Peace AirShed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
June 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

July 29, 2010

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

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

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

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

On June 17th the portable station was moved from the Kinuso site and was installed at a new location – Bonanza. The station will remain at the Bonanza location over the course of the next year.

During the month of June 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 June.

Evergreen Park Station:
- The measured ambient air quality was within the AAAQO for the Evergreen Park station.
- All analyzers / sensors at the Evergreen Park station had an operational uptime greater than 90% for the month of June.

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

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 June.

Portable – Kinuso Station:
- The measured ambient air quality was within the AAAQO for the Kinuso station.

- All analyzers / sensors at the Kinuso station had an operational uptime greater than 90% for the month of June (based on operation from June 1st to June 17th).
- On June 17th removal calibrations were performed and the portable station was removed from the Kinuso site and relocated at the Bonanza site.

Portable – Bonanza Station:

- On June 17th the portable station was relocated at the Bonanza site, start-up installation calibrations were performed on June 18th.
- 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 June (based on operation from June 18th to June 30th).

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 greater than 90% for the month of June.
- Calibrations were performed in early July due to change out of the Valleyview shelter. A new shelter was installed the week of July 5th and all equipment calibrations were completed during that time.

Passive Monitoring - 43 Stations throughout the PASZA zone:

There were four duplicate sites sampled in the month of June: Fourth Creek, Pinto Creek, Crooked Creek and Valleyview. 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 0.3 ppb, with a mean of 0.2 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.2 ppb to 2.9 ppb, with a mean of 1.0 ppb.
- Monthly average concentrations for O_3 passives ranged from 20.4 ppb to 36.3 ppb, with a mean of 26.9 ppb.

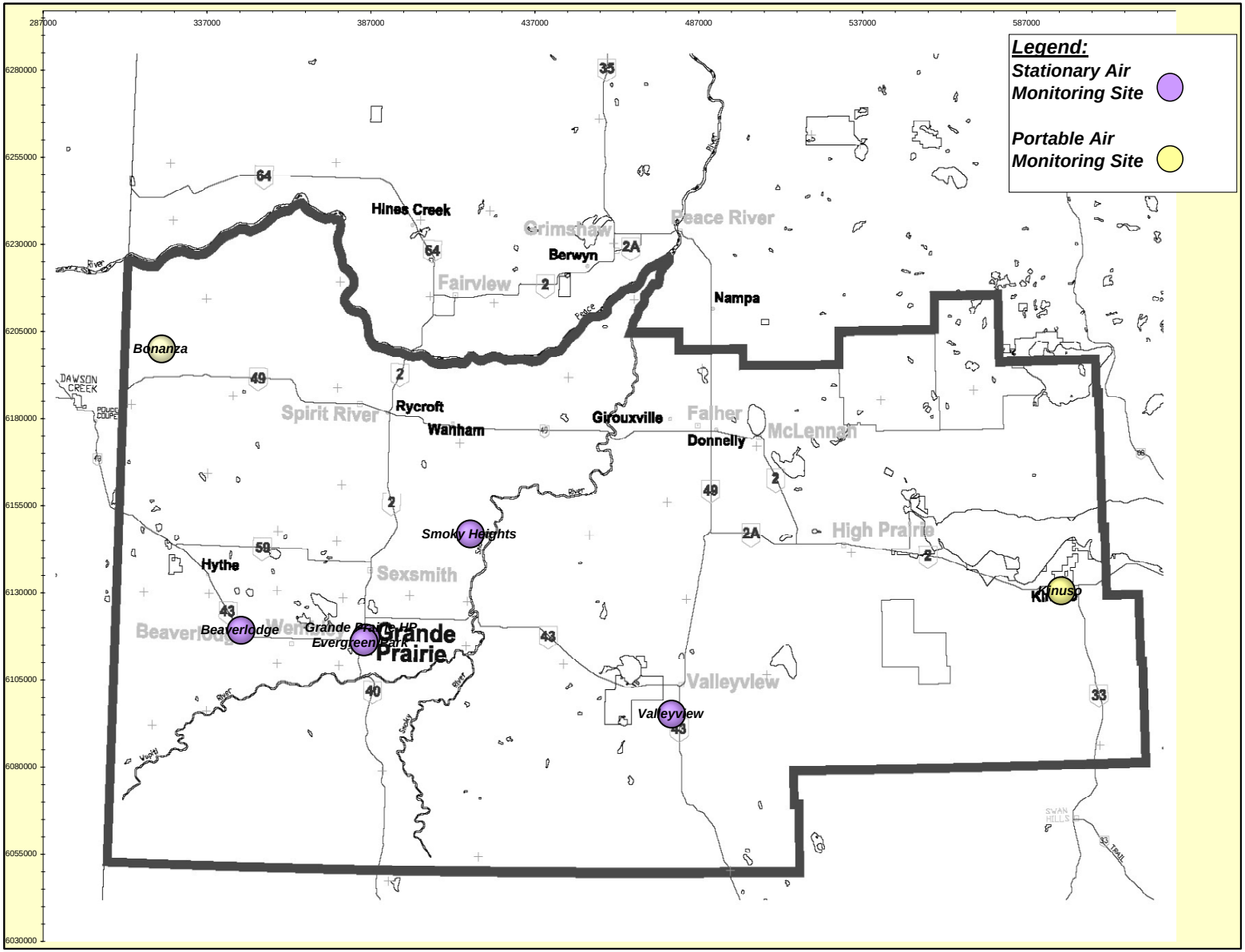
If you have any questions or concerns, please contact Shelly Pruden, PASZA Program Manager at 780.833.4343 or 780.882.4071.

On Behalf of the,
Peace Airshed Zone Association

Shelly Pruden
Program Manager

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

Location of PASZA Continuous Monitoring Stations



PASZA Monthly Continuous Data Summary

Jun-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	0.1	0	0	1.2	Jun-23 19:00	0.4	Jun-20	99.6%
SO_2 (ppb)	172	57	Evergreen Park	0.2	0	0	6.3	Jun-04 07:00	0.5	Jun-04	99.3%
SO_2 (ppb)	172	57	Smoky Heights	0.4	0	0	9.4	Jun-07 02:00	1.1	Jun-07	100.0%
SO_2 (ppb)	172	57	Beaverlodge	0.2	0	0	1.3	Jun-23 15:00	0.4	Jun-20	93.3%
SO_2 (ppb)	172	57	Portable-Kinuso	0.2	0	0	1.6	Jun-01 01:00	0.5	Jun-02	99.5%
SO_2 (ppb)	172	57	Portable-Bonanza	0.3	0	0	9.1	Jun-23 10:00	1.3	Jun-23	99.4%
SO_2 (ppb)	172	57	Valleyview	0.2	0	0	2.5	Jun-14 08:00	0.7	Jun-25	99.7%
NO (ppb)			Henry Pirker	0.9	0	0	25.5	Jun-10 07:00	3.7	Jun-10	99.6%
NO_2 (ppb)	212	106	Henry Pirker	4.3	0	0	30.1	Jun-10 23:00	9.2	Jun-10	99.6%
NO_X (ppb)			Henry Pirker	5.3	0	0	41.7	Jun-10 07:00	13.0	Jun-10	99.6%
NO (ppb)			Beaverlodge	0.3	0	0	14.9	Jun-17 07:00	1.6	Jun-17	93.3%
NO_2 (ppb)	212	106	Beaverlodge	1.7	0	0	11.3	Jun-17 07:00	3.2	Jun-17	93.3%
NO_X (ppb)			Beaverlodge	2.1	0	0	26.4	Jun-17 07:00	4.8	Jun-17	93.3%
NO (ppb)			Portable-Kinuso	0.2	0	0	13.8	Jun-10 13:00	0.9	Jun-10	99.5%
NO2 (ppb)	212	106	Portable-Kinuso	1.0	0	0	11.8	Jun-10 13:00	1.8	Jun-10	99.5%
NOX (ppb)			Portable-Kinuso	1.2	0	0	25.5	Jun-10 13:00	2.6	Jun-10	99.5%
NO (ppb)			Portable-Bonanza	0.5	0	0	40.4	Jun-19 19:00	2.1	Jun-19	99.4%
NO_2 (ppb)	212	106	Portable-Bonanza	1.9	0	0	14.2	Jun-19 19:00	3.8	Jun-22	99.4%
NO_X (ppb)			Portable-Bonanza	2.3	0	0	49.2	Jun-19 19:00	4.9	Jun-19	99.4%
O_3 (ppb)	82		Henry Pirker	29.3	0	-	52.7	Jun-17 18:00	37.5	Jun-20	99.6%
O_3 (ppb) - 8-hr			Henry Pirker		0				50.1	Jun-20	
O_3 (ppb)	82		Beaverlodge	31.3	0	-	50.7	Jun-17 19:00	38.4	Jun-01	93.3%
O_3 (ppb) - 8-hr			Beaverlodge		0				47.9	Jun-17	
O3 (ppb)	82		Portable-Kinuso	29.2	0	-	60.7	Jun-01 19:00	42.2	Jun-02	99.8%
O3 (ppb) - 8-hr			Portable-Kinuso		0				57.5	Jun-01	
O_3 (ppb)	82		Portable-Bonanza	28.5	0	-	49.4	Jun-20 18:00	25.3	Jun-20	99.3%
O_3 (ppb) - 8-hr			Portable-Bonanza		0				47.2	Jun-20	
CO (ppm)	13		Henry Pirker	0.18	0	-	0.7	Jun-05 00:00	0.2	Jun-22	99.6%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.3	Jun-11	
THC (ppm)			Henry Pirker	1.99	-	-	2.5	Jun-09 08:00	2.1	Jun-11	99.6%
TRS (ppb)			Henry Pirker	0.2	-	-	1.3	Jun-02 13:00	0.5	Jun-13	93.1%
TRS (ppb)			Evergreen Park	0.5	-	-	1.4	Jun-14 00:00	0.6	Jun-03	99.3%
TRS (ppb)			Smoky Heights	0.4	-	-	0.9	Jun-22 04:00	0.5	Jun-22	100.0%
TRS (ppb)			Portable-Kinuso	0.4	-	-	0.6	Jun-13 07:00	0.5	Jun-04	99.8%
TRS (ppb)			Portable-Bonanza	0.4	-	-	0.9	Jun-25 02:00	0.5	Jun-19	99.3%
H_2S (ppb)	10	3	Valleyview	0.1	0	0	0.6	Jun-08 07:00	0.1	Jun-12	99.7%

PASZA Monthly Continuous Data Summary – continued

Jun-2010	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
PM2.5 (µg/m3)	80	30	Henry Pirker	8.4	0	0	29.9	Jun-04 21:00	14.4	Jun-20	92.5%
PM2.5 (µg/m3)	80	30	Evergreen Park	5.3	0	0	44.7	Jun-14 09:00	11.7	Jun-18	98.8%
PM2.5 (µg/m3)	80	30	Smoky Heights	5.3	0	0	65.6	Jun-13 00:00	12.8	Jun-19	99.6%
PM2.5 (µg/m3)	80	30	Beaverlodge	7.1	0	0	30.4	Jun-16 22:00	15.1	Jun-17	93.1%
RH (%)			Henry Pirker	50.1	-	-	90.7	Jun-22 05:00	66.0	Jun-08	99.6%
RH (%)			Evergreen Park	51.2	-	-	97.7	Jun-22 07:00	72.8	Jun-08	99.3%
RH (%)			Beaverlodge	49.2	-	-	95.2	Jun-28 02:00	76.5	Jun-08	93.3%
RH (%)			Valleyview	57.8	-	-	99.7	Jun-10 08:00	73.0	Jun-22	99.7%
SR (W/m^2)			Henry Pirker	237.4	-	-	823.9	Jun-14 14:00	283.0	Jun-17	98.6%
Temp (°C)			Henry Pirker	15.6	-	-	28.5	Jun-20 16:00	20.7	Jun-20	99.6%
Temp (°C)			Evergreen Park	15.4	-	-	27.2	Jun-20 18:00	20.4	Jun-19	99.3%
Temp (°C)			Smoky Heights	15.2	-	-	27.2	Jun-20 16:00	19.3	Jun-20	100.0%
Temp (°C)			Beaverlodge	14.9	-	-	27.2	Jun-12 18:00	20.6	Jun-20	93.3%
Temp (°C)			Portable-Kinuso	13.6	-	-	25.6	Jun-12 16:00	19.3	Jun-12	99.8%
Temp (°C)			Portable-Bonanza	18.1	-	-	28.4	Jun-20 17:00	20.6	Jun-18	99.4%
Temp (°C)			Valleyview	14.2	-	-	26.8	Jun-20 17:00	18.9	Jun-20	99.7%
WSPD s (km/hr)			Henry Pirker	10.6	-	-	38.0	Jun-03 11:00	24.0	Jun-03	99.6%
WSPD s (km/hr)			Evergreen Park	6.9	-	-	24.0	Jun-03 16:00	16.6	Jun-03	99.3%
WSPD s (km/hr)			Smoky Heights	12.9	-	-	41.0	Jun-03 12:00	25.8	Jun-03	100.0%
WSPD s (km/hr)			Beaverlodge	11.9	-	-	43.0	Jun-03 13:00	27.1	Jun-03	93.3%
WSPD s (km/hr)			Portable-Kinuso	6.3	-	-	19.0	Jun-02 11:00	12.3	Jun-02	99.8%
WSPD s (km/hr)			Portable-Bonanza	13.7	-	-	40.0	Jun-30 19:00	25.3	Jun-30	99.4%
WSPD s (km/hr)			Valleyview	5.6	-	-	20.0	Jun-21 16:00	10.3	Jun-03	99.7%
WSPD v (km/hr)			Henry Pirker	5.5	-	-	38.0	Jun-03 11:00	22.5	Jun-03	99.6%
WSPD v (km/hr)			Evergreen Park	4.1	-	-	24.0	Jun-03 14:00	15.8	Jun-03	99.3%
WSPD v (km/hr)			Smoky Heights	6.5	-	-	41.0	Jun-03 12:00	24.2	Jun-03	100.0%
WSPD v (km/hr)			Beaverlodge	6.1	-	-	42.0	Jun-03 13:00	25.2	Jun-03	93.3%
WSPD v (km/hr)			Portable-Kinuso	1.5	-	-	19.0	Jun-02 11:00	11.5	Jun-02	99.8%
WSPD v (km/hr)			Portable-Bonanza	9.2	-	-	40.0	Jun-30 19:00	23.1	Jun-30	99.4%
WSPD v (km/hr)			Valleyview	1.6	-	-	19.0	Jun-21 16:00	9.1	Jun-03	99.7%
WDIR			Henry Pirker	WSW	-	-	-	-	-	-	99.6%
WDIR			Evergreen Park	W	-	-	-	-	-	-	99.3%
WDIR			Smoky Heights	WSW	-	-	-	-	-	-	100.0%
WDIR			Beaverlodge	WSW	-	-	-	-	-	-	93.3%
WDIR			Portable-Kinuso	S	-	-	-	-	-	-	99.8%
WDIR			Portable-Bonanza	SW	-	-	-	-	-	-	99.4%
WDIR			Valleyview	WNW	-	-	-	-	-	-	99.7%

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on June 1st (SO_2, NO_X & O_3), June 2nd (TRS, CO & THC), June 3rd (TRS) and June 7th ($PM_{2.5}$). A power failure on June 18th resulted in three (3) hours of invalid data for all parameters. The air conditioning unit failure caused high internal temperatures on June 12th, 13th and 18th – air conditioning unit was repaired on June 18th.

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed, except above noted power failure.
NOx/NO/NO_2	TEI	42C	Spans were outside the target range from June 23rd to the 28th – a reference point was put in the analyzer on June 28th to ensure the integrity of the analyzer.
O_3	TEI	49C	No operational issues observed, except above noted power failure.
CO	TEI	48C	No operational issues observed, except above noted power failure.
THC	TEI	51-CLT	No operational issues observed, except above noted power failure.
TRS	TEI	45C/43C	On June 2nd As-Founds were done and then lamp and socket were replaced in analyzer. A full calibration was performed on June 3rd. There were two additional maintenance / calibrations performed in June in order to troubleshoot TRS issues. A total of four (4) hours were flagged for maintenance. A total of forty-three (27) were flagged invalid on June 7th, 8th and 9th (optical block, lamp power supply and thermocouple were replaced, and analyzer was allowed to stabilize before calibration on June 9th). The TECO 45C analyzer was removed and a TECO 43C analyzer was installed on June 10th to deal with the failures in the 45C analyzer.
$PM_{2.5}$	R&P	1400AB	Four (4) hours were flagged for maintenance on June 9th – troubleshooting power concerns to unit. A total of twenty-two (22) hours were flagged invalid due to high station temperature issues affecting analyzer. Twenty-eight (28) hours were flagged for baseline drift.
RH	Met One	083D	No operational issues observed, except above noted power failure.
ET	Met One	083D	No operational issues observed, except above noted power failure.
SR	Met One	096-1	Seven (7) hours were flagged invalid due to signal interference (possible loose connection). No other operational issues observed, except above noted power failure.
WS	Met One	010C	No operational issues observed, except above noted power failure.
WD	Met One	020C	No operational issues observed, except above noted power failure.

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on June 14th (SO_2, TRS & $PM_{2.5}$). A power failure occurred on June 1st resulting in two (2) hours of invalid data for all parameters. A DACS/ Communication error occurred on June 9th – three (3) hours were flagged invalid for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed, except above noted power failure and DACS error.
TRS	TEI	43C	Spans were outside the target June 21st and 22nd – reason unknown.
$PM_{2.5}$	R&P	1400AB	Four (4) hours were flagged invalid due to above noted DACS / communication error . A total of three (3) hours were flagged for baseline drift.
ET	Met One/Gill	083D	No operational issues observed, except above noted power failure and DACS error.
RH	Met One/Gill		No operational issues observed, except above noted power failure and DACS error.
WS	Met One/ Gill	010C	No operational issues observed, except above noted power failure and DACS error.
WD	Met One/ Gill	020C	No operational issues observed, except above noted power failure and DACS error.

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on June 15th (TRS, SO_2 & $PM_{2.5}$).

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	A total of three (3) hours were flagged for baseline drift.
ET	Met One	083D	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on June 11th (SO_2, O_3 & NO_X & $PM_{2.5}$). A total of forty-eight (48) hours of data were flagged invalid due to communication/DACS errors during the month of June – for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43CTL	No operational issues observed, other than above noted communication / DACS errors.
NOx/NO/NO_2	TEI	42C	No operational issues observed, other than above noted communication / DACS errors.
O_3	TEI	49C	No operational issues observed, other than above noted communication / DACS errors.
$PM_{2.5}$	R&P	1400AB	No operational issues observed, other than above noted communication / DACS errors. A filter change was performed on June 21st- two (2) hours were flagged maintenance.
ET	n/a	n/a	No operational issues observed, other than above noted communication / DACS errors.
RH	n/a	n/a	No operational issues observed, other than above noted communication / DACS errors.
WS	Blue Sky	857	No operational issues observed, other than above noted communication / DACS errors.
WD	Blue Sky	857	No operational issues observed, other than above noted communication / DACS errors.

PASZA – Kinuso (Portable) Station

General Station Issues

Removal calibrations were performed on June 17th (SO_2, TRS, NO_X & O_3). The portable station at the Kinuso site was decommissioned and moved to the Bonanza site on June 17th. A power failure on June 7th resulted in one (1) hour of invalid data for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed, except above noted power failure. One (1) hour was flagged maintenance just prior to final calibration to reconfigure DACS (AP1000).
TRS	TEI	43C	No operational issues observed, except above noted power failure.
NOx/NO/NO_2	TEI	42I	No operational issues observed, except above noted power failure. One (1) hour was flagged maintenance just prior to final calibration to reconfigure DACS (AP1000).
O_3	TEI	49C	No operational issues observed, except above noted power failure.
ET	Met One		No operational issues observed, except above noted power failure.
WS	Met One		No operational issues observed, except above noted power failure.
WD	Met One		No operational issues observed, except above noted power failure.

PASZA – Bonanza (Portable) Station

General Station Issues

The portable station was commissioned at the Bonanza site June 17th and 18th. Installation calibrations were performed on June 18th (SO_2, TRS, NO_X & O_3). On June 25th two (2) hours were flagged invalid due to DACS maintenance for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed, except above noted DACS maintenance.
TRS	TEI	43C	There was no span on June 24th due to a power bump.
NOx/NO/NO_2	TEI	42I	No operational issues observed, except above noted DACS maintenance. Note – a large hourly maximum spike for NO. NO_2 & NO_X on June 19th at 7:00 pm – possible parked and running vehicle.
O_3	TEI	49C	No operational issues observed, except above noted DACS maintenance.
ET	Met One		No operational issues observed, except above noted DACS maintenance.
WS	Met One		No operational issues observed, except above noted DACS maintenance.
WD	Met One		No operational issues observed, except above noted DACS maintenance.

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed in the first week of July (SO_2 & H_2S) due to the new shelter replacement. A power failure on June 8th resulted in two (2) hours of invalid data for all parameters.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed, except above noted power failure.
H_2S	TEI	43A	No operational issues observed, except above noted power failure.
ET	Gill	Met Pak 3	No operational issues observed, except above noted power failure.
RH	Gill	Met Pak 3	No operational issues observed, except above noted power failure.
WS	Gill	Met Pak 3	No operational issues observed, except above noted power failure.
WD	Gill	Met Pak 3	No operational issues observed, except above noted power failure.

PASZA
Henry Pirker Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.2 ppb on Jun 23 19:00 Maximum Daily Average: 0.4 ppb on Jun 20

Minimum Value: 0 ppb on Jun 1 13:00 Minimum Daily Average: 0.0 ppb on Jun 22
Maximum Diurnal Average: 0.2 ppb at hour 8 Minimum Diurnal Average: 0.0 ppb at hour 15
Monthly Average: 0.09 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.0 $Q_3 = 0.1$ $P_{90} = 0.2$ $P_{99} = 0.9$

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	33
Percent Operational Time:	99.6

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

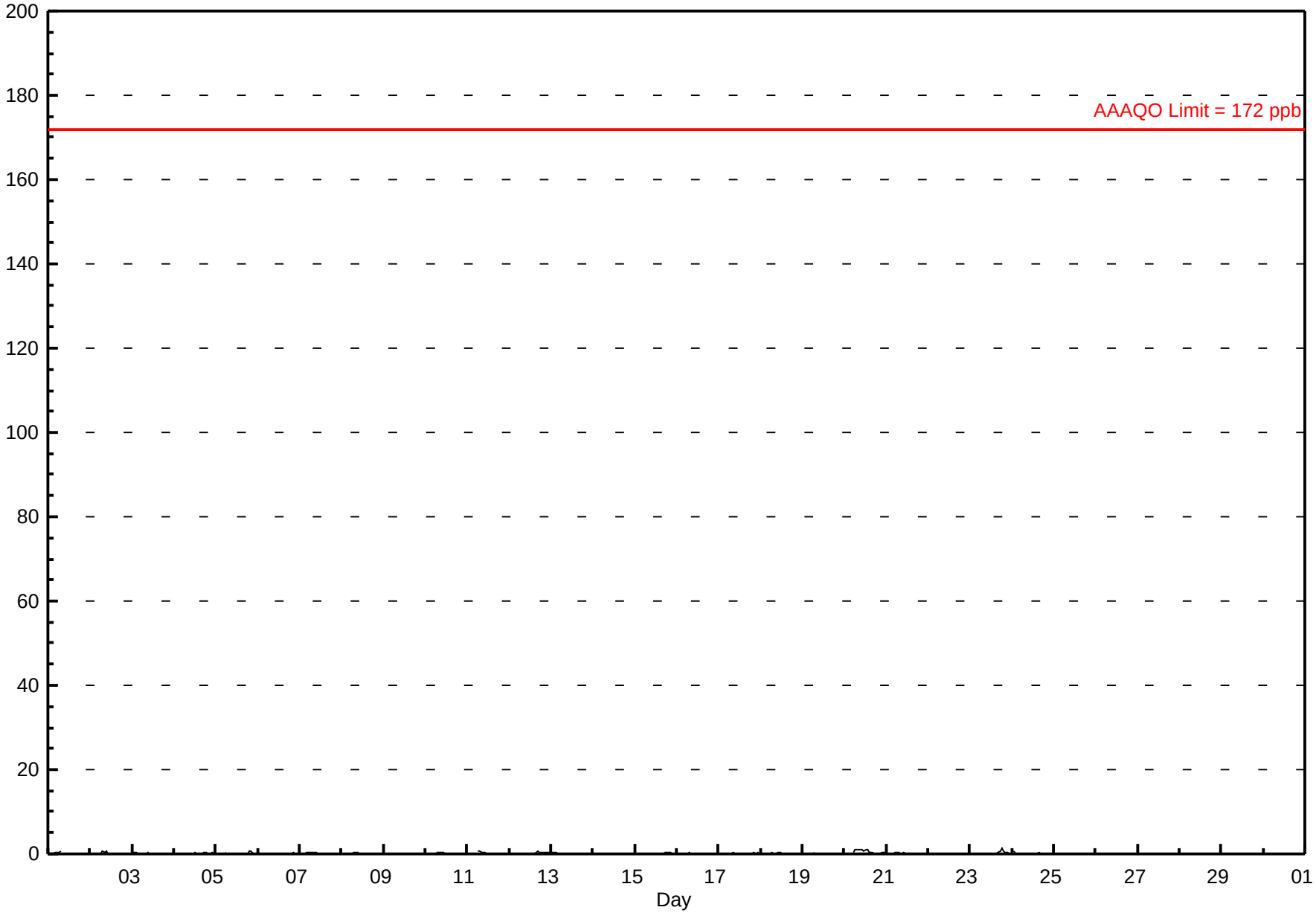
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2010

Maximum Value: 3.7 ppb on Jun 24 02:00

Maximum Daily Average: 0.7 ppb on Jun 20

Minimum Value: 0 ppb on Jun 1 13:00

Minimum Daily Average: 0.1 ppb on Jun 14

Maximum Diurnal Average: 0.5 ppb at hour 8

Minimum Diurnal Average: 0.3 ppb at hour 23

Monthly Average: 0.35 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.5$ $P_{90} = 0.6$ $P_{99} = 1.5$

Hours in Service:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	33
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	0	0	0	0	0	0	0	1	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
2-Jun	0	0	0	0	0	A	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.6
3-Jun	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
4-Jun	0	0	0	0	0	A	0	1	1	1	0	0	1	1	1	0	0	1	1	1	0	1	1	0	0.5	1.1
5-Jun	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0.4	1.1
6-Jun	0	1	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
7-Jun	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0.3	0.8
8-Jun	0	0	1	0	0	A	1	1	1	1	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0.3	0.7
9-Jun	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	1	1	0.4	0.5
10-Jun	1	0	1	0	0	A	1	1	1	1	1	1	0	1	1	0	0	0	1	0	1	0	0	0	0.5	1.0
11-Jun	0	0	0	0	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	1.5
12-Jun	1	1	0	1	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	1	0.5	0.9
13-Jun	1	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
14-Jun	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
15-Jun	0	0	1	0	A	0	0	1	0	1	0	0	0	1	1	1	1	1	1	1	1	1	0	1	0.4	0.6
16-Jun	1	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4	0.5
17-Jun	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
18-Jun	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	P	P	P	0	1	1	0	0	0.4	0.7
19-Jun	1	0	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
20-Jun	0	0	0	1	A	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.7	1.5
21-Jun	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
22-Jun	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
23-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0.4	1.7
24-Jun	A	4	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	A	0.5	3.7
25-Jun	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0.3	0.7
26-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	A	0	0	0.2	0.6
27-Jun	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.7
28-Jun	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0.3	0.7
29-Jun	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
30-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.2	0.6
	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	Diurnal Average	
	0.7	3.7	0.7	0.7	0.6	0.8	1.5	1.5	1.5	1.6	1.0	1.0	1.5	1.5	1.0	2.7	0.9	1.2	1.7	1.2	1.1	0.8	0.8	0.7	Diurnal Maximum	

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

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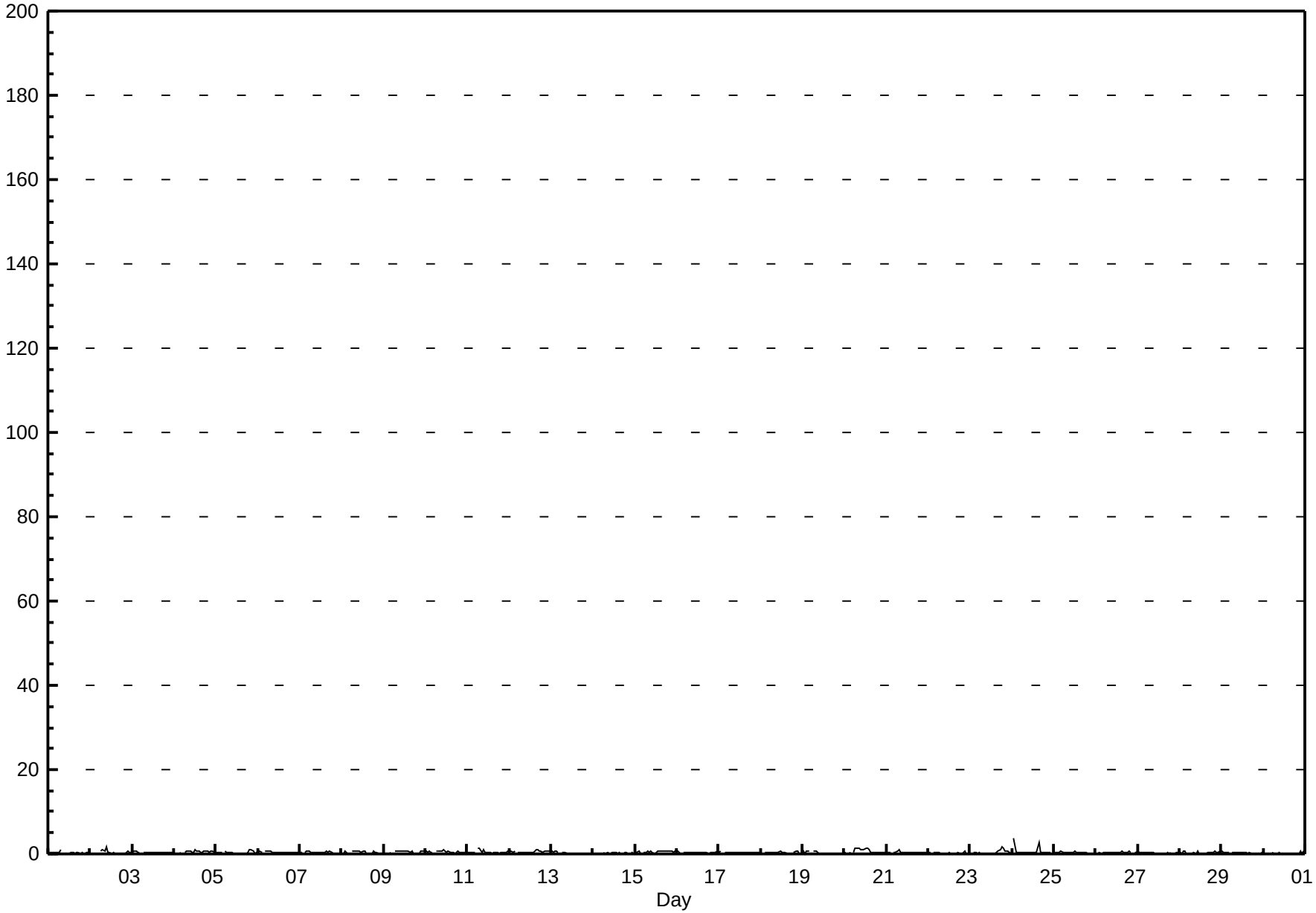
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

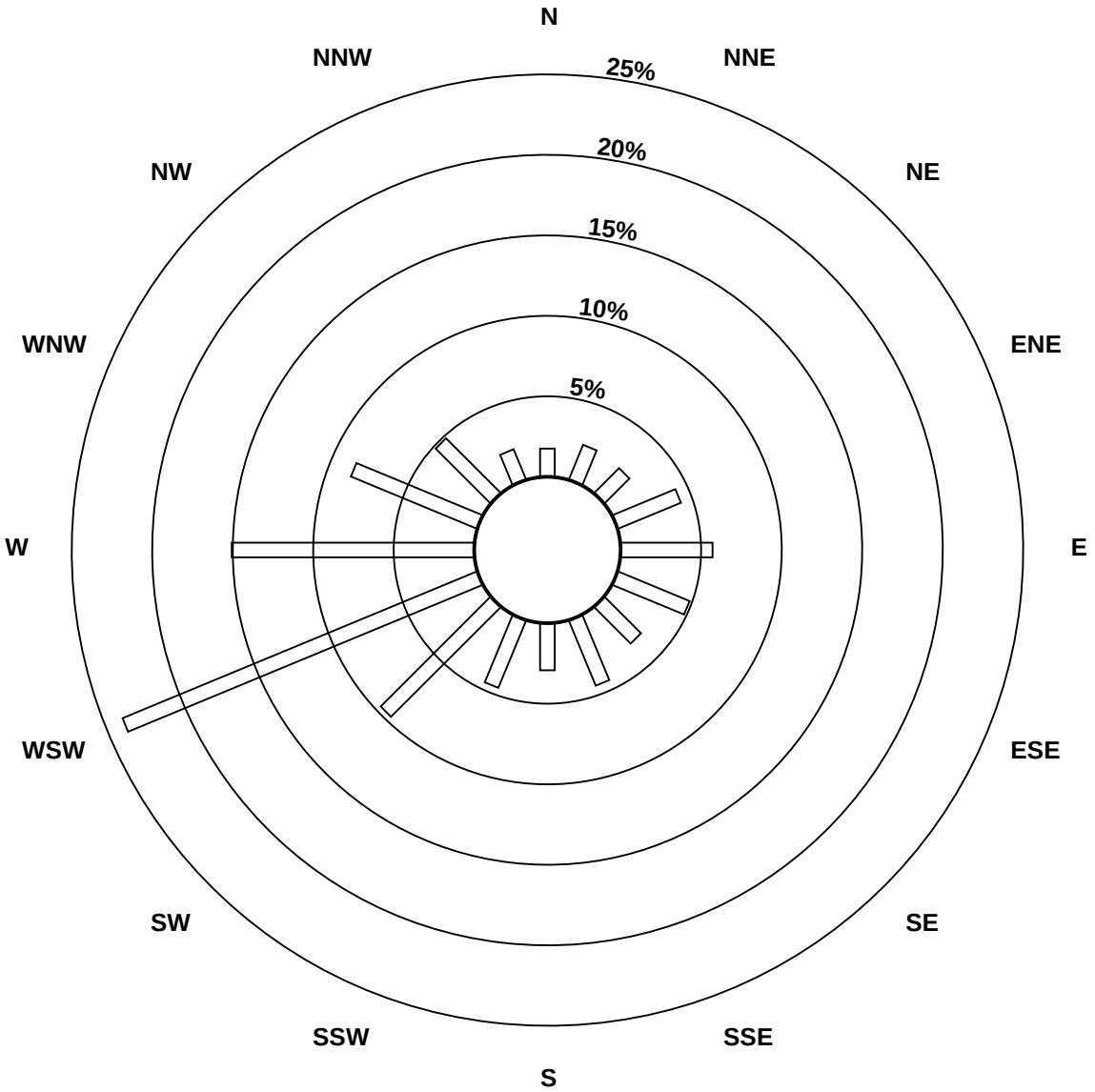
Henry Pirker - June 2010



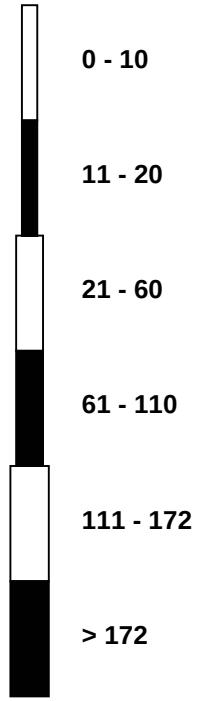
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2010



Pollutant Classes (ppb)



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Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.3 ppb on Jun 2 13:00 Maximum Daily Average: 0.5 ppb on Jun 13

Minimum Value: 0 ppb on Jun 2 21:00
Maximum Diurnal Average: 0.3 ppb at hour 13
Monthly Average: 0.20 ppb

Minimum Daily Average: 0.0 ppb on Jun 25
Minimum Diurnal Average: 0.2 ppb at hour 19
Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.3$ $P_{90} = 0.4$ $P_{99} = 0.9$

Hours in Service:	720
Hours of Data:	619
Hours of Missing Data:	101
Hours of Calibration:	51
Percent Operational Time:	93.1

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

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

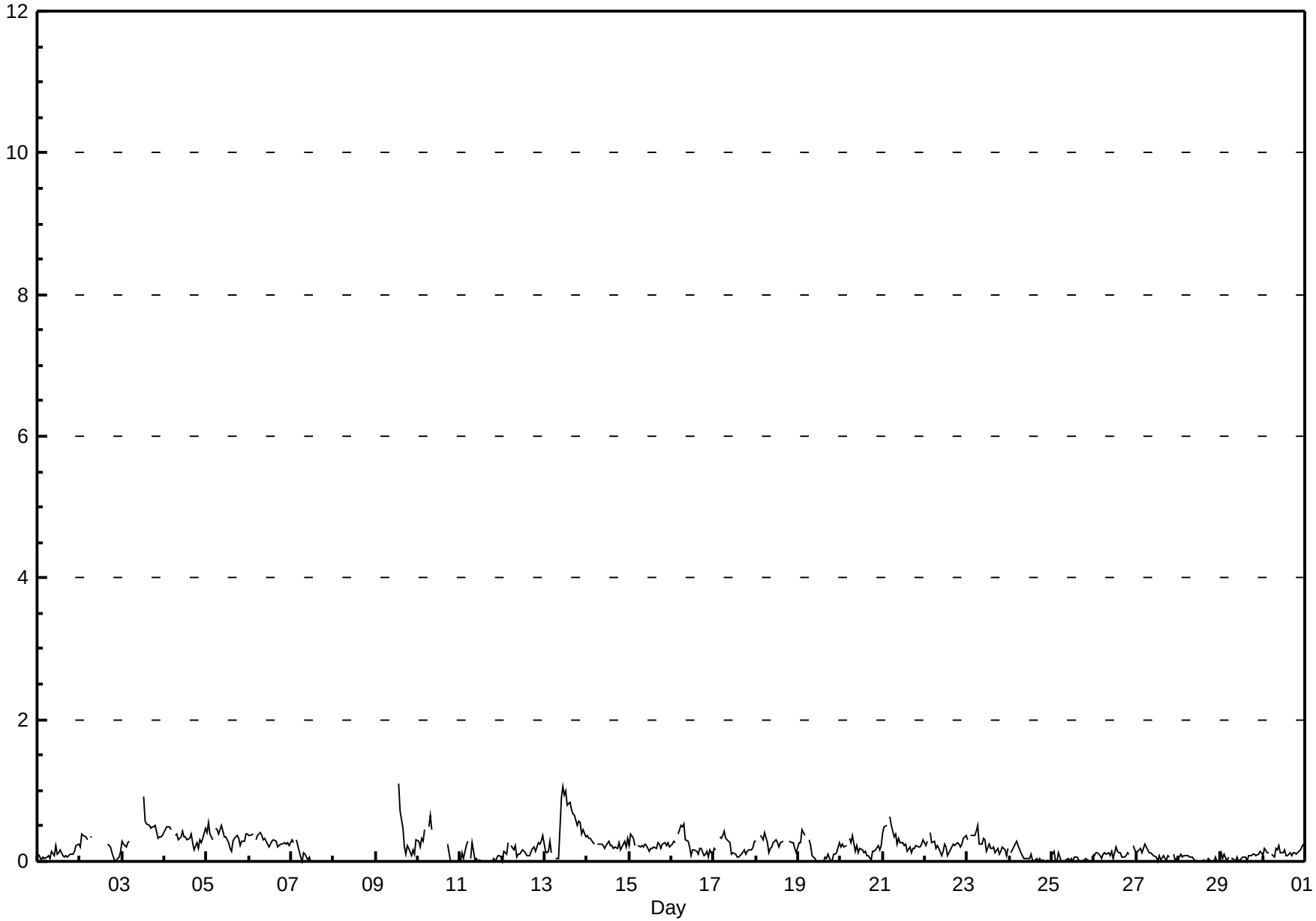
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2010

Maximum Value: 2.1 ppb on Jun 9 14:00

Maximum Daily Average: 1.2 ppb on Jun 13

Minimum Value: 0 ppb on Jun 10 22:00

Minimum Daily Average: 0.5 ppb on Jun 1

Maximum Diurnal Average: 1.0 ppb at hour 5

Minimum Diurnal Average: 0.8 ppb at hour 21

Monthly Average: 0.85 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 1.0$ $P_{90} = 1.1$ $P_{99} = 1.6$

Hours in Service:	720
Hours of Data:	619
Hours of Missing Data:	101
Hours of Calibration:	51
Percent Operational Time:	93.1

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	0	0	0	1	1	0	0	0	1	1	1	0	1	1	0	0	0	1	0	0	1	0	1	1	0.5	0.8
2-Jun	1	1	1	1	1	A	1	1	C	C	C	C	2	M	M	M	1	1	1	1	0	1	1	1	--	1.6
3-Jun	1	1	1	1	1	A	1	C	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5
4-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
5-Jun	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	1.1
6-Jun	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
7-Jun	1	1	A	1	1	1	0	0	1	0	0	0	N	N	N	N	N	N	N	N	N	N	N	N	--	0.8
8-Jun	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	M	N	N	N	N	N	N	N	N	--	--
9-Jun	N	N	N	N	N	N	N	N	C	C	C	C	C	2	1	1	1	1	1	1	1	1	1	1	--	2.1
10-Jun	1	1	1	1	2	A	1	2	1	C	C	C	C	C	C	C	C	1	1	1	0	0	0	1	--	1.6
11-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.8	1.3
12-Jun	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
13-Jun	1	1	1	1	1	A	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.2	1.8
14-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
15-Jun	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	1.2
16-Jun	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	1.5
17-Jun	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
18-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	P	P	P	1	1	1	1	1	1.0	1.3
19-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0.8	1.1
20-Jun	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
21-Jun	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
22-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
23-Jun	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6
24-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	0.8	1.4
25-Jun	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.9
26-Jun	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
27-Jun	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
28-Jun	1	1	1	1	1	1	1	1	1	1	1	C	C	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
29-Jun	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
30-Jun	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.9	1.7
	0.9	0.9	0.9	0.9	1.0	0.9	0.9	0.9	0.8	0.9	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	Diurnal Average	
	1.3	1.2	1.3	1.1	1.6	1.5	1.6	1.6	1.2	1.8	1.7	1.6	1.6	2.1	1.5	1.4	1.3	1.5	1.3	1.4	1.1	1.1	1.1	1.7	Diurnal Maximum	

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

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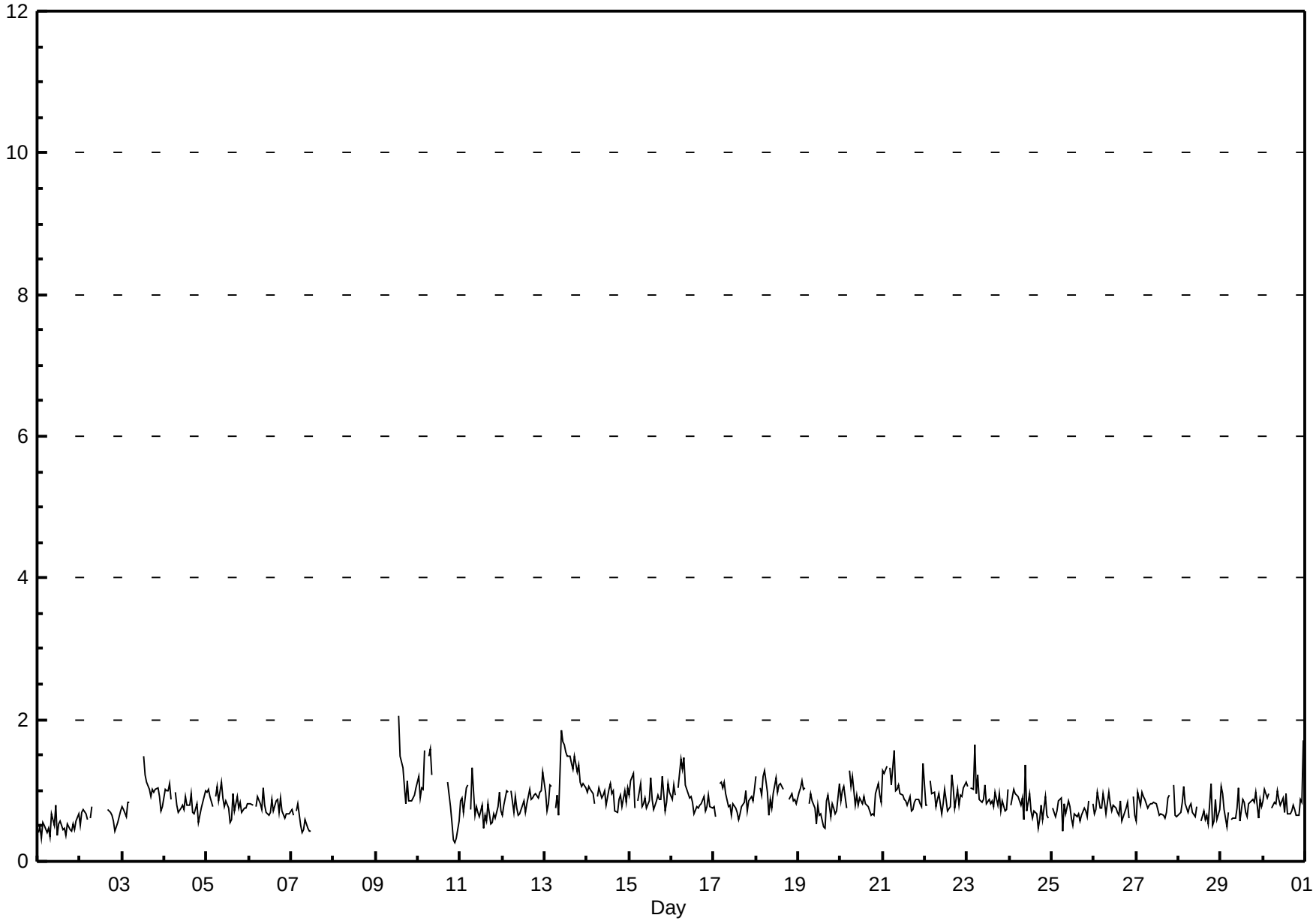
Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

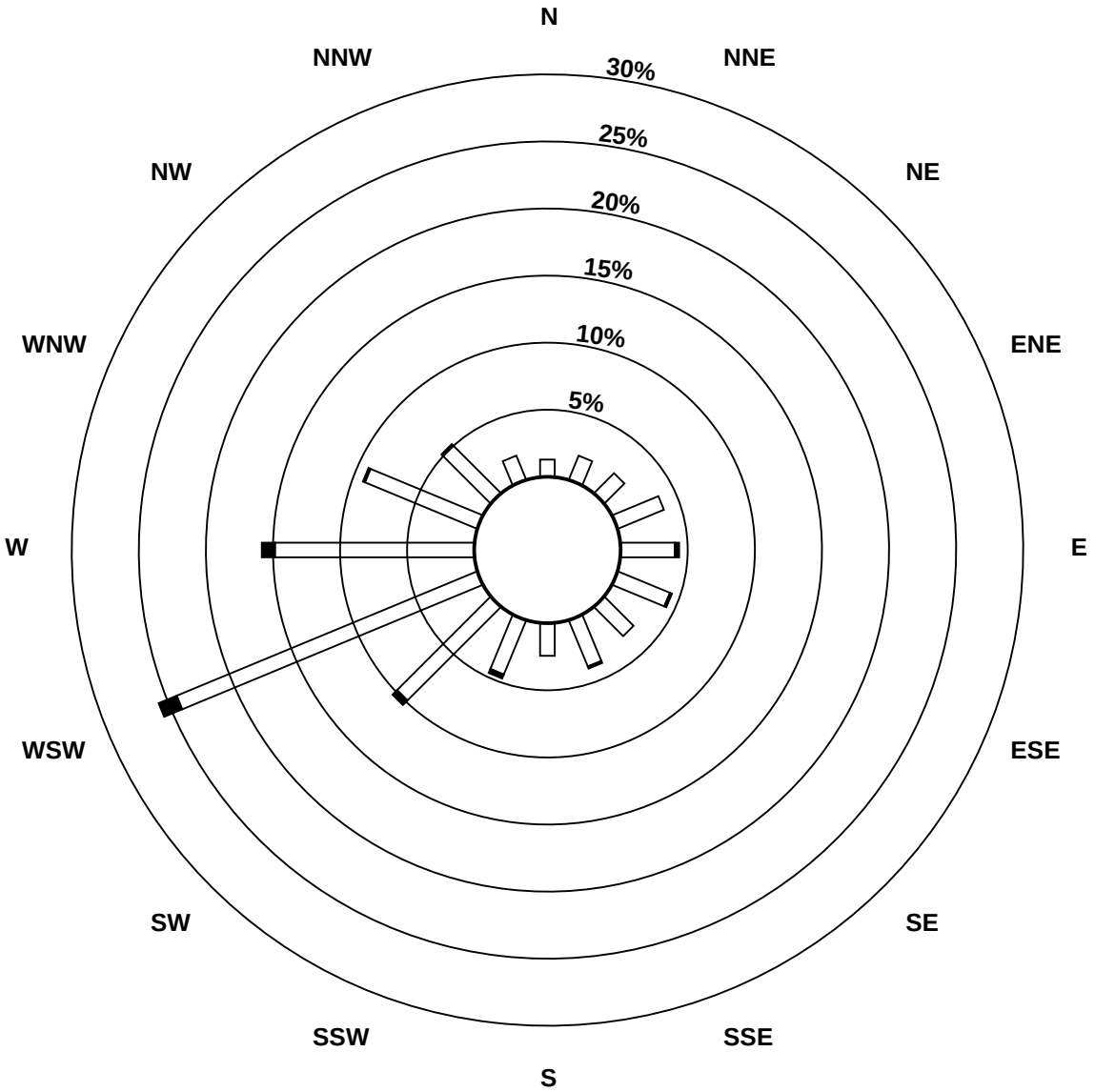
Henry Pirker - June 2010



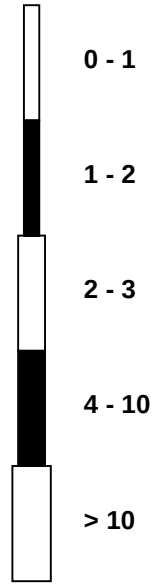
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 30.1 ppb on Jun 10 23:00 Maximum Daily Average: 9.2 ppb on Jun 10

Minimum Value: 1 ppb on Jun 6 18:00
Maximum Diurnal Average: 8.0 ppb at hour 6
Monthly Average: 4.31 ppb

Minimum Daily Average: 1.9 ppb on Jun 26
Minimum Diurnal Average: 1.8 ppb at hour 13
Percentiles: $P_1 = 0.8$ $P_{10} = 1.3$ $Q_1 = 1.8$ Median = 3.1 $Q_3 = 5.2$ $P_{90} = 9.5$ $P_{99} = 16.1$

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	39
Percent Operational Time:	99.6

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-Jun	5	4	4	4	6	6	5	4	C	C	C	C	C	C	C	C	3	3	3	5	3	4	4	5	--	5.6
2-Jun	8	7	8	11	9	A	8	7	4	4	2	2	2	2	3	2	3	2	2	3	6	5	5	6	4.8	10.7
3-Jun	6	6	4	3	2	A	6	4	3	2	2	2	2	2	2	2	3	2	2	2	2	2	3	3	2.9	6.2
4-Jun	3	3	4	4	4	A	7	5	3	1	1	1	1	1	1	2	1	2	2	3	5	8	13	14	3.9	13.9
5-Jun	12	7	6	4	A	6	4	4	4	1	1	1	1	1	1	2	1	1	1	2	2	5	5	4	3.4	11.9
6-Jun	5	5	4	A	4	3	3	3	2	1	1	1	1	1	1	1	1	1	1	2	3	3	3	3	2.2	5.1
7-Jun	5	5	A	12	9	5	4	4	3	3	3	3	2	2	3	2	2	3	4	4	4	6	6	4	4.3	11.7
8-Jun	5	4	3	3	5	A	7	5	3	4	4	4	4	3	4	3	3	3	3	2	5	5	7	11	4.3	11.0
9-Jun	10	9	10	10	10	A	16	11	7	3	2	3	3	3	3	2	3	3	3	4	3	2	10	12	6.2	15.6
10-Jun	17	18	14	15	12	A	16	14	10	6	4	2	3	2	2	2	2	2	2	2	4	16	30	20	9.2	30.1
11-Jun	13	11	10	16	15	A	12	14	11	6	3	2	2	2	2	2	2	2	2	2	7	11	11	9	7.3	16.5
12-Jun	8	7	8	8	A	10	8	7	3	2	2	1	2	1	1	2	2	2	2	3	4	10	14	10	5.1	13.9
13-Jun	3	2	2	3	2	A	3	2	3	4	2	1	1	1	1	1	1	1	2	2	3	3	3	2	2.1	4.2
14-Jun	1	1	2	2	3	A	5	3	2	2	1	1	1	2	2	2	2	2	1	1	3	4	3	4	2.1	5.0
15-Jun	3	3	3	4	A	7	6	4	3	2	2	1	1	1	1	1	1	1	2	2	5	8	5	3	3.0	8.4
16-Jun	4	9	12	A	14	15	15	16	5	3	3	3	2	2	3	6	4	3	3	2	4	8	9	5	6.4	15.6
17-Jun	6	6	A	16	13	17	15	16	13	14	4	3	4	4	3	1	2	2	2	2	5	7	9	15	7.7	16.5
18-Jun	9	A	7	6	6	7	6	5	4	3	2	2	2	2	1	1	P	P	P	3	4	8	7	8	4.6	8.9
19-Jun	11	11	10	13	16	A	13	5	3	3	2	1	1	1	1	1	1	1	2	3	4	7	7	12	5.7	16.0
20-Jun	9	9	8	8	A	13	6	4	6	5	3	3	2	2	1	1	1	1	1	3	7	7	7	6	4.9	12.6
21-Jun	13	16	11	A	14	16	13	7	5	3	2	2	2	2	3	4	4	4	3	5	8	5	5	6	6.7	15.9
22-Jun	5	6	A	9	7	8	8	7	5	3	5	5	3	3	4	2	3	2	2	3	5	5	5	4	4.8	9.5
23-Jun	4	A	6	7	9	10	10	10	8	5	4	2	1	1	1	1	1	1	1	2	4	3	4	3	4.3	10.4
24-Jun	A	4	4	5	6	7	6	5	4	2	2	1	1	1	3	2	1	2	2	2	3	4	3	A	3.2	6.9
25-Jun	4	2	3	4	5	6	4	3	2	2	2	2	2	2	2	2	2	1	1	1	2	2	A	3	2.5	5.9
26-Jun	2	2	2	2	3	3	3	2	2	2	2	1	1	1	1	1	2	1	1	1	2	A	5	4	1.9	5.1
27-Jun	3	3	4	4	4	3	4	3	3	1	1	1	1	1	1	2	1	1	2	2	A	4	4	3	2.5	4.2
28-Jun	3	4	4	4	5	7	6	4	3	2	C	C	2	2	1	2	1	3	4	3	4	6	7	6	3.8	7.0
29-Jun	3	2	2	3	3	A	6	4	3	1	1	1	1	2	2	2	2	2	2	2	3	2	2	2	2.3	6.3
30-Jun	1	1	1	2	A	6	6	5	4	3	3	3	2	2	2	2	2	2	2	2	2	2	4	4	2.8	6.3
	6.3	5.9	5.8	6.7	7.3	8.0	7.6	6.2	4.6	3.3	2.4	2.0	1.8	1.8	1.9	2.0	2.0	1.9	2.1	2.5	3.9	5.5	6.9	6.6	Diurnal Average	
	17.1	17.5	13.9	16.5	16.0	16.5	16.0	16.2	12.9	14.2	4.6	4.8	3.8	4.1	4.1	6.2	4.2	3.6	4.0	5.0	8.1	15.7	30.1	19.9	Diurnal Maximum	

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

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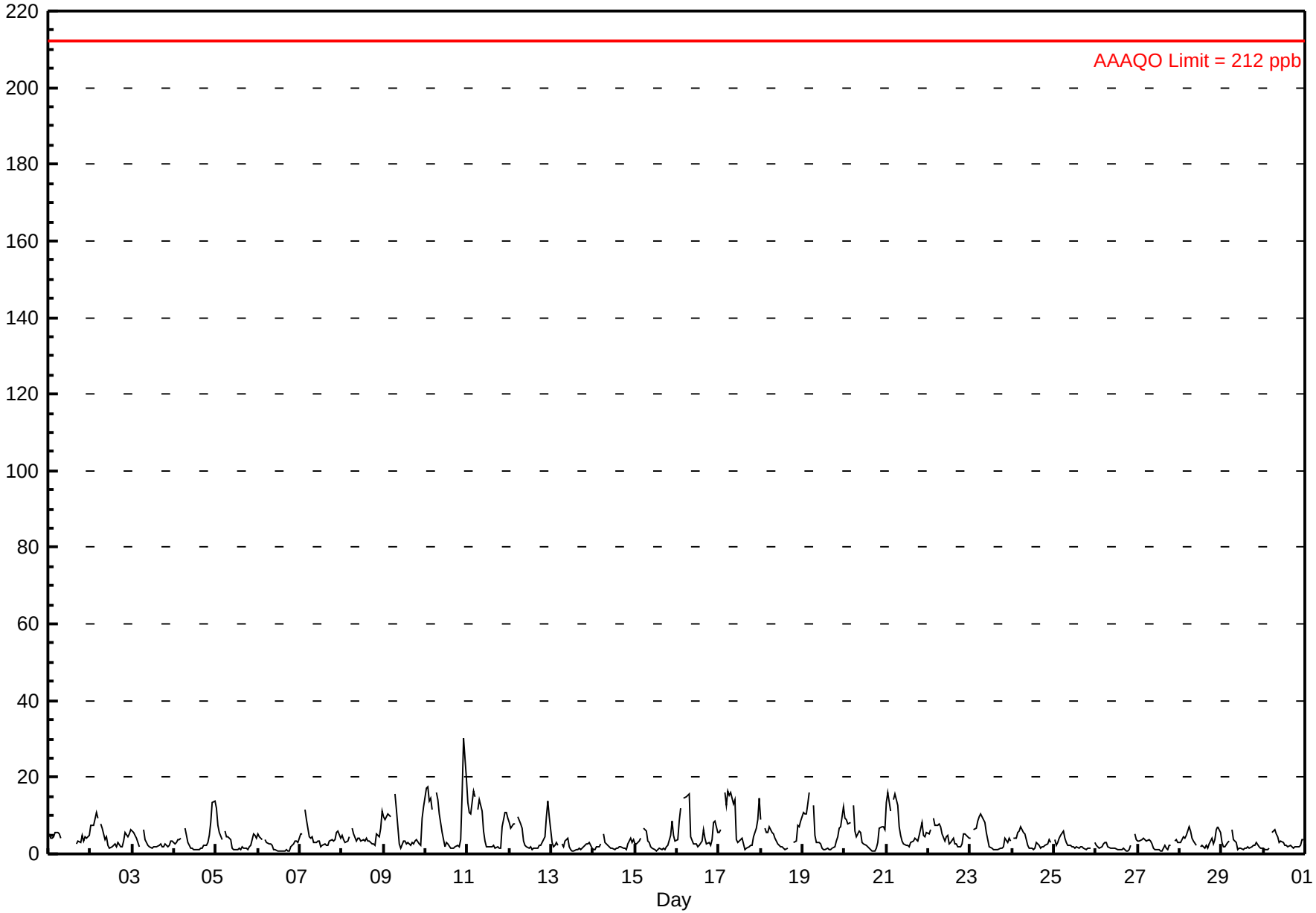
Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2010



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Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2010

Maximum Value: 50.1 ppb on Jun 7 12:00

Maximum Daily Average: 14.0 ppb on Jun 17

Minimum Value: 1 ppb on Jun 6 18:00

Minimum Daily Average: 3.1 ppb on Jun 26

Maximum Diurnal Average: 11.4 ppb at hour 23

Minimum Diurnal Average: 4.4 ppb at hour 17

Monthly Average: 7.25 ppb

Percentiles: P_1 = 1.9 P_{10} = 2.5 Q_1 = 3.4 Median = 5.5 Q_3 = 9.1 P_{90} = 14.9 P_{99} = 23.4

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	39
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	11	7	6	6	7	8	7	5	C	C	C	C	C	C	C	C	4	6	5	9	6	7	7	6	--	10.7
2-Jun	15	11	14	16	11	A	13	9	5	8	3	3	3	3	5	4	11	3	3	6	11	7	11	11	8.2	15.9
3-Jun	11	8	6	4	4	A	9	5	5	4	3	3	3	3	4	3	4	3	4	4	3	3	5	5	4.6	11.0
4-Jun	4	4	5	5	6	A	8	7	5	2	3	3	14	2	2	8	4	5	6	6	8	12	20	20	7.0	20.5
5-Jun	19	12	7	5	A	8	7	6	6	3	3	3	2	2	3	5	3	3	2	4	5	9	7	6	5.8	18.8
6-Jun	7	5	5	A	5	5	4	4	4	2	3	2	2	2	2	2	6	1	2	5	5	5	4	6	3.7	7.0
7-Jun	10	6	A	15	12	11	6	11	8	4	9	50	5	5	8	4	5	13	7	5	5	7	15	5	10.0	50.1
8-Jun	6	5	4	4	9	A	9	10	8	11	6	6	9	15	11	5	5	4	8	4	9	9	12	16	8.1	15.8
9-Jun	13	10	16	14	12	A	18	13	12	4	3	5	6	4	5	4	5	5	6	6	5	3	26	15	9.3	25.8
10-Jun	22	21	16	16	13	A	23	19	15	8	7	4	5	5	4	4	5	3	3	3	11	28	39	24	13.0	39.4
11-Jun	23	14	12	24	23	A	14	19	14	10	5	4	4	3	3	20	2	13	6	2	13	15	14	15	11.9	23.7
12-Jun	11	7	10	10	A	12	11	8	5	5	2	2	3	2	4	4	3	6	4	5	7	21	22	15	7.9	21.7
13-Jun	7	2	4	4	10	A	5	3	5	19	14	2	3	2	2	2	3	2	3	3	4	4	5	3	4.8	19.2
14-Jun	2	2	3	2	3	A	8	5	4	3	3	3	2	3	3	3	3	3	3	4	4	6	5	6	3.6	8.0
15-Jun	3	5	5	6	A	9	9	5	5	3	3	4	2	2	3	3	3	3	11	5	11	20	8	6	5.7	20.0
16-Jun	6	11	13	A	17	18	19	21	6	6	3	4	3	9	14	17	12	9	7	7	6	11	12	9	10.6	21.0
17-Jun	9	15	A	21	14	18	17	18	16	18	19	21	20	23	10	4	3	3	4	4	7	12	18	23	14.0	23.4
18-Jun	14	A	11	7	8	10	8	7	5	4	4	3	11	3	2	3	P	P	P	5	16	27	14	10	8.8	26.9
19-Jun	13	16	13	14	18	A	17	8	4	4	4	3	2	2	2	2	2	3	4	6	6	8	10	21	8.0	20.9
20-Jun	20	15	11	11	A	15	10	6	9	8	4	3	3	3	5	3	3	3	3	7	11	18	14	11	8.6	20.0
21-Jun	21	21	15	A	18	18	18	13	14	5	3	5	4	5	9	7	8	6	8	7	11	8	7	8	10.5	21.4
22-Jun	6	7	A	10	10	9	12	8	7	5	6	6	4	4	6	5	6	3	2	4	7	11	8	6	6.7	11.8
23-Jun	6	A	7	8	11	12	12	12	11	9	5	3	5	2	2	2	2	3	3	3	9	4	6	7	6.4	12.3
24-Jun	A	7	5	8	8	9	7	7	6	4	2	3	2	2	6	6	3	3	4	4	4	5	4	A	5.1	9.0
25-Jun	6	4	4	5	7	7	5	4	3	3	3	3	3	4	3	3	3	3	2	2	2	2	A	4	3.8	7.5
26-Jun	3	3	2	2	4	4	4	3	3	2	2	2	2	2	3	2	3	2	2	3	4	A	6	5	3.1	6.5
27-Jun	6	4	6	5	6	5	6	4	3	2	2	2	2	2	2	9	3	3	4	5	A	6	12	5	4.6	12.5
28-Jun	4	4	5	5	7	10	9	6	5	6	C	C	9	7	3	31	3	7	9	4	6	9	9	8	7.6	31.3
29-Jun	5	3	3	5	5	A	10	5	7	3	2	3	3	2	7	8	3	4	7	5	6	3	3	3	4.5	10.5
30-Jun	2	2	2	3	A	9	9	9	15	4	5	5	4	4	3	4	4	3	3	4	3	3	6	7	4.9	15.3
	9.9	8.4	7.8	8.7	10.0	10.3	10.6	8.7	7.5	6.0	4.8	5.7	4.9	4.5	4.7	6.3	4.4	4.4	4.7	4.7	7.2	9.8	11.4	9.8	Diurnal Average	
	23.4	21.0	16.0	23.7	23.4	18.5	22.9	21.0	16.0	19.2	19.1	50.1	20.2	23.3	13.5	31.3	12.5	13.5	10.8	9.0	15.7	28.0	39.4	23.9	Diurnal Maximum	

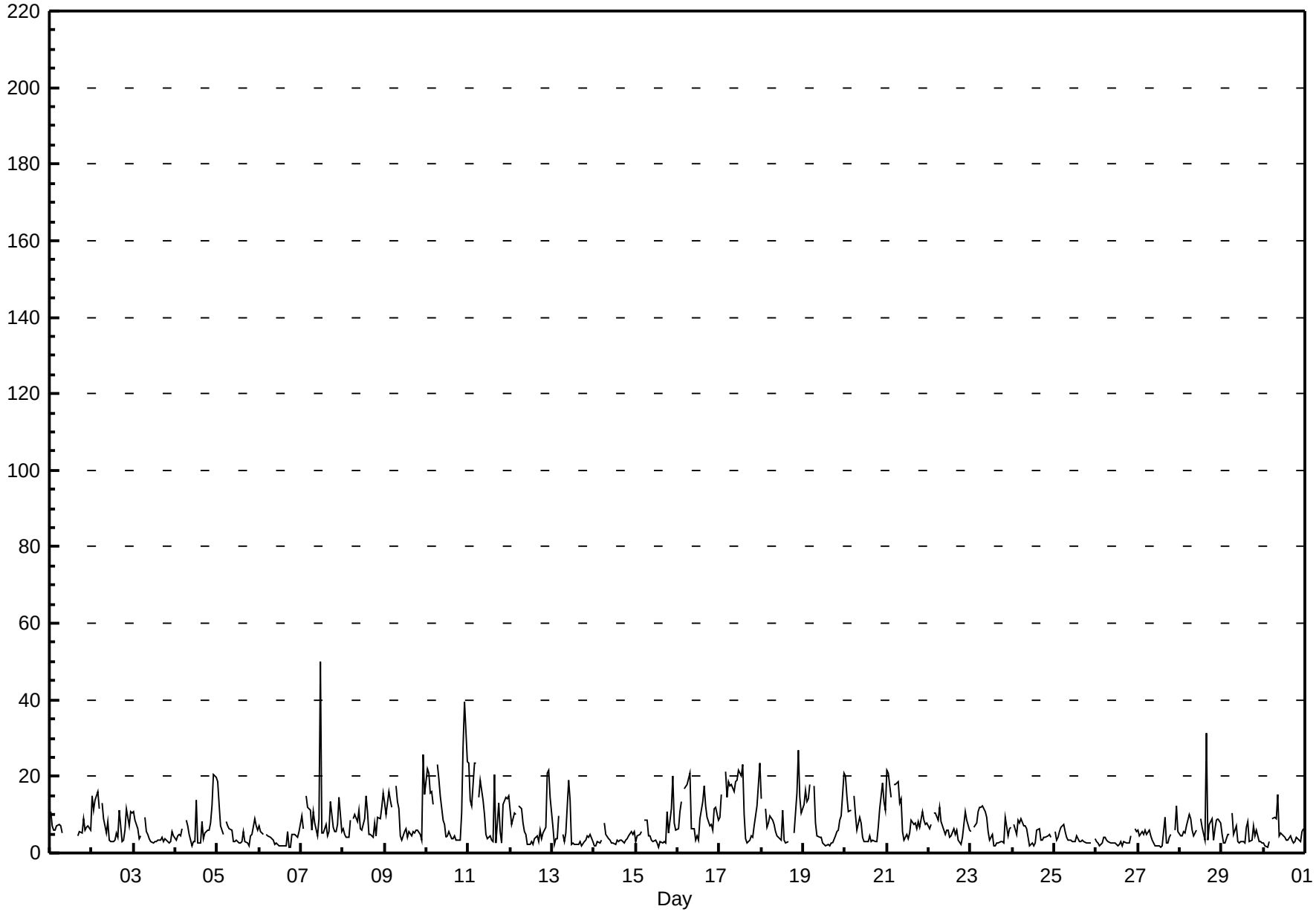
C - Calibration P - Power Failure A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

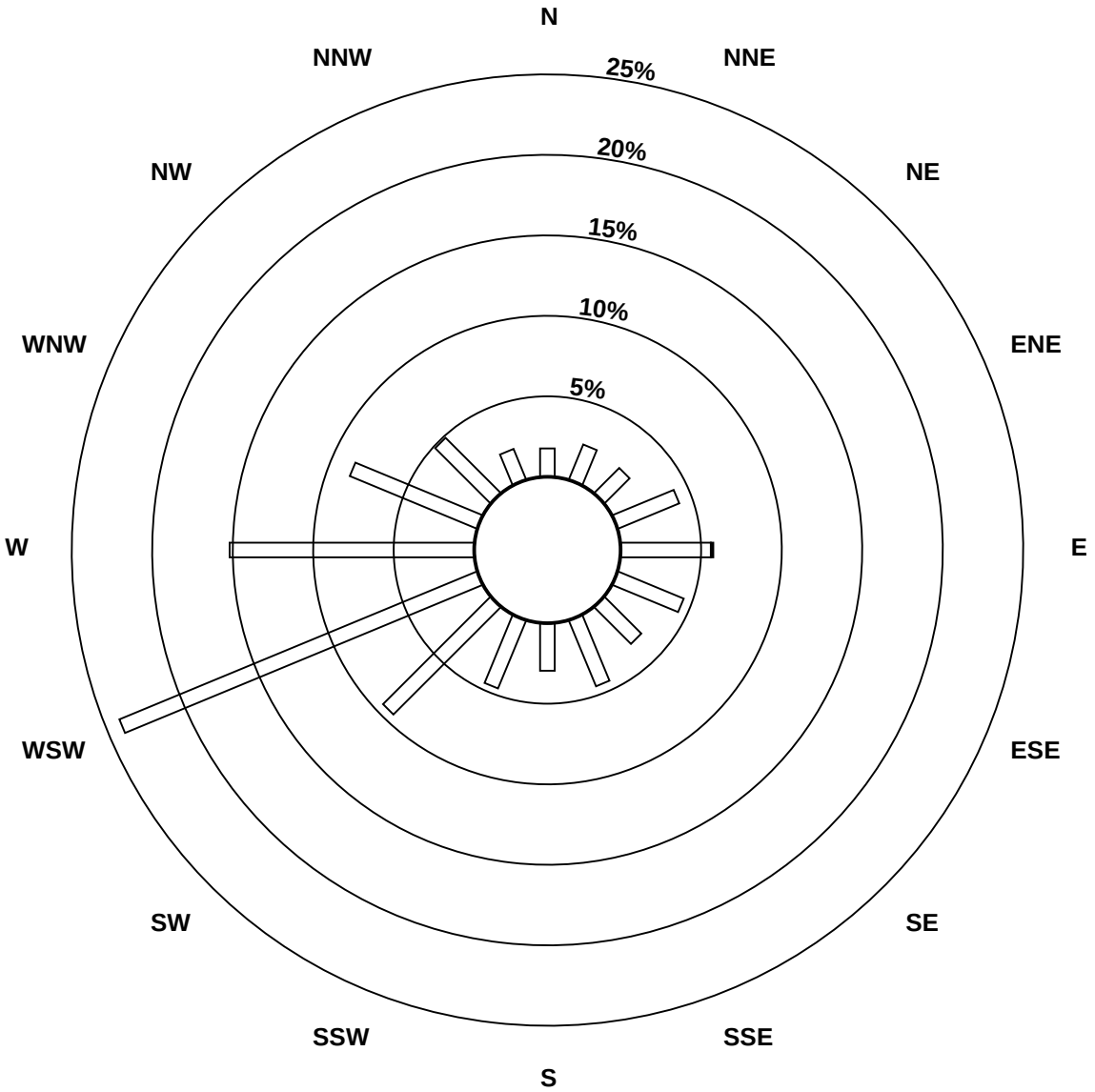
Henry Pirker - June 2010



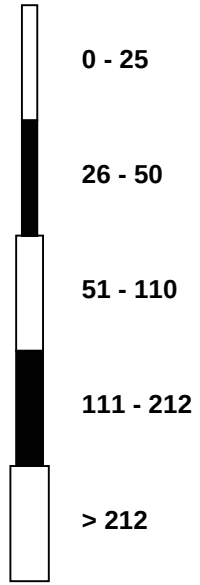
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.5 ppb on Jun 10 07:00 Maximum Daily Average: 3.7 ppb on Jun 10

Minimum Value: 0 ppb on Jun 3 04:00 Minimum Daily Average: 0.2 ppb on Jun 13
Maximum Diurnal Average: 4.2 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 1
Monthly Average: 0.90 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.3 $Q_3 = 0.8$ $P_{90} = 1.7$ $P_{99} = 13.5$

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	39
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	0	0	0	0	0	1	2	1	C	C	C	C	C	C	C	C	1	1	1	1	0	0	0	0	--	1.6
2-Jun	0	0	0	1	0	A	2	3	3	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.7	3.0
3-Jun	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.0
4-Jun	0	0	0	0	0	A	2	2	1	1	1	0	1	0	0	0	0	1	0	1	1	0	0	0	0.6	2.4
5-Jun	0	0	0	0	A	1	1	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	1.5
6-Jun	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
7-Jun	0	0	A	0	1	1	2	3	1	1	3	4	1	1	1	1	1	1	1	0	0	0	0	0	1.0	3.8
8-Jun	0	0	0	0	0	A	1	1	2	3	1	1	1	1	1	0	1	0	0	0	0	0	0	1	0.7	3.4
9-Jun	0	0	1	1	1	A	20	20	5	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	2.4	20.1
10-Jun	1	4	4	7	8	A	26	20	7	2	1	0	1	0	0	0	0	0	0	0	0	0	2	0	3.7	25.5
11-Jun	0	0	0	0	2	A	5	9	6	2	1	0	0	0	0	1	0	0	1	0	0	0	0	0	1.2	8.9
12-Jun	0	0	0	0	A	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.8
13-Jun	0	0	0	0	0	A	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
14-Jun	0	0	0	0	0	A	1	1	1	1	1	1	0	1	0	1	1	0	0	0	0	0	0	0	0.4	1.4
15-Jun	0	0	0	0	A	1	2	2	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0.5	2.1
16-Jun	0	0	0	A	2	11	13	18	2	1	1	1	0	1	2	5	2	1	0	0	0	0	0	0	2.6	17.7
17-Jun	0	0	A	1	1	14	17	10	7	7	1	1	1	2	1	0	0	0	0	0	0	0	0	0	2.8	16.9
18-Jun	0	A	0	0	0	1	2	2	1	1	1	0	0	0	0	0	P	P	P	6	5	3	0	0	1.2	6.1
19-Jun	0	0	0	0	2	A	5	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.6
20-Jun	0	0	0	0	A	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8
21-Jun	0	1	0	A	1	4	4	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	6.1
22-Jun	0	0	A	0	0	1	2	4	3	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0.8	4.0
23-Jun	0	A	0	0	0	1	4	4	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.3
24-Jun	A	0	0	0	0	1	2	2	2	1	0	0	0	0	1	1	0	1	0	0	0	0	0	A	0.5	1.7
25-Jun	0	0	0	0	0	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0.6	1.6
26-Jun	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0.4	1.1
27-Jun	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.7
28-Jun	0	0	0	0	0	2	3	2	2	1	C	C	1	1	0	1	0	0	1	0	0	0	0	0	0.8	3.4
29-Jun	0	0	0	0	0	A	2	2	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0.4	2.5
30-Jun	0	0	0	0	A	0	1	2	2	1	2	1	1	1	1	1	1	1	1	1	0	0	0	1	0.8	2.3
	0.1	0.2	0.2	0.4	0.8	2.3	4.2	4.2	2.2	1.4	0.8	0.6	0.5	0.5	0.5	0.6	0.5	0.3	0.3	0.4	0.3	0.2	0.1	0.1	Diurnal Average	
	0.8	4.0	4.2	7.0	7.7	14.3	25.5	19.7	7.4	7.0	3.1	3.8	1.4	1.7	1.7	4.6	2.1	0.9	0.9	6.1	4.8	3.1	1.6	1.1	Diurnal Maximum	

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

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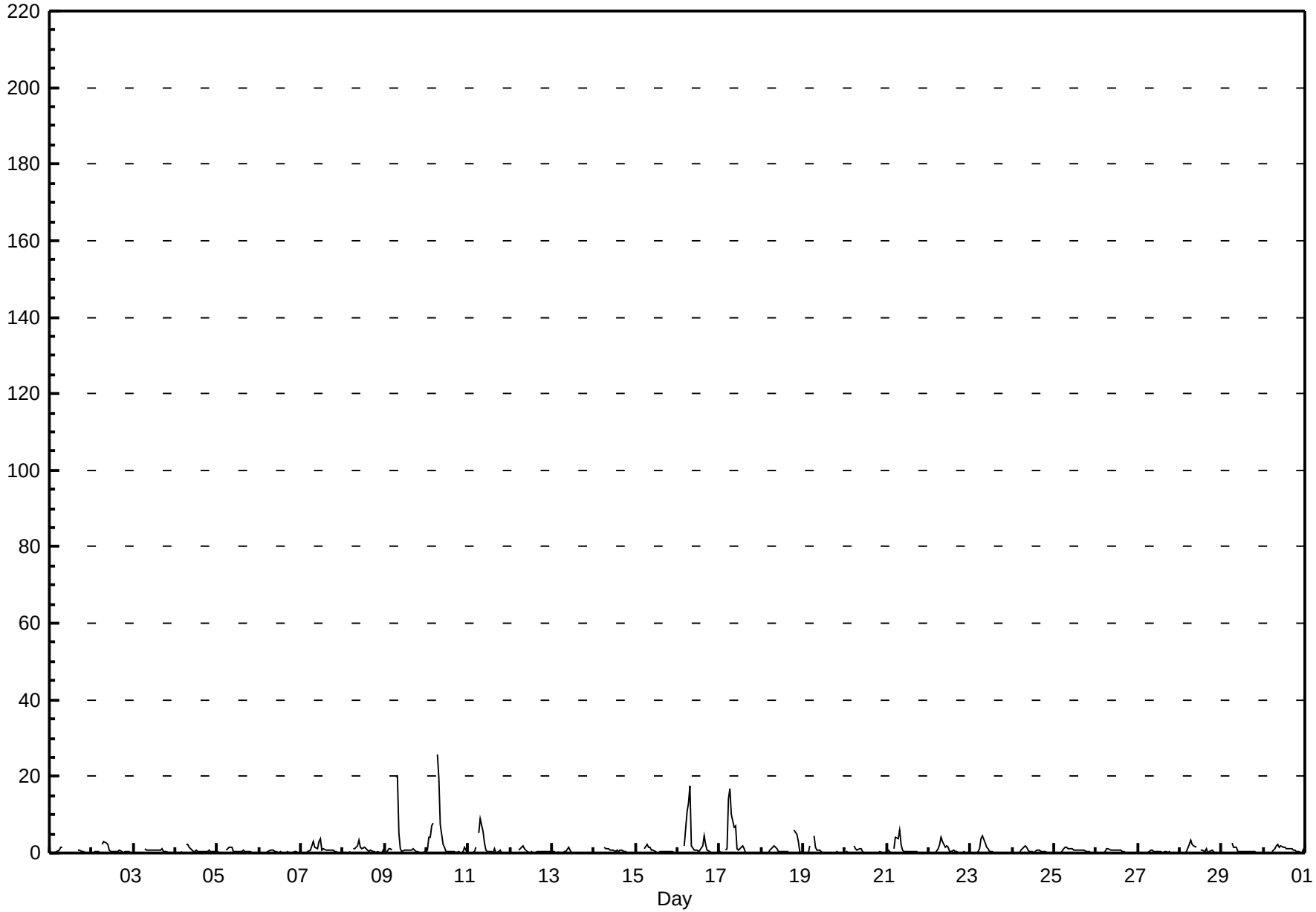
Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2010



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Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2010

Maximum Value: 165.1 ppb on Jun 21 08:00

Maximum Daily Average: 12.0 ppb on Jun 21

Minimum Value: 0 ppb on Jun 13 20:00

Minimum Daily Average: 0.7 ppb on Jun 27

Maximum Diurnal Average: 12.8 ppb at hour 8

Minimum Diurnal Average: 0.8 ppb at hour 1

Monthly Average: 3.28 ppb

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.5 Median = 1.3 Q_3 = 2.8 P_{90} = 7.1 P_{99} = 31.4

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	39
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	1	1	1	1	1	2	3	3	C	C	C	C	C	C	C	C	2	3	2	3	0	1	2	0	--	3.2
2-Jun	2	1	6	3	1	A	4	5	30	9	2	1	1	1	1	1	3	1	1	1	5	4	1	2	3.7	30.4
3-Jun	3	0	1	0	1	A	2	2	2	1	2	1	1	2	2	2	2	1	2	1	1	0	0	0	1.2	2.5
4-Jun	0	0	0	1	1	A	4	3	3	1	1	2	29	1	1	4	1	2	1	7	2	2	3	1	3.0	29.0
5-Jun	1	2	0	0	A	2	2	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1.1	2.5
6-Jun	0	0	0	A	0	1	1	1	1	1	1	1	5	1	1	1	4	1	1	1	2	1	0	2	1.2	5.0
7-Jun	1	0	A	1	3	5	4	13	5	4	15	49	4	4	5	3	5	9	4	2	3	1	1	1	6.2	48.9
8-Jun	1	1	1	1	2	A	3	4	17	18	3	3	6	7	5	1	1	1	2	1	1	0	1	10	3.9	17.9
9-Jun	1	0	7	5	1	A	31	31	16	2	2	1	1	1	3	2	5	3	2	1	0	0	3	1	5.3	31.0
10-Jun	3	10	12	11	12	A	53	42	13	4	3	2	2	1	1	1	2	1	1	1	1	4	5	0	8.1	52.9
11-Jun	0	0	0	2	5	A	8	16	8	5	1	1	1	1	1	18	1	8	28	1	1	0	0	0	4.5	28.2
12-Jun	0	0	1	0	A	2	3	3	2	16	0	0	1	0	1	1	0	1	1	1	0	0	9	0	1.9	16.1
13-Jun	0	0	0	0	2	A	0	0	1	39	15	1	1	0	1	0	0	0	0	0	0	0	0	0	2.8	38.9
14-Jun	0	0	0	0	0	A	2	2	2	2	1	1	1	2	1	1	2	1	1	1	1	0	0	0	0.9	2.0
15-Jun	0	0	0	0	A	2	3	2	5	2	1	4	3	1	1	1	4	1	11	4	1	1	2	3	2.3	11.2
16-Jun	0	0	0	A	6	20	33	31	3	4	1	3	1	4	17	21	12	7	3	1	1	1	2	2	7.6	33.1
17-Jun	4	1	A	3	4	27	29	14	10	10	8	5	12	13	7	1	1	0	1	0	0	1	2	1	6.6	29.1
18-Jun	0	A	0	0	0	2	2	3	2	2	1	1	6	1	1	1	P	P	P	8	12	21	0	0	3.2	21.2
19-Jun	1	2	0	0	4	A	7	4	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	2	1.2	7.0
20-Jun	2	5	1	3	A	3	2	2	3	3	1	1	1	1	1	2	1	1	1	0	1	3	2	2	1.8	5.2
21-Jun	3	3	1	A	5	8	7	165	59	3	1	2	2	2	3	2	4	1	2	0	0	0	1	0	12.0	165.1
22-Jun	0	0	A	0	1	2	6	6	6	3	3	2	1	1	2	1	1	1	0	1	1	1	1	0	1.6	5.8
23-Jun	0	A	0	1	1	3	9	9	5	3	2	1	6	1	1	1	1	0	1	0	1	0	0	0	1.9	9.0
24-Jun	A	0	0	0	1	2	3	3	3	1	1	1	1	1	2	3	1	1	1	1	1	1	0	A	1.1	3.5
25-Jun	0	0	0	0	1	2	2	2	2	2	2	2	2	2	1	2	2	1	1	1	1	1	A	1	1.3	2.5
26-Jun	0	0	0	0	1	1	2	2	1	2	2	2	1	2	3	1	1	1	1	1	0	A	0	0	1.0	2.8
27-Jun	0	0	0	0	0	0	1	2	1	1	1	1	1	1	1	3	1	1	1	1	A	1	1	0	0.7	2.9
28-Jun	0	0	0	0	1	6	6	4	5	15	C	C	12	9	1	18	1	1	6	1	1	2	2	3	4.2	18.1
29-Jun	0	0	0	0	0	A	5	2	6	1	1	1	6	1	6	3	1	1	15	3	1	0	0	0	2.4	14.9
30-Jun	0	0	0	0	A	2	3	8	11	3	9	3	3	2	2	3	2	2	2	2	1	1	1	21	3.5	20.5
	0.8	1.0	1.2	1.2	2.2	4.8	8.0	12.8	7.7	5.5	2.9	3.3	3.9	2.1	2.5	3.5	2.2	1.9	3.2	1.4	1.4	1.6	1.4	1.8	Diurnal Average	
	4.3	10.4	12.0	11.0	12.0	26.6	52.9	165.1	58.8	38.9	15.1	48.9	29.0	12.6	17.0	21.0	11.9	9.4	28.2	7.9	11.6	21.2	8.8	20.5	Diurnal Maximum	

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

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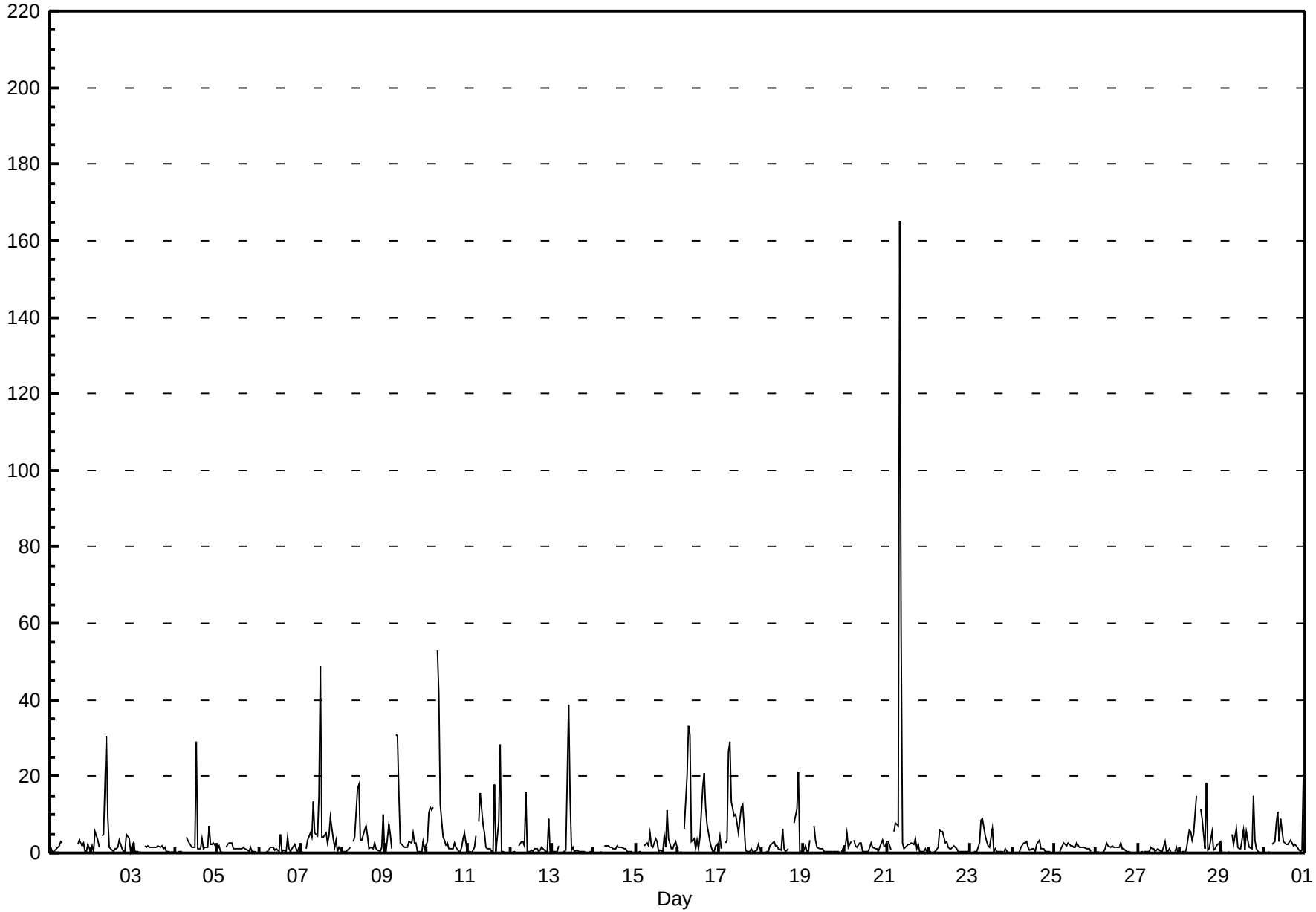
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2010



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Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 41.7 ppb on Jun 10 07:00 Maximum Daily Average: 13.0 ppb on Jun 10

Minimum Value: 1 ppb on Jun 6 18:00 Minimum Daily Average: 2.1 ppb on Jun 13
Maximum Diurnal Average: 11.9 ppb at hour 7 Minimum Diurnal Average: 2.3 ppb at hour 18
Monthly Average: 5.30 ppb Percentiles: $P_1 = 0.9$ $P_{10} = 1.6$ $Q_1 = 2.3$ Median = 3.7 $Q_3 = 6.4$ $P_{90} = 10.6$ $P_{99} = 31.1$

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	39
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	6	4	5	5	6	7	7	6	C	C	C	C	C	C	C	C	3	4	3	5	3	5	4	5	--	7.1
2-Jun	8	8	8	11	10	A	10	10	6	7	3	2	2	3	3	2	4	2	2	4	6	5	5	7	5.5	11.2
3-Jun	6	6	4	3	2	A	7	5	4	3	3	2	3	3	3	3	4	2	2	3	2	2	3	3	3.4	7.2
4-Jun	3	3	4	4	4	A	9	7	4	2	2	2	2	1	2	2	2	3	3	4	5	8	14	14	4.5	14.3
5-Jun	12	8	6	4	A	7	5	6	5	2	2	2	1	2	2	3	2	2	1	2	3	6	5	4	3.9	12.3
6-Jun	5	5	4	A	4	3	3	4	3	2	1	1	1	1	1	1	2	1	1	2	3	4	4	3	2.5	5.2
7-Jun	5	5	A	12	9	5	6	8	5	4	7	7	3	3	3	3	3	4	4	4	4	6	6	4	5.3	11.9
8-Jun	5	4	3	3	5	A	8	6	5	7	5	5	5	4	5	4	4	3	3	2	5	5	7	12	5.1	11.7
9-Jun	10	9	12	11	10	A	36	31	13	4	2	4	4	3	4	3	4	3	4	4	3	3	10	13	8.7	35.8
10-Jun	18	22	18	22	20	A	42	34	18	8	5	2	3	3	2	2	2	2	3	2	4	16	32	20	13.0	41.7
11-Jun	14	11	11	17	17	A	17	23	17	9	4	2	2	2	2	3	2	3	2	2	7	11	11	10	8.6	23.1
12-Jun	8	7	8	8	A	11	9	9	4	3	2	2	2	1	1	2	2	3	3	3	5	10	14	10	5.5	14.3
13-Jun	3	2	2	3	3	A	3	2	4	6	2	1	1	1	1	1	1	1	2	2	2	3	3	2	2.1	5.7
14-Jun	1	1	2	2	3	A	6	4	3	2	2	2	2	2	2	2	3	2	2	1	3	4	3	4	2.5	6.4
15-Jun	3	3	3	4	A	8	8	5	4	3	2	2	1	1	2	1	2	1	2	3	5	9	5	3	3.5	8.8
16-Jun	4	9	12	A	16	26	28	33	6	4	3	3	2	3	5	11	6	4	3	3	4	8	9	6	9.1	33.3
17-Jun	6	7	A	17	14	31	32	26	20	21	5	4	5	6	4	1	1	2	2	2	5	7	9	15	10.4	32.2
18-Jun	9	A	7	5	6	8	7	7	5	4	3	2	2	2	1	2	P	P	P	9	8	11	7	8	5.6	10.6
19-Jun	11	11	10	13	18	A	17	7	4	4	3	2	1	1	1	1	1	2	2	4	5	7	7	12	6.3	18.1
20-Jun	10	9	8	8	A	14	7	5	7	7	3	3	2	2	1	1	1	1	1	3	7	7	7	6	5.4	14.4
21-Jun	14	17	11	A	16	20	16	13	7	4	3	3	3	2	4	4	5	4	4	5	8	5	5	6	7.7	19.9
22-Jun	5	7	A	10	8	9	10	11	8	5	6	6	3	4	5	3	3	2	2	3	5	6	5	4	5.7	11.1
23-Jun	4	A	6	7	9	11	14	14	11	7	5	2	2	1	1	1	1	2	2	2	4	3	4	3	5.1	14.2
24-Jun	A	4	4	6	6	8	7	7	5	3	2	2	1	2	4	3	2	3	2	2	3	4	3	A	3.7	7.8
25-Jun	4	2	3	4	5	7	6	4	3	3	3	3	2	3	2	3	2	2	2	2	2	2	A	3	3.1	7.1
26-Jun	2	2	2	2	3	4	4	3	2	2	2	2	2	2	2	2	2	1	1	1	2	A	5	4	2.4	5.2
27-Jun	3	3	4	4	4	3	4	4	3	2	1	1	1	1	1	3	2	1	3	2	A	4	4	3	2.7	4.2
28-Jun	3	4	5	4	5	9	10	6	5	4	C	C	5	6	4	6	4	5	7	5	6	9	9	7	5.8	9.6
29-Jun	4	3	3	4	4	A	10	6	5	2	2	2	2	2	2	3	2	2	3	3	4	2	2	2	3.0	9.6
30-Jun	2	1	1	2	A	7	8	8	7	5	5	5	4	4	3	3	3	2	3	2	2	2	4	5	3.9	8.1
	6.5	6.2	6.1	7.2	8.2	10.4	11.9	10.4	6.7	4.7	3.2	2.7	2.5	2.4	2.5	2.7	2.6	2.3	2.6	3.0	4.3	5.9	7.1	6.8	Diurnal Average	
	18.0	21.6	18.3	21.9	19.5	30.8	41.7	33.9	19.7	21.2	6.5	7.3	5.4	5.8	5.3	10.8	6.2	5.0	7.2	9.0	8.3	16.2	31.8	20.2	Diurnal Maximum	

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

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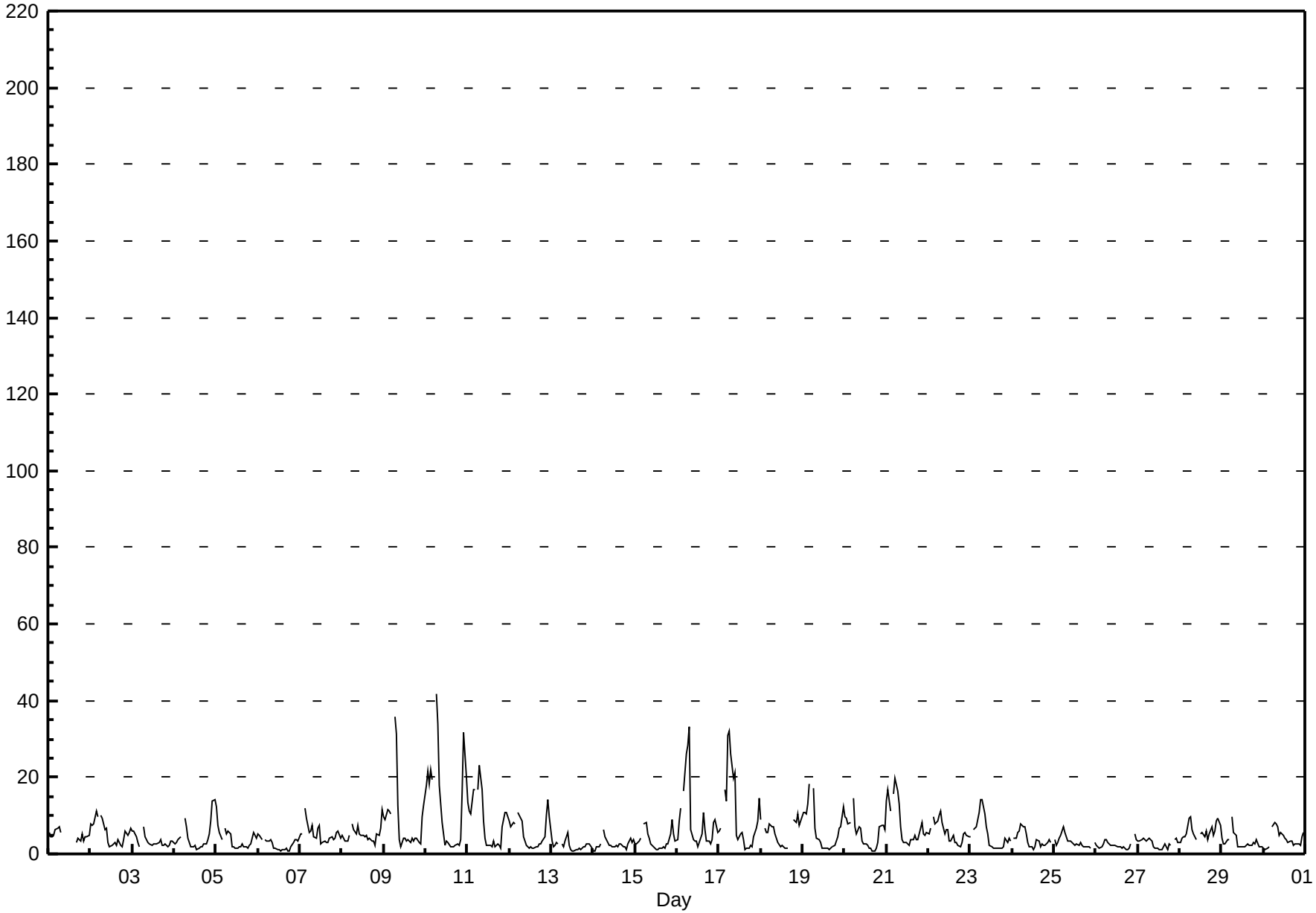
Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2010

Maximum Value: 134.9 ppb on Jun 21 08:00

Maximum Daily Average: 20.8 ppb on Jun 10

Minimum Value: 2 ppb on Jun 6 19:00

Minimum Daily Average: 4.0 ppb on Jun 26

Maximum Diurnal Average: 19.8 ppb at hour 8

Minimum Diurnal Average: 6.1 ppb at hour 20

Monthly Average: 10.28 ppb

Percentiles: P_1 = 2.0 P_{10} = 3.2 Q_1 = 4.5 Median = 6.9 Q_3 = 12.0 P_{90} = 22.6 P_{99} = 51.8

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	39
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	12	8	7	7	8	10	10	8	C	C	C	C	C	C	C	C	6	8	7	12	6	7	9	6	--	12.2
2-Jun	17	12	19	19	13	A	17	14	26	9	5	4	3	4	6	4	14	4	3	6	17	10	11	11	10.8	25.8
3-Jun	11	9	6	4	5	A	11	7	7	5	4	4	4	4	5	5	6	4	6	4	3	3	6	4	5.6	11.5
4-Jun	4	5	5	5	7	A	12	10	7	3	5	4	37	3	3	12	5	7	7	12	9	13	23	21	9.6	36.8
5-Jun	19	13	7	5	A	10	9	9	8	4	4	4	4	4	4	7	4	3	3	6	6	9	7	6	6.7	19.4
6-Jun	7	6	5	A	5	5	5	5	5	3	4	2	5	2	3	2	10	2	2	6	7	6	4	7	4.7	9.6
7-Jun	10	7	A	16	15	13	9	24	12	8	23	99	8	9	12	7	8	23	10	6	9	8	16	6	15.6	99.4
8-Jun	7	5	5	5	10	A	12	14	25	29	10	9	15	22	16	6	6	4	10	5	10	9	13	23	11.7	29.1
9-Jun	13	10	24	18	12	A	45	44	27	6	5	7	8	5	8	7	10	8	7	7	6	3	29	16	14.2	44.7
10-Jun	25	30	27	26	25	A	74	61	27	13	11	5	7	6	5	5	6	5	4	4	12	32	44	24	20.8	74.2
11-Jun	24	14	13	24	28	A	23	34	22	16	6	5	5	4	3	39	3	21	33	3	13	15	14	15	16.4	38.6
12-Jun	11	7	11	10	A	14	13	10	7	10	3	3	4	2	5	5	3	7	5	6	7	21	23	15	8.9	23.4
13-Jun	7	3	4	4	12	A	5	3	6	56	28	3	4	3	3	3	3	2	3	3	4	4	5	3	7.3	56.1
14-Jun	2	2	3	2	4	A	10	7	5	5	4	4	3	5	4	5	5	4	4	4	5	6	5	6	4.5	10.0
15-Jun	3	5	5	6	A	10	11	7	10	5	4	7	5	2	4	3	7	4	22	9	13	21	10	9	7.9	22.1
16-Jun	6	11	14	A	20	36	53	51	10	10	5	8	4	13	29	38	23	17	10	9	6	12	14	11	17.7	52.7
17-Jun	13	17	A	23	18	45	46	32	25	28	27	27	32	36	17	4	3	4	5	4	7	13	20	24	20.4	46.1
18-Jun	14	A	11	7	8	12	11	10	7	6	5	4	17	4	3	4	P	P	P	12	27	48	15	11	11.8	48.1
19-Jun	13	18	13	14	21	A	23	12	6	5	5	3	3	3	3	2	3	3	5	6	6	9	10	23	9.0	23.1
20-Jun	22	20	12	14	A	17	12	8	12	11	5	3	3	3	6	5	5	3	4	7	12	22	15	13	10.2	21.7
21-Jun	24	24	15	A	23	25	26	135	73	8	5	7	6	7	11	9	12	8	11	7	11	9	9	8	20.5	134.9
22-Jun	7	8	A	11	11	10	18	13	13	8	9	8	6	5	8	6	7	4	2	4	8	11	9	7	8.2	17.6
23-Jun	6	A	7	9	13	14	21	21	16	12	8	5	10	3	3	3	3	3	3	3	11	4	6	7	8.2	20.9
24-Jun	A	7	5	9	8	10	10	10	8	5	3	4	3	3	8	10	4	5	5	5	4	5	4	A	6.1	10.3
25-Jun	6	4	4	6	8	10	8	6	6	5	5	4	4	7	4	5	4	4	4	3	3	3	A	4	5.1	10.0
26-Jun	3	3	2	3	4	5	6	5	4	5	4	4	3	4	6	3	4	3	3	3	5	A	7	6	4.0	6.5
27-Jun	6	4	6	5	6	5	6	5	5	4	2	3	2	2	2	12	3	3	5	5	A	6	14	6	5.1	14.0
28-Jun	5	5	6	6	8	16	15	9	8	20	C	C	25	19	7	50	6	11	14	6	10	12	13	10	12.7	50.0
29-Jun	7	3	3	6	6	A	17	8	14	4	4	4	8	4	13	13	5	5	22	8	7	3	4	3	7.5	22.1
30-Jun	3	2	2	4	A	12	13	14	28	8	15	8	7	6	7	8	6	4	4	6	5	4	7	25	8.5	27.8
	10.5	9.3	8.9	9.8	11.8	14.6	18.3	19.8	14.8	10.7	7.7	9.0	8.5	6.8	7.2	9.8	6.4	6.2	7.7	6.1	8.6	11.3	12.6	11.3	Diurnal Average	
	24.6	30.4	27.1	26.1	28.1	44.6	74.2	134.9	72.8	56.1	28.4	99.4	36.8	36.1	28.7	50.0	22.8	22.8	32.9	12.3	27.3	48.1	44.0	24.7	Diurnal Maximum	

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

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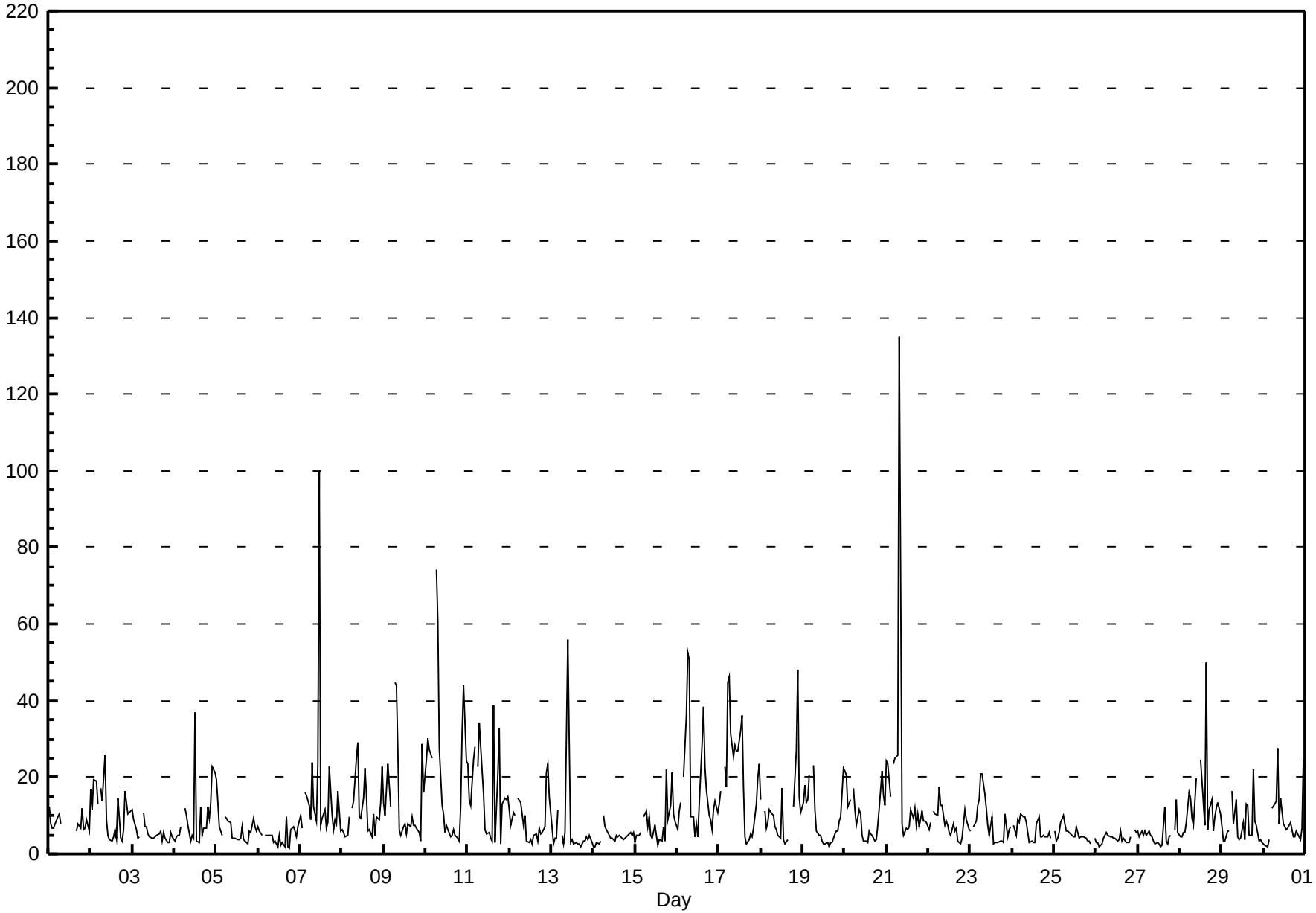
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2010



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Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 52.7 ppb on Jun 17 18:00 Maximum Daily Average: 37.5 ppb on Jun 20

Minimum Value: 1 ppb on Jun 10 04:00 Minimum Daily Average: 22.8 ppb on Jun 25
Maximum Diurnal Average: 38.9 ppb at hour 18 Minimum Diurnal Average: 16.0 ppb at hour 6
Monthly Average: 29.33 ppb Percentiles: P_1 = 4.7 P_{10} = 15.8 Q_1 = 22.7 Median = 30.1 Q_3 = 36.2 P_{90} = 42.4 P_{99} = 51.0

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	31	32	31	28	25	25	26	29	33	37	39	C	C	C	C	C	C	45	45	42	38	34	31	27	33.3	45.3
2-Jun	22	19	17	13	14	A	21	21	23	25	33	39	41	40	40	40	39	41	41	38	33	31	30	26	29.8	41.2
3-Jun	25	22	25	25	29	A	28	32	33	36	36	36	36	36	36	36	34	33	31	30	31	30	27	26	30.9	36.3
4-Jun	25	23	21	21	21	A	20	23	27	30	32	33	35	36	36	36	37	36	35	33	29	23	16	11	27.9	36.5
5-Jun	13	17	17	24	A	21	23	24	26	31	35	38	39	36	36	35	34	34	34	32	30	27	26	26	28.7	38.5
6-Jun	24	25	26	A	27	26	26	27	29	33	36	38	40	41	43	44	44	46	46	44	36	34	32	32	34.7	46.3
7-Jun	27	25	A	15	15	18	16	15	17	17	19	22	27	30	34	36	36	36	37	39	36	32	31	32	26.6	39.4
8-Jun	28	26	26	24	22	A	19	20	23	24	27	31	33	34	34	33	32	33	32	31	27	26	19	13	26.8	34.2
9-Jun	11	11	7	8	6	A	2	5	18	26	31	33	33	34	36	39	39	41	39	38	33	30	22	15	24.4	40.6
10-Jun	7	2	3	1	1	A	5	9	20	29	34	40	41	41	40	43	45	48	45	46	44	28	13	17	26.1	48.3
11-Jun	19	20	19	10	10	A	14	16	25	31	39	45	47	48	48	47	46	44	45	45	38	32	29	26	32.3	48.2
12-Jun	24	25	21	16	A	18	22	25	31	36	38	40	39	39	38	38	35	30	29	25	26	22	15	18	28.2	39.6
13-Jun	22	21	20	19	23	A	39	37	34	31	32	34	35	37	39	42	41	43	40	40	40	35	35	36	33.7	43.4
14-Jun	35	33	30	28	25	A	23	26	29	30	31	31	32	34	37	37	33	32	31	31	29	25	25	24	30.1	36.9
15-Jun	25	24	22	21	A	19	20	23	24	27	29	31	33	33	33	35	36	36	35	35	31	25	30	31	28.6	36.5
16-Jun	29	18	11	A	6	5	8	14	28	32	36	39	41	41	39	37	39	41	41	40	38	32	29	32	29.5	41.1
17-Jun	30	28	A	5	7	3	8	16	23	27	40	45	46	47	48	51	52	53	52	51	43	38	34	22	33.4	52.7
18-Jun	28	A	23	20	21	20	24	26	29	33	39	42	43	42	44	44	P	P	P	38	33	28	24	19	31.0	43.9
19-Jun	15	13	13	9	4	A	11	23	29	33	38	41	43	43	43	43	44	43	45	44	42	36	33	22	30.9	45.4
20-Jun	24	20	22	21	A	15	24	29	34	38	45	49	52	52	50	51	49	49	48	43	36	39	36	36	37.5	52.0
21-Jun	17	6	11	A	10	8	16	26	34	39	42	43	46	46	47	48	47	47	44	37	32	33	32	29	32.1	48.3
22-Jun	28	23	A	15	15	12	14	13	16	23	29	37	42	46	43	44	44	43	40	36	32	27	25	25	29.2	45.5
23-Jun	23	A	20	18	14	12	10	15	19	23	29	31	33	34	34	36	38	39	38	35	31	34	33	31	27.4	38.7
24-Jun	A	28	24	20	19	16	19	20	25	30	32	33	32	32	29	29	30	29	29	26	24	21	24	A	26.0	32.6
25-Jun	23	23	20	17	15	15	18	19	20	21	23	26	29	29	29	29	31	29	26	23	22	22	A	17	22.8	30.6
26-Jun	17	18	17	16	15	14	15	17	20	22	23	23	23	23	24	28	37	39	38	38	34	A	33	33	24.7	38.9
27-Jun	32	31	29	26	27	27	25	23	23	28	31	32	32	33	34	34	36	35	31	29	A	29	29	28	29.7	36.1
28-Jun	23	20	18	18	15	11	14	20	24	30	33	35	37	39	40	40	41	41	40	41	37	31	28	26	29.2	41.2
29-Jun	27	30	29	25	23	A	17	23	26	34	35	36	35	34	34	34	34	35	35	34	31	32	33	32	30.9	36.0
30-Jun	32	32	29	27	A	19	16	15	16	18	19	21	21	26	27	27	27	29	30	29	28	27	23	21	24.3	32.5
	23.7	21.9	20.4	18.1	16.3	16.0	18.2	21.1	25.3	29.2	32.8	35.4	36.8	37.4	37.9	38.5	38.5	38.9	38.0	36.5	33.2	29.7	27.5	25.3	Diurnal Average	
	35.4	33.4	30.9	28.5	29.0	26.6	38.8	37.4	34.5	38.9	44.9	49.1	52.0	52.0	50.3	51.1	52.3	52.7	52.1	50.6	44.0	39.0	36.3	35.9	Diurnal Maximum	

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

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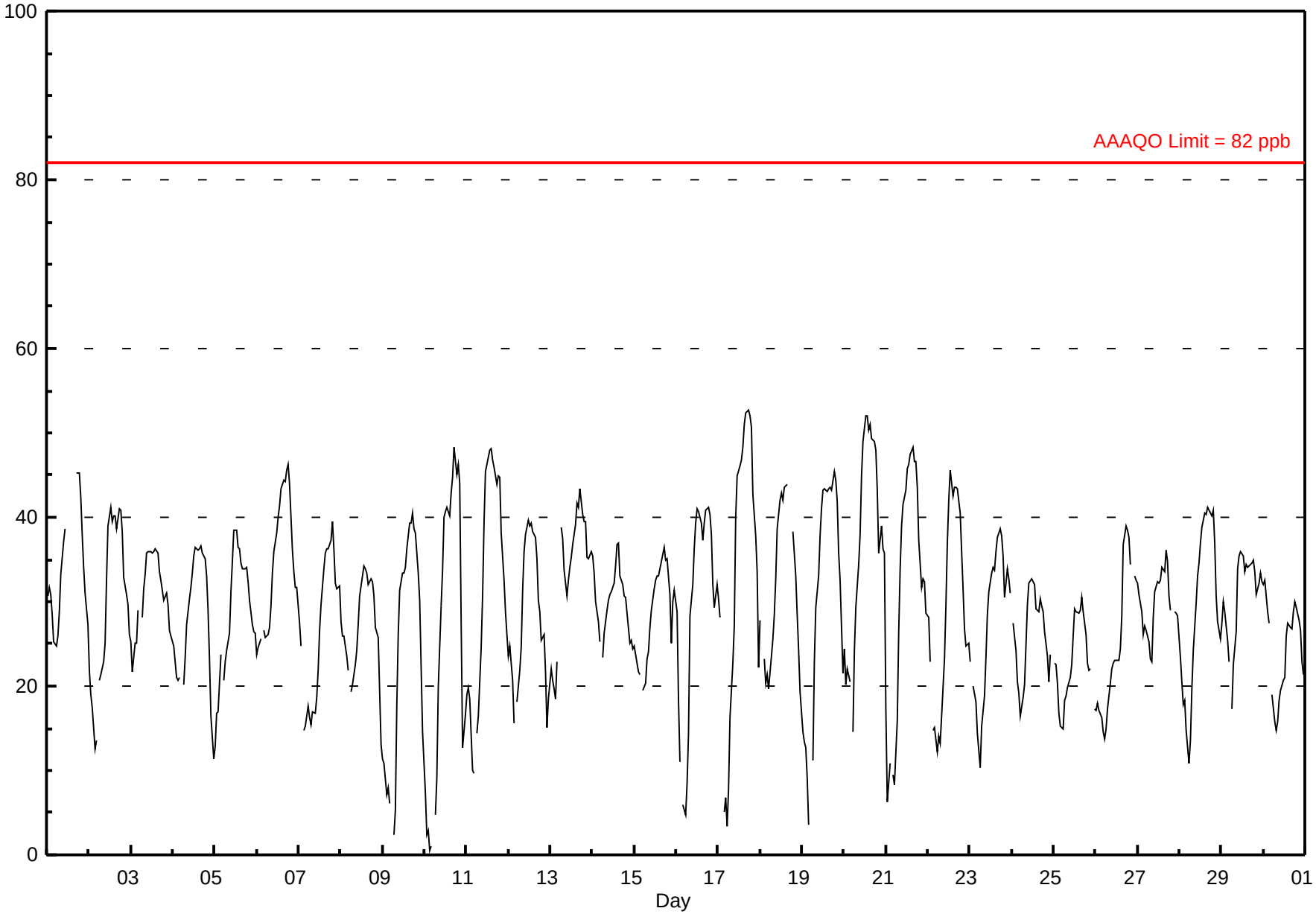
Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - June 2010



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Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - June 2010

Maximum Value: 54.3 ppb on Jun 17 19:00

Maximum Daily Average: 41.0 ppb on Jun 20

Minimum Value: 1 ppb on Jun 10 04:00

Minimum Daily Average: 24.6 ppb on Jun 25

Maximum Diurnal Average: 41.1 ppb at hour 16

Minimum Diurnal Average: 18.7 ppb at hour 6

Monthly Average: 32.17 ppb

Percentiles: P_1 = 8.0 P_{10} = 19.1 Q_1 = 25.3 Median = 32.8 Q_3 = 38.7 P_{90} = 44.7 P_{99} = 52.7

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	35
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	33	35	33	30	27	27	29	31	37	39	40	C	C	C	C	C	C	47	48	46	41	37	33	33	36.0	47.8
2-Jun	26	23	23	17	17	A	25	23	26	30	37	41	43	42	43	43	42	44	43	42	38	33	33	29	33.1	44.2
3-Jun	28	25	30	29	32	A	33	34	36	38	37	38	37	38	38	38	36	34	33	33	33	31	29	27	33.3	38.3
4-Jun	27	24	22	22	23	A	22	26	31	32	33	36	38	38	37	38	38	38	37	36	33	27	23	14	30.2	38.3
5-Jun	19	22	21	25	A	24	25	26	30	33	38	41	40	39	38	37	36	36	36	34	32	31	28	29	31.2	41.3
6-Jun	25	27	28	A	29	27	27	29	33	36	38	39	43	43	45	46	47	48	48	47	41	35	33	33	36.8	47.7
7-Jun	32	27	A	18	18	20	18	17	19	18	21	26	29	33	36	38	38	38	40	41	40	34	34	34	29.1	41.2
8-Jun	30	27	27	25	23	A	22	24	27	28	32	35	36	37	37	36	35	35	34	33	31	30	22	16	29.6	36.8
9-Jun	14	13	11	14	8	A	4	10	23	31	35	37	37	36	39	41	42	42	41	41	37	32	28	22	27.7	42.3
10-Jun	14	10	8	1	2	A	10	16	28	32	38	43	44	45	43	44	47	50	49	48	47	40	24	23	30.6	50.2
11-Jun	24	24	23	15	19	A	19	21	29	38	44	47	49	50	50	50	47	46	47	47	44	36	33	30	36.2	50.3
12-Jun	28	27	24	18	A	21	25	28	35	39	41	41	40	41	40	39	37	33	30	28	29	27	17	25	31.1	41.0
13-Jun	25	21	20	23	24	A	40	39	37	34	35	36	37	38	42	44	44	45	43	45	49	36	37	38	36.3	49.3
14-Jun	37	36	32	29	27	A	26	29	30	31	32	33	34	36	40	39	35	34	32	32	31	27	27	26	32.0	40.2
15-Jun	25	25	23	23	A	22	23	24	26	29	31	33	34	34	35	36	37	38	37	37	37	31	32	33	30.7	37.6
16-Jun	31	26	13	A	8	8	11	28	30	35	39	41	43	43	42	41	42	43	43	42	40	37	32	33	32.7	43.0
17-Jun	32	33	A	8	8	5	17	19	26	34	44	47	49	51	51	53	54	54	54	53	51	41	47	32	37.5	54.3
18-Jun	31	A	25	23	23	21	26	28	31	36	42	44	44	44	46	45	P	P	P	48	35	34	28	23	33.9	47.5
19-Jun	17	17	15	13	7	A	20	27	34	35	40	43	45	45	44	45	45	45	47	47	44	40	38	29	34.0	47.4
20-Jun	32	26	25	23	A	20	27	33	37	42	47	52	54	54	52	53	51	50	50	48	43	45	38	39	41.0	54.2
21-Jun	38	11	16	A	15	12	22	32	37	42	43	45	47	48	50	51	49	49	49	43	35	35	36	33	36.6	50.7
22-Jun	31	27	A	17	18	16	16	16	21	26	34	40	44	48	47	46	47	45	44	40	34	30	26	27	32.1	47.7
23-Jun	25	A	22	20	19	16	12	18	22	27	31	34	35	36	36	38	39	41	39	38	34	37	37	34	30.0	40.8
24-Jun	A	30	27	25	22	18	21	23	29	32	35	34	34	35	32	31	32	31	30	30	25	23	27	A	28.4	34.9
25-Jun	25	24	22	19	17	18	20	20	21	22	25	28	31	31	30	31	32	32	28	25	24	24	A	18	24.6	31.8
26-Jun	18	19	18	17	17	15	16	20	21	23	24	24	24	24	27	34	44	40	40	39	36	A	35	34	26.5	44.3
27-Jun	33	32	32	28	29	29	27	24	24	32	32	34	34	35	36	43	39	37	33	32	A	31	33	31	32.2	42.8
28-Jun	27	23	20	22	20	13	19	22	28	32	35	37	40	43	42	43	43	46	43	42	43	35	30	28	32.3	45.9
29-Jun	31	32	30	30	26	A	20	26	32	37	37	37	38	37	36	39	36	37	37	37	33	34	36	37	33.7	38.9
30-Jun	35	34	31	29	A	22	18	17	18	20	22	22	24	28	30	30	28	30	31	31	30	29	25	25	26.5	34.5
	27.3	25.1	23.1	20.8	19.2	18.7	21.3	24.4	28.6	32.1	35.4	37.4	38.8	39.7	40.2	41.1	40.7	41.0	40.2	39.4	36.9	33.2	31.2	28.7	Diurnal Average	
	37.7	35.9	32.8	30.0	31.6	28.6	39.9	39.4	37.4	42.5	47.2	52.2	53.7	54.2	51.7	53.4	54.2	54.3	54.3	52.8	50.8	45.1	46.6	38.7	Diurnal Maximum	

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

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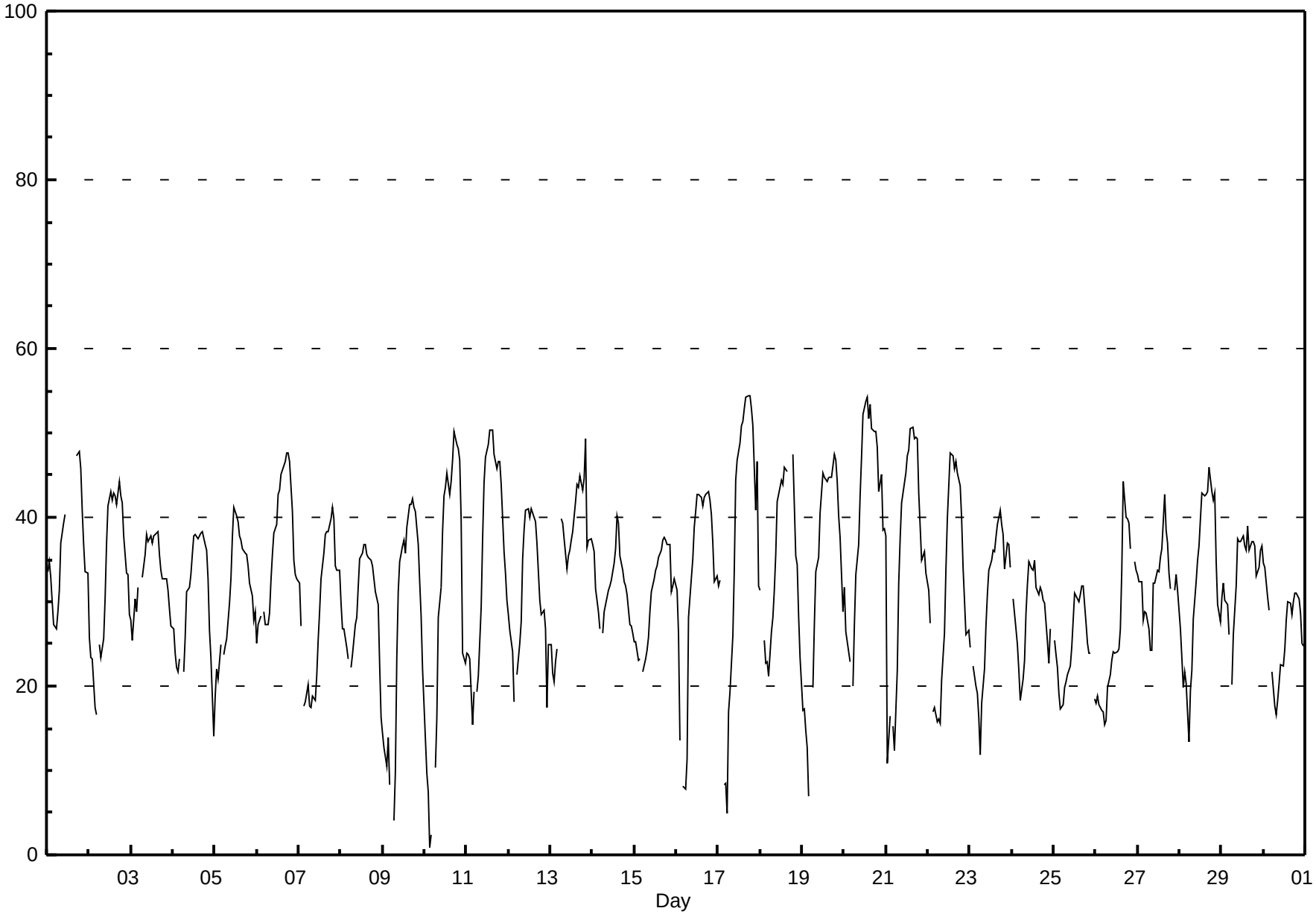
Hourly Maximums

Ozone (O_3) - ppb

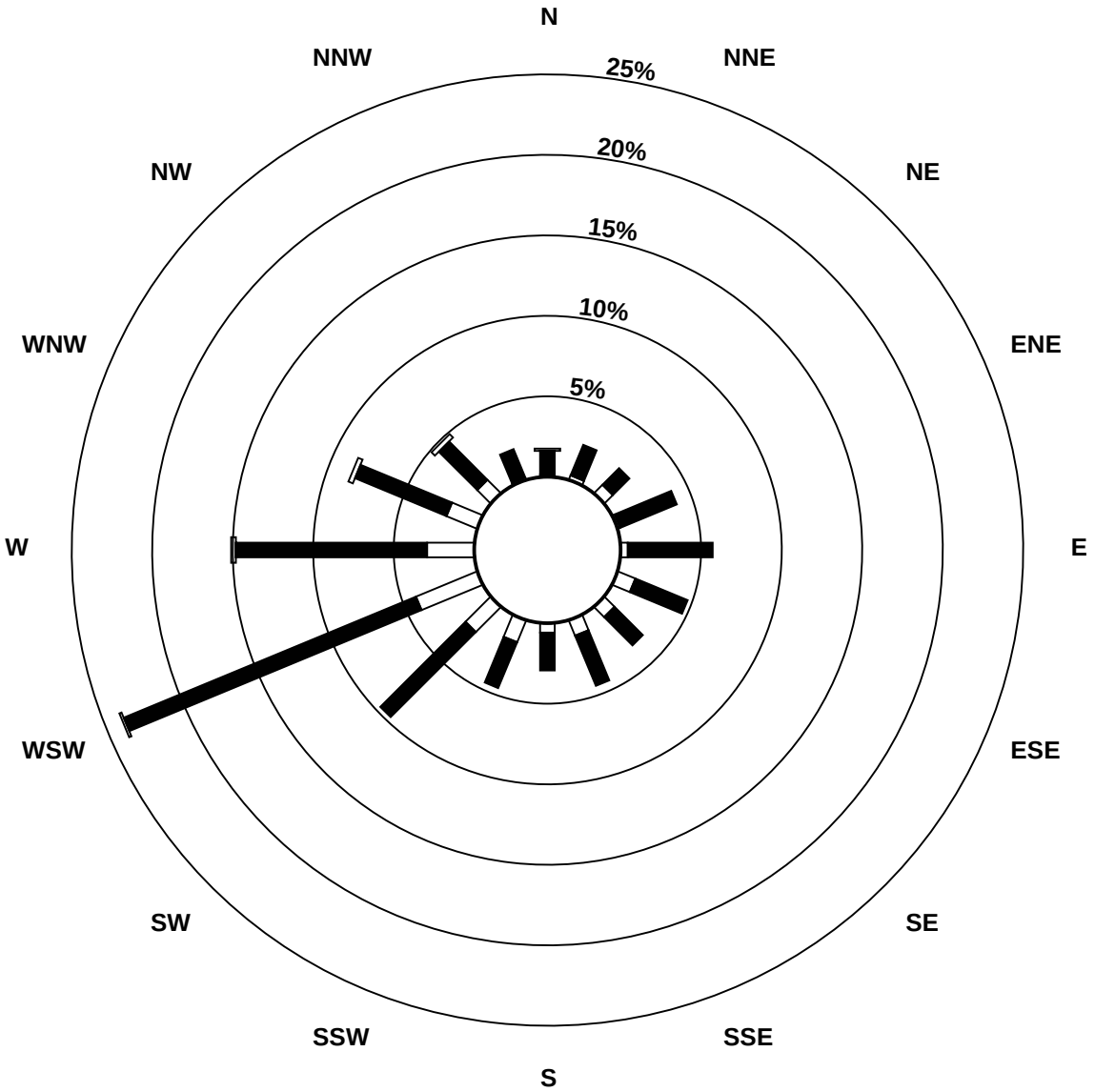
Henry Pirker - June 2010



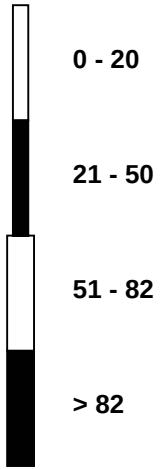
Pollutant Rose

Ozone (O_3) - ppb

Henry Pirker - June 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Henry Pirker - June 2010

Maximum Value: 50.1 ppb on Jun 20 19:00

Minimum Value: 4.0 ppb on Jun 10 08:00

Percentiles: P_1 = 9.4 P_{10} = 18.1 Q_1 = 23.2 Median = 29.1 Q_3 = 34.7 P_{90} = 39.9 P_{99} = 48.0

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

Day	Hourly Period Ending At (MST)																							Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	35	34	33	31	29	28	28	28	29	29	30	31	31	N	N	N	N	N	N	N	N	N	39	38	39.3
2-Jun	36	32	29	25	22	20	19	18	18	19	21	25	29	30	33	35	37	39	40	40	39	38	37	35	40.1
3-Jun	33	31	29	27	27	26	26	27	28	30	31	33	34	34	35	36	36	35	35	34	33	33	31	30	35.6
4-Jun	29	28	26	25	24	23	22	22	22	23	25	27	29	30	32	33	35	35	36	36	35	33	31	28	35.6
5-Jun	25	22	20	19	17	17	18	20	22	24	26	28	30	32	33	35	36	36	36	35	34	33	32	31	35.8
6-Jun	29	28	27	26	26	26	26	26	26	28	29	30	32	34	36	38	40	42	43	44	43	42	41	39	43.6
7-Jun	37	34	33	29	26	23	21	19	17	16	16	17	19	20	22	25	27	30	32	34	36	36	36	35	37.0
8-Jun	34	33	31	29	28	27	25	23	23	22	23	24	25	26	28	30	31	32	33	33	32	31	29	27	34.1
9-Jun	24	21	18	15	13	11	8	7	8	10	14	17	21	23	27	31	34	36	37	37	37	37	35	32	37.5
10-Jun	28	23	19	14	10	7	5	4	6	10	14	20	25	27	32	36	39	41	43	44	44	42	39	36	44.1
11-Jun	32	29	26	21	17	15	15	15	16	18	21	26	31	33	37	41	44	46	46	46	45	43	41	38	46.2
12-Jun	35	33	30	26	25	23	22	21	22	24	26	30	31	34	36	37	38	37	36	34	33	30	28	25	37.9
13-Jun	23	22	21	20	20	20	23	26	27	29	31	33	35	35	35	35	36	38	39	40	40	40	40	39	40.2
14-Jun	38	37	36	34	32	32	30	29	28	27	27	28	29	30	31	33	33	33	33	33	33	32	30	29	38.1
15-Jun	28	27	26	24	24	23	22	22	22	22	23	25	26	28	29	31	32	33	34	34	34	33	33	32	34.4
16-Jun	32	29	26	25	22	19	16	13	13	15	19	21	26	30	34	37	38	39	40	40	40	39	37	37	40.0
17-Jun	35	34	33	28	23	19	16	14	13	13	16	21	26	31	37	41	45	48	49	50	50	48	47	43	50.0
18-Jun	40	38	34	30	27	24	23	23	23	24	26	29	32	35	37	39	41	42	N	N	N	N	N	N	42.2
19-Jun	26	24	23	19	16	14	12	12	15	17	21	26	31	33	37	39	41	42	43	44	44	43	41	39	43.7
20-Jun	36	33	30	27	25	22	21	22	24	26	29	34	36	41	44	46	48	50	50	49	47	46	44	42	50.1
21-Jun	38	33	28	26	22	18	15	14	16	21	25	27	32	36	40	43	45	46	46	45	43	42	40	37	46.0
22-Jun	35	32	31	27	25	22	19	17	15	16	17	20	23	28	31	35	38	41	42	42	41	38	36	34	42.3
23-Jun	31	30	27	24	22	20	18	16	16	17	18	19	22	24	27	30	32	34	35	36	36	35	35	35	35.9
24-Jun	34	33	31	29	27	24	22	21	21	22	23	24	26	28	29	30	31	31	30	30	29	27	26	26	34.3
25-Jun	25	24	23	21	20	19	19	19	18	18	18	20	21	23	24	26	27	28	28	28	27	26	26	24	28.4
26-Jun	22	21	19	19	18	16	16	16	17	17	18	19	20	21	22	23	25	28	29	31	33	34	35	36	35.9
27-Jun	35	34	33	31	30	30	29	28	26	26	26	27	28	28	30	31	33	33	33	33	33	32	32	31	35.3
28-Jun	29	27	25	24	23	20	18	17	17	19	21	23	25	29	32	35	37	38	39	40	40	39	37	36	40.0
29-Jun	34	32	31	29	27	27	25	25	25	25	26	28	30	30	32	34	35	35	35	34	34	34	33	33	34.7
30-Jun	33	33	32	31	31	29	27	24	22	20	19	18	18	19	20	22	23	25	26	27	28	28	27	27	33.0
	40.0	38.2	35.5	34.0	32.2	31.8	30.1	28.7	28.6	29.7	31.3	33.5	35.8	40.5	43.8	46.5	48.3	49.7	50.1	50.0	49.6	48.4	46.6	43.0	
	Diurnal Maximums																								

N - Not Valid

PASZA
Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.71 ppm on Jun 5 00:00 Maximum Daily Average: 0.23 ppm on Jun 22

Minimum Value: 0.0 ppm on Jun 18 20:00 Minimum Daily Average: 0.12 ppm on Jun 14
Maximum Diurnal Average: 0.22 ppm at hour 24 Minimum Diurnal Average: 0.16 ppm at hour 20
Monthly Average: 0.178 ppm Percentiles: P_1 = 0.04 P_{10} = 0.12 Q_1 = 0.15 Median = 0.17 Q_3 = 0.21 P_{90} = 0.24 P_{99} = 0.37

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	32
Percent Operational Time:	99.6

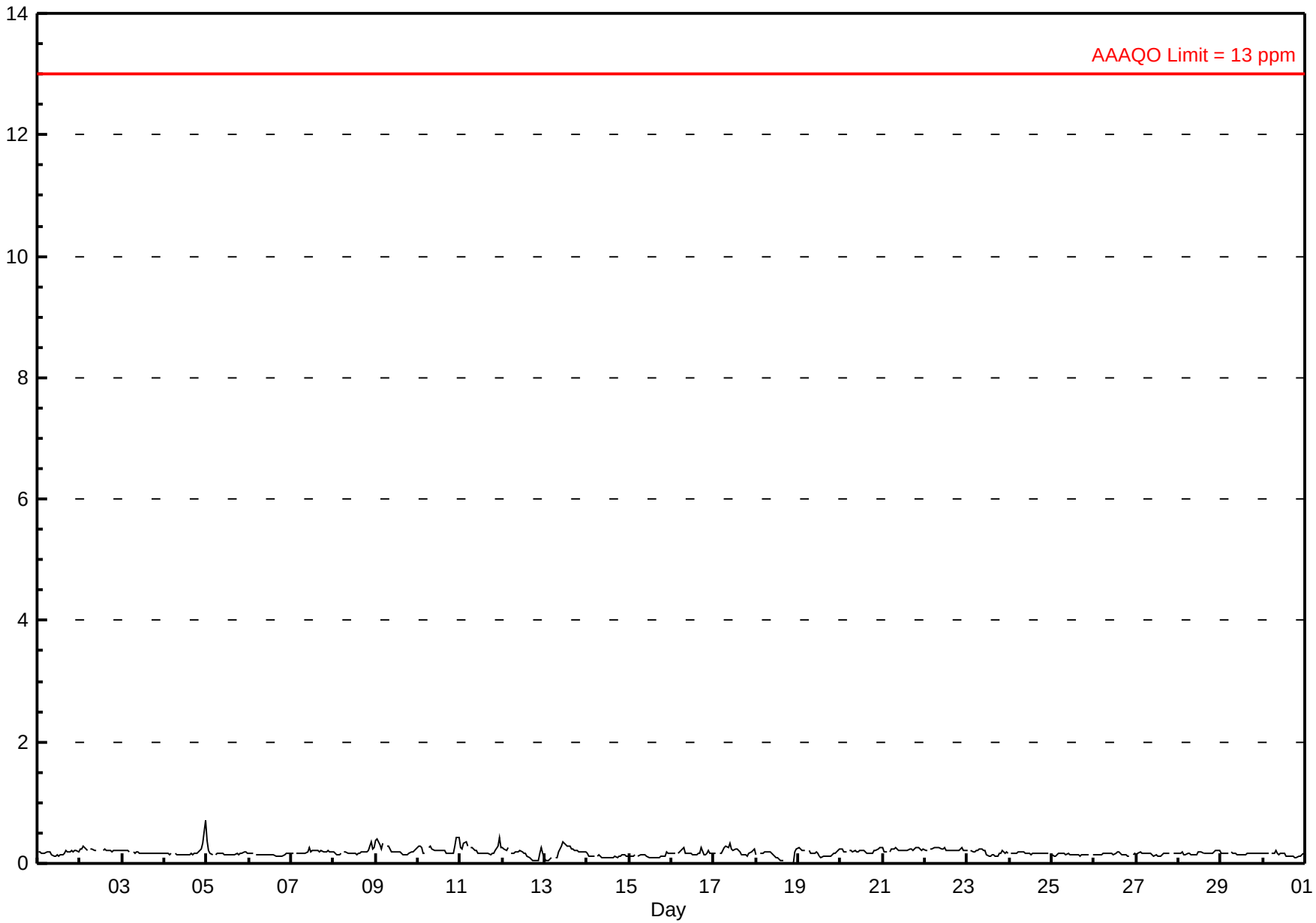
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.21
2-Jun	0.2	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.28
3-Jun	0.2	0.2	0.2	0.2	0.2	A	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	0.17	0.21
4-Jun	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.19	0.71
5-Jun	0.4	0.2	0.2	0.2	A	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	0.17	0.37
6-Jun	0.2	0.2	0.2	A	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	0.2	0.2	0.2	0.14	0.17
7-Jun	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.27
8-Jun	0.2	0.2	0.1	0.1	0.2	A	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	0.4	0.2	0.3	0.19	0.35
9-Jun	0.4	0.4	0.3	0.2	0.3	A	0.3	0.3	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	0.2	0.23	0.39
10-Jun	0.3	0.3	0.3	0.2	0.2	A	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	0.3	0.4	0.4	0.23	0.43
11-Jun	0.3	0.2	0.3	0.4	0.3	A	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	0.3	0.4	0.3	0.22	0.43
12-Jun	0.3	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.16	0.27
13-Jun	0.1	0.0	0.0	0.1	0.1	A	0.1	0.1	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.36
14-Jun	0.2	0.1	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	0.12	0.17
15-Jun	0.1	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	0.2	0.2	0.2	0.12	0.18
16-Jun	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.27
17-Jun	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.20	0.32
18-Jun	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	P	P	P	0.0	0.0	0.0	0.2	0.2	0.12	0.25
19-Jun	0.3	0.2	0.2	0.2	0.2	A	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	0.2	0.2	0.2	0.2	0.17	0.26
20-Jun	0.2	0.2	0.2	0.2	A	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	0.21	0.25
21-Jun	0.3	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.23	0.27
22-Jun	0.2	0.2	A	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.27
23-Jun	0.2	A	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	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.24
24-Jun	A	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	A	0.17	0.20
25-Jun	0.1	0.1	0.1	0.1	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	0.1	0.2	0.1	A	0.1	0.15	0.17
26-Jun	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.15	0.19
27-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.16	0.18
28-Jun	0.2	0.2	0.2	0.1	0.1	0.2	0.2	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	0.17	0.22
29-Jun	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.18
30-Jun	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.14	0.20
	0.20	0.19	0.18	0.18	0.18	0.18	0.19	0.20	0.18	0.18	0.18	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.19	0.21	0.22	Diurnal Average	
	0.39	0.39	0.34	0.36	0.33	0.26	0.28	0.30	0.27	0.32	0.36	0.33	0.31	0.29	0.27	0.24	0.23	0.26	0.24	0.25	0.27	0.35	0.43	0.71	Diurnal Maximum	

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

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2010

Maximum Value: 3.91 ppm on Jun 5 00:00

Maximum Daily Average: 0.40 ppm on Jun 9

Minimum Value: 0.0 ppm on Jun 18 20:00

Minimum Daily Average: 0.15 ppm on Jun 14

Maximum Diurnal Average: 0.43 ppm at hour 24

Minimum Diurnal Average: 0.20 ppm at hour 16

Monthly Average: 0.251 ppm

Percentiles: P_1 = 0.09 P_{10} = 0.16 Q_1 = 0.18 Median = 0.21 Q_3 = 0.27 P_{90} = 0.33 P_{99} = 1.18

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	32
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	0.2	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.23	0.29
2-Jun	0.6	0.3	1.2	0.3	0.2	A	0.3	0.3	0.2	0.2	C	C	C	0.3	1.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.39	1.23
3-Jun	0.3	0.2	0.2	0.2	0.2	A	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	0.19	0.26
4-Jun	0.2	0.2	0.2	0.2	0.2	A	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	0.5	0.3	0.4	0.4	3.9	0.38	3.91
5-Jun	0.6	0.6	0.2	0.2	A	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	0.24	0.61
6-Jun	0.2	0.2	0.2	A	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	0.2	0.2	0.3	0.2	0.2	0.18	0.30
7-Jun	0.3	0.2	A	0.2	0.2	0.3	0.3	0.3	0.2	0.3	1.1	0.3	0.3	0.2	0.5	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.30	1.13
8-Jun	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	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	1.1	0.3	0.6	0.28	1.09
9-Jun	1.4	1.3	0.6	0.4	0.7	A	0.3	0.3	0.4	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.40	1.42
10-Jun	0.3	0.3	0.3	0.2	0.2	A	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.7	0.9	0.31	0.88
11-Jun	0.4	0.6	0.7	0.8	0.5	A	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.8	0.5	0.34	0.83
12-Jun	0.5	0.4	0.3	0.5	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.4	0.4	0.3	0.23	0.46
13-Jun	0.1	0.1	0.1	0.1	0.1	A	0.1	0.1	0.2	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.23	0.38
14-Jun	0.2	0.1	0.2	0.2	0.2	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.15	0.24
15-Jun	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.4	0.2	0.2	0.3	0.2	0.2	0.17	0.40
16-Jun	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.1	0.2	0.2	0.3	0.3	0.2	0.2	0.25	1.14
17-Jun	0.3	0.2	A	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.6	0.2	0.3	0.2	0.2	0.2	0.3	0.1	0.2	0.3	0.4	0.3	0.28	0.65
18-Jun	0.2	A	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.0	P	P	P	0.0	0.0	0.2	0.3	0.4	0.18	0.40
19-Jun	0.3	0.3	0.3	0.3	0.3	A	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.22	0.36
20-Jun	0.6	0.5	0.2	0.2	A	0.3	0.3	0.2	0.3	0.2	0.2	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.4	0.29	0.61
21-Jun	0.3	0.2	0.3	A	0.2	0.4	0.3	1.2	0.4	0.5	0.2	0.2	0.3	0.2	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.36	1.19
22-Jun	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.27	0.32
23-Jun	0.2	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.27
24-Jun	A	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	A	0.19	0.23
25-Jun	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.18	0.33
26-Jun	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	0.2	0.2	0.2	0.2	0.1	0.2	A	0.2	0.2	0.19	0.28
27-Jun	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.20	0.31
28-Jun	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	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.23	0.53
29-Jun	0.2	0.2	0.2	0.2	0.2	A	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	0.2	0.2	0.2	0.19	0.26
30-Jun	0.2	0.2	0.2	0.2	A	0.2	0.2	2.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.28	2.42
	0.32	0.28	0.28	0.24	0.24	0.24	0.24	0.34	0.23	0.22	0.24	0.21	0.22	0.21	0.25	0.20	0.20	0.22	0.21	0.21	0.22	0.29	0.28	0.43	Diurnal Average	
	1.42	1.27	1.21	0.83	0.72	0.42	0.36	2.42	0.44	0.48	1.13	0.38	0.65	0.53	1.23	0.40	0.41	1.14	0.40	0.50	0.39	1.09	0.82	3.91	Diurnal Maximum	

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

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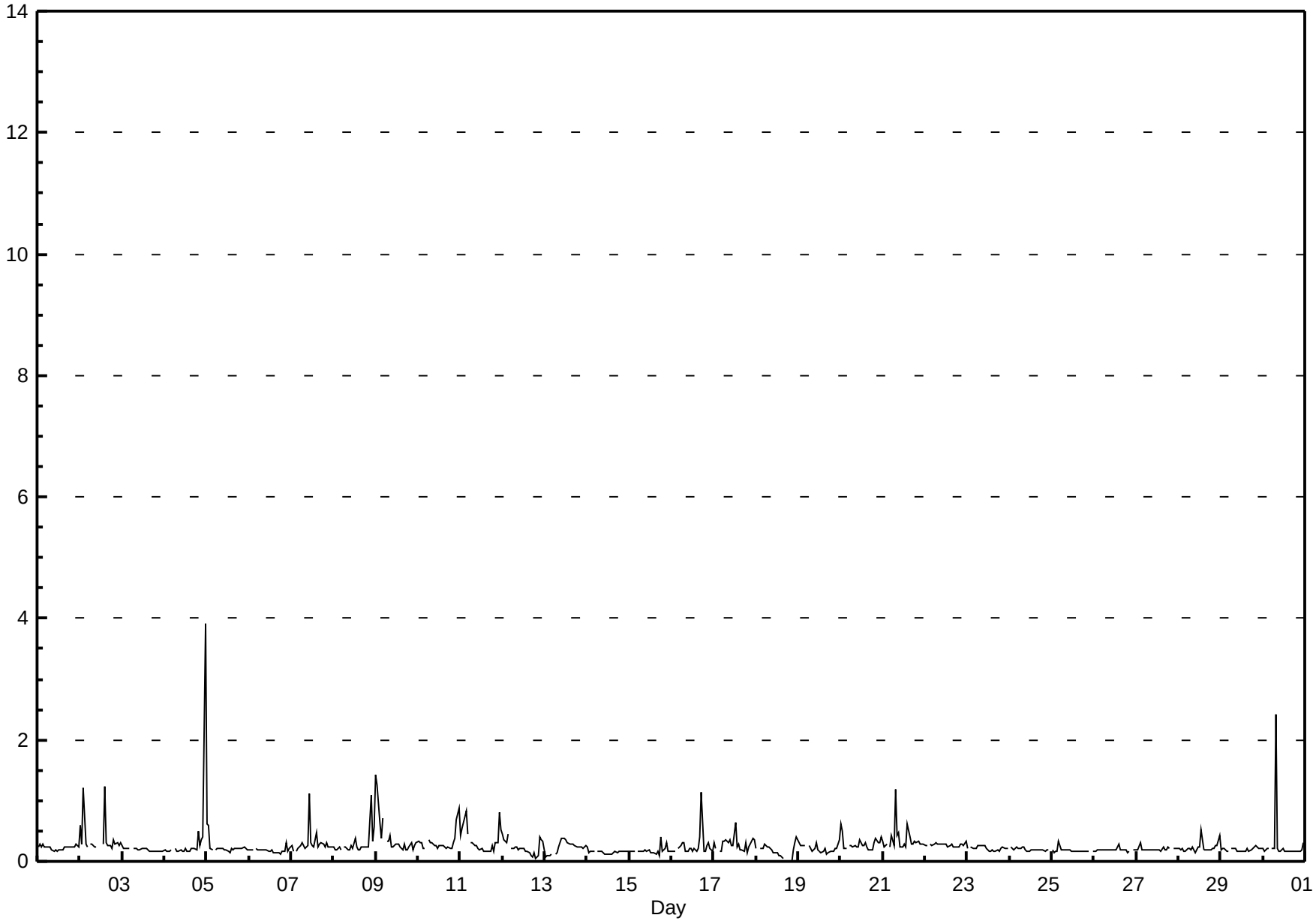
Hourly Maximums

Carbon Monoxide (CO) - ppm

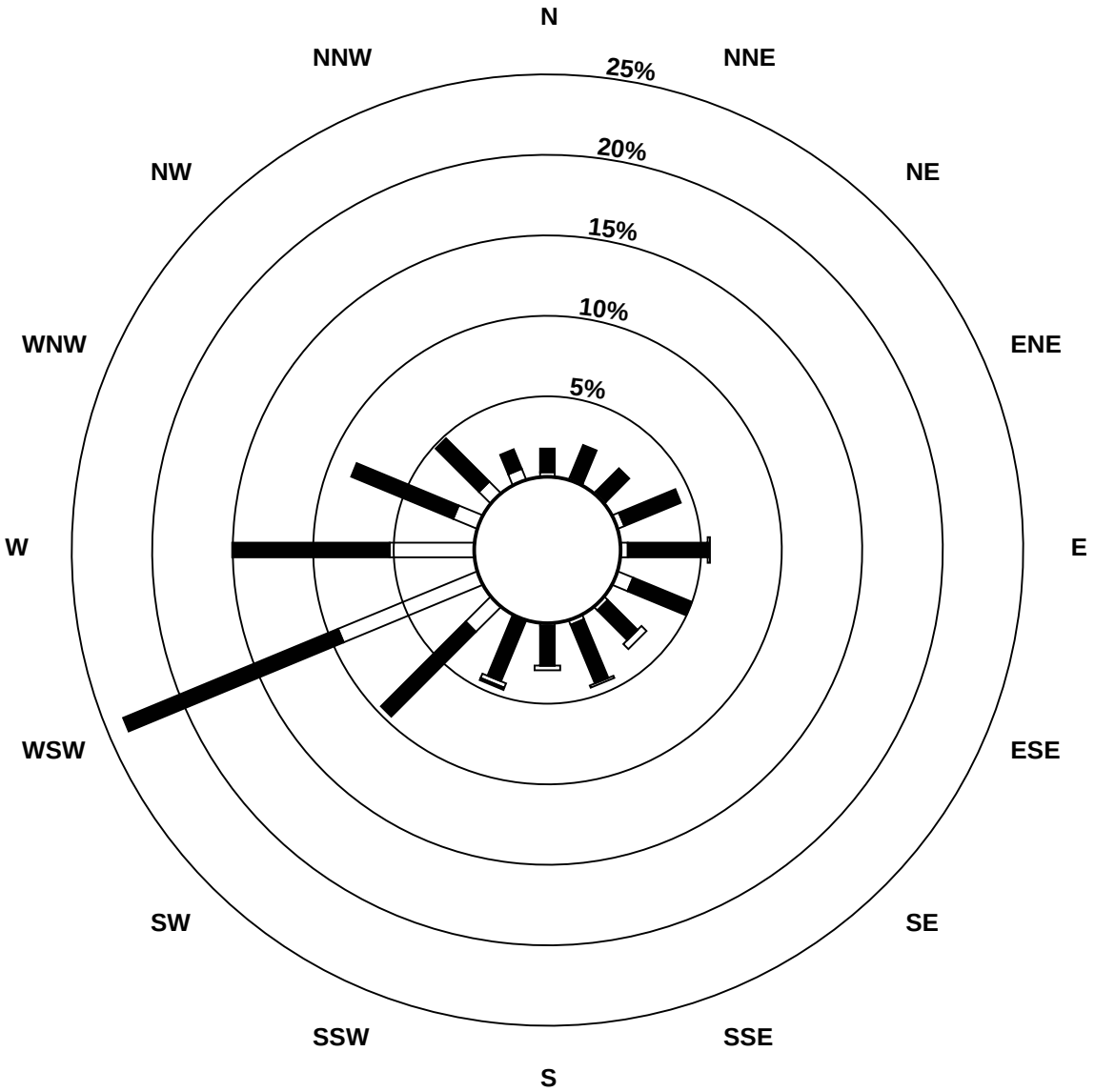
Henry Pirker - June 2010



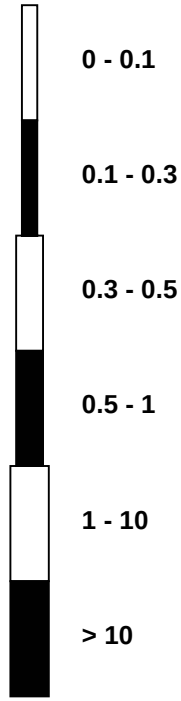
Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2010



Pollutant Classes (ppm)



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Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 8-hr: 0
Maximum Value: 0.33 ppm on Jun 11 06:00

Minimum Value: 0.04 ppm on Jun 19 01:00

Percentiles: P_1 = 0.09 P_{10} = 0.13 Q_1 = 0.15 Median = 0.17 Q_3 = 0.21 P_{90} = 0.23 P_{99} = 0.31

Hours in Service:	720
Hours of Data:	707
Hours of Missing Data:	13
Hours of Calibration:	7
Percent Operational Time:	99.2

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
2-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.2	0.2	0.24
3-Jun	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	0.2	0.21
4-Jun	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	0.3	0.27
5-Jun	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31
6-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17
7-Jun	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	0.2	0.2	0.2	0.2	0.2	0.21
8-Jun	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	0.2	0.22
9-Jun	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32
10-Jun	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	0.2	0.25
11-Jun	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
12-Jun	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.28
13-Jun	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	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.29
14-Jun	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	0.1	0.1	0.1	0.1	0.20
15-Jun	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
16-Jun	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	0.2	0.2	0.2	0.2	0.19
17-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
18-Jun	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	N	N	N	N	N	N	0.18
19-Jun	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.23
20-Jun	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	0.2	0.21
21-Jun	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	0.2	0.24
22-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
23-Jun	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	0.1	0.1	0.1	0.2	0.2	0.2	0.23
24-Jun	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	0.2	0.18
25-Jun	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	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.16
26-Jun	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	0.1	0.1	0.1	0.17
27-Jun	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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.17
28-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
29-Jun	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	0.2	0.19
30-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17
	0.30	0.31	0.31	0.31	0.32	0.33	0.31	0.32	0.30	0.27	0.25	0.25	0.26	0.26	0.27	0.29	0.29	0.28	0.26	0.25	0.23	0.23	0.23	0.27	
	Diurnal Maximums																								

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

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Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.50 ppm on Jun 9 08:00 Maximum Daily Average: 2.10 ppm on Jun 11

Minimum Value: 1.9 ppm on Jun 24 21:00 Minimum Daily Average: 1.90 ppm on Jun 25
Maximum Diurnal Average: 2.09 ppm at hour 6 Minimum Diurnal Average: 1.93 ppm at hour 17
Monthly Average: 1.992 ppm Percentiles: P_1 = 1.87 P_{10} = 1.90 Q_1 = 1.94 Median = 1.96 Q_3 = 2.01 P_{90} = 2.12 P_{99} = 2.34

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	32
Percent Operational Time:	99.6

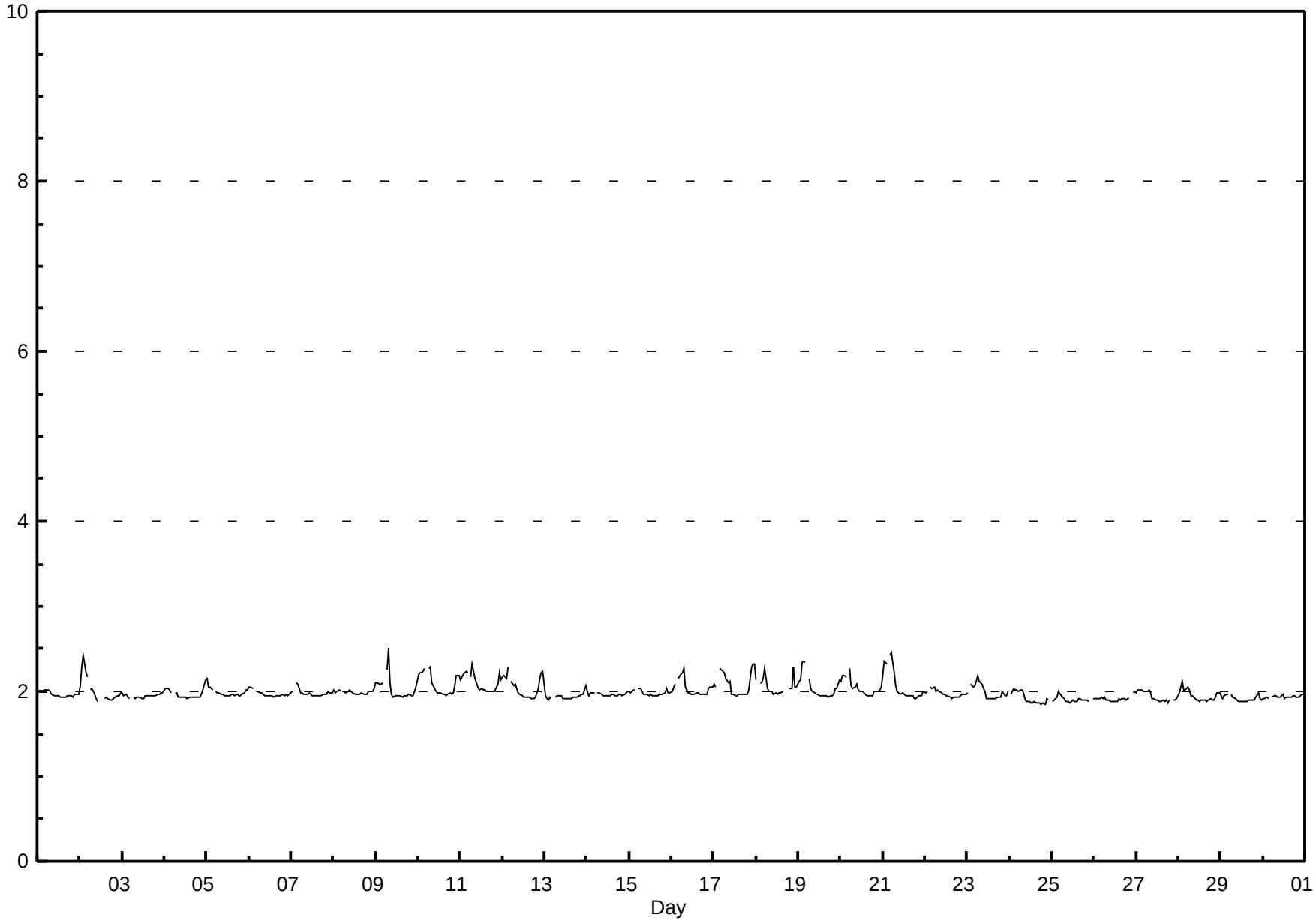
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.97	2.02
2-Jun	2.1	2.3	2.4	2.2	2.2	A	2.0	2.0	2.0	1.9	1.9	C	C	C	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.01	2.42
3-Jun	2.0	1.9	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.95	1.99
4-Jun	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	1.97	2.13
5-Jun	2.1	2.1	2.1	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	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.99	2.15
6-Jun	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	1.97	2.06
7-Jun	2.0	2.0	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.11
8-Jun	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.03
9-Jun	2.1	2.1	2.1	2.1	2.1	A	2.3	2.5	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.03	2.50
10-Jun	2.2	2.2	2.2	2.2	2.3	A	2.3	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	2.0	2.1	2.2	2.2	2.09	2.28
11-Jun	2.1	2.2	2.2	2.2	2.2	A	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.10	2.32
12-Jun	2.2	2.2	2.2	2.3	A	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.2	2.2	2.05	2.28
13-Jun	1.9	1.9	1.9	1.9	1.9	A	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	2.0	2.0	2.0	2.1	1.94	2.06
14-Jun	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.01
15-Jun	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	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.04
16-Jun	2.0	2.0	2.1	A	2.1	2.2	2.2	2.3	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	2.1	2.04	2.28
17-Jun	2.1	2.0	A	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	2.09	2.32
18-Jun	2.1	A	2.1	2.1	2.2	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	P	P	P	2.0	2.0	2.3	2.0	2.1	2.06	2.28
19-Jun	2.1	2.1	2.3	2.4	2.3	A	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.05	2.36
20-Jun	2.1	2.2	2.2	2.2	A	2.3	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.04	2.28
21-Jun	2.2	2.3	2.3	A	2.4	2.5	2.2	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.06	2.46
22-Jun	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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.97	2.04
23-Jun	2.0	A	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.00	2.19
24-Jun	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.92	2.03
25-Jun	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.90	1.99
26-Jun	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	1.91	2.00
27-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.94	2.02
28-Jun	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.95	2.12
29-Jun	2.0	1.9	2.0	2.0	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.92	1.98
30-Jun	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.94	1.97
	2.04	2.05	2.08	2.07	2.08	2.09	2.05	2.04	1.99	1.97	1.95	1.94	1.94	1.94	1.94	1.94	1.93	1.94	1.93	1.94	1.96	2.00	2.01	2.03	Diurnal Average	
	2.19	2.35	2.42	2.36	2.43	2.46	2.28	2.50	2.15	2.12	2.04	2.02	2.03	2.01	2.02	2.01	2.00	2.00	2.01	2.03	2.04	2.29	2.32	2.32	Diurnal Maximum	

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

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2010



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Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2010

Maximum Value: 6.63 ppm on Jun 18 22:00

Maximum Daily Average: 2.36 ppm on Jun 18

Minimum Value: 1.9 ppm on Jun 24 19:00

Minimum Daily Average: 1.93 ppm on Jun 25

Maximum Diurnal Average: 2.27 ppm at hour 22

Minimum Diurnal Average: 1.97 ppm at hour 18

Monthly Average: 2.076 ppm

Percentiles: P_1 = 1.88 P_{10} = 1.93 Q_1 = 1.96 Median = 2.01 Q_3 = 2.09 P_{90} = 2.31 P_{99} = 2.57

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	32
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.26
2-Jun	2.4	2.5	3.1	2.4	2.3	A	2.1	2.1	2.0	1.9	2.0	C	C	C	2.0	2.0	2.0	1.9	1.9	1.9	2.1	2.1	2.2	2.5	2.17	3.10
3-Jun	2.2	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	2.3	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.27
4-Jun	2.1	2.1	2.0	2.0	2.0	A	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.4	2.01	2.37
5-Jun	2.3	2.2	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.03	2.30
6-Jun	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.00	2.12
7-Jun	2.5	2.1	A	2.2	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.0	2.0	2.07	2.49
8-Jun	2.1	2.0	2.1	2.1	2.0	A	2.0	2.0	2.2	2.4	2.5	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	2.08	2.46
9-Jun	2.2	2.2	2.1	2.3	2.1	A	2.5	2.6	2.4	2.0	2.0	2.0	2.0	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.12	2.60
10-Jun	2.5	2.5	2.3	2.4	2.6	A	2.5	2.6	2.2	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.4	2.20	2.62
11-Jun	2.2	2.3	2.3	2.4	2.3	A	2.2	2.6	2.3	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.3	2.0	2.1	2.3	2.5	2.2	2.22	2.60
12-Jun	2.3	2.3	2.2	2.4	A	2.2	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	2.2	2.1	2.8	2.3	2.5	2.15	2.77
13-Jun	2.1	1.9	1.9	2.0	2.0	A	2.0	2.0	5.0	2.5	1.9	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.14	5.01
14-Jun	2.2	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	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.01	2.18
15-Jun	2.0	2.0	2.1	2.1	A	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.4	2.0	2.3	2.08	2.38
16-Jun	2.2	2.1	2.4	A	2.3	2.4	2.5	2.5	2.1	2.0	2.0	2.0	2.1	2.0	2.4	2.0	2.1	2.0	2.0	2.0	2.0	2.3	2.4	2.3	2.18	2.52
17-Jun	2.5	2.3	A	2.5	2.3	2.4	2.4	2.3	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.3	2.9	2.5	2.5	2.26	2.92
18-Jun	2.4	A	2.2	2.2	2.3	2.5	2.2	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	P	P	P	2.1	2.4	6.6	2.1	2.1	2.36	6.63
19-Jun	2.2	2.2	2.6	2.4	2.4	A	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.10	2.55
20-Jun	2.2	2.2	2.3	2.2	A	2.3	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.09	2.34
21-Jun	2.4	2.4	2.5	A	2.9	2.6	2.4	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.15	2.88
22-Jun	2.1	2.0	A	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.00	2.11
23-Jun	2.0	A	2.2	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.0	2.1	2.04	2.22
24-Jun	A	2.0	2.1	2.1	2.1	2.0	2.0	2.5	2.4	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	A	1.99	2.52
25-Jun	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.93	2.03
26-Jun	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	A	2.0	2.0	1.94	2.04
27-Jun	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	A	1.9	2.0	2.1	1.99	2.09
28-Jun	2.1	2.2	2.3	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.5	2.5	2.05	2.50
29-Jun	2.0	1.9	2.0	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.2	2.0	1.9	1.97	2.20
30-Jun	1.9	1.9	1.9	1.9	A	2.0	2.0	2.3	2.0	2.0	1.9	2.2	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.31
	2.17	2.12	2.17	2.15	2.16	2.16	2.13	2.15	2.17	2.05	2.02	1.99	1.98	1.98	1.99	1.98	1.97	1.97	1.97	1.99	2.04	2.27	2.12	2.16	Diurnal Average	
	2.55	2.52	3.10	2.48	2.88	2.58	2.51	2.62	5.01	2.48	2.46	2.23	2.22	2.37	2.36	2.09	2.09	2.06	2.28	2.21	2.37	6.63	2.54	2.50	Diurnal Maximum	

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

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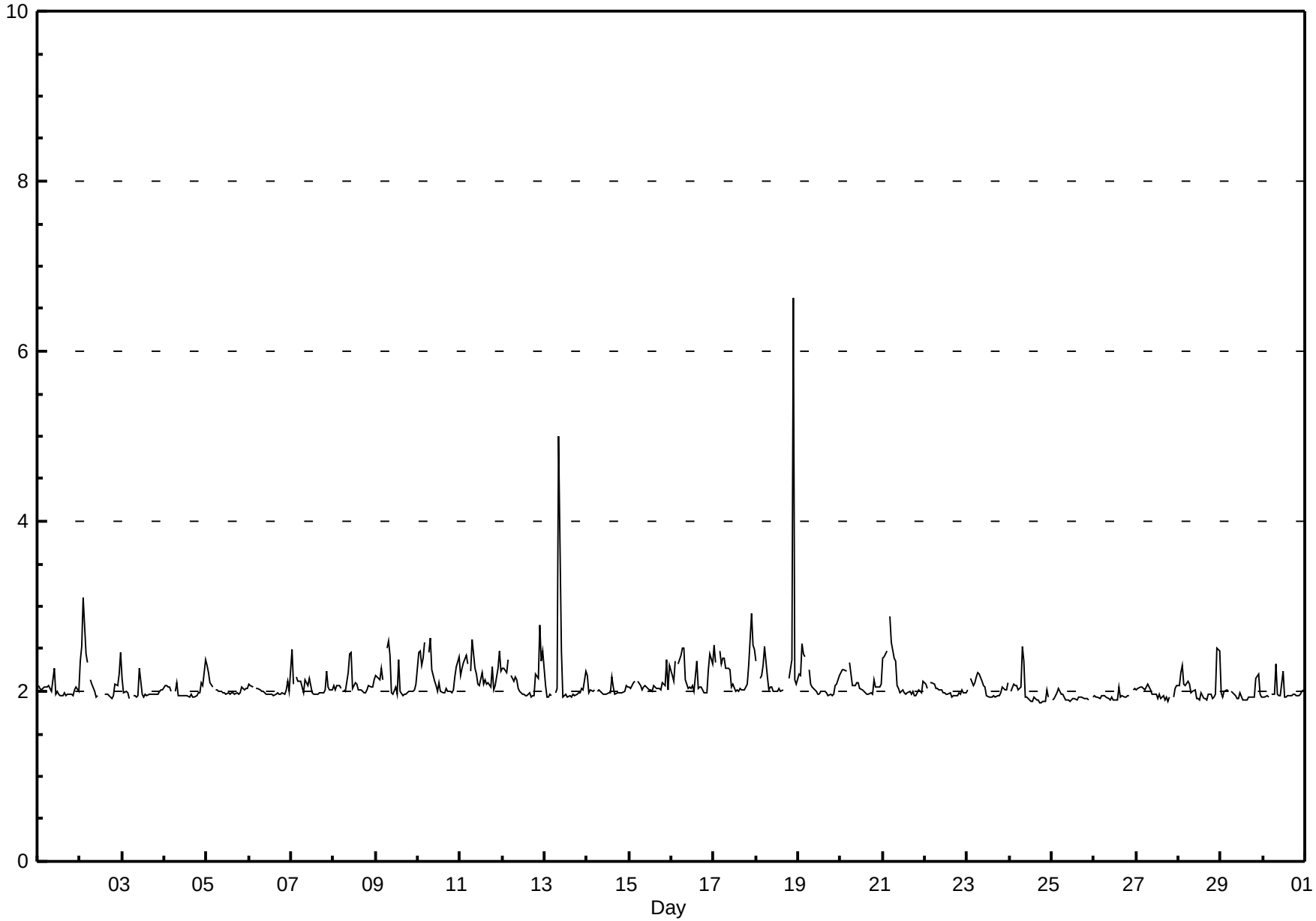
Hourly Maximums

Total Hydrocarbons (THC) - ppm

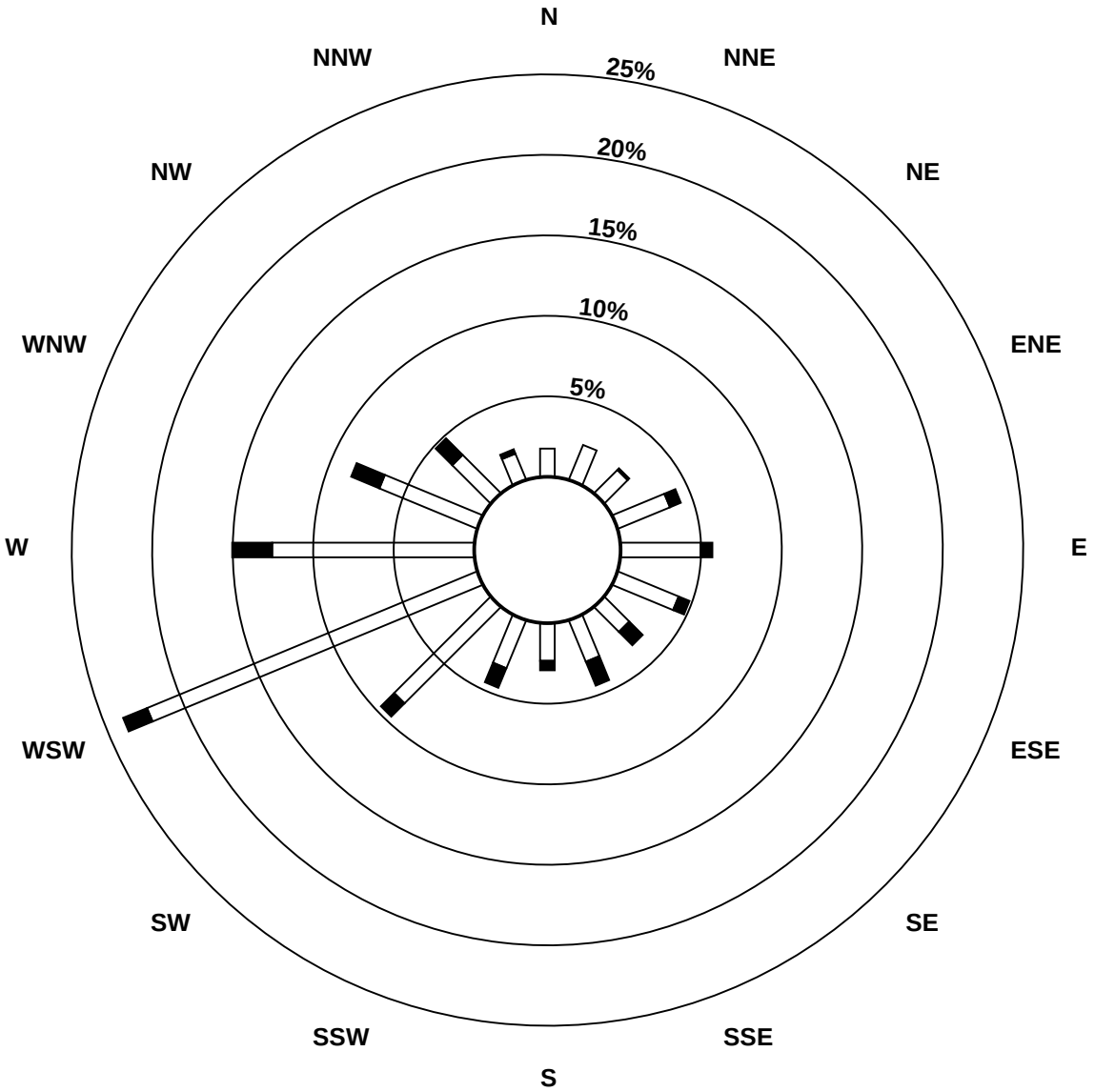
Henry Pirker - June 2010



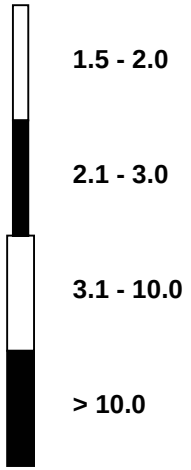
Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2010



Pollutant Classes (ppm)



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Hourly Averages

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

Henry Pirker - June 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 29.9 $\mu g/m^3$ on Jun 4 21:00
Maximum Daily Average: 14.4 $\mu g/m^3$ on Jun 20

Minimum Value: 0 $\mu g/m^3$ on Jun 4 09:00
Minimum Daily Average: 3.0 $\mu g/m^3$ on Jun 14
Maximum Diurnal Average: 9.9 $\mu g/m^3$ at hour 1
Minimum Diurnal Average: 6.0 $\mu g/m^3$ at hour 18
Monthly Average: 8.35 $\mu g/m^3$
Percentiles: P_1 = 0.0 P_{10} = 1.9 Q_1 = 3.8 Median = 7.6 Q_3 = 11.8 P_{90} = 16.0 P_{99} = 24.6

Hours in Service:	720
Hours of Data:	659
Hours of Missing Data:	61
Hours of Calibration:	7
Percent Operational Time:	92.5

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-Jun	16	10	1	7	13	3	13	7	8	8	5	8	6	6	10	8	9	10	8	11	8	10	11	8	8.5	15.9
2-Jun	11	11	12	14	14	15	14	12	13	11	10	8	10	9	8	6	6	5	7	7	6	7	9	7	9.6	15.2
3-Jun	8	8	8	5	9	4	7	2	7	3	13	14	16	11	14	BD	9	16	BD	BD	10	17	BD	11	9.5	16.6
4-Jun	4	3	6	4	4	8	2	15	0	BD	0	9	22	17	0	BD	BD	5	13	21	30	24	6	0	9.2	29.9
5-Jun	15	20	BD	12	1	6	19	BD	4	24	10	BD	0	9	23	18	1	BD	5	14	22	25	8	BD	12.4	24.7
6-Jun	12	16	0	15	0	7	8	3	21	3	BD	1	8	19	25	7	BD	1	12	26	16	0	BD	2	9.6	26.1
7-Jun	14	16	BD	7	17	0	10	C	C	C	C	C	C	C	9	5	10	7	8	8	10	6	6	8	--	17.1
8-Jun	7	7	5	5	6	6	6	6	6	8	8	9	15	18	8	2	14	2	9	14	0	6	16	4	7.8	17.7
9-Jun	1	16	11	3	7	22	21	8	7	M	M	M	M	2	2	5	9	0	2	10	4	9	12	7	7.8	22.1
10-Jun	13	9	13	8	8	9	5	15	9	9	11	11	8	11	12	9	9	9	10	10	8	11	19	21	10.8	21.5
11-Jun	19	16	17	18	14	12	10	14	16	11	18	12	9	7	6	7	7	9	5	6	8	12	17	15	11.9	18.7
12-Jun	12	16	13	11	12	9	9	9	8	8	8	6	6	8	10	9	12	11	13	16	N	N	N	N	10.3	15.8
13-Jun	N	N	N	N	N	N	N	N	4	7	5	0	4	1	0	6	0	5	1	2	8	3	1	5	--	7.9
14-Jun	2	2	3	0	2	2	1	2	0	2	2	5	2	1	4	6	6	6	3	3	2	4	5	5	3.0	6.4
15-Jun	4	4	3	4	2	4	4	4	5	3	2	10	10	1	0	3	2	3	5	5	7	11	8	6	4.5	10.6
16-Jun	6	5	7	6	3	13	13	13	9	5	11	7	0	2	4	4	5	6	7	7	6	7	10	9	6.8	13.2
17-Jun	4	5	9	12	10	7	12	12	13	14	11	4	6	7	7	8	8	7	8	10	11	16	19	16	9.8	18.5
18-Jun	19	18	16	11	11	9	10	11	13	13	15	16	15	21	N	N	N	N	N	N	N	N	N	N	--	20.9
19-Jun	3	12	13	14	12	10	10	11	9	22	12	2	BD	6	3	12	4	9	1	1	12	9	23	23	10.2	23.3
20-Jun	27	7	13	11	12	10	12	12	9	15	22	13	13	12	18	29	12	9	10	11	21	15	19	17	14.4	29.3
21-Jun	15	22	25	17	15	12	12	15	17	14	12	13	13	9	13	9	14	13	13	14	6	13	7	12	13.6	25.4
22-Jun	9	9	11	9	10	14	17	18	20	17	12	17	17	12	17	8	13	6	14	14	9	20	12	7	13.0	20.5
23-Jun	17	9	12	8	15	8	14	9	18	20	14	12	9	18	2	9	13	2	3	13	9	8	9	8	10.8	20.5
24-Jun	16	9	0	9	11	2	11	2	0	2	4	10	9	BD	BD	7	1	4	6	BD	BD	BD	BD	BD	--	16.2
25-Jun	BD	1	11	1	5	3	4	3	5	BD	0	6	5	3	0	6	2	7	2	4	4	2	3	6	3.9	11.2
26-Jun	2	0	7	9	8	5	BD	BD	3	8	4	3	6	6	3	3	12	4	5	6	6	7	6	6	5.5	11.7
27-Jun	3	8	0	7	2	7	1	9	3	7	4	4	1	3	1	5	5	3	0	3	8	8	6	3	4.1	8.5
28-Jun	4	11	12	5	0	0	2	7	7	10	9	5	2	6	2	3	3	6	3	4	7	6	6	7	5.2	12.4
29-Jun	10	3	4	4	5	5	5	4	3	4	3	3	3	1	4	2	1	1	4	3	5	4	3	3	3.7	9.8
30-Jun	3	3	2	2	4	2	4	3	3	3	4	4	3	4	3	2	2	0	1	3	4	5	3	17	3.6	17.4
	9.9	9.5	8.6	8.1	8.0	7.4	9.1	8.7	8.3	9.6	8.4	7.8	8.1	8.2	7.4	7.5	6.9	6.0	6.3	9.1	9.1	9.7	9.8	9.0	Diurnal Average	
	26.6	22.5	25.4	17.9	17.1	22.1	20.5	18.1	21.4	23.7	22.3	17.4	22.1	20.9	25.4	29.3	14.0	16.2	13.6	26.1	29.9	24.7	23.0	23.3	Diurnal Maximum	

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

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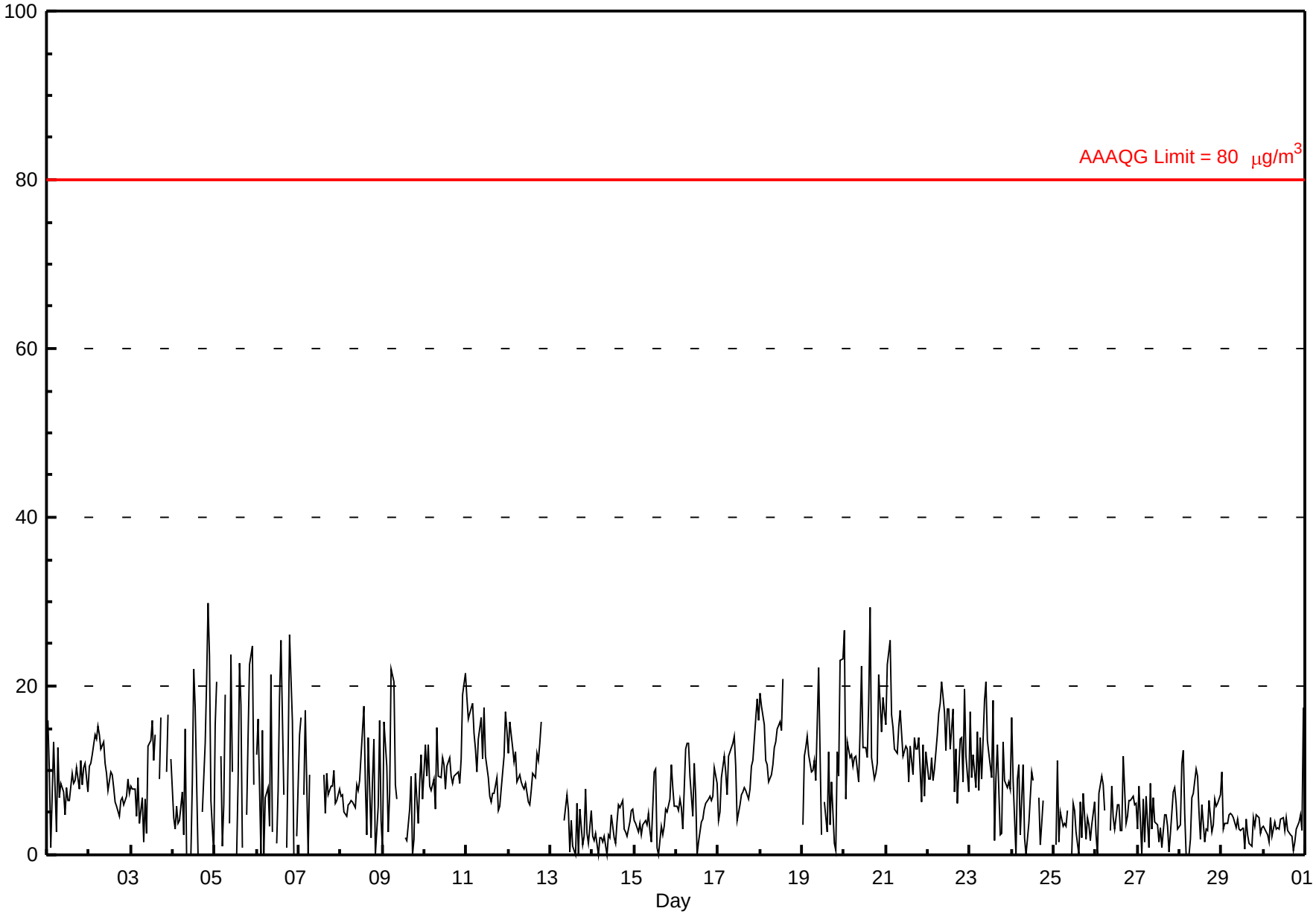
Hourly Averages

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

Henry Pirker - June 2010



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Hourly Maximums

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

Henry Pirker - June 2010

Maximum Value: 36.0 $\mu g/m^3$ on Jun 20 16:00

Maximum Daily Average: 18.3 $\mu g/m^3$ on Jun 20

Minimum Value: 0 $\mu g/m^3$ on Jun 4 10:00

Minimum Daily Average: 5.6 $\mu g/m^3$ on Jun 29

Maximum Diurnal Average: 13.5 $\mu g/m^3$ at hour 1

Minimum Diurnal Average: 8.9 $\mu g/m^3$ at hour 18

Monthly Average: 11.35 $\mu g/m^3$

Percentiles: P_1 = -0.2 P_{10} = 4.7 Q_1 = 6.8 Median = 10.3 Q_3 = 15.3 P_{90} = 19.1 P_{99} = 29.4

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	7
Percent Operational Time:	95.1

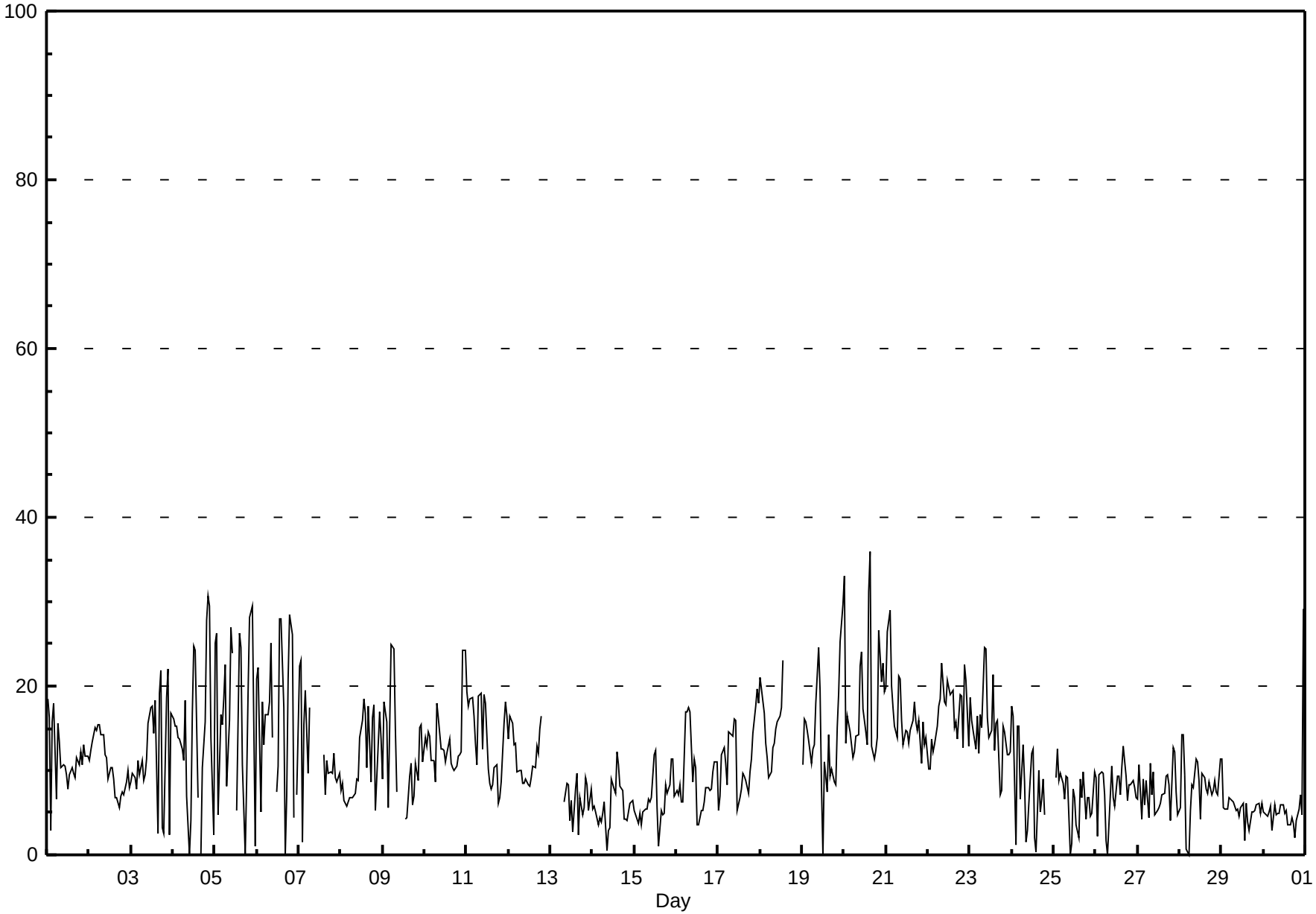
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	19	16	3	16	18	7	16	13	10	11	11	10	8	9	10	10	9	12	11	12	11	13	12	12	11.5	18.6
2-Jun	11	12	13	15	15	16	15	14	14	12	12	9	10	10	9	7	7	6	7	7	7	9	10	8	10.6	15.5
3-Jun	9	10	9	8	11	10	11	9	9	11	16	17	18	14	18	3	19	22	3	3	19	22	2	17	12.0	22.0
4-Jun	16	15	15	14	14	13	11	18	7	0	4	17	25	24	7	BD	0	10	16	28	31	29	14	2	14.4	30.7
5-Jun	25	26	5	17	15	18	22	8	16	27	24	BD	5	16	26	25	11	0	9	19	28	29	15	1	16.9	29.4
6-Jun	21	22	5	18	13	17	17	18	25	14	BD	7	11	28	28	17	0	7	21	28	26	4	BD	7	16.1	28.5
7-Jun	22	23	2	15	20	10	17	C	C	C	C	C	C	C	12	7	11	10	10	10	12	9	9	10	--	23.0
8-Jun	8	8	6	6	6	7	7	7	7	9	9	14	16	19	17	10	18	9	16	18	5	13	17	14	11.0	18.5
9-Jun	9	18	16	6	15	25	24	15	7	M	M	M	M	4	4	9	11	6	7	11	9	15	15	11	11.9	24.9
10-Jun	14	13	15	14	11	11	9	18	16	12	12	12	11	12	14	11	10	10	11	12	12	12	24	24	13.4	24.3
11-Jun	19	18	18	19	16	13	11	19	19	12	19	18	10	8	8	8	10	11	6	7	9	16	18	16	13.7	19.4
12-Jun	14	16	16	13	13	10	10	10	8	8	9	8	8	9	10	10	13	12	15	16	N	N	N	N	11.5	16.5
13-Jun	N	N	N	N	N	N	N	N	6	8	8	4	7	3	8	10	2	7	5	6	9	8	5	8	--	9.7
14-Jun	5	6	5	4	4	4	5	6	1	3	3	9	8	7	12	11	8	8	4	4	4	6	6	6	5.8	12.2
15-Jun	5	5	4	5	4	5	5	5	7	6	7	12	12	6	1	5	5	5	8	7	8	11	11	7	6.5	12.3
16-Jun	8	7	8	6	6	17	17	17	17	9	11	10	4	4	5	5	6	8	8	8	8	10	11	11	9.2	17.5
17-Jun	5	7	12	13	11	8	15	14	14	16	16	5	7	8	10	9	9	7	10	11	14	18	20	18	11.5	19.7
18-Jun	21	20	17	13	12	9	10	13	13	15	16	16	17	23	N	N	N	N	N	N	N	N	N	N	--	23.0
19-Jun	11	16	16	15	14	11	13	13	18	25	19	8	0	11	7	14	9	10	9	8	15	19	25	30	14.0	29.6
20-Jun	33	13	16	15	13	11	12	14	14	22	24	17	15	13	31	36	13	11	12	14	27	21	23	19	18.3	36.0
21-Jun	20	26	29	20	18	15	14	21	21	16	13	15	15	13	15	16	18	16	15	16	11	16	13	14	16.8	28.9
22-Jun	10	10	14	12	13	15	18	18	23	18	18	21	20	19	19	15	16	14	19	19	13	23	21	13	16.6	22.7
23-Jun	19	16	15	12	16	12	17	15	24	24	16	14	15	21	12	16	16	7	8	15	15	12	12	12	15.1	24.5
24-Jun	18	16	1	15	15	7	13	9	2	3	6	12	13	2	0	10	5	7	9	5	BD	BD	BD	BD	8.3	17.6
25-Jun	BD	9	12	9	10	9	7	9	9	0	1	8	7	4	2	9	7	10	4	7	7	5	5	10	6.9	12.5
26-Jun	9	2	10	10	10	7	2	0	7	10	7	6	9	9	7	10	13	9	6	8	8	9	8	7	7.7	12.9
27-Jun	7	11	4	9	6	9	4	11	7	10	5	5	6	6	7	7	9	9	8	4	13	12	7	5	7.6	12.6
28-Jun	6	14	14	10	1	0	5	8	8	11	11	9	4	10	9	8	7	9	7	8	9	8	7	11	8.0	14.3
29-Jun	11	6	5	5	7	7	6	6	5	5	4	6	6	2	6	4	3	5	5	5	6	6	5	6	5.6	11.3
30-Jun	5	5	5	5	6	3	6	5	5	5	6	6	5	5	4	4	4	4	2	4	5	7	5	29	5.8	29.2
	13.5	13.4	10.7	11.6	11.5	10.5	11.7	12.0	11.8	11.6	11.4	10.9	10.3	11.0	11.0	10.9	9.3	8.9	9.3	11.1	12.6	13.4	12.3	12.2	Diurnal Average	
	33.0	26.5	28.9	20.0	19.6	24.9	24.5	21.2	25.0	27.0	24.1	20.6	24.7	28.0	31.2	36.0	19.1	21.8	20.8	28.5	30.7	29.4	25.3	29.6	Diurnal Maximum	

C - Calibration M - Maintenance N - Not Valid BD - Baseline Drift

Hourly Maximums

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

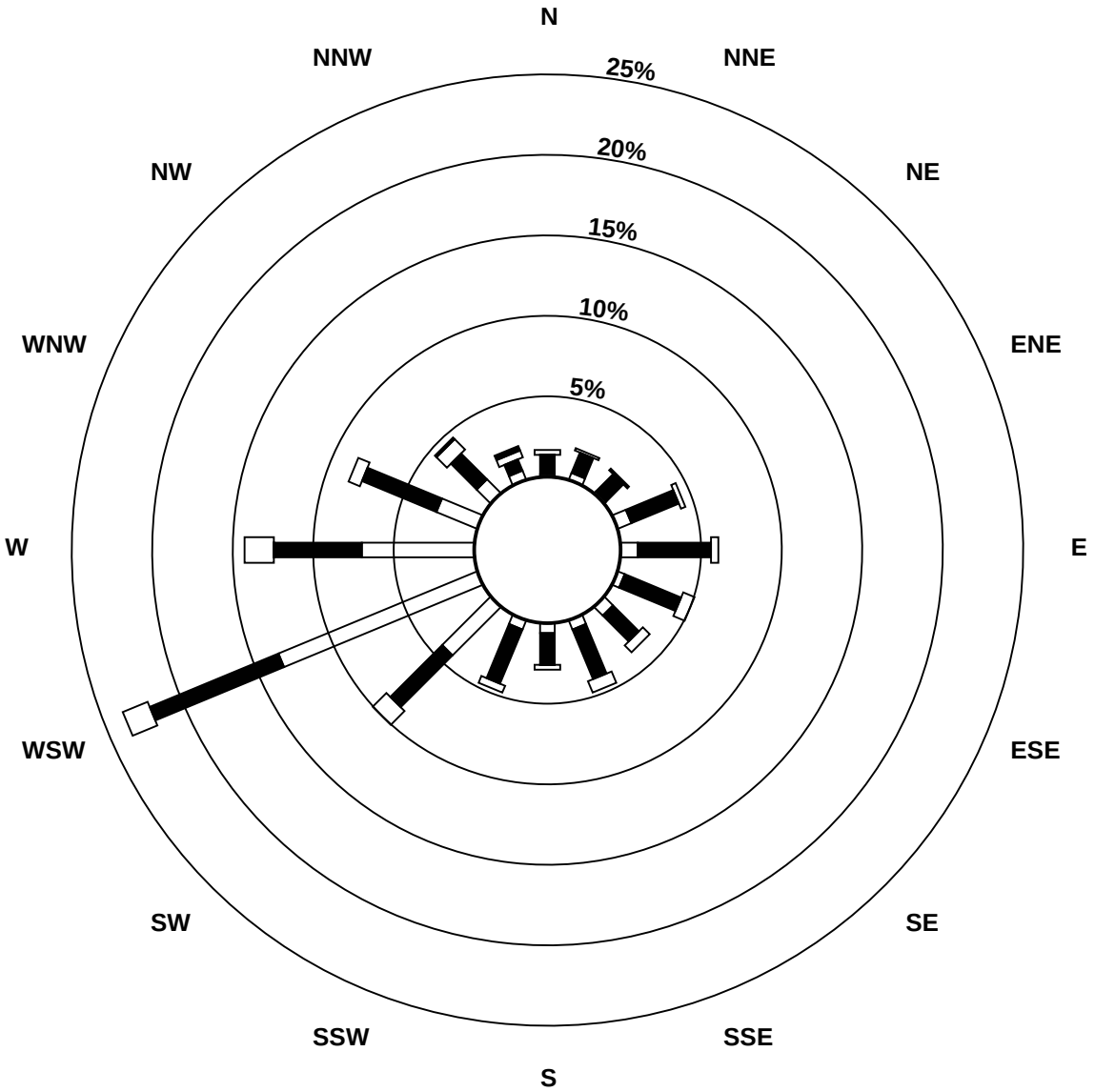
Henry Pirker - June 2010



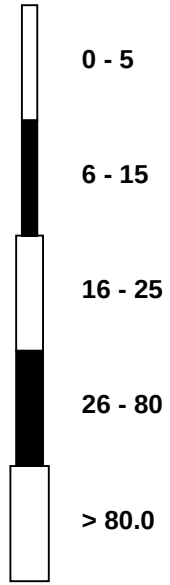
Pollutant Rose

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

Henry Pirker - June 2010



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



PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 28.5 °C on Jun 20 16:00 Maximum Daily Average: 20.7 °C on Jun 20

Minimum Value: 3 °C on Jun 10 05:00 Minimum Daily Average: 9.9 °C on Jun 8
Maximum Diurnal Average: 21.2 °C at hour 16 Minimum Diurnal Average: 8.6 °C at hour 5
Monthly Average: 15.60 °C Percentiles: P_1 = 5.1 P_{10} = 8.2 Q_1 = 11.5 Median = 15.5 Q_3 = 19.8 P_{90} = 22.9 P_{99} = 27.8

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	8	8	7	6	5	5	7	9	12	14	16	17	18	19	19	21	21	21	20	19	16	15	14	12	13.7	21.4
2-Jun	10	9	8	8	7	7	10	12	14	16	19	21	21	20	21	19	18	21	21	19	18	16	15	13	15.0	20.8
3-Jun	13	12	13	12	11	10	10	11	12	13	14	14	15	16	16	16	15	15	14	14	14	12	11	10	13.1	16.1
4-Jun	9	7	6	6	5	5	8	11	13	15	16	17	18	19	20	20	20	19	18	18	16	14	12	10	13.3	19.6
5-Jun	10	9	7	9	9	9	11	12	14	17	19	20	20	20	21	20	20	20	20	19	16	14	13	12	15.0	20.5
6-Jun	10	9	9	8	8	8	11	13	15	17	18	20	21	21	22	22	23	22	22	21	17	15	13	13	15.6	22.7
7-Jun	11	10	9	8	7	9	10	10	11	11	12	14	15	17	17	16	17	16	15	14	13	12	11	10	12.2	16.7
8-Jun	8	7	7	7	7	7	7	7	9	10	11	12	13	13	13	13	13	12	12	11	11	10	8	8	9.9	13.5
9-Jun	7	7	7	7	7	7	9	8	13	14	15	13	14	15	16	18	18	17	17	16	15	12	10	8	12.2	18.3
10-Jun	8	7	5	4	3	3	8	11	13	16	18	18	17	18	18	20	20	20	19	18	17	14	12	11	13.2	20.2
11-Jun	9	8	7	6	5	6	8	11	15	16	18	20	22	23	24	24	24	24	24	23	21	19	16	15	16.3	24.5
12-Jun	14	12	11	9	10	12	14	16	19	21	23	23	24	26	27	27	27	26	26	25	23	22	20	20	19.9	26.9
13-Jun	18	16	14	13	14	13	13	13	12	13	14	16	18	19	19	20	19	19	17	16	15	14	13	11	15.4	19.9
14-Jun	10	10	8	8	7	7	9	11	12	13	14	15	16	17	16	17	17	16	15	16	14	12	10	9	12.4	17.1
15-Jun	8	7	5	5	5	5	7	10	11	14	16	17	18	17	18	19	19	20	18	17	15	13	12	11	12.9	19.8
16-Jun	9	8	6	5	5	6	9	12	14	16	18	20	21	21	20	21	21	21	20	20	18	17	14	14	14.8	21.4
17-Jun	12	12	8	6	5	6	11	15	17	20	20	22	23	24	24	24	24	25	24	23	20	17	16	14	17.2	24.6
18-Jun	14	12	11	9	9	9	12	14	17	19	21	23	24	24	25	26	P	P	P	24	21	18	16	15	17.4	25.9
19-Jun	14	14	13	12	11	12	13	17	19	21	24	25	26	26	28	28	28	27	26	26	24	21	19	16	20.5	27.9
20-Jun	15	13	12	11	10	11	14	16	19	21	23	25	27	28	28	29	29	28	28	26	23	22	20	19	20.7	28.5
21-Jun	16	13	11	11	11	11	15	18	20	22	23	24	25	26	26	24	23	22	14	16	15	14	14	13	17.8	26.0
22-Jun	13	13	13	12	12	12	13	14	15	18	20	21	22	24	22	24	23	23	22	21	20	19	17	16	17.8	24.1
23-Jun	16	15	14	14	14	13	14	16	16	17	21	24	25	26	26	26	26	25	24	22	20	19	18	17	19.5	26.1
24-Jun	16	16	15	14	14	13	14	15	18	20	21	22	24	23	22	22	23	22	22	20	19	18	17	16	18.5	23.9
25-Jun	15	14	13	11	10	11	13	15	17	19	20	21	21	22	22	22	21	20	20	19	17	16	15	13	17.0	21.9
26-Jun	12	12	11	11	10	11	12	15	16	18	19	19	21	22	22	22	23	22	22	21	20	18	16	14	17.0	22.7
27-Jun	13	13	12	11	12	13	13	13	16	19	19	20	21	22	22	19	20	19	16	17	15	12	11	10	15.8	22.2
28-Jun	10	9	9	8	8	8	9	12	14	16	18	20	21	20	22	23	23	19	22	21	19	18	17	15	15.8	22.9
29-Jun	13	12	11	10	9	9	11	14	17	19	21	21	22	20	21	20	20	18	18	19	17	15	13	11	15.9	22.0
30-Jun	10	10	9	9	9	9	9	10	11	12	12	13	14	16	17	17	17	17	16	16	13	11	9	9	12.3	17.0
	11.7	10.8	9.8	9.0	8.6	9.0	10.8	12.7	14.6	16.5	18.0	19.2	20.2	20.8	21.1	21.2	21.1	20.6	19.7	19.2	17.4	15.7	14.1	12.9	Diurnal Average	
	17.6	16.0	14.8	13.9	13.7	13.5	14.5	18.0	19.9	22.0	23.9	25.4	26.5	27.9	28.4	28.5	28.5	28.4	28.1	25.6	23.6	22.1	20.3	19.8	Diurnal Maximum	

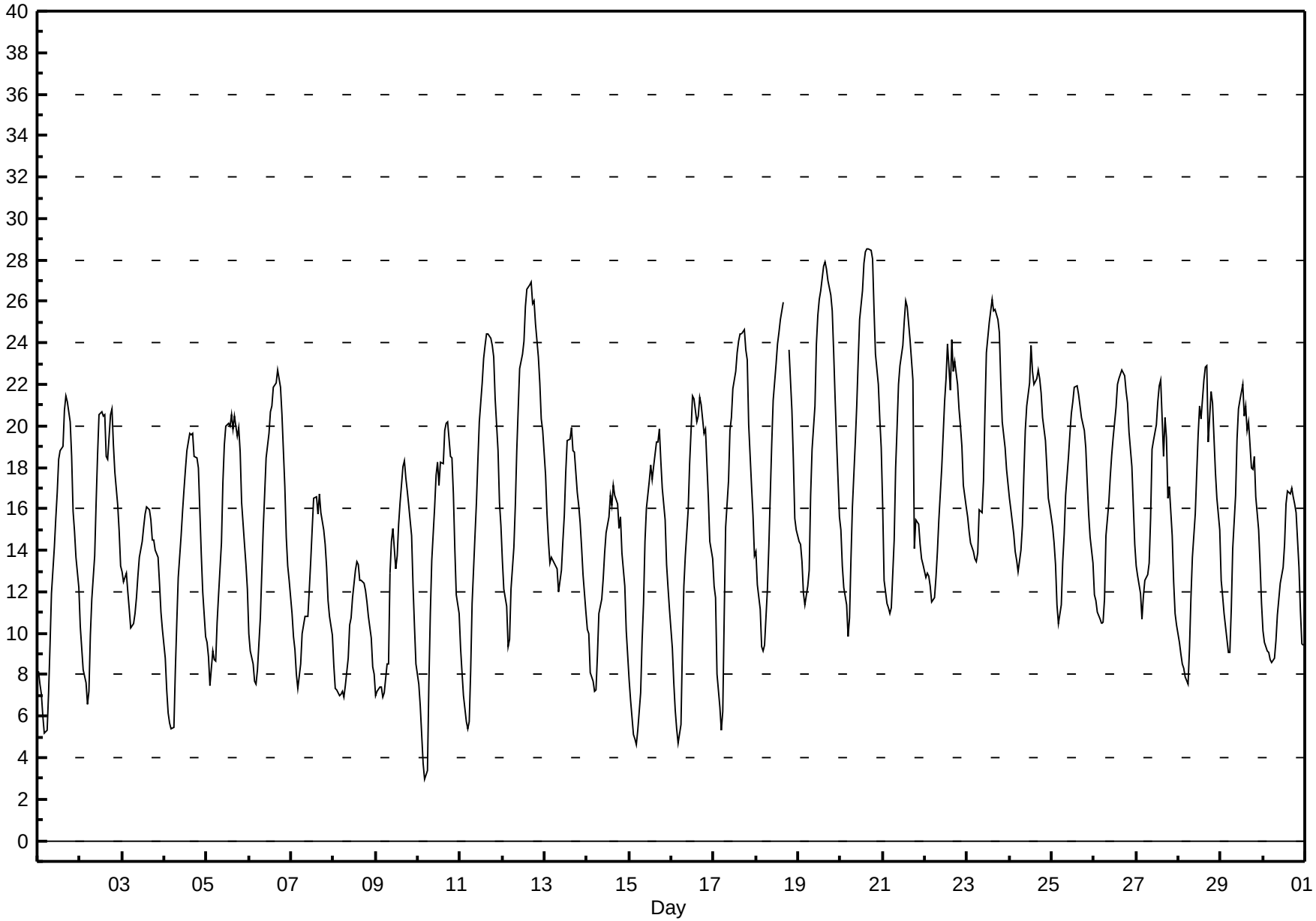
P - Power Failure

PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - June 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 90.7 % on Jun 22 05:00 Maximum Daily Average: 66.0 % on Jun 8

Minimum Value: 13 % on Jun 19 17:00 Minimum Daily Average: 36.8 % on Jun 19
Maximum Diurnal Average: 72.6 % at hour 5 Minimum Diurnal Average: 31.4 % at hour 16
Monthly Average: 50.09 % Percentiles: P_1 = 16.3 P_{10} = 27.5 Q_1 = 34.9 Median = 48.2 Q_3 = 64.3 P_{90} = 76.4 P_{99} = 89.5

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
Percent Operational Time:	99.6

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-Jun	64	65	66	70	73	72	67	61	54	48	45	42	39	36	34	33	32	32	33	37	52	56	62	68	51.9	73.5
2-Jun	76	80	85	84	85	83	74	69	63	56	47	38	36	35	34	42	45	38	37	40	46	57	61	67	57.4	85.4
3-Jun	69	72	72	77	71	69	64	58	51	43	39	38	36	34	33	34	35	36	36	37	37	39	45	49	48.9	77.3
4-Jun	54	59	63	64	64	63	57	51	45	38	35	32	29	27	26	25	25	27	29	35	47	55	62	73	45.2	73.1
5-Jun	73	64	62	53	56	59	56	53	47	37	30	24	23	25	26	28	29	29	28	32	38	41	44	47	41.7	72.9
6-Jun	52	54	56	58	59	58	52	49	44	36	31	27	23	22	21	20	19	18	18	21	41	50	55	57	39.2	58.7
7-Jun	63	67	71	78	76	80	75	74	72	71	66	61	56	52	48	48	46	47	48	48	53	59	60	62	61.8	80.4
8-Jun	66	69	68	70	71	71	76	75	70	64	59	53	45	46	47	54	61	64	66	70	72	76	85	86	66.0	86.4
9-Jun	88	88	88	89	90	90	86	83	70	63	53	57	55	47	43	34	32	32	33	35	47	63	70	79	63.1	90.4
10-Jun	83	87	89	88	89	87	77	71	65	55	46	39	40	38	40	33	30	26	33	29	32	41	47	56	55.0	88.8
11-Jun	63	67	72	78	78	77	70	60	50	48	40	30	25	23	21	21	20	19	19	20	24	31	40	40	43.2	78.3
12-Jun	47	49	50	62	60	54	49	46	41	36	32	29	30	28	27	28	28	30	31	34	36	39	46	45	39.8	61.8
13-Jun	56	59	63	67	66	63	54	58	68	65	59	52	47	39	33	27	28	26	29	30	30	35	36	39	47.1	68.2
14-Jun	40	41	47	50	52	53	49	43	38	34	32	30	28	24	24	23	25	27	31	30	34	40	47	52	37.3	53.2
15-Jun	57	62	66	67	68	64	59	54	49	41	35	28	25	25	25	23	23	23	27	29	34	45	52	55	43.3	68.2
16-Jun	62	70	77	78	79	81	68	62	57	50	43	35	31	30	31	33	30	32	34	34	37	41	46	47	49.5	80.6
17-Jun	52	55	70	77	79	76	66	54	48	43	38	31	27	23	21	20	20	19	21	24	36	44	50	61	44.0	79.2
18-Jun	52	57	61	66	65	66	57	52	47	42	36	31	27	25	23	22	P	P	P	29	39	44	55	56	45.3	66.1
19-Jun	61	61	64	70	80	66	63	48	40	36	30	23	17	15	15	14	13	13	13	16	21	28	34	42	36.8	80.2
20-Jun	46	56	56	57	64	67	65	60	49	44	39	36	33	29	22	19	19	19	21	27	33	36	43	48	41.1	66.6
21-Jun	63	70	73	76	76	76	67	56	50	45	42	39	37	34	35	38	38	40	77	71	74	79	84	87	59.5	87.2
22-Jun	86	87	87	90	91	90	84	79	74	65	60	54	44	41	47	40	42	40	44	49	51	56	65	68	63.9	90.7
23-Jun	69	70	68	67	68	70	69	58	58	55	47	34	30	28	28	28	29	29	32	38	47	49	50	55	49.0	70.3
24-Jun	57	62	66	69	69	70	67	63	56	49	46	43	38	41	42	43	42	44	45	50	49	56	56	57	53.3	70.5
25-Jun	60	62	66	73	75	72	63	61	55	49	44	39	35	35	34	32	31	32	35	39	43	47	53	58	49.8	75.2
26-Jun	62	62	64	65	67	67	63	56	49	44	42	40	37	35	35	32	27	28	30	30	33	38	40	43	45.4	66.8
27-Jun	46	48	50	54	51	50	50	53	51	43	40	37	33	31	30	45	41	43	62	56	73	81	85	86	51.6	85.8
28-Jun	90	89	90	89	88	86	79	72	64	55	47	44	36	36	33	33	34	41	36	38	45	52	56	63	58.2	90.1
29-Jun	69	73	74	78	81	81	75	65	57	46	40	39	37	40	37	41	41	45	43	40	45	52	58	73	55.5	81.0
30-Jun	78	80	86	86	86	84	82	78	71	65	61	58	56	38	33	32	32	30	28	32	41	49	55	58	58.3	85.8
	63.5	66.1	69.0	71.6	72.6	71.6	66.1	60.8	55.1	48.9	43.5	38.9	35.2	32.8	31.6	31.4	31.6	32.1	35.1	36.7	43.0	49.3	54.8	59.3	Diurnal Average	
	89.7	89.4	90.1	89.6	90.7	90.3	86.1	82.9	73.6	71.4	66.2	60.7	56.1	51.8	48.0	53.7	61.5	64.3	77.0	71.2	73.8	81.3	85.3	87.2	Diurnal Maximum	

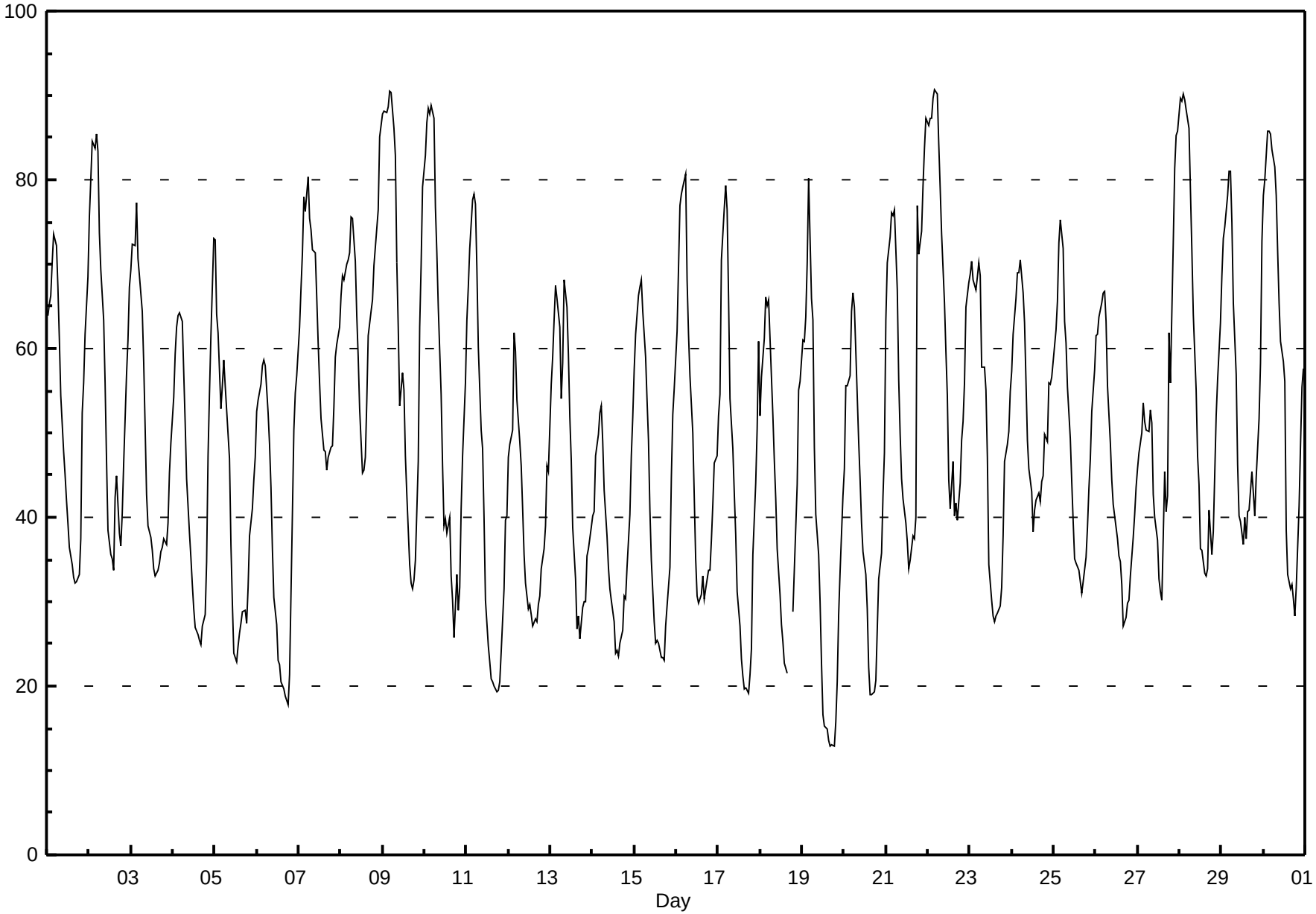
P - Power Failure

PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - June 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0

Maximum Value: 823.9 W/m^2 on Jun 14 14:00

Maximum Daily Average: 283.0 W/m^2 on Jun 17

Minimum Value: 0 W/m^2 on Jun 1 01:00

Minimum Daily Average: 115.7 W/m^2 on Jun 8

Maximum Diurnal Average: 645.0 W/m^2 at hour 13

Minimum Diurnal Average: 0.0 W/m^2 at hour 1

Monthly Average: 237.40 W/m^2

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.2 Median = 135.5 Q_3 = 483.5 P_{90} = 665.0 P_{99} = 778.8

Hours in Service:	720
Hours of Data:	710
Hours of Missing Data:	10
Hours of Calibration:	0
Percent Operational Time:	98.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	0	0	0	0	3	22	148	290	372	552	505	582	728	493	373	677	487	145	151	66	22	0	0	0	234.0	727.5
2-Jun	0	0	0	0	4	25	147	286	370	532	517	687	520	349	224	150	271	190	183	72	14	0	0	0	189.2	687.2
3-Jun	0	0	0	0	2	23	79	132	288	450	647	731	766	780	724	545	379	180	135	76	33	2	0	0	248.8	780.0
4-Jun	0	0	0	0	2	22	151	300	381	554	653	726	775	782	724	593	409	128	134	98	35	3	0	0	269.7	782.0
5-Jun	0	0	0	0	7	42	129	232	313	501	633	699	634	506	735	534	514	211	158	102	22	4	0	0	249.0	735.2
6-Jun	0	0	0	0	4	23	153	298	379	554	652	700	783	675	682	618	521	173	178	50	26	4	0	0	269.8	783.2
7-Jun	0	0	0	0	5	32	154	155	158	144	323	498	434	557	333	207	288	134	72	47	20	2	0	0	148.5	556.6
8-Jun	0	0	0	0	4	37	54	105	196	288	218	294	348	257	170	130	222	184	131	88	42	9	0	0	115.7	348.1
9-Jun	0	0	0	0	3	27	60	229	364	539	500	177	320	365	398	638	468	230	125	61	30	5	0	0	189.1	637.5
10-Jun	0	0	0	0	5	29	156	288	369	541	668	648	344	474	805	694	493	201	190	86	30	5	0	0	251.0	804.9
11-Jun	0	0	0	0	5	27	157	295	374	548	646	716	761	766	739	688	480	185	167	88	26	3	0	0	278.0	765.9
12-Jun	0	0	0	0	13	45	129	214	371	422	615	604	611	765	693	569	484	173	160	62	6	5	N	N	270.1	765.3
13-Jun	N	N	N	N	N	16	33	81	64	175	298	337	615	603	541	570	229	192	68	31	12	3	0	0	203.6	614.6
14-Jun	0	0	0	0	5	23	169	319	390	563	663	692	742	824	696	740	484	219	125	105	24	8	0	0	282.9	823.9
15-Jun	0	0	0	0	6	24	163	298	376	553	653	731	783	601	487	649	473	252	167	97	25	5	0	0	264.3	783.0
16-Jun	0	0	0	0	5	27	154	293	358	543	642	740	704	630	361	553	491	173	77	77	29	7	0	0	244.3	740.1
17-Jun	0	0	0	0	6	26	162	286	362	542	656	758	770	774	743	704	496	194	181	85	38	7	0	0	283.0	773.6
18-Jun	0	0	0	0	5	26	155	293	365	536	633	704	614	568	673	647	P	P	P	96	39	5	0	0	255.2	704.0
19-Jun	0	0	0	0	5	27	105	293	369	539	639	714	768	769	747	682	486	182	183	82	31	9	0	0	276.3	768.9
20-Jun	0	0	0	0	6	27	152	327	340	536	633	705	748	762	743	687	495	195	189	52	44	12	0	0	277.3	761.8
21-Jun	0	0	0	0	5	31	138	278	350	473	614	683	736	691	476	217	147	107	39	49	14	0	0	0	210.3	735.8
22-Jun	0	0	0	0	1	30	119	241	322	525	612	705	595	728	359	652	294	257	178	84	57	9	0	0	240.3	728.2
23-Jun	0	0	0	0	9	46	106	222	168	265	619	678	767	800	688	593	506	201	258	83	28	4	0	0	251.7	800.1
24-Jun	0	0	0	0	3	48	167	185	360	536	631	603	724	426	500	616	508	223	188	97	43	8	0	0	244.4	724.5
25-Jun	0	0	0	0	10	60	158	279	362	537	636	718	763	734	716	668	442	145	195	91	25	6	0	0	272.6	762.6
26-Jun	0	0	0	0	6	29	105	307	344	539	549	642	757	752	696	684	503	168	188	91	26	12	0	0	266.6	757.2
27-Jun	0	0	0	0	5	29	70	191	212	446	479	444	585	664	460	256	385	88	95	49	24	0	0	0	186.7	664.3
28-Jun	0	0	0	0	8	19	157	300	369	548	632	643	592	571	651	609	507	151	237	149	38	6	0	0	257.7	651.0
29-Jun	0	0	0	0	4	21	172	317	367	530	626	626	623	323	357	385	373	147	122	78	18	0	0	0	212.0	626.2
30-Jun	0	0	0	0	2	13	41	127	212	219	271	310	441	542	632	476	504	142	193	119	24	5	0	0	178.2	631.6
	0.0	0.0	0.0	0.0	5.1	29.2	128.1	248.6	320.9	474.3	568.7	616.5	645.0	617.7	570.9	547.6	425.5	178.3	154.1	80.3	28.3	4.9	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.0	13.1	60.3	172.0	327.2	389.7	563.3	667.6	757.6	783.2	823.9	804.9	739.8	521.0	257.2	258.3	148.6	56.6	12.4	0.0	0.0	Diurnal Maximum	

P - Power Failure N - Not Valid

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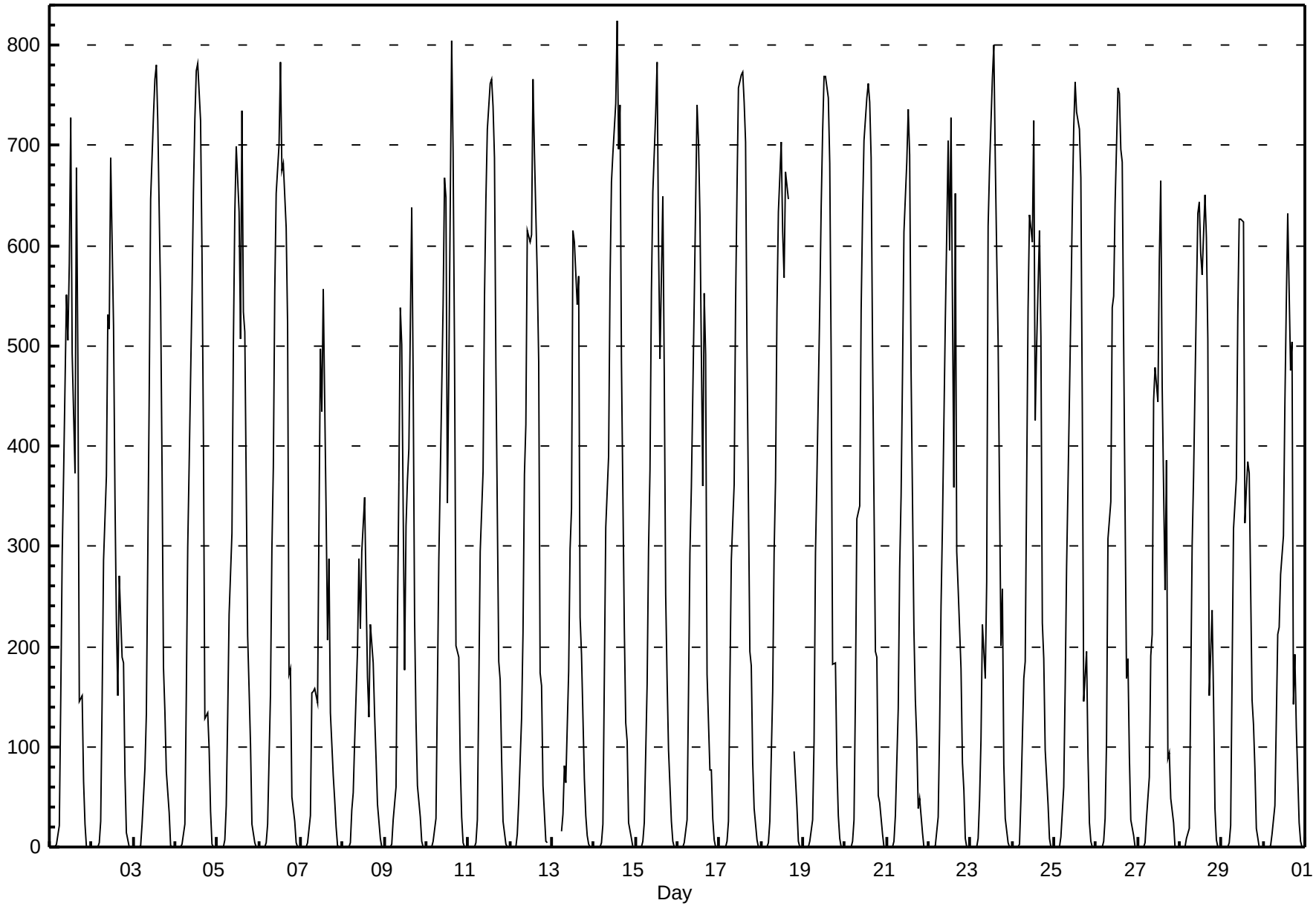
Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - June 2010



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Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - June 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	7	9	10	10	10	12	12	13	14	15	11	11	8	5	3	7	7	9	10	6	10	8	5	7	6.5	14.5
Dir	96	89	87	86	89	91	102	106	108	120	126	113	123	112	123	76	59	62	62	75	259	336	320	294	93.0	120.2
2 Spd	2	4	1	5	2	4	5	6	6	7	7	11	13	13	12	11	14	8	4	6	7	7	4	5	4.9	14.3
Dir	314	145	131	101	129	100	120	100	117	114	96	111	115	121	126	164	193	214	237	117	67	69	43	34	122.2	192.6
3 Spd	5	9	10	14	17	24	23	29	33	35	38	35	31	29	29	29	29	30	26	23	24	18	12	15	22.5	38.1
Dir	28	324	341	266	269	266	266	267	266	265	264	263	261	253	255	252	254	248	256	254	248	247	241	243	260.5	264.0
4 Spd	13	12	11	12	11	8	11	15	17	16	14	14	14	13	13	13	15	11	9	8	7	5	3	4	8.7	16.5
Dir	239	230	229	233	239	309	280	255	269	305	284	286	280	287	299	309	307	311	300	333	34	77	104	205	279.8	269.5
5 Spd	3	7	7	9	10	9	9	13	15	15	16	18	19	18	19	17	16	16	16	19	13	8	9	12	12.6	19.2
Dir	209	274	278	249	263	263	271	251	257	276	296	286	277	276	274	261	245	256	280	276	278	258	243	243	267.6	276.1
6 Spd	8	8	8	6	8	8	7	9	11	17	11	9	9	9	9	7	6	5	6	6	15	11	9	8	6.2	16.5
Dir	226	236	261	300	286	292	290	255	246	248	260	254	252	261	274	251	289	301	316	348	2	7	20	12	282.4	247.9
7 Spd	2	6	6	5	6	10	9	10	7	8	9	9	5	4	7	9	7	9	10	10	9	8	8	9	5.9	10.4
Dir	306	288	287	319	341	23	39	8	35	41	12	356	44	30	351	345	2	356	1	13	60	88	85	86	16.6	22.5
8 Spd	9	9	7	7	7	7	9	8	7	6	5	5	6	5	5	7	8	7	8	6	7	4	1	3	2.9	9.2
Dir	82	74	80	78	98	95	104	104	98	85	63	56	29	30	316	293	238	199	198	174	183	177	224	37	98.6	103.8
9 Spd	3	3	1	0	3	3	2	6	4	9	10	10	10	11	11	11	13	13	10	10	10	7	4	1	5.3	13.0
Dir	124	149	58	254	166	314	190	179	97	101	106	113	87	84	79	59	53	66	71	87	133	167	158	187	96.3	66.2
10 Spd	2	1	2	2	3	3	3	5	4	4	3	4	10	6	11	7	4	7	11	6	4	3	4	5	2.0	11.5
Dir	36	287	204	310	284	287	257	240	199	237	141	154	329	148	157	135	100	84	111	119	96	67	86	135	134.0	110.9
11 Spd	4	3	4	2	5	4	5	4	3	7	9	9	5	5	5	7	5	8	6	7	8	5	4	6	4.6	9.2
Dir	120	118	122	139	115	132	158	201	159	139	152	166	207	211	211	228	205	180	160	159	135	171	183	213	167.1	152.3
12 Spd	6	3	4	6	6	7	9	9	11	10	8	13	12	8	10	10	13	10	12	11	6	4	6	7	6.0	13.3
Dir	168	156	209	163	204	218	218	220	233	242	244	235	235	230	220	168	150	126	100	113	177	163	162	216	195.0	234.7
13 Spd	20	15	10	9	14	14	16	17	12	8	8	11	7	10	13	17	16	22	17	14	12	13	12	15	12.0	22.2
Dir	305	315	308	294	270	261	278	272	256	223	211	199	222	242	234	246	266	271	265	256	238	239	264	276	262.7	271.1
14 Spd	15	16	13	19	15	14	17	20	25	25	22	19	20	18	21	22	22	20	16	15	15	12	10	9	17.2	25.4
Dir	273	253	243	248	243	241	244	242	243	253	258	250	262	247	243	244	255	255	272	267	258	248	267	237	251.7	243.5
15 Spd	11	11	2	7	10	11	13	13	10	8	8	8	8	10	11	10	9	8	10	8	6	6	8	6	6.6	12.9
Dir	244	251	264	248	255	247	249	246	260	267	247	263	264	263	275	289	327	306	338	339	331	8	22	43	277.6	248.6
16 Spd	2	4	3	2	3	3	3	4	7	6	4	3	4	4	5	10	8	8	10	9	9	7	6	6	3.2	10.4
Dir	30	314	303	300	324	271	270	161	134	122	124	330	315	23	80	74	83	89	88	87	87	85	63	67	76.2	74.2
17 Spd	5	3	4	3	3	3	3	3	4	3	10	7	5	6	4	5	8	3	5	6	7	2	2	4	0.9	10.0
Dir	67	109	310	304	298	311	280	242	244	133	127	131	102	38	17	242	261	319	1	286	292	313	310	253	299.5	126.6
18 Spd	5	4	9	8	8	6	13	13	8	8	8	9	10	11	14	12	P	P	P	17	15	7	3	4	8.4	17.2
Dir	219	241	241	275	278	287	247	246	233	217	223	222	231	278	286	289	P	P	P	260	275	269	258	278	257.1	259.7
19 Spd	2	2	2	2	2	0	4	9	10	9	8	8	10	10	9	10	12	15	17	13	11	9	8	3	7.4	16.7
Dir	271	280	266	241	254	263	202	242	239	250	271	286	228	219	256	260	242	254	259	266	251	245	256	314	251.6	258.8
20 Spd	6	2	4	4	3	2	4	3	2	7	8	7	8	4	5	6	7	4	7	7	5	5	6	5	2.8	8.2
Dir	336	247	271	294	5	110	85	136	261	266	310	290	286	280	299	311	279	289	304	293	323	66	76	80	304.8	309.9
21 Spd	3	4	4	4	5	3	3	4	6	5	6	8	7	5	8	8	8	7	14	8	7	6	2	2	2.7	14.3
Dir	265	292	280	256	288	304	292	94	9	37	64	64	44	36	24	23	17	8	301	115	237	299	263	292	353.4	300.8
22 Spd	6	8	4	2	4	5	5	6	5	4	3	3	4	4	5	1	8	6	9	8	7	9	9	7	3.0	9.5
Dir	281	238	267	195	196	189	244	217	212	212	202	145	283	207	333	204	151	170	170	165	151	108	90	107	182.5	170.2

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Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	5	5	3	4	6	4	4	6	6	6	8	7	6	7	7	7	7	8	7	9	12	10	4	6	4.9	12.3
Dir	124	155	216	292	301	299	311	237	214	210	234	256	236	217	264	237	218	227	223	169	178	207	169	192	219.7	178.2
24 Spd	5	8	5	8	7	9	9	9	10	12	11	8	7	11	13	15	14	16	12	13	17	13	13	14	9.7	16.9
Dir	167	252	226	261	226	224	241	241	239	228	231	247	220	270	192	190	186	241	235	236	255	238	265	266	234.0	254.8
25 Spd	12	14	10	5	5	10	17	17	19	19	22	22	23	21	21	23	22	26	26	24	23	24	18	16	18.1	25.9
Dir	260	251	249	273	297	251	243	251	261	259	249	257	254	256	257	256	258	266	265	262	255	254	244	244	256.1	265.5
26 Spd	11	11	12	12	11	10	13	19	25	25	24	21	20	16	18	21	23	24	22	21	17	9	10	10	16.3	25.5
Dir	231	233	237	238	259	260	242	252	259	258	251	254	245	241	248	263	265	280	281	272	254	233	237	228	254.2	258.5
27 Spd	9	11	5	3	7	9	10	7	8	12	15	16	14	13	12	11	9	12	13	8	11	16	8	5	8.0	16.1
Dir	230	228	266	297	276	282	247	228	240	248	247	242	256	245	244	182	144	186	253	216	153	193	176	150	227.3	192.9
28 Spd	5	5	5	5	8	6	7	10	15	18	15	13	12	13	6	5	5	9	5	8	8	6	6	4	5.3	18.3
Dir	157	162	210	227	237	230	232	251	243	247	235	226	258	212	228	243	219	216	157	109	81	62	64	56	222.8	246.6
29 Spd	10	14	10	6	10	5	11	13	10	10	9	9	11	12	12	16	14	18	10	10	10	10	11	16	10.2	17.7
Dir	303	296	258	234	242	231	241	256	290	287	268	254	300	304	311	291	296	280	320	313	292	296	291	262	282.4	280.5
30 Spd	22	17	10	12	9	9	10	7	11	14	13	13	13	24	27	26	28	31	25	28	23	19	10	11	16.8	31.0
Dir	254	268	254	256	237	214	236	241	265	253	252	228	217	248	254	251	246	247	245	256	259	245	226	229	247.6	246.9
Spd	3.4	4.3	4.0	4.2	4.8	4.2	5.8	7.2	7.4	7.3	6.8	6.7	6.8	6.8	7.1	7.2	6.7	7.4	6.1	5.0	4.9	3.6	2.2	3.3	Diurnal Average	
Dir	252.1	254.4	256.9	257.0	257.7	257.6	248.1	243.4	247.9	248.7	247.4	246.1	255.0	251.4	257.4	254.2	250.9	256.0	267.9	255.9	249.1	240.2	245.0	245.3		
Spd	22.0	16.8	12.9	18.6	17.2	24.1	22.7	28.6	32.6	35.4	38.1	35.1	30.6	29.4	29.3	28.9	29.2	31.0	26.1	28.1	24.0	23.9	18.4	16.4	Diurnal Maximum	
Dir	253.6	268.1	243.5	247.7	269.0	266.0	266.3	267.2	266.5	265.4	264.0	263.1	260.6	252.8	254.6	252.1	253.5	246.9	256.1	256.3	248.3	254.0	243.7	262.1		

Maximum Speed Value: 38 km/h on Jun 3 11:00
Minimum Speed Value: 0 km/h on Jun 19 06:00
Maximum Daily Speed Average: 22.5 km/h on Jun 3
Minimum Daily Speed Average: 0.9 km/h on Jun 17
Maximum Diurnal Speed Average: 7.4 km/h at hour 9
Minimum Diurnal Speed Average: 2.2 km/h at hour 23

Monthly Average Velocity: 5.51 km/h 252.02 deg
Speed Percentiles: P_1 = 1.0 P_{10} = 3.5 Q_1 = 5.4 Median = 8.6 Q_3 = 12.3 P_{90} = 18.1 P_{99} = 29.0
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Percent Operational Time:	99.6

P - Power Failure

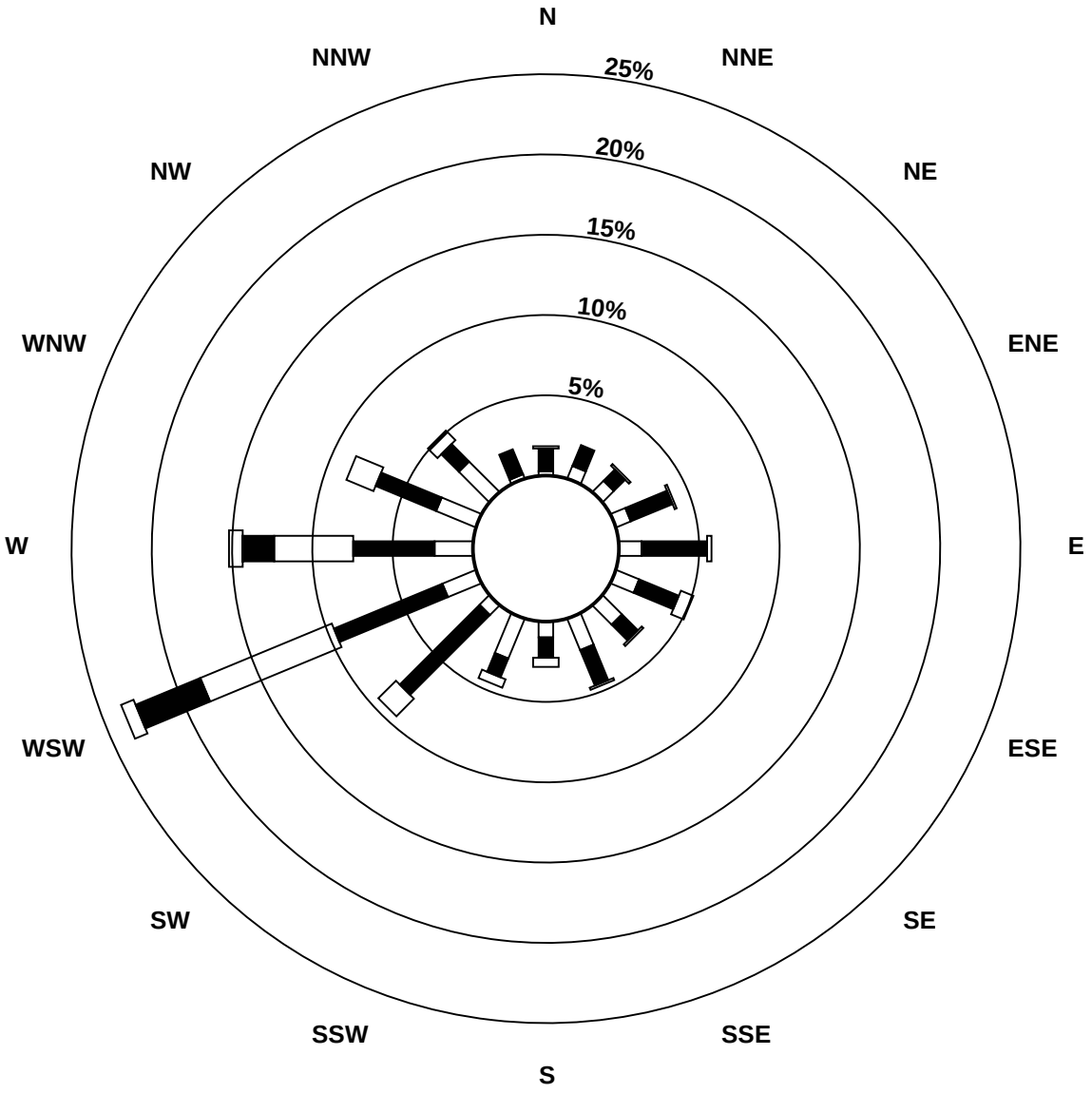
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	2	23	1	0	0	0	26
NorthEast	16	25	3	0	0	0	44
East	11	49	7	0	0	0	67
SouthEast	20	28	9	0	0	0	57
South	18	25	9	0	0	0	52
SouthWest	26	86	52	7	1	0	172
West	32	73	70	41	11	1	228
NorthWest	28	30	12	1	0	0	71
Total	153	339	163	49	12	1	717

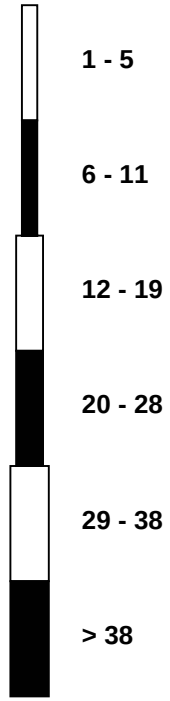
Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - June 2010



Wind Speed Classes (km/h)



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Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - June 2010

Maximum Speed: 38 km/h on Jun 3 11:00

Maximum Daily Speed Average: 24.0 km/h on Jun 3

Minimum Speed: 2 km/h on Jun 2 03:00

Minimum Daily Speed Average: 5.7 km/h on Jun 17

Maximum Diurnal Speed Average: 13.9 km/h at hour 18

Minimum Diurnal Speed Average: 6.9 km/h at hour 4

Monthly Average Speed: 10.55 km/h

Percentiles: P_1 = 2.4 P_{10} = 4.4 Q_1 = 6.5 Median = 9.2 Q_3 = 13.1 P_{90} = 18.6 P_{99} = 29.3

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	7	9	10	10	10	12	12	13	14	15	12	11	9	8	6	8	8	10	10	9	11	9	8	7	10.0	15.1
2-Jun	3	6	2	5	3	5	5	7	6	7	8	12	13	13	14	11	15	9	5	7	7	8	4	5	7.5	15.2
3-Jun	5	9	13	14	17	24	23	29	33	36	38	36	31	30	30	29	30	30	26	23	24	18	12	15	24.0	38.4
4-Jun	14	12	11	12	11	8	11	15	17	16	15	15	15	14	14	14	15	11	9	10	7	5	3	4	11.7	17.0
5-Jun	4	7	7	9	11	9	10	13	15	16	17	19	19	18	21	18	17	17	16	19	13	8	9	12	13.5	21.1
6-Jun	9	8	9	6	8	9	8	10	11	17	12	10	11	11	10	9	8	8	7	7	16	11	9	8	9.6	16.8
7-Jun	5	7	6	5	6	11	10	11	8	8	9	10	7	7	9	10	9	10	10	11	10	8	8	9	8.5	10.8
8-Jun	9	9	8	7	8	7	9	8	7	6	5	6	7	6	6	8	10	7	8	6	7	4	3	4	6.8	9.6
9-Jun	3	3	3	2	3	3	4	7	5	10	11	11	11	11	12	12	13	13	11	10	11	7	5	2	7.6	13.3
10-Jun	2	2	4	3	3	3	3	5	5	5	7	8	11	9	12	8	8	9	12	6	4	3	5	5	5.9	12.3
11-Jun	4	4	4	3	6	4	5	4	5	8	10	10	8	7	7	9	7	9	7	7	8	6	5	6	6.3	9.8
12-Jun	7	4	4	6	7	8	9	10	11	11	9	14	13	10	11	11	13	10	12	11	6	5	6	8	9.0	14.0
13-Jun	20	15	10	10	15	14	16	17	12	9	9	11	9	12	15	18	17	23	17	15	12	13	12	15	14.0	22.6
14-Jun	15	16	13	19	15	14	17	20	26	25	22	20	20	19	21	23	23	21	17	16	15	12	10	9	17.9	25.7
15-Jun	11	11	5	7	10	11	13	13	10	9	9	10	9	12	11	12	11	10	11	8	6	7	8	7	9.7	13.2
16-Jun	3	4	4	3	3	3	3	5	7	7	5	7	6	7	7	11	10	11	10	9	9	7	6	6	6.4	11.1
17-Jun	6	5	4	4	3	3	3	3	4	5	11	9	8	8	8	7	9	6	7	6	7	3	2	5	5.7	10.7
18-Jun	5	5	9	8	8	6	13	13	9	9	10	9	11	11	15	14	P	P	P	18	15	8	4	4	9.7	17.8
19-Jun	3	4	4	3	2	2	5	10	11	10	9	10	12	12	10	11	13	16	17	13	11	10	8	4	8.7	17.1
20-Jun	6	5	5	5	3	3	5	4	3	7	9	8	9	7	8	8	8	6	8	7	6	5	6	5	6.1	9.0
21-Jun	4	5	5	5	6	4	4	5	6	6	7	9	9	8	9	9	9	10	22	11	8	9	5	7	7.5	21.5
22-Jun	6	8	5	3	4	5	5	6	6	5	5	5	6	6	10	6	8	7	10	8	7	9	9	7	6.5	9.8
23-Jun	5	5	4	4	6	4	5	6	7	7	8	8	7	9	9	9	9	9	9	9	13	10	5	7	7.2	12.6
24-Jun	6	8	6	8	8	9	9	10	10	12	11	9	8	12	15	16	15	17	12	14	17	13	14	14	11.3	17.0
25-Jun	12	14	11	5	5	10	17	17	19	20	22	22	23	21	22	24	23	26	26	25	23	24	19	16	18.6	26.3
26-Jun	11	11	12	12	11	10	13	19	25	26	25	22	21	17	19	22	23	24	23	22	17	9	10	10	17.2	25.8
27-Jun	9	11	7	4	8	10	10	7	8	12	15	16	14	14	13	13	9	13	14	10	12	16	8	6	10.9	16.3
28-Jun	6	5	5	5	8	7	7	11	16	19	16	14	13	14	8	8	8	12	5	8	8	6	6	8	9.3	18.6
29-Jun	11	14	10	7	10	6	11	13	10	11	10	11	12	13	12	17	15	18	11	11	10	10	12	17	11.7	17.9
30-Jun	22	17	11	13	9	9	10	7	11	15	13	13	14	24	27	26	28	31	25	29	23	19	10	11	17.4	31.3
	7.8	8.1	7.0	6.9	7.6	7.7	9.2	10.6	11.3	12.2	12.4	12.5	12.2	12.3	13.0	13.4	13.4	13.9	12.9	12.2	11.5	9.4	7.7	8.2	Diurnal Average	
	22.2	17.1	13.4	18.7	17.3	24.1	22.8	28.7	32.7	35.7	38.4	35.6	31.1	30.0	30.0	29.4	29.5	31.3	26.3	28.6	24.1	24.0	18.5	16.6	Diurnal Maximum	

P - Power Failure

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

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - June 2010

Maximum Value: 95.3 deg on Jun 19 06:00

Minimum Value: 4.0 deg on Jun 3 22:00

Percentiles: P_1 = 5.3 P_{10} = 8.0 Q_1 = 11.8 Median = 19.0 Q_3 = 32.0 P_{90} = 50.8 P_{99} = 79.4

Hours in Service:	720
Hours of Data:	717
Hours of Missing Data:	3
Hours of Calibration:	0
Percent Operational Time:	99.6

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-Jun	6	7	5	6	6	5	7	9	11	16	16	20	34	74	73	35	38	22	15	52	33	15	50	22	74.2
2-Jun	63	46	75	17	51	15	21	23	22	27	29	23	18	17	24	14	19	35	44	30	19	10	24	17	75.0
3-Jun	23	15	39	11	7	5	5	5	6	7	8	10	10	11	13	11	9	8	8	8	6	4	7	6	39.3
4-Jun	7	6	6	6	15	19	15	9	15	13	18	20	21	25	23	23	16	15	11	42	18	17	18	22	42.4
5-Jun	49	29	7	10	11	13	14	10	9	10	17	15	13	17	25	21	25	18	17	9	6	19	6	5	48.7
6-Jun	6	15	28	25	19	15	14	24	14	11	25	25	33	31	38	46	46	79	50	34	11	13	11	33	79.1
7-Jun	79	34	25	31	12	17	16	17	26	21	18	30	58	56	40	23	33	27	16	12	26	8	12	9	78.6
8-Jun	8	7	9	11	13	13	11	13	17	24	31	35	25	33	36	12	36	27	19	15	16	18	79	42	78.7
9-Jun	50	24	80	86	19	17	75	30	46	23	20	29	16	16	19	27	16	13	18	16	27	10	11	57	86.0
10-Jun	49	72	62	22	26	31	25	16	36	44	81	75	25	82	38	36	68	37	21	21	18	10	13	13	81.6
11-Jun	21	17	10	40	13	17	14	31	55	21	16	32	65	54	51	40	51	28	47	21	14	22	20	13	65.5
12-Jun	20	41	23	11	13	9	9	9	12	25	29	19	26	38	29	30	21	17	10	14	20	31	14	31	40.7
13-Jun	7	5	9	8	14	10	6	7	15	12	24	16	44	37	31	18	16	10	8	14	14	8	12	5	44.2
14-Jun	6	14	15	7	7	7	7	9	9	10	15	19	14	18	13	15	15	15	14	21	8	11	15	9	21.1
15-Jun	7	14	86	21	14	10	8	12	15	23	33	39	36	30	25	34	47	33	30	22	21	35	12	15	85.9
16-Jun	65	31	40	46	25	27	26	49	25	39	56	79	60	55	48	22	36	39	21	15	8	8	8	9	78.7
17-Jun	14	73	17	38	49	23	25	26	21	61	21	56	60	58	65	53	35	73	50	35	8	82	45	53	82.0
18-Jun	15	39	13	10	6	12	8	8	17	23	28	26	26	19	20	25	P	P	P	17	9	34	31	32	38.9
19-Jun	62	81	71	41	28	95	21	18	14	18	25	45	37	32	31	34	25	19	12	9	8	7	8	36	95.3
20-Jun	25	57	33	23	45	46	22	48	56	21	28	33	34	66	56	64	38	66	54	10	40	22	11	12	66.2
21-Jun	67	27	16	40	24	66	31	50	29	49	36	32	39	60	25	29	17	45	55	51	27	55	77	88	87.8
22-Jun	25	9	34	57	27	27	20	19	24	54	58	70	54	58	89	88	23	55	9	8	15	13	8	14	89.5
23-Jun	16	22	44	21	12	37	19	22	15	16	23	30	40	46	40	48	40	28	33	8	13	11	32	41	48.0
24-Jun	24	18	16	15	13	10	11	13	16	18	19	34	37	27	39	15	21	13	14	21	8	12	16	9	39.0
25-Jun	9	6	11	19	24	17	6	8	9	11	9	13	10	14	16	14	15	12	9	8	7	6	6	7	24.0
26-Jun	8	9	7	8	11	15	7	10	8	9	12	13	14	17	21	13	11	11	8	11	8	9	8	7	20.9
27-Jun	9	6	43	39	23	21	10	22	20	20	14	18	17	20	25	40	20	25	25	44	24	9	30	30	43.9
28-Jun	22	20	17	18	16	27	20	15	12	10	16	19	19	22	44	56	55	58	38	15	13	12	12	67	66.9
29-Jun	33	11	13	18	14	32	12	11	15	30	28	36	31	13	18	12	14	9	16	27	9	11	18	10	36.0
30-Jun	6	11	16	16	13	12	14	21	13	11	15	13	15	14	13	10	10	8	8	10	7	7	11	9	20.6
	78.6	80.8	85.9	86.0	50.8	95.3	74.6	49.9	55.9	61.2	80.5	78.7	65.5	81.6	89.5	87.5	68.5	79.1	55.2	52.1	39.6	82.0	78.7	87.8	

P - Power Failure

PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.3 ppb on Jun 4 07:00 Maximum Daily Average: 0.5 ppb on Jun 4

Minimum Value: 0 ppb on Jun 2 05:00 Minimum Daily Average: 0.0 ppb on Jun 26
Maximum Diurnal Average: 0.4 ppb at hour 10 Minimum Diurnal Average: 0.0 ppb at hour 23
Monthly Average: 0.17 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.1$ $P_{90} = 0.3$ $P_{99} = 2.2$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	34
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-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	P	0	0	A	0	0	0	0.2	0.4
2-Jun	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	2.0
3-Jun	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0.2	1.4
4-Jun	0	0	0	0	0	0	6	3	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0.5	6.3
5-Jun	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	0.4
6-Jun	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	0.1
7-Jun	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	0.2
8-Jun	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	0.3
9-Jun	0	0	0	0	0	D	D	D	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
10-Jun	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.1
11-Jun	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
12-Jun	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	1.0
13-Jun	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
14-Jun	0	0	A	0	0	0	0	1	C	C	C	C	0	0	0	0	1	4	0	0	0	0	0	0	0.3	3.6
15-Jun	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
16-Jun	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
17-Jun	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	0.5
18-Jun	0	0	A	0	0	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.2
19-Jun	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	1.5
20-Jun	A	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.6
21-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.2
22-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.1
23-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0.2	0.8
24-Jun	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0.2	0.6
25-Jun	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	2	0	0	A	0	0	0	0	0	0.3	2.3
26-Jun	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	0.1
27-Jun	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	0.1
28-Jun	0	0	0	0	0	0	1	0	0	0	3	3	0	0	0	A	0	0	0	0	0	0	0	0	0.4	3.3
29-Jun	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0.1	1.4
30-Jun	0	0	0	0	0	0	0	0	0	1	0	1	0	A	0	2	4	0	0	0	0	0	0	0	0.4	4.0
	0.1	0.1	0.1	0.1	0.0	0.1	0.4	0.4	0.3	0.4	0.3	0.3	0.2	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.0	0.1	Diurnal Average	
	0.2	0.6	0.4	0.2	0.3	0.2	6.3	2.7	1.4	2.1	2.9	3.3	1.5	0.6	0.9	2.0	4.0	3.6	0.7	0.3	0.4	0.3	0.1	0.3	Diurnal Maximum	

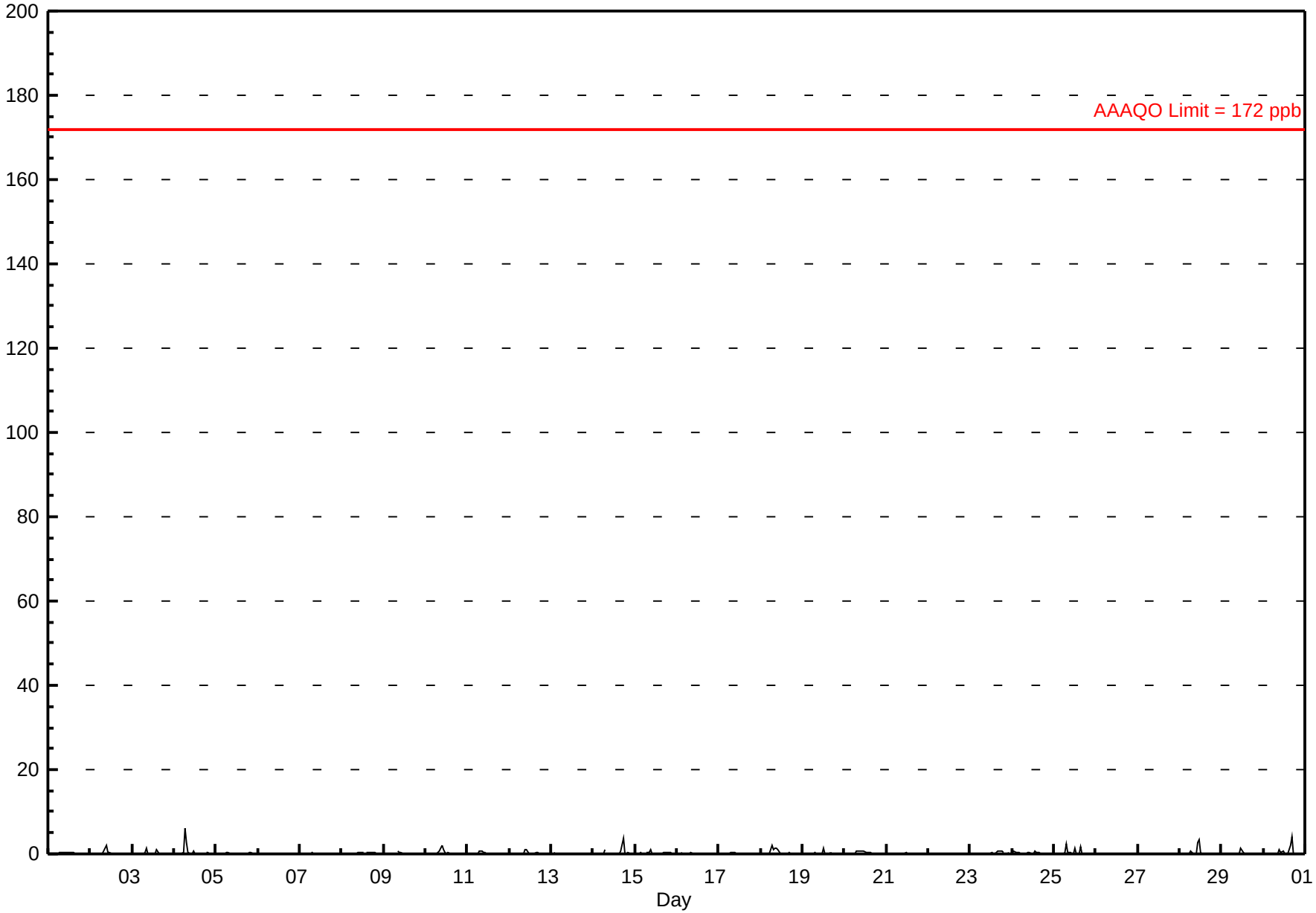
C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2010

Maximum Value: 16.6 ppb on Jun 30 17:00

Maximum Daily Average: 2.4 ppb on Jun 18

Minimum Value: 0 ppb on Jun 26 14:00

Minimum Daily Average: 0.3 ppb on Jun 7

Maximum Diurnal Average: 2.2 ppb at hour 8

Minimum Diurnal Average: 0.3 ppb at hour 22

Monthly Average: 0.92 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.5$ $P_{90} = 1.0$ $P_{99} = 12.2$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	34
Percent Operational Time:	99.3

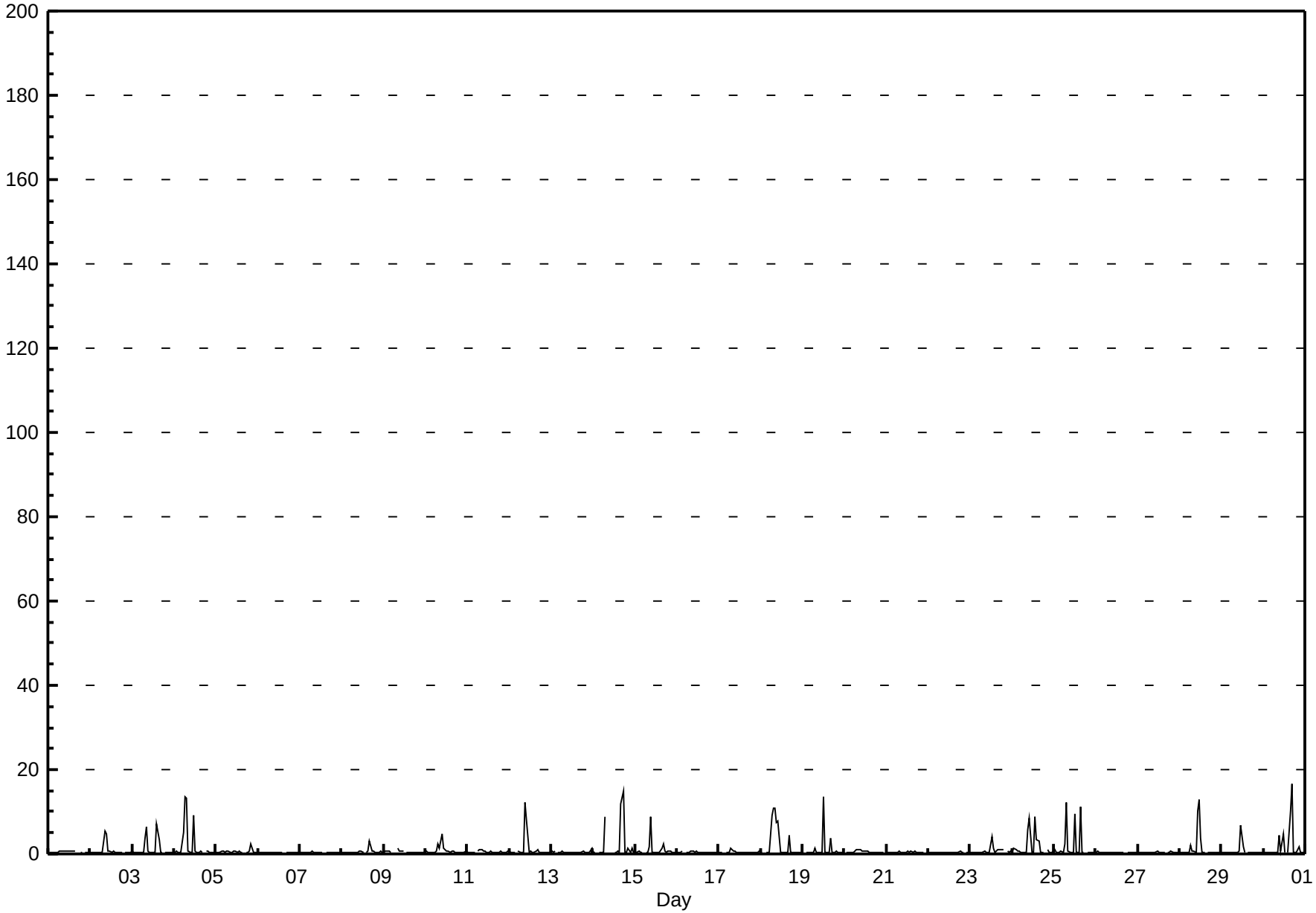
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	P	P	0	0	A	0	0	0	0.5	0.7
2-Jun	0	0	0	0	0	0	0	0	5	5	1	1	0	1	0	0	0	0	0	A	0	0	0	0	0.8	5.3
3-Jun	1	0	0	0	0	0	0	4	7	1	0	0	0	0	7	3	0	0	A	0	0	0	0	0	1.2	7.2
4-Jun	0	1	0	0	0	5	14	13	1	0	0	9	1	0	0	1	0	A	1	1	0	0	0	0	2.1	13.7
5-Jun	0	0	0	1	1	0	1	1	0	0	1	1	0	1	0	0	A	0	0	1	2	0	0	0	0.5	2.3
6-Jun	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	0.5
7-Jun	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.5
8-Jun	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	1	3	1	1	0	1	0	1	0	0.6	3.2
9-Jun	0	1	1	1	0	D	D	D	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.5	1.4
10-Jun	1	0	0	0	0	0	1	2	1	5	1	1	1	1	0	1	1	0	0	0	0	0	0	1	0.8	4.7
11-Jun	0	0	0	0	0	A	1	1	1	1	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0.4	1.2
12-Jun	1	0	0	0	A	1	0	0	0	12	8	0	1	0	0	1	1	0	0	0	0	0	0	0	1.2	12.3
13-Jun	1	0	1	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.4	1.4
14-Jun	0	0	A	0	0	0	0	9	C	C	C	C	0	1	1	0	12	15	0	0	1	0	2	0	2.3	15.0
15-Jun	0	0	1	0	0	A	0	0	2	9	0	0	0	0	0	1	2	1	1	1	1	0	0	0	1.0	8.8
16-Jun	0	0	0	1	A	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
17-Jun	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	1.3
18-Jun	0	0	A	0	0	0	9	11	11	7	8	0	0	0	0	0	4	0	0	0	0	0	0	0	2.4	11.0
19-Jun	0	A	0	0	0	0	0	1	0	0	0	0	13	0	0	0	4	0	0	1	0	0	0	0	1.2	13.5
20-Jun	A	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0.5	1.0
21-Jun	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	1	0	0	0	0	0	A	0	0.4	0.6
22-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0.3	0.6
23-Jun	0	0	0	0	0	0	0	0	1	0	0	0	4	1	0	1	1	1	1	1	A	1	0	1	0.7	4.2
24-Jun	0	1	1	1	1	0	0	0	0	6	8	0	0	9	3	3	0	0	0	A	1	0	0	0	1.7	8.8
25-Jun	1	0	0	0	1	0	2	12	1	0	1	0	10	0	0	11	0	0	A	0	0	0	0	0	1.9	12.3
26-Jun	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.6
27-Jun	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	1	0	0	0	0	0.4	0.5
28-Jun	0	0	0	0	0	0	2	1	1	0	10	13	4	0	0	A	0	0	0	0	0	0	0	0	1.6	12.8
29-Jun	0	0	0	0	0	0	0	0	0	0	1	7	2	0	A	0	0	0	0	0	0	0	0	0	0.7	6.9
30-Jun	0	0	0	0	0	0	0	0	0	4	1	5	0	A	0	10	17	0	0	0	2	0	0	0	1.9	16.6
	0.4	0.4	0.4	0.4	0.4	0.5	1.3	2.2	1.3	2.0	1.6	1.5	1.5	0.7	0.7	1.4	1.9	0.9	0.4	0.4	0.5	0.3	0.4	0.4	Diurnal Average	
	1.0	1.5	1.2	0.8	0.6	5.0	13.7	13.1	10.8	12.3	10.0	12.8	13.5	8.8	7.2	11.3	16.6	15.0	1.0	0.9	2.3	0.7	1.5	1.4	Diurnal Maximum	

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

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

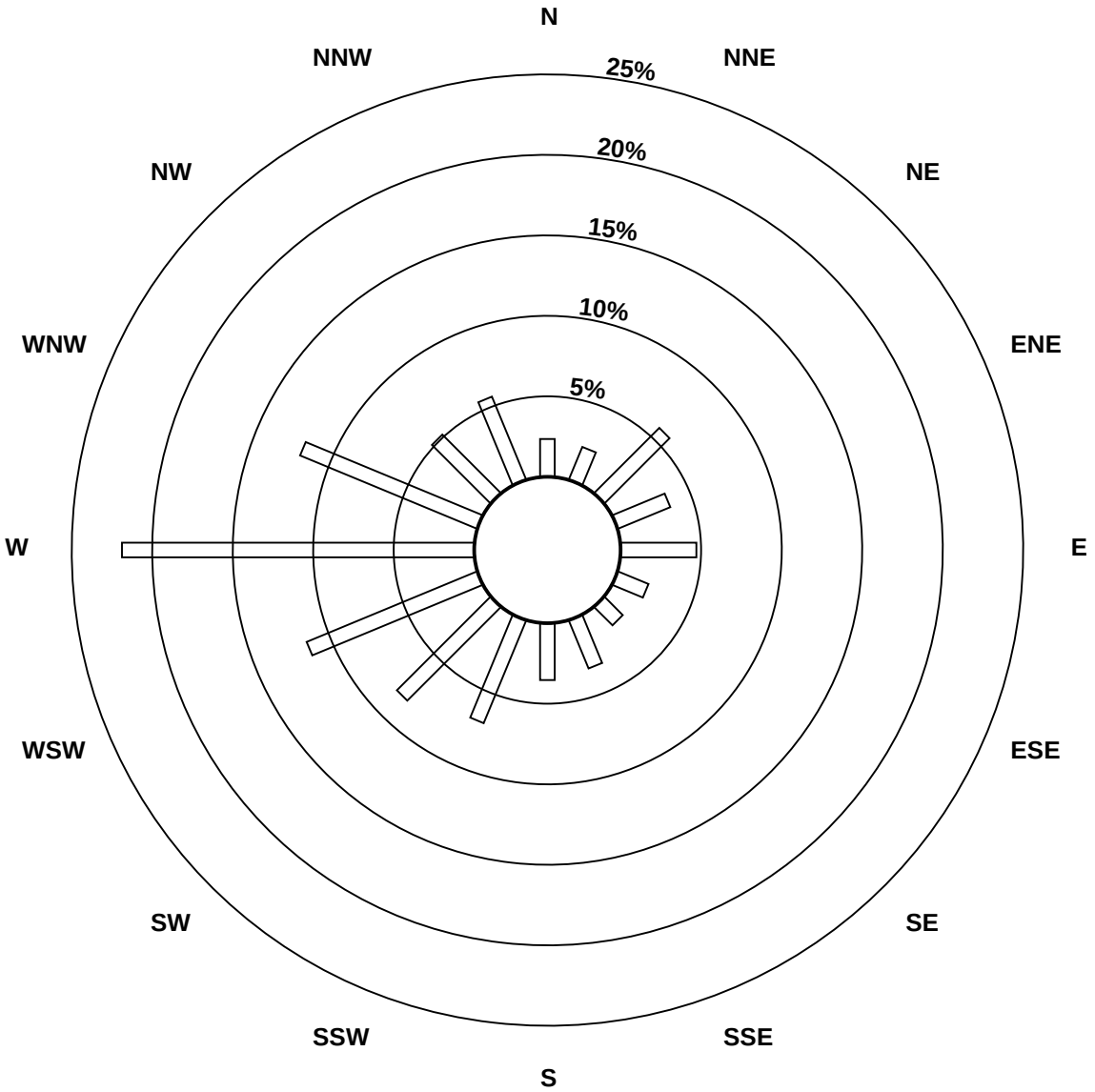
Evergreen Park - June 2010



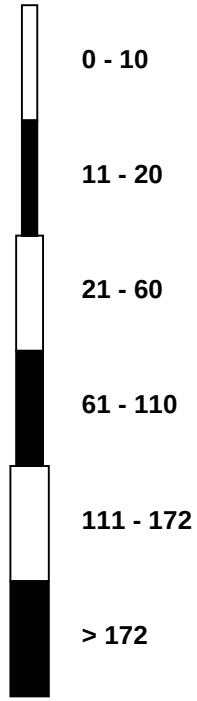
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.4 ppb on Jun 14 00:00 Maximum Daily Average: 0.6 ppb on Jun 3

Minimum Value: 0 ppb on Jun 17 00:00 Minimum Daily Average: 0.4 ppb on Jun 9
Maximum Diurnal Average: 0.6 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 19
Monthly Average: 0.47 ppb Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.5$ $P_{90} = 0.6$ $P_{99} = 1.0$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	33
Percent Operational Time:	99.3

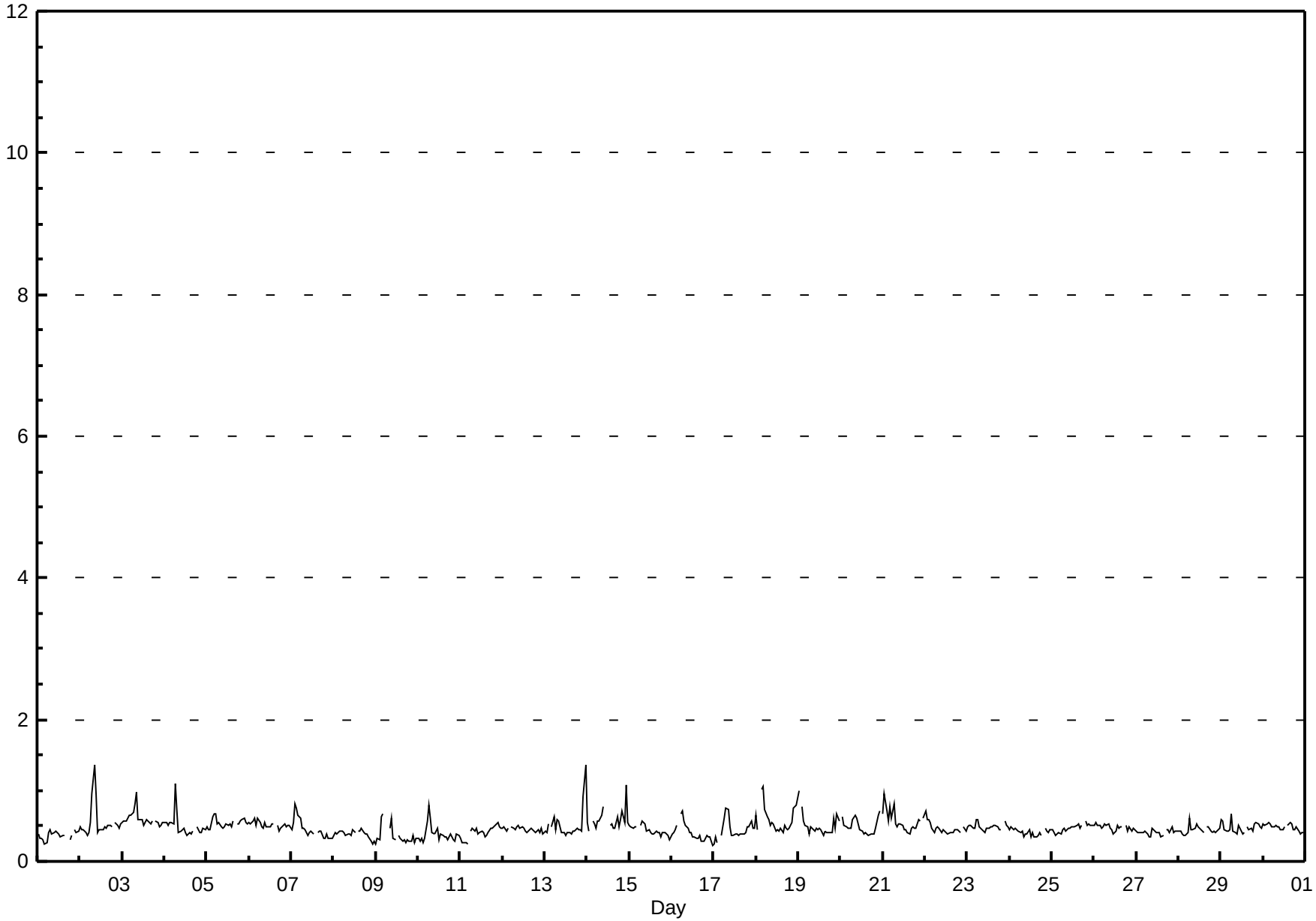
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	P	0	0	A	0	0	0	0.4	0.4
2-Jun	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	0	A	1	1	0	1	0.6	1.4
3-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1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

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

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2010



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Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2010

Maximum Value: 3.4 ppb on Jun 14 00:00

Maximum Daily Average: 1.1 ppb on Jun 18

Minimum Value: 1 ppb on Jun 9 01:00

Minimum Daily Average: 0.7 ppb on Jun 1

Maximum Diurnal Average: 1.0 ppb at hour 7

Minimum Diurnal Average: 0.8 ppb at hour 15

Monthly Average: 0.85 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 0.7$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 0.9$ $P_{90} = 1.0$ $P_{99} = 2.2$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	33
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-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	P	P	1	1	A	1	1	1	0.7	0.9
2-Jun	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	2.2
3-Jun	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	2.5
4-Jun	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	2.2
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1.0	2.4
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.1
7-Jun	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	1.3
8-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	1	1	1	1	1	0.8	1.8
9-Jun	1	1	1	1	1	D	D	D	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
10-Jun	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	1.3
11-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
12-Jun	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
13-Jun	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1.0	3.4
14-Jun	1	1	A	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	2	1	1.1	2.2
15-Jun	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	1.0
16-Jun	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	1.1
17-Jun	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	1.2
18-Jun	2	1	A	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8
19-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
20-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.2
21-Jun	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.7
22-Jun	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	1.1
23-Jun	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
24-Jun	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	1.1
25-Jun	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
26-Jun	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	1.0
27-Jun	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
28-Jun	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	1.2
29-Jun	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
30-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	0.9	1.8
	0.9	0.8	0.8	0.9	0.9	0.9	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.9	0.9	Diurnal Average	
	1.5	1.7	1.3	1.8	1.5	1.3	2.2	1.9	2.5	1.9	1.6	1.2	1.0	1.0	1.0	1.0	1.8	1.1	0.9	1.2	2.4	1.4	2.7	3.4	Diurnal Maximum	

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

FOCUS AIR QUALITY MONITORING

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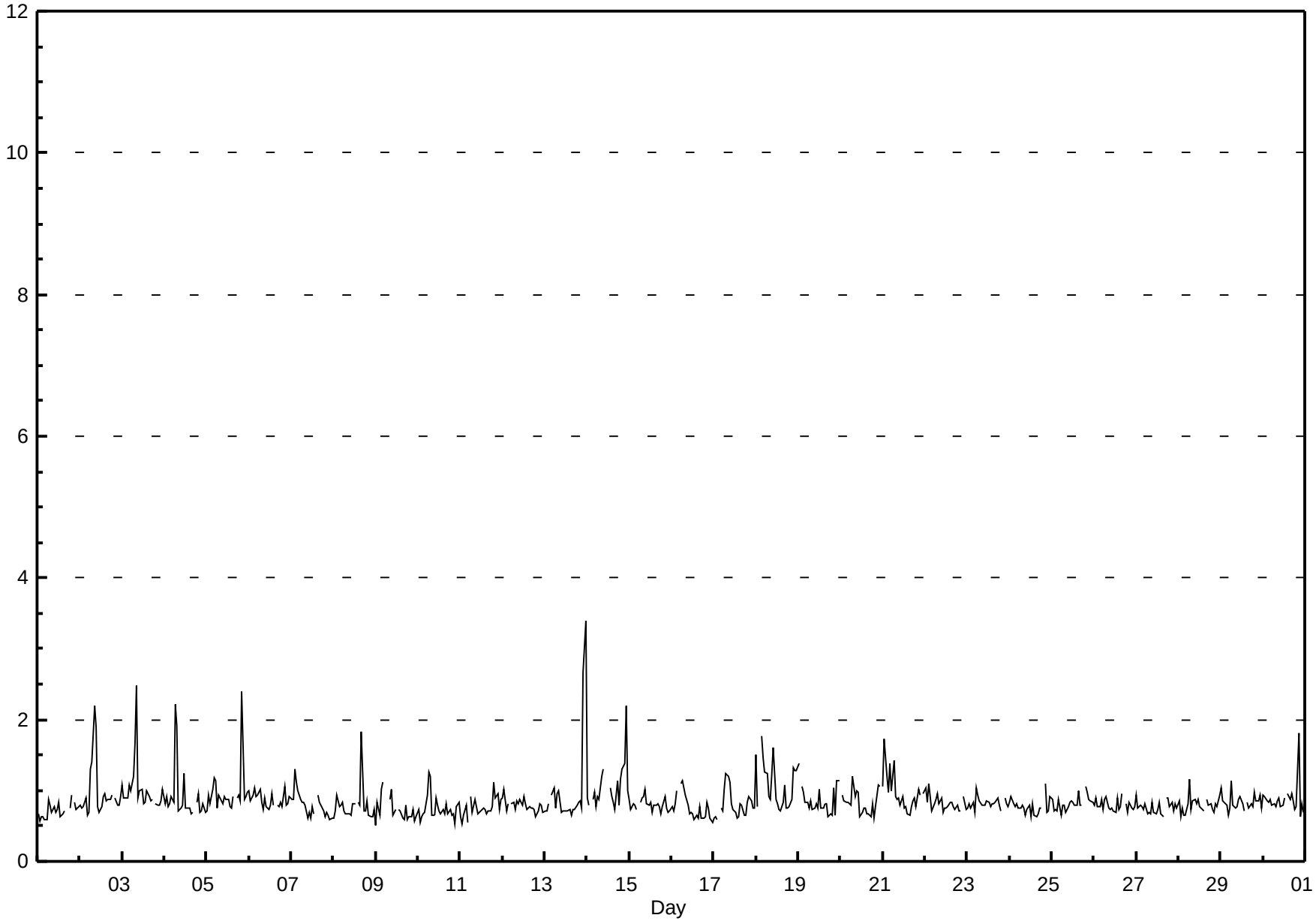
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

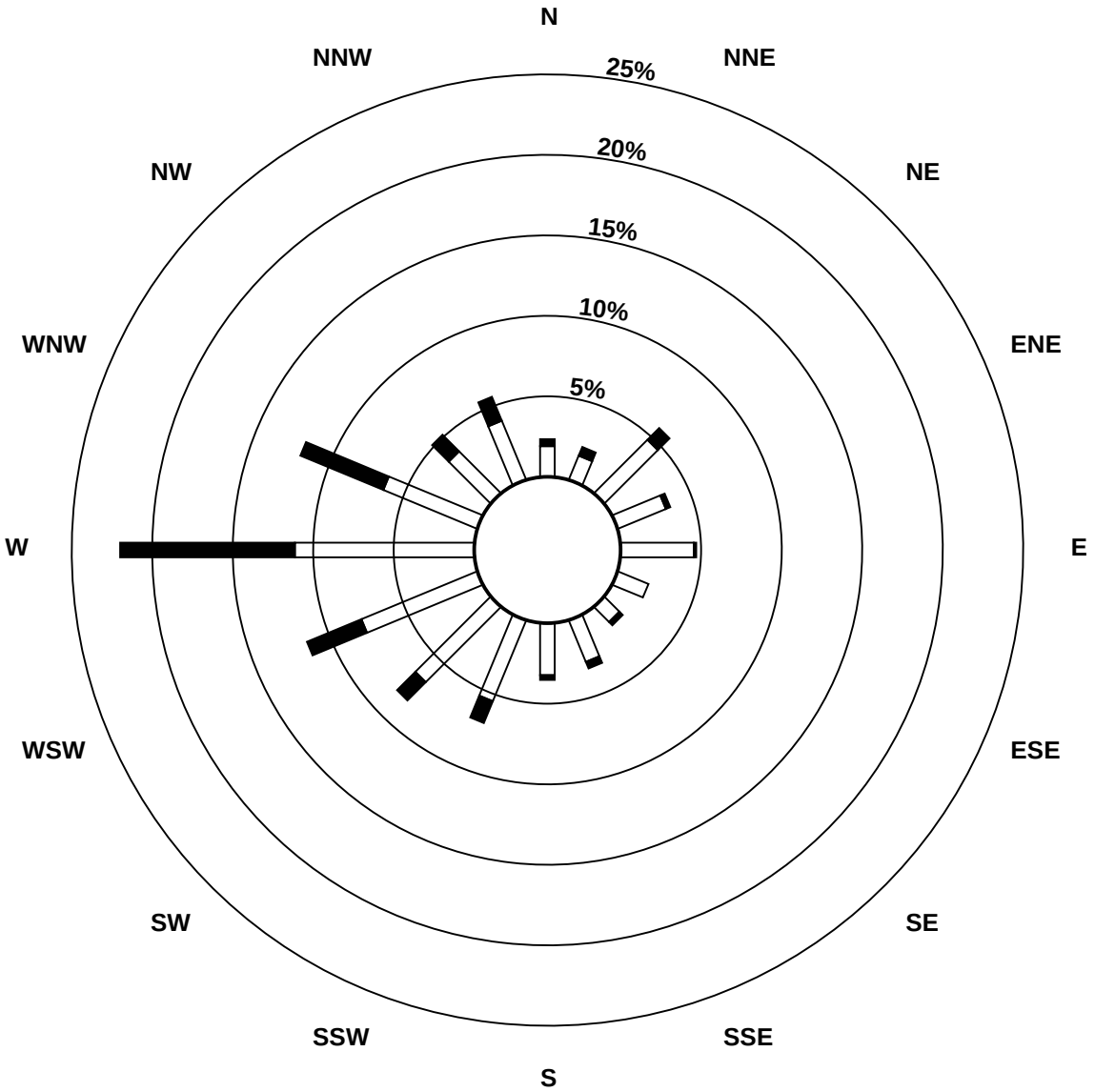
Evergreen Park - June 2010



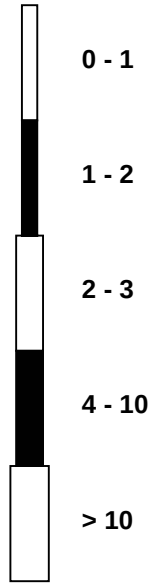
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2010



Pollutant Classes (ppb)



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Hourly Averages

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

Evergreen Park - June 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 44.7 $\mu g/m^3$ on Jun 14 09:00
Maximum Daily Average: 11.7 $\mu g/m^3$ on Jun 18

Minimum Value: 0 $\mu g/m^3$ on Jun 2 11:00
Maximum Diurnal Average: 8.6 $\mu g/m^3$ at hour 7
Monthly Average: 5.33 $\mu g/m^3$
Minimum Daily Average: 1.5 $\mu g/m^3$ on Jun 13
Minimum Diurnal Average: 3.3 $\mu g/m^3$ at hour 13
Percentiles: $P_1 = 0.0$ $P_{10} = 0.5$ $Q_1 = 1.9$ Median = 3.9 $Q_3 = 7.8$ $P_{90} = 11.3$ $P_{99} = 20.5$

Hours in Service:	720
Hours of Data:	709
Hours of Missing Data:	11
Hours of Calibration:	2
Percent Operational Time:	98.8

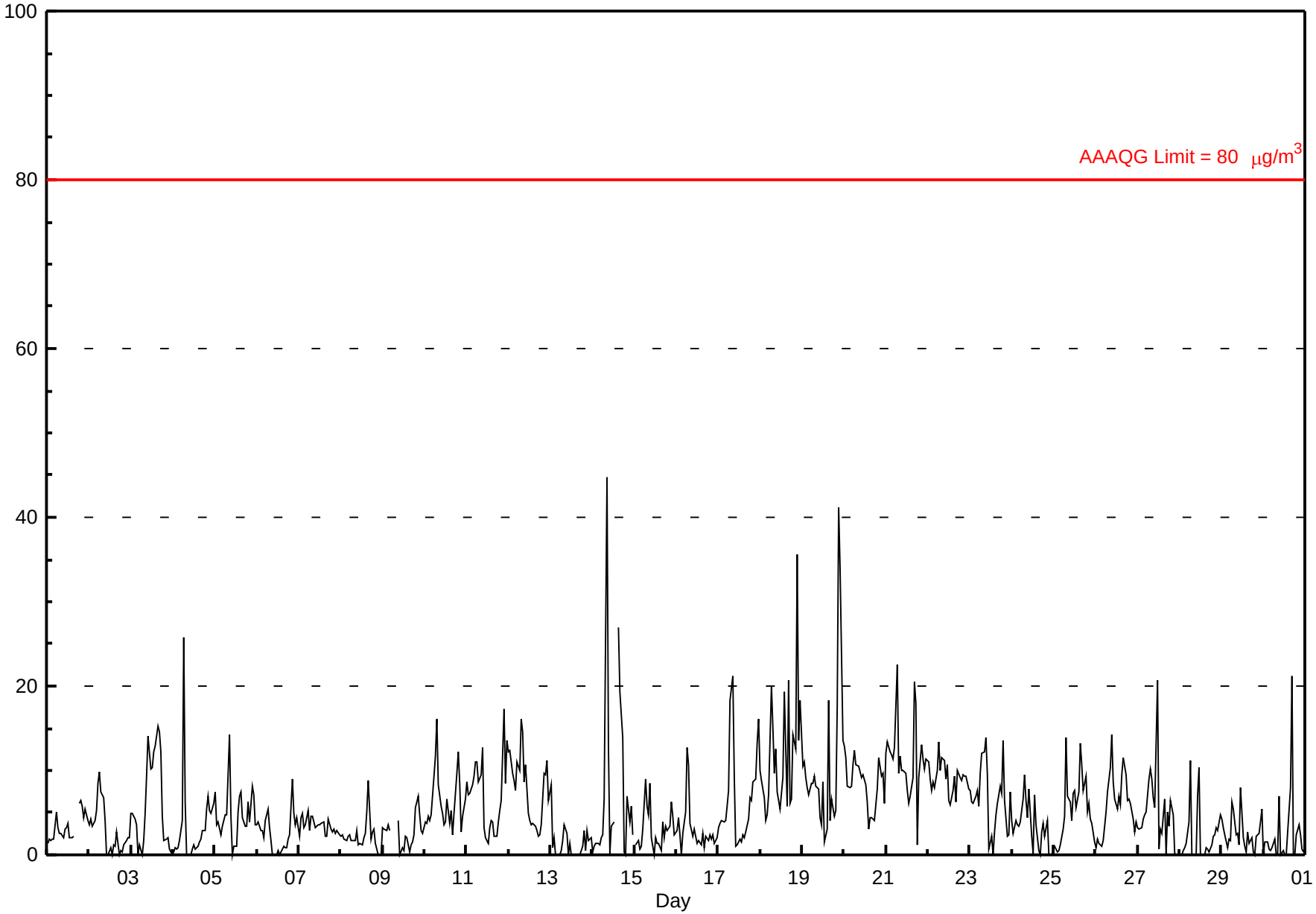
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	1	2	2	2	2	5	3	3	3	2	3	3	4	2	2	2	P	P	6	6	6	4	5	4	3.3	6.5
2-Jun	4	4	3	4	5	8	10	7	7	4	0	0	1	0	1	1	3	0	1	0	1	2	2	2	2.9	9.8
3-Jun	5	5	4	4	0	1	0	2	5	9	14	10	10	12	13	15	15	12	5	2	2	2	1	0	6.1	15.3
4-Jun	0	1	1	1	2	4	26	6	0	0	0	1	1	1	1	2	2	3	3	5	7	5	5	6	3.4	25.7
5-Jun	7	4	4	2	3	4	5	5	14	5	0	1	1	5	7	8	4	3	3	6	4	8	7	4	4.8	14.3
6-Jun	4	4	3	3	2	4	6	3	2	0	0	0	0	0	0	1	1	1	2	2	9	5	4	4	2.5	9.0
7-Jun	2	4	5	3	3	5	3	5	5	3	3	4	4	4	4	2	2	4	3	3	3	3	3	2	3.4	5.2
8-Jun	2	2	2	2	2	2	2	2	2	3	1	1	1	2	3	5	9	2	3	3	1	0	0	0	2.2	8.9
9-Jun	3	3	3	4	3	D	D	D	D	4	0	1	0	2	2	0	1	2	2	6	7	5	3	2	2.7	7.0
10-Jun	4	4	5	4	5	9	12	16	8	6	5	4	4	7	4	5	2	5	10	12	9	3	5	7	6.3	16.0
11-Jun	9	7	7	8	9	11	11	9	10	13	3	2	1	3	4	4	2	2	4	5	6	17	9	14	7.1	17.4
12-Jun	12	12	10	9	8	11	10	16	15	9	11	5	4	4	4	3	3	2	2	4	10	9	11	6	7.9	16.2
13-Jun	8	1	2	0	0	0	1	2	4	3	0	1	0	0	BD	BD	0	0	1	3	1	3	2	2	1.5	8.3
14-Jun	0	1	1	1	1	2	2	7	45	13	0	3	4	C	C	27	19	14	0	0	7	4	6	2	7.3	44.7
15-Jun	BD	1	2	1	1	3	9	6	5	9	2	0	2	1	1	1	4	2	3	3	3	6	5	2	3.1	8.9
16-Jun	3	4	2	0	2	5	13	11	4	2	3	2	1	2	1	2	1	2	2	2	2	2	1	2	3.0	12.7
17-Jun	3	4	4	4	4	6	8	18	21	9	1	1	2	2	2	2	3	4	7	6	9	9	13	16	6.6	21.2
18-Jun	10	9	7	4	5	7	20	15	10	13	7	5	7	9	19	6	21	6	7	14	13	36	13	18	11.7	35.7
19-Jun	11	11	9	8	7	9	9	9	8	8	4	4	9	2	3	18	4	7	5	5	18	41	34	14	10.6	41.2
20-Jun	13	12	8	8	8	11	12	11	11	10	9	9	8	6	3	4	4	4	6	8	11	9	10	6	8.4	12.8
21-Jun	12	13	12	12	11	13	22	10	12	10	10	10	8	6	7	9	21	18	1	9	13	11	10	11	11.3	22.5
22-Jun	11	9	8	9	8	10	13	10	12	11	9	11	6	6	8	9	6	10	9	9	9	9	9	8	9.1	13.4
23-Jun	8	6	6	7	8	6	10	12	12	14	10	1	2	0	3	5	6	8	7	14	6	2	2	7	6.8	14.0
24-Jun	4	3	4	4	3	4	7	10	6	4	8	2	0	7	4	0	0	3	4	2	4	0	0	0	3.5	9.6
25-Jun	1	1	0	0	1	3	5	14	7	6	4	7	8	6	7	13	11	8	9	5	6	4	4	2	5.5	14.0
26-Jun	1	2	1	1	2	3	5	7	10	14	9	7	5	7	6	9	12	10	6	7	6	4	3	4	5.9	14.3
27-Jun	3	3	3	4	5	5	9	10	9	7	6	21	1	3	2	7	0	5	3	7	5	0	0	0	4.9	20.6
28-Jun	0	0	1	1	1	4	11	0	0	0	7	10	0	0	0	1	1	0	1	2	2	3	3	5	2.2	11.2
29-Jun	4	3	2	1	2	2	6	5	2	2	1	8	2	1	0	3	1	2	0	0	2	2	4	5	2.7	8.0
30-Jun	0	2	2	1	0	1	2	0	0	7	0	0	0	0	3	8	21	0	0	2	3	2	1	0	2.3	21.2
	5.0	4.6	4.1	3.7	3.8	5.5	8.6	7.9	8.5	6.6	4.3	4.5	3.3	3.4	4.1	6.0	6.1	4.8	3.9	5.1	6.2	7.1	5.8	5.2	Diurnal Average	
	12.8	13.4	12.3	11.9	11.4	12.7	25.7	18.3	44.7	14.3	14.0	20.6	10.3	12.1	19.3	26.9	21.2	18.0	9.6	14.2	17.7	41.2	33.9	18.3	Diurnal Maximum	

C - Calibration P - Power Failure D - DAS Failure 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 $\mu g/m^3$

Hourly Averages

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

Evergreen Park - June 2010



PASZA
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Hourly Maximums

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

Evergreen Park - June 2010

Maximum Value: 234.5 $\mu g/m^3$ on Jun 14 09:00

Maximum Daily Average: 26.4 $\mu g/m^3$ on Jun 14

Minimum Value: 0 $\mu g/m^3$ on Jun 28 02:00

Minimum Daily Average: 4.9 $\mu g/m^3$ on Jun 8

Maximum Diurnal Average: 20.6 $\mu g/m^3$ at hour 9

Minimum Diurnal Average: 6.1 $\mu g/m^3$ at hour 4

Monthly Average: 10.99 $\mu g/m^3$

Percentiles: $P_1 = 1.2$ $P_{10} = 3.4$ $Q_1 = 4.9$ Median = 7.8 $Q_3 = 13.3$ $P_{90} = 19.4$ $P_{99} = 48.3$

Hours in Service:	720
Hours of Data:	712
Hours of Missing Data:	8
Hours of Calibration:	2
Percent Operational Time:	99.2

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	4	3	3	3	5	10	9	4	5	4	5	7	7	6	5	4	P	P	12	16	10	7	10	8	6.6	15.8
2-Jun	9	9	6	6	8	17	19	10	11	11	5	2	4	4	8	5	9	2	5	4	6	5	5	5	7.2	18.7
3-Jun	9	7	10	7	2	9	1	5	15	21	19	14	15	17	27	27	21	15	10	3	4	4	2	2	11.2	27.4
4-Jun	2	3	2	2	5	7	39	32	2	3	3	3	4	3	3	4	6	5	6	15	15	7	7	8	7.8	38.7
5-Jun	10	6	7	5	6	7	7	7	40	8	4	4	3	11	13	13	7	7	8	10	7	13	9	6	9.1	39.9
6-Jun	6	7	5	5	4	8	9	5	4	2	2	2	4	3	3	3	4	4	6	7	15	8	5	7	5.3	15.0
7-Jun	4	7	7	5	6	8	5	7	7	5	5	6	6	7	7	5	4	6	5	5	7	4	5	4	5.7	8.1
8-Jun	4	3	4	3	4	4	4	3	5	6	4	5	4	5	5	11	19	5	4	6	5	1	1	2	4.9	18.8
9-Jun	5	5	5	7	5	D	D	D	D	8	3	8	5	5	5	5	3	4	5	8	9	6	5	4	5.5	8.9
10-Jun	7	6	6	5	6	17	17	26	14	11	9	10	9	13	22	28	8	10	19	30	18	6	11	9	13.2	29.6
11-Jun	10	9	10	11	11	18	19	13	13	25	7	6	6	9	7	9	6	7	9	8	9	31	15	19	11.9	31.0
12-Jun	18	15	12	10	10	15	15	30	24	19	31	7	8	8	9	7	7	7	9	12	28	26	26	13	15.3	30.6
13-Jun	17	5	7	2	2	0	6	3	7	6	2	5	4	6	6	4	3	1	4	8	4	4	4	5	4.9	17.4
14-Jun	2	2	3	4	3	5	5	18	235	28	11	7	8	C	C	54	42	28	25	18	32	31	13	10	26.4	234.5
15-Jun	1	7	6	4	6	8	18	10	8	13	7	9	6	6	3	2	7	6	6	7	8	12	7	4	7.1	18.0
16-Jun	7	6	5	6	5	8	20	17	5	5	6	5	5	4	4	6	3	3	3	4	4	5	4	4	5.9	19.6
17-Jun	5	5	5	5	7	10	9	27	27	15	3	5	4	5	5	6	7	6	10	9	15	17	18	25	10.4	27.3
18-Jun	14	15	10	6	8	9	46	20	23	26	25	8	10	32	52	8	62	15	8	17	42	87	34	27	25.2	86.6
19-Jun	14	16	11	11	9	12	12	15	14	10	9	7	35	4	7	89	7	13	9	8	28	110	94	17	23.4	109.7
20-Jun	18	16	10	9	10	14	15	17	17	13	12	12	11	11	7	10	8	6	10	13	17	12	11	10	12.0	17.7
21-Jun	15	17	16	15	16	18	34	14	18	13	13	13	11	10	13	12	33	32	20	14	19	15	12	14	16.9	34.0
22-Jun	15	12	9	10	10	11	19	21	15	15	14	16	14	12	15	15	12	15	13	15	15	18	19	12	14.3	20.7
23-Jun	17	10	11	12	12	14	13	15	17	19	25	5	8	5	11	11	12	12	15	21	12	7	6	14	12.7	24.7
24-Jun	14	6	10	6	5	7	11	13	12	9	20	8	6	21	13	5	4	12	8	10	9	8	0	2	9.1	20.8
25-Jun	4	3	3	2	4	6	10	33	11	11	9	13	22	10	14	26	16	28	28	8	9	7	8	3	12.1	32.7
26-Jun	3	4	2	3	3	6	7	10	21	20	13	9	10	9	11	23	19	15	10	11	9	12	5	6	10.0	23.5
27-Jun	6	7	8	9	9	12	18	18	14	11	13	52	4	7	11	15	6	24	18	14	11	7	2	1	12.4	52.1
28-Jun	3	0	3	3	3	16	25	2	4	6	20	34	5	9	4	4	7	8	7	7	8	8	6	11	8.4	34.1
29-Jun	9	5	5	3	7	5	10	10	6	7	5	19	8	8	4	9	8	10	6	4	5	7	8	12	7.5	19.5
30-Jun	3	6	5	3	3	2	6	4	4	21	3	5	4	5	6	21	52	2	4	5	12	6	2	2	7.7	52.2
	8.4	7.4	6.9	6.1	6.5	9.8	14.7	14.0	20.6	12.3	10.2	10.2	8.3	8.9	10.4	14.7	13.8	10.6	10.0	10.6	13.1	16.3	11.8	8.8	Diurnal Average	
	17.7	16.6	15.7	15.4	15.8	17.9	45.9	32.7	234.5	27.6	30.6	52.1	35.2	32.2	52.2	89.1	62.0	31.5	28.0	29.6	42.4	109.7	93.9	26.9	Diurnal Maximum	

C - Calibration P - Power Failure D - DAS Failure

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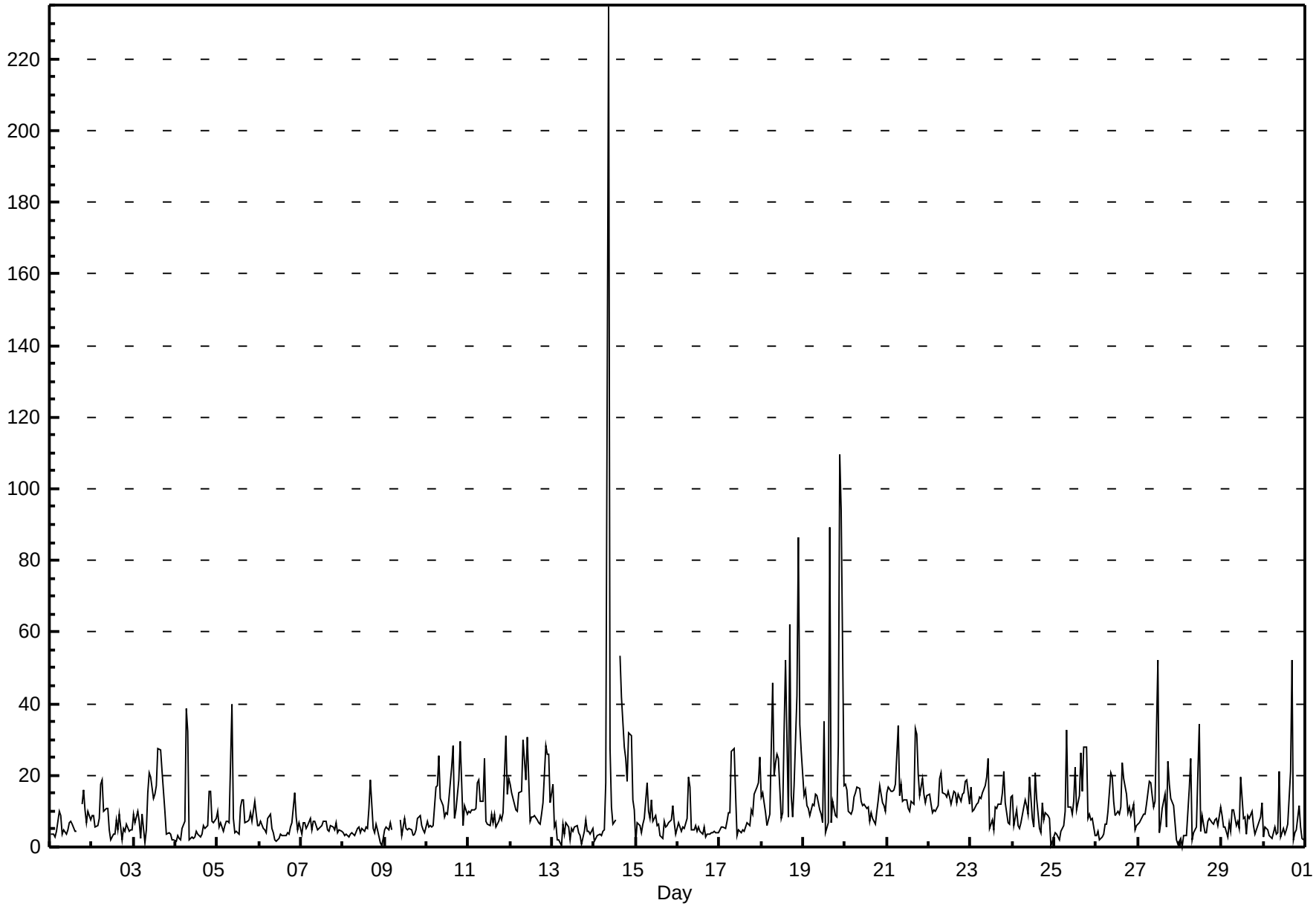
Hourly Maximums

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

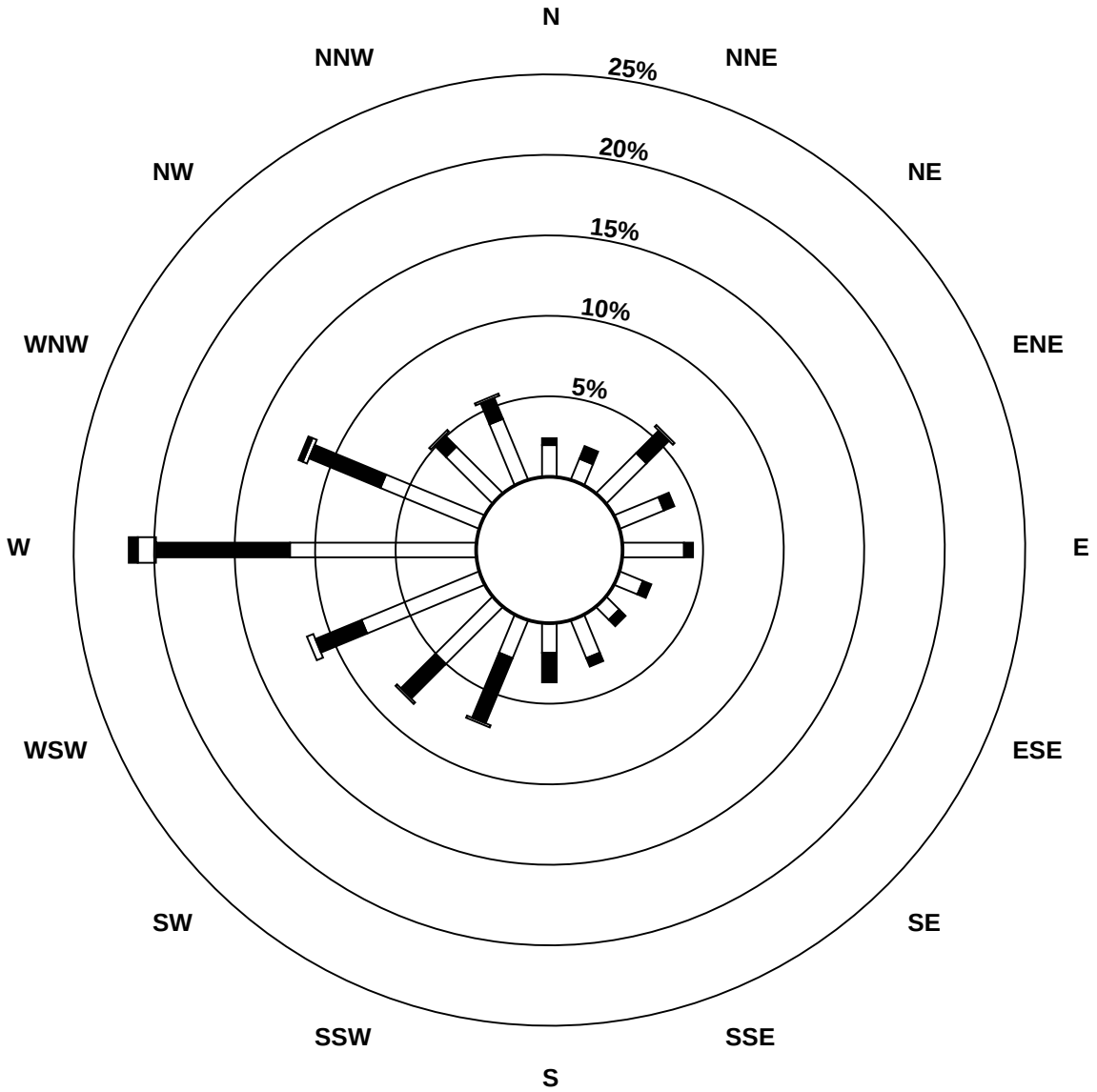
Evergreen Park - June 2010



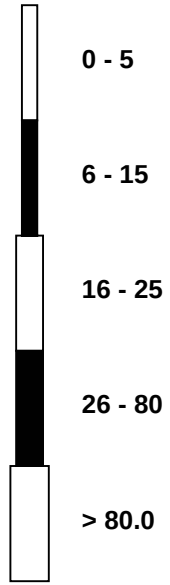
Pollutant Rose

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

Evergreen Park - June 2010



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



Hourly Averages

External Temperature (ET) - °C

Evergreen Park - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 27.2 °C on Jun 20 18:00 Maximum Daily Average: 20.4 °C on Jun 19

Minimum Value: 2 °C on Jun 10 05:00 Minimum Daily Average: 9.6 °C on Jun 8
Maximum Diurnal Average: 20.4 °C at hour 17 Minimum Diurnal Average: 8.6 °C at hour 5
Monthly Average: 15.35 °C Percentiles: P_1 = 3.7 P_{10} = 8.2 Q_1 = 11.7 Median = 15.4 Q_3 = 19.4 P_{90} = 22.2 P_{99} = 26.7

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	6	4	4	4	3	5	7	10	12	14	15	16	17	18	19	20	P	P	21	19	16	15	14	13	12.4	20.7
2-Jun	11	10	8	6	5	6	9	12	14	16	18	20	20	21	20	19	18	20	20	19	18	17	16	14	14.9	20.7
3-Jun	13	13	13	12	12	11	12	12	12	13	14	15	15	16	16	16	15	15	15	15	14	13	12	11	13.5	15.8
4-Jun	10	9	8	8	7	6	8	10	12	14	15	16	17	17	18	18	19	19	18	19	17	15	12	10	13.4	18.9
5-Jun	8	9	9	8	8	9	11	12	14	16	18	19	19	20	19	20	19	19	20	19	18	16	14	12	14.8	19.7
6-Jun	10	10	9	8	6	7	9	11	14	16	17	18	19	19	20	21	21	21	21	21	18	15	13	12	14.9	21.1
7-Jun	11	10	10	10	7	8	9	10	10	11	11	12	13	15	15	16	16	16	15	14	13	12	11	10	11.9	16.0
8-Jun	8	7	7	7	7	7	7	7	9	11	11	12	12	13	13	13	12	12	12	11	11	10	8	6	9.6	13.1
9-Jun	6	6	6	6	5	D	D	D	11	13	14	13	14	15	16	17	17	18	17	16	14	13	10	7	12.1	17.5
10-Jun	6	5	4	3	2	4	7	10	12	14	15	16	17	16	17	17	19	19	17	18	17	13	10	8	11.9	19.1
11-Jun	6	6	4	3	2	5	8	10	13	15	18	19	20	21	22	23	23	24	24	24	22	19	16	13	15.1	24.1
12-Jun	12	11	9	7	8	11	13	15	19	21	21	22	23	24	26	26	27	27	26	26	24	21	19	19	19.1	27.1
13-Jun	19	17	16	15	15	14	14	14	12	12	14	15	16	18	19	20	20	19	18	17	16	16	14	13	15.9	20.0
14-Jun	12	10	9	8	9	9	9	11	12	13	14	14	15	15	16	16	16	16	15	15	14	13	11	10	12.6	16.0
15-Jun	9	8	6	6	5	5	8	9	11	13	14	16	16	17	17	17	18	18	18	17	16	14	12	10	12.5	18.2
16-Jun	8	6	5	4	3	5	8	11	13	15	17	17	18	18	20	20	20	20	20	20	19	16	12	10	13.5	20.2
17-Jun	8	7	6	5	4	6	11	13	14	18	19	20	21	21	22	22	23	23	23	23	22	18	14	13	15.7	23.0
18-Jun	15	13	12	12	11	12	12	14	16	18	20	21	22	23	24	24	24	25	25	24	22	19	17	16	18.4	25.0
19-Jun	15	15	15	14	12	12	12	16	18	20	22	24	25	25	26	26	27	27	27	26	25	22	20	18	20.4	27.1
20-Jun	15	13	14	13	11	11	13	16	17	19	22	23	24	25	26	27	27	27	27	26	24	21	17	15	19.8	27.2
21-Jun	13	12	12	13	13	13	14	18	19	20	21	22	23	24	24	24	19	18	15	14	14	14	14	13	17.0	24.3
22-Jun	14	14	14	13	12	12	13	14	15	16	18	20	21	22	23	22	23	23	23	22	21	19	18	17	17.8	23.2
23-Jun	16	15	15	14	14	15	15	16	16	18	21	22	23	24	24	24	25	25	25	23	21	20	19	18	19.5	24.8
24-Jun	18	17	15	14	14	14	15	16	17	19	20	21	22	22	21	21	22	22	21	21	20	19	18	17	18.6	22.4
25-Jun	16	16	15	14	13	14	15	16	17	18	20	21	21	22	22	21	21	21	20	19	18	17	16	15	17.8	21.7
26-Jun	14	14	13	13	13	13	13	15	17	18	19	20	20	21	22	23	23	23	22	22	21	20	18	17	18.0	22.9
27-Jun	16	16	14	12	11	12	13	13	15	18	20	20	21	21	21	19	20	20	17	17	15	13	12	11	16.0	21.4
28-Jun	11	10	9	8	8	8	10	11	14	16	17	18	19	19	20	21	21	19	21	21	20	17	15	14	15.3	21.0
29-Jun	14	12	11	10	9	10	11	14	15	17	19	19	20	20	20	19	19	18	18	18	17	16	15	12	15.6	20.0
30-Jun	10	10	9	9	9	8	9	9	10	11	12	13	14	15	16	16	16	16	16	16	14	12	10	10	12.1	16.4
	11.6	10.8	10.1	9.3	8.6	9.3	10.9	12.6	14.1	15.8	17.2	18.2	19.0	19.6	20.1	20.2	20.4	20.3	19.9	19.3	18.0	16.0	14.2	12.8	Diurnal Average	
	18.6	17.1	15.9	14.9	14.7	14.5	15.1	17.7	18.9	20.8	22.2	23.7	24.6	25.5	26.1	26.8	27.1	27.2	27.1	26.3	25.0	22.1	19.6	19.1	Diurnal Maximum	

P - Power Failure D - DAS Failure

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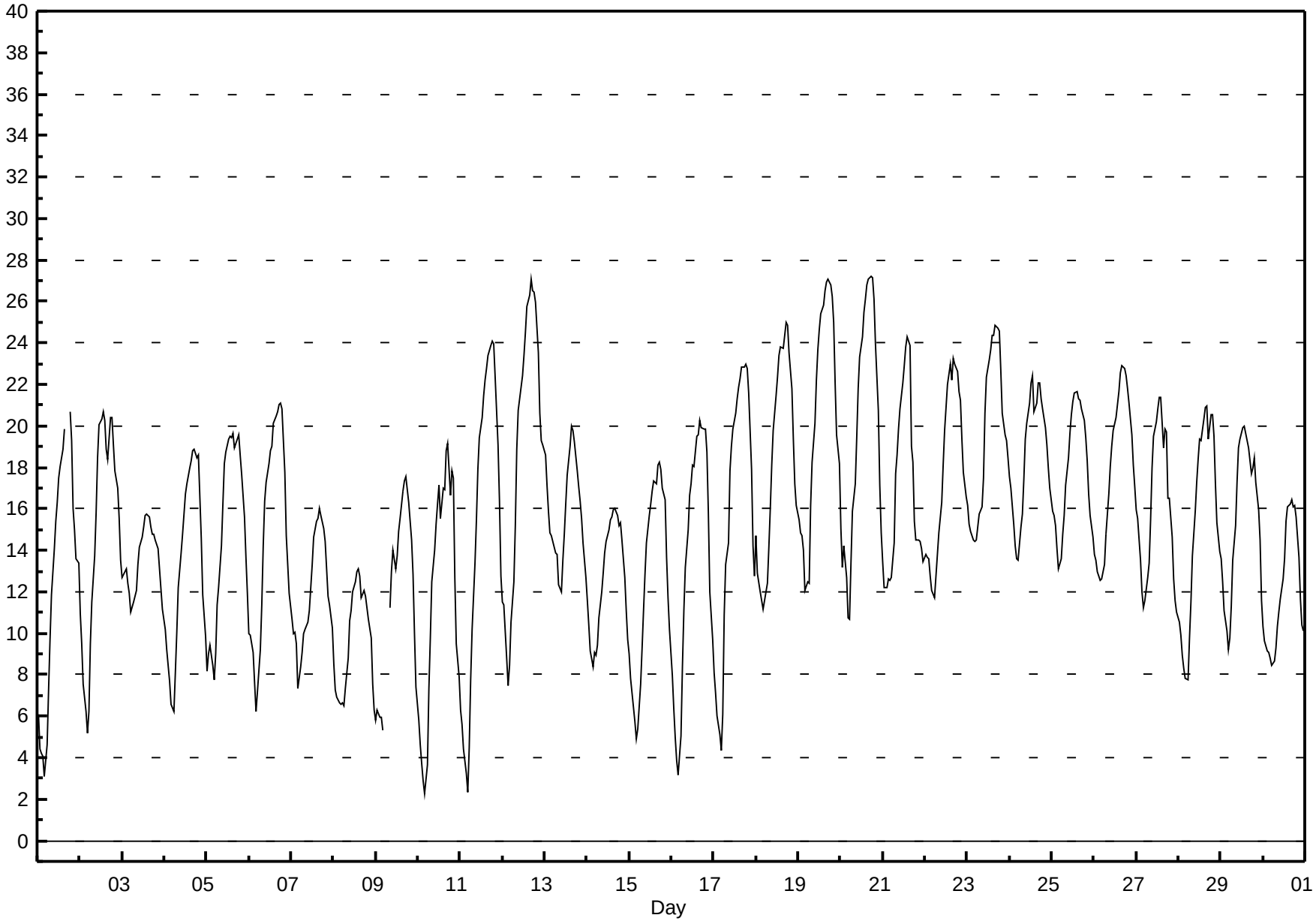
Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - June 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 97.7 % on Jun 22 07:00 Maximum Daily Average: 72.1 % on Jun 8

Minimum Value: 13 % on Jun 19 19:00 Minimum Daily Average: 33.5 % on Jun 14
Maximum Diurnal Average: 74.9 % at hour 5 Minimum Diurnal Average: 31.4 % at hour 16
Monthly Average: 51.15 % Percentiles: P_1 = 18.0 P_{10} = 25.1 Q_1 = 33.1 Median = 49.2 Q_3 = 66.7 P_{90} = 82.7 P_{99} = 96.2

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	73	81	82	80	86	79	69	60	54	47	44	41	38	35	33	32	P	P	31	37	55	61	67	67	56.8	85.5
2-Jun	77	84	90	93	94	91	80	73	64	55	43	36	35	33	34	41	43	35	35	41	47	53	60	69	58.6	93.6
3-Jun	74	75	76	78	69	68	57	52	47	37	35	32	29	27	28	30	31	32	32	33	33	36	39	42	45.5	78.3
4-Jun	45	48	50	53	59	61	55	50	43	36	33	30	28	26	25	25	24	25	25	28	45	54	66	71	41.8	71.5
5-Jun	79	65	55	57	61	58	50	48	44	37	27	22	21	22	22	24	28	26	26	29	31	36	43	46	39.9	79.0
6-Jun	50	51	55	61	66	64	59	53	44	34	28	25	24	23	20	20	19	19	19	19	36	49	55	61	39.7	66.4
7-Jun	66	70	72	74	83	85	83	79	77	75	72	67	62	57	52	49	46	48	49	50	56	60	61	67	65.0	84.6
8-Jun	73	78	77	77	78	80	86	86	77	66	64	56	50	47	46	52	71	66	70	79	82	84	91	93	72.1	93.3
9-Jun	94	95	95	96	96	D	D	D	85	72	59	57	55	48	45	35	33	32	33	36	53	63	74	83	63.8	96.2
10-Jun	87	89	91	93	92	90	84	79	68	58	49	42	35	45	39	43	29	27	39	42	50	76	77	77	62.6	92.7
11-Jun	85	84	90	92	93	89	76	66	56	51	38	27	23	21	21	21	19	18	19	20	24	31	38	51	48.0	92.9
12-Jun	52	53	63	71	66	61	60	51	39	33	32	30	28	27	27	27	26	28	30	32	40	51	54	50	43.0	70.7
13-Jun	53	57	61	64	63	57	51	55	71	83	72	68	61	53	40	23	24	23	25	28	28	30	32	32	48.1	82.6
14-Jun	34	38	43	47	44	46	46	41	35	32	28	26	24	23	23	23	22	24	25	25	30	37	40	47	33.5	47.1
15-Jun	51	56	62	64	67	66	56	51	47	43	35	29	27	25	24	23	23	23	25	29	32	46	53	60	42.4	66.7
16-Jun	71	76	81	85	87	83	75	65	58	50	43	41	37	36	31	32	31	33	33	34	37	48	63	71	54.1	87.1
17-Jun	76	78	84	85	86	81	65	60	59	47	36	31	27	25	23	21	21	21	21	23	29	44	56	59	48.2	85.7
18-Jun	49	55	59	58	58	57	55	50	44	40	35	28	25	25	23	22	21	18	19	29	33	40	47	52	39.4	58.6
19-Jun	55	57	59	61	68	67	70	52	41	35	28	22	18	17	16	15	14	13	13	14	18	26	32	35	35.3	70.1
20-Jun	46	51	45	51	58	62	60	59	52	45	41	38	34	30	24	21	21	20	21	24	34	45	61	68	42.1	67.9
21-Jun	71	78	76	74	71	74	71	57	55	50	48	45	41	38	37	38	68	85	76	83	87	88	91	96	66.6	96.0
22-Jun	97	96	94	96	97	98	98	93	81	77	68	62	52	44	39	44	40	42	45	48	50	58	65	70	68.9	97.7
23-Jun	71	74	74	75	72	69	64	60	60	56	46	33	31	29	28	30	29	30	31	41	47	49	47	52	49.9	74.6
24-Jun	57	61	68	73	77	77	67	62	57	48	45	44	40	39	46	46	44	44	47	49	52	53	50	54	54.2	76.8
25-Jun	58	59	60	65	68	65	60	58	52	49	39	38	34	33	32	30	29	30	32	35	39	44	48	53	46.2	68.1
26-Jun	54	56	58	60	60	58	58	54	47	41	38	36	34	33	32	27	22	24	26	26	29	31	32	34	40.5	60.1
27-Jun	37	38	44	52	58	58	56	54	53	45	38	36	33	32	31	44	43	44	64	67	80	88	92	94	53.5	94.1
28-Jun	95	95	96	96	97	97	88	79	67	57	46	40	36	38	34	35	35	39	38	41	47	58	70	74	62.3	96.9
29-Jun	68	69	75	81	84	83	77	68	61	52	42	40	40	39	39	40	41	45	41	38	41	45	52	76	55.7	84.5
30-Jun	78	83	89	90	89	91	88	84	76	71	68	59	56	37	31	30	29	29	26	29	35	45	50	53	59.1	91.2
	65.9	68.3	70.8	73.4	74.9	73.0	67.7	62.1	57.1	50.6	44.0	39.3	35.9	33.5	31.5	31.4	31.9	32.5	33.9	37.0	43.4	50.9	56.9	61.9	Diurnal Average	
	96.7	96.0	95.9	96.4	96.9	97.5	97.7	93.2	85.0	82.6	72.5	67.6	62.0	56.9	51.5	51.8	71.2	85.3	76.2	83.1	87.5	87.6	92.3	96.0	Diurnal Maximum	

P - Power Failure D - DAS Failure

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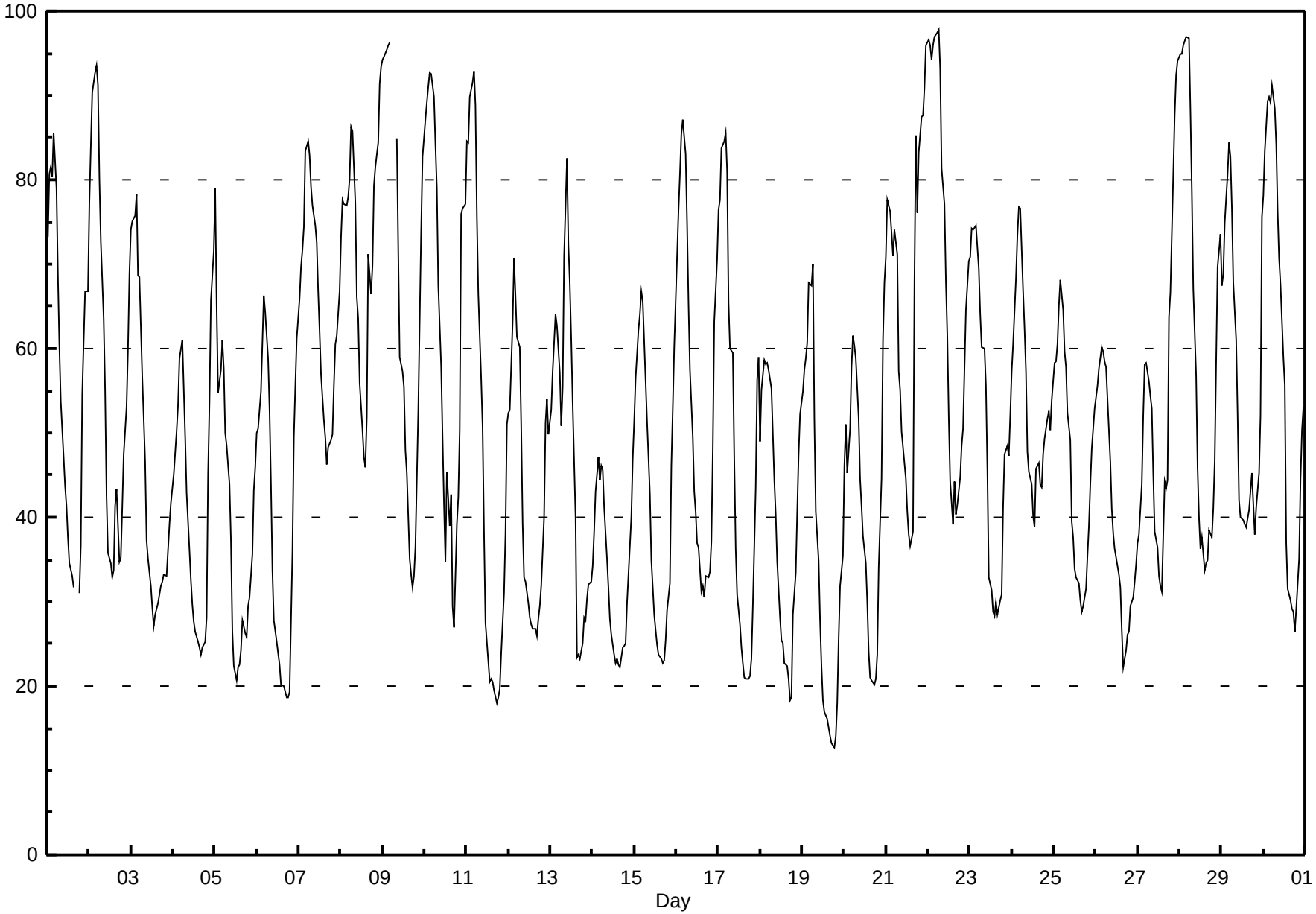
Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - June 2010



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Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	1	2	2	2	3	3	5	7	7	7	6	5	4	3	2	3	P	P	5	3	4	2	2	2	2.2	7.4
Dir	91	81	93	88	88	99	119	135	139	142	149	158	167	197	167	222	P	P	80	223	313	40	256	321	137.4	138.5
2 Spd	1	0	1	1	0	1	1	3	2	3	4	6	7	5	8	7	11	6	2	4	3	4	2	2	2.1	10.8
Dir	166	183	78	178	16	64	32	143	173	150	131	149	149	145	176	207	239	242	293	125	75	99	39	46	166.0	239.1
3 Spd	1	3	2	10	12	13	17	18	19	23	23	23	24	24	23	24	23	23	19	17	17	12	11	11	15.8	23.6
Dir	50	350	331	282	286	293	286	289	283	277	282	286	289	282	282	274	271	270	277	270	267	262	258	258	279.0	281.9
4 Spd	10	11	11	11	7	8	14	15	13	10	11	11	9	8	11	8	8	7	6	5	6	2	1	2	6.6	14.6
Dir	258	257	256	261	269	271	269	275	286	308	335	325	312	325	340	319	330	348	341	335	56	86	232	212	297.9	275.3
5 Spd	0	2	2	2	2	4	7	10	12	11	12	12	11	12	16	12	14	12	13	14	7	4	2	3	7.6	16.1
Dir	180	285	322	316	339	286	296	284	278	286	311	329	325	298	279	289	263	288	271	277	297	261	269	247	289.3	279.1
6 Spd	2	4	2	2	1	1	3	5	8	12	11	7	6	4	7	4	4	6	2	3	6	4	3	0	3.2	11.5
Dir	219	250	262	269	260	132	271	284	269	269	267	272	295	280	279	295	315	332	326	6	48	47	42	340	289.2	268.7
7 Spd	1	4	4	2	1	6	7	6	6	6	6	4	3	3	5	3	5	4	5	5	5	3	2	3	3.2	7.4
Dir	339	264	319	336	321	45	60	69	70	74	39	34	56	40	4	44	25	36	52	59	87	91	82	85	46.6	60.1
8 Spd	3	3	3	4	2	2	3	3	2	2	4	4	4	3	4	5	10	6	6	4	4	1	0	1	0.4	9.9
Dir	80	77	85	89	96	96	103	108	110	57	53	53	32	56	359	290	246	239	221	223	230	228	36	119	104.3	245.9
9 Spd	1	2	1	0	0	D	D	D	2	4	5	4	7	6	6	8	8	9	7	5	6	2	1	1	2.9	8.6
Dir	243	209	91	354	73	D	D	D	82	168	149	73	65	72	79	73	70	68	99	115	184	203	81	42	94.3	68.3
10 Spd	0	0	0	0	0	1	2	3	3	4	3	2	2	6	4	3	1	3	7	1	1	1	1	1	1.1	6.8
Dir	359	121	150	343	222	226	216	246	216	252	268	155	200	179	204	305	117	99	123	117	63	43	214	218	194.3	122.8
11 Spd	0	1	1	0	0	1	3	2	2	4	5	5	5	5	5	4	5	4	4	3	2	4	2	1	2.5	5.1
Dir	205	69	69	55	165	211	208	210	170	178	196	212	229	238	218	203	219	243	197	158	160	206	208	209	205.8	228.9
12 Spd	1	1	1	1	2	1	2	6	7	9	7	8	9	8	5	7	7	5	5	4	1	0	1	5	3.2	9.4
Dir	211	199	163	236	220	241	233	225	247	272	273	269	249	230	226	188	161	147	126	161	195	196	220	212	224.0	271.6
13 Spd	15	13	7	5	9	9	9	9	5	4	7	4	5	6	5	16	13	13	11	9	8	9	8	6	6.4	15.8
Dir	340	345	333	324	293	285	293	286	266	214	221	182	159	187	249	269	271	306	276	246	252	253	273	269	278.6	268.9
14 Spd	8	8	9	10	10	9	12	16	20	18	16	17	15	15	15	16	18	15	13	12	8	6	6	6	12.2	20.0
Dir	265	264	257	253	263	262	266	265	264	263	272	269	275	269	279	283	279	273	269	279	284	275	273	265	270.0	264.0
15 Spd	10	7	5	3	2	3	8	10	9	7	7	6	6	6	8	5	7	6	7	4	1	2	4	0	4.0	10.5
Dir	268	264	233	255	241	253	265	266	279	279	264	279	290	341	335	330	327	343	356	37	11	39	52	87	295.5	266.3
16 Spd	1	1	0	0	0	2	1	2	3	4	2	2	2	3	4	5	6	6	5	4	3	2	1	0	1.3	6.3
Dir	355	224	238	275	290	216	304	211	183	180	158	1	181	63	182	53	76	123	109	111	104	82	41	349	118.6	122.6
17 Spd	1	1	1	1	0	1	1	2	3	1	4	2	4	2	4	4	4	6	3	4	3	1	1	2	1.1	5.6
Dir	28	224	44	226	266	322	343	251	265	137	80	81	24	50	11	352	23	312	316	332	323	193	219	237	342.1	312.4
18 Spd	3	2	4	4	5	6	9	9	9	6	7	8	9	7	8	8	8	8	9	14	9	5	3	2	6.2	14.1
Dir	272	227	249	285	288	300	274	280	285	267	277	285	274	291	299	332	312	333	345	275	290	287	315	263	291.2	275.0
19 Spd	2	3	2	3	2	3	3	5	9	8	9	7	7	6	8	6	8	11	11	8	5	2	2	2	4.9	10.6
Dir	262	265	252	235	203	214	212	269	268	271	299	324	279	311	329	299	270	283	292	294	275	269	273	284	282.8	283.1
20 Spd	1	3	3	0	1	0	2	2	3	3	4	5	4	3	5	5	5	6	6	4	1	1	1	0	2.0	6.2
Dir	73	219	235	35	98	129	55	201	241	288	351	326	296	283	318	323	341	314	307	304	17	12	337	192	308.0	306.7
21 Spd	1	1	2	3	3	1	2	1	4	3	5	5	7	5	5	3	5	1	8	6	5	2	1	2	1.4	7.8
Dir	210	217	243	247	299	333	274	36	20	41	12	25	52	34	42	44	38	329	9	154	256	219	187	236	17.4	8.6
22 Spd	3	3	1	2	1	2	1	2	4	3	3	1	1	2	3	5	2	4	3	3	3	3	2	2	1.0	4.6
Dir	264	273	253	212	170	201	126	264	253	213	187	198	40	0	297	45	181	194	185	184	178	116	97	83	202.1	45.2

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Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	1	2	1	0	2	3	3	4	4	6	5	7	4	4	2	6	5	6	3	4	7	7	2	3	3.3	7.2
Dir	194	214	213	11	243	328	300	268	240	242	242	267	289	296	246	244	252	214	213	193	212	229	212	211	243.2	229.5
24 Spd	2	3	2	1	2	5	7	7	7	9	10	5	5	8	11	12	9	10	7	11	9	10	9	6	6.6	11.9
Dir	233	232	222	254	226	223	260	253	254	267	264	255	248	265	224	224	214	268	256	258	266	261	276	287	252.3	223.7
25 Spd	5	9	8	7	8	10	13	15	14	13	17	16	14	14	16	18	16	16	17	15	13	13	15	11	12.7	18.3
Dir	280	271	261	259	259	263	266	267	279	283	284	277	288	288	278	276	288	292	286	292	283	276	263	257	277.4	276.0
26 Spd	10	12	12	11	13	12	15	19	20	18	18	16	16	13	14	17	17	15	14	14	9	8	7	7	13.2	19.6
Dir	252	256	253	254	256	264	261	264	275	279	278	282	280	289	270	280	288	294	292	289	275	258	257	250	272.7	275.0
27 Spd	7	7	2	1	1	2	3	4	5	8	11	12	10	10	10	5	3	9	9	6	5	12	4	3	5.5	12.2
Dir	251	245	238	6	197	217	236	264	241	256	271	268	266	260	252	217	172	240	284	241	186	230	209	184	247.8	267.6
28 Spd	2	1	1	2	2	4	5	9	12	12	14	11	9	6	4	3	2	7	2	3	2	2	2	2	3.6	13.8
Dir	194	205	233	202	212	225	262	254	260	266	268	277	268	252	265	33	234	275	21	78	82	72	35	317	263.4	267.6
29 Spd	6	8	5	4	5	4	7	8	6	6	5	7	6	7	8	11	12	9	7	6	5	5	7	9	6.0	12.0
Dir	320	293	268	246	247	242	275	285	316	283	285	283	296	320	345	327	334	312	346	343	313	322	297	285	304.1	333.6
30 Spd	14	10	6	6	5	5	4	5	7	9	9	11	14	19	21	20	22	21	18	17	16	13	9	11	11.9	22.1
Dir	278	284	278	272	247	229	236	244	285	271	262	252	242	266	267	271	267	261	268	263	276	268	243	244	263.9	267.4
Spd	2.6	3.0	2.5	2.5	2.6	2.8	4.3	5.6	5.8	5.8	5.6	5.3	4.9	4.7	5.5	5.5	5.7	5.9	4.3	4.0	3.2	2.8	2.4	2.7	Diurnal Average	
Dir	275.6	268.8	262.7	265.3	263.7	266.6	269.6	265.7	268.4	266.5	276.8	282.3	279.9	282.0	280.8	283.3	279.2	284.1	289.6	271.0	272.3	259.5	265.5	255.2		
Spd	15.3	12.8	12.0	11.3	13.4	12.7	16.6	18.5	20.0	22.5	23.0	23.0	23.5	23.6	22.7	23.6	23.4	22.8	18.9	17.0	16.6	13.5	14.7	10.9	Diurnal Maximum	
Dir	339.9	345.3	253.4	253.6	256.0	293.3	286.2	263.7	264.0	277.2	282.1	286.1	288.7	281.9	282.4	273.9	270.6	269.7	276.8	263.4	266.9	268.4	263.0	256.5		

Maximum Speed Value: 24 km/h on Jun 3 14:00
Minimum Speed Value: 0 km/h on Jun 8 23:00
Maximum Daily Speed Average: 15.8 km/h on Jun 3
Minimum Daily Speed Average: 0.4 km/h on Jun 10
Maximum Diurnal Speed Average: 5.9 km/h at hour 18
Minimum Diurnal Speed Average: 2.4 km/h at hour 23

Monthly Average Velocity: 4.11 km/h 273.93 deg
Speed Percentiles: P_1 = 0.2 P_{10} = 1.0 Q_1 = 2.3 Median = 4.9 Q_3 = 8.6 P_{90} = 13.5 P_{99} = 22.7
All monthly, daily, and diurnal averages have been calculated using vector methods

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

P - Power Failure D - DAS Failure

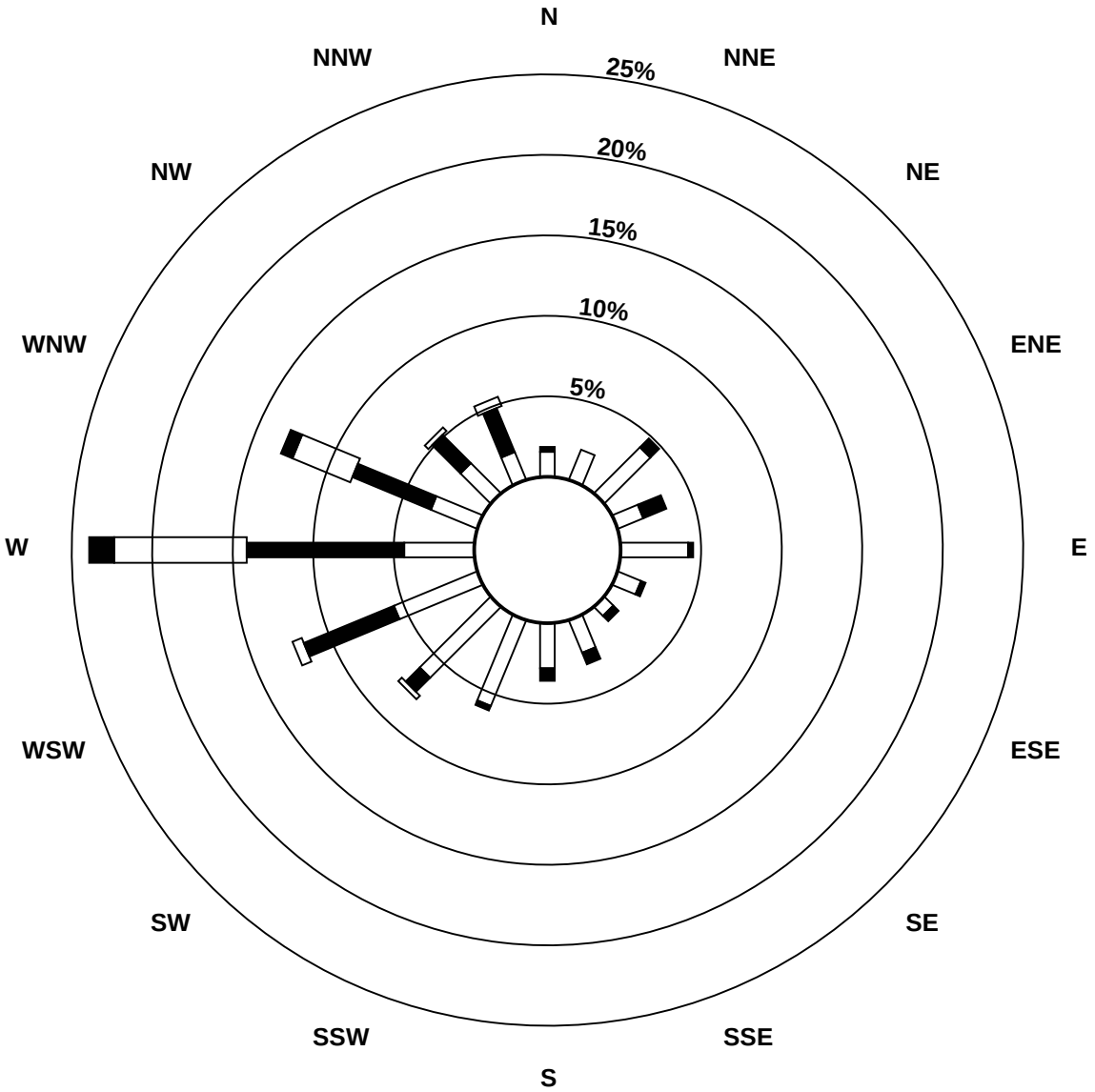
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	26	12	3	0	0	0	41
NorthEast	47	10	0	0	0	0	57
East	46	10	0	0	0	0	56
SouthEast	18	12	0	0	0	0	30
South	49	8	0	0	0	0	57
SouthWest	94	30	3	0	0	0	127
West	51	115	81	16	0	0	263
NorthWest	34	41	9	0	0	0	84
Total	365	238	96	16	0	0	715

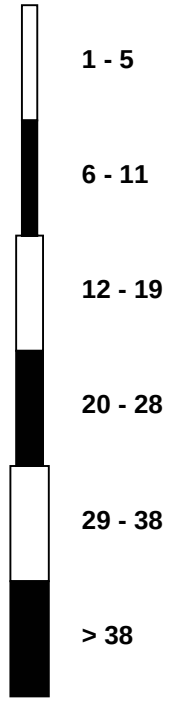
Wind Rose

Wind Speed (WS) (km/h)

Evergreen Park - June 2010



Wind Speed Classes (km/h)



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Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - June 2010

Maximum Speed: 24 km/h on Jun 3 16:00

Maximum Daily Speed Average: 16.6 km/h on Jun 3

Minimum Speed: 1 km/h on Jun 16 05:00

Minimum Daily Speed Average: 3.1 km/h on Jun 10

Maximum Diurnal Speed Average: 10.0 km/h at hour 17

Minimum Diurnal Speed Average: 3.7 km/h at hour 4

Monthly Average Speed: 6.89 km/h

Percentiles: P_1 = 0.9 P_{10} = 1.6 Q_1 = 3.0 Median = 5.9 Q_3 = 9.2 P_{90} = 13.9 P_{99} = 23.2

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
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-Jun	1	2	2	2	3	3	5	7	8	8	7	6	6	5	5	6	P	P	5	7	6	2	4	3	4.8	7.8
2-Jun	3	2	2	1	1	2	2	4	3	4	5	7	8	6	10	8	11	6	3	4	3	4	2	2	4.3	11.1
3-Jun	2	4	4	10	13	13	17	19	19	23	23	24	24	24	23	24	24	23	19	17	17	12	11	11	16.6	24.2
4-Jun	10	11	12	11	7	8	14	15	13	11	12	12	10	10	12	9	9	8	7	6	6	2	2	2	9.1	14.7
5-Jun	1	2	2	2	2	4	8	10	12	11	13	13	13	14	17	13	14	13	13	15	7	4	2	3	8.7	16.6
6-Jun	2	4	2	2	2	1	4	6	9	12	11	9	8	6	8	7	7	7	3	4	6	5	3	2	5.4	11.9
7-Jun	2	4	4	3	1	6	8	6	7	6	6	5	5	5	6	4	6	4	5	5	5	3	2	3	4.6	7.7
8-Jun	3	3	4	4	2	2	3	3	3	3	5	5	5	4	4	6	10	7	6	4	4	2	1	1	4.0	10.3
9-Jun	1	2	1	1	1	D	D	D	3	5	6	6	7	7	6	9	9	9	7	6	6	2	1	1	4.6	9.3
10-Jun	1	1	1	1	1	1	3	3	3	4	4	5	6	7	6	4	5	4	9	2	1	1	1	2	3.1	8.6
11-Jun	1	1	1	1	1	1	3	2	3	5	6	6	7	7	6	6	6	6	5	3	2	4	2	1	3.6	6.9
12-Jun	2	2	1	1	2	1	2	6	7	10	8	9	10	9	7	8	8	5	5	5	1	1	2	5	4.9	10.3
13-Jun	16	13	7	5	9	9	9	9	6	4	7	6	6	7	8	17	14	14	11	9	8	9	8	7	9.1	16.5
14-Jun	8	8	9	10	10	9	13	16	21	19	17	18	16	16	16	17	19	15	13	12	9	6	6	6	12.8	20.5
15-Jun	10	7	5	3	2	3	8	11	9	8	8	8	7	8	9	7	9	7	8	5	2	3	4	2	6.3	10.7
16-Jun	2	1	1	1	1	2	2	3	4	5	4	5	4	4	5	6	7	7	5	4	3	2	1	1	3.3	6.9
17-Jun	1	1	1	2	1	1	1	3	4	3	5	4	6	6	6	6	6	7	6	5	3	2	2	2	3.4	6.7
18-Jun	3	2	5	4	5	7	9	9	9	7	8	9	10	9	10	9	9	9	9	14	10	5	3	2	7.4	14.3
19-Jun	2	3	3	3	2	3	3	5	9	9	10	9	9	8	10	8	10	12	11	8	5	2	2	3	6.2	11.7
20-Jun	3	4	3	1	2	2	2	3	4	4	5	6	6	6	7	7	6	8	7	5	2	1	1	1	4.0	7.5
21-Jun	2	2	3	3	4	2	2	2	4	5	6	7	8	7	7	4	5	3	14	7	5	3	2	4	4.7	13.9
22-Jun	4	4	2	2	2	2	1	3	4	4	4	4	4	5	5	5	4	4	4	3	3	3	3	2	3.3	5.3
23-Jun	1	2	1	2	3	3	3	5	5	6	6	8	6	6	5	7	6	6	4	4	8	7	4	3	4.6	7.7
24-Jun	3	3	2	2	2	5	7	7	7	10	11	6	6	9	11	12	9	10	8	12	9	10	9	6	7.4	12.2
25-Jun	5	9	8	7	8	10	13	15	14	14	18	17	15	15	16	19	16	16	18	15	14	13	15	11	13.3	18.8
26-Jun	10	12	12	11	14	12	15	19	20	18	18	17	16	14	15	17	18	16	15	14	9	8	7	7	13.9	19.9
27-Jun	7	7	5	2	1	2	4	5	5	8	11	13	11	11	11	6	4	10	10	8	6	12	5	3	6.9	12.8
28-Jun	3	1	2	2	2	5	5	9	13	13	14	12	10	8	6	5	4	9	3	3	3	2	2	3	5.8	14.3
29-Jun	6	9	5	4	5	4	8	9	7	7	6	8	8	8	9	11	13	10	7	7	5	6	8	10	7.5	13.0
30-Jun	15	10	6	7	5	5	4	6	7	10	9	11	15	19	22	20	22	21	18	17	17	14	9	11	12.6	22.4
	4.3	4.5	3.9	3.7	3.8	4.4	6.1	7.5	8.1	8.6	9.2	9.1	9.0	8.9	9.6	9.6	10.0	9.5	8.6	7.7	6.1	5.0	4.2	4.0	Diurnal Average	
	16.1	13.0	12.1	11.3	13.5	12.9	16.9	18.7	20.5	22.9	23.5	23.8	24.0	24.1	23.3	24.2	23.9	23.0	19.3	17.5	17.0	13.7	14.7	11.0	Diurnal Maximum	

P - Power Failure D - DAS Failure

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

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Evergreen Park - June 2010

Maximum Value: 96.9 deg on Jun 7 00:00

Minimum Value: 5.2 deg on Jun 4 01:00

Percentiles: P_1 = 5.6 P_{10} = 11.1 Q_1 = 16.0 Median = 27.4 Q_3 = 50.9 P_{90} = 72.0 P_{99} = 91.9

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

Day	Hourly Period Ending At (MST)																								Daily
	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-Jun	43	11	23	26	8	13	19	20	21	31	36	40	56	75	80	72	P	P	40	75	49	24	85	55	84.8
2-Jun	74	94	71	83	78	73	48	33	57	52	52	41	29	45	38	20	15	30	64	23	15	20	39	21	93.8
3-Jun	43	36	57	13	12	10	11	11	9	10	12	15	12	12	13	13	11	7	12	8	7	6	6	7	57.4
4-Jun	5	5	5	6	8	9	8	8	18	29	27	27	32	49	27	31	23	31	18	39	14	24	71	50	70.5
5-Jun	79	35	34	41	50	31	15	15	14	19	23	24	27	30	15	22	19	17	16	14	16	15	16	20	79.2
6-Jun	19	11	19	17	81	66	38	22	21	15	19	35	51	65	37	57	67	41	58	70	20	16	16	97	96.9
7-Jun	49	32	13	57	69	16	18	22	21	26	24	35	58	64	36	34	33	22	19	18	21	18	68	14	69.5
8-Jun	10	12	14	16	26	39	19	27	44	67	34	43	25	42	34	28	15	29	18	18	9	89	87	58	88.8
9-Jun	57	48	64	91	88	D	D	D	86	47	48	64	23	25	27	27	22	26	22	22	18	31	64	35	91.4
10-Jun	93	83	73	85	84	47	16	34	33	41	63	71	91	45	57	54	92	66	42	63	57	64	72	60	92.9
11-Jun	75	52	75	69	83	64	20	44	48	33	41	43	56	66	59	65	44	54	39	40	19	18	56	63	83.2
12-Jun	84	71	73	62	42	52	35	15	19	24	23	27	20	25	47	33	29	33	26	31	74	84	70	11	84.5
13-Jun	28	10	17	18	12	14	16	15	36	13	15	39	49	43	65	18	21	21	18	12	15	10	12	12	65.3
14-Jun	8	7	16	15	15	10	11	9	13	17	18	17	22	21	20	14	17	17	16	20	13	19	15	11	21.5
15-Jun	7	11	13	24	39	34	13	13	22	24	31	53	43	48	38	47	45	43	39	30	51	72	9	92	91.9
16-Jun	64	56	93	79	82	57	50	57	53	40	73	85	68	40	54	65	37	26	34	32	21	31	68	85	93.1
17-Jun	70	80	58	50	87	63	72	62	29	92	50	71	60	79	65	66	62	62	60	45	36	71	94	32	93.9
18-Jun	33	45	13	17	14	14	15	14	21	27	26	25	38	40	37	28	28	25	20	9	15	19	18	42	45.5
19-Jun	21	38	57	17	30	27	13	45	16	25	29	41	45	50	39	51	39	26	16	16	12	12	18	30	56.7
20-Jun	75	34	17	85	63	84	38	62	47	52	52	52	62	74	60	61	49	40	24	20	63	59	59	84	85.4
21-Jun	76	74	72	39	42	69	46	77	27	49	43	41	30	40	40	38	24	83	74	29	38	54	61	73	83.3
22-Jun	35	27	62	30	44	21	76	82	27	41	50	90	88	74	65	38	76	22	16	12	13	27	33	44	89.7
23-Jun	64	30	38	86	66	20	20	23	17	18	31	34	58	55	76	37	48	26	22	26	24	7	77	32	86.1
24-Jun	74	33	19	57	24	6	15	13	21	16	19	40	37	30	15	12	16	19	18	13	10	8	15	14	73.6
25-Jun	12	9	7	9	9	8	8	8	13	19	17	18	19	23	18	12	17	16	12	11	13	12	6	7	22.9
26-Jun	7	7	7	7	6	8	6	7	11	12	13	19	17	19	17	14	15	15	14	13	16	7	8	10	19.0
27-Jun	14	13	84	60	81	45	26	43	31	20	20	19	21	26	27	47	36	32	23	36	42	9	42	27	84.1
28-Jun	40	84	67	70	51	28	17	12	10	16	15	20	29	54	60	51	64	47	51	22	23	21	31	82	84.3
29-Jun	17	26	12	17	15	33	18	17	33	29	52	25	58	39	25	15	22	16	25	30	14	25	33	13	58.2
30-Jun	10	13	16	21	24	13	23	21	25	18	11	17	15	13	11	11	9	10	11	13	16	11	9	7	24.7
	92.9	93.8	93.1	91.4	88.3	84.0	75.7	82.2	86.0	91.6	72.9	89.7	90.7	79.0	79.7	72.2	92.0	83.3	73.6	74.8	74.3	88.8	93.9	96.9	

P - Power Failure D - DAS Failure

PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.4 ppb on Jun 7 02:00 Maximum Daily Average: 1.1 ppb on Jun 7

Minimum Value: 0 ppb on Jun 3 02:00 Minimum Daily Average: 0.0 ppb on Jun 28
Maximum Diurnal Average: 0.9 ppb at hour 7 Minimum Diurnal Average: 0.1 ppb at hour 14
Monthly Average: 0.36 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 1.0$ $P_{99} = 4.4$

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	35
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-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0.2	1.0
2-Jun	1	1	1	2	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.6	2.0
3-Jun	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0.2	1.1
4-Jun	0	0	2	3	2	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0.9	3.8
5-Jun	0	0	0	0	1	4	3	2	2	1	0	0	0	0	0	0	0	0	0	A	0	1	1	0	0.8	4.0
6-Jun	0	4	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	4	0.6	4.5
7-Jun	7	9	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1.1	9.4
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0.1	1.0
9-Jun	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	0.5
10-Jun	0	0	0	0	0	0	0	1	2	2	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	2.2
11-Jun	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
12-Jun	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	0.3
13-Jun	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0.3	1.2
14-Jun	0	0	1	2	3	2	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.1
15-Jun	0	1	5	5	0	0	0	0	1	C	C	C	A	0	0	0	0	0	0	0	0	2	1	0	0.8	5.0
16-Jun	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
17-Jun	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
18-Jun	1	0	0	A	1	1	6	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	5.8
19-Jun	1	1	A	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
20-Jun	0	A	2	1	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0
21-Jun	A	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.8
22-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.5
23-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.5
24-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0.1	0.8
25-Jun	0	2	2	2	2	2	4	3	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.8	4.4
26-Jun	0	0	0	0	2	3	3	1	0	0	0	0	0	0	0	0	0	0	A	0	0	3	0	0	0.6	3.3
27-Jun	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	1.1
28-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.2
29-Jun	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.6
30-Jun	0	0	0	1	1	1	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	1.4
	0.5	0.8	0.8	0.8	0.7	0.9	0.9	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.2	0.3	Diurnal Average	
	6.8	9.4	5.5	4.6	3.1	4.0	5.8	2.5	2.3	1.8	0.8	0.6	0.5	0.2	0.3	0.2	0.3	0.4	0.3	0.4	1.0	3.0	0.7	4.5	Diurnal Maximum	

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

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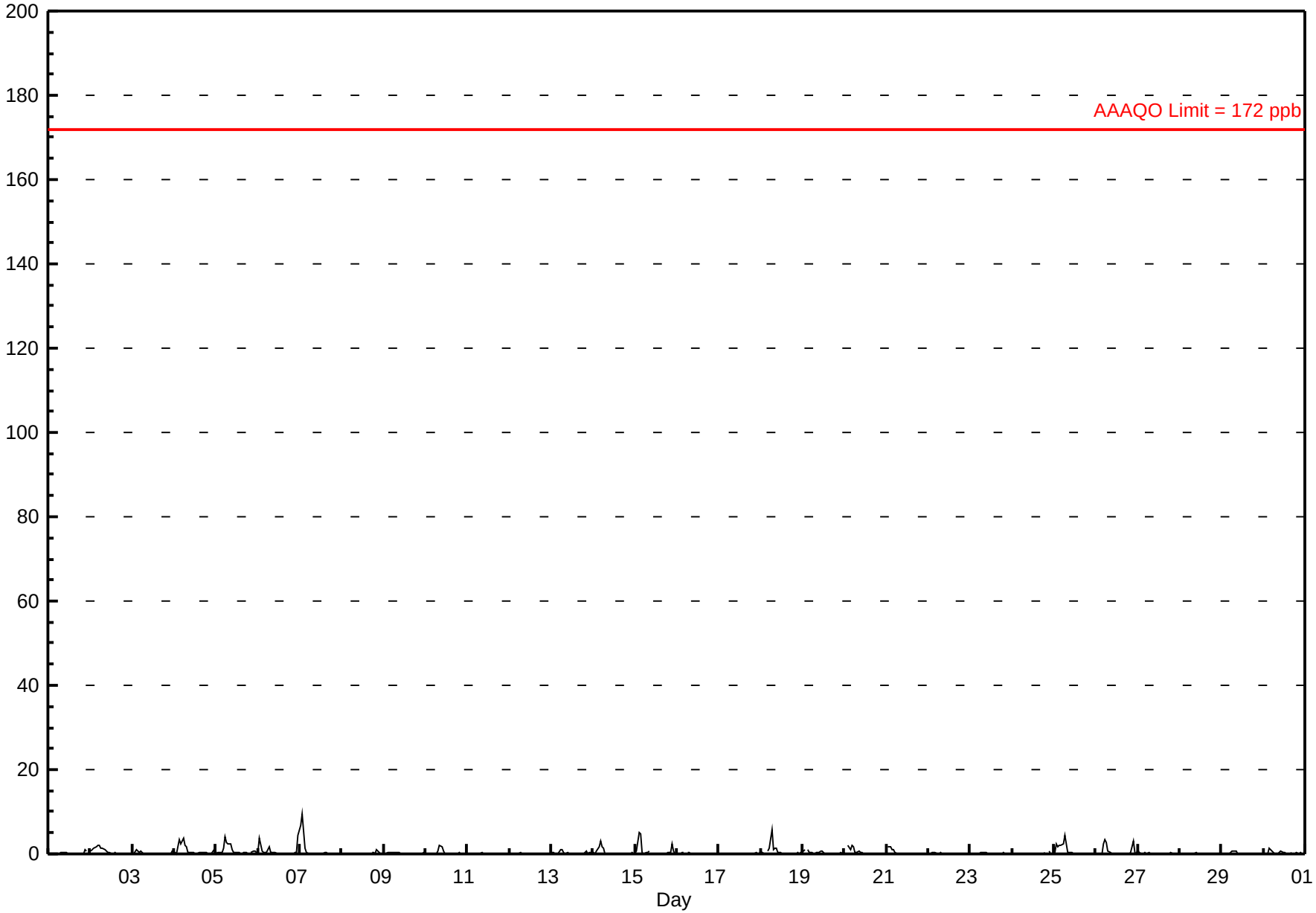
Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2010

Maximum Value: 22.2 ppb on Jun 15 04:00

Maximum Daily Average: 2.8 ppb on Jun 7

Minimum Value: 0 ppb on Jun 21 22:00

Minimum Daily Average: 0.3 ppb on Jun 28

Maximum Diurnal Average: 2.3 ppb at hour 7

Minimum Diurnal Average: 0.4 ppb at hour 14

Monthly Average: 1.05 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.3$ Median = 0.5 $Q_3 = 0.8$ $P_{90} = 2.3$ $P_{99} = 9.6$

Hours in Service:	720
Hours of Data:	685
Hours of Missing Data:	35
Hours of Calibration:	35
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-Jun	A	0	0	0	0	1	0	1	1	1	0	0	0	0	0	1	1	1	0	1	0	3	2	A	0.7	3.1
2-Jun	1	1	2	2	2	3	2	2	1	1	1	1	0	0	1	0	0	0	0	0	0	1	A	0	1.0	2.6
3-Jun	0	0	5	3	1	3	1	0	1	1	1	1	1	0	1	0	0	0	0	2	2	A	0	2	1.1	5.1
4-Jun	2	0	5	6	4	6	4	2	1	1	1	1	1	0	1	1	0	2	1	0	A	0	2	3	1.9	6.0
5-Jun	0	2	1	1	5	5	7	4	4	2	1	1	1	0	0	0	1	0	1	A	1	1	1	1	1.7	6.5
6-Jun	1	9	2	1	1	1	9	1	1	1	1	0	0	1	0	0	0	0	A	0	1	1	1	8	1.7	9.2
7-Jun	16	19	15	6	1	0	0	0	0	0	0	0	1	1	1	1	0	A	0	0	0	0	1	0	2.8	18.7
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	5	2	0	0	0.7	5.4
9-Jun	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	1	0	0	0	1	0.5	0.9
10-Jun	0	0	0	1	1	1	0	5	6	3	2	0	0	0	A	0	0	0	0	0	1	0	0	1	1.0	5.9
11-Jun	1	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0.4	0.7
12-Jun	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.5	0.7
13-Jun	1	1	1	0	0	5	3	1	0	1	0	A	0	1	0	1	1	0	0	1	3	1	1	1	1.0	4.7
14-Jun	1	0	2	5	6	6	3	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	1	0	1.3	5.8
15-Jun	0	4	6	22	1	0	0	1	1	C	C	C	A	0	0	0	1	0	0	2	2	3	2	0	2.4	22.2
16-Jun	0	0	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.4	0.9
17-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.7
18-Jun	1	1	0	A	3	5	10	2	2	2	1	1	0	1	0	0	0	1	1	0	0	1	1	1	1.5	10.2
19-Jun	1	4	A	1	1	1	0	1	0	1	2	1	1	0	0	0	0	0	0	0	1	1	1	0	0.9	4.2
20-Jun	2	A	5	2	5	3	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	1	0	1.1	4.8
21-Jun	A	3	2	2	3	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	A	0.8	3.5
22-Jun	0	1	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	1.0
23-Jun	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0.4	1.0
24-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	2	0	0	0.4	2.3
25-Jun	1	8	4	3	6	8	11	7	1	1	1	0	1	0	0	0	0	0	0	A	1	0	0	0	2.3	10.7
26-Jun	0	0	0	0	10	6	9	1	1	0	0	0	0	0	0	0	0	0	A	1	3	5	1	0	1.8	9.8
27-Jun	3	3	0	1	1	0	1	1	0	1	0	0	0	0	0	0	0	A	0	2	0	0	0	0	0.7	2.7
28-Jun	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.6
29-Jun	0	1	1	0	0	1	1	1	1	0	0	1	1	1	0	A	0	0	0	0	0	0	0	1	0.5	1.4
30-Jun	1	1	0	3	2	2	0	0	1	1	1	1	1	0	A	1	1	0	0	1	1	2	0	0	0.9	2.8
	1.3	2.2	1.9	2.2	1.9	2.1	2.3	1.2	1.0	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.6	0.9	1.0	0.7	0.9	Diurnal Average	
	15.5	18.7	15.1	22.2	9.8	7.5	10.7	6.6	5.9	2.7	1.6	1.1	1.0	0.7	0.9	1.0	0.8	1.6	1.1	2.2	5.4	5.4	2.0	8.2	Diurnal Maximum	

C - Calibration

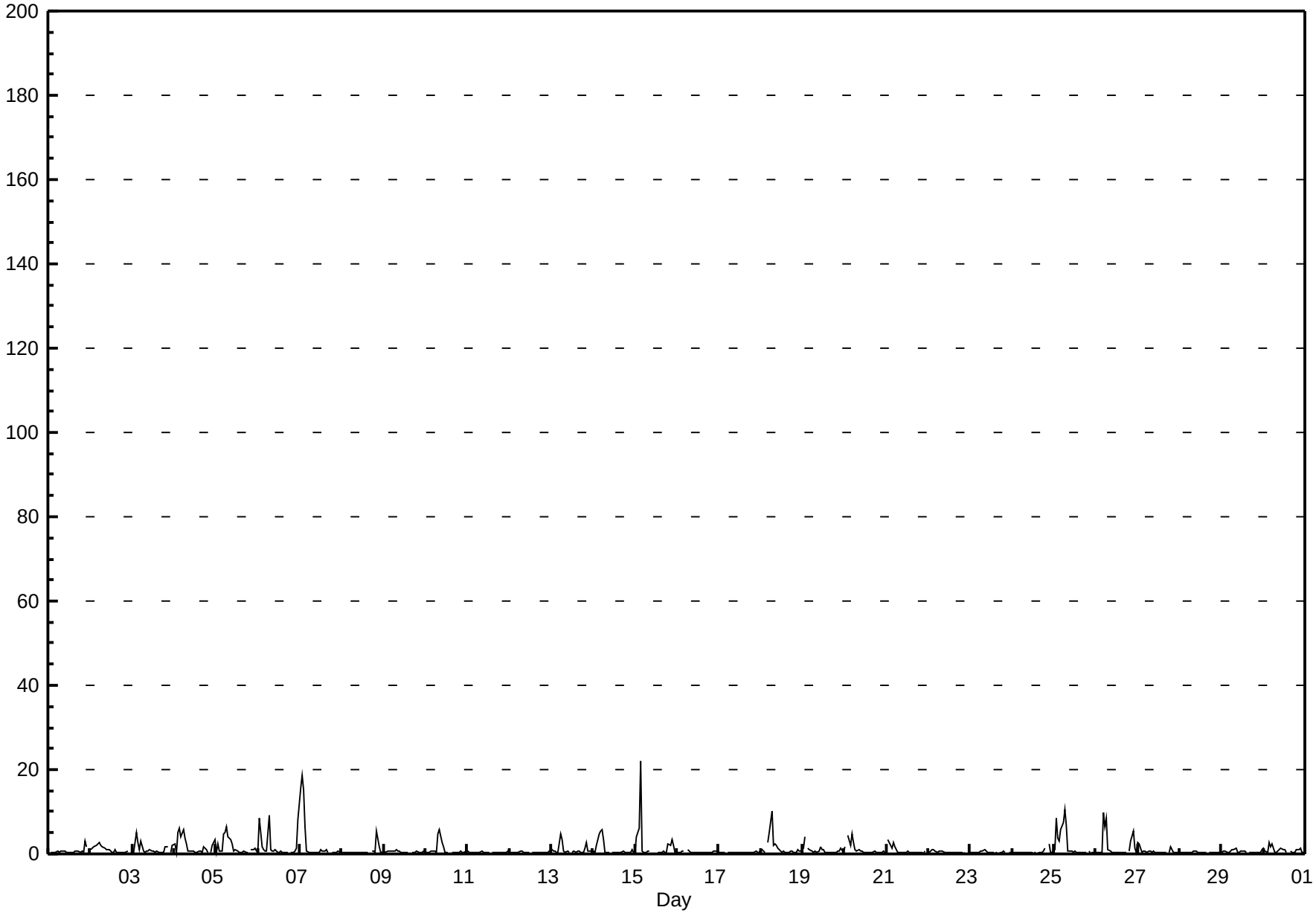
A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

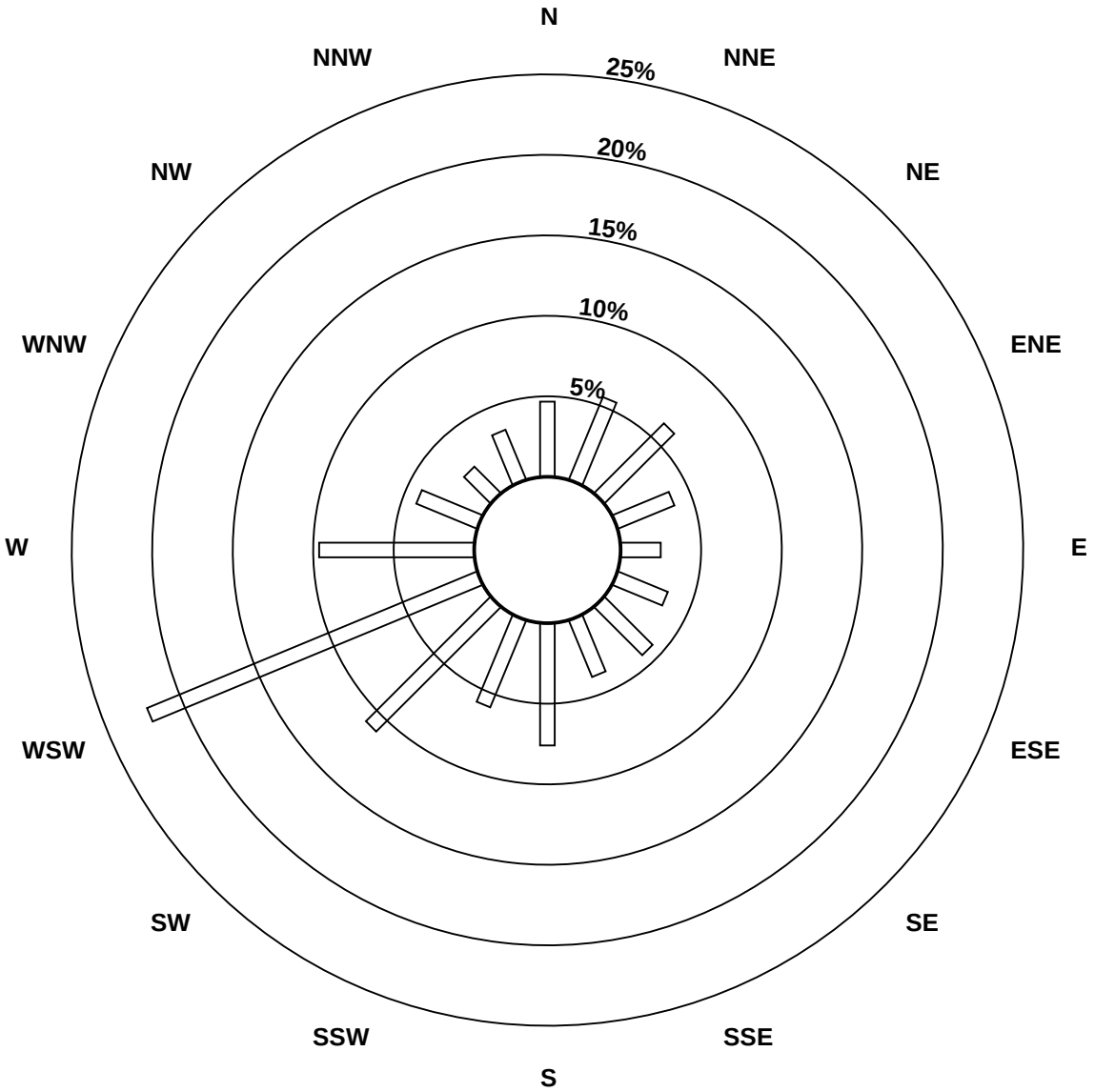
Smoky Heights - June 2010



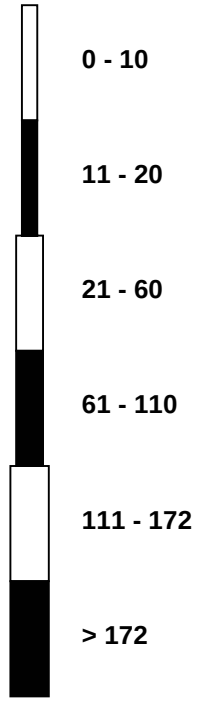
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.9 ppb on Jun 22 04:00 Maximum Daily Average: 0.5 ppb on Jun 22

Minimum Value: 0 ppb on Jun 4 19:00 Minimum Daily Average: 0.3 ppb on Jun 14
Maximum Diurnal Average: 0.5 ppb at hour 5 Minimum Diurnal Average: 0.3 ppb at hour 17
Monthly Average: 0.36 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 0.7$

Hours in Service:	720
Hours of Data:	684
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-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.4
2-Jun	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
3-Jun	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
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.5
5-Jun	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	0.5
6-Jun	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.5
8-Jun	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
9-Jun	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.6
10-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.5
11-Jun	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0.3	0.5
12-Jun	1	1	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.4	0.6
13-Jun	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
14-Jun	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	0.4
15-Jun	0	0	0	0	0	0	0	0	0	A	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.3	0.5
16-Jun	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
17-Jun	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.4	0.6
18-Jun	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
19-Jun	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
20-Jun	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
21-Jun	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.6
22-Jun	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	0.9
23-Jun	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0.4	0.7
24-Jun	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.5
25-Jun	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	0.5
26-Jun	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.6
27-Jun	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0.4	0.8
28-Jun	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0	0.4	0.6
29-Jun	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.6
30-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
	0.4	0.4	0.4	0.5	0.5	0.4	0.4	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	0.4	0.4	0.4	Diurnal Average	
	0.6	0.6	0.7	0.9	0.8	0.8	0.7	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6	Diurnal Maximum	

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

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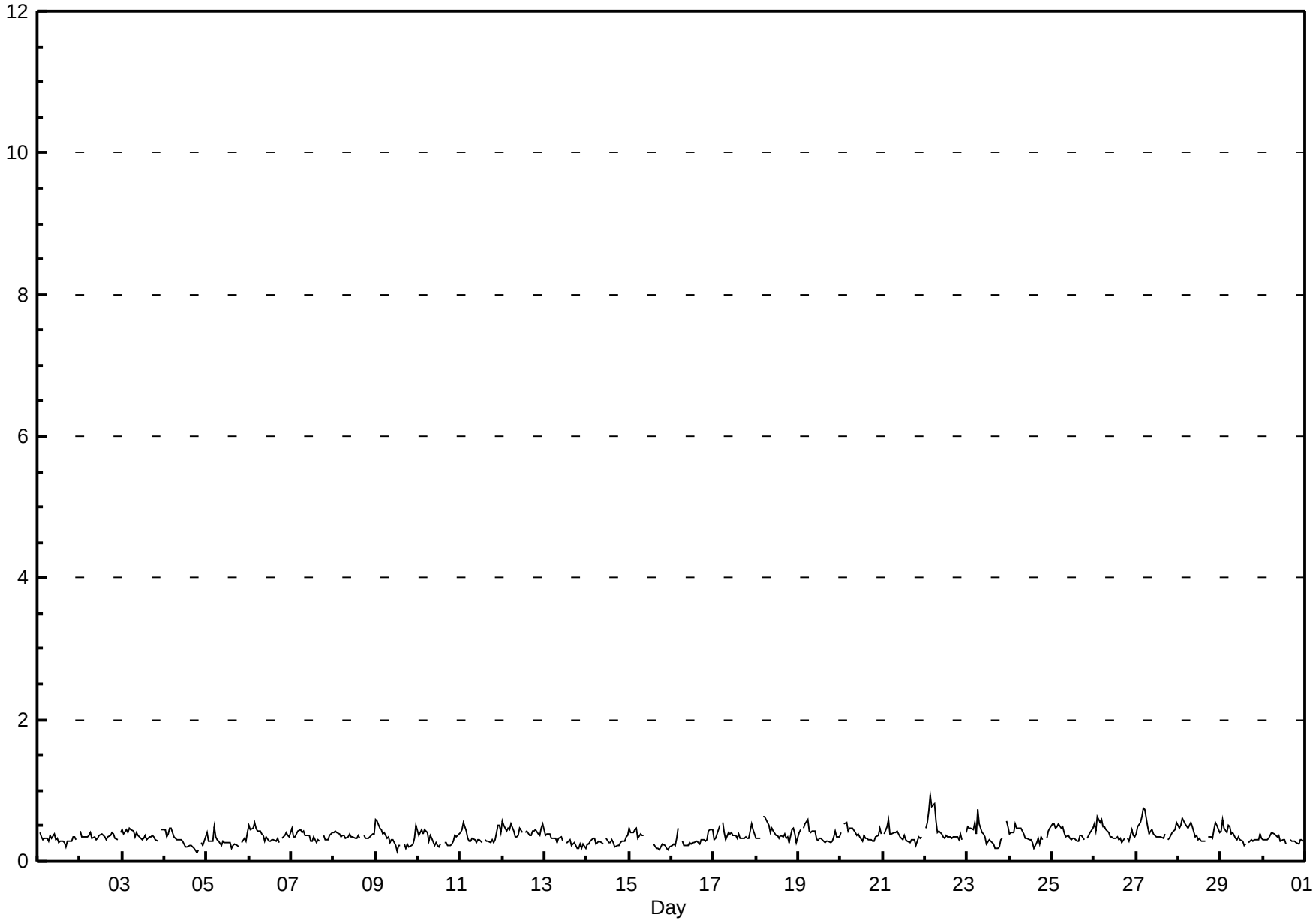
Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2010



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Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2010

Maximum Value: 1.6 ppb on Jun 9 01:00

Maximum Daily Average: 0.9 ppb on Jun 22

Minimum Value: 0 ppb on Jun 15 18:00

Minimum Daily Average: 0.7 ppb on Jun 5

Maximum Diurnal Average: 0.9 ppb at hour 5

Minimum Diurnal Average: 0.7 ppb at hour 19

Monthly Average: 0.76 ppb

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:	720
Hours of Data:	684
Hours of Missing Data:	36
Hours of Calibration:	36
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-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.8
2-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.0
3-Jun	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
4-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	A	1	1	1	0.7	1.4
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	0.7	0.9
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9
8-Jun	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	1.0
9-Jun	2	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	1.6
10-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
11-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.0
12-Jun	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	1.2
13-Jun	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0	1	0	0.7	0.8
14-Jun	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
15-Jun	1	1	1	1	1	1	1	1	1	A	C	C	C	C	1	1	1	0	1	1	1	1	0	1	0.7	1.1
16-Jun	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	1.2
17-Jun	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	1.1
18-Jun	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
19-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
20-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
21-Jun	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
22-Jun	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.5
23-Jun	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	1.1
24-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	0.8	1.0
25-Jun	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	1.1
26-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0
27-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.3
28-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.1
29-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	1.0
30-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
	0.9	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	Diurnal Average	
	1.6	1.0	1.4	1.5	1.3	1.3	1.2	1.0	0.9	0.9	0.9	0.9	0.8	1.0	0.9	0.9	0.9	1.0	0.9	0.9	0.9	1.1	1.1	1.4	Diurnal Maximum	

C - Calibration

A - Automated Daily Zero Span

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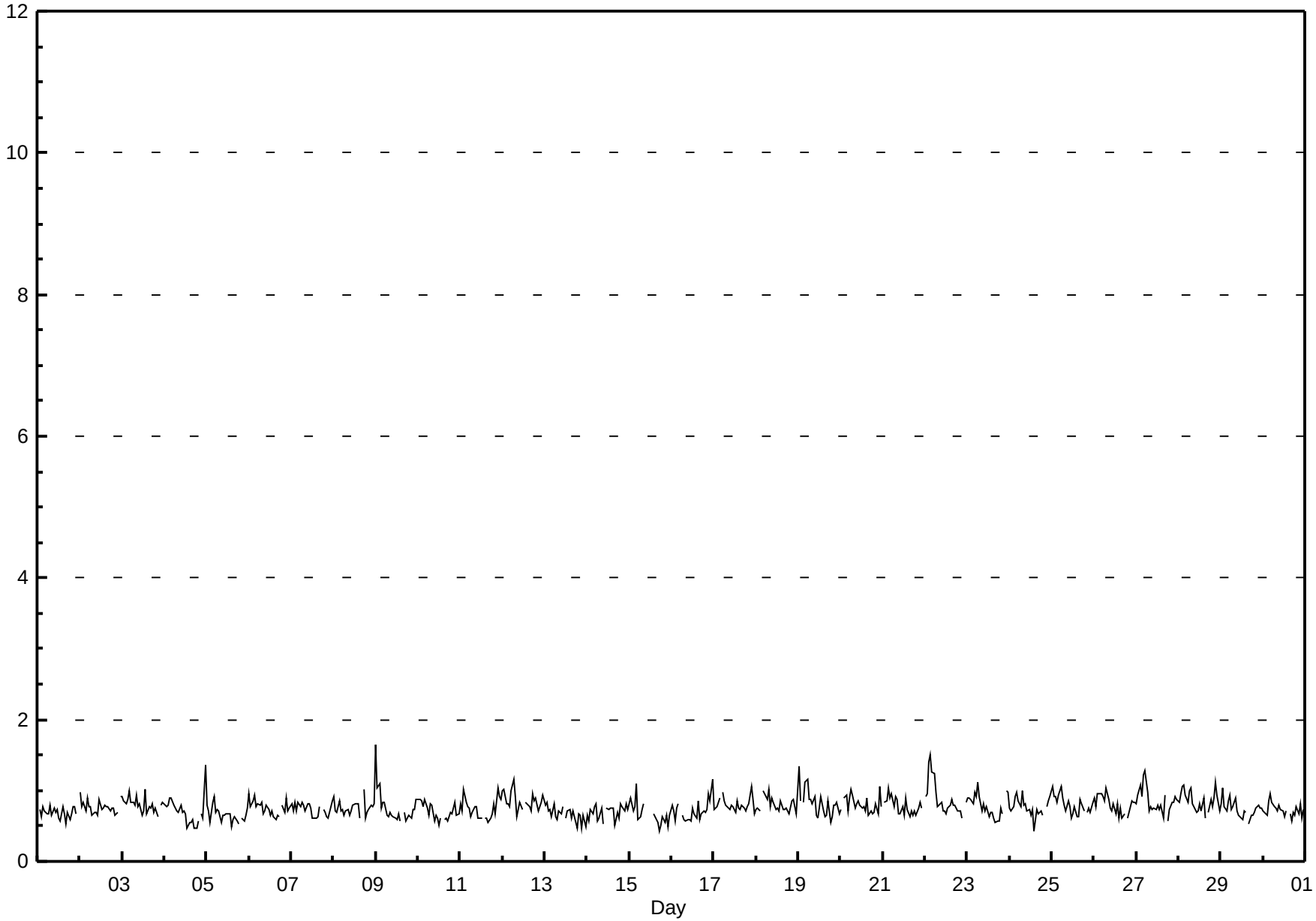
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

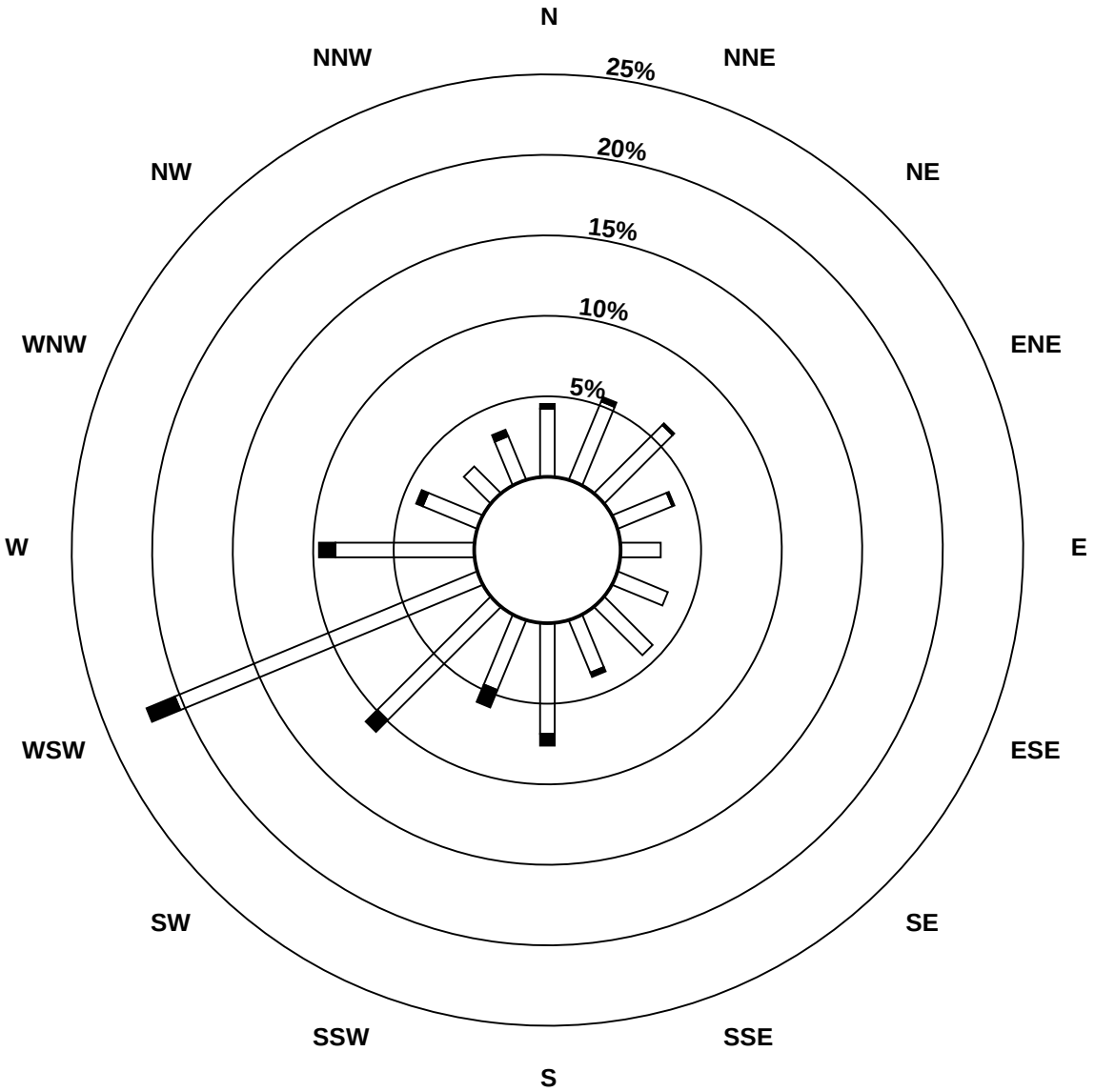
Smoky Heights - June 2010



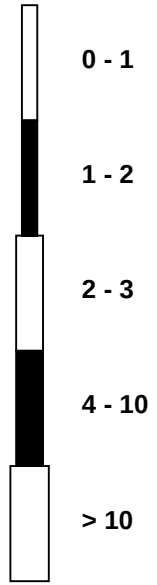
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2010



Pollutant Classes (ppb)



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Hourly Averages

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

Smoky Heights - June 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 65.6 $\mu g/m^3$ on Jun 13 00:00
Maximum Daily Average: 12.8 $\mu g/m^3$ on Jun 19

Minimum Value: 0 $\mu g/m^3$ on Jun 2 13:00
Maximum Diurnal Average: 12.7 $\mu g/m^3$ at hour 22
Monthly Average: 5.28 $\mu g/m^3$
Minimum Daily Average: 1.5 $\mu g/m^3$ on Jun 3
Minimum Diurnal Average: 2.3 $\mu g/m^3$ at hour 11
Percentiles: $P_1 = 0.0$ $P_{10} = 0.6$ $Q_1 = 1.7$ Median = 4.0 $Q_3 = 6.9$ $P_{90} = 10.2$ $P_{99} = 34.9$

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	2
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	3	2	3	3	2	2	3	2	1	1	0	0	1	1	0	1	2	1	2	3	4	7	12	4	2.6	12.3
2-Jun	6	6	6	6	6	6	5	5	5	4	2	0	0	0	1	1	4	3	0	2	2	1	2	2	3.2	5.8
3-Jun	3	3	4	4	3	2	0	0	0	0	0	1	1	1	1	1	2	1	1	1	2	1	1	1	1.5	4.1
4-Jun	0	1	1	1	1	1	2	2	2	1	1	1	2	1	2	4	4	6	4	4	5	11	5	3	2.7	11.2
5-Jun	5	4	3	3	4	5	4	7	4	4	5	3	3	2	9	4	9	5	4	4	10	8	7	13	5.3	12.6
6-Jun	10	5	4	2	2	3	3	3	2	3	2	2	3	0	4	3	9	2	7	7	10	6	4	4	4.2	10.1
7-Jun	4	4	4	4	5	2	2	2	3	3	3	3	7	5	6	5	9	10	5	5	4	4	4	3	4.4	9.6
8-Jun	1	2	1	2	1	1	1	3	1	1	0	0	0	1	1	5	2	4	5	8	6	8	5	4	2.8	8.4
9-Jun	4	4	3	3	3	4	4	5	4	3	1	1	1	1	2	1	2	7	4	4	7	15	30	9	5.1	29.9
10-Jun	7	5	6	5	6	10	7	9	8	6	2	2	4	3	5	6	8	15	7	9	9	25	22	21	8.6	25.0
11-Jun	8	6	28	6	5	6	10	7	6	5	3	4	3	4	4	3	4	9	7	5	8	49	22	12	9.3	48.8
12-Jun	8	8	8	7	9	12	9	7	15	6	0	1	3	2	2	13	3	3	3	3	5	2	23	66	9.0	65.6
13-Jun	5	1	1	1	0	1	0	1	7	3	1	BD	4	BD	0	0	0	0	2	3	1	3	6	4	2.0	6.8
14-Jun	8	1	1	1	1	0	1	0	0	0	0	0	0	0	1	1	1	2	2	1	6	4	8	4	1.8	8.1
15-Jun	4	17	2	2	3	4	3	3	2	10	2	0	C	C	13	8	6	5	7	7	11	7	5	5	5.8	17.0
16-Jun	3	3	2	2	9	4	4	3	2	2	2	1	1	1	2	2	2	1	2	3	3	35	12	12	4.8	35.0
17-Jun	3	3	3	3	5	8	9	4	3	3	2	3	1	1	2	3	4	7	6	5	6	41	12	15	6.3	41.4
18-Jun	6	7	6	5	6	7	7	7	7	7	4	6	7	6	11	13	10	16	16	16	40	20	14	10	10.7	39.7
19-Jun	10	8	8	8	15	13	8	9	10	6	4	4	12	7	11	7	4	5	9	14	34	58	22	21	12.8	58.0
20-Jun	8	7	11	8	9	9	13	12	12	11	7	7	5	5	5	4	9	8	8	8	8	17	35	8	9.8	34.9
21-Jun	10	8	8	6	16	7	7	6	7	5	6	7	8	7	7	6	4	7	4	3	5	7	10	6	6.9	16.2
22-Jun	6	6	4	5	6	5	8	6	7	7	2	6	7	7	9	10	8	6	5	7	8	6	4	5	6.3	10.0
23-Jun	7	5	5	5	10	10	8	6	10	16	10	12	6	1	2	4	4	11	6	13	10	7	13	8	8.0	15.8
24-Jun	12	5	5	5	7	5	7	4	5	0	2	6	14	12	11	13	9	2	5	4	7	5	6	21	7.1	20.6
25-Jun	3	1	0	0	0	1	3	3	3	5	2	3	2	0	2	6	11	1	2	4	5	4	7	2	2.9	10.5
26-Jun	2	1	1	1	1	1	2	2	6	9	3	2	7	4	2	3	8	3	1	5	6	8	18	7	4.2	17.9
27-Jun	9	8	11	4	5	4	5	5	7	3	1	0	3	5	5	1	5	0	9	7	11	9	1	0	5.0	11.2
28-Jun	1	0	0	0	1	5	5	0	0	0	0	1	1	0	0	2	3	2	9	2	3	4	0	0	1.6	8.7
29-Jun	0	1	1	1	1	3	3	3	0	0	0	0	1	1	3	3	5	0	2	1	8	3	0	0	1.6	8.1
30-Jun	1	2	0	1	1	2	2	2	2	0	0	4	3	1	BD	1	0	2	1	2	2	3	1	1	1.5	4.3
	5.2	4.3	4.6	3.5	4.8	4.8	4.8	4.3	4.7	4.1	2.3	2.9	3.8	2.8	4.3	4.5	5.0	4.9	4.9	5.4	8.2	12.7	10.4	8.9	Diurnal Average	
	12.4	17.0	27.6	8.2	16.2	13.0	12.9	12.4	14.6	15.8	10.5	12.4	14.2	11.5	13.2	13.3	10.5	16.2	16.1	16.4	39.7	58.0	34.9	65.6	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 $\mu g/m^3$

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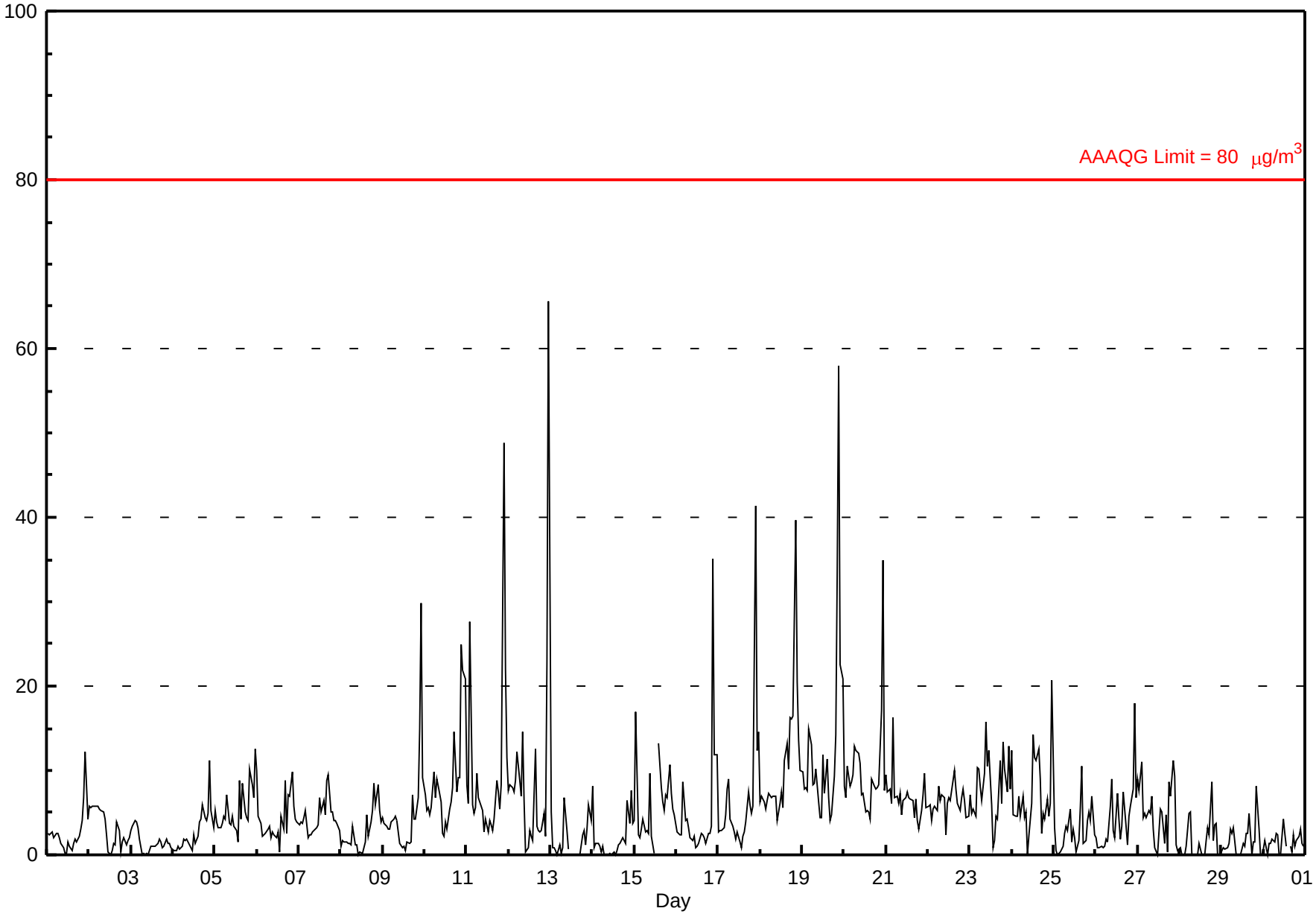
Hourly Averages

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

Smoky Heights - June 2010



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Hourly Maximums

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

Smoky Heights - June 2010

Maximum Value: 249.7 $\mu g/m^3$ on Jun 13 00:00

Maximum Daily Average: 27.3 $\mu g/m^3$ on Jun 19

Minimum Value: 0 $\mu g/m^3$ on Jun 13 18:00

Minimum Daily Average: 3.4 $\mu g/m^3$ on Jun 3

Maximum Diurnal Average: 29.0 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 5.6 $\mu g/m^3$ at hour 4

Monthly Average: 12.16 $\mu g/m^3$

Percentiles: $P_1 = 1.0$ $P_{10} = 2.8$ $Q_1 = 4.3$ Median = 7.5 $Q_3 = 12.6$ $P_{90} = 24.5$ $P_{99} = 98.6$

Hours in Service:	720
Hours of Data:	715
Hours of Missing Data:	5
Hours of Calibration:	2
Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	4	4	4	3	3	3	4	3	3	2	2	3	3	2	3	3	4	3	4	5	6	15	27	6	5.0	26.9
2-Jun	7	7	7	8	7	8	7	7	6	7	5	3	2	3	4	7	13	11	3	5	4	2	3	3	5.8	13.0
3-Jun	5	5	6	7	7	5	0	2	2	3	2	3	3	4	2	3	4	3	2	3	3	4	2	3	3.4	6.8
4-Jun	2	2	1	2	2	3	3	3	4	3	3	3	5	3	8	8	8	12	6	7	8	19	13	6	5.6	19.4
5-Jun	9	7	6	6	6	6	7	18	6	5	8	8	7	11	29	10	18	9	12	12	17	14	9	31	11.3	31.3
6-Jun	21	8	6	3	4	4	6	10	5	12	8	7	9	3	15	11	20	5	15	14	26	11	6	5	9.7	25.7
7-Jun	5	6	5	8	8	4	4	4	4	5	4	5	12	7	9	7	18	16	9	7	6	6	6	5	7.1	18.4
8-Jun	2	3	4	3	3	3	2	6	4	5	2	2	2	3	5	16	6	8	14	22	9	17	8	5	6.3	21.6
9-Jun	6	6	5	4	5	5	6	7	6	5	3	3	3	4	3	3	4	15	7	5	13	20	61	23	9.3	61.0
10-Jun	12	7	8	7	8	13	10	13	11	12	7	7	8	7	13	11	11	42	12	11	12	110	100	55	21.1	109.6
11-Jun	11	8	107	9	7	7	19	11	8	7	5	9	7	13	11	5	6	18	15	8	34	90	36	20	19.6	106.5
12-Jun	10	10	10	9	15	16	13	13	66	11	7	5	5	5	5	55	8	9	6	5	13	6	70	250	25.8	249.7
13-Jun	17	3	3	2	1	4	2	11	20	13	4	BD	21	BD	9	16	20	0	7	6	5	7	8	6	8.5	20.9
14-Jun	25	5	3	3	2	2	3	2	2	2	3	3	4	2	4	5	5	6	4	3	15	12	12	5	5.5	25.4
15-Jun	5	90	12	4	20	19	5	4	7	55	17	8	C	C	19	11	9	8	13	10	22	11	8	9	16.6	89.7
16-Jun	4	3	4	4	37	10	9	5	3	3	4	5	3	3	4	5	4	3	5	4	5	56	29	26	9.8	55.6
17-Jun	5	4	5	6	10	27	27	6	5	5	6	7	3	3	7	6	10	22	13	7	12	148	24	54	17.5	147.9
18-Jun	8	9	7	7	8	10	11	11	10	13	5	16	12	9	31	31	18	34	55	33	88	48	18	20	21.3	88.3
19-Jun	11	10	10	9	52	24	10	10	13	11	7	8	37	31	30	13	8	11	31	24	81	102	58	53	27.3	101.5
20-Jun	12	12	19	12	18	12	15	14	18	16	12	10	7	8	10	10	20	12	14	13	13	32	130	12	18.8	130.1
21-Jun	13	9	11	11	32	9	9	8	9	7	9	11	11	10	12	12	9	12	8	5	9	9	15	9	10.8	32.4
22-Jun	8	8	7	7	7	7	11	11	12	15	10	10	10	9	15	23	14	11	10	10	10	11	7	15	10.7	23.2
23-Jun	16	6	6	6	36	15	11	10	15	27	13	17	14	6	9	8	7	34	9	29	18	12	42	18	16.1	42.4
24-Jun	24	6	6	9	15	8	16	7	7	7	9	39	36	50	27	30	16	12	17	7	19	31	28	65	20.6	65.5
25-Jun	7	2	1	2	1	3	5	13	9	19	5	10	10	4	10	13	28	7	6	9	12	8	18	5	8.7	28.3
26-Jun	5	2	2	2	2	3	4	4	23	16	8	5	35	11	7	9	34	14	4	11	15	18	40	10	11.9	40.2
27-Jun	26	25	35	6	9	6	9	7	8	7	4	2	14	19	16	9	12	3	27	25	33	23	6	4	13.9	35.2
28-Jun	3	1	2	3	3	8	11	3	1	4	4	9	5	3	3	8	10	10	14	9	11	13	5	1	6.0	14.4
29-Jun	3	3	2	3	3	6	4	6	6	1	3	3	4	4	9	5	15	8	6	4	20	6	6	3	5.6	20.3
30-Jun	3	4	1	3	4	3	4	4	5	4	9	15	6	5	BD	3	4	6	3	7	7	8	3	3	4.9	15.4
	9.6	9.1	10.2	5.6	11.1	8.5	8.2	7.8	10.0	10.1	6.2	8.1	10.2	8.7	11.4	11.8	12.1	12.1	11.7	10.7	18.2	29.0	26.6	24.3	Diurnal Average	
	26.3	89.7	106.5	11.5	51.7	26.7	26.6	18.3	65.7	55.0	17.4	39.3	37.4	49.9	30.7	54.8	34.2	41.9	54.6	33.1	88.3	147.9	130.1	249.7	Diurnal Maximum	

C - Calibration BD - Baseline Drift

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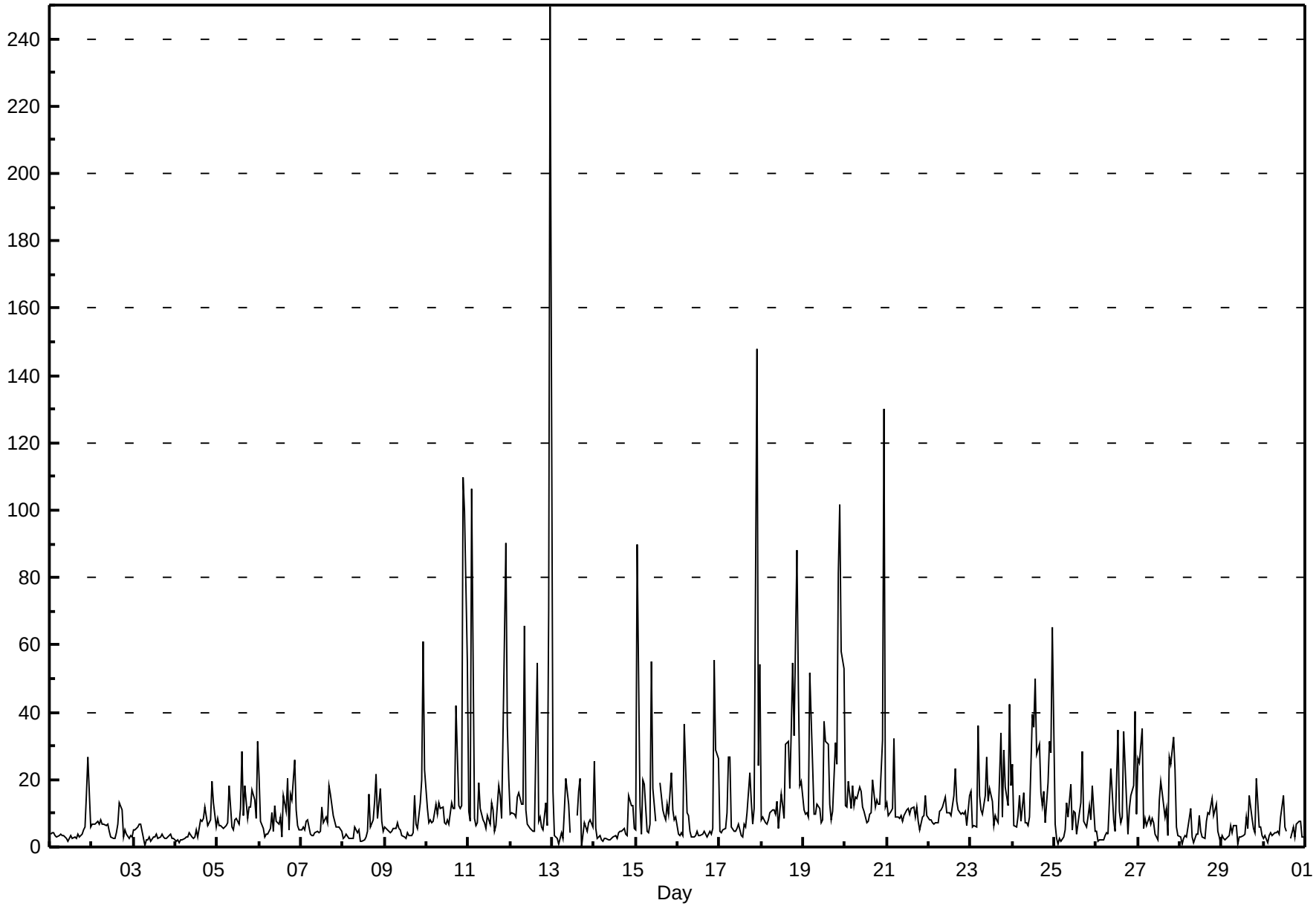
Hourly Maximums

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

Smoky Heights - June 2010



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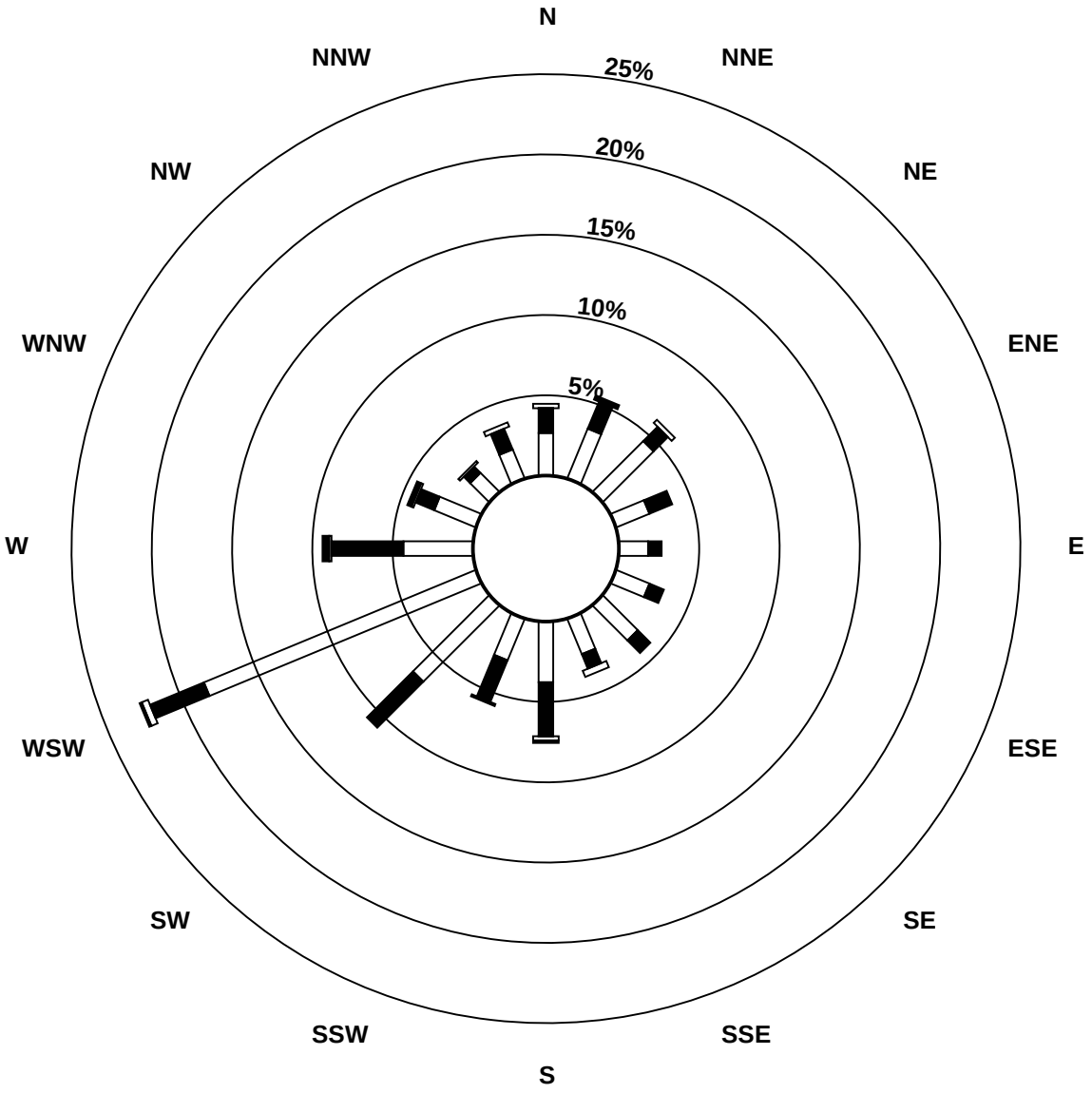
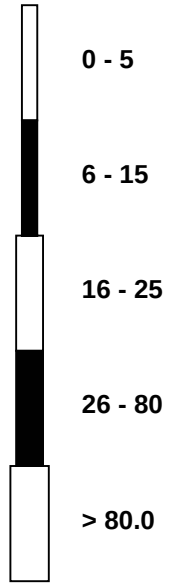
Pollutant Rose

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

Smoky Heights - June 2010



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



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Hourly Averages

External Temperature (ET) - °C

Smoky Heights - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 27.2 °C on Jun 20 16:00 Maximum Daily Average: 19.3 °C on Jun 20

Minimum Value: 2 °C on Jun 15 05:00 Minimum Daily Average: 10.6 °C on Jun 8
Maximum Diurnal Average: 21.1 °C at hour 16 Minimum Diurnal Average: 7.7 °C at hour 5
Monthly Average: 15.19 °C Percentiles: P_1 = 3.8 P_{10} = 7.5 Q_1 = 10.9 Median = 15.2 Q_3 = 19.6 P_{90} = 22.8 P_{99} = 26.4

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	6	5	5	4	3	6	9	10	12	14	15	16	17	18	18	19	19	20	20	20	17	15	15	13	13.2	19.8
2-Jun	12	11	10	9	9	9	10	12	14	16	18	20	21	21	22	21	17	18	19	18	16	15	14	13	15.2	21.7
3-Jun	12	11	11	11	13	11	11	10	11	12	13	14	15	16	17	16	16	15	14	14	13	12	11	9	12.9	16.5
4-Jun	7	8	8	6	5	6	8	10	12	13	15	16	17	17	18	19	19	19	18	17	15	12	9	8	12.6	19.0
5-Jun	6	8	6	5	5	8	9	12	13	15	17	19	19	20	20	20	20	20	20	19	17	13	10	9	13.8	20.4
6-Jun	8	7	6	6	6	7	10	12	14	16	17	18	19	20	20	21	21	21	21	20	16	14	13	12	14.3	21.1
7-Jun	11	11	11	9	8	8	9	9	9	10	12	13	15	15	16	15	16	16	15	14	12	10	8	6	11.5	16.4
8-Jun	4	6	6	6	6	6	6	8	10	11	12	14	14	15	15	15	15	15	14	13	12	11	10	9	10.6	15.4
9-Jun	8	8	8	8	8	8	9	12	13	14	14	15	15	16	17	18	18	18	18	16	16	14	10	8	12.8	18.4
10-Jun	6	5	4	3	2	5	8	10	13	16	18	18	19	19	19	19	20	19	19	18	17	13	9	9	12.8	19.7
11-Jun	8	7	4	4	4	6	8	10	13	15	17	19	21	21	22	23	23	23	23	22	20	16	14	12	14.8	23.1
12-Jun	8	8	8	7	7	8	11	15	18	19	21	22	23	24	25	26	26	26	25	23	22	21	19	16	17.8	26.2
13-Jun	18	17	15	12	11	14	13	13	13	12	13	15	16	18	19	20	19	20	19	17	16	16	13	11	15.5	20.2
14-Jun	9	7	7	7	7	7	9	11	12	13	14	15	16	17	17	17	17	16	16	15	14	11	8	7	12.0	17.0
15-Jun	5	4	5	5	2	3	6	9	11	13	15	17	17	17	19	18	18	17	17	16	14	12	11	10	11.7	18.6
16-Jun	9	7	7	4	3	5	10	11	13	15	17	18	20	19	20	20	21	20	20	19	18	14	10	9	13.6	20.5
17-Jun	9	8	7	5	4	7	11	14	16	18	20	22	22	23	23	23	23	23	22	21	20	16	14	12	15.9	23.5
18-Jun	12	10	9	7	7	8	11	14	17	19	21	22	23	24	23	23	25	25	25	24	21	17	15	17	17.4	24.9
19-Jun	13	11	10	9	10	10	11	13	14	19	23	24	26	26	26	27	27	27	27	26	23	18	17	15	18.8	27.1
20-Jun	13	10	9	8	11	12	15	16	18	21	22	24	25	26	26	27	27	26	26	26	24	21	17	15	19.3	27.2
21-Jun	13	12	12	10	12	13	15	17	19	22	23	24	25	26	25	25	23	22	20	19	18	16	15	15	18.3	25.5
22-Jun	14	13	13	12	12	12	13	15	16	18	19	21	22	22	24	23	23	23	22	21	20	18	17	16	17.8	24.1
23-Jun	15	14	13	12	10	11	15	17	19	19	18	21	23	25	25	25	26	25	26	24	21	18	17	17	19.0	25.7
24-Jun	17	16	15	13	12	12	14	15	16	19	21	22	23	23	24	22	21	23	23	22	20	19	18	16	18.8	24.3
25-Jun	15	15	14	14	13	12	13	14	18	19	20	21	22	23	23	23	22	22	21	20	18	16	15	13	17.7	22.9
26-Jun	12	11	11	10	11	11	12	14	16	17	19	21	22	23	23	23	24	23	23	22	20	16	14	12	17.0	23.5
27-Jun	11	10	10	8	9	11	12	12	15	18	21	22	22	22	23	23	22	23	21	19	15	13	12	12	16.0	23.3
28-Jun	11	10	8	7	7	8	10	12	14	16	18	19	20	21	21	22	22	22	19	20	20	17	15	15	15.7	22.3
29-Jun	14	10	10	7	7	8	11	13	16	19	20	21	22	22	22	23	20	20	20	19	16	14	14	14	15.9	22.5
30-Jun	12	11	11	10	10	10	10	9	10	13	15	14	14	15	16	16	16	16	16	16	14	12	10	10	12.8	16.5
	10.6	9.7	9.1	8.0	7.7	8.7	10.6	12.3	14.2	16.0	17.6	18.9	19.8	20.5	21.0	21.1	20.9	20.8	20.1	19.3	17.6	15.0	13.2	11.9	Diurnal Average	
	17.8	16.8	15.3	13.8	12.6	13.5	15.2	17.0	19.4	21.8	22.9	24.3	25.5	26.5	26.4	27.2	27.1	27.0	26.5	25.8	24.3	20.8	18.9	17.4	Diurnal Maximum	

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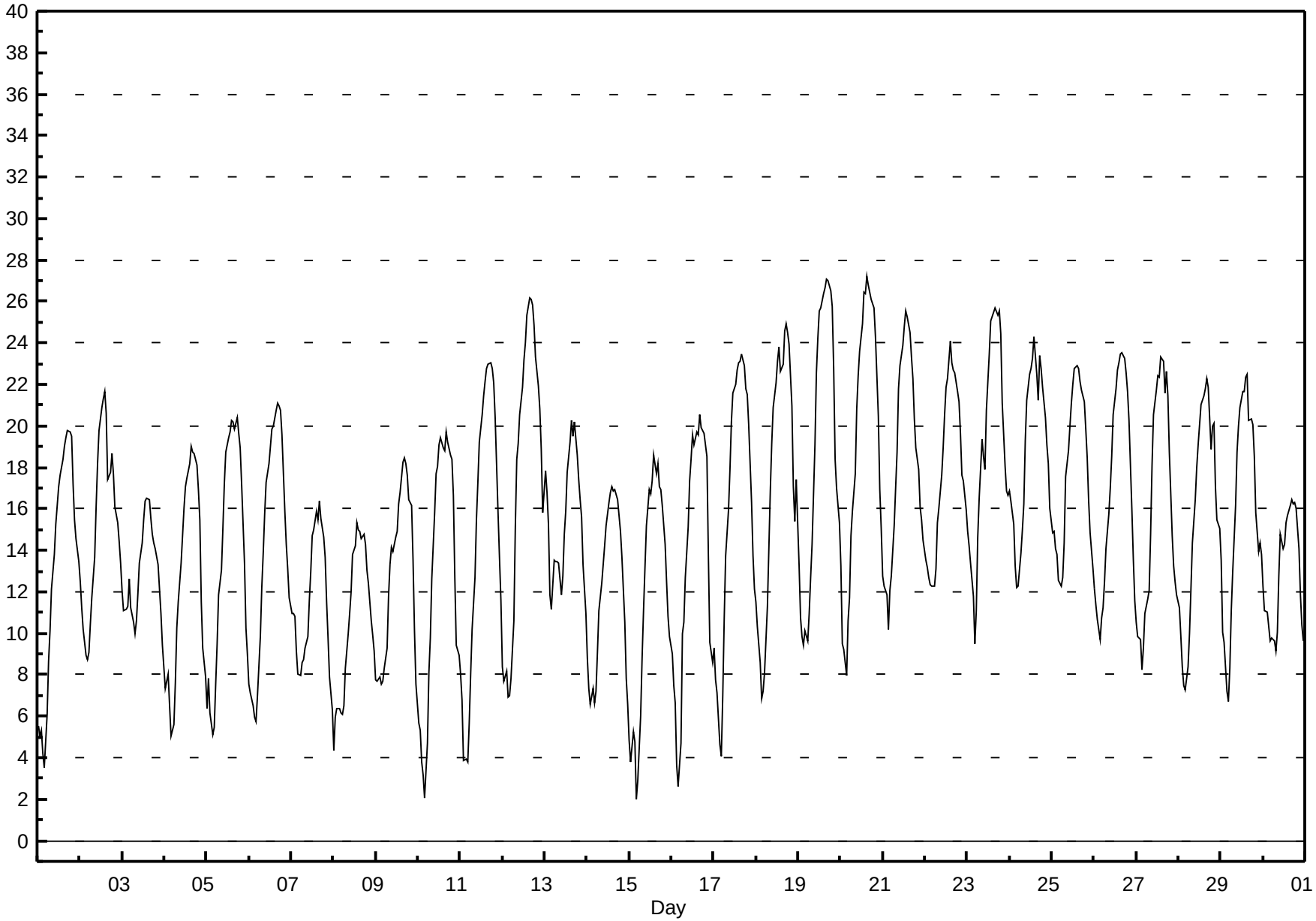
Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - June 2010



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Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - June 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	5	3	1	3	8	7	13	18	22	22	25	20	19	15	9	9	7	9	8	9	9	11	17	10.2	25.2
Dir	249	170	200	309	168	114	127	130	135	130	120	133	124	144	146	141	152	101	100	81	88	84	100	133	127.0	132.8
2 Spd	16	12	11	2	6	6	10	10	8	11	12	14	16	18	17	19	9	7	7	14	14	10	7	6	9.7	19.3
Dir	146	158	170	156	171	173	151	154	124	116	138	136	132	124	147	170	200	110	116	121	122	130	100	33	139.9	170.3
3 Spd	6	6	7	8	11	24	27	31	32	36	39	41	40	37	37	37	34	33	31	28	19	16	16	13	24.2	40.7
Dir	20	0	330	308	250	246	258	259	257	260	257	259	258	256	250	249	243	241	245	245	243	244	246	245	253.9	259.5
4 Spd	14	16	21	19	21	22	21	18	17	14	13	13	13	9	9	7	9	11	15	13	6	2	6	6	10.7	22.3
Dir	244	252	250	257	260	253	249	249	253	285	298	294	319	300	293	314	306	339	347	1	10	346	308	299	279.9	252.9
5 Spd	9	10	2	8	11	16	12	16	20	15	11	11	8	13	14	20	22	28	24	21	22	13	13	13	13.7	27.8
Dir	274	284	217	213	261	262	251	249	247	253	294	316	357	282	273	267	255	262	264	261	265	262	253	271	264.7	262.0
6 Spd	13	14	15	17	16	14	15	16	18	17	16	16	16	14	13	10	9	4	6	14	18	15	13	10	10.1	17.7
Dir	261	255	257	265	261	253	225	224	228	242	235	223	234	223	237	229	301	218	303	329	330	345	351	360	259.7	330.2
7 Spd	9	12	15	15	11	12	15	16	14	13	11	10	11	12	11	12	14	13	14	12	10	9	7	4	10.9	15.6
Dir	5	354	356	7	13	22	21	23	25	23	31	359	358	345	341	342	13	27	50	58	52	63	53	24	17.4	23.3
8 Spd	4	5	3	4	4	5	4	3	5	7	8	3	6	4	3	2	2	3	8	15	14	10	7	4	0.7	15.3
Dir	13	31	16	19	40	48	56	151	89	109	106	72	68	40	357	347	347	311	242	250	257	268	264	159	337.4	249.6
9 Spd	2	2	2	2	3	5	6	6	3	8	9	10	10	12	15	16	16	15	13	11	7	10	4	5	6.2	16.3
Dir	347	358	320	294	16	32	45	45	91	55	74	75	64	65	53	49	43	47	55	40	76	167	209	251	55.1	49.1
10 Spd	7	5	5	4	3	1	3	6	5	0	6	7	9	8	11	5	9	8	8	8	6	2	2	4	2.4	11.0
Dir	239	243	228	265	247	11	140	170	146	31	42	52	16	72	162	121	131	143	107	64	62	46	154	167	117.3	162.4
11 Spd	3	7	6	7	6	7	10	9	11	11	16	15	12	13	12	11	13	11	13	10	7	6	7	6	8.9	15.5
Dir	219	253	245	204	203	203	186	183	177	171	175	167	172	190	189	167	175	182	174	161	166	177	171	236	183.4	175.3
12 Spd	6	7	8	9	8	8	8	12	20	17	17	24	24	17	14	12	12	12	12	9	6	10	8	8	10.2	24.0
Dir	239	200	220	209	221	210	211	219	225	236	223	234	236	240	232	222	180	170	133	117	149	176	177	265	213.9	236.4
13 Spd	19	21	11	4	5	14	19	17	17	9	13	14	14	15	13	17	20	23	23	15	16	15	12	11	11.8	23.0
Dir	317	317	291	204	229	238	251	253	259	202	176	193	187	198	170	226	228	252	268	251	238	247	235	265	241.9	251.9
14 Spd	12	13	15	19	20	23	26	26	34	31	26	24	25	27	30	29	28	25	25	22	15	12	10	12	21.9	33.9
Dir	264	260	248	246	251	251	247	252	249	253	250	253	257	234	239	242	243	262	265	251	236	249	266	256	250.1	249.4
15 Spd	12	14	18	15	8	8	11	15	12	9	9	9	18	9	7	10	6	8	7	11	9	8	8	7	6.5	18.2
Dir	254	257	255	236	204	187	204	228	224	199	209	238	331	353	267	299	351	310	306	276	301	342	4	2	265.8	254.7
16 Spd	7	4	4	1	2	1	4	6	5	5	4	3	6	4	6	6	7	3	7	7	4	5	4	6	3.5	6.8
Dir	359	3	21	281	267	329	17	51	107	141	72	35	66	52	35	39	65	109	83	74	43	25	6	17	47.7	74.2
17 Spd	6	6	5	3	4	5	4	4	4	6	6	8	6	4	5	6	5	6	6	6	4	5	9	11	2.3	11.1
Dir	17	19	352	337	289	275	114	124	109	125	71	35	16	23	39	57	336	13	59	81	98	263	275	277	19.1	276.9
18 Spd	11	11	5	9	10	10	7	9	12	13	15	15	14	14	17	11	6	9	11	10	6	7	10	9	8.5	17.1
Dir	270	265	206	222	201	218	216	210	223	209	230	231	233	227	263	280	255	326	302	308	302	278	275	321	250.0	262.5
19 Spd	3	3	2	5	8	3	6	7	7	10	10	6	9	18	17	19	18	19	21	15	9	9	8	8	7.5	20.6
Dir	36	24	67	240	271	162	177	172	169	216	234	232	227	232	240	241	231	242	243	266	262	282	347	3	241.6	242.6
20 Spd	6	4	4	2	6	6	4	2	6	3	6	6	5	4	3	7	6	7	8	9	6	5	4	5	3.0	9.4
Dir	337	294	356	16	5	360	30	205	245	55	52	85	90	338	137	91	285	47	52	83	67	37	16	6	35.2	83.3
21 Spd	4	3	5	1	11	8	9	10	4	6	6	4	8	11	12	13	12	13	13	9	7	13	16	17	4.5	17.4
Dir	315	347	14	297	350	22	28	55	75	109	177	21	6	1	2	29	39	34	35	50	147	218	263	291	11.6	291.5
22 Spd	1	2	2	4	3	2	4	6	5	6	7	8	6	6	6	2	15	14	13	9	8	9	11	4	4.0	14.8
Dir	306	57	291	295	252	213	204	178	188	101	126	129	116	138	144	332	59	50	84	70	103	70	95	119	98.0	58.5

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Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	2	3	3	7	7	8	8	7	10	12	13	10	11	13	10	9	11	8	10	11	15	8	5	8	7.5	15.3
Dir	105	128	188	234	240	212	213	187	190	167	169	171	148	165	224	210	245	238	229	224	193	224	203	186	198.8	193.2
24 Spd	12	9	6	6	6	8	7	7	9	15	12	15	13	13	14	20	19	21	24	18	18	17	10	7	10.7	24.1
Dir	179	161	173	188	192	192	189	181	170	232	234	210	230	236	244	217	177	211	261	255	247	257	300	241	222.0	260.7
25 Spd	13	18	16	16	18	20	14	17	23	23	23	25	25	28	31	31	31	28	30	29	27	25	24	19	22.8	31.3
Dir	245	256	254	250	249	254	254	254	257	248	248	260	254	252	254	265	259	249	250	246	243	241	243	242	251.4	258.9
26 Spd	16	17	17	18	19	19	18	22	27	32	25	24	25	27	27	26	25	26	27	26	20	10	11	13	21.4	31.8
Dir	251	256	246	253	251	248	252	253	260	264	264	268	260	248	240	240	258	252	248	246	243	240	239	260	252.3	264.3
27 Spd	13	13	13	13	11	9	7	10	12	13	14	20	19	17	16	13	21	15	17	20	23	15	16	12	12.3	22.6
Dir	261	266	265	256	246	189	154	170	181	195	217	237	234	239	256	213	188	188	219	253	185	202	186	152	217.1	184.9
28 Spd	10	7	5	6	6	11	11	15	20	22	20	23	21	20	17	13	11	8	6	3	3	5	7	5	9.3	22.8
Dir	226	206	233	202	223	223	231	232	248	243	232	233	235	237	238	237	240	186	232	34	35	18	56	55	233.4	232.7
29 Spd	6	3	4	7	4	11	5	10	18	15	10	12	11	10	10	13	18	16	18	19	10	3	11	12	7.8	19.2
Dir	35	334	341	225	217	239	233	209	250	274	259	245	243	262	294	336	303	291	298	303	88	8	290	253	276.5	302.9
30 Spd	26	27	17	11	9	13	12	11	12	10	18	26	26	26	26	31	30	31	38	34	36	31	28	28	22.5	38.1
Dir	260	260	260	240	224	229	211	189	193	228	246	246	248	241	236	250	250	240	238	248	258	247	234	230	242.4	237.9
Spd	5.1	5.6	5.5	6.1	6.1	6.7	6.1	7.3	9.0	7.9	7.4	8.1	6.9	8.2	9.0	8.4	7.7	6.7	7.0	6.2	5.1	5.1	4.5	4.7	Diurnal Average	
Dir	267.3	267.1	260.4	249.2	249.4	239.1	230.4	223.5	228.5	229.6	226.8	233.6	243.6	236.9	240.1	245.6	244.0	249.3	255.2	260.4	236.7	246.3	252.6	259.6		
Spd	25.9	27.0	21.3	19.4	21.3	23.6	27.1	31.2	33.9	35.8	38.9	40.7	40.1	36.9	37.2	37.2	34.5	33.2	38.1	33.8	36.3	31.4	28.1	28.2	Diurnal Maximum	
Dir	260.1	260.2	249.6	245.7	260.0	245.7	258.3	258.8	249.4	260.5	257.3	259.5	257.8	256.2	250.1	248.6	242.8	241.3	237.9	247.5	258.2	247.4	234.1	230.2		

Maximum Speed Value: 41 km/h on Jun 3 12:00
Minimum Speed Value: 0 km/h on Jun 10 10:00
Maximum Daily Speed Average: 24.2 km/h on Jun 3
Minimum Daily Speed Average: 0.7 km/h on Jun 16
Maximum Diurnal Speed Average: 9.0 km/h at hour 15
Minimum Diurnal Speed Average: 4.5 km/h at hour 23

Monthly Average Velocity: 6.54 km/h 243.28 deg
Speed Percentiles: P_1 = 1.5 P_{10} = 3.9 Q_1 = 6.4 Median = 10.7 Q_3 = 15.8 P_{90} = 23.4 P_{99} = 36.7
All monthly, daily, and diurnal averages have been calculated using vector methods

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

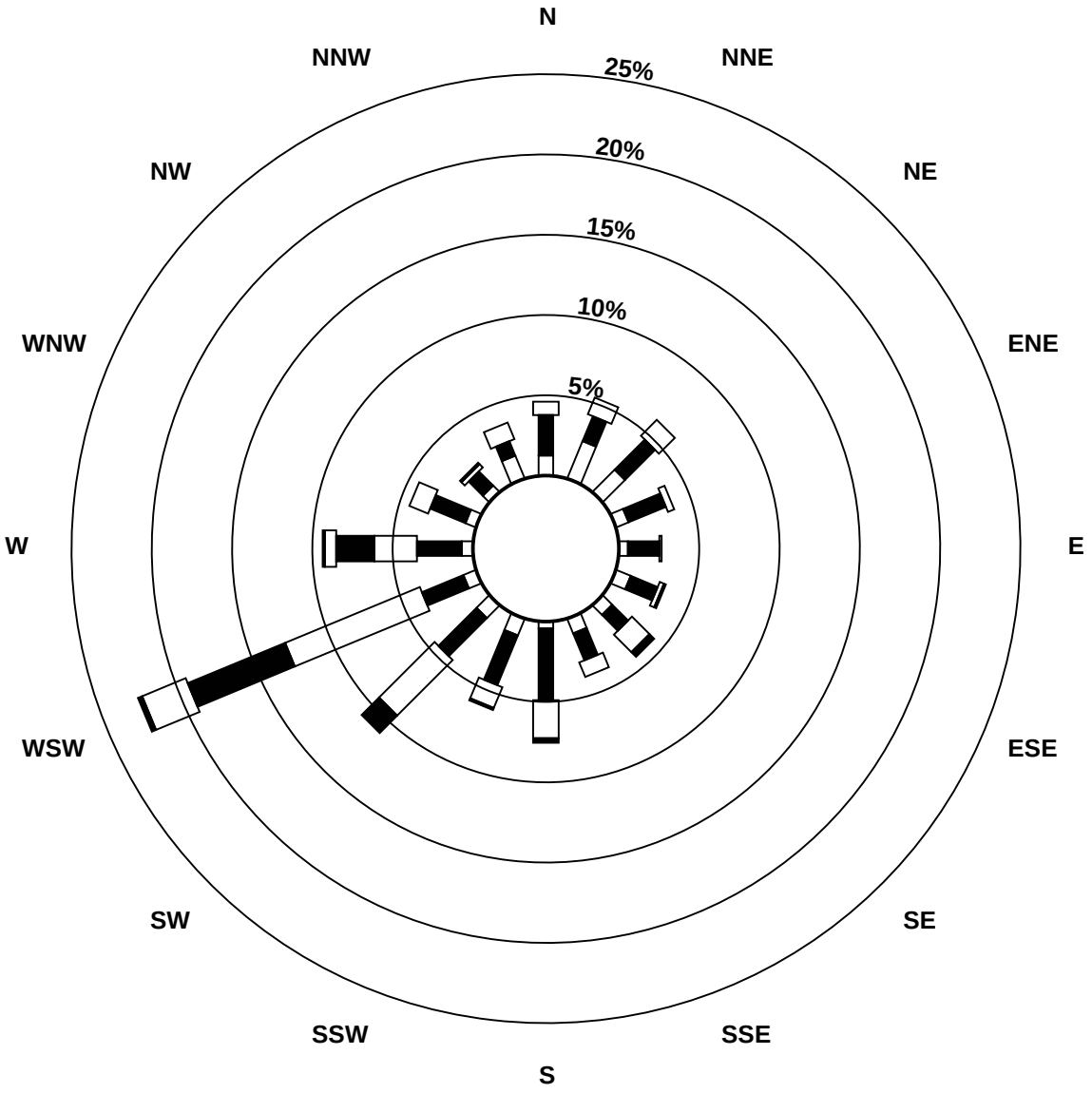
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	27	28	16	0	0	0	71
NorthEast	22	33	19	0	0	0	74
East	8	33	1	0	0	0	42
SouthEast	11	23	16	4	0	0	54
South	8	43	29	4	0	0	84
SouthWest	15	59	62	30	12	1	179
West	8	27	63	47	18	3	166
NorthWest	13	22	12	3	0	0	50
Total	112	268	218	88	30	4	720

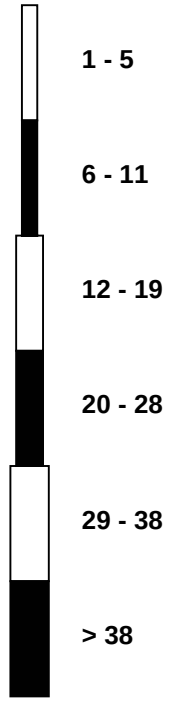
Wind Rose

Wind Speed (WS) (km/h)

Smoky Heights - June 2010



Wind Speed Classes (km/h)



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Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - June 2010

Maximum Speed: 41 km/h on Jun 3 12:00

Maximum Daily Speed Average: 25.8 km/h on Jun 3

Minimum Speed: 2 km/h on Jun 1 04:00

Minimum Daily Speed Average: 5.7 km/h on Jun 16

Maximum Diurnal Speed Average: 16.3 km/h at hour 19

Minimum Diurnal Speed Average: 8.9 km/h at hour 4

Monthly Average Speed: 12.93 km/h

Percentiles: P_1 = 3.0 P_{10} = 4.9 Q_1 = 7.4 Median = 11.3 Q_3 = 16.3 P_{90} = 24.0 P_{99} = 37.5

Hours in Service: 720
Hours of Data: 720
Hours of Missing Data: 0

Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	3	5	3	2	4	8	7	14	18	23	23	26	20	19	16	11	10	8	9	8	9	9	11	17	11.8	25.5
2-Jun	16	12	11	4	6	7	11	10	8	12	12	15	17	18	18	22	12	7	8	14	14	10	8	6	11.6	22.2
3-Jun	6	6	7	9	14	24	27	31	32	36	39	41	41	38	38	38	35	33	31	28	19	16	16	13	25.8	41.0
4-Jun	14	16	21	19	21	22	21	19	17	15	14	14	14	11	11	9	12	12	15	13	6	4	6	6	13.9	22.4
5-Jun	9	10	5	8	11	16	12	16	20	16	12	12	9	14	16	20	22	28	24	21	22	13	13	13	15.1	28.4
6-Jun	13	14	15	17	16	15	15	16	18	18	16	17	17	15	15	11	10	7	8	14	18	15	13	10	14.3	17.8
7-Jun	9	12	15	15	11	12	15	16	14	13	11	11	11	12	13	13	15	14	15	12	10	9	7	4	12.2	15.9
8-Jun	4	5	4	4	4	5	4	4	6	8	8	6	8	7	6	5	5	4	9	15	14	10	7	4	6.6	15.4
9-Jun	3	3	4	4	3	5	6	6	6	9	10	10	11	13	16	17	16	15	14	11	8	10	5	5	8.8	16.9
10-Jun	7	5	5	4	4	3	4	6	6	5	7	9	11	10	12	7	11	10	9	8	6	4	4	4	6.6	12.0
11-Jun	3	7	7	7	6	7	10	10	11	11	16	15	13	14	13	12	13	12	13	10	7	6	8	7	9.9	15.8
12-Jun	6	7	8	9	9	8	8	13	20	17	17	24	24	18	15	13	13	12	12	9	7	11	9	8	12.4	24.4
13-Jun	20	22	11	5	5	14	19	18	18	11	13	16	15	16	15	18	21	24	23	16	16	15	13	11	15.6	23.6
14-Jun	12	13	15	20	20	23	26	27	34	32	27	25	26	28	30	30	28	27	26	22	15	12	10	12	22.5	34.3
15-Jun	12	14	18	16	8	8	11	15	13	10	10	13	20	11	10	11	10	10	8	11	10	8	8	7	11.3	19.6
16-Jun	7	4	5	3	3	2	5	6	6	6	6	6	8	8	8	7	9	5	8	7	4	5	4	6	5.7	8.7
17-Jun	6	6	5	4	5	5	4	4	4	7	8	9	9	8	9	9	8	7	7	6	4	5	9	11	6.6	11.1
18-Jun	12	11	5	10	10	10	7	9	12	13	16	16	15	15	20	12	8	11	12	10	6	8	10	9	11.2	19.5
19-Jun	4	3	4	7	8	6	6	7	7	11	11	9	11	19	18	20	19	19	21	15	9	10	10	9	10.9	21.0
20-Jun	7	5	6	6	7	6	5	4	7	5	7	8	7	6	6	8	8	7	9	10	6	5	4	5	6.4	9.5
21-Jun	6	4	5	4	12	8	9	10	5	7	8	8	9	12	13	13	12	13	13	10	9	14	16	17	9.9	17.4
22-Jun	7	5	4	5	4	3	5	7	5	7	8	9	8	8	9	12	15	14	14	9	8	9	11	6	8.0	15.1
23-Jun	3	3	3	7	8	8	9	8	10	12	13	11	12	16	12	11	12	9	11	11	15	9	5	9	9.4	15.7
24-Jun	12	10	7	6	7	8	7	7	9	16	14	16	14	14	15	21	20	23	24	18	18	18	11	7	13.4	24.4
25-Jun	13	18	16	16	18	20	14	17	23	24	24	25	26	29	32	31	32	28	30	29	27	25	24	19	23.2	31.9
26-Jun	16	17	17	18	19	19	18	22	27	32	26	25	26	28	27	27	26	27	27	26	20	10	11	13	21.9	31.9
27-Jun	13	13	13	13	11	9	8	10	12	14	15	21	20	18	18	14	21	16	18	20	24	15	17	13	15.3	24.0
28-Jun	11	7	6	8	6	11	11	16	21	23	20	23	21	20	17	15	12	9	14	4	4	5	8	6	12.4	23.5
29-Jun	7	4	6	7	6	11	6	11	19	16	12	12	13	11	12	14	18	16	18	19	12	6	11	13	11.7	19.4
30-Jun	26	27	18	11	9	14	12	11	12	11	18	27	26	26	27	31	30	31	38	34	36	32	28	28	23.5	38.4
	9.6	9.7	9.0	8.9	9.2	10.6	10.7	12.3	14.0	14.5	14.7	16.0	16.1	16.1	16.2	16.1	16.2	15.3	16.3	14.7	12.8	10.9	10.5	10.0	Diurnal Average	
	26.0	27.2	21.3	19.5	21.3	23.8	27.2	31.2	34.3	36.0	39.2	41.0	40.6	37.5	37.7	37.6	34.8	33.4	38.4	34.2	36.4	31.5	28.3	28.3	Diurnal Maximum	

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

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - June 2010

Maximum Value: 99.3 deg on Jun 10 10:00

Minimum Value: 2.2 deg on Jun 6 05:00

Percentiles: P_1 = 2.9 P_{10} = 6.0 Q_1 = 9.3 Median = 15.2 Q_3 = 28.2 P_{90} = 49.1 P_{99} = 80.7

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

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	60	23	25	59	70	16	10	9	12	12	12	10	17	18	21	35	31	33	21	19	6	6	17	7	70.0
2-Jun	11	6	11	84	11	14	10	14	18	22	18	23	25	15	18	30	43	13	12	9	10	13	23	19	83.8
3-Jun	18	22	15	28	47	7	4	3	4	5	7	7	9	10	9	8	8	6	4	5	4	4	4	3	46.7
4-Jun	7	3	3	3	3	3	3	9	9	23	21	27	24	47	39	52	39	22	14	11	18	61	14	15	60.9
5-Jun	13	21	76	16	17	6	6	7	5	22	25	33	36	29	22	14	13	14	7	4	4	5	10	4	75.8
6-Jun	8	7	3	3	2	9	6	9	9	12	15	19	19	26	31	27	38	74	39	10	8	8	10	10	74.4
7-Jun	8	13	8	6	10	9	9	10	9	16	17	28	21	19	28	19	15	10	13	11	7	6	8	16	28.5
8-Jun	8	11	28	21	10	11	30	46	32	32	21	70	45	72	79	69	80	48	30	7	6	6	27	25	79.8
9-Jun	56	47	70	61	21	15	11	21	76	20	12	15	22	25	19	15	13	17	19	11	37	9	29	7	76.1
10-Jun	11	18	31	22	47	62	33	13	32	99	45	34	40	42	26	59	48	49	17	19	11	64	76	18	99.3
11-Jun	40	13	32	8	13	12	8	12	10	15	11	15	25	26	24	27	15	26	11	6	5	10	14	21	40.4
12-Jun	19	11	7	7	15	17	13	17	8	8	10	10	11	14	24	23	23	17	11	4	25	17	31	12	31.2
13-Jun	15	10	13	20	40	9	8	8	14	30	8	28	15	19	30	19	20	14	7	10	9	16	22	9	40.1
14-Jun	4	7	9	8	6	3	5	8	9	11	14	16	14	13	12	12	10	20	11	8	7	11	6	6	19.9
15-Jun	8	6	3	24	15	9	15	9	18	23	30	42	27	35	55	25	55	48	25	10	24	11	9	8	55.0
16-Jun	8	19	28	74	33	79	33	21	30	42	53	78	57	62	45	25	43	64	34	18	19	6	16	4	78.7
17-Jun	5	11	12	52	38	29	13	20	29	26	41	38	58	67	80	67	54	43	41	9	18	9	3	2	80.5
18-Jun	8	11	40	22	10	9	10	13	14	15	15	19	23	29	31	38	49	30	22	15	9	29	16	27	49.1
19-Jun	59	49	59	34	13	67	21	13	11	25	21	55	46	21	24	13	19	13	12	9	5	14	33	14	67.2
20-Jun	32	35	55	83	25	23	37	82	34	74	28	49	50	58	67	43	48	17	9	9	15	15	16	15	82.7
21-Jun	51	39	10	78	52	9	10	13	57	41	44	80	34	24	23	20	15	9	9	7	49	20	11	4	79.7
22-Jun	88	74	70	21	69	55	37	16	40	41	30	33	50	67	64	88	12	12	14	13	19	10	11	49	88.3
23-Jun	59	37	22	19	9	13	24	16	15	8	11	21	27	33	34	49	31	39	22	11	6	24	17	17	58.9
24-Jun	10	8	39	8	11	15	6	11	10	25	27	19	24	24	31	23	8	26	8	8	5	17	18	29	39.2
25-Jun	6	5	3	3	2	4	5	5	8	10	13	13	12	13	11	11	11	10	8	6	5	3	3	3	13.3
26-Jun	7	6	3	4	5	4	3	6	7	5	9	15	12	14	11	14	15	12	9	6	4	11	8	4	15.2
27-Jun	4	4	7	9	15	9	26	13	15	25	19	14	19	20	31	24	12	19	20	11	23	10	12	21	31.3
28-Jun	29	17	43	34	18	8	6	10	12	12	14	13	15	18	16	34	28	29	94	46	21	8	22	40	93.9
29-Jun	17	52	62	20	54	11	23	20	15	20	40	21	38	51	34	17	19	12	12	9	48	56	11	25	61.7
30-Jun	6	7	13	14	20	12	9	16	12	22	15	9	9	9	10	6	8	7	7	9	5	6	7	6	22.4
	88.3	74.4	75.8	83.8	70.0	78.7	37.4	81.5	76.1	99.3	53.2	79.7	58.4	72.0	80.5	88.1	79.8	74.4	93.9	45.6	48.9	64.5	76.0	49.1	

PASZA
Beaverlodge Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.3 ppb on Jun 23 15:00 Maximum Daily Average: 0.4 ppb on Jun 20

Minimum Value: 0 ppb on Jun 3 08:00 Minimum Daily Average: 0.0 ppb on Jun 14
Maximum Diurnal Average: 0.2 ppb at hour 10 Minimum Diurnal Average: 0.1 ppb at hour 23
Monthly Average: 0.17 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.3$ $P_{99} = 0.8$

Hours in Service:	720
Hours of Data:	640
Hours of Missing Data:	80
Hours of Calibration:	32
Percent Operational Time:	93.3

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-Jun	D	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
2-Jun	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
3-Jun	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
4-Jun	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
5-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	1.0
6-Jun	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-Jun	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
8-Jun	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
9-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
10-Jun	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
11-Jun	0	0	0	0	A	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
12-Jun	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-Jun	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-Jun	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
15-Jun	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-Jun	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
17-Jun	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-Jun	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-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
20-Jun	0	0	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	0.4	1.3
21-Jun	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	D	D	D	D	D	D	D	D	--	0.8
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	0	1	1	1	1	1	0	0	0	0	0	0	--	1.3
24-Jun	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
25-Jun	0	0	0	0	A	0	0	0	0	D	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
26-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
27-Jun	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
28-Jun	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
29-Jun	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
30-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	D	0.0	0.2
	0.1	0.2	0.2	0.2	--	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	Diurnal Average	
	0.4	0.5	0.3	0.4	--	0.6	0.7	0.8	0.8	0.7	1.1	1.3	0.7	1.1	1.3	0.8	0.9	0.7	1.0	0.5	0.4	0.4	0.4	0.4	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

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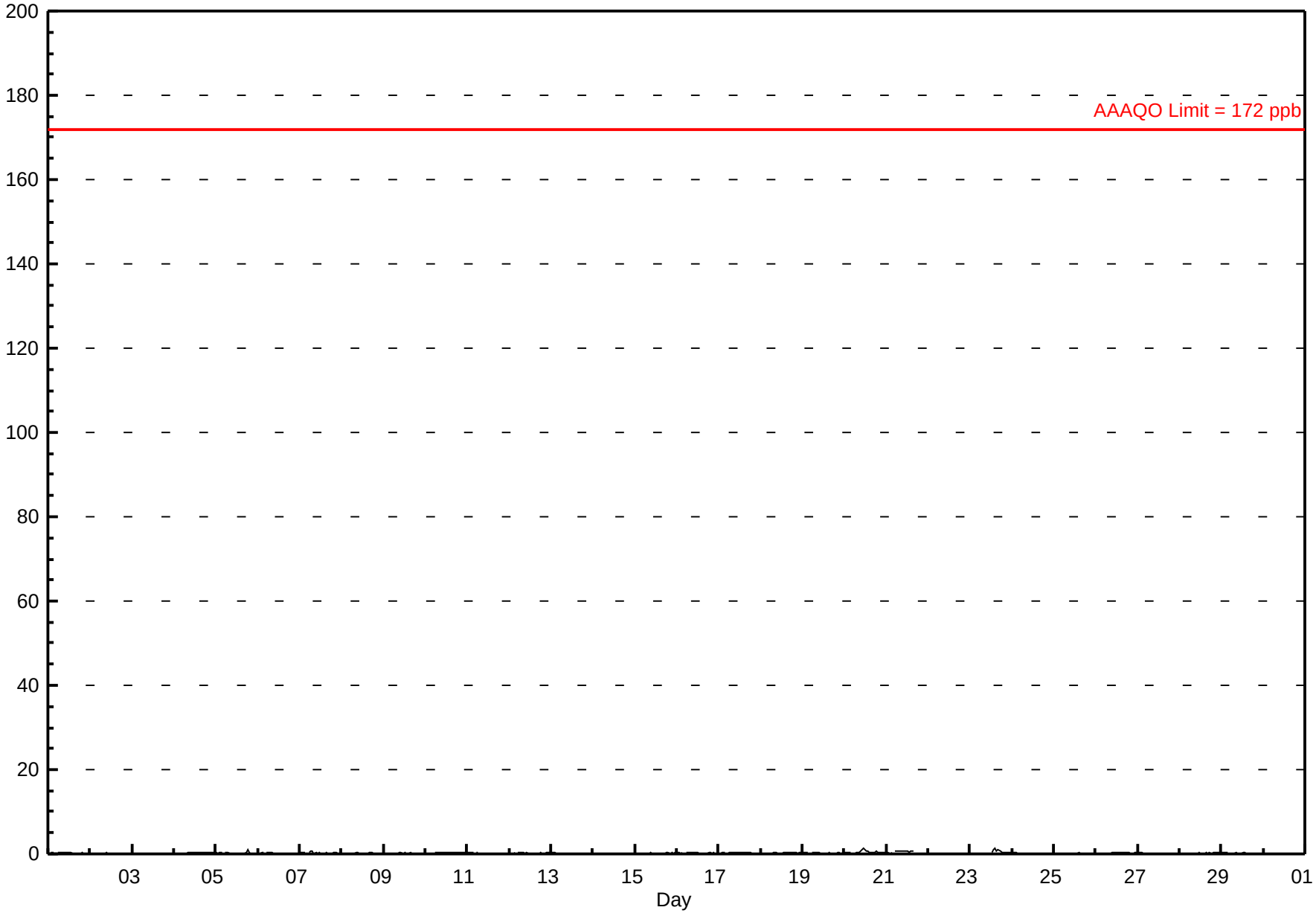
Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2010



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Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2010

Maximum Value: 1.8 ppb on Jun 20 12:00

Maximum Daily Average: 0.7 ppb on Jun 20

Minimum Value: 0 ppb on Jun 11 12:00

Minimum Daily Average: 0.2 ppb on Jun 14

Maximum Diurnal Average: 0.4 ppb at hour 16

Minimum Diurnal Average: 0.3 ppb at hour 21

Monthly Average: 0.31 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 1.2$

Hours in Service:	720
Hours of Data:	640
Hours of Missing Data:	80
Hours of Calibration:	32
Percent Operational Time:	93.3

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-Jun	D	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
2-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.9
3-Jun	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
4-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.3	0.6
5-Jun	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.4	1.3
6-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
7-Jun	0	0	0	0	A	1	1	1	0	0	0	0	1	0	0	2	0	0	0	1	1	1	0	0	0.5	1.6
8-Jun	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
9-Jun	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
10-Jun	0	0	0	0	A	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	1	1	0.4	0.6
11-Jun	1	1	1	0	A	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
12-Jun	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
13-Jun	0	1	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
14-Jun	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	0.2
15-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.9
16-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
17-Jun	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
18-Jun	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
19-Jun	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
20-Jun	0	0	0	0	A	0	0	1	1	1	1	2	1	1	1	1	0	1	1	1	1	0	1	1	0.7	1.8
21-Jun	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	D	D	D	D	D	D	D	D	--	1.0
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	0	1	2	1	1	1	0	0	0	0	0	0	--	1.7
24-Jun	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
25-Jun	0	0	0	0	A	0	0	0	0	D	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
26-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
27-Jun	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
28-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.3	0.7
29-Jun	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
30-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	D	0.2	0.3
	0.3	0.3	0.3	0.3	--	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	0.6	0.6	0.7	0.6	--	0.8	0.9	1.0	1.0	1.1	1.5	1.8	1.1	1.5	1.7	1.6	1.0	1.0	1.3	1.0	0.6	0.9	0.6	0.7	Diurnal Maximum	

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

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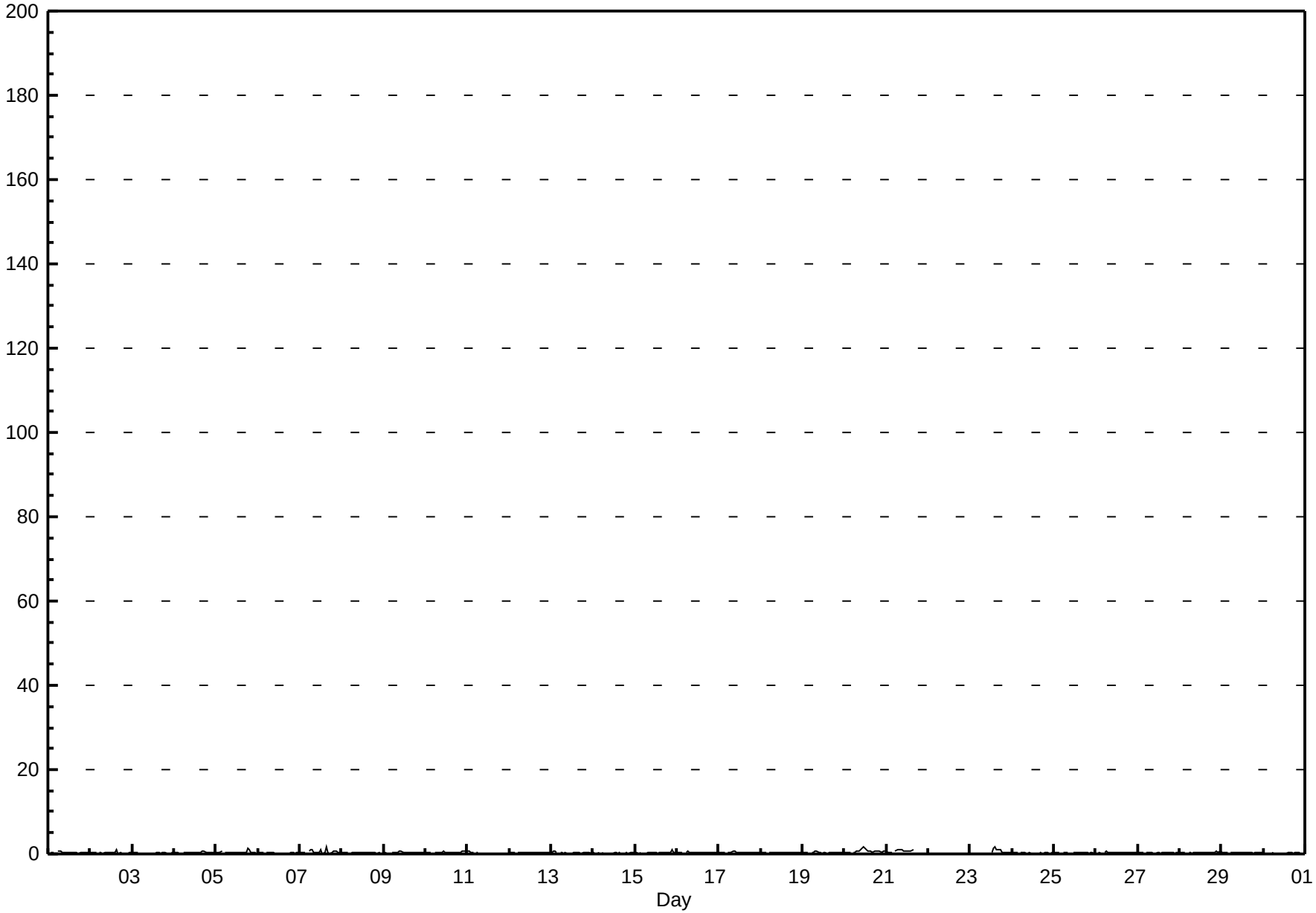
Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

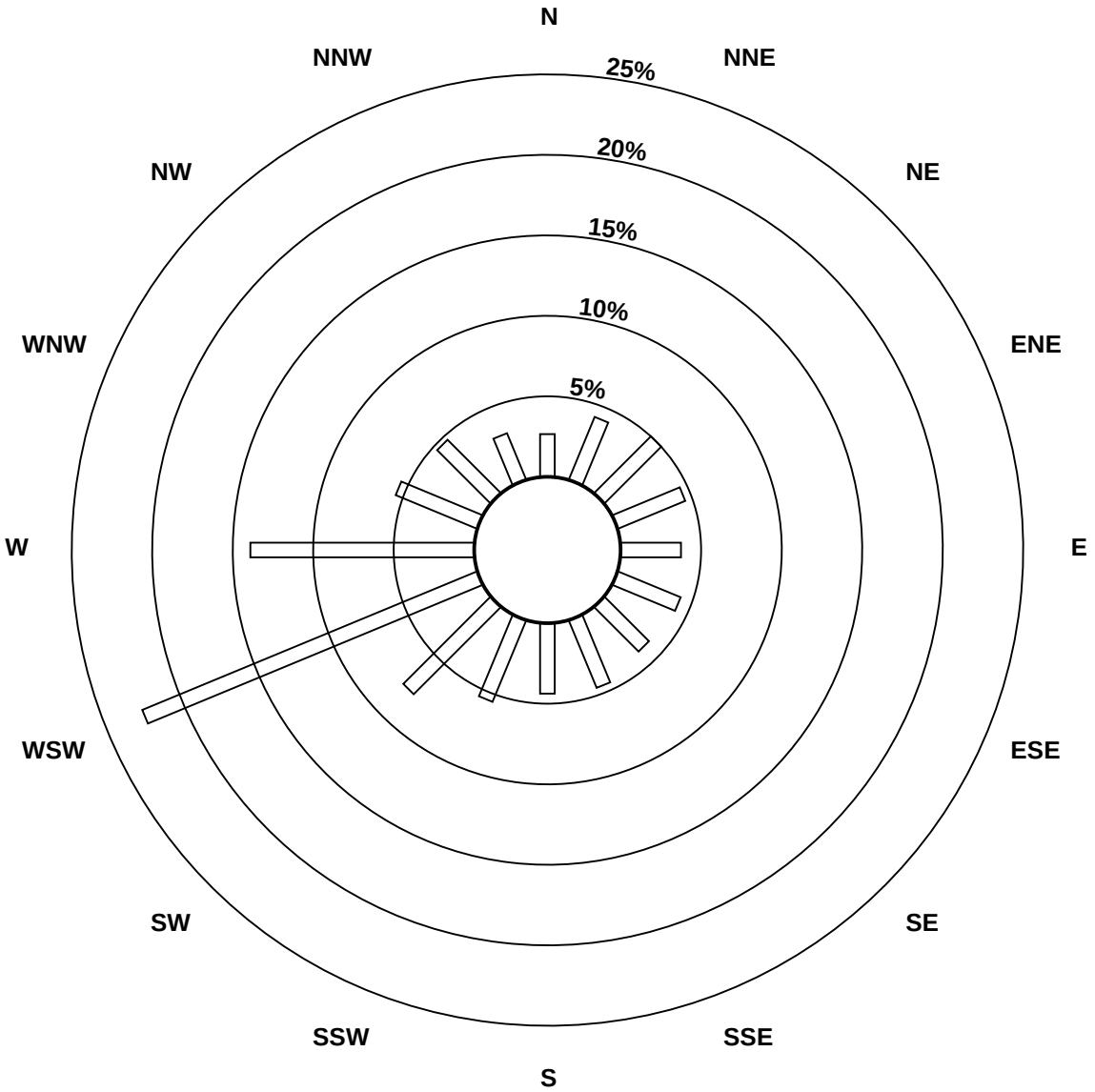
Beaverlodge - June 2010



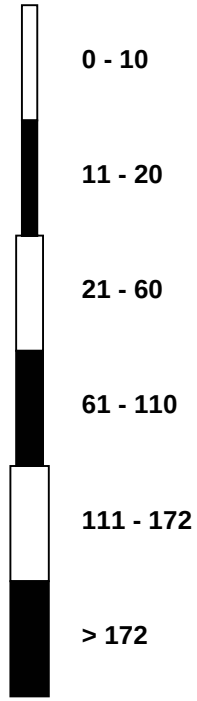
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.3 ppb on Jun 17 07:00 Maximum Daily Average: 3.2 ppb on Jun 17

Minimum Value: 0 ppb on Jun 18 14:00 Minimum Daily Average: 0.6 ppb on Jun 14
Maximum Diurnal Average: 4.5 ppb at hour 6 Minimum Diurnal Average: 0.6 ppb at hour 15
Monthly Average: 1.68 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 1.1 $Q_3 = 2.3$ $P_{90} = 3.9$ $P_{99} = 6.7$

Hours in Service:	720
Hours of Data:	637
Hours of Missing Data:	83
Hours of Calibration:	35
Percent Operational Time:	93.3

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-Jun	D	2	2	2	A	4	4	3	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2	3	1.7	4.0
2-Jun	4	3	3	3	A	6	4	3	3	3	2	1	1	1	1	1	1	0	0	1	1	2	2	3	2.3	5.9
3-Jun	2	2	2	1	A	2	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0.8	2.4
4-Jun	1	1	1	1	A	3	2	1	1	1	0	0	0	0	0	0	0	0	0	1	4	4	2	2	1.1	3.8
5-Jun	3	3	3	2	A	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1.2	3.3
6-Jun	1	2	2	2	A	4	2	2	2	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1.1	3.9
7-Jun	4	7	4	8	A	5	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2.2	7.6
8-Jun	3	2	2	2	A	3	2	2	4	4	2	1	1	1	2	1	2	1	1	2	2	4	2	2	2.2	4.2
9-Jun	3	2	2	3	A	4	9	4	3	3	3	2	2	1	1	1	1	1	1	1	1	2	2	1	2.1	8.6
10-Jun	1	2	3	4	A	4	9	7	4	2	1	1	1	1	1	1	1	1	1	1	2	2	2	1	2.3	8.8
11-Jun	1	2	2	3	A	6	5	C	C	C	C	C	C	C	1	1	1	1	1	2	5	2	2	2	--	6.3
12-Jun	2	2	3	4	A	4	5	4	2	1	1	0	1	0	0	0	1	1	1	2	3	5	5	3	2.2	5.2
13-Jun	1	1	1	1	A	2	1	1	2	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.7	1.8
14-Jun	0	0	1	1	A	2	1	1	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	1	0.6	2.2
15-Jun	1	1	2	2	A	5	4	2	2	1	0	0	1	0	1	0	1	1	1	1	1	1	2	3	1.3	5.4
16-Jun	2	3	3	3	A	9	6	5	4	3	2	1	1	1	1	1	1	1	1	1	2	2	2	2	2.4	9.4
17-Jun	2	2	3	3	A	7	11	9	7	6	3	2	1	1	1	1	1	1	1	1	3	3	2	2	3.2	11.3
18-Jun	2	2	2	3	A	4	4	3	2	1	1	0	2	0	1	1	1	1	1	1	1	2	2	3	1.7	4.1
19-Jun	5	3	3	3	A	5	4	3	2	1	1	0	0	0	0	0	0	0	1	1	1	3	2	1	1.8	5.2
20-Jun	1	1	2	2	A	4	3	3	4	2	1	1	1	1	1	1	0	1	1	1	2	2	3	4	1.8	4.3
21-Jun	4	5	7	7	A	6	5	4	3	2	2	2	1	1	1	2	D	D	D	D	D	D	D	D	--	6.9
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	1	1	1	1	1	1	2	3	3	3	3	2	--	3.2
24-Jun	3	6	5	5	A	7	5	3	2	1	0	0	0	0	0	1	2	1	1	1	1	1	2	1	2.1	7.2
25-Jun	1	1	2	2	A	5	3	2	2	D	D	0	0	0	0	0	0	0	0	0	0	1	1	1	1.0	4.8
26-Jun	1	1	1	2	A	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.8	3.2
27-Jun	1	1	2	2	A	5	4	2	1	0	0	0	0	0	0	0	0	1	1	2	1	1	3	4	1.4	5.1
28-Jun	4	5	4	4	A	5	3	1	1	0	0	0	0	0	0	1	0	0	1	1	2	2	1	1	1.6	5.2
29-Jun	1	1	1	2	A	5	3	2	2	1	0	0	0	1	1	0	1	0	0	1	1	1	2	1	1.1	4.7
30-Jun	1	1	1	2	A	5	3	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	D	1.1	4.8
	2.1	2.3	2.5	2.7	--	4.5	3.9	2.7	2.1	1.5	1.0	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	1.0	1.5	1.8	1.8	1.9	Diurnal Average	
	5.2	6.9	6.5	7.6	--	9.4	11.3	9.0	7.2	5.7	3.3	1.9	1.8	1.4	1.9	1.6	2.1	1.1	1.7	3.2	4.9	4.8	5.2	4.5	Diurnal Maximum	

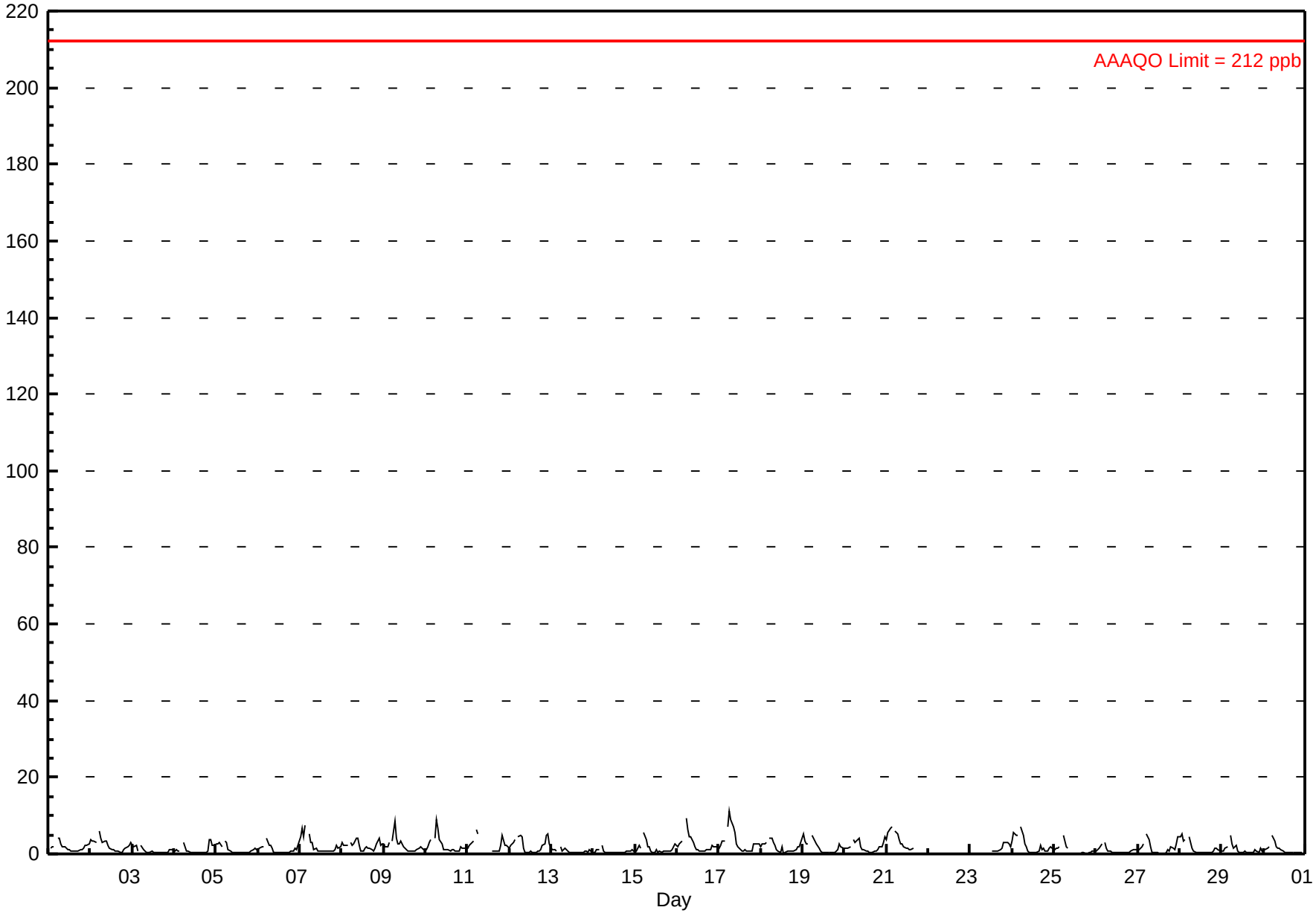
C - Calibration D - DAS Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2010



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Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2010

Maximum Value: 39.0 ppb on Jun 18 13:00

Maximum Daily Average: 5.5 ppb on Jun 7

Minimum Value: 0 ppb on Jun 25 12:00

Minimum Daily Average: 1.5 ppb on Jun 13

Maximum Diurnal Average: 7.8 ppb at hour 6

Minimum Diurnal Average: 1.2 ppb at hour 15

Monthly Average: 3.10 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.7$ $Q_1 = 1.1$ Median = 2.0 $Q_3 = 4.0$ $P_{90} = 6.5$ $P_{99} = 15.3$

Hours in Service:	720
Hours of Data:	637
Hours of Missing Data:	83
Hours of Calibration:	35
Percent Operational Time:	93.3

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-Jun	D	2	2	2	A	6	5	4	3	3	2	1	1	1	1	1	1	1	3	2	6	4	3	4	2.7	6.0
2-Jun	7	4	4	6	A	13	6	5	5	4	4	2	2	3	2	1	1	1	1	2	2	6	3	4	3.8	12.6
3-Jun	4	3	5	1	A	5	1	1	1	1	1	4	5	1	1	1	1	1	1	1	1	3	3	2	2.1	5.4
4-Jun	2	2	1	1	A	6	3	2	1	1	1	0	1	1	0	1	1	1	1	2	6	8	4	3	2.1	8.1
5-Jun	5	4	5	3	A	6	5	4	1	1	1	1	0	1	1	1	1	1	1	1	2	3	2	3	2.3	6.5
6-Jun	2	2	2	3	A	6	3	3	3	1	0	0	0	1	0	0	0	0	0	1	1	2	1	3	1.7	6.1
7-Jun	8	13	6	11	A	12	3	9	11	24	1	1	2	2	1	1	1	1	1	2	3	9	2	3	5.5	24.0
8-Jun	5	4	3	3	A	6	3	3	9	7	3	1	1	2	2	2	2	1	1	3	4	6	4	5	3.5	8.6
9-Jun	3	4	3	6	A	6	15	6	3	3	6	4	4	2	1	1	1	1	1	4	6	4	3	1	3.8	14.8
10-Jun	3	4	7	7	A	7	14	11	5	4	2	2	11	18	1	1	1	2	1	1	3	2	3	2	4.9	18.4
11-Jun	2	5	3	12	A	8	8	C	C	C	C	C	C	C	3	1	1	1	2	5	7	4	4	2	--	11.7
12-Jun	2	4	4	6	A	6	8	6	3	1	1	1	1	1	1	1	1	1	3	4	4	6	9	5	3.5	9.2
13-Jun	2	2	2	1	A	4	1	2	3	2	1	1	1	1	1	1	1	2	1	1	1	2	2	1	1.5	4.1
14-Jun	1	1	6	2	A	6	1	1	1	1	0	1	1	2	1	3	1	1	2	3	2	1	2	1	1.7	5.9
15-Jun	1	2	3	2	A	7	6	4	3	1	1	1	17	1	2	2	2	2	1	1	1	2	3	4	2.9	16.9
16-Jun	3	3	4	6	A	16	8	5	6	4	3	1	1	1	3	1	1	1	1	1	6	4	2	2	3.7	15.7
17-Jun	3	3	4	4	A	11	15	11	10	7	5	3	2	1	1	1	1	2	1	1	5	8	4	5	4.7	14.8
18-Jun	2	3	3	4	A	7	5	4	3	2	1	1	39	1	1	2	1	1	1	1	2	3	3	5	4.2	39.0
19-Jun	9	6	4	4	A	8	5	5	3	2	1	1	1	0	1	1	1	1	1	2	2	4	9	3	3.1	8.6
20-Jun	2	2	2	3	A	6	4	4	5	3	1	2	1	1	1	1	1	1	2	1	6	5	5	10	3.0	10.4
21-Jun	16	14	11	9	A	11	7	5	4	4	2	2	2	2	2	2	D	D	D	D	D	D	D	D	--	16.0
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	1	1	1	1	2	3	3	6	5	5	4	3	--	5.6
24-Jun	4	7	6	7	A	10	7	4	3	1	1	1	1	1	1	1	4	2	2	2	1	2	3	3	3.2	9.8
25-Jun	2	2	3	3	A	7	5	3	2	D	D	0	0	0	0	1	1	1	0	1	1	1	2	1	1.6	6.5
26-Jun	1	2	2	3	A	6	2	1	1	1	1	0	1	1	0	1	1	1	1	1	2	3	2	3	1.6	5.9
27-Jun	2	2	3	3	A	8	5	3	1	1	0	0	0	0	0	0	1	3	1	4	3	2	5	7	2.4	8.0
28-Jun	5	12	4	4	A	10	6	3	1	1	1	1	1	1	2	6	1	1	1	2	4	3	4	1	3.3	11.8
29-Jun	1	1	3	3	A	9	5	2	5	3	2	1	1	13	1	1	1	1	1	3	2	1	3	2	2.8	12.7
30-Jun	2	2	2	2	A	7	5	4	3	5	2	2	1	1	1	1	2	1	1	1	1	1	1	D	2.0	6.9
	3.7	4.1	3.8	4.3	--	7.8	5.8	4.2	3.7	3.3	1.7	1.2	3.5	2.2	1.2	1.3	1.2	1.3	1.3	2.1	3.1	3.8	3.4	3.2	Diurnal Average	
	16.0	14.0	11.3	11.7	--	15.7	14.8	11.3	10.6	24.0	5.7	3.9	39.0	18.4	3.3	6.5	3.9	3.0	3.4	5.6	7.3	8.6	9.2	10.4	Diurnal Maximum	

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

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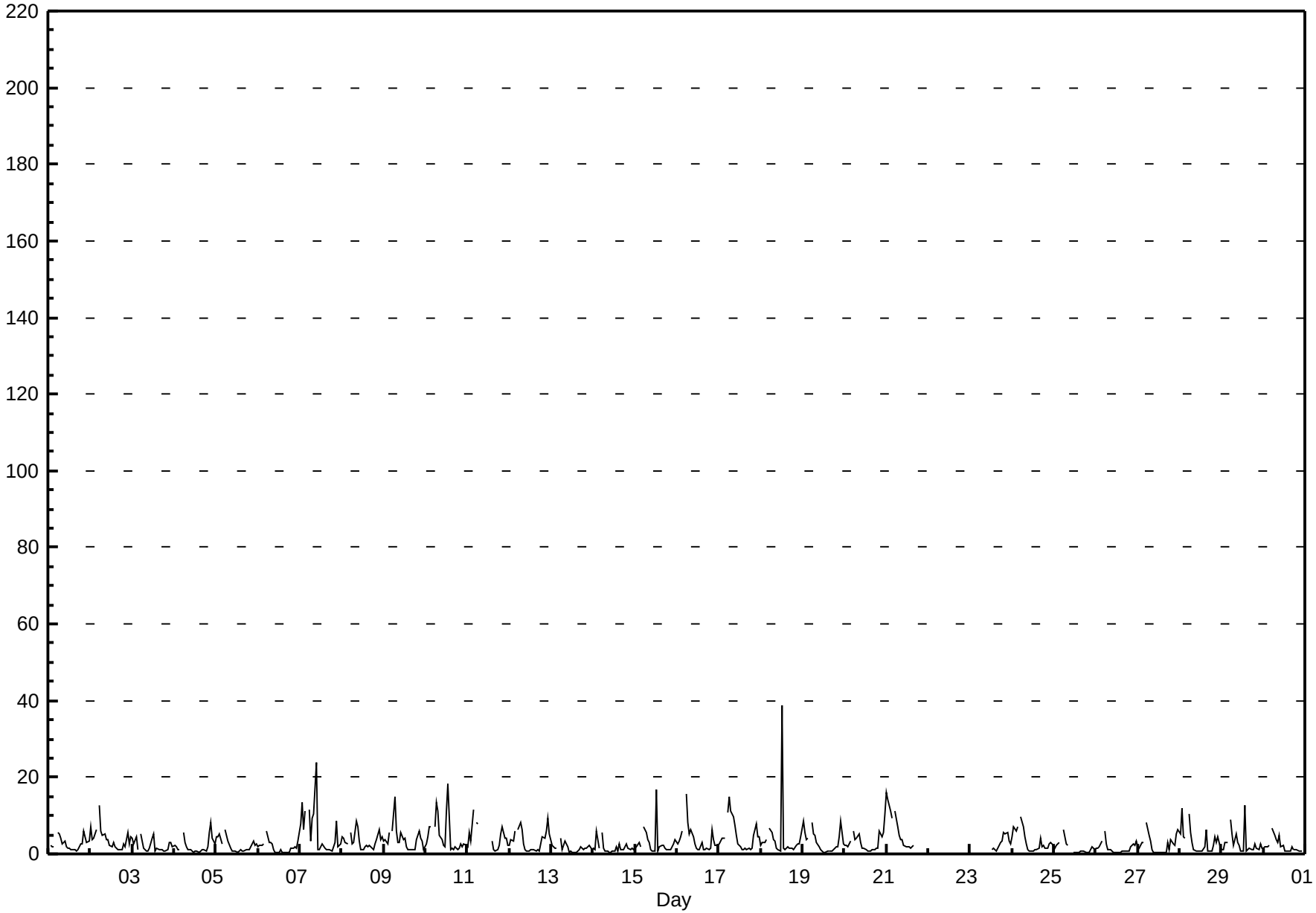
Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

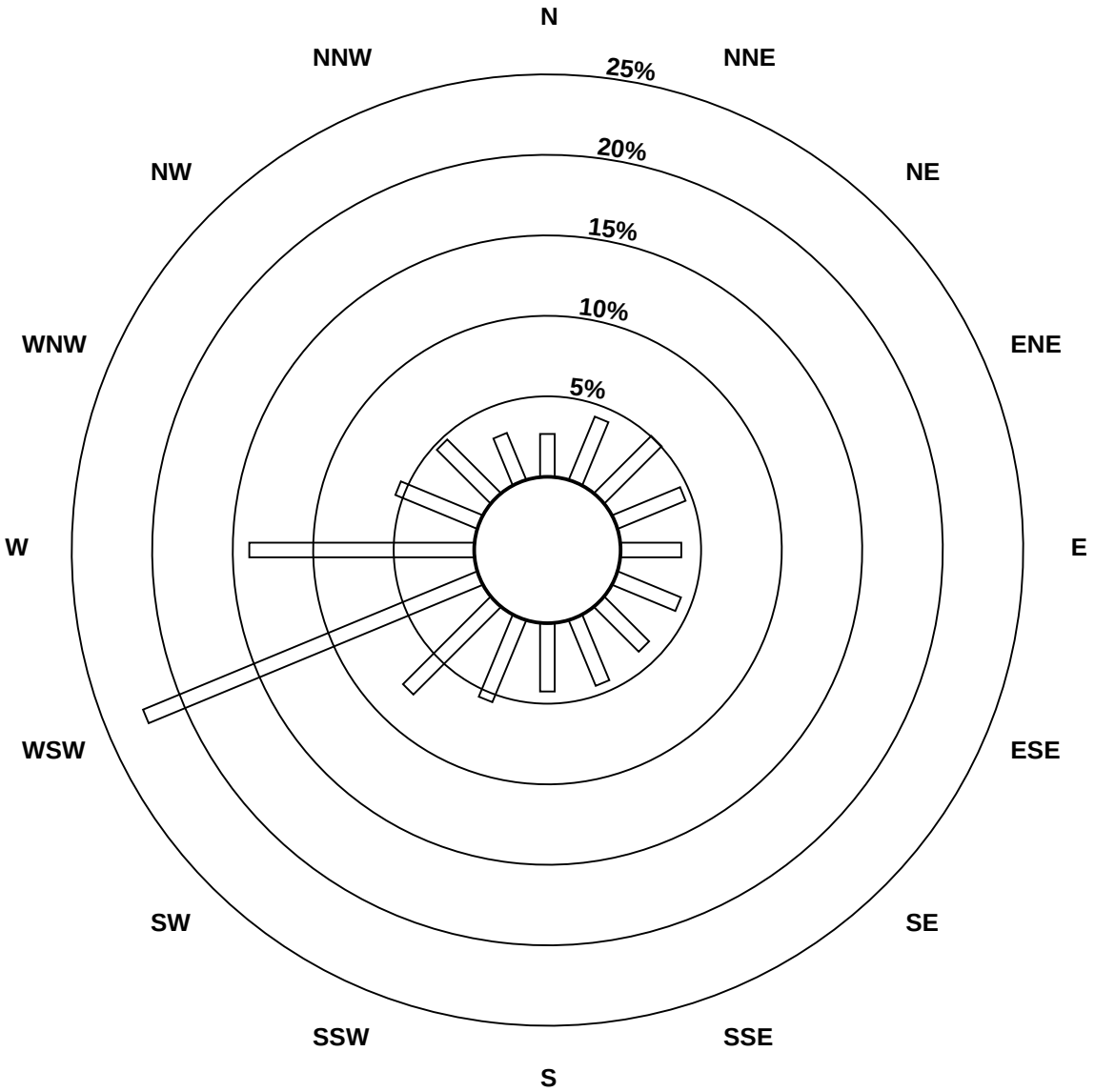
Beaverlodge - June 2010



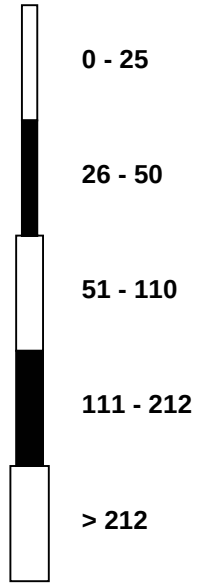
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14.9 ppb on Jun 17 07:00 Maximum Daily Average: 1.6 ppb on Jun 17

Minimum Value: 0 ppb on Jun 1 02:00 Minimum Daily Average: 0.1 ppb on Jun 13
Maximum Diurnal Average: 2.3 ppb at hour 7 Minimum Diurnal Average: 0.0 ppb at hour 3
Monthly Average: 0.34 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.8$ $P_{99} = 4.6$

Hours in Service:	720
Hours of Data:	637
Hours of Missing Data:	83
Hours of Calibration:	35
Percent Operational Time:	93.3

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-Jun	D	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
2-Jun	0	0	0	0	A	1	2	3	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.0
3-Jun	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
4-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
5-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
6-Jun	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
7-Jun	0	0	0	0	A	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
8-Jun	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
9-Jun	0	0	0	0	A	0	13	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	13.4
10-Jun	0	0	0	0	A	1	9	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	8.6
11-Jun	0	0	0	0	A	1	2	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	--	1.9
12-Jun	0	0	0	0	A	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
13-Jun	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
14-Jun	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
15-Jun	0	0	0	0	A	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.1
16-Jun	0	0	0	0	A	4	5	4	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	5.0
17-Jun	0	0	0	0	A	1	15	11	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	14.9
18-Jun	0	0	0	0	A	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.1
19-Jun	0	0	0	0	A	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
20-Jun	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.4
21-Jun	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	D	D	D	D	D	D	D	D	--	1.2
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	0	0	0	0	0	0	0	0	0	0	0	0	--	0.3
24-Jun	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
25-Jun	0	0	0	0	A	1	1	2	2	D	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
26-Jun	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
27-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
28-Jun	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
29-Jun	0	0	0	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
30-Jun	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	D	0.3	0.9
	0.0	0.0	0.0	0.0	--	0.6	2.3	1.6	1.1	0.7	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	Diurnal Average	
	0.2	0.2	0.1	0.1	--	4.3	14.9	11.0	5.4	3.0	1.6	0.5	0.9	0.6	0.4	0.3	0.5	0.3	0.3	0.3	0.2	0.2	0.1	0.1	Diurnal Maximum	

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

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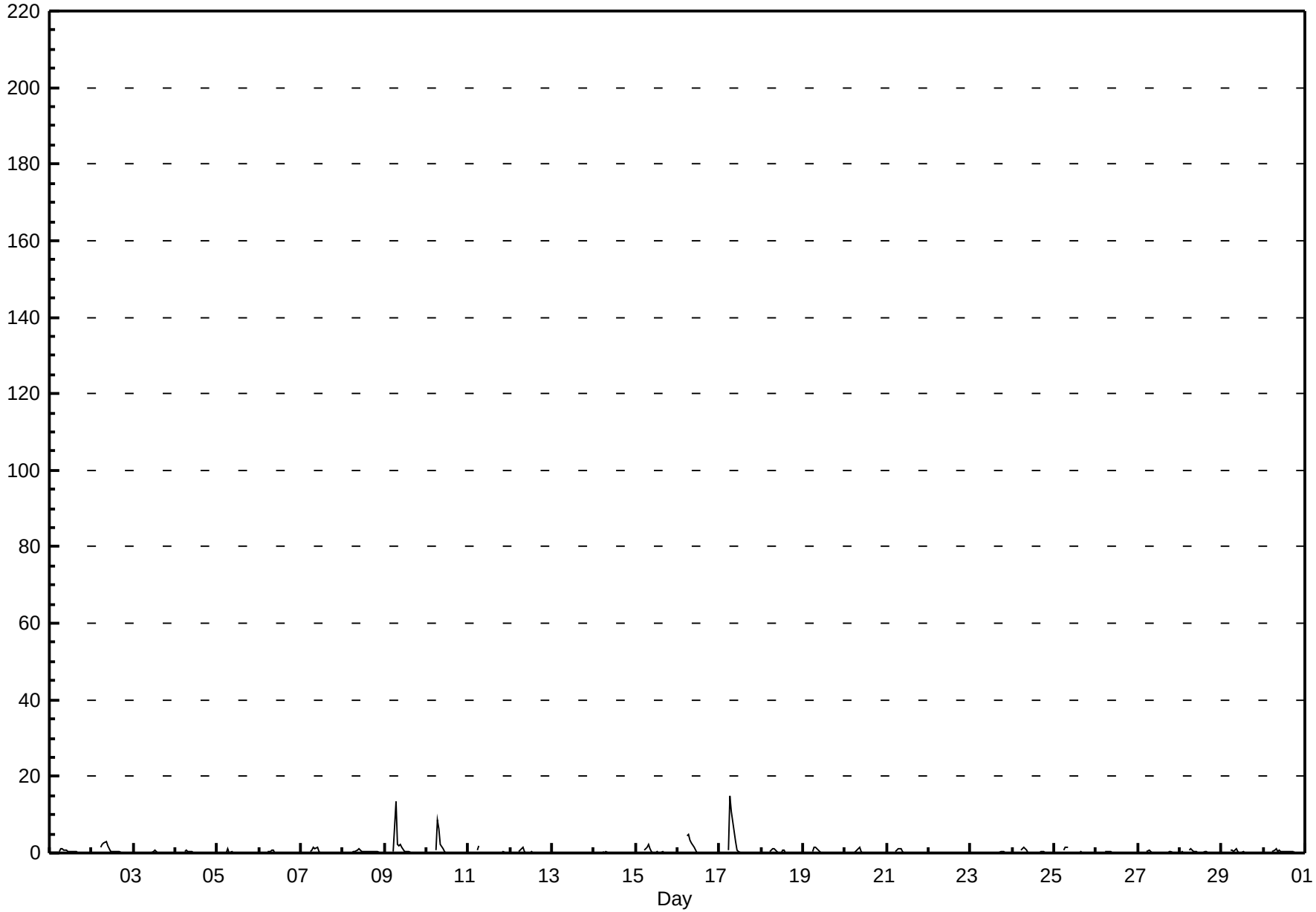
Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2010



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Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2010

Maximum Value: 39.9 ppb on Jun 9 07:00

Maximum Daily Average: 2.9 ppb on Jun 9

Minimum Value: 0 ppb on Jun 1 02:00

Minimum Daily Average: 0.2 ppb on Jun 13

Maximum Diurnal Average: 4.9 ppb at hour 7

Minimum Diurnal Average: 0.2 ppb at hour 24

Monthly Average: 1.13 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.4 $Q_3 = 0.9$ $P_{90} = 2.2$ $P_{99} = 17.7$

Hours in Service:	720
Hours of Data:	637
Hours of Missing Data:	83
Hours of Calibration:	35
Percent Operational Time:	93.3

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-Jun	D	0	0	0	A	0	1	2	1	2	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0.7	2.4
2-Jun	1	0	1	1	A	5	4	5	6	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.8	5.5
3-Jun	1	2	0	1	A	1	1	2	1	1	1	1	6	3	1	1	1	1	1	1	1	1	1	0	1.1	6.2
4-Jun	1	1	1	1	A	1	2	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	0	1.0	3.3
5-Jun	0	0	0	0	A	1	3	2	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0.9	3.0
6-Jun	0	0	0	0	A	2	1	2	2	1	1	0	1	1	1	1	1	0	1	1	1	1	0	0	0.8	2.1
7-Jun	0	1	1	1	A	1	2	9	9	13	1	2	1	3	1	1	1	1	1	1	0	1	1	0	2.2	13.5
8-Jun	1	1	1	1	A	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1.0	2.2
9-Jun	0	0	1	0	A	2	40	5	3	4	3	1	3	1	1	1	0	0	0	1	1	0	0	0	2.9	39.9
10-Jun	0	0	1	0	A	3	19	11	4	2	1	0	3	3	0	0	0	0	0	0	0	0	0	0	2.2	18.7
11-Jun	0	0	0	2	A	1	4	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	--	3.8
12-Jun	0	0	0	0	A	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.5	2.6
13-Jun	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
14-Jun	0	0	0	0	A	1	1	0	0	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0.4	1.0
15-Jun	0	0	0	0	A	2	2	27	2	0	0	0	5	0	1	4	1	1	0	0	0	0	0	0	2.0	27.3
16-Jun	0	0	0	0	A	10	8	5	4	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1.5	9.8
17-Jun	0	0	0	0	A	1	25	18	8	5	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2.7	24.8
18-Jun	0	0	0	0	A	1	2	1	1	0	0	0	20	13	0	0	0	0	0	0	0	0	0	0	1.9	19.8
19-Jun	0	0	0	0	A	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.3
20-Jun	0	0	0	0	A	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0
21-Jun	7	0	0	0	A	1	3	2	20	1	0	0	1	0	0	0	D	D	D	D	D	D	D	D	--	20.2
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	0	0	1	0	0	1	0	1	0	0	0	0	--	1.0
24-Jun	0	0	0	0	A	1	3	2	1	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0.6	2.5
25-Jun	0	0	0	0	A	2	2	2	2	D	D	0	0	0	0	4	0	1	0	0	0	0	0	0	0.8	4.3
26-Jun	0	0	0	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
27-Jun	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0.3	1.1
28-Jun	0	1	0	0	A	2	3	4	0	0	0	0	0	0	5	7	0	0	0	0	0	0	0	0	1.2	7.0
29-Jun	0	0	0	0	A	2	3	1	3	1	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0.8	5.4
30-Jun	0	0	0	0	A	1	2	2	2	5	1	1	1	1	3	0	1	1	0	0	0	0	0	D	0.9	4.7
	0.5	0.3	0.3	0.4	--	1.6	4.9	4.1	3.0	1.9	0.8	0.5	1.9	1.4	0.7	0.9	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.2	Diurnal Average	
	7.0	1.7	1.4	1.6	--	9.8	39.9	27.3	20.2	13.5	3.0	1.5	19.8	13.4	5.2	7.0	1.1	1.2	1.3	0.9	1.1	1.3	1.3	1.0	Diurnal Maximum	

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

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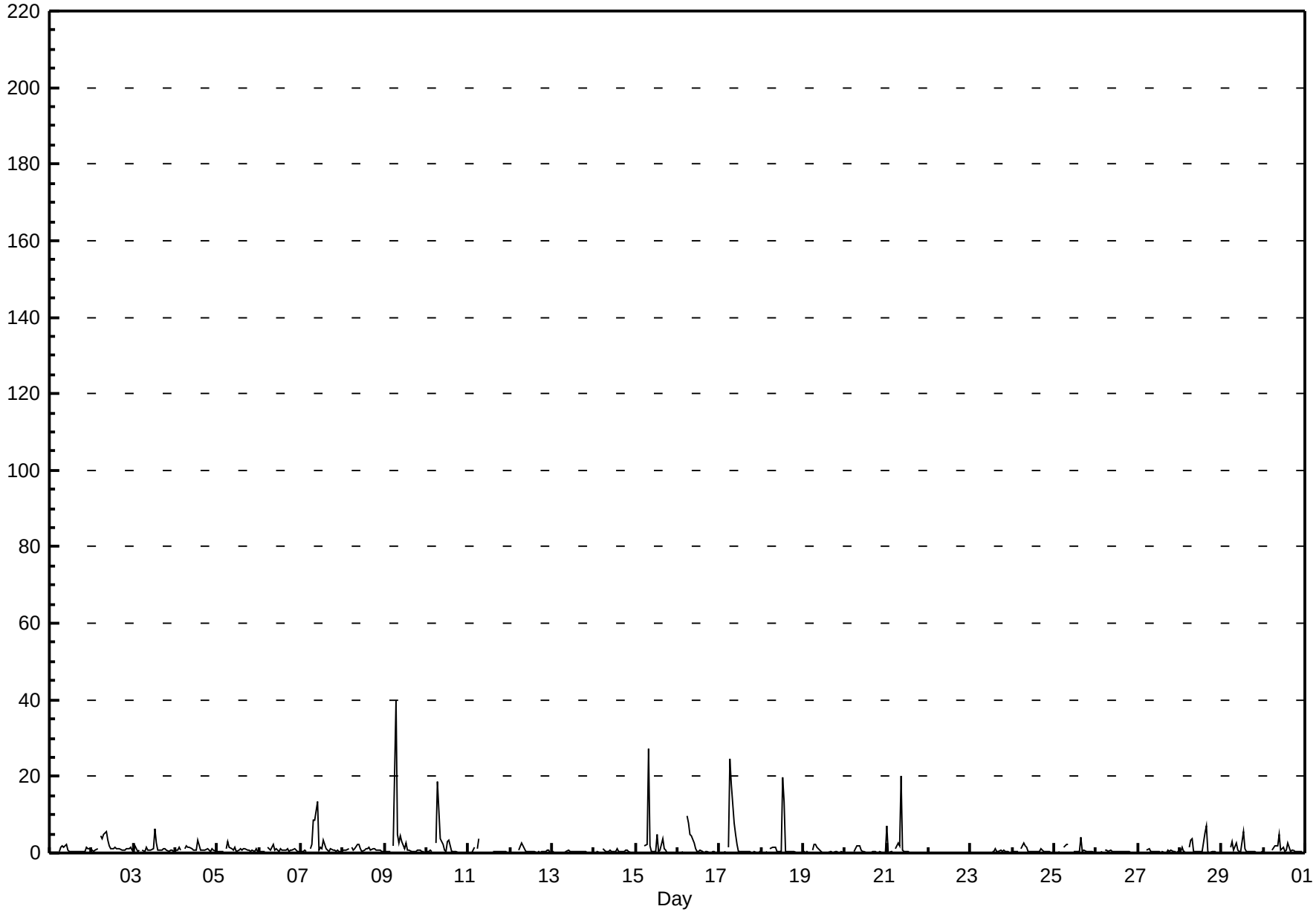
Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2010



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Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 26.4 ppb on Jun 17 07:00 Maximum Daily Average: 4.8 ppb on Jun 17

Minimum Value: 0 ppb on Jun 27 15:00
Maximum Diurnal Average: 6.3 ppb at hour 7
Monthly Average: 2.09 ppb

Minimum Daily Average: 0.7 ppb on Jun 14
Minimum Diurnal Average: 0.7 ppb at hour 15
Percentiles: $P_1 = 0.2$ $P_{10} = 0.5$ $Q_1 = 0.7$ Median = 1.3 $Q_3 = 2.6$ $P_{90} = 4.6$ $P_{99} = 13.1$

Hours in Service:	720
Hours of Data:	637
Hours of Missing Data:	83
Hours of Calibration:	35
Percent Operational Time:	93.3

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-Jun	D	2	2	2	A	4	5	4	3	3	2	2	1	1	1	1	1	1	1	1	2	2	2	3	2.1	5.0
2-Jun	4	3	3	3	A	7	6	6	7	6	3	2	2	2	1	1	1	1	0	1	2	2	2	3	3.0	7.5
3-Jun	3	2	2	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1.0	2.5
4-Jun	1	1	1	1	A	3	3	1	1	1	0	0	0	0	0	0	1	1	1	1	4	4	2	2	1.3	4.1
5-Jun	3	3	3	2	A	4	4	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1	2	1	1.4	4.3
6-Jun	1	2	2	2	A	4	3	3	2	1	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1.3	4.4
7-Jun	4	7	5	8	A	6	4	5	3	3	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2.6	7.7
8-Jun	3	3	2	2	A	3	2	3	5	5	3	1	1	2	2	2	2	1	1	2	3	5	2	3	2.6	5.1
9-Jun	3	2	2	3	A	4	22	6	5	5	5	2	2	1	1	1	1	1	1	1	2	2	2	1	3.3	22.2
10-Jun	1	2	3	4	A	5	18	13	6	4	2	1	1	1	1	1	1	1	1	1	2	2	2	1	3.3	17.6
11-Jun	1	2	3	4	A	7	7	C	C	C	C	C	C	C	1	1	1	1	1	2	5	2	2	2	--	7.3
12-Jun	2	2	3	4	A	5	6	6	2	1	1	1	1	1	1	1	1	1	1	3	3	5	5	3	2.5	6.2
13-Jun	1	1	1	1	A	2	1	1	2	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0.8	1.8
14-Jun	0	0	1	1	A	2	1	1	0	0	0	0	1	1	0	1	0	1	1	1	1	1	1	1	0.7	2.5
15-Jun	1	1	2	2	A	6	5	4	3	1	0	0	1	0	1	1	1	1	1	1	1	1	2	3	1.7	6.3
16-Jun	2	3	3	3	A	14	11	8	7	4	3	1	1	1	1	1	1	1	1	1	2	2	2	2	3.3	13.8
17-Jun	2	2	3	3	A	8	26	20	13	9	4	2	1	1	1	1	1	1	1	1	3	3	3	3	4.8	26.4
18-Jun	2	2	3	3	A	4	5	4	3	2	1	1	3	1	1	1	1	1	1	1	1	2	2	3	2.0	5.1
19-Jun	5	4	3	3	A	5	5	5	4	2	1	0	0	0	0	0	0	0	1	1	1	3	2	2	2.1	5.5
20-Jun	2	1	2	2	A	4	4	4	6	2	1	1	1	1	1	1	1	1	1	1	2	2	3	4	2.0	5.7
21-Jun	4	6	7	7	A	7	6	5	4	3	2	2	2	1	1	2	D	D	D	D	D	D	D	D	--	7.0
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	1	1	1	1	1	1	2	4	3	3	3	2	--	3.5
24-Jun	3	6	5	5	A	8	6	4	3	1	1	1	1	1	1	1	3	2	2	1	1	1	2	2	2.5	7.9
25-Jun	1	1	2	2	A	5	4	3	2	D	D	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	5.3
26-Jun	1	1	1	3	A	3	2	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1.0	3.5
27-Jun	1	1	2	2	A	5	5	2	1	0	0	0	0	0	0	0	0	1	1	2	2	1	3	5	1.6	5.3
28-Jun	4	5	4	4	A	5	4	2	1	1	1	1	1	0	1	1	0	0	1	1	2	2	1	1	1.8	5.4
29-Jun	1	1	1	2	A	5	3	2	3	1	1	0	1	1	1	1	1	0	0	1	1	1	2	1	1.3	5.4
30-Jun	1	1	1	2	A	5	4	3	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	D	1.4	5.1
	2.2	2.4	2.6	2.8	--	5.2	6.3	4.4	3.3	2.3	1.4	0.9	1.0	0.8	0.7	0.8	0.8	0.8	0.8	1.2	1.7	2.0	1.9	2.0	Diurnal Average	
	5.3	7.0	6.7	7.7	--	13.8	26.4	20.2	12.7	8.8	5.0	2.5	2.7	1.8	2.3	1.7	2.6	1.5	2.0	3.5	5.1	5.0	5.4	4.6	Diurnal Maximum	

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

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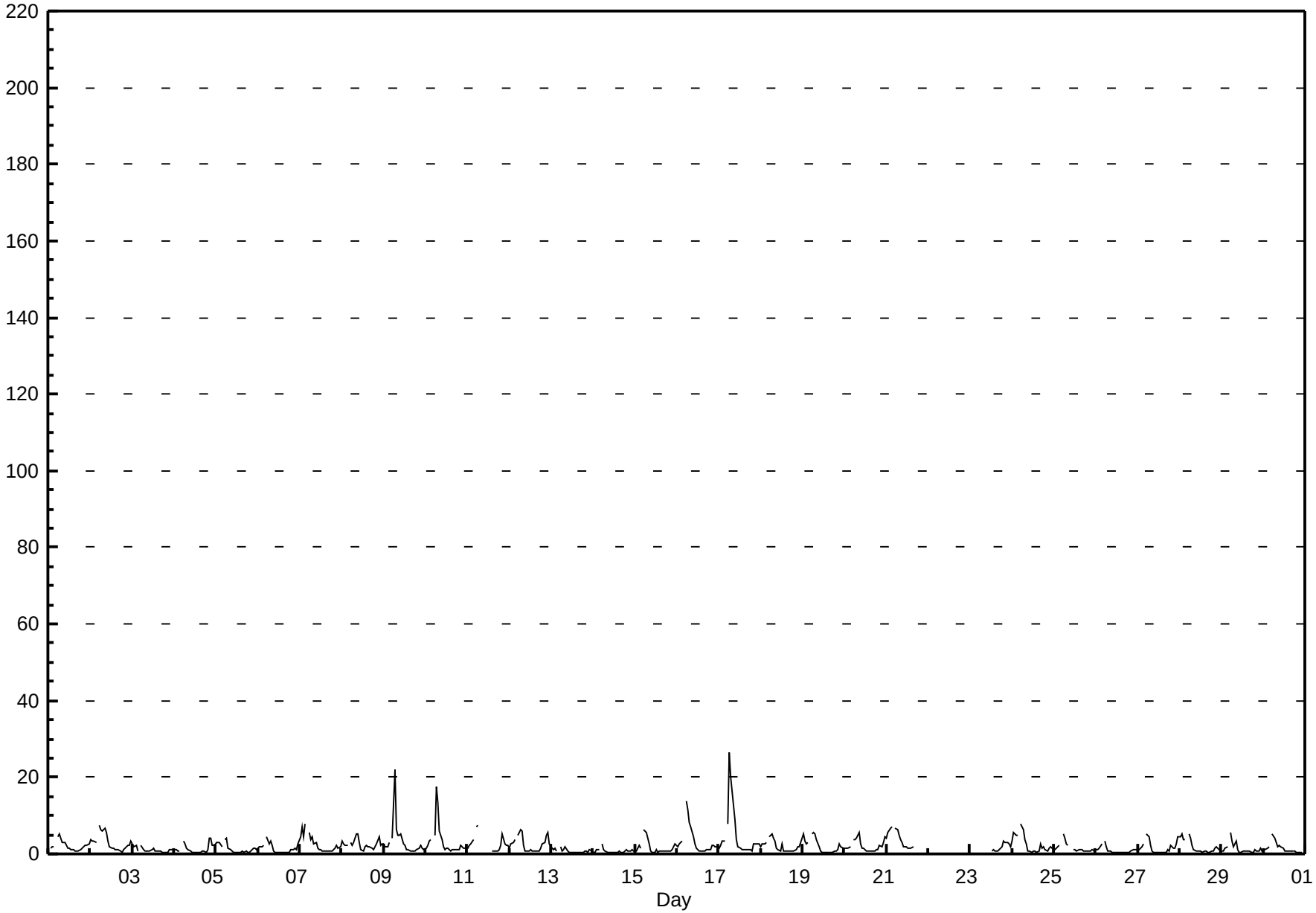
Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2010

Maximum Value: 54.1 ppb on Jun 9 07:00

Maximum Daily Average: 7.4 ppb on Jun 17

Minimum Value: 0 ppb on Jun 6 12:00

Minimum Daily Average: 1.7 ppb on Jun 13

Maximum Diurnal Average: 10.4 ppb at hour 7

Minimum Diurnal Average: 1.6 ppb at hour 15

Monthly Average: 3.91 ppb

Percentiles: $P_1 = 0.5$ $P_{10} = 1.0$ $Q_1 = 1.4$ Median = 2.5 $Q_3 = 4.7$ $P_{90} = 8.0$ $P_{99} = 24.5$

Hours in Service:	720
Hours of Data:	637
Hours of Missing Data:	83
Hours of Calibration:	35
Percent Operational Time:	93.3

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-Jun	D	2	2	2	A	6	7	6	4	5	3	2	2	1	2	1	1	1	3	3	6	5	3	4	3.2	6.8
2-Jun	8	4	4	6	A	17	9	10	11	7	5	3	2	4	2	2	2	1	1	3	2	7	3	5	5.2	17.5
3-Jun	4	3	5	1	A	5	2	1	1	1	2	5	6	1	2	2	2	2	1	1	2	3	3	2	2.5	6.0
4-Jun	3	2	1	1	A	6	4	3	2	2	1	1	1	2	1	1	1	1	1	2	6	9	4	3	2.5	9.2
5-Jun	5	4	5	3	A	7	8	5	2	1	1	1	1	1	2	1	1	2	1	2	2	4	3	3	2.8	7.5
6-Jun	2	3	2	3	A	6	4	5	4	1	1	0	0	1	0	0	0	0	1	2	1	2	2	4	2.0	6.3
7-Jun	8	14	7	11	A	12	4	14	13	27	2	1	3	5	2	1	1	1	1	2	3	9	2	3	6.3	26.7
8-Jun	5	4	3	3	A	6	3	4	11	9	4	2	2	3	3	2	3	2	2	3	4	7	4	5	4.0	10.7
9-Jun	4	4	3	6	A	7	54	10	6	6	9	5	7	3	1	1	1	1	1	4	7	4	3	1	6.4	54.1
10-Jun	3	4	7	7	A	10	32	21	9	6	3	2	14	21	1	2	1	2	1	2	3	2	3	2	7.0	32.4
11-Jun	2	5	4	13	A	9	12	C	C	C	C	C	C	C	3	1	1	1	3	6	8	4	4	2	--	13.5
12-Jun	3	4	4	6	A	7	11	8	4	1	1	1	2	1	1	1	1	1	3	5	4	7	10	5	3.9	10.8
13-Jun	2	2	2	2	A	4	1	2	4	2	1	1	1	1	1	1	1	2	1	2	1	2	2	1	1.7	4.2
14-Jun	2	1	6	2	A	7	2	1	1	1	1	1	1	2	1	3	1	2	3	3	2	1	2	1	2.0	6.7
15-Jun	1	2	3	2	A	9	7	22	5	1	1	1	18	1	2	3	3	2	1	1	1	2	3	4	4.2	22.3
16-Jun	3	4	4	6	A	26	16	10	11	7	4	2	1	2	3	1	1	2	1	2	7	4	2	2	5.2	25.7
17-Jun	3	3	4	4	A	12	39	29	18	12	7	3	2	1	1	2	2	2	1	1	5	8	4	5	7.4	39.1
18-Jun	2	3	3	4	A	7	7	5	5	2	2	1	39	2	1	2	2	2	2	1	2	3	3	5	4.6	39.5
19-Jun	9	6	4	4	A	9	8	7	5	2	2	1	1	1	1	1	1	1	2	2	2	4	9	3	3.6	8.9
20-Jun	2	3	2	3	A	6	5	6	7	4	2	2	1	1	1	1	1	1	2	2	6	5	6	10	3.4	10.4
21-Jun	23	14	12	9	A	12	10	6	5	4	2	2	3	2	2	3	D	D	D	D	D	D	D	D	--	22.8
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	1	2	1	1	2	3	4	6	5	6	4	3	--	6.2
24-Jun	4	7	6	7	A	11	10	6	4	1	1	1	1	1	2	2	5	3	3	2	2	3	3	3	3.8	10.7
25-Jun	2	2	3	3	A	8	6	4	4	D	D	1	1	1	1	2	2	2	1	1	1	2	2	1	2.4	8.0
26-Jun	2	2	2	4	A	6	3	1	2	1	1	1	1	1	1	1	1	1	1	1	2	3	2	4	1.9	6.0
27-Jun	2	2	3	3	A	8	5	4	1	1	1	1	0	1	1	1	1	4	1	5	3	2	5	7	2.6	8.1
28-Jun	5	13	5	4	A	12	9	6	1	1	1	1	1	1	3	11	1	1	1	2	5	3	5	1	4.1	13.1
29-Jun	1	1	3	3	A	10	8	3	8	3	3	1	1	13	1	1	2	1	1	3	2	1	3	2	3.2	12.8
30-Jun	2	2	2	2	A	7	5	5	5	9	3	4	1	1	1	1	3	2	2	1	1	1	1	D	2.8	9.4
	4.1	4.3	4.0	4.5	--	8.9	10.4	7.6	5.6	4.6	2.4	1.7	4.1	2.8	1.6	1.8	1.6	1.7	1.7	2.5	3.4	4.0	3.5	3.3	Diurnal Average	
	22.8	14.2	11.6	13.5	--	25.7	54.1	29.3	17.7	26.7	8.6	4.8	39.5	20.8	3.4	11.4	4.9	3.5	3.8	6.2	7.8	9.2	9.6	10.4	Diurnal Maximum	

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

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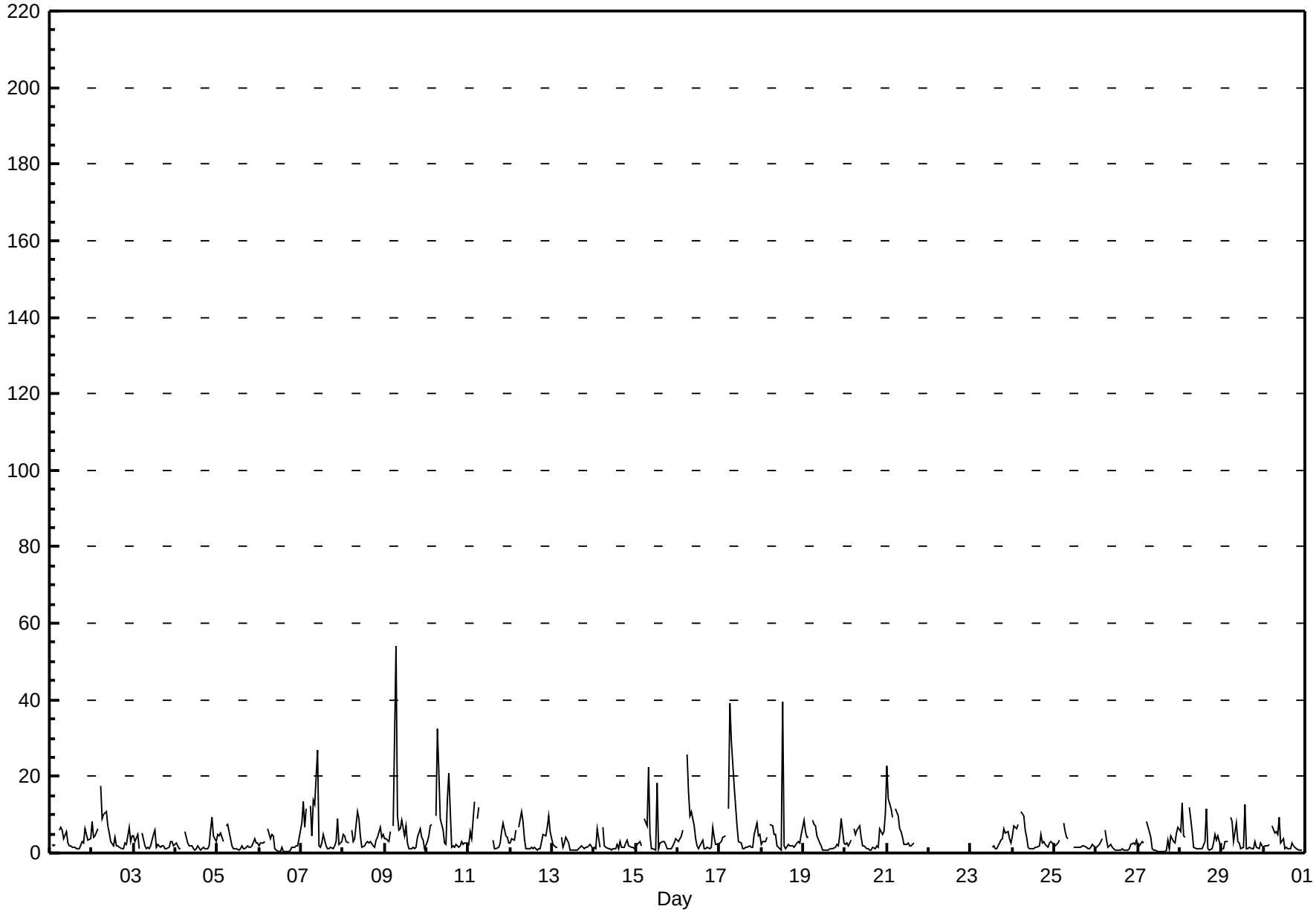
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2010



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Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 50.7 ppb on Jun 17 19:00 Maximum Daily Average: 38.4 ppb on Jun 1

Minimum Value: 6 ppb on Jun 9 07:00 Minimum Daily Average: 22.1 ppb on Jun 25
Maximum Diurnal Average: 39.1 ppb at hour 16 Minimum Diurnal Average: 19.7 ppb at hour 7
Monthly Average: 31.32 ppb Percentiles: P_1 = 11.3 P_{10} = 19.8 Q_1 = 25.1 Median = 31.6 Q_3 = 37.5 P_{90} = 42.7 P_{99} = 49.1

Hours in Service:	720
Hours of Data:	641
Hours of Missing Data:	79
Hours of Calibration:	31
Percent Operational Time:	93.3

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-Jun	D	35	35	34	A	33	31	31	33	34	37	40	42	45	46	48	48	48	47	43	38	37	31	30	38.4	48.1
2-Jun	29	23	21	21	A	13	14	15	19	26	36	44	43	45	45	42	42	43	41	38	36	30	28	27	31.4	44.7
3-Jun	31	30	24	32	A	32	35	35	36	37	37	37	38	38	38	37	35	35	34	34	33	30	29	27	33.6	38.3
4-Jun	27	26	26	26	A	20	23	29	32	33	34	34	35	36	37	38	38	38	38	36	31	28	29	30	31.3	37.8
5-Jun	27	23	23	25	A	21	20	30	32	36	38	39	37	37	37	36	36	35	35	37	34	33	33	32	32.1	38.9
6-Jun	30	29	28	28	A	25	28	27	30	35	39	40	42	44	45	46	48	48	48	40	38	35	36	34	36.7	48.2
7-Jun	29	26	27	21	A	23	23	22	21	22	24	29	33	33	32	33	33	34	36	35	36	26	22	22	27.9	35.7
8-Jun	21	24	28	27	A	27	25	24	23	29	33	38	41	41	40	39	36	34	35	32	29	23	25	29	30.5	41.1
9-Jun	28	31	30	24	A	23	6	14	19	22	25	35	34	38	39	43	45	46	45	42	37	29	29	32	31.2	45.8
10-Jun	33	32	26	23	A	19	11	15	25	31	38	40	42	46	49	48	50	49	48	49	41	40	43	43	36.6	50.0
11-Jun	44	40	35	32	A	23	21	22	24	32	42	C	C	C	42	42	42	42	42	40	33	30	27	28	34.1	43.6
12-Jun	28	25	23	22	A	20	18	19	31	38	38	38	38	33	33	35	38	36	32	29	28	22	19	23	28.9	38.3
13-Jun	20	21	21	22	A	40	39	37	34	34	36	38	39	39	41	43	43	41	41	39	38	42	37	37	35.7	43.1
14-Jun	35	32	28	26	A	24	26	27	29	29	30	32	32	33	34	32	31	30	30	29	28	30	29	27	29.7	34.6
15-Jun	26	26	22	22	A	19	19	21	23	28	29	30	31	32	33	35	36	37	35	34	35	33	27	28	28.8	36.7
16-Jun	31	26	22	24	A	11	10	16	21	28	34	38	39	41	41	43	43	45	44	42	36	36	35	37	32.3	44.9
17-Jun	36	34	31	25	A	17	7	11	18	27	38	43	45	48	51	47	46	49	51	47	41	37	31	31	35.2	50.7
18-Jun	30	29	25	21	A	20	21	24	27	33	37	39	40	42	41	41	42	41	35	36	34	32	29	27	32.5	41.7
19-Jun	22	24	26	24	A	18	17	22	24	30	37	40	42	42	43	44	43	44	46	43	39	39	38	35	33.9	45.6
20-Jun	33	32	33	31	A	30	24	26	30	36	39	44	45	46	48	47	45	45	44	44	39	41	40	34	38.1	48.2
21-Jun	33	29	22	14	A	18	20	25	32	38	42	46	48	49	49	49	D	D	D	D	D	D	D	D	--	48.9
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	32	34	37	39	38	35	34	30	29	30	29	30	--	38.6
24-Jun	27	22	21	17	A	15	15	21	25	28	30	29	29	29	28	28	27	27	24	23	23	20	21	22	24.0	29.9
25-Jun	22	22	21	17	A	17	16	17	19	D	D	27	28	27	28	32	28	25	22	22	22	19	17	16	22.1	31.6
26-Jun	16	15	14	11	A	14	17	19	21	23	23	22	22	22	25	33	37	38	37	35	38	35	34	34	25.4	38.0
27-Jun	33	30	27	24	A	20	19	21	26	29	30	31	29	29	32	34	34	31	32	30	27	33	29	22	28.3	34.1
28-Jun	19	16	18	16	A	16	18	25	28	30	33	34	37	39	40	40	40	41	40	38	34	32	34	34	30.5	40.5
29-Jun	32	32	27	23	A	15	15	19	23	31	32	31	34	34	33	35	35	35	36	33	34	35	29	32	29.8	35.8
30-Jun	28	28	26	20	A	14	13	14	19	19	18	23	26	27	27	26	26	28	29	29	28	27	27	D	23.7	29.1
	28.5	27.1	25.3	23.3	--	21.0	19.7	22.4	25.9	30.3	33.6	35.6	36.6	37.5	38.4	39.1	38.7	38.5	37.9	36.1	33.5	31.5	30.0	29.7	Diurnal Average	
	43.6	40.1	35.3	34.4	--	39.6	39.2	36.6	36.3	37.7	41.7	45.5	47.7	48.9	50.6	48.6	50.0	49.4	50.7	49.2	41.1	41.6	43.0	42.8	Diurnal Maximum	

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

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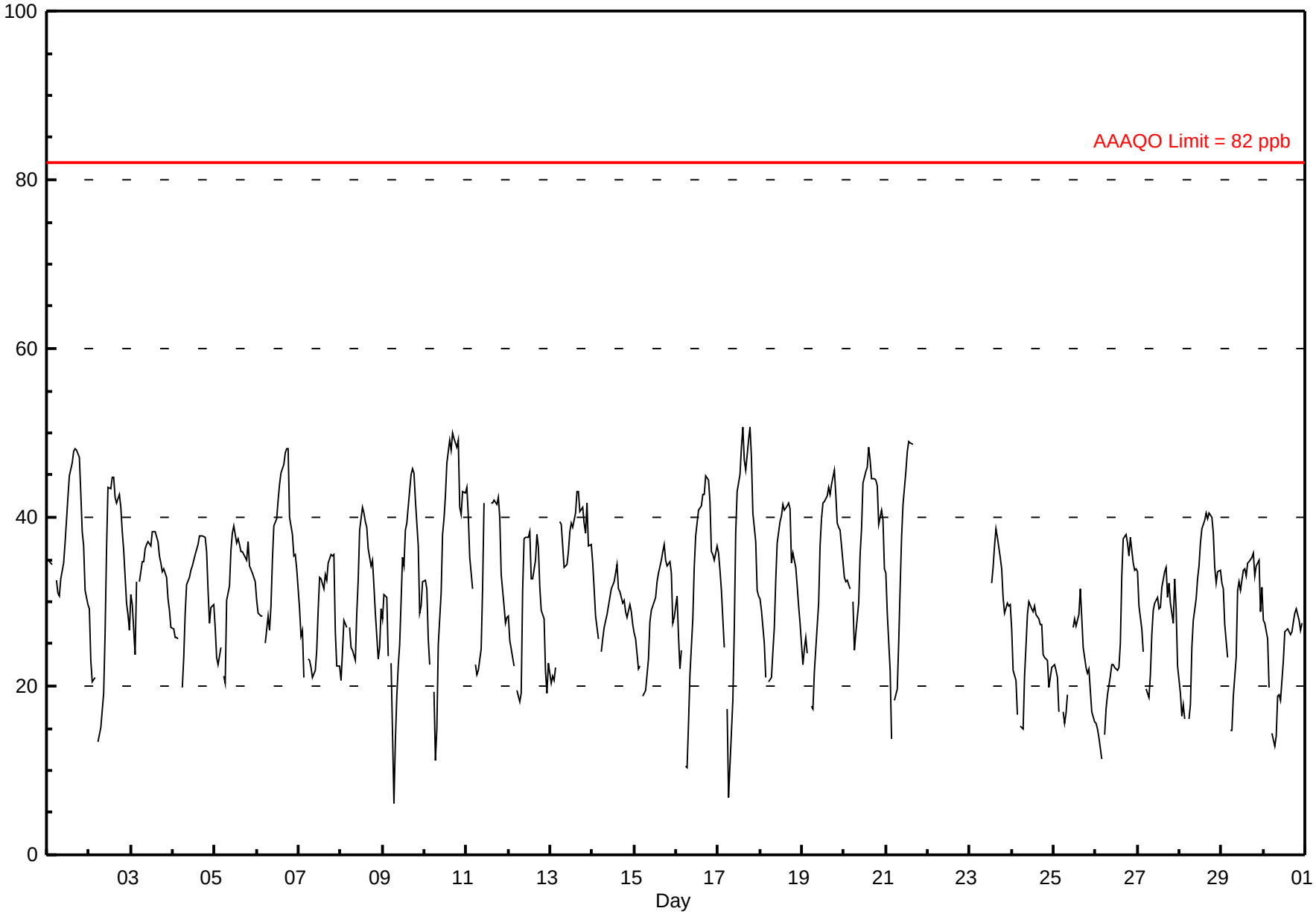
Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - June 2010



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Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - June 2010

Maximum Value: 52.5 ppb on Jun 10 15:00

Maximum Daily Average: 41.3 ppb on Jun 10

Minimum Value: 11 ppb on Jun 9 07:00

Minimum Daily Average: 24.2 ppb on Jun 25

Maximum Diurnal Average: 41.3 ppb at hour 16

Minimum Diurnal Average: 23.4 ppb at hour 7

Monthly Average: 34.20 ppb

Percentiles: P_1 = 16.6 P_{10} = 22.9 Q_1 = 28.1 Median = 34.5 Q_3 = 39.9 P_{90} = 46.0 P_{99} = 51.7

Hours in Service:	720
Hours of Data:	641
Hours of Missing Data:	79
Hours of Calibration:	31
Percent Operational Time:	93.3

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-Jun	D	36	36	35	A	35	33	32	34	38	39	42	46	47	48	49	49	49	50	49	41	38	37	34	40.9	50.3
2-Jun	34	28	25	27	A	20	19	18	23	35	43	46	46	47	47	46	44	45	43	42	38	36	34	33	35.5	46.9
3-Jun	36	34	27	36	A	37	38	37	38	39	38	39	40	40	40	39	37	36	35	35	34	33	30	29	35.9	40.2
4-Jun	28	27	27	27	A	23	26	33	33	35	36	36	36	37	38	39	39	39	39	39	34	33	32	32	33.3	39.4
5-Jun	31	28	25	27	A	24	24	32	34	39	40	41	40	39	39	38	37	38	37	39	37	35	34	33	34.4	41.0
6-Jun	33	31	31	32	A	30	30	28	33	39	41	42	45	46	47	48	49	49	50	49	40	38	37	37	39.2	49.6
7-Jun	33	31	29	26	A	25	25	23	22	24	26	32	34	35	34	35	34	37	38	38	37	37	24	26	30.6	38.1
8-Jun	24	31	30	29	A	30	26	26	28	36	39	41	43	43	42	41	38	38	37	36	33	26	28	33	33.9	42.6
9-Jun	32	34	33	30	A	32	11	19	22	25	27	43	37	41	42	46	47	49	47	46	41	33	33	33	34.9	48.7
10-Jun	35	35	36	32	A	31	22	21	30	36	41	44	48	49	53	51	52	51	51	52	47	42	46	46	41.3	52.5
11-Jun	45	43	40	36	A	25	26	24	28	38	46	C	C	C	44	44	44	43	46	45	37	32	30	31	37.4	46.3
12-Jun	33	27	26	25	A	22	22	26	37	40	39	40	40	37	35	38	40	38	35	33	31	25	26	27	32.2	40.4
13-Jun	22	22	23	24	A	41	41	39	36	37	39	40	40	41	43	45	46	43	43	42	45	44	39	38	37.9	46.1
14-Jun	36	34	30	27	A	26	27	29	30	31	33	33	34	35	36	33	33	31	31	32	30	31	30	28	31.3	36.2
15-Jun	28	28	24	24	A	22	22	22	27	29	32	32	33	34	35	36	38	38	37	38	37	39	29	31	31.1	38.6
16-Jun	32	31	27	30	A	20	13	20	25	31	39	39	41	42	43	44	44	47	46	45	41	37	36	39	35.4	46.6
17-Jun	39	36	33	32	A	29	17	17	23	31	44	46	47	51	52	53	49	52	52	51	43	41	36	36	39.5	52.5
18-Jun	34	33	27	23	A	22	24	26	30	35	39	40	42	43	42	43	43	47	37	37	36	34	34	32	35.0	46.6
19-Jun	31	31	29	27	A	20	21	24	27	34	41	42	43	44	46	47	46	46	47	46	42	41	41	40	37.2	47.1
20-Jun	35	35	34	33	A	32	31	32	35	38	43	46	47	48	50	48	47	47	47	47	41	44	43	42	41.0	50.0
21-Jun	38	36	32	28	A	20	22	29	35	40	44	47	49	50	50	51	D	D	D	D	D	D	D	D	--	50.8
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	35	36	40	40	39	38	38	34	31	33	31	31	--	40.0
24-Jun	31	25	23	20	A	19	20	23	28	31	32	31	31	32	31	30	33	29	28	25	25	22	24	24	26.8	33.2
25-Jun	23	24	24	20	A	22	18	19	21	D	D	29	31	28	31	34	33	27	23	23	23	21	18	17	24.2	33.6
26-Jun	17	17	15	13	A	17	19	21	23	23	23	23	23	24	28	39	40	39	39	38	39	37	35	35	27.3	39.8
27-Jun	35	34	34	28	A	22	22	25	30	31	31	32	32	31	35	35	35	35	37	37	31	38	33	27	31.7	37.5
28-Jun	22	20	20	19	A	21	25	27	30	33	35	37	39	40	42	42	42	42	42	40	36	34	35	36	33.0	42.1
29-Jun	33	33	31	28	A	18	17	22	31	33	35	33	35	35	35	37	36	37	38	35	39	38	39	35	32.8	39.4
30-Jun	30	30	31	22	A	17	14	18	22	21	21	28	28	28	29	27	28	29	31	31	29	28	29	D	25.9	31.2
	31.4	30.5	28.7	27.2	--	25.1	23.4	25.5	29.2	33.4	36.5	37.9	38.7	39.3	40.5	41.3	40.8	40.7	40.1	39.4	36.3	34.6	33.0	32.7	Diurnal Average	
	45.2	43.2	40.2	35.7	--	41.1	40.6	39.1	38.5	40.4	46.3	47.0	49.5	50.5	52.5	52.5	51.8	52.2	52.4	51.8	47.4	43.7	45.6	46.1	Diurnal Maximum	

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

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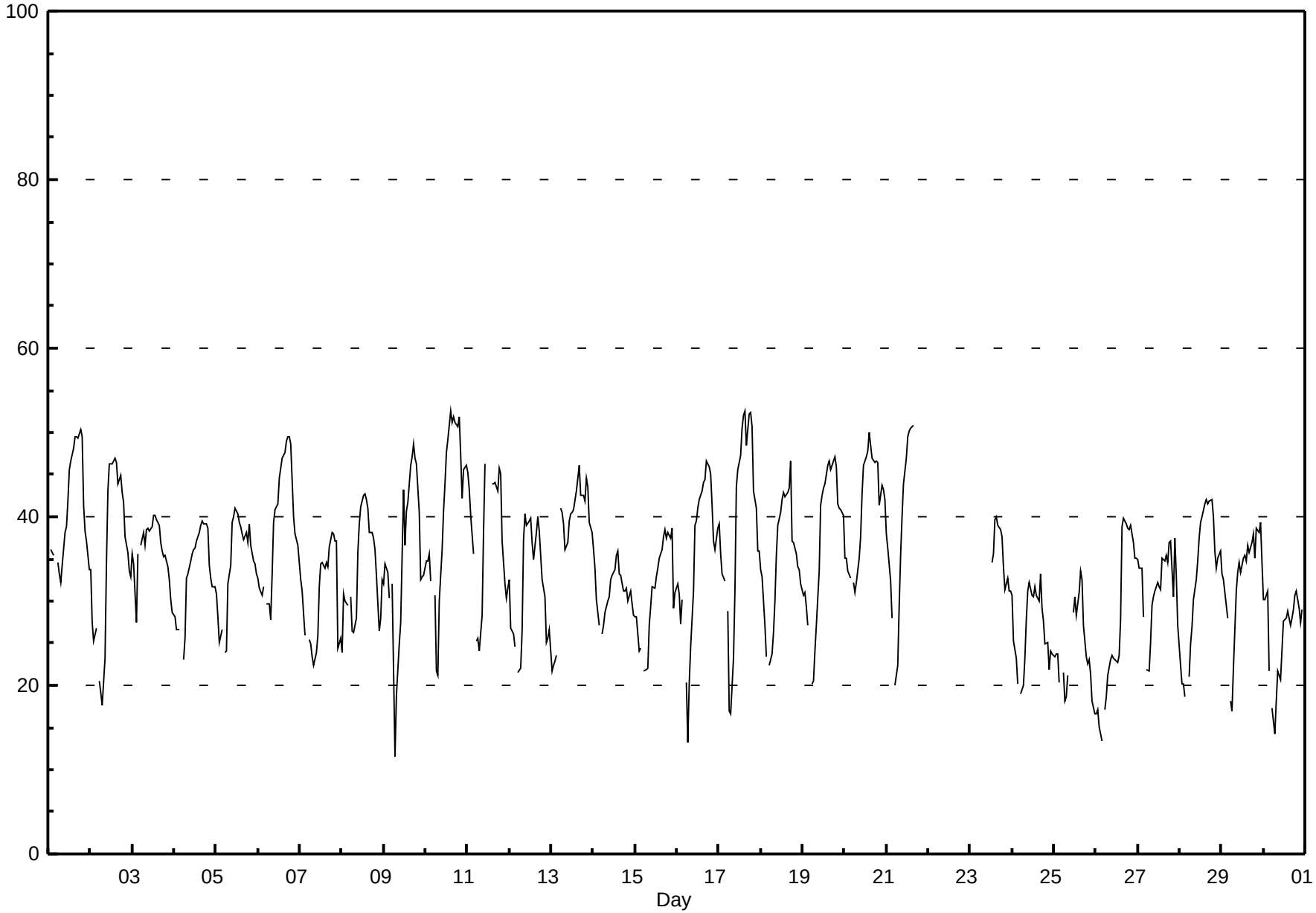
Hourly Maximums

Ozone (O_3) - ppb

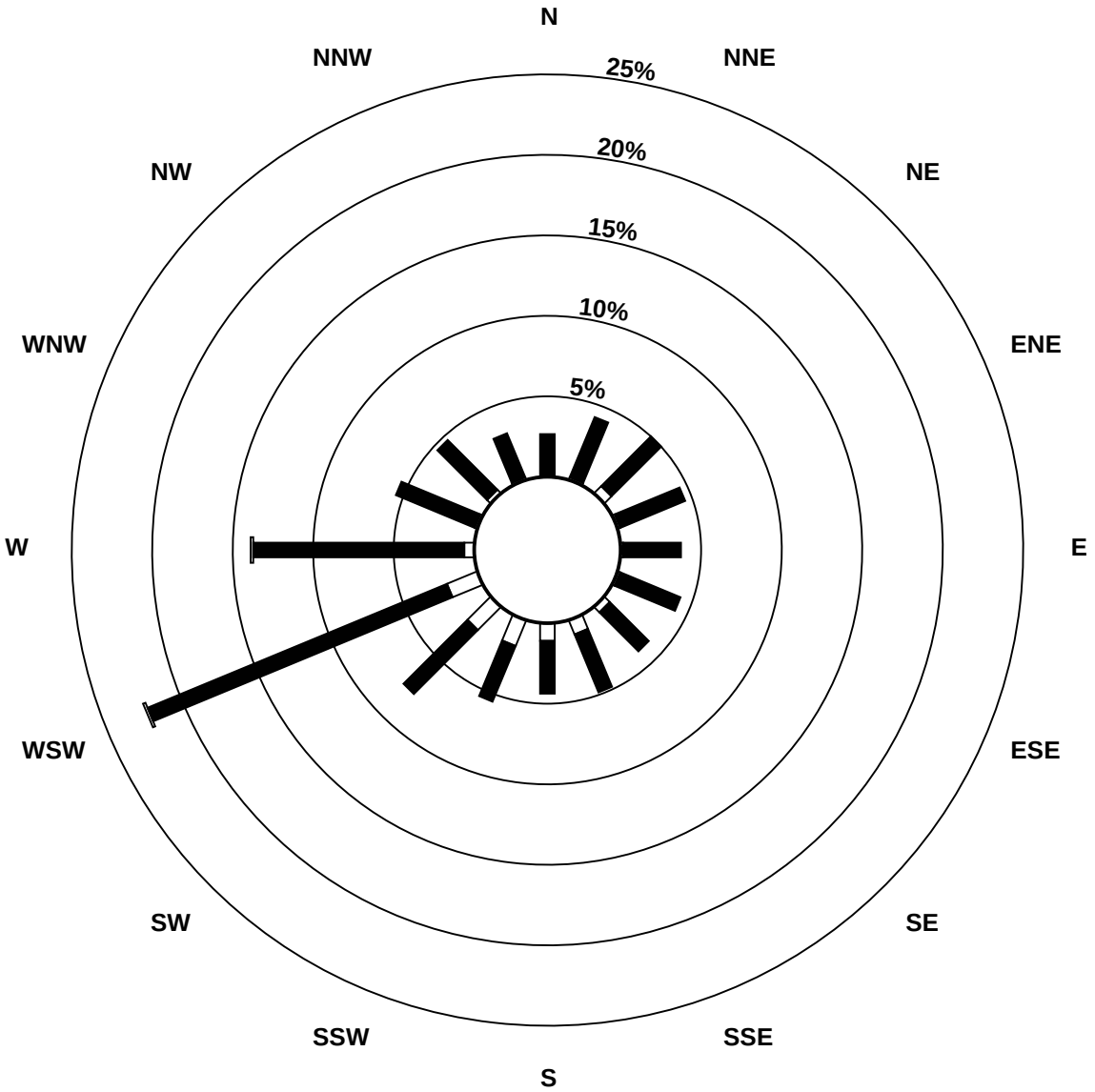
Beaverlodge - June 2010



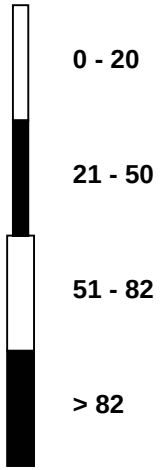
Pollutant Rose

Ozone (O_3) - ppb

Beaverlodge - June 2010



Pollutant Classes (ppb)



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Eight Hour Running Averages

Ozone (O_3) - ppb

Beaverlodge - June 2010

Maximum Value: 47.9 ppb on Jun 17 20:00

Minimum Value: 14.7 ppb on Jun 26 06:00

Percentiles: P_1 = 17.0 P_{10} = 22.0 Q_1 = 25.8 Median = 30.9 Q_3 = 36.0 P_{90} = 40.8 P_{99} = 46.9

Hours in Service:	720
Hours of Data:	665
Hours of Missing Data:	55
Hours of Calibration:	8
Percent Operational Time:	93.5

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-Jun	41	39	38	36	35	34	34	33	33	33	33	34	35	37	39	41	43	44	46	46	45	44	43	40	45.9
2-Jun	38	35	31	29	27	24	22	20	18	19	21	24	26	30	34	38	40	42	43	42	41	40	38	36	43.0
3-Jun	34	33	30	30	29	29	30	31	32	33	35	36	36	37	37	37	37	37	37	36	35	34	33	32	37.3
4-Jun	31	30	29	28	27	26	25	25	26	27	28	29	30	32	34	35	35	36	37	37	36	35	34	33	36.8
5-Jun	32	30	28	27	26	25	24	24	25	27	29	31	32	34	36	37	37	37	37	36	36	35	35	35	37.0
6-Jun	34	33	32	31	31	29	29	28	28	29	30	32	33	36	38	40	42	44	45	45	45	44	42	41	45.2
7-Jun	39	36	33	31	30	28	26	24	23	23	22	24	25	26	27	28	30	31	33	34	34	33	32	31	38.6
8-Jun	29	28	27	26	24	24	25	25	25	26	27	28	30	32	34	35	37	38	38	37	36	33	32	30	38.0
9-Jun	29	29	28	27	27	27	24	22	21	20	19	21	22	24	28	32	35	38	41	42	42	41	40	38	42.0
10-Jun	37	35	32	30	29	28	25	23	21	21	23	26	28	31	36	40	43	45	47	48	48	47	46	46	47.9
11-Jun	45	44	42	40	40	37	34	31	28	27	28	27	27	N	N	N	N	N	N	42	40	39	37	36	44.7
12-Jun	34	32	29	27	26	25	24	22	23	24	27	29	30	32	33	35	36	36	35	34	33	32	30	28	36.2
13-Jun	26	24	23	22	21	24	27	29	30	32	35	37	37	37	37	38	39	40	41	41	41	41	40	40	40.9
14-Jun	39	37	36	34	34	31	29	28	27	27	27	28	29	30	31	31	32	32	32	31	31	30	30	29	38.6
15-Jun	29	28	27	26	26	24	23	22	22	22	23	24	25	27	28	30	32	33	34	34	35	35	34	33	34.8
16-Jun	33	31	30	28	27	24	22	20	19	19	21	23	25	28	32	36	38	40	42	42	42	41	40	40	42.3
17-Jun	39	37	36	34	33	31	27	23	20	19	20	23	26	30	35	40	43	46	47	48	47	46	44	42	47.9
18-Jun	40	37	34	31	29	27	25	24	24	24	26	29	30	33	35	37	39	40	40	40	39	38	36	34	40.4
19-Jun	32	30	29	27	26	24	23	22	22	23	24	27	29	32	35	38	40	42	43	43	43	42	42	41	43.1
20-Jun	40	38	36	35	34	33	31	30	30	30	31	33	34	36	39	42	44	45	45	45	45	44	43	41	45.5
21-Jun	40	38	35	31	30	27	24	23	23	24	27	31	33	37	41	44	46	47	N	N	N	N	N	N	46.9
22-Jun	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
23-Jun	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	36	35	35	34	34	33	32	35.7
24-Jun	31	29	27	25	25	23	21	20	19	20	22	23	24	26	28	28	29	29	28	27	26	25	24	23	30.5
25-Jun	23	22	22	21	21	20	20	19	18	18	N	N	21	22	24	27	28	28	27	26	26	25	23	21	28.4
26-Jun	20	19	18	16	15	15	15	15	16	17	18	20	20	21	22	24	26	28	30	31	33	35	36	36	35.9
27-Jun	35	34	33	32	31	29	27	25	24	24	24	25	26	27	28	30	31	31	31	31	31	32	31	30	35.4
28-Jun	28	26	24	23	22	20	18	18	19	21	24	26	28	30	33	35	37	38	39	39	39	38	37	37	39.3
29-Jun	36	34	33	31	31	28	25	23	22	22	23	24	25	27	30	32	33	34	34	34	34	34	34	34	35.6
30-Jun	33	32	30	29	28	25	23	20	19	18	17	17	18	20	22	23	24	25	26	27	27	27	27	28	32.7
	44.7	43.6	41.9	39.7	39.5	37.0	33.9	33.0	33.0	33.0	34.9	36.9	37.2	37.3	40.9	43.8	45.6	46.9	47.4	47.9	47.7	46.9	46.2	45.5	
	Diurnal Maximums																								

N - Not Valid

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Hourly Averages

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

Beaverlodge - June 2010

Number of Exceedences: 1-hr: 0 24-hr: 0
Maximum Value: 30.4 $\mu g/m^3$ on Jun 16 22:00
Maximum Daily Average: 15.1 $\mu g/m^3$ on Jun 17

Minimum Value: 0 $\mu g/m^3$ on Jun 4 13:00
Maximum Diurnal Average: 8.3 $\mu g/m^3$ at hour 22
Monthly Average: 7.05 $\mu g/m^3$
Minimum Daily Average: 3.2 $\mu g/m^3$ on Jun 3
Minimum Diurnal Average: 6.2 $\mu g/m^3$ at hour 20
Percentiles: P_1 = 1.8 P_{10} = 3.5 Q_1 = 4.4 Median = 6.0 Q_3 = 9.0 P_{90} = 11.9 P_{99} = 19.2

Hours in Service:	720
Hours of Data:	668
Hours of Missing Data:	52
Hours of Calibration:	2
Percent Operational Time:	93.1

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	D	10	9	8	7	7	8	6	7	7	6	6	5	5	6	6	3	6	7	7	6	5	5	5	6.4	10.2
2-Jun	8	10	8	9	11	10	10	11	9	8	9	8	7	4	5	5	4	5	4	3	3	3	4	5	6.8	10.8
3-Jun	5	5	10	6	3	2	3	3	2	3	1	2	4	3	0	1	2	1	3	2	4	2	4	4	3.2	10.4
4-Jun	3	4	3	4	3	2	4	6	4	4	4	3	0	6	5	5	4	4	5	5	7	9	11	9	4.8	11.2
5-Jun	10	9	7	9	8	8	9	5	5	3	3	7	6	4	6	6	3	5	7	6	5	4	6	6	6.1	9.6
6-Jun	5	5	5	4	4	5	4	5	5	6	6	4	5	9	8	5	4	5	5	5	7	7	6	6	5.5	9.0
7-Jun	7	8	7	7	7	7	7	5	8	6	6	6	6	5	6	5	7	7	6	7	8	8	5	5	6.5	8.0
8-Jun	5	5	6	4	5	5	4	4	5	6	6	4	5	5	7	7	7	6	6	5	3	4	3	4	5.2	7.5
9-Jun	3	4	4	4	5	6	7	9	9	10	8	9	7	7	5	6	5	7	6	5	6	6	8	7	6.3	9.7
10-Jun	7	8	5	6	6	8	9	10	9	10	9	8	9	10	9	10	8	10	10	9	11	12	13	11	9.0	13.2
11-Jun	10	12	12	11	12	12	12	11	12	12	11	11	15	C	C	6	7	6	8	8	7	9	9	10	10.2	14.6
12-Jun	8	8	8	10	10	9	9	10	10	7	5	5	6	7	6	6	9	10	10	9	11	17	16	15	9.3	16.5
13-Jun	10	3	4	9	7	5	4	2	4	3	5	5	4	4	5	7	8	6	4	5	7	5	5	6	5.3	10.0
14-Jun	4	5	4	5	4	5	4	4	5	4	5	5	3	4	2	4	5	5	5	5	5	5	4	4	4.3	5.3
15-Jun	4	3	3	3	4	5	5	4	5	5	4	4	4	4	4	5	6	6	6	7	6	5	5	3	4.5	6.8
16-Jun	4	5	4	5	6	6	8	9	9	10	9	8	7	9	7	7	8	8	9	8	8	30	18	9	8.9	30.4
17-Jun	7	8	10	10	15	9	12	17	26	30	18	15	15	18	12	12	11	10	13	13	17	26	26	13	15.1	29.8
18-Jun	10	10	9	7	9	8	8	9	11	16	23	9	11	15	11	10	9	10	9	10	8	8	7	12	10.4	23.2
19-Jun	12	12	12	11	11	11	11	13	11	11	11	9	10	6	7	10	13	5	5	6	9	10	10	10	9.9	13.2
20-Jun	19	20	13	14	11	11	10	12	13	12	13	12	13	12	10	9	9	10	12	12	11	13	12	10	12.2	19.8
21-Jun	12	12	13	16	14	17	17	16	16	14	15	13	M	M	13	15	D	D	D	D	D	D	D	D	--	16.9
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	12	14	15	14	14	13	13	9	8	8	8	8	--	14.7
24-Jun	9	9	9	9	10	9	7	6	7	8	7	3	4	4	6	5	5	4	4	3	4	3	3	4	6.0	9.9
25-Jun	4	4	4	5	5	3	4	6	5	D	D	5	4	5	4	2	5	5	3	2	4	4	5	5	4.2	5.7
26-Jun	4	4	3	4	4	4	3	4	5	5	4	6	5	4	5	4	5	5	5	6	5	7	7	7	4.9	7.0
27-Jun	8	8	8	8	9	8	10	10	5	4	4	2	5	3	3	3	4	1	5	3	2	5	4	4	5.2	10.1
28-Jun	4	5	5	6	5	4	3	5	4	4	2	4	4	5	5	4	5	5	4	4	5	7	6	5	4.6	7.0
29-Jun	4	4	5	3	2	8	11	6	3	4	4	2	3	3	5	5	4	5	5	5	5	6	5	5	4.7	11.4
30-Jun	5	4	5	3	5	5	3	4	4	4	5	4	6	5	4	4	5	6	5	4	5	3	4	D	4.4	6.4
	7.0	7.2	7.1	7.1	7.2	7.1	7.4	7.6	7.7	8.0	7.5	6.5	6.6	6.7	6.4	6.6	6.5	6.3	6.6	6.2	6.7	8.3	7.9	7.2	Diurnal Average	
	19.3	19.8	13.5	15.6	14.9	16.8	16.9	16.6	25.8	29.8	23.2	14.9	15.1	17.8	14.7	14.8	14.1	12.8	13.2	12.6	17.0	30.4	26.1	15.1	Diurnal Maximum	

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

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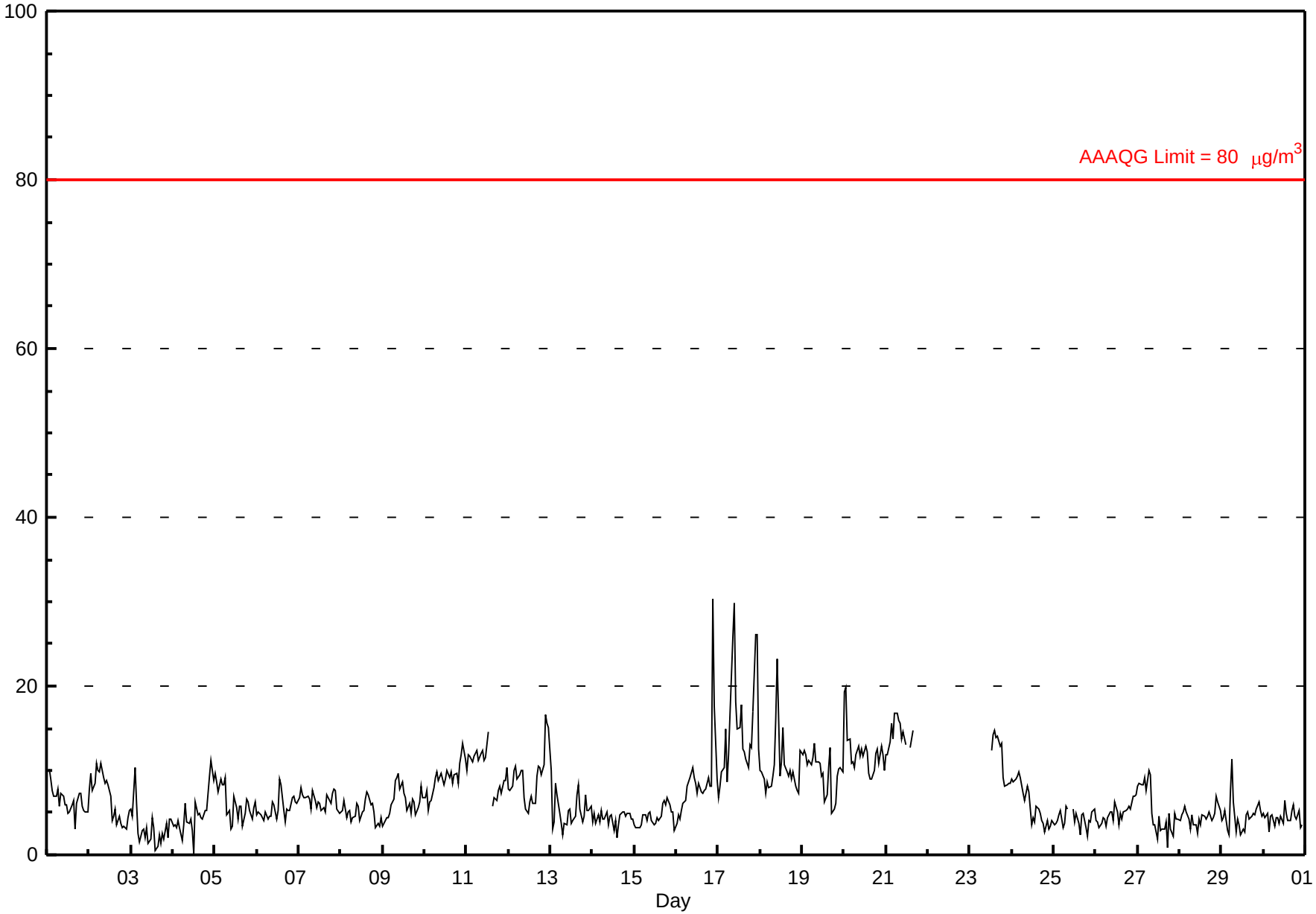
Hourly Averages

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

Beaverlodge - June 2010



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Hourly Maximums

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

Beaverlodge - June 2010

Maximum Value: 38.7 $\mu g/m^3$ on Jun 17 23:00

Maximum Daily Average: 18.3 $\mu g/m^3$ on Jun 17

Minimum Value: 2 $\mu g/m^3$ on Jun 27 18:00

Minimum Daily Average: 4.4 $\mu g/m^3$ on Jun 3

Maximum Diurnal Average: 9.9 $\mu g/m^3$ at hour 23

Minimum Diurnal Average: 7.3 $\mu g/m^3$ at hour 20

Monthly Average: 8.25 $\mu g/m^3$

Percentiles: $P_1 = 3.0$ $P_{10} = 4.3$ $Q_1 = 5.3$ Median = 7.0 $Q_3 = 10.2$ $P_{90} = 13.2$ $P_{99} = 25.3$

Hours in Service:	720
Hours of Data:	668
Hours of Missing Data:	52
Hours of Calibration:	2
Percent Operational Time:	93.1

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	D	11	10	9	8	8	8	7	8	8	6	6	6	6	6	7	5	8	8	8	7	6	6	6	7.3	11.2
2-Jun	9	10	10	9	12	11	11	12	12	9	11	9	9	5	6	7	5	5	4	4	4	4	5	6	7.9	11.9
3-Jun	6	7	12	11	4	2	4	4	3	4	2	3	5	4	2	3	3	2	3	3	5	3	5	5	4.4	11.8
4-Jun	4	4	5	5	4	3	4	7	6	4	5	4	4	8	6	5	5	5	6	6	9	10	12	11	6.0	12.5
5-Jun	12	11	8	9	9	9	10	7	6	5	5	8	8	5	7	7	5	6	8	7	6	5	7	8	7.4	11.7
6-Jun	5	6	5	5	4	6	6	5	5	8	8	5	6	12	11	6	5	6	6	7	7	7	7	7	6.5	12.1
7-Jun	7	9	8	7	8	8	7	6	9	8	6	7	6	6	6	6	8	7	7	8	9	9	7	5	7.3	8.9
8-Jun	6	6	7	6	6	6	5	5	6	6	6	5	6	7	7	8	8	7	7	6	5	5	4	5	5.9	7.9
9-Jun	4	4	5	5	6	7	8	9	10	10	9	10	8	7	7	7	6	7	7	6	6	8	9	8	7.3	10.4
10-Jun	8	8	7	7	7	9	10	11	10	11	10	10	10	11	10	11	9	10	11	10	11	14	14	12	10.0	13.9
11-Jun	12	12	12	12	13	13	13	12	13	13	13	14	16	C	C	7	7	7	9	9	9	9	11	12	11.3	15.6
12-Jun	8	8	10	11	11	9	10	11	11	9	6	5	7	7	7	7	11	11	11	10	12	19	19	17	10.4	19.0
13-Jun	15	6	6	10	10	6	6	4	5	4	6	7	5	5	6	9	9	7	5	6	8	7	7	7	6.8	14.7
14-Jun	4	6	5	5	5	6	5	5	6	5	5	6	5	5	3	5	5	5	6	6	6	6	5	5	5.1	6.0
15-Jun	4	4	4	4	4	6	6	5	5	6	5	4	4	5	5	5	9	9	8	8	6	6	6	4	5.4	8.5
16-Jun	5	5	5	6	7	8	9	9	10	11	11	9	8	10	10	8	8	9	10	9	17	36	29	12	10.9	35.6
17-Jun	7	9	10	13	17	11	13	19	36	38	20	17	19	19	15	13	13	12	14	14	18	34	39	20	18.3	38.7
18-Jun	11	11	9	8	10	10	9	11	13	22	25	14	15	16	12	10	10	11	10	10	10	8	10	14	12.1	25.2
19-Jun	13	13	13	11	11	11	12	14	13	12	11	10	11	7	8	16	16	7	6	8	10	11	11	12	11.2	16.2
20-Jun	26	26	16	16	11	11	11	14	14	12	13	13	13	13	12	10	10	13	13	13	12	14	13	11	13.8	25.9
21-Jun	13	13	16	17	15	18	18	16	16	15	15	15	M	M	14	17	D	D	D	D	D	D	D	D	--	18.3
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	14	15	15	15	15	15	15	10	9	9	9	9	--	15.2
24-Jun	10	9	10	10	10	10	8	7	8	9	9	5	5	5	7	7	8	4	4	4	5	4	4	5	6.8	10.4
25-Jun	4	4	4	5	6	5	5	6	6	D	D	6	6	7	6	3	6	5	5	4	5	4	6	6	5.2	7.1
26-Jun	5	5	4	4	5	5	4	5	6	6	5	7	6	4	6	5	6	6	7	7	6	7	8	8	5.6	7.6
27-Jun	9	9	9	9	9	8	12	13	6	4	4	3	5	4	4	4	5	2	7	6	4	5	5	5	6.4	12.8
28-Jun	5	5	6	6	6	6	4	5	4	4	3	6	6	5	5	5	6	6	4	5	5	8	8	6	5.5	8.1
29-Jun	5	5	6	6	5	13	14	7	4	5	4	3	4	3	5	5	5	6	6	5	6	8	7	6	6.0	13.7
30-Jun	6	5	7	4	5	5	5	5	5	5	6	5	8	6	5	5	6	7	6	5	7	4	5	D	5.4	7.7
	8.2	8.2	8.1	8.3	8.2	8.1	8.5	8.6	9.0	9.4	8.5	7.7	8.0	7.7	7.6	7.8	7.7	7.4	7.6	7.3	8.0	9.5	9.9	8.6	Diurnal Average	
	25.9	25.6	15.9	17.1	16.6	18.0	18.3	19.3	35.9	38.3	25.2	16.5	18.5	19.0	15.2	16.6	16.2	14.7	15.1	13.6	18.3	35.6	38.7	19.8	Diurnal Maximum	

C - Calibration D - DAS Failure M - Maintenance

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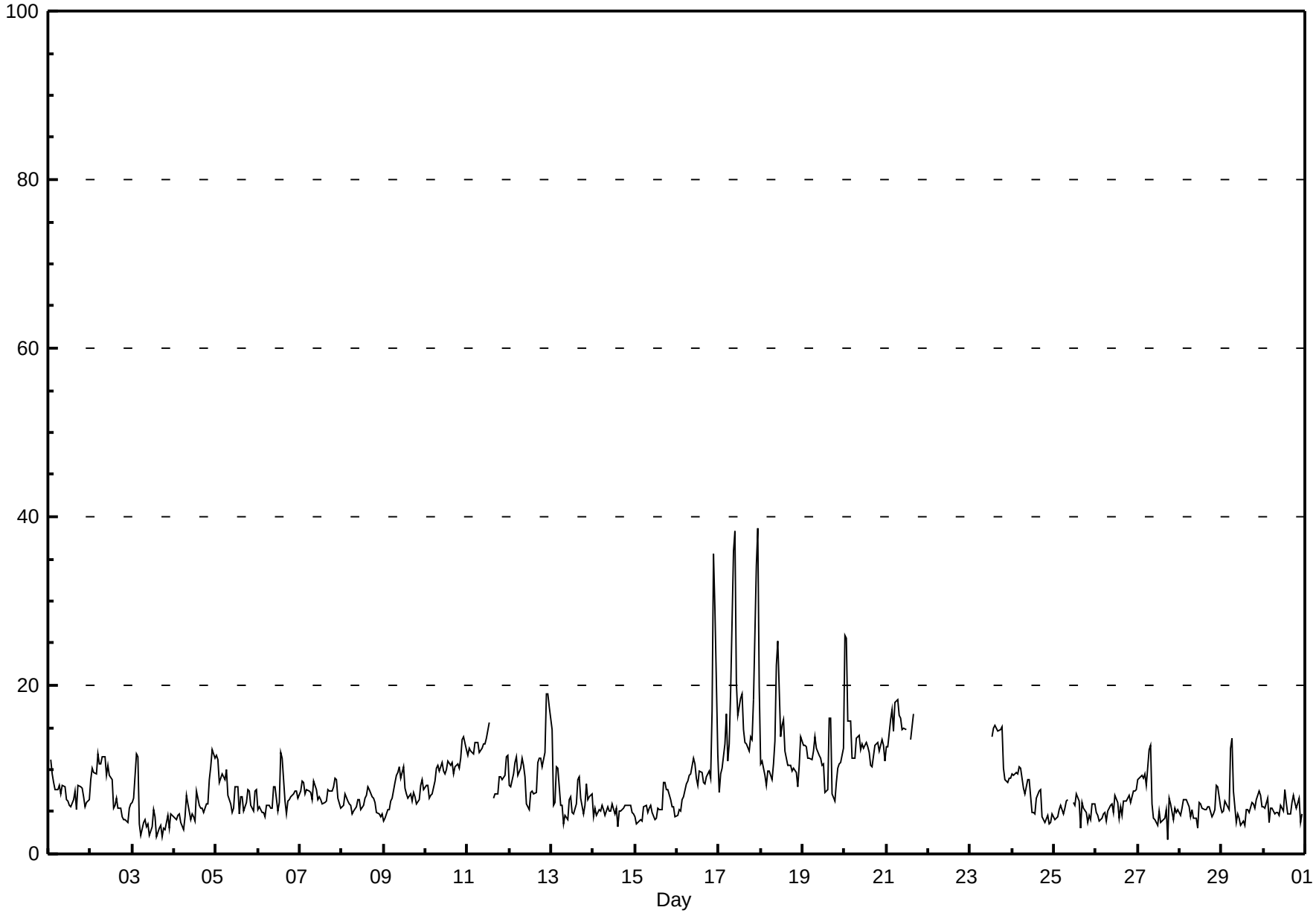
Hourly Maximums

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

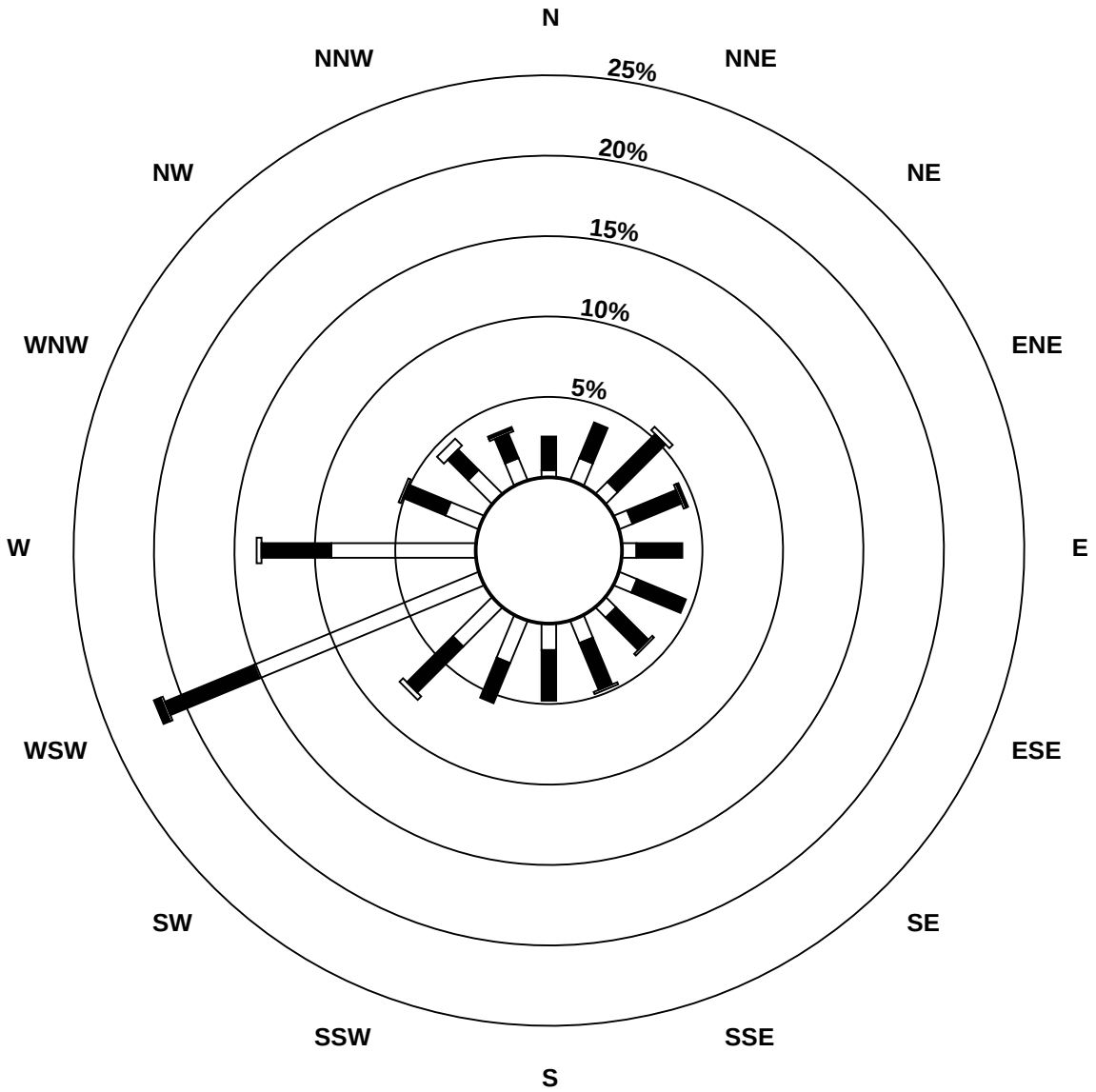
Beaverlodge - June 2010



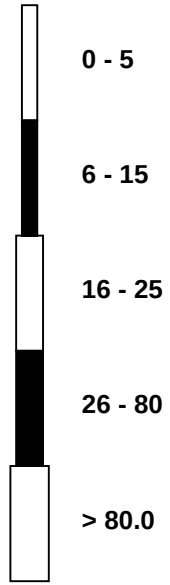
Pollutant Rose

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

Beaverlodge - June 2010



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



PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Beaverlodge - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 27.2 °C on Jun 12 18:00 Maximum Daily Average: 20.6 °C on Jun 20

Minimum Value: 3 °C on Jun 15 05:00 Minimum Daily Average: 9.3 °C on Jun 8
Maximum Diurnal Average: 20.1 °C at hour 15 Minimum Diurnal Average: 8.1 °C at hour 5
Monthly Average: 14.89 °C Percentiles: P_1 = 5.0 P_{10} = 7.5 Q_1 = 10.9 Median = 14.6 Q_3 = 19.0 P_{90} = 21.9 P_{99} = 26.3

Hours in Service:	720
Hours of Data:	672
Hours of Missing Data:	48
Hours of Calibration:	0
Percent Operational Time:	93.3

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-Jun	D	7	7	6	6	7	8	9	11	13	14	15	17	19	19	20	19	19	18	16	14	13	12	11	13.0	19.6
2-Jun	10	8	7	7	7	7	8	12	14	17	19	20	20	20	19	18	18	21	21	18	15	15	14	13	14.5	20.8
3-Jun	12	12	11	11	11	10	10	11	12	13	13	14	15	15	15	14	14	14	14	13	12	10	8	7	12.2	15.1
4-Jun	7	6	5	5	4	5	9	11	13	14	15	16	17	17	18	18	18	18	18	18	17	14	12	12	12.9	18.5
5-Jun	11	9	7	7	7	6	11	14	15	18	18	19	19	19	19	19	19	19	17	18	16	14	12	10	14.3	19.1
6-Jun	9	7	7	7	5	7	10	11	14	16	18	19	19	20	21	21	21	21	21	17	15	13	12	12	14.3	21.3
7-Jun	10	10	10	9	8	9	10	11	10	12	13	14	14	15	15	15	15	15	14	14	12	11	9	9	11.9	15.2
8-Jun	9	9	7	7	7	7	7	7	8	9	9	10	12	12	12	12	12	12	12	11	10	9	7	8	9.3	12.0
9-Jun	6	6	6	6	6	7	6	7	11	13	13	13	14	15	16	17	17	16	16	15	14	12	10	9	11.2	16.7
10-Jun	9	8	7	5	6	7	9	11	14	15	17	16	15	17	20	19	19	19	19	19	17	14	13	12	13.5	19.6
11-Jun	11	10	8	7	6	8	10	11	13	16	19	20	21	22	23	24	24	24	24	22	20	17	14	14	16.2	24.2
12-Jun	13	12	11	11	11	11	14	15	17	19	20	22	23	25	26	27	27	27	26	24	23	21	19	18	19.2	27.2
13-Jun	16	15	14	13	13	13	13	12	13	14	16	18	19	18	19	19	18	18	17	16	15	14	12	11	15.2	19.3
14-Jun	10	8	7	5	6	7	9	10	12	13	14	14	15	14	15	15	15	14	14	13	13	11	9	7	11.2	15.1
15-Jun	6	5	3	3	3	5	6	10	12	14	16	17	16	17	16	17	17	18	18	16	16	14	11	11	12.0	17.9
16-Jun	10	9	6	6	6	6	7	11	13	16	18	19	19	18	21	20	21	21	20	20	18	15	14	14	14.5	21.1
17-Jun	12	11	11	8	7	9	10	13	16	20	21	20	21	23	22	22	21	21	22	22	20	18	14	13	16.6	22.5
18-Jun	12	11	9	7	7	9	11	13	16	19	21	22	23	24	24	25	25	24	23	21	19	17	16	15	17.2	25.0
19-Jun	14	13	13	12	12	11	14	15	17	21	24	24	25	26	26	26	26	26	26	24	21	20	19	17	19.7	26.4
20-Jun	15	14	14	13	13	14	15	18	18	21	23	24	25	26	27	27	27	26	26	26	24	22	20	17	20.6	27.1
21-Jun	16	15	13	11	12	12	13	15	18	21	22	23	24	24	24	23	D	D	D	D	D	D	D	D	--	24.1
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	24	24	25	25	24	24	22	22	20	18	17	17	--	24.9
24-Jun	16	14	12	11	11	11	12	15	17	20	21	22	21	22	22	20	19	22	19	20	19	16	16	15	17.3	22.4
25-Jun	14	13	12	10	10	12	13	15	17	D	D	20	21	21	21	20	20	19	19	18	16	14	12	11	15.8	20.7
26-Jun	11	10	9	9	10	12	15	16	17	18	19	20	21	21	22	22	22	22	21	21	19	16	14	14	16.6	22.1
27-Jun	13	12	11	11	11	11	13	15	17	19	20	21	21	21	22	22	22	15	18	17	15	12	11	10	15.8	22.0
28-Jun	9	8	8	8	7	8	11	13	15	17	18	19	19	20	21	22	21	22	22	20	20	17	14	13	15.5	22.0
29-Jun	12	11	9	8	8	8	11	13	15	18	19	19	20	19	19	18	18	19	19	17	15	13	12	10	14.5	19.6
30-Jun	9	9	8	8	8	8	8	9	10	11	11	14	15	16	16	16	16	15	15	13	11	10	9	D	11.5	16.0
	11.2	10.1	9.1	8.2	8.1	8.8	10.5	12.3	14.2	16.1	17.5	18.3	19.2	19.6	20.1	20.0	19.9	19.7	19.3	18.2	16.6	14.6	13.0	12.1	Diurnal Average	
	16.3	14.9	13.9	13.1	12.9	13.6	15.4	17.6	18.3	21.0	23.6	24.5	25.1	26.0	27.1	27.1	26.7	27.2	25.8	25.8	24.4	21.7	19.8	18.4	Diurnal Maximum	

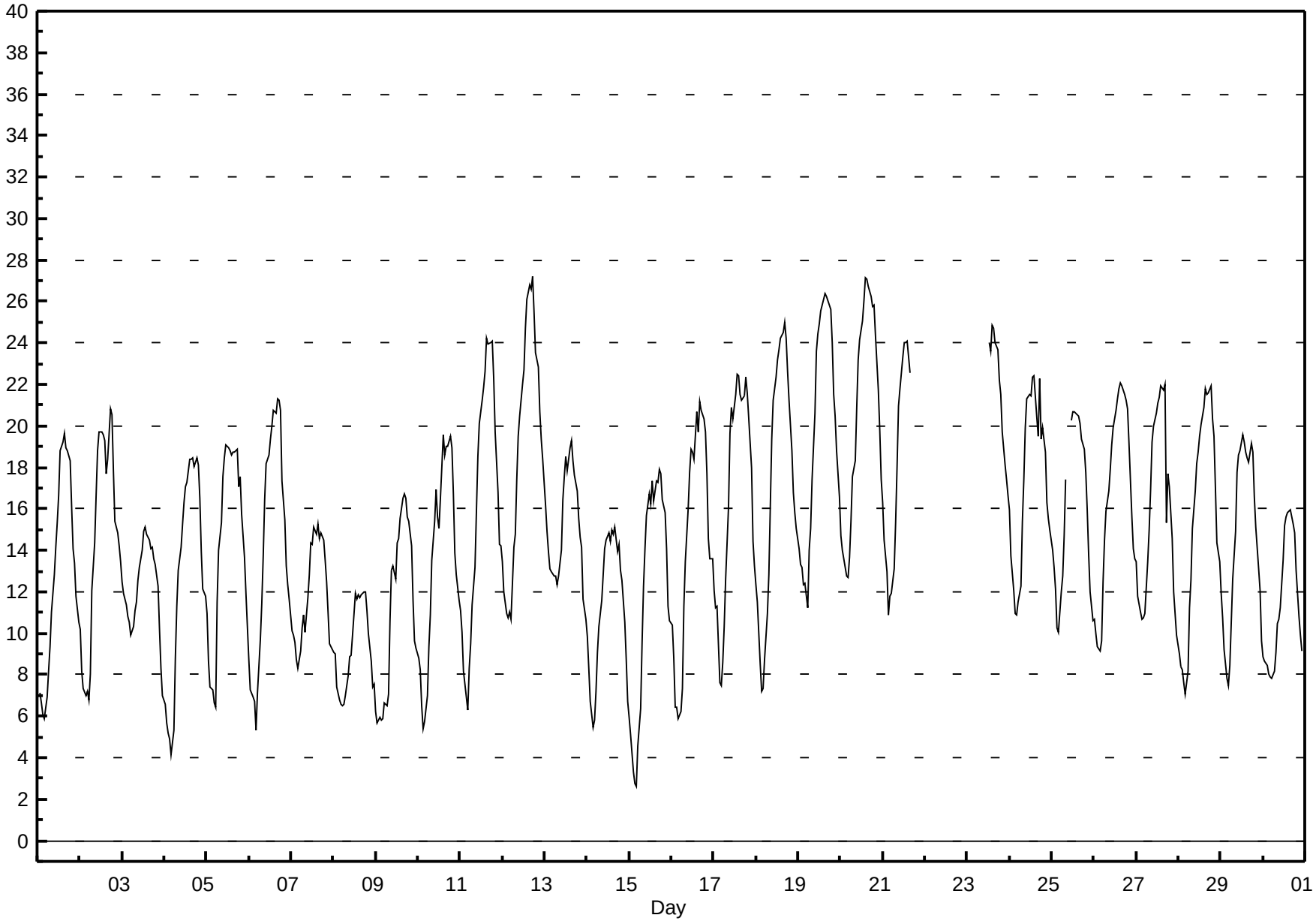
D - DAS Failure

PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - June 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 95.2 % on Jun 28 02:00 Maximum Daily Average: 76.5 % on Jun 8

Minimum Value: 13 % on Jun 19 16:00 Minimum Daily Average: 35.5 % on Jun 19
Maximum Diurnal Average: 73.5 % at hour 5 Minimum Diurnal Average: 30.1 % at hour 15
Monthly Average: 49.17 % Percentiles: P_1 = 17.1 P_{10} = 25.7 Q_1 = 31.8 Median = 47.0 Q_3 = 64.3 P_{90} = 78.3 P_{99} = 93.3

Hours in Service:	720
Hours of Data:	672
Hours of Missing Data:	48
Hours of Calibration:	0
Percent Operational Time:	93.3

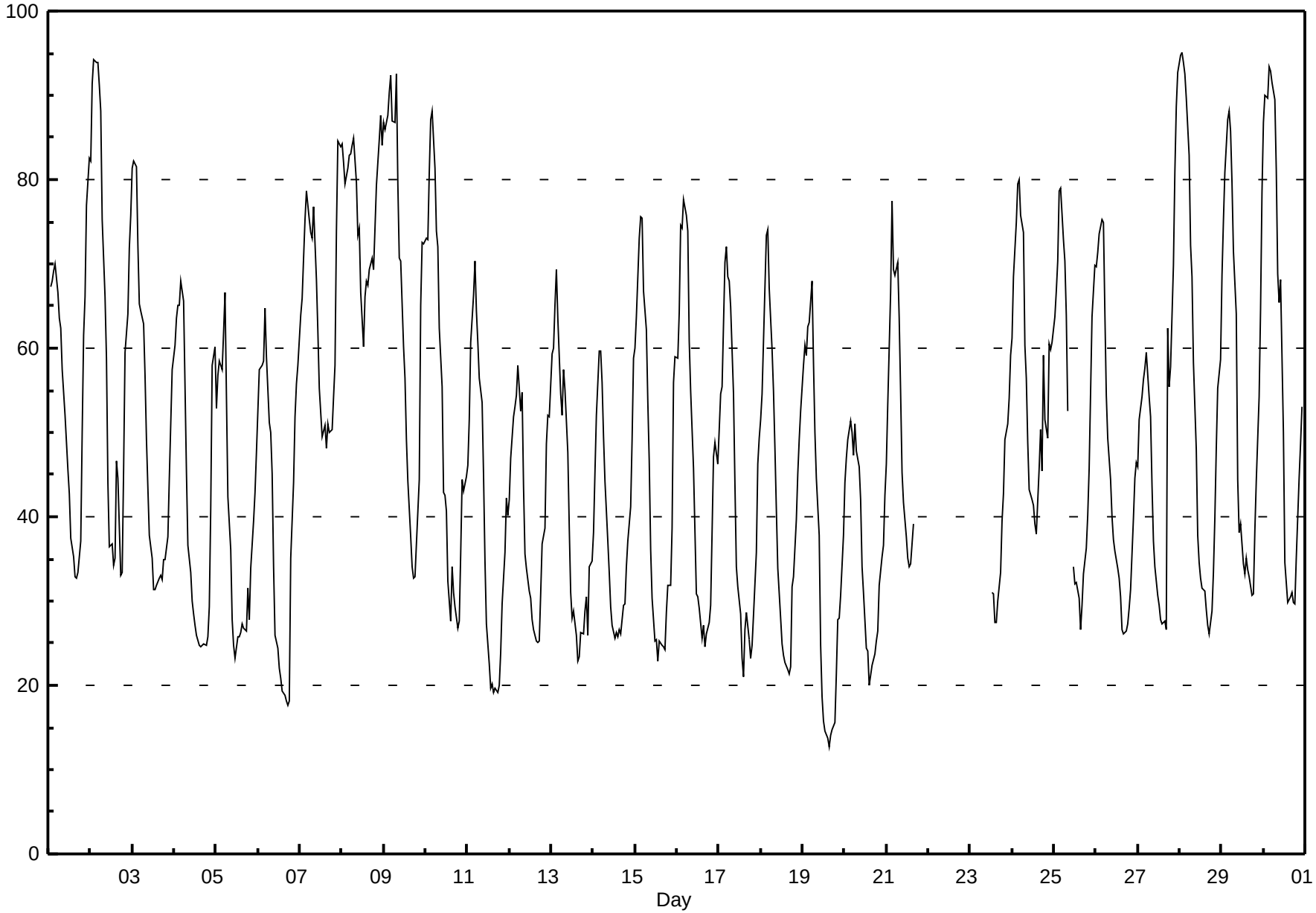
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	D	67	68	69	70	67	64	62	58	52	49	46	43	37	35	33	33	33	37	50	61	66	77	82	54.8	82.5
2-Jun	82	91	94	94	94	91	88	75	66	59	44	36	37	34	35	47	45	33	33	46	60	64	72	76	62.3	94.3
3-Jun	81	82	81	72	65	64	63	57	49	43	38	35	31	31	32	33	33	33	35	35	38	45	51	57	49.4	82.2
4-Jun	60	64	65	65	68	66	55	45	37	33	30	29	27	26	25	25	25	25	25	26	29	41	58	60	42.0	67.9
5-Jun	53	57	58	58	62	67	54	42	36	28	25	23	26	26	26	27	27	26	31	28	34	39	43	48	39.3	66.6
6-Jun	53	58	58	59	65	59	51	50	45	34	26	24	22	21	19	19	18	18	18	35	44	52	56	58	40.0	64.7
7-Jun	64	66	71	75	79	75	74	73	77	68	62	55	52	49	51	48	51	50	50	54	58	74	85	84	64.4	84.6
8-Jun	84	82	80	81	83	83	84	85	80	73	74	67	60	66	68	68	69	71	69	74	79	85	88	84	76.5	87.7
9-Jun	87	86	88	90	92	87	87	93	80	71	70	60	56	49	44	38	34	33	33	37	44	65	73	72	65.3	92.6
10-Jun	73	73	81	87	88	81	74	72	62	55	43	43	41	32	28	34	31	29	27	28	36	44	43	45	52.1	88.1
11-Jun	46	52	61	66	70	64	61	56	54	45	35	27	23	20	20	19	20	19	20	24	30	36	42	40	39.5	70.3
12-Jun	42	47	52	53	54	58	52	55	44	36	34	31	30	28	27	25	25	25	31	37	39	49	52	52	40.7	58.0
13-Jun	59	60	65	69	64	55	52	58	55	48	39	31	28	29	26	23	23	26	26	29	30	26	34	35	41.2	69.4
14-Jun	38	45	52	60	60	56	50	44	37	33	29	27	26	26	26	27	26	29	30	34	37	41	49	59	39.2	59.7
15-Jun	60	64	73	76	75	67	62	54	47	36	30	25	25	23	25	25	25	24	29	32	32	39	56	59	44.2	75.5
16-Jun	59	64	75	74	78	76	74	61	55	46	38	31	30	29	26	27	25	26	27	30	38	47	49	46	47.1	77.6
17-Jun	50	55	55	70	72	68	68	65	55	44	34	32	28	23	21	27	29	25	23	25	28	36	46	49	42.9	72.0
18-Jun	52	55	67	73	74	67	60	55	48	41	34	28	25	24	23	22	21	22	32	33	40	45	49	53	43.4	74.1
19-Jun	58	60	59	62	63	68	58	50	44	38	25	19	16	15	14	13	14	15	16	21	28	28	31	38	35.5	67.9
20-Jun	44	47	49	51	50	47	51	48	46	42	34	31	24	24	20	21	22	24	25	26	32	35	37	43	36.4	51.4
21-Jun	46	53	67	78	69	69	70	64	55	45	42	38	35	34	34	39	D	D	D	D	D	D	D	D	--	77.5
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	31	31	28	27	30	33	39	43	49	51	54	59	--	59.2
24-Jun	61	69	75	79	80	76	74	60	56	49	43	42	41	39	38	46	50	45	59	52	49	60	60	61	56.9	80.0
25-Jun	64	67	70	79	79	73	70	64	52	D	D	34	32	32	30	27	30	33	36	40	46	55	64	70	52.1	79.0
26-Jun	70	71	74	75	75	64	54	49	44	40	37	36	34	33	31	27	26	26	27	29	31	40	45	46	45.2	75.2
27-Jun	46	51	54	56	58	59	54	52	44	37	34	31	30	28	27	28	27	62	55	58	70	81	89	93	51.0	92.7
28-Jun	95	95	94	92	90	83	72	68	58	48	38	35	33	31	31	29	27	26	29	33	40	48	55	59	54.6	95.2
29-Jun	69	75	81	87	88	86	80	71	64	44	38	39	34	33	35	34	33	31	31	38	44	54	64	78	55.6	88.1
30-Jun	87	90	90	93	93	92	90	81	69	66	68	50	35	32	30	31	31	30	30	35	45	49	53	D	59.4	93.4
	62.3	65.9	69.9	73.1	73.5	70.3	65.9	61.1	54.1	46.5	40.5	35.9	33.0	31.2	30.1	30.5	30.3	31.2	33.0	36.8	42.5	49.8	56.2	59.5	Diurnal Average	
	94.7	95.2	94.3	94.0	93.8	91.6	89.5	92.6	79.7	73.3	74.3	66.7	60.1	66.0	67.9	67.5	69.3	70.6	69.3	74.2	79.3	84.7	88.6	92.7	Diurnal Maximum	

D - DAS Failure

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - June 2010



PASZA
Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - June 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	12	12	14	12	13	14	14	15	15	13	11	9	6	8	8	3	6	10	11	8	13	7	9	6.6	15.3
Dir	D	90	86	92	92	109	128	123	123	120	139	134	155	131	117	130	89	34	56	206	240	323	308	26	112	123
2 Spd	9	4	5	5	3	2	1	2	4	7	11	13	17	18	18	23	10	6	5	10	12	8	11	7	2.1	22.9
Dir	15	274	46	45	50	52	189	203	189	133	114	121	122	135	179	206	227	209	241	268	329	10	18	329	154	206
3 Spd	16	6	15	11	15	18	20	28	34	37	42	41	42	38	39	38	38	39	33	29	23	16	13	13	25.2	42.3
Dir	25	345	281	277	267	257	249	254	251	250	259	253	260	261	270	255	259	261	254	251	250	248	249	250	259	260
4 Spd	13	13	13	10	7	1	5	15	20	18	17	13	12	12	11	11	10	10	9	8	4	3	5	1	8.4	20.1
Dir	247	249	247	247	246	222	220	266	285	293	304	303	296	304	319	315	318	317	313	297	297	2	105	304	287	285
5 Spd	5	5	2	3	3	4	2	9	17	24	23	22	24	25	24	22	20	24	26	22	13	9	7	8	12.6	26.0
Dir	248	186	97	77	75	54	112	268	291	280	287	285	259	243	246	291	281	273	274	274	269	260	249	253	270	274
6 Spd	4	4	3	5	1	4	6	7	15	14	11	10	8	7	7	7	6	6	3	18	17	14	13	14	3.0	17.7
Dir	234	194	201	193	135	163	174	187	225	245	257	253	247	280	295	276	336	275	273	21	25	24	16	344	292	21
7 Spd	8	11	8	10	12	13	12	12	14	9	13	10	7	7	10	8	12	13	12	12	7	7	10	4	7.2	14.0
Dir	310	316	340	330	334	358	8	14	31	19	47	53	3	6	359	9	42	45	39	49	55	216	229	196	12	31
8 Spd	4	4	6	8	5	6	9	8	7	7	8	10	6	4	4	5	7	9	11	9	6	7	6	6	5.8	11.5
Dir	166	111	84	86	104	71	92	90	108	142	100	79	112	188	77	173	136	141	148	143	138	118	69	53	113	148
9 Spd	2	2	2	1	0	2	5	6	2	6	7	9	10	18	18	20	20	16	19	18	10	9	6	5	6.5	19.8
Dir	51	147	98	23	258	337	226	220	246	200	170	137	119	110	92	72	65	75	73	66	80	134	80	62	93	72
10 Spd	6	7	2	0	0	1	2	3	4	6	6	2	17	6	7	12	9	3	9	9	8	6	5	5	3.9	17.0
Dir	43	39	58	43	197	41	218	221	188	171	177	246	78	73	117	138	147	117	106	102	120	71	54	75	107	78
11 Spd	5	3	4	5	3	2	4	5	8	8	8	8	7	8	6	6	8	6	8	10	6	8	0	2	3.7	9.6
Dir	64	71	66	83	116	77	147	155	162	168	174	168	184	254	255	139	151	213	165	156	188	255	231	223	168	156
12 Spd	1	3	3	4	5	2	2	4	13	18	15	14	15	15	6	9	6	7	5	6	8	2	2	12	4.7	18.2
Dir	231	139	163	193	236	92	178	184	241	240	220	224	251	238	196	155	145	104	116	274	261	126	299	326	224	240
13 Spd	18	14	11	13	16	19	20	15	18	18	20	26	26	24	26	31	29	19	25	19	18	25	15	19	18.9	31.0
Dir	333	330	298	278	269	268	269	265	260	250	247	248	248	246	250	259	252	274	261	250	246	267	265	266	263	259
14 Spd	20	18	14	15	15	12	22	29	34	29	29	28	26	25	27	27	26	22	19	15	14	18	11	10	20.8	33.8
Dir	263	252	250	253	247	251	240	242	247	246	257	266	264	259	245	252	253	267	264	250	258	266	263	250	254	247
15 Spd	4	4	3	2	3	4	5	3	6	11	10	7	10	6	11	6	9	8	7	9	8	6	11	5	3.7	11.5
Dir	261	232	200	129	180	210	206	210	281	285	278	308	304	284	327	349	349	344	50	8	345	330	39	18	319	39
16 Spd	4	1	5	2	3	3	3	3	5	5	6	2	4	4	5	8	9	13	15	15	10	7	8	8	4.3	15.3
Dir	15	277	32	25	37	204	225	138	174	156	168	190	56	46	172	79	136	83	83	96	90	69	69	66	95	96
17 Spd	3	3	5	5	1	1	3	4	3	3	6	2	4	3	6	17	17	6	6	8	6	5	2	5	3.5	17.3
Dir	96	206	308	43	178	31	251	235	253	246	157	155	3	330	262	281	275	243	247	274	274	251	336	284	269	275
18 Spd	4	2	2	2	5	4	5	7	5	5	8	10	12	12	11	14	9	12	23	26	13	4	3	5	6.0	25.7
Dir	328	280	123	67	47	54	196	201	210	221	237	261	275	296	294	292	319	294	251	274	282	319	9	22	277	274
19 Spd	1	2	1	1	3	2	5	9	6	7	11	13	17	16	20	20	22	21	19	16	12	7	3	1	8.8	21.5
Dir	264	31	38	168	217	127	204	212	207	225	265	227	253	253	263	250	256	242	241	240	252	286	306	36	246	256
20 Spd	6	6	2	1	2	1	4	2	6	11	9	9	9	7	3	7	8	8	5	5	6	7	6	2	3.5	10.9
Dir	48	56	69	82	217	238	27	270	292	285	296	320	317	307	291	300	269	292	317	11	29	26	24	101	325	285
21 Spd	2	2	5	3	5	12	13	13	10	4	8	7	7	8	8	8	D	D	D	D	D	D	D	D	--	13.0
Dir	57	23	294	281	335	311	309	307	313	7	28	9	28	37	28	65	D	D	D	D	D	D	D	D	--	307
22 Spd	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
Dir	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--

PASZA
Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	D	D	D	D	D	D	D	D	D	D	D	D	10	10	8	11	11	15	9	8	9	8	7	8	--	15.1
Dir	D	D	D	D	D	D	D	D	D	D	D	D	220	235	234	224	192	229	232	211	217	187	227	240	--	229
24 Spd	8	7	2	2	4	2	2	4	10	11	12	12	16	14	15	20	9	5	15	18	17	10	7	8	8.5	20.0
Dir	229	216	154	131	53	168	165	174	221	251	245	250	247	232	251	259	215	176	227	246	255	253	259	271	240	259
25 Spd	10	7	4	1	0	4	6	10	10	D	D	28	31	30	32	33	31	29	30	28	26	18	13	4	17.1	32.5
Dir	253	247	241	50	332	212	210	219	249	D	D	262	257	256	257	250	250	253	247	245	245	241	244	249	249	250
26 Spd	7	9	7	2	1	9	19	25	27	29	27	26	21	24	27	29	30	31	29	26	17	13	11	12	18.6	30.6
Dir	239	224	220	183	41	246	253	259	259	258	257	245	263	265	263	260	267	270	264	259	250	245	246	246	257	270
27 Spd	9	1	3	2	3	3	2	4	11	17	20	19	19	19	19	14	10	21	6	6	18	11	9	7	8.1	20.9
Dir	257	171	164	139	107	166	70	245	251	257	256	254	247	245	259	259	247	236	51	163	202	183	171	153	235	236
28 Spd	3	3	5	3	4	0	1	10	17	20	20	18	17	15	11	5	14	9	8	12	7	7	15	15	6.3	20.5
Dir	151	162	198	184	196	165	215	219	234	244	245	237	226	230	164	238	261	246	122	119	121	352	318	310	233	244
29 Spd	15	13	2	6	4	5	5	4	3	16	20	20	16	15	15	13	12	14	16	12	12	4	9	13	9.4	20.3
Dir	313	309	326	239	53	243	217	203	304	256	262	265	260	272	292	317	307	299	278	277	261	11	227	243	276	265
30 Spd	5	6	8	6	4	6	8	8	11	9	12	20	30	34	34	34	38	30	35	38	33	30	32	D	19.8	38.5
Dir	228	210	206	172	181	210	218	237	267	262	212	238	252	256	254	243	239	243	252	253	248	249	243	D	244	253
Spd	3.1	2.0	1.4	0.7	1.0	1.7	3.9	6.1	8.3	9.8	9.3	9.9	10.1	10.3	9.8	9.9	9.5	8.8	7.4	7.4	6.8	4.8	3.5	3.5	Diurnal Average	
Dir	296	263	258	239	260	256	233	238	250	249	249	251	254	254	256	256	256	261	253	254	253	265	274	288		
Spd	19.6	17.8	14.5	14.7	16.3	19.4	22.0	28.8	33.8	36.6	42.2	41.3	42.3	38.0	39.2	38.2	38.1	38.6	35.0	38.5	33.0	30.3	31.6	19.1	Diurnal Maximum	
Dir	263	252	281	253	269	268	240	242	251	250	259	253	260	261	270	255	239	261	252	253	248	249	243	266		

Maximum Speed Value: 42 km/h on Jun 3 13:00
Minimum Speed Value: 0 km/h on Jun 10 05:00
Maximum Daily Speed Average: 25.2 km/h on Jun 3
Minimum Daily Speed Average: 2.1 km/h on Jun 17
Maximum Diurnal Speed Average: 10.3 km/h at hour 14
Minimum Diurnal Speed Average: 0.7 km/h at hour 4

Monthly Average Velocity: 6.12 km/h 254.9 deg
Speed Percentiles: P_1 = 0.7 P_{10} = 2.5 Q_1 = 4.9 Median = 8.7 Q_3 = 15.2 P_{90} = 24.4 P_{99} = 38.1
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	720
Hours of Data:	672
Hours of Missing Data:	48
Percent Operational Time:	93.3

D - DAS Failure

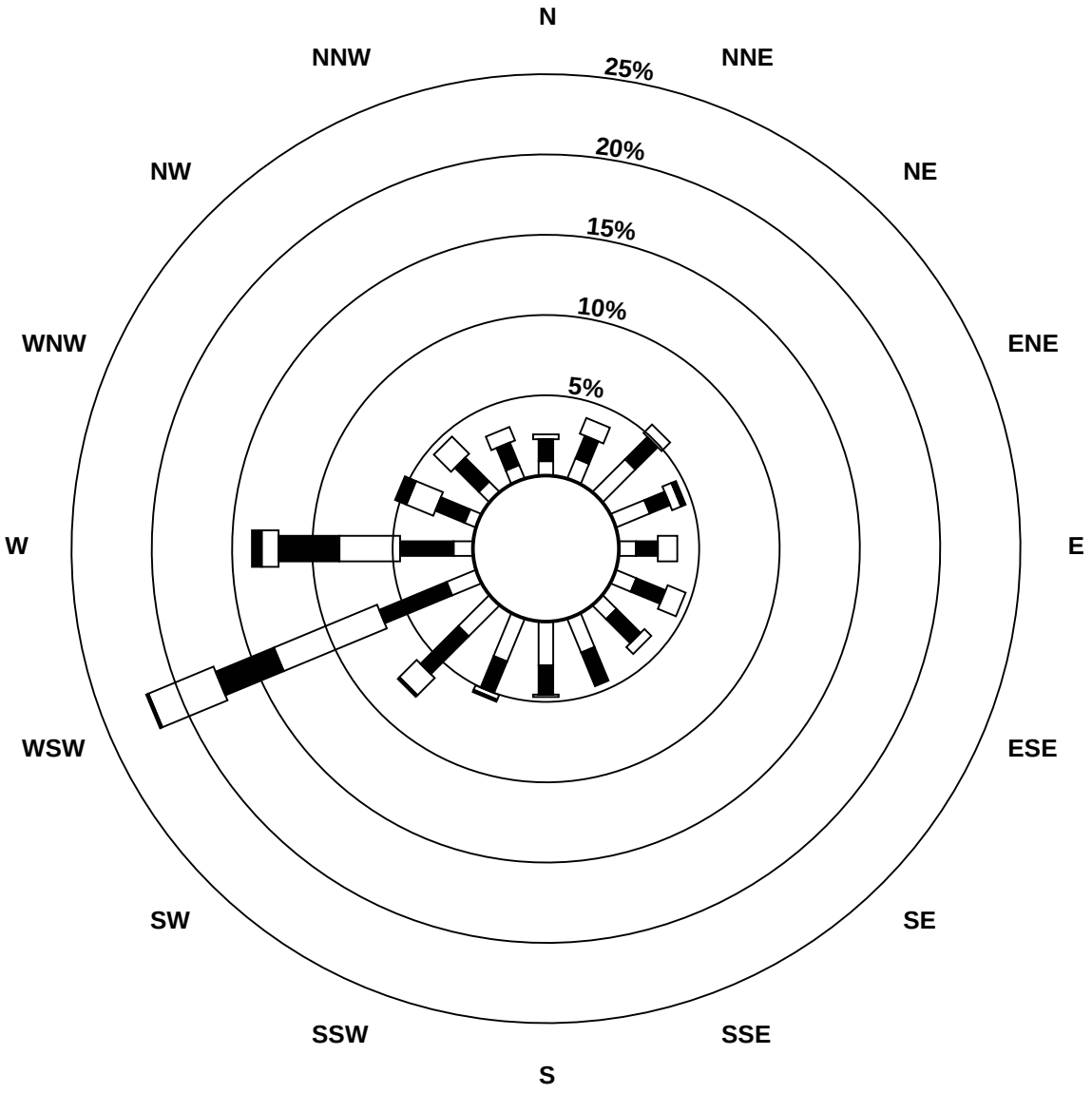
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	9	16	7	0	0	0	32
NorthEast	33	22	11	1	0	0	67
East	21	21	12	2	0	0	56
SouthEast	17	30	12	0	0	0	59
South	37	23	4	0	0	0	64
SouthWest	35	48	34	15	8	1	141
West	15	39	53	46	27	8	188
NorthWest	15	25	25	0	0	0	65
Total	182	224	158	64	35	9	672

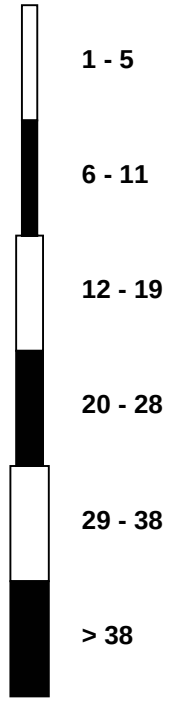
Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - June 2010



Wind Speed Classes (km/h)



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Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - June 2010

Maximum Speed: 43 km/h on Jun 3 13:00

Maximum Daily Speed Average: 27.1 km/h on Jun 3

Minimum Speed: 1 km/h on Jun 20 04:00

Minimum Daily Speed Average: 6.3 km/h on Jun 17

Maximum Diurnal Speed Average: 17.2 km/h at hour 16

Minimum Diurnal Speed Average: 5.5 km/h at hour 5

Monthly Average Speed: 11.85 km/h

Percentiles: P_1 = 1.8 P_{10} = 3.5 Q_1 = 5.6 Median = 9.5 Q_3 = 15.6 P_{90} = 24.8 P_{99} = 38.5

Hours in Service:	720
Hours of Data:	672
Hours of Missing Data:	48
Percent Operational Time:	93.3

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-Jun	D	12	12	14	12	13	14	15	16	15	14	11	9	7	9	9	5	6	10	16	9	13	11	9	11.3	16.0
2-Jun	10	6	5	5	4	3	2	2	5	8	12	14	17	19	18	24	10	7	6	11	12	9	12	10	9.6	24.2
3-Jun	16	9	15	12	15	18	20	28	34	37	43	42	43	39	39	39	38	39	33	29	23	16	13	13	27.1	42.8
4-Jun	13	13	13	10	7	2	5	16	21	18	17	14	13	14	12	12	11	11	9	8	5	6	6	4	10.8	20.5
5-Jun	6	5	4	3	3	4	2	10	17	24	24	24	25	26	24	23	22	25	26	23	13	9	8	8	14.9	26.2
6-Jun	5	4	3	5	2	5	6	8	15	15	12	11	10	12	9	9	7	8	5	18	17	14	14	14	9.5	18.0
7-Jun	10	11	9	10	12	13	12	12	14	9	13	11	8	8	10	9	13	13	13	13	7	8	10	4	10.5	14.2
8-Jun	5	5	6	8	5	6	9	9	7	7	9	10	7	6	5	6	8	10	12	9	6	7	6	6	7.2	11.8
9-Jun	4	3	3	2	1	3	5	6	2	7	8	10	10	19	19	20	20	17	19	18	11	9	6	5	9.4	20.4
10-Jun	6	7	4	1	1	2	2	3	4	6	7	6	18	7	9	13	10	6	10	10	9	6	5	5	6.6	17.7
11-Jun	5	3	4	5	4	2	4	5	8	8	9	9	8	9	8	7	9	8	9	10	7	8	2	3	6.4	9.7
12-Jun	4	4	3	4	5	3	3	4	13	19	16	14	15	16	10	10	7	8	9	7	9	2	3	13	8.4	18.6
13-Jun	18	14	11	13	16	19	20	15	18	19	21	26	26	25	27	31	29	20	25	20	18	25	16	19	20.5	31.5
14-Jun	20	18	15	15	15	12	22	29	34	29	29	29	27	26	27	27	27	22	20	15	14	18	11	10	21.4	34.1
15-Jun	5	5	3	3	3	4	5	4	7	11	10	9	11	10	12	9	10	9	8	10	9	13	11	5	7.8	13.2
16-Jun	4	3	6	3	3	3	3	4	5	6	7	5	8	5	8	9	10	14	16	15	10	7	8	8	7.1	15.6
17-Jun	4	3	5	5	2	3	3	5	4	3	7	5	7	7	9	17	18	7	6	8	6	5	4	7	6.3	17.7
18-Jun	5	4	2	2	5	5	5	7	6	5	9	11	14	13	13	16	11	14	23	26	13	6	4	5	9.3	26.0
19-Jun	3	4	2	2	3	2	5	9	7	8	12	13	18	17	21	20	22	21	20	16	13	7	5	4	10.6	21.8
20-Jun	6	6	3	1	2	2	5	5	7	11	10	10	10	9	7	10	10	9	6	5	6	7	6	5	6.5	11.4
21-Jun	3	3	7	4	6	13	13	13	10	6	10	8	8	9	9	9	D	D	D	D	D	D	D	D	--	13.1
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	11	10	9	12	11	15	9	8	9	8	7	8	--	15.2
24-Jun	8	7	2	3	4	2	3	4	11	11	13	13	17	16	17	21	11	6	15	19	17	11	7	8	10.3	20.6
25-Jun	10	7	5	2	1	4	6	11	10	D	D	29	31	31	32	33	31	29	30	28	26	18	13	5	17.8	33.0
26-Jun	7	9	8	3	3	9	19	25	27	29	28	26	23	25	28	30	31	31	29	26	18	13	11	12	19.5	31.0
27-Jun	9	2	4	3	3	5	2	6	11	18	21	20	20	20	19	16	11	24	8	7	18	11	9	7	11.4	23.9
28-Jun	5	4	5	3	5	3	4	11	17	21	20	18	18	16	13	7	15	10	10	12	8	10	16	16	11.1	20.9
29-Jun	16	14	5	7	6	6	5	4	7	16	20	21	16	16	16	13	12	14	16	13	13	8	10	13	12.0	21.0
30-Jun	5	8	8	6	5	6	8	9	11	9	12	21	30	35	34	34	38	31	36	39	33	30	32	D	20.9	38.7
	7.9	6.9	6.2	5.5	5.5	6.1	7.7	9.9	12.4	14.0	15.3	15.7	16.4	16.2	16.3	17.2	16.3	15.5	15.6	15.6	12.8	10.8	9.4	8.4	Diurnal Average	
	19.7	18.1	15.1	14.8	16.4	19.5	22.2	28.9	34.1	37.4	42.6	41.5	42.8	38.5	39.4	38.5	38.4	38.9	35.6	38.7	33.1	30.4	31.7	19.1	Diurnal Maximum	

D - DAS Failure

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

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - June 2010

Maximum Value: 99.2 deg on Jun 5 00:00

Minimum Value: 1.9 deg on Jun 4 01:00

Percentiles: P_1 = 2.3 P_{10} = 6.8 Q_1 = 10.2 Median = 18.7 Q_3 = 36.8 P_{90} = 59.0 P_{99} = 87.0

Hours in Service:	720
Hours of Data:	672
Hours of Missing Data:	48
Hours of Calibration:	0
Percent Operational Time:	93.3

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-Jun	D	2	5	3	11	8	13	10	11	12	10	19	17	45	37	32	74	16	10	65	29	8	54	21	73.8
2-Jun	38	59	18	20	52	73	74	24	35	21	20	17	14	13	10	20	17	30	57	30	9	25	7	46	73.7
3-Jun	14	53	16	8	9	5	7	6	6	11	7	6	9	9	7	8	8	7	5	4	4	2	2	3	53.2
4-Jun	2	2	2	8	13	89	21	31	12	13	17	20	27	30	30	28	23	22	23	11	8	65	36	99	99.2
5-Jun	28	20	60	29	21	15	56	23	7	10	13	23	14	9	10	17	24	12	6	7	8	8	10	5	59.8
6-Jun	55	20	48	24	58	46	19	32	11	14	28	28	43	60	51	54	63	47	59	14	4	5	6	16	63.1
7-Jun	55	11	14	9	10	9	10	13	11	16	15	29	37	23	17	29	9	10	10	8	8	42	7	33	55.4
8-Jun	19	37	9	8	13	11	5	8	7	15	26	14	39	48	53	43	28	17	13	8	14	11	13	6	52.7
9-Jun	67	65	45	92	75	55	22	15	41	21	46	31	21	13	20	14	13	17	7	4	20	16	12	12	92.4
10-Jun	8	10	84	86	79	66	48	15	28	27	36	82	22	37	52	25	40	68	35	23	20	8	8	16	86.3
11-Jun	14	16	28	14	24	21	22	17	15	17	22	30	33	33	51	43	34	42	23	10	27	16	87	75	87.4
12-Jun	91	40	46	29	44	37	37	21	11	12	10	14	13	19	64	36	43	24	68	27	34	48	72	42	90.6
13-Jun	8	10	9	8	7	6	6	6	6	15	20	13	11	16	11	10	8	15	9	14	11	3	6	4	19.9
14-Jun	5	10	11	7	3	7	7	5	7	10	12	17	15	13	9	9	14	12	12	8	11	4	9	11	16.6
15-Jun	55	38	35	44	14	33	10	35	25	18	28	41	44	60	24	61	30	30	51	35	26	58	4	20	61.3
16-Jun	22	86	35	73	32	26	33	37	24	27	34	84	79	54	65	29	32	31	13	7	10	3	5	11	86.3
17-Jun	52	29	27	14	54	69	16	21	38	52	44	77	60	70	60	23	14	32	28	14	5	26	59	72	77.2
18-Jun	37	69	25	46	8	22	37	10	19	32	22	38	26	29	30	29	28	31	9	8	8	48	44	21	69.1
19-Jun	87	90	81	73	15	30	17	11	14	22	33	38	24	19	22	17	11	12	11	4	14	6	54	85	89.7
20-Jun	10	10	30	72	62	83	43	71	17	16	22	32	28	51	78	44	36	18	34	18	5	4	35	74	82.8
21-Jun	63	84	52	51	34	11	11	6	15	59	30	48	49	26	40	24	D	D	D	D	D	D	D	D	84.5
22-Jun	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--
23-Jun	D	D	D	D	D	D	D	D	D	D	D	D	26	21	31	28	18	9	9	7	14	10	18	6	31.2
24-Jun	7	12	43	52	21	42	54	19	13	25	24	21	26	27	26	15	34	44	12	20	10	23	23	6	54.3
25-Jun	12	10	40	54	84	27	9	10	17	D	D	11	9	9	11	10	8	11	9	6	4	3	2	70	84.3
26-Jun	15	7	9	51	74	19	7	6	7	8	10	11	22	14	15	13	15	8	7	6	5	3	5	4	74.1
27-Jun	6	79	45	47	26	45	30	90	11	18	18	16	17	17	16	39	35	41	46	51	9	10	9	17	89.6
28-Jun	47	44	43	25	53	87	86	14	7	11	14	11	11	17	34	66	21	26	62	11	25	41	18	12	86.6
29-Jun	7	7	77	40	67	46	41	55	66	17	15	17	19	20	14	15	14	15	17	8	50	68	19	10	76.9
30-Jun	28	58	27	8	16	9	8	9	11	9	14	24	8	9	9	8	6	8	10	6	5	4	4	D	58.1
	90.6	89.7	83.8	92.4	84.3	89.1	85.9	89.6	66.5	58.5	46.5	84.5	79.1	70.5	78.1	66.4	73.8	67.8	68.4	65.4	50.4	67.6	87.4	99.2	

D - DAS Failure

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

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Kinuso - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 1.6 ppb on Jun 1 09:00 Maximum Daily Average: 0.5 ppb on Jun 2

Minimum Value: 0 ppb on Jun 4 23:00 Minimum Daily Average: 0.0 ppb on Jun 14
Maximum Diurnal Average: 0.3 ppb at hour 9 Minimum Diurnal Average: 0.1 ppb at hour 1
Monthly Average: 0.16 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.3$ $P_{99} = 0.8$

Hours in Service:	396
Hours of Data:	368
Hours of Missing Data:	28
Hours of Calibration:	26
Percent Operational Time:	99.5

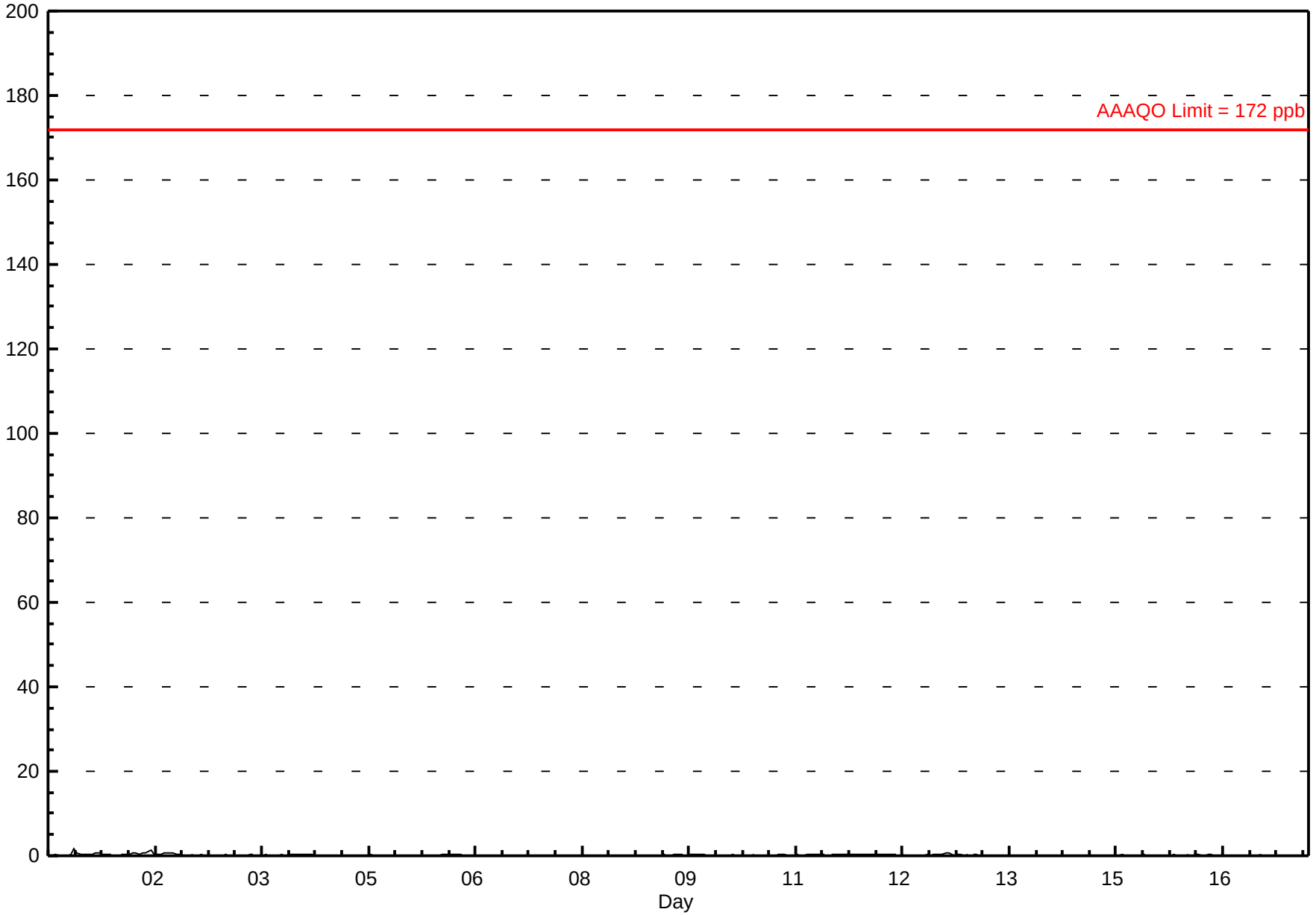
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	1	1	0	0	0	0	A	A	0	0.4	1.6
2-Jun	0	0	0	1	1	0	1	1	1	1	0	0	0	1	1	1	1	0	0	0	A	A	0	0	0.5	1.3
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0.1	0.3
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0.1	0.3
5-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0.1	0.2
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0.1	0.3
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	P	0	0	0	0	0.0	0.1
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2
9-Jun	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
10-Jun	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
11-Jun	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
12-Jun	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
13-Jun	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
14-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
15-Jun	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
16-Jun	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
17-Jun	0	0	0	0	0	0	A	0	0	M	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.2
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.3	0.5	0.5	0.6	0.6	0.4	0.6	0.7	1.6	1.3	0.3	0.5	0.3	0.5	0.6	0.8	0.8	0.4	0.4	0.4	0.4	0.3	0.3	0.3	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Kinuso - June 2010



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Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable-Kinuso - June 2010

Maximum Value: 3.0 ppb on Jun 1 09:00

Maximum Daily Average: 0.8 ppb on Jun 2

Minimum Value: 0 ppb on Jun 15 08:00

Minimum Daily Average: 0.3 ppb on Jun 14

Maximum Diurnal Average: 0.7 ppb at hour 9

Minimum Diurnal Average: 0.4 ppb at hour 22

Monthly Average: 0.44 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.4$ $P_{90} = 0.7$ $P_{99} = 1.4$

Hours in Service:	396
Hours of Data:	368
Hours of Missing Data:	28
Hours of Calibration:	26
Percent Operational Time:	99.5

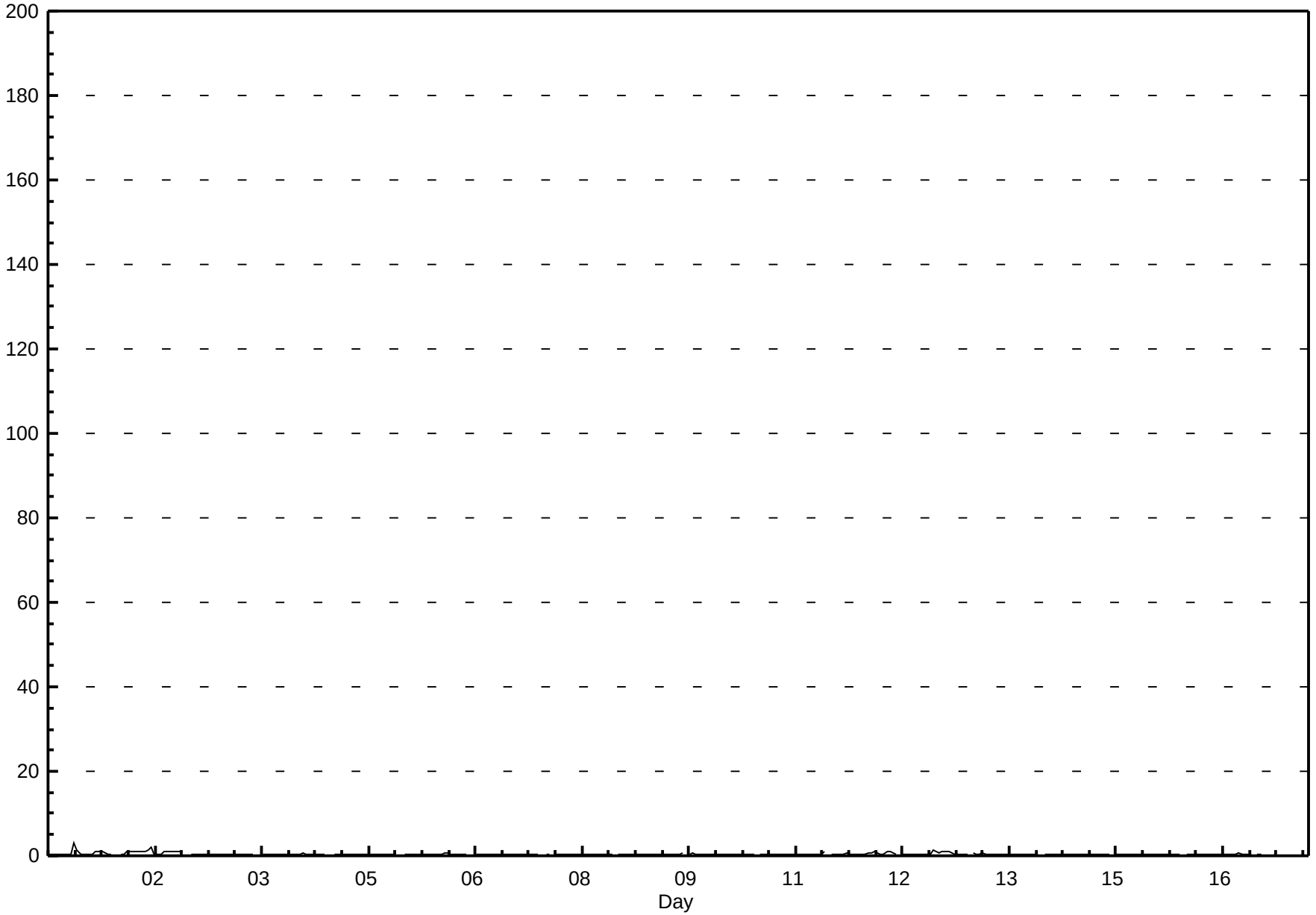
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	1	1	1	1	0	0	A	A	0	0.7	3.0
2-Jun	0	1	1	1	1	1	1	1	1	2	0	0	0	1	1	1	1	1	1	1	A	A	0	0	0.8	1.9
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0.4	0.5
4-Jun	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	A	0	0	0	0	0.4	0.6
5-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0.4	0.4
6-Jun	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0.4	0.8
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	P	0	0	0	0	0.3	0.4
8-Jun	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	0.4
9-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	1	0	0	0	0	0	0	0	0.4	0.8
10-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	0.5
11-Jun	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	1	0	0	0	0	0	0.5	0.9
12-Jun	0	1	1	1	1	0	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0.6	1.4
13-Jun	1	1	1	1	1	0	0	0	0	0	A	1	0	0	1	0	0	0	0	0	0	0	0	0	0.5	0.9
14-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
15-Jun	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
16-Jun	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
17-Jun	0	1	0	0	0	0	A	0	0	M	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.5
	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.7	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	3.0	1.9	0.6	0.9	0.5	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.4	0.5	1.4	0.9	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

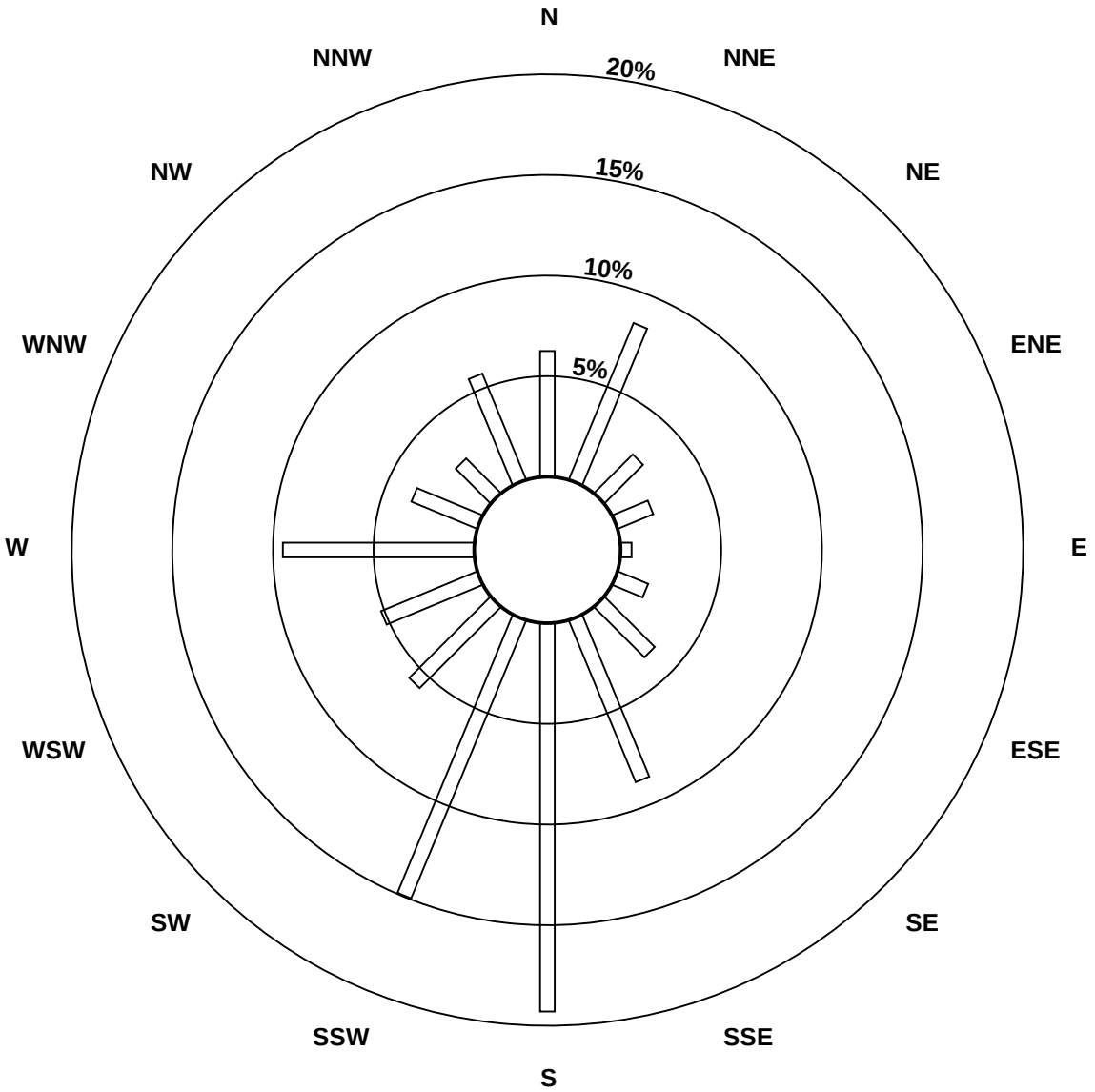
Portable-Kinuso - June 2010



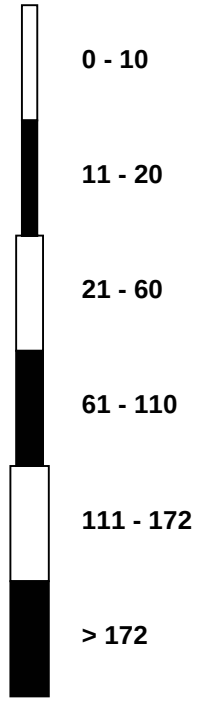
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable-Kinuso - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Kinuso - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.6 ppb on Jun 13 07:00 Maximum Daily Average: 0.5 ppb on Jun 4

Minimum Value: 0 ppb on Jun 9 05:00 Minimum Daily Average: 0.3 ppb on Jun 10
Maximum Diurnal Average: 0.4 ppb at hour 9 Minimum Diurnal Average: 0.4 ppb at hour 6
Monthly Average: 0.40 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 0.5$

Hours in Service:	400
Hours of Data:	373
Hours of Missing Data:	27
Hours of Calibration:	26
Percent Operational Time:	99.8

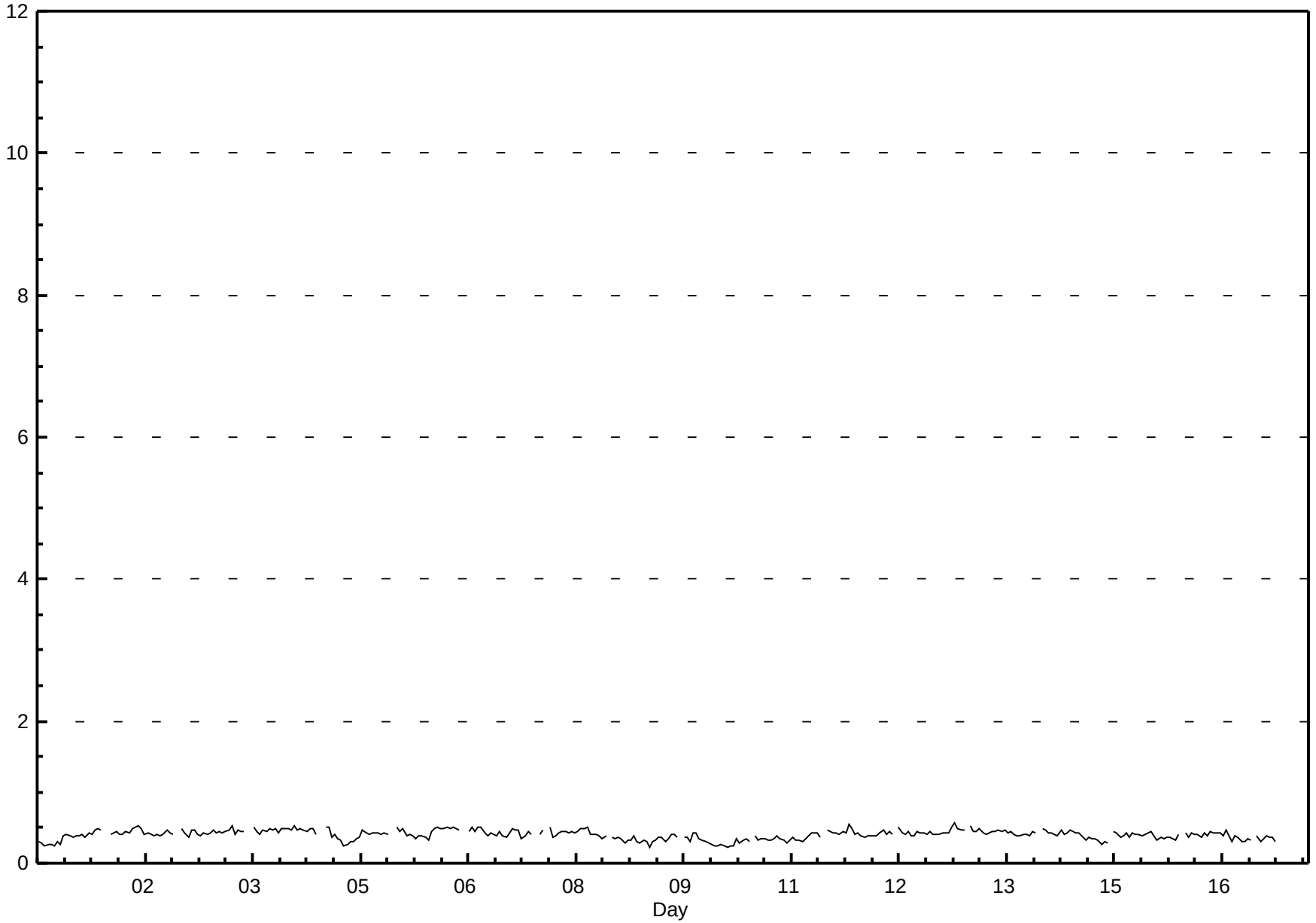
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.4	0.5
2-Jun	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0.4	0.5
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	A	1	0	0	0.4	0.5
4-Jun	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	A	0	1	0	0	0.5	0.5
5-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	1	0	0	0	0	0.4	0.5
6-Jun	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	A	A	0	1	0	1	1	0	0.5	0.5
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	P	1	0	0	0	0.4	0.5
8-Jun	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.5
9-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
10-Jun	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
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0.4	0.5
12-Jun	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
13-Jun	0	0	0	0	0	1	1	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.6
14-Jun	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
15-Jun	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
16-Jun	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
17-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	C	C	NS	NS	NS	NS	NS	NS	NS	NS	--	0.4
	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average	
	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	Diurnal Maximum	

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

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Kinuso - June 2010



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Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable-Kinuso - June 2010

Maximum Value: 1.2 ppb on Jun 17 02:00

Maximum Daily Average: 0.8 ppb on Jun 6

Minimum Value: 0 ppb on Jun 10 08:00

Minimum Daily Average: 0.6 ppb on Jun 10

Maximum Diurnal Average: 0.8 ppb at hour 22

Minimum Diurnal Average: 0.7 ppb at hour 5

Monthly Average: 0.74 ppb

Percentiles: $P_1 = 0.5$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 0.9$ $P_{99} = 1.0$

Hours in Service:	400
Hours of Data:	373
Hours of Missing Data:	27
Hours of Calibration:	26
Percent Operational Time:	99.8

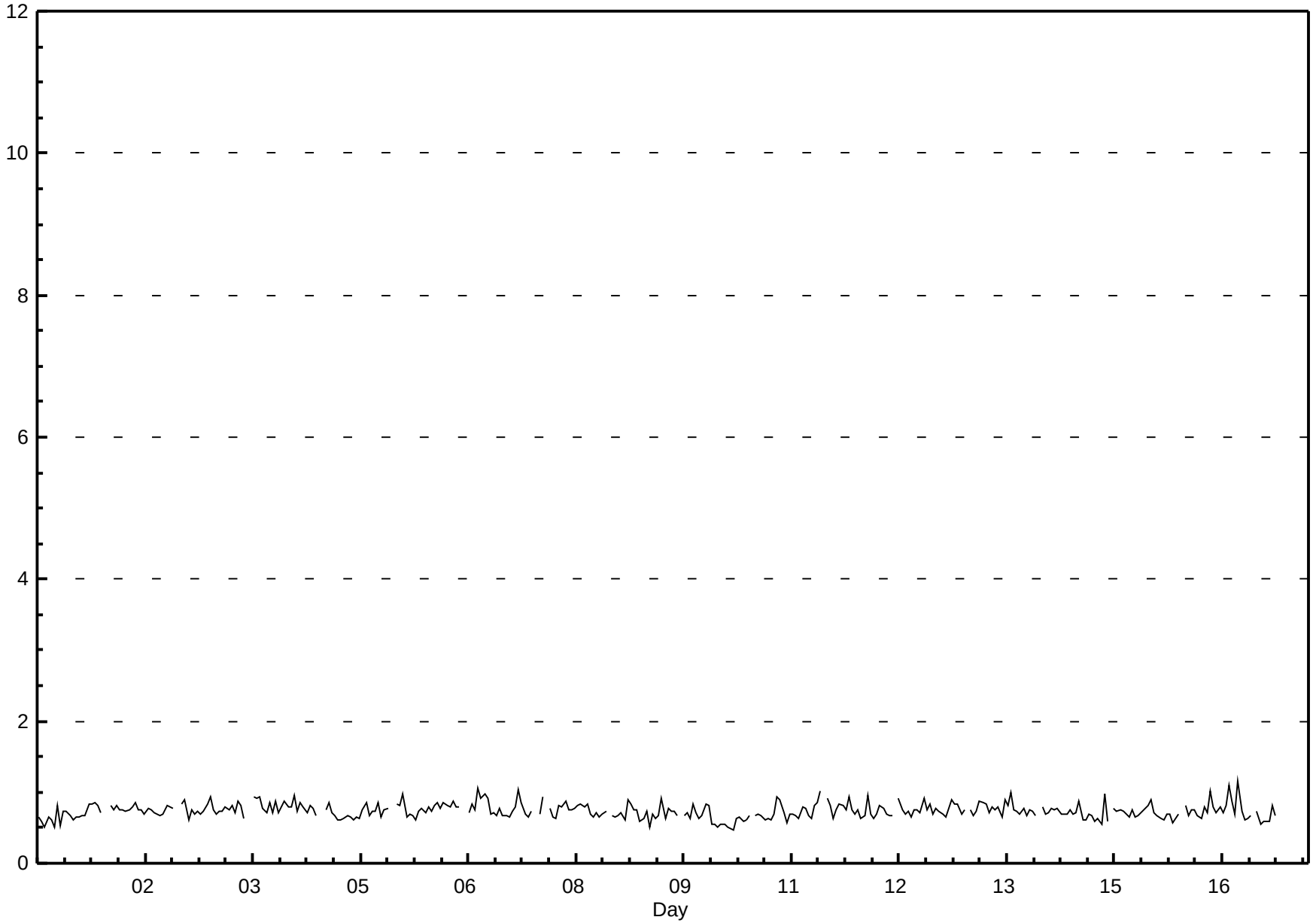
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	0.7	0.9
2-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	0.8	0.9
3-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1	0.8	0.9
4-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1	1	0.8	1.0
5-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1	1	1	0.7	1.0
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1	1	1	1	0.8	1.1
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	P	1	1	1	1	0.7	1.0
8-Jun	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
9-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
10-Jun	1	1	1	1	1	1	0	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.9
11-Jun	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	1.0
12-Jun	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	1.0
13-Jun	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
14-Jun	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	1.0
15-Jun	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
16-Jun	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
17-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	1	C	C	NS	NS	NS	NS	NS	NS	NS	NS	--	1.2
	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	Diurnal Average	
	1.0	1.2	1.0	0.8	0.9	0.9	1.0	0.9	0.9	0.8	1.0	1.0	0.9	0.9	0.9	0.8	1.0	0.8	0.9	0.8	0.9	1.1	1.1	1.0	Diurnal Maximum	

C - Calibration P - Power Failure NS - Not in service A - Automated Daily Zero Span

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

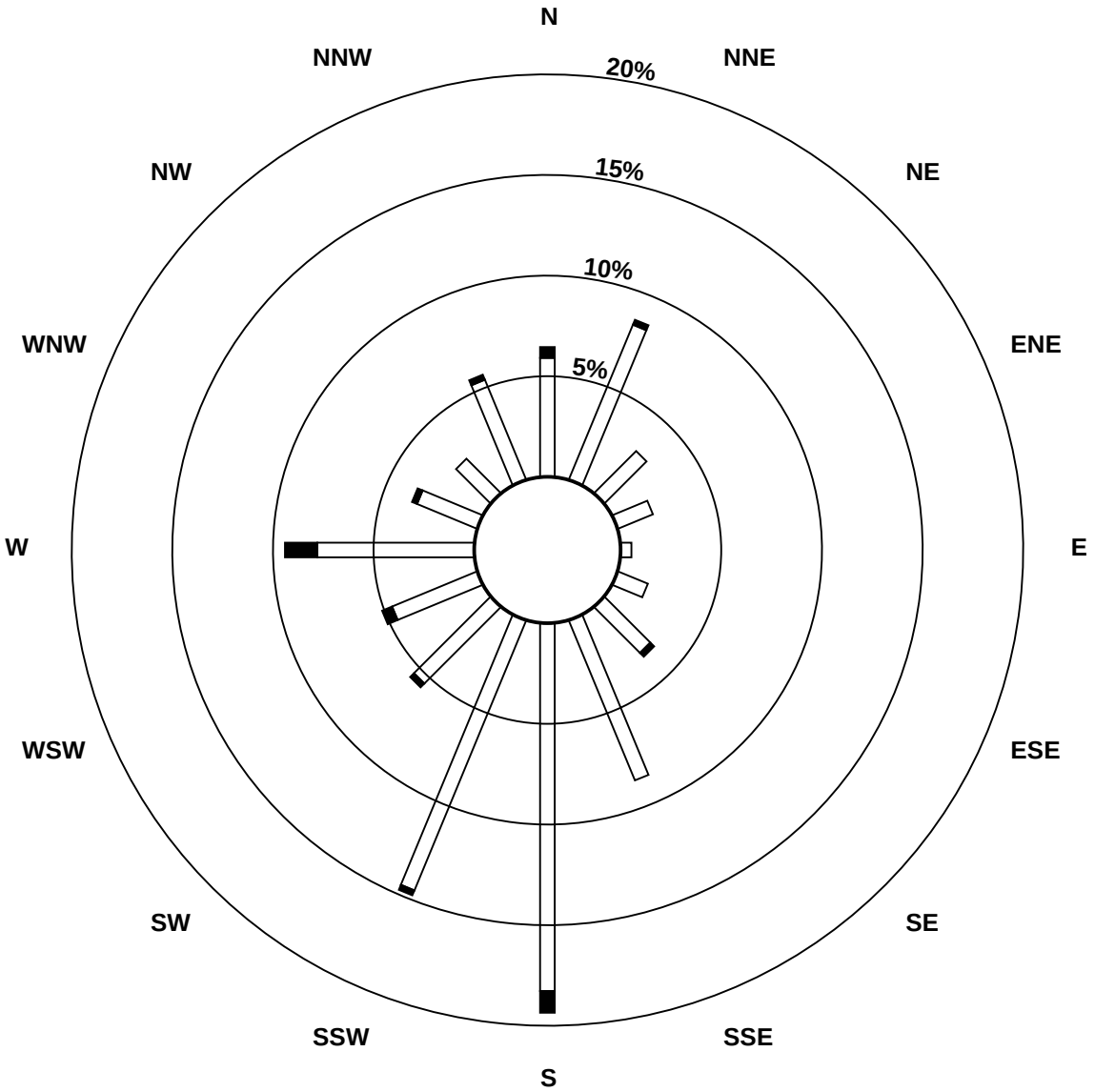
Portable-Kinuso - June 2010



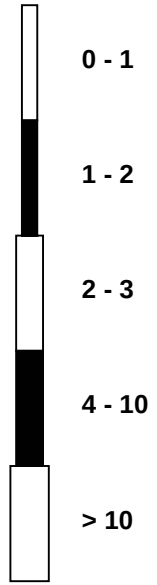
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable-Kinuso - June 2010



Pollutant Classes (ppb)



PASZA
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Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Kinuso - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.8 ppb on Jun 10 13:00 Maximum Daily Average: 1.8 ppb on Jun 10

Minimum Value: 0 ppb on Jun 8 06:00 Minimum Daily Average: 0.6 ppb on Jun 7
Maximum Diurnal Average: 2.1 ppb at hour 22 Minimum Diurnal Average: 0.6 ppb at hour 15
Monthly Average: 1.01 ppb Percentiles: P_1 = 0.2 P_{10} = 0.4 Q_1 = 0.5 Median = 0.8 Q_3 = 1.2 P_{90} = 1.9 P_{99} = 3.7

Hours in Service:	398
Hours of Data:	368
Hours of Missing Data:	30
Hours of Calibration:	28
Percent Operational Time:	99.5

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-Jun	1	1	1	1	2	1	1	1	2	1	0	0	1	0	0	1	1	1	1	1	1	A	A	2	1.1	2.1
2-Jun	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	A	A	2	2	1.5	2.1
3-Jun	1	1	1	1	2	1	1	1	1	1	1	1	0	0	0	0	0	1	1	A	A	1	1	1	0.9	1.8
4-Jun	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	3	2	3	2	1.0	2.9
5-Jun	2	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	A	2	2	4	2	1	1.0	4.5
6-Jun	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	A	1	2	1	1	1	1	0.7	1.8
7-Jun	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	A	1	1	P	1	1	0	0	0.6	1.4
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	2	1	2	4	1	2	1	1	0.8	3.8
9-Jun	1	1	1	1	1	1	1	1	0	0	0	1	1	0	A	2	1	1	2	2	1	1	2	1	0.9	2.3
10-Jun	1	1	1	1	1	1	1	1	1	2	1	2	12	A	2	1	1	1	1	1	1	3	3	2	1.8	11.8
11-Jun	1	1	1	1	2	2	1	1	1	1	0	0	A	2	1	1	1	1	1	1	3	2	1	1	1.1	2.6
12-Jun	1	1	1	1	1	1	1	1	1	1	0	A	2	1	1	1	1	0	0	2	2	4	3	1	1.1	3.5
13-Jun	1	1	1	1	2	2	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.1
14-Jun	1	1	1	1	1	1	1	0	0	A	2	1	1	0	0	0	0	0	0	0	1	1	3	1	0.7	2.5
15-Jun	1	1	0	0	0	0	0	0	A	2	1	0	0	0	0	0	0	0	0	1	1	4	2	2	0.8	3.9
16-Jun	1	1	1	1	1	1	1	A	2	1	1	1	1	0	0	0	0	0	1	1	1	2	2	1	0.9	2.4
17-Jun	1	1	1	1	1	1	A	3	2	M	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	2.8
	1.0	0.9	0.9	0.9	1.1	1.0	0.9	1.0	1.0	0.9	0.7	0.8	1.4	0.6	0.6	0.7	0.7	0.7	0.9	1.4	1.4	2.1	1.7	1.2	Diurnal Average	
	1.7	1.7	1.6	1.8	2.1	1.9	1.9	2.8	2.4	2.1	1.8	2.5	11.8	2.0	1.9	2.3	1.7	1.4	2.1	3.8	2.6	4.5	3.0	2.4	Diurnal Maximum	

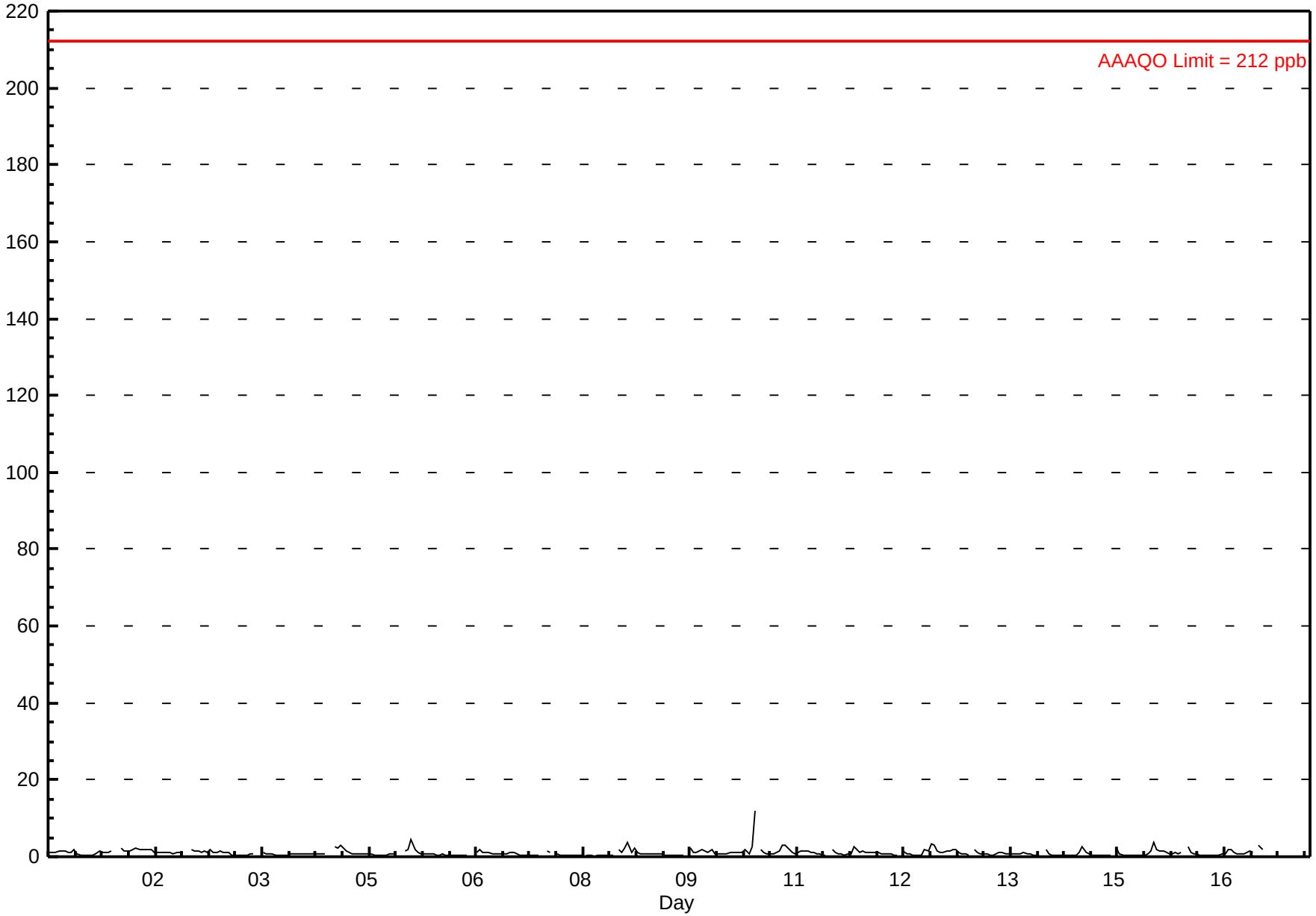
C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Kinuso - June 2010



PASZA
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Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable-Kinuso - June 2010

Maximum Value: 32.4 ppb on Jun 10 13:00

Maximum Daily Average: 4.9 ppb on Jun 10

Minimum Value: 0 ppb on Jun 8 06:00

Minimum Daily Average: 1.1 ppb on Jun 7

Maximum Diurnal Average: 4.9 ppb at hour 21

Minimum Diurnal Average: 1.1 ppb at hour 2

Monthly Average: 2.02 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.6$ $Q_1 = 0.8$ Median = 1.2 $Q_3 = 2.0$ $P_{90} = 3.7$ $P_{99} = 19.2$

Hours in Service:	398
Hours of Data:	368
Hours of Missing Data:	30
Hours of Calibration:	28
Percent Operational Time:	99.5

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-Jun	2	1	1	2	2	2	1	1	3	2	1	1	2	1	1	2	2	2	2	3	3	A	A	2	1.8	3.4
2-Jun	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	1	2	1	3	A	A	3	2	2.0	3.0
3-Jun	2	1	4	2	7	2	2	6	5	1	2	1	1	1	0	1	1	1	1	A	A	2	1	1	2.0	6.9
4-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	4	3	5	3	1.4	5.5
5-Jun	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	2	6	11	3	1	1.8	10.7
6-Jun	1	1	1	1	1	1	1	1	1	1	1	0	0	3	5	1	A	A	2	5	1	2	1	1	1.4	5.1
7-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	3	5	P	1	1	1	1	1.1	4.8
8-Jun	1	1	1	0	0	0	1	0	0	1	1	1	1	1	1	A	3	1	12	28	5	9	2	1	3.1	27.9
9-Jun	1	1	1	1	1	2	2	1	1	1	2	2	1	1	A	4	2	3	3	5	3	2	3	1	1.9	4.8
10-Jun	1	1	1	1	1	1	1	1	1	9	2	19	32	A	4	2	2	3	2	3	7	7	8	4	4.9	32.4
11-Jun	2	1	1	1	2	2	2	1	1	1	1	1	A	4	2	1	1	1	1	2	19	5	2	2	2.4	19.2
12-Jun	2	1	1	1	1	1	1	1	1	1	1	A	3	1	1	1	1	1	1	6	4	6	9	8	2.3	8.5
13-Jun	1	1	2	2	3	3	1	1	1	2	A	3	1	1	1	1	1	1	1	3	2	1	1	1	1.5	3.5
14-Jun	1	1	2	2	1	1	1	1	0	A	3	1	1	1	1	1	0	0	1	1	1	2	5	2	1.3	4.7
15-Jun	1	1	1	1	1	1	1	1	A	4	1	1	1	1	1	1	1	1	1	1	9	11	4	3	1.8	11.1
16-Jun	2	1	1	1	3	1	1	A	4	2	1	1	1	1	1	1	1	1	1	1	2	5	3	2	1.6	4.8
17-Jun	3	1	1	1	1	1	A	4	2	M	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	4.3
	1.5	1.1	1.3	1.2	1.7	1.3	1.3	1.5	1.6	1.8	1.3	2.3	3.2	1.2	1.3	1.4	1.2	1.4	2.5	4.8	4.9	4.8	3.3	2.2	Diurnal Average	
	2.9	1.8	4.1	2.2	6.9	2.6	2.1	5.7	5.0	8.6	3.0	19.2	32.4	3.6	5.1	4.4	3.0	2.6	12.0	27.9	19.2	11.1	8.5	8.0	Diurnal Maximum	

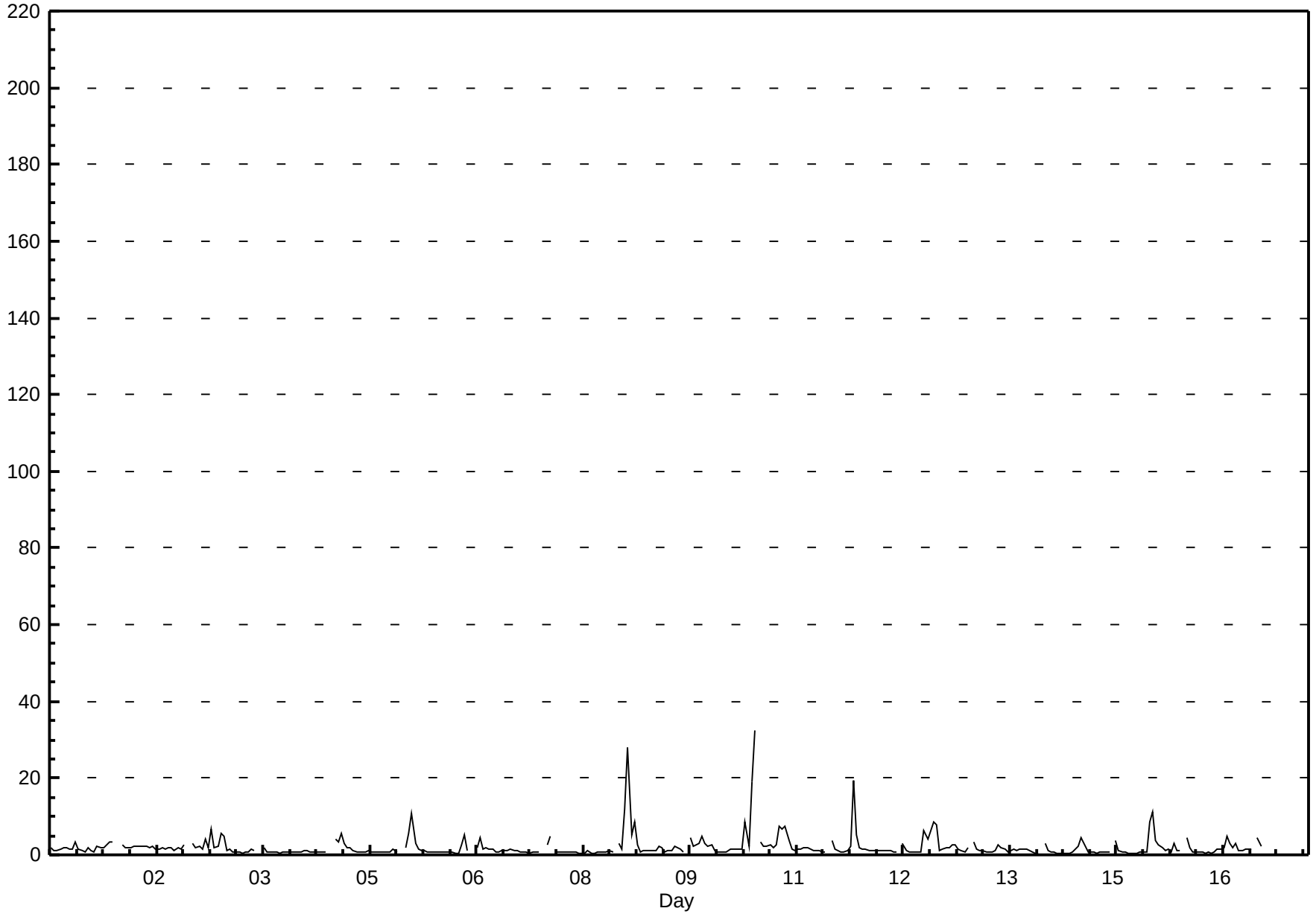
C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

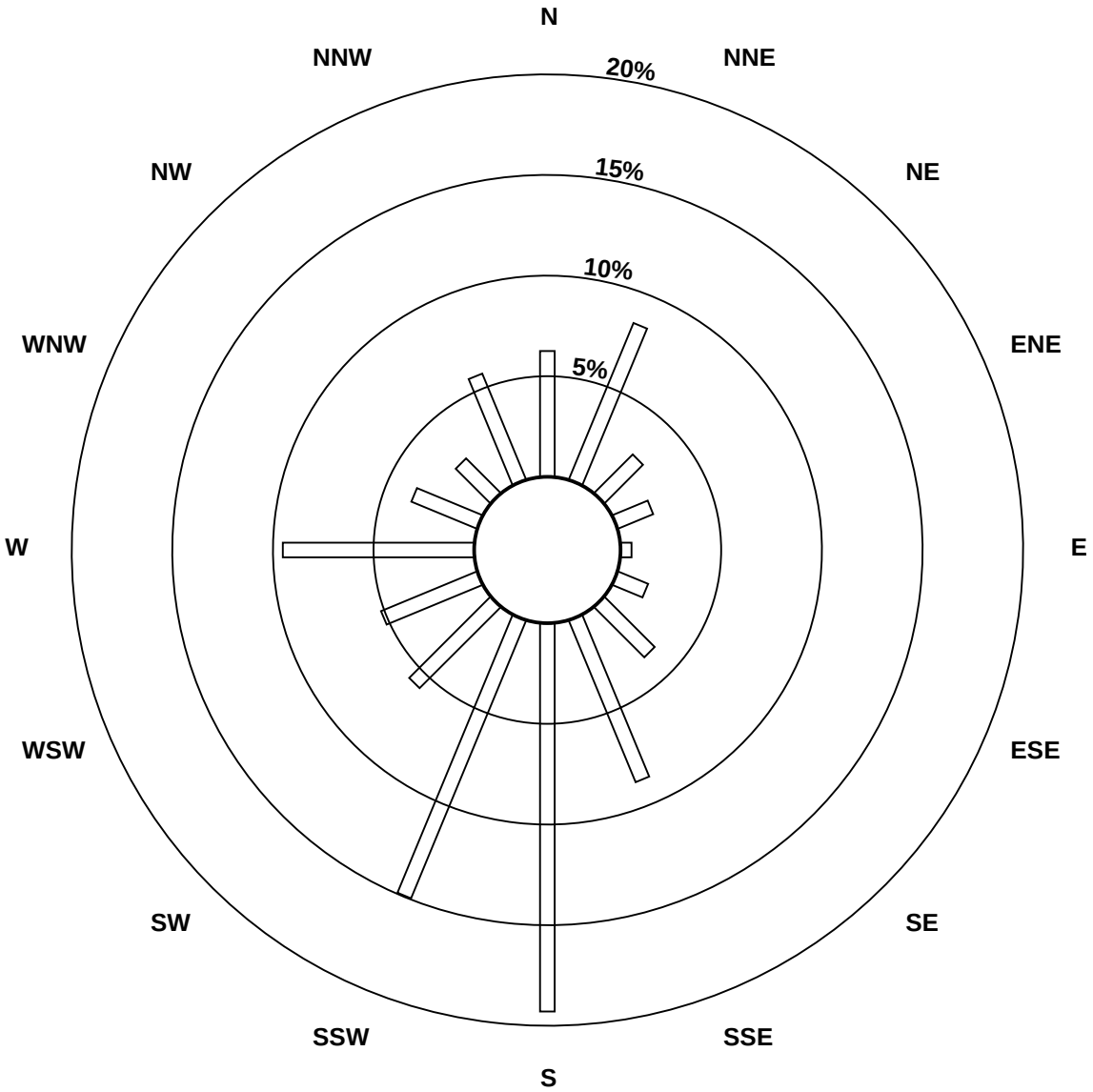
Portable-Kinuso - June 2010



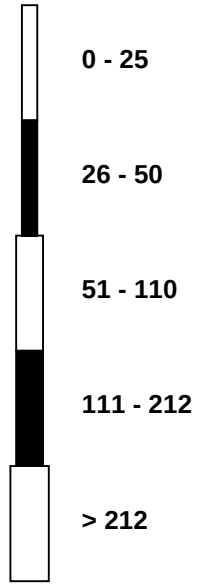
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable-Kinuso - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Kinuso - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 13.8 ppb on Jun 10 13:00 Maximum Daily Average: 0.9 ppb on Jun 10

Minimum Value: 0 ppb on Jun 1 14:00 Minimum Daily Average: 0.1 ppb on Jun 14
Maximum Diurnal Average: 1.0 ppb at hour 13 Minimum Diurnal Average: 0.1 ppb at hour 17
Monthly Average: 0.20 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.3$ $P_{99} = 1.6$

Hours in Service:	398
Hours of Data:	368
Hours of Missing Data:	30
Hours of Calibration:	28
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-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.1	0.5
2-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0.1	0.5
3-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0.1	0.2
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0.1	0.3
5-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0.2	0.5
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0.2	0.3
7-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	P	1	0	0	0	0.2	0.6
8-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	2	2	0	0	0	0	0.3	2.3
9-Jun	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	0.5
10-Jun	0	0	0	0	0	0	1	1	0	1	0	3	14	A	0	0	0	0	0	0	0	0	0	0	0.9	13.8
11-Jun	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
12-Jun	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.6
13-Jun	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
14-Jun	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Jun	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
16-Jun	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
17-Jun	0	0	0	0	0	0	A	1	0	M	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.6
	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.3	0.1	0.3	1.0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.1	Diurnal Average	
	0.2	0.2	0.2	0.2	0.3	0.5	0.7	0.7	0.5	1.2	0.2	2.8	13.8	0.2	0.2	0.3	0.2	0.3	1.7	2.3	0.6	0.4	0.6	0.3	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span

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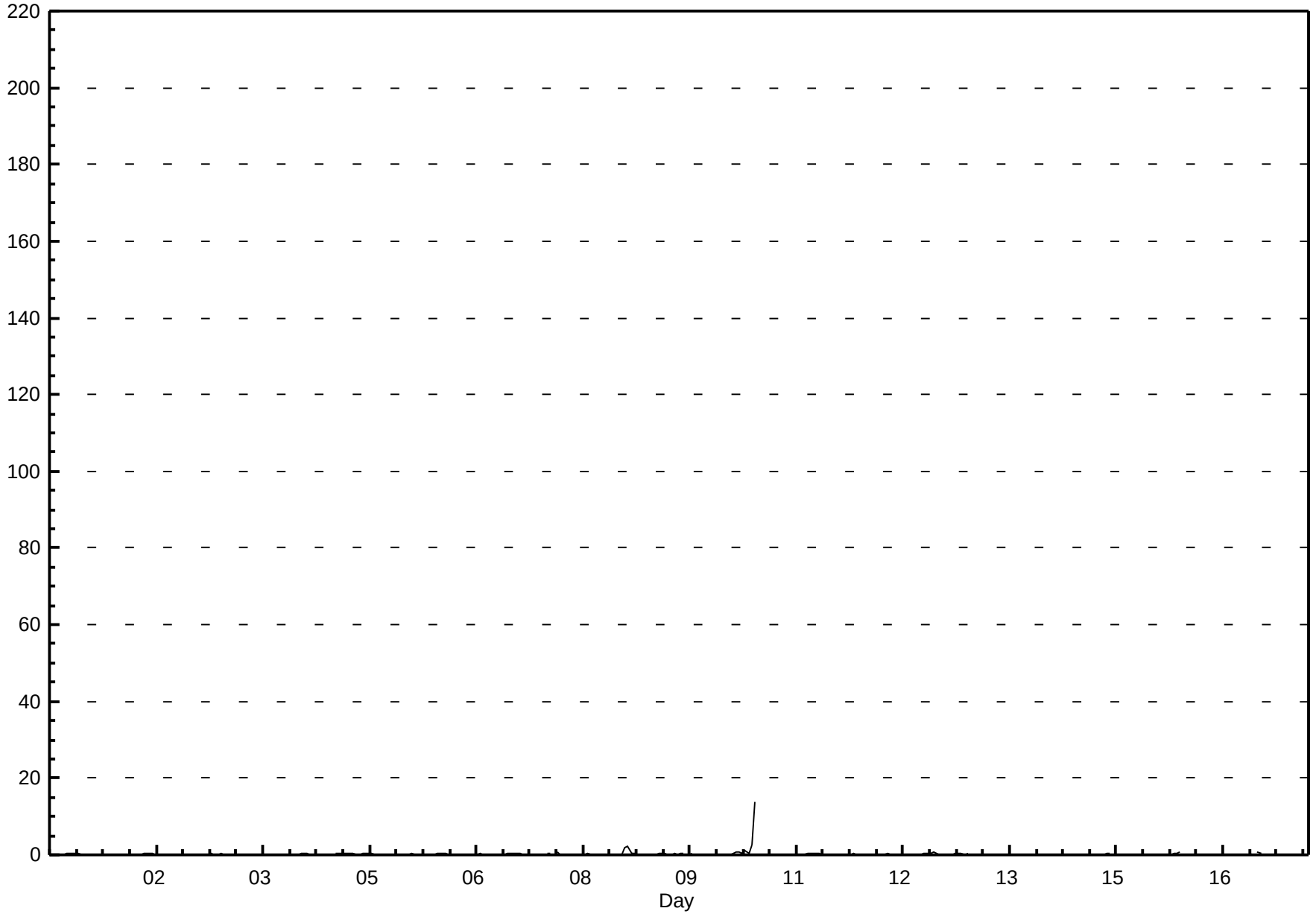
Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Kinuso - June 2010



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Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Kinuso - June 2010

Maximum Value: 40.5 ppb on Jun 10 13:00

Maximum Daily Average: 3.7 ppb on Jun 10

Minimum Value: 0 ppb on Jun 1 20:00

Minimum Daily Average: 0.2 ppb on Jun 15

Maximum Diurnal Average: 3.0 ppb at hour 13

Minimum Diurnal Average: 0.2 ppb at hour 4

Monthly Average: 0.75 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.7$ $P_{99} = 10.8$

Hours in Service:	398
Hours of Data:	368
Hours of Missing Data:	30
Hours of Calibration:	28
Percent Operational Time:	99.5

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-Jun	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.3	0.9
2-Jun	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	1	A	A	0	0	0.3	0.7
3-Jun	0	0	0	0	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0.4	2.2
4-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	1	1	0.3	0.7
5-Jun	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	A	A	0	0	3	0	0	0.5	2.8
6-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	A	A	0	1	0	0	0	0	0.5	2.8
7-Jun	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	A	A	2	6	P	2	0	0	0	0.8	5.5
8-Jun	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	A	0	1	13	23	2	1	0	0	2.0	23.4
9-Jun	0	0	0	0	0	2	1	0	1	0	1	1	1	0	A	2	1	1	1	1	0	0	0	0	0.6	2.1
10-Jun	0	0	0	0	0	1	1	1	1	11	2	22	41	A	0	1	1	1	0	0	0	0	0	0	3.7	40.5
11-Jun	0	0	0	0	0	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	9	0	0	0	0.7	9.0
12-Jun	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	2	1	2	5	3	0.7	5.0
13-Jun	0	0	0	0	0	0	0	0	0	5	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	4.5
14-Jun	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
15-Jun	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.2	0.8
16-Jun	0	0	0	0	2	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0
17-Jun	0	0	0	0	0	1	A	1	1	M	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.7
	0.3	0.2	0.2	0.2	0.4	0.5	0.5	0.6	0.5	1.4	0.4	1.7	3.0	0.4	0.4	0.4	0.3	0.5	1.5	2.2	1.2	0.6	0.6	0.4	Diurnal Average	
	0.6	0.5	0.5	0.5	2.0	2.1	1.2	2.2	1.8	11.5	1.6	22.3	40.5	2.1	2.8	1.5	0.7	1.9	12.6	23.4	9.0	2.8	5.0	2.6	Diurnal Maximum	

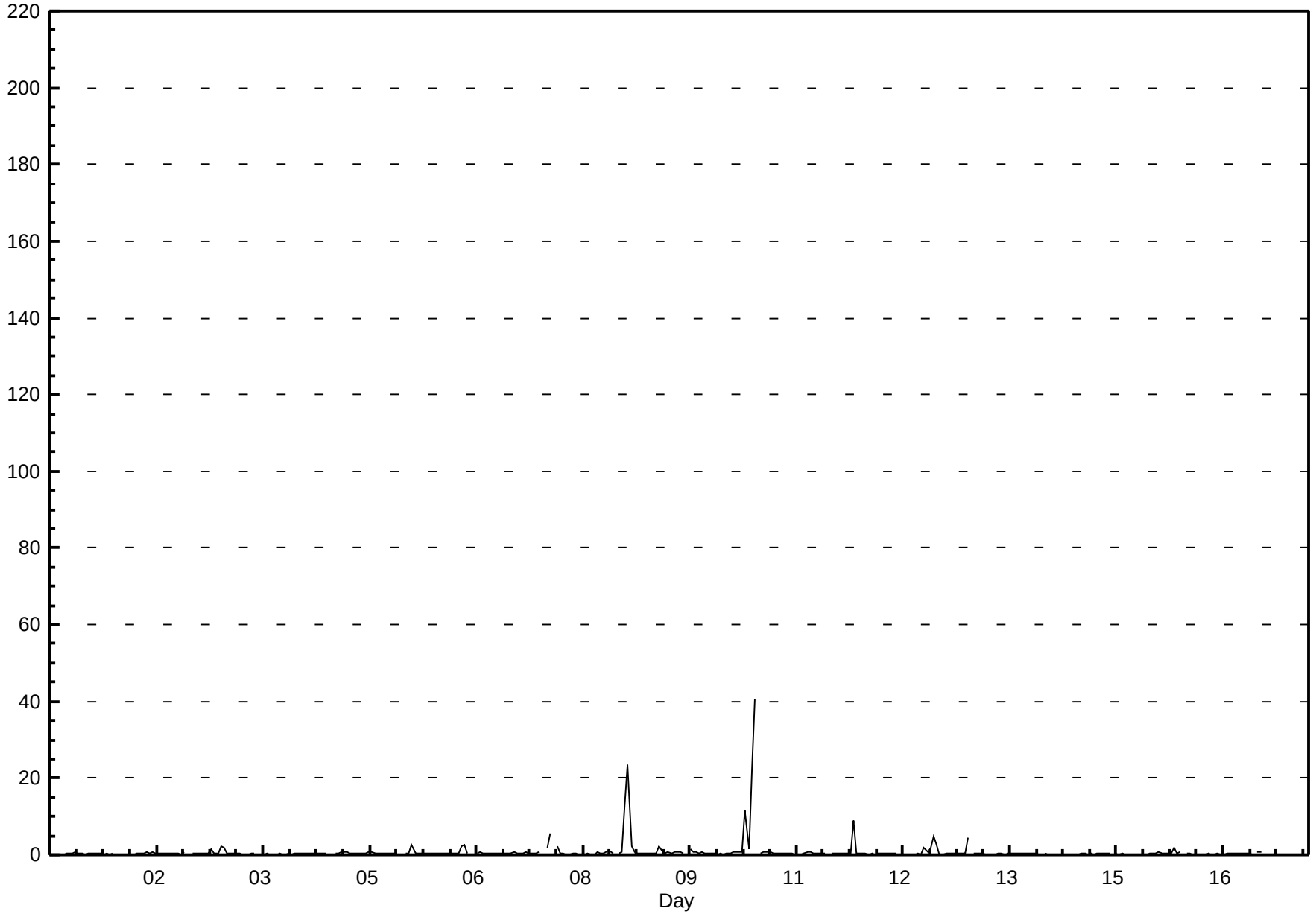
C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Kinuso - June 2010



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Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Kinuso - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.5 ppb on Jun 10 13:00 Maximum Daily Average: 2.6 ppb on Jun 10

Minimum Value: 0 ppb on Jun 14 18:00 Minimum Daily Average: 0.8 ppb on Jun 14
Maximum Diurnal Average: 2.3 ppb at hour 13 Minimum Diurnal Average: 0.7 ppb at hour 15
Monthly Average: 1.15 ppb Percentiles: $P_1 = 0.2$ $P_{10} = 0.4$ $Q_1 = 0.6$ Median = 0.9 $Q_3 = 1.4$ $P_{90} = 2.0$ $P_{99} = 4.7$

Hours in Service:	398
Hours of Data:	368
Hours of Missing Data:	30
Hours of Calibration:	28
Percent Operational Time:	99.5

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-Jun	1	1	1	1	2	2	1	1	2	1	0	0	1	0	0	1	1	1	1	1	1	A	A	2	1.1	2.5
2-Jun	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	A	A	2	2	1.6	2.4
3-Jun	2	1	1	1	2	1	1	2	1	1	1	1	0	0	0	0	0	1	1	A	A	1	1	1	1.0	2.0
4-Jun	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	3	2	3	3	1.0	3.1
5-Jun	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	2	2	5	2	1	1.2	4.8
6-Jun	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	A	A	1	2	1	1	1	1	0.8	2.0
7-Jun	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	A	A	2	1	P	1	1	0	0	0.8	1.5
8-Jun	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	2	1	4	6	1	2	1	1	1.0	6.0
9-Jun	1	1	1	1	1	1	1	1	1	0	1	1	1	1	A	2	1	1	2	2	2	1	2	1	1.0	2.4
10-Jun	1	1	1	1	1	2	2	2	1	3	1	5	26	A	2	1	1	1	1	1	1	3	3	2	2.6	25.5
11-Jun	1	1	1	1	2	2	2	1	1	1	0	0	A	2	1	1	1	0	1	1	3	2	1	1	1.2	3.0
12-Jun	1	1	1	1	1	1	1	1	1	0	0	A	2	1	1	0	0	0	0	2	2	4	4	2	1.2	3.9
13-Jun	1	1	1	1	2	2	1	1	1	1	A	2	1	1	1	1	0	0	1	1	1	1	1	1	1.1	2.2
14-Jun	1	1	1	1	1	1	1	0	0	A	2	1	1	0	0	0	0	0	0	0	1	1	3	1	0.8	2.6
15-Jun	1	1	0	0	0	0	1	1	A	2	1	0	0	0	0	0	0	0	0	1	2	4	2	2	0.9	4.0
16-Jun	1	1	1	1	1	1	2	A	3	1	1	1	0	0	0	0	0	0	0	1	1	2	2	1	1.0	2.6
17-Jun	1	1	1	1	1	2	A	3	2	M	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	3.3
	1.0	0.9	0.9	0.9	1.1	1.2	1.2	1.2	1.1	1.1	0.7	1.0	2.3	0.7	0.7	0.7	0.7	0.7	1.0	1.6	1.5	2.2	1.9	1.3	Diurnal Average	
	1.7	1.6	1.6	1.7	2.2	2.0	2.2	3.3	2.6	3.0	1.9	5.2	25.5	2.0	1.9	2.4	1.7	1.5	3.7	6.0	3.0	4.8	3.6	2.6	Diurnal Maximum	

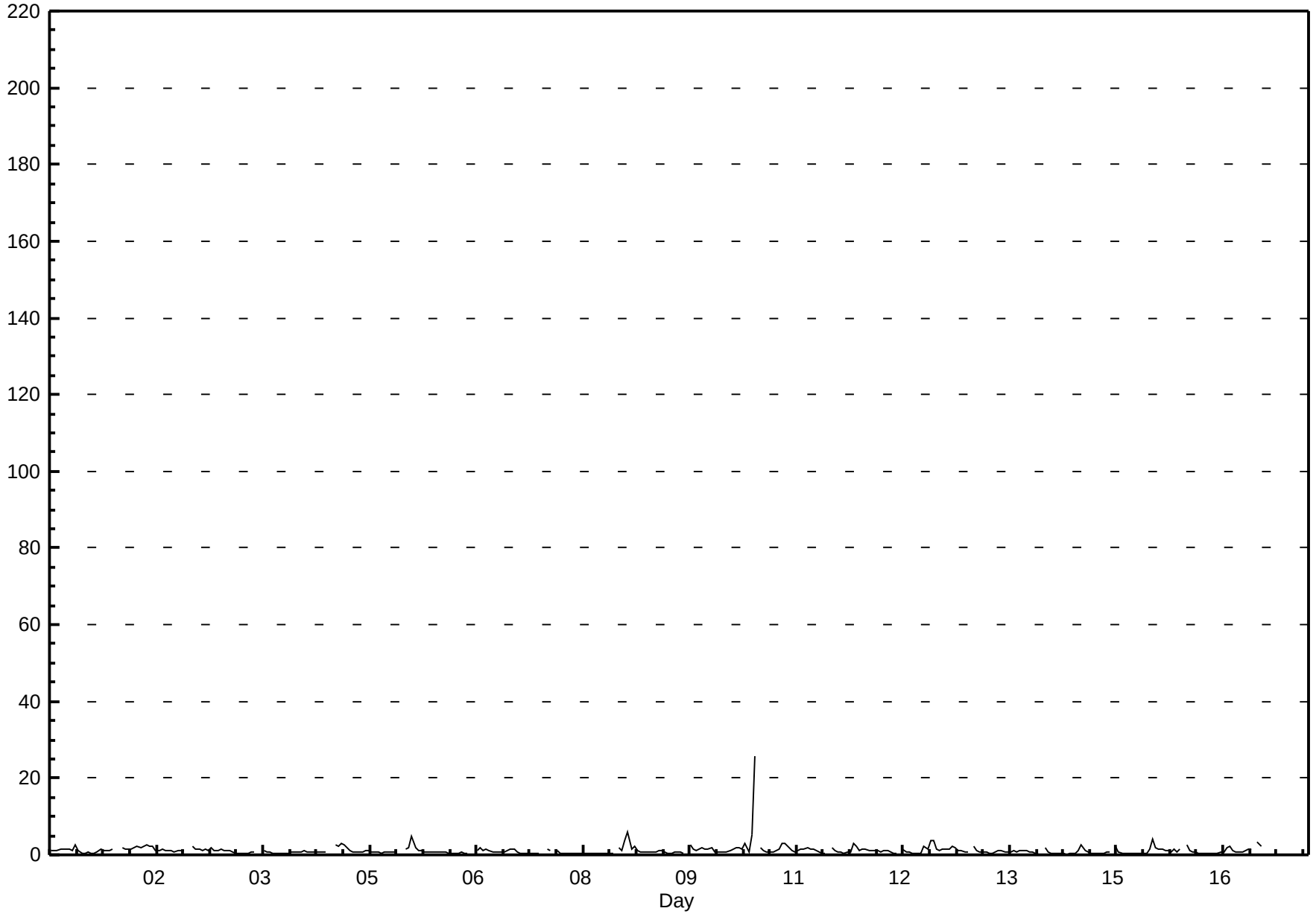
C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Kinuso - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Kinuso - June 2010

Maximum Value: 62.1 ppb on Jun 10 13:00

Maximum Daily Average: 7.8 ppb on Jun 10

Minimum Value: 0 ppb on Jun 14 18:00

Minimum Daily Average: 1.4 ppb on Jun 14

Maximum Diurnal Average: 6.8 ppb at hour 20

Minimum Diurnal Average: 1.2 ppb at hour 2

Monthly Average: 2.57 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.9$ Median = 1.4 $Q_3 = 2.3$ $P_{90} = 4.5$ $P_{99} = 26.0$

Hours in Service:	398
Hours of Data:	368
Hours of Missing Data:	30
Hours of Calibration:	28
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-Jun	2	1	1	2	2	2	2	2	4	2	1	1	2	1	1	3	2	2	3	3	4	A	A	3	2.0	4.1
2-Jun	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	1	2	2	3	A	A	3	2	2.2	3.2
3-Jun	2	1	4	2	8	2	2	8	7	1	2	1	1	0	0	0	1	2	1	A	A	2	1	1	2.3	8.3
4-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	4	3	6	3	1.4	5.7
5-Jun	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	2	1	A	A	2	6	13	3	1	2.0	12.9
6-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	5	8	1	A	A	2	5	1	2	2	2	1.7	7.9
7-Jun	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	A	A	4	10	P	3	1	1	1	1.7	10.1
8-Jun	1	1	0	0	0	0	1	0	0	2	1	1	2	2	1	A	3	2	23	51	8	10	3	1	4.9	51.3
9-Jun	1	1	1	1	1	4	3	1	2	1	3	3	2	1	A	5	3	3	3	5	3	2	3	1	2.4	5.4
10-Jun	1	1	1	1	1	2	2	2	2	17	4	41	62	A	3	3	3	3	2	3	8	7	8	4	7.8	62.1
11-Jun	2	1	1	2	2	2	2	2	1	1	1	1	A	4	2	1	1	1	1	2	28	6	2	2	2.9	28.3
12-Jun	2	1	1	1	1	1	1	1	1	1	0	A	3	1	1	1	1	1	1	8	5	8	13	11	2.8	13.2
13-Jun	1	2	2	2	3	3	2	1	1	6	A	4	2	1	1	1	1	1	1	3	2	1	1	1	1.8	5.6
14-Jun	2	1	2	2	2	1	1	1	1	A	3	1	1	1	0	0	0	0	0	1	1	2	5	2	1.4	4.9
15-Jun	1	1	1	1	1	1	1	1	A	4	1	1	1	0	0	0	0	1	1	1	9	12	4	3	1.9	11.7
16-Jun	2	1	2	1	5	1	2	A	5	2	1	1	1	1	0	1	0	1	2	1	2	5	3	2	1.8	5.1
17-Jun	3	1	1	1	1	2	A	5	3	M	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	4.8
	1.5	1.2	1.4	1.2	2.0	1.7	1.6	1.9	2.0	2.8	1.5	3.9	5.3	1.4	1.6	1.6	1.3	1.6	3.7	6.8	6.0	5.3	3.7	2.4	Diurnal Average	
	3.2	2.2	4.4	2.2	8.3	4.3	2.8	8.0	6.8	17.0	3.8	41.3	62.1	4.6	7.9	5.4	3.0	4.3	22.8	51.3	28.3	12.9	13.2	10.5	Diurnal Maximum	

C - Calibration P - Power Failure M - Maintenance NS - Not in service A - Automated Daily Zero Span

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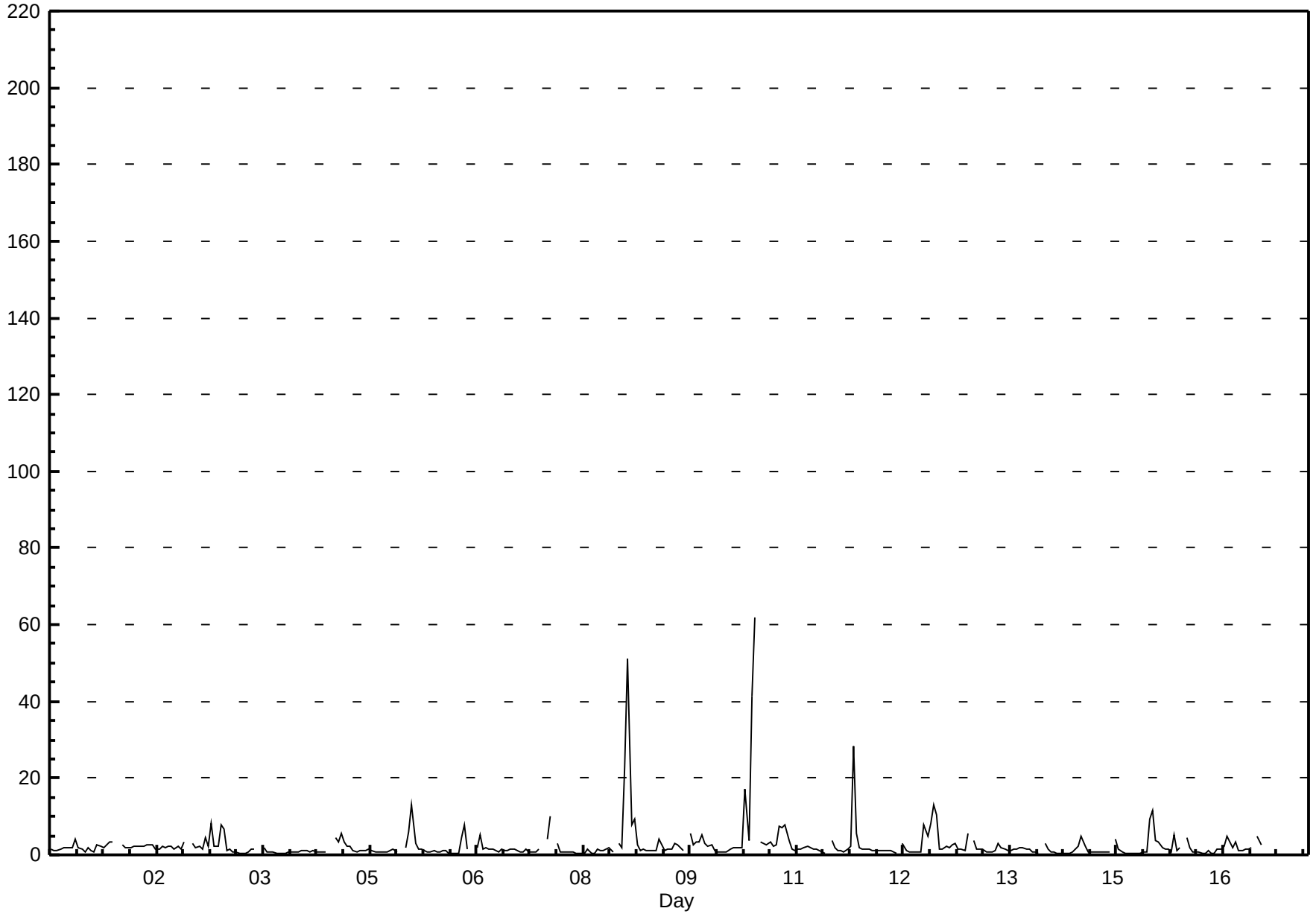
Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Kinuso - June 2010



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Hourly Averages

Ozone (O_3) - ppb

Portable-Kinuso - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 60.7 ppb on Jun 1 19:00 Maximum Daily Average: 42.2 ppb on Jun 2

Minimum Value: 1 ppb on Jun 5 01:00 Minimum Daily Average: 19.8 ppb on Jun 7
Maximum Diurnal Average: 40.7 ppb at hour 17 Minimum Diurnal Average: 19.4 ppb at hour 6
Monthly Average: 29.20 ppb Percentiles: P_1 = 2.9 P_{10} = 14.7 Q_1 = 20.2 Median = 28.7 Q_3 = 37.7 P_{90} = 44.6 P_{99} = 57.2

Hours in Service:	398
Hours of Data:	371
Hours of Missing Data:	27
Hours of Calibration:	26
Percent Operational Time:	99.8

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	23	18	18	19	18	20	25	30	38	44	46	47	47	50	52	55	58	60	61	57	54	A	A	46	40.3	60.7
2-Jun	40	40	38	38	37	35	34	34	41	44	45	45	47	49	49	49	50	50	49	47	A	A	34	35	42.2	50.5
3-Jun	36	29	26	30	26	25	20	18	29	21	23	28	30	29	28	27	26	27	25	A	A	29	29	28	26.8	36.2
4-Jun	28	28	29	29	28	28	26	26	25	24	22	21	22	25	27	29	31	34	A	A	19	14	6	2	23.7	33.6
5-Jun	1	2	3	3	4	5	6	10	18	25	27	29	31	39	39	40	36	A	A	39	33	16	14	20	20.0	39.7
6-Jun	17	16	16	14	13	15	18	23	30	34	36	36	37	37	39	40	A	A	45	36	33	26	24	26	27.8	44.9
7-Jun	22	23	18	14	13	14	16	18	15	15	21	22	24	24	24	A	A	24	22	P	26	24	22	16	19.8	25.6
8-Jun	18	18	23	27	25	24	25	27	28	27	27	29	30	31	32	A	33	30	29	27	25	21	22	21	26.1	32.5
9-Jun	20	19	18	16	12	12	15	25	33	35	34	36	36	38	A	40	42	44	39	32	31	25	22	22	28.1	43.6
10-Jun	20	16	13	12	10	11	11	15	23	27	37	39	36	A	45	47	49	50	51	44	40	33	28	22	29.5	51.4
11-Jun	25	23	20	19	18	18	20	24	30	37	43	46	A	43	43	45	47	48	49	43	32	26	31	36	33.3	49.3
12-Jun	37	38	41	42	41	38	34	32	34	37	40	A	37	33	32	33	30	26	26	21	18	12	8	14	30.6	42.1
13-Jun	31	35	33	32	23	20	28	35	39	41	A	43	43	42	43	43	45	47	43	32	30	36	31	32	35.8	46.6
14-Jun	32	31	27	25	25	26	29	28	28	A	30	31	34	36	37	39	40	42	42	37	34	27	20	19	31.3	42.1
15-Jun	20	20	20	19	17	16	14	15	A	22	27	30	32	33	34	36	39	39	41	35	30	19	18	15	25.7	40.6
16-Jun	14	12	10	12	9	10	13	A	26	34	39	40	41	42	42	44	45	46	46	40	34	26	18	17	28.7	46.1
17-Jun	22	18	15	14	15	15	A	17	21	32	40	44	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	43.6
	23.9	22.6	21.7	21.5	19.7	19.4	20.9	23.6	28.6	31.2	33.4	35.3	35.1	36.8	37.7	40.3	40.7	40.5	40.6	37.8	31.3	23.9	21.8	23.2	Diurnal Average	
	40.3	39.9	41.3	42.1	40.8	38.0	33.9	35.2	41.0	44.1	45.6	47.1	47.4	50.1	51.7	54.9	58.1	60.0	60.7	57.4	54.0	36.2	34.5	45.9	Diurnal Maximum	

C - Calibration P - Power Failure NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

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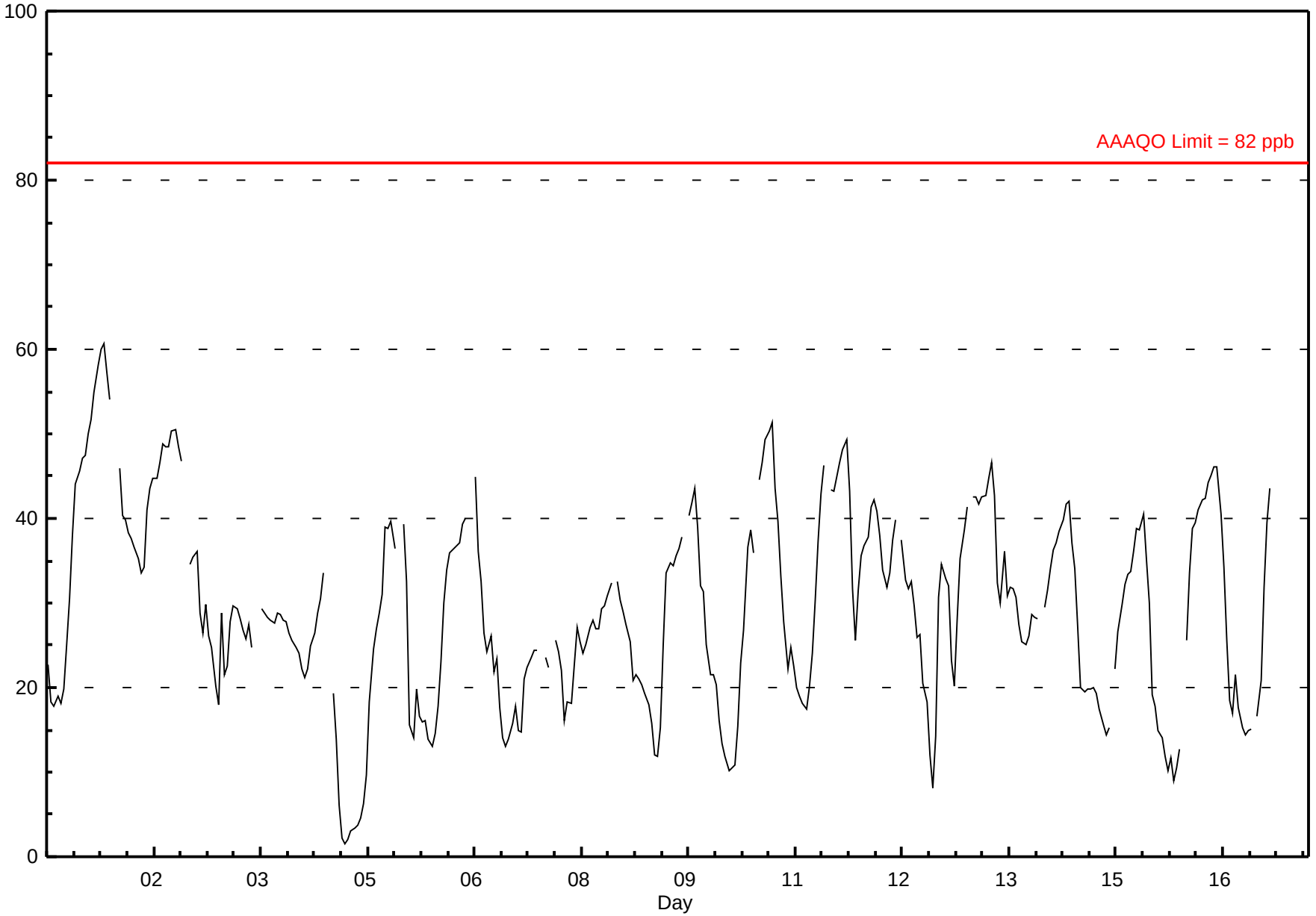
Hourly Averages

Ozone (O_3) - ppb

Portable-Kinuso - June 2010



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Hourly Maximums

Ozone (O_3) - ppb

Portable-Kinuso - June 2010

Maximum Value: 63.8 ppb on Jun 1 19:00

Maximum Daily Average: 45.0 ppb on Jun 2

Minimum Value: 4 ppb on Jun 5 01:00

Minimum Daily Average: 22.9 ppb on Jun 7

Maximum Diurnal Average: 44.3 ppb at hour 17

Minimum Diurnal Average: 22.4 ppb at hour 6

Monthly Average: 32.79 ppb

Percentiles: P_1 = 4.8 P_{10} = 17.6 Q_1 = 24.7 Median = 32.4 Q_3 = 41.6 P_{90} = 47.6 P_{99} = 60.9

Hours in Service:	398
Hours of Data:	371
Hours of Missing Data:	27
Hours of Calibration:	26
Percent Operational Time:	99.8

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	26	20	21	21	21	22	31	33	44	46	47	50	50	52	54	59	61	63	64	62	57	A	A	49	43.3	63.8
2-Jun	45	42	42	40	39	37	35	37	45	47	47	47	49	51	51	51	53	53	51	49	A	A	40	39	45.0	53.2
3-Jun	39	33	32	33	31	30	27	22	35	27	26	31	32	32	31	30	29	30	28	A	A	32	31	31	30.5	39.3
4-Jun	30	31	31	31	30	31	29	28	27	26	25	23	25	28	30	32	34	38	A	A	22	19	13	5	26.8	38.3
5-Jun	4	5	6	5	6	8	8	13	25	28	29	31	35	44	43	44	39	A	A	46	38	28	20	22	24.0	45.9
6-Jun	19	19	19	18	16	17	21	26	35	36	38	39	40	40	42	44	A	A	49	43	36	32	29	31	31.4	49.1
7-Jun	27	26	25	17	15	16	18	21	18	17	25	25	26	28	27	A	A	26	24	P	28	27	25	20	22.9	28.1
8-Jun	21	21	29	30	28	27	27	29	30	31	29	34	33	34	36	A	37	33	32	32	29	25	25	25	29.4	37.0
9-Jun	24	23	21	18	17	16	21	33	37	37	37	38	39	42	A	43	47	47	44	36	34	31	27	26	32.0	47.2
10-Jun	23	19	16	14	13	13	13	22	27	33	41	44	43	A	48	50	55	53	54	50	46	40	35	27	33.8	54.9
11-Jun	27	26	23	21	21	20	25	27	39	42	47	49	A	46	46	48	51	50	52	49	39	34	34	38	37.2	52.4
12-Jun	40	41	44	45	44	41	37	34	39	41	43	A	40	36	37	36	34	29	29	28	21	17	12	25	34.4	44.6
13-Jun	36	37	35	34	32	25	35	40	42	45	A	46	45	45	45	46	49	49	49	39	35	41	36	35	40.1	49.2
14-Jun	35	33	32	30	28	29	30	30	30	A	32	35	37	39	40	42	43	44	47	41	37	33	25	23	34.6	46.5
15-Jun	23	22	23	22	22	18	17	19	A	24	30	33	35	36	36	42	42	42	45	39	36	26	21	20	29.3	44.8
16-Jun	17	15	12	15	11	14	15	A	31	39	42	42	43	45	45	47	47	49	49	47	38	34	24	20	32.2	49.1
17-Jun	25	24	17	16	17	17	A	20	26	39	46	48	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	47.6
	27.2	25.7	25.2	24.1	22.9	22.4	24.3	27.1	33.0	34.9	36.6	38.5	38.1	39.8	40.9	43.7	44.3	43.3	44.1	43.1	35.5	29.9	26.5	27.3	Diurnal Average	
	45.2	42.4	43.5	44.6	44.3	40.5	36.5	39.7	44.6	46.5	47.5	49.5	50.4	52.1	53.9	58.6	61.1	62.6	63.8	62.4	56.6	41.1	40.2	49.3	Diurnal Maximum	

C - Calibration P - Power Failure NS - Not in service A - Automated Daily Zero Span

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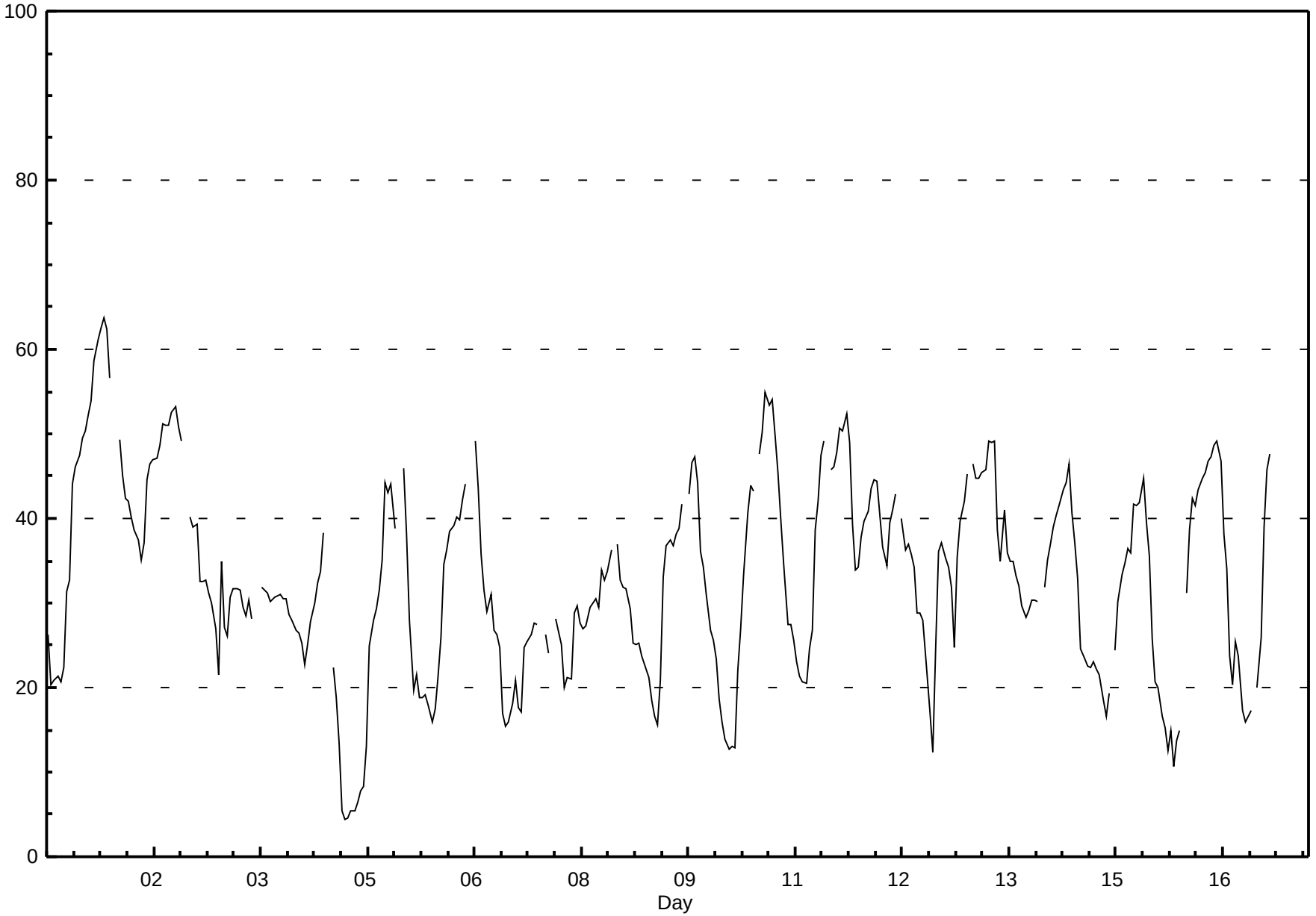
Hourly Maximums

Ozone (O_3) - ppb

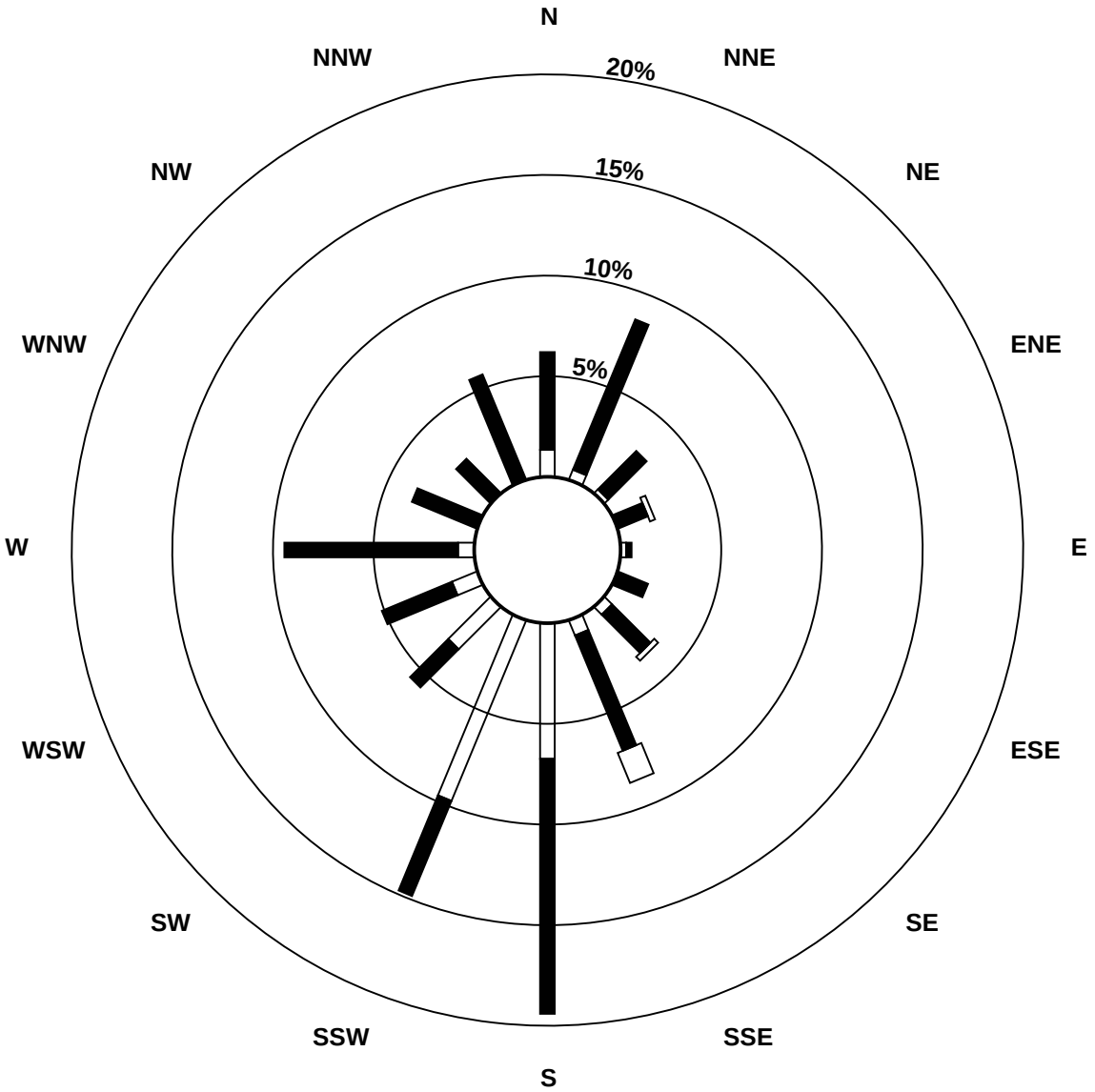
Portable-Kinuso - June 2010



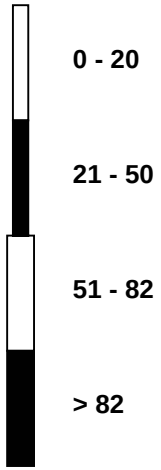
Pollutant Rose

Ozone (O_3) - ppb

Portable-Kinuso - June 2010



Pollutant Classes (ppb)



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Eight Hour Running Averages

Ozone (O_3) - ppb

Portable-Kinuso - June 2010

Maximum Value: 57.5 ppb on Jun 1 23:00

Minimum Value: 3.3 ppb on Jun 5 06:00

Percentiles: P_1 = 6.3 P_{10} = 17.4 Q_1 = 22.1 Median = 28.3 Q_3 = 37.1 P_{90} = 42.6 P_{99} = 55.8

Hours in Service:	405
Hours of Data:	393
Hours of Missing Data:	12
Hours of Calibration:	12
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-Jun	38	33	28	24	21	19	20	21	23	27	30	34	37	41	44	47	50	52	54	55	56	57	58	56	57.5
2-Jun	53	50	46	43	40	39	38	37	37	38	38	39	40	42	44	46	47	48	48	49	49	49	47	44	53.1
3-Jun	42	38	35	32	31	30	28	26	25	24	24	24	24	25	26	27	26	27	27	27	27	27	27	27	42.0
4-Jun	28	28	28	28	28	28	28	28	27	27	26	25	24	24	24	24	25	26	27	28	27	25	22	18	28.5
5-Jun	13	8	7	6	5	3	3	4	6	9	12	15	19	23	27	31	33	34	36	37	38	34	30	26	37.6
6-Jun	23	22	21	18	16	16	16	16	18	20	23	26	29	31	34	36	37	38	39	39	38	37	34	32	39.1
7-Jun	30	29	26	23	21	19	18	17	16	15	16	17	18	19	20	21	22	23	23	N	N	N	N	22	30.3
8-Jun	22	21	21	22	22	22	22	23	25	26	26	27	27	28	29	29	30	30	31	30	30	28	27	26	30.6
9-Jun	24	23	22	20	19	17	17	17	19	21	23	25	28	32	34	36	37	39	39	39	38	36	34	32	39.2
10-Jun	29	26	23	20	17	16	14	14	14	15	18	21	25	27	32	36	40	43	45	46	46	45	43	40	46.5
11-Jun	37	33	29	26	23	22	21	21	21	23	26	30	31	35	38	41	44	45	46	46	44	42	40	39	46.0
12-Jun	38	36	35	35	36	38	38	38	37	37	37	37	36	35	35	35	34	33	31	30	27	25	22	19	38.3
13-Jun	20	21	21	23	23	24	27	30	31	31	31	33	36	39	41	42	43	43	43	42	40	40	38	37	43.4
14-Jun	35	33	31	30	30	29	28	28	27	27	27	28	29	31	32	34	35	36	38	38	38	37	35	33	38.3
15-Jun	30	27	25	22	20	19	18	18	17	18	19	20	22	25	28	31	32	34	35	36	36	34	32	29	36.1
16-Jun	26	23	19	16	14	12	12	11	13	16	20	24	29	33	38	38	41	42	43	43	43	41	38	34	43.5
17-Jun	31	28	24	21	18	17	17	16	16	18	22	26	28	N	N	N	N	N	N	N	N	N	N	N	31.2
	53.1	49.7	46.0	42.7	39.8	39.1	38.4	37.8	37.4	37.5	38.4	39.2	40.5	42.2	44.3	47.4	49.9	51.9	53.8	55.0	55.9	56.7	57.5	56.0	
	Diurnal Maximums																								

N - Not Valid

PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Portable-Kinuso - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 25.6 °C on Jun 12 16:00
Maximum Daily Average: 19.3 °C on Jun 12

Minimum Value: 3 °C on Jun 16 05:00
Maximum Diurnal Average: 18.9 °C at hour 16
Monthly Average: 13.58 °C
Minimum Daily Average: 10.5 °C on Jun 8
Minimum Diurnal Average: 6.9 °C at hour 5
Percentiles: P_1 = 3.4 P_{10} = 6.1 Q_1 = 9.2 Median = 13.5 Q_3 = 17.9 P_{90} = 20.2 P_{99} = 24.6

Hours in Service:	393
Hours of Data:	392
Hours of Missing Data:	1
Hours of Calibration:	0
Percent Operational Time:	99.8

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	8	7	6	6	5	6	8	11	14	17	18	19	19	19	19	19	19	18	18	16	15	12	10	9	13.2	19.2
2-Jun	7	8	7	8	9	10	13	15	17	18	19	20	21	22	22	22	22	22	21	20	17	13	12	12	15.7	22.1
3-Jun	12	12	11	12	12	12	12	12	12	13	11	10	10	10	11	12	13	14	14	14	12	12	12	11	11.9	14.0
4-Jun	11	11	11	11	10	10	11	11	12	14	13	13	15	16	17	17	17	18	17	15	13	10	8	7	12.9	17.7
5-Jun	7	6	6	5	5	8	10	12	16	17	18	19	20	19	18	18	18	18	19	17	14	11	9	10	13.4	20.2
6-Jun	8	7	7	6	6	7	12	15	18	19	20	21	21	21	21	20	20	20	20	18	15	13	12	10	15.0	21.2
7-Jun	9	8	6	4	5	8	11	12	13	14	15	16	16	17	18	18	16	15	14	P	11	10	10	9	11.9	17.6
8-Jun	8	8	7	6	6	7	7	8	9	10	11	12	12	13	14	14	15	15	14	13	12	10	10	10	10.5	14.9
9-Jun	9	8	7	6	5	9	12	14	15	15	15	15	15	17	16	17	17	17	16	14	13	11	8	8	12.5	17.3
10-Jun	7	5	4	4	3	4	6	10	13	15	16	16	16	18	18	19	19	19	19	18	15	13	10	9	12.3	19.0
11-Jun	8	7	6	5	4	6	8	12	16	18	20	20	21	22	21	22	23	23	22	20	17	13	13	12	15.0	23.0
12-Jun	12	11	12	12	11	13	16	18	22	24	25	25	24	24	24	26	24	25	25	22	19	16	16	16	19.3	25.6
13-Jun	18	18	16	15	15	18	18	19	20	20	19	20	20	21	21	21	21	21	19	17	16	14	12	11	17.8	20.9
14-Jun	10	10	9	8	9	10	12	13	14	15	16	17	18	19	19	19	19	18	18	15	13	9	7	6	13.4	19.0
15-Jun	5	4	4	3	3	4	6	8	12	15	17	18	18	19	19	20	19	19	19	16	14	10	8	6	11.9	19.6
16-Jun	5	4	3	3	3	5	8	12	13	15	17	18	19	19	20	20	20	20	19	18	15	12	9	8	12.8	20.2
17-Jun	7	7	6	6	6	6	7	10	13	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	13.0
	9.0	8.3	7.6	7.1	6.9	8.4	10.4	12.4	14.6	16.1	16.9	17.4	17.9	18.4	18.6	18.9	18.9	18.9	18.3	16.9	14.5	11.9	10.4	9.8	Diurnal Average	
	17.9	18.0	16.3	15.2	14.8	17.8	17.6	19.2	22.2	23.8	24.8	25.5	23.8	23.8	23.7	25.6	24.5	24.7	25.2	22.2	19.3	16.2	15.5	16.4	Diurnal Maximum	

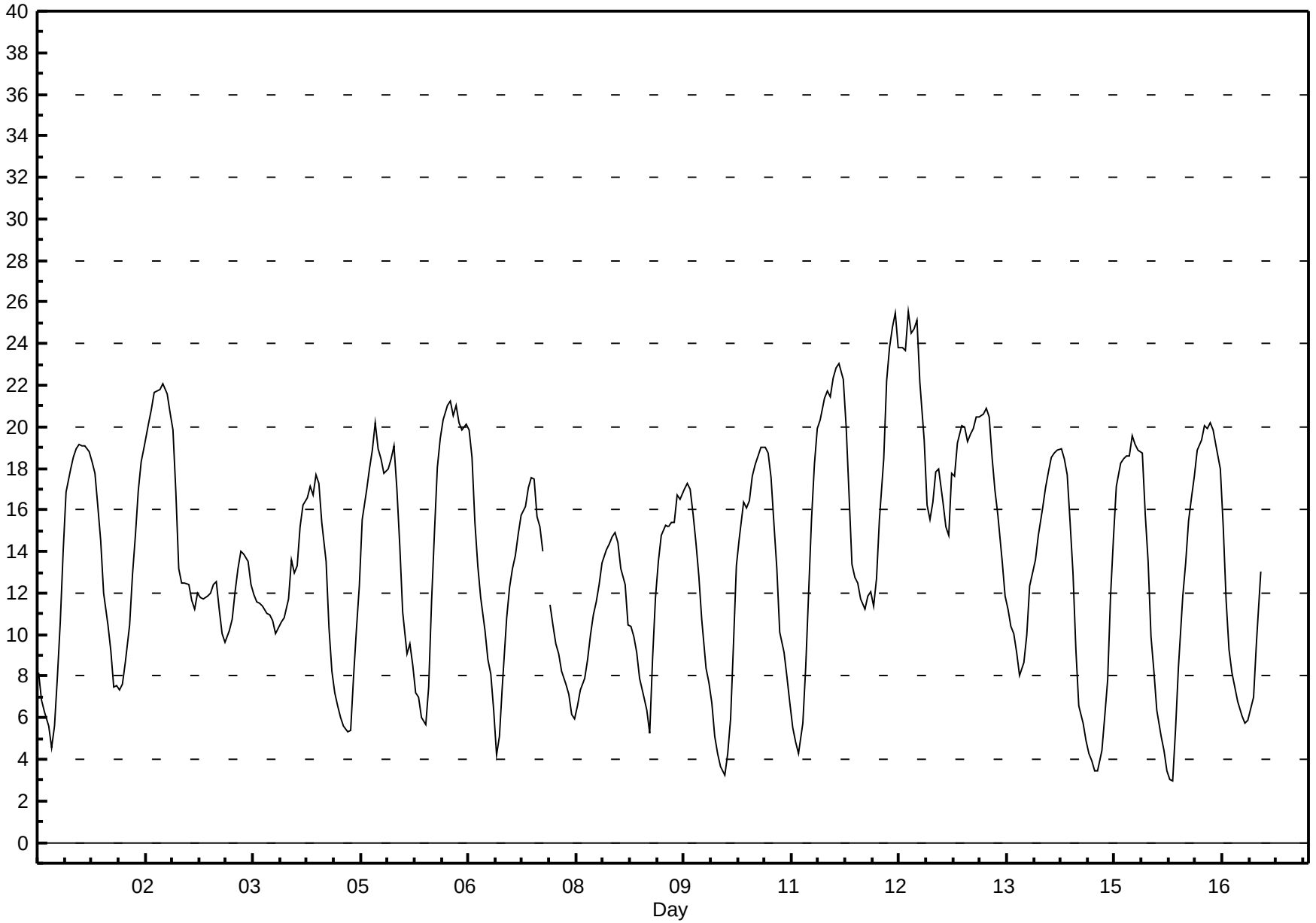
P - Power Failure NS - Not in service

PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable-Kinuso - June 2010



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Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Kinuso - June 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	8	8	8	8	8	10	10	8	8	9	11	12	13	14	13	13	14	12	12	13	9	6	6	6	9.6	14.2
Dir	186	191	193	190	192	183	186	186	185	188	172	160	152	162	166	150	160	165	145	153	154	153	162	171	169	160
2 Spd	5	7	8	10	10	10	9	13	16	18	19	18	17	15	17	14	18	16	12	9	7	7	5	5	11.5	19.0
Dir	182	180	181	173	166	165	172	182	171	170	161	156	157	167	152	157	138	141	141	138	170	136	133	190	160	161
3 Spd	6	3	3	8	5	1	1	1	3	3	5	5	5	4	3	2	2	3	3	1	3	4	4	5	1.7	7.6
Dir	156	133	201	167	149	105	278	39	192	273	275	278	271	272	272	247	265	14	8	230	267	277	272	280	245	167
4 Spd	5	4	5	4	4	4	4	4	4	3	5	4	3	4	5	5	5	6	5	6	2	1	1	2	2.9	6.2
Dir	275	271	263	268	258	279	266	271	272	283	297	302	323	307	330	327	345	1	357	40	6	244	218	224	301	1
5 Spd	3	4	3	3	3	4	5	5	2	4	5	5	5	7	6	10	5	3	1	1	1	2	3	9	1.7	10.5
Dir	216	205	208	220	221	201	197	190	276	318	326	318	313	321	332	15	350	317	296	273	211	226	221	194	276	15
6 Spd	5	4	5	4	5	6	6	6	3	3	3	3	3	5	5	5	2	5	4	3	3	6	5	6	1.9	6.1
Dir	202	207	206	213	205	194	189	173	230	259	260	251	332	350	345	358	322	18	16	142	190	181	189	179	214	173
7 Spd	4	6	3	2	4	5	3	7	11	9	9	10	10	9	7	6	15	15	14	P	11	4	3	7	5.2	15.4
Dir	237	189	140	186	187	189	200	9	16	6	10	11	13	15	13	353	36	33	25	P	17	351	343	8	17	33
8 Spd	9	5	8	7	3	3	6	7	4	5	6	6	8	9	7	7	8	7	9	6	4	2	6	6	5.1	8.8
Dir	15	1	16	8	346	347	20	19	358	12	22	29	43	37	30	39	28	25	29	24	29	48	164	163	26	15
9 Spd	4	4	5	4	1	1	2	5	6	6	6	7	6	6	10	10	9	7	6	4	4	2	2	6	3.9	10.4
Dir	166	165	173	182	231	146	166	164	147	140	112	79	119	102	63	70	112	117	156	171	169	201	222	196	132	63
10 Spd	7	5	6	7	7	8	5	5	1	3	9	12	11	8	9	10	7	7	6	5	2	3	2	4	2.7	11.8
Dir	196	201	195	184	193	189	184	184	174	13	45	42	51	75	62	66	62	56	76	72	127	50	214	205	98	42
11 Spd	8	10	10	11	10	9	8	6	6	0	3	2	2	1	3	2	6	3	2	2	2	4	6	7	4.7	10.8
Dir	193	187	191	194	193	187	184	184	188	216	202	177	167	167	355	151	160	192	72	184	207	183	177	178	185	194
12 Spd	7	4	8	9	9	8	8	6	4	4	5	5	5	4	4	5	4	4	4	2	1	2	3	5	4.0	9.0
Dir	175	198	177	180	191	193	180	176	200	255	265	281	280	256	264	215	243	194	168	135	84	210	179	196	202	180
13 Spd	7	6	6	6	3	3	4	3	4	5	5	7	6	6	8	7	6	4	2	2	1	4	4	4	2.6	8.4
Dir	174	180	190	203	232	264	264	287	294	308	311	345	337	344	349	339	333	327	326	276	222	282	285	245	293	349
14 Spd	5	6	2	2	2	4	3	5	6	6	5	5	5	5	5	4	4	4	3	3	2	2	2	3	3.1	6.3
Dir	169	173	188	205	248	254	234	249	281	282	274	261	282	269	278	288	296	290	292	280	258	225	213	216	258	282
15 Spd	3	5	6	6	6	5	4	4	5	4	4	4	5	4	4	4	3	4	2	1	2	1	4	2	1.8	5.9
Dir	213	209	199	201	205	207	205	192	175	195	264	324	343	356	348	346	338	339	286	253	220	185	227	189	235	199
16 Spd	3	3	2	2	2	5	4	3	2	4	4	4	3	5	4	5	4	5	7	4	1	1	1	2	1.1	7.2
Dir	218	243	204	240	186	190	182	165	33	356	5	16	2	8	1	12	19	30	34	28	353	202	252	249	7	34
17 Spd	5	4	9	8	8	6	7	5	7	3	1	5	3	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	8.6
Dir	186	196	190	202	201	191	190	179	188	189	40	28	356	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	190

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Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Kinuso - June 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
Spd	3.9	4.2	4.3	4.6	4.6	4.5	4.0	3.2	2.3	1.3	0.5	1.2	1.2	1.0	1.9	2.0	1.9	2.2	2.3	1.7	0.8	1.2	2.4	3.4	Diurnal Average	
Dir	190	193	192	194	197	195	194	188	198	240	278	18	29	27	26	49	69	62	65	123	152	194	199	198		
Spd	8.8	10.2	9.9	10.8	10.1	9.9	9.7	13.2	16.5	17.8	19.0	17.6	17.3	15.2	16.8	14.3	17.6	16.4	13.8	12.5	11.1	6.6	6.4	8.6	Diurnal Maximum	
Dir	15	187	191	194	166	165	186	182	171	170	161	156	157	167	152	157	138	141	25	153	17	136	162	194		

Maximum Speed Value: 19 km/h on Jun 2 11:00
Minimum Speed Value: 0 km/h on Jun 11 10:00
Maximum Daily Speed Average: 11.5 km/h on Jun 2
Minimum Daily Speed Average: 1.1 km/h on Jun 16
Maximum Diurnal Speed Average: 4.6 km/h at hour 4
Minimum Diurnal Speed Average: 0.5 km/h at hour 11

Monthly Average Velocity: 1.49 km/h 182.0 deg
Speed Percentiles: P_1 = 1.0 P_{10} = 2.0 Q_1 = 3.4 Median = 4.8 Q_3 = 7.0 P_{90} = 9.9 P_{99} = 17.6
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service: 397
Hours of Data: 396
Hours of Missing Data: 1

Percent Operational Time: 99.8

P - Power Failure NS - Not in service

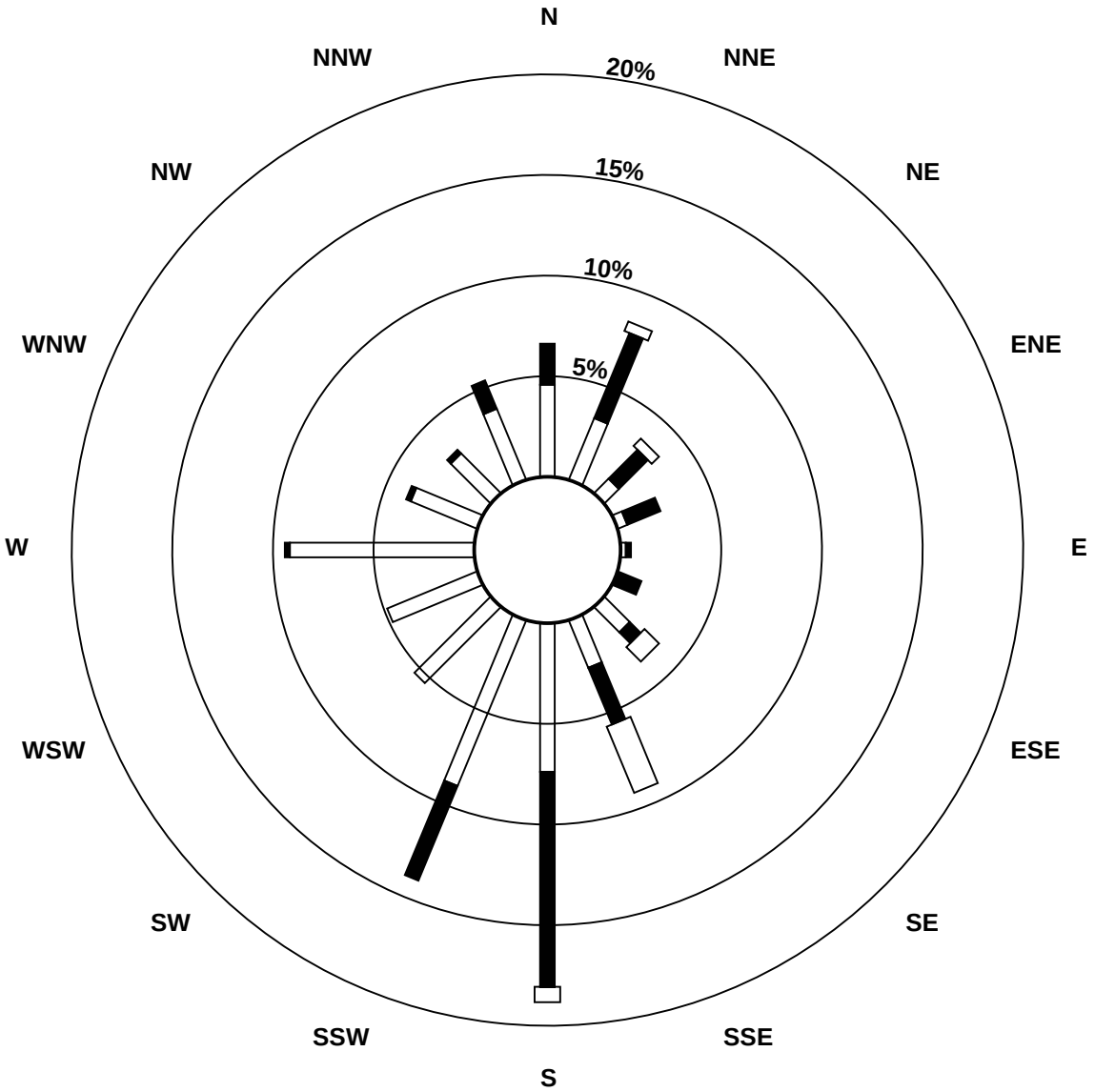
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	31	26	2	0	0	0	59
NorthEast	9	17	5	0	0	0	31
East	3	8	0	0	0	0	11
SouthEast	9	10	11	0	0	0	30
South	46	77	10	0	0	0	133
SouthWest	45	3	0	0	0	0	48
West	52	7	0	0	0	0	59
NorthWest	19	6	0	0	0	0	25
Total	214	154	28	0	0	0	396

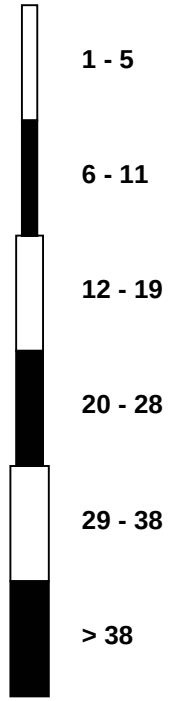
Wind Rose

Wind Speed (WS) (km/h)

Portable-Kinuso - June 2010



Wind Speed Classes (km/h)



PASZA
Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable-Kinuso - June 2010

Maximum Speed: 19 km/h on Jun 2 11:00

Maximum Daily Speed Average: 12.3 km/h on Jun 2

Minimum Speed: 2 km/h on Jun 15 20:00

Minimum Daily Speed Average: 4.2 km/h on Jun 3

Maximum Diurnal Speed Average: 8.0 km/h at hour 15

Minimum Diurnal Speed Average: 3.8 km/h at hour 22

Monthly Average Speed: 6.34 km/h

Percentiles: P_1 = 1.7 P_{10} = 3.0 Q_1 = 4.3 Median = 5.7 Q_3 = 7.7 P_{90} = 10.2 P_{99} = 18.0

Hours in Service:	397
Hours of Data:	396
Hours of Missing Data:	1
Percent Operational Time:	99.8

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	8	8	8	8	9	10	10	9	8	10	12	13	14	15	15	14	15	13	13	13	9	6	7	7	10.4	14.6
2-Jun	5	7	8	10	10	10	9	13	17	18	19	18	18	16	17	15	18	17	12	10	9	7	5	5	12.3	19.4
3-Jun	6	4	4	8	5	2	2	3	4	4	5	5	6	5	4	3	3	4	4	2	3	5	4	5	4.2	7.8
4-Jun	6	5	5	5	5	5	4	5	5	5	6	5	5	5	5	6	6	7	7	6	3	2	3	3	4.9	6.9
5-Jun	3	4	3	3	4	4	5	5	4	5	6	7	6	8	7	11	6	3	3	2	2	2	3	9	4.8	10.9
6-Jun	5	5	5	4	6	6	6	6	4	4	5	5	6	6	6	5	3	5	5	4	3	6	6	6	5.1	6.3
7-Jun	5	7	4	3	6	5	4	8	12	10	10	11	11	10	8	7	15	16	14	P	11	5	3	7	8.3	15.7
8-Jun	9	6	8	7	4	3	7	8	5	6	8	8	9	10	9	8	9	8	9	7	4	3	6	6	6.8	9.8
9-Jun	4	4	5	4	2	3	3	6	8	8	7	7	8	8	11	11	9	8	6	4	5	2	2	6	5.9	10.9
10-Jun	7	6	6	7	7	8	6	6	4	5	10	12	12	9	10	10	9	8	7	6	5	4	3	4	7.1	12.1
11-Jun	8	10	10	11	10	9	8	7	6	4	5	6	5	5	6	6	7	5	5	3	2	4	6	7	6.5	10.9
12-Jun	7	5	9	9	9	8	8	6	5	5	6	6	6	5	5	6	5	5	4	2	2	2	4	5	5.6	9.3
13-Jun	7	7	6	7	3	4	5	5	5	6	6	8	7	7	9	7	7	5	3	2	4	5	5	5	5.6	8.9
14-Jun	6	6	2	3	3	4	4	6	7	7	7	6	6	7	6	6	6	5	5	3	2	2	2	4	4.8	7.2
15-Jun	4	5	7	6	6	6	5	4	5	5	5	5	6	6	5	6	5	5	3	2	2	3	4	4	4.8	7.0
16-Jun	3	4	3	3	3	5	5	4	4	5	6	6	6	7	6	7	6	6	8	4	3	3	2	2	4.6	7.6
17-Jun	5	4	9	8	8	6	7	6	8	4	4	6	4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	8.8
	5.8	5.7	6.1	6.3	5.9	5.8	5.7	6.2	6.5	6.5	7.4	7.9	7.8	7.9	8.0	8.0	7.9	7.4	6.7	4.6	4.4	3.8	4.1	5.4	Diurnal Average	
	9.0	10.4	10.1	10.9	10.2	10.0	9.8	13.4	16.8	18.3	19.4	18.0	17.9	15.9	17.2	15.0	18.1	16.7	14.1	12.7	11.2	7.4	6.5	8.8	Diurnal Maximum	

P - Power Failure NS - Not in service

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

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable-Kinuso - June 2010

Maximum Value: 95.7 deg on Jun 11 10:00

Minimum Value: 7.5 deg on Jun 2 06:00

Percentiles: P_1 = 7.9 P_{10} = 11.8 Q_1 = 19.2 Median = 34.2 Q_3 = 45.8 P_{90} = 58.2 P_{99} = 87.4

Hours in Service:	397
Hours of Data:	396
Hours of Missing Data:	1
Hours of Calibration:	0
Percent Operational Time:	99.8

Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	9	12	12	10	10	10	8	11	18	21	23	27	22	17	24	14	15	19	15	10	8	8	9	14	26.8
2-Jun	20	12	13	10	8	8	11	11	12	13	12	13	15	18	13	19	14	11	14	13	44	30	26	30	44.1
3-Jun	22	57	35	12	25	78	68	78	43	41	39	44	35	47	52	42	42	61	26	48	32	37	37	34	78.3
4-Jun	36	37	37	43	41	34	43	41	45	58	40	55	56	50	38	44	37	26	43	10	50	40	55	32	58.2
5-Jun	36	20	31	33	28	20	23	19	68	42	46	45	44	37	37	19	40	53	72	57	46	40	26	13	72.1
6-Jun	31	25	24	25	31	19	15	16	45	52	56	57	63	35	46	39	45	40	36	35	34	24	28	15	62.7
7-Jun	37	27	64	51	43	35	37	50	21	27	27	27	24	35	38	44	13	11	13	P	13	21	26	19	64.2
8-Jun	14	19	15	16	34	37	21	34	49	45	43	50	32	37	40	55	28	33	21	17	16	66	14	10	66.3
9-Jun	16	11	14	16	32	68	62	27	37	39	51	25	34	44	18	18	23	25	18	14	11	27	23	12	67.9
10-Jun	12	15	13	22	13	12	23	18	88	59	20	15	13	40	28	24	40	39	45	20	68	56	57	20	88.2
11-Jun	8	13	11	8	9	10	12	15	23	96	50	84	78	93	73	77	33	66	67	41	37	35	10	13	95.7
12-Jun	12	40	9	12	22	11	14	22	44	45	34	42	42	50	48	40	37	23	24	39	76	33	31	18	76.5
13-Jun	12	23	26	44	29	48	37	59	49	47	41	31	32	37	23	35	30	43	65	39	80	43	28	44	79.9
14-Jun	23	23	50	70	53	32	46	44	42	35	43	46	45	42	47	60	43	43	51	45	32	18	29	39	69.8
15-Jun	33	31	37	32	26	24	21	33	24	49	52	56	43	57	53	56	52	50	55	46	37	61	37	77	77.4
16-Jun	32	47	57	43	48	21	21	36	75	58	63	60	68	59	61	57	60	49	22	31	85	58	49	48	84.5
17-Jun	19	32	13	12	12	26	13	19	15	55	90	51	54	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	89.9
	37.3	56.7	64.2	69.8	53.2	78.3	67.7	77.7	88.2	95.7	89.9	83.6	77.7	92.8	73.0	76.9	60.3	65.6	72.1	56.7	84.5	66.3	56.6	77.4	

P - Power Failure NS - Not in service

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

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 9.1 ppb on Jun 23 10:00 Maximum Daily Average: 1.3 ppb on Jun 23

Minimum Value: 0 ppb on Jun 18 14:00 Minimum Daily Average: 0.1 ppb on Jun 26
Maximum Diurnal Average: 1.1 ppb at hour 10 Minimum Diurnal Average: 0.2 ppb at hour 14
Monthly Average: 0.32 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.2 $Q_3 = 0.4$ $P_{90} = 0.6$ $P_{99} = 1.4$

Hours in Service:	306
Hours of Data:	286
Hours of Missing Data:	20
Hours of Calibration:	18
Percent Operational Time:	99.4

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
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	0	0	0	0	0	0	0	0	1	0	0	0	0	--	0.9
19-Jun	0	0	0	A	1	1	0	0	1	0	1	1	0	0	0	0	1	0	1	0	0	0	1	1	0.5	1.1
20-Jun	0	0	A	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
21-Jun	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0.4	1.0
22-Jun	A	0	0	0	0	0	0	0	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	A	0.3	0.8
23-Jun	1	1	0	0	0	0	1	1	3	9	7	1	0	0	0	0	0	0	0	1	0	0	A	0	1.3	9.1
24-Jun	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	A	1	0	0.3	1.1
25-Jun	0	0	0	0	0	0	0	0	0	0	0	M	M	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
26-Jun	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
27-Jun	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	0.3
28-Jun	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	0.5
29-Jun	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0.1	0.6
30-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	A	0	0.3	2.3
	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.6	1.1	0.9	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	Diurnal Average	
	0.9	0.7	0.4	0.4	0.7	0.6	0.6	1.4	2.9	9.1	7.2	1.3	0.7	0.6	2.3	1.4	0.5	0.5	1.0	0.9	1.0	0.8	0.6	0.6	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

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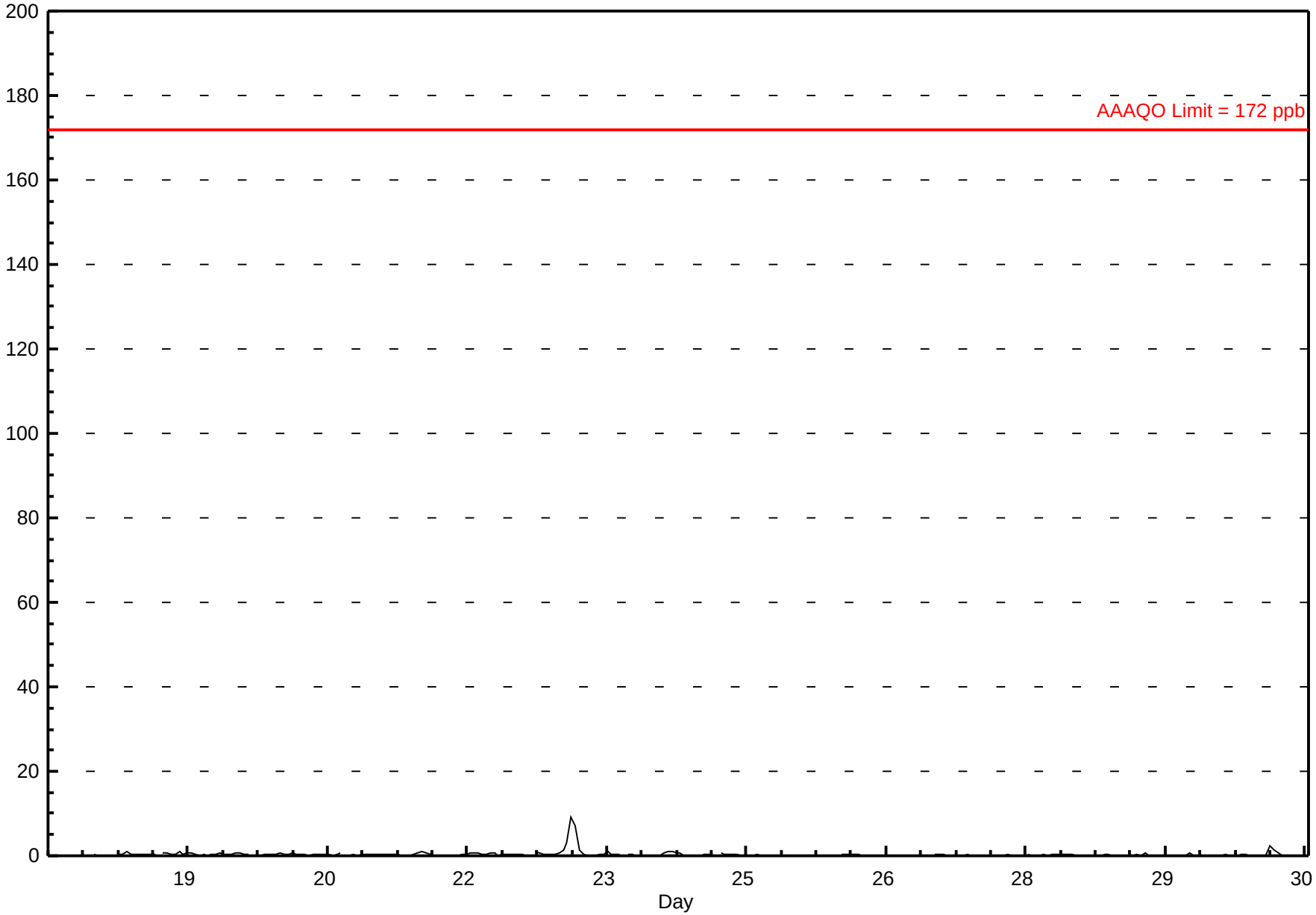
Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - June 2010



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Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - June 2010

Maximum Value: 12.9 ppb on Jun 23 10:00

Maximum Daily Average: 2.0 ppb on Jun 23

Minimum Value: 0 ppb on Jun 18 15:00

Minimum Daily Average: 0.4 ppb on Jun 25

Maximum Diurnal Average: 1.9 ppb at hour 11

Minimum Diurnal Average: 0.5 ppb at hour 2

Monthly Average: 0.84 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.8$ $P_{90} = 1.4$ $P_{99} = 2.8$

Hours in Service:	306
Hours of Data:	286
Hours of Missing Data:	20
Hours of Calibration:	18
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	1	0	0	0	0	0	0	1	2	1	2	1	1	--	1.8
19-Jun	0	0	0	A	1	1	1	1	2	1	1	1	0	0	0	0	1	1	3	1	0	1	1	1	1.0	3.5
20-Jun	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.7	2.0
21-Jun	3	A	0	4	0	2	0	1	1	1	1	1	1	1	1	1	1	1	1	3	4	4	1	1	1.3	4.2
22-Jun	A	1	0	0	0	0	4	0	1	1	1	1	1	2	1	0	1	1	0	0	0	0	0	A	0.9	3.8
23-Jun	1	1	1	0	0	0	1	3	3	13	12	2	1	0	0	0	0	1	1	1	1	0	A	1	2.0	12.9
24-Jun	0	0	0	0	0	0	0	1	1	1	4	3	5	0	0	0	0	0	1	0	0	A	1	0	1.0	5.3
25-Jun	0	0	0	0	0	0	0	0	0	0	0	M	M	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
26-Jun	0	0	0	A	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.9
27-Jun	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.5	0.9
28-Jun	0	A	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	1.0
29-Jun	A	1	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	A	0.6	1.5
30-Jun	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4	2	1	0	0	0	0	0	A	0	0.7	3.7
	0.7	0.5	0.5	0.8	0.5	0.7	0.9	0.9	1.2	1.8	1.9	1.0	1.0	0.5	0.7	0.6	0.6	0.5	0.8	0.8	0.8	0.9	0.7	0.7	Diurnal Average	
	3.0	0.9	0.9	4.2	1.4	2.5	3.8	2.9	3.4	12.9	12.4	3.2	5.3	2.0	3.7	2.4	1.4	1.0	3.5	2.5	3.5	4.1	1.4	2.0	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

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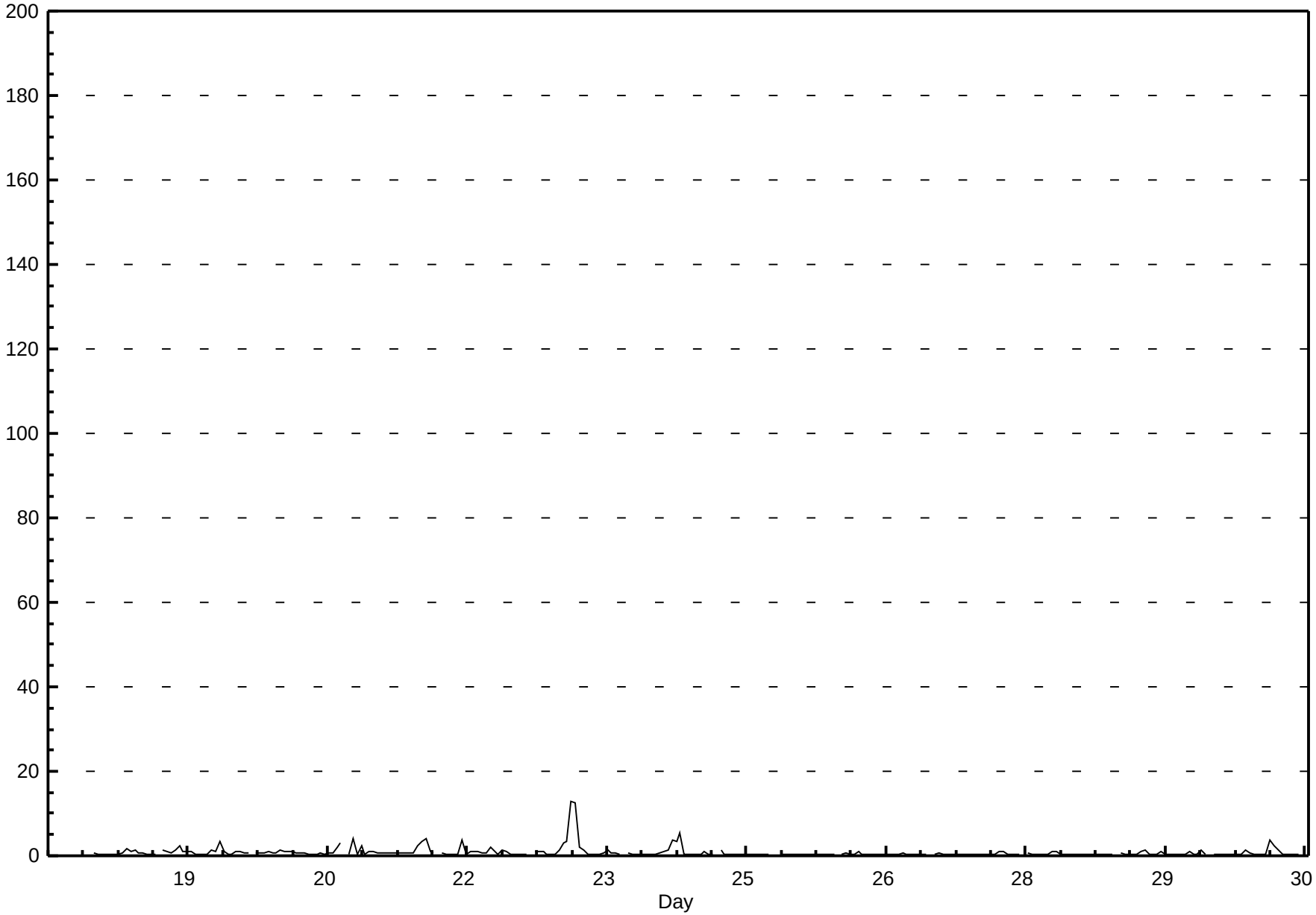
Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

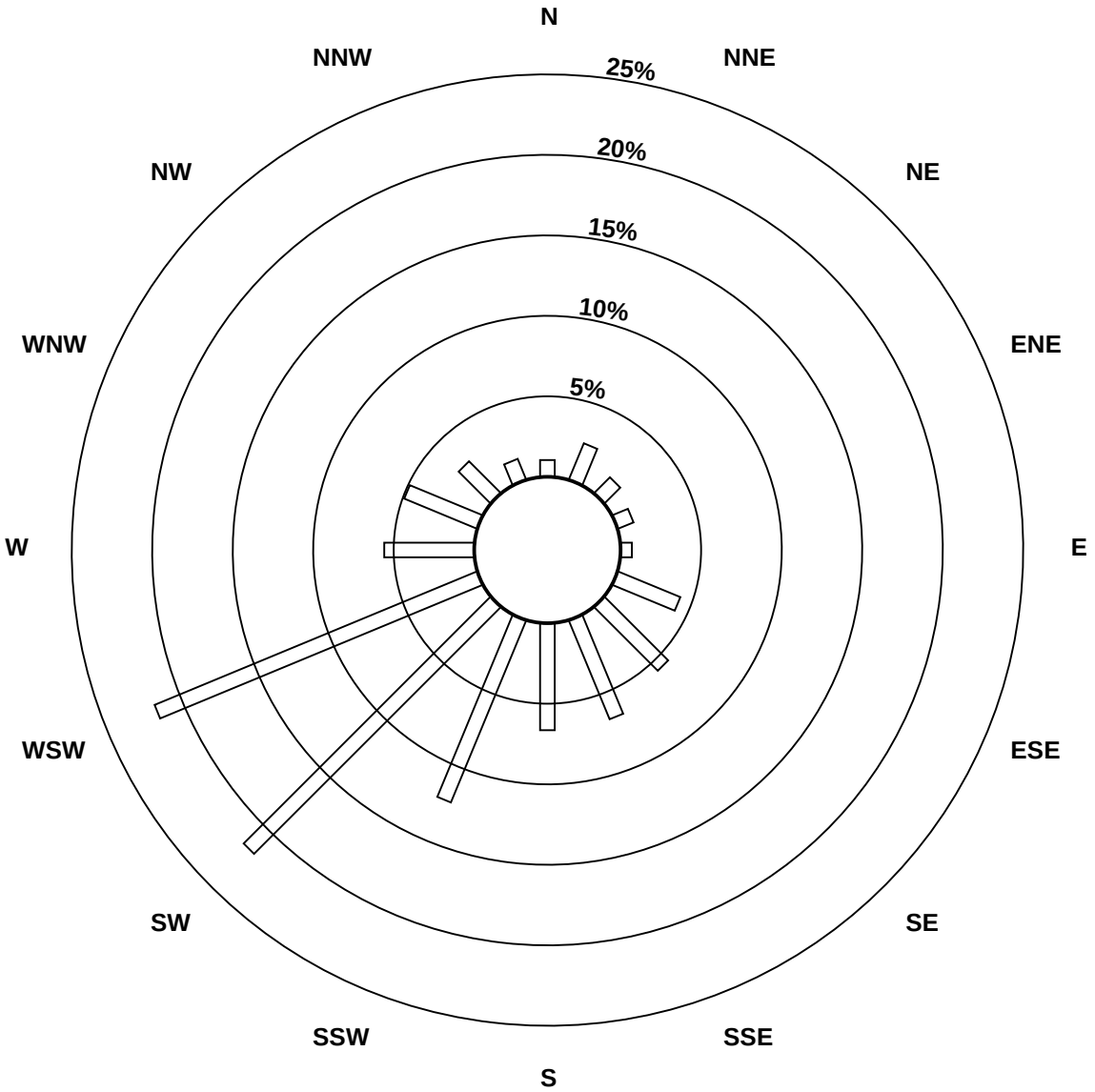
Portable-Bonanza - June 2010



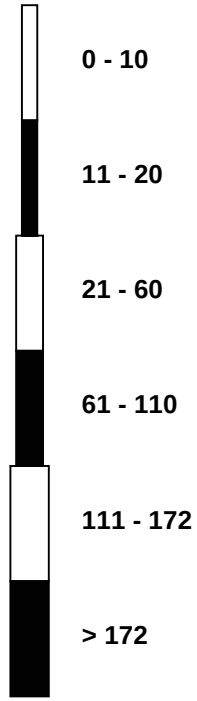
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable-Bonanza - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.9 ppb on Jun 25 02:00 Maximum Daily Average: 0.5 ppb on Jun 19

Minimum Value: 0 ppb on Jun 23 09:00
Maximum Diurnal Average: 0.5 ppb at hour 2
Monthly Average: 0.41 ppb

Minimum Daily Average: 0.4 ppb on Jun 26
Minimum Diurnal Average: 0.3 ppb at hour 16
Percentiles: P_1 = 0.2 P_{10} = 0.3 Q_1 = 0.3 Median = 0.4 Q_3 = 0.5 P_{90} = 0.5 P_{99} = 0.7

Hours in Service:	301
Hours of Data:	283
Hours of Missing Data:	18
Hours of Calibration:	16
Percent Operational Time:	99.3

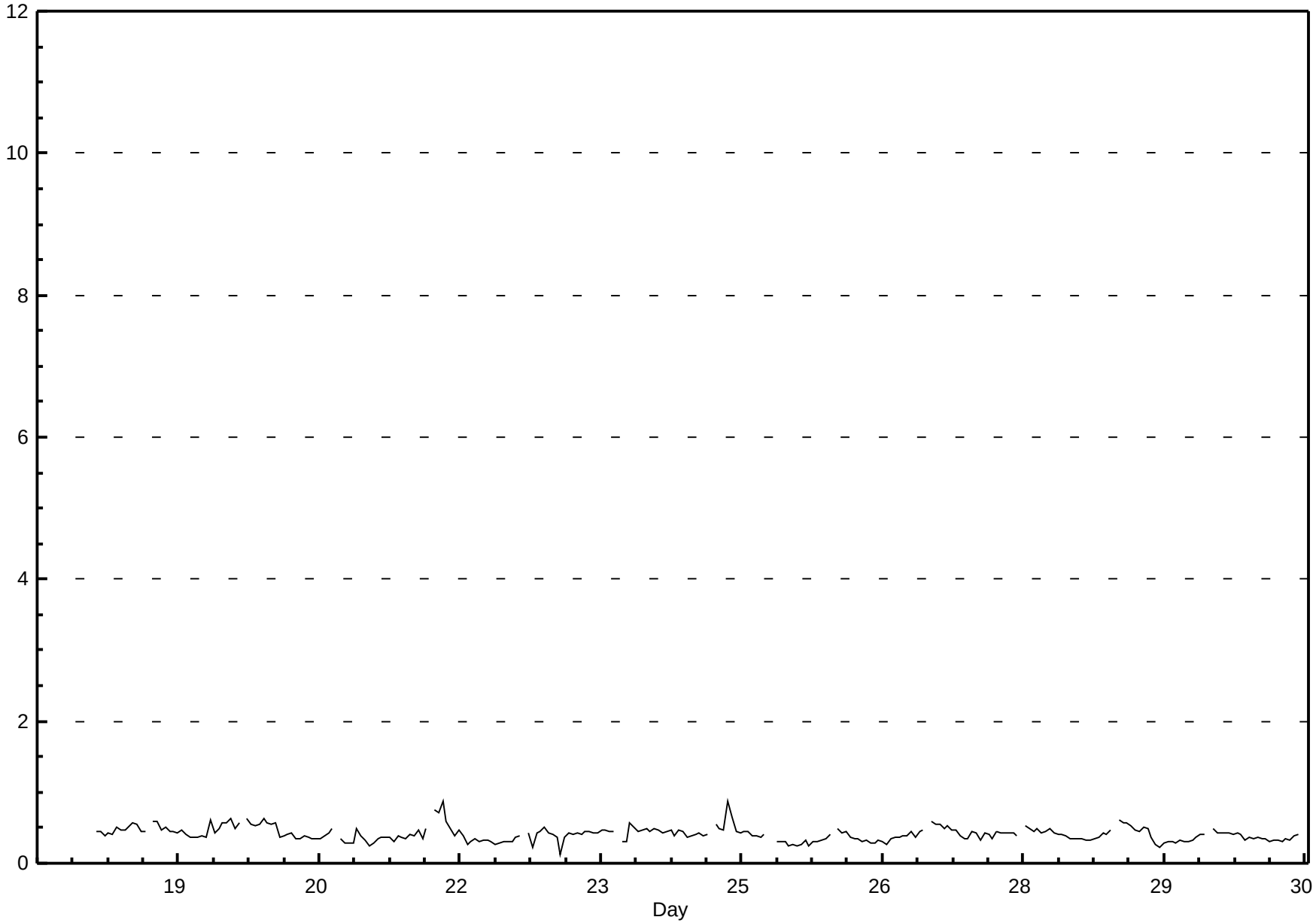
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	0	0	0	0	0	1	0	0	1	1	--	0.6
19-Jun	1	0	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	0.5	0.6
20-Jun	0	1	A	1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

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - June 2010



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Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - June 2010

Maximum Value: 2.5 ppb on Jun 19 19:00

Maximum Daily Average: 0.9 ppb on Jun 19

Minimum Value: 0 ppb on Jun 29 11:00

Minimum Daily Average: 0.7 ppb on Jun 26

Maximum Diurnal Average: 0.9 ppb at hour 2

Minimum Diurnal Average: 0.7 ppb at hour 14

Monthly Average: 0.75 ppb

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:	301
Hours of Data:	283
Hours of Missing Data:	18
Hours of Calibration:	16
Percent Operational Time:	99.3

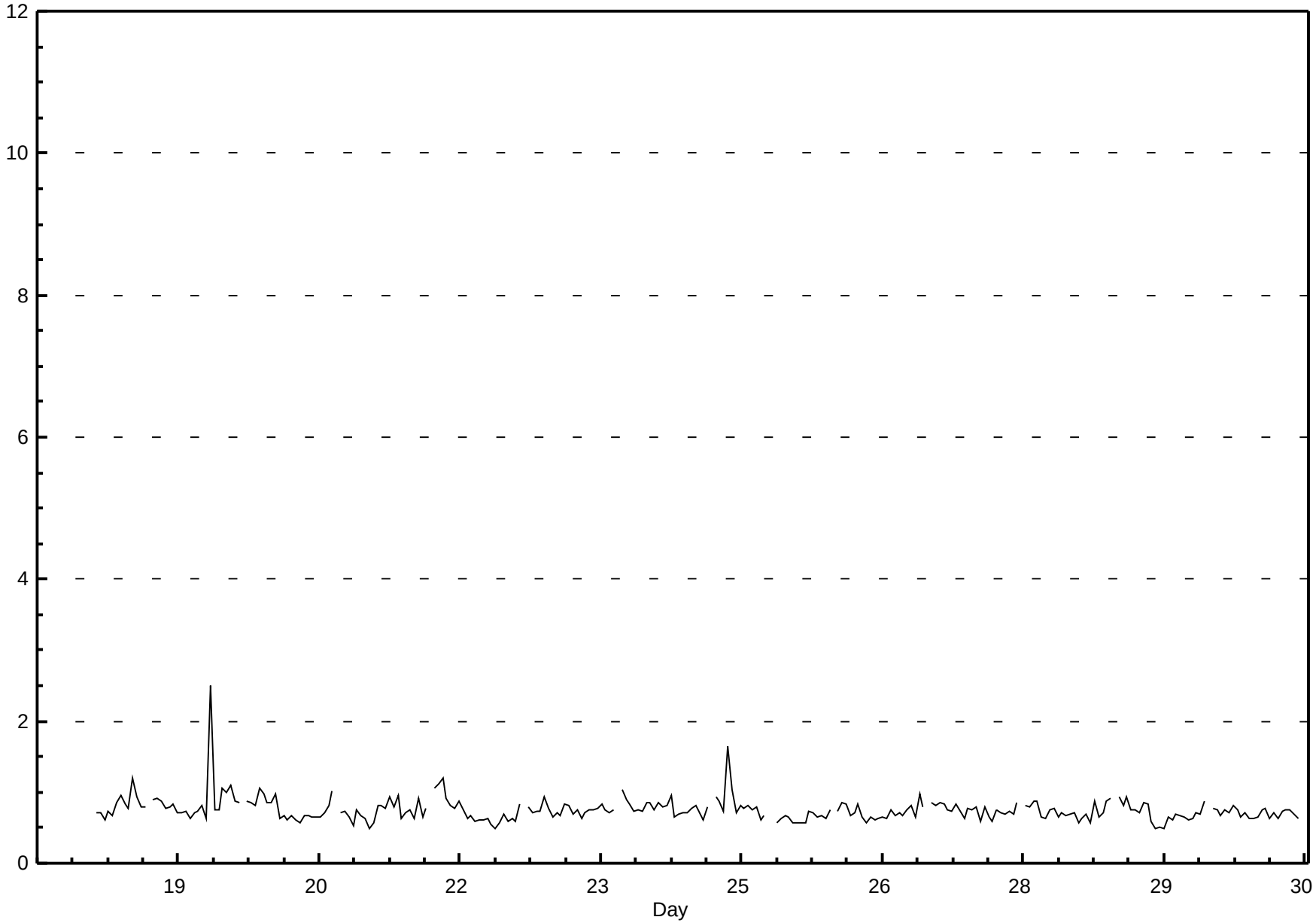
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	1	1	1	1	1	1	1	1	1	1	--	1.2
19-Jun	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	0.9	2.5
20-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
21-Jun	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
22-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	0.7	1.2
23-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.0
24-Jun	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
25-Jun	1	2	1	1	1	1	1	1	1	1	1	M	M	1	1	1	1	1	1	1	1	1	1	1	0.7	1.6
26-Jun	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
27-Jun	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	1.0
28-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
29-Jun	A	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	A	0.7	0.9
30-Jun	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
	0.9	0.9	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	0.7	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.9	Diurnal Average	
	1.0	1.6	1.1	1.2	0.9	0.9	1.1	1.0	0.9	0.9	1.0	1.0	0.8	0.8	0.9	0.8	1.0	0.8	2.5	0.9	1.0	1.1	1.0	1.2	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

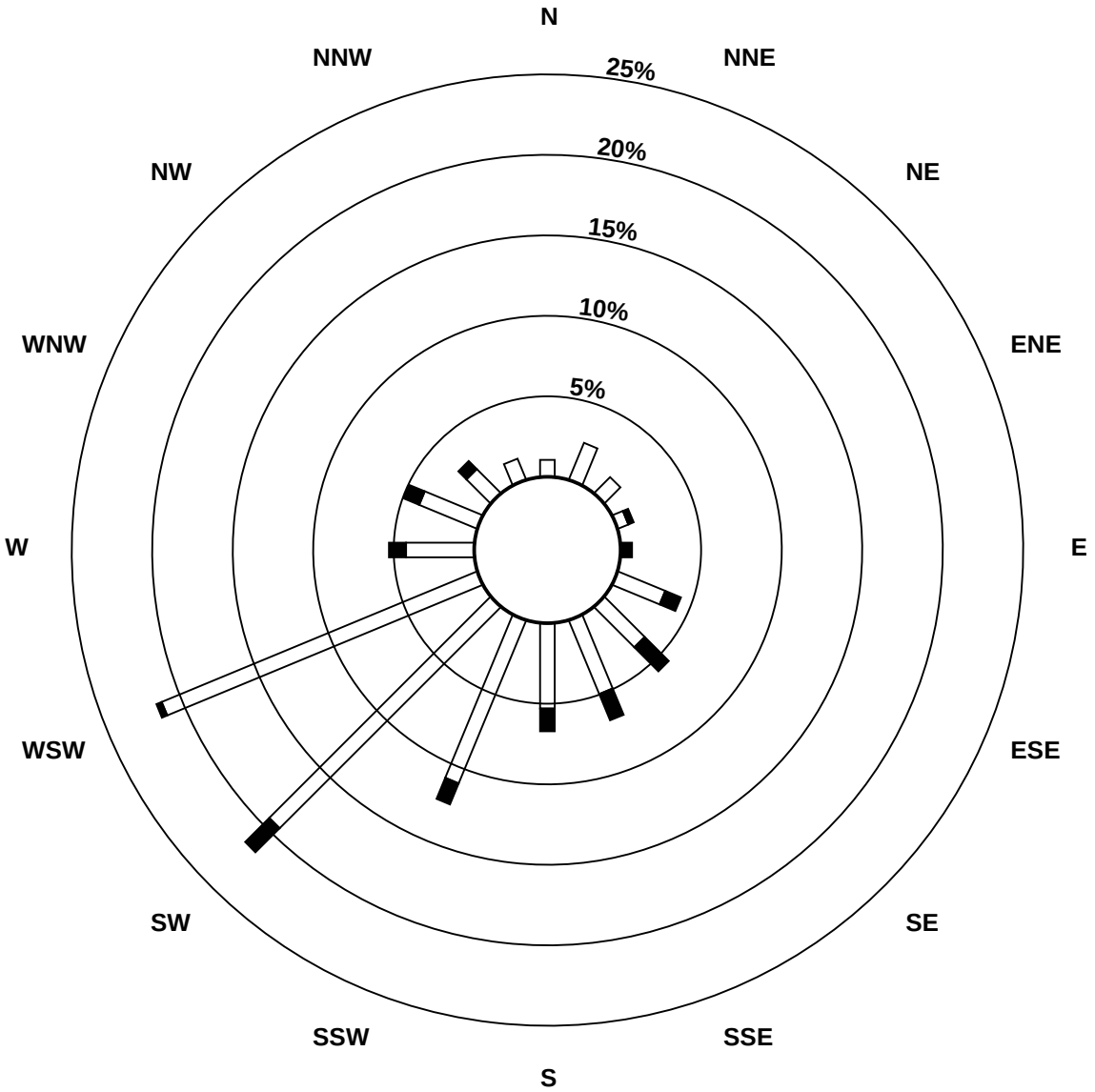
Portable-Bonanza - June 2010



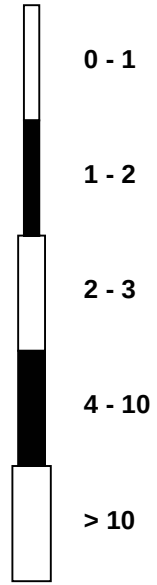
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable-Bonanza - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 14.2 ppb on Jun 19 19:00 Maximum Daily Average: 3.8 ppb on Jun 22

Minimum Value: 0 ppb on Jun 30 17:00 Minimum Daily Average: 0.7 ppb on Jun 30
Maximum Diurnal Average: 4.2 ppb at hour 6 Minimum Diurnal Average: 0.5 ppb at hour 16
Monthly Average: 1.85 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 1.2 $Q_3 = 2.6$ $P_{90} = 4.3$ $P_{99} = 8.1$

Hours in Service:	306
Hours of Data:	285
Hours of Missing Data:	21
Hours of Calibration:	19
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	2	1	1	1	1	1	1	1	2	4	3	5	--	5.0
19-Jun	5	3	3	A	6	6	5	4	2	2	2	1	0	1	0	0	2	1	14	0	2	3	4	3	3.0	14.2
20-Jun	3	3	A	5	5	5	4	4	3	4	3	2	2	1	1	1	1	1	1	1	4	3	3	3	2.7	5.1
21-Jun	4	A	6	5	5	5	4	3	2	2	1	1	1	1	1	1	2	1	2	2	3	2	3	4	2.7	5.9
22-Jun	A	13	8	9	8	8	5	6	4	3	2	1	1	1	1	1	1	1	1	2	2	2	4	A	3.8	12.7
23-Jun	4	4	3	4	6	7	3	2	2	2	1	0	0	0	0	0	0	0	1	1	1	2	A	3	2.1	7.1
24-Jun	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	0	1	1	1	2	1	A	4	4	1.6	4.1
25-Jun	4	4	3	3	2	3	2	1	1	0	0	M	M	0	0	0	0	0	0	0	0	1	1	1	1.3	4.4
26-Jun	1	1	1	A	3	2	2	2	1	1	0	0	0	1	0	0	0	0	1	2	0	1	2	1	1.0	2.6
27-Jun	1	1	A	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.8	2.4
28-Jun	1	A	3	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0.8	3.1
29-Jun	A	4	5	4	6	5	3	3	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	A	1.8	6.1
30-Jun	2	1	1	1	2	2	2	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	A	1	0.7	2.0
	2.7	3.6	3.5	3.8	4.0	4.2	2.9	2.4	1.7	1.4	1.0	0.8	0.8	0.7	0.6	0.5	0.6	0.6	1.7	1.0	1.3	1.6	2.4	2.4	Diurnal Average	
	5.0	12.7	7.9	9.3	7.7	8.3	4.7	6.1	3.5	3.6	2.7	2.0	2.2	1.4	1.4	1.4	1.7	1.5	14.2	2.3	4.1	3.6	4.1	5.0	Diurnal Maximum	

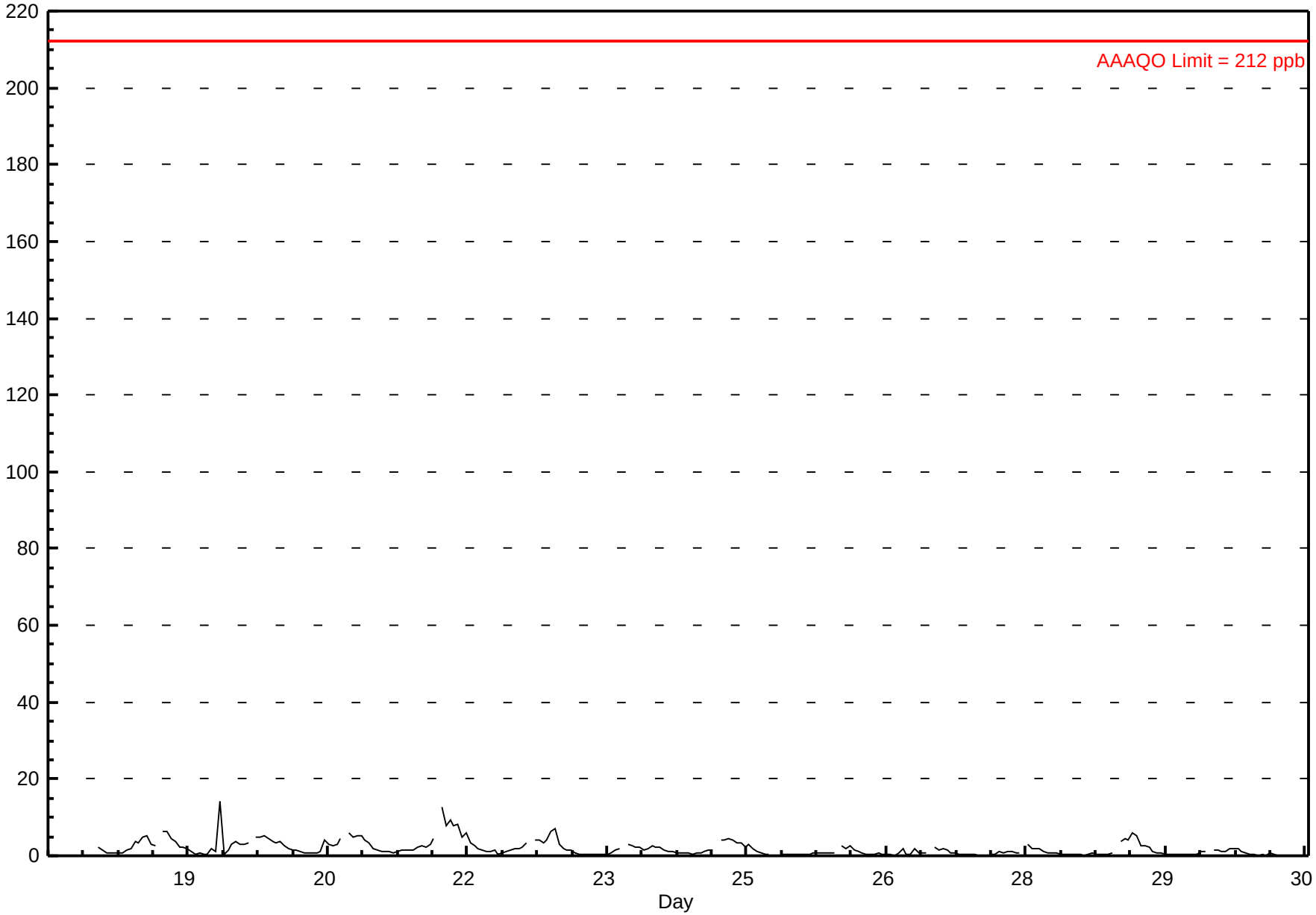
C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - June 2010



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Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - June 2010

Maximum Value: 269.9 ppb on Jun 19 19:00

Maximum Daily Average: 16.7 ppb on Jun 19

Minimum Value: 0 ppb on Jun 30 22:00

Minimum Daily Average: 3.0 ppb on Jun 27

Maximum Diurnal Average: 24.0 ppb at hour 19

Minimum Diurnal Average: 2.0 ppb at hour 12

Monthly Average: 5.66 ppb

Percentiles: P_1 = 0.3 P_{10} = 1.0 Q_1 = 1.7 Median = 3.1 Q_3 = 6.3 P_{90} = 10.2 P_{99} = 18.6

Hours in Service:	306
Hours of Data:	285
Hours of Missing Data:	21
Hours of Calibration:	19
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	3	3	1	1	1	1	1	2	4	23	8	10	--	22.7
19-Jun	8	6	4	A	9	16	6	8	3	3	2	2	1	4	1	2	9	5	270	1	4	6	9	5	16.7	269.9
20-Jun	5	5	A	6	7	16	7	5	4	9	10	3	3	2	1	1	1	8	1	11	22	17	26	11	7.8	26.1
21-Jun	10	A	8	13	11	9	9	4	3	2	2	2	2	1	3	3	5	5	6	4	7	4	9	10	5.8	13.0
22-Jun	A	17	13	11	10	10	8	13	5	7	3	6	1	1	5	3	3	4	2	7	4	3	8	A	6.5	16.8
23-Jun	6	7	4	9	10	19	7	5	4	2	1	1	1	2	2	4	5	1	2	1	6	3	A	7	4.8	19.1
24-Jun	4	4	2	2	3	7	9	8	4	3	5	2	3	3	2	2	3	3	3	3	3	A	7	5	3.8	9.0
25-Jun	5	8	4	5	4	11	8	2	2	1	1	M	M	1	1	1	1	2	2	1	2	2	4	1	3.1	10.7
26-Jun	1	1	1	A	4	4	7	6	4	2	1	1	2	3	4	1	1	1	19	26	1	2	47	2	6.1	47.4
27-Jun	1	2	A	4	2	3	7	2	1	3	2	3	2	2	1	1	1	6	1	10	9	5	1	1	3.0	9.6
28-Jun	1	A	5	2	2	5	7	5	7	3	2	1	1	2	2	5	1	3	4	6	2	3	4	1	3.2	7.1
29-Jun	A	6	11	7	11	11	5	3	3	2	1	1	2	1	4	5	2	2	2	1	2	5	10	A	4.4	11.2
30-Jun	4	3	3	2	3	5	7	4	1	1	1	1	5	2	10	12	0	0	1	2	0	0	A	3	3.0	11.5
	4.5	5.9	5.5	6.2	6.4	9.7	7.2	5.4	3.4	3.0	2.6	2.0	2.2	2.0	2.9	3.1	2.6	3.1	24.0	5.7	4.9	6.1	12.2	5.0	Diurnal Average	
	10.4	16.8	12.7	13.0	11.3	19.1	9.3	12.9	6.8	8.5	10.0	5.6	5.1	3.6	10.5	11.5	8.5	7.8	269.9	26.0	22.2	22.7	47.4	10.8	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

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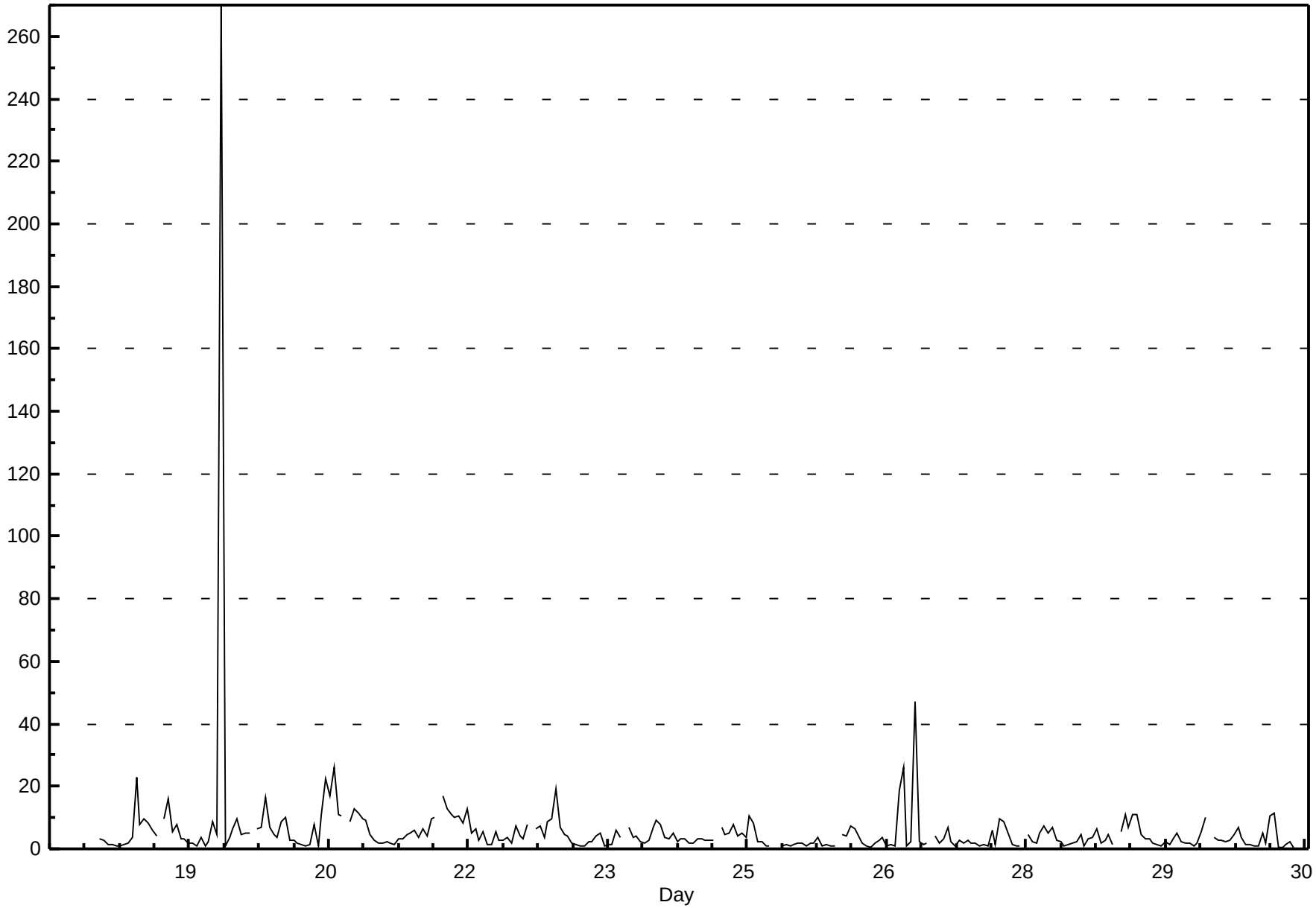
Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

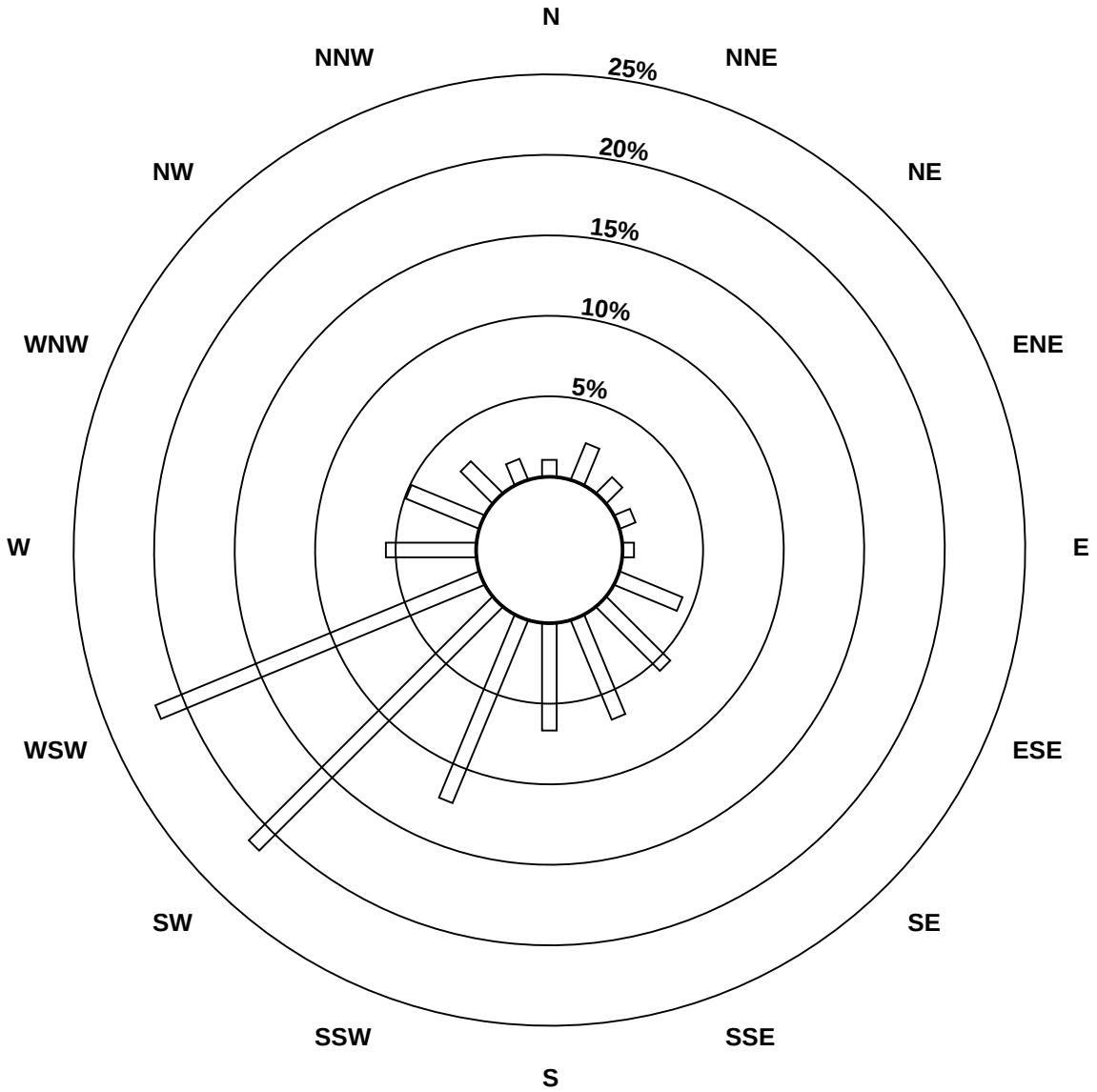
Portable-Bonanza - June 2010



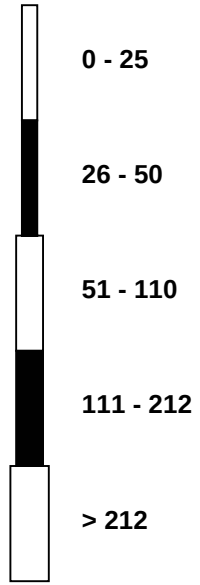
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable-Bonanza - June 2010



Pollutant Classes (ppb)



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Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 40.4 ppb on Jun 19 19:00 Maximum Daily Average: 2.1 ppb on Jun 19

Minimum Value: 0 ppb on Jun 18 15:00 Minimum Daily Average: 0.2 ppb on Jun 27
Maximum Diurnal Average: 3.3 ppb at hour 19 Minimum Diurnal Average: 0.1 ppb at hour 13
Monthly Average: 0.47 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.2 $Q_3 = 0.4$ $P_{90} = 0.8$ $P_{99} = 5.3$

Hours in Service:	306
Hours of Data:	285
Hours of Missing Data:	21
Hours of Calibration:	19
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	1	0	0	--	0.7
19-Jun	0	0	0	A	0	1	1	2	1	0	0	0	0	0	0	0	2	1	40	0	0	0	0	0	2.1	40.4
20-Jun	0	0	A	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	1.1
21-Jun	1	A	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
22-Jun	A	1	0	1	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	1.9
23-Jun	0	0	0	0	1	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0.4	3.3
24-Jun	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.3
25-Jun	0	0	0	0	0	2	1	1	0	0	0	M	M	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
26-Jun	0	0	0	A	0	1	5	2	1	0	0	0	0	0	0	0	0	0	0	6	0	1	1	0	0.7	5.5
27-Jun	0	0	A	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	0.8
28-Jun	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
29-Jun	A	0	0	0	1	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.4	1.7
30-Jun	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0.2	0.8
	0.2	0.1	0.1	0.2	0.3	1.0	1.2	0.9	0.5	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.3	0.2	3.3	0.6	0.2	0.2	0.4	0.1	Diurnal Average	
	0.9	0.6	0.4	1.0	0.7	3.3	5.4	1.9	1.1	0.9	0.7	0.3	0.2	0.3	0.8	0.6	1.6	0.7	40.4	5.5	0.7	0.7	1.2	0.6	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

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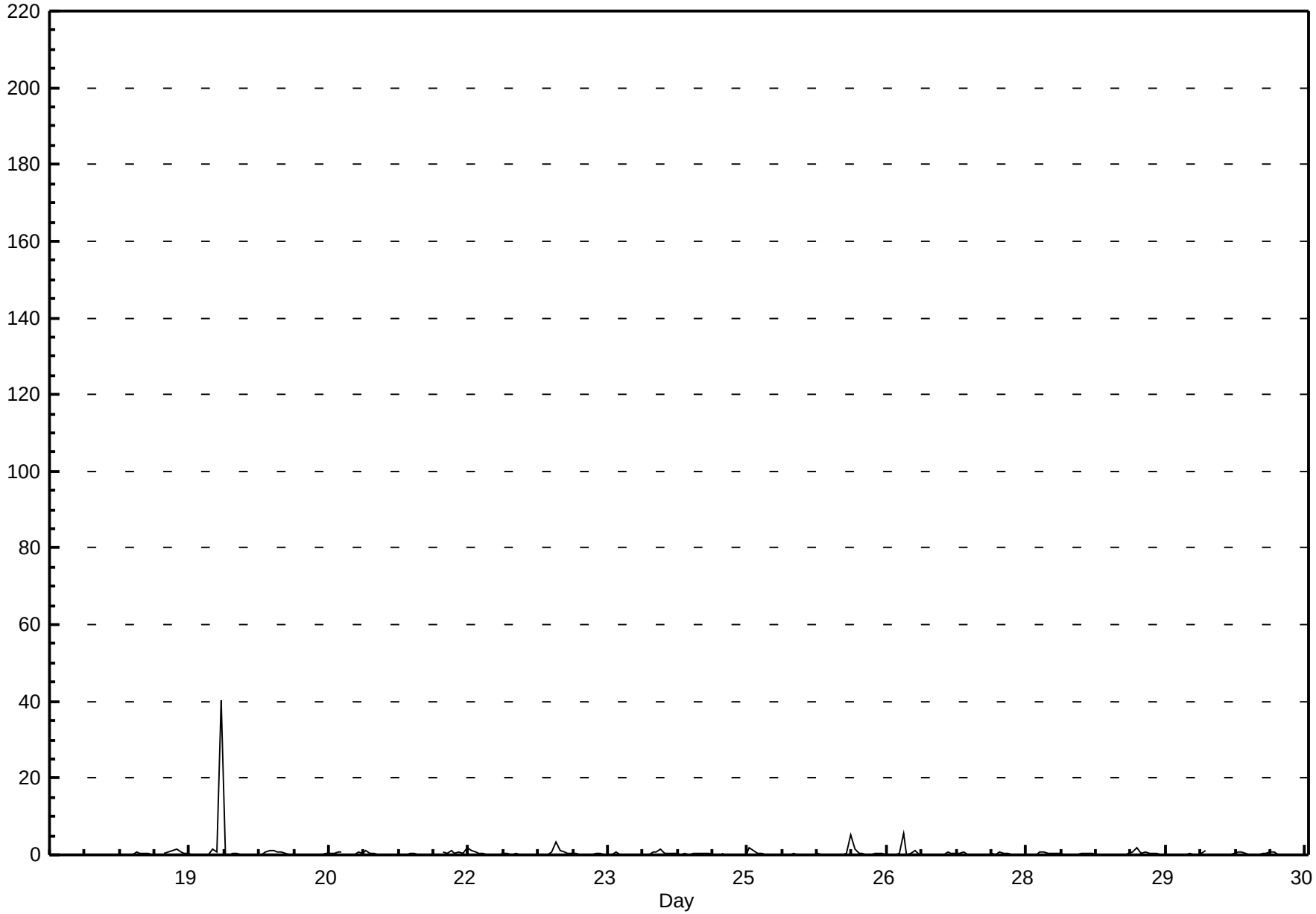
Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - June 2010



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Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - June 2010

Maximum Value: 490.9 ppb on Jun 19 19:00

Maximum Daily Average: 23.6 ppb on Jun 19

Minimum Value: 0 ppb on Jun 26 21:00

Minimum Daily Average: 2.0 ppb on Jun 21

Maximum Diurnal Average: 39.9 ppb at hour 19

Minimum Diurnal Average: 0.5 ppb at hour 3

Monthly Average: 5.57 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.2$ $Q_1 = 0.5$ Median = 1.7 $Q_3 = 4.2$ $P_{90} = 9.7$ $P_{99} = 28.7$

Hours in Service:	306
Hours of Data:	285
Hours of Missing Data:	21
Hours of Calibration:	19
Percent Operational Time:	99.4

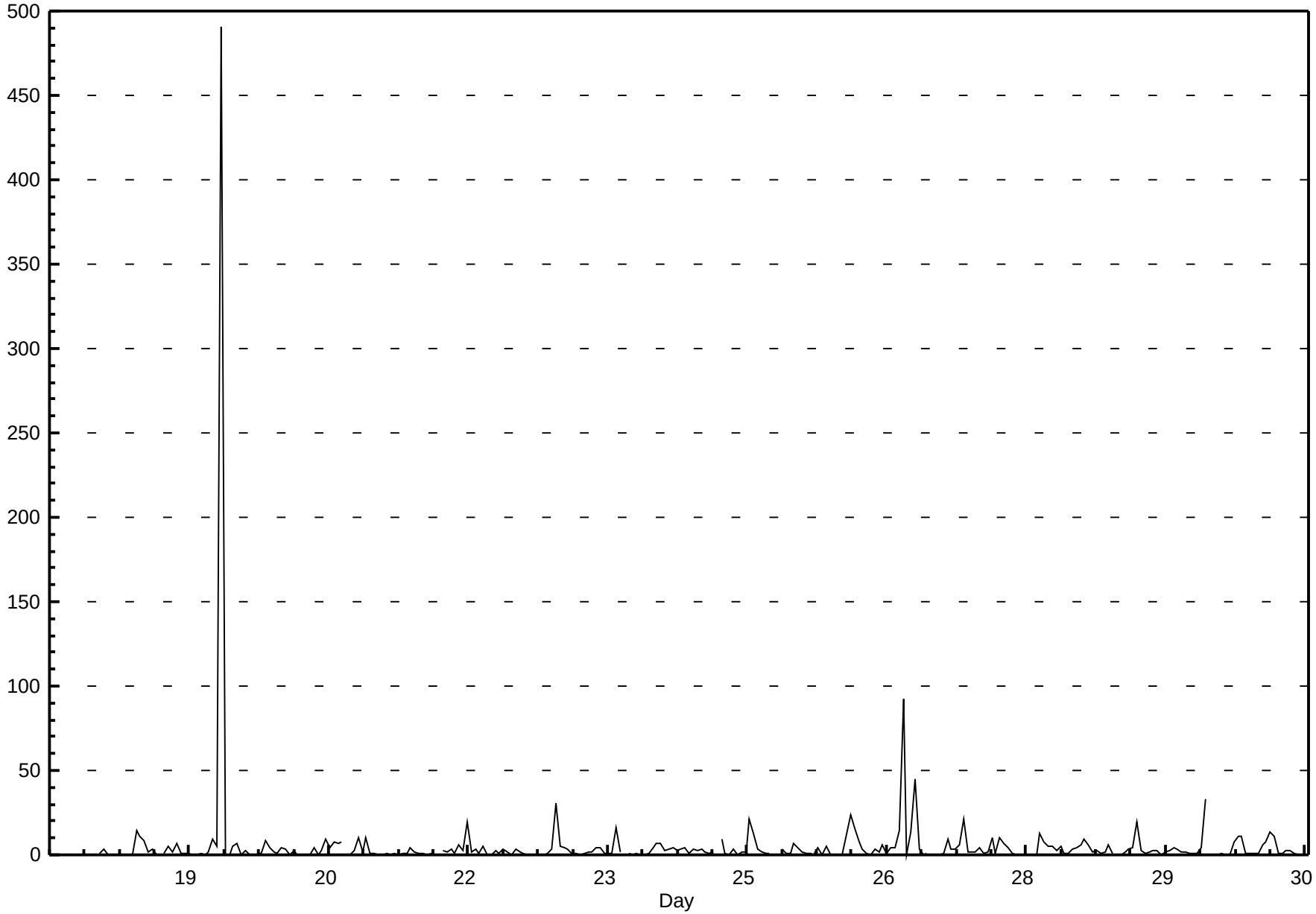
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	1	3	0	0	0	0	0	0	0	14	11	8	--	14.1
19-Jun	2	3	0	A	1	5	2	7	1	1	0	0	0	1	0	1	10	5	491	0	0	5	7	0	23.6	490.9
20-Jun	3	0	A	0	0	8	4	1	1	5	3	0	3	0	0	0	0	4	0	3	10	4	8	7	2.9	9.5
21-Jun	7	A	0	3	10	2	10	1	0	0	0	0	0	0	0	1	1	5	2	1	1	0	1	1	2.0	10.1
22-Jun	A	3	2	3	1	6	3	20	2	4	1	5	0	0	3	1	3	2	0	4	1	1	0	A	2.9	19.8
23-Jun	0	0	0	0	3	31	5	4	3	1	1	0	1	2	2	4	4	1	1	1	16	2	A	1	3.6	30.9
24-Jun	0	1	0	0	1	5	7	7	3	4	4	3	3	4	1	3	3	3	2	1	1	A	10	1	2.9	9.7
25-Jun	0	4	0	2	2	22	13	3	1	1	1	M	M	3	1	1	7	4	1	1	1	0	4	0	3.3	21.6
26-Jun	5	0	0	A	0	12	24	16	8	4	1	0	4	2	6	1	4	4	14	92	0	14	45	3	11.3	92.1
27-Jun	0	1	A	0	0	1	10	3	3	6	21	2	2	1	4	1	2	10	1	10	7	4	1	0	3.9	20.9
28-Jun	0	A	0	0	0	13	8	5	5	3	5	1	1	3	4	6	10	6	2	3	1	2	6	1	3.6	12.7
29-Jun	A	0	2	3	4	19	2	1	1	2	2	0	2	2	4	4	2	1	1	1	1	4	33	A	4.2	32.6
30-Jun	0	0	1	0	0	8	11	11	1	1	0	1	6	8	14	11	1	1	3	3	1	0	A	0	3.5	13.6
	1.8	1.2	0.5	1.3	1.9	10.9	8.2	6.6	2.6	2.6	3.4	1.2	1.8	2.4	3.0	2.6	3.5	3.6	39.9	9.1	3.1	4.2	11.3	2.1	Diurnal Average	
	7.2	3.5	1.6	3.5	10.0	30.9	24.1	19.8	8.0	6.3	20.9	5.2	5.6	7.6	13.6	11.3	9.7	10.0	490.9	92.1	15.8	14.1	45.1	8.2	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable-Bonanza - June 2010



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Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 49.2 ppb on Jun 19 19:00 Maximum Daily Average: 4.9 ppb on Jun 19

Minimum Value: 0 ppb on Jun 30 17:00 Minimum Daily Average: 0.9 ppb on Jun 30
Maximum Diurnal Average: 5.2 ppb at hour 6 Minimum Diurnal Average: 0.6 ppb at hour 16
Monthly Average: 2.26 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.3$ $Q_1 = 0.6$ Median = 1.4 $Q_3 = 3.0$ $P_{90} = 5.0$ $P_{99} = 9.2$

Hours in Service:	306
Hours of Data:	285
Hours of Missing Data:	21
Hours of Calibration:	19
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	2	1	1	1	1	1	1	1	2	4	4	5	--	5.4
19-Jun	5	3	3	A	6	7	6	5	3	3	2	1	0	1	0	1	3	2	49	0	2	3	4	3	4.9	49.2
20-Jun	3	4	A	5	5	6	5	5	4	4	3	2	2	1	1	1	1	1	1	1	5	3	3	3	3.0	6.0
21-Jun	5	A	6	5	6	6	5	4	2	2	1	1	1	1	1	1	2	2	2	2	3	2	3	5	2.9	6.1
22-Jun	A	13	8	10	8	9	5	8	5	3	2	2	1	1	2	1	1	1	1	2	2	2	4	A	4.2	13.5
23-Jun	4	4	3	4	7	10	4	3	2	2	1	0	0	0	0	1	1	1	1	1	2	2	A	3	2.4	10.3
24-Jun	3	2	2	2	2	3	3	3	2	2	2	1	1	1	1	1	1	1	1	2	1	A	4	4	1.9	4.5
25-Jun	4	4	3	3	2	5	3	2	1	0	0	M	M	0	0	0	0	0	0	0	0	1	1	1	1.6	5.0
26-Jun	1	1	1	A	3	3	8	3	1	1	0	0	1	1	1	0	0	0	1	7	0	1	3	1	1.6	7.8
27-Jun	1	1	A	2	2	2	2	1	1	1	1	1	0	0	0	0	0	1	0	2	1	1	1	1	0.9	2.4
28-Jun	1	A	3	2	2	2	2	1	1	1	1	0	0	0	0	1	0	1	1	0	0	1	1	1	1.0	3.1
29-Jun	A	4	5	4	7	7	3	3	2	2	1	1	0	0	0	0	0	0	1	0	0	1	2	A	2.1	7.0
30-Jun	2	1	1	1	2	2	3	2	1	0	0	0	0	0	1	1	0	0	0	0	0	0	A	1	0.9	2.5
	2.9	3.8	3.6	4.0	4.3	5.2	4.1	3.3	2.1	1.7	1.2	0.8	0.8	0.7	0.7	0.6	0.8	0.7	4.5	1.5	1.5	1.8	2.7	2.5	Diurnal Average	
	5.3	13.5	8.4	10.3	8.0	10.3	7.8	8.0	4.6	4.5	3.0	2.0	2.2	1.5	1.5	1.4	3.3	1.7	49.2	7.3	4.6	4.3	4.5	5.4	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

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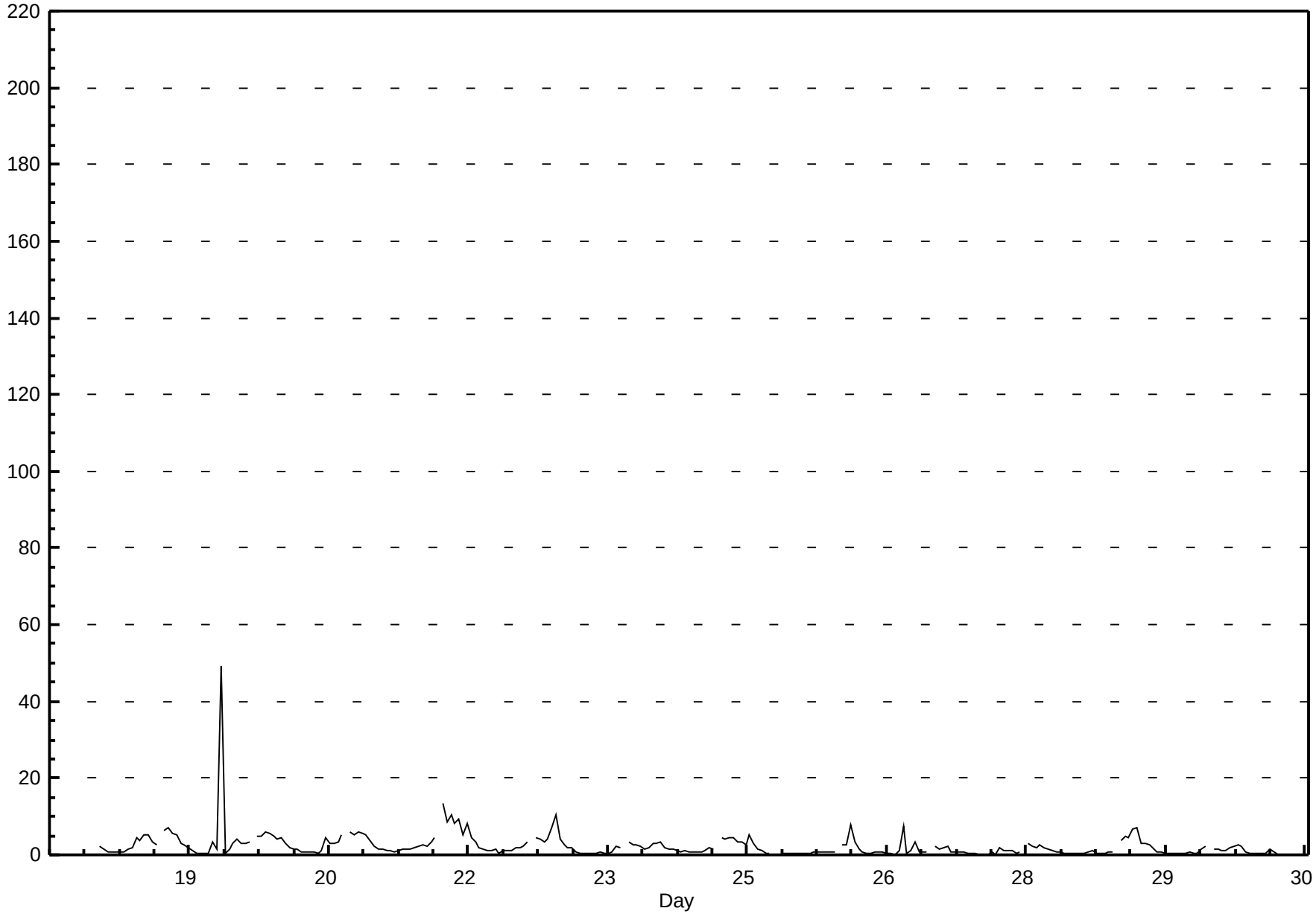
Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - June 2010



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Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - June 2010

Maximum Value: 498.7 ppb on Jun 19 19:00

Maximum Daily Average: 28.8 ppb on Jun 19

Minimum Value: 0 ppb on Jun 30 22:00

Minimum Daily Average: 5.8 ppb on Jun 27

Maximum Diurnal Average: 43.4 ppb at hour 19

Minimum Diurnal Average: 2.9 ppb at hour 12

Monthly Average: 9.83 ppb

Percentiles: P_1 = 0.6 P_{10} = 1.4 Q_1 = 2.5 Median = 5.0 Q_3 = 9.8 P_{90} = 16.9 P_{99} = 86.7

Hours in Service:	306
Hours of Data:	285
Hours of Missing Data:	21
Hours of Calibration:	19
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	4	5	1	2	1	1	1	2	4	37	14	18	--	36.9
19-Jun	10	9	4	A	11	21	7	15	4	4	2	2	1	5	1	3	18	8	499	1	4	11	16	5	28.8	498.7
20-Jun	8	6	A	6	7	24	11	6	5	13	14	3	5	2	1	1	1	12	1	14	32	21	34	17	10.7	34.1
21-Jun	15	A	9	16	17	11	19	5	3	2	2	3	2	2	3	4	5	10	7	4	7	4	10	11	7.4	19.5
22-Jun	A	20	15	13	11	17	9	32	7	10	3	11	1	1	8	4	6	4	2	11	6	4	8	A	9.1	32.1
23-Jun	7	8	4	9	13	50	11	7	6	2	3	1	2	4	4	8	9	1	2	2	21	5	A	8	8.0	50.0
24-Jun	4	5	3	2	3	12	16	14	6	7	8	4	6	6	3	5	6	6	4	3	4	A	17	6	6.5	16.8
25-Jun	5	11	4	7	5	30	21	5	4	2	2	M	M	3	2	1	8	6	3	2	2	2	8	1	6.0	29.9
26-Jun	6	1	1	A	4	15	27	17	9	5	1	1	6	4	9	1	4	4	30	109	1	11	93	5	15.9	109.3
27-Jun	2	3	A	4	2	3	12	5	2	9	9	4	4	3	3	2	2	16	2	19	16	9	2	1	5.8	18.9
28-Jun	1	A	5	3	2	16	15	10	12	5	6	2	2	5	6	11	9	10	6	9	3	4	9	1	6.5	16.4
29-Jun	A	6	13	9	14	25	7	4	3	3	3	1	4	3	8	8	4	3	3	1	3	10	42	A	8.0	41.8
30-Jun	4	3	3	2	3	13	15	15	2	2	1	2	11	9	22	23	1	1	4	5	1	0	A	3	6.2	22.9
	6.0	6.9	5.9	7.1	7.6	19.9	14.3	11.3	5.4	5.4	4.5	2.9	3.9	4.0	5.5	5.6	5.6	6.2	43.4	13.9	7.8	9.8	23.0	6.8	Diurnal Average	
	15.4	19.6	14.5	15.9	17.1	50.0	27.2	32.1	11.7	12.7	13.6	10.7	10.8	8.9	22.4	22.9	18.1	15.8	498.7	109.3	32.1	36.9	92.6	18.1	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

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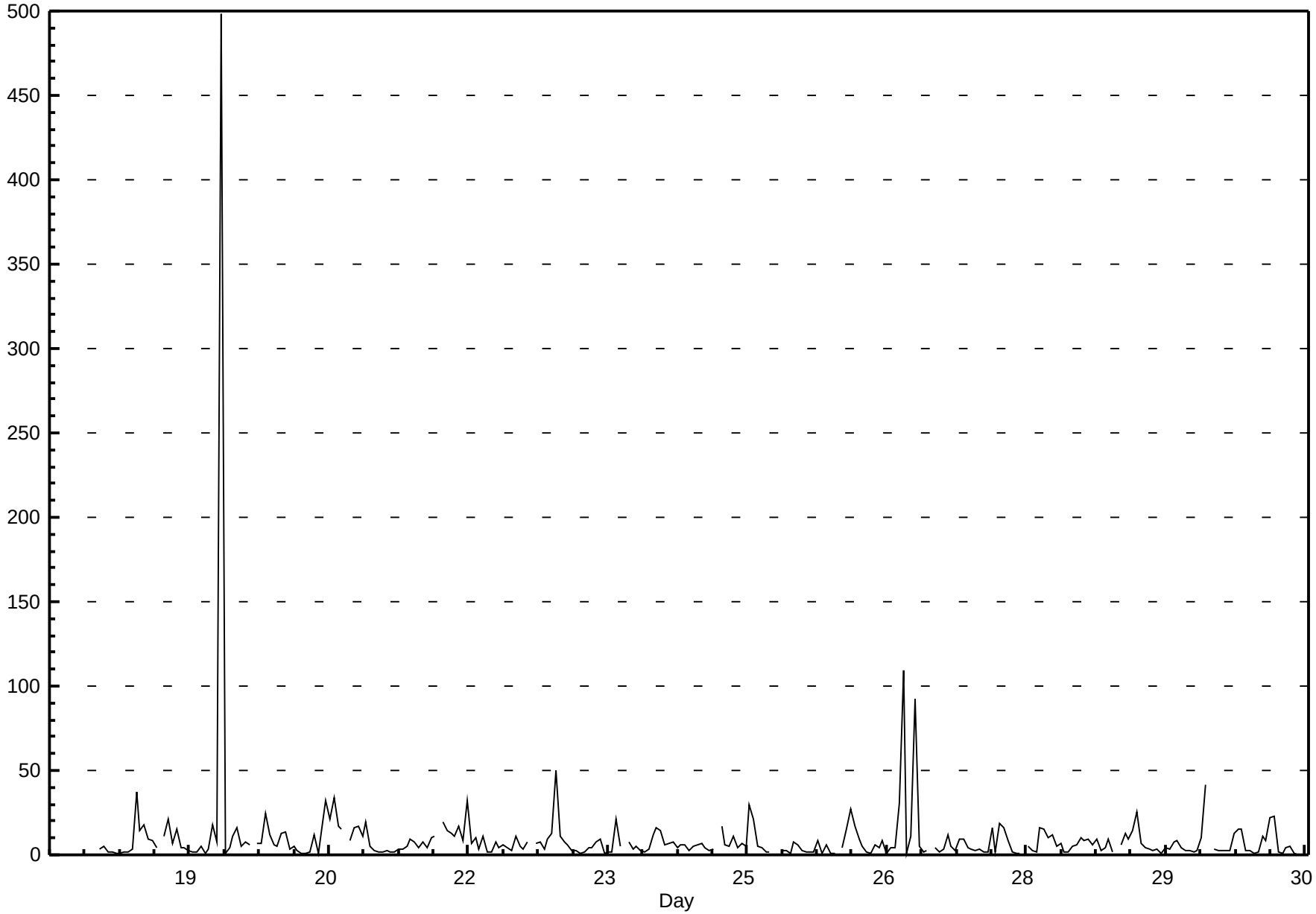
Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable-Bonanza - June 2010



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Hourly Averages

Ozone (O_3) - ppb

Portable-Bonanza - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 49.4 ppb on Jun 20 18:00 Maximum Daily Average: 35.3 ppb on Jun 20

Minimum Value: 6 ppb on Jun 22 04:00 Minimum Daily Average: 17.7 ppb on Jun 25
Maximum Diurnal Average: 36.3 ppb at hour 17 Minimum Diurnal Average: 17.6 ppb at hour 6
Monthly Average: 28.50 ppb Percentiles: P_1 = 10.4 P_{10} = 14.2 Q_1 = 23.1 Median = 28.2 Q_3 = 34.6 P_{90} = 42.9 P_{99} = 48.3

Hours in Service:	302
Hours of Data:	283
Hours of Missing Data:	19
Hours of Calibration:	17
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
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	44	43	43	44	41	36	31	23	22	17	--	43.8
19-Jun	16	23	28	A	21	12	12	18	28	33	39	43	43	43	44	46	46	46	43	44	36	25	28	25	32.2	46.4
20-Jun	26	23	A	16	18	23	24	25	30	36	42	45	46	46	46	48	48	49	48	46	36	33	33	26	35.3	49.4
21-Jun	20	A	23	23	18	14	18	25	30	34	39	43	46	48	41	36	38	37	32	33	35	34	31	24	31.4	47.9
22-Jun	A	9	11	6	12	12	21	21	27	34	38	39	41	41	43	42	45	44	44	44	43	37	35	A	31.3	44.5
23-Jun	31	27	26	16	11	10	22	27	27	30	29	29	30	30	30	29	30	30	31	29	25	24	A	25	26.1	30.9
24-Jun	22	22	25	26	25	23	23	25	28	31	31	31	31	32	34	35	32	28	28	27	25	A	13	12	26.4	34.6
25-Jun	12	11	12	14	14	13	16	18	19	20	22	M	M	26	27	26	25	24	23	17	14	12	12	12	17.7	26.6
26-Jun	13	13	13	A	12	11	11	12	13	14	16	18	18	19	20	23	26	30	31	30	29	28	30	32	20.1	31.7
27-Jun	30	28	A	27	26	24	24	25	26	27	29	33	35	32	32	32	33	32	30	27	27	29	31	37	29.4	37.1
28-Jun	37	A	32	28	26	25	27	28	27	28	29	31	33	38	37	37	39	38	39	40	35	35	32	30	32.7	39.8
29-Jun	A	29	25	21	17	19	26	27	27	29	32	34	36	37	38	38	37	38	37	35	32	27	21	A	30.0	38.3
30-Jun	30	28	28	28	26	24	22	22	25	27	28	28	29	29	28	28	29	28	27	24	24	23	A	24	26.5	30.3
	23.6	21.1	22.3	20.4	18.9	17.6	20.6	22.6	25.6	28.5	31.1	33.9	35.4	35.1	35.7	35.5	36.3	36.1	35.0	33.2	30.2	27.6	26.3	24.1	Diurnal Average	
	37.2	28.8	31.9	28.5	26.4	25.3	27.3	27.7	29.9	36.1	41.9	44.6	46.3	47.9	45.7	47.7	48.3	49.4	48.3	45.8	43.1	37.1	35.3	37.1	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

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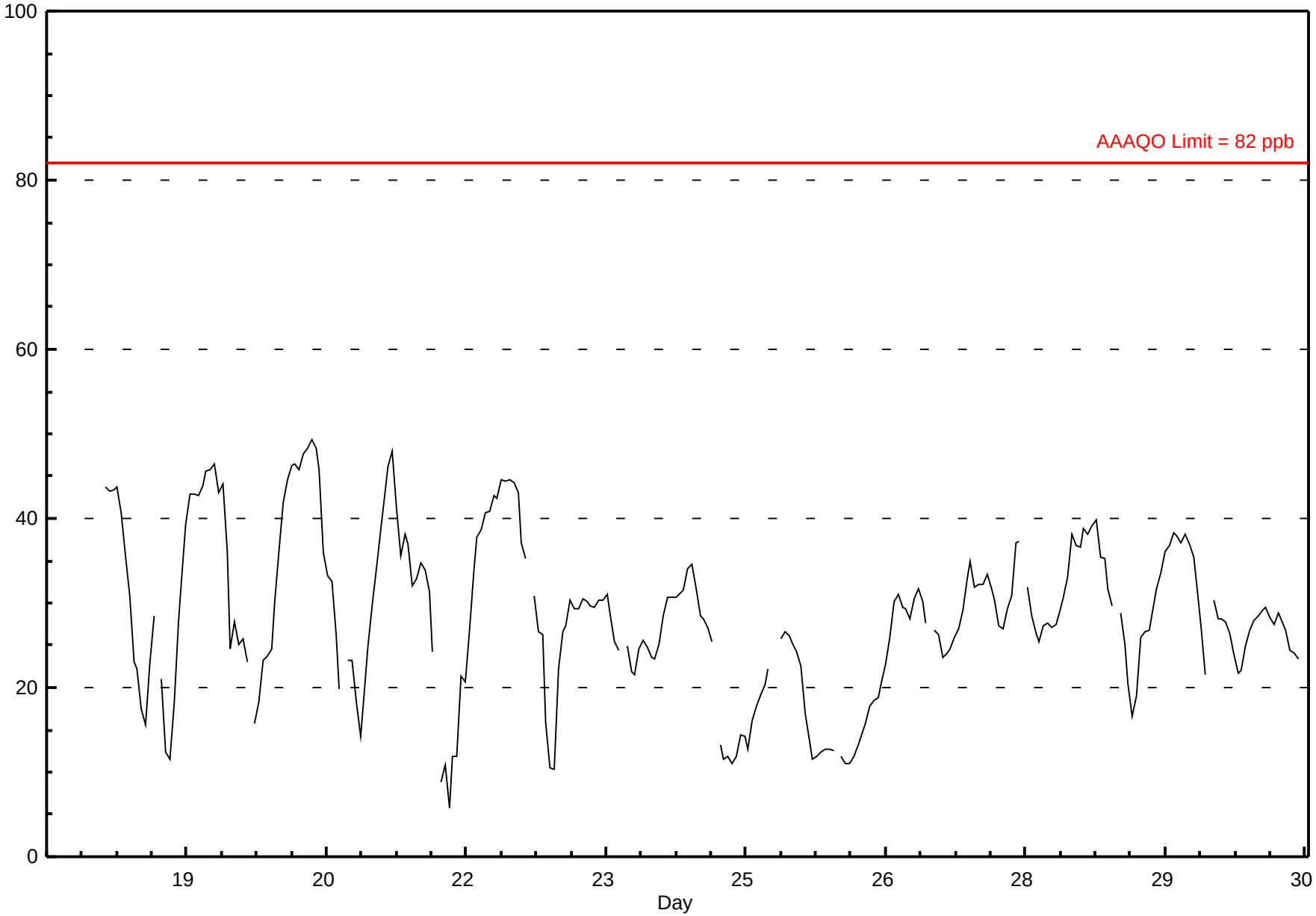
Hourly Averages

Ozone (O_3) - ppb

Portable-Bonanza - June 2010



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Hourly Maximums

Ozone (O_3) - ppb

Portable-Bonanza - June 2010

Maximum Value: 52.8 ppb on Jun 20 18:00

Maximum Daily Average: 39.8 ppb on Jun 20

Minimum Value: 12 ppb on Jun 22 04:00

Minimum Daily Average: 19.8 ppb on Jun 25

Maximum Diurnal Average: 39.2 ppb at hour 17

Minimum Diurnal Average: 21.7 ppb at hour 6

Monthly Average: 32.02 ppb

Percentiles: P_1 = 13.2 P_{10} = 18.0 Q_1 = 26.8 Median = 31.7 Q_3 = 38.8 P_{90} = 46.3 P_{99} = 51.3

Hours in Service:	302
Hours of Data:	283
Hours of Missing Data:	19
Hours of Calibration:	17
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		
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	46	46	46	48	45	39	35	32	30	24	--	47.6
19-Jun	25	30	32	A	28	22	16	27	32	37	45	45	47	45	47	48	49	50	50	49	43	32	35	32	37.7	50.4
20-Jun	30	26	A	18	24	27	28	28	36	41	45	47	49	49	48	51	51	53	52	50	49	40	39	33	39.8	52.8
21-Jun	25	A	29	29	23	17	22	28	34	38	45	48	50	51	49	40	43	43	35	39	39	38	37	31	36.2	51.0
22-Jun	A	21	17	12	16	15	25	25	34	39	41	42	43	46	46	46	47	48	48	48	47	42	39	A	35.7	48.4
23-Jun	34	31	29	26	16	16	29	29	32	33	33	32	33	33	32	32	33	33	33	33	30	28	A	28	29.9	34.1
24-Jun	25	27	27	29	28	27	27	29	30	33	33	33	34	35	36	37	36	30	30	30	28	A	20	14	29.4	36.5
25-Jun	13	13	14	17	17	16	19	19	21	22	24	M	M	27	29	28	27	26	25	21	16	13	14	14	19.8	28.6
26-Jun	14	14	15	A	13	13	13	14	16	16	18	19	20	21	22	25	30	32	33	33	32	30	32	33	22.1	33.0
27-Jun	32	30	A	29	29	27	26	26	27	29	33	36	38	34	35	36	35	34	33	31	30	32	34	40	32.0	39.8
28-Jun	40	A	35	31	29	28	30	30	29	30	31	32	37	40	39	40	41	41	42	43	39	38	35	35	35.3	42.7
29-Jun	A	32	33	29	21	25	43	30	29	31	34	36	39	39	41	40	39	40	39	37	35	31	25	A	34.2	42.5
30-Jun	33	30	30	30	29	28	23	25	27	30	30	30	31	33	31	29	32	30	30	26	27	25	A	26	28.8	33.1
	27.1	25.5	26.1	24.9	22.7	21.7	25.0	26.0	28.8	31.5	34.3	36.6	38.2	37.8	38.5	38.2	39.2	39.0	38.0	36.9	34.6	31.9	30.8	28.1	Diurnal Average	
	39.6	32.4	35.5	30.6	28.6	27.7	42.5	30.0	35.8	40.8	45.3	48.4	49.6	51.0	48.6	50.8	51.4	52.8	51.7	50.2	49.3	41.8	38.9	39.8	Diurnal Maximum	

C - Calibration M - Maintenance NS - Not in service A - Automated Daily Zero Span

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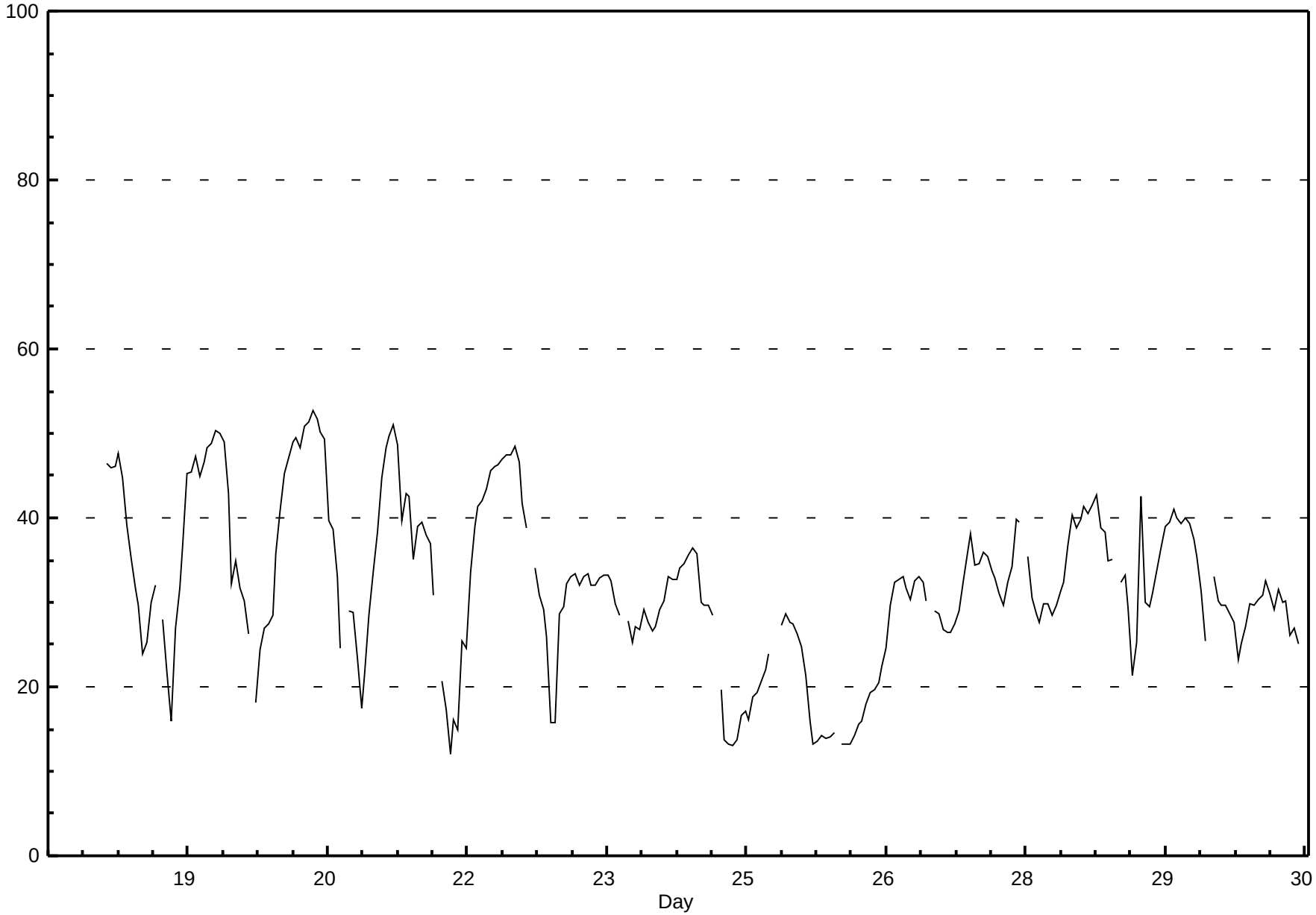
Hourly Maximums

Ozone (O_3) - ppb

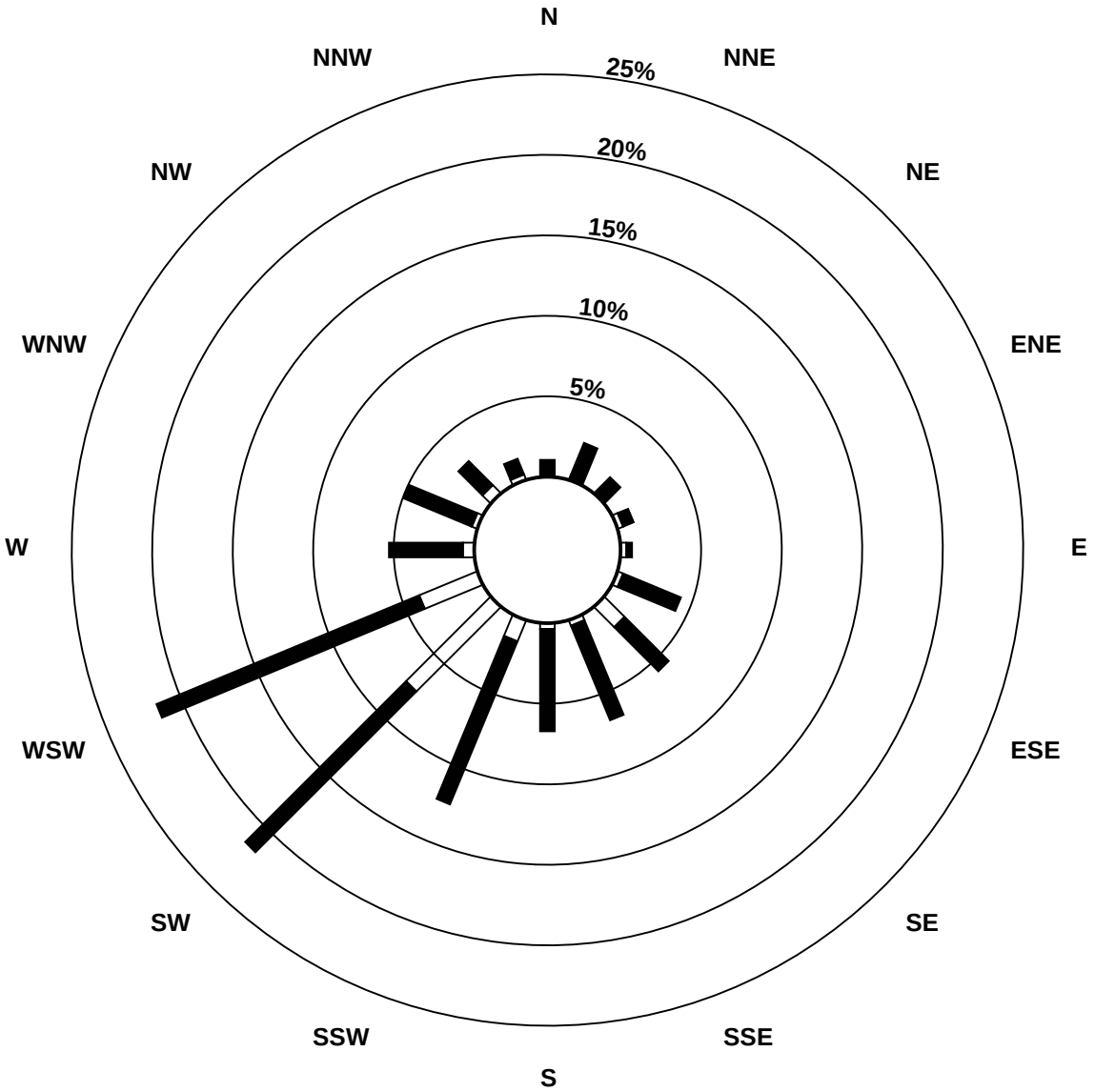
Portable-Bonanza - June 2010



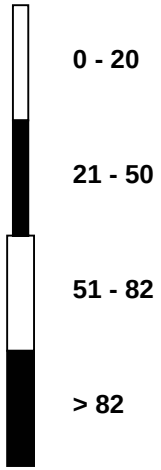
Pollutant Rose

Ozone (O_3) - ppb

Portable-Bonanza - June 2010



Pollutant Classes (ppb)



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Eight Hour Running Averages

Ozone (O_3) - ppb

Portable-Bonanza - June 2010

Maximum Value: 47.2 ppb on Jun 20 20:00

Minimum Value: 12.0 ppb on Jun 26 08:00

Percentiles: P_1 = 12.1 P_{10} = 17.5 Q_1 = 23.6 Median = 28.1 Q_3 = 32.6 P_{90} = 39.9 P_{99} = 45.9

Hours in Service:	295
Hours of Data:	293
Hours of Missing Data:	2
Hours of Calibration:	2
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	
18-Jun	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	42	40	38	35	32	41.8
19-Jun	29	26	25	23	22	20	18	19	20	22	23	26	28	32	36	40	42	44	44	44	43	41	39	37	44.3
20-Jun	34	31	29	25	23	23	22	22	23	25	27	30	34	37	39	42	45	46	47	47	46	44	43	40	47.2
21-Jun	36	35	31	28	25	22	20	20	22	23	25	28	31	35	38	40	41	41	40	39	37	36	34	33	41.0
22-Jun	32	28	25	21	18	15	14	13	15	18	21	25	29	33	35	38	40	42	42	43	43	43	42	42	43.4
23-Jun	40	37	35	31	26	22	20	21	21	21	22	23	26	28	29	29	30	30	30	30	29	29	29	28	39.9
24-Jun	27	25	24	24	24	24	24	24	25	26	27	27	28	29	30	31	32	32	31	31	30	30	27	24	31.9
25-Jun	21	18	16	14	13	13	13	14	15	16	17	18	18	20	22	23	24	25	25	24	23	21	19	17	25.1
26-Jun	16	14	13	13	12	12	12	12	12	12	13	13	14	15	16	18	19	21	23	25	26	27	28	30	29.5
27-Jun	30	30	30	29	29	28	27	26	26	25	26	27	28	29	30	31	32	32	32	32	31	30	30	31	32.4
28-Jun	31	31	32	32	32	31	31	29	28	28	27	28	29	30	31	32	34	35	36	38	38	37	37	36	37.9
29-Jun	36	34	32	29	27	24	24	23	24	24	24	26	29	31	32	34	35	36	37	37	37	35	33	33	37.1
30-Jun	32	30	29	28	27	27	27	26	25	25	25	25	26	26	27	28	28	28	28	28	27	26	26	26	31.7
	39.9	37.4	34.8	31.7	31.6	31.0	30.5	29.2	27.8	27.7	27.4	30.3	33.8	36.7	39.4	42.3	44.6	46.3	47.1	47.2	46.0	44.3	42.7	41.9	
	Diurnal Maximums																								

N - Not Valid

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Hourly Averages

External Temperature (ET) - °C

Portable-Bonanza - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 28.4 °C on Jun 20 17:00 Maximum Daily Average: 20.6 °C on Jun 18

Minimum Value: 9 °C on Jun 23 05:00 Minimum Daily Average: 14.1 °C on Jun 30
Maximum Diurnal Average: 23.5 °C at hour 17 Minimum Diurnal Average: 11.7 °C at hour 5
Monthly Average: 18.13 °C Percentiles: P_1 = 9.4 P_{10} = 11.9 Q_1 = 14.1 Median = 18.0 Q_3 = 21.9 P_{90} = 24.6 P_{99} = 27.2

Hours in Service:	306
Hours of Data:	304
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
18-Jun	NS	NS	NS	NS	NS	NS	11	14	17	20	21	22	24	25	25	25	25	25	23	21	20	19	18	16	20.6	25.2
19-Jun	15	15	16	14	13	12	12	15	19	21	23	24	26	27	27	27	27	27	26	25	24	19	17	15	20.2	27.3
20-Jun	15	14	12	11	11	12	14	15	17	19	22	25	25	26	27	27	28	27	27	27	23	20	18	15	19.9	28.4
21-Jun	13	12	12	12	10	11	12	15	17	18	20	24	24	25	22	21	23	22	21	20	17	14	13	13	17.1	25.1
22-Jun	12	12	12	12	12	12	12	13	16	19	21	23	24	23	25	26	25	26	24	23	22	19	17	16	18.6	25.6
23-Jun	15	14	14	10	9	10	14	17	19	21	23	24	24	25	25	26	26	26	26	24	23	21	19	19	19.7	25.9
24-Jun	17	16	16	15	14	14	15	17	19	21	22	23	22	21	23	24	23	22	20	19	18	16	15	15	18.7	24.0
25-Jun	14	13	13	13	12	11	14	17	18	19	20	M	M	22	23	22	22	22	21	20	18	17	16	15	17.4	22.6
26-Jun	14	14	14	14	14	14	14	15	16	18	19	21	21	21	23	23	23	22	22	22	21	19	17	16	18.2	22.7
27-Jun	15	15	14	14	14	13	15	17	18	20	20	21	23	22	22	22	23	22	22	21	21	18	17	16	18.5	22.8
28-Jun	15	14	13	12	11	11	13	15	16	18	19	20	21	22	22	22	21	21	22	21	20	18	16	14	17.4	22.2
29-Jun	13	12	11	10	9	10	12	14	15	17	18	19	19	20	21	20	20	20	20	19	17	15	14	14	15.8	20.7
30-Jun	14	13	13	12	11	11	12	12	13	15	16	17	18	18	18	18	18	17	16	15	13	11	10	9	14.1	18.2
	14.5	13.7	13.1	12.2	11.7	11.7	13.1	15.1	17.0	18.8	20.5	21.9	22.6	22.8	23.2	23.3	23.5	23.0	22.3	21.2	19.7	17.5	15.9	14.8	Diurnal Average	
	17.5	15.9	15.9	15.1	14.3	14.0	15.1	17.1	19.1	21.1	23.1	24.7	25.8	26.6	27.1	27.5	28.4	27.1	27.1	26.6	24.3	20.8	19.4	18.6	Diurnal Maximum	

M - Maintenance NS - Not in service

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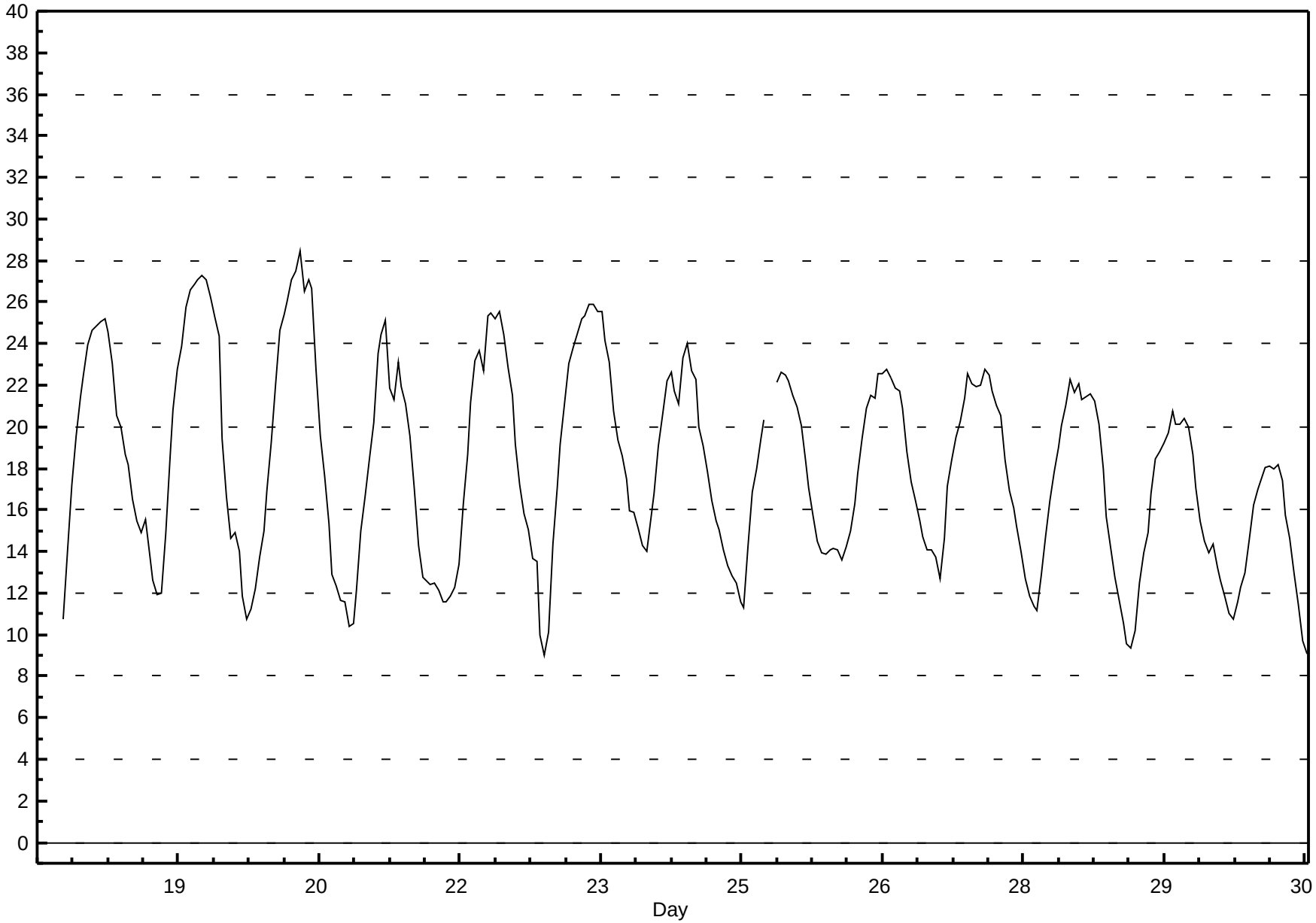
Hourly Averages

External Temperature (ET) - ^{o}C

Portable-Bonanza - June 2010



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Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Bonanza - June 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
18 Spd	NS	NS	NS	NS	NS	NS	4	8	13	10	10	11	9	10	11	12	13	14	17	12	11	4	4	6	7.2	16.7
Dir	NS	NS	NS	NS	NS	NS	211	208	232	237	250	228	248	280	274	288	296	311	299	294	323	20	173	144	270	299
19 Spd	6	8	14	8	7	2	5	8	7	4	3	9	7	6	8	12	13	17	14	9	4	6	6	6	3.4	16.8
Dir	92	112	119	148	152	264	307	233	239	256	256	303	290	187	223	230	234	257	263	279	303	112	126	96	223	257
20 Spd	21	11	7	3	5	9	8	5	3	5	2	4	5	6	6	8	2	6	6	5	4	13	10	1	1.3	21.2
Dir	121	115	45	58	140	128	188	285	306	281	169	355	218	209	281	293	290	206	185	158	30	17	52	128	128	121
21 Spd	3	7	5	3	6	7	7	7	5	4	7	7	5	1	19	16	9	7	7	8	9	15	10	6	3.5	19.4
Dir	329	24	62	274	152	222	215	263	266	273	323	17	348	342	350	358	29	45	112	232	274	331	37	36	343	350
22 Spd	3	1	2	4	1	0	3	4	6	6	7	5	5	9	3	9	11	8	13	16	20	18	15	11	3.3	19.5
Dir	359	112	129	226	283	237	12	129	138	126	111	119	256	321	27	251	244	320	63	110	114	121	129	135	120	114
23 Spd	10	8	7	1	1	3	5	7	9	9	12	10	8	11	12	15	14	11	11	12	8	6	9	7	6.3	15.2
Dir	133	141	151	277	308	128	193	215	223	243	249	239	232	244	231	256	232	263	251	250	200	157	145	155	220	256
24 Spd	6	6	7	8	9	7	6	9	14	12	9	9	14	11	11	14	14	18	18	15	12	9	7	7	7.9	18.1
Dir	155	147	172	151	144	145	163	197	236	237	226	252	216	192	205	219	211	254	292	282	259	253	236	209	222	292
25 Spd	10	9	9	9	8	5	12	23	21	26	26	M	M	24	22	24	25	26	25	26	24	19	14	16	18.0	26.3
Dir	223	222	211	202	214	222	225	233	240	245	251	M	M	250	245	250	247	241	242	232	237	224	218	224	236	245
26 Spd	17	19	20	19	18	16	18	21	23	27	26	25	26	27	29	29	28	28	26	26	17	11	16	16	21.3	29.3
Dir	224	221	224	232	231	229	226	231	236	242	252	257	253	249	238	250	243	239	248	240	236	204	197	200	237	250
27 Spd	12	12	11	14	8	8	17	25	24	23	24	20	19	17	21	20	10	9	10	7	8	15	16	12	13.6	24.5
Dir	201	205	208	201	196	202	208	219	239	229	247	248	249	233	204	212	183	187	195	226	183	154	171	168	213	219
28 Spd	12	8	8	8	9	8	11	19	21	18	16	16	16	14	14	14	19	14	9	15	14	16	7	22	12.3	21.6
Dir	171	150	161	162	165	176	196	223	233	241	241	234	228	235	212	191	192	193	192	216	233	195	183	217	209	217
29 Spd	9	10	6	8	5	5	8	11	11	17	24	23	27	21	21	21	19	18	19	18	14	8	7	9	12.3	27.2
Dir	175	225	156	164	126	173	199	229	197	209	228	244	211	228	227	230	238	245	252	279	282	258	224	185	227	211
30 Spd	11	9	13	12	12	7	12	18	22	24	27	30	36	35	34	32	37	38	40	36	31	31	27	25	23.1	39.8
Dir	163	166	186	180	175	176	219	234	243	251	255	239	246	243	243	241	245	236	239	233	222	218	211	208	230	239

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Hourly Averages

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

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		
Spd	6.7	5.7	6.1	6.4	6.0	5.2	7.7	11.8	12.8	13.1	13.0	11.5	13.5	13.3	12.8	14.3	13.6	13.3	11.7	12.2	8.8	5.8	7.1	8.5	Diurnal Average	
Dir	169	174	173	192	180	190	211	226	234	239	246	249	240	241	240	244	238	245	247	241	236	203	180	190		
Spd	21.2	18.6	19.6	19.2	17.7	16.3	17.8	24.5	24.2	27.0	26.6	30.3	36.1	35.2	33.6	31.5	36.9	38.3	39.8	35.8	30.7	30.8	27.3	25.3	Diurnal Maximum	
Dir	121	221	224	232	231	229	226	219	239	242	255	239	246	243	243	241	245	236	239	233	222	218	211	208		

Maximum Speed Value: 40 km/h on Jun 30 19:00
Minimum Speed Value: 0 km/h on Jun 22 06:00
Maximum Daily Speed Average: 23.1 km/h on Jun 30
Minimum Daily Speed Average: 1.3 km/h on Jun 20
Maximum Diurnal Speed Average: 14.3 km/h at hour 16
Minimum Diurnal Speed Average: 5.2 km/h at hour 6

Monthly Average Velocity: 9.19 km/h 227.4 deg
Speed Percentiles: P_1 = 1.2 P_{10} = 4.7 Q_1 = 7.1 Median = 10.7 Q_3 = 17.7 P_{90} = 25.2 P_{99} = 36.2
All monthly, daily, and diurnal averages have been calculated using vector methods

Hours in Service:	306
Hours of Data:	304
Hours of Missing Data:	2
Percent Operational Time:	99.4

M - Maintenance NS - Not in service

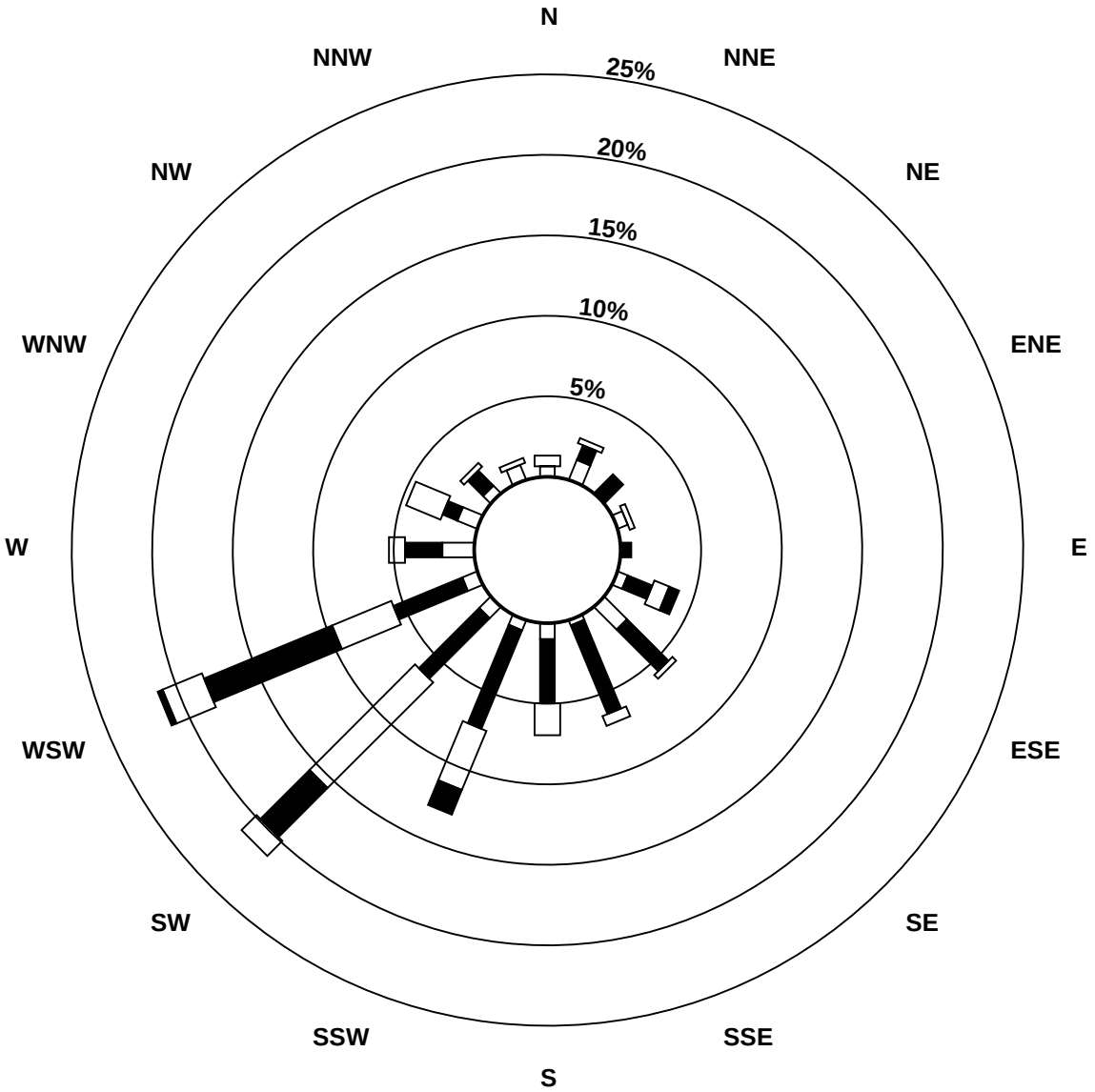
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	6	1	2	1	0	0	10
NorthEast	3	8	1	0	0	0	12
East	1	6	1	0	0	0	8
SouthEast	7	21	6	2	0	0	36
South	3	30	16	0	0	0	49
SouthWest	3	31	39	33	12	2	120
West	9	17	15	11	1	0	53
NorthWest	5	6	5	0	0	0	16
Total	37	120	85	47	13	2	304

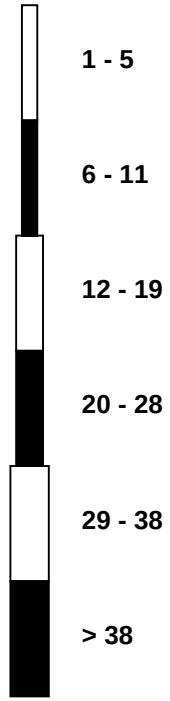
Wind Rose

Wind Speed (WS) (km/h)

Portable-Bonanza - June 2010



Wind Speed Classes (km/h)



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Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable-Bonanza - June 2010

Maximum Speed: 40 km/h on Jun 30 19:00

Maximum Daily Speed Average: 25.3 km/h on Jun 30

Minimum Speed: 2 km/h on Jun 23 05:00

Minimum Daily Speed Average: 8.0 km/h on Jun 20

Maximum Diurnal Speed Average: 18.5 km/h at hour 16

Minimum Diurnal Speed Average: 7.1 km/h at hour 6

Monthly Average Speed: 13.65 km/h

Percentiles: P_1 = 2.7 P_{10} = 5.9 Q_1 = 7.8 Median = 11.5 Q_3 = 17.9 P_{90} = 25.4 P_{99} = 36.6

Hours in Service:	306
Hours of Data:	304
Hours of Missing Data:	2
Percent Operational Time:	99.4

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
18-Jun	NS	NS	NS	NS	NS	NS	4	8	13	10	11	11	11	12	12	14	14	14	17	12	11	7	6	6	10.8	16.8
19-Jun	7	9	15	8	8	4	5	9	8	5	6	9	10	8	11	13	14	18	15	9	5	6	8	8	9.0	17.5
20-Jun	21	14	8	3	5	9	11	5	4	6	5	6	8	8	9	9	5	7	7	6	8	14	11	2	8.0	21.2
21-Jun	5	7	6	7	7	7	7	7	6	5	8	8	6	6	21	16	10	8	7	12	10	16	10	6	8.8	20.7
22-Jun	4	3	3	4	3	2	4	5	7	7	8	7	8	10	9	12	12	12	14	16	20	18	15	11	8.9	19.6
23-Jun	10	8	7	3	2	3	5	7	9	9	12	11	10	12	13	16	15	12	11	13	9	6	9	7	9.2	15.8
24-Jun	6	6	7	9	9	7	7	9	15	12	10	10	16	12	12	15	15	24	18	15	12	9	7	7	11.2	23.6
25-Jun	10	9	10	9	8	5	12	24	22	27	26	M	M	25	23	25	26	27	26	26	25	19	14	16	18.7	26.7
26-Jun	17	19	20	19	18	16	18	21	23	27	26	25	27	27	30	30	29	28	27	26	18	11	16	16	22.3	29.9
27-Jun	12	12	11	14	8	8	17	25	25	24	24	20	20	18	21	20	11	10	10	7	9	15	16	12	15.5	24.8
28-Jun	12	8	9	9	9	8	11	19	21	19	17	17	17	16	16	15	19	16	10	16	14	16	7	22	14.3	21.7
29-Jun	10	11	7	9	7	7	10	12	12	17	25	24	28	23	22	22	19	18	20	19	14	9	7	9	15.1	27.7
30-Jun	11	9	13	12	12	8	12	18	22	24	27	31	37	36	34	32	37	39	40	36	31	31	27	25	25.3	40.1
	10.5	9.7	9.5	8.8	8.0	7.1	9.6	13.0	14.3	14.9	15.9	15.0	16.3	16.4	17.9	18.5	17.4	17.9	17.1	16.5	14.2	13.8	11.8	11.4	Diurnal Average	
	21.2	18.6	19.7	19.3	17.8	16.3	17.9	24.8	24.6	27.2	27.3	31.1	36.9	35.8	34.4	32.2	37.3	38.5	40.1	36.3	31.1	30.9	27.3	25.4	Diurnal Maximum	

M - Maintenance NS - Not in service

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

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable-Bonanza - June 2010

Maximum Value: 88.4 deg on Jun 21 14:00

Minimum Value: 2.1 deg on Jun 20 01:00

Percentiles: P_1 = 2.7 P_{10} = 5.4 Q_1 = 10.0 Median = 16.9 Q_3 = 29.2 P_{90} = 55.5 P_{99} = 85.0

Hours in Service:	306
Hours of Data:	304
Hours of Missing Data:	2
Hours of Calibration:	0
Percent Operational Time:	99.4

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	
18-Jun	NS	NS	NS	NS	NS	NS	14	9	12	20	33	23	43	33	31	32	21	16	7	5	16	74	53	21	73.9
19-Jun	26	14	6	14	24	65	24	17	27	47	65	25	63	56	58	32	28	16	17	11	53	9	35	61	65.4
20-Jun	2	69	17	57	22	21	43	33	53	33	87	66	72	56	58	52	80	36	48	24	68	19	21	86	86.9
21-Jun	70	19	46	75	29	16	18	11	25	40	32	29	56	88	33	19	18	26	20	54	34	26	8	20	88.4
22-Jun	31	80	51	20	73	82	38	53	29	33	35	51	58	33	76	44	30	52	19	11	5	3	3	5	82.2
23-Jun	7	8	11	80	64	57	29	15	17	23	23	33	42	32	33	16	26	24	22	16	14	17	5	12	79.9
24-Jun	13	10	7	8	5	6	17	17	15	20	34	26	25	19	26	20	25	42	11	10	11	14	18	9	42.1
25-Jun	12	11	5	6	5	12	5	6	10	10	12	M	M	14	18	17	12	11	11	8	5	7	4	4	18.3
26-Jun	4	4	5	5	4	5	4	5	7	7	11	13	10	12	12	12	12	10	12	7	8	11	4	2	13.1
27-Jun	3	4	4	9	17	17	5	9	11	12	15	16	18	20	12	14	29	24	18	9	19	8	7	8	29.1
28-Jun	11	13	11	9	7	7	12	14	9	19	19	21	17	26	27	27	10	31	30	20	9	12	20	6	30.7
29-Jun	20	38	32	28	43	57	38	26	12	8	17	17	11	21	18	18	10	14	14	17	8	26	11	11	56.6
30-Jun	18	10	8	5	7	20	9	6	10	11	12	14	11	11	12	12	8	7	7	9	9	4	4	4	19.6
	70.4	79.8	50.7	79.9	73.0	82.2	43.2	53.1	52.7	46.7	86.9	66.5	71.7	88.4	76.5	51.6	80.1	51.8	48.0	54.4	67.7	73.9	53.1	85.7	

M - Maintenance NS - Not in service

PASZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.5 ppb on Jun 14 08:00 Maximum Daily Average: 0.7 ppb on Jun 25

Minimum Value: 0 ppb on Jun 1 02:00 Minimum Daily Average: 0.0 ppb on Jun 1
Maximum Diurnal Average: 0.4 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 4
Monthly Average: 0.16 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.0 $Q_3 = 0.2$ $P_{90} = 0.4$ $P_{99} = 1.8$

Hours in Service:	720
Hours of Data:	688
Hours of Missing Data:	32
Hours of Calibration:	30
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	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
2-Jun	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
3-Jun	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0.2	1.0
4-Jun	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
5-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0.2	1.6
6-Jun	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
7-Jun	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
8-Jun	A	0	0	0	0	0	0	0	0	0	P	P	0	0	0	0	0	0	0	0	0	1	1	0	0.2	0.8
9-Jun	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
10-Jun	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
11-Jun	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
12-Jun	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
13-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.2	0.9
14-Jun	A	0	0	0	0	0	0	3	2	2	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0.5	2.5
15-Jun	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
16-Jun	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-Jun	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
18-Jun	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
19-Jun	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
20-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
21-Jun	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
22-Jun	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
23-Jun	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
24-Jun	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	0.5
25-Jun	A	0	0	0	0	0	0	0	1	1	1	2	2	1	1	1	1	2	1	0	1	1	0	0	0.7	2.0
26-Jun	A	0	0	0	0	0	1	2	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	2.0
27-Jun	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.2
28-Jun	A	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
29-Jun	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
30-Jun	A	1	0	0	1	1	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8
	--	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	--	0.5	0.4	0.3	0.6	0.7	1.0	2.5	2.0	1.7	2.4	2.0	1.8	1.0	1.2	1.1	0.7	1.6	1.4	0.3	0.9	0.8	1.6	0.7	Diurnal Maximum	

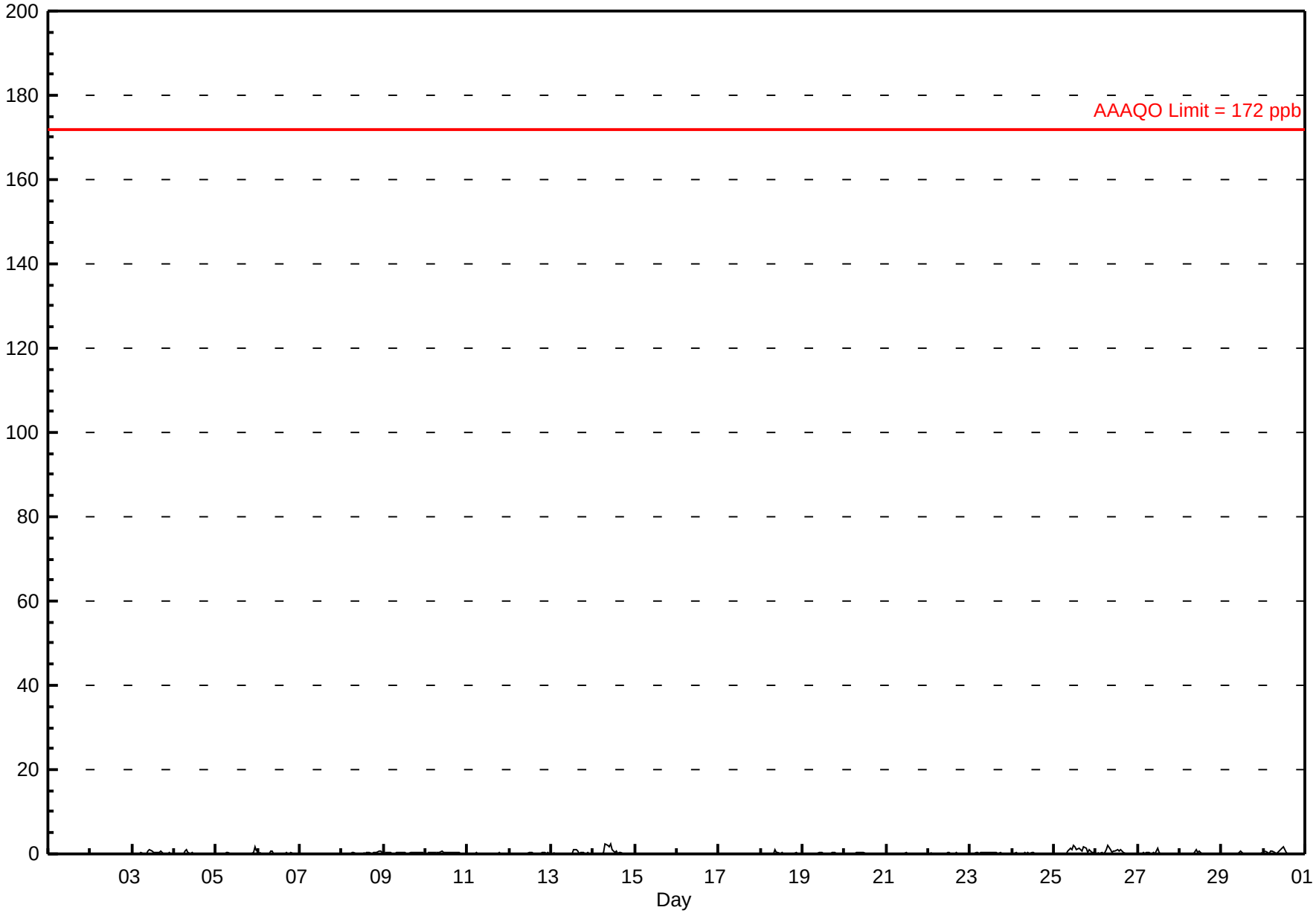
P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2010

Maximum Value: 9.3 ppb on Jun 14 11:00

Maximum Daily Average: 2.8 ppb on Jun 25

Minimum Value: 0 ppb on Jun 15 04:00

Minimum Daily Average: 0.2 ppb on Jun 15

Maximum Diurnal Average: 1.7 ppb at hour 12

Minimum Diurnal Average: 0.6 ppb at hour 5

Monthly Average: 0.93 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 0.7 $Q_3 = 0.8$ $P_{90} = 1.6$ $P_{99} = 5.7$

Hours in Service:	720
Hours of Data:	688
Hours of Missing Data:	32
Hours of Calibration:	30
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-Jun	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
2-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
3-Jun	A	1	1	1	1	1	1	1	1	2	3	2	2	2	2	2	3	2	1	1	1	2	1	1	1.3	2.8
4-Jun	A	0	1	1	1	1	3	3	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	0.8	2.5
5-Jun	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	0.8	2.7
6-Jun	A	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.7
7-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0.5	0.6
8-Jun	A	0	1	0	1	1	6	4	1	1	P	P	1	1	1	1	2	1	1	1	1	3	1	1	1.1	5.5
9-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
10-Jun	A	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.7
11-Jun	A	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	1.2
12-Jun	A	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.5
13-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	4	3	1	1	1	1	1	1	1	1	1	0.9	3.6
14-Jun	A	1	1	1	1	1	4	6	5	5	9	6	3	7	1	2	3	1	0	0	0	0	0	0	2.5	9.3
15-Jun	A	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	2.0
16-Jun	A	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
17-Jun	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
18-Jun	A	0	0	0	0	0	0	0	3	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0.7	3.4
19-Jun	A	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	2	1	1	1	1	1	0.6	1.5
20-Jun	A	1	1	1	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.6	1.4
21-Jun	A	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.5
22-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
23-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
24-Jun	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0.8	1.7
25-Jun	A	1	1	1	1	1	1	1	4	4	4	9	5	3	6	4	3	6	8	1	3	1	1	1	2.8	8.7
26-Jun	A	1	1	1	1	1	4	5	3	1	3	5	6	4	6	2	3	1	1	1	1	1	1	1	2.1	5.8
27-Jun	A	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	0.9	4.7
28-Jun	A	1	1	1	1	1	1	1	1	4	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.7
29-Jun	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1.0	1.9
30-Jun	A	1	1	1	1	2	1	1	1	3	3	4	4	2	1	1	1	1	1	1	1	1	1	1	1.4	3.8
	--	0.6	0.6	0.6	0.6	0.6	1.1	1.2	1.2	1.2	1.3	1.7	1.3	1.2	1.1	0.9	1.0	0.9	0.9	0.6	0.7	0.7	0.7	0.7	Diurnal Average	
	--	1.0	1.0	0.9	0.9	1.9	5.5	6.4	5.4	5.1	9.3	8.7	5.8	6.6	5.7	3.7	3.2	5.8	7.7	1.0	2.7	2.6	2.7	1.9	Diurnal Maximum	

P - Power Failure

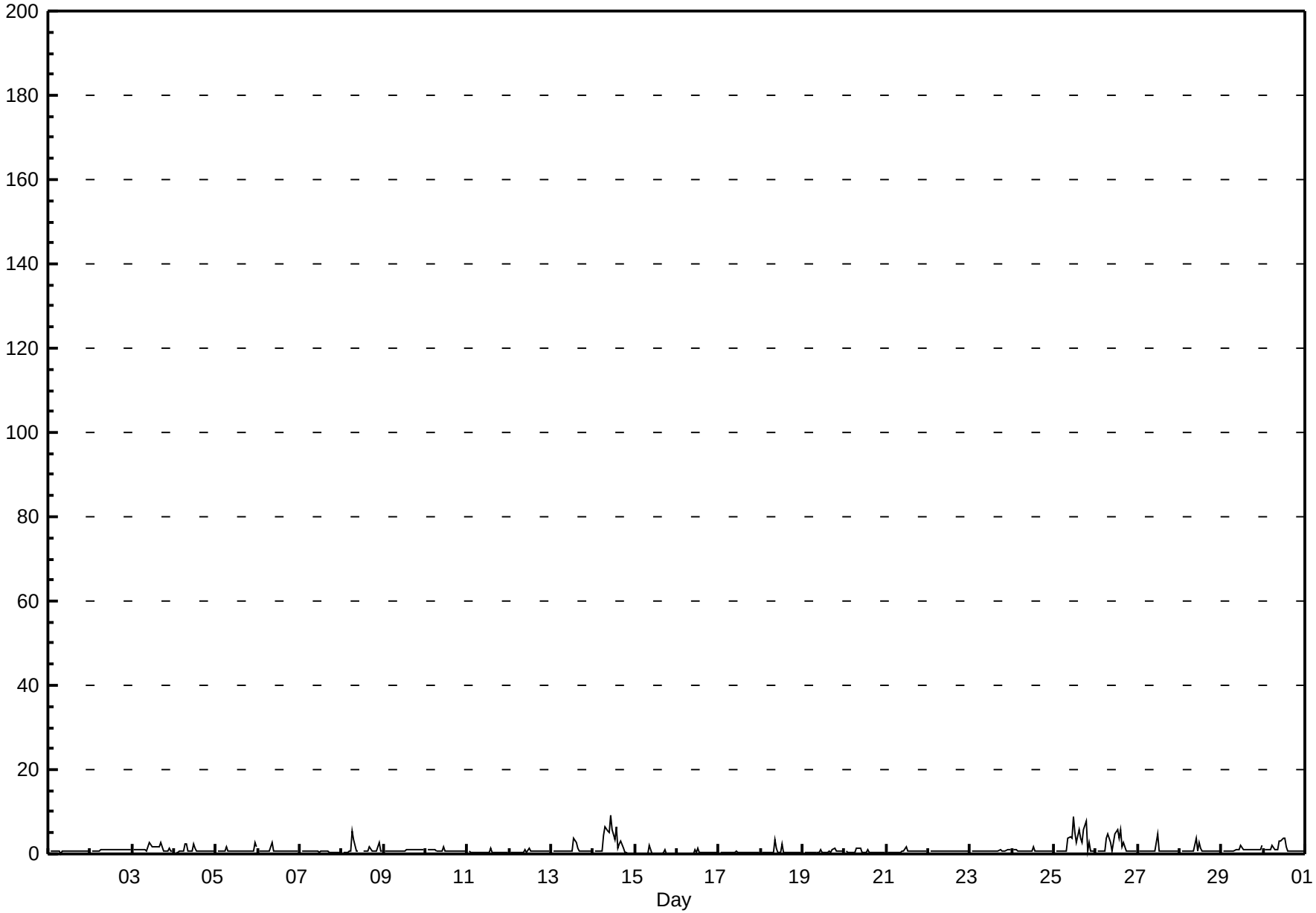
A - Automated Daily Zero Span

PASZA
Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

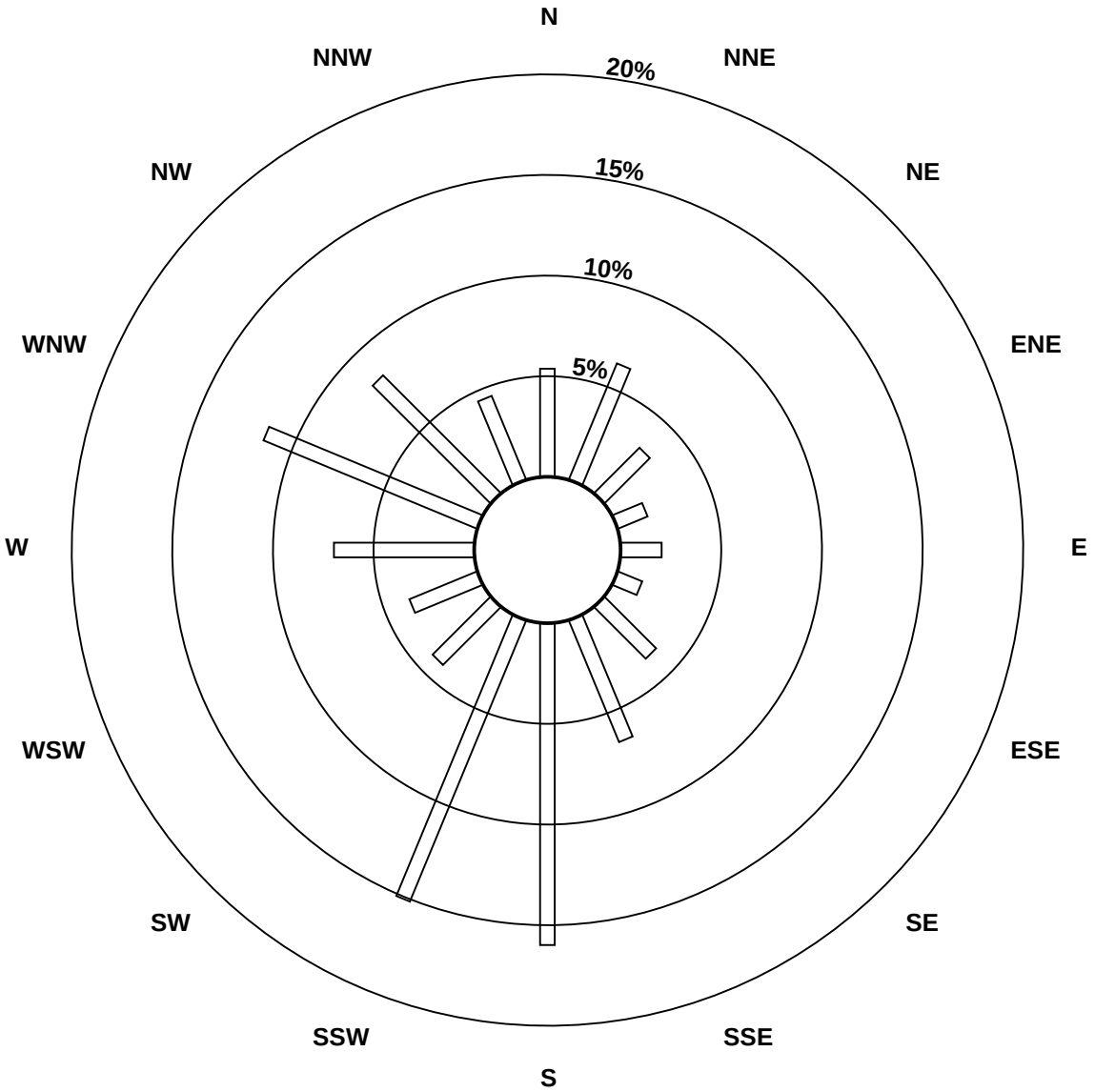
Valleyview - June 2010



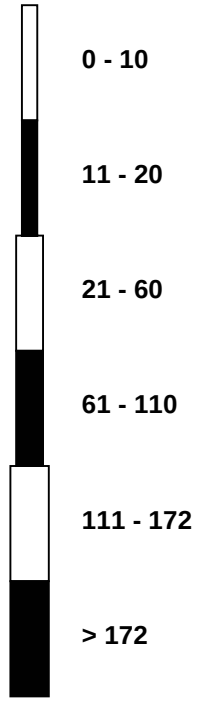
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2010



Pollutant Classes (ppb)



PASZA
Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.6 ppb on Jun 8 07:00 Maximum Daily Average: 0.1 ppb on Jun 12

Minimum Value: 0 ppb on Jun 1 19:00 Minimum Daily Average: 0.0 ppb on Jun 26
Maximum Diurnal Average: 0.1 ppb at hour 2 Minimum Diurnal Average: 0.0 ppb at hour 20
Monthly Average: 0.05 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.0 $Q_3 = 0.1$ $P_{90} = 0.1$ $P_{99} = 0.3$

Hours in Service:	720
Hours of Data:	688
Hours of Missing Data:	32
Hours of Calibration:	30
Percent Operational Time:	99.7

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

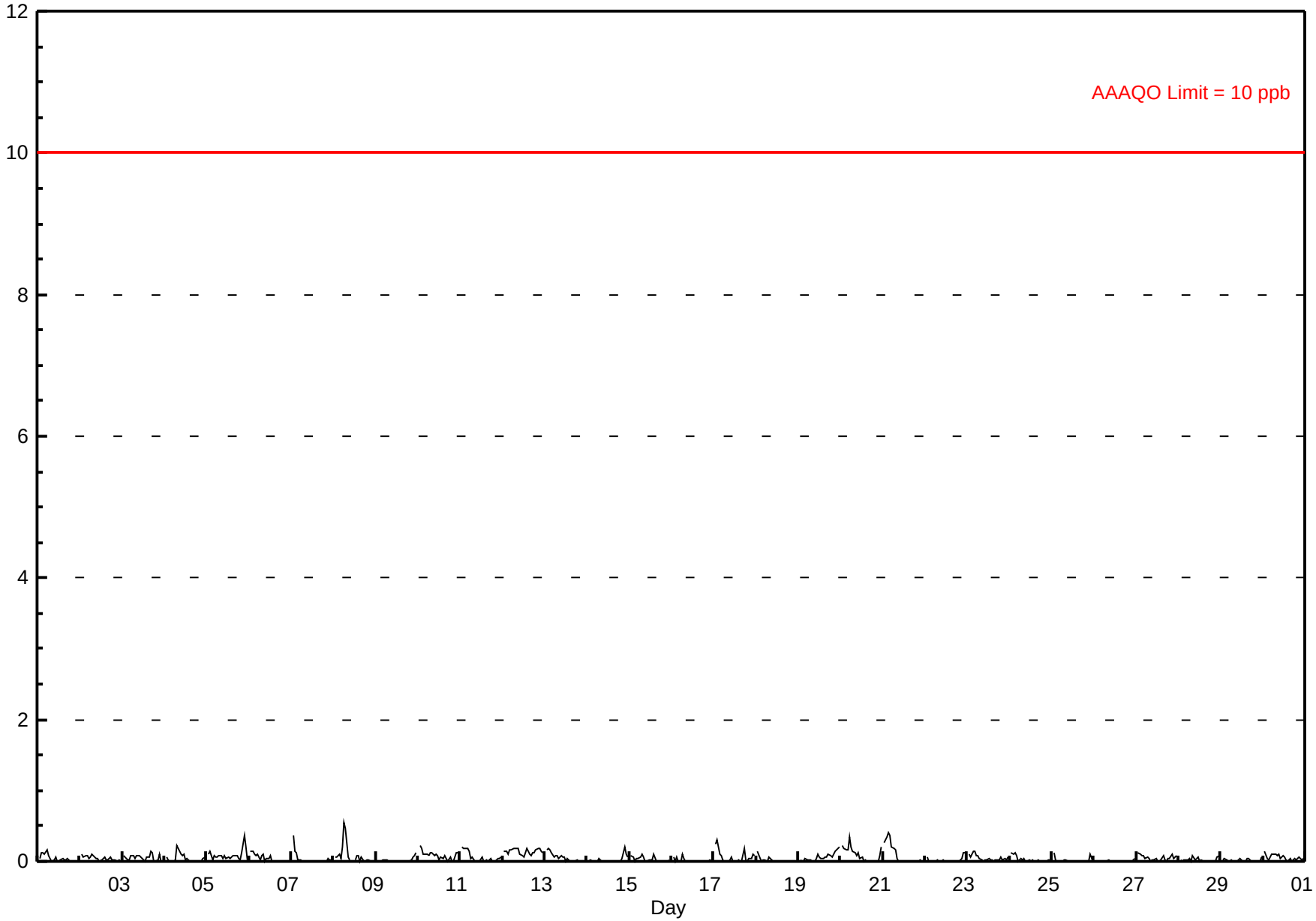
P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

PASZA
Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2010



PASZA
Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2010

Maximum Value: 5.4 ppb on Jun 3 18:00

Maximum Daily Average: 0.8 ppb on Jun 8

Minimum Value: 0 ppb on Jun 18 18:00

Minimum Daily Average: 0.3 ppb on Jun 18

Maximum Diurnal Average: 0.6 ppb at hour 7

Minimum Diurnal Average: 0.3 ppb at hour 20

Monthly Average: 0.42 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 0.4$ $P_{90} = 0.6$ $P_{99} = 1.5$

Hours in Service:	720
Hours of Data:	688
Hours of Missing Data:	32
Hours of Calibration:	30
Percent Operational Time:	99.7

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	A	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
2-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.4	0.5
3-Jun	A	0	0	0	0	0	1	0	1	1	0	0	0	0	1	0	1	5	0	0	0	1	0	0	0.7	5.4
4-Jun	A	0	0	0	0	0	0	1	1	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0.5	2.2
5-Jun	A	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0.5	1.6
6-Jun	A	1	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
7-Jun	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	1.3
8-Jun	A	0	0	0	0	1	5	4	0	0	P	P	0	0	1	0	1	0	0	0	0	0	0	0	0.8	4.6
9-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
10-Jun	A	1	1	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	1	0	0	0.5	0.9
11-Jun	A	1	1	1	1	1	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0.4	0.8
12-Jun	A	0	0	1	1	0	0	1	1	0	1	0	1	0	0	0	1	0	0	0	1	1	1	0	0.5	0.6
13-Jun	A	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
14-Jun	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.4	0.7
15-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0.4	0.7
16-Jun	A	0	0	0	0	0	1	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
17-Jun	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0.4	0.8
18-Jun	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
19-Jun	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	1	0.4	0.6
20-Jun	A	1	1	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0.4	0.8
21-Jun	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
22-Jun	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
23-Jun	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
24-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0.4	1.5
25-Jun	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.6
26-Jun	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
27-Jun	A	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	0.6
28-Jun	A	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7
29-Jun	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
30-Jun	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	1.4
	--	0.5	0.4	0.4	0.4	0.4	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.3	0.4	0.4	0.4	0.4	Diurnal Average	
	--	1.3	0.8	0.8	0.8	0.8	4.6	4.3	0.6	0.7	1.7	2.2	0.9	1.5	0.9	0.9	1.0	5.4	0.5	0.8	1.4	1.6	0.7	0.6	Diurnal Maximum	

P - Power Failure

A - Automated Daily Zero Span

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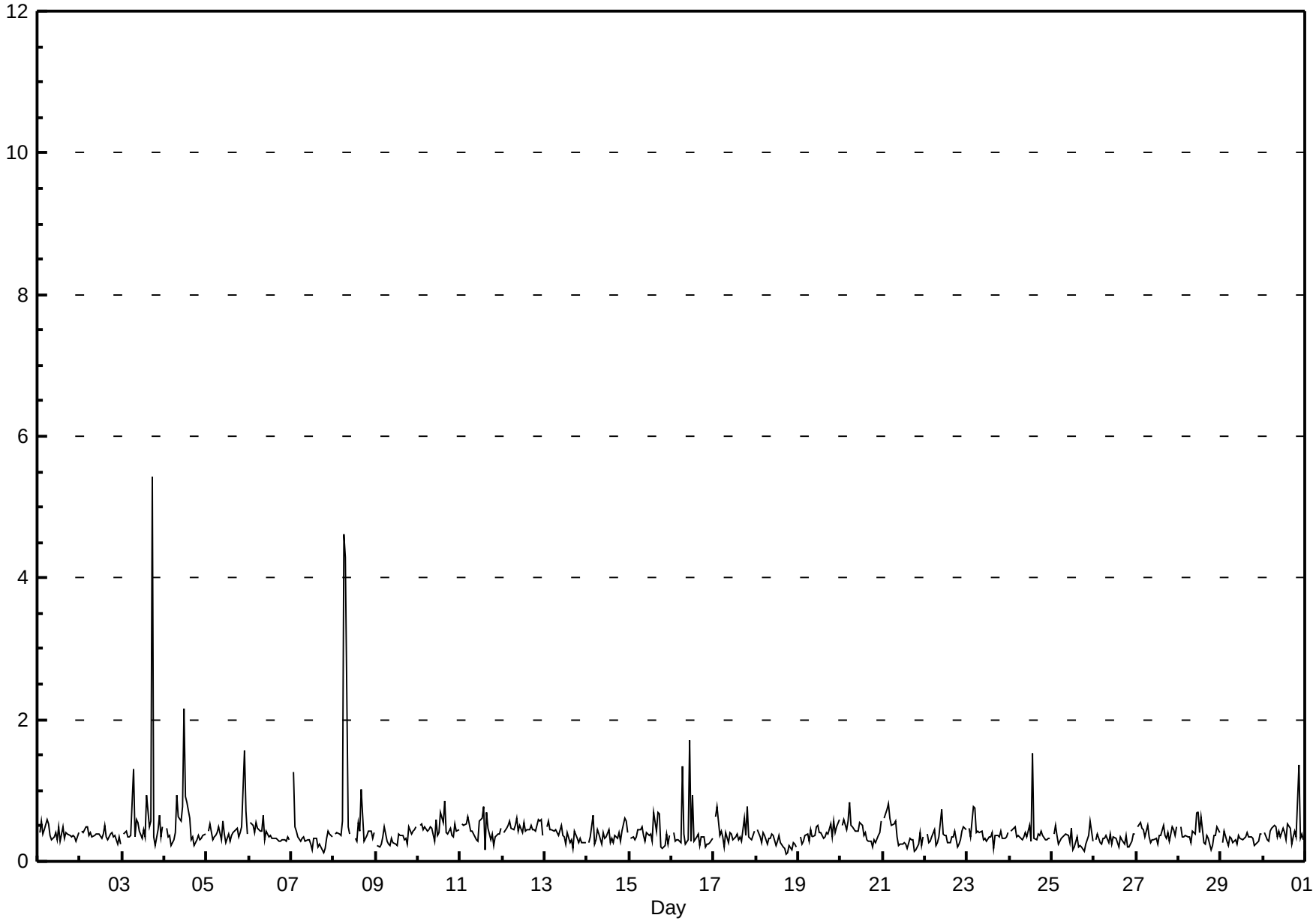
Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

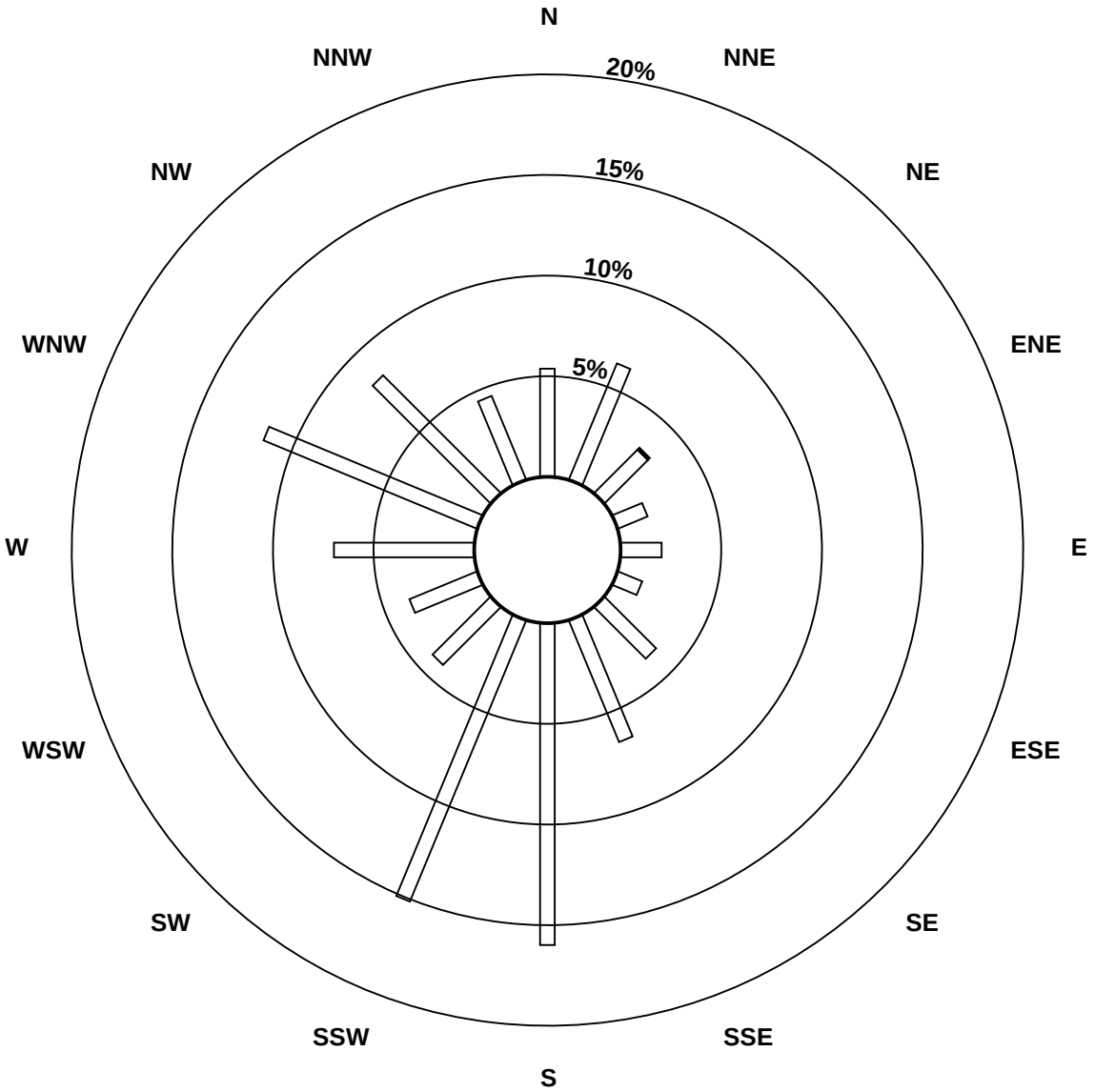
Valleyview - June 2010



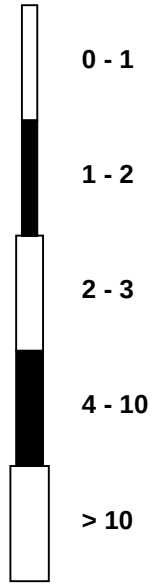
Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2010



Pollutant Classes (ppb)



Hourly Averages

External Temperature (ET) - °C

Valleyview - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 26.8 °C on Jun 20 17:00
Maximum Daily Average: 18.9 °C on Jun 20

Minimum Value: 1 °C on Jun 1 05:00
Maximum Diurnal Average: 19.6 °C at hour 16
Monthly Average: 14.24 °C
Minimum Daily Average: 9.3 °C on Jun 8
Minimum Diurnal Average: 7.2 °C at hour 5
Percentiles: P_1 = 1.9 P_{10} = 6.9 Q_1 = 10.5 Median = 14.2 Q_3 = 18.2 P_{90} = 21.6 P_{99} = 25.5

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	5	4	3	2	1	2	5	8	12	13	14	15	16	17	18	19	19	20	19	18	17	15	14	12	12.0	19.7
2-Jun	12	10	9	7	6	7	10	12	14	17	18	20	21	21	20	20	17	16	14	14	14	13	12	12	14.0	20.9
3-Jun	11	11	11	11	11	11	12	11	11	12	12	14	15	16	17	17	16	16	15	14	13	12	11	10	12.9	16.5
4-Jun	8	6	5	4	4	4	8	10	12	12	14	14	15	16	17	17	18	18	18	18	16	14	12	9	12.1	18.3
5-Jun	7	6	5	5	4	6	11	12	13	15	16	17	18	19	18	20	20	19	20	19	18	15	14	13	13.7	19.9
6-Jun	9	8	8	7	7	7	10	12	14	16	17	18	19	19	19	20	20	20	20	20	19	15	11	11	14.4	20.2
7-Jun	10	9	7	6	6	7	9	8	8	9	10	11	12	14	15	15	15	14	13	12	11	10	8	6	10.1	14.8
8-Jun	6	5	3	2	2	2	4	6	8	10	P	P	13	14	14	15	15	14	14	13	12	12	11	10	9.3	14.9
9-Jun	9	8	8	7	8	9	9	10	11	12	13	14	14	15	15	16	16	14	12	12	12	11	9	7	11.3	15.8
10-Jun	6	4	3	3	3	2	3	5	9	14	14	15	16	17	18	18	18	18	18	16	14	12	9	7	10.9	18.3
11-Jun	6	4	3	2	2	3	6	9	12	15	17	18	19	20	21	22	22	22	22	22	20	17	15	14	14.0	22.5
12-Jun	13	12	11	10	8	9	12	15	19	21	21	21	23	23	24	25	26	25	25	24	22	20	20	18	18.6	25.6
13-Jun	16	16	15	15	14	13	14	15	15	15	16	16	16	15	16	16	17	17	16	12	11	11	10	9	14.4	17.4
14-Jun	9	8	7	8	8	8	8	10	11	12	13	14	14	15	16	16	16	16	15	15	14	12	8	6	11.6	16.3
15-Jun	4	4	3	2	2	3	5	9	11	12	14	15	16	16	17	18	17	17	17	17	17	13	10	7	11.1	17.5
16-Jun	6	4	3	3	2	2	6	9	12	14	16	17	17	18	18	18	18	19	19	19	18	15	12	10	12.3	19.2
17-Jun	8	6	5	4	3	4	7	10	13	16	18	19	20	21	21	21	22	22	21	21	19	16	12	10	14.2	22.0
18-Jun	9	7	7	6	5	6	9	14	17	19	20	21	22	23	22	23	23	22	23	23	22	18	15	12	16.2	23.2
19-Jun	11	10	9	7	7	8	11	14	17	19	21	23	24	25	25	26	26	26	26	25	23	20	17	15	18.1	26.4
20-Jun	14	11	11	10	8	8	12	15	18	20	22	23	25	25	26	26	27	27	26	25	22	20	17	16	18.9	26.8
21-Jun	14	12	10	9	9	9	10	13	16	19	21	21	23	24	24	23	22	22	19	17	15	14	14	13	16.4	24.4
22-Jun	13	13	13	12	12	12	13	14	16	17	18	19	19	20	21	22	22	21	20	19	18	16	15	14	16.8	22.3
23-Jun	13	13	14	13	13	13	14	15	16	17	20	21	23	23	24	24	24	25	24	20	17	17	16	15	18.1	24.6
24-Jun	14	13	13	13	12	13	14	16	18	19	20	21	22	23	23	18	16	16	17	17	17	17	16	15	16.8	23.1
25-Jun	14	14	13	13	12	12	12	15	16	18	18	19	20	21	21	22	22	21	21	20	19	17	15	12	17.0	22.3
26-Jun	11	11	10	10	11	11	13	14	15	15	16	18	19	21	22	22	23	22	22	22	20	18	16	13	16.4	22.6
27-Jun	10	9	9	8	7	9	10	10	13	16	18	19	21	21	21	18	18	17	18	16	15	14	12	12	14.2	21.4
28-Jun	11	10	10	10	10	10	12	13	14	16	17	18	19	20	17	18	20	20	19	18	17	16	14	13	15.1	20.4
29-Jun	12	11	11	11	12	11	10	11	15	16	18	19	20	21	22	22	21	18	17	15	14	13	12	12	15.1	21.7
30-Jun	12	11	10	9	9	9	9	9	10	11	11	11	11	10	11	11	12	13	14	14	13	11	9	8	10.7	13.8
	10.1	9.1	8.2	7.7	7.2	7.6	9.6	11.5	13.5	15.2	16.7	17.6	18.4	19.1	19.5	19.6	19.6	19.3	18.9	17.9	16.7	14.8	12.8	11.3	Diurnal Average	
	16.2	15.6	14.6	14.7	13.7	13.2	14.2	16.3	18.5	20.8	21.9	23.3	24.5	25.4	25.6	26.4	26.8	26.5	26.4	24.9	22.8	20.5	19.6	18.1	Diurnal Maximum	

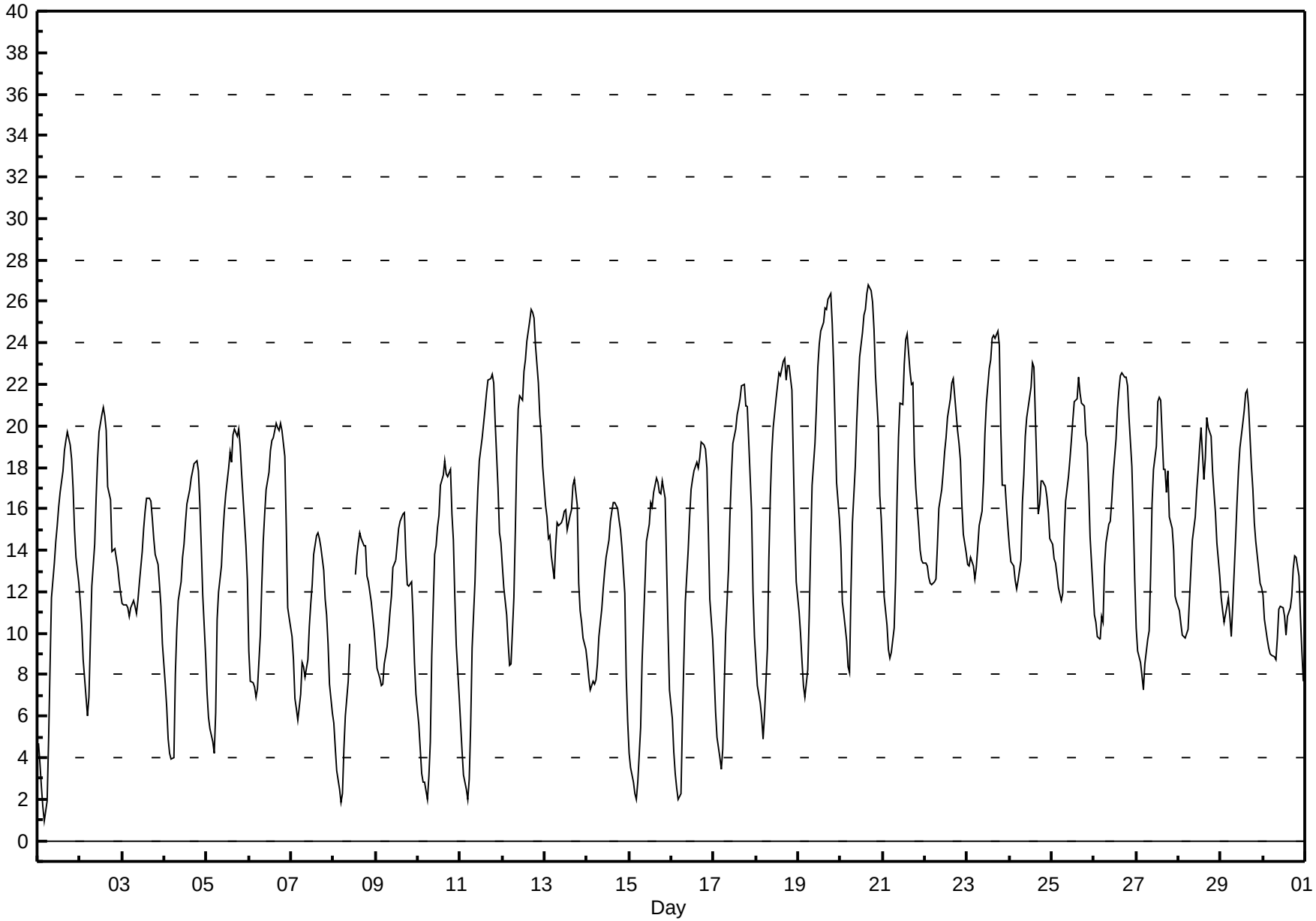
P - Power Failure

PASZA
Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - June 2010



Hourly Averages

Relative Humidity (RH) - %

Valleyview - June 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 99.7 % on Jun 10 08:00 Maximum Daily Average: 73.0 % on Jun 22

Minimum Value: 20 % on Jun 19 18:00 Minimum Daily Average: 41.8 % on Jun 12
Maximum Diurnal Average: 86.2 % at hour 5 Minimum Diurnal Average: 33.9 % at hour 15
Monthly Average: 57.84 % Percentiles: P_1 = 20.9 P_{10} = 27.3 Q_1 = 36.8 Median = 55.7 Q_3 = 79.4 P_{90} = 91.4 P_{99} = 97.8

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

Day	Hourly Period Ending At (MST)																								Daily	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-Jun	92	93	95	96	96	94	83	67	48	41	37	34	32	31	30	27	28	28	31	34	39	44	48	53	54.3	96.2
2-Jun	56	61	69	77	82	80	72	63	57	49	40	35	33	32	35	37	50	54	71	72	70	73	79	82	59.6	82.3
3-Jun	84	82	80	82	84	81	71	63	62	57	49	38	34	32	29	29	29	31	32	33	36	40	43	51	52.1	84.4
4-Jun	59	61	68	70	71	71	55	47	44	46	45	43	35	31	28	26	25	24	24	27	42	52	62	79	47.3	78.7
5-Jun	86	89	92	94	94	82	56	48	45	39	39	37	33	28	33	26	21	23	23	27	31	36	40	46	48.7	94.0
6-Jun	65	71	72	71	74	74	64	51	42	36	31	28	26	23	23	22	23	23	22	23	25	40	55	54	43.1	74.3
7-Jun	64	67	79	79	81	82	84	85	83	79	70	65	60	55	51	52	51	51	53	56	56	61	68	74	66.9	84.8
8-Jun	80	82	88	93	96	95	89	84	73	56	P	P	41	38	38	39	40	41	41	60	64	68	73	78	66.3	95.6
9-Jun	85	91	91	93	91	86	79	73	71	67	59	54	50	46	44	42	41	56	69	68	68	77	91	94	70.3	94.2
10-Jun	96	97	98	98	99	99	100	100	91	60	49	40	34	26	23	22	26	29	27	41	48	63	75	88	63.7	99.7
11-Jun	92	92	95	96	97	95	85	72	59	45	32	27	27	25	23	21	20	20	20	22	29	38	42	42	50.8	96.9
12-Jun	45	49	54	59	64	66	56	49	41	30	29	32	32	31	30	29	29	30	30	37	43	45	44	49	41.8	66.0
13-Jun	56	58	61	61	65	71	66	53	45	44	45	45	45	46	45	50	48	47	55	83	92	91	93	94	60.8	93.8
14-Jun	95	96	93	78	74	71	57	50	46	39	34	31	29	27	26	24	24	25	26	27	29	38	67	74	49.2	95.7
15-Jun	80	85	86	87	91	83	71	59	46	42	36	31	28	26	23	22	23	26	28	27	31	40	61	70	50.0	91.2
16-Jun	75	92	93	96	97	95	82	71	63	56	45	37	34	35	33	34	33	31	33	32	38	51	66	70	58.0	96.7
17-Jun	79	85	93	95	96	94	81	70	61	50	45	35	30	27	26	25	24	25	29	29	34	49	75	84	55.9	96.3
18-Jun	88	90	93	94	95	92	76	61	44	38	34	29	28	26	26	23	22	24	23	26	32	43	61	77	51.9	95.4
19-Jun	82	82	87	87	93	87	73	61	52	49	39	29	22	22	21	21	21	20	20	26	37	45	54	61	49.6	93.5
20-Jun	65	78	81	87	89	89	73	55	46	39	37	33	30	27	24	22	21	27	28	31	37	45	65	66	49.8	89.3
21-Jun	75	87	89	92	95	93	87	79	65	56	49	46	39	34	32	43	45	40	55	63	82	87	95	97	67.7	96.9
22-Jun	96	98	97	94	96	96	96	90	82	78	73	64	59	52	48	43	40	43	51	54	62	73	80	85	73.0	97.9
23-Jun	87	85	81	84	85	82	80	78	74	66	54	47	40	37	34	33	32	32	38	55	64	61	69	76	61.4	86.8
24-Jun	84	88	89	92	94	91	86	74	66	52	45	43	39	36	37	61	77	78	76	78	80	77	78	86	71.0	94.0
25-Jun	84	91	89	91	88	88	86	68	59	53	49	45	42	39	37	33	36	34	35	36	32	39	50	60	56.8	91.4
26-Jun	64	67	70	71	66	70	58	52	49	49	48	45	40	35	32	27	28	28	27	26	31	38	44	54	46.7	71.0
27-Jun	75	75	77	78	83	77	73	75	64	53	45	39	33	35	35	52	59	63	62	79	81	85	90	92	65.8	91.8
28-Jun	94	96	98	98	97	96	89	79	61	55	51	48	45	39	47	45	40	39	43	56	64	71	79	87	67.4	98.1
29-Jun	89	91	90	79	71	78	87	81	63	58	53	49	42	42	35	36	44	58	64	75	80	83	84	82	67.2	91.2
30-Jun	75	84	81	81	83	82	84	88	81	72	68	69	63	67	71	67	57	58	54	46	53	56	54	58	68.7	88.0
	78.3	82.0	84.4	85.1	86.2	84.7	76.7	68.2	59.5	51.8	45.8	41.3	37.5	35.0	33.9	34.4	35.2	36.9	39.6	44.9	50.4	57.0	66.2	72.1	Diurnal Average	
	95.7	97.9	97.8	98.2	98.8	99.1	99.7	99.7	91.2	78.8	72.6	68.9	63.4	66.7	71.3	66.5	76.8	77.6	76.1	82.9	92.0	91.0	94.6	96.9	Diurnal Maximum	

P - Power Failure

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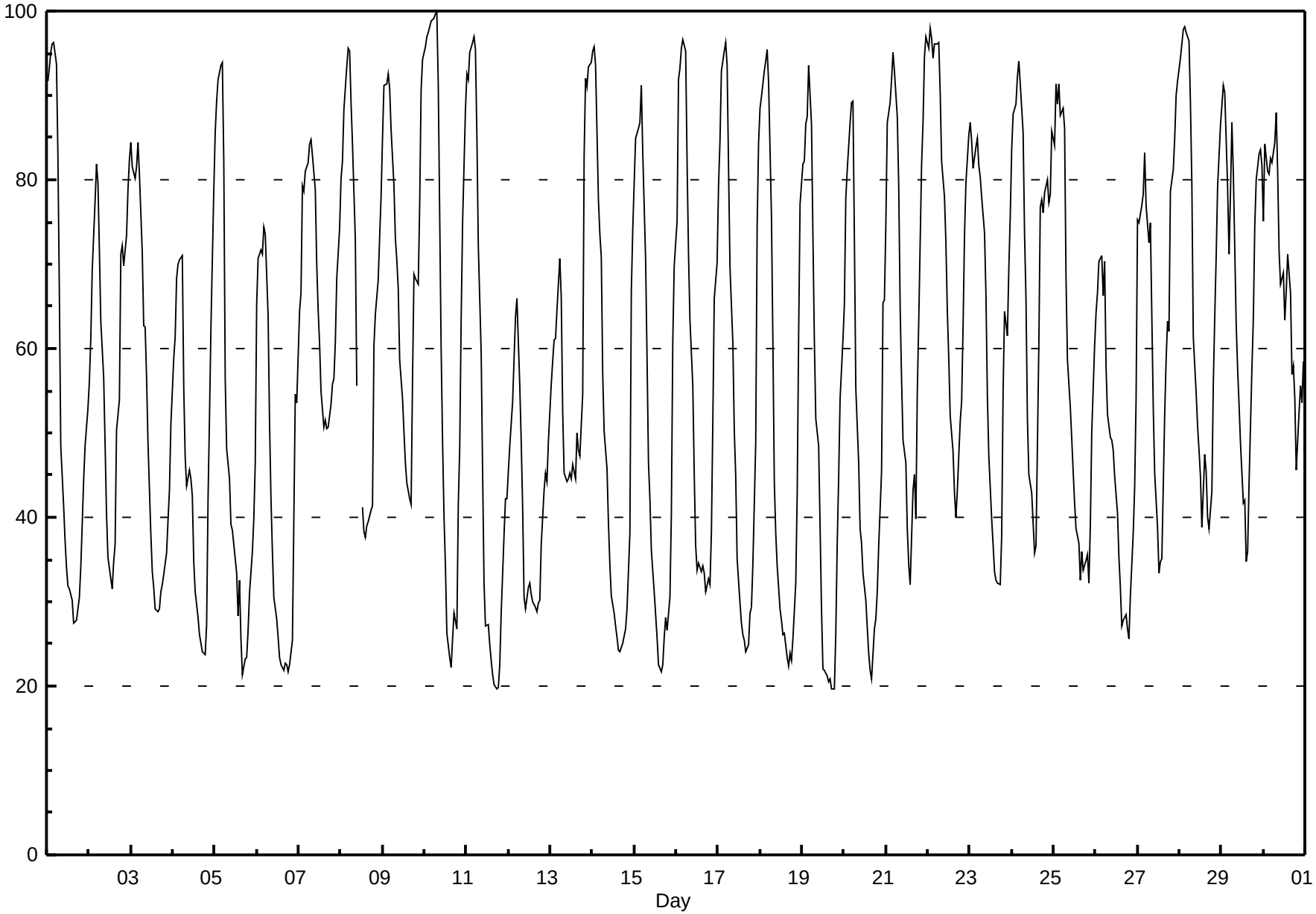
Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - June 2010



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Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	1	1	1	1	0	1	1	2	8	10	10	11	10	8	7	5	2	4	8	10	8	8	9	8	5.2	10.6
Dir	230	251	228	276	256	304	185	174	176	162	151	158	160	160	166	177	126	135	130	140	144	152	163	169	158	158
2 Spd	6	5	1	2	1	1	4	10	9	8	9	9	10	9	7	11	11	11	8	7	5	4	3	1	6.1	11.5
Dir	179	187	207	256	266	217	190	189	185	178	188	173	179	180	172	184	170	149	142	164	159	176	155	125	175	170
3 Spd	0	3	4	4	3	7	11	10	10	10	13	16	15	16	18	15	17	14	17	12	8	5	5	3	9.1	17.9
Dir	126	181	192	192	219	293	301	300	303	292	289	287	293	295	293	294	287	301	302	305	294	270	260	230	290	293
4 Spd	3	2	3	3	3	3	8	14	13	13	13	12	13	11	10	12	12	11	11	10	8	6	1	1	6.6	14.5
Dir	209	207	203	204	209	205	283	291	306	314	319	325	328	327	322	331	330	306	327	349	24	19	328	186	318	291
5 Spd	2	2	2	2	3	3	1	7	10	15	11	15	14	14	12	7	15	13	13	11	7	7	8	4	6.8	15.2
Dir	194	188	190	168	181	150	228	299	313	320	317	314	311	317	0	320	321	313	304	301	297	273	279	263	308	321
6 Spd	3	3	3	3	3	3	2	2	4	7	5	5	6	4	7	4	3	2	5	6	4	0	1	3	1.7	6.9
Dir	153	160	148	160	171	185	185	254	309	303	278	276	300	279	318	310	2	28	3	352	332	311	30	323	303	303
7 Spd	1	3	1	6	2	4	13	15	16	12	15	14	13	15	14	14	13	12	11	12	8	4	4	3	9.0	15.6
Dir	192	352	190	7	1	18	21	11	7	18	13	15	9	12	14	18	24	35	30	29	27	17	342	28	17	7
8 Spd	3	4	1	0	1	1	2	3	4	4	P	P	8	7	6	6	5	6	3	6	4	5	2	2	2.8	7.5
Dir	358	350	21	129	283	254	52	67	47	51	P	P	14	5	349	13	344	21	35	298	270	283	323	355	358	14
9 Spd	1	3	1	0	1	0	2	4	5	3	1	4	4	6	8	7	7	7	4	3	2	1	1	1	1.7	7.6
Dir	172	189	247	299	318	220	179	159	195	192	78	79	81	66	79	85	80	169	196	200	202	183	173	216	130	79
10 Spd	1	2	1	1	2	2	2	2	3	2	4	1	6	6	6	4	6	5	5	9	4	2	1	1	1.5	9.0
Dir	206	191	253	209	195	215	234	203	193	133	36	65	32	86	60	64	89	126	104	176	192	166	183	184	124	176
11 Spd	2	1	1	1	1	1	2	4	5	6	8	6	4	6	5	5	3	5	5	4	3	3	5	8	3.8	7.6
Dir	177	273	213	251	211	199	193	191	176	197	191	179	205	181	181	168	170	177	184	169	176	171	181	180	184	180
12 Spd	6	6	6	3	2	1	3	3	4	11	9	5	1	4	2	3	4	3	3	2	3	3	4	3	2.6	10.8
Dir	179	192	192	196	206	220	185	186	249	261	265	285	129	322	254	162	195	163	148	102	106	160	184	193	209	261
13 Spd	3	4	3	7	1	2	2	10	15	14	12	10	10	7	1	3	4	3	3	6	4	3	4	4	3.0	15.5
Dir	191	187	342	337	351	242	299	315	328	329	325	328	329	301	306	193	209	190	172	198	186	204	187	198	300	328
14 Spd	4	2	2	4	3	3	9	11	12	14	14	12	11	11	11	8	9	11	12	11	5	2	2	2	6.9	14.2
Dir	193	196	202	255	235	212	274	278	279	278	280	281	282	287	299	290	289	298	318	322	305	279	186	192	283	278
15 Spd	3	3	3	3	2	4	4	3	7	5	2	1	2	2	4	5	6	4	2	3	2	4	1	1	0.7	7.0
Dir	195	191	198	186	168	181	180	276	294	269	242	5	353	319	331	332	18	37	69	93	4	12	198	341	297	294
16 Spd	1	2	1	1	2	2	0	1	1	3	3	2	4	5	6	8	8	5	4	3	1	1	2	2	1.7	8.2
Dir	318	205	174	139	187	202	185	159	93	51	29	10	354	35	18	356	7	44	63	117	89	38	351	338	28	7
17 Spd	0	1	2	1	2	1	1	2	2	1	2	3	4	5	3	6	4	4	4	4	1	1	1	3	1.0	6.1
Dir	270	262	163	204	198	187	192	195	202	104	357	36	19	331	359	2	6	40	26	28	38	248	196	168	14	2
18 Spd	2	1	2	3	2	3	5	2	4	6	5	4	5	6	7	6	10	15	7	4	2	3	2	2	2.8	14.5
Dir	188	199	200	190	193	189	182	195	278	298	301	287	316	295	321	311	329	344	336	322	285	233	179	166	299	344
19 Spd	2	2	2	1	2	2	3	3	3	3	2	3	5	4	6	4	2	4	4	5	3	3	2	4	1.8	5.5
Dir	175	160	198	210	195	198	183	187	196	199	243	293	287	326	281	270	265	328	278	184	159	191	212	180	228	281
20 Spd	2	3	3	2	1	2	1	2	2	4	2	3	4	6	4	4	4	3	4	5	2	0	0	0	0.7	6.0
Dir	235	194	190	189	337	3	157	188	221	321	7	317	323	307	324	308	338	95	81	94	48	16	235	293	322	307
21 Spd	1	1	1	1	1	0	0	2	0	3	4	5	4	6	9	19	14	8	11	3	1	3	2	1	1.6	19.2
Dir	204	148	285	200	179	286	57	59	132	190	224	294	25	5	8	18	23	43	176	205	175	307	133	46	20	18
22 Spd	1	2	3	2	2	2	2	2	2	2	3	4	4	4	3	1	2	2	6	5	1	2	1	1	0.6	5.6
Dir	12	187	230	220	208	230	202	198	176	151	36	23	16	34	46	118	222	235	85	136	129	42	319	182	114	85

PASZA
Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
23 Spd	3	3	4	2	3	4	2	3	4	5	3	3	2	1	2	4	3	1	2	7	10	1	2	2	2.6	9.7
Dir	147	185	179	182	184	188	206	193	189	187	168	159	160	150	189	195	3	251	131	200	187	337	147	202	183	187
24 Spd	1	3	1	2	3	3	5	4	3	3	4	1	3	5	3	7	3	3	3	3	2	3	5	3	1.9	6.9
Dir	209	138	139	206	202	161	185	194	257	307	343	280	276	258	307	227	174	137	135	167	194	195	250	237	214	227
25 Spd	2	2	2	3	3	2	2	7	11	12	12	11	12	12	11	11	11	13	11	9	9	4	2	3	6.6	13.5
Dir	281	178	199	193	206	202	192	283	292	292	301	294	292	288	297	279	266	282	304	312	288	292	256	216	284	282
26 Spd	3	3	3	3	3	3	6	14	15	13	12	13	9	12	12	14	16	14	12	10	7	4	2	2	7.6	15.9
Dir	234	218	196	197	227	196	262	288	295	296	296	296	295	282	288	290	300	316	320	317	315	281	262	211	291	300
27 Spd	2	2	3	3	1	3	3	3	1	2	8	5	1	5	4	4	1	6	3	1	1	3	8	2	1.3	8.4
Dir	186	200	191	188	197	189	194	190	245	15	313	279	177	152	199	284	114	121	170	290	289	223	316	273	226	316
28 Spd	3	3	3	4	2	2	3	3	6	7	6	5	3	4	12	5	3	3	3	4	2	1	1	2	1.2	12.4
Dir	112	197	192	158	195	198	188	198	299	290	258	280	263	337	318	329	134	69	171	135	142	165	121	187	253	318
29 Spd	3	2	3	5	4	2	1	2	4	3	2	2	5	7	7	7	6	8	7	11	12	9	4	7	1.9	12.3
Dir	178	189	191	189	190	196	212	196	259	253	234	8	10	20	6	22	49	136	358	357	17	14	25	290	7	17
30 Spd	9	12	12	5	4	5	4	4	6	5	9	12	15	4	6	7	5	5	5	5	3	4	4	3	4.9	15.2
Dir	324	295	299	305	260	266	280	284	267	267	277	280	271	346	170	196	204	204	233	252	209	210	217	206	264	271
Spd	1.4	1.8	1.7	1.4	1.5	1.5	1.5	2.5	3.6	3.8	3.9	3.9	3.8	3.6	3.7	3.1	2.9	1.5	1.5	1.2	0.7	0.9	1.2	1.5	Diurnal Average	
Dir	197	204	209	210	209	213	237	267	285	290	296	300	312	319	326	317	331	338	332	305	282	251	227	210		
Spd	8.7	12.0	12.3	7.4	4.3	7.3	12.8	14.9	15.6	14.5	14.6	15.9	15.5	16.4	17.9	19.2	16.9	14.5	16.7	12.4	12.3	8.5	8.8	7.9	Diurnal Maximum	
Dir	324	295	299	337	190	293	21	11	7	320	13	287	293	295	293	18	287	344	302	305	17	14	163	169		

Maximum Speed Value: 19 ppb on Jun 21 16:00
Minimum Speed Value: 0 ppb on Jun 21 00:00
Maximum Daily Speed Average: 9.1 ppb on Jun 3
Minimum Daily Speed Average: 0.6 ppb on Jun 22
Maximum Diurnal Speed Average: 3.9 ppb at hour 11
Minimum Diurnal Speed Average: 0.7 ppb at hour 21

Monthly Average Velocity: 1.64 ppb 285.6 deg
Speed Percentiles: P_1 = 0.4 P_{10} = 1.2 Q_1 = 2.1 Median = 3.5 Q_3 = 6.7 P_{90} = 11.5 P_{99} = 15.9
All monthly, daily, and diurnal averages have been calculated using vector methods

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

P - Power Failure

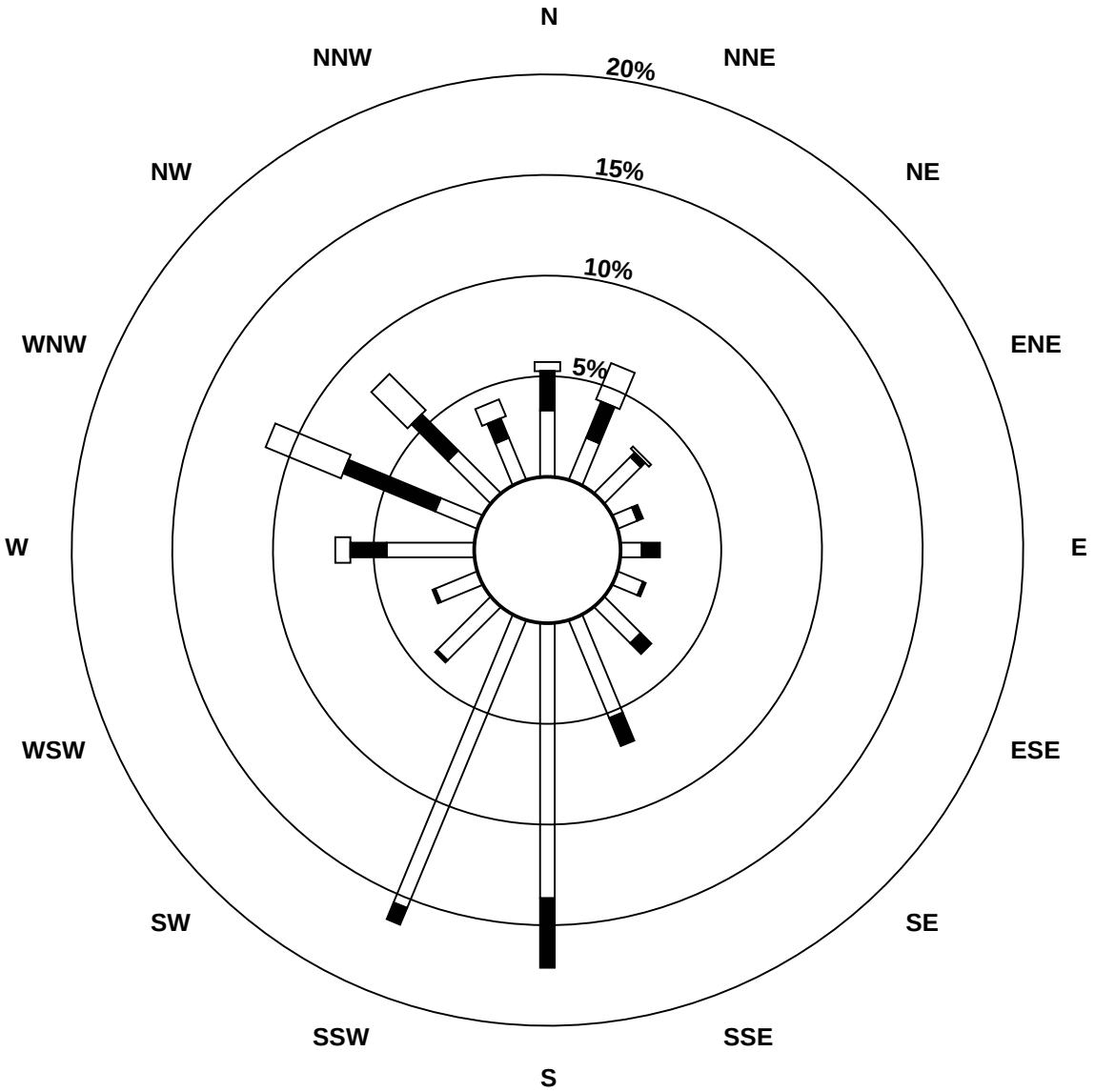
Frequency Distribution

Direction	Speed Range (ppb) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	36	25	13	1	0	0	75
NorthEast	34	7	5	0	0	0	46
East	16	6	0	0	0	0	22
SouthEast	34	12	0	0	0	0	46
South	187	40	1	0	0	0	228
SouthWest	69	3	0	0	0	0	72
West	60	24	22	0	0	0	106
NorthWest	37	43	43	0	0	0	123
Total	473	160	84	1	0	0	718

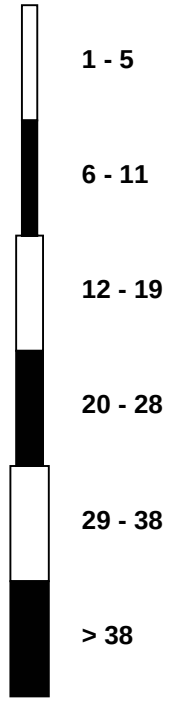
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - June 2010



Wind Speed Classes (km/h)



PASZA
Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - June 2010

Maximum Speed: 20 km/h on Jun 21 16:00

Maximum Daily Speed Average: 10.3 km/h on Jun 3

Minimum Speed: 1 km/h on Jun 9 06:00

Minimum Daily Speed Average: 3.1 km/h on Jun 22

Maximum Diurnal Speed Average: 8.4 km/h at hour 14

Minimum Diurnal Speed Average: 2.4 km/h at hour 5

Monthly Average Speed: 5.59 km/h

Percentiles: P_1 = 1.1 P_{10} = 1.7 Q_1 = 2.7 Median = 4.3 Q_3 = 7.6 P_{90} = 12.0 P_{99} = 16.2

Hours in Service: 720

Hours of Data: 718

Hours of Missing Data: 2

Percent Operational Time: 99.7

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	1	1	1	1	2	1	2	2	9	10	10	11	10	9	8	6	4	5	9	10	8	8	9	8	6.1	11.2
2-Jun	6	5	2	2	1	1	4	10	9	8	9	9	11	10	8	11	12	11	9	7	6	4	3	1	6.6	11.9
3-Jun	1	3	4	4	3	8	11	11	10	10	13	16	16	17	18	16	17	15	17	13	8	6	5	3	10.3	18.4
4-Jun	3	2	3	3	3	3	8	15	14	14	13	13	14	12	11	13	12	11	11	10	8	6	1	1	8.5	14.7
5-Jun	2	2	2	2	3	3	3	7	10	15	12	15	15	15	13	9	16	13	13	11	7	7	8	4	8.7	15.6
6-Jun	3	3	3	3	3	3	2	3	5	8	6	6	7	6	8	6	5	4	6	6	4	2	2	3	4.6	8.0
7-Jun	2	3	2	6	3	4	13	15	16	12	15	15	13	15	15	14	13	12	12	13	8	4	4	3	9.6	15.8
8-Jun	3	4	1	1	2	1	2	3	5	5	P	P	9	9	8	7	6	6	4	6	4	5	3	2	4.4	8.8
9-Jun	2	3	1	1	1	1	2	4	5	3	4	5	6	8	9	9	7	8	4	3	2	2	1	1	3.8	8.8
10-Jun	2	2	2	1	2	2	2	2	3	3	5	6	8	8	7	6	7	6	6	10	4	2	1	2	4.1	9.5
11-Jun	2	2	1	1	1	1	2	4	5	6	8	7	6	7	6	6	5	6	5	4	4	3	5	8	4.3	7.9
12-Jun	6	6	6	3	2	1	3	3	5	11	9	7	2	7	4	5	4	4	3	2	3	4	5	3	4.6	11.0
13-Jun	3	4	4	8	3	2	3	10	16	15	13	11	11	7	3	3	4	3	4	7	5	5	5	4	6.3	15.9
14-Jun	4	3	3	4	4	3	9	12	12	15	14	13	12	13	11	9	10	12	12	11	5	3	2	2	8.3	14.6
15-Jun	4	3	3	3	2	4	4	5	8	6	4	4	5	4	6	6	7	5	3	4	2	4	2	2	4.1	7.6
16-Jun	2	2	2	1	2	2	1	2	2	3	5	5	6	7	7	9	9	6	5	3	2	2	2	2	3.6	8.7
17-Jun	2	2	2	1	2	1	2	2	2	3	3	4	6	7	6	7	6	6	4	4	1	1	1	3	3.2	7.2
18-Jun	2	2	3	3	2	3	5	3	4	6	6	5	7	8	8	7	11	15	8	5	3	3	2	2	5.1	14.6
19-Jun	2	2	2	1	2	2	3	3	3	3	3	4	6	6	7	6	5	5	5	5	4	3	2	4	3.7	6.5
20-Jun	2	3	3	2	1	2	1	2	3	5	4	4	5	8	6	6	6	4	5	5	2	1	1	1	3.5	7.6
21-Jun	2	1	2	1	2	2	2	3	2	3	5	6	5	8	10	20	14	11	11	4	4	5	3	2	5.3	19.6
22-Jun	2	2	3	2	2	2	2	2	3	3	3	5	6	5	5	4	3	4	7	6	2	2	1	2	3.1	6.5
23-Jun	3	3	4	2	3	4	2	3	4	5	4	4	4	3	3	5	4	3	2	7	10	6	3	3	3.8	10.0
24-Jun	2	3	2	2	3	4	5	4	4	4	6	4	5	6	5	7	5	3	3	3	2	3	5	4	3.9	7.3
25-Jun	3	3	2	3	3	2	2	7	12	13	12	12	12	13	12	11	11	14	11	9	10	5	3	3	7.8	13.8
26-Jun	4	3	3	3	3	3	7	14	16	14	12	13	10	12	12	15	17	15	13	11	7	4	3	2	9.0	16.5
27-Jun	2	2	3	3	1	3	3	3	2	4	9	5	4	6	5	6	3	7	3	5	3	4	11	3	4.2	10.7
28-Jun	3	4	3	4	2	2	3	3	7	8	7	6	5	6	13	6	4	4	3	4	2	1	2	2	4.3	12.8
29-Jun	3	2	3	5	4	2	2	2	4	4	3	4	6	8	8	7	8	8	9	11	12	9	5	8	5.8	12.4
30-Jun	9	12	12	5	5	5	5	4	6	6	9	13	16	6	6	8	5	6	6	6	3	4	4	3	6.9	15.5
	2.9	3.0	2.9	2.8	2.4	2.6	3.8	5.5	6.9	7.5	7.8	8.1	8.2	8.4	8.2	8.3	8.0	7.7	7.0	6.8	4.7	3.9	3.5	3.1	Diurnal Average	
	9.1	12.2	12.5	7.6	4.6	7.6	13.0	15.1	15.9	15.1	15.0	16.3	15.9	17.2	18.4	19.6	17.2	15.1	16.9	12.6	12.4	8.6	10.7	8.2	Diurnal Maximum	

P - Power Failure

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

PASZA
Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - June 2010

Maximum Value: 95.0 deg on Jun 15 13:00

Minimum Value: 5.6 deg on Jun 12 03:00

Percentiles: P_1 = 7.4 P_{10} = 11.4 Q_1 = 15.4 Median = 26.8 Q_3 = 49.3 P_{90} = 68.9 P_{99} = 87.0

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

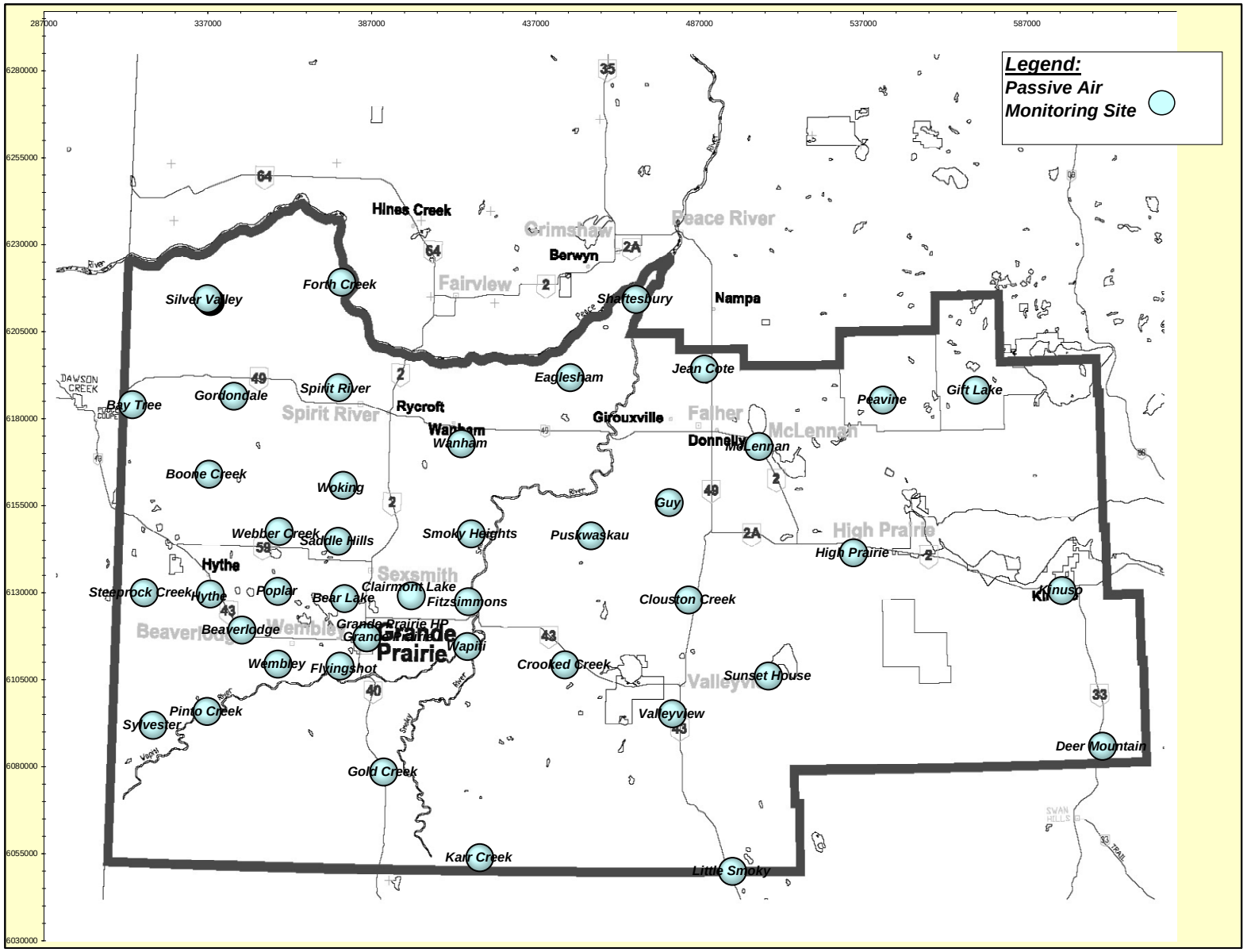
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Jun	54	80	60	66	86	52	38	53	19	17	17	19	25	27	26	39	81	43	17	12	10	10	11	10	85.7
2-Jun	12	9	24	17	41	58	19	8	13	19	14	19	16	16	18	17	14	14	13	14	15	14	15	35	58.0
3-Jun	78	22	13	10	28	19	17	17	17	18	12	14	15	18	14	18	12	19	11	9	12	10	9	18	77.7
4-Jun	13	8	8	10	10	12	41	11	13	16	19	23	21	27	26	20	16	20	22	14	11	7	68	64	68.0
5-Jun	23	12	11	18	23	29	76	20	14	15	26	17	20	23	28	43	13	13	13	12	8	10	8	21	75.7
6-Jun	19	15	20	9	16	9	13	52	55	26	61	49	52	60	50	67	75	74	32	14	13	88	47	52	87.6
7-Jun	54	37	74	18	40	16	10	9	9	14	13	16	14	15	17	17	15	13	14	14	11	20	12	15	74.0
8-Jun	52	8	77	68	73	54	44	36	29	41	P	P	41	46	47	43	37	19	40	18	19	25	74	60	76.8
9-Jun	68	25	53	82	57	71	46	32	11	37	83	38	45	40	29	36	28	30	9	23	15	27	73	81	82.8
10-Jun	76	26	63	41	19	14	38	35	18	50	52	81	49	42	37	69	43	46	34	22	10	16	86	70	85.5
11-Jun	20	42	78	66	50	26	28	14	19	13	15	36	45	30	36	46	54	25	22	19	11	7	7	8	78.2
12-Jun	10	7	6	7	18	32	15	26	48	14	26	46	67	76	76	61	40	38	31	20	11	20	17	17	76.0
13-Jun	14	7	58	15	85	25	73	16	14	14	24	26	19	21	85	27	37	31	36	30	22	39	22	11	85.4
14-Jun	14	39	50	23	32	36	12	11	15	14	14	25	26	29	22	34	30	18	12	12	19	34	23	22	50.2
15-Jun	10	10	9	12	21	10	14	56	25	43	69	91	95	76	59	54	26	31	49	48	41	27	47	84	95.0
16-Jun	81	55	83	75	27	20	91	68	87	61	56	86	70	67	39	59	23	44	39	23	45	40	58	69	91.3
17-Jun	91	62	30	27	13	16	48	31	56	72	60	54	55	60	75	46	61	48	19	10	56	43	49	19	91.3
18-Jun	27	49	36	20	26	11	8	58	39	43	42	64	53	48	28	37	23	8	16	13	30	22	22	17	64.0
19-Jun	20	43	27	15	28	9	13	15	38	30	59	67	52	65	43	53	83	52	47	26	19	10	20	16	82.8
20-Jun	42	13	7	8	59	21	64	64	49	50	69	61	59	53	59	59	60	54	31	19	38	78	68	81	81.4
21-Jun	33	73	75	70	66	63	88	59	83	36	41	46	46	47	37	12	10	48	14	61	82	72	53	88	88.4
22-Jun	86	28	22	36	17	26	22	33	34	71	53	39	44	59	60	86	69	63	32	10	66	51	69	49	86.2
23-Jun	14	12	9	29	16	8	22	12	11	14	37	40	70	82	66	41	40	83	21	12	13	86	54	56	85.5
24-Jun	53	29	43	20	29	41	12	17	48	66	52	93	63	51	65	23	50	30	21	23	11	17	23	36	92.8
25-Jun	81	42	29	14	13	11	14	40	14	16	18	20	21	18	18	25	16	13	17	12	12	19	42	21	80.8
26-Jun	25	23	15	13	27	9	40	13	11	14	15	17	24	21	20	20	16	16	16	13	11	18	44	19	44.1
27-Jun	20	13	19	12	49	11	15	22	88	78	25	38	79	27	34	60	65	40	31	88	87	41	45	67	87.5
28-Jun	39	37	17	16	21	24	17	36	22	25	30	50	70	70	15	32	59	34	47	13	26	57	49	24	70.4
29-Jun	12	17	7	8	8	31	28	35	45	43	69	76	37	25	26	19	44	12	55	13	9	8	32	65	76.1
30-Jun	17	11	12	27	36	28	35	43	23	44	14	11	15	57	16	15	20	19	30	16	20	13	12	12	57.4
	91.3	79.6	83.2	82.3	85.7	70.5	91.3	68.1	87.5	78.0	82.8	92.8	95.0	81.6	85.4	85.9	82.8	82.9	55.4	87.5	86.9	87.6	85.5	87.6	

P - Power Failure

PASZA

Monthly Passive Data Summary

Location of PASZA Passive Monitoring Stations



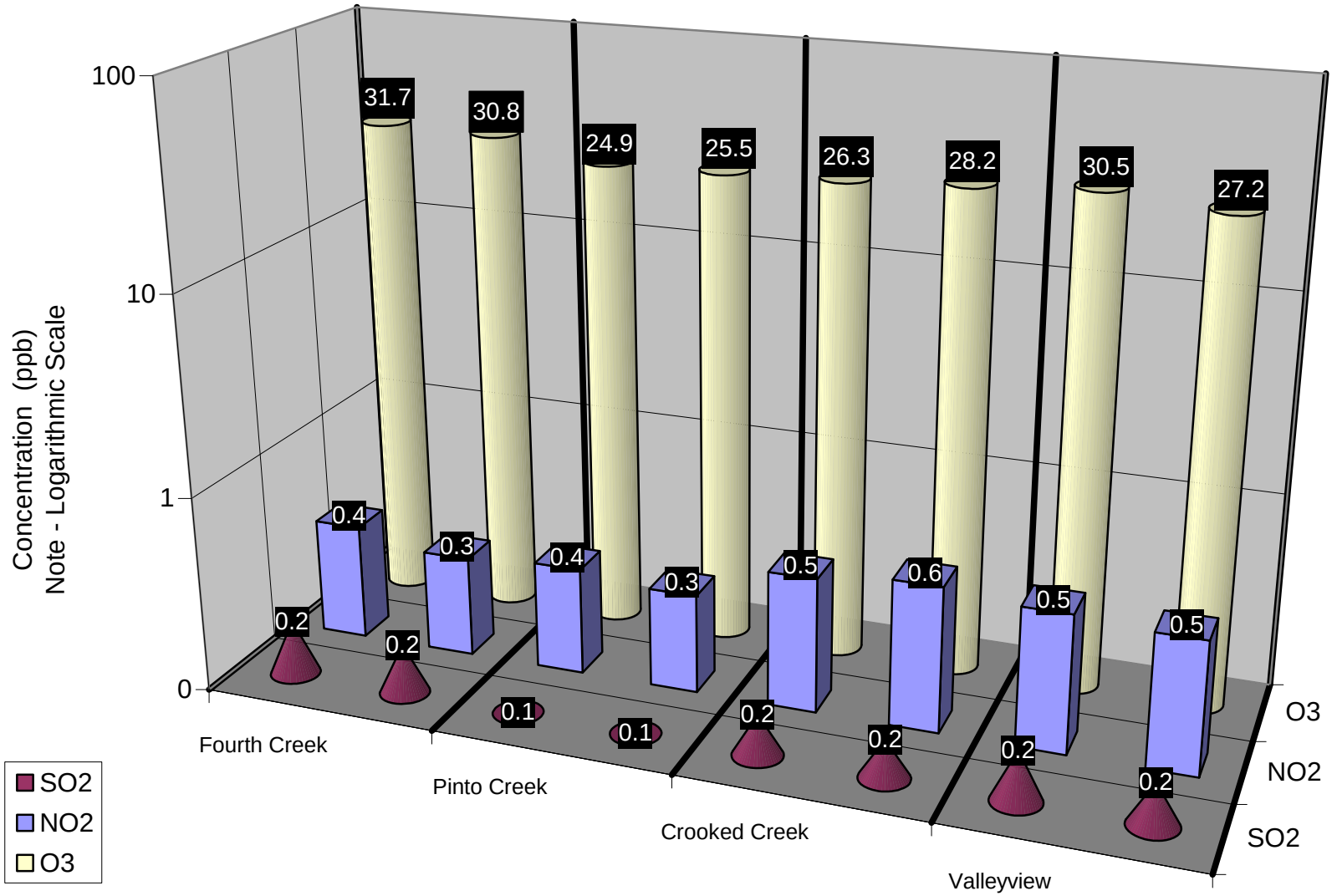
PASZA Passive Results for June 2010

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
3a	Fourth Creek	**0.2**	**31.7**	**0.4**	
3b	Fourth Creek	**0.2**	**30.8**	**0.3**	
25a	Pinto Creek	**0.1**	**24.9**	**0.4**	
25b	Pinto Creek	**0.1**	**25.5**	**0.3**	
37a	Crooked Creek	**0.2**	**26.3**	**0.5**	
37b	Crooked Creek	**0.2**	**28.2**	**0.6**	
41a	Valleyview	**0.2**	**30.5**	**0.5**	
41b	Valleyview	**0.2**	**27.2**	**0.5**	
1	Silver Valley	**0.2**	**27.7**	**0.9**	08-27-081-11 W6M
2	Bay Tree	**0.1**	**25.1**	**0.4**	13-16-078-13 W6M
3	Fourth Creek	**0.2**	**31.3**	**0.4**	04-13-082-07 W6M
4	Gordondale	**0.2**	**28.5**	**0.5**	04-34-078-10 W6M
5	Boone Creek	**0.2**	**23.9**	**0.5**	01-23-076-11 W6M
7	Steeprock Creek	**0.1**	**28.1**	**0.2**	09-35-072-13 W6M
9	Spirit River	**0.2**	**28.6**	**1.6**	08-12-079-07 W6M
10	Woking	**0.2**	**28.6**	**0.7**	01-13-076-07 W6M
11	Webber Creek	**0.2**	**28.8**	**2.5**	09-36-074-09 W6M
12	Hythe	**0.1**	**26.5**	**1.0**	14-36-072-11 W6M
14	Sylvester	**0.1**	**22.7**	**0.5**	08-06-069-12 W6M
16	Beaverlodge	**0.2**	**31.2**	**0.6**	15-36-071-10 W6M
17	Poplar	**0.3**	**25.7**	**2.0**	13-06-073-08 W6M
18	Saddle Hills	**0.2**	**28.9**	**0.4**	04-25-074-07 W6M
19	Wanham	**0.2**	**28.6**	**1.9**	16-22-077-03 W6M
20	Shaftesbury	**0.1**	**33.3**	**0.8**	04-03-082-23 W5M
21	Eaglesham	**0.2**	**25.4**	**2.3**	16-21-079-25 W5M
23	Bear Lake	**0.2**	**26.1**	**1.3**	15-31-072-06 W6M

PASZA Passive Results for June 2010 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	**0.1**	**26.2**	**1.3**	12-31-070-08 W6M
25	Pinto Creek	**0.1**	**25.2**	**0.3**	04-24-069-11 W6M
26	Flyingshot	**0.2**	**24.2**	**1.7**	15-36-070-07 W6M
27	Grande Prairie I	**0.2**	**29.9**	**1.7**	08-15-071-06 W6M
28	Clairmont Lake	**0.1**	**28.8**	**0.9**	09-06-073-04 W6M
29	Smoky Heights	**0.3**	**31.2**	**1.0**	04-06-075-02 W6M
30	Fitzsimmons	**0.2**	**23.2**	**0.5**	15-36-072-03 W6M
32	Gold Creek	**0.1**	**25.3**	**0.5**	06-33-067-05 W6M
33	Wapiti	**0.1**	**28.1**	**0.5**	02-25-071-03 W6M
34	Puskwaskau	**0.1**	**21.9**	**0.4**	15-35-074-25 W5M
35	Jean Cote	**0.3**	**28.7**	**2.5**	12-35-079-21 W5M
36	Guy	**0.1**	**25.0**	**2.3**	03-04-076-22 W5M
37	Crooked Creek	**0.2**	**27.2**	**0.5**	16-01-071-26 W5M
38	Karr Creek	**0.1**	**20.4**	**0.8**	10-16-065-02 W6M
39	Clouston Creek	**0.1**	**26.2**	**0.6**	12-01-073-22 W5M
40	McLennan	**0.3**	**27.1**	**2.9**	03-29-077-19 W5M
41	Valleyview	**0.2**	**28.9**	**0.5**	09-30-069-22 W5M
42	Sunset House	**0.1**	**29.5**	**0.3**	05-32-070-19 W5M
43	High Prairie	**0.1**	**27.0**	**2.2**	16-13-074-17 W5M
44	Peavine	**0.1**	**25.2**	**0.3**	03-05-079-15 W5M
45	Gift Lake	**0.1**	**23.8**	**0.3**	10-07-079-12 W5M
46	Little Smoky	**0.2**	**23.1**	**1.8**	12-01-065-21 W5M
47	Kinuso	**0.1**	**22.5**	**0.3**	12-10-073-10 W5M
48	Deer Mountain	**0.1**	**23.3**	**0.4**	15-22-068-09 W5M
49	Grande Prairie HP	**0.1**	**36.3**	**0.4**	17-26-071-06 W6M

*BDL = Below Detection Level



Duplicate Summary Chart

Passive Summary for June 2010

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2
	ppb	ppb	ppb
	Passive Summary for June 2010 (PASZA Zone)		
Mean	**0.2**	**26.9**	**1.0**
Standard Deviation	**0.1**	**3.2**	**0.8**
Minimum	**0.1**	**20.4**	**0.2**
Minimum At	**Karr Creek (#38)**	**Karr Creek (#38)**	**Steeprock Creek (#7)**
Maximum	**0.3**	**36.3**	**2.9**
Maximum At	**Poplar (#17)**	**Grande Prairie HP (#49)**	**McLennan (#40)**

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

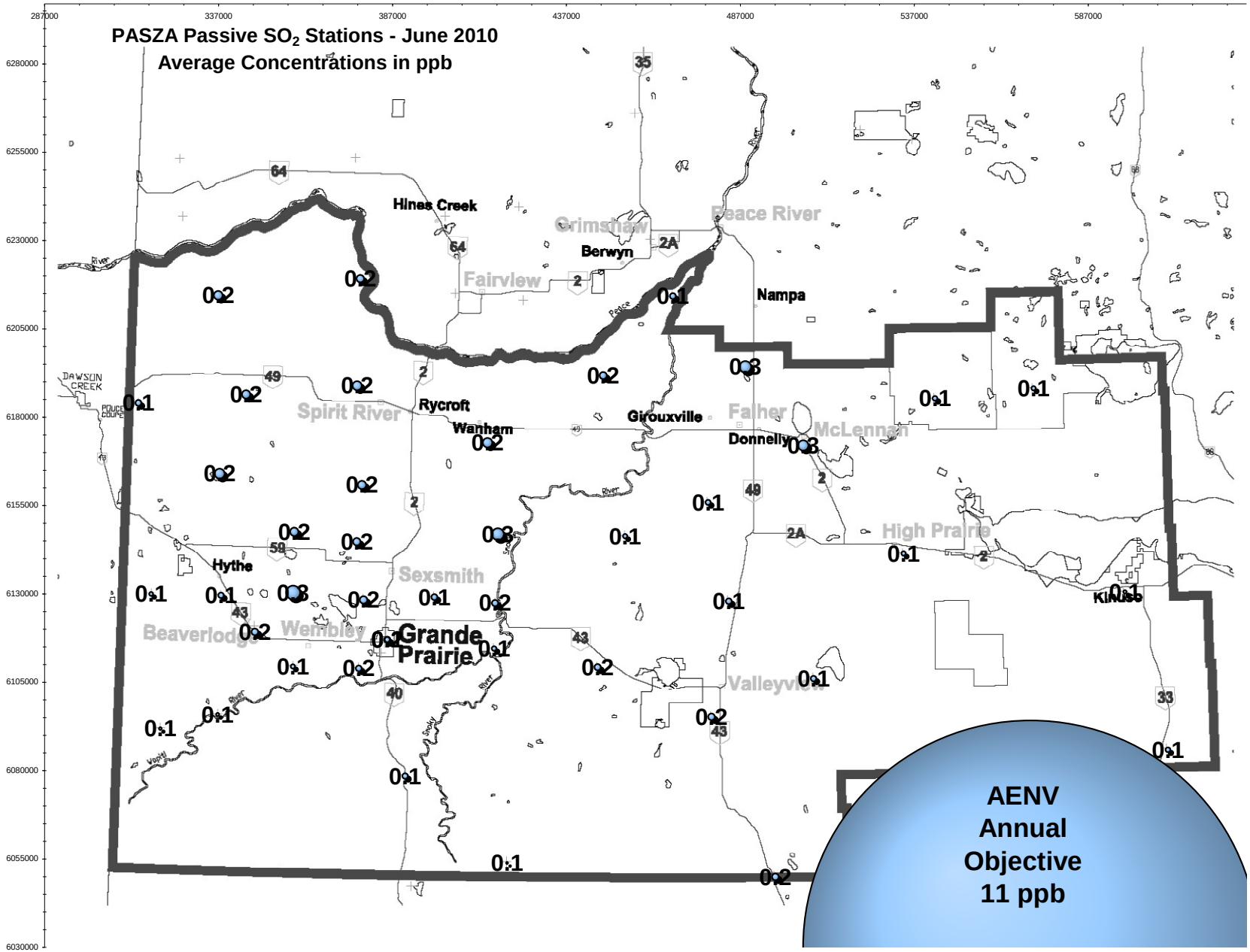
	SO_2	O_3	NO_2
PASZA Beaverlodge station	**0.2**	**31.3**	**1.7**
PASZA Beaverlodge passive	**0.2**	**31.2**	**0.6**

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

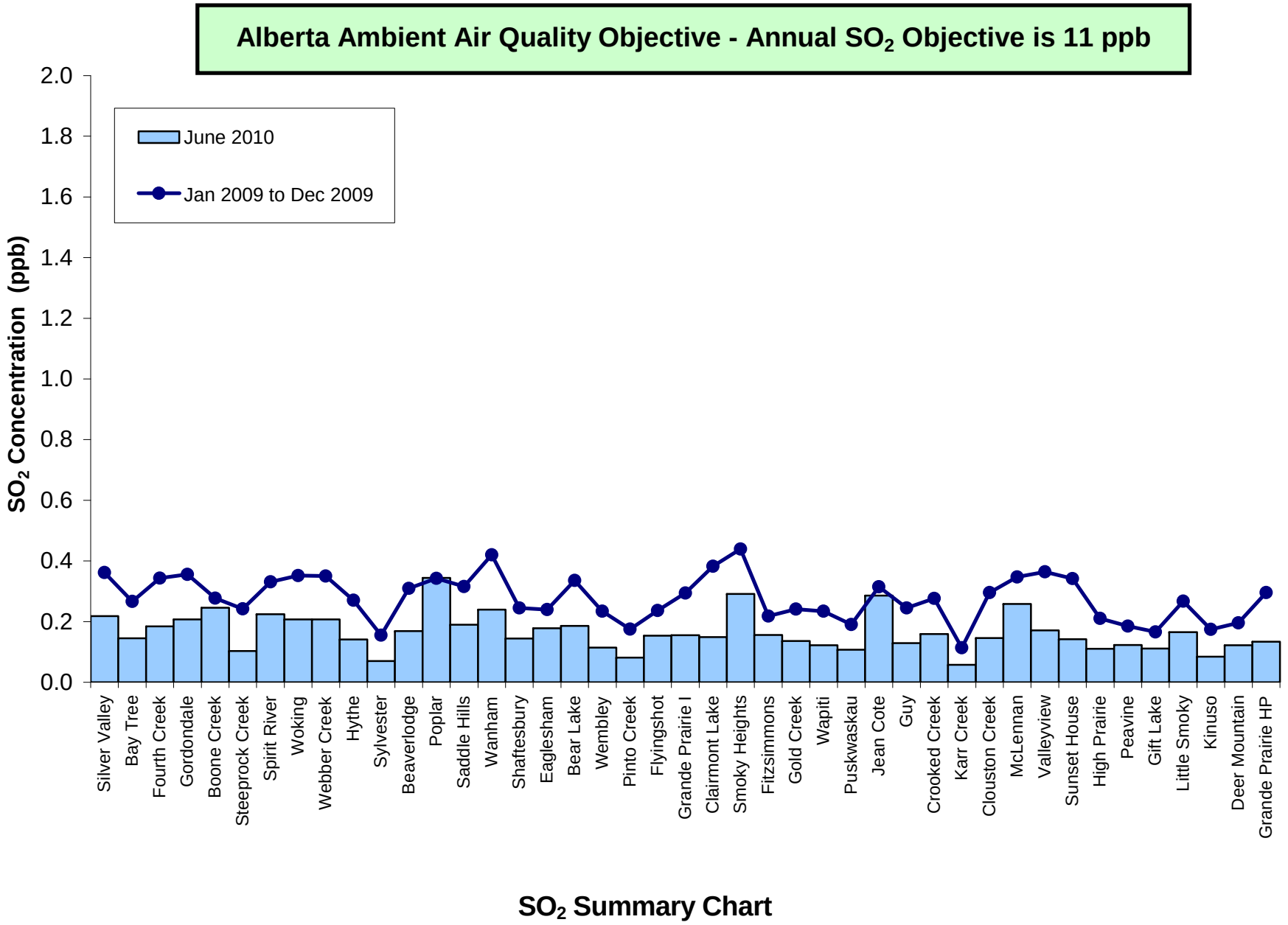
	SO_2	O_3	NO_2
PASZA Henry Pirker station	**0.1**	**29.3**	**4.3**
PASZA Grande Prairie passive	**0.1**	**36.3**	**0.4**

Comparison between Continuous and Passive monitoring at Kinuso (passive #47 Kinuso)

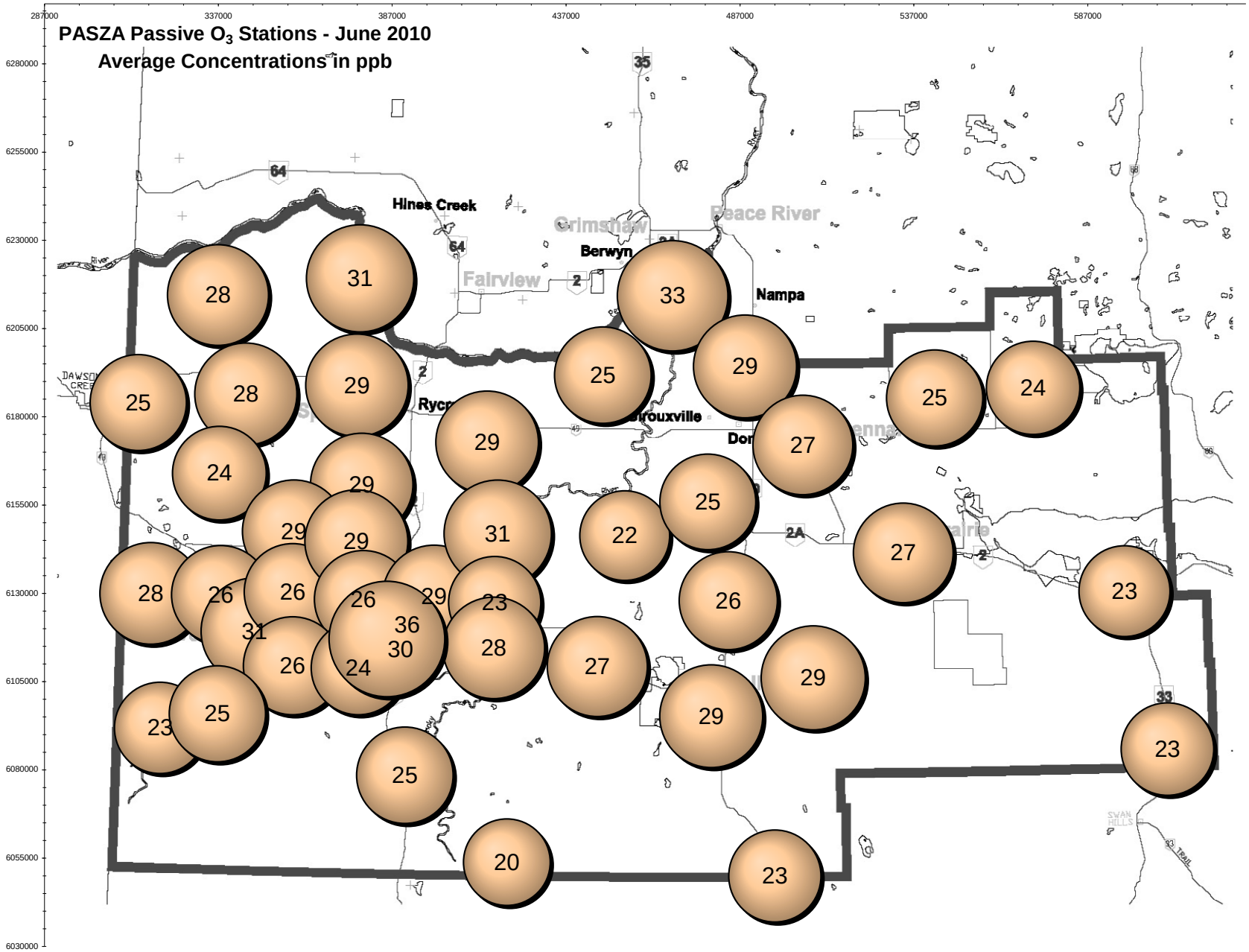
	SO_2	O_3	NO_2
PASZA Portable Kinuso station	**0.2**	**29.2**	**1.0**
PASZA Kinuso passive	**0.1**	**22.5**	**0.3**



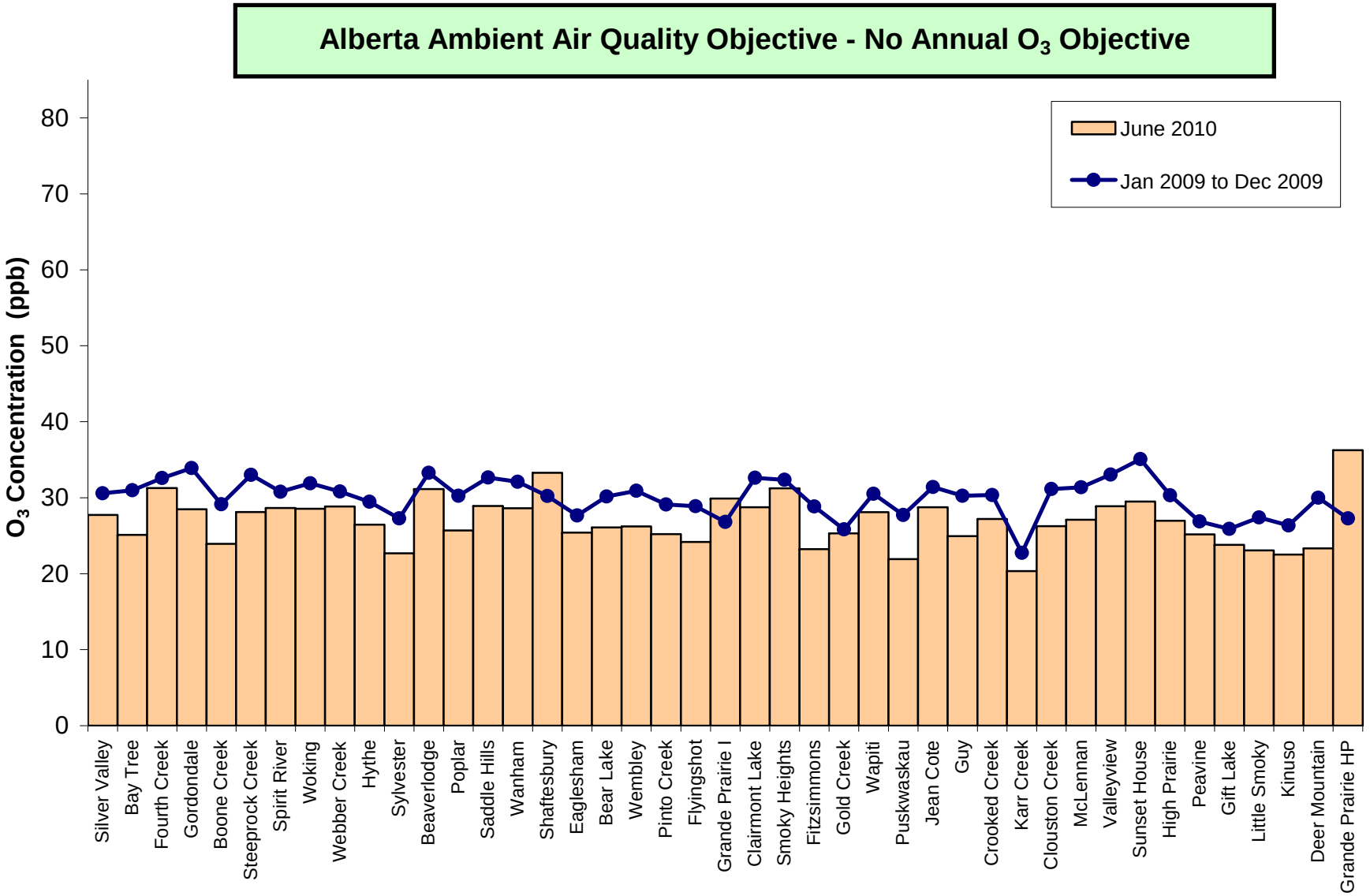
SO_2 Bubble Chart



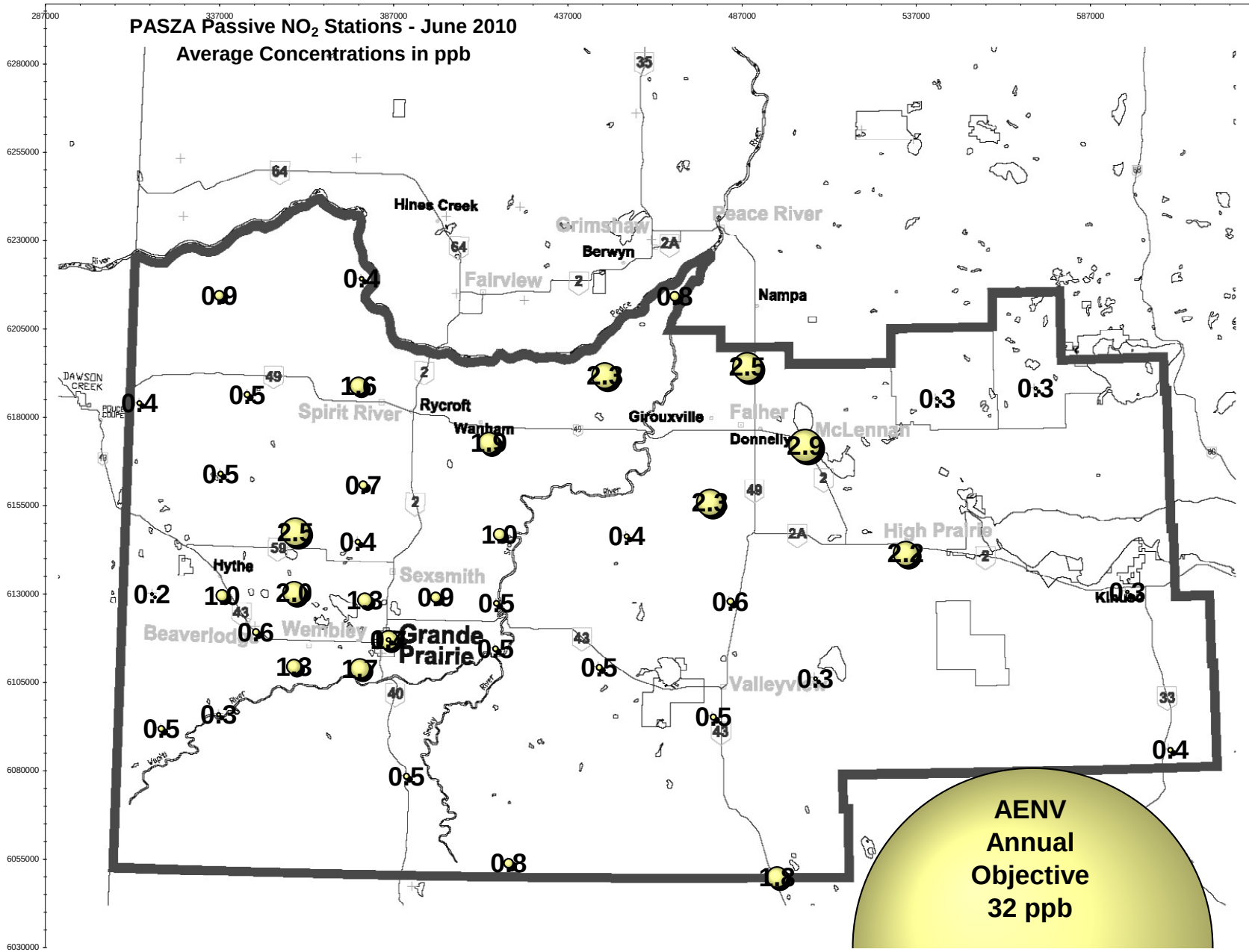
SO_2 Summary Chart



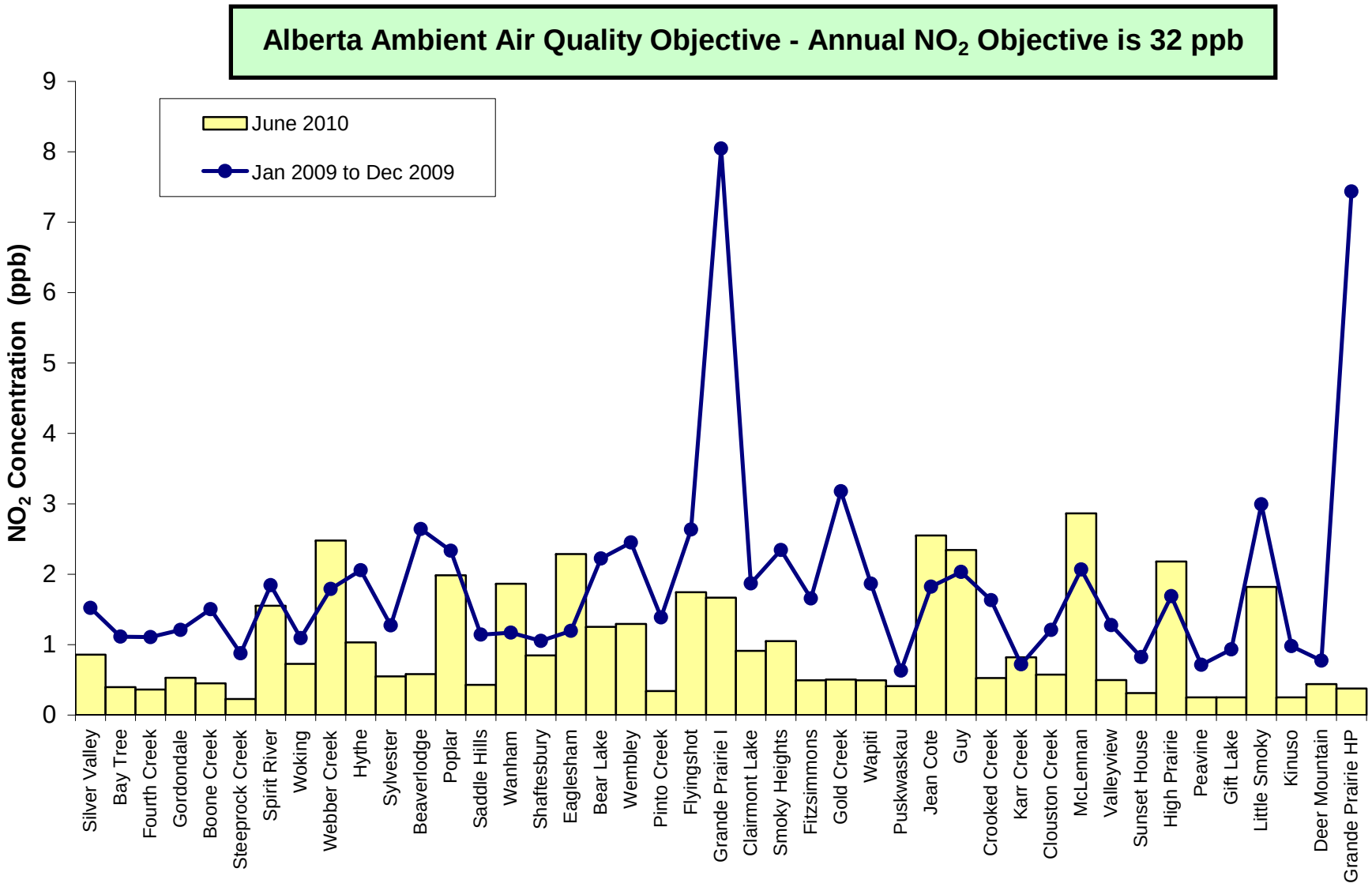
O_3 Bubble Chart



O_3 Summary Chart



NO_2 Bubble Chart



NO_2 Summary Chart

June 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	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine ☐ Install	☐ Removal	☐ Other:
Start Time (MST)	8:40	End Time (MST)	10:55
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	50.6 ppb	Cal Gas Cert Date	13/3/2009
		Cal Gas Cylinder #	AAL 15377
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.003486	Calculated slope	1.002323
Calculated intercept	-2.272684	Calculated intercept	-1.420158
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.5		8.7	
Coefficient	.817		.815	
Pressure	637.8	mm Hg	641.9	mm Hg
Flow	0.479	lpm	0.481	lpm
Lamp Voltage	43580	Hz	43878	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)
4988	0.00	0.0	0.4	N/A
4988	39.83	400.8	401.2	0.9990
4989	19.89	200.9	201.1	0.9990
4988	9.93	100.5	103.6	0.9707
4988	0.00	0.0	0.4	As Found Zero
4988	39.83	400.8	399.8	As Found Span
			Average Correction Factor	0.9896

Calculated value of As Found Response: 398.5 ppb Percent Change of As Found: 0.6%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	239.8	ppb	237.1	ppb

Notes: No adjustments or maintenance performed.

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

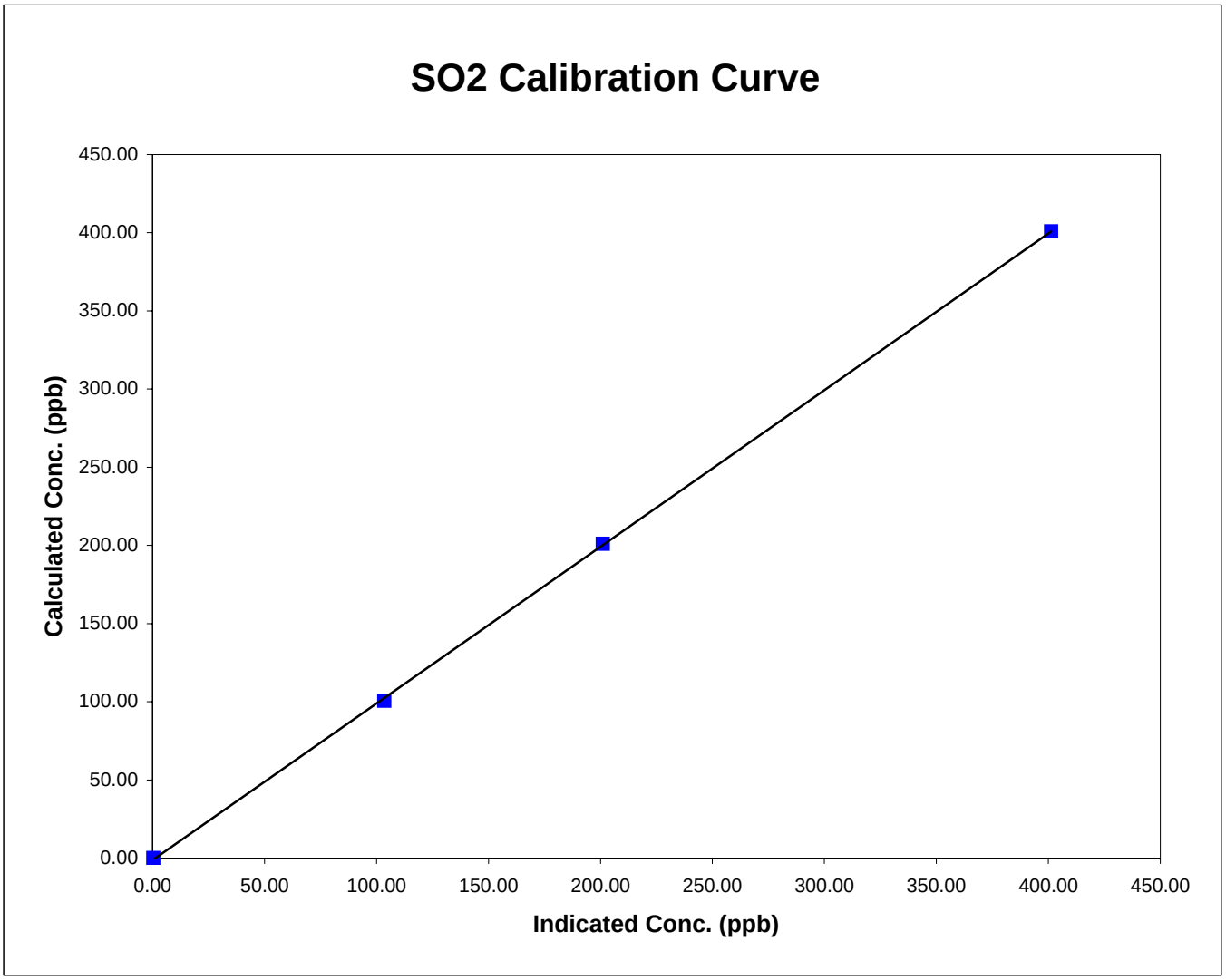
FOCUS AIR QUALITY MONITORING

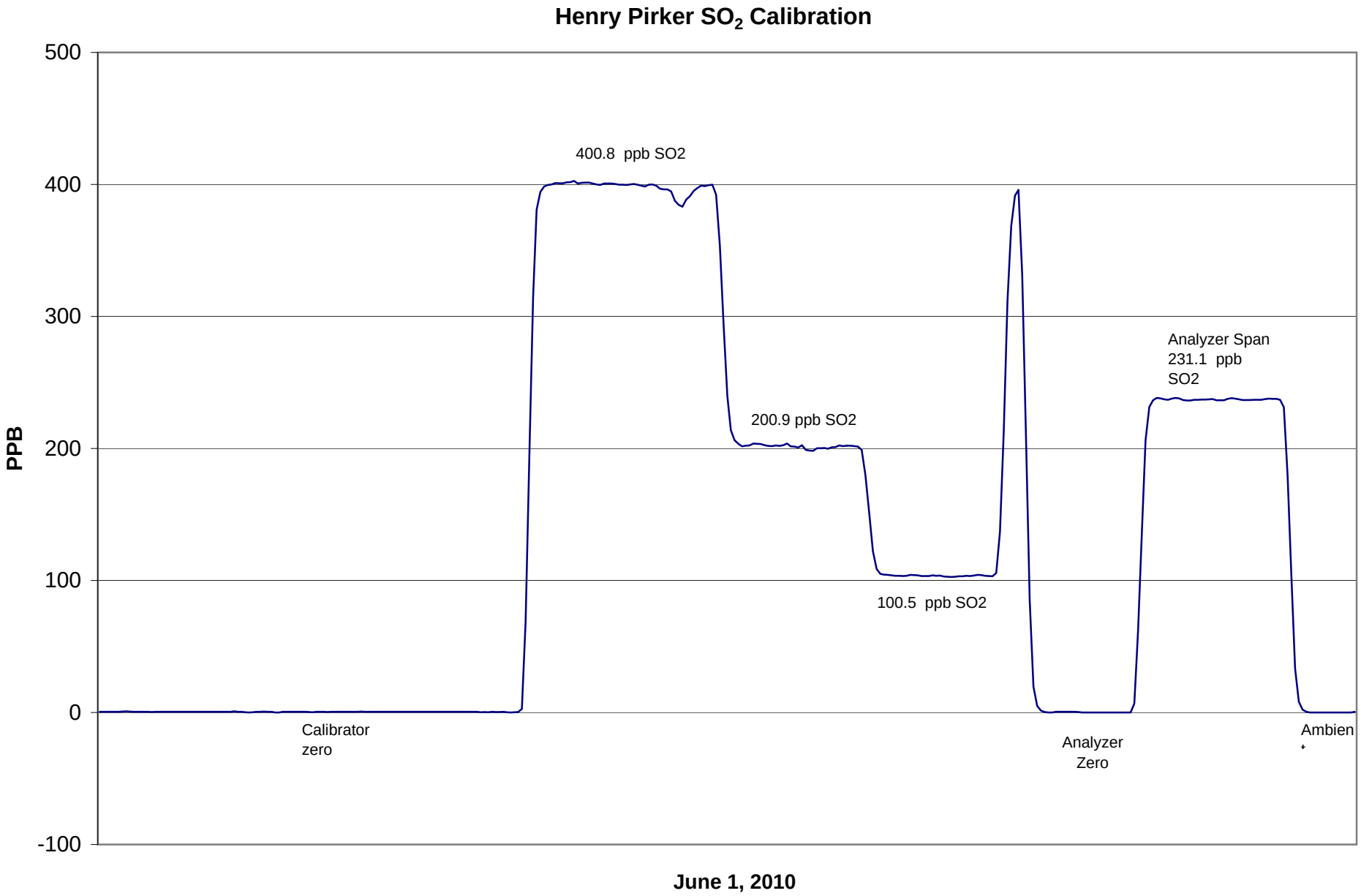
Station Information

Calibration Date	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:40	End Time (MST)	10:55
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		
400.8	401.2	0.9990	Correlation Coefficient	0.999943
200.9	201.1	0.9990		
100.5	103.6	0.9707	Slope	1.002323
			Intercept	-1.420158




Henry Pirker SO2 Calibration
500
400
300
200
100
0
-100
PPB
400.8 ppb SO2
200.9 ppb SO2
100.5 ppb SO2
Analyzer Span
231.1 ppb
SO2
Calibrator
zero
Analyzer
Zero
Ambien
t
June 1, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 2, 2010	Previous Calibration	May 18, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine ■ Install ☐	Removal ☐	Other: ☐
Start Time (MST)	8:30	End Time (MST)	16:00
Barometric Pressure	0.915 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	0.981843	Calculated slope	1.008162
Calculated intercept	-0.152978	Calculated intercept	0.009779
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.812		.812	
Background	17.5		17.5	
Pressure	651.3	mm Hg	653.2	mm Hg
Flow	0.467	ccm	0.467	ccm
Lamp Voltage	842	V	848	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)
4988	0.00	0.00	-0.01	N/A
4989	79.78	81.06	80.39	1.0083
				As Found Zero
				As Found Span
			Average Correction Factor	1.0083

Calculated value of As Found Response: NA ppb Percent Change of As Found: NA

	before calibration		after calibration	
Auto zero	-0.29	ppb	NA	ppb
Auto span	22.60	ppb	NA	ppb

Notes: As found response was negligable; attempted repairs and checks.
Lamp and socket were replaced.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

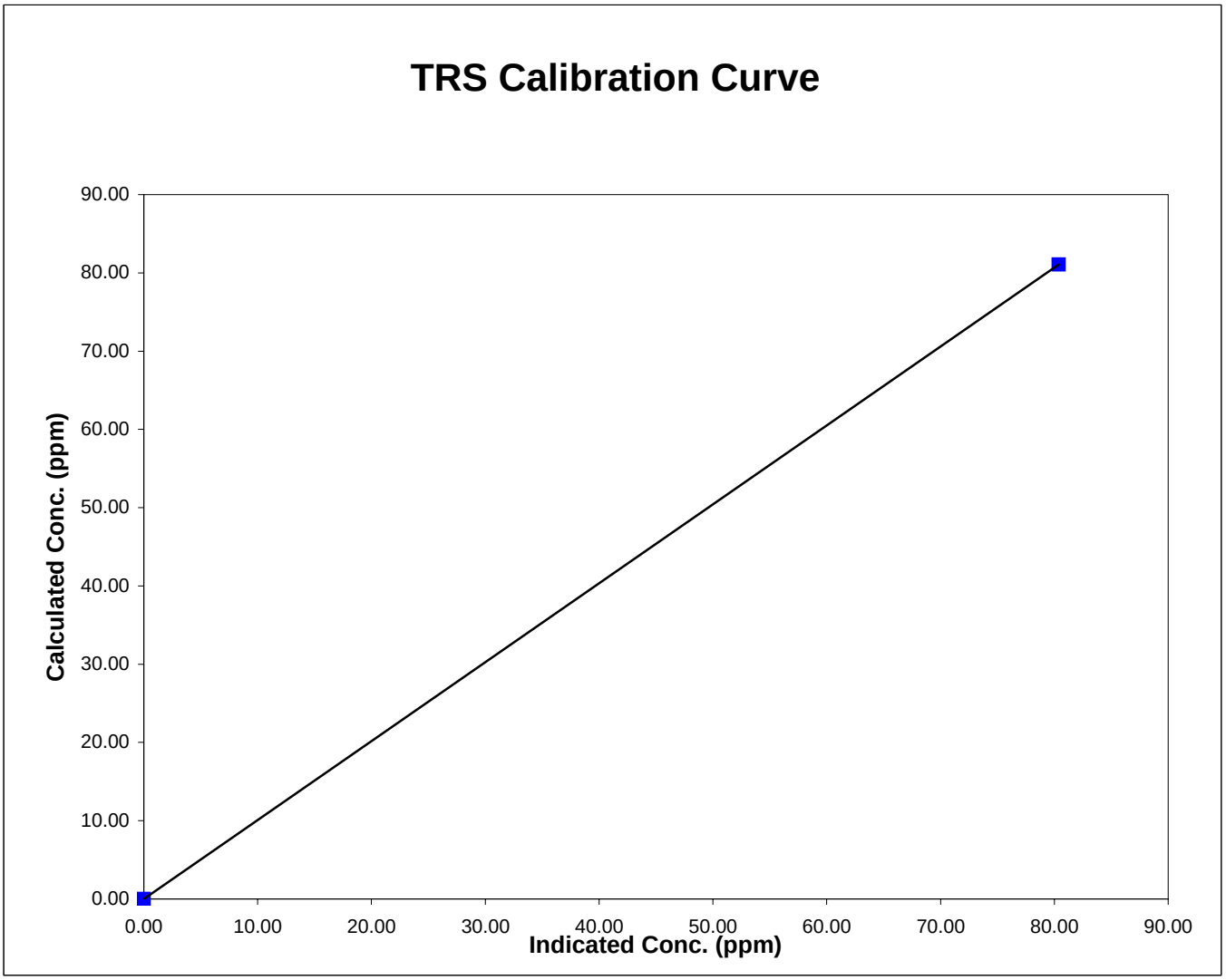
FOCUS AIR QUALITY MONITORING

Station Information

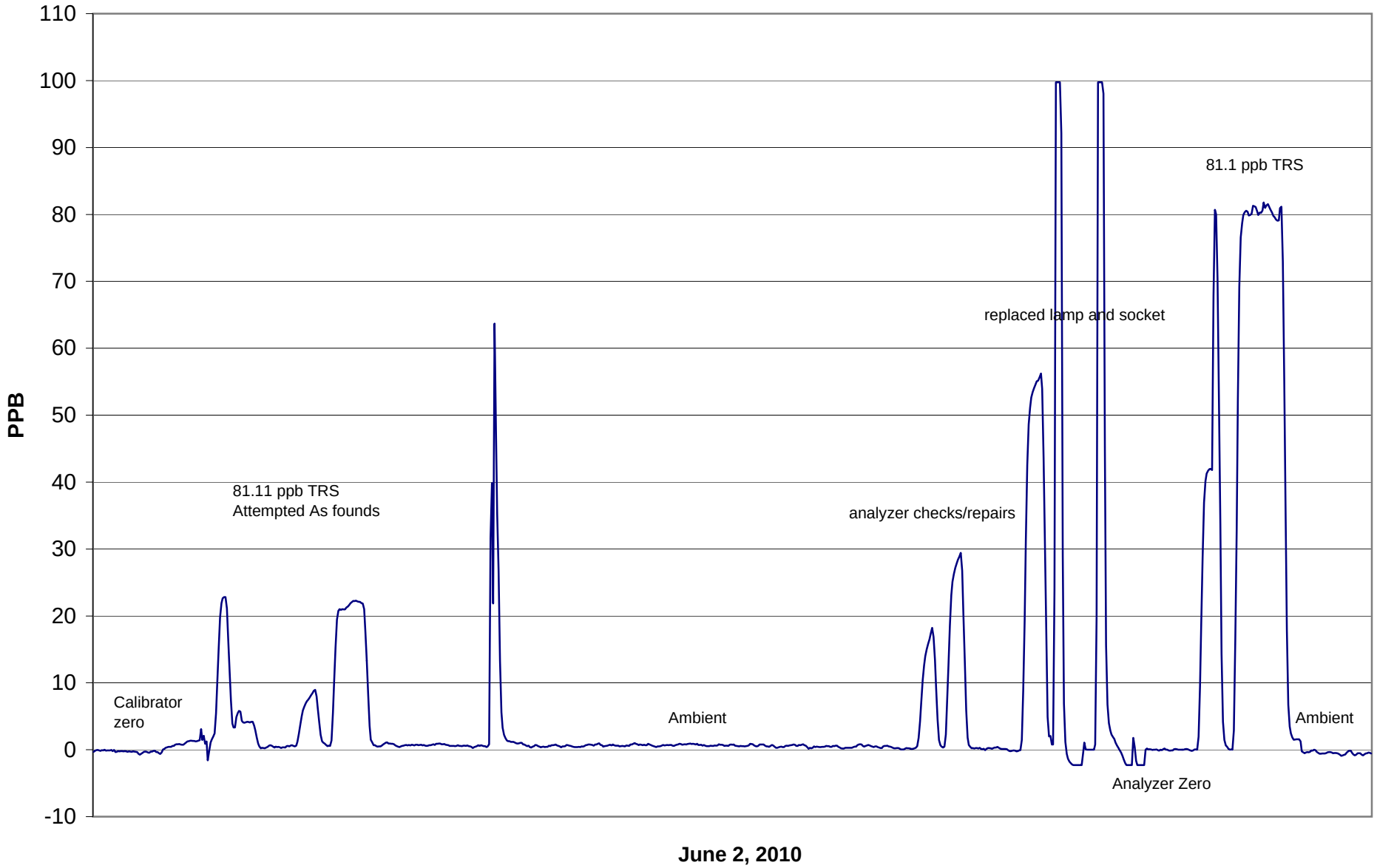
Calibration Date	June 2, 2010	Previous Calibration	May 18, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:30	End Time (MST)	16:00
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.010	N/A		
81.058	80.392	1.0083	Correlation Coefficient	1.000000
			Slope	1.008162
			Intercept	0.009779



Henry Pirker TRS Calibration



Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 3, 2010	Previous Calibration	June 2, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	7:50	End Time (MST)	11:30
Barometric Pressure	0.914 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	0.981843	Calculated slope	0.998686
Calculated intercept	-0.152978	Calculated intercept	0.091235
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.812		1.022	
Background	17.5		20.5	
Pressure	651.3	mm Hg	652.1	mm Hg
Flow	0.467	ccm	0.467	ccm
Lamp Voltage	842	V	973	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)
4988	0.00	0.00	0.15	N/A
4989	79.78	81.06	81.13	0.9992
4989	39.81	40.77	40.69	1.0020
4989	9.93	10.23	9.90	1.0332
				As Found Zero
				As Found Span
			Average Correction Factor	1.0114

Calculated value of As Found Response: NA ppb Percent Change of As Found: NA

	before calibration		after calibration	
Auto zero	-0.29	ppb	0.40	ppb
Auto span	22.60	ppb	23.96	ppb

Notes: The as found point is not applicable as the analyzer was not functional upon arrival on calibration day.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

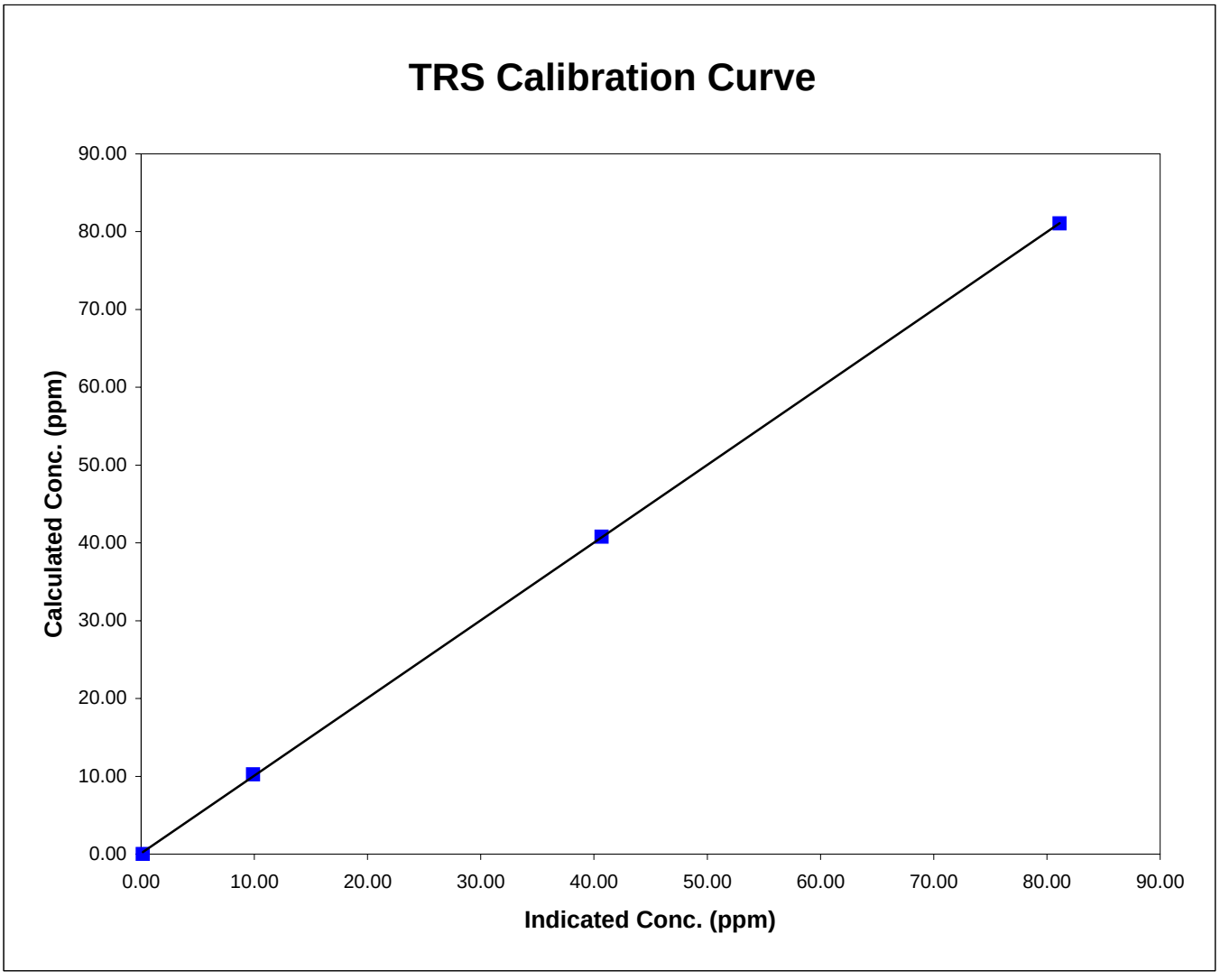
FOCUS AIR QUALITY MONITORING

Station Information

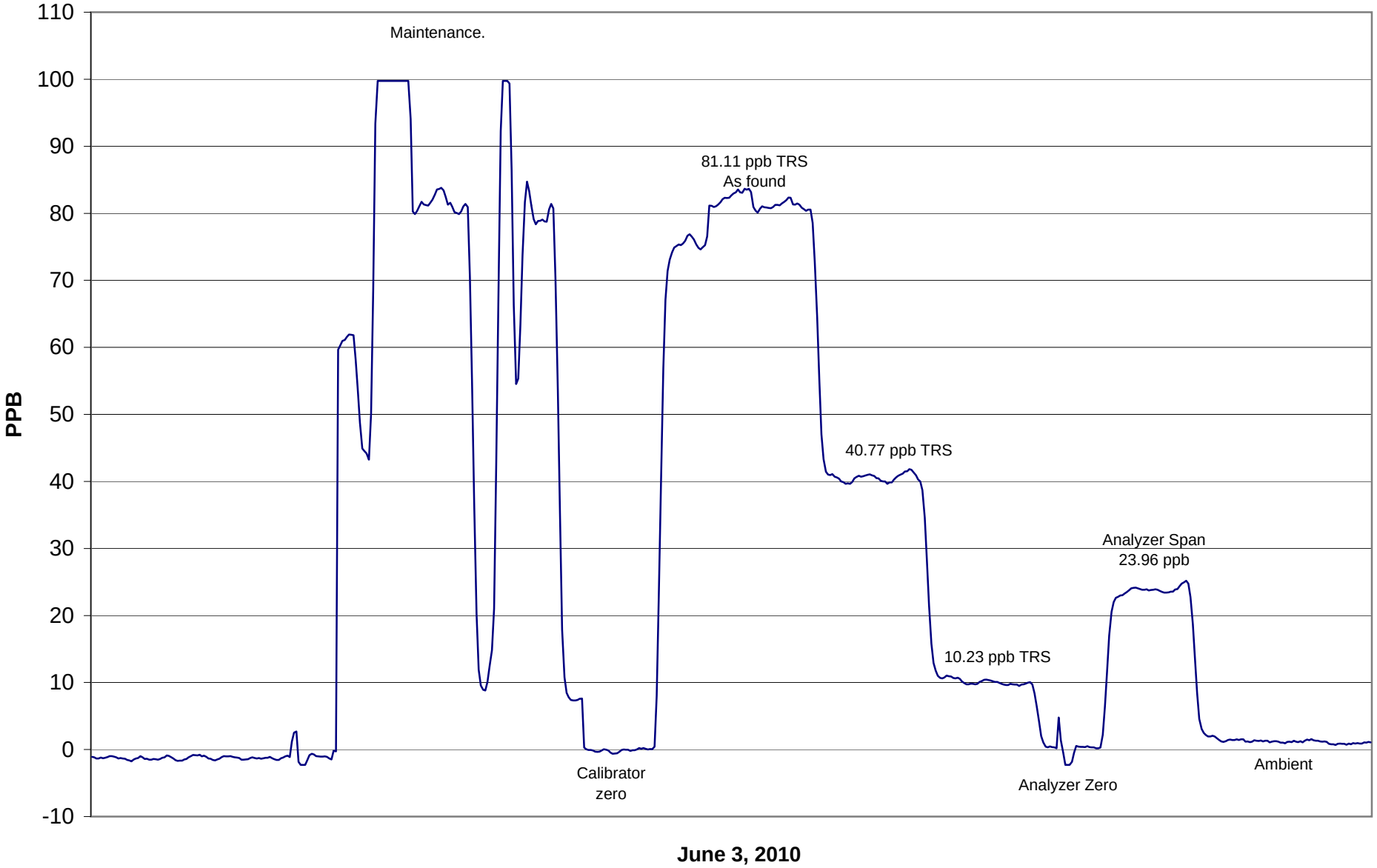
Calibration Date	June 3, 2010	Previous Calibration	June 2, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:50	End Time (MST)	11:30
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.151	N/A		
81.058	81.126	0.9992	Correlation Coefficient	0.999968
40.769	40.688	1.0020		
10.230	9.902	1.0332	Slope	0.998686
			Intercept	0.091235



Henry Pirker TRS Calibration



Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 9, 2010	Previous Calibration	June 3, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	8:45	End Time (MST)	13:04
Barometric Pressure	0.927 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	0.998686	Calculated slope	0.986908
Calculated intercept	0.091235	Calculated intercept	0.334846
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	1.634		1.835	
Background	24.1		28.2	
Pressure	651.3	mm Hg	653.6	mm Hg
Flow	0.467	ccm	0.487	ccm
Lamp Voltage	882	V	883	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)
4988	0.00	0.00	0.12	N/A
4989	79.78	81.06	82.14	0.9869
4989	39.81	40.77	40.30	1.0116
4989	9.93	10.23	9.89	1.0346
4989	0.00	0.00	0.15	As Found Zero
4989	79.78	81.06	71.60	As Found Span
			Average Correction Factor	1.0110

Calculated value of As Found Response: 71.5 ppb Percent Change of As Found: 11.8%

	before calibration		after calibration	
Auto zero	-0.29	ppb	1.13	ppb
Auto span	22.60	ppb	23.46	ppb

Notes:

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

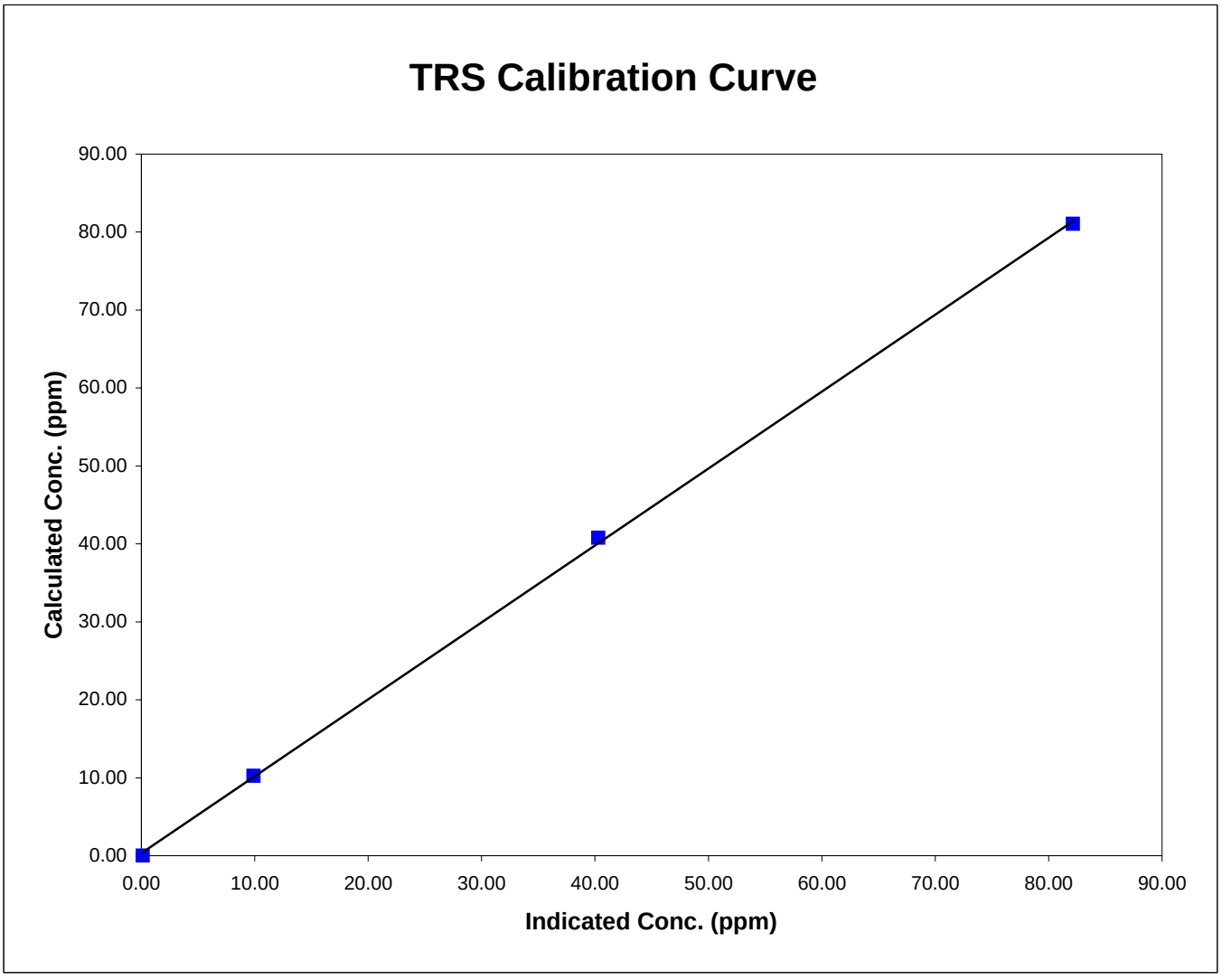
FOCUS AIR QUALITY MONITORING

Station Information

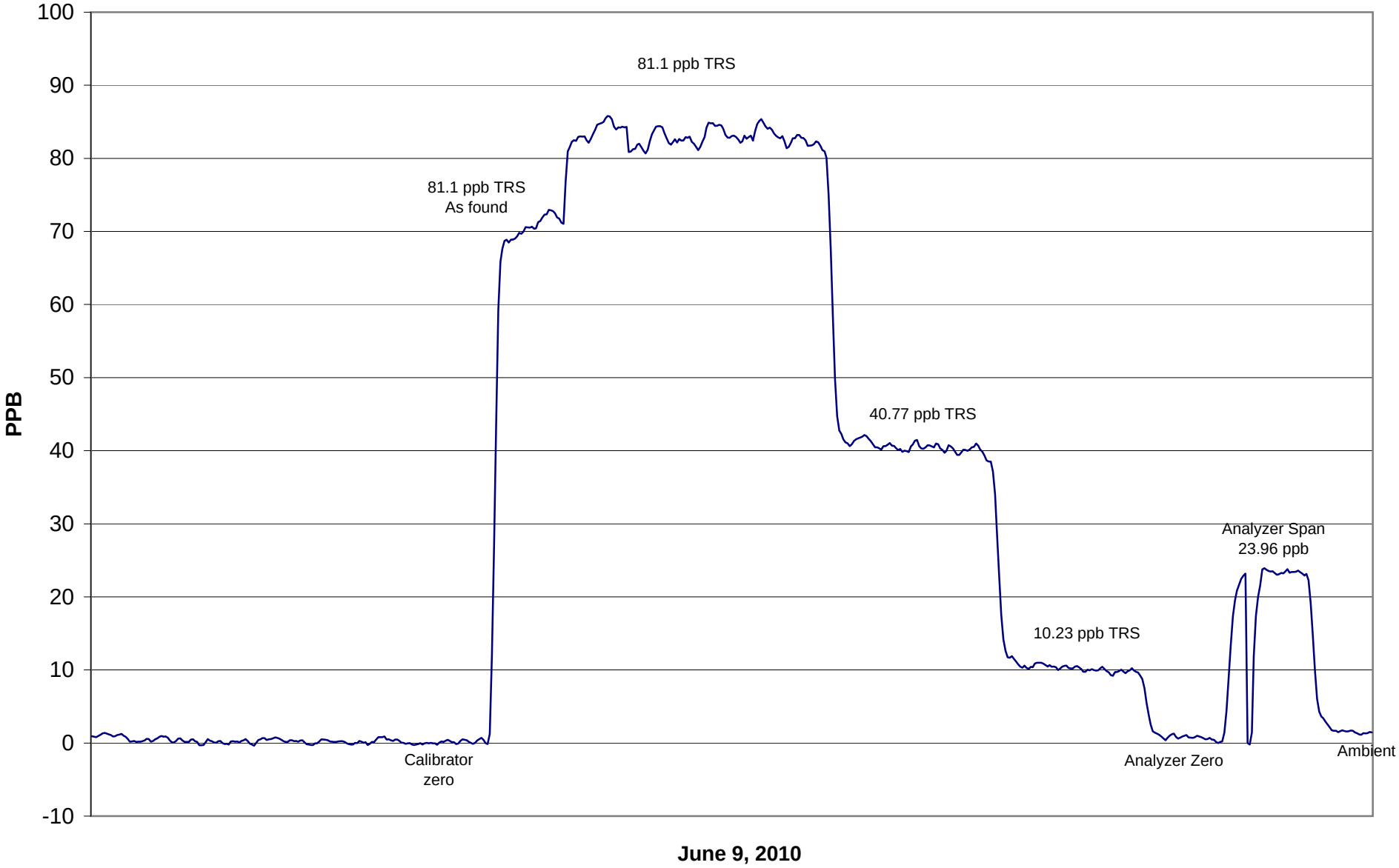
Calibration Date	June 9, 2010	Previous Calibration	June 3, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:45	End Time (MST)	13:04
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.124	N/A		
81.058	82.138	0.9869	Correlation Coefficient	0.999804
40.769	40.303	1.0116		
10.230	9.888	1.0346	Slope	0.986908
			Intercept	0.334846



Henry Pirker TRS Calibration



Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2010	Previous Calibration	June 3, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	8:50	End Time (MST)	16:36
Barometric Pressure	0.929 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	0.998686	Calculated slope	0.997885
Calculated intercept	0.091235	Calculated intercept	0.453633
Analyzer make	TEI 43C	Analyzer serial #	31990000000491

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	1.619		1.641	
Background	28.1		28.5	
Pressure	650.0	mm Hg	648.1	mm Hg
Flow	0.602	ccm	0.601	ccm
Lamp Voltage	821	V	824	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)
4988	0.00	0.00	-0.22	N/A
4991	79.78	81.03	80.97	1.0007
4991	39.81	40.75	39.93	1.0206
4991	9.93	10.23	9.79	1.0443
4989	0.00	0.00	-0.45	As Found Zero
4991	79.78	81.03	80.98	As Found Span
			Average Correction Factor	1.0219

Calculated value of As Found Response: 81.4 ppb Percent Change of As Found: -0.5%

	before calibration		after calibration	
Auto zero	-0.29	ppb	0.32	ppb
Auto span	22.60	ppb	29.02	ppb

Notes: Analyzer was swapped with spare. Original analyzer sent for repairs.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

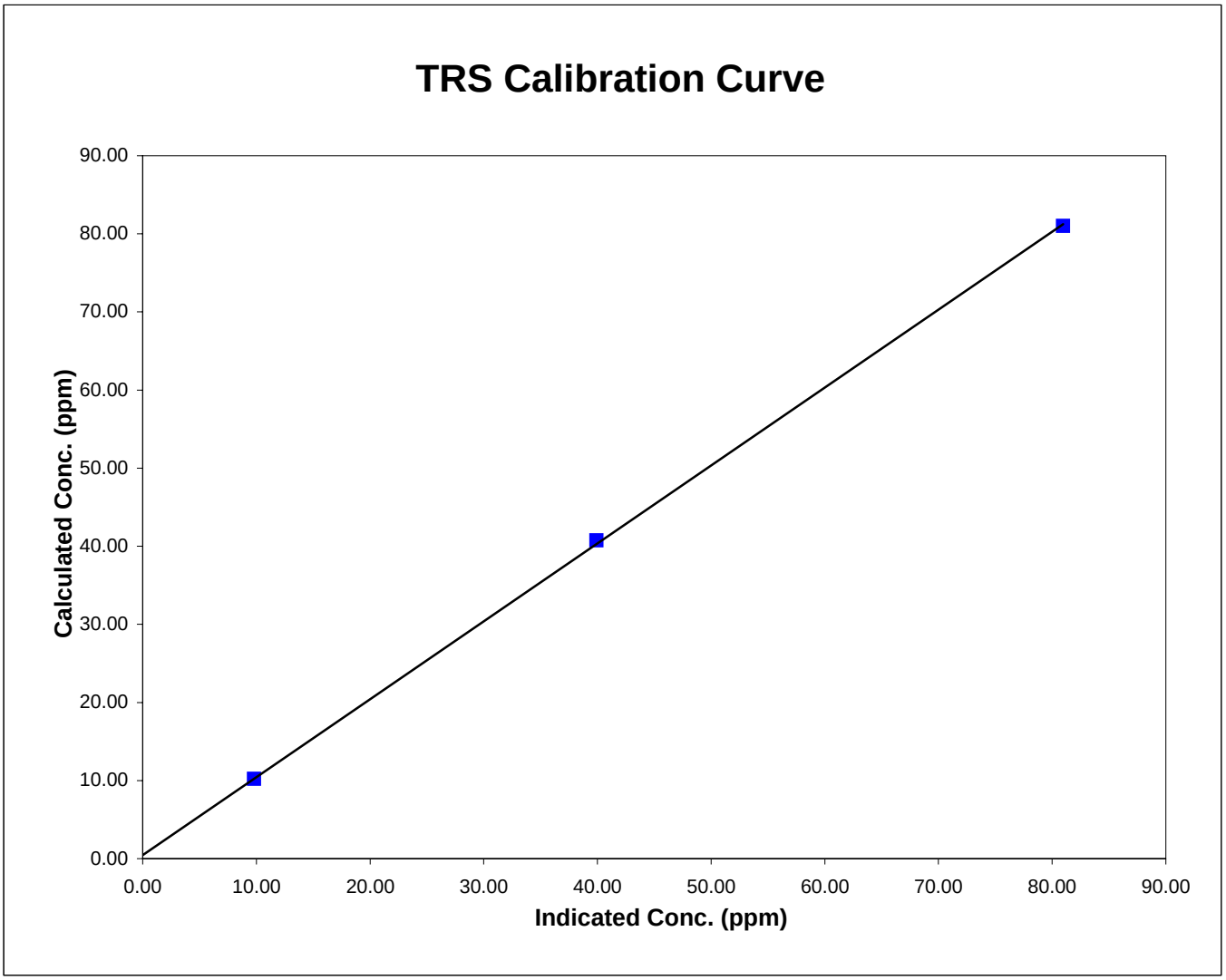
FOCUS AIR QUALITY MONITORING

Station Information

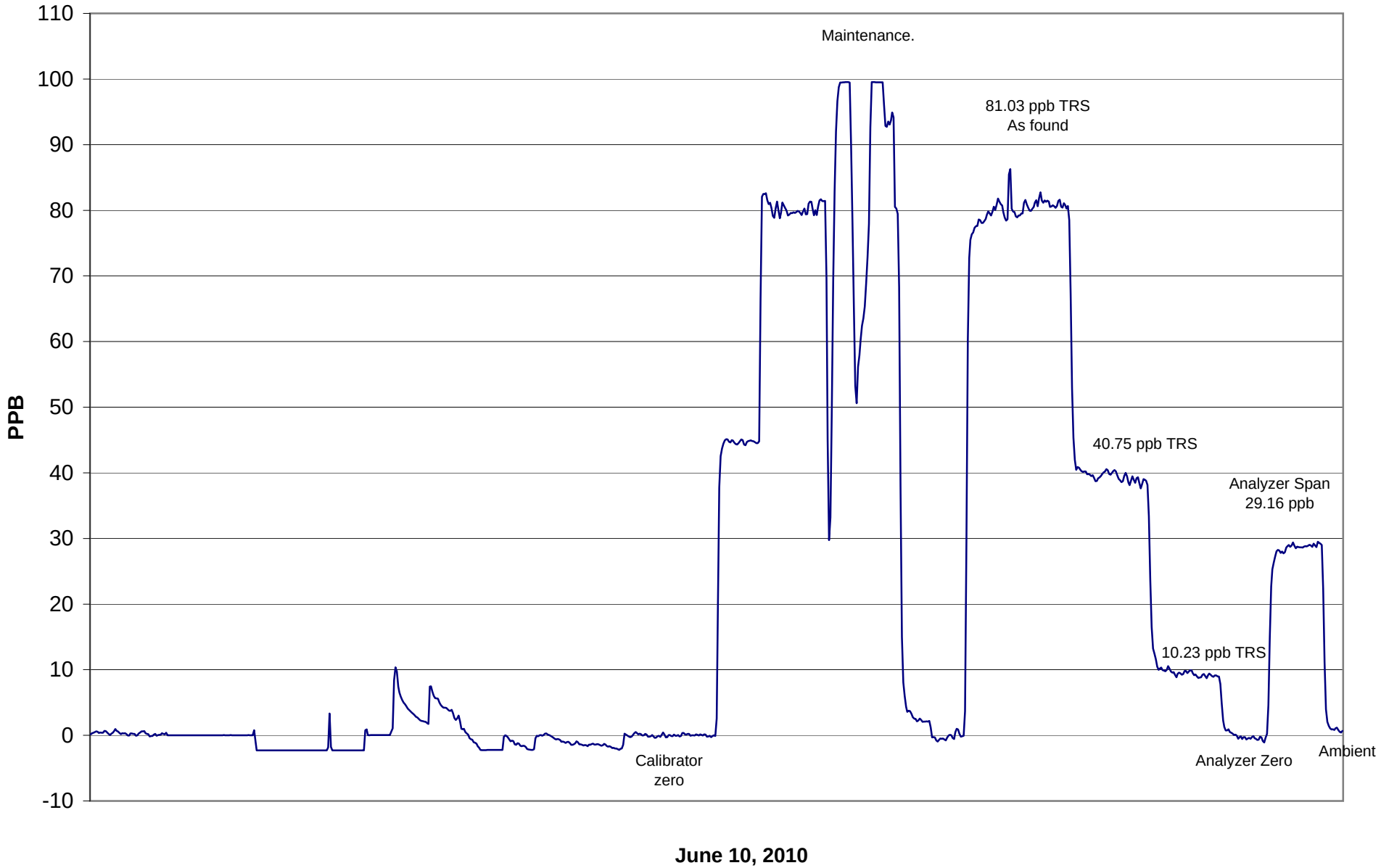
Calibration Date	June 10, 2010	Previous Calibration	June 3, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:50	End Time (MST)	16:36
Analyzer make/model	TEI 43C	Analyzer serial #	3.199E+13

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.223	N/A		
81.026	80.969	1.0007	Correlation Coefficient	0.999922
40.753	39.929	1.0206		
10.226	9.792	1.0443	Slope	0.997885
			Intercept	0.453633



Henry Pirker TRS Calibration



Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 28, 2010	Previous Calibration	June 10, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	11:45	End Time (MST)	12:57
Barometric Pressure	0.925 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	0.998686	Calculated slope	1.015601
Calculated intercept	0.091235	Calculated intercept	0.662155
Analyzer make	TEI 43C	Analyzer serial #	31990000000491

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	1.641		1.641	
Background	28.5		27.3	
Pressure	648.1	mm Hg	643.9	mm Hg
Flow	0.601	ccm	0.617	ccm
Lamp Voltage	824	V	822	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)
4988	0.00	0.00	-0.65	N/A
4991	79.78	81.03	79.13	1.0240
4989	0.00	0.00	-0.65	As Found Zero
4991	79.78	81.03	79.13	As Found Span
			Average Correction Factor	1.0240

Calculated value of As Found Response: 79.8 ppb Percent Change of As Found: 1.6%

	before calibration		after calibration	
Auto zero	-0.29	ppb	NA	ppb
Auto span	22.60	ppb	NA	ppb

Notes: Reference point performed. Analyzer performance was good.

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

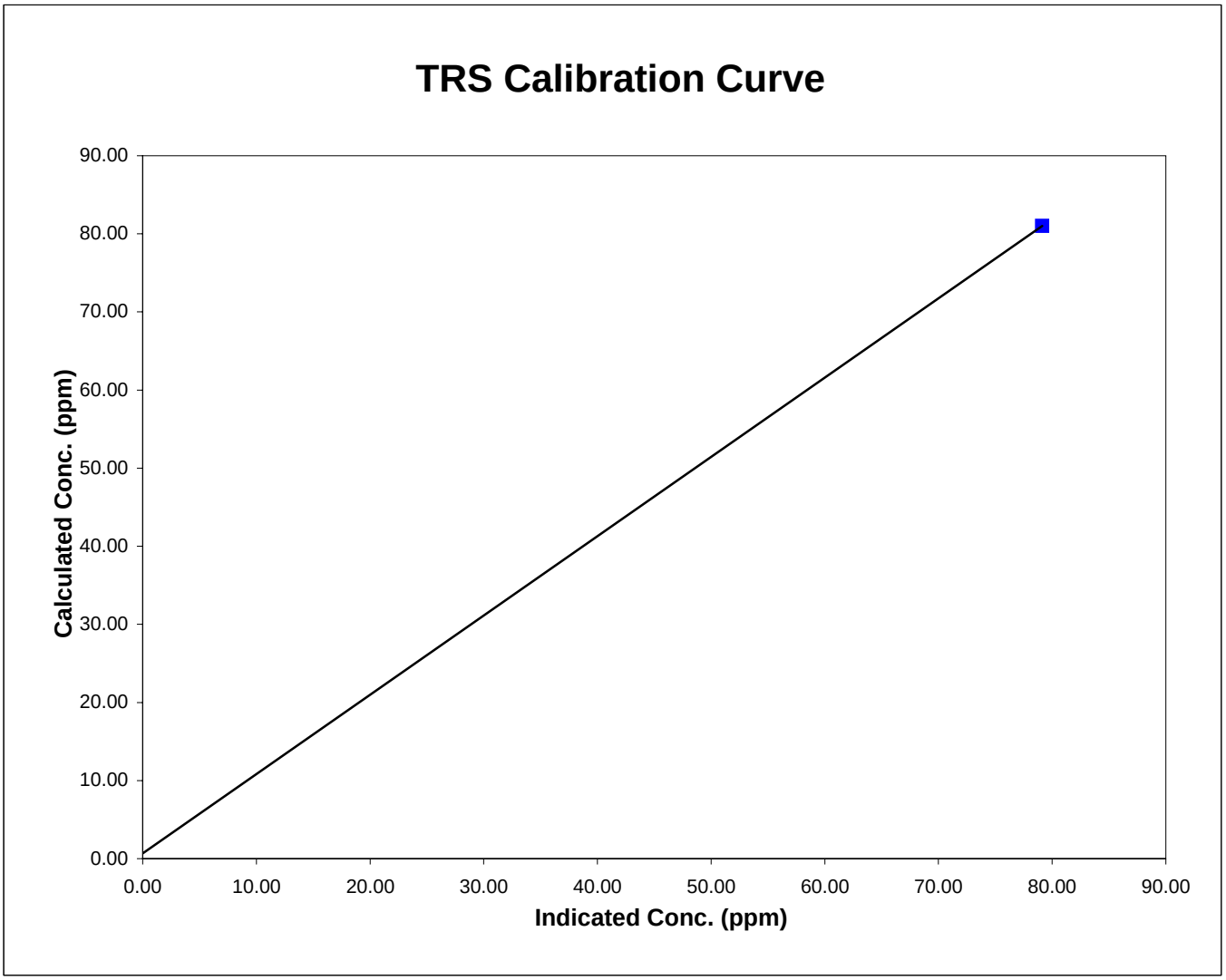
FOCUS AIR QUALITY MONITORING

Station Information

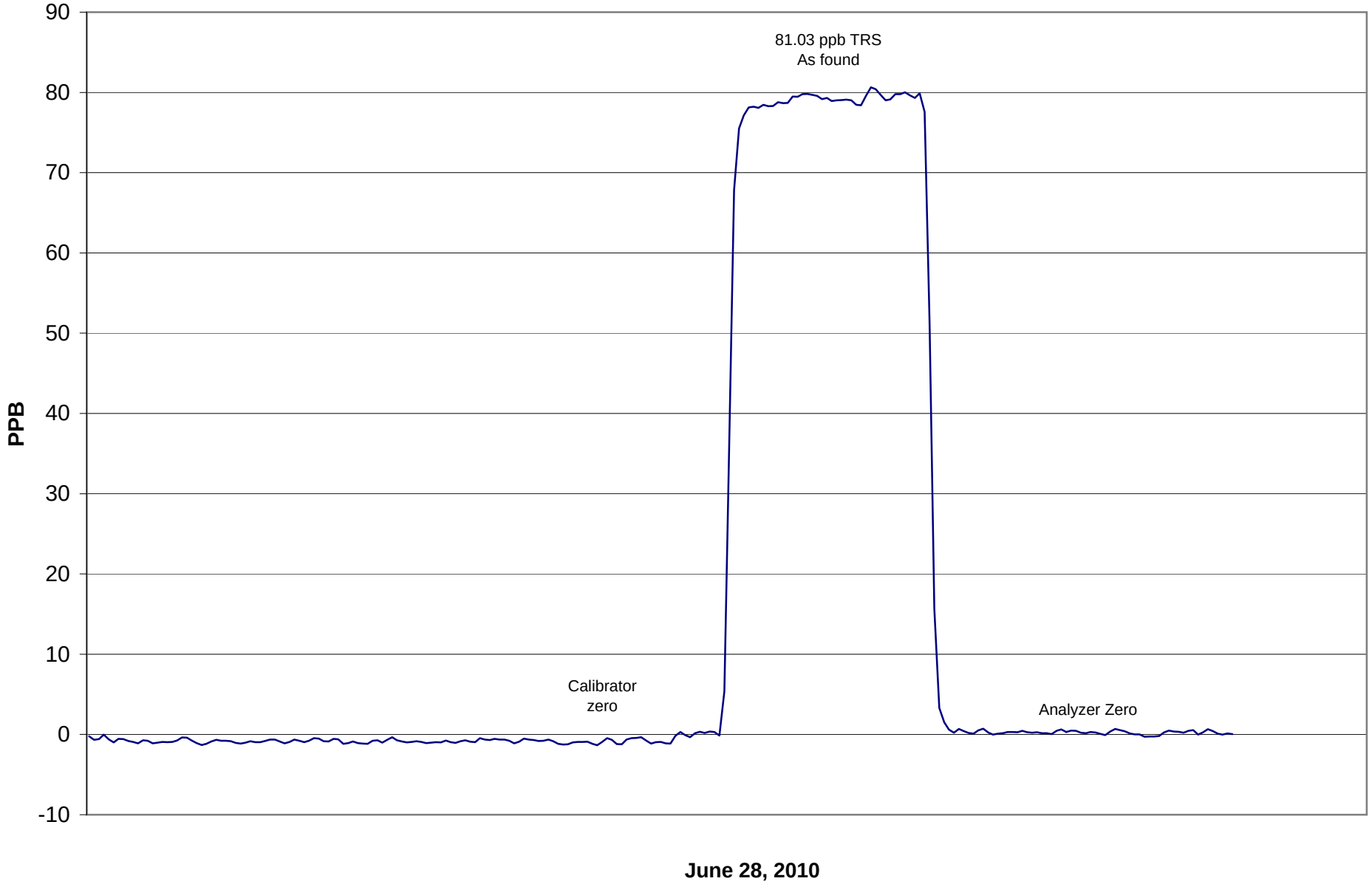
Calibration Date	June 28, 2010	Previous Calibration	June 10, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:45	End Time (MST)	12:57
Analyzer make/model	TEI 43C	Analyzer serial #	3.199E+13

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.652	N/A		
81.026	79.130	1.0240	Correlation Coefficient	1.000000
			Slope	1.015601
			Intercept	0.662155



Henry Pirker TRS Calibration



Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	8:00		End Time (MST)	15:27	
Barometric Pressure	0.925	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3474	
NO Cal Gas Conc	49.6	ppm	Cal Gas Expiry Date	June 8, 2008	
NOx Cal Gas Conc	49.6	ppm	Cal Gas Serial #	AAL 15377	

DACS Information

DACS make: Focus AP1000 DACS serial No.:

Parameter		NO2	NOx	NO
Before	Data Slope	1.000050	1.006028	1.004617
	Data Offset	-0.279852	-2.733204	-2.481294
After	Data Slope	1.002001	1.005499	1.004154
	Data Offset	0.273088	-2.507828	-2.154573
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	10.4	mV
NOx bkgnd	11.0	mV	10.6	mV
NO coefficient	0.785		0.778	
NOx coefficient	1.000		1.000	
NO2 conv temp	318.0	Deg C	318.0	Deg C
PMT Temp	-2.5	Deg C	-2.4	Deg C
PMT Volt	-786.0	mV	-786.0	mV
R Cell Press	178.6	in Hg	175.7	in Hg
Sample Flow	0.749	ccm	0.744	ccm

Notes:

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 1, 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	4988	0.00	0.0	0.0	0.0	-0.2	0.0	0.0	N/A	N/A
1	4988	39.83	392.9	392.9	0.0	391.6	392.3	-0.8	1.0035	1.0017
2	4989	19.89	197.0	197.0	0.0	200.6	199.5	1.1	0.9816	0.9873
3	4988	9.93	98.5	98.5	0.0	102.6	102.4	0.2	0.9602	0.9621
AFZ	4988	0.00	0.0	0.0	0.0	-0.2	0.0	0.0	0.0000	0.0000
AFS	4988	39.83	392.9	392.9	0.0	391.6	392.3	-0.8	1.0035	1.0017
							Average Correction Factor		0.9818	0.9837

As Found Concentrations: NO_X= 389.0 NO= 389.8 As Found Percent Change NO_X= -1.0% NO= -0.8%

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	-0.2	0.0	0.0	N/A	N/A	N/A	N/A
NO point	392.4	392.4	0.0	392.4	392.4	-0.1	1.0000	1.0000	N/A	N/A
300	392.4	111.1	281.2	391.9	111.1	280.6	1.0013	1.0000	1.0024	99.8%
200	392.4	202.2	190.2	391.6	202.2	189.6	1.0020	1.0000	1.0034	99.7%
100	392.4	291.2	101.2	391.3	291.2	100.2	1.0027	1.0000	1.0093	99.1%
					Average Correction Factor		1.0020	1.0000	1.0050	99.5%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.0	ppb	-0.3	-0.4	0.0	ppb
Auto span	168.4	169.5	1.2	ppb	171.2	170.1	1.0	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

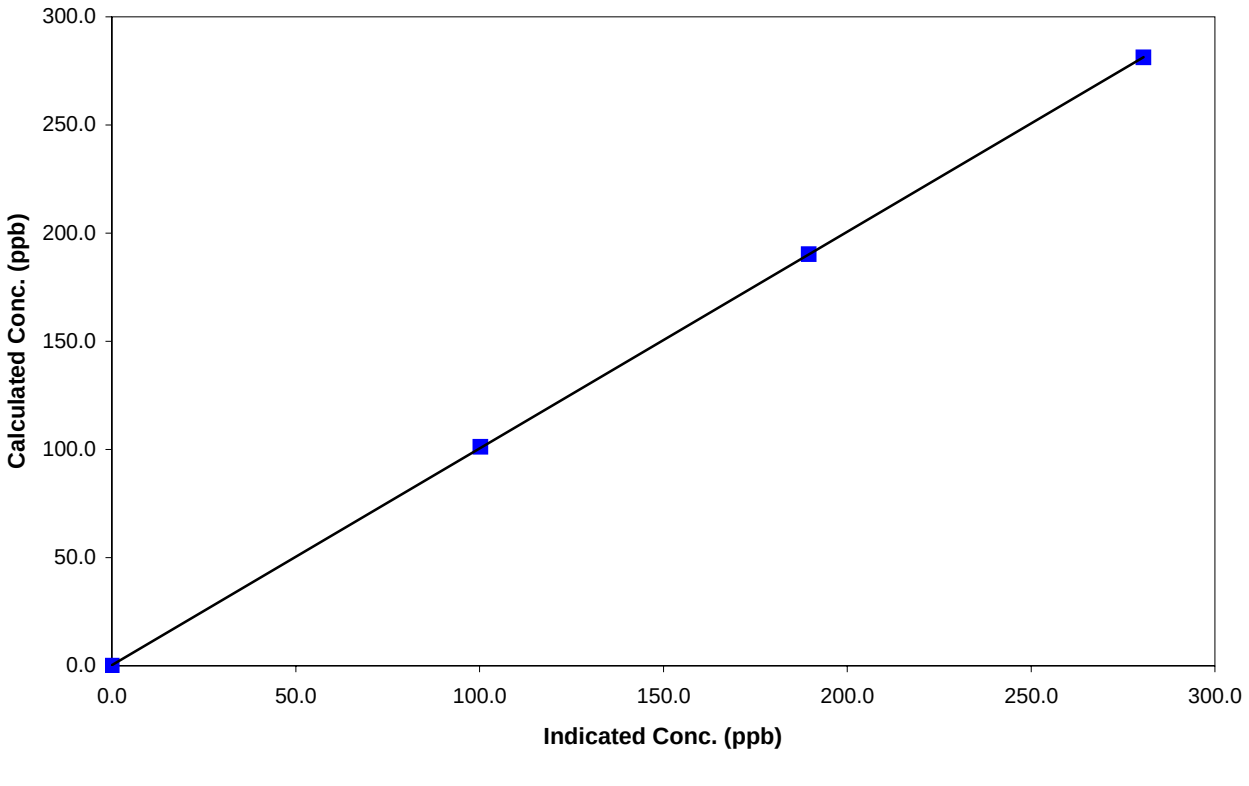
Station Information

Calibration Date	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:00	End Time (MST)	15:27
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		
281.2	280.6	1.0024	Correlation Coefficient	0.999993
190.2	189.6	1.0034		
101.2	100.2	1.0093	Slope	1.002001
			Intercept	0.273088

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

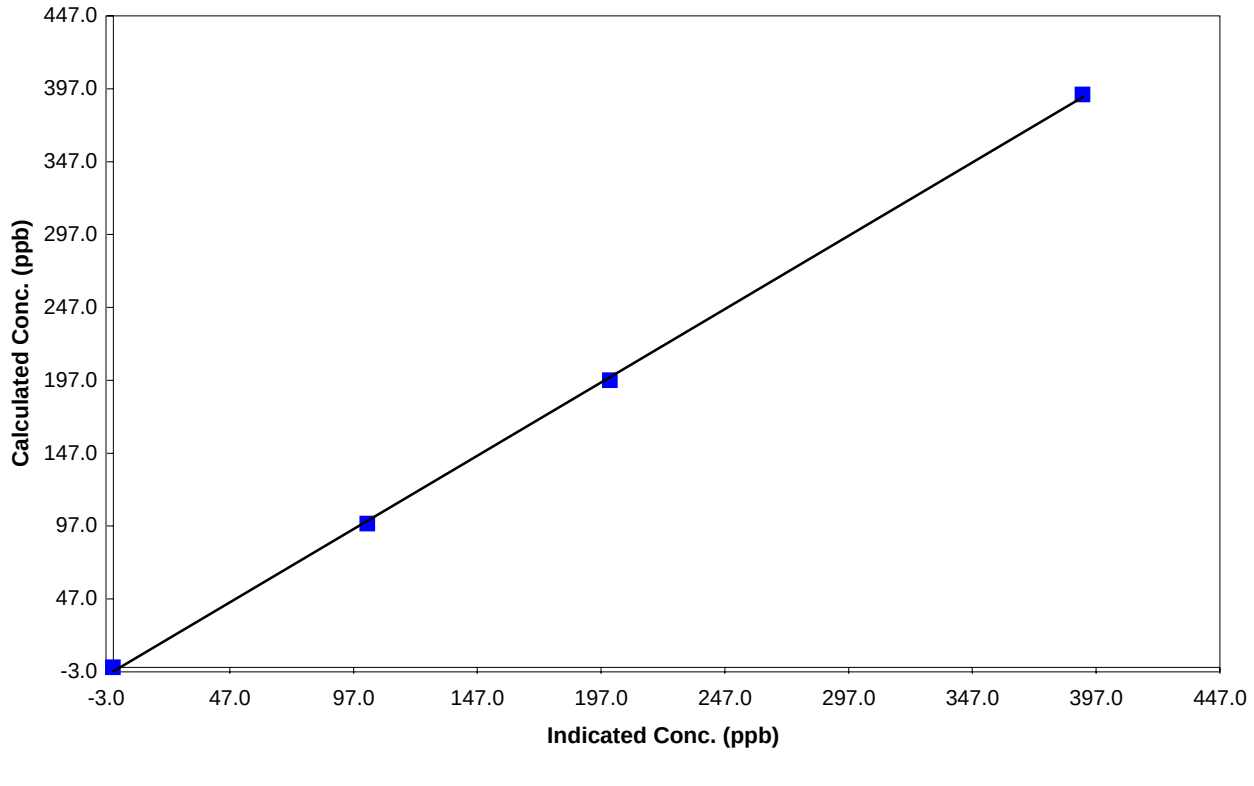
Station Information

Calibration Date	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:00	End Time (MST)	15:27
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	-0.2	N/A		
392.9	391.6	1.0035	Correlation Coefficient	0.999763
197.0	200.6	0.9816		
98.5	102.6	0.9602	Slope	1.005499
			Intercept	-2.507828

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

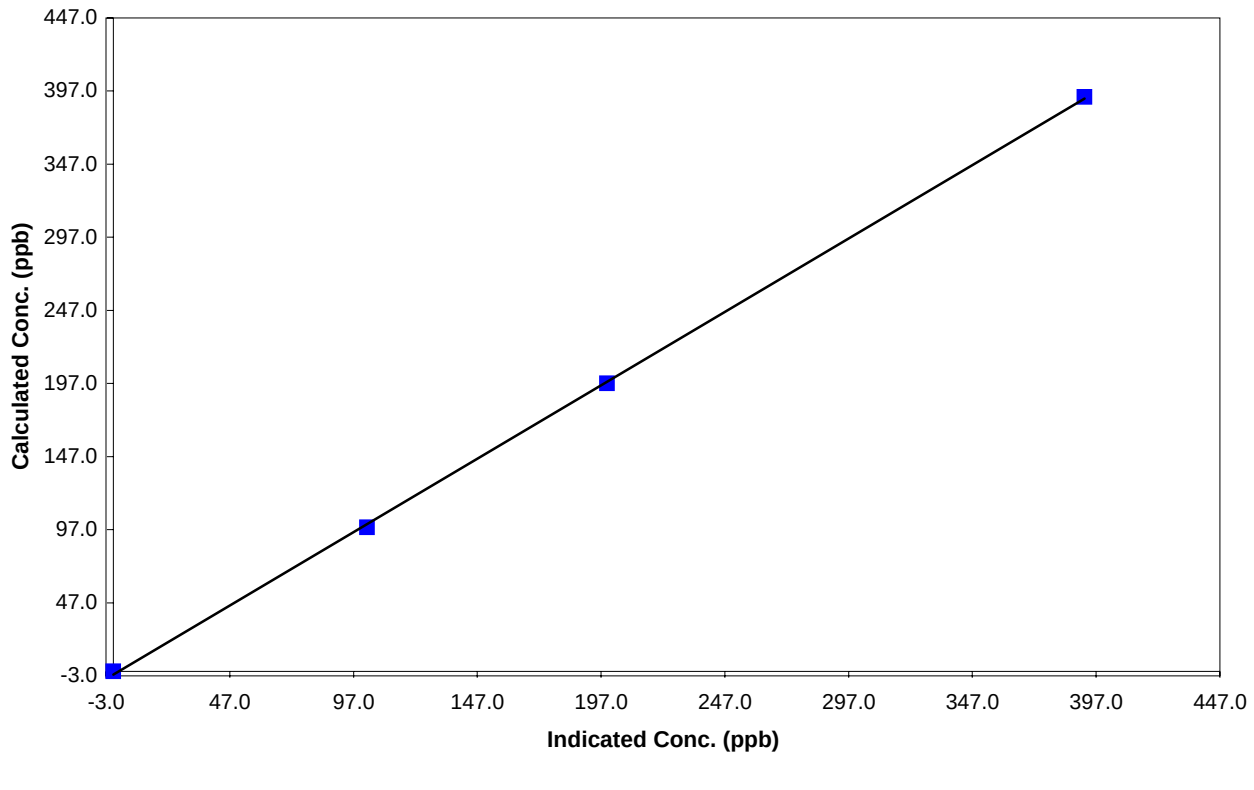
Station Information

Calibration Date	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:00	End Time (MST)	15:27
Analyzer make	TEI 42C	Analyzer serial #	508011073

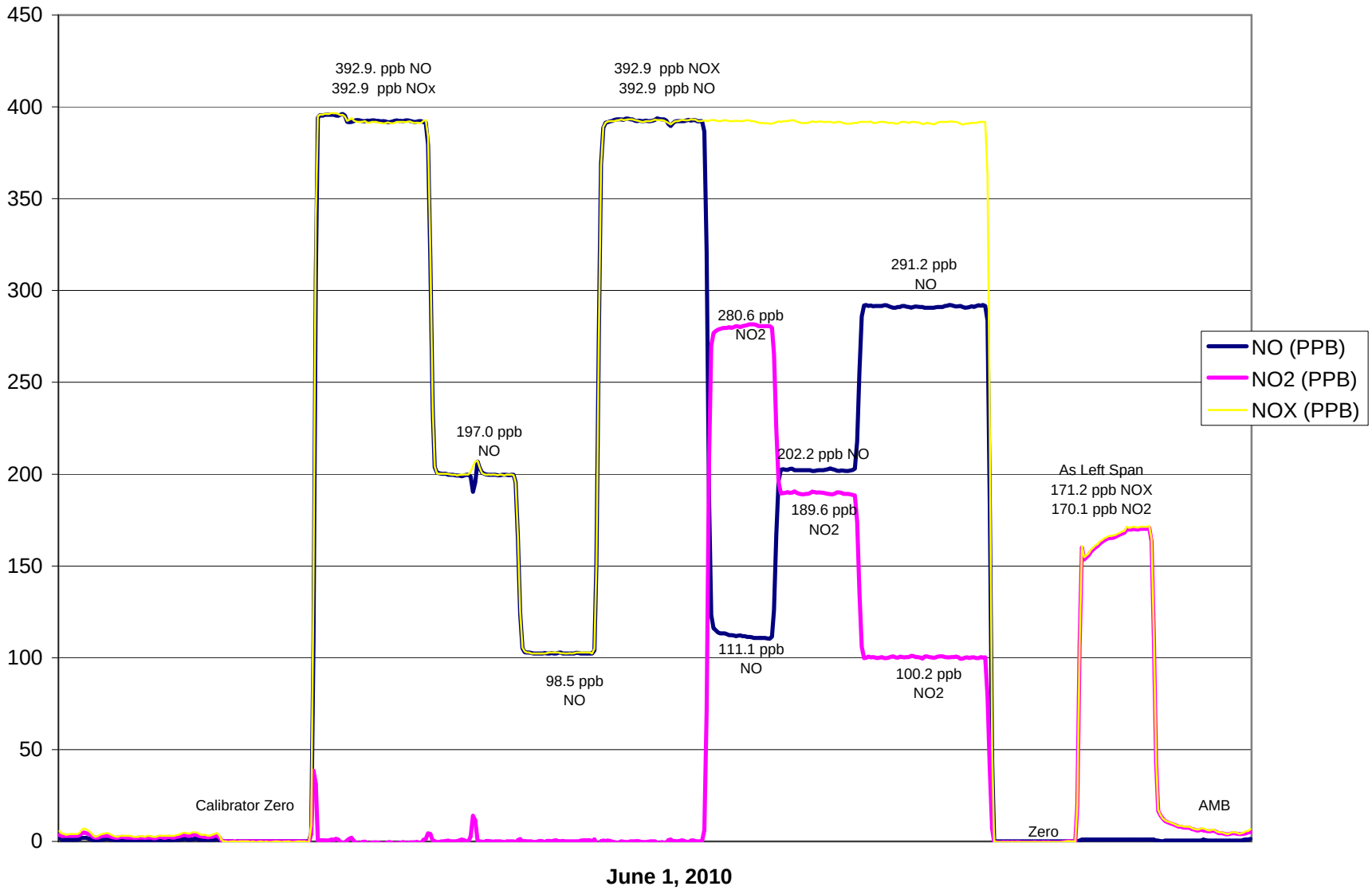
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
392.9	392.3	1.0017	Correlation Coefficient	0.999855
197.0	199.5	0.9873		
98.5	102.4	0.9621	Slope	1.004154
			Intercept	-2.154573

NO Calibration Curve



Henry Pirker NO_X Calibration



June 1, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 28, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker

Reason: **Routine** Installation Removal Other:

Start Time (MST)	10:41		End Time (MST)	12:04	
Barometric Pressure	0.925	Atm	Station Temperature	25.0	Deg C
Calibrator	Environics		Serial Number	3474	
NO Cal Gas Conc	49.6	ppm	Cal Gas Expiry Date	June 8, 2008	
NOx Cal Gas Conc	49.6	ppm	Cal Gas Serial #	AAL 15377	

DACS Information

DACS make: Focus AP1000 DACS serial No.:

Parameter		NO2	NOx	NO
Before	Data Slope	1.000050	1.006028	1.004617
	Data Offset	-0.279852	-2.733204	-2.481294
After	Data Slope		1.127906	1.127673
	Data Offset		0.476673	0.014364
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	10.3	mV	10.2	mV
NOx bkgnd	10.9	mV	10.8	mV
NO coefficient	0.776		0.776	
NOx coefficient	1.000		1.000	
NO2 conv temp	318.0	Deg C	318.0	Deg C
PMT Temp	-2.4	Deg C	-2.5	Deg C
PMT Volt	-786.0	mV	-786.0	mV
R Cell Press	198.6	in Hg	199.4	in Hg

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 28, 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	4989	0.00	0.0	0.0	0.0	-0.4	0.0	-0.5	N/A	N/A
1	4989	39.85	393.0	393.0	0.0	348.0	348.5	-0.4	1.1293	1.1277
2										
3										
AFZ	4989	0.00	0.0	0.0	0.0	-0.4	0.0	-0.5	0.0000	0.0000
AFS	4989	39.83	392.8	392.8	0.0	348.0	348.5	-0.4	1.1287	1.1272
							Average Correction Factor		1.1293	1.1277

As Found Concentrations: NO_X= 345.7 NO= 346.1 As Found Percent Change NO_X= -12.0% NO= -11.9%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.85 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	-0.4	0.0	-0.5	N/A	N/A	N/A	N/A
NO point									N/A	N/A
300										
200										
100										
					Average Correction Factor					

AIC Data

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

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

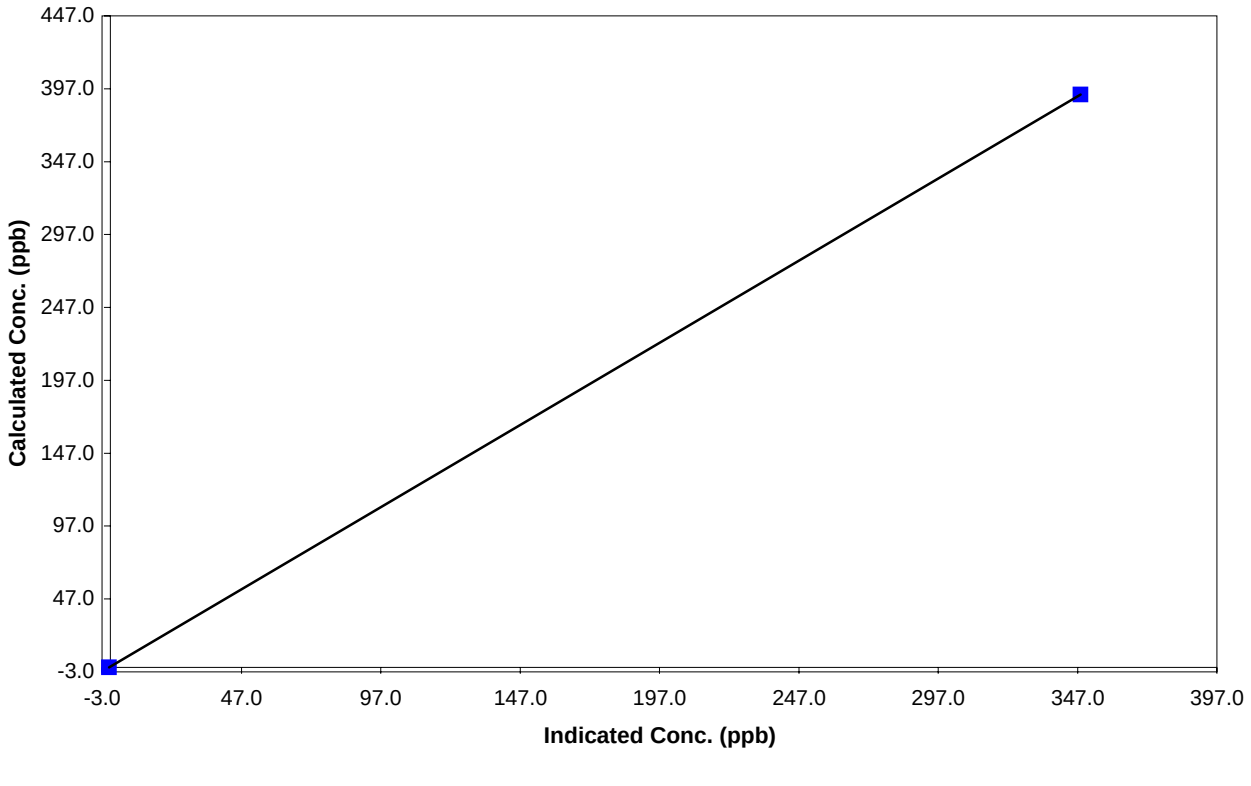
Station Information

Calibration Date	June 28, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:41	End Time (MST)	12:04
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	-0.4	N/A		
393.0	348.0	1.1293	Correlation Coefficient	1.000000
			Slope	1.127906
			Intercept	0.476673

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

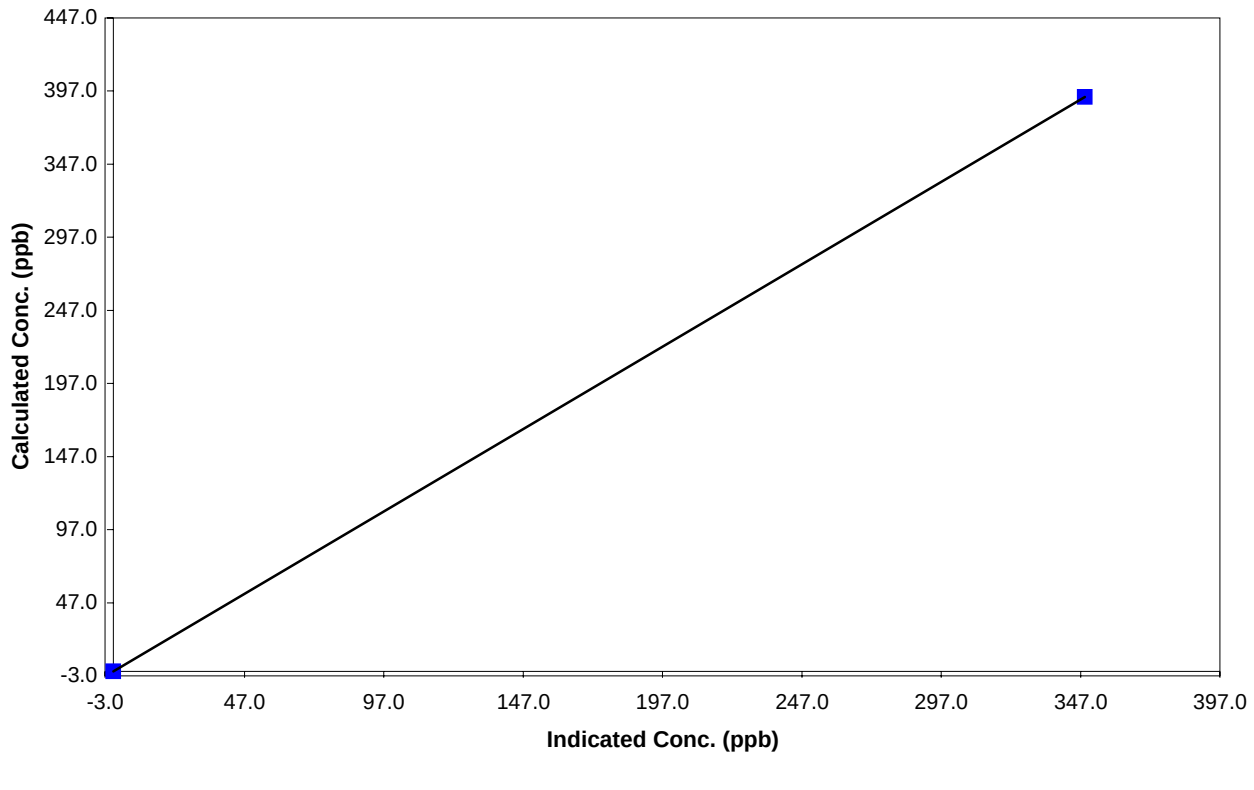
Station Information

Calibration Date	June 28, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:41	End Time (MST)	12:04
Analyzer make	TEI 42C	Analyzer serial #	508011073

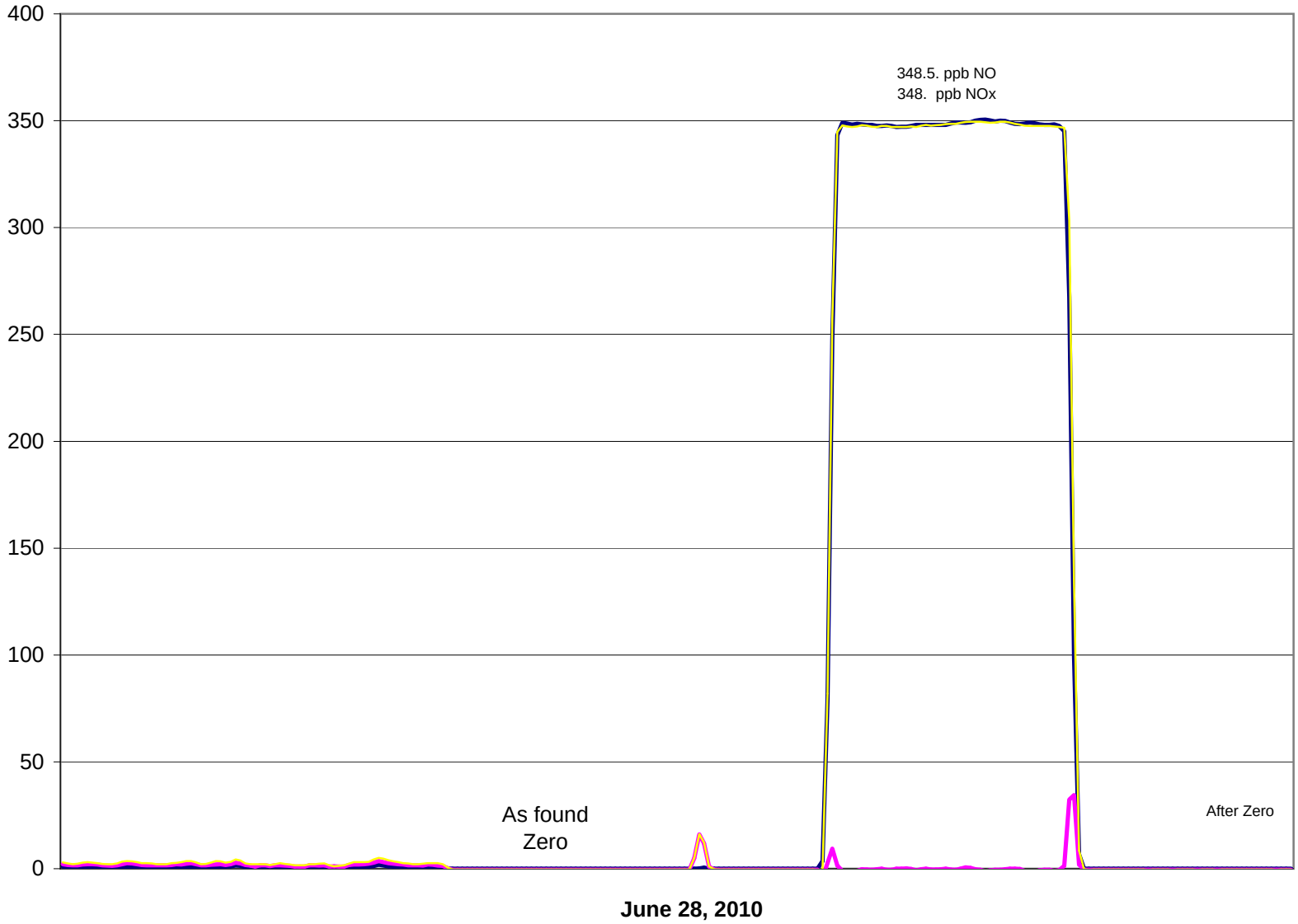
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
393.0	348.5	1.1277	Correlation Coefficient	1.000000
			Slope	1.127673
			Intercept	0.014364

NO Calibration Curve



Henry Pirker NO_X Calibration



Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Reason: Routine / Install / Removal / Other:	Routine	Install	Removal / Other:
Start Time (MST)	10:15	End Time (MST)	16:25
Barometric Pressure	0.925 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	0.995931	Calculated slope	0.998751
Calculated intercept	-0.573223	Calculated intercept	0.343555
Analyzer make	TECO 49C	Analyzer serial #	607415761

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.4	ppb	-0.6	ppb
slope	1.028		1.018	
O3 Lamp temp	71	Deg C	71	Deg C
Intensities	86042/74229	mV	84671/73134	mV
Pressure	685.6	inches Hg	691.9	inches Hg
Flow A	0.719	ccm	0.719	ccm
Flow B	0.734	ccm	0.740	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	0.1	N/A
300	4989	281.0	281.5	0.9985
200	4989	190.2	189.7	1.0024
100	4989	101.2	100.5	1.0072
				As found zero
				As found span
			Average Correction Factor	1.0027

Calculated value of As Found Response: NA ppm Percent Change of As Found: NA

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	153.0	ppb	147.1	ppb

Notes: As found not accurate do to faulty adjustment made on failing calibrator zero air supply issue.
Virtually no change in daily span indicate analyzer adjustment and operation was accurate.

Calibration Performed By: **Grover Christiansen/Courtney Thompson**

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

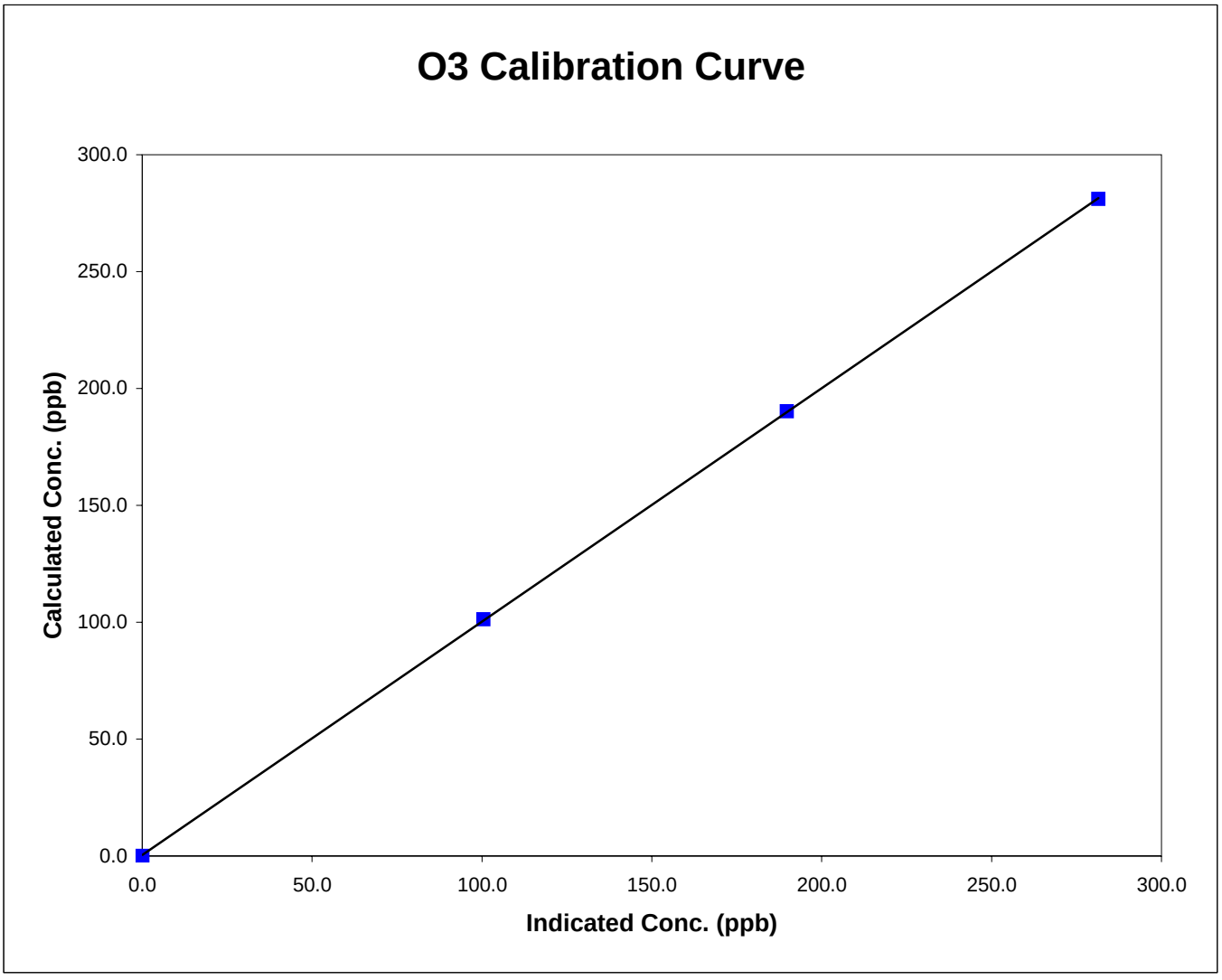
FOCUS AIR QUALITY MONITORING

Station Information

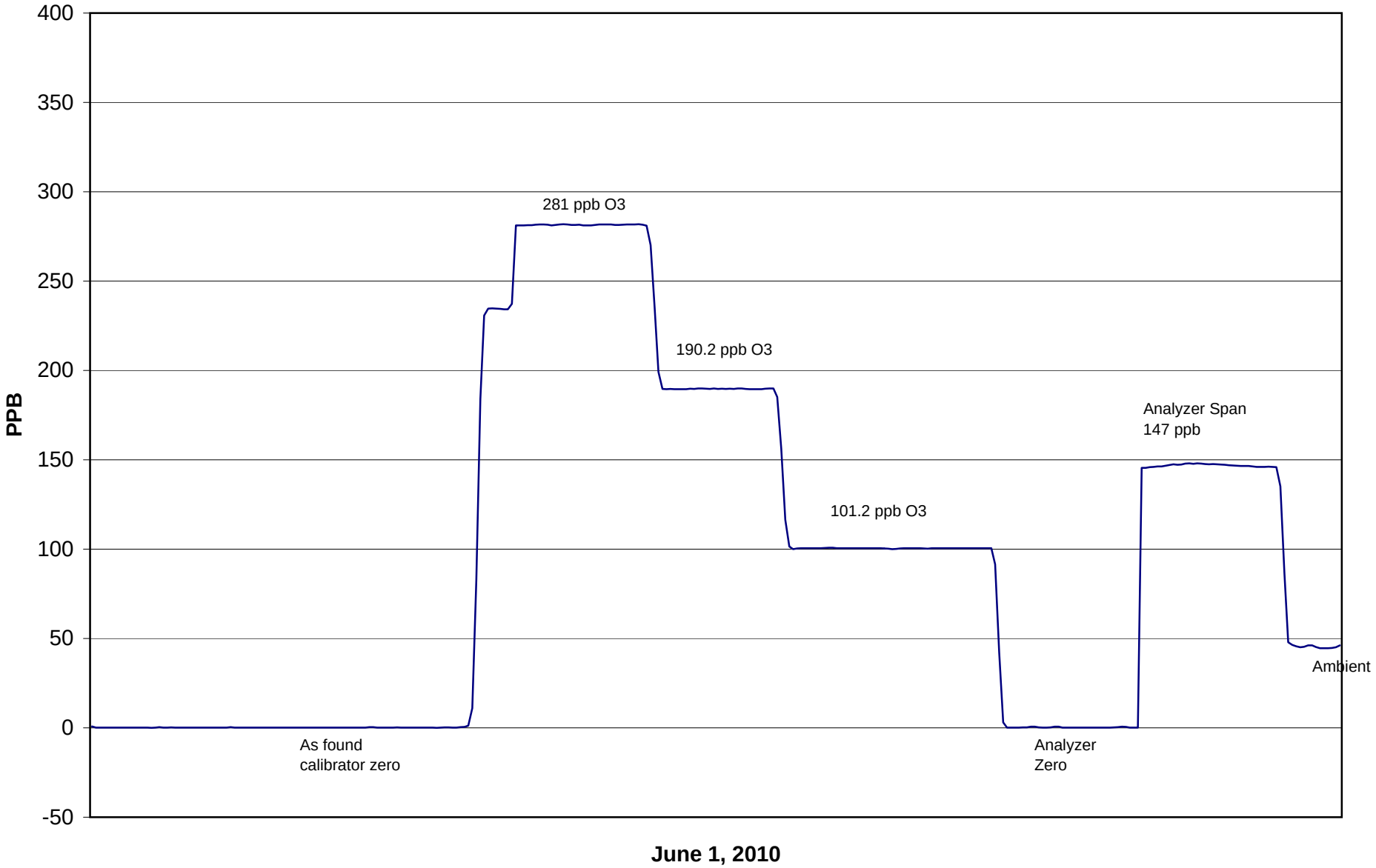
Calibration Date	June 1, 2010	Previous Calibration	May 17, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:15	End Time (MST)	16:25
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
281.0	281.5	0.9985	Correlation Coefficient	0.999983
190.2	189.7	1.0024		
101.2	100.5	1.0072	Slope	0.998751
			Intercept	0.343555



Henry Pirker O_3 Calibration



Calibration Report

Parameter **CO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 2, 2010	Previous Calibration	April 29, 2010
Station Number	1	Station Location	Henry Pirker

Reason: Routine | Install | Removal | Other:

Start Time (MST)	10:21	End Time (MST)	12:44
Barometric Pressure	0.915 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	1.005928	Calculated slope	1.021092
Calculated intercept	-0.208527	Calculated intercept	-0.218260

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	9.747		9.817	
Sample pressure	666.5	mm Hg	675.1	mm Hg
Sample Flow	1.118	LPM	1.126	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	0.24	N/A
4989	39.84	23.77	23.50	1.0113
4989	19.90	11.92	11.88	1.0036
4989	9.95	5.97	6.03	0.9897
4990	0.00	0.00	0.24	As Found Zero
4989	39.84	23.77	23.50	As Found Span
			Average Correction Factor	1.0015

Calculated value of As Found Response: 23.193 ppm Percent Change of As Found: 2.4%

	before calibration		after calibration	
Auto zero	0.03	ppm	-0.20	ppm
Auto span	19.80	ppm	19.54	ppm

Notes:

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary

Parameter **CO**

Air Monitoring Network **PASZA**

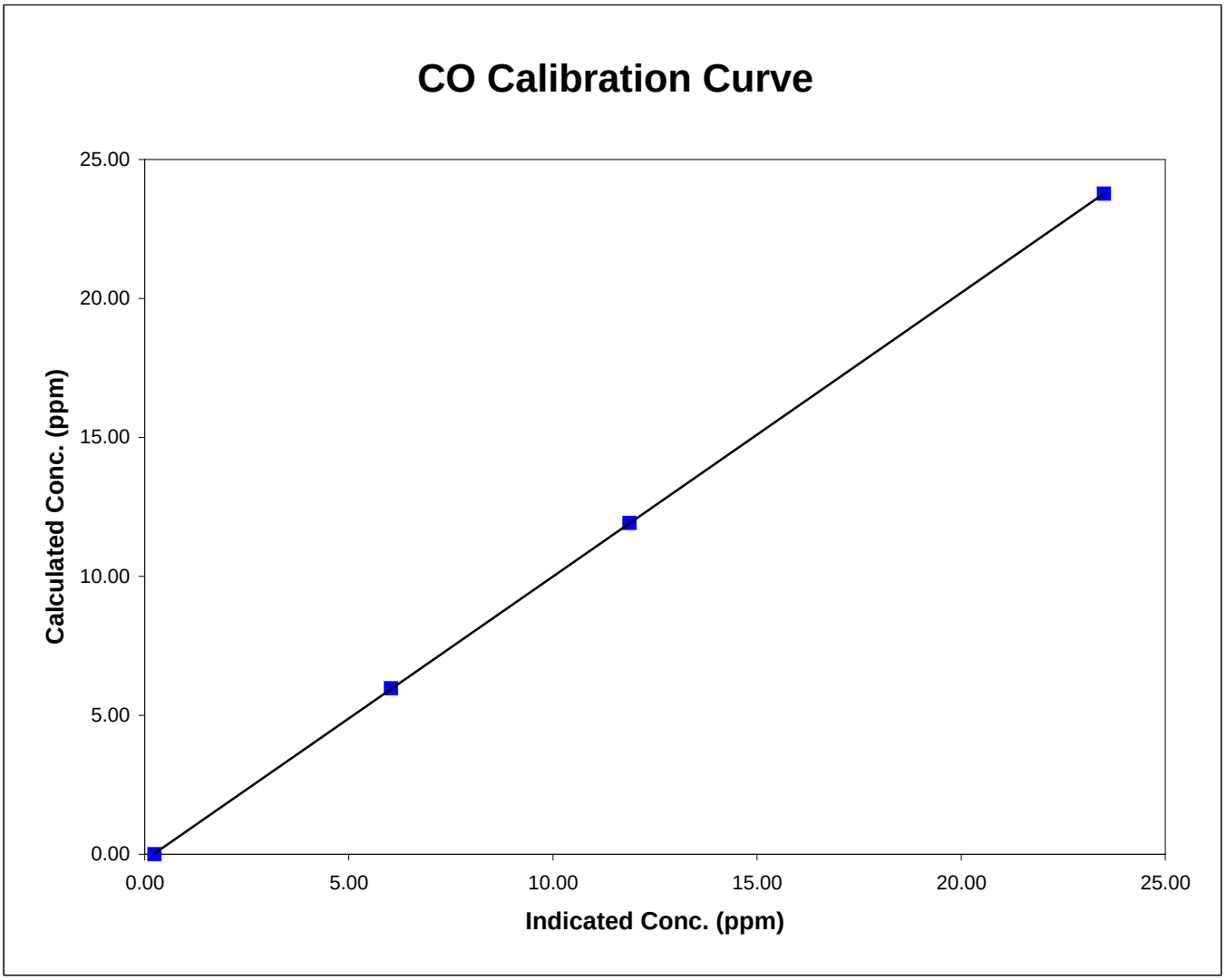
FOCUS AIR QUALITY MONITORING

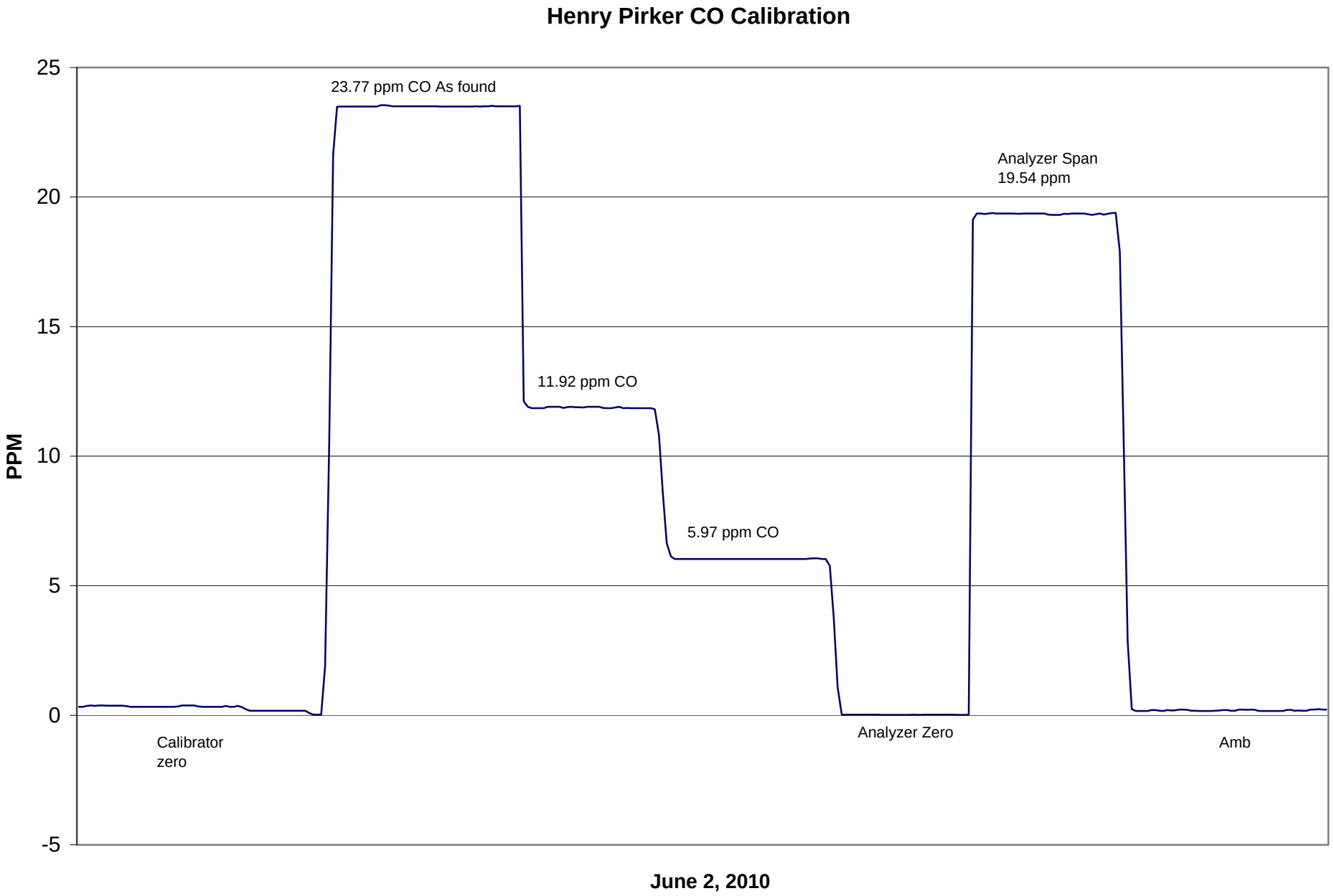
Station Information

Calibration Date	June 2, 2010	Previous Calibration	April 29, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:21	End Time (MST)	12:44
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	0.240	N/A		
23.767	23.502	1.0113	Correlation Coefficient	0.999994
11.919	11.876	1.0036		
5.971	6.034	0.9897	Slope	1.021092
			Intercept	-0.218260




Henry Pirker CO Calibration
25
20
15
10
5
0
-5
PPM
23.77 ppm CO As found
11.92 ppm CO
5.97 ppm CO
Analyzer Span
19.54 ppm
Calibrator
zero
Analyzer Zero
Amb
June 2, 2010

Calibration Report

Parameter **THC**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 2, 2010	Previous Calibration	May 8, 2010
Station Number	1	Station Location	Henry Pirker

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

Start Time (MST)	11:40	End Time (MST)	13:56
Barometric Pressure	0.915 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	1.003975	Calculated slope	1.016572
Calculated intercept	-0.035023	Calculated intercept	0.060640

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	9615	capture	9611	capture
THC zero counts	431	capture	449	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	-0.06	N/A
4989	69.77	21.01	20.63	1.0183
4989	29.94	9.09	8.80	1.0323
4989	9.92	3.02	2.97	1.0195
4988	0.00	0.00	-0.06	As Found Zero
4989	69.50	21.01	20.63	As Found Span
			Average Correction Factor	1.0234

Calculated value of As Found Response: 20.740 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	0.10	ppm	-0.02	ppm
Auto span	21.34	ppm	25.47	ppm

Notes:

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary

Parameter **THC**

Air Monitoring Network **PASZA**

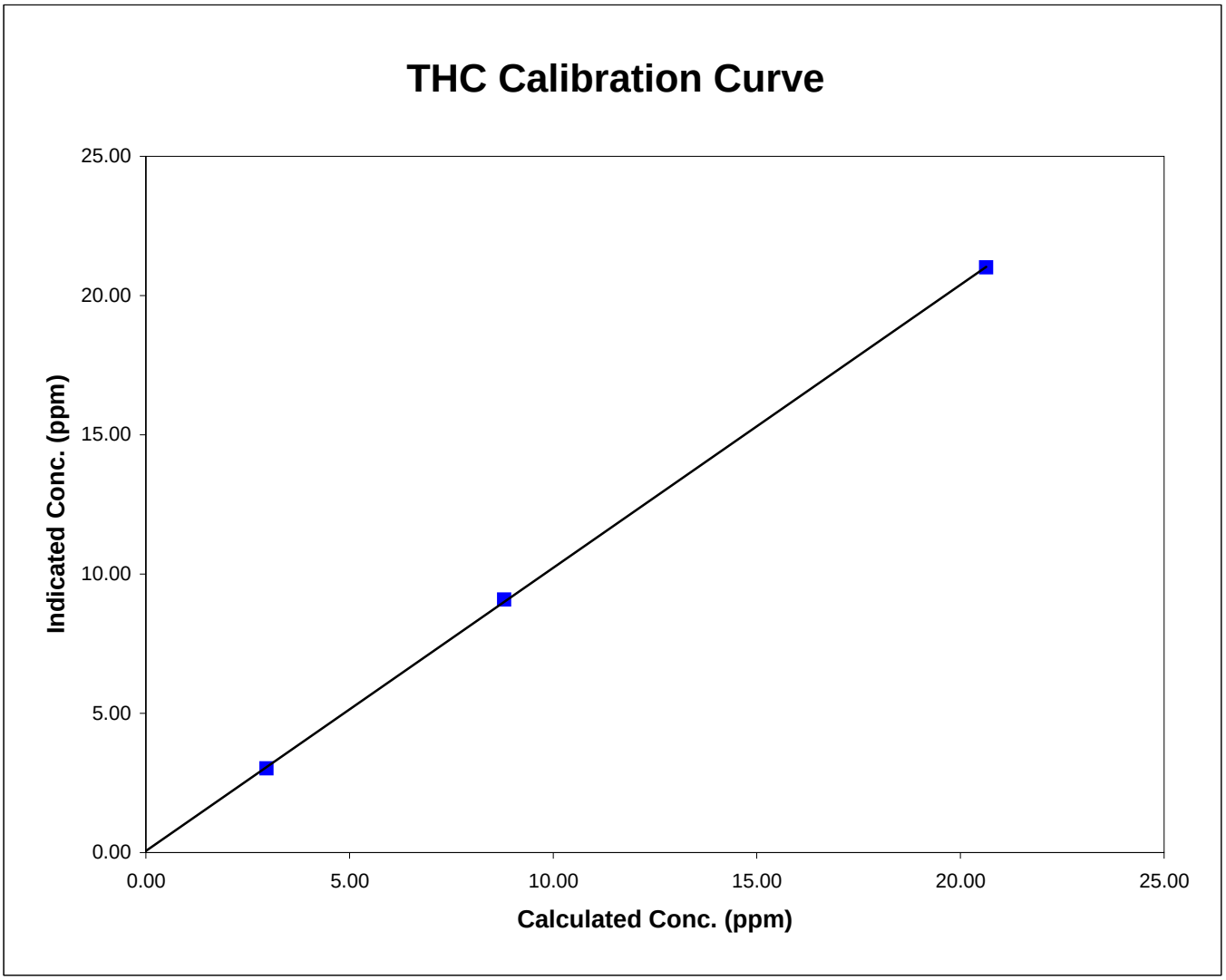
FOCUS AIR QUALITY MONITORING

Station Information

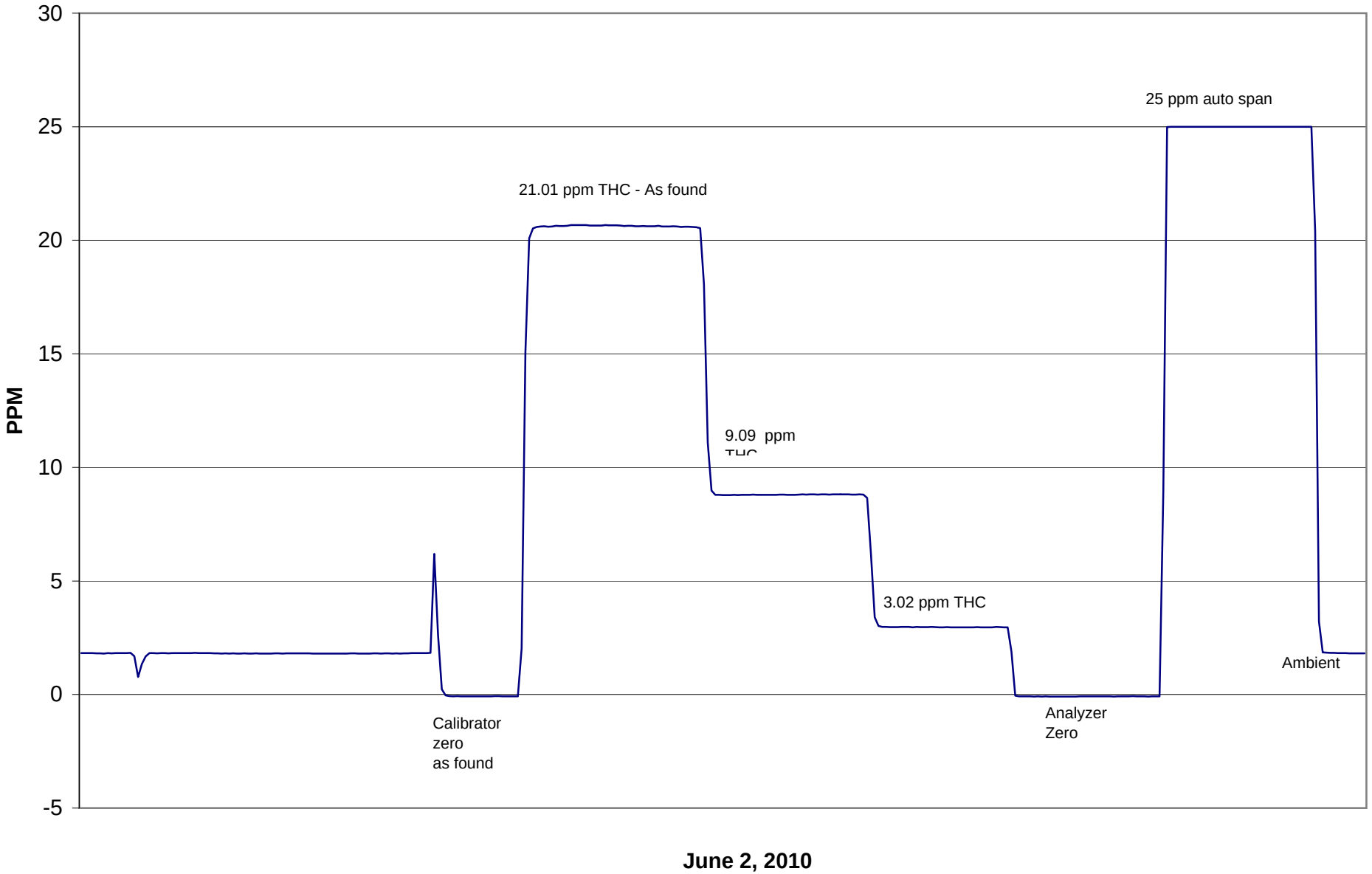
Calibration Date	June 2, 2010	Previous Calibration	May 8, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:40	End Time (MST)	13:56
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.059	N/A		
21.008	20.632	1.0183	Correlation Coefficient	0.999963
9.087	8.802	1.0323		
3.023	2.965	1.0195	Slope	1.016572
			Intercept	0.060640



Henry Pirker THC Calibration



FDMS AB TEOM PM2.5 AUDIT

FOCUS AIR QUALITY MONITORING

STATION: **Henry Pirker**
LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen/Courtne
DATE: 6/9/2010

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	AMU 1697
Site Number	1
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.000
T-Case Indicated / Set Point	30/30
T-Air Indicated / Set Point	30/30
T-Cap Indicated / Set Point	30/30
Splitter Assembly Alignment (cm)	15.5

(vs. specified depth of 15.5 cm from top of flow tube to top of concentric 1/2 in. tube)

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	18-May-10
Previous Calibration	NA

PUMP CAPACITY CHECK *	PASS

* capacity test or pump on timed test utilized to verify pump integrity

"FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.000	0.000
PUMP OFF	0.030	-0.080
NET	-0.030	0.080
LIMITS	*<0.15*	*<0.60*

]

		Ambient Temp. (^{U}C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
	SET POINT (S)	na	na	13020	13.67	3.000
	INDICATED (I)	21.5	0.915		13.65	3.000
As Found Data	MEASURED (AF)	21.5	0.915		13.68	3.001
Adjusted Data	MEASURED (M)	21.5	0.915	12919	13.68	3.001
	DIFFERENCE (M-I)	0.0	0.000	-0.8%	0.07	0.03
	LIMITS	*± 2 ^{0} C*	*± 0.005 atm*	*± 2.5 %*	*± 1.0 L/min*	*± 0.2 L/min*

Ko Audit Filter data *Weight:* 0.11014 *Serial #:* *CVK 2123*

COMMENTS: PASS

Sample Head Inspection Or Cleaning:

PM10: Cleaned
PM2.5: Cleaned

TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACEMENT:

TEOM IN LINE:
Main: Good
AUX: Replace next cal.

FDMS Water knck out:Good

FDMS 47 mm Filter Cassette: Replaced

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 14, 2010	Previous Calibration	May 23, 2010
Station Number	2	Station Location	Evergreen Park

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

Start Time (MST)	8:46	End Time (MST)	11:52
Barometric Pressure	0.926 ATM	Station Temperature	5.2 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.033152	Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.001218	Calculated slope	1.010438
Calculated intercept	-2.004445	Calculated intercept	-2.737553

Analyzer make	Teco 43i	Analyzer serial # 701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	10.9		10.9	
coefficient	1.051		1.051	
Lamp Voltage	829	volts	830	volts
Chamber Temp	45.3	Deg C	45.2	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	670.1	mm Hg	669.8	mm Hg
Sample Flow	0.453	ccm	0.451	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	0.5	N/A
4991	39.85	400.81	398.2	1.0066
4991	19.91	201.05	202.9	0.9908
4991	9.96	100.78	104.6	0.9638
	0.0			
4991	0.0	0.00	0.5	As Found Zero
4991	39.85	400.81	398.2	As Found Span
			Average Correction Factor	0.9871

Calculated value of As Found Response: 396.134 ppm Percent Change of As Found: 1.2%

	before calibration		after calibration	
Auto zero	0.7	ppm	0.2	ppm
Auto span	286.9	ppm	289.4	ppm

Notes:

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

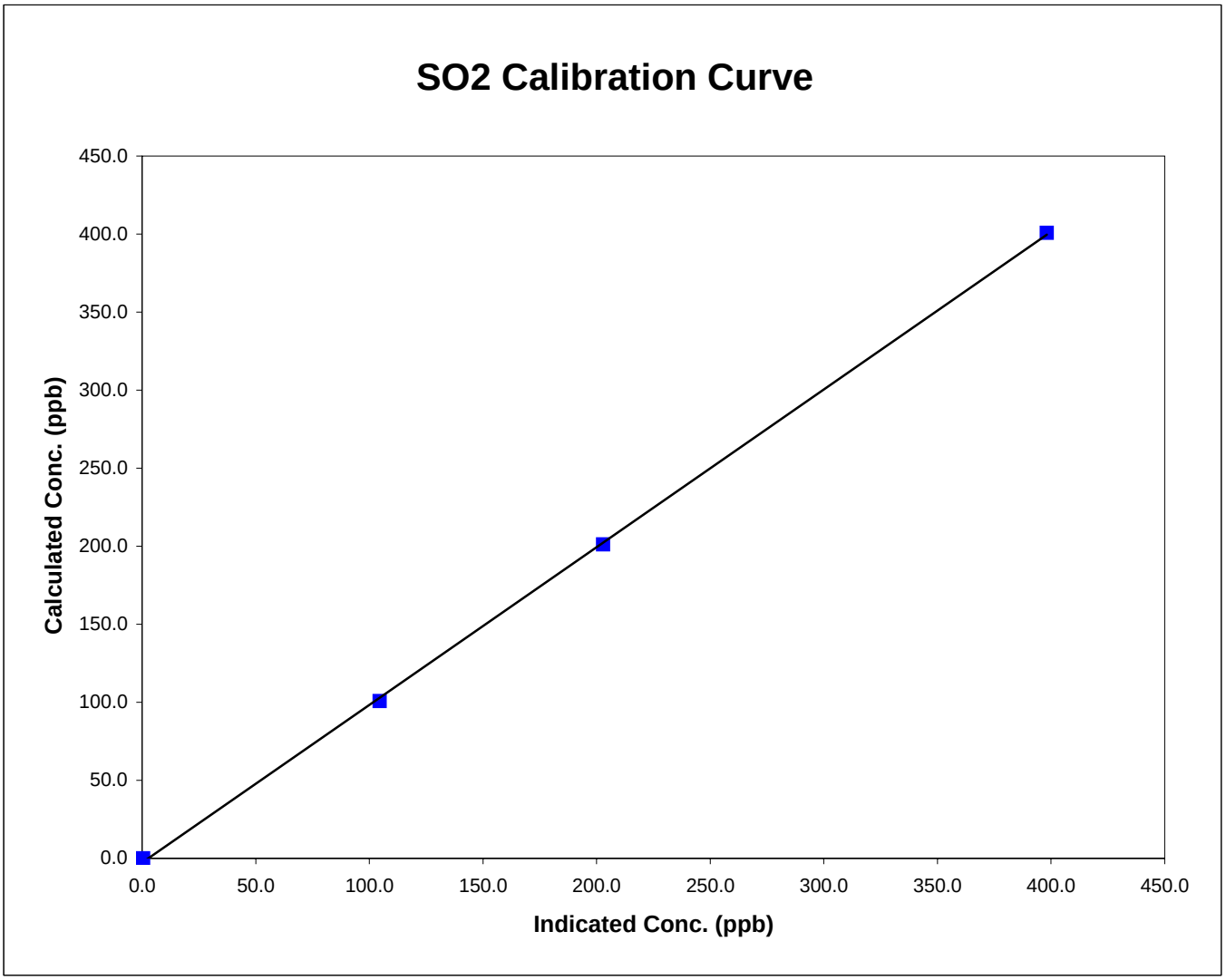
FOCUS AIR QUALITY MONITORING

Station Information

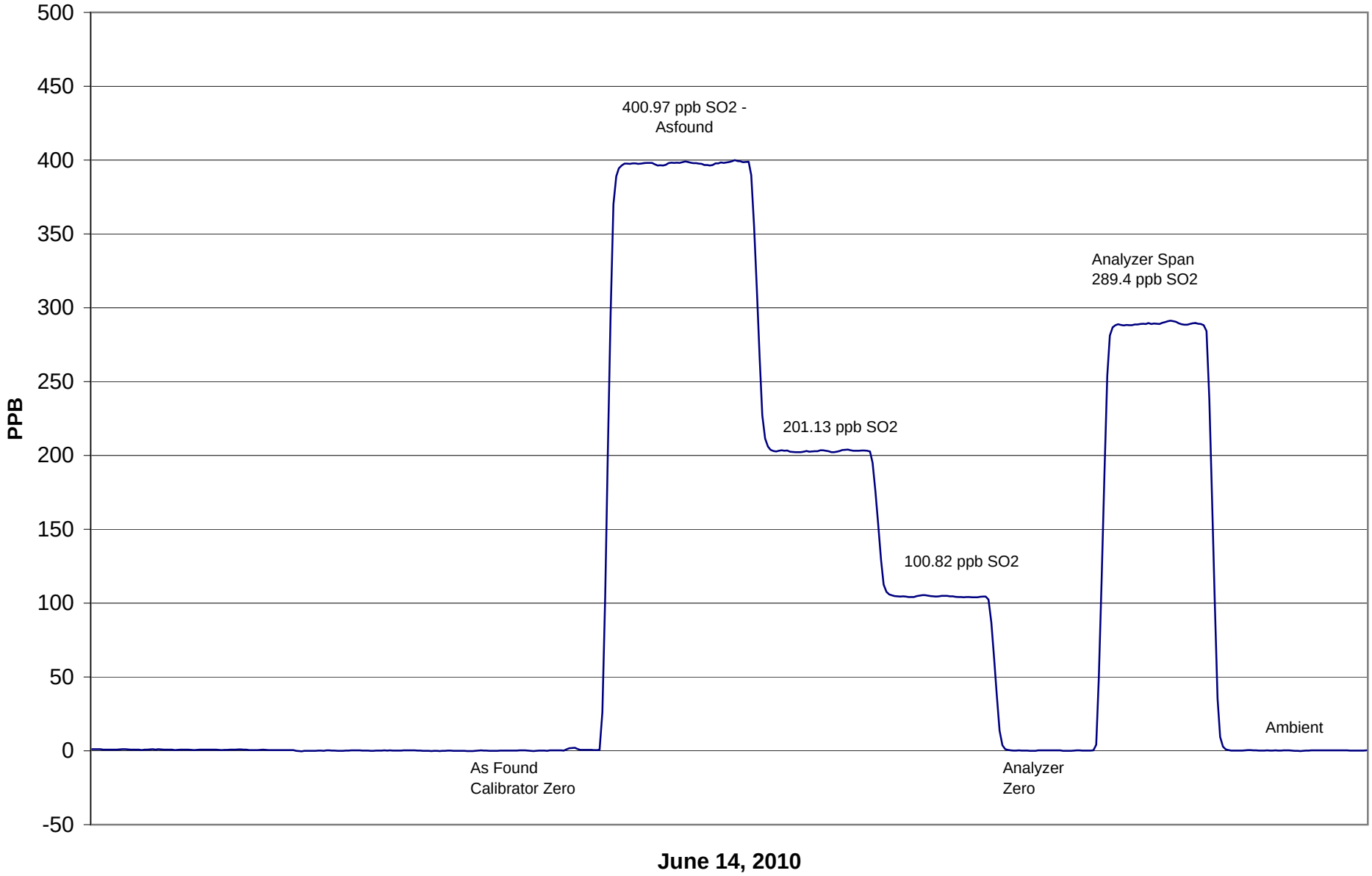
Calibration Date	June 14, 2010	Previous Calibration	May 23, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:46	End Time (MST)	11:52
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A		
400.8	398.2	1.0066	Correlation Coefficient	0.999859
201.1	202.9	0.9908		
100.8	104.6	0.9638	Slope	1.010438
			Intercept	-2.737553



Evergreen Park SO_2 Calibration



Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 14, 2010	Previous Calibration	May 23, 2010
Station Number	2	Station Location	Evergreen Park

Reason: Routine | Install | Removal | Other:

Start Time (MST)	10:40	End Time (MST)	13:37
Barometric Pressure	0.926 ATM	Station Temperature	5.9 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	5.15 ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.033069	Cal Gas Cylinder #	ALM 013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	1.008746	Calculated slope	1.011467
Calculated intercept	-0.322021	Calculated intercept	-0.427580

Analyzer make	TEI Model 43C	Analyzer serial # 436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.3	ppb	15.4	ppb
coefficient	0.859		0.859	
Lamp Voltage	811	volts	811	volts
Chamber Temp	44.1	Deg C	44.2	Deg C
Perm Gas Temp	45	Deg C	44.99	Deg C
Pressure	648.5	mm Hg	644.3	mm Hg
Sample Flow	0.482	ccm	0.480	ccm
Lamp Intensity	45,876	mv	45,813	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	0.2	N/A
4991	79.79	81.04	80.5	1.0067
4991	39.87	40.81	40.8	1.0003
4991	9.95	10.25	10.8	0.9513
4990	0.00	0.00	0.2	As Found Zero
4991	79.79	81.04	80.5	As Found Span
			Average Correction Factor	0.9861

Calculated value of As Found Response: 80.66 ppm Percent Change of As Found: 0.5%

	before calibration		after calibration	
Auto zero	-0.5	ppm	-0.1	ppm
Auto span	62.0	ppm	58.1	ppm

Notes:

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

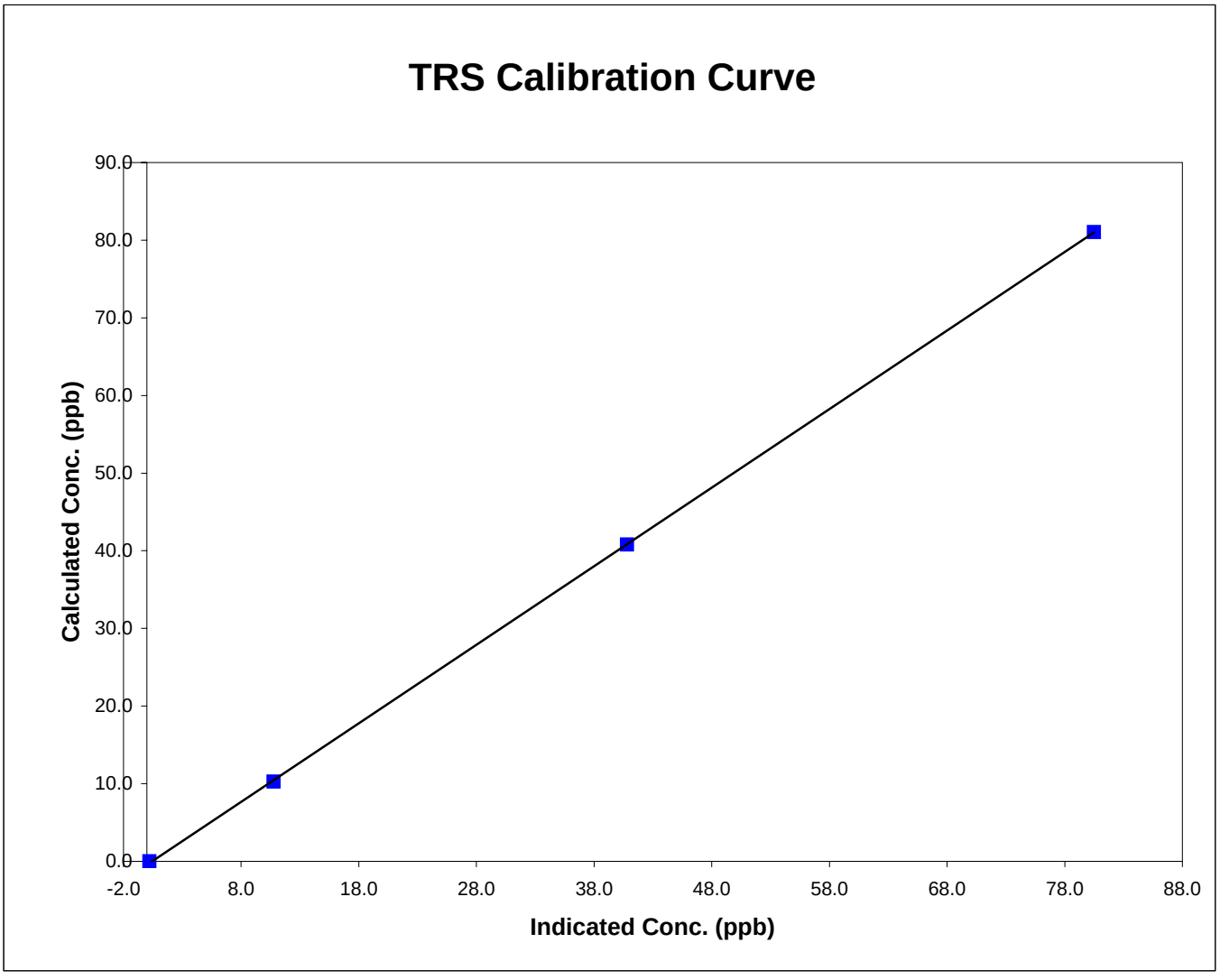
FOCUS AIR QUALITY MONITORING

Station Information

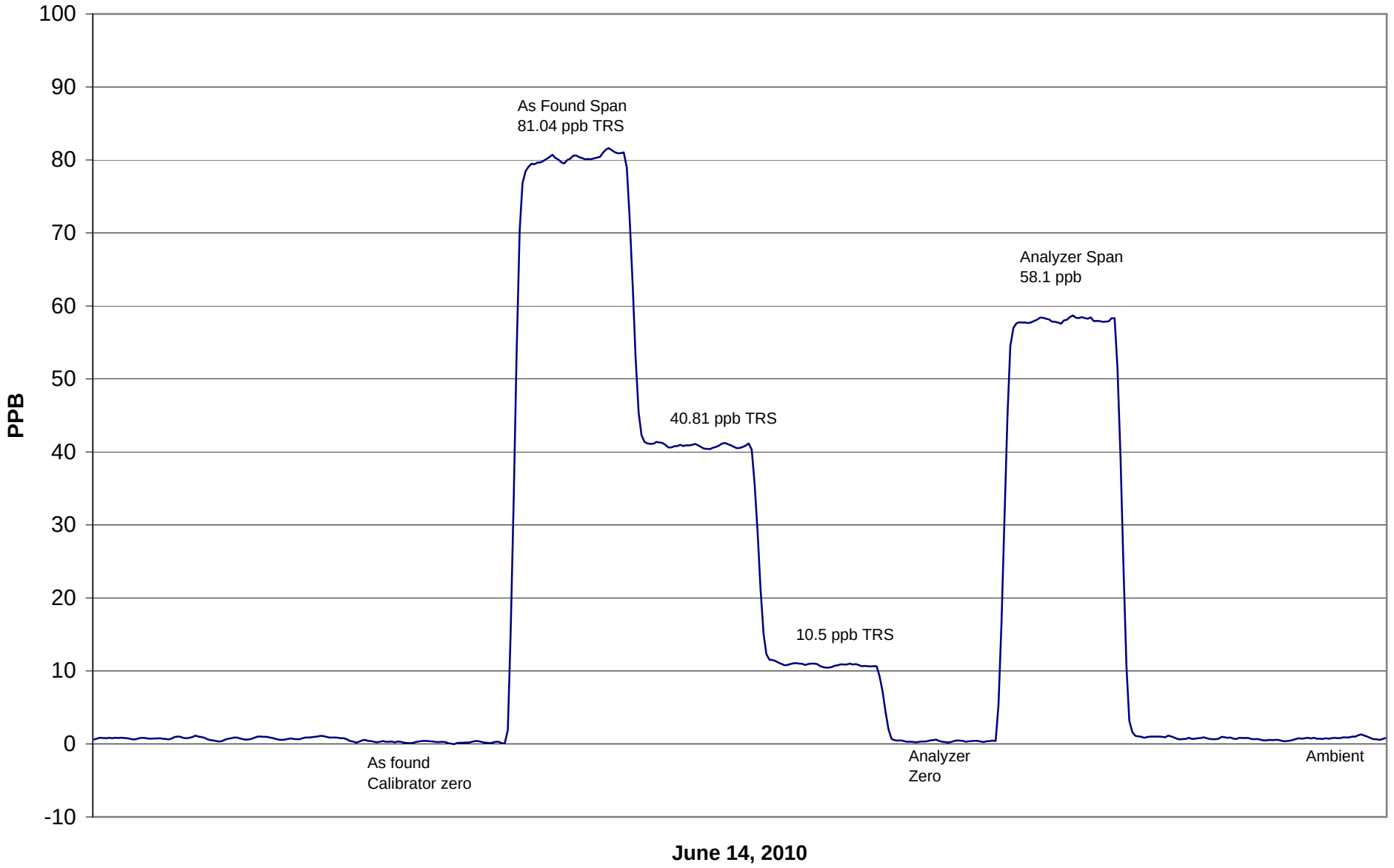
Calibration Date	June 14, 2010	Previous Calibration	May 23, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:40	End Time (MST)	13:37
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
81.0	80.5	1.0067	Correlation Coefficient	0.999977
40.8	40.8	1.0003		
10.2	10.8	0.9513	Slope	1.011467
			Intercept	-0.427580



Evergreen Park TRS Calibration



AB TEOM PM2.5 Calibration

FOCUS AIR QUALITY MONITORING

STATION: **Evergreen Park**

LOCATION: PASZA - Grande Prairie

OPERATOR: G.Christiansen/C. Thompson

DATE: 14-Jun-10

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	21551
Site Number	2
Inlet Type	PM 10 / SCC
FAdj. Main Setting	0.985
FAdj. Aux. Setting	0.975
T-Case Indicated / Set Point	40/40
T-Air Indicated / Set Point	40/40
T-Cap Indicated / Set Point	40/40
Splitter Assembly Alignment (cm)	15.5

(vs. specified depth of 15.5 cm from top of flow tube to top of concentric 1/2 in. tube)

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	23-May-10
Previous Calibration	NA

PUMP CAPACITY CHECK *	PASS

* capacity test or pump on timed test utilized to verify pump integrity

"FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.010	0.010
PUMP OFF	0.000	0.000
NET	0.010	0.010
LIMITS	*<0.15*	*<0.60*

		Ambient Temp. (^{U}C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
	SET POINT (S)	na	na	10124	13.67	3.000
	INDICATED (I)	16.3	0.926		13.67	2.990
As Found Data	MEASURED (AF)	15.8	0.926		13.63	3.020
Adjusted Data	MEASURED (M)	15.8	0.926	10118	13.63	3.020
	DIFFERENCE (M-I)	-0.5	0.000	-0.1%	-0.29	0.67
	LIMITS	*± 2 ^{0} C*	*± 0.005 atm*	*± 2.5 %*	*± 1.0 L/min*	*± 0.2 L/min*

Ko Audit Filter data *Weight:* 0.11014 *Serial #:* *CVK 2123*

COMMENTS: PASS. Also note that the TEOM heads were cleaned as per monthly cleaning schedule.

As well as filter change.

TEOM back online as 14:30

Sample Head Inspection/Cleaning:

PM10:Cleaned

PM2.5:Cleaned

Large In Line Filter Inspection & Or Cleaning:

Main:Good

Aux: Good

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 15, 2010	Previous Calibration	May 26, 2010
Station Number	3	Station Location	Smoky Heights

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

Start Time (MST)	9:30	End Time (MST)	12:04
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Cert Date	6/8/2008
Correction factor	0.031443	Cal Gas Cylinder #	AAL 15377
DACS make	Focus AP1000	DACS serial No.	45272
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.004469	Calculated slope	1.003646
Calculated intercept	-2.232628	Calculated intercept	-2.009232

Analyzer make	Teco 43i		Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.4		8.8	
coefficient	0.714		0.698	
Lamp Voltage	923	volts	923	volts
Chamber Temp	45.2	Deg C	45.2	Deg C
Perm Gas Temp	44.99	Deg C	45	Deg C
Pressure	670.8	mm Hg	670.5	mm Hg
Sample Flow	0.442	ccm	0.442	ccm
Lamp Intensity	89	%	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	0.6	N/A
4989	39.84	400.87	400.6	1.0007
4989	19.91	201.13	203.4	0.9888
4989	9.95	100.72	103.5	0.9727
4989	0.0	0.00	0.6	As Found Zero
4989	39.84	400.87	406.3	As Found Span
			Average Correction Factor	0.9874

Calculated value of As Found Response: 405.248 ppm Percent Change of As Found: -1.1%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.3	ppb
Auto span	304.1	ppb	310.0	ppb

Notes:

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

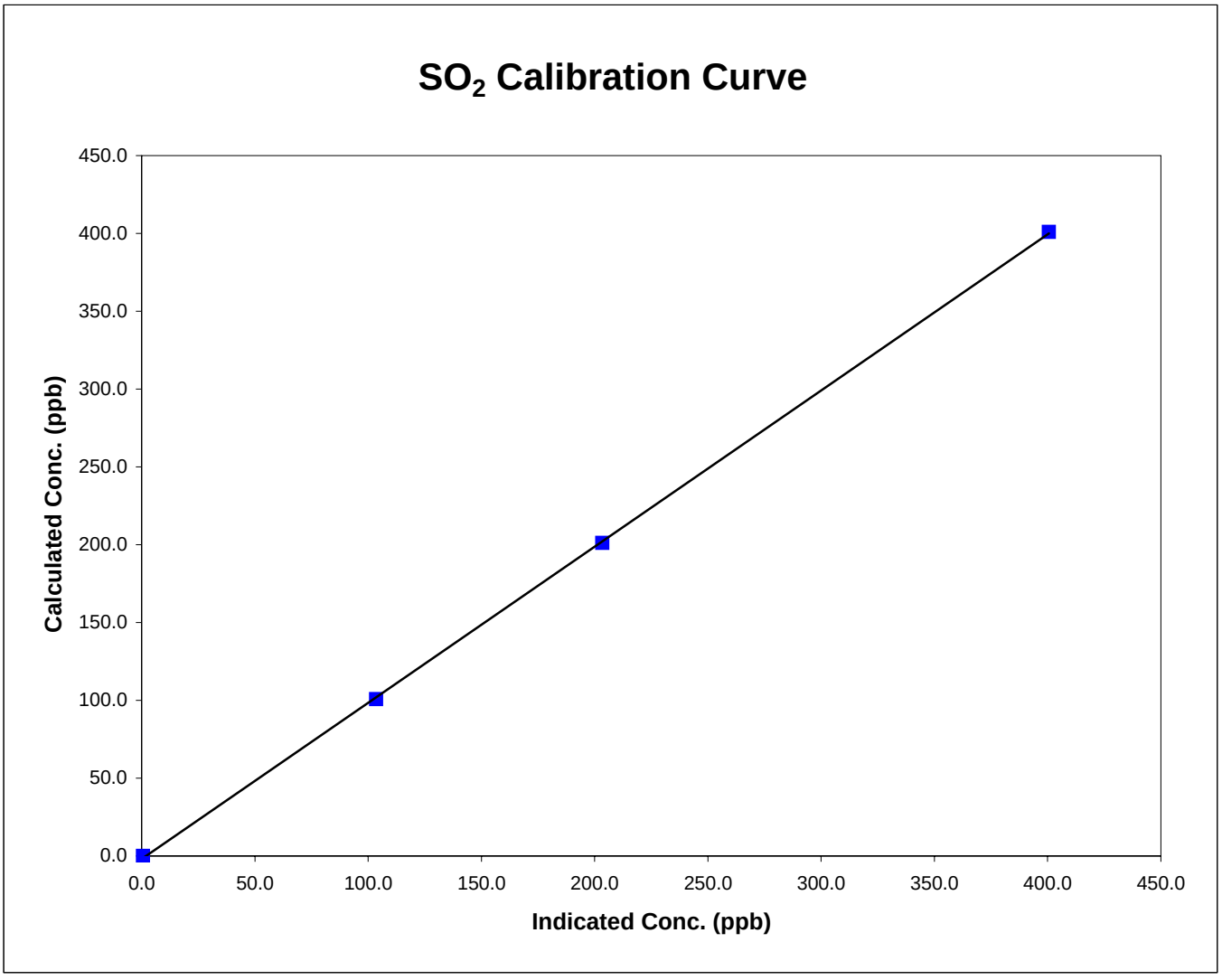
FOCUS AIR QUALITY MONITORING

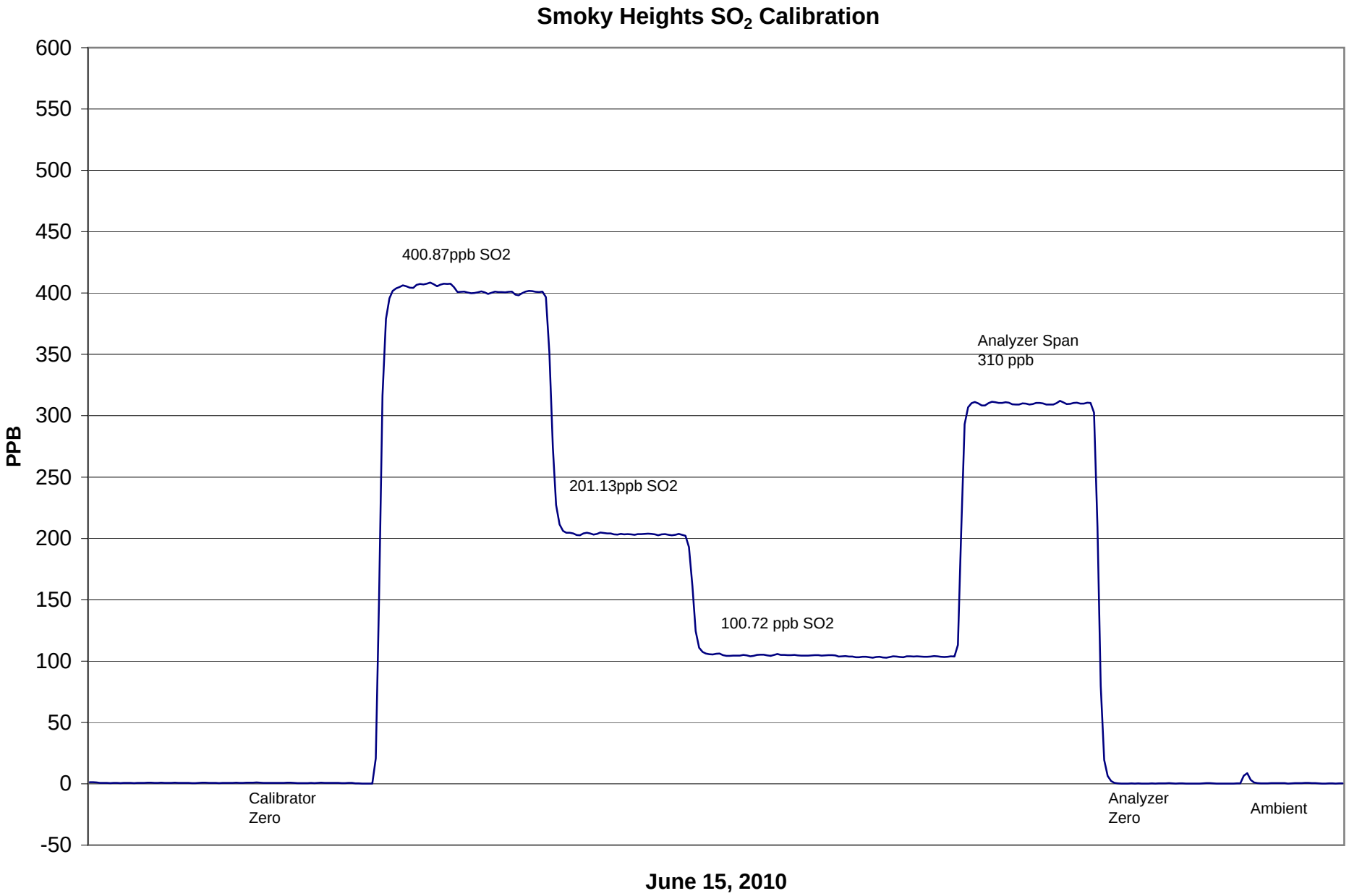
Station Information

Calibration Date	June 15, 2010	Previous Calibration	May 26, 2010
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:30	End Time (MST)	12:04
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	0.6	N/A		
400.9	400.6	1.0007	Correlation Coefficient	0.999943
201.1	203.4	0.9888		
100.7	103.5	0.9727	Slope	1.003646
			Intercept	-2.009232




Smoky Heights SO2 Calibration
600
550
500
450
400
350
300
250
200
150
100
50
0
-50
PPB
400.87ppb SO2
201.13ppb SO2
100.72 ppb SO2
Analyzer Span
310 ppb
Calibrator
Zero
Analyzer
Zero
Ambient
June 15, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 15, 2010	Previous Calibration	May 26, 2010
Station Number	3	Station Location	Smoky Heights

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

Start Time (MST)	10:30	End Time (MST)	13:14
Barometric Pressure	0.926 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	0.031477	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	1.010320	Calculated slope	1.006195
Calculated intercept	-0.162887	Calculated intercept	-0.094834

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	13.7	ppb	14.1	ppb
coefficient	0.999		1.024	
Lamp Voltage	764	volts	765	volts
Chamber Temp	43.8	Deg C	43.7	Deg C
Perm Gas Temp	45.03	Deg C	45	Deg C
Pressure	509.9	mm Hg	504.1	mm Hg
Sample Flow	0.752	ccm	0.741	ccm
Lamp Intensity	32,264	mv	32,017	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)
4989	0.0	0.00	-0.1	N/A
4990	79.77	81.03	80.6	1.0053
4990	39.85	40.80	40.6	1.0039
4990	9.94	10.24	10.5	0.9795
4990	0.0	0.00	-0.1	As Found Zero
4990	79.77	81.03	79.1	As Found Span
			Average Correction Factor	0.9962

Calculated value of As Found Response: 79.79 ppm Percent Change of As Found: 1.5%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	40.8	ppm	42.1	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

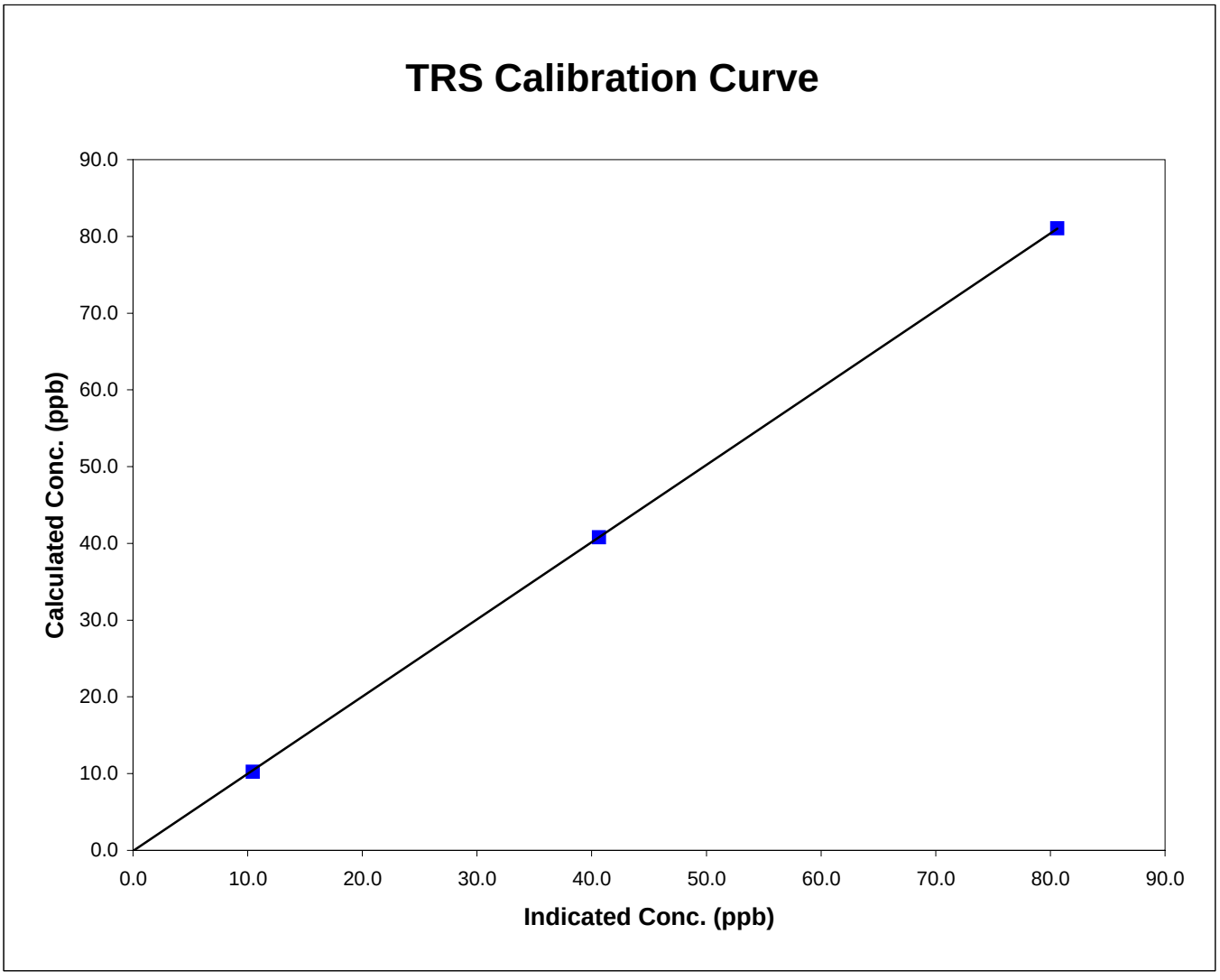
FOCUS AIR QUALITY MONITORING

Station Information

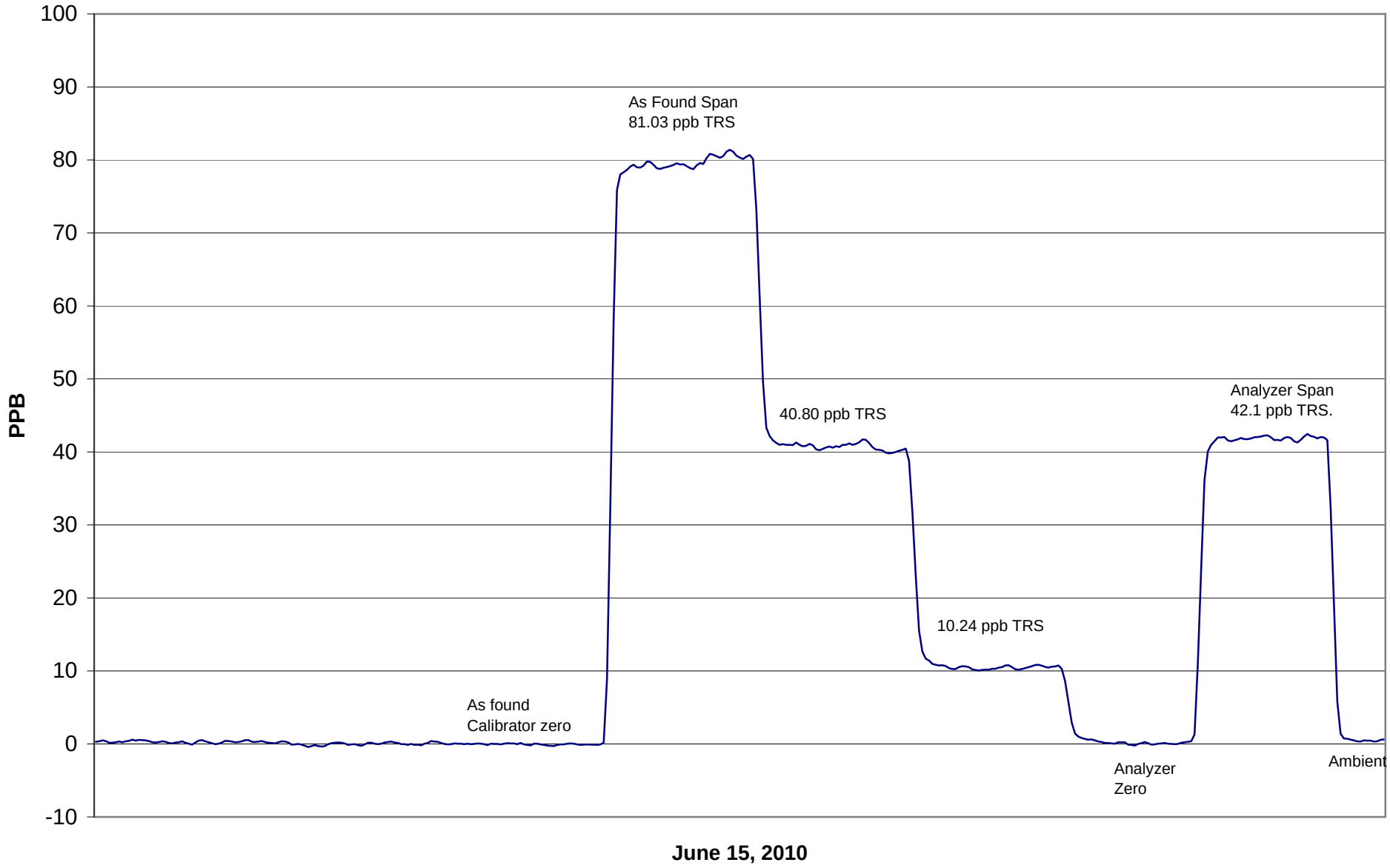
Calibration Date	June 15, 2010	Previous Calibration	May 26, 2010
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	10:30	End Time (MST)	13:14
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
81.0	80.6	1.0053	Correlation Coefficient	0.999985
40.8	40.6	1.0039		
10.2	10.5	0.9795	Slope	1.006195
			Intercept	-0.094834



Smoky Heights TRS Calibration



AB TEOM PM2.5 Calibration

FOCUS AIR QUALITY MONITORING

STATION: **Smoky Heights**
LOCATION: PASZA - Grande Prairie

OPERATOR: Courtney Thompson
DATE: 15-Jun-10

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	24634
Site Number	3
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.000
T-Case Indicated / Set Point	40/40
T-Air Indicated / Set Point	40/40
T-Cap Indicated / Set Point	40/40
Splitter Assembly Alignment (cm)	15.5

(vs. specified depth of 15.5 cm from top of flow tube to top of concentric 1/2 in. tube)

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	26-May-10
Previous Calibration	NA

PUMP CAPACITY CHECK *	PASS

* capacity test or pump on timed test utilized to verify pump integrity

"FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.010	0.080
PUMP OFF	0.002	0.001
NET	0.008	0.079
LIMITS	*<0.15*	*<0.60*

		Ambient Temp. (^{U}C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
	SET POINT (S)	na	na	12122	13.67	3.000
	INDICATED (I)	17.4	0.925		13.68	3.000
As Found Data	MEASURED (AF)	17.6	0.926		13.66	3.000
Adjusted Data	MEASURED (M)	17.6	0.926	12218	13.66	3.000
	DIFFERENCE (M-I)	0.2	0.001	0.8%	-0.07	0.00
	LIMITS	*± 2 ^{0} C*	*± 0.005 atm*	*± 2.5 %*	*± 1.0 L/min*	*± 0.2 L/min*

Ko Audit Filter data *Weight:* 0.10814 *Serial #:* *CVK 3831*

COMMENTS: PASS

TEOM head throughly cleaned, long in line filters were changed on AUX flow line, sample filter changed.

Sample Head Inspection/Cleaning:

PM10:Cleaned
PM2.5:Cleaned

Large In Line Filter Inspection & Or Replacement:

Main: Good
Aux: changed

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	Beaverlodge

Reason: Routine | Install | Removal | Other:

Start Time (MST)	8:30	End Time (MST)	10:52
Barometric Pressure	0.919 atm	Station Temperature	23.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	10.06 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	CC 114395		
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.010634	Calculated slope	1.046514
Calculated intercept	0.082732	Calculated intercept	-0.367873

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

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.44		2.43	
Coefficient	0.886		0.886	
PMT	-812.9	V	-812.9	V
UV Lamp Voltage	1077	V	1079	V
Chamber Temp	44.9	Deg C	45.2	Deg C
Pressure	668.8	mm Hg	668.8	mm Hg
Sample Flow	0.503	LPM	0.503	LPM
Lamp Intesity	87%	%	88%	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.1	N/A
4988	39.82	79.7	76.2	1.0452
4988	19.90	40.0	39.0	1.0244
4988	9.93	20.0	19.5	1.0240
4988	0.00	0.0	0.1	As found zero
4988	39.82	79.7	76.2	As found span
			Average Correction Factor	1.0312

Calculated value of As Found Response: 77.048 ppm Percent Change of As Found: 3.3%

	before calibration		after calibration	
Auto zero	-0.3	ppb	-0.4	ppb
Auto span	57.8	ppb	57.0	ppb

Notes: Noticed that the auto span, after calibration value is more than what is indicated on the data page (reference E10) attached to this calibration sheet.

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

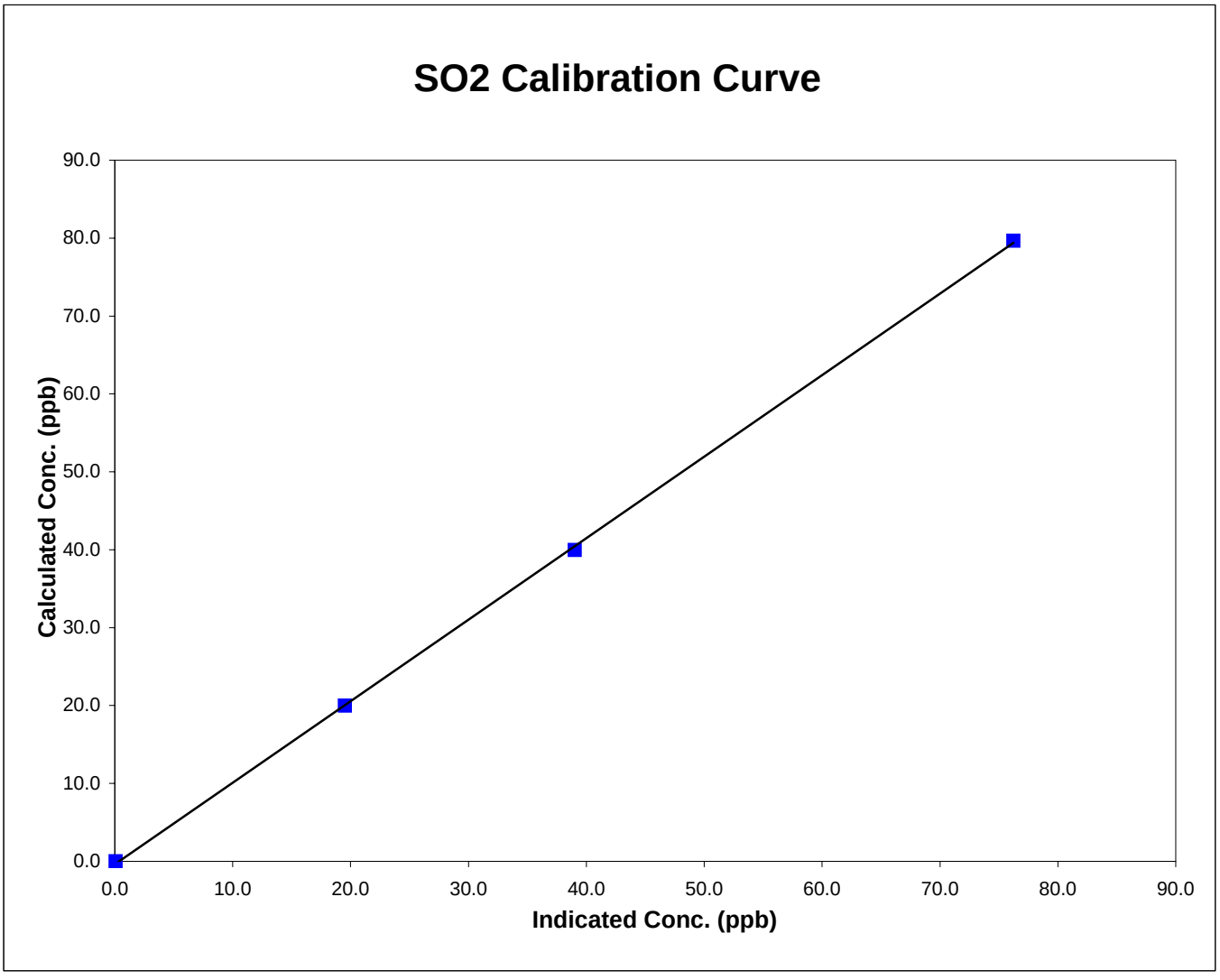
FOCUS AIR QUALITY MONITORING

Station Information

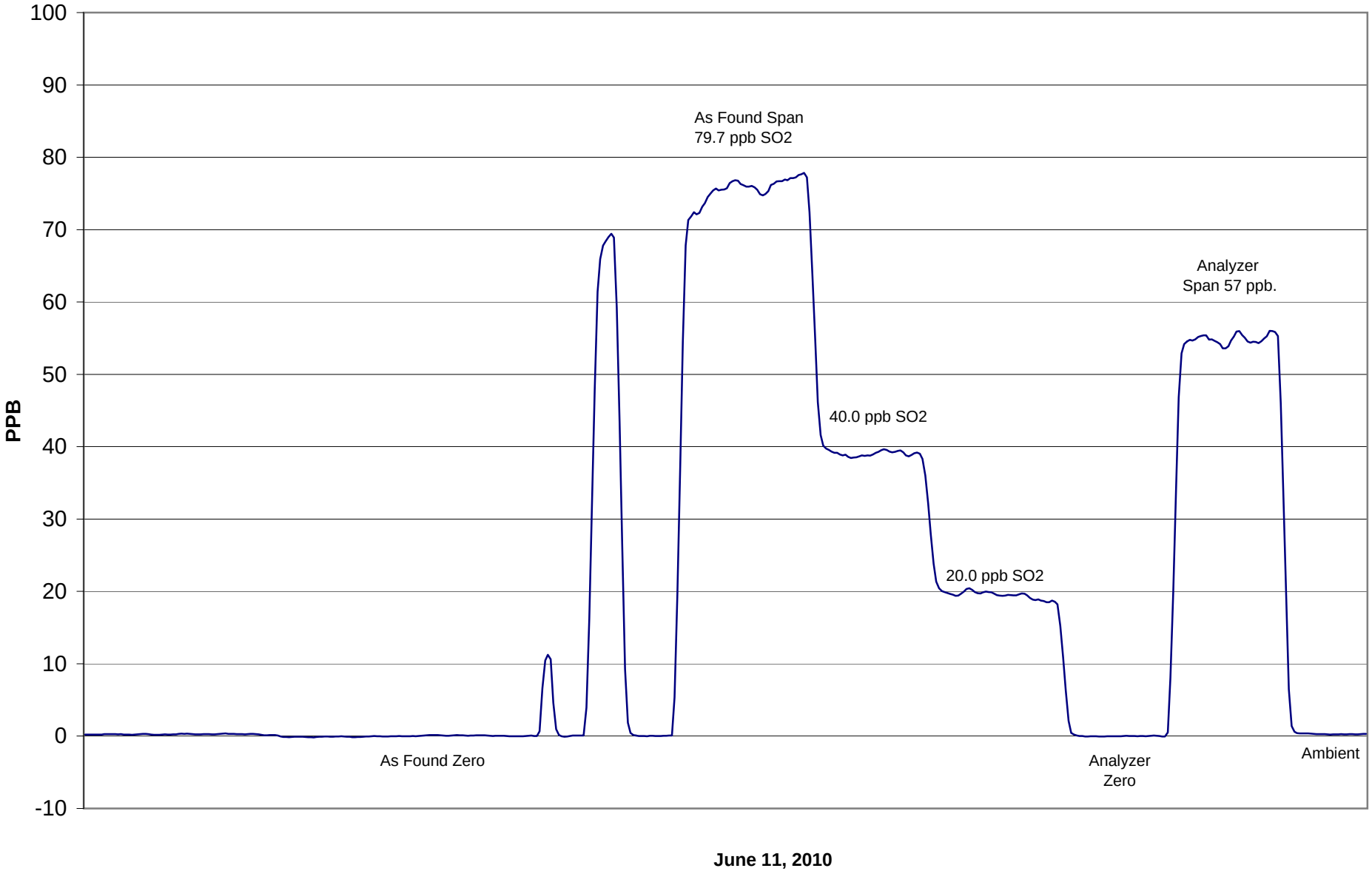
Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:30	End Time (MST)	10:52
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
79.7	76.2	1.0452	Correlation Coefficient	0.999882
40.0	39.0	1.0244		
20.0	19.5	1.0240	Slope	1.046514
			Intercept	-0.367873



Beaverlodge SO_2 Calibration



June 11, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	BeaverLodge

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	8:40		End Time (MST)	12:06	
Barometric Pressure	0.919	Atm	Station Temperature	9.0	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	0.995237	1.001981	1.002299
	Data Offset	-0.712453	-1.670713	-0.622375
After	Data Slope	0.998443	1.004538	1.002358
	Data Offset	-0.355322	-2.377709	-1.353658
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	2.4	mV	2.4	mV
NOx bkgnd	2.9	mV	2.6	mV
NO coefficient	1.405		1.405	
NOx coefficient	0.994		0.994	
NO2 conv temp	327.1	Deg C	321.8	Deg C
PMT Temp	-3.0	Deg C	-2.9	Deg C
PMT Volt	676.4	mV	-676.4	mV
R Cell Press	181.6	in Hg	181.9	in Hg
Sample Flow	0.760	ccm	0.762	ccm

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 11, 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	0.4	0.1	0.0	N/A	N/A
1	4988	39.82	397.6	396.8	0.8	397.0	396.6	0.2	1.0014	1.0006
2	4988	19.90	199.5	199.1	0.4	202.2	200.6	1.0	0.9863	0.9926
3	4988	9.93	99.7	99.5	0.2	103.5	102.0	1.3	0.9635	0.9759
AFZ	4988	0.00	0.0	0.0	0.0	0.4	0.1	0.0	0.0000	0.0000
AFS	4988	39.84	397.8	397.0	0.8	397.0	396.6	0.2	1.0019	1.0011
							Average Correction Factor		0.9838	0.9897

As Found Concentrations: NO_X= 395.0 NO= 395.9 As Found Percent Change NO_X= -0.7% NO= -0.3%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.1	0.1	0.0	0.4	0.1	0.0	N/A	N/A	N/A	N/A
NO point	396.6	396.6	0.0	397.2	396.6	0.3	0.9985	1.0000	N/A	N/A
300	396.6	85.7	310.9	397.6	85.7	311.6	0.9974	1.0000	0.9975	100.3%
200	396.6	183.3	213.3	397.4	183.3	213.7	0.9980	1.0000	0.9981	100.2%
100	396.6	280.6	116.0	397.8	280.6	117.2	0.9969	1.0000	0.9898	101.0%
					Average Correction Factor		0.9974	1.0000	0.9951	100.5%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	0.2	0.0	0.1	ppb
Auto span	175.3	173.3	2.1	ppb	206.3	204.2	1.6	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

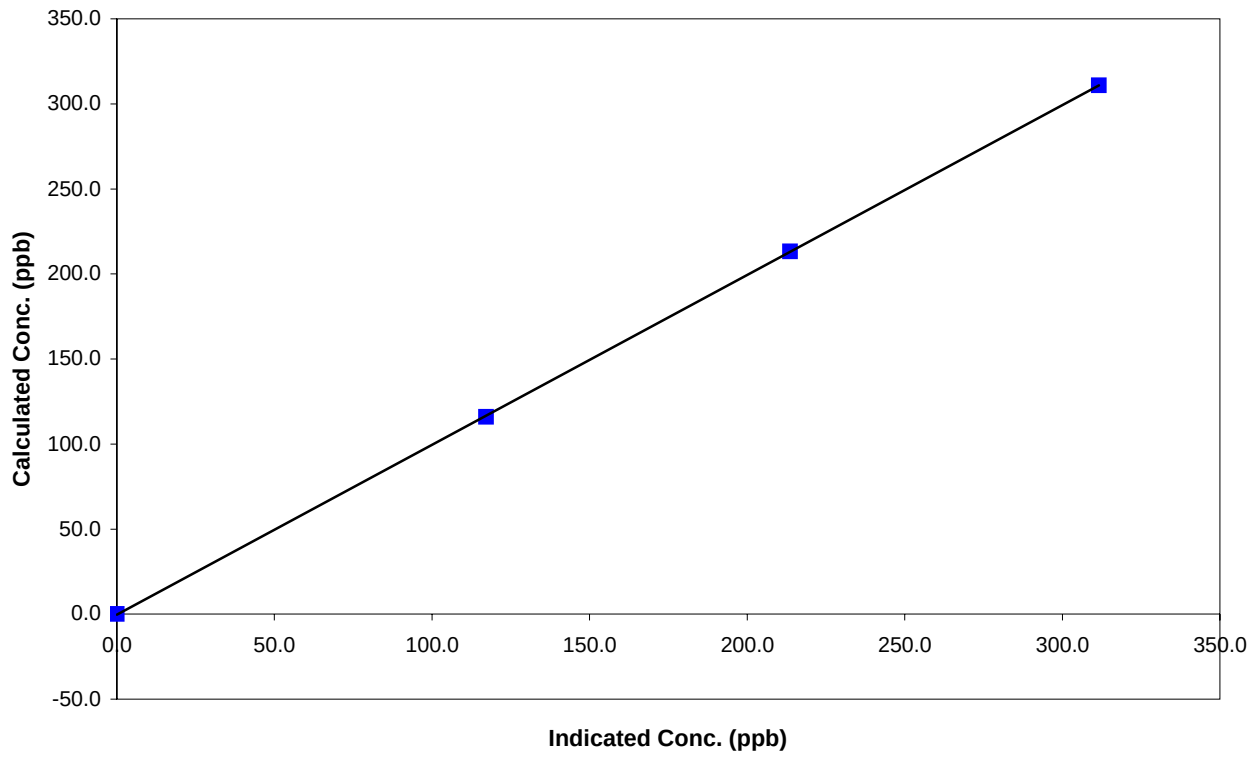
Station Information

Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:40	End Time (MST)	12:06
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
310.9	311.6	0.9975	Correlation Coefficient	0.999988
213.3	213.7	0.9981		
116.0	117.2	0.9898	Slope	0.998443
			Intercept	-0.355322

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

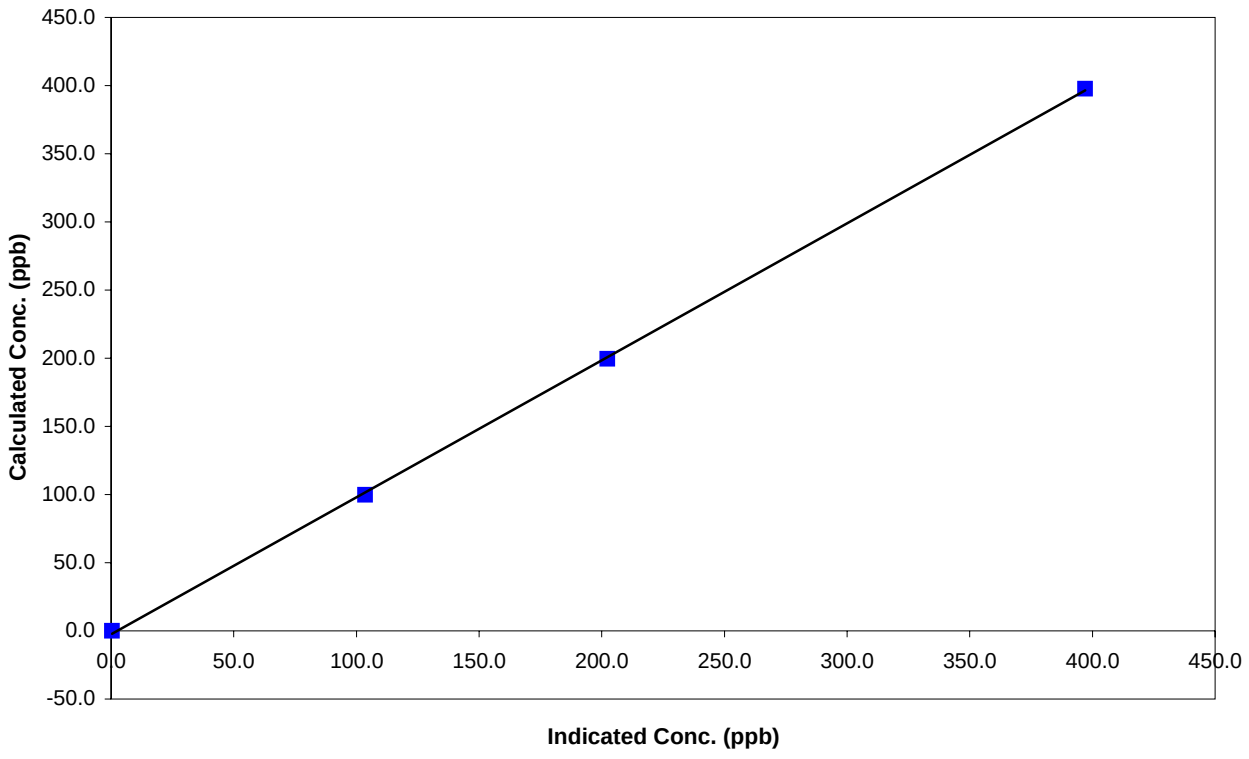
Station Information

Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:40	End Time (MST)	12:06
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	0.4	N/A		
397.6	397.0	1.0014	Correlation Coefficient	0.999877
199.5	202.2	0.9863		
99.7	103.5	0.9635	Slope	1.004538
			Intercept	-2.377709

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

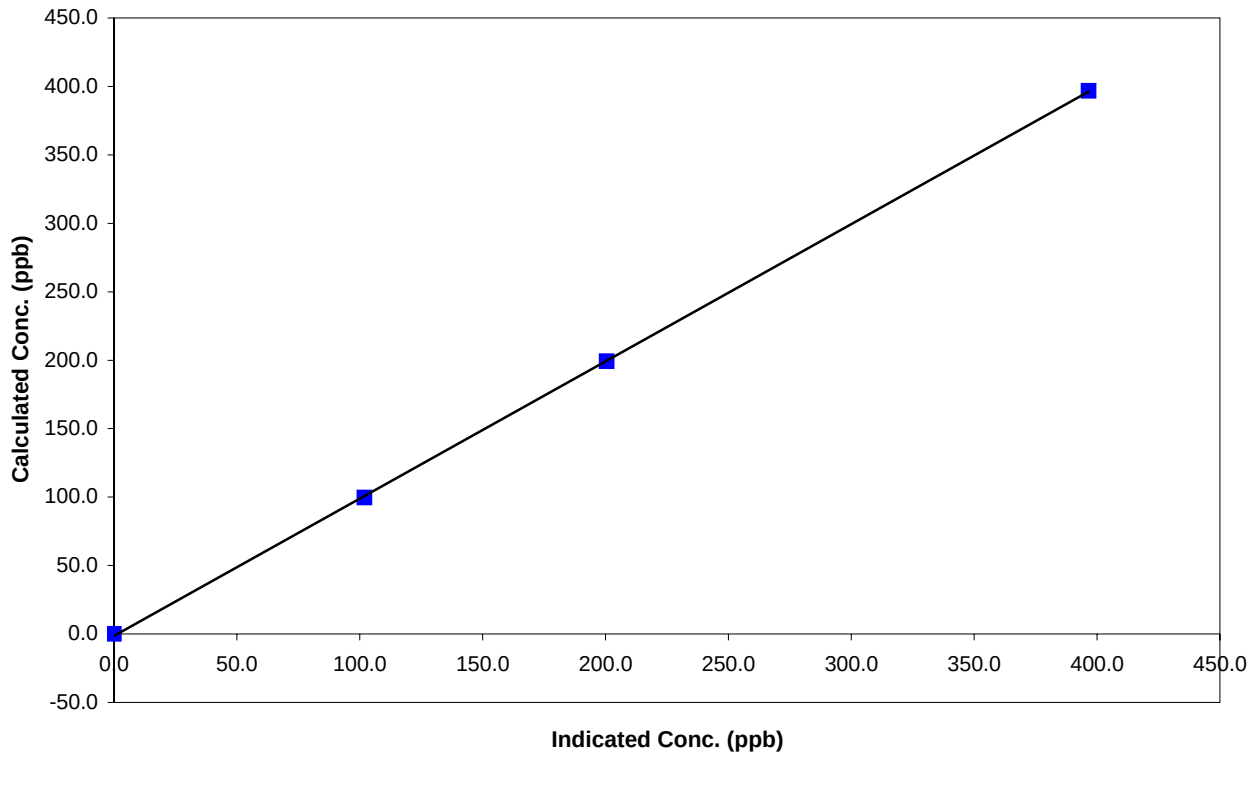
Station Information

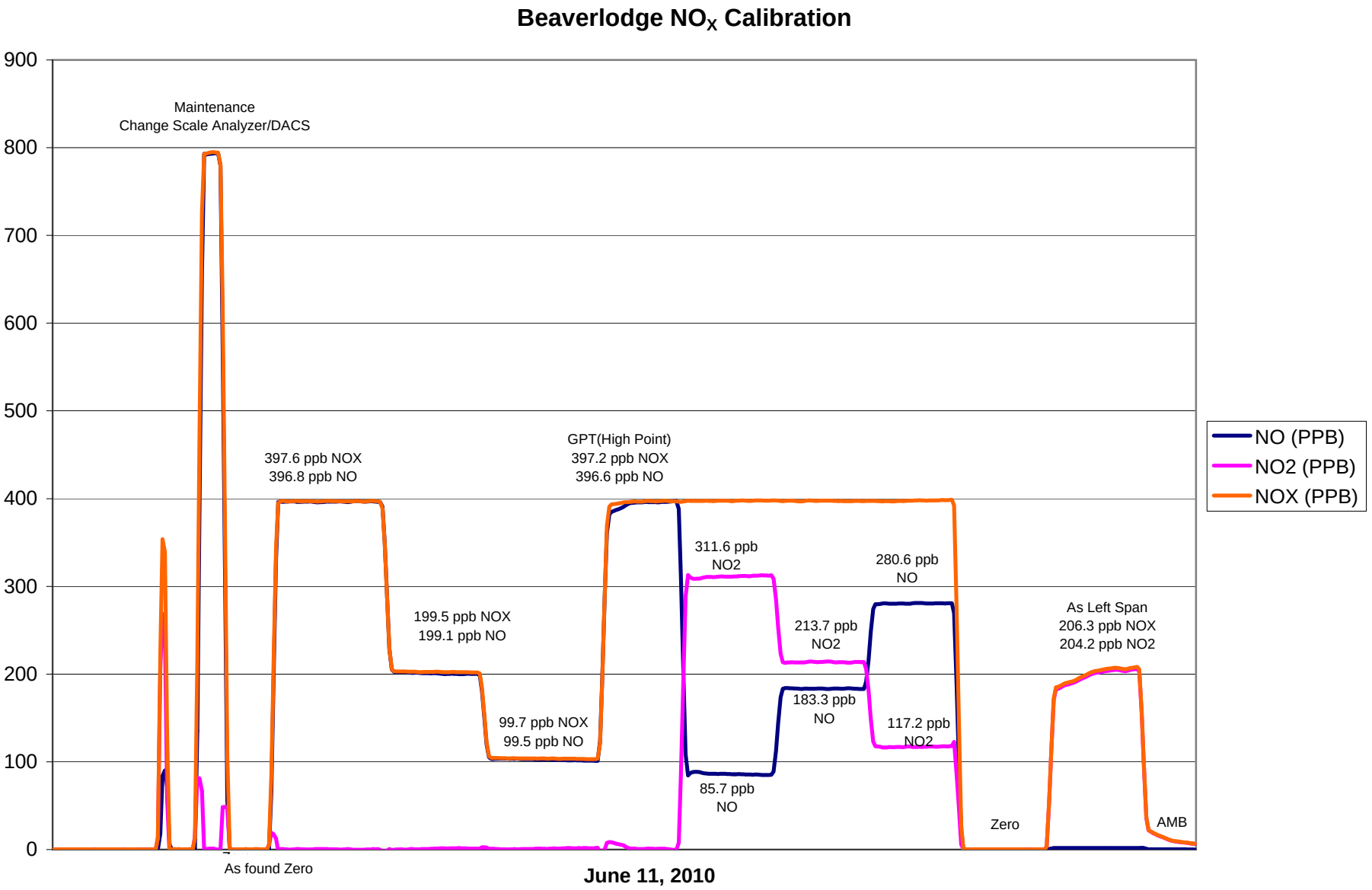
Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:40	End Time (MST)	12:06
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
396.8	396.6	1.0006	Correlation Coefficient	0.999950
199.1	200.6	0.9926		
99.5	102.0	0.9759	Slope	1.002358
			Intercept	-1.353658

NO Calibration Curve




Beaverlodge NOX Calibration
900
800
700
600
500
400
300
200
100
0
Maintenance
Change Scale Analyzer/DACS
397.6 ppb NOX
396.8 ppb NO
199.5 ppb NOX
199.1 ppb NO
99.7 ppb NOX
99.5 ppb NO
GPT(High Point)
397.2 ppb NOX
396.6 ppb NO
311.6 ppb
NO2
85.7 ppb
NO
213.7 ppb
NO2
183.3 ppb
NO
280.6 ppb
NO
117.2 ppb
NO2
Zero
As Left Span
206.3 ppb NOX
204.2 ppb NO2
AMB
As found Zero
June 11, 2010
NO (PPB)
NO2 (PPB)
NOX (PPB)

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	Beaverlodge

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

Start Time (MST)	12:00	End Time (MST)	13:28
Barometric Pressure	0.919 atm	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.014237	Calculated slope	0.998409
Calculated intercept	-1.774581	Calculated intercept	0.743590

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

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.70	ppb	-0.70	ppb
slope	1.062		1.008	
Lamp temp	56.5	mV	56.5	mV
Lamp Intensity A/B	68898/68296	mV	68954/68350	mV
Pressure	667.3	mm Hg	690.5	mm Hg
Flow A	0.694	ccm	0.712	ccm
Flow B	0.641	ccm	0.661	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	-0.3	N/A
4990	0.00	310.9	311.4	0.9985
4990	0.00	213.3	211.9	1.0065
4990	0.00	116.0	115.3	1.0064
4990	0.00	0.0	-0.3	As found zero
4990	0.00	310.9	329.4	As found span
			Average Correction Factor	1.0038

Calculated value of As Found Response: 332.6 ppm Percent Change of As Found: 7.0%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.4	ppb
Auto span	114.3	ppb	119.6	ppb

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

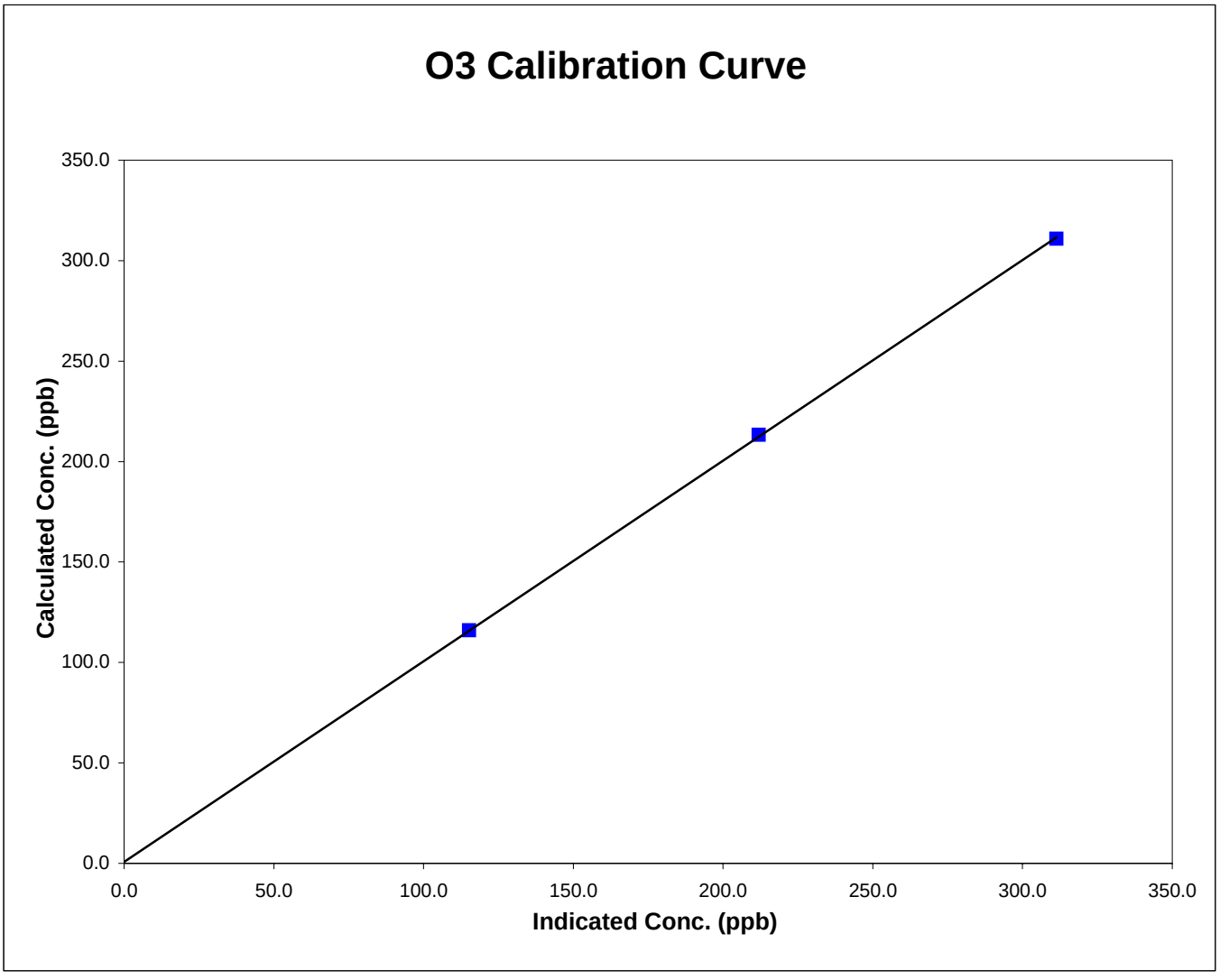
FOCUS AIR QUALITY MONITORING

Station Information

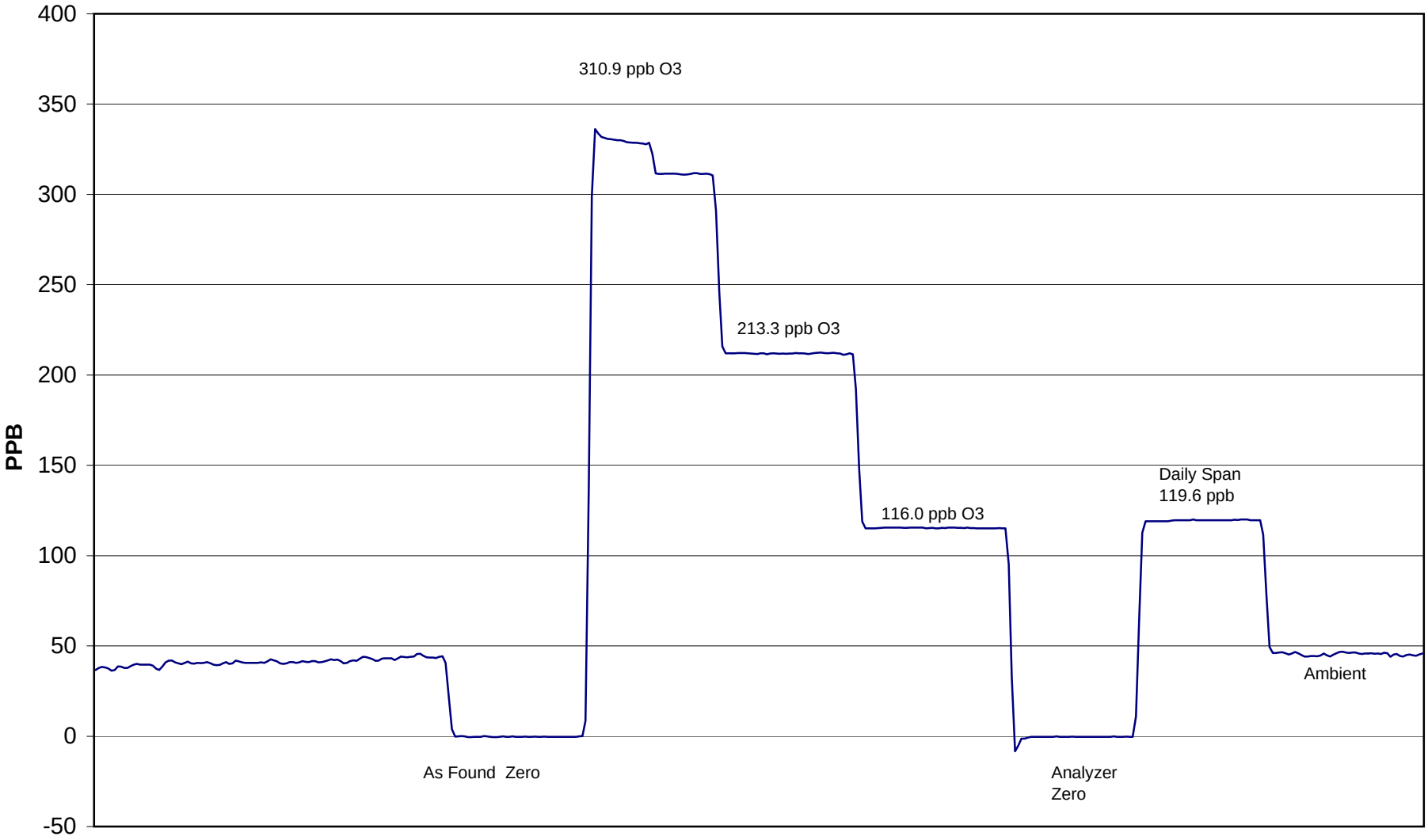
Calibration Date	June 11, 2010	Previous Calibration	May 20, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:00	End Time (MST)	13:28
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	NA		
310.9	311.4	0.9985	Correlation Coefficient	0.999969
213.3	211.9	1.0065		
116.0	115.3	1.0064	Slope	0.998409
			Intercept	0.743590



Beaverlodge O_3 Calibration



June 11, 2010

FDMS TEOM PM2.5 AUDIT

FOCUS AIR QUALITY MONITORING

STATION: **BeaverLodge**
LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
DATE: 11-Jun-10

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	AMU1649
Site Number	4
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.000
T-Case Indicated / Set Point	30/30
T-Air Indicated / Set Point	30/30
T-Cap Indicated / Set Point	30/30
Splitter Assembly Alignment (cm)	15.5

(vs. specified depth of 15.5 cm from top of flow tube to top of concentric 1/2 in. tube)

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	4-May-10
Previous Calibration	

PUMP CAPACITY CHECK *	PASS

* capacity test or pump on timed test utilized to verify pump integrity

"FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	-0.100	0.170
PUMP OFF	0.000	0.040
NET	-0.100	0.130
LIMITS	*<0.15*	*<0.60*

		Ambient Temp. (^{U}C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
	SET POINT (S)	na	na	14287	13.67	3.000
	INDICATED (I)	20.9	0.918		13.67	2.990
As Found Data	MEASURED (AF)	20.9	0.919		13.79	3.000
Adjusted Data	MEASURED (M)	20.9	0.919	14119	13.79	3.000
	DIFFERENCE (M-I)	0.0	0.001	-1.2%	0.88	0.00
	LIMITS	*± 2 ^{0} C*	*± 0.005 atm*	*± 2.5 %*	*± 1.0 L/min*	*± 0.2 L/min*

Ko Audit Filter data *Weight:* 0.11477 *Serial #:* *CVK 3532*

COMMENTS: PASS

PASS

Sample Head Inspection Or Cleaning:
PM10: Cleaned
PM2.5: Cleaned

TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACE
TEOM IN LINE:
Main: Good
AUX: Good
FDMS Water knock out:Good
FDMS 47 mm Filter Cassette: Replaced

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover - Kinuso

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

Start Time (MST)	9:00	End Time (MST)	10:56
Barometric Pressure	27.66 inches Hg	Station Temperature	15.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL 16161		
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	0.965749	Calculated slope	1.001749
Calculated intercept	0.447904	Calculated intercept	-2.100578

Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	10.1		10.2	
Coefficient	1.004		1.004	
UV Lamp Voltage	796	V	796	V
Chamber Temp	44.4	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	680.5	mm Hg	677.4	mm Hg
Sample Flow	0.491	LPM	0.49	LPM
Lamp Intesity	47388	Hz	47632	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	0.1	N/A
4991	39.84	400.7	453.4	0.8837
4991	19.90	200.9	231.7	0.8672
4991	9.93	100.5	119.3	0.8422
4991	0.00	0.0	0.1	As found zero
4991	39.84	400.7	453.4	As found span
			Average Correction Factor	0.8644

Calculated value of As Found Response: 438.246 ppm Percent Change of As Found: -9.4%

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

Notes: Removal cal analyzer was noted to be out on the 80% point, however it was not adjusted.
Trailer will be moved
and an installation, set up, start cal will be conducted at this time.

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

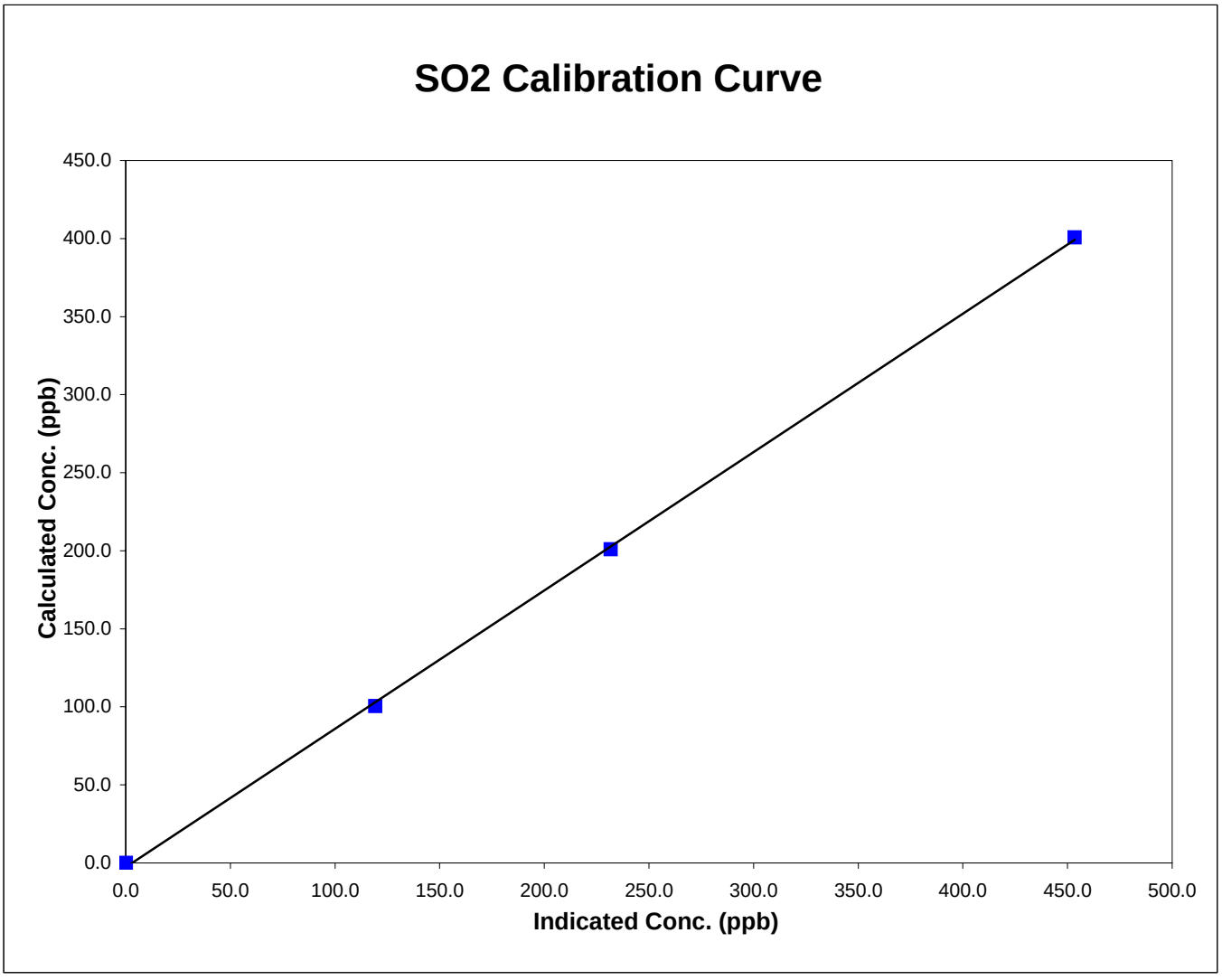
FOCUS AIR QUALITY MONITORING

Station Information

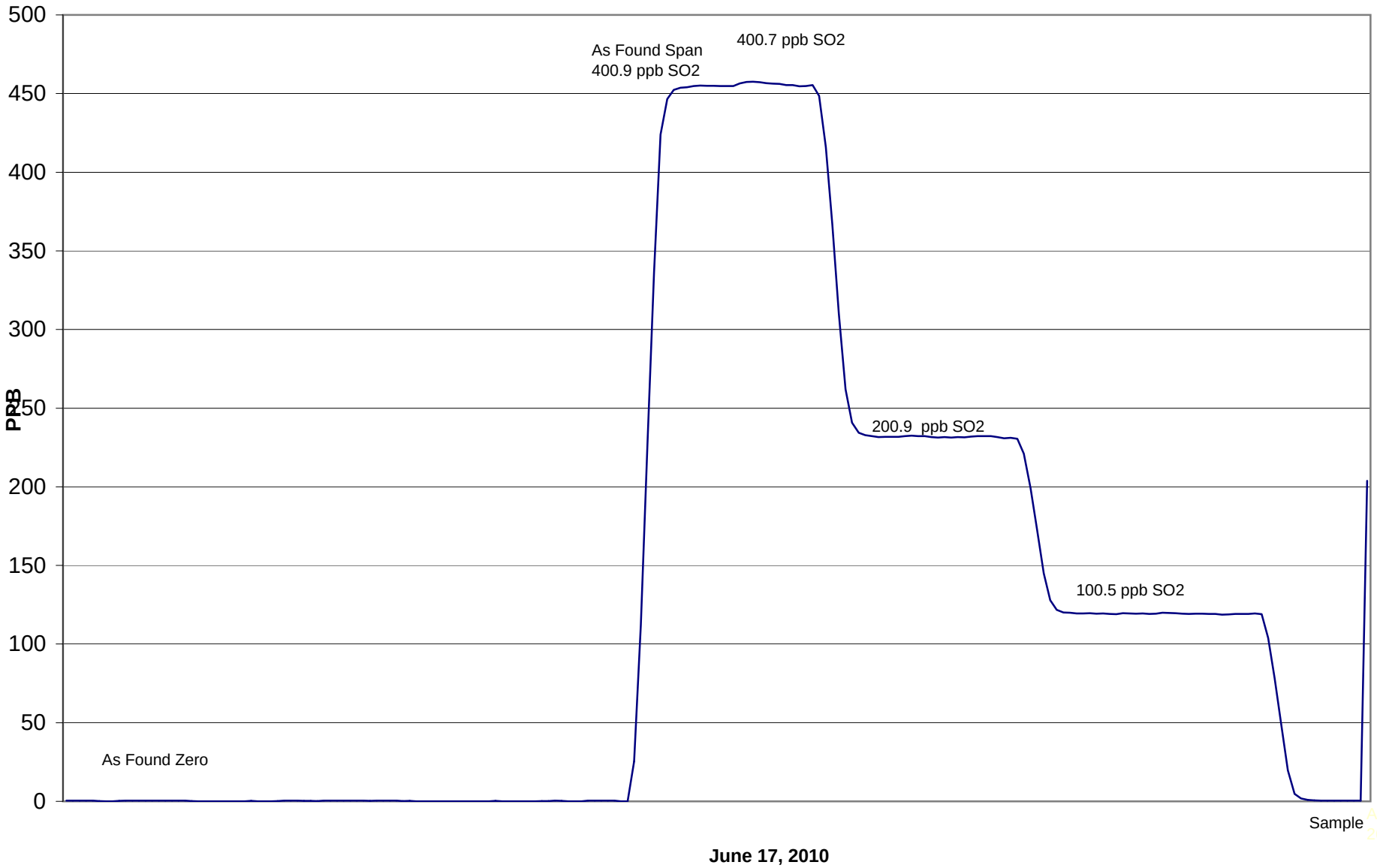
Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover - Kinuso
Start Time (MST)	9:00	End Time (MST)	10:56
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
400.7	453.4	0.8837	Correlation Coefficient	0.999789
200.9	231.7	0.8672		
100.5	119.3	0.8422	Slope	0.886475
			Intercept	-2.774152



Kinuso SO_2 Calibration



June 17, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover-Kinuso
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:00	End Time (MST)	15:25
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	0.989409	Calculated slope	0.965749
Calculated intercept	0.425370	Calculated intercept	0.447904
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	10.7	ppb	10.7	ppb
Coefficient	1.451		1.452	
Lamp Voltage	791	V	792	V
Chamber Temp	43.7	C	43.6	C
Perm gas Temp	45.01	C	45	C
Pressure	663	mmHg	661	mmHg
Sample Flow	.432	ccm	.432	ccm
Lamp Intensity	38577.0	Hz	39043.0	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	-0.6	N/A
4991	79.74	81.0	83.4	0.9707
4991	39.80	40.7	41.6	0.9795
4991	9.93	10.2	10.3	0.9898
4991	0.00	0.0	-0.6	As found zero
4991	79.74	81.0	83.4	As found span
			Average Correction Factor	0.9800

Calculated value of As Found Response: 83.55 ppm Percent Change of As Found: -3.2%

	before calibration		after calibration	
Auto zero	-0.6	ppm	NA	ppm
Auto span	64.8	ppm	65.7	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

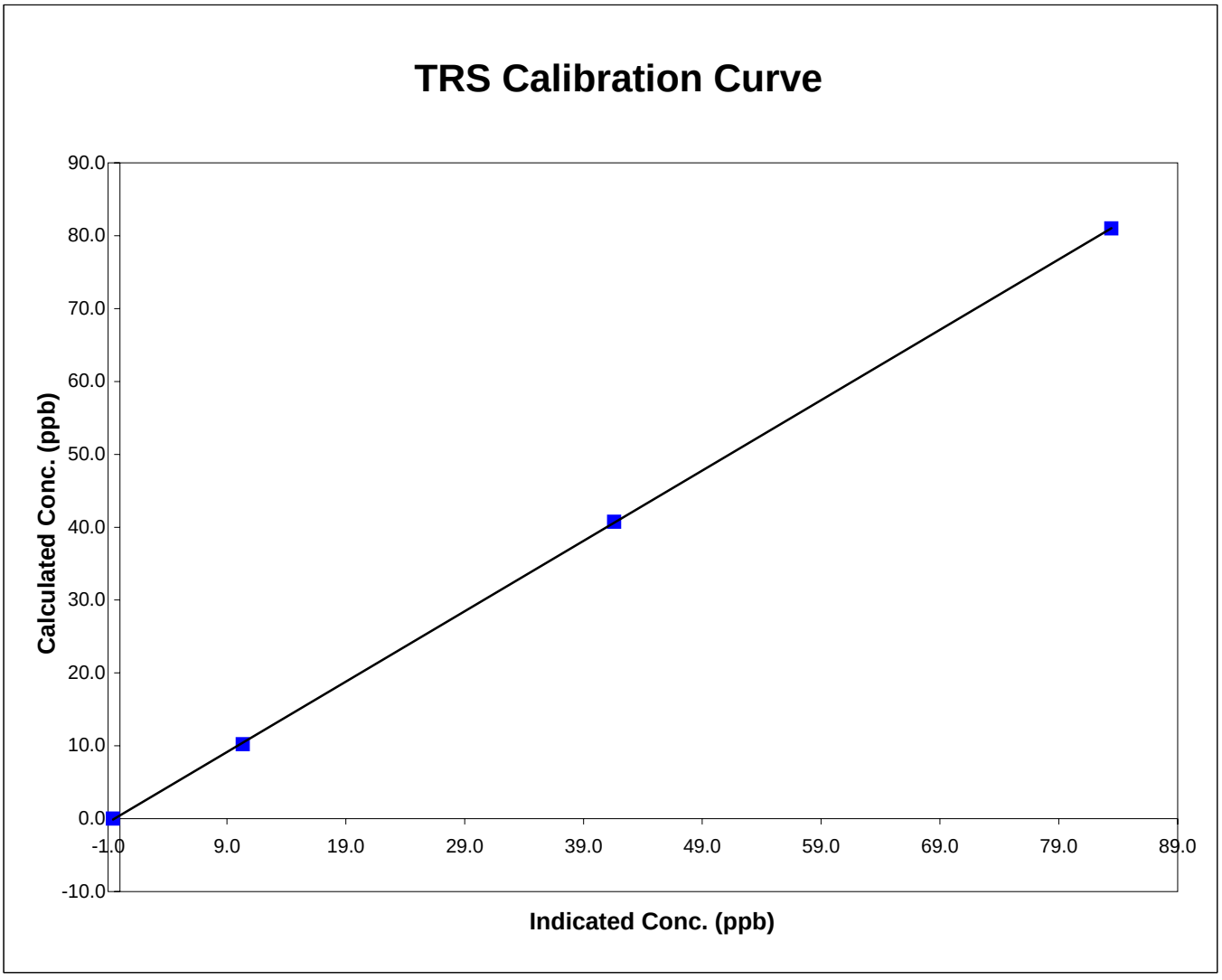
FOCUS AIR QUALITY MONITORING

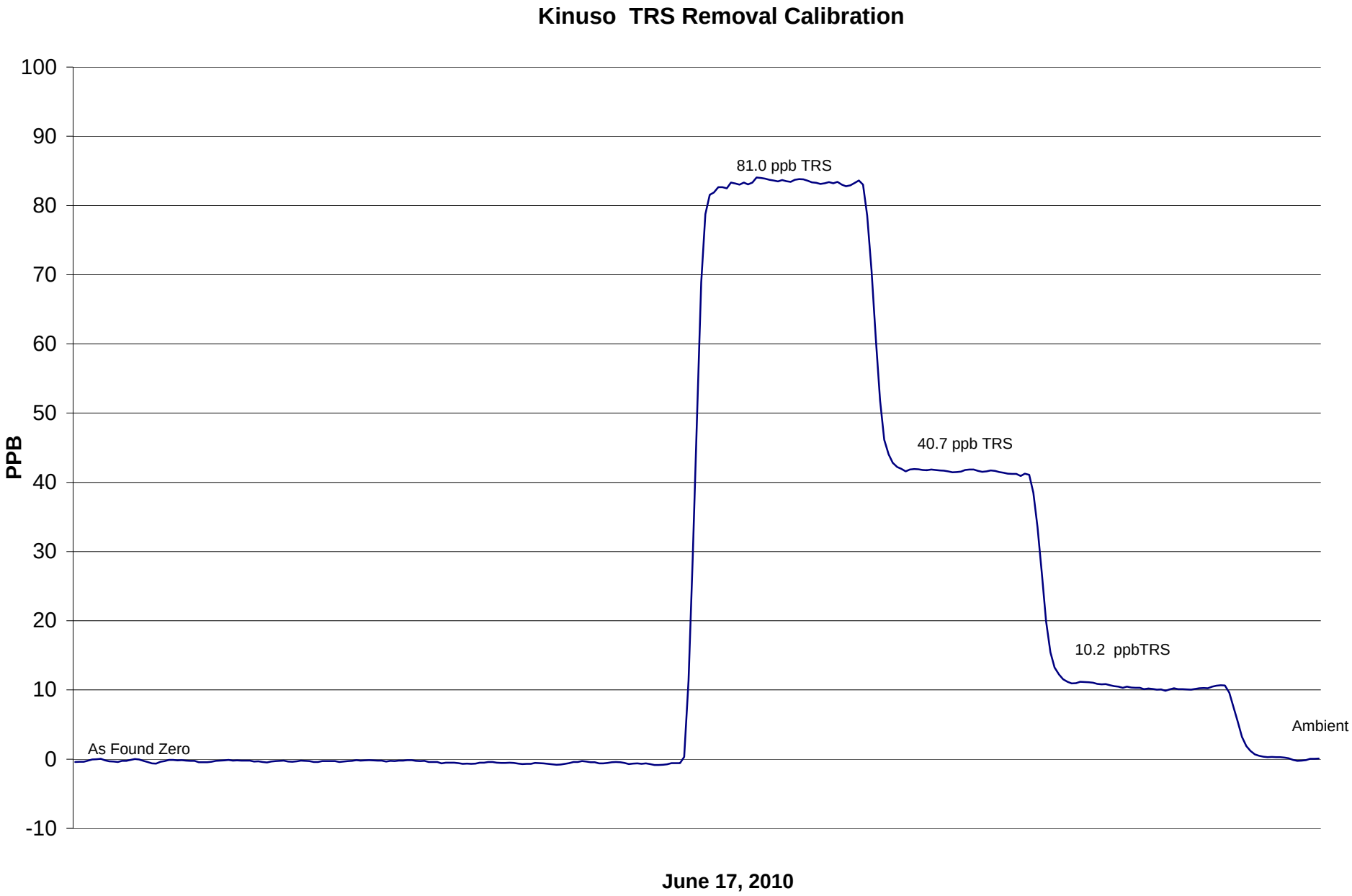
Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover-Kinuso
Start Time (MST)	13:00	End Time (MST)	15:25
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	-0.6	N/A		
81.0	83.4	0.9707	Correlation Coefficient	0.999983
40.7	41.6	0.9795		
10.2	10.3	0.9898	Slope	0.965749
			Intercept	0.447904




Kinuso TRS Removal 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
Ambient
As Found Zero
June 17, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover Kinuso

Reason: Routine | Installation | **Removal** | Other:

Start Time (MST)	9:00		End Time (MST)	13:03	
Barometric Pressure	0.916	Atm	Station Temperature	15.7	Deg C
Calibrator	Environics 6100		Serial Number	3474	
NO Cal Gas Conc	49.6	ppm	Cal Gas Expiry Date	July 2, 2007	
NOx Cal Gas Conc	49.6	ppm	Cal Gas Serial #	CC114395	

DACS Information

DACS make: Focus AP1000 DACS serial No.: 52662

Parameter		NO2	NOx	NO
Before	Data Slope	1.004289	0.999128	1.006602
	Data Offset	2.872985	-2.692304	-3.352176
After	Data Slope	0.995639	0.988887	0.994665
	Data Offset	1.276473	-2.694964	-3.299501
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

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

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	4.9	mV	4.8	mV
NOx bkgnd	5.1	mV	5.4	mV
NO coefficient	0.878		0.878	
NOx coefficient	0.999		0.999	
NO2 conv temp	326.8	Deg C	325.5	Deg C
PMT Temp	-2.9	Deg C	-2.7	Deg C
PMT Volt	-829.5	mV	-829.9	mV
R Cell Press	156.9	in Hg	157.2	in Hg
Sample Flow	0.515	ccm	0.508	ccm

Notes: ***Please note that these calibrations are removal calibrations, therefore there are no after zeros or spans.***

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 17, 2010 Station Location: Rover Kinuso

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4989	0.00	0.0	0.0	0.0	0.3	0.5	-1.4	N/A	N/A
1	4991	39.84	392.8	392.8	0.0	398.4	396.6	-1.1	0.9858	0.9904
2	4991	19.90	197.0	197.0	0.0	203.7	203.2	-1.2	0.9670	0.9695
3	4991	9.93	98.5	98.5	0.0	104.5	105.0	-1.2	0.9426	0.9380
AFZ	4991	0.00	0.0	0.0	0.0	0.3	0.5	-0.7	0.0000	0.0000
AFS	4991	39.85	392.9	392.9	0.0	398.5	396.6	-1.1	0.9860	0.9907
							Average Correction Factor		0.9651	0.9660

As Found Concentrations: NO_X= 395.5 NO= 392.8 As Found Percent Change NO_X= 0.7% NO= 0.0%

GPT Calibration Data

Dilution Flow 4988 ccm Source Gas Flow 39.84 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.5	0.5	0.0	0.3	0.5	-1.4	N/A	N/A	N/A	N/A
NO point	394.8	394.8	0.0	396.5	394.8	-1.2	0.9957	1.0000	N/A	N/A
300	394.8	87.2	307.6	396.5	87.2	307.5	0.9957	1.0000	1.0001	100.0%
200	394.8	187.4	207.4	396.9	187.4	207.1	0.9948	1.0000	1.0014	99.9%
100	394.8	285.9	108.9	396.7	285.9	108.2	0.9953	1.0000	1.0067	99.3%
					Average Correction Factor		0.9953	1.0000	1.0027	99.7%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.4	-0.9	0.7	ppb	0.5	-0.6	0.6	ppb
Auto span	312.6	308.0	2.9	ppb				ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

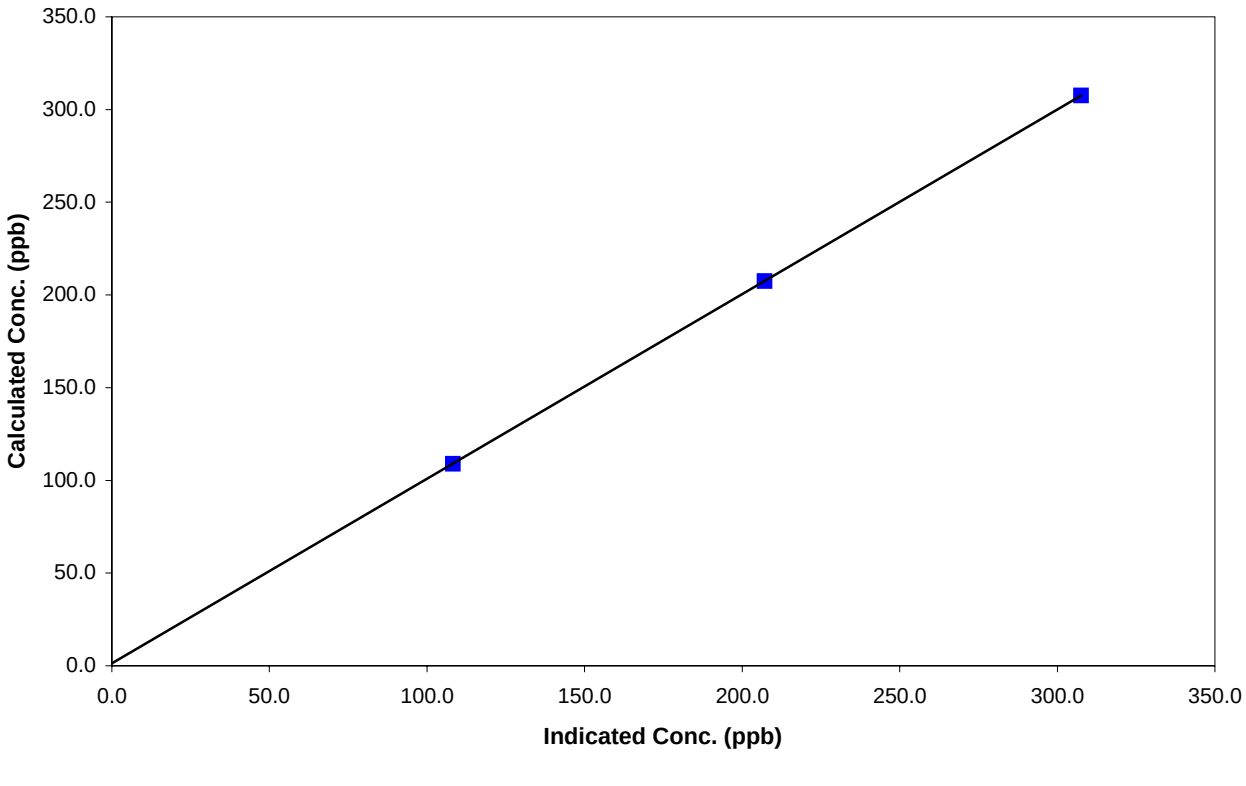
Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:00	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.4	N/A		
307.6	307.5	1.0001	Correlation Coefficient	0.999999
207.4	207.1	1.0014		
108.9	108.2	1.0067	Slope	0.995639
			Intercept	1.276473

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

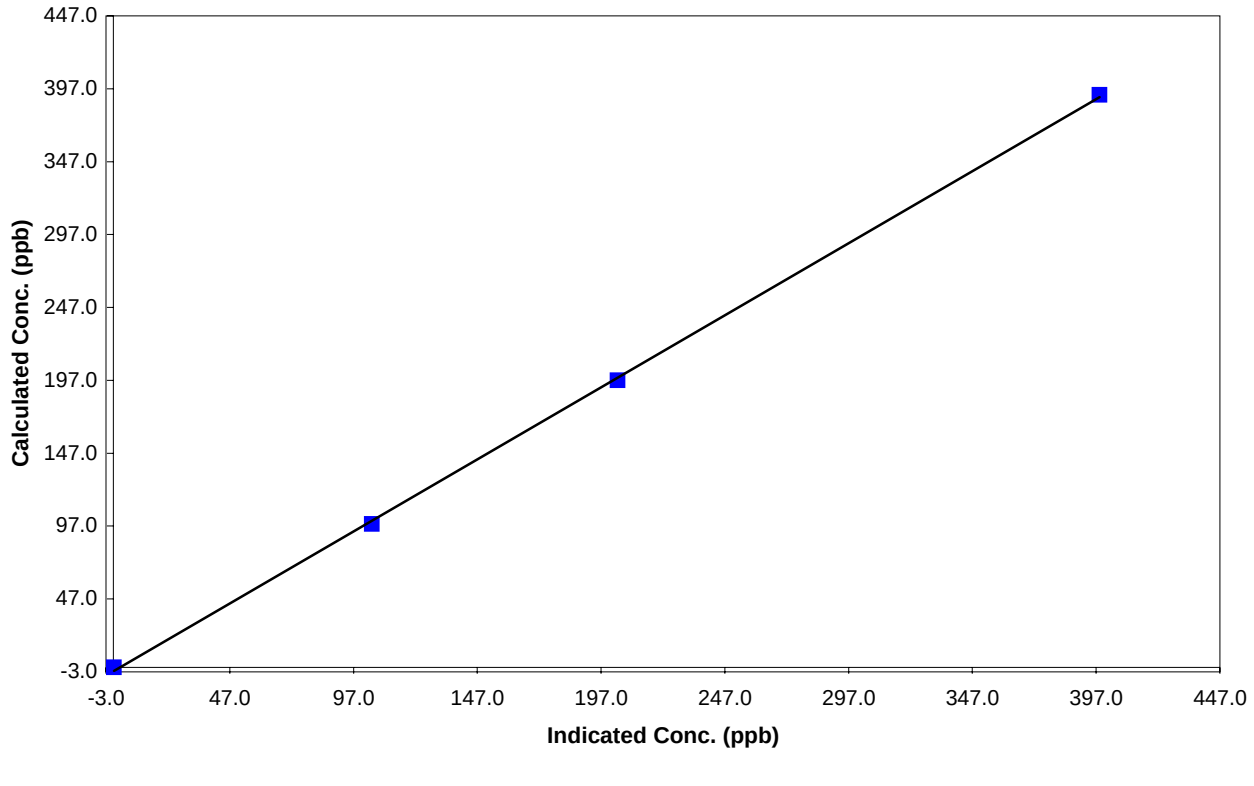
Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:00	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
392.8	398.4	0.9858	Correlation Coefficient	0.999813
197.0	203.7	0.9670		
98.5	104.5	0.9426	Slope	0.988887
			Intercept	-2.694964

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

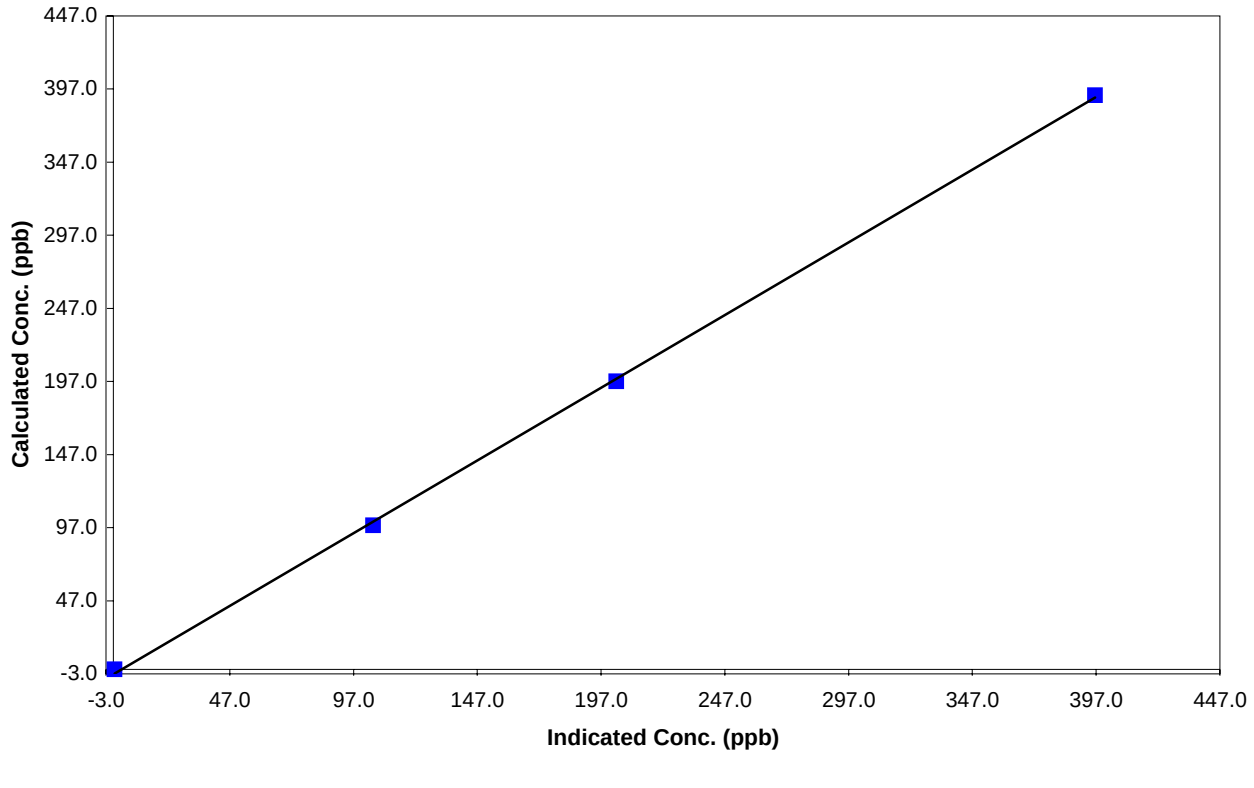
Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:00	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

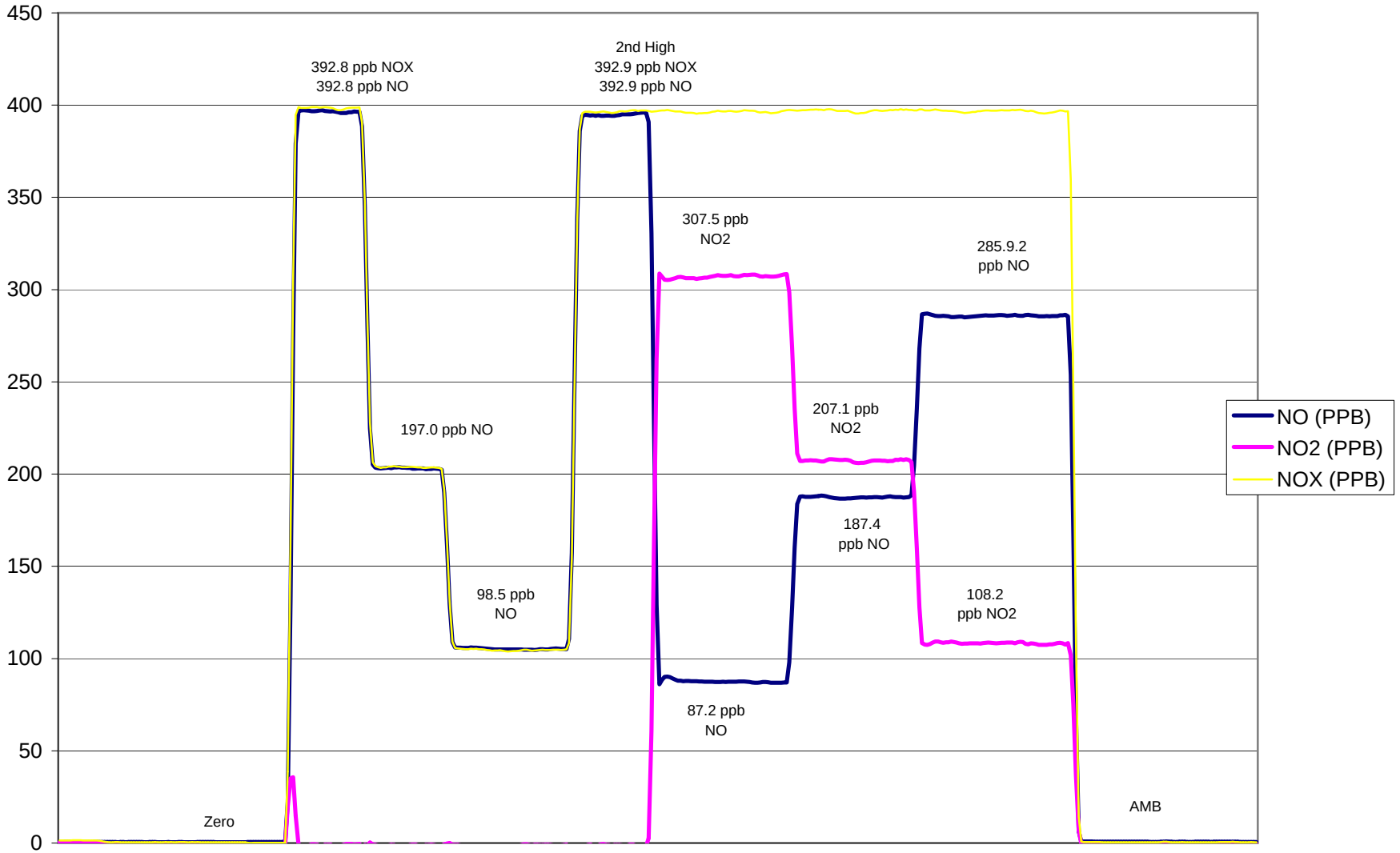
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A		
392.8	396.6	0.9904	Correlation Coefficient	0.999751
197.0	203.2	0.9695		
98.5	105.0	0.9380	Slope	0.994665
			Intercept	-3.299501

NO Calibration Curve



Kinuso NO_X Calibration



June 17, 2010

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover - Kinuso

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

Start Time (MST)	9:00	End Time (MST)	13:59
Barometric Pressure	0.935 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	1.466769	Calculated slope	0.986721
Calculated intercept	-5.199701	Calculated intercept	-2.067479
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-13.4	ppb	-13.4	ppb
Span	1.479		1.479	
Cell A intensity	78002	Hz		Hz
Cell B intensity	93149	Hz	94013	Hz
Pressure	695.30	in Hg	692.40	in Hg
CellA Flow	0.586	ccm	0.717	ccm
Cell B Flow	0.712	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	1.7	N/A
49.88	0.30	307.6	313.1	0.9824
4990	0.20	207.4	213.3	0.9724
4990	0.10	108.9	112.6	0.9674
4990	0.00	0.0	2.3	As found zero
4990	0.30	307.6	313.7	As found span
			Average Correction Factor	0.9741

Calculated value of As Found Response: 313.7 ppm Percent Change of As Found: 2.0%

	before calibration		after calibration	
Auto zero	2.1	ppb	109.8	ppb
Auto span	326.9	ppb	#DIV/0!	ppb

Notes: **After Zero & Span were not performed. Dropped to sample following last cal point.**
Level 2 internal span was accidentally pushed on analyzer instead of sample on first point.

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

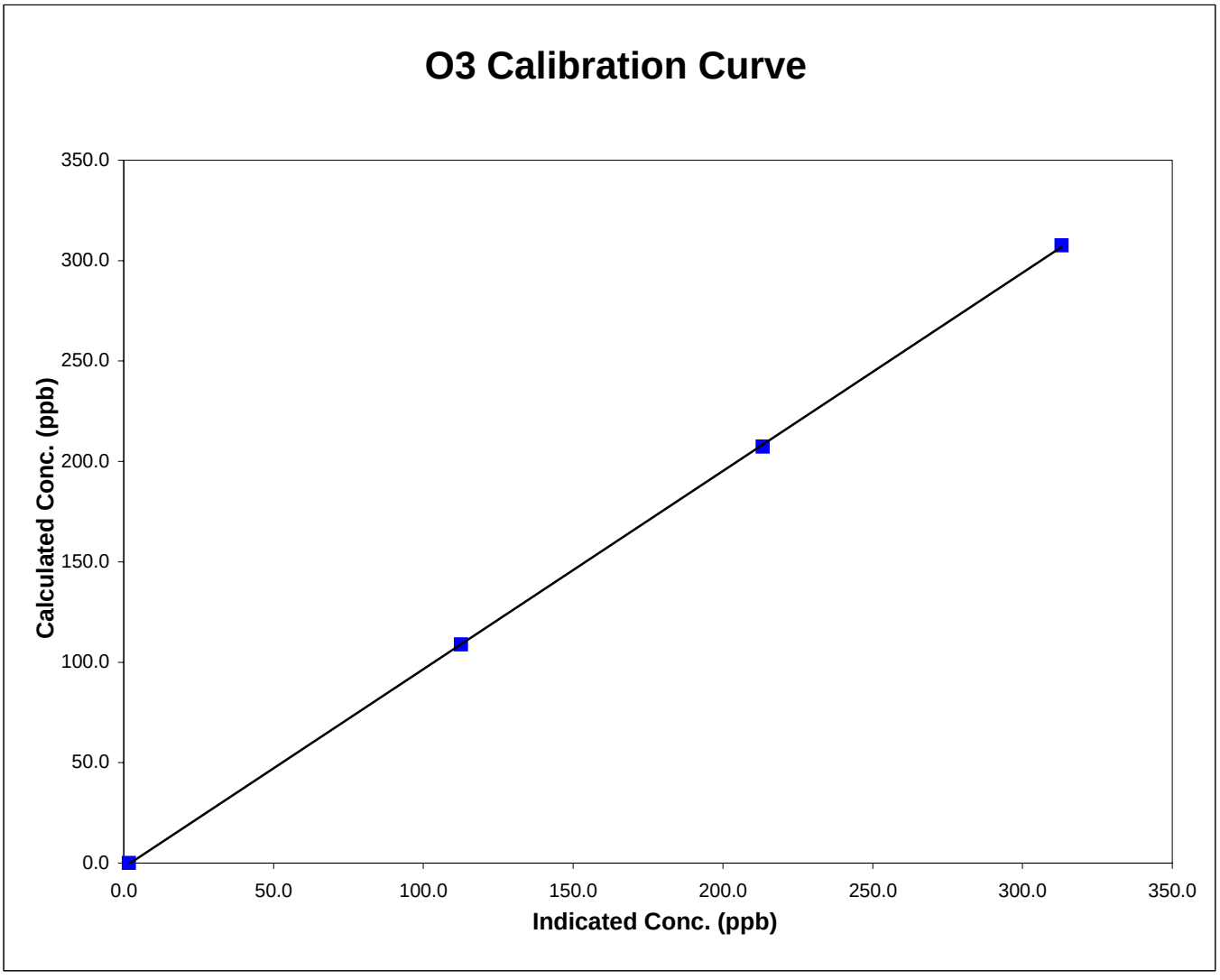
Air Monitoring Network **PASZA**

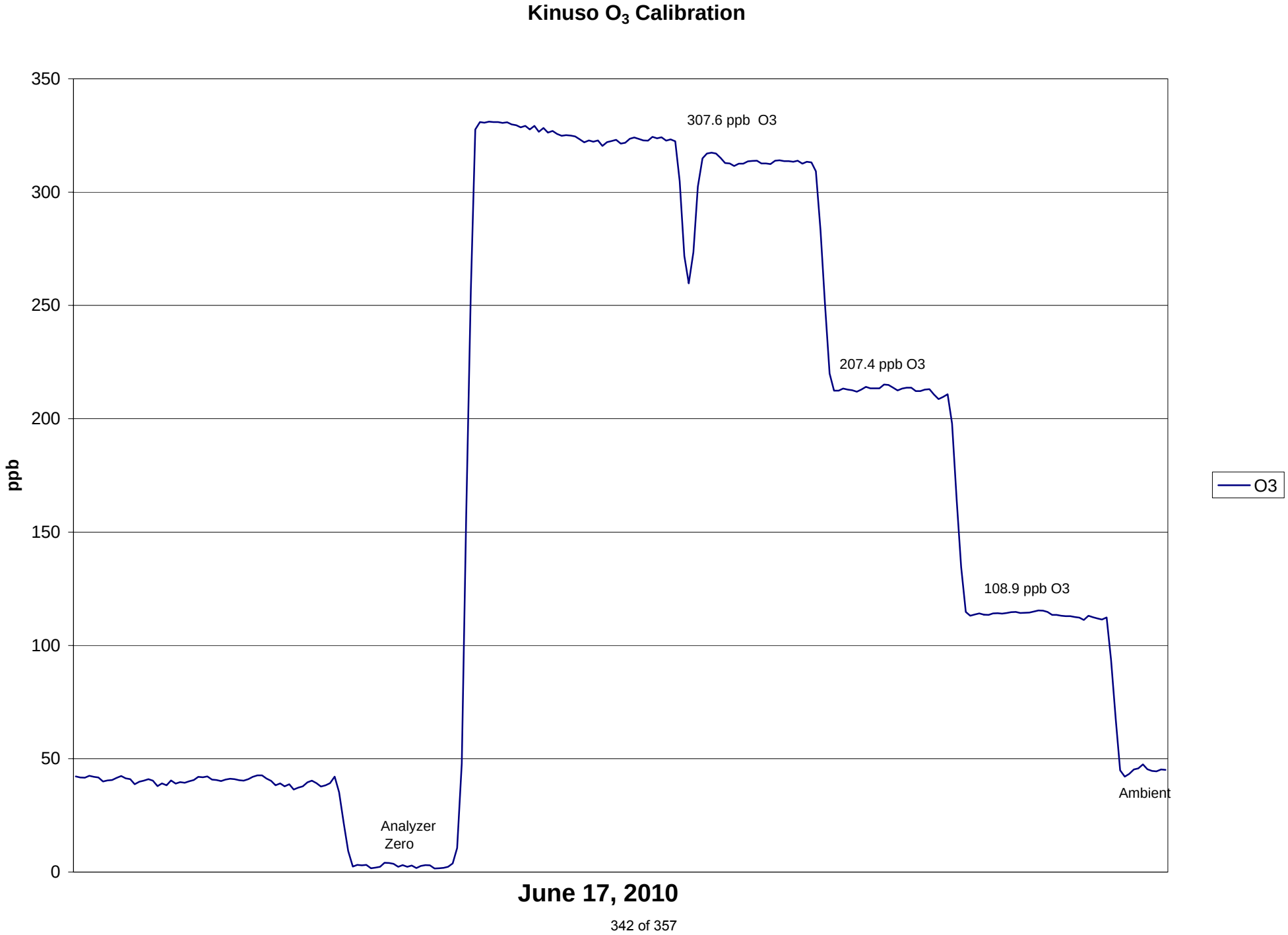
Station Information

Calibration Date	June 17, 2010	Previous Calibration	May 25, 2010
Station Number	9	Station Location	Rover - Kinuso
Start Time (MST)	9:00	End Time (MST)	13:59
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	1.7	NA		
307.6	313.1	0.9824	Correlation Coefficient	0.999969
207.4	213.3	0.9724		
108.9	112.6	0.9674	Slope	0.986721
			Intercept	-2.067479




Kinuso O_3 Calibration
350
300
250
200
150
100
50
0
ppb
307.6 ppb O3
207.4 ppb O3
108.9 ppb O3
Ambient
Analyzer
Zero
O3
June 17, 2010

Calibration Report

Parameter **SO2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover - Bonanza
Reason:	Routine / Install / Removal / Other:		
Start Time (MST)	8:00	End Time (MST)	10:28
Barometric Pressure	27.66 inches Hg	Station Temperature	15.7 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL 16161		
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	0.997578	Calculated slope	1.001749
Calculated intercept	-0.646236	Calculated intercept	-2.100578
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	10.1		9	
Coefficient	1.004		0.985	
UV Lamp Voltage	796	V	797	V
Chamber Temp	44.4	C	44.4	C
Perm Gas Temp	45	C	45	C
Pressure	675.8	mm Hg	672.7	mm Hg
Sample Flow	0.498	LPM	0.488	LPM
Lamp Intesity	47420	Hz	47396	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	0.0	N/A
4991	39.84	400.7	401.0	0.9992
4991	19.90	200.9	203.8	0.9860
4991	9.93	100.5	104.5	0.9619
				As found zero
				As found span
			Average Correction Factor	0.9824

Calculated value of As Found Response: NA

Percent Change of As Found: NA

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

Notes: As found span was same as yesterday, ~450 ppb, after stabilization PMT power supply was adjusted. Analyzer was then placed in internal.ZERO and calibration was restarted.

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

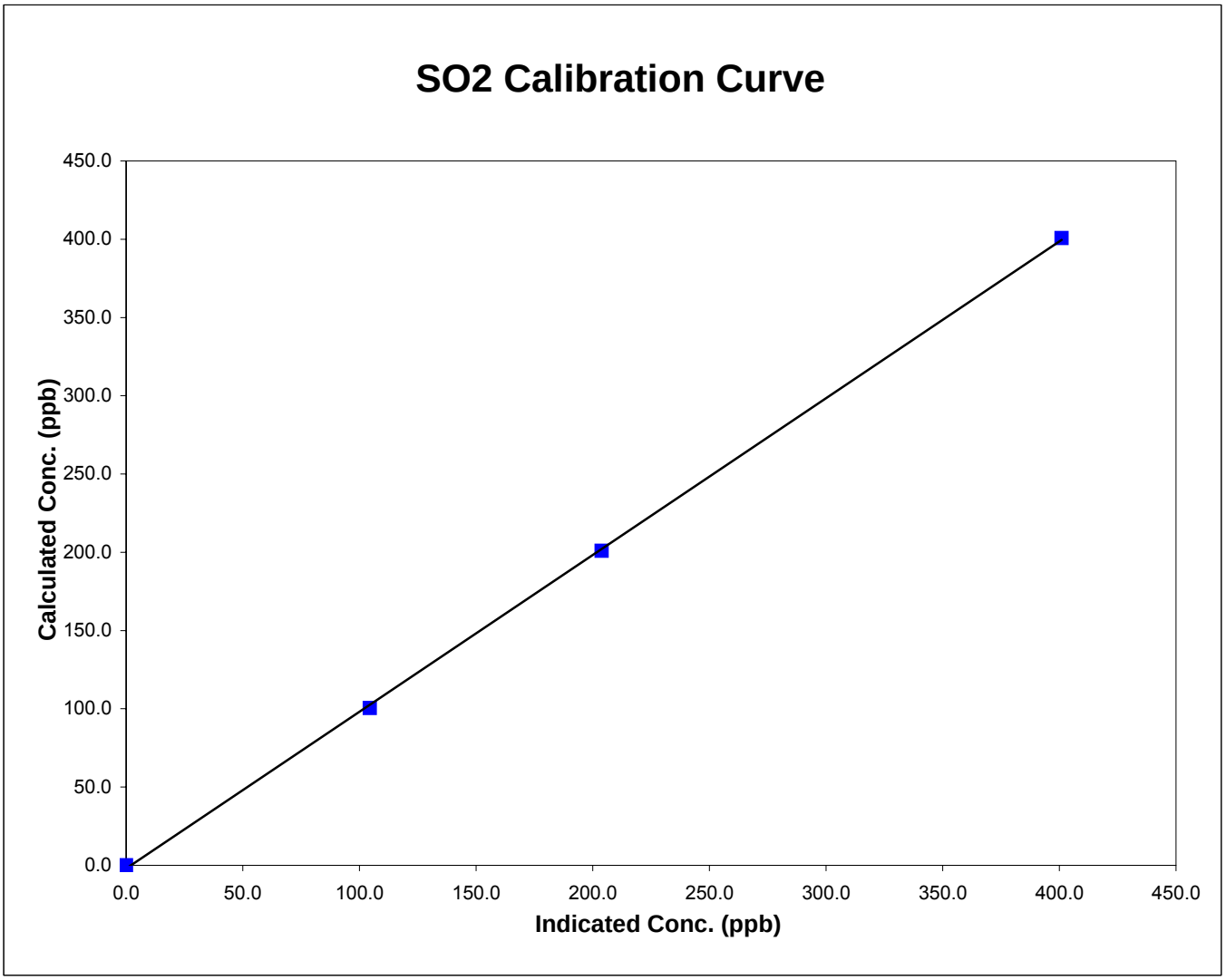
FOCUS AIR QUALITY MONITORING

Station Information

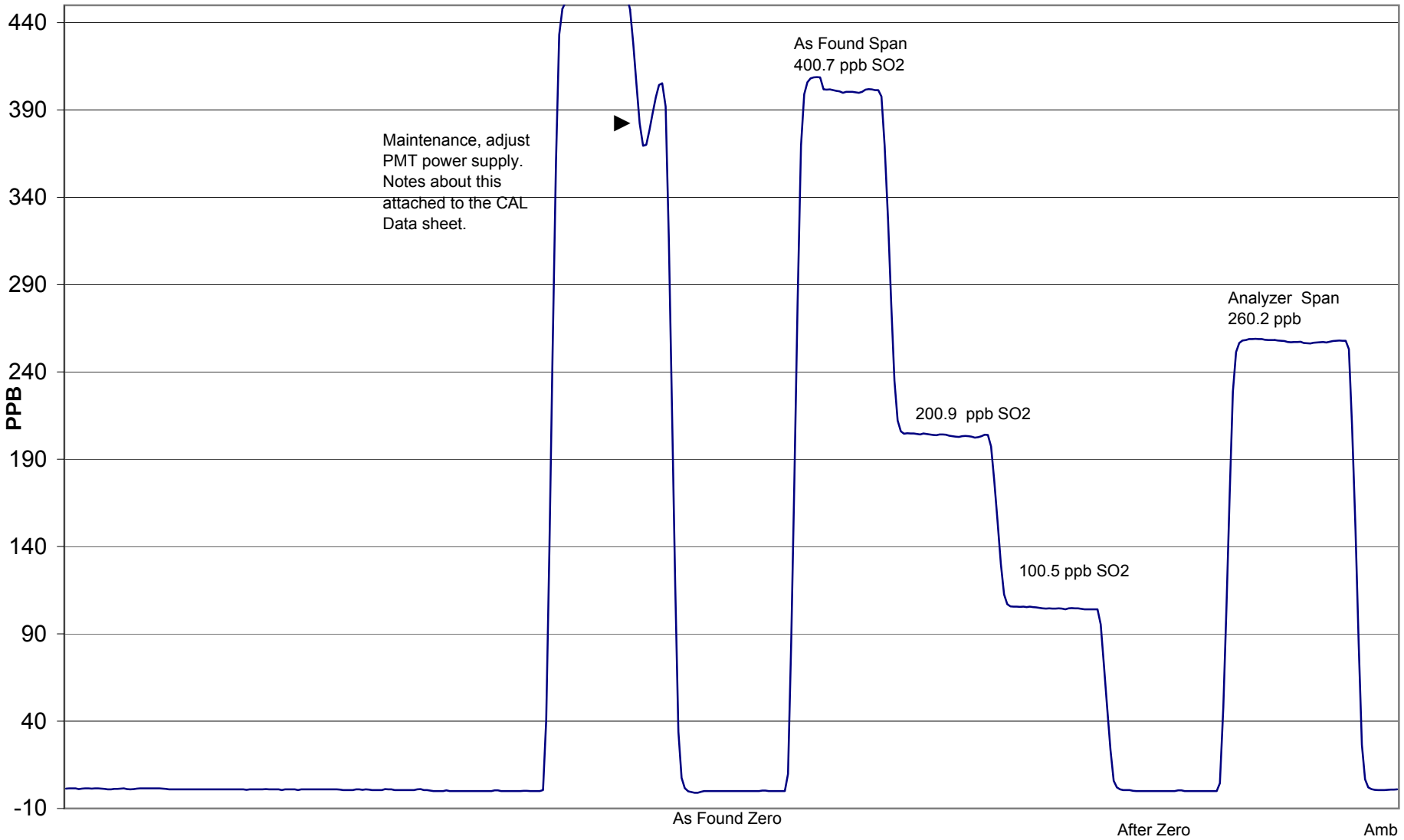
Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover - Bonanza
Start Time (MST)	8:00	End Time (MST)	10:28
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
400.7	401.0	0.9992	Correlation Coefficient	0.999875
200.9	203.8	0.9860		
100.5	104.5	0.9619	Slope	1.001749
			Intercept	-2.100578



Bonanza SO_2 Calibration



June 18, 2010

Calibration Report

Parameter **TRS**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover-Bonanza
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:00	End Time (MST)	13:44
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	0.965749	Calculated slope	1.000749
Calculated intercept	0.447904	Calculated intercept	0.498726
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	10.7	ppb	10.4	ppb
Coefficient	1.451		1.379	
Lamp Voltage	790	V	791	V
Chamber Temp	43.8	C	43.6	C
Perm gas Temp	45.01	C	45	C
Pressure	663	mmHg	658	mmHg
Sample Flow	.432	ccm	.438	ccm
Lamp Intensity	38554.0	Hz	39134.0	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	-0.7	N/A
4991	79.74	81.0	80.4	1.0069
4991	39.80	40.7	40.2	1.0145
4991	9.93	10.2	9.9	1.0302
				As found zero
				As found span
			Average Correction Factor	1.0172

Calculated value of As Found Response: NA ppm Percent Change of As Found: NA

	before calibration		after calibration	
Auto zero	-0.6	ppm	0.1	ppm
Auto span	64.8	ppm	65.7	ppm

Notes:

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**

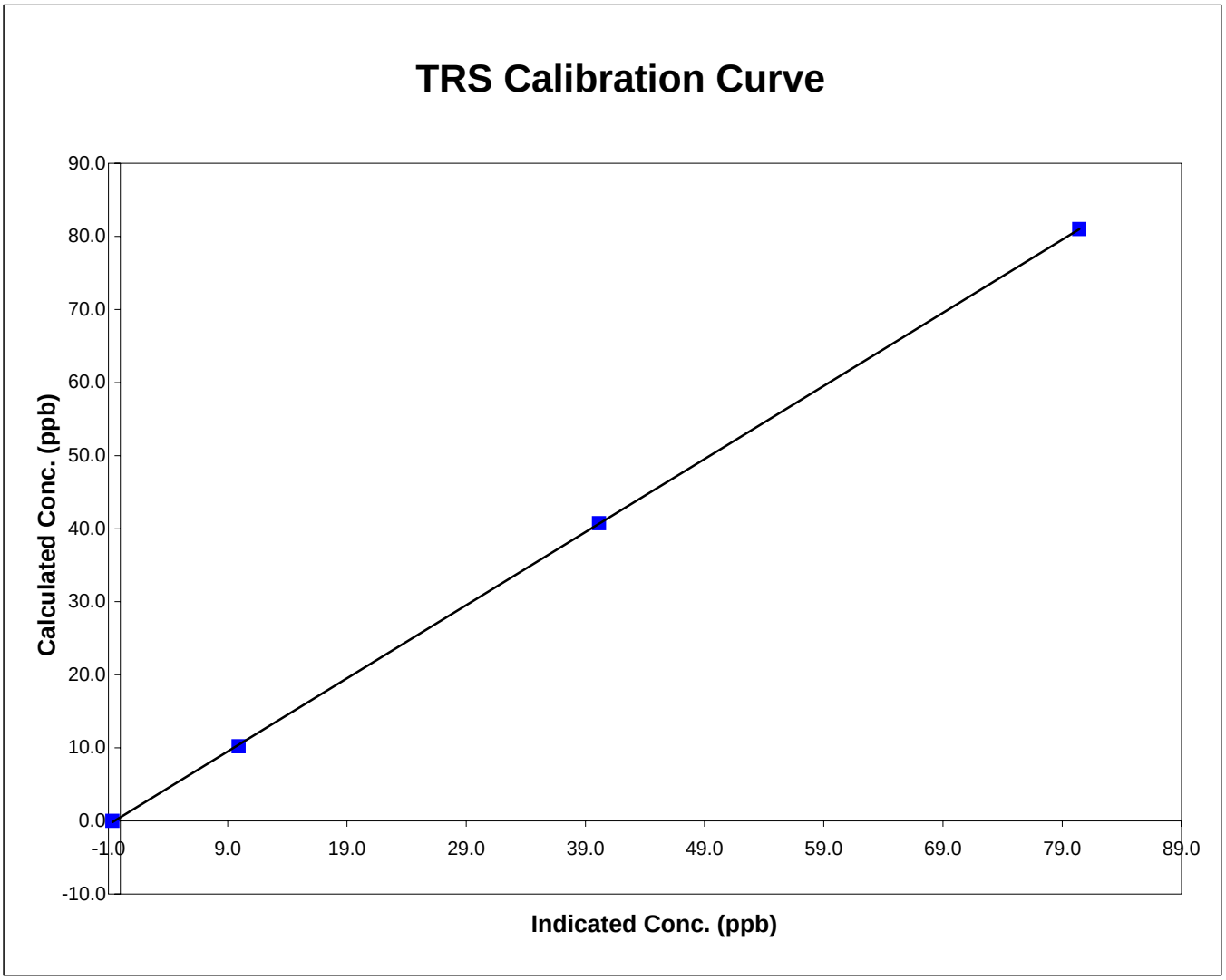
FOCUS AIR QUALITY MONITORING

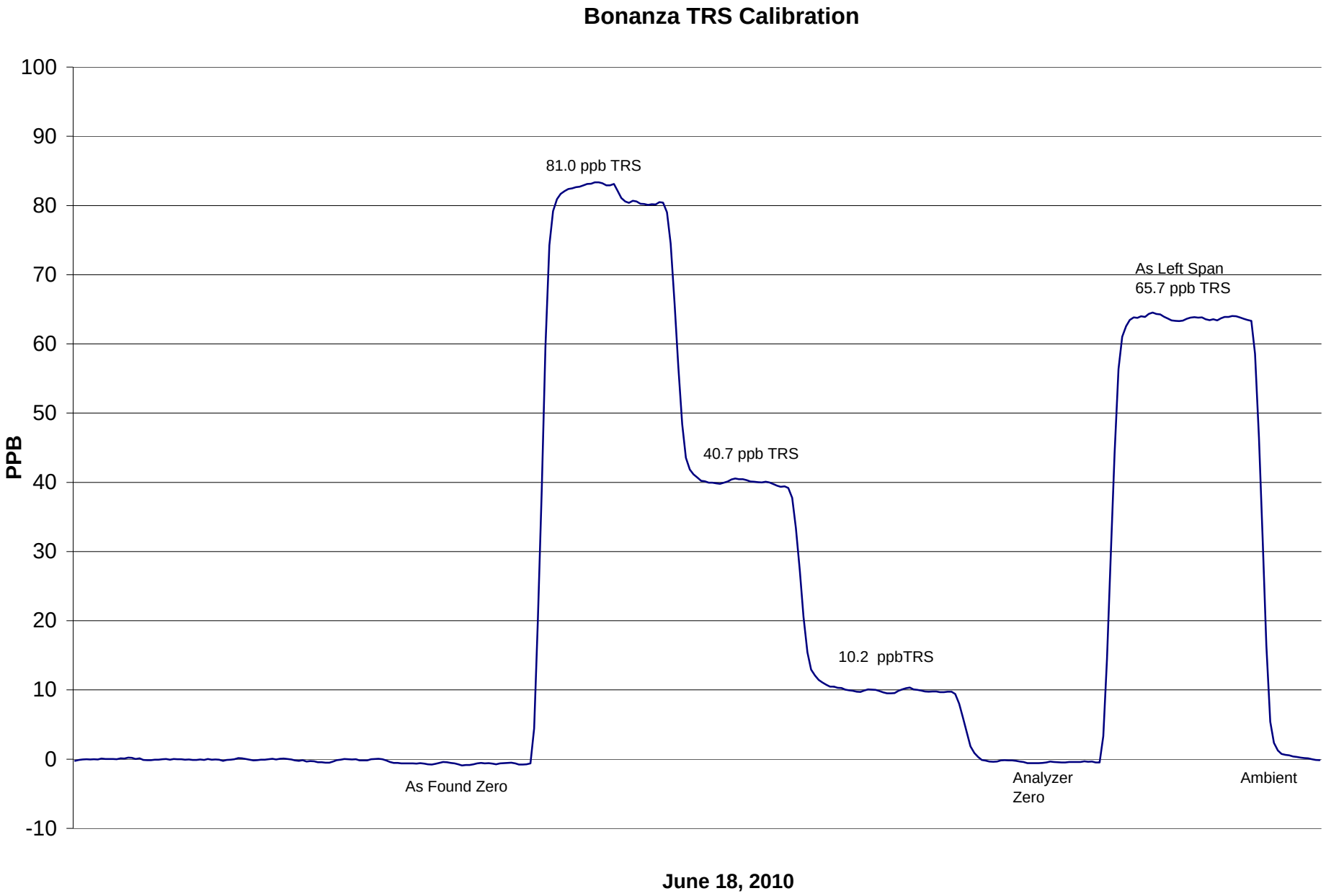
Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover-Bonanza
Start Time (MST)	11:00	End Time (MST)	13:44
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	-0.7	N/A		
81.0	80.4	1.0069	Correlation Coefficient	0.999983
40.7	40.2	1.0145		
10.2	9.9	1.0302	Slope	1.000749
			Intercept	0.498726




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
65.7 ppb TRS
As Found Zero
Analyzer
Zero
Ambient
June 18, 2010

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover Bonanza

Reason: Routine | Installation | Removal | Other:

Start Time (MST)	9:00		End Time (MST)	11:43	
Barometric Pressure	0.916	Atm	Station Temperature	15.7	Deg C
Calibrator	Environics 6100		Serial Number	3474	
NO Cal Gas Conc	49.6	ppm	Cal Gas Expiry Date	July 2, 2007	
NOx Cal Gas Conc	49.6	ppm	Cal Gas Serial #	CC114395	

DACS Information

DACS make	Focus AP1000	DACS serial No.	52662

Parameter		NO2	NOx	NO
Before	Data Slope	0.995639	0.988887	0.994665
	Data Offset	1.276473	-2.694964	-3.299501
After	Data Slope	0.995766	0.997728	1.005136
	Data Offset	1.154511	-2.729008	-3.513829
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	701120011

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	4.9	mV	4.9	mV
NOx bkgnd	5.2	mV	5.3	mV
NO coefficient	0.878		0.875	
NOx coefficient	0.999		0.999	
NO2 conv temp	326.3	Deg C	323.2	Deg C
PMT Temp	-2.9	Deg C	-3.1	Deg C
PMT Volt	-829.5	mV	-829.9	mV
R Cell Press	157.2	in Hg	153.0	in Hg
Sample Flow	0.506	ccm	0.521	ccm

Notes:

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 18, 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	0.0	0.6	-1.6	N/A	N/A
1	4991	39.84	392.8	392.8	0.0	394.9	392.7	-0.8	0.9947	1.0002
2	4991	19.90	197.0	197.0	0.0	201.9	201.0	-0.9	0.9757	0.9800
3	4991	9.93	98.5	98.5	0.0	104.0	104.4	-1.1	0.9470	0.9434
AFZ										
AFS										
							Average Correction Factor		0.9725	0.9745

As Found Concentrations: NO_X= NA NO= NA As Found Percent Change NO_X= NA NO= NA

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				0.0	0.6	-1.6	N/A	N/A	N/A	N/A
NO point	393.0	393.0	0.0	394.8	393.0	-1.3	0.9956	1.0000	N/A	N/A
300	393.0	87.1	306.0	394.8	87.1	305.8	0.9955	1.0000	1.0007	99.9%
200	393.0	185.8	207.3	395.3	185.8	207.2	0.9943	1.0000	1.0004	100.0%
100	393.0	283.8	109.2	395.6	283.8	109.1	0.9935	1.0000	1.0008	99.9%
					Average Correction Factor		0.9944	1.0000	1.0006	99.9%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.4	-0.9	0.7	ppb	0.0	-1.0	0.6	ppb
Auto span	312.6	308.0	2.9	ppb	290.7	285.1	4.0	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

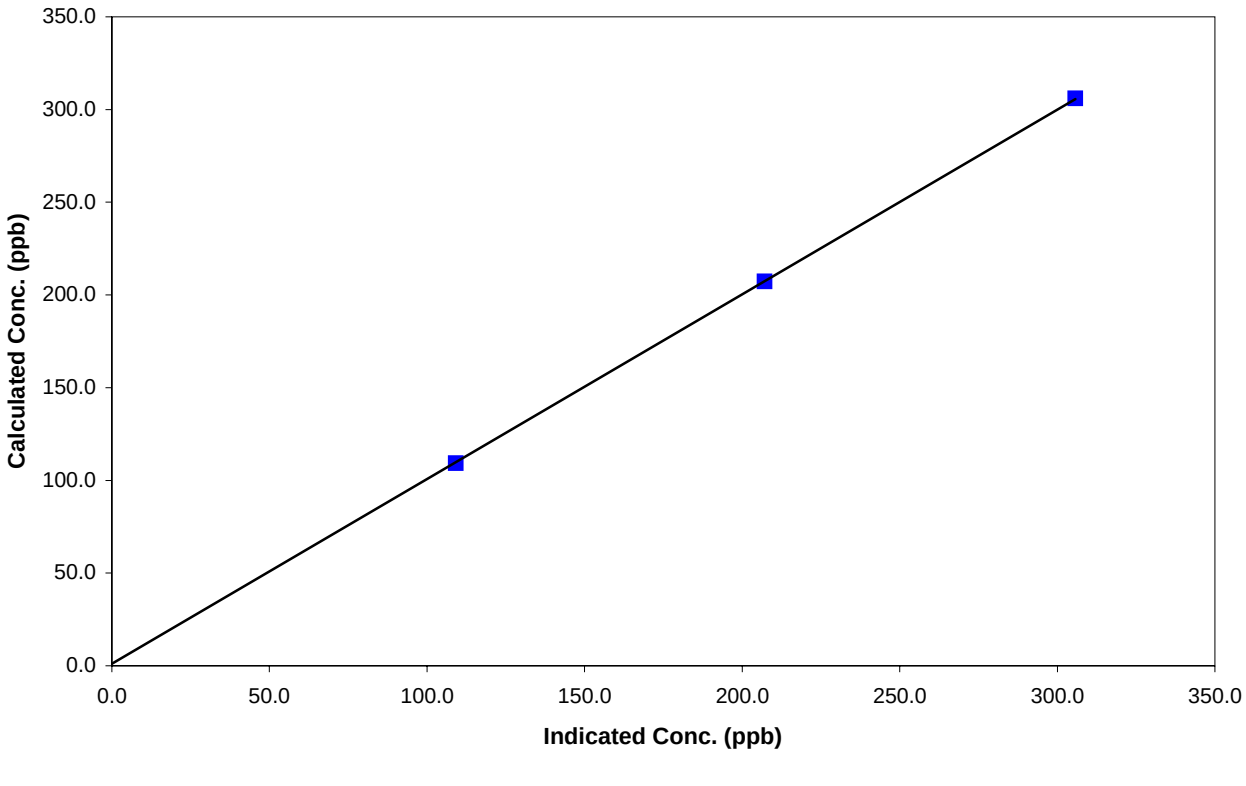
Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:00	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.6	N/A		
306.0	305.8	1.0007	Correlation Coefficient	0.999986
207.3	207.2	1.0004		
109.2	109.1	1.0008	Slope	0.995766
			Intercept	1.154511

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

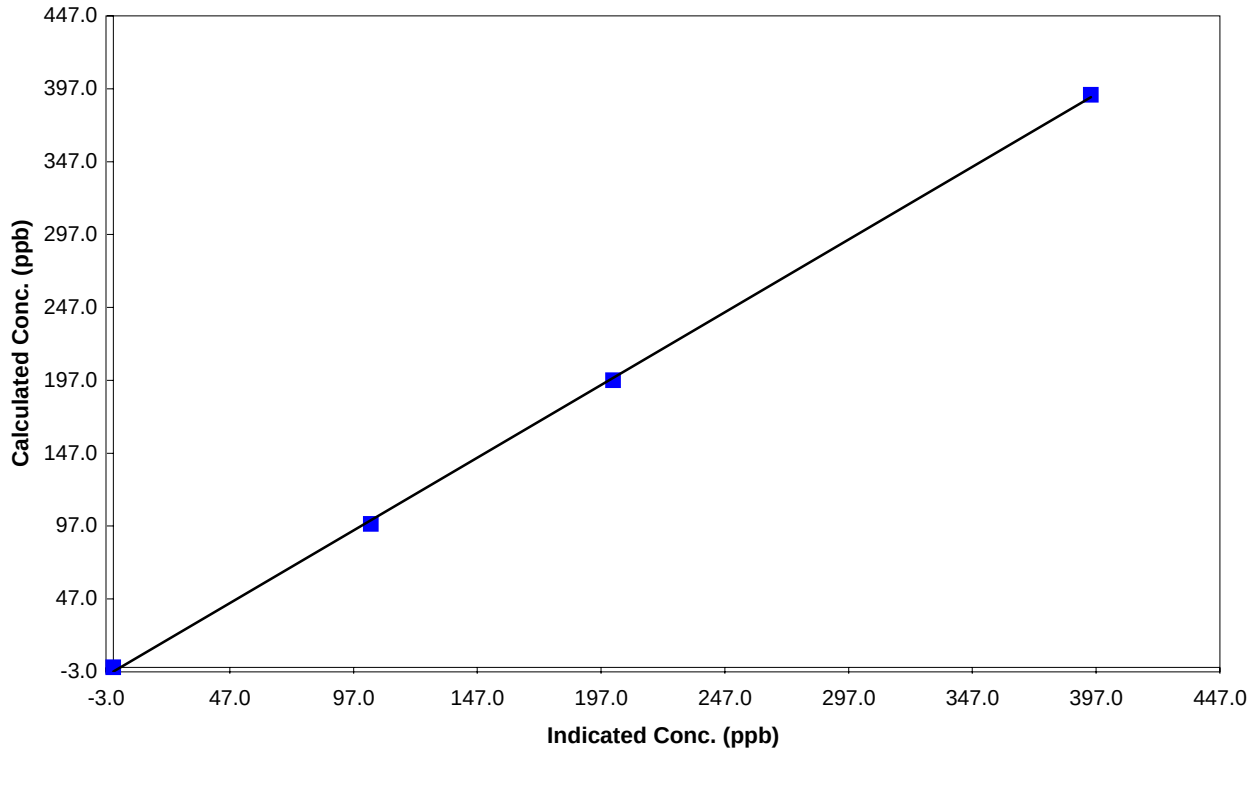
Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:00	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
392.8	394.9	0.9947	Correlation Coefficient	0.999772
197.0	201.9	0.9757		
98.5	104.0	0.9470	Slope	0.997728
			Intercept	-2.729008

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

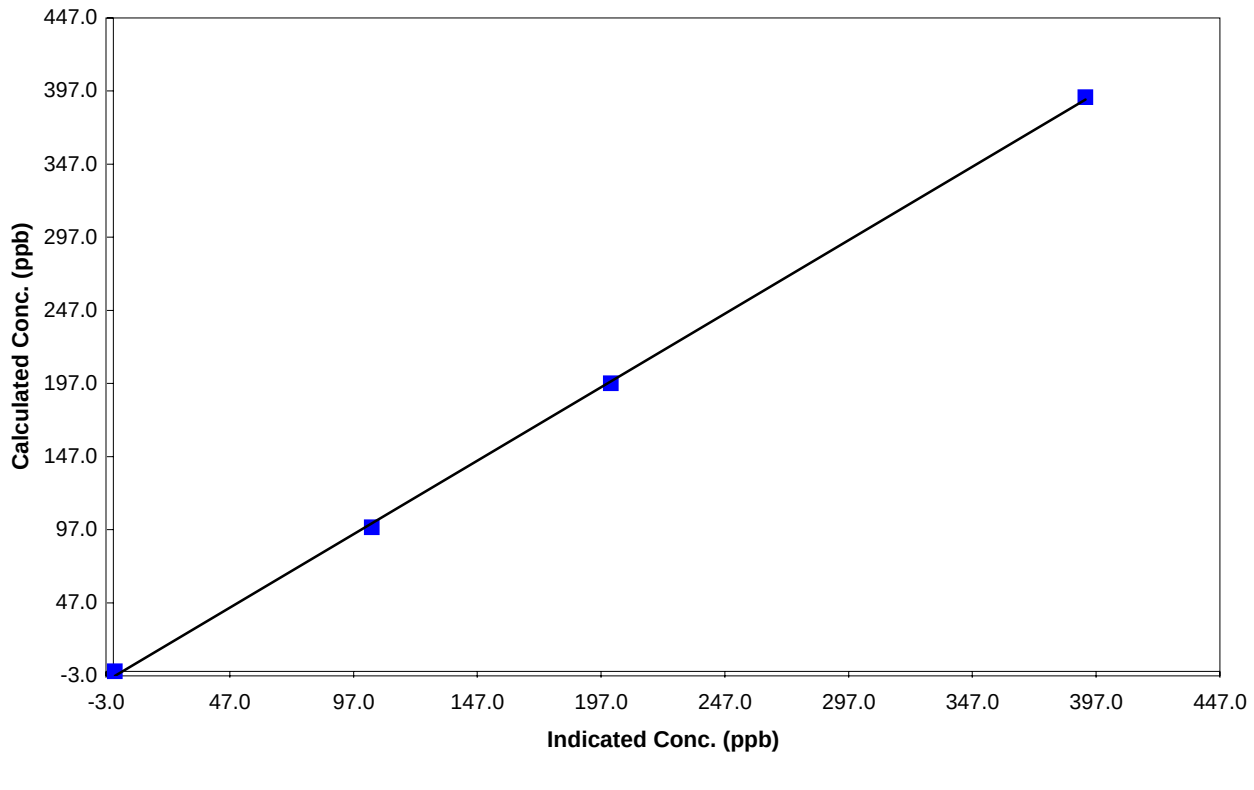
Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover Bonanza
Start Time (MST)	9:00	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

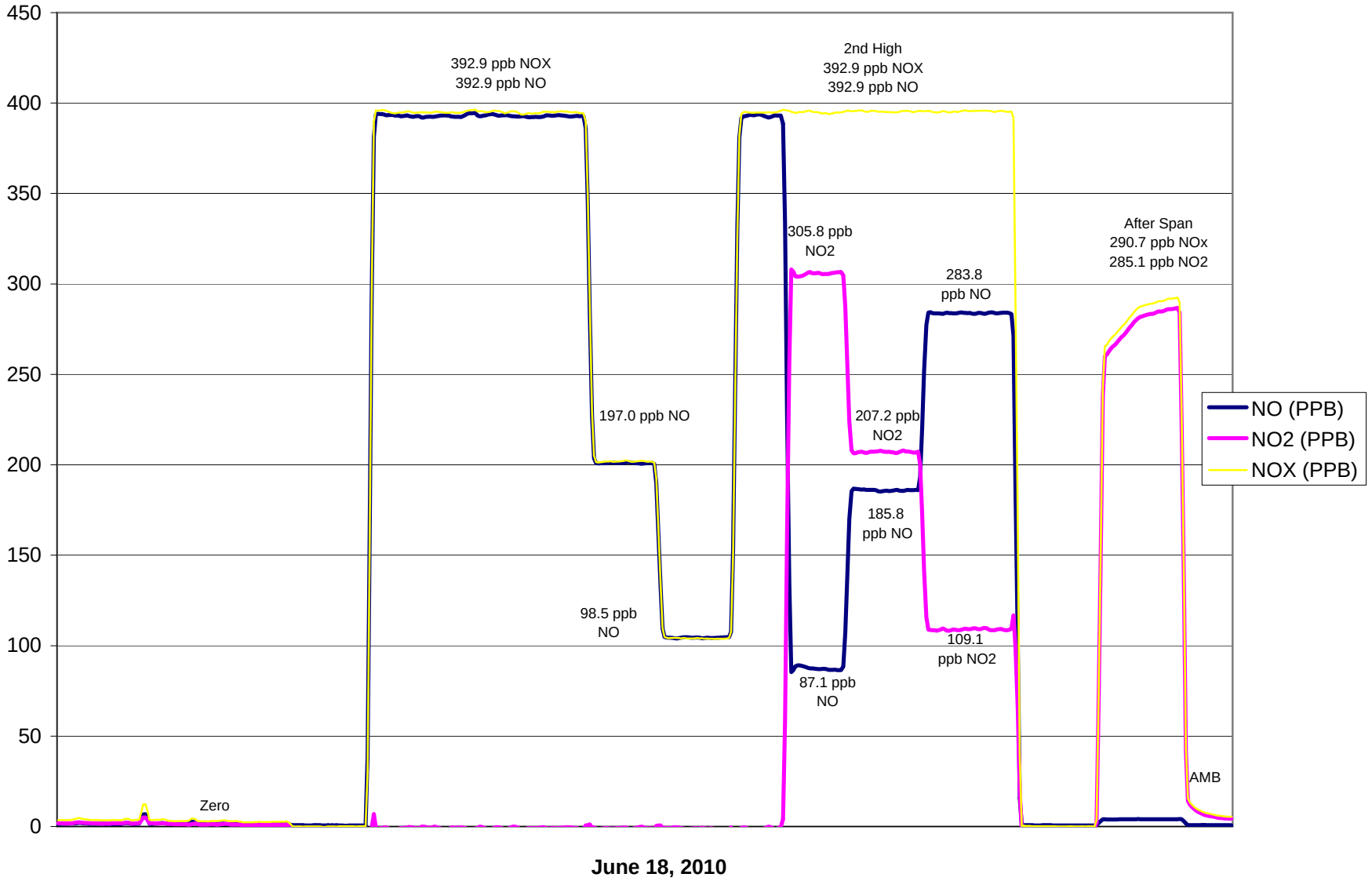
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A		
392.8	392.7	1.0002	Correlation Coefficient	0.999741
197.0	201.0	0.9800		
98.5	104.4	0.9434	Slope	1.005136
			Intercept	-3.513829

NO Calibration Curve



Bonanza NO_X Calibration



June 18, 2010

Calibration Report

Parameter **O3**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover - Bonanza

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

Start Time (MST)	9:00	End Time (MST)	12:44
Barometric Pressure	0.935 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	0.986721	Calculated slope	1.005504
Calculated intercept	-2.067479	Calculated intercept	-1.583813
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-13.4	ppb	-13.4	ppb
Span	1.479		1.442	
Cell A intensity	78002	Hz	75967	Hz
Cell B intensity	93149	Hz	90691	Hz
Pressure	695.30	in Hg	697.80	in Hg
CellA Flow	0.586	ccm	0.723	ccm
Cell B Flow	0.712	cmm	0.687	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.6	N/A
4990	0.30	306.0	305.5	1.0017
4990	0.20	207.3	207.5	0.9991
4990	0.10	109.2	111.8	0.9768
				As found zero
				As found span
			Average Correction Factor	0.9925

Calculated value of As Found Response: NA ppm Percent Change of As Found: NA

	before calibration		after calibration	
Auto zero	2.1	ppb	0.2	ppb
Auto span	326.9	ppb	298.7	ppb

Notes: **The zero air cylinder was almost empty, so the points were taken on 15 min intervals instead of the standard 20 min.**

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

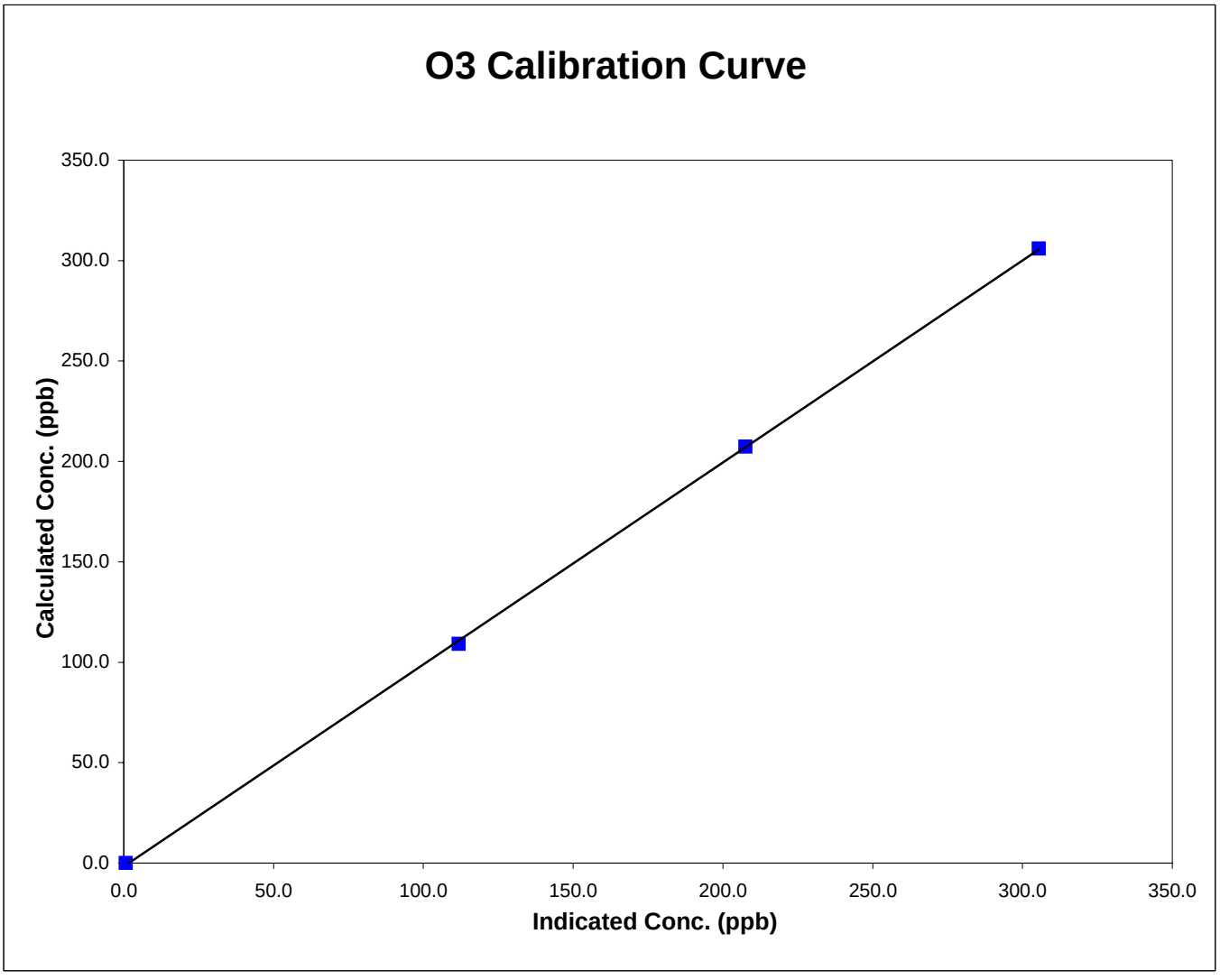
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2010	Previous Calibration	June 17, 2010
Station Number	9	Station Location	Rover - Bonanza
Start Time (MST)	9:00	End Time (MST)	12:44
Analyzer make/model	TEI Model 49C	Analyzer serial #	609-716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	NA		
306.0	305.5	1.0017	Correlation Coefficient	0.999927
207.3	207.5	0.9991		
109.2	111.8	0.9768	Slope	1.005504
			Intercept	-1.583813



Bonanza O3 Calibration