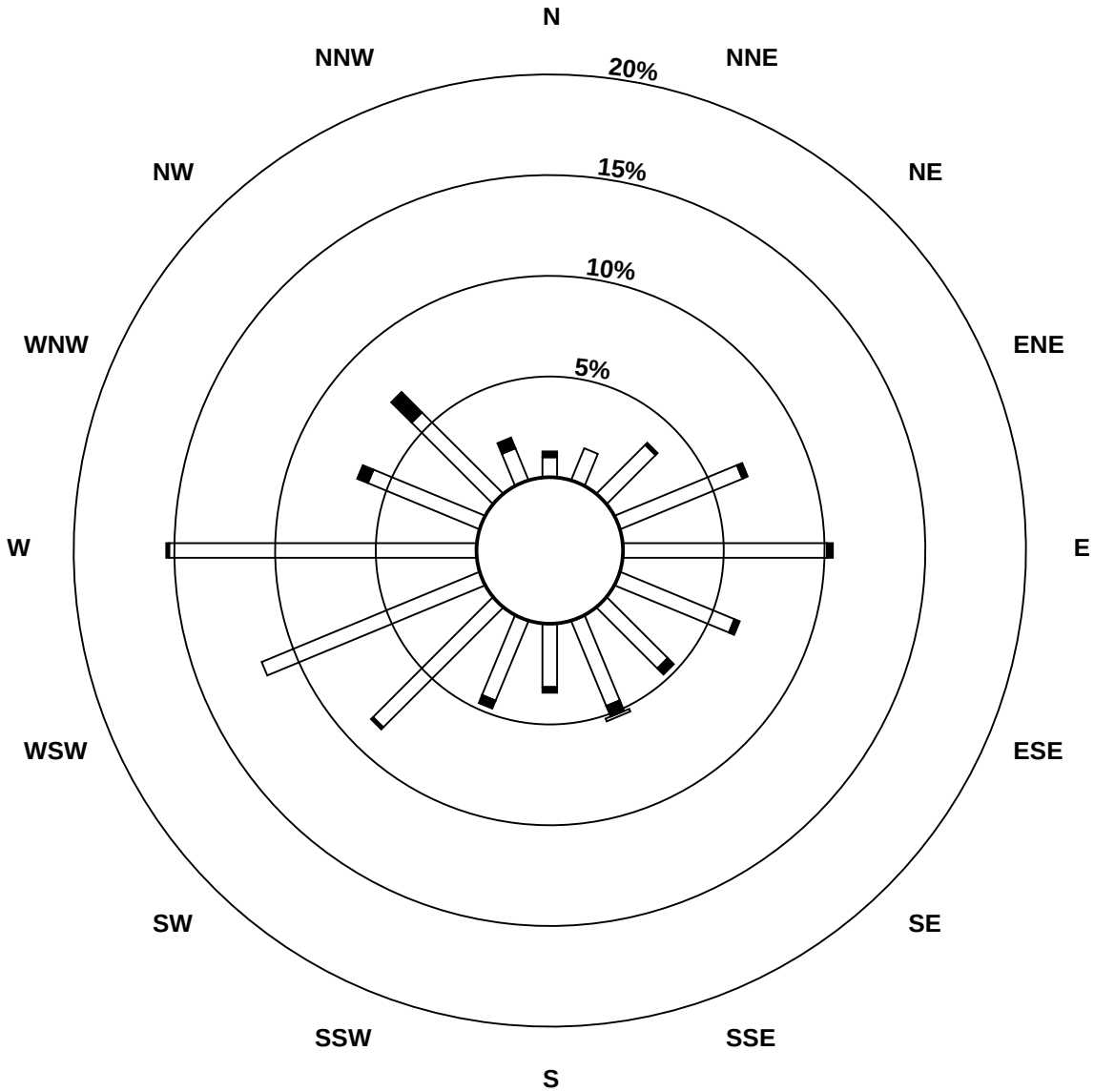
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

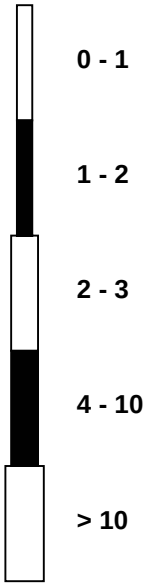
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - October 2010



Pollutant Classes (ppb)



FOCUS
AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 48.0 ppb on Oct 18 09:00 Maximum Daily Average: 17.3 ppb on Oct 30

Minimum Value: 1 ppb on Oct 11 01:00 Minimum Daily Average: 2.5 ppb on Oct 11
Maximum Diurnal Average: 16.1 ppb at hour 8 Minimum Diurnal Average: 4.2 ppb at hour 14
Monthly Average: 9.10 ppb Percentiles: P_1 = 1.1 P_{10} = 2.4 Q_1 = 4.0 Median = 6.4 Q_3 = 12.3 P_{90} = 19.4 P_{99} = 31.8

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	4	3	4	4	A	8	13	27	13	13	10	10	9	7	5	3	4	10	26	37	27	20	18	15	12.6	36.7
2-Oct	13	13	16	A	15	17	15	14	17	13	10	6	3	2	3	3	2	3	2	2	2	1	1	2	7.6	17.1
3-Oct	4	6	A	10	8	19	23	16	10	8	9	6	2	2	2	2	2	7	9	12	7	6	6	6	7.9	22.5
4-Oct	5	A	8	8	7	18	20	20	17	16	12	12	11	10	8	6	7	7	5	6	5	4	3	4	9.5	20.0
5-Oct	A	5	4	5	4	6	11	13	5	5	5	4	3	5	4	6	9	3	8	8	12	15	24	21	8.1	24.0
6-Oct	28	23	20	18	14	A	22	C	C	C	C	C	6	5	5	5	15	15	11	14	20	23	17	15	15.2	27.6
7-Oct	19	18	15	12	11	A	14	18	16	19	18	7	5	3	3	4	5	11	30	30	27	17	14	14	14.3	30.2
8-Oct	14	11	11	8	A	6	11	21	11	5	3	3	3	3	2	2	3	8	30	32	17	9	10	6	10.0	32.3
9-Oct	5	4	3	A	5	6	12	21	26	20	6	4	3	2	2	3	4	15	31	22	13	11	8	5	10.1	30.8
10-Oct	4	7	A	8	8	4	3	5	5	1	2	1	1	1	1	1	1	1	1	2	2	2	2	1	2.8	8.1
11-Oct	1	A	2	2	1	2	4	5	4	2	1	1	1	1	2	2	4	4	5	3	3	3	2	2	2.5	4.7
12-Oct	A	3	2	2	3	10	30	31	25	16	8	4	5	4	5	6	8	7	11	14	13	6	2	3	9.5	30.7
13-Oct	3	6	8	12	14	A	10	9	9	6	4	4	3	2	2	2	4	11	23	24	21	9	8	6	8.8	24.3
14-Oct	5	5	4	6	A	19	21	17	12	8	4	2	2	2	3	3	4	6	7	7	6	4	3	2	6.7	20.7
15-Oct	2	2	2	A	4	5	5	5	4	3	2	3	2	2	2	3	3	4	5	7	6	6	5	5	3.8	6.6
16-Oct	3	5	A	5	9	9	20	32	30	12	6	3	2	2	3	3	4	6	9	11	14	19	9	7	9.7	32.0
17-Oct	14	A	22	24	15	17	20	12	4	3	3	2	2	2	2	2	4	5	16	8	16	27	29	19	11.7	29.4
18-Oct	A	9	6	8	12	21	18	40	48	33	21	4	5	8	9	7	10	7	7	8	4	5	4	A	13.4	48.0
19-Oct	4	3	2	2	3	7	9	13	16	13	6	4	4	3	2	2	3	14	14	7	13	7	A	9	7.0	15.6
20-Oct	8	11	16	24	26	30	28	29	30	30	19	8	6	6	5	6	10	11	11	12	11	A	11	9	15.4	30.1
21-Oct	11	10	10	11	11	13	13	16	12	9	6	4	4	6	5	5	8	9	10	6	A	10	6	6	8.7	15.8
22-Oct	4	3	3	3	4	5	6	6	5	6	5	5	4	4	5	5	5	6	5	A	7	6	8	8	5.2	8.1
23-Oct	5	4	5	5	6	6	6	9	8	6	5	5	4	4	4	5	5	5	A	6	5	5	4	3	5.3	9.1
24-Oct	3	4	6	5	5	5	5	5	4	4	5	4	4	5	5	4	6	A	6	4	4	3	3	3	4.5	6.1
25-Oct	2	2	2	2	3	6	10	14	9	6	5	5	4	4	5	5	A	6	5	8	7	4	4	3	5.4	13.7
26-Oct	3	2	2	2	3	4	7	9	7	5	4	4	4	4	4	5	6	7	7	5	5	5	5	5	4.7	8.5
27-Oct	4	5	8	7	10	A	10	13	10	8	12	8	8	9	8	9	10	11	9	10	11	10	11	8	9.0	13.2
28-Oct	6	3	4	7	11	A	19	15	15	12	12	13	9	6	7	7	9	18	18	16	14	15	14	14	11.5	18.9
29-Oct	12	9	9	9	10	A	16	16	17	16	10	9	8	7	6	7	9	15	23	15	17	13	8	11	11.8	22.8
30-Oct	8	8	9	17	A	15	20	20	28	21	13	7	4	5	8	9	18	22	30	24	21	30	32	30	17.3	31.5
31-Oct	28	19	15	A	13	12	12	13	13	10	15	12	7	4	3	3	4	13	32	28	21	15	17	8	13.8	31.9
	7.8	7.4	7.8	8.3	8.7	10.9	14.0	16.1	14.4	11.0	8.1	5.4	4.5	4.2	4.2	4.4	6.2	9.0	13.5	13.0	11.7	10.4	9.5	8.2	Diurnal Average	
	27.7	23.5	22.2	24.2	25.9	30.1	30.1	40.2	48.0	32.6	20.7	13.2	10.7	10.0	8.6	9.2	18.1	21.7	31.9	36.7	26.9	30.5	31.5	29.8	Diurnal Maximum	

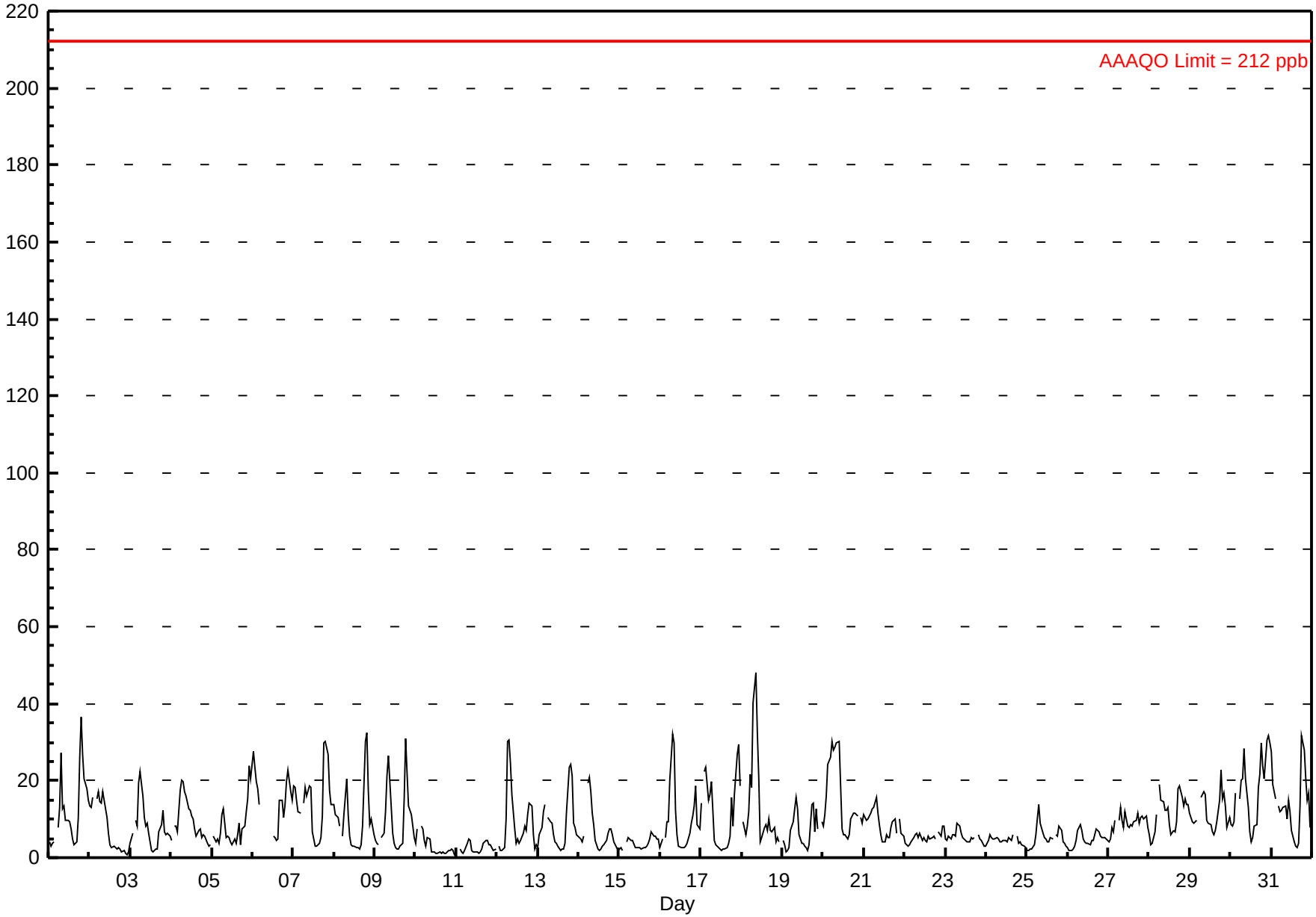
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - October 2010

Maximum Value: 60.9 ppb on Oct 18 08:00

Maximum Daily Average: 23.3 ppb on Oct 30

Minimum Value: 1 ppb on Oct 11 00:00

Minimum Daily Average: 4.7 ppb on Oct 11

Maximum Diurnal Average: 22.2 ppb at hour 8

Minimum Diurnal Average: 6.9 ppb at hour 13

Monthly Average: 13.20 ppb

Percentiles: P_1 = 2.0 P_{10} = 4.4 Q_1 = 6.1 Median = 10.4 Q_3 = 17.2 P_{90} = 26.9 P_{99} = 41.4

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	7	5	5	5	A	9	22	33	22	21	15	12	11	9	17	5	8	29	41	41	37	23	22	17	18.2	41.4
2-Oct	16	16	18	A	17	23	16	17	20	18	14	8	5	6	5	5	5	5	5	4	4	3	2	3	10.3	23.2
3-Oct	8	9	A	15	16	24	26	21	15	10	14	13	3	4	4	5	4	22	11	22	11	9	10	8	12.4	25.9
4-Oct	5	A	10	14	8	27	25	25	20	19	15	14	16	16	12	12	13	10	8	8	9	5	5	5	13.2	26.9
5-Oct	A	7	6	7	7	9	18	20	11	9	7	7	6	9	9	11	14	5	12	13	21	28	32	27	12.9	31.8
6-Oct	31	29	28	25	17	A	28	C	C	C	C	C	10	11	7	9	19	22	16	23	25	24	24	22	20.5	30.9
7-Oct	22	22	18	15	12	A	18	22	19	22	25	10	7	5	4	6	9	16	36	38	34	22	17	18	18.1	38.1
8-Oct	18	15	18	12	A	10	17	31	17	10	6	5	5	6	5	5	7	17	42	42	30	13	21	9	15.6	42.2
9-Oct	6	5	5	A	8	10	16	28	30	23	12	6	7	4	6	6	7	29	41	40	20	14	14	6	14.9	41.4
10-Oct	5	23	A	12	15	8	5	7	10	3	3	3	2	2	3	2	2	2	3	3	3	3	3	1	5.2	22.5
11-Oct	1	A	4	2	2	3	7	9	10	3	2	3	3	2	4	4	9	8	11	6	5	4	3	4	4.7	10.6
12-Oct	A	5	3	5	6	17	38	40	36	33	14	7	8	6	9	11	15	10	16	21	18	11	4	5	14.6	39.7
13-Oct	4	11	14	24	19	A	16	17	12	9	7	6	7	3	4	9	8	21	31	32	28	14	15	10	14.0	31.6
14-Oct	7	9	6	8	A	25	24	38	16	11	7	4	4	5	5	9	7	11	11	11	9	7	4	3	10.4	37.7
15-Oct	5	4	4	A	6	8	6	6	6	6	5	5	5	5	5	5	4	6	9	9	9	8	7	9	6.0	9.3
16-Oct	5	7	A	7	16	14	31	35	35	16	13	6	4	4	5	6	6	10	14	17	17	25	14	13	14.0	35.4
17-Oct	22	A	27	31	20	24	24	18	8	5	5	4	3	4	4	4	7	14	26	14	31	31	38	26	16.9	38.1
18-Oct	A	19	12	12	17	32	25	61	59	53	33	9	8	15	17	12	16	11	12	12	6	8	6	A	20.7	60.9
19-Oct	6	5	3	3	4	13	11	24	24	18	11	5	7	6	6	4	5	25	20	10	21	15	A	12	11.1	24.6
20-Oct	11	18	20	30	30	36	35	42	43	38	35	15	9	10	7	10	16	14	14	15	16	A	16	13	21.4	43.0
21-Oct	14	12	12	13	14	16	14	20	16	10	8	6	6	12	11	10	10	14	14	10	A	13	9	12	12.0	20.1
22-Oct	5	5	5	5	6	7	10	9	11	9	7	7	7	6	9	7	7	10	8	A	9	7	13	11	7.8	12.8
23-Oct	10	6	7	6	9	8	8	12	11	8	7	7	6	6	6	7	6	6	A	8	7	6	5	5	7.2	11.5
24-Oct	4	8	9	6	6	6	6	6	5	5	7	5	6	7	6	6	8	A	8	5	5	4	4	4	6.0	9.0
25-Oct	2	3	3	4	6	10	15	18	16	10	9	7	6	6	8	8	A	9	10	11	10	7	8	6	8.4	17.8
26-Oct	6	3	4	3	5	8	12	12	11	7	7	6	6	6	7	7	9	11	10	9	7	8	7	10	7.4	11.5
27-Oct	7	10	11	11	14	A	13	17	18	11	14	12	9	11	11	11	12	14	14	27	24	14	12	11	13.3	26.6
28-Oct	9	4	5	11	17	A	26	20	17	14	15	16	11	8	10	11	14	25	25	19	18	20	17	17	15.1	25.9
29-Oct	15	11	10	11	12	A	21	18	19	21	12	10	10	11	7	10	16	22	35	29	22	22	15	14	16.2	35.0
30-Oct	13	12	14	24	A	23	22	28	32	32	19	15	7	7	12	12	23	36	38	36	28	37	35	34	23.3	37.6
31-Oct	33	28	20	A	17	15	16	16	17	19	19	16	12	7	6	6	6	30	39	35	29	30	27	13	19.7	39.0
	10.6	11.2	10.7	11.9	12.1	15.4	18.4	22.2	19.4	15.8	12.2	8.3	6.9	7.0	7.4	7.5	9.7	15.4	19.3	19.0	17.1	14.6	13.6	11.5	Diurnal Average	
	33.2	29.4	27.8	31.1	29.8	35.6	38.1	60.9	58.8	52.7	35.1	16.0	16.4	16.2	17.3	12.2	22.6	35.6	42.2	42.1	36.6	37.2	38.1	33.6	Diurnal Maximum	

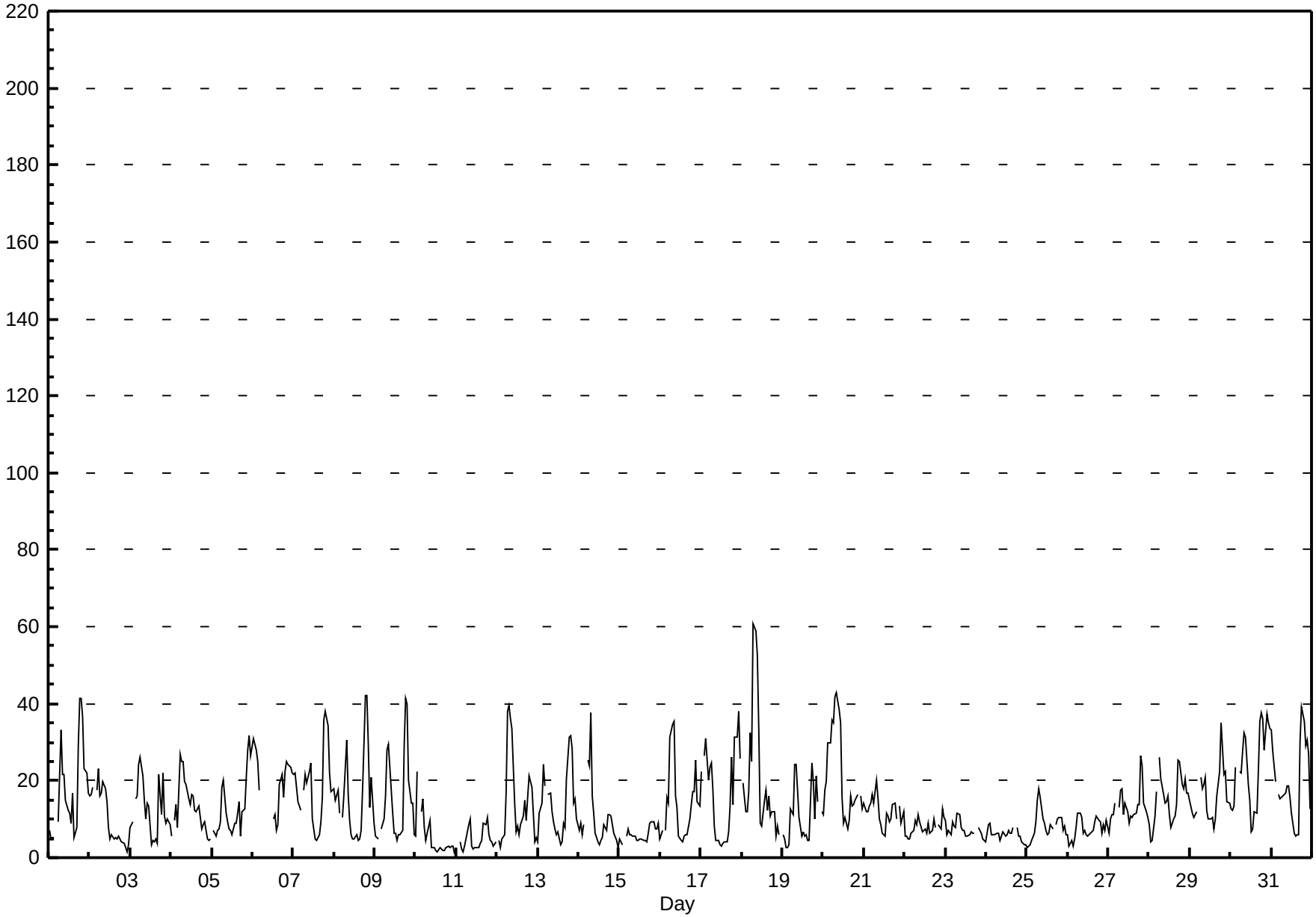
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - October 2010



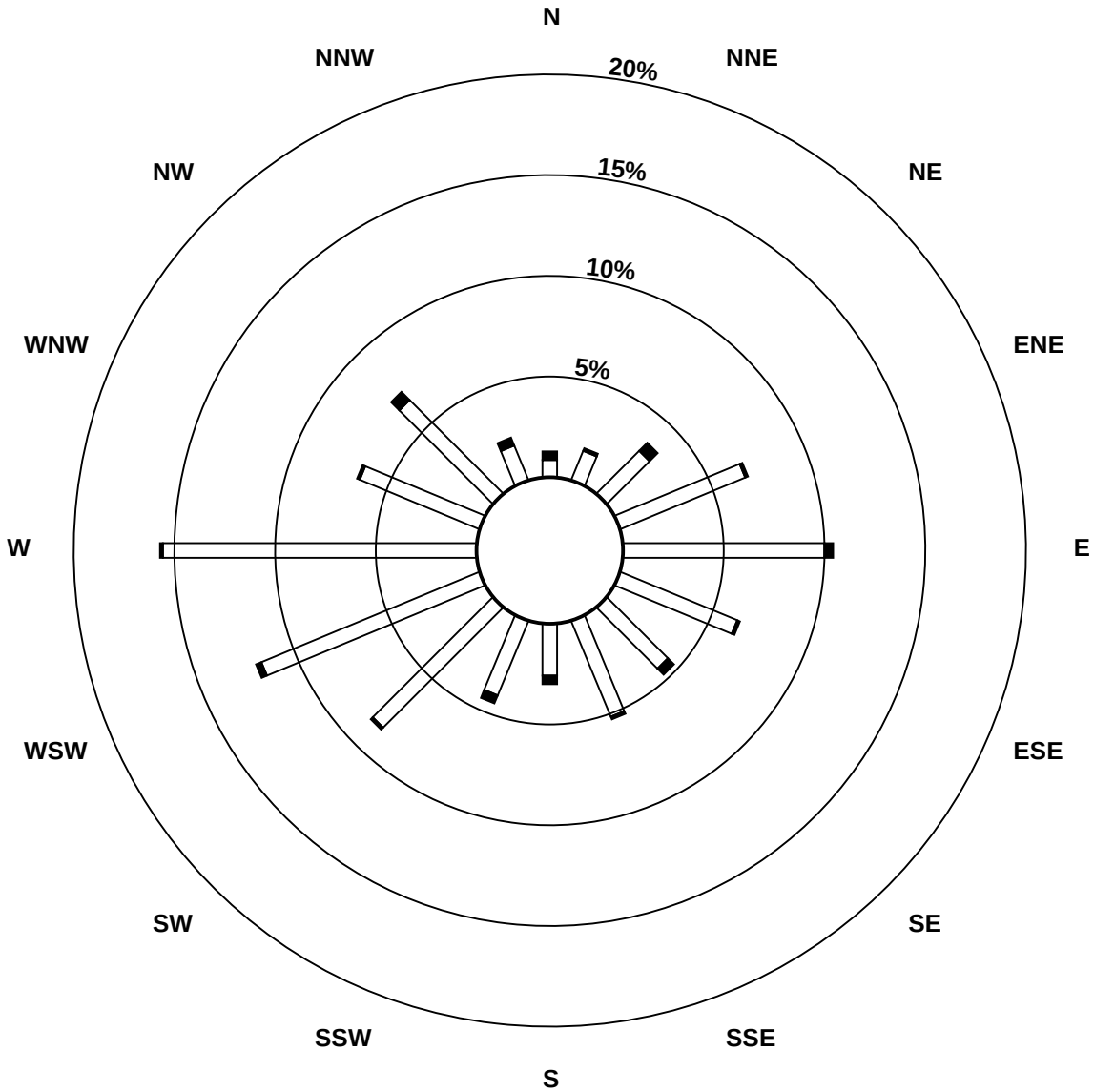
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

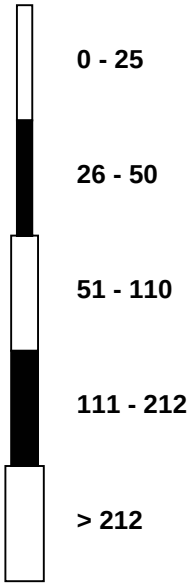
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 106.9 ppb on Oct 20 09:00 Maximum Daily Average: 31.9 ppb on Oct 28

Minimum Value: 0 ppb on Oct 2 22:00 Minimum Daily Average: 0.1 ppb on Oct 10
Maximum Diurnal Average: 20.3 ppb at hour 9 Minimum Diurnal Average: 1.2 ppb at hour 16
Monthly Average: 5.20 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.2$ Median = 0.8 $Q_3 = 3.0$ $P_{90} = 11.8$ $P_{99} = 83.6$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	0	0	0	0	A	1	1	14	4	10	6	5	4	3	2	1	1	1	4	40	27	6	2	1	5.7	39.9
2-Oct	1	1	3	A	2	17	12	16	39	13	12	3	1	0	1	1	0	0	0	0	0	0	0	0	5.4	39.3
3-Oct	0	0	A	0	0	5	25	17	8	5	4	2	1	0	0	0	0	1	0	0	0	0	0	0	3.1	25.1
4-Oct	0	A	0	0	0	8	9	11	10	12	6	7	4	4	2	1	1	0	0	0	0	0	0	0	3.3	11.6
5-Oct	A	0	0	0	0	0	0	1	1	2	2	1	1	1	1	1	1	0	0	0	1	1	1	1	0.7	1.8
6-Oct	6	6	9	6	11	A	31	C	C	C	C	C	1	1	1	1	4	2	1	1	6	11	5	4	6.0	31.0
7-Oct	5	12	9	8	8	A	26	74	70	72	31	5	3	1	1	1	1	1	15	30	19	7	1	2	17.4	74.0
8-Oct	1	0	0	0	A	0	0	2	2	2	1	1	1	1	1	0	0	0	10	12	1	0	0	0	1.5	12.1
9-Oct	0	0	0	A	0	0	0	3	33	15	2	1	0	0	0	0	0	1	4	2	0	0	0	0	2.7	32.7
10-Oct	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	0.4
11-Oct	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
12-Oct	A	0	0	0	0	0	3	8	11	6	2	1	1	1	1	1	0	0	0	0	0	0	0	0	1.5	10.8
13-Oct	0	0	0	0	0	A	0	1	1	0	1	1	1	0	0	0	0	1	3	4	3	1	1	0	0.7	3.6
14-Oct	0	0	0	0	A	8	22	29	12	5	2	1	1	1	1	1	1	0	0	0	0	0	0	0	3.6	28.9
15-Oct	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.0
16-Oct	0	0	A	0	0	0	2	15	29	4	2	1	1	1	1	1	0	0	0	0	0	0	0	0	2.5	29.0
17-Oct	0	A	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0.4	2.5
18-Oct	A	0	0	0	0	1	0	31	92	22	8	1	1	0	1	0	1	0	0	0	0	0	0	A	7.2	92.1
19-Oct	0	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	1	0	0	0	0	A	0	0.3	1.5
20-Oct	0	0	0	2	5	27	44	55	107	93	28	2	1	1	1	1	1	2	1	1	1	A	1	1	16.3	106.9
21-Oct	1	2	2	2	1	4	10	49	11	9	4	1	1	2	1	1	1	1	1	1	A	1	0	0	4.6	49.2
22-Oct	0	0	0	0	1	1	1	2	1	1	1	1	1	1	2	2	1	2	1	A	1	1	1	0	1.0	2.4
23-Oct	1	0	0	1	1	1	0	2	3	4	4	4	4	4	3	5	4	4	A	4	3	3	2	1	2.4	4.6
24-Oct	1	1	2	1	1	1	1	1	1	1	1	2	2	2	2	1	2	A	1	1	1	1	1	0	1.2	2.2
25-Oct	0	0	0	0	1	2	5	10	4	3	4	3	3	2	3	2	A	2	1	2	2	1	1	0	2.3	10.2
26-Oct	1	0	0	0	1	1	2	3	3	2	2	2	2	2	2	2	2	2	2	1	1	1	1	0	1.4	2.8
27-Oct	0	1	1	1	2	A	1	3	3	3	7	12	15	18	13	8	9	9	4	1	2	1	1	1	5.1	17.9
28-Oct	1	0	0	2	9	A	69	58	49	40	24	23	10	5	5	3	2	16	69	89	84	94	37	44	31.9	94.3
29-Oct	49	38	23	21	29	A	59	68	85	79	18	13	7	4	2	2	1	0	1	0	0	0	0	0	21.6	84.6
30-Oct	0	0	0	1	A	1	1	1	5	5	4	2	1	1	2	1	2	2	7	3	1	6	9	9	2.7	9.4
31-Oct	20	10	8	A	10	18	23	24	26	4	9	6	4	1	1	0	0	1	16	8	2	1	2	0	8.4	26.0
	3.1	2.6	2.1	1.7	3.0	3.8	11.2	16.7	20.3	13.9	6.3	3.4	2.3	1.9	1.7	1.2	1.3	1.7	4.8	6.7	5.2	4.6	2.2	2.2	Diurnal Average	
	48.7	37.7	22.8	21.0	28.7	27.1	68.9	74.0	106.9	92.8	31.2	22.8	15.4	17.9	13.0	8.2	9.2	16.2	69.0	88.6	84.0	94.3	37.0	43.5	Diurnal Maximum	

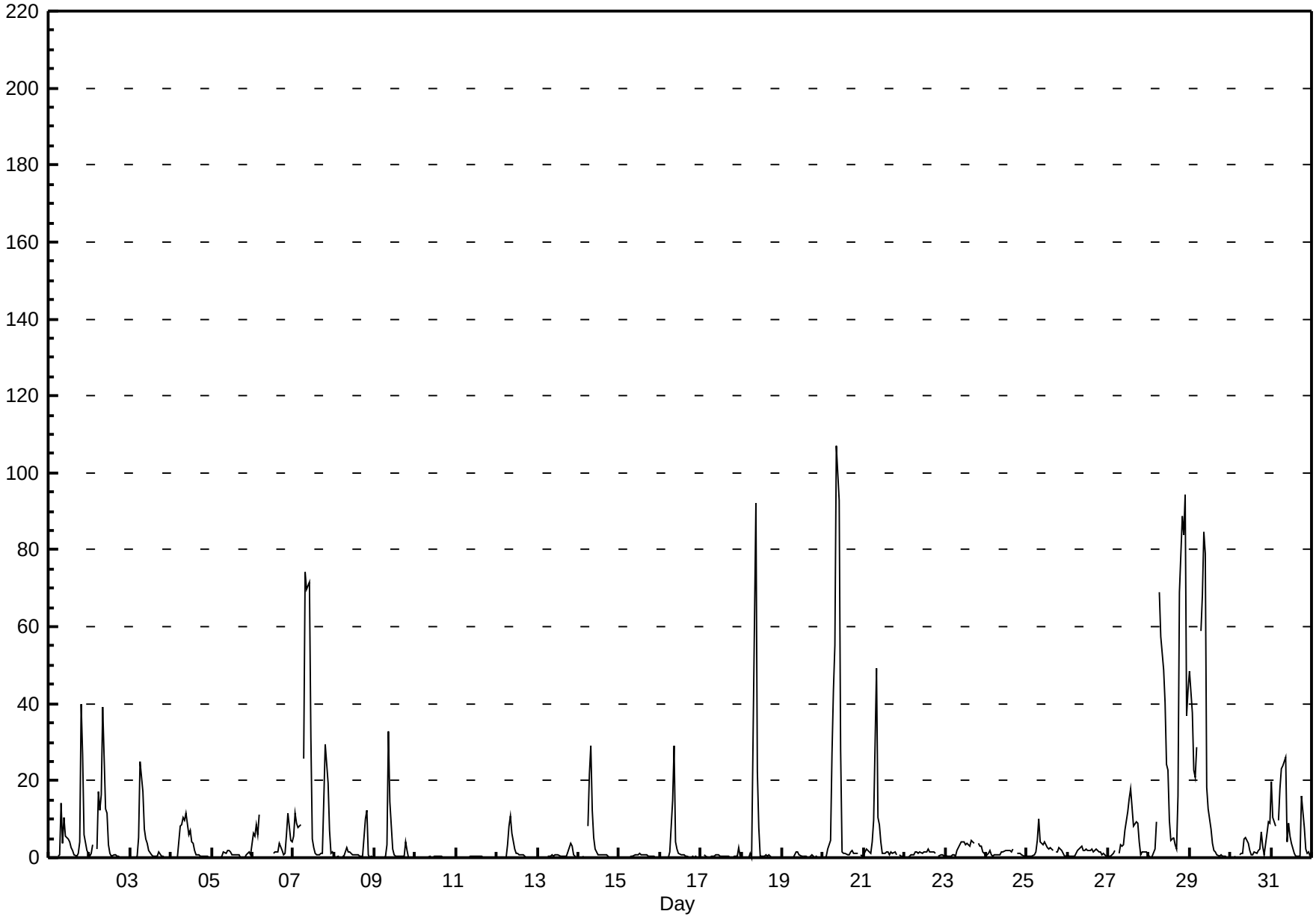
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - October 2010

Maximum Value: 157.9 ppb on Oct 28 22:00

Maximum Daily Average: 51.3 ppb on Oct 28

Minimum Value: 0 ppb on Oct 4 03:00

Minimum Daily Average: 0.4 ppb on Oct 11

Maximum Diurnal Average: 35.3 ppb at hour 8

Minimum Diurnal Average: 2.9 ppb at hour 16

Monthly Average: 10.51 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.5$ $Q_1 = 1.0$ Median = 2.5 $Q_3 = 8.5$ $P_{90} = 27.7$ $P_{99} = 124.5$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	1	1	1	1	A	1	4	33	9	27	12	7	6	4	32	1	1	7	15	62	57	13	18	3	13.7	62.4
2-Oct	3	4	7	A	5	53	17	35	50	24	24	6	2	2	2	2	1	1	1	1	1	1	0	0	10.4	53.2
3-Oct	1	2	A	2	7	13	36	27	16	8	7	6	2	3	2	3	1	19	3	3	1	2	1	0	7.1	36.1
4-Oct	0	A	0	0	0	26	23	22	16	19	10	10	9	8	4	2	2	1	1	1	1	1	1	1	6.7	26.2
5-Oct	A	0	0	0	0	1	2	3	4	4	3	3	2	2	3	1	2	1	1	1	7	8	6	4	2.4	8.2
6-Oct	12	10	17	11	25	A	47	C	C	C	C	C	5	5	2	2	6	4	3	5	19	46	18	18	14.2	47.0
7-Oct	10	23	14	30	27	A	38	107	95	102	57	10	5	2	2	2	2	2	49	56	71	20	6	7	31.9	106.5
8-Oct	6	1	3	0	A	1	1	8	3	3	2	1	1	2	1	1	1	1	29	47	3	1	3	1	5.2	47.3
9-Oct	1	1	1	A	1	1	1	24	53	21	5	2	2	1	2	1	1	3	27	23	1	1	0	0	7.4	53.3
10-Oct	0	2	A	1	1	0	0	0	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	2.0
11-Oct	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.4	1.4
12-Oct	A	0	0	0	0	0	9	33	33	29	5	2	2	2	1	2	1	0	0	0	0	0	0	0	5.1	32.8
13-Oct	0	0	0	1	1	A	2	2	2	1	1	4	2	1	1	6	4	2	9	12	10	3	2	1	2.9	11.9
14-Oct	0	1	1	2	A	21	34	109	25	15	10	3	1	1	1	2	1	1	1	1	0	0	0	0	10.0	109.0
15-Oct	0	0	0	A	0	0	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	0	0	0	0.9	2.0
16-Oct	0	0	A	0	1	2	8	41	49	7	6	2	2	1	2	1	1	1	1	1	0	2	0	0	5.6	49.2
17-Oct	1	A	3	1	0	1	2	1	1	1	1	1	1	1	1	1	1	0	5	1	9	2	18	2	2.3	18.0
18-Oct	A	0	0	0	0	4	3	125	125	87	15	2	1	1	1	1	1	1	1	0	0	0	0	A	16.8	124.8
19-Oct	0	0	0	0	0	1	0	3	3	3	2	1	1	1	1	0	1	2	2	1	2	1	A	0	1.1	3.5
20-Oct	0	2	4	7	22	42	73	130	149	117	83	5	2	4	4	3	5	7	2	3	3	A	3	2	29.2	148.6
21-Oct	3	4	3	3	2	14	22	99	16	12	9	2	2	5	4	2	2	6	9	6	A	5	2	5	10.4	98.6
22-Oct	1	2	2	3	6	4	4	6	4	5	4	5	5	3	6	4	5	5	6	A	1	4	3	4	3.9	5.7
23-Oct	7	2	11	2	2	2	2	6	7	10	9	10	7	7	5	9	8	5	A	9	8	7	5	5	6.4	10.7
24-Oct	1	4	4	2	1	3	1	2	2	2	4	4	6	4	4	6	6	A	3	3	2	4	1	1	3.1	6.3
25-Oct	1	1	1	1	3	4	17	23	18	8	12	6	6	9	5	7	A	4	4	4	5	2	2	2	6.4	23.4
26-Oct	9	1	2	1	3	9	6	8	9	3	3	5	6	5	5	4	9	13	7	8	5	8	2	2	5.5	12.6
27-Oct	2	4	2	3	5	A	4	10	14	7	18	19	20	23	22	11	16	14	16	6	6	4	2	2	10.0	23.0
28-Oct	2	1	1	9	29	A	105	90	64	55	31	34	14	6	13	6	3	57	129	112	140	158	57	63	51.3	157.9
29-Oct	53	58	28	31	38	A	96	77	109	97	40	17	13	9	3	3	1	1	5	3	1	1	0	0	29.8	109.5
30-Oct	0	1	0	2	A	3	3	3	11	10	8	5	2	1	3	2	4	8	26	9	4	23	24	18	7.4	26.2
31-Oct	37	28	21	A	22	31	33	33	44	15	18	11	10	3	1	1	1	12	56	32	15	6	4	2	19.1	56.4
	5.4	5.5	4.5	4.1	7.5	9.6	19.2	35.3	31.1	23.1	13.3	6.2	4.5	3.8	4.4	2.9	2.9	6.0	13.6	13.7	12.5	10.8	6.0	4.8	Diurnal Average	
	53.0	58.5	28.4	30.5	38.0	53.2	104.8	130.3	148.6	116.6	82.6	34.0	20.0	23.0	31.8	10.5	15.8	56.9	129.3	112.3	140.3	157.9	56.8	63.4	Diurnal Maximum	

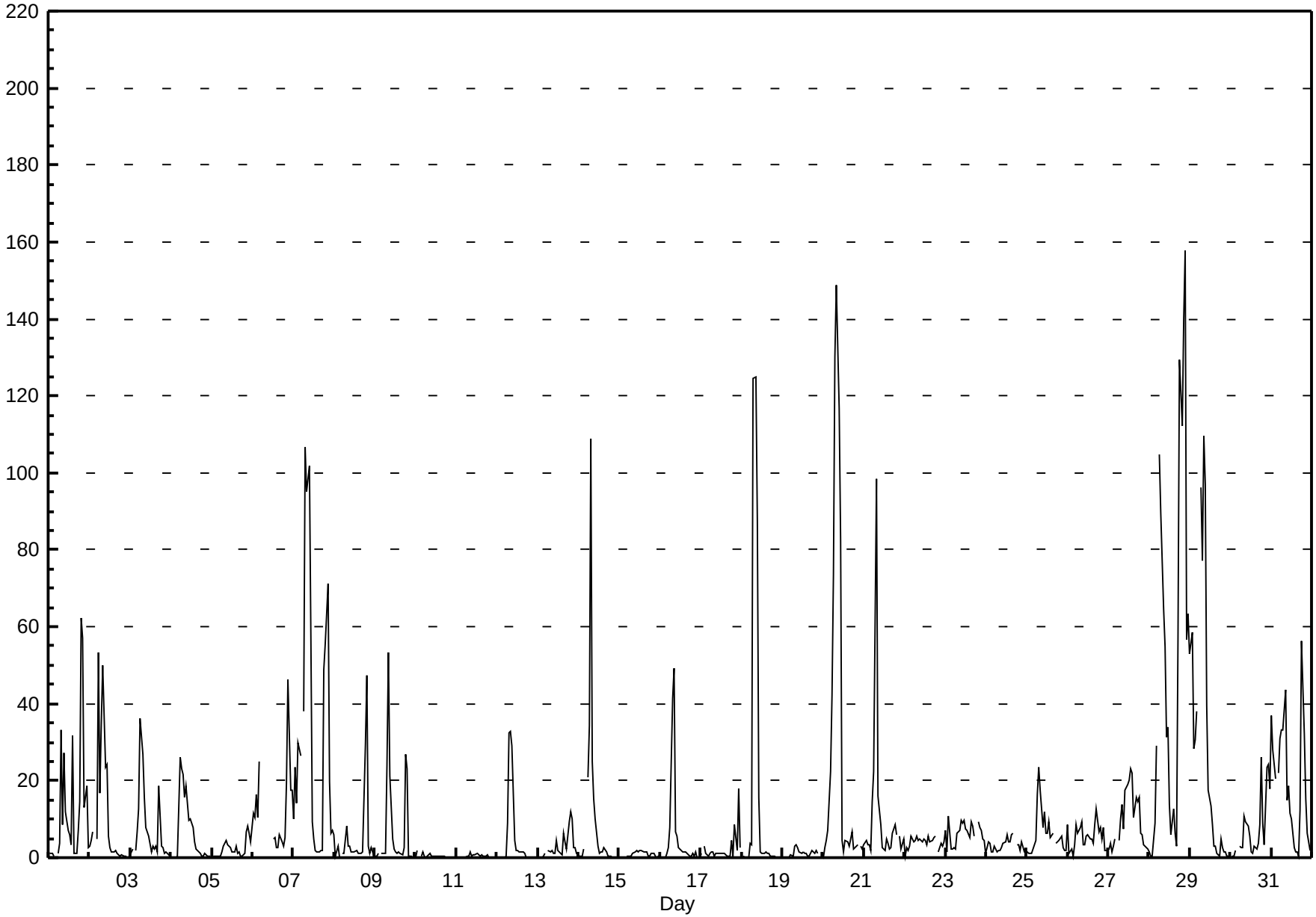
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 140.0 ppb on Oct 18 09:00 Maximum Daily Average: 43.3 ppb on Oct 28

Minimum Value: 1 ppb on Oct 2 23:00 Minimum Daily Average: 2.8 ppb on Oct 11
Maximum Diurnal Average: 34.7 ppb at hour 9 Minimum Diurnal Average: 5.6 ppb at hour 16
Monthly Average: 14.33 ppb Percentiles: P_1 = 1.4 P_{10} = 2.7 Q_1 = 4.6 Median = 8.0 Q_3 = 16.1 P_{90} = 32.7 P_{99} = 95.2

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	4	3	4	4	A	9	14	41	17	24	16	15	14	10	7	4	5	11	30	77	54	27	20	16	18.5	76.8
2-Oct	14	14	19	A	18	34	27	31	57	26	22	10	5	3	4	3	3	3	2	2	2	1	1	1	13.1	56.6
3-Oct	4	7	A	10	8	25	48	33	18	13	13	8	3	2	2	3	2	8	9	13	7	6	6	6	11.0	47.8
4-Oct	5	A	8	8	7	26	29	30	27	28	19	19	15	14	10	6	8	8	6	6	6	4	3	4	12.9	30.5
5-Oct	A	6	4	5	4	7	12	14	6	7	7	6	4	6	5	7	10	3	8	8	13	17	26	22	8.9	25.5
6-Oct	34	29	28	24	25	A	53	C	C	C	C	C	7	7	6	6	19	17	11	15	26	34	22	19	21.2	52.9
7-Oct	24	30	24	20	20	A	40	92	86	90	49	12	7	4	4	4	6	12	44	60	46	24	15	15	31.7	92.2
8-Oct	15	11	11	8	A	6	11	23	13	7	4	4	4	4	3	3	4	8	40	44	18	9	10	6	11.6	44.4
9-Oct	5	4	3	A	5	7	12	25	59	34	8	5	3	3	3	3	4	16	35	24	13	11	8	5	12.8	58.9
10-Oct	4	8	A	8	8	4	3	5	5	2	2	2	1	1	2	2	2	1	1	2	2	2	2	1	3.1	8.2
11-Oct	1	A	2	2	1	2	4	5	5	3	2	2	2	2	2	3	4	5	5	3	3	3	2	2	2.8	5.0
12-Oct	A	3	2	2	3	10	33	39	36	23	10	5	6	5	5	7	9	7	11	14	13	6	2	3	11.1	39.0
13-Oct	3	6	8	12	14	A	11	10	10	6	5	4	4	2	3	3	4	12	26	28	24	10	9	6	9.5	27.9
14-Oct	5	5	4	6	A	28	42	46	24	14	7	3	3	3	4	4	5	7	8	8	6	4	3	2	10.4	46.1
15-Oct	2	2	2	A	4	5	5	5	5	4	3	3	3	3	3	3	4	4	5	7	6	6	5	5	4.2	7.1
16-Oct	3	5	A	5	9	9	22	47	59	16	8	4	3	3	3	3	4	6	9	11	14	19	9	7	12.1	58.6
17-Oct	14	A	23	24	15	17	20	13	5	4	3	3	2	3	3	3	4	5	16	8	17	27	32	19	12.1	31.8
18-Oct	A	9	6	8	12	22	18	71	140	55	29	5	6	8	9	8	11	7	7	8	4	5	4	A	20.6	140.0
19-Oct	4	3	2	2	2	7	9	13	17	14	7	4	4	4	3	2	4	14	15	7	13	8	A	9	7.3	17.0
20-Oct	8	11	16	26	31	57	72	84	137	123	46	9	7	7	6	7	11	13	12	13	12	A	11	10	31.7	136.8
21-Oct	12	12	12	12	13	17	22	65	22	17	10	5	5	7	7	6	9	10	11	7	A	11	7	6	13.3	65.0
22-Oct	4	3	3	4	5	6	7	8	7	8	6	7	6	6	8	6	6	7	6	A	7	6	9	9	6.3	8.8
23-Oct	6	5	6	6	7	7	6	11	12	10	9	9	8	8	7	10	9	9	A	10	8	7	5	4	7.7	11.8
24-Oct	3	6	8	6	5	6	6	6	5	6	6	6	6	7	7	6	8	A	7	5	5	4	3	3	5.6	8.0
25-Oct	2	2	2	3	4	7	15	24	13	10	9	8	7	7	8	7	A	7	7	11	9	5	4	3	7.6	23.9
26-Oct	3	2	2	2	3	6	9	11	10	6	6	6	6	5	7	6	8	10	8	7	6	6	6	5	6.2	11.2
27-Oct	5	5	9	8	11	A	11	17	13	11	19	20	23	26	21	17	19	20	13	11	12	11	12	9	14.1	26.4
28-Oct	7	3	4	9	21	A	88	73	64	53	36	36	18	10	12	10	11	34	87	104	98	110	51	57	43.3	109.7
29-Oct	60	47	32	30	38	A	75	85	102	95	28	21	16	11	8	9	10	15	24	16	17	14	8	11	33.5	101.7
30-Oct	8	8	9	17	A	16	21	21	33	26	17	9	5	6	10	10	20	24	37	27	21	37	41	39	20.0	40.9
31-Oct	47	29	23	A	23	30	36	37	39	14	24	18	11	5	3	3	4	14	48	36	23	16	18	8	22.2	47.7
	11.0	10.0	9.9	10.0	11.7	14.8	25.2	32.8	34.7	24.9	14.3	8.9	6.9	6.2	5.9	5.6	7.5	10.7	18.3	19.7	16.9	15.0	11.8	10.4	Diurnal Average	
	60.3	47.1	31.7	30.2	38.5	57.2	87.8	92.2	140.0	122.8	49.5	36.0	23.3	26.4	21.3	17.4	19.9	34.0	87.4	104.1	97.6	109.7	50.6	57.4	Diurnal Maximum	

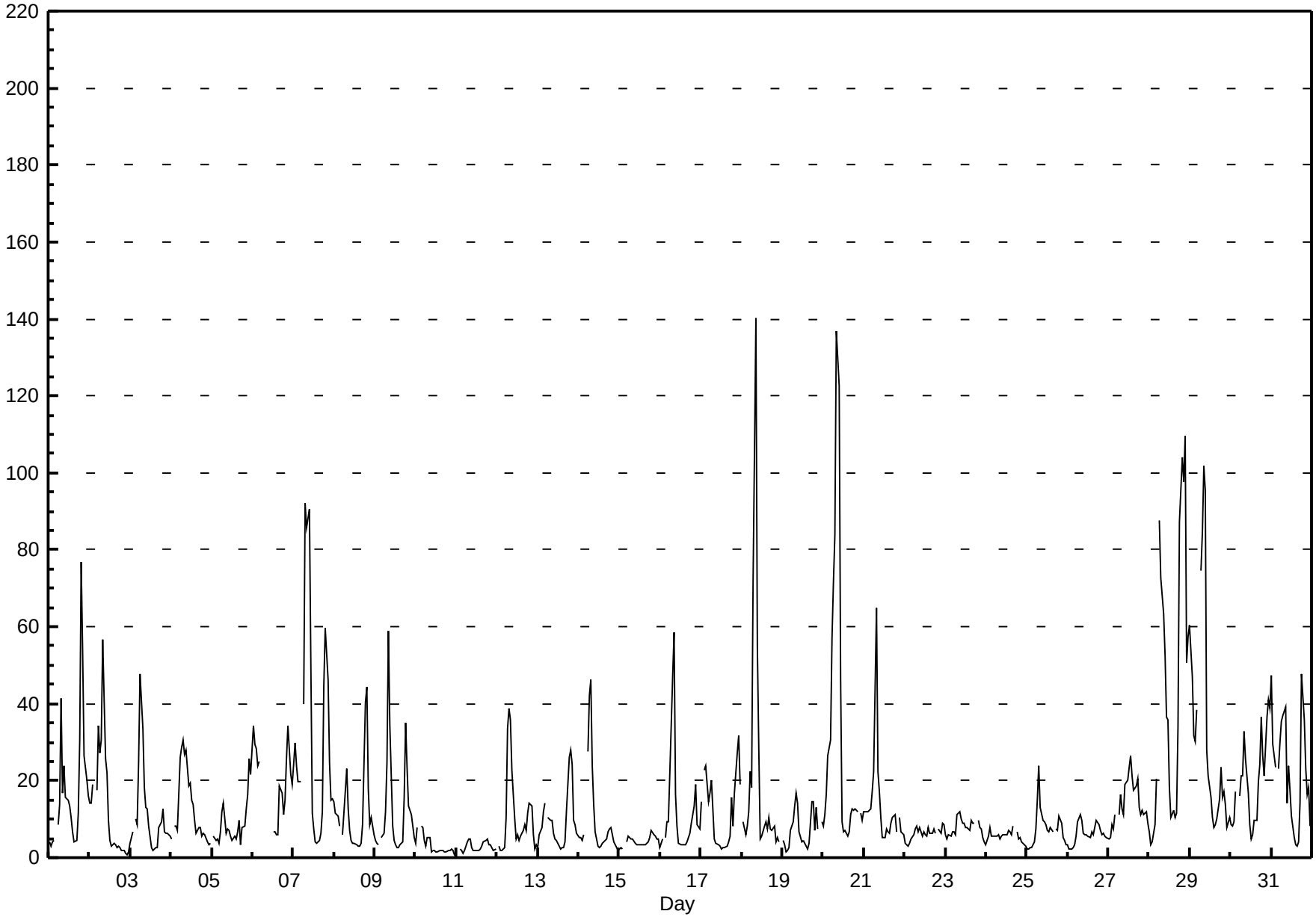
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - October 2010

Maximum Value: 191.0 ppb on Oct 20 09:00

Maximum Daily Average: 64.9 ppb on Oct 28

Minimum Value: 1 ppb on Oct 11 00:00

Minimum Daily Average: 5.2 ppb on Oct 11

Maximum Diurnal Average: 56.6 ppb at hour 8

Minimum Diurnal Average: 10.3 ppb at hour 16

Monthly Average: 23.22 ppb

Percentiles: $P_1 = 2.5$ $P_{10} = 5.1$ $Q_1 = 7.7$ Median = 13.6 $Q_3 = 26.5$ $P_{90} = 49.2$ $P_{99} = 140.8$

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	8	6	6	6	A	11	23	67	30	49	27	20	17	13	49	6	9	36	57	100	92	37	41	19	31.6	99.5
2-Oct	19	21	24	A	20	76	32	52	68	42	39	13	8	8	7	7	6	6	5	5	4	3	2	4	20.3	75.6
3-Oct	9	12	A	17	22	37	62	46	30	17	21	19	5	7	6	8	5	40	14	23	11	9	11	9	19.1	61.5
4-Oct	6	A	10	14	8	52	49	46	35	38	25	24	26	24	17	14	14	11	8	9	10	5	5	6	19.8	52.0
5-Oct	A	8	6	8	8	10	19	23	16	13	11	10	7	11	12	13	16	6	12	14	25	36	38	29	15.1	37.6
6-Oct	42	39	43	32	39	A	69	C	C	C	C	C	15	16	9	11	25	25	16	28	44	69	40	40	33.4	68.6
7-Oct	30	43	32	40	39	A	55	126	114	123	82	19	12	7	6	7	11	17	83	88	104	41	23	23	49.0	126.0
8-Oct	24	15	18	11	A	11	17	39	19	12	7	7	6	8	5	6	8	19	70	88	32	14	23	9	20.5	87.9
9-Oct	6	5	5	A	8	10	16	52	81	45	16	8	8	5	8	7	8	31	64	61	20	14	14	6	21.7	80.9
10-Oct	6	24	A	13	15	8	5	7	10	3	3	3	3	2	3	3	3	2	3	3	3	3	3	1	5.6	23.8
11-Oct	1	A	4	2	2	3	7	9	12	4	3	3	4	3	4	5	9	9	12	6	5	4	3	4	5.2	11.7
12-Oct	A	5	3	5	6	17	45	71	67	62	19	9	10	8	10	12	16	10	16	22	19	11	4	5	19.5	71.3
13-Oct	4	11	14	25	19	A	18	18	14	10	9	10	8	4	5	16	12	21	40	43	37	17	18	10	16.7	42.9
14-Oct	8	10	7	9	A	46	54	147	38	27	13	5	5	6	6	11	8	12	11	11	9	7	4	3	19.7	147.0
15-Oct	5	4	4	A	6	8	6	7	7	7	7	6	7	7	6	6	6	7	10	10	10	8	7	9	6.9	10.2
16-Oct	5	7	A	7	17	17	39	74	84	23	19	8	7	5	7	7	7	10	14	18	17	26	14	13	19.3	83.6
17-Oct	23	A	29	32	20	25	26	18	8	6	6	4	4	4	5	5	7	14	28	15	40	32	56	28	18.9	55.9
18-Oct	A	20	12	12	17	35	25	174	182	139	49	11	9	16	19	13	17	11	13	12	6	8	6	A	36.6	182.5
19-Oct	6	5	3	3	4	13	12	27	27	19	12	7	8	7	7	5	5	26	21	11	23	15	A	12	12.0	27.3
20-Oct	11	19	22	36	47	74	106	172	191	147	116	20	11	15	11	13	20	20	16	17	19	A	19	13	49.3	191.0
21-Oct	17	15	15	17	15	30	36	119	30	22	17	8	8	16	15	12	12	20	21	15	A	19	10	17	22.0	118.7
22-Oct	6	7	6	8	12	11	13	13	16	12	11	11	12	9	13	9	10	14	14	A	10	10	16	11	11.1	15.7
23-Oct	15	7	17	8	11	10	10	18	17	17	15	17	13	11	11	16	13	11	A	16	14	12	9	9	12.9	17.8
24-Oct	5	12	12	8	7	9	8	8	6	7	9	9	12	10	9	12	13	A	10	8	7	8	4	4	8.7	13.5
25-Oct	4	3	4	5	8	13	29	41	33	18	20	13	12	16	13	14	A	12	14	15	16	9	10	7	14.4	41.2
26-Oct	14	3	7	4	8	16	17	18	18	10	11	11	12	10	11	10	18	22	16	17	11	16	9	11	12.5	21.8
27-Oct	8	12	12	13	18	A	16	28	32	17	32	29	29	33	32	21	27	28	29	33	30	17	14	13	22.9	33.5
28-Oct	10	4	5	20	46	A	129	106	81	68	46	50	23	12	20	16	16	81	147	129	158	177	69	80	64.9	176.8
29-Oct	68	69	38	42	48	A	117	94	128	118	52	27	23	18	10	13	17	23	40	31	23	24	14	14	45.7	128.4
30-Oct	13	13	14	25	A	25	24	30	43	41	26	20	8	8	15	14	26	44	58	45	31	58	59	51	30.1	59.0
31-Oct	63	55	38	A	38	46	48	49	60	34	35	27	21	9	7	8	6	42	88	65	43	36	31	14	37.6	88.5
	15.6	16.2	14.6	15.6	18.8	24.5	36.5	56.6	50.0	38.3	25.3	14.2	11.4	10.6	11.6	10.3	12.4	21.0	31.7	31.9	29.0	24.8	19.3	15.9	Diurnal Average	
	67.8	69.5	42.6	41.5	47.7	75.6	128.6	174.0	191.0	146.6	116.1	49.7	29.0	33.5	48.8	21.0	27.1	80.8	147.2	128.9	158.3	176.8	69.3	79.7	Diurnal Maximum	

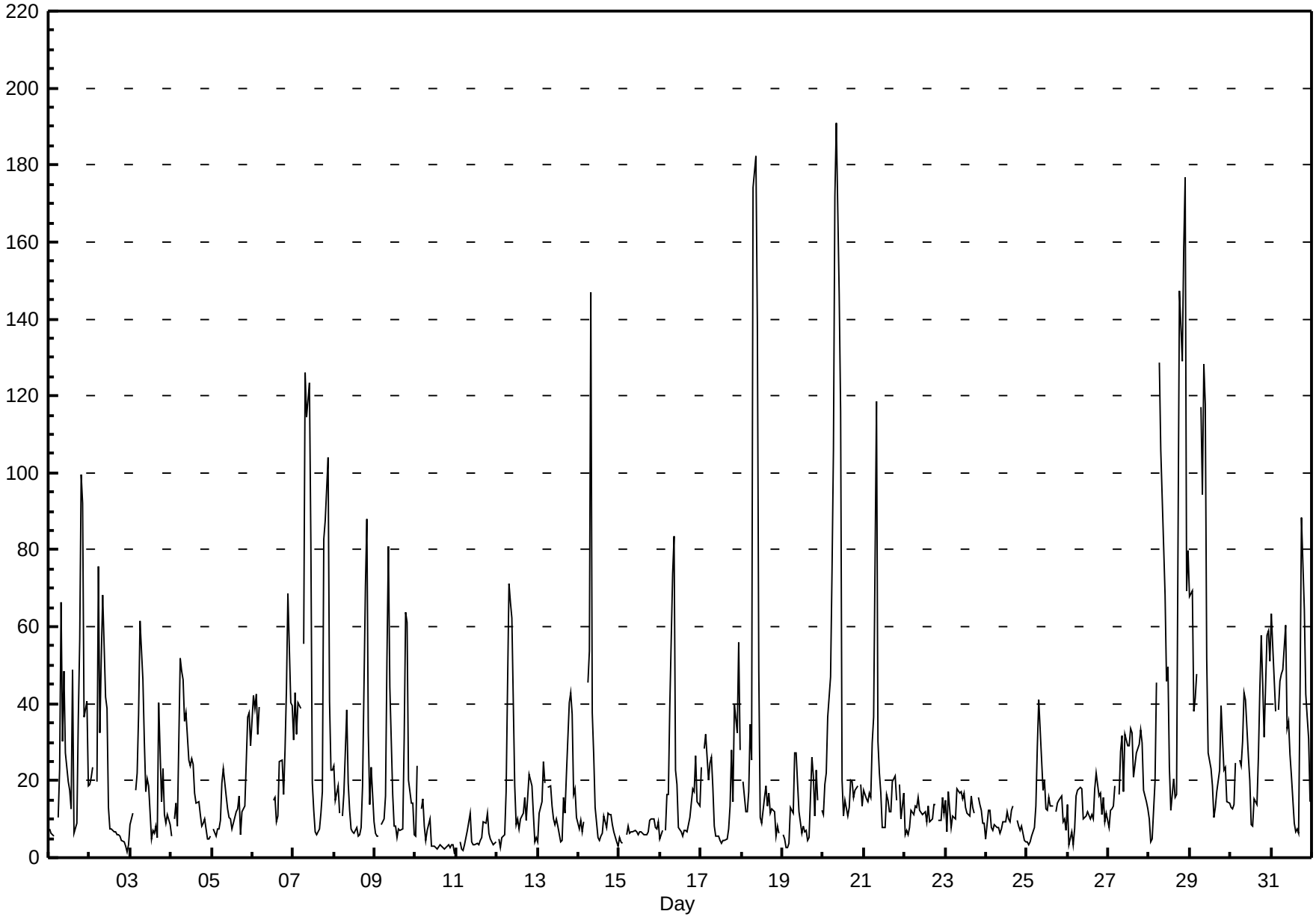
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 44.4 ppb on Oct 17 15:00 Maximum Daily Average: 33.3 ppb on Oct 10

Minimum Value: 1 ppb on Oct 21 07:00 Minimum Daily Average: 5.0 ppb on Oct 28
Maximum Diurnal Average: 29.2 ppb at hour 16 Minimum Diurnal Average: 9.8 ppb at hour 8
Monthly Average: 19.87 ppb Percentiles: P_1 = 0.8 P_{10} = 2.6 Q_1 = 9.6 Median = 20.2 Q_3 = 30.2 P_{90} = 35.7 P_{99} = 42.4

Hours in Service:	744
Hours of Data:	710
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-Oct	27	28	26	25	A	22	16	4	16	15	19	23	25	29	30	31	31	28	13	3	2	2	4	4	18.5	31.5
2-Oct	5	5	2	A	2	1	1	1	2	4	11	19	26	29	29	30	29	29	30	32	31	31	32	30	18.0	31.9
3-Oct	28	21	A	12	12	2	1	2	7	14	19	28	35	36	37	37	36	30	26	22	28	28	29	22	22.2	36.8
4-Oct	20	A	14	13	15	6	4	2	4	5	8	10	14	16	23	26	23	23	23	20	19	21	23	22	15.4	26.4
5-Oct	A	21	21	21	24	20	19	17	25	26	28	29	29	28	30	30	27	31	26	25	20	16	9	9	23.3	31.0
6-Oct	2	1	1	1	1	A	1	4	11	18	23	C	C	C	27	27	17	16	17	12	5	2	6	6	9.9	27.4
7-Oct	1	1	1	1	1	A	1	1	1	2	7	17	23	27	29	31	31	25	6	3	2	3	7	10	10.0	31.1
8-Oct	9	11	15	17	A	30	24	14	22	31	38	40	40	41	41	41	40	33	11	8	22	30	27	30	26.8	41.3
9-Oct	31	31	30	A	28	25	19	10	4	12	28	36	40	42	42	43	41	28	12	20	25	25	29	31	27.6	42.6
10-Oct	30	25	A	25	25	28	29	25	23	38	39	40	40	41	40	39	37	36	36	34	34	34	34	36	33.3	40.6
11-Oct	35	A	34	34	34	33	30	28	28	32	34	35	36	36	36	35	34	31	29	30	30	32	33	32	32.7	36.4
12-Oct	A	33	35	36	35	26	9	9	14	23	32	36	34	38	38	35	34	35	29	26	26	33	38	37	30.1	37.9
13-Oct	37	33	28	21	18	A	26	24	22	24	26	27	29	31	31	32	31	23	10	9	10	22	23	25	24.4	36.7
14-Oct	26	25	25	23	A	6	1	1	4	10	25	40	41	41	39	38	36	34	31	29	31	33	34	35	26.4	41.4
15-Oct	31	32	33	A	32	31	31	31	31	33	33	33	33	33	32	32	31	29	27	25	27	26	27	28	30.6	33.5
16-Oct	31	27	A	27	23	20	10	2	5	21	28	33	33	36	37	38	36	32	26	23	20	16	24	26	25.0	38.1
17-Oct	19	A	13	9	17	13	9	19	31	34	39	42	44	44	44	44	42	38	25	31	24	10	11	20	27.1	44.4
18-Oct	A	27	29	25	22	16	22	5	3	10	23	40	39	36	35	37	33	35	33	33	38	36	35	A	27.7	39.6
19-Oct	36	35	38	38	37	31	29	25	21	26	35	40	42	42	41	41	38	24	23	29	24	30	A	24	32.6	42.3
20-Oct	22	20	12	5	1	1	1	1	1	2	16	27	30	29	30	28	22	18	16	14	14	A	14	11	14.6	30.2
21-Oct	4	3	3	4	5	1	1	1	3	5	11	17	19	18	19	18	14	17	18	24	A	19	22	22	11.5	23.5
22-Oct	23	24	23	22	20	20	20	23	26	25	26	25	24	23	20	20	18	17	17	A	15	14	10	9	20.2	26.2
23-Oct	12	12	8	8	7	7	8	4	5	6	6	7	6	6	6	5	5	4	A	3	4	6	9	11	6.8	12.2
24-Oct	12	11	9	10	11	11	10	10	13	13	13	13	13	12	13	14	12	A	11	11	9	10	11	12	11.5	14.0
25-Oct	13	13	13	13	12	10	7	4	6	8	10	11	12	12	12	13	A	13	12	9	10	13	15	20	11.4	20.3
26-Oct	19	20	20	19	18	15	12	11	12	15	15	15	16	17	16	16	15	13	14	16	16	16	16	18	16.0	20.1
27-Oct	19	18	14	15	12	A	12	8	9	8	4	7	6	6	7	5	3	2	11	16	8	7	4	6	9.0	18.9
28-Oct	6	9	6	3	1	A	1	1	1	2	5	6	10	12	10	14	15	6	1	1	1	1	2	1	5.0	14.5
29-Oct	1	1	1	1	1	A	1	1	2	2	5	8	13	23	31	33	31	24	17	23	21	23	29	25	13.7	32.9
30-Oct	26	27	26	19	A	23	17	16	9	18	25	33	37	35	32	33	22	17	8	12	15	7	4	3	20.2	37.5
31-Oct	1	2	1	A	1	1	1	1	2	7	6	9	22	36	40	39	34	24	6	7	11	19	18	26	13.6	39.8
	18.9	18.4	17.3	16.6	15.3	16.0	12.0	9.8	11.7	15.8	20.6	24.8	27.1	28.5	29.1	29.2	27.3	23.8	18.9	18.3	18.1	18.8	19.3	19.8	Diurnal Average	
	36.7	34.7	38.5	38.3	36.6	32.9	31.1	31.0	31.1	38.0	39.0	41.9	43.7	44.1	44.4	44.1	42.5	38.4	35.6	34.3	37.7	35.7	37.7	36.6	Diurnal Maximum	

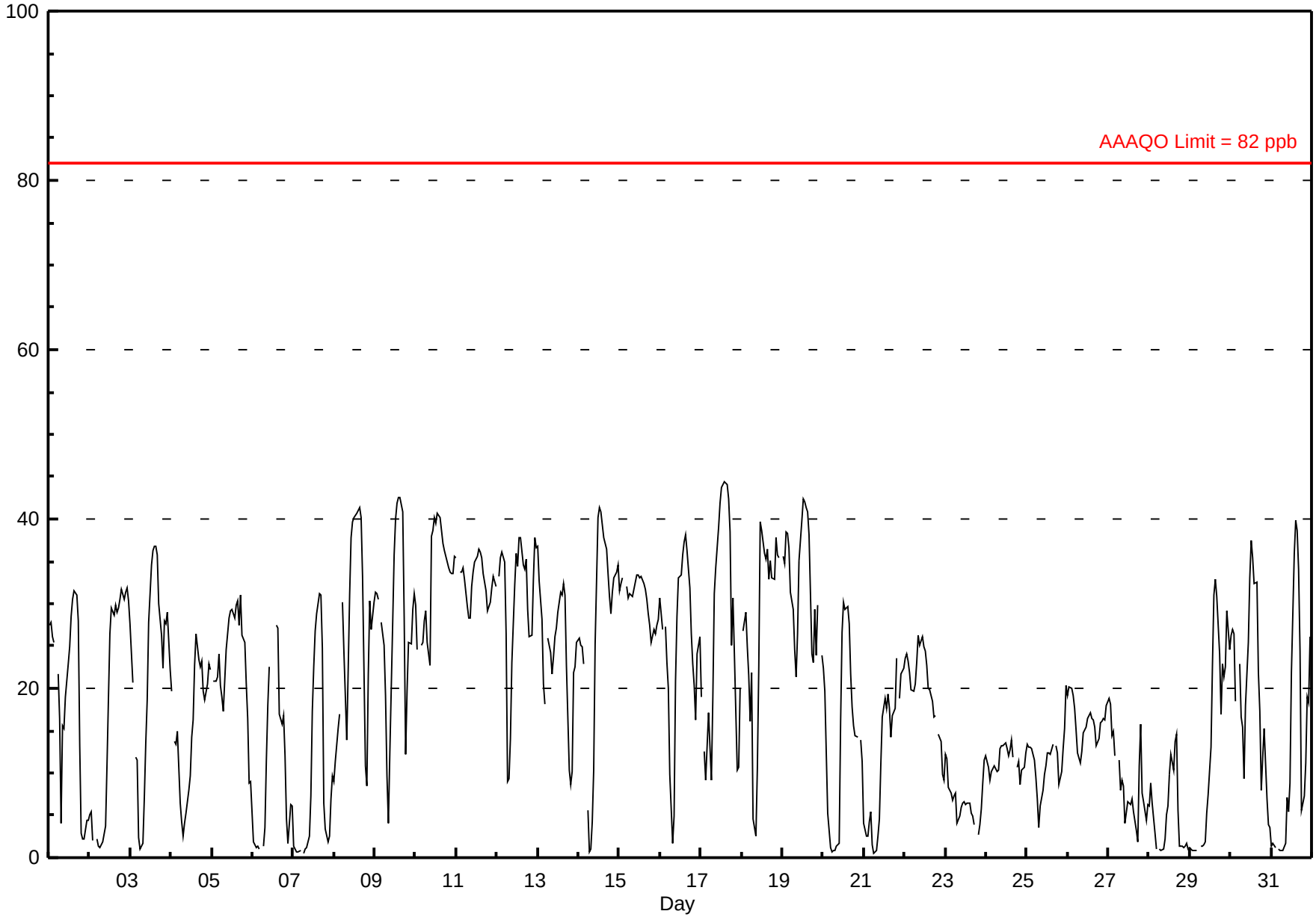
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

PASZA
Peace Air Shed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - October 2010

Maximum Value: 46.2 ppb on Oct 17 15:00

Maximum Daily Average: 36.3 ppb on Oct 19

Minimum Value: 1 ppb on Oct 29 04:00

Minimum Daily Average: 7.2 ppb on Oct 28

Maximum Diurnal Average: 31.5 ppb at hour 16

Minimum Diurnal Average: 13.8 ppb at hour 8

Monthly Average: 23.10 ppb

Percentiles: P_1 = 1.3 P_{10} = 5.1 Q_1 = 13.4 Median = 24.9 Q_3 = 32.6 P_{90} = 38.2 P_{99} = 44.9

Hours in Service:	744
Hours of Data:	710
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-Oct	29	30	28	27	A	23	21	9	20	21	24	26	27	30	34	34	34	33	25	7	3	4	7	6	21.8	34.1
2-Oct	6	7	3	A	3	2	1	2	3	5	18	23	30	32	31	32	31	32	32	34	32	33	34	32	19.9	34.0
3-Oct	30	25	A	15	15	6	2	5	11	20	21	34	36	38	38	38	37	35	29	25	31	30	31	27	25.2	38.4
4-Oct	23	A	15	16	19	16	10	5	7	7	12	14	17	21	29	30	29	26	26	22	22	22	24	24	18.9	29.9
5-Oct	A	22	22	24	27	24	27	25	27	30	31	31	31	31	32	33	31	33	32	28	29	22	16	14	27.0	33.4
6-Oct	5	4	2	2	1	A	2	10	16	21	24	C	C	C	30	30	24	24	22	17	9	4	11	13	13.5	29.7
7-Oct	7	2	1	1	2	A	1	2	2	6	14	21	26	29	31	33	34	31	24	11	6	8	10	17	13.8	34.1
8-Oct	13	17	23	19	A	33	31	21	26	40	41	42	42	42	43	43	42	41	31	26	30	34	30	32	32.3	43.5
9-Oct	32	32	31	A	29	27	23	15	8	23	32	40	43	44	45	45	43	40	23	30	31	30	33	33	31.9	45.0
10-Oct	31	29	A	28	28	30	30	27	37	39	41	41	41	42	41	40	38	38	37	35	35	34	35	37	35.5	41.8
11-Oct	37	A	35	34	35	35	32	30	32	34	35	36	37	37	38	38	37	35	32	32	32	34	34	34	34.5	37.8
12-Oct	A	36	36	38	37	30	23	32	27	33	36	38	38	40	41	38	38	39	33	30	29	37	39	38	35.0	40.8
13-Oct	38	35	33	28	23	A	30	26	24	27	28	31	31	33	33	34	34	31	19	16	19	24	25	27	28.3	37.8
14-Oct	27	27	26	25	A	17	1	2	9	15	33	42	43	43	41	40	39	36	34	32	33	35	35	35	29.3	43.3
15-Oct	34	33	34	A	33	32	32	32	33	35	35	35	35	34	33	33	32	31	29	28	29	28	29	31	32.3	34.9
16-Oct	32	30	A	29	26	26	18	4	19	24	33	35	35	38	39	40	39	36	30	26	23	26	28	29	28.9	40.3
17-Oct	26	A	15	16	20	19	18	26	35	38	41	44	45	46	46	46	45	42	32	35	33	16	20	26	31.8	46.2
18-Oct	A	31	31	27	28	25	30	16	4	18	36	43	41	39	40	40	39	39	37	38	39	38	37	A	32.5	42.9
19-Oct	37	37	40	40	38	35	32	30	26	30	40	42	45	44	43	43	41	35	31	34	29	34	A	27	36.3	44.8
20-Oct	28	24	16	13	3	1	2	2	2	3	28	29	33	32	32	31	29	21	19	17	18	A	17	16	18.1	32.6
21-Oct	6	5	4	9	9	3	1	2	3	8	16	20	23	21	22	20	17	20	21	26	A	23	25	25	14.4	26.4
22-Oct	25	25	24	23	22	21	22	26	29	27	27	27	26	25	22	22	21	18	18	A	17	16	12	13	22.1	28.8
23-Oct	13	14	10	8	8	9	10	6	7	7	8	8	7	7	7	7	6	5	A	3	5	7	11	12	8.3	13.9
24-Oct	13	12	10	11	11	12	11	12	14	14	14	14	14	13	15	15	14	A	12	12	10	12	11	13	12.7	15.4
25-Oct	14	14	14	14	13	11	10	6	9	10	12	13	14	14	15	15	A	15	15	11	13	15	18	22	13.4	22.1
26-Oct	21	21	21	20	19	17	15	14	15	17	17	17	18	18	18	18	18	16	16	18	19	18	18	21	17.9	21.3
27-Oct	20	20	18	18	16	A	15	13	11	10	5	8	7	7	9	7	5	3	24	23	13	9	7	9	12.2	23.6
28-Oct	8	10	7	5	2	A	5	1	2	4	7	8	13	14	13	19	19	11	2	3	2	2	5	2	7.2	18.7
29-Oct	2	1	1	1	1	A	2	2	2	3	7	11	16	29	35	36	35	30	24	28	25	31	34	30	16.7	35.7
30-Oct	29	31	31	25	A	28	20	20	13	30	30	37	40	38	36	35	32	24	15	24	20	21	8	12	25.9	39.8
31-Oct	2	3	2	A	1	1	2	2	4	9	8	15	30	41	41	41	39	31	21	17	19	25	27	29	17.8	41.5
	21.1	20.7	19.1	19.2	17.5	19.4	15.5	13.8	15.4	19.7	24.3	27.5	29.4	30.7	31.5	31.5	30.7	28.3	24.8	23.0	21.8	22.4	22.5	22.9	Diurnal Average	
	37.8	37.2	39.9	40.0	38.4	34.9	32.4	32.4	37.4	40.0	40.8	43.8	45.4	45.5	46.2	45.6	44.9	42.2	37.1	37.9	38.9	37.9	38.8	37.9	Diurnal Maximum	

C - Calibration

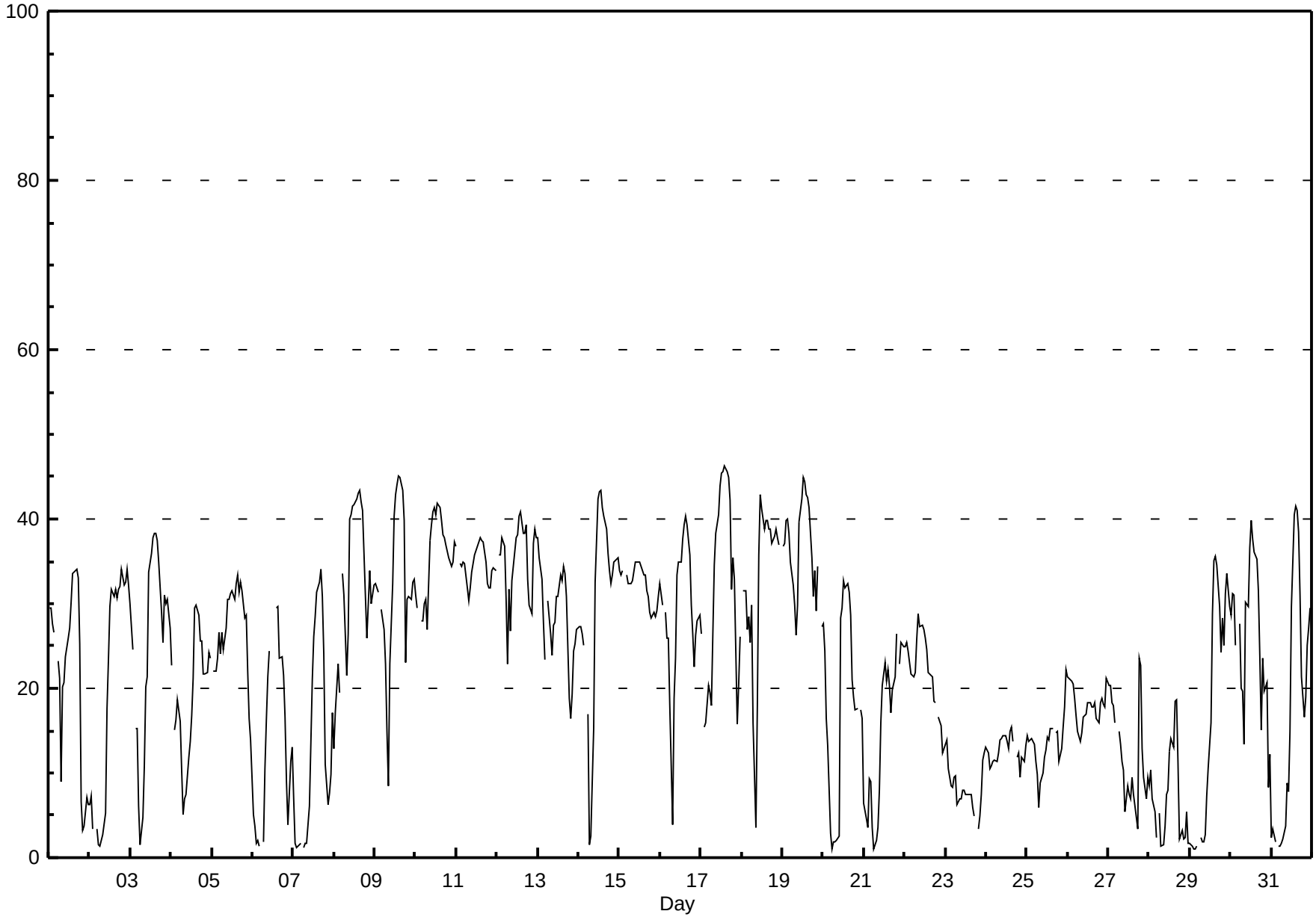
A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - October 2010



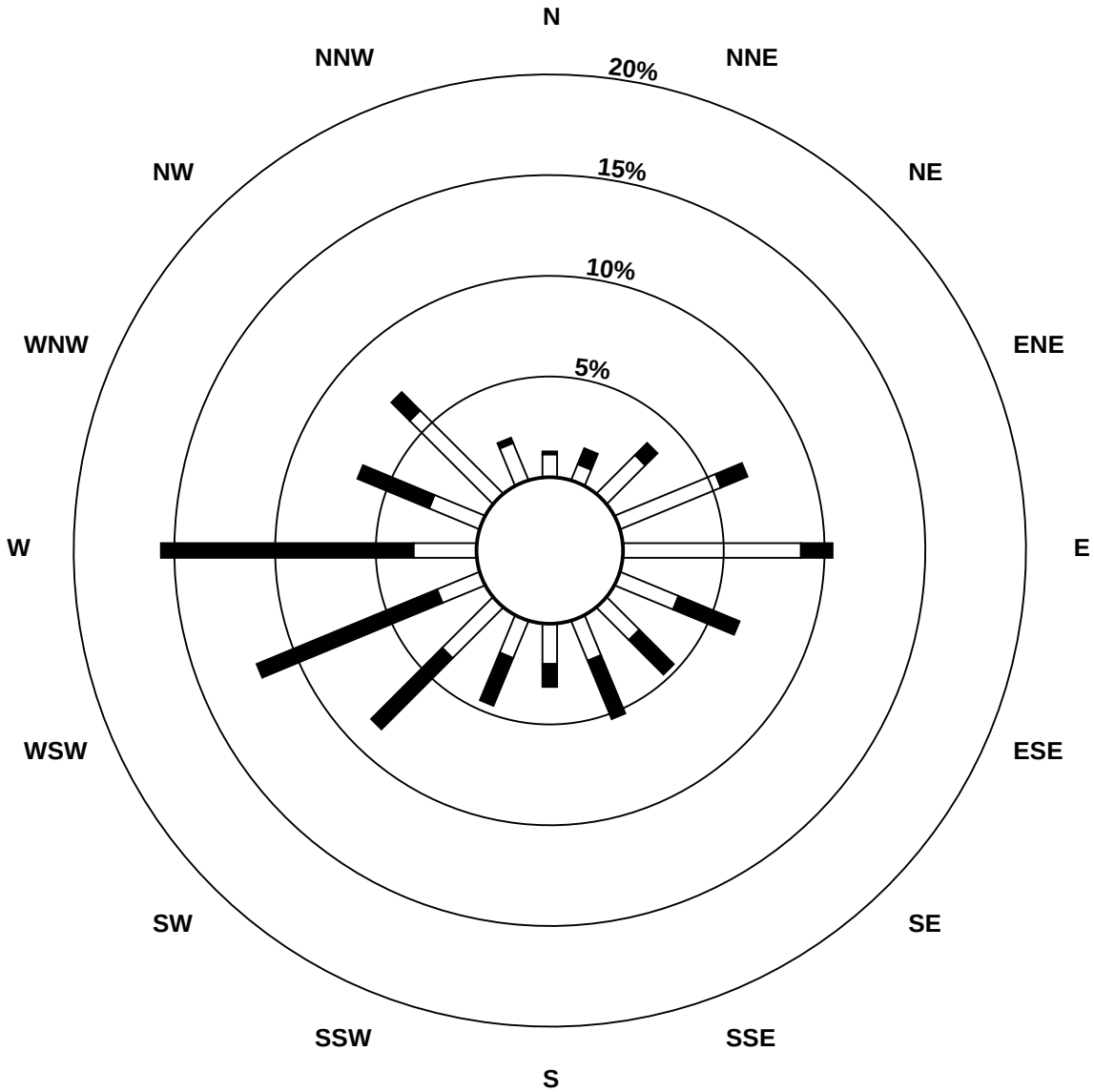
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

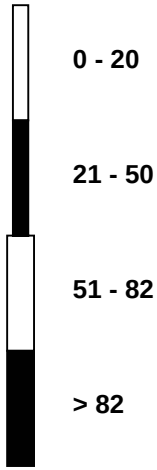
Pollutant Rose

Ozone (O_3) - ppb

Henry Pirker - October 2010



Pollutant Classes (ppb)



FOCUS
AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Henry Pirker - October 2010

Maximum Value: 42.2 ppb on Oct 17 18:00

Minimum Value: 0.9 ppb on Oct 7 09:00

Percentiles: P_1 = 1.1 P_{10} = 5.2 Q_1 = 10.9 Median = 20.8 Q_3 = 28.4 P_{90} = 33.2 P_{99} = 39.1

Hours in Service:	744
Hours of Data:	737
Hours of Missing Data:	7
Hours of Calibration:	7
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Oct	27	27	26	27	27	26	25	21	20	18	17	16	17	18	20	23	25	27	26	24	21	18	14	11	27.1
2-Oct	8	5	4	4	4	4	3	3	2	2	3	5	8	12	15	19	22	25	28	29	30	30	31	31	30.6
3-Oct	30	29	29	26	24	20	15	11	8	7	8	10	13	18	22	26	30	32	33	32	32	30	29	28	33.0
4-Oct	26	25	23	22	20	17	13	11	8	8	7	7	7	8	10	13	16	18	20	21	22	22	22	22	25.6
5-Oct	21	21	21	21	22	22	21	21	21	22	23	24	24	25	27	28	29	29	29	29	27	26	23	21	29.2
6-Oct	17	14	11	8	5	4	2	2	3	5	8	10	N	N	N	N	N	N	N	19	17	15	13	10	19.3
7-Oct	8	6	4	3	2	2	2	1	1	1	2	4	7	10	13	17	21	24	24	22	19	16	13	11	23.7
8-Oct	8	6	8	9	10	14	17	17	19	22	25	28	30	31	33	37	39	39	36	32	30	28	27	25	39.2
9-Oct	24	24	26	29	30	29	28	25	21	18	18	20	22	24	27	31	35	37	36	33	32	30	28	27	37.5
10-Oct	25	25	26	27	27	28	28	27	26	28	29	31	33	34	36	37	39	39	39	38	37	36	35	35	39.1
11-Oct	35	35	34	34	34	34	34	33	32	32	32	32	32	32	33	34	35	35	34	33	33	32	32	31	34.8
12-Oct	31	31	32	33	34	33	30	26	25	23	23	23	23	24	28	31	34	35	35	34	33	32	32	32	35.2
13-Oct	33	32	32	31	30	30	28	27	24	23	23	24	25	26	27	28	29	29	27	25	22	21	20	19	32.6
14-Oct	18	19	21	22	24	22	19	15	12	10	10	12	16	21	25	30	34	37	38	36	35	34	33	33	37.5
15-Oct	32	32	32	33	33	33	32	32	32	32	32	32	32	32	33	33	33	32	31	30	30	29	28	28	32.9
16-Oct	28	27	27	28	27	26	24	20	16	15	17	18	19	21	24	29	33	34	34	33	31	29	27	26	34.3
17-Oct	23	22	20	18	18	17	15	14	16	18	21	26	29	33	37	40	42	42	41	39	37	32	28	25	42.2
18-Oct	23	21	22	21	20	21	23	21	18	16	16	17	20	22	24	28	31	35	36	35	35	35	35	35	35.9
19-Oct	35	35	36	37	36	36	35	34	32	31	30	31	31	33	34	36	38	38	36	35	33	31	30	27	38.3
20-Oct	25	25	23	20	16	12	11	8	5	3	3	6	10	13	17	20	23	25	25	23	21	20	18	16	25.2
21-Oct	13	11	9	8	6	6	4	3	3	3	4	5	7	9	11	14	15	17	17	18	18	18	19	19	19.3
22-Oct	21	22	22	22	22	22	22	22	22	22	23	23	24	24	24	24	23	22	20	20	18	17	16	14	24.1
23-Oct	13	13	11	11	10	9	9	8	7	7	6	6	6	6	6	6	6	6	6	5	5	5	5	6	13.3
24-Oct	7	8	8	9	10	10	11	10	11	11	11	12	12	12	13	13	13	13	12	12	12	11	11	11	13.0
25-Oct	11	11	12	12	12	12	12	11	10	9	9	8	8	9	9	11	11	12	12	12	12	12	12	13	13.3
26-Oct	14	15	16	17	18	18	18	17	16	15	15	14	14	14	15	15	16	16	16	16	16	16	15	16	18.3
27-Oct	16	17	17	17	16	16	15	14	13	11	10	9	8	8	7	7	6	5	6	7	7	7	7	7	16.8
28-Oct	7	8	8	6	5	5	5	4	3	2	2	2	4	5	6	8	9	10	9	9	8	6	5	4	9.7
29-Oct	2	1	1	1	1	1	1	1	1	1	2	3	5	7	11	14	18	21	22	24	25	25	25	24	25.4
30-Oct	23	24	25	24	25	25	23	22	19	18	18	20	22	24	26	28	30	29	27	25	22	18	15	11	29.5
31-Oct	9	7	6	5	3	2	1	1	1	2	3	3	6	10	15	20	24	26	26	26	25	23	20	18	26.2
Diurnal Maximums	35.1	35.0	35.8	36.6	36.4	35.8	34.9	33.7	31.9	31.6	31.7	31.9	32.7	34.3	37.2	40.3	41.7	42.2	40.5	39.1	37.1	36.2	35.4	35.0	

N - Not Valid

PASZA
Peace Air Shed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.21 ppm on Oct 28 07:00
Maximum Daily Average: 0.39 ppm on Oct 28

Minimum Value: 0.0 ppm on Oct 14 14:00
Maximum Diurnal Average: 0.26 ppm at hour 8
Monthly Average: 0.164 ppm

Minimum Daily Average: 0.07 ppm on Oct 11
Minimum Diurnal Average: 0.12 ppm at hour 5
Percentiles: $P_1 = 0.05$ $P_{10} = 0.08$ $Q_1 = 0.10$ Median = 0.14 $Q_3 = 0.17$ $P_{90} = 0.26$ $P_{99} = 0.65$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	0.1	0.1	0.1	0.1	A	0.1	0.1	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.6	0.4	0.2	0.2	0.1	0.18	0.63
2-Oct	0.1	0.2	0.2	A	0.1	0.1	0.1	0.2	0.3	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	0.12	0.29
3-Oct	0.1	0.1	A	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.11	0.19
4-Oct	0.1	A	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	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.15	0.22
5-Oct	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	C	C	C	C	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.12	0.26
6-Oct	0.3	0.2	0.2	0.2	0.1	A	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.4	0.2	0.2	0.18	0.36
7-Oct	0.2	0.3	0.2	0.1	0.1	A	0.2	0.6	0.3	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.5	0.5	0.4	0.2	0.1	0.2	0.24	0.57
8-Oct	0.1	0.2	0.1	0.1	A	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.4	0.4	0.2	0.2	0.2	0.1	0.15	0.43
9-Oct	0.1	0.1	0.1	A	0.1	0.1	0.1	0.3	0.5	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.1	0.1	0.17	0.47
10-Oct	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	0.09	0.14
11-Oct	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	0.1	0.07	0.09
12-Oct	A	0.1	0.1	0.1	0.1	0.1	0.2	0.3	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	0.1	0.1	0.13	0.30
13-Oct	0.1	0.1	0.2	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	0.2	0.3	0.3	0.3	0.2	0.1	0.1	0.16	0.32
14-Oct	0.1	0.1	0.1	0.1	A	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.09	0.21
15-Oct	0.1	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	0.10	0.12
16-Oct	0.1	0.1	A	0.1	0.1	0.1	0.2	0.5	0.7	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	0.1	0.16	0.66
17-Oct	0.2	A	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	0.2	0.1	0.2	0.3	0.3	0.2	0.15	0.35
18-Oct	A	0.1	0.1	0.1	0.1	0.2	0.2	0.6	1.0	0.4	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	A	0.22	1.04
19-Oct	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	A	0.1	0.11	0.17
20-Oct	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.6	0.6	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.23	0.63
21-Oct	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.1	0.1	0.17	0.38
22-Oct	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	0.2	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.12	0.15
23-Oct	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.1	0.2	0.16	0.20
24-Oct	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	A	0.1	0.2	0.1	0.1	0.1	0.1	0.16	0.19
25-Oct	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.13	0.25
26-Oct	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.13	0.20
27-Oct	0.1	0.1	0.1	0.1	0.1	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	0.1	0.2	0.2	0.2	0.2	0.17	0.22
28-Oct	0.1	0.1	0.2	0.1	0.2	A	1.2	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.8	0.8	0.6	0.8	0.4	0.4	0.39	1.21
29-Oct	0.4	0.2	0.2	0.1	0.2	A	0.5	0.6	0.7	0.5	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	0.67
30-Oct	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.4	0.5	0.4	0.26	0.46
31-Oct	0.4	0.3	0.2	A	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	0.2	0.5	0.4	0.2	0.2	0.1	0.1	0.20	0.46
	0.15	0.13	0.13	0.12	0.12	0.13	0.21	0.26	0.26	0.20	0.15	0.13	0.12	0.12	0.12	0.12	0.14	0.16	0.22	0.22	0.20	0.19	0.16	0.14	Diurnal Average	
	0.45	0.28	0.21	0.26	0.23	0.27	1.21	0.64	1.04	0.60	0.32	0.29	0.19	0.21	0.20	0.20	0.23	0.34	0.78	0.80	0.58	0.79	0.46	0.43	Diurnal Maximum	

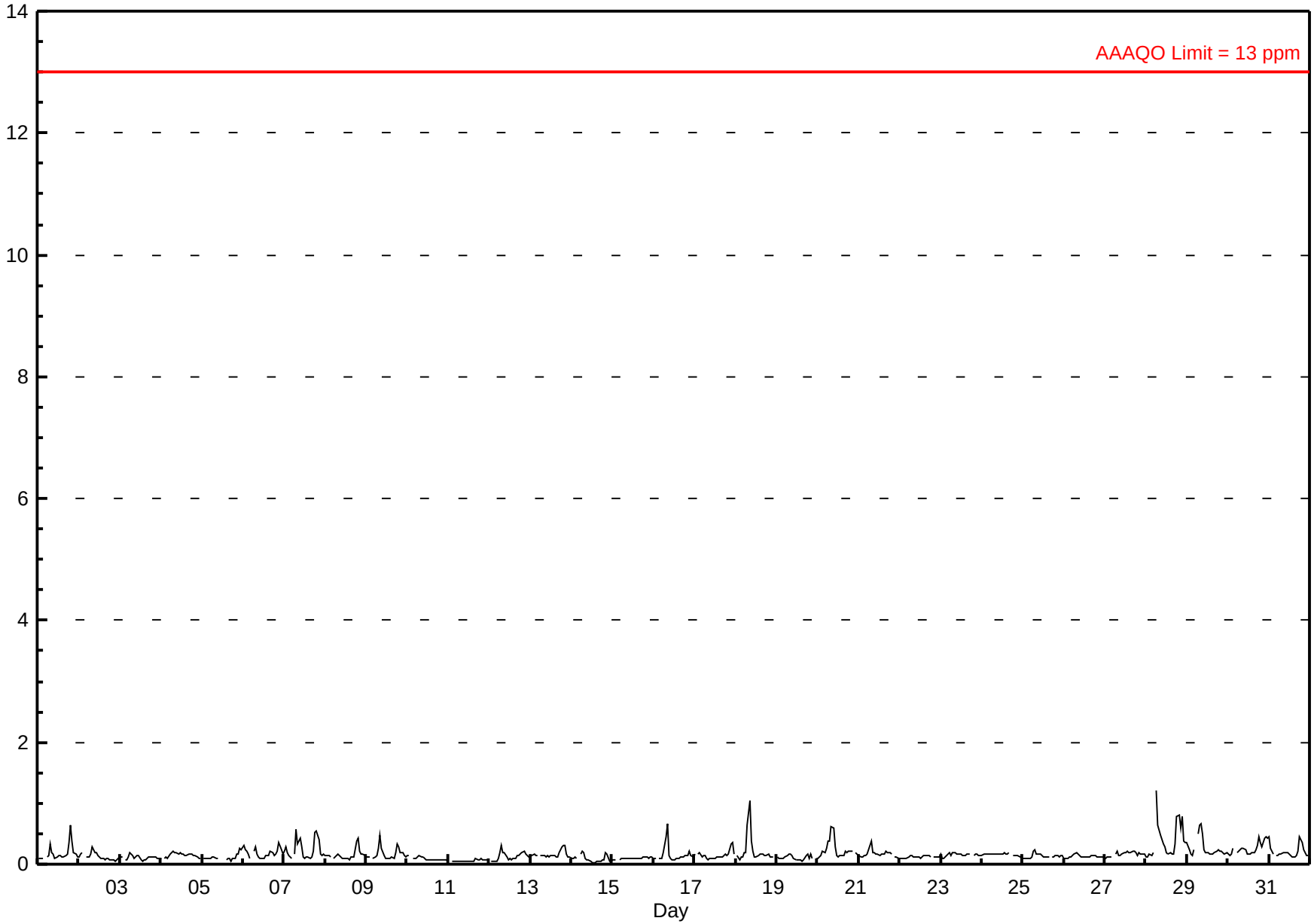
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na

PASZA
Peace Air Shed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - October 2010

Maximum Value: 12.40 ppm on Oct 28 07:00

Maximum Daily Average: 1.06 ppm on Oct 28

Minimum Value: 0.1 ppm on Oct 11 10:00

Minimum Daily Average: 0.09 ppm on Oct 11

Maximum Diurnal Average: 0.78 ppm at hour 7

Minimum Diurnal Average: 0.16 ppm at hour 14

Monthly Average: 0.279 ppm

Percentiles: $P_1 = 0.06$ $P_{10} = 0.10$ $Q_1 = 0.14$ Median = 0.20 $Q_3 = 0.28$ $P_{90} = 0.48$ $P_{99} = 1.37$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	0.2	0.1	0.1	0.1	A	0.2	0.2	0.6	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.7	0.9	0.6	0.3	0.3	0.1	0.28	0.88
2-Oct	0.2	0.3	0.6	A	0.2	0.2	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.20	0.56
3-Oct	0.2	0.2	A	0.1	0.2	0.2	0.4	0.3	0.2	0.2	0.3	0.4	0.2	0.1	0.2	0.1	0.1	0.2	0.4	0.2	0.2	0.2	0.1	0.1	0.18	0.41
4-Oct	0.1	A	0.1	0.2	0.1	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.19	0.31
5-Oct	A	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	C	C	C	C	0.1	0.2	0.1	0.1	0.2	0.2	0.5	0.3	0.4	0.3	0.19	0.49
6-Oct	0.4	0.3	0.3	0.3	0.2	A	0.3	0.4	0.2	0.1	0.1	0.1	0.1	0.3	0.2	0.2	0.3	0.2	0.1	0.2	0.3	0.7	0.4	0.3	0.27	0.70
7-Oct	0.3	0.4	0.3	0.4	0.1	A	0.3	1.2	0.5	0.6	1.0	0.2	0.1	0.1	0.1	0.1	0.2	0.3	1.6	1.0	1.2	0.2	0.2	0.3	0.48	1.65
8-Oct	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.7	0.8	0.3	0.3	0.2	0.3	0.22	0.77
9-Oct	0.2	0.1	0.2	A	0.2	0.2	0.2	0.8	0.8	0.4	0.2	0.1	0.2	0.1	0.1	0.5	0.1	0.3	0.4	0.5	0.3	0.2	0.2	0.1	0.29	0.81
10-Oct	0.1	0.2	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	0.10	0.19
11-Oct	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	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09	0.21
12-Oct	A	0.1	0.1	0.1	0.1	0.1	0.3	0.6	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.19	0.56
13-Oct	0.2	0.2	0.2	0.3	0.3	A	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.5	0.3	0.2	0.2	0.22	0.48
14-Oct	0.2	0.2	0.2	0.2	A	0.4	0.5	0.4	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.5	0.1	0.1	0.20	0.61
15-Oct	0.1	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	0.2	0.2	0.2	0.1	0.3	0.2	0.12	0.27
16-Oct	0.1	0.1	A	0.1	0.1	0.2	1.5	1.8	2.4	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.39	2.43
17-Oct	0.3	A	0.2	0.3	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	0.2	0.2	0.2	0.4	0.7	0.6	0.3	0.22	0.65
18-Oct	A	0.2	0.1	0.7	0.2	0.3	0.3	1.2	1.8	0.8	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	A	0.37	1.80
19-Oct	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.5	0.2	A	0.1	0.16	0.55
20-Oct	0.1	0.2	0.2	0.3	0.3	0.4	1.4	0.9	1.1	0.8	0.6	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	A	0.3	0.2	0.39	1.39
21-Oct	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.3	A	0.2	0.1	0.1	0.24	0.69
22-Oct	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	A	0.3	0.2	0.2	0.2	0.20	0.31
23-Oct	1.2	0.1	0.2	0.2	0.2	0.5	0.2	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.29	1.23
24-Oct	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3	A	0.2	0.2	0.1	0.1	0.2	0.1	0.22	0.31
25-Oct	0.1	0.1	0.1	0.1	0.1	0.2	1.0	0.9	0.2	0.2	0.5	0.2	0.2	0.1	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.26	1.01
26-Oct	0.1	0.2	0.1	0.2	0.2	0.4	0.3	0.4	0.3	0.2	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	0.21	0.38
27-Oct	0.2	0.2	0.2	0.2	0.2	A	0.4	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.24	0.36
28-Oct	0.2	0.2	0.2	0.2	0.2	A	12.4	1.3	0.6	0.5	0.4	0.4	0.3	0.2	0.3	0.3	0.2	0.9	1.2	1.1	1.1	1.2	0.6	0.8	1.06	12.40
29-Oct	0.4	0.4	0.3	0.2	2.3	A	1.4	0.7	0.8	0.7	0.3	0.2	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.47	2.30
30-Oct	0.2	0.2	0.2	0.5	A	0.6	0.3	0.3	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.5	0.4	0.5	0.6	0.6	0.37	0.72
31-Oct	0.5	0.5	0.3	A	0.3	0.2	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.8	0.7	0.3	0.2	0.2	0.34	0.79
	0.23	0.19	0.18	0.20	0.24	0.24	0.78	0.51	0.44	0.29	0.25	0.18	0.17	0.16	0.16	0.18	0.19	0.23	0.37	0.35	0.36	0.29	0.23	0.21	Diurnal Average	
	1.23	0.49	0.56	0.68	2.30	0.56	12.40	1.81	2.43	0.83	0.97	0.41	0.41	0.32	0.31	0.46	0.33	0.92	1.65	1.12	1.18	1.17	0.60	0.75	Diurnal Maximum	

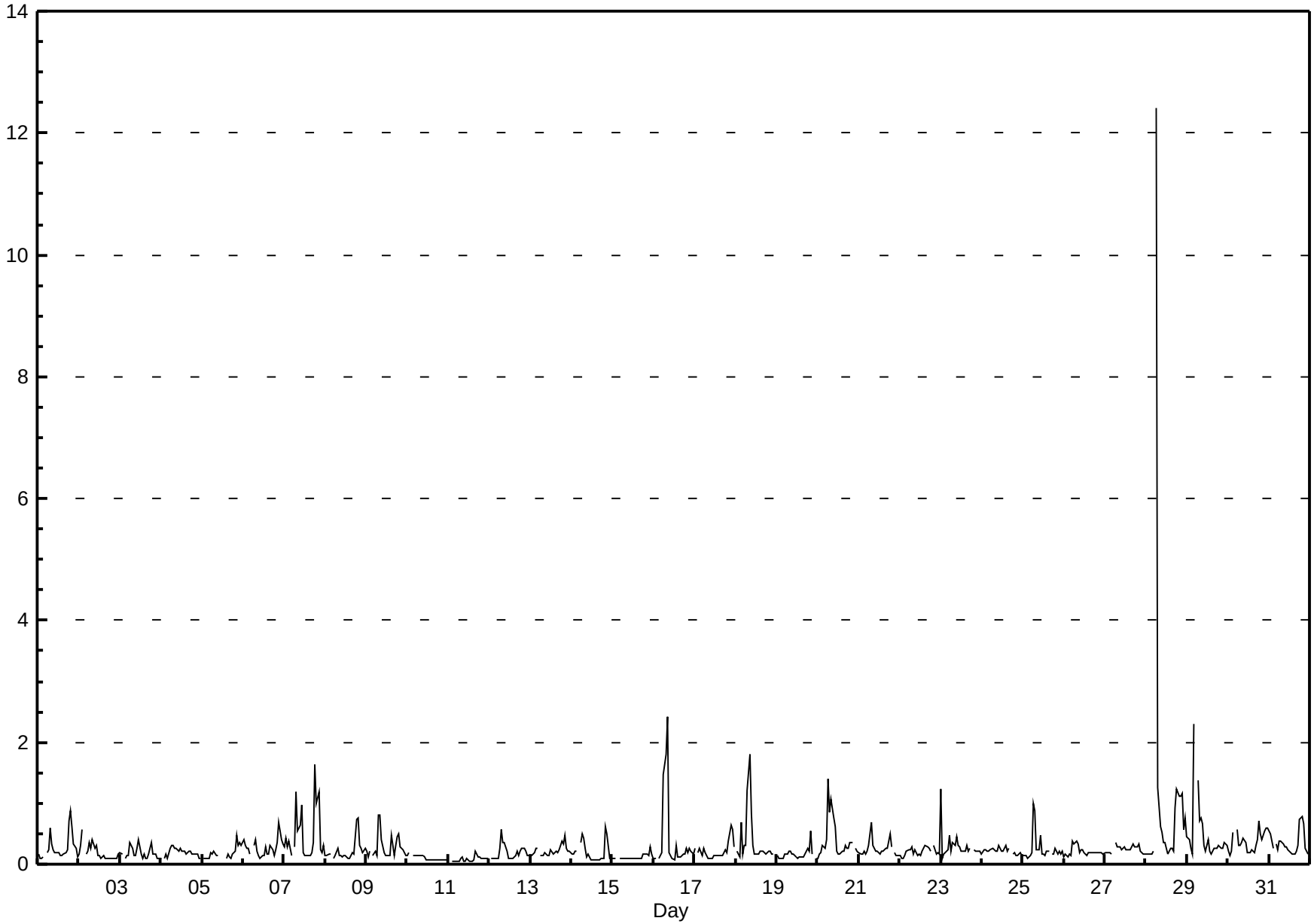
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - October 2010



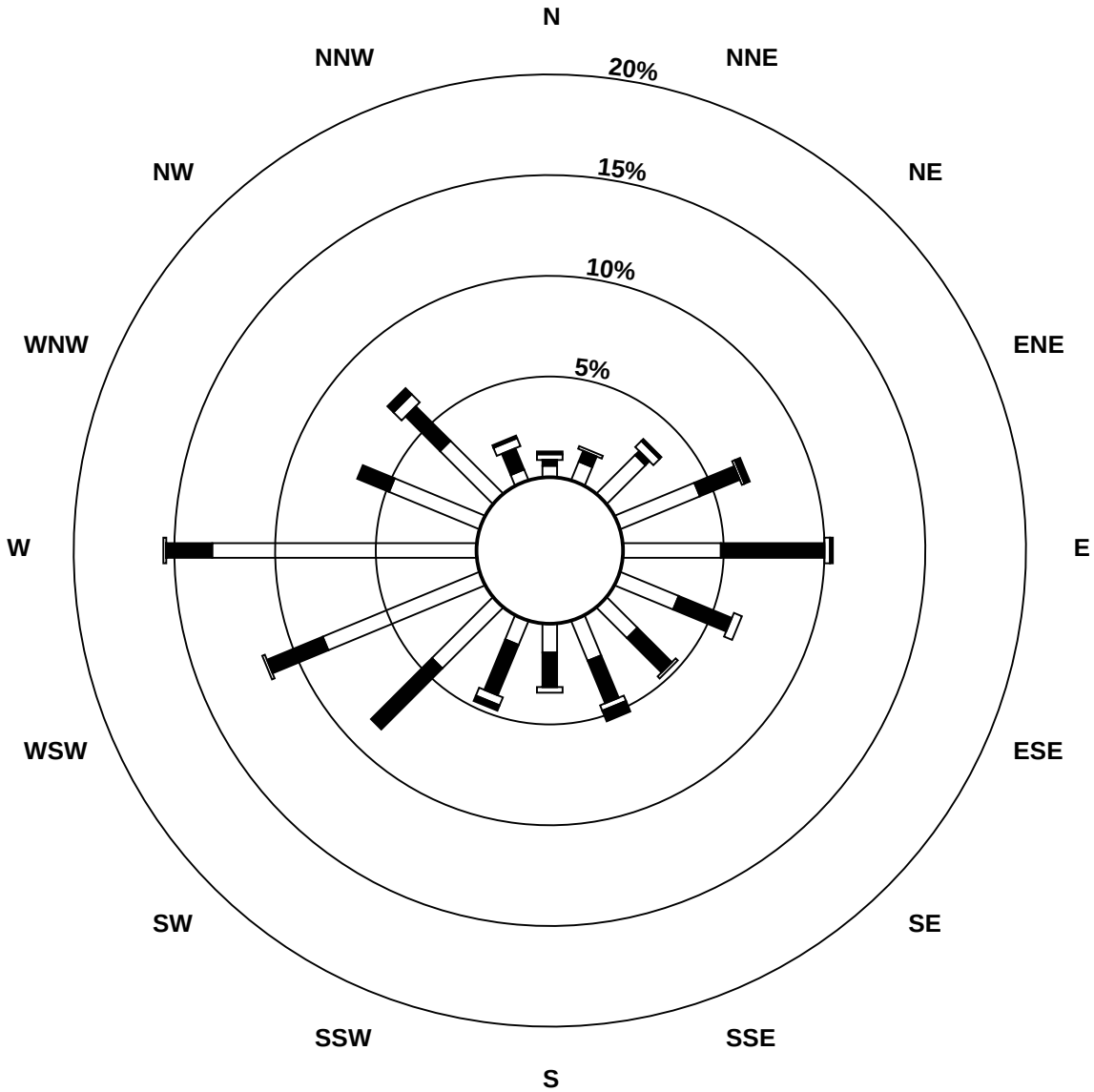
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - October 2010



Pollutant Classes (ppm)

- 0 - 0.1
- 0.1 - 0.3
- 0.3 - 0.5
- 0.5 - 1
- 1 - 10
- > 10

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 8-hr: 0
Maximum Value: 0.55 ppm on Oct 29 01:00

Minimum Value: 0.04 ppm on Oct 14 18:00

Percentiles: P_1 = 0.06 P_{10} = 0.09 Q_1 = 0.11 Median = 0.15 Q_3 = 0.19 P_{90} = 0.26 P_{99} = 0.47

Hours in Service:	744
Hours of Data:	737
Hours of Missing Data:	7
Hours of Calibration:	7
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 Maximum
1-Oct	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	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.27
2-Oct	0.3	0.3	0.2	0.2	0.2	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	0.27
3-Oct	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	0.13
4-Oct	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	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.19
5-Oct	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N	N	N	N	N	N	N	0.1	0.1	0.1	0.1	0.2	0.15
6-Oct	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	0.1	0.2	0.2	0.2	0.2	0.2	0.22
7-Oct	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.29
8-Oct	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.29
9-Oct	0.2	0.2	0.2	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	0.2	0.2	0.2	0.2	0.2	0.22
10-Oct	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.20
11-Oct	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	0.08
12-Oct	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.16
13-Oct	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	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.21
14-Oct	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.20
15-Oct	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
16-Oct	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.25
17-Oct	0.1	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	0.1	0.1	0.1	0.2	0.2	0.2	0.20
18-Oct	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.36
19-Oct	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	0.13
20-Oct	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.37
21-Oct	0.2	0.2	0.2	0.2	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	0.2	0.2	0.2	0.21
22-Oct	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	0.14
23-Oct	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
24-Oct	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	0.2	0.1	0.17
25-Oct	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	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17
26-Oct	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	0.15
27-Oct	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
28-Oct	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.5	0.52
29-Oct	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	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	0.2	0.55
30-Oct	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	0.3	0.3	0.3	0.3	0.4	0.37
31-Oct	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.39
Diurnal Maximums	0.55	0.54	0.46	0.38	0.33	0.29	0.30	0.37	0.42	0.46	0.48	0.50	0.50	0.46	0.36	0.29	0.23	0.23	0.28	0.35	0.40	0.48	0.50	0.52	

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

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.96 ppm on Oct 29 10:00
Maximum Daily Average: 2.28 ppm on Oct 29

Minimum Value: 1.8 ppm on Oct 6 16:00
Maximum Diurnal Average: 2.17 ppm at hour 9
Monthly Average: 2.059 ppm

Minimum Daily Average: 1.93 ppm on Oct 10
Minimum Diurnal Average: 1.95 ppm at hour 16
Percentiles: P_1 = 1.88 P_{10} = 1.93 Q_1 = 1.95 Median = 2.01 Q_3 = 2.10 P_{90} = 2.28 P_{99} = 2.55

Hours in Service:	744
Hours of Data:	705
Hours of Missing Data:	39
Hours of Calibration:	39
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-Oct	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.5	2.4	2.2	2.2	2.2	2.11	2.49
2-Oct	2.2	2.3	2.5	A	2.5	2.5	2.6	2.8	2.8	2.7	2.3	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.19	2.83
3-Oct	2.0	2.0	A	2.1	2.1	2.2	2.3	2.2	2.3	2.3	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	2.0	2.07	2.30
4-Oct	2.1	A	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.10	2.33
5-Oct	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	C	C	C	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.2	2.2	2.02	2.20
6-Oct	2.3	2.3	2.3	2.2	2.2	A	2.4	2.3	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.05	2.42
7-Oct	2.3	2.4	2.4	2.3	2.2	A	2.2	2.4	2.4	2.4	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.2	2.2	2.2	2.1	2.16	2.44
8-Oct	2.1	2.1	2.1	2.1	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	2.0	2.1	2.1	2.0	2.0	2.0	2.0	1.99	2.14
9-Oct	2.0	2.0	2.0	A	1.9	2.0	2.0	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.2	2.2	2.1	2.0	2.0	2.02	2.27
10-Oct	2.0	2.0	A	1.9	1.9	1.9	1.9	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	2.0	1.9	1.93	1.96
11-Oct	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.95	1.97
12-Oct	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.98	2.07
13-Oct	2.0	2.3	2.3	2.1	2.1	A	1.9	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.00	2.28
14-Oct	2.0	1.9	2.0	2.0	A	2.1	2.1	2.1	2.2	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.0	2.0	2.01	2.17
15-Oct	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	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	2.1	2.0	2.0	1.97	2.10
16-Oct	2.0	2.0	A	2.0	2.0	2.0	2.1	2.2	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.03	2.25
17-Oct	2.1	A	2.2	2.2	2.2	2.4	2.3	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2	2.3	2.5	2.08	2.50
18-Oct	A	2.4	2.1	2.1	2.4	2.3	2.1	2.3	2.4	2.3	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.06	2.40
19-Oct	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	2.0	1.96	2.10
20-Oct	2.1	2.2	2.2	2.3	2.4	2.4	2.2	2.2	2.4	2.5	2.2	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.13	2.46
21-Oct	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.07	2.27
22-Oct	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	A	2.3	2.0	2.0	2.0	2.01	2.26
23-Oct	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.0	2.0	2.06	2.10
24-Oct	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.10
25-Oct	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	A	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.99	2.06
26-Oct	2.0	1.9	2.0	1.9	2.0	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	1.99	2.04
27-Oct	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	A	2.1	2.1	2.1	2.1	2.06	2.14
28-Oct	2.1	2.0	2.0	2.1	2.1	A	2.4	2.5	2.5	2.4	2.4	2.3	2.1	A	A	A	2.0	2.1	2.3	2.4	2.4	2.5	2.3	2.4	2.28	2.54
29-Oct	2.5	2.4	2.4	2.4	2.6	A	2.6	2.6	2.7	3.0	2.3	2.2	2.1	2.0	1.9	1.9	1.9	2.1	2.4	2.2	2.1	2.1	2.1	2.1	2.28	2.96
30-Oct	2.0	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.4	2.3	2.3	2.07	2.40
31-Oct	2.3	2.2	2.2	A	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.4	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.8	2.2	2.0	2.1	2.0	2.20	2.81
	2.06	2.08	2.10	2.08	2.11	2.10	2.13	2.16	2.17	2.16	2.08	2.02	1.98	1.97	1.96	1.95	1.97	1.98	2.04	2.07	2.06	2.07	2.05	2.06	Diurnal Average	
	2.47	2.42	2.46	2.41	2.56	2.53	2.60	2.83	2.83	2.96	2.38	2.36	2.14	2.13	2.12	2.09	2.10	2.10	2.42	2.81	2.42	2.54	2.33	2.50	Diurnal Maximum	

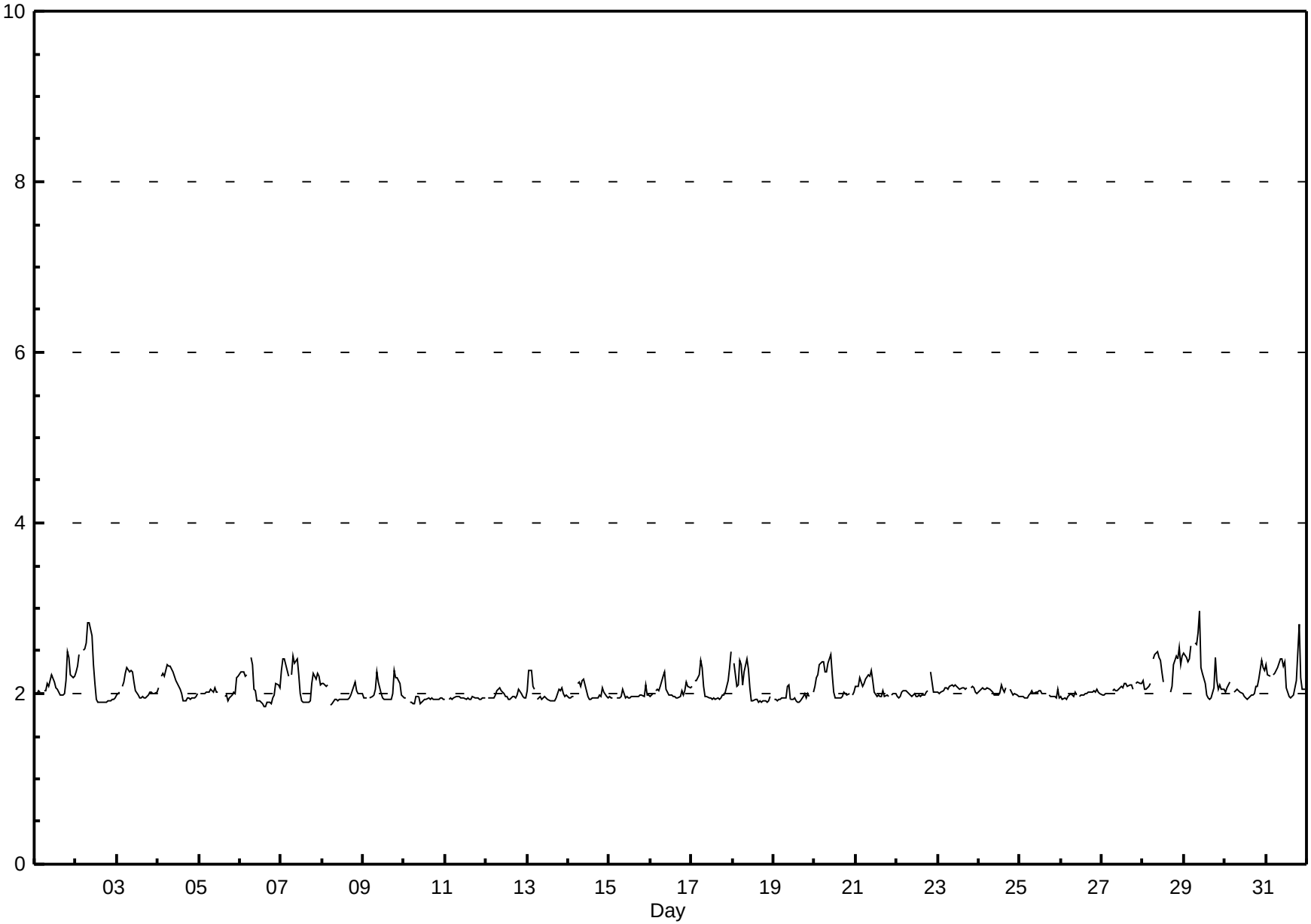
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - October 2010

Maximum Value: 5.54 ppm on Oct 31 20:00

Maximum Daily Average: 2.48 ppm on Oct 29

Minimum Value: 1.9 ppm on Oct 6 16:00

Minimum Daily Average: 1.96 ppm on Oct 10

Maximum Diurnal Average: 2.36 ppm at hour 9

Minimum Diurnal Average: 2.07 ppm at hour 15

Monthly Average: 2.197 ppm

Percentiles: P_1 = 1.92 P_{10} = 1.96 Q_1 = 1.99 Median = 2.12 Q_3 = 2.33 P_{90} = 2.55 P_{99} = 3.02

Hours in Service:	744
Hours of Data:	705
Hours of Missing Data:	39
Hours of Calibration:	39
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-Oct	2.0	2.0	2.0	2.0	A	2.1	2.1	2.2	2.1	2.3	2.3	2.4	2.1	2.1	2.1	2.0	2.0	2.0	2.7	2.9	2.9	2.3	2.2	2.2	2.23	2.94
2-Oct	2.3	2.4	2.6	A	2.5	2.7	2.7	2.9	3.0	2.8	2.6	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.27	2.95
3-Oct	2.0	2.1	A	2.2	2.3	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.3	2.4	2.0	2.7	2.3	2.0	2.0	2.1	2.5	2.1	2.1	2.1	2.22	2.66
4-Oct	2.1	A	2.3	2.4	2.2	2.6	2.5	2.4	2.4	2.4	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.17	2.56
5-Oct	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	C	C	C	2.0	2.2	2.0	2.1	2.1	2.2	2.2	2.3	2.4	2.10	2.36
6-Oct	2.4	2.3	2.3	2.3	2.3	A	2.6	2.5	2.2	2.1	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.1	2.1	2.3	2.3	2.3	2.15	2.57
7-Oct	2.5	2.5	2.6	2.4	2.4	A	2.4	2.6	2.4	2.6	2.5	2.3	2.0	1.9	1.9	1.9	1.9	2.0	3.0	2.5	2.5	2.3	2.3	2.2	2.33	2.98
8-Oct	2.3	2.2	2.1	2.1	A	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	1.9	2.0	1.9	2.0	2.1	2.2	2.3	2.6	2.0	2.0	2.0	2.06	2.62
9-Oct	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.5	2.2	2.1	2.0	2.0	2.0	2.0	1.9	2.0	2.2	3.0	2.5	2.5	2.3	2.0	2.0	2.14	3.02
10-Oct	2.0	2.0	A	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.2	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.96	2.22
11-Oct	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	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.06
12-Oct	A	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.0	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	2.03	2.23
13-Oct	2.3	2.4	2.3	2.2	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.2	2.1	2.2	2.1	2.0	2.0	2.07	2.37
14-Oct	2.0	2.0	2.1	2.1	A	2.2	2.2	2.3	2.2	2.2	2.2	2.3	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.0	2.0	2.08	2.28
15-Oct	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.6	2.0	2.0	2.04	2.63
16-Oct	2.0	2.0	A	2.1	2.1	2.1	2.2	2.9	2.8	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.4	2.2	2.2	2.15	2.91
17-Oct	2.1	A	2.2	2.2	2.5	2.7	2.4	2.2	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.4	2.7	3.0	2.19	2.98
18-Oct	A	2.7	2.2	2.1	2.8	2.6	2.3	2.5	2.6	2.8	2.3	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.1	A	2.20	2.82
19-Oct	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.2	2.2	2.0	2.1	2.0	A	2.1	2.08	3.02
20-Oct	2.3	2.4	2.3	2.9	2.4	2.5	2.5	2.5	2.5	2.8	2.6	2.1	2.0	2.2	2.2	2.8	2.1	2.5	2.4	2.3	2.4	A	2.2	2.3	2.40	2.85
21-Oct	2.2	2.1	2.3	2.3	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.1	2.0	2.0	2.0	2.0	2.7	2.1	2.0	2.0	A	2.0	2.0	2.0	2.16	2.72
22-Oct	2.0	2.0	2.1	2.7	2.6	2.5	2.6	2.3	2.2	2.3	2.4	2.2	2.3	2.2	2.2	2.3	2.2	2.4	2.4	A	2.9	2.4	2.1	2.0	2.32	2.90
23-Oct	2.2	2.2	2.0	2.1	2.1	2.2	2.1	2.2	2.4	2.4	2.7	2.6	2.5	2.5	2.5	2.5	2.5	2.4	A	2.6	2.4	2.5	2.2	2.1	2.34	2.71
24-Oct	2.2	2.1	2.1	2.2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.3	2.4	2.4	2.3	2.5	A	2.1	2.2	2.1	2.2	2.1	2.3	2.19	2.48
25-Oct	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.3	2.1	2.2	2.2	2.4	2.5	2.5	2.4	2.5	A	2.2	2.3	2.0	2.0	2.2	2.6	2.0	2.21	2.65
26-Oct	2.1	2.0	2.2	2.0	2.2	2.2	2.3	2.1	2.6	2.3	A	2.1	2.3	2.4	2.6	2.4	2.6	2.5	2.4	2.5	2.4	2.7	2.5	2.4	2.34	2.72
27-Oct	2.2	2.3	2.2	2.3	2.0	A	2.3	2.4	2.2	2.1	2.2	2.3	2.1	2.2	2.2	2.1	2.1	2.2	2.2	A	2.2	2.3	2.1	2.2	2.20	2.42
28-Oct	2.2	2.1	2.1	2.1	2.2	A	3.1	2.6	2.5	2.5	2.4	2.4	2.2	A	A	A	2.1	2.3	2.5	2.6	2.8	2.8	2.4	2.5	2.42	3.15
29-Oct	2.6	2.5	2.4	2.5	3.0	A	2.7	2.6	3.1	3.1	2.6	2.3	2.2	2.1	2.0	2.0	2.1	2.2	3.1	2.5	2.3	2.3	2.4	2.3	2.48	3.14
30-Oct	2.1	2.1	2.1	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.3	2.9	2.6	2.5	2.17	2.91
31-Oct	2.5	2.5	2.2	A	2.3	2.4	2.3	2.4	2.6	2.6	2.5	2.6	2.2	2.0	2.0	2.0	2.1	2.2	2.3	5.5	2.7	2.1	2.1	2.1	2.44	5.54
	2.17	2.18	2.17	2.19	2.23	2.21	2.27	2.30	2.36	2.32	2.22	2.15	2.09	2.08	2.07	2.09	2.09	2.10	2.24	2.31	2.28	2.24	2.18	2.17	Diurnal Average	
	2.56	2.71	2.57	2.85	3.02	2.74	3.15	2.94	3.10	3.14	2.71	2.60	2.54	2.54	2.58	2.83	2.72	2.53	3.10	5.54	2.94	2.91	2.66	2.98	Diurnal Maximum	

C - Calibration

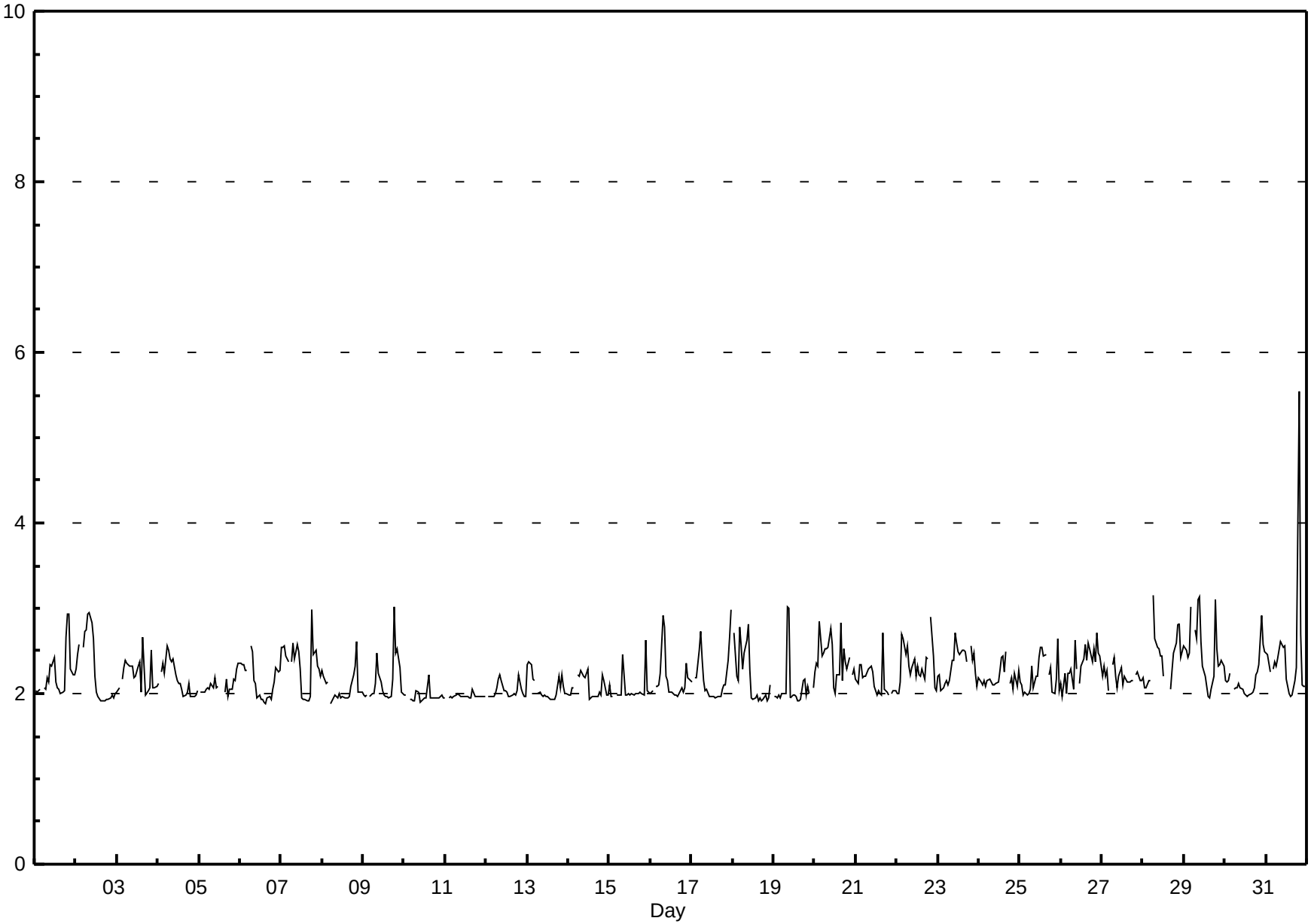
A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - October 2010



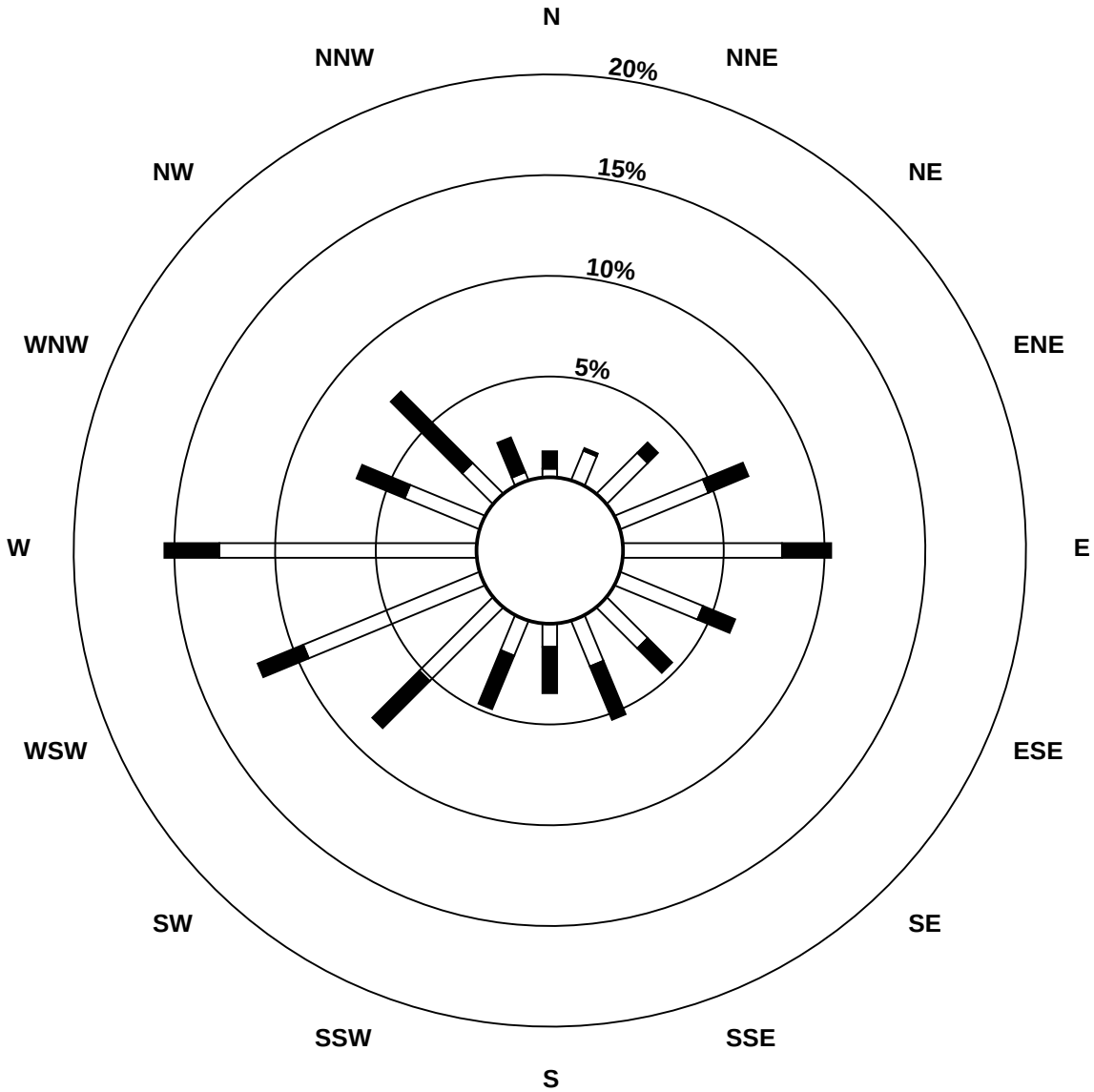
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - October 2010



Pollutant Classes (ppm)

- 1.5 - 2.0
- 2.1 - 3.0
- 3.1 - 10.0
- > 10.0

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Henry Pirker - October 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 33.4 $\mu g/m^3$ on Oct 1 22:00
Maximum Daily Average: 11.4 $\mu g/m^3$ on Oct 1

Minimum Value: 0 $\mu g/m^3$ on Oct 5 13:00
Maximum Diurnal Average: 9.3 $\mu g/m^3$ at hour 10
Monthly Average: 6.75 $\mu g/m^3$

Minimum Daily Average: 0.8 $\mu g/m^3$ on Oct 11
Minimum Diurnal Average: 5.4 $\mu g/m^3$ at hour 4
Percentiles: P_1 = 0.0 P_{10} = 1.8 Q_1 = 3.6 Median = 5.7 Q_3 = 8.5 P_{90} = 12.9 P_{99} = 23.8

Hours in Service:	744
Hours of Data:	728
Hours of Missing Data:	16
Hours of Calibration:	1
Percent Operational Time:	98.0

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-Oct	2	4	3	5	4	4	4	9	9	8	14	13	11	12	11	10	7	2	11	19	32	33	27	19	11.4	33.4
2-Oct	15	15	17	16	15	13	12	15	16	17	15	13	8	12	4	6	10	8	3	1	2	3	4	3	10.0	17.1
3-Oct	3	5	5	4	3	3	4	5	8	8	7	6	5	4	4	5	3	4	12	13	8	4	4	4	5.5	12.7
4-Oct	3	5	2	3	4	5	4	4	7	10	12	14	12	8	7	7	4	3	3	4	4	1	2	5	5.5	13.6
5-Oct	4	6	4	6	3	2	3	4	3	3	0	2	0	5	BD	1	BD	15	19	9	5	8	7	6	5.2	18.6
6-Oct	5	11	5	10	1	0	0	8	11	16	0	13	2	5	BD	7	16	21	3	BD	2	16	6	1	7.3	20.7
7-Oct	3	7	6	6	5	4	2	5	5	9	19	8	8	BD	16	BD	18	BD	12	25	15	14	28	23	11.4	28.2
8-Oct	11	11	17	9	BD	0	BD	7	7	3	8	2	6	5	3	13	7	BD	0	17	8	6	8	6	7.3	16.8
9-Oct	5	3	1	3	2	3	2	9	13	11	8	11	7	BD	7	BD	5	5	5	21	8	2	6	10	6.7	20.7
10-Oct	5	1	1	0	6	2	3	1	BD	1	0	0	5	2	0	BD	4	8	6	1	0	0	2	1	2.3	7.8
11-Oct	0	0	0	1	1	0	0	6	0	1	1	0	1	5	0	0	BD	0	0	0	2	0	0	0	0.8	5.8
12-Oct	0	1	1	0	1	1	5	1	5	C	3	2	2	2	2	2	5	4	4	5	7	5	5	3	2.9	6.7
13-Oct	6	5	4	2	3	4	4	2	4	3	4	4	3	0	1	1	1	2	4	6	8	6	4	7	3.6	7.6
14-Oct	6	2	3	2	4	6	9	10	3	5	5	6	5	6	3	4	3	6	4	2	2	7	2	5	4.6	10.2
15-Oct	4	4	8	6	7	6	5	5	5	4	4	7	3	4	7	5	7	4	6	5	3	5	6	7	5.2	8.1
16-Oct	6	6	7	8	6	6	8	8	12	13	8	5	5	3	1	1	2	4	7	7	8	7	7	7	6.4	12.9
17-Oct	6	7	5	7	8	9	7	6	5	3	5	5	6	8	6	6	6	7	8	8	8	9	11	10	6.9	10.8
18-Oct	6	4	2	3	6	4	5	9	15	24	15	5	0	1	3	5	4	6	5	6	1	2	6	6	6.0	23.7
19-Oct	3	2	1	2	2	3	5	5	3	5	4	3	7	3	5	1	4	8	14	13	9	7	5	7	5.0	13.5
20-Oct	6	5	4	8	7	9	12	13	19	29	27	12	10	9	5	7	7	12	10	9	9	9	7	10	10.6	29.4
21-Oct	6	6	6	7	9	13	13	13	12	8	11	8	7	4	4	9	9	7	8	8	7	6	7	5	8.0	12.9
22-Oct	4	2	3	4	2	2	4	4	4	6	4	4	3	2	5	4	3	4	4	4	5	4	4	6	3.7	5.9
23-Oct	6	5	3	4	10	10	8	5	6	6	7	6	7	7	6	7	9	7	7	7	7	10	7	9	6.9	10.1
24-Oct	10	13	15	16	16	18	18	15	13	12	12	11	10	9	9	7	9	10	10	6	4	4	3	3	10.6	18.5
25-Oct	2	3	3	2	2	2	2	5	8	10	9	6	4	5	5	6	6	5	4	6	6	4	4	7	4.8	10.1
26-Oct	5	3	2	3	3	3	4	3	5	4	3	3	4	4	6	7	7	7	6	5	4	4	6	6	4.5	7.4
27-Oct	6	5	5	4	5	5	8	8	7	6	8	10	8	15	15	16	12	11	11	6	4	7	8	7	8.3	15.5
28-Oct	6	6	8	6	9	11	11	13	11	14	13	12	13	10	6	5	6	7	12	17	18	22	20	17	11.3	21.8
29-Oct	14	16	13	8	7	11	14	17	17	20	13	9	8	7	6	4	6	6	9	8	7	8	6	5	9.9	20.1
30-Oct	4	3	6	6	4	4	9	8	8	11	9	8	6	5	6	6	6	8	11	13	10	13	19	18	8.4	19.0
31-Oct	17	16	9	9	8	7	9	8	8	7	12	12	8	4	3	4	3	4	11	12	12	5	5	3	8.1	17.1
	5.9	5.9	5.4	5.4	5.4	5.5	6.4	7.3	8.4	9.3	8.3	7.1	5.9	5.7	5.5	5.5	6.6	6.7	7.4	8.7	7.3	7.5	7.6	7.3	Diurnal Average	
	17.1	15.9	16.8	15.6	16.4	18.5	17.6	16.8	18.8	29.4	26.9	13.6	12.8	15.4	16.3	15.5	17.9	20.7	18.6	25.0	32.1	33.4	28.2	22.5	Diurnal Maximum	

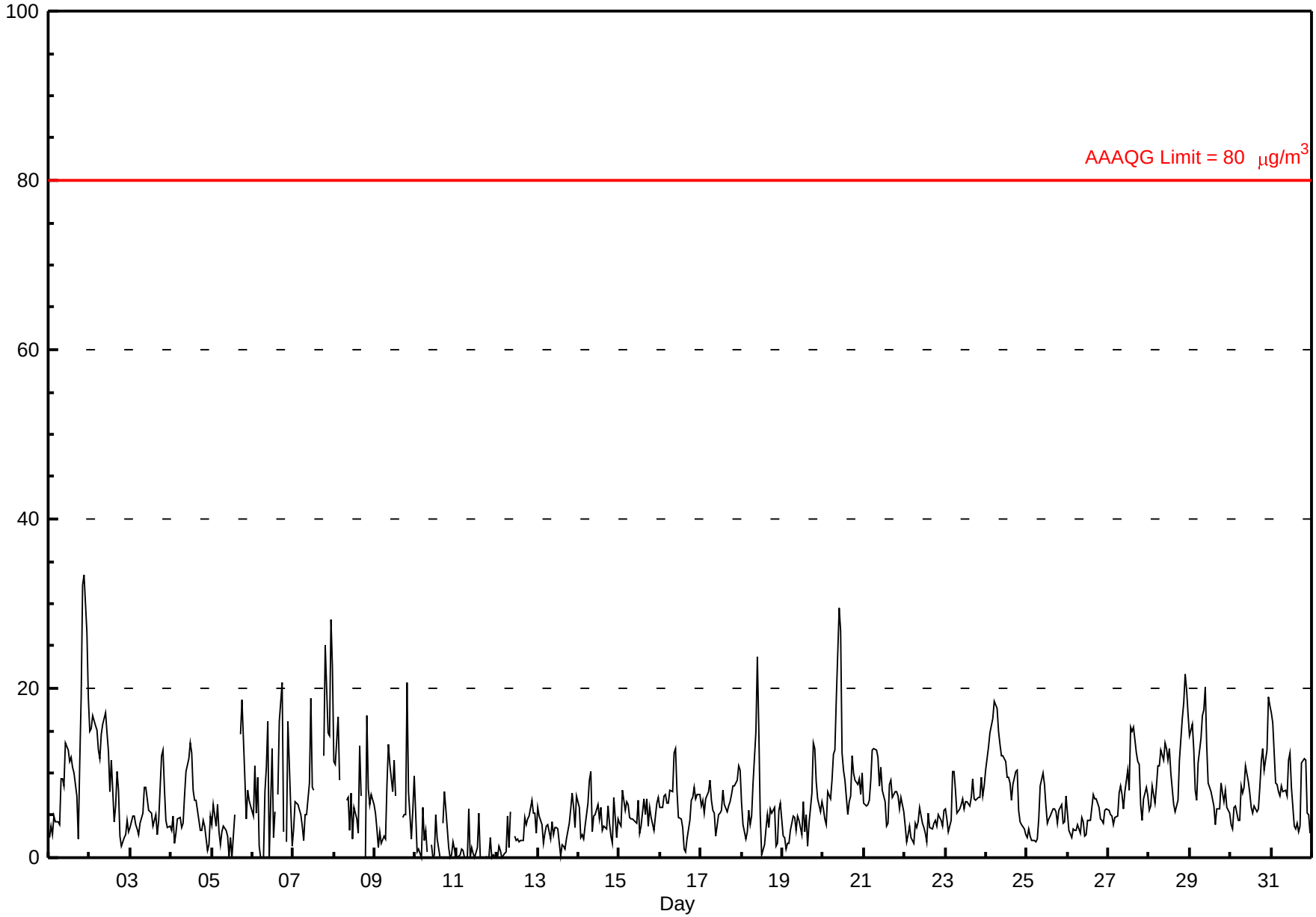
C - Calibration BD - Baseline Drift
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Henry Pirker - October 2010

Maximum Value: 35.8 $\mu g/m^3$ on Oct 1 22:00

Maximum Daily Average: 15.4 $\mu g/m^3$ on Oct 7

Minimum Value: 0 $\mu g/m^3$ on Oct 8 06:00

Minimum Daily Average: 2.3 $\mu g/m^3$ on Oct 11

Maximum Diurnal Average: 11.2 $\mu g/m^3$ at hour 10

Minimum Diurnal Average: 6.5 $\mu g/m^3$ at hour 5

Monthly Average: 8.63 $\mu g/m^3$

Percentiles: $P_1 = 0.2$ $P_{10} = 3.3$ $Q_1 = 5.1$ Median = 7.4 $Q_3 = 11.0$ $P_{90} = 16.1$ $P_{99} = 27.3$

Hours in Service:	744
Hours of Data:	741
Hours of Missing Data:	3
Hours of Calibration:	1
Percent Operational Time:	99.7

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-Oct	4	5	3	6	6	5	6	12	12	12	14	13	12	13	14	12	11	7	15	27	35	36	30	23	13.8	35.8
2-Oct	16	16	18	17	16	13	13	16	17	18	17	15	13	14	9	10	15	15	5	3	4	6	6	5	12.3	17.9
3-Oct	6	6	6	5	4	4	5	6	9	9	9	6	7	5	5	7	4	9	18	17	9	8	4	5	7.2	17.6
4-Oct	4	6	4	4	6	5	5	6	8	11	12	15	15	10	7	8	5	5	5	5	5	4	5	6	7.0	15.2
5-Oct	7	8	8	9	4	2	4	5	5	5	1	5	4	10	7	8	8	19	22	13	6	9	9	7	7.6	22.1
6-Oct	8	13	8	11	6	0	4	11	12	21	11	18	16	13	7	14	18	22	17	BD	12	18	12	5	12.0	22.4
7-Oct	5	7	8	8	6	5	3	9	9	18	23	19	21	19	26	5	25	6	21	28	20	19	30	29	15.4	30.4
8-Oct	13	19	20	13	0	0	0	11	11	6	13	12	11	10	8	15	13	0	11	20	12	8	9	8	10.2	20.0
9-Oct	6	6	3	5	3	4	4	11	15	13	13	18	18	BD	12	7	14	14	12	25	24	12	12	15	11.7	25.2
10-Oct	9	9	5	5	10	9	7	3	2	4	1	1	8	7	2	3	5	10	8	4	0	3	3	1	5.0	10.1
11-Oct	1	1	1	2	2	0	4	9	2	3	1	1	2	7	6	1	1	3	2	2	3	1	1	1	2.3	8.5
12-Oct	0	3	2	2	2	3	9	7	8	C	4	4	4	3	3	5	5	4	5	6	7	6	6	5	4.5	9.4
13-Oct	6	6	6	2	4	4	5	4	5	4	4	4	5	2	2	2	2	3	5	6	9	9	5	8	4.7	9.0
14-Oct	7	5	4	3	6	8	11	13	6	7	6	7	7	7	5	5	4	7	6	3	6	8	4	5	6.4	12.9
15-Oct	5	7	9	7	7	7	5	5	5	5	6	8	5	7	8	8	8	5	7	6	4	6	7	8	6.4	8.9
16-Oct	7	6	8	8	7	8	9	9	15	15	10	6	5	6	2	1	3	6	7	7	9	9	9	8	7.6	15.2
17-Oct	7	8	7	8	10	10	8	7	7	6	6	6	6	9	8	6	6	7	8	9	9	10	11	11	7.9	11.3
18-Oct	8	5	3	6	6	5	6	11	20	27	22	10	2	2	6	6	5	7	7	8	4	3	7	8	8.1	26.6
19-Oct	5	4	2	2	2	4	5	5	5	7	7	6	7	6	6	3	6	9	17	17	10	10	7	7	6.7	17.3
20-Oct	7	5	5	9	9	11	13	15	25	31	31	20	12	12	6	7	10	13	12	12	10	10	9	10	12.7	31.3
21-Oct	9	7	8	9	12	13	13	14	13	10	12	12	7	6	7	10	10	8	9	9	9	8	8	6	9.6	13.6
22-Oct	4	3	4	5	3	3	5	5	5	6	5	4	4	4	6	4	5	5	5	4	6	5	5	6	4.6	6.2
23-Oct	8	7	4	9	11	12	9	7	7	8	8	7	7	7	7	8	10	9	8	7	8	11	8	9	8.2	11.9
24-Oct	11	14	16	17	17	20	19	17	14	13	13	13	11	10	10	8	10	11	11	8	5	5	4	4	11.7	19.7
25-Oct	3	4	3	3	2	3	3	8	10	11	9	8	5	5	6	6	6	6	5	6	7	6	6	8	5.8	10.8
26-Oct	8	4	4	4	4	4	5	5	6	5	5	4	5	6	6	8	8	8	7	5	5	5	6	6	5.4	7.7
27-Oct	6	6	6	5	5	6	9	9	8	7	10	11	11	18	17	17	14	12	11	10	7	7	9	8	9.5	17.5
28-Oct	7	7	9	8	10	12	12	13	12	14	13	13	14	12	8	6	7	9	14	18	19	24	23	19	12.6	23.9
29-Oct	15	17	15	10	7	15	15	18	19	22	18	10	10	8	8	6	7	7	10	10	8	9	8	6	11.5	21.9
30-Oct	6	5	7	7	5	6	10	9	10	11	10	9	7	6	6	6	8	9	15	15	13	14	21	21	9.8	21.1
31-Oct	18	18	12	10	9	8	9	8	9	9	13	14	10	6	4	5	5	5	14	14	13	8	5	5	9.6	17.9
	7.3	7.7	7.0	7.0	6.5	6.7	7.5	9.2	10.0	11.2	10.6	9.7	8.8	8.4	7.5	7.0	8.3	8.4	10.2	10.9	9.5	9.6	9.4	8.8	Diurnal Average	
	17.9	19.3	20.0	16.8	17.3	19.7	19.0	17.6	24.7	31.3	30.8	19.8	20.9	19.1	25.7	17.0	24.7	22.4	22.1	28.2	35.0	35.8	30.4	28.7	Diurnal Maximum	

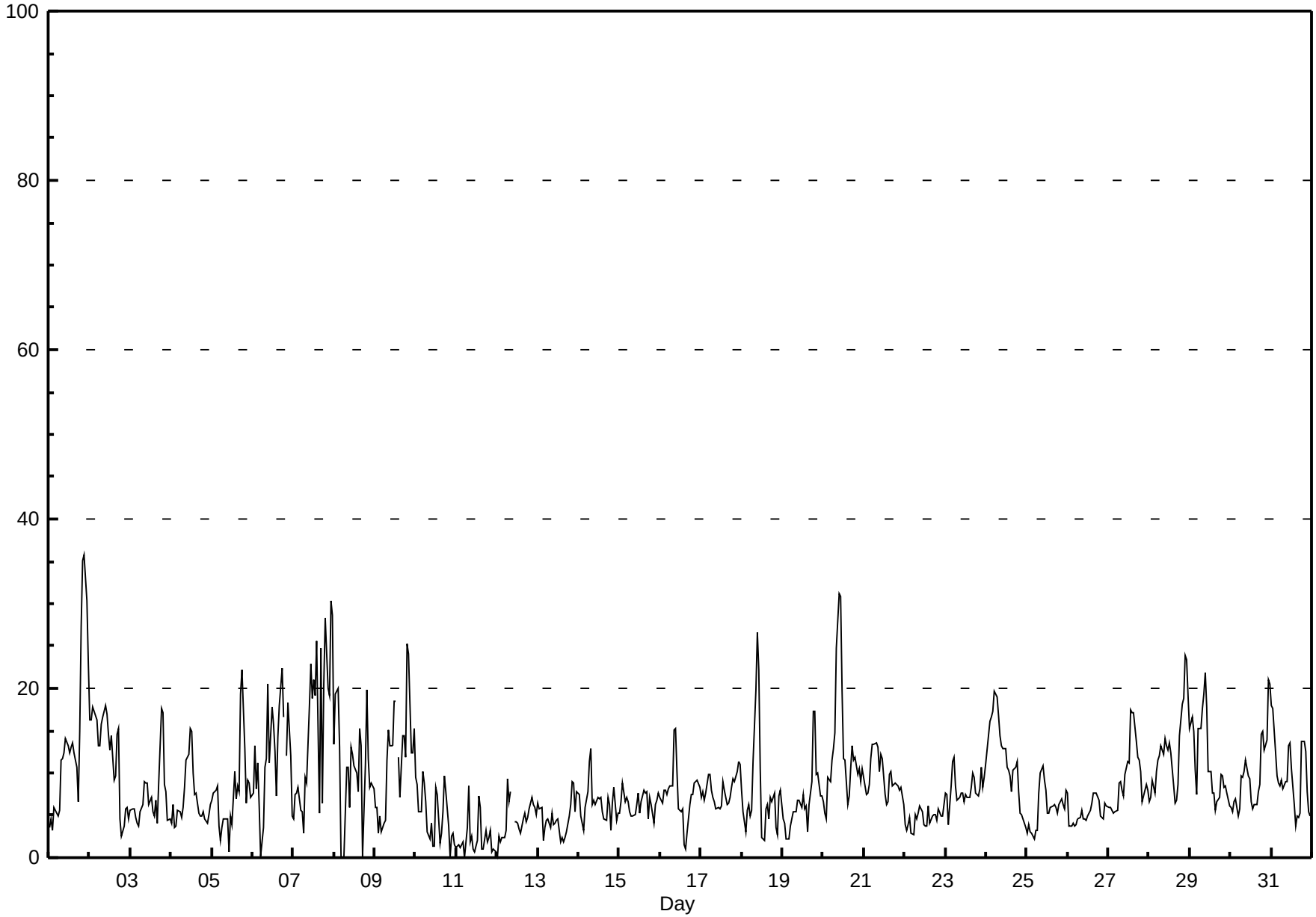
C - Calibration BD - Baseline Drift

PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Henry Pirker - October 2010



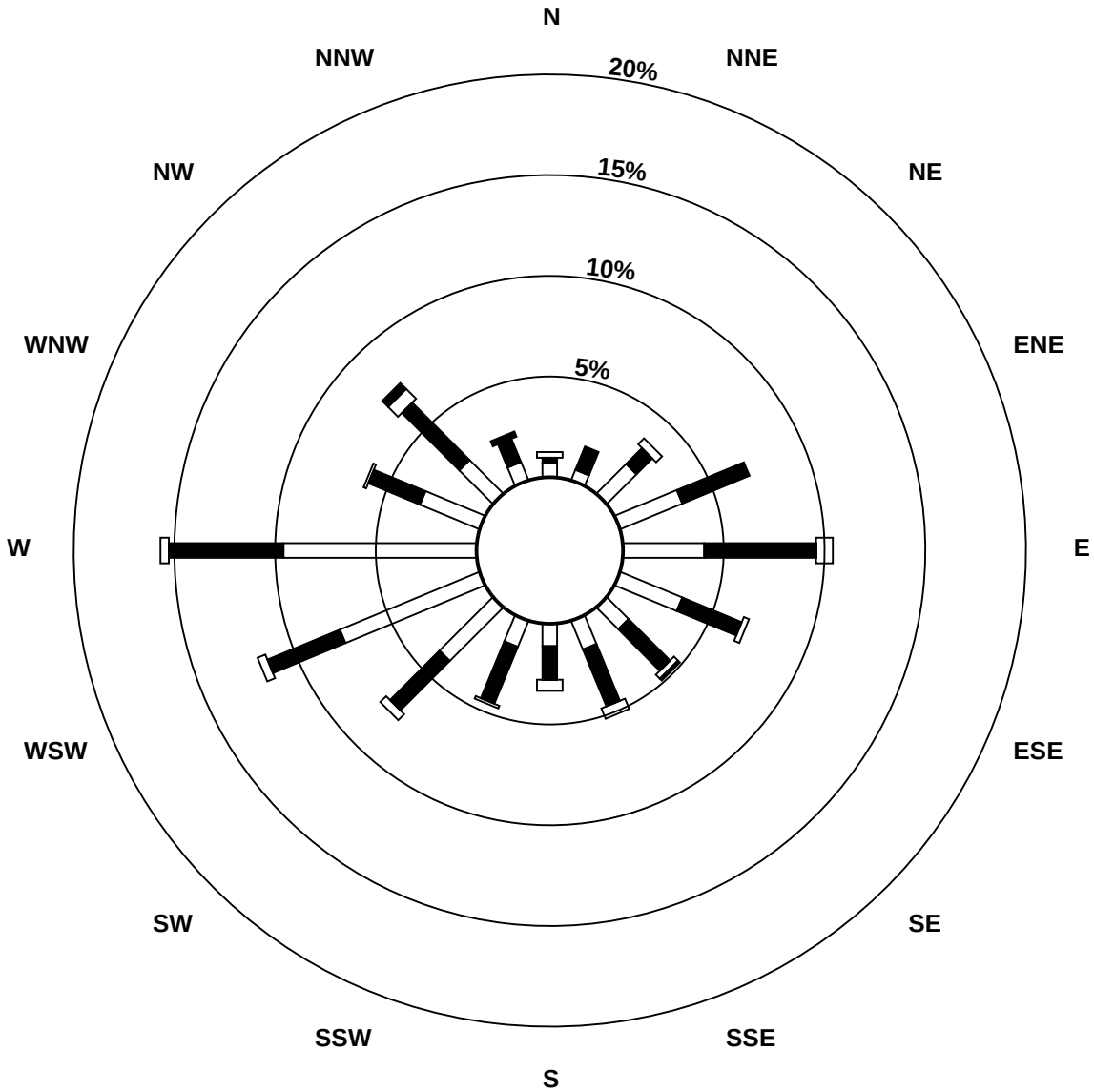
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

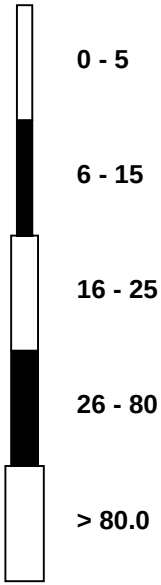
Pollutant Rose

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

Henry Pirker - October 2010



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



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 23.7 ^{o}C on Oct 7 17:00 Maximum Daily Average: 15.0 ^{o}C on Oct 9

Minimum Value: -7 ^{o}C on Oct 29 04:00 Minimum Daily Average: -0.4 ^{o}C on Oct 26
Maximum Diurnal Average: 11.4 ^{o}C at hour 15 Minimum Diurnal Average: 2.8 ^{o}C at hour 8
Monthly Average: 6.47 ^{o}C Percentiles: P_1 = -5.6 P_{10} = -0.3 Q_1 = 1.8 Median = 5.7 Q_3 = 10.3 P_{90} = 14.2 P_{99} = 22.7

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

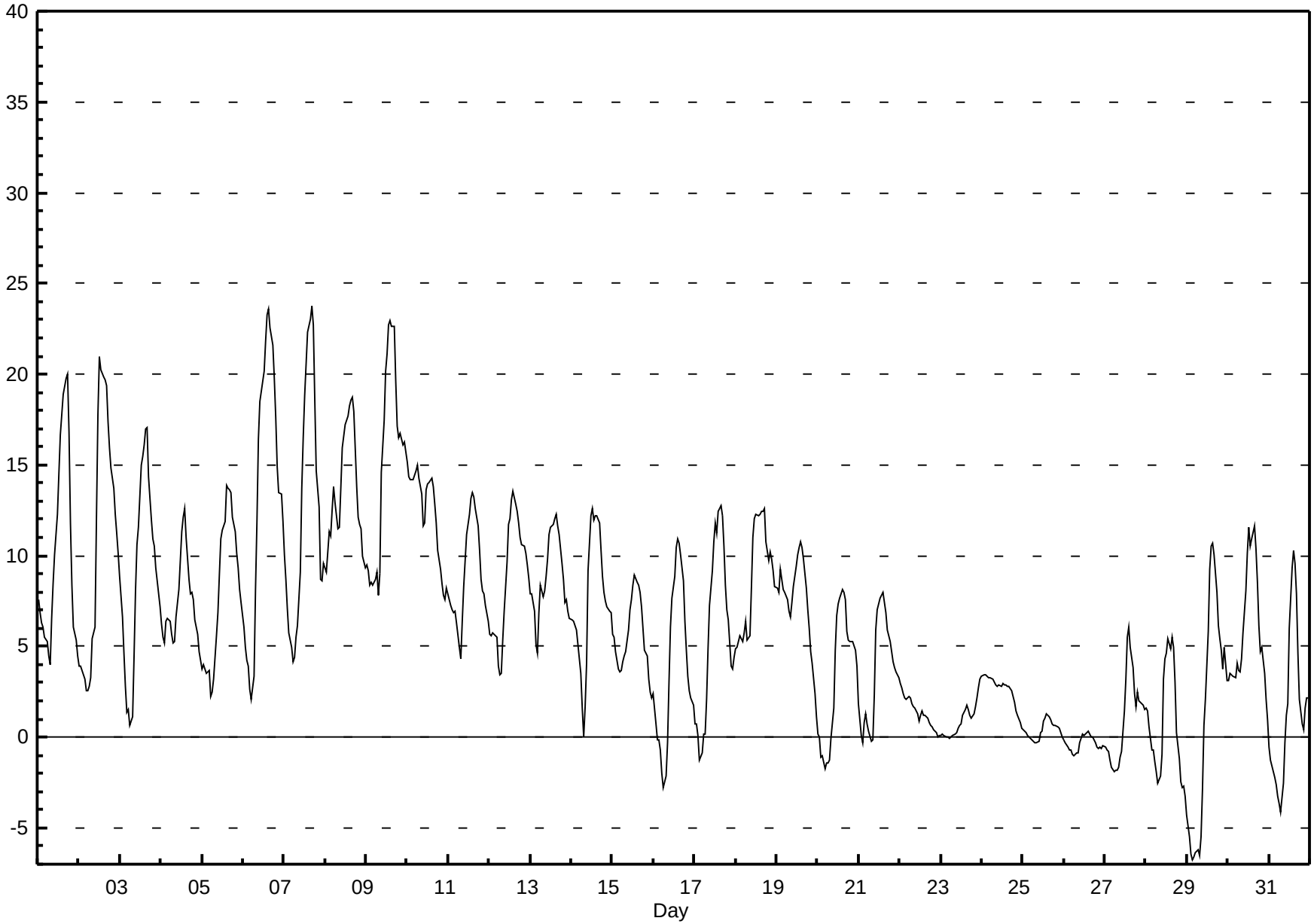
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Oct	8	7	6	6	6	5	4	4	7	8	10	12	14	17	18	19	20	20	17	12	8	6	5	4	10.2	20.0
2-Oct	4	4	4	3	3	3	3	3	5	6	12	18	21	20	20	20	19	17	16	15	14	12	11	10	11.0	20.9
3-Oct	9	7	5	3	1	2	1	1	5	8	11	12	15	15	16	17	17	14	12	11	11	9	9	7	9.0	17.0
4-Oct	6	6	5	6	7	6	6	5	5	7	8	10	11	12	13	11	9	8	8	8	6	6	5	4	7.4	12.6
5-Oct	4	4	4	4	4	2	3	3	6	7	9	11	11	12	14	14	14	13	12	11	10	9	8	7	8.1	13.9
6-Oct	6	5	4	4	3	2	3	8	12	16	18	20	20	22	23	24	23	22	20	18	15	14	13	12	13.6	23.6
7-Oct	10	9	7	6	5	4	4	6	6	9	14	17	19	21	22	23	24	23	19	15	13	9	9	10	12.5	23.7
8-Oct	9	9	11	11	12	14	13	11	12	14	16	17	17	18	18	19	19	18	14	12	12	11	10	9	13.6	18.7
9-Oct	9	9	8	9	8	9	9	8	9	15	17	20	21	23	23	23	23	20	17	17	17	16	16	16	15.0	23.0
10-Oct	15	14	14	14	14	15	15	14	13	12	12	14	14	14	14	14	13	12	10	9	8	8	8	8	12.5	15.1
11-Oct	8	7	7	7	7	6	5	4	6	8	10	11	12	13	13	13	13	12	10	9	8	8	7	6	8.8	13.5
12-Oct	6	6	6	6	5	4	3	4	5	7	10	12	12	13	14	13	12	12	11	11	10	10	9	9	8.7	13.6
13-Oct	8	8	7	5	5	7	8	8	8	9	10	11	12	12	12	12	12	11	10	9	7	8	7	7	8.8	12.3
14-Oct	6	6	6	6	5	3	2	0	2	4	9	12	13	12	12	12	12	10	9	8	7	7	7	7	7.4	12.6
15-Oct	6	6	5	4	4	4	4	4	5	6	7	8	8	9	9	8	8	7	6	5	4	3	2	2	5.6	8.9
16-Oct	2	1	0	0	-1	-2	-3	-2	0	3	6	8	9	10	11	11	10	9	6	5	3	3	2	2	3.8	10.9
17-Oct	1	1	0	-1	-1	0	0	2	5	7	9	11	12	11	12	13	12	10	8	7	6	4	4	4	5.8	12.7
18-Oct	5	5	6	5	5	6	6	5	6	8	11	12	12	12	12	12	12	13	11	10	10	10	9	8	8.9	12.6
19-Oct	8	8	9	9	8	8	8	7	7	7	8	9	10	10	11	10	10	8	7	6	5	4	2	1	7.6	10.8
20-Oct	0	0	-1	-1	-2	-1	-1	-1	0	2	5	7	7	8	8	8	8	6	5	5	5	5	5	4	3.3	8.1
21-Oct	2	0	0	1	1	1	0	0	0	2	6	7	8	8	8	7	7	6	5	5	4	4	4	3	3.7	8.0
22-Oct	3	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1.4	3.0
23-Oct	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1	1	1	1	2	2	3	3	0.9	3.2
24-Oct	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	1	1	1	2.6	3.4
25-Oct	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0.4	1.3
26-Oct	0	0	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-1	-1	-1	0	-0.4	0.3
27-Oct	-1	-1	-1	-1	-2	-2	-2	-2	-2	-1	-1	1	3	6	6	5	4	2	2	2	2	2	2	2	1.0	6.1
28-Oct	2	1	1	-1	-1	-1	-2	-3	-2	-1	3	4	5	5	5	6	5	3	0	-1	-2	-3	-3	-3	0.7	5.5
29-Oct	-4	-5	-6	-7	-7	-6	-6	-7	-5	-3	1	2	6	9	10	11	10	8	6	5	5	4	5	3	1.2	10.7
30-Oct	3	3	3	3	3	4	4	4	4	6	8	10	12	11	11	12	10	9	6	5	5	4	2	1	5.9	11.7
31-Oct	-1	-1	-2	-2	-3	-3	-4	-4	-3	0	1	2	6	9	10	10	8	5	2	1	0	2	2	2	1.6	10.3
	4.5	4.0	3.6	3.3	3.1	3.0	2.8	2.8	3.8	5.5	7.6	9.1	10.2	10.9	11.4	11.4	10.9	9.8	8.2	7.1	6.4	5.7	5.3	4.8	Diurnal Average	
	15.1	14.3	14.2	14.2	14.4	14.7	15.0	14.3	13.4	16.4	18.5	20.2	21.1	22.7	23.3	23.6	23.7	22.7	19.8	17.7	16.8	16.1	16.2	15.7	Diurnal Maximum	

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 91.6 % on Oct 21 10:00 Maximum Daily Average: 88.4 % on Oct 23

Minimum Value: 17 % on Oct 9 16:00 Minimum Daily Average: 39.2 % on Oct 11
Maximum Diurnal Average: 72.2 % at hour 8 Minimum Diurnal Average: 48.3 % at hour 16
Monthly Average: 62.12 % Percentiles: P_1 = 23.4 P_{10} = 36.4 Q_1 = 46.7 Median = 61.0 Q_3 = 80.8 P_{90} = 86.4 P_{99} = 91.0

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

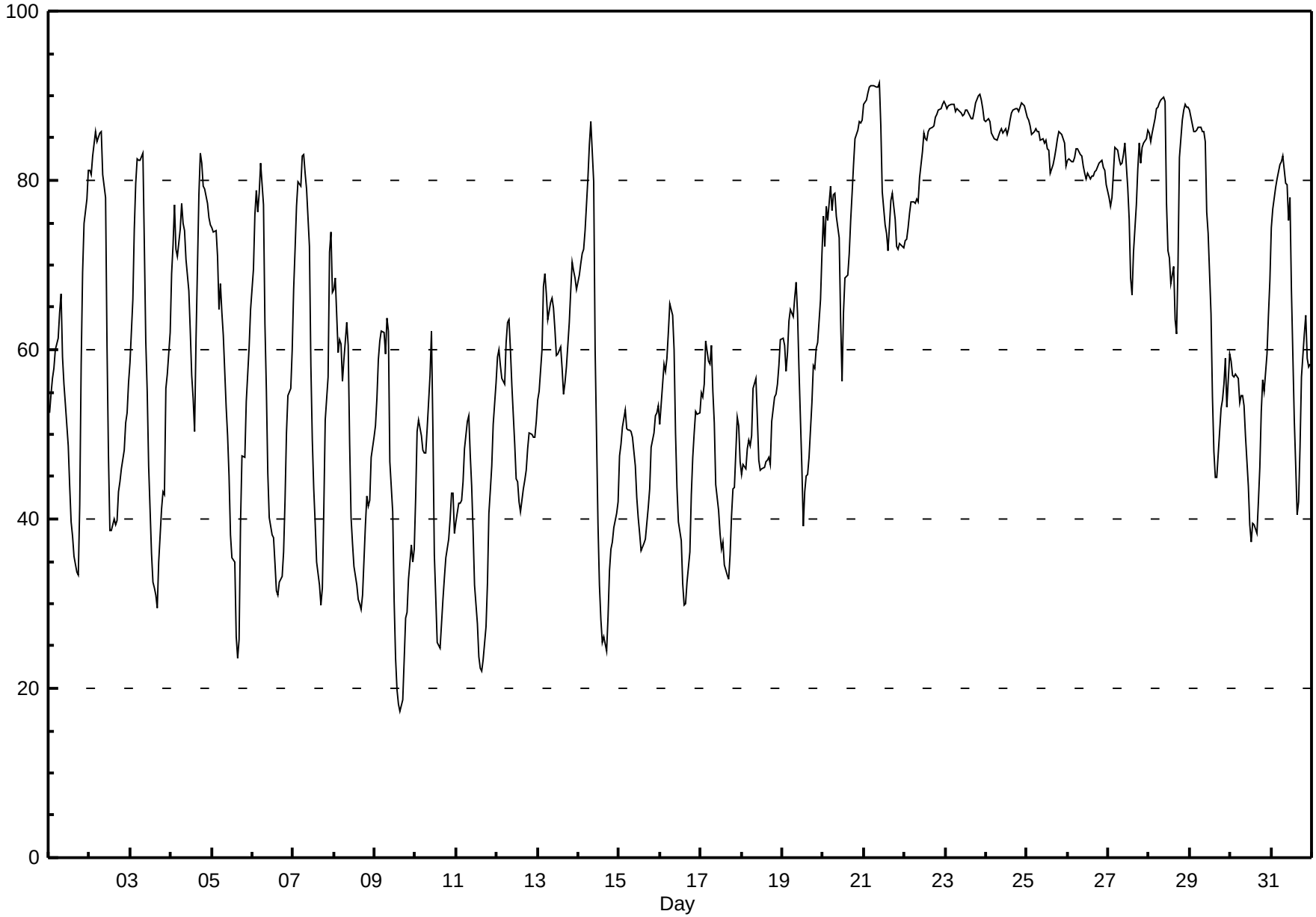
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Oct	53	55	57	58	60	61	64	67	59	56	53	49	44	40	38	36	34	33	42	58	69	75	78	81	54.9	81.2
2-Oct	81	81	83	86	85	85	86	86	81	78	61	48	39	39	40	39	40	43	44	46	48	51	53	56	61.5	85.8
3-Oct	58	66	74	80	82	82	82	83	72	61	55	46	36	32	32	31	30	35	41	43	43	55	57	62	55.9	83.3
4-Oct	69	72	77	72	71	74	77	75	74	71	67	62	57	54	50	61	78	83	82	79	79	77	76	75	71.4	83.2
5-Oct	74	74	74	71	65	68	64	62	53	50	45	38	35	35	26	24	26	39	47	47	54	57	60	65	52.3	74.4
6-Oct	69	76	79	76	78	82	77	63	55	45	40	38	38	35	32	31	33	33	36	42	50	55	55	60	53.3	82.0
7-Oct	67	72	77	80	79	83	83	81	79	72	58	49	44	39	35	32	30	32	41	52	57	71	74	67	60.6	83.0
8-Oct	67	69	60	61	61	56	59	63	61	49	40	37	34	32	30	30	29	31	39	43	41	42	47	50	47.2	68.5
9-Oct	51	54	59	61	62	62	60	64	62	47	41	30	24	20	18	17	19	23	28	29	33	37	35	36	40.5	63.8
10-Oct	42	50	52	50	48	48	48	51	57	62	51	36	31	25	25	28	30	33	35	38	40	43	43	38	41.8	62.3
11-Oct	40	42	42	42	44	48	51	52	48	44	38	32	28	24	22	22	23	27	32	41	43	46	51	56	39.2	56.1
12-Oct	59	60	58	57	56	61	63	64	60	56	49	45	44	42	41	43	45	46	48	50	50	50	50	51	52.0	63.6
13-Oct	54	55	60	67	69	67	63	66	66	65	62	59	59	60	58	55	56	58	63	67	70	69	68	67	62.8	70.4
14-Oct	69	70	71	72	74	80	84	87	83	80	60	39	32	28	25	26	24	29	34	36	37	39	41	42	52.7	87.0
15-Oct	47	49	51	53	51	51	50	50	50	46	43	40	38	36	37	38	39	41	44	48	50	52	53	53	46.3	53.4
16-Oct	51	56	58	58	59	62	65	64	60	50	44	40	37	32	30	30	33	36	43	47	50	53	52	53	48.5	65.4
17-Oct	55	54	56	61	59	58	60	55	51	44	41	38	36	37	35	33	33	36	40	44	44	52	51	47	46.7	61.0
18-Oct	45	46	46	48	49	49	50	55	57	52	47	46	46	46	47	47	47	46	52	54	55	56	58	61	50.2	61.2
19-Oct	61	60	57	60	63	65	64	66	68	64	58	46	39	43	45	45	47	54	58	58	60	61	66	71	57.6	71.4
20-Oct	76	72	77	75	79	76	78	78	76	73	64	56	64	69	69	71	75	78	82	85	86	87	87	87	75.9	87.1
21-Oct	89	89	90	91	91	91	91	91	91	92	87	79	75	74	72	75	78	78	75	72	72	72	72	72	81.6	91.6
22-Oct	73	73	74	76	77	78	77	78	77	80	83	86	85	85	86	86	86	87	87	88	88	89	89	89	82.4	89.3
23-Oct	89	88	89	89	89	89	88	88	88	88	88	88	88	88	88	87	87	88	89	90	90	89	88	87	88.4	90.1
24-Oct	87	87	87	86	85	85	85	85	86	86	86	86	85	86	87	88	88	88	88	88	89	89	89	88	86.9	89.1
25-Oct	87	87	86	86	86	86	86	86	85	85	84	85	84	84	81	82	83	84	85	86	85	85	84	82	84.7	87.5
26-Oct	82	82	82	82	83	84	84	83	83	82	81	80	81	80	80	81	81	81	82	82	82	82	81	79	81.7	83.7
27-Oct	78	77	78	81	84	84	83	82	82	83	84	79	75	69	66	72	77	81	84	82	84	84	85	86	80.0	85.9
28-Oct	86	85	86	87	88	89	89	90	90	89	77	72	71	68	70	64	62	70	83	87	88	89	89	89	81.5	89.8
29-Oct	88	87	86	86	86	86	86	86	86	85	76	74	64	54	48	45	45	50	53	54	56	59	53	59	68.9	88.3
30-Oct	59	57	57	57	57	54	55	55	53	50	44	39	37	40	39	38	42	46	53	56	55	60	64	68	51.4	68.1
31-Oct	74	77	79	80	81	82	82	83	80	80	75	78	67	52	46	40	42	48	57	62	64	59	58	58	66.9	82.8
	67.2	68.5	69.7	70.6	71.0	71.8	72.1	72.2	70.1	66.6	60.7	55.5	52.2	50.0	48.3	48.3	49.8	52.9	57.1	59.9	61.8	64.1	64.8	65.7	Diurnal Average	
	89.0	89.5	90.3	91.0	91.2	91.1	91.1	91.0	91.1	91.6	87.7	87.7	88.3	88.4	87.6	87.9	88.4	88.5	89.2	90.0	90.1	89.5	89.0	89.3	Diurnal Maximum	

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 515.1 W/m^2 on Oct 3 13:00 Maximum Daily Average: 123.9 W/m^2 on Oct 1

Minimum Value: 0 W/m^2 on Oct 1 01:00 Minimum Daily Average: 7.4 W/m^2 on Oct 24
Maximum Diurnal Average: 250.2 W/m^2 at hour 13 Minimum Diurnal Average: 0.0 W/m^2 at hour 1
Monthly Average: 62.90 W/m^2 Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 82.2 P_{90} = 251.0 P_{99} = 411.0

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

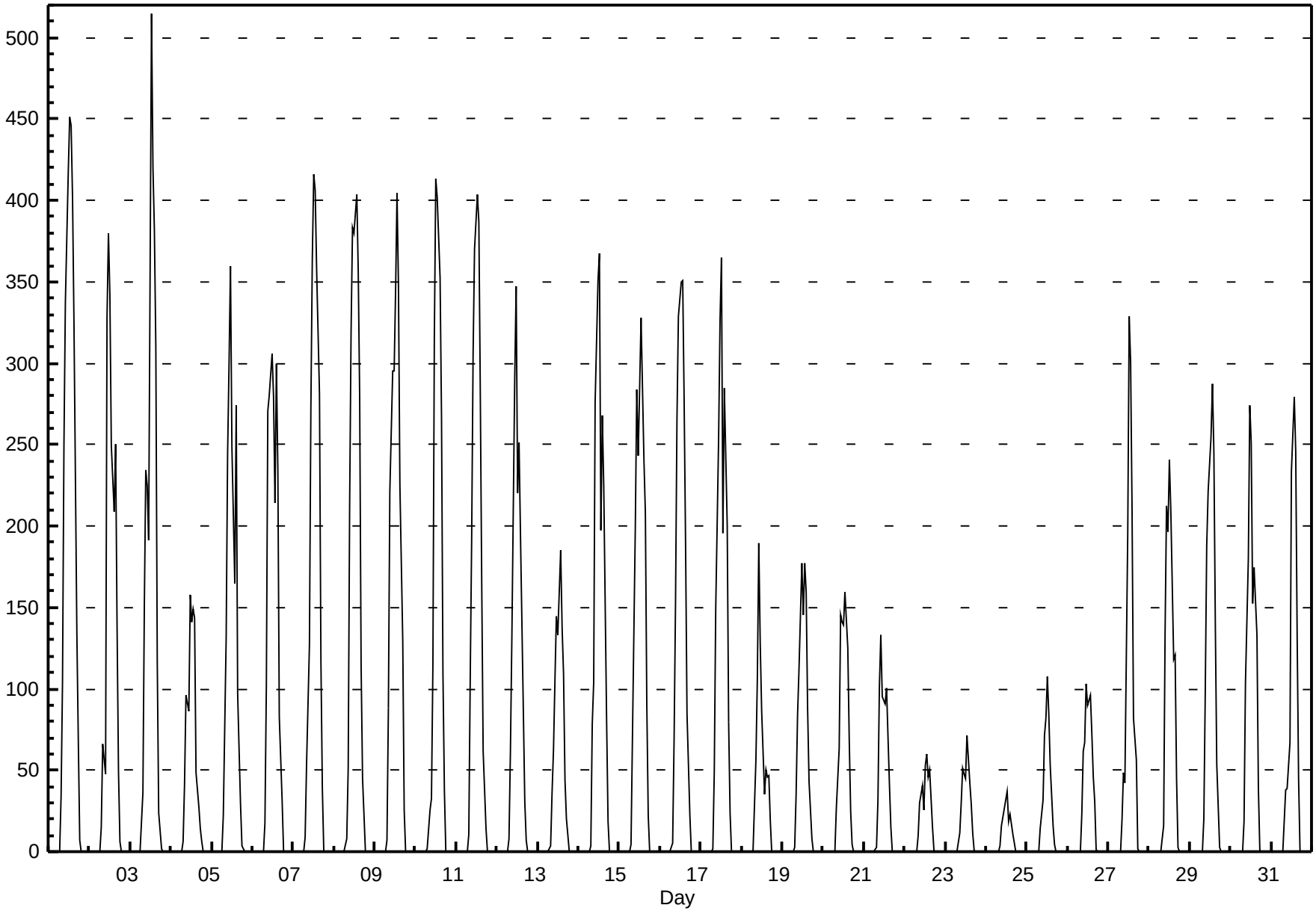
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Oct	0	0	0	0	0	0	0	34	104	250	337	417	451	446	401	324	134	69	7	0	0	0	0	0	123.9	451.1
2-Oct	0	0	0	0	0	0	0	15	66	48	328	380	342	249	208	250	138	49	6	0	0	0	0	0	86.7	380.2
3-Oct	0	0	0	0	0	0	0	36	150	235	225	191	515	421	382	310	117	24	2	0	0	0	0	0	108.7	515.1
4-Oct	0	0	0	0	0	0	0	6	41	96	86	158	141	149	143	48	27	14	6	0	0	0	0	0	38.1	157.6
5-Oct	0	0	0	0	0	0	0	22	131	245	300	360	248	164	274	97	63	29	4	0	0	0	0	0	80.7	359.5
6-Oct	0	0	0	0	0	0	0	17	102	271	281	306	279	214	300	235	83	31	0	0	0	0	0	0	88.3	305.6
7-Oct	0	0	0	0	0	0	0	9	53	127	273	364	416	406	357	281	118	39	0	0	0	0	0	0	101.8	416.0
8-Oct	0	0	0	0	0	0	0	8	51	212	319	384	380	404	356	279	113	45	0	0	0	0	0	0	106.3	403.6
9-Oct	0	0	0	0	0	0	0	7	88	222	295	296	344	404	348	226	129	26	0	0	0	0	0	0	99.4	404.1
10-Oct	0	0	0	0	0	0	0	2	25	32	114	316	413	402	353	267	110	38	0	0	0	0	0	0	86.4	413.4
11-Oct	0	0	0	0	0	0	0	11	106	192	306	370	404	387	284	166	62	14	0	0	0	0	0	0	95.9	403.7
12-Oct	0	0	0	0	0	0	0	8	61	132	291	347	221	251	195	87	31	7	0	0	0	0	0	0	67.9	347.2
13-Oct	0	0	0	0	0	0	0	4	36	63	105	144	133	185	137	109	44	20	0	0	0	0	0	0	40.9	185.0
14-Oct	0	0	0	0	0	0	0	3	79	104	276	351	368	198	268	224	80	19	0	0	0	0	0	0	82.0	367.7
15-Oct	0	0	0	0	0	0	0	4	70	200	284	244	284	328	240	208	90	22	0	0	0	0	0	0	82.3	327.8
16-Oct	0	0	0	0	0	0	0	6	69	153	266	329	350	351	277	189	84	22	0	0	0	0	0	0	87.3	351.1
17-Oct	0	0	0	0	0	0	0	1	50	149	253	326	365	196	284	201	80	24	0	0	0	0	0	0	80.3	364.6
18-Oct	0	0	0	0	0	0	0	1	57	107	190	128	87	35	50	46	47	20	0	0	0	0	0	0	31.9	189.5
19-Oct	0	0	0	0	0	0	0	3	35	84	112	177	145	177	159	88	43	8	0	0	0	0	0	0	43.0	177.0
20-Oct	0	0	0	0	0	0	0	0	26	63	146	141	140	160	125	69	25	5	0	0	0	0	0	0	37.5	159.5
21-Oct	0	0	0	0	0	0	0	2	32	102	133	95	91	101	70	42	15	0	0	0	0	0	0	0	28.5	133.3
22-Oct	0	0	0	0	0	0	0	0	10	30	41	25	53	60	46	50	15	1	0	0	0	0	0	0	13.7	59.9
23-Oct	0	0	0	0	0	0	0	0	11	30	51	48	45	71	42	29	11	1	0	0	0	0	0	0	14.1	71.4
24-Oct	0	0	0	0	0	0	0	0	4	16	21	32	37	19	23	16	10	0	0	0	0	0	0	0	7.4	37.3
25-Oct	0	0	0	0	0	0	0	0	14	31	71	82	108	85	53	16	5	0	0	0	0	0	0	0	19.4	107.9
26-Oct	0	0	0	0	0	0	0	0	23	62	67	103	90	96	72	46	31	1	0	0	0	0	0	0	24.6	102.8
27-Oct	0	0	0	0	0	0	0	0	19	48	42	195	328	301	210	82	57	1	0	0	0	0	0	0	53.5	328.5
28-Oct	0	0	0	0	0	0	0	0	16	134	212	197	241	210	118	121	45	3	0	0	0	0	0	0	54.0	240.5
29-Oct	0	0	0	0	0	0	0	0	20	99	188	221	255	287	245	140	53	3	0	0	0	0	0	0	63.0	287.1
30-Oct	0	0	0	0	0	0	0	0	19	104	180	274	251	153	174	133	39	1	0	0	0	0	0	0	55.3	274.1
31-Oct	0	0	0	0	0	0	0	0	38	38	53	67	234	280	246	132	45	0	0	0	0	0	0	0	47.2	279.6
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.4	51.9	118.6	188.5	228.0	250.2	231.8	207.8	145.5	62.7	17.3	0.8	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.9	150.3	270.7	337.3	416.8	515.1	445.8	401.4	323.8	138.4	68.6	7.1	0.0	0.0	0.0	0.0	0.0	Diurnal Maximum	

PASZA
Peace Air Shed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - October 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	12	11	11	12	12	13	7	3	7	5	6	4	3	3	6	8	7	5	3	3	3	5	4	5	4.7	12.6
Dir	103	110	108	108	104	99	123	142	115	189	184	143	135	155	143	128	132	118	39	46	322	307	333	304	116.2	99.1
2 Spd	3	1	1	1	1	4	4	2	1	4	4	7	16	20	21	22	21	21	19	27	21	24	22	9	10.9	27.0
Dir	325	287	308	237	308	312	316	310	228	170	222	230	274	290	280	282	284	278	285	285	287	298	302	297	285.1	285.0
3 Spd	5	2	2	4	2	2	2	3	5	3	3	6	9	9	9	5	7	7	6	6	6	5	7	7	3.0	8.7
Dir	303	8	348	309	251	354	332	291	317	340	1	92	86	91	94	86	71	42	44	28	54	27	23	320	35.6	90.9
4 Spd	4	4	2	5	3	3	4	5	4	5	6	7	6	10	13	22	15	9	10	11	13	12	12	13	7.5	21.5
Dir	317	340	267	292	320	285	270	256	214	247	236	238	216	235	254	267	271	212	225	236	242	243	243	246	250.6	267.3
5 Spd	12	14	12	15	18	7	8	11	11	16	12	16	12	8	10	14	11	23	11	4	2	4	5	3	10.1	22.6
Dir	248	253	252	256	261	279	256	260	271	260	256	253	267	249	218	216	230	260	242	228	224	216	155	146	249.2	259.5
6 Spd	3	1	2	2	4	1	6	7	6	8	16	18	16	16	13	12	9	9	10	8	3	2	4	4	5.6	18.1
Dir	135	160	130	298	344	273	177	194	192	180	190	189	187	204	237	267	223	234	272	272	259	197	266	347	216.3	188.8
7 Spd	2	1	1	3	4	3	3	1	2	4	4	8	11	11	10	10	8	7	4	4	1	6	5	5	1.7	11.3
Dir	92	297	328	300	313	310	179	323	307	348	98	114	116	128	140	163	136	114	100	56	15	323	309	274	119.5	127.5
8 Spd	4	5	7	4	11	19	13	9	12	20	25	27	25	23	20	15	10	6	2	5	7	10	9	11	8.7	27.1
Dir	321	250	272	264	275	279	268	249	255	270	261	260	264	269	270	270	277	293	11	96	96	106	104	102	266.1	259.9
9 Spd	13	12	12	12	12	11	8	3	2	2	10	12	17	15	15	12	6	3	3	5	5	7	8	9	6.1	17.0
Dir	104	116	116	118	125	132	130	180	339	223	184	204	216	212	212	234	264	228	242	186	206	162	152	160	171.3	215.8
10 Spd	10	8	9	12	11	12	13	8	16	30	31	39	42	45	40	33	30	27	23	19	17	18	16	25	17.1	45.3
Dir	162	141	122	141	131	149	162	180	297	284	273	270	268	262	258	247	238	235	228	233	229	221	233	255	244.0	261.9
11 Spd	18	14	20	22	29	21	8	8	6	17	20	22	21	20	17	13	9	13	15	14	12	13	13	9	15.2	29.1
Dir	255	261	258	260	263	269	245	235	257	257	257	258	263	263	248	241	218	266	269	254	235	234	234	236	254.3	262.8
12 Spd	9	12	15	14	14	7	6	5	6	7	7	7	9	18	16	11	9	10	7	5	7	10	9	8	8.1	18.4
Dir	237	247	258	272	261	246	231	276	229	225	223	230	224	255	236	217	213	210	212	148	155	171	171	166	228.3	254.5
13 Spd	6	6	2	4	3	12	16	15	7	5	7	4	9	11	8	6	3	5	6	6	6	9	11	10	1.8	16.4
Dir	162	150	226	260	230	270	259	267	292	313	297	290	319	309	296	321	343	132	126	116	91	95	103	101	273.0	259.0
14 Spd	10	8	8	7	4	1	4	4	7	9	15	30	37	38	31	29	22	17	15	13	12	10	12	17	10.6	37.6
Dir	104	106	98	112	117	225	330	311	315	313	318	287	280	276	277	280	270	253	260	248	201	214	243	249	270.7	276.5
15 Spd	12	13	14	18	24	23	22	24	25	30	32	31	30	31	33	34	29	23	19	14	17	10	8	11	21.7	33.8
Dir	280	247	250	260	259	259	262	262	259	260	271	276	281	273	262	262	267	262	258	254	256	236	261	253	263.2	261.6
16 Spd	14	10	9	10	8	7	2	2	1	5	12	18	15	14	12	12	16	12	13	11	6	6	6	5	8.9	18.1
Dir	254	245	260	259	244	302	229	257	211	256	252	264	268	256	241	259	271	264	268	252	229	222	188	189	254.5	263.5
17 Spd	7	6	4	5	3	3	5	5	16	19	25	28	28	27	23	21	17	12	7	8	5	4	5	6	9.7	28.2
Dir	176	139	136	166	176	166	193	231	254	251	258	260	269	275	271	268	272	266	275	268	236	188	168	145	253.2	268.6
18 Spd	4	5	3	1	6	3	4	1	2	4	5	19	20	12	18	17	11	15	13	10	12	12	10	9	7.4	19.7
Dir	147	161	150	157	168	101	199	100	198	172	222	263	252	254	253	252	244	265	273	239	223	213	213	213	235.9	251.9
19 Spd	8	9	16	17	15	14	12	13	11	14	19	23	25	22	21	15	11	8	9	9	5	8	5	2	12.0	24.6
Dir	226	243	262	263	261	272	265	259	246	245	257	268	274	279	287	302	301	285	284	312	341	323	321	315	273.3	273.8
20 Spd	4	1	1	1	0	3	3	2	2	3	5	7	6	7	8	7	6	7	6	7	5	5	5	2	2.8	7.6
Dir	265	239	215	111	299	355	308	197	306	341	130	110	129	94	99	101	73	71	82	95	86	82	85	28	89.9	99.2
21 Spd	3	4	3	4	3	2	1	4	4	5	10	12	11	7	10	10	6	6	8	8	7	6	6	5	4.3	12.0
Dir	304	300	292	229	259	199	210	315	316	319	315	307	312	294	310	315	85	29	14	15	12	17	12	30	330.4	306.9
22 Spd	4	5	6	9	8	9	10	11	12	11	13	13	13	13	10	11	9	8	7	5	4	3	2	3	8.3	13.2
Dir	37	36	56	73	69	67	68	67	78	78	71	70	72	69	63	64	59	65	69	64	56	60	54	34	66.1	71.8

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

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
23 Spd	4	3	4	5	N	N	N	N	3	5	5	5	7	6	7	7	8	7	7	7	8	9	10	12	5.7	11.7
Dir	43	7	327	356	N	N	N	N	80	90	77	74	79	69	77	66	69	58	56	62	66	72	84	90	66.7	89.8
24 Spd	12	11	12	11	11	11	13	12	13	13	12	13	12	9	9	10	8	6	9	9	9	9	9	8	9.9	12.8
Dir	91	97	98	96	97	96	95	95	92	90	92	85	81	75	75	80	74	60	48	49	44	50	48	53	80.3	94.8
25 Spd	8	8	9	8	6	5	N	N	N	N	5	6	7	7	7	8	8	9	9	8	8	9	10	11	7.3	10.6
Dir	54	43	37	38	41	22	N	N	N	N	63	72	69	80	93	85	88	88	97	97	103	87	95	93	74.9	93.4
26 Spd	8	10	10	9	8	8	8	9	9	9	10	10	10	10	9	8	7	7	6	7	6	6	5	5	7.9	10.4
Dir	85	92	89	95	87	78	84	91	81	81	92	92	78	84	65	62	77	81	67	76	73	73	80	93	82.2	91.5
27 Spd	7	6	5	7	7	6	3	5	6	5	2	3	3	4	5	4	6	6	6	4	7	5	5	6	1.1	7.2
Dir	91	94	98	97	112	108	79	92	90	116	87	105	160	241	260	254	246	263	323	274	206	223	276	265	155.8	206.3
28 Spd	7	9	7	4	4	2	2	5	2	3	3	3	5	6	7	8	8	1	3	2	1	4	2	2	0.9	9.1
Dir	295	305	314	273	279	326	60	155	123	157	172	119	109	125	107	117	144	130	57	351	319	153	281	106	133.3	305.3
29 Spd	1	3	3	2	3	3	3	2	3	3	4	6	5	12	18	15	11	8	6	8	9	8	10	7	5.4	17.9
Dir	194	298	303	326	154	133	130	162	157	164	213	200	238	237	238	227	221	197	233	206	216	211	201	225	217.0	238.2
30 Spd	8	8	3	5	6	8	8	8	8	9	8	10	9	10	8	9	7	7	5	6	5	3	3	1	6.0	10.2
Dir	202	189	129	123	133	119	131	135	135	151	139	161	162	155	149	149	123	107	76	129	193	174	114	44	144.2	154.9
31 Spd	1	3	2	2	3	4	4	3	4	7	4	8	11	17	16	20	13	4	5	6	5	8	7	8	3.8	20.0
Dir	8	307	343	322	299	312	343	326	295	294	263	238	257	258	267	284	292	297	326	343	116	113	110	118	281.0	284.2
Spd	1.2	1.4	1.1	1.6	2.4	1.6	2.1	2.5	2.4	4.6	5.6	7.3	7.8	8.7	8.5	7.7	5.1	4.4	3.5	2.6	2.3	2.0	1.5	1.8	Diurnal Average	
Dir	194.7	200.2	232.4	234.3	237.6	259.1	221.0	235.8	257.2	255.7	251.7	252.9	260.0	258.7	254.6	257.4	253.0	252.2	270.4	258.4	223.8	208.2	206.1	214.4		
Spd	17.6	14.3	19.5	21.7	29.1	22.8	22.2	24.3	24.5	30.3	32.3	39.1	41.9	45.3	39.5	33.8	29.9	26.8	22.9	27.0	21.4	24.2	22.5	24.9	Diurnal Maximum	
Dir	254.8	253.4	258.0	259.7	262.8	259.2	261.7	262.2	259.0	260.5	271.1	270.4	268.1	261.9	258.0	261.6	238.3	234.7	228.1	285.0	287.0	298.0	302.3	254.8		

Maximum Speed Value: 45 km/h on Oct 10 14:00
Maximum Daily Speed Average: 21.7 km/h on Oct 10
Maximum Diurnal Speed Average: 8.7 km/h at hour 14

Minimum Speed Value: 0 km/h on Oct 20 05:00
Minimum Daily Speed Average: 0.9 km/h on Oct 28
Minimum Diurnal Speed Average: 1.1 km/h at hour 3

Monthly Average Velocity: 3.60 km/h 249.01 deg

Speed Percentiles: $P_1 = 0.9$ $P_{10} = 2.7$ $Q_1 = 4.7$ Median = 7.7 $Q_3 = 12.0$ $P_{90} = 18.8$ $P_{99} = 31.3$

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

Hours in Service:	744
Hours of Data:	736
Hours of Missing Data:	8
Percent Operational Time:	98.9

N - Not Valid

Frequency Distribution

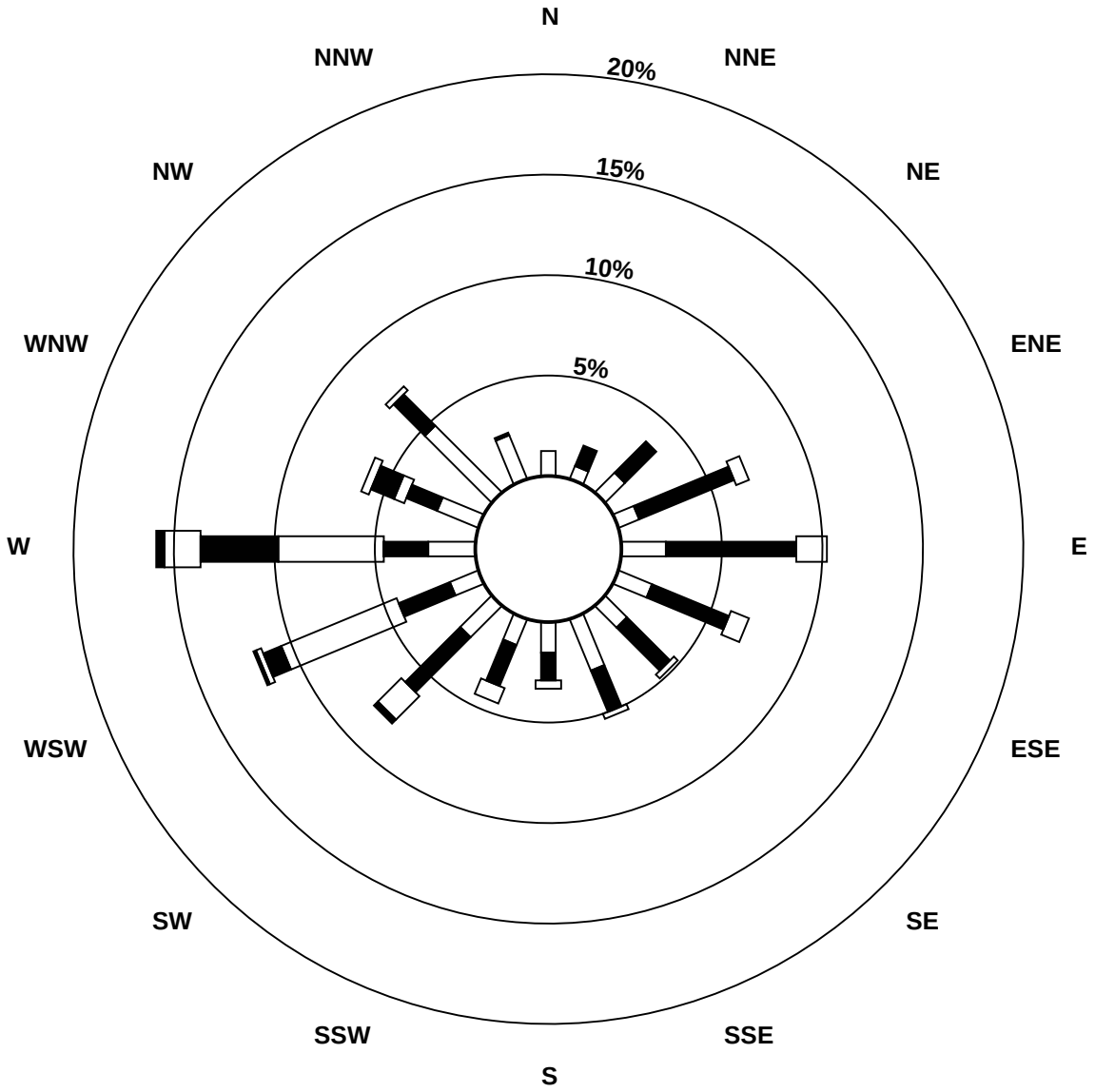
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	21	8	0	0	0	0	29
NorthEast	15	36	0	0	0	0	51
East	18	89	26	0	0	0	133
SouthEast	25	47	7	0	0	0	79
South	25	27	5	0	0	0	57
SouthWest	25	51	34	2	2	0	114
West	27	24	72	45	17	4	189
NorthWest	49	28	5	2	0	0	84
Total	205	310	149	49	19	4	736

PASZA
Peace Air Shed Zone Association

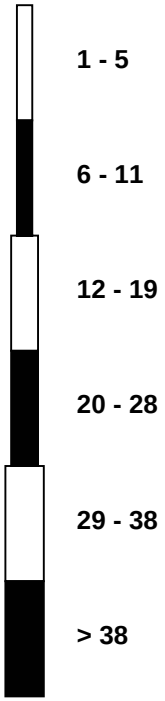
Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - October 2010



Wind Speed Classes (km/h)



PASZA
Peace Air Shed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - October 2010

Maximum Speed: 46 km/h on Oct 10 14:00

Maximum Daily Speed Average: 22.7 km/h on Oct 10

Minimum Speed: 2 km/h on Oct 20 03:00

Minimum Daily Speed Average: 4.7 km/h on Oct 28

Maximum Diurnal Speed Average: 15.4 km/h at hour 14

Minimum Diurnal Speed Average: 7.2 km/h at hour 8

Monthly Average Speed: 9.89 km/h

Percentiles: P_1 = 2.4 P_{10} = 3.6 Q_1 = 5.2 Median = 8.1 Q_3 = 12.2 P_{90} = 19.1 P_{99} = 31.6

Hours in Service: 744

Hours of Data: 736

Hours of Missing Data: 8

Percent Operational Time: 98.9

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Oct	13	11	11	12	12	13	7	4	7	7	7	5	5	5	7	9	8	6	3	3	4	5	4	5	7.1	12.6
2-Oct	4	3	2	3	3	4	4	3	3	5	5	8	16	20	21	22	21	21	20	27	22	24	23	9	12.2	27.2
3-Oct	6	4	3	5	4	4	3	4	5	4	3	7	9	9	9	5	8	7	6	6	6	6	8	8	5.7	9.2
4-Oct	5	4	2	5	4	5	5	5	5	6	6	7	6	11	14	22	16	9	11	11	13	12	12	14	8.8	21.8
5-Oct	12	14	12	15	18	9	9	12	12	16	12	16	12	8	10	14	11	23	12	5	4	5	5	4	11.4	23.0
6-Oct	4	3	3	4	4	3	6	8	6	9	16	18	16	17	14	13	9	9	10	8	5	3	6	5	8.4	18.4
7-Oct	4	3	3	3	5	3	4	3	3	4	4	8	11	12	11	10	8	7	4	5	5	6	5	6	5.6	11.7
8-Oct	5	5	8	5	11	19	13	9	12	21	25	27	25	24	20	15	10	6	5	5	7	10	9	11	12.8	27.4
9-Oct	13	12	12	12	12	11	9	4	4	3	10	12	17	16	15	13	6	4	5	6	5	7	9	9	9.5	17.4
10-Oct	10	9	9	12	11	12	13	8	18	31	32	39	42	46	40	34	30	27	23	19	17	18	17	25	22.7	45.6
11-Oct	18	14	20	22	29	22	9	9	7	17	20	22	21	20	18	14	10	13	15	15	12	13	13	9	15.9	29.2
12-Oct	9	13	15	14	14	7	6	6	6	8	8	8	10	19	17	11	10	11	8	5	7	10	10	8	9.9	18.7
13-Oct	6	6	4	6	4	12	17	15	7	5	7	5	9	11	8	7	5	5	6	7	6	9	11	10	7.8	16.5
14-Oct	10	9	8	7	5	3	5	6	8	9	15	31	37	38	32	29	22	17	15	13	12	10	12	18	15.4	37.9
15-Oct	13	14	14	18	24	23	22	24	25	30	33	31	30	32	34	34	29	23	19	14	17	10	8	11	22.1	34.1
16-Oct	14	10	9	10	8	8	3	4	2	6	13	18	16	15	13	13	16	12	13	12	6	6	6	5	9.9	18.4
17-Oct	7	6	4	5	3	4	5	6	16	19	25	28	29	27	23	21	17	12	8	8	5	5	5	6	12.3	28.6
18-Oct	5	5	6	4	6	5	5	3	3	4	5	19	20	13	18	17	11	15	13	11	12	12	10	9	9.6	19.9
19-Oct	9	9	17	17	15	14	12	13	11	14	20	24	25	23	21	15	11	8	9	9	6	8	6	3	13.2	24.7
20-Oct	4	3	2	3	2	3	4	3	3	4	6	7	7	7	8	8	6	7	6	7	5	5	5	4	5.0	8.0
21-Oct	3	4	4	5	4	3	2	4	5	6	10	12	11	7	10	10	6	7	8	9	7	6	6	5	6.4	12.2
22-Oct	4	5	6	9	8	9	10	11	12	12	13	13	13	13	11	11	9	8	8	6	5	4	3	4	8.6	13.3
23-Oct	5	4	4	5	N	N	N	N	3	5	5	5	7	6	7	7	8	7	7	7	8	10	10	12	6.6	11.8
24-Oct	12	11	12	11	11	11	13	13	13	13	12	13	12	9	9	10	8	6	9	9	9	9	9	8	10.5	12.9
25-Oct	9	8	9	8	6	6	N	N	N	N	6	6	7	7	8	8	9	10	9	8	9	9	10	11	8.1	10.8
26-Oct	8	10	10	9	8	8	8	9	9	9	10	11	10	11	9	8	7	7	6	7	6	6	5	6	8.1	10.7
27-Oct	7	6	5	7	7	6	4	6	7	5	3	4	4	5	6	5	7	7	9	5	7	6	5	7	5.8	9.1
28-Oct	7	9	7	4	4	3	3	5	3	3	3	4	5	6	7	8	8	2	3	3	3	4	6	3	4.7	9.2
29-Oct	3	4	3	2	3	3	3	3	4	4	5	7	7	13	18	16	11	8	6	8	9	9	10	7	6.8	18.1
30-Oct	9	8	4	6	6	8	8	8	8	9	9	10	9	10	9	9	7	7	5	6	6	4	4	4	7.2	10.5
31-Oct	2	4	4	2	4	4	4	4	6	7	5	8	12	18	16	20	13	4	5	6	8	8	7	8	7.5	20.2
	7.6	7.5	7.5	8.0	8.5	8.2	7.5	7.2	7.7	9.9	11.4	14.0	14.9	15.4	14.9	14.1	11.5	10.2	9.2	8.7	8.1	8.4	8.3	8.1	Diurnal Average	
	17.8	14.4	19.6	21.8	29.2	22.8	22.3	24.5	24.6	31.0	32.6	39.4	42.3	45.6	39.7	34.1	30.2	27.1	23.2	27.2	21.6	24.3	22.6	25.2	Diurnal Maximum	

N - Not Valid

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

PASZA
Peace Air Shed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - October 2010

Maximum Value: 93.7 deg on Oct 20 05:00

Minimum Value: 3.3 deg on Oct 15 05:00

Percentiles: P_1 = 4.8 P_{10} = 6.7 Q_1 = 9.0 Median = 14.1 Q_3 = 26.5 P_{90} = 52.9 P_{99} = 82.9

Hours in Service:	744
Hours of Data:	736
Hours of Missing Data:	8
Hours of Calibration:	0
Percent Operational Time:	98.9

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-Oct	5	6	6	5	5	5	22	27	11	47	22	45	53	59	28	19	19	21	17	23	62	13	17	24	62.2
2-Oct	53	76	73	67	75	23	34	50	61	17	49	29	10	11	8	9	10	7	10	7	7	5	5	11	75.7
3-Oct	33	67	77	58	70	69	56	31	14	30	45	35	22	19	13	19	25	9	11	15	18	33	20	22	76.6
4-Oct	27	32	37	28	44	53	40	24	38	25	15	13	27	12	14	10	18	15	15	8	6	7	5	6	52.7
5-Oct	8	6	6	5	5	56	26	17	21	9	13	13	16	24	17	12	11	12	26	36	64	48	24	29	64.4
6-Oct	64	83	57	57	38	84	14	17	15	25	8	9	10	16	24	17	11	12	15	20	76	72	57	30	84.3
7-Oct	45	92	80	43	42	41	49	82	43	24	38	18	13	15	19	16	21	10	16	29	76	24	21	54	92.2
8-Oct	26	25	35	28	7	4	8	15	8	6	7	9	11	10	12	13	12	19	59	17	10	8	5	4	59.1
9-Oct	4	8	5	9	9	8	10	43	79	73	11	15	13	18	18	16	22	53	59	27	25	22	12	10	79.3
10-Oct	8	14	8	8	11	13	7	16	46	15	6	7	7	7	6	11	8	8	8	6	10	7	12	9	45.9
11-Oct	10	9	6	6	6	11	28	22	34	9	10	11	12	12	17	19	20	15	8	17	7	9	11	9	33.6
12-Oct	12	9	5	11	10	12	11	39	26	21	30	30	23	10	17	12	12	11	21	12	9	6	8	5	39.0
13-Oct	5	13	51	43	42	12	8	9	35	27	10	31	12	15	19	17	72	17	15	9	14	7	6	6	72.0
14-Oct	9	9	10	22	52	83	38	58	25	9	7	10	7	6	6	6	8	9	6	12	8	22	12	18	82.8
15-Oct	22	12	10	6	3	3	5	6	4	6	8	7	8	8	7	8	7	6	5	6	5	13	16	8	21.6
16-Oct	8	8	8	7	9	22	53	55	52	20	15	11	17	14	23	17	9	6	6	9	10	14	22	25	55.3
17-Oct	13	21	24	14	24	29	25	36	9	7	6	6	9	7	8	11	8	11	25	27	12	40	15	17	39.7
18-Oct	19	12	60	83	26	45	40	86	76	25	39	14	9	11	12	8	14	12	9	21	7	6	6	8	85.5
19-Oct	15	14	6	5	5	6	7	8	7	5	7	8	7	10	11	8	9	9	6	13	17	10	46	64	63.8
20-Oct	17	76	69	82	94	24	28	54	44	48	56	12	19	17	21	17	21	13	11	9	16	30	25	56	93.7
21-Oct	28	39	61	45	34	54	83	49	25	16	9	9	8	18	12	10	29	22	11	10	10	15	14	19	83.1
22-Oct	19	19	16	9	8	9	7	9	9	9	8	7	7	9	12	11	14	14	14	18	24	28	34	54	53.5
23-Oct	26	44	24	25	N	N	N	N	34	11	21	19	13	19	14	16	12	17	17	14	9	10	9	8	43.6
24-Oct	8	7	6	6	6	6	6	6	8	6	8	8	8	10	11	9	11	15	11	11	10	11	11	12	15.2
25-Oct	12	16	9	11	13	15	N	N	N	N	19	14	15	12	16	12	11	10	12	9	10	7	8	10	19.2
26-Oct	9	9	7	8	11	10	10	8	10	10	10	11	13	14	14	15	12	12	14	12	20	12	15	14	20.3
27-Oct	10	9	13	8	10	16	28	16	13	26	60	55	61	27	25	37	17	22	47	40	13	31	23	17	61.3
28-Oct	12	6	9	19	31	65	43	16	41	26	34	39	23	23	12	14	10	75	27	54	78	35	83	43	82.7
29-Oct	83	32	24	45	50	32	19	45	21	53	42	28	57	53	9	11	11	9	15	12	7	17	15	12	83.0
30-Oct	20	14	42	14	15	15	8	14	7	9	13	15	17	13	16	11	13	7	27	35	39	53	41	80	80.0
31-Oct	65	78	64	56	31	33	37	68	75	29	34	17	15	7	10	8	8	19	14	29	64	9	12	7	77.6
	83.0	92.2	80.5	82.6	93.7	84.3	83.1	85.5	79.3	73.0	60.2	55.1	61.3	58.8	28.3	37.3	72.0	75.2	59.4	53.7	78.3	71.8	82.7	80.0	

N - Not Valid

PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.8 ppb on Oct 15 10:00 Maximum Daily Average: 1.8 ppb on Oct 15

Minimum Value: 0 ppb on Oct 2 02:00 Minimum Daily Average: 0.0 ppb on Oct 26
Maximum Diurnal Average: 1.0 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 20
Monthly Average: 0.38 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.7$ $P_{99} = 6.2$

Hours in Service:	744
Hours of Data:	697
Hours of Missing Data:	47
Hours of Calibration:	34
Percent Operational Time:	98.3

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-Oct	0	0	0	0	A	1	1	0	0	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0.4	1.1
2-Oct	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	1.1
3-Oct	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.6
4-Oct	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	2	3	0	0	0	0	0	0	0	0.6	3.5
5-Oct	A	0	0	0	0	0	0	0	1	6	2	2	4	1	0	0	0	1	0	0	0	0	0	A	0.8	6.1
6-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	A	0	0.3	3.3
7-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	2	1	0	0	0	A	0	0	0.5	1.8
8-Oct	0	0	0	0	0	0	1	2	8	6	6	0	0	2	2	0	0	0	0	0	A	0	0	0	1.2	7.7
9-Oct	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0.3	1.0
10-Oct	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	1.8
11-Oct	0	0	0	0	0	0	0	1	0	2	4	3	3	0	0	0	0	A	0	0	0	0	0	0	0.6	3.6
12-Oct	0	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0.1	0.2
13-Oct	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
14-Oct	0	0	0	0	A	0	0	1	0	0	1	0	2	4	1	1	1	0	0	0	0	0	0	0	0.6	4.2
15-Oct	0	0	0	A	0	0	0	0	2	10	7	4	0	0	1	6	8	3	0	0	0	0	0	0	1.8	9.8
16-Oct	0	0	A	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0.4	2.7
17-Oct	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
18-Oct	A	0	0	0	0	0	0	0	0	0	2	4	1	1	0	1	0	0	0	0	0	0	0	A	0.5	4.1
19-Oct	0	0	0	0	0	0	0	0	0	1	0	8	5	0	1	1	1	0	0	0	0	0	A	0	0.8	7.9
20-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
21-Oct	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.7
22-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	--	0.2
23-Oct	D	D	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
24-Oct	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	0.1
25-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
26-Oct	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	0.0
27-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0.2	1.6
28-Oct	0	0	0	A	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0.2	1.9
29-Oct	0	0	A	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
30-Oct	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
31-Oct	A	0	0	0	0	0	0	0	0	0	1	1	5	3	5	3	0	0	0	0	0	0	0	A	0.9	4.9
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.5	1.0	0.9	1.0	0.9	0.6	0.6	0.8	0.6	0.3	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.5	0.4	1.8	1.0	0.9	1.1	0.7	1.6	7.7	9.8	6.8	7.9	4.9	4.2	4.6	5.5	8.2	2.9	0.6	0.2	0.5	0.6	0.4	0.5	Diurnal Maximum	

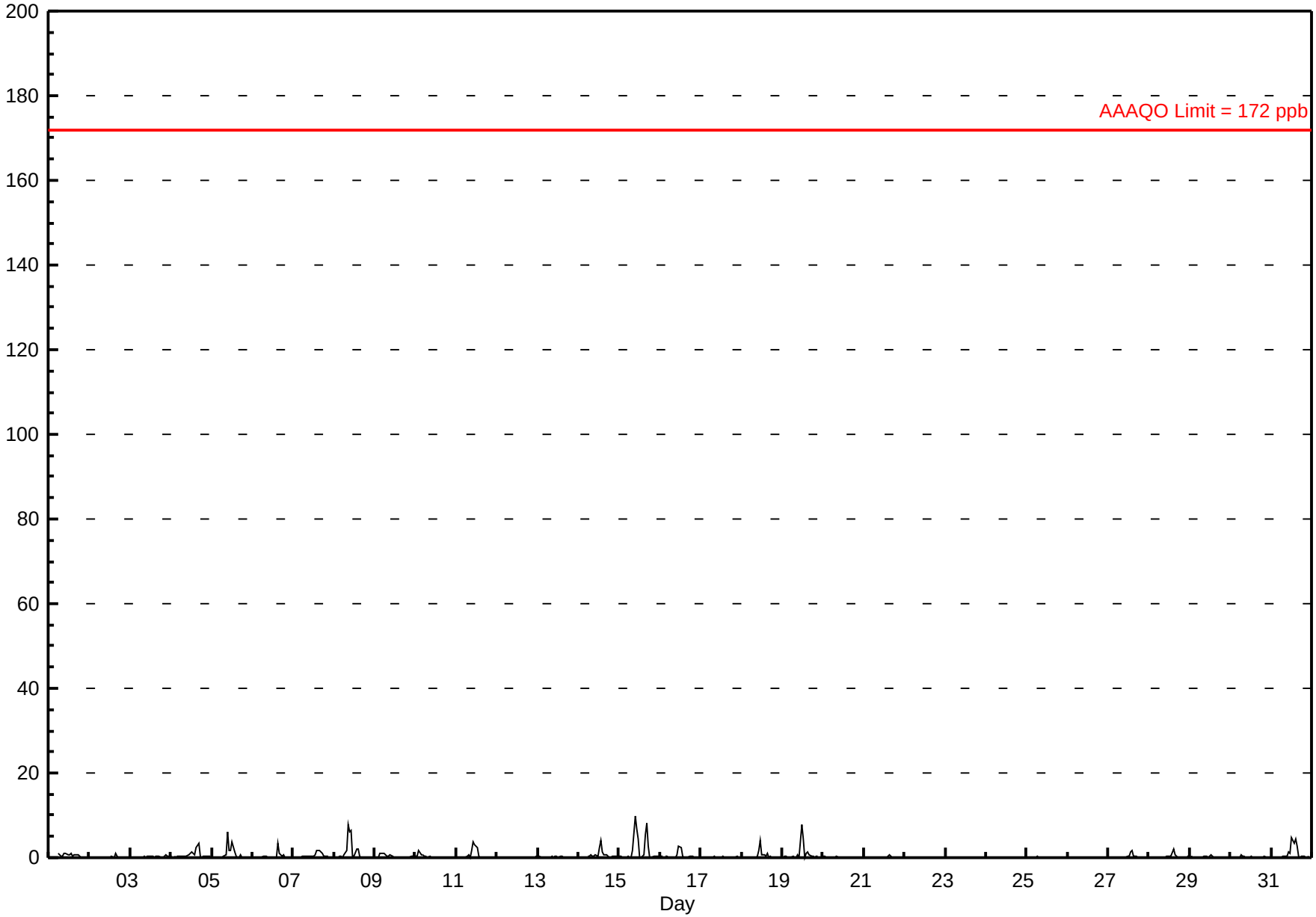
C - Calibration D - DAS Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - October 2010

Maximum Value: 20.7 ppb on Oct 31 14:00

Maximum Daily Average: 5.7 ppb on Oct 15

Minimum Value: 0 ppb on Oct 26 16:00

Minimum Daily Average: 0.3 ppb on Oct 26

Maximum Diurnal Average: 3.7 ppb at hour 13

Minimum Diurnal Average: 0.4 ppb at hour 20

Monthly Average: 1.49 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.6$ $P_{90} = 3.6$ $P_{99} = 18.3$

Hours in Service:	744
Hours of Data:	697
Hours of Missing Data:	47
Hours of Calibration:	34
Percent Operational Time:	98.3

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-Oct	0	0	0	0	A	2	2	1	1	2	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0.8	1.8
2-Oct	1	0	0	A	0	0	0	0	0	0	0	1	0	5	0	13	5	0	0	0	0	0	0	0	1.3	12.6
3-Oct	0	0	A	0	0	0	0	0	1	0	1	1	1	1	0	1	0	0	0	0	1	1	1	1	0.5	1.4
4-Oct	1	A	1	1	1	1	1	1	1	1	2	4	4	4	4	13	13	1	1	1	0	1	1	1	2.3	12.9
5-Oct	A	0	1	0	0	0	0	2	8	19	6	12	19	6	2	0	0	4	0	0	0	0	0	A	3.8	18.7
6-Oct	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	14	9	1	4	0	1	0	A	0	1.6	13.9
7-Oct	0	0	0	0	0	1	1	1	1	1	2	1	1	1	5	5	3	1	1	1	1	A	0	0	1.2	5.2
8-Oct	0	0	0	0	1	0	6	4	16	20	14	3	5	11	10	5	0	0	0	0	A	0	0	0	4.4	20.1
9-Oct	0	0	0	3	3	3	1	1	1	3	1	1	0	0	0	0	0	0	0	A	0	0	1	1	1.0	3.0
10-Oct	1	1	3	2	1	1	1	0	1	1	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0.7	2.6
11-Oct	0	1	0	0	1	0	4	4	0	11	16	12	18	5	2	2	0	A	0	0	1	0	0	0	3.5	18.4
12-Oct	0	0	0	0	1	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	1	0.4	0.6
13-Oct	1	0	0	0	0	A	0	1	2	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0.6	2.3
14-Oct	0	0	0	0	A	0	1	1	1	1	2	1	11	10	8	4	7	1	0	0	1	1	1	1	2.3	10.8
15-Oct	1	0	0	A	0	1	0	0	13	20	18	13	0	0	7	16	17	18	0	0	2	1	1	1	5.7	19.7
16-Oct	1	1	A	1	0	0	0	0	0	0	7	10	13	3	0	0	1	1	0	0	1	0	0	0	1.9	13.1
17-Oct	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	4	0	0	0.7	4.0
18-Oct	A	0	0	0	0	1	1	1	1	1	9	14	3	4	1	5	0	1	0	0	0	0	0	A	2.0	14.3
19-Oct	0	1	1	0	0	1	1	0	1	4	1	19	12	1	9	4	1	1	1	0	1	1	A	1	2.6	19.4
20-Oct	1	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
21-Oct	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0.4	1.5
22-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	--	0.4
23-Oct	D	D	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
24-Oct	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
25-Oct	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
26-Oct	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	0.3
27-Oct	0	0	0	0	A	0	0	0	0	0	0	1	1	5	5	1	1	0	1	0	0	0	0	0	0.8	5.2
28-Oct	0	0	0	A	0	0	0	0	0	0	1	1	1	1	3	2	0	0	0	0	0	0	0	0	0.6	3.2
29-Oct	0	0	A	0	0	0	0	0	1	0	2	0	2	3	2	0	0	0	0	0	1	0	0	0	0.8	3.1
30-Oct	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.5	2.5
31-Oct	A	0	0	0	0	0	0	1	1	2	4	5	14	21	11	15	1	0	1	0	0	0	1	A	3.6	20.7
	0.4	0.4	0.5	0.5	0.5	0.6	0.8	0.8	1.7	2.9	3.0	3.5	3.7	3.0	2.6	3.5	2.2	1.2	0.5	0.4	0.8	0.6	0.4	0.4	Diurnal Average	
	0.8	0.9	2.6	2.6	2.6	2.8	6.5	4.3	16.4	20.1	18.0	19.4	18.7	20.7	11.4	16.2	17.4	17.5	4.3	0.5	4.0	3.9	0.8	1.0	Diurnal Maximum	

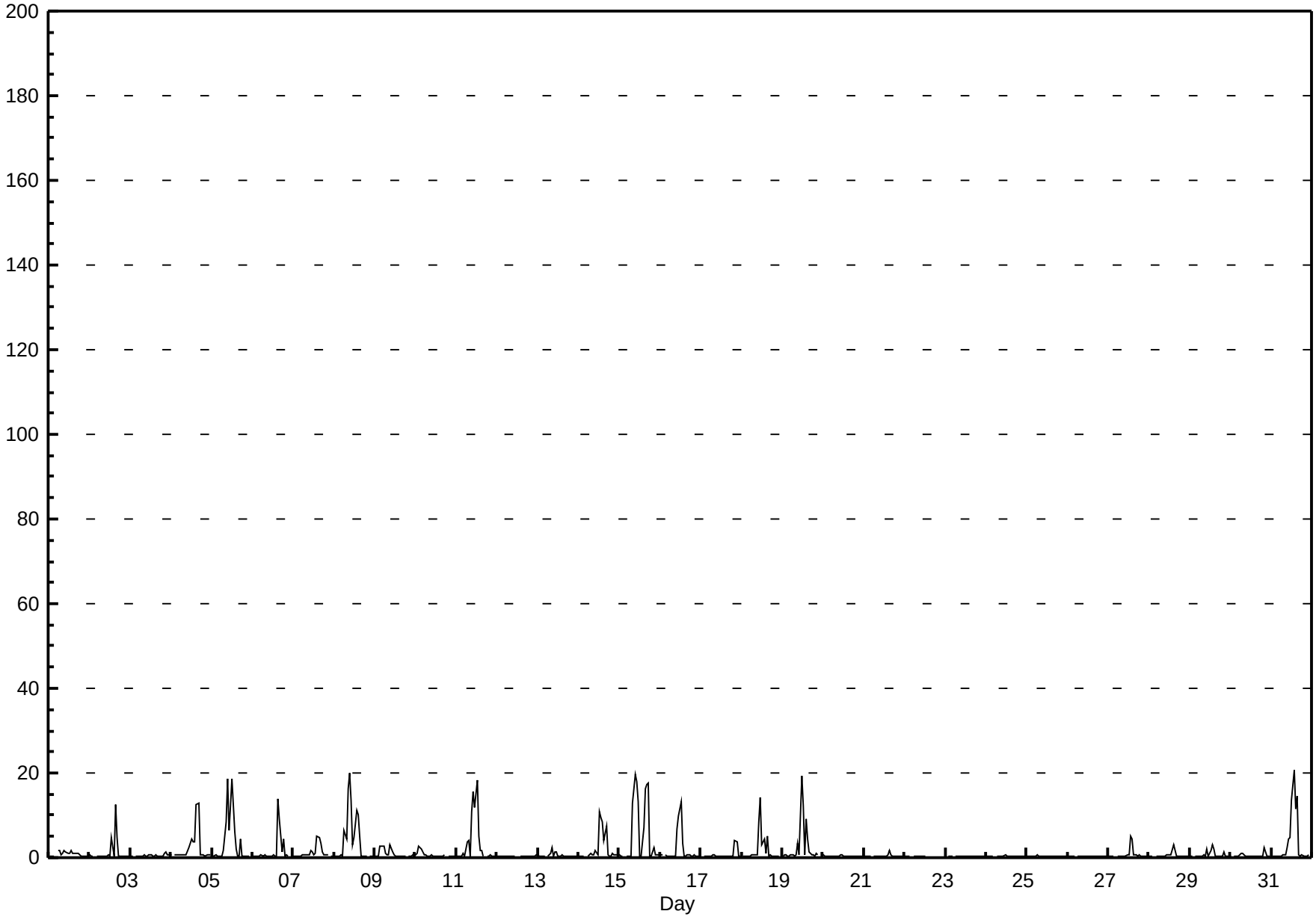
C - Calibration D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - October 2010



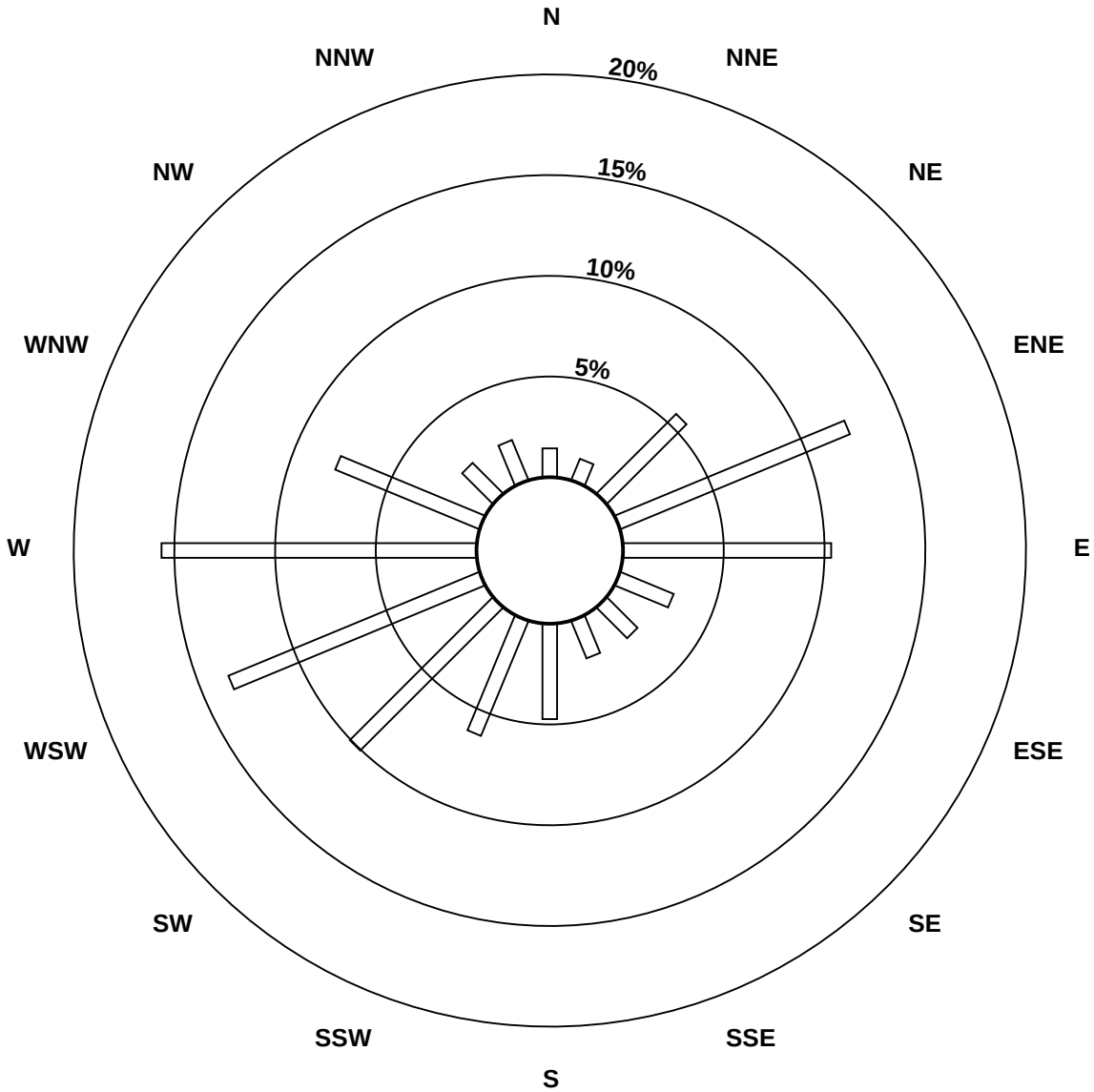
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - October 2010



Pollutant Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.3 ppb on Oct 29 09:00 Maximum Daily Average: 0.7 ppb on Oct 7

Minimum Value: 0 ppb on Oct 28 09:00 Minimum Daily Average: 0.3 ppb on Oct 17
Maximum Diurnal Average: 0.6 ppb at hour 9 Minimum Diurnal Average: 0.4 ppb at hour 18
Monthly Average: 0.49 ppb Percentiles: $P_1 = 0.3$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.5$ $P_{90} = 0.7$ $P_{99} = 1.1$

Hours in Service:	744
Hours of Data:	697
Hours of Missing Data:	47
Hours of Calibration:	34
Percent Operational Time:	98.3

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-Oct	0	0	0	0	A	1	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	1	2	1	0.5	1.7
2-Oct	1	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	0.7
3-Oct	0	0	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.8
4-Oct	1	A	1	0	1	1	1	0	0	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.2
5-Oct	A	0	0	1	0	0	0	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0.5	0.7
6-Oct	0	0	0	0	1	1	1	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	A	1	0.6	0.9
7-Oct	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	1	A	1	1	0.7	1.2
8-Oct	0	0	0	1	1	0	1	1	1	1	1	1	0	1	1	1	0	0	1	1	A	1	0	0	0.6	1.3
9-Oct	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	A	0	1	1	1	0.6	1.0
10-Oct	0	1	1	1	1	1	0	0	1	1	1	0	1	0	0	0	0	0	A	1	0	0	1	0	0.6	1.1
11-Oct	0	0	1	0	1	0	0	0	0	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0.5	0.7
12-Oct	0	0	0	0	0	0	0	0	0	0	1	0	C	C	C	1	0	0	0	0	0	0	0	0	0.5	0.5
13-Oct	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
14-Oct	0	0	0	0	A	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.5	0.7
15-Oct	0	0	0	A	0	0	1	1	0	1	1	1	0	0	0	1	1	1	0	0	1	0	1	0	0.6	0.8
16-Oct	1	1	A	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
17-Oct	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.5
18-Oct	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.7
19-Oct	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	1	1	1	1	A	1	0.5	1.0
20-Oct	1	1	1	1	0	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	1	1	0	0.5	0.7
21-Oct	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
22-Oct	1	0	1	1	A	1	1	1	1	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	--	0.6
23-Oct	D	D	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.4	0.5
24-Oct	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	0.5
25-Oct	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
26-Oct	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
27-Oct	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0.4	0.7
28-Oct	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	1	0	0.4	0.7
29-Oct	0	1	A	0	0	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.3
30-Oct	0	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0.5	0.7
31-Oct	A	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	1	1	0	0	A	0.6	0.9
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	Diurnal Average	
	1.2	0.6	1.1	1.1	0.8	1.2	1.0	1.6	2.3	1.1	1.3	0.7	0.7	0.8	0.7	0.8	0.8	0.6	0.6	0.8	0.7	0.6	1.7	1.0	Diurnal Maximum	

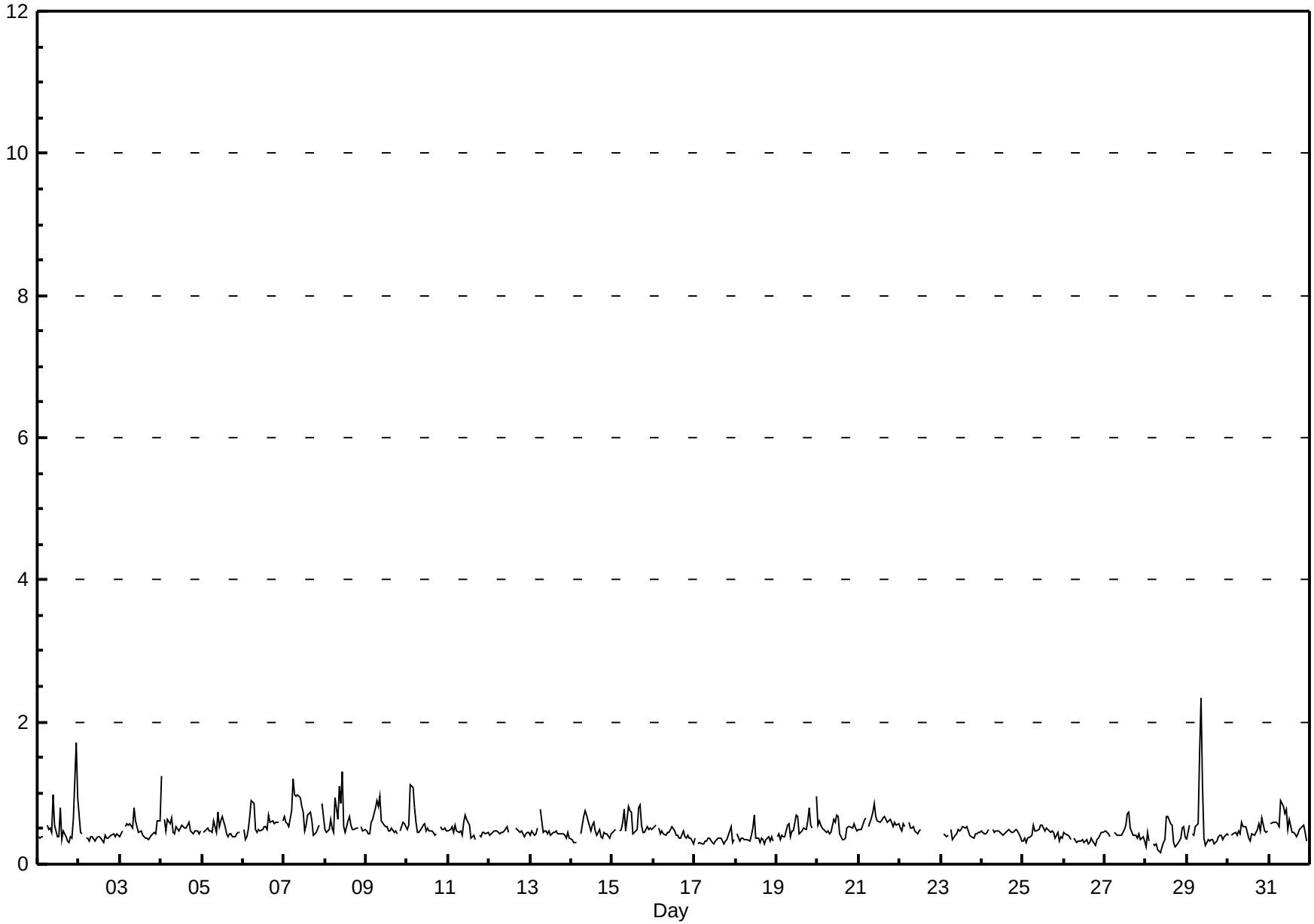
C - Calibration D - DAS Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - October 2010

Maximum Value: 3.3 ppb on Oct 17 21:00

Maximum Daily Average: 1.2 ppb on Oct 8

Minimum Value: 0 ppb on Oct 28 10:00

Minimum Daily Average: 0.7 ppb on Oct 26

Maximum Diurnal Average: 1.0 ppb at hour 9

Minimum Diurnal Average: 0.8 ppb at hour 19

Monthly Average: 0.90 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 0.7$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 0.9$ $P_{90} = 1.2$ $P_{99} = 2.5$

Hours in Service:	744
Hours of Data:	697
Hours of Missing Data:	47
Hours of Calibration:	34
Percent Operational Time:	98.3

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-Oct	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	3	2	1.0	2.9
2-Oct	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
3-Oct	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.9	1.5
4-Oct	2	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
5-Oct	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	0.9	1.9
6-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.4
7-Oct	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1	2	1.2	1.7
8-Oct	1	1	1	1	1	1	2	1	2	2	3	1	1	2	1	1	1	1	1	1	A	1	1	1	1.2	2.8
9-Oct	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	2.3
10-Oct	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	A	1	1	1	1	1	0.9	1.7
11-Oct	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.6
12-Oct	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	0.8	1.0
13-Oct	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.9
14-Oct	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
15-Oct	1	1	1	A	1	1	1	1	1	2	2	1	1	1	1	2	1	1	1	1	2	1	1	1	1.1	2.4
16-Oct	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	1.1
17-Oct	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	1	0.9	3.3
18-Oct	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	0.8	2.1
19-Oct	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	2	1.0	2.1
20-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
21-Oct	1	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	1.2
22-Oct	1	1	1	1	A	1	1	1	1	1	1	1	1	D	D	D	D	D	D	D	D	D	D	D	--	1.1
23-Oct	D	D	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
24-Oct	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	0.9
25-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
26-Oct	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
27-Oct	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0.8	1.8
28-Oct	1	1	1	A	1	0	1	1	1	0	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0.8	1.6
29-Oct	1	1	A	1	1	1	1	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.1
30-Oct	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	0.9	2.5
31-Oct	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.7
	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	1.0	0.9	0.9	0.9	Diurnal Average	
	1.7	1.1	1.5	1.5	1.2	1.7	2.5	2.4	3.1	2.3	2.8	2.1	1.9	1.6	1.8	1.8	1.7	1.2	1.3	1.2	3.3	3.3	2.9	2.1	Diurnal Maximum	

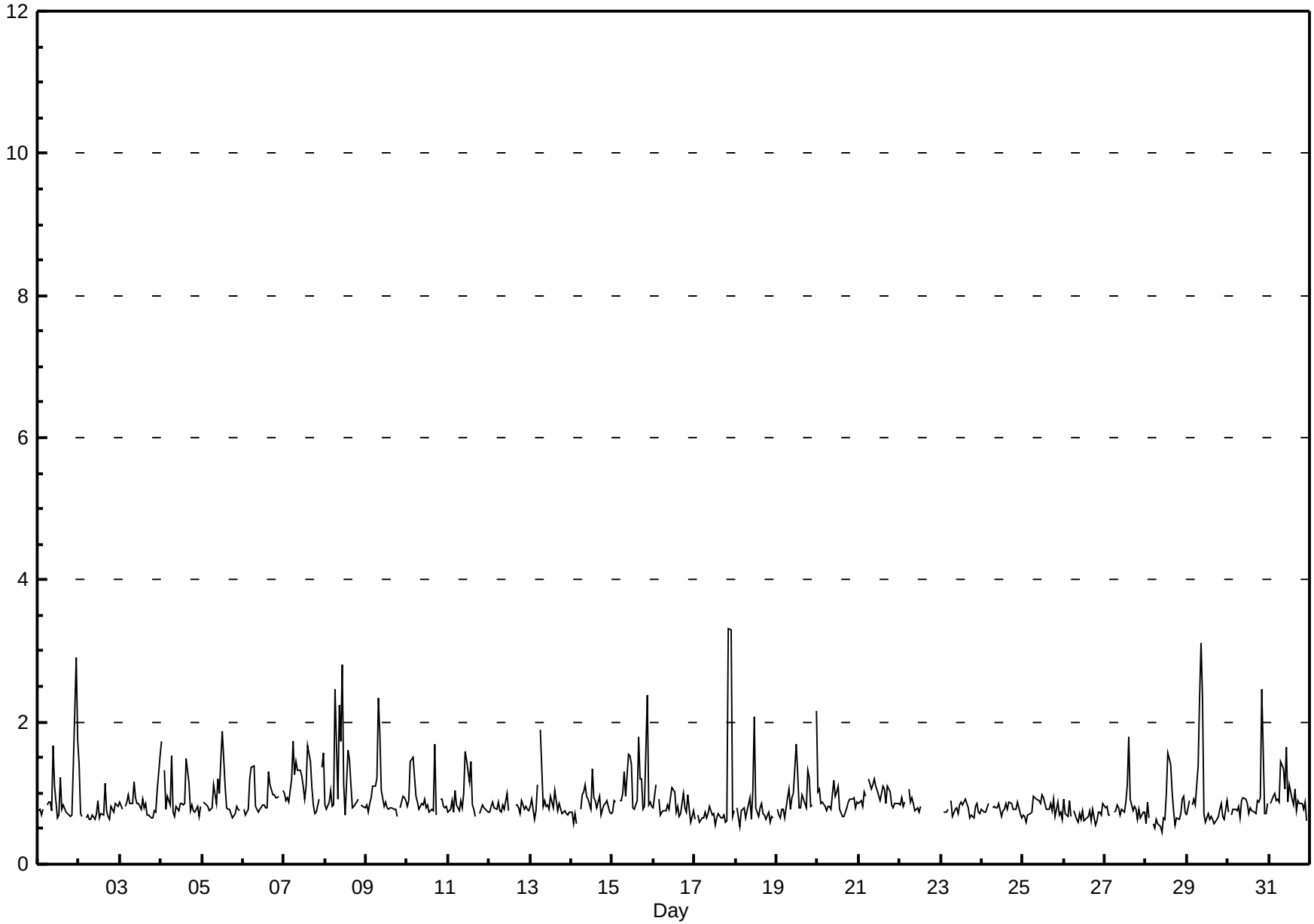
C - Calibration D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - October 2010



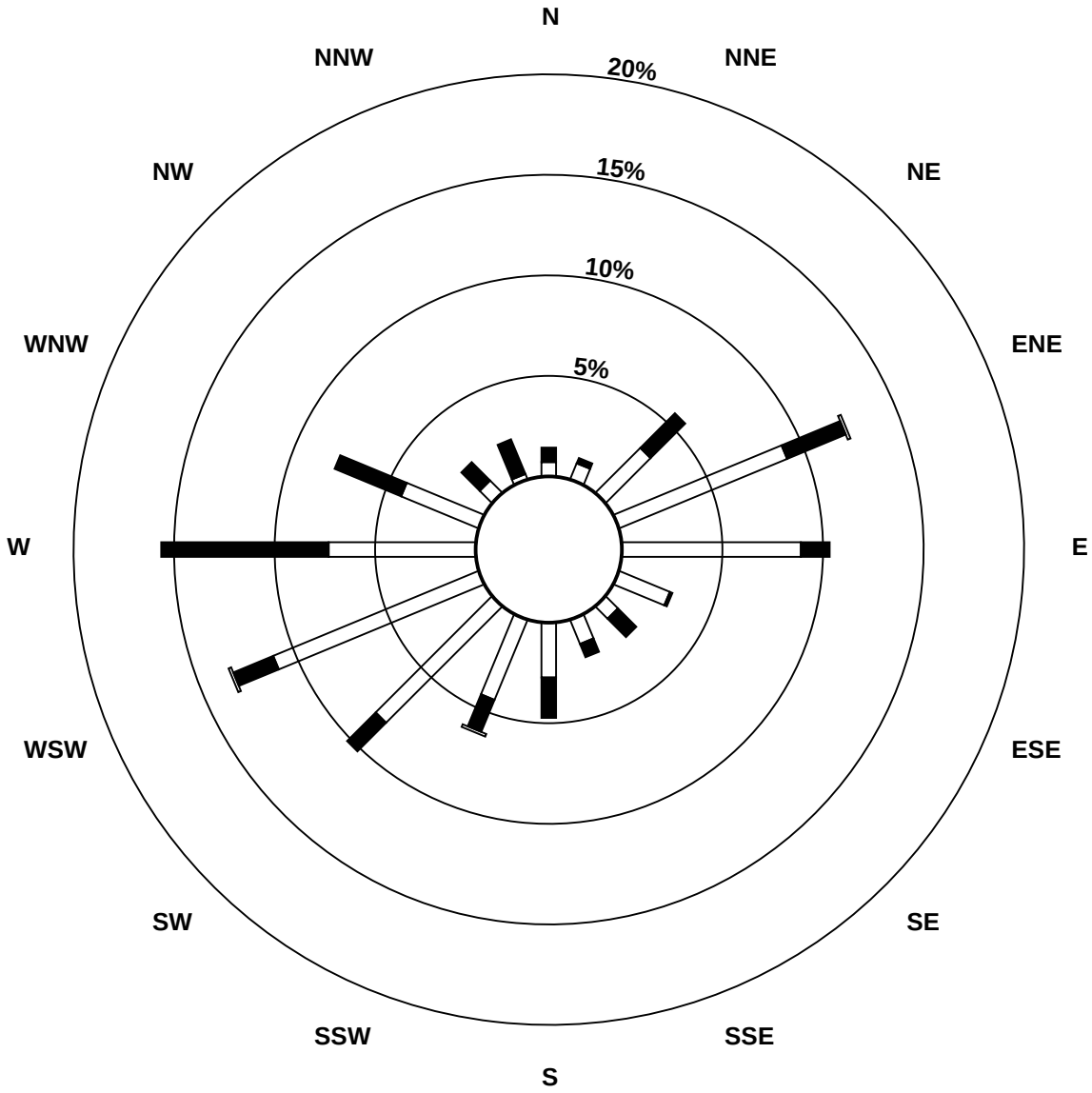
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

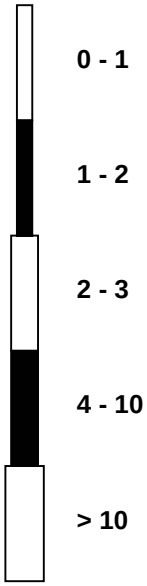
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Evergreen Park - October 2010

Number of Exceedences: 1-hr: 31 24-hr: 4
Maximum Value: 434.7 $\mu g/m^3$ on Oct 15 16:00
Maximum Daily Average: 110.9 $\mu g/m^3$ on Oct 15

Minimum Value: 0 $\mu g/m^3$ on Oct 3 02:00
Maximum Diurnal Average: 54.0 $\mu g/m^3$ at hour 13
Monthly Average: 18.33 $\mu g/m^3$

Minimum Daily Average: 0.9 $\mu g/m^3$ on Oct 25
Minimum Diurnal Average: 3.4 $\mu g/m^3$ at hour 5
Percentiles: P_1 = 0.0 P_{10} = 0.7 Q_1 = 2.1 Median = 5.0 Q_3 = 14.1 P_{90} = 44.3 P_{99} = 237.3

Hours in Service:	744
Hours of Data:	715
Hours of Missing Data:	29
Hours of Calibration:	2
Percent Operational Time:	96.4

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-Oct	1	0	2	1	2	2	3	14	10	22	27	15	9	15	8	11	8	11	11	10	13	14	21	22	10.5	27.2
2-Oct	17	12	9	9	8	12	15	14	15	17	59	45	55	30	26	52	53	38	14	15	27	7	2	1	23.1	59.3
3-Oct	1	0	1	0	0	0	1	4	15	7	8	15	0	3	3	3	4	6	6	7	8	14	6	3	4.8	15.4
4-Oct	6	4	5	4	7	8	4	6	10	17	15	21	27	31	39	60	18	0	0	0	BD	0	1	3	12.4	60.3
5-Oct	3	4	3	0	4	2	7	18	23	54	58	45	53	54	14	7	18	68	23	12	1	2	1	2	19.8	67.7
6-Oct	0	2	2	2	4	7	7	10	9	13	4	3	3	6	9	89	94	87	158	10	16	12	10	8	23.5	157.9
7-Oct	6	4	2	4	5	6	8	7	8	12	11	9	4	5	3	1	3	3	3	7	14	26	18	18	7.9	26.3
8-Oct	9	8	10	9	7	14	25	35	50	55	55	42	125	53	22	9	3	1	7	1	4	1	2	3	23.0	125.5
9-Oct	2	3	1	3	2	3	2	6	25	40	10	0	15	25	15	11	9	4	16	11	8	2	0	4	9.1	40.2
10-Oct	6	5	1	0	0	0	2	3	14	29	5	180	391	418	274	83	78	13	4	2	2	0	0	0	62.8	417.7
11-Oct	2	0	0	0	3	1	5	28	20	62	81	123	79	33	5	17	4	23	11	24	3	0	1	1	21.9	123.1
12-Oct	1	2	22	9	0	3	6	7	8	18	18	15	14	C	C	22	13	11	14	9	6	9	7	6	10.1	21.9
13-Oct	5	4	4	4	4	5	14	19	22	13	10	22	11	5	11	4	3	3	0	0	0	1	1	0	6.8	22.3
14-Oct	1	1	1	2	2	4	5	13	14	17	16	56	153	188	63	47	34	18	11	8	3	1	3	21	28.4	188.2
15-Oct	7	3	1	3	8	22	50	95	120	235	419	252	212	201	275	435	205	76	5	21	10	1	2	4	110.9	434.7
16-Oct	6	6	6	3	2	3	3	4	5	5	13	80	61	41	48	43	45	51	16	15	19	2	2	2	20.1	79.9
17-Oct	2	2	3	3	3	4	9	25	26	74	181	247	137	81	62	69	47	17	18	7	5	14	3	2	43.3	246.6
18-Oct	3	2	2	2	2	3	4	7	9	12	60	121	74	32	21	44	20	18	5	5	2	0	0	0	18.7	121.4
19-Oct	0	2	1	8	4	5	9	18	16	32	44	199	137	54	43	33	11	41	29	10	10	9	5	3	30.1	198.6
20-Oct	4	4	5	3	2	2	10	6	14	10	8	9	10	5	4	3	3	3	3	3	4	4	2	3	5.2	14.2
21-Oct	2	4	4	4	6	2	2	4	10	11	5	3	2	2	2	6	6	4	3	1	4	2	4	1	3.8	10.5
22-Oct	0	0	0	0	1	0	0	0	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	--	0.7
23-Oct	D	D	2	0	3	5	5	5	4	4	3	3	3	2	2	2	0	3	7	10	0	1	1	1	3.0	9.6
24-Oct	2	3	4	5	5	7	7	5	4	3	3	4	4	4	4	19	N	N	N	N	N	N	N	N	--	19.3
25-Oct	N	N	N	N	N	0	0	0	1	2	4	1	2	1	1	2	2	1	1	0	0	1	0	0	0.9	3.9
26-Oct	2	1	2	1	0	0	0	1	1	2	6	3	2	2	2	2	2	1	2	2	2	0	1	2	1.6	6.0
27-Oct	1	2	3	4	3	2	2	2	2	3	4	5	15	24	20	15	14	14	5	2	7	4	3	2	6.5	23.7
28-Oct	3	2	1	2	1	2	1	2	3	7	3	5	7	5	1	5	1	9	5	4	4	3	6	3	3.6	9.2
29-Oct	2	6	4	3	3	3	3	5	12	11	11	5	7	2	22	15	16	13	16	6	7	4	2	4	7.5	22.0
30-Oct	2	1	0	3	1	3	1	2	5	4	5	11	9	2	6	7	4	5	17	10	16	10	7	9	5.9	17.4
31-Oct	10	16	16	11	10	10	11	23	22	28	32	15	50	51	41	70	3	5	14	9	4	1	1	1	18.8	70.0
	3.6	3.5	3.9	3.5	3.4	4.6	7.2	12.5	16.0	26.5	38.1	50.0	54.0	47.4	36.0	39.5	24.9	18.8	14.6	7.6	7.2	4.9	3.8	4.4	Diurnal Average	
	16.6	15.5	21.7	11.4	9.7	22.1	49.8	95.0	120.3	235.1	419.1	251.7	390.5	417.7	275.0	434.7	204.6	87.0	157.9	24.2	27.2	26.3	20.7	22.4	Diurnal Maximum	

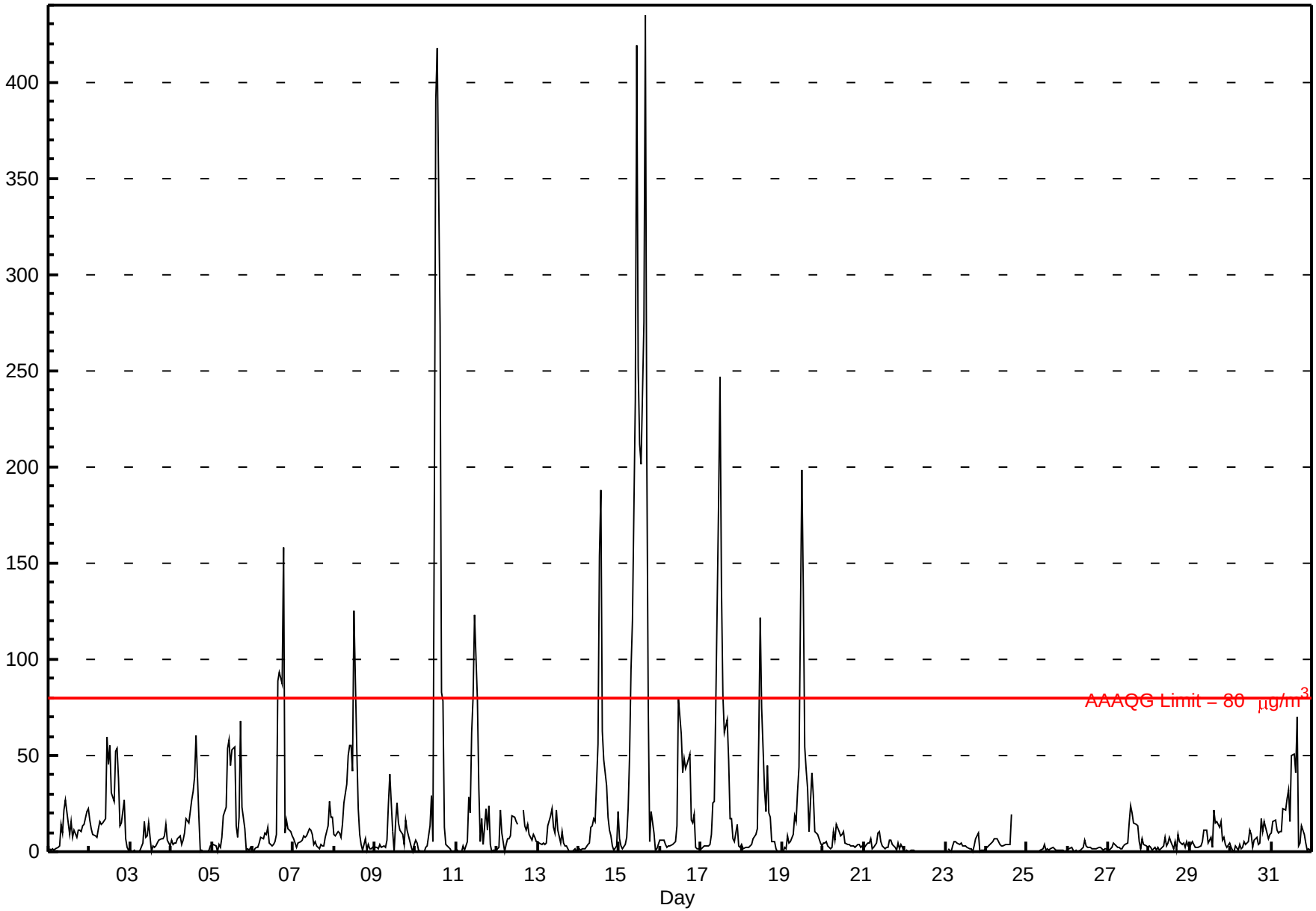
C - Calibration D - DAS Failure N - Not Valid BD - Baseline Drift
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Evergreen Park - October 2010



PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Evergreen Park - October 2010

Maximum Value: 450.0 $\mu g/m^3$ on Oct 10 12:00

Maximum Daily Average: 170.8 $\mu g/m^3$ on Oct 15

Minimum Value: 0 $\mu g/m^3$ on Oct 4 21:00

Minimum Daily Average: 3.5 $\mu g/m^3$ on Oct 25

Maximum Diurnal Average: 93.9 $\mu g/m^3$ at hour 12

Minimum Diurnal Average: 6.2 $\mu g/m^3$ at hour 5

Monthly Average: 34.22 $\mu g/m^3$

Percentiles: P_1 = 0.5 P_{10} = 2.7 Q_1 = 4.8 Median = 10.5 Q_3 = 27.9 P_{90} = 78.3 P_{99} = 450.0

Hours in Service:	744
Hours of Data:	716
Hours of Missing Data:	28
Hours of Calibration:	2
Percent Operational Time:	96.5

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Oct	3	2	4	3	3	4	5	23	15	60	68	25	16	21	16	21	20	19	18	17	23	18	28	26	19.1	68.2
2-Oct	24	20	13	10	10	14	20	20	21	23	106	68	81	42	48	111	87	65	42	34	78	15	8	2	40.1	110.6
3-Oct	3	1	4	3	3	1	4	7	25	11	11	48	3	10	6	7	9	9	10	11	12	33	14	8	10.5	48.0
4-Oct	9	7	7	9	11	12	7	10	26	24	22	34	49	62	60	127	43	1	2	1	0	1	3	5	22.1	126.6
5-Oct	4	6	6	3	8	6	15	37	55	69	86	65	77	96	37	12	62	128	61	38	7	5	3	8	37.3	128.3
6-Oct	2	7	4	4	7	13	12	20	16	20	9	7	7	18	21	173	171	406	425	34	27	14	13	12	60.0	424.9
7-Oct	9	7	6	7	7	11	13	10	12	17	21	21	10	13	6	5	8	7	6	14	19	35	25	27	13.1	34.8
8-Oct	15	13	16	14	11	24	36	61	89	126	97	89	192	158	36	21	17	13	18	3	14	4	6	6	44.8	191.6
9-Oct	5	5	4	7	4	6	3	17	58	66	50	9	55	74	28	22	24	12	33	21	15	10	4	6	22.5	73.5
10-Oct	12	15	4	1	1	1	9	10	46	111	31	450	450	450	450	112	170	34	10	7	7	0	1	1	99.3	450.0
11-Oct	4	0	0	1	6	3	17	46	41	123	158	239	156	92	22	61	18	70	25	76	16	2	2	2	49.1	239.0
12-Oct	5	6	80	57	1	15	15	16	21	37	68	49	41	C	C	35	26	17	20	16	10	11	10	8	25.6	79.7
13-Oct	7	6	6	6	6	11	22	31	41	18	13	33	25	8	23	15	5	4	3	1	1	16	14	4	13.2	40.6
14-Oct	4	5	5	4	3	6	8	16	20	24	26	167	248	379	122	90	46	35	28	21	8	5	7	48	55.1	378.8
15-Oct	24	9	3	6	10	48	70	201	165	450	450	450	372	357	450	450	333	166	14	39	19	3	3	6	170.8	450.0
16-Oct	11	12	9	6	6	11	7	10	9	9	42	115	140	82	81	73	75	98	26	27	44	3	3	3	37.6	140.2
17-Oct	4	3	4	4	5	6	28	51	37	143	276	420	297	198	100	127	121	36	34	10	15	44	6	4	82.3	419.8
18-Oct	8	3	6	6	5	6	10	12	22	22	92	190	182	88	41	69	45	37	10	12	6	3	2	2	36.6	190.2
19-Oct	2	9	4	29	14	10	13	29	29	50	78	307	225	75	70	54	36	69	84	12	18	11	7	5	51.8	307.1
20-Oct	7	7	12	6	4	5	25	15	27	21	12	12	14	9	7	6	6	5	5	5	7	6	5	5	9.7	26.7
21-Oct	4	7	9	7	17	12	6	8	16	16	14	5	4	4	5	8	8	13	4	5	20	3	7	2	8.5	20.1
22-Oct	2	1	2	2	2	2	1	1	2	2	1	1	1	D	D	D	D	D	D	D	D	D	D	D	--	2.4
23-Oct	D	D	14	2	5	7	8	22	5	6	5	5	5	5	3	3	3	20	34	96	2	2	2	2	11.7	96.3
24-Oct	3	5	5	6	6	9	9	7	5	5	5	5	5	5	7	60	N	N	N	N	N	N	N	N	--	59.9
25-Oct	N	N	N	N	N	0	0	1	4	5	25	3	3	2	3	4	3	2	3	2	2	2	1	1	3.5	25.2
26-Oct	4	3	3	3	1	2	1	2	3	4	23	4	5	3	3	4	4	3	3	3	3	1	2	4	3.8	22.6
27-Oct	3	3	6	7	6	3	4	3	3	6	6	8	42	43	29	27	27	23	8	5	14	9	5	4	12.2	42.9
28-Oct	4	4	2	4	2	5	4	4	5	11	17	8	13	13	4	8	4	27	28	7	8	4	14	9	8.8	27.6
29-Oct	5	8	6	6	4	4	6	7	18	15	39	20	15	10	42	30	33	31	24	11	30	7	5	14	16.2	42.2
30-Oct	9	3	2	10	3	7	3	5	20	14	10	24	15	6	17	16	7	21	30	39	39	30	12	17	14.9	39.5
31-Oct	12	22	22	14	12	12	12	45	31	47	58	32	90	118	72	185	10	17	31	19	7	3	13	11	37.4	185.4
	7.2	6.9	8.9	8.3	6.2	8.9	12.7	24.1	28.6	50.1	61.9	93.9	91.4	84.1	62.4	64.6	49.0	47.9	35.9	20.1	16.2	10.4	7.7	8.7	Diurnal Average	
	24.0	22.2	79.7	57.5	17.3	47.7	70.4	201.5	165.5	450.0	450.0	450.0	450.0	450.0	450.0	450.0	332.6	405.7	424.9	96.3	78.4	43.9	28.0	47.5	Diurnal Maximum	

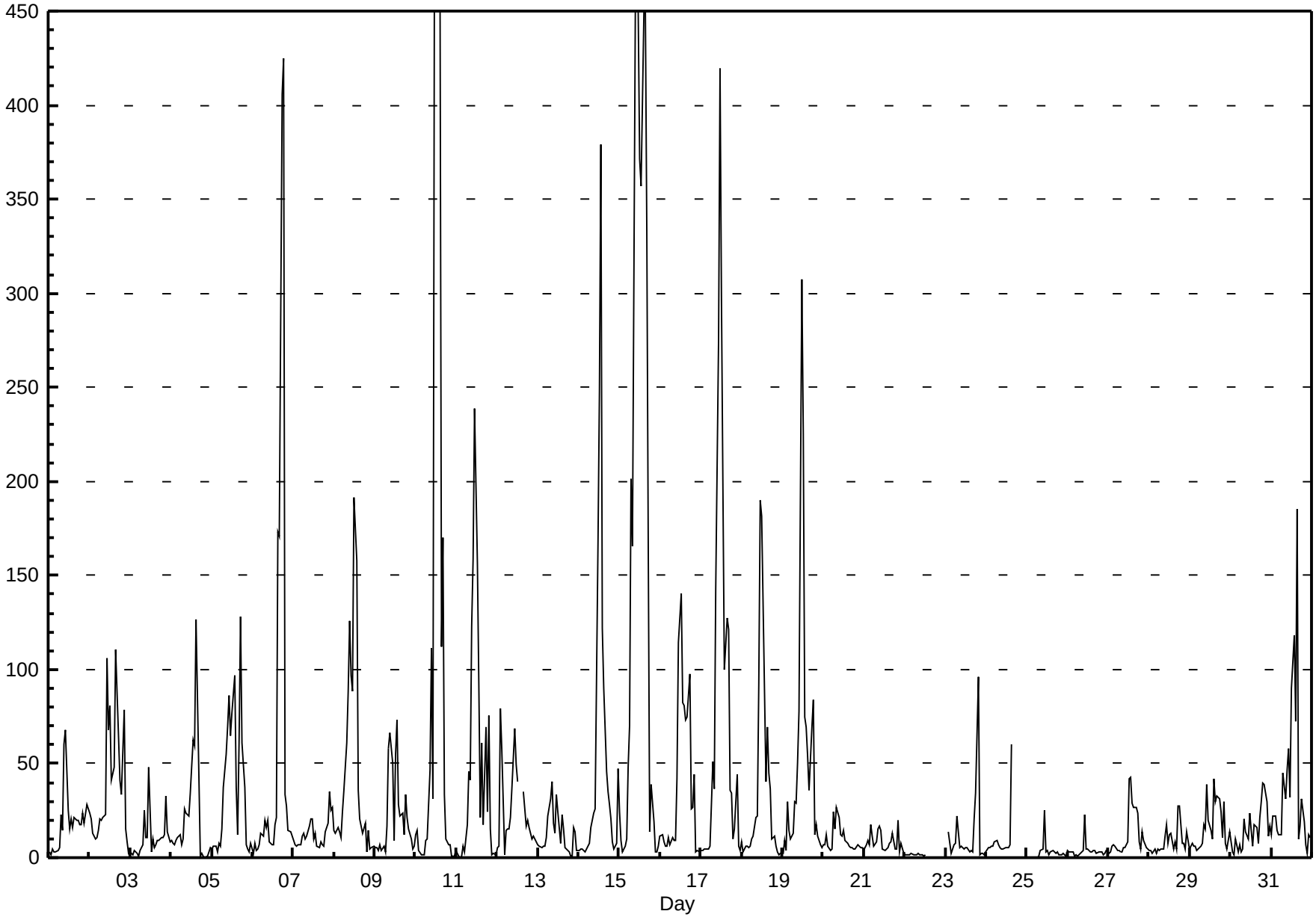
C - Calibration D - DAS Failure N - Not Valid

PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Evergreen Park - October 2010



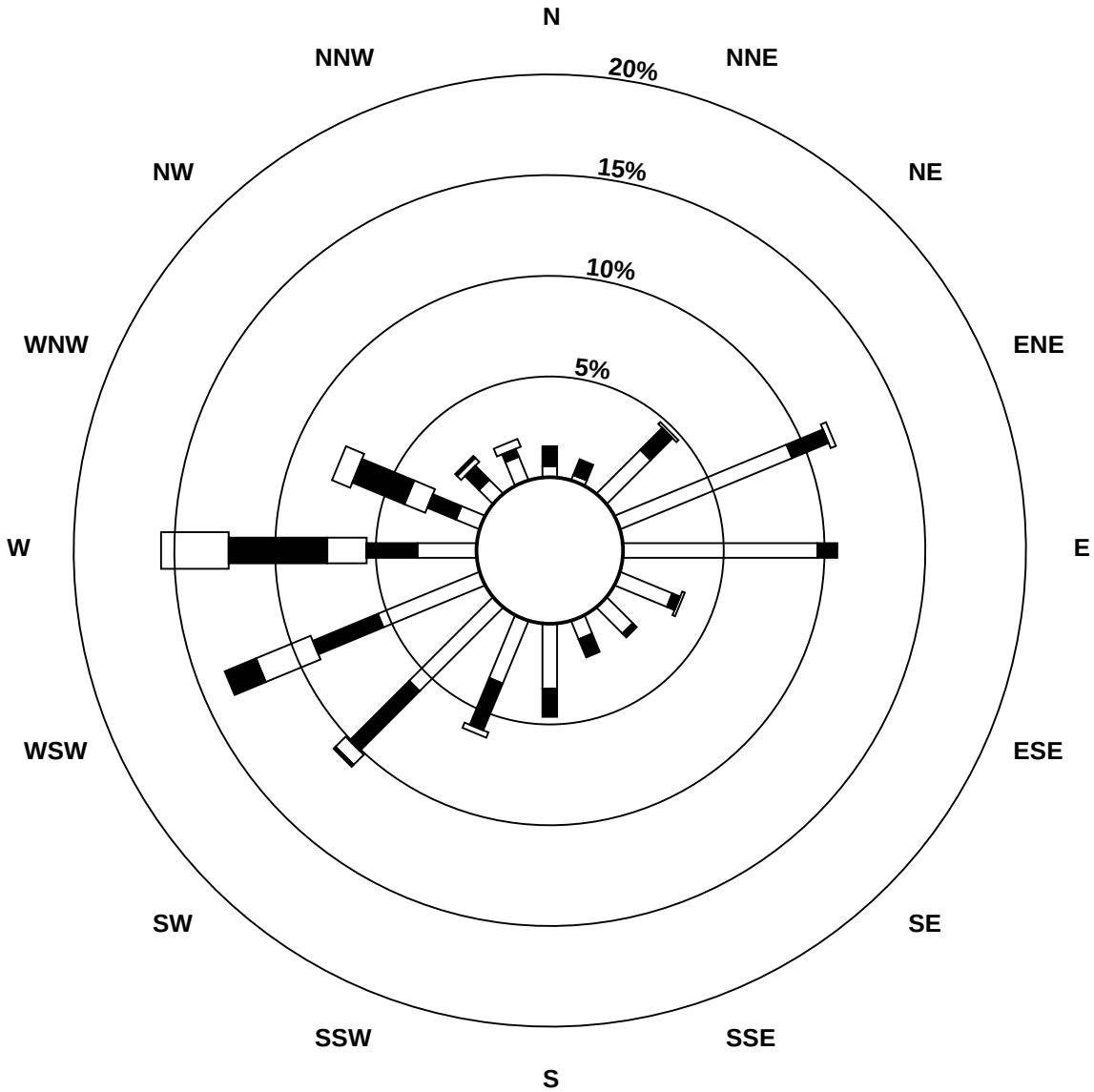
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

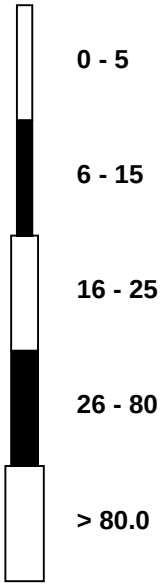
Pollutant Rose

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

Evergreen Park - October 2010



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



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.3 ^{o}C on Oct 7 17:00 Maximum Daily Average: 15.5 ^{o}C on Oct 9

Minimum Value: -7 ^{o}C on Oct 29 08:00 Minimum Daily Average: -0.1 ^{o}C on Oct 26
Maximum Diurnal Average: 12.1 ^{o}C at hour 16 Minimum Diurnal Average: 3.3 ^{o}C at hour 8
Monthly Average: 7.11 ^{o}C Percentiles: P_1 = -4.9 P_{10} = 0.0 Q_1 = 2.5 Median = 6.4 Q_3 = 11.0 P_{90} = 14.7 P_{99} = 23.0

Hours in Service:	744
Hours of Data:	731
Hours of Missing Data:	13
Hours of Calibration:	0
Percent Operational Time:	98.3

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-Oct	6	6	7	7	6	6	4	2	5	7	9	11	14	16	18	19	20	21	17	12	10	8	7	6	10.2	20.8
2-Oct	6	5	4	3	2	2	3	4	6	8	11	17	20	21	20	20	20	18	17	16	15	14	13	12	11.5	20.7
3-Oct	10	8	6	4	2	1	0	0	4	8	10	12	14	15	16	16	17	15	13	12	11	10	9	8	9.3	16.7
4-Oct	7	7	6	7	7	6	6	5	6	6	8	9	11	12	12	11	9	8	9	9	8	8	7	6	7.9	12.4
5-Oct	6	6	6	6	5	5	3	4	5	7	9	11	12	13	14	15	15	14	13	13	12	11	10	8	9.3	14.6
6-Oct	7	6	5	4	4	5	7	10	13	16	18	20	21	23	24	24	24	23	22	21	18	16	14	13	14.9	24.3
7-Oct	12	10	9	7	7	6	6	5	6	8	11	14	18	20	22	24	24	24	20	15	13	12	11	12	13.2	24.3
8-Oct	11	10	9	14	14	14	14	13	13	14	16	17	17	18	18	19	19	18	15	12	10	8	8	7	13.7	18.8
9-Oct	7	7	8	8	10	10	10	10	10	13	18	20	21	22	23	23	23	21	19	18	16	18	17	17	15.5	23.0
10-Oct	16	16	16	15	15	16	16	16	16	12	12	14	14	14	15	14	13	12	11	10	9	9	8	9	13.3	16.2
11-Oct	8	8	8	8	8	7	6	6	7	8	9	11	12	13	13	14	13	13	11	10	9	9	8	7	9.5	13.5
12-Oct	6	7	7	6	6	5	5	4	4	6	9	10	12	13	14	14	13	12	12	11	11	11	11	10	9.2	13.6
13-Oct	9	9	9	7	6	5	7	8	8	9	9	11	11	11	12	13	12	12	10	8	6	6	6	6	8.9	12.5
14-Oct	5	5	4	4	4	2	1	1	2	4	8	12	12	13	13	12	12	11	10	9	8	8	8	8	7.3	12.6
15-Oct	7	7	6	4	4	5	5	5	5	6	7	8	8	9	9	9	8	8	7	6	6	5	5	5	6.4	8.8
16-Oct	4	3	4	3	2	1	-1	-2	-1	2	5	7	9	10	10	11	11	9	7	6	4	4	3	2	4.8	10.8
17-Oct	0	0	-2	-2	-2	-1	0	2	5	6	9	11	12	12	13	13	13	12	10	8	7	4	5	6	5.8	13.1
18-Oct	6	6	7	6	6	7	6	5	5	9	11	13	13	13	13	13	13	14	12	12	11	11	10	10	9.7	13.6
19-Oct	9	10	10	10	10	9	9	8	8	8	9	10	11	11	11	11	11	10	9	8	7	6	6	6	9.0	11.2
20-Oct	5	3	2	0	-2	-1	-1	-1	0	2	6	8	8	8	9	9	9	7	6	6	5	5	4	4	4.1	8.8
21-Oct	3	2	2	2	1	1	1	0	1	3	6	8	9	8	9	8	8	7	6	5	5	5	4	4	4.4	8.7
22-Oct	4	3	3	3	3	3	3	2	2	2	2	1	2	D	D	D	D	D	D	D	D	D	D	D	--	3.6
23-Oct	D	D	1	1	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	1.4	3.0
24-Oct	3	4	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	1	1	3.0	3.6
25-Oct	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	1.5
26-Oct	0	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	-0.1	0.8
27-Oct	0	0	-1	-1	-1	-1	-1	-1	-1	0	0	1	2	4	6	5	5	4	3	3	2	3	2	2	1.4	5.9
28-Oct	2	2	2	1	0	-1	-2	-2	-2	-1	2	4	5	6	5	6	5	3	0	-1	-2	-3	-3	-3	1.0	5.8
29-Oct	-4	-5	-5	-6	-6	-7	-7	-7	-6	-4	-1	2	6	10	11	11	11	9	7	6	6	5	5	5	1.5	11.0
30-Oct	5	5	6	6	6	5	5	5	5	6	8	10	11	11	11	12	11	9	6	4	4	4	3	1	6.7	11.7
31-Oct	-1	-1	-1	-1	-2	-2	-3	-3	-3	0	1	2	6	9	10	10	9	7	3	2	2	3	2	3	2.2	10.3
	5.4	5.0	4.5	4.2	3.8	3.5	3.4	3.3	4.1	5.5	7.4	9.0	10.2	11.4	11.9	12.1	11.8	10.9	9.4	8.2	7.3	6.8	6.3	5.9	Diurnal Average	
	16.1	15.5	15.6	15.4	15.2	15.6	15.6	16.2	16.1	16.5	18.4	20.3	21.4	22.9	24.3	24.2	24.3	23.8	22.1	20.5	18.2	17.9	17.2	16.9	Diurnal Maximum	

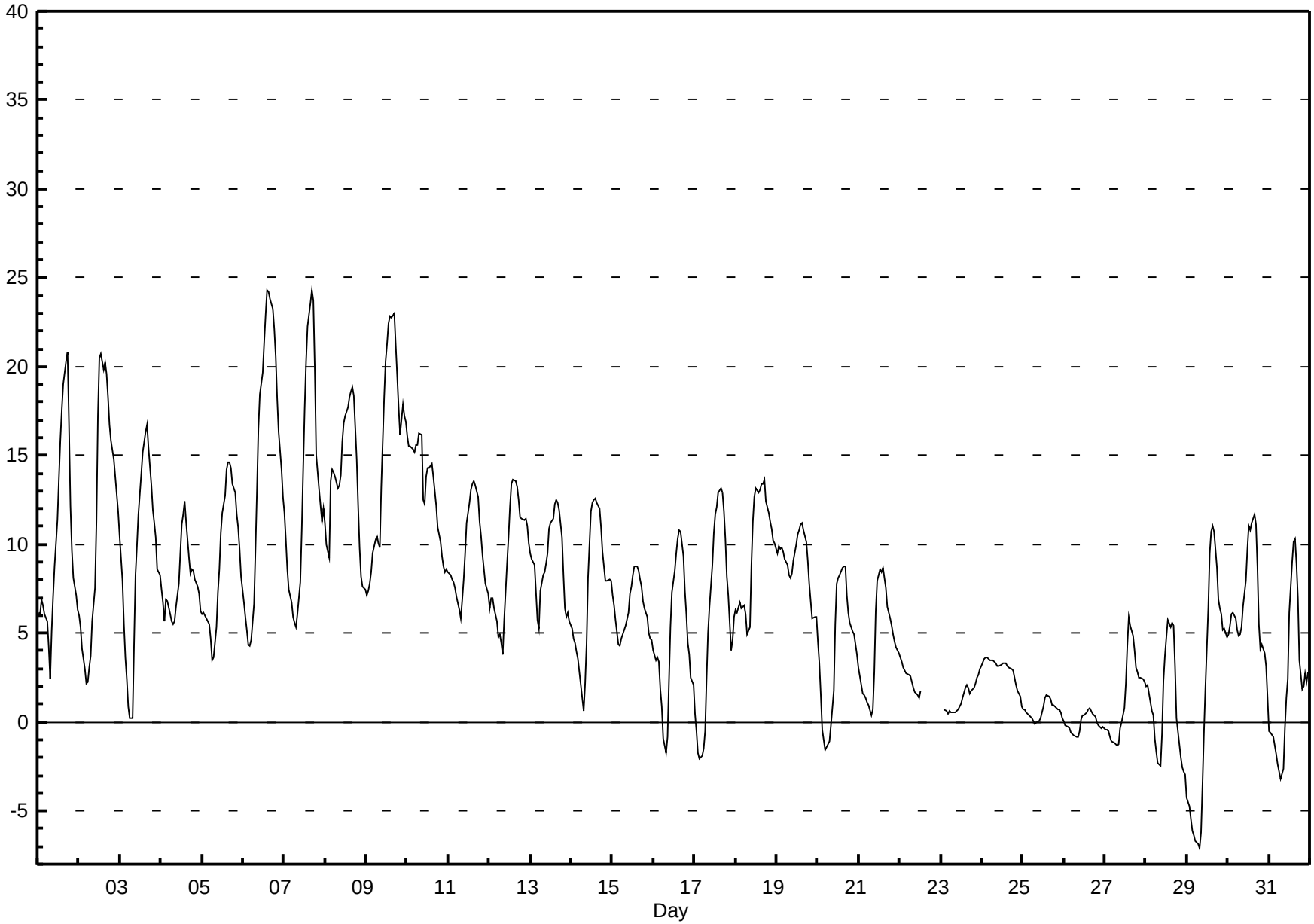
D - DAS Failure

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 98.5 % on Oct 21 10:00 Maximum Daily Average: 96.9 % on Oct 23

Minimum Value: 17 % on Oct 9 15:00 Minimum Daily Average: 35.5 % on Oct 11
Maximum Diurnal Average: 74.9 % at hour 8 Minimum Diurnal Average: 47.0 % at hour 16
Monthly Average: 62.62 % Percentiles: P_1 = 21.1 P_{10} = 33.3 Q_1 = 43.8 Median = 60.1 Q_3 = 84.7 P_{90} = 94.3 P_{99} = 97.8

Hours in Service:	744
Hours of Data:	731
Hours of Missing Data:	13
Hours of Calibration:	0
Percent Operational Time:	98.3

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-Oct	58	58	55	57	60	63	69	78	68	62	56	48	44	40	36	34	32	32	45	61	70	76	81	84	56.9	84.1
2-Oct	84	83	86	90	91	92	90	88	83	77	64	47	39	37	39	37	38	41	42	43	43	46	49	51	61.7	91.9
3-Oct	56	65	74	81	85	87	89	89	79	65	61	49	36	33	33	31	30	32	37	39	40	46	65	62	56.8	89.5
4-Oct	66	67	76	69	69	79	81	81	78	76	74	65	59	57	52	62	81	88	85	83	75	68	65	69	71.8	88.0
5-Oct	68	67	68	64	59	63	68	65	56	49	42	35	31	29	24	21	23	31	34	44	49	52	56	61	48.2	68.1
6-Oct	67	70	73	76	78	78	69	60	51	43	39	36	34	31	28	28	29	29	30	34	40	47	54	58	49.4	78.3
7-Oct	62	67	73	77	81	84	84	86	84	80	68	53	44	38	34	30	28	29	39	54	60	63	65	60	60.0	85.5
8-Oct	63	67	70	53	55	57	57	58	53	47	42	38	33	32	31	30	29	29	38	44	51	55	57	57	47.8	69.7
9-Oct	58	60	62	64	60	57	56	57	59	50	37	28	22	20	17	17	18	21	22	27	32	32	31	34	39.3	63.5
10-Oct	39	45	46	46	46	45	46	45	49	62	51	36	29	24	22	25	27	30	33	34	37	39	40	35	38.8	62.3
11-Oct	38	38	37	37	39	42	45	48	46	42	35	28	24	21	21	21	22	23	28	33	39	43	49	53	35.5	52.6
12-Oct	56	56	55	56	57	60	61	64	67	62	50	46	43	40	40	41	41	43	46	47	46	45	45	48	50.6	66.9
13-Oct	50	51	54	60	67	70	67	65	65	66	65	62	68	73	59	56	57	59	65	72	79	81	79	78	65.3	81.0
14-Oct	78	80	83	84	87	91	92	93	92	82	66	39	30	25	22	21	22	27	30	32	35	35	36	38	55.1	93.3
15-Oct	41	44	45	49	48	46	46	47	46	44	40	38	35	34	34	36	38	38	40	43	44	45	45	44	42.1	48.9
16-Oct	45	46	46	46	51	54	61	65	61	52	44	37	34	31	28	27	29	32	38	42	47	47	51	52	44.4	64.6
17-Oct	57	60	65	65	65	65	63	55	47	44	40	36	34	34	32	31	31	31	33	38	41	50	45	41	45.9	65.4
18-Oct	41	42	41	43	46	46	50	56	56	49	46	43	42	44	44	44	43	43	46	49	52	53	56	56	47.1	56.3
19-Oct	57	55	55	57	61	63	62	64	64	61	55	43	41	44	46	46	48	50	54	57	56	59	57	56	54.7	64.2
20-Oct	60	64	71	78	82	81	81	81	80	76	63	59	67	71	69	72	75	81	86	89	91	94	95	96	77.6	95.5
21-Oct	96	96	97	97	98	98	98	98	98	98	96	77	71	72	67	74	80	83	81	75	72	74	75	76	85.4	98.5
22-Oct	76	77	77	79	81	82	82	82	84	88	90	92	92	D	D	D	D	D	D	D	D	D	D	D	--	92.5
23-Oct	D	D	96	96	96	96	96	96	96	97	97	97	97	97	97	97	97	97	97	98	98	98	98	98	96.9	97.8
24-Oct	98	98	97	97	96	95	95	94	94	95	95	95	95	94	95	96	96	97	97	97	96	97	97	96	95.8	97.7
25-Oct	96	96	95	95	95	94	94	95	95	95	95	95	95	93	93	93	93	94	94	94	94	94	94	94	94.3	96.4
26-Oct	92	92	93	93	93	93	93	93	92	91	90	88	88	87	87	87	86	87	88	88	89	89	88	88	89.8	93.0
27-Oct	89	88	88	90	92	93	92	91	91	90	90	88	84	76	71	75	78	81	85	86	89	89	88	88	86.3	92.5
28-Oct	90	91	92	93	93	94	95	96	96	96	85	75	72	66	63	61	66	76	85	89	91	93	94	94	85.2	96.1
29-Oct	94	94	94	94	93	92	92	92	92	91	87	80	66	52	45	43	44	47	50	52	52	54	53	55	71.1	94.5
30-Oct	54	51	48	47	48	50	51	51	50	46	43	39	36	38	37	37	40	46	58	62	58	59	61	69	49.1	69.2
31-Oct	77	79	80	82	84	87	88	89	89	84	77	77	65	53	46	37	38	43	54	60	58	56	58	56	67.4	89.3
	66.9	68.2	70.7	71.4	72.7	74.1	74.7	74.9	73.0	69.7	63.9	57.1	53.2	49.5	47.0	47.0	48.6	51.4	55.4	58.8	60.8	62.6	64.2	64.9	Diurnal Average	
	97.7	97.7	97.2	97.2	97.7	97.9	98.0	98.0	98.2	98.5	96.6	96.7	96.8	97.0	97.2	97.3	97.4	97.3	97.4	97.5	97.7	97.7	97.8	97.8	Diurnal Maximum	

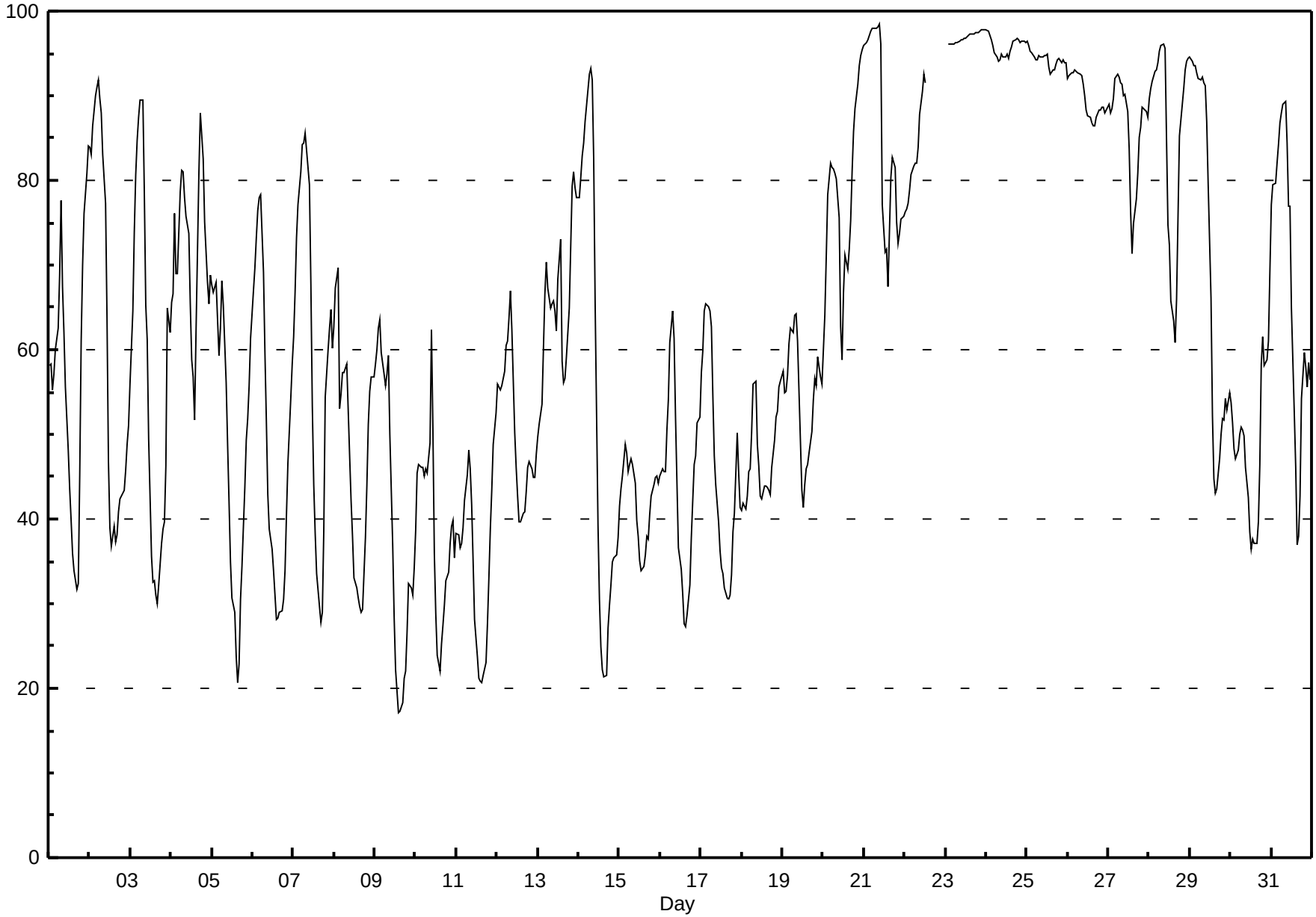
D - DAS Failure

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - October 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	4	4	6	5	1	1	1	3	3	2	1	3	4	4	4	1	1	1	1	1	1	1	1.4	5.7
Dir	84	92	103	106	104	97	188	41	64	233	224	152	199	190	169	148	137	100	27	31	349	310	251	275	128.6	103.5
2 Spd	1	1	0	1	1	2	1	3	5	2	3	9	12	11	11	15	14	14	13	15	16	13	10	4	6.9	15.6
Dir	235	218	196	224	32	217	225	227	229	237	255	276	286	300	302	290	290	290	295	293	301	312	299	276	288.9	300.7
3 Spd	4	1	0	0	1	1	1	0	1	1	2	4	6	6	7	7	7	6	5	3	3	1	3	3	2.2	7.4
Dir	231	135	350	184	198	37	221	282	360	3	52	65	101	80	79	80	60	52	56	39	53	56	359	335	63.8	79.6
4 Spd	1	1	2	3	3	3	4	2	4	6	5	6	5	9	10	18	10	7	9	11	14	13	12	11	6.7	17.7
Dir	298	325	232	281	290	264	267	232	241	258	255	282	278	254	261	272	277	227	238	256	252	258	256	262	260.0	272.2
5 Spd	12	12	10	11	15	11	4	7	7	7	15	14	9	6	9	13	11	11	10	9	5	4	3	1	8.6	15.2
Dir	259	262	260	266	259	247	242	264	254	273	260	264	274	277	237	236	241	253	238	234	222	220	203	90	252.8	260.4
6 Spd	2	1	0	0	1	3	2	5	6	9	8	9	11	16	16	14	5	4	11	3	3	2	1	1	4.7	16.5
Dir	204	87	112	39	241	220	206	215	212	210	205	205	213	233	231	260	284	298	264	286	258	264	226	97	233.1	232.7
7 Spd	0	1	1	1	1	0	0	0	1	1	3	4	4	5	5	5	4	3	1	1	1	3	1	4	0.8	5.4
Dir	208	16	137	299	242	194	45	17	10	38	81	73	93	138	144	169	145	122	65	18	275	297	310	282	122.6	138.1
8 Spd	2	1	1	5	9	12	11	10	13	15	16	16	19	15	12	9	5	3	0	2	2	1	2	3	6.6	19.1
Dir	252	251	249	315	276	291	282	265	269	280	272	272	283	289	288	289	307	344	62	93	78	85	77	78	283.2	283.0
9 Spd	3	2	2	3	4	5	6	2	1	2	5	9	17	15	15	9	7	4	4	0	2	4	4	6	4.4	16.7
Dir	86	95	110	150	163	179	182	209	288	264	211	222	235	242	248	256	232	223	219	261	199	179	183	195	219.5	234.7
10 Spd	5	4	4	5	6	7	7	7	9	19	24	30	32	36	35	34	32	26	22	19	18	19	17	13	15.9	35.9
Dir	192	170	165	168	170	179	180	204	285	291	282	279	276	271	267	260	258	252	244	246	246	243	243	257	256.4	270.5
11 Spd	18	16	16	18	20	11	6	9	13	19	18	20	19	18	15	10	7	9	10	16	11	10	9	9	13.3	20.0
Dir	262	264	261	266	262	257	251	255	257	263	264	269	270	251	242	247	234	261	280	253	247	241	244	245	257.9	261.5
12 Spd	10	14	17	10	8	6	4	0	2	1	4	4	6	15	14	9	11	6	4	2	4	6	6	3	6.3	17.0
Dir	233	252	260	259	243	246	247	150	175	106	202	230	253	262	246	241	247	230	229	182	184	194	189	182	239.1	260.3
13 Spd	5	4	3	1	1	2	6	15	5	4	5	1	1	1	5	3	2	2	2	1	2	3	4	4	1.0	15.5
Dir	206	204	194	313	220	230	269	257	266	250	243	299	123	68	349	6	72	153	112	96	79	76	87	78	244.2	257.5
14 Spd	3	2	1	0	1	1	0	1	4	4	9	19	22	24	21	21	18	14	10	10	10	12	15	18	8.6	24.4
Dir	84	70	55	133	231	220	296	266	308	295	337	299	285	284	290	293	284	264	252	240	220	234	246	258	275.4	284.0
15 Spd	8	10	11	10	17	19	18	18	22	23	26	23	23	22	26	30	22	19	16	17	16	11	13	15	17.9	30.0
Dir	287	258	246	253	267	266	269	272	271	273	278	278	278	282	274	268	275	275	265	266	265	249	259	263	270.0	268.2
16 Spd	14	12	11	10	9	5	1	0	1	2	4	12	13	12	11	9	9	8	8	6	5	8	7	2	6.8	14.2
Dir	260	254	257	251	233	225	91	56	159	188	219	270	281	250	269	270	280	278	271	267	222	230	216	188	254.7	259.8
17 Spd	1	1	3	1	0	0	1	9	14	16	19	22	20	18	17	15	14	10	3	2	2	0	4	6	7.4	21.6
Dir	141	118	64	201	118	173	205	242	249	257	264	269	276	286	282	266	259	270	275	235	221	161	207	203	262.8	268.6
18 Spd	5	6	4	5	4	6	1	1	1	3	11	19	19	14	14	16	12	13	9	12	9	11	8	10	8.4	19.4
Dir	208	211	212	220	217	210	72	59	203	218	261	265	256	254	252	258	260	255	244	249	237	233	231	230	245.2	255.6
19 Spd	10	10	11	15	11	9	9	11	14	16	17	22	19	16	14	13	5	4	3	2	3	4	4	2	9.6	21.8
Dir	230	240	251	265	270	274	278	265	257	261	268	272	280	286	290	292	318	292	321	321	325	260	317	349	273.3	272.0
20 Spd	3	0	2	1	1	1	0	1	1	2	3	3	2	4	4	4	3	5	3	2	2	2	2	1	1.6	4.9
Dir	339	232	221	203	52	57	212	62	219	59	120	124	78	78	82	81	71	73	83	80	70	61	76	21	78.7	72.8
21 Spd	1	2	2	3	3	1	1	2	1	2	6	6	9	5	7	8	3	5	4	5	4	3	3	2	2.3	8.6
Dir	228	265	284	272	255	222	326	250	270	291	327	339	343	318	330	346	74	56	50	43	51	45	53	51	347.8	342.6
22 Spd	3	3	4	4	5	6	6	8	8	8	8	8	7	D	D	D	D	D	D	D	D	D	D	D	--	8.2
Dir	40	53	67	78	78	75	73	75	82	77	69	73	72	D	D	D	D	D	D	D	D	D	D	D	--	69.3

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

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
23 Spd	D	D	1	2	2	1	1	1	1	2	3	3	3	5	3	5	5	5	4	5	7	6	6	5	3.3	6.9
Dir	D	D	350	49	52	82	230	108	72	84	72	86	79	66	84	78	72	65	67	67	76	78	79	84	73.9	76.1
24 Spd	4	5	5	4	4	5	5	6	7	6	7	6	6	5	5	5	6	4	4	6	7	7	7	6	5.3	7.3
Dir	80	94	97	92	87	89	94	94	86	86	87	85	81	75	78	76	76	76	58	58	59	60	60	58	77.9	59.5
25 Spd	5	6	6	6	5	4	4	3	3	3	3	2	3	3	3	4	4	4	3	3	3	4	5	5	3.6	6.2
Dir	54	51	51	50	51	49	51	39	51	56	66	75	91	105	83	79	89	89	97	111	97	92	95	84	71.2	50.8
26 Spd	5	4	4	3	4	4	5	5	5	5	4	5	6	5	5	6	5	4	3	4	3	3	3	1	4.1	5.7
Dir	86	82	84	92	72	76	80	80	75	81	84	90	77	84	78	68	76	80	72	76	72	73	77	71	78.9	76.9
27 Spd	2	1	2	2	2	1	2	2	2	1	2	1	2	2	3	4	5	5	2	3	3	2	3	3	0.4	5.1
Dir	76	96	85	85	100	63	37	75	74	108	49	59	40	343	301	283	243	269	323	211	227	227	234	236	265.5	269.0
28 Spd	2	2	1	2	1	0	1	1	1	1	1	2	4	2	4	3	2	0	0	0	0	0	2	0	0.3	3.7
Dir	303	292	259	245	332	117	186	94	96	225	212	68	56	124	125	128	142	23	229	258	58	184	242	103	148.8	124.7
29 Spd	0	1	0	1	0	1	1	1	2	3	4	2	1	13	17	12	9	7	8	8	7	6	6	7	4.5	17.2
Dir	151	217	106	74	124	58	64	60	212	216	209	208	240	254	255	250	243	223	229	229	229	228	223	230	236.0	254.6
30 Spd	10	8	8	6	6	5	5	4	3	6	5	6	6	5	4	4	1	1	2	1	2	2	1	0	3.7	10.0
Dir	224	226	215	200	194	179	181	180	176	182	178	174	178	170	161	154	113	91	72	152	200	169	121	358	186.7	224.3
31 Spd	1	0	1	1	0	0	0	0	2	5	6	7	10	12	10	12	7	4	1	1	3	3	2	2	2.6	11.9
Dir	65	320	45	81	213	345	51	327	253	271	267	267	269	261	270	283	302	313	74	347	135	121	112	104	273.7	283.5
Spd	2.3	2.3	2.0	2.2	2.4	2.0	1.5	2.3	2.8	4.0	5.0	6.3	6.7	7.7	7.6	7.2	5.1	3.9	3.3	3.2	2.6	2.7	2.6	2.4	Diurnal Average	
Dir	242.0	243.6	242.2	250.8	247.1	238.8	243.7	249.4	256.4	263.3	264.4	270.3	273.1	267.1	266.2	268.2	267.3	265.5	259.9	256.7	245.0	240.2	238.4	246.0		
Spd	17.7	15.5	17.0	17.6	20.0	18.9	17.7	17.7	21.8	23.2	25.9	29.9	32.2	35.9	35.2	33.6	32.5	25.8	22.1	19.2	18.3	19.0	16.9	18.5	Diurnal Maximum	
Dir	261.6	264.2	260.3	265.7	261.5	266.1	268.9	271.7	271.2	273.1	277.8	279.1	276.4	270.5	266.6	259.7	258.5	252.0	244.0	246.0	245.6	243.5	242.7	257.7		

Maximum Speed Value: 36 km/h on Oct 10 14:00
Maximum Daily Speed Average: 17.9 km/h on Oct 15
Maximum Diurnal Speed Average: 7.7 km/h at hour 14

Minimum Speed Value: 0 km/h on Oct 6 04:00
Minimum Daily Speed Average: 0.3 km/h on Oct 28
Minimum Diurnal Speed Average: 1.5 km/h at hour 7

Monthly Average Velocity: 3.68 km/h 259.44 deg

Speed Percentiles: $P_1 = 0.2$ $P_{10} = 0.8$ $Q_1 = 2.0$ Median = 4.4 $Q_3 = 9.2$ $P_{90} = 15.5$ $P_{99} = 29.9$

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

Hours in Service:	744
Hours of Data:	731
Hours of Missing Data:	13
Percent Operational Time:	98.3

D - DAS Failure

Frequency Distribution

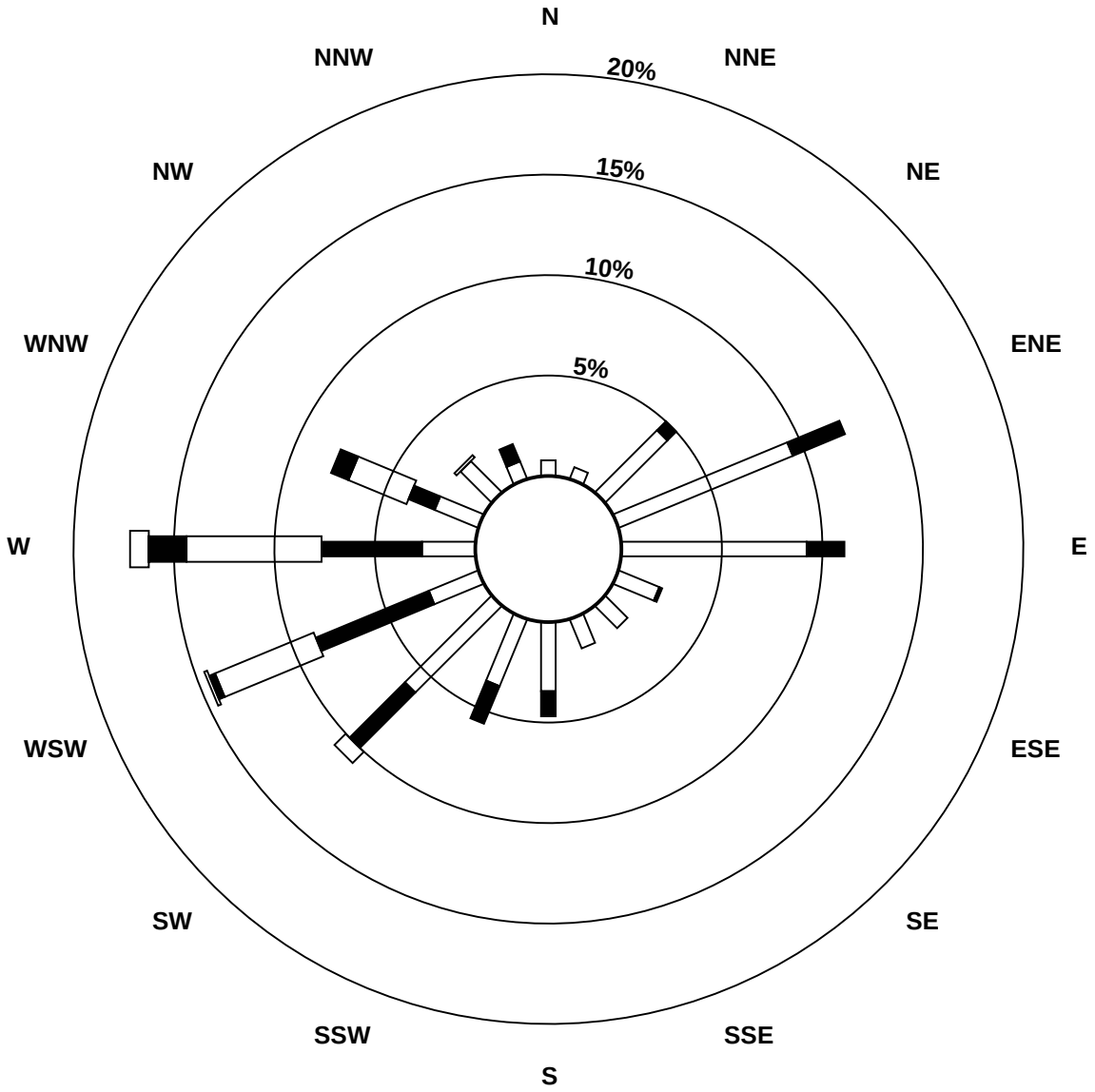
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	19	4	0	0	0	0	23
NorthEast	60	15	0	0	0	0	75
East	113	36	0	0	0	0	149
SouthEast	30	2	0	0	0	0	32
South	35	18	0	0	0	0	53
SouthWest	74	59	13	3	0	0	149
West	38	53	86	24	7	0	208
NorthWest	25	9	6	2	0	0	42
Total	394	196	105	29	7	0	731

PASZA
Peace Air Shed Zone Association

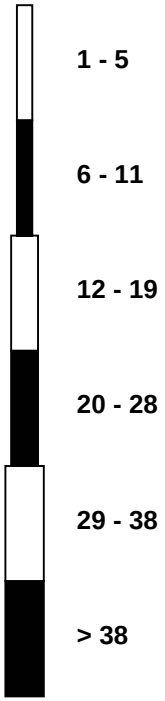
Wind Rose

Wind Speed (WS) (km/h)

Evergreen Park - October 2010



Wind Speed Classes (km/h)



PASZA
Peace Air Shed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - October 2010

Maximum Speed: 36 km/h on Oct 10 14:00

Maximum Daily Speed Average: 18.3 km/h on Oct 10

Minimum Speed: 1 km/h on Oct 29 05:00

Minimum Daily Speed Average: 2.0 km/h on Oct 28

Maximum Diurnal Speed Average: 11.3 km/h at hour 15

Minimum Diurnal Speed Average: 4.2 km/h at hour 7

Monthly Average Speed: 6.86 km/h

Percentiles: P_1 = 1.0 P_{10} = 1.5 Q_1 = 2.6 Median = 4.7 Q_3 = 9.6 P_{90} = 15.7 P_{99} = 30.2

Hours in Service:	744
Hours of Data:	731
Hours of Missing Data:	13
Percent Operational Time:	98.3

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-Oct	4	3	4	4	6	5	2	1	1	4	3	3	3	4	5	5	4	2	1	1	1	1	1	2	2.9	5.7
2-Oct	2	2	1	2	1	2	2	3	5	2	3	10	12	11	12	16	14	15	13	15	16	14	11	4	7.8	15.9
3-Oct	4	2	2	2	2	1	2	1	1	1	2	5	7	7	8	8	7	6	5	3	3	3	3	3	3.8	7.9
4-Oct	1	2	2	4	3	4	4	3	4	6	5	6	6	9	10	18	10	7	9	11	14	13	12	11	7.2	18.0
5-Oct	12	12	10	11	15	11	4	7	7	7	15	14	10	7	10	14	11	11	10	9	5	4	3	2	9.2	15.3
6-Oct	2	3	2	1	2	3	3	5	6	9	8	10	11	17	16	15	5	4	11	4	4	3	1	3	6.1	17.0
7-Oct	2	2	2	1	1	1	2	1	1	1	3	4	5	6	6	6	4	3	2	1	2	4	2	5	2.8	6.0
8-Oct	3	2	2	6	9	12	11	11	13	15	16	17	20	16	13	9	6	3	2	2	2	1	2	3	8.2	19.7
9-Oct	4	2	2	3	4	6	6	3	2	3	6	10	17	16	16	10	8	4	4	2	3	4	4	6	6.0	17.2
10-Oct	5	5	4	6	6	7	7	8	11	20	24	30	33	36	35	34	33	26	22	19	18	19	17	13	18.3	36.2
11-Oct	18	16	16	18	20	11	7	9	13	19	19	20	19	18	15	11	8	9	10	16	11	10	9	9	13.7	20.1
12-Oct	10	14	17	10	8	6	4	2	2	1	5	5	7	16	14	10	11	6	4	3	4	6	6	3	7.3	17.1
13-Oct	5	4	3	2	2	2	6	16	7	4	5	2	2	2	6	4	2	2	2	2	2	3	4	4	3.9	15.5
14-Oct	3	2	2	2	2	2	2	2	5	4	9	20	23	25	21	21	19	15	10	11	10	12	15	19	10.6	24.8
15-Oct	8	10	11	10	17	19	18	18	22	23	26	24	23	23	27	30	23	19	16	18	16	11	13	15	18.3	30.3
16-Oct	14	12	11	10	9	6	2	1	2	2	5	12	13	13	12	9	9	8	8	6	5	8	7	4	7.9	14.2
17-Oct	1	2	3	2	1	1	2	9	14	16	19	22	21	18	18	15	14	10	4	3	2	1	4	6	8.6	21.8
18-Oct	5	6	4	5	5	6	1	2	2	3	11	19	20	14	15	17	13	13	9	12	9	11	8	10	9.2	19.6
19-Oct	10	10	11	15	11	9	9	12	14	16	17	22	20	17	15	13	6	4	3	3	3	5	4	3	10.4	22.0
20-Oct	4	1	3	1	1	1	1	1	1	2	3	3	2	4	4	4	3	5	4	2	3	2	2	3	2.6	5.1
21-Oct	2	3	3	3	3	2	1	3	2	3	6	6	9	6	7	9	3	5	4	5	4	3	3	2	4.1	8.9
22-Oct	3	3	5	4	5	6	6	8	8	8	8	8	7	D	D	D	D	D	D	D	D	D	D	D	--	8.3
23-Oct	D	D	1	2	2	1	2	1	1	2	3	3	3	5	4	5	6	5	5	5	7	6	6	6	3.7	7.1
24-Oct	4	5	5	4	5	5	5	6	7	6	7	6	6	5	5	5	6	4	4	6	7	7	7	6	5.6	7.4
25-Oct	5	6	6	6	5	4	4	3	3	3	3	3	3	3	3	4	4	4	3	3	3	4	5	5	4.0	6.3
26-Oct	5	4	4	3	4	5	5	5	5	5	4	6	6	6	5	6	5	4	3	4	3	3	3	1	4.3	6.0
27-Oct	2	1	2	3	2	1	2	2	2	1	2	2	3	3	4	4	5	5	3	4	3	3	3	3	2.7	5.4
28-Oct	3	2	1	2	2	1	2	2	1	1	2	2	4	4	4	3	2	1	1	1	1	1	3	1	2.0	4.0
29-Oct	1	1	1	1	1	1	1	1	2	4	4	2	2	13	17	12	9	7	9	8	7	6	7	7	5.3	17.4
30-Oct	10	8	8	6	6	5	5	4	4	6	5	6	6	5	4	4	2	2	2	2	3	3	3	1	4.7	10.2
31-Oct	1	2	2	1	2	1	2	1	3	6	6	8	10	12	10	13	7	4	1	3	4	3	2	2	4.5	12.6
	5.2	4.9	4.9	4.9	5.2	4.8	4.2	4.9	5.5	6.7	8.3	10.0	10.7	11.3	11.3	11.0	8.6	7.2	6.2	6.1	5.9	5.9	5.7	5.4	Diurnal Average	
	17.8	15.7	17.1	17.7	20.1	19.0	17.8	17.8	21.9	23.4	26.2	30.3	32.5	36.2	35.5	34.0	32.7	26.0	22.2	19.3	18.4	19.1	17.1	18.7	Diurnal Maximum	

D - DAS Failure

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

PASZA
Peace Air Shed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Evergreen Park - October 2010

Maximum Value: 98.8 deg on Oct 20 07:00

Minimum Value: 3.6 deg on Oct 16 22:00

Percentiles: P_1 = 4.9 P_{10} = 7.7 Q_1 = 10.9 Median = 17.2 Q_3 = 44.7 P_{90} = 74.2 P_{99} = 93.6

Hours in Service:	744
Hours of Data:	731
Hours of Missing Data:	13
Hours of Calibration:	0
Percent Operational Time:	98.3

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Oct	6	10	8	8	8	11	43	74	53	29	52	66	89	64	50	40	34	54	28	56	75	64	49	69	88.9
2-Oct	77	58	97	80	56	40	55	44	14	36	39	15	14	15	15	12	15	9	10	11	10	14	17	27	97.1
3-Oct	43	64	79	89	82	85	77	92	76	56	52	26	32	28	25	21	14	10	8	13	22	74	30	17	91.6
4-Oct	51	62	37	24	32	41	26	61	26	18	17	16	15	11	10	11	13	6	12	6	6	5	5	4	62.0
5-Oct	5	5	6	6	5	6	13	8	13	17	8	9	15	28	33	11	10	11	10	12	9	52	44	75	74.8
6-Oct	68	74	89	87	82	37	64	13	7	9	9	16	22	15	10	15	20	24	11	34	51	55	54	69	88.5
7-Oct	95	69	73	65	77	93	86	98	82	46	29	22	46	30	30	28	30	12	29	69	80	43	70	26	98.1
8-Oct	49	82	70	19	9	13	7	10	13	10	10	18	15	13	17	20	26	18	76	39	59	55	21	14	82.1
9-Oct	26	48	43	23	29	16	11	58	86	67	52	12	15	17	14	11	20	29	51	95	70	16	16	13	95.0
10-Oct	12	11	17	14	15	10	12	12	42	17	8	9	8	8	8	8	7	8	8	7	7	6	9	11	42.4
11-Oct	8	9	9	7	5	39	46	18	7	8	10	9	13	11	15	18	11	17	13	8	9	5	8	10	46.1
12-Oct	8	9	6	11	11	10	13	84	45	59	26	39	29	13	14	12	9	14	11	13	8	9	9	15	84.4
13-Oct	7	12	47	77	81	46	23	6	81	33	14	62	44	50	24	29	32	23	28	41	29	13	14	10	80.6
14-Oct	11	41	44	94	76	86	96	64	36	20	16	17	11	11	9	9	11	13	9	17	6	8	9	8	96.0
15-Oct	20	14	11	11	5	7	6	7	7	8	9	10	10	11	10	7	8	6	5	6	6	8	7	4	19.8
16-Oct	5	6	6	6	12	60	66	91	48	33	29	15	16	13	14	21	14	8	5	5	19	4	7	58	90.7
17-Oct	77	69	34	81	75	89	89	17	6	7	7	9	10	10	12	12	9	10	41	56	43	80	11	7	88.8
18-Oct	7	9	46	18	39	7	89	65	58	40	11	8	8	10	8	9	9	7	8	9	6	5	4	5	89.3
19-Oct	7	9	10	6	8	7	10	13	5	6	7	7	10	11	11	13	21	11	15	49	20	22	17	31	48.5
20-Oct	32	79	38	78	68	79	99	67	76	33	48	26	38	23	25	23	17	18	17	22	34	37	37	66	98.8
21-Oct	82	58	56	55	32	70	69	62	69	33	24	21	17	24	18	12	41	23	10	11	9	15	13	24	82.4
22-Oct	12	10	13	15	13	14	12	11	13	15	11	12	13	D	D	D	D	D	D	D	D	D	D	D	15.4
23-Oct	D	D	79	21	18	63	70	64	35	23	21	20	22	17	22	18	15	14	12	11	11	13	11	11	79.0
24-Oct	13	15	15	15	15	14	17	14	13	15	13	16	16	21	15	15	13	12	14	12	10	9	12	10	21.1
25-Oct	12	10	9	9	9	13	9	14	10	16	19	24	21	29	27	18	12	17	24	18	17	14	13	16	29.1
26-Oct	16	17	16	18	13	16	15	14	15	18	20	19	20	19	18	19	17	14	15	13	17	20	17	21	21.2
27-Oct	18	48	22	19	37	45	18	23	29	73	63	66	54	56	41	33	13	23	66	52	24	44	28	15	72.8
28-Oct	49	25	49	15	65	73	58	55	66	85	53	47	23	54	26	19	42	75	90	82	78	82	65	84	89.7
29-Oct	74	39	84	71	76	84	61	59	34	39	36	72	89	8	8	9	11	10	5	5	8	15	45	8	89.3
30-Oct	9	10	19	16	13	12	12	11	15	12	16	19	25	17	20	22	30	48	53	76	63	60	60	75	75.6
31-Oct	83	85	77	77	85	81	75	79	74	24	16	26	15	13	15	19	15	32	69	87	50	14	43	24	87.2
	94.7	85.2	97.1	94.1	85.4	93.0	98.8	98.1	86.5	85.2	62.5	72.0	89.3	63.6	50.3	40.1	42.2	75.2	89.7	95.0	79.7	82.2	70.4	83.5	

D - DAS Failure

PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 5.0 ppb on Oct 5 01:00 Maximum Daily Average: 1.2 ppb on Oct 5

Minimum Value: 0 ppb on Oct 8 07:00 Minimum Daily Average: 0.0 ppb on Oct 30
Maximum Diurnal Average: 0.6 ppb at hour 1 Minimum Diurnal Average: 0.2 ppb at hour 16
Monthly Average: 0.36 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.1 Median = 0.2 Q_3 = 0.4 P_{90} = 0.9 P_{99} = 3.2

Hours in Service:	744
Hours of Data:	703
Hours of Missing Data:	41
Hours of Calibration:	36
Percent Operational Time:	99.3

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-Oct	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	A	2	2	1	1	1	1	1	0	1.2	2.2
2-Oct	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	2	1	0	0	0	1	2	0.5	1.7
3-Oct	1	0	0	0	0	1	1	0	0	1	1	1	1	A	0	0	0	0	0	0	0	0	1	1	0.5	1.0
4-Oct	2	4	2	2	1	1	1	1	1	0	1	2	A	0	0	0	0	0	0	0	0	1	1	3	1.1	4.3
5-Oct	5	3	3	4	4	1	1	1	2	3	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1.2	5.0
6-Oct	0	1	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	1	1	0.4	1.2
7-Oct	1	0	0	0	0	0	0	0	0	A	0	0	0	1	2	1	1	1	1	1	1	1	1	1	0.7	2.3
8-Oct	1	0	0	0	0	0	0	0	A	0	C	C	C	C	P	0	0	0	0	0	0	0	0	0	0.2	0.6
9-Oct	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.3
10-Oct	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
11-Oct	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.1	0.9
12-Oct	0	0	A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.2
13-Oct	0	A	0	0	1	2	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6
14-Oct	A	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0.4	1.2
15-Oct	1	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	1	1	2	2	1	A	2	0.8	3.3
16-Oct	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0.3	0.9
17-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	A	0	0	0	0.2	2.3
18-Oct	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	0.4
19-Oct	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	2.0
20-Oct	0	0	1	0	0	0	1	0	0	0	0	1	1	1	1	0	0	A	0	0	0	0	0	0	0.4	1.1
21-Oct	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	1	3	0	0	4	1	0	0.6	4.4
22-Oct	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.5
23-Oct	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
24-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.2
25-Oct	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
26-Oct	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	0.2
27-Oct	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	1.2
28-Oct	2	2	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6
29-Oct	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	0.1
30-Oct	0	0	0	0	A	0	0	0	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
31-Oct	0	0	0	0	0	A	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.9
	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.2	0.3	0.3	0.2	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.4	Diurnal Average	
	5.0	4.3	2.7	4.2	3.9	1.6	3.3	2.2	2.2	2.7	1.9	1.7	1.4	1.2	2.3	1.5	2.2	1.8	2.8	1.8	2.0	4.4	1.4	3.4	Diurnal Maximum	

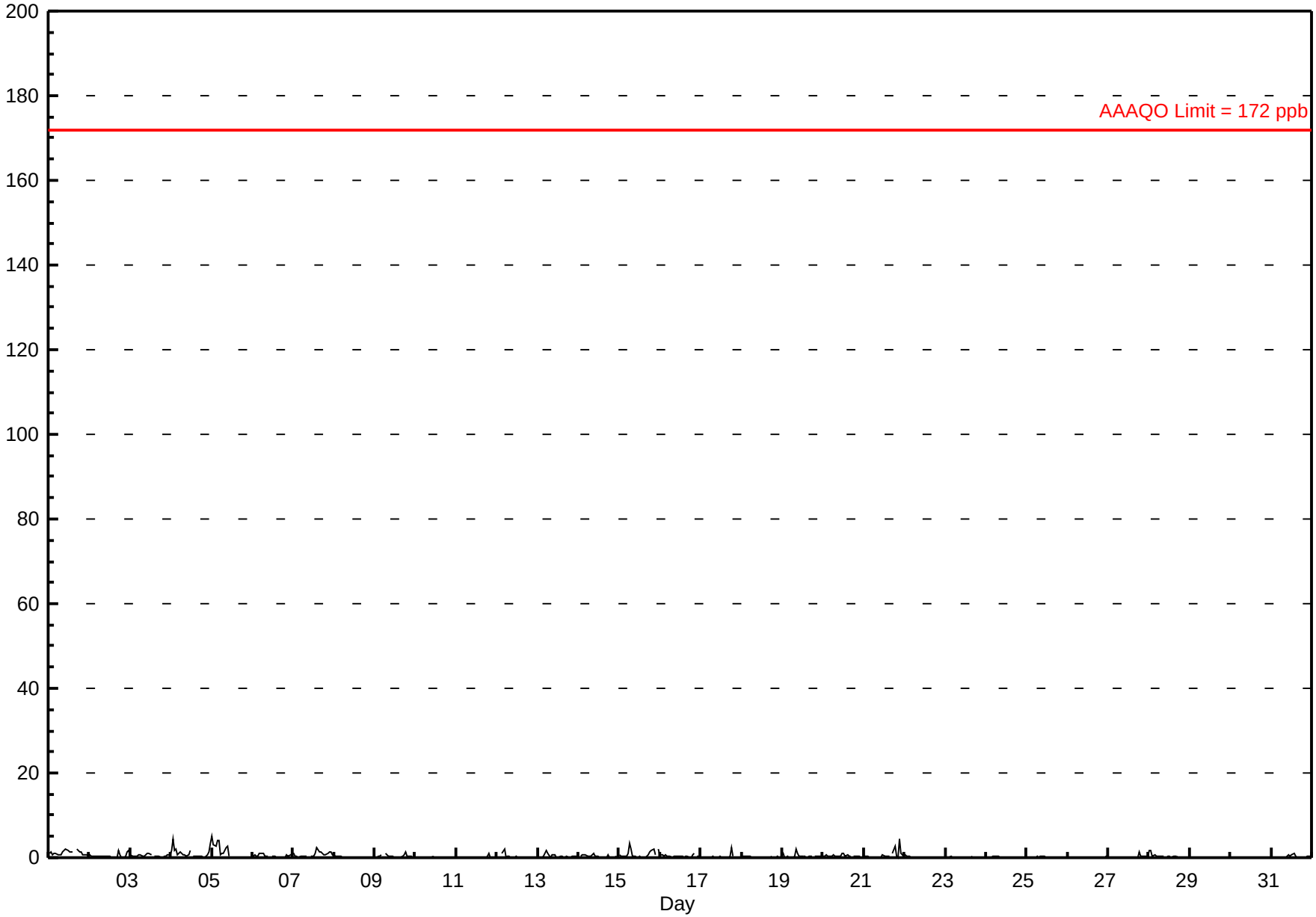
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - October 2010

Maximum Value: 25.7 ppb on Oct 5 05:00

Maximum Daily Average: 3.8 ppb on Oct 5

Minimum Value: 0 ppb on Oct 30 23:00

Minimum Daily Average: 0.3 ppb on Oct 30

Maximum Diurnal Average: 1.9 ppb at hour 5

Minimum Diurnal Average: 0.6 ppb at hour 16

Monthly Average: 1.02 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.9$ $P_{90} = 2.0$ $P_{99} = 8.7$

Hours in Service:	744
Hours of Data:	703
Hours of Missing Data:	41
Hours of Calibration:	36
Percent Operational Time:	99.3

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-Oct	2	2	1	2	1	1	1	1	2	2	2	2	2	2	2	A	3	2	2	2	1	1	1	1	1.6	2.6
2-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	0	10	4	0	0	1	2	2	1.4	10.5
3-Oct	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.6
4-Oct	6	6	3	4	3	3	2	1	1	1	2	3	A	1	1	1	1	1	1	0	0	2	6	12	2.6	12.4
5-Oct	10	8	9	12	26	1	2	2	4	9	1	A	0	0	1	0	0	0	0	0	0	0	0	1	3.8	25.7
6-Oct	1	2	1	1	2	2	2	1	1	0	A	1	1	1	0	0	0	0	0	1	2	1	2	2	1.0	2.2
7-Oct	2	1	1	0	0	1	1	1	1	A	1	0	1	2	3	2	2	2	1	1	1	2	2	1	1.2	2.7
8-Oct	1	1	1	1	1	1	1	0	A	2	C	C	C	C	P	1	0	0	0	0	1	1	0	0	0.7	2.3
9-Oct	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	2	2	2	1	1	1	0	0	0.8	2.1
10-Oct	0	0	0	0	A	0	0	0	1	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0.4	0.8
11-Oct	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	2	0	0	0	0	0.5	2.2
12-Oct	0	1	A	7	6	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1.0	7.1
13-Oct	0	A	0	1	4	3	4	1	2	1	2	0	0	1	1	0	0	1	0	1	0	1	1	1	1.1	4.4
14-Oct	A	1	1	1	1	1	1	1	2	4	1	1	0	0	0	1	1	2	0	0	0	0	1	A	0.9	3.5
15-Oct	2	1	1	1	1	2	5	4	1	1	1	1	1	0	0	1	1	2	3	4	7	4	A	8	2.2	8.0
16-Oct	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	2	2	A	1	0	0.9	2.5
17-Oct	0	0	0	0	1	0	1	1	0	0	0	1	0	0	1	1	1	3	4	2	A	1	1	0	0.8	3.9
18-Oct	1	1	1	1	0	0	0	0	0	1	0	0	0	1	1	0	0	0	3	A	0	1	0	0	0.6	2.7
19-Oct	4	0	0	2	1	0	0	2	4	2	0	1	1	1	1	1	1	1	A	1	1	1	0	1	1.1	4.3
20-Oct	1	1	1	1	1	1	3	1	1	1	1	2	1	1	1	1	1	A	1	0	0	1	1	0	0.9	3.4
21-Oct	1	1	1	0	1	1	0	0	0	0	1	1	1	1	1	1	A	2	5	1	0	9	4	1	1.4	8.8
22-Oct	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	1.5
23-Oct	0	0	0	1	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0.4	1.0
24-Oct	0	1	0	1	0	1	1	1	1	1	0	1	0	A	1	0	0	0	0	0	0	0	0	0	0.5	0.6
25-Oct	0	0	0	0	0	0	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8
26-Oct	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.6
27-Oct	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	3	3	1	1	1	4	0.8	4.0
28-Oct	6	6	1	1	1	1	1	1	1	A	0	1	0	0	1	1	1	0	0	0	0	0	0	0	1.0	6.0
29-Oct	0	0	0	0	1	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
30-Oct	1	0	0	0	A	0	0	0	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
31-Oct	0	0	0	0	0	A	0	0	0	2	3	0	2	2	1	0	0	0	0	0	1	1	0	1	0.7	3.4
	1.6	1.3	0.9	1.4	1.9	0.9	1.1	0.8	0.9	1.2	0.8	0.8	0.6	0.7	0.6	0.6	0.7	1.2	1.2	0.9	0.8	1.0	0.9	1.4	Diurnal Average	
	10.4	8.1	8.7	12.1	25.7	3.2	5.2	3.8	4.3	9.1	3.4	3.1	1.8	2.0	2.7	2.4	2.6	10.5	5.0	4.5	6.9	8.8	5.8	12.4	Diurnal Maximum	

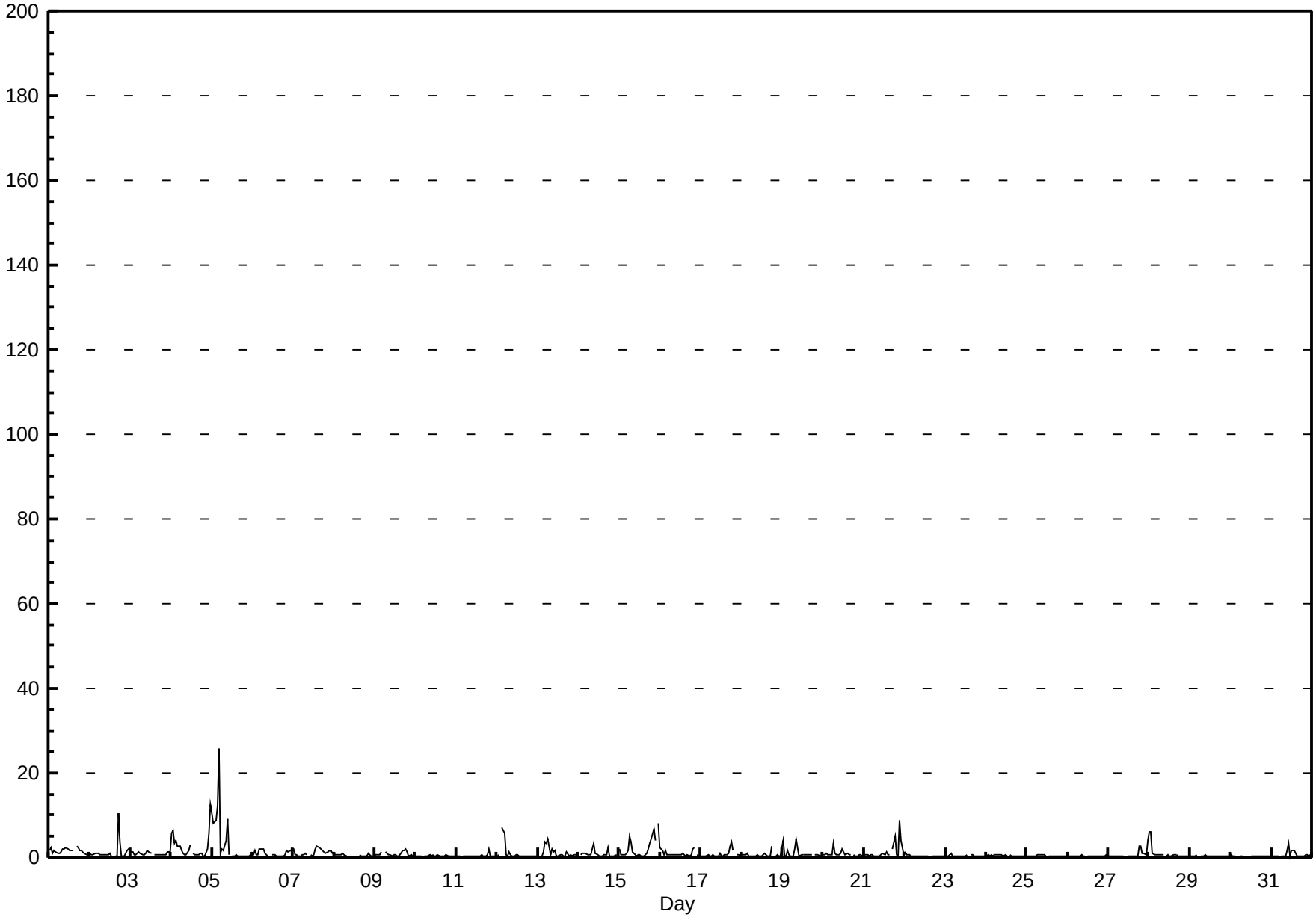
C - Calibration P - Power Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - October 2010



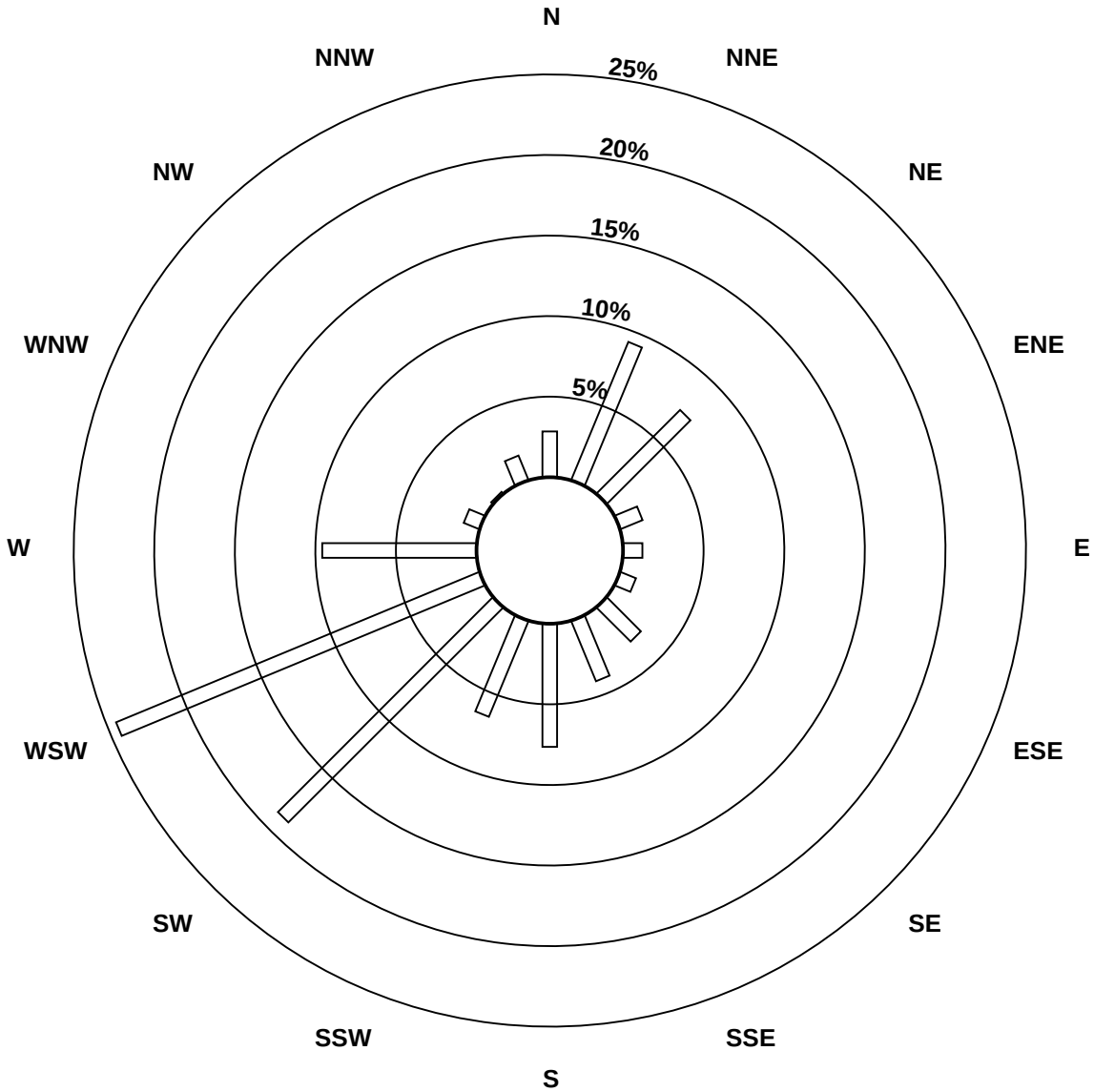
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

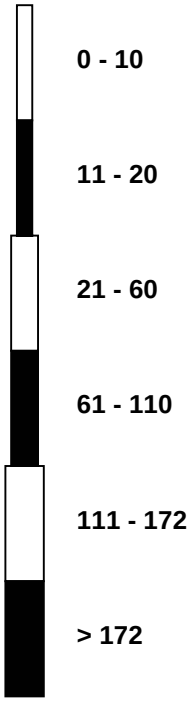
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.7 ppb on Oct 27 22:00 Maximum Daily Average: 0.4 ppb on Oct 17

Minimum Value: 0 ppb on Oct 31 03:00 Minimum Daily Average: 0.2 ppb on Oct 31
Maximum Diurnal Average: 0.4 ppb at hour 10 Minimum Diurnal Average: 0.3 ppb at hour 21
Monthly Average: 0.33 ppb Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.4$ $P_{99} = 0.5$

Hours in Service:	744
Hours of Data:	704
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

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-Oct	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
2-Oct	0	0	0	0	0	1	1	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.6
3-Oct	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
4-Oct	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
5-Oct	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	0.4
6-Oct	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
7-Oct	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
8-Oct	0	0	1	0	0	0	0	0	A	C	C	C	0	0	P	0	0	0	0	0	0	0	0	0	0.4	0.5
9-Oct	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
10-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
11-Oct	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	0.5
12-Oct	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	0.3
13-Oct	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
14-Oct	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5
15-Oct	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	0.4
16-Oct	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
17-Oct	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0.4	0.5
18-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.5
19-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4
20-Oct	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	0.4
21-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.5
22-Oct	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
23-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	1	0.4	0.5
24-Oct	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	0.5
25-Oct	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
26-Oct	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0.3	0.5
27-Oct	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	1	1	0	0	1	1	0	0.4	0.7
28-Oct	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	0.6
29-Oct	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	0.5
30-Oct	0	0	0	0	A	0	0	0	P	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
31-Oct	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
	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	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	Diurnal Average	
	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.5	0.5	0.7	0.5	0.5	Diurnal Maximum	

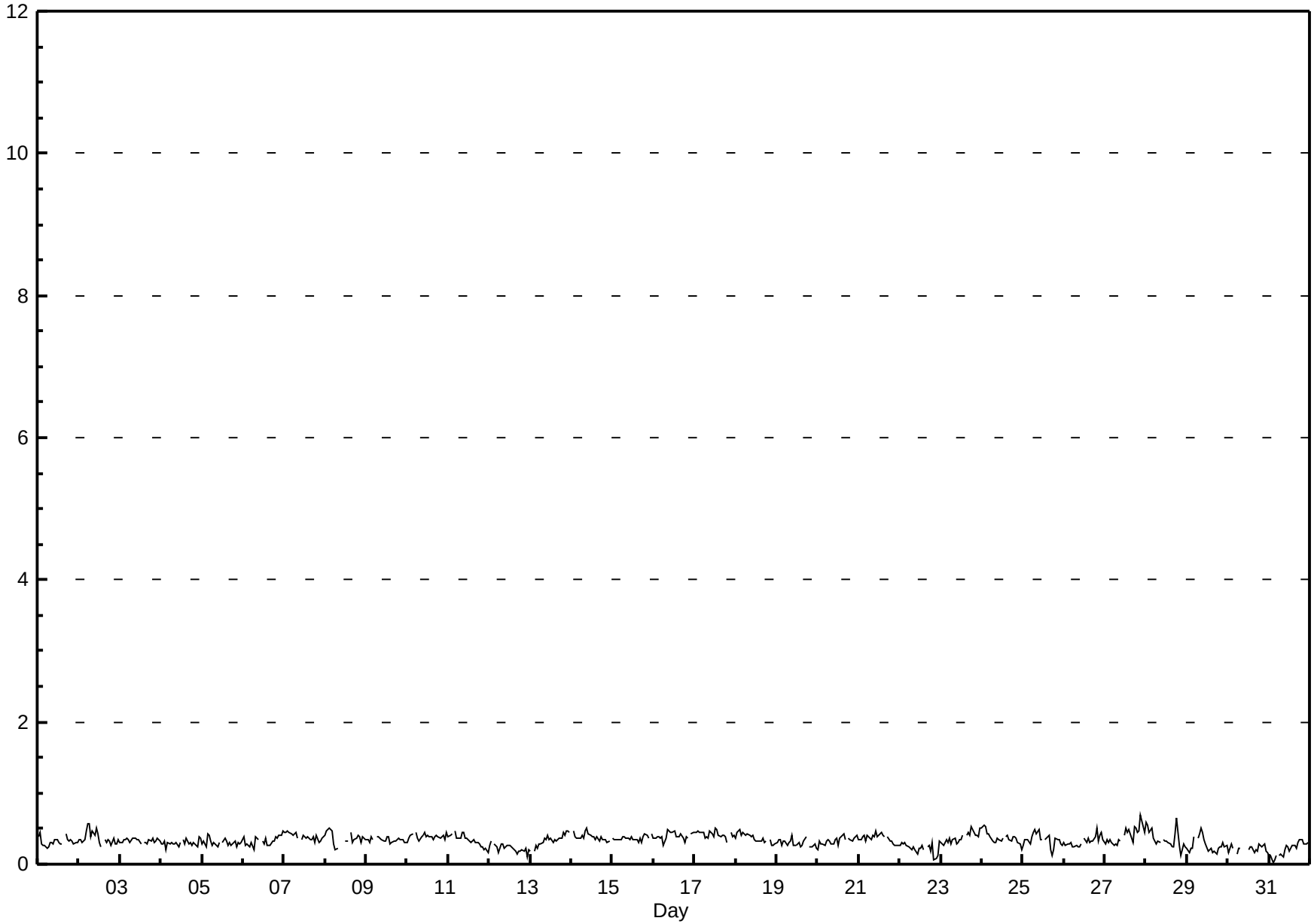
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - October 2010

Maximum Value: 1.8 ppb on Oct 27 22:00

Maximum Daily Average: 0.9 ppb on Oct 27

Minimum Value: 0 ppb on Oct 22 23:00

Maximum Diurnal Average: 0.8 ppb at hour 10

Monthly Average: 0.74 ppb

Minimum Daily Average: 0.6 ppb on Oct 12

Minimum Diurnal Average: 0.7 ppb at hour 17

Percentiles: $P_1 = 0.5$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 0.9$ $P_{99} = 1.1$

Hours in Service:	744
Hours of Data:	704
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

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-Oct	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	0.9
2-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.1
3-Oct	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	0.9
4-Oct	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
5-Oct	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
6-Oct	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	0.8
7-Oct	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	0.9
8-Oct	1	1	1	1	1	1	1	1	A	C	C	C	1	1	P	1	1	1	1	1	1	1	1	1	0.8	1.1
9-Oct	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
10-Oct	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	1.0
11-Oct	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
12-Oct	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.9
13-Oct	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	1.0
14-Oct	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	1.0
15-Oct	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	0.9
16-Oct	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
17-Oct	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	1.1
18-Oct	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
19-Oct	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	0.9
20-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	0.9
21-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	0.9
22-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0.6	0.8
23-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.1
24-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.0
25-Oct	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
26-Oct	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4
27-Oct	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1	0.9	1.8
28-Oct	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
29-Oct	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	0.8
30-Oct	1	1	1	1	A	1	1	1	P	P	P	P	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
31-Oct	1	1	0	1	1	A	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	0.7	0.8	Diurnal Average	
	1.1	1.0	1.0	1.1	0.9	1.0	1.1	0.9	0.9	1.0	1.0	1.0	1.1	0.9	1.0	0.9	1.0	0.9	1.2	1.4	0.9	1.8	0.9	1.1	Diurnal Maximum	

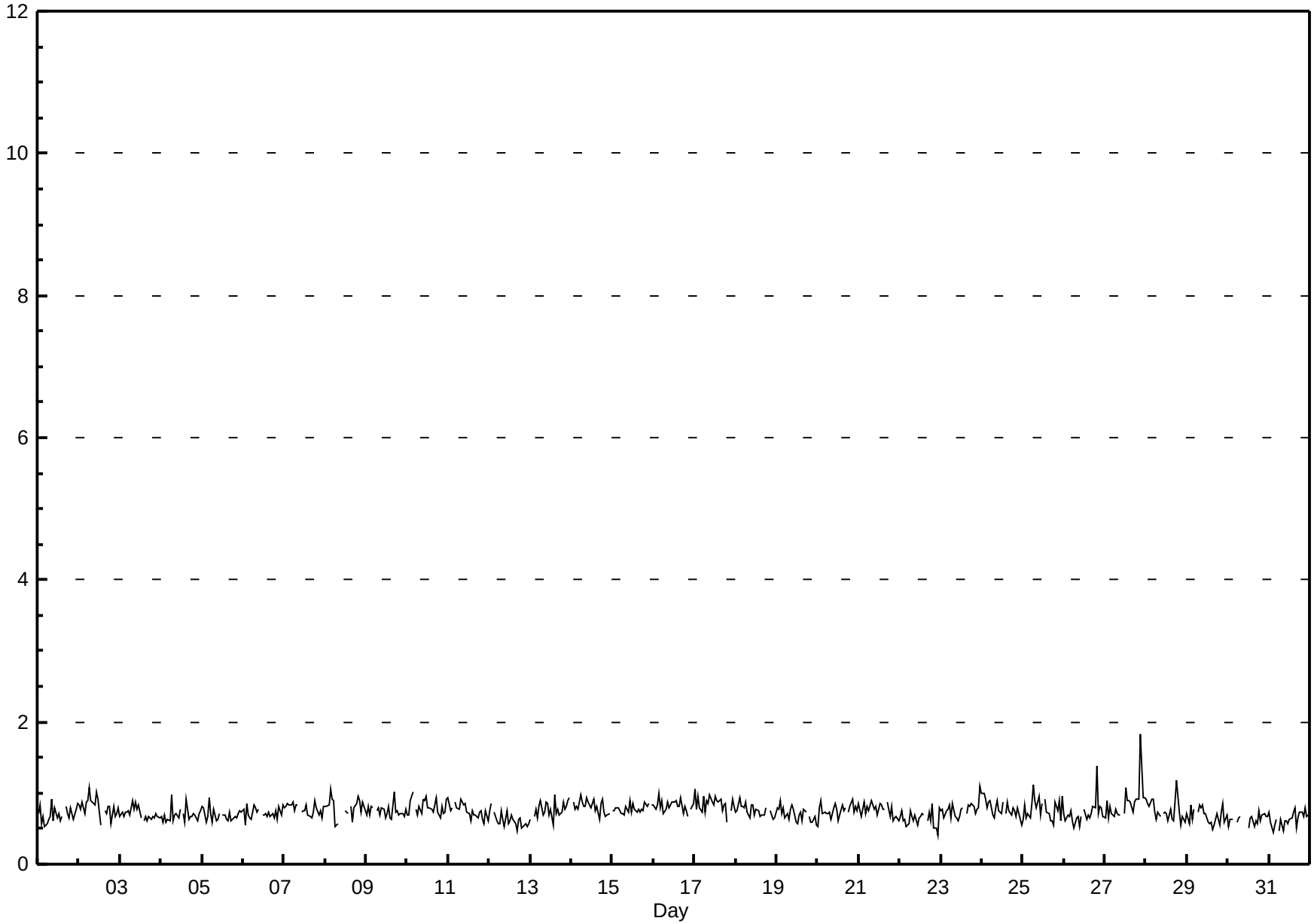
C - Calibration P - Power Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - October 2010



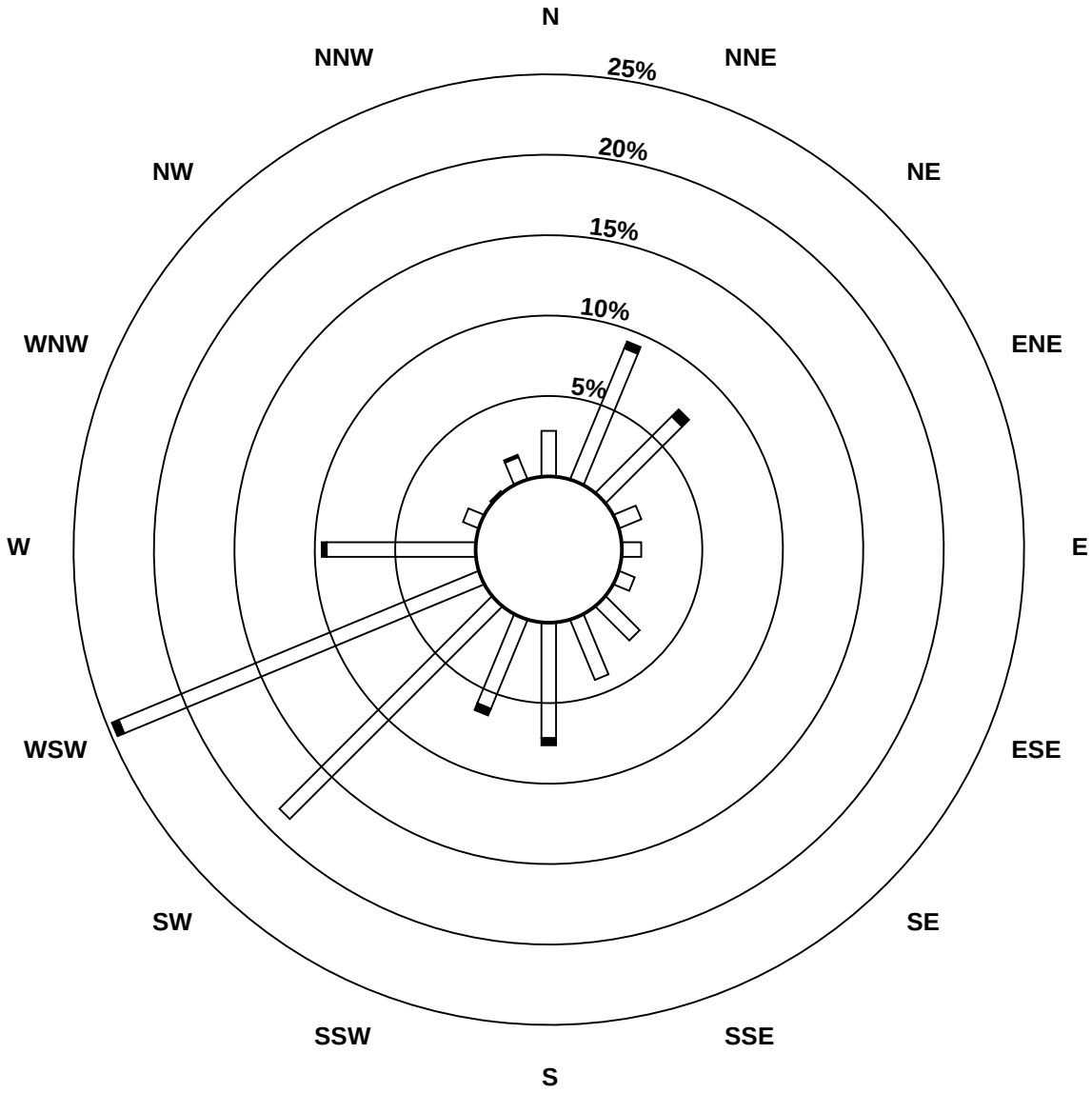
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

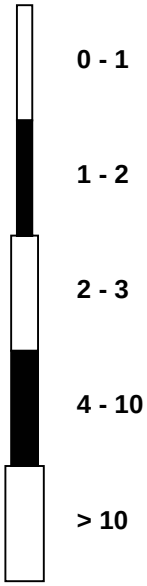
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Smoky Heights - October 2010

Number of Exceedences: 1-hr: 3 24-hr: 0
Maximum Value: 329.2 $\mu g/m^3$ on Oct 9 18:00
Maximum Daily Average: 25.9 $\mu g/m^3$ on Oct 19

Minimum Value: 0 $\mu g/m^3$ on Oct 5 12:00
Maximum Diurnal Average: 15.3 $\mu g/m^3$ at hour 18
Monthly Average: 4.90 $\mu g/m^3$

Minimum Daily Average: 0.7 $\mu g/m^3$ on Oct 22
Minimum Diurnal Average: 2.2 $\mu g/m^3$ at hour 14
Percentiles: P_1 = 0.0 P_{10} = 0.2 Q_1 = 1.2 Median = 2.6 Q_3 = 4.8 P_{90} = 8.4 P_{99} = 25.8

Hours in Service:	744
Hours of Data:	739
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-Oct	2	2	2	1	2	2	2	2	3	4	4	4	4	5	4	6	6	6	7	11	11	7	14	11	5.1	13.5
2-Oct	6	6	5	6	8	9	9	9	10	11	14	11	5	7	7	10	9	4	0	12	9	10	10	18	8.6	18.2
3-Oct	8	16	10	6	3	4	11	5	6	4	1	1	2	1	1	3	1	1	3	5	7	5	3	3	4.6	15.9
4-Oct	2	3	2	3	3	4	4	4	4	6	4	5	6	7	8	7	5	4	2	2	0	0	0	2	3.7	8.5
5-Oct	2	3	3	4	2	1	1	2	1	1	1	0	0	0	0	0	1	1	3	2	1	2	1	2	1.4	3.6
6-Oct	2	3	2	1	3	3	3	8	4	3	0	0	0	0	1	2	2	2	10	21	9	17	2	2	4.2	21.2
7-Oct	1	2	0	1	1	3	13	6	9	5	2	1	0	0	2	2	3	4	3	3	4	4	7	7	3.4	13.2
8-Oct	5	6	7	5	7	5	4	4	3	2	0	1	1	0	P	4	2	9	18	25	15	8	5	2	6.0	25.0
9-Oct	0	0	4	4	4	6	4	7	9	4	5	1	1	0	3	5	7	329	73	31	34	8	6	3	22.8	329.2
10-Oct	2	3	3	0	0	0	1	1	5	5	0	0	1	2	3	4	3	2	1	0	0	0	2	1	1.6	5.4
11-Oct	2	1	1	1	1	1	1	1	2	1	0	1	0	0	0	0	0	1	3	3	2	2	2	1	1.1	3.0
12-Oct	2	2	1	1	1	2	1	2	3	3	3	2	2	1	1	1	0	1	1	2	0	0	1	1	1.4	3.4
13-Oct	1	2	2	4	3	2	2	3	3	3	2	5	5	1	3	12	11	4	1	2	1	0	0	0	2.9	11.5
14-Oct	1	2	1	1	2	3	8	5	8	8	8	6	7	1	3	2	2	3	4	4	3	3	2	2	3.7	8.4
15-Oct	3	3	3	4	3	4	5	6	7	6	4	4	6	3	12	5	9	4	4	4	5	4	6	2	4.9	12.4
16-Oct	1	1	3	2	3	6	12	14	8	10	8	6	2	2	1	0	2	5	61	10	9	15	6	5	7.9	60.9
17-Oct	5	4	3	3	5	4	4	3	4	4	3	4	7	3	3	6	3	4	6	5	5	6	5	4	4.3	6.8
18-Oct	5	4	2	3	3	3	5	6	5	6	4	5	4	3	3	5	2	5	4	1	1	2	1	1	3.5	6.4
19-Oct	2	2	1	1	2	5	1	2	3	7	11	9	13	4	9	25	35	31	163	182	58	35	16	5	25.9	181.6
20-Oct	4	4	5	3	3	7	15	9	13	9	18	8	8	9	5	8	5	5	2	3	4	4	3	3	6.5	17.9
21-Oct	3	2	2	2	4	5	4	4	6	6	5	6	4	4	3	3	2	1	1	2	1	2	2	0	3.1	6.1
22-Oct	1	2	1	1	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1	1	2	1	0.7	1.7
23-Oct	1	2	2	4	4	2	1	0	1	1	1	1	1	0	0	0	1	0	1	0	0	1	2	2	1.2	4.4
24-Oct	2	2	2	3	3	3	3	3	3	3	4	3	3	2	4	4	2	0	1	1	1	0	0	1	2.2	4.0
25-Oct	1	1	1	0	1	2	13	15	5	14	1	1	0	0	1	1	1	1	1	1	0	1	0	0	2.6	15.1
26-Oct	0	1	0	1	0	1	1	2	2	2	2	2	1	1	2	1	2	1	1	23	10	22	7	0	3.5	23.4
27-Oct	0	0	2	1	0	1	2	2	2	5	7	4	4	3	3	4	3	4	7	5	6	6	5	5	3.5	7.5
28-Oct	5	9	7	7	7	5	5	5	6	2	1	3	3	3	3	2	2	41	0	2	0	0	2	2	5.1	40.8
29-Oct	2	0	1	2	1	2	1	3	4	6	6	4	6	0	0	0	0	0	0	0	1	1	1	2	1.8	6.4
30-Oct	0	0	0	0	0	0	0	1	P	P	P	P	4	2	2	3	2	2	2	4	6	4	2	3	1.8	5.6
31-Oct	3	4	3	4	3	3	2	3	3	5	5	7	6	2	0	0	0	1	0	0	1	0	0	2	2.4	7.2
	2.3	2.9	2.6	2.6	2.6	3.1	4.6	4.4	4.6	4.9	4.2	3.5	3.4	2.2	3.0	4.0	4.0	15.3	12.3	11.9	6.6	5.5	3.7	3.0	Diurnal Average	
	8.0	15.9	9.8	6.6	8.1	9.2	15.4	15.1	12.7	13.7	17.9	11.2	13.0	8.8	12.4	25.3	35.3	329.2	163.2	181.6	57.7	34.6	16.4	18.2	Diurnal Maximum	

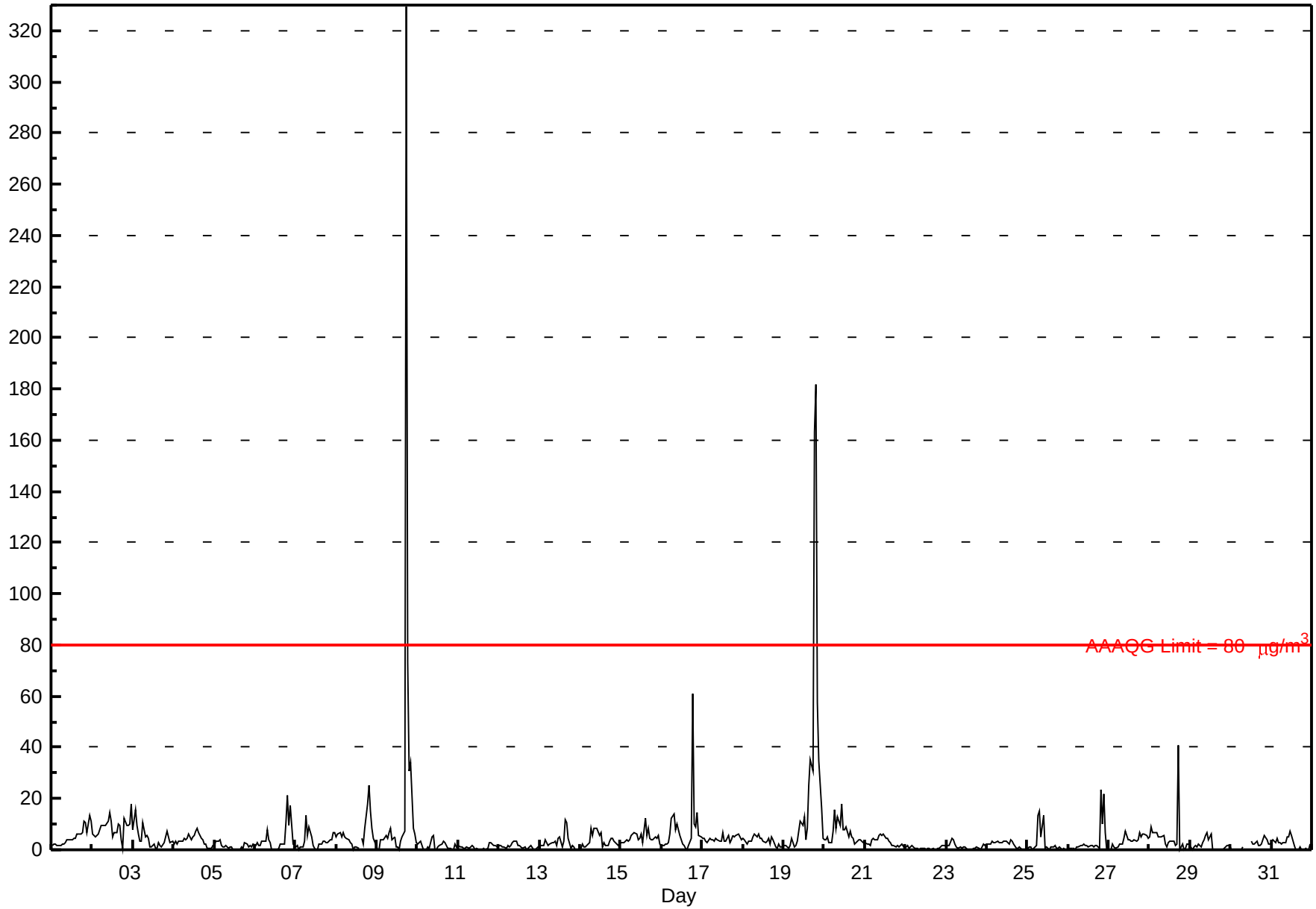
P - Power Failure
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Smoky Heights - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Smoky Heights - October 2010

Maximum Value: 449.0 $\mu g/m^3$ on Oct 19 20:00

Maximum Daily Average: 66.3 $\mu g/m^3$ on Oct 19

Minimum Value: 0 $\mu g/m^3$ on Oct 5 14:00

Minimum Daily Average: 2.2 $\mu g/m^3$ on Oct 22

Maximum Diurnal Average: 44.0 $\mu g/m^3$ at hour 19

Minimum Diurnal Average: 4.6 $\mu g/m^3$ at hour 5

Monthly Average: 11.61 $\mu g/m^3$

Percentiles: P_1 = 0.4 P_{10} = 1.8 Q_1 = 2.9 Median = 4.9 Q_3 = 8.4 P_{90} = 17.9 P_{99} = 52.5

Hours in Service:	744
Hours of Data:	739
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-Oct	4	4	3	3	3	3	4	3	4	5	5	6	5	7	5	8	8	8	10	21	22	15	29	24	8.7	29.4
2-Oct	7	8	8	10	10	19	14	15	12	15	19	13	11	17	13	29	18	16	2	35	29	20	13	44	16.5	44.4
3-Oct	26	64	28	15	5	7	40	11	7	7	5	3	4	3	2	6	3	3	4	12	19	8	4	5	12.2	64.3
4-Oct	4	6	3	6	5	6	7	7	13	13	7	8	9	9	10	8	12	8	4	3	3	1	2	2	6.7	13.4
5-Oct	4	5	4	5	4	2	2	3	3	3	2	2	1	0	0	5	6	4	6	5	5	5	3	3	3.3	5.6
6-Oct	6	5	4	4	9	9	7	18	7	5	1	2	2	2	4	8	9	8	37	70	45	67	3	3	14.1	70.5
7-Oct	2	3	2	3	3	8	22	21	26	10	4	2	2	2	3	4	5	6	4	4	5	6	18	9	7.2	25.8
8-Oct	7	8	9	7	9	12	7	9	5	5	3	6	4	6	P	11	7	41	67	68	24	16	9	5	15.0	68.2
9-Oct	3	4	8	6	7	7	7	12	17	6	7	5	7	5	11	12	20	449	342	82	63	14	12	5	46.3	449.0
10-Oct	4	8	8	0	0	1	4	3	10	14	7	1	4	12	8	6	6	4	3	2	2	1	4	3	4.7	13.6
11-Oct	3	2	3	2	2	3	2	3	3	2	2	2	0	0	1	3	2	2	5	8	8	3	4	4	2.9	7.9
12-Oct	4	3	3	2	2	3	3	3	4	6	5	5	5	4	4	5	2	2	5	4	3	1	3	4	3.5	5.7
13-Oct	3	3	4	6	4	3	9	9	6	6	4	18	18	6	23	29	31	7	2	3	3	1	1	2	8.3	30.8
14-Oct	2	5	3	4	4	10	28	7	18	17	17	13	14	12	11	6	10	12	11	9	8	13	4	5	10.1	27.6
15-Oct	5	6	5	6	4	5	7	8	8	13	7	9	13	4	32	11	18	7	6	8	8	9	14	5	9.1	32.3
16-Oct	3	3	4	4	6	50	50	35	10	14	10	8	4	4	3	2	4	15	352	61	37	45	7	7	30.8	351.9
17-Oct	7	6	5	5	6	6	5	4	6	8	8	6	17	6	5	18	4	6	9	7	16	14	6	5	7.7	17.8
18-Oct	6	5	4	5	6	6	10	12	8	10	9	11	9	6	7	13	5	10	9	3	5	6	3	2	7.1	12.9
19-Oct	4	3	2	3	6	17	4	4	6	24	38	33	38	16	23	48	103	104	449	449	91	71	46	9	66.3	449.0
20-Oct	7	7	7	6	4	51	58	15	24	17	37	10	14	14	9	10	7	8	5	6	7	7	5	4	14.2	57.9
21-Oct	4	4	5	4	6	7	7	6	7	8	8	11	7	6	5	4	4	3	4	4	2	3	4	3	5.3	11.3
22-Oct	3	3	2	3	3	3	3	2	1	2	2	1	3	2	1	1	2	2	2	2	2	3	3	2	2.2	3.4
23-Oct	2	3	3	7	5	4	3	2	3	2	2	2	2	2	2	1	2	3	2	2	1	2	4	3	2.7	7.3
24-Oct	4	3	3	5	4	4	4	4	4	4	5	4	4	4	5	5	4	2	2	2	2	1	1	1	3.4	5.5
25-Oct	2	2	2	1	3	3	82	57	18	34	4	2	2	1	2	3	3	2	2	2	1	2	2	1	9.7	82.5
26-Oct	1	2	2	2	1	2	2	3	3	3	4	3	3	3	4	2	3	3	2	70	33	57	40	0	10.4	70.3
27-Oct	1	2	4	3	3	2	4	3	4	10	14	7	6	5	5	6	5	5	9	7	7	7	6	6	5.4	14.1
28-Oct	7	12	9	9	9	6	7	7	7	5	3	5	4	10	9	5	6	161	1	5	2	3	4	6	12.5	161.2
29-Oct	4	3	2	3	3	5	3	5	7	9	10	7	10	5	2	2	0	0	1	1	2	3	4	4	3.9	9.8
30-Oct	1	2	3	1	1	1	1	4	P	P	P	P	7	5	4	5	3	4	6	7	7	7	5	4	3.8	7.3
31-Oct	5	5	5	8	5	5	5	4	6	8	8	10	10	6	2	2	3	3	2	2	3	2	2	8	4.9	10.2
	4.7	6.4	5.0	4.7	4.6	8.8	13.2	9.6	8.5	9.5	8.6	7.2	7.7	5.9	7.2	9.0	10.1	29.4	44.0	31.1	15.0	13.3	8.5	6.1	Diurnal Average	
	26.2	64.3	28.3	15.3	9.7	51.1	82.5	56.5	25.8	33.9	38.1	33.4	37.5	16.6	32.3	47.7	103.5	449.0	449.0	449.0	91.3	70.8	46.4	44.4	Diurnal Maximum	

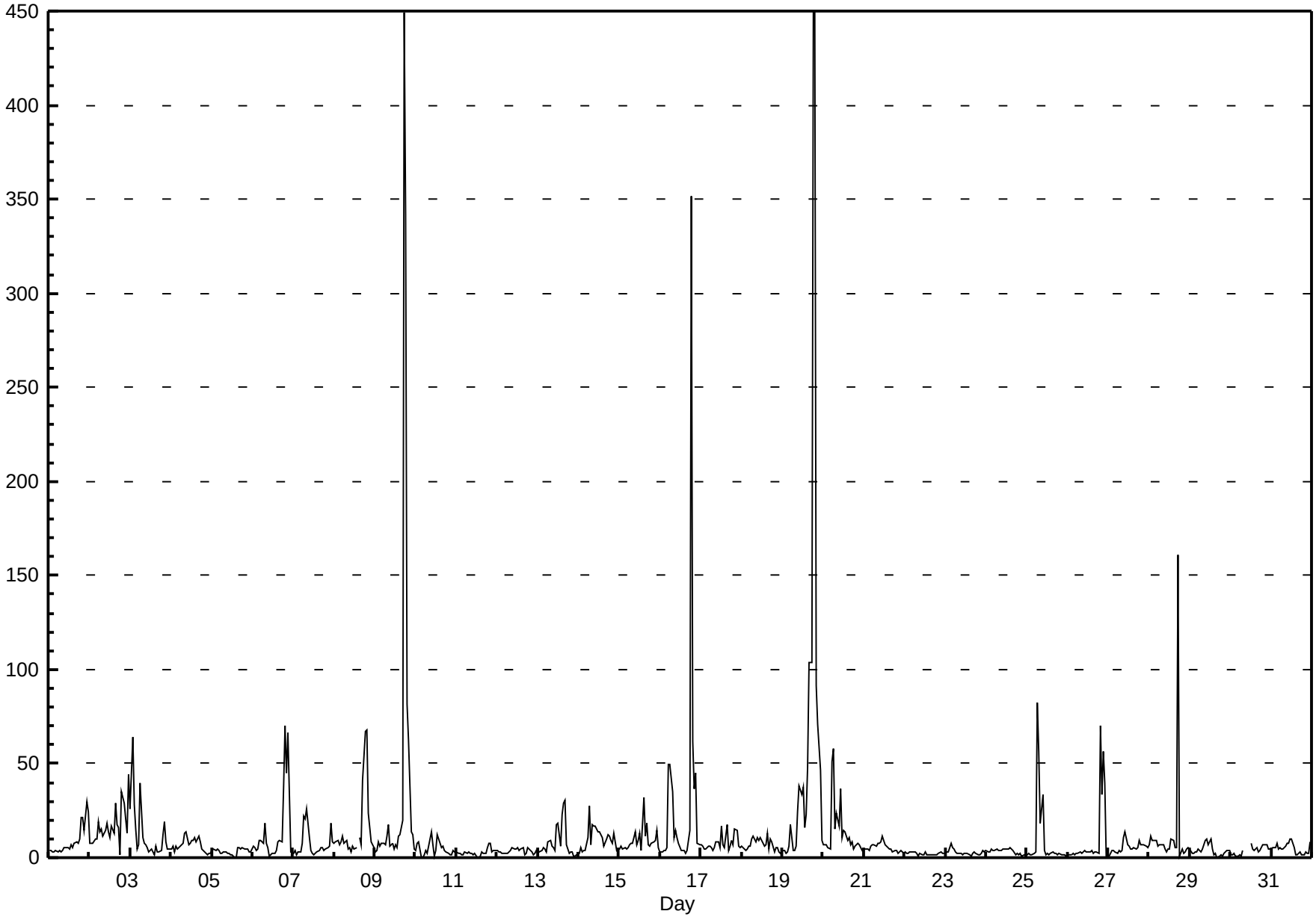
P - Power Failure

PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Smoky Heights - October 2010



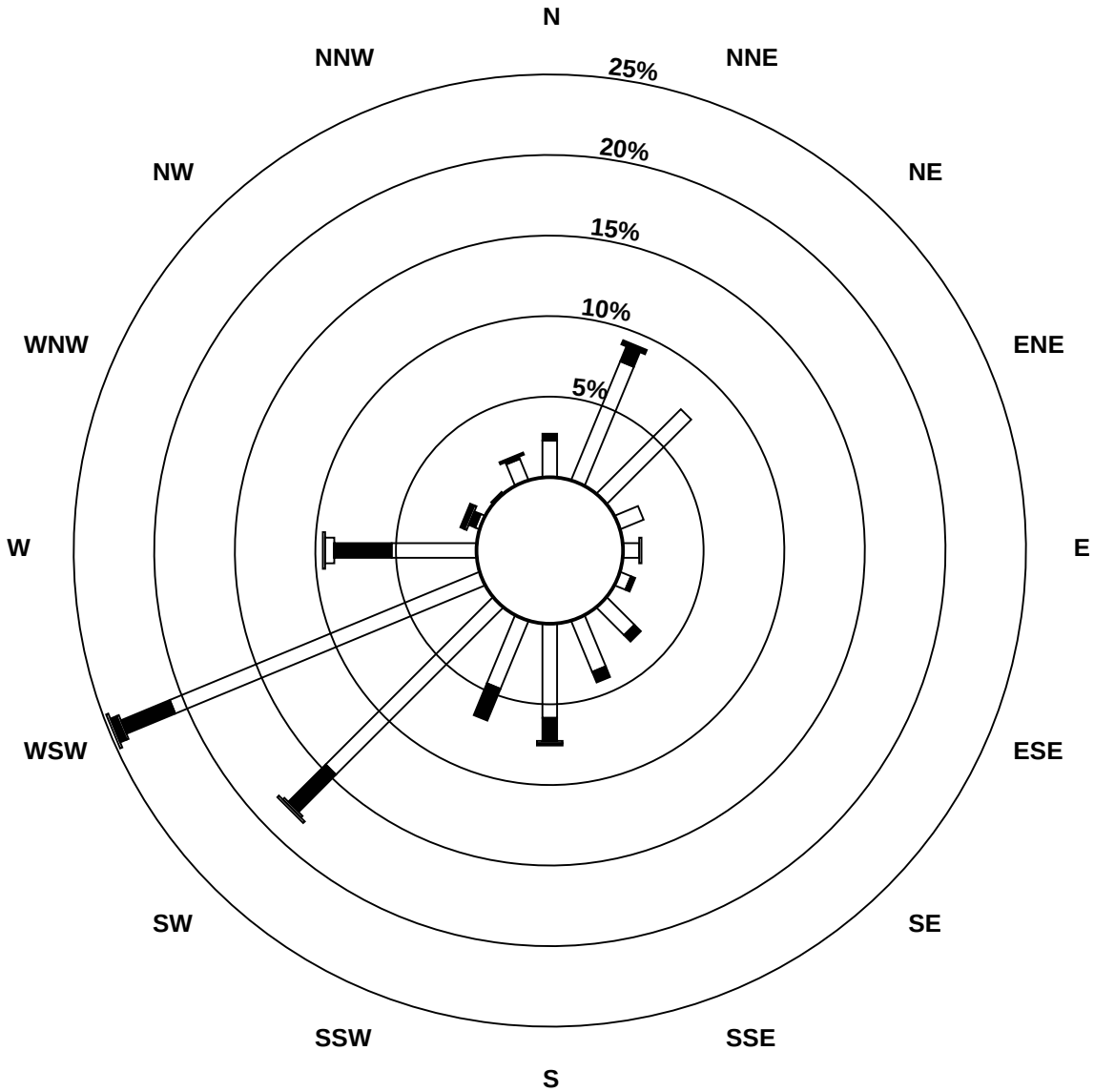
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

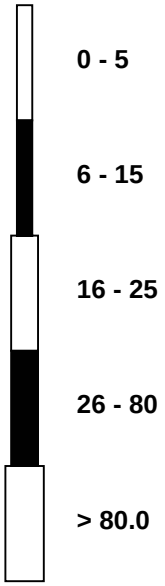
Pollutant Rose

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

Smoky Heights - October 2010



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



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 23.5 ^{o}C on Oct 7 17:00 Maximum Daily Average: 14.7 ^{o}C on Oct 7

Minimum Value: -6 ^{o}C on Oct 29 08:00 Minimum Daily Average: -1.2 ^{o}C on Oct 26
Maximum Diurnal Average: 11.2 ^{o}C at hour 16 Minimum Diurnal Average: 2.8 ^{o}C at hour 8
Monthly Average: 6.22 ^{o}C Percentiles: P_1 = -5.0 P_{10} = -0.9 Q_1 = 1.1 Median = 5.7 Q_3 = 10.3 P_{90} = 13.9 P_{99} = 22.4

Hours in Service:	744
Hours of Data:	740
Hours of Missing Data:	4
Hours of Calibration:	0
Percent Operational Time:	99.5

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-Oct	9	9	8	8	8	8	8	7	9	11	13	14	16	18	19	20	20	19	17	14	14	13	10	8	12.5	20.4
2-Oct	7	6	5	3	4	3	4	4	6	7	9	14	21	22	22	21	20	19	17	16	15	14	12	9	11.7	22.1
3-Oct	6	4	4	3	1	0	0	0	5	9	12	13	13	15	16	17	17	15	12	11	11	10	10	10	8.9	17.0
4-Oct	10	8	8	5	5	5	4	5	7	8	9	9	8	8	9	9	10	8	8	8	7	6	5	5	7.2	9.8
5-Oct	4	3	3	2	3	3	1	1	4	6	8	10	11	12	13	14	14	14	13	12	10	9	7	7	7.6	13.9
6-Oct	5	6	4	4	4	4	3	4	9	13	18	20	20	21	22	23	23	20	16	15	17	15	14	12	13.0	23.0
7-Oct	12	11	9	7	7	7	6	6	9	12	16	19	21	23	23	23	24	22	20	18	18	17	14	10	14.7	23.5
8-Oct	9	8	8	6	7	14	14	13	12	13	16	17	17	18	P	18	18	17	13	9	8	8	8	9	12.2	18.4
9-Oct	10	9	9	10	10	11	11	9	8	13	16	20	21	22	22	23	22	19	15	12	13	14	14	15	14.4	22.9
10-Oct	14	13	12	13	13	12	13	14	15	14	12	13	14	15	15	14	13	12	10	9	9	8	8	8	12.3	15.2
11-Oct	9	8	7	6	6	6	6	6	6	8	9	10	12	13	13	13	12	11	10	8	9	7	7	7	8.7	13.0
12-Oct	6	6	6	4	5	3	2	2	3	6	9	11	12	13	13	13	13	12	12	11	11	11	11	10	8.5	13.4
13-Oct	10	11	10	7	8	9	9	8	9	10	11	13	13	13	14	14	13	12	10	8	8	8	7	6	10.1	14.3
14-Oct	7	7	8	8	7	6	5	3	4	7	11	13	14	13	13	13	12	11	9	9	8	8	7	6	8.8	13.7
15-Oct	6	5	6	4	1	1	2	3	4	5	7	8	9	10	9	9	9	8	6	4	2	1	1	0	5.0	9.8
16-Oct	-2	-3	-3	-3	-4	-3	-5	-5	-3	0	4	6	8	10	10	10	10	8	5	3	2	0	-1	-1	1.8	10.3
17-Oct	-2	-3	-1	-2	-2	-1	0	2	3	6	8	10	12	13	13	13	12	10	8	7	6	5	3	2	5.0	12.7
18-Oct	2	3	3	4	3	2	3	4	7	8	12	13	13	13	12	12	13	13	12	11	9	8	9	9	8.2	13.0
19-Oct	7	6	5	5	4	5	5	6	6	7	8	9	10	11	11	11	10	8	5	2	0	-1	-2	-1	5.8	11.2
20-Oct	1	1	-2	-3	-3	-2	-1	-2	-1	1	4	6	7	6	7	6	6	5	5	4	4	5	4	4	2.6	6.6
21-Oct	5	4	2	0	0	0	1	1	1	2	4	6	6	6	7	7	6	6	5	5	4	4	3	3	3.6	7.0
22-Oct	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1.1	2.6
23-Oct	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	3	0.9	2.7
24-Oct	3	3	3	3	3	3	3	3	3	3	3	3	4	4	3	3	3	3	2	2	2	1	1	1	2.6	3.6
25-Oct	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	-1	0.2	1.2
26-Oct	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	-1	-2	-2	-2	-2	-2	-2	-1.2	-0.1
27-Oct	-2	-2	-3	-3	-3	-3	-3	-3	-3	-2	-1	0	2	3	5	6	4	2	2	1	1	1	1	1	-0.1	6.2
28-Oct	1	1	1	1	0	0	-1	-1	-1	-1	-1	-1	0	1	2	3	5	1	-1	-1	-1	-1	-2	-3	0.0	5.0
29-Oct	-3	-5	-5	-5	-5	-5	-6	-6	-6	-4	-3	-1	2	6	9	10	9	7	5	3	3	2	1	0	0.2	10.0
30-Oct	2	1	2	2	1	2	2	2	P	P	P	7	8	8	9	10	8	5	4	2	1	1	1	0	3.8	9.7
31-Oct	-2	0	1	0	1	1	-1	0	0	2	4	5	5	8	10	10	8	5	3	0	2	1	0	1	2.7	9.7
	4.3	3.9	3.5	2.9	2.8	2.9	2.8	2.8	3.9	5.4	7.2	8.6	9.7	10.5	10.7	11.2	10.9	9.5	7.9	6.7	6.2	5.6	4.9	4.5	Diurnal Average	
	13.6	13.0	12.2	13.2	13.3	13.6	14.2	13.5	15.2	13.8	18.0	20.3	21.4	22.7	22.6	23.4	23.5	22.0	19.6	18.4	17.9	17.0	14.2	14.8	Diurnal Maximum	

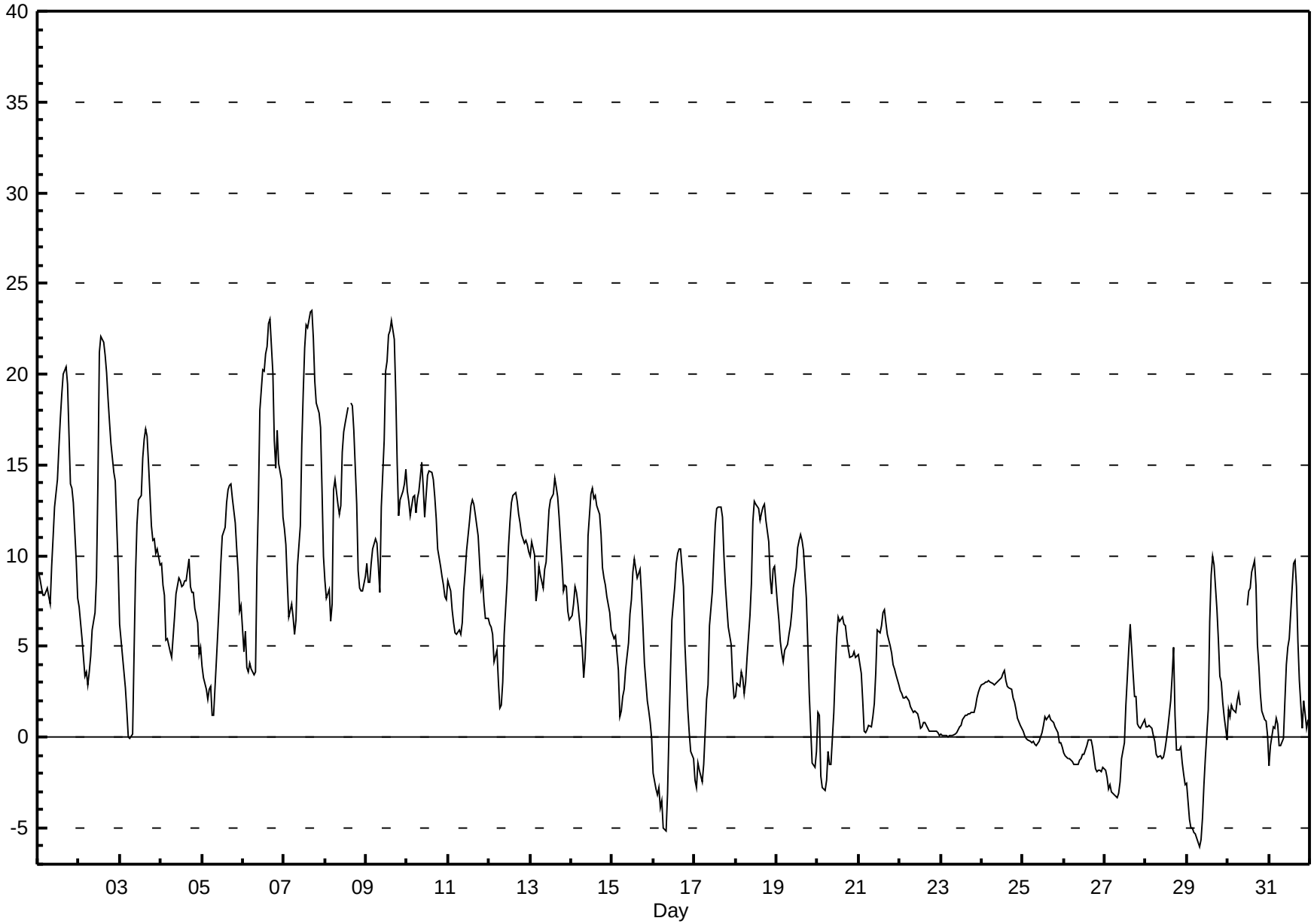
P - Power Failure

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - October 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	13	14	14	12	13	19	16	11	12	15	15	12	9	10	13	14	15	14	9	8	9	7	8	7	11.3	18.9
Dir	142	150	146	132	127	129	128	142	153	151	165	163	152	150	138	131	131	123	125	134	154	177	223	222	144.8	128.8
2 Spd	10	9	10	10	9	7	10	9	9	10	10	12	28	32	33	35	34	32	29	33	26	23	8	10	16.0	34.8
Dir	223	225	205	195	222	200	203	216	214	181	183	191	254	265	271	267	263	259	260	273	267	282	233	261	250.2	266.6
3 Spd	11	13	15	15	15	6	6	10	7	5	4	4	6	7	10	11	12	11	8	9	8	9	11	10	2.6	15.2
Dir	221	241	268	264	269	214	220	259	253	201	121	76	105	54	50	39	35	40	15	1	12	10	7	11	329.8	263.7
4 Spd	10	8	8	7	6	2	2	3	4	5	6	5	7	7	10	11	16	10	14	18	17	20	20	22	5.5	22.4
Dir	6	11	8	30	31	242	221	189	206	272	182	190	148	147	172	151	253	252	217	223	236	245	257	253	234.8	252.8
5 Spd	21	19	17	18	23	24	18	18	23	17	22	24	23	23	24	24	19	27	37	23	8	10	14	7	19.4	36.9
Dir	255	258	242	250	258	259	236	240	252	237	237	237	240	235	217	211	207	223	235	231	223	214	214	236	236.1	235.5
6 Spd	7	6	5	6	5	7	6	9	11	8	16	28	30	26	20	18	16	14	6	12	18	18	16	12	11.4	29.6
Dir	251	239	275	239	241	249	249	243	232	240	191	199	191	188	190	185	199	174	178	232	258	262	261	258	216.6	190.8
7 Spd	13	9	5	5	7	7	2	3	5	6	7	11	11	18	20	16	16	14	13	16	16	14	7	8	5.7	20.3
Dir	267	218	270	253	280	268	179	233	264	284	55	83	97	136	141	144	139	125	120	137	149	168	226	222	157.5	140.5
8 Spd	9	10	3	5	7	27	31	19	13	15	30	32	34	32	P	27	20	11	9	4	4	9	8	10	12.9	34.1
Dir	216	245	267	232	204	263	268	262	237	236	245	253	252	251	P	251	255	274	296	100	359	23	40	63	255.5	251.8
9 Spd	10	8	5	14	16	14	13	8	9	7	5	23	20	27	23	16	13	3	2	1	6	4	9	10	8.6	27.4
Dir	49	37	170	166	157	178	165	215	232	190	185	217	195	198	190	223	238	249	27	294	173	201	157	157	190.0	197.6
10 Spd	7	9	6	11	11	3	6	10	15	42	45	53	57	56	54	59	51	42	34	32	32	34	32	37	28.3	59.1
Dir	164	179	149	152	152	180	199	189	239	266	256	259	258	245	245	245	238	237	229	225	227	225	229	239	238.4	245.2
11 Spd	50	42	30	27	26	32	35	35	31	32	38	37	33	31	30	22	17	13	15	16	28	18	21	20	28.0	50.0
Dir	247	243	242	241	241	238	246	240	241	241	240	240	237	235	238	239	228	240	257	242	235	224	222	219	239.1	247.1
12 Spd	18	23	20	18	24	16	17	16	11	15	13	20	22	25	24	22	20	20	19	13	14	19	15	17	17.3	24.8
Dir	231	231	231	237	245	250	240	239	224	223	226	238	235	237	234	232	217	214	221	220	176	181	183	186	224.9	237.3
13 Spd	14	19	13	12	22	31	26	16	14	11	12	22	22	24	18	13	8	8	5	8	10	10	8	10	8.9	30.8
Dir	179	197	218	272	232	246	253	255	244	234	256	271	267	261	279	289	304	17	49	76	100	86	51	29	252.8	246.0
14 Spd	9	11	12	7	7	7	9	12	13	9	12	36	40	36	35	35	30	24	22	20	19	16	15	17	15.9	39.6
Dir	43	146	159	178	184	188	234	241	252	243	274	271	270	261	260	259	253	245	238	239	221	215	245	260	247.5	269.9
15 Spd	20	19	25	21	14	20	24	26	27	31	38	36	32	30	31	35	36	31	23	17	19	20	18	14	25.0	38.1
Dir	254	236	237	232	237	253	253	257	260	256	258	259	263	267	262	261	259	252	252	257	257	255	257	244	254.7	258.1
16 Spd	9	11	14	16	9	9	11	13	13	10	14	24	21	20	21	22	22	15	14	16	14	12	12	10	14.3	24.1
Dir	233	231	233	252	229	218	244	255	241	209	212	241	243	234	234	236	232	233	241	243	255	249	242	244	237.5	240.8
17 Spd	13	13	15	10	11	11	14	21	20	25	25	37	36	36	33	29	27	17	18	18	14	13	15	10	19.4	36.5
Dir	256	250	223	222	235	239	237	238	241	244	249	253	261	261	259	256	259	255	244	243	210	217	223	218	246.1	253.1
18 Spd	10	9	11	7	6	12	15	13	13	17	34	39	35	40	24	20	27	30	33	22	12	15	18	20	19.5	40.4
Dir	206	238	237	236	218	194	205	212	200	203	233	238	237	245	235	224	230	232	247	241	237	232	237	241	231.3	245.4
19 Spd	16	15	13	9	13	14	16	18	13	12	17	24	26	26	27	26	16	3	5	6	9	6	11	11	14.2	26.7
Dir	252	247	258	258	252	245	238	252	259	298	263	264	266	271	270	269	283	339	279	234	252	249	260	266	262.1	270.3
20 Spd	14	13	9	11	10	15	7	8	4	5	4	2	5	8	9	11	10	10	9	7	6	6	7	7	2.9	14.9
Dir	274	265	246	254	260	265	233	199	193	176	178	106	25	25	33	25	12	19	20	26	348	12	23	21	319.2	265.2
21 Spd	2	6	7	9	13	9	5	5	5	2	1	7	8	7	6	10	12	8	9	9	9	7	7	8	2.9	13.0
Dir	191	215	232	223	221	211	191	172	199	215	162	349	360	356	327	338	344	342	339	352	341	344	18	17	312.9	221.2
22 Spd	8	9	9	10	10	11	13	12	13	15	17	16	17	15	17	17	16	15	15	15	12	10	9	8	12.5	16.9
Dir	15	356	10	29	42	45	46	40	39	42	46	41	37	34	29	29	27	26	28	26	23	16	16	17	30.8	29.2

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

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
23 Spd	11	8	7	8	7	8	6	4	7	9	7	7	9	11	10	12	14	13	13	15	14	13	15	13	9.8	15.3
Dir	14	20	357	356	358	17	30	355	23	33	41	30	28	30	34	28	27	23	27	28	31	38	37	49	26.4	27.9
24 Spd	12	11	12	12	11	12	13	16	17	16	12	13	14	13	12	10	11	13	13	14	12	13	14	15	12.2	16.8
Dir	45	45	44	51	58	71	80	88	84	77	64	61	56	61	52	36	25	37	35	25	34	35	33	28	51.9	83.5
25 Spd	15	N	N	N	N	N	N	N	N	N	N	9	9	9	9	9	8	9	9	9	11	12	10	11	--	14.5
Dir	29	N	N	N	N	N	N	N	N	N	N	32	32	58	30	41	41	46	56	44	71	52	47	44	--	28.5
26 Spd	11	11	11	11	13	13	12	15	12	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	14.6
Dir	41	34	32	30	41	43	39	46	48	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	46.4
27 Spd	N	N	N	N	N	N	N	N	N	N	N	N	5	5	4	3	6	3	14	10	4	3	8	2	--	14.0
Dir	N	N	N	N	N	N	N	N	N	N	N	N	172	141	176	167	140	258	257	248	255	183	199	212	--	257.0
28 Spd	4	5	6	3	6	4	7	4	5	9	9	8	6	4	1	3	1	4	3	6	6	6	6	9	3.0	9.1
Dir	17	15	345	30	206	201	189	189	194	195	200	220	207	183	227	249	106	27	340	225	225	217	240	241	218.9	240.6
29 Spd	9	7	9	8	8	6	6	3	4	6	5	5	11	21	29	23	22	17	18	16	11	6	6	8	10.8	28.8
Dir	223	226	234	240	239	234	235	263	240	227	219	193	201	225	228	233	224	224	221	216	221	214	199	232	225.0	227.5
30 Spd	17	14	14	11	8	13	16	10	P	P	P	12	15	14	13	13	10	6	3	1	5	1	7	7	8.9	16.7
Dir	204	205	182	187	193	189	181	182	P	P	P	179	178	175	177	164	165	172	243	346	359	213	213	251	187.1	204.4
31 Spd	7	5	7	5	6	8	6	5	10	10	14	14	23	23	24	26	22	14	9	1	6	5	2	6	8.7	25.9
Dir	212	233	226	246	240	247	225	224	191	236	225	215	243	251	259	263	267	277	296	119	144	146	18	31	244.8	262.7
Spd	5.8	7.2	6.7	5.9	6.6	7.8	7.8	7.9	7.8	8.8	11.1	13.4	13.4	13.8	12.2	12.0	10.6	7.4	7.6	6.4	5.6	5.2	5.4	5.2	Diurnal Average	
Dir	244.3	234.6	234.0	234.6	230.7	233.7	229.2	233.7	235.0	235.8	235.5	242.6	243.9	241.4	241.2	245.0	245.7	244.9	250.3	244.2	235.8	235.1	241.2	249.5		
Spd	50.0	41.6	29.6	26.9	26.1	31.6	34.7	34.6	30.5	42.5	44.9	52.7	57.3	56.5	53.9	59.1	51.1	42.2	36.9	32.7	32.0	34.1	31.8	37.2	Diurnal Maximum	
Dir	247.1	243.2	241.9	241.2	240.7	238.4	246.5	239.9	241.2	266.2	255.9	258.9	258.4	244.6	245.1	245.2	238.4	237.1	235.5	272.7	226.9	225.0	229.0	239.2		

Maximum Speed Value: 59 km/h on Oct 10 16:00
Maximum Daily Speed Average: 28.3 km/h on Oct 10
Maximum Diurnal Speed Average: 13.8 km/h at hour 14

Minimum Speed Value: 1 km/h on Oct 28 15:00
Minimum Daily Speed Average: 2.6 km/h on Oct 28
Minimum Diurnal Speed Average: 5.2 km/h at hour 22

Monthly Average Velocity: 8.35 km/h 239.77 deg

Speed Percentiles: P_1 = 1.7 P_{10} = 5.3 Q_1 = 8.0 Median = 12.2 Q_3 = 18.3 P_{90} = 28.6 P_{99} = 49.4

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

Hours in Service:	744
Hours of Data:	703
Hours of Missing Data:	41
Percent Operational Time:	94.5

P - Power Failure N - Not Valid

Frequency Distribution

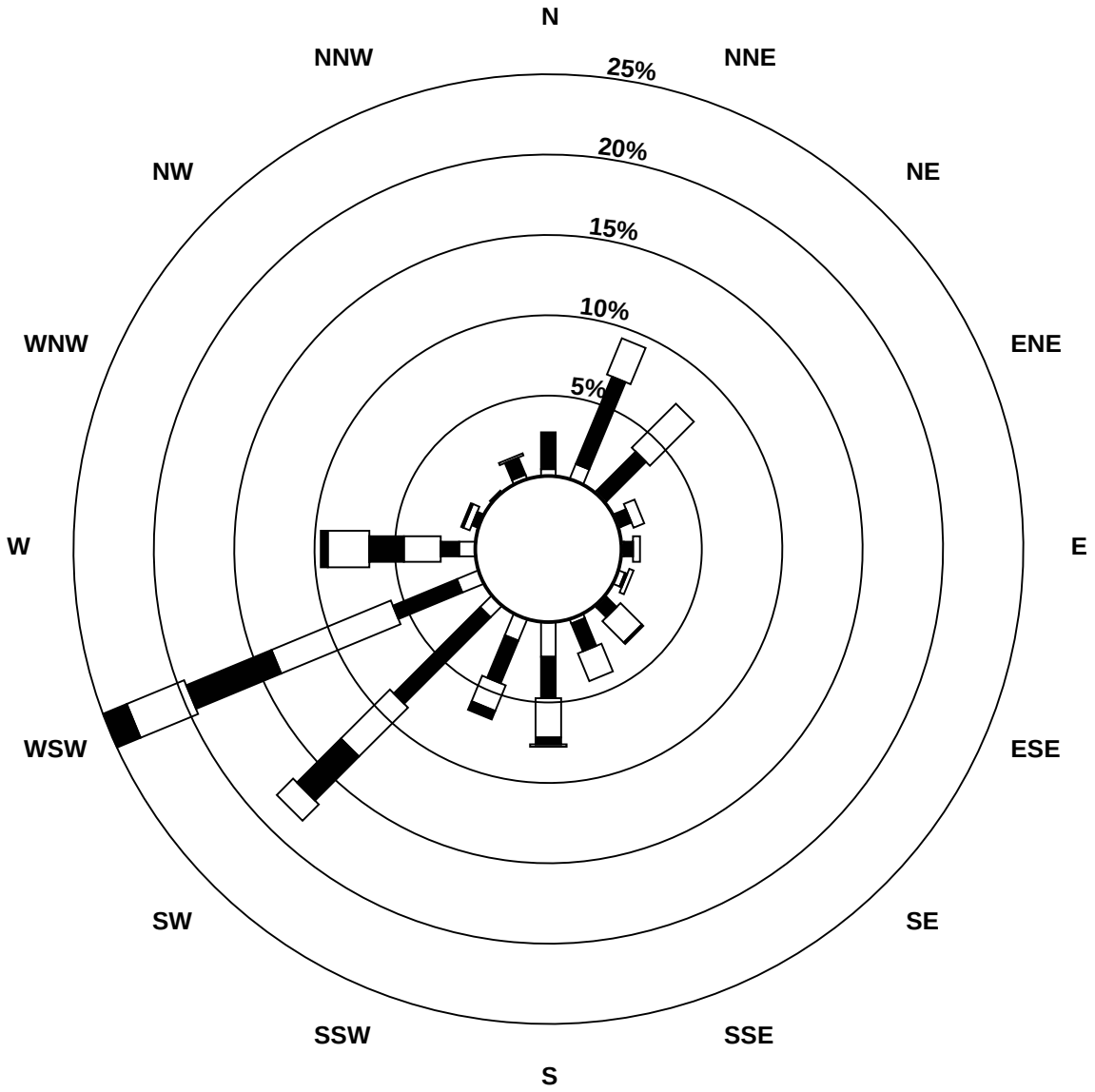
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	7	42	1	0	0	0	50
NorthEast	4	47	52	0	0	0	103
East	4	4	8	0	0	0	16
SouthEast	3	17	22	1	0	0	43
South	19	36	27	6	2	0	90
SouthWest	12	82	70	51	25	10	250
West	9	19	48	34	29	6	145
NorthWest	1	4	1	0	0	0	6
Total	59	251	229	92	56	16	703

PASZA
Peace Air Shed Zone Association

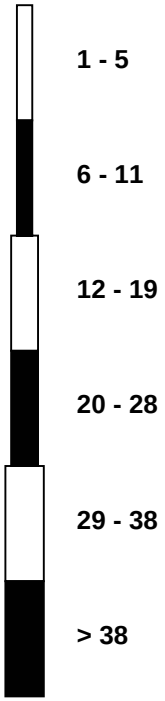
Wind Rose

Wind Speed (WS) (km/h)

Smoky Heights - October 2010



Wind Speed Classes (km/h)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - October 2010

Maximum Speed: 59 km/h on Oct 10 16:00

Maximum Daily Speed Average: 31.2 km/h on Oct 10

Minimum Speed: 3 km/h on Oct 28 17:00

Minimum Daily Speed Average: 5.5 km/h on Oct 28

Maximum Diurnal Speed Average: 21.5 km/h at hour 14

Minimum Diurnal Speed Average: 11.2 km/h at hour 4

Monthly Average Speed: 14.86 km/h

Percentiles: P_1 = 3.5 P_{10} = 5.9 Q_1 = 8.3 Median = 12.4 Q_3 = 18.5 P_{90} = 28.8 P_{99} = 49.4

Hours in Service: 744
Hours of Data: 703
Hours of Missing Data: 41

Percent Operational Time: 94.5

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-Oct	13	14	14	12	13	19	16	11	12	15	15	13	10	11	14	15	15	14	9	8	10	8	8	7	12.4	18.9
2-Oct	10	9	10	10	10	7	11	10	9	10	10	13	28	32	33	35	34	32	29	33	26	23	9	10	18.4	35.1
3-Oct	11	14	15	15	15	7	7	10	8	6	5	5	7	8	10	11	12	11	8	9	9	9	11	10	9.8	15.2
4-Oct	10	8	8	7	6	5	4	9	7	7	7	6	8	7	10	11	22	11	14	18	17	20	20	22	11.0	22.4
5-Oct	21	19	17	18	23	24	18	18	24	17	22	24	24	23	24	24	20	27	37	23	9	10	14	9	20.4	37.0
6-Oct	8	7	5	6	5	7	6	9	11	8	17	29	30	26	21	19	17	15	7	13	18	18	16	12	13.8	29.7
7-Oct	14	10	7	6	7	7	4	4	5	7	7	12	12	19	21	17	16	14	13	16	16	14	9	8	11.0	20.8
8-Oct	9	10	7	6	7	28	31	19	13	15	30	32	35	32	P	27	21	12	10	5	6	9	8	10	16.5	34.5
9-Oct	10	8	7	15	16	14	13	9	9	7	6	23	21	28	23	17	13	4	4	4	7	5	9	10	11.8	27.8
10-Oct	8	10	6	11	11	5	7	11	18	43	45	53	58	57	54	59	51	42	34	32	32	34	32	37	31.2	59.3
11-Oct	50	42	30	27	26	32	35	35	31	32	38	37	33	32	30	23	17	14	15	16	28	18	21	20	28.3	50.1
12-Oct	18	23	20	18	24	16	17	16	12	15	14	20	23	25	24	23	21	20	19	13	14	19	15	17	18.5	25.2
13-Oct	14	19	15	13	22	31	26	17	14	11	12	22	22	25	19	14	9	8	5	8	10	11	9	10	15.1	30.9
14-Oct	9	12	12	7	8	7	9	12	14	9	14	36	40	36	35	35	30	24	22	20	20	17	16	18	19.1	39.8
15-Oct	20	20	25	21	14	20	24	26	27	31	38	36	33	31	32	35	36	31	23	17	19	20	18	15	25.4	38.2
16-Oct	9	12	14	16	9	10	11	13	13	10	14	24	21	21	22	22	22	15	14	16	14	12	12	10	14.8	24.3
17-Oct	13	13	15	10	11	11	14	21	20	25	25	37	36	36	33	30	27	17	18	18	15	13	15	10	20.2	36.7
18-Oct	10	9	12	8	7	12	15	13	14	17	35	39	35	41	24	20	27	30	33	22	12	15	18	20	20.3	40.6
19-Oct	17	15	13	9	13	14	16	18	13	12	18	24	26	26	27	26	17	5	5	6	9	7	11	12	15.0	26.9
20-Oct	14	13	9	11	10	15	8	8	5	6	4	4	5	8	10	11	10	10	9	7	6	6	7	7	8.5	14.9
21-Oct	5	7	8	9	13	10	7	6	6	3	3	8	8	8	7	10	12	8	9	9	9	7	7	8	7.8	13.2
22-Oct	8	9	9	10	10	11	13	12	13	15	17	16	17	15	17	17	16	15	15	15	12	10	9	8	12.9	17.0
23-Oct	11	8	7	8	7	8	7	4	8	9	8	7	9	11	10	12	14	13	13	15	14	13	15	13	10.2	15.4
24-Oct	12	11	13	12	11	12	13	16	17	16	12	13	14	13	12	10	11	13	13	14	13	13	14	15	13.0	16.9
25-Oct	15	N	N	N	N	N	N	N	N	N	N	9	9	9	9	9	9	9	10	9	12	12	10	11	--	14.5
26-Oct	12	11	11	11	13	13	12	15	12	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	14.7
27-Oct	N	N	N	N	N	N	N	N	N	N	N	N	5	6	5	4	6	5	14	10	4	5	8	5	--	14.1
28-Oct	4	5	6	4	6	4	7	4	5	9	9	8	7	5	3	4	3	4	4	6	7	6	6	9	5.5	9.3
29-Oct	9	7	9	8	8	6	6	4	4	6	5	5	11	21	29	23	22	17	19	16	11	7	6	8	11.2	29.0
30-Oct	17	14	14	11	8	13	16	11	P	P	P	12	15	14	13	13	10	6	5	5	6	3	7	7	10.5	16.8
31-Oct	8	5	7	6	6	8	6	6	10	10	14	14	23	23	24	26	22	15	9	4	8	5	3	6	11.2	26.0
Diurnal Average	12.9	12.5	11.9	11.2	11.7	12.9	13.0	12.6	12.6	13.7	16.5	20.1	20.8	21.5	20.5	20.0	18.7	15.4	14.5	13.7	13.0	12.4	12.1	12.2		
Diurnal Maximum	50.1	41.7	29.7	26.9	26.2	31.7	34.8	34.6	30.6	42.8	45.2	52.8	57.5	56.8	54.2	59.3	51.4	42.3	37.0	33.0	32.1	34.2	31.8	37.4		

P - Power Failure N - Not Valid

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

PASZA
Peace Air Shed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - October 2010

Maximum Value: 97.5 deg on Oct 31 20:00

Minimum Value: 2.3 deg on Oct 15 21:00

Percentiles: P_1 = 2.8 P_{10} = 4.1 Q_1 = 5.9 Median = 8.7 Q_3 = 15.2 P_{90} = 29.2 P_{99} = 83.4

Hours in Service:	744
Hours of Data:	703
Hours of Missing Data:	41
Hours of Calibration:	0
Percent Operational Time:	94.5

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Oct	13	4	4	9	6	4	8	8	6	8	11	20	24	22	14	14	12	7	6	6	28	16	15	16	27.6
2-Oct	5	8	10	12	20	24	18	16	11	9	8	14	13	10	7	7	6	4	9	8	7	5	19	9	23.6
3-Oct	13	17	5	4	6	38	33	8	23	30	29	39	27	25	16	14	11	8	6	9	14	8	15	12	38.8
4-Oct	7	9	14	10	15	94	82	74	52	39	43	44	14	15	8	9	51	23	5	4	7	4	6	3	94.0
5-Oct	6	8	5	10	4	4	11	7	4	11	8	7	7	6	8	11	9	7	5	5	40	13	4	38	40.5
6-Oct	33	16	30	22	22	19	17	18	7	19	16	6	6	7	13	16	11	17	31	27	7	4	3	11	33.3
7-Oct	10	25	45	30	22	14	62	25	21	29	11	15	19	13	13	12	8	4	5	4	4	9	29	12	62.0
8-Oct	14	14	89	23	15	6	4	7	8	9	8	7	8	11	P	10	9	19	25	47	53	5	15	12	89.5
9-Oct	9	9	52	13	9	7	11	32	15	18	45	13	10	10	12	25	16	38	74	85	29	32	20	7	85.1
10-Oct	17	11	27	7	4	47	18	15	35	7	7	4	5	6	5	5	6	3	5	5	3	3	3	6	46.9
11-Oct	3	3	4	3	3	4	3	3	4	7	6	7	8	11	8	8	6	6	9	9	6	5	6	6	11.4
12-Oct	4	3	7	6	4	7	3	4	10	5	15	11	11	10	8	8	8	6	5	12	9	4	6	4	14.6
13-Oct	8	4	30	15	5	5	7	7	5	13	8	8	9	8	17	19	34	7	19	14	6	17	12	8	34.0
14-Oct	17	40	12	16	18	18	14	7	16	15	62	6	6	6	5	6	9	6	5	7	16	16	22	8	62.2
15-Oct	7	6	4	4	6	4	2	3	3	4	6	4	12	15	7	5	7	4	3	3	2	3	5	11	14.6
16-Oct	21	15	12	8	21	15	8	5	14	9	19	7	9	13	11	11	7	3	8	3	8	10	13	12	21.3
17-Oct	14	8	7	7	9	8	5	3	4	6	5	5	7	8	8	7	5	4	5	8	20	10	9	9	19.8
18-Oct	10	13	19	27	33	7	9	10	21	9	7	6	5	6	8	5	6	9	7	9	7	4	4	3	33.1
19-Oct	7	6	9	13	13	9	7	6	18	9	9	6	7	9	8	7	13	50	24	14	10	27	9	21	49.8
20-Oct	13	10	9	14	11	4	31	7	32	13	37	54	15	8	8	7	7	7	4	6	12	17	7	10	53.9
21-Oct	82	16	24	16	10	13	61	33	39	64	91	34	20	16	22	14	12	11	5	12	7	7	21	8	90.8
22-Oct	13	8	7	9	4	4	4	6	4	8	6	6	5	5	5	6	4	4	3	3	5	6	5	6	12.9
23-Oct	8	15	15	11	12	10	13	19	11	10	9	8	5	6	7	6	4	5	7	3	4	4	11	5	18.8
24-Oct	7	6	7	9	8	11	10	8	7	7	6	6	6	8	10	8	5	6	10	7	12	6	5	4	12.1
25-Oct	3	N	N	N	N	N	N	N	N	N	N	5	8	10	8	10	10	9	7	5	13	9	11	6	12.9
26-Oct	7	5	4	4	4	5	5	6	4	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	7.1
27-Oct	N	N	N	N	N	N	N	N	N	N	N	N	20	24	39	35	26	51	5	14	32	69	6	69	69.2
28-Oct	24	10	11	50	12	10	8	15	7	12	11	17	18	57	88	15	72	17	32	18	10	12	10	6	88.3
29-Oct	7	23	6	7	8	5	12	29	14	7	12	11	13	7	5	5	3	3	5	4	10	15	25	21	28.8
30-Oct	4	6	16	12	7	5	3	14	P	P	P	5	5	8	6	5	9	27	61	76	32	94	12	11	94.4
31-Oct	21	12	18	21	20	8	15	33	20	19	7	9	11	6	7	6	5	6	13	97	51	29	54	22	97.5
	82.2	40.4	89.5	50.2	33.1	94.0	82.0	74.2	52.4	63.6	90.8	53.9	26.6	56.5	88.3	34.7	72.0	50.8	73.6	97.5	52.8	94.4	54.2	69.2	

P - Power Failure N - Not Valid

PASZA
Beaverlodge Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.5 ppb on Oct 8 23:00 Maximum Daily Average: 0.5 ppb on Oct 1

Minimum Value: 0 ppb on Oct 2 17:00 Minimum Daily Average: 0.0 ppb on Oct 18
Maximum Diurnal Average: 0.3 ppb at hour 1 Minimum Diurnal Average: 0.1 ppb at hour 17
Monthly Average: 0.19 ppb 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} = 1.1

Hours in Service:	744
Hours of Data:	704
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

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-Oct	D	0	0	0	A	1	1	0	0	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	0.5	0.8
2-Oct	1	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
3-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0.2	0.6
4-Oct	1	1	0	1	A	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
5-Oct	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
6-Oct	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	0.2
7-Oct	0	0	0	0	A	0	0	0	C	C	C	C	0	0	1	1	0	0	0	0	0	0	0	0	0.2	1.3
8-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.1	1.5
9-Oct	1	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
10-Oct	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
11-Oct	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
12-Oct	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
13-Oct	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-Oct	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
15-Oct	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	0.4
16-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.3	0.6
17-Oct	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
18-Oct	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
19-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	0.6
20-Oct	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
21-Oct	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
22-Oct	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
23-Oct	1	1	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
24-Oct	P	P	P	P	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.4	0.9
25-Oct	1	1	1	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.4
26-Oct	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-Oct	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
28-Oct	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
29-Oct	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	0.4
30-Oct	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	0.4
31-Oct	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
	0.3	0.3	0.3	0.2	--	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	Diurnal Average	
	1.1	1.1	1.1	0.8	--	1.3	0.8	1.1	1.1	1.4	0.8	0.7	0.6	0.5	0.7	1.3	0.4	0.3	0.5	0.6	0.8	0.8	1.5	1.0	Diurnal Maximum	

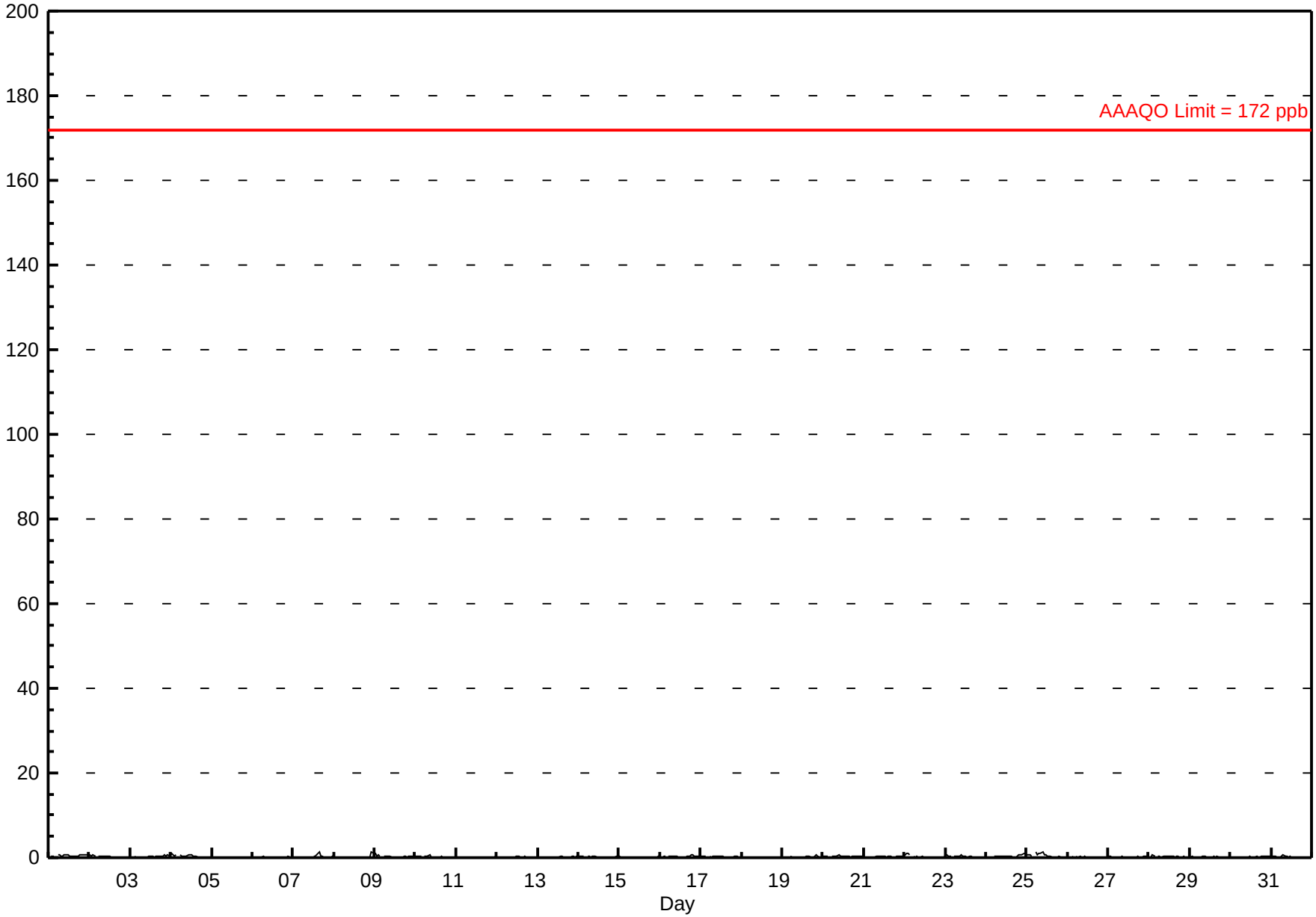
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - October 2010

Maximum Value: 3.3 ppb on Oct 8 23:00

Maximum Daily Average: 0.8 ppb on Oct 25

Minimum Value: 0 ppb on Oct 5 20:00

Minimum Daily Average: 0.1 ppb on Oct 6

Maximum Diurnal Average: 0.5 ppb at hour 1

Minimum Diurnal Average: 0.3 ppb at hour 18

Monthly Average: 0.39 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.1 Q_1 = 0.2 Median = 0.3 Q_3 = 0.5 P_{90} = 0.7 P_{99} = 1.7

Hours in Service:	744
Hours of Data:	704
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

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-Oct	D	1	1	0	A	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	0.7	1.0
2-Oct	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
3-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0.4	1.3
4-Oct	2	1	1	1	A	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	1.5
5-Oct	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
6-Oct	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	0.4
7-Oct	0	0	0	0	A	0	0	0	C	C	C	C	1	1	1	2	1	0	0	0	0	0	1	1	0.5	1.8
8-Oct	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0.4	3.3
9-Oct	2	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	1.9
10-Oct	1	1	0	0	A	0	0	1	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.5	3.1
11-Oct	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
12-Oct	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
13-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	0.5
14-Oct	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.6
15-Oct	1	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	0.6
16-Oct	0	0	1	1	A	1	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0	0.5	0.9
17-Oct	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
18-Oct	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
19-Oct	0	0	0	0	A	2	1	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	0	0	0.4	1.9
20-Oct	0	0	1	1	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.5
21-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0.4	0.7
22-Oct	1	1	2	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6
23-Oct	1	1	0	1	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.1
24-Oct	P	P	P	P	A	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	0.6	1.4
25-Oct	1	1	1	1	A	2	1	2	1	2	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0.8	2.0
26-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
27-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
28-Oct	0	0	1	1	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
29-Oct	0	1	1	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
30-Oct	0	0	0	0	A	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0.4	1.3
31-Oct	1	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
	0.5	0.5	0.5	0.4	--	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	Diurnal Average	
	1.9	1.3	1.6	1.3	--	2.0	1.3	1.6	3.1	1.7	1.3	0.9	0.9	0.8	1.2	1.8	0.7	0.5	0.8	0.9	1.3	1.3	3.3	2.6	Diurnal Maximum	

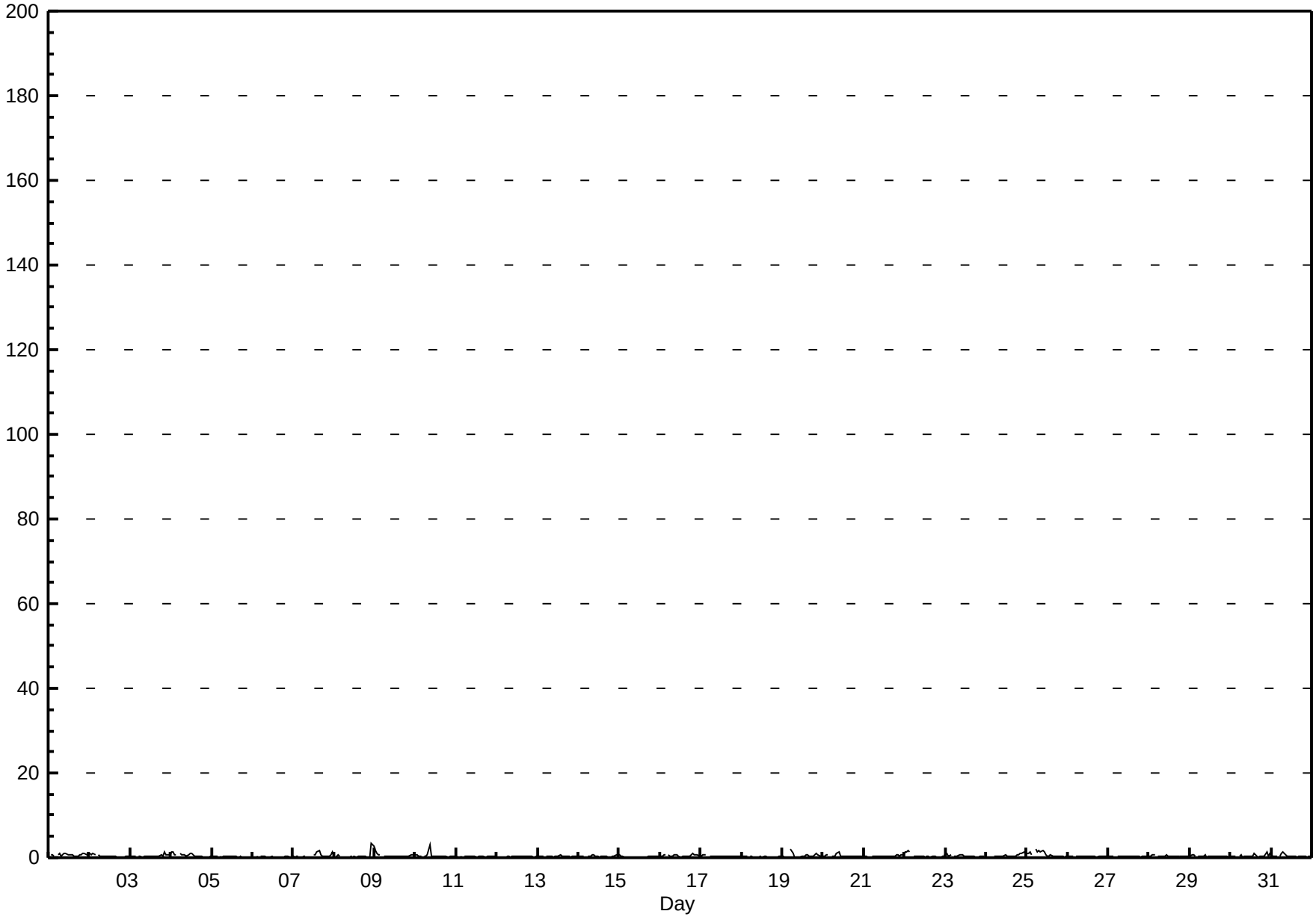
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - October 2010



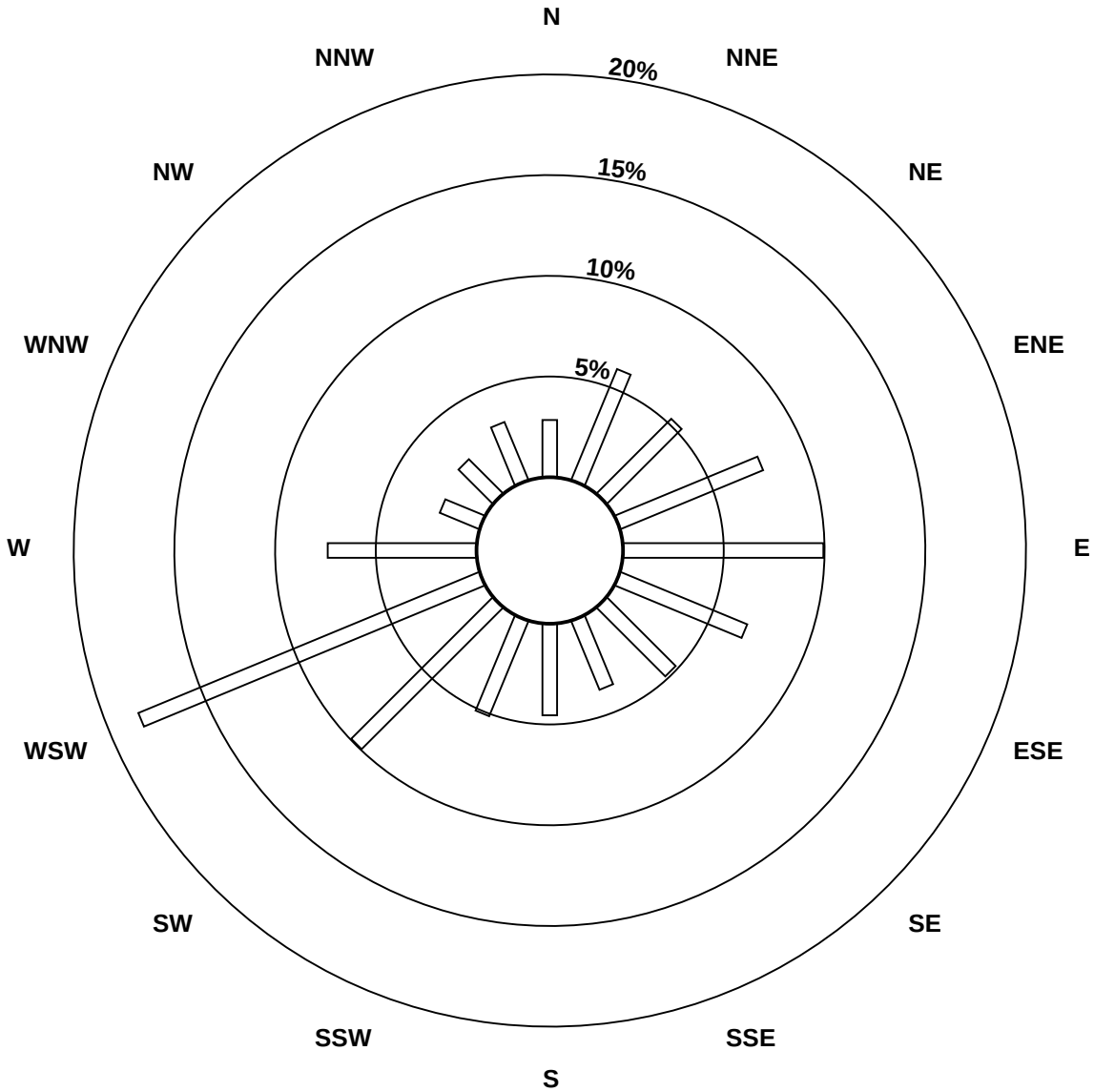
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

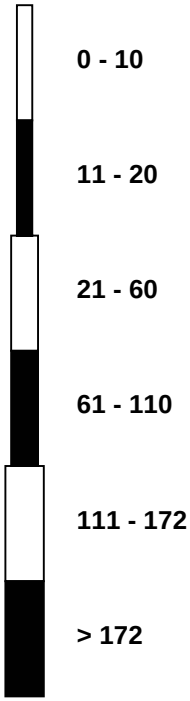
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 17.9 ppb on Oct 28 19:00 Maximum Daily Average: 6.3 ppb on Oct 20

Minimum Value: 0 ppb on Oct 11 03:00 Minimum Daily Average: 0.7 ppb on Oct 11
Maximum Diurnal Average: 5.1 ppb at hour 9 Minimum Diurnal Average: 1.5 ppb at hour 16
Monthly Average: 2.96 ppb Percentiles: P_1 = 0.3 P_{10} = 0.6 Q_1 = 1.2 Median = 2.3 Q_3 = 4.0 P_{90} = 6.3 P_{99} = 10.6

Hours in Service:	744
Hours of Data:	700
Hours of Missing Data:	44
Hours of Calibration:	39
Percent Operational Time:	99.3

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-Oct	D	2	2	3	A	8	7	10	9	6	6	4	6	5	4	3	4	5	5	4	4	3	7	6	5.1	9.9
2-Oct	9	9	9	7	A	9	10	7	6	6	5	1	1	1	1	1	0	0	1	1	1	1	3	1	3.9	9.5
3-Oct	1	1	2	2	A	4	3	2	9	8	5	2	1	1	1	1	1	1	2	3	3	4	2	3	2.6	9.3
4-Oct	4	5	7	6	A	6	11	10	8	8	4	3	3	3	2	3	2	1	1	2	1	1	1	1	4.0	10.8
5-Oct	1	1	1	1	A	2	2	3	2	1	2	1	1	2	1	1	1	1	2	2	3	3	3	3	1.8	3.4
6-Oct	2	2	2	2	A	4	8	4	5	3	2	1	1	1	1	1	1	3	4	4	4	2	1	2	2.5	7.8
7-Oct	1	1	2	4	A	5	9	9	C	C	C	C	C	C	C	C	5	4	2	2	4	5	8	5	--	9.3
8-Oct	5	3	2	1	A	2	2	2	1	1	1	0	0	0	0	0	1	3	2	1	1	2	4	3	1.7	5.3
9-Oct	3	3	3	3	A	5	4	8	5	5	4	2	1	1	1	1	1	2	5	3	1	3	3	3	2.9	8.4
10-Oct	2	2	2	2	A	3	4	3	1	0	2	3	5	4	4	2	2	2	1	0	0	0	2	2	2.3	5.2
11-Oct	1	0	0	0	A	1	1	1	1	1	0	0	0	0	0	1	1	1	0	2	2	1	1	0	0.7	1.7
12-Oct	0	0	0	0	A	2	2	1	1	1	1	1	3	3	2	1	1	2	3	3	4	3	3	3	1.9	4.0
13-Oct	2	1	1	2	A	3	2	2	1	2	4	2	2	1	1	1	1	2	2	5	3	2	4	2	2.2	5.3
14-Oct	2	2	3	5	A	13	7	6	10	4	2	1	0	1	0	1	1	1	1	3	4	2	4	3	3.2	13.3
15-Oct	2	1	0	0	A	2	1	1	1	0	0	0	0	0	0	0	0	1	1	3	3	3	1	2	1.1	3.4
16-Oct	1	2	6	6	A	5	5	7	11	8	3	1	0	0	0	0	1	1	1	2	2	2	4	5	3.1	11.3
17-Oct	4	3	3	4	A	3	2	1	1	1	0	0	0	0	0	0	1	1	4	2	3	3	3	3	1.9	4.4
18-Oct	3	4	3	2	A	2	4	5	5	1	1	1	1	1	1	0	1	1	1	2	3	4	2	2	2.2	5.2
19-Oct	1	0	0	0	A	2	5	6	3	2	1	1	1	1	1	1	3	6	4	3	2	2	5	3	2.2	5.9
20-Oct	6	5	2	8	A	6	5	3	18	8	13	10	10	4	6	5	5	4	3	2	3	5	7	4	6.3	17.5
21-Oct	4	6	6	5	A	6	6	5	9	6	3	3	3	3	3	2	2	2	2	2	1	1	2	2	3.7	9.1
22-Oct	2	3	2	2	A	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1.7	2.7
23-Oct	2	2	2	2	A	3	4	4	3	3	2	2	2	2	2	2	3	3	2	2	2	2	2	2	2.4	4.4
24-Oct	P	P	P	P	A	5	4	3	3	3	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2.2	5.1
25-Oct	1	1	1	1	A	3	2	2	2	2	1	1	1	1	1	2	2	2	2	1	1	1	2	1	1.5	2.5
26-Oct	1	1	1	1	A	2	1	1	1	2	1	1	2	1	1	1	1	2	2	2	1	1	1	1	1.4	2.4
27-Oct	2	2	3	4	A	6	6	9	5	5	4	3	2	2	2	3	4	2	4	8	5	5	5	7	4.3	8.6
28-Oct	5	5	4	4	A	6	6	7	7	5	3	3	2	2	3	3	8	13	18	9	5	6	9	7	6.1	17.9
29-Oct	7	7	7	8	A	9	6	8	8	5	5	3	1	2	1	1	3	5	5	5	4	6	4	3	4.8	8.6
30-Oct	4	3	3	3	A	4	5	10	5	9	7	2	6	5	2	2	4	8	5	3	3	5	3	3	4.5	10.1
31-Oct	3	2	3	3	A	8	7	6	10	10	9	5	1	0	0	0	1	3	2	2	2	4	3	5	3.9	10.4
	2.8	2.6	2.7	3.1	--	4.7	4.6	4.8	5.1	3.8	3.1	2.0	2.0	1.7	1.5	1.5	2.1	2.7	2.9	2.7	2.6	2.9	3.3	2.9	Diurnal Average	
	9.2	9.2	8.9	8.0	--	13.3	10.8	10.2	17.5	10.0	12.7	9.7	9.9	5.3	5.8	5.4	8.1	12.6	17.9	8.8	5.4	6.3	9.3	7.5	Diurnal Maximum	

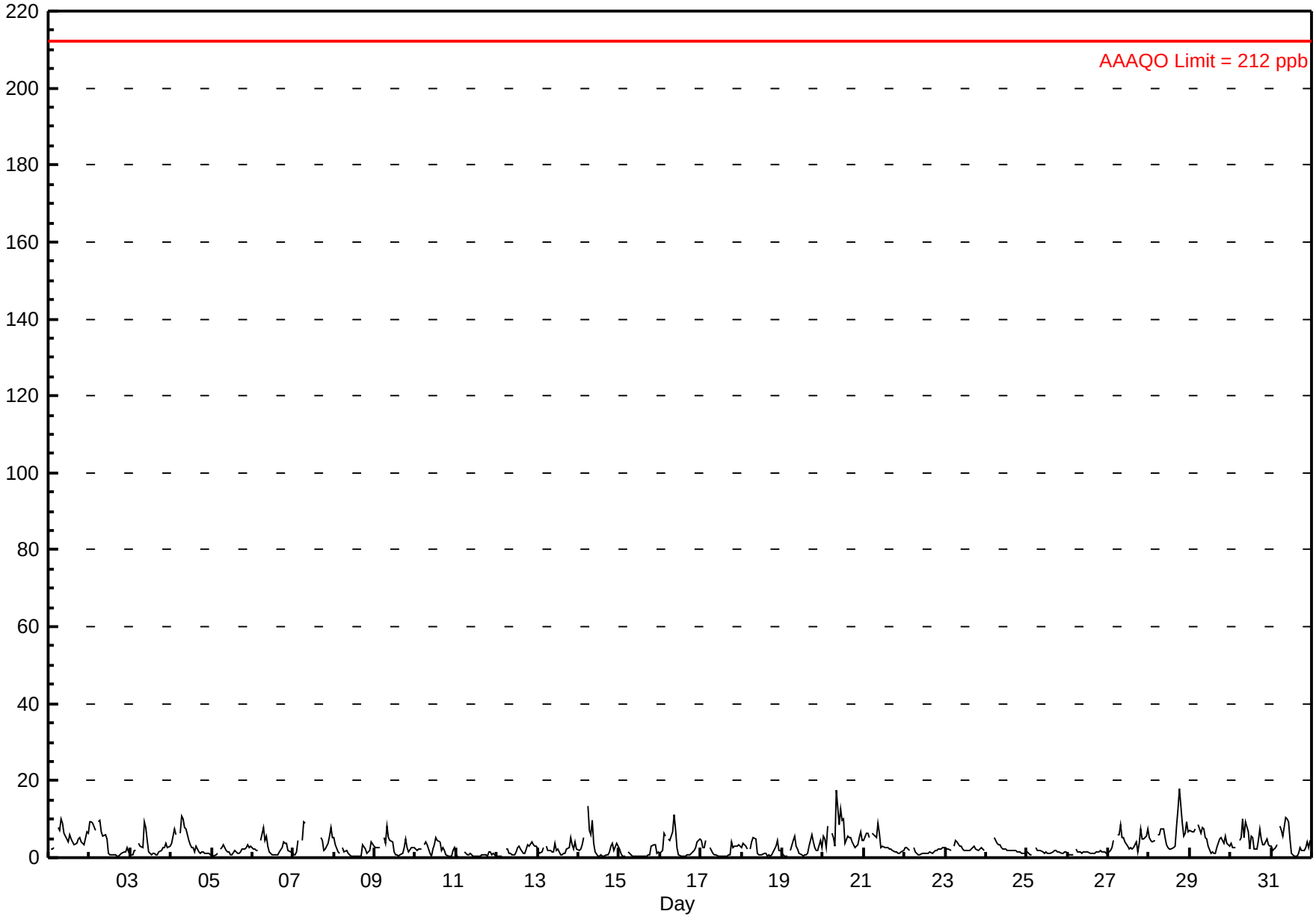
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - October 2010

Maximum Value: 41.5 ppb on Oct 20 04:00

Maximum Daily Average: 12.7 ppb on Oct 20

Minimum Value: 0 ppb on Oct 11 13:00

Minimum Daily Average: 1.8 ppb on Oct 11

Maximum Diurnal Average: 8.9 ppb at hour 8

Minimum Diurnal Average: 2.7 ppb at hour 16

Monthly Average: 5.36 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 1.3$ $Q_1 = 2.1$ Median = 3.7 $Q_3 = 7.0$ $P_{90} = 11.0$ $P_{99} = 23.2$

Hours in Service:	744
Hours of Data:	700
Hours of Missing Data:	44
Hours of Calibration:	39
Percent Operational Time:	99.3

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-Oct	D	3	3	4	A	10	22	21	14	8	9	6	7	6	5	4	5	9	10	5	5	5	19	16	8.8	22.1
2-Oct	18	12	14	10	A	14	15	10	7	7	7	4	1	1	1	2	1	1	2	3	3	3	6	2	6.3	17.6
3-Oct	1	1	3	3	A	6	4	5	13	13	10	2	1	2	1	1	1	3	4	5	4	12	4	7	4.7	13.2
4-Oct	7	8	12	8	A	8	19	16	15	11	8	4	4	4	3	7	3	2	3	3	2	2	2	1	6.6	19.4
5-Oct	2	1	1	3	A	6	6	6	5	3	3	2	2	23	16	2	3	5	4	5	6	7	3	3	5.1	22.6
6-Oct	4	5	5	5	A	10	13	6	10	4	3	2	2	1	2	2	3	9	11	7	6	7	7	2	5.4	12.9
7-Oct	1	1	3	19	A	8	22	15	C	C	C	C	C	C	C	C	7	9	3	6	6	9	10	12	--	21.5
8-Oct	8	5	2	2	A	5	6	6	2	1	1	2	1	1	1	1	1	8	10	2	2	2	7	6	3.5	10.2
9-Oct	4	3	3	3	A	8	6	19	7	6	6	3	1	1	1	2	3	4	13	15	2	5	5	4	5.4	19.1
10-Oct	3	3	3	2	A	5	6	6	4	1	13	11	9	8	8	7	9	11	2	1	1	1	9	10	5.8	12.5
11-Oct	5	0	1	0	A	4	1	1	2	2	1	0	0	1	2	3	3	2	1	3	4	2	2	1	1.8	5.2
12-Oct	1	1	1	1	A	5	3	3	2	1	1	2	3	3	4	2	3	5	6	5	8	5	6	5	3.3	7.7
13-Oct	3	2	3	5	A	6	4	3	2	3	25	7	12	2	2	2	3	5	3	10	5	3	6	3	5.2	25.5
14-Oct	2	3	5	7	A	21	10	11	17	10	10	2	2	5	1	2	1	2	4	6	7	4	6	4	6.1	20.6
15-Oct	3	2	1	1	A	4	2	1	1	1	1	1	1	1	3	2	1	2	3	7	5	5	2	3	2.3	7.0
16-Oct	2	6	8	8	A	7	7	13	13	13	5	1	1	1	1	1	2	2	3	3	6	5	7	7	5.2	13.4
17-Oct	5	3	4	5	A	7	7	4	2	1	1	1	1	1	1	1	1	2	7	9	6	4	4	4	3.5	8.6
18-Oct	4	5	4	3	A	5	9	8	11	2	1	2	2	2	3	2	2	2	3	5	7	7	4	3	4.1	11.0
19-Oct	2	1	1	1	A	4	7	7	5	4	2	3	1	2	2	3	6	10	5	3	2	4	15	7	4.3	14.7
20-Oct	12	8	4	41	A	10	27	24	34	22	16	11	13	5	8	6	6	6	4	3	8	7	10	6	12.7	41.5
21-Oct	5	10	11	6	A	9	7	10	12	10	11	4	6	4	5	3	3	3	3	2	2	2	2	2	5.7	12.1
22-Oct	3	3	3	2	A	5	3	3	1	1	1	2	2	1	2	2	2	3	2	3	3	3	4	3	2.5	4.9
23-Oct	3	3	3	3	A	5	6	5	4	3	3	2	2	3	2	3	3	3	3	2	3	3	2	2	3.2	6.4
24-Oct	P	P	P	P	A	8	4	4	4	3	2	3	2	3	2	3	3	3	2	2	2	2	1	1	2.8	8.1
25-Oct	2	1	1	1	A	5	3	2	3	2	2	2	1	1	2	2	2	2	2	2	1	1	2	2	1.9	4.5
26-Oct	1	1	1	1	A	4	2	2	2	3	2	2	2	2	2	2	3	2	2	2	2	3	2	1	2.0	4.5
27-Oct	2	2	4	5	A	9	9	14	9	8	8	5	3	3	3	3	6	5	13	9	6	8	11	13	6.8	13.9
28-Oct	7	6	5	6	A	9	9	10	10	7	5	3	3	3	3	5	13	17	20	20	6	13	12	8	8.6	20.5
29-Oct	10	8	9	9	A	13	8	10	9	6	6	29	3	38	2	2	5	8	9	8	7	8	6	4	9.6	38.3
30-Oct	5	3	5	5	A	8	11	23	17	20	13	5	11	8	4	3	7	11	10	5	5	7	6	4	8.5	23.5
31-Oct	9	3	4	4	A	16	16	8	15	14	12	9	2	1	1	1	3	5	3	3	5	9	3	6	6.6	16.2
	4.7	3.8	4.1	5.8	--	7.8	8.9	8.9	8.4	6.4	6.2	4.4	3.4	4.5	3.1	2.7	3.7	5.1	5.5	5.3	4.5	5.1	6.0	4.9	Diurnal Average	
	17.6	11.8	13.8	41.5	--	20.6	27.2	24.0	34.0	22.2	25.5	28.7	12.8	38.3	15.7	7.1	12.8	16.6	20.5	19.7	8.2	12.8	18.8	15.9	Diurnal Maximum	

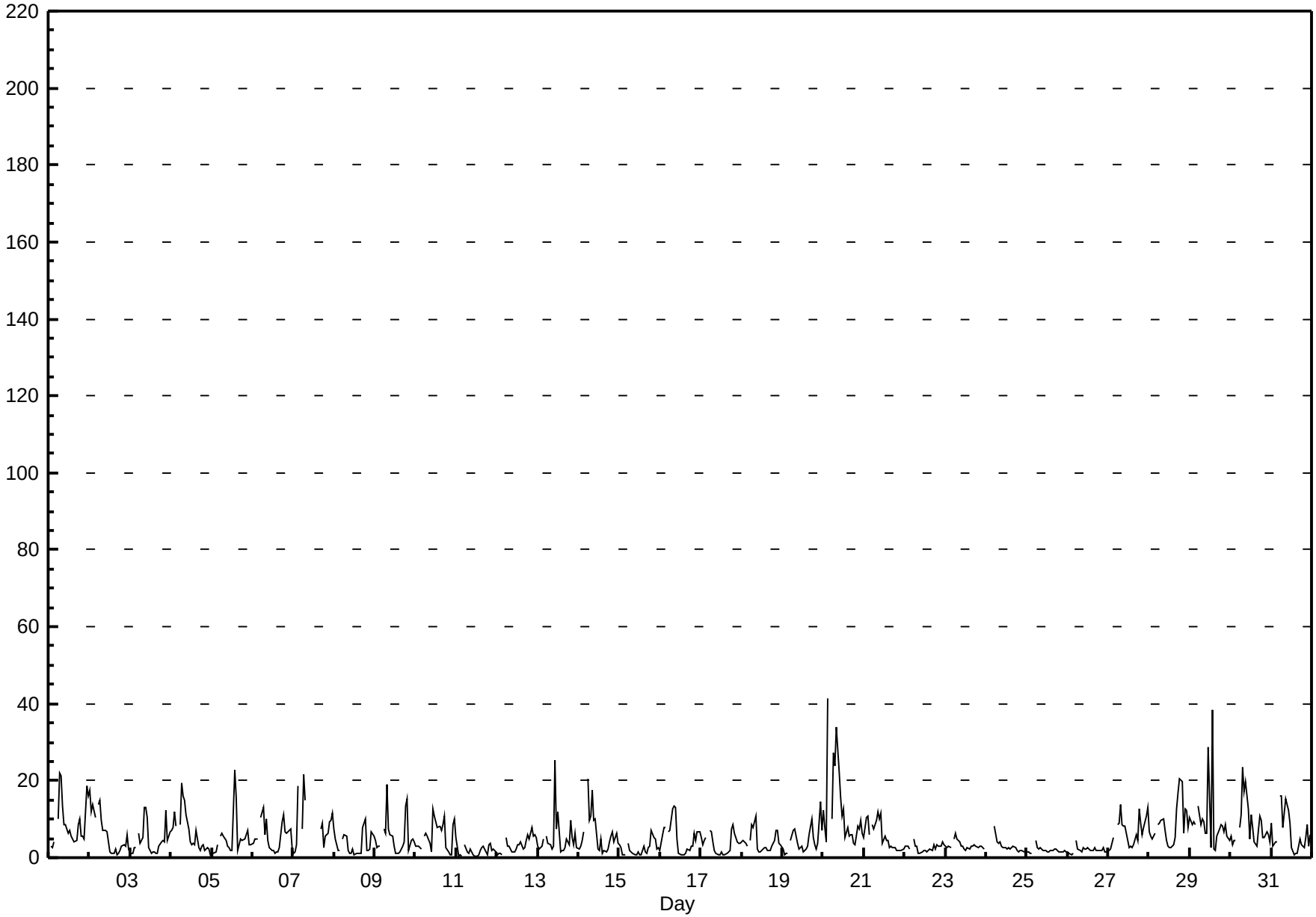
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - October 2010



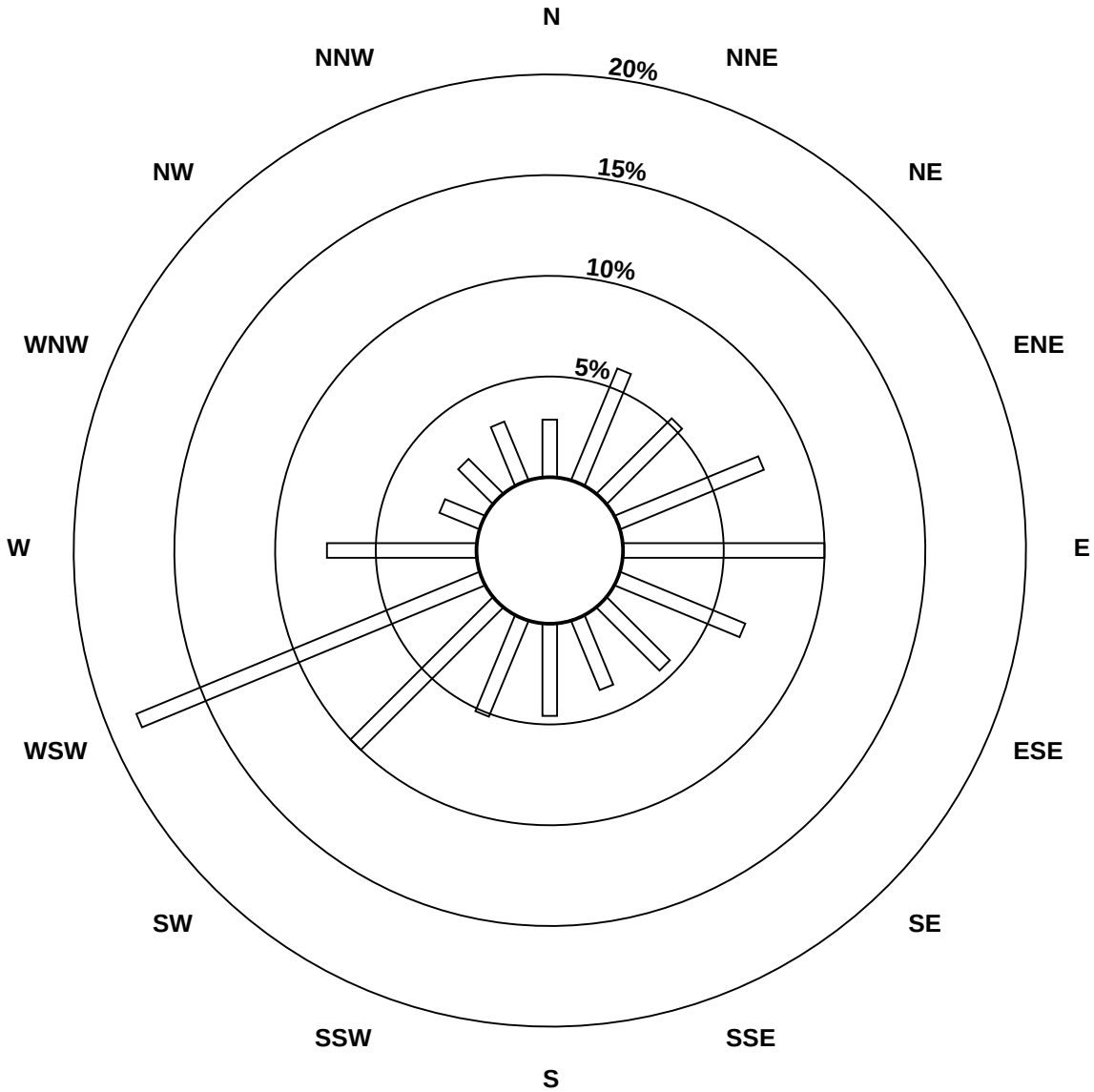
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

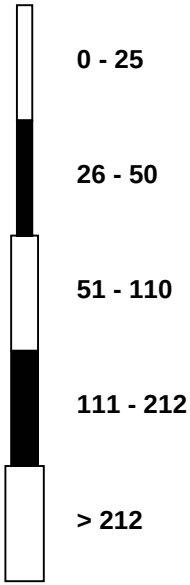
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 8.0 ppb on Oct 28 19:00 Maximum Daily Average: 1.9 ppb on Oct 28

Minimum Value: 0 ppb on Oct 1 21:00 Minimum Daily Average: 0.0 ppb on Oct 8
Maximum Diurnal Average: 1.7 ppb at hour 10 Minimum Diurnal Average: 0.0 ppb at hour 2
Monthly Average: 0.42 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 1.1$ $P_{99} = 5.3$

Hours in Service:	744
Hours of Data:	700
Hours of Missing Data:	44
Hours of Calibration:	39
Percent Operational Time:	99.3

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-Oct	D	0	0	0	A	0	0	1	5	4	4	2	4	2	1	1	1	0	0	0	0	0	0	0	1.2	4.9
2-Oct	0	0	0	0	A	1	0	0	2	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.9
3-Oct	0	0	0	0	A	0	0	0	6	8	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0.8	7.7
4-Oct	0	0	0	0	A	0	2	1	4	6	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0.8	5.8
5-Oct	0	0	0	0	A	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.5
6-Oct	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	1.0
7-Oct	0	0	0	0	A	0	3	1	C	C	C	C	C	C	C	C	1	0	0	0	0	0	0	0	--	2.8
8-Oct	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
9-Oct	0	0	0	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
10-Oct	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	0.4
11-Oct	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
12-Oct	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.1	0.6
13-Oct	0	0	0	0	A	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
14-Oct	0	0	0	0	A	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6
15-Oct	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	0.1
16-Oct	0	0	0	0	A	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.9
17-Oct	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
18-Oct	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
19-Oct	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
20-Oct	0	0	0	6	A	0	0	0	5	2	4	3	3	1	1	1	0	0	0	0	0	0	0	0	1.2	6.1
21-Oct	0	0	0	0	A	0	0	3	2	2	3	0	1	1	1	1	0	0	0	0	0	0	0	0	0.6	3.2
22-Oct	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	0.1
23-Oct	0	0	0	0	A	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0.3	1.2
24-Oct	P	P	P	P	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-Oct	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
26-Oct	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
27-Oct	0	0	0	0	A	0	0	1	1	1	2	2	2	2	2	2	2	0	0	0	0	0	0	1	0.7	2.3
28-Oct	0	0	0	0	A	0	3	3	7	5	3	2	1	1	1	1	3	2	8	2	0	0	0	0	1.9	8.0
29-Oct	0	0	0	0	A	0	0	3	2	5	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0.9	4.8
30-Oct	0	0	0	0	A	0	0	0	0	2	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0.4	2.4
31-Oct	0	0	0	0	A	0	1	0	1	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.1
	0.0	0.0	0.0	0.3	--	0.1	0.4	0.5	1.5	1.7	1.5	0.7	0.7	0.4	0.4	0.3	0.3	0.2	0.3	0.1	0.0	0.0	0.1	0.1	Diurnal Average	
	0.2	0.2	0.2	6.1	--	0.9	3.4	3.2	6.9	7.7	4.5	2.6	3.9	2.4	1.6	2.0	2.6	1.6	8.0	1.7	0.2	0.2	0.4	0.6	Diurnal Maximum	

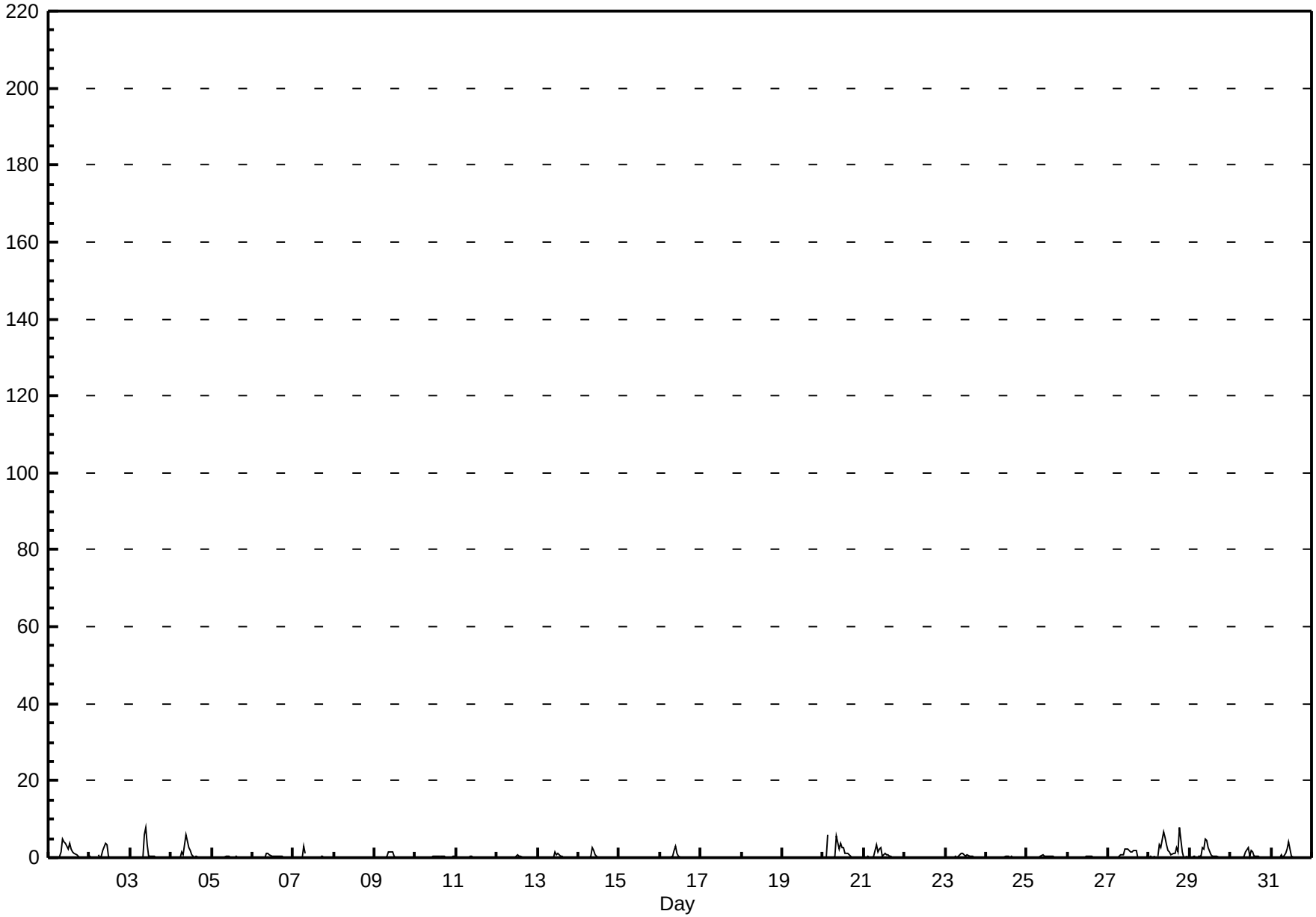
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - October 2010



PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - October 2010

Maximum Value: 57.7 ppb on Oct 20 04:00

Maximum Daily Average: 5.9 ppb on Oct 28

Minimum Value: 0 ppb on Oct 8 01:00

Minimum Daily Average: 0.2 ppb on Oct 17

Maximum Diurnal Average: 5.5 ppb at hour 11

Minimum Diurnal Average: 0.2 ppb at hour 2

Monthly Average: 1.44 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.3 $Q_3 = 0.7$ $P_{90} = 3.2$ $P_{99} = 20.0$

Hours in Service:	744
Hours of Data:	700
Hours of Missing Data:	44
Hours of Calibration:	39
Percent Operational Time:	99.3

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-Oct	D	0	0	0	A	0	6	7	12	7	7	4	5	3	2	1	1	1	0	0	0	0	0	0	2.6	11.6
2-Oct	1	0	0	0	A	9	1	1	7	6	5	2	0	0	0	1	0	0	0	0	0	0	0	0	1.6	8.8
3-Oct	0	0	0	0	A	0	0	1	12	18	12	1	0	0	0	0	0	0	0	0	0	0	0	0	2.1	17.8
4-Oct	0	0	1	0	A	0	9	3	15	13	13	2	1	1	0	1	0	0	0	0	0	0	0	0	2.6	14.9
5-Oct	0	0	0	0	A	0	0	1	1	1	1	1	1	1	10	0	0	1	0	0	0	0	0	0	0.8	9.7
6-Oct	0	0	0	0	A	0	0	0	2	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0.5	2.4
7-Oct	0	0	0	4	A	0	19	5	C	C	C	C	C	C	C	C	1	1	0	0	0	0	0	1	--	18.7
8-Oct	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.9
9-Oct	0	0	0	0	A	0	1	3	3	2	2	1	0	0	0	0	0	0	1	2	0	0	0	0	0.7	3.2
10-Oct	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0.5	1.3
11-Oct	1	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
12-Oct	0	0	0	0	A	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0.2	0.8
13-Oct	0	0	0	0	A	0	0	0	0	0	24	7	22	0	1	0	0	0	0	0	0	0	0	0	2.5	23.8
14-Oct	0	0	0	0	A	0	0	2	7	14	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1.7	14.3
15-Oct	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
16-Oct	0	0	0	0	A	0	0	5	5	5	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0.9	5.0
17-Oct	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
18-Oct	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
19-Oct	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
20-Oct	0	0	0	58	A	0	1	18	29	10	6	4	4	2	2	1	0	0	0	0	0	0	0	0	5.9	57.7
21-Oct	0	0	1	0	A	0	1	27	6	8	46	1	16	1	2	1	1	1	0	0	0	0	0	0	4.9	46.1
22-Oct	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
23-Oct	0	0	0	0	A	0	1	0	2	1	2	1	1	1	1	1	1	0	1	0	1	0	0	0	0.6	1.7
24-Oct	P	P	P	P	A	0	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0.4	1.0
25-Oct	0	0	0	0	A	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0.4	1.0
26-Oct	0	0	0	0	A	0	0	0	0	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0.3	0.6
27-Oct	0	0	0	0	A	0	1	3	2	2	4	4	2	2	2	3	3	0	1	0	0	1	0	3	1.4	3.6
28-Oct	0	0	1	4	A	2	15	19	21	13	5	3	2	1	1	2	4	4	20	13	0	1	2	3	5.9	20.6
29-Oct	0	1	1	0	A	1	1	8	4	6	7	5	1	1	1	0	0	0	0	0	0	0	0	0	1.7	8.1
30-Oct	0	0	0	0	A	0	0	1	1	5	6	2	6	2	1	0	1	0	0	0	0	0	0	0	1.2	6.4
31-Oct	0	0	0	0	A	1	6	0	3	10	8	5	2	0	0	0	0	0	0	0	0	0	0	0	1.6	9.5
	0.2	0.2	0.2	2.3	--	0.6	2.1	3.5	4.5	4.2	5.5	1.6	2.3	0.8	1.0	0.6	0.7	0.5	0.9	0.6	0.2	0.2	0.2	0.3	Diurnal Average	
	1.3	0.9	0.7	57.7	--	8.8	18.7	27.4	29.2	17.8	46.1	6.7	21.9	3.5	9.7	3.3	4.4	3.6	20.0	12.9	0.7	1.4	1.5	3.1	Diurnal Maximum	

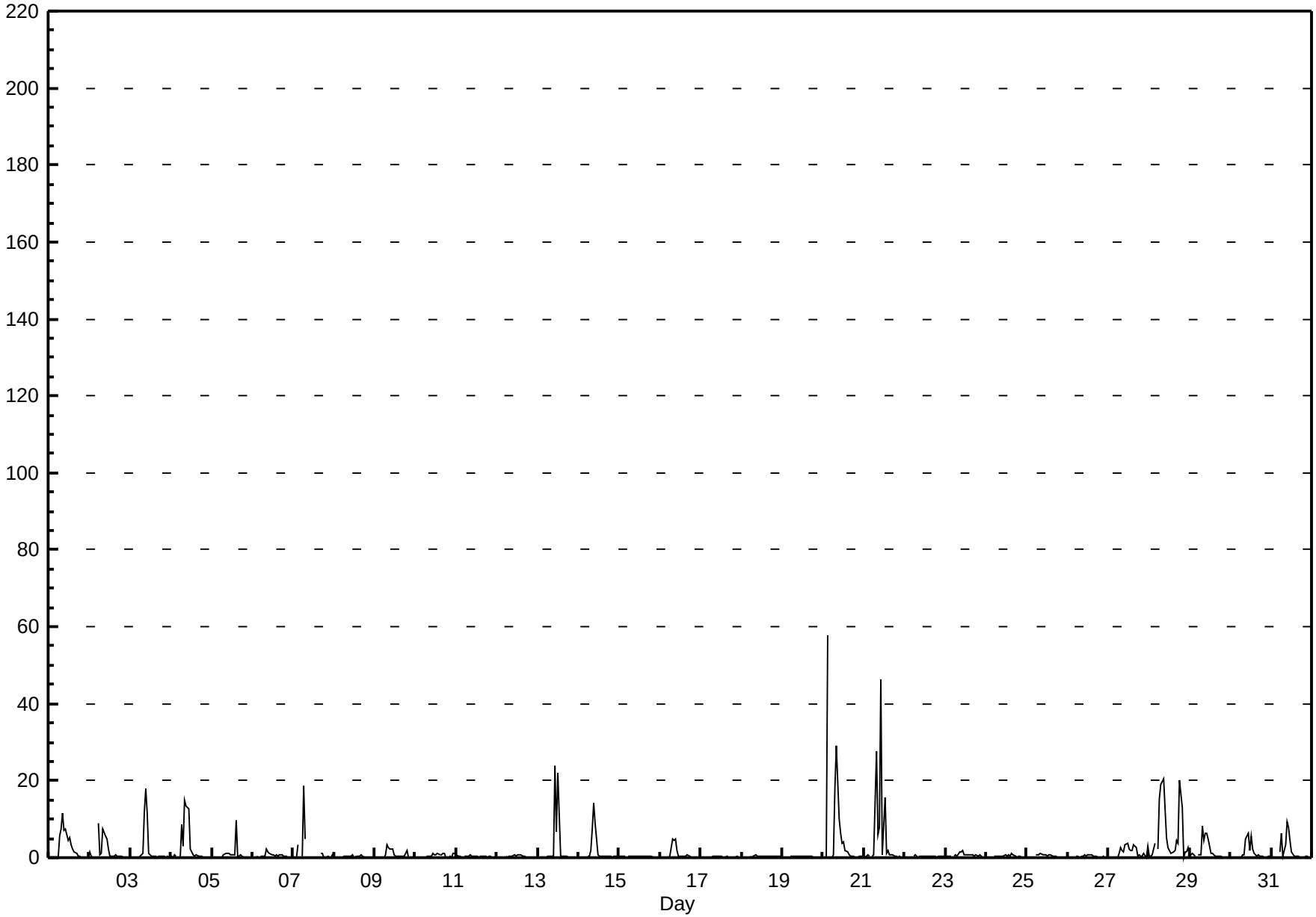
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - October 2010



PASZA
Peace Air Shed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 26.4 ppb on Oct 28 19:00 Maximum Daily Average: 8.2 ppb on Oct 28

Minimum Value: 0 ppb on Oct 11 04:00 Minimum Daily Average: 0.8 ppb on Oct 11
Maximum Diurnal Average: 6.8 ppb at hour 9 Minimum Diurnal Average: 1.8 ppb at hour 16
Monthly Average: 3.48 ppb Percentiles: P_1 = 0.4 P_{10} = 0.7 Q_1 = 1.4 Median = 2.5 Q_3 = 4.6 P_{90} = 7.5 P_{99} = 14.4

Hours in Service:	744
Hours of Data:	700
Hours of Missing Data:	44
Hours of Calibration:	39
Percent Operational Time:	99.3

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-Oct	D	2	2	3	A	8	8	12	14	10	9	7	10	7	6	5	4	5	5	4	4	4	7	6	6.5	14.0
2-Oct	10	10	9	7	A	10	10	7	8	10	9	2	1	1	1	1	1	1	1	1	1	2	3	2	4.6	10.4
3-Oct	1	1	2	2	A	4	3	3	15	16	8	2	1	1	1	1	1	1	2	3	3	4	3	3	3.5	15.7
4-Oct	4	6	8	6	A	7	13	11	12	14	7	5	4	3	2	3	2	1	2	2	1	1	1	1	5.0	13.6
5-Oct	1	1	1	1	A	3	3	4	3	2	2	1	1	2	2	1	1	2	2	2	3	4	3	3	2.0	3.7
6-Oct	2	2	2	2	A	5	8	5	7	4	2	1	1	1	1	1	2	3	4	4	4	2	2	2	2.9	8.1
7-Oct	1	1	2	5	A	5	12	10	C	C	C	C	C	C	C	C	6	5	2	2	4	6	8	5	--	12.5
8-Oct	5	4	2	1	A	3	2	2	1	1	1	1	1	1	1	1	1	3	2	1	1	2	4	3	1.8	5.5
9-Oct	3	3	3	3	A	5	4	9	7	6	6	2	1	1	1	1	1	3	5	3	1	3	3	3	3.2	9.1
10-Oct	2	2	2	2	A	4	4	4	1	1	3	4	6	5	4	2	3	2	1	0	0	0	2	3	2.5	5.8
11-Oct	1	0	0	0	A	2	1	1	1	1	0	0	0	0	1	1	1	1	0	2	2	1	1	1	0.8	1.8
12-Oct	0	0	0	0	A	2	2	1	1	1	1	2	3	4	3	1	1	3	3	3	4	4	3	3	2.1	4.1
13-Oct	3	1	1	3	A	3	2	2	2	2	5	3	4	1	1	1	1	3	3	6	3	2	4	2	2.5	5.5
14-Oct	2	2	3	6	A	14	7	6	13	6	3	1	1	1	0	1	1	1	2	3	4	2	4	3	3.6	13.8
15-Oct	2	1	0	0	A	2	1	1	1	1	0	1	0	0	1	1	1	1	1	3	4	3	1	2	1.2	3.6
16-Oct	1	2	6	6	A	5	5	8	14	11	4	1	0	0	0	1	1	1	1	2	2	3	4	5	3.6	13.6
17-Oct	5	3	3	5	A	3	2	1	1	1	1	1	1	0	0	1	1	1	4	3	3	3	3	3	2.0	4.6
18-Oct	3	4	3	2	A	2	4	5	5	1	1	1	1	1	1	1	1	1	1	3	3	5	2	2	2.3	5.4
19-Oct	1	0	0	1	A	2	5	6	3	2	1	1	1	1	1	1	3	6	4	3	2	2	5	3	2.4	6.3
20-Oct	6	5	3	14	A	7	6	3	24	11	17	13	13	5	7	6	6	4	4	3	4	6	7	5	7.7	23.6
21-Oct	5	6	7	5	A	7	6	9	11	9	5	3	4	3	3	3	2	2	2	2	1	1	2	2	4.4	11.1
22-Oct	3	3	2	2	A	3	2	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	3	3	1.8	2.9
23-Oct	3	2	2	2	A	3	5	4	4	4	4	3	2	3	2	3	3	3	2	2	2	3	2	2	2.8	4.8
24-Oct	P	P	P	P	A	5	4	4	4	3	2	3	2	2	2	2	2	2	1	1	1	1	1	1	2.4	5.2
25-Oct	1	1	1	1	A	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	1	1.7	2.7
26-Oct	1	1	1	1	A	2	2	1	1	2	2	2	2	2	1	1	1	2	2	2	1	2	1	1	1.5	2.5
27-Oct	2	2	3	5	A	6	6	9	6	6	7	5	4	4	4	5	6	2	4	8	5	5	6	8	5.1	9.5
28-Oct	5	5	4	5	A	6	10	10	14	11	7	4	4	3	4	4	11	15	26	11	6	7	10	7	8.2	26.4
29-Oct	8	7	7	8	A	9	7	11	10	10	9	6	2	2	1	1	3	5	5	5	4	6	4	3	5.8	10.7
30-Oct	4	3	3	3	A	4	5	11	6	11	9	3	8	7	3	2	5	8	5	3	3	5	4	3	5.1	11.1
31-Oct	3	2	3	4	A	9	8	6	12	12	14	7	1	1	1	1	1	3	2	2	3	4	3	5	4.5	13.6
	3.0	2.8	2.9	3.5	--	4.9	5.1	5.5	6.8	5.7	4.7	2.8	2.7	2.2	2.0	1.8	2.5	2.9	3.3	2.9	2.7	3.0	3.4	3.1	Diurnal Average	
	9.7	9.5	9.2	14.4	--	13.8	12.8	11.7	23.6	15.7	16.9	12.6	13.1	7.2	7.1	6.2	10.9	14.5	26.4	10.7	5.6	6.6	9.9	8.3	Diurnal Maximum	

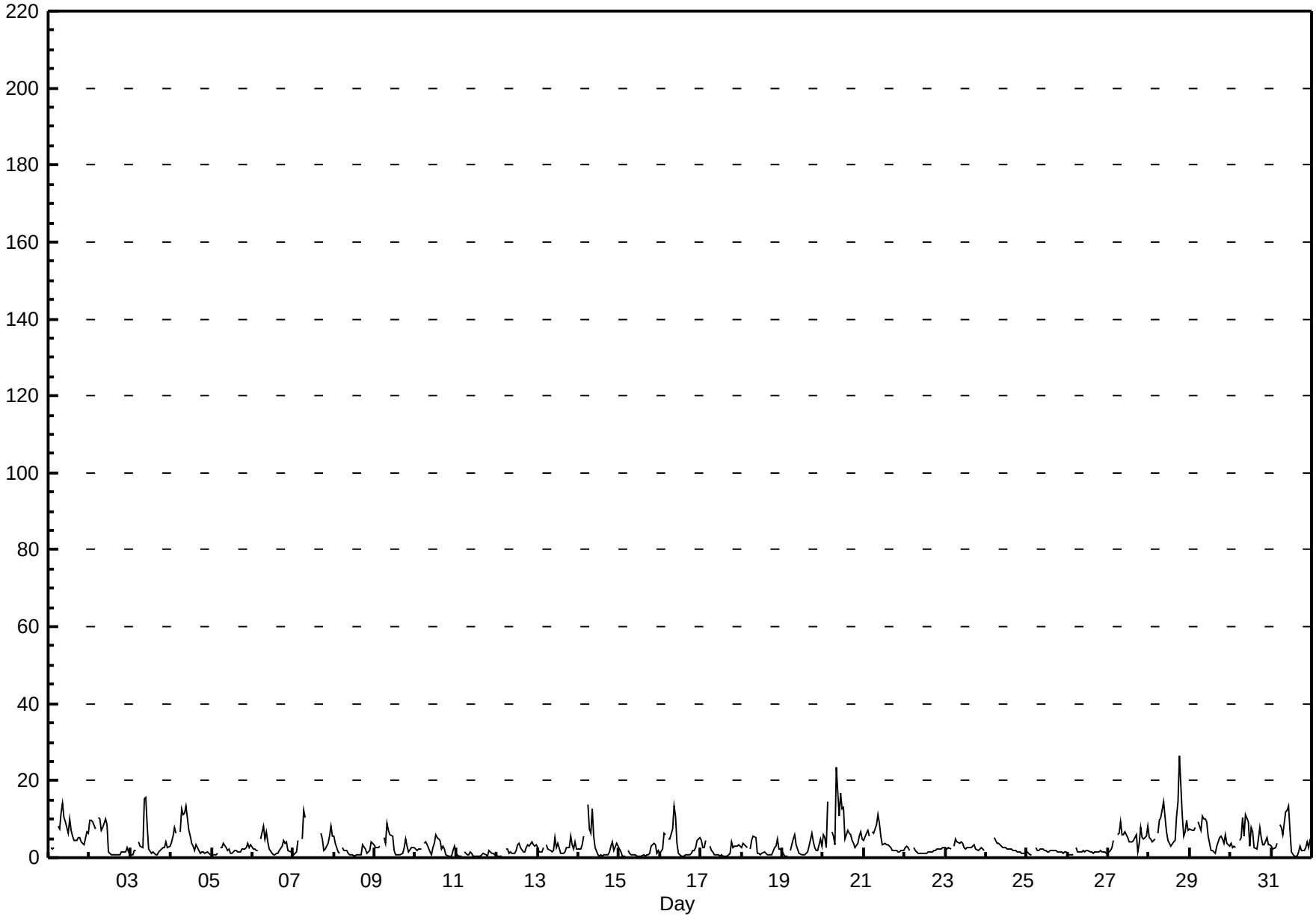
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - October 2010

Maximum Value: 99.6 ppb on Oct 20 04:00

Maximum Daily Average: 18.7 ppb on Oct 20

Minimum Value: 1 ppb on Oct 11 04:00

Minimum Daily Average: 2.1 ppb on Oct 11

Maximum Diurnal Average: 12.6 ppb at hour 9

Minimum Diurnal Average: 3.3 ppb at hour 16

Monthly Average: 6.71 ppb

Percentiles: P_1 = 0.8 P_{10} = 1.6 Q_1 = 2.4 Median = 4.1 Q_3 = 8.0 P_{90} = 14.6 P_{99} = 38.2

Hours in Service:	744
Hours of Data:	700
Hours of Missing Data:	44
Hours of Calibration:	39
Percent Operational Time:	99.3

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-Oct	D	3	3	4	A	10	27	29	20	16	16	11	12	9	7	6	5	9	11	6	5	5	19	16	11.4	29.1
2-Oct	19	12	14	11	A	22	15	11	13	13	12	6	2	1	2	3	1	1	2	3	4	3	6	2	7.8	21.9
3-Oct	1	1	3	3	A	7	4	6	25	30	22	4	2	2	2	1	1	4	4	5	4	13	5	7	6.7	29.7
4-Oct	8	8	13	8	A	9	28	18	29	25	18	7	5	4	4	8	3	2	3	4	2	3	2	1	9.2	29.3
5-Oct	2	1	1	4	A	6	7	6	5	4	4	3	3	24	16	2	4	6	5	5	6	8	3	4	5.6	23.5
6-Oct	4	5	5	5	A	11	14	6	13	6	3	3	3	1	2	2	3	10	12	7	7	7	8	2	6.1	13.5
7-Oct	1	2	3	23	A	8	39	18	C	C	C	C	C	C	C	C	9	10	3	6	7	10	10	13	--	38.7
8-Oct	8	5	2	2	A	5	7	6	2	2	1	3	1	1	2	2	2	8	11	2	2	2	7	6	3.8	10.8
9-Oct	5	3	3	3	A	8	8	21	10	8	8	4	1	2	1	2	3	4	15	18	2	5	5	4	6.2	21.2
10-Oct	3	3	3	2	A	6	7	6	4	2	14	12	10	9	9	8	10	13	3	2	1	1	10	11	6.4	13.9
11-Oct	6	1	1	1	A	4	2	1	3	2	1	1	1	1	2	3	3	2	1	4	4	2	3	1	2.1	5.9
12-Oct	1	1	1	1	A	6	3	3	2	2	2	3	4	4	5	2	3	5	6	5	8	6	6	5	3.7	7.9
13-Oct	3	2	3	5	A	6	4	4	3	3	40	13	33	2	3	2	3	5	4	10	6	3	7	3	7.2	39.6
14-Oct	2	3	5	7	A	21	10	13	25	21	17	3	2	5	1	2	2	3	5	6	7	5	7	4	7.6	25.2
15-Oct	3	3	1	1	A	4	2	2	1	1	1	2	1	1	3	2	2	3	4	7	6	5	2	3	2.6	7.4
16-Oct	2	6	8	8	A	7	7	14	18	18	7	2	1	1	1	1	3	2	3	3	7	5	7	7	6.0	18.0
17-Oct	5	4	5	5	A	7	7	5	2	2	1	1	2	1	1	1	2	2	8	9	6	4	4	4	3.8	9.0
18-Oct	4	5	4	3	A	5	9	8	12	2	2	2	2	3	3	2	2	2	3	5	8	8	4	4	4.4	11.9
19-Oct	2	1	1	1	A	5	7	8	6	4	2	3	2	2	3	3	7	11	5	4	2	4	15	7	4.7	15.3
20-Oct	13	8	4	100	A	10	29	42	59	33	22	15	17	7	9	7	7	6	4	3	8	8	10	7	18.7	99.6
21-Oct	6	11	12	6	A	9	9	37	16	15	21	5	11	5	6	3	4	3	3	2	2	2	2	2	8.4	37.3
22-Oct	3	3	3	2	A	5	4	4	1	1	2	2	2	2	2	3	2	4	2	3	3	3	4	3	2.9	5.2
23-Oct	3	3	3	3	A	5	7	5	6	5	5	3	3	4	3	4	4	4	3	3	4	3	3	2	3.8	7.2
24-Oct	P	P	P	P	A	8	4	4	4	3	3	3	3	3	3	4	3	3	2	2	2	2	1	2	3.1	8.4
25-Oct	2	1	1	1	A	5	3	3	4	3	3	3	2	2	2	2	3	2	2	2	2	1	2	2	2.2	4.6
26-Oct	2	1	1	1	A	5	3	2	2	3	3	3	3	3	2	2	3	2	2	2	2	3	2	1	2.3	4.6
27-Oct	2	2	4	5	A	9	10	17	11	10	11	8	5	5	4	7	9	5	14	9	7	9	11	16	8.3	16.6
28-Oct	7	6	5	10	A	9	23	29	31	19	10	6	5	4	5	7	17	21	40	33	7	14	14	10	14.4	40.5
29-Oct	11	10	10	9	A	15	9	18	12	12	13	30	4	41	3	2	6	8	9	9	7	9	6	5	11.1	40.5
30-Oct	6	4	5	5	A	8	11	25	18	25	20	7	17	10	5	4	8	11	10	6	5	7	6	4	9.8	25.2
31-Oct	9	3	4	4	A	18	23	8	19	24	19	14	4	1	1	1	3	5	3	3	5	9	3	6	8.3	23.6
	4.9	4.0	4.4	8.1	--	8.4	10.9	12.2	12.6	10.4	10.0	5.9	5.4	5.4	3.8	3.3	4.4	5.7	6.5	6.0	4.7	5.4	6.3	5.3	Diurnal Average	
	19.3	12.2	14.3	99.6	--	21.9	38.7	42.5	59.3	33.2	39.6	29.9	33.2	40.5	16.4	8.1	17.5	20.7	40.5	32.9	8.5	14.0	19.5	16.5	Diurnal Maximum	

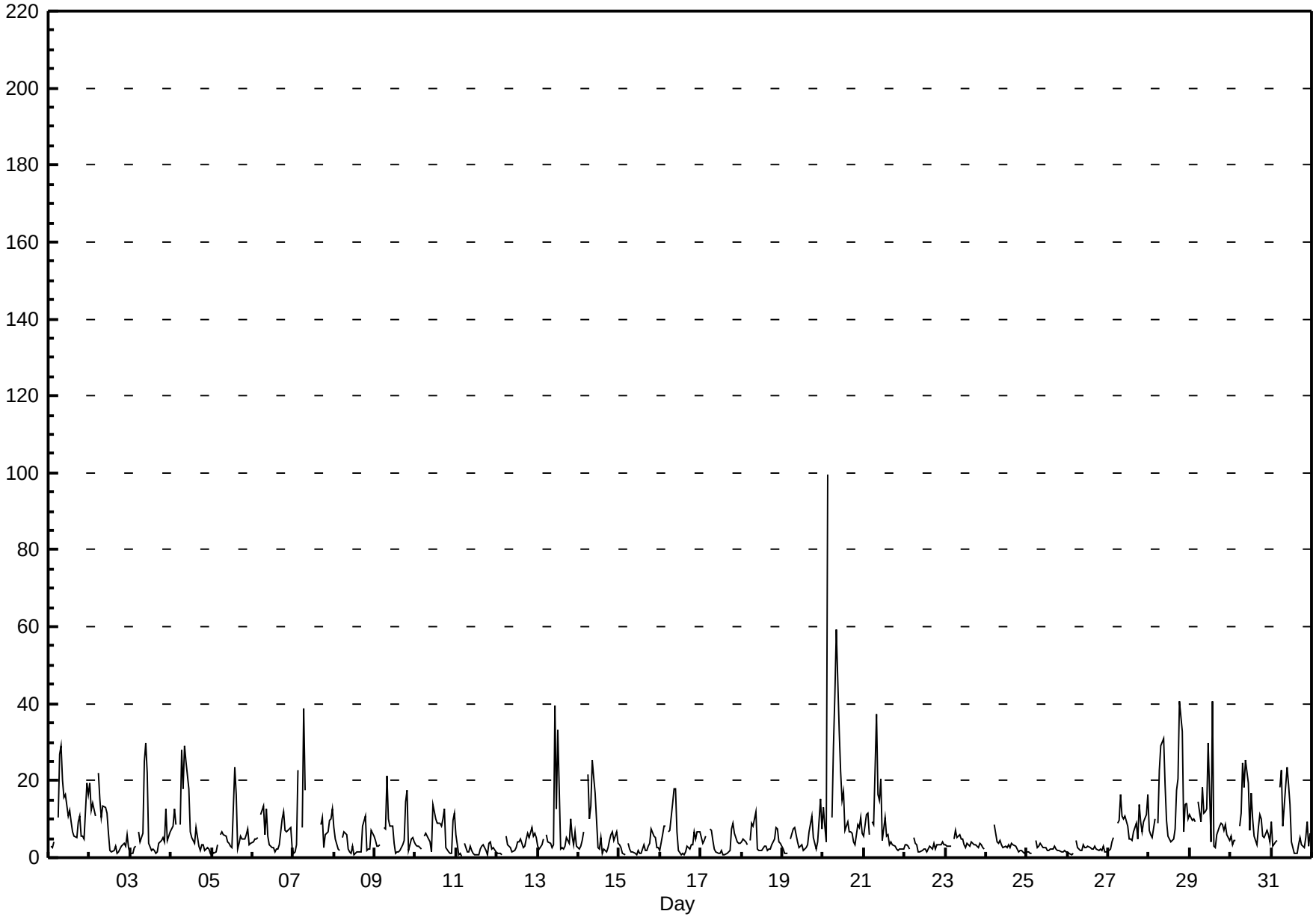
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 44.5 ppb on Oct 17 16:00 Maximum Daily Average: 36.7 ppb on Oct 17

Minimum Value: 1 ppb on Oct 28 08:00 Minimum Daily Average: 9.3 ppb on Oct 23
Maximum Diurnal Average: 30.5 ppb at hour 16 Minimum Diurnal Average: 19.4 ppb at hour 9
Monthly Average: 25.55 ppb Percentiles: P_1 = 4.5 P_{10} = 10.4 Q_1 = 16.8 Median = 28.0 Q_3 = 33.4 P_{90} = 37.0 P_{99} = 42.0

Hours in Service:	744
Hours of Data:	704
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

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-Oct	D	30	29	29	A	22	21	14	15	19	23	25	23	27	31	33	34	35	35	37	36	37	26	29	27.9	37.3
2-Oct	20	13	17	18	A	15	14	19	15	15	18	32	33	33	34	33	34	35	34	34	33	32	30	30	25.7	34.9
3-Oct	30	31	29	30	A	26	25	27	11	14	23	35	38	38	39	40	38	36	36	33	32	30	33	33	30.7	39.5
4-Oct	30	22	21	21	A	19	10	11	11	9	15	17	22	26	31	29	31	29	28	27	29	28	28	28	22.7	31.1
5-Oct	28	26	26	30	A	32	31	28	29	31	33	35	35	34	34	34	34	33	32	32	31	31	31	31	31.5	35.4
6-Oct	30	28	28	27	A	26	19	20	19	24	27	28	29	29	29	28	26	24	22	20	20	24	24	21	24.9	30.4
7-Oct	24	22	23	20	A	17	8	9	5	6	5	12	17	18	C	C	C	C	31	32	27	24	19	23	18.0	31.5
8-Oct	21	25	28	27	A	33	30	31	32	36	37	39	40	40	41	41	40	37	38	38	36	34	31	34	34.3	41.5
9-Oct	34	33	31	30	A	24	24	19	19	26	25	34	40	42	41	41	40	36	32	33	35	31	29	29	31.6	41.5
10-Oct	28	26	26	26	A	26	24	24	34	39	36	33	31	32	31	33	32	32	33	34	35	35	32	31	31.0	38.6
11-Oct	33	34	34	33	A	33	32	31	30	31	33	35	35	35	35	34	33	33	33	31	30	31	29	33	32.7	35.4
12-Oct	35	37	36	36	A	35	34	35	34	35	36	35	33	33	35	39	38	35	34	34	34	32	33	34	34.9	38.6
13-Oct	36	38	37	34	A	30	30	29	28	30	27	31	30	31	32	31	30	25	24	22	25	28	27	28	29.7	38.2
14-Oct	28	28	26	20	A	12	17	17	17	26	38	40	40	39	39	38	37	36	34	29	28	30	28	29	29.5	40.5
15-Oct	30	31	35	35	A	34	34	33	33	34	34	33	33	33	32	31	31	31	31	26	25	26	28	27	31.4	35.2
16-Oct	28	27	24	25	A	26	25	21	16	20	28	33	36	36	37	36	35	34	32	32	32	30	27	26	29.0	36.8
17-Oct	26	28	28	27	A	32	34	36	38	39	40	42	42	43	44	44	43	42	36	38	38	36	34	32	36.7	44.5
18-Oct	33	31	32	33	A	36	35	33	33	40	41	41	40	39	39	42	41	41	40	35	34	33	35	34	36.6	41.7
19-Oct	35	38	38	36	A	36	32	31	31	35	40	43	42	41	40	39	36	31	34	36	38	37	33	36	36.5	43.0
20-Oct	32	29	33	25	A	29	30	32	15	22	14	19	19	30	30	28	25	25	24	24	22	19	17	15	24.3	33.2
21-Oct	14	13	7	10	A	11	11	12	9	10	22	29	20	15	17	19	20	23	25	23	24	24	23	20	17.4	28.7
22-Oct	20	19	19	22	A	23	24	27	30	29	28	28	28	27	25	23	22	20	19	17	15	16	14	13	22.0	29.8
23-Oct	13	13	12	12	A	12	8	7	9	8	9	11	11	10	11	9	8	6	8	7	6	6	8	10	9.3	13.0
24-Oct	P	P	P	P	A	10	11	10	11	13	14	14	15	14	14	15	16	15	12	9	9	10	11	12	12.5	15.6
25-Oct	13	13	14	14	A	13	11	11	11	12	12	13	14	14	14	14	14	15	15	15	16	17	16	15	13.8	17.2
26-Oct	16	19	19	18	A	17	17	17	16	15	15	16	15	17	17	18	17	17	17	16	17	17	17	19	16.9	19.0
27-Oct	18	17	16	14	A	12	10	7	8	8	8	8	9	9	9	9	7	23	22	12	10	10	10	7	11.5	23.3
28-Oct	10	8	7	4	A	3	3	1	2	6	12	15	19	25	23	19	11	6	2	10	12	10	6	9	9.7	25.4
29-Oct	7	7	6	4	A	5	6	5	6	8	11	17	25	31	32	36	33	30	29	30	28	27	26	29	19.0	36.0
30-Oct	27	29	28	29	A	31	28	22	25	21	27	36	30	31	37	37	34	29	32	30	29	28	28	28	29.4	37.2
31-Oct	29	31	29	28	A	16	20	20	8	9	9	16	36	41	40	39	37	34	37	37	34	25	27	27	27.3	40.8
	25.1	24.9	24.6	23.9	--	22.6	21.2	20.6	19.4	21.6	23.9	27.2	28.4	29.6	30.5	30.5	29.3	28.3	27.8	27.0	26.5	25.8	24.5	24.9	Diurnal Average	
	36.4	38.2	38.0	36.5	--	36.5	34.9	36.1	37.8	39.6	41.0	43.0	42.4	43.2	43.9	44.5	43.3	41.7	39.7	38.4	38.1	37.5	35.1	35.7	Diurnal Maximum	

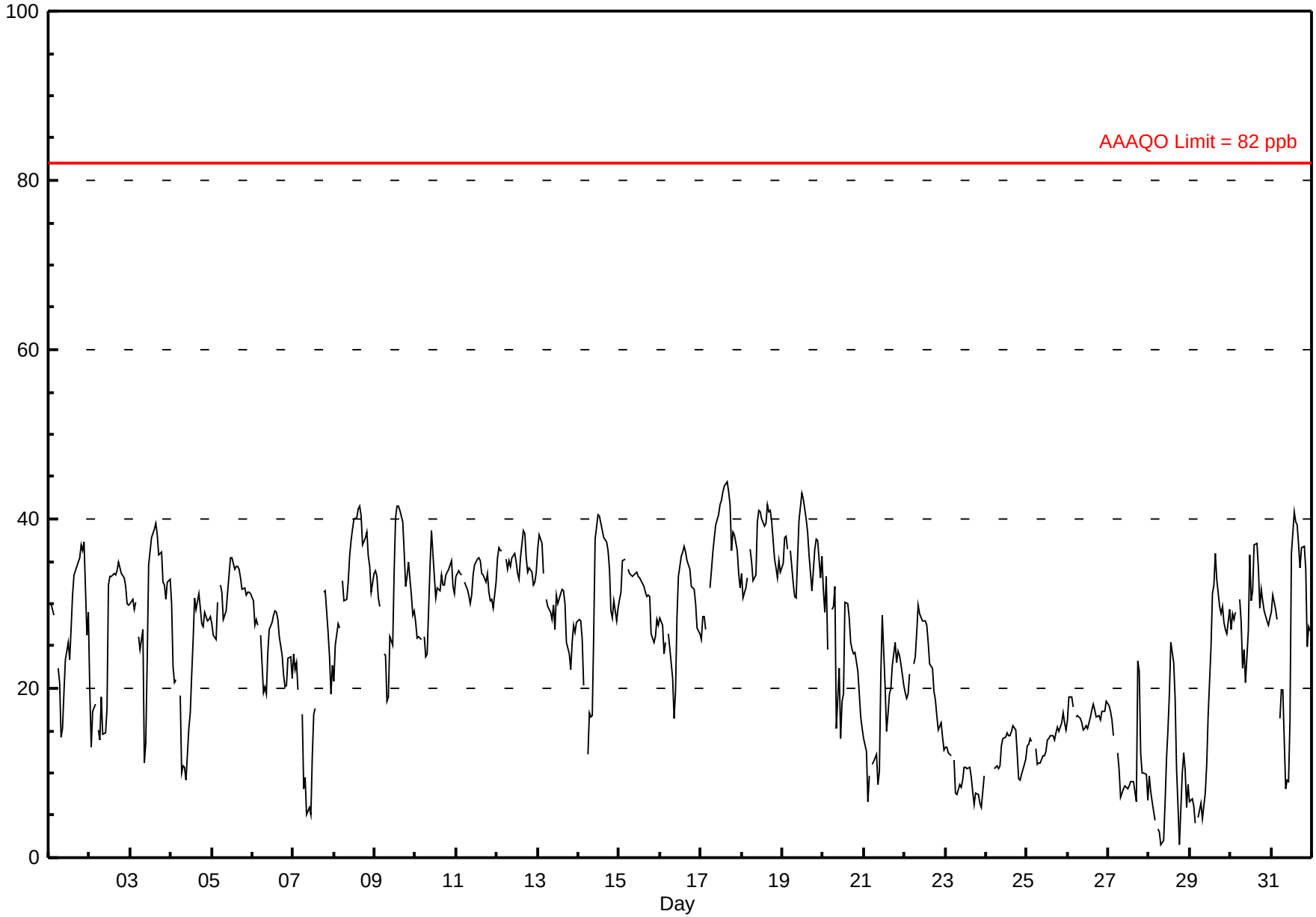
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

PASZA
Peace Air Shed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - October 2010

Maximum Value: 46.2 ppb on Oct 17 15:00

Maximum Daily Average: 39.1 ppb on Oct 19

Minimum Value: 3 ppb on Oct 28 08:00

Minimum Daily Average: 11.1 ppb on Oct 23

Maximum Diurnal Average: 32.4 ppb at hour 15

Minimum Diurnal Average: 23.2 ppb at hour 9

Monthly Average: 28.19 ppb

Percentiles: P_1 = 6.5 P_{10} = 12.8 Q_1 = 20.1 Median = 30.9 Q_3 = 35.9 P_{90} = 39.2 P_{99} = 43.9

Hours in Service:	744
Hours of Data:	704
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

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-Oct	D	31	30	30	A	26	24	19	20	24	26	27	25	30	33	37	39	39	37	38	37	38	37	34	31.0	39.0
2-Oct	34	25	25	23	A	26	23	22	20	17	22	35	34	34	35	34	35	36	36	35	35	34	31	31	29.7	35.9
3-Oct	31	31	31	33	A	28	29	29	20	24	31	38	40	39	40	40	39	38	38	36	34	38	35	36	34.0	40.5
4-Oct	35	34	24	24	A	21	20	17	18	14	17	23	24	32	34	35	35	31	29	29	30	30	29	30	26.9	35.4
5-Oct	30	27	29	34	A	34	33	32	33	33	37	37	37	36	36	37	36	35	33	33	33	34	33	33	33.8	37.5
6-Oct	33	34	32	30	A	31	25	22	23	27	29	30	29	30	30	29	28	26	24	23	24	25	25	24	27.6	33.9
7-Oct	25	24	24	24	A	20	16	14	10	8	7	15	19	19	C	C	C	C	32	33	32	27	22	28	21.1	33.1
8-Oct	26	32	34	31	A	34	33	34	34	37	38	41	41	43	43	43	43	40	42	40	38	36	34	36	37.0	43.4
9-Oct	36	36	34	32	A	27	26	27	23	28	31	40	42	43	43	42	42	39	37	37	36	35	30	30	34.6	43.3
10-Oct	29	29	27	27	A	28	26	28	40	40	40	39	37	38	38	36	36	35	35	35	36	36	36	35	34.3	40.0
11-Oct	35	35	35	34	A	33	33	32	31	33	34	36	36	37	36	36	35	35	35	33	32	32	31	34	34.1	36.5
12-Oct	37	38	38	37	A	37	36	36	35	37	37	37	35	35	39	40	40	38	35	38	37	35	35	37	37.0	40.4
13-Oct	38	39	38	37	A	32	31	31	29	32	31	33	32	32	33	33	32	30	26	24	27	29	29	29	31.7	39.4
14-Oct	29	29	27	25	A	19	20	22	27	29	42	42	42	41	40	39	39	37	37	31	31	32	31	32	32.2	42.0
15-Oct	33	35	36	36	A	35	34	34	34	34	34	34	34	33	33	32	32	32	32	32	27	28	29	29	32.9	36.5
16-Oct	31	29	26	28	A	29	29	29	20	26	31	36	36	37	38	37	36	36	34	33	34	32	29	29	31.6	38.0
17-Oct	28	31	31	28	A	36	36	38	39	41	42	43	43	44	46	45	45	44	40	42	41	38	35	34	38.8	46.2
18-Oct	36	33	37	35	A	39	39	35	39	41	43	43	41	41	42	44	43	42	42	39	37	36	36	36	39.0	43.6
19-Oct	39	39	39	38	A	38	37	34	35	40	43	44	44	43	42	41	40	36	36	37	38	39	38	39	39.1	44.5
20-Oct	34	33	36	37	A	34	35	34	27	28	18	21	27	34	33	31	27	27	26	25	24	22	19	20	28.4	37.4
21-Oct	16	16	9	12	A	14	14	18	12	17	27	37	30	17	19	21	22	25	27	26	27	27	25	22	20.8	37.1
22-Oct	21	21	21	25	A	26	26	30	32	30	30	29	29	29	27	25	24	21	21	20	17	17	16	14	23.8	31.5
23-Oct	14	14	14	13	A	13	10	9	10	9	11	13	12	12	12	13	10	9	10	10	9	7	9	11	11.1	14.3
24-Oct	P	P	P	P	A	12	12	12	12	14	15	15	15	16	16	16	17	16	16	10	10	11	12	13	13.6	17.1
25-Oct	14	14	15	15	A	14	12	12	12	13	13	13	15	16	16	15	15	16	17	16	18	19	18	16	14.9	18.6
26-Oct	19	20	21	19	A	18	18	18	17	16	16	17	17	18	19	19	19	17	18	17	18	19	19	19	18.1	20.7
27-Oct	19	19	18	17	A	14	13	10	9	10	10	9	10	10	10	10	13	28	28	18	11	12	11	11	13.8	28.1
28-Oct	14	10	8	7	A	5	6	3	4	11	15	18	24	28	26	22	18	9	5	13	13	13	8	10	12.5	28.2
29-Oct	10	8	9	6	A	6	10	10	7	9	15	23	29	33	34	38	36	32	33	32	31	30	30	32	21.9	37.5
30-Oct	29	31	32	31	A	33	31	30	27	26	34	39	37	35	41	40	36	35	36	36	34	33	33	33	33.5	40.8
31-Oct	34	32	33	31	A	26	25	24	18	15	16	21	42	42	41	41	40	36	38	39	36	36	30	29	31.6	42.1
	27.9	27.6	27.2	26.5	--	25.4	24.6	24.0	23.2	24.7	27.0	30.0	31.0	31.6	32.4	32.4	31.8	30.6	30.2	29.5	28.6	28.2	27.0	27.3	Diurnal Average	
	38.7	39.4	38.8	37.9	--	39.3	38.8	38.1	40.0	41.2	43.1	44.5	44.0	44.2	46.2	45.4	44.9	43.9	41.9	41.9	41.4	39.4	38.2	38.9	Diurnal Maximum	

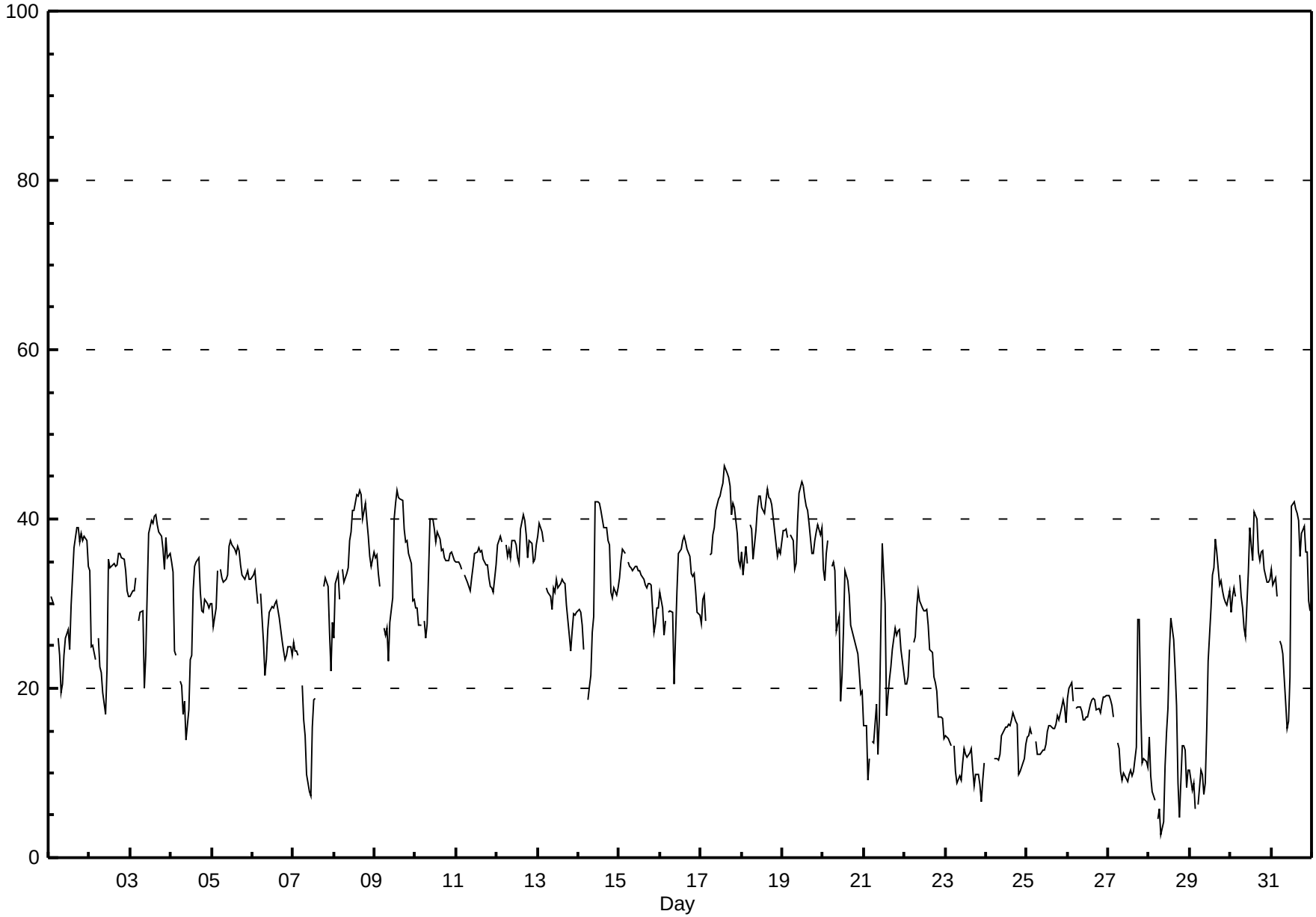
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - October 2010



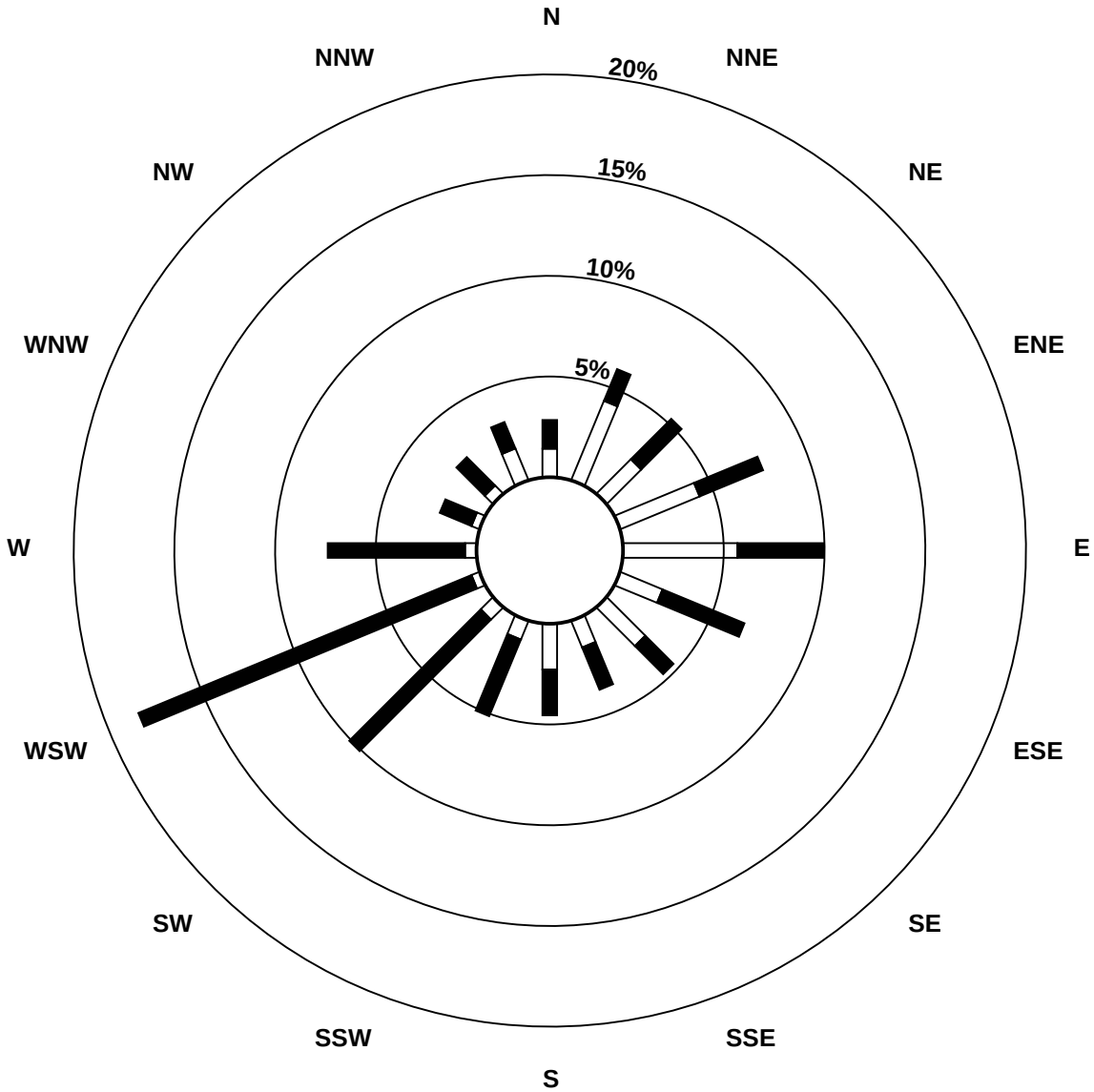
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

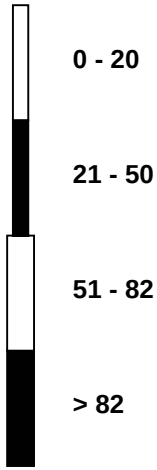
Pollutant Rose

Ozone (O_3) - ppb

Beaverlodge - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Beaverlodge - October 2010

Maximum Value: 42.6 ppb on Oct 17 18:00

Minimum Value: 3.9 ppb on Oct 28 10:00

Percentiles: P_1 = 5.9 P_{10} = 11.8 Q_1 = 17.2 Median = 27.7 Q_3 = 33.1 P_{90} = 35.5 P_{99} = 40.1

Hours in Service:	744
Hours of Data:	729
Hours of Missing Data:	15
Hours of Calibration:	7
Percent Operational Time:	98.9

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Oct	33	32	32	31	31	29	27	24	23	21	21	20	21	21	22	25	27	29	31	32	34	35	34	34	35.0
2-Oct	32	29	27	25	23	20	18	17	16	16	16	18	20	22	25	27	29	32	34	34	34	34	33	33	33.8
3-Oct	32	32	31	31	30	29	29	28	26	23	22	23	25	26	28	30	33	36	37	37	36	35	35	34	37.4
4-Oct	33	31	29	28	27	26	22	19	16	14	14	13	14	15	18	20	23	25	27	28	29	29	29	29	32.8
5-Oct	28	28	28	28	28	28	29	29	29	30	31	32	32	32	33	33	34	34	34	34	33	33	32	32	34.3
6-Oct	31	31	30	30	30	29	27	26	24	24	23	23	24	24	26	27	28	27	27	26	25	24	23	23	31.5
7-Oct	22	22	22	22	23	22	19	18	15	13	10	9	10	10	10	10	N	N	N	N	N	N	N	26	25.9
8-Oct	25	25	25	24	24	25	27	28	29	31	32	34	35	36	37	38	39	40	40	40	39	38	37	36	39.6
9-Oct	35	35	34	33	32	31	30	28	26	25	24	24	26	29	31	34	36	37	38	38	37	36	35	33	38.2
10-Oct	32	30	30	29	28	27	26	26	27	28	30	31	31	32	33	34	33	33	32	32	33	33	33	33	33.7
11-Oct	33	33	33	33	33	33	33	33	32	32	32	32	32	33	33	34	34	34	34	34	33	33	32	32	34.2
12-Oct	32	32	33	33	34	35	35	36	35	35	35	35	35	35	35	35	36	36	35	35	35	35	35	34	35.6
13-Oct	34	34	35	35	35	35	34	33	32	31	30	29	29	29	30	30	30	30	29	28	28	27	27	26	34.8
14-Oct	26	26	26	26	26	24	23	21	20	19	21	24	26	29	32	35	37	38	38	37	35	34	33	32	38.5
15-Oct	31	30	30	31	31	32	33	33	34	34	34	34	33	33	33	33	33	32	32	31	30	29	29	28	34.0
16-Oct	28	27	27	27	27	27	26	25	24	23	23	24	26	27	28	30	33	34	35	35	34	33	32	31	34.9
17-Oct	30	29	29	28	28	28	29	30	32	33	35	37	38	39	41	42	42	43	42	42	41	40	39	37	42.6
18-Oct	36	35	34	34	33	33	33	33	33	35	36	37	37	38	38	39	40	41	40	40	39	38	38	37	40.5
19-Oct	36	35	35	35	36	36	36	35	35	34	35	35	36	37	38	39	40	39	38	37	37	36	36	35	39.5
20-Oct	35	34	34	33	32	31	30	30	28	27	24	23	23	23	23	22	24	24	25	26	26	25	23	21	34.7
21-Oct	20	19	16	15	13	12	11	11	10	10	12	15	15	16	17	18	19	21	21	20	21	22	23	23	22.9
22-Oct	23	22	22	21	21	21	21	22	23	25	26	27	27	28	28	27	26	25	24	23	21	20	18	17	27.7
23-Oct	16	15	14	14	13	13	12	11	10	10	9	9	9	9	9	10	10	9	9	9	8	8	7	7	15.8
24-Oct	7	7	N	N	N	N	N	N	N	N	12	12	12	13	13	14	14	15	14	14	13	13	12	12	14.7
25-Oct	11	11	11	12	12	13	13	13	13	12	12	12	12	12	13	13	13	14	14	14	15	15	15	15	15.4
26-Oct	16	16	17	17	17	17	17	17	17	17	16	16	16	16	16	16	16	17	17	17	17	17	17	17	17.4
27-Oct	17	17	17	17	17	16	15	14	12	11	10	9	9	8	8	8	8	10	12	12	13	13	13	13	17.3
28-Oct	13	11	9	8	8	7	6	5	4	4	5	6	8	11	13	15	16	16	15	14	13	12	9	8	16.3
29-Oct	8	8	8	8	7	6	6	6	6	6	6	8	10	14	17	21	24	27	29	31	31	31	30	29	31.1
30-Oct	28	28	28	28	28	28	29	28	27	26	26	27	27	27	29	30	32	33	33	33	33	32	31	30	33.4
31-Oct	29	29	29	29	29	27	26	25	22	19	16	14	17	20	22	25	28	32	35	38	37	35	34	32	37.5
	36.2	35.4	35.2	35.4	35.6	36.0	35.6	35.6	35.4	35.2	35.9	37.3	37.9	39.3	40.6	41.6	42.3	42.6	42.1	41.7	41.2	40.3	39.0	37.4	
	Diurnal Maximums																								

N - Not Valid

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Beaverlodge - October 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 19.1 $\mu g/m^3$ on Oct 24 08:00
Maximum Daily Average: 11.6 $\mu g/m^3$ on Oct 1

Minimum Value: 0 $\mu g/m^3$ on Oct 11 14:00
Maximum Diurnal Average: 8.2 $\mu g/m^3$ at hour 10
Monthly Average: 7.32 $\mu g/m^3$

Minimum Daily Average: 3.9 $\mu g/m^3$ on Oct 11
Minimum Diurnal Average: 6.8 $\mu g/m^3$ at hour 16
Percentiles: P_1 = 2.4 P_{10} = 4.3 Q_1 = 5.3 Median = 6.9 Q_3 = 8.8 P_{90} = 11.2 P_{99} = 15.8

Hours in Service:	744
Hours of Data:	736
Hours of Missing Data:	8
Hours of Calibration:	0
Percent Operational Time:	98.9

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-Oct	D	7	8	8	8	9	9	10	10	11	12	10	11	11	12	13	13	16	17	14	13	12	14	16	11.6	16.9
2-Oct	15	16	17	16	14	13	14	15	12	15	14	13	12	10	8	8	8	9	7	7	4	5	7	7	11.0	16.7
3-Oct	6	8	8	7	9	9	7	6	6	8	10	8	7	7	7	6	6	8	9	9	8	8	8	8	7.6	10.1
4-Oct	7	6	7	9	9	9	10	9	10	10	11	11	11	11	10	8	7	7	6	7	6	5	6	10	8.4	11.2
5-Oct	9	8	9	7	4	4	3	4	5	7	7	3	3	2	2	3	3	8	1	2	4	6	6	4	4.8	8.9
6-Oct	5	5	4	4	5	7	6	6	6	5	6	5	5	4	6	5	5	7	7	6	5	6	6	6	5.5	7.0
7-Oct	5	6	6	7	8	7	6	8	9	8	7	7	8	9	10	11	13	13	11	10	11	14	14	13	9.2	14.1
8-Oct	15	11	11	11	8	6	5	7	7	7	5	4	5	5	8	9	P	P	7	6	7	9	10	8	7.8	14.5
9-Oct	7	8	7	8	9	9	8	9	8	8	9	10	4	3	5	7	5	6	8	10	11	8	7	8	7.5	11.0
10-Oct	4	4	7	8	5	6	3	6	6	10	7	3	5	9	8	5	11	5	5	4	7	7	3	0	5.7	10.7
11-Oct	5	6	5	3	3	6	6	5	5	4	3	5	3	0	4	4	4	4	3	3	3	3	5	4	3.9	5.7
12-Oct	4	4	4	4	5	5	4	7	6	6	5	6	5	5	4	6	6	6	8	7	4	5	7	6	5.4	8.4
13-Oct	4	4	5	5	5	4	6	6	6	5	6	5	5	7	7	4	3	6	7	8	10	13	7	10	6.1	13.4
14-Oct	6	6	8	12	10	8	9	5	4	8	8	3	3	4	5	5	5	2	4	7	8	6	5	5	6.1	11.7
15-Oct	7	8	7	8	7	8	7	7	7	6	6	4	5	6	3	3	3	4	5	4	7	7	6	8	5.9	8.4
16-Oct	9	9	10	10	10	9	9	11	13	13	9	7	5	5	5	5	6	5	6	6	7	7	6	7	7.9	13.0
17-Oct	6	7	5	5	5	4	5	6	7	6	6	4	5	7	6	6	5	6	8	9	9	10	11	9	6.5	11.2
18-Oct	7	7	7	8	6	6	5	6	6	4	5	7	9	7	6	5	5	2	1	7	9	5	4	5	5.9	9.0
19-Oct	5	3	6	6	5	5	6	7	4	6	4	5	6	7	7	6	6	8	8	7	7	7	7	7	6.0	7.7
20-Oct	7	7	7	6	10	8	9	8	10	10	13	11	10	10	7	10	11	10	11	13	11	11	11	11	9.7	13.5
21-Oct	11	13	10	10	9	8	9	9	8	8	9	8	8	10	7	9	11	10	9	7	6	6	5	6	8.6	13.1
22-Oct	6	7	7	7	6	7	7	7	5	5	6	5	4	4	5	3	4	4	5	4	6	5	6	7	5.6	7.4
23-Oct	10	14	15	12	10	10	10	12	14	13	P	3	8	9	8	8	8	9	7	6	5	5	7	10	9.3	14.9
24-Oct	P	P	P	P	6	16	15	19	16	15	13	13	12	11	11	10	9	9	7	7	5	5	5	4	10.4	19.1
25-Oct	6	6	4	4	5	5	4	5	6	6	6	4	5	5	8	6	6	6	8	9	8	7	6	7	5.9	9.0
26-Oct	7	7	7	6	7	7	9	8	9	8	8	9	9	8	8	8	8	9	9	8	8	10	9	8	8.1	10.2
27-Oct	7	8	7	10	10	8	10	11	10	6	9	10	12	12	14	14	12	8	5	5	7	7	7	7	9.0	14.3
28-Oct	8	9	10	12	9	7	10	10	8	8	7	7	5	6	6	8	9	10	13	14	8	7	8	8	8.7	13.8
29-Oct	7	9	8	7	7	8	8	9	8	8	7	7	8	8	5	4	4	5	5	4	3	4	5	5	6.3	8.9
30-Oct	6	6	6	5	5	6	7	7	7	8	10	13	9	8	7	7	5	5	5	5	5	8	7	5	6.7	13.4
31-Oct	8	5	6	6	6	9	7	6	9	12	11	9	8	5	6	5	5	5	4	5	6	6	6	6	6.7	11.6
	7.2	7.4	7.5	7.7	7.2	7.5	7.5	8.0	7.9	8.2	8.0	7.1	7.0	6.9	7.0	6.8	6.9	7.1	7.0	7.0	7.0	7.3	7.1	7.2	Diurnal Average	
	15.1	16.0	16.7	15.6	14.0	16.0	14.6	19.1	16.4	15.2	14.2	13.4	12.3	11.7	13.8	14.3	13.5	16.2	16.9	13.8	13.4	14.0	14.1	16.4	Diurnal Maximum	

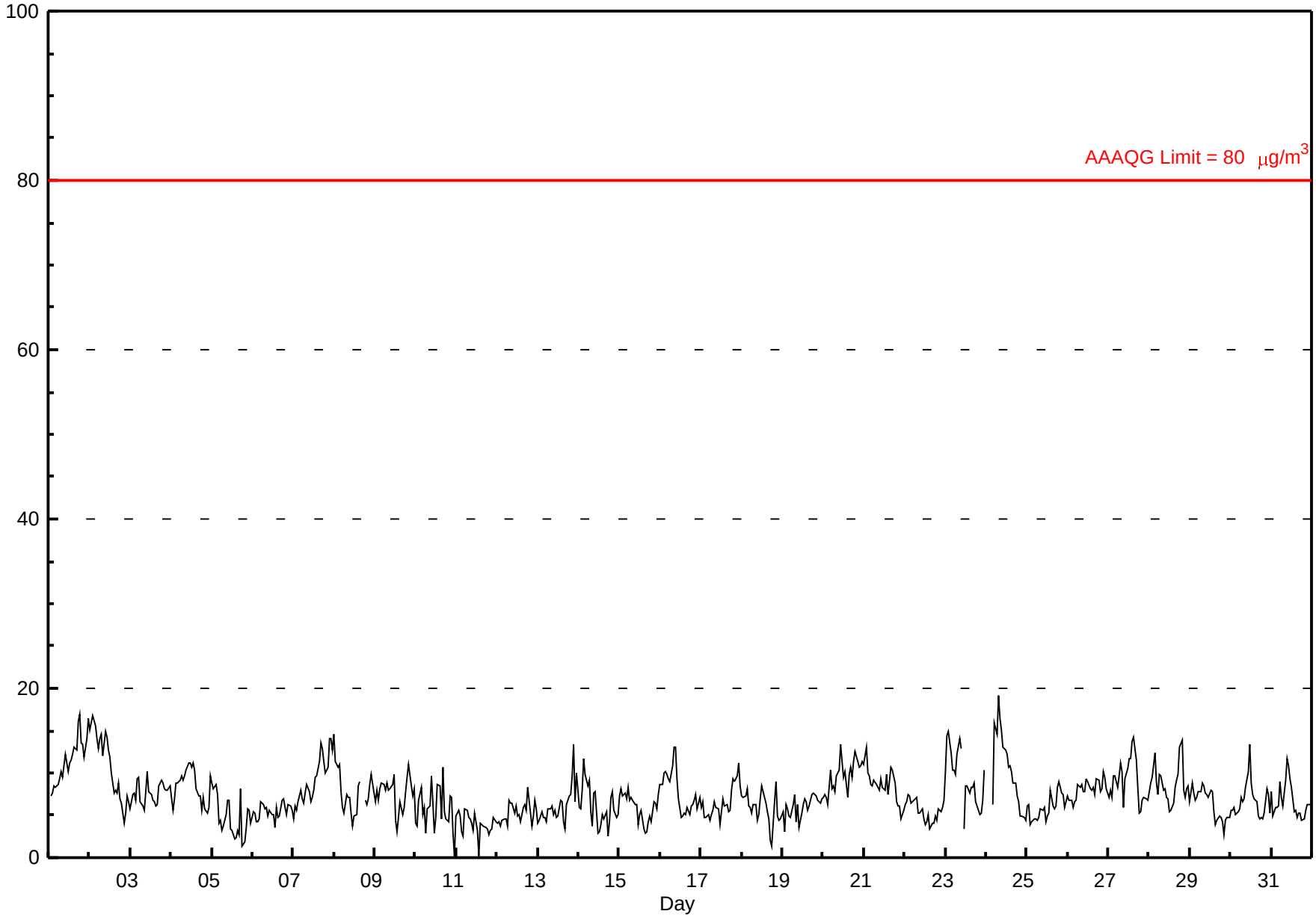
P - Power Failure D - DAS Failure
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Beaverlodge - October 2010

Maximum Value: 20.4 $\mu g/m^3$ on Oct 24 07:00

Maximum Daily Average: 12.5 $\mu g/m^3$ on Oct 1

Minimum Value: 2 $\mu g/m^3$ on Oct 11 14:00

Maximum Diurnal Average: 9.3 $\mu g/m^3$ at hour 11

Monthly Average: 8.41 $\mu g/m^3$

Minimum Daily Average: 4.9 $\mu g/m^3$ on Oct 11

Minimum Diurnal Average: 7.7 $\mu g/m^3$ at hour 17

Percentiles: P_1 = 3.4 P_{10} = 5.3 Q_1 = 6.3 Median = 8.0 Q_3 = 9.9 P_{90} = 12.3 P_{99} = 17.1

Hours in Service:	744
Hours of Data:	736
Hours of Missing Data:	8
Hours of Calibration:	0
Percent Operational Time:	98.9

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-Oct	D	9	8	9	9	9	10	11	10	12	13	11	12	12	13	14	14	17	18	17	14	13	15	17	12.5	17.5
2-Oct	17	17	18	16	16	16	16	17	13	16	16	13	13	11	9	9	8	10	8	7	6	6	9	8	12.3	17.6
3-Oct	6	9	9	8	11	12	7	7	6	9	11	10	9	8	7	7	7	10	10	10	10	10	9	9	8.8	11.6
4-Oct	8	7	9	10	9	10	11	9	10	12	12	12	12	12	12	9	8	8	6	7	7	6	8	10	9.4	12.2
5-Oct	10	9	9	8	6	5	4	4	7	8	8	6	5	3	4	4	6	10	5	3	4	7	7	5	6.2	9.8
6-Oct	6	6	5	5	6	8	7	6	7	7	7	7	6	5	8	6	6	8	7	7	6	7	7	7	6.4	8.0
7-Oct	6	8	7	7	9	8	7	9	9	8	8	8	8	11	11	13	14	14	12	11	12	15	15	13	10.2	15.4
8-Oct	15	15	11	12	10	7	7	8	8	8	7	4	6	6	10	10	P	P	8	7	8	9	10	9	8.9	15.4
9-Oct	8	9	7	9	9	9	9	12	11	9	10	11	8	5	7	8	6	8	9	11	12	10	9	9	8.9	12.0
10-Oct	5	7	8	10	6	7	5	7	8	11	10	4	8	10	10	5	12	11	6	6	9	9	6	2	7.6	12.3
11-Oct	6	7	6	4	4	6	7	6	5	5	5	6	4	2	5	5	5	4	4	3	4	4	5	5	4.9	6.6
12-Oct	5	5	5	5	5	6	6	7	7	7	6	7	6	6	5	7	7	7	9	8	6	6	7	7	6.2	9.1
13-Oct	5	5	6	6	6	6	6	6	7	6	6	6	6	8	8	6	4	9	9	8	13	16	10	11	7.4	16.1
14-Oct	9	7	10	13	12	10	10	8	5	10	10	5	3	5	6	5	6	5	6	8	8	7	6	7	7.6	13.5
15-Oct	8	10	10	8	8	9	8	8	8	7	8	5	6	6	5	4	3	6	6	5	7	7	6	9	7.0	9.7
16-Oct	9	9	11	11	10	10	10	12	13	14	13	7	7	6	6	6	6	6	6	7	7	8	7	8	8.8	13.7
17-Oct	7	7	6	5	5	5	6	7	7	7	6	5	7	7	7	7	6	6	9	10	9	12	12	10	7.3	11.9
18-Oct	8	7	8	8	8	7	6	7	7	6	7	8	9	9	7	6	6	3	3	9	10	7	5	5	6.9	9.9
19-Oct	6	5	7	7	6	6	7	8	6	8	4	7	7	9	9	6	7	9	9	8	8	8	7	8	7.1	8.9
20-Oct	8	8	8	10	12	9	9	9	11	11	15	15	10	11	9	11	11	11	13	14	12	12	12	12	11.0	14.6
21-Oct	13	15	12	11	10	9	10	9	9	9	10	9	10	11	8	10	11	11	10	7	7	7	5	6	9.5	15.2
22-Oct	7	7	8	8	7	8	8	8	6	6	6	5	5	5	6	5	5	5	5	5	6	6	7	8	6.4	8.3
23-Oct	12	15	15	14	11	11	11	14	15	14	P	6	9	9	8	9	9	9	8	6	6	6	9	11	10.4	15.5
24-Oct	P	P	P	P	13	19	20	20	18	16	14	13	13	11	12	11	9	9	8	7	6	5	5	5	11.8	20.4
25-Oct	7	7	5	5	5	5	5	5	6	7	7	5	5	6	9	8	7	7	9	9	9	8	7	7	6.7	9.4
26-Oct	8	8	7	7	7	8	9	9	9	8	9	10	10	9	9	9	8	10	10	8	9	11	11	9	8.8	11.2
27-Oct	8	8	8	11	11	9	11	12	12	8	10	12	13	13	16	16	13	11	6	6	8	8	8	8	10.1	15.9
28-Oct	8	10	12	14	10	8	12	12	9	9	8	7	6	6	8	9	10	10	16	16	11	8	9	9	9.9	15.7
29-Oct	8	9	8	8	9	8	9	9	9	8	8	8	8	9	8	5	5	5	5	5	4	5	5	6	7.2	9.4
30-Oct	7	6	7	6	6	7	8	7	8	9	12	14	12	8	8	8	6	5	5	5	6	9	9	7	7.7	14.3
31-Oct	9	6	7	7	7	11	10	9	10	13	12	10	9	7	6	6	6	6	5	6	6	7	7	8	7.9	12.7
	8.3	8.5	8.6	8.7	8.6	8.6	8.6	9.1	8.9	9.2	9.3	8.3	8.2	7.9	8.1	7.9	7.7	8.3	8.1	8.0	8.1	8.3	8.2	8.3	Diurnal Average	
	16.8	16.9	17.6	16.4	15.7	18.7	20.4	20.3	17.6	16.4	15.7	14.5	13.4	12.7	15.9	15.9	14.3	17.2	17.5	17.1	14.4	16.1	15.2	17.3	Diurnal Maximum	

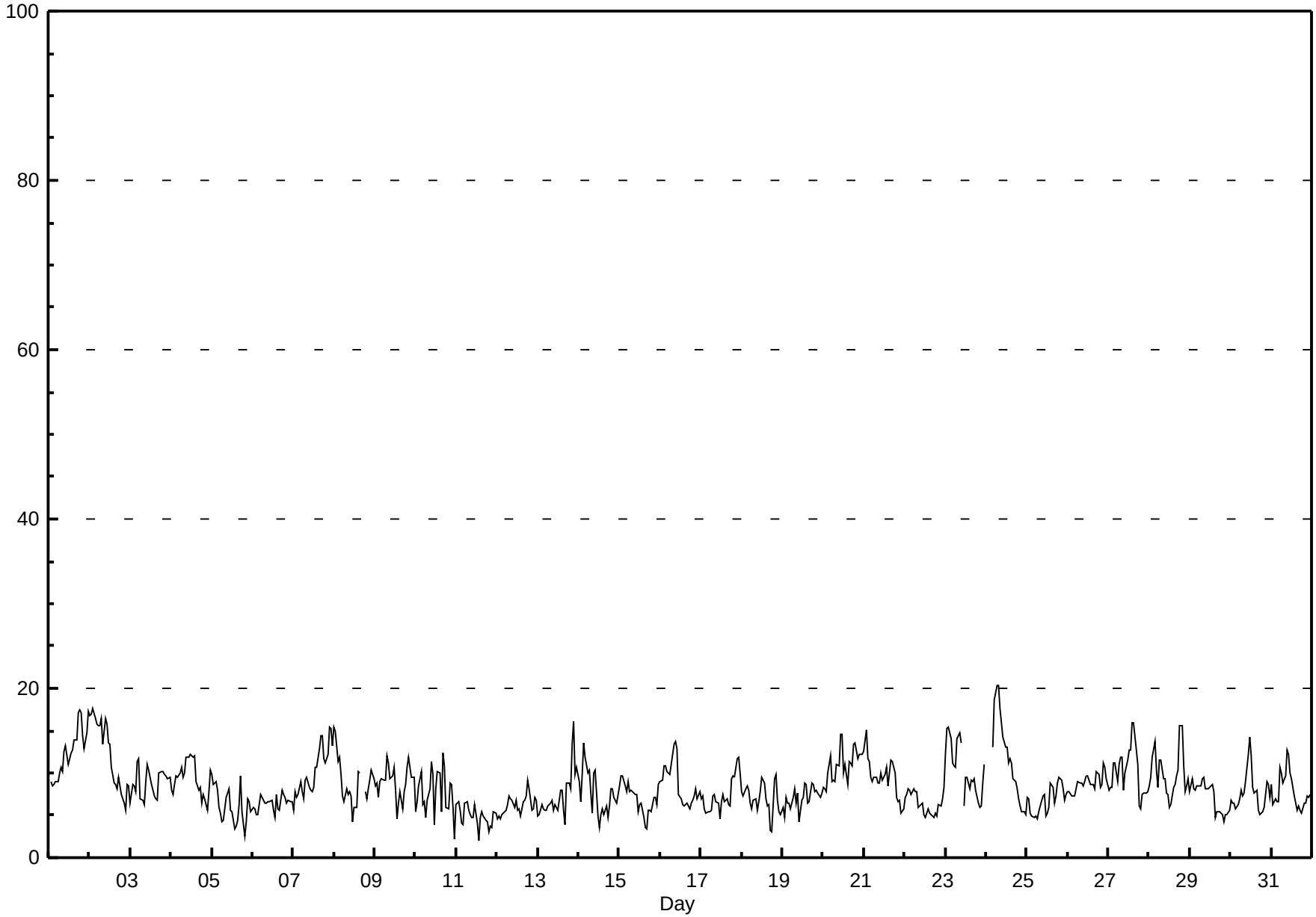
P - Power Failure D - DAS Failure

PASZA
Peace Air Shed Zone Association

Hourly Maximums

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

Beaverlodge - October 2010



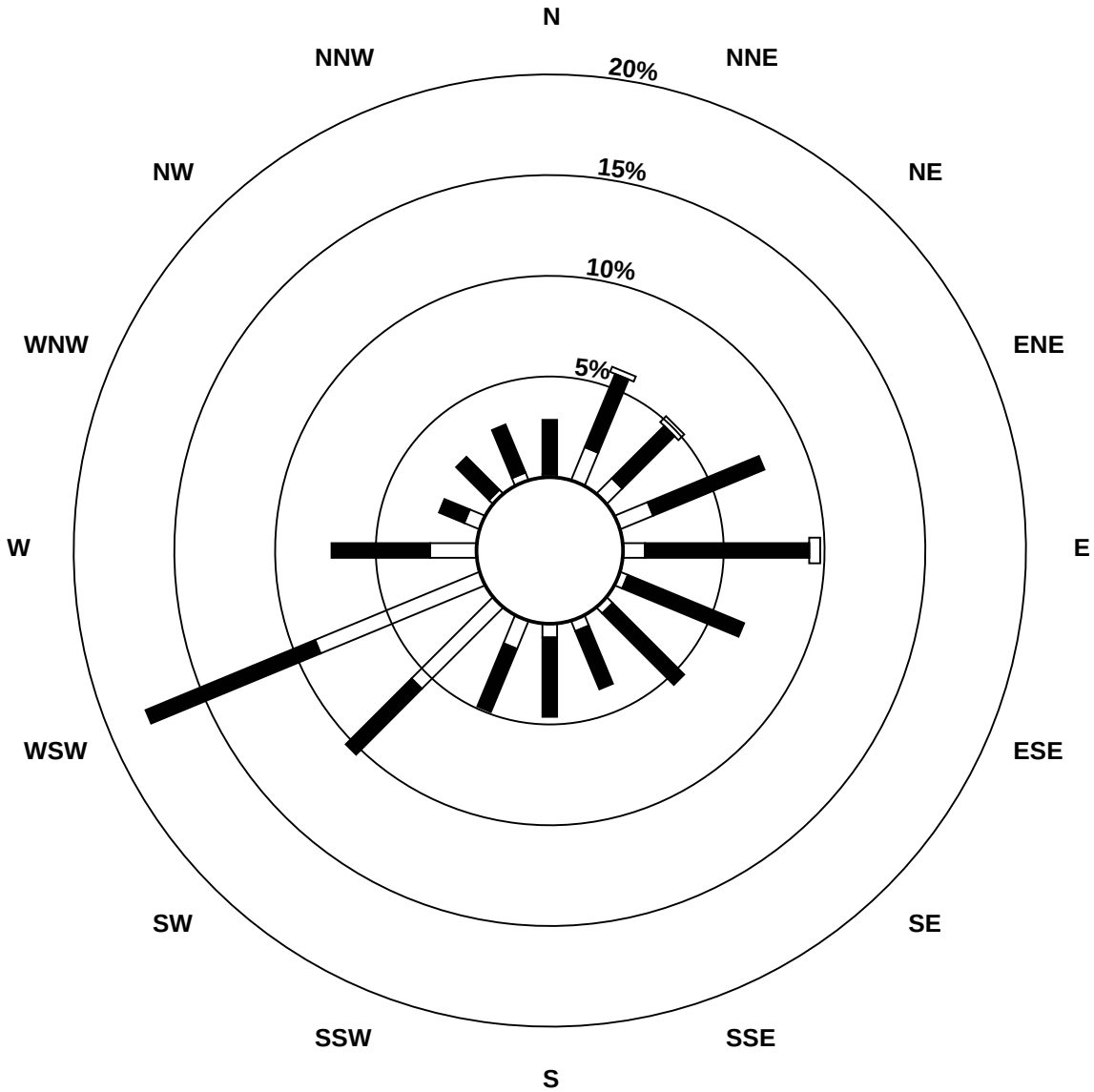
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

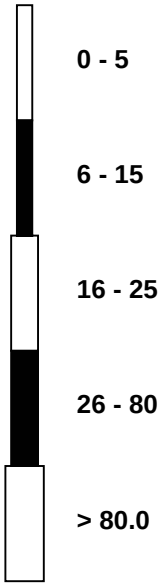
Pollutant Rose

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

Beaverlodge - October 2010



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



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 22.4 ^{o}C on Oct 6 14:00 Maximum Daily Average: 15.0 ^{o}C on Oct 7

Minimum Value: -4 ^{o}C on Oct 29 08:00 Minimum Daily Average: -0.4 ^{o}C on Oct 26
Maximum Diurnal Average: 10.8 ^{o}C at hour 15 Minimum Diurnal Average: 3.7 ^{o}C at hour 7
Monthly Average: 6.73 ^{o}C Percentiles: P_1 = -2.2 P_{10} = 0.0 Q_1 = 1.9 Median = 6.3 Q_3 = 10.4 P_{90} = 14.4 P_{99} = 21.4

Hours in Service:	744
Hours of Data:	739
Hours of Missing Data:	5
Hours of Calibration:	0
Percent Operational Time:	99.3

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-Oct	D	8	7	7	5	4	3	2	5	11	13	15	17	18	18	18	18	18	15	15	14	15	10	9	11.5	18.2
2-Oct	8	5	6	6	6	6	6	7	7	12	18	20	20	19	19	19	17	16	15	13	12	10	9	8	12.0	20.5
3-Oct	8	8	7	6	3	4	3	5	7	8	12	14	15	16	16	16	14	13	12	11	10	9	10	9	9.8	16.0
4-Oct	8	7	6	6	5	5	4	4	5	6	8	10	12	12	11	9	8	8	7	6	6	5	5	5	6.9	12.1
5-Oct	4	3	3	4	3	4	3	4	5	7	9	10	11	11	12	12	13	12	11	10	9	10	9	10	7.9	13.0
6-Oct	9	8	8	8	8	9	8	8	10	15	18	19	21	22	22	22	22	21	19	17	16	17	16	14	14.9	22.4
7-Oct	15	13	13	13	8	9	7	7	8	13	16	18	19	21	21	21	21	20	19	18	16	15	13	14	15.0	21.3
8-Oct	12	13	14	14	14	13	12	11	12	14	15	16	17	18	18	18	18	17	14	13	12	11	11	11	14.2	18.4
9-Oct	12	11	10	11	11	9	8	8	10	15	15	18	21	22	22	22	21	18	16	15	15	16	15	15	14.8	21.8
10-Oct	14	13	13	13	13	13	12	12	12	11	13	13	13	14	13	13	12	11	9	9	8	8	8	8	11.7	13.9
11-Oct	7	7	7	6	6	5	5	5	6	8	10	11	12	13	12	12	11	10	9	7	7	6	5	5	8.0	12.6
12-Oct	6	6	5	5	5	6	5	6	6	7	9	9	10	11	12	12	11	10	10	10	10	8	7	7	8.1	11.9
13-Oct	8	9	9	8	6	6	7	7	8	10	10	12	12	12	13	12	12	10	8	7	7	8	8	8	9.0	12.6
14-Oct	8	7	6	5	4	3	3	3	5	8	11	12	12	11	12	12	11	9	8	5	4	4	3	4	7.1	12.3
15-Oct	3	3	4	4	4	4	4	4	4	6	7	7	8	8	8	8	7	6	5	2	1	1	1	0	4.6	8.4
16-Oct	-1	-1	-1	-1	-1	-2	-2	-2	-1	2	5	8	9	10	10	10	9	7	5	4	3	2	1	0	3.1	10.1
17-Oct	0	1	2	2	4	5	6	5	6	8	9	11	11	12	13	12	11	10	7	6	7	6	5	6	6.8	12.6
18-Oct	7	6	7	7	7	8	7	7	8	10	11	11	11	12	12	14	14	12	10	8	8	8	8	8	9.2	13.9
19-Oct	8	10	9	8	8	7	6	5	6	7	8	9	10	10	10	10	9	8	7	6	6	5	3	4	7.5	10.1
20-Oct	2	1	1	0	-1	1	2	2	2	4	4	6	7	9	8	8	7	7	6	6	6	6	5	4	4.4	8.6
21-Oct	3	3	2	2	1	1	2	3	4	5	7	8	7	6	7	7	6	5	4	4	3	3	2	2	4.0	7.7
22-Oct	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1.0	2.1
23-Oct	0	0	0	0	0	0	0	0	0	1	1	1	2	1	1	1	1	1	0	1	1	1	2	2	0.7	2.2
24-Oct	P	P	P	P	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	1	1	0	0	0	2.1	3.0
25-Oct	0	0	0	0	0	0	0	-1	-1	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0.3	1.3
26-Oct	0	0	0	0	0	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	-1	-1	0	0	-1	0	0	-0.4	0.2
27-Oct	0	-1	-1	-1	-1	-1	-1	-1	-1	-1	0	0	0	0	1	4	2	2	2	2	2	1	2	1	0.5	4.0
28-Oct	1	1	1	0	0	-1	-1	-2	-2	0	2	3	6	6	6	6	5	3	2	0	0	0	-2	-1	1.3	6.4
29-Oct	-2	-2	-2	-3	-3	-3	-3	-4	-3	-1	1	5	8	9	10	10	9	6	5	5	4	4	2	3	2.2	9.8
30-Oct	2	3	3	3	4	4	4	4	3	4	9	10	10	11	11	11	10	8	7	6	5	5	4	4	6.1	11.4
31-Oct	4	4	4	3	1	-1	0	1	0	1	3	5	9	10	9	8	7	4	4	4	3	1	2	3	3.7	9.7
	5.2	4.9	4.8	4.5	4.0	4.0	3.7	3.7	4.4	6.2	8.0	9.2	10.1	10.6	10.8	10.7	10.0	8.9	7.7	6.8	6.3	5.9	5.3	5.3	Diurnal Average	
	15.3	13.2	14.4	14.0	13.9	13.5	12.5	11.9	12.4	14.8	18.3	20.5	21.2	22.4	22.1	22.4	21.8	20.8	19.0	18.5	15.8	17.1	16.5	15.2	Diurnal Maximum	

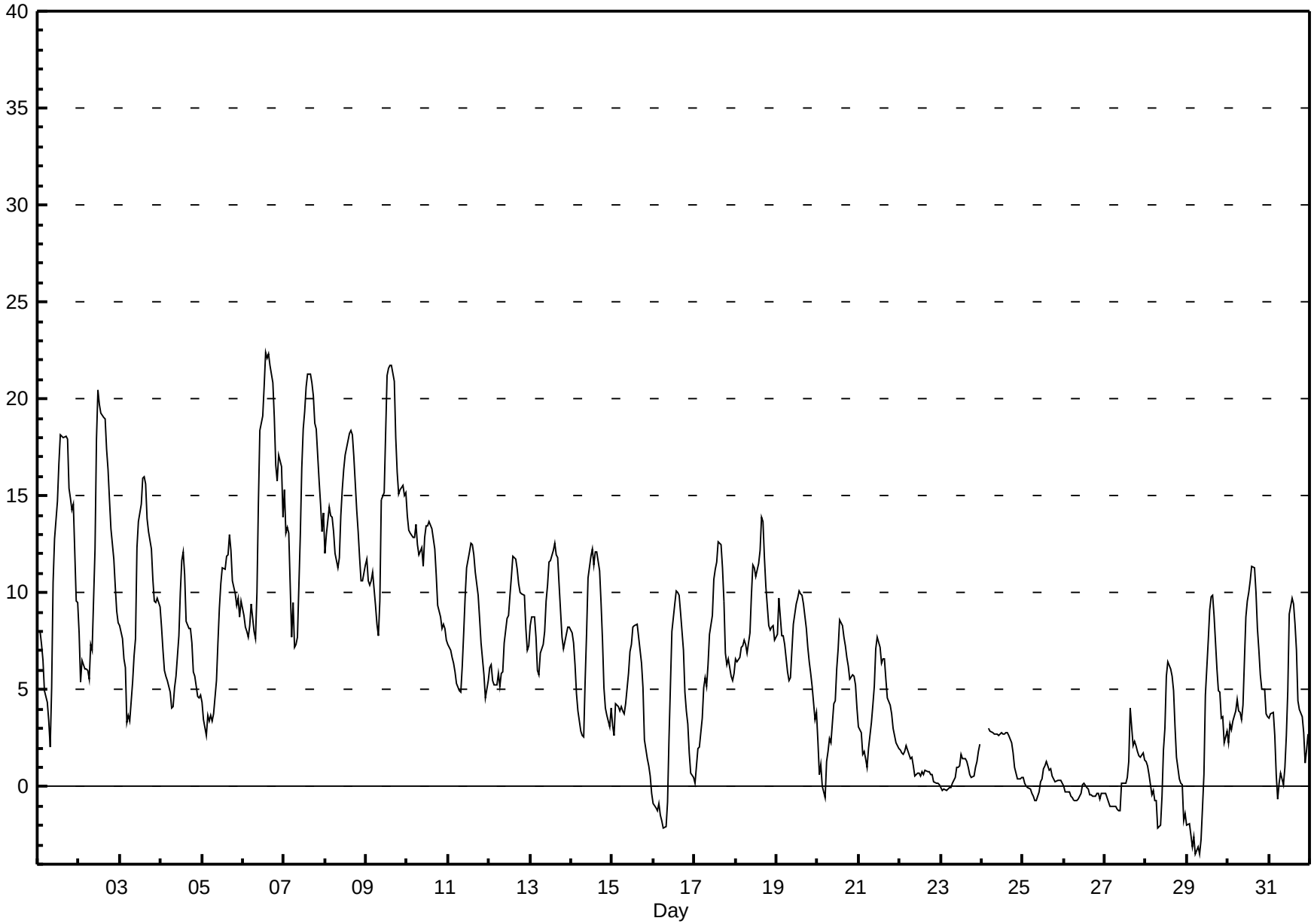
P - Power Failure D - DAS Failure

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 96.6 % on Oct 21 06:00 Maximum Daily Average: 93.8 % on Oct 23

Minimum Value: 20 % on Oct 9 16:00 Minimum Daily Average: 40.6 % on Oct 9
Maximum Diurnal Average: 74.1 % at hour 7 Minimum Diurnal Average: 50.0 % at hour 15
Monthly Average: 62.93 % Percentiles: P_1 = 23.7 P_{10} = 34.3 Q_1 = 46.4 Median = 60.4 Q_3 = 83.4 P_{90} = 93.2 P_{99} = 96.3

Hours in Service:	744
Hours of Data:	739
Hours of Missing Data:	5
Hours of Calibration:	0
Percent Operational Time:	99.3

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-Oct	D	52	54	56	63	65	69	76	65	48	43	40	37	35	35	34	34	35	41	41	44	43	61	61	49.2	76.2
2-Oct	68	79	75	76	76	76	78	70	72	57	44	36	37	38	38	38	40	41	45	48	51	56	61	62	56.7	78.7
3-Oct	63	63	66	66	78	77	78	69	68	66	49	39	34	31	31	31	36	39	40	46	47	46	44	45	52.2	78.1
4-Oct	50	61	68	66	66	68	76	76	76	75	68	62	57	53	59	80	82	76	75	75	72	74	73	73	69.2	81.5
5-Oct	74	77	77	63	62	58	58	57	53	49	42	34	31	31	26	27	30	44	54	57	58	56	59	55	51.3	76.8
6-Oct	58	62	62	64	63	60	66	68	64	51	40	39	35	30	30	29	31	33	37	45	47	42	44	53	48.1	68.0
7-Oct	48	55	54	55	75	68	77	77	76	60	50	41	37	33	32	32	33	35	37	36	44	50	55	49	50.3	77.0
8-Oct	58	51	51	56	55	56	59	57	54	46	39	32	30	29	27	26	27	31	35	37	41	43	45	44	42.9	58.9
9-Oct	45	50	54	54	52	60	64	65	60	43	44	32	22	20	20	20	22	27	30	32	32	37	43	43	40.6	65.4
10-Oct	54	61	56	54	53	52	56	58	59	51	34	29	26	24	26	29	27	29	32	31	32	32	36	42	41.1	61.2
11-Oct	42	41	42	44	49	53	55	55	50	44	34	28	25	24	24	25	27	31	40	48	53	60	64	61	42.5	64.2
12-Oct	58	55	57	57	56	54	58	58	59	55	52	52	50	49	47	46	48	52	52	52	51	56	60	60	54.0	60.4
13-Oct	57	56	56	61	70	73	71	70	69	63	60	55	55	54	53	56	57	62	70	73	73	71	69	68	63.4	72.7
14-Oct	68	70	74	80	83	87	89	88	74	61	44	29	28	27	25	23	24	28	34	44	46	50	53	51	53.3	89.0
15-Oct	55	57	47	47	49	49	50	52	50	44	39	38	35	35	35	38	39	39	44	53	60	60	61	63	47.5	62.9
16-Oct	63	63	63	61	64	66	67	67	64	57	47	37	32	31	31	32	34	39	46	49	50	55	58	58	51.5	67.5
17-Oct	59	57	54	53	50	46	47	50	48	44	41	37	35	34	31	29	31	34	41	42	41	44	45	45	43.3	59.2
18-Oct	42	43	43	44	47	53	58	59	56	52	47	48	50	49	48	41	41	48	54	61	63	63	62	65	51.5	64.9
19-Oct	63	58	61	67	68	66	70	71	72	64	52	41	43	45	48	50	52	57	57	56	57	59	64	62	58.5	71.7
20-Oct	68	75	74	78	80	75	76	75	76	72	72	69	72	71	70	73	78	79	83	85	86	87	88	90	77.2	90.3
21-Oct	95	95	96	96	96	97	97	91	90	88	77	71	79	88	86	83	83	82	80	82	79	80	81	83	86.5	96.6
22-Oct	84	84	84	82	82	86	88	86	88	93	92	92	93	92	94	92	92	92	91	93	95	96	95	95	90.0	95.9
23-Oct	95	96	95	95	95	95	96	95	93	91	91	91	88	90	90	92	95	96	96	96	95	95	95	96	93.8	96.0
24-Oct	P	P	P	P	95	94	94	94	94	94	93	93	93	92	91	92	92	94	95	95	95	96	95	95	93.7	95.7
25-Oct	93	94	94	93	93	93	93	93	92	90	88	88	86	86	86	88	89	91	93	94	94	92	92	94	91.2	94.3
26-Oct	94	93	92	92	93	92	92	92	92	92	91	90	90	90	90	91	91	92	92	90	89	91	89	88	91.2	93.8
27-Oct	88	90	93	93	94	94	95	96	96	96	91	91	93	93	91	79	90	89	88	92	93	94	92	94	91.9	96.4
28-Oct	93	93	93	95	96	96	96	96	96	89	78	72	60	52	58	65	71	79	84	83	84	87	93	93	83.4	96.4
29-Oct	94	94	94	95	94	94	93	92	90	84	80	72	63	54	52	48	51	57	60	59	66	65	69	65	74.3	95.1
30-Oct	67	62	63	61	58	55	57	58	62	60	47	43	44	43	41	43	47	53	55	58	59	57	62	61	54.9	66.9
31-Oct	61	60	60	64	74	80	75	73	81	79	76	71	54	41	37	35	39	48	46	47	54	64	62	60	60.0	81.0
	67.4	68.2	68.5	69.1	72.0	72.2	74.1	73.8	72.2	66.3	59.6	54.6	52.1	50.4	50.0	50.5	52.7	56.0	58.9	61.3	63.0	64.5	66.9	66.9	Diurnal Average	
	95.3	95.7	96.0	96.2	96.4	96.6	96.5	96.2	96.4	96.4	93.5	93.0	93.3	92.6	93.7	91.9	95.3	95.8	96.0	95.8	95.3	95.9	95.3	95.7	Diurnal Maximum	

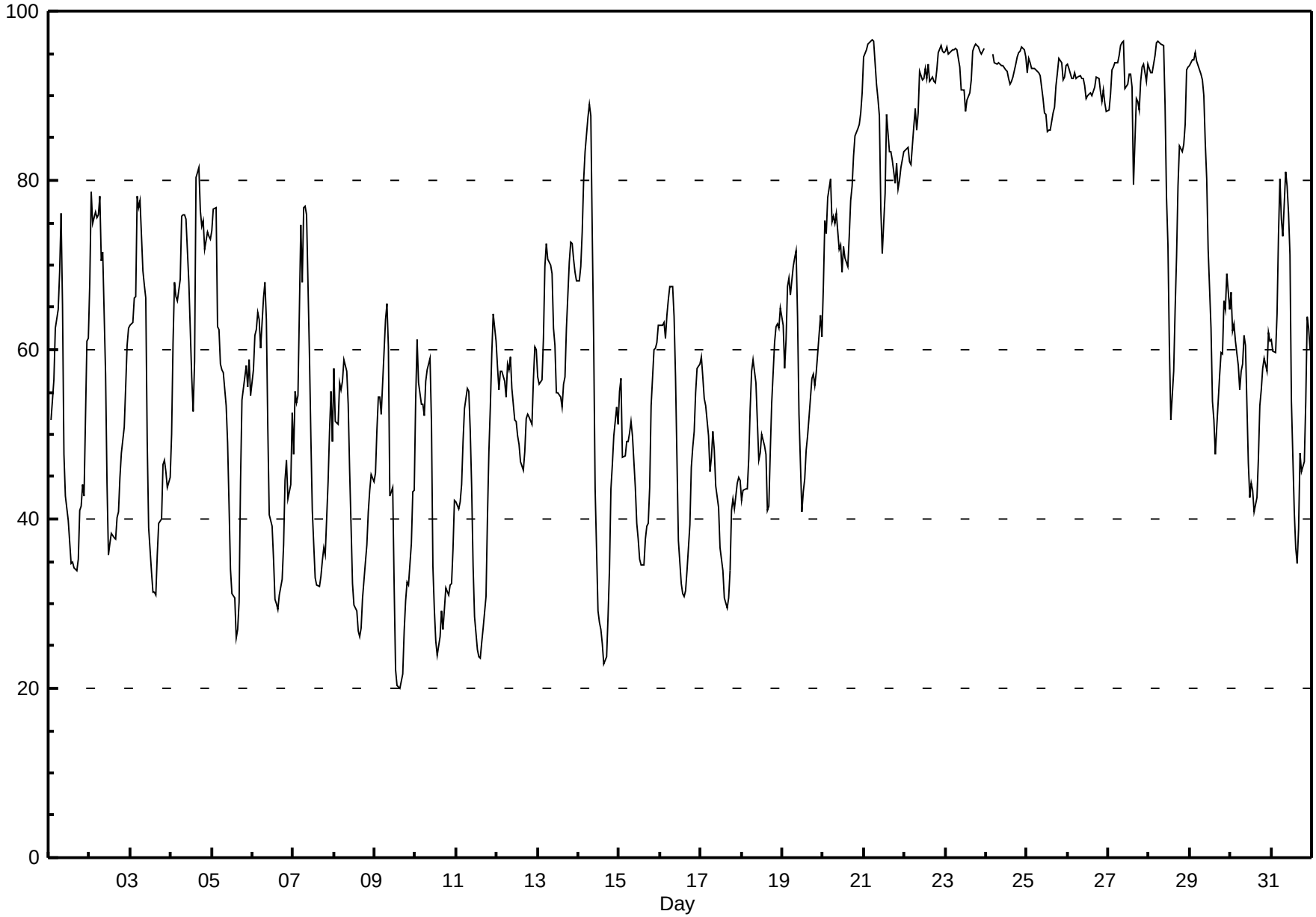
P - Power Failure D - DAS Failure

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - October 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	D	17	18	6	2	4	6	4	3	2	1	2	3	5	11	14	12	6	6	5	5	6	2	6	4.6	17.5
Dir	D	94	90	101	176	129	98	212	289	110	116	118	106	126	124	129	116	96	51	52	47	296	50	44	100	90
2 Spd	3	3	3	3	1	0	2	1	2	2	2	25	29	28	29	30	37	40	25	17	15	11	9	11	12.1	40.4
Dir	360	45	16	25	1	131	50	153	180	91	144	267	272	262	264	269	257	259	250	263	272	290	286	298	267	259
3 Spd	10	9	5	5	3	2	3	4	2	3	3	10	13	11	11	12	10	8	9	12	11	6	9	9	4.5	13.1
Dir	298	306	316	358	229	239	29	26	189	266	68	107	95	94	87	66	51	40	22	26	28	7	3	360	35	95
4 Spd	10	12	9	7	11	6	2	3	3	4	4	4	5	7	17	11	11	16	11	11	15	10	11	16	6.4	17.3
Dir	11	322	334	343	323	342	285	37	327	216	192	229	221	228	261	250	224	239	236	248	241	242	240	248	262	261
5 Spd	16	14	11	14	14	16	15	6	8	11	17	18	18	15	20	16	14	25	18	9	10	6	5	2	12.2	24.7
Dir	245	246	249	258	248	257	260	238	230	208	228	232	234	221	214	202	229	222	223	218	219	220	46	39	232	222
6 Spd	5	0	2	3	5	4	4	4	6	7	13	22	20	34	31	22	16	10	9	9	3	7	11	3	8.1	34.4
Dir	63	152	108	101	82	135	112	159	178	172	183	202	184	220	222	226	229	255	240	228	199	276	252	14	211	220
7 Spd	3	3	2	1	4	2	1	2	3	1	2	12	17	14	15	14	12	6	6	4	7	10	5	6	3.2	17.5
Dir	17	73	95	359	140	70	169	103	89	235	308	129	126	129	118	133	126	98	76	314	330	342	336	271	109	126
8 Spd	2	6	14	21	26	18	18	19	23	25	31	31	31	23	23	17	13	5	7	8	9	10	15	21	11.4	31.3
Dir	204	238	307	276	266	262	247	249	244	239	246	262	265	266	255	255	241	254	40	45	75	84	103	105	255	262
9 Spd	23	19	18	20	15	5	5	2	4	3	7	15	30	32	26	22	16	11	2	6	8	7	10	11	6.8	31.8
Dir	103	103	107	113	131	213	48	264	51	184	190	210	228	222	227	229	232	246	63	70	69	128	162	161	178	222
10 Spd	5	7	11	11	9	7	2	8	36	44	46	54	59	51	49	44	45	39	32	29	26	34	43	43	26.1	59.0
Dir	154	76	94	104	103	105	176	316	276	260	255	257	253	246	240	231	241	236	239	239	237	237	241	242	244	253
11 Spd	36	32	30	30	33	28	22	22	14	17	30	29	28	19	18	10	16	21	31	19	16	15	14	16	22.5	36.1
Dir	245	244	241	244	244	244	248	251	219	222	236	242	247	239	238	259	269	251	233	222	230	229	242	245	241	245
12 Spd	18	25	22	20	14	16	6	16	14	13	10	7	5	8	16	23	22	11	5	8	9	6	4	3	10.9	24.9
Dir	241	250	247	248	254	250	216	236	238	249	243	210	199	216	218	225	228	211	188	174	156	128	98	133	229	250
13 Spd	6	3	7	11	6	6	15	17	14	10	4	14	11	11	6	6	6	8	8	8	10	11	15	16	1.2	16.9
Dir	195	223	297	286	295	261	258	247	241	273	326	293	322	351	333	42	81	114	101	101	103	98	101	100	286	247
14 Spd	13	6	5	2	3	0	4	7	12	16	33	45	39	32	28	23	25	25	18	12	9	12	8	15	12.6	45.4
Dir	103	118	138	172	150	328	334	337	328	320	274	267	257	250	252	257	253	256	254	225	204	214	210	232	256	267
15 Spd	3	10	23	25	28	29	29	28	30	39	41	37	39	39	42	37	32	28	19	9	8	6	12	7	24.5	41.8
Dir	246	237	249	259	257	260	262	260	259	258	262	265	257	263	257	256	261	260	249	216	191	208	237	228	256	257
16 Spd	4	3	5	9	3	3	3	3	2	2	11	14	15	19	23	23	23	20	15	9	6	5	2	3	8.3	22.8
Dir	241	190	207	242	233	256	58	109	93	167	222	248	257	234	230	245	243	251	250	248	255	206	148	158	238	245
17 Spd	4	5	5	4	9	8	11	14	18	25	27	34	30	27	27	26	23	21	6	5	6	4	3	4	13.5	34.3
Dir	169	191	211	201	218	234	246	239	243	248	252	252	260	263	259	250	266	262	225	221	217	195	154	173	247	252
18 Spd	6	2	1	5	7	13	10	9	3	24	27	20	21	19	18	30	40	32	22	14	15	17	21	16	15.9	40.2
Dir	192	173	168	213	219	242	240	210	208	252	249	241	246	250	244	241	245	249	249	225	223	223	228	234	239	245
19 Spd	15	29	29	26	22	13	2	2	2	9	19	30	24	23	24	18	12	10	7	8	7	7	4	10	13.4	30.2
Dir	253	248	247	251	248	254	214	198	253	234	254	264	267	269	274	274	281	286	311	327	330	337	301	317	265	264
20 Spd	7	0	4	0	4	6	3	4	4	4	2	3	1	6	8	9	8	9	9	10	4	4	2	3	3.2	9.6
Dir	299	23	35	326	70	53	80	84	101	113	230	178	162	89	123	100	79	89	91	89	105	126	258	308	90	89
21 Spd	3	2	1	1	3	4	4	5	8	12	15	12	8	9	7	12	15	11	9	12	13	11	10	7	7.0	14.5
Dir	64	212	145	82	56	57	49	335	331	342	327	313	8	34	14	19	16	20	348	9	10	6	13	24	5	327
22 Spd	7	9	11	7	11	14	16	17	19	21	23	20	18	15	8	9	9	8	7	2	4	7	3	5	10.6	23.1
Dir	10	15	30	46	63	69	67	71	76	78	68	62	59	61	51	47	54	66	66	336	21	23	9	17	57	68

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

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
23 Spd	7	7	5	8	6	2	3	1	1	1	2	4	1	5	4	6	6	6	6	5	7	5	17	16	4.7	17.4
Dir	16	5	11	31	33	60	191	169	13	54	83	84	66	36	74	38	23	27	32	5	33	359	71	74	43	71
24 Spd	P	P	P	P	14	13	13	16	16	16	16	17	18	18	15	11	12	14	15	17	17	18	14	8	13.9	18.4
Dir	P	P	P	P	89	79	82	80	86	80	79	77	76	76	72	67	62	51	35	32	31	33	30	24	63	33
25 Spd	9	9	11	12	8	11	9	11	8	6	4	3	8	9	11	11	12	13	15	14	13	14	16	17	9.0	16.9
Dir	29	22	28	28	19	34	27	34	37	36	36	41	93	100	90	78	90	92	96	100	102	102	95	90	69	90
26 Spd	11	11	11	11	10	9	11	11	13	10	9	7	8	11	11	10	10	9	9	8	6	8	9	7	9.4	12.8
Dir	77	70	82	88	73	71	67	78	85	65	72	93	90	97	88	78	87	89	80	71	99	134	79	87	82	85
27 Spd	6	5	6	6	7	6	6	6	4	5	4	4	4	5	4	3	5	5	0	3	3	1	2	3	3.0	7.3
Dir	90	106	117	132	131	115	122	141	144	131	106	190	193	179	189	144	202	5	220	191	138	65	277	247	141	131
28 Spd	5	6	7	2	1	5	2	2	3	4	5	5	3	3	7	7	6	5	4	5	5	3	3	5	2.2	7.2
Dir	307	329	354	248	230	43	91	106	97	158	163	170	158	184	165	140	126	115	130	106	100	133	90	75	122	140
29 Spd	3	2	2	2	4	4	2	4	5	7	9	13	25	29	21	23	16	11	10	7	6	8	2	4	7.8	29.2
Dir	150	134	107	94	135	113	121	154	181	183	200	219	231	233	221	225	223	223	209	239	237	199	99	189	213	233
30 Spd	7	4	6	3	5	7	5	6	8	7	8	11	7	8	7	8	6	1	6	2	4	3	4	3	4.7	10.7
Dir	202	168	156	133	144	150	117	112	107	111	138	153	133	125	159	191	220	67	68	117	98	146	107	72	139	153
31 Spd	3	3	2	1	1	1	2	3	10	5	1	3	16	29	31	29	16	10	8	7	9	5	9	13	4.1	30.7
Dir	81	77	148	47	170	157	278	300	325	17	188	80	254	255	260	266	272	295	322	12	30	104	93	108	278	260
Spd	1.4	1.8	1.6	2.8	2.8	2.3	1.6	2.2	3.0	5.2	8.0	10.6	10.8	10.6	11.3	9.7	9.0	7.3	3.9	1.7	0.8	1.6	1.1	1.3	Diurnal Average	
Dir	234	242	253	253	233	245	248	241	251	245	245	246	245	240	237	238	244	249	244	239	211	215	190	197		
Spd	36.1	32.5	30.4	29.5	33.0	29.3	28.9	27.7	35.6	44.4	45.8	53.7	59.0	51.3	49.1	44.1	44.7	40.4	31.9	29.1	25.7	33.6	42.6	43.5	Diurnal Maximum	
Dir	245	244	241	244	244	260	262	260	276	260	255	257	253	246	240	231	241	259	239	239	237	237	241	242		

Maximum Speed Value: 59 km/h on Oct 10 13:00
Maximum Daily Speed Average: 26.1 km/h on Oct 10
Maximum Diurnal Speed Average: 11.3 km/h at hour 15

Minimum Speed Value: 0 km/h on Oct 27 19:00
Minimum Daily Speed Average: 1.2 km/h on Oct 27
Minimum Diurnal Speed Average: 0.8 km/h at hour 21

Monthly Average Velocity: 4.64 km/h 241.6 deg

Speed Percentiles: $P_1 = 0.6$ $P_{10} = 2.6$ $Q_1 = 4.8$ Median = 9.0 $Q_3 = 15.9$ $P_{90} = 26.2$ $P_{99} = 44.0$

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

Hours in Service:	744
Hours of Data:	739
Hours of Missing Data:	5
Percent Operational Time:	99.3

P - Power Failure D - DAS Failure

Frequency Distribution

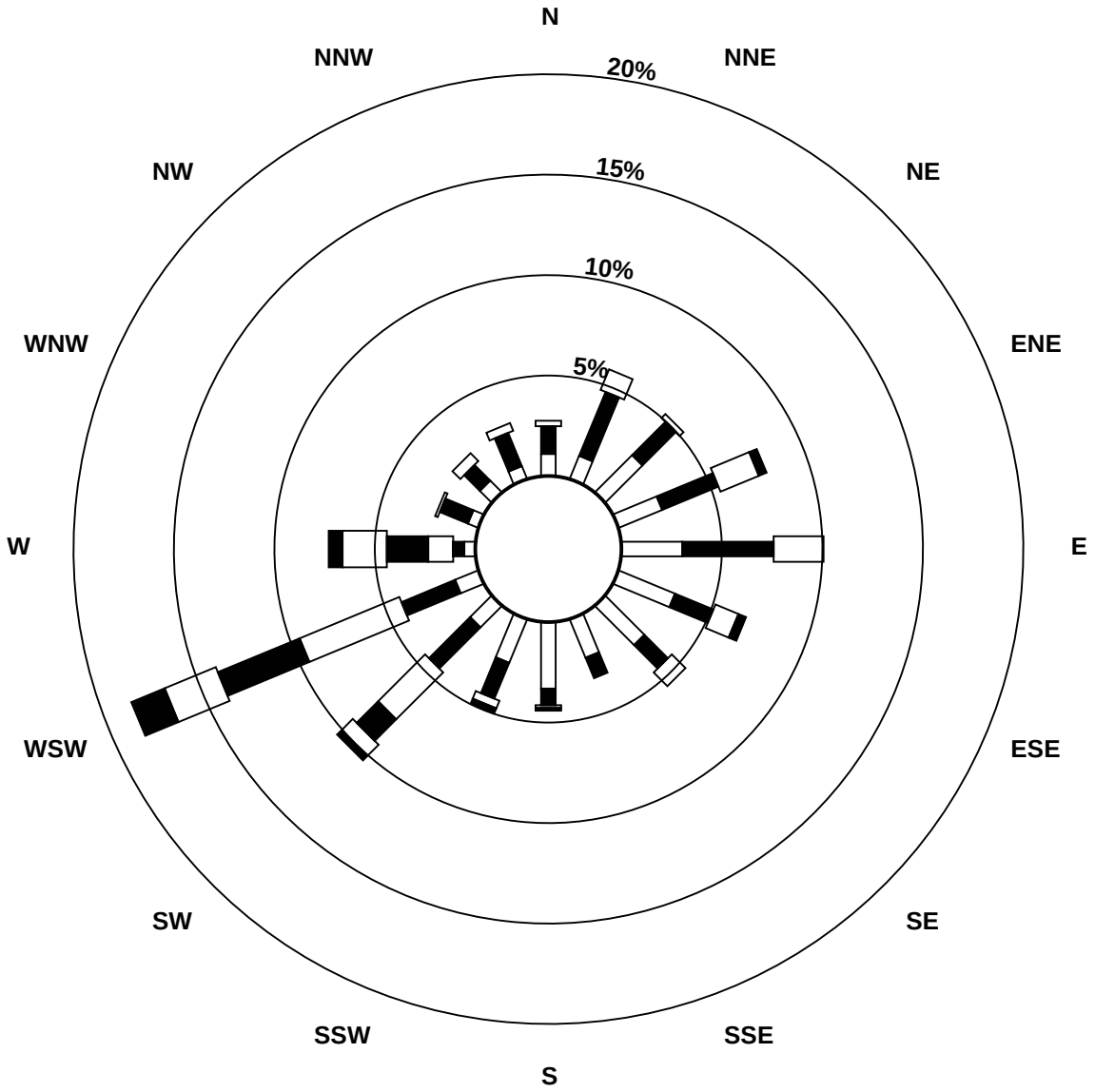
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	14	23	7	0	0	0	44
NorthEast	28	38	18	1	0	0	85
East	40	54	42	5	0	0	141
SouthEast	36	25	9	1	0	0	71
South	36	22	3	2	0	0	63
SouthWest	23	38	48	24	20	8	161
West	10	13	30	40	23	12	128
NorthWest	11	27	8	0	0	0	46
Total	198	240	165	73	43	20	739

PASZA
Peace Air Shed Zone Association

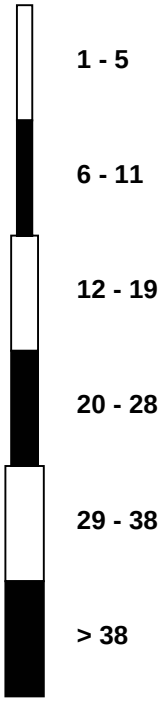
Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - October 2010



Wind Speed Classes (km/h)



PASZA
Peace Air Shed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - October 2010

Maximum Speed: 59 km/h on Oct 10 13:00

Maximum Daily Speed Average: 30.8 km/h on Oct 10

Minimum Speed: 1 km/h on Oct 23 09:00

Minimum Daily Speed Average: 4.9 km/h on Oct 27

Maximum Diurnal Speed Average: 18.7 km/h at hour 15

Minimum Diurnal Speed Average: 8.3 km/h at hour 7

Monthly Average Speed: 12.28 km/h

Percentiles: P_1 = 1.8 P_{10} = 3.6 Q_1 = 5.4 Median = 9.2 Q_3 = 16.1 P_{90} = 26.6 P_{99} = 44.3

Hours in Service: 744
Hours of Data: 739
Hours of Missing Data: 5

Percent Operational Time: 99.3

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-Oct	D	17	18	8	3	5	7	5	4	2	2	3	4	6	11	14	12	6	6	5	6	6	3	6	6.9	17.6
2-Oct	6	4	6	5	3	3	3	2	3	3	3	26	29	28	29	31	38	40	26	17	15	11	9	12	14.7	40.5
3-Oct	10	9	6	6	5	3	5	5	2	3	3	11	14	11	12	12	10	8	9	12	11	8	9	9	8.1	13.7
4-Oct	10	13	10	8	11	7	4	3	5	5	4	4	6	8	18	11	11	16	11	11	15	10	12	16	9.5	17.7
5-Oct	16	14	11	14	14	16	16	8	9	11	17	19	19	15	21	16	15	25	18	9	10	6	5	2	13.5	24.8
6-Oct	6	3	3	4	5	5	5	5	6	8	14	23	21	35	31	22	16	11	9	9	4	8	12	6	11.3	34.9
7-Oct	5	3	3	3	5	3	3	3	4	2	4	12	18	14	15	14	12	7	6	6	9	11	8	8	7.4	17.7
8-Oct	3	7	15	21	26	18	19	20	23	25	31	32	31	24	24	18	13	6	7	8	9	10	15	21	17.7	31.7
9-Oct	24	19	18	20	15	9	6	4	4	4	8	16	30	32	26	22	16	11	5	6	8	8	10	12	13.9	32.0
10-Oct	6	8	11	11	9	7	3	9	36	45	46	54	59	52	50	44	45	39	32	29	26	34	43	44	30.8	59.3
11-Oct	36	33	30	30	33	28	22	22	15	17	30	29	28	20	19	10	17	22	31	19	16	15	14	17	23.0	36.2
12-Oct	18	25	22	20	14	16	7	17	15	14	11	7	6	8	16	23	22	12	5	9	10	6	5	3	12.7	25.0
13-Oct	6	4	7	11	7	6	15	17	14	10	7	15	11	12	7	6	6	8	8	8	10	11	15	16	9.9	17.1
14-Oct	13	7	6	5	4	2	5	8	12	17	33	46	40	32	28	23	26	26	18	12	9	12	8	15	17.0	45.5
15-Oct	6	11	23	25	28	29	29	28	30	39	41	37	39	40	42	37	32	28	19	10	8	7	12	8	25.3	42.0
16-Oct	6	5	5	9	5	4	4	4	3	4	12	15	16	20	23	23	23	20	15	9	6	5	3	4	10.0	22.9
17-Oct	4	6	6	4	9	9	11	15	18	25	27	35	31	27	28	27	23	21	8	5	6	4	3	5	14.8	34.6
18-Oct	6	2	4	5	7	13	10	9	5	24	28	20	21	19	19	30	40	32	22	14	16	17	21	16	16.7	40.3
19-Oct	16	29	29	26	22	13	2	2	3	9	20	30	24	24	24	18	12	10	7	8	8	7	4	10	14.9	30.3
20-Oct	8	4	5	6	5	6	3	4	5	5	4	3	2	7	8	9	8	9	9	10	5	5	3	6	5.7	9.7
21-Oct	3	3	3	2	3	4	4	6	8	13	15	12	9	9	8	12	15	11	9	12	14	11	10	7	8.5	14.7
22-Oct	7	9	11	7	11	14	16	17	19	21	23	20	18	15	8	9	10	9	7	4	4	7	4	5	11.5	23.2
23-Oct	7	7	6	8	6	3	3	2	1	1	3	4	2	5	4	6	6	6	6	6	7	6	17	16	5.8	17.4
24-Oct	P	P	P	P	14	13	14	16	16	16	16	17	18	18	15	11	13	14	15	17	17	18	14	8	15.0	18.4
25-Oct	9	9	11	12	8	11	9	11	8	6	4	4	8	9	11	11	12	13	15	15	13	15	16	17	10.7	17.0
26-Oct	11	11	11	11	11	10	11	11	13	10	9	7	9	11	11	10	10	9	9	8	6	9	9	7	9.8	12.8
27-Oct	6	5	6	6	7	7	6	6	4	5	4	4	5	5	5	4	7	8	4	3	4	1	2	4	4.9	8.1
28-Oct	5	6	7	5	2	5	4	4	5	4	5	6	4	4	7	7	6	5	5	5	6	4	5	5	5.0	7.4
29-Oct	3	2	3	2	4	5	3	6	5	7	10	14	25	29	21	23	16	12	10	8	6	9	3	4	9.5	29.2
30-Oct	8	6	7	5	7	8	6	7	8	7	8	11	7	8	8	8	7	5	6	4	5	4	5	5	6.6	10.8
31-Oct	4	3	3	2	2	2	4	4	11	6	2	3	16	29	31	29	16	10	8	8	9	8	9	13	9.7	30.9
	9.2	9.5	10.1	10.1	9.9	9.1	8.3	9.0	10.1	11.8	14.3	17.4	18.3	18.5	18.7	17.6	16.5	14.8	11.8	9.9	9.6	9.4	10.0	10.5	Diurnal Average	
	36.2	32.6	30.5	29.6	33.1	29.3	28.9	27.8	36.4	44.6	46.1	54.0	59.3	51.7	49.5	44.5	44.9	40.5	32.0	29.1	25.8	33.6	42.7	43.6	Diurnal Maximum	

P - Power Failure D - DAS Failure

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

PASZA
Peace Air Shed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - October 2010

Maximum Value: 98.0 deg on Oct 14 06:00

Minimum Value: 2.1 deg on Oct 24 21:00

Percentiles: P_1 = 2.9 P_{10} = 4.6 Q_1 = 6.5 Median = 12.0 Q_3 = 30.9 P_{90} = 52.8 P_{99} = 85.6

Hours in Service:	744
Hours of Data:	739
Hours of Missing Data:	5
Hours of Calibration:	0
Percent Operational Time:	99.3

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-Oct	D	2	3	56	46	40	36	16	76	47	58	65	57	36	16	12	8	14	13	11	41	16	72	52	76.5
2-Oct	64	66	85	71	84	90	66	68	56	34	42	20	5	7	10	8	6	4	7	11	6	18	6	10	89.6
3-Oct	11	14	34	35	67	45	46	51	29	26	48	28	17	18	19	18	6	7	5	3	6	35	15	19	67.3
4-Oct	18	32	34	33	34	36	71	23	51	22	20	28	26	21	14	19	8	6	3	5	3	7	8	5	71.1
5-Oct	4	3	9	10	11	3	6	48	35	12	11	12	10	10	10	9	10	6	3	16	8	30	40	49	48.7
6-Oct	40	95	63	33	34	45	24	34	12	24	25	11	10	10	4	5	6	20	12	26	62	9	14	60	94.8
7-Oct	67	53	54	84	54	60	63	38	55	45	63	18	8	15	10	9	6	20	17	50	51	36	57	43	84.0
8-Oct	71	25	26	11	4	8	8	11	3	5	6	10	8	15	15	18	7	29	12	6	12	4	6	3	71.3
9-Oct	5	6	5	6	7	55	51	81	27	53	32	12	6	6	6	11	7	5	79	18	11	22	6	10	81.4
10-Oct	27	13	7	8	6	15	39	42	18	5	7	5	6	6	7	7	5	5	6	4	4	3	4	4	42.1
11-Oct	5	5	4	4	4	6	6	6	16	11	5	9	11	12	12	17	6	10	6	4	3	4	4	8	16.8
12-Oct	4	4	6	5	11	13	40	12	5	8	13	14	13	13	7	4	3	12	9	11	13	27	36	32	40.4
13-Oct	9	23	13	10	24	39	4	7	7	12	52	9	20	15	36	31	22	11	9	9	7	4	3	3	52.5
14-Oct	10	21	39	71	49	98	50	39	19	11	12	4	8	6	7	10	12	5	11	8	10	7	16	14	98.0
15-Oct	67	26	7	5	4	4	3	4	3	4	7	6	6	7	6	7	4	6	3	25	10	23	5	44	67.5
16-Oct	68	57	13	17	75	65	65	42	32	46	14	14	15	14	10	7	3	3	4	6	48	20	49	31	74.9
17-Oct	15	31	64	23	11	15	14	15	5	5	6	8	7	8	12	10	5	6	33	19	18	13	17	18	64.3
18-Oct	12	40	77	17	13	6	10	12	51	4	6	7	5	7	10	11	3	4	5	15	6	3	2	6	76.7
19-Oct	5	4	4	3	3	10	65	34	67	9	13	5	9	10	6	6	7	8	14	12	14	13	31	24	67.5
20-Oct	24	84	18	97	30	8	21	29	40	40	51	32	79	15	12	14	8	7	7	6	34	45	52	64	96.6
21-Oct	33	39	64	38	22	36	26	66	10	9	10	8	30	14	16	8	7	7	6	12	6	12	8	8	66.2
22-Oct	8	9	5	15	8	5	5	7	5	4	4	5	6	9	15	9	15	10	11	49	18	9	57	19	57.0
23-Oct	6	20	24	5	7	37	24	84	65	44	26	37	47	10	28	24	7	6	6	31	23	41	3	5	84.1
24-Oct	P	P	P	P	5	5	4	5	5	5	5	5	5	5	6	7	6	7	10	2	2	3	5	10	10.1
25-Oct	7	6	5	5	6	4	5	6	4	7	16	27	12	9	10	7	6	7	7	6	6	7	6	6	26.9
26-Oct	9	8	7	7	8	7	8	11	7	10	13	18	12	5	8	9	8	7	7	10	29	20	11	8	29.4
27-Oct	9	9	11	7	7	12	12	16	27	21	43	34	33	19	37	46	33	50	86	15	53	66	29	26	86.2
28-Oct	12	15	7	58	89	7	58	48	44	20	20	17	29	33	12	12	13	8	22	11	15	40	46	30	89.1
29-Oct	33	47	35	35	28	26	51	47	29	12	16	30	5	4	6	5	5	8	15	28	22	22	45	37	50.8
30-Oct	23	45	24	57	35	22	31	15	8	11	15	8	12	11	24	10	10	82	26	61	39	53	49	53	81.9
31-Oct	30	14	55	85	68	82	86	53	29	30	85	39	37	7	6	5	7	9	12	17	7	49	10	4	85.9
	71.3	94.8	84.7	96.6	89.1	98.0	85.9	84.1	76.5	53.0	84.7	64.8	78.7	36.5	36.7	45.6	33.4	81.9	86.2	61.3	62.0	66.1	72.2	63.6	

P - Power Failure D - DAS Failure

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

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.9 ppb on Oct 1 10:00 Maximum Daily Average: 1.1 ppb on Oct 1

Minimum Value: 0 ppb on Oct 10 09:00 Minimum Daily Average: 0.0 ppb on Oct 26
Maximum Diurnal Average: 0.4 ppb at hour 11 Minimum Diurnal Average: 0.2 ppb at hour 21
Monthly Average: 0.28 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.5$ $P_{99} = 1.4$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	1	1	1	A	1	1	1	0	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9
2-Oct	1	1	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	1.3
3-Oct	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.6	1.0
4-Oct	A	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	A	0.4	1.2
5-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0.2	0.5
6-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.5
7-Oct	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	1	1	A	1	0	1	0.6	1.4
8-Oct	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0.3	0.6
9-Oct	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0.3	0.8
10-Oct	1	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	0.8
11-Oct	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	0.3
12-Oct	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.9
13-Oct	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.7
14-Oct	0	0	0	0	1	1	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
15-Oct	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	0.5
16-Oct	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	0.3
17-Oct	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
18-Oct	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
19-Oct	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	0.5
20-Oct	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0.4	1.4
21-Oct	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5
22-Oct	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	0.2
23-Oct	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	0.2
24-Oct	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	0.2
25-Oct	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	0.2
26-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.2
27-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3
28-Oct	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0.3	0.6
29-Oct	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
30-Oct	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.5
31-Oct	0	1	1	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	Diurnal Average	
	1.3	1.0	0.8	0.8	0.7	0.6	0.8	0.7	0.7	1.9	1.7	1.8	1.5	1.4	1.4	1.4	1.5	1.3	1.0	0.9	0.8	0.7	0.9	1.4	Diurnal Maximum	

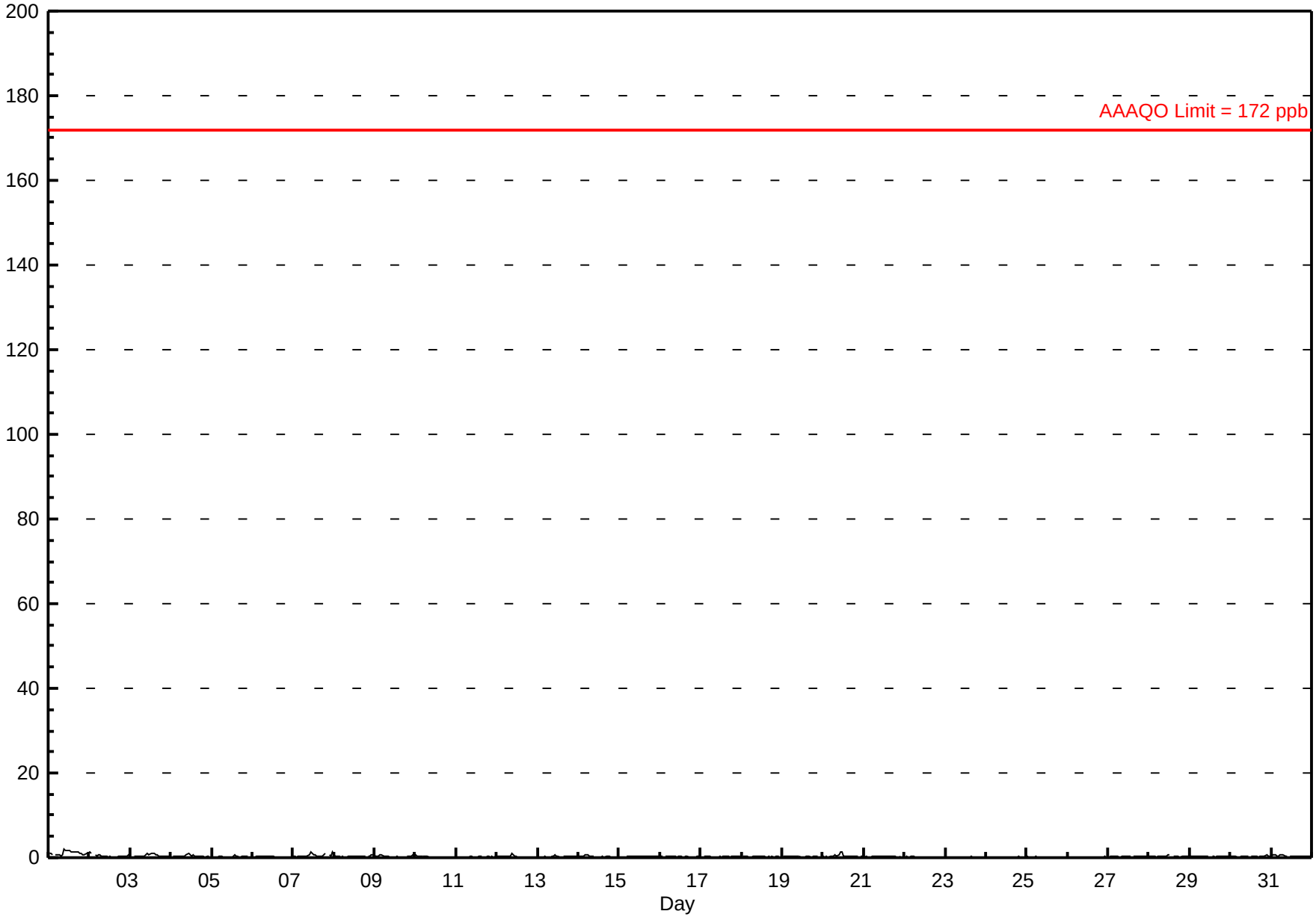
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - October 2010

Maximum Value: 3.9 ppb on Oct 8 00:00

Maximum Daily Average: 1.5 ppb on Oct 1

Minimum Value: 0 ppb on Oct 10 17:00

Minimum Daily Average: 0.2 ppb on Oct 26

Maximum Diurnal Average: 0.7 ppb at hour 11

Minimum Diurnal Average: 0.4 ppb at hour 3

Monthly Average: 0.54 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.7$ $P_{90} = 0.9$ $P_{99} = 1.8$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	1	1	1	A	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1	2	1.5	2.3
2-Oct	2	2	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.8	1.8
3-Oct	1	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1.0	1.4
4-Oct	A	0	0	0	1	0	1	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0.6	1.4
5-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	A	0	0.4	0.9
6-Oct	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.9
7-Oct	0	0	0	0	0	1	1	1	1	1	2	2	1	1	1	0	0	1	1	1	A	1	1	4	1.0	3.9
8-Oct	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	A	1	1	1	1	0.6	1.4
9-Oct	1	0	0	1	1	0	1	1	1	0	0	0	0	1	0	0	0	0	A	0	1	1	2	1	0.7	1.5
10-Oct	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	1.3
11-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.4
12-Oct	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0.5	1.3
13-Oct	0	0	0	0	0	0	0	0	0	1	1	1	1	0	A	0	0	0	0	0	0	0	0	1	0.4	1.3
14-Oct	1	1	1	1	1	1	1	0	1	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8
15-Oct	0	0	0	A	1	1	1	1	0	0	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0.6	0.9
16-Oct	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	0.5
17-Oct	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	0.4
18-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.4
19-Oct	0	0	0	0	0	1	1	0	1	1	0	0	0	0	0	1	0	0	0	0	1	1	A	1	0.5	0.9
20-Oct	0	0	0	0	1	1	1	1	1	1	2	2	1	1	1	0	0	0	0	0	0	A	0	0	0.7	1.8
21-Oct	0	0	0	1	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	A	0	0	0	0.5	0.9
22-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.4
23-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.3
24-Oct	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	0.4
25-Oct	1	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	0.8
26-Oct	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
27-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	1	0	0	0.4	0.8
28-Oct	0	0	0	1	0	1	1	0	0	0	1	1	1	A	1	0	0	1	0	0	1	1	1	0	0.5	1.3
29-Oct	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	0.4
30-Oct	0	0	0	0	0	0	0	1	1	1	1	A	0	0	0	0	0	0	0	0	1	1	0	0	0.5	0.9
31-Oct	1	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	1	1	0.7	1.0
	0.6	0.5	0.4	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.6	Diurnal Average	
	1.8	1.5	0.9	0.9	1.3	1.3	1.4	1.0	1.3	2.3	2.3	2.3	1.9	1.8	1.8	1.8	1.8	1.3	1.3	1.4	0.9	1.3	1.5	3.9	Diurnal Maximum	

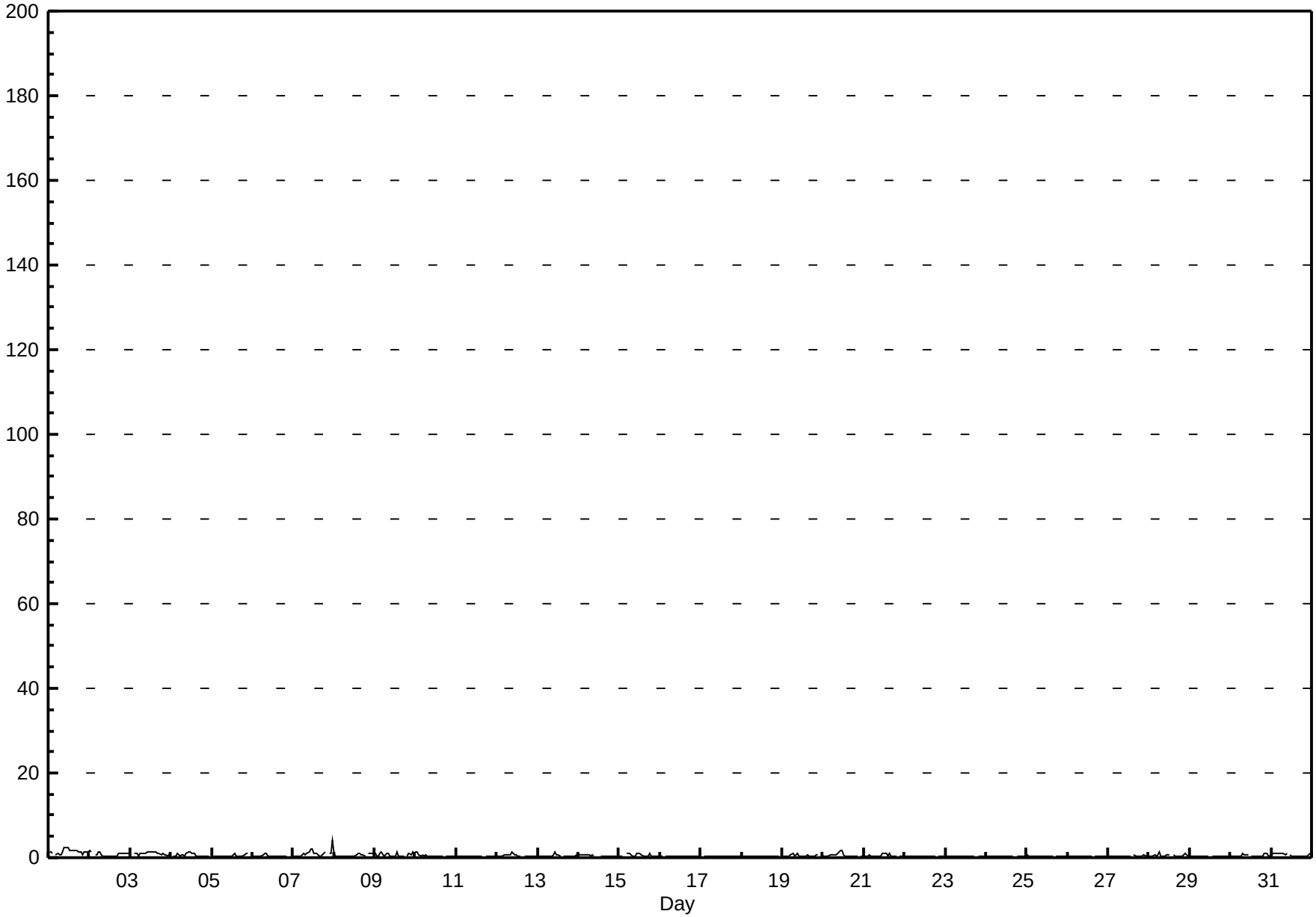
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - October 2010



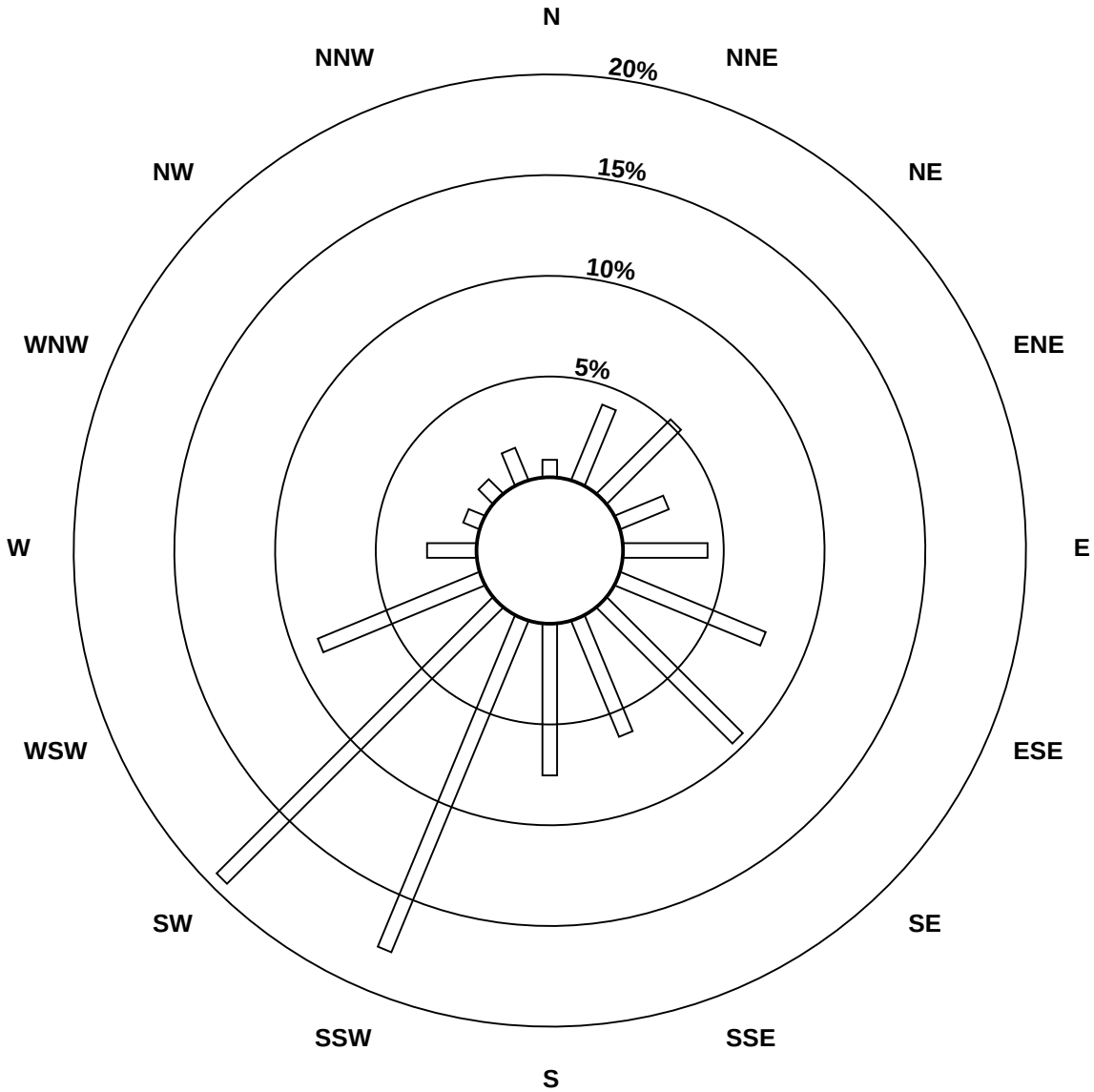
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - October 2010



Pollutant Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.1 ppb on Oct 31 07:00 Maximum Daily Average: 0.6 ppb on Oct 31

Minimum Value: 0 ppb on Oct 10 16:00 Minimum Daily Average: 0.3 ppb on Oct 24
Maximum Diurnal Average: 0.5 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 15
Monthly Average: 0.43 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.5$ $P_{90} = 0.5$ $P_{99} = 0.9$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.5	0.5
2-Oct	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0.5	0.6
3-Oct	1	A	1	0	1	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.6
4-Oct	A	0	0	0	1	1	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	A	0.5	0.9
5-Oct	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
6-Oct	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
7-Oct	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.5
8-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	0	1	0	0.4	0.6
9-Oct	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	1	1	0	1	0	0.5	0.6
10-Oct	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.6
11-Oct	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
12-Oct	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	0.3
13-Oct	0	0	0	0	0	0	0	0	0	1	1	0	1	0	A	1	1	1	1	1	0	0	0	0	0.5	0.7
14-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	1	0	1	1	0	0	0.4	0.6
15-Oct	0	0	0	A	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	0	0	0	0	0	0.5	0.7
16-Oct	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	0.5
17-Oct	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.5
18-Oct	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0.5	0.6
19-Oct	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	A	1	0.5	0.8
20-Oct	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	1	0	0.5	0.9
21-Oct	0	1	1	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	1	A	1	0	0	0.5	0.6
22-Oct	0	0	0	0	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	A	0	1	1	1	0.5	0.6
23-Oct	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
24-Oct	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	0.3
25-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.5
26-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.5
27-Oct	0	0	0	0	0	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	1	1	1	0.5	0.8
28-Oct	1	1	1	1	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0.5	0.8
29-Oct	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	0.4
30-Oct	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0.4	0.8
31-Oct	1	1	1	1	1	1	2	2	1	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0.6	2.1
	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5	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	
	0.8	0.6	0.7	0.9	1.1	1.2	2.1	1.6	0.7	0.9	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.8	0.6	0.7	0.8	Diurnal Maximum	

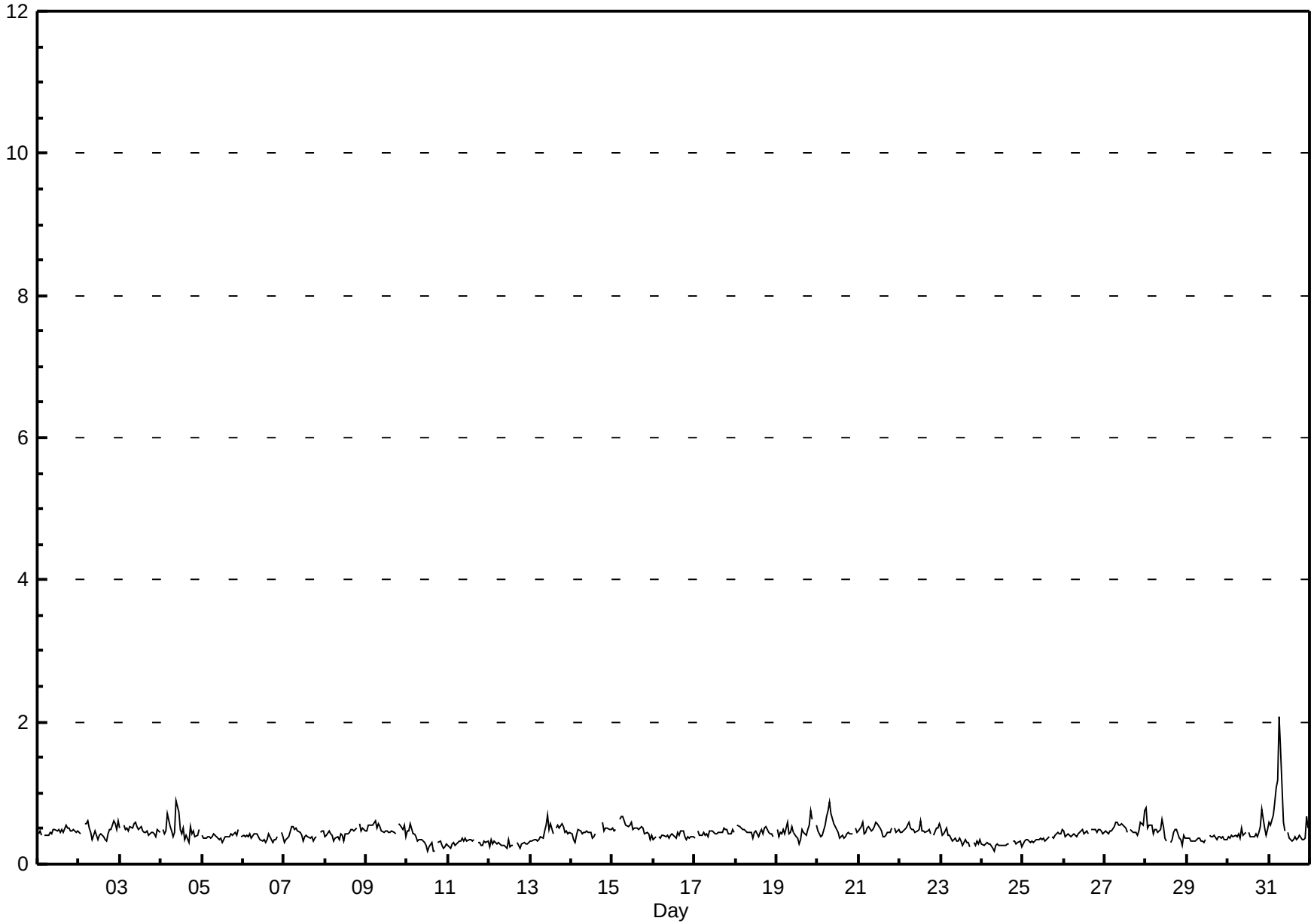
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - October 2010

Maximum Value: 2.6 ppb on Oct 31 07:00

Maximum Daily Average: 1.0 ppb on Oct 31

Minimum Value: 0 ppb on Oct 10 16:00

Maximum Diurnal Average: 0.9 ppb at hour 22

Monthly Average: 0.77 ppb

Minimum Daily Average: 0.6 ppb on Oct 24

Minimum Diurnal Average: 0.7 ppb at hour 14

Percentiles: $P_1 = 0.5$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 0.9$ $P_{99} = 1.3$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	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	1.0
2-Oct	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	0.9
3-Oct	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	1.0
4-Oct	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.7
5-Oct	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	0.8
6-Oct	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	0.8
7-Oct	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	1.1
8-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.0
9-Oct	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	1.1
10-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	1	1	1	1	1	1	0.7	1.0
11-Oct	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8
12-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	1.0
13-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.0
14-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	0.8	1.0
15-Oct	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	1.1
16-Oct	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	1.1
17-Oct	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	0.9
18-Oct	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
19-Oct	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	1.4
20-Oct	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	1.3
21-Oct	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	1.1
22-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.0
23-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	0.7	0.8
24-Oct	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0.6	1.0
25-Oct	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	1.2
26-Oct	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
27-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.2
28-Oct	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.1
29-Oct	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	0.8
30-Oct	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	1.2
31-Oct	1	1	1	1	2	2	3	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.6
Diurnal Average	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.9	0.8	0.8		
Diurnal Maximum	1.1	1.0	1.1	1.3	1.5	1.8	2.6	2.2	1.1	1.6	1.7	1.0	1.0	0.9	1.0	0.8	1.1	0.9	0.9	1.0	1.4	1.1	1.1	1.2		

C - Calibration

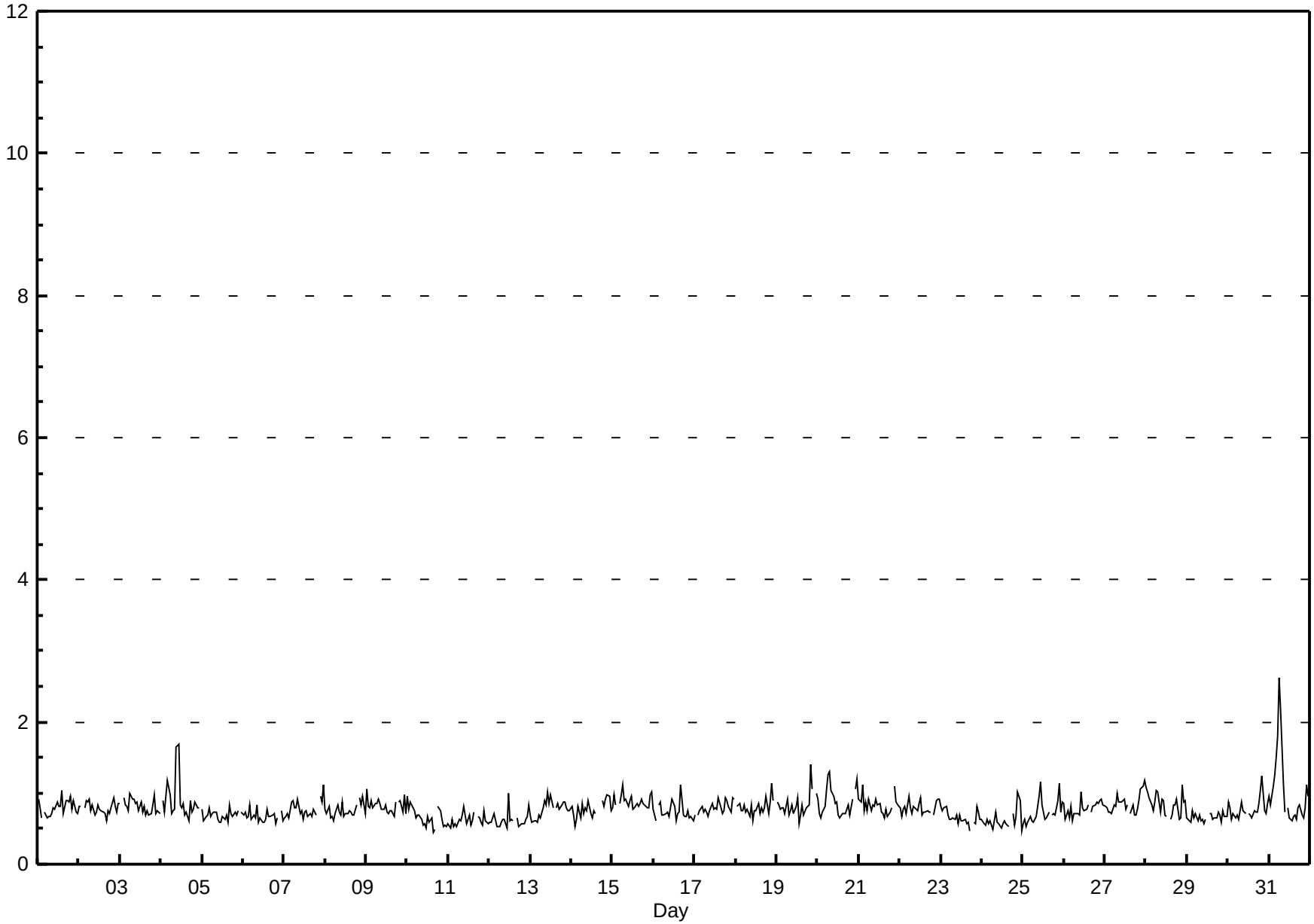
A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - October 2010



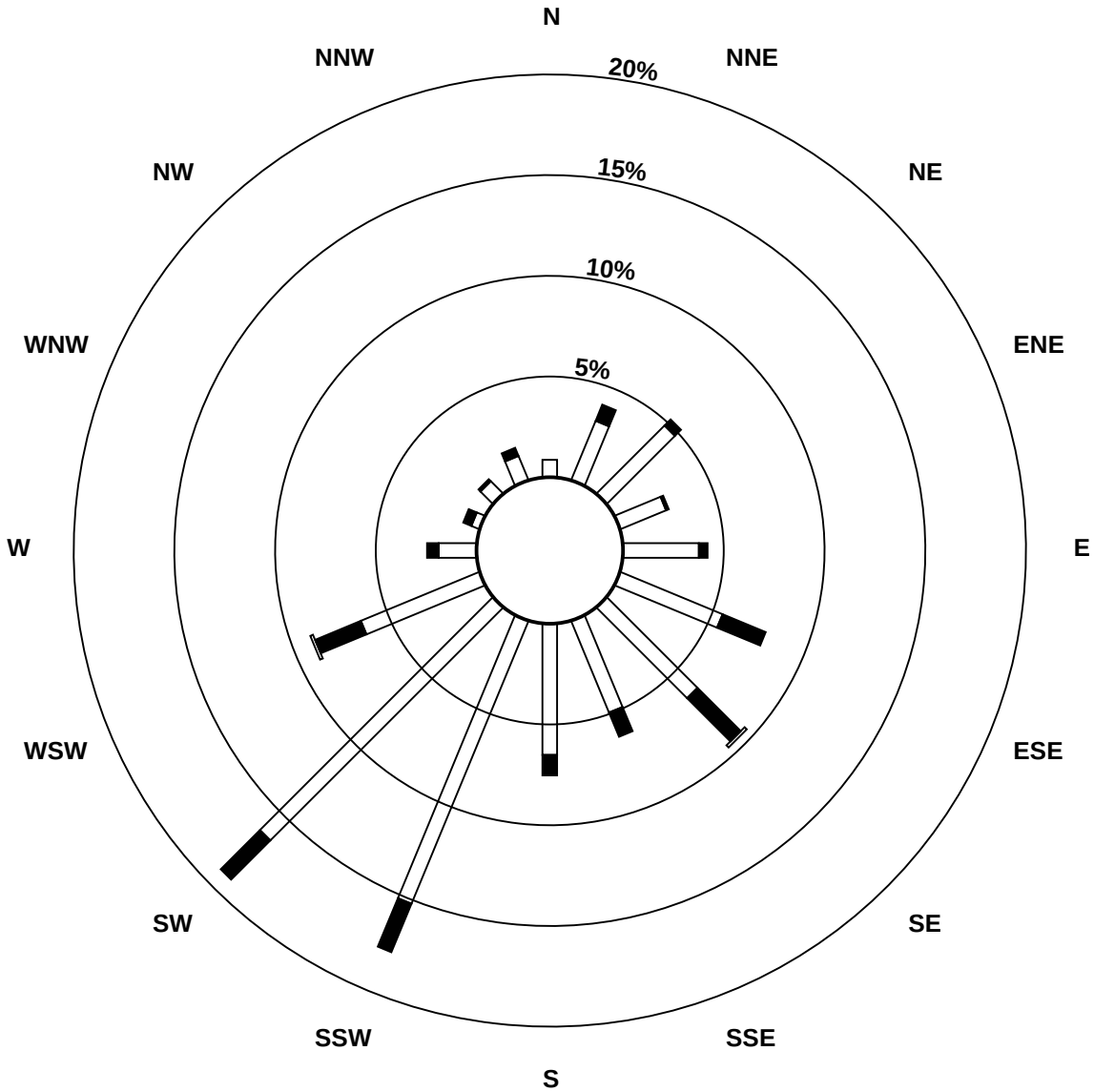
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - October 2010



Pollutant Classes (ppb)

- 0 - 1
- 1 - 2
- 2 - 3
- 4 - 10
- > 10

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.7 ppb on Oct 7 08:00 Maximum Daily Average: 5.3 ppb on Oct 1

Minimum Value: 0 ppb on Oct 11 13:00 Minimum Daily Average: 0.6 ppb on Oct 11
Maximum Diurnal Average: 3.8 ppb at hour 8 Minimum Diurnal Average: 1.4 ppb at hour 14
Monthly Average: 2.49 ppb Percentiles: $P_1 = 0.3$ $P_{10} = 0.6$ $Q_1 = 1.0$ Median = 1.8 $Q_3 = 3.6$ $P_{90} = 5.6$ $P_{99} = 9.3$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
Percent Operational Time:	100.0

Day	Hourly Period Ending At (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-Oct	2	2	3	A	5	6	6	9	7	6	4	4	4	3	3	3	5	4	8	4	8	8	11	5	5.3	10.9
2-Oct	6	5	A	7	6	8	6	4	3	1	1	1	0	1	1	0	0	1	1	2	1	1	1	1	2.5	7.7
3-Oct	1	A	2	2	4	9	9	8	5	6	4	5	4	3	3	2	2	2	4	5	5	5	5	5	4.4	9.4
4-Oct	A	6	5	7	5	5	5	6	5	7	4	3	2	1	1	1	1	1	1	1	1	1	1	A	3.0	6.9
5-Oct	2	1	1	1	2	1	2	6	2	1	1	1	1	1	1	1	0	1	1	1	1	2	A	4	1.3	6.4
6-Oct	2	2	3	6	8	9	9	7	3	2	1	1	1	1	1	1	1	1	1	2	2	A	3	5	2.9	9.4
7-Oct	2	3	2	2	5	6	9	12	6	3	3	1	1	1	2	1	2	4	4	4	A	5	4	5	3.9	11.7
8-Oct	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	3	6	A	4	3	2	2	1.4	6.0
9-Oct	2	2	2	2	3	4	4	4	2	1	1	1	1	0	0	0	0	1	A	6	6	4	3	3	2.2	6.0
10-Oct	4	5	5	4	4	4	2	1	1	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	1.5	4.7
11-Oct	1	0	0	0	0	0	1	1	1	1	1	0	0	0	1	1	A	1	1	1	1	1	1	1	0.6	1.5
12-Oct	1	2	1	0	1	1	1	1	1	1	1	1	1	1	2	A	2	1	1	1	1	1	1	1	1.0	2.0
13-Oct	1	1	1	1	1	1	1	1	1	2	2	1	1	1	A	1	2	6	6	3	4	2	2	2	1.9	6.2
14-Oct	4	5	6	4	3	3	3	7	3	3	C	C	C	C	C	2	1	1	1	1	2	2	1	1	2.8	6.7
15-Oct	1	1	1	A	2	1	1	2	2	1	1	1	1	1	1	1	1	3	4	1	1	1	1	1	1.2	3.6
16-Oct	1	1	A	2	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	3.2
17-Oct	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1.1	2.2
18-Oct	A	2	1	1	1	1	1	1	1	2	3	3	1	1	1	1	1	1	1	1	1	1	1	A	1.2	2.9
19-Oct	2	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1.2	2.4
20-Oct	2	2	2	2	3	6	8	7	7	10	7	6	7	6	8	7	5	5	4	4	4	A	4	4	5.1	9.7
21-Oct	4	6	6	3	5	4	4	3	3	3	3	3	2	2	1	1	1	2	3	4	A	5	4	4	3.2	6.1
22-Oct	6	6	4	3	5	4	2	1	1	1	1	2	2	1	2	1	1	1	1	A	2	2	2	2	2.4	6.1
23-Oct	2	1	3	3	2	1	1	2	2	1	2	3	2	2	3	3	3	2	A	3	3	3	3	2	2.2	3.1
24-Oct	2	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2	A	3	5	2	2	4	4	2.3	5.0
25-Oct	5	1	1	1	1	7	3	2	4	2	1	2	2	1	1	2	A	2	2	2	2	1	2	2	2.1	7.2
26-Oct	2	2	1	2	1	1	2	2	1	1	2	2	2	2	4	A	4	3	2	2	2	3	4	5	2.4	4.7
27-Oct	3	5	3	3	3	3	3	4	6	6	8	6	3	4	A	7	4	3	3	3	4	4	4	4	4.2	7.6
28-Oct	4	4	4	5	4	7	6	7	7	7	3	2	2	A	2	2	4	6	6	5	4	5	5	4	4.6	7.4
29-Oct	3	3	3	2	3	3	2	3	2	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1.8	3.2
30-Oct	1	1	1	1	3	2	2	2	4	3	2	A	3	1	1	1	1	3	2	3	4	2	2	3	2.2	4.2
31-Oct	4	4	5	5	11	8	9	6	5	4	A	2	1	1	1	1	1	1	2	3	3	4	7	8	4.2	11.5
	2.5	2.6	2.5	2.6	3.0	3.7	3.5	3.8	3.1	2.7	2.2	1.9	1.6	1.4	1.5	1.5	1.7	2.1	2.6	2.5	2.4	2.5	2.7	2.9	Diurnal Average	
	5.8	6.1	6.1	6.9	11.5	9.4	9.1	11.7	7.4	9.7	7.6	6.1	6.8	6.1	7.5	6.7	5.4	6.2	8.2	6.0	8.4	8.3	10.9	8.2	Diurnal Maximum	

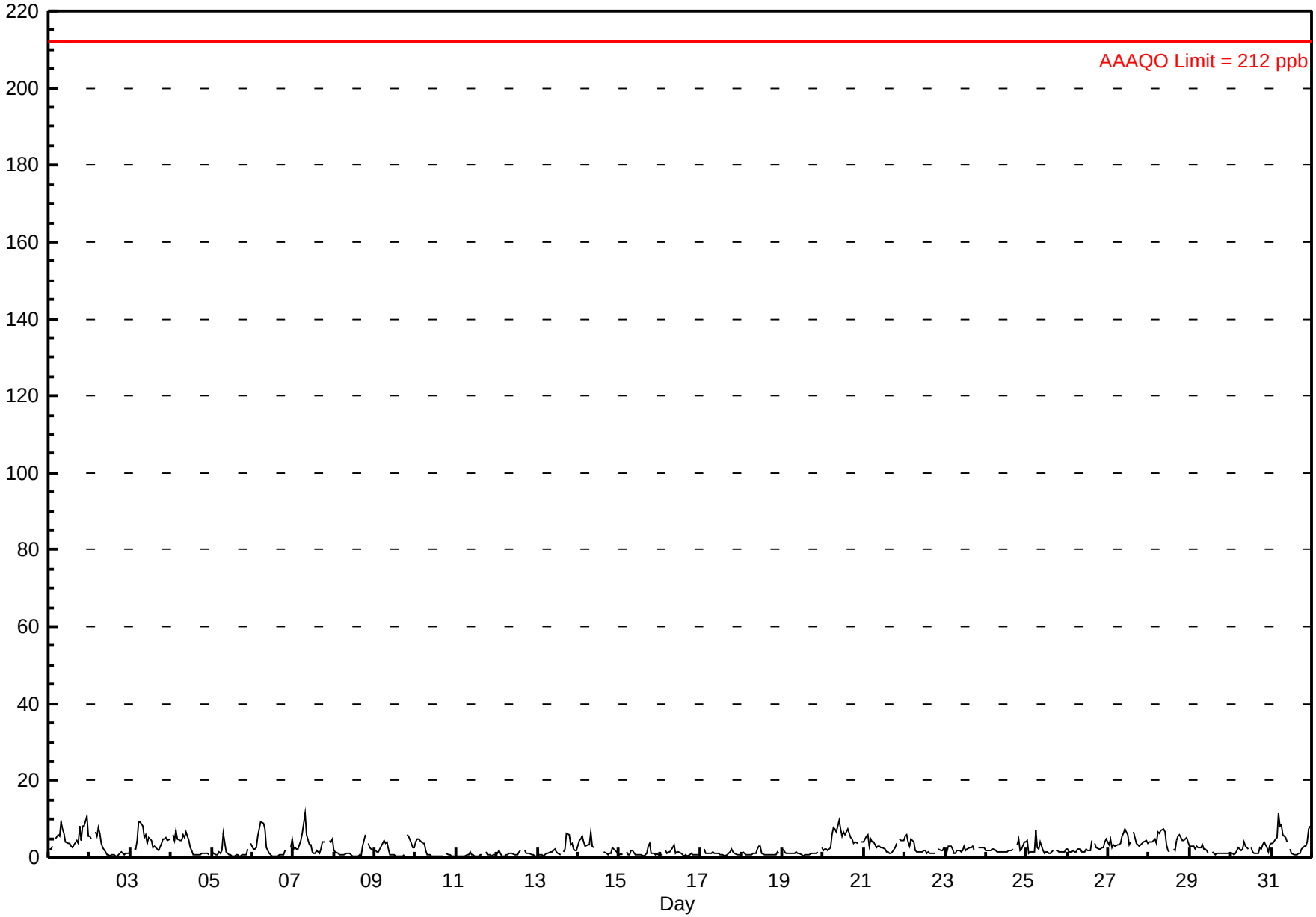
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - October 2010

Maximum Value: 35.8 ppb on Oct 28 07:00

Maximum Daily Average: 11.6 ppb on Oct 20

Minimum Value: 0 ppb on Oct 11 13:00

Minimum Daily Average: 2.5 ppb on Oct 11

Maximum Diurnal Average: 9.6 ppb at hour 7

Minimum Diurnal Average: 3.5 ppb at hour 14

Monthly Average: 5.62 ppb

Percentiles: $P_1 = 0.7$ $P_{10} = 1.2$ $Q_1 = 2.3$ Median = 3.8 $Q_3 = 7.4$ $P_{90} = 12.0$ $P_{99} = 25.4$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
Percent Operational Time:	100.0

Day	Hourly Period Ending At (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-Oct	4	3	3	A	9	13	14	16	13	10	7	6	5	4	4	6	11	11	17	9	25	18	14	9	10.1	24.6
2-Oct	7	6	A	9	7	12	24	6	6	4	3	4	2	6	13	1	1	1	5	3	3	1	2	2	5.6	24.3
3-Oct	6	A	3	10	17	19	22	18	12	11	5	17	8	4	6	4	6	3	13	10	9	10	7	8	9.9	21.9
4-Oct	A	8	6	18	7	8	10	16	9	15	8	8	3	3	3	2	5	1	10	2	3	1	4	A	6.8	18.2
5-Oct	3	1	1	1	4	6	10	23	4	3	2	4	1	1	2	3	2	1	4	1	3	7	A	32	5.3	32.3
6-Oct	4	3	10	23	17	26	24	19	6	3	3	1	6	2	2	2	3	2	5	8	4	A	5	6	8.0	25.8
7-Oct	4	4	4	4	7	11	19	25	19	9	7	3	2	3	8	3	8	16	8	11	A	5	5	7	8.3	24.5
8-Oct	4	2	2	1	1	1	1	3	5	3	3	1	2	1	1	9	1	18	23	A	12	5	3	3	4.6	23.0
9-Oct	2	2	2	5	7	9	12	8	6	1	1	1	1	1	1	1	2	1	A	20	12	7	4	11	5.1	20.2
10-Oct	6	7	8	14	7	8	3	2	1	1	1	1	1	0	1	8	2	A	4	1	1	1	1	1	3.4	13.6
11-Oct	2	1	1	1	1	2	3	5	9	3	10	1	0	1	1	1	A	4	1	1	1	1	3	1	2.5	10.5
12-Oct	2	3	3	1	1	5	3	2	2	2	2	3	8	10	10	A	4	3	1	1	1	3	2	1	3.2	10.0
13-Oct	1	1	1	1	1	3	3	8	7	7	8	3	2	2	A	3	10	14	11	8	7	3	4	2	4.8	14.4
14-Oct	7	6	9	7	5	6	5	16	11	10	C	C	C	C	C	4	2	2	2	2	5	7	7	1	6.0	16.0
15-Oct	1	2	1	A	3	4	2	5	7	5	2	2	3	4	2	6	10	12	19	3	2	5	3	2	4.5	18.6
16-Oct	1	1	A	3	2	7	5	22	10	3	4	7	7	3	2	5	1	2	2	4	1	2	3	1	4.2	22.1
17-Oct	1	A	3	3	2	3	4	2	1	2	2	1	2	2	1	1	3	4	9	5	4	1	2	2	2.7	8.6
18-Oct	A	3	1	3	1	3	1	2	3	10	8	13	7	5	3	3	2	3	1	1	2	6	1	A	3.8	13.1
19-Oct	5	2	2	1	2	4	3	2	4	2	5	1	1	2	2	3	2	3	2	9	4	3	A	3	2.8	9.0
20-Oct	3	9	4	3	8	16	28	21	17	15	16	11	15	13	26	14	17	8	5	5	5	A	5	5	11.6	28.3
21-Oct	5	11	13	5	8	11	7	4	4	6	5	4	3	2	3	2	2	2	6	6	A	10	7	7	5.8	12.7
22-Oct	8	9	7	3	6	6	4	2	2	3	2	4	3	3	2	2	3	2	2	A	4	4	2	4	3.8	8.7
23-Oct	3	2	8	7	5	4	2	5	3	2	7	7	5	3	4	4	5	3	A	3	3	3	3	3	4.2	7.7
24-Oct	2	2	2	2	3	7	2	2	2	2	3	3	2	3	2	2	3	A	8	9	3	8	8	8	4.0	9.4
25-Oct	9	2	2	2	4	11	6	4	9	3	2	4	4	3	4	7	A	4	4	4	3	2	5	3	4.3	10.7
26-Oct	3	2	2	3	2	3	15	13	3	4	4	4	6	4	20	A	7	5	3	3	3	3	7	9	5.5	19.5
27-Oct	7	9	4	8	5	5	5	7	9	10	17	9	4	7	A	12	9	4	4	4	4	4	6	6	7.0	16.7
28-Oct	5	5	5	7	5	14	36	12	15	10	5	3	2	A	4	3	9	9	8	7	6	6	7	7	8.2	35.8
29-Oct	4	5	5	6	6	3	7	7	9	3	4	3	A	3	4	2	2	2	5	2	1	2	2	6	4.1	8.5
30-Oct	2	2	2	4	9	7	3	7	11	7	6	A	4	2	2	2	5	5	6	9	9	3	3	9	5.1	10.9
31-Oct	5	5	8	13	26	17	14	8	7	6	A	3	2	2	1	5	4	2	5	12	10	14	16	26	9.1	26.1
	3.9	4.0	4.2	5.8	6.0	8.2	9.6	9.4	7.4	5.7	5.2	4.6	3.9	3.5	4.7	4.1	4.8	5.1	6.7	5.7	5.2	5.1	4.9	6.4	Diurnal Average	
	8.7	11.0	12.7	22.8	26.1	25.8	35.8	24.5	19.0	15.1	16.7	17.3	14.5	13.3	26.4	14.0	16.8	18.2	23.0	20.2	24.6	18.4	16.5	32.3	Diurnal Maximum	

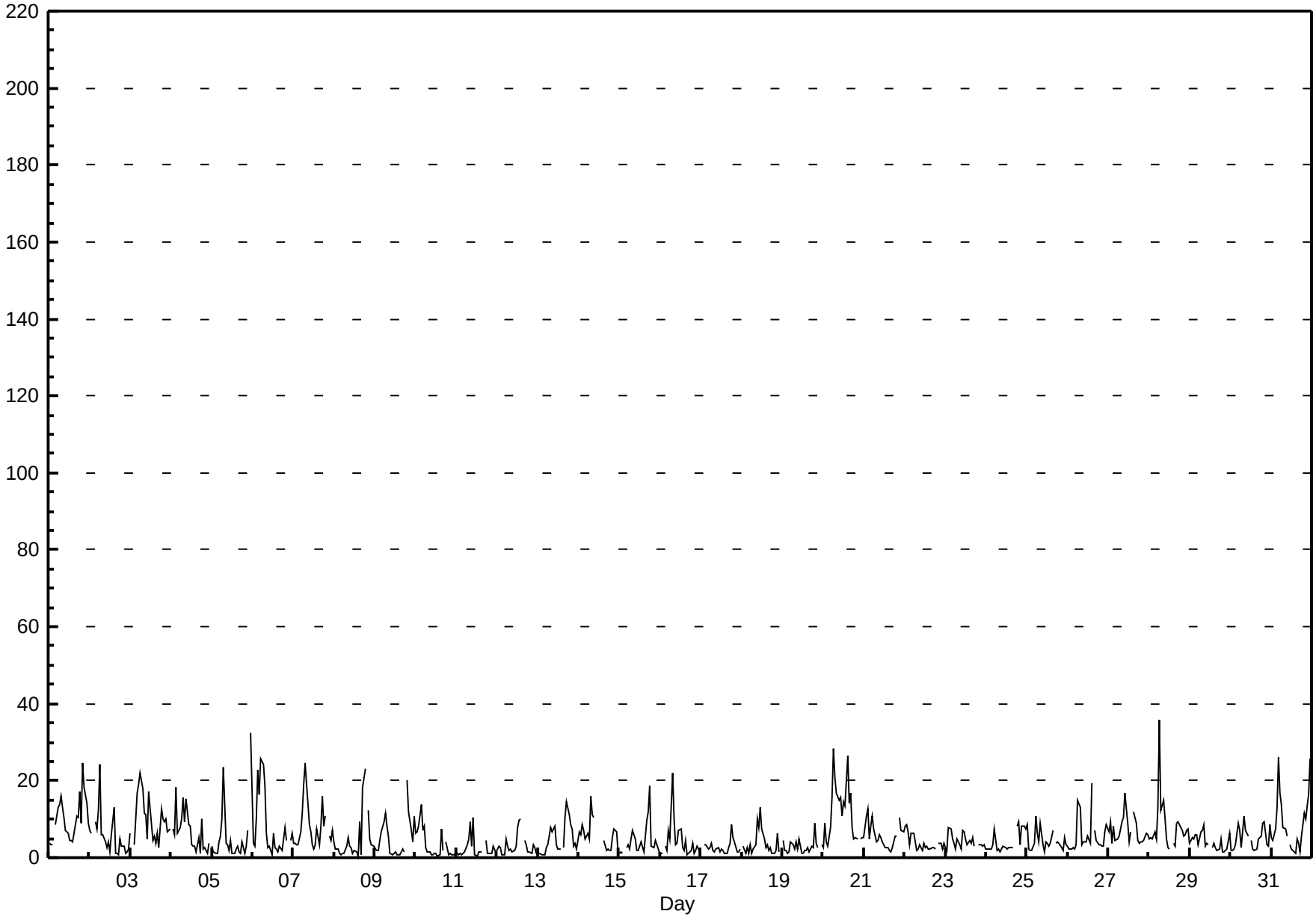
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - October 2010



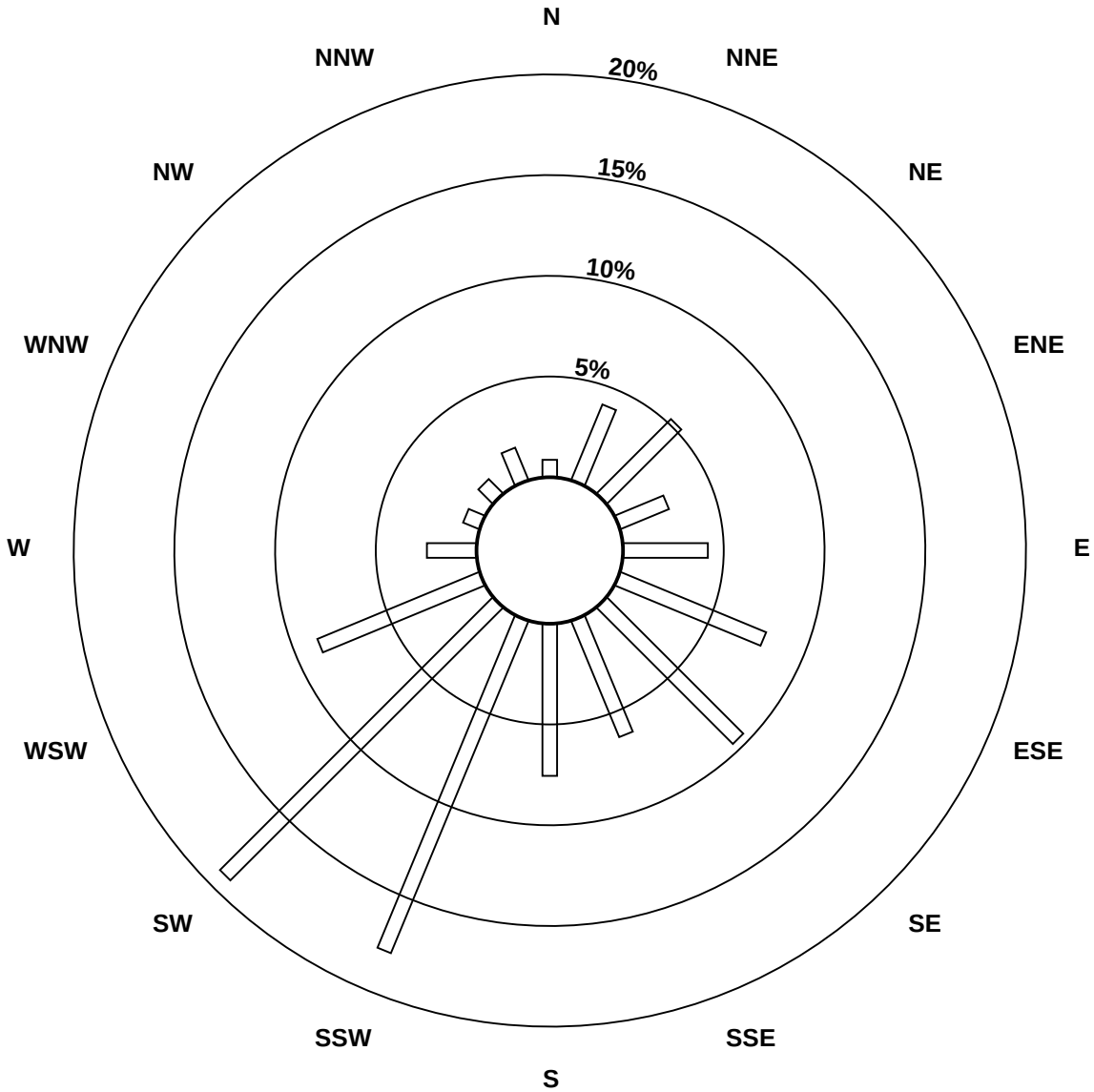
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

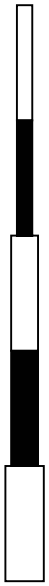
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - October 2010



Pollutant Classes (ppb)



- 0 - 25
- 26 - 50
- 51 - 110
- 111 - 212
- > 212

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 17.8 ppb on Oct 7 07:00 Maximum Daily Average: 2.8 ppb on Oct 28

Minimum Value: 0 ppb on Oct 12 02:00 Minimum Daily Average: 0.1 ppb on Oct 10
Maximum Diurnal Average: 1.7 ppb at hour 8 Minimum Diurnal Average: 0.2 ppb at hour 2
Monthly Average: 0.72 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.1$ Median = 0.3 $Q_3 = 0.7$ $P_{90} = 1.6$ $P_{99} = 7.4$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
Percent Operational Time:	100.0

Day	Hourly Period Ending At (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-Oct	0	0	0	A	0	1	2	4	4	3	2	2	2	1	1	1	2	1	1	0	1	1	1	0	1.2	3.9
2-Oct	0	0	A	0	0	1	2	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0.4	1.5
3-Oct	0	A	0	1	1	2	2	3	2	3	1	2	2	1	1	0	0	0	1	1	0	0	0	0	1.0	3.2
4-Oct	A	0	0	3	0	1	1	2	1	4	2	1	1	0	0	0	0	0	1	0	0	0	0	A	0.9	4.0
5-Oct	0	0	0	0	0	0	1	4	0	0	0	1	0	0	0	1	0	0	0	0	0	0	A	1	0.5	3.6
6-Oct	0	0	0	2	0	1	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	A	0	0	0.5	1.9
7-Oct	0	0	0	0	0	2	18	15	2	1	2	1	0	1	1	0	1	1	1	1	A	0	0	0	2.1	17.8
8-Oct	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0.3	1.0
9-Oct	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.8
10-Oct	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	0.5
11-Oct	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	1.3
12-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	A	0	0	0	0	0	0	0	0	0.2	2.0
13-Oct	0	0	0	0	0	0	0	1	1	0	1	0	0	0	A	0	0	1	1	1	0	0	0	0	0.4	1.1
14-Oct	0	0	0	0	0	0	0	3	3	1	C	C	C	C	C	0	0	0	0	0	1	1	0	0	0.7	3.0
15-Oct	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	1	5	8	0	0	0	0	0	0.8	7.5
16-Oct	0	0	A	0	0	1	0	3	4	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	3.9
17-Oct	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
18-Oct	A	0	0	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	A	0.4	2.1
19-Oct	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0.2	0.6
20-Oct	0	1	0	0	0	1	2	2	3	3	2	1	1	2	5	2	2	1	0	0	0	A	0	0	1.3	4.8
21-Oct	0	0	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	1	0	0	0.3	1.3
22-Oct	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	1	1	A	0	0	0	0	0.4	0.9
23-Oct	0	0	1	1	0	0	0	1	1	1	1	2	1	1	1	1	1	1	A	0	0	0	0	0	0.7	2.3
24-Oct	0	0	0	0	0	1	0	0	0	1	1	0	1	1	1	1	1	A	2	5	0	0	3	3	0.9	4.6
25-Oct	4	0	0	0	0	5	1	0	2	1	1	1	1	1	1	1	A	0	1	0	0	0	0	0	0.9	5.3
26-Oct	0	0	0	0	0	1	3	2	1	1	1	2	1	1	4	A	2	1	0	0	0	0	0	0	0.9	4.4
27-Oct	0	0	0	0	0	0	1	1	2	4	14	7	2	2	A	3	0	0	0	0	0	0	1	1	1.8	13.7
28-Oct	0	1	0	2	1	12	10	7	4	7	4	2	1	A	1	1	2	4	4	1	0	0	0	0	2.8	11.9
29-Oct	0	0	1	0	0	0	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
30-Oct	0	0	0	0	0	0	0	0	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
31-Oct	0	0	0	0	2	1	1	0	0	1	A	1	0	0	0	0	0	0	0	0	1	0	0	0	0.4	2.2
	0.3	0.2	0.2	0.4	0.3	1.1	1.6	1.7	1.2	1.3	1.4	1.0	0.7	0.6	0.8	0.5	0.6	0.6	0.8	0.5	0.3	0.3	0.3	0.3	Diurnal Average	
	4.0	0.7	1.3	3.0	2.2	11.9	17.8	15.0	4.1	7.5	13.7	6.7	2.1	2.2	4.8	3.4	2.4	5.3	7.5	4.6	1.2	1.5	3.3	3.3	Diurnal Maximum	

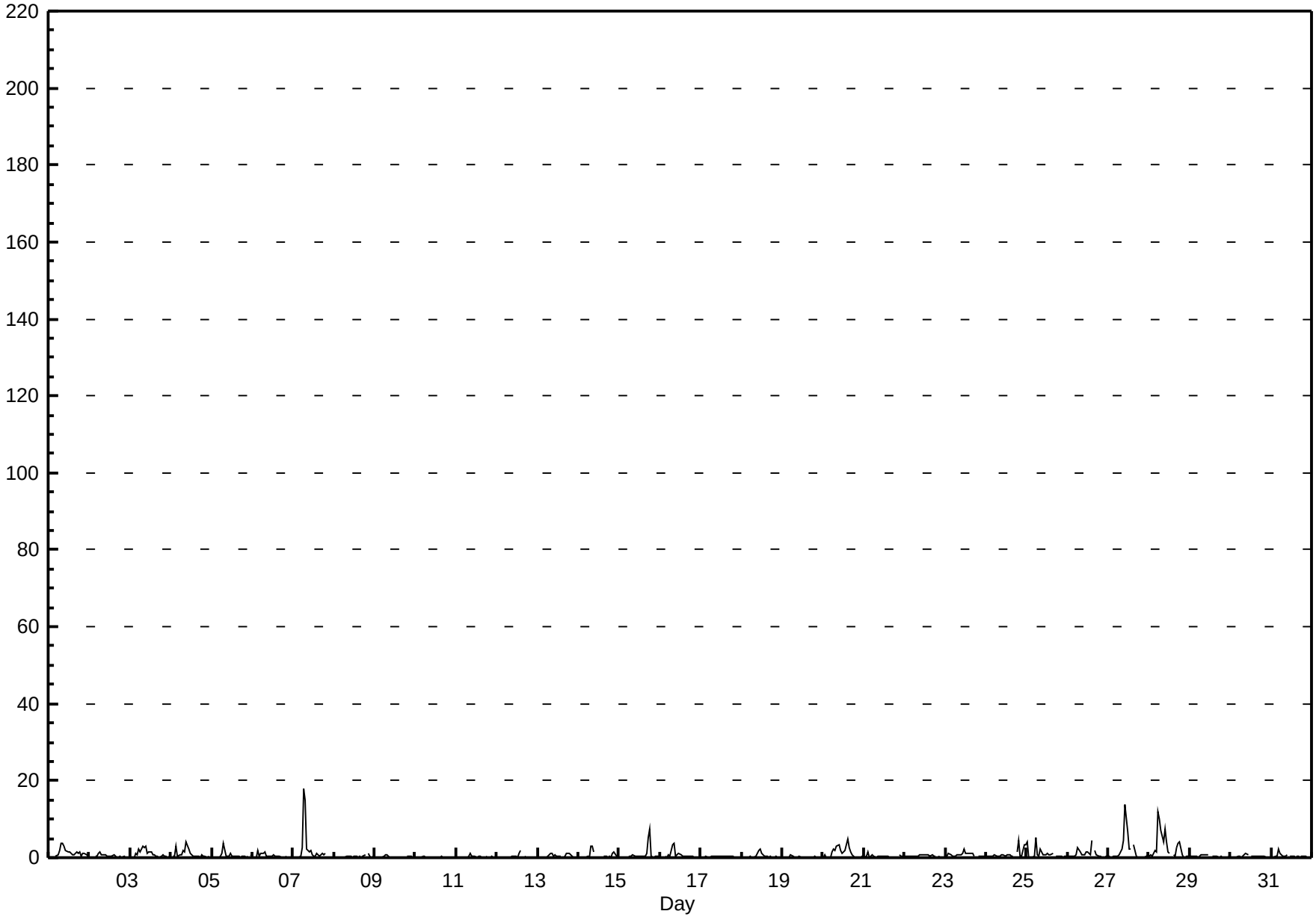
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - October 2010

Maximum Value: 171.0 ppb on Oct 28 07:00

Maximum Daily Average: 17.2 ppb on Oct 28

Minimum Value: 0 ppb on Oct 12 20:00

Minimum Daily Average: 1.1 ppb on Oct 10

Maximum Diurnal Average: 16.1 ppb at hour 7

Minimum Diurnal Average: 1.4 ppb at hour 1

Monthly Average: 5.14 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 0.8$ Median = 2.3 $Q_3 = 5.2$ $P_{90} = 12.5$ $P_{99} = 43.2$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
Percent Operational Time:	100.0

Day	Hourly Period Ending At (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-Oct	1	0	0	A	3	8	29	16	9	12	4	3	2	2	2	2	8	7	10	3	15	16	3	0	6.8	28.9
2-Oct	0	0	A	12	2	11	45	4	3	11	4	13	5	3	13	3	2	1	3	1	3	0	1	1	6.1	44.9
3-Oct	6	A	1	20	7	12	20	25	13	10	2	9	3	2	1	1	1	0	2	4	2	1	1	2	6.3	25.0
4-Oct	A	1	0	40	3	5	7	26	4	17	11	5	3	4	2	1	3	0	9	2	6	0	17	A	7.6	39.9
5-Oct	0	0	0	0	0	3	18	22	1	2	3	12	2	2	4	6	8	1	2	5	2	3	A	28	5.5	28.4
6-Oct	0	0	4	20	4	11	9	8	3	2	5	2	14	2	2	3	4	3	5	2	2	A	6	1	4.8	19.9
7-Oct	0	1	2	0	9	12	71	62	23	5	6	4	3	3	9	3	6	9	13	18	A	0	0	0	11.2	70.9
8-Oct	0	0	1	0	0	0	2	2	3	2	2	1	4	3	0	5	0	5	7	A	24	7	1	10	3.5	24.1
9-Oct	0	0	0	1	1	5	8	11	1	0	0	1	1	1	1	0	3	0	A	4	7	3	0	14	2.7	13.8
10-Oct	0	0	1	1	1	4	1	0	0	1	1	1	1	0	0	5	2	A	1	0	0	0	4	1	1.1	4.7
11-Oct	3	0	1	2	3	1	2	3	17	2	3	3	1	3	0	0	A	3	2	0	1	3	1	1	2.4	16.5
12-Oct	1	0	3	0	0	2	1	1	1	2	2	4	2	8	13	A	3	2	1	0	0	1	1	1	2.1	13.1
13-Oct	0	0	0	0	0	0	3	11	15	4	9	1	0	2	A	0	3	9	5	7	3	1	2	0	3.4	15.4
14-Oct	0	0	1	3	0	2	1	20	22	9	C	C	C	C	C	4	2	2	5	3	9	5	5	0	4.8	21.8
15-Oct	0	1	0	A	0	2	4	11	9	3	4	1	4	5	4	6	15	31	41	2	1	5	5	3	6.8	41.0
16-Oct	1	1	A	1	0	13	7	44	11	2	5	9	11	3	3	2	0	2	4	4	0	1	1	1	5.4	43.6
17-Oct	0	A	1	3	1	1	4	2	1	1	11	1	2	2	0	2	2	2	4	4	3	1	1	1	2.2	11.4
18-Oct	A	0	0	1	0	5	1	0	4	15	9	13	16	3	3	5	1	5	1	0	5	4	0	A	4.1	15.7
19-Oct	2	0	0	0	0	9	5	1	3	1	9	0	1	2	1	2	1	0	2	12	4	1	A	1	2.5	12.3
20-Oct	1	22	2	1	2	17	17	18	41	17	12	5	9	16	46	9	11	4	1	2	1	A	0	3	11.1	46.3
21-Oct	0	8	18	0	2	7	6	0	2	2	2	1	0	0	1	0	0	0	0	2	A	17	2	2	3.2	17.8
22-Oct	1	2	2	0	3	1	3	1	2	4	1	5	2	2	1	1	2	2	2	A	2	1	0	1	1.8	4.9
23-Oct	0	1	5	6	3	3	1	5	5	3	8	10	9	5	5	3	11	4	A	2	1	1	1	1	4.1	11.0
24-Oct	0	1	1	2	1	8	1	1	1	1	3	1	2	2	1	2	1	A	13	20	2	11	11	9	4.2	20.3
25-Oct	12	1	0	0	4	11	5	3	9	2	1	4	4	4	4	8	A	2	4	3	1	0	5	1	3.9	12.5
26-Oct	1	1	1	1	1	6	30	12	4	4	4	4	6	3	44	A	10	6	1	3	1	0	0	3	6.3	43.8
27-Oct	4	0	0	11	1	3	8	13	16	13	38	19	4	8	A	14	6	0	0	0	0	0	5	3	7.4	38.4
28-Oct	2	4	1	10	11	52	171	23	13	19	10	2	2	A	3	4	9	25	17	3	1	1	6	5	17.2	171.0
29-Oct	1	3	13	4	3	0	4	5	5	2	6	5	A	2	3	1	5	1	3	0	0	1	1	9	3.3	12.9
30-Oct	1	1	1	0	2	3	1	6	5	13	9	A	3	2	1	3	3	1	3	6	6	1	2	2	3.1	12.8
31-Oct	1	0	4	8	26	10	16	1	4	3	A	1	1	0	0	5	2	0	3	4	7	1	0	1	4.3	25.8
	1.4	1.7	2.3	5.1	3.0	7.3	16.1	11.5	8.1	6.0	6.2	4.8	4.1	3.2	6.1	3.4	4.3	4.4	5.6	4.1	3.8	3.0	2.9	3.6	Diurnal Average	
	12.5	22.0	17.8	39.9	25.8	52.1	171.0	62.1	40.7	19.5	38.4	18.7	15.7	15.7	46.3	13.5	15.1	30.6	41.0	20.3	24.1	16.9	16.6	28.4	Diurnal Maximum	

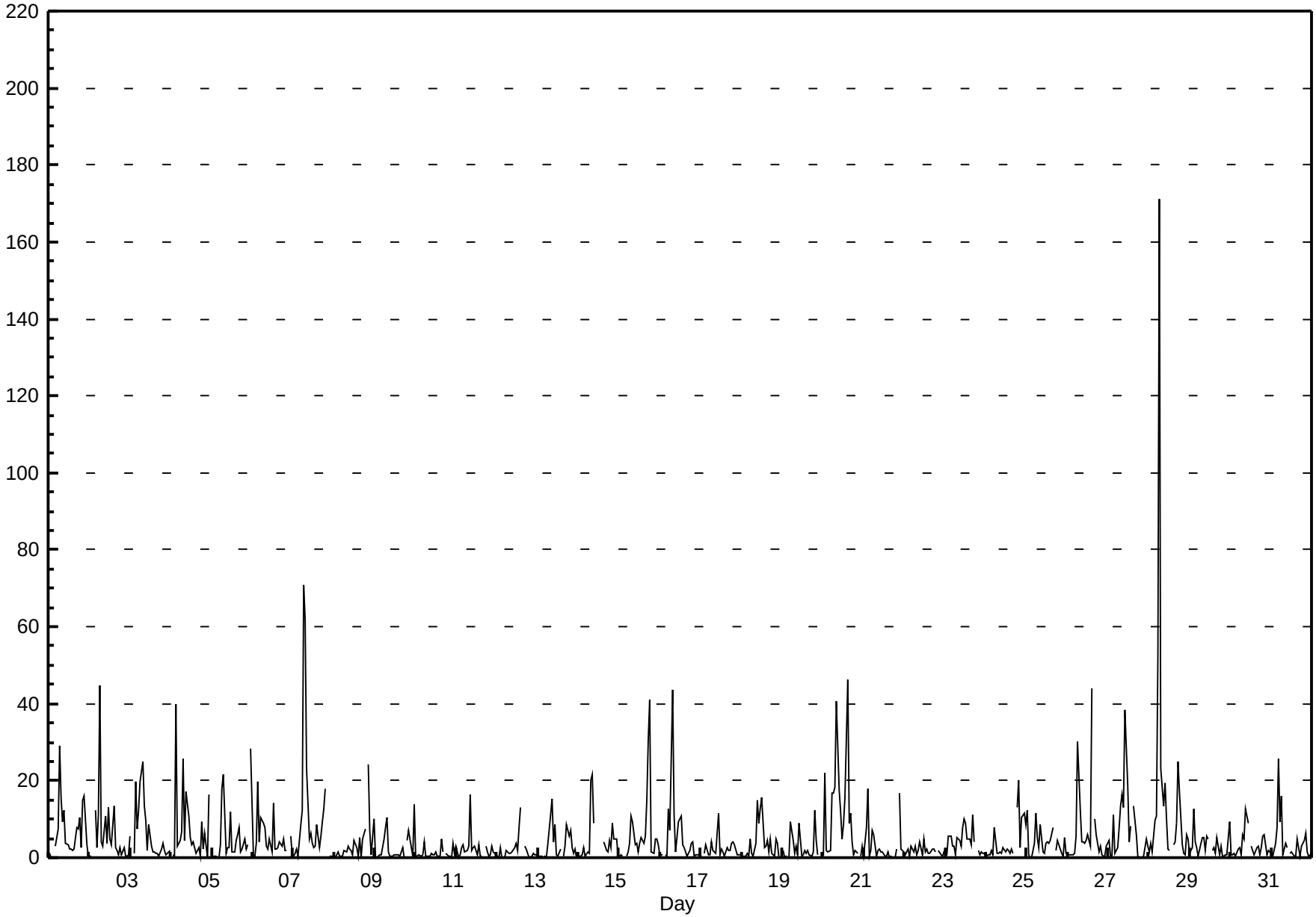
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 27.1 ppb on Oct 7 07:00 Maximum Daily Average: 7.4 ppb on Oct 28

Minimum Value: 0 ppb on Oct 10 15:00 Minimum Daily Average: 0.8 ppb on Oct 11
Maximum Diurnal Average: 5.5 ppb at hour 8 Minimum Diurnal Average: 1.9 ppb at hour 14
Monthly Average: 3.18 ppb Percentiles: $P_1 = 0.4$ $P_{10} = 0.7$ $Q_1 = 1.1$ Median = 2.2 $Q_3 = 4.2$ $P_{90} = 6.9$ $P_{99} = 14.2$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
Percent Operational Time:	100.0

Day	Hourly Period Ending At (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-Oct	2	2	3	A	5	7	8	13	11	9	6	5	5	4	3	4	6	5	10	5	10	9	12	6	6.6	13.4
2-Oct	6	5	A	7	6	9	8	4	3	2	1	1	1	1	2	1	1	1	1	2	1	1	1	1	2.8	8.8
3-Oct	2	A	2	3	5	12	11	11	8	9	5	7	6	3	3	3	3	2	4	6	5	6	5	5	5.5	11.7
4-Oct	A	6	5	10	5	5	5	8	7	11	7	4	2	1	1	1	1	1	2	1	1	1	1	A	3.9	10.7
5-Oct	2	1	1	1	2	1	3	10	2	1	1	2	1	1	1	1	1	1	1	1	1	2	A	5	1.8	10.1
6-Oct	2	2	3	7	8	11	10	9	3	2	2	1	1	1	1	1	1	1	1	2	2	A	3	5	3.4	10.7
7-Oct	2	3	2	2	5	9	27	27	8	5	5	2	1	2	3	1	3	5	5	5	A	5	4	5	6.0	27.1
8-Oct	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	3	7	A	5	3	2	2	1.6	6.9
9-Oct	2	2	2	2	3	5	5	5	2	1	1	1	1	0	0	0	1	1	A	6	6	4	3	3	2.4	6.4
10-Oct	4	5	5	4	4	4	2	1	1	1	1	0	0	0	0	1	0	A	1	1	1	0	0	0	1.6	4.8
11-Oct	1	0	1	0	1	1	1	1	3	1	1	0	0	1	1	1	A	2	1	1	1	1	1	1	0.8	2.7
12-Oct	1	2	1	0	0	1	1	1	1	1	1	1	1	2	4	A	2	1	1	1	1	1	1	1	1.2	4.0
13-Oct	1	1	1	1	1	1	1	2	3	2	3	2	1	1	A	1	3	7	7	4	4	2	2	2	2.2	7.3
14-Oct	4	5	6	4	3	4	4	10	6	4	C	C	C	C	C	2	1	1	2	1	3	4	2	1	3.5	9.8
15-Oct	1	1	1	A	2	1	1	2	2	1	1	1	1	1	1	1	2	8	11	1	1	1	1	1	1.9	11.0
16-Oct	1	1	A	2	1	2	2	6	7	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.6	7.1
17-Oct	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1.2	2.4
18-Oct	A	2	1	1	1	1	1	1	1	3	5	5	2	1	1	1	1	1	1	1	1	2	1	A	1.6	5.0
19-Oct	3	1	1	1	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	2	1	2	A	3	1.3	2.6
20-Oct	2	3	2	2	3	7	10	9	10	13	9	7	8	8	12	9	7	5	4	4	4	A	4	5	6.5	13.1
21-Oct	4	6	7	3	5	5	4	3	3	3	3	3	2	2	2	1	1	2	3	4	A	6	5	5	3.6	7.5
22-Oct	6	7	4	3	5	4	2	1	2	2	2	3	3	2	2	2	2	2	2	A	2	2	2	3	2.8	6.8
23-Oct	2	1	4	3	3	1	1	3	3	2	3	5	3	3	4	4	4	2	A	3	3	3	3	3	2.9	5.3
24-Oct	2	2	2	2	3	3	2	2	2	2	2	2	2	3	3	2	3	A	5	10	2	3	8	7	3.2	9.7
25-Oct	9	1	1	1	2	13	3	3	7	2	2	2	3	2	2	3	A	2	2	2	2	2	2	2	3.0	12.6
26-Oct	2	2	2	2	2	2	5	4	2	2	2	4	3	3	9	A	6	3	3	2	3	3	4	5	3.2	8.7
27-Oct	3	5	3	4	3	3	4	5	8	11	21	13	5	7	A	10	4	4	3	3	4	4	5	4	6.0	21.4
28-Oct	5	5	4	7	5	19	17	14	12	14	7	3	3	A	3	2	7	10	10	5	5	5	6	4	7.4	18.7
29-Oct	3	3	3	2	3	3	3	4	3	3	3	2	A	2	1	1	1	1	1	1	1	1	1	1	2.1	4.0
30-Oct	1	1	1	1	3	3	2	3	5	4	3	A	3	2	1	1	2	3	2	4	5	3	2	4	2.5	4.7
31-Oct	4	4	5	6	14	9	10	6	6	5	A	3	1	1	1	1	1	1	3	3	4	4	8	8	4.7	13.9
	2.7	2.8	2.7	3.0	3.3	4.8	5.0	5.5	4.3	4.0	3.5	2.9	2.2	1.9	2.3	2.0	2.2	2.7	3.3	2.9	2.7	2.7	3.1	3.2	Diurnal Average	
	8.5	6.8	7.5	10.0	13.9	18.7	27.1	26.9	11.5	14.4	21.4	12.9	8.3	8.0	12.4	10.2	7.1	9.7	11.0	9.7	9.8	9.4	11.9	8.5	Diurnal Maximum	

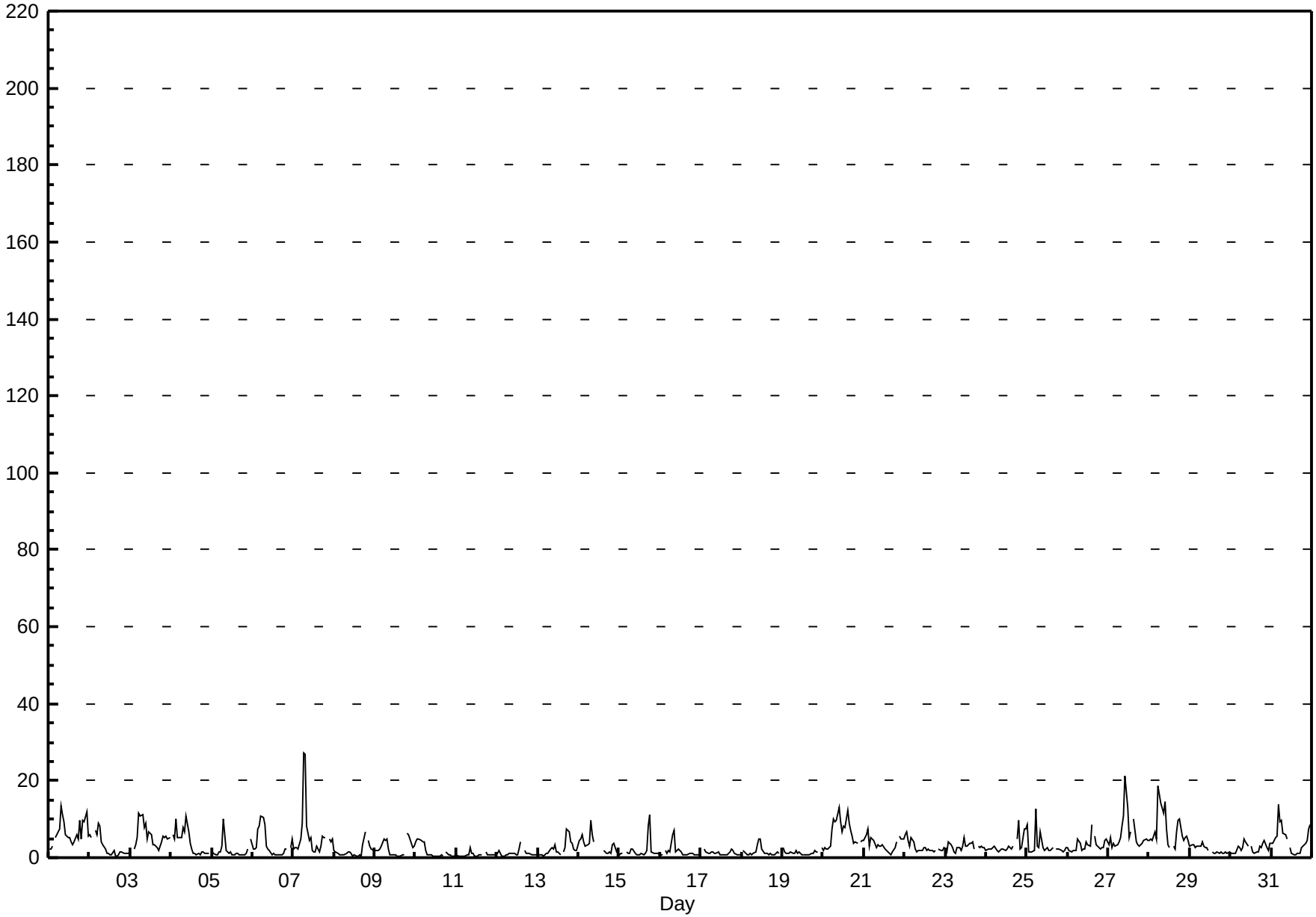
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - October 2010

Maximum Value: 201.7 ppb on Oct 28 07:00

Maximum Daily Average: 24.5 ppb on Oct 28

Minimum Value: 1 ppb on Oct 8 17:00

Minimum Daily Average: 4.0 ppb on Oct 11

Maximum Diurnal Average: 24.9 ppb at hour 7

Minimum Diurnal Average: 5.2 ppb at hour 1

Monthly Average: 10.29 ppb

Percentiles: $P_1 = 0.8$ $P_{10} = 1.8$ $Q_1 = 3.2$ Median = 6.2 $Q_3 = 12.3$ $P_{90} = 23.4$ $P_{99} = 59.9$

Hours in Service:	744
Hours of Data:	707
Hours of Missing Data:	37
Hours of Calibration:	37
Percent Operational Time:	100.0

Day	Hourly Period Ending At (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-Oct	5	3	4	A	11	16	43	31	22	23	11	10	7	7	6	9	19	18	23	12	39	35	17	10	16.5	43.0
2-Oct	8	7	A	22	10	23	69	8	9	15	6	17	4	8	26	4	3	1	7	3	5	1	2	3	11.3	69.3
3-Oct	12	A	5	30	23	32	42	38	25	21	7	26	11	6	7	4	7	3	15	14	11	10	7	9	16.0	42.0
4-Oct	A	8	6	53	9	12	17	41	14	32	19	14	7	7	5	3	7	1	16	4	9	1	17	A	13.8	53.5
5-Oct	3	2	1	1	4	9	28	45	4	5	4	15	2	2	6	6	6	2	6	6	5	10	A	61	10.2	61.2
6-Oct	4	3	14	43	21	30	30	26	8	4	7	2	20	4	3	2	6	4	10	9	5	A	10	7	11.9	43.2
7-Oct	4	4	5	4	15	23	86	87	42	13	13	7	4	6	14	6	13	26	12	23	A	6	5	7	18.5	86.8
8-Oct	4	3	3	1	1	2	2	4	8	4	4	2	6	4	1	15	1	23	25	A	37	12	4	10	7.6	36.6
9-Oct	3	2	2	5	7	14	19	18	7	1	1	2	2	1	1	1	3	1	A	25	20	10	4	25	7.6	25.0
10-Oct	7	7	8	14	8	10	3	2	2	2	1	2	2	1	1	12	3	A	5	1	1	1	3	2	4.2	14.5
11-Oct	4	1	1	3	4	3	5	8	16	5	13	1	1	5	2	2	A	7	2	1	2	2	4	2	4.0	16.0
12-Oct	2	3	5	1	1	7	5	2	3	2	4	5	10	18	23	A	7	6	2	1	1	4	3	2	5.1	22.7
13-Oct	1	1	1	1	1	3	6	19	19	12	16	4	3	3	A	3	13	20	16	16	10	4	6	2	7.8	20.2
14-Oct	7	6	9	7	5	8	6	34	33	19	C	C	C	C	C	8	3	2	5	4	10	12	11	2	10.1	34.0
15-Oct	2	2	2	A	3	5	6	16	17	8	5	3	7	10	5	11	25	41	48	5	3	9	8	6	10.7	47.9
16-Oct	2	2	A	4	2	20	12	59	21	5	9	17	18	6	4	6	1	3	6	8	1	3	4	2	9.3	59.4
17-Oct	1	A	4	7	3	3	8	3	3	3	12	2	4	3	2	2	5	5	11	9	5	2	2	3	4.4	11.9
18-Oct	A	3	1	4	1	5	2	3	7	25	16	24	23	8	6	8	2	6	2	1	4	8	1	A	7.3	25.1
19-Oct	6	2	2	1	2	11	5	3	7	3	14	1	2	4	3	4	2	3	4	21	7	3	A	4	5.0	21.5
20-Oct	3	31	6	4	10	31	41	33	58	32	28	13	24	28	72	23	28	12	6	7	6	A	5	8	22.1	71.8
21-Oct	5	19	30	5	9	18	14	4	6	8	7	5	3	3	4	2	2	2	6	8	A	27	9	9	8.9	30.2
22-Oct	9	10	9	4	9	8	5	2	4	7	3	9	4	5	4	3	4	5	4	A	6	4	2	5	5.4	9.8
23-Oct	3	2	13	13	7	7	3	10	8	5	15	17	14	8	9	7	16	7	A	5	4	4	4	4	8.0	17.0
24-Oct	2	3	3	4	4	16	3	3	3	3	5	3	4	4	3	5	4	A	21	30	5	19	20	16	8.0	29.5
25-Oct	21	3	2	2	7	22	12	7	17	5	3	8	8	7	8	15	A	5	9	7	4	2	10	4	8.2	22.4
26-Oct	3	3	3	3	3	7	45	24	7	8	8	8	11	6	63	A	18	10	4	6	4	3	7	10	11.6	63.4
27-Oct	8	10	4	20	6	7	12	21	25	24	52	27	8	15	A	26	15	5	4	4	4	5	11	9	14.0	51.8
28-Oct	6	9	6	17	16	60	202	33	24	29	15	5	4	A	7	5	18	34	25	10	7	7	13	12	24.5	201.7
29-Oct	5	8	17	10	9	4	10	10	14	5	10	8	A	4	5	3	5	3	6	2	2	3	3	16	7.0	17.3
30-Oct	3	2	3	4	10	9	3	11	16	19	15	A	7	3	2	3	8	6	7	14	11	3	4	10	7.6	19.2
31-Oct	6	5	11	21	50	22	28	8	10	8	A	4	3	2	1	10	6	2	8	16	16	14	17	27	12.9	50.4
	5.2	5.6	6.3	10.6	8.7	14.4	24.9	19.9	14.8	11.4	11.1	9.0	7.8	6.4	10.4	7.2	8.6	9.1	10.8	9.4	8.4	7.7	7.5	9.9	Diurnal Average	
	21.3	31.0	30.2	53.5	50.4	59.8	201.7	86.8	57.7	32.4	51.8	27.4	23.5	27.6	71.8	25.6	28.5	41.2	47.9	29.5	39.1	34.6	19.9	61.2	Diurnal Maximum	

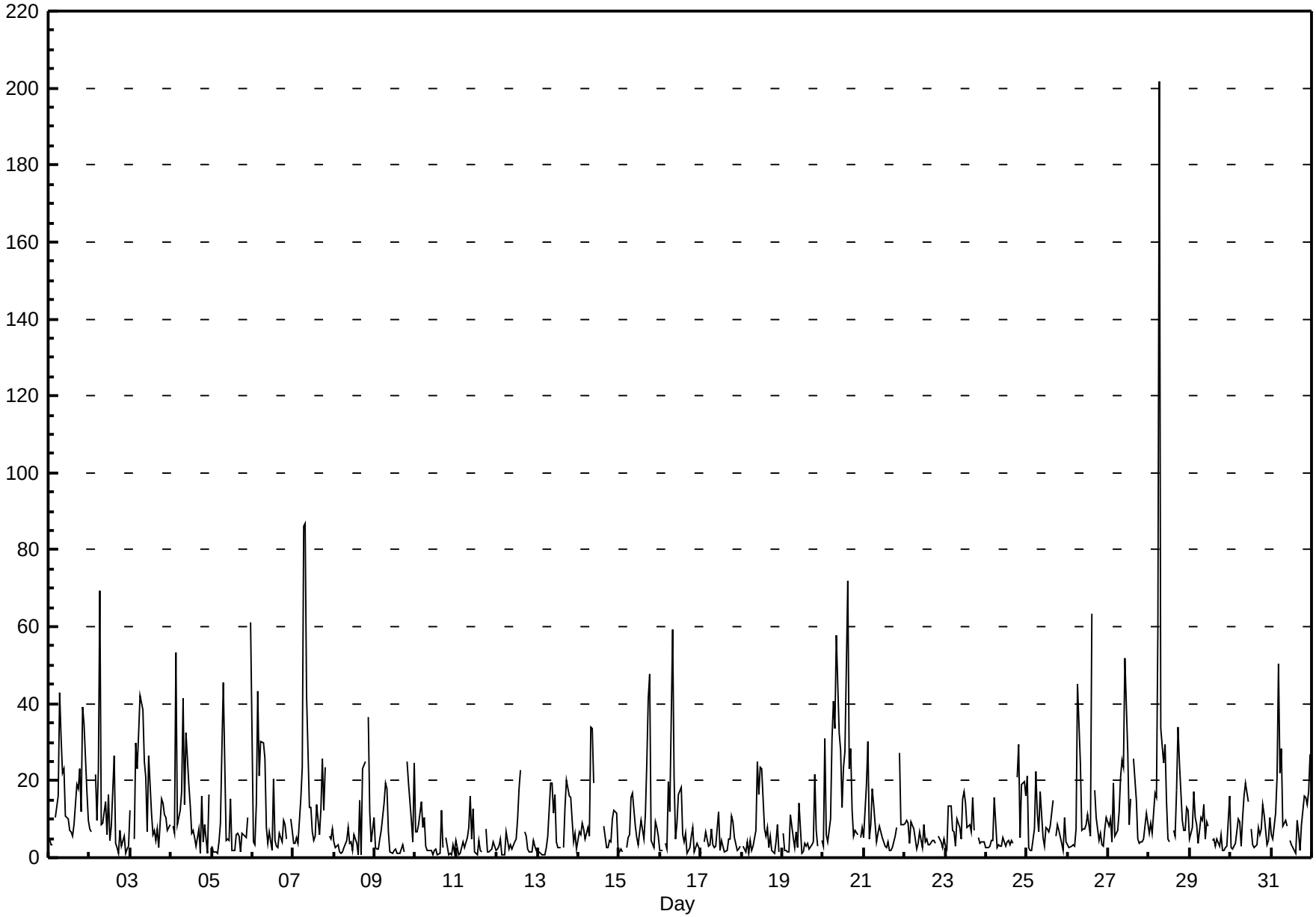
C - Calibration A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable-Bonanza - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 43.1 ppb on Oct 8 16:00 Maximum Daily Average: 33.9 ppb on Oct 12

Minimum Value: 0 ppb on Oct 28 19:00 Minimum Daily Average: 8.1 ppb on Oct 28
Maximum Diurnal Average: 29.7 ppb at hour 15 Minimum Diurnal Average: 19.6 ppb at hour 6
Monthly Average: 24.08 ppb Percentiles: P_1 = 2.3 P_{10} = 10.4 Q_1 = 16.9 Median = 26.5 Q_3 = 31.5 P_{90} = 34.7 P_{99} = 39.8

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	31	31	26	A	23	20	20	11	14	26	28	26	27	29	33	34	32	31	23	26	20	16	17	24	24.7	33.8
2-Oct	25	24	A	13	6	9	16	18	21	27	29	30	31	31	32	33	33	33	29	28	28	26	31	32	25.5	33.4
3-Oct	25	A	28	28	26	15	17	13	13	18	25	24	26	28	30	30	29	26	21	18	18	18	14	16	22.1	30.1
4-Oct	A	15	11	4	9	12	15	15	10	11	23	26	27	33	33	33	33	31	28	29	29	26	27	A	21.9	33.5
5-Oct	26	27	26	26	24	24	24	21	29	35	37	34	33	32	33	32	32	32	30	30	29	27	A	28	29.2	36.6
6-Oct	27	23	24	18	17	18	19	21	27	26	25	27	28	29	28	27	24	24	22	19	20	A	16	15	22.8	28.6
7-Oct	20	19	19	23	16	7	4	5	18	22	22	27	29	30	31	32	30	25	26	25	A	19	19	17	21.1	31.6
8-Oct	21	23	24	27	29	29	30	29	28	32	37	39	40	42	43	43	43	33	22	A	29	35	38	37	32.8	43.1
9-Oct	37	36	34	32	27	18	23	26	29	33	33	35	37	39	40	39	36	30	A	23	25	28	29	30	31.3	39.7
10-Oct	27	19	20	23	23	23	25	32	34	35	34	35	36	35	34	34	34	A	32	33	33	33	33	33	30.4	35.6
11-Oct	33	31	31	29	30	30	29	29	29	35	34	32	32	32	33	33	A	30	32	34	36	33	29	28	31.4	35.9
12-Oct	26	26	29	31	31	31	32	32	32	37	40	38	37	35	33	A	36	36	36	36	36	37	37	36	33.9	40.3
13-Oct	35	34	33	30	30	28	32	31	33	36	37	39	41	39	A	35	32	24	18	26	30	32	32	34	32.1	40.6
14-Oct	32	31	28	28	28	26	19	15	25	35	36	36	36	C	C	C	C	30	28	32	28	31	31	31	29.2	35.7
15-Oct	29	29	31	A	28	28	28	27	27	29	29	29	30	29	28	28	27	23	24	25	26	25	25	28	27.5	30.9
16-Oct	28	28	A	27	23	23	28	28	28	31	32	35	36	36	35	33	31	29	34	33	31	30	31	32	30.5	36.1
17-Oct	33	A	30	30	32	33	32	33	35	36	38	37	35	34	35	35	33	30	28	36	35	34	35	34	33.6	37.5
18-Oct	A	32	36	35	35	34	33	32	31	30	32	32	32	33	32	31	31	30	31	31	30	24	27	A	31.6	35.6
19-Oct	23	26	29	27	28	29	31	30	31	33	34	36	37	36	35	35	34	32	26	25	24	26	A	29	30.3	36.8
20-Oct	23	25	27	27	27	24	22	22	11	20	28	28	24	23	24	24	24	21	21	19	19	A	17	15	22.4	28.4
21-Oct	12	8	7	12	11	11	12	17	16	16	20	22	25	31	35	35	34	25	21	17	A	16	13	10	18.5	35.3
22-Oct	8	11	12	14	12	12	16	17	18	18	16	15	15	19	21	23	20	19	18	A	15	14	13	12	15.6	23.2
23-Oct	12	13	11	11	11	11	11	10	10	11	11	11	12	12	12	11	9	9	A	8	7	6	6	6	10.1	12.5
24-Oct	7	6	6	7	7	8	10	12	13	13	13	11	10	10	10	9	8	A	8	7	9	10	8	8	9.1	13.3
25-Oct	8	12	12	12	13	8	12	13	10	13	15	14	16	16	17	16	A	16	17	17	16	15	17	17	14.1	17.2
26-Oct	17	19	21	19	19	19	19	20	20	21	21	20	20	20	20	A	20	20	20	20	19	18	16	15	19.3	21.5
27-Oct	15	14	16	14	15	13	10	8	7	6	6	5	6	6	A	7	10	10	10	11	9	6	5	4	9.2	15.6
28-Oct	3	2	2	1	2	2	3	2	3	5	8	14	17	A	23	26	10	2	0	12	16	14	9	12	8.1	25.5
29-Oct	13	13	14	15	15	15	15	16	17	19	20	22	A	29	31	31	29	31	29	32	30	29	28	29	22.7	31.5
30-Oct	29	28	29	29	28	29	30	31	27	28	32	A	34	37	36	35	34	33	34	29	26	30	32	29	30.8	36.6
31-Oct	29	28	27	25	16	20	19	14	15	19	A	30	35	33	33	32	26	25	28	29	30	29	25	24	25.6	34.6
	22.5	21.8	22.1	21.4	20.7	19.6	20.6	20.3	21.2	24.3	26.5	27.0	28.1	28.8	29.7	29.1	27.6	25.6	24.0	24.5	24.3	23.7	22.7	23.0	Diurnal Average	
	37.1	35.9	35.6	35.1	35.1	34.0	33.5	32.8	34.6	37.0	40.3	39.2	40.6	41.7	42.7	43.1	42.5	36.1	36.1	36.5	36.4	37.1	38.3	37.5	Diurnal Maximum	

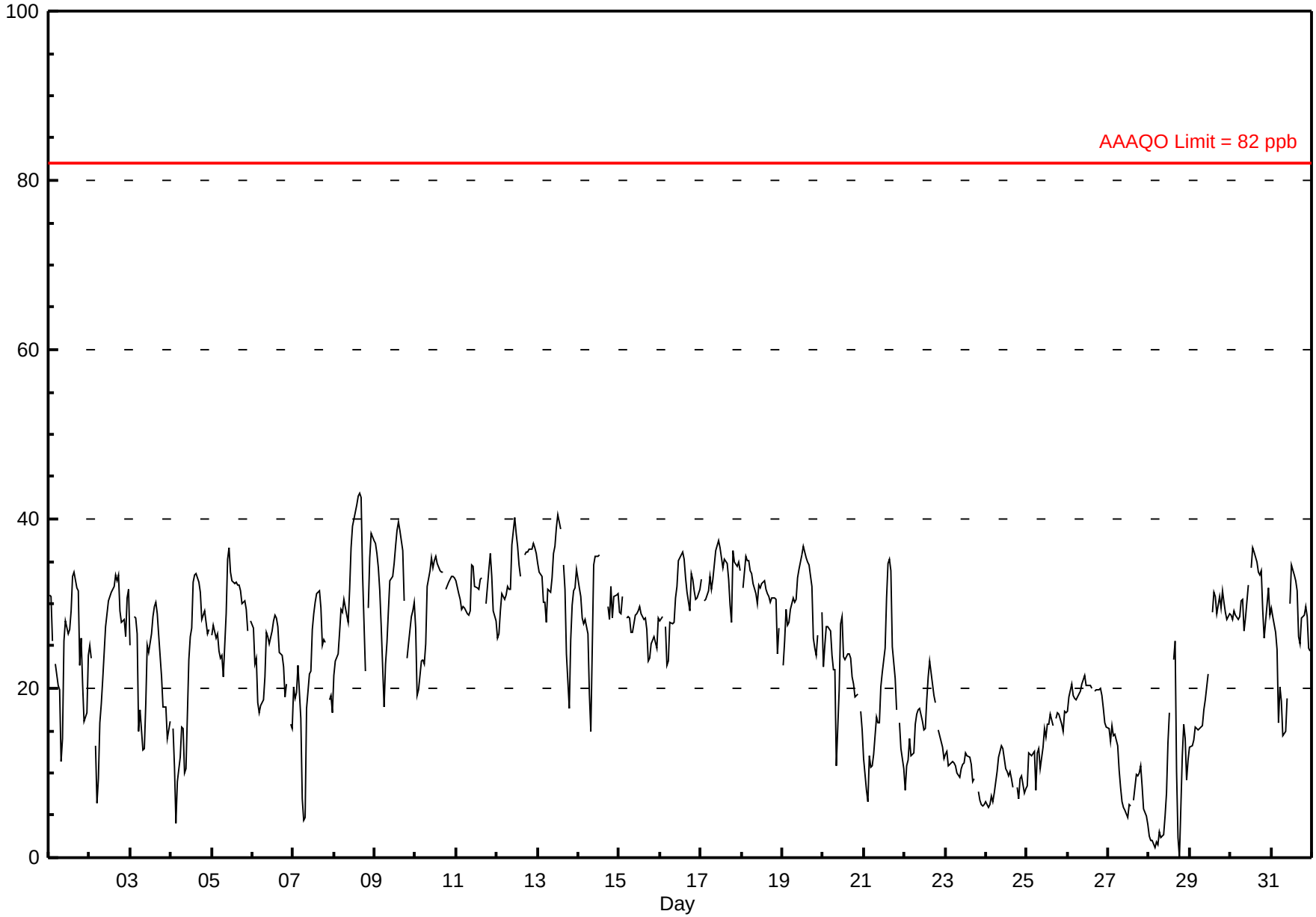
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

PASZA
Peace Air Shed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable-Bonanza - October 2010

Maximum Value: 45.9 ppb on Oct 8 17:00

Maximum Daily Average: 36.9 ppb on Oct 17

Minimum Value: 2 ppb on Oct 28 19:00

Minimum Daily Average: 11.5 ppb on Oct 24

Maximum Diurnal Average: 32.4 ppb at hour 15

Minimum Diurnal Average: 23.7 ppb at hour 6

Monthly Average: 27.43 ppb

Percentiles: P_1 = 5.1 P_{10} = 13.4 Q_1 = 20.4 Median = 30.3 Q_3 = 34.3 P_{90} = 37.5 P_{99} = 42.5

Hours in Service:	744
Hours of Data:	708
Hours of Missing Data:	36
Hours of Calibration:	36
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-Oct	33	34	30	A	25	25	22	21	21	30	30	29	29	32	37	37	36	35	30	29	27	27	24	33	29.4	37.1
2-Oct	29	30	A	20	12	15	20	20	25	30	31	33	34	34	34	36	35	37	31	33	32	30	34	35	29.2	37.3
3-Oct	33	A	32	33	33	26	26	25	19	23	28	28	30	32	33	32	32	31	26	22	26	23	20	21	27.5	32.9
4-Oct	A	20	19	8	15	15	19	20	18	13	30	31	30	35	37	35	36	34	32	32	31	29	29	A	25.8	36.7
5-Oct	29	32	28	29	27	26	28	28	32	38	39	36	36	35	34	34	35	33	32	32	31	30	A	33	32.1	38.9
6-Oct	34	32	30	30	21	28	26	27	29	29	27	29	30	30	30	30	27	26	25	22	23	A	20	21	27.2	33.5
7-Oct	23	22	24	27	22	12	7	9	21	24	25	30	31	33	34	34	32	29	28	30	A	26	23	20	24.7	34.1
8-Oct	27	27	27	29	32	31	33	31	32	36	39	42	43	45	44	45	46	41	33	A	34	40	40	40	36.5	45.9
9-Oct	39	38	36	34	31	26	28	28	34	35	36	38	40	41	42	41	40	36	A	34	31	33	33	32	35.0	41.7
10-Oct	31	26	24	27	27	27	28	37	38	38	37	39	38	37	36	36	36	A	33	35	35	35	36	36	33.5	39.0
11-Oct	36	34	33	32	33	32	31	32	32	38	39	34	35	34	36	35	A	33	34	37	39	36	34	31	34.4	39.4
12-Oct	29	29	32	33	33	34	35	35	34	40	42	41	39	37	37	A	38	38	38	39	38	39	38	38	36.3	42.5
13-Oct	37	37	35	33	32	31	35	34	35	39	40	43	44	42	A	37	35	32	26	30	34	35	34	36	35.5	43.6
14-Oct	36	34	32	31	30	31	27	18	32	41	38	38	38	C	C	C	C	33	32	35	33	34	34	34	33.1	40.7
15-Oct	32	33	33	A	31	30	31	29	29	32	31	31	32	32	31	31	30	27	28	28	29	28	30	31	30.4	33.2
16-Oct	30	31	A	30	28	26	31	32	31	35	35	38	38	38	38	35	33	31	38	37	33	33	33	34	33.4	38.1
17-Oct	35	A	34	33	36	39	36	35	37	40	40	39	37	38	38	37	37	35	38	39	37	37	37	36	36.9	39.9
18-Oct	A	35	38	37	37	36	36	36	34	35	35	36	36	35	34	34	34	34	34	33	33	29	32	A	34.6	38.1
19-Oct	26	32	34	31	31	33	33	33	35	35	38	37	39	39	38	38	37	36	31	28	27	31	A	32	33.6	39.0
20-Oct	28	29	32	30	30	29	28	29	15	28	31	32	28	27	29	27	27	24	23	21	21	A	19	18	26.4	32.5
21-Oct	15	11	9	14	14	13	16	19	19	18	24	25	30	34	39	40	36	32	25	22	A	20	17	14	22.0	40.1
22-Oct	11	13	16	16	15	15	20	19	20	21	19	18	18	22	25	25	25	22	21	A	18	17	15	14	18.4	25.2
23-Oct	14	15	15	16	14	13	14	13	12	13	13	14	15	14	14	14	11	12	A	9	9	8	8	8	12.6	15.7
24-Oct	9	8	8	10	9	11	13	14	15	16	15	13	12	11	12	11	11	A	11	11	11	12	11	11	11.5	15.6
25-Oct	13	14	15	14	14	14	15	15	14	16	18	17	19	19	20	18	A	19	19	20	18	16	19	20	16.8	20.5
26-Oct	19	22	22	22	21	21	22	22	24	23	24	23	23	23	23	A	22	22	22	22	21	20	18	19	21.7	24.2
27-Oct	18	17	18	18	17	15	12	10	10	9	8	8	8	9	A	10	12	14	13	13	12	8	6	6	11.9	18.3
28-Oct	5	4	4	3	5	5	5	5	5	9	11	18	20	A	26	29	27	5	2	18	18	16	15	15	11.7	28.7
29-Oct	15	15	17	19	18	17	18	19	21	21	23	25	A	32	34	34	32	34	32	34	32	32	31	31	25.4	33.9
30-Oct	31	31	32	31	32	31	32	33	32	33	35	A	37	39	38	37	36	37	36	35	29	32	34	33	33.8	38.7
31-Oct	31	31	30	28	24	25	23	22	18	24	A	35	38	37	36	36	33	30	32	33	33	33	29	30	30.1	37.7
	25.8	25.3	25.5	24.8	24.2	23.7	24.2	24.2	25.0	27.8	29.4	30.0	30.8	31.5	32.4	31.7	31.2	29.4	27.8	28.0	27.5	27.2	26.1	26.2	Diurnal Average	
	39.1	38.0	38.1	37.1	36.8	38.6	35.8	36.8	37.7	40.7	42.5	43.2	43.6	44.7	44.3	45.1	45.9	40.9	38.1	39.5	38.6	40.4	40.0	39.8	Diurnal Maximum	

C - Calibration

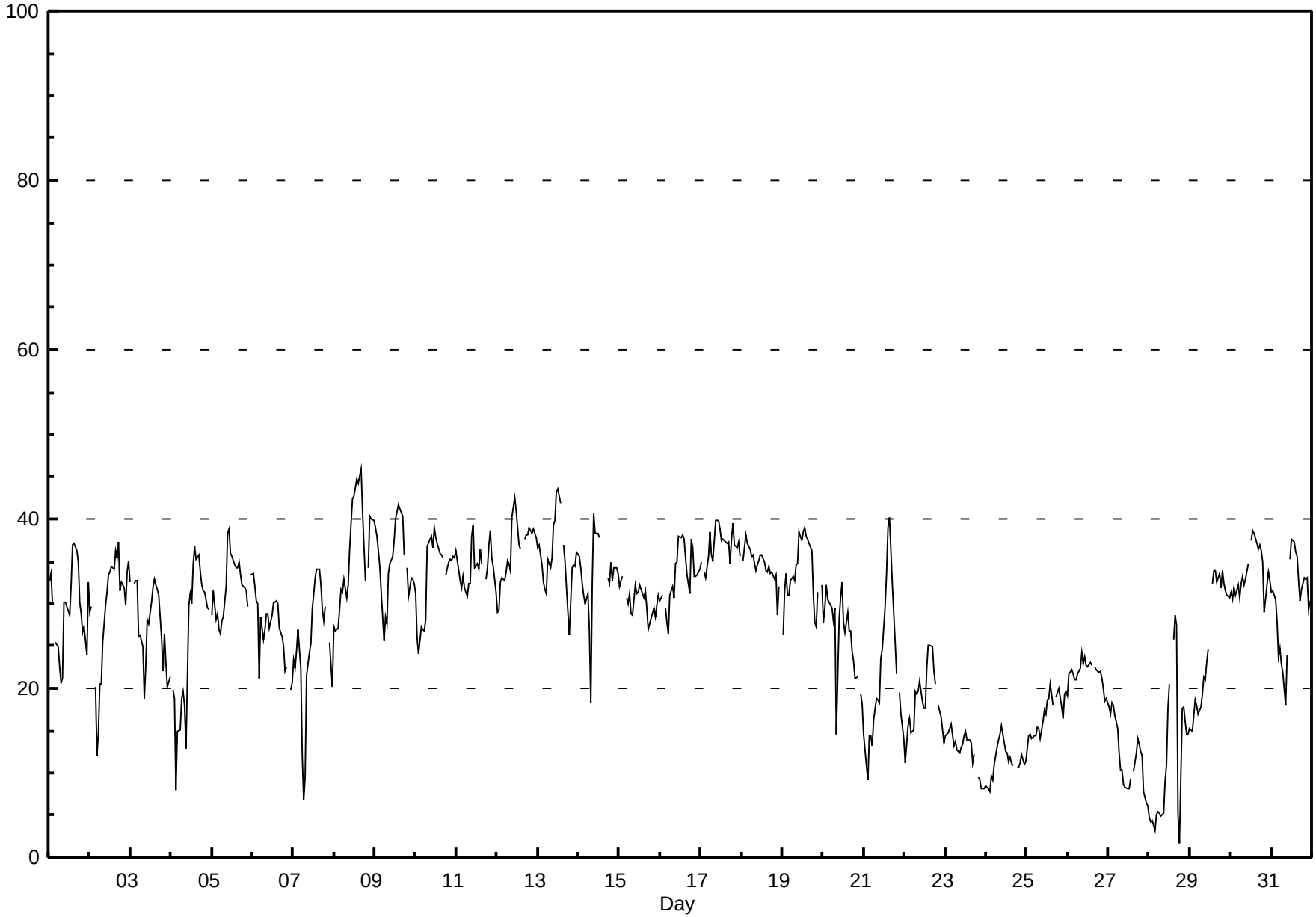
A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable-Bonanza - October 2010



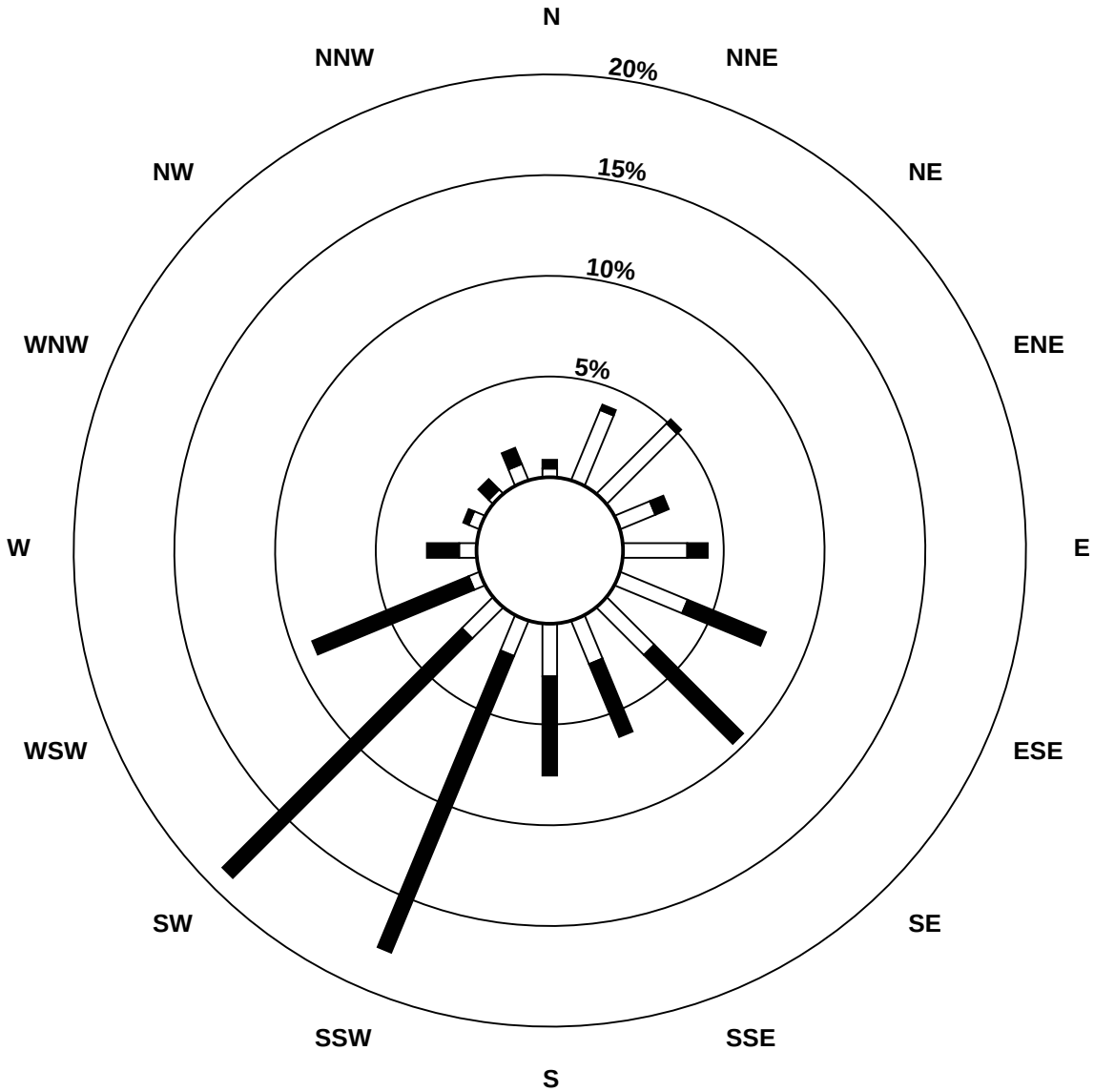
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Ozone (O_3) - ppb

Portable-Bonanza - October 2010



Pollutant Classes (ppb)

0 - 20

21 - 50

51 - 82

> 82

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Portable-Bonanza - October 2010

Maximum Value: 39.9 ppb on Oct 8 18:00

Minimum Value: 2.1 ppb on Oct 28 08:00

Percentiles: P_1 = 3.8 P_{10} = 11.1 Q_1 = 17.4 Median = 26.5 Q_3 = 30.8 P_{90} = 33.7 P_{99} = 36.6

Hours in Service:	744
Hours of Data:	737
Hours of Missing Data:	7
Hours of Calibration:	7
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Oct	30	30	29	29	29	28	26	23	21	20	20	21	22	23	24	27	29	30	29	29	29	27	25	24	30.2
2-Oct	23	22	22	20	18	17	17	16	15	16	18	20	23	25	27	29	31	32	32	31	31	30	30	30	31.7
3-Oct	29	28	28	28	28	27	25	22	20	20	19	19	19	21	22	24	26	27	27	26	25	24	22	20	29.0
4-Oct	19	17	16	14	12	12	12	12	11	11	12	15	17	20	22	25	27	30	31	31	31	30	30	29	31.2
5-Oct	28	28	27	27	26	26	25	25	25	26	28	28	30	31	32	33	33	33	32	32	31	31	30	30	33.5
6-Oct	29	28	27	25	23	22	22	21	21	21	21	22	24	25	26	27	27	27	26	25	24	24	22	20	29.0
7-Oct	20	19	18	19	18	17	16	14	14	14	15	15	17	20	23	26	28	28	29	28	28	27	25	23	28.6
8-Oct	22	22	21	21	22	24	25	27	27	28	30	32	33	34	36	38	40	40	38	38	36	36	35	34	39.9
9-Oct	33	34	35	35	35	32	31	29	28	28	28	28	29	32	34	35	36	36	36	35	33	32	30	29	36.4
10-Oct	28	26	25	25	25	24	24	24	25	27	29	30	32	33	34	35	35	34	34	34	33	33	33	33	34.6
11-Oct	33	33	32	32	32	31	31	30	30	30	30	31	31	31	32	32	33	32	32	32	33	33	32	32	33.0
12-Oct	31	31	30	30	29	29	29	30	30	32	33	34	35	35	35	36	37	36	36	36	35	36	36	36	36.5
13-Oct	36	36	36	35	34	33	32	32	31	32	32	33	35	36	37	37	37	35	32	30	29	28	28	28	37.0
14-Oct	28	29	31	31	31	30	28	26	25	26	26	27	28	29	30	N	N	N	N	N	N	N	30	30	30.7
15-Oct	30	30	30	30	30	30	29	29	28	28	28	28	28	28	28	28	29	28	27	27	26	26	25	25	30.3
16-Oct	26	26	27	27	26	26	27	26	26	27	27	28	30	32	33	33	34	33	34	33	33	32	32	31	33.7
17-Oct	32	32	31	31	31	32	32	32	32	33	34	34	35	35	35	36	35	35	33	33	33	33	33	33	35.6
18-Oct	33	33	35	34	34	34	34	34	34	33	33	33	32	32	32	32	32	32	31	31	31	30	29	29	34.5
19-Oct	28	27	27	27	26	27	28	28	29	30	30	31	33	33	34	35	35	35	34	33	31	30	29	28	35.1
20-Oct	26	25	26	26	26	26	26	25	23	23	23	23	22	22	23	23	24	25	24	22	22	22	21	19	26.3
21-Oct	18	16	14	13	12	12	11	11	12	13	14	16	17	20	23	25	27	28	28	28	28	26	23	20	28.4
22-Oct	16	14	12	12	12	12	12	13	14	15	15	15	16	17	17	18	18	19	19	19	19	19	18	16	19.5
23-Oct	15	14	13	13	12	12	11	11	11	11	11	11	11	11	11	11	11	11	11	10	10	9	8	7	14.7
24-Oct	7	7	6	6	6	7	7	8	9	9	10	11	11	11	11	11	11	10	10	9	9	9	9	8	11.4
25-Oct	8	9	9	10	10	10	11	11	12	12	12	12	13	14	14	15	15	16	16	16	16	16	16	17	16.5
26-Oct	17	17	17	18	18	18	19	19	19	20	20	20	20	20	20	21	20	20	20	20	20	19	19	18	20.6
27-Oct	18	17	17	16	15	15	14	13	12	11	10	9	8	7	6	6	6	7	8	9	9	9	8	8	17.9
28-Oct	7	6	5	4	3	2	2	2	2	2	3	5	7	7	10	14	15	14	13	13	13	13	11	9	14.6
29-Oct	10	11	13	13	13	13	14	15	15	16	17	17	18	20	22	24	26	28	29	30	30	30	30	30	30.3
30-Oct	30	29	29	29	29	29	29	29	29	29	29	29	30	31	32	33	34	34	35	34	33	32	32	31	34.7
31-Oct	30	30	29	28	27	26	24	22	20	19	18	19	22	23	26	28	30	31	30	30	29	29	28	27	30.5
	36.2	35.9	35.5	34.9	34.7	34.4	34.1	33.9	33.6	33.4	33.5	34.3	34.8	35.9	36.5	37.8	39.7	39.9	38.1	37.9	36.4	35.9	36.4	36.3	
	Diurnal Maximums																								

N - Not Valid

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable-Bonanza - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 24.4 ^{o}C on Oct 7 15:00 Maximum Daily Average: 15.2 ^{o}C on Oct 7

Minimum Value: -2 ^{o}C on Oct 28 05:00 Minimum Daily Average: -0.5 ^{o}C on Oct 26
Maximum Diurnal Average: 10.9 ^{o}C at hour 15 Minimum Diurnal Average: 3.7 ^{o}C at hour 8
Monthly Average: 6.79 ^{o}C Percentiles: P_1 = -1.1 P_{10} = -0.1 Q_1 = 1.4 Median = 6.2 Q_3 = 10.7 P_{90} = 13.9 P_{99} = 21.8

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

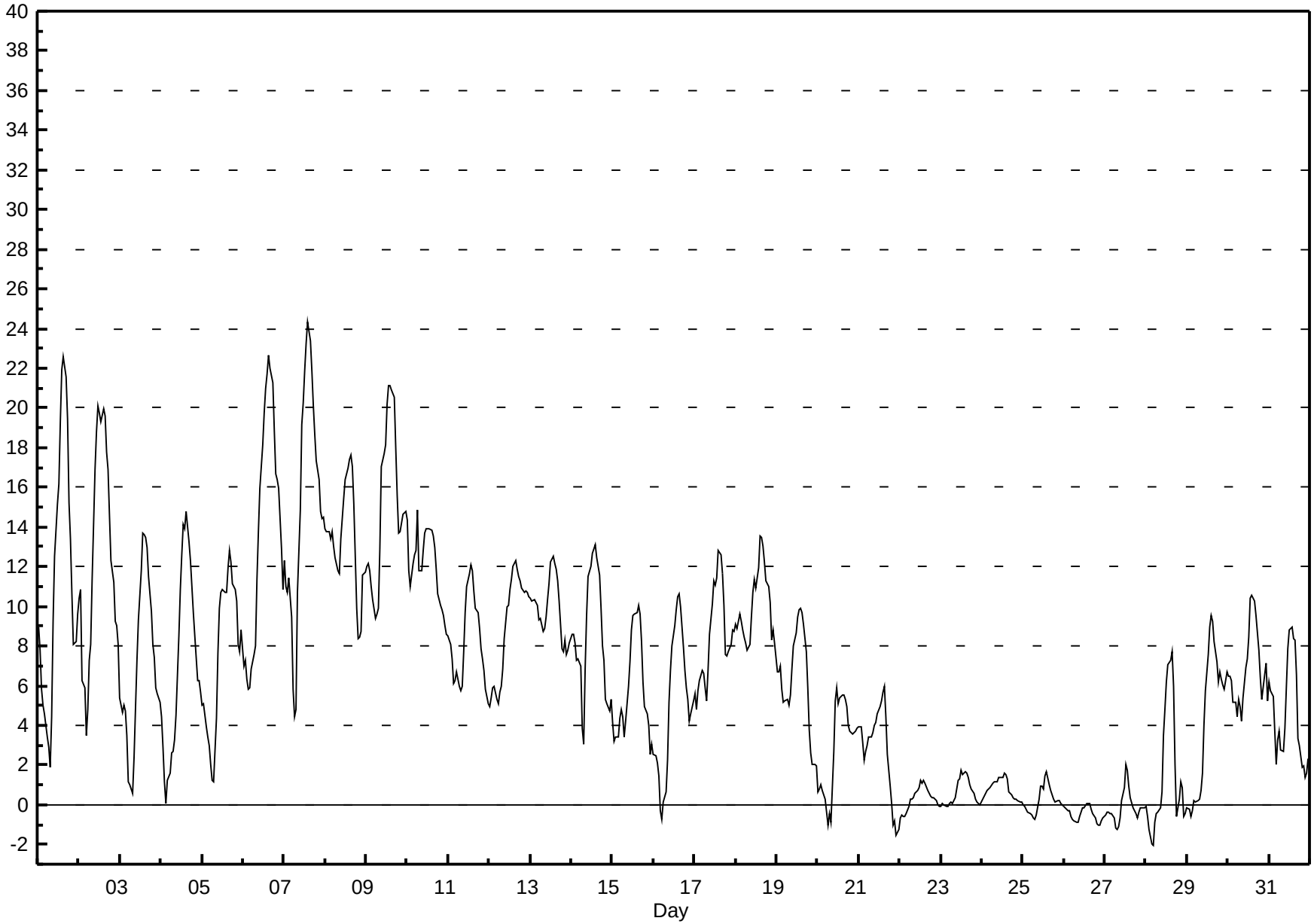
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Oct	9	8	6	5	5	3	3	2	4	9	12	15	16	19	22	23	22	19	15	13	11	8	8	10	11.2	22.6
2-Oct	10	11	6	6	3	5	7	8	11	17	19	20	20	19	20	20	18	17	15	12	11	9	9	8	12.6	20.1
3-Oct	5	5	5	5	3	1	1	1	2	5	7	9	12	14	14	13	13	12	10	8	7	6	6	5	7.0	13.7
4-Oct	4	3	1	0	1	2	3	3	3	5	9	11	13	14	14	15	13	12	11	10	9	6	6	6	7.2	14.8
5-Oct	5	5	4	3	3	2	1	1	4	8	10	11	11	11	11	12	13	12	11	11	10	8	8	9	7.6	12.8
6-Oct	7	7	6	6	6	7	8	8	11	14	16	18	20	21	22	23	22	21	19	17	16	16	13	11	13.9	22.6
7-Oct	12	11	11	11	9	6	4	5	11	15	19	20	22	23	24	23	22	20	19	17	16	15	14	15	15.2	24.4
8-Oct	14	14	14	13	14	13	12	12	12	13	14	15	16	17	17	18	17	15	10	8	8	9	12	12	13.3	17.6
9-Oct	12	12	12	11	10	9	10	10	13	17	18	18	20	21	21	21	21	18	16	14	14	15	15	15	15.0	21.1
10-Oct	14	12	11	12	13	13	15	12	12	13	14	14	14	14	14	14	13	12	11	10	10	10	9	9	12.1	14.9
11-Oct	8	8	7	6	6	7	6	6	6	8	10	11	12	12	12	11	10	10	9	8	7	7	6	5	8.2	12.1
12-Oct	5	5	6	6	5	5	6	6	7	8	10	10	11	11	12	12	12	12	11	11	11	11	11	10	8.9	12.3
13-Oct	10	10	10	10	10	9	9	9	9	9	10	11	12	13	12	12	11	10	8	8	8	8	8	8	9.8	12.5
14-Oct	9	9	8	7	7	7	4	3	7	10	11	12	13	13	13	12	12	10	8	7	5	5	5	5	8.4	13.1
15-Oct	4	3	3	3	4	5	4	3	4	6	7	9	10	10	10	10	10	8	6	5	5	4	3	3	5.8	10.1
16-Oct	3	2	2	1	0	-1	0	1	2	5	7	8	9	10	11	11	10	8	7	6	5	4	5	5	5.0	10.7
17-Oct	6	5	6	6	7	7	6	5	7	9	10	11	11	11	13	13	12	10	8	7	8	8	9	9	8.4	12.8
18-Oct	9	9	10	9	9	8	8	8	8	9	11	11	11	12	14	13	13	12	11	11	10	8	9	8	10.1	13.5
19-Oct	7	7	7	6	5	5	5	5	6	7	8	9	9	10	10	10	9	8	6	4	3	2	2	2	6.3	9.9
20-Oct	1	1	1	1	0	0	-1	0	-1	3	5	6	5	5	6	6	5	5	4	4	4	4	4	4	2.9	5.9
21-Oct	4	4	3	2	3	3	3	3	4	4	4	5	5	5	6	6	4	3	1	0	-1	-1	-2	-1	2.8	6.0
22-Oct	-1	-1	-1	-1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.3	1.2
23-Oct	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	2	1	1	1	1	0	0	0	0	0.6	1.8
24-Oct	0	0	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0.8	1.6
25-Oct	0	0	0	0	0	-1	-1	-1	-1	0	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0.2	1.7
26-Oct	0	0	0	0	-1	-1	-1	-1	-1	-1	0	0	0	0	0	0	0	0	-1	-1	-1	-1	-1	-1	-0.5	0.1
27-Oct	-1	0	0	0	0	-1	-1	-1	-1	-1	0	1	2	2	1	0	0	0	0	-1	0	0	0	0	-0.1	2.0
28-Oct	0	-1	-1	-2	-2	-1	0	0	0	1	3	5	6	7	7	8	6	2	-1	0	1	1	-1	0	1.6	7.7
29-Oct	0	0	-1	0	0	0	0	0	1	2	4	6	8	9	10	9	8	7	6	7	6	6	6	7	4.2	9.5
30-Oct	6	6	6	5	5	4	5	5	4	5	7	7	8	10	11	10	10	9	8	6	5	7	7	5	6.9	10.6
31-Oct	6	6	5	4	2	3	4	3	3	4	6	8	9	9	8	8	7	3	3	2	2	1	2	2	4.6	9.0
	5.5	5.2	4.8	4.4	4.2	3.9	4.0	3.7	4.8	6.6	8.3	9.2	10.0	10.6	10.9	10.9	10.1	8.9	7.4	6.6	6.2	5.7	5.5	5.5	Diurnal Average	
	14.3	13.8	13.8	13.4	13.8	13.1	14.9	11.8	12.9	17.0	19.1	20.3	21.9	23.3	24.4	23.4	22.0	21.3	18.9	17.3	16.4	16.0	14.7	14.8	Diurnal Maximum	

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable-Bonanza - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Bonanza - October 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	16	11	7	7	9	10	10	3	2	6	4	3	1	4	7	9	12	13	8	7	4	3	3	7	6.2	16.3
Dir	121	122	102	120	125	120	128	70	189	102	76	102	241	62	87	87	96	103	124	137	123	138	195	169	115	121
2 Spd	8	7	4	6	4	8	10	7	13	24	27	30	27	27	28	32	32	27	27	13	17	13	14	11	16.4	32.4
Dir	152	168	207	204	216	203	187	224	214	200	203	219	213	211	225	238	242	251	232	228	232	214	205	205	219	238
3 Spd	8	8	8	6	2	2	6	2	4	5	2	4	7	9	9	9	9	9	4	4	1	7	4	5	0.7	9.5
Dir	226	217	189	212	180	134	125	159	247	236	298	356	16	16	11	1	346	334	345	38	230	135	221	181	299	346
4 Spd	3	5	0	1	7	8	7	6	2	5	8	11	13	22	21	24	25	28	20	18	19	15	17	17	11.6	28.1
Dir	179	147	185	185	218	186	190	189	217	195	200	209	224	251	250	249	250	243	233	210	211	217	216	217	226	243
5 Spd	17	17	16	17	18	15	8	6	13	16	24	24	22	19	21	23	31	19	22	16	11	7	6	5	15.6	30.5
Dir	214	215	220	219	230	229	231	196	209	213	226	223	209	193	193	199	209	188	196	194	183	141	151	189	207	209
6 Spd	5	3	5	6	9	10	10	12	18	16	18	25	28	27	24	27	29	33	22	14	13	14	9	2	12.9	32.9
Dir	162	108	148	142	122	130	117	137	166	159	174	178	193	197	193	215	231	233	249	214	187	203	226	349	193	233
7 Spd	7	9	9	9	9	1	1	7	16	18	12	17	16	17	13	14	13	10	13	12	9	5	4	10	8.7	17.5
Dir	215	151	143	157	162	152	325	120	119	125	128	142	140	136	135	140	139	133	142	147	157	218	215	315	143	125
8 Spd	11	13	14	18	18	22	26	20	19	23	30	37	34	29	21	14	10	5	7	8	8	12	22	24	12.3	36.8
Dir	253	224	215	213	207	209	215	201	219	236	247	249	245	253	273	262	272	308	94	110	102	114	116	115	223	249
9 Spd	27	26	27	14	4	5	10	13	17	24	22	26	32	31	26	26	23	13	6	6	9	12	10	15	13.4	32.2
Dir	115	118	121	127	126	219	135	143	177	192	192	203	208	210	201	210	216	229	177	118	126	120	122	121	172	208
10 Spd	9	7	11	16	16	15	18	39	29	38	43	53	50	55	53	49	47	44	43	37	34	36	32	30	30.6	55.2
Dir	151	134	129	132	135	154	176	249	220	222	227	223	213	220	220	221	222	219	216	210	212	223	222	225	215	220
11 Spd	37	37	33	22	27	32	25	22	12	13	27	36	35	29	25	18	15	26	26	23	20	18	17	14	23.4	36.6
Dir	234	233	231	226	231	237	238	230	204	219	241	238	240	241	247	271	268	226	207	204	194	199	212	208	230	234
12 Spd	16	22	26	27	25	22	20	18	20	18	23	20	20	18	15	18	21	18	16	16	15	19	19	16	18.3	27.3
Dir	228	229	232	229	228	220	212	220	228	221	231	210	205	205	199	202	202	191	174	168	170	180	180	182	209	229
13 Spd	17	18	25	24	23	17	22	20	20	21	22	23	23	30	23	15	8	4	6	9	14	16	17	17	12.6	29.8
Dir	189	195	203	220	226	237	251	234	232	237	239	262	261	236	249	262	253	138	113	118	122	122	108	119	220	236
14 Spd	19	15	11	10	9	11	5	7	19	20	29	39	36	37	36	38	37	28	19	21	14	20	22	27	18.4	39.3
Dir	126	126	115	116	147	150	261	229	222	207	231	238	238	231	233	231	233	227	207	216	226	200	201	208	216	238
15 Spd	16	15	17	18	23	29	26	21	22	30	35	36	33	33	33	30	34	27	20	17	21	21	14	18	23.7	36.1
Dir	210	208	205	212	236	240	235	230	230	240	250	252	251	244	245	242	237	236	222	214	218	229	212	203	233	252
16 Spd	17	16	15	13	12	11	12	12	12	19	24	27	26	19	22	23	24	20	15	16	16	11	16	13	16.5	26.5
Dir	204	204	199	206	218	216	208	204	205	225	237	235	231	224	230	217	218	215	198	196	198	186	194	191	214	235
17 Spd	7	5	8	12	7	12	11	13	19	19	26	37	40	31	31	29	27	21	10	9	11	10	12	10	15.9	39.7
Dir	163	155	176	198	200	261	202	199	209	220	230	239	240	235	231	227	227	220	213	181	175	171	190	180	219	240
18 Spd	14	13	23	25	22	19	18	11	16	17	20	22	23	22	34	31	34	27	21	21	19	17	21	17	20.4	34.4
Dir	197	194	202	204	202	205	200	192	210	220	209	211	208	208	233	236	240	217	206	205	202	219	240	236	215	233
19 Spd	12	15	15	16	17	20	22	20	21	24	25	31	25	27	28	27	23	16	16	16	16	10	10	12	18.5	30.8
Dir	219	224	219	219	228	223	225	230	241	249	252	260	266	259	254	254	256	258	243	240	232	218	210	204	241	260
20 Spd	9	7	8	9	9	6	8	8	1	5	8	9	7	8	8	7	6	7	8	10	10	7	5	6	5.7	10.0
Dir	226	205	173	183	179	152	139	139	254	134	121	135	143	129	112	101	70	95	105	117	106	95	70	105	132	117
21 Spd	7	3	3	7	5	7	9	9	7	7	10	9	11	14	16	17	17	8	7	3	2	5	3	1	5.6	17.4
Dir	112	346	336	286	234	221	266	273	280	264	328	297	306	305	306	329	338	336	315	291	176	196	196	66	301	329
22 Spd	2	3	6	5	6	9	10	12	10	10	11	10	12	13	11	12	11	10	10	9	6	7	9	8	8.7	13.2
Dir	28	29	27	37	31	29	37	40	40	42	36	33	34	38	45	44	42	55	55	45	51	25	29	23	38	38

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

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
23 Spd	9	5	7	7	7	6	4	3	6	5	5	7	4	6	7	6	6	7	7	8	7	10	10	9	6.1	9.8
Dir	39	43	15	19	30	37	27	67	42	43	21	19	76	94	82	82	62	51	50	43	31	22	24	27	41	24
24 Spd	8	7	8	7	4	8	13	15	14	17	14	12	14	12	13	15	11	10	12	11	N	N	N	N	11.1	16.7
Dir	35	39	47	49	10	33	54	60	49	41	36	27	30	36	36	34	30	23	20	19	N	N	N	N	37	41
25 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	7	8	8	9	8	10	7	8	8	7	--	10.0
Dir	N	N	N	N	N	N	N	N	N	N	N	N	N	N	35	77	78	68	86	102	97	82	100	80	--	102
26 Spd	7	8	7	7	10	8	8	9	8	8	10	11	12	12	12	9	8	8	10	16	12	10	12	15	9.5	15.5
Dir	72	70	72	84	91	79	80	89	74	70	98	92	99	103	108	93	89	84	100	110	104	109	122	128	96	110
27 Spd	11	9	5	7	8	12	12	10	10	8	7	6	5	8	10	9	7	4	6	8	5	6	6	7	3.0	12.4
Dir	134	126	93	100	96	117	119	116	121	114	102	97	52	3	3	14	344	336	297	295	266	225	202	214	98	117
28 Spd	6	5	6	5	6	7	7	6	8	9	8	9	8	8	8	8	5	5	3	7	12	13	7	7	5.7	12.8
Dir	209	188	167	157	159	140	139	122	130	134	151	174	175	180	195	204	354	34	66	159	151	150	177	176	159	150
29 Spd	9	7	7	8	12	11	12	11	11	9	9	21	25	30	28	25	20	16	13	22	21	17	14	18	14.5	30.3
Dir	180	183	153	145	145	147	149	155	177	188	200	221	216	216	210	208	208	199	191	193	197	192	196	196	194	216
30 Spd	17	14	13	11	11	13	13	14	12	12	14	10	13	13	15	14	13	10	9	11	9	12	10	12	11.7	16.5
Dir	197	183	174	155	152	142	156	151	142	144	151	159	166	182	191	184	180	159	147	129	144	151	154	144	161	197
31 Spd	13	12	11	11	11	12	9	5	7	7	13	26	27	30	26	22	14	14	10	9	9	10	10	15	9.0	29.6
Dir	147	145	145	143	132	139	143	238	196	202	206	236	246	253	250	248	238	226	179	145	137	130	126	130	199	253
Spd	7.7	7.3	7.4	7.7	7.4	7.4	7.4	6.9	8.4	9.9	12.0	15.4	15.2	15.1	13.5	12.5	12.0	9.7	8.1	8.1	8.7	8.3	7.9	7.8	Diurnal Average	
Dir	182	183	184	189	193	196	193	200	202	207	221	226	225	225	228	229	231	221	201	184	184	181	184	179		
Spd	36.6	36.6	32.5	27.3	26.7	31.9	26.2	39.3	28.9	37.9	43.5	53.4	50.2	55.2	52.8	49.1	47.2	44.2	42.8	36.9	34.0	35.6	32.1	30.3	Diurnal Maximum	
Dir	234	233	231	229	231	237	215	249	220	222	227	223	213	220	220	221	222	219	216	210	212	223	222	225		

Maximum Speed Value: 55 km/h on Oct 10 14:00
Maximum Daily Speed Average: 30.6 km/h on Oct 10
Maximum Diurnal Speed Average: 15.4 km/h at hour 12

Minimum Speed Value: 0 km/h on Oct 4 03:00
Minimum Daily Speed Average: 0.7 km/h on Oct 3
Minimum Diurnal Speed Average: 6.9 km/h at hour 8

Monthly Average Velocity: 9.15 km/h 206.7 deg

Speed Percentiles: $P_1 = 1.4$ $P_{10} = 5.4$ $Q_1 = 7.9$ Median = 12.3 $Q_3 = 20.1$ $P_{90} = 27.4$ $P_{99} = 41.9$

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

Hours in Service:	744
Hours of Data:	726
Hours of Missing Data:	18
Percent Operational Time:	97.6

N - Not Valid

Frequency Distribution

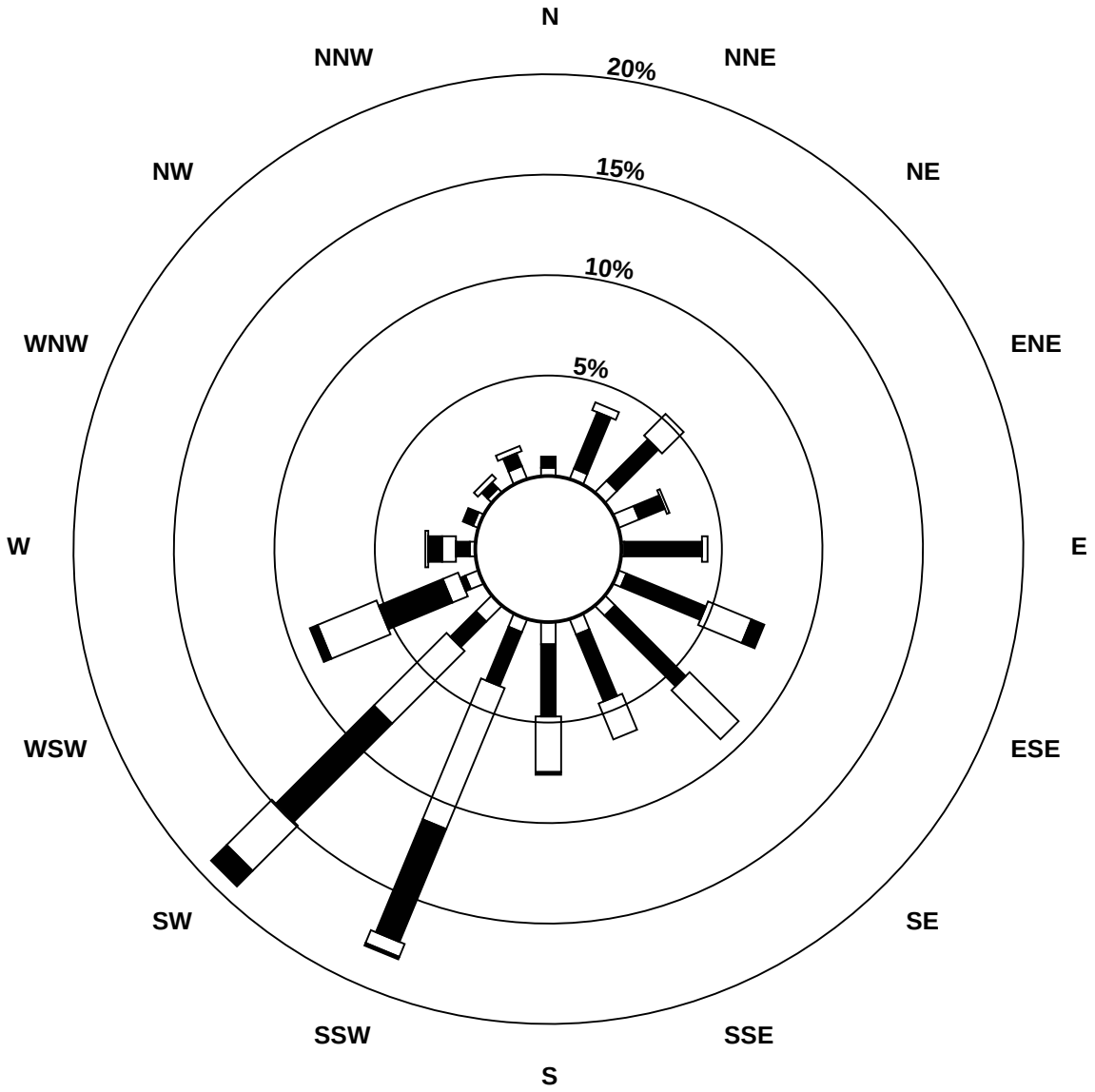
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	5	16	2	0	0	0	23
NorthEast	9	38	16	0	0	0	63
East	6	49	9	0	0	0	64
SouthEast	10	65	54	5	0	0	134
South	14	43	50	20	0	0	127
SouthWest	10	26	72	86	47	11	252
West	4	8	6	20	7	1	46
NorthWest	5	9	3	0	0	0	17
Total	63	254	212	131	54	12	726

PASZA
Peace Air Shed Zone Association

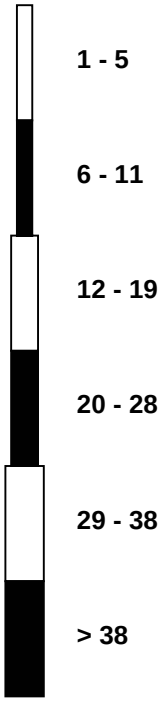
Wind Rose

Wind Speed (WS) (km/h)

Portable-Bonanza - October 2010



Wind Speed Classes (km/h)



PASZA
Peace Air Shed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable-Bonanza - October 2010

Maximum Speed: 56 km/h on Oct 10 14:00

Maximum Daily Speed Average: 33.9 km/h on Oct 10

Minimum Speed: 2 km/h on Oct 20 09:00

Minimum Daily Speed Average: 6.3 km/h on Oct 3

Maximum Diurnal Speed Average: 21.6 km/h at hour 14

Minimum Diurnal Speed Average: 11.7 km/h at hour 2

Monthly Average Speed: 15.11 km/h

Percentiles: P_1 = 3.1 P_{10} = 5.8 Q_1 = 8.2 Median = 12.4 Q_3 = 20.2 P_{90} = 27.6 P_{99} = 42.0

Hours in Service: 744
Hours of Data: 726
Hours of Missing Data: 18

Percent Operational Time: 97.6

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-Oct	16	11	8	8	10	10	10	5	4	7	5	4	4	6	7	9	13	13	8	9	4	5	4	7	7.7	16.3
2-Oct	8	8	5	6	5	8	11	8	13	24	28	30	27	28	29	33	32	27	27	13	17	13	15	12	17.7	32.9
3-Oct	9	8	8	7	3	3	7	5	4	6	3	4	7	9	9	9	10	9	5	5	3	7	5	5	6.3	9.6
4-Oct	4	5	2	3	7	8	7	6	3	6	8	11	13	22	22	24	25	28	20	18	19	15	17	17	13.0	28.2
5-Oct	17	18	16	17	18	15	8	7	13	16	24	24	22	19	21	23	31	19	22	16	11	7	6	6	16.6	30.6
6-Oct	5	7	6	6	9	10	11	12	18	16	18	25	28	28	24	28	29	33	22	14	14	14	12	5	16.4	33.0
7-Oct	7	9	9	9	9	5	4	7	16	18	12	17	16	17	13	14	13	10	13	12	9	5	4	11	10.8	17.7
8-Oct	12	13	14	18	18	22	26	20	19	23	31	37	35	29	21	14	11	6	7	8	8	13	22	24	18.8	37.1
9-Oct	28	26	27	14	8	8	10	13	18	24	22	26	33	32	27	26	24	13	7	7	9	12	11	15	18.3	32.5
10-Oct	10	7	11	16	16	15	20	40	29	38	44	54	51	56	53	49	47	44	43	37	34	36	32	30	33.9	55.5
11-Oct	37	37	33	22	27	32	25	22	12	13	28	37	35	29	25	18	15	27	26	23	20	18	17	15	24.7	36.8
12-Oct	16	22	26	27	25	22	20	18	20	18	24	21	20	19	15	18	21	18	16	17	16	19	19	16	19.7	27.4
13-Oct	17	18	25	24	23	17	23	20	20	21	22	24	23	30	24	15	9	4	6	9	14	16	17	17	18.3	30.0
14-Oct	19	15	11	10	9	11	8	8	20	20	29	40	36	38	37	38	37	28	19	21	16	20	22	27	22.4	39.6
15-Oct	17	15	17	18	23	29	26	21	22	31	35	36	34	33	33	31	34	27	20	17	22	21	14	18	24.6	36.3
16-Oct	17	16	15	13	12	11	12	12	12	19	24	27	27	20	22	23	24	20	15	16	16	11	16	13	17.2	26.7
17-Oct	7	5	8	12	8	12	12	13	19	20	27	37	40	31	31	29	27	21	11	10	11	10	12	10	17.5	40.0
18-Oct	14	13	23	26	23	19	18	11	16	17	20	23	23	22	35	31	34	27	21	21	19	17	21	17	21.2	34.9
19-Oct	13	15	15	16	17	20	22	20	21	24	26	31	26	28	28	28	23	16	16	16	16	10	10	12	19.5	30.9
20-Oct	9	7	8	10	9	7	8	8	2	5	8	9	7	8	8	7	6	7	8	10	10	8	5	6	7.5	10.1
21-Oct	7	5	5	7	5	7	10	9	8	8	10	9	11	14	16	18	17	9	7	4	3	5	3	3	8.3	18.0
22-Oct	3	3	6	5	6	9	10	12	10	10	11	10	12	13	11	12	11	10	10	9	7	7	9	8	8.9	13.2
23-Oct	9	5	7	7	7	6	5	4	6	5	6	7	6	6	7	6	6	7	7	8	7	10	10	9	6.8	9.8
24-Oct	8	8	8	7	5	9	13	15	14	17	14	12	14	12	13	15	11	10	12	11	N	N	N	N	11.4	16.7
25-Oct	N	N	N	N	N	N	N	N	N	N	N	N	N	N	8	8	8	10	9	10	8	8	9	8	--	10.2
26-Oct	8	8	7	7	10	9	9	10	9	8	10	12	12	12	12	10	8	8	10	16	12	10	13	15	10.1	15.6
27-Oct	11	10	5	7	9	13	12	10	10	8	8	7	6	8	10	9	8	5	6	8	5	6	6	7	7.9	12.5
28-Oct	6	5	6	5	6	7	7	6	8	9	8	9	8	8	9	8	8	6	5	7	12	13	8	7	7.5	12.9
29-Oct	9	7	7	9	12	11	12	11	11	9	9	21	25	30	28	25	20	16	13	22	21	17	14	18	15.7	30.4
30-Oct	17	14	13	12	12	13	13	14	12	12	14	11	13	13	15	14	13	10	9	11	9	12	10	12	12.4	16.6
31-Oct	13	13	11	11	11	12	10	6	8	7	13	26	28	30	26	22	14	14	10	9	9	10	10	15	14.1	29.7
Diurnal Average	12.4	11.7	12.0	12.0	12.0	12.6	12.9	12.3	13.2	15.3	18.0	21.3	21.3	21.6	20.6	19.9	19.0	16.3	13.9	13.4	12.6	12.5	12.4	12.9		
Diurnal Maximum	36.7	36.8	32.6	27.4	27.0	32.0	26.4	40.2	29.1	38.0	43.6	53.6	50.6	55.5	53.1	49.5	47.3	44.3	42.9	37.0	34.1	35.7	32.3	30.4		

N - Not Valid
All monthly, daily, and diurnal averages have been calculated using scalar methods

FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable-Bonanza - October 2010

Maximum Value: 87.9 deg on Oct 7 06:00

Minimum Value: 1.9 deg on Oct 19 20:00

Percentiles: P_1 = 2.5 P_{10} = 4.2 Q_1 = 5.6 Median = 8.3 Q_3 = 13.2 P_{90} = 25.6 P_{99} = 74.6

Hours in Service:	744
Hours of Data:	726
Hours of Missing Data:	18
Hours of Calibration:	0
Percent Operational Time:	97.6

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Oct	2	9	42	55	7	9	4	47	66	19	36	73	74	66	21	18	13	10	12	51	36	61	32	25	73.5
2-Oct	9	20	38	34	58	31	8	26	7	4	8	7	9	8	16	10	6	7	3	4	5	4	6	12	58.1
3-Oct	15	8	14	19	52	63	24	80	19	19	41	43	12	12	13	13	11	10	46	24	62	9	36	17	79.9
4-Oct	28	27	81	75	18	12	9	10	35	22	18	13	11	12	11	11	6	6	10	5	5	3	5	3	80.7
5-Oct	3	10	2	3	3	4	12	32	6	10	7	7	8	8	7	7	5	11	3	4	11	6	25	44	43.5
6-Oct	27	61	25	14	5	12	20	7	6	6	11	7	7	8	8	13	6	5	8	15	6	4	55	70	70.2
7-Oct	14	11	9	14	16	88	84	8	8	8	14	9	11	11	11	7	5	5	5	11	11	25	25	43	87.9
8-Oct	26	11	6	5	9	6	7	4	14	9	8	7	7	10	11	18	17	49	34	8	26	20	3	2	49.3
9-Oct	3	3	3	38	69	55	21	6	24	6	9	5	8	11	12	8	8	13	27	31	5	7	12	4	69.0
10-Oct	26	28	8	7	5	12	21	13	6	4	5	5	7	7	5	7	5	4	5	4	5	5	6	6	28.1
11-Oct	5	6	3	5	9	4	3	9	15	24	9	7	8	9	10	8	12	18	4	6	6	5	5	8	23.6
12-Oct	9	2	3	4	3	3	7	6	5	8	16	9	9	10	11	7	8	8	9	8	6	6	6	5	15.6
13-Oct	6	5	5	6	5	7	8	7	4	7	8	10	10	7	12	11	30	25	24	7	3	4	6	5	30.1
14-Oct	3	5	19	11	7	9	57	29	9	5	11	6	6	7	8	5	5	4	8	8	28	3	8	5	56.6
15-Oct	7	5	3	4	11	3	3	4	4	6	6	7	9	8	7	11	5	3	4	7	3	5	7	4	11.1
16-Oct	5	4	3	4	6	3	7	4	13	5	7	6	8	13	12	8	6	6	7	5	4	6	4	11	13.2
17-Oct	15	11	9	5	19	15	13	3	7	15	6	9	7	7	7	8	9	7	21	16	7	6	6	11	21.2
18-Oct	4	4	4	4	5	5	5	6	6	10	6	9	7	8	10	6	5	10	5	9	8	5	6	8	10.3
19-Oct	11	9	11	4	8	4	3	2	6	4	7	6	9	9	7	7	4	4	4	2	3	9	11	8	11.0
20-Oct	10	23	23	10	7	13	6	15	58	75	7	8	9	5	14	12	8	17	11	8	13	15	12	14	75.4
21-Oct	22	75	55	8	23	12	23	8	20	28	11	17	11	14	11	16	11	10	4	42	34	19	39	75	74.9
22-Oct	74	22	11	9	7	9	13	3	4	4	4	5	4	3	8	6	5	10	9	9	14	8	6	7	73.7
23-Oct	6	20	4	7	11	7	11	28	9	10	13	8	43	22	21	17	13	10	10	7	6	4	5	6	42.7
24-Oct	5	8	8	9	27	17	7	5	4	3	4	4	5	4	5	4	4	4	4	3	N	N	N	N	27.5
25-Oct	N	N	N	N	N	N	N	N	N	N	N	N	N	N	6	13	8	9	14	14	16	14	18	18	18.2
26-Oct	21	17	21	21	16	16	13	14	15	17	15	13	12	11	13	12	14	12	13	6	10	8	6	3	21.1
27-Oct	10	10	26	15	22	8	5	5	6	11	10	18	13	17	8	8	10	15	9	7	21	9	8	4	26.4
28-Oct	17	14	6	8	11	4	7	7	7	4	16	10	13	21	22	20	59	17	58	29	5	3	38	9	59.2
29-Oct	7	13	9	5	4	5	4	6	11	10	15	5	5	4	4	5	5	4	8	8	7	6	7	4	14.9
30-Oct	4	11	5	15	11	5	7	6	6	5	6	11	6	11	10	8	9	8	12	9	8	7	7	8	14.8
31-Oct	6	7	5	5	8	2	33	28	30	22	9	9	8	5	7	6	12	7	19	10	9	9	7	6	32.6
	73.7	74.5	80.7	74.7	69.0	87.9	83.5	79.9	65.9	75.4	41.4	73.3	73.5	65.6	22.0	19.9	59.2	49.3	58.1	50.7	62.0	61.1	55.3	74.9	

N - Not Valid

PASZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 33.1 ppb on Oct 15 20:00 Maximum Daily Average: 6.6 ppb on Oct 15

Minimum Value: 0 ppb on Oct 4 02:00 Minimum Daily Average: 0.0 ppb on Oct 6
Maximum Diurnal Average: 2.3 ppb at hour 15 Minimum Diurnal Average: 0.2 ppb at hour 5
Monthly Average: 0.88 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.2 Q_3 = 0.6 P_{90} = 2.0 P_{99} = 12.3

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0.5	1.5
2-Oct	A	2	2	1	0	0	0	0	1	1	1	0	0	2	2	2	3	0	0	0	0	0	0	0	0.8	2.9
3-Oct	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	0.6
4-Oct	A	0	0	0	0	0	0	0	0	0	1	0	0	2	1	4	4	1	0	0	0	0	0	0	0.6	4.4
5-Oct	A	4	3	0	0	0	0	0	0	0	1	6	3	5	6	0	0	0	0	0	0	0	0	0	1.2	6.5
6-Oct	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-Oct	A	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	1	1	1	0	1	2	3	0.6	3.0
8-Oct	A	3	2	1	0	0	0	0	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0	0.6	3.3
9-Oct	A	0	0	0	0	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	2.2
10-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	5	6	7	6	6	7	1	8	0	0	0	2.0	8.2
11-Oct	A	0	0	0	0	0	0	0	0	0	8	4	1	4	4	0	0	0	0	0	0	0	0	0	0.9	7.6
12-Oct	A	0	0	0	0	0	0	0	0	0	0	3	8	12	10	18	0	0	0	0	0	0	0	0	2.3	18.2
13-Oct	A	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	2.2
14-Oct	A	0	0	0	1	1	1	1	1	3	12	0	0	0	0	0	0	0	2	0	5	2	0	0	1.5	12.3
15-Oct	A	0	0	0	0	18	0	6	18	7	2	1	0	8	12	7	3	12	6	33	8	0	11	0	6.6	33.1
16-Oct	A	0	0	0	0	0	0	0	0	0	0	5	5	6	8	3	1	0	0	0	0	0	0	0	1.3	7.8
17-Oct	A	0	0	0	0	0	0	0	0	0	0	1	2	5	0	5	7	1	0	0	0	0	0	0	0.9	6.5
18-Oct	A	0	0	0	0	0	0	1	0	0	0	1	0	0	16	1	0	0	0	2	0	0	0	0	0.9	15.8
19-Oct	A	0	3	10	1	9	3	1	4	C	C	C	C	0	0	2	0	0	0	0	0	0	0	0	1.8	9.8
20-Oct	A	0	0	0	0	0	0	0	0	1	1	1	2	4	1	1	1	0	0	1	2	1	1	1	0.8	3.6
21-Oct	A	2	1	1	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
22-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0.3	0.9
23-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0.3	2.1
24-Oct	A	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0	0	0.5	1.2
25-Oct	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
26-Oct	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
27-Oct	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	1	0	0	0	0	0	0.5	1.6
28-Oct	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	0.9
29-Oct	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
30-Oct	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
31-Oct	A	0	0	0	0	0	0	0	0	0	0	1	1	3	2	0	0	0	0	0	0	0	0	0	0.5	3.0
	--	0.5	0.5	0.6	0.2	1.1	0.3	0.4	0.9	0.6	1.2	1.1	1.0	2.0	2.3	1.7	0.9	0.8	0.7	1.3	0.9	0.2	0.6	0.3	Diurnal Average	
	--	4.1	2.5	9.8	1.1	17.8	3.1	5.8	18.0	6.6	12.3	5.6	8.3	12.3	15.8	18.2	6.5	11.5	7.0	33.1	8.2	1.9	11.5	3.0	Diurnal Maximum	

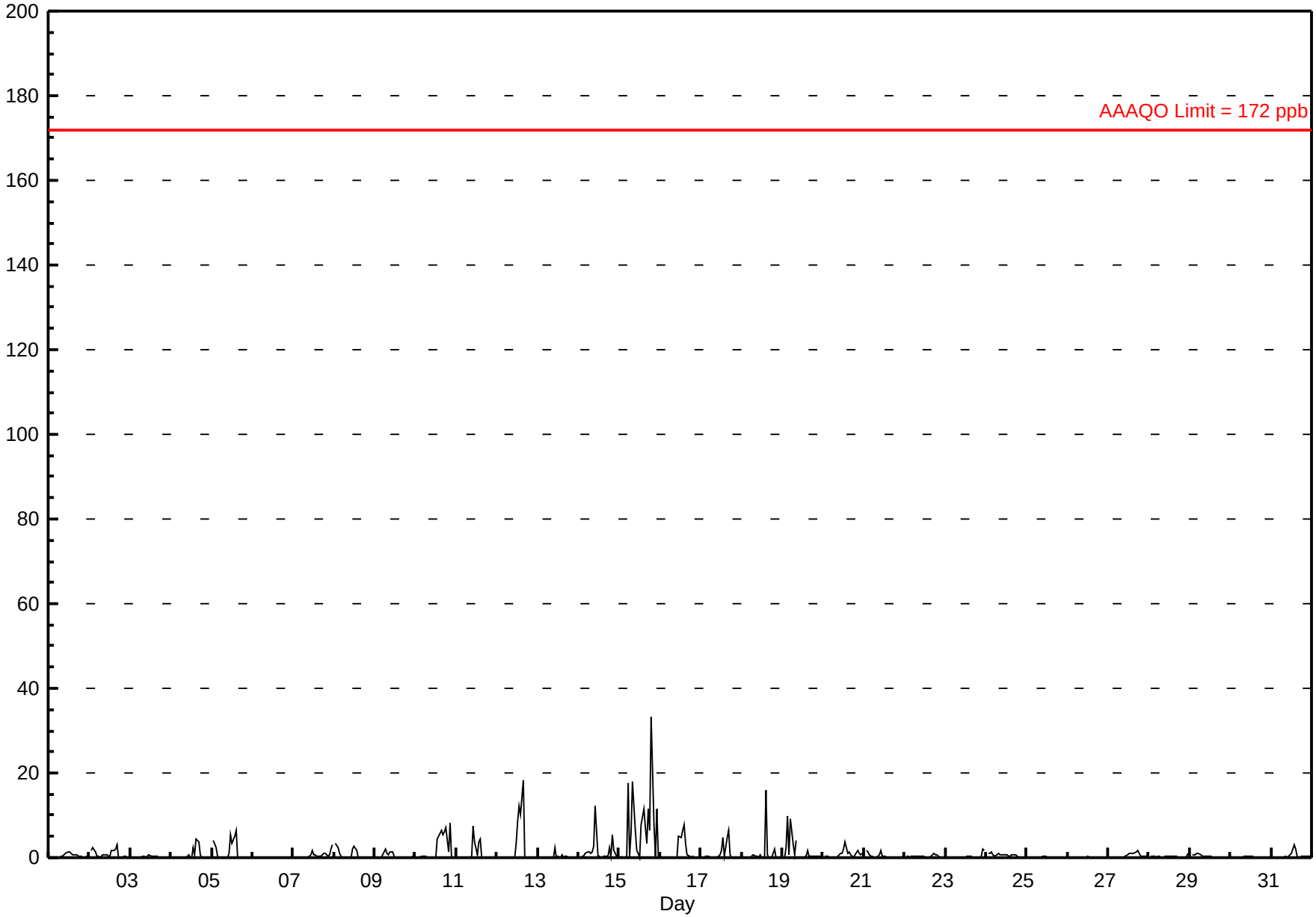
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - October 2010

Maximum Value: 67.9 ppb on Oct 15 06:00

Maximum Daily Average: 26.9 ppb on Oct 15

Minimum Value: 0 ppb on Oct 5 00:00

Minimum Daily Average: 0.5 ppb on Oct 6

Maximum Diurnal Average: 9.0 ppb at hour 16

Minimum Diurnal Average: 0.7 ppb at hour 5

Monthly Average: 3.64 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 0.7 $Q_3 = 1.2$ $P_{90} = 9.0$ $P_{99} = 47.7$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	A	1	0	0	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.0	2.2
2-Oct	A	2	3	3	1	1	1	1	1	1	1	1	1	12	8	14	11	1	0	0	1	1	1	1	2.8	14.4
3-Oct	A	1	1	0	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	2.1
4-Oct	A	0	1	0	1	1	0	0	1	1	4	2	1	9	8	24	25	6	1	1	0	0	0	0	3.7	25.1
5-Oct	A	21	19	1	0	0	0	0	0	0	13	24	13	14	25	0	0	0	0	0	0	0	0	0	6.0	25.4
6-Oct	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	0.5	0.7
7-Oct	A	0	1	1	1	1	0	0	1	1	1	3	2	1	1	1	1	1	2	2	1	2	3	4	1.2	3.6
8-Oct	A	6	3	2	1	1	1	0	1	1	1	22	18	11	1	1	1	1	0	1	1	1	1	1	3.1	22.0
9-Oct	A	1	1	1	1	3	3	2	1	2	2	1	1	0	0	0	0	0	0	0	0	0	1	1	1.0	3.2
10-Oct	A	0	0	1	1	1	1	0	0	0	0	0	1	19	16	16	18	25	24	11	24	1	0	0	7.1	24.7
11-Oct	A	0	0	0	0	0	0	0	0	6	21	27	7	22	19	0	0	0	0	0	0	1	1	0	4.8	27.4
12-Oct	A	0	0	0	0	0	0	0	0	0	0	15	23	37	37	49	2	0	0	0	0	0	0	0	7.3	48.6
13-Oct	A	0	0	0	0	0	0	0	0	0	26	0	0	1	4	1	2	2	1	1	1	1	1	1	1.9	26.3
14-Oct	A	1	1	1	2	2	2	2	2	21	37	1	1	1	1	1	1	1	10	1	46	44	1	1	7.6	46.0
15-Oct	A	1	1	0	0	68	1	25	52	27	11	8	1	47	41	52	28	45	35	64	55	1	56	1	26.9	67.9
16-Oct	A	0	1	1	0	1	0	1	0	1	1	23	24	34	34	35	9	1	1	1	1	1	1	1	7.3	35.0
17-Oct	A	1	1	1	1	1	1	1	1	1	1	5	17	31	9	49	46	2	1	0	0	1	0	0	7.4	49.4
18-Oct	A	0	1	1	0	1	1	1	1	1	1	2	2	0	38	16	1	0	0	8	1	0	1	0	3.3	37.6
19-Oct	A	0	13	30	2	47	17	4	21	C	C	C	C	3	1	8	1	1	1	1	1	1	1	1	8.0	46.6
20-Oct	A	1	0	1	1	1	1	0	0	2	2	2	4	5	2	2	2	1	1	2	3	2	2	2	1.7	5.1
21-Oct	A	3	3	2	1	2	1	2	1	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.8
22-Oct	A	2	1	1	1	1	2	1	1	1	1	1	0	0	0	0	1	1	1	1	1	0	1	1	1.0	1.8
23-Oct	A	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	0	1	0	0	1	3	3	0.8	3.0
24-Oct	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1.0	2.0
25-Oct	A	0	0	0	0	0	0	1	0	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0.5	0.9
26-Oct	A	0	0	1	1	1	1	1	1	0	0	0	1	1	0	0	1	0	1	0	0	0	1	1	0.5	0.7
27-Oct	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	5	2	1	1	1	1	1.3	5.2
28-Oct	A	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0.7	1.3
29-Oct	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	1	0.7	1.4
30-Oct	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.6	0.8
31-Oct	A	0	1	1	1	1	0	1	1	1	1	2	6	17	13	1	1	1	1	1	1	1	1	1	2.3	17.0
	--	1.6	1.9	1.8	0.7	4.5	1.3	1.6	3.0	2.6	4.5	5.0	4.4	8.9	8.6	9.0	5.1	3.2	2.9	3.3	4.6	2.1	2.5	0.8	Diurnal Average	
	--	21.2	19.1	29.6	2.3	67.9	17.3	24.7	52.3	26.8	36.9	27.4	24.1	47.0	40.6	52.3	46.0	44.8	34.9	63.8	55.3	43.6	55.6	3.6	Diurnal Maximum	

C - Calibration

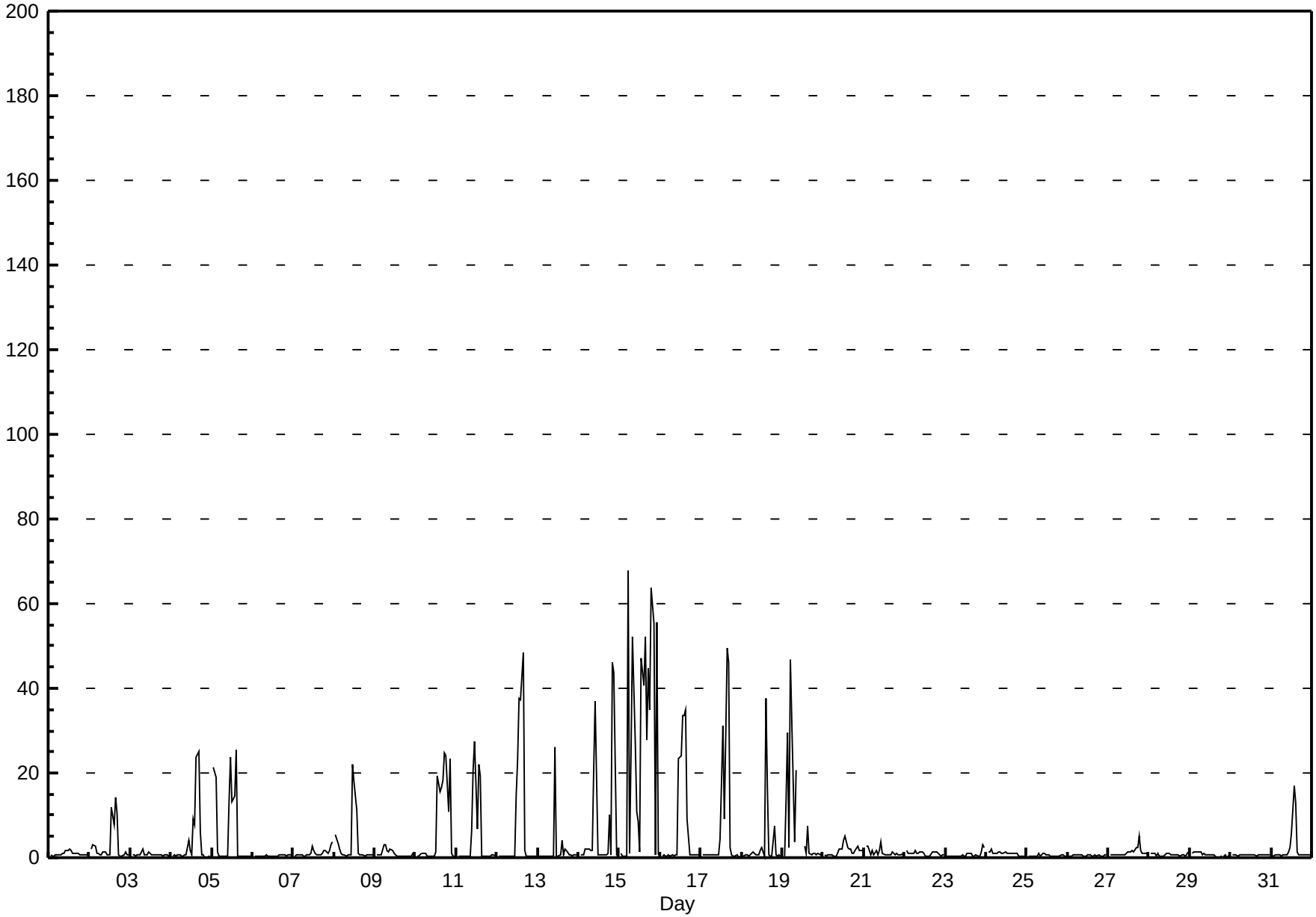
A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - October 2010



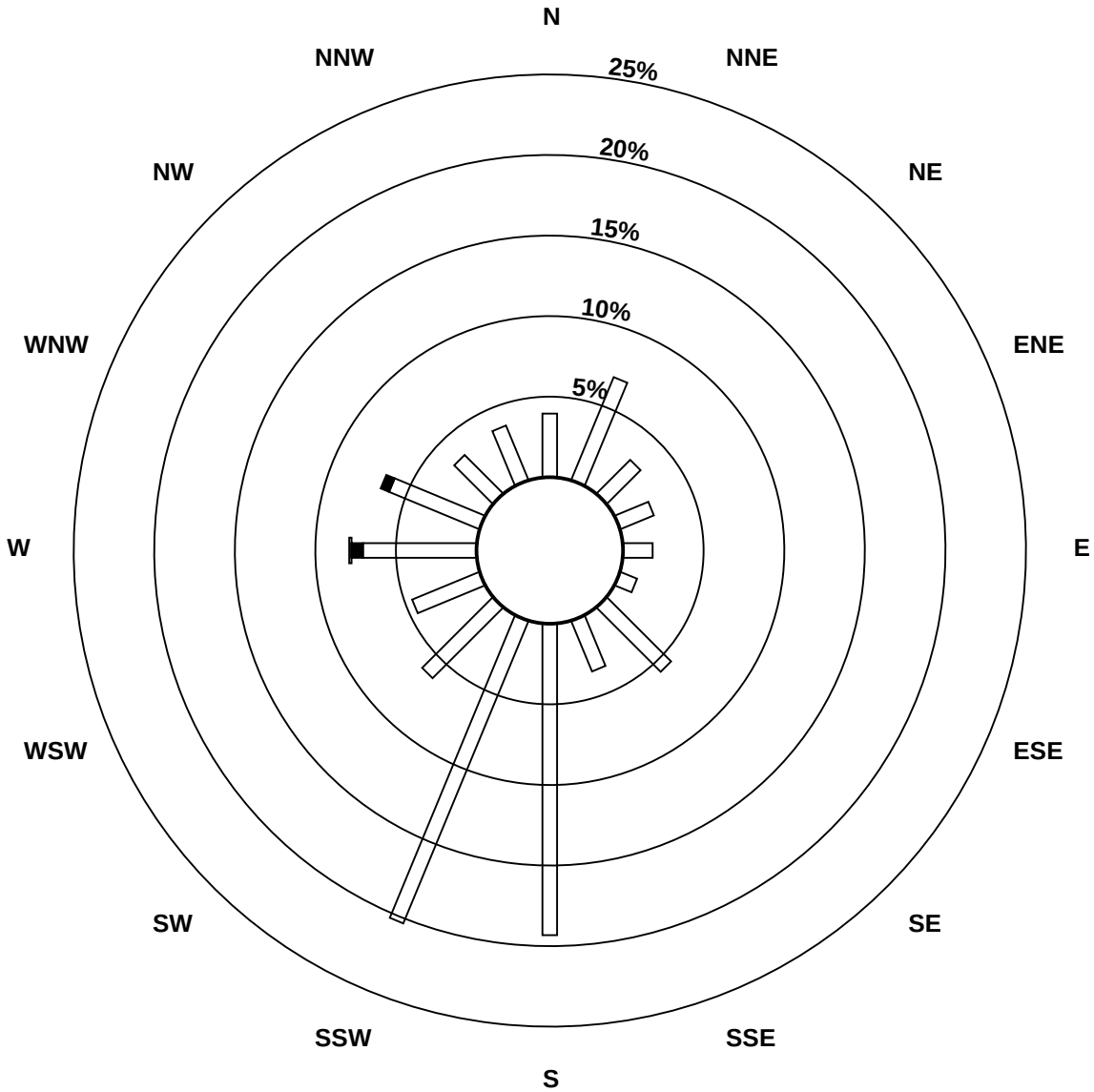
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Valleyview - October 2010



Pollutant Classes (ppb)

- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

PASZA
Peace Air Shed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.0 ppb on Oct 1 09:00 Maximum Daily Average: 0.2 ppb on Oct 7

Minimum Value: 0 ppb on Oct 1 23:00 Minimum Daily Average: 0.0 ppb on Oct 12
Maximum Diurnal Average: 0.1 ppb at hour 8 Minimum Diurnal Average: 0.0 ppb at hour 14
Monthly Average: 0.07 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.1 P_{90} = 0.2 P_{99} = 0.4

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
2-Oct	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
3-Oct	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	0.4
4-Oct	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-Oct	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-Oct	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
7-Oct	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
8-Oct	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
9-Oct	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
10-Oct	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
11-Oct	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-Oct	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
13-Oct	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
14-Oct	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	0.4
15-Oct	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
16-Oct	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
17-Oct	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
18-Oct	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
19-Oct	A	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0.1	0.2
20-Oct	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
21-Oct	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
22-Oct	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
23-Oct	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
24-Oct	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
25-Oct	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
26-Oct	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
27-Oct	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
28-Oct	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	0.3
29-Oct	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
30-Oct	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
31-Oct	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	0.1	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	Diurnal Average	
	--	0.4	0.3	0.4	0.6	0.6	0.7	1.0	1.0	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.2	Diurnal Maximum	

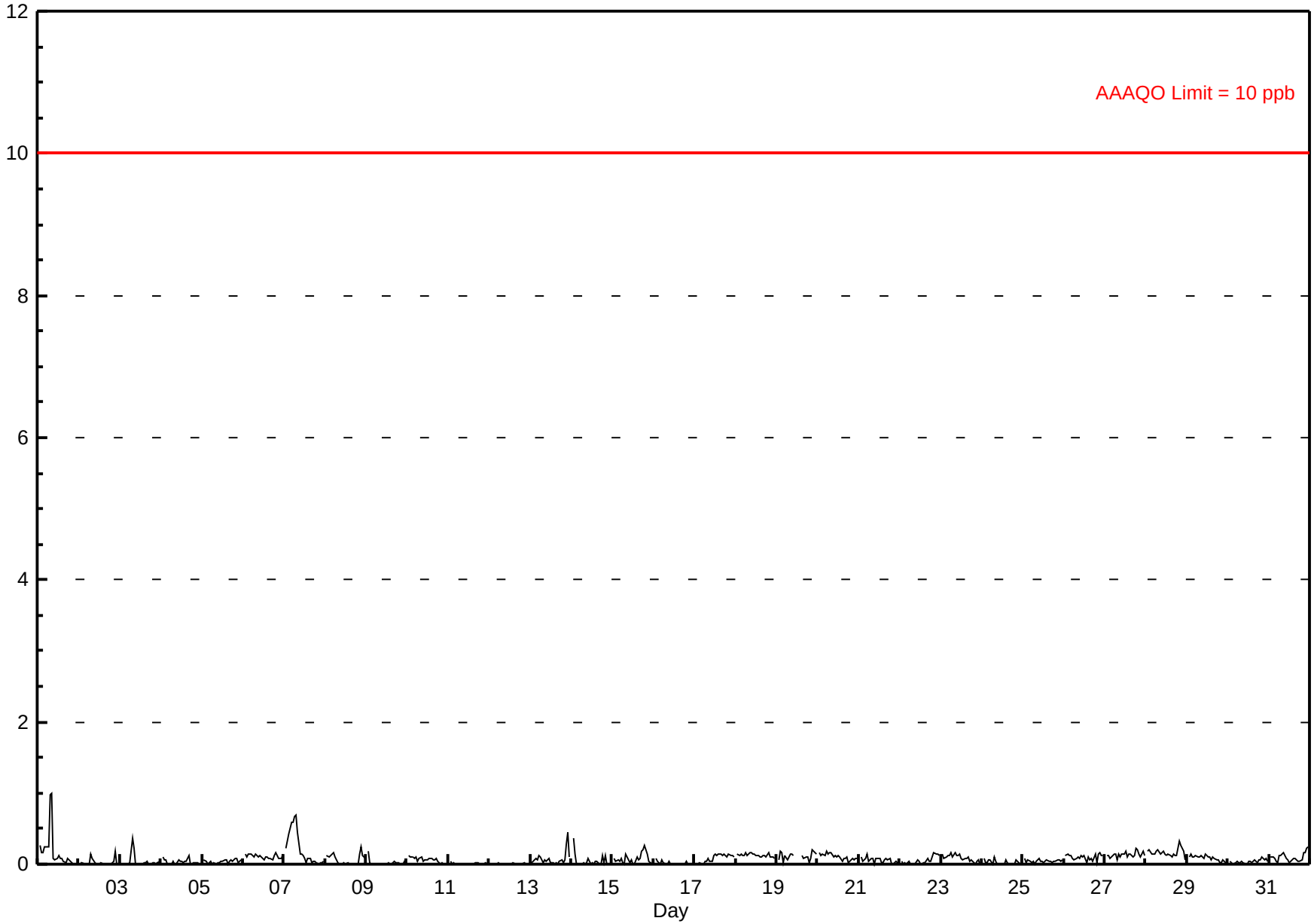
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Air Shed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - October 2010

Maximum Value: 2.7 ppb on Oct 1 09:00

Maximum Daily Average: 0.6 ppb on Oct 1

Minimum Value: 0 ppb on Oct 12 11:00

Minimum Daily Average: 0.3 ppb on Oct 24

Maximum Diurnal Average: 0.5 ppb at hour 8

Minimum Diurnal Average: 0.3 ppb at hour 14

Monthly Average: 0.37 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 1.1$

Hours in Service:	744
Hours of Data:	709
Hours of Missing Data:	35
Hours of Calibration:	35
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-Oct	A	1	1	0	1	1	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.7
2-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.3	0.7
3-Oct	A	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
4-Oct	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
5-Oct	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
6-Oct	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.5
7-Oct	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.2
8-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.3	0.6
9-Oct	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
10-Oct	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	0.4
11-Oct	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	0.9
12-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	1.1
13-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.4	0.8
14-Oct	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.4	1.1
15-Oct	A	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0.4	1.0
16-Oct	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
17-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.6
18-Oct	A	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
19-Oct	A	0	0	1	0	0	0	0	0	1	0	C	C	C	C	0	0	0	0	0	0	1	1	0	0.4	0.7
20-Oct	A	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
21-Oct	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	0.5
22-Oct	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
23-Oct	A	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
24-Oct	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
25-Oct	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	0.6
26-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0.4	0.6
27-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.4	1.2
28-Oct	A	0	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	1	1	1	0	0	0	0.5	0.8
29-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	0.5
30-Oct	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
31-Oct	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.5
	--	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	Diurnal Average	
	--	1.1	0.8	0.9	1.0	1.1	0.9	2.0	2.7	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.6	1.2	1.1	1.0	0.7	0.8	0.5	Diurnal Maximum	

C - Calibration

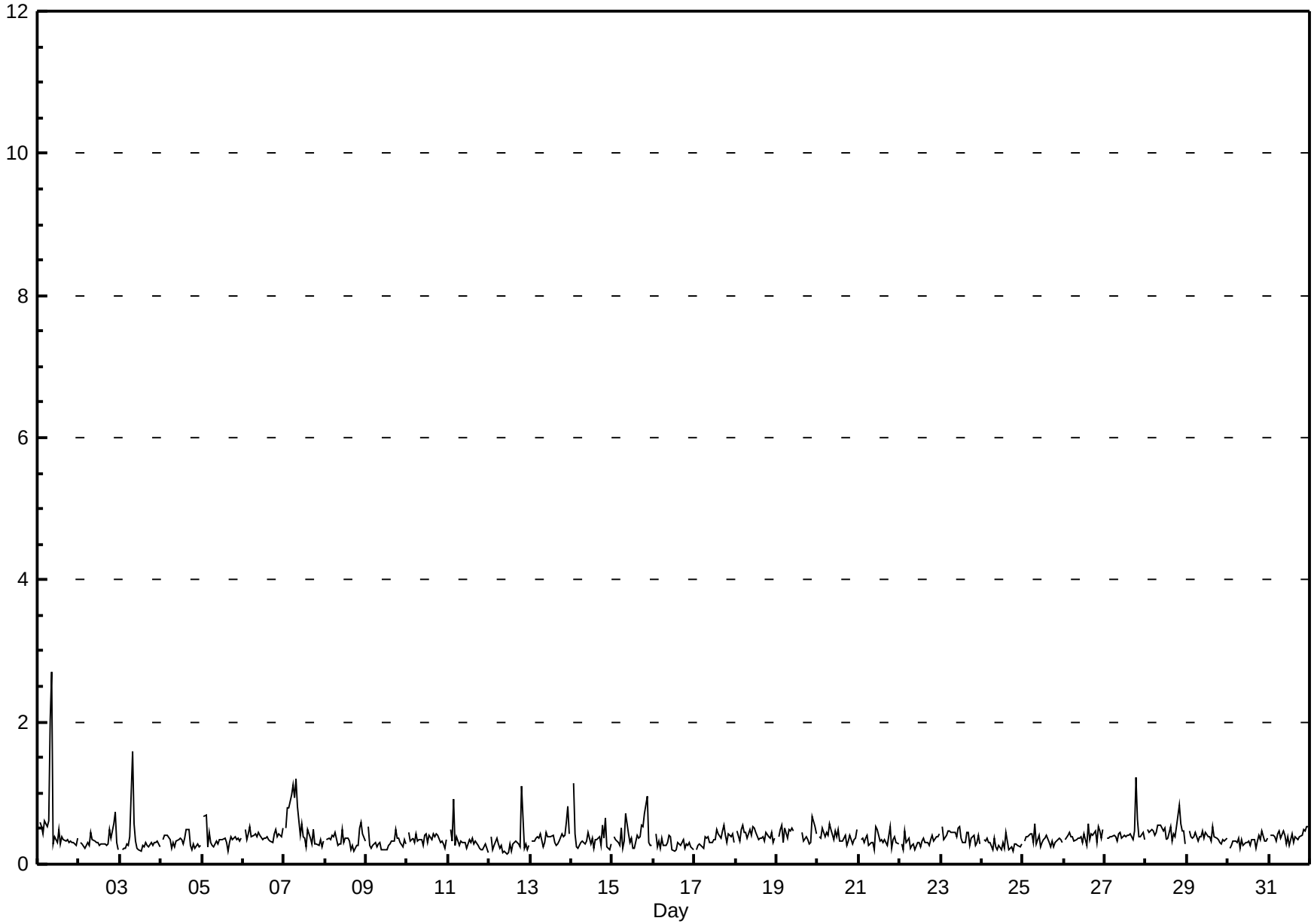
A - Automated Daily Zero Span

PASZA
Peace Air Shed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - October 2010



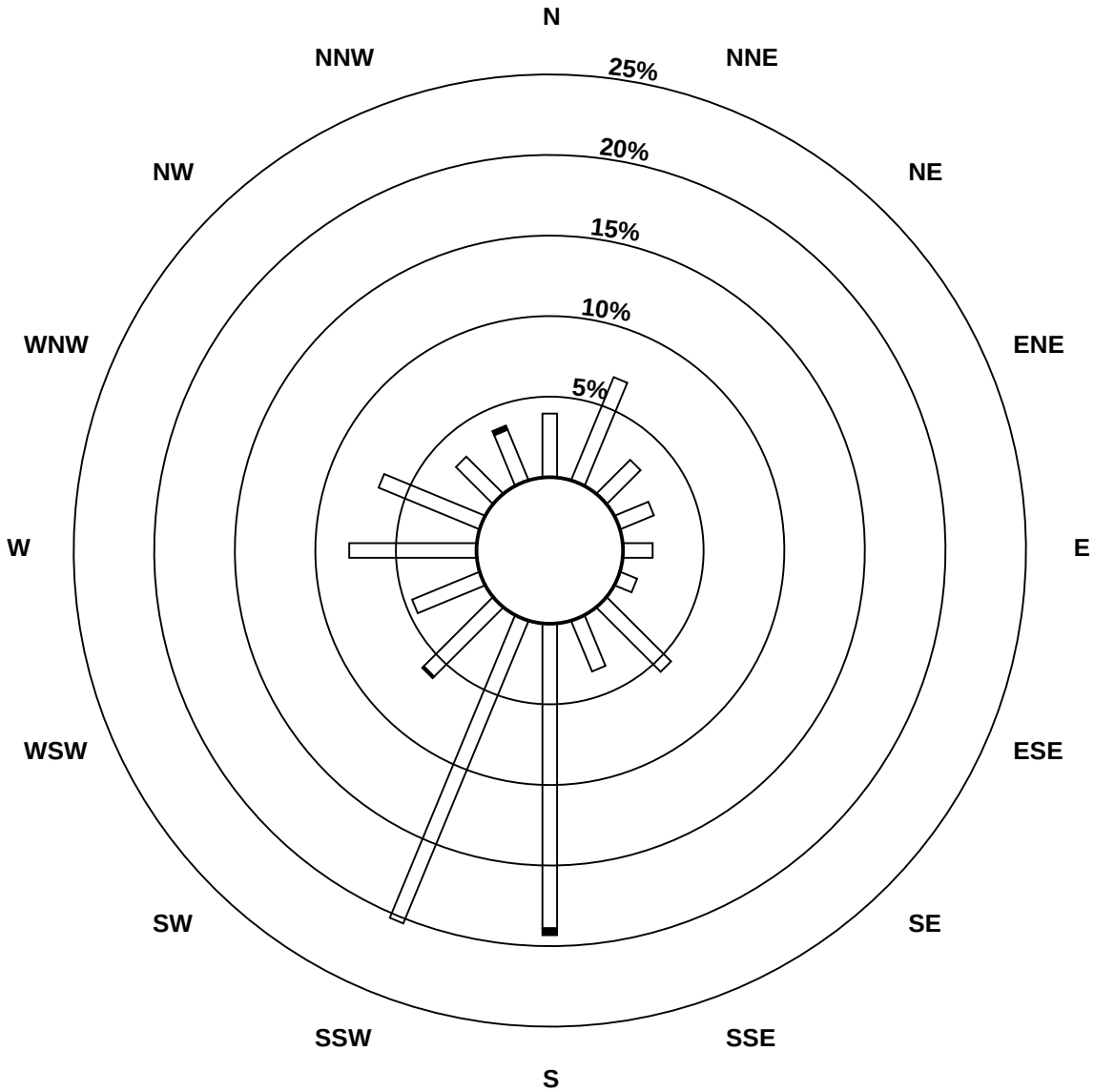
FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

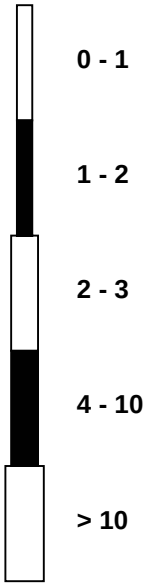
Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Valleyview - October 2010



Pollutant Classes (ppb)



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 22.7 ^{o}C on Oct 7 16:00 Maximum Daily Average: 14.4 ^{o}C on Oct 9

Minimum Value: -4 ^{o}C on Oct 31 08:00 Minimum Daily Average: -0.8 ^{o}C on Oct 26
Maximum Diurnal Average: 11.6 ^{o}C at hour 16 Minimum Diurnal Average: 2.9 ^{o}C at hour 8
Monthly Average: 6.76 ^{o}C Percentiles: P_1 = -3.3 P_{10} = -0.7 Q_1 = 2.3 Median = 6.0 Q_3 = 10.7 P_{90} = 15.4 P_{99} = 21.7

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

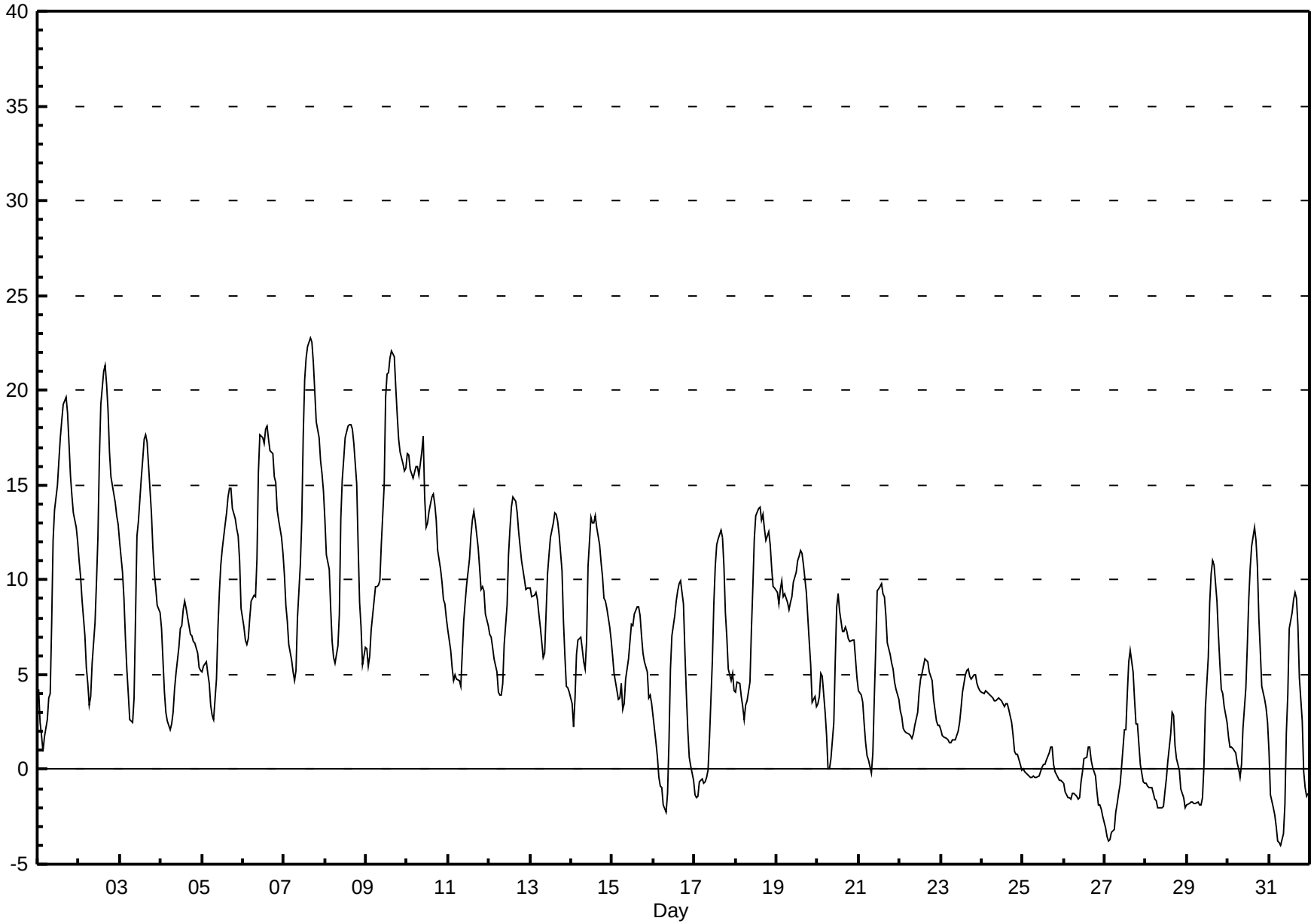
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Oct	4	2	2	1	2	3	4	4	8	12	14	15	16	17	18	19	20	19	17	16	14	14	13	12	11.1	19.6
2-Oct	11	10	9	7	5	5	3	4	6	8	10	12	16	19	21	21	20	19	17	15	15	14	13	13	12.3	21.3
3-Oct	12	10	9	7	5	4	3	2	4	8	12	13	15	16	17	18	17	16	14	12	10	10	9	8	10.5	17.7
4-Oct	7	6	4	3	3	2	2	3	4	5	6	7	8	8	9	9	8	7	7	7	7	6	5	5	5.8	8.9
5-Oct	5	5	6	5	5	3	3	3	5	7	9	11	12	13	14	14	15	15	14	13	13	12	11	9	9.2	14.8
6-Oct	7	7	7	7	8	9	9	9	11	16	18	17	17	18	18	17	17	17	15	15	14	13	12	11	12.9	18.1
7-Oct	10	9	8	7	6	5	5	5	8	11	13	18	21	22	22	23	22	21	20	18	17	16	16	15	14.0	22.7
8-Oct	13	11	11	9	7	6	6	7	8	13	15	16	17	18	18	18	18	17	15	12	9	7	6	6	11.8	18.2
9-Oct	6	5	6	7	8	10	10	10	10	12	15	20	21	21	22	22	22	20	19	17	17	16	16	16	14.4	22.0
10-Oct	17	17	16	15	16	16	16	16	17	18	14	13	13	14	14	15	14	13	12	11	10	9	9	8	13.7	17.6
11-Oct	7	6	5	5	5	5	5	4	6	8	9	10	11	12	13	14	13	12	11	10	10	9	8	8	8.5	13.6
12-Oct	7	7	6	6	5	4	4	4	5	7	9	11	13	14	14	14	14	13	12	11	10	9	10	10	9.0	14.4
13-Oct	10	9	9	9	9	8	8	6	6	8	10	11	12	13	14	13	13	12	10	8	6	4	4	4	9.1	13.5
14-Oct	3	2	4	6	7	7	6	6	5	7	11	13	13	13	13	13	12	11	10	9	9	8	8	7	8.5	13.4
15-Oct	6	5	5	4	4	5	3	3	5	6	7	8	8	8	9	9	8	7	6	6	5	4	4	3	5.6	8.6
16-Oct	3	1	1	0	-1	-1	-2	-2	-1	2	5	7	8	9	9	10	10	9	6	4	2	1	0	-1	3.3	10.0
17-Oct	-1	-1	-1	-1	-1	-1	-1	0	0	2	6	9	11	12	12	13	12	11	8	7	5	5	5	4	4.7	12.6
18-Oct	4	5	5	4	3	3	3	4	5	7	10	12	13	14	14	13	13	13	12	13	12	11	10	10	8.8	13.9
19-Oct	9	9	10	10	9	9	9	8	9	9	10	10	11	11	12	11	11	9	8	7	6	4	4	3	8.7	11.6
20-Oct	3	4	5	5	3	2	0	0	1	2	6	9	9	8	7	7	8	7	7	7	7	7	6	5	5.2	9.3
21-Oct	4	4	4	2	1	1	0	0	1	4	6	9	10	10	9	9	8	7	6	6	5	5	4	4	5.0	9.8
22-Oct	3	3	2	2	2	2	2	2	2	2	3	4	5	5	5	6	6	5	5	5	4	3	2	2	3.4	5.8
23-Oct	2	2	2	2	2	1	1	2	2	2	2	2	3	4	5	5	5	5	5	5	5	5	4	4	3.2	5.3
24-Oct	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	2	2	1	1	1	0	0	2.9	4.2
25-Oct	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	-1	-1	-1	0.0	1.2
26-Oct	-1	-1	-2	-1	-2	-1	-1	-1	-2	-1	-1	0	1	1	1	1	1	0	0	-1	-2	-2	-2	-2	-0.8	1.2
27-Oct	-3	-4	-4	-4	-3	-3	-2	-2	-1	-1	0	2	2	4	6	6	5	4	2	2	1	0	-1	-1	0.3	6.3
28-Oct	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	0	0	2	3	3	1	1	0	-1	-1	-1	-2	-0.6	3.0
29-Oct	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	0	3	6	9	10	11	11	9	7	6	4	4	3	2	2.9	11.0
30-Oct	2	1	1	1	1	0	0	0	0	2	4	7	9	11	12	13	12	11	8	6	4	4	3	2	4.8	12.8
31-Oct	1	-1	-2	-2	-3	-4	-4	-4	-3	-2	2	4	7	8	9	9	9	8	5	3	0	-1	-1	-1	1.5	9.4
	5.0	4.3	4.1	3.7	3.4	3.2	3.0	2.9	3.8	5.6	7.3	8.9	10.0	10.9	11.4	11.6	11.3	10.3	9.0	8.0	7.0	6.3	5.8	5.3	Diurnal Average	
	16.7	16.6	15.8	15.4	15.6	16.0	16.0	15.5	16.7	17.6	17.7	19.6	20.9	21.7	22.3	22.7	22.5	21.5	19.9	18.3	17.5	16.3	15.7	15.9	Diurnal Maximum	

PASZA
Peace Air Shed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - October 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 98.7 % on Oct 28 14:00 Maximum Daily Average: 95.6 % on Oct 28

Minimum Value: 19 % on Oct 10 16:00 Minimum Daily Average: 33.9 % on Oct 11
Maximum Diurnal Average: 73.9 % at hour 8 Minimum Diurnal Average: 45.7 % at hour 16
Monthly Average: 61.11 % Percentiles: P_1 = 21.6 P_{10} = 33.2 Q_1 = 43.2 Median = 59.9 Q_3 = 79.9 P_{90} = 90.2 P_{99} = 98.5

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

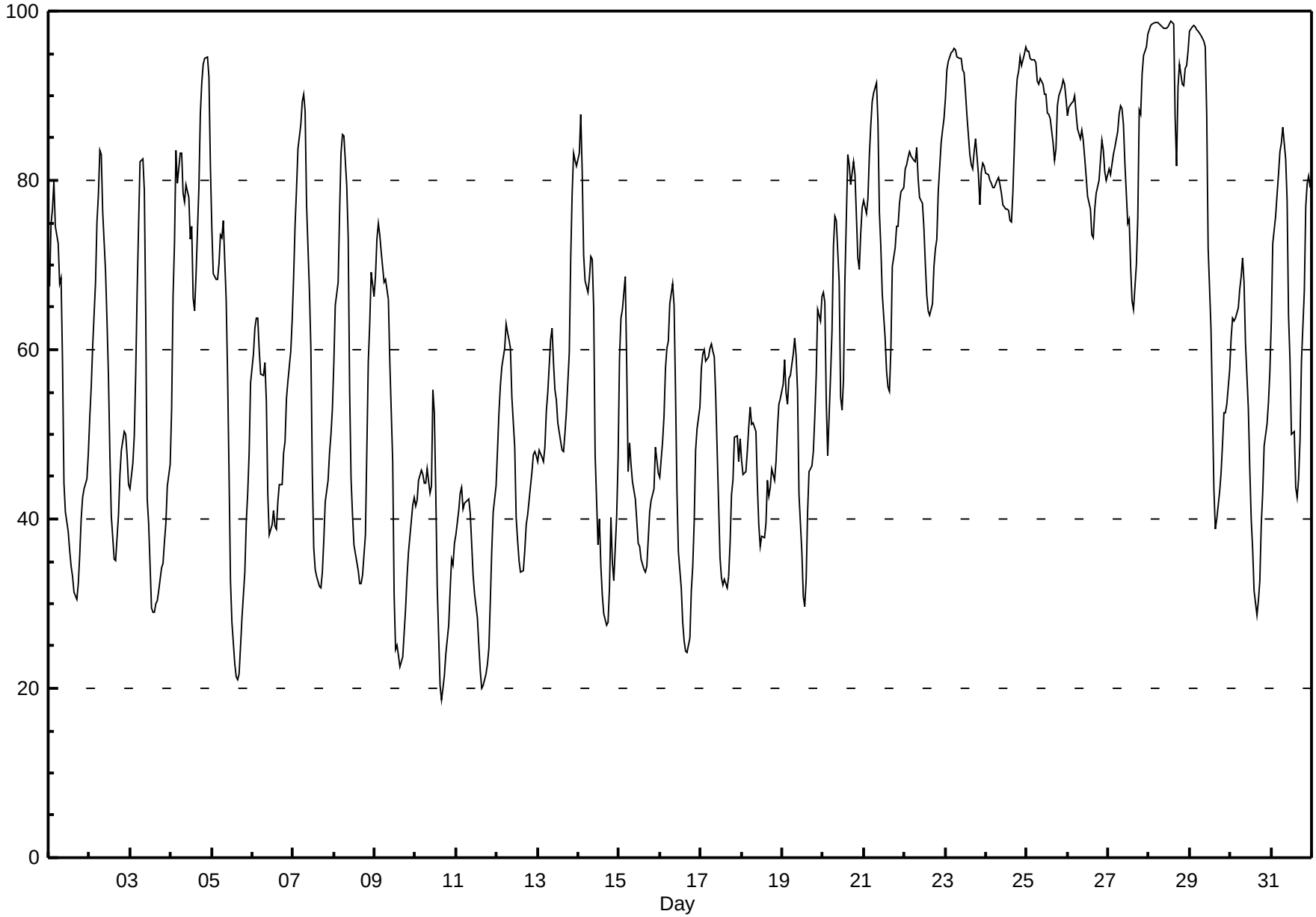
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Oct	67	75	77	80	75	72	68	69	59	44	41	38	36	34	33	31	31	32	36	40	42	44	45	48	50.7	79.9
2-Oct	52	56	60	68	75	78	83	83	76	69	63	57	48	40	35	35	38	41	45	48	50	50	47	44	56.0	83.5
3-Oct	44	47	50	57	67	75	82	83	79	64	42	40	30	29	29	30	30	32	34	35	37	40	44	46	47.7	82.5
4-Oct	53	66	73	83	80	83	83	78	77	79	78	73	75	66	65	69	79	88	92	94	94	95	92	82	79.0	94.6
5-Oct	74	69	68	68	70	74	73	75	66	57	45	33	28	23	21	21	22	25	28	34	40	43	48	56	48.4	75.3
6-Oct	60	63	64	64	60	57	57	58	54	43	38	39	41	39	39	42	44	44	48	49	54	56	60	64	51.5	63.8
7-Oct	69	75	79	84	87	89	90	88	77	67	60	45	37	34	33	32	32	34	37	42	45	48	50	53	57.8	90.2
8-Oct	58	65	68	76	83	85	85	79	73	55	45	41	37	35	34	32	32	33	38	48	59	63	69	66	56.8	85.4
9-Oct	69	73	75	74	72	68	68	67	66	59	47	31	25	25	24	23	24	27	30	33	36	40	42	43	47.4	74.9
10-Oct	42	42	45	46	45	44	44	46	43	44	55	53	43	32	20	19	20	22	24	27	32	35	35	37	37.3	55.2
11-Oct	38	41	43	44	41	42	42	42	41	37	33	31	28	25	22	20	20	22	23	25	30	36	41	44	33.9	43.8
12-Oct	48	53	56	58	60	63	62	61	60	54	48	40	37	35	34	34	36	39	41	42	46	48	48	47	48.0	63.0
13-Oct	47	48	47	47	48	53	55	61	63	58	55	54	51	49	48	48	50	53	60	71	78	83	82	82	58.0	83.2
14-Oct	83	88	81	71	68	67	68	71	71	65	48	37	40	34	31	29	27	28	32	40	35	33	40	47	51.4	87.7
15-Oct	59	64	65	69	58	46	49	46	44	42	40	37	37	35	34	34	34	38	41	42	44	48	47	45	45.8	68.6
16-Oct	45	49	52	58	60	61	66	68	65	55	43	36	32	28	26	24	24	26	32	34	40	48	51	53	44.8	67.7
17-Oct	58	59	60	59	59	60	61	60	59	54	42	35	33	32	33	32	33	37	43	45	50	50	47	50	47.9	60.6
18-Oct	47	45	46	48	51	53	51	51	50	44	39	37	38	38	39	45	43	44	46	45	47	51	54	54	46.0	54.2
19-Oct	56	59	55	54	57	57	59	61	59	55	43	36	31	30	33	41	46	46	48	52	57	65	63	66	51.2	66.2
20-Oct	67	66	54	47	57	62	72	76	75	68	54	53	56	68	83	82	79	81	82	81	71	69	74	77	69.0	83.1
21-Oct	78	76	78	83	86	89	90	92	87	76	72	67	61	57	56	55	60	70	72	75	75	77	79	79	74.6	91.6
22-Oct	81	82	83	83	83	82	82	84	80	78	77	74	70	66	65	64	65	70	72	73	79	84	86	87	77.2	87.3
23-Oct	90	93	94	95	95	96	95	95	94	94	93	93	90	88	83	82	81	83	85	81	77	81	82	82	88.4	95.6
24-Oct	81	81	80	80	79	79	80	80	80	78	77	77	77	77	75	75	79	89	92	93	95	93	95	96	82.8	95.8
25-Oct	95	95	94	94	94	94	92	91	92	91	90	90	88	88	87	84	82	84	89	90	91	92	91	90	90.4	95.3
26-Oct	88	89	89	89	90	88	86	85	86	85	83	80	78	77	74	73	77	78	80	82	85	84	81	80	82.7	90.0
27-Oct	81	81	82	83	84	86	88	89	89	87	82	75	75	70	66	65	70	76	88	88	93	95	96	97	82.6	97.3
28-Oct	98	98	99	99	99	99	99	98	98	98	98	98	98	99	98	87	82	91	94	91	91	93	94	95	95.6	98.7
29-Oct	98	98	98	98	98	98	97	97	96	96	88	72	62	53	44	39	40	43	45	49	53	53	53	58	71.9	98.3
30-Oct	61	64	63	64	65	67	69	71	68	61	53	46	40	37	31	29	30	33	39	43	49	51	54	57	51.9	70.8
31-Oct	63	73	76	78	81	83	84	86	83	78	64	59	50	50	44	43	45	49	59	67	77	80	80	79	67.9	86.2
	66.1	68.7	69.4	71.0	71.8	72.6	73.6	73.9	71.3	65.7	59.3	54.1	50.7	48.2	46.4	45.7	47.0	50.2	54.0	56.7	59.6	62.2	63.5	64.7	Diurnal Average	
	97.8	98.3	98.5	98.7	98.7	98.7	98.5	98.2	97.9	98.0	97.9	98.2	98.5	98.7	98.5	87.4	82.3	91.0	93.7	93.7	94.6	94.8	95.8	97.3	Diurnal Maximum	

PASZA
Peace Air Shed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - October 2010



FOCUS AIR QUALITY MONITORING

PASZA
Peace Air Shed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - October 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	1	1	1	2	2	2	0	6	13	14	13	14	14	12	14	12	11	9	6	9	10	10	9	7.2	14.4
Dir	258	272	343	318	310	230	291	216	185	178	179	169	176	183	182	179	172	169	173	180	185	187	189	192	182	179
2 Spd	8	7	5	2	2	1	1	2	3	2	2	3	2	1	3	3	5	9	7	6	5	5	7	5	2.0	9.3
Dir	194	196	198	219	198	228	305	200	209	191	190	191	182	194	284	257	318	341	322	329	288	295	316	322	269	341
3 Spd	5	5	3	2	3	2	2	2	0	1	1	3	3	6	5	6	7	7	8	7	6	5	3	2	2.0	8.3
Dir	322	317	276	220	174	165	184	192	229	196	145	351	117	80	113	57	46	48	26	30	18	20	10	360	36	26
4 Spd	1	0	1	2	2	2	3	2	2	2	1	1	2	2	4	9	6	5	2	3	3	4	3	7	2.1	8.6
Dir	18	121	207	211	196	178	190	197	146	179	273	194	201	264	255	292	287	255	219	197	196	200	198	260	233	292
5 Spd	9	11	9	8	4	4	3	3	3	3	6	11	10	9	3	6	6	4	5	5	5	4	3	1	4.5	11.2
Dir	265	276	268	272	218	211	204	208	204	186	254	281	293	272	267	181	210	220	213	211	198	186	175	164	244	281
6 Spd	1	2	2	2	4	3	5	4	5	5	5	5	7	7	7	8	7	4	3	4	1	2	2	2	3.9	8.1
Dir	248	202	211	218	199	180	197	193	188	191	203	194	185	190	190	187	181	187	186	193	261	189	211	225	193	187
7 Spd	0	1	0	0	1	1	1	0	1	2	1	3	12	12	13	11	12	9	8	7	4	10	10	8	4.9	12.8
Dir	188	78	334	316	347	169	188	338	165	29	28	137	160	166	166	156	167	164	163	162	189	187	183	183	168	166
8 Spd	5	3	2	1	1	2	5	4	4	9	13	12	10	11	12	10	7	4	2	1	1	1	4	2	3.0	13.5
Dir	205	211	223	252	230	230	175	194	172	311	311	303	294	300	333	352	22	49	130	8	356	359	0	245	309	311
9 Spd	2	2	3	3	6	9	9	10	11	8	7	8	7	7	9	9	10	10	11	8	7	5	7	8	7.0	11.2
Dir	234	254	229	246	181	189	198	198	188	189	199	227	229	212	202	188	179	177	186	180	180	183	178	188	194	188
10 Spd	9	8	9	7	9	10	7	6	6	4	26	17	17	19	27	22	19	17	16	14	19	20	23	16	10.8	26.9
Dir	196	187	180	184	183	180	184	201	196	207	325	320	300	283	285	281	277	273	278	267	276	268	265	258	267	285
11 Spd	11	6	5	4	6	5	5	5	2	6	14	16	15	12	11	10	6	5	4	5	13	9	4	5	7.1	16.4
Dir	258	252	237	183	211	199	208	235	234	257	277	269	266	264	272	258	239	233	230	231	261	251	217	208	250	269
12 Spd	4	7	4	5	5	5	6	4	5	5	5	7	12	13	15	14	9	3	5	4	3	4	8	6	5.2	14.8
Dir	220	247	237	193	187	180	203	215	205	195	204	269	275	280	282	275	263	208	197	204	214	199	187	186	235	282
13 Spd	7	7	5	7	6	1	2	3	1	1	5	7	7	9	6	7	1	1	1	1	1	2	1	1	1.3	9.1
Dir	188	181	193	198	196	281	205	236	148	178	300	332	346	315	330	331	310	271	123	39	20	327	128	314	270	315
14 Spd	3	2	4	8	10	8	8	5	5	2	3	23	18	16	15	15	12	4	9	8	6	4	3	6	4.5	22.7
Dir	304	192	203	195	193	192	193	198	203	262	299	331	331	331	325	318	315	303	284	219	263	238	216	191	282	331
15 Spd	2	3	6	2	8	12	7	10	16	22	24	21	22	21	22	21	21	19	16	13	10	5	11	10	12.8	24.2
Dir	208	193	202	236	263	275	261	267	287	289	295	299	301	294	287	295	294	289	288	277	267	256	273	271	284	295
16 Spd	10	8	5	4	4	5	6	5	6	6	4	7	7	9	7	6	4	3	5	3	4	4	6	5	4.4	10.4
Dir	263	254	243	195	191	189	196	195	187	200	209	272	278	290	276	253	260	192	185	211	212	184	196	211	229	263
17 Spd	4	5	5	6	4	5	6	6	4	5	6	3	13	9	11	12	9	3	3	4	4	5	5	6	3.7	12.9
Dir	194	204	199	191	200	200	192	195	196	182	191	276	303	301	315	295	293	263	205	236	213	210	197	185	238	303
18 Spd	5	7	6	6	5	4	5	4	4	5	7	6	8	6	17	7	4	4	5	14	10	6	8	9	5.8	17.1
Dir	188	184	196	197	206	215	199	216	207	197	187	199	257	240	276	255	220	214	228	266	256	220	208	208	226	276
19 Spd	6	4	9	7	4	8	10	10	10	15	16	18	21	20	19	15	13	10	6	2	1	2	2	1	8.5	20.9
Dir	213	231	270	274	284	277	269	266	288	292	299	291	297	304	309	295	302	338	332	158	207	188	217	209	291	297
20 Spd	1	2	2	3	2	3	2	1	1	1	4	9	9	8	6	6	5	5	4	2	9	6	5	3	3.4	9.3
Dir	213	287	287	296	211	239	162	145	151	148	191	194	196	189	169	149	144	138	138	164	179	176	174	184	180	196
21 Spd	3	6	4	1	1	4	4	2	3	3	1	13	16	15	14	9	12	8	3	4	6	6	4	6	3.6	16.0
Dir	207	193	209	231	243	213	202	222	212	210	346	340	344	349	344	343	6	32	29	2	28	17	20	27	348	344
22 Spd	5	2	4	4	3	6	7	6	6	6	5	7	10	11	8	4	6	7	4	3	4	6	4	3	3.3	11.2
Dir	34	38	27	25	25	25	35	40	71	89	84	114	144	135	127	93	137	139	130	112	347	355	8	348	80	135

PASZA
Peace Air Shed Zone Association

Hourly Averages

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

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
23 Spd	3	5	5	3	2	4	3	1	1	2	4	2	3	3	3	4	4	4	4	8	11	10	9	12	2.8	11.8
Dir	15	360	6	29	351	16	23	9	84	53	30	67	31	38	92	109	78	67	92	126	136	140	144	132	89	132
24 Spd	9	9	9	10	11	8	10	10	11	8	10	11	12	10	7	9	6	2	2	4	4	6	7	7	6.6	12.0
Dir	132	133	143	140	136	132	134	135	137	132	136	131	133	135	130	135	130	150	57	67	35	29	21	24	124	133
25 Spd	8	9	9	9	8	8	7	7	5	5	4	6	6	6	5	3	3	3	5	4	3	4	4	4	5.3	9.1
Dir	25	26	23	26	18	20	30	18	32	36	54	62	58	42	31	96	81	36	34	23	14	15	40	64	33	23
26 Spd	4	4	5	2	4	4	5	3	4	4	3	4	4	9	7	9	9	4	4	5	4	4	4	4	4.1	9.4
Dir	64	33	39	34	39	75	86	102	84	76	75	78	42	20	13	351	11	20	1	9	37	31	2	16	33	351
27 Spd	4	4	3	3	2	3	2	3	4	2	5	8	7	6	6	6	6	5	4	4	2	7	7	6	2.5	8.3
Dir	29	12	17	359	6	11	98	163	176	131	176	183	183	177	181	168	185	202	211	323	187	186	194	186	181	183
28 Spd	5	7	7	4	5	6	5	5	5	5	3	3	4	2	2	4	5	4	1	3	2	3	6	8	3.0	8.0
Dir	192	188	189	194	179	191	197	200	179	190	162	155	171	130	88	29	12	358	124	188	186	186	195	186	182	186
29 Spd	8	10	10	11	10	10	8	9	9	9	9	7	5	5	7	13	5	4	4	6	6	7	7	7	7.2	13.1
Dir	183	184	184	183	184	185	188	184	187	188	187	192	199	224	246	257	240	210	205	201	207	195	200	194	198	257
30 Spd	7	7	8	10	10	7	4	7	8	8	9	10	10	9	9	8	4	2	4	4	4	7	7	5	7.0	10.4
Dir	193	192	192	191	191	194	195	196	192	189	186	185	175	181	199	213	224	168	188	200	185	186	188	190	191	175
31 Spd	1	0	1	2	1	0	1	1	1	1	2	3	10	12	11	8	5	2	1	0	1	1	1	1	2.0	12.1
Dir	209	292	7	350	357	311	222	233	229	170	202	225	288	287	293	317	343	78	344	133	173	211	190	288	291	287
Spd	2.3	2.3	2.3	2.2	2.6	2.5	2.8	2.8	2.9	2.5	2.7	3.4	4.1	4.1	4.7	4.0	2.4	1.2	1.7	2.0	2.5	2.5	2.8	2.8	Diurnal Average	
Dir	217	213	213	204	195	200	194	203	194	212	252	270	270	273	278	272	271	240	233	230	232	213	213	208		
Spd	10.8	10.6	9.9	10.5	10.7	11.7	9.8	10.3	16.2	22.2	26.0	22.7	22.4	21.1	26.9	21.5	21.3	19.3	16.4	14.2	18.6	20.1	22.8	15.7	Diurnal Maximum	
Dir	258	276	184	183	136	275	134	198	287	289	325	331	301	294	285	281	294	289	278	267	276	268	265	258		

Maximum Speed Value: 27 ppb on Oct 10 15:00
Maximum Daily Speed Average: 12.8 ppb on Oct 10
Maximum Diurnal Speed Average: 4.7 ppb at hour 15

Minimum Speed Value: 0 ppb on Oct 7 08:00
Minimum Daily Speed Average: 1.3 ppb on Oct 31
Minimum Diurnal Speed Average: 1.2 ppb at hour 18

Monthly Average Velocity: 2.37 ppb 233.2 deg

Speed Percentiles: $P_1 = 0.4$ $P_{10} = 1.5$ $Q_1 = 3.0$ Median = 5.2 $Q_3 = 8.3$ $P_{90} = 11.7$ $P_{99} = 22.1$

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

Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Percent Operational Time:	100.0

Frequency Distribution

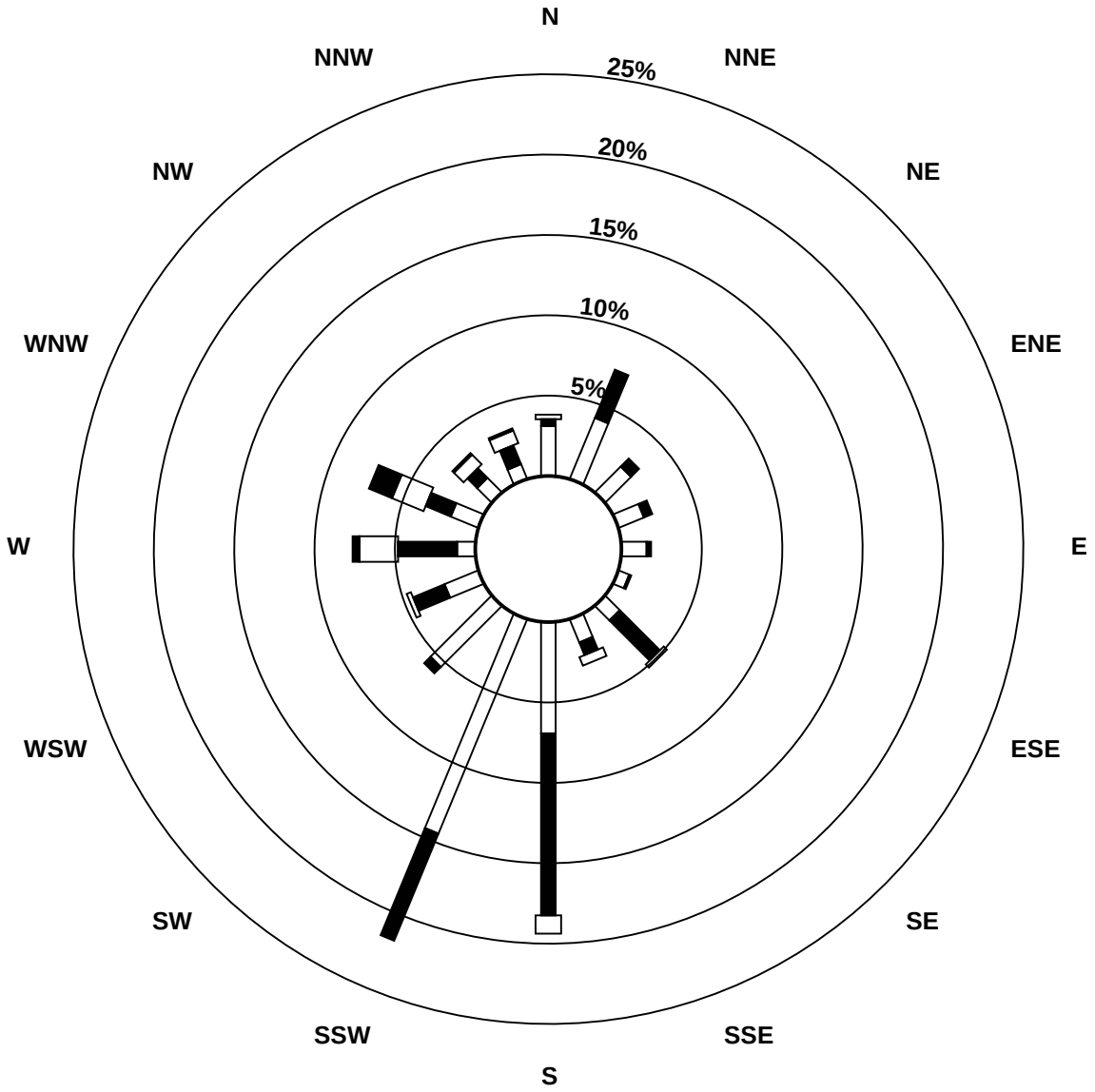
Direction	Speed Range (ppb) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	42	19	5	0	0	0	66
NorthEast	37	24	0	0	0	0	61
East	20	4	0	0	0	0	24
SouthEast	20	29	4	0	0	0	53
South	97	144	13	0	0	0	254
SouthWest	93	26	0	0	0	0	119
West	26	42	27	9	0	0	104
NorthWest	16	18	18	11	0	0	63
Total	351	306	67	20	0	0	744

PASZA
Peace Air Shed Zone Association

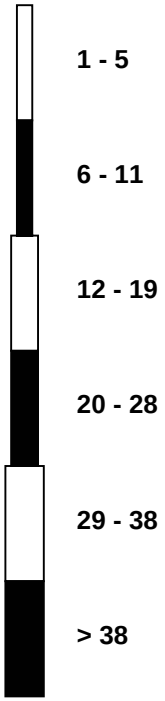
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - October 2010



Wind Speed Classes (km/h)



PASZA
Peace Air Shed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - October 2010

Maximum Speed: 27 km/h on Oct 10 15:00

Maximum Daily Speed Average: 14.6 km/h on Oct 10

Minimum Speed: 1 km/h on Oct 1 08:00

Minimum Daily Speed Average: 3.4 km/h on Oct 4

Maximum Diurnal Speed Average: 10.3 km/h at hour 15

Minimum Diurnal Speed Average: 4.7 km/h at hour 8

Monthly Average Speed: 6.54 km/h

Percentiles: P_1 = 1.3 P_{10} = 2.1 Q_1 = 3.5 Median = 5.4 Q_3 = 8.5 P_{90} = 12.0 P_{99} = 22.3

Hours in Service:	744
Hours of Data:	744
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-Oct	3	1	2	2	2	2	2	1	6	14	15	13	14	14	12	14	12	11	9	6	9	10	10	9	8.1	14.6
2-Oct	8	7	5	2	2	2	2	2	3	2	2	3	3	4	4	3	5	9	7	6	5	5	7	5	4.4	9.4
3-Oct	5	6	3	3	3	2	2	2	1	2	2	4	4	7	6	6	7	7	8	7	6	5	4	3	4.3	8.3
4-Oct	2	1	2	2	2	2	4	3	2	3	2	1	2	3	4	9	7	6	2	3	4	4	3	8	3.4	8.8
5-Oct	9	11	9	8	4	4	4	3	3	3	7	12	11	9	4	6	6	4	5	5	6	4	3	3	6.0	11.6
6-Oct	2	2	2	2	4	3	5	4	6	5	5	5	7	7	7	8	7	4	3	4	4	3	2	2	4.4	8.2
7-Oct	3	1	1	2	3	2	2	2	1	3	2	4	12	13	13	11	12	9	8	8	5	10	11	8	6.1	13.2
8-Oct	5	3	2	2	2	3	5	4	4	11	14	12	11	12	13	10	8	4	2	2	3	2	4	3	6.0	13.7
9-Oct	3	3	3	3	6	9	9	10	11	8	7	9	8	7	9	10	10	11	11	8	8	5	7	8	7.6	11.3
10-Oct	9	8	9	7	9	10	7	6	6	4	26	17	17	20	27	22	20	17	17	14	19	20	23	16	14.6	27.4
11-Oct	11	6	6	4	6	5	5	5	3	7	14	17	15	12	12	10	6	5	4	5	13	9	4	5	7.9	16.8
12-Oct	5	7	4	5	5	6	6	4	5	5	5	8	12	14	15	14	9	3	5	4	3	4	8	7	6.8	15.3
13-Oct	7	7	5	7	6	3	2	3	2	1	6	8	8	10	7	7	2	1	1	1	1	2	2	2	4.3	9.6
14-Oct	3	3	4	8	10	8	8	5	5	4	5	23	18	16	15	15	12	4	10	9	7	4	4	6	8.6	22.9
15-Oct	3	4	6	2	8	12	7	10	16	22	24	21	23	22	22	21	22	19	16	13	10	5	12	10	13.8	24.5
16-Oct	10	8	5	4	5	5	6	5	6	6	5	7	8	9	8	7	4	3	5	3	4	5	6	5	5.7	10.4
17-Oct	5	5	5	6	4	5	6	6	4	5	6	9	13	10	11	13	9	3	4	4	4	5	5	6	6.3	13.2
18-Oct	5	7	6	6	5	4	5	4	4	6	7	7	8	6	17	8	4	4	5	14	11	7	8	9	6.9	17.4
19-Oct	6	4	9	7	4	8	10	10	10	15	16	18	21	21	19	16	13	10	6	2	2	2	2	1	9.7	21.2
20-Oct	2	2	2	4	2	3	2	1	1	2	4	9	9	8	7	6	5	5	4	3	9	7	5	3	4.4	9.5
21-Oct	3	6	4	2	2	4	4	2	3	3	2	14	16	16	14	10	12	8	3	4	6	6	4	6	6.4	16.2
22-Oct	5	3	4	4	3	6	7	6	6	6	5	8	10	11	8	4	6	7	4	3	4	6	4	3	5.6	11.3
23-Oct	4	5	5	3	3	4	3	1	2	3	4	2	3	3	3	4	5	4	4	8	11	10	9	12	4.8	11.9
24-Oct	9	9	9	11	11	8	10	10	11	8	10	11	12	10	8	9	6	3	2	4	4	6	8	8	8.2	12.1
25-Oct	8	9	9	9	8	8	7	7	5	5	5	6	6	6	5	4	3	3	5	4	4	4	4	4	5.7	9.2
26-Oct	4	4	5	3	4	4	5	3	5	4	3	4	5	9	7	10	9	4	4	5	4	4	4	4	4.9	9.6
27-Oct	4	4	3	3	2	3	2	3	4	2	5	9	7	7	6	6	6	5	6	5	2	7	7	6	4.7	8.5
28-Oct	5	7	7	4	5	6	5	5	5	5	4	3	4	3	3	4	5	4	2	3	2	3	6	8	4.5	8.1
29-Oct	8	10	10	11	10	10	8	9	9	9	9	7	5	6	7	13	5	4	4	6	6	7	7	7	7.9	13.2
30-Oct	7	7	8	10	10	7	4	7	8	8	9	10	11	9	9	8	6	3	4	4	4	7	7	6	7.3	10.6
31-Oct	2	1	2	2	1	1	1	2	2	2	3	4	11	12	12	8	5	3	4	2	2	1	2	2	3.6	12.4
	5.3	5.2	5.0	4.8	4.9	5.1	5.0	4.7	5.2	5.8	7.6	9.2	10.2	10.2	10.3	9.6	8.1	6.1	5.7	5.5	5.8	5.8	6.1	5.9	Diurnal Average	
	10.9	10.7	10.0	10.7	10.9	11.8	9.9	10.4	16.3	22.4	26.3	22.9	22.7	21.7	27.4	21.9	21.5	19.5	16.7	14.3	18.8	20.1	22.8	15.8	Diurnal Maximum	

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

PASZA
Peace Air Shed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - October 2010

Maximum Value: 94.3 deg on Oct 8 22:00

Minimum Value: 3.0 deg on Oct 29 21:00

Percentiles: P_1 = 4.7 P_{10} = 7.0 Q_1 = 9.4 Median = 13.9 Q_3 = 27.2 P_{90} = 52.8 P_{99} = 87.1

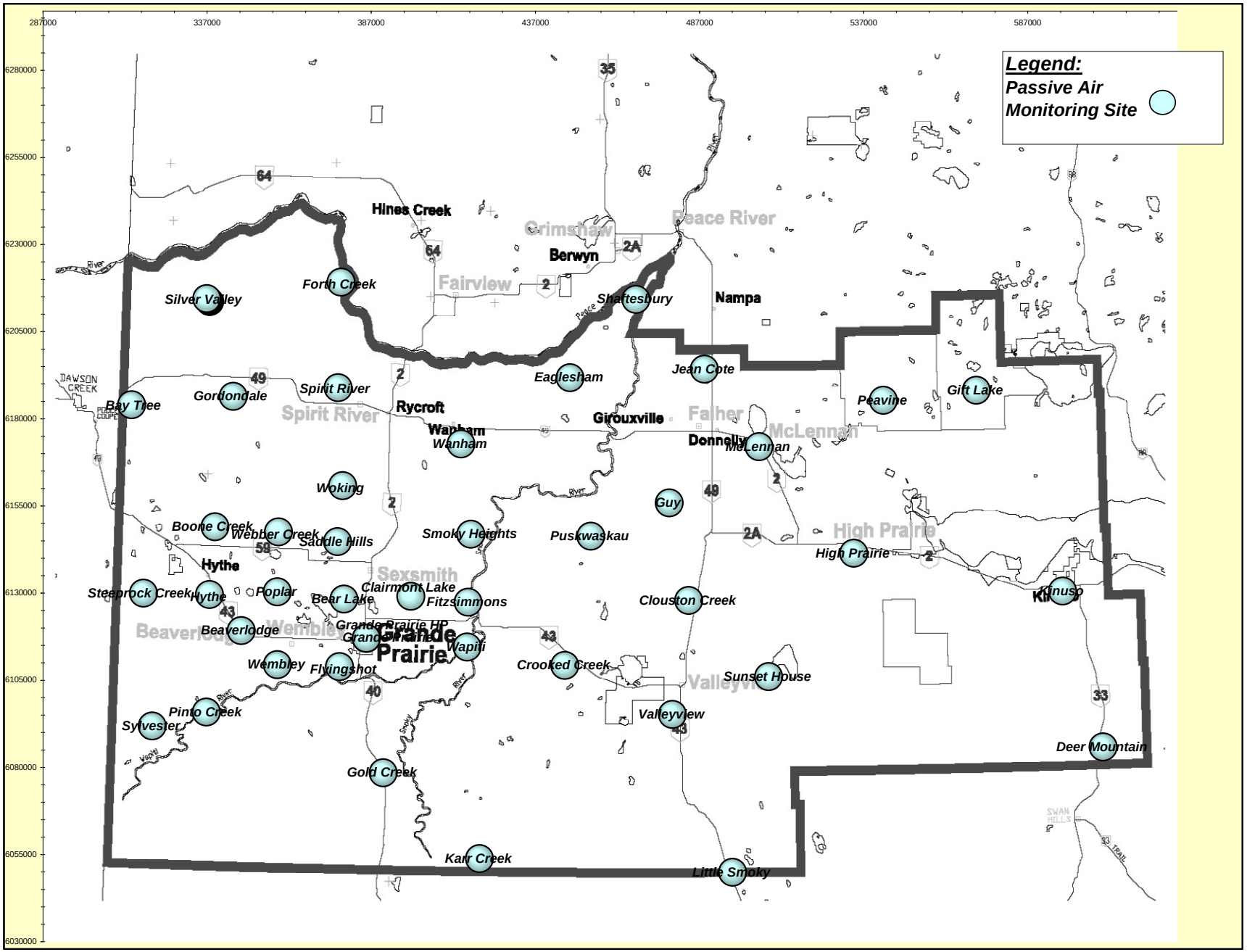
Hours in Service:	744
Hours of Data:	744
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

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-Oct	24	51	58	88	61	44	27	70	23	12	11	12	13	10	12	11	11	10	10	10	7	6	7	7	88.0
2-Oct	6	6	6	30	22	47	54	53	33	25	17	15	32	85	60	29	22	10	5	11	13	33	18	14	84.6
3-Oct	9	9	20	33	28	20	29	27	72	75	84	45	44	29	38	24	16	10	7	8	7	15	41	42	83.8
4-Oct	41	91	51	32	43	19	20	30	29	41	68	29	40	48	31	14	25	35	16	18	9	10	21	25	91.3
5-Oct	5	8	11	7	33	9	33	13	18	19	41	17	15	14	64	17	18	12	8	8	7	20	30	78	78.2
6-Oct	73	35	17	25	17	55	9	17	9	12	8	10	11	11	7	7	8	66	56	49	69	63	56	9	73.3
7-Oct	79	62	87	91	91	69	70	90	68	69	59	65	16	13	14	13	12	10	8	11	17	8	5	7	90.9
8-Oct	31	22	31	64	83	38	9	13	10	59	11	18	25	24	20	16	14	12	28	74	93	94	16	59	94.3
9-Oct	46	34	24	24	11	9	6	7	6	9	10	27	20	12	10	14	12	15	9	15	12	15	10	6	46.2
10-Oct	6	9	7	10	13	9	21	13	15	17	20	10	11	13	11	10	11	10	12	9	7	5	5	6	20.8
11-Oct	7	10	15	19	11	16	16	10	40	33	11	11	14	18	18	14	17	12	13	11	8	18	17	6	40.3
12-Oct	12	11	15	10	22	18	8	6	7	11	28	27	16	16	15	10	12	18	5	9	3	16	7	8	28.0
13-Oct	6	7	8	7	7	78	40	22	64	44	52	26	32	19	35	22	53	64	42	65	87	48	81	74	86.6
14-Oct	37	46	32	7	9	7	8	15	10	54	65	8	10	14	14	12	15	20	22	16	23	19	10	9	64.5
15-Oct	70	40	9	15	11	9	8	7	8	8	9	10	10	14	9	12	8	8	7	9	10	14	6	6	69.9
16-Oct	7	9	10	19	18	14	10	8	7	9	28	22	34	24	30	22	20	17	5	11	12	13	4	5	34.3
17-Oct	14	6	7	5	10	8	7	6	15	21	14	79	14	22	17	11	11	35	45	22	13	8	6	8	78.7
18-Oct	6	5	6	9	19	10	10	7	6	11	8	26	15	22	11	24	16	11	21	6	14	14	4	3	25.6
19-Oct	6	12	11	18	31	13	7	9	10	9	8	9	9	12	12	11	9	14	42	51	76	36	21	53	75.9
20-Oct	66	45	74	42	38	22	53	65	30	74	25	10	11	12	17	15	14	9	12	25	9	25	18	24	74.2
21-Oct	26	7	9	52	57	8	9	27	12	46	72	22	9	9	11	16	7	13	13	20	11	13	12	8	72.3
22-Oct	10	30	13	8	12	9	11	9	16	17	15	28	14	9	10	27	12	10	11	25	36	6	21	21	35.6
23-Oct	26	9	16	27	26	11	36	31	52	38	17	46	23	28	28	23	20	13	13	12	7	7	11	8	52.1
24-Oct	8	9	11	11	10	9	9	8	9	9	10	8	10	8	12	9	11	31	39	27	10	7	7	6	39.5
25-Oct	7	7	8	7	7	8	10	7	10	15	15	15	21	15	15	39	22	14	7	17	17	14	13	11	39.5
26-Oct	13	12	10	19	18	17	18	22	16	16	33	34	45	11	18	10	8	15	16	7	11	20	16	13	45.1
27-Oct	9	16	17	28	24	17	45	17	16	30	31	14	16	17	19	21	8	9	49	39	29	9	8	10	49.3
28-Oct	12	10	12	14	13	12	11	11	13	13	32	47	27	46	47	16	10	10	54	15	41	8	7	7	54.0
29-Oct	9	11	9	9	10	10	11	10	10	8	9	13	14	27	19	7	15	8	6	7	3	6	8	5	27.2
30-Oct	6	6	5	5	4	5	11	8	7	7	10	10	12	11	11	20	39	36	11	15	20	8	5	18	39.4
31-Oct	80	89	68	50	33	66	37	61	66	80	47	35	42	14	11	20	12	39	88	83	77	71	51	72	88.6
	80.0	91.3	86.8	90.9	90.7	78.4	69.9	90.2	71.9	80.5	83.8	78.7	45.1	84.6	63.9	39.5	52.9	66.3	88.4	83.1	92.8	94.3	81.5	78.2	

PASZA

Monthly Passive Data Summary

Location of PASZA Passive Monitoring Stations



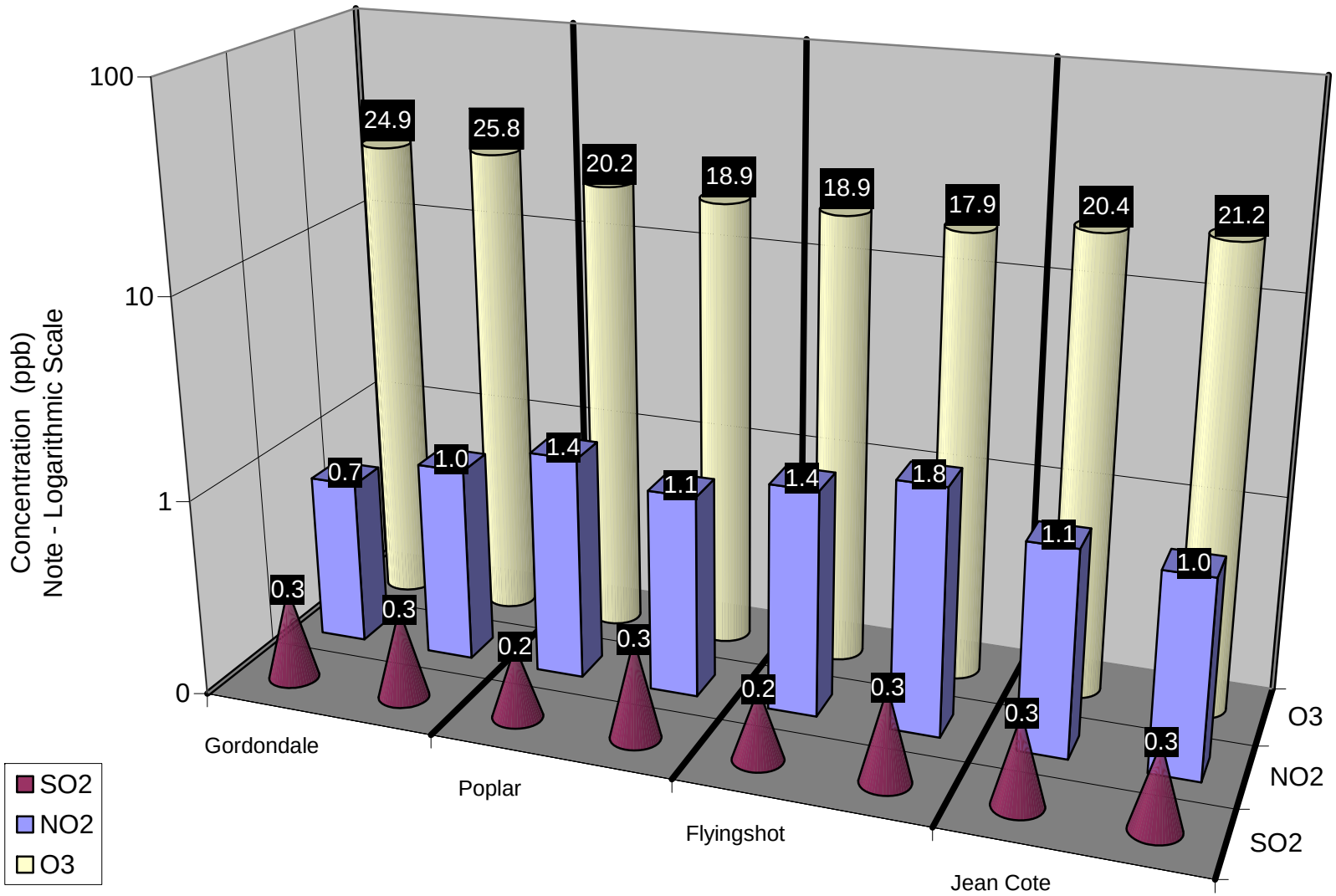
PASZA Passive Results for October 2010

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
4a	Gordondale	**0.3**	**24.9**	**0.7**	
4b	Gordondale	**0.3**	**25.8**	**1.0**	
17a	Poplar	**0.2**	**20.2**	**1.4**	
17b	Poplar	**0.3**	**18.9**	**1.1**	
26a	Flyingshot	**0.2**	**18.9**	**1.4**	
26b	Flyingshot	**0.3**	**17.9**	**1.8**	
35a	Jean Cote	**0.3**	**20.4**	**1.1**	
35b	Jean Cote	**0.3**	**21.2**	**1.0**	
1	Silver Valley	**0.3**	**N/A**	**0.8**	08-27-081-11 W6M
2	Bay Tree	**0.2**	**21.8**	**1.1**	13-16-078-13 W6M
3	Fourth Creek	**0.3**	**29.4**	**0.6**	04-13-082-07 W6M
4	Gordondale	**0.3**	**25.4**	**0.8**	04-34-078-10 W6M
5	Boone Creek	**0.2**	**22.1**	**0.9**	16-36-074-11 W6M
7	Steeprock Creek	**0.2**	**23.1**	**0.8**	09-35-072-13 W6M
9	Spirit River	**0.3**	**22.0**	**1.1**	08-12-079-07 W6M
10	Woking	**0.5**	**23.2**	**0.9**	01-13-076-07 W6M
11	Webber Creek	**0.2**	**20.5**	**0.9**	09-36-074-09 W6M
12	Hythe	**0.3**	**18.8**	**1.0**	14-36-072-11 W6M
14	Sylvester	**0.1**	**16.5**	**0.6**	08-06-069-12 W6M
16	Beaverlodge	**0.3**	**22.1**	**1.4**	15-36-071-10 W6M
17	Poplar	**0.3**	**19.5**	**1.2**	13-06-073-08 W6M
18	Saddle Hills	**0.3**	**23.4**	**0.6**	04-25-074-07 W6M
19	Wanham	**0.4**	**27.5**	**0.6**	16-22-077-03 W6M
20	Shaftesbury	**0.3**	**26.0**	**0.6**	04-03-082-23 W5M
21	Eaglesham	**0.2**	**18.0**	**0.9**	16-21-079-25 W5M
23	Bear Lake	**0.3**	**20.9**	**1.5**	15-31-072-06 W6M

PASZA Passive Results for October 2010 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	**0.2**	**17.8**	**2.2**	12-31-070-08 W6M
25	Pinto Creek	**0.1**	**20.4**	**0.8**	04-24-069-11 W6M
26	Flyingshot	**0.3**	**18.4**	**1.6**	15-36-070-07 W6M
27	Grande Prairie I	**0.3**	**19.4**	**7.5**	08-15-071-06 W6M
28	Clairmont Lake	**0.3**	**22.8**	**1.1**	09-06-073-04 W6M
29	Smoky Heights	**0.4**	**22.0**	**0.9**	04-06-075-02 W6M
30	Fitzsimmons	**0.2**	**18.6**	**0.9**	15-36-072-03 W6M
32	Gold Creek	**0.4**	**15.0**	**1.8**	06-33-067-05 W6M
33	Wapiti	**0.2**	**21.8**	**1.3**	02-25-071-03 W6M
34	Puskwaskau	**0.2**	**19.0**	**0.5**	15-35-074-25 W5M
35	Jean Cote	**0.3**	**20.8**	**1.1**	12-35-079-21 W5M
36	Guy	**0.2**	**22.2**	**0.8**	03-04-076-22 W5M
37	Crooked Creek	**0.2**	**21.5**	**1.0**	16-01-071-26 W5M
38	Karr Creek	**0.1**	**14.5**	**0.8**	10-16-065-02 W6M
39	Clouston Creek	**0.2**	**22.1**	**2.8**	12-01-073-22 W5M
40	McLennan	**0.3**	**23.3**	**0.7**	03-29-077-19 W5M
41	Valleyview	**0.3**	**24.6**	**0.8**	09-30-069-22 W5M
42	Sunset House	**0.4**	**28.9**	**0.5**	05-32-070-19 W5M
43	High Prairie	**0.1**	**21.6**	**0.7**	16-13-074-17 W5M
44	Peavine	**0.2**	**22.5**	**0.6**	03-05-079-15 W5M
45	Gift Lake	**0.2**	**19.6**	**0.7**	10-07-079-12 W5M
46	Little Smoky	**0.3**	**17.4**	**2.1**	12-01-065-21 W5M
47	Kinuso	**0.1**	**20.4**	**0.5**	12-10-073-10 W5M
48	Deer Mountain	**0.3**	**19.9**	**0.8**	15-22-068-09 W5M
49	Grande Prairie HP	**0.2**	**17.2**	**4.6**	17-26-071-06 W6M

*BDL = Below Detection Level



Duplicate Summary Chart

Passive Summary for October 2010

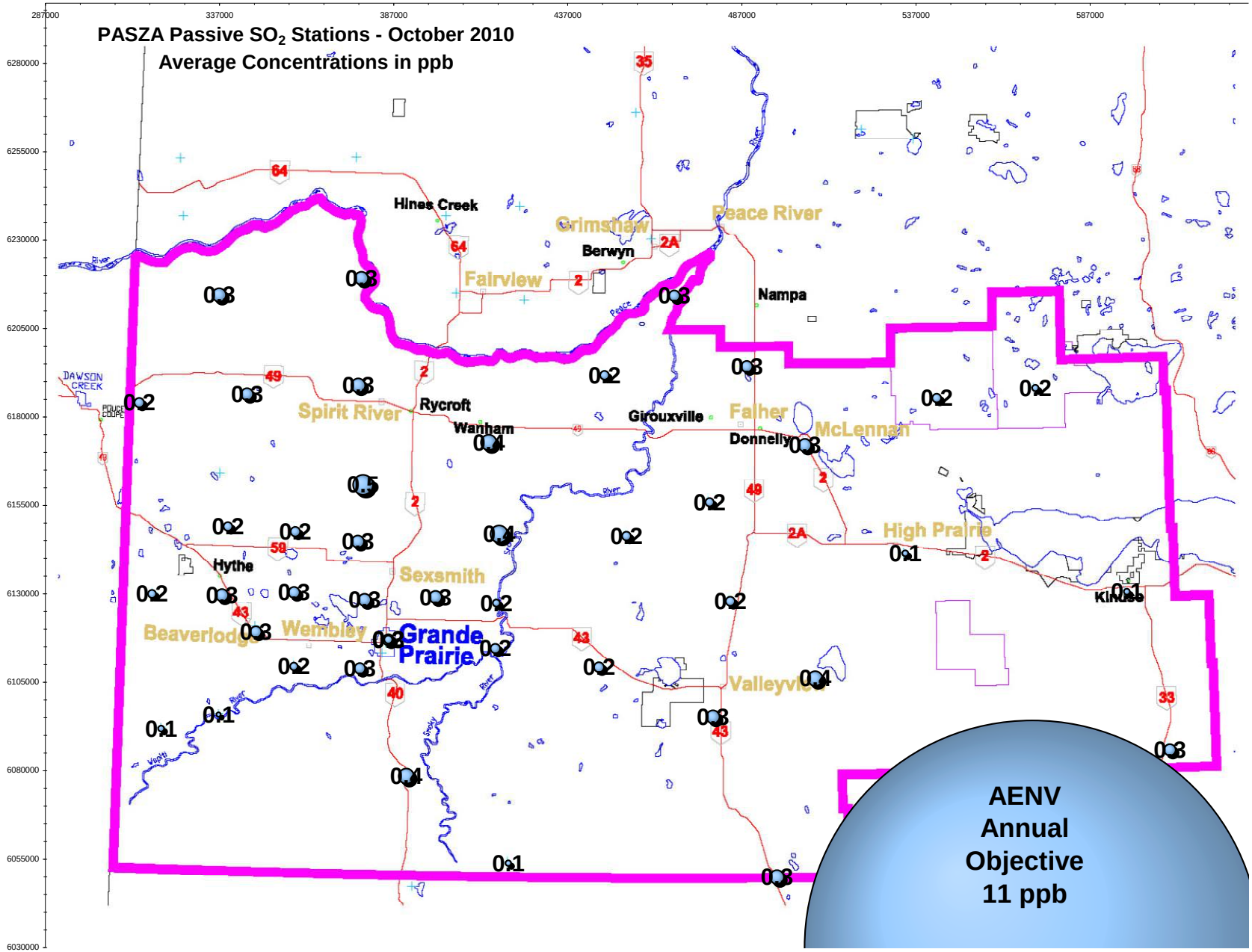
Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for October 2010 (PASZA Zone)		
Mean	**0.3**	**21.2**	**1.2**
Standard Deviation	**0.1**	**3.3**	**1.2**
Minimum	**0.1**	**14.5**	**0.5**
Minimum At	**Pinto Creek (#25)**	**Karr Creek (#38)**	**Sunset House (#42)**
Maximum	**0.5**	**29.4**	**7.5**
Maximum At	**Woking (#10)**	**Fourth Creek (#3)**	**Grande Prairie I (#27)**

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

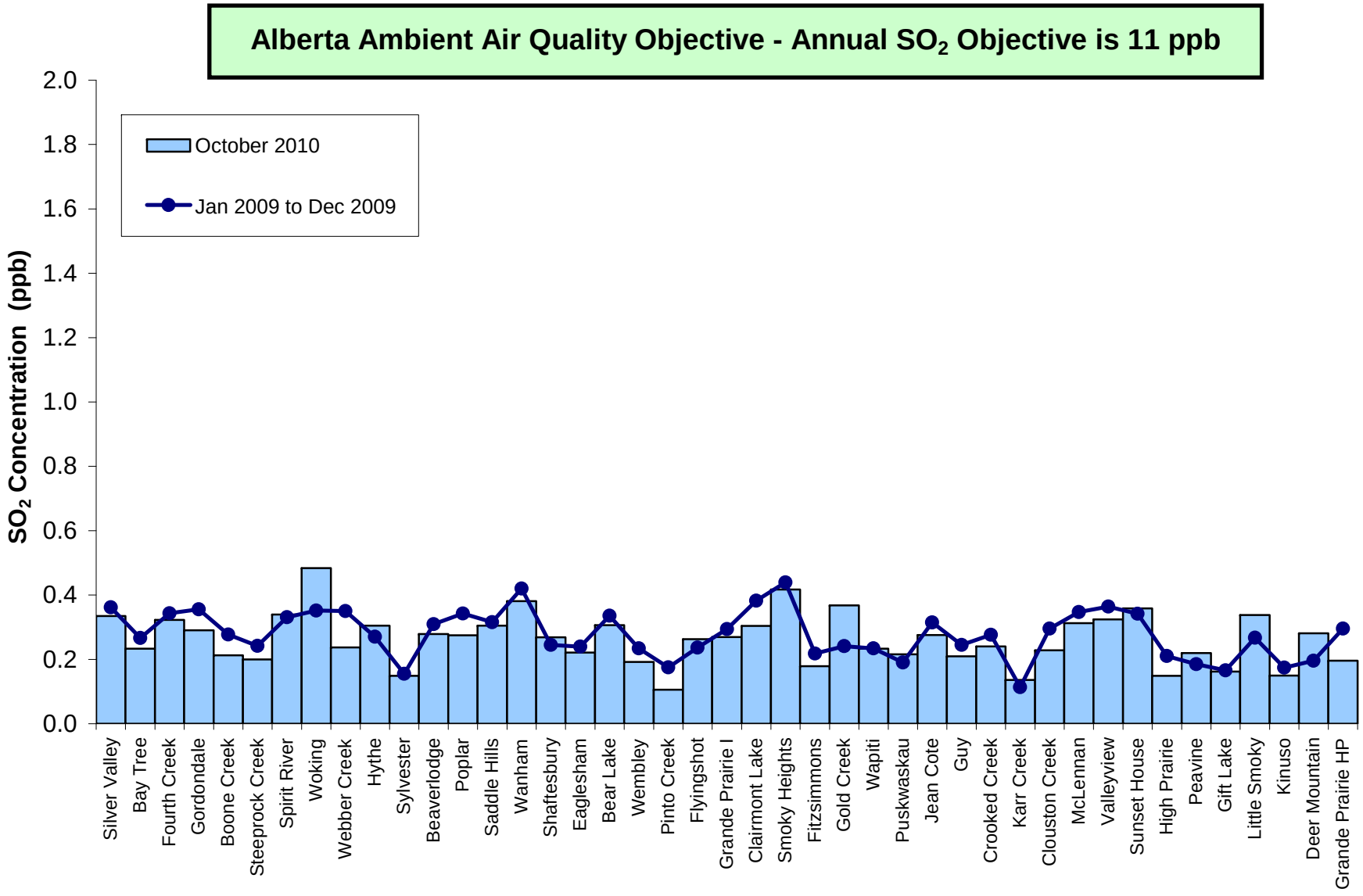
	SO_2	O_3	NO_2
PASZA Beaverlodge station	**0.2**	**25.6**	**3.0**
PASZA Beaverlodge passive	**0.3**	**22.1**	**1.4**

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

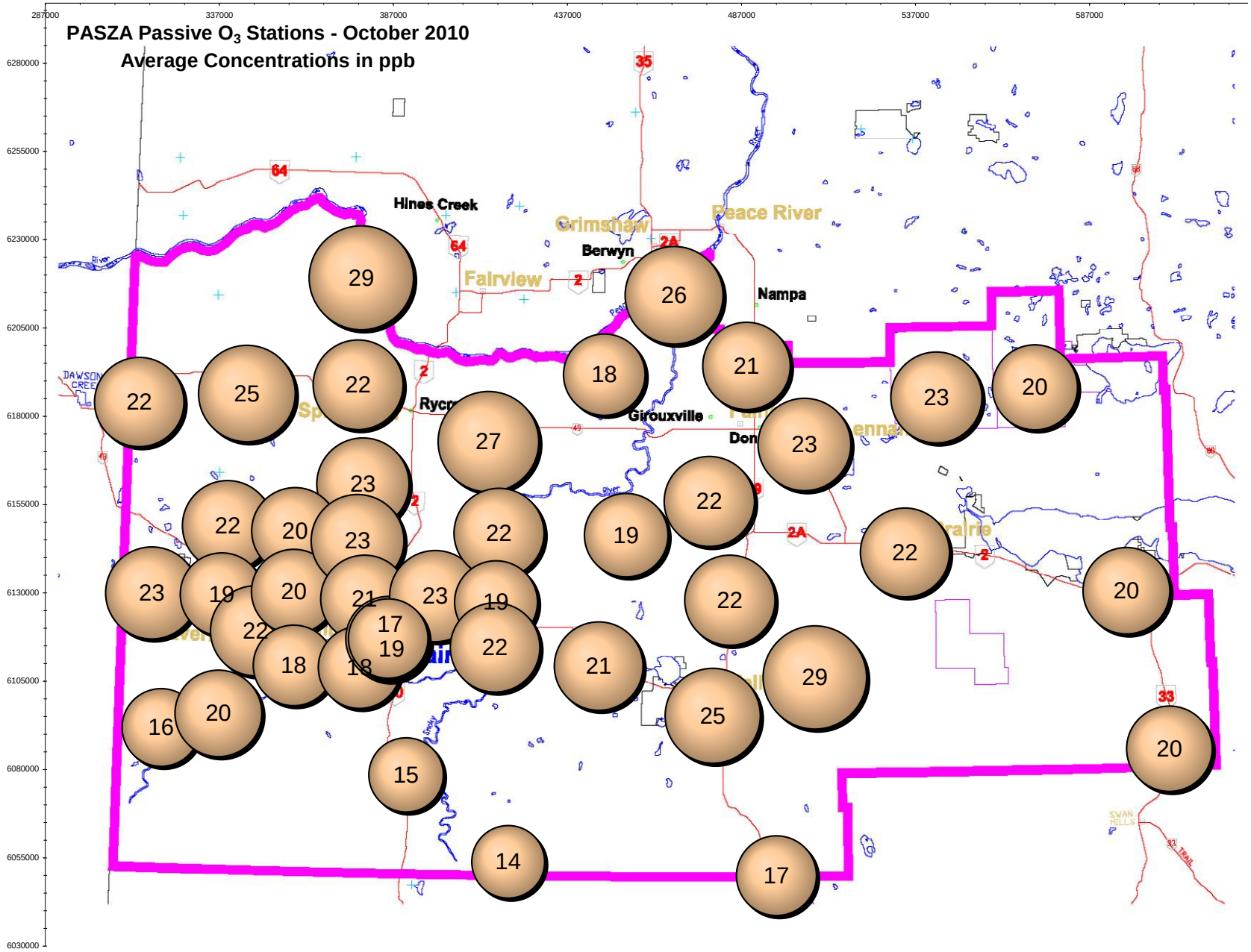
	SO_2	O_3	NO_2
PASZA Henry Pirker station	**0.3**	**19.9**	**9.1**
PASZA Grande Prairie passive	**0.2**	**17.2**	**4.6**



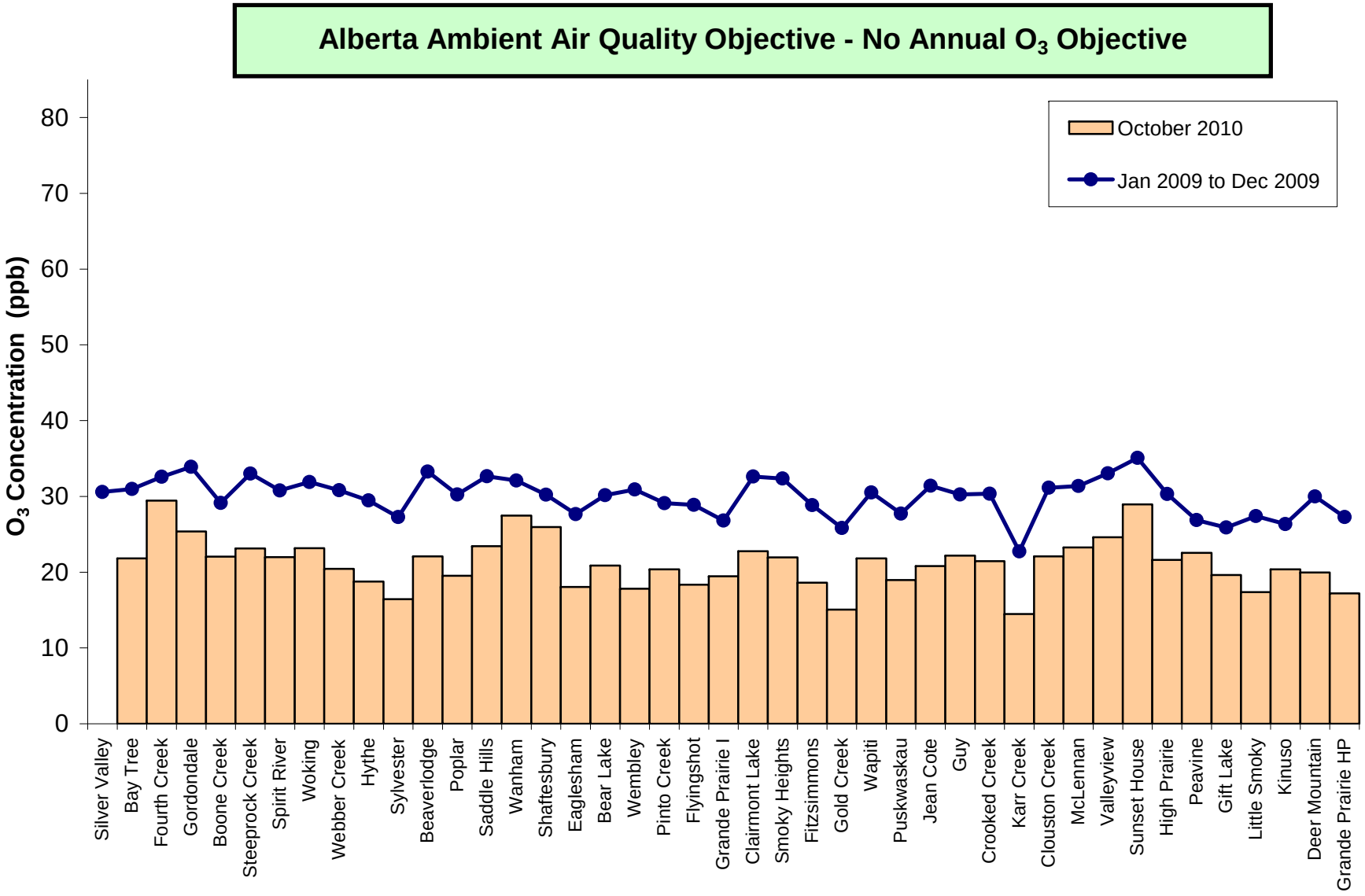
SO_2 Bubble Chart



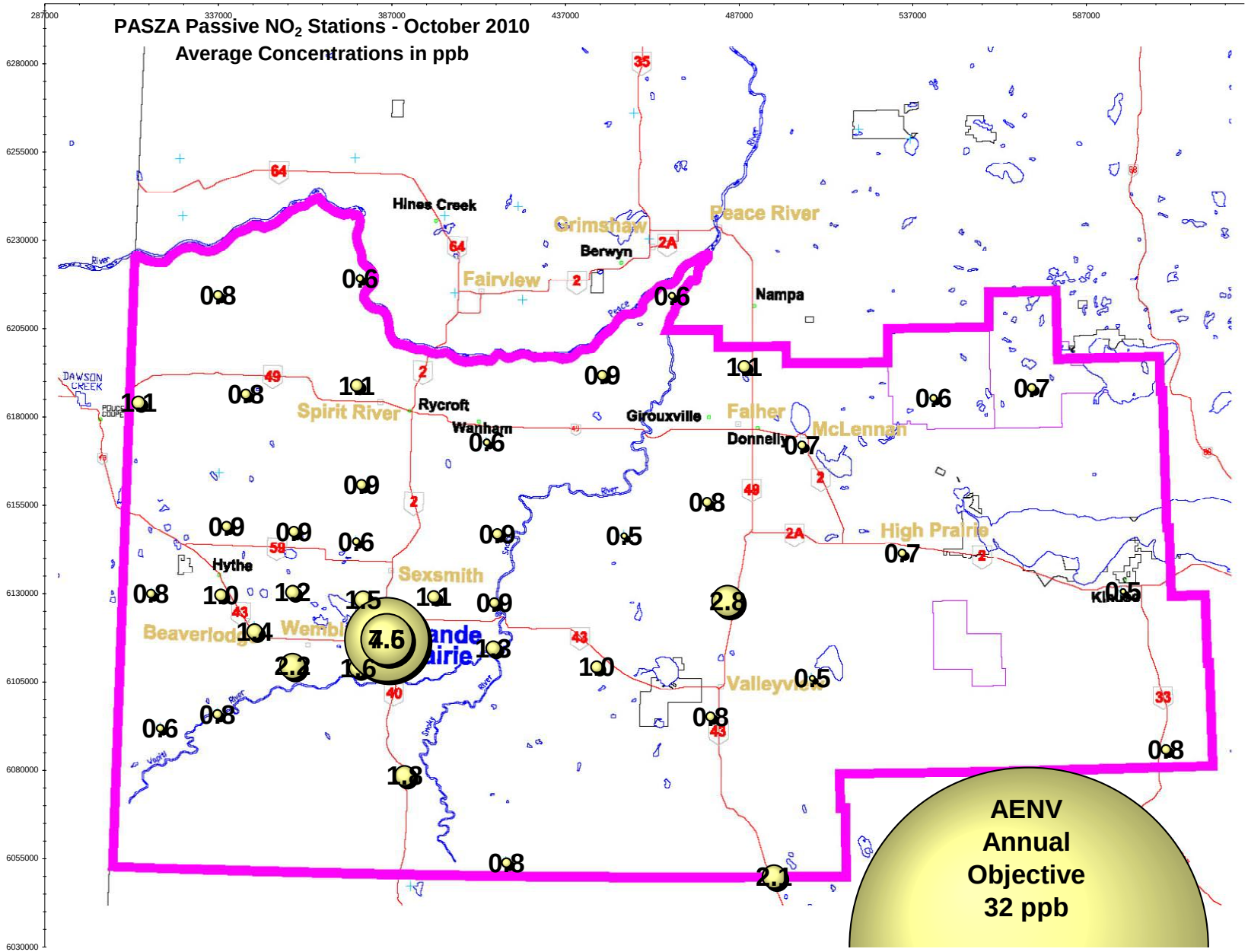
SO_2 Summary Chart



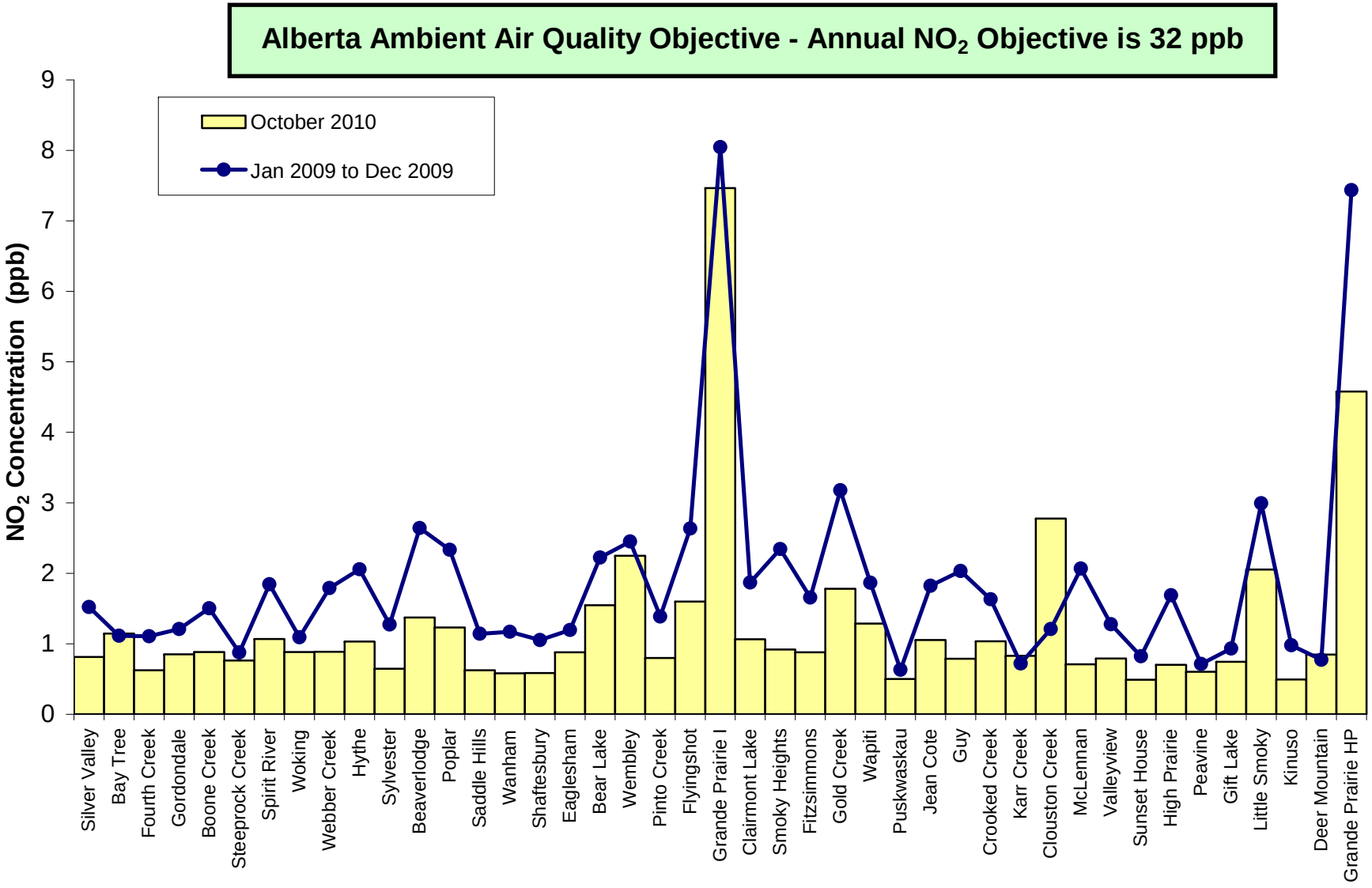
O_3 Bubble Chart



O_3 Summary Chart



NO_2 Bubble Chart



NO_2 Summary Chart

PASZA

ALBERTA ENVIRONMENT
INCIDENCE REPORTS

October 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:	**240880**	**Reported To (AENV Contact):**	Lacey/Steven/Laura
Date & Time Incident Reported to AENV:	October 06, 2010	**Reported By:**	Grover Christiansen
Reported on Behalf of:	**PASZA Airshed**	**Approval Number (if applicable):**	Not applicable
Location(s) of Incident:	**Evergreen Park / South Grande Prairie Area**		
Start Date & Time of Incident:	Oct 06, 2010 @ 15:00 MST.	**End Date & Time of Incident:**	Oct 06, 2010 @ 19:00 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:

Oct 06, 2010	15:00–16:00 MST	$PM_{2.5}$= 89.1 µg/m^3	WS= 14.0 km/h	WD=260 deg
Oct 06, 2010	16:00–17:00 MST	$PM_{2.5}$= 93.6 µg/m^3	WS= 5.0 km/h	WD=284 deg
Oct 06, 2010	17:00–18:00 MST	$PM_{2.5}$= 87.0 µg/m^3	WS= 4.1 km/h	WD=298 deg
Oct 06, 2010	18:00–19:00 MST	$PM_{2.5}$= 157.9 µg/m^3	WS= 10.7 km/h	WD=264 deg

Immediate Actions Taken:

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

Investigation Details:

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:	Grover Christiansen	Date Report Submitted:	October 7, 2010
7-Day Letter Due Date:	October 13, 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:	240959	**Reported To (AENV Contact):**	Lacey
Date & Time Incident Reported to AENV:	2010-10-08 13:08	**Reported By:**	Grover Christiansen
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	
Location(s) of Incident:	Evergreen Park		
Start Date & Time of Incident:	2010-10-08 12:00 to 13:00	**End Date & Time of Incident:**	2010-10-08 13:00

Details of Exceedence:

13:00 PM 2.5 = 125.5 ug/m3. WS = 19.1 km/hr. WD = 283 deg. Ambient temp = 17.3 deg C.

Immediate Actions Taken:

Exceedance reported to Ministry

Follow-up Details:

General road dust & Wapiti process particulate being blow towards monitoring trailer.

Actions Taken to Prevent Reoccurrence (if any):

Not Applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Grover Christiansen	Date Report Submitted:	2010-11-23
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:	**240999 / 241004**	**Reported To (AENV Contact):**	Carson / Jasmisa
Date & Time Incident Reported to AENV:	October 10, 2010	**Reported By:**	Grover Christiansen
Reported on Behalf of:	**PASZA Airshed**	**Approval Number (if applicable):**	Not applicable
Location(s) of Incident:	**Evergreen Park / South Grande Prairie Area**		
Start Date & Time of Incident:	Oct 10, 2010 @ 11:00 MST.	**End Date & Time of Incident:**	Oct 10, 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 (under AENV Ref # 240999):

Oct 10, 2010 11:00–12:00 MST $PM_{2.5}$= 180 µg/m^3 WS= 29.9 km/h WD=279 deg
Oct 10, 2010 12:00–13:00 MST $PM_{2.5}$= 391 µg/m^3 WS= 32 km/h WD=276 deg
Oct 10, 2010 13:00–14:00 MST $PM_{2.5}$= 418 µg/m^3 WS= 36 km/h WD=271 deg
Oct 10, 2010 14:00–15:00 MST $PM_{2.5}$= 274 µg/m^3 WS= 35 km/h WD=267 deg
Oct 10, 2010 15:00–16:00 MST $PM_{2.5}$= 82.9 µg/m^3 WS= 34 km/h WD=260 deg

24 hr exceedence value exceedence average (AENV Ref # 241004)
Oct 10, 2010 $PM_{2.5}$= 157.9 µg/m^3 WS= 18.0 km/h WD=235 deg

Immediate Actions Taken:

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

Investigation Details:

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:	Grover Christiansen	Date Report Submitted:	October 14, 2010
7-Day Letter Due Date:	October 17, 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:	**241009**	**Reported To (AENV Contact):**	Laura
Date & Time Incident Reported to AENV:	**October 11, 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:	**October 11 2010 @ 010:00 MST.**	**End Date & Time of Incident:**	**October 11, 2010 @**

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:

October 11th 2010 10:00-11:00 MST $PM_{2.5}$= 80.7 µg/m^3 WS= 18.3 km/h WD=263.8 deg
October 11th 2010 11:00-12:00 MST $PM_{2.5}$= 122.2 µg/m^3 WS= 19.7 km/h WD=269.3 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:	October 11th, 2010
7-Day Letter Due Date:	October 18th, 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:	241111	**Reported To (AENV Contact):**	Krysta
Date & Time Incident Reported to AENV:	11:00 2010-10-14	**Reported By:**	Courtney Thompson
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	
Location(s) of Incident:	Evergreen Park		
Start Date & Time of Incident:	2010-10-14 12:00MST	**End Date & Time of Incident:**	2010-10-14 12:00 MST

Details of Exceedence:

12:00-13:00 MST $PM_{2.5}$= 153.4 µg/m^3 WD=284.6 deg WS = 22.5 km/hr ET = 12.3 deg C
13:00-14:00 MST $PM_{2.5}$= 188.2 µg/m^3 WD=284.0 deg WS = 24.4 km/hr ET = 12.5 deg C

Immediate Actions Taken:

Hourly exceedance phoned in to Ministry.

Follow-up Details:

Process & yard/road dust impacting monitoring trailer due elevated wind speed & it's direction.

Actions Taken to Prevent Reoccurrence (if any):

Not Applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Courtney Thompson	Date Report Submitted:	2010-10-14
7-Day Letter Due Date:	Oct. 21st 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:	241152	**Reported To (AENV Contact):**	Nancy/Steven /Krysta/ Jasmina
Date & Time Incident Reported to AENV:	8:25 MST 2010-10-15	**Reported By:**	Courtney Thompson - Focus
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	
Location(s) of Incident:	Evergreen Park		
Start Date & Time of Incident:	2010-10-15 07:00MST	**End Date & Time of Incident:**	2010-10-15 17:00 MST

Details of Exceedence:

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:

07:00-08:00 MST $PM_{2.5}$=	95.5 µg/m^3	WD=271.7 Deg	WS = 17.7 km/hr	ET = 5.2 deg C
08:00-09:00 MST $PM_{2.5}$=	120.3 µg/m^3	WD=271.2 Deg	WS = 21.8 km/hr	ET = 5.4 deg C
09:00-10:00 MST $PM_{2.5}$=	235.1 µg/m^3	WD=273.1 Deg	WS = 23.2 km/hr	ET = 6.1 deg C
10:00-11:00 MST $PM_{2.5}$=	419.1 µg/m^3	WD=277.8 Deg	WS = 25.9 km/hr	ET = 7.2 deg C
11:00-12:00 MST $PM_{2.5}$=	251.7 µg/m^3	WD=277.7 Deg	WS = 23.2 km/hr	ET = 7.6 deg C
12:00-13:00 MST $PM_{2.5}$=	211.6 µg/m^3	WD=277.9 Deg	WS = 23.0 km/hr	ET = 8.3 deg C
13:00-14:00 MST $PM_{2.5}$=	201.3 µg/m^3	WD=281.8 Deg	WS = 22.5 km/hr	ET = 8.8 deg C
14:00-15:00 MST $PM_{2.5}$=	237.0 µg/m^3	WD=274.2 Deg	WS = 25.9 km/hr	ET = 8.8 deg C
15:00-16:00 MST $PM_{2.5}$=	434.7 µg/m^3	WD=268.2 Deg	WS = 30.0 km/hr	ET = 8.5 deg C
16:00-17:00 MST $PM_{2.5}$=	204.6 µg/m^3	WD=275.5 Deg	WS = 22.3 km/hr	ET = 8.1 deg C

24-hour average (30 µg/m^3):
October 15th, 2010
00:00–24:00 MST $PM_{2.5}$= 115.5 µg/m^3 WD=268.5 Deg WS = 18.2 km/hr ET = 6.4 deg C

Immediate Actions Taken:

Hourly exceedance phoned in to Ministry.

Follow-up Details:

Process & yard/road dust impacting monitoring trailer due elevated wind speed & it's direction.

Actions Taken to Prevent Reoccurrence (if any):

Not Applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Courtney Thompson	Date Report Submitted:	2010-10-15
7-Day Letter Due Date:	Oct. 22nd 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:	241209	**Reported To (AENV Contact):**	Stephen - Nancy
Date & Time Incident Reported to AENV:	11:15 MST	**Reported By:**	Courtney Thompson - Focus
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	
Location(s) of Incident:	Evergreen Park		
Start Date & Time of Incident:	10:00 MST 10-17-2010	**End Date & Time of Incident:**	14:00 MST 10-17-2010

Details of Exceedence:

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:

10:00-11:00 MST $PM_{2.5}$= 181.2 µg/m^3 WD=264.0 Deg WS = 19.1 km/hr ET = 8.9 deg C
11:00-12:00 MST $PM_{2.5}$= 246.6 µg/m^3 WD=286.6 Deg WS = 21.6 km/hr ET = 10.6 deg C
12:00-13:00 MST $PM_{2.5}$= 136.1 µg/m^3 WD=276.1 Deg WS = 20.3 km/hr ET = 11.7 deg C
13:00-14:00 MST $PM_{2.5}$= 81.1 µg/m^3 WD=285.6 Deg WS = 17.6 km/hr ET = 12.1 deg C

24-hour average (30 µg/m^3):
October 15=7th, 2010
00:00–24:00 MST $PM_{2.5}$= 43.3 µg/m^3 WD=218.4 Deg WS = 8.2 km/hr ET = 5.8 deg C

Immediate Actions Taken:

Hourly exceedance phoned in to Ministry.

Follow-up Details:

Process & yard/road dust impacting monitoring trailer due elevated wind speed & it's direction.

Actions Taken to Prevent Reoccurrence (if any):

Not Applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Courtney Thompson	Date Report Submitted:	2010-10-17
7-Day Letter Due Date:	Oct. 24th 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:	241274	**Reported To (AENV Contact):**	Nancy
Date & Time Incident Reported to AENV:	12:00 2010-10-19	**Reported By:**	Grover Christiansen
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	
Location(s) of Incident:	Evergreen Park		
Start Date & Time of Incident:	2010-10-19 12:00pm	**End Date & Time of Incident:**	2010-10-19 23:59

Details of Exceedence:

Hourly Exceedance 12:00 PM 2.5 = 198 ug/m3. WS = 22 km/hr. WD = 272 deg. ET = 10 deg C.
13:00 PM 2.5 = 137 ug/m3. WS = 19 km/hr. WD = 280 deg. ET = 10.5 deg C.

24hr Exceedance 23:59 PM 2.5 = 30.1 ug/m3. WS = 10.2 km/hr. WD = 282.7 deg. ET = 9 deg C.

Immediate Actions Taken:

Each hourly exceedance phoned in to Ministry.
24hr exceedance phoned in to Ministry.

Follow-up Details:

WD & WS indicate yard/process dust from Wapiti impacting monitoring 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:	2010-10-20
7-Day Letter Due Date:			

Air Monitoring Directive Guideline 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:	**240992**	**Reported To (AENV Contact):**	Nancy
Date & Time Incident Reported to AENV:	Oct 09, 2010	**Reported By:**	Grover Christiansen
Reported on Behalf of:	**PASZA airshed**	**Approval Number (if applicable):**	Not applicable
Location(s) of Incident:	**Smoky Heights Air Quality station**		
Start Date & Time of Incident:	Oct 09 @ 17:00 MST	**End Date & Time of Incident:**	Oct 09 @ 18:00 MST

Reason or Nature of Incident:

The $PM_{2.5}$ analyzer (TEOM) within the Smoky Heights station, currently located ENE of Grande Prairie at LSD 13-8-074-02 W6, exceeded the AENV hourly average $PM_{2.5}$ hourly guideline (80 µg/m^3) as detailed below:

Oct 09 17:00 – 18:00 MST $PM_{2.5}$= 329.0 µg/m^3 WS= 3.4 km/h WD=249 deg (WSW)

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:	Grover Christiansen	Date Report Submitted:	Oct 14, 2010
7-Day Letter Due Date:	October 16, 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:	241294	**Reported To (AENV Contact):**	Christi
Date & Time Incident Reported to AENV:	2010-10-19 19:00	**Reported By:**	Grover Christiansen
Reported on Behalf of:	PASZA	**Approval Number (if applicable):**	
Location(s) of Incident:	Smoky Hieghts		
Start Date & Time of Incident:	19:00 2010-10-19	**End Date & Time of Incident:**	20:00 2010-10-19

Details of Exceedence:

Hourly exceedance 19:00 PM 2.5 = 163 ug/m3. WS = 4.6 km/hr. WD = 279 deg. ET = 5.2 deg C.
20:00 PM 2.5 = 182 ug/m3. WS = 6.2 km/hr. WD = 234 deg. ET = 2.4 deg C.

Immediate Actions Taken:

Hourly exceedances phoned in to Ministry.

Follow-up Details:

Cause is unknown at this time.

Actions Taken to Prevent Reoccurrence (if any):

Not Applicable

Additional Actions Required (if any):

Not applicable

Report Completed By:	Grover Christiansen	Date Report Submitted:	2010-10-20
7-Day Letter Due Date:			

October 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	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	7:20	End Time (MST)	10:39
Barometric Pressure	0.935 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	1.005695	Calculated slope	1.002582
Calculated intercept	-2.011506	Calculated intercept	0.204944
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.8		9.2	
Coefficient	.825		.857	
Pressure	646.0	mm Hg	642.0	mm Hg
Flow	0.481	lpm	,477	lpm
Lamp Voltage	43800	Hz	44209	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	0.4	N/A
4991	39.83	407.7	406.5	1.0030
4991	19.89	204.4	204.2	1.0010
4991	9.93	102.3	100.6	1.0160
4991	0.00	0.0	0.4	As Found Zero
4991	39.83	407.7	385.9	As Found Span
			Average Correction Factor	1.0067

Calculated value of As Found Response: 385.7 ppb Percent Change of As Found: 5.4%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	239.8	ppb	254.0	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

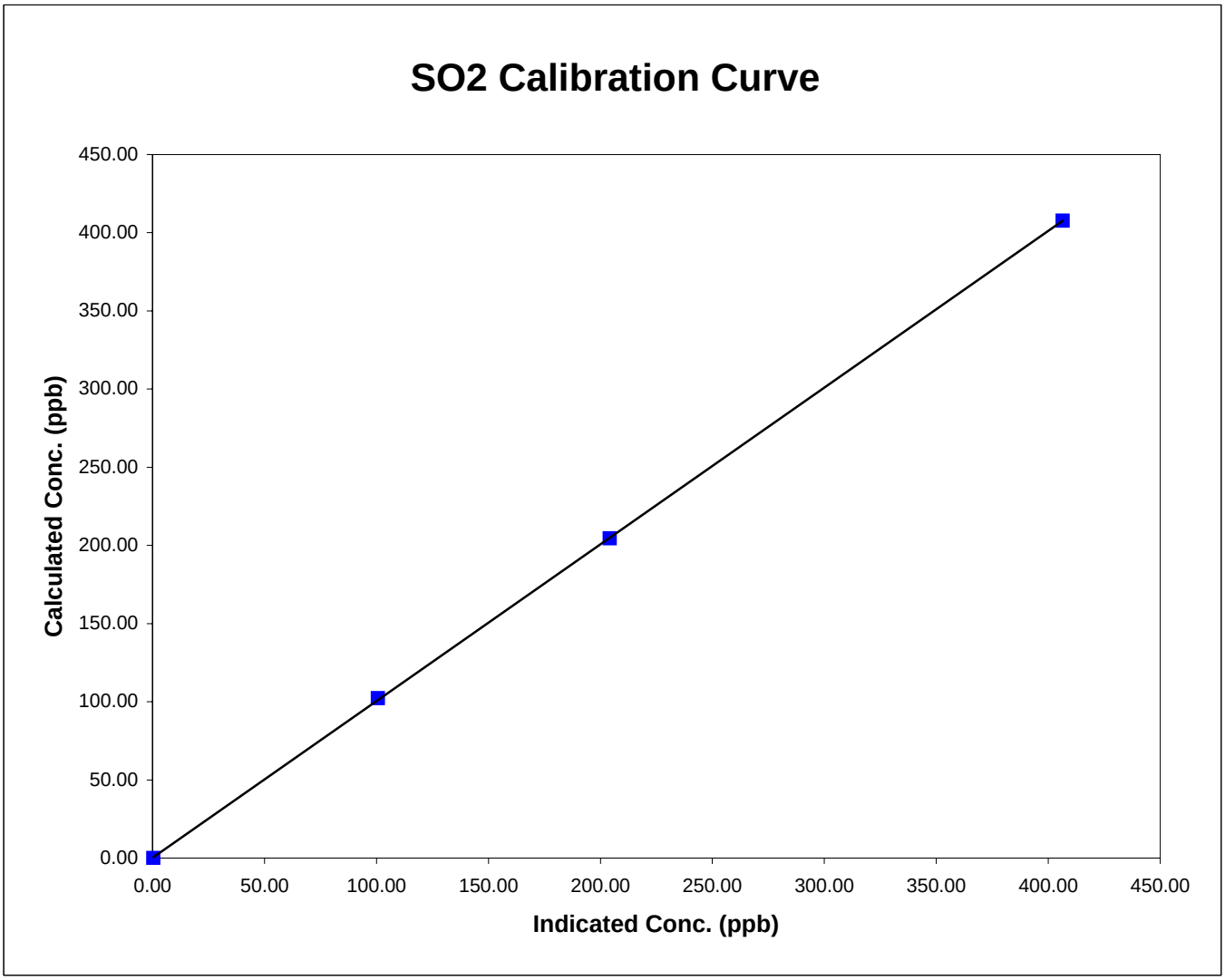
Air Monitoring Network **PASZA**

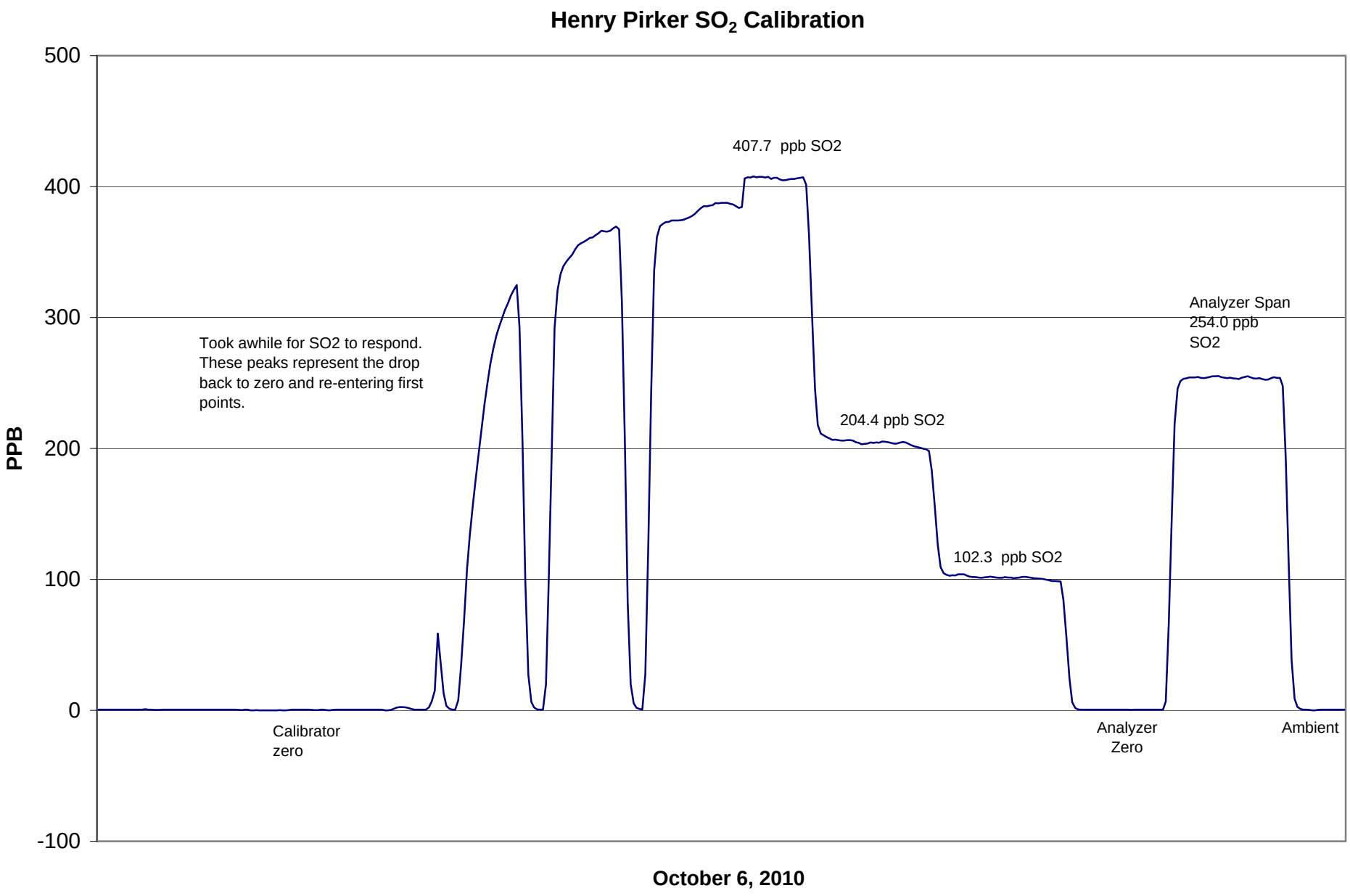
Station Information

Calibration Date	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:20	End Time (MST)	10:39
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	0.4	N/A		
407.7	406.5	1.0030	Correlation Coefficient	0.999978
204.4	204.2	1.0010		
102.3	100.6	1.0160	Slope	1.002582
			Intercept	0.204944




Henry Pirker SO_2 Calibration
500
400
300
200
100
0
-100
PPB
407.7 ppb SO2
Took awhile for SO2 to respond. These peaks represent the drop back to zero and re-entering first points.
204.4 ppb SO2
102.3 ppb SO2
Analyzer Span 254.0 ppb SO2
Calibrator zero
Analyzer Zero
Ambient
October 6, 2010

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	October 5, 2010	Previous Calibration	September 22, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	8:00	End Time (MST)	11:58
Barometric Pressure	0.935 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	0.999747	Calculated slope	0.997303
Calculated intercept	-0.217363	Calculated intercept	0.669447
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	1.022		1.084	
Background	9.6		10.3	
Pressure	661.8	mm Hg	664.3	mm Hg
Flow	0.461	ccm	0.462	ccm
Lamp Voltage	825	V	825	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	-0.21	N/A
4991	79.83	81.08	80.75	1.0040
4991	39.87	40.81	40.09	1.0180
4991	9.93	10.23	9.15	1.1178
4991	0.00	0.00	-0.21	As Found Zero
4991	79.83	81.08	75.16	As Found Span
			Average Correction Factor	1.0466

Calculated value of As Found Response: 75.1 ppb Percent Change of As Found: 7.3%

	before calibration		after calibration	
Auto zero	-0.29	ppb	0.95	ppb
Auto span	32.32	ppb	26.32	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

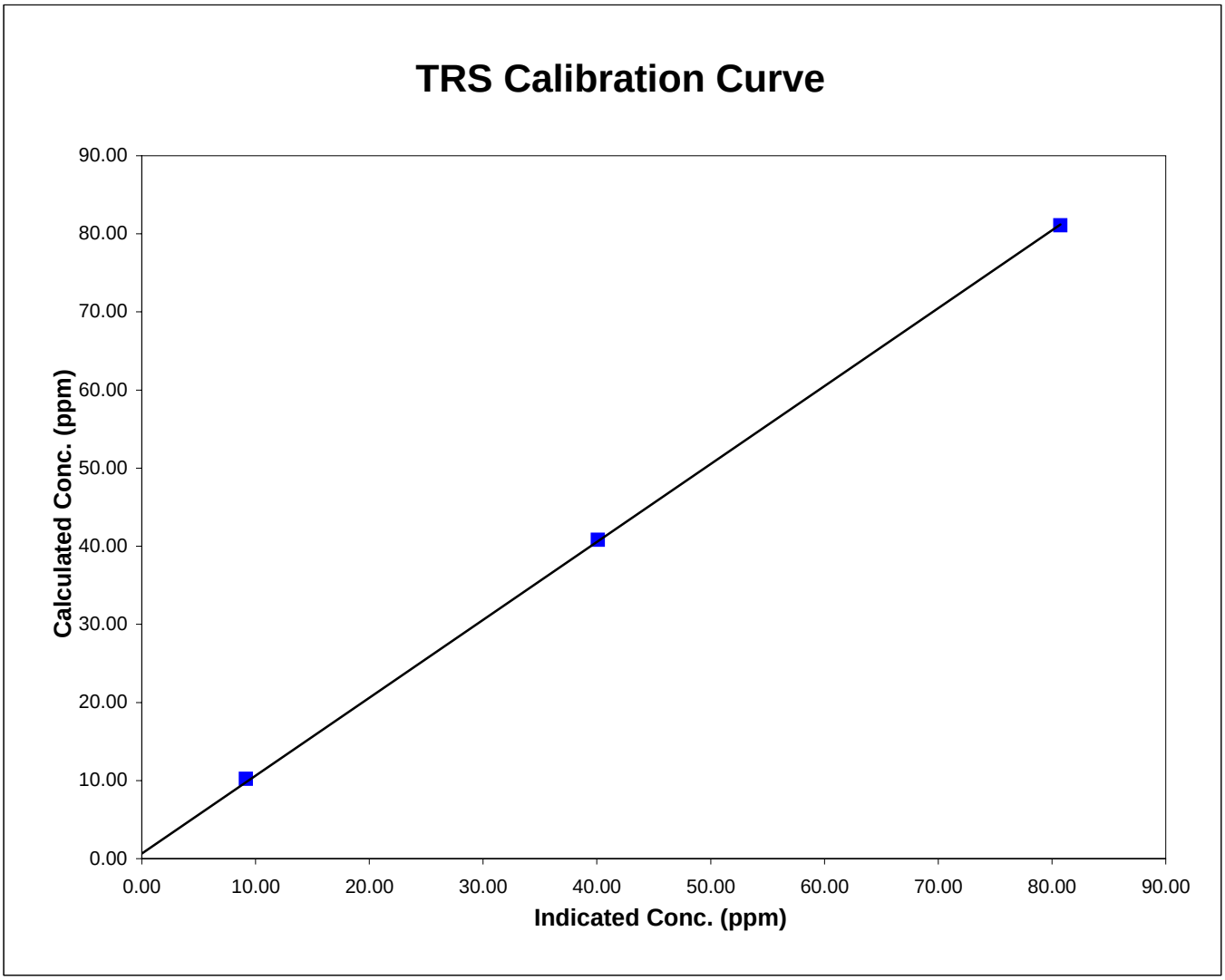
Air Monitoring Network **PASZA**

Station Information

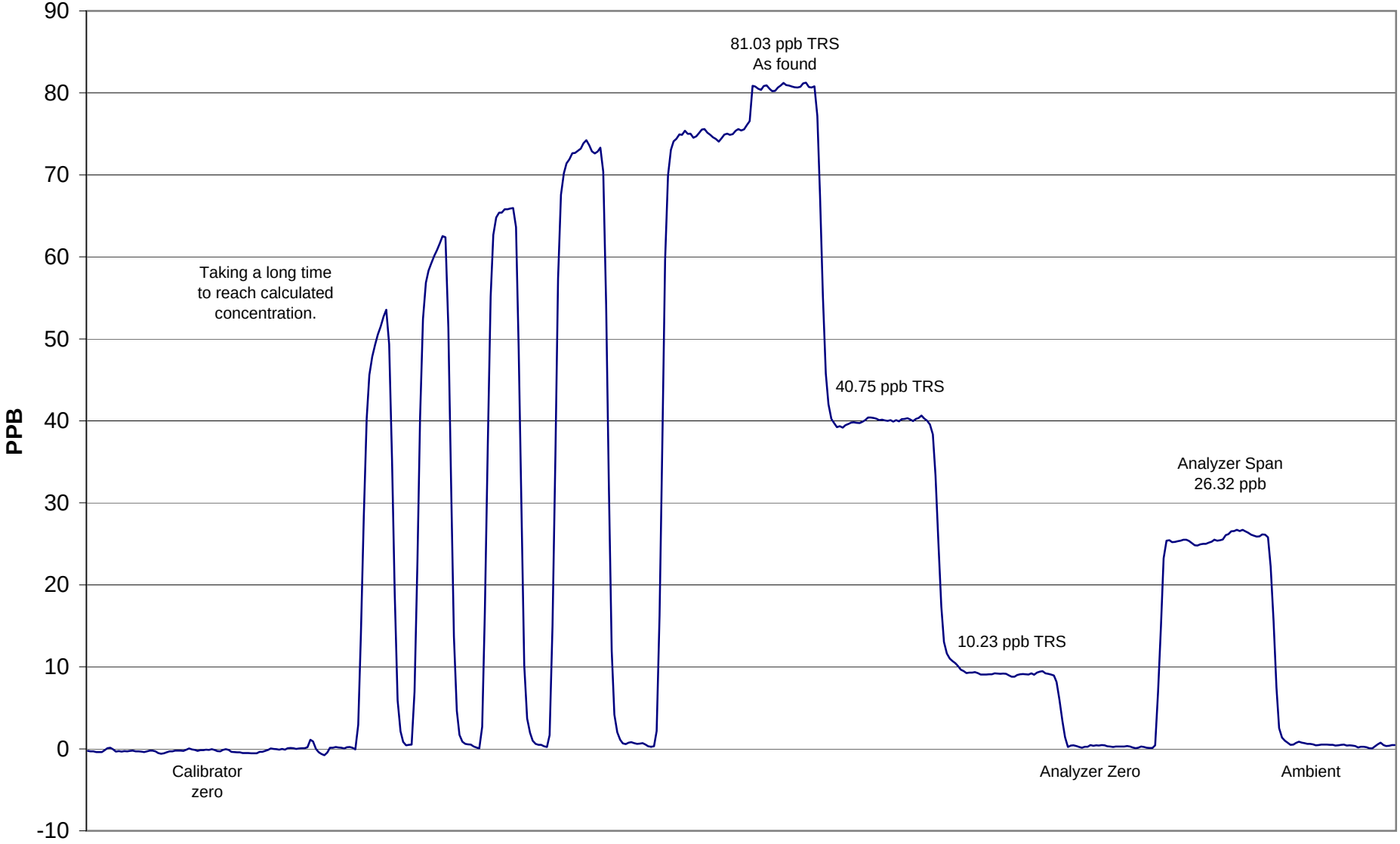
Calibration Date	October 5, 2010	Previous Calibration	September 22, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:00	End Time (MST)	11:58
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.207	N/A		
81.076	80.754	1.0040	Correlation Coefficient	0.999889
40.814	40.094	1.0180		
10.226	9.148	1.1178	Slope	0.997303
			Intercept	0.669447



Henry Pirker TRS Calibration



October 5, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker

Reason: Routine Installation Removal Other:

Start Time (MST)	7:20		End Time (MST)	12:20	
Barometric Pressure	0.935	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	0.999311	1.008475	1.009402
	Data Offset	0.212535	-2.316570	-2.272702
After	Data Slope	1.003940	1.001796	1.001461
	Data Offset	-0.316878	-1.616176	-1.828206
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	10.6	mV	10.6	mV
NOx bkgnd	11.4	mV	11.4	mV
NO coefficient	0.791		0.791	
NOx coefficient	1.000		1.000	
NO2 conv temp	318.0	Deg C	319.0	Deg C
PMT Temp	-2.5	Deg C	-2.5	Deg C
PMT Volt	-786.0	mV	-786.0	mV
R Cell Press	174.1	in Hg	174.4	in Hg
Sample Flow	0.759	ccm	0.762	ccm

Notes:

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: October 6, 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	0.1	N/A	N/A
1	4991	39.83	402.2	402.2	0.0	402.3	402.5	-0.2	0.9997	0.9993
2	4991	19.89	201.6	201.6	0.0	203.6	204.2	-0.5	0.9902	0.9877
3	4991	9.93	100.9	100.9	0.0	103.8	104.4	-0.7	0.9720	0.9666
AFZ	4991	0.00	0.0	0.0	0.0	0.1	0.0	0.1	0.0000	0.0000
AFS	4991	39.83	402.2	402.2	0.0	402.3	402.5	-0.2	0.9997	0.9993
							Average Correction Factor		0.9873	0.9845

As Found Concentrations: NO_X= 399.9 NO= 400.2 As Found Percent Change NO_X= -0.6% NO= -0.5%

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	0.1	N/A	N/A	N/A	N/A
NO point	403.1	403.1	0.0	402.4	403.1	-0.8	1.0017	1.0000	N/A	N/A
300	403.1	91.1	312.0	402.0	91.1	311.0	1.0028	1.0000	1.0029	99.7%
200	403.1	190.1	213.0	402.1	190.1	212.3	1.0025	1.0000	1.0035	99.6%
100	403.1	289.2	113.9	403.1	289.2	114.2	1.0000	1.0000	0.9973	100.3%
					Average Correction Factor		1.0017	1.0000	1.0013	99.9%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.0	ppb	-0.4	-0.4	0.0	ppb
Auto span	168.4	169.5	1.2	ppb	179.6	178.3	1.0	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

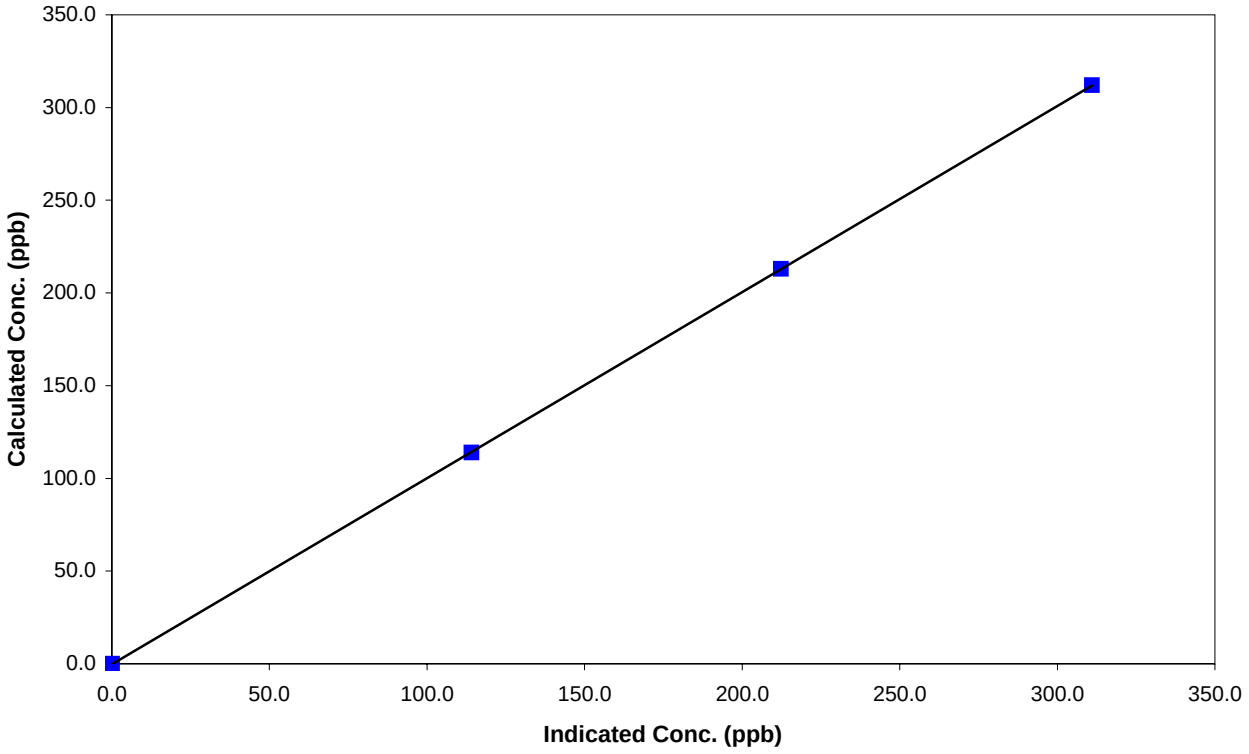
Station Information

Calibration Date	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:20	End Time (MST)	12:20
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		
312.0	311.0	1.0029	Correlation Coefficient	0.999995
213.0	212.3	1.0035		
113.9	114.2	0.9973	Slope	1.003940
			Intercept	-0.316878

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

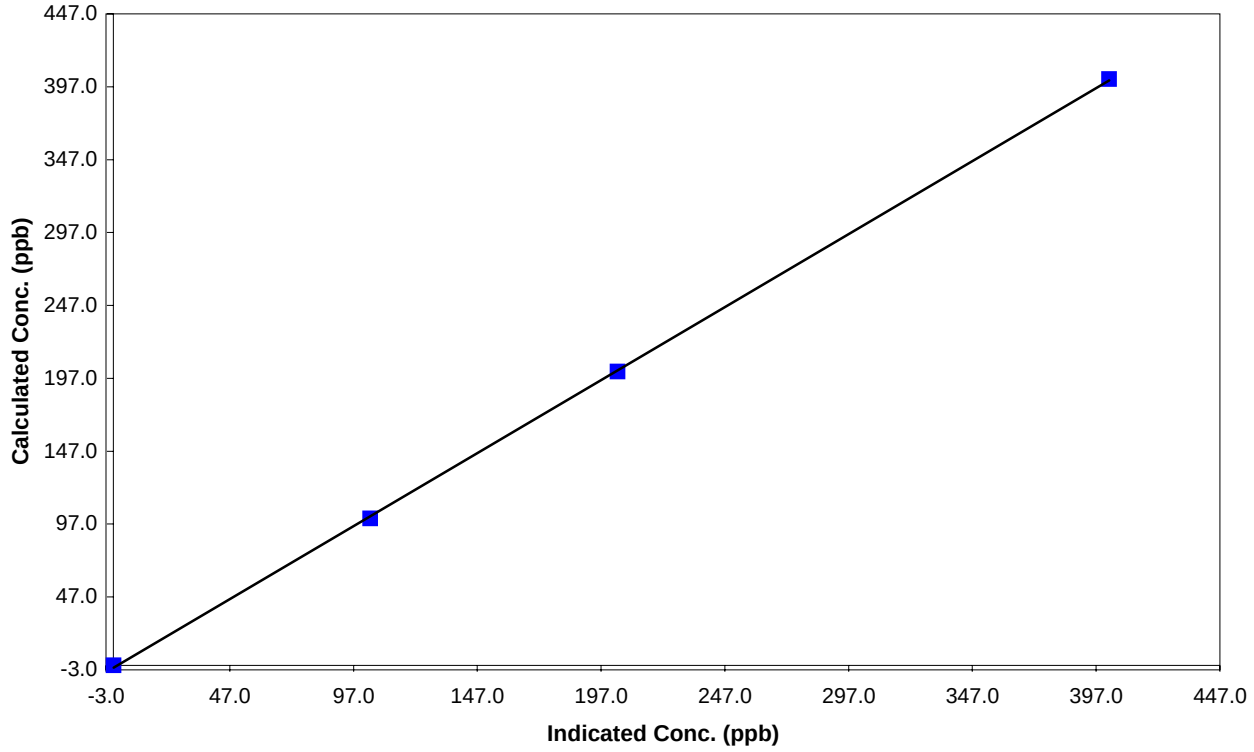
Station Information

Calibration Date	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:20	End Time (MST)	12:20
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	402.3	0.9997	Correlation Coefficient	0.999938
201.6	203.6	0.9902		
100.9	103.8	0.9720	Slope	1.001796
			Intercept	-1.616176

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

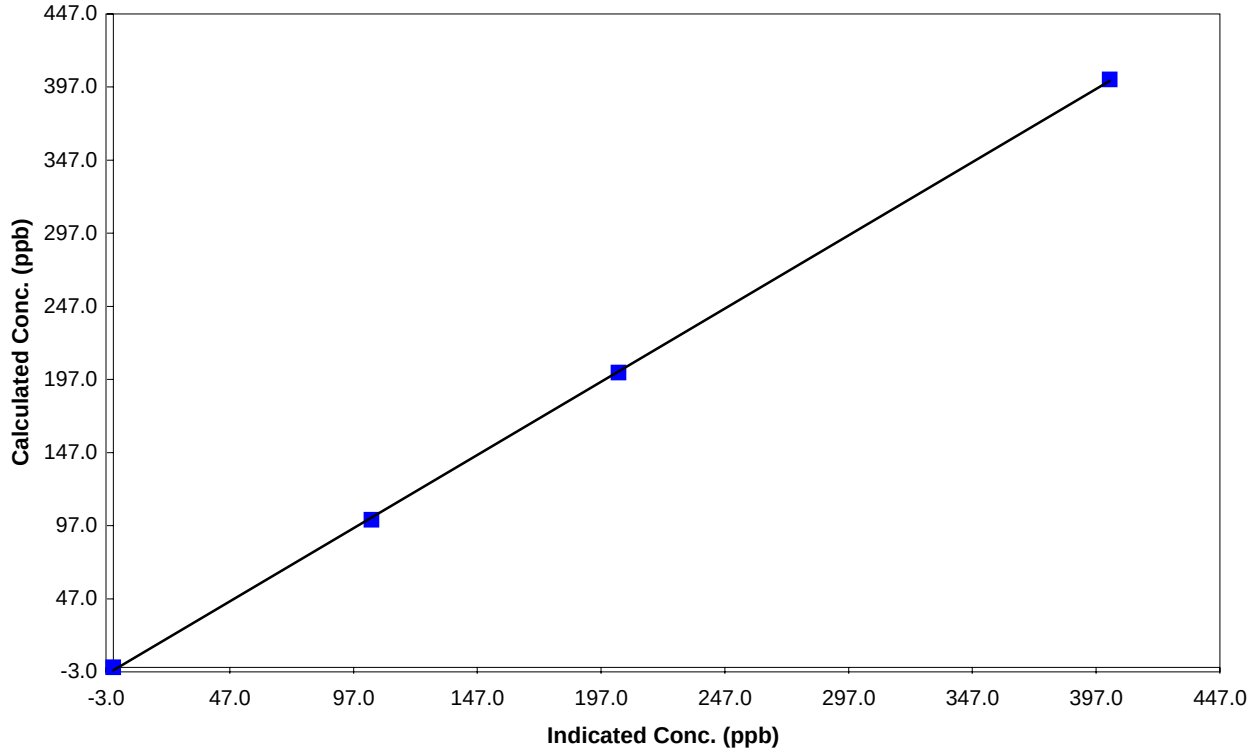
Station Information

Calibration Date	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:20	End Time (MST)	12:20
Analyzer make	TEI 42C	Analyzer serial #	508011073

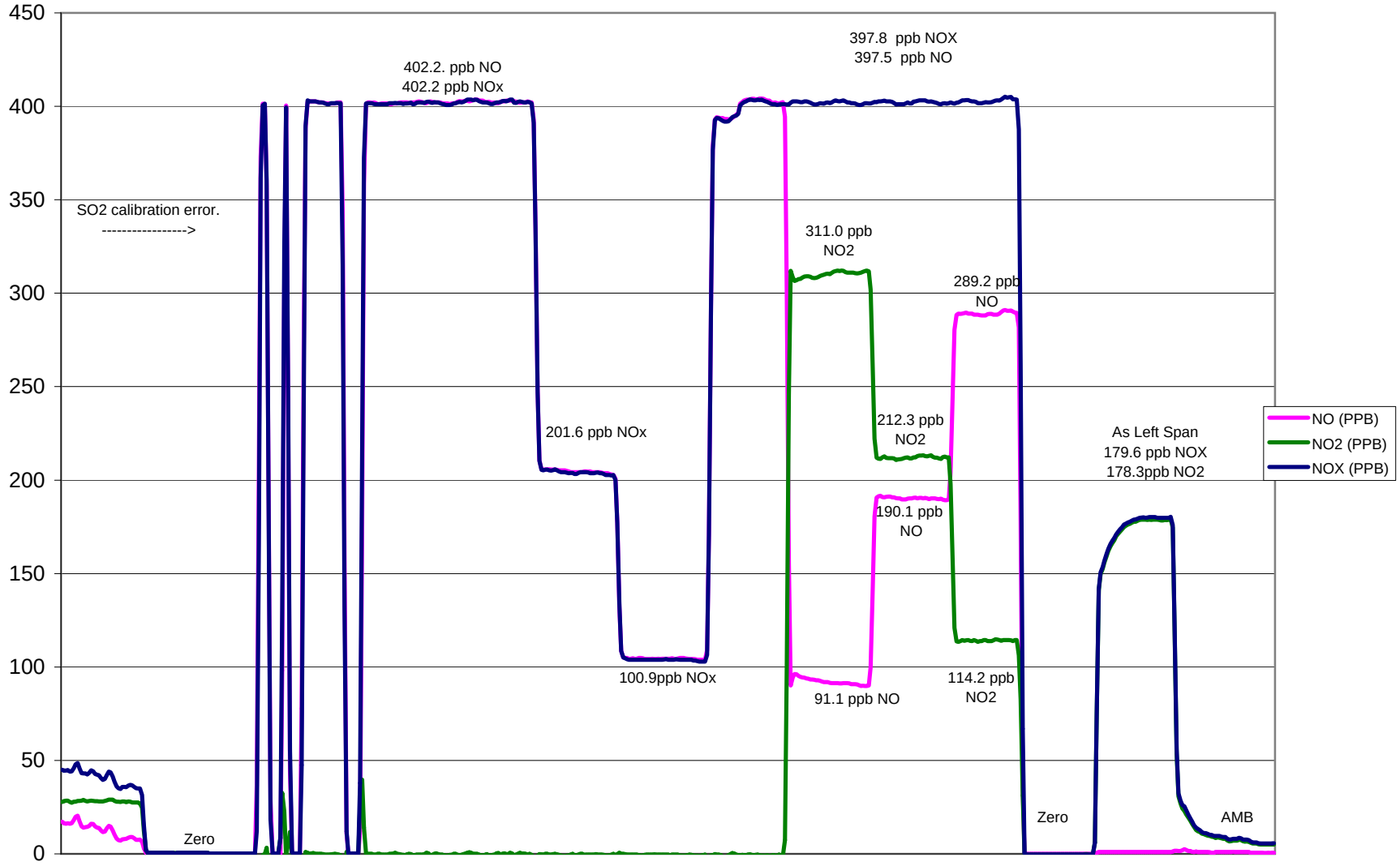
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
402.2	402.5	0.9993	Correlation Coefficient	0.999904
201.6	204.2	0.9877		
100.9	104.4	0.9666	Slope	1.001461
			Intercept	-1.828206

NO Calibration Curve



Henry Pirker NO_X Calibration



October 6, 2010

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:50	End Time (MST)	13:14
Barometric Pressure	0.935 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	0.982260	Calculated slope	0.997259
Calculated intercept	-1.000003	Calculated intercept	0.031354
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	-0.2	N/A
300	4991	312.0	313.1	0.9965
200	4991	213.0	212.8	1.0007
100	4991	113.9	114.8	0.9925
0	4991	0.0	-0.2	As found zero
300	4991	312.0	313.1	As found span
			Average Correction Factor	0.9966

Calculated value of As Found Response: 306.7 ppm Percent Change of As Found: -1.7%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	153.0	ppb	157.9	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

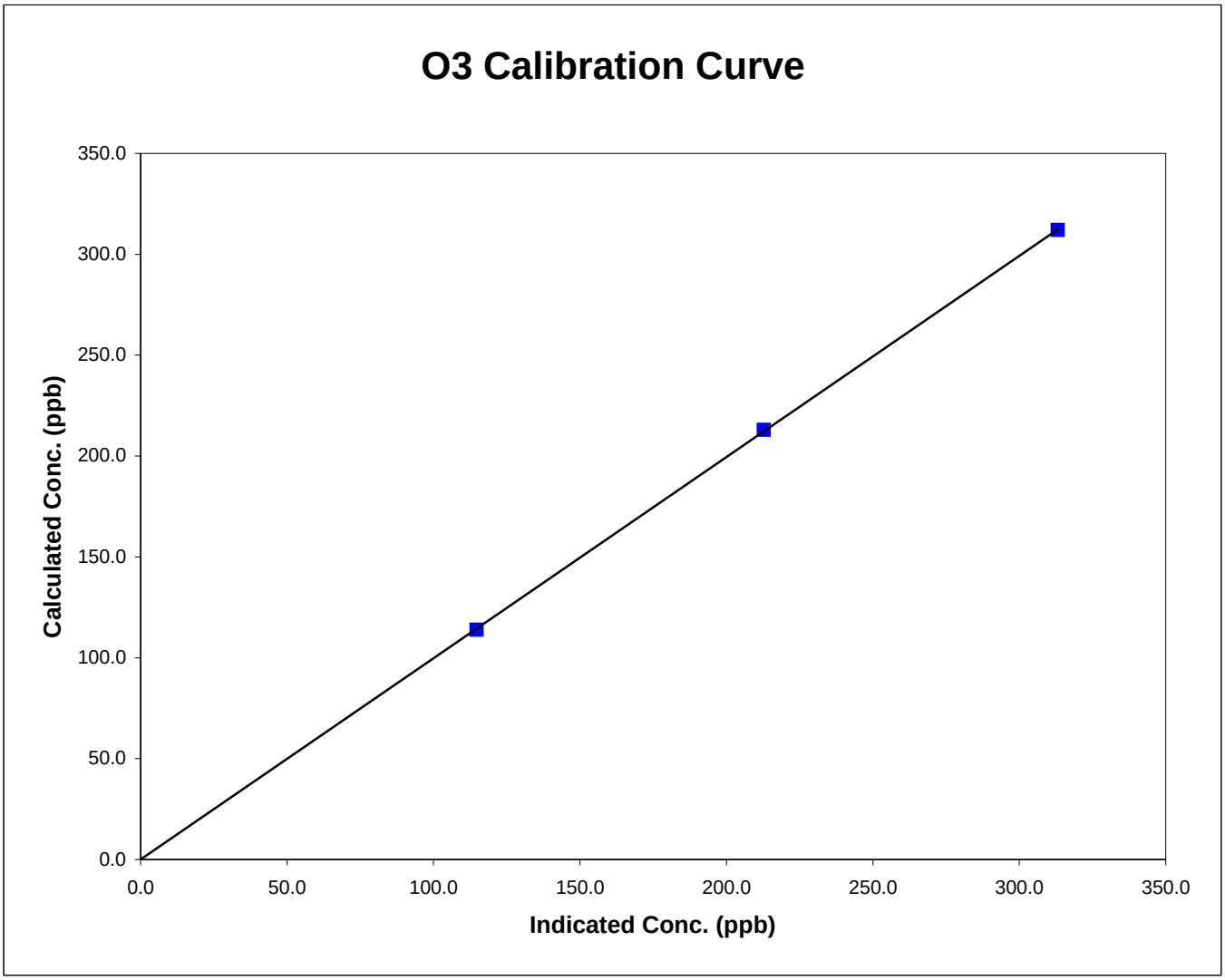
FOCUS AIR QUALITY MONITORING

Station Information

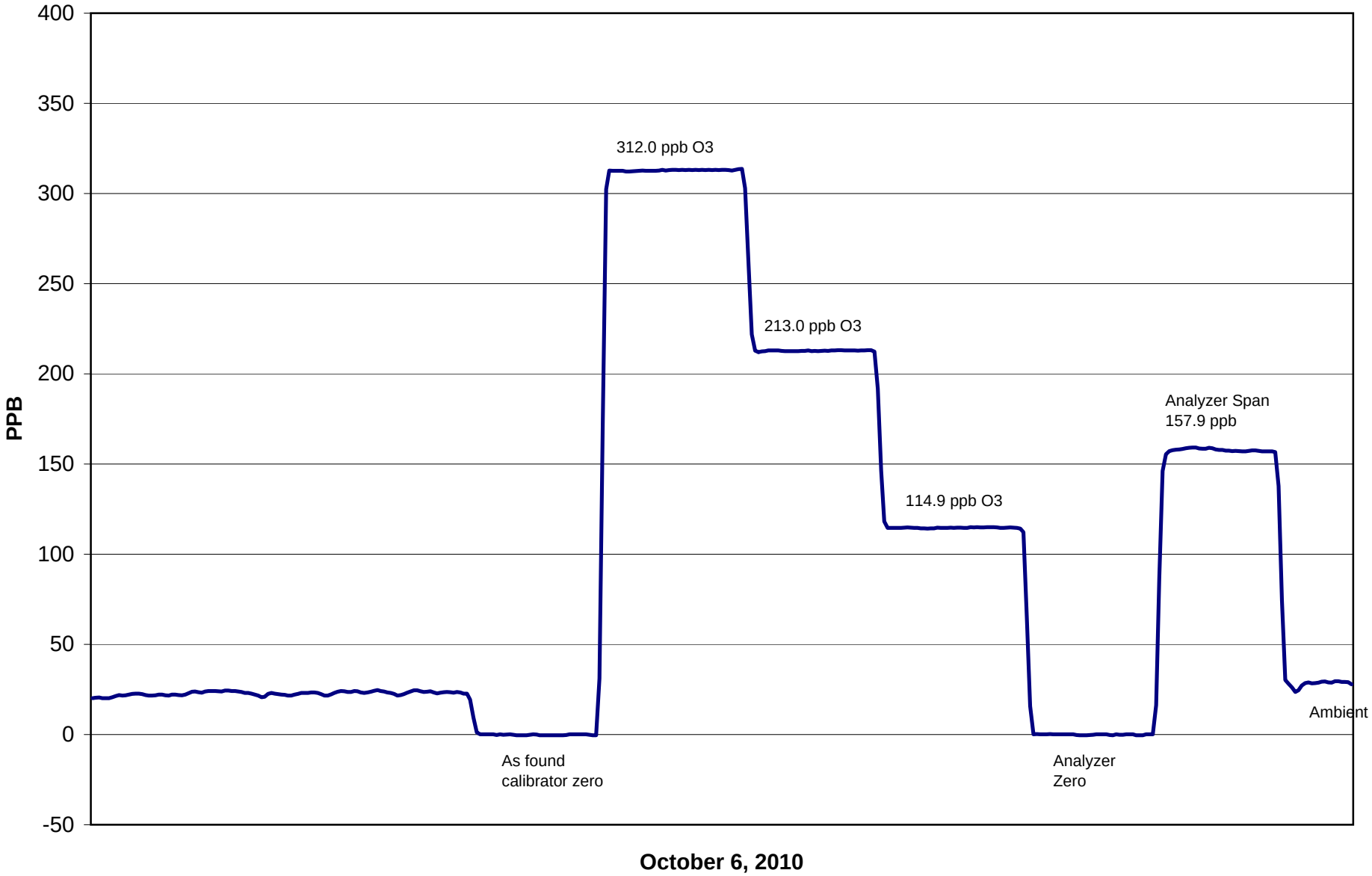
Calibration Date	October 6, 2010	Previous Calibration	September 23, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:50	End Time (MST)	13:14
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	NA		
312.0	313.1	0.9965	Correlation Coefficient	0.999983
213.0	212.8	1.0007		
113.9	114.8	0.9925	Slope	0.997259
			Intercept	0.031354



Henry Pirker O_3 Calibration



Calibration Report

Parameter **CO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 5, 2010	Previous Calibration	September 14, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	10:45	End Time (MST)	13:13
Barometric Pressure	0.935 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	1.021734	Calculated slope	1.019748
Calculated intercept	-0.248982	Calculated intercept	-0.167079
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	9.774		9.881	
Sample pressure	691.4	mm Hg	682.4	mm Hg
Sample Flow	1.149	LPM	1.140	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	0.05	N/A
4991	39.84	23.76	23.40	1.0152
4991	19.90	11.91	11.91	1.0007
4991	9.95	5.97	6.13	0.9740
4991	0.00	0.00	0.05	As Found Zero
4991	39.84	23.76	23.40	As Found Span
			Average Correction Factor	0.9966

Calculated value of As Found Response: 23.608 ppm Percent Change of As Found: 0.6%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.43	ppm	19.57	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **CO**

Air Monitoring Network **PASZA**

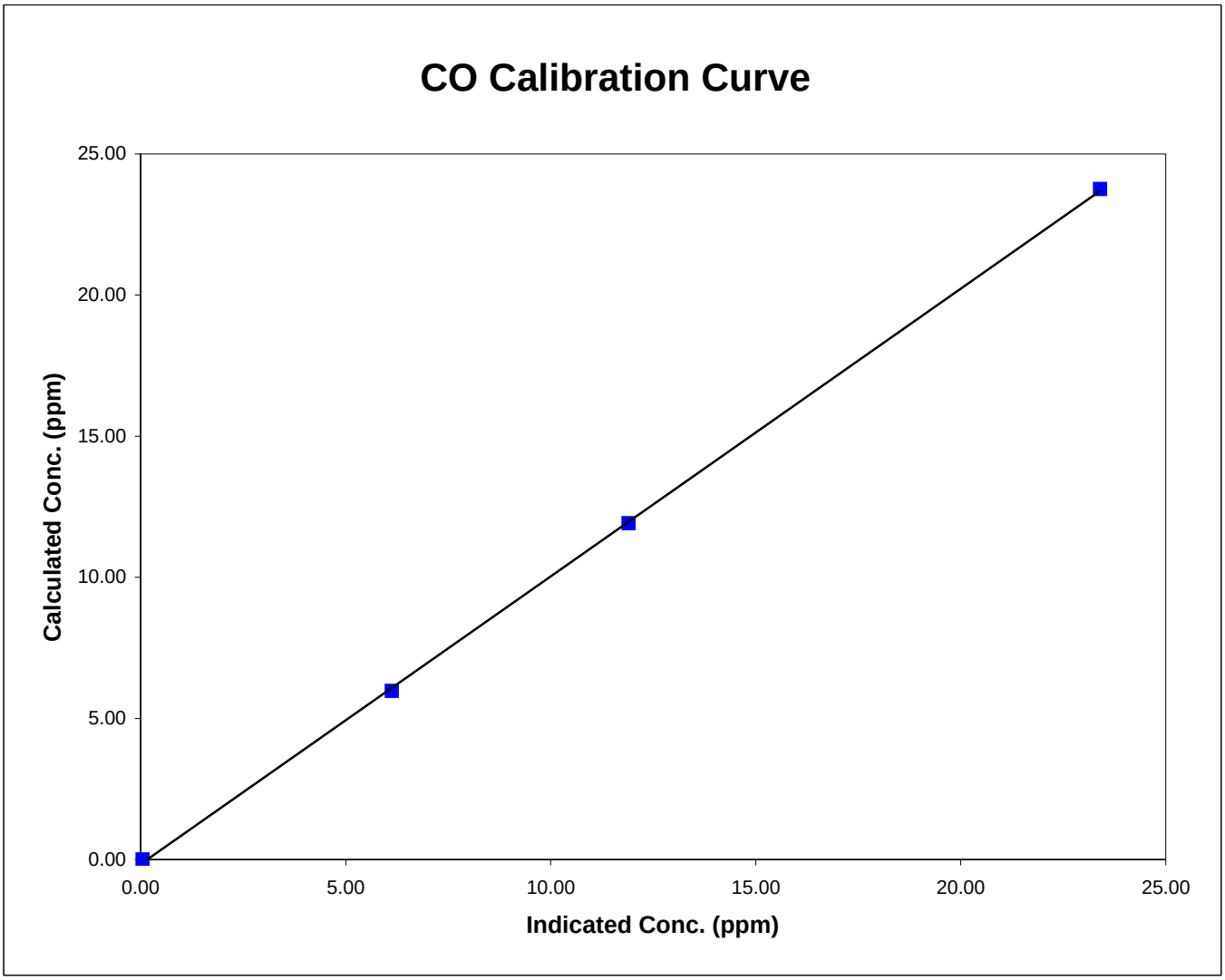
FOCUS AIR QUALITY MONITORING

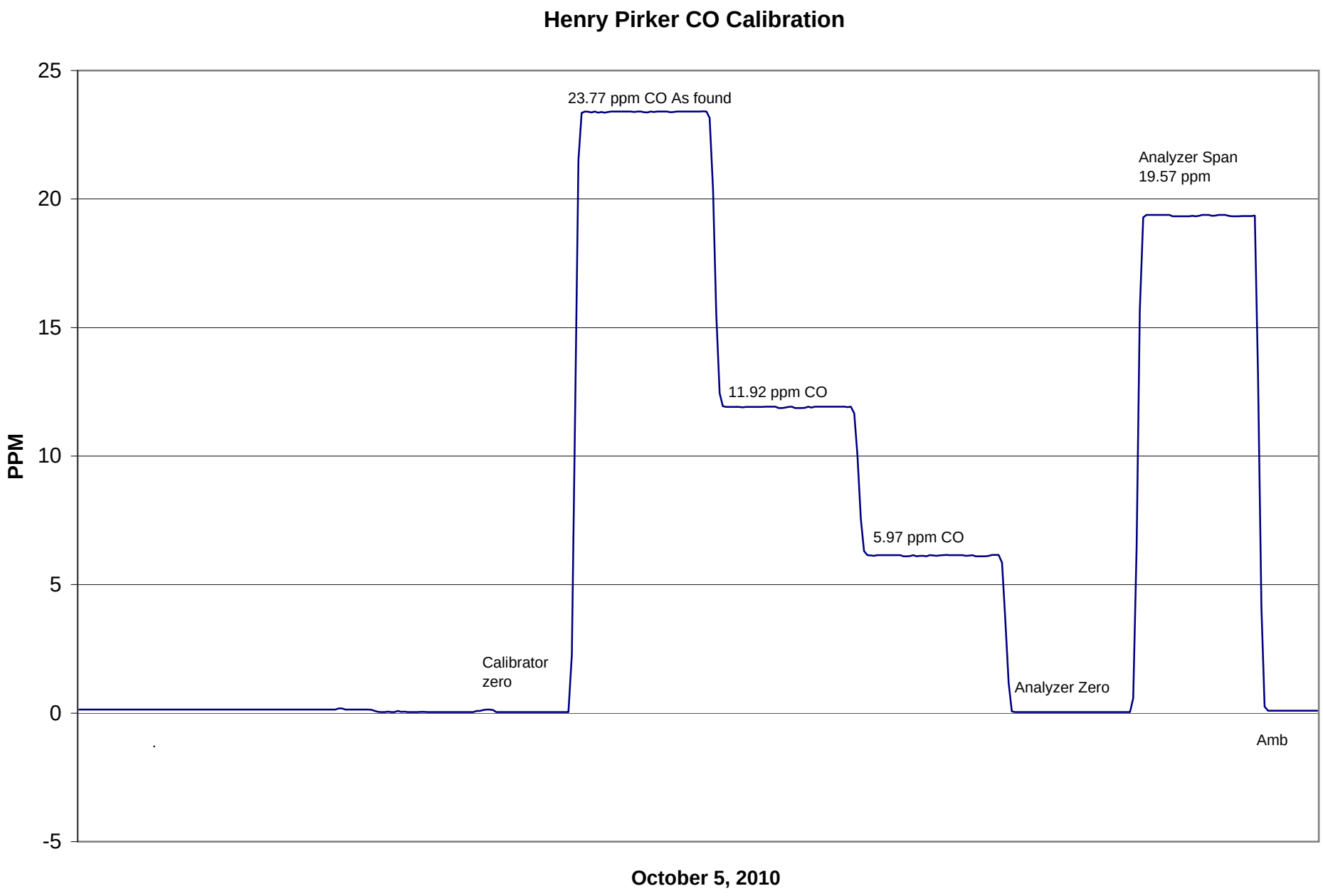
Station Information

Calibration Date	October 5, 2010	Previous Calibration	September 14, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:45	End Time (MST)	13:13
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	0.053	N/A		
23.757	23.403	1.0152	Correlation Coefficient	0.999894
11.914	11.905	1.0007		
5.969	6.128	0.9740	Slope	1.019748
			Intercept	-0.167079




Henry Pirker CO Calibration
25
20
15
10
5
0
-5
PPM
23.77 ppm CO As found
Analyzer Span
19.57 ppm
11.92 ppm CO
5.97 ppm CO
Calibrator
zero
Analyzer Zero
Amb
October 5, 2010

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)	12:30	End Time (MST)	14:45
Barometric Pressure	0.935 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	1.000693
Calculated intercept	0.127320	Calculated intercept	0.121766
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	-0.13	N/A
4991	69.73	20.99	20.87	1.0056
4991	29.90	9.07	8.88	1.0213
4991	9.92	3.02	2.95	1.0258
4991	0.00	0.00	-0.13	As Found Zero
4991	69.73	20.99	20.87	As Found Span
			Average Correction Factor	1.0176

Calculated value of As Found Response: 21.240 ppm Percent Change of As Found: -1.2%

	before calibration		after calibration	
Auto zero	0.10	ppm	-0.02	ppm
Auto span	25.45	ppm	23.27	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **THC**

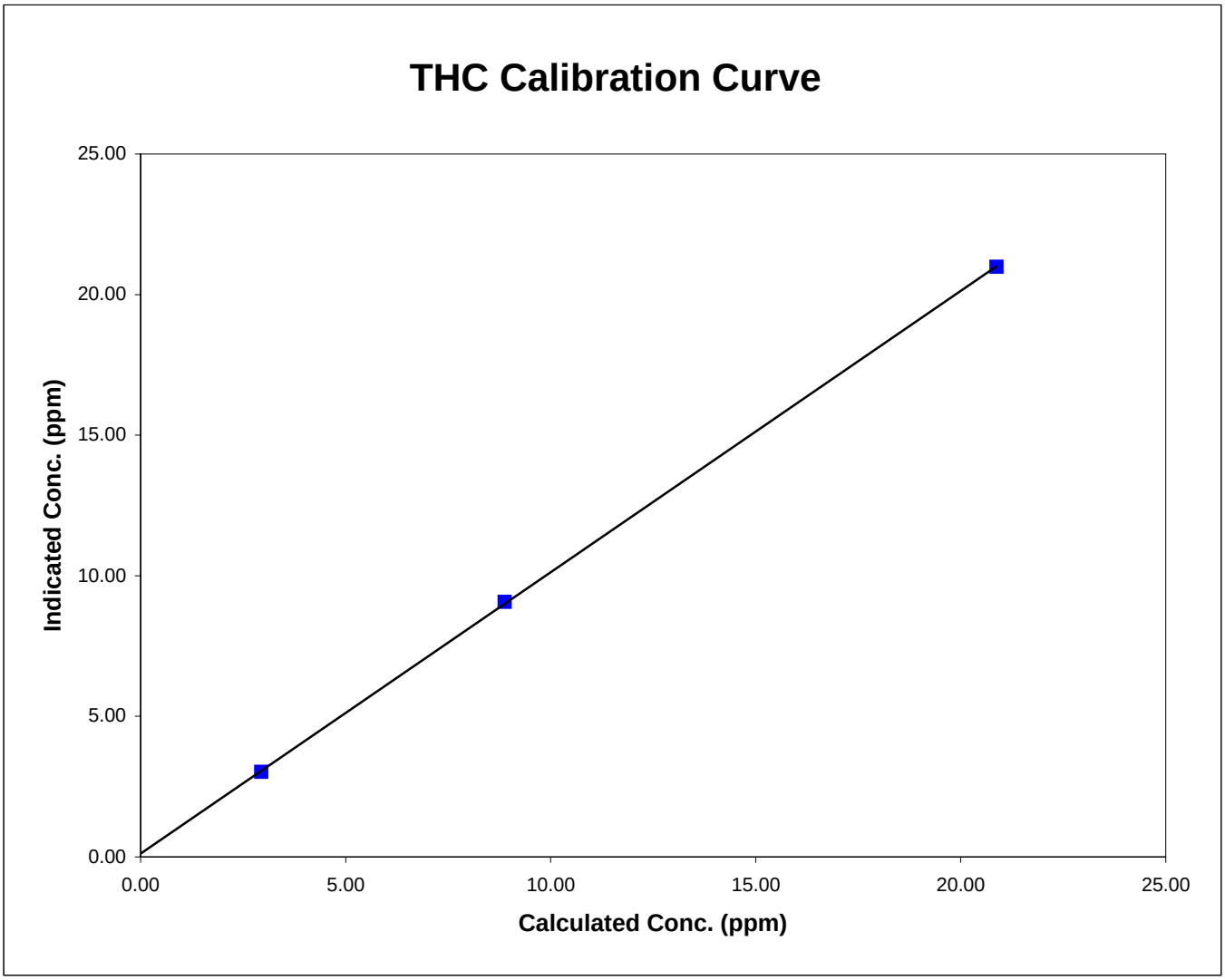
Air Monitoring Network **PASZA**

Station Information

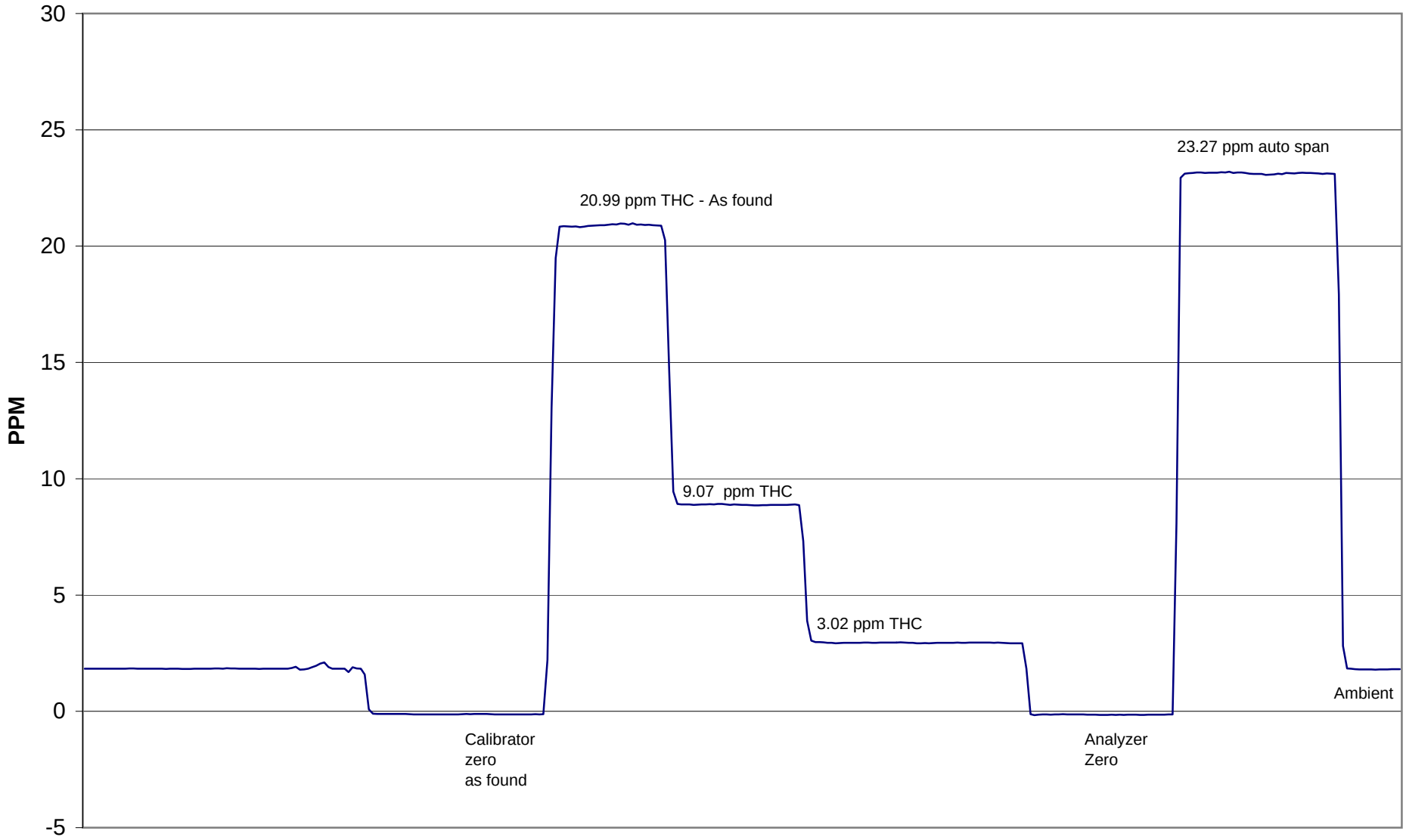
Calibration Date	September 24, 2010	Previous Calibration	August 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:30	End Time (MST)	14:45
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.128	N/A		
20.988	20.871	1.0056	Correlation Coefficient	0.999975
9.071	8.882	1.0213		
3.022	2.945	1.0258	Slope	1.000693
			Intercept	0.121766



Henry Pirker THC Calibration



September 24, 2010

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	October 12, 2010	Previous Calibration	September 29, 2010
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:55	End Time (MST)	13:14
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	0.997398	Calculated slope	1.004049
Calculated intercept	-2.209584	Calculated intercept	-2.213429
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	10.9		11	
coefficient	1.051		1.051	
Lamp Voltage	830	volts	829	volts
Chamber Temp	45.2	Deg C	45.1	Deg C
Perm Gas Temp	45.00	Deg C	45	Deg C
Pressure	671.9	mm Hg	669.2	mm Hg
Sample Flow	0.455	ccm	0.452	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	0.2	N/A
4991	39.85	407.94	407.4	1.0012
4991	19.91	204.63	207.0	0.9886
4991	9.96	102.57	106.5	0.9633
	0.0			
4991	0.0	0.00	0.2	As Found Zero
4991	39.85	407.94	407.4	As Found Span
			Average Correction Factor	0.9844

Calculated value of As Found Response: 404.021 ppm Percent Change of As Found: 1.0%

	before calibration		after calibration	
Auto zero	0.7	ppm	0.1	ppm
Auto span	286.9	ppm	285.4	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

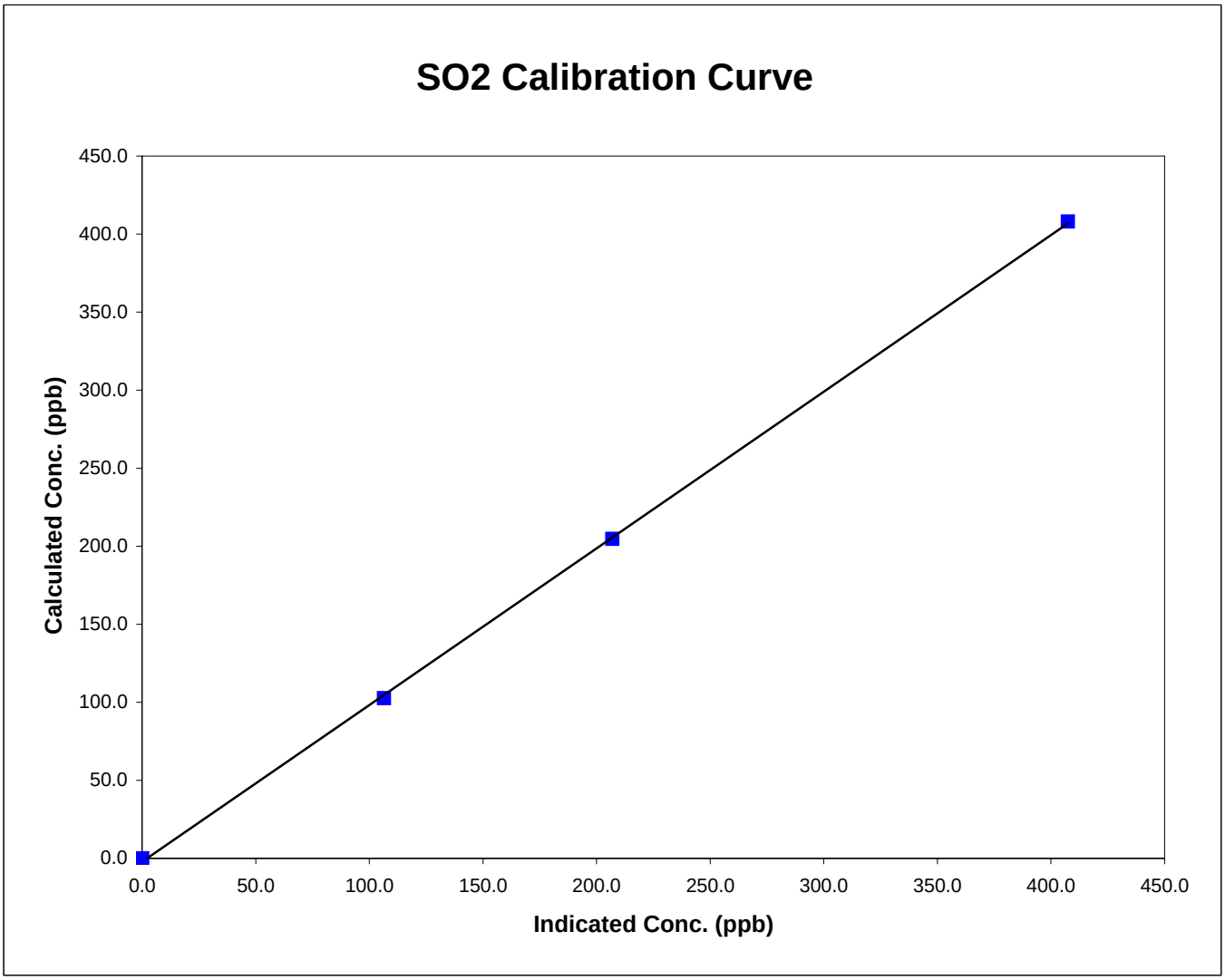
Air Monitoring Network **PASZA**

Station Information

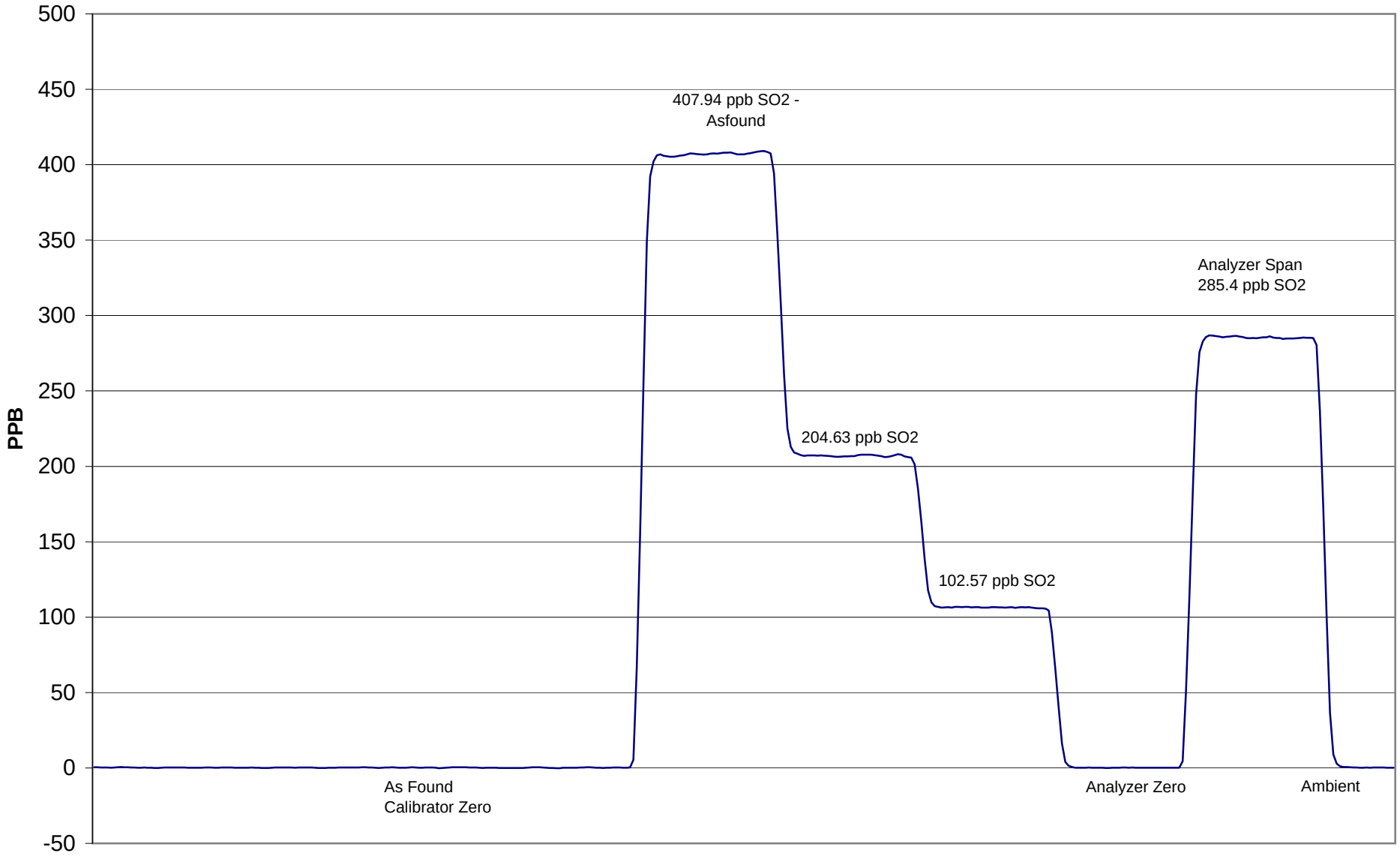
Calibration Date	October 12, 2010	Previous Calibration	September 29, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:55	End Time (MST)	13:14
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
407.9	407.4	1.0012	Correlation Coefficient	0.999881
204.6	207.0	0.9886		
102.6	106.5	0.9633	Slope	1.004049
			Intercept	-2.213429



Evergreen Park SO_2 Calibration



October 12, 2010

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	October 12, 2010	Previous Calibration	September 29, 2010
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:

Start Time (MST)	12:00	End Time (MST)	14:39
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	0.994842	Calculated slope	1.009497
Calculated intercept	-0.418101	Calculated intercept	-0.199681

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	807	volts	808	volts
Chamber Temp	44.4	Deg C	44.1	Deg C
Perm Gas Temp	40	Deg C	45.02	Deg C
Pressure	647.1	mm Hg	645.8	mm Hg
Sample Flow	0.480	ccm	0.479	ccm
Lamp Intensity	45,532	mv	45,619	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	0.1	N/A
4991	79.79	81.04	80.4	1.0076
4991	39.87	40.81	40.7	1.0027
4991	9.95	10.25	10.4	0.9830
4990	0.00	0.00	0.1	As Found Zero
4991	79.79	81.04	80.4	As Found Span
			Average Correction Factor	0.9978

Calculated value of As Found Response: 79.50 ppm Percent Change of As Found: 1.9%

	before calibration		after calibration	
Auto zero	-0.5	ppm	-0.1	ppm
Auto span	62.0	ppm	63.4	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

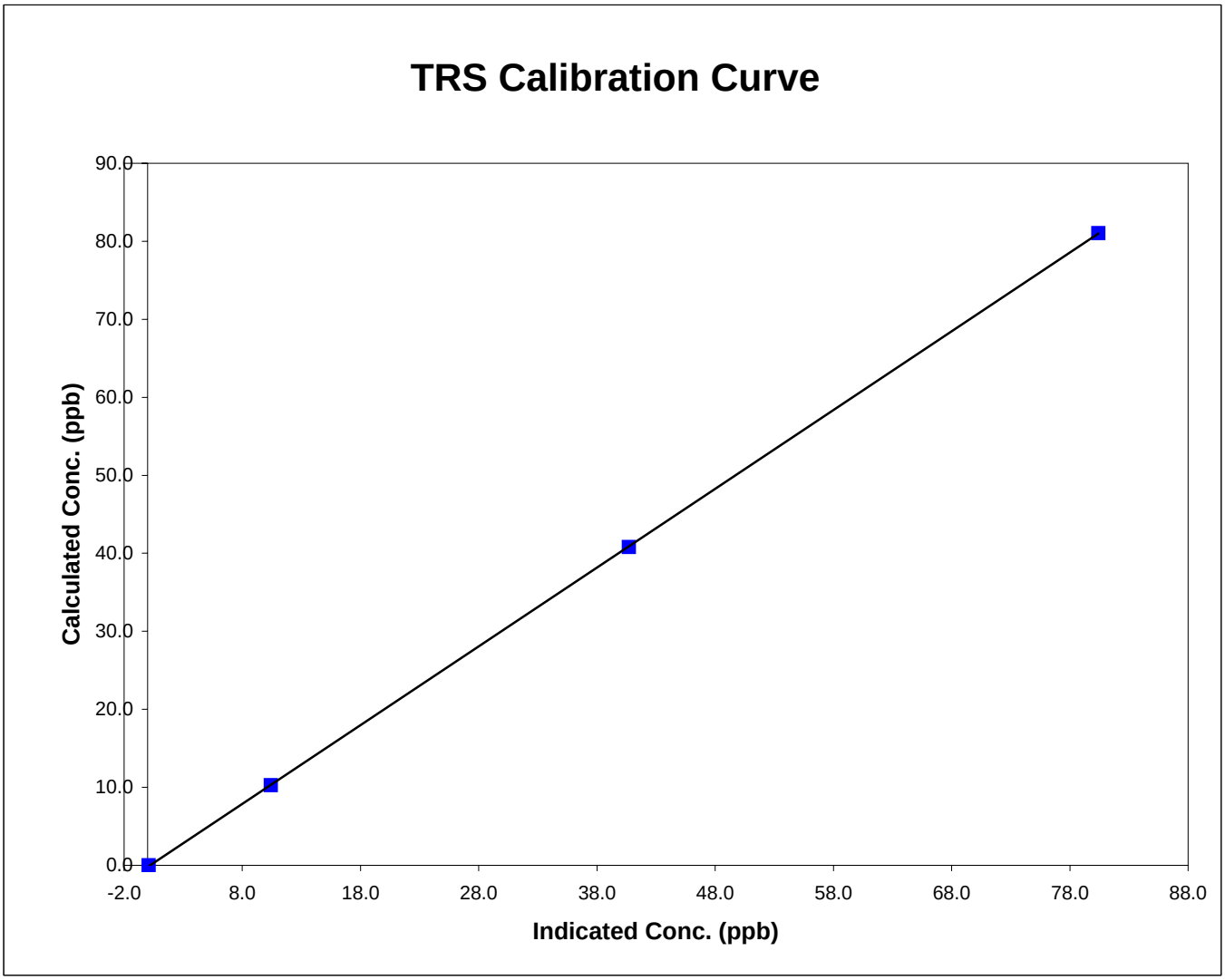
Air Monitoring Network **PASZA**

Station Information

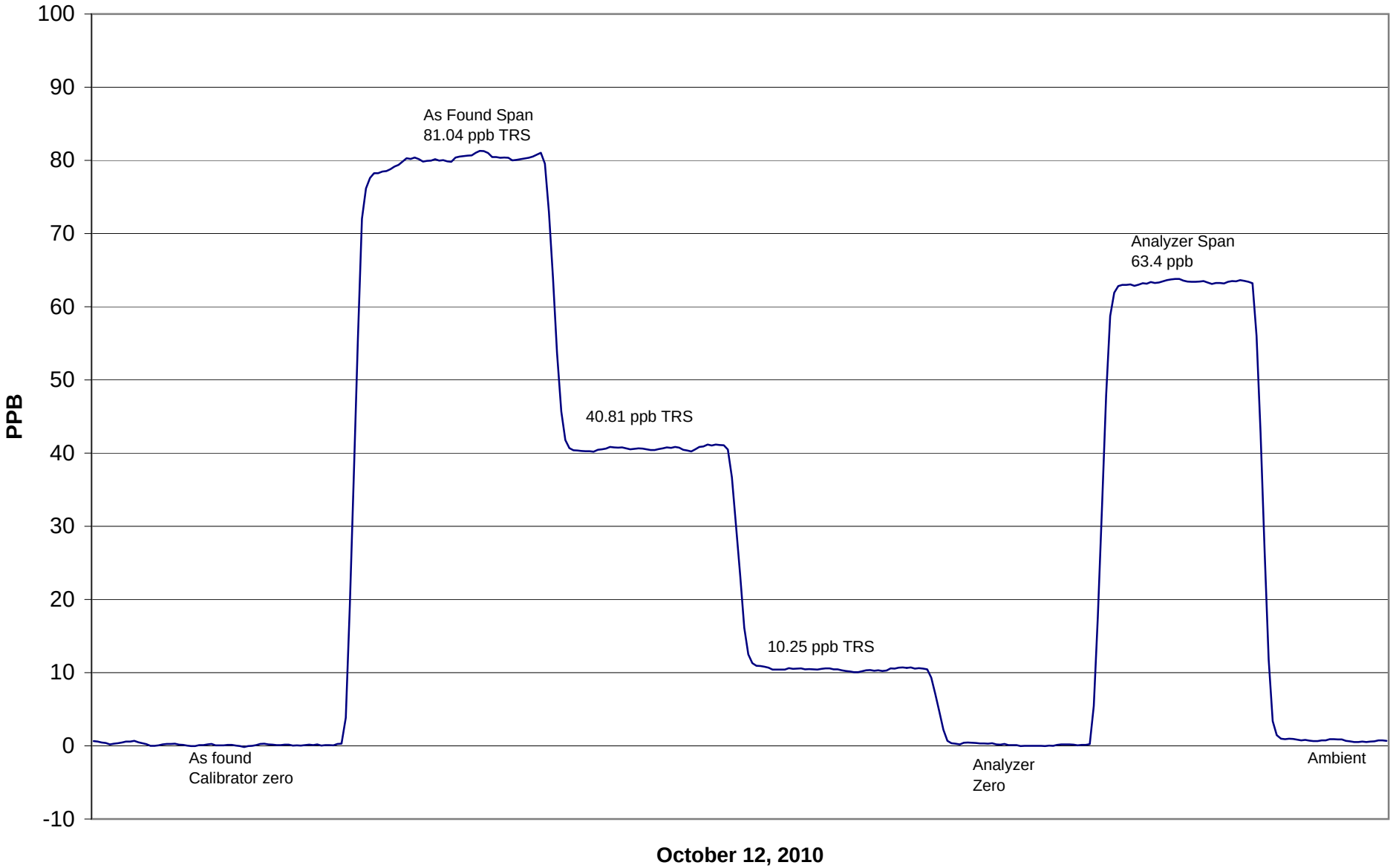
Calibration Date	October 12, 2010	Previous Calibration	September 29, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:00	End Time (MST)	14:39
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
81.0	80.4	1.0076	Correlation Coefficient	0.999994
40.8	40.7	1.0027		
10.2	10.4	0.9830	Slope	1.009497
			Intercept	-0.199681



Evergreen Park TRS Calibration



October 12, 2010

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **SO_2**

Air Monitoring Network **PASZA**

Station Information

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

Start Time (MST)	10:55	End Time (MST)	13:41
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	51.5 ppm	Cal Gas Cert Date	7/23/2010
Correction factor	0.031409	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	1.014801	Calculated slope	1.008231
Calculated intercept	-0.863433	Calculated intercept	-1.265438

Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	9		8.8	
coefficient	0.707		0.692	
Lamp Voltage	920	volts	924	volts
Chamber Temp	45.2	Deg C	45.1	Deg C
Perm Gas Temp	45	Deg C	45.01	Deg C
Pressure	665.4	mm Hg	666.6	mm Hg
Sample Flow	0.440	ccm	0.440	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	0.5	N/A
4989	39.84	408.00	405.5	1.0061
4989	19.91	204.71	204.6	1.0005
4989	9.95	102.51	103.8	0.9876
4989	0.0	0.00	0.5	As Found Zero
4989	39.84	408.00	417.5	As Found Span
			Average Correction Factor	0.9981

Calculated value of As Found Response: 422.378 ppm Percent Change of As Found: -3.5%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.5	ppb
Auto span	311.6	ppb	245.4	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

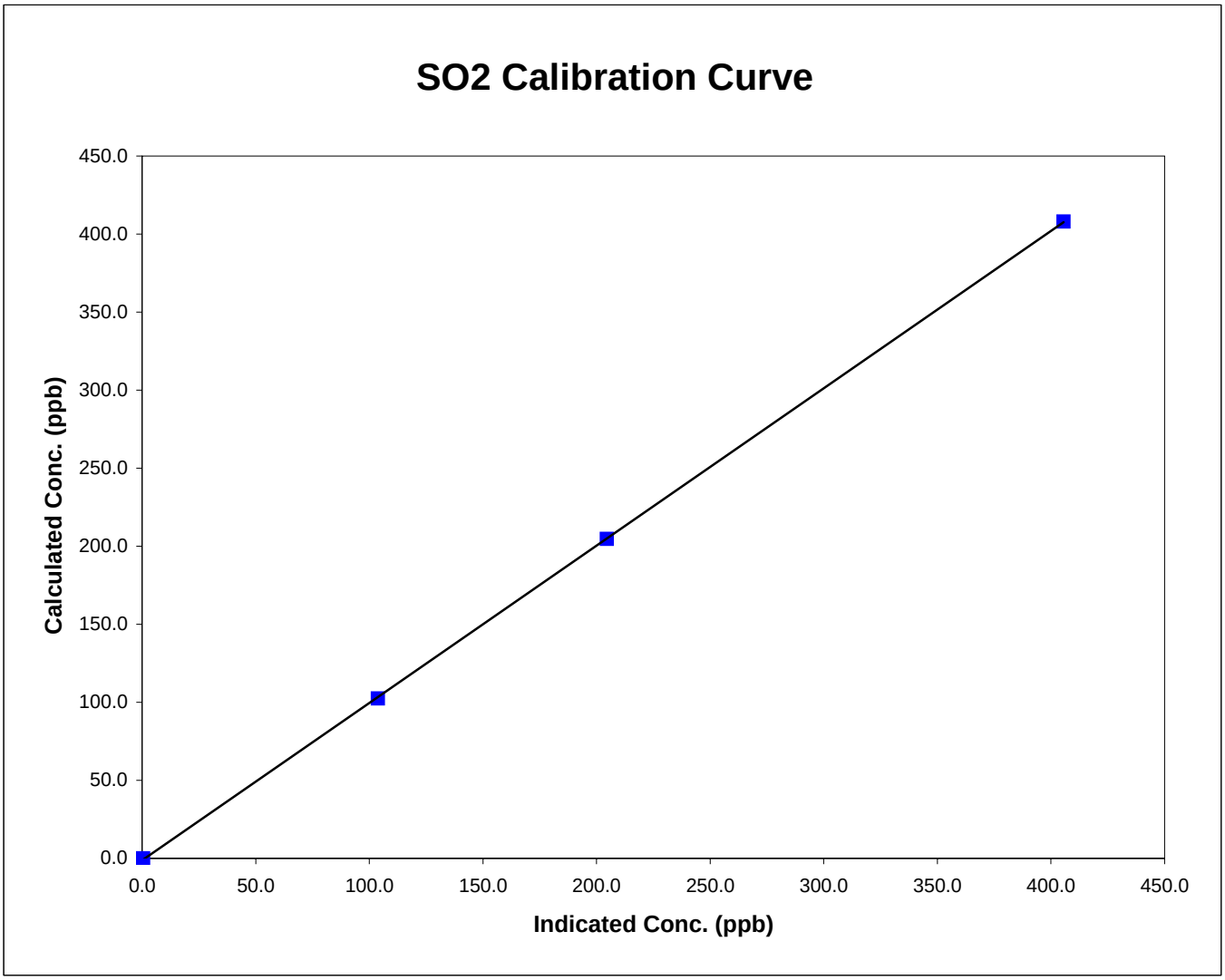
Air Monitoring Network **PASZA**

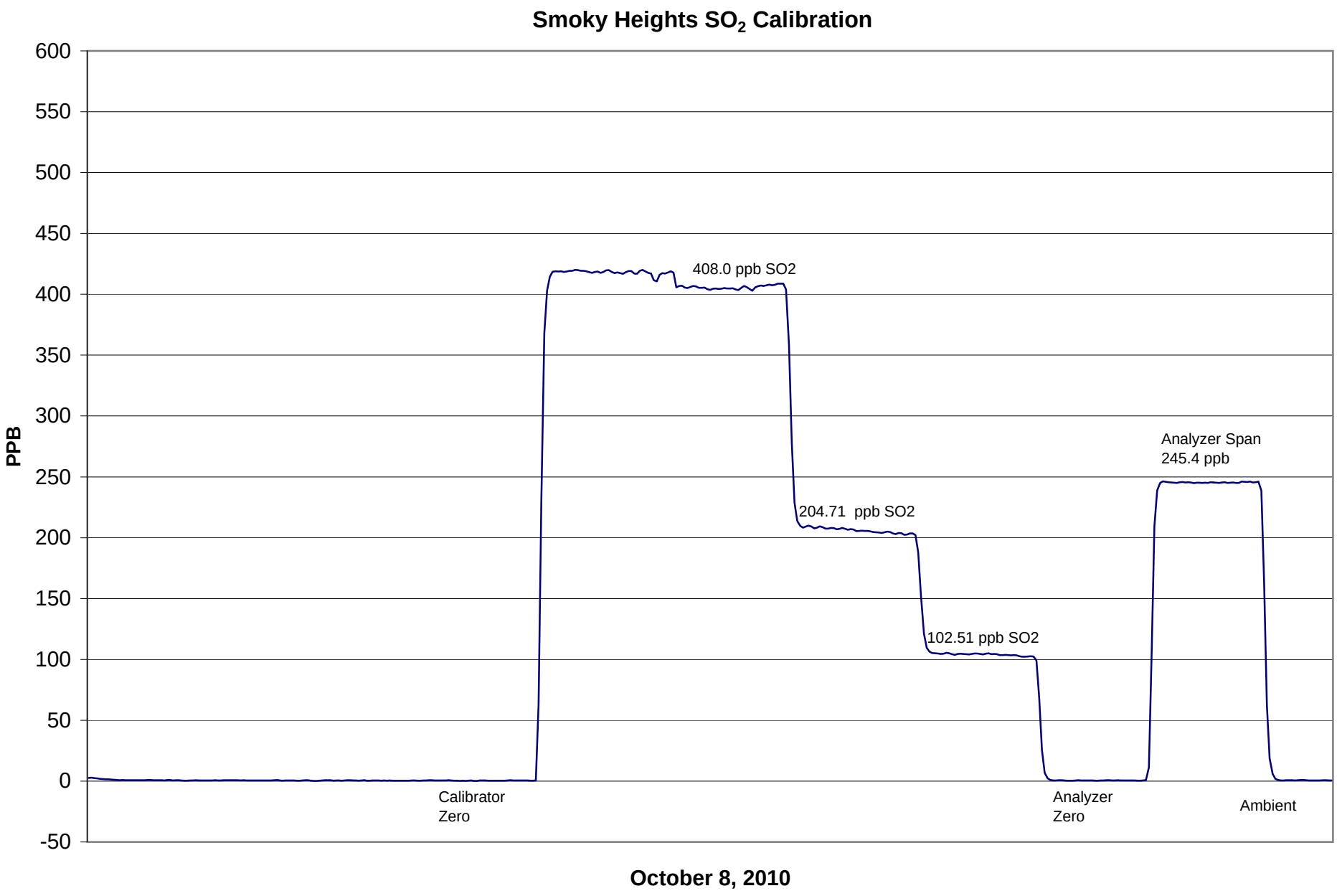
Station Information

Calibration Date	October 8, 2010	Previous Calibration	September 3, 2010
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:55	End Time (MST)	13:41
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	0.5	N/A		
408.0	405.5	1.0061	Correlation Coefficient	0.999982
204.7	204.6	1.0005		
102.5	103.8	0.9876	Slope	1.008231
			Intercept	-1.265438




Smoky Heights SO_2 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
245.4 ppb
Calibrator
Zero
Analyzer
Zero
Ambient
October 8, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

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

Start Time (MST)	8:50	End Time (MST)	11:45
Barometric Pressure	0.924 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	0.031409	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	1.056541	Calculated slope	0.997041
Calculated intercept	-0.554914	Calculated intercept	-0.004699

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	13.7	ppb	15.1	ppb
coefficient	0.995		1.068	
Lamp Voltage	764	volts	764	volts
Chamber Temp	43.8	Deg C	43.8	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	506.2	mm Hg	487.5	mm Hg
Sample Flow	0.731	ccm	0.707	ccm
Lamp Intensity	32,297	mv	32,456	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	0.2	N/A
4990	79.77	81.03	81.3	0.9964
4990	39.85	40.80	40.9	0.9982
4990	9.94	10.24	10.1	1.0158
4990	0.0	0.00	0.2	As Found Zero
4990	79.77	81.03	75.1	As Found Span
			Average Correction Factor	1.0034

Calculated value of As Found Response: 78.56 ppm Percent Change of As Found: 3.0%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.4	ppm
Auto span	40.8	ppm	44.1	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

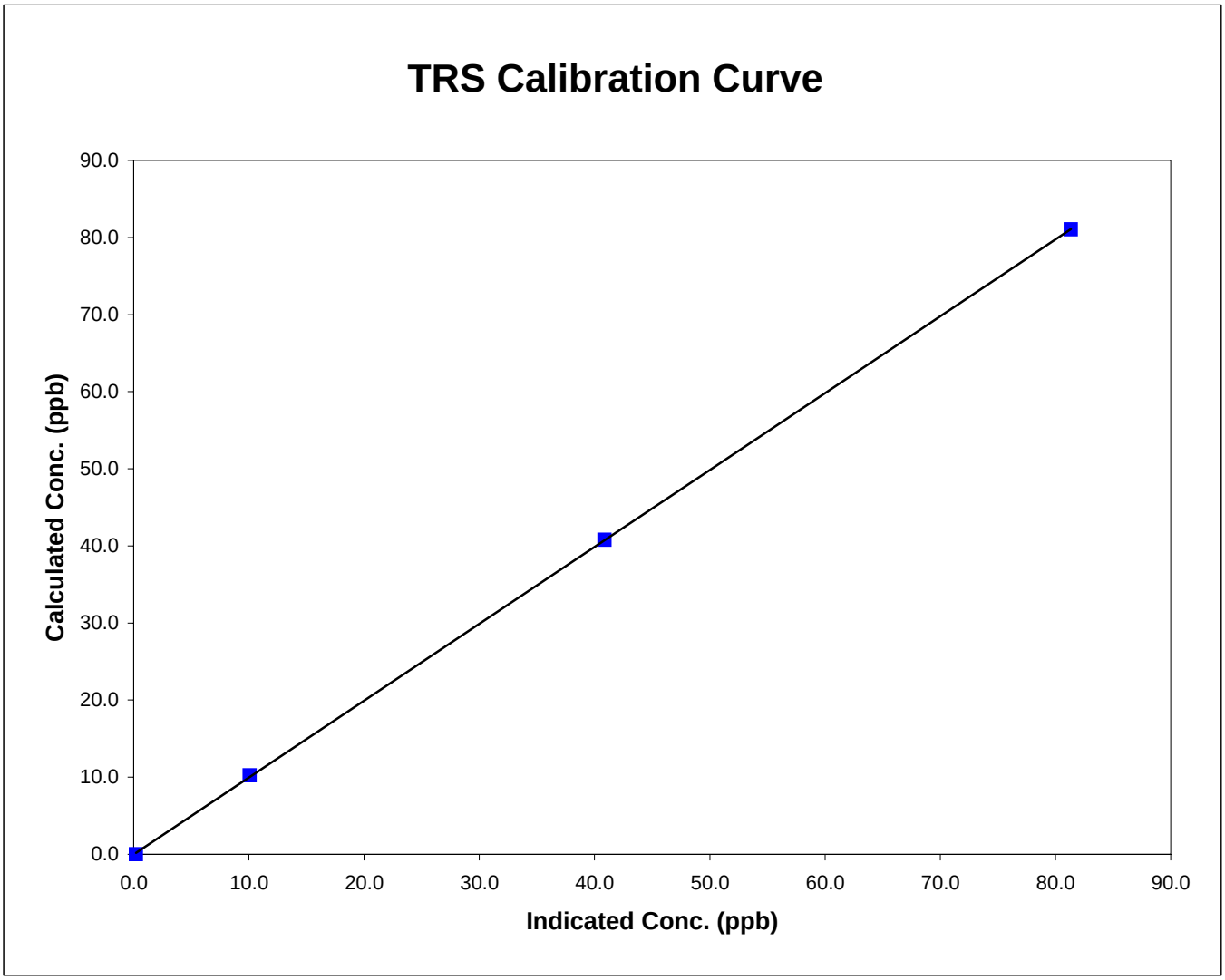
Air Monitoring Network **PASZA**

Station Information

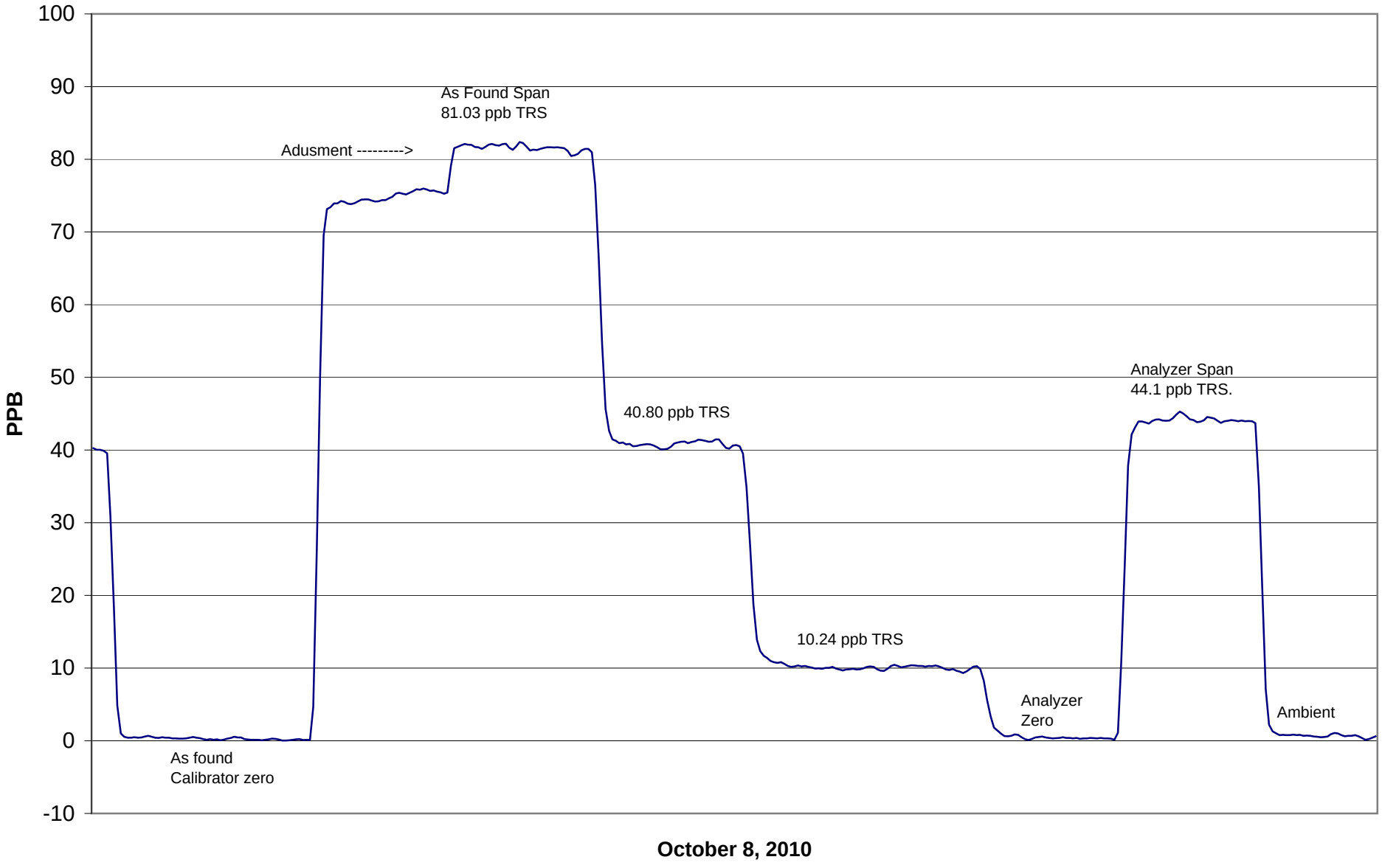
Calibration Date	October 8, 2010	Previous Calibration	September 3, 2010
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	8:50	End Time (MST)	11:45
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
81.0	81.3	0.9964	Correlation Coefficient	0.999980
40.8	40.9	0.9982		
10.2	10.1	1.0158	Slope	0.997041
			Intercept	-0.004699



Smoky Heights TRS Calibration



Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	8:15	End Time (MST)	12:40
Barometric Pressure	0.905 atm	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	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	1.004276	Calculated slope	1.009534
Calculated intercept	-0.421404	Calculated intercept	-0.521130
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.42		2.57	
Coefficient	0.872		0.924	
PMT	-812.9	V	-813.3	V
UV Lamp Voltage	1084	V	1075	V
Chamber Temp	44.9	Deg C	45.3	Deg C
Pressure	661	mm Hg	655	mm Hg
Sample Flow	0.51	LPM	0.506	LPM
Lamp Intesity	80%	%	80%	%

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	0.0	N/A
4988	39.82	79.7	79.5	1.0024
4988	19.90	40.0	39.3	1.0165
4988	9.93	20.0	21.6	0.9263
4988	0.00	0.0	0.0	As found zero
4988	39.82	79.7	74.6	As found span
			Average Correction Factor	0.9817

Calculated value of As Found Response: 74.527 ppm Percent Change of As Found: 6.5%

	before calibration		after calibration	
Auto zero	-0.3	ppb	-0.5	ppb
Auto span	59.7	ppb	58.6	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

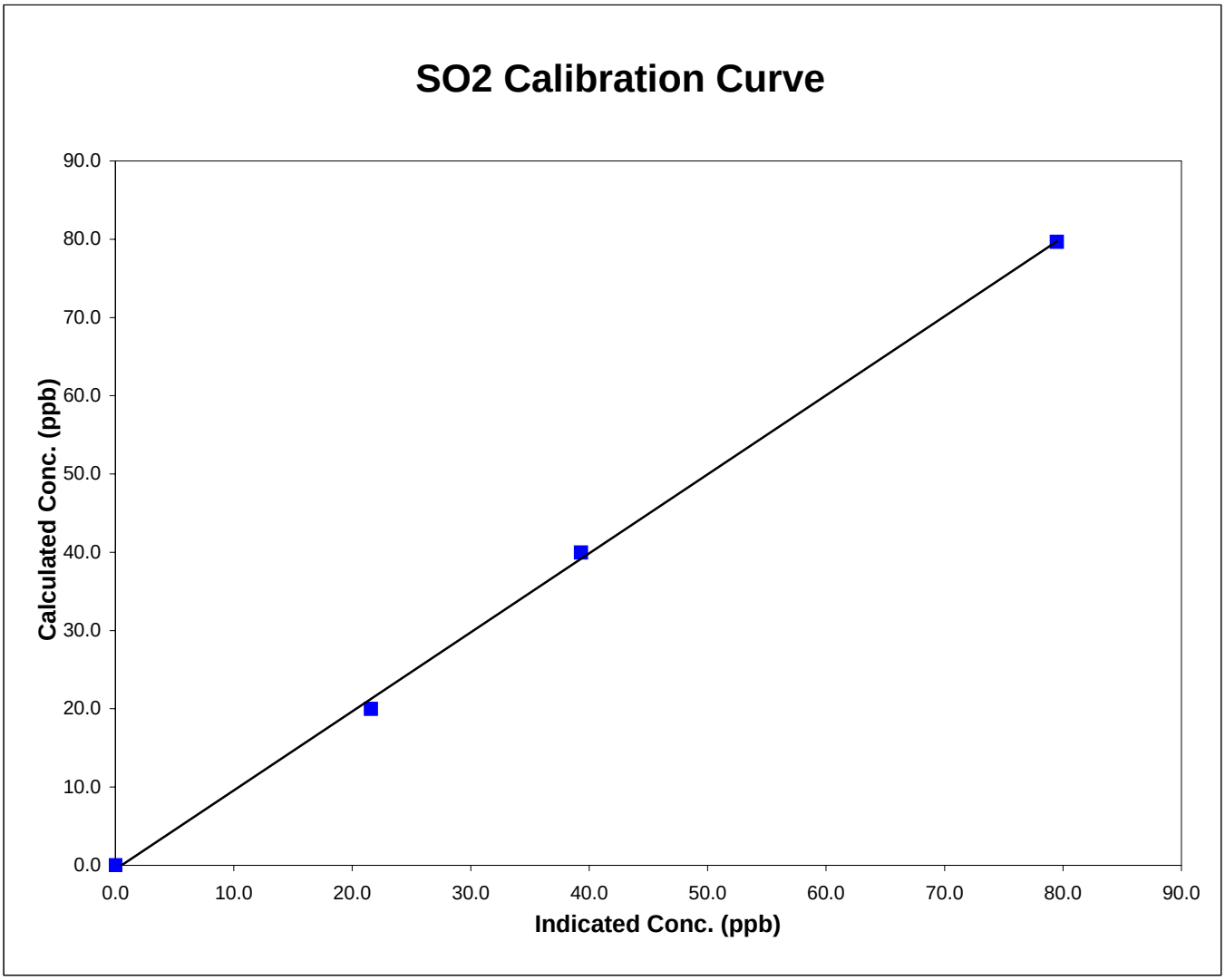
Air Monitoring Network **PASZA**

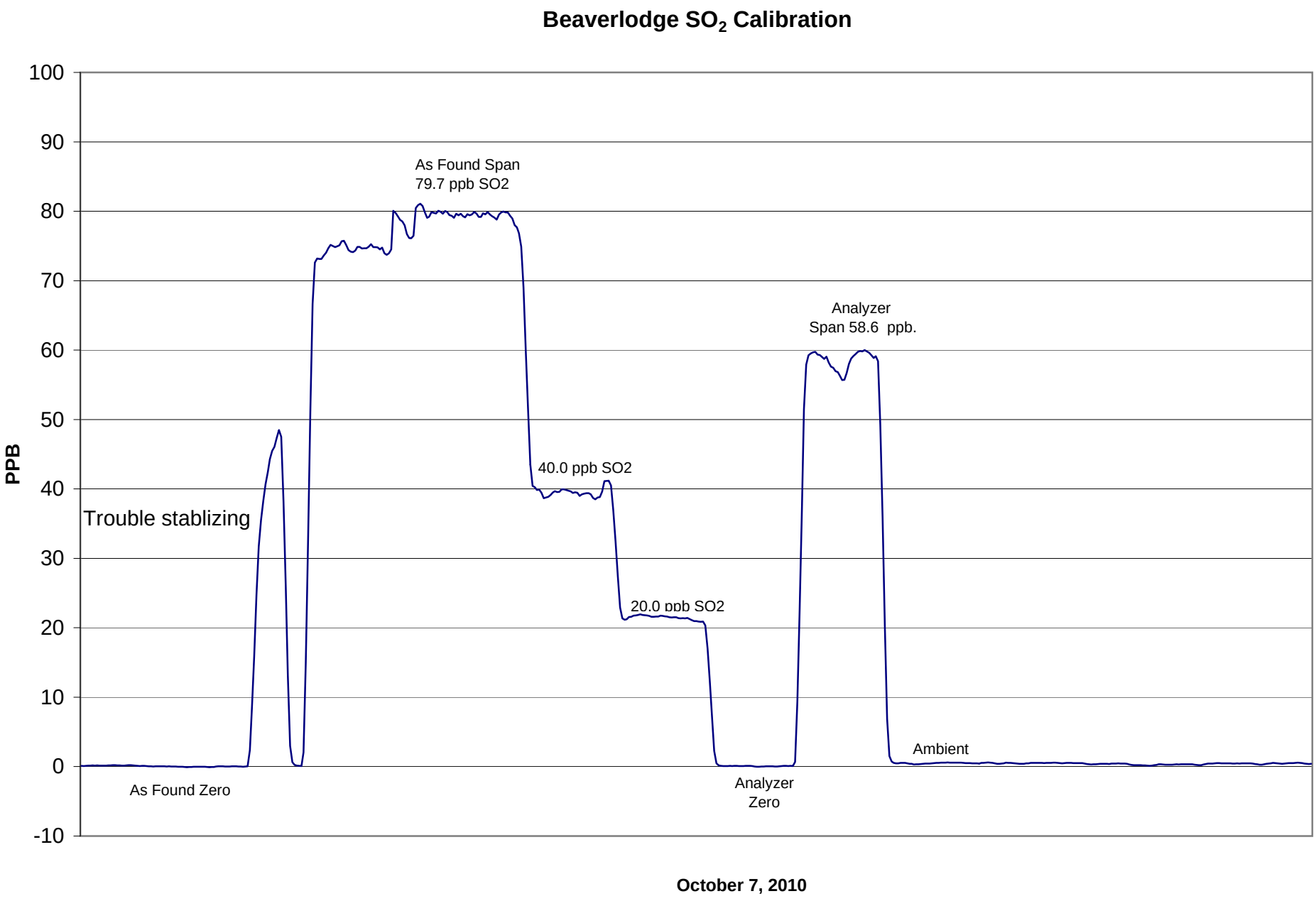
Station Information

Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:15	End Time (MST)	12:40
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	0.0	N/A		
79.7	79.5	1.0024	Correlation Coefficient	0.999269
40.0	39.3	1.0165		
20.0	21.6	0.9263	Slope	1.009534
			Intercept	-0.521130




Beaverlodge SO_2 Calibration
PPB
100
90
80
70
60
50
40
30
20
10
0
-10
As Found Span
79.7 ppb SO2
Analyzer
Span 58.6 ppb.
40.0 ppb SO2
Trouble stablizing
20.0 ppb SO2
Ambient
As Found Zero
Analyzer
Zero
October 7, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	BeaverLodge

Reason: Routine Installation Removal Other:

Start Time (MST)	8:15		End Time (MST)	16:20	
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	0.969831	1.002429	1.003231
	Data Offset	-1.964922	-2.066563	-0.977019
After	Data Slope	0.997317	0.980324	0.975697
	Data Offset	-0.129866	-3.064274	-0.203445
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	2.8	mV	2.8	mV
NOx bkgnd	3.0	mV	3.0	mV
NO coefficient	1.663		1.663	
NOx coefficient	0.986		0.986	
NO2 conv temp	326.8	Deg C	323.9	Deg C
PMT Temp	-2.8	Deg C	-2.9	Deg C
PMT Volt	-676.4	mV	-676.4	mV
R Cell Press	187.0	in Hg	190.9	in Hg
Sample Flow	0.686	ccm	0.673	ccm

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: October 7, 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	-0.1	-0.2	-0.1	N/A	N/A
1	4988	39.82	397.6	396.8	0.8	406.3	407.2	-1.3	0.9786	0.9743
2	4988	19.90	199.5	199.1	0.4	210.3	202.8	6.8	0.9488	0.9818
3	4988	9.93	99.7	99.5	0.2	106.8	103.7	2.8	0.9340	0.9598
AFZ	4988	0.00	0.0	0.0	0.0	-0.1	-0.2	-0.1	0.0000	0.0000
AFS	4988	39.84	397.8	397.0	0.8	419.0	414.4	4.2	0.9494	0.9579
							Average Correction Factor		0.9538	0.9720

As Found Concentrations: NO_X= 416.9 NO= 413.6 As Found Percent Change NO_X= 4.8% NO= 4.2%

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	-0.2	-0.2	0.0	-0.1	-0.2	-0.1	N/A	N/A	N/A	N/A
NO point	406.3	406.3	0.0	406.5	406.3	-0.2	0.9995	1.0000	N/A	N/A
300	406.3	87.1	319.2	407.5	87.1	320.2	0.9969	1.0000	0.9969	100.3%
200	406.3	185.3	221.0	407.1	185.3	221.5	0.9979	1.0000	0.9978	100.2%
100	406.3	282.6	123.7	407.2	282.6	124.6	0.9978	1.0000	0.9929	100.7%
					Average Correction Factor		0.9976	1.0000	0.9959	100.4%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	-0.1	-0.1	-0.1	ppb
Auto span	202.3	192.5	1.9	ppb	234.0	231.5	1.8	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

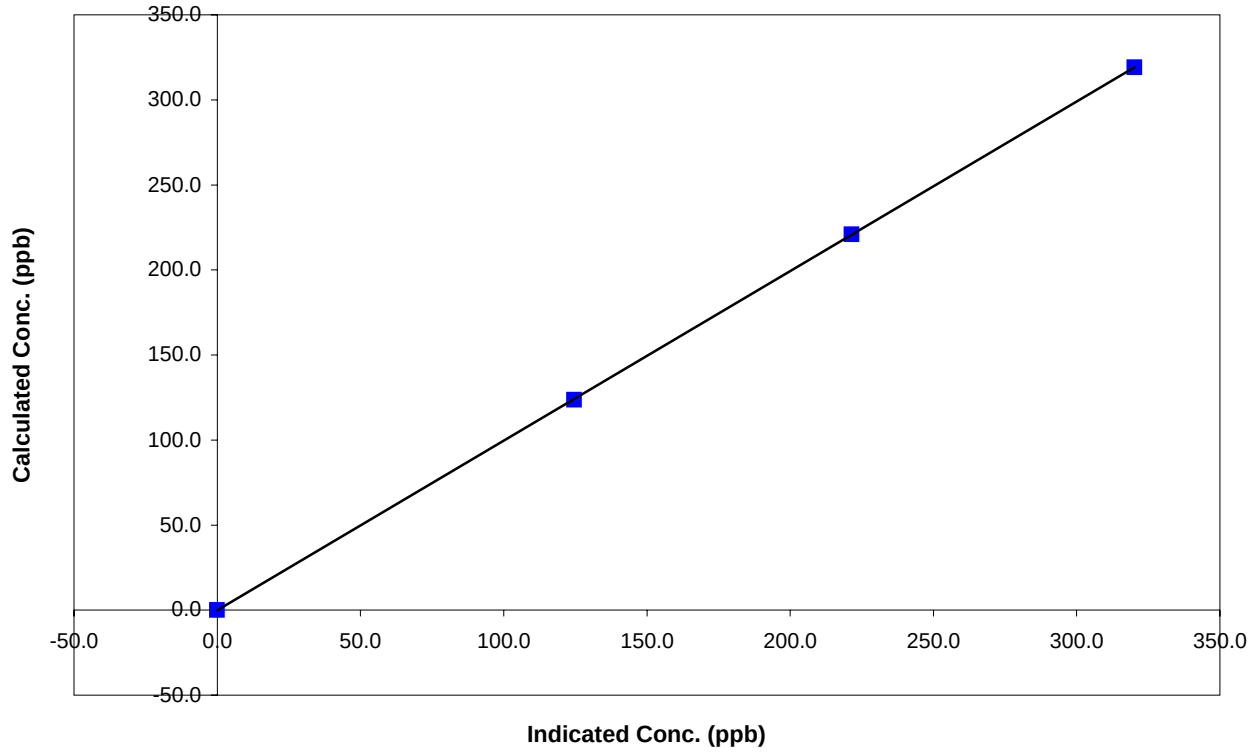
Station Information

Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:15	End Time (MST)	16:20
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		
319.2	320.2	0.9969	Correlation Coefficient	0.999995
221.0	221.5	0.9978		
123.7	124.6	0.9929	Slope	0.997317
			Intercept	-0.129866

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

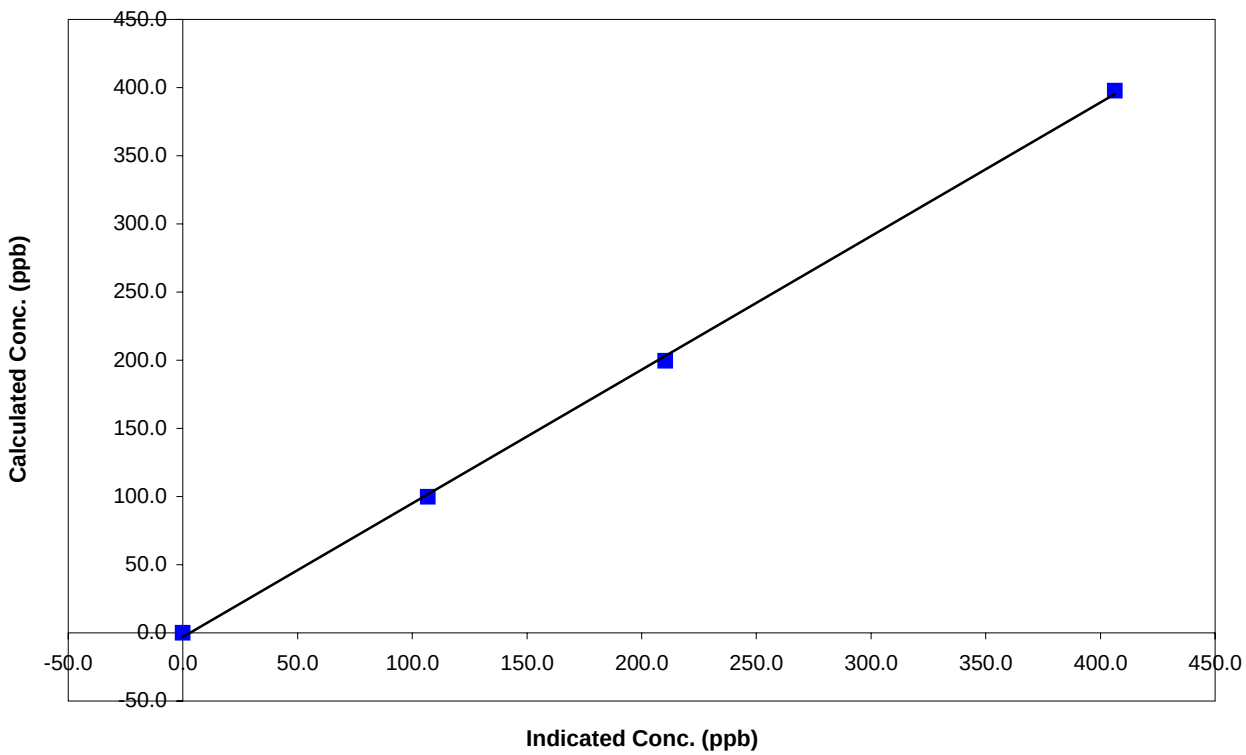
Station Information

Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:15	End Time (MST)	16:20
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		
397.6	406.3	0.9786	Correlation Coefficient	0.999635
199.5	210.3	0.9488		
99.7	106.8	0.9340	Slope	0.980324
			Intercept	-3.064274

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

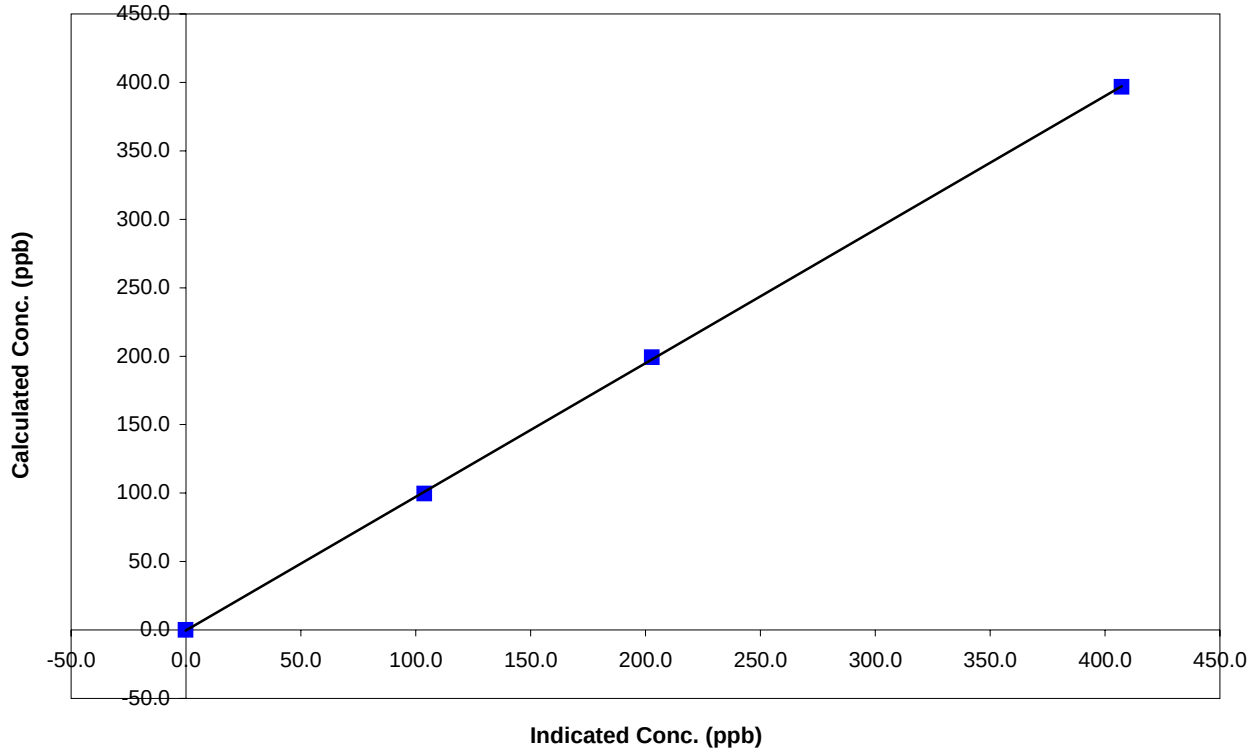
Station Information

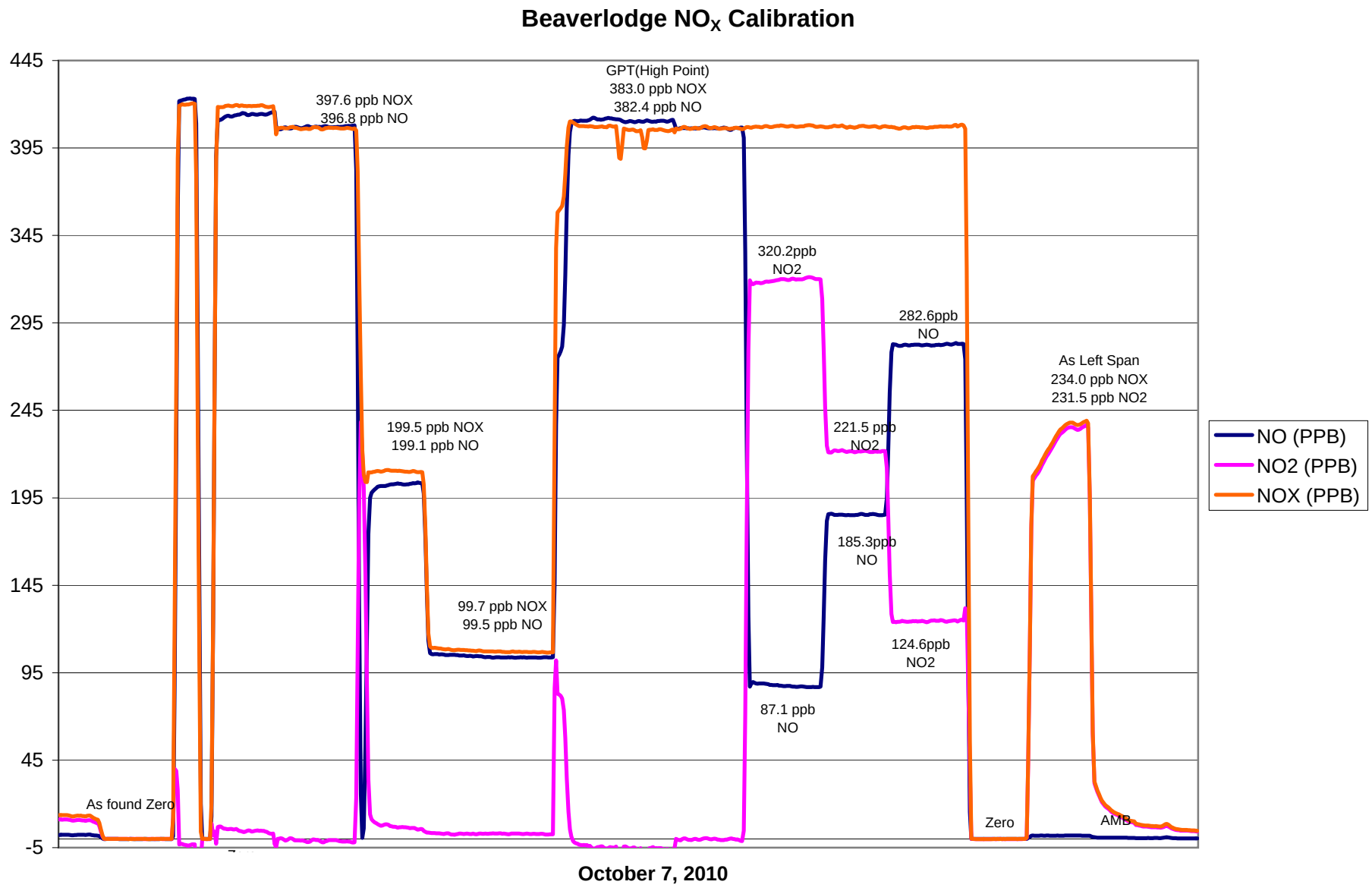
Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:15	End Time (MST)	16:20
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
396.8	407.2	0.9743	Correlation Coefficient	0.999949
199.1	202.8	0.9818		
99.5	103.7	0.9598	Slope	0.975697
			Intercept	-0.203445

NO Calibration Curve




Beaverlodge NOX Calibration
445
395
345
295
245
195
145
95
45
-5
397.6 ppb NOX
396.8 ppb NO
GPT(High Point)
383.0 ppb NOX
382.4 ppb NO
320.2ppb
NO2
282.6ppb
NO
As Left Span
234.0 ppb NOX
231.5 ppb NO2
199.5 ppb NOX
199.1 ppb NO
221.5 ppb
NO2
185.3ppb
NO
99.7 ppb NOX
99.5 ppb NO
124.6ppb
NO2
87.1 ppb
NO
As found Zero
Zero
AMB
NO (PPB)
NO2 (PPB)
NOX (PPB)
October 7, 2010

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	15:00	End Time (MST)	17:19
Barometric Pressure	0.905 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	0.998736	Calculated slope	1.033844
Calculated intercept	0.029288	Calculated intercept	-0.201956
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-1.40	ppb	-1.40	ppb
slope	1.008		1.008	
Lamp temp	56.5	mV	56.5	mV
Lamp Intensity A/B	66392/67124	mV	66140/66963	mV
Pressure	680.1	mm Hg	658.8	mm Hg
Flow A	0.708	ccm	0.688	ccm
Flow B	0.655	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	0.5	N/A
4990	0.00	319.2	309.4	1.0317
4990	0.00	221.0	213.4	1.0355
4990	0.00	123.7	119.7	1.0335
4990	0.00	0.0	0.5	As found zero
4990	0.00	319.2	309.4	As found span
			Average Correction Factor	1.0336

Calculated value of As Found Response: 308.6 ppm Percent Change of As Found: -3.3%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	114.3	ppb	125.1	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

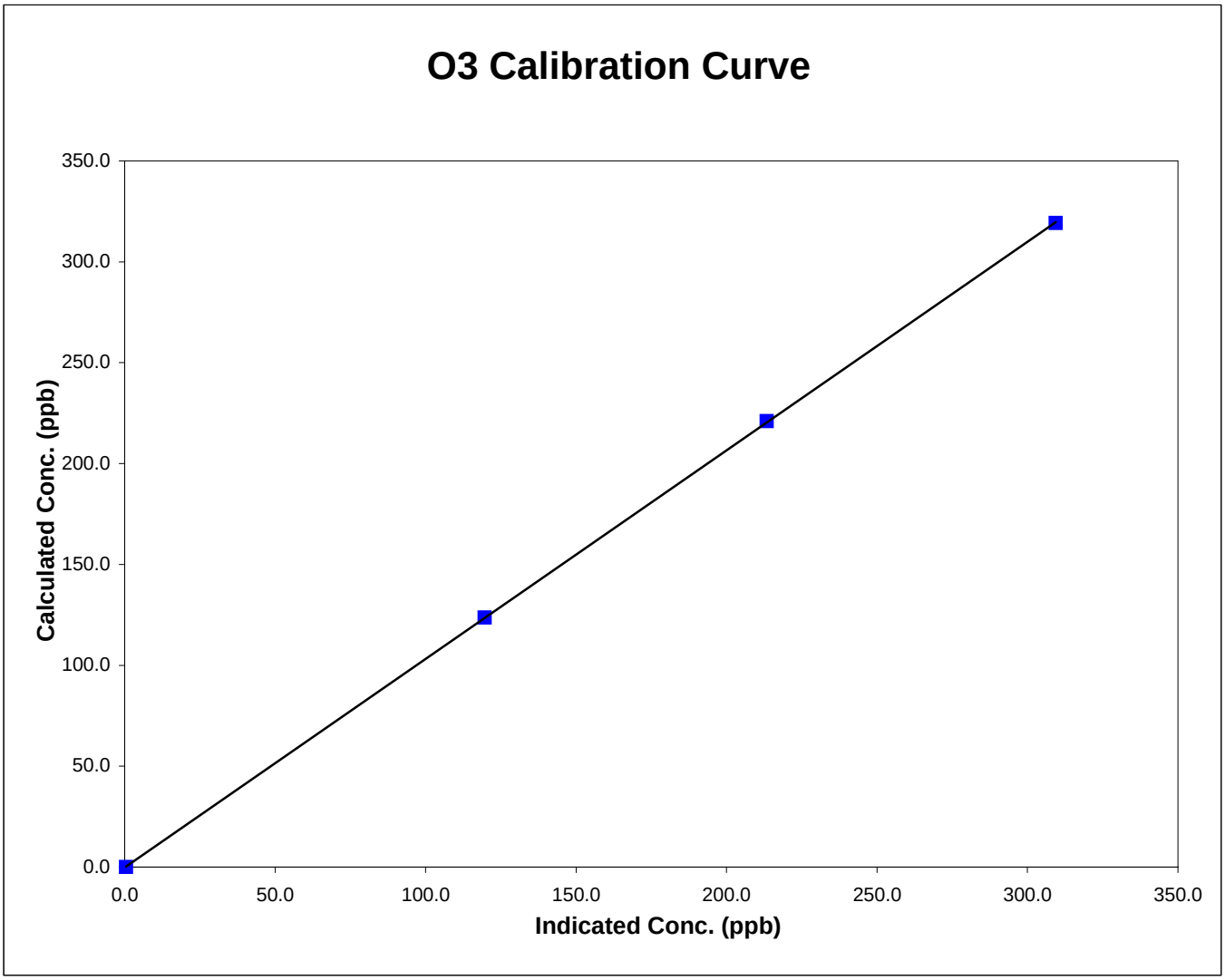
FOCUS AIR QUALITY MONITORING

Station Information

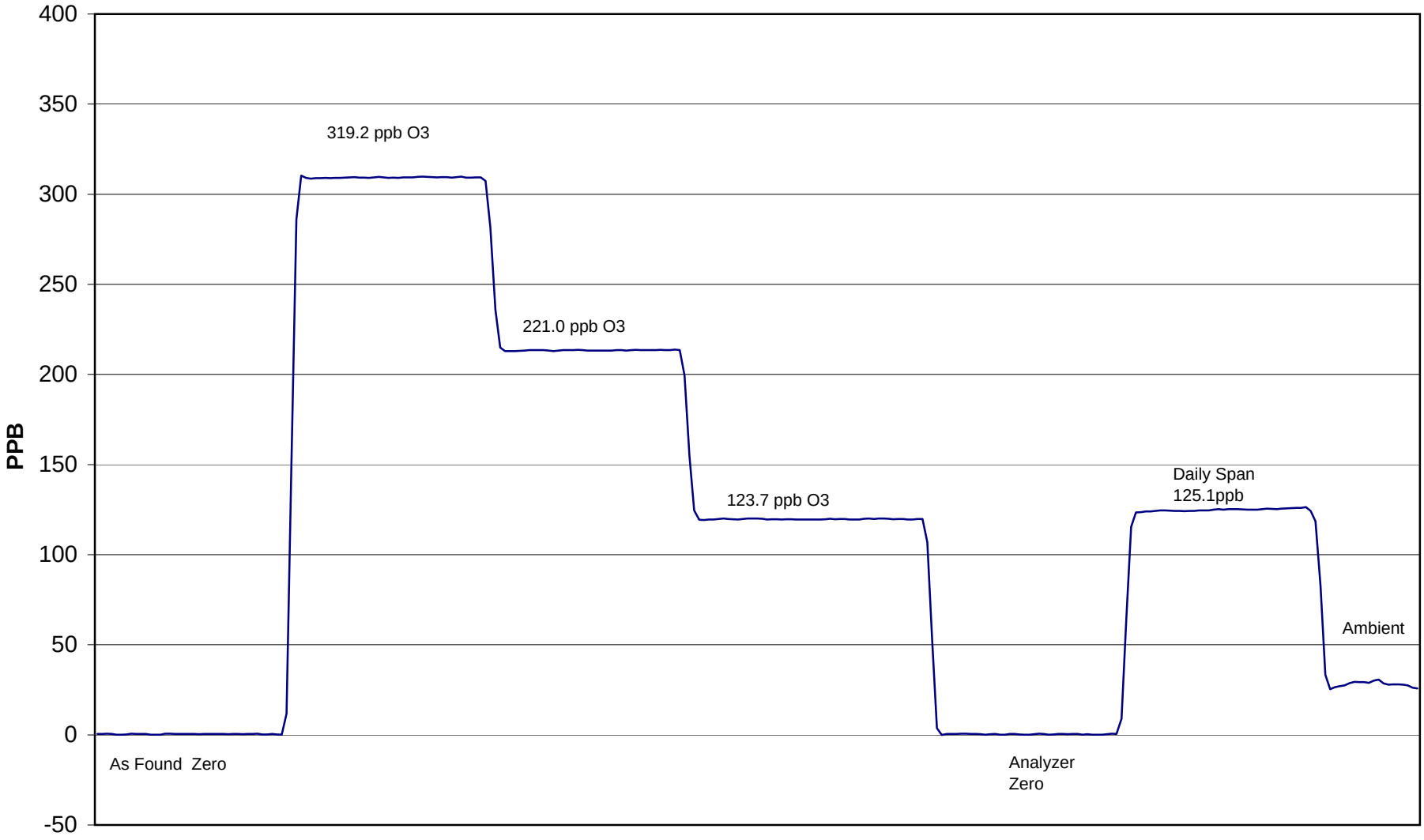
Calibration Date	October 7, 2010	Previous Calibration	September 15, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	15:00	End Time (MST)	17:19
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	NA		
319.2	309.4	1.0317	Correlation Coefficient	0.999989
221.0	213.4	1.0355		
123.7	119.7	1.0335	Slope	1.033844
			Intercept	-0.201956



Beaverlodge O_3 Calibration



October 7, 2010

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover - Bonanza
Reason: Routine	Install	Removal	Other:
Start Time (MST)	9:55	End Time (MST)	12:46
Barometric Pressure	31.70 inches Hg	Station Temperature	15.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	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	1.000989	Calculated slope	1.010659
Calculated intercept	-1.332158	Calculated intercept	-0.092093
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	9.4		9.4	
Coefficient	0.980		0.980	
UV Lamp Voltage	794	V	794	V
Chamber Temp	44.4	C	44.3	C
Perm Gas Temp	45	C	45	C
Pressure	674.3	mm Hg	669.3	mm Hg
Sample Flow	0.488	LPM	0.486	LPM
Lamp Intesity	47464	Hz	47125	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	-0.2	N/A
4991	39.84	407.8	403.6	1.0105
4991	19.90	204.5	202.3	1.0110
4991	9.93	102.3	101.7	1.0051
4991	0.00	0.0	-0.2	As found zero
4991	39.84	407.8	403.6	As found span
			Average Correction Factor	1.0089

Calculated value of As Found Response: 402.833 ppm Percent Change of As Found: 1.2%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	256.9	ppm	259.6	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

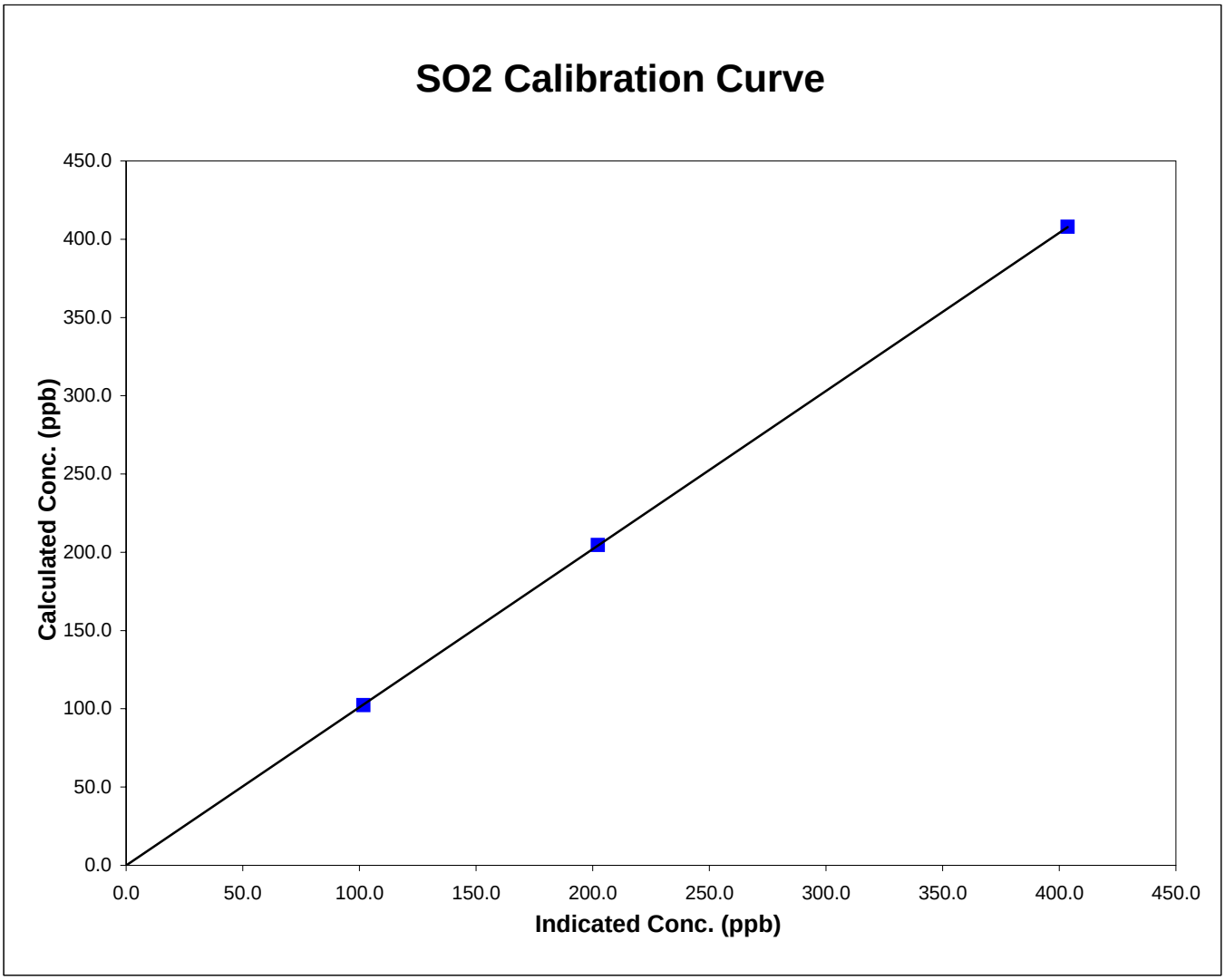
FOCUS AIR QUALITY MONITORING

Station Information

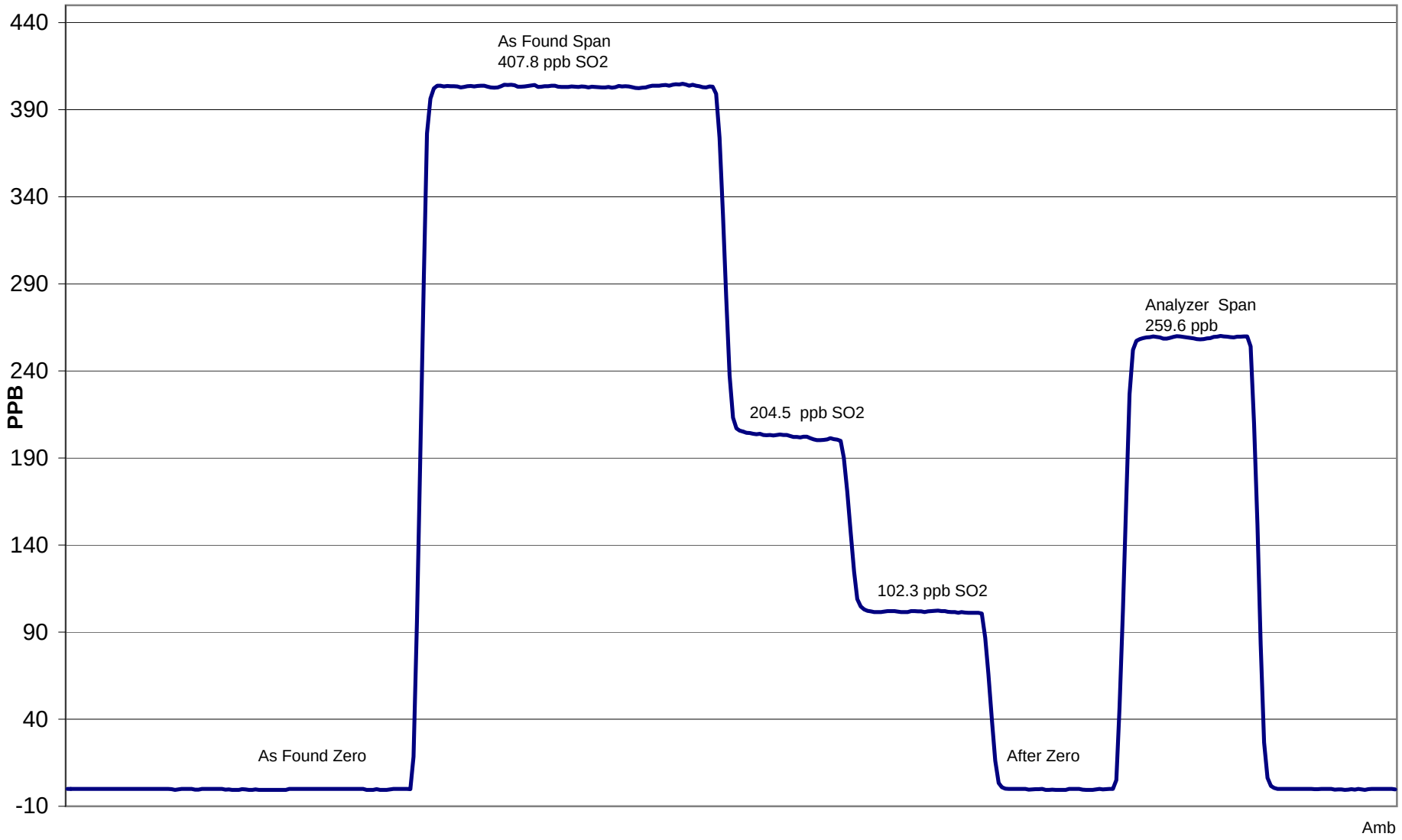
Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover - Bonanza
Start Time (MST)	9:55	End Time (MST)	12:46
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
407.8	403.6	1.0105	Correlation Coefficient	0.999996
204.5	202.3	1.0110		
102.3	101.7	1.0051	Slope	1.010659
			Intercept	-0.092093



Bonanza SO_2 Calibration



October 14, 2010

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover-Bonanza
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	14:00	End Time (MST)	17:48
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	1.017123	Calculated slope	0.981824
Calculated intercept	0.887626	Calculated intercept	1.189224
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	10.8	ppb	11.2	ppb
Coefficient	1.397		1.280	
Lamp Voltage	788	V	788	V
Chamber Temp	43.8	C	43.8	C
Perm gas Temp	45.00	C	45.00	C
Pressure	661.2	mmHg	659.1	mmHg
Sample Flow	.440	ccm	.436	ccm
Lamp Intensity	39244.0	Hz	38747.0	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	-0.9	N/A
4991	79.74	81.0	81.5	0.9937
4991	39.80	40.7	39.9	1.0223
4991	9.93	10.2	9.1	1.1215
4991	0.00	0.0	-0.9	As found zero
4991	79.74	81.0	76.2	As found span
			Average Correction Factor	1.0459

Calculated value of As Found Response: 79.29 ppm Percent Change of As Found: 2.1%

	before calibration		after calibration	
Auto zero	-0.6	ppm	0.6	ppm
Auto span	64.8	ppm	67.2	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

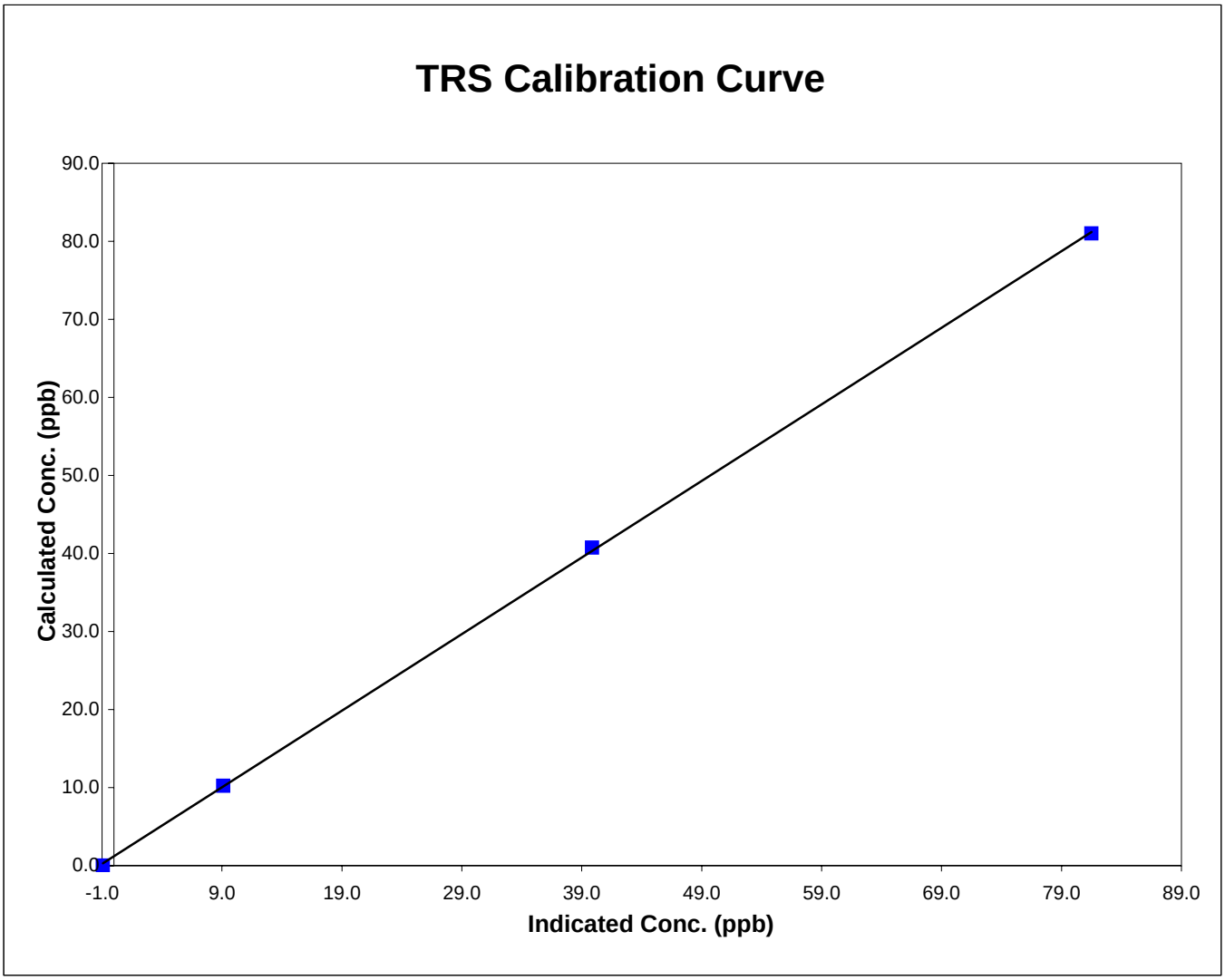
Air Monitoring Network **PASZA**

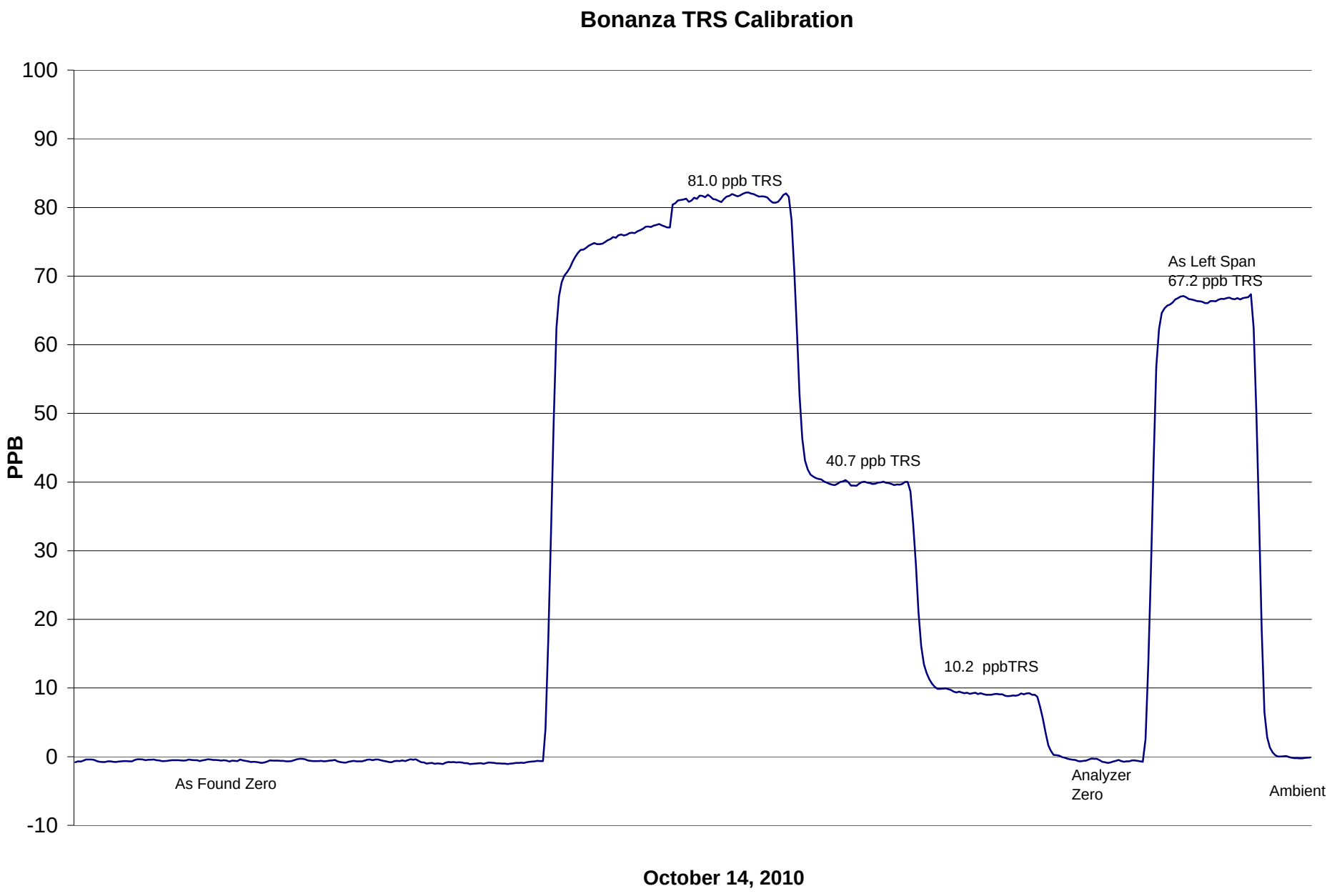
Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover-Bonanza
Start Time (MST)	14:00	End Time (MST)	17:48
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	-0.9	N/A		
81.0	81.5	0.9937	Correlation Coefficient	0.999919
40.7	39.9	1.0223		
10.2	9.1	1.1215	Slope	0.981824
			Intercept	1.189224




Bonanza TRS Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
81.0 ppb TRS
40.7 ppb TRS
10.2 ppbTRS
As Left Span
67.2 ppb TRS
As Found Zero
Analyzer
Zero
Ambient
October 14, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover Bonanza

Reason: Routine Installation Removal Other:

Start Time (MST)	9:55		End Time (MST)	15:14	
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	0.995269	1.006883	1.011265
	Data Offset	1.096609	-2.962987	-3.479726
After	Data Slope	0.991632	1.001518	1.007004
	Data Offset	1.274525	-1.849806	-2.673151
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	0701120011

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	5.1	mV	5.5	mV
NOx bkgnd	5.5	mV	5.9	mV
NO coefficient	0.956		1.041	
NOx coefficient	0.997		0.998	
NO2 conv temp	325.3	Deg C	323.4	Deg C
PMT Temp	-2.7	Deg C	-3.2	Deg C
PMT Volt	-829.5	mV	-829.9	mV
R Cell Press	176.0	in Hg	176.3	in Hg

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: October 14, 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	0.4	-1.9	N/A	N/A
1	4989	39.84	402.5	402.5	0.0	402.5	401.1	0.1	0.9999	1.0033
2	4989	19.91	201.9	201.9	0.0	204.8	204.3	-1.3	0.9859	0.9882
3	4989	9.96	101.2	101.2	0.0	104.9	105.5	-1.5	0.9646	0.9596
AFZ	4989	0.00	0.0	0.0	0.0	-0.3	0.4	-1.2	0.0000	0.0000
AFS	4989	39.85	402.6	402.6	0.0	371.1	369.8	-1.5	1.0848	1.0886
							Average Correction Factor		0.9835	0.9837

As Found Concentrations: NO_X= 368.4 NO= 365.9 As Found Percent Change NO_X= -8.5% NO= -9.1%

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	0.4	0.4	0.0	-0.3	0.4	-1.9	N/A	N/A	N/A	N/A
NO point	399.3	399.3	0.0	401.3	399.3	-0.9	0.9949	1.0000	N/A	N/A
300	399.3	94.8	304.4	402.0	94.8	305.3	0.9932	1.0000	0.9969	100.3%
200	399.3	192.6	206.7	402.1	192.6	207.1	0.9929	1.0000	0.9977	100.2%
100	399.3	288.0	111.3	402.5	288.0	111.9	0.9919	1.0000	0.9948	100.5%
					Average Correction Factor		0.9927	1.0000	0.9965	100.4%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.4	-0.9	0.7	ppb	-0.2	-1.2	0.5	ppb
Auto span	275.6	274.9	2.9	ppb	306.3	301.6	3.0	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

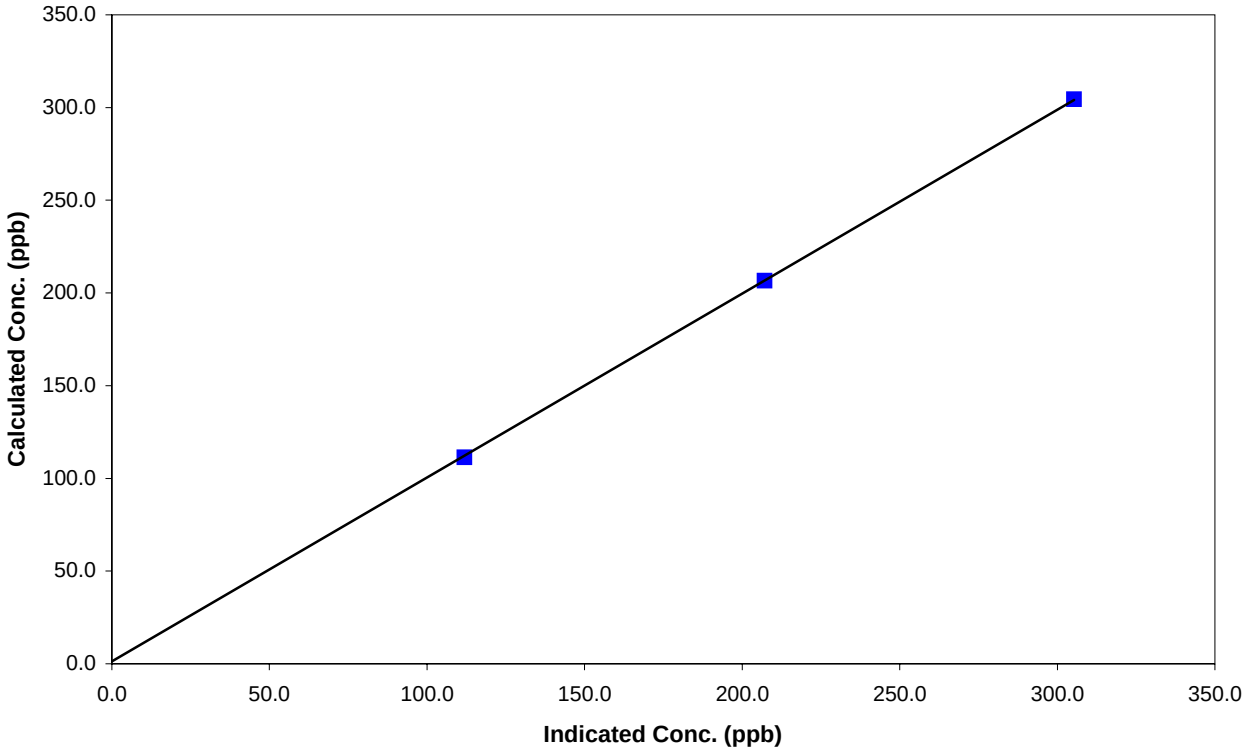
Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:55	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.9	N/A		
304.4	305.3	0.9969	Correlation Coefficient	0.999974
206.7	207.1	0.9977		
111.3	111.9	0.9948	Slope	0.991632
			Intercept	1.274525

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

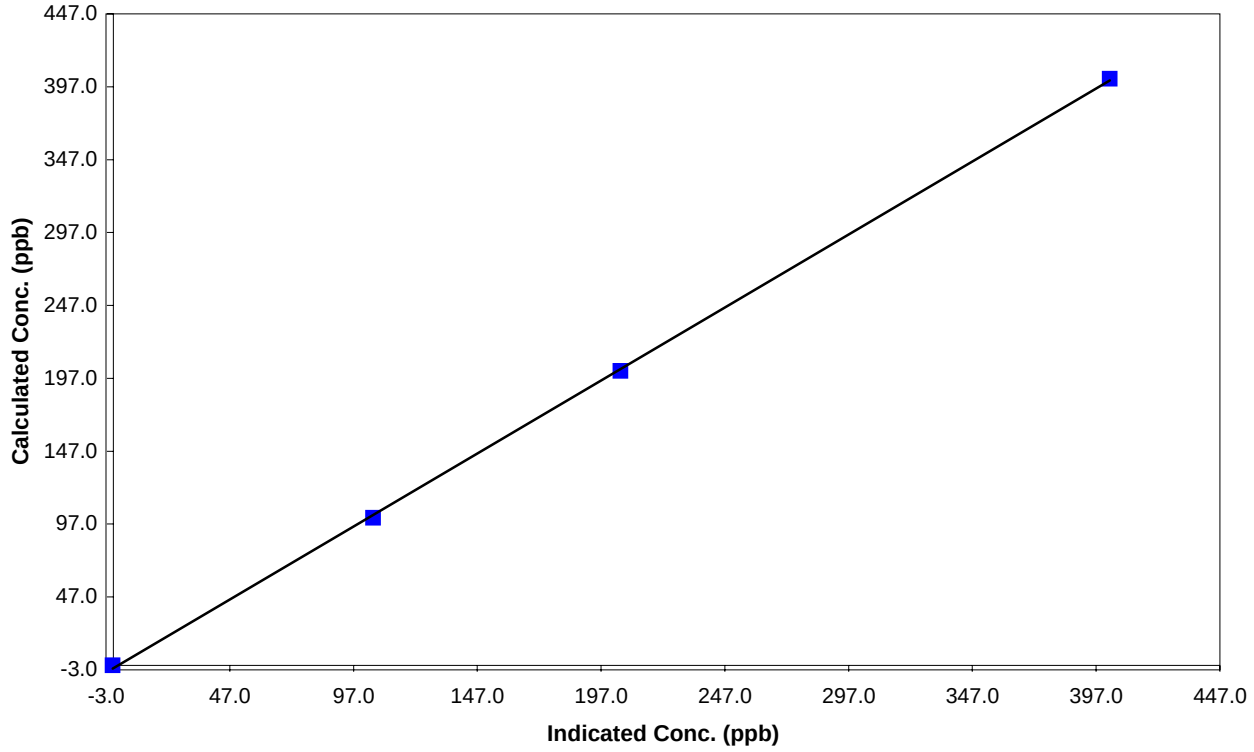
Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:55	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
402.5	402.5	0.9999	Correlation Coefficient	0.999865
201.9	204.8	0.9859		
101.2	104.9	0.9646	Slope	1.001518
			Intercept	-1.849806

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

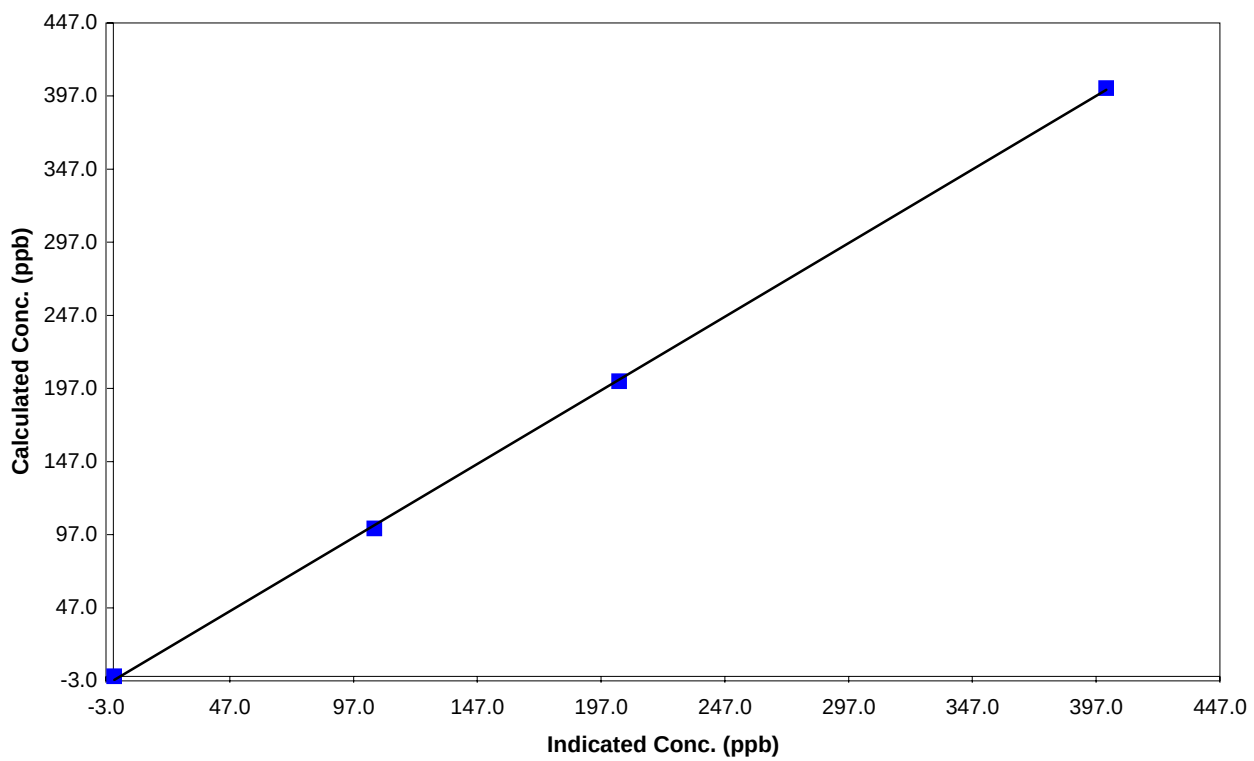
Station Information

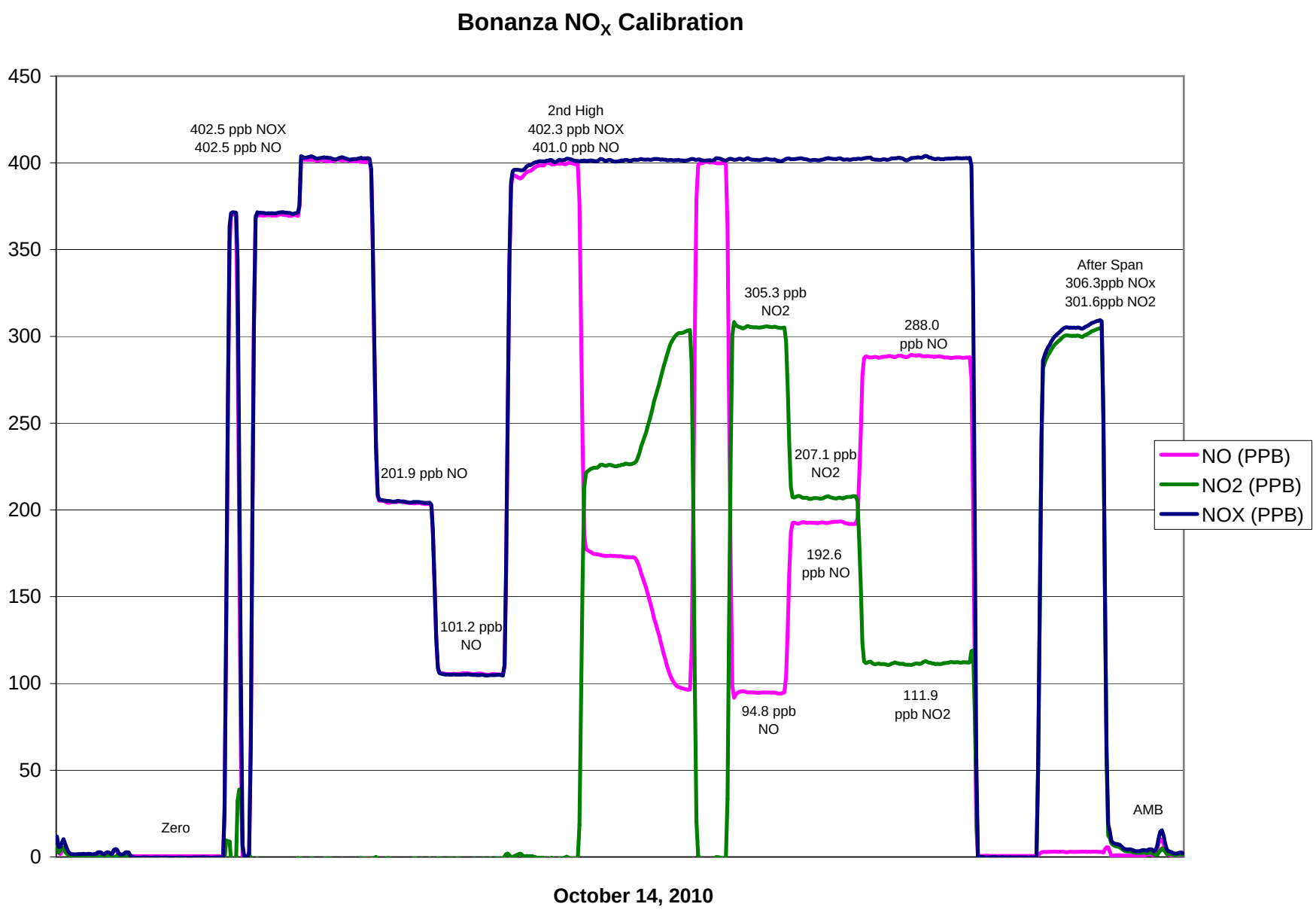
Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:55	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A		
402.5	401.1	1.0033	Correlation Coefficient	0.999847
201.9	204.3	0.9882		
101.2	105.5	0.9596	Slope	1.007004
			Intercept	-2.673151

NO Calibration Curve




Bonanza NOX Calibration
450
400
350
300
250
200
150
100
50
0
402.5 ppb NOX
402.5 ppb NO
2nd High
402.3 ppb NOX
401.0 ppb NO
305.3 ppb
NO2
288.0
ppb NO
After Span
306.3ppb NOx
301.6ppb NO2
207.1 ppb
NO2
201.9 ppb NO
192.6
ppb NO
101.2 ppb
NO
94.8 ppb
NO
111.9
ppb NO2
Zero
AMB
NO (PPB)
NO2 (PPB)
NOX (PPB)
October 14, 2010

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	12:00	Station Location	Rover - Bonanza
Reason: Routine	Install	Removal remove	Other:
Start Time (MST)	13:40	End Time (MST)	16:18
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	0.990502	Calculated slope	0.996517
Calculated intercept	-0.557857	Calculated intercept	0.029500
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-13.7	ppb	-13.8	ppb
Span	1.460		1.460	
Cell A intensity	74504	Hz	74599	Hz
Cell B intensity	91478	Hz	91688	Hz
Pressure	696.50	in Hg	694.80	in Hg
CellA Flow	0.586	ccm	0.718	ccm
Cell B Flow	0.711	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	-1.1	N/A
4990	0.30	304.4	304.6	0.9994
4990	0.20	206.7	207.9	0.9943
4990	0.10	111.3	113.0	0.9845
4990	0.00	0.0	-1.1	As found zero
4990	0.30	304.4	304.6	As found span
			Average Correction Factor	0.9927

Calculated value of As Found Response: 313.7 ppm Percent Change of As Found: 3.1%

	before calibration		after calibration	
Auto zero	2.1	ppb	-0.9	ppb
Auto span	297.1	ppb	307.8	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

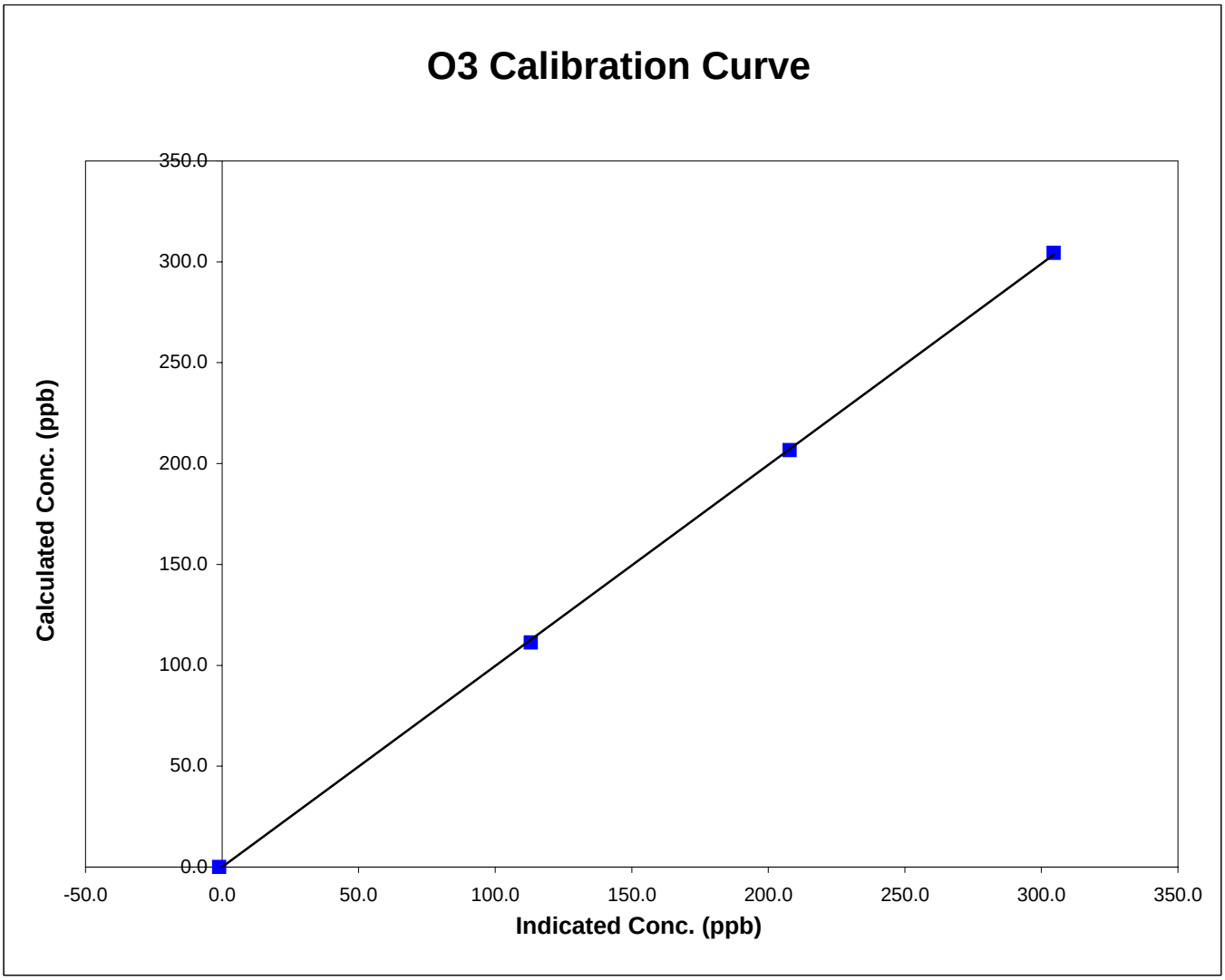
Air Monitoring Network **PASZA**

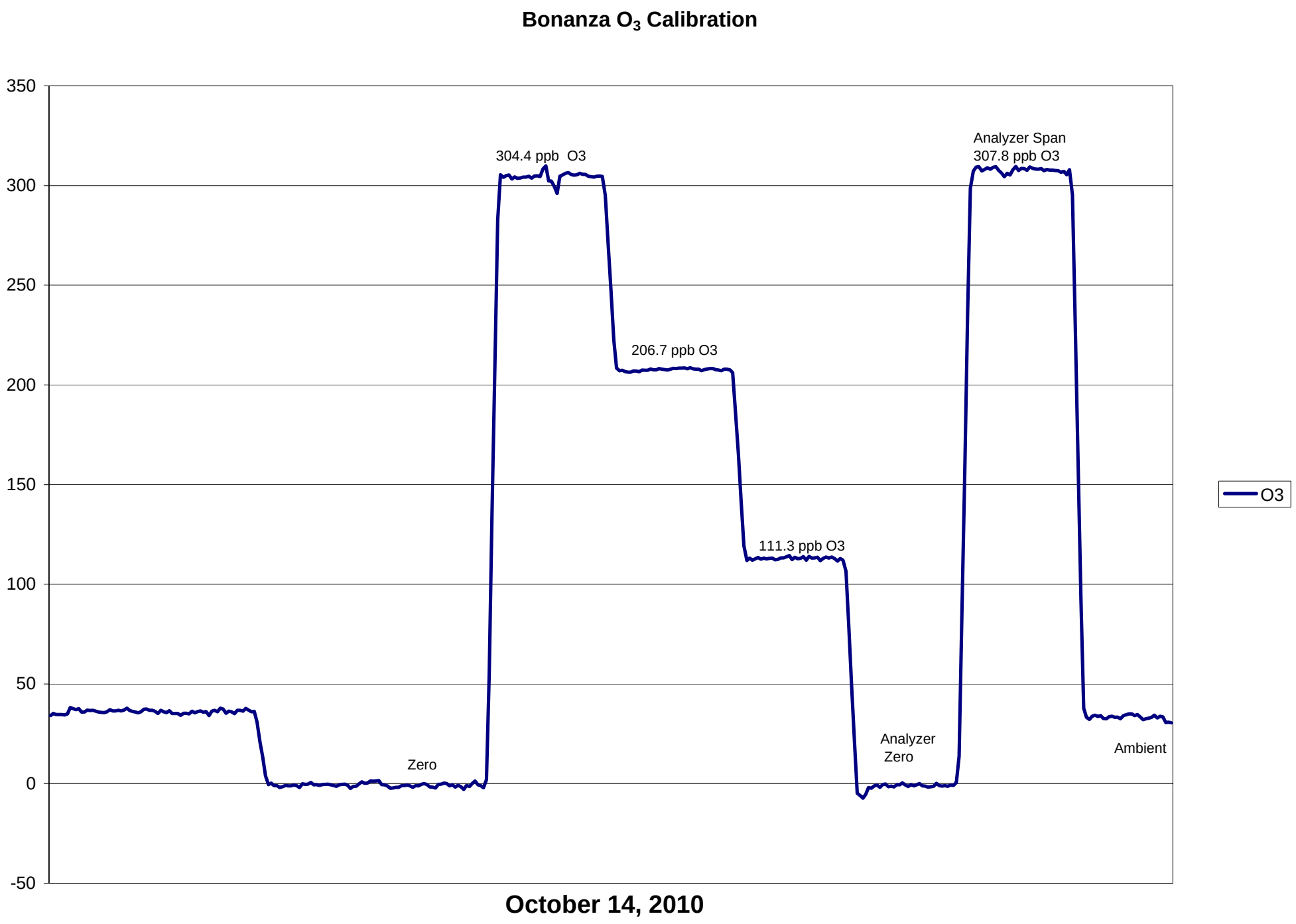
Station Information

Calibration Date	October 14, 2010	Previous Calibration	September 2, 2010
Station Number	0.5	Station Location	Rover - Bonanza
Start Time (MST)	13:40	End Time (MST)	16:18
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	-1.1	NA		
304.4	304.6	0.9994	Correlation Coefficient	0.999922
206.7	207.9	0.9943		
111.3	113.0	0.9845	Slope	0.996517
			Intercept	0.029500




Bonanza O_3 Calibration
350
300
250
200
150
100
50
0
-50
304.4 ppb O3
Analyzer Span
307.8 ppb O3
206.7 ppb O3
111.3 ppb O3
Zero
Analyzer
Zero
Ambient
O3
October 14, 2010

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 19, 2010	Previous Calibration	September 7, 2010
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	10:00	End Time (MST)	12:53
Barometric Pressure	702.00 mm	Station Temperature	14.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	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	1.009661	Calculated slope	1.022552
Calculated intercept	-2.980186	Calculated intercept	-0.795289
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	25		25	
Coefficient	0.851		0.851	
UV Lamp Voltage	938	LPM	942	LPM
Chamber Temp	44.1	V	44.1	V
Perm Gas Temp	35	C	35	C
Pressure	611.8	in Hg	613.5	in Hg
Sample Flow	0.469	LPM	0.469	LPM
Lamp Intensity	48474	Hz	49149	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	0.5	N/A
4989	39.85	408.1	400.1	1.0200
4989	19.89	204.5	199.8	1.0237
4989	9.94	102.4	102.0	1.0040
4989	0.00	0.0	0.5	As found zero
4989	39.88	408.4	400.1	As found span
			Average Correction Factor	1.0159

Calculated value of As Found Response: 400.503 ppm Percent Change of As Found: 1.9%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	155.5	ppm	155.7	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

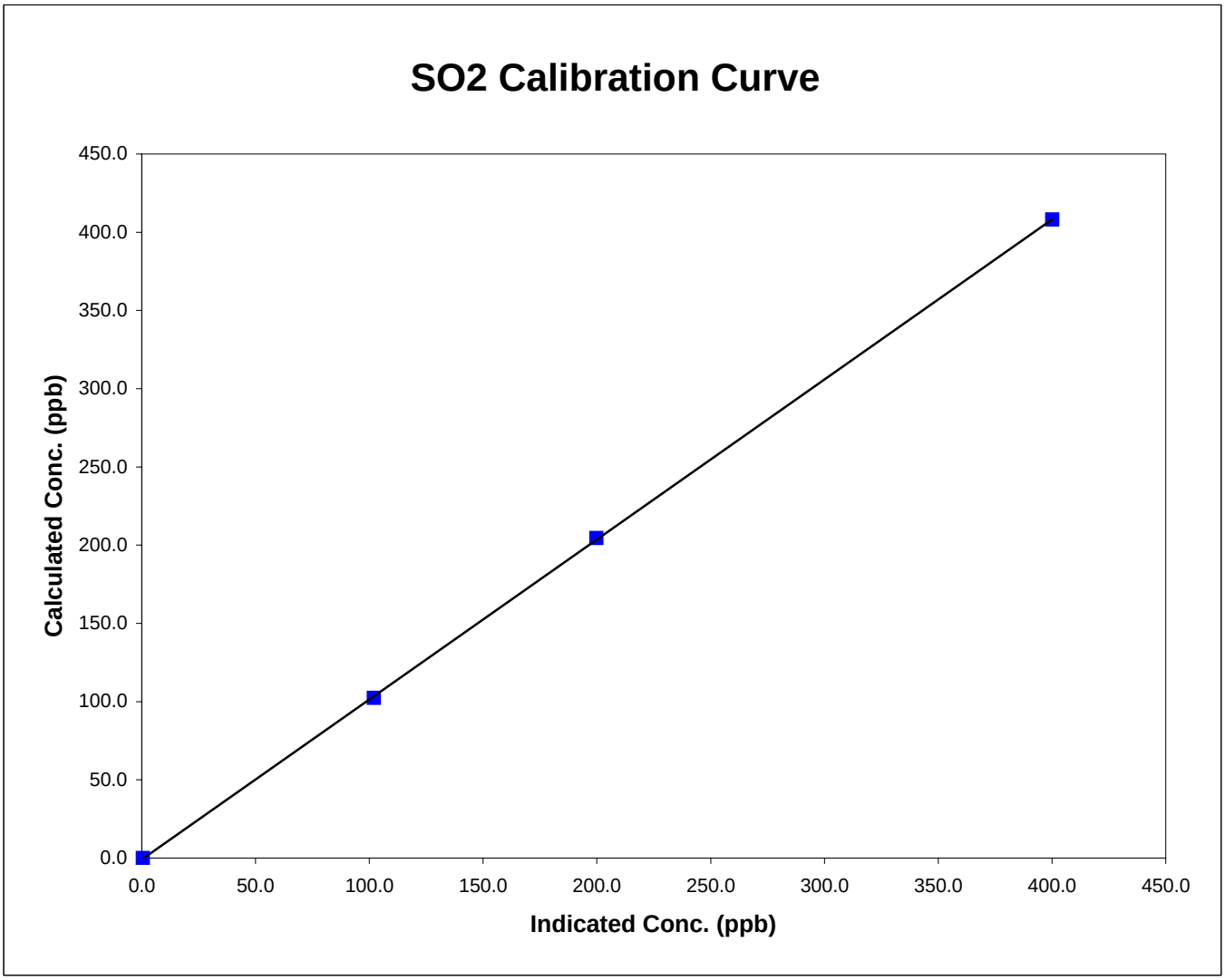
Air Monitoring Network **PASZA**

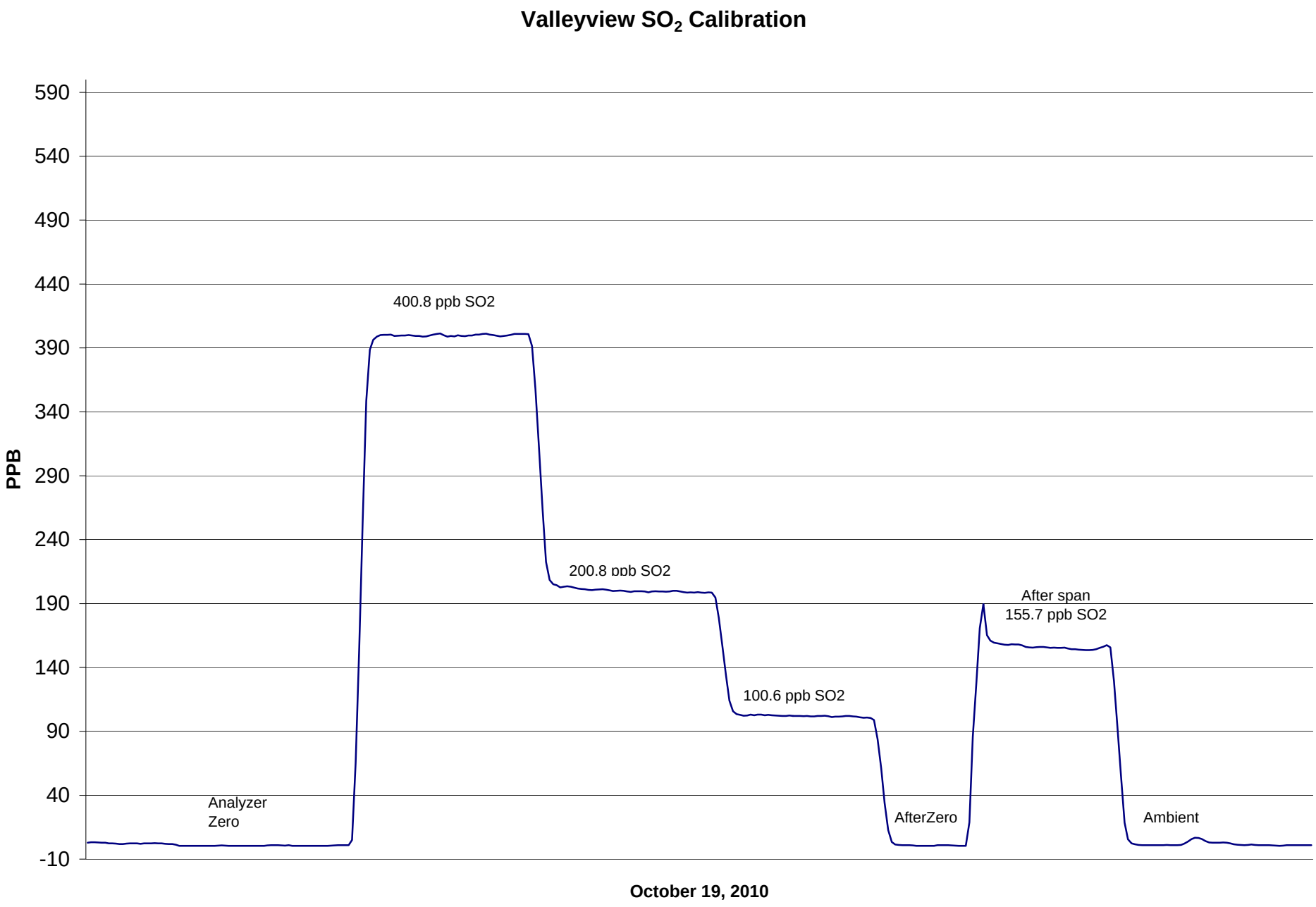
Station Information

Calibration Date	October 19, 2010	Previous Calibration	September 7, 2010
Station Number	6	Station Location	Valleyview
Start Time (MST)	10:00	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	0.5	N/A		
408.1	400.1	1.0200	Correlation Coefficient	0.999974
204.5	199.8	1.0237		
102.4	102.0	1.0040	Slope	1.022552
			Intercept	-0.795289




Valleyview SO_2 Calibration
590
540
490
440
390
340
290
240
190
140
90
40
-10
PPB
400.8 ppb SO2
200.8 ppb SO2
100.6 ppb SO2
After span
155.7 ppb SO2
Analyzer
Zero
AfterZero
Ambient
October 19, 2010

Calibration Report

Parameter **H2S**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	October 19, 2010	Previous Calibration	September 7, 2010
Station Number	5	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:50	End Time (MST)	14:42
Barometric Pressure	702.00 mm	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	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	1.015884	Calculated slope	1.029825
Calculated intercept	-0.379369	Calculated intercept	-0.647700
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	4.7	ppb	4.7	ppb
Coefficient	1.056		1.056	
Lamp Voltage	783	V	785	V
Chamber Temp	44.9	c	44.3	c
Perm Oven Temp	44.3	c	44.3	c
Pressure	657.80	mm Hg	656.30	mm Hg
Sample Flow	.290	ccm	.287	ccm
Lamp Intensity	90.0	%	91.0	%

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	0.3	N/A
4989	79.75	81.0	79.2	1.0235
4989	39.83	40.8	40.5	1.0082
4989	9.93	10.2	10.8	0.9504
4989	0.00	0.0	0.3	As found zero
4989	79.75	81.0	79.2	As found span
			Average Correction Factor	0.9940

Calculated value of As Found Response: 79.70 ppm Percent Change of As Found: 1.6%

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.2	ppm
Auto span	70.6	ppm	80.4	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PASZA**

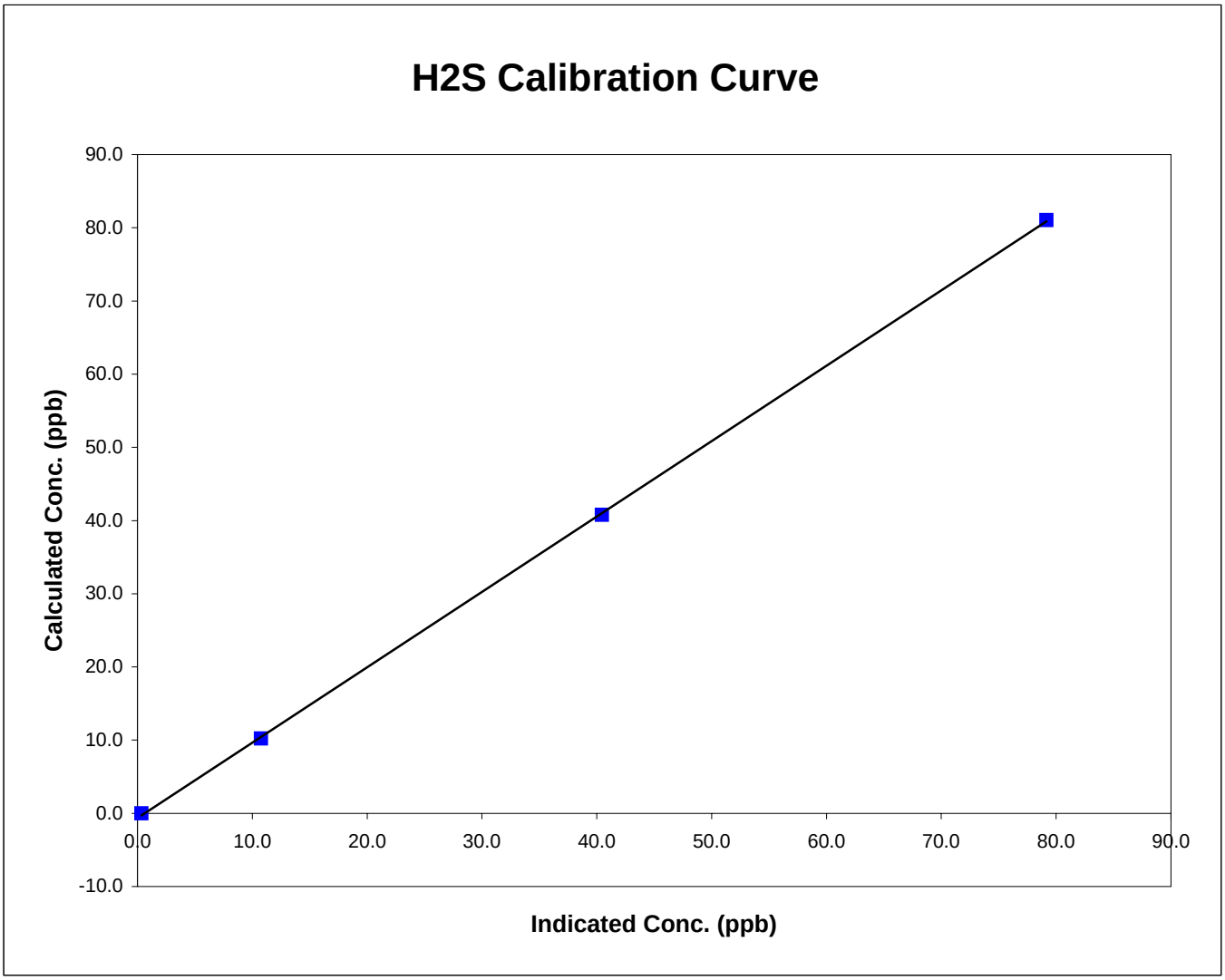
FOCUS AIR QUALITY MONITORING

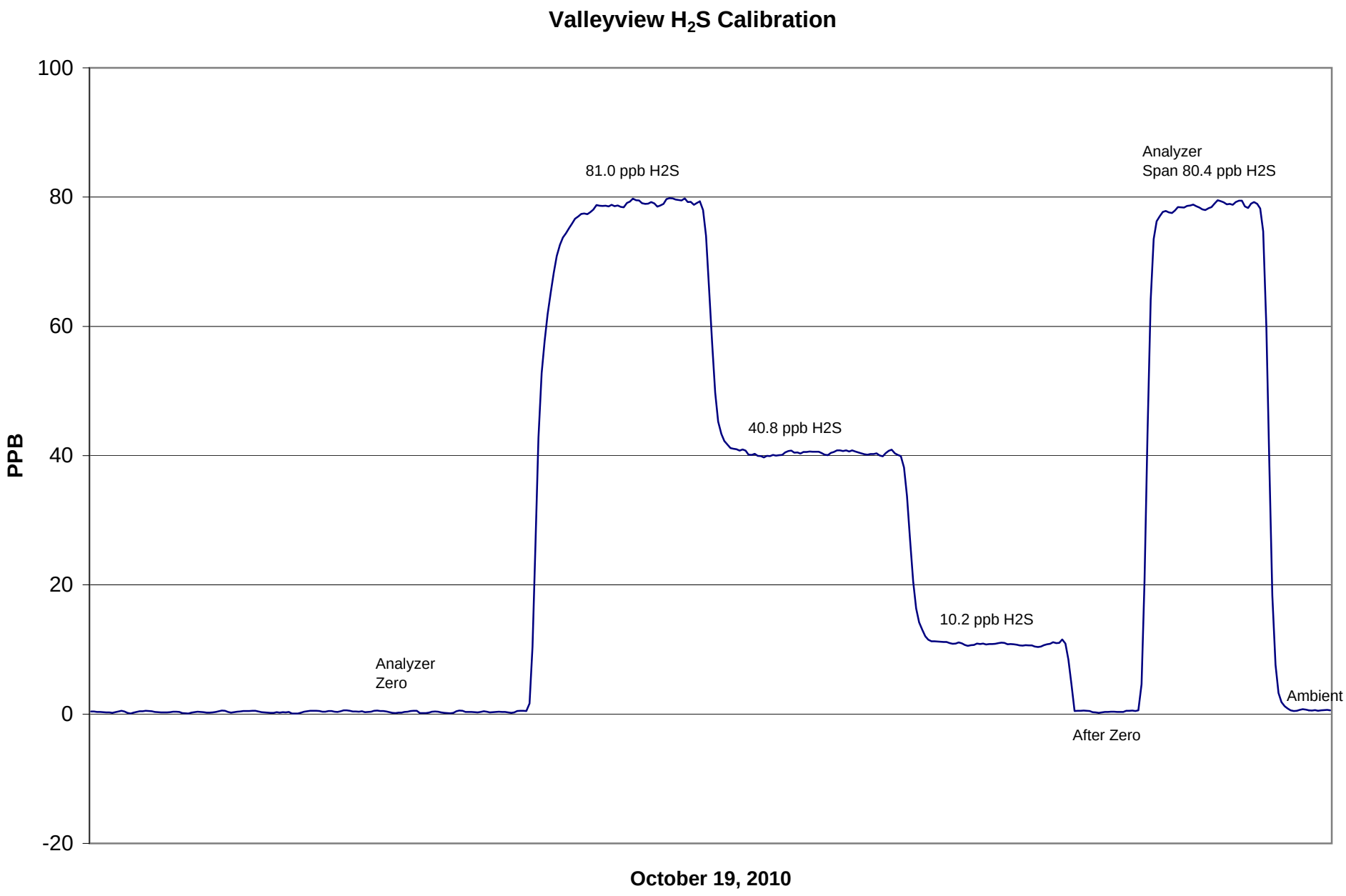
Station Information

Calibration Date	October 19, 2010	Previous Calibration	September 7, 2010
Station Number	5	Station Location	Valleyview
Start Time (MST)	11:50	End Time (MST)	14:42
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	0.3	N/A		
81.0	79.2	1.0235	Correlation Coefficient	0.999950
40.8	40.5	1.0082		
10.2	10.8	0.9504	Slope	1.029825
			Intercept	-0.647700




Valleyview H_2S Calibration
100
80
60
40
20
0
-20
PPB
81.0 ppb H2S
40.8 ppb H2S
10.2 ppb H2S
Analyzer
Span 80.4 ppb H2S
Analyzer
Zero
Ambient
After Zero
October 19, 2010