Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
June 2014

Peace Airshed Zone Association
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July 30th, 2014

Alberta Environment
11th Floor, Oxbridge Place
9820-106 Street
Edmonton Alberta T5K 2J6

RE: Peace Airshed Zone Association (PAZA) – June 2014 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **June 2014**.

This report is submitted by PAZA on behalf of the industrial member companies to satisfy the requirements of the following facility Operating Approvals:

Company	Facility	LSD	EPEA Approval Number
Advantage Oil & Gas Ltd.	Glacier	05-02-076-13-W6	262479-00-00
Alberta Power (2000) Ltd. (an ATCO company)	Sturgeon	SW-06-069-21-W5	10283-02-02
ATCO Power Canada	Poplar Hill	11-19-073-08-W6	67774-01-01
ATCO Power Canada	Valleyview	SW-06-069-21-W5	147709-01-01
AltaGas Ltd.	Pouce Coupe	03-03-081-13-W6	247673-00-00
	Ante Creek	02-26-068-25-W5	266694-00-00
	Gordondale	16-31-78-11-W6M	287474-00-00
Apache Canada Ltd.	House Mountain	01-08-070-10-W5	10137-02-02
Birchcliff Energy Ltd.	Pouce Coupe	03-22-078-12-W6	252529-00-00
Canadian Natural Resources Limited	Bonanza	11-25-081-11-W6	00000029-01-00
	Progress/Gordondale	01-01-077-10-W6	00010036-02-00
	Gold Creek	13-26-067-05-W6	00010446-02-00

Company	Facility	LSD	EPEA Approval Number
	Teepee Creek	SE-2-074-04-W6	00001635-02-00
	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00
Canfor Forest Products	Grande Prairie	SW-23-071-06-W6	152645-01-00
Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	00000212-01-00
Devon Canada	NW Belloy (Dunvegan)	16-36-079-03-W6	00009810-02-00
	Eaglesham (South)	02-14-077-25-W5	00047669-01-00
	North Normanville	03-36-079-23-W5	00047455-01-00
	West Culp	05-34-078-25-W6	00136284-00-00
	Cecil	08-15-084-08-W6	00010032-02-00
Encana Corporation	Sexsmith	04-08-075-07-W6	00010002-01-00
Enerplus Resources	Pouce Coupe	SW-06-069-21-W5	1464-02-03
Grande Prairie Generation Inc.	Northern Prairie Power Project	04-19-073-08-W6	00238762-00-00
Long Run Exploration	Eaglesham	01-25-076-01-W6	00241532-00-00
	Kakut	14-12-075-03-W6	00248469-00-00
	Donnelly	06-01-077-21-W5	00000087-02-00
	Puskwaskau	03-26-074-01-W6	00017524-01-00
Longview Oil Corp.	Sunset House	06-22-070-20-W5	138884-01-00
Penn West Petroleum Ltd.	Tangent	13-29-080-23-W5	00001746-02-00
	Pouce Coupe	16-07-078-11-W6	00000614-01-00

Company	Facility	LSD	EPEA Approval Number
Petrus Resources	Rycroft	08-25-077-06-W6	11351-02-00
	Spirit River	08-34-077-06-W6	11096-02-00
Spectra Energy Midstream Corporation	Fourth Creek	16-11-082-09-W6	00000263-01-00
	Gordondale	11-26-079-09-W6	00011495-01-01
	Pouce Coupe/Bonanza	3-23-080-13-W6	00070203-01-01
Suncor Energy Inc.	Progress	07-22-078-09-W6	00011428-02-00
TAQA North Ltd.	Valhalla	13-21-076-09-W6	00017620-01-00
Veresen Energy	Hythe Brainard	11-18-074-12-W6	00010910-02-00
Weyerhaeuser Canada	Grande Prairie Pulp and Wood Plant	01-14-070-05-W6	00000113-02-00

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 Continuous Data Summary" and "Continuous Network Equipment Summary" pages of the report.

Continuous Monitoring: **Eight (8) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, Falher, Portable-Reno and Portable-Clairmont.**

During the month of **June** the following events were noted:

Henry Pirker Station:

- The measured ambient air quality was within the 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 and 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 and 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 and sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of June with the exception of the $PM_{2.5}$ analyzer, which experienced equipment failure. Replacement parts delivered June 19th and analyzer returned to service June 20th. **AE Reference #286016**

Valleyview Station:

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

Reno Station:

- The measured ambient air quality was within the AAAQO for the Reno station.
- All analyzers and sensors at the Reno station had an operational uptime greater than 90% for the month of June.
- Station ended service at this location on June 19th and was relocated to Clairmont.

Falher Station:

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

Clairmont Station:

- The measured ambient air quality was within the AAAQO for the Reno station.
- All analyzers and sensors at the Reno station had an operational uptime greater than 90% for the month of June.
- Station was relocated to this site on June 19th, allowed to stabilize overnight and began service on June 20th.

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of June: Woking, Pinto Creek, Wapiti, Puskwaskau, and Girouxville 4. The passive sample analyses were performed by MAXXAM Analytics Inc.

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

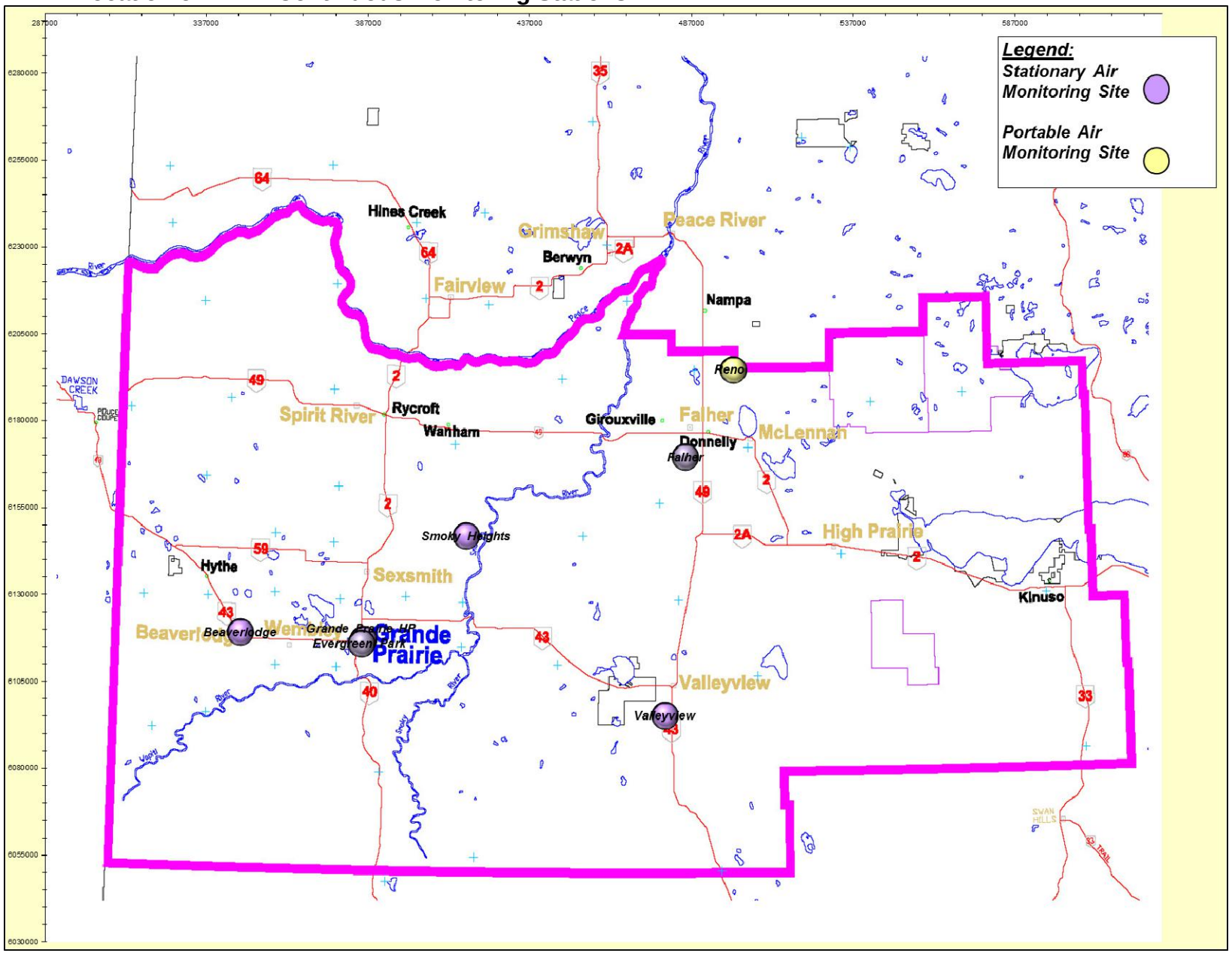
- Monthly average concentrations for SO_2 passives ranged from 0.1 ppb to 0.3 ppb, with a mean of 0.2 ppb.
- Monthly average concentrations for NO_2 passives ranged from 0.2 ppb to 4.3 ppb, with a mean of 1.2 ppb.
- Monthly average concentrations for O_3 passives ranged from 21.2 ppb to 39.4 ppb, with a mean of 30.2 ppb.
- Monthly average concentrations for H_2S ranged from 0.1 ppb to 0.2 ppb, with a mean of 0.2 pbb.

If you have any questions or concerns, please contact Patrick Andersen at 403.505.1041 or the PAZA office at 780.833.4343.

On Behalf of the
Peace Airshed Zone Association

Patrick Andersen, B.Sc.
Program Manager

Location of PAZA Continuous Monitoring Stations



PAZA Monthly Continuous Data Summary

Jun-2014	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	48	Henry Pirker	0.1	0	0	4.2	Jun-05 08:00	0.6	Jun-05	100%
SO_2 (ppb)	172	48	Evergreen Park	0.2	0	0	12.2	Jun-04 12:00	1.4	Jun-04	100%
SO_2 (ppb)	172	48	Smoky Heights	0.2	0	0	4.8	Jun-21 23:00	0.5	Jun-03	100%
SO_2 (ppb)	172	48	Beaverlodge	0.1	0	0	2.6	Jun-26 23:00	0.3	Jun-07	100%
SO_2 (ppb)	172	48	Valleyview	0.6	0	0	36.8	Jun-09 09:00	3.9	Jun-09	100%
SO_2 (ppb)	172	48	Reno	0.1	0	0	2.0	Jun-08 02:00	0.3	Jun-13	100%
SO_2 (ppb)	172	48	Falher	0.1	0	0	3.1	Jun-27 10:00	0.4	Jun-12	99%
SO_2 (ppb)	172	48	Clairmont	0.4	0	0	6.7	Jun-24 11:00	1.1	Jun-21	100%
NO (ppb)			Henry Pirker	0.9	0	0	16.9	Jun-17 08:00	2.9	Jun-19	100%
NO_2 (ppb)	159	106	Henry Pirker	4.5	0	0	21.0	Jun-12 07:00	7.5	Jun-13	100%
NO_X (ppb)			Henry Pirker	5.4	0	0	34.9	Jun-12 07:00	10.3	Jun-19	100%
NO (ppb)			Beaverlodge	0.4	0	0	13.1	Jun-22 07:00	1.4	Jun-22	100%
NO_2 (ppb)	159	106	Beaverlodge	2.0	0	0	16.7	Jun-27 14:00	4.2	Jun-27	100%
NO_X (ppb)			Beaverlodge	2.4	0	0	21.7	Jun-27 14:00	5.3	Jun-27	100%
NO (ppb)			Reno	0.9	0	0	14.9	Jun-19 03:00	1.3	Jun-01	100%
NO_2 (ppb)	159	106	Reno	3.7	0	0	21.9	Jun-19 03:00	5.7	Jun-01	100%
NO_X (ppb)			Reno	4.6	0	0	37.1	Jun-19 03:00	7.0	Jun-01	100%
NO (ppb)			Clairmont	0.9	0	0	11.3	Jun-27 07:00	1.8	Jun-22	100%
NO_2 (ppb)	159	106	Clairmont	3.6	0	0	18.2	Jun-21 23:00	5.0	Jun-07	100%
NO_X (ppb)			Clairmont	4.6	0	0	23.1	Jun-21 23:00	6.7	Jun-22	100%
O_3 (ppb)	82		Henry Pirker	27.9	0	-	52.4	Jun-13 16:00	35.5	Jun-23	100%
O_3 (ppb) - 8-hr			Henry Pirker		0				48.5	Jun-11	
O_3 (ppb)	82		Beaverlodge	30.1	0	-	52.9	Jun-13 17:00	39.9	Jun-12	100%
O_3 (ppb) - 8-hr			Beaverlodge		0				47.0	Jun-23	
O_3 (ppb)	82		Reno	29.6	0	-	55.8	Jun-12 17:00	42.0	Jun-12	100%
O_3 (ppb) - 8-hr			Reno		0				53.3	Jun-12	
O_3 (ppb)	82		Clairmont	26.6	0	-	49.2	Jun-23 19:00	36.7	Jun-23	100%
O_3 (ppb) - 8-hr			Clairmont		0				46.3	Jun-23	
CO (ppm)	13		Henry Pirker	0.17	0	-	0.5	Jun-12 06:00	0.2	Jun-02	100%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.3	Jun-08	

PAZA Monthly Continuous Data Summary – continued

Jun-2014	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
THC (ppm)			Henry Pirker	1.8	-	-	2.7	Jun-18 06:00	2.1	Jun-02	99%
CH_4 (ppm)			Henry Pirker	1.8	-	-	2.7	Jun-18 06:00	2.1	Jun-02	99%
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	Jun-23 14:00	0.0	Jun-26	99%
THC (ppm)			Reno	2.01	-	-	2.3	Jun-02 02:00	2.1	Jun-06	100%
THC (ppm)			Clairmont	2.14	-	-	3.0	Jun-27 06:00	2.2	Jun-27	100%
TRS (ppb)			Henry Pirker	0.2	-	-	1.1	Jun-14 06:00	0.3	Jun-23	100%
TRS (ppb)			Evergreen Park	0.3	-	-	2.0	Jun-14 02:00	0.5	Jun-13	100%
TRS (ppb)			Smoky Heights	0.1	-	-	2.7	Jun-22 04:00	0.3	Jun-22	100%
TRS (ppb)			Reno	0.3	-	-	0.8	Jun-11 07:00	0.5	Jun-12	100%
TRS (ppb)			Clairmont	0.3	-	-	2.0	Jun-27 06:00	0.5	Jun-30	100%
H_2S (ppb)	10	3	Valleyview	0.2	0	0	2.5	Jun-19 06:00	0.5	Jun-19	100%
H_2S (ppb)	10	3	Falher	0.2	0	0	2.6	Jun-23 07:00	0.5	Jun-23	99%
$PM_{2.5}$ (µg/m3)	80	30	Henry Pirker	5.1	0	0	50.4	Jun-01 00:00	10.2	Jun-24	100%
$PM_{2.5}$ (µg/m3)	80	30	Evergreen Park	3.9	0	0	40.4	Jun-04 17:00	9.8	Jun-24	99%
$PM_{2.5}$ (µg/m3)	80	30	Smoky Heights	3.4	0	0	48.2	Jun-03 22:00	10.2	Jun-03	99%
$PM_{2.5}$ (µg/m3)	80	30	Beaverlodge	3.2	0	0	10.0	Jun-27 15:00	5.3	Jun-27	18%
$PM_{2.5}$ (µg/m3)	80	30	Reno	2.1	0	0	12.4	Jun-03 19:00	5.2	Jun-03	100%
$PM_{2.5}$ (µg/m3)	80	30	Clairmont	3.1	0	0	24.2	Jun-28 00:00	6.8	Jun-27	99%
RH (%)			Henry Pirker	55.9	-	-	91.2	Jun-14 07:00	74.1	Jun-10	100%
RH (%)			Evergreen Park	59.9	-	-	98.8	Jun-14 09:00	79.4	Jun-10	100%
RH (%)			Beaverlodge	62.8	-	-	100.0	Jun-11 03:00	85.9	Jun-10	100%
RH (%)			Valleyview	65.8	-	-	100.0	Jun-09 01:00	88.4	Jun-29	100%
SR (W/m^2)			Henry Pirker	235.4	-	-	828.9	Jun-02 14:00	325.0	Jun-26	100%
Temp (°C)			Henry Pirker	15.2	-	-	28.0	Jun-23 15:00	21.2	Jun-23	100%
Temp (°C)			Evergreen Park	14.6	-	-	26.9	Jun-23 17:00	19.9	Jun-23	100%
Temp (°C)			Smoky Heights	14.6	-	-	27.5	Jun-24 16:00	20.1	Jun-23	100%
Temp (°C)			Beaverlodge	14.3	-	-	26.4	Jun-23 17:00	20.7	Jun-23	100%
Temp (°C)			Valleyview	14.8	-	-	28.3	Jun-24 16:00	20.1	Jun-23	100%
Temp (°C)			Reno	13.2	-	-	25.8	Jun-02 16:00	18.2	Jun-02	100%
Temp (°C)			Falher	14.9	-	-	28.3	Jun-24 16:00	19.8	Jun-24	100%
Temp (°C)			Clairmont	17.9	-	-	27.1	Jun-23 14:00	20.9	Jun-23	100%

PAZA Monthly Continuous Data Summary – continued

Jun-2014	Peace Airshed Zone Assocation						Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
WSPD s (km/hr)			Henry Pirker	9.0	-	-	29.0	Jun-24 17:00	18.0	Jun-09	100%
WSPD s (km/hr)			Evergreen Park	10.7	-	-	39.0	Jun-24 17:00	23.9	Jun-09	100%
WSPD s (km/hr)			Smoky Heights	17.9	-	-	51.0	Jun-09 14:00	33.8	Jun-09	100%
WSPD s (km/hr)			Beaverlodge	11.0	-	-	36.0	Jun-14 16:00	17.4	Jun-09	100%
WSPD s (km/hr)			Valleyview	4.0	-	-	18.0	Jun-09 16:00	9.7	Jun-09	100%
WSPD s (km/hr)			Reno	12.0	-	-	40.0	Jun-09 16:00	23.5	Jun-09	100%
WSPD s (km/hr)			Falher	12.7	-	-	36.0	Jun-06 18:00	22.0	Jun-09	100%
WSPD s (km/hr)			Clairmont	10.1	-	-	29.0	Jun-24 17:00	12.1	Jun-21	100%
WSPD v (km/hr)			Henry Pirker	3.9	-	-	28.0	Jun-09 08:00	16.2	Jun-09	100%
WSPD v (km/hr)			Evergreen Park	5.4	-	-	38.0	Jun-24 17:00	20.8	Jun-09	100%
WSPD v (km/hr)			Smoky Heights	7.0	-	-	51.0	Jun-09 14:00	31.9	Jun-09	100%
WSPD v (km/hr)			Beaverlodge	3.3	-	-	35.0	Jun-14 16:00	14.9	Jun-09	100%
WSPD v (km/hr)			Valleyview	1.8	-	-	18.0	Jun-09 16:00	8.5	Jun-09	100%
WSPD v (km/hr)			Reno	3.6	-	-	39.0	Jun-09 16:00	20.1	Jun-09	100%
WSPD v (km/hr)			Falher	3.7	-	-	35.0	Jun-06 18:00	19.5	Jun-09	100%
WSPD v (km/hr)			Clairmont	4.0	-	-	29.0	Jun-24 17:00	11.0	Jun-21	100%
WDIR			Henry Pirker	W	-	-	-	-	-	-	100%
WDIR			Evergreen Park	W	-	-	-	-	-	-	100%
WDIR			Smoky Heights	WSW	-	-	-	-	-	-	100%
WDIR			Beaverlodge	W	-	-	-	-	-	-	100%
WDIR			Valleyview	WNW	-	-	-	-	-	-	100%
WDIR			Reno	SSW	-	-	-	-	-	-	100%
WDIR			Falher	SSW	-	-	-	-	-	-	100%
WDIR			Clairmont	WSW	-	-	-	-	-	-	100%

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on June 4th (SO_2, NO_X O_3, TRS) and 5th (CO, THC). Tubing replacement on June 23rd.

Parameter	Make	Model	Notes
SO_2	TEI	43C	No operational issues observed.
NOx/NO/NO_2	TEI	42C	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
CO	TEI	48C	No operational issues observed.
THC/CH_4/NMHC	TEI	55I	Analyzer zero-air checked June 26th, analyzer calibrated and returned to service.
TRS	TEI	45C/43C	No operational issues observed.
$PM_{2.5}$	Sharp	5030	No operational issues observed.
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Evergreen Park Station

General Station Issues

Routine monthly calibration performed on June 7th (SO_2, TRS).

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	Three hours invalidated due to negative swings.
ET	Met One/Gill	083D	No operational issues observed.
RH	Met One/Gill		No operational issues observed.
WS / WD	Met One/ Gill		No operational issues observed.

PAZA – Smoky Heights Station

General Station Issues

Routine monthly calibration performed on June 6th (SO_2, TRS). Brief power outage June 15th caused loss of one (1) hour of data.

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	Four hours flagged invalid due to negative swings. Glassware cleaned during calibration period.
ET	Met One	083D	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations performed on June 10th (SO_2, NO_X, O_3) and 25th ($PM_{2.5}$)

Parameter	Make	Model	Notes
SO_2	TEI	43CTL	No operational issues observed.
NOx/NO/NO_2	TEI	42C	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	Analyzer removed from service June 12th due to frozen switching valve. Part ordered from ESRD. Analyzer returned to service June 25th. Two hours flagged invalid due to negative swings. **Reference #286016**
ET	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS / WD	Blue Sky	857	No operational issues observed.

PAZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on June 2nd (SO_2 & H_2S).

Parameter	Make	Model	Notes
SO_2	TEI	43i	Irregular spans in early month due to moisture trapped in lines, corrected at calibration.
H_2S	TEI	43A	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Portable-Reno

General Station Issues

Shutdown calibrations were performed on June 18th (SO_2, NO_X, O_3, TRS, THC). Station removed from service June 19th and relocated to Clairmont site.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
NO_x	TEI	42i	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	Span bottle ran out June 4th, replaced June 14th.
$PM_{2.5}$	R&P	1400AB	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Falher Station

General Station Issues

Routine monthly calibrations were performed on June 12th (SO_2 & H_2S). Power outage on June 24th invalidated five hours of data.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
H_2S	Thermo	450i	Irregular spans later in month investigated and repaired in during July calibration.
ET	Gill	RM Young 5103	No operational issues observed.
WS / WD	Gill	RM Young 5103	No operational issues observed.

PAZA – Portable-Clairmont

General Station Issues

Startup calibrations were performed on June 20th (SO_2, NO_X, O_3, TRS, THC). Station relocated to new site on June 19th and allowed to stabilize overnight before calibration.

Parameter	Make	Model	Notes
SO_2	TEI	43i	No operational issues observed.
NO_x	TEI	42i	No operational issues observed.
O_3	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	No operational issues observed.
$PM_{2.5}$	R&P	1400AB	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA
Henry Pirker Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2014

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

Maximum Value: 4.2 ppb on Jun 5 08:00 Maximum Daily Average: 0.6 ppb on Jun 5

Minimum Value: 0 ppb on Jun 2 13:00 Minimum Daily Average: 0.0 ppb on Jun 15

Maximum Diurnal Average: 0.3 ppb at hour 8 Minimum Diurnal Average: 0.1 ppb at hour 20

Monthly Average: 0.12 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.3 P_{99} = 1.2

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	36
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	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	0.2
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
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	0.0	0.1
4-Jun	0	0	0	0	A	0	0	0	0	0	C	C	C	C	C	1	1	1	0	0	0	0	0	0	0.2	0.9
5-Jun	0	0	0	A	1	1	1	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	4.2
6-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	0.4
7-Jun	1	A	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
8-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
9-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
10-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	0.3
11-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	0.0	0.1
12-Jun	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	A	0	0	0	0	0.3	1.8
13-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3
14-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	0.2
15-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	0.0
16-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	0.4
17-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	0.4
18-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	0.3
19-Jun	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.3	0.8
20-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	0.1	0.2
21-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	0.0	0.2
22-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	0.3
23-Jun	0	0	0	0	0	0	0	0	A	M	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
24-Jun	0	0	1	1	1	1	1	A	0	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	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
26-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
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	0.4
28-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	0.1
29-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
30-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	0.1	0.4
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.9	0.5	1.2	1.3	1.2	1.3	1.2	4.2	2.1	0.7	1.7	1.8	0.6	0.3	0.4	0.9	0.5	0.5	0.5	0.4	0.3	0.3	0.4	0.8	Diurnal Maximum	

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

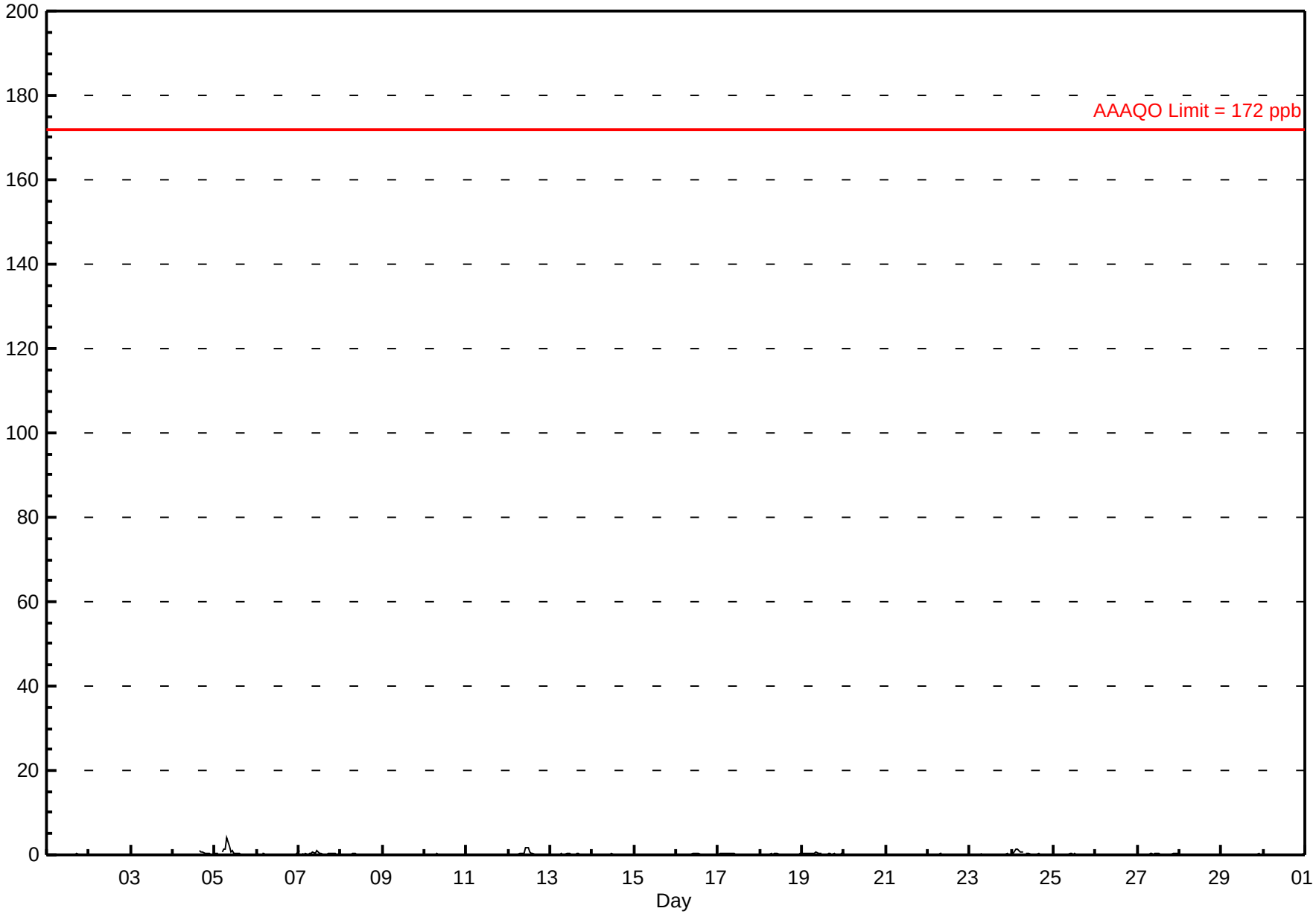
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2014

Maximum Value: 19.1 ppb on Jun 13 11:00

Maximum Daily Average: 1.6 ppb on Jun 5

Minimum Value: 0 ppb on Jun 24 00:00

Minimum Daily Average: 0.3 ppb on Jun 15

Maximum Diurnal Average: 1.4 ppb at hour 11

Minimum Diurnal Average: 0.4 ppb at hour 23

Monthly Average: 0.54 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.4 $Q_3 = 0.4$ $P_{90} = 0.6$ $P_{99} = 3.3$

Hours in Service:	720
Hours of Data:	682
Hours of Missing Data:	38
Hours of Calibration:	36
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	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.5	0.9
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
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	0.4	0.4
4-Jun	0	0	0	0	A	0	0	0	0	0	C	C	C	C	C	1	2	1	1	1	1	1	0	0	0.8	2.0
5-Jun	0	0	1	A	2	4	3	6	6	1	4	0	0	1	1	0	0	0	1	0	0	0	0	0	1.6	6.4
6-Jun	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	0.9
7-Jun	2	A	0	0	0	0	0	1	1	1	2	1	1	1	0	0	0	0	1	1	0	0	0	0	0.7	1.9
8-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	0.4	0.4
9-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
10-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
11-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	0.4	0.4
12-Jun	0	0	0	0	0	0	0	0	0	1	2	2	1	1	0	1	1	0	0	A	0	0	0	0	0.7	2.3
13-Jun	0	0	0	0	0	1	0	0	0	1	19	0	0	0	0	0	0	0	A	0	0	0	0	0	1.2	19.1
14-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	0.3	0.4
15-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	0.3	0.4
16-Jun	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0.4	0.6
17-Jun	0	1	1	0	0	0	1	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	1.0
18-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
19-Jun	1	0	0	0	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	2	0.6	1.6
20-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	0.4	0.5
21-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	0.4	0.4
22-Jun	0	0	0	0	0	1	0	1	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.5	1.2
23-Jun	0	0	0	0	0	0	0	1	A	M	M	0	0	0	0	0	0	0	0	1	0	1	0	0	0.4	0.7
24-Jun	1	1	2	2	1	1	1	A	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.7	1.7
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
26-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	0.4
27-Jun	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	0.9
28-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
29-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	0.4	0.5
30-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0.6	3.3
	0.5	0.4	0.5	0.5	0.5	0.6	0.5	0.7	0.7	0.5	1.4	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.6	Diurnal Average	
	1.9	0.9	1.7	1.7	1.9	4.4	3.4	6.4	5.9	1.4	19.1	2.3	1.3	0.9	1.4	1.5	2.0	1.0	1.2	1.0	1.5	1.0	0.9	3.3	Diurnal Maximum	

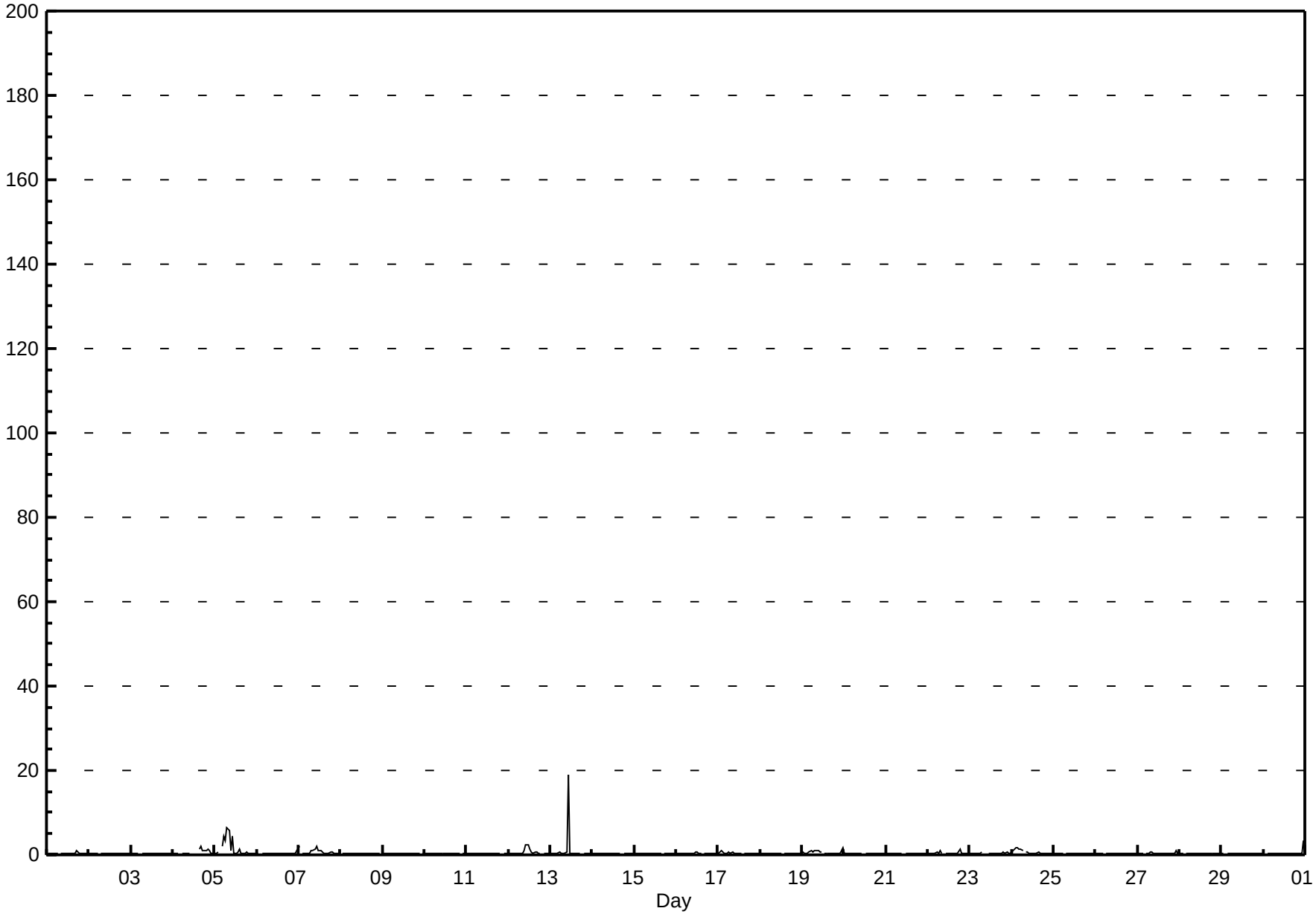
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

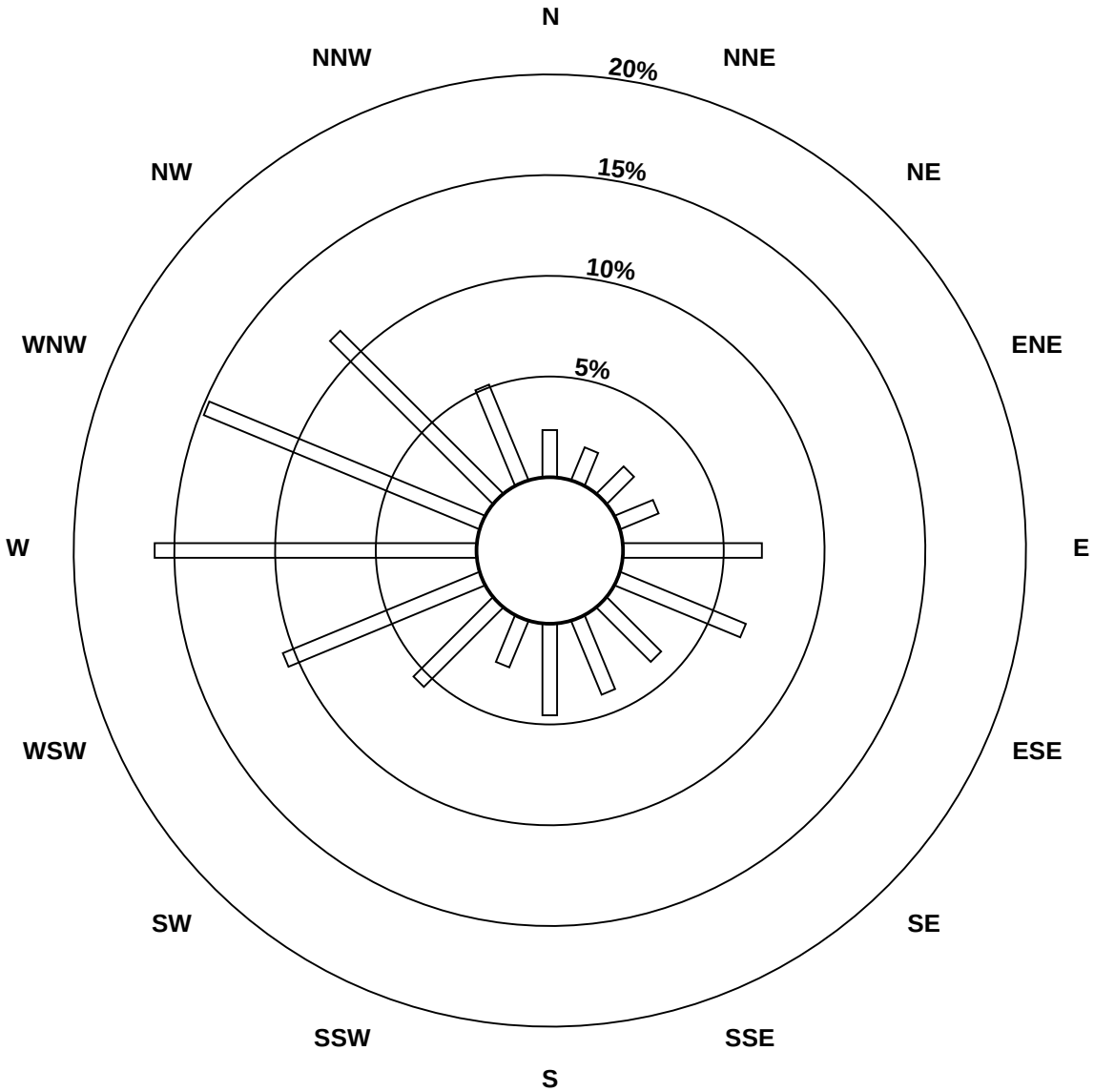
Henry Pirker - June 2014



Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Henry Pirker - June 2014



Pollutant Classes (ppb)

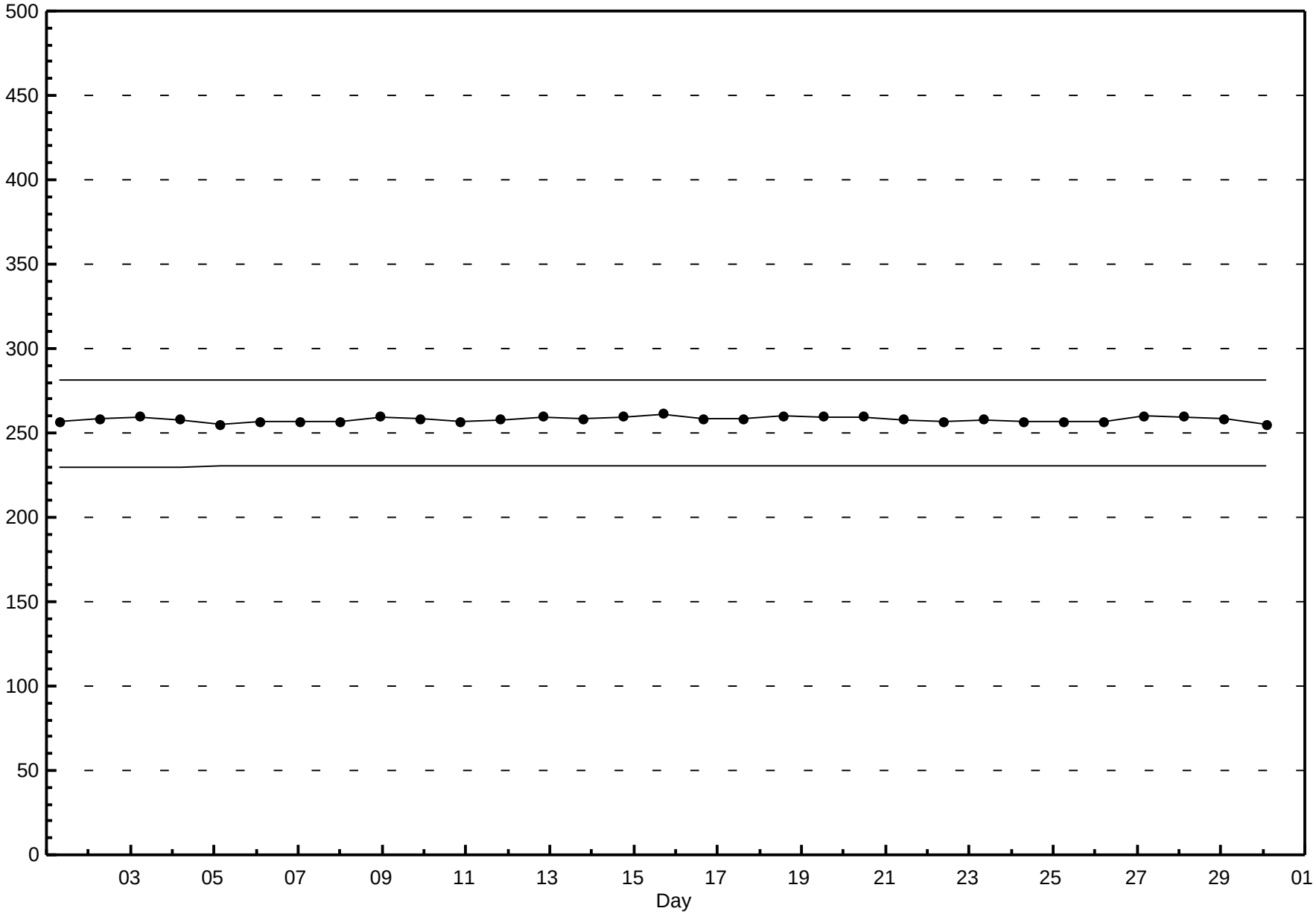
- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2014

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

Maximum Value: 1.1 ppb on Jun 14 06:00

Maximum Daily Average: 0.3 ppb on Jun 23

Minimum Value: 0 ppb on Jun 3 14:00

Minimum Daily Average: 0.0 ppb on Jun 15

Maximum Diurnal Average: 0.3 ppb at hour 6

Minimum Diurnal Average: 0.1 ppb at hour 15

Monthly Average: 0.15 ppb

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

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	39
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	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
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	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
5-Jun	0	0	0	A	0	0	0	C	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	0.3
6-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	0.3
7-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	0.1	0.3
8-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
9-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
10-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
11-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	0.2	0.5
12-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	0.2	0.3
13-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	0	0	0.3	0.7
14-Jun	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	1.1
15-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	0.1
16-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
17-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0.2	0.9
18-Jun	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.7
19-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	0.4
20-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	0.1	0.3
21-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
22-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	0.2	0.3
23-Jun	0	0	0	0	0	0	0	0	A	M	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
24-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	0.2	0.3
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
26-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
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	0.4
28-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
29-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
30-Jun	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	0.9
	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Diurnal Average	
	0.8	0.5	0.4	0.7	0.6	1.1	0.4	0.3	0.3	0.3	0.2	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.7	0.9	0.7	0.9	Diurnal Maximum	

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

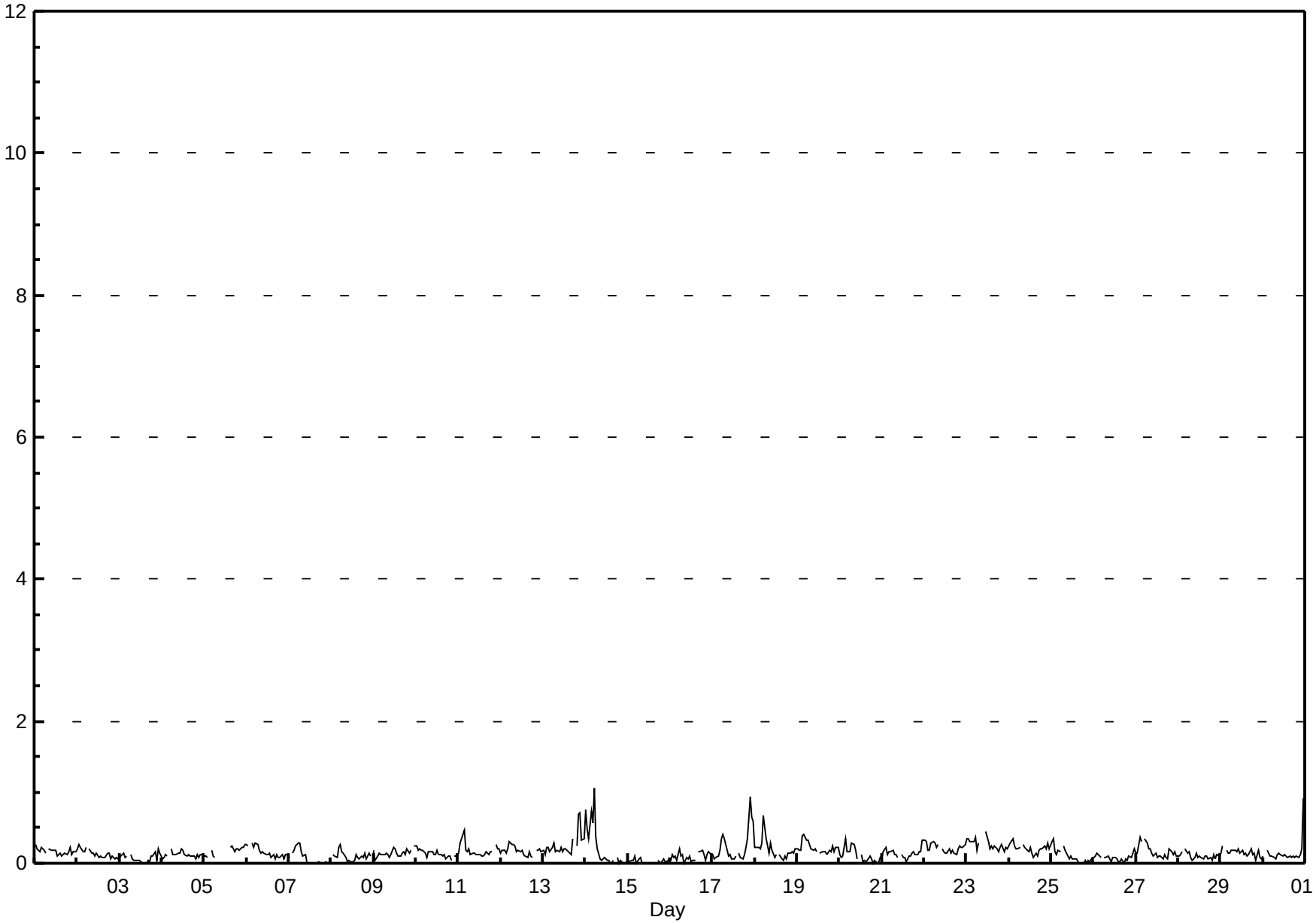
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2014

Maximum Value: 7.7 ppb on Jul 1 00:00

Maximum Daily Average: 0.9 ppb on Jun 13

Minimum Value: 0 ppb on Jun 15 10:00

Minimum Daily Average: 0.5 ppb on Jun 15

Maximum Diurnal Average: 0.9 ppb at hour 24

Minimum Diurnal Average: 0.5 ppb at hour 15

Monthly Average: 0.61 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 0.6 $Q_3 = 0.7$ $P_{90} = 0.8$ $P_{99} = 1.4$

Hours in Service:	720
Hours of Data:	679
Hours of Missing Data:	41
Hours of Calibration:	39
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	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
2-Jun	1	1	1	0	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0.6	0.8
3-Jun	1	1	1	1	1	A	1	0	0	0	0	0	1	1	0	1	1	0	0	1	1	0	1	1	0.5	0.9
4-Jun	1	1	1	1	A	1	1	0	1	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	0.6	0.8
5-Jun	0	1	1	A	1	1	0	C	C	C	C	C	C	C	C	1	1	1	1	1	1	1	1	1	--	0.8
6-Jun	1	1	A	1	1	1	1	1	1	1	0	0	0	1	1	1	0	1	1	0	0	0	0	1	0.6	0.8
7-Jun	1	A	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0.5	0.8
8-Jun	A	1	0	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0	1	1	0	1	0	A	0.5	0.7
9-Jun	0	0	0	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	A	1	0.6	0.8
10-Jun	1	1	1	1	1	1	0	1	1	0	1	0	1	0	1	0	1	1	0	0	0	A	1	0	0.5	0.8
11-Jun	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	1	A	1	0	1	0.6	0.9
12-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	0	A	1	1	1	1	0.6	0.9
13-Jun	1	1	1	1	1	1	2	1	1	1	4	1	1	1	1	1	0	1	A	1	1	1	1	1	0.9	4.0
14-Jun	1	1	1	1	1	2	1	1	1	0	0	1	1	1	0	0	1	A	1	1	1	1	0	0	0.8	1.9
15-Jun	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	A	1	0	1	1	0	1	0	0.5	0.7
16-Jun	1	1	1	1	1	1	1	1	0	0	1	1	0	1	0	A	1	1	1	1	1	1	1	1	0.6	0.8
17-Jun	0	0	0	0	1	1	1	1	1	1	1	0	0	0	A	1	0	0	1	1	1	1	1	1	0.7	1.3
18-Jun	1	1	1	1	1	1	1	1	1	1	1	0	0	A	1	1	1	1	1	1	0	0	1	1	0.6	1.1
19-Jun	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	0.7	0.8
20-Jun	1	0	1	1	0	0	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.0
21-Jun	1	1	1	1	1	0	1	1	1	0	A	1	0	1	0	1	1	1	1	1	1	1	1	1	0.6	0.8
22-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	0.9
23-Jun	1	1	1	1	1	1	1	1	A	M	M	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
24-Jun	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.8
25-Jun	1	1	1	0	1	1	A	1	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0.5	0.9
26-Jun	1	0	1	1	1	A	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	0.5	0.6
27-Jun	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	0	0.6	0.7
28-Jun	0	0	1	A	1	0	1	1	0	1	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0.5	0.7
29-Jun	1	1	A	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	0	1	0	1	0	0	0.5	0.9
30-Jun	1	A	0	1	1	0	1	0	0	1	1	1	0	1	0	1	0	1	1	0	0	1	1	8	0.9	7.7
	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.9	Diurnal Average	
	1.5	1.4	0.8	1.2	1.3	1.9	1.5	0.9	0.8	0.9	4.0	0.9	0.8	0.7	0.8	0.8	0.9	1.0	0.7	0.7	1.4	1.3	1.3	7.7	Diurnal Maximum	

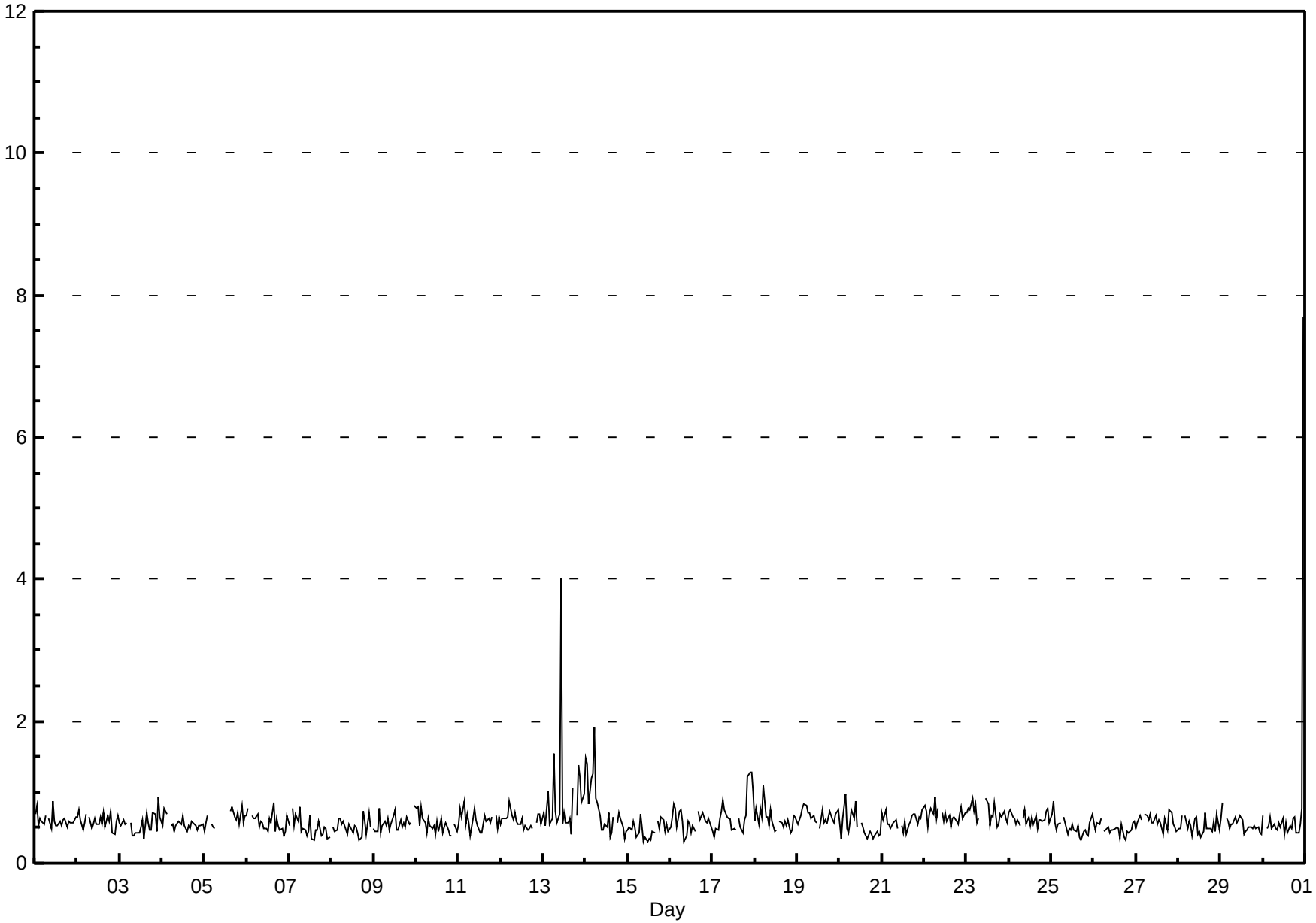
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

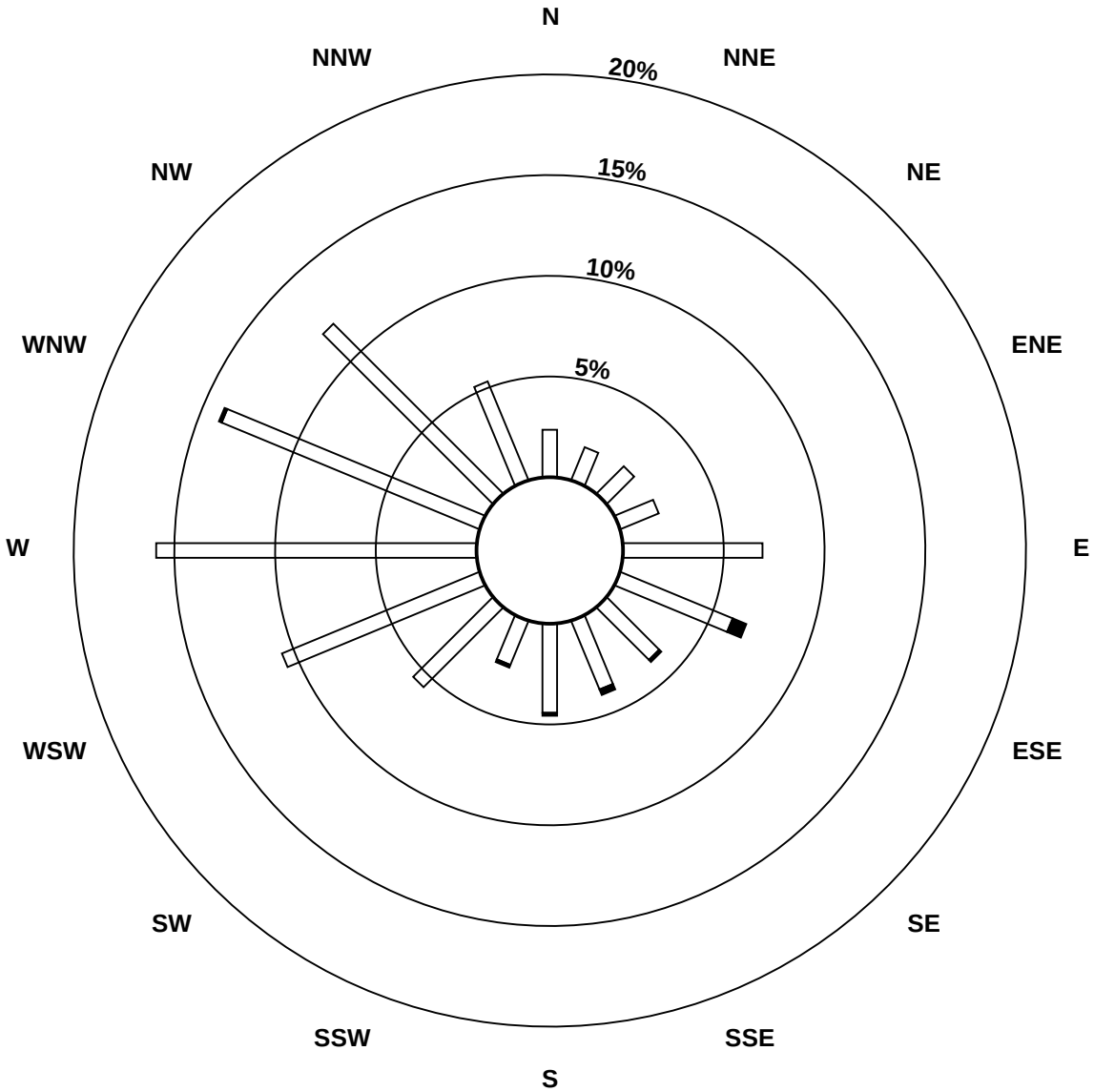
Henry Pirker - June 2014



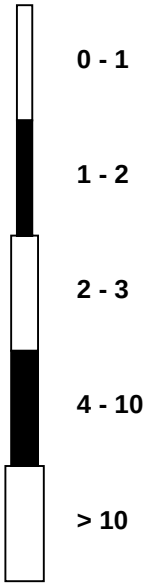
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - June 2014



Pollutant Classes (ppb)

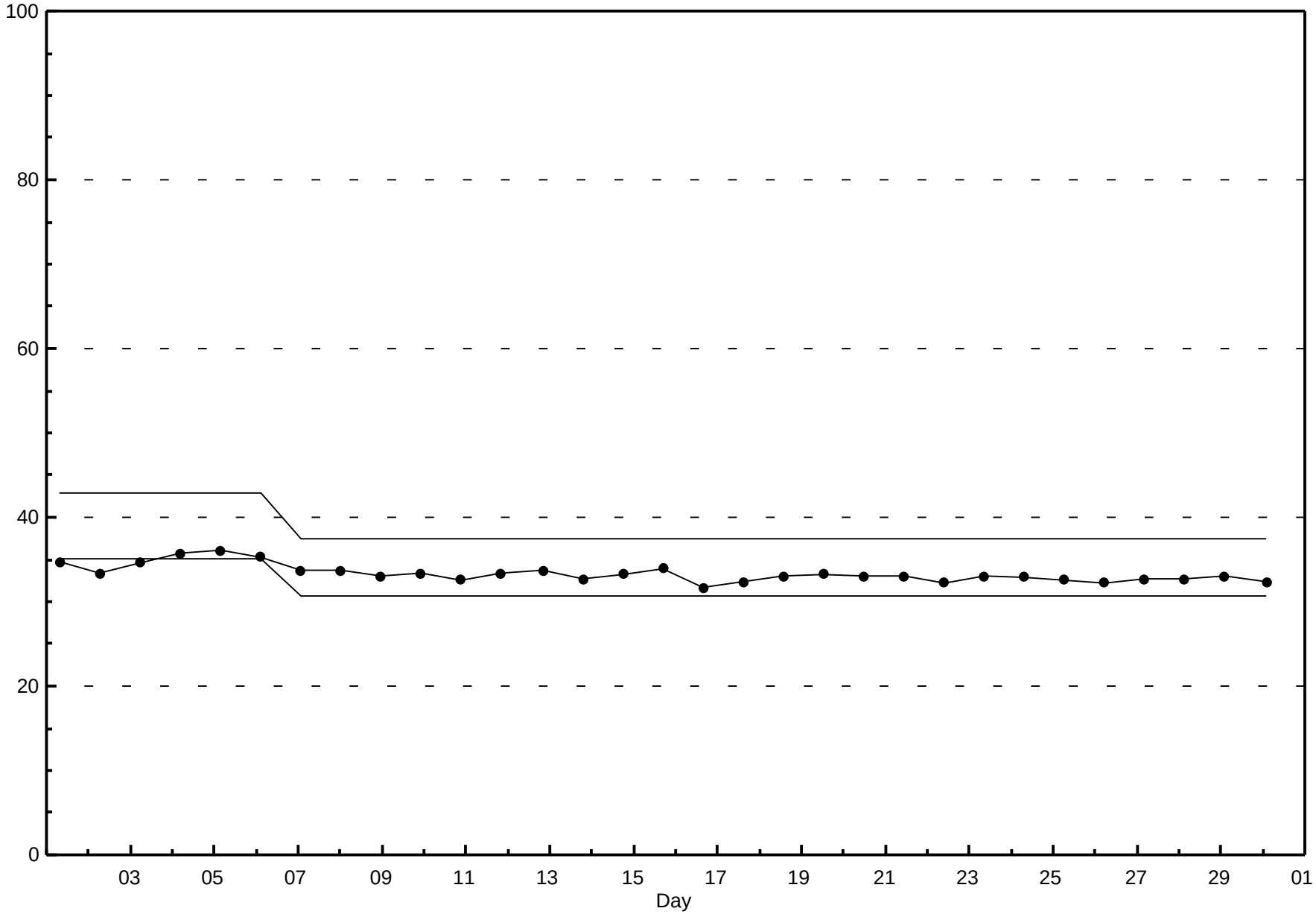


Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 21.0 ppb on Jun 12 07:00 Maximum Daily Average: 7.5 ppb on Jun 13

Minimum Value: 1 ppb on Jun 21 18:00 Minimum Daily Average: 2.4 ppb on Jun 9
Maximum Diurnal Average: 8.6 ppb at hour 7 Minimum Diurnal Average: 1.8 ppb at hour 16
Monthly Average: 4.46 ppb Percentiles: P_1 = 0.8 P_{10} = 1.3 Q_1 = 2.0 Median = 3.5 Q_3 = 5.5 P_{90} = 9.7 P_{99} = 16.8

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
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	4	4	5	6	6	5	5	A	4	2	2	2	1	1	1	2	3	3	2	2	4	5	6	6	3.6	6.3
2-Jun	4	5	6	7	8	13	A	9	5	4	3	2	1	1	1	1	1	1	1	3	8	6	2	2	4.0	12.6
3-Jun	6	6	6	6	7	A	13	9	7	3	2	1	1	1	2	2	2	2	2	2	2	2	3	2	3.8	12.7
4-Jun	2	1	1	1	A	4	3	3	2	4	C	C	C	C	C	C	5	3	2	2	1	1	1	1	--	4.7
5-Jun	2	1	1	A	3	2	2	3	3	2	1	1	2	2	2	1	1	3	6	2	4	9	8	7	2.9	8.7
6-Jun	5	5	A	4	3	4	5	4	3	2	2	1	2	2	2	2	2	2	4	4	5	6	5	4	3.5	6.3
7-Jun	7	A	11	10	12	14	11	6	4	4	3	2	1	1	2	1	2	1	2	2	3	4	7	13	5.3	13.8
8-Jun	A	9	11	10	12	12	10	7	3	1	1	1	1	3	3	2	3	4	2	2	4	3	7	A	5.0	12.1
9-Jun	4	3	2	1	2	4	4	2	3	2	1	4	4	2	1	2	2	1	2	2	2	2	A	4	2.4	4.3
10-Jun	3	3	1	1	1	2	3	5	5	3	3	4	3	3	3	1	2	1	2	3	3	A	12	14	3.6	13.5
11-Jun	10	8	7	6	8	9	8	5	4	7	6	4	3	3	3	3	2	2	2	3	A	8	6	5	5.3	9.8
12-Jun	7	8	8	6	10	15	21	13	7	4	4	3	3	2	2	2	3	3	5	A	6	5	6	8	6.5	21.0
13-Jun	6	4	4	4	8	13	11	18	21	10	3	3	3	3	3	2	2	4	A	5	12	14	10	10	7.5	20.6
14-Jun	8	6	6	9	10	8	6	6	6	3	2	2	2	2	1	2	2	A	3	2	3	3	5	6	4.4	9.7
15-Jun	5	4	4	5	9	8	4	3	2	1	1	1	1	1	1	2	A	3	4	3	3	3	4	4	3.4	9.0
16-Jun	4	3	3	5	6	6	6	3	3	2	2	2	2	1	3	A	6	6	3	4	4	5	5	5	3.9	6.5
17-Jun	5	4	5	5	9	14	18	17	11	5	3	3	2	2	A	5	3	2	2	2	4	5	5	3	5.8	18.0
18-Jun	5	3	3	5	8	8	18	13	11	13	9	2	2	A	3	2	2	1	1	3	8	10	12	11	6.6	17.7
19-Jun	11	11	13	14	14	14	13	12	7	7	6	2	A	4	3	3	3	3	5	5	4	4	4	5	7.3	14.2
20-Jun	4	3	3	4	5	7	13	10	7	6	3	A	5	2	1	2	1	1	2	2	3	4	4	4	4.2	12.7
21-Jun	3	4	4	3	5	5	7	5	2	1	A	3	1	1	1	1	1	1	1	1	3	8	14	13	3.8	14.1
22-Jun	15	12	11	11	13	11	8	6	8	A	4	2	1	1	1	1	1	1	1	2	4	7	6	5	5.7	15.5
23-Jun	6	4	5	5	12	11	8	5	A	M	M	2	2	2	2	2	2	2	2	3	4	5	4	3	4.4	12.2
24-Jun	3	3	4	5	5	8	9	A	10	6	4	3	2	2	2	2	2	3	4	4	4	5	3	4	4.2	9.9
25-Jun	3	3	3	3	4	5	A	5	3	2	2	2	2	1	1	1	1	1	1	2	4	5	4	4	2.7	5.3
26-Jun	4	5	5	5	6	A	7	5	4	3	3	1	1	1	1	1	1	2	2	3	4	7	8	9	3.9	9.4
27-Jun	5	8	12	12	A	13	12	12	16	7	4	2	2	2	2	2	3	7	6	5	5	7	7	6	6.8	16.0
28-Jun	4	5	5	A	6	7	6	6	4	3	2	2	2	1	1	1	1	1	1	1	2	3	4	2	3.0	7.1
29-Jun	3	3	A	4	3	4	3	3	4	4	4	3	2	2	3	3	2	3	2	4	3	4	4	5	3.3	4.7
30-Jun	4	A	5	3	4	5	6	5	2	2	2	2	2	2	1	1	1	1	1	2	4	7	13	19	4.1	19.0
	5.2	4.9	5.5	5.8	7.2	8.3	8.6	7.3	5.9	4.0	3.0	2.2	2.0	1.9	1.9	1.8	2.0	2.4	2.5	2.7	4.1	5.4	6.2	6.4	Diurnal Average	
	15.5	12.1	13.4	14.2	14.0	14.5	21.0	18.4	20.6	12.7	8.7	4.0	4.7	3.9	3.3	5.2	5.8	7.3	5.7	4.9	12.3	13.7	14.1	19.0	Diurnal Maximum	

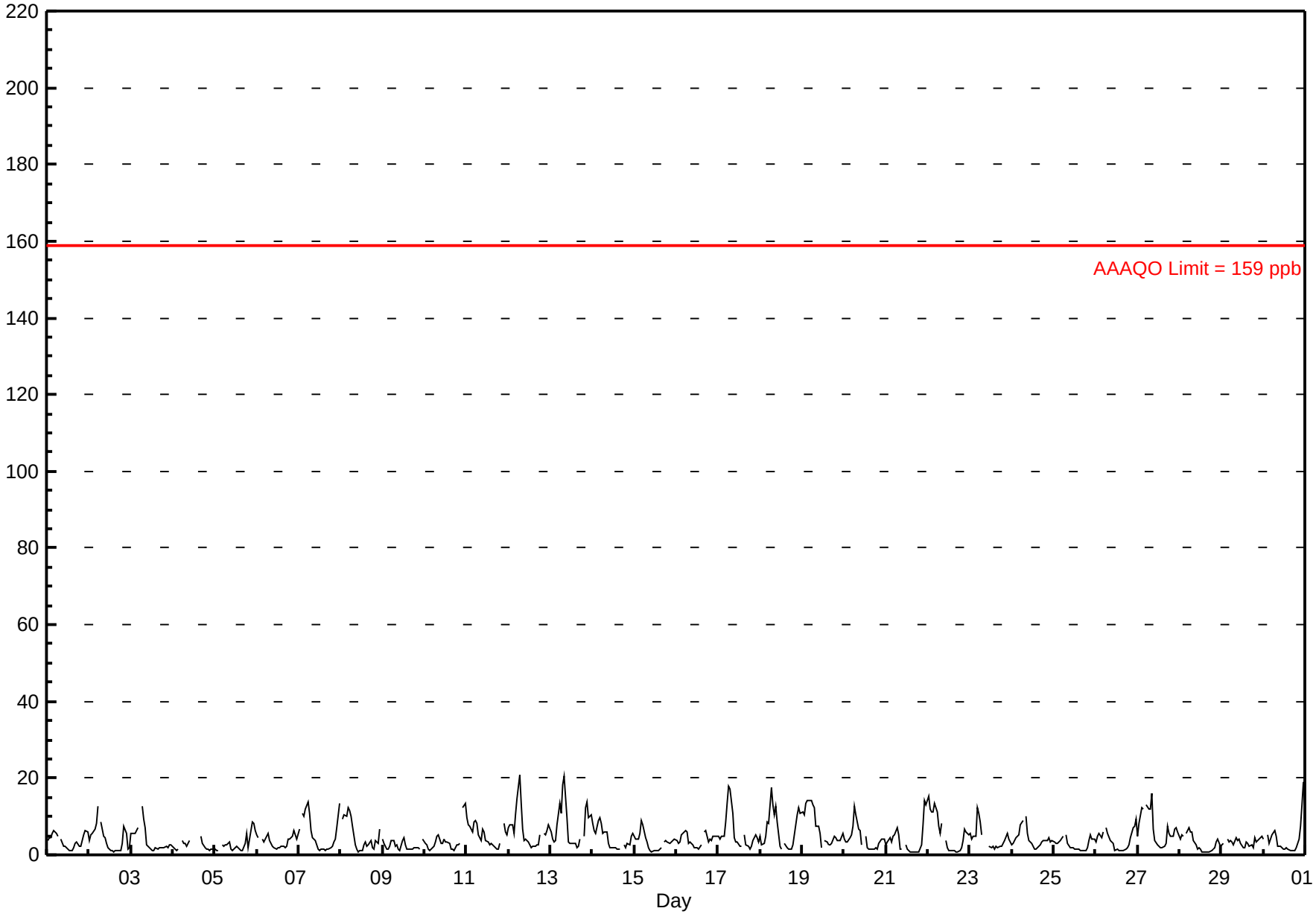
C - Calibration M - Maintenance A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2014

Maximum Value: 64.6 ppb on Jun 17 16:00

Maximum Daily Average: 14.0 ppb on Jun 13

Minimum Value: 1 ppb on Jun 15 11:00

Minimum Daily Average: 4.2 ppb on Jun 25

Maximum Diurnal Average: 11.6 ppb at hour 7

Minimum Diurnal Average: 3.8 ppb at hour 14

Monthly Average: 7.24 ppb

Percentiles: P_1 = 1.5 P_{10} = 2.5 Q_1 = 3.5 Median = 5.6 Q_3 = 9.0 P_{90} = 14.1 P_{99} = 27.2

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
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	5	6	5	9	8	8	6	A	6	3	3	3	2	2	3	3	5	5	3	4	6	7	8	7	5.2	9.5
2-Jun	5	7	8	8	11	16	A	14	6	6	3	3	2	2	1	2	2	2	3	7	13	11	4	3	6.1	16.3
3-Jun	14	9	9	10	13	A	16	13	11	4	4	3	3	2	5	2	3	3	12	10	4	3	5	3	7.0	16.3
4-Jun	2	2	2	2	A	6	5	5	5	6	C	C	C	C	C	C	12	5	3	3	2	2	2	2	--	12.1
5-Jun	3	2	2	A	4	3	4	4	7	3	2	2	4	4	5	3	3	9	47	4	7	11	11	8	6.5	46.7
6-Jun	6	6	A	6	6	7	8	5	4	4	10	3	4	4	4	4	4	5	8	7	8	8	7	8	5.8	9.7
7-Jun	10	A	13	12	15	16	14	8	6	6	5	5	2	4	3	3	3	3	4	4	5	6	11	27	7.9	26.8
8-Jun	A	12	12	14	14	13	12	11	5	2	2	2	2	7	6	3	4	6	3	3	5	4	9	A	7.0	14.3
9-Jun	6	4	2	2	3	5	6	4	4	3	2	6	24	4	3	3	5	4	3	3	3	4	A	6	4.8	23.6
10-Jun	4	4	2	2	2	4	6	8	8	4	6	7	17	7	9	3	6	5	5	6	5	A	18	19	6.8	19.3
11-Jun	14	11	9	7	10	11	11	14	6	10	10	7	6	4	7	6	4	4	4	10	A	12	9	10	8.4	13.8
12-Jun	16	15	14	8	19	17	25	24	15	9	10	6	4	3	4	3	5	4	15	A	10	9	8	14	11.2	25.3
13-Jun	26	8	8	7	12	18	17	45	32	17	5	5	5	13	6	4	4	7	A	9	22	19	16	18	14.0	45.2
14-Jun	10	10	8	11	15	10	8	9	8	7	3	3	3	4	3	3	3	A	6	3	4	4	6	9	6.5	15.3
15-Jun	8	6	9	9	14	11	7	4	3	3	1	3	2	3	2	4	A	6	5	6	6	4	6	5	5.4	14.0
16-Jun	5	7	7	8	8	12	11	5	5	5	5	4	4	2	5	A	10	11	6	13	6	7	6	6	6.8	13.0
17-Jun	6	7	6	8	12	17	27	22	16	14	6	28	4	4	A	65	4	3	3	4	7	7	7	5	12.2	64.6
18-Jun	19	5	5	7	16	12	21	16	14	16	15	4	3	A	7	3	3	3	3	7	12	14	15	12	10.0	21.0
19-Jun	12	13	16	15	15	17	17	15	9	9	9	3	A	6	7	5	3	5	14	7	7	6	5	8	9.7	17.5
20-Jun	6	5	5	6	7	11	15	13	11	12	5	A	9	3	3	3	3	3	4	3	5	6	6	5	6.5	15.3
21-Jun	4	5	7	4	6	7	10	8	3	2	A	5	2	2	2	2	2	2	4	4	5	12	20	17	5.7	20.3
22-Jun	18	13	13	13	15	13	9	6	13	A	8	3	2	2	3	2	2	4	3	4	6	8	10	6	7.7	18.4
23-Jun	7	6	10	7	18	14	11	7	A	M	M	3	3	6	4	4	3	3	4	4	6	7	6	5	6.5	18.4
24-Jun	3	5	7	8	6	12	12	A	12	8	5	4	11	3	3	3	4	5	5	6	6	7	5	5	6.3	12.3
25-Jun	4	4	4	4	5	8	A	10	4	4	3	3	3	2	2	2	2	2	2	3	6	8	7	8	4.2	9.6
26-Jun	5	8	7	6	9	A	10	8	5	5	4	3	7	2	2	2	3	4	7	8	9	8	14	14	6.5	14.2
27-Jun	6	14	16	17	A	15	14	25	17	14	7	4	3	3	3	4	5	35	12	8	7	10	11	8	11.3	35.2
28-Jun	6	6	6	A	8	9	8	8	6	4	3	4	3	2	1	2	2	2	2	3	6	8	8	3	4.8	9.0
29-Jun	3	4	A	6	4	7	4	4	9	7	6	4	3	3	5	7	3	4	3	7	6	6	8	7	5.2	9.5
30-Jun	5	A	8	4	6	7	10	7	5	3	4	3	3	4	2	3	2	5	2	6	12	11	16	24	6.5	24.1
	8.3	7.2	7.8	7.9	10.0	10.9	11.6	11.4	8.8	6.8	5.4	4.7	4.9	3.8	3.9	5.4	3.9	5.4	6.6	5.6	7.1	7.8	9.1	9.3	Diurnal Average	
	25.6	14.7	16.1	16.9	18.9	18.5	27.5	45.2	31.9	16.8	14.8	28.5	23.6	13.2	8.6	64.6	12.1	35.2	46.7	13.0	22.4	18.7	20.3	26.8	Diurnal Maximum	

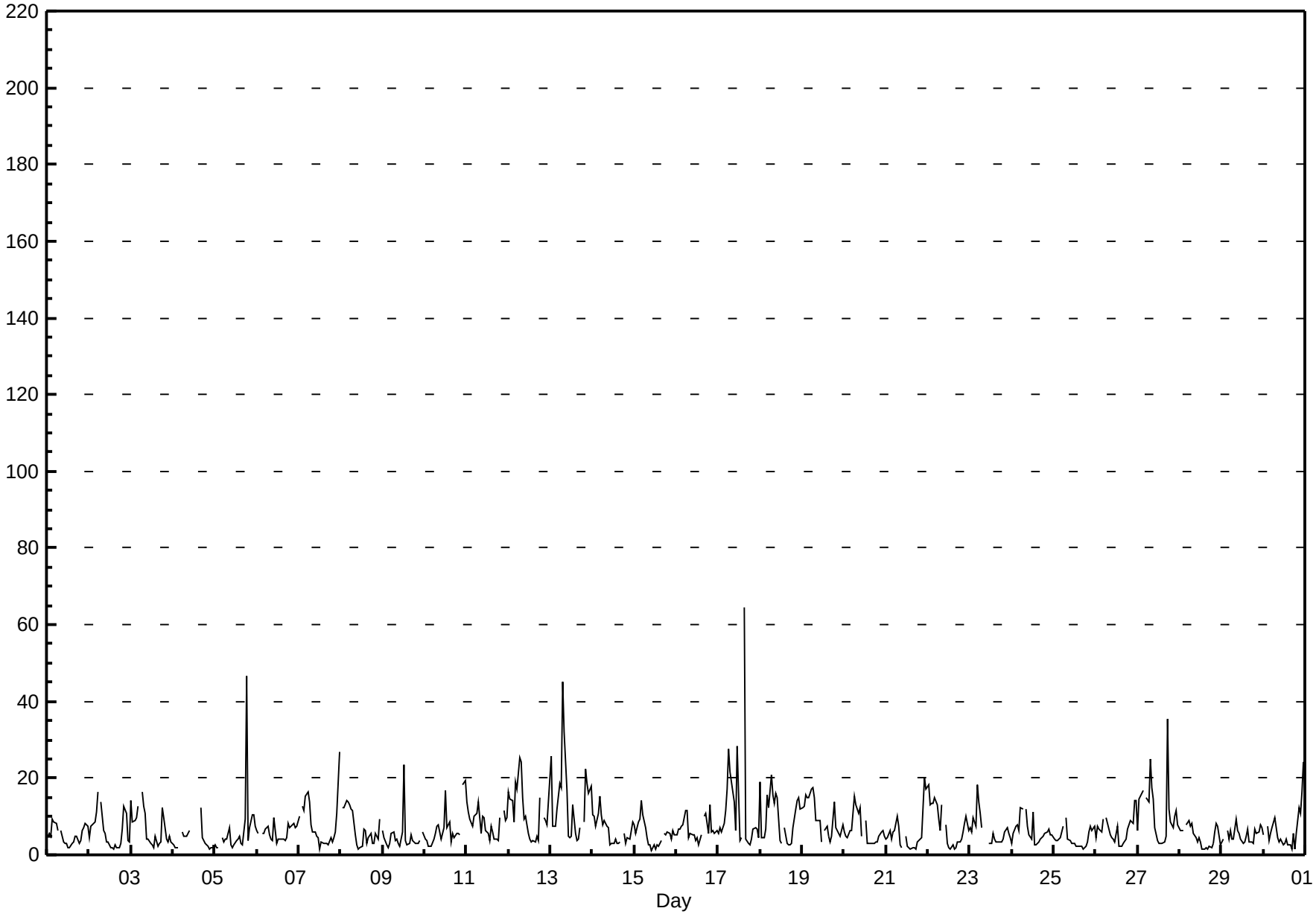
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

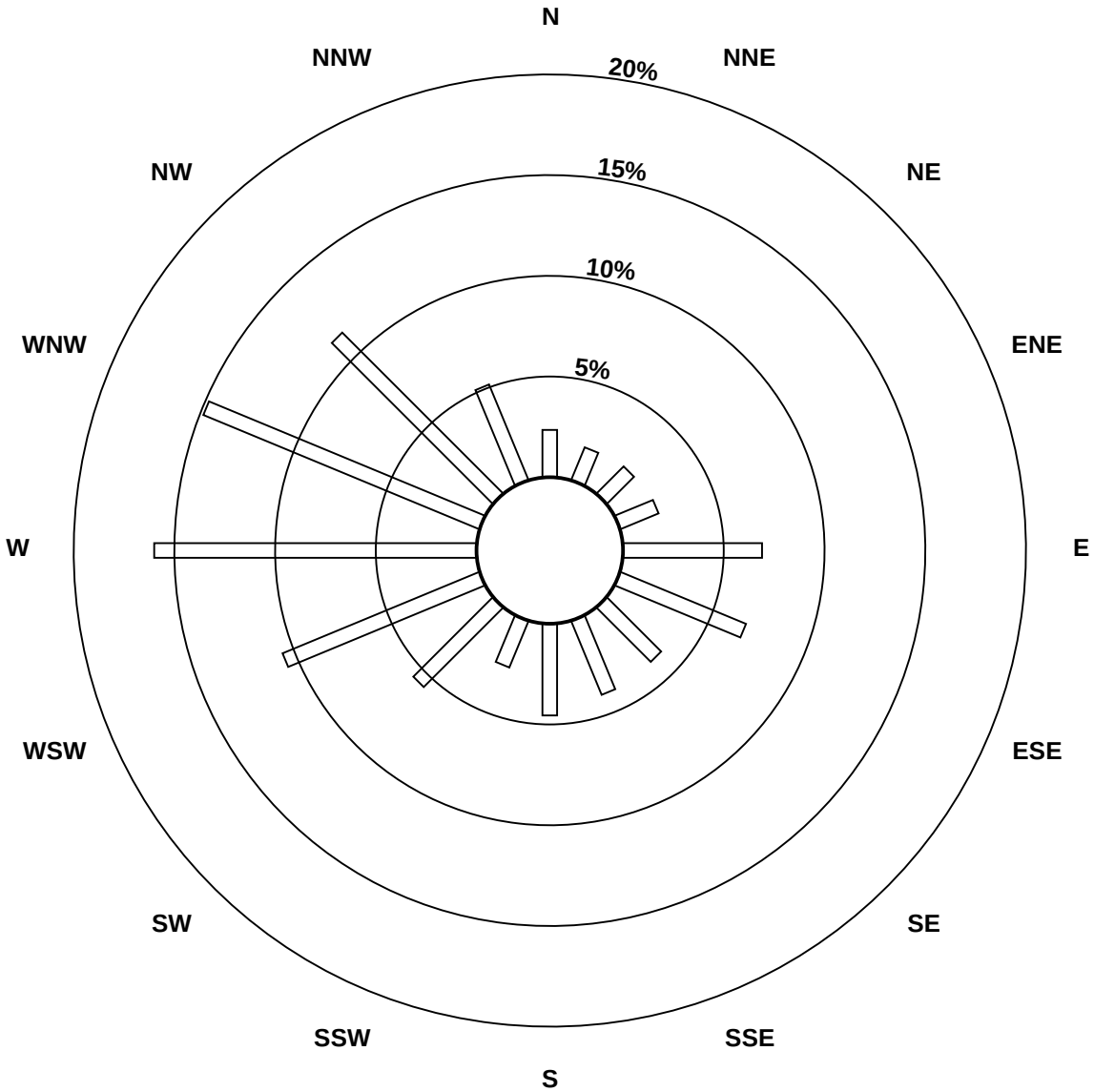
Henry Pirker - June 2014



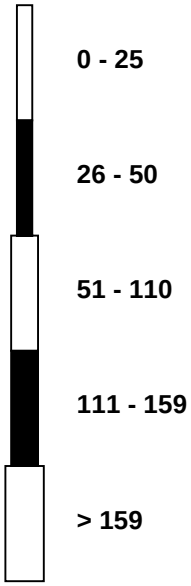
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Henry Pirker - June 2014



Pollutant Classes (ppb)

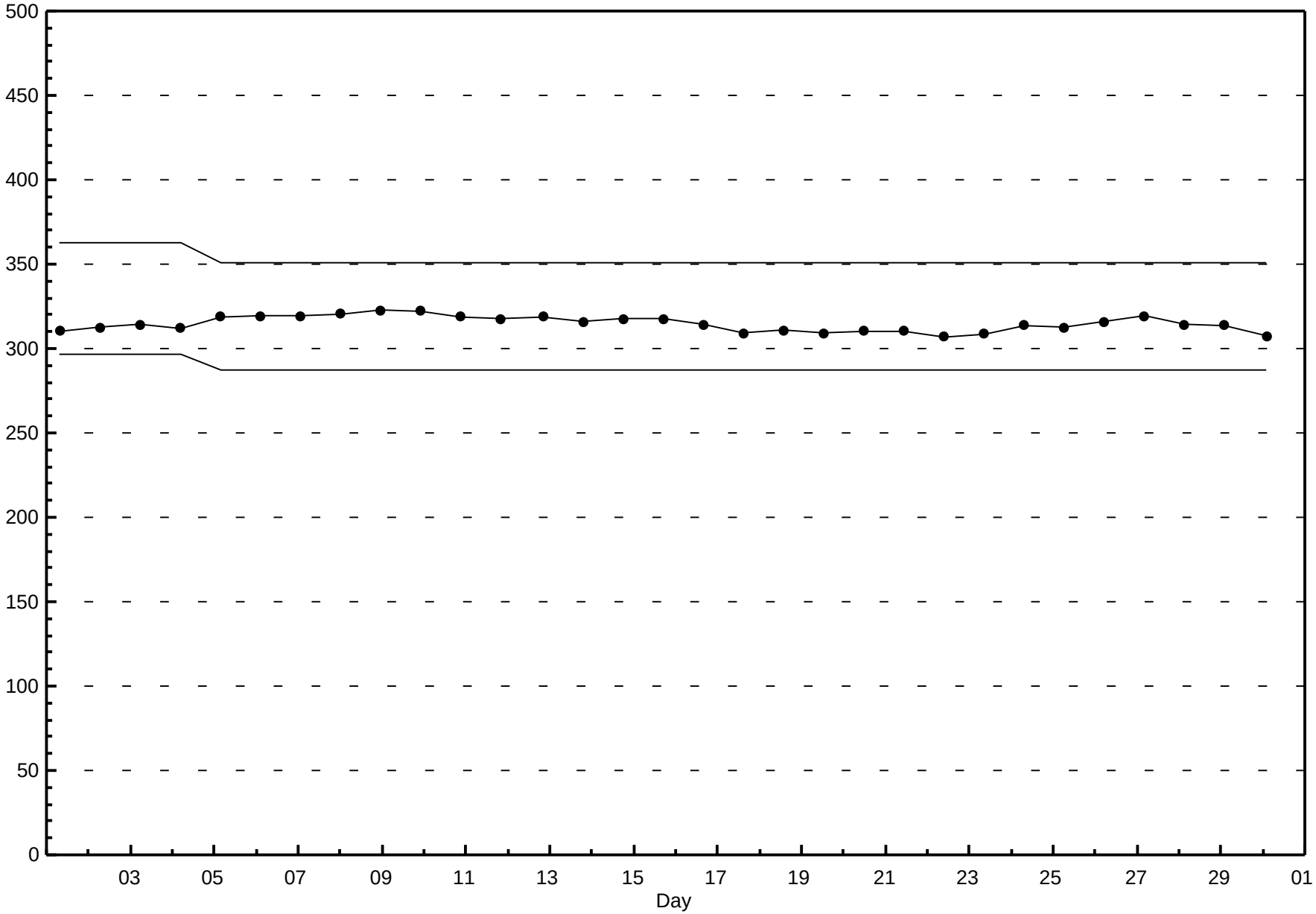


Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2014

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

Maximum Value: 16.9 ppb on Jun 17 08:00

Maximum Daily Average: 2.9 ppb on Jun 19

Minimum Value: 0 ppb on Jun 1 23:00

Minimum Daily Average: 0.2 ppb on Jun 1

Maximum Diurnal Average: 3.8 ppb at hour 8

Minimum Diurnal Average: 0.1 ppb at hour 2

Monthly Average: 0.85 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.3 $Q_3 = 0.7$ $P_{90} = 2.0$ $P_{99} = 9.8$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
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	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
2-Jun	0	0	0	0	0	2	A	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.2
3-Jun	0	0	0	0	0	A	3	2	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.6	2.6
4-Jun	0	0	0	0	A	1	1	2	1	3	C	C	C	C	C	C	0	0	0	0	0	0	0	0	--	3.2
5-Jun	0	0	0	A	0	0	0	1	1	0	0	0	1	1	0	0	0	1	6	0	0	0	0	0	0.5	5.6
6-Jun	0	0	A	0	0	1	2	2	1	1	1	0	0	1	1	0	0	0	1	1	0	0	0	0	0.5	2.0
7-Jun	0	A	0	0	1	4	6	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1.0	5.5
8-Jun	A	0	0	0	2	4	5	4	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0.9	4.7
9-Jun	0	0	0	0	0	0	1	1	1	1	0	1	3	2	1	1	1	0	0	0	0	0	A	0	0.5	3.2
10-Jun	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	0	0	0	0	0	0	A	0	0	0.5	1.6
11-Jun	0	0	0	0	1	6	9	8	4	6	4	1	1	1	1	0	0	0	0	0	A	0	0	0	1.8	9.2
12-Jun	0	0	0	0	1	1	14	5	2	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	1.2	13.8
13-Jun	0	0	0	0	0	1	2	3	3	2	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0.7	2.7
14-Jun	0	0	0	0	1	4	4	5	5	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	1.1	5.0
15-Jun	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	1.3
16-Jun	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	A	1	1	0	1	0	0	0	0	0.4	1.4
17-Jun	0	0	0	0	0	3	9	17	10	2	1	1	0	0	A	1	0	0	0	0	0	0	0	0	2.0	16.9
18-Jun	0	0	0	0	0	0	9	7	6	11	6	1	0	A	0	0	0	0	0	0	0	0	0	0	1.9	11.5
19-Jun	0	0	2	5	8	14	11	13	5	4	3	0	A	0	1	0	0	0	0	0	0	0	0	0	2.9	13.6
20-Jun	0	0	0	0	0	0	1	4	3	2	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0.6	3.6
21-Jun	0	0	0	0	0	1	2	2	1	1	A	1	0	0	0	0	0	0	0	0	0	0	1	0	0.4	2.5
22-Jun	2	1	0	1	2	5	5	3	5	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	5.3
23-Jun	0	0	0	0	1	1	2	1	A	M	M	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
24-Jun	0	0	0	0	0	0	1	A	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	2.1
25-Jun	0	0	0	0	0	1	A	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8
26-Jun	0	0	0	0	0	A	2	3	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	3.0
27-Jun	0	0	1	1	A	4	6	7	10	2	1	0	0	0	0	0	0	2	1	1	0	0	0	0	1.6	10.2
28-Jun	0	0	0	A	0	1	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.2
29-Jun	0	0	A	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0.4	1.0
30-Jun	0	A	0	0	0	1	2	2	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	9	1.0	9.4
	0.2	0.1	0.2	0.3	0.7	2.1	3.7	3.8	2.6	1.7	1.0	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.2	0.2	0.1	0.1	0.5	Diurnal Average	
	2.4	0.6	1.5	4.5	8.1	13.6	13.8	16.9	10.2	11.5	6.0	1.3	3.2	1.6	1.6	1.3	0.6	2.4	5.6	0.6	0.7	0.3	0.7	9.4	Diurnal Maximum	

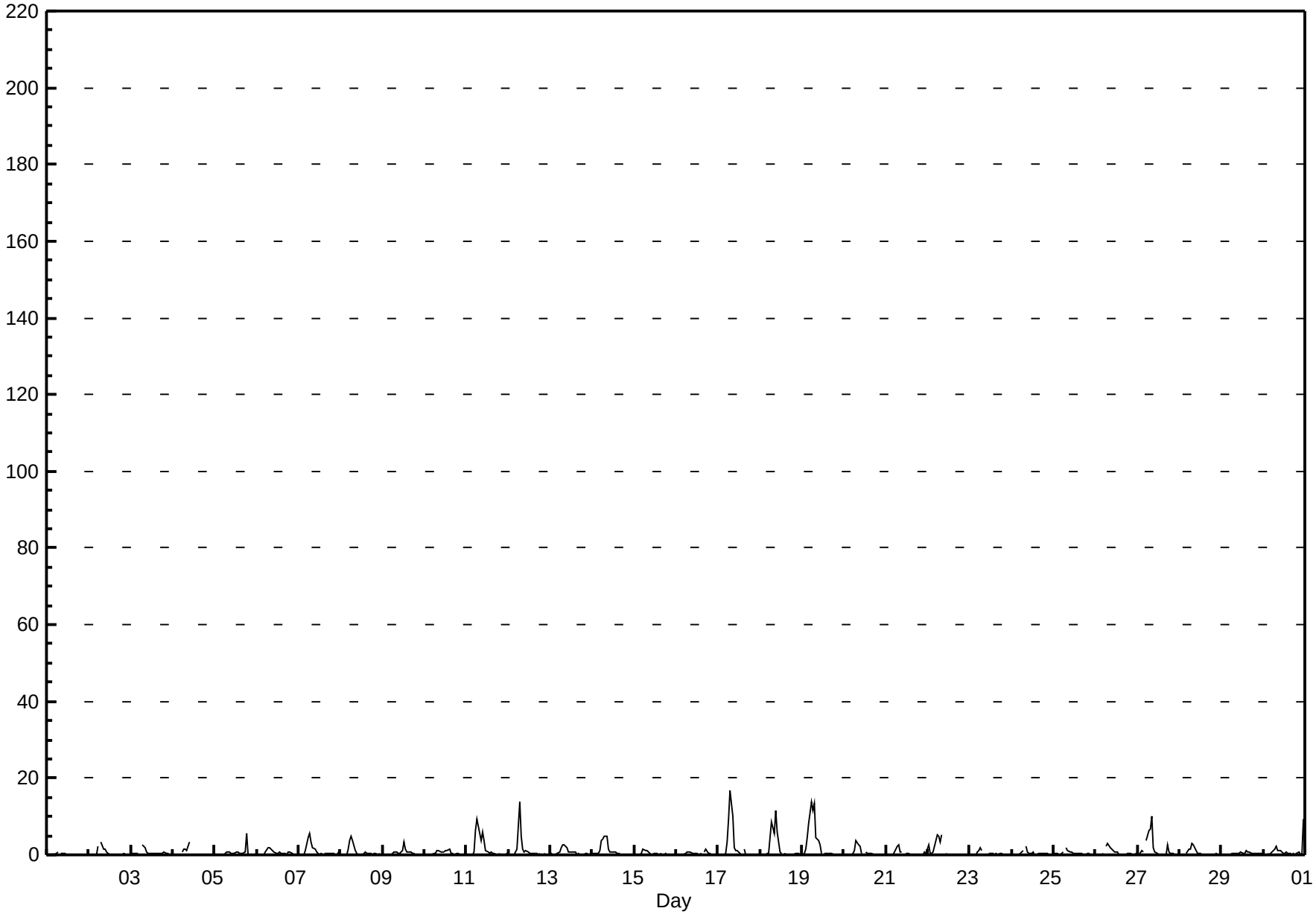
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2014

Maximum Value: 56.4 ppb on Jul 1 00:00

Maximum Daily Average: 8.0 ppb on Jun 17

Minimum Value: 0 ppb on Jun 4 19:00

Minimum Daily Average: 0.6 ppb on Jun 1

Maximum Diurnal Average: 8.6 ppb at hour 8

Minimum Diurnal Average: 0.7 ppb at hour 2

Monthly Average: 2.77 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.5$ Median = 1.0 $Q_3 = 2.5$ $P_{90} = 6.0$ $P_{99} = 34.3$

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
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	0	0	0	0	3	1	1	A	1	1	1	1	0	0	1	1	1	1	1	1	0	1	0	0	0.6	2.7
2-Jun	0	0	0	0	1	5	A	5	3	3	1	1	0	0	0	1	0	0	1	0	1	1	0	0	1.0	5.5
3-Jun	0	0	0	0	3	A	5	5	3	2	1	1	1	1	3	1	1	1	7	7	4	2	1	0	2.1	7.5
4-Jun	0	0	0	0	A	2	3	4	3	8	C	C	C	C	C	C	0	1	0	0	0	0	0	0	--	7.7
5-Jun	0	0	0	A	0	1	1	1	2	1	1	1	2	2	1	1	1	5	56	1	1	1	0	0	3.4	55.9
6-Jun	0	0	A	0	1	2	3	3	2	2	9	1	1	2	1	1	1	1	5	4	1	0	0	0	1.8	8.9
7-Jun	0	A	0	1	7	10	9	5	3	3	2	2	1	1	1	1	1	1	3	2	1	2	0	21	3.3	21.1
8-Jun	A	4	0	1	3	5	7	6	3	1	1	1	1	1	2	1	1	1	1	1	1	0	1	A	1.9	7.2
9-Jun	0	0	0	0	0	2	1	1	1	1	1	2	35	3	1	1	5	1	1	1	0	0	A	0	2.6	35.3
10-Jun	0	0	0	0	1	1	1	2	2	1	2	4	8	4	10	1	3	2	1	1	1	A	2	3	2.2	9.7
11-Jun	0	0	1	0	2	12	13	38	5	10	8	2	2	1	3	2	1	1	2	4	A	1	2	4	5.1	38.5
12-Jun	1	1	2	0	6	3	24	28	4	4	3	2	1	1	1	2	3	1	1	A	3	3	0	0	4.1	27.8
13-Jun	5	1	0	3	4	6	7	20	6	4	19	1	1	11	5	1	1	0	A	0	1	1	1	1	4.4	20.2
14-Jun	1	1	1	2	3	5	7	7	9	5	1	1	1	2	1	1	1	A	1	1	1	0	0	0	2.2	8.9
15-Jun	0	0	1	1	3	2	2	2	1	1	1	1	1	2	1	2	A	1	1	1	0	0	1	0	1.0	3.5
16-Jun	0	3	1	1	1	1	2	1	1	1	2	1	2	1	1	A	2	3	1	5	1	1	0	3	1.4	4.6
17-Jun	1	3	0	0	1	7	36	27	21	10	4	20	1	1	A	47	1	1	0	1	1	1	1	1	8.0	46.7
18-Jun	3	0	1	0	2	2	15	9	14	18	13	1	1	A	5	1	1	1	1	1	1	1	1	1	3.9	18.3
19-Jun	1	1	5	6	11	31	24	19	8	5	5	1	A	1	4	1	1	1	1	0	1	1	0	0	5.5	31.4
20-Jun	0	2	0	0	1	4	5	6	6	6	1	A	1	1	1	1	1	1	1	1	1	0	0	0	1.7	6.5
21-Jun	0	0	0	0	0	2	5	4	1	1	A	4	1	1	1	1	1	1	1	1	1	1	4	3	1.4	5.0
22-Jun	6	1	2	9	4	7	8	4	10	A	1	1	1	1	2	1	1	2	1	1	1	2	1	1	2.9	9.9
23-Jun	1	0	1	1	5	7	4	3	A	M	M	1	9	3	2	1	1	1	1	1	1	2	1	0	2.0	8.7
24-Jun	0	1	0	0	0	1	2	A	3	2	1	1	35	1	1	1	1	1	1	1	1	1	1	1	2.3	34.6
25-Jun	1	1	1	1	1	2	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.9	3.5
26-Jun	1	0	0	0	1	A	4	6	3	2	2	11	21	1	1	1	2	2	3	4	3	1	5	5	3.4	20.6
27-Jun	2	2	6	5	A	6	10	21	11	6	2	1	1	1	2	0	1	33	11	3	2	0	0	0	5.6	33.5
28-Jun	0	0	0	A	1	3	3	5	5	2	2	1	1	1	1	3	0	1	0	0	1	5	0	0	1.5	5.2
29-Jun	0	0	A	0	0	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	0.9	2.0
30-Jun	1	A	1	1	1	3	3	4	2	2	2	2	1	2	1	1	1	5	0	3	5	1	1	56	4.2	56.4
	0.9	0.7	0.9	1.2	2.3	4.7	7.5	8.6	4.8	3.7	3.3	2.3	4.6	1.6	1.9	2.8	1.2	2.3	3.6	1.5	1.1	1.0	0.8	3.6	Diurnal Average	
	6.4	3.8	6.0	8.7	10.9	31.4	35.9	38.5	20.8	18.3	19.2	20.0	35.3	11.4	9.7	46.7	5.3	33.5	55.9	7.5	5.4	4.5	5.0	56.4	Diurnal Maximum	

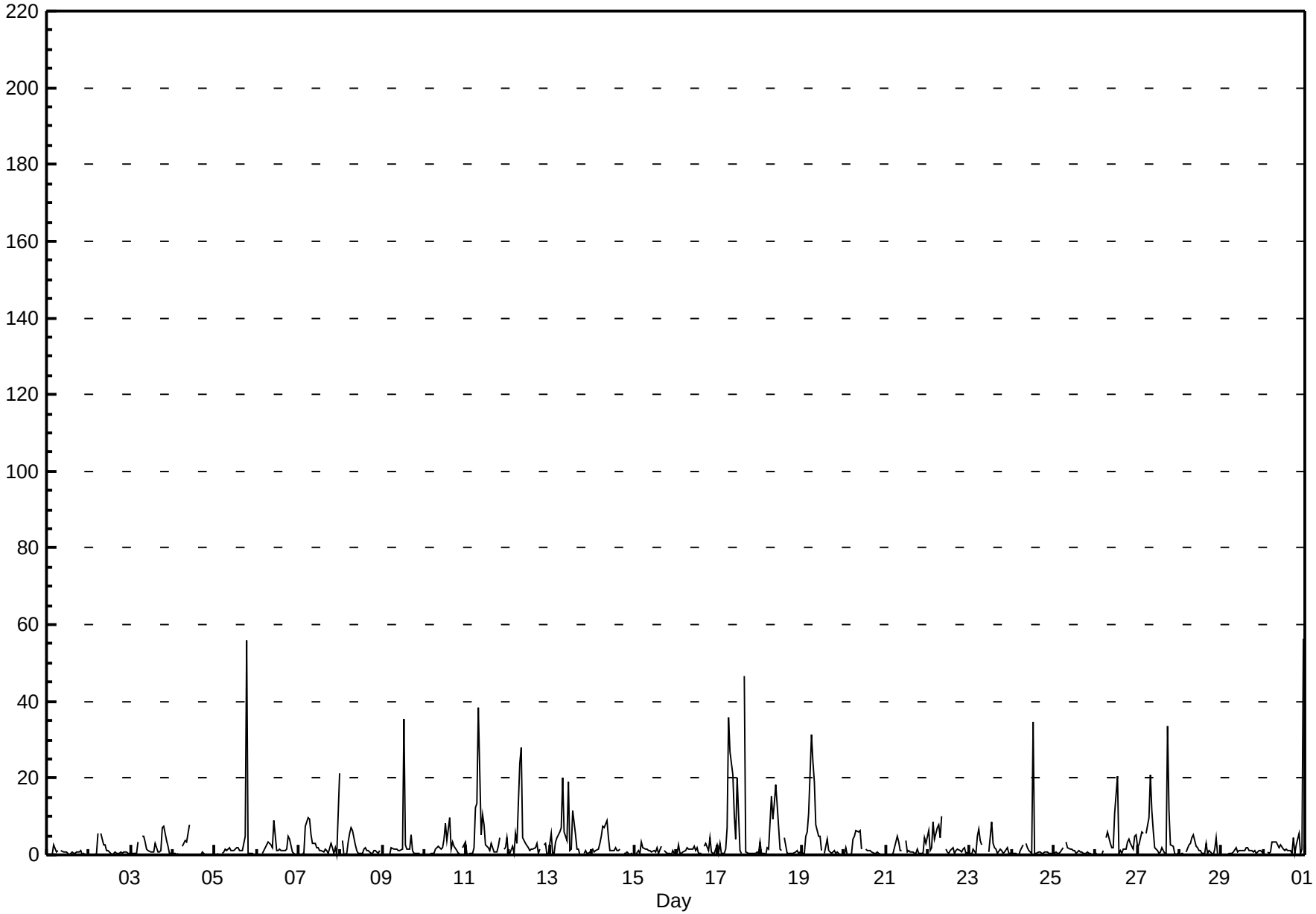
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 34.9 ppb on Jun 12 07:00
Maximum Daily Average: 10.3 ppb on Jun 19

Minimum Value: 1 ppb on Jun 4 22:00
Maximum Diurnal Average: 12.3 ppb at hour 7
Monthly Average: 5.36 ppb

Minimum Daily Average: 3.1 ppb on Jun 9
Minimum Diurnal Average: 2.2 ppb at hour 16
Percentiles: P_1 = 0.9 P_{10} = 1.5 Q_1 = 2.3 Median = 3.9 Q_3 = 6.2 P_{90} = 11.5 P_{99} = 26.3

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
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	4	4	4	6	6	6	6	A	5	3	3	2	1	1	1	2	3	4	3	2	4	5	6	6	3.8	6.4
2-Jun	4	5	6	7	8	15	A	12	6	6	3	2	1	1	1	1	1	1	1	3	8	6	2	2	4.4	14.9
3-Jun	6	6	6	6	7	A	15	12	9	3	3	2	1	1	2	2	2	2	2	3	2	2	3	2	4.3	15.1
4-Jun	2	1	1	1	A	4	5	5	3	7	C	C	C	C	C	C	4	2	1	1	1	1	1	1	--	6.8
5-Jun	1	1	1	A	3	2	3	3	4	2	2	2	3	2	2	2	2	4	11	2	4	9	8	7	3.4	11.3
6-Jun	5	5	A	4	3	5	7	6	4	3	3	2	2	3	3	3	2	3	5	5	5	6	5	4	4.1	7.5
7-Jun	7	A	11	10	13	18	16	10	6	5	4	2	1	2	2	2	2	2	2	3	4	4	7	15	6.4	18.2
8-Jun	A	9	11	10	14	15	15	11	4	2	1	1	1	3	4	3	3	4	2	2	4	3	7	A	5.9	15.3
9-Jun	4	3	2	1	2	4	5	3	3	2	2	5	8	4	2	3	2	2	2	2	2	2	A	4	3.1	7.8
10-Jun	3	3	2	1	2	3	4	6	7	4	4	5	5	5	5	2	2	1	3	3	3	A	13	14	4.3	14.1
11-Jun	10	8	8	6	9	15	17	13	8	12	10	5	4	3	4	3	3	2	2	4	A	8	6	6	7.2	17.4
12-Jun	7	8	8	6	11	16	35	19	8	5	5	4	3	2	3	3	3	3	6	A	6	5	6	8	7.8	34.9
13-Jun	6	4	4	4	8	14	13	21	23	12	4	4	4	4	4	2	3	4	A	5	13	14	10	11	8.3	23.4
14-Jun	9	7	6	10	11	12	10	11	11	5	3	3	3	3	2	2	2	A	3	2	3	3	5	6	5.7	12.2
15-Jun	5	4	4	6	10	9	6	5	3	2	1	1	1	1	1	2	A	4	4	4	3	3	4	4	3.8	9.7
16-Jun	4	3	4	5	6	7	7	4	4	3	2	2	2	2	3	A	6	8	4	5	4	5	5	5	4.4	8.0
17-Jun	5	4	5	5	9	17	27	34	21	6	5	5	2	2	A	7	3	2	2	2	4	5	5	3	7.8	34.1
18-Jun	5	3	3	5	9	9	26	20	16	24	15	3	2	A	3	2	2	1	2	3	8	11	12	11	8.5	26.4
19-Jun	11	11	15	19	22	28	25	26	12	11	8	3	A	4	4	3	3	3	5	5	4	4	4	6	10.3	27.9
20-Jun	4	4	3	5	5	8	14	14	9	8	3	A	5	2	2	2	2	2	2	2	3	4	4	4	4.9	14.1
21-Jun	3	4	4	3	5	6	9	8	2	2	A	3	2	2	1	1	1	1	1	1	3	8	15	13	4.3	14.9
22-Jun	18	13	11	12	15	17	12	9	13	A	4	2	1	1	1	1	1	1	1	2	4	7	6	5	6.9	18.0
23-Jun	6	4	5	5	13	12	10	7	A	M	M	2	2	3	2	2	2	3	3	3	4	6	4	4	4.8	12.9
24-Jun	3	3	5	5	5	8	10	A	12	6	4	3	3	2	2	3	3	4	4	4	4	5	4	4	4.6	12.1
25-Jun	4	3	3	4	4	6	A	7	4	3	3	2	2	2	2	2	2	1	1	2	4	5	4	4	3.2	7.2
26-Jun	4	5	6	5	6	A	10	8	6	5	4	2	2	1	1	1	1	2	2	3	5	7	8	10	4.5	9.8
27-Jun	5	8	13	13	A	17	19	19	26	9	4	3	2	2	2	2	3	10	6	5	5	7	7	6	8.5	26.3
28-Jun	4	5	5	A	6	9	8	9	6	4	2	2	2	1	1	1	1	1	1	2	2	4	4	2	3.5	9.2
29-Jun	3	3	A	4	3	4	4	3	5	4	5	4	3	2	4	4	3	3	2	5	4	4	5	5	3.7	5.1
30-Jun	5	A	6	3	4	6	8	7	3	3	3	2	2	3	2	1	1	2	1	2	5	7	13	28	5.2	28.5
	5.4	5.1	5.8	6.1	8.0	10.4	12.3	11.1	8.5	5.8	4.0	2.8	2.6	2.3	2.4	2.2	2.3	2.8	2.9	3.0	4.3	5.6	6.3	6.9	Diurnal Average	
	18.0	12.6	15.0	18.8	22.2	27.9	34.9	34.1	26.3	24.3	14.7	5.1	7.8	4.8	4.7	6.5	6.5	9.8	11.3	5.4	12.7	14.0	14.9	28.5	Diurnal Maximum	

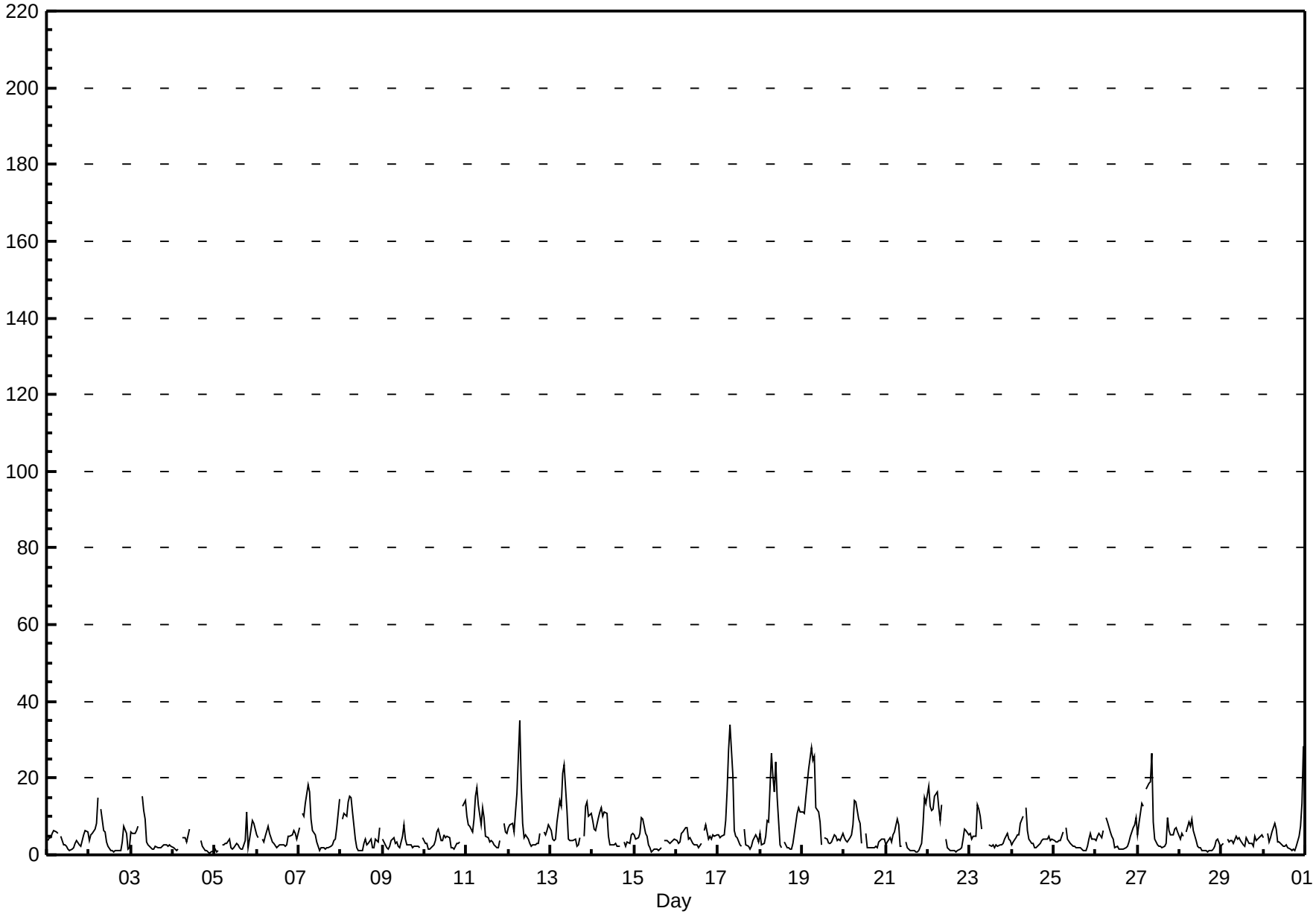
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2014

Maximum Value: 111.6 ppb on Jun 17 16:00

Maximum Daily Average: 20.0 ppb on Jun 17

Minimum Value: 1 ppb on Jun 4 22:00

Minimum Daily Average: 5.1 ppb on Jun 25

Maximum Diurnal Average: 19.9 ppb at hour 8

Minimum Diurnal Average: 4.9 ppb at hour 17

Monthly Average: 9.77 ppb

Percentiles: P_1 = 1.5 P_{10} = 3.1 Q_1 = 4.5 Median = 6.6 Q_3 = 11.3 P_{90} = 19.1 P_{99} = 49.3

Hours in Service:	720
Hours of Data:	681
Hours of Missing Data:	39
Hours of Calibration:	37
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	5	5	5	9	11	9	7	A	7	4	4	3	3	2	4	4	6	5	4	5	6	7	8	7	5.7	11.0
2-Jun	5	8	8	8	11	22	A	18	9	8	4	4	2	2	2	3	2	2	3	7	13	11	4	3	6.9	21.9
3-Jun	14	9	9	10	13	A	20	17	13	6	5	4	3	2	7	3	3	4	19	17	8	5	5	3	8.8	19.9
4-Jun	3	2	2	2	A	7	8	9	8	14	C	C	C	C	C	C	11	5	2	2	2	1	1	2	--	13.8
5-Jun	2	2	2	A	4	4	6	5	8	4	3	4	5	6	5	4	4	14	88	4	7	11	11	8	9.1	87.8
6-Jun	7	6	A	5	7	9	10	8	7	6	18	4	5	6	5	5	5	6	12	10	9	8	7	8	7.4	18.4
7-Jun	10	A	13	12	21	26	23	13	9	9	7	7	3	5	4	4	3	3	7	5	5	8	11	48	11.1	48.4
8-Jun	A	16	12	14	16	18	19	18	8	3	2	2	3	8	9	4	5	6	3	4	6	5	10	A	8.8	18.9
9-Jun	7	5	3	2	3	6	7	5	6	4	3	8	43	6	4	5	11	5	4	4	4	5	A	6	6.6	42.8
10-Jun	4	4	2	2	3	5	7	9	10	5	8	11	25	11	15	5	9	7	7	6	6	A	19	22	8.7	24.9
11-Jun	14	12	10	8	11	21	24	53	11	20	18	9	8	4	10	8	5	5	6	14	A	13	11	13	13.3	52.5
12-Jun	16	15	17	9	23	19	46	52	19	13	13	7	5	5	5	5	7	4	16	A	11	12	8	14	14.9	52.5
13-Jun	30	8	8	11	14	21	24	66	38	21	6	6	6	25	11	5	6	7	A	9	23	19	16	19	17.2	65.7
14-Jun	12	10	8	12	18	15	15	16	17	12	4	5	4	6	4	4	5	A	7	4	5	4	7	9	8.8	18.4
15-Jun	9	6	10	9	17	12	9	6	4	4	2	4	2	5	3	6	A	6	6	7	6	5	8	6	6.5	17.3
16-Jun	6	9	7	8	8	13	13	6	7	7	7	5	6	3	6	A	12	14	7	18	6	7	6	9	8.2	17.6
17-Jun	6	8	6	8	13	23	63	48	37	24	10	49	4	5	A	112	5	4	3	5	7	7	7	5	20.0	111.6
18-Jun	22	5	5	7	18	14	35	25	27	34	28	5	4	A	12	4	3	3	4	8	13	15	16	12	13.8	35.0
19-Jun	13	13	20	20	25	48	42	33	16	14	14	5	A	7	12	6	4	6	15	7	7	6	5	8	15.0	48.4
20-Jun	6	7	5	7	7	15	20	18	17	19	6	A	10	4	4	4	3	3	4	4	5	6	7	5	8.1	19.9
21-Jun	4	5	7	5	6	9	15	11	4	3	A	6	3	3	2	3	3	2	5	5	5	13	25	20	7.0	24.7
22-Jun	24	14	15	21	19	20	17	11	23	A	9	3	2	3	5	2	3	5	4	5	7	10	10	7	10.3	24.5
23-Jun	7	6	11	8	21	20	14	9	A	M	M	4	8	9	6	5	4	5	4	5	6	8	6	5	8.1	21.4
24-Jun	3	6	8	8	6	13	14	A	15	9	6	5	45	3	3	4	5	5	6	6	7	7	6	6	8.5	45.5
25-Jun	5	4	4	5	5	10	A	13	6	5	4	4	4	3	3	3	3	2	3	4	7	8	7	8	5.1	13.2
26-Jun	5	8	7	6	10	A	14	14	8	7	6	11	28	3	2	3	4	6	10	12	11	9	19	19	9.6	28.3
27-Jun	9	15	22	22	A	19	23	46	28	21	9	4	4	4	5	4	5	69	23	10	9	10	11	8	16.5	69.0
28-Jun	6	7	7	A	8	11	11	12	10	6	5	5	4	2	2	4	2	3	2	3	7	12	8	3	6.1	12.5
29-Jun	4	4	A	7	4	7	5	5	11	7	7	6	4	5	7	9	4	4	4	8	6	7	9	8	6.0	11.5
30-Jun	6	A	8	4	6	10	13	11	7	6	7	4	4	6	4	3	2	10	2	8	18	11	18	81	10.7	80.8
	9.0	7.7	8.4	8.8	11.9	15.2	18.6	19.9	13.4	10.5	8.0	6.9	8.8	5.3	5.7	8.2	4.9	7.6	9.6	7.0	8.0	8.6	9.8	12.8	Diurnal Average	
	30.4	16.5	21.9	21.9	25.4	48.4	62.8	65.7	37.6	34.4	27.7	48.8	45.5	24.7	15.3	111.6	12.0	69.0	87.8	17.6	23.4	19.1	24.7	80.8	Diurnal Maximum	

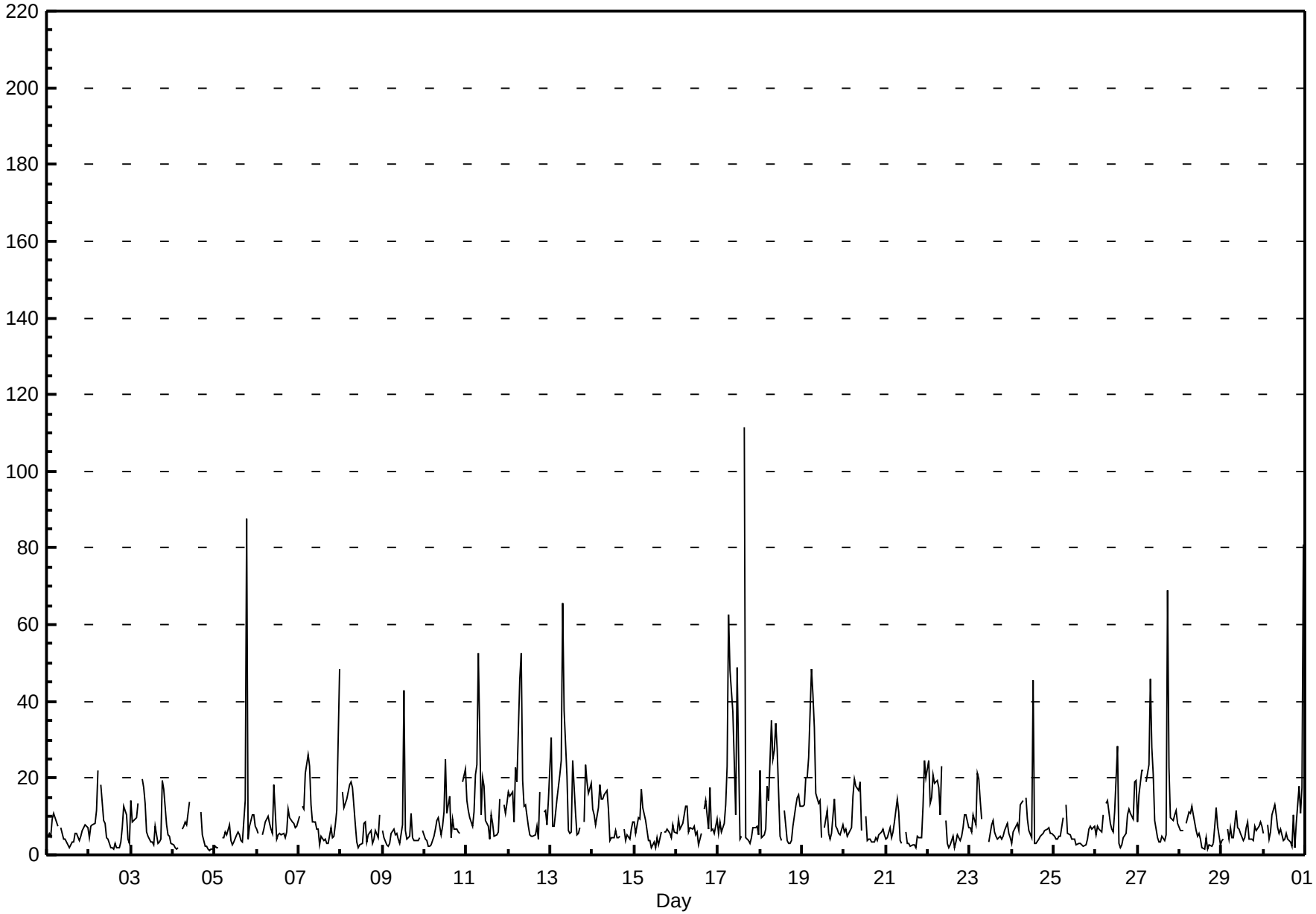
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Henry Pirker - June 2014

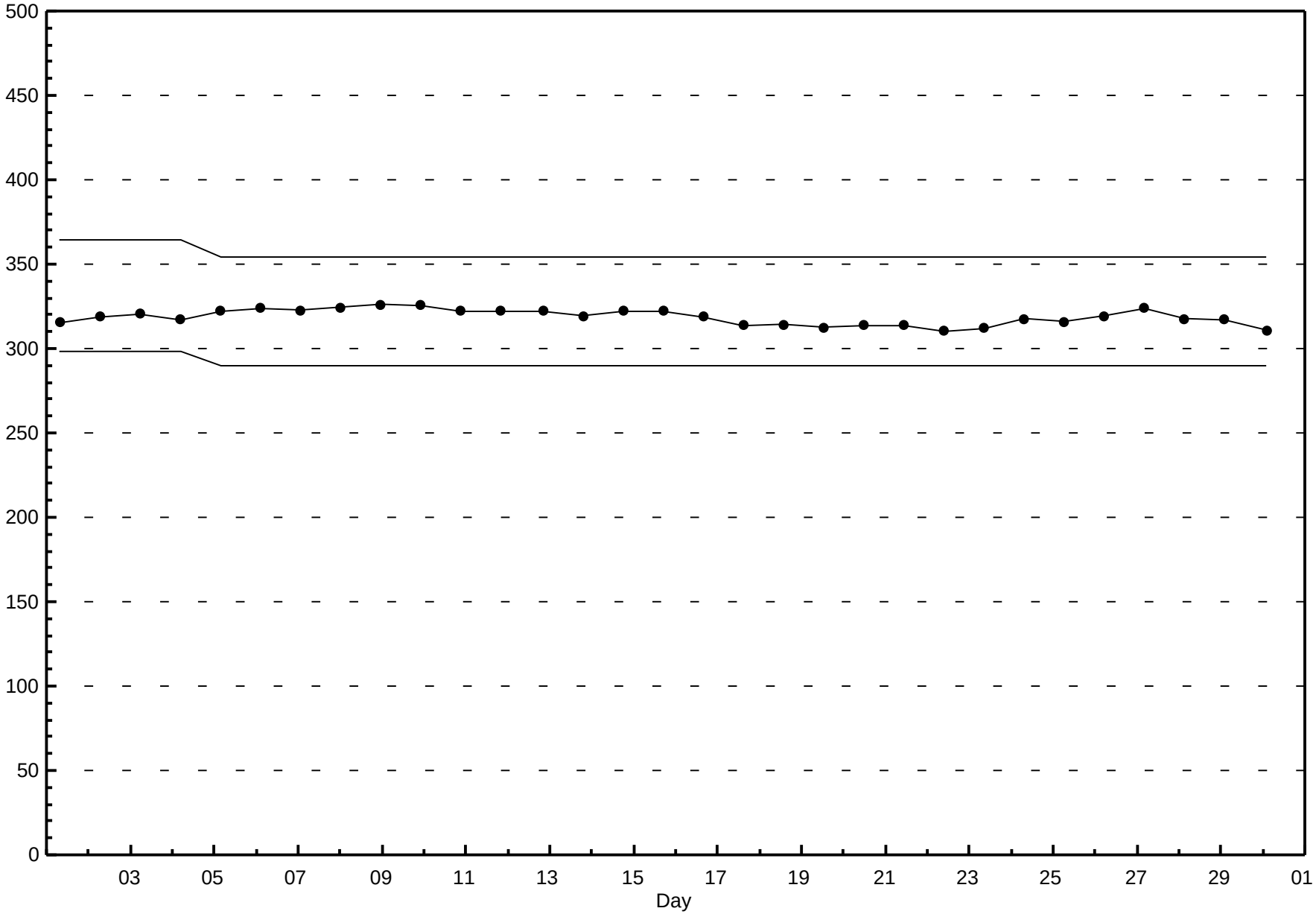


Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 52.4 ppb on Jun 13 16:00 Maximum Daily Average: 35.5 ppb on Jun 23

Minimum Value: 0 ppb on Jun 19 04:00 Minimum Daily Average: 16.3 ppb on Jun 4
Maximum Diurnal Average: 38.7 ppb at hour 16 Minimum Diurnal Average: 15.1 ppb at hour 6
Monthly Average: 27.92 ppb Percentiles: P_1 = 3.6 P_{10} = 11.8 Q_1 = 20.3 Median = 28.7 Q_3 = 36.4 P_{90} = 43.0 P_{99} = 49.9

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

Day	Hourly Period Ending At (MST) 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	32	27	26	24	21	24	27	A	33	37	38	41	45	47	46	45	43	43	40	43	33	31	25	25	34.7	46.7
2-Jun	26	20	14	15	15	13	A	21	27	28	35	38	41	44	47	49	49	50	51	48	39	40	45	43	34.8	50.6
3-Jun	35	31	26	24	21	A	19	26	27	36	43	49	47	46	45	46	44	43	39	35	30	27	24	21	34.0	48.5
4-Jun	22	21	19	17	A	13	12	11	13	9	10	12	15	19	20	C	C	C	16	15	17	21	23	22	16.3	22.6
5-Jun	19	20	20	A	24	25	27	29	28	32	35	36	35	36	37	39	42	38	39	41	36	28	26	24	31.1	41.8
6-Jun	23	22	A	21	21	18	19	22	25	28	32	39	39	39	39	39	38	37	31	31	29	26	26	29	29.3	39.2
7-Jun	21	A	13	10	8	9	13	20	27	33	35	37	38	38	38	39	38	39	38	35	33	32	28	18	27.9	39.2
8-Jun	A	21	13	12	5	8	14	19	25	28	30	30	31	29	29	30	32	29	25	23	21	17	10	A	21.9	32.1
9-Jun	24	24	34	36	33	29	28	29	28	30	34	26	24	25	29	30	30	31	29	27	29	30	A	25	28.8	35.6
10-Jun	22	21	26	26	26	25	23	19	19	25	28	26	27	29	34	36	39	41	37	35	35	A	17	14	27.3	40.9
11-Jun	11	11	8	9	6	4	6	9	14	17	26	37	42	46	48	49	50	50	49	47	A	36	36	35	28.1	50.1
12-Jun	31	22	23	25	18	11	6	20	30	33	33	39	43	46	46	47	46	44	43	A	44	44	36	30	33.0	46.7
13-Jun	30	32	36	34	29	22	26	21	22	28	41	42	43	49	50	52	49	46	A	43	28	20	22	15	34.0	52.4
14-Jun	12	11	12	7	4	4	6	10	15	25	31	32	33	32	34	36	37	A	39	35	32	31	25	23	22.9	38.7
15-Jun	23	24	23	18	11	13	22	23	26	30	33	35	36	36	37	37	A	36	32	31	31	29	30	26	27.9	37.4
16-Jun	27	25	29	23	22	22	29	33	38	44	44	48	51	49	46	A	39	38	42	43	39	31	29	25	35.4	50.5
17-Jun	23	26	25	23	14	7	8	4	16	33	36	39	42	43	A	43	44	44	43	41	37	30	27	27	29.4	44.1
18-Jun	24	26	24	20	12	10	5	6	10	11	19	33	37	A	42	43	43	44	43	36	26	19	11	10	24.1	43.6
19-Jun	8	7	3	0	1	2	4	8	17	21	26	32	A	39	40	43	42	43	44	35	33	34	35	29	23.7	44.0
20-Jun	31	32	30	25	23	20	15	16	26	34	35	A	33	36	39	40	41	40	40	39	36	33	30	29	31.4	41.0
21-Jun	29	25	22	23	20	21	18	20	29	30	A	31	32	33	33	33	34	34	34	33	30	21	11	10	26.3	34.2
22-Jun	3	4	6	7	3	5	11	17	19	A	37	36	36	37	37	37	38	38	38	37	37	32	29	29	24.9	38.2
23-Jun	30	32	29	29	21	22	27	30	A	M	M	36	38	40	42	44	46	45	47	46	42	39	32	29	35.5	47.1
24-Jun	37	37	40	40	36	32	30	A	33	39	44	44	37	38	39	34	27	25	21	21	20	18	15	13	31.3	44.2
25-Jun	12	11	12	13	14	14	A	19	24	26	27	28	29	32	31	31	31	31	31	30	26	21	20	19	23.1	31.6
26-Jun	20	19	14	18	14	A	16	16	20	24	28	31	33	35	36	37	37	38	37	37	34	29	26	22	27.0	37.7
27-Jun	26	17	5	6	A	7	10	16	17	35	41	43	44	44	44	42	39	33	31	31	28	25	25	23	27.5	44.0
28-Jun	20	18	17	A	16	10	12	12	18	23	29	32	32	35	34	34	34	34	33	30	30	28	27	25	25.4	35.1
29-Jun	22	19	A	24	23	22	22	22	18	19	21	23	25	23	20	19	18	17	24	21	20	15	13	12	20.2	25.4
30-Jun	11	A	11	13	12	11	12	15	18	19	20	22	24	26	27	27	30	30	31	28	22	17	11	5	19.2	31.0
	22.6	21.7	20.0	19.4	16.9	15.1	16.6	18.3	22.9	27.8	31.8	34.3	35.7	36.8	37.5	38.7	38.6	37.9	36.1	34.4	31.0	27.7	24.6	22.6	Diurnal Average	
	37.0	37.5	40.1	39.5	36.3	31.6	30.2	33.1	38.5	43.9	44.4	48.5	50.5	48.8	50.5	52.4	50.1	50.1	50.6	48.2	43.6	43.9	45.1	42.5	Diurnal Maximum	

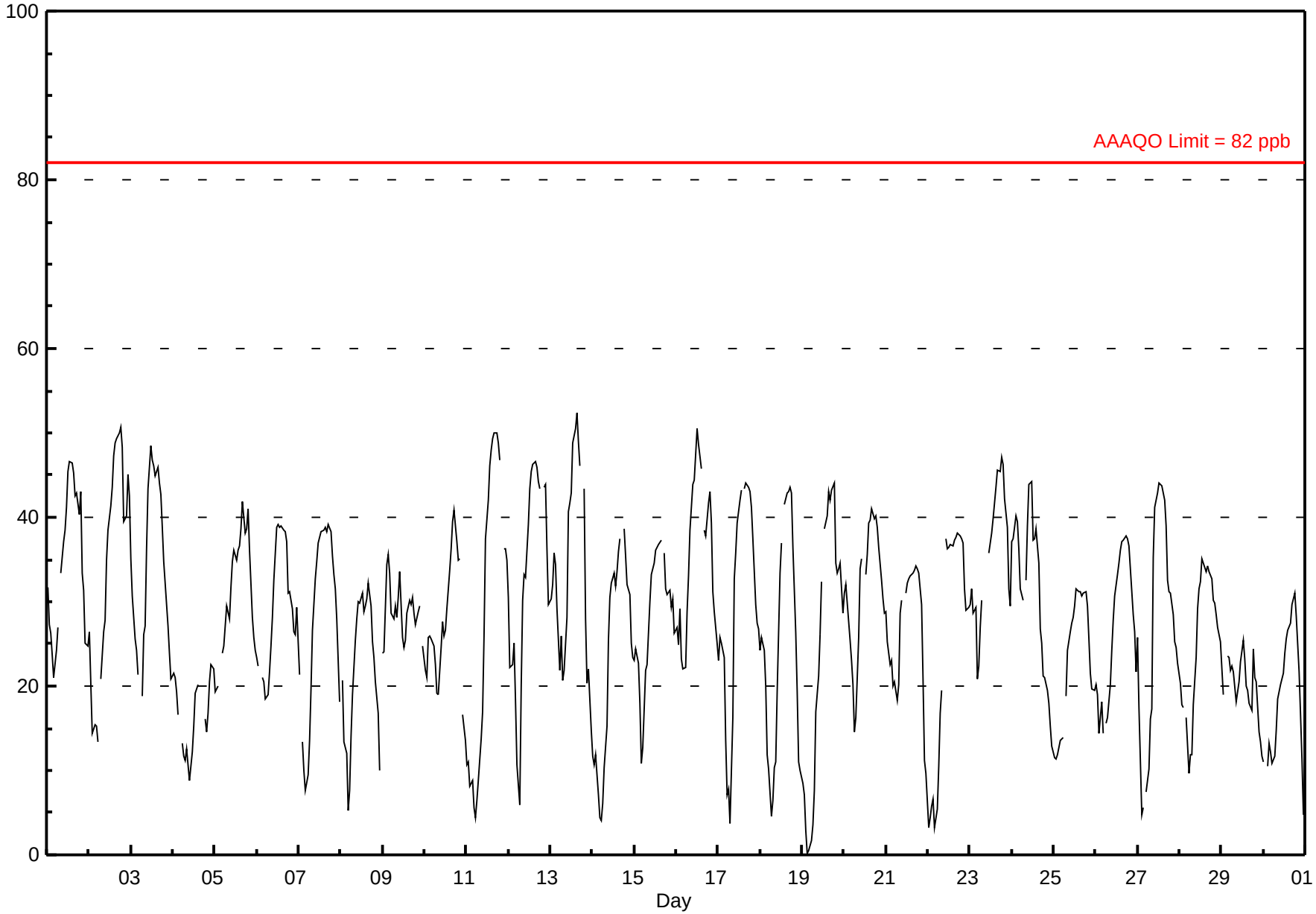
C - Calibration M - Maintenance A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Henry Pirker - June 2014

Maximum Value: 54.4 ppb on Jun 13 16:00

Maximum Daily Average: 39.0 ppb on Jun 16

Minimum Value: 1 ppb on Jun 19 04:00

Minimum Daily Average: 17.9 ppb on Jun 4

Maximum Diurnal Average: 40.8 ppb at hour 16

Minimum Diurnal Average: 18.1 ppb at hour 6

Monthly Average: 30.86 ppb

Percentiles: P_1 = 6.4 P_{10} = 14.8 Q_1 = 23.5 Median = 31.5 Q_3 = 39.1 P_{90} = 45.4 P_{99} = 51.9

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

Day	Hourly Period Ending At (MST) 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	34	32	27	26	24	27	30	A	37	39	41	43	48	49	48	48	45	45	42	45	42	34	29	27	37.5	48.9
2-Jun	29	26	20	19	19	18	A	25	28	33	37	40	44	47	50	51	51	52	53	52	45	51	51	46	38.5	52.5
3-Jun	43	37	30	27	27	A	24	29	32	39	48	50	50	49	47	48	46	46	43	39	32	30	26	24	37.6	50.4
4-Jun	22	22	20	18	A	14	13	12	14	12	11	14	17	22	23	C	C	C	17	16	18	23	24	23	17.9	23.8
5-Jun	21	21	21	A	25	26	29	32	32	35	37	38	38	38	40	42	43	42	43	43	40	33	27	27	33.6	43.4
6-Jun	25	24	A	22	21	20	21	23	26	30	35	41	41	40	41	40	40	40	33	33	32	29	28	32	31.4	41.5
7-Jun	25	A	18	12	11	12	17	24	30	36	37	39	39	40	40	40	40	41	40	37	36	34	31	32	30.9	40.5
8-Jun	A	22	19	15	14	10	19	21	29	30	31	31	34	32	33	33	34	33	29	26	23	21	15	A	25.1	34.3
9-Jun	25	29	37	37	36	31	29	31	30	35	39	29	27	27	31	33	32	32	34	29	31	31	A	27	31.4	39.0
10-Jun	23	26	27	27	27	27	25	22	23	30	30	29	29	32	38	40	41	43	42	38	39	A	27	20	30.6	42.6
11-Jun	17	13	12	10	7	6	8	14	17	22	32	44	45	49	50	51	52	52	51	49	A	38	39	37	31.2	52.3
12-Jun	34	28	26	26	25	14	9	26	34	36	35	42	46	47	48	48	48	50	49	A	48	47	42	36	36.7	49.7
13-Jun	35	34	38	39	33	27	29	27	30	39	46	45	49	50	53	54	54	50	A	48	38	25	26	23	38.7	54.4
14-Jun	14	14	15	11	7	6	10	15	22	29	32	34	36	34	35	40	39	A	40	38	34	32	30	26	25.8	40.4
15-Jun	27	28	26	21	15	20	25	25	28	34	35	36	38	38	38	39	A	39	34	34	34	32	34	29	30.8	39.1
16-Jun	33	28	32	28	25	28	33	37	42	46	47	51	53	51	50	A	42	42	44	45	44	37	31	29	39.0	52.6
17-Jun	25	29	28	25	24	12	13	7	32	37	39	42	44	45	A	45	46	46	44	43	42	32	29	28	32.9	46.0
18-Jun	27	27	26	22	18	13	8	9	12	16	32	36	39	A	43	44	44	45	45	42	33	22	16	12	27.4	45.0
19-Jun	10	10	8	1	2	3	6	12	21	23	30	35	A	41	44	45	43	46	50	39	37	39	40	31	26.7	49.6
20-Jun	34	35	34	28	27	26	17	21	30	42	41	A	36	39	42	42	43	42	42	40	38	36	32	30	34.7	42.7
21-Jun	30	28	25	24	21	22	22	29	30	31	A	32	34	34	34	34	35	35	35	34	33	26	14	14	28.6	35.2
22-Jun	7	7	9	11	4	10	16	19	22	A	39	38	39	38	38	39	39	40	40	39	40	34	31	30	27.3	40.2
23-Jun	31	33	32	32	25	26	30	32	A	M	M	38	40	42	43	45	47	47	49	48	45	41	37	33	37.9	48.7
24-Jun	39	39	42	41	38	34	33	A	35	42	48	48	41	39	40	39	29	28	24	24	21	22	18	15	34.0	48.2
25-Jun	12	13	13	15	15	15	A	23	27	28	29	30	31	33	32	33	32	33	33	32	29	24	22	22	25.0	33.1
26-Jun	23	24	19	21	18	A	17	19	23	27	30	33	36	36	38	38	39	39	40	39	38	31	29	26	29.7	39.8
27-Jun	27	27	6	8	A	11	14	18	24	40	44	44	45	45	46	43	41	38	33	33	35	33	30	28	31.2	46.4
28-Jun	22	20	20	A	21	12	14	15	23	27	32	33	35	37	35	35	36	35	34	33	32	31	31	29	27.9	36.6
29-Jun	24	25	A	26	24	24	24	23	22	21	24	25	29	25	22	22	20	23	26	25	24	18	16	13	22.8	29.2
30-Jun	13	A	14	14	15	12	15	17	20	21	22	23	26	28	28	30	31	31	37	32	25	20	17	8	21.7	37.0
	25.2	24.9	23.0	21.6	20.5	18.1	19.6	21.7	26.8	31.5	35.1	36.7	38.2	38.8	39.7	40.8	40.5	40.5	38.8	37.1	34.7	31.2	28.2	26.1	Diurnal Average	
	42.8	39.2	41.7	41.3	38.3	34.3	33.2	36.6	42.3	46.4	48.2	51.1	52.6	51.2	52.5	54.4	53.5	52.0	52.5	51.8	47.6	50.7	50.8	46.3	Diurnal Maximum	

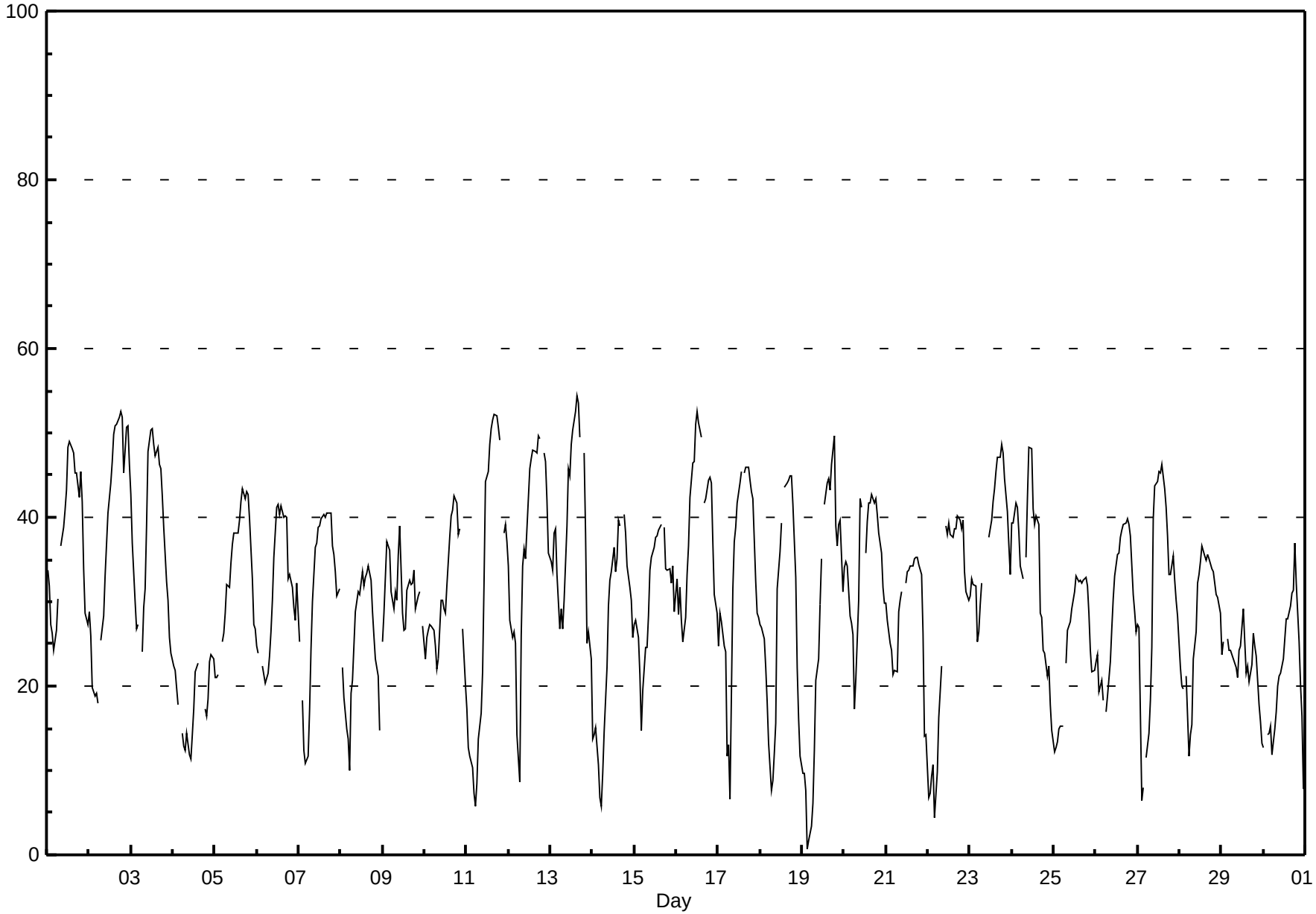
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

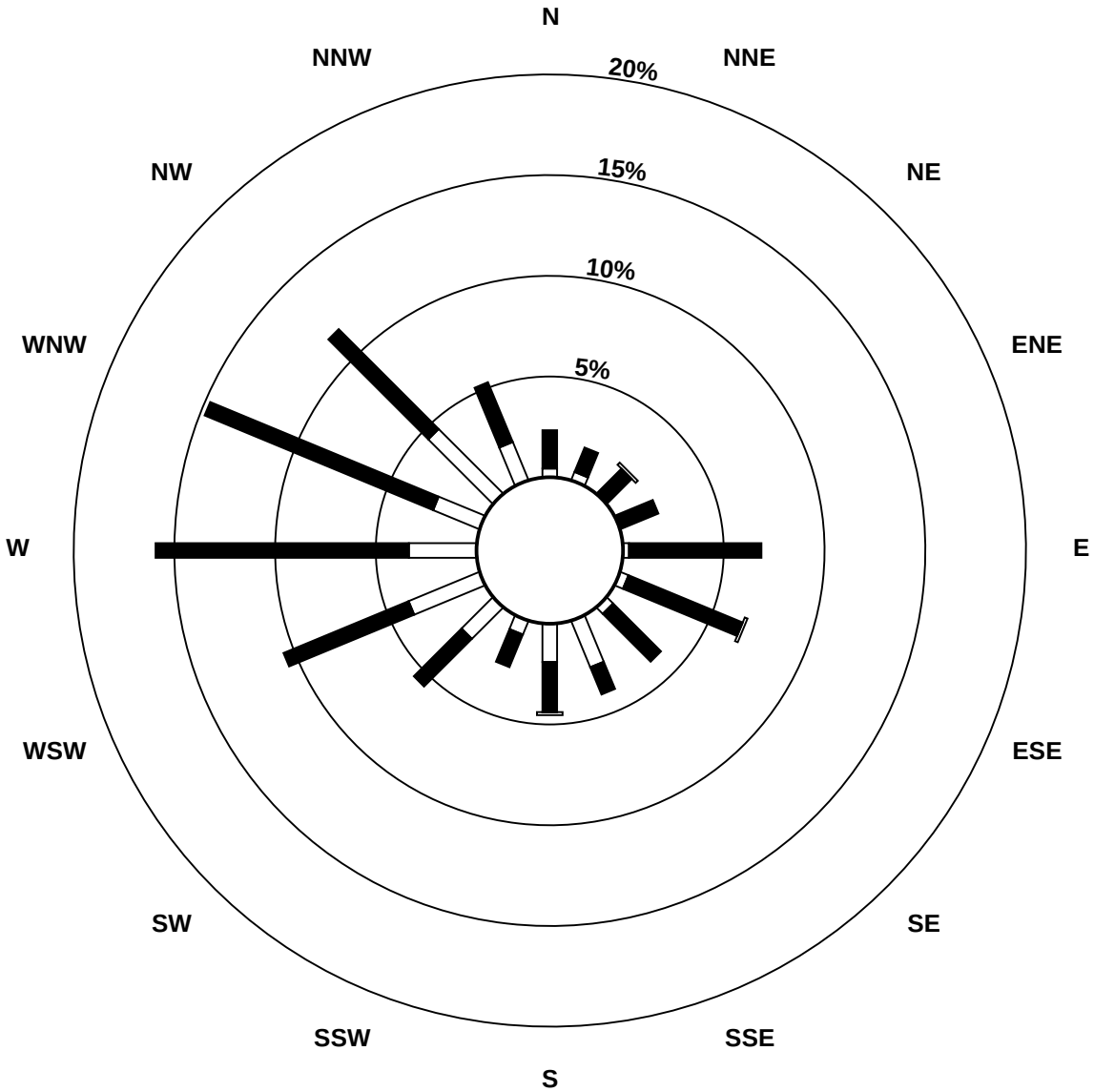
Henry Pirker - June 2014



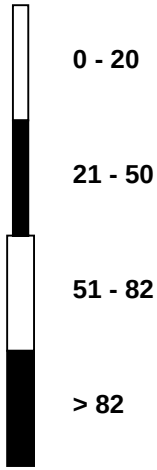
Pollutant Rose

Ozone (O_3) - ppb

Henry Pirker - June 2014



Pollutant Classes (ppb)



Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Henry Pirker - June 2014

Maximum Value: 48.5 ppb on Jun 11 21:00

Minimum Value: 4.0 ppb on Jun 19 08:00

Percentiles: P_1 = 6.8 P_{10} = 15.0 Q_1 = 21.3 Median = 28.2 Q_3 = 35.3 P_{90} = 40.6 P_{99} = 47.0

Hours in Service:	720
Hours of Data:	708
Hours of Missing Data:	12
Hours of Calibration:	12
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jun	36	35	33	31	29	28	27	26	26	28	29	32	35	38	41	42	43	44	44	44	43	41	38	35	44.1
2-Jun	33	31	27	24	22	19	19	18	18	19	22	25	29	33	35	39	41	44	46	47	47	47	46	46	47.4
3-Jun	44	41	38	35	33	32	28	26	25	26	28	32	35	37	40	42	45	45	45	43	41	39	36	33	45.3
4-Jun	30	27	25	22	21	19	18	16	15	13	12	11	12	13	14	14	14	N	N	N	N	N	N	19	29.9
5-Jun	19	19	19	20	21	22	22	23	25	26	29	29	31	32	33	35	36	37	38	38	38	37	36	34	38.4
6-Jun	32	30	29	26	24	22	21	21	21	22	23	25	28	30	33	35	37	38	38	37	35	34	32	31	37.8
7-Jun	29	28	25	22	19	17	15	14	14	17	19	23	26	30	33	36	37	38	38	38	37	37	35	33	38.2
8-Jun	32	29	26	22	18	15	13	13	15	16	18	20	23	26	28	29	30	30	30	29	27	26	23	23	32.0
9-Jun	21	21	22	24	25	27	30	30	30	31	31	30	29	28	28	28	29	29	28	28	29	29	29	28	31.0
10-Jun	27	26	26	25	25	24	24	23	23	23	24	24	24	24	26	28	30	32	34	35	36	37	34	31	36.8
11-Jun	27	23	19	15	11	10	9	8	8	9	11	15	19	25	30	35	39	44	46	48	48	47	45	43	48.5
12-Jun	41	37	33	30	28	25	21	19	19	21	22	24	27	31	36	40	42	43	44	45	45	45	43	41	45.1
13-Jun	39	37	36	36	34	31	30	29	28	27	28	29	30	34	37	41	44	47	47	48	45	41	37	32	47.6
14-Jun	27	22	20	16	13	11	9	8	9	11	13	16	20	23	27	30	33	34	35	35	35	35	34	32	35.2
15-Jun	30	29	27	25	22	20	20	20	20	21	22	24	27	30	32	34	35	36	35	35	34	33	32	31	35.7
16-Jun	30	29	29	28	27	26	25	26	28	30	32	35	39	42	44	46	46	45	44	44	42	40	37	36	45.6
17-Jun	34	32	30	28	25	21	19	16	15	16	18	20	23	28	30	36	40	42	43	43	42	40	39	37	42.9
18-Jun	34	32	30	27	24	21	18	16	14	12	12	13	17	17	23	28	33	37	41	41	40	37	33	29	41.0
19-Jun	25	20	15	11	7	5	4	4	5	7	10	14	16	21	26	31	35	38	41	41	40	39	39	37	40.8
20-Jun	35	34	32	31	30	28	26	24	23	24	24	24	26	28	31	35	37	38	38	38	39	38	37	36	38.9
21-Jun	34	33	30	28	26	25	23	22	22	23	23	24	26	28	30	32	32	33	33	33	33	31	29	26	34.5
22-Jun	22	18	15	11	8	6	6	7	9	10	14	18	23	28	31	34	37	37	37	37	37	37	36	35	37.3
23-Jun	34	33	32	31	29	28	27	27	27	26	N	N	N	N	N	N	41	41	42	43	44	44	43	41	43.9
24-Jun	40	39	38	37	36	35	35	36	35	36	36	37	37	38	39	38	38	36	33	30	28	26	23	20	39.7
25-Jun	18	16	15	14	13	13	13	13	15	17	20	22	24	27	27	29	30	30	31	31	30	29	28	26	30.7
26-Jun	25	23	21	20	18	18	17	17	17	18	20	21	24	25	28	30	33	34	36	36	36	36	34	32	36.3
27-Jun	31	28	24	21	19	16	13	12	11	14	19	24	27	31	36	39	41	41	40	38	36	34	32	29	41.5
28-Jun	27	25	23	22	21	18	17	15	15	15	17	19	21	24	27	30	32	33	33	33	33	32	31	30	33.4
29-Jun	29	27	26	25	24	23	22	22	21	21	21	21	22	22	21	21	21	21	21	21	20	19	19	18	28.6
30-Jun	17	17	15	14	12	12	12	12	13	14	15	16	18	19	21	23	24	26	27	28	28	26	25	22	27.9
Diurnal Maximums	43.9	41.5	38.4	37.0	36.3	35.4	35.2	36.0	35.4	35.6	36.2	36.8	38.6	41.9	44.0	45.6	45.6	46.5	47.3	47.7	48.5	47.1	46.5	45.7	

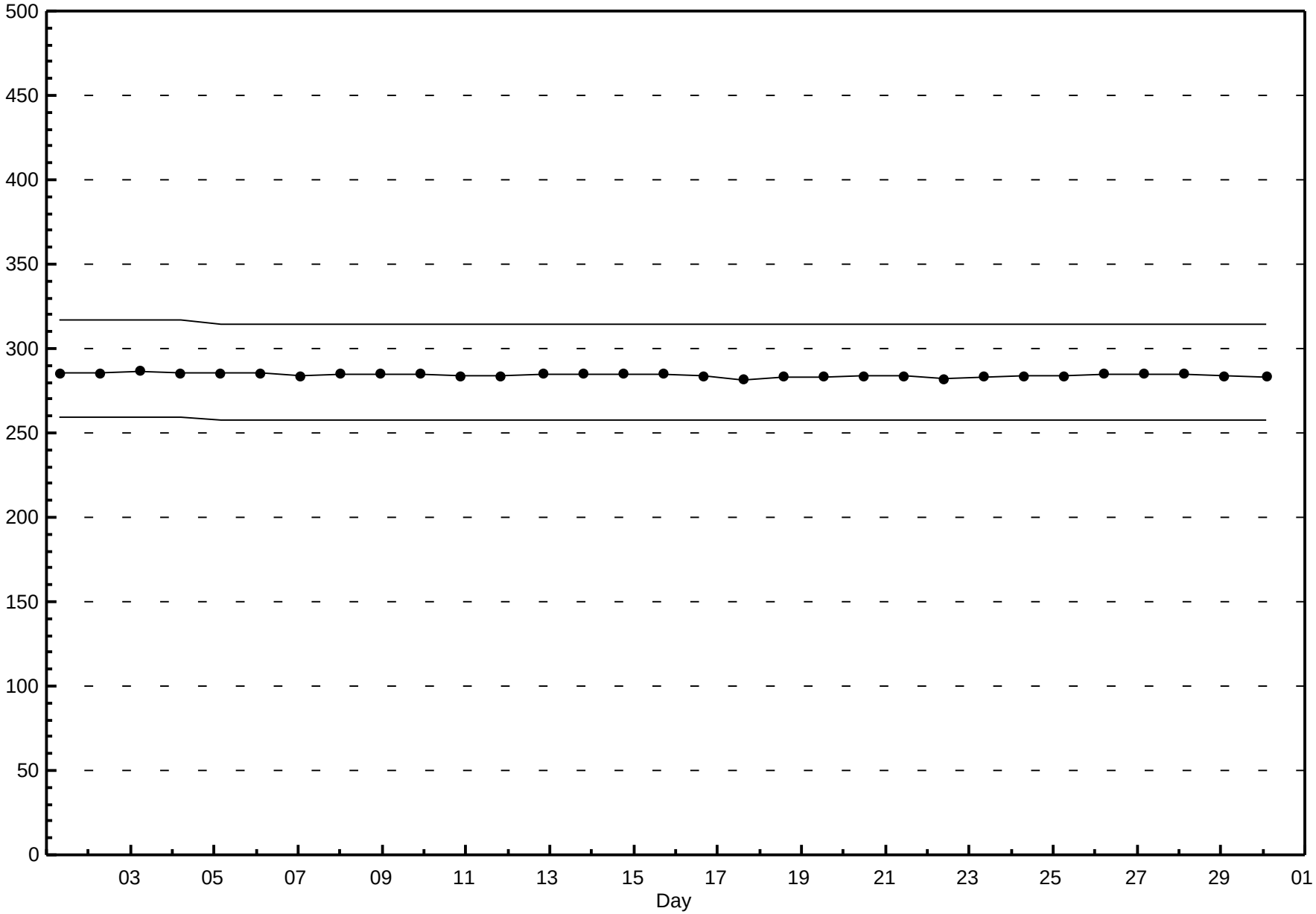
N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.45 ppm on Jun 12 06:00
Maximum Daily Average: 0.22 ppm on Jun 2

Minimum Value: 0.0 ppm on Jun 5 19:00
Maximum Diurnal Average: 0.19 ppm at hour 24
Monthly Average: 0.167 ppm

Minimum Daily Average: 0.12 ppm on Jun 21
Minimum Diurnal Average: 0.15 ppm at hour 20
Percentiles: $P_1 = 0.10$ $P_{10} = 0.12$ $Q_1 = 0.14$ Median = 0.16 $Q_3 = 0.19$ $P_{90} = 0.22$ $P_{99} = 0.28$

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

Day	Hourly Period Ending At (MST) 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	0.2	0.2	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	0.21	0.24
2-Jun	0.2	0.2	0.2	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	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.22	0.27
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	0.20	0.25
4-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	0.1	0.1	0.1	0.15	0.15
5-Jun	0.1	0.1	0.1	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	C	C	C	0.0	0.0	0.1	0.1	0.1	0.1	0.16	0.25
6-Jun	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	0.2	0.2	0.2	0.2	0.2	0.2	0.15	0.20
7-Jun	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.4	0.18	0.40
8-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	0.24
9-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	A	0.1	0.15	0.19
10-Jun	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	0.1	0.2	0.2	0.2	A	0.2	0.2	0.17	0.25
11-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	0.1	0.1	0.1	0.1	A	0.2	0.2	0.2	0.17	0.22
12-Jun	0.2	0.2	0.2	0.1	0.2	0.5	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	A	0.2	0.2	0.2	0.2	0.19	0.45
13-Jun	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	A	0.2	0.2	0.2	0.2	0.2	0.19	0.29
14-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	0.2	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.15	0.21
15-Jun	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.13	0.20
16-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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.16	0.18
17-Jun	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	A	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.16	0.24
18-Jun	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.15	0.23
19-Jun	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.15	0.19
20-Jun	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	A	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	0.25
21-Jun	0.1	0.1	0.1	0.1	0.1	0.1	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	0.2	0.2	0.12	0.24
22-Jun	0.2	0.2	0.2	0.2	0.1	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	0.14	0.21
23-Jun	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	A	M	M	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.24
24-Jun	0.1	0.2	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	0.19	0.23
25-Jun	0.2	0.2	0.2	0.1	0.1	0.1	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	0.2	0.1	0.2	0.2	0.15	0.19
26-Jun	0.2	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.15	0.24
27-Jun	0.2	0.2	0.1	0.1	A	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	0.19	0.33
28-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	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.17	0.19
29-Jun	0.2	0.2	A	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	0.15	0.17
30-Jun	0.2	A	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.15	0.45
	0.17	0.16	0.17	0.16	0.16	0.18	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.17	0.17	0.18	0.19	Diurnal Average	
	0.24	0.25	0.25	0.25	0.25	0.45	0.34	0.29	0.33	0.25	0.22	0.24	0.24	0.25	0.25	0.23	0.25	0.24	0.23	0.21	0.25	0.24	0.35	0.45	Diurnal Maximum	

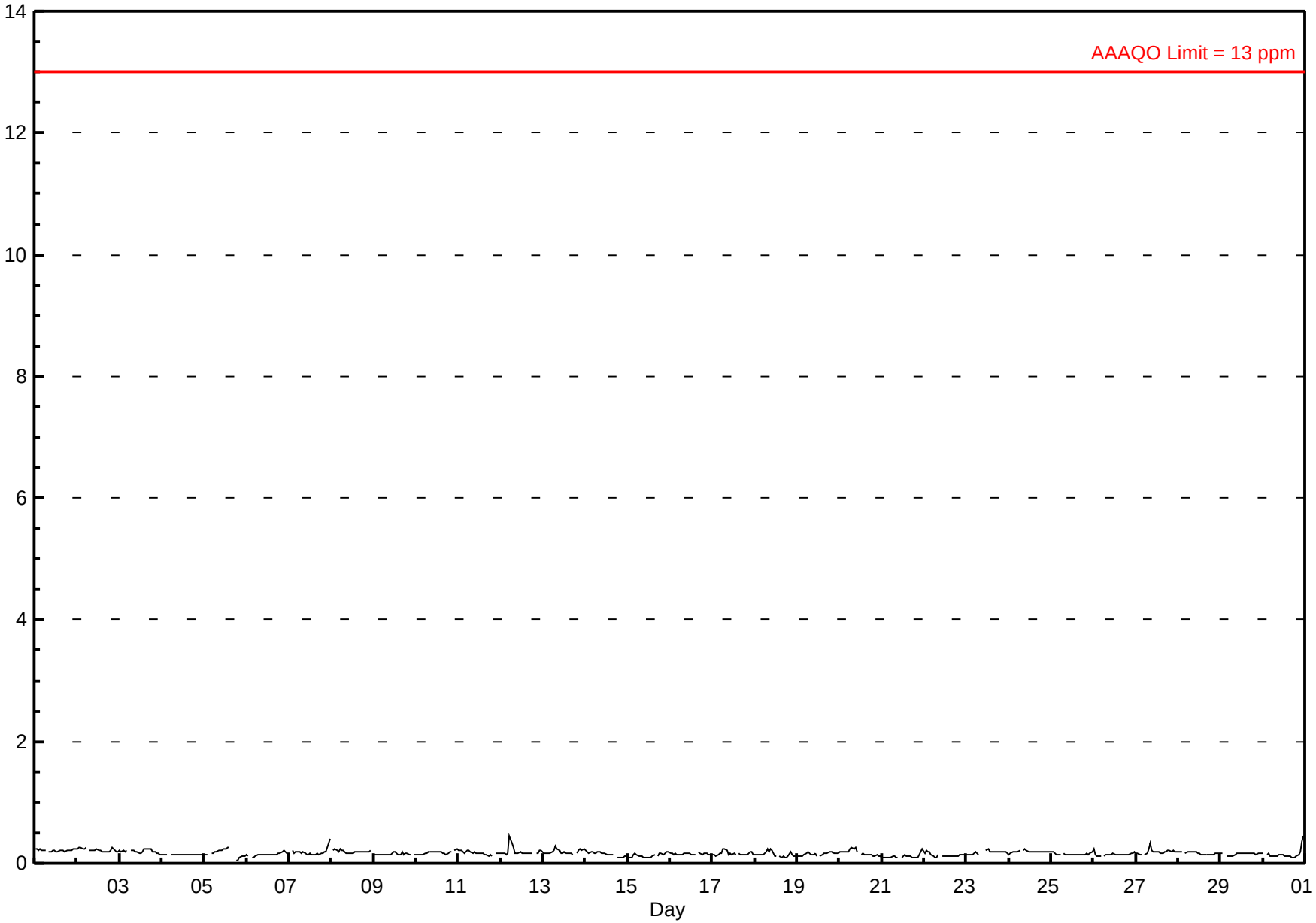
C - Calibration M - Maintenance A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na

Peace Airshed Zone Association

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2014

Maximum Value: 1.88 ppm on Jun 13 11:00

Maximum Daily Average: 0.34 ppm on Jun 13

Minimum Value: 0.1 ppm on Jun 5 20:00

Minimum Daily Average: 0.17 ppm on Jun 21

Maximum Diurnal Average: 0.28 ppm at hour 24

Minimum Diurnal Average: 0.19 ppm at hour 14

Monthly Average: 0.223 ppm

Percentiles: P_1 = 0.11 P_{10} = 0.15 Q_1 = 0.17 Median = 0.20 Q_3 = 0.24 P_{90} = 0.29 P_{99} = 0.81

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

Day	Hourly Period Ending At (MST) 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	0.3	0.3	0.3	0.3	0.3	0.5	0.3	A	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.27	0.52
2-Jun	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.25	0.32
3-Jun	0.2	0.2	0.3	0.2	0.3	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.26	0.40
4-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	0.2	0.2	0.17	0.20
5-Jun	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	C	C	C	0.1	0.1	0.1	0.2	0.2	0.1	0.20	0.30
6-Jun	0.2	0.1	A	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.17	0.30
7-Jun	0.2	A	0.3	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.2	0.2	0.2	0.6	1.0	0.30	1.03
8-Jun	A	0.3	0.3	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	A	0.23	0.29
9-Jun	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.6	0.5	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.1	0.21	0.56
10-Jun	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.21	0.34
11-Jun	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	1.1	0.2	A	0.2	0.2	0.2	0.27	1.05
12-Jun	0.2	0.2	0.2	0.2	0.4	0.9	0.5	0.8	0.4	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.31	0.85
13-Jun	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.4	0.3	1.9	0.2	0.2	0.2	0.4	0.2	0.2	0.2	A	0.2	0.3	0.3	0.3	0.3	0.34	1.88
14-Jun	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	A	0.1	0.1	0.1	0.1	0.2	0.2	0.19	0.26
15-Jun	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.6	0.3	0.20	0.58
16-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	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.25
17-Jun	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.3	0.3	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	0.21	0.40
18-Jun	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	A	0.2	0.1	0.1	0.1	0.1	0.3	0.4	0.2	0.2	0.2	0.20	0.41
19-Jun	0.1	0.1	0.1	0.1	0.2	0.2	0.2	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	0.3	0.2	0.2	0.2	0.19	0.29
20-Jun	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	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	0.21	0.37
21-Jun	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.4	0.5	0.17	0.46
22-Jun	0.3	0.3	0.2	0.5	0.2	0.2	0.1	0.1	0.2	A	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.19	0.45
23-Jun	0.2	0.1	0.3	0.3	0.3	0.2	0.2	0.2	A	M	M	0.3	0.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.25	0.68
24-Jun	0.2	0.3	0.2	0.2	0.2	0.3	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	0.22	0.27
25-Jun	0.2	0.2	0.2	0.2	0.1	0.2	A	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	0.3	0.3	0.19	0.28
26-Jun	0.4	0.1	0.1	0.1	0.1	A	0.2	0.2	0.3	0.1	0.1	1.0	0.7	0.1	0.4	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.26	1.03
27-Jun	0.2	0.2	0.1	0.1	A	0.2	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.23	0.39
28-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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.24
29-Jun	0.2	0.2	A	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.22
30-Jun	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	0.1	0.2	0.2	0.2	0.2	0.2	0.7	0.8	0.22	0.84
	0.20	0.20	0.20	0.20	0.22	0.24	0.23	0.25	0.23	0.21	0.26	0.24	0.24	0.19	0.22	0.20	0.19	0.19	0.24	0.21	0.22	0.22	0.27	0.28	Diurnal Average	
	0.38	0.30	0.33	0.45	0.48	0.85	0.50	0.82	0.41	0.30	1.88	1.03	0.68	0.30	0.45	0.33	0.40	0.29	1.05	0.35	0.41	0.30	0.73	1.03	Diurnal Maximum	

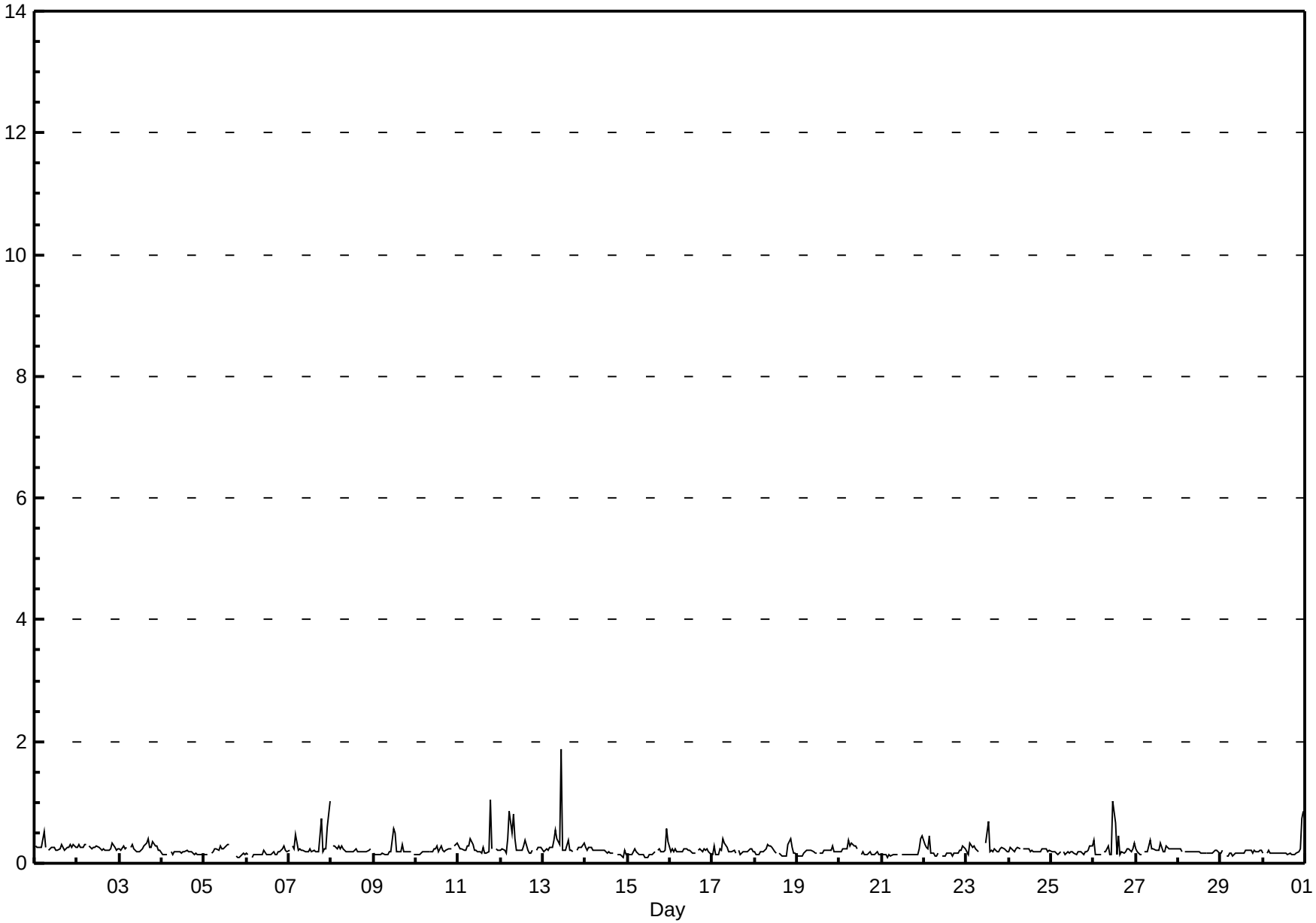
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Carbon Monoxide (CO) - ppm

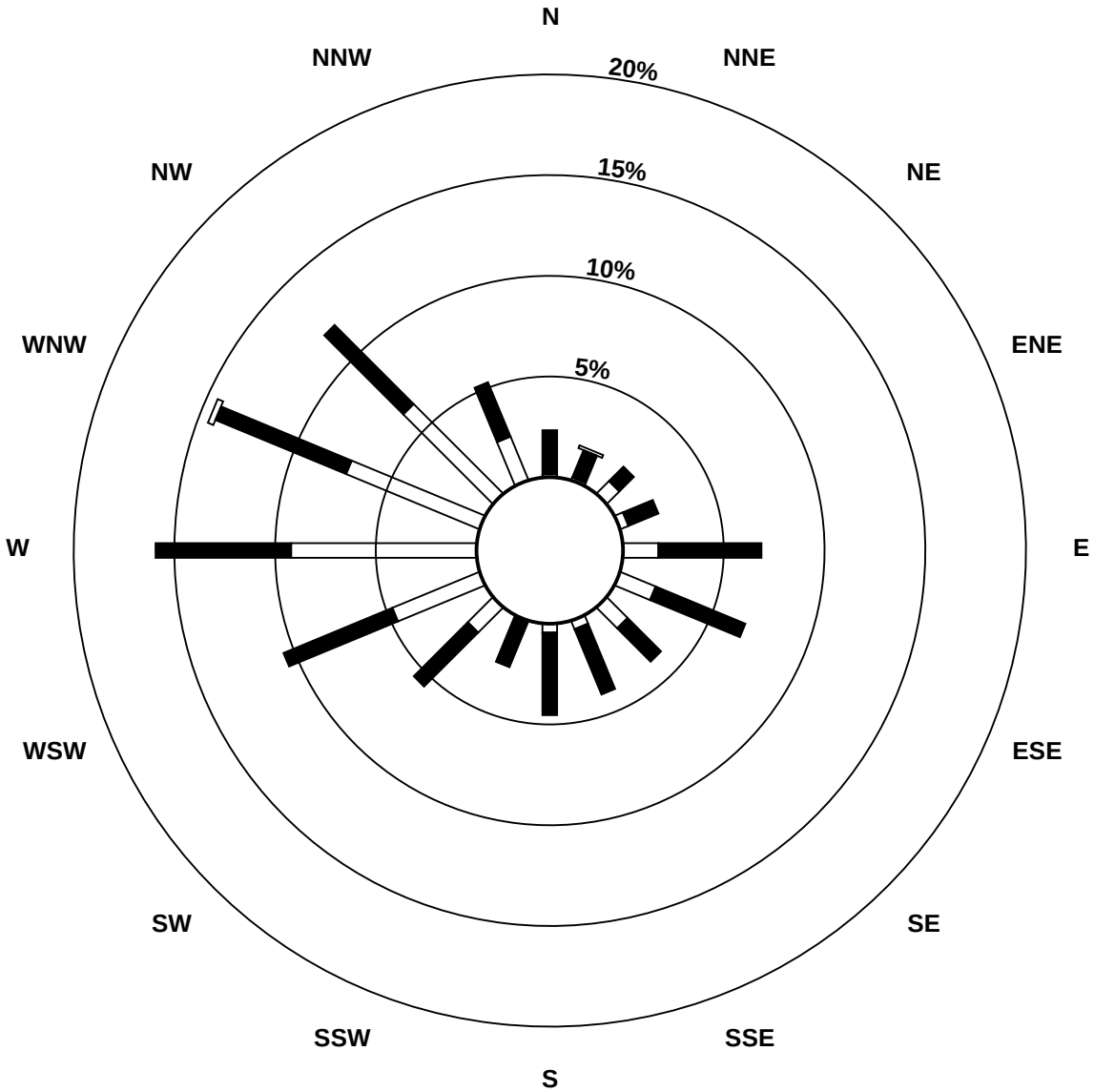
Henry Pirker - June 2014



Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2014



Pollutant Classes (ppm)

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

Peace Airshed Zone Association

Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - June 2014

Number of Exceedences (AAAQO): 8-hr: 0
Maximum Value: 0.25 ppm on Jun 8 06:00

Minimum Value: 0.09 ppm on Jun 6 00:00

Percentiles: P_1 = 0.10 P_{10} = 0.12 Q_1 = 0.15 Median = 0.16 Q_3 = 0.19 P_{90} = 0.21 P_{99} = 0.24

Hours in Service:	720
Hours of Data:	708
Hours of Missing Data:	12
Hours of Calibration:	12
Percent Operational Time:	100.0

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

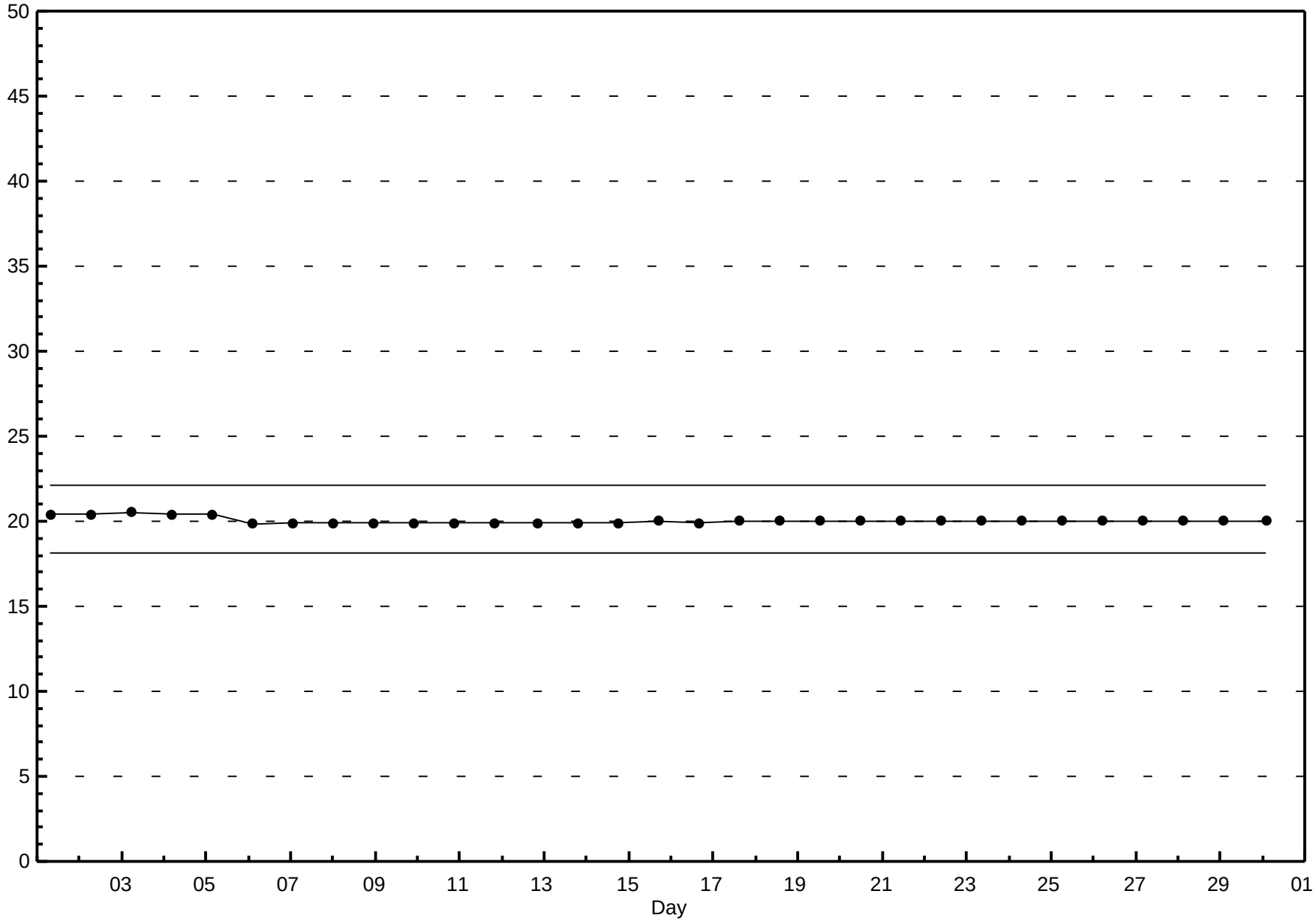
N - Not Valid
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm

Peace Airshed Zone Association

Span Responses

Carbon Monoxide (CO)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2014

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

Maximum Value: 2.74 ppm on Jun 18 06:00

Maximum Daily Average: 2.06 ppm on Jun 2

Minimum Value: 1.6 ppm on Jun 19 14:00

Minimum Daily Average: 1.62 ppm on Jun 9

Maximum Diurnal Average: 1.91 ppm at hour 6

Minimum Diurnal Average: 1.70 ppm at hour 16

Monthly Average: 1.773 ppm

Percentiles: P_1 = 1.60 P_{10} = 1.61 Q_1 = 1.63 Median = 1.70 Q_3 = 1.88 P_{90} = 1.96 P_{99} = 2.46

Hours in Service:	720
Hours of Data:	677
Hours of Missing Data:	43
Hours of Calibration:	39
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
1-Jun	2.1	2.0	2.0	1.9	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	1.93	2.10
2-Jun	2.3	2.3	2.6	2.4	2.5	2.7	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	2.0	1.9	1.9	2.0	2.0	2.06	2.69
3-Jun	2.0	2.3	2.6	2.2	2.0	A	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.94	2.55
4-Jun	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.92
5-Jun	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	C	C	C	C	C	1.6	1.6	1.6	1.6	1.6	1.7	1.9	2.2	1.83	2.21
6-Jun	1.8	1.7	A	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.8	1.8	1.7	1.67	1.83
7-Jun	1.7	A	1.9	2.1	2.1	1.8	1.8	1.7	1.7	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.9	1.7	1.72	2.09
8-Jun	A	1.9	2.4	2.5	2.1	2.0	1.9	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	A	1.79	2.48
9-Jun	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.62	1.66
10-Jun	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.8	1.6	A	2.0	1.7	1.66	2.01
11-Jun	2.2	2.0	2.5	2.3	2.3	2.1	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.7	1.7	1.7	1.81	2.47
12-Jun	1.7	2.1	1.8	1.7	1.7	1.9	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	A	1.6	1.6	1.7	1.8	1.70	2.06
13-Jun	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.7	1.7	2.0	1.9	1.8	1.68	1.96
14-Jun	1.7	1.8	1.8	1.8	1.9	1.8	1.9	1.8	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.7	1.69	1.88
15-Jun	1.7	1.7	1.8	2.0	2.0	2.1	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.69	2.12
16-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.7	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.65	1.70
17-Jun	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.7	1.6	1.6	1.6	1.6	A	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.7	1.7	1.69	1.87
18-Jun	1.7	1.7	1.7	1.7	2.0	2.7	2.0	1.8	1.8	1.8	1.7	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.75	2.74
19-Jun	1.7	1.7	1.8	1.8	2.0	1.9	2.0	1.8	1.7	1.7	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.7	1.70	1.98
20-Jun	1.7	1.6	1.6	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.65	1.78
21-Jun	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.8	1.7	1.65	1.79
22-Jun	1.8	1.9	2.0	1.8	2.0	1.9	1.9	1.8	1.8	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.72	2.05
23-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	A	M	M	M	M	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.68	1.72
24-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.8	A	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.7	1.69	1.80
25-Jun	1.9	1.8	1.7	1.7	1.7	1.7	A	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.69	1.91
26-Jun	1.9	1.8	2.0	1.9	1.9	A	1.7	1.7	C	C	C	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	1.87	2.02
27-Jun	2.0	2.1	2.3	2.2	A	2.1	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.98	2.27
28-Jun	1.9	2.0	2.0	A	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.9	1.90	1.97
29-Jun	2.0	2.1	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.92	2.11
30-Jun	2.0	A	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	2.1	2.2	2.4	1.96	2.39
	1.83	1.84	1.91	1.89	1.89	1.91	1.82	1.78	1.77	1.74	1.73	1.71	1.71	1.70	1.70	1.70	1.70	1.70	1.71	1.72	1.72	1.75	1.82	1.81	Diurnal Average	
	2.29	2.33	2.61	2.48	2.48	2.74	2.17	2.10	2.13	1.93	1.91	1.91	1.89	1.89	1.88	1.89	1.90	1.90	1.93	1.99	1.94	2.09	2.25	2.39	Diurnal Maximum	

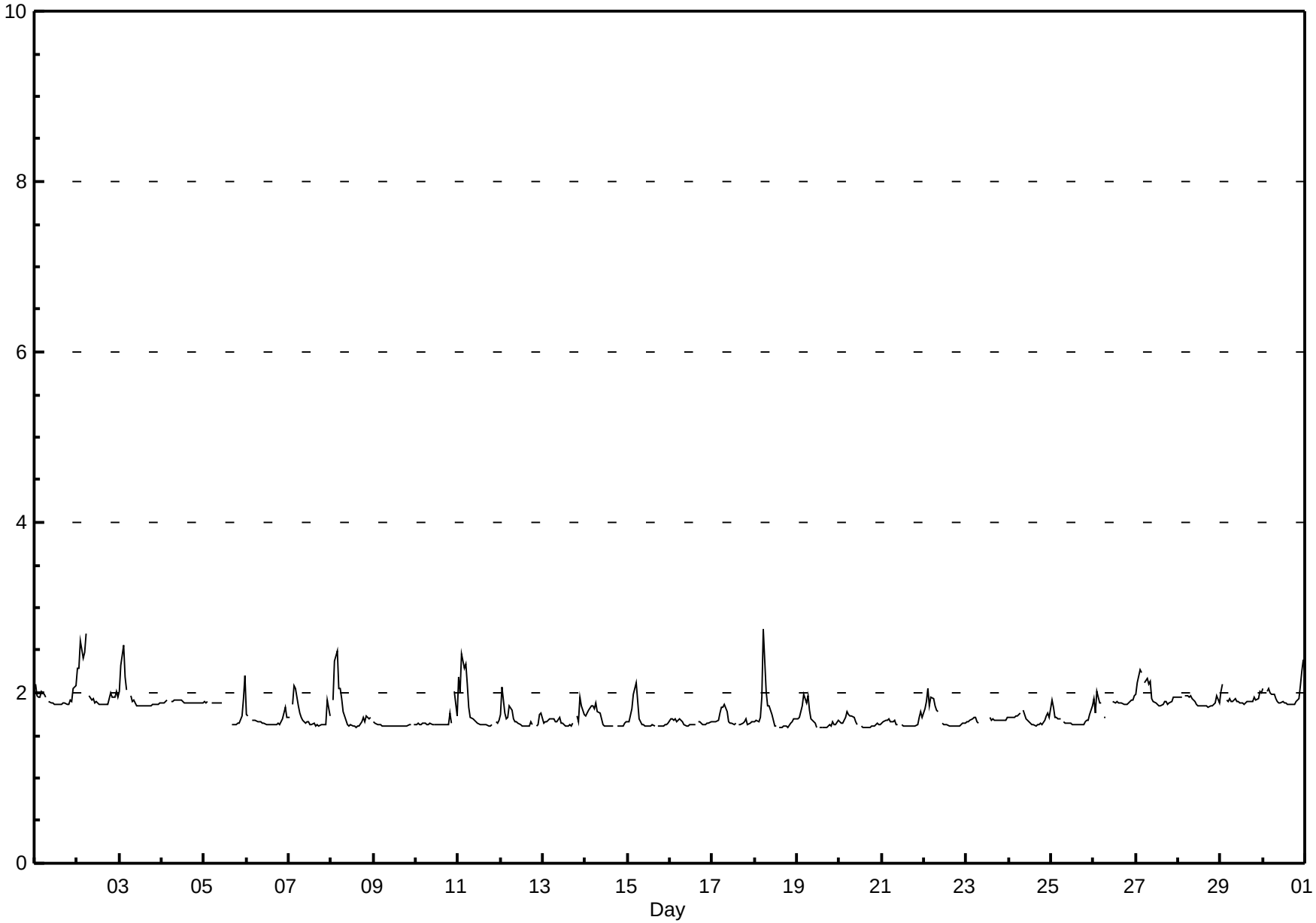
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2014

Maximum Value: 5.18 ppm on Jul 1 00:00

Maximum Daily Average: 2.69 ppm on Jun 2

Minimum Value: 1.6 ppm on Jun 19 14:00

Minimum Daily Average: 1.64 ppm on Jun 9

Maximum Diurnal Average: 2.31 ppm at hour 23

Minimum Diurnal Average: 1.76 ppm at hour 15

Monthly Average: 1.954 ppm

Percentiles: P_1 = 1.61 P_{10} = 1.63 Q_1 = 1.67 Median = 1.86 Q_3 = 2.00 P_{90} = 2.39 P_{99} = 3.96

Hours in Service:	720
Hours of Data:	677
Hours of Missing Data:	43
Hours of Calibration:	39
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
1-Jun	2.5	2.0	2.0	2.0	2.3	2.5	2.0	A	1.9	1.9	1.9	1.9	1.9	2.3	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	3.9	3.0	2.14	3.85
2-Jun	3.7	2.9	3.7	4.3	4.1	4.0	A	2.1	2.1	2.2	2.0	2.5	2.1	2.1	2.1	2.1	2.2	2.4	2.6	2.7	2.7	2.3	2.8	2.4	2.69	4.25
3-Jun	3.6	3.3	3.8	3.4	3.0	A	2.0	1.9	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.23	3.80
4-Jun	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.95
5-Jun	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	C	C	C	C	C	1.6	1.6	1.6	1.6	1.7	2.1	2.5	2.9	1.93	2.85
6-Jun	1.9	1.8	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.9	1.7	1.8	1.6	1.6	1.8	1.6	1.7	1.9	1.6	2.3	2.4	3.1	2.6	1.87	3.09
7-Jun	1.8	A	2.2	3.9	3.5	1.9	2.1	1.8	1.8	1.8	1.8	1.9	1.7	1.7	2.0	1.6	1.9	1.7	1.6	1.7	1.6	1.6	3.3	2.1	2.05	3.94
8-Jun	A	3.2	3.5	3.2	2.3	2.1	2.1	2.0	1.8	1.7	1.6	1.7	1.9	2.0	1.6	1.7	1.6	2.2	2.2	2.0	2.1	1.9	2.2	A	2.12	3.52
9-Jun	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7	A	1.6	1.64	1.73
10-Jun	1.6	1.7	1.7	1.6	1.7	1.7	1.6	1.7	1.7	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.7	2.3	1.7	A	4.0	1.9	1.80	3.99
11-Jun	3.6	2.7	3.1	3.0	3.5	3.0	2.2	1.9	1.9	1.7	1.8	1.7	1.7	1.7	1.6	1.7	1.9	1.6	1.6	1.6	A	1.7	1.7	1.9	2.12	3.56
12-Jun	2.4	4.8	2.1	1.7	1.8	2.4	1.9	1.8	1.9	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.8	1.9	2.0	A	1.6	1.7	2.7	2.3	2.01	4.76
13-Jun	1.7	1.9	1.7	1.8	1.8	1.8	1.9	1.8	1.7	1.8	1.7	1.7	1.7	1.6	1.6	1.7	1.6	1.9	A	1.9	1.7	2.7	2.4	1.9	1.83	2.73
14-Jun	1.8	2.0	1.9	1.9	2.1	2.0	2.1	2.0	2.0	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.6	1.6	1.6	1.7	1.7	1.79	2.13
15-Jun	1.7	1.7	2.5	3.1	3.2	3.2	1.8	1.7	1.7	1.6	1.6	1.6	1.6	1.6	2.0	1.6	A	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.92	3.24
16-Jun	2.1	1.9	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.7	1.8	2.1	1.7	A	1.9	1.8	1.6	1.6	1.6	1.7	1.7	1.8	1.75	2.07
17-Jun	1.8	1.8	1.7	1.8	2.0	1.9	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.8	A	1.8	1.7	2.0	2.0	2.2	1.7	1.7	1.7	1.7	1.84	2.24
18-Jun	1.7	1.7	1.7	2.1	2.5	3.4	3.0	2.4	2.5	1.8	1.8	1.7	1.7	A	1.7	1.6	1.9	1.7	1.9	1.6	1.9	2.0	2.1	1.8	2.01	3.43
19-Jun	1.8	1.8	1.8	1.9	2.1	2.1	2.2	1.9	1.8	1.8	1.8	1.6	A	1.6	1.6	1.6	1.6	1.6	2.0	1.7	1.7	1.7	1.7	1.7	1.79	2.23
20-Jun	1.9	1.7	1.7	1.8	2.0	1.8	1.8	1.8	1.8	1.7	1.7	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.7	1.71	2.05
21-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	1.8	1.71	2.19
22-Jun	1.9	2.4	3.7	1.9	2.0	2.1	1.9	1.8	1.9	A	1.7	1.6	1.7	1.8	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.86	3.72
23-Jun	1.7	1.7	1.7	1.7	1.8	1.8	1.7	1.7	A	M	M	M	M	3.3	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.80	3.33
24-Jun	1.7	1.7	1.7	1.7	2.0	1.7	2.0	A	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.8	1.7	1.9	2.1	2.2	2.0	1.80	2.22
25-Jun	2.1	2.1	1.8	1.8	1.7	1.8	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.9	2.0	1.76	2.14
26-Jun	2.1	2.2	2.7	2.8	3.4	A	1.8	1.7	C	C	C	2.0	2.0	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.1	2.12	3.37
27-Jun	2.1	2.6	2.6	2.4	A	2.2	2.2	2.2	2.2	2.0	1.9	1.9	1.9	1.9	1.9	2.5	2.1	2.2	1.9	1.9	2.0	2.0	2.0	2.0	2.11	2.56
28-Jun	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.6	2.1	1.99	2.59
29-Jun	2.4	3.4	A	1.9	1.9	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	1.9	2.0	2.3	2.1	2.0	2.3	2.0	2.07	3.40
30-Jun	2.1	A	2.1	2.1	2.1	2.4	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	2.0	2.4	4.0	5.2	2.25	5.18
	2.10	2.22	2.23	2.25	2.27	2.15	1.97	1.86	1.88	1.80	1.79	1.79	1.77	1.86	1.76	1.77	1.78	1.80	1.82	1.84	1.84	1.92	2.31	2.11	Diurnal Average	
	3.73	4.76	3.80	4.25	4.12	3.97	3.02	2.36	2.51	2.19	1.96	2.48	2.11	3.33	2.10	2.53	2.20	2.38	2.58	2.65	2.73	2.73	4.01	5.18	Diurnal Maximum	

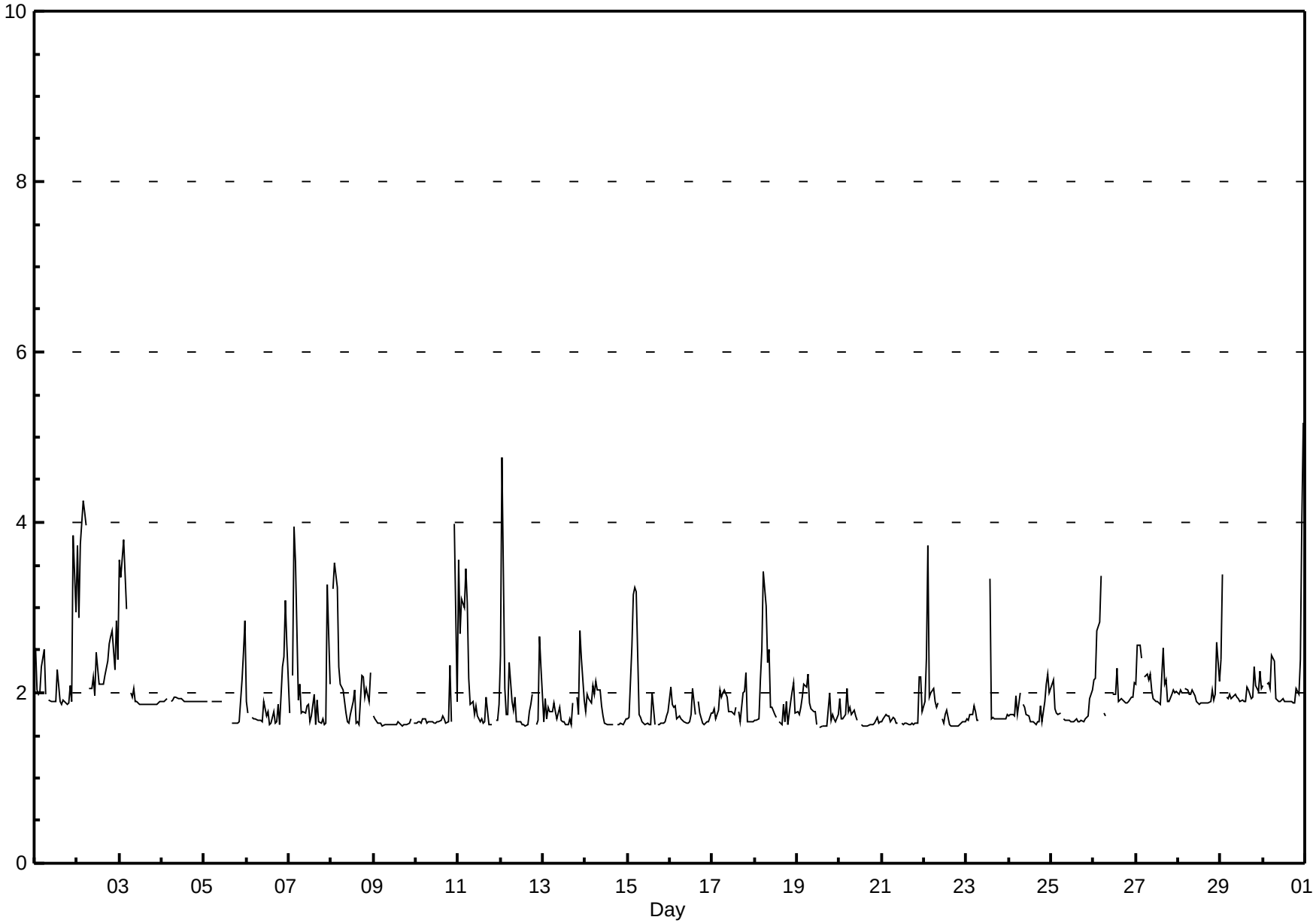
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

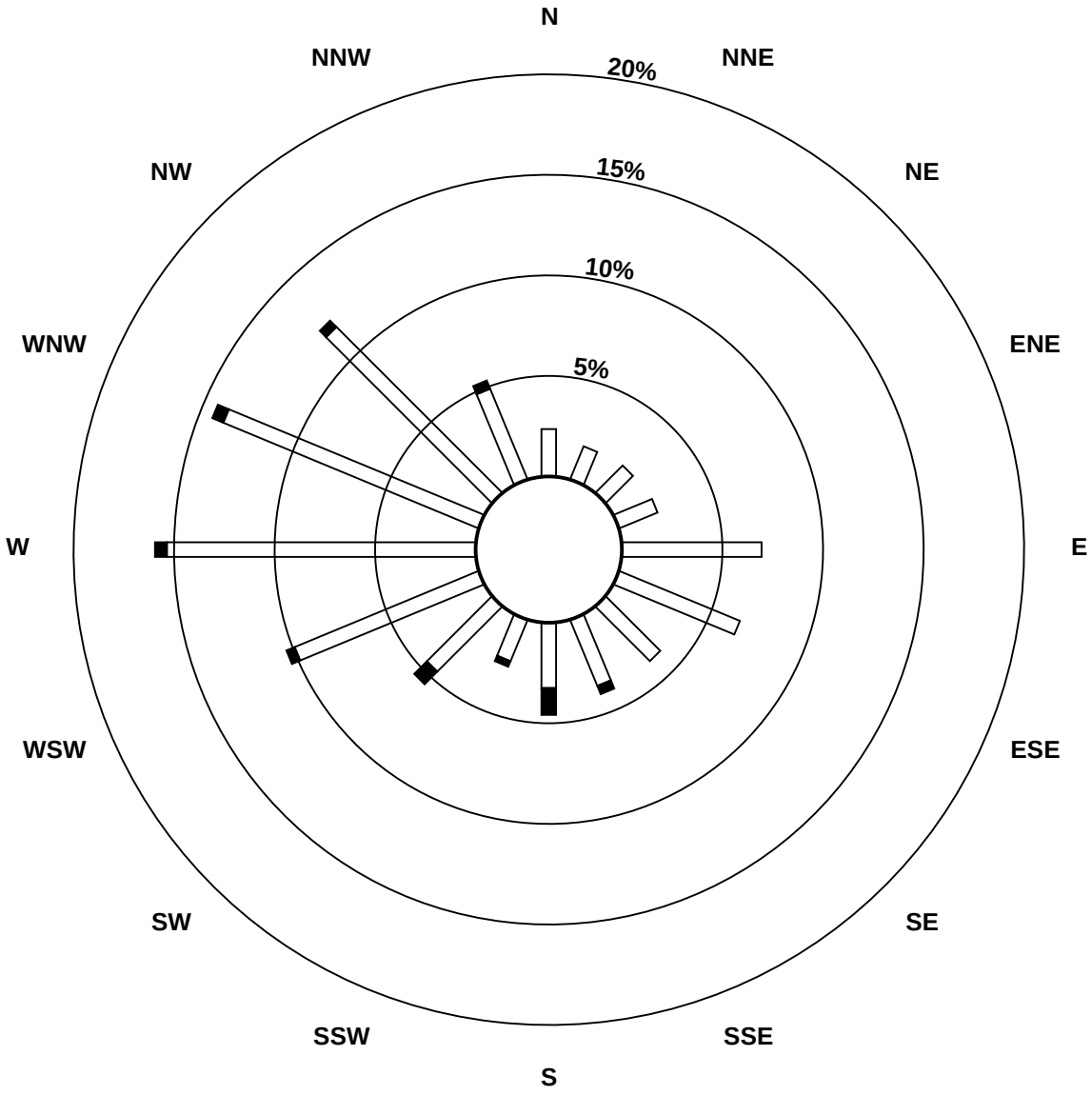
Henry Pirker - June 2014



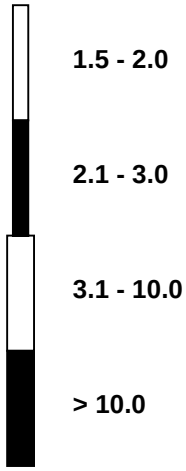
Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - June 2014



Pollutant Classes (ppm)

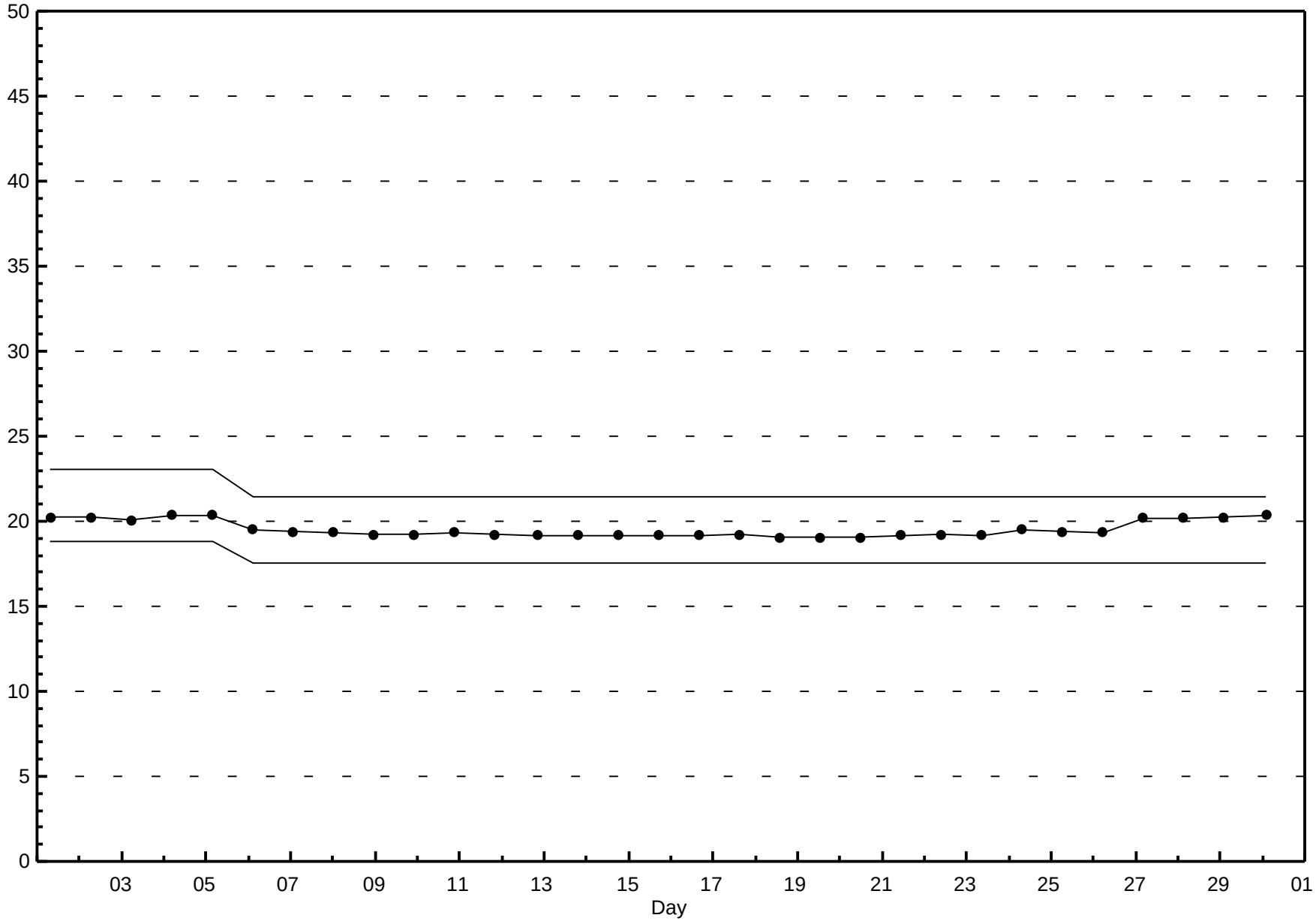


Peace Airshed Zone Association

Span Responses

Total Hydrocarbons (THC)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Methane (CH_4) - ppm

Henry Pirker - June 2014

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

Maximum Value: 2.74 ppm on Jun 18 06:00

Maximum Daily Average: 2.06 ppm on Jun 2

Minimum Value: 1.6 ppm on Jun 19 14:00

Minimum Daily Average: 1.62 ppm on Jun 9

Maximum Diurnal Average: 1.91 ppm at hour 6

Minimum Diurnal Average: 1.70 ppm at hour 16

Monthly Average: 1.773 ppm

Percentiles: P_1 = 1.60 P_{10} = 1.62 Q_1 = 1.63 Median = 1.70 Q_3 = 1.88 P_{90} = 1.96 P_{99} = 2.46

Hours in Service:	720
Hours of Data:	677
Hours of Missing Data:	43
Hours of Calibration:	39
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
1-Jun	2.1	2.0	2.0	1.9	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.1	1.93	2.10
2-Jun	2.3	2.3	2.6	2.4	2.5	2.7	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	2.0	1.9	1.9	2.0	2.0	2.06	2.69
3-Jun	2.0	2.3	2.5	2.2	2.0	A	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.94	2.55
4-Jun	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.92
5-Jun	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	C	C	C	C	C	1.6	1.6	1.6	1.6	1.6	1.7	1.9	2.2	1.83	2.21
6-Jun	1.8	1.7	A	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.8	1.8	1.7	1.67	1.83
7-Jun	1.7	A	1.9	2.1	2.1	1.8	1.8	1.7	1.7	1.6	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.9	1.7	1.72	2.09
8-Jun	A	1.9	2.4	2.5	2.1	2.0	1.9	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	A	1.79	2.48
9-Jun	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.62	1.66
10-Jun	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.8	1.6	A	2.0	1.7	1.66	2.01
11-Jun	2.2	2.0	2.5	2.3	2.3	2.1	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.7	1.7	1.7	1.81	2.46
12-Jun	1.7	2.1	1.8	1.7	1.7	1.9	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	A	1.6	1.6	1.7	1.8	1.70	2.06
13-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.7	1.7	2.0	1.9	1.8	1.69	1.96
14-Jun	1.7	1.8	1.8	1.8	1.9	1.8	1.9	1.8	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.7	1.70	1.88
15-Jun	1.7	1.7	1.8	2.0	2.0	2.1	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.70	2.12
16-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	A	1.7	1.7	1.6	1.6	1.6	1.6	1.7	1.7	1.65	1.70
17-Jun	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.9	1.8	1.7	1.7	1.6	1.6	1.6	A	1.6	1.6	1.7	1.7	1.7	1.6	1.6	1.7	1.7	1.69	1.87
18-Jun	1.7	1.7	1.7	1.7	2.0	2.7	2.0	1.8	1.8	1.8	1.7	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.75	2.74
19-Jun	1.7	1.7	1.8	1.8	2.0	1.9	2.0	1.8	1.7	1.7	1.7	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.7	1.70	1.97
20-Jun	1.7	1.6	1.7	1.7	1.8	1.7	1.7	1.7	1.7	1.7	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.65	1.78
21-Jun	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.8	1.7	1.65	1.79
22-Jun	1.8	1.9	2.0	1.8	2.0	1.9	1.9	1.8	1.8	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.72	2.05
23-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	A	M	M	M	M	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.68	1.72
24-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.8	A	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.7	1.69	1.81
25-Jun	1.9	1.8	1.7	1.7	1.7	1.7	A	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.69	1.91
26-Jun	1.9	1.8	2.0	1.9	1.9	A	1.7	1.7	C	C	C	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	1.87	2.02
27-Jun	2.0	2.1	2.3	2.2	A	2.1	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.98	2.26
28-Jun	1.9	1.9	1.9	A	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0	1.9	1.89	1.97
29-Jun	2.0	2.1	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.92	2.10
30-Jun	2.0	A	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	2.1	2.2	2.4	1.96	2.38
	1.83	1.84	1.91	1.89	1.89	1.91	1.82	1.78	1.77	1.74	1.73	1.71	1.71	1.70	1.70	1.70	1.70	1.70	1.71	1.72	1.72	1.76	1.82	1.81	Diurnal Average	
	2.29	2.32	2.61	2.48	2.47	2.74	2.16	2.09	2.13	1.93	1.91	1.91	1.89	1.88	1.88	1.89	1.89	1.90	1.93	1.99	1.94	2.08	2.24	2.38	Diurnal Maximum	

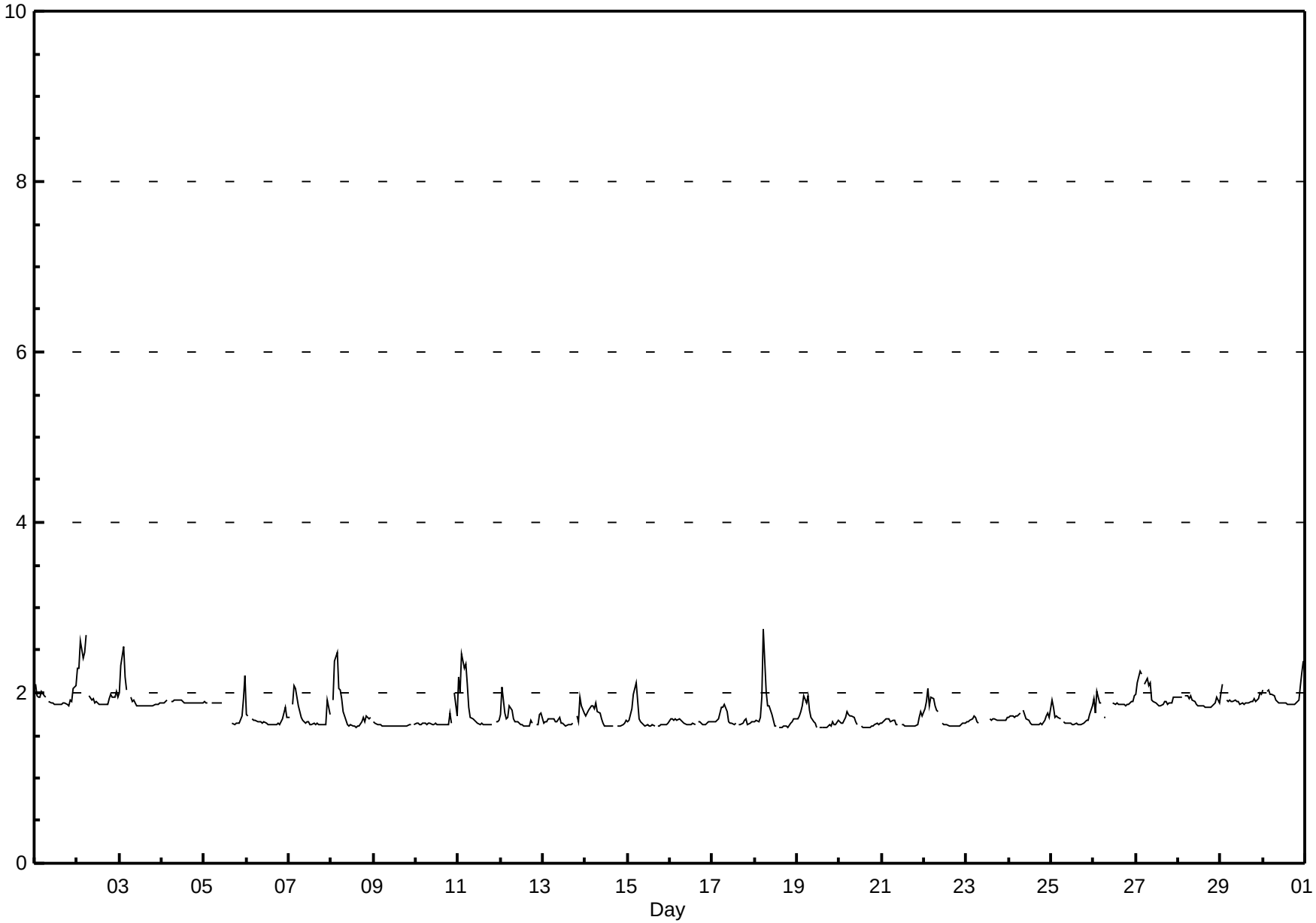
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Methane (CH_4) - ppm

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Methane (CH_4) - ppm

Henry Pirker - June 2014

Maximum Value: 5.17 ppm on Jul 1 00:00

Maximum Daily Average: 2.69 ppm on Jun 2

Minimum Value: 1.6 ppm on Jun 19 14:00

Minimum Daily Average: 1.64 ppm on Jun 9

Maximum Diurnal Average: 2.30 ppm at hour 23

Minimum Diurnal Average: 1.76 ppm at hour 15

Monthly Average: 1.950 ppm

Percentiles: P_1 = 1.61 P_{10} = 1.64 Q_1 = 1.67 Median = 1.86 Q_3 = 1.99 P_{90} = 2.38 P_{99} = 3.96

Hours in Service:	720
Hours of Data:	677
Hours of Missing Data:	43
Hours of Calibration:	39
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
1-Jun	2.5	2.0	2.0	2.0	2.3	2.5	2.0	A	1.9	1.9	1.9	1.9	1.9	2.3	1.9	1.9	1.9	1.9	1.9	1.9	2.1	1.9	3.8	3.0	2.14	3.84
2-Jun	3.7	2.9	3.7	4.3	4.1	4.0	A	2.0	2.0	2.2	2.0	2.5	2.1	2.1	2.1	2.1	2.2	2.4	2.6	2.6	2.7	2.3	2.8	2.4	2.69	4.25
3-Jun	3.6	3.3	3.8	3.4	3.0	A	2.0	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	2.22	3.80
4-Jun	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.95
5-Jun	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	C	C	C	C	C	1.6	1.6	1.6	1.7	1.7	2.1	2.5	2.9	1.93	2.85
6-Jun	1.9	1.8	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.9	1.7	1.8	1.6	1.6	1.8	1.6	1.7	1.9	1.6	2.3	2.4	3.1	2.6	1.87	3.08
7-Jun	1.8	A	2.2	3.9	3.5	1.9	2.1	1.8	1.8	1.8	1.8	1.9	1.7	1.7	2.0	1.6	1.9	1.7	1.6	1.7	1.6	1.7	3.3	2.1	2.05	3.94
8-Jun	A	3.2	3.5	3.2	2.3	2.1	2.1	2.0	1.8	1.7	1.6	1.7	1.9	2.0	1.6	1.7	1.6	2.2	2.2	2.0	2.1	1.9	2.2	A	2.12	3.51
9-Jun	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.7	A	1.6	1.64	1.73
10-Jun	1.6	1.7	1.7	1.6	1.7	1.7	1.6	1.7	1.7	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	2.3	1.7	A	4.0	1.9	1.80	3.99
11-Jun	3.6	2.7	3.1	3.0	3.4	3.0	2.2	1.9	1.9	1.7	1.8	1.7	1.7	1.7	1.6	1.7	1.9	1.6	1.6	1.6	A	1.7	1.7	1.9	2.12	3.56
12-Jun	2.4	4.8	2.0	1.7	1.8	2.4	1.9	1.8	1.9	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.8	1.9	2.0	A	1.6	1.7	2.6	2.3	2.00	4.75
13-Jun	1.7	1.9	1.7	1.8	1.8	1.8	1.9	1.8	1.7	1.8	1.7	1.7	1.7	1.6	1.6	1.7	1.6	1.9	A	1.9	1.8	2.7	2.4	1.9	1.83	2.72
14-Jun	1.8	2.0	1.9	1.9	2.1	2.0	2.1	2.0	2.0	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	A	1.6	1.6	1.6	1.6	1.7	1.7	1.79	2.13
15-Jun	1.7	1.7	2.5	3.1	3.2	3.2	1.8	1.7	1.7	1.6	1.6	1.6	1.6	1.6	2.0	1.6	A	1.6	1.6	1.6	1.7	1.7	1.7	1.8	1.92	3.24
16-Jun	2.1	1.9	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.7	1.7	2.0	1.7	A	1.9	1.8	1.7	1.6	1.6	1.7	1.7	1.8	1.75	2.07
17-Jun	1.8	1.8	1.7	1.8	2.0	1.9	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.8	A	1.8	1.7	2.0	2.0	2.2	1.7	1.7	1.7	1.7	1.84	2.23
18-Jun	1.7	1.7	1.7	2.1	2.5	3.4	3.0	2.3	2.5	1.8	1.8	1.7	1.7	A	1.7	1.6	1.9	1.7	1.9	1.6	1.9	2.0	2.1	1.8	2.01	3.42
19-Jun	1.8	1.8	1.8	1.9	2.1	2.1	2.2	1.9	1.8	1.8	1.8	1.6	A	1.6	1.6	1.6	1.6	1.6	2.0	1.7	1.7	1.7	1.7	1.7	1.79	2.23
20-Jun	1.9	1.7	1.7	1.8	2.0	1.8	1.8	1.7	1.8	1.7	1.7	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.7	1.71	2.04
21-Jun	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	A	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.2	2.2	1.8	1.72	2.19
22-Jun	1.9	2.4	3.7	1.9	2.0	2.0	1.9	1.8	1.9	A	1.7	1.6	1.7	1.8	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.86	3.72
23-Jun	1.7	1.7	1.8	1.7	1.8	1.8	1.7	1.7	A	M	M	M	M	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.72	1.85
24-Jun	1.7	1.8	1.7	1.7	2.0	1.7	2.0	A	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7	1.8	1.7	1.9	2.1	2.2	2.0	1.80	2.21
25-Jun	2.1	2.1	1.8	1.8	1.7	1.8	A	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.9	2.0	1.76	2.14
26-Jun	2.1	2.2	2.7	2.8	3.4	A	1.8	1.7	C	C	C	2.0	2.0	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.11	3.36
27-Jun	2.1	2.5	2.6	2.4	A	2.2	2.2	2.1	2.2	2.0	1.9	1.9	1.9	1.9	1.9	2.5	2.1	2.1	1.9	1.9	2.0	2.0	2.0	2.0	2.10	2.55
28-Jun	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.6	2.1	1.98	2.58
29-Jun	2.4	3.4	A	1.9	1.9	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	1.9	1.9	2.3	2.1	2.0	2.2	2.0	2.07	3.38
30-Jun	2.1	A	2.1	2.1	2.0	2.4	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	2.0	2.4	4.0	5.2	2.24	5.17
	2.10	2.22	2.23	2.25	2.27	2.15	1.97	1.86	1.88	1.80	1.79	1.79	1.77	1.80	1.76	1.77	1.78	1.80	1.82	1.84	1.84	1.92	2.30	2.10	Diurnal Average	
	3.73	4.75	3.80	4.25	4.13	3.97	3.02	2.35	2.51	2.19	1.96	2.47	2.11	2.27	2.09	2.51	2.20	2.38	2.57	2.65	2.71	2.72	4.01	5.17	Diurnal Maximum	

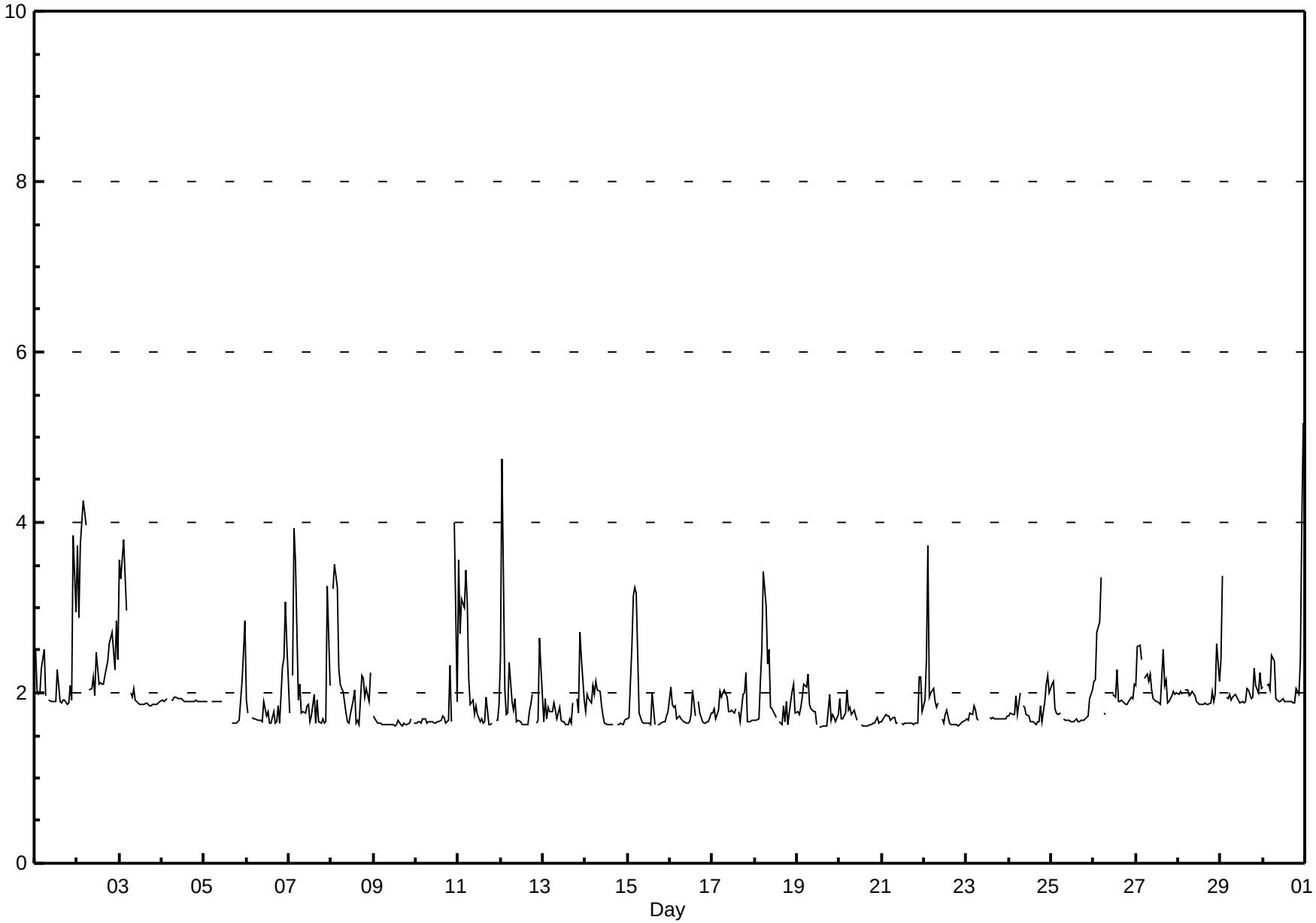
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Methane (CH_4) - ppm

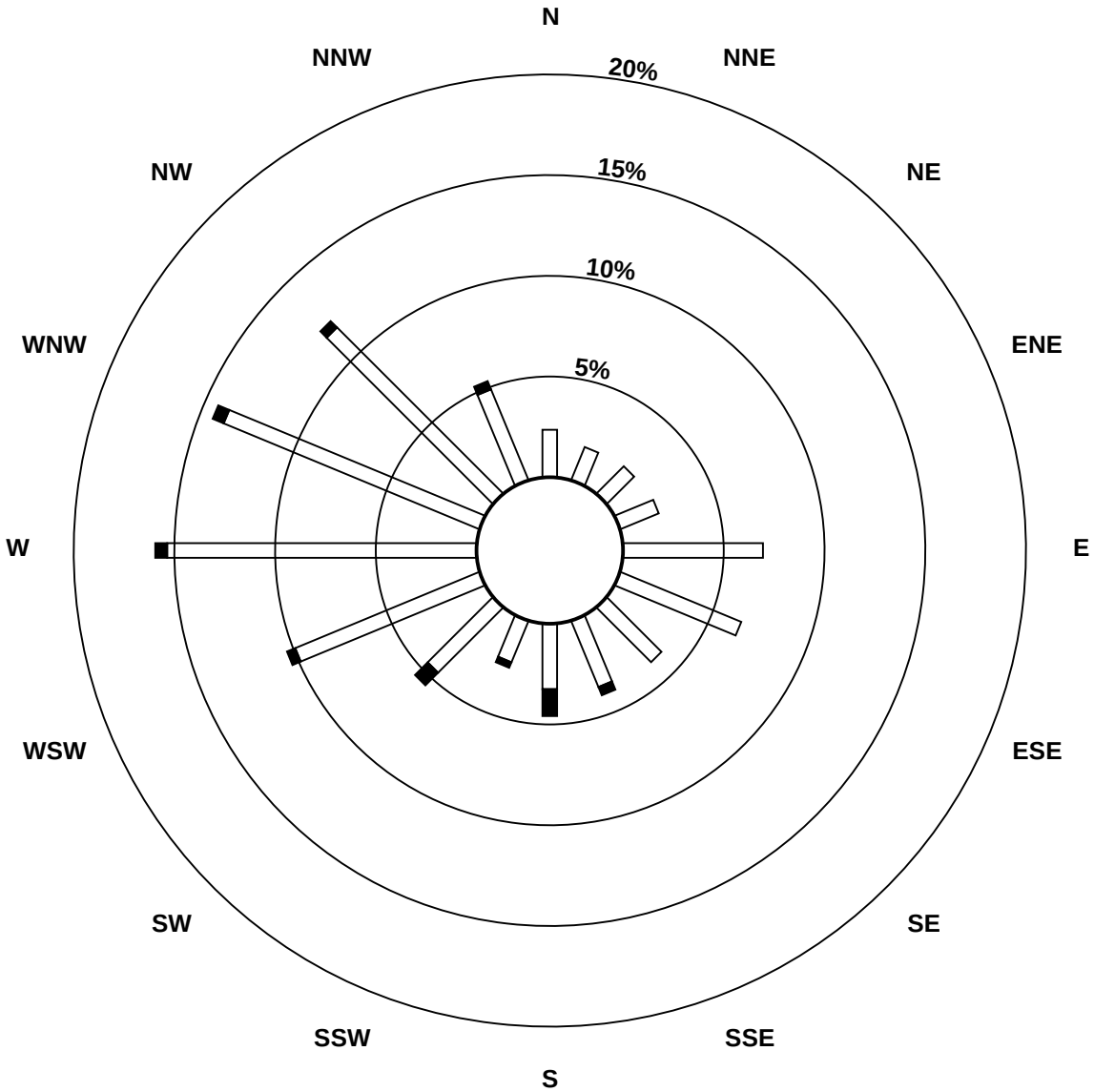
Henry Pirker - June 2014



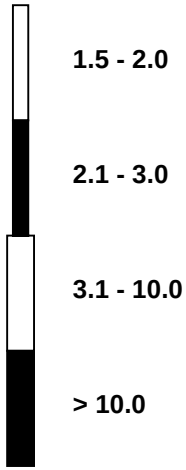
Pollutant Rose

Methane (CH_4) - ppm

Henry Pirker - June 2014



Pollutant Classes (ppm)

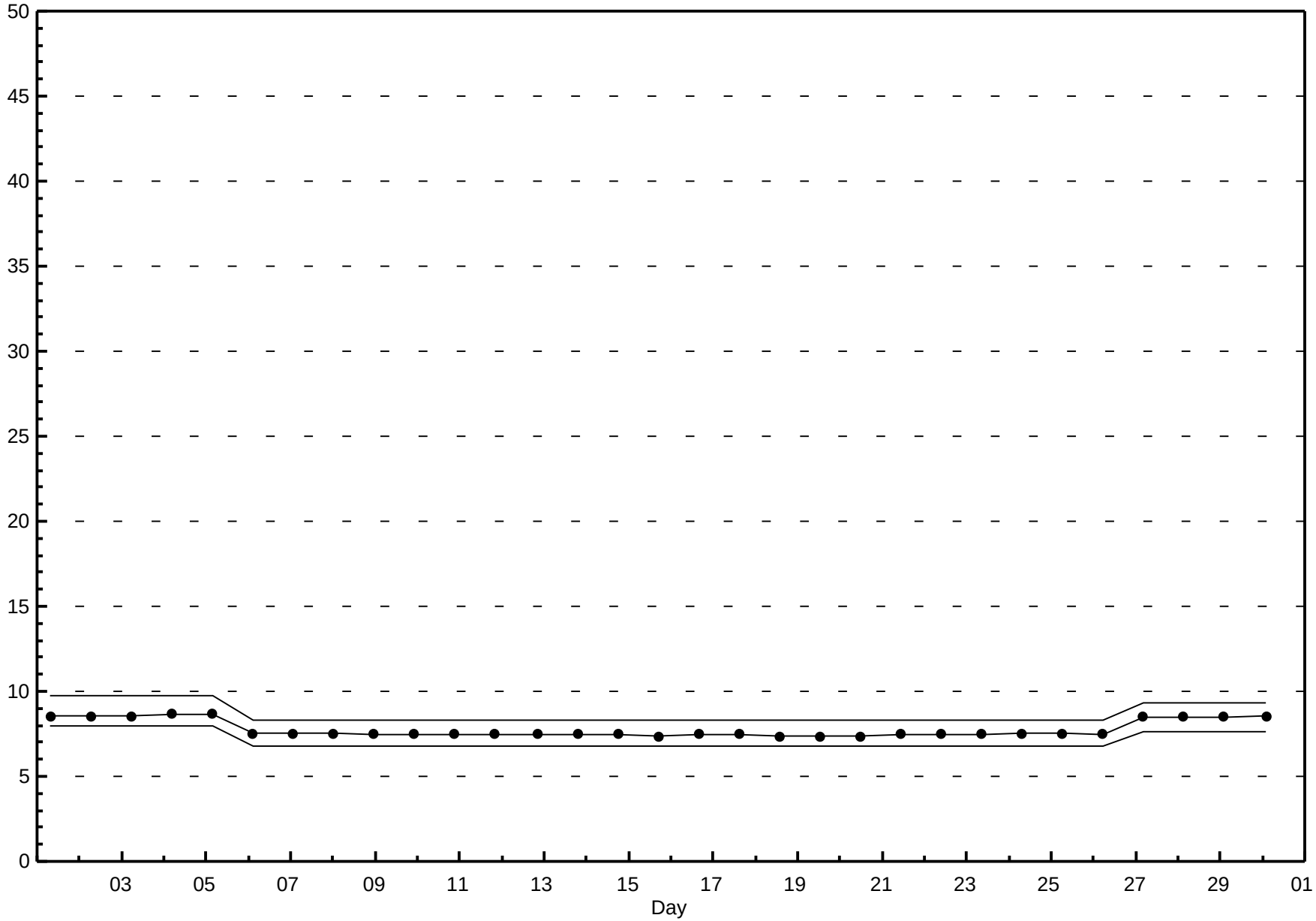


Peace Airshed Zone Association

Span Responses

Methane (CH_4)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.03 ppm on Jun 23 14:00
Maximum Daily Average: 0.01 ppm on Jun 26

Minimum Value: 0.0 ppm on Jun 1 01:00
Maximum Diurnal Average: 0.00 ppm at hour 14
Monthly Average: 0.000 ppm

Minimum Daily Average: 0.00 ppm on Jun 5
Minimum Diurnal Average: 0.00 ppm at hour 11
Percentiles: P_1 = 0.00 P_{10} = 0.00 Q_1 = 0.00 Median = 0.00 Q_3 = 0.00 P_{90} = 0.00 P_{99} = 0.01

Hours in Service:	720
Hours of Data:	677
Hours of Missing Data:	43
Hours of Calibration:	39
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
1-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
3-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Jun	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
7-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
8-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
9-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
10-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00
11-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.00	0.00
12-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
13-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	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00
14-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	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
15-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	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
16-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	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
17-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	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
18-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	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
19-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	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
20-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
21-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
22-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
23-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	M	M	M	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.03
24-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
25-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
26-Jun	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02
27-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Jun	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
29-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
30-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	Diurnal Maximum	

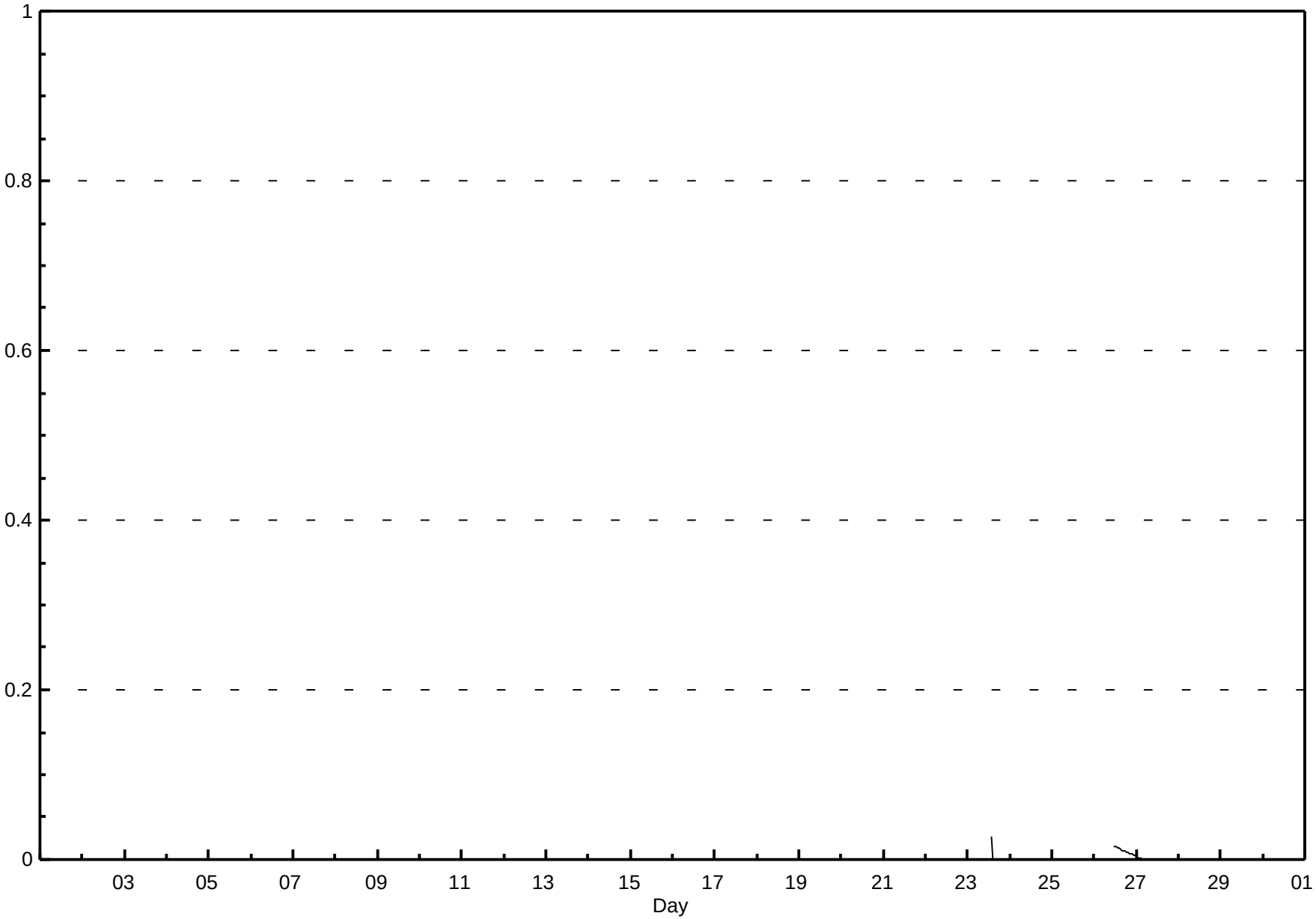
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - June 2014

Maximum Value: 1.62 ppm on Jun 23 14:00

Maximum Daily Average: 0.09 ppm on Jun 23

Minimum Value: 0.0 ppm on Jun 1 13:00

Minimum Daily Average: 0.00 ppm on Jun 11

Maximum Diurnal Average: 0.06 ppm at hour 14

Minimum Diurnal Average: 0.00 ppm at hour 7

Monthly Average: 0.003 ppm

Percentiles: P_1 = 0.00 P_{10} = 0.00 Q_1 = 0.00 Median = 0.00 Q_3 = 0.00 P_{90} = 0.00 P_{99} = 0.01

Hours in Service:	720
Hours of Data:	677
Hours of Missing Data:	43
Hours of Calibration:	39
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
1-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
3-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Jun	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
7-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
8-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
9-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.00	0.00
10-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00
11-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.00	0.00
12-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
13-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	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00
14-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	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
15-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	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
16-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	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
17-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	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
18-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	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
19-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	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
20-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
21-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
22-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
23-Jun	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	M	M	M	M	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	1.62
24-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
25-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
26-Jun	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02
27-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Jun	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
29-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
30-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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Average	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	1.62	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	Diurnal Maximum	

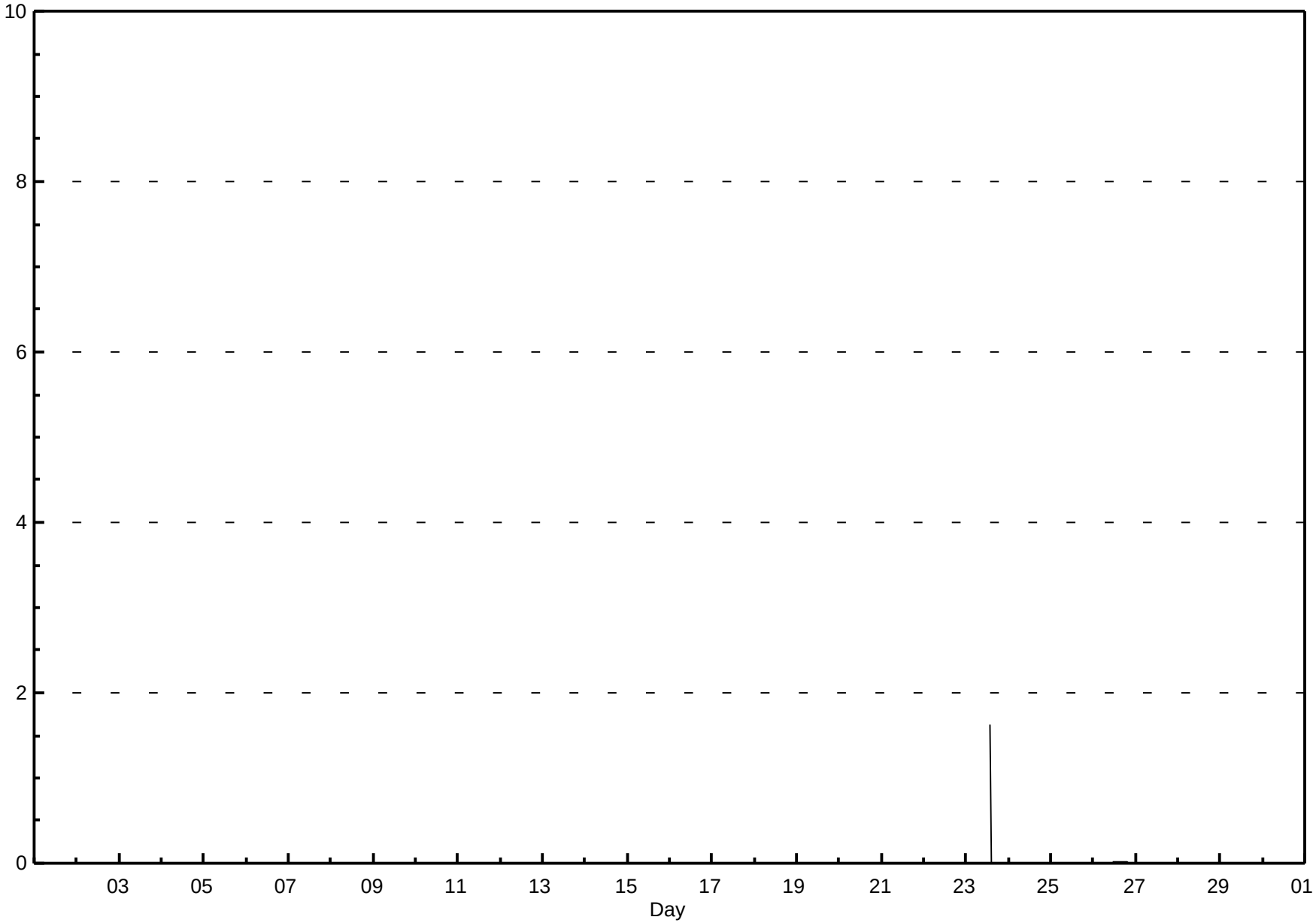
C - Calibration M - Maintenance A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - June 2014



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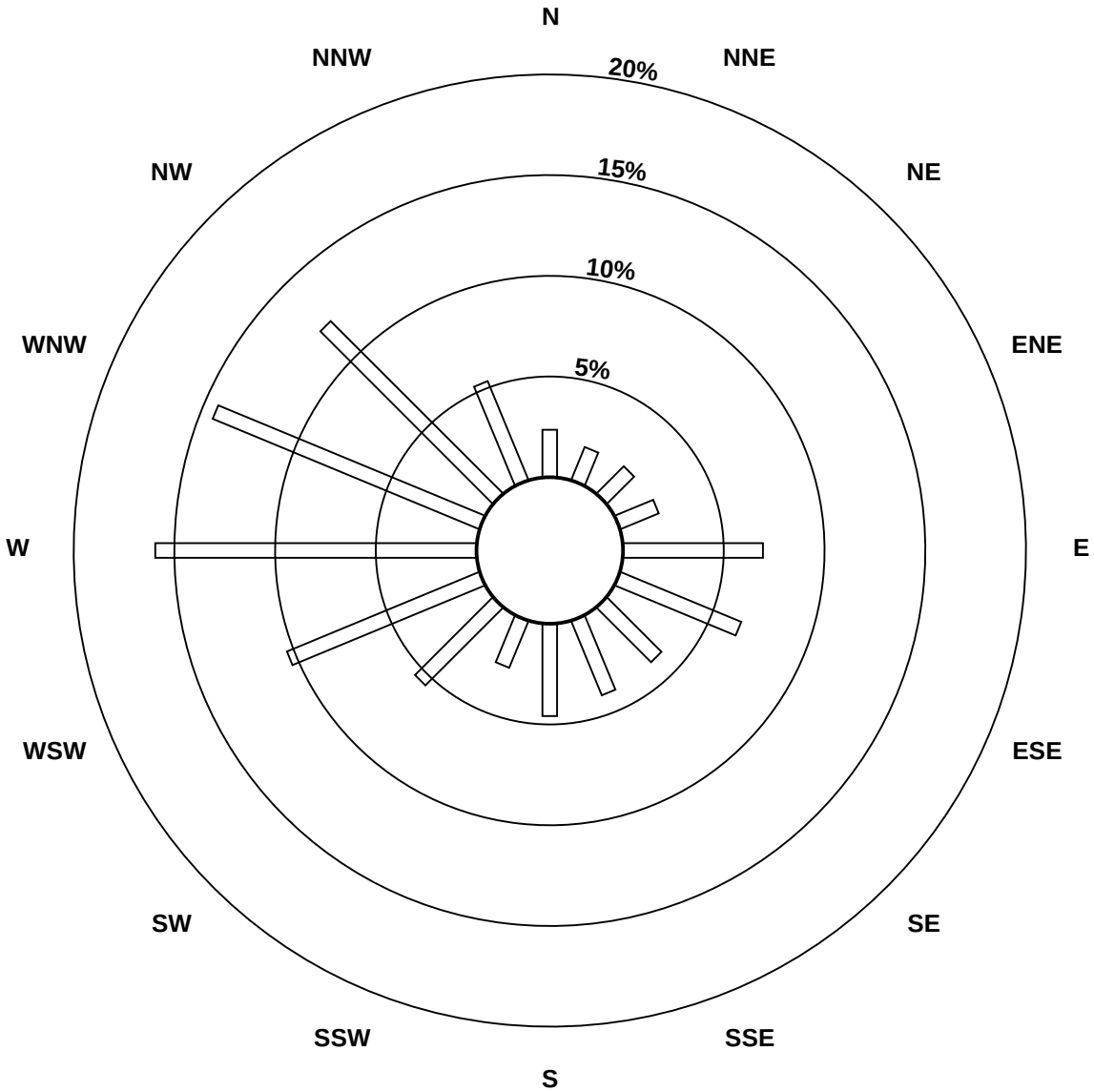
Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - June 2014



Pollutant Classes (ppm)

- 0 - 0.05
- 0.06 - 0.1
- 0.11 - 0.30
- > 0.30

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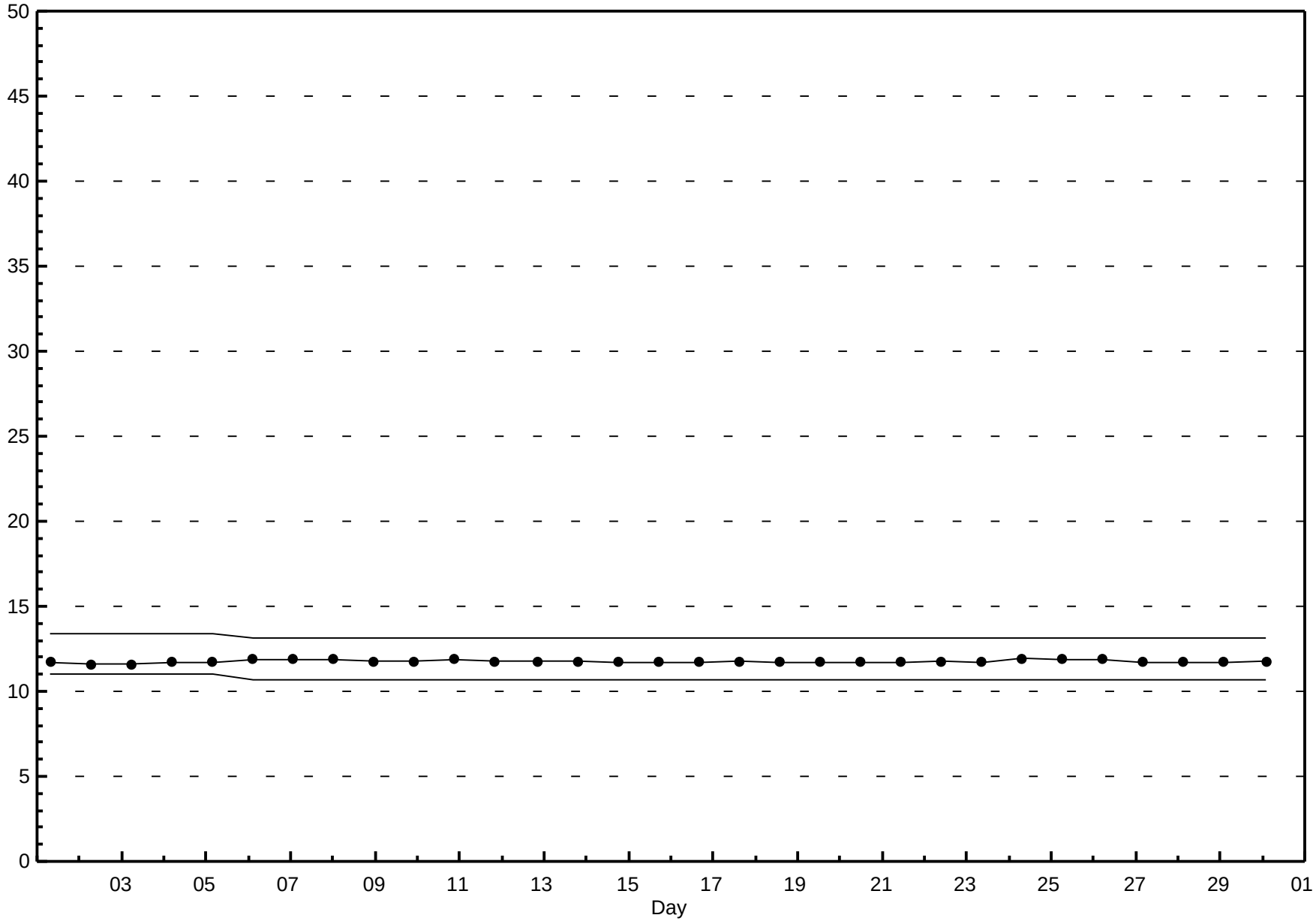
Span Responses

Non Methane Hydrocarbon (NMHC)

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

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

Henry Pirker - June 2014

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 50.4 $\mu g/m^3$ on Jul 1 00:00

Maximum Daily Average: 10.2 $\mu g/m^3$ on Jun 24

Minimum Value: 1 $\mu g/m^3$ on Jun 20 17:00

Maximum Diurnal Average: 8.3 $\mu g/m^3$ at hour 24

Monthly Average: 5.05 $\mu g/m^3$

Minimum Daily Average: 1.6 $\mu g/m^3$ on Jun 9

Minimum Diurnal Average: 3.0 $\mu g/m^3$ at hour 16

Percentiles: P_1 = 1.0 P_{10} = 1.6 Q_1 = 2.5 Median = 4.1 Q_3 = 6.7 P_{90} = 9.5 P_{99} = 16.5

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	8	10	11	11	9	7	7	5	5	5	5	5	4	3	3	4	5	4	5	4	5	6	7	8	6.0	11.0
2-Jun	9	10	12	12	11	11	8	5	4	5	3	3	3	3	2	2	2	3	3	3	5	6	5	4	5.6	11.8
3-Jun	6	8	10	9	9	10	10	8	8	6	5	4	4	6	13	14	13	11	8	6	4	4	4	4	7.6	13.6
4-Jun	4	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	1	2	2	2	2	2.4	3.5
5-Jun	2	3	3	3	3	3	4	4	3	3	2	2	2	2	2	2	2	2	3	2	3	4	5	6	3.0	6.3
6-Jun	6	6	5	5	4	4	4	4	3	3	2	2	2	2	2	2	2	2	3	3	4	5	5	4	3.6	6.0
7-Jun	6	7	9	8	9	10	9	6	5	4	4	3	3	3	3	3	2	2	3	4	4	5	10	26	6.2	26.3
8-Jun	8	8	12	12	10	11	14	9	5	3	3	3	2	3	3	2	2	3	3	3	2	3	4	4	5.5	13.9
9-Jun	2	2	2	2	2	2	1	1	1	1	1	2	2	1	1	1	2	1	2	2	2	2	1	2	1.6	2.4
10-Jun	2	3	3	3	3	3	3	3	4	4	5	5	5	6	4	2	2	2	2	3	3	4	7	9	3.6	8.9
11-Jun	9	9	9	9	10	10	9	8	6	6	5	4	4	3	3	3	3	2	2	2	3	5	5	5	5.6	10.4
12-Jun	5	7	7	7	7	12	11	6	6	6	6	5	4	3	3	3	3	4	4	4	4	5	8	8	5.8	11.8
13-Jun	6	6	6	6	6	7	7	8	9	7	5	5	4	4	4	3	3	5	7	5	9	14	13	14	6.8	14.3
14-Jun	16	15	16	16	11	10	10	12	9	6	5	4	4	4	4	3	3	3	3	2	3	3	4	4	7.1	16.5
15-Jun	4	4	4	5	7	7	5	3	3	2	1	1	1	1	1	1	2	2	3	4	4	5	5	5	3.4	6.8
16-Jun	4	5	5	7	7	6	5	4	4	3	2	3	3	2	2	3	5	4	3	3	3	4	4	4	3.9	6.8
17-Jun	5	5	5	5	6	6	7	8	8	4	3	4	3	3	3	4	4	3	3	3	4	5	6	5	4.6	7.6
18-Jun	5	5	6	6	7	10	11	13	12	11	10	5	4	3	2	2	2	2	2	2	5	9	10	8	6.3	12.7
19-Jun	8	8	8	8	7	8	10	10	7	6	5	3	3	4	4	4	4	5	6	7	8	8	7	8	6.5	10.2
20-Jun	8	8	8	8	8	8	9	11	10	7	4	2	2	2	1	1	1	1	1	1	1	1	1	2	4.5	11.5
21-Jun	2	2	2	2	3	3	3	2	2	1	1	2	1	1	1	1	1	1	1	1	2	3	9	14	2.6	13.9
22-Jun	18	19	17	15	10	9	8	6	6	5	4	3	3	3	2	2	2	2	2	2	3	3	4	4	6.4	19.4
23-Jun	5	6	6	7	8	8	7	6	M	M	6	5	5	4	4	5	5	5	5	6	7	9	8	8	6.1	8.6
24-Jun	9	9	10	11	14	15	16	16	16	16	14	10	11	8	7	7	7	9	7	7	7	6	6	6	10.2	16.3
25-Jun	8	7	6	5	5	5	4	4	3	2	2	1	1	1	1	1	1	1	1	1	2	2	3	3	3.0	7.9
26-Jun	5	6	7	7	7	7	6	5	4	4	3	2	2	2	2	2	2	2	2	2	3	4	5	6	4.0	7.4
27-Jun	6	7	10	9	9	9	10	9	11	7	5	5	5	4	5	5	5	6	6	7	6	7	6	6	6.9	10.8
28-Jun	8	10	9	8	8	8	7	7	6	4	3	3	2	2	1	1	1	1	1	2	2	3	4	9	4.6	9.6
29-Jun	8	7	5	4	4	4	4	3	4	4	4	4	3	3	3	2	2	3	2	2	2	3	3	9	3.9	9.3
30-Jun	3	3	4	3	3	3	3	3	2	2	1	1	1	1	2	1	1	1	1	1	2	2	8	50	4.3	50.4
	6.6	6.9	7.3	7.2	7.0	7.3	7.2	6.4	5.7	4.8	4.1	3.4	3.2	3.0	3.0	3.0	3.1	3.2	3.3	3.3	3.7	4.7	5.6	8.3	Diurnal Average	
	17.9	19.4	17.2	16.3	14.3	15.2	16.0	15.8	16.3	15.6	14.1	10.1	10.9	7.6	13.0	13.6	13.1	10.8	8.5	7.2	9.5	14.3	13.0	50.4	Diurnal Maximum	

M - Maintenance

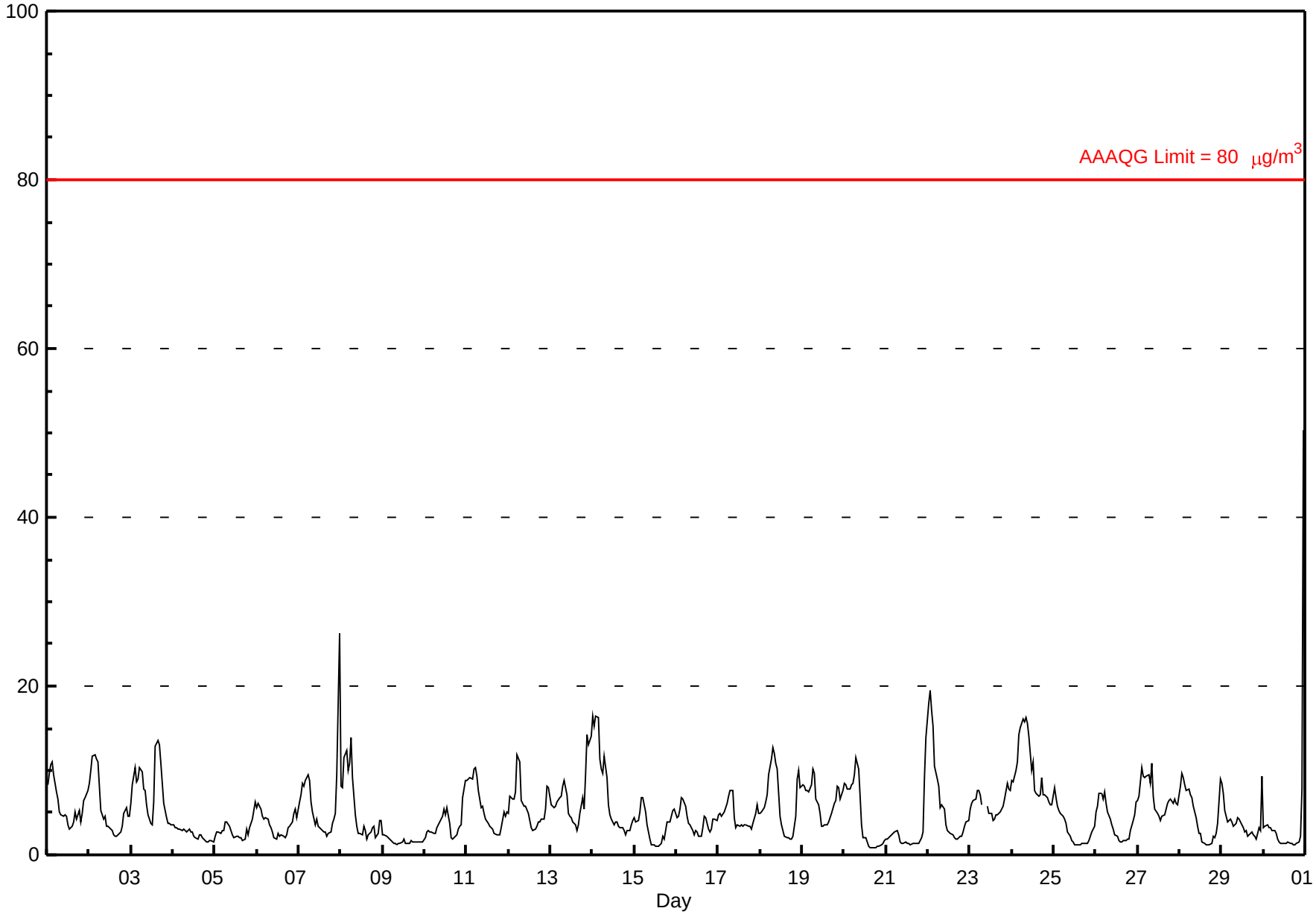
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - June 2014

Maximum Value: 448.3 $\mu g/m^3$ on Jul 1 00:00

Maximum Daily Average: 21.7 $\mu g/m^3$ on Jun 30

Minimum Value: 1 $\mu g/m^3$ on Jun 20 17:00

Minimum Daily Average: 2.2 $\mu g/m^3$ on Jun 9

Maximum Diurnal Average: 28.4 $\mu g/m^3$ at hour 24

Minimum Diurnal Average: 3.7 $\mu g/m^3$ at hour 14

Monthly Average: 7.43 $\mu g/m^3$

Percentiles: P_1 = 1.1 P_{10} = 2.0 Q_1 = 3.1 Median = 4.9 Q_3 = 8.3 P_{90} = 12.4 P_{99} = 36.7

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	10	11	11	12	11	8	7	6	5	5	5	5	4	3	4	5	6	6	6	4	6	12	8	8	7.0	11.9
2-Jun	9	12	13	14	12	12	11	7	5	5	4	4	3	3	3	3	2	3	3	4	8	7	6	6	6.6	13.6
3-Jun	9	10	11	10	10	11	11	8	9	7	6	4	4	10	16	16	15	12	10	7	5	4	4	5	9.0	16.2
4-Jun	23	3	3	3	3	3	3	3	3	3	3	3	3	2	2	3	3	3	2	2	2	2	2	2	3.6	23.4
5-Jun	3	3	3	3	3	3	5	5	4	3	3	2	3	3	2	2	2	3	8	3	5	5	6	7	3.7	8.2
6-Jun	6	6	6	5	4	5	5	4	3	3	3	2	3	3	3	3	2	3	4	4	4	7	6	6	4.2	6.5
7-Jun	7	9	11	9	11	12	10	7	6	4	5	4	3	4	4	3	3	3	3	6	5	6	34	93	10.9	93.1
8-Jun	14	13	13	13	14	13	16	15	6	4	3	3	3	4	4	2	3	3	5	4	2	3	5	5	7.1	15.9
9-Jun	3	3	2	2	2	2	2	1	1	2	2	2	5	2	2	2	7	2	2	2	2	2	2	2	2.2	7.0
10-Jun	4	3	3	3	3	3	3	4	4	5	5	6	6	7	5	3	2	3	3	4	4	5	9	13	4.4	12.6
11-Jun	10	10	10	10	13	12	11	12	7	7	6	5	4	4	3	3	3	3	2	3	4	7	5	5	6.6	12.8
12-Jun	5	12	7	7	9	18	12	11	17	7	6	6	5	4	3	3	4	4	5	5	5	7	9	10	7.6	18.2
13-Jun	10	6	6	6	7	8	8	12	10	8	5	5	5	4	4	4	6	6	9	7	12	16	16	22	8.4	22.3
14-Jun	19	22	20	19	14	11	14	14	11	7	5	5	4	4	4	4	3	4	3	3	3	3	4	5	8.6	22.5
15-Jun	10	4	5	7	7	7	6	4	4	2	2	1	1	1	2	2	15	3	4	5	5	6	14	13	5.5	15.2
16-Jun	7	5	6	8	7	7	5	4	4	4	3	3	3	3	3	4	5	6	3	4	4	5	5	4	4.7	8.3
17-Jun	9	6	5	5	6	7	8	9	10	6	4	8	4	4	4	7	4	4	4	4	4	7	9	5	5.9	10.3
18-Jun	5	6	6	7	7	11	12	15	14	13	13	5	4	3	4	2	2	2	2	4	6	12	13	8	7.4	14.9
19-Jun	12	11	8	8	8	9	12	15	8	6	6	4	4	4	4	5	5	6	7	7	11	9	7	9	7.6	15.2
20-Jun	12	10	9	8	10	9	10	12	12	10	5	2	2	2	1	1	1	1	1	1	1	1	2	2	5.3	12.5
21-Jun	6	2	3	3	3	3	3	3	2	2	2	4	1	1	1	1	1	1	2	2	2	5	21	56	5.5	56.3
22-Jun	38	37	29	28	13	10	9	6	7	7	5	3	3	3	3	2	3	2	5	2	3	4	4	4	9.6	38.0
23-Jun	6	7	10	8	9	10	8	7	M	M	6	7	8	5	5	6	5	6	7	7	11	26	11	11	8.5	26.4
24-Jun	40	9	11	12	45	20	32	18	37	24	36	34	31	12	9	9	12	50	8	8	7	7	6	7	20.1	49.6
25-Jun	14	8	6	6	5	5	5	4	3	2	2	2	1	1	1	1	1	1	1	2	2	2	3	7	3.7	14.1
26-Jun	7	7	8	8	8	11	7	6	5	4	3	3	8	2	2	2	2	2	4	2	4	7	5	16	5.5	16.1
27-Jun	13	10	11	10	10	10	10	16	13	8	6	5	5	4	11	9	7	9	8	7	11	7	7	7	9.0	15.6
28-Jun	9	10	9	9	8	8	7	7	7	5	4	6	3	2	1	1	2	1	2	11	3	3	15	32	7.0	32.1
29-Jun	25	8	7	5	4	5	4	4	5	5	5	5	3	3	3	3	3	3	3	2	2	7	3	35	6.3	34.7
30-Jun	3	4	4	3	3	3	3	3	2	2	2	1	2	2	5	2	3	2	2	2	2	3	14	448	21.7	448.3
	11.7	8.9	8.6	8.4	9.0	8.5	8.7	8.1	7.7	5.9	5.4	5.0	4.7	3.7	3.9	3.8	4.4	5.2	4.3	4.3	4.9	6.5	8.5	28.4	Diurnal Average	
	40.0	37.2	28.5	28.2	44.7	20.0	31.7	17.7	36.8	23.6	36.2	34.3	30.9	11.5	15.6	16.2	15.2	49.6	10.2	11.0	11.9	26.4	34.0	448.3	Diurnal Maximum	

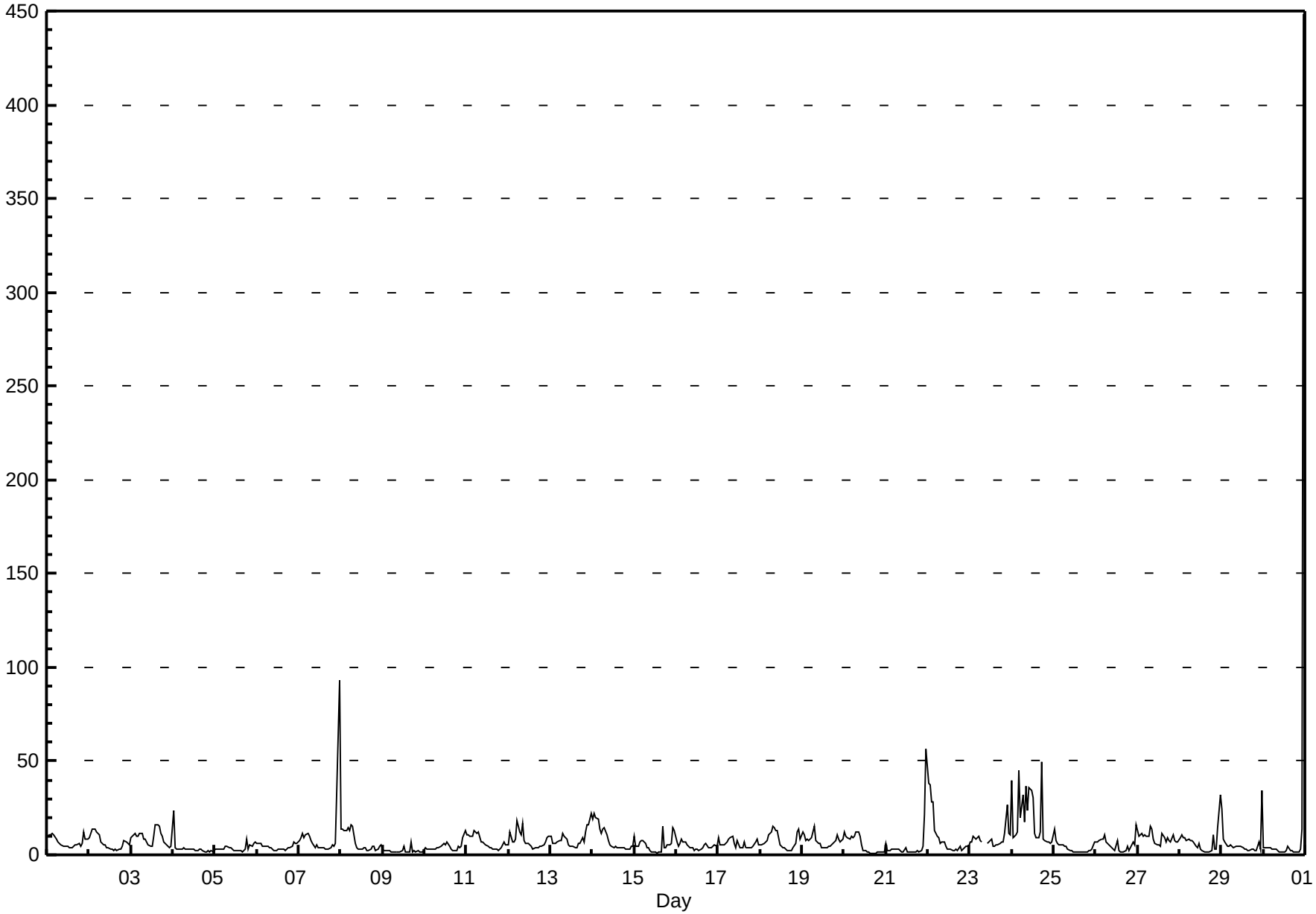
M - Maintenance

Peace Airshed Zone Association

Hourly Maximums

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

Henry Pirker - June 2014

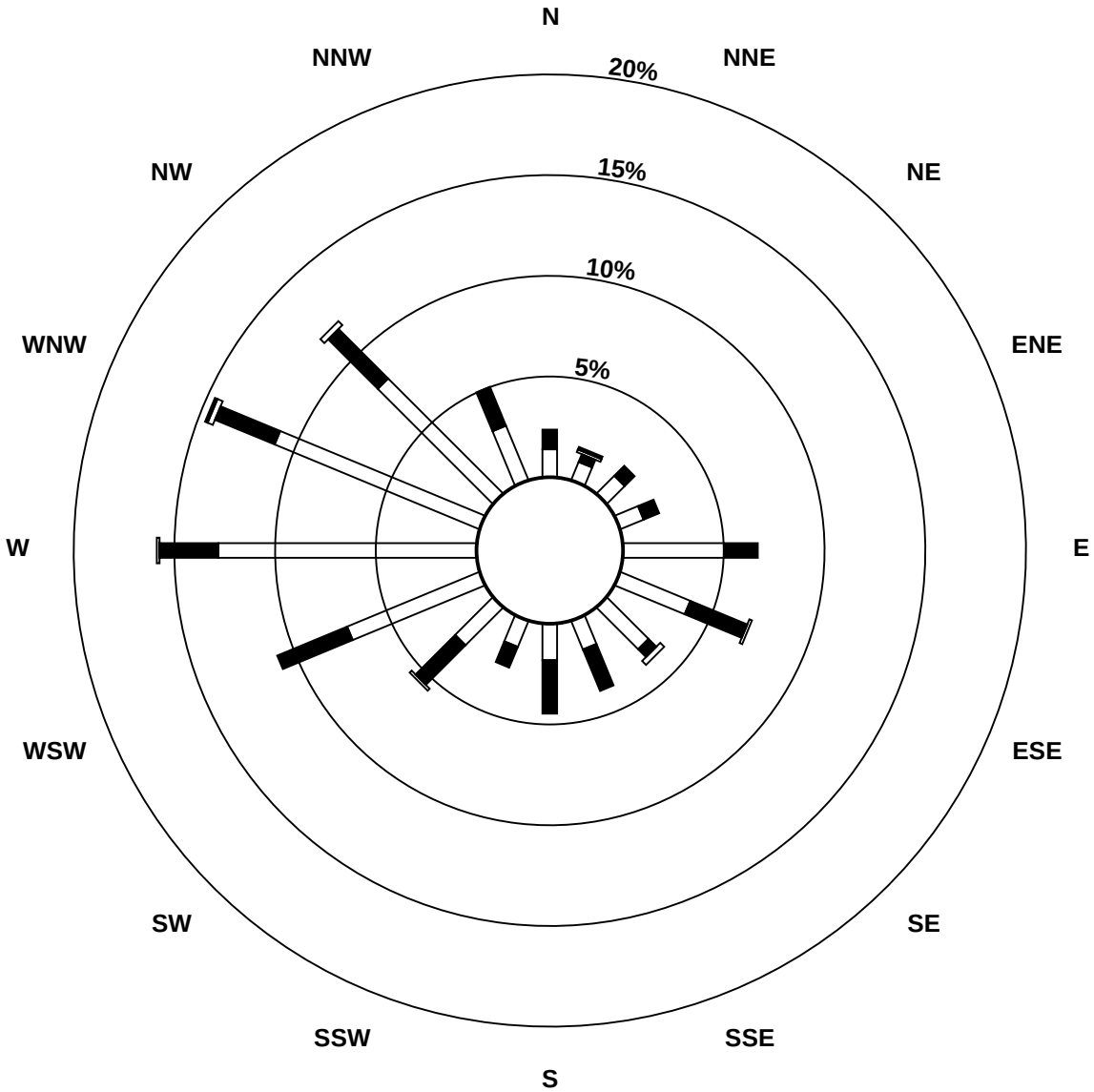


Peace Airshed Zone Association

Pollutant Rose

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

Henry Pirker - June 2014



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

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 80.0

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - June 2014

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

Maximum Value: 28.0 ^{o}C on Jun 23 15:00

Maximum Daily Average: 21.2 ^{o}C on Jun 23

Minimum Value: 3 ^{o}C on Jun 5 05:00

Minimum Daily Average: 5.8 ^{o}C on Jun 4

Maximum Diurnal Average: 20.8 ^{o}C at hour 15

Minimum Diurnal Average: 9.2 ^{o}C at hour 5

Monthly Average: 15.23 ^{o}C

Percentiles: P_1 = 3.4 P_{10} = 8.2 Q_1 = 10.9 Median = 14.8 Q_3 = 19.5 P_{90} = 23.4 P_{99} = 26.2

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

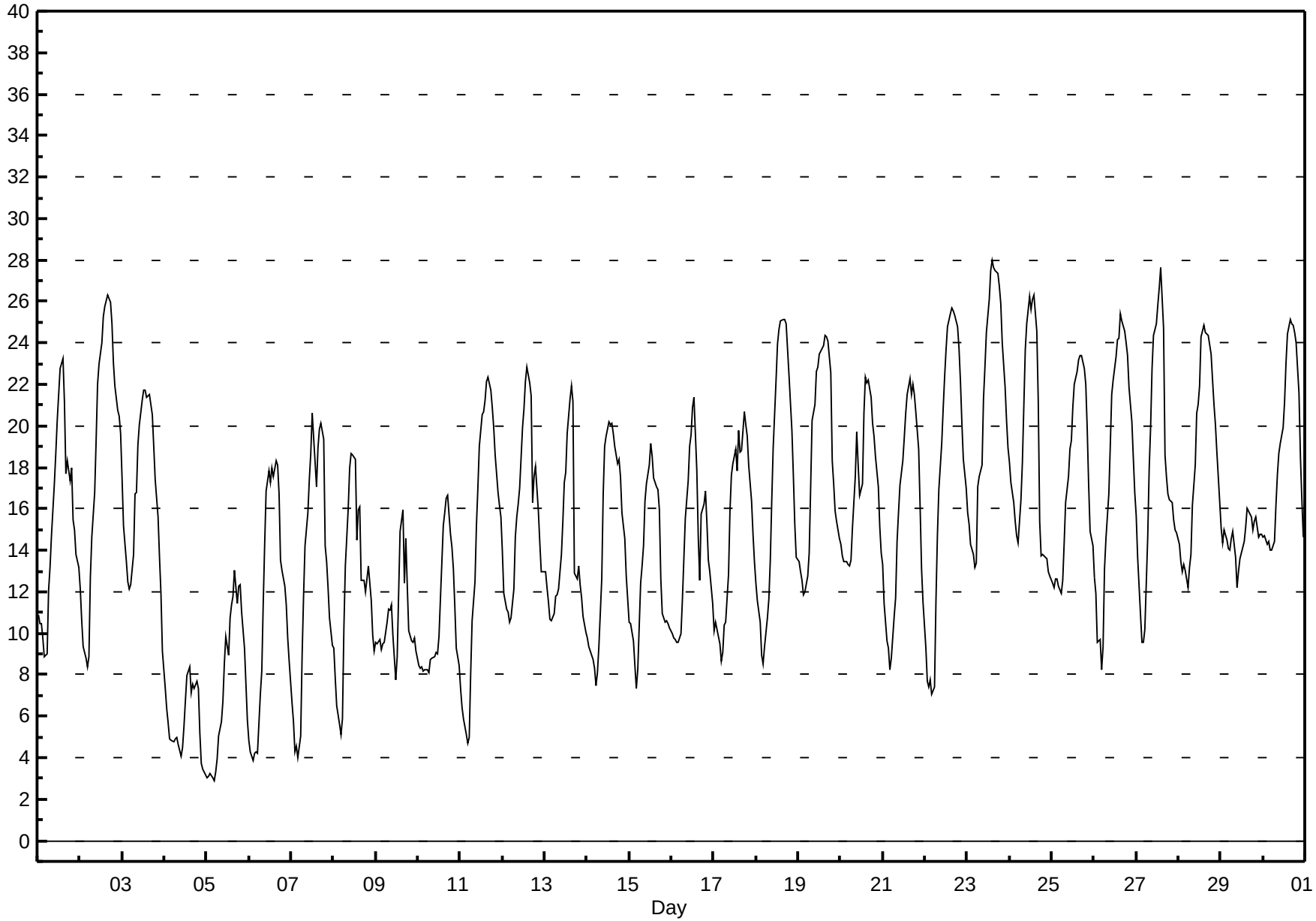
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	11	10	10	10	9	9	12	13	15	17	19	20	22	23	23	21	18	18	17	18	15	15	14	13	15.5	23.3
2-Jun	12	11	9	9	8	9	13	15	17	19	22	23	24	25	26	26	26	26	25	23	22	21	20	20	18.8	26.3
3-Jun	17	15	13	12	12	12	14	17	17	19	20	21	22	22	21	21	21	21	19	17	16	14	12	9	16.9	21.8
4-Jun	7	6	6	5	5	5	5	5	5	4	5	6	7	8	8	7	8	7	8	7	5	4	3	3	5.8	8.4
5-Jun	3	3	3	3	3	3	4	5	6	7	9	10	9	11	11	12	13	11	12	12	11	9	8	6	7.7	13.1
6-Jun	5	4	4	4	4	4	7	8	11	14	17	18	17	18	18	18	18	17	14	13	12	11	10	9	11.5	18.3
7-Jun	7	6	4	5	4	5	9	12	14	16	17	19	21	19	17	19	20	20	19	14	13	12	11	9	13.0	20.6
8-Jun	9	8	7	6	5	6	10	13	16	18	19	19	18	15	16	16	13	13	12	13	13	12	10	9	12.2	18.7
9-Jun	10	9	10	9	9	10	11	11	11	11	10	8	9	12	15	16	12	15	12	10	10	10	10	9	10.7	15.9
10-Jun	8	8	8	8	8	8	8	9	9	9	9	9	10	12	15	16	17	17	15	14	13	11	9	8	10.8	16.7
11-Jun	7	6	6	5	5	5	8	11	12	15	17	19	21	21	21	22	22	22	21	20	19	17	16	16	14.7	22.4
12-Jun	14	12	11	11	11	11	12	15	16	16	17	20	21	22	23	22	21	16	18	18	16	14	13	13	15.9	22.8
13-Jun	13	12	12	11	11	11	12	12	12	14	15	17	18	20	21	22	21	13	13	13	12	12	11	10	14.0	21.9
14-Jun	10	9	9	9	8	7	8	9	13	17	19	20	20	20	20	20	19	18	18	18	16	15	13	12	14.4	20.2
15-Jun	11	10	10	8	7	8	12	13	14	16	17	18	19	19	17	17	17	16	13	11	11	11	10	10	13.2	19.1
16-Jun	10	10	10	10	10	10	12	14	16	17	19	20	21	21	18	15	13	16	16	17	15	14	13	11	14.4	21.3
17-Jun	10	11	10	9	9	9	10	11	13	16	18	18	19	18	20	19	19	21	20	20	18	16	15	13	15.0	20.7
18-Jun	12	12	11	9	8	9	11	12	13	16	19	22	24	25	25	25	25	25	24	22	20	18	15	14	17.3	25.1
19-Jun	13	13	13	12	12	13	14	17	20	21	23	23	23	24	24	24	24	24	23	18	17	16	15	15	18.4	24.4
20-Jun	14	14	13	13	13	13	14	15	18	20	18	17	17	21	22	22	22	21	20	19	19	17	15	14	17.2	22.3
21-Jun	13	11	10	9	8	9	11	12	14	16	17	18	19	21	22	22	22	22	22	21	19	16	13	12	15.7	22.2
22-Jun	9	8	7	8	7	7	12	15	17	19	21	22	24	25	25	26	26	25	25	24	22	20	18	17	17.9	25.7
23-Jun	16	15	14	14	13	13	17	18	18	21	23	25	26	27	28	28	28	27	27	26	24	22	20	19	21.2	28.0
24-Jun	18	17	16	15	15	14	16	18	21	24	25	26	26	26	26	25	21	15	14	14	14	14	13	13	18.6	26.3
25-Jun	12	12	13	13	12	12	13	14	16	18	19	19	21	22	23	23	23	23	23	22	20	17	15	14	17.5	23.4
26-Jun	13	12	10	10	8	9	13	15	17	19	22	22	23	24	24	25	25	25	24	23	22	20	18	17	18.3	25.4
27-Jun	16	14	11	10	10	10	15	18	20	23	24	25	26	27	28	25	19	18	17	16	16	15	15	15	17.9	27.6
28-Jun	14	13	13	13	13	12	13	14	16	18	21	21	22	24	25	25	24	24	23	22	21	20	19	16	18.7	24.8
29-Jun	15	14	15	14	14	14	15	15	14	12	13	14	14	14	15	16	16	16	15	15	16	15	15	15	14.6	16.0
30-Jun	15	15	14	14	14	14	14	16	18	19	19	20	21	23	24	25	25	25	25	24	22	19	16	15	19.0	25.1
	11.5	10.7	10.1	9.6	9.2	9.5	11.4	13.0	14.6	16.4	17.7	18.6	19.4	20.2	20.8	20.6	19.9	19.2	18.4	17.5	16.3	14.8	13.6	12.5	Diurnal Average	
	18.2	17.3	16.3	15.4	14.7	14.4	17.1	18.3	20.9	23.7	24.9	26.2	26.1	27.5	28.0	27.6	27.5	27.4	26.7	25.9	24.0	21.9	20.5	19.7	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - June 2014

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

Maximum Value: 91.2 % on Jun 14 07:00 Maximum Daily Average: 74.1 % on Jun 10

Minimum Value: 18 % on Jun 18 18:00 Minimum Daily Average: 38.4 % on Jun 23

Maximum Diurnal Average: 75.5 % at hour 5 Minimum Diurnal Average: 36.1 % at hour 16

Monthly Average: 55.85 % Percentiles: P_1 = 20.0 P_{10} = 28.1 Q_1 = 38.5 Median = 56.4 Q_3 = 72.9 P_{90} = 82.1 P_{99} = 89.8

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

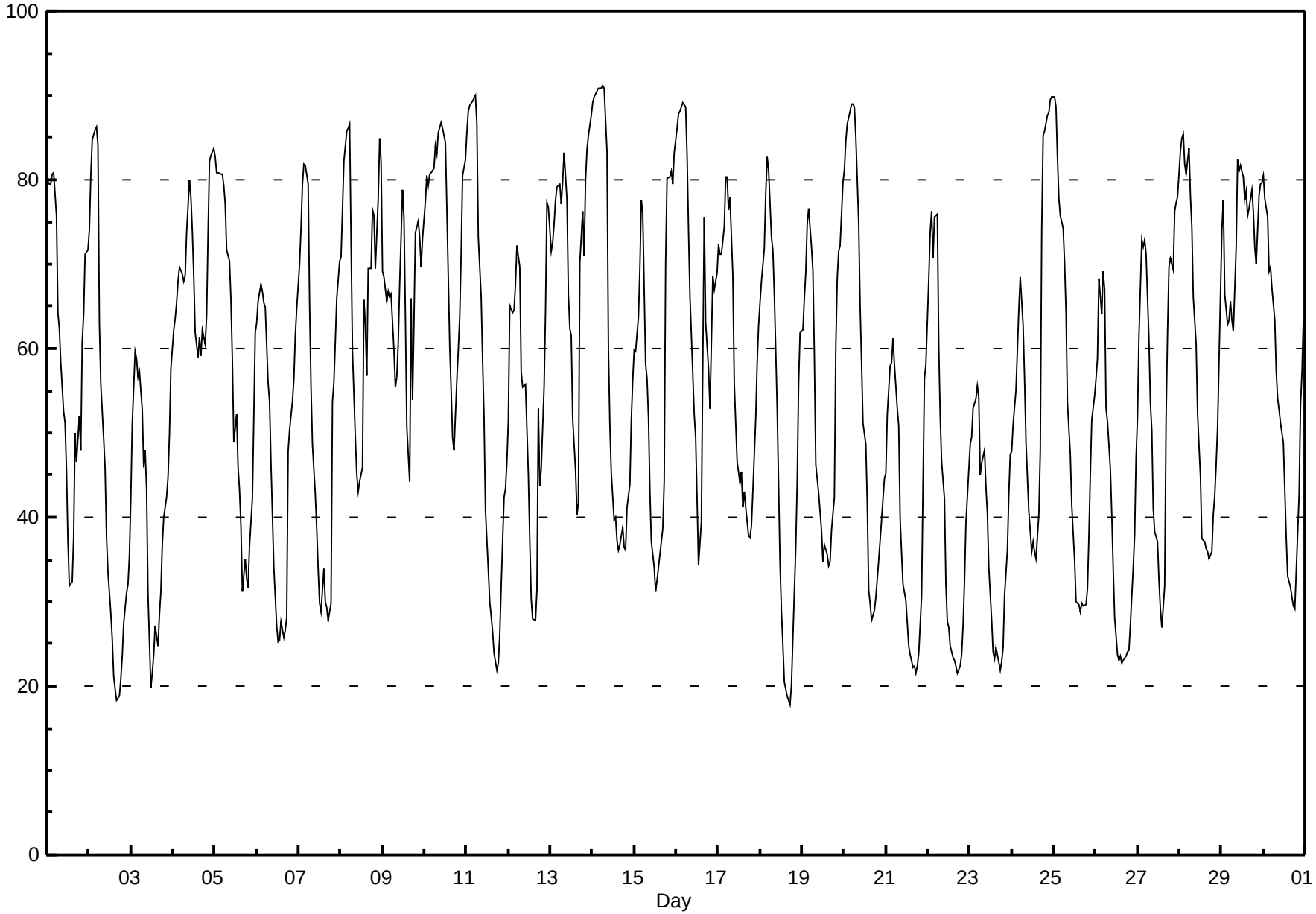
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	80	80	80	81	81	76	64	62	58	53	51	46	37	32	32	38	50	47	52	48	61	64	71	72	58.9	80.8
2-Jun	74	80	85	86	86	84	63	56	49	46	38	34	29	26	21	20	18	19	21	24	27	31	32	35	45.1	86.2
3-Jun	42	51	60	59	57	57	53	46	48	43	31	20	22	24	27	25	28	31	37	40	42	45	50	58	41.4	59.7
4-Jun	62	63	65	68	70	69	68	69	74	80	78	74	69	62	59	61	59	62	61	64	74	82	83	84	69.1	83.7
5-Jun	83	81	81	81	81	79	77	72	70	66	59	49	52	46	43	39	31	35	33	32	37	42	52	62	57.6	82.8
6-Jun	63	66	68	67	65	65	56	54	46	40	34	27	25	25	28	26	27	28	48	50	54	56	61	65	47.7	67.6
7-Jun	70	74	80	82	82	79	65	55	49	43	39	34	30	29	34	30	29	28	30	54	56	61	66	70	52.8	81.8
8-Jun	71	76	82	86	86	87	73	60	50	45	43	44	46	66	63	57	69	70	77	76	69	78	85	82	68.3	86.7
9-Jun	69	68	66	67	66	66	60	55	57	61	68	79	76	64	51	44	66	54	63	74	75	73	70	73	65.1	78.8
10-Jun	78	81	79	81	81	81	84	83	86	87	86	85	84	77	60	55	49	48	56	60	64	71	81	82	74.1	86.8
11-Jun	86	88	89	89	90	90	87	73	66	59	52	41	34	30	28	26	24	22	23	26	32	42	43	47	53.6	90.0
12-Jun	52	65	64	65	68	72	70	57	55	56	56	45	37	30	28	28	31	53	44	46	55	64	77	77	54.0	77.3
13-Jun	71	73	75	78	79	79	77	80	83	78	66	62	62	52	46	40	42	70	76	71	80	84	85	88	70.7	87.6
14-Jun	89	90	90	91	91	91	91	91	83	60	51	45	40	40	37	36	37	39	36	36	41	44	52	56	60.7	91.2
15-Jun	60	60	64	69	78	76	58	56	52	43	37	34	31	33	34	37	39	44	70	80	80	81	79	83	57.5	83.2
16-Jun	86	88	88	89	89	89	83	74	66	57	52	50	42	34	39	58	76	63	58	53	61	69	67	69	66.6	89.2
17-Jun	72	71	71	74	80	80	76	78	69	56	51	47	44	46	41	43	41	38	38	39	43	52	58	63	57.1	80.3
18-Jun	65	68	72	78	83	81	73	72	66	60	53	35	29	25	20	19	18	18	20	26	36	44	56	62	49.2	82.7
19-Jun	62	66	69	75	77	72	69	59	46	43	41	39	35	37	36	34	35	39	42	60	68	72	72	80	55.3	79.7
20-Jun	81	85	87	88	89	89	89	85	75	65	59	51	49	42	31	30	28	29	31	33	35	40	42	45	57.3	89.0
21-Jun	45	52	58	58	61	58	53	51	40	36	32	30	28	25	24	22	22	21	22	24	31	44	56	58	39.7	61.2
22-Jun	68	74	76	71	76	76	60	52	47	42	32	28	27	25	23	23	22	22	22	24	27	32	39	46	43.1	76.3
23-Jun	49	49	53	54	56	54	45	47	48	44	41	34	28	24	23	25	24	22	23	25	31	36	43	47	38.4	55.7
24-Jun	48	51	55	60	65	68	63	56	49	45	41	36	37	36	35	40	48	74	85	86	88	88	89	90	59.7	89.9
25-Jun	90	89	83	78	76	74	70	64	54	47	42	38	35	30	30	29	30	29	30	32	38	45	52	54	51.5	89.8
26-Jun	56	59	68	64	69	67	53	51	46	40	34	28	24	23	24	23	23	24	24	24	27	34	38	47	40.4	69.2
27-Jun	52	61	73	72	73	71	61	54	50	41	38	37	33	29	27	32	52	62	70	71	69	76	77	78	56.6	77.9
28-Jun	83	85	85	82	81	84	78	74	66	60	52	49	45	37	37	36	36	35	36	40	43	46	51	66	57.9	85.4
29-Jun	74	78	66	63	63	66	63	62	72	82	81	82	80	78	79	76	77	79	76	72	70	78	80	80	74.0	82.4
30-Jun	80	78	76	69	70	67	63	57	54	53	51	49	43	38	33	32	30	30	29	34	43	53	57	63	52.2	80.5
	68.8	71.6	73.5	74.1	75.5	75.0	68.2	63.5	59.1	54.3	49.6	45.0	41.7	38.7	36.5	36.1	38.7	41.1	44.4	47.4	51.9	57.6	62.2	66.0	Diurnal Average	
	89.8	89.8	90.2	90.8	90.9	90.9	91.2	90.9	85.6	86.8	86.2	85.2	84.4	77.6	78.6	75.7	76.6	78.8	85.3	85.8	87.7	88.0	89.5	89.9	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - June 2014

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

Maximum Value: 828.9 W/m^2 on Jun 2 14:00

Maximum Daily Average: 325.0 W/m^2 on Jun 26

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

Maximum Diurnal Average: 641.7 W/m^2 at hour 14

Monthly Average: 235.43 W/m^2

Minimum Daily Average: 65.3 W/m^2 on Jun 29

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

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.3 Median = 112.4 Q_3 = 439.5 P_{90} = 692.0 P_{99} = 820.1

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

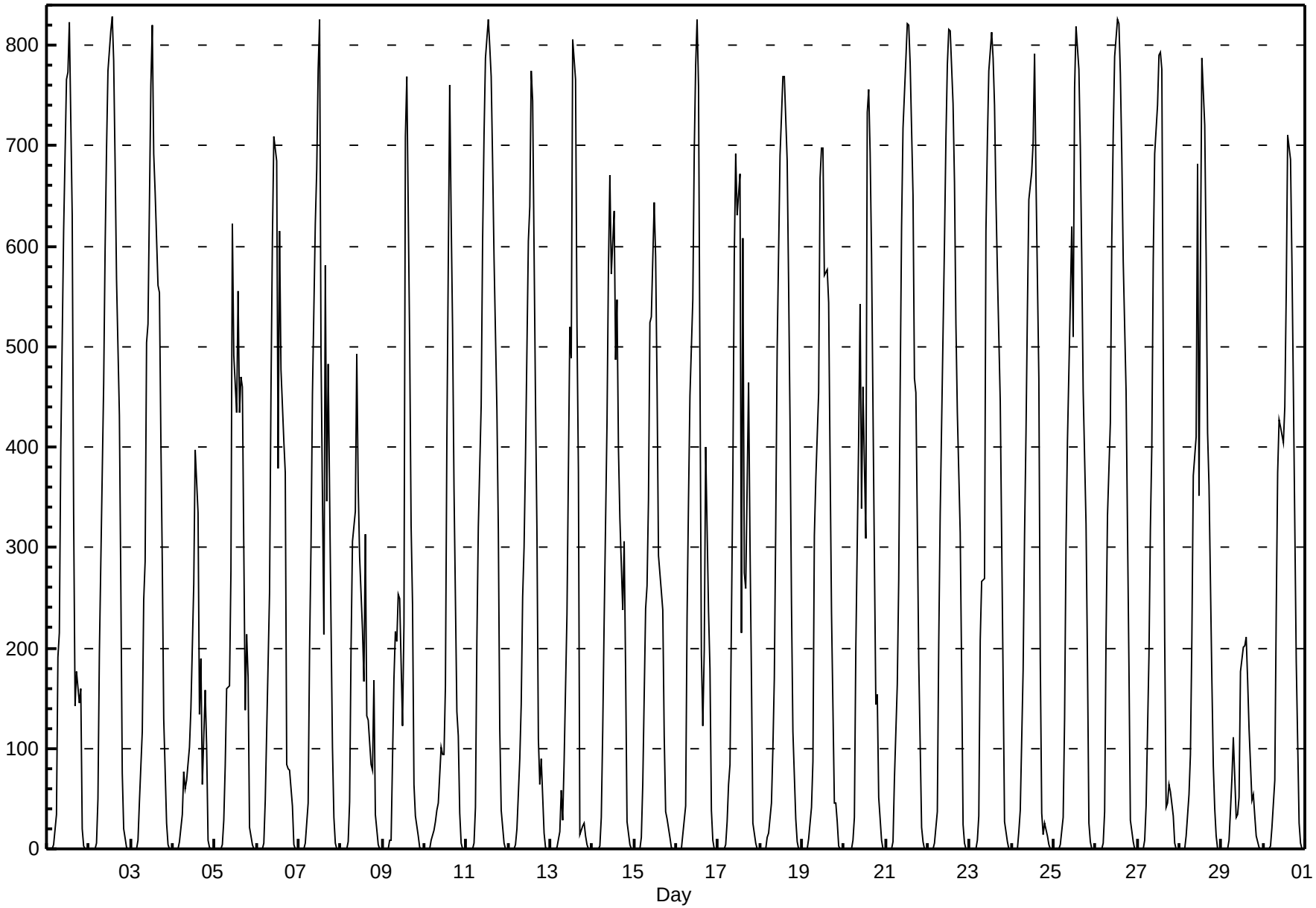
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	0	0	0	0	5	34	191	215	397	616	691	767	773	822	631	334	143	176	145	160	20	2	0	0	255.0	822.5
2-Jun	0	0	0	0	5	49	195	284	463	596	696	774	814	829	784	682	566	431	263	76	20	2	0	0	313.8	828.9
3-Jun	0	0	0	0	8	47	117	248	286	504	523	761	820	692	653	561	554	409	284	129	26	4	0	0	276.0	820.0
4-Jun	0	0	0	0	8	34	77	60	68	101	140	201	264	398	335	134	190	65	158	102	8	1	0	0	97.6	397.9
5-Jun	0	0	0	0	5	28	82	160	163	276	622	491	435	556	434	469	460	138	213	171	21	5	0	0	197.0	621.9
6-Jun	0	0	0	0	6	49	185	255	455	606	710	685	379	615	477	405	375	85	80	78	43	4	0	0	228.8	709.6
7-Jun	0	0	0	0	6	46	199	302	452	623	677	775	826	493	213	581	345	482	224	102	32	6	0	0	266.0	825.9
8-Jun	0	0	0	0	7	47	199	306	337	493	360	291	218	166	313	132	128	83	79	168	34	5	0	0	140.2	493.2
9-Jun	0	0	0	0	8	9	169	216	207	253	249	122	224	709	769	503	321	243	65	33	12	1	0	0	171.4	769.1
10-Jun	0	0	0	0	9	18	27	39	46	101	93	95	162	405	760	629	519	359	137	113	36	6	0	0	148.1	759.8
11-Jun	0	0	0	0	6	41	208	320	441	605	710	788	825	799	769	684	588	437	317	120	39	5	0	0	320.9	825.1
12-Jun	0	0	0	0	4	19	90	144	250	300	390	606	639	775	745	444	316	109	64	89	16	2	0	0	208.4	774.9
13-Jun	0	0	0	0	2	17	58	29	87	233	376	520	488	805	766	521	376	15	23	26	12	4	0	0	181.5	805.4
14-Jun	0	0	0	0	4	31	118	227	425	577	671	572	635	488	547	398	328	238	306	178	27	5	0	0	240.6	671.2
15-Jun	0	0	0	0	12	64	240	262	347	525	530	644	590	461	292	256	238	113	38	30	11	2	0	0	193.9	643.9
16-Jun	0	0	0	0	14	43	231	348	451	547	694	781	825	758	194	123	198	400	236	180	39	8	0	0	252.9	825.2
17-Jun	0	0	0	0	4	26	65	84	371	590	692	630	672	214	607	274	259	464	303	171	26	6	0	0	227.4	692.0
18-Jun	0	0	0	0	11	15	45	99	169	324	499	691	729	769	768	685	562	424	245	117	30	8	0	0	257.9	769.2
19-Jun	0	0	0	0	10	41	86	312	367	454	668	697	698	571	577	543	386	235	46	45	27	3	0	0	240.2	698.1
20-Jun	0	0	0	0	1	8	31	199	410	542	339	459	308	734	755	693	591	288	144	153	51	8	0	0	238.2	755.5
21-Jun	0	0	0	0	6	70	164	268	457	619	718	786	821	820	782	651	468	454	324	187	22	6	0	0	317.7	821.1
22-Jun	0	0	0	0	6	36	206	333	423	603	706	781	816	814	742	663	523	434	315	179	24	6	0	0	317.1	815.8
23-Jun	0	0	0	0	8	33	208	266	269	616	703	775	813	788	740	647	575	446	308	171	27	7	0	0	308.3	813.1
24-Jun	0	0	0	0	17	38	178	312	413	537	647	674	704	792	667	469	188	36	15	26	12	4	0	0	238.6	792.0
25-Jun	0	0	0	0	5	31	129	304	406	545	619	510	757	819	776	699	586	456	323	187	26	7	0	0	299.4	818.8
26-Jun	0	0	0	0	6	37	213	331	424	606	711	788	826	821	771	691	585	455	317	182	28	7	0	0	325.0	825.5
27-Jun	0	0	0	0	8	42	192	319	402	586	692	740	790	793	776	209	42	45	64	57	33	5	0	0	241.5	793.4
28-Jun	0	0	0	0	13	54	94	209	372	409	681	352	583	787	720	588	415	361	168	83	40	12	0	0	247.7	786.8
29-Jun	0	0	0	0	8	38	70	111	31	34	51	176	200	202	210	168	119	49	54	33	12	2	0	0	65.3	210.4
30-Jun	0	0	0	0	3	22	68	235	374	426	420	405	440	554	710	686	583	456	320	187	25	6	0	0	246.6	710.2
	0.0	0.0	0.0	0.0	7.2	35.7	137.9	226.5	325.4	461.5	542.6	577.9	602.4	641.7	609.5	484.0	384.1	279.6	185.9	117.7	25.9	5.0	0.0	0.0	Diurnal Average	
	0.0	0.0	0.0	0.2	17.0	70.4	239.6	347.7	463.3	622.7	717.8	788.1	825.9	828.9	784.2	698.7	590.6	482.2	324.4	187.2	50.7	12.4	0.1	0.0	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Solar Radiation (SR) - W/m^2

Henry Pirker - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - June 2014

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	5	6	4	4	4	4	7	11	11	10	10	10	11	6	5	13	14	10	12	10	8	6	3	5	6.3	14.3
Dir	195	235	245	241	270	282	277	261	267	279	295	275	287	254	295	332	292	277	341	351	303	348	250	186	286.2	292.4
2 Spd	4	2	3	2	2	3	5	7	8	5	4	7	6	5	6	5	2	3	4	5	4	3	5	4	3.6	7.7
Dir	174	272	190	234	238	215	242	239	243	214	229	206	209	203	181	198	217	196	181	136	129	223	262	258	212.9	242.9
3 Spd	5	3	2	5	4	5	7	8	9	13	17	19	17	15	17	17	20	15	19	18	15	13	11	13	8.9	19.9
Dir	135	185	193	290	278	236	247	252	231	254	280	294	285	309	325	306	323	321	340	356	7	3	353	332	310.4	323.1
4 Spd	12	15	12	10	9	11	11	9	5	11	9	11	11	14	14	17	13	13	17	19	19	18	19	20	13.1	19.5
Dir	332	327	321	312	316	322	329	320	320	306	319	325	319	331	312	317	320	304	303	307	312	306	303	298	314.5	298.2
5 Spd	16	18	17	20	16	16	16	12	14	14	11	12	17	11	12	12	13	10	10	14	10	5	5	4	11.9	19.8
Dir	301	312	315	317	318	317	319	318	300	300	289	303	282	269	283	294	289	318	296	280	277	235	220	226	298.8	317.3
6 Spd	6	5	6	8	9	7	10	12	12	12	11	13	13	18	15	17	13	10	10	9	4	5	5	5	7.7	17.6
Dir	235	250	292	279	280	297	257	249	247	247	233	259	263	256	253	253	271	299	25	15	138	210	164	242	261.4	256.0
7 Spd	6	4	1	2	1	3	3	3	2	5	4	5	4	12	12	3	3	3	2	14	8	6	1	4	1.1	13.9
Dir	320	301	317	271	229	255	252	265	177	146	199	246	281	242	228	1	281	121	359	49	109	112	178	28	246.9	48.8
8 Spd	4	1	2	2	3	1	2	4	11	11	10	9	4	11	4	14	17	5	8	9	11	6	5	4	4.0	16.7
Dir	49	125	183	183	329	353	164	234	255	254	255	256	279	148	138	266	254	178	176	172	190	155	148	170	217.1	253.7
9 Spd	8	13	18	14	13	17	21	28	23	25	27	19	18	21	25	22	16	9	15	12	17	17	14	13	16.2	27.8
Dir	245	250	251	254	263	265	263	271	278	307	294	269	264	252	260	278	345	311	310	310	307	286	282	259	277.4	270.6
10 Spd	12	11	15	15	16	14	13	14	12	12	11	10	10	6	5	6	4	3	6	4	9	4	3	2	6.2	16.3
Dir	260	264	291	295	284	284	286	297	311	327	335	332	331	16	26	73	46	319	104	164	241	238	197	176	299.6	284.2
11 Spd	3	4	3	2	2	3	4	6	5	3	4	2	4	3	3	2	3	6	7	5	5	7	7	4	0.5	7.1
Dir	155	157	165	165	218	179	218	241	222	211	191	224	316	298	93	277	278	331	338	17	64	87	104	71	178.9	103.7
12 Spd	3	1	2	3	3	1	3	2	5	10	12	11	14	13	13	11	8	15	6	4	10	5	0	3	5.0	15.3
Dir	87	291	83	70	10	300	6	101	116	108	115	94	93	101	92	84	98	178	135	7	19	56	256	111	95.6	177.8
13 Spd	7	7	7	4	2	1	4	2	3	5	7	7	6	8	5	2	12	17	6	9	1	2	5	4	1.5	17.3
Dir	111	122	96	64	49	343	67	68	285	291	323	311	322	355	9	52	101	155	210	173	102	192	152	109	104.0	155.2
14 Spd	4	2	2	3	4	4	5	5	5	8	13	19	19	18	20	17	23	24	23	22	16	14	8	7	9.8	23.6
Dir	125	167	32	117	162	150	165	205	186	226	248	265	277	289	277	274	287	285	275	273	271	261	276	256	266.9	285.4
15 Spd	7	7	2	1	2	3	3	6	8	7	5	4	3	5	5	6	6	6	9	5	5	2	2	2	1.0	9.3
Dir	289	268	227	150	218	220	255	252	276	282	282	269	285	92	138	79	92	94	110	295	323	352	70	78	271.3	110.0
16 Spd	4	3	5	1	2	4	5	8	6	6	5	5	4	7	14	15	8	6	4	7	8	10	8	6	1.7	14.6
Dir	135	109	119	16	353	304	316	328	348	74	84	93	120	146	141	120	168	231	326	16	324	335	18	48	67.6	119.7
17 Spd	5	5	5	2	2	2	2	4	4	5	4	5	5	4	3	5	5	6	5	7	10	9	9	8	2.9	9.9
Dir	43	38	41	65	285	299	248	227	248	205	224	179	152	137	122	133	124	155	177	144	135	119	119	116	138.6	134.8
18 Spd	7	7	5	3	3	3	4	5	4	3	6	15	11	10	12	12	9	9	7	6	5	5	6	4	3.4	14.7
Dir	111	114	121	113	173	171	200	156	153	142	185	227	236	254	267	264	263	258	271	309	320	328	314	327	239.9	227.4
19 Spd	3	6	4	3	2	3	2	5	1	4	3	9	10	10	11	11	13	12	5	7	9	9	12	6	1.3	12.7
Dir	331	329	318	315	334	138	222	280	314	118	124	140	119	110	94	96	101	100	113	279	304	303	322	288	75.2	100.6
20 Spd	6	4	3	4	1	3	1	3	0	5	20	22	14	12	15	19	17	14	18	20	16	11	15	15	10.1	21.6
Dir	292	340	324	293	229	327	83	26	171	284	276	276	276	295	295	288	285	291	282	285	271	269	259	259	282.0	276.3
21 Spd	15	11	8	11	10	12	9	8	20	21	21	20	19	18	15	13	14	13	11	9	6	4	4	3	11.5	21.5
Dir	262	262	261	248	252	258	248	254	263	259	259	262	264	280	285	285	295	298	307	309	315	312	317	333	272.2	259.0
22 Spd	3	2	1	3	3	2	3	2	4	8	11	10	8	7	7	7	8	5	8	9	10	8	10	9	4.3	11.4
Dir	306	315	293	322	338	326	283	260	148	130	129	132	144	132	100	112	112	100	100	99	90	87	93	96	109.0	128.8

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	6	5	2	2	3	4	5	10	9	9	9	12	11	8	8	11	12	13	13	12	10	11	12	10	8.3	13.1
Dir	105	117	43	52	52	76	82	108	120	107	107	106	102	99	95	94	95	90	97	94	85	83	88	102	96.1	97.2
24 Spd	11	10	12	10	8	3	4	5	4	5	8	10	12	12	13	18	28	23	13	7	5	4	5	4	3.8	27.6
Dir	116	100	98	110	120	120	139	221	273	292	295	299	311	312	308	300	269	264	245	277	287	191	165	158	270.6	269.3
25 Spd	5	5	7	7	6	8	9	14	18	18	19	16	13	14	14	12	12	12	12	10	8	7	9	5	10.1	18.6
Dir	170	187	243	251	260	255	262	269	274	281	269	287	296	278	287	290	295	292	287	285	285	286	293	291	277.2	269.3
26 Spd	5	4	3	3	1	4	7	8	7	7	5	8	7	8	7	4	6	7	6	5	5	7	6	4	2.6	8.0
Dir	335	299	217	280	316	276	268	243	251	249	227	233	260	271	314	303	315	334	340	44	76	91	86	106	284.7	270.9
27 Spd	4	2	3	4	2	3	2	3	3	2	5	8	10	11	8	14	23	11	8	7	5	7	9	8	1.0	22.7
Dir	73	319	310	333	319	331	307	277	245	93	76	94	94	108	103	140	181	220	9	357	318	250	260	245	159.9	181.0
28 Spd	7	4	6	8	8	7	9	10	12	11	10	8	9	8	7	7	6	6	7	10	7	5	6	7	6.6	11.7
Dir	252	285	275	256	257	278	255	246	267	267	279	298	295	291	287	302	296	315	321	302	309	305	214	150	277.5	266.9
29 Spd	7	4	7	8	10	9	11	10	8	8	13	15	15	15	6	5	6	8	12	4	5	4	5	6	7.3	14.8
Dir	173	179	218	240	263	271	273	275	297	231	251	271	278	271	251	237	221	265	275	262	320	308	228	244	259.3	271.1
30 Spd	5	8	5	6	7	3	7	10	13	14	15	14	15	12	12	10	10	9	6	5	6	4	2	2	7.8	15.1
Dir	256	251	275	278	261	260	250	267	270	273	279	283	291	291	296	302	314	321	323	308	307	293	277	296	284.6	279.1
Spd	1.3	2.1	2.3	3.1	3.5	3.8	4.5	5.8	6.0	5.4	6.1	6.5	6.0	4.8	4.3	4.5	4.8	4.4	4.2	4.2	3.7	2.3	1.8	1.5	Diurnal Average	
Dir	248.9	270.8	275.4	281.2	279.2	277.8	269.0	265.1	265.2	267.6	268.5	269.5	278.3	273.9	281.5	289.3	284.6	277.9	304.9	316.9	310.6	300.5	277.5	260.3		
Spd	16.1	18.0	18.4	19.8	16.3	16.9	21.1	27.8	23.0	24.9	26.6	21.6	19.0	20.8	25.1	21.5	27.6	23.6	22.6	22.2	19.2	17.7	18.7	19.5	Diurnal Maximum	
Dir	301.2	311.9	250.7	317.3	284.2	265.4	263.3	270.6	277.7	306.9	294.1	276.3	264.4	252.4	259.8	277.9	269.3	285.4	274.7	272.8	311.7	306.2	302.5	298.2		

Maximum Speed Value: 28 km/h on Jun 9 08:00
Maximum Daily Speed Average: 16.2 km/h on Jun 9
Maximum Diurnal Speed Average: 6.5 km/h at hour 12

Minimum Speed Value: 0 km/h on Jun 20 09:00
Minimum Daily Speed Average: 0.5 km/h on Jun 11
Minimum Diurnal Speed Average: 1.3 km/h at hour 1

Monthly Average Velocity: 3.91 km/h 278.74 deg

Speed Percentiles: P_1 = 1.0 P_{10} = 2.7 Q_1 = 4.3 Median = 7.1 Q_3 = 11.7 P_{90} = 16.0 P_{99} = 23.1

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

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

Frequency Distribution

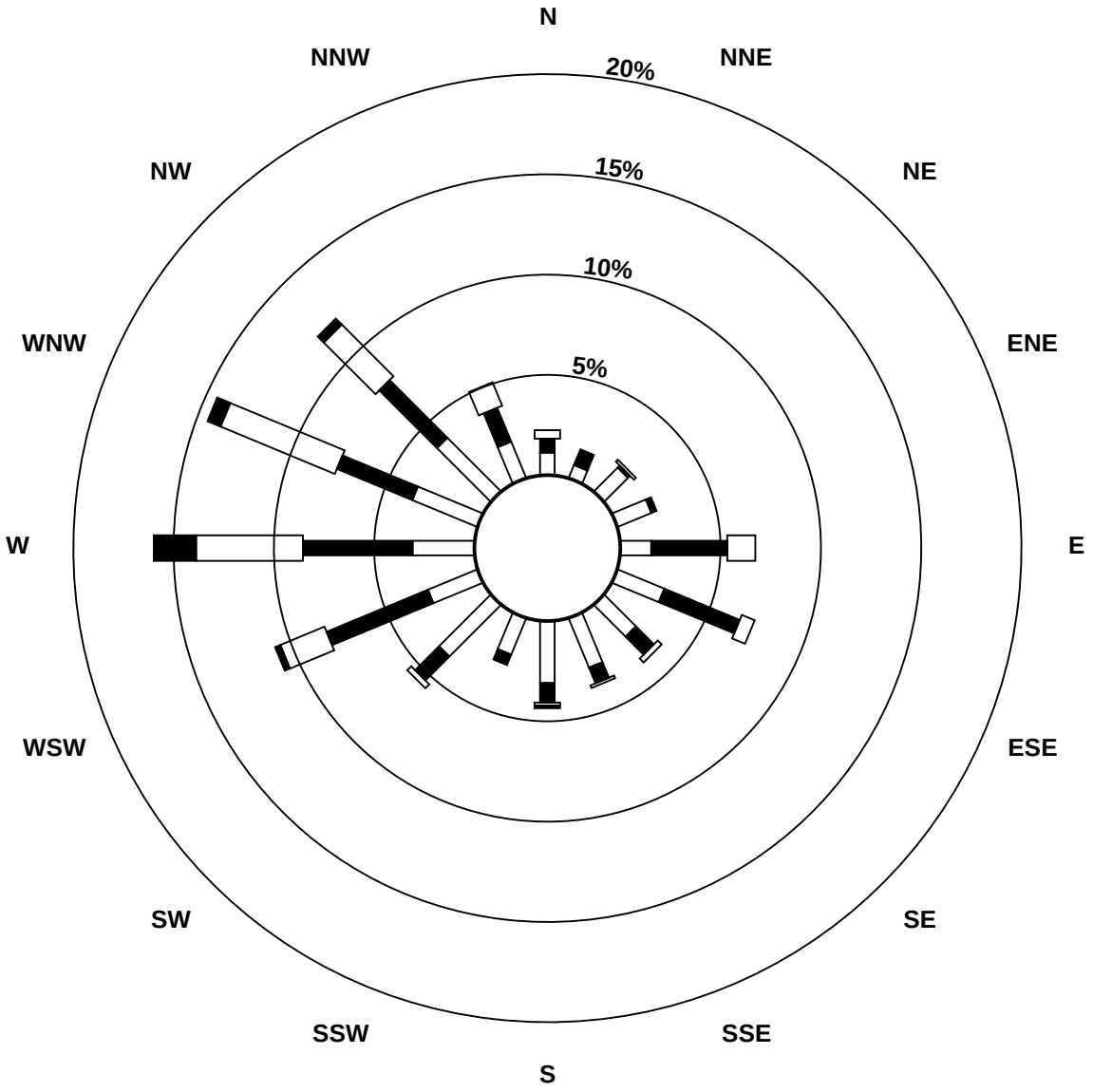
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	13	15	6	0	0	0	34
NorthEast	14	8	1	0	0	0	23
East	21	48	18	0	0	0	87
SouthEast	33	27	7	0	0	0	67
South	40	10	1	1	0	0	52
SouthWest	31	37	7	0	0	0	75
West	36	82	81	22	0	0	221
NorthWest	45	59	51	6	0	0	161
Total	233	286	172	29	0	0	720

Peace Airshed Zone Association

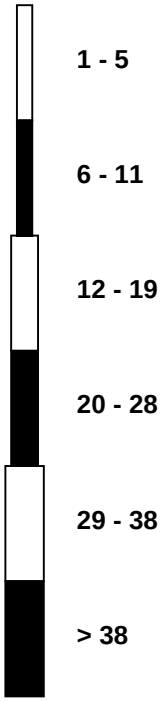
Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - June 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - June 2014

Peace Airshed Zone Association

Maximum Speed: 29 km/h on Jun 24 17:00

Maximum Daily Speed Average: 18.0 km/h on Jun 9

Minimum Speed: 1 km/h on Jun 16 04:00

Minimum Daily Speed Average: 4.9 km/h on Jun 11

Maximum Diurnal Speed Average: 12.5 km/h at hour 17

Minimum Diurnal Speed Average: 5.7 km/h at hour 5

Monthly Average Speed: 9.00 km/h

Percentiles: $P_1 = 1.8$ $P_{10} = 3.4$ $Q_1 = 5.1$ Median = 7.9 $Q_3 = 12.1$ $P_{90} = 16.4$ $P_{99} = 23.5$

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 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	6	5	4	4	5	7	11	12	11	10	11	11	8	7	14	15	11	12	11	8	7	4	5	8.5	15.5
2-Jun	4	3	3	3	2	3	6	8	8	6	5	8	8	7	7	7	6	5	5	6	5	5	8	6	5.5	8.0
3-Jun	5	4	4	6	5	5	7	9	10	13	18	19	17	16	18	18	21	16	20	19	16	13	11	13	12.5	20.8
4-Jun	12	15	12	10	9	11	11	9	5	11	9	11	11	14	15	18	13	14	17	19	20	18	19	20	13.5	19.7
5-Jun	16	18	17	20	16	16	16	12	14	15	13	13	19	13	13	13	15	10	11	14	10	5	5	4	13.2	19.9
6-Jun	7	5	8	9	9	8	11	13	13	13	11	15	14	18	15	18	14	11	11	9	6	6	5	5	10.5	18.2
7-Jun	6	5	2	3	2	4	4	4	3	6	5	7	5	14	14	6	5	5	7	15	8	6	3	4	5.9	14.6
8-Jun	4	2	2	2	3	1	2	4	11	11	11	10	8	12	4	14	17	6	8	9	11	6	5	5	7.1	17.1
9-Jun	8	13	19	14	13	17	21	28	23	25	27	20	19	21	26	23	16	9	16	12	17	17	14	13	18.0	28.0
10-Jun	12	11	15	16	16	15	13	14	12	13	11	10	10	7	6	7	6	4	7	5	9	4	3	2	9.6	16.5
11-Jun	3	4	3	2	2	3	4	6	5	4	5	4	5	6	6	5	6	7	7	5	5	7	8	5	4.9	7.8
12-Jun	3	3	3	3	3	3	3	3	5	10	12	12	14	14	13	12	12	16	6	5	11	6	4	4	7.5	15.6
13-Jun	7	7	7	4	3	2	4	3	4	6	7	8	7	8	7	6	13	18	7	9	4	3	5	4	6.4	18.0
14-Jun	4	4	4	3	5	4	5	5	5	8	14	19	19	18	20	18	23	24	23	22	17	15	9	7	12.3	24.0
15-Jun	7	8	3	2	3	3	4	6	8	8	7	6	5	6	7	7	7	8	10	6	5	3	2	3	5.5	9.6
16-Jun	5	4	5	1	3	4	5	9	7	7	6	7	7	9	15	17	9	7	5	8	8	10	9	6	7.2	17.0
17-Jun	5	5	5	3	2	3	2	4	5	6	5	7	7	5	6	6	5	7	5	7	10	9	9	8	5.8	10.1
18-Jun	7	7	6	3	3	4	5	5	4	4	9	15	12	11	13	13	10	10	8	7	5	5	7	4	7.3	15.4
19-Jun	3	6	4	3	3	3	3	5	4	5	6	10	11	10	12	12	13	12	9	8	10	12	13	8	7.7	13.4
20-Jun	7	7	4	5	2	4	2	3	3	5	20	22	14	12	15	20	18	14	19	20	16	11	15	15	11.5	21.8
21-Jun	15	11	8	11	10	12	9	9	21	22	22	21	20	18	16	14	14	13	11	9	6	4	4	3	12.7	22.1
22-Jun	3	2	2	3	3	2	4	3	5	8	12	11	9	8	9	8	9	6	9	9	10	8	10	9	6.7	12.0
23-Jun	6	5	2	2	4	4	6	10	10	9	10	12	12	9	9	13	12	13	14	12	10	11	12	10	9.0	13.5
24-Jun	11	10	12	10	8	3	5	6	5	6	8	10	13	13	13	19	29	24	16	9	6	5	5	4	10.4	29.2
25-Jun	6	5	7	7	6	8	9	15	18	18	19	17	14	15	14	13	13	13	12	10	9	7	9	6	11.2	19.2
26-Jun	6	5	3	4	2	5	7	8	7	8	6	10	9	10	10	6	7	8	7	6	5	7	6	5	6.5	10.1
27-Jun	4	3	4	4	2	3	3	3	4	4	6	9	10	11	10	15	23	12	9	8	6	7	9	8	7.4	23.1
28-Jun	7	5	7	8	9	7	9	11	12	11	11	9	10	9	8	9	7	7	7	10	8	7	8	8	8.4	12.0
29-Jun	7	4	7	8	10	9	11	10	8	9	13	15	15	15	7	6	6	9	12	5	6	5	5	6	8.7	15.0
30-Jun	6	8	6	6	7	4	7	11	13	14	15	14	15	12	13	10	11	9	6	5	6	4	3	3	8.7	15.5
	6.7	6.6	6.3	6.0	5.7	5.8	6.8	8.2	8.7	9.9	11.1	12.0	11.7	11.6	11.6	12.2	12.5	10.9	10.5	10.0	9.1	7.7	7.6	6.8	Diurnal Average	
	16.2	18.2	18.6	19.9	16.5	17.1	21.4	28.0	23.3	25.4	26.9	21.8	20.0	21.1	25.9	23.3	29.2	24.0	23.0	22.5	19.5	18.0	18.9	19.7	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - June 2014

Maximum Value: 95.9 deg on Jun 7 19:00

Minimum Value: 6.0 deg on Jun 22 23:00

Percentiles: P_1 = 6.7 P_{10} = 9.3 Q_1 = 13.2 Median = 20.1 Q_3 = 33.2 P_{90} = 52.4 P_{99} = 80.9

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

Day	Hourly Period Ending At (MST)																								Daily 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	12	15	17	28	28	16	10	13	19	21	26	15	53	63	22	21	27	15	16	19	16	45	20	62.7
2-Jun	17	51	24	31	33	17	13	13	17	29	49	25	44	61	50	59	87	76	51	24	41	53	50	63	86.6
3-Jun	27	33	50	34	43	16	17	14	16	19	17	14	18	22	17	20	17	16	15	13	13	12	13	8	50.4
4-Jun	9	9	13	10	10	9	10	14	20	11	13	13	13	11	15	14	19	11	10	10	10	9	8	9	19.9
5-Jun	7	8	8	6	8	7	7	12	13	12	27	15	25	31	19	19	25	13	15	13	11	17	8	12	31.5
6-Jun	9	19	33	33	22	20	17	11	12	14	22	27	17	14	17	21	19	24	23	15	55	23	18	34	55.4
7-Jun	16	24	50	31	66	26	31	29	68	47	53	51	65	30	25	71	76	77	96	19	16	24	82	24	95.9
8-Jun	18	49	17	16	31	58	59	22	23	17	21	22	82	21	65	47	16	31	13	14	15	14	18	46	82.1
9-Jun	10	10	9	10	11	11	9	8	10	12	9	12	8	9	15	25	14	19	18	10	8	11	10	8	25.0
10-Jun	8	14	7	7	8	8	12	8	11	10	12	11	15	34	37	41	60	59	33	43	13	21	33	38	59.6
11-Jun	11	8	12	38	21	17	38	19	33	48	48	61	50	76	62	85	72	39	23	28	19	7	23	12	85.3
12-Jun	17	83	46	21	46	78	28	25	28	17	14	13	16	19	20	20	41	10	33	70	20	39	93	44	92.9
13-Jun	8	14	13	16	36	54	20	47	16	14	16	24	32	26	49	76	30	17	23	13	76	50	23	38	76.2
14-Jun	15	73	61	31	36	27	23	15	21	17	20	13	16	13	13	14	8	10	11	9	9	8	28	16	72.7
15-Jun	18	22	76	80	43	23	32	23	20	26	42	55	52	49	61	41	35	53	16	52	14	33	42	57	80.3
16-Jun	28	41	33	95	31	9	26	16	41	36	47	43	60	60	21	31	25	29	42	24	10	8	24	12	94.9
17-Jun	15	19	15	55	45	57	30	15	25	42	43	50	48	64	67	40	35	45	47	27	10	8	6	7	67.3
18-Jun	7	7	11	14	35	17	23	19	49	66	39	17	21	32	30	22	32	24	30	19	9	9	10	17	65.5
19-Jun	44	9	11	22	55	53	44	21	79	41	71	29	19	20	18	17	13	15	62	33	17	50	28	33	78.7
20-Jun	41	58	24	37	58	46	72	55	93	25	18	9	11	15	14	17	23	16	14	10	10	14	7	7	93.2
21-Jun	8	9	20	8	9	9	14	21	12	11	14	18	19	15	18	23	17	16	16	16	8	17	23	29	28.6
22-Jun	23	54	29	21	24	25	21	66	32	17	18	23	32	39	39	43	37	52	28	14	8	7	6	6	66.1
23-Jun	9	10	30	30	32	17	20	14	13	18	22	18	22	33	35	32	17	15	15	9	9	8	6	10	35.5
24-Jun	7	10	6	9	20	21	25	31	23	27	19	17	21	20	16	10	19	10	40	36	40	40	12	14	40.3
25-Jun	12	28	17	14	11	10	12	9	10	11	15	13	15	18	18	20	19	13	15	11	8	7	7	22	27.5
26-Jun	22	54	21	41	49	47	24	18	21	22	37	35	43	34	66	57	53	29	37	32	22	11	13	26	66.4
27-Jun	13	54	29	23	53	32	27	32	46	78	38	28	21	22	35	22	11	41	20	20	31	15	9	17	78.4
28-Jun	19	23	16	12	13	14	15	12	14	14	22	27	24	27	36	37	40	33	24	22	18	38	44	45	44.5
29-Jun	11	25	13	9	22	20	8	11	18	20	11	13	8	8	21	23	14	36	15	45	39	24	17	13	44.7
30-Jun	13	10	21	15	21	44	15	12	10	10	11	10	9	12	12	22	28	15	24	20	16	18	40	33	44.4
	44.4	82.7	76.0	94.9	65.6	78.1	71.7	66.1	93.2	78.4	70.8	60.7	82.1	75.9	67.3	85.3	86.6	77.4	95.9	70.0	76.0	52.8	92.9	62.8	

PAZA
Evergreen Park Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 12.2 ppb on Jun 4 12:00 Maximum Daily Average: 1.4 ppb on Jun 4

Minimum Value: 0 ppb on Jun 1 02:00 Minimum Daily Average: 0.0 ppb on Jun 26
Maximum Diurnal Average: 0.6 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 22
Monthly Average: 0.18 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} = 1.4

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

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-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
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
3-Jun	0	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
4-Jun	0	1	1	1	A	1	0	0	0	0	5	12	6	1	0	0	0	0	0	0	0	0	0	0	1.4	12.2
5-Jun	0	0	0	A	1	1	3	4	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.7	4.1
6-Jun	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
7-Jun	0	A	0	0	0	0	0	1	1	1	0	C	C	C	1	1	1	1	1	0	0	0	0	0	0.4	0.9
8-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	0.2
9-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
10-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
11-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	0.5
12-Jun	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	A	0	0	0	0	0.3	1.7
13-Jun	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.9
14-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	0.1	0.5
15-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	0.1
16-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	0.3
17-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
18-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
19-Jun	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
20-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	0.1	0.4
21-Jun	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
22-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	0.4
23-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	0.4
24-Jun	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.8
25-Jun	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
26-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
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	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
29-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
30-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	0.1	0.2
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.3	0.4	0.6	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.6	0.5	1.0	1.2	1.4	1.1	2.7	4.1	3.4	0.9	4.8	12.2	5.8	0.5	1.0	0.5	0.5	0.8	0.5	0.4	0.4	0.4	0.4	0.3	Diurnal Maximum	

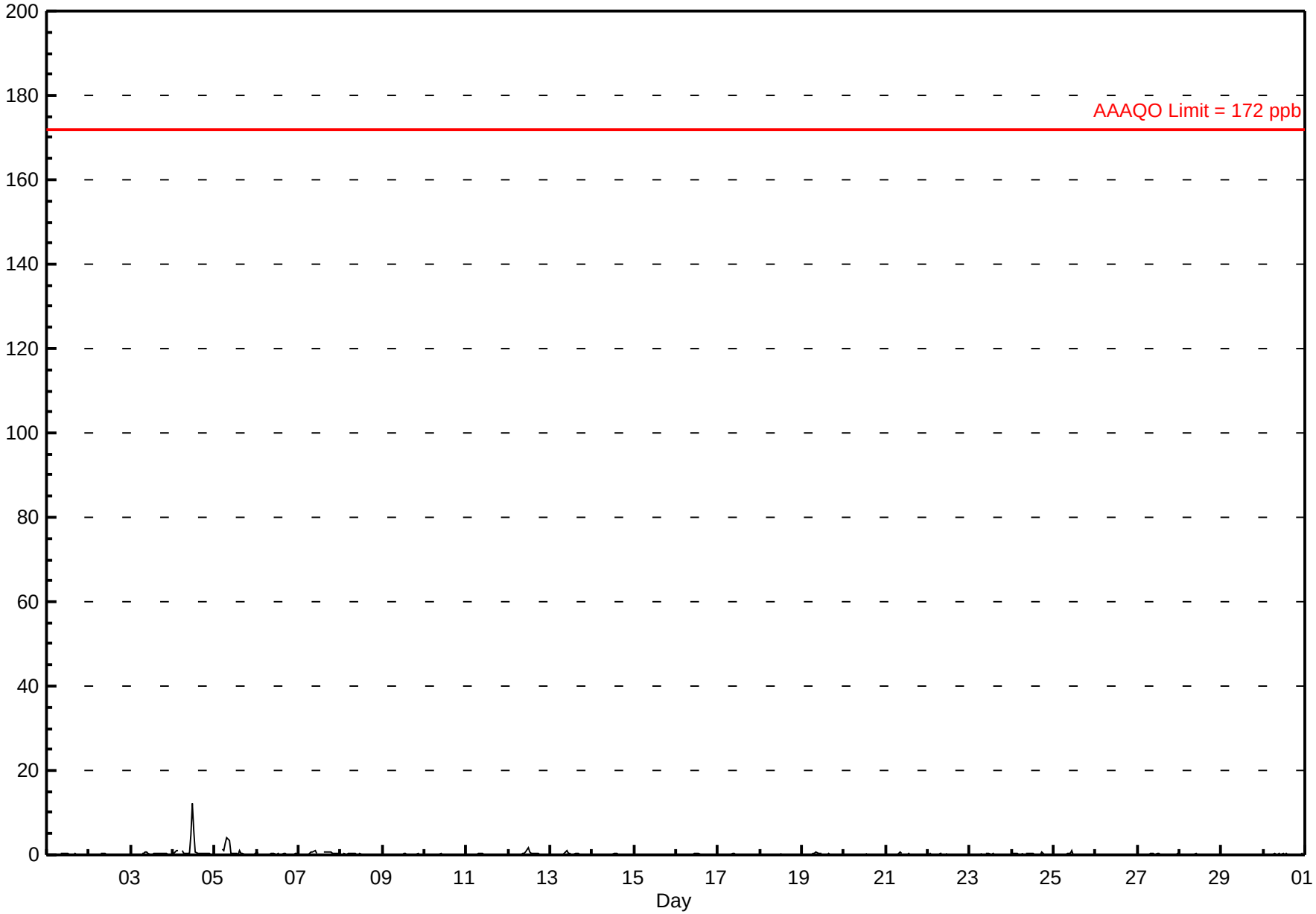
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2014

Maximum Value: 22.7 ppb on Jun 4 12:00

Maximum Daily Average: 3.4 ppb on Jun 4

Minimum Value: 0 ppb on Jun 26 05:00

Minimum Daily Average: 0.5 ppb on Jun 26

Maximum Diurnal Average: 1.7 ppb at hour 13

Minimum Diurnal Average: 0.5 ppb at hour 20

Monthly Average: 0.83 ppb

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.5$ Median = 0.6 $Q_3 = 0.7$ $P_{90} = 1.2$ $P_{99} = 4.5$

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

Day	Hourly Period Ending At (MST) 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	0	0	0	1	0	A	1	1	1	1	1	1	1	0	1	0	1	1	0	0	1	0	0.6	0.9
2-Jun	0	0	0	1	0	1	A	2	2	2	1	1	1	1	1	1	1	0	1	1	0	1	0	1	0.7	2.3
3-Jun	1	1	1	1	1	A	1	2	2	2	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.1
4-Jun	1	2	2	2	A	2	1	1	1	1	13	23	21	1	1	1	2	1	1	1	1	1	1	0	3.4	22.7
5-Jun	1	1	1	A	4	2	9	6	10	1	2	1	2	1	5	2	2	1	1	1	1	1	0	1	2.3	10.2
6-Jun	1	1	A	1	1	1	1	1	2	2	1	2	1	1	0	2	2	1	1	1	1	1	1	1	0.9	1.8
7-Jun	1	A	1	1	0	0	2	2	2	2	1	C	C	C	1	1	1	1	1	1	1	1	2	1	1.2	2.4
8-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	1	A	0.6	0.9
9-Jun	0	0	1	0	1	0	1	1	1	0	1	1	2	5	1	1	1	1	1	1	1	1	A	1	0.8	4.8
10-Jun	1	0	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	1	1	0	A	0	0	0.6	0.8
11-Jun	1	0	0	1	1	1	0	1	2	1	1	1	1	0	1	1	1	0	1	0	A	0	0	1	0.6	1.6
12-Jun	1	0	0	0	0	0	0	1	1	1	2	2	1	1	1	1	1	1	1	A	1	0	0	0	0.7	2.3
13-Jun	0	1	0	1	0	1	1	0	1	3	2	1	0	1	1	1	1	0	A	0	0	1	1	0	0.7	2.6
14-Jun	0	0	0	1	0	0	1	0	0	0	1	1	1	2	1	1	0	A	1	1	0	1	1	1	0.6	2.4
15-Jun	0	0	0	1	1	1	1	1	1	0	1	1	0	0	0	0	A	1	0	0	0	0	0	1	0.5	1.4
16-Jun	0	1	0	0	0	1	1	0	1	1	1	1	1	1	1	A	0	0	0	1	0	1	1	1	0.6	1.0
17-Jun	1	0	0	0	1	1	0	1	1	1	1	1	0	0	A	0	1	0	0	0	0	0	0	1	0.5	1.2
18-Jun	0	1	0	0	0	0	0	1	0	1	1	1	1	A	0	1	1	1	1	1	1	1	0	0	0.6	1.2
19-Jun	0	1	0	1	0	0	1	1	1	1	1	1	A	1	1	1	1	1	0	0	1	0	1	0	0.6	1.1
20-Jun	1	0	1	1	0	1	0	1	1	1	1	A	4	1	1	1	1	1	0	1	0	1	1	1	0.8	4.2
21-Jun	0	1	0	0	0	0	1	2	3	2	A	1	1	2	2	0	0	1	0	0	0	0	1	1	0.9	3.0
22-Jun	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	0	1	0	0	0	0	1	0	0.6	1.2
23-Jun	1	0	1	1	1	1	0	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.8
24-Jun	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0	4	3	0	0	1	1	1	1.0	4.1
25-Jun	0	0	1	1	0	1	A	0	1	2	3	0	0	1	0	1	1	1	1	0	1	1	1	1	0.7	2.9
26-Jun	0	1	1	0	0	A	0	0	0	1	0	1	1	0	0	1	0	0	0	1	0	0	1	0	0.5	0.9
27-Jun	1	0	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.6	0.8
28-Jun	1	1	0	A	0	1	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	1	0	1	0.6	1.3
29-Jun	0	1	A	0	0	0	1	1	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0.5	0.7
30-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0.6	1.1
	0.6	0.6	0.6	0.6	0.6	0.7	1.0	1.0	1.3	1.1	1.3	1.6	1.7	0.9	0.8	0.7	0.7	0.7	0.7	0.5	0.5	0.6	0.7	0.6	Diurnal Average	
	1.4	1.7	1.5	1.8	4.1	2.4	9.0	5.5	10.2	2.6	12.7	22.7	21.4	4.8	4.7	1.8	1.8	4.1	2.8	1.1	0.9	1.1	2.4	0.8	Diurnal Maximum	

C - Calibration

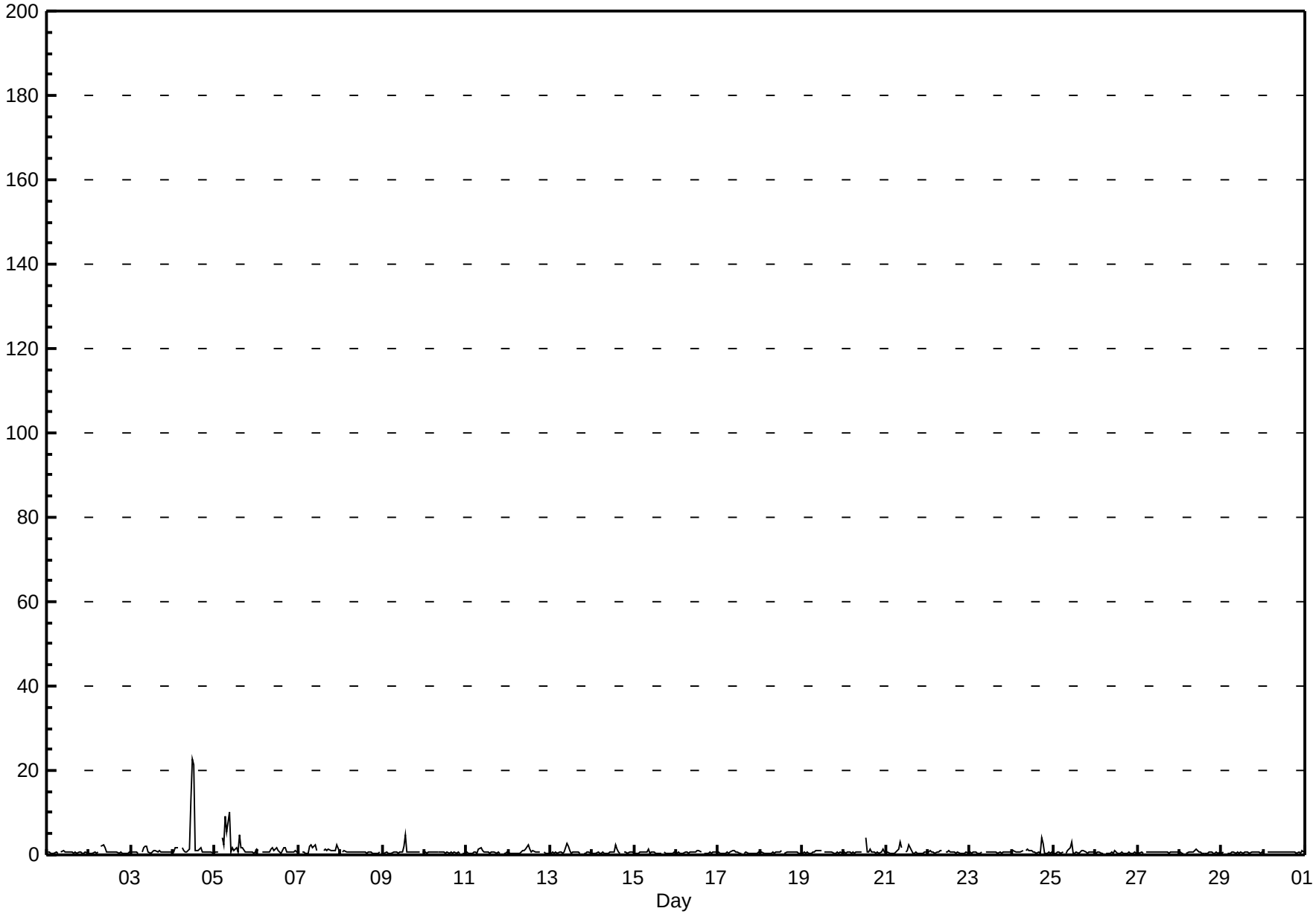
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

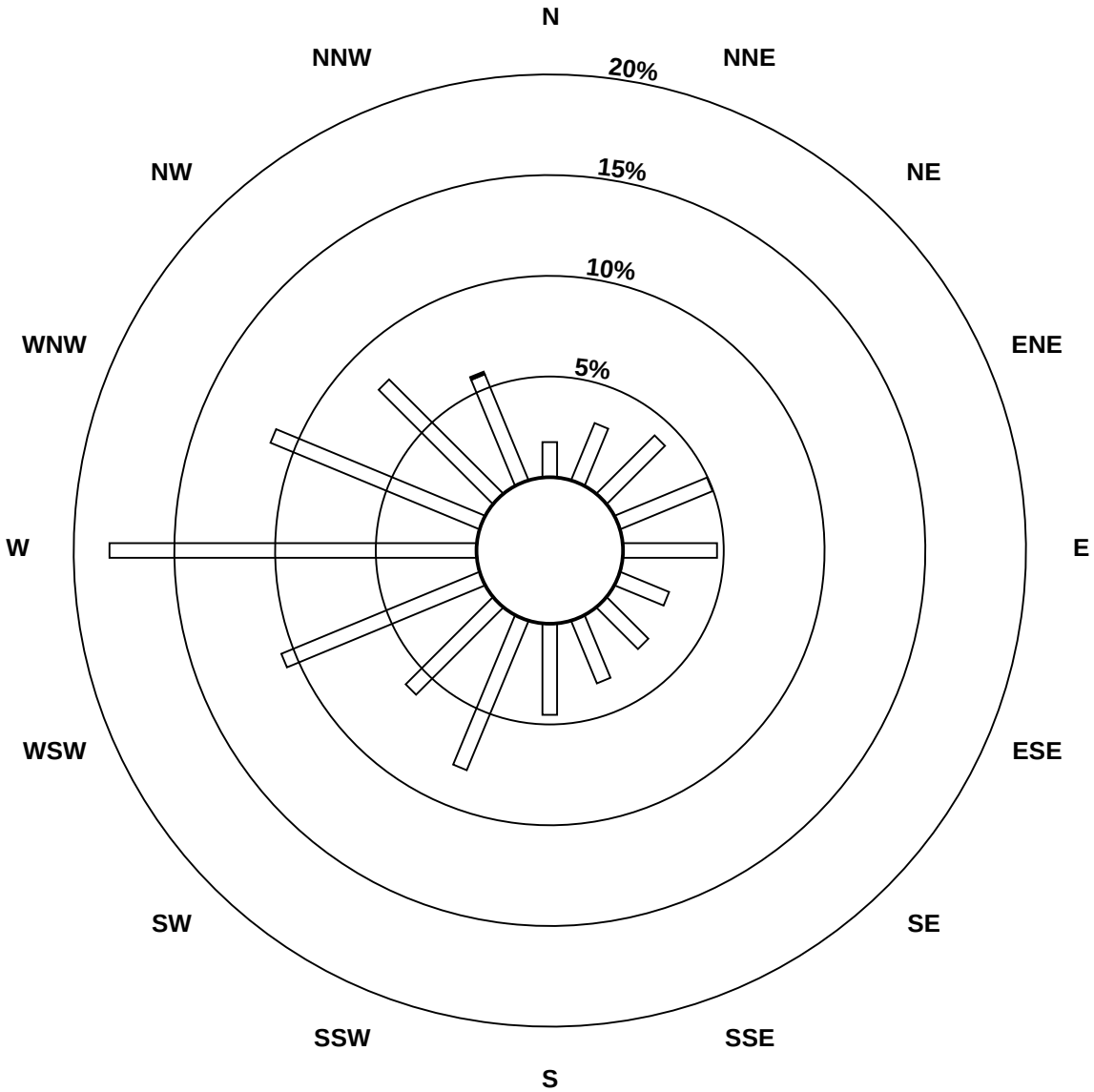
Evergreen Park - June 2014



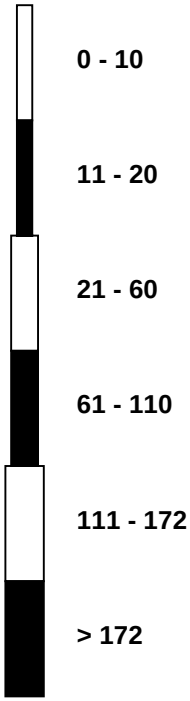
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Evergreen Park - June 2014



Pollutant Classes (ppb)

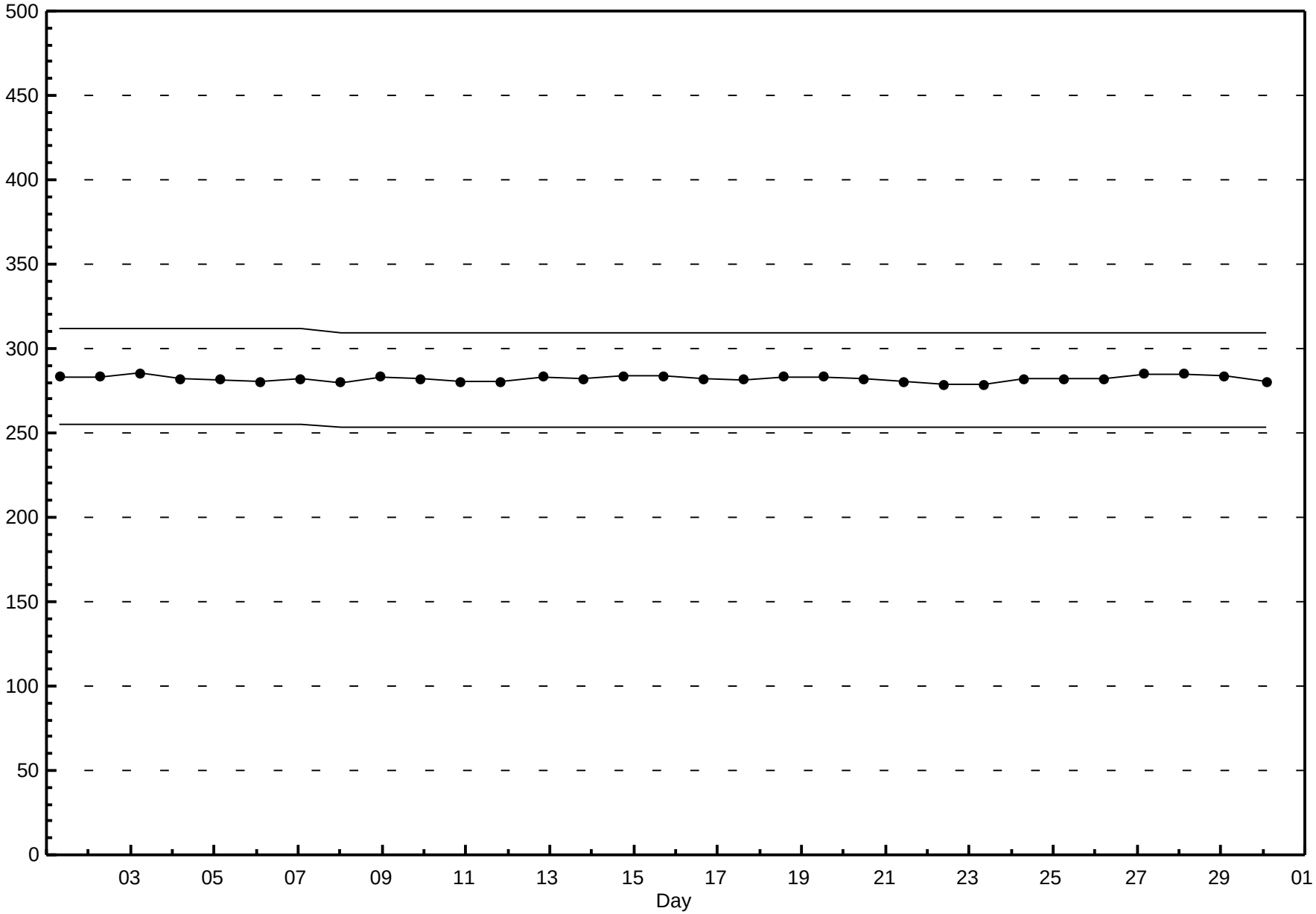


Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Evergreen Park - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.0 ppb on Jun 14 02:00 Maximum Daily Average: 0.5 ppb on Jun 13

Minimum Value: 0 ppb on Jun 2 14:00 Minimum Daily Average: 0.1 ppb on Jun 2
Maximum Diurnal Average: 0.4 ppb at hour 7 Minimum Diurnal Average: 0.2 ppb at hour 15
Monthly Average: 0.30 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 0.9$

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) 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	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
3-Jun	0	0	1	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.9
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	0.3	0.4
5-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	0.2	0.5
6-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
7-Jun	0	A	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
8-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	A	0.4	0.6
9-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	0.2	0.3
10-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	0.3	0.4
11-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	0.4
12-Jun	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.6
13-Jun	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	A	1	1	1	0	0	0.5	1.4
14-Jun	0	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.5	2.0
15-Jun	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	0	0	0.3	0.7
16-Jun	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0.4	0.8
17-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
18-Jun	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0.2	1.2
19-Jun	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
20-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	0.5
21-Jun	0	1	0	0	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.7
22-Jun	1	1	1	1	1	0	0	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
23-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	0.2	0.4
24-Jun	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.3	0.6
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0.4	0.5
26-Jun	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
27-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	0.8
28-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
29-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	0.3	0.4
30-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	0.3
	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	0.7	2.0	1.3	0.8	0.9	0.9	0.9	0.7	0.7	1.2	0.6	0.4	0.5	0.5	0.6	0.6	0.6	1.0	0.4	1.3	1.4	0.7	0.5	0.6	Diurnal Maximum	

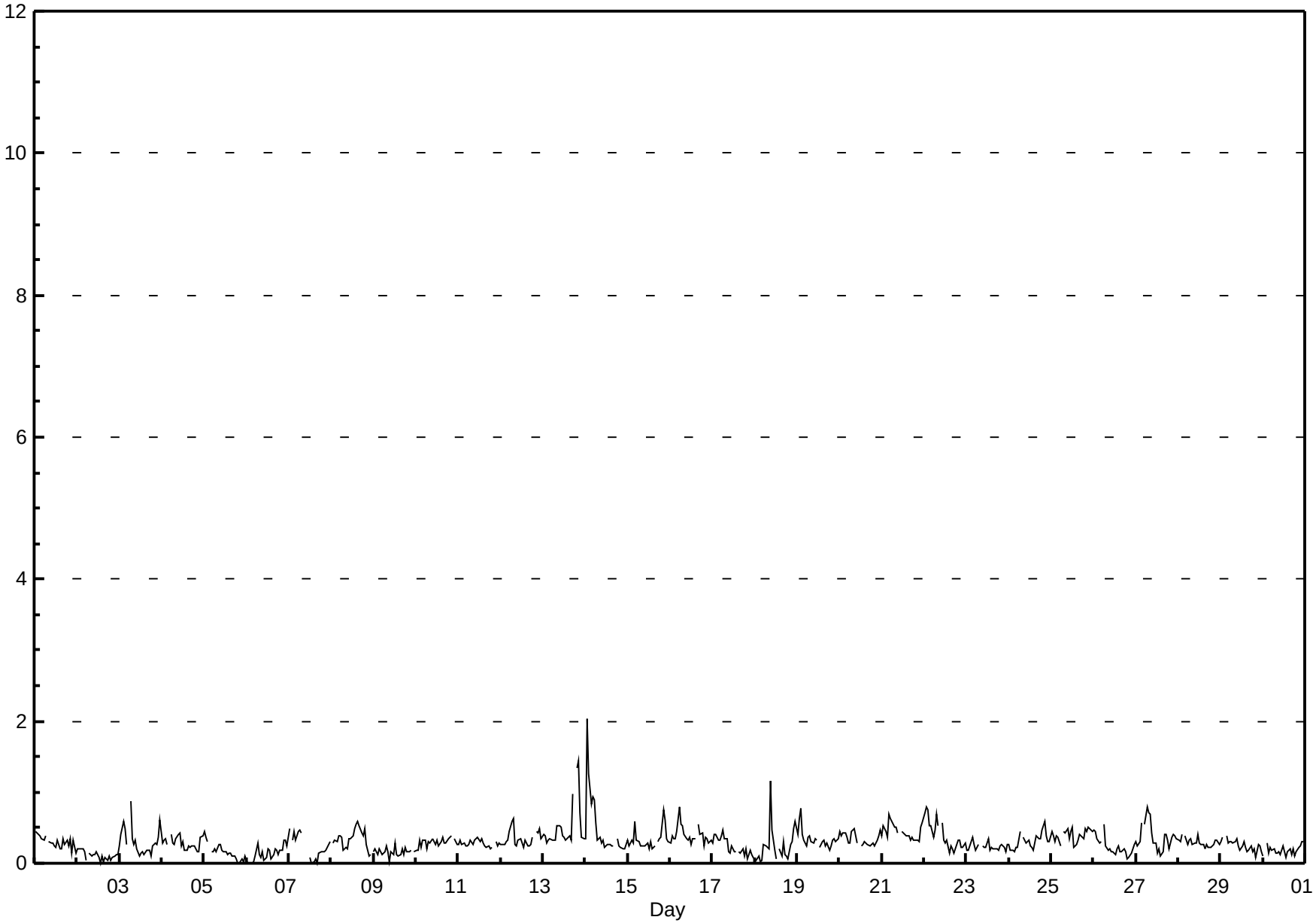
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2014

Maximum Value: 4.3 ppb on Jun 14 02:00

Maximum Daily Average: 1.4 ppb on Jun 13

Minimum Value: 1 ppb on Jun 7 14:00

Minimum Daily Average: 0.9 ppb on Jun 9

Maximum Diurnal Average: 1.3 ppb at hour 7

Minimum Diurnal Average: 1.0 ppb at hour 14

Monthly Average: 1.10 ppb

Percentiles: $P_1 = 0.7$ $P_{10} = 0.8$ $Q_1 = 0.9$ Median = 1.1 $Q_3 = 1.2$ $P_{90} = 1.4$ $P_{99} = 2.0$

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) 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	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4
2-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
3-Jun	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.2	2.2
4-Jun	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.1	1.5
5-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	1.0	1.3
6-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	1.5
7-Jun	2	A	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8
8-Jun	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	A	1.2	1.6
9-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	0.9	1.2
10-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	1.1	1.4
11-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	1.0	1.3
12-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	1.1	1.5
13-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	A	4	2	2	1	1	1.4	3.8
14-Jun	1	4	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.3	4.3
15-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	1.2	2.0
16-Jun	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	1.9
17-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	1.1	1.4
18-Jun	1	1	1	1	1	1	1	1	1	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1.1	2.2
19-Jun	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6
20-Jun	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6
21-Jun	1	1	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6
22-Jun	1	2	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6
23-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	1.1	1.3
24-Jun	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1.1	1.5
25-Jun	1	1	1	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1.2	2.0
26-Jun	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7
27-Jun	1	1	1	1	A	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1.2	1.7
28-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	1.1	1.4
29-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	1.0	1.5
30-Jun	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6
	1.1	1.2	1.2	1.1	1.1	1.2	1.3	1.1	1.1	1.1	1.2	1.0	1.0	1.0	1.1	1.0	1.1	1.0	1.0	1.1	1.1	1.0	1.1	1.1	Diurnal Average	
	1.8	4.3	2.3	1.6	1.6	1.9	2.2	1.6	1.5	2.2	1.6	1.3	2.0	1.3	1.6	1.3	1.6	1.9	1.4	3.8	2.2	1.8	1.5	1.8	Diurnal Maximum	

C - Calibration

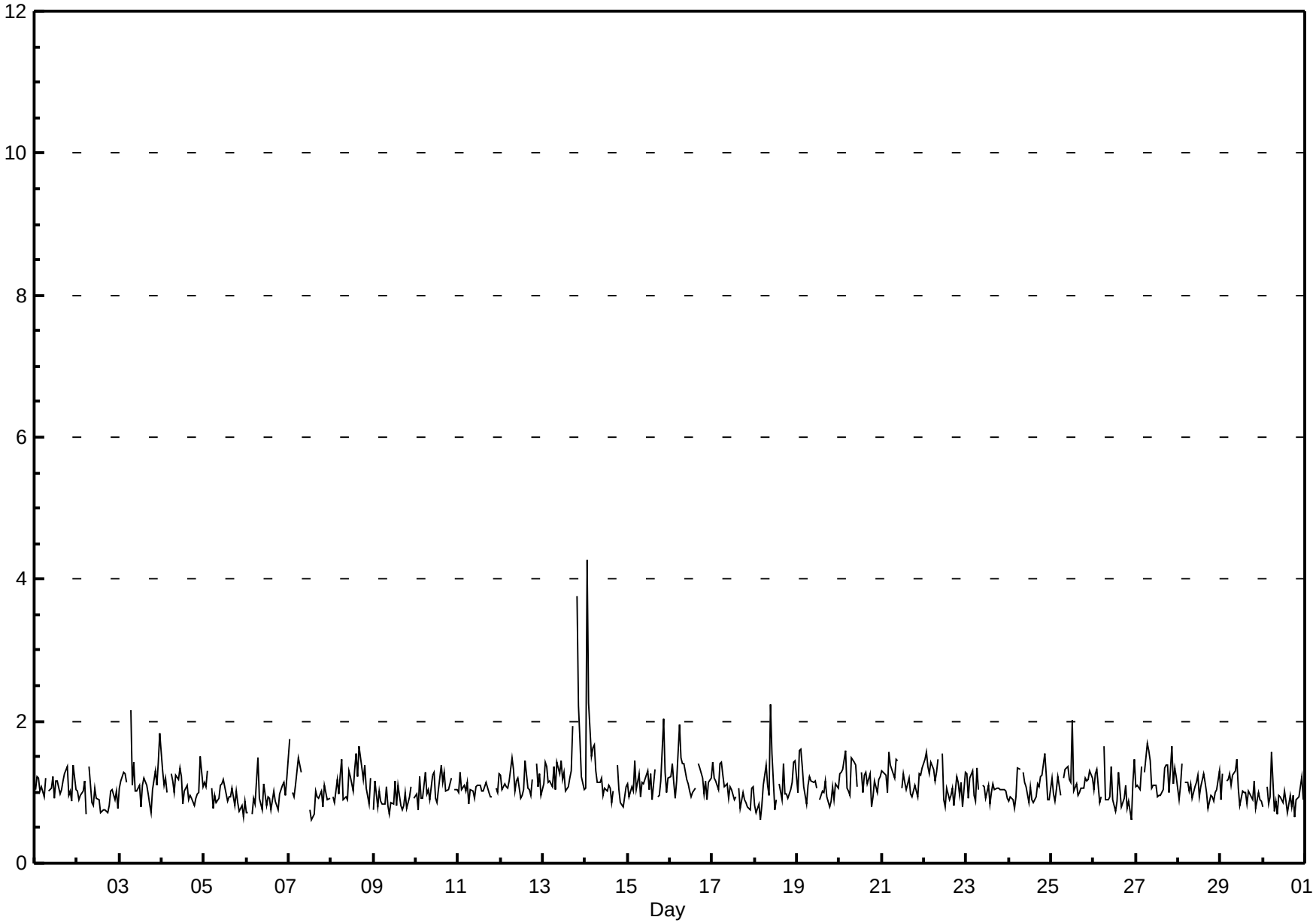
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

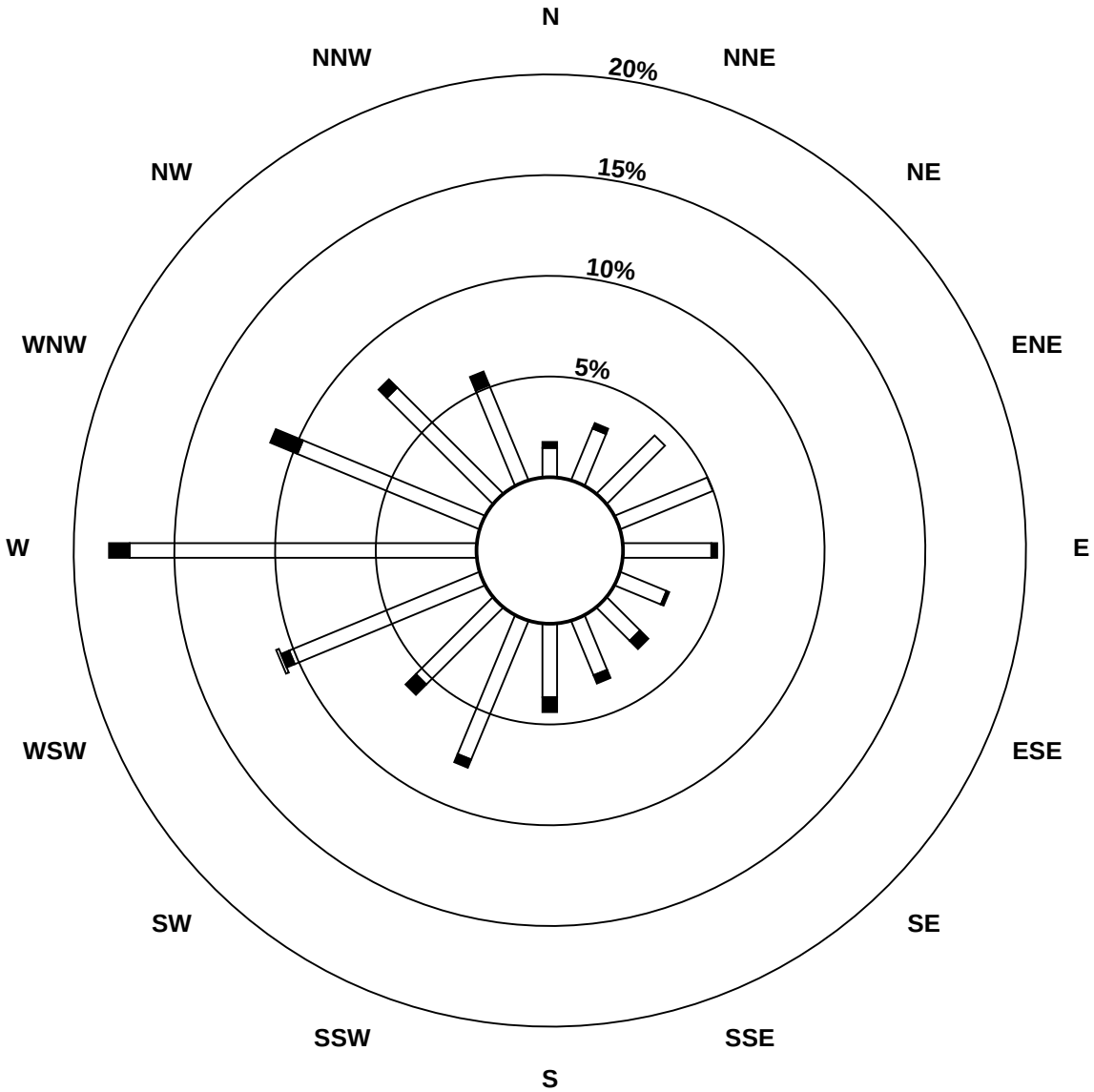
Evergreen Park - June 2014



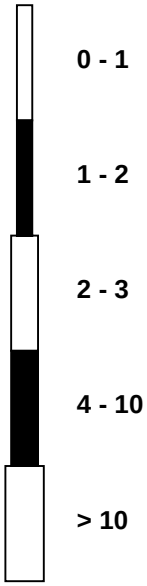
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - June 2014



Pollutant Classes (ppb)

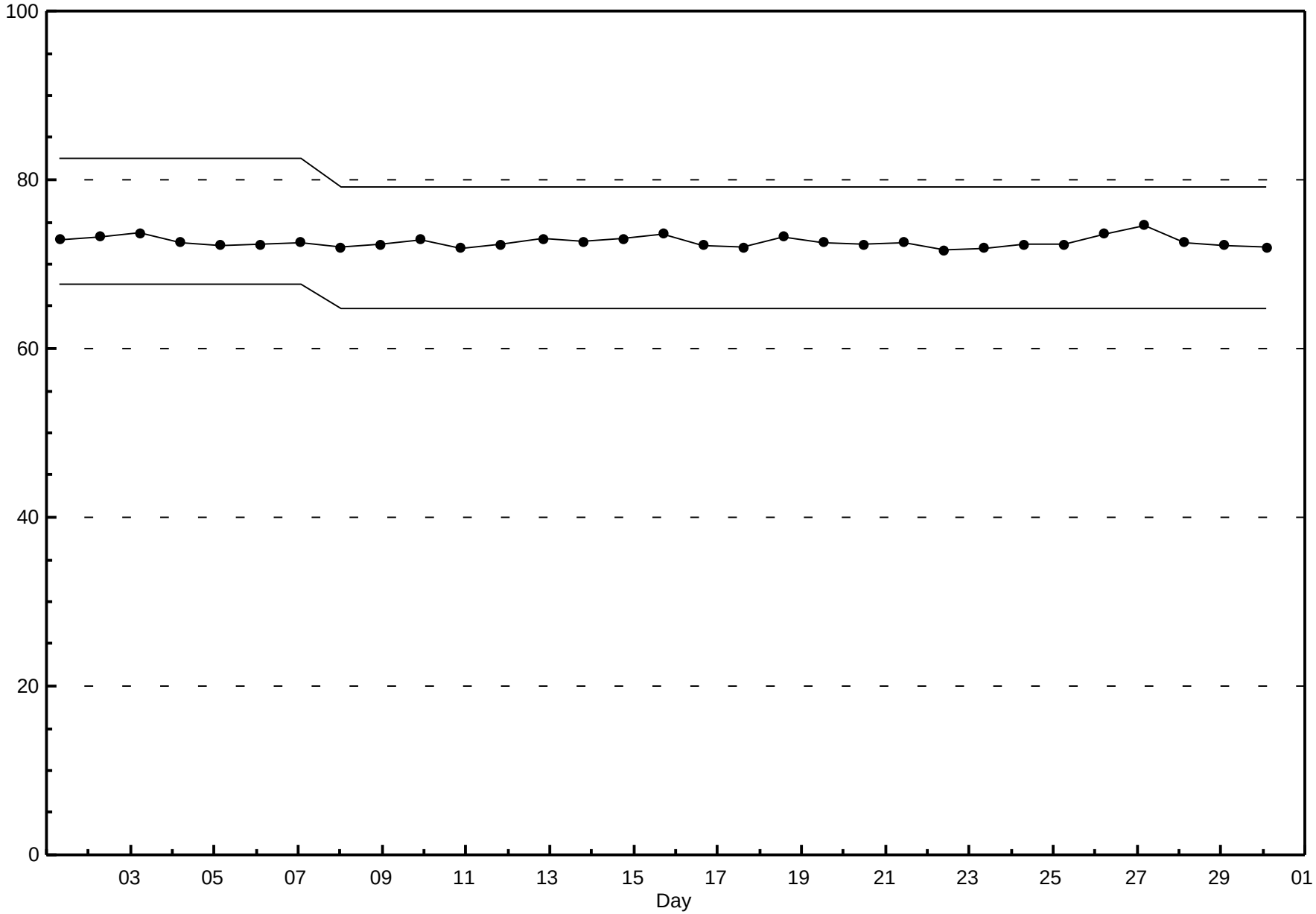


Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Evergreen Park - June 2014



Peace Airshed Zone Association

Hourly Averages

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

Evergreen Park - June 2014

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 40.4 $\mu g/m^3$ on Jun 24 17:00

Maximum Daily Average: 9.8 $\mu g/m^3$ on Jun 24

Minimum Value: 0 $\mu g/m^3$ on Jun 2 12:00

Maximum Diurnal Average: 6.2 $\mu g/m^3$ at hour 9

Monthly Average: 3.90 $\mu g/m^3$

Minimum Daily Average: 0.4 $\mu g/m^3$ on Jun 4

Minimum Diurnal Average: 2.5 $\mu g/m^3$ at hour 14

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 1.2$ Median = 2.9 $Q_3 = 5.2$ $P_{90} = 8.2$ $P_{99} = 20.4$

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

Day	Hourly Period Ending At (MST) 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	4	6	5	4	8	8	7	3	3	3	3	2	1	1	2	6	12	1	3	1	6	5	7	4	4.5	12.0
2-Jun	5	3	4	4	5	7	17	5	6	7	1	0	1	0	0	2	3	3	4	5	15	21	8	6	5.4	20.6
3-Jun	1	7	7	4	3	6	16	12	15	12	0	20	6	8	9	12	21	15	15	7	4	3	1	1	8.5	20.6
4-Jun	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	0	2	0	0	1	1	1	0	0	0.4	1.8
5-Jun	0	0	0	0	0	1	2	2	3	1	2	1	7	1	9	1	1	2	0	1	4	5	3	3	1.9	8.6
6-Jun	2	2	1	0	1	3	4	5	9	7	3	6	6	5	9	11	13	6	8	3	2	5	3	3	4.9	13.4
7-Jun	3	1	1	3	2	8	8	12	3	3	1	3	M	M	15	7	7	5	5	8	4	6	9	5	5.3	15.0
8-Jun	6	6	7	6	6	7	9	6	4	2	0	1	3	2	4	1	0	0	0	2	0	1	2	0	3.1	9.2
9-Jun	0	0	0	0	0	0	0	1	2	3	3	7	3	5	0	0	2	0	1	1	0	0	0	0	1.2	7.3
10-Jun	0	1	1	1	1	1	1	1	3	4	4	4	4	3	3	2	1	2	4	3	2	3	2	2	2.2	3.9
11-Jun	3	3	2	2	3	4	8	11	9	6	0	0	0	0	0	1	1	2	3	4	4	5	4	5	3.3	11.0
12-Jun	4	4	3	4	4	6	7	6	4	3	4	4	0	0	0	1	5	3	2	4	4	4	5	4	3.6	7.1
13-Jun	2	1	2	2	4	5	5	4	11	22	3	4	3	1	2	1	4	6	3	4	7	5	4	4	4.6	21.8
14-Jun	4	7	4	3	4	3	3	6	6	4	3	1	1	5	1	2	2	2	0	0	1	2	2	2	2.9	7.1
15-Jun	2	2	2	2	5	4	3	2	1	0	0	0	0	0	0	0	0	3	5	1	2	3	2	2	1.7	5.1
16-Jun	2	3	2	2	2	4	4	2	2	1	3	2	5	4	2	7	2	2	3	2	3	3	3	1	2.8	7.2
17-Jun	1	1	1	2	2	4	5	5	8	4	0	1	3	2	2	3	2	1	2	3	2	2	2	1	2.5	7.9
18-Jun	0	0	1	1	3	6	7	5	5	7	7	1	3	5	10	7	9	5	4	5	9	12	15	5	5.6	15.5
19-Jun	6	5	4	3	4	4	8	9	6	7	5	4	1	3	3	5	14	7	7	10	8	5	6	6	5.9	13.9
20-Jun	6	3	5	3	5	7	8	9	7	5	0	0	3	N	N	0	0	0	1	1	1	1	1	1	3.0	8.5
21-Jun	1	1	5	2	1	1	4	7	10	2	3	4	4	10	3	1	1	1	3	3	5	10	18	12	4.6	18.4
22-Jun	13	21	16	14	11	10	6	11	6	4	1	0	0	0	0	2	2	1	2	2	3	4	3	3	5.7	20.5
23-Jun	3	3	3	3	3	2	2	3	10	6	4	4	4	3	4	5	3	5	4	5	8	16	10	5	4.9	15.7
24-Jun	5	6	6	6	7	9	12	16	23	23	19	12	9	5	4	7	40	23	1	0	0	0	0	0	9.8	40.4
25-Jun	2	1	1	0	0	0	1	0	5	4	7	0	0	1	4	5	7	6	2	1	3	5	4	3	2.6	7.2
26-Jun	5	4	1	1	2	4	5	8	4	7	2	3	5	1	1	1	2	2	2	3	5	13	11	6	4.1	12.8
27-Jun	3	5	4	3	4	7	17	21	13	5	4	3	2	0	3	5	12	6	4	2	4	4	2	4	5.7	20.9
28-Jun	2	2	2	1	2	3	2	2	2	1	1	0	0	0	0	0	0	0	1	2	0	3	6	4	1.5	6.4
29-Jun	4	6	2	N	0	1	1	2	2	3	3	3	1	2	2	1	1	2	0	0	3	1	1	2	1.9	5.8
30-Jun	1	0	1	0	0	4	2	3	4	10	6	7	0	3	2	0	1	0	1	1	4	7	12	6	3.1	11.6
	3.1	3.5	3.1	2.7	3.0	4.3	5.8	5.9	6.2	5.5	3.1	3.3	2.6	2.5	3.2	3.3	5.7	3.8	3.1	2.8	3.8	5.1	4.8	3.3	Diurnal Average	
	12.8	20.5	16.0	14.0	10.8	9.6	17.1	20.9	22.5	23.1	18.5	19.7	8.8	10.3	15.0	12.5	40.4	23.2	15.2	10.0	14.6	20.6	18.4	12.1	Diurnal Maximum	

M - Maintenance N - Not Valid

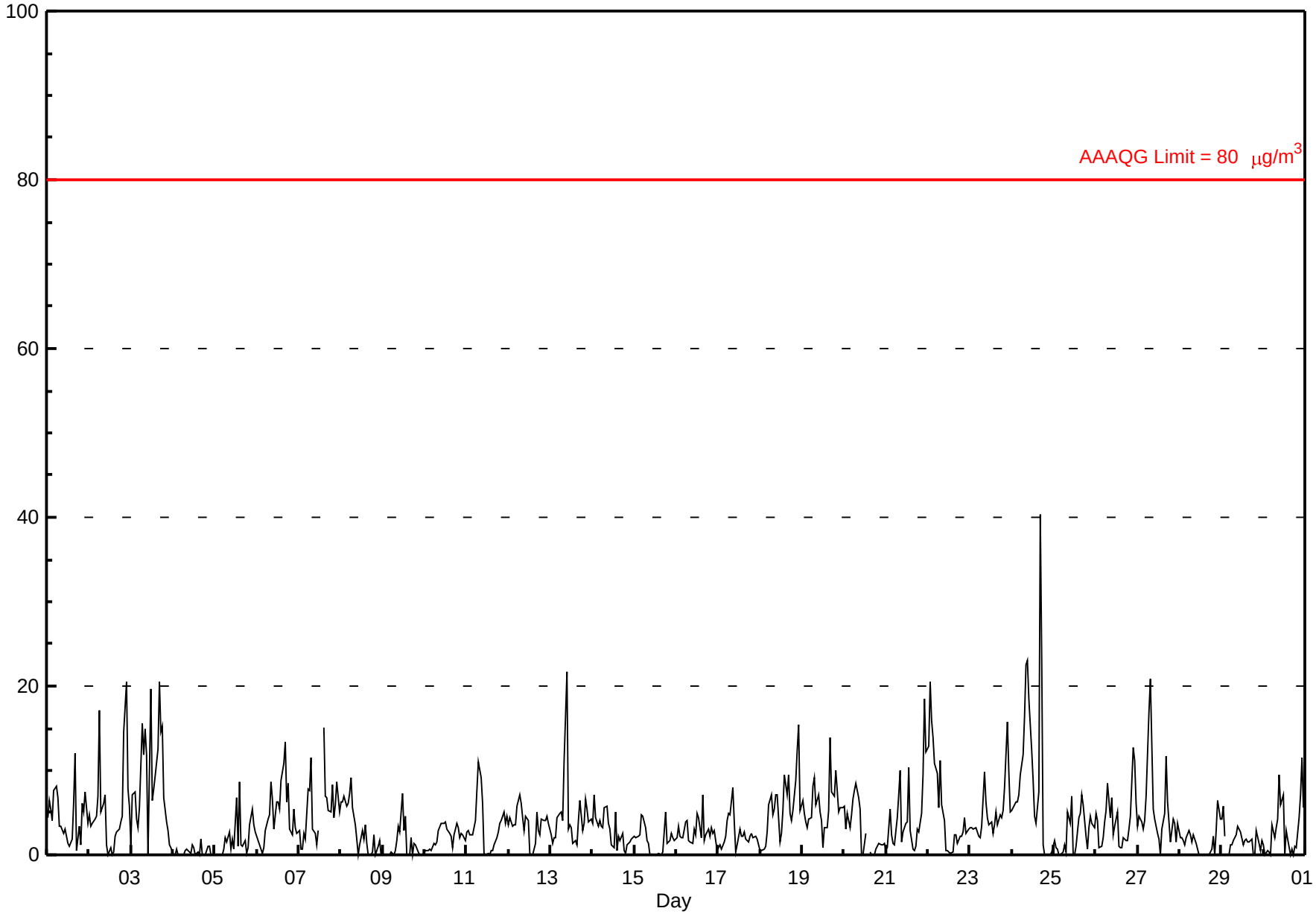
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Evergreen Park - June 2014



Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - June 2014

Maximum Value: 77.5 $\mu g/m^3$ on Jun 24 17:00

Maximum Daily Average: 18.8 $\mu g/m^3$ on Jun 24

Minimum Value: 0 $\mu g/m^3$ on Jun 4 06:00

Maximum Diurnal Average: 13.2 $\mu g/m^3$ at hour 17

Monthly Average: 8.77 $\mu g/m^3$

Minimum Daily Average: 2.6 $\mu g/m^3$ on Jun 4

Minimum Diurnal Average: 4.6 $\mu g/m^3$ at hour 4

Percentiles: P_1 = 0.0 P_{10} = 2.4 Q_1 = 4.1 Median = 6.8 Q_3 = 10.7 P_{90} = 17.6 P_{99} = 39.0

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) 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	9	8	7	7	10	14	16	6	7	6	7	7	6	5	9	29	29	8	12	5	11	10	14	7	10.4	28.9
2-Jun	8	5	7	10	7	16	25	12	16	18	6	4	8	7	7	14	9	8	15	11	48	44	24	16	14.4	48.2
3-Jun	12	15	13	11	12	10	30	21	23	18	39	65	12	20	25	17	28	20	18	13	7	5	6	3	18.5	64.6
4-Jun	1	2	4	2	1	0	1	3	4	4	2	3	4	1	3	7	6	2	3	3	3	4	1	0	2.6	7.2
5-Jun	0	0	0	1	1	2	5	5	6	3	6	8	28	17	24	10	5	7	5	7	7	8	6	4	6.9	28.2
6-Jun	4	4	2	2	2	8	14	9	16	15	10	27	22	11	18	22	28	14	20	7	5	8	7	5	11.7	28.2
7-Jun	5	2	2	5	5	10	24	29	9	6	7	8	M	M	23	10	14	9	7	16	7	10	15	9	10.6	29.2
8-Jun	8	8	10	7	7	9	11	10	7	4	2	4	11	10	18	10	2	0	2	5	2	2	5	2	6.6	18.4
9-Jun	1	2	0	0	1	2	1	2	7	9	7	12	8	14	1	1	7	1	6	6	1	2	1	1	3.9	14.1
10-Jun	3	2	2	2	2	4	2	3	4	5	5	5	6	5	5	4	3	5	6	6	4	6	5	4	4.0	6.0
11-Jun	6	6	4	3	5	9	11	16	21	26	2	3	4	4	4	3	3	6	5	8	6	7	6	7	7.2	25.5
12-Jun	6	8	6	6	6	7	9	8	7	6	7	7	5	3	3	4	12	6	7	9	8	7	7	6	6.6	12.2
13-Jun	4	3	4	5	6	7	7	7	20	34	15	9	5	4	6	4	9	10	7	7	8	7	7	6	8.4	33.8
14-Jun	6	10	7	6	7	5	6	8	11	6	7	4	4	16	7	8	11	5	2	3	4	3	4	3	6.4	15.5
15-Jun	6	6	4	5	9	6	6	3	5	0	1	0	5	1	3	3	4	9	8	3	3	4	4	4	4.3	8.9
16-Jun	3	5	4	4	4	6	7	4	5	4	6	8	11	14	12	17	6	7	7	8	7	4	7	2	6.7	17.2
17-Jun	2	4	3	3	5	6	7	9	13	15	4	4	7	6	5	8	6	6	4	5	4	3	3	2	5.6	15.3
18-Jun	2	2	3	2	4	9	8	8	9	9	10	12	11	13	13	13	15	11	8	10	15	17	21	8	9.7	20.6
19-Jun	9	11	5	5	6	8	14	18	10	13	8	12	7	6	6	9	37	14	16	14	11	14	10	8	11.3	37.0
20-Jun	13	5	6	6	7	9	10	12	9	12	10	18	20	1	0	12	3	3	4	4	4	4	3	3	7.4	19.9
21-Jun	3	3	10	4	4	4	10	16	24	12	5	7	13	22	12	4	3	7	6	7	8	19	29	22	10.5	29.2
22-Jun	16	26	18	16	13	12	12	18	16	9	5	3	4	4	5	6	7	5	6	6	5	7	7	5	9.6	25.5
23-Jun	6	6	6	6	4	5	6	6	16	11	8	10	11	9	8	14	7	9	8	9	25	38	13	9	10.4	38.0
24-Jun	7	7	8	7	10	12	21	22	30	39	31	27	19	12	9	24	77	59	23	0	3	2	2	2	18.8	77.5
25-Jun	3	2	3	2	0	2	9	3	12	14	24	12	6	7	10	10	20	22	6	6	6	7	6	14	8.7	24.3
26-Jun	18	8	2	2	4	10	11	11	9	11	6	9	16	7	4	8	9	8	6	8	8	39	17	12	10.2	39.4
27-Jun	7	7	6	6	5	9	31	29	22	10	8	8	9	5	12	17	17	15	14	7	12	8	4	5	11.4	31.1
28-Jun	4	5	4	3	5	5	4	6	5	5	7	6	4	4	5	4	7	4	5	19	2	7	12	6	5.7	18.9
29-Jun	6	7	5	0	6	6	3	5	13	7	5	6	4	4	6	6	4	6	2	10	9	6	3	4	5.5	12.6
30-Jun	5	2	3	2	4	13	8	6	9	18	12	12	11	9	8	7	7	3	9	5	10	24	21	15	9.3	24.0
	6.0	6.0	5.2	4.6	5.4	7.5	10.9	10.5	12.2	11.6	9.1	10.6	9.7	8.4	9.1	10.2	13.2	9.7	8.2	7.6	8.5	11.0	8.9	6.4	Diurnal Average	
	18.2	25.5	18.2	15.8	12.9	15.7	31.1	29.4	29.9	39.2	39.0	64.6	28.2	22.3	25.0	28.7	77.5	58.6	23.5	18.9	48.2	44.1	29.2	21.6	Diurnal Maximum	

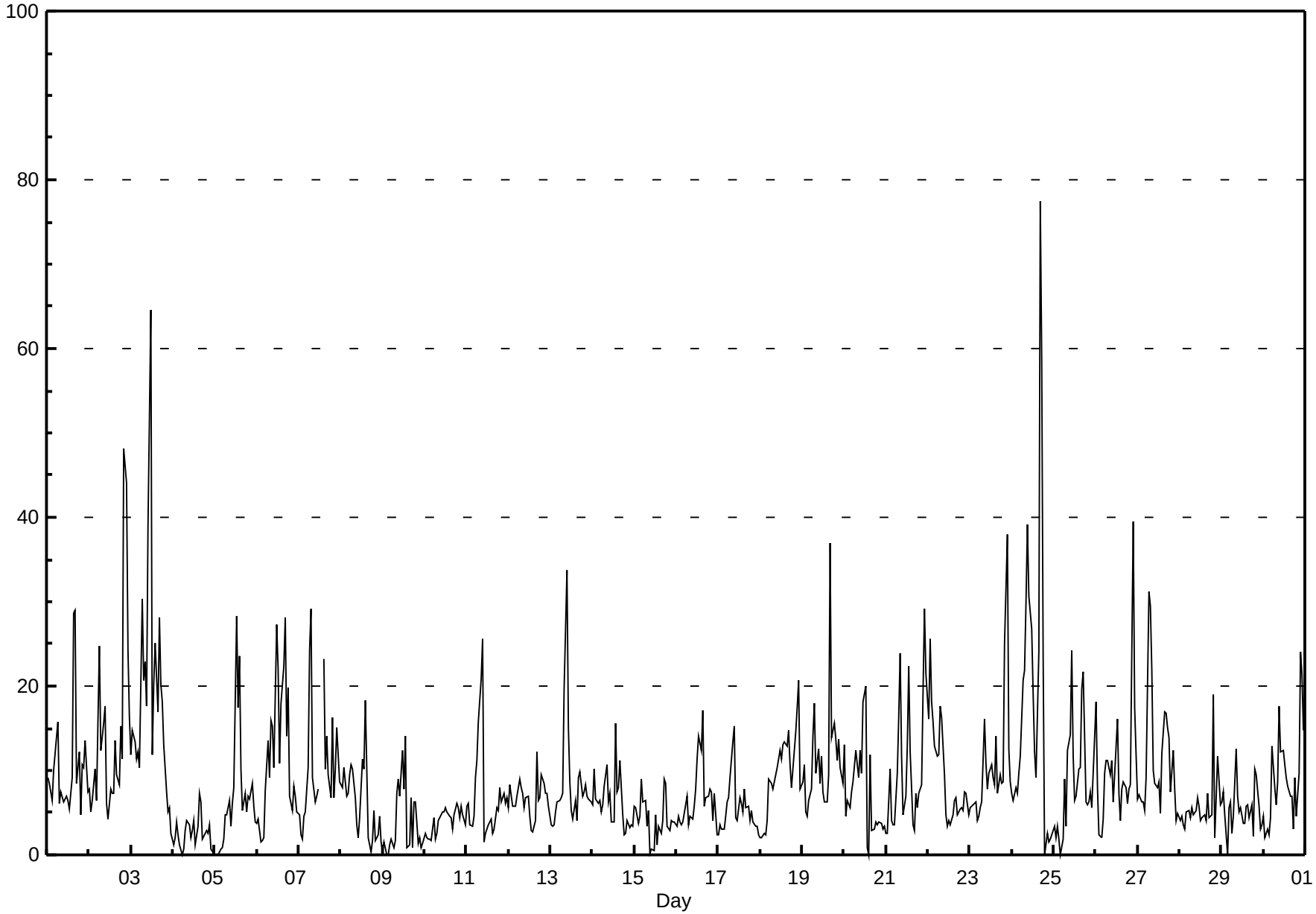
M - Maintenance

Peace Airshed Zone Association

Hourly Maximums

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

Evergreen Park - June 2014

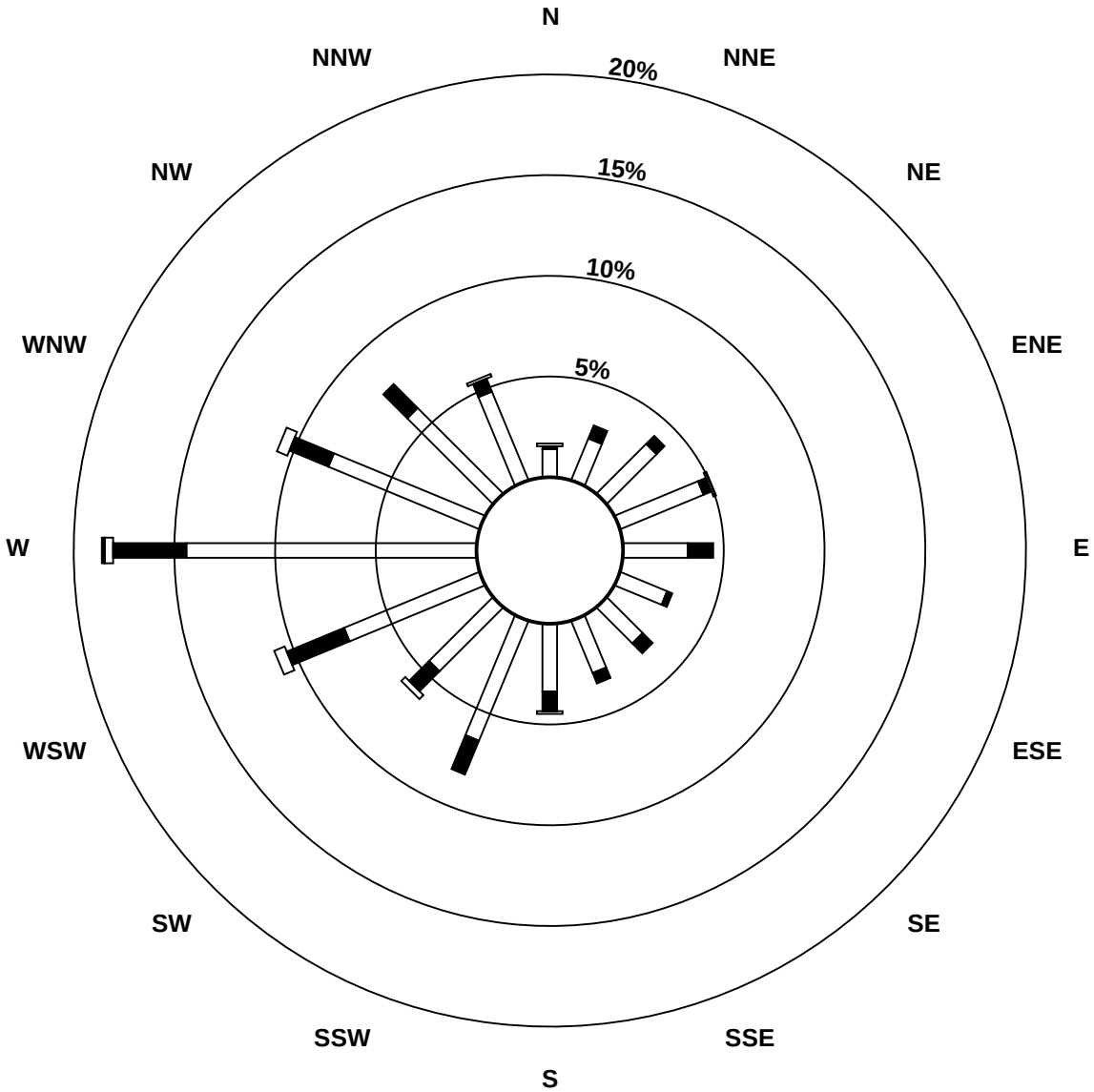


Peace Airshed Zone Association

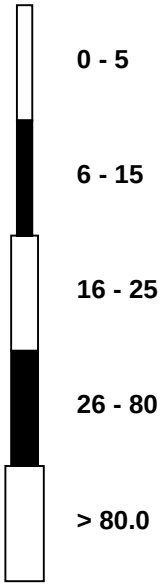
Pollutant Rose

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

Evergreen Park - June 2014



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



Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - June 2014

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

Maximum Value: 26.9 ^{o}C on Jun 23 17:00

Maximum Daily Average: 19.9 ^{o}C on Jun 23

Minimum Value: 0 ^{o}C on Jun 6 05:00

Minimum Daily Average: 5.9 ^{o}C on Jun 4

Maximum Diurnal Average: 19.5 ^{o}C at hour 16

Minimum Diurnal Average: 8.7 ^{o}C at hour 5

Monthly Average: 14.63 ^{o}C

Percentiles: P_1 = 3.3 P_{10} = 7.6 Q_1 = 10.5 Median = 14.7 Q_3 = 18.6 P_{90} = 22.2 P_{99} = 26.0

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

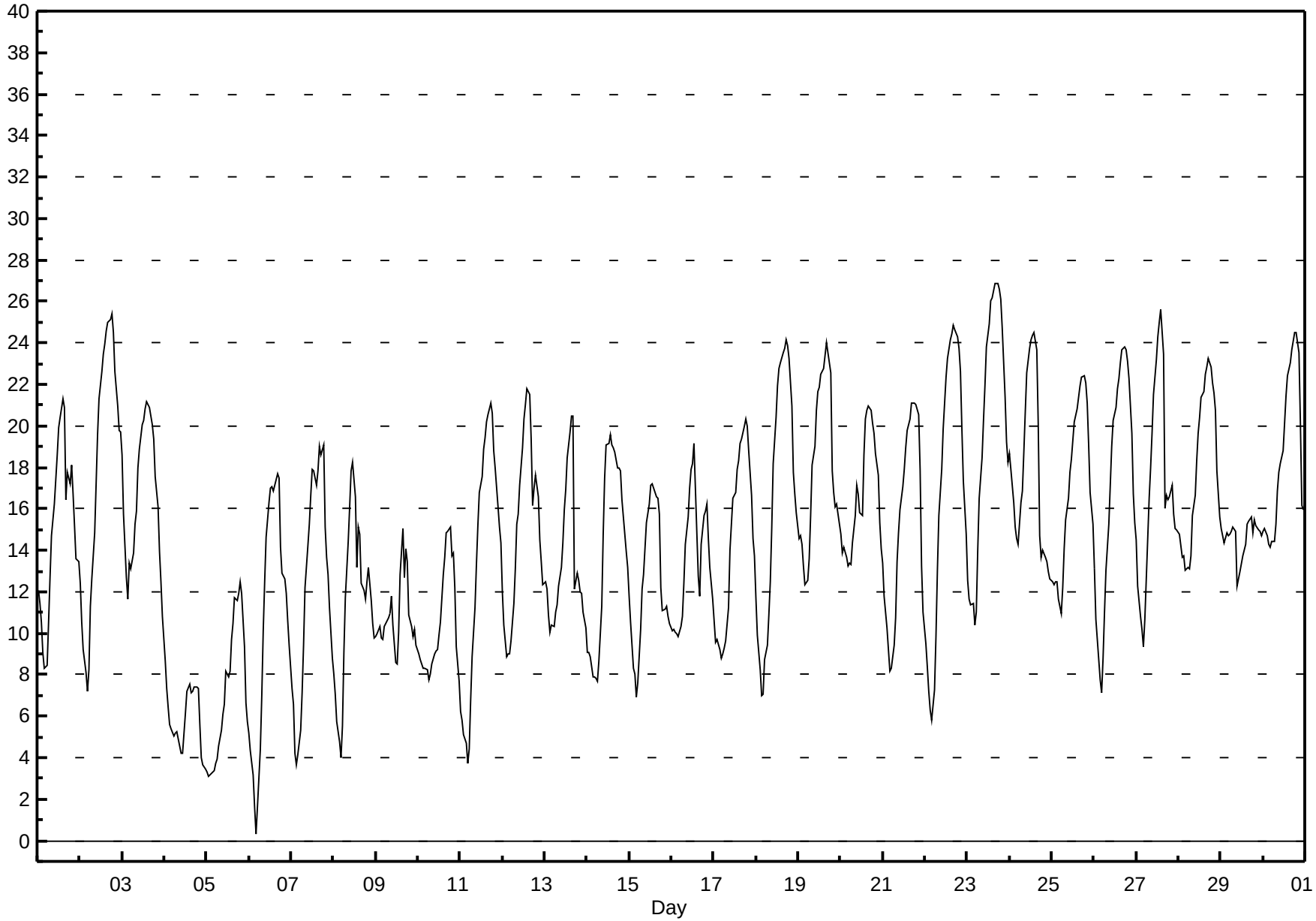
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	12	11	11	9	8	8	11	13	15	16	17	19	20	20	21	21	16	18	17	18	17	15	14	13	15.0	21.3
2-Jun	12	11	9	8	7	8	11	13	15	17	20	21	23	23	24	25	25	25	25	25	23	21	20	20	17.9	25.4
3-Jun	19	16	13	12	13	13	14	15	16	18	19	20	20	21	21	21	20	20	19	18	16	14	12	11	16.7	21.2
4-Jun	9	7	6	6	5	5	5	5	5	4	4	5	6	7	8	7	7	7	7	7	6	4	4	3	5.9	8.6
5-Jun	3	3	3	3	3	4	4	5	5	6	7	8	8	8	10	10	12	12	12	12	12	9	7	6	7.2	12.5
6-Jun	5	4	3	2	0	2	4	7	10	12	15	16	17	17	17	17	18	18	14	13	13	12	11	9	10.7	17.7
7-Jun	7	7	4	4	4	5	7	9	12	14	15	17	18	18	17	18	19	19	19	15	14	13	11	9	12.3	19.1
8-Jun	8	7	6	5	4	6	9	12	14	16	18	18	17	13	15	15	12	12	12	12	13	12	10	10	11.5	18.2
9-Jun	10	10	10	10	10	10	11	11	11	12	10	9	9	10	13	15	13	14	13	11	10	10	10	9	10.9	15.1
10-Jun	9	9	9	8	8	8	8	8	9	9	9	9	10	11	13	14	15	15	15	14	14	12	9	8	10.5	15.1
11-Jun	6	6	5	5	4	4	7	9	11	13	15	17	18	19	19	20	21	21	21	19	18	16	15	14	13.4	21.1
12-Jun	12	10	9	9	9	10	11	13	15	16	17	19	20	21	22	22	19	16	17	18	17	15	13	12	15.1	21.8
13-Jun	12	12	11	10	10	10	11	11	12	13	14	16	17	18	20	20	20	12	13	13	12	12	11	10	13.5	20.4
14-Jun	9	9	9	8	8	8	8	9	11	15	17	19	19	20	19	19	19	18	18	18	16	15	14	13	14.1	19.6
15-Jun	12	11	8	8	7	8	10	12	13	14	15	16	17	17	17	17	16	16	12	11	11	11	11	10	12.5	17.2
16-Jun	10	10	10	10	10	10	11	12	14	16	17	18	18	19	15	13	12	14	16	16	16	15	13	12	13.6	19.2
17-Jun	11	10	10	9	9	9	9	10	11	14	15	17	17	18	18	19	19	20	20	20	19	17	15	14	14.5	20.3
18-Jun	12	10	8	7	7	9	9	11	12	15	18	20	22	23	23	24	24	24	24	23	21	18	17	16	16.5	24.1
19-Jun	15	15	14	13	12	13	14	16	18	19	21	22	22	22	23	23	24	24	23	18	17	16	16	15	18.1	24.0
20-Jun	15	14	14	14	13	13	13	14	16	17	17	16	16	19	20	21	21	21	20	20	19	18	15	14	16.6	21.0
21-Jun	13	12	10	9	8	8	9	11	13	15	16	17	18	19	20	20	21	21	21	21	21	18	13	11	15.3	21.1
22-Jun	10	8	7	6	6	7	10	13	16	18	20	21	22	23	24	24	25	25	24	24	23	20	17	15	17.0	24.9
23-Jun	13	12	11	11	10	11	14	17	18	20	22	24	25	26	26	27	27	27	27	26	25	21	19	18	19.9	26.9
24-Jun	19	18	16	15	15	14	16	17	19	21	23	24	24	24	24	24	20	15	14	14	14	13	13	13	17.8	24.5
25-Jun	12	12	12	13	12	11	12	14	15	17	18	18	19	20	21	21	22	22	22	22	21	19	17	15	17.1	22.4
26-Jun	13	11	10	8	7	9	11	13	15	17	19	20	21	22	22	23	24	24	24	23	22	20	17	15	17.0	23.8
27-Jun	15	12	11	10	9	11	15	17	18	20	21	23	24	25	26	23	16	17	16	17	17	16	15	15	17.0	25.6
28-Jun	15	14	14	14	13	13	13	14	16	17	18	20	20	21	22	23	23	23	23	22	22	21	18	16	18.0	23.3
29-Jun	15	15	14	15	15	15	15	15	15	12	13	13	14	14	14	15	15	16	15	15	15	15	15	15	14.6	15.6
30-Jun	15	15	15	14	14	14	14	15	17	18	18	19	20	21	22	23	24	24	24	25	24	20	16	16	18.7	24.5
	11.6	10.7	9.8	9.1	8.7	9.2	10.6	12.0	13.6	15.0	16.3	17.4	18.0	18.7	19.2	19.5	19.0	18.6	18.3	17.6	16.8	15.2	13.6	12.6	Diurnal Average	
	18.6	17.9	16.3	15.1	14.7	14.8	16.3	16.9	18.7	20.7	22.6	23.8	25.0	26.1	26.2	26.6	26.9	26.9	26.6	26.1	24.7	21.4	19.8	19.7	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Evergreen Park - June 2014



Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - June 2014

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

Maximum Value: 98.8 % on Jun 14 09:00 Maximum Daily Average: 79.4 % on Jun 10

Minimum Value: 20 % on Jun 2 18:00 Minimum Daily Average: 40.6 % on Jun 21

Maximum Diurnal Average: 82.4 % at hour 5 Minimum Diurnal Average: 38.6 % at hour 16

Monthly Average: 59.92 % Percentiles: P_1 = 20.6 P_{10} = 28.8 Q_1 = 39.9 Median = 60.5 Q_3 = 80.7 P_{90} = 89.0 P_{99} = 96.0

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

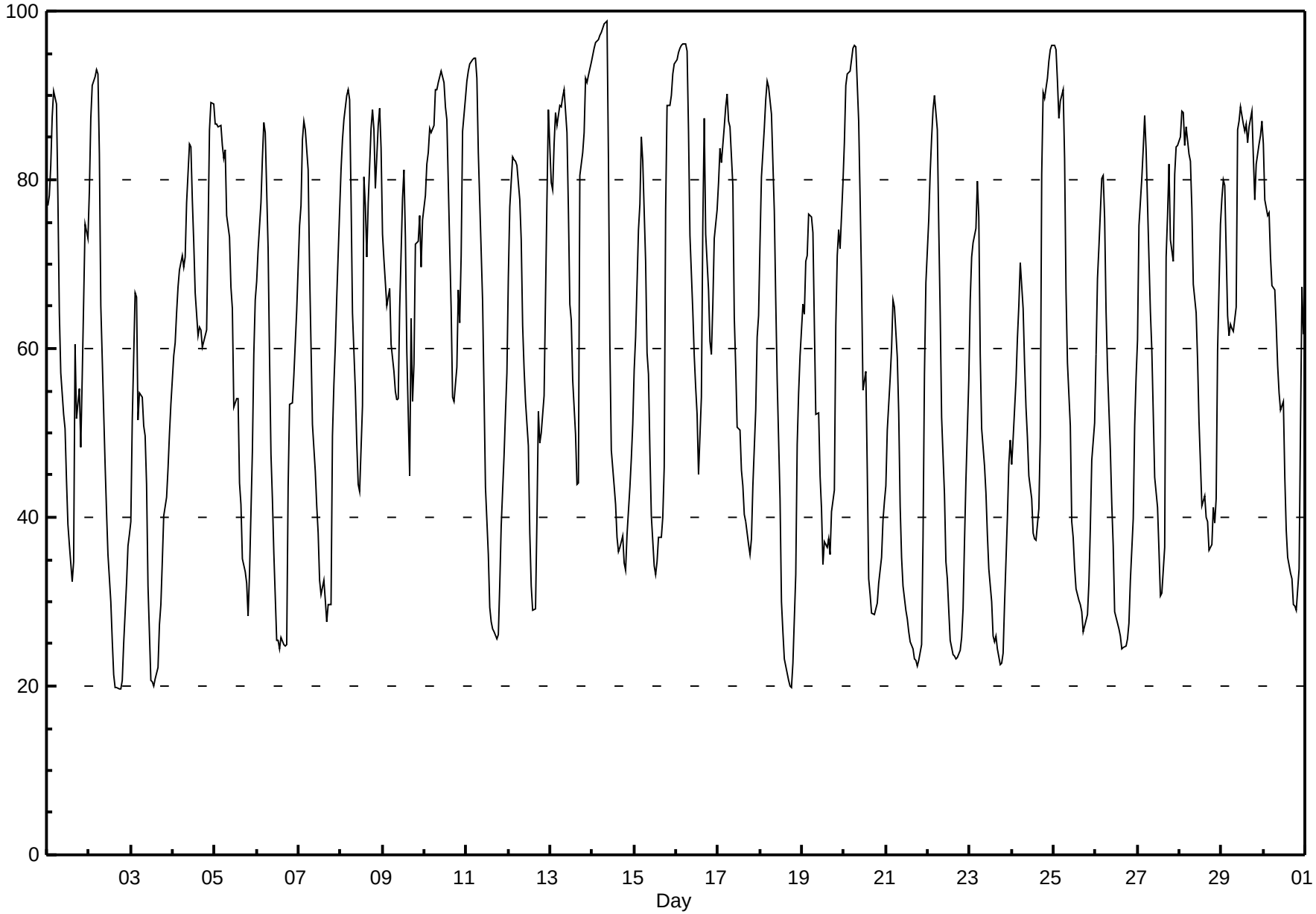
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	77	78	82	87	91	89	78	64	57	52	50	44	39	37	32	35	61	52	55	48	57	66	75	73	61.6	90.5
2-Jun	79	87	91	92	93	93	83	65	53	46	41	36	30	25	21	20	20	20	20	21	25	32	37	38	48.6	93.1
3-Jun	40	52	67	66	52	55	54	51	50	44	32	21	21	20	21	22	27	30	35	40	42	46	50	53	41.2	66.6
4-Jun	59	61	64	67	69	71	70	71	77	84	84	78	73	67	62	62	62	60	61	62	74	86	89	89	70.9	89.2
5-Jun	87	87	86	86	84	83	83	76	73	67	65	53	54	54	44	42	35	33	32	28	33	48	59	66	60.8	86.7
6-Jun	68	72	77	82	87	86	72	59	47	42	36	26	25	24	26	25	25	25	44	53	54	57	61	65	51.5	86.8
7-Jun	75	77	85	87	86	81	69	60	51	45	41	38	32	31	33	30	28	30	30	50	56	60	66	76	54.9	87.0
8-Jun	81	85	87	90	91	89	78	64	55	49	44	43	53	80	77	71	77	86	88	86	79	86	88	84	75.5	90.6
9-Jun	74	70	65	66	67	60	57	55	54	54	65	78	81	73	60	45	64	54	58	72	73	76	70	75	65.2	81.2
10-Jun	78	82	83	86	86	86	91	91	92	93	92	91	89	87	72	65	54	54	58	67	63	71	86	90	79.4	92.9
11-Jun	92	93	94	94	94	94	92	83	72	66	55	44	36	29	28	27	26	26	26	32	39	47	52	57	58.2	94.4
12-Jun	68	77	83	82	82	82	78	73	63	58	54	48	38	32	29	29	40	52	49	50	54	66	78	88	60.6	88.3
13-Jun	80	79	84	88	87	89	89	90	91	86	77	65	63	56	50	44	44	81	83	86	92	91	92	94	78.3	93.9
14-Jun	95	96	96	97	97	98	98	98	99	82	60	48	44	42	38	36	36	38	35	34	38	44	47	51	64.4	98.8
15-Jun	57	61	74	77	85	82	70	60	57	48	40	34	33	35	38	38	40	46	76	89	89	90	93	94	62.7	93.8
16-Jun	94	95	96	96	96	96	95	86	73	64	59	55	52	45	54	75	87	74	67	61	59	65	73	76	74.8	96.1
17-Jun	80	84	82	86	89	90	87	86	79	64	58	51	50	46	44	40	40	37	36	37	44	53	61	64	61.9	90.2
18-Jun	73	80	86	90	92	91	88	82	76	66	56	42	30	26	23	22	21	20	20	23	33	49	55	59	54.2	91.7
19-Jun	65	64	70	71	76	76	74	63	52	52	45	41	34	37	36	37	36	41	43	63	71	74	72	80	57.2	79.7
20-Jun	84	91	93	93	94	96	96	96	87	78	68	55	57	46	33	31	29	28	29	30	32	35	40	42	60.9	96.0
21-Jun	44	50	57	60	66	65	59	52	41	35	32	29	28	26	25	24	23	23	22	23	25	37	57	68	40.6	67.9
22-Jun	75	81	85	88	90	86	74	64	52	43	35	33	29	26	24	24	23	23	24	26	29	37	44	56	48.8	90.0
23-Jun	66	71	73	74	80	76	59	50	46	43	38	34	30	26	25	26	24	23	23	24	30	40	46	49	44.8	79.8
24-Jun	46	49	56	61	65	70	65	58	53	49	45	42	38	37	37	41	49	81	90	90	92	94	95	96	62.6	95.9
25-Jun	96	95	92	87	89	91	83	67	58	51	40	38	34	32	30	30	29	26	28	29	32	39	47	51	53.8	95.9
26-Jun	59	68	72	80	80	75	64	58	48	42	37	29	27	27	26	24	25	25	26	28	33	40	51	57	45.8	80.5
27-Jun	61	75	80	84	88	84	71	64	60	52	45	41	36	31	31	36	71	76	82	73	70	81	84	84	64.9	87.6
28-Jun	85	88	88	84	86	83	82	77	68	64	59	51	46	41	43	40	39	36	37	41	39	42	60	75	60.6	88.1
29-Jun	78	80	79	64	62	63	62	62	65	86	87	89	87	86	87	84	86	88	83	78	82	84	85	87	78.9	88.7
30-Jun	84	78	76	76	71	67	67	63	58	55	53	54	45	39	35	33	33	30	29	29	34	51	67	62	53.7	84.3
	73.3	76.9	80.1	81.5	82.4	81.5	76.3	69.6	63.6	58.7	53.0	47.7	44.5	42.1	39.4	38.6	41.8	43.8	46.3	49.0	52.4	59.6	66.0	69.9	Diurnal Average	
	95.9	95.6	96.3	96.7	97.1	97.5	98.0	98.4	98.8	92.9	92.2	91.5	88.7	87.2	86.6	84.3	87.2	88.2	90.3	89.7	92.0	94.0	95.4	95.9	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Evergreen Park - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - June 2014

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	3	4	5	0	5	3	6	14	16	13	12	15	11	11	8	11	14	9	11	9	7	1	7	4	6.6	16.4
Dir	206	247	213	205	212	324	287	263	280	300	273	260	275	300	271	307	288	279	346	19	280	330	209	184	279.5	279.9
2 Spd	0	1	1	2	2	0	2	11	15	14	9	10	11	9	9	9	6	3	3	4	1	3	7	7	5.0	14.7
Dir	191	253	224	209	203	52	255	255	254	253	269	217	225	208	240	232	224	213	158	150	161	240	177	215	230.2	253.9
3 Spd	3	3	0	5	6	7	6	12	16	22	18	22	25	20	20	21	29	21	22	20	17	10	8	17	10.7	28.9
Dir	125	192	134	269	253	241	260	258	259	265	287	304	306	302	308	304	328	335	351	26	24	27	22	346	313.9	327.9
4 Spd	22	25	20	17	12	15	14	9	5	12	13	12	16	16	21	24	17	19	21	25	25	22	19	19	17.1	25.4
Dir	342	337	333	333	310	308	334	302	297	308	322	326	330	334	331	335	330	309	316	322	317	313	306	302	322.5	337.2
5 Spd	21	19	21	20	23	18	16	20	15	18	17	15	20	21	20	15	21	17	10	14	10	5	4	2	14.1	23.3
Dir	310	315	310	323	333	332	327	333	314	316	318	291	301	250	275	279	276	274	299	285	271	212	198	204	301.2	332.9
6 Spd	3	4	1	0	0	2	7	13	21	22	16	27	21	27	18	21	21	18	12	8	4	6	7	2	9.6	26.9
Dir	221	218	198	79	54	209	245	249	251	248	248	246	261	264	267	264	273	274	37	42	159	227	201	280	256.6	264.4
7 Spd	4	2	2	2	3	8	10	9	3	6	5	3	7	25	22	6	5	4	8	16	7	2	5	4	2.8	24.7
Dir	321	269	197	210	220	249	274	286	270	175	198	188	271	242	246	13	337	66	183	53	104	88	210	54	247.7	241.8
8 Spd	1	1	1	1	1	0	2	5	11	14	17	13	12	7	3	13	15	5	9	9	13	7	5	8	5.6	16.8
Dir	45	211	178	207	229	132	196	243	239	262	271	269	225	149	80	234	260	163	185	192	205	174	189	217	226.6	270.8
9 Spd	6	13	24	26	20	26	36	36	33	27	35	27	25	27	30	33	18	9	18	19	19	16	16	15	20.8	35.8
Dir	242	248	254	250	257	268	264	266	268	303	304	277	263	256	251	270	349	284	324	330	313	269	274	257	275.1	263.9
10 Spd	15	16	15	13	16	18	19	18	12	14	15	14	16	9	6	7	5	7	6	2	12	4	2	1	8.1	18.7
Dir	260	265	278	289	281	279	275	270	290	328	339	332	332	3	20	78	40	256	230	82	272	207	202	62	292.9	274.5
11 Spd	3	1	2	2	1	3	4	5	5	6	5	6	6	3	4	4	9	5	7	3	3	3	2	0	0.9	9.2
Dir	214	189	221	200	214	211	227	233	257	236	230	217	337	157	174	213	342	35	24	49	63	76	93	127	244.7	342.4
12 Spd	1	2	2	1	2	1	0	1	3	8	9	11	14	16	14	12	11	15	2	1	8	4	1	3	4.1	16.2
Dir	25	204	44	61	357	216	238	24	83	103	93	74	89	93	80	79	161	220	169	149	69	62	174	99	97.2	92.9
13 Spd	4	4	4	4	0	1	1	1	3	7	11	8	9	6	7	6	9	13	3	5	3	7	4	2	0.4	13.1
Dir	102	127	76	74	55	56	63	322	285	282	316	302	323	16	37	31	113	162	272	166	93	228	164	136	42.0	161.8
14 Spd	1	2	2	2	1	4	5	4	3	6	10	21	18	19	24	21	20	19	25	25	17	13	17	8	10.8	25.5
Dir	82	236	9	132	172	189	193	218	181	196	259	254	269	282	275	262	275	278	269	270	277	261	253	252	263.2	269.2
15 Spd	5	3	3	0	2	2	4	10	11	12	10	4	4	7	6	7	5	6	6	8	4	1	2	1	0.9	11.9
Dir	250	195	200	29	196	207	197	269	274	288	304	290	68	77	64	57	75	139	124	308	319	106	151	53	287.5	288.4
16 Spd	3	3	1	1	1	4	6	10	7	4	3	5	5	5	20	14	7	7	1	5	5	14	5	3	0.6	19.6
Dir	179	212	99	14	314	269	304	341	11	63	57	175	290	312	153	128	181	226	147	46	358	348	31	45	34.4	152.5
17 Spd	1	3	1	1	1	1	7	6	8	6	7	3	6	7	2	7	3	3	5	7	7	5	4	4	2.4	7.7
Dir	353	30	359	210	239	300	263	245	252	203	220	195	156	165	132	234	195	193	195	135	130	118	108	120	189.2	251.9
18 Spd	3	1	0	1	1	3	3	2	4	3	5	19	16	17	16	15	12	9	11	7	2	0	5	3	5.1	18.6
Dir	63	72	53	50	204	200	173	167	133	159	224	244	248	267	269	284	263	263	272	288	319	305	293	341	260.9	244.5
19 Spd	1	4	5	3	1	2	2	8	3	6	2	8	13	10	13	10	12	10	2	16	13	11	8	7	0.7	16.0
Dir	347	311	296	242	171	204	262	300	323	225	77	135	114	96	67	73	96	88	94	282	275	311	315	270	354.0	281.6
20 Spd	8	4	5	6	4	3	3	1	4	8	22	26	13	16	21	24	23	19	18	25	18	14	16	17	12.3	26.4
Dir	289	19	260	268	184	226	201	305	286	279	286	278	257	307	307	285	301	285	287	282	274	271	258	258	280.8	277.7
21 Spd	13	8	9	11	5	7	7	11	23	29	31	31	28	23	19	16	15	13	13	11	7	1	0	1	13.2	31.4
Dir	269	275	256	254	293	300	293	271	267	264	255	264	262	271	274	283	284	300	308	320	318	303	299	15	273.9	264.2
22 Spd	0	1	1	0	1	2	4	3	5	8	11	9	8	5	6	6	5	10	10	9	5	4	4	2	3.4	10.7
Dir	243	215	233	326	218	205	212	242	142	136	141	129	140	153	118	181	78	76	55	69	72	74	79	54	115.7	140.6

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	0	1	2	1	1	2	4	7	6	8	12	11	10	8	12	10	12	15	16	12	6	6	6	5	6.6	15.9
Dir	123	53	46	359	18	55	80	106	120	146	117	94	109	135	140	90	84	110	102	100	77	68	68	94	102.9	102.4
24 Spd	8	9	5	4	2	2	1	11	8	6	6	4	12	15	17	24	38	33	17	9	8	6	4	5	6.7	37.7
Dir	127	110	85	85	81	30	213	254	279	255	285	326	294	311	318	317	266	260	236	275	282	195	165	185	273.9	266.2
25 Spd	6	5	6	2	0	1	4	15	19	22	29	22	21	22	23	22	20	19	14	13	9	5	6	6	12.4	28.8
Dir	190	200	229	273	232	216	270	273	276	279	278	278	282	273	266	272	265	269	281	290	281	288	266	259	271.9	278.0
26 Spd	2	4	0	1	2	1	7	8	12	12	10	13	12	8	11	6	5	5	7	8	4	4	2	4	3.4	12.6
Dir	232	207	208	222	223	231	261	269	263	253	264	268	280	288	297	298	332	38	35	42	68	83	185	57	283.3	267.9
27 Spd	3	1	2	0	1	0	1	1	2	4	4	6	10	11	9	18	20	7	6	7	5	9	8	9	0.9	19.6
Dir	47	38	218	171	206	202	177	350	338	331	27	85	67	104	89	150	188	250	40	7	280	252	274	241	151.1	188.2
28 Spd	6	4	5	8	11	7	10	17	16	17	15	12	15	12	9	7	7	10	7	12	12	4	12	10	8.4	17.3
Dir	257	251	293	258	250	272	266	255	277	279	287	299	295	317	308	303	331	266	295	276	295	283	172	163	276.4	254.6
29 Spd	7	5	8	12	9	7	12	7	11	11	15	15	14	17	12	7	8	4	12	5	3	4	5	6	7.7	17.1
Dir	176	164	213	237	257	275	270	289	311	260	259	278	290	269	252	238	221	290	279	243	11	258	240	243	260.6	268.6
30 Spd	8	11	6	5	8	3	5	14	16	20	19	14	16	16	14	13	10	11	6	7	6	1	0	1	9.0	20.1
Dir	251	251	298	288	267	265	271	257	268	279	279	271	308	290	308	309	296	327	341	297	288	277	238	285	285.5	278.5
Spd	2.4	2.6	3.2	3.4	3.4	3.8	5.4	8.1	8.6	8.9	9.3	9.1	8.4	7.6	6.9	7.0	7.0	6.1	4.6	4.8	4.3	2.7	2.9	2.4	Diurnal Average	
Dir	272.7	271.0	276.7	275.8	270.7	274.3	270.2	270.6	271.2	271.5	280.6	271.0	281.8	275.8	280.8	283.9	285.2	274.9	305.1	319.7	301.9	282.1	244.7	258.6		
Spd	21.8	25.4	24.1	25.8	23.3	25.7	35.8	35.8	32.8	29.0	34.6	31.4	28.5	27.1	30.4	33.5	37.7	32.7	25.5	25.4	24.6	22.3	19.2	18.7	Diurnal Maximum	
Dir	341.7	337.2	254.2	250.4	332.9	267.6	263.9	266.4	267.9	263.7	304.3	264.2	262.0	255.5	251.1	270.4	266.2	259.9	269.2	281.8	316.6	312.9	306.3	301.8		

Maximum Speed Value: 38 km/h on Jun 24 17:00
Maximum Daily Speed Average: 20.8 km/h on Jun 9
Maximum Diurnal Speed Average: 9.3 km/h at hour 11

Minimum Speed Value: 0 km/h on Jun 25 05:00
Minimum Daily Speed Average: 0.4 km/h on Jun 11
Minimum Diurnal Speed Average: 2.4 km/h at hour 24

Monthly Average Velocity: 5.40 km/h 278.35 deg

Speed Percentiles: $P_1 = 0.2$ $P_{10} = 1.3$ $Q_1 = 3.7$ Median = 7.4 $Q_3 = 14.3$ $P_{90} = 20.1$ $P_{99} = 32.7$

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

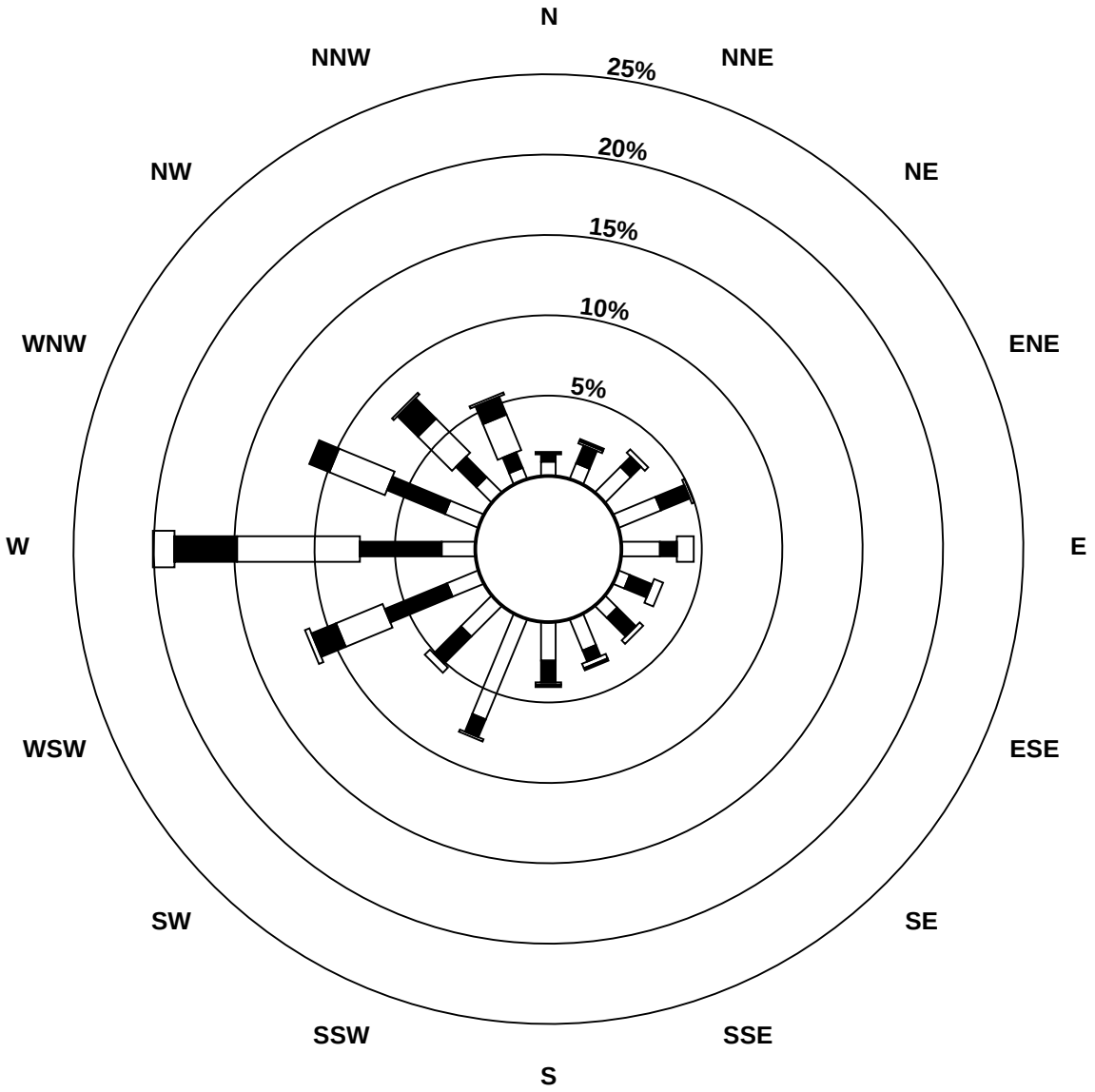
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	14	12	5	2	0	0	33
NorthEast	35	16	4	1	0	0	56
East	27	28	9	0	0	0	64
SouthEast	18	18	5	1	0	0	42
South	51	17	2	1	0	0	71
SouthWest	62	33	8	3	0	0	106
West	23	64	89	41	12	0	229
NorthWest	21	28	41	27	2	0	119
Total	251	216	163	76	14	0	720

Peace Airshed Zone Association

Wind Rose

Wind Speed (WS) (km/h)

Evergreen Park - June 2014



Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - June 2014

Maximum Speed: 39 km/h on Jun 24 17:00

Maximum Daily Speed Average: 23.9 km/h on Jun 9

Minimum Speed: 0 km/h on Jun 6 04:00

Minimum Daily Speed Average: 5.3 km/h on Jun 11

Maximum Diurnal Speed Average: 16.6 km/h at hour 15

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

Monthly Average Speed: 10.67 km/h

Percentiles: $P_1 = 0.7$ $P_{10} = 2.3$ $Q_1 = 4.6$ Median = 8.8 $Q_3 = 15.4$ $P_{90} = 21.8$ $P_{99} = 33.1$

Hours in Service: 720

Hours of Data: 720

Hours of Missing Data: 0

Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	4	4	5	1	6	5	7	15	18	15	15	17	15	14	12	14	16	10	12	9	7	5	7	4	9.9	17.5
2-Jun	1	2	1	2	3	0	2	11	15	15	10	11	13	12	13	12	9	9	6	5	3	4	11	11	7.5	15.1
3-Jun	5	4	2	6	7	7	7	13	17	23	21	24	27	22	24	22	30	23	23	21	17	10	9	17	15.9	30.0
4-Jun	22	26	20	17	12	15	14	10	6	12	14	13	17	17	22	25	19	20	22	26	25	23	20	20	18.3	26.0
5-Jun	22	20	21	20	24	18	16	20	16	20	19	17	24	22	23	17	23	18	12	15	10	5	4	2	17.0	23.7
6-Jun	3	4	1	0	1	2	7	14	21	22	17	28	23	28	24	24	22	20	15	9	5	6	8	2	12.8	28.0
7-Jun	4	3	2	2	3	8	11	10	6	9	7	9	10	26	25	10	10	7	9	18	8	4	6	4	8.9	26.1
8-Jun	2	3	3	1	1	1	2	6	13	15	18	14	16	9	4	15	15	6	9	9	13	7	5	9	8.3	17.5
9-Jun	6	13	24	26	21	26	36	36	33	29	36	28	25	27	31	35	22	11	19	20	20	17	17	15	23.9	36.3
10-Jun	16	16	15	14	17	18	19	19	13	15	15	15	16	10	8	9	7	9	10	5	12	4	3	1	11.9	19.4
11-Jun	3	1	3	2	1	3	5	6	7	7	7	8	8	9	9	7	11	7	8	4	3	4	4	3	5.3	11.0
12-Jun	2	2	2	2	3	5	0	1	4	9	10	12	16	18	16	14	19	17	5	4	10	5	3	3	7.7	18.6
13-Jun	4	5	4	4	1	1	1	3	4	8	12	9	11	10	9	9	18	15	5	6	3	8	6	3	6.7	18.1
14-Jun	2	4	4	2	3	5	6	5	4	7	12	22	19	20	25	21	21	20	26	25	17	14	17	8	12.9	26.1
15-Jun	5	4	3	2	4	3	4	10	11	13	12	7	8	9	8	11	7	8	7	8	5	1	4	3	6.5	13.4
16-Jun	3	5	2	2	2	5	8	10	8	6	8	8	7	10	26	18	9	8	4	6	6	14	6	3	7.7	25.8
17-Jun	2	3	1	2	3	2	7	6	8	8	9	8	8	10	8	10	7	7	7	7	7	5	4	4	6.0	10.4
18-Jun	3	1	1	1	1	3	3	3	4	4	6	19	18	19	17	17	14	12	13	9	3	1	5	3	7.5	19.3
19-Jun	2	5	5	4	2	2	3	9	5	7	6	11	14	12	14	11	13	11	10	17	14	16	11	9	8.9	16.8
20-Jun	11	7	6	7	5	3	4	4	5	9	23	28	14	18	22	26	25	21	19	26	18	14	16	17	14.6	27.6
21-Jun	14	9	10	11	5	8	8	11	24	30	31	33	30	27	21	20	18	15	14	12	7	1	1	1	15.0	33.2
22-Jun	1	1	1	1	2	3	5	3	6	9	12	12	11	11	10	11	10	11	12	10	6	4	4	2	6.5	12.3
23-Jun	1	2	3	1	1	2	4	7	7	9	13	12	13	11	15	13	14	16	17	13	6	6	6	6	8.3	16.9
24-Jun	8	10	6	4	3	2	3	12	8	9	8	8	14	17	19	25	39	33	20	11	10	6	4	5	11.8	39.2
25-Jun	6	5	6	3	1	2	4	16	19	23	30	22	23	24	25	24	22	20	15	14	10	6	6	6	13.7	30.0
26-Jun	3	5	1	1	2	1	7	8	12	13	11	15	14	13	15	10	9	7	8	9	4	4	3	4	7.5	15.4
27-Jun	4	2	3	2	2	1	1	2	5	6	7	9	12	14	12	20	22	7	7	8	7	10	8	9	7.5	21.7
28-Jun	7	4	6	8	11	8	12	18	17	18	18	14	18	15	11	11	9	11	8	12	12	5	13	10	11.5	18.1
29-Jun	8	5	8	12	10	8	12	8	11	14	15	16	15	18	12	8	9	7	13	5	4	6	6	6	9.8	17.6
30-Jun	8	11	7	6	8	4	5	14	16	21	20	15	17	17	16	14	13	13	7	8	7	1	1	2	10.5	20.7
	6.0	6.2	5.9	5.5	5.5	5.7	7.5	10.3	11.5	13.5	14.8	15.5	15.9	16.3	16.6	16.1	16.0	13.3	12.1	11.6	9.3	7.3	7.3	6.4	Diurnal Average	
	22.1	25.8	24.5	26.1	23.7	26.1	36.2	36.3	33.4	29.8	35.9	33.2	29.6	28.0	30.7	34.8	39.2	33.1	26.1	26.2	25.3	23.5	19.9	19.5	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Evergreen Park - June 2014

Maximum Value: 95.0 deg on Jun 2 06:00

Minimum Value: 6.3 deg on Jun 14 23:00

Percentiles: P_1 = 8.2 P_{10} = 13.7 Q_1 = 18.8 Median = 31.8 Q_3 = 53.7 P_{90} = 75.1 P_{99} = 90.5

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 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	55	29	11	83	59	58	31	11	21	32	43	31	44	44	61	43	37	26	24	23	29	87	11	21	87.0
2-Jun	77	75	77	48	83	95	55	10	14	15	32	39	35	54	60	52	70	88	80	43	43	76	78	63	95.0
3-Jun	72	48	85	61	50	49	19	17	15	15	31	25	23	30	41	22	17	23	20	15	16	15	20	12	85.4
4-Jun	9	10	12	16	18	16	16	19	31	17	19	22	22	28	18	18	26	18	19	16	13	19	15	16	30.9
5-Jun	14	14	15	14	10	15	14	12	21	23	29	36	35	22	27	26	28	29	29	22	17	16	7	33	36.0
6-Jun	34	15	47	37	85	31	33	11	11	12	22	14	26	17	50	26	17	30	45	30	35	19	21	51	84.8
7-Jun	34	63	76	61	48	15	26	37	65	62	71	87	64	26	32	62	69	62	28	36	28	77	64	16	87.5
8-Jun	69	68	85	64	79	77	52	36	32	23	17	20	43	48	45	51	36	47	12	19	17	16	22	13	85.4
9-Jun	18	12	10	7	12	10	8	10	11	19	16	16	12	8	9	16	33	38	20	16	22	21	18	8	38.4
10-Jun	10	11	11	15	16	12	15	13	22	18	12	10	12	35	51	41	57	33	67	77	18	17	61	57	76.6
11-Jun	64	80	13	26	27	52	23	29	41	40	58	65	51	86	85	79	46	56	36	9	15	17	53	91	91.0
12-Jun	78	52	23	75	55	86	92	48	52	43	31	34	32	30	35	33	57	44	70	81	41	27	72	44	91.9
13-Jun	11	27	23	17	80	78	43	89	27	27	25	43	42	70	51	59	67	52	61	41	41	26	66	77	88.6
14-Jun	93	81	64	51	68	35	21	26	52	28	37	20	22	27	16	16	19	20	13	13	15	10	6	18	92.5
15-Jun	24	55	75	78	79	30	27	21	23	28	34	74	76	50	48	48	58	55	47	28	47	66	75	63	79.3
16-Jun	35	66	76	59	69	32	48	23	38	68	87	72	49	73	46	44	40	45	80	22	33	12	26	17	86.6
17-Jun	47	26	38	70	85	75	23	19	20	58	57	82	59	56	89	54	80	87	57	39	15	12	14	16	89.1
18-Jun	54	29	75	57	73	24	20	53	39	73	43	20	35	27	23	39	38	43	31	39	31	69	25	28	75.4
19-Jun	68	20	19	33	51	44	51	31	63	72	91	60	27	49	31	32	39	25	75	19	28	47	52	41	90.7
20-Jun	42	63	51	62	35	49	46	74	45	48	20	17	19	34	23	22	24	26	18	14	11	12	7	8	73.8
21-Jun	12	14	17	8	24	31	29	23	15	13	14	19	16	30	26	36	36	34	23	24	15	79	90	65	90.1
22-Jun	81	52	69	75	65	51	24	57	61	34	35	48	53	76	69	70	72	31	31	27	22	10	11	59	81.0
23-Jun	87	80	83	84	55	66	28	24	33	39	36	36	49	57	41	50	36	25	24	22	22	15	15	21	86.9
24-Jun	14	13	14	14	50	36	90	17	26	55	52	73	28	35	29	21	20	9	36	38	37	19	32	16	90.1
25-Jun	12	16	16	46	90	50	60	12	16	15	17	16	24	18	22	20	23	23	26	19	15	16	23	12	89.8
26-Jun	61	16	95	82	62	56	20	25	18	21	34	37	38	55	47	72	83	67	34	18	17	14	83	17	94.6
27-Jun	32	76	70	89	87	92	79	86	80	62	71	49	37	42	46	39	26	37	37	26	46	25	21	19	92.2
28-Jun	36	30	28	17	10	40	34	12	18	15	33	34	33	37	37	59	57	34	23	20	15	47	21	23	59.1
29-Jun	21	38	12	11	31	35	15	23	18	38	12	19	18	14	15	21	16	85	22	37	48	46	68	18	84.5
30-Jun	11	8	28	26	18	37	40	9	16	14	19	18	22	23	27	27	42	31	40	42	16	82	64	60	81.8
	92.5	80.9	94.6	88.9	89.8	95.0	91.9	88.6	80.1	72.9	90.7	87.5	76.5	86.2	89.1	78.5	83.4	88.2	80.3	81.1	47.6	87.0	90.1	91.0	

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 4.8 ppb on Jun 21 23:00 Maximum Daily Average: 0.5 ppb on Jun 3

Minimum Value: 0 ppb on Jun 1 01:00 Minimum Daily Average: 0.0 ppb on Jun 11
Maximum Diurnal Average: 0.3 ppb at hour 8 Minimum Diurnal Average: 0.0 ppb at hour 6
Monthly Average: 0.15 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.0 Q_3 = 0.1 P_{90} = 0.4 P_{99} = 1.8

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

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	0	0	1	0	0	0	0	A	1	1	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0.4	1.5
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
3-Jun	0	0	0	0	1	A	1	3	1	0	1	1	1	0	0	0	1	0	0	0	1	1	0	0	0.5	2.6
4-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	0.1	0.8
5-Jun	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.6
6-Jun	0	0	A	0	0	0	0	0	0	0	0	0	C	C	C	1	1	1	1	1	1	1	0	0	0.4	1.5
7-Jun	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
8-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	0.0	0.2
9-Jun	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	2.4
10-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	0.0	0.2
11-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	0.0	0.0
12-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	0.0	0.0
13-Jun	0	0	0	0	0	0	1	0	1	1	2	0	0	0	0	0	0	0	A	0	1	0	0	0	0.3	2.3
14-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0.1	0.5
15-Jun	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	1.1
16-Jun	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	1.2
17-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	0.1
18-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0.0	0.6
19-Jun	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1
20-Jun	0	0	0	0	0	0	0	0	0	0	0	A	2	0	0	0	0	0	0	0	0	0	0	0	0.1	1.8
21-Jun	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	5	0	0.3	4.8
22-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
23-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	0.0	0.4
24-Jun	2	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0.1	1.3
26-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
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	0.0	0.3
28-Jun	0	0	0	A	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.8
29-Jun	0	0	A	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.2	1.1
30-Jun	1	A	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
	0.1	0.1	0.2	0.1	0.1	0.0	0.2	0.3	0.3	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.2	0.3	0.1	Diurnal Average	
	1.6	0.9	2.4	0.3	1.0	0.3	1.4	2.6	1.5	1.8	2.3	0.6	1.8	0.5	0.4	1.5	1.3	1.5	1.0	0.9	0.7	1.3	4.8	0.6	Diurnal Maximum	

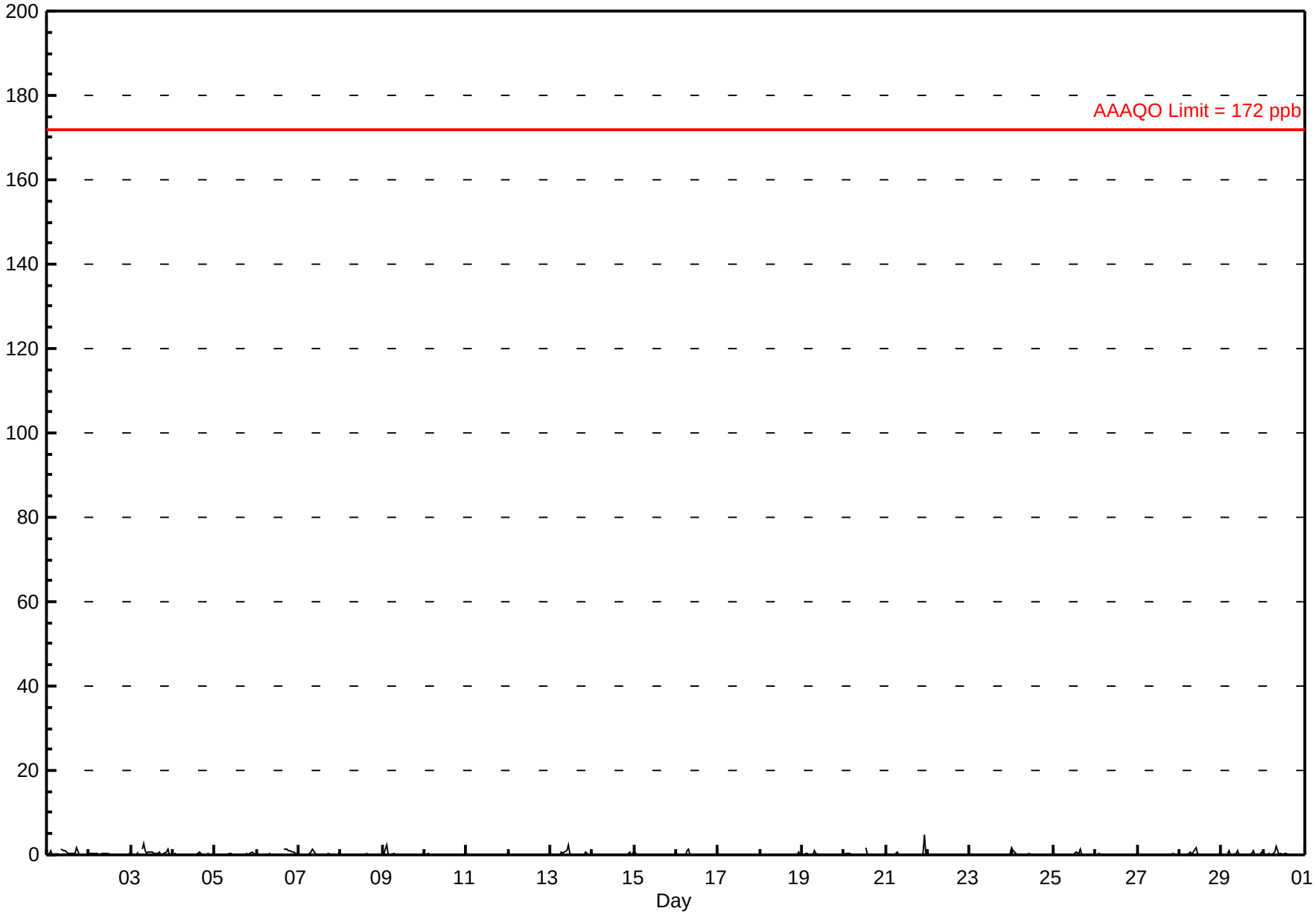
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2014

Maximum Value: 15.2 ppb on Jun 21 23:00

Maximum Daily Average: 1.8 ppb on Jun 3

Minimum Value: 0 ppb on Jun 6 10:00

Minimum Daily Average: 0.0 ppb on Jun 11

Maximum Diurnal Average: 1.2 ppb at hour 8

Minimum Diurnal Average: 0.2 ppb at hour 6

Monthly Average: 0.52 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.1 $Q_3 = 0.5$ $P_{90} = 1.3$ $P_{99} = 5.4$

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

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	0	1	2	0	0	0	1	A	3	2	1	1	1	1	1	1	1	8	0	0	0	0	0	0	1.2	8.0
2-Jun	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	1	1	0.6	0.9
3-Jun	1	1	0	0	2	A	3	12	2	1	1	1	1	1	1	3	3	1	1	1	2	4	0	0	1.8	12.2
4-Jun	0	1	0	0	A	0	0	0	0	0	0	0	0	0	1	2	4	1	1	0	1	1	0	0	0.8	4.1
5-Jun	0	1	0	A	0	0	0	1	0	1	0	0	1	0	0	1	1	0	1	1	1	2	1	0	0.6	1.6
6-Jun	0	1	A	0	0	0	1	1	0	0	0	0	C	C	C	2	1	2	1	1	1	1	1	0	0.6	1.6
7-Jun	0	A	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	2.0
8-Jun	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0.1	1.0
9-Jun	0	8	11	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	1.0	10.5
10-Jun	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.6
11-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	0.0	0.3
12-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	0.1	0.5
13-Jun	0	0	0	0	0	0	1	2	4	4	6	3	0	0	0	0	0	0	A	0	3	2	0	0	1.1	5.6
14-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	4	0	1	0.3	3.7
15-Jun	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	3.9
16-Jun	0	0	0	0	0	0	4	3	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	3.9
17-Jun	0	0	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.8
18-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	2	0	0.2	2.3
19-Jun	0	0	2	1	0	0	0	2	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	2.4
20-Jun	0	1	1	1	0	0	0	0	0	0	0	A	4	2	0	1	0	0	0	0	0	0	0	0	0.5	4.1
21-Jun	0	0	0	0	0	0	2	1	1	0	A	0	0	0	0	0	0	0	0	0	0	1	15	0	1.0	15.2
22-Jun	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
23-Jun	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	1.2
24-Jun	2	2	1	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.1
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	3	1	2	2	1	0	0	0	0	0	0	0	0.5	2.9
26-Jun	0	0	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
27-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	0.2	1.6
28-Jun	0	0	0	A	0	1	2	1	2	3	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0.5	2.9
29-Jun	0	0	A	1	6	0	0	0	1	2	1	0	1	0	0	0	0	2	3	0	0	1	1	1	1.0	6.2
30-Jun	1	A	0	1	0	1	4	5	3	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.9	5.3
	0.4	0.7	0.8	0.3	0.5	0.2	0.9	1.2	0.8	0.6	0.6	0.3	0.5	0.3	0.3	0.5	0.5	0.6	0.3	0.2	0.4	0.6	0.8	0.3	Diurnal Average	
	3.9	7.9	10.5	1.5	6.2	0.9	4.4	12.2	4.1	4.2	5.6	2.6	4.1	1.6	2.3	3.1	4.1	8.0	3.3	1.0	3.2	3.9	15.2	1.4	Diurnal Maximum	

C - Calibration

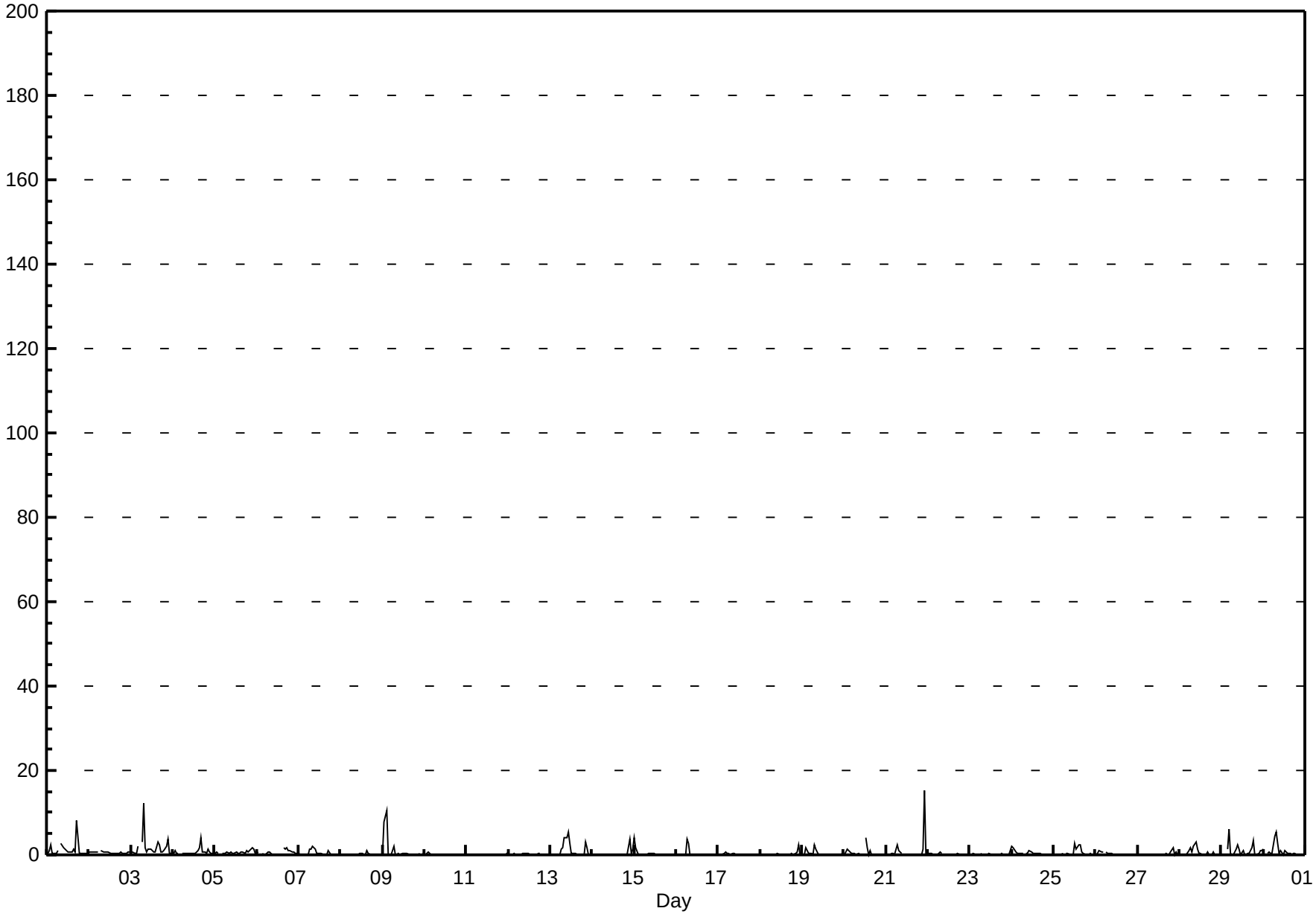
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

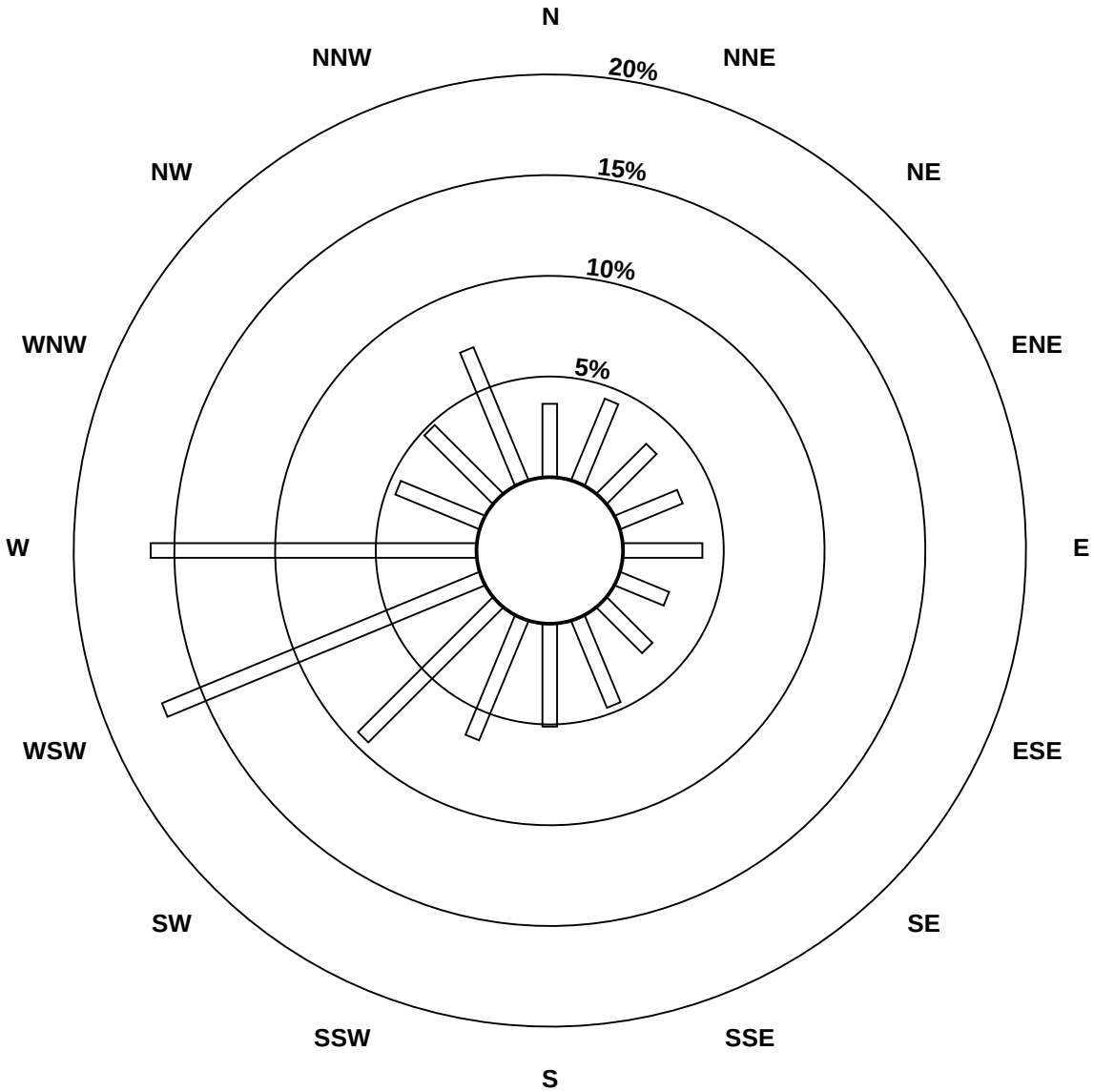
Smoky Heights - June 2014



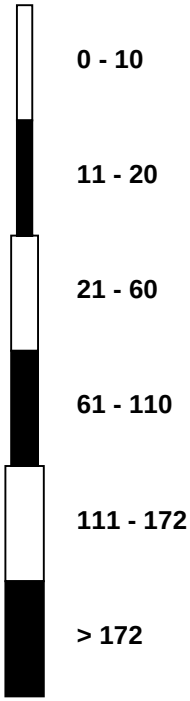
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Smoky Heights - June 2014



Pollutant Classes (ppb)

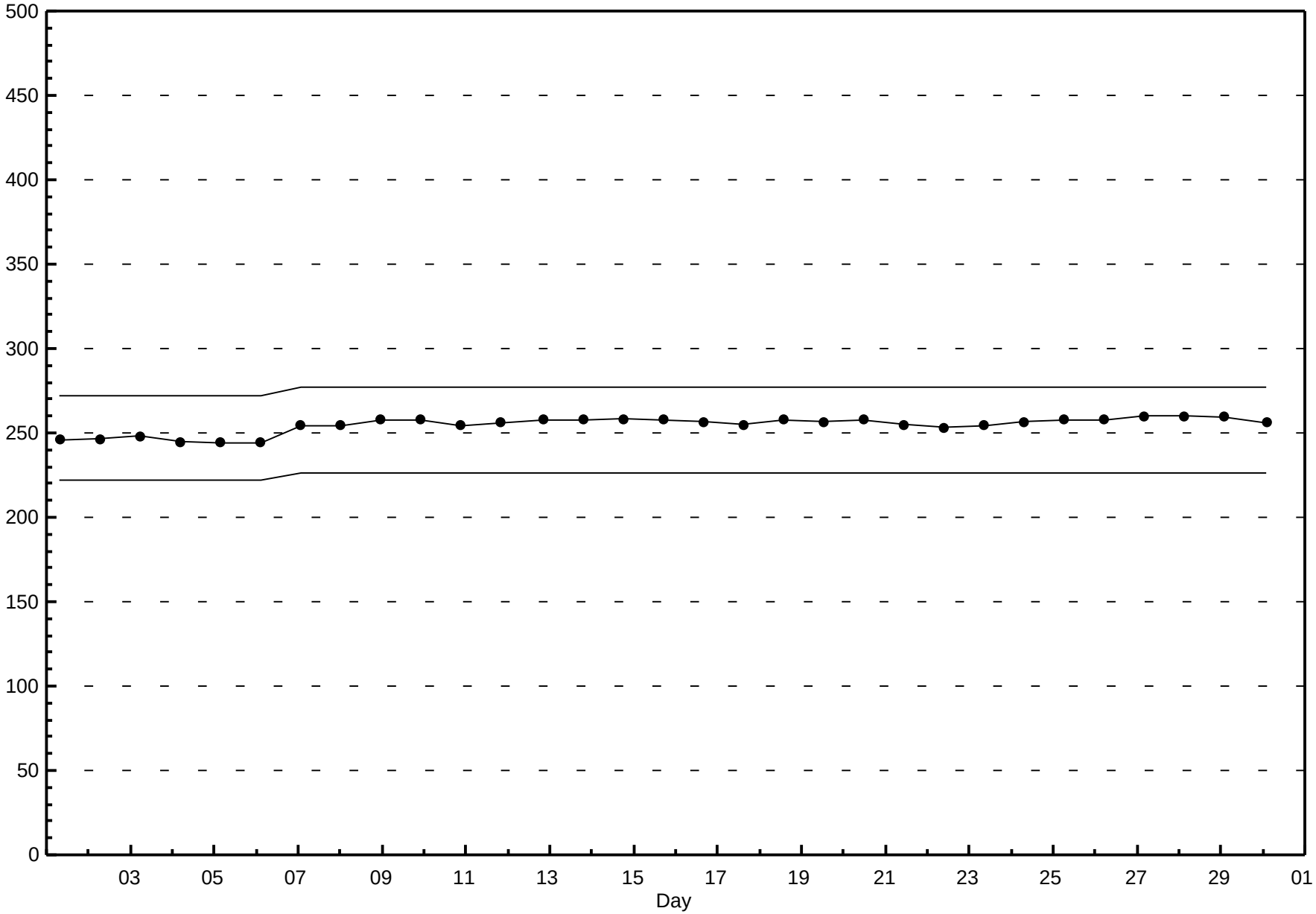


Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Smoky Heights - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2014

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

Maximum Value: 2.7 ppb on Jun 22 04:00

Maximum Daily Average: 0.3 ppb on Jun 22

Minimum Value: 0 ppb on Jun 6 07:00

Minimum Daily Average: 0.0 ppb on Jun 21

Maximum Diurnal Average: 0.3 ppb at hour 4

Minimum Diurnal Average: 0.1 ppb at hour 14

Monthly Average: 0.11 ppb

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

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	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	0.2
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
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	0.2	0.4
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	0.1	0.1
5-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	0.1
6-Jun	0	0	A	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.2	0.5
7-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	0.1	0.2
8-Jun	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.5
9-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	0.2
10-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
11-Jun	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.5
12-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	0.1	0.3
13-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.1
14-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	0.1	0.3
15-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	0.2
16-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
17-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
18-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
19-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	0.0	0.1
20-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	0.0	0.1
21-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	0.0	0.1
22-Jun	0	0	1	3	2	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.7
23-Jun	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
24-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
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
26-Jun	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
27-Jun	0	0	2	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7
28-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
29-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	0.1
30-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	0.4
	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
	0.3	0.4	1.7	2.7	1.7	1.1	0.5	0.3	0.3	0.3	0.2	0.1	0.2	0.2	0.5	0.4	0.4	0.4	0.3	0.3	0.2	0.4	0.3	0.4	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

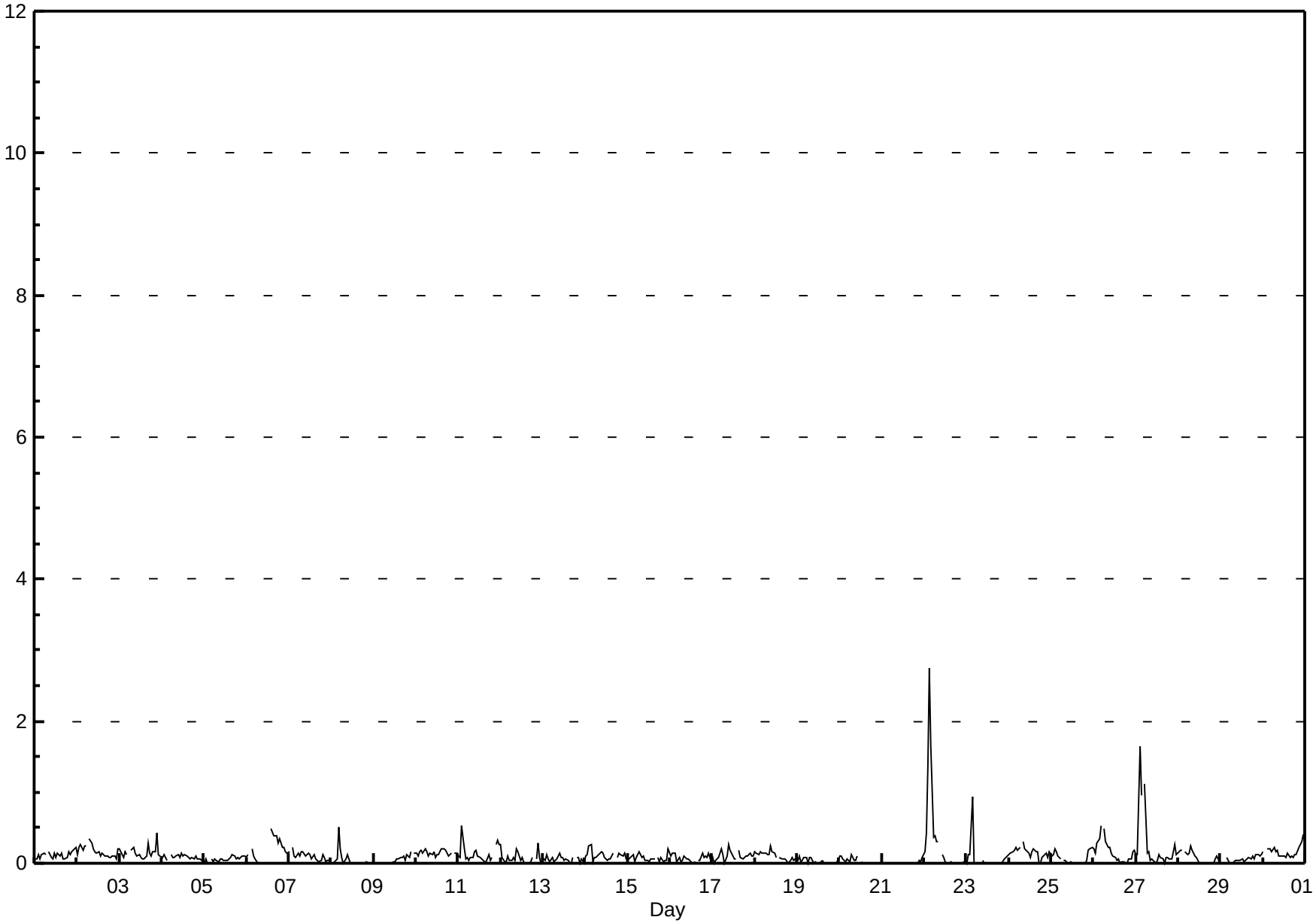
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2014

Maximum Value: 8.7 ppb on Jun 27 04:00

Maximum Daily Average: 1.3 ppb on Jun 27

Minimum Value: 0 ppb on Jun 21 13:00

Maximum Diurnal Average: 1.2 ppb at hour 4

Monthly Average: 0.57 ppb

Minimum Daily Average: 0.3 ppb on Jun 21

Minimum Diurnal Average: 0.4 ppb at hour 14

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.6$ $P_{90} = 0.7$ $P_{99} = 2.9$

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	0	0	0	0	0	1	1	A	1	0	0	1	0	1	1	1	0	0	0	1	0	0	1	1	0.5	0.8
2-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	0	1	0.6	0.7
3-Jun	1	1	0	0	0	A	1	1	1	0	1	0	0	0	0	1	1	1	1	1	1	3	1	0	0.7	2.7
4-Jun	0	1	1	0	A	0	0	0	0	1	1	1	1	0	1	1	1	0	1	0	1	0	1	0	0.5	0.8
5-Jun	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0.4	0.5
6-Jun	0	1	A	1	1	1	0	0	0	C	C	C	C	C	1	1	1	1	1	1	1	1	1	1	0.6	0.9
7-Jun	1	A	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	1	1	0	0	0.5	0.7
8-Jun	A	1	2	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.5	1.7
9-Jun	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	0	1	A	1	0.4	0.6
10-Jun	1	1	0	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1	A	1	1	0.5	0.7
11-Jun	0	0	1	1	1	1	0	0	0	1	1	0	1	0	0	0	0	1	1	1	A	2	2	2	0.7	1.8
12-Jun	1	1	1	0	1	1	0	1	0	2	1	0	0	0	0	0	0	0	0	A	0	4	3	0	0.8	3.6
13-Jun	1	1	1	1	0	1	0	1	0	1	1	0	0	0	1	0	0	0	A	1	0	0	1	0	0.5	0.8
14-Jun	1	1	1	1	0	0	1	1	1	1	0	1	1	0	0	0	1	A	0	1	0	1	1	0	0.6	0.9
15-Jun	0	1	0	1	0	1	1	1	1	1	0	0	0	0	1	1	A	1	1	1	0	0	1	1	0.5	0.9
16-Jun	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	A	0	0	1	0	0	0	1	0	0.5	1.0
17-Jun	1	0	0	0	0	1	0	0	0	1	1	0	0	0	A	1	0	0	1	1	1	0	1	0	0.5	0.9
18-Jun	0	1	1	1	1	1	0	1	1	1	1	1	0	A	0	1	0	0	1	0	0	1	0	0	0.5	0.7
19-Jun	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	1	0.4	0.6
20-Jun	1	1	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
21-Jun	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.5
22-Jun	1	1	2	7	3	1	1	1	1	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1.0	7.1
23-Jun	0	1	1	5	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0.6	4.6
24-Jun	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0	1	0	0	1	0	1	0.5	0.8
25-Jun	0	1	1	1	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.8
26-Jun	1	1	1	1	1	A	1	1	1	1	0	1	0	1	0	0	0	0	0	0	1	1	1	1	0.6	1.1
27-Jun	0	0	8	9	A	3	0	1	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	1	1.3	8.7
28-Jun	1	1	1	A	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.5	0.8
29-Jun	0	0	A	0	0	0	0	0	0	0	1	1	0	0	1	1	1	0	0	1	0	1	0	0	0.5	0.6
30-Jun	1	A	1	1	1	0	1	1	1	0	0	1	0	0	0	0	1	0	1	1	1	1	1	2	0.6	2.3
	0.5	0.6	0.9	1.2	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.6	Diurnal Average	
	1.3	1.5	7.8	8.7	3.0	2.8	0.9	0.7	0.8	1.6	0.7	0.7	0.7	0.7	0.9	0.7	1.4	0.8	0.6	0.7	0.7	3.6	2.9	2.3	Diurnal Maximum	

C - Calibration

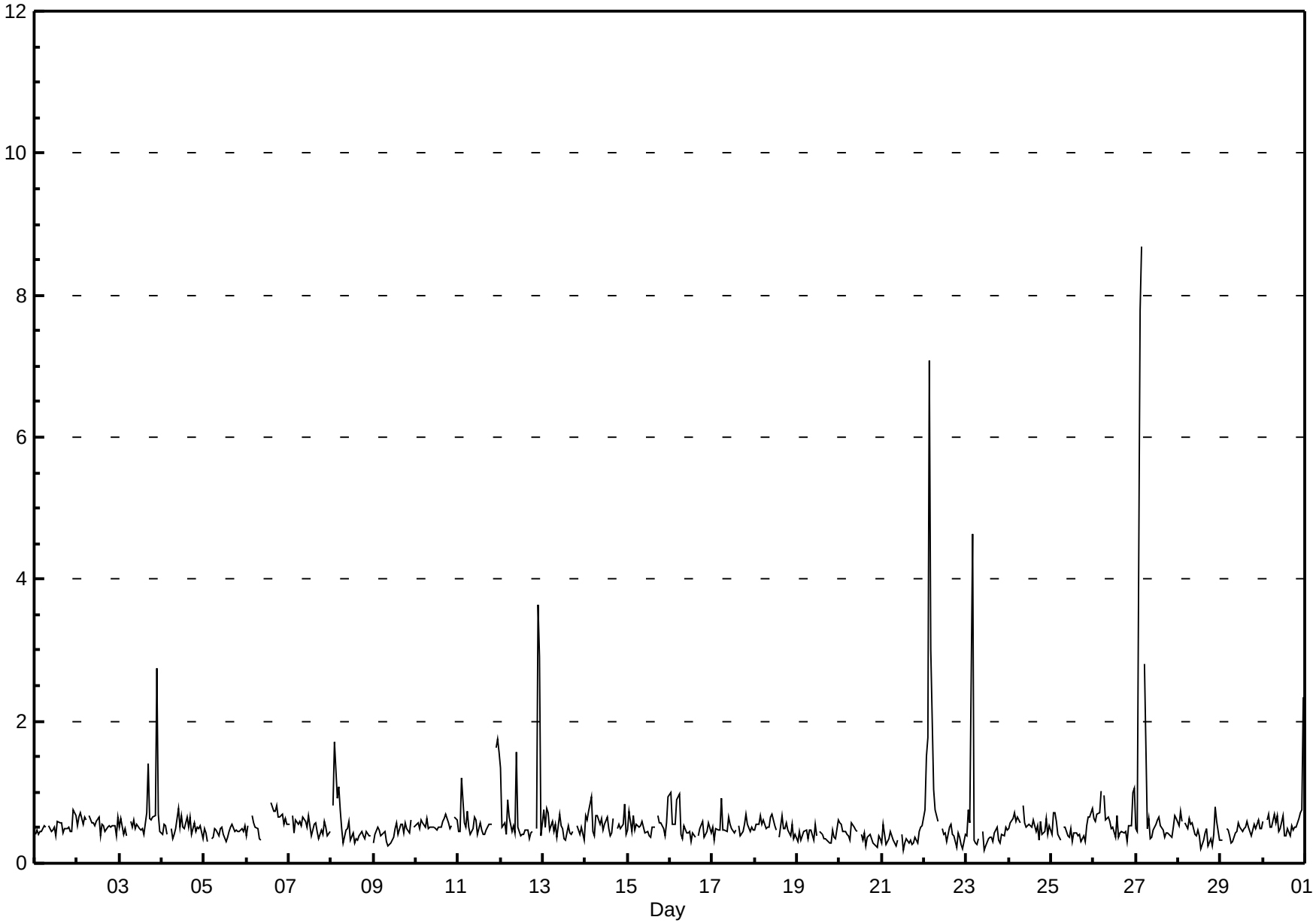
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

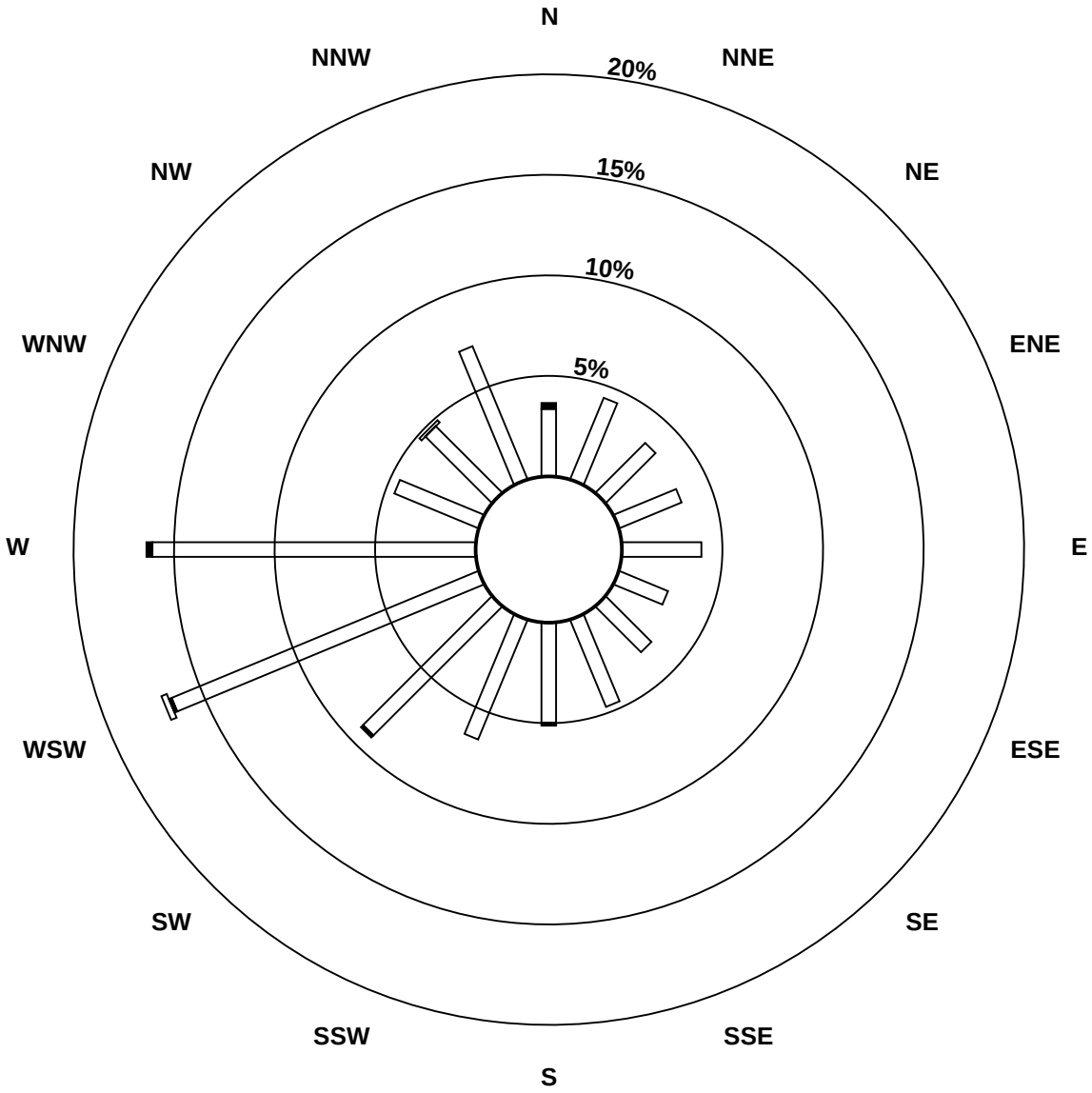
Smoky Heights - June 2014



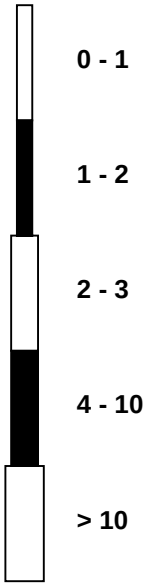
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - June 2014



Pollutant Classes (ppb)

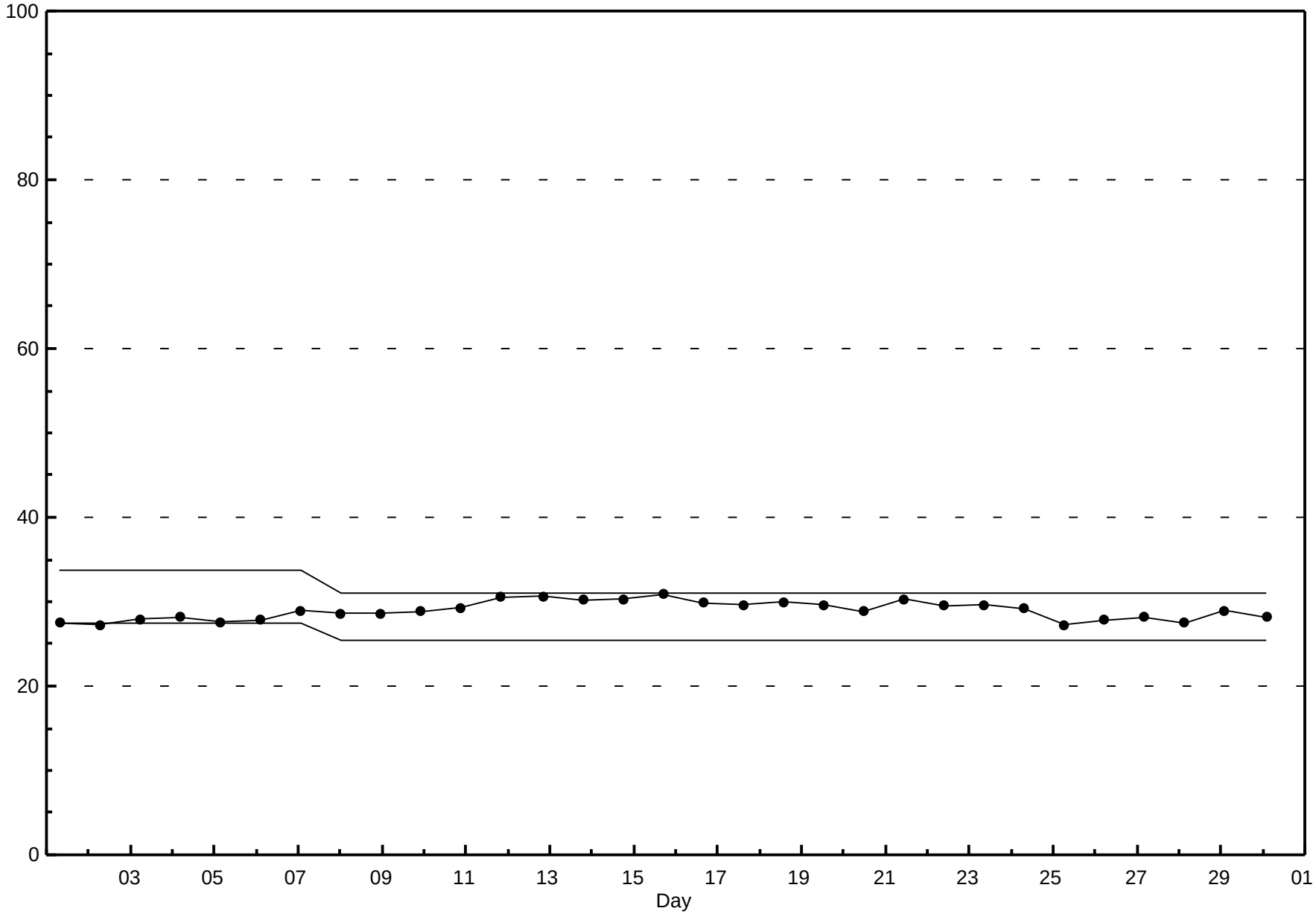


Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Smoky Heights - June 2014



Peace Airshed Zone Association

Hourly Averages

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

Smoky Heights - June 2014

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 48.2 $\mu g/m^3$ on Jun 3 22:00

Maximum Daily Average: 10.2 $\mu g/m^3$ on Jun 3

Minimum Value: 0 $\mu g/m^3$ on Jun 2 11:00

Maximum Diurnal Average: 5.6 $\mu g/m^3$ at hour 21

Monthly Average: 3.40 $\mu g/m^3$

Minimum Daily Average: 0.4 $\mu g/m^3$ on Jun 9

Minimum Diurnal Average: 1.7 $\mu g/m^3$ at hour 12

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 1.2 Median = 2.7 Q_3 = 4.4 P_{90} = 6.9 P_{99} = 15.0

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

Day	Hourly Period Ending At (MST) 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	2	3	5	5	5	8	4	3	4	5	6	4	4	2	3	6	2	4	2	3	5	3	4	7	4.2	7.5
2-Jun	5	4	4	4	5	7	3	4	1	N	0	1	2	3	2	3	1	2	2	4	3	7	6	4	3.2	6.8
3-Jun	4	0	4	6	4	7	5	4	3	2	6	8	11	10	12	17	46	14	12	12	9	48	0	0	10.2	48.2
4-Jun	0	1	2	0	3	0	0	3	2	1	0	0	1	0	1	2	7	3	0	0	6	5	0	0	1.5	6.9
5-Jun	0	0	0	0	0	1	2	2	2	2	0	1	1	0	N	10	6	2	2	1	2	3	4	3	1.9	9.5
6-Jun	6	2	3	4	3	3	4	2	2	2	1	M	M	M	11	7	4	14	5	6	3	4	6	3	4.5	13.7
7-Jun	N	3	3	0	4	5	4	4	3	3	1	1	2	2	0	5	0	2	10	2	2	2	2	1	2.6	10.3
8-Jun	2	2	3	2	2	7	3	4	5	5	1	0	0	3	0	0	1	0	0	1	0	1	1	1	1.9	7.3
9-Jun	3	0	0	0	0	0	0	0	1	0	0	0	0	0	1	2	0	0	1	0	0	0	1	1	0.4	2.8
10-Jun	0	0	1	1	1	1	2	2	1	3	5	4	3	2	3	3	2	3	2	3	2	4	4	3	2.4	4.8
11-Jun	2	0	1	0	4	4	6	7	3	3	2	1	1	0	1	2	1	2	2	3	6	5	9	13	3.2	12.5
12-Jun	7	7	2	7	11	5	2	4	3	5	4	0	0	1	1	2	5	6	5	3	4	2	5	3	3.8	10.6
13-Jun	2	2	3	4	3	3	4	5	4	4	4	3	5	5	7	3	0	3	3	1	3	4	5	3	3.5	6.6
14-Jun	3	5	3	5	7	6	5	7	7	4	4	2	0	5	1	7	1	0	1	2	5	3	3	2	3.8	7.0
15-Jun	1	3	2	1	1	3	5	3	0	0	0	0	0	1	0	3	0	4	3	1	1	2	2	2	1.7	5.0
16-Jun	2	2	3	2	2	4	4	3	4	4	3	1	1	4	9	8	1	1	2	3	2	1	2	2	2.9	8.7
17-Jun	3	1	1	3	2	3	3	2	2	1	2	0	2	2	3	3	2	3	8	10	6	1	1	3	2.8	9.7
18-Jun	2	2	2	3	3	5	5	6	6	6	5	3	0	0	3	1	2	3	3	7	21	7	4	4	4.3	21.3
19-Jun	1	0	2	4	4	8	7	3	4	0	0	2	9	4	2	4	5	5	5	9	6	4	3	5	4.0	9.0
20-Jun	4	6	6	4	7	7	8	6	3	5	3	0	N	0	1	0	0	0	0	5	1	1	2	2	3.1	7.9
21-Jun	3	0	0	1	1	2	1	0	0	0	3	0	1	3	0	2	3	2	2	3	27	4	4	4	2.8	27.5
22-Jun	3	4	3	2	1	4	4	5	4	1	1	0	2	0	0	1	0	1	1	3	3	2	2	5	2.2	5.3
23-Jun	3	4	3	3	5	4	4	3	5	3	1	0	1	5	2	4	4	4	4	6	6	6	5	5	3.8	6.3
24-Jun	9	12	10	9	7	9	8	8	11	10	12	3	5	5	11	7	8	3	11	4	0	0	1	0	6.8	12.3
25-Jun	1	1	0	1	3	0	1	0	0	0	0	1	1	1	0	1	4	2	2	3	4	5	10	4	1.8	10.0
26-Jun	1	1	2	3	2	4	4	3	3	4	0	0	2	4	3	3	4	5	2	3	14	21	10	8	4.4	21.3
27-Jun	7	6	4	3	10	6	5	10	8	6	6	6	5	5	4	2	8	5	13	28	15	11	2	3	7.4	27.8
28-Jun	2	4	2	3	5	5	4	3	3	5	1	2	1	0	0	4	3	0	2	7	10	5	3	0	3.1	9.6
29-Jun	0	4	1	0	0	3	3	3	3	3	2	4	2	2	1	0	2	3	0	0	2	0	2	2	1.7	3.6
30-Jun	3	3	2	2	3	4	2	3	0	0	2	0	6	1	0	0	0	0	5	3	2	4	8	4	2.4	8.2
	2.9	2.7	2.6	2.7	3.6	4.2	3.8	3.8	3.2	3.0	2.5	1.7	2.5	2.4	2.8	3.7	4.1	3.1	3.7	4.5	5.6	5.6	3.7	3.2	Diurnal Average	
	8.5	12.0	9.7	8.7	10.6	8.8	8.4	9.6	11.1	9.7	12.3	8.4	11.3	9.7	12.0	17.4	45.6	13.9	12.7	27.8	27.5	48.2	10.3	12.5	Diurnal Maximum	

M - Maintenance N - Not Valid

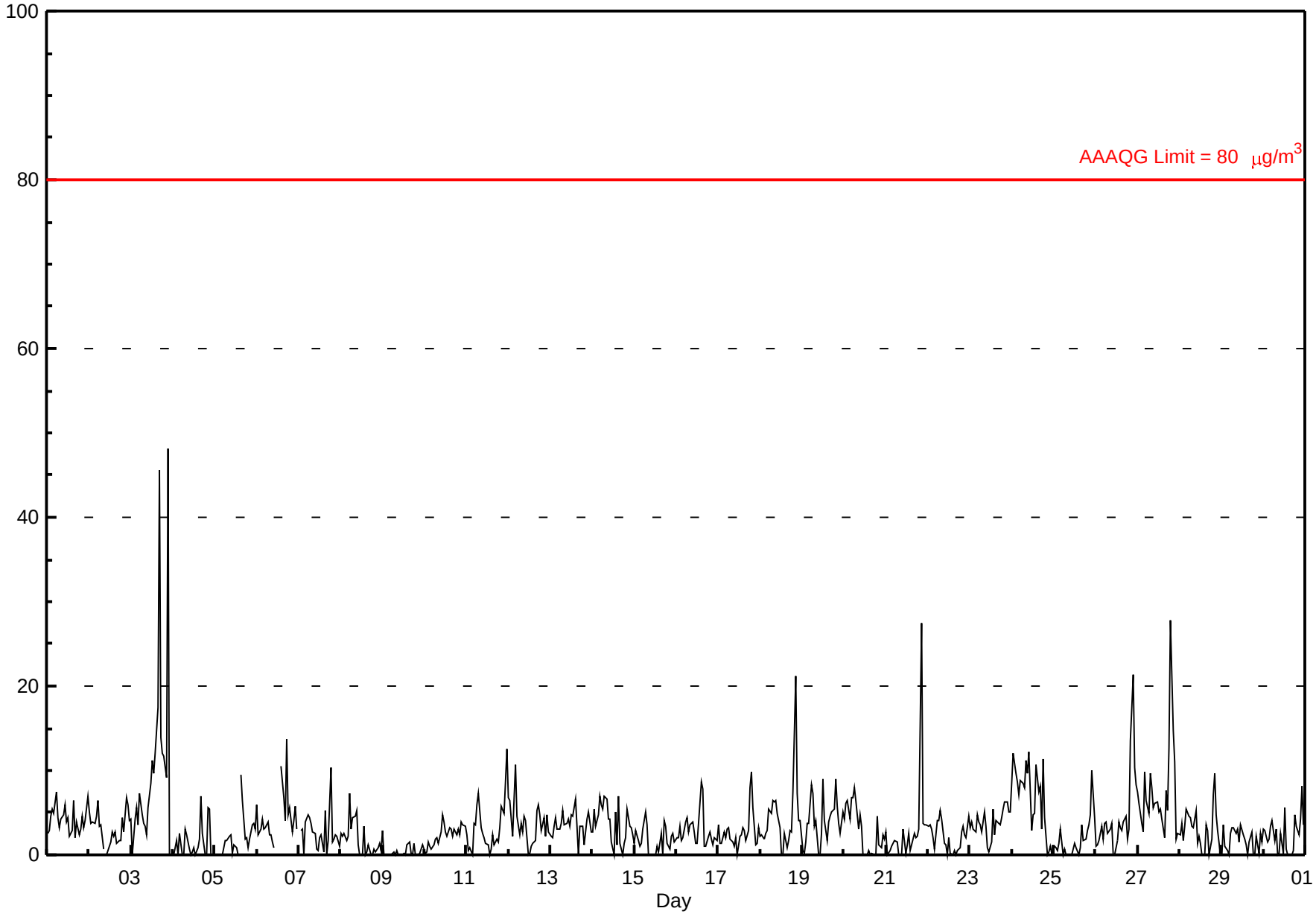
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Smoky Heights - June 2014



Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - June 2014

Maximum Value: 207.4 $\mu g/m^3$ on Jun 3 22:00

Maximum Daily Average: 25.6 $\mu g/m^3$ on Jun 27

Minimum Value: 0 $\mu g/m^3$ on Jun 3 23:00

Minimum Daily Average: 2.8 $\mu g/m^3$ on Jun 9

Maximum Diurnal Average: 17.4 $\mu g/m^3$ at hour 22

Minimum Diurnal Average: 5.5 $\mu g/m^3$ at hour 3

Monthly Average: 9.46 $\mu g/m^3$

Percentiles: P_1 = 0.4 P_{10} = 2.9 Q_1 = 4.7 Median = 6.8 Q_3 = 10.3 P_{90} = 16.1 P_{99} = 62.2

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) 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	7	7	7	9	8	5	8	8	9	8	16	14	12	13	6	9	8	8	14	6	6	13	8.8	15.9
2-Jun	9	6	6	9	10	9	8	7	5	3	4	5	5	11	11	8	3	4	7	10	5	21	18	9	8.0	20.8
3-Jun	10	5	7	10	7	19	10	7	9	6	12	14	17	13	15	32	103	21	29	35	19	207	0	0	25.3	207.4
4-Jun	2	4	6	0	16	1	0	14	11	3	1	3	5	4	5	5	26	10	4	2	17	11	8	0	6.6	26.4
5-Jun	1	0	0	1	2	3	4	5	6	7	8	8	4	4	5	16	20	5	5	4	4	9	8	5	5.5	20.1
6-Jun	22	5	6	7	5	6	6	5	6	3	4	M	M	M	34	13	10	31	10	13	6	15	19	6	11.0	34.4
7-Jun	6	6	6	4	6	10	7	7	7	6	4	5	9	10	11	15	2	5	21	7	5	5	6	4	7.2	20.6
8-Jun	7	6	6	5	6	12	10	6	8	7	7	2	4	13	5	5	3	2	3	3	3	4	4	2	5.5	12.7
9-Jun	6	4	1	1	0	1	3	1	3	3	2	2	3	4	6	4	3	3	8	2	1	2	3	3	2.8	7.6
10-Jun	2	3	3	2	2	3	3	4	2	4	11	10	9	6	6	6	5	8	5	5	6	8	6	7	5.3	10.6
11-Jun	4	3	4	4	7	5	8	16	6	5	7	6	5	5	10	7	5	5	8	10	15	12	26	52	9.9	51.8
12-Jun	18	16	5	21	41	12	10	11	6	10	9	5	13	7	11	9	11	10	8	5	15	5	8	4	11.2	40.6
13-Jun	6	5	5	7	6	5	5	9	6	5	6	6	8	9	21	16	3	10	7	5	4	7	8	5	7.3	20.8
14-Jun	7	10	12	12	10	11	8	10	11	8	7	5	5	10	6	24	5	4	3	5	16	5	5	5	8.5	23.9
15-Jun	3	5	5	2	4	5	8	5	2	3	6	6	4	7	11	11	3	16	7	4	3	4	5	4	5.5	16.1
16-Jun	3	4	6	4	4	7	6	6	6	7	10	6	6	9	25	14	8	6	6	7	9	3	4	4	7.0	24.7
17-Jun	7	4	4	5	4	5	8	5	4	4	6	4	7	8	19	14	5	6	13	16	9	3	4	5	7.1	19.1
18-Jun	5	4	3	4	5	10	8	10	9	12	9	8	6	7	11	6	6	8	9	18	56	18	9	7	10.3	56.2
19-Jun	2	3	4	7	10	18	37	30	14	6	4	14	30	11	11	7	9	8	10	16	8	7	6	10	11.7	36.6
20-Jun	6	9	11	6	10	11	11	9	10	11	12	9	2	4	6	6	7	3	3	12	12	3	11	3	7.8	11.8
21-Jun	13	2	2	2	3	3	4	4	2	2	8	4	6	10	6	4	6	7	5	23	82	6	5	6	9.0	81.6
22-Jun	6	6	7	5	5	8	9	9	12	7	8	8	6	6	4	6	5	7	8	13	8	4	4	10	7.1	12.7
23-Jun	5	6	6	7	9	10	8	7	8	10	11	7	6	32	8	12	12	9	11	13	9	8	8	7	9.5	31.8
24-Jun	11	13	12	17	10	11	11	11	29	14	19	18	13	11	46	20	13	10	19	10	1	4	4	1	13.6	45.5
25-Jun	3	3	2	3	5	4	3	3	4	4	5	6	5	5	2	6	18	6	6	8	9	19	21	12	6.7	21.2
26-Jun	4	5	5	7	6	7	9	7	9	7	6	7	9	12	14	19	12	12	7	12	68	65	20	24	14.7	68.0
27-Jun	25	21	10	8	31	9	9	17	23	14	12	14	13	13	15	12	34	15	122	127	31	26	8	6	25.6	127.3
28-Jun	7	8	7	6	8	6	6	6	6	8	8	10	17	10	9	13	12	8	10	21	35	15	10	11	10.8	35.5
29-Jun	9	5	4	4	3	4	5	6	7	6	7	9	8	7	7	2	5	6	7	3	4	3	4	4	5.4	9.0
30-Jun	7	5	3	6	7	6	4	8	7	6	15	10	13	9	4	4	7	9	16	15	21	17	12	11	9.2	21.0
	7.4	6.1	5.5	6.2	8.3	7.7	7.9	8.3	8.2	6.6	7.9	7.5	8.8	9.3	11.8	11.0	12.3	8.7	12.8	14.4	16.5	17.4	8.7	8.0	Diurnal Average	
	25.2	21.1	11.8	21.1	40.6	18.6	36.6	30.3	28.6	13.7	19.3	18.2	30.4	31.8	45.5	32.2	102.7	31.3	121.5	127.3	81.6	207.4	26.2	51.8	Diurnal Maximum	

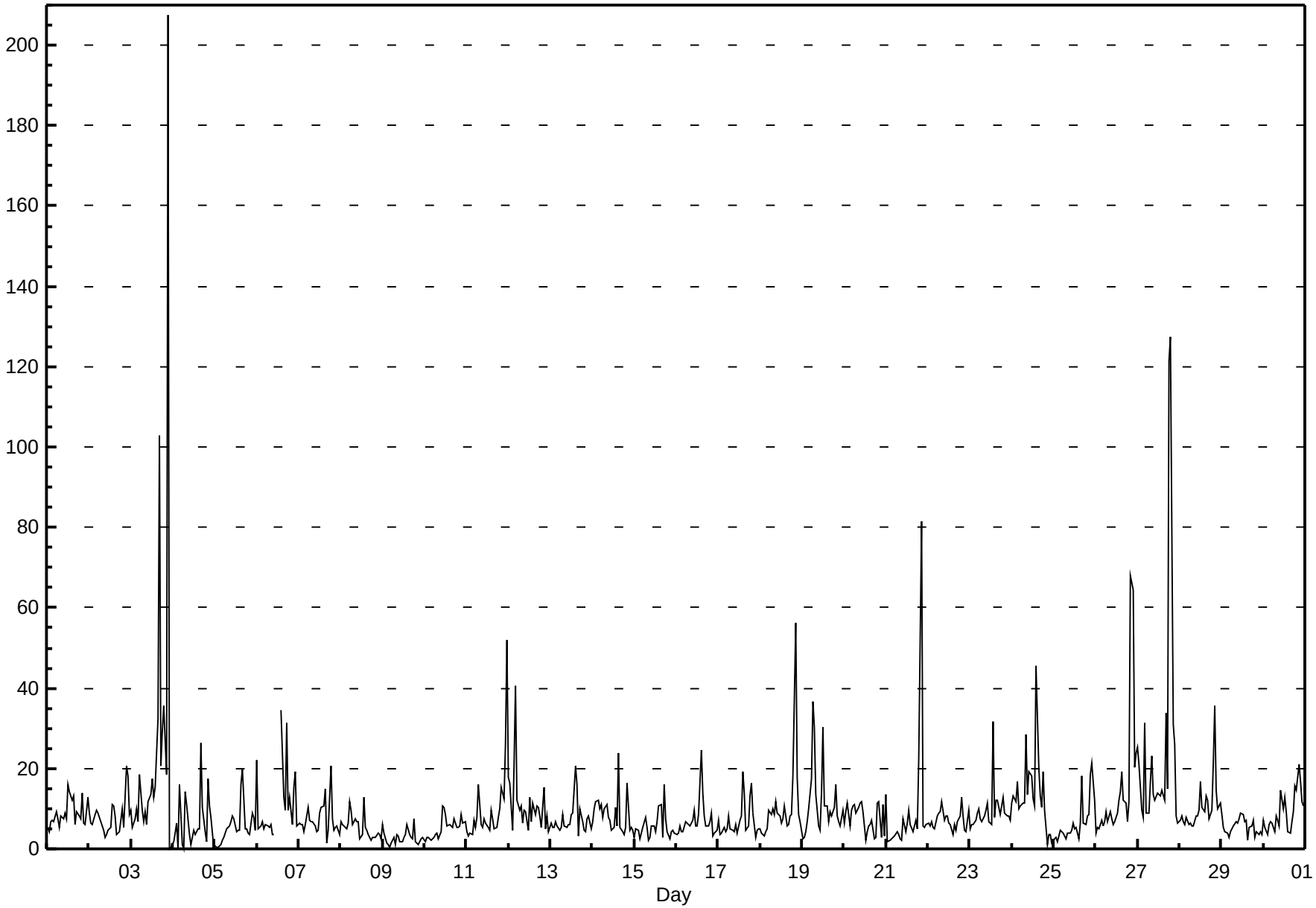
M - Maintenance

Peace Airshed Zone Association

Hourly Maximums

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

Smoky Heights - June 2014

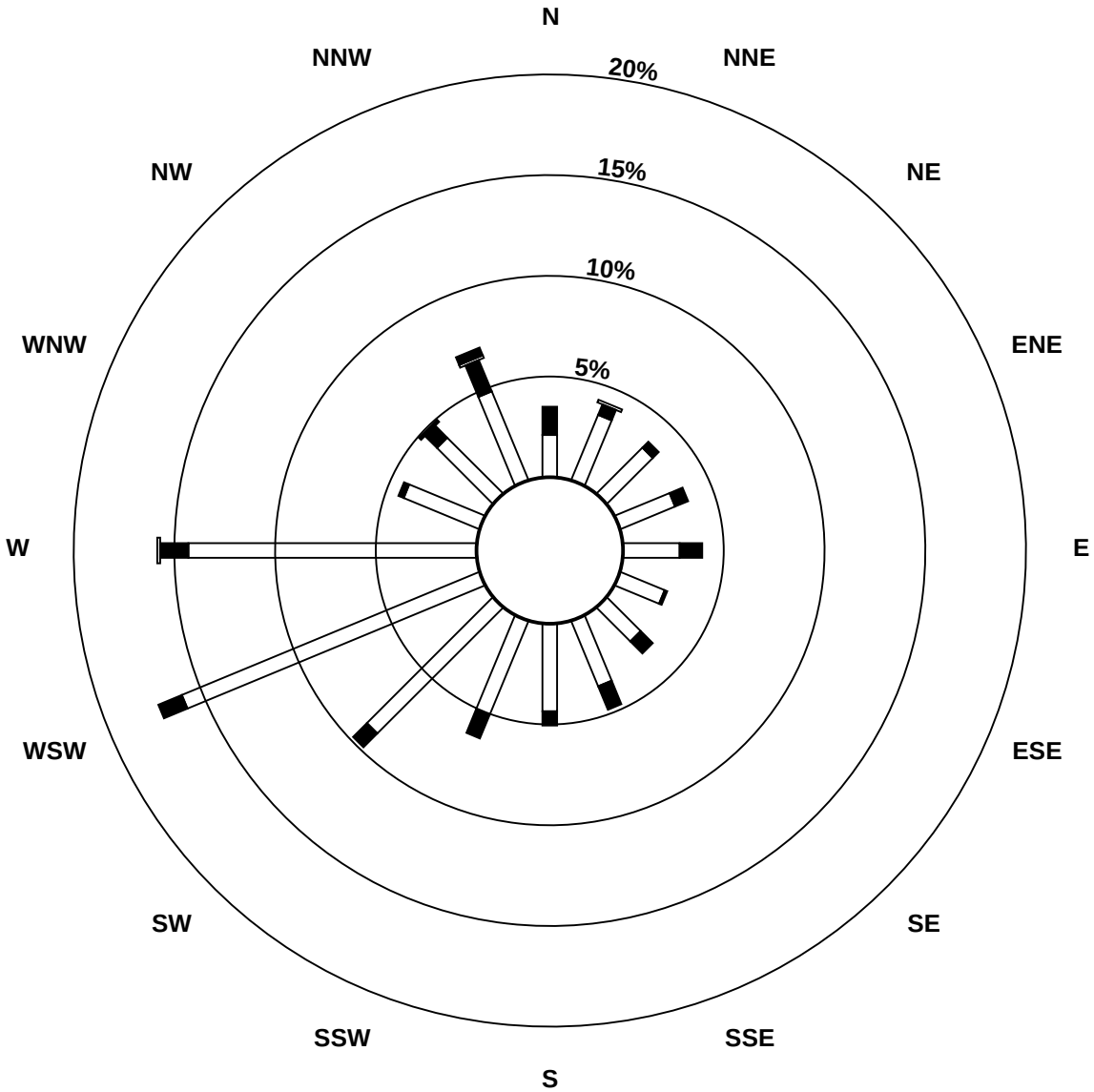


Peace Airshed Zone Association

Pollutant Rose

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

Smoky Heights - June 2014



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

- 0 - 5
- 6 - 15
- 16 - 25
- 26 - 80
- > 80.0

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - June 2014

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

Maximum Value: 27.5 ^{o}C on Jun 24 16:00

Maximum Daily Average: 20.1 ^{o}C on Jun 23

Minimum Value: 0 ^{o}C on Jun 6 05:00

Minimum Daily Average: 5.3 ^{o}C on Jun 4

Maximum Diurnal Average: 19.8 ^{o}C at hour 15

Minimum Diurnal Average: 7.9 ^{o}C at hour 5

Monthly Average: 14.62 ^{o}C

Percentiles: P_1 = 2.6 P_{10} = 6.7 Q_1 = 10.1 Median = 14.4 Q_3 = 19.2 P_{90} = 22.7 P_{99} = 26.6

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

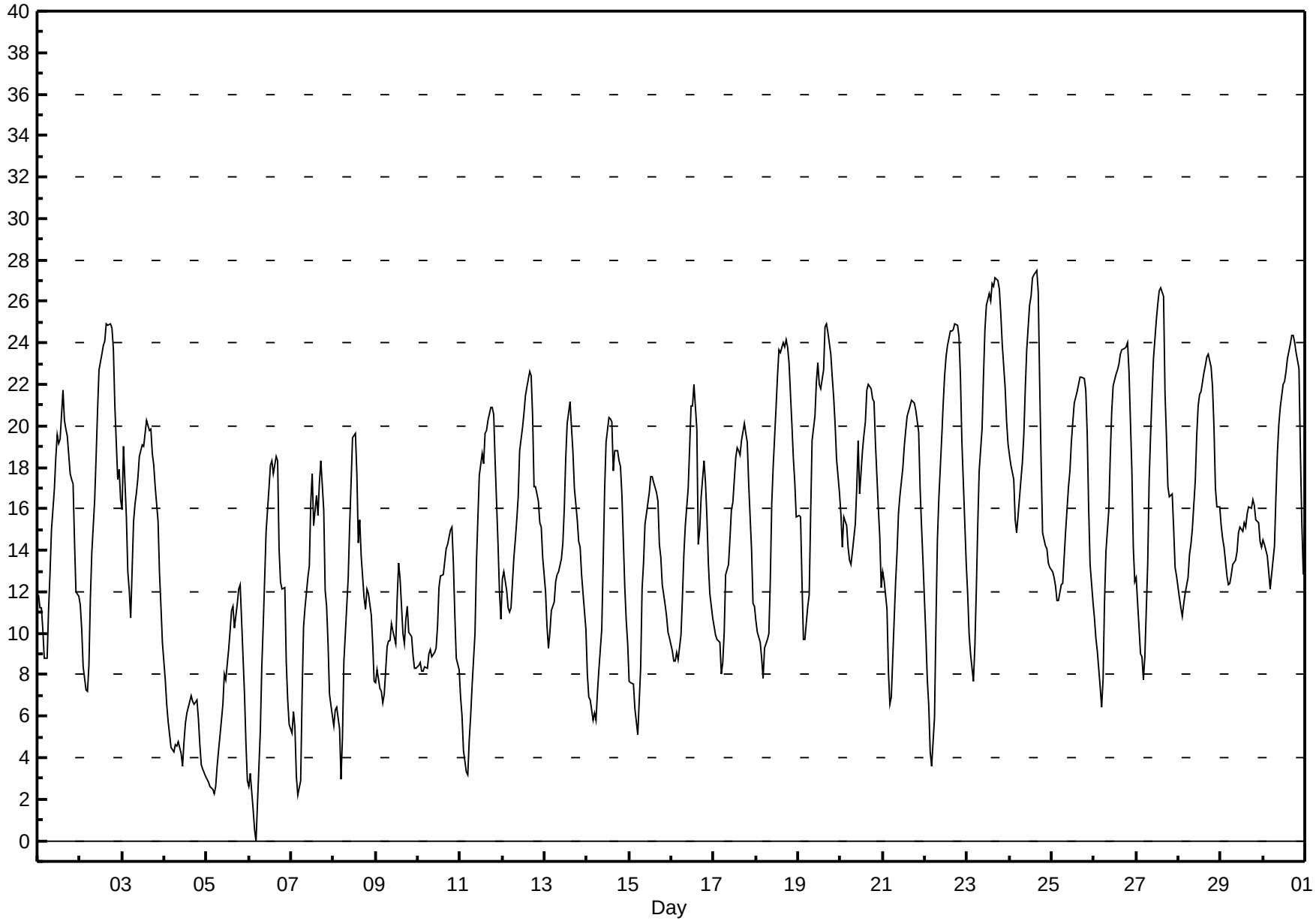
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	12	11	11	10	9	9	11	13	15	17	18	20	19	19	22	20	20	19	18	17	17	14	12	12	15.3	21.7
2-Jun	11	10	8	7	7	8	12	14	16	18	21	23	23	24	24	25	25	25	25	24	21	17	18	16	17.7	24.9
3-Jun	16	19	16	13	12	11	15	16	17	17	19	19	19	20	20	20	20	19	18	17	15	13	11	10	16.3	20.2
4-Jun	8	7	6	5	4	4	5	5	5	4	4	5	6	6	7	7	7	7	7	6	5	4	3	3	5.3	7.7
5-Jun	3	3	3	2	2	3	4	4	6	7	8	8	9	10	11	11	10	11	12	12	11	7	5	3	6.9	12.4
6-Jun	3	3	2	1	0	2	5	8	10	13	15	17	18	18	18	19	18	14	12	12	12	9	7	6	10.0	18.5
7-Jun	5	6	5	3	2	3	7	10	11	13	13	16	18	15	17	16	17	18	16	12	11	9	7	6	10.8	18.3
8-Jun	6	6	6	5	3	5	9	10	13	15	17	19	20	18	14	15	14	12	11	12	12	11	9	8	11.3	19.6
9-Jun	8	8	7	7	7	7	9	10	10	10	10	10	12	13	13	10	10	11	11	10	10	9	8	8	9.5	13.4
10-Jun	8	9	8	8	8	8	9	9	9	9	9	10	12	13	13	13	14	14	15	15	13	11	9	8	10.7	15.1
11-Jun	7	6	4	3	3	5	6	7	10	13	16	18	19	18	20	20	20	21	21	21	18	14	12	11	13.0	20.9
12-Jun	13	13	12	11	11	11	14	14	16	17	19	20	21	21	22	23	22	20	17	17	16	15	15	14	16.4	22.7
13-Jun	12	10	9	10	11	12	12	13	13	14	14	16	18	20	21	20	19	17	15	14	14	13	12	10	14.2	21.1
14-Jun	8	7	7	6	6	6	7	8	10	13	17	19	20	20	20	18	19	19	18	18	17	12	11	10	13.2	20.4
15-Jun	8	8	8	6	6	5	8	12	13	15	16	17	18	18	17	17	16	14	14	12	11	11	10	10	12.1	17.6
16-Jun	9	9	9	9	9	10	12	14	15	17	19	21	21	22	20	14	15	17	18	17	16	13	12	11	14.5	22.0
17-Jun	10	10	10	10	8	9	10	13	13	15	16	16	18	19	19	19	19	20	20	19	17	14	11	11	14.4	20.1
18-Jun	11	10	10	9	8	9	10	10	13	16	18	21	22	24	24	24	24	24	24	23	20	18	17	16	16.8	24.1
19-Jun	16	16	13	10	10	11	12	16	19	20	22	23	22	22	23	25	25	24	23	22	21	20	18	17	18.8	24.9
20-Jun	16	14	16	15	14	14	13	14	15	17	19	17	19	20	20	22	22	22	21	21	19	16	15	12	17.2	22.0
21-Jun	13	13	11	8	7	7	11	12	14	16	17	18	19	20	20	21	21	21	21	21	20	17	15	13	15.6	21.2
22-Jun	10	8	6	4	4	6	11	14	17	19	21	22	23	24	25	25	25	25	25	24	22	19	17	13	17.1	24.9
23-Jun	12	10	9	8	9	12	15	18	20	22	25	26	26	26	27	27	27	27	27	25	24	22	20	19	20.1	27.2
24-Jun	19	18	17	15	15	16	17	18	20	22	24	26	26	27	27	27	26	22	18	15	14	14	13	13	19.6	27.5
25-Jun	13	13	12	12	12	12	12	14	15	17	18	19	20	21	22	22	22	22	22	22	20	16	13	12	16.8	22.4
26-Jun	11	10	9	7	6	8	11	14	16	19	21	22	23	23	23	23	24	24	24	24	23	18	14	12	17.0	24.0
27-Jun	13	11	9	9	8	9	13	17	20	22	23	25	26	27	27	26	22	20	17	17	17	15	13	13	17.4	26.7
28-Jun	12	11	11	11	12	13	14	14	15	17	20	21	22	22	23	23	23	23	23	22	20	17	16	16	17.5	23.5
29-Jun	15	15	14	13	12	12	13	13	14	14	15	15	15	15	15	16	16	16	16	16	15	15	14	14	14.6	16.5
30-Jun	14	14	14	13	12	13	14	17	19	20	21	22	22	23	23	24	24	24	24	24	23	19	15	13	18.8	24.4
	10.6	10.2	9.4	8.4	7.9	8.6	10.7	12.4	13.9	15.6	17.1	18.3	19.2	19.6	19.8	19.7	19.6	19.1	18.5	17.7	16.5	14.1	12.5	11.3	Diurnal Average	
	18.6	19.0	17.4	15.5	14.8	15.7	17.4	18.3	19.9	22.4	24.6	25.8	26.4	27.2	27.3	27.5	27.2	27.0	26.6	25.4	24.0	21.9	20.3	19.2	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Smoky Heights - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - June 2014

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	12	15	9	10	14	16	21	22	24	19	18	22	19	21	18	21	17	21	25	28	5	9	8	5	11.6	28.1
Dir	249	252	243	219	208	221	242	249	239	222	214	214	258	304	293	318	352	332	302	299	106	241	154	160	260.5	298.9
2 Spd	19	12	11	11	13	10	21	24	29	26	23	25	20	18	13	18	18	15	17	17	18	14	16	16	14.1	29.4
Dir	254	273	261	252	251	240	235	230	229	227	216	202	213	222	203	189	185	169	154	137	135	141	178	264	211.5	228.9
3 Spd	21	13	17	18	24	14	27	27	27	28	17	18	22	26	25	27	26	28	30	29	24	20	21	22	15.1	30.4
Dir	185	149	183	272	261	263	256	249	253	284	325	332	357	350	336	331	345	336	339	345	350	337	331	322	310.7	339.0
4 Spd	17	8	11	10	9	10	13	12	5	5	9	6	14	17	24	25	11	8	20	27	28	19	19	19	13.7	27.5
Dir	331	14	339	339	338	320	323	326	345	350	319	357	347	327	331	326	325	298	295	300	297	299	306	310	320.0	297.2
5 Spd	16	17	21	20	19	16	18	15	27	26	25	26	26	29	27	27	24	23	24	22	18	9	12	13	19.4	28.9
Dir	312	311	316	315	321	331	321	303	305	297	277	299	290	286	295	290	306	271	266	283	242	241	260	262	293.2	285.8
6 Spd	15	14	14	8	11	9	12	23	28	32	28	32	29	20	17	32	33	27	17	14	7	7	12	11	15.0	33.2
Dir	266	260	257	244	219	206	203	221	225	231	237	232	242	272	274	228	250	335	21	207	8	258	250	276	246.4	249.9
7 Spd	13	9	5	4	4	4	11	13	14	14	13	9	7	4	7	26	24	24	23	24	17	7	11	15	2.3	26.3
Dir	270	289	267	255	245	216	222	165	133	125	108	74	72	85	221	210	220	252	341	54	55	295	347	262	227.9	210.4
8 Spd	17	16	12	11	15	9	12	18	15	19	19	25	31	28	18	14	16	18	20	20	23	24	19	20	12.4	31.5
Dir	270	243	275	349	273	338	152	162	177	170	183	237	249	228	175	342	223	225	144	166	182	180	197	217	209.8	248.9
9 Spd	23	27	25	25	26	30	38	40	34	41	47	48	50	51	40	38	31	19	30	27	29	26	26	24	31.9	50.8
Dir	236	251	252	241	256	259	255	262	263	255	260	256	257	260	284	306	277	263	292	287	262	260	253	259	263.1	260.0
10 Spd	23	26	23	24	25	23	24	29	28	28	24	24	28	25	28	26	17	20	10	16	18	17	15	12	8.2	29.1
Dir	262	271	262	265	270	262	291	321	324	338	12	27	20	28	49	52	80	40	52	160	107	76	102	136	350.6	321.4
11 Spd	15	14	20	17	17	17	18	20	22	23	24	20	17	15	14	12	18	12	4	14	17	19	19	11	9.0	24.2
Dir	181	224	251	233	196	212	195	196	221	173	178	180	211	206	187	211	186	191	166	18	39	15	14	21	200.2	178.1
12 Spd	15	16	15	5	13	15	20	17	23	24	25	28	28	29	28	26	25	20	25	29	23	17	23	28	13.3	29.3
Dir	28	89	127	344	3	13	33	52	56	52	56	83	79	68	65	59	84	91	263	304	150	129	120	157	72.4	304.1
13 Spd	11	14	10	19	19	14	16	20	23	25	27	28	23	23	18	29	30	30	30	27	28	22	20	4	6.1	30.3
Dir	143	321	37	25	359	359	355	22	352	354	345	330	348	350	355	78	101	201	193	244	266	154	200	217	347.4	192.8
14 Spd	4	13	17	11	17	19	20	22	23	29	28	35	35	38	36	33	30	29	39	37	35	26	23	19	21.8	38.6
Dir	347	233	277	207	212	244	197	192	180	170	189	232	243	253	247	206	181	236	257	263	268	247	253	264	231.5	257.3
15 Spd	13	10	14	10	8	9	9	17	24	26	21	16	5	12	20	24	17	7	17	11	16	12	10	15	5.5	25.7
Dir	250	232	250	233	182	195	248	199	241	237	261	243	283	117	119	99	75	121	226	225	336	17	254	6	225.6	237.4
16 Spd	12	13	15	16	10	13	8	19	23	18	14	11	15	21	22	22	22	19	9	12	18	18	15	11	5.2	23.0
Dir	259	287	256	271	266	343	84	14	24	50	43	55	12	38	93	130	204	204	131	87	64	46	42	11	42.3	24.4
17 Spd	15	15	14	7	5	14	16	20	24	21	19	13	11	12	10	12	13	12	14	14	16	16	13	16	6.5	23.9
Dir	15	22	335	16	154	266	270	252	245	238	232	226	140	157	173	131	171	165	166	157	148	160	159	167	197.7	244.9
18 Spd	14	10	12	13	16	16	18	17	19	17	17	25	24	22	23	21	22	19	17	15	12	17	19	10	13.4	24.9
Dir	173	212	201	219	235	213	186	193	186	214	229	234	226	235	245	250	255	252	257	269	269	339	331	339	235.8	234.2
19 Spd	13	10	7	10	9	7	12	14	14	13	13	12	13	10	12	15	14	20	20	14	14	13	6	5	7.6	20.1
Dir	318	347	103	133	275	199	272	337	48	45	58	78	82	92	68	44	36	82	88	60	85	85	95	44	60.0	87.8
20 Spd	4	14	15	12	5	3	8	5	2	6	8	25	35	25	21	23	24	24	20	13	21	17	16	17	13.4	34.6
Dir	60	268	308	346	195	219	256	272	50	202	178	253	262	257	280	274	274	274	279	306	271	268	272	268	270.6	262.4
21 Spd	22	26	22	20	21	18	18	24	31	35	35	30	30	30	30	27	22	22	19	15	7	12	12	10	20.8	35.2
Dir	283	274	273	264	256	241	234	249	255	255	257	257	255	268	264	268	263	265	257	273	317	352	336	325	264.9	255.4
22 Spd	1	2	5	6	6	6	4	6	8	8	12	11	8	7	9	11	13	8	10	11	12	12	11	4	5.2	12.7
Dir	309	225	268	247	252	202	167	163	135	162	155	152	151	183	128	102	129	90	92	102	67	82	95	34	128.6	128.6

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	7	5	5	2	9	6	8	12	10	11	11	12	11	9	10	8	9	14	16	17	15	13	14	14	7.8	17.1
Dir	13	329	319	356	27	23	32	33	57	64	60	73	108	116	117	136	151	124	121	94	84	78	85	109	82.6	94.4
24 Spd	17	19	17	5	7	6	11	12	10	9	7	15	13	10	6	2	14	48	37	18	21	5	11	10	8.7	47.9
Dir	144	150	148	142	126	129	149	165	187	218	241	254	253	264	227	347	269	262	258	240	285	212	187	212	223.8	261.6
25 Spd	8	7	5	7	6	14	11	13	23	26	25	22	21	19	19	17	16	18	17	11	9	11	13	10	13.7	25.9
Dir	198	219	224	208	203	244	217	241	249	260	262	258	252	254	230	229	263	260	260	254	247	260	273	277	248.7	259.6
26 Spd	13	15	14	8	5	3	8	12	15	13	12	15	20	17	14	11	13	9	8	4	3	4	4	4	8.6	19.5
Dir	272	269	270	207	219	233	212	218	242	226	215	227	227	246	241	228	233	255	244	208	166	30	8	30	238.5	226.8
27 Spd	5	6	4	9	8	3	11	5	9	11	11	7	10	11	10	10	8	15	15	12	11	4	6	4	3.3	15.1
Dir	256	330	307	4	52	179	331	52	79	114	78	61	60	53	63	83	253	248	320	339	8	2	258	235	17.5	247.6
28 Spd	8	8	6	7	8	8	9	12	16	12	12	3	10	11	8	5	7	10	6	4	5	3	4	19	6.9	19.4
Dir	226	287	265	216	231	229	249	243	250	239	253	286	263	267	269	277	332	296	309	11	95	178	222	255	257.3	255.0
29 Spd	20	16	6	12	14	13	14	10	10	8	10	16	19	17	13	14	11	12	17	12	9	10	8	10	12.4	20.5
Dir	240	231	241	263	261	260	259	266	257	255	263	265	260	266	257	257	254	232	248	264	247	272	247	258	255.1	240.0
30 Spd	11	10	10	9	2	6	10	12	13	20	16	18	17	19	18	16	20	18	10	6	4	3	3	3	10.5	20.4
Dir	268	273	265	260	181	193	244	253	276	292	269	293	256	253	258	262	259	261	276	280	306	334	1	346	267.3	292.0
Spd	7.4	8.1	8.0	6.8	7.3	7.3	8.5	8.3	9.0	8.6	8.0	9.8	9.9	9.2	6.0	4.3	6.5	9.2	8.6	6.4	2.6	1.2	3.1	5.4	Diurnal Average	
Dir	256.7	263.9	262.8	265.6	255.1	254.1	248.1	246.4	249.0	244.3	246.5	251.2	261.2	271.3	269.8	264.4	242.3	254.7	265.8	278.3	282.6	277.8	255.4	266.2		
Spd	23.1	27.3	25.0	25.5	26.1	29.7	37.7	39.7	33.7	40.6	46.9	48.5	49.6	50.8	39.7	38.0	33.2	47.9	38.6	37.0	34.7	26.2	26.0	28.3	Diurnal Maximum	
Dir	236.3	250.7	252.1	240.6	255.5	259.1	255.0	262.3	262.7	254.7	260.4	255.8	256.8	260.0	284.1	305.7	249.9	261.6	257.3	262.6	268.1	260.0	252.7	156.5		

Maximum Speed Value: 51 km/h on Jun 9 14:00
Maximum Daily Speed Average: 31.9 km/h on Jun 9
Maximum Diurnal Speed Average: 9.9 km/h at hour 13

Minimum Speed Value: 1 km/h on Jun 22 01:00
Minimum Daily Speed Average: 2.3 km/h on Jun 22
Minimum Diurnal Speed Average: 1.2 km/h at hour 22

Monthly Average Velocity: 6.95 km/h 257.88 deg

Speed Percentiles: $P_1 = 2.6$ $P_{10} = 6.3$ $Q_1 = 10.4$ Median = 15.3 $Q_3 = 21.9$ $P_{90} = 27.5$ $P_{99} = 39.2$

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

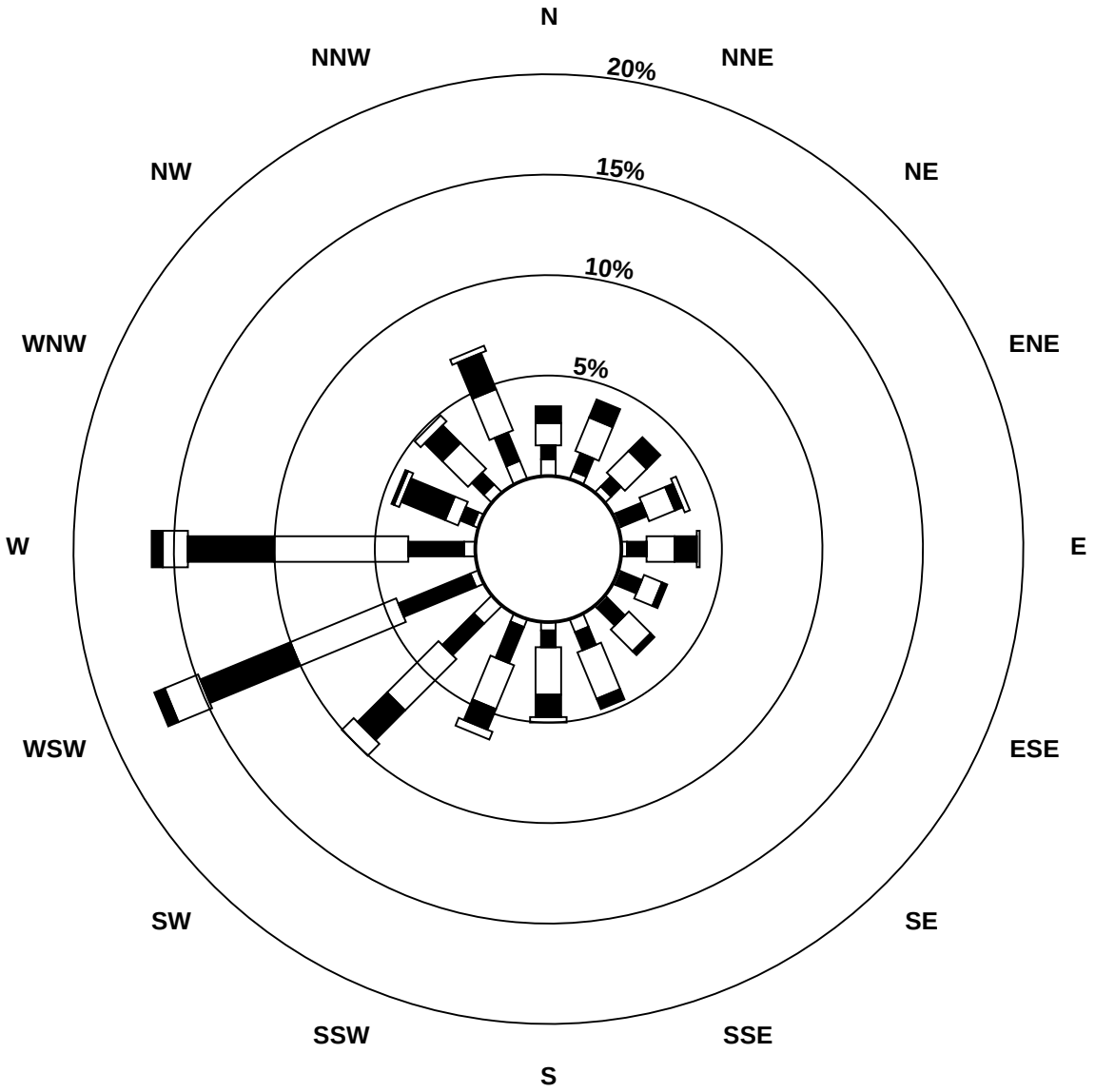
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	8	16	24	17	3	0	68
NorthEast	6	14	19	13	1	0	53
East	2	12	24	6	5	0	49
SouthEast	0	17	26	6	1	0	50
South	7	14	31	15	5	0	72
SouthWest	12	34	50	32	13	0	141
West	3	36	80	63	22	9	213
NorthWest	4	12	26	26	5	1	74
Total	42	155	280	178	55	10	720

Peace Airshed Zone Association

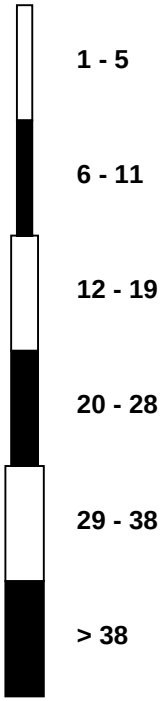
Wind Rose

Wind Speed (WS) (km/h)

Smoky Heights - June 2014



Wind Speed Classes (km/h)



Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - June 2014

Maximum Speed: 51 km/h on Jun 9 14:00

Maximum Daily Speed Average: 33.8 km/h on Jun 9

Minimum Speed: 3 km/h on Jun 22 01:00

Minimum Daily Speed Average: 9.1 km/h on Jun 28

Maximum Diurnal Speed Average: 22.5 km/h at hour 13

Minimum Diurnal Speed Average: 12.9 km/h at hour 6

Monthly Average Speed: 17.93 km/h

Percentiles: $P_1 = 3.7$ $P_{10} = 8.2$ $Q_1 = 12.2$ Median = 17.1 $Q_3 = 23.1$ $P_{90} = 28.4$ $P_{99} = 37.2$

Hours in Service: 720

Hours of Data: 720

Hours of Missing Data: 0

Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	16	15	11	11	15	16	21	22	25	23	20	24	23	22	21	23	18	22	26	29	20	16	13	12	19.3	28.5
2-Jun	19	12	11	11	13	10	21	24	30	27	24	27	24	21	19	21	22	18	18	17	18	15	21	19	19.3	29.9
3-Jun	23	21	20	19	24	14	27	28	29	29	20	21	24	27	26	28	27	29	31	30	24	20	21	22	24.3	31.0
4-Jun	18	10	12	10	9	10	13	13	7	6	9	7	14	18	25	26	12	10	21	27	28	19	19	19	15.0	27.6
5-Jun	16	17	21	20	19	17	18	15	27	27	26	28	28	30	28	28	25	24	25	23	18	9	12	13	21.5	29.9
6-Jun	15	14	14	8	11	9	13	24	29	32	29	33	31	26	22	33	35	34	19	19	16	10	12	12	20.7	34.6
7-Jun	13	10	6	5	7	7	12	16	15	17	16	14	13	15	15	28	26	25	28	25	17	16	19	19	16.0	28.5
8-Jun	19	17	15	14	15	12	13	18	16	20	22	26	33	36	23	19	28	20	22	20	24	24	21	20	20.7	35.6
9-Jun	24	27	25	26	26	30	38	40	34	41	47	49	50	51	46	39	32	20	31	28	29	26	26	24	33.8	51.3
10-Jun	23	26	23	24	25	23	26	29	29	29	25	24	29	27	29	27	22	22	19	19	19	18	18	18	24.0	29.3
11-Jun	17	16	20	19	18	17	18	20	23	25	26	23	22	22	21	21	23	19	17	15	18	20	19	15	19.8	26.1
12-Jun	16	18	17	15	16	19	22	20	24	25	26	29	30	31	30	28	27	26	28	29	28	22	27	29	24.2	30.6
13-Jun	21	15	17	21	21	15	16	20	24	26	28	28	25	25	23	31	31	37	34	28	28	25	21	17	24.1	36.8
14-Jun	15	19	17	16	20	19	20	22	24	30	30	36	37	39	37	38	30	34	39	37	35	26	23	19	27.6	39.2
15-Jun	13	10	14	12	9	9	10	19	25	28	24	22	16	16	22	26	18	15	20	17	16	16	17	15	17.0	27.7
16-Jun	15	13	17	18	14	13	13	21	24	19	16	15	17	21	28	25	26	21	15	14	19	18	15	14	17.9	28.4
17-Jun	16	15	15	11	12	15	16	20	24	22	20	15	13	15	14	15	15	13	15	14	16	16	13	16	15.7	24.4
18-Jun	15	11	12	14	17	17	18	17	19	17	18	25	25	24	24	22	23	20	18	15	12	18	19	11	17.9	25.5
19-Jun	13	11	10	13	11	14	14	17	15	14	14	12	13	10	12	16	15	21	20	14	14	13	10	9	13.6	21.0
20-Jun	12	15	16	13	7	6	8	6	6	7	10	29	35	26	22	24	24	25	21	15	21	17	16	17	16.6	35.0
21-Jun	22	26	22	20	21	18	19	24	31	35	35	30	31	31	31	28	23	22	19	15	9	12	12	10	22.8	35.4
22-Jun	3	3	5	6	6	6	4	7	9	9	13	13	13	13	12	13	15	13	13	13	13	13	12	6	9.6	15.4
23-Jun	7	5	5	3	9	6	8	12	10	11	12	14	15	11	13	11	11	15	17	17	15	13	14	15	11.2	17.4
24-Jun	17	19	18	6	8	6	11	12	11	9	8	15	14	13	9	8	18	48	39	20	21	5	11	10	14.9	48.2
25-Jun	8	7	5	7	6	14	11	13	23	26	25	22	21	20	19	17	17	19	17	12	10	11	13	10	14.7	26.0
26-Jun	13	15	14	8	5	4	8	12	15	13	13	17	21	18	16	12	14	10	9	4	3	4	4	4	10.8	21.3
27-Jun	7	7	8	11	13	14	12	6	11	13	13	8	11	12	12	12	17	17	16	12	11	5	7	5	10.9	17.3
28-Jun	8	9	7	8	8	8	9	12	16	12	12	6	11	12	9	8	7	11	7	5	5	4	4	20	9.1	20.0
29-Jun	21	17	7	12	14	13	14	11	10	8	10	16	19	17	13	14	11	12	17	12	9	11	8	10	12.8	21.3
30-Jun	11	11	10	9	3	6	10	12	14	21	18	18	18	19	19	17	21	18	11	6	4	4	3	4	11.9	20.7
	15.2	14.4	13.9	13.0	13.4	12.9	15.4	17.7	19.9	20.6	20.3	21.5	22.5	22.3	21.4	21.9	21.1	21.3	21.0	18.4	17.4	14.9	15.0	14.6	Diurnal Average	
	23.6	27.4	25.4	25.8	26.2	29.8	37.8	39.8	34.0	40.9	47.1	48.7	49.9	51.3	46.3	38.9	34.6	48.2	39.0	37.3	34.9	26.3	26.5	29.2	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - June 2014

Maximum Value: 91.6 deg on Jun 11 19:00

Minimum Value: 2.6 deg on Jun 5 23:00

Percentiles: P_1 = 3.9 P_{10} = 6.9 Q_1 = 10.9 Median = 17.2 Q_3 = 32.0 P_{90} = 49.8 P_{99} = 83.9

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

Day	Hourly Period Ending At (MST)																								Daily 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	53	7	50	28	27	11	7	8	15	36	28	25	38	22	31	26	14	19	7	10	86	57	58	68	85.8
2-Jun	12	6	8	5	5	12	7	6	11	18	14	23	32	38	60	44	34	36	22	8	5	20	43	33	59.6
3-Jun	22	69	39	13	3	7	10	12	21	12	31	34	20	15	19	18	18	14	12	12	11	13	9	8	69.3
4-Jun	28	41	14	12	17	14	15	14	37	33	14	22	19	19	16	17	23	33	15	8	4	7	7	8	41.4
5-Jun	8	7	7	6	7	11	9	7	10	16	21	20	19	15	21	16	17	14	14	19	9	8	3	5	20.8
6-Jun	4	4	3	18	4	7	10	8	8	9	13	11	19	41	41	18	17	38	22	46	76	48	8	15	76.0
7-Jun	10	39	42	50	59	74	15	36	22	33	38	56	65	88	74	28	22	13	35	13	14	84	62	41	87.7
8-Jun	25	25	41	37	17	43	21	16	21	14	34	17	16	37	50	49	82	26	22	9	11	5	19	6	81.8
9-Jun	12	7	11	10	5	3	5	4	7	8	6	5	6	8	31	13	16	22	16	12	12	5	8	6	31.4
10-Jun	13	9	9	6	6	9	21	7	8	14	11	13	13	25	16	15	43	25	71	36	21	20	38	66	71.5
11-Jun	28	31	13	26	23	11	10	11	15	23	24	32	41	59	56	66	44	57	92	29	11	12	11	41	91.6
12-Jun	21	30	32	77	48	41	23	31	16	12	19	11	17	19	19	23	20	42	28	6	49	39	28	14	77.4
13-Jun	64	30	58	26	20	12	11	14	16	13	16	11	27	25	43	25	17	41	26	13	5	31	21	82	81.9
14-Jun	85	47	15	54	29	11	15	10	12	10	18	16	19	16	11	29	10	30	8	8	7	8	6	6	84.7
15-Jun	10	18	11	38	22	12	21	27	20	22	34	44	85	52	26	21	19	72	30	51	14	50	57	17	84.6
16-Jun	43	15	22	22	53	14	57	22	15	14	29	56	36	17	39	34	32	26	63	36	21	8	9	42	62.7
17-Jun	22	11	28	54	70	17	8	8	12	13	17	31	36	49	44	48	34	30	24	14	4	14	13	11	70.0
18-Jun	17	24	13	12	8	18	10	6	11	15	17	12	16	23	13	19	18	14	16	11	11	13	12	33	33.0
19-Jun	8	19	53	41	50	66	37	34	20	19	18	21	16	12	19	16	16	20	11	10	10	7	61	67	67.1
20-Jun	75	17	12	11	50	75	13	32	81	33	36	35	9	12	15	14	11	10	13	29	6	4	4	6	80.7
21-Jun	4	5	6	7	8	5	7	7	8	7	11	13	13	17	16	14	16	13	14	11	40	8	7	23	39.7
22-Jun	80	43	9	10	24	17	17	25	16	29	19	33	54	65	51	40	43	73	44	29	11	11	32	67	79.7
23-Jun	15	15	9	39	12	13	26	12	14	18	20	30	46	46	47	43	41	22	13	11	7	6	9	19	47.2
24-Jun	6	5	8	38	24	16	11	11	24	19	34	20	24	49	69	82	47	6	15	29	11	29	7	10	82.1
25-Jun	11	15	17	13	11	12	8	13	6	6	8	9	13	14	17	18	22	17	12	14	11	9	6	8	21.7
26-Jun	8	5	5	22	21	40	12	10	10	17	22	25	24	16	31	29	23	33	24	38	35	34	33	24	39.8
27-Jun	52	51	75	41	55	86	15	32	30	30	34	36	31	38	36	32	79	27	18	12	15	54	37	38	86.4
28-Jun	9	23	27	30	7	19	13	6	10	13	17	84	39	22	42	61	34	31	21	25	25	32	21	15	84.2
29-Jun	17	13	78	5	4	4	4	16	9	8	8	7	6	6	7	6	10	12	7	7	9	9	17	10	77.8
30-Jun	11	11	7	9	66	8	12	8	22	11	25	12	19	12	17	17	13	10	29	33	20	48	11	46	65.9
	84.7	69.3	77.8	77.4	70.0	86.4	57.1	36.3	80.7	36.1	38.1	84.2	84.6	87.7	74.3	82.1	81.8	73.5	91.6	51.0	85.8	83.8	62.0	81.9	

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.6 ppb on Jun 26 23:00 Maximum Daily Average: 0.3 ppb on Jun 7

Minimum Value: 0 ppb on Jun 8 23:00 Minimum Daily Average: 0.0 ppb on Jun 30
Maximum Diurnal Average: 0.2 ppb at hour 10 Minimum Diurnal Average: 0.1 ppb at hour 16
Monthly Average: 0.11 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} = 0.7

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

Day	Hourly Period Ending At (MST) 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	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.5
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	0.3
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	0.1	0.2
4-Jun	0	0	0	1	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
5-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
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	0.3
7-Jun	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.2
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	0.3
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	0.0	0.1
10-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0.1	0.3
11-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
12-Jun	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3
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	0.0	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	0.0	0.1
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	0.4
17-Jun	0	0	1	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
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	0.1	0.4
19-Jun	0	0	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
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	0.1	0.4
21-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
22-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
23-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
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	0.4
25-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
26-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0.2	2.6
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	0.0	0.1
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	0.0	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	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Diurnal Average	
	0.4	0.4	0.6	0.7	--	0.3	0.3	0.3	0.7	1.2	1.0	1.3	1.1	0.5	0.3	0.2	0.4	0.7	0.7	0.3	0.2	0.5	2.6	1.0	Diurnal Maximum	

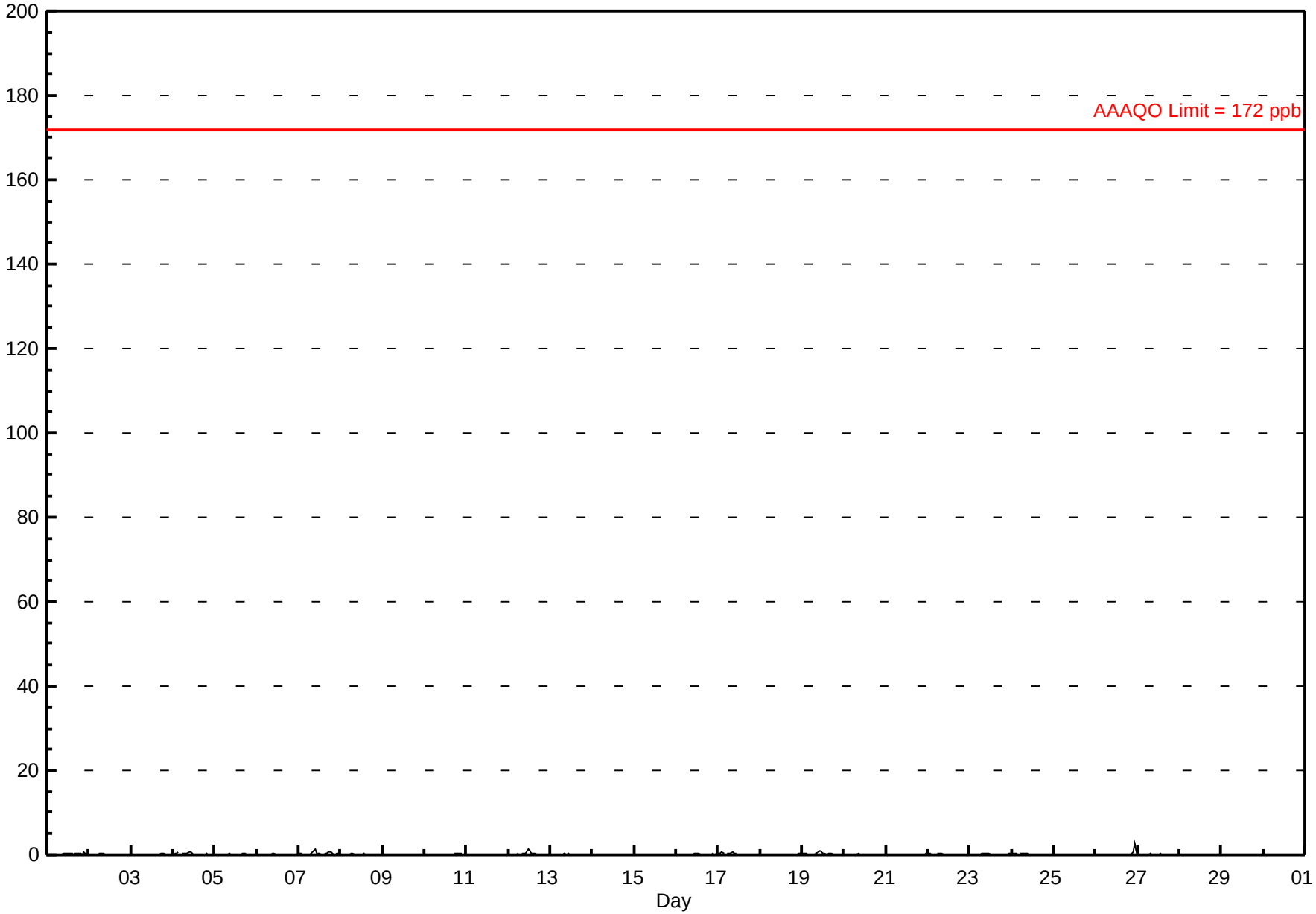
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2014

Maximum Value: 3.1 ppb on Jun 26 23:00

Maximum Daily Average: 0.6 ppb on Jun 7

Minimum Value: 0 ppb on Jun 10 12:00

Minimum Daily Average: 0.1 ppb on Jun 30

Maximum Diurnal Average: 0.4 ppb at hour 10

Minimum Diurnal Average: 0.2 ppb at hour 16

Monthly Average: 0.25 ppb

Percentiles: P_1 = 0.1 P_{10} = 0.1 Q_1 = 0.1 Median = 0.2 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.9

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

Day	Hourly Period Ending At (MST) 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	A	0	0	0	0	1	1	0	0	0	0	0	1	1	2	2	0	1	1	0	0.5	2.0
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	0.2	0.4
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	0.4
4-Jun	0	1	1	1	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
5-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
6-Jun	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0.3	0.7
7-Jun	0	0	0	0	A	0	0	0	1	3	1	0	0	0	0	0	1	1	1	1	0	0	0	0	0.6	2.8
8-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0.3	2.1
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	0.2
10-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0.2	0.5
11-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
12-Jun	0	1	0	0	A	0	0	0	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.6
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	0.2	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	0.1	0.3
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	0.3
16-Jun	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
17-Jun	1	1	1	1	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
18-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0.3	1.8
19-Jun	0	0	1	1	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.5
20-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	0.2	0.7
21-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
22-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	1.1
23-Jun	0	0	0	0	A	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
24-Jun	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	1.3
25-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
26-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	3	0.4	3.1
27-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.8
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	0.3
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	0.2
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	0.2
	0.2	0.3	0.2	0.2	--	0.2	0.2	0.2	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	Diurnal Average	
	0.6	1.1	1.2	1.1	--	0.4	0.4	0.5	1.5	2.8	1.5	1.6	1.5	2.1	0.4	0.4	1.3	1.0	2.0	1.9	0.4	2.0	3.1	2.6	Diurnal Maximum	

C - Calibration

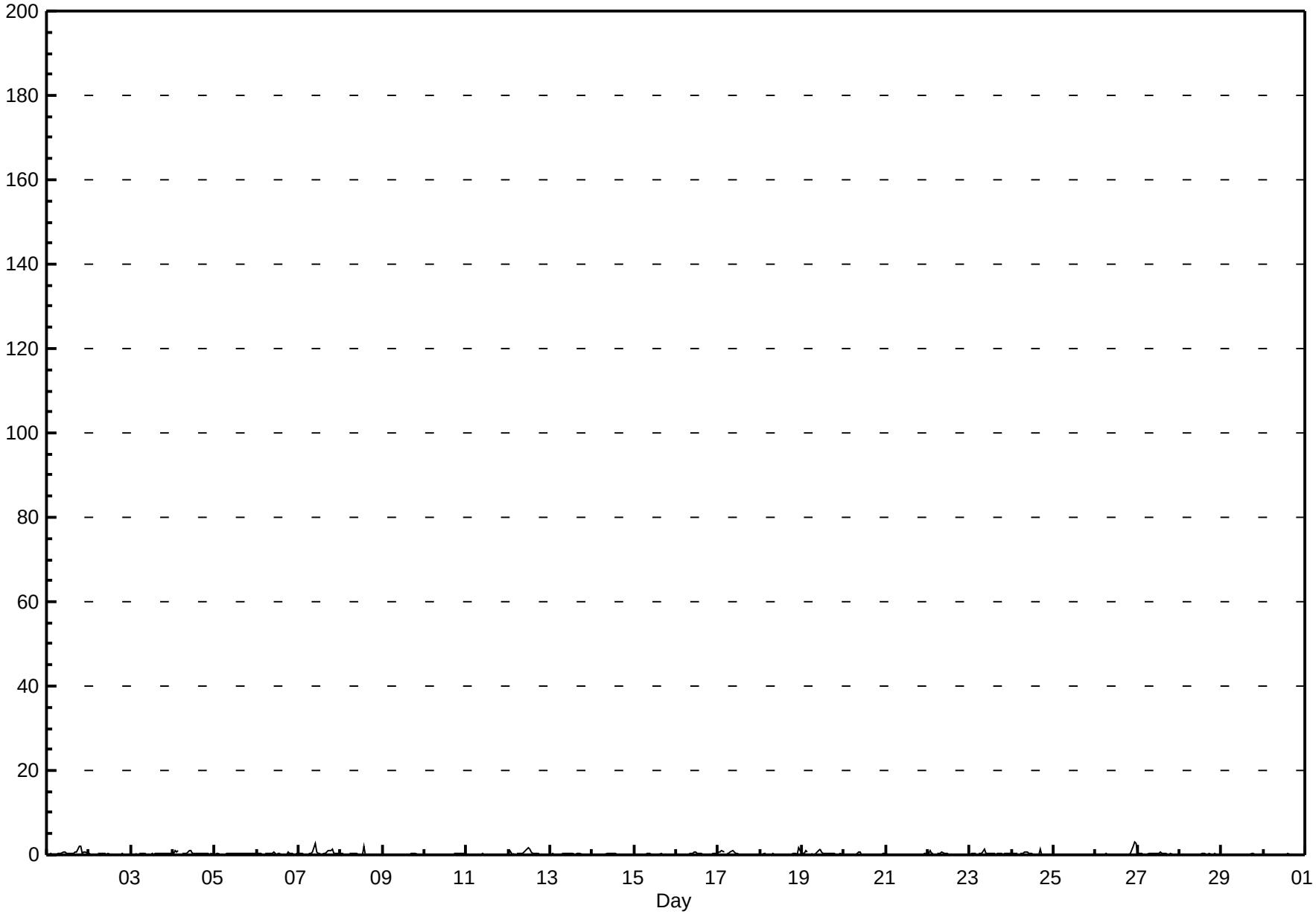
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

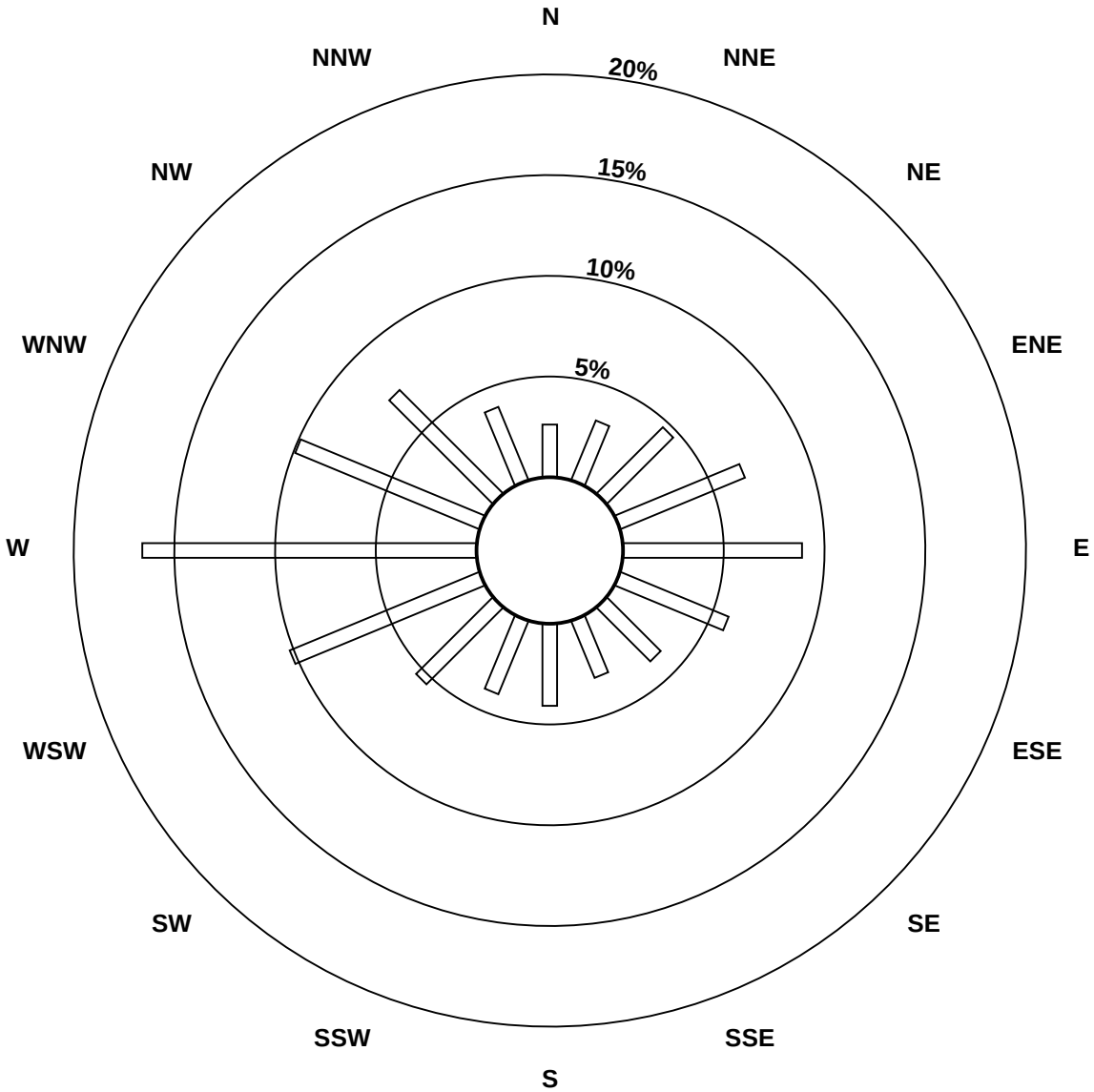
Beaverlodge - June 2014



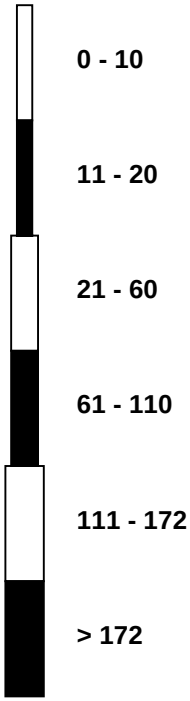
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Beaverlodge - June 2014



Pollutant Classes (ppb)

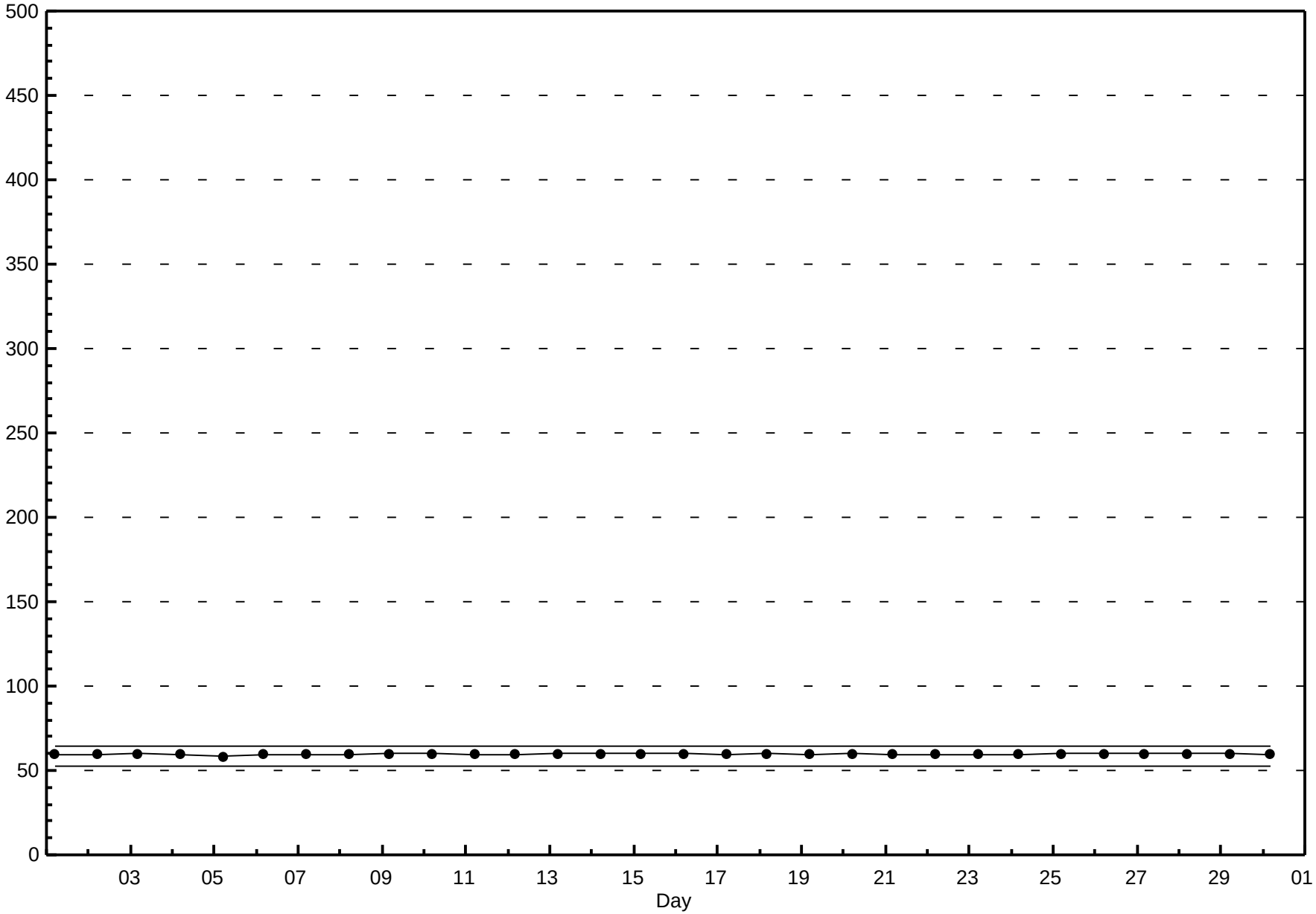


Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 16.7 ppb on Jun 27 14:00 Maximum Daily Average: 4.2 ppb on Jun 27

Minimum Value: 0 ppb on Jun 18 11:00 Minimum Daily Average: 0.9 ppb on Jun 9
Maximum Diurnal Average: 5.5 ppb at hour 6 Minimum Diurnal Average: 0.7 ppb at hour 15
Monthly Average: 2.00 ppb Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.7$ Median = 1.5 $Q_3 = 2.8$ $P_{90} = 4.2$ $P_{99} = 8.6$

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	3	3	3	2	A	4	3	3	2	1	1	1	1	1	1	1	1	2	1	1	2	3	4	4	2.2	4.5
2-Jun	3	3	3	4	A	5	4	4	3	2	1	1	1	1	1	0	1	1	1	1	2	2	2	2	2.0	5.4
3-Jun	2	2	3	2	A	7	4	3	2	1	1	0	0	1	1	1	1	1	1	1	1	1	2	1	1.6	7.1
4-Jun	1	2	2	2	A	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	3.0
5-Jun	1	1	1	1	A	3	2	1	1	1	1	1	1	1	0	1	0	0	0	0	1	2	3	2	1.2	3.3
6-Jun	2	3	3	3	A	4	4	4	1	1	0	0	0	0	0	0	0	0	0	1	1	1	2	2	1.6	4.2
7-Jun	2	2	3	4	A	6	3	3	3	1	1	1	1	1	0	0	0	0	0	1	2	1	2	2	1.8	5.6
8-Jun	2	2	2	3	A	6	4	2	2	2	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1.6	6.0
9-Jun	1	1	1	1	A	2	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0.9	2.2
10-Jun	1	1	1	1	A	4	2	2	C	C	C	C	C	C	2	1	1	1	1	2	3	2	4	3	--	4.0
11-Jun	3	3	3	3	A	5	3	3	2	2	2	1	1	1	1	1	1	1	1	1	2	2	2	3	1.9	5.1
12-Jun	3	2	3	3	A	6	4	3	2	2	3	3	2	2	1	1	1	1	1	2	2	2	2	2	2.2	5.6
13-Jun	2	3	3	2	A	5	9	6	2	1	4	5	3	2	1	1	1	1	2	1	2	3	3	6	3.1	9.3
14-Jun	5	3	3	4	A	6	5	3	2	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	1.6	6.0
15-Jun	1	1	2	2	A	4	3	2	1	0	0	0	0	0	0	1	1	1	2	2	2	2	2	2	1.4	4.4
16-Jun	4	3	5	5	A	7	6	6	4	2	2	2	2	1	1	1	2	2	1	2	3	3	4	3	3.0	6.8
17-Jun	3	3	3	9	A	7	4	3	3	2	1	1	1	1	1	1	1	1	1	1	2	3	3	3	2.4	8.7
18-Jun	3	3	3	5	A	10	9	4	2	1	0	0	1	0	0	0	0	0	1	1	1	2	3	3	2.3	9.8
19-Jun	4	4	4	4	A	9	7	4	4	3	2	2	2	2	1	1	1	1	1	2	2	2	2	2	3.0	9.0
20-Jun	1	2	2	2	A	5	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1.6	5.4
21-Jun	1	1	1	1	A	3	4	1	1	0	0	0	0	0	0	0	0	0	0	0	1	2	3	3	1.2	3.9
22-Jun	2	6	7	5	A	6	7	7	5	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2.8	6.9
23-Jun	3	4	2	2	A	6	8	6	5	5	3	2	2	1	1	1	1	1	1	1	2	2	3	2	2.7	7.8
24-Jun	2	2	2	4	A	9	11	6	4	2	1	2	1	1	1	1	1	2	1	2	2	5	5	3	3.0	10.9
25-Jun	3	4	4	3	A	5	3	1	1	1	1	1	0	0	0	0	0	0	0	1	1	2	1	1	1.5	5.3
26-Jun	1	1	2	4	A	5	4	3	3	2	1	1	1	0	0	0	0	0	1	1	3	2	1	3	1.7	5.4
27-Jun	3	3	4	4	A	8	7	6	4	4	5	2	3	17	1	2	2	1	2	2	3	5	5	4	4.2	16.7
28-Jun	4	4	3	4	A	7	4	2	2	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1.6	6.6
29-Jun	1	1	1	1	A	4	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	3	4	1.5	4.4
30-Jun	3	3	2	2	A	4	2	1	1	1	1	1	0	0	0	0	0	0	0	1	1	2	2	1	1.3	4.1
	2.3	2.5	2.7	3.1	--	5.5	4.5	3.2	2.3	1.6	1.3	1.0	0.9	1.3	0.7	0.7	0.8	0.9	0.9	1.2	1.7	2.1	2.5	2.4	Diurnal Average	
	4.5	6.0	6.5	8.7	--	9.8	10.9	6.9	5.3	5.1	5.4	4.9	3.1	16.7	1.8	1.5	2.0	1.6	1.7	2.4	3.1	4.9	4.7	6.4	Diurnal Maximum	

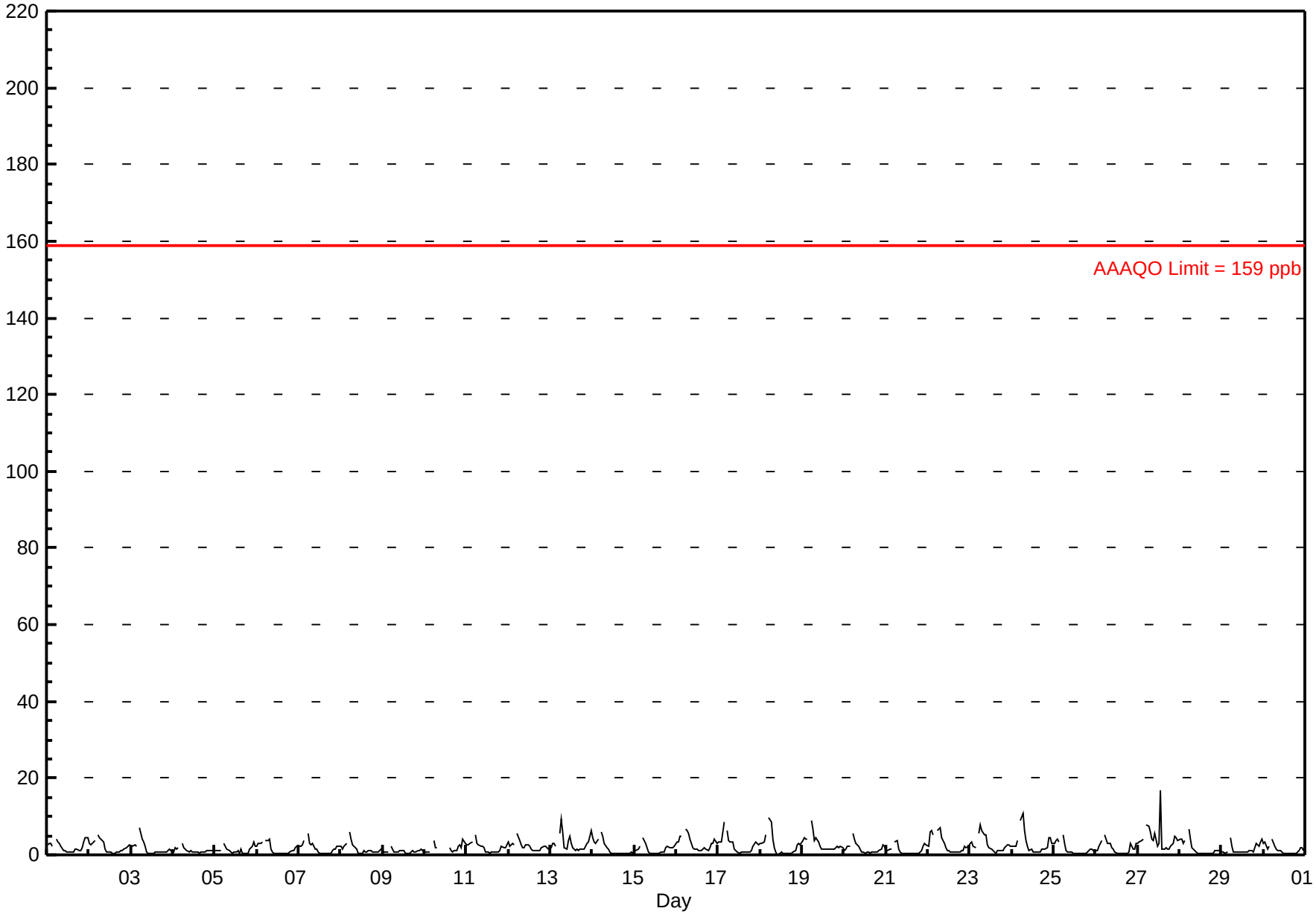
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2014

Maximum Value: 386.7 ppb on Jun 27 14:00

Maximum Daily Average: 28.3 ppb on Jun 27

Minimum Value: 0 ppb on Jun 15 12:00

Minimum Daily Average: 1.9 ppb on Jun 4

Maximum Diurnal Average: 15.8 ppb at hour 14

Minimum Diurnal Average: 1.2 ppb at hour 15

Monthly Average: 4.33 ppb

Percentiles: $P_1 = 0.6$ $P_{10} = 0.9$ $Q_1 = 1.3$ Median = 2.5 $Q_3 = 4.5$ $P_{90} = 7.0$ $P_{99} = 21.9$

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	5	4	4	4	A	10	5	4	4	2	1	1	1	1	1	1	2	3	2	2	4	5	7	5	3.4	10.1
2-Jun	9	3	3	4	A	7	7	7	4	3	1	1	1	2	1	1	1	2	2	2	5	3	4	3	3.4	9.3
3-Jun	3	5	4	4	A	10	6	6	6	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2.7	10.1
4-Jun	1	3	3	3	A	5	3	3	2	1	1	2	1	1	1	1	1	1	1	1	2	2	2	2	1.9	4.7
5-Jun	1	2	2	1	A	5	3	2	2	1	1	1	8	29	1	36	1	1	1	1	3	6	8	8	5.4	36.2
6-Jun	3	4	3	4	A	6	5	91	2	1	1	1	1	1	1	1	1	1	1	2	4	4	3	5	6.3	91.0
7-Jun	4	3	4	6	A	9	7	4	3	2	2	1	1	1	1	1	1	1	1	1	3	2	3	6	2.9	8.5
8-Jun	3	3	4	4	A	8	5	3	4	2	1	1	1	9	1	2	3	3	1	2	1	2	4	2	3.1	9.5
9-Jun	2	2	1	2	A	5	2	2	1	1	3	4	3	1	1	1	1	2	2	1	2	3	3	2	2.0	4.5
10-Jun	1	2	1	2	A	5	3	3	C	C	C	C	C	C	3	1	2	2	2	5	4	4	5	5	--	5.4
11-Jun	4	4	4	4	A	7	4	3	3	3	2	1	1	1	1	1	1	1	1	5	3	5	5	4	2.9	6.8
12-Jun	4	5	4	4	A	7	15	7	3	2	3	3	6	3	2	2	2	2	2	3	3	3	4	2	4.0	14.8
13-Jun	3	5	4	4	A	7	19	21	6	2	8	16	11	3	2	2	2	2	2	3	3	5	6	8	6.3	21.4
14-Jun	7	6	4	5	A	8	7	4	2	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2.6	7.8
15-Jun	2	2	3	4	A	6	4	3	1	1	1	0	1	0	1	1	2	2	3	4	3	2	3	3	2.2	5.9
16-Jun	7	5	9	6	A	9	7	9	6	2	2	2	6	2	2	3	3	3	2	3	5	5	5	4	4.7	9.2
17-Jun	4	5	4	13	A	11	5	4	6	2	2	1	1	1	1	1	1	1	1	2	4	6	4	5	3.6	13.0
18-Jun	3	3	4	10	A	13	10	8	3	2	1	1	24	1	1	1	1	1	2	1	2	4	5	3	4.5	23.7
19-Jun	7	6	5	5	A	12	9	6	6	5	3	2	2	3	2	2	2	2	3	4	4	2	4	5	4.4	11.7
20-Jun	2	2	5	4	A	8	6	4	3	3	1	1	1	1	1	1	2	2	2	2	2	5	5	4	3.0	7.9
21-Jun	2	1	4	3	A	5	5	2	1	1	1	1	1	1	1	1	1	1	1	2	3	3	7	4	2.2	6.6
22-Jun	4	15	14	8	A	9	9	9	6	4	3	2	2	1	1	1	1	1	2	2	2	5	4	3	4.6	15.0
23-Jun	3	4	4	3	A	7	13	8	22	6	5	2	2	1	1	1	1	2	2	1	3	3	5	2	4.4	22.2
24-Jun	2	3	3	7	A	14	16	9	5	4	2	3	2	2	2	2	4	4	3	3	4	8	8	6	5.0	15.8
25-Jun	4	4	5	4	A	7	5	3	1	1	1	1	1	1	1	1	1	1	1	3	4	3	3	1	2.4	6.6
26-Jun	1	1	4	5	A	9	5	4	3	3	2	1	1	1	1	1	1	1	1	1	6	3	2	7	2.7	9.0
27-Jun	4	9	6	9	A	11	9	7	6	6	122	3	31	387	2	2	3	3	2	3	5	8	8	7	28.3	386.7
28-Jun	7	6	4	6	A	8	6	3	2	1	1	1	1	1	1	1	1	1	1	1	4	3	2	2	2.7	8.2
29-Jun	1	1	1	2	A	7	4	1	2	2	2	1	1	1	1	1	1	2	3	5	5	3	5	5	2.5	6.7
30-Jun	6	5	2	3	A	7	4	3	2	2	2	1	1	1	1	1	1	1	1	2	2	4	5	2	2.6	7.3
	3.7	4.1	4.1	4.8	--	8.0	6.9	8.0	4.0	2.4	6.2	2.0	3.8	15.8	1.2	2.4	1.5	1.7	1.6	2.3	3.1	3.8	4.4	4.0	Diurnal Average	
	9.3	15.0	13.8	13.0	--	14.0	18.9	91.0	22.2	6.2	121.8	15.6	30.7	386.7	2.6	36.2	4.2	4.0	2.7	5.1	5.6	8.5	8.4	8.4	Diurnal Maximum	

C - Calibration

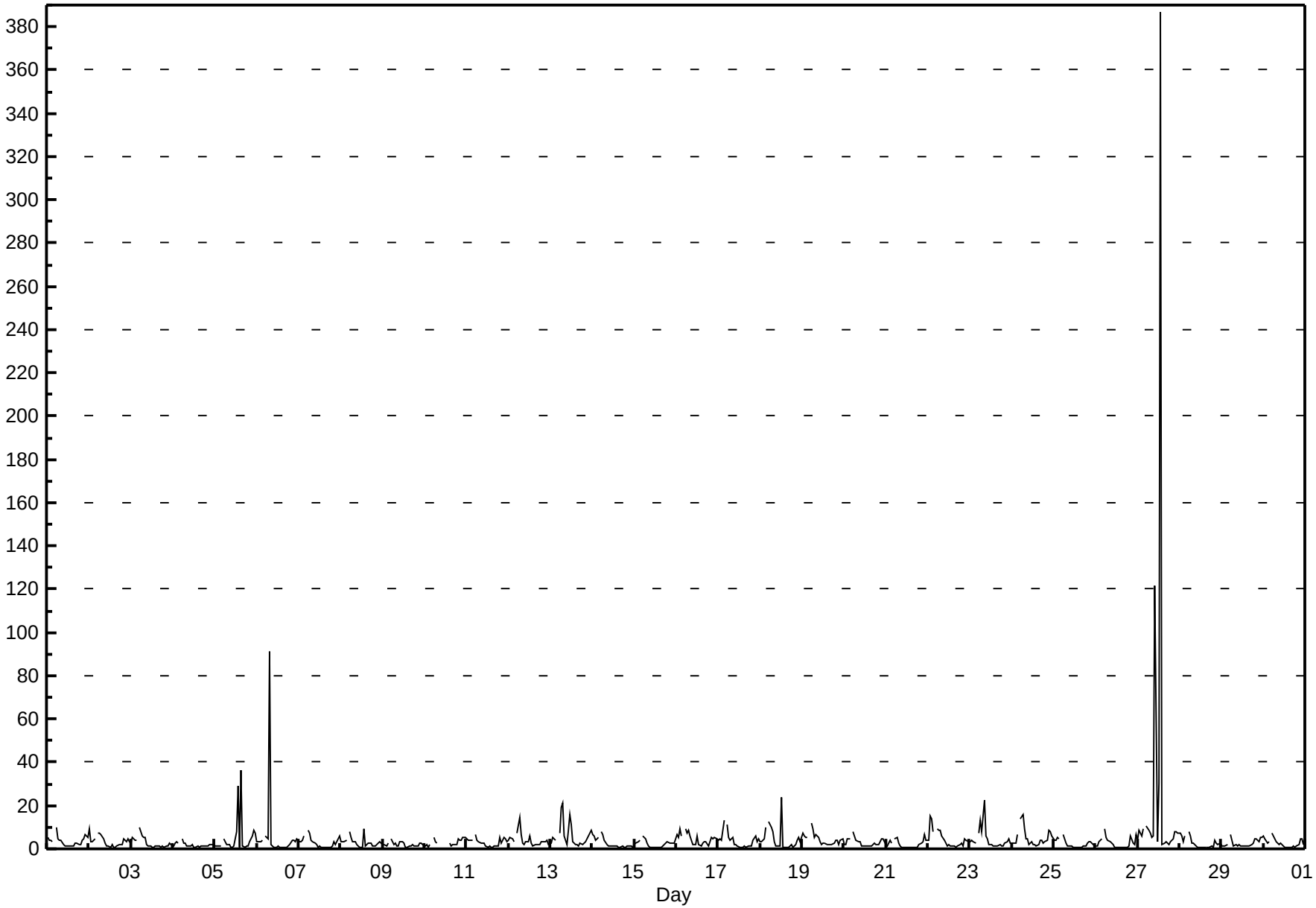
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

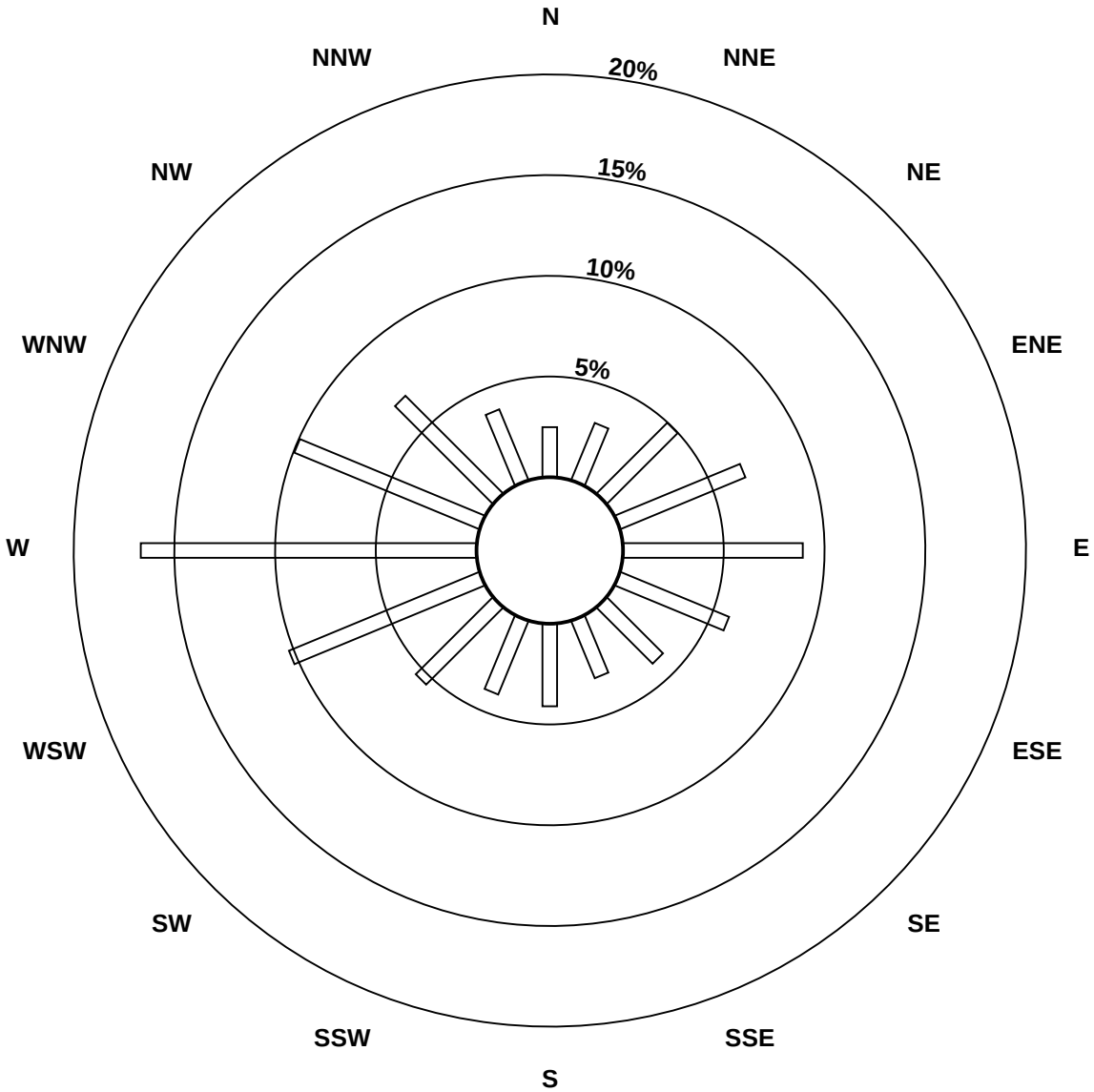
Beaverlodge - June 2014



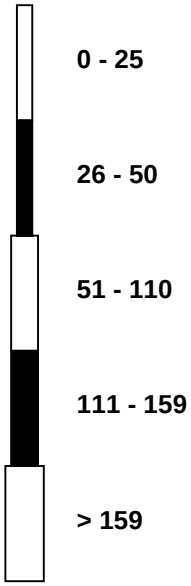
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Beaverlodge - June 2014



Pollutant Classes (ppb)

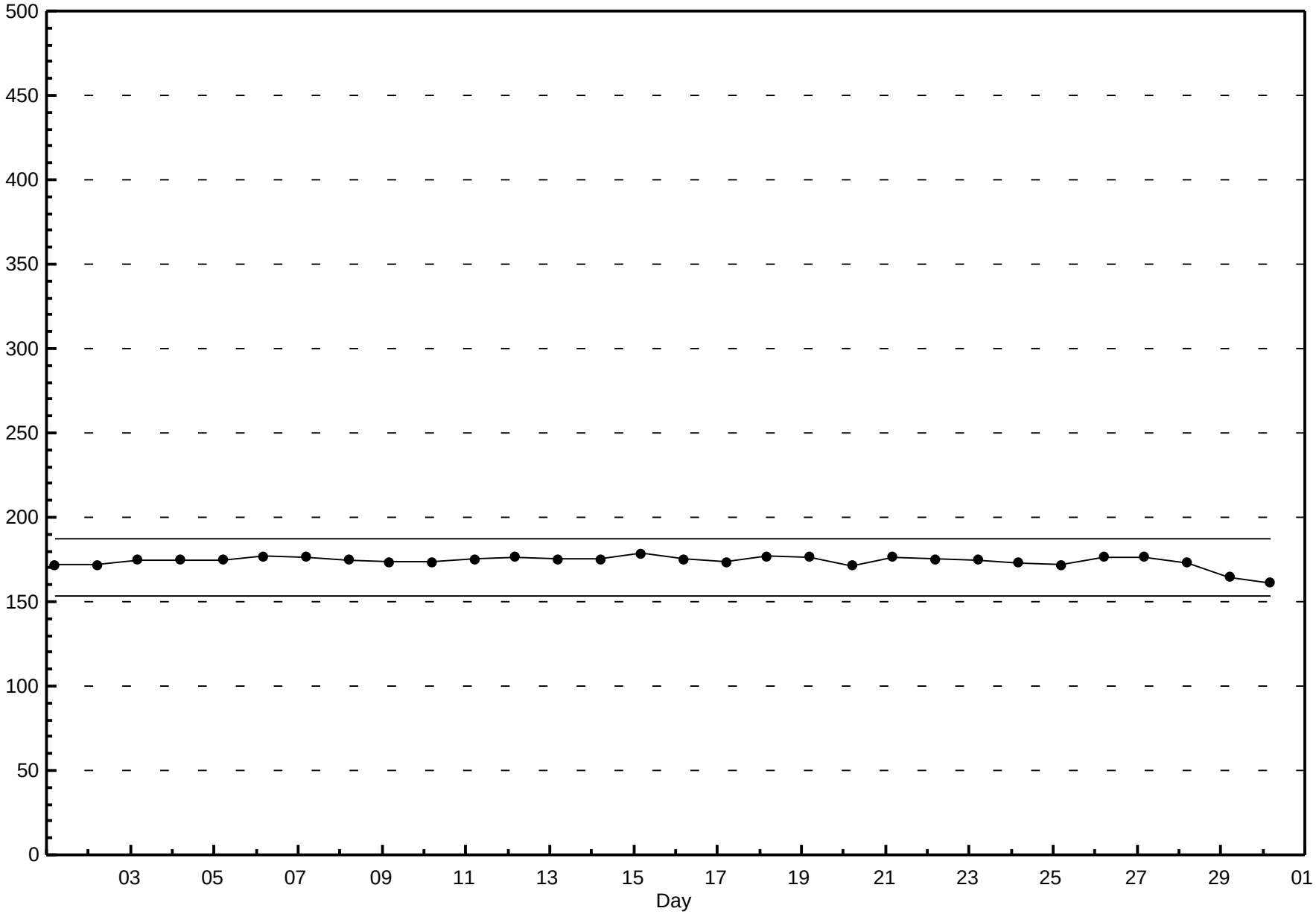


Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2014

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

Maximum Value: 13.1 ppb on Jun 22 07:00

Maximum Daily Average: 1.4 ppb on Jun 22

Minimum Value: 0 ppb on Jun 3 03:00

Minimum Daily Average: 0.1 ppb on Jun 9

Maximum Diurnal Average: 2.0 ppb at hour 7

Minimum Diurnal Average: 0.1 ppb at hour 3

Monthly Average: 0.40 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.1 $Q_3 = 0.3$ $P_{90} = 1.0$ $P_{99} = 4.6$

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	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	0.9
2-Jun	0	0	0	0	A	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.0
3-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	0.1	0.7
4-Jun	0	0	0	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
5-Jun	0	0	0	0	A	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0.3	2.4
6-Jun	0	0	0	0	A	1	2	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	4.7
7-Jun	0	0	0	0	A	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
8-Jun	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
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	0.4
10-Jun	0	0	0	0	A	0	0	0	C	C	C	C	C	C	2	2	2	2	2	1	1	1	1	1	--	2.2
11-Jun	1	0	0	0	A	1	2	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.9
12-Jun	0	0	0	0	A	0	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
13-Jun	0	0	0	0	A	0	2	2	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	2.1
14-Jun	0	0	0	0	A	1	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.9
15-Jun	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
16-Jun	0	0	0	0	A	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.2
17-Jun	0	0	0	0	A	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
18-Jun	0	0	0	0	A	1	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
19-Jun	0	0	0	0	A	2	6	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	5.9
20-Jun	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
21-Jun	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
22-Jun	0	0	0	0	A	1	13	11	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	13.1
23-Jun	0	0	0	0	A	0	5	3	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	5.0
24-Jun	0	0	0	0	A	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.9
25-Jun	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
26-Jun	0	0	0	0	A	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0
27-Jun	0	0	0	0	A	2	7	4	1	1	3	0	1	7	0	0	0	0	0	0	0	0	0	0	1.2	7.4
28-Jun	0	0	0	0	A	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9
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	0.2	0.4
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	0.2	0.5
	0.1	0.1	0.1	0.1	--	0.6	2.0	1.7	1.1	0.5	0.4	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	Diurnal Average	
	0.6	0.4	0.3	0.3	--	2.2	13.1	10.9	4.3	1.7	2.6	0.8	1.2	7.4	2.2	2.0	2.1	1.7	1.6	1.5	1.3	1.1	0.9	0.8	Diurnal Maximum	

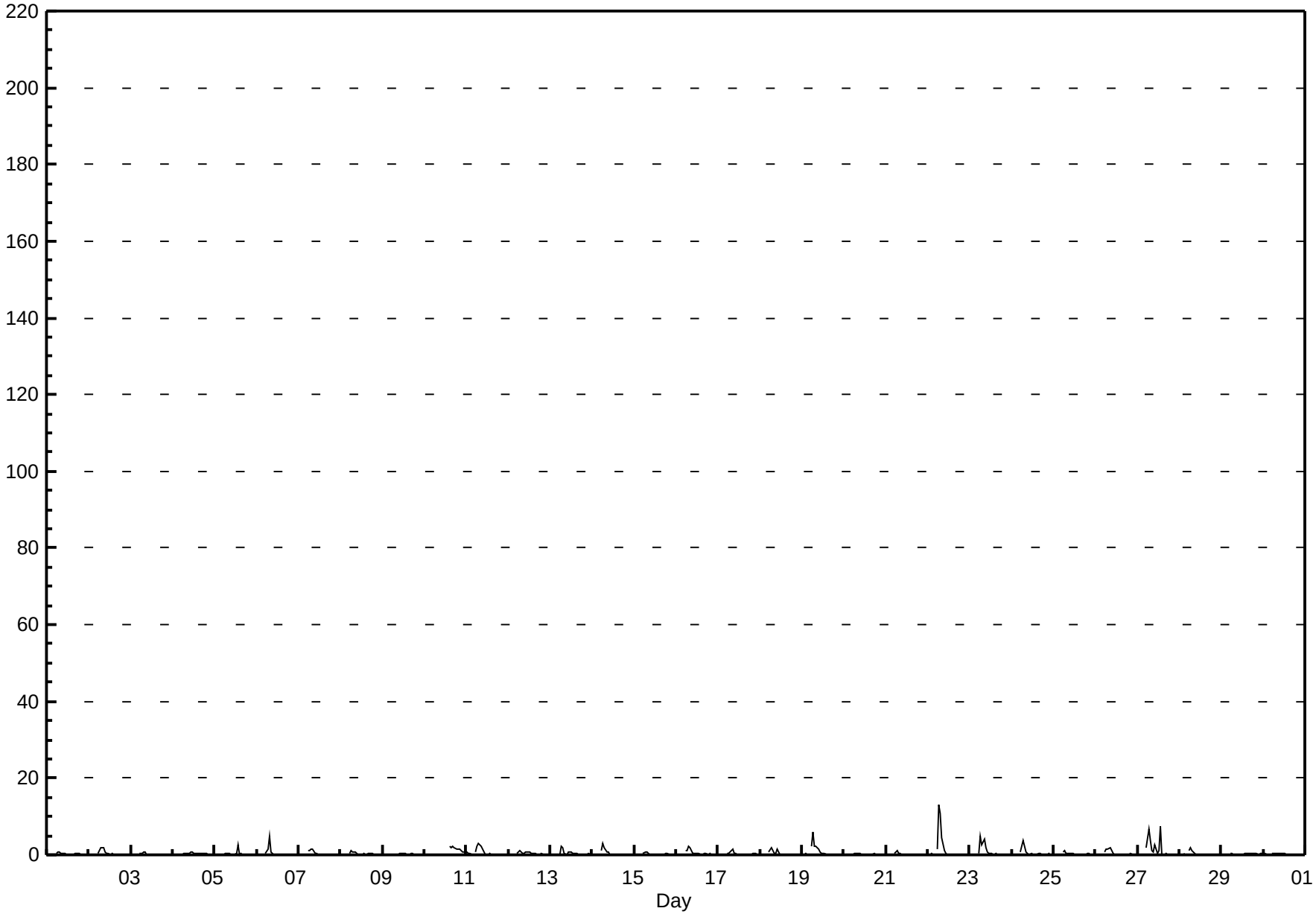
C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2014

Maximum Value: 168.0 ppb on Jun 27 14:00

Maximum Daily Average: 12.1 ppb on Jun 27

Minimum Value: 0 ppb on Jun 10 07:00

Minimum Daily Average: 0.4 ppb on Jun 15

Maximum Diurnal Average: 9.4 ppb at hour 14

Minimum Diurnal Average: 0.3 ppb at hour 23

Monthly Average: 1.85 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.4 $Q_3 = 0.8$ $P_{90} = 2.5$ $P_{99} = 8.6$

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	1	0	0	0	A	5	2	1	1	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0.7	4.5
2-Jun	1	0	0	0	A	1	6	4	2	1	0	4	0	7	0	0	0	0	0	0	0	0	0	0	1.4	7.2
3-Jun	0	0	0	0	A	1	1	2	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.5	1.7
4-Jun	0	0	0	0	A	1	1	1	1	1	3	2	1	1	1	0	1	1	1	0	0	0	0	0	0.7	2.7
5-Jun	0	0	0	0	A	0	0	0	1	0	0	0	7	67	0	10	0	0	0	0	0	0	0	0	3.9	66.7
6-Jun	0	0	0	0	A	1	2	137	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6.4	137.3
7-Jun	0	0	0	0	A	4	3	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.8	3.6
8-Jun	0	0	0	0	A	1	2	1	1	1	0	0	0	10	0	1	1	1	0	0	0	1	0	0	1.0	9.9
9-Jun	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0.4	0.8
10-Jun	0	0	0	0	A	0	0	0	C	C	C	C	C	C	2	2	15	2	2	2	2	1	1	1	--	14.6
11-Jun	1	1	0	0	A	2	3	4	3	2	1	0	0	10	0	0	0	0	0	0	0	0	0	0	1.4	10.1
12-Jun	0	4	0	0	A	1	11	3	1	1	1	1	2	2	0	0	0	0	0	0	0	0	0	0	1.3	11.4
13-Jun	0	0	0	0	A	0	8	3	1	0	3	3	5	1	0	0	0	0	0	0	0	0	1	0	1.2	7.6
14-Jun	1	1	0	0	A	3	5	3	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.9	4.5
15-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	0.4	1.1
16-Jun	1	0	1	1	A	2	2	3	4	1	1	0	4	1	0	1	1	1	0	1	0	0	0	0	1.1	4.2
17-Jun	0	0	0	1	A	1	1	2	4	1	14	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	13.8
18-Jun	0	0	0	2	A	1	3	4	1	1	81	1	1	0	0	0	0	0	1	0	0	0	0	0	4.3	81.0
19-Jun	0	1	1	0	A	7	11	5	4	4	1	1	0	1	1	0	0	0	0	0	0	0	0	0	1.6	10.7
20-Jun	0	0	0	0	A	0	1	1	1	1	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0.4	0.9
21-Jun	0	0	0	0	A	1	2	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.4	2.1
22-Jun	0	1	2	2	A	4	20	16	8	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7	20.5
23-Jun	0	0	0	0	A	1	18	6	58	3	2	1	0	0	0	13	0	0	0	0	0	0	0	0	4.5	58.2
24-Jun	0	0	0	0	A	5	10	4	1	1	0	1	1	0	1	1	4	0	0	0	0	1	0	0	1.4	9.6
25-Jun	0	0	0	1	A	1	2	1	0	1	1	1	0	0	1	0	0	1	1	1	1	0	0	0	0.6	1.9
26-Jun	0	0	0	0	A	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0.6	2.5
27-Jun	0	1	1	1	A	12	9	6	2	1	55	1	18	168	0	0	1	0	0	0	0	0	1	0	12.1	168.0
28-Jun	0	1	0	3	A	2	3	2	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.8	3.4
29-Jun	0	0	0	0	A	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	2	0.6	2.1
30-Jun	3	1	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0.6	3.0
	0.4	0.5	0.3	0.5	--	2.1	4.3	7.2	3.7	1.0	5.9	0.7	1.6	9.4	0.5	1.2	1.0	0.5	0.4	0.4	0.4	0.3	0.3	0.4	Diurnal Average	
	3.0	3.5	1.5	3.4	--	11.9	20.5	137.3	58.2	3.8	81.0	4.3	18.4	168.0	2.4	13.0	14.6	2.0	1.9	1.7	1.5	1.3	1.3	2.1	Diurnal Maximum	

C - Calibration

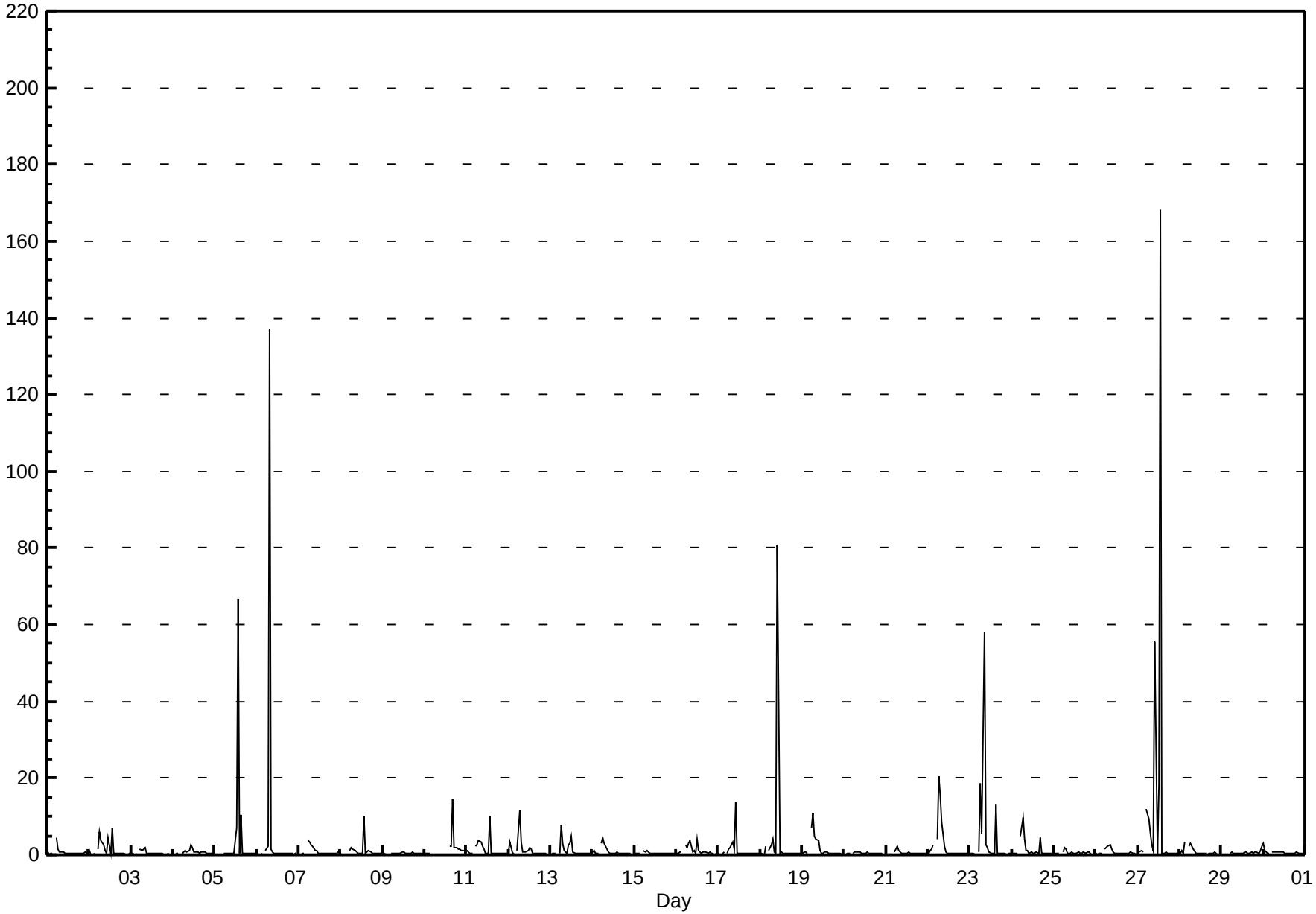
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 21.7 ppb on Jun 27 14:00
Maximum Daily Average: 5.3 ppb on Jun 27

Minimum Value: 0 ppb on Jun 28 17:00
Maximum Diurnal Average: 6.6 ppb at hour 7
Monthly Average: 2.42 ppb

Minimum Daily Average: 1.1 ppb on Jun 9
Minimum Diurnal Average: 0.9 ppb at hour 15
Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.9$ Median = 1.7 $Q_3 = 3.1$ $P_{90} = 4.9$ $P_{99} = 12.8$

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	3	3	3	2	A	5	4	4	3	1	1	1	1	1	1	1	2	2	1	1	2	3	4	5	2.4	4.7
2-Jun	3	3	3	4	A	6	6	6	5	2	1	1	1	1	1	0	1	1	1	1	2	2	2	3	2.3	6.1
3-Jun	2	2	3	2	A	8	5	4	3	1	1	0	0	1	1	1	1	1	1	1	1	1	2	1	1.8	7.6
4-Jun	1	2	2	2	A	3	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	3.1
5-Jun	1	1	1	1	A	3	2	2	1	1	1	1	1	3	0	2	1	0	0	1	2	2	3	2	1.5	3.4
6-Jun	2	3	3	3	A	4	6	8	2	1	0	0	0	1	1	0	0	1	1	1	1	1	2	2	2.0	7.6
7-Jun	2	2	3	4	A	7	4	4	5	2	2	1	1	1	1	1	0	0	1	1	2	2	2	2	2.1	6.8
8-Jun	2	2	2	3	A	7	5	3	3	2	1	0	0	1	1	1	2	1	1	1	1	1	1	1	1.8	6.5
9-Jun	1	1	1	1	A	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	1	1.1	2.3
10-Jun	1	1	1	1	A	4	2	1	C	C	C	C	C	C	4	3	3	3	3	4	4	3	5	4	--	4.9
11-Jun	3	3	3	3	A	6	5	5	4	4	3	1	1	1	1	1	1	1	1	1	2	2	2	3	2.5	6.0
12-Jun	3	2	3	3	A	6	5	3	2	2	3	3	3	2	1	1	1	1	1	2	2	2	2	2	2.6	5.9
13-Jun	2	3	3	3	A	6	12	8	2	2	4	6	4	2	2	2	1	2	2	2	2	3	4	6	3.5	11.5
14-Jun	5	3	3	4	A	7	8	5	3	2	1	1	1	1	1	0	0	0	0	0	1	1	1	0	2.0	7.6
15-Jun	1	1	2	2	A	5	4	3	1	1	0	1	0	0	1	1	1	1	2	3	2	2	2	2	1.6	5.0
16-Jun	4	3	5	5	A	8	8	8	6	2	2	2	2	1	1	2	2	2	1	2	3	3	4	3	3.5	7.9
17-Jun	3	4	4	9	A	7	4	4	5	2	1	1	1	1	1	1	1	1	1	1	2	4	3	3	2.7	8.8
18-Jun	3	3	3	5	A	10	10	5	2	1	1	0	1	0	0	0	0	0	1	1	1	3	3	3	2.6	10.5
19-Jun	4	5	4	4	A	11	13	6	7	5	3	2	2	2	2	2	2	2	2	2	2	2	2	2	3.7	12.8
20-Jun	1	2	2	2	A	6	4	3	3	2	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1.8	5.6
21-Jun	1	1	1	2	A	4	5	2	1	1	1	1	0	0	0	0	0	0	1	1	1	2	3	3	1.4	5.0
22-Jun	2	6	7	5	A	8	20	18	9	4	2	1	1	1	1	1	1	1	1	1	1	2	2	3	4.3	19.9
23-Jun	3	4	2	2	A	6	13	9	10	7	3	2	2	1	1	1	1	1	1	1	2	3	3	2	3.5	12.8
24-Jun	2	2	2	4	A	10	15	9	5	3	1	2	1	1	1	1	1	2	2	2	2	5	5	3	3.4	14.9
25-Jun	3	4	4	3	A	6	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1.7	5.8
26-Jun	1	1	2	4	A	6	5	5	5	3	2	1	1	1	0	1	0	0	1	1	3	2	2	3	2.1	6.2
27-Jun	3	4	4	4	A	10	14	10	6	5	8	3	4	22	1	2	2	2	2	2	3	5	5	4	5.3	21.7
28-Jun	4	4	3	4	A	8	6	3	3	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1.9	7.8
29-Jun	1	1	1	1	A	5	3	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	4	5	1.7	4.7
30-Jun	3	4	2	2	A	4	3	2	2	1	2	1	1	1	1	1	1	1	1	1	1	2	2	1	1.6	4.4
	2.4	2.6	2.7	3.2	--	6.2	6.6	4.9	3.5	2.1	1.7	1.3	1.2	1.7	0.9	0.9	1.0	1.1	1.1	1.4	1.9	2.2	2.6	2.5	Diurnal Average	
	4.6	6.1	6.7	8.8	--	11.2	19.9	17.9	9.5	6.9	8.1	5.7	4.1	21.7	4.1	3.2	3.0	2.8	2.9	3.7	4.1	5.0	4.9	6.4	Diurnal Maximum	

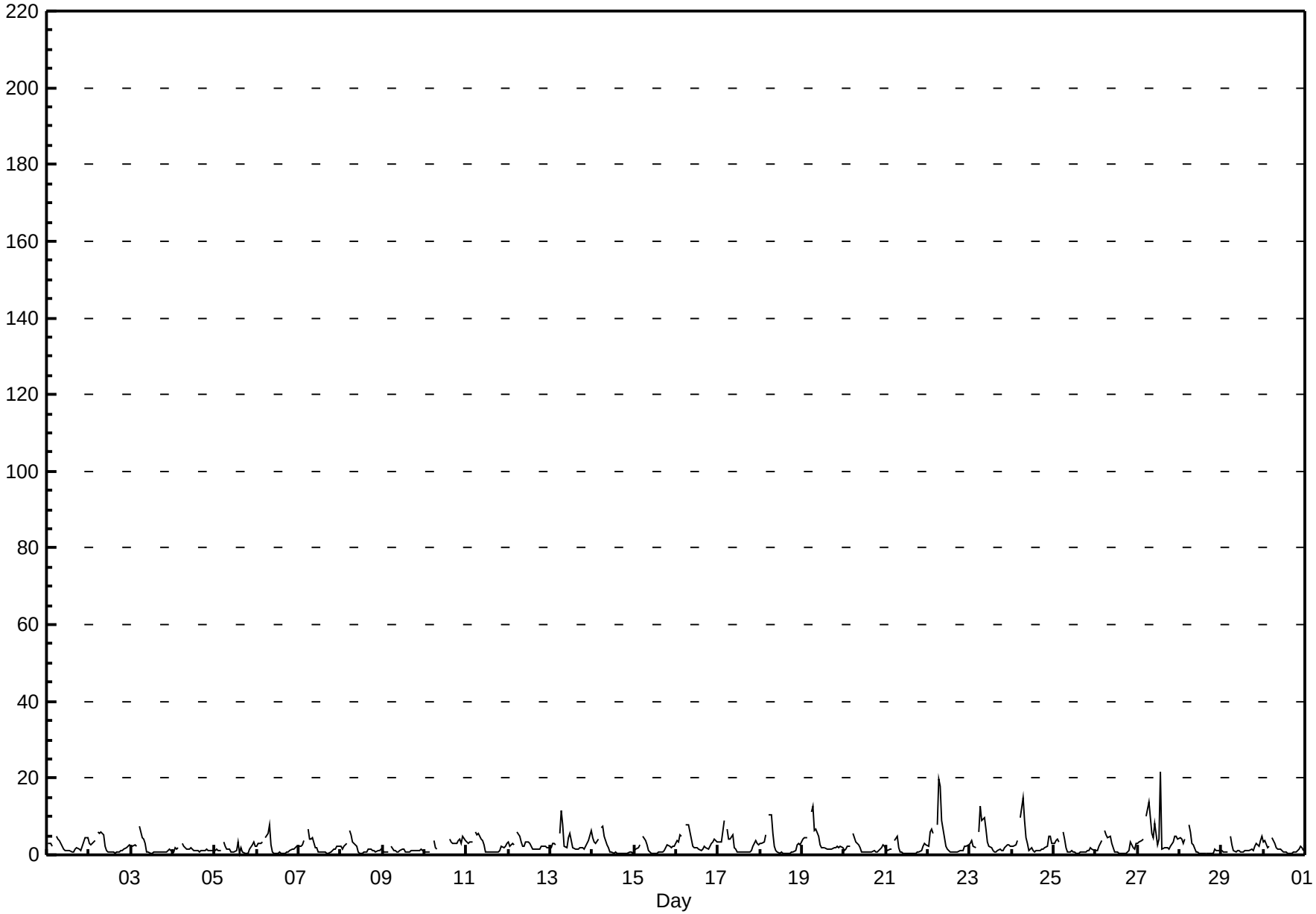
C - Calibration A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2014

Maximum Value: 413.2 ppb on Jun 27 14:00

Maximum Daily Average: 31.2 ppb on Jun 27

Minimum Value: 1 ppb on Jun 15 14:00

Minimum Daily Average: 2.4 ppb on Jun 9

Maximum Diurnal Average: 18.0 ppb at hour 14

Minimum Diurnal Average: 1.6 ppb at hour 15

Monthly Average: 5.25 ppb

Percentiles: P_1 = 0.7 P_{10} = 1.1 Q_1 = 1.7 Median = 3.1 Q_3 = 5.1 P_{90} = 8.5 P_{99} = 32.9

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	6	4	4	4	A	15	6	5	5	3	2	1	2	1	1	1	3	3	2	2	5	5	7	6	4.0	14.6
2-Jun	11	4	3	4	A	9	13	11	7	4	1	1	1	7	1	1	1	3	3	2	5	3	4	3	4.4	13.1
3-Jun	3	5	4	4	A	10	7	7	7	2	2	1	1	1	2	1	2	1	1	1	1	2	3	2	3.1	10.4
4-Jun	2	3	3	3	A	5	4	3	2	3	4	4	2	1	2	1	2	2	2	2	2	2	2	3	2.4	4.7
5-Jun	1	2	2	1	A	5	4	2	2	1	1	2	11	46	1	37	2	1	1	1	3	6	9	8	6.5	45.9
6-Jun	3	4	3	4	A	6	7	103	3	2	1	1	1	1	1	1	1	1	2	2	4	4	3	4	7.2	103.2
7-Jun	4	3	4	6	A	11	10	7	5	4	3	1	2	1	1	1	1	1	1	2	3	2	3	6	3.6	11.1
8-Jun	3	3	4	4	A	8	7	5	5	3	2	1	1	7	2	3	4	3	2	2	1	3	4	3	3.4	8.3
9-Jun	2	2	1	3	A	5	2	3	2	2	3	4	3	1	1	2	2	2	2	2	2	3	3	2	2.4	4.7
10-Jun	2	2	1	2	A	5	3	2	C	C	C	C	C	C	5	4	4	4	4	6	5	5	6	6	--	6.4
11-Jun	5	4	4	4	A	7	6	7	5	5	4	1	1	7	1	1	1	1	1	6	3	5	5	4	3.9	7.2
12-Jun	5	12	4	4	A	8	26	10	3	3	4	4	8	5	2	2	2	2	2	4	3	3	4	2	5.3	26.2
13-Jun	3	5	5	4	A	7	27	23	7	2	11	18	13	4	2	2	2	3	3	3	4	5	7	9	7.3	26.6
14-Jun	7	7	4	5	A	10	11	7	4	2	1	2	2	1	2	1	1	2	1	1	2	1	1	1	3.4	11.2
15-Jun	2	3	3	4	A	7	5	4	2	1	1	1	1	1	1	1	2	2	3	4	3	3	3	3	2.5	6.6
16-Jun	7	5	10	6	A	12	9	11	10	3	2	2	8	3	2	3	4	4	2	4	6	5	5	5	5.5	11.5
17-Jun	4	5	4	13	A	11	7	6	9	3	9	1	1	1	1	1	1	1	1	2	4	6	4	5	4.4	13.1
18-Jun	3	4	4	12	A	13	12	12	4	2	2	2	24	1	1	1	1	1	3	1	2	4	6	4	5.1	24.3
19-Jun	7	6	5	5	A	16	18	10	10	9	5	2	3	3	3	2	2	2	3	4	4	2	4	5	5.7	18.0
20-Jun	2	2	5	5	A	8	6	5	4	4	1	2	1	2	2	1	2	3	3	2	2	5	5	4	3.3	8.0
21-Jun	2	1	4	3	A	6	7	3	2	1	1	1	1	2	1	1	1	1	1	2	3	3	7	5	2.6	7.4
22-Jun	4	15	14	10	A	11	28	24	14	6	3	2	2	1	1	1	1	2	2	3	2	5	4	3	6.9	28.0
23-Jun	3	4	4	3	A	7	31	14	52	8	6	3	2	2	2	3	2	2	2	2	3	3	5	3	7.1	51.7
24-Jun	3	3	3	7	A	18	25	13	6	5	2	4	2	2	2	2	4	4	3	3	4	9	8	6	6.1	24.8
25-Jun	4	4	5	5	A	7	7	4	1	2	2	1	1	1	1	1	1	2	2	4	4	4	3	1	2.9	7.0
26-Jun	1	1	4	5	A	10	7	6	6	4	3	1	1	1	1	1	1	1	1	2	6	3	2	7	3.3	10.4
27-Jun	4	9	7	10	A	23	17	13	8	7	124	4	34	413	2	3	4	3	2	3	5	8	8	8	31.2	413.2
28-Jun	7	6	4	10	A	10	8	5	4	1	1	1	1	1	1	1	1	1	2	1	4	3	2	2	3.4	10.5
29-Jun	1	1	1	2	A	7	5	2	2	2	2	1	2	2	2	2	2	3	3	6	5	4	6	7	3.0	7.3
30-Jun	8	6	3	3	A	8	5	4	3	3	3	2	1	1	1	1	1	2	1	2	2	5	5	2	3.1	8.4
	4.0	4.6	4.3	5.1	--	9.5	11.0	11.0	6.7	3.4	7.2	2.5	4.5	18.0	1.6	2.8	1.9	2.1	2.0	2.7	3.4	4.0	4.6	4.2	Diurnal Average	
	10.6	15.2	13.9	13.1	--	22.5	30.8	103.2	51.7	8.9	124.2	17.8	33.8	413.2	4.9	36.7	4.3	4.3	3.9	6.4	6.1	9.0	8.5	8.6	Diurnal Maximum	

C - Calibration

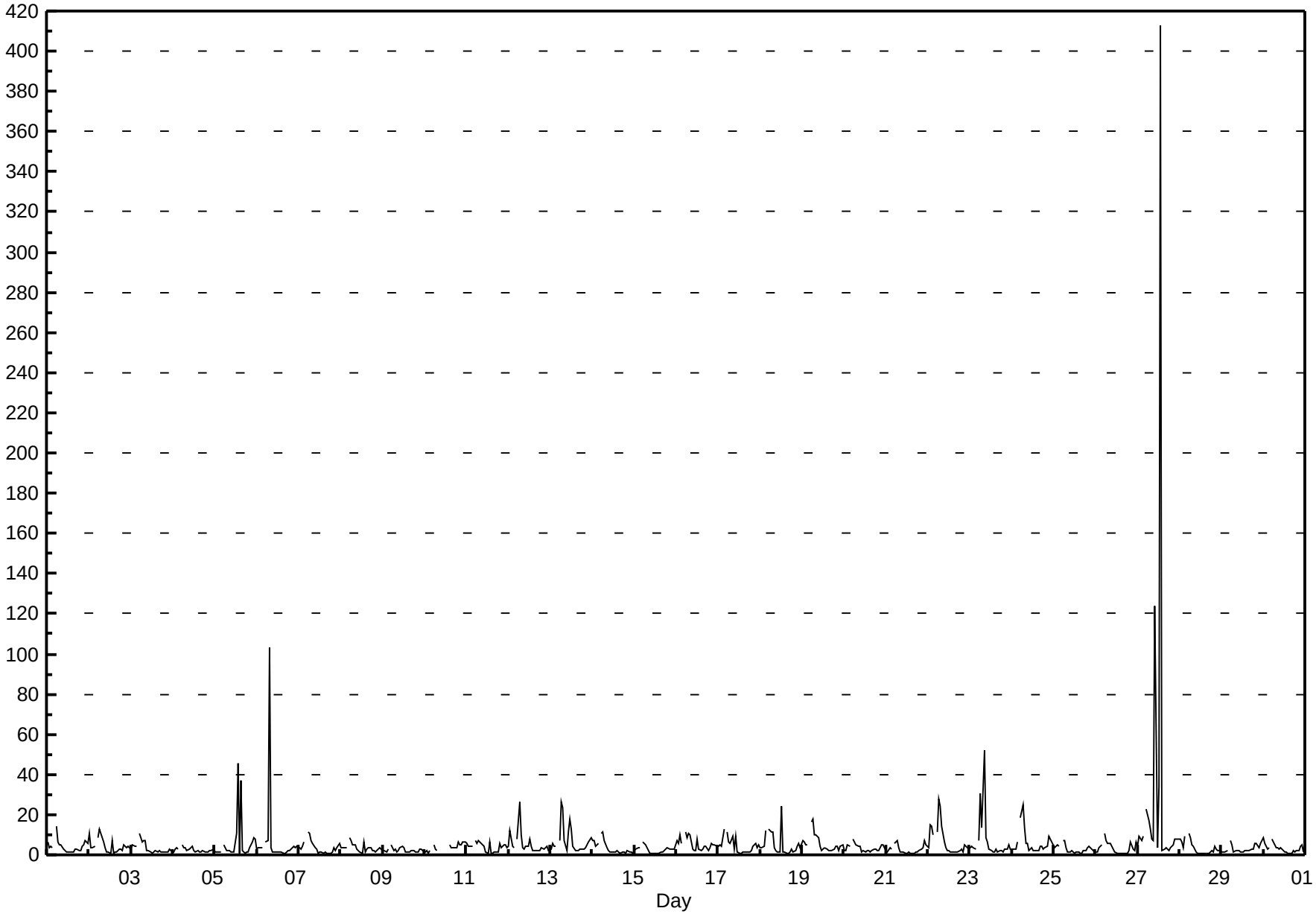
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Beaverlodge - June 2014

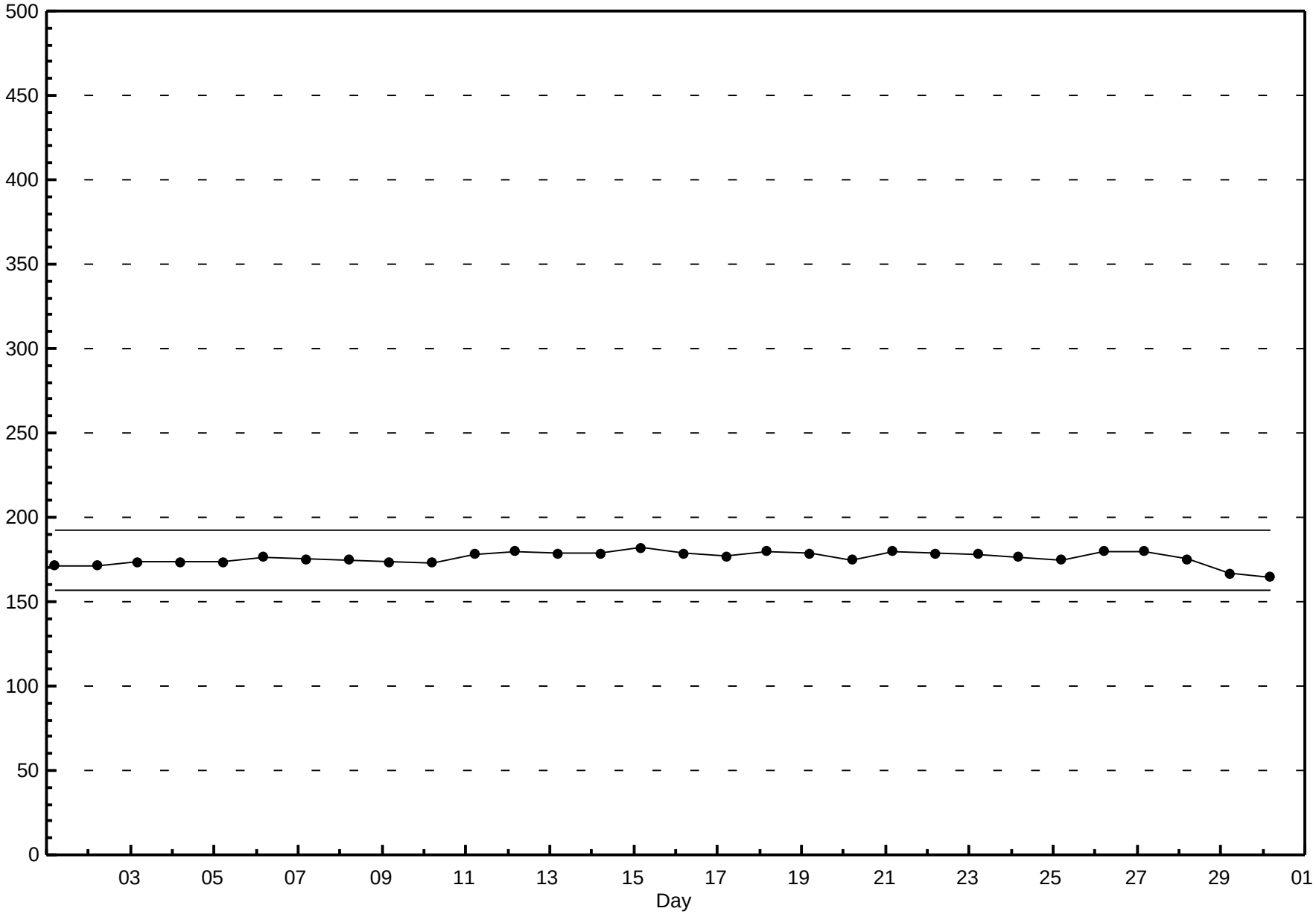


Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 52.9 ppb on Jun 13 17:00 Maximum Daily Average: 39.9 ppb on Jun 12

Minimum Value: 6 ppb on Jun 22 07:00 Minimum Daily Average: 17.0 ppb on Jun 4
Maximum Diurnal Average: 38.0 ppb at hour 15 Minimum Diurnal Average: 18.0 ppb at hour 7
Monthly Average: 30.12 ppb Percentiles: P_1 = 8.6 P_{10} = 17.0 Q_1 = 23.1 Median = 30.2 Q_3 = 37.1 P_{90} = 43.5 P_{99} = 48.6

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

Day	Hourly Period Ending At (MST) 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	28	27	27	26	A	24	22	26	28	37	39	42	44	44	44	44	41	39	41	41	37	33	29	24	34.1	44.2
2-Jun	29	30	30	26	A	21	24	23	25	29	33	39	44	47	46	46	46	45	42	40	44	41	37	30	35.5	46.6
3-Jun	33	33	32	31	A	19	23	28	34	44	48	44	47	47	46	45	44	39	37	33	31	26	23	24	35.2	48.0
4-Jun	23	20	17	14	A	12	12	11	11	11	12	14	17	18	19	19	19	18	16	17	22	24	22	21	17.0	24.2
5-Jun	23	23	23	24	A	25	26	26	25	33	35	33	36	36	39	40	40	41	41	40	37	35	29	29	32.1	41.1
6-Jun	26	22	20	18	A	17	18	20	24	31	36	39	39	39	38	40	38	37	36	34	33	35	31	28	30.4	39.5
7-Jun	27	28	24	18	A	12	17	23	25	33	34	36	36	37	37	37	38	38	37	35	33	32	28	29	30.1	38.3
8-Jun	28	32	26	24	A	22	21	23	25	25	30	31	31	27	26	31	29	27	26	27	32	29	26	24	27.0	32.0
9-Jun	24	30	34	34	A	31	31	29	30	33	25	23	22	28	30	32	29	28	29	30	30	27	23	23	28.5	33.9
10-Jun	23	25	24	22	A	24	24	23	23	22	22	28	C	C	C	27	39	34	34	31	28	25	21	19	26.0	39.4
11-Jun	20	20	18	15	A	11	11	11	15	22	32	41	44	45	47	48	48	47	46	44	37	41	39	37	32.1	48.3
12-Jun	34	35	33	31	A	31	32	31	40	41	37	39	41	45	47	48	46	46	46	43	42	41	46	43	39.9	47.8
13-Jun	40	37	33	37	A	35	19	30	43	47	42	34	41	45	47	50	53	49	42	44	38	37	24	23	38.7	52.9
14-Jun	26	27	25	21	A	12	12	16	21	26	31	33	34	34	35	39	40	39	37	35	33	32	31	32	29.1	40.0
15-Jun	28	26	24	23	A	17	20	23	26	30	32	34	35	35	37	39	37	30	27	24	21	22	22	21	27.6	38.7
16-Jun	16	14	12	13	A	9	10	16	26	37	43	47	51	52	51	48	42	40	42	39	36	35	33	32	32.4	52.0
17-Jun	30	30	29	16	A	22	22	23	28	35	39	41	43	44	44	44	44	44	43	42	36	30	29	29	34.2	43.9
18-Jun	27	26	27	23	A	14	15	22	28	30	33	39	41	40	41	40	39	38	36	32	29	26	22	18	29.8	40.7
19-Jun	18	15	13	15	A	10	6	16	19	25	30	35	39	42	43	45	45	43	37	38	36	37	33	37	29.5	45.1
20-Jun	35	33	31	28	A	21	19	23	34	29	34	35	38	41	41	42	41	41	40	39	37	34	33	29	33.8	41.7
21-Jun	29	30	30	27	A	27	22	26	29	30	32	32	33	33	33	34	35	34	34	33	30	28	26	25	30.1	34.5
22-Jun	27	18	13	14	A	14	6	9	17	30	37	39	41	41	41	42	42	43	42	40	36	33	35	32	30.0	42.5
23-Jun	32	33	34	36	A	30	19	22	30	37	42	44	45	45	47	48	49	49	47	46	45	44	41	35	39.1	48.8
24-Jun	36	37	36	34	A	24	19	26	32	35	35	32	34	34	29	28	21	23	22	22	20	15	13	13	26.9	36.7
25-Jun	12	9	9	10	A	15	18	24	26	27	29	31	31	32	31	30	31	31	31	30	26	24	25	28	24.5	31.7
26-Jun	27	27	22	15	A	16	18	19	19	23	28	30	32	33	34	34	35	35	35	34	30	31	32	30	27.8	35.4
27-Jun	30	28	26	22	A	13	8	18	29	37	42	45	47	47	47	41	40	39	38	36	32	28	22	20	32.1	47.4
28-Jun	19	16	17	13	A	10	8	14	18	29	31	31	31	33	32	32	33	33	33	34	32	33	31	30	25.8	34.5
29-Jun	28	28	29	28	A	21	20	23	24	25	23	22	22	22	22	19	19	20	22	17	16	15	11	8	21.0	28.9
30-Jun	13	12	17	17	A	16	19	20	21	21	23	25	25	25	28	30	30	29	29	28	26	25	23	26	22.9	30.2
	26.4	25.6	24.5	22.4	--	19.2	18.0	21.5	25.8	30.5	33.0	34.6	36.6	37.6	38.0	38.0	37.8	36.7	35.6	34.2	32.1	30.6	28.1	26.6	Diurnal Average	
	39.6	37.0	36.2	36.7	--	35.2	32.0	31.3	42.9	46.7	48.0	46.9	51.2	52.0	50.8	50.2	52.9	49.4	47.3	46.2	44.5	44.1	46.1	42.9	Diurnal Maximum	

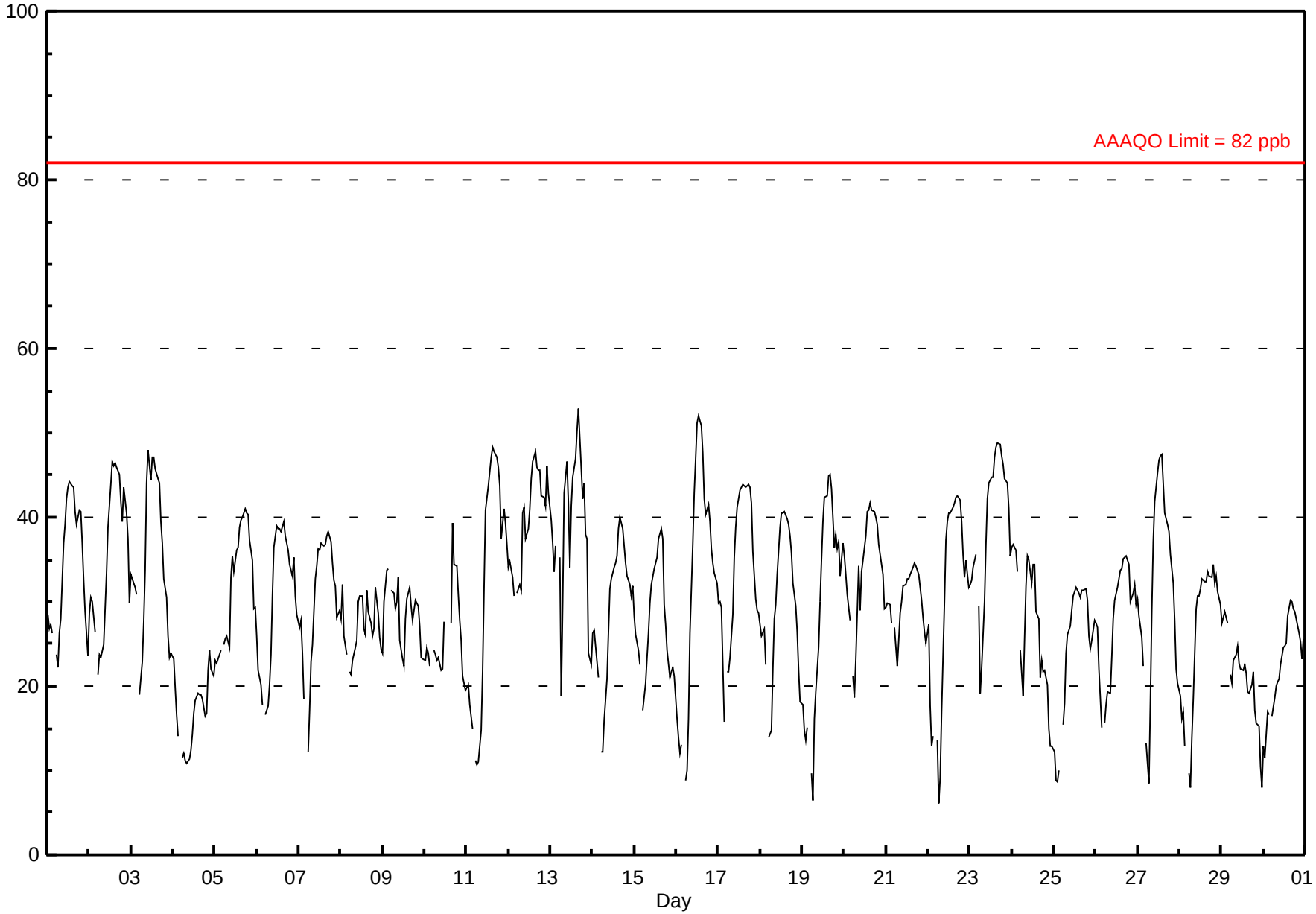
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Beaverlodge - June 2014

Maximum Value: 55.2 ppb on Jun 13 18:00

Maximum Daily Average: 43.8 ppb on Jun 13

Minimum Value: 9 ppb on Jun 25 03:00

Minimum Daily Average: 18.5 ppb on Jun 4

Maximum Diurnal Average: 40.2 ppb at hour 16

Minimum Diurnal Average: 21.9 ppb at hour 7

Monthly Average: 32.86 ppb

Percentiles: P_1 = 11.6 P_{10} = 20.2 Q_1 = 25.9 Median = 32.9 Q_3 = 40.0 P_{90} = 45.5 P_{99} = 52.1

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

Day	Hourly Period Ending At (MST) 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	31	29	30	28	A	25	25	30	32	38	41	44	45	46	46	45	44	43	43	44	42	36	32	27	36.7	45.9
2-Jun	30	32	32	28	A	24	26	25	27	32	36	43	50	49	48	48	48	48	45	43	48	46	39	38	38.5	49.7
3-Jun	34	34	34	33	A	23	27	31	39	48	50	47	48	49	47	46	46	43	40	36	32	28	25	26	37.7	49.8
4-Jun	24	22	18	16	A	13	13	12	12	12	14	18	20	20	21	20	20	20	18	19	24	25	24	22	18.5	25.3
5-Jun	24	24	24	26	A	26	28	28	28	36	37	35	37	40	41	42	42	43	42	42	40	36	36	31	34.2	43.3
6-Jun	30	23	22	19	A	18	20	21	27	34	39	41	40	40	40	41	39	39	39	35	38	38	35	31	32.7	41.0
7-Jun	30	30	30	28	A	16	26	25	27	36	36	37	38	38	38	38	39	39	39	36	37	35	32	34	33.2	39.1
8-Jun	35	34	30	26	A	24	23	24	27	29	31	32	32	38	29	34	30	35	27	33	33	30	28	27	30.1	37.9
9-Jun	25	36	35	37	A	32	32	31	31	40	27	25	24	30	32	33	32	30	31	31	31	29	25	25	30.5	40.0
10-Jun	26	26	25	24	A	27	25	24	24	23	24	33	C	C	C	42	42	37	36	34	33	34	25	24	29.3	42.4
11-Jun	24	23	20	17	A	13	11	12	18	27	40	44	45	48	48	49	49	49	47	47	40	43	41	40	34.5	49.5
12-Jun	39	42	38	35	A	34	37	38	42	43	40	40	43	47	48	49	48	48	47	47	45	47	49	45	43.1	49.1
13-Jun	42	41	37	43	A	44	39	34	46	48	47	41	46	47	49	52	54	55	46	45	46	43	33	28	43.8	55.2
14-Jun	32	31	28	23	A	18	15	19	24	32	33	36	35	36	40	41	41	40	38	36	34	33	33	33	31.8	41.1
15-Jun	31	28	27	25	A	21	24	25	28	31	34	35	36	37	39	40	40	31	29	29	23	23	25	24	29.8	39.8
16-Jun	19	16	15	15	A	18	12	23	31	42	46	50	54	54	53	52	46	44	43	43	39	37	35	35	35.8	54.1
17-Jun	32	32	32	26	A	25	24	27	35	38	41	44	45	45	45	45	45	45	45	44	40	32	30	30	36.7	45.3
18-Jun	29	29	28	28	A	16	16	27	30	32	38	42	42	42	42	42	41	40	40	34	31	28	24	22	32.3	42.3
19-Jun	21	18	18	17	A	20	12	19	21	27	33	37	42	45	44	47	47	46	40	41	40	42	38	42	32.9	47.4
20-Jun	38	38	35	32	A	23	20	30	39	38	36	37	41	42	43	43	42	43	41	41	39	36	36	31	36.7	43.5
21-Jun	31	31	31	31	A	30	25	30	30	31	33	33	33	34	35	35	36	35	35	35	33	29	30	28	31.9	35.6
22-Jun	28	30	21	20	A	20	15	13	29	34	39	42	42	42	42	43	44	44	43	42	39	36	37	35	33.8	43.7
23-Jun	34	34	35	37	A	34	30	25	36	38	44	46	46	47	49	50	51	50	49	47	46	45	45	36	41.4	50.5
24-Jun	37	38	37	35	A	30	27	32	34	37	38	34	37	37	32	30	32	26	23	23	23	22	16	14	30.2	37.6
25-Jun	14	10	9	11	A	18	21	28	27	29	32	32	33	33	33	31	33	33	33	32	29	26	27	29	26.2	33.1
26-Jun	28	28	27	18	A	18	20	20	22	26	30	31	33	34	35	35	36	37	36	36	34	33	33	33	29.7	36.7
27-Jun	33	33	31	32	A	20	12	24	36	41	45	48	50	51	50	45	43	41	40	39	36	36	24	23	36.2	50.6
28-Jun	25	22	19	21	A	14	10	18	28	31	32	32	33	34	34	33	35	34	36	37	35	35	33	31	28.7	36.5
29-Jun	29	30	30	29	A	23	23	24	25	26	25	24	23	24	24	21	21	25	23	19	19	17	15	11	23.1	29.9
30-Jun	16	16	19	18	A	21	20	22	22	23	25	26	27	27	30	32	31	31	30	30	28	27	27	27	25.0	31.9
	29.0	28.6	27.2	25.9	--	23.0	21.9	24.7	29.3	33.5	35.5	36.9	38.7	39.7	39.8	40.2	39.9	39.2	37.5	36.6	35.2	33.6	31.1	29.3	Diurnal Average	
	42.4	42.2	38.5	43.3	--	44.3	39.3	38.4	45.8	48.4	49.8	50.4	54.1	53.8	52.9	52.3	54.5	55.2	48.9	47.1	48.0	47.3	49.0	44.8	Diurnal Maximum	

C - Calibration

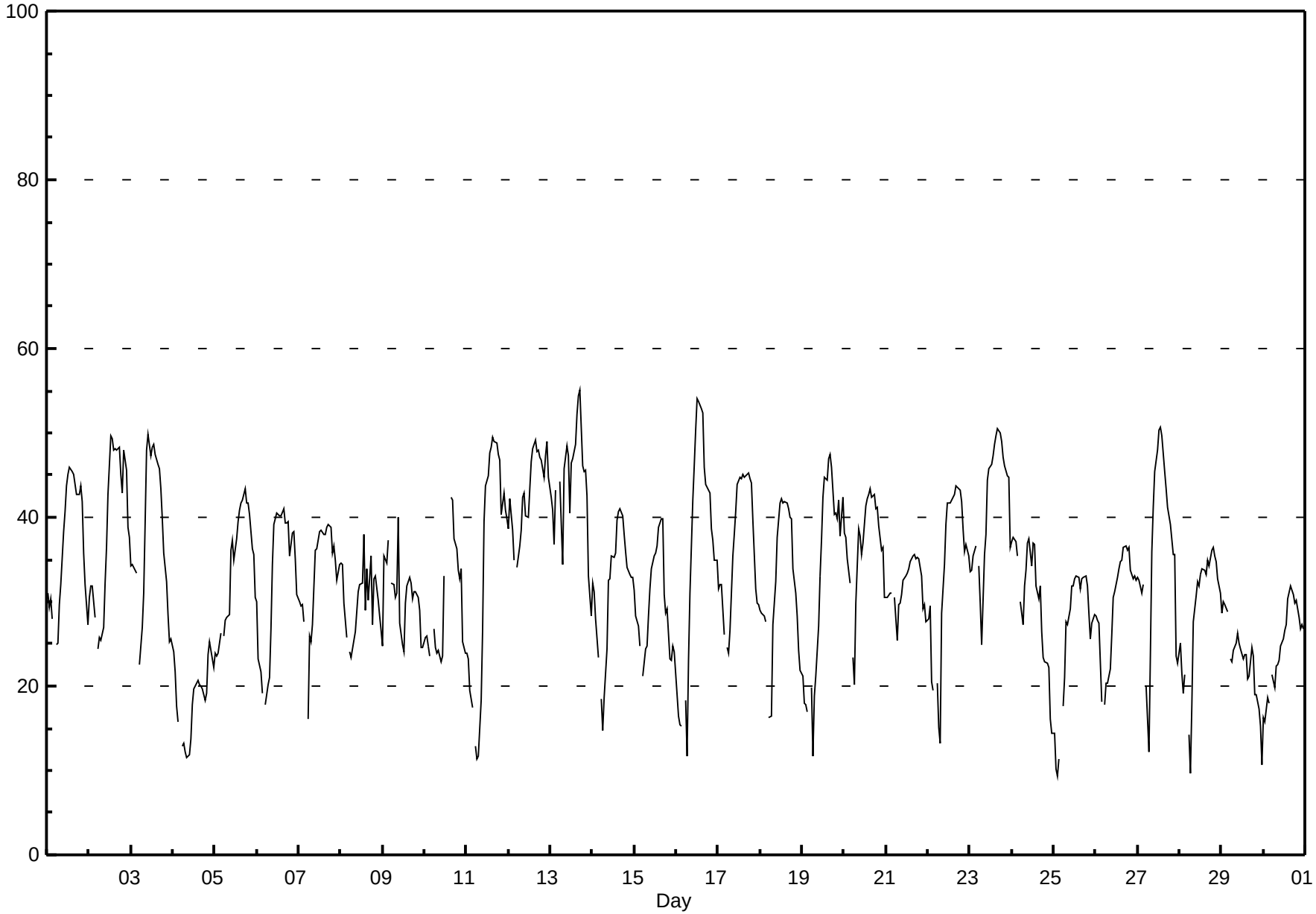
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

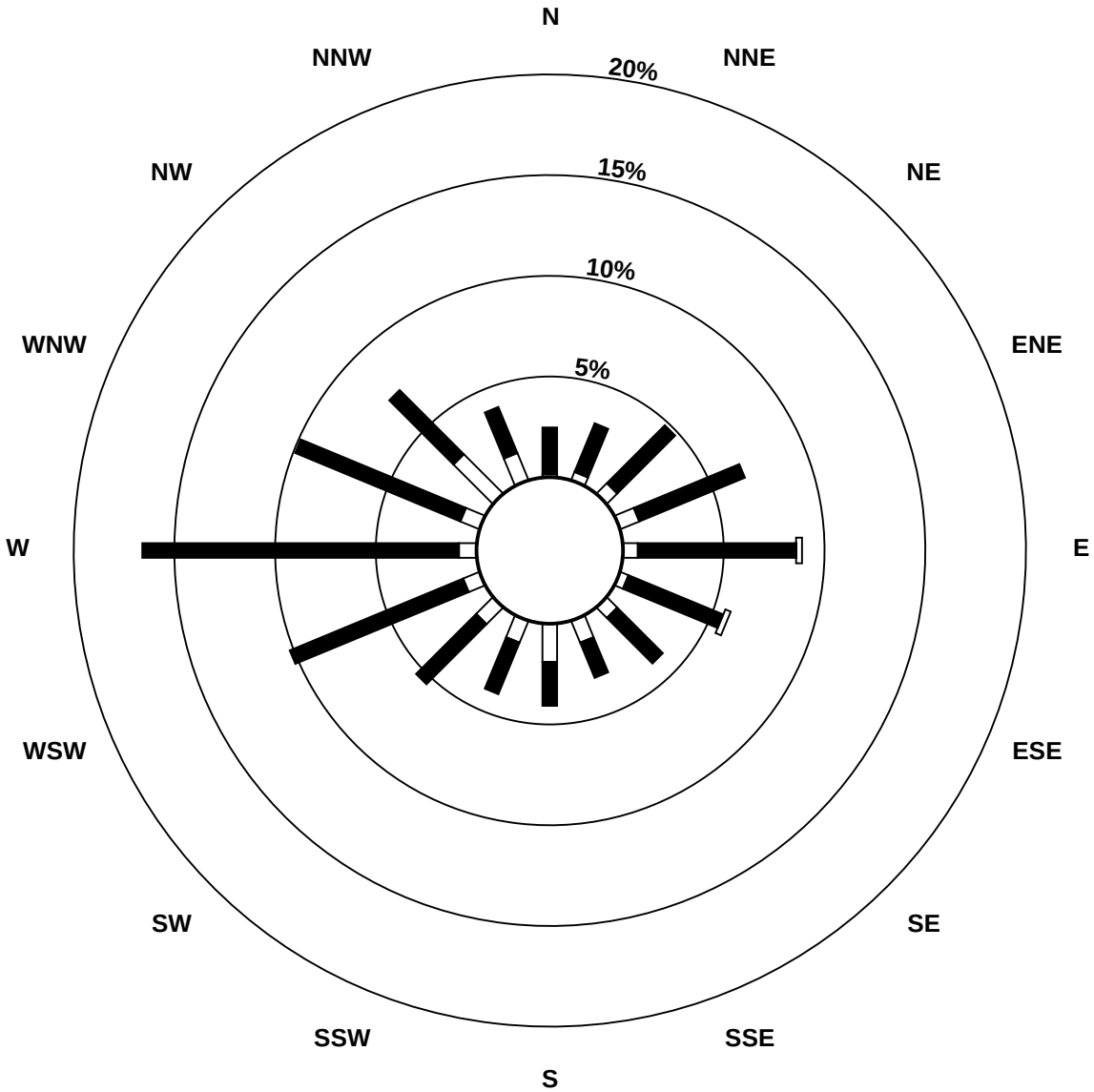
Beaverlodge - June 2014



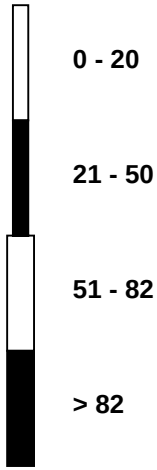
Pollutant Rose

Ozone (O_3) - ppb

Beaverlodge - June 2014



Pollutant Classes (ppb)



Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Beaverlodge - June 2014

Maximum Value: 47.0 ppb on Jun 23 20:00

Minimum Value: 11.5 ppb on Jun 25 05:00

Percentiles: P_1 = 12.5 P_{10} = 18.9 Q_1 = 24.2 Median = 29.7 Q_3 = 35.8 P_{90} = 41.4 P_{99} = 46.4

Hours in Service:	720
Hours of Data:	714
Hours of Missing Data:	6
Hours of Calibration:	6
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jun	35	34	32	31	30	28	26	26	26	27	29	31	33	35	38	40	42	42	42	42	41	40	38	35	42.2
2-Jun	34	33	31	30	29	27	26	26	26	26	26	28	30	33	36	39	41	43	44	44	44	44	43	40	44.4
3-Jun	39	37	36	35	34	31	29	28	28	30	32	34	36	39	42	44	46	45	44	42	40	38	35	32	45.7
4-Jun	30	27	25	22	21	19	17	16	14	13	12	12	13	13	14	15	16	17	18	18	19	19	20	20	29.5
5-Jun	20	21	22	23	23	23	24	24	24	26	28	29	30	31	33	35	37	38	38	39	39	39	38	37	39.3
6-Jun	35	32	30	27	26	23	21	20	20	21	23	26	28	31	33	36	37	38	38	38	37	36	35	34	38.2
7-Jun	33	32	30	28	27	24	22	21	21	22	23	26	27	30	33	34	36	37	37	37	36	36	35	34	37.0
8-Jun	32	32	30	29	28	27	26	25	25	24	24	25	26	27	27	28	29	29	28	28	28	28	28	27	32.4
9-Jun	27	27	28	29	29	29	30	30	31	32	31	29	28	28	28	28	28	27	28	29	29	29	29	27	31.7
10-Jun	27	26	26	25	24	24	24	24	24	23	23	24	24	24	N	N	N	N	N	N	32	31	30	29	32.3
11-Jun	27	25	23	21	20	18	16	15	14	15	17	20	23	27	32	37	41	44	46	46	45	45	44	42	46.1
12-Jun	41	39	38	36	36	34	33	32	33	34	35	36	37	38	40	42	43	43	44	45	45	45	45	44	45.1
13-Jun	43	42	41	40	40	39	35	33	33	35	36	36	36	38	41	44	45	45	45	46	46	45	42	39	46.5
14-Jun	35	33	30	28	26	22	21	20	19	19	20	22	23	26	29	32	34	36	36	37	36	36	36	35	36.5
15-Jun	33	32	30	29	28	26	24	23	23	23	25	26	27	29	32	33	35	35	34	33	31	30	28	26	34.9
16-Jun	23	21	19	18	17	15	14	13	14	18	22	27	30	35	40	44	46	47	47	46	44	42	39	37	46.7
17-Jun	36	35	33	30	29	27	26	25	24	25	26	30	32	34	37	40	42	43	43	43	42	41	39	37	43.4
18-Jun	35	33	31	28	27	25	23	22	22	23	23	26	28	31	34	36	38	39	39	38	37	35	33	30	39.1
19-Jun	27	25	22	20	18	16	14	13	14	15	17	20	23	27	31	35	38	40	41	42	41	40	39	38	41.6
20-Jun	37	36	35	34	34	31	29	27	27	26	27	28	29	32	34	37	37	39	40	40	40	39	38	37	40.2
21-Jun	35	34	33	31	30	29	28	27	27	27	28	28	29	29	31	32	33	33	33	34	33	33	32	31	35.3
22-Jun	30	28	25	23	22	20	17	14	13	15	18	22	24	28	32	36	39	41	41	41	41	40	39	38	41.3
23-Jun	36	35	34	34	33	33	31	29	29	30	31	32	34	35	39	42	45	46	47	47	47	47	46	45	47.0
24-Jun	43	41	40	38	38	35	32	30	30	29	29	29	30	31	32	32	31	30	28	27	25	22	20	19	43.0
25-Jun	17	16	14	13	11	12	12	14	16	18	21	24	25	27	29	30	30	31	31	31	30	30	29	28	31.2
26-Jun	28	27	26	24	24	23	22	21	19	19	20	22	23	25	27	29	31	33	33	34	34	34	33	33	34.0
27-Jun	32	31	30	29	28	26	23	21	21	22	24	28	30	34	39	42	43	44	43	42	40	38	34	32	43.5
28-Jun	29	26	24	21	19	17	15	14	14	16	18	20	21	24	27	30	32	32	32	33	33	33	33	32	33.0
29-Jun	32	31	31	30	29	28	26	25	25	24	23	23	22	23	23	22	22	21	21	20	20	19	17	16	31.8
30-Jun	15	14	13	13	13	13	14	16	17	19	19	21	21	22	23	25	26	27	28	28	28	28	28	27	28.3
Diurnal Maximums	43.3	42.2	40.7	39.9	39.6	38.7	34.8	33.0	33.4	34.8	36.0	36.0	36.6	39.4	42.2	44.4	46.3	46.7	46.7	47.0	47.0	46.9	46.1	44.5	

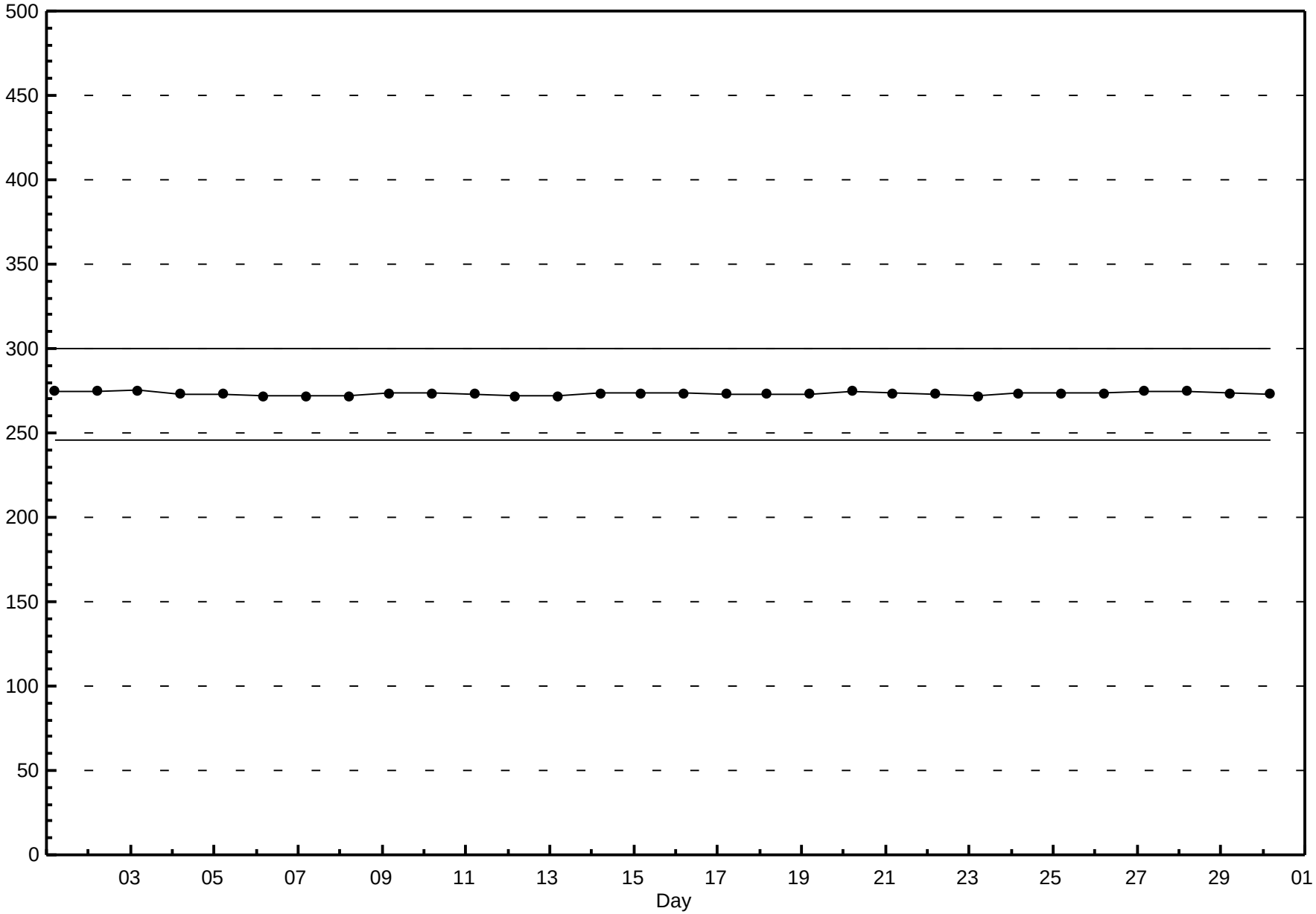
N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Averages

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

Beaverlodge - June 2014

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 10.0 $\mu g/m^3$ on Jun 27 15:00

Maximum Daily Average: 5.3 $\mu g/m^3$ on Jun 27

Minimum Value: 0 $\mu g/m^3$ on Jun 25 17:00

Maximum Diurnal Average: 5.0 $\mu g/m^3$ at hour 1

Monthly Average: 3.20 $\mu g/m^3$

Minimum Daily Average: 1.9 $\mu g/m^3$ on Jun 30

Minimum Diurnal Average: 1.7 $\mu g/m^3$ at hour 21

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 1.5$ Median = 3.1 $Q_3 = 4.5$ $P_{90} = 6.0$ $P_{99} = 10.0$

Hours in Service:	720
Hours of Data:	125
Hours of Missing Data:	595
Hours of Calibration:	7
Percent Operational Time:	18.3

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	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
2-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	--	--
3-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	--	--
4-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	--	--
5-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	--	--
6-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	--	--
7-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	--	--
8-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	--	--
9-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	--	--
10-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	--	--
11-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	--	--
12-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	--	--
13-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	--	--
14-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	--	--
15-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	--	--
16-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	--	--
17-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	--	--
18-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	--	--
19-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	--	--
20-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	--	--
21-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	--	--
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	N	N	N	N	N	N	N	--	--
24-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	--	--
25-Jun	N	N	N	N	N	N	N	N	N	C	C	C	C	C	C	C	0	0	1	4	1	3	3	3	--	4.2
26-Jun	3	2	4	2	1	4	5	4	5	3	4	4	3	3	5	2	1	4	3	2	2	3	3	2	3.2	5.0
27-Jun	6	6	6	6	5	7	6	4	6	6	6	8	4	10	10	7	6	4	2	3	1	0	3	6	5.3	10.0
28-Jun	8	10	6	3	6	7	5	4	6	4	4	5	3	3	1	0	2	0	0	0	0	3	3	3	3.6	9.9
29-Jun	4	3	2	3	3	6	1	N	N	2	1	2	N	0	0	1	3	3	3	4	2	2	1	3	2.3	6.1
30-Jun	3	1	0	2	0	0	3	7	2	3	1	0	1	2	3	3	1	1	1	0	3	3	4	0	1.9	7.0
	5.0	4.5	3.7	3.3	3.0	4.7	4.0	4.7	4.8	3.6	3.2	3.7	3.2	3.6	3.6	2.6	2.2	1.9	1.7	2.3	1.7	2.2	2.8	3.0	Diurnal Average	
	7.6	9.9	6.4	5.9	6.0	7.0	5.7	7.0	6.0	5.6	6.0	7.7	4.4	9.9	10.0	7.2	5.9	3.7	3.0	4.2	3.5	3.1	4.1	5.7	Diurnal Maximum	

C - Calibration N - Not Valid

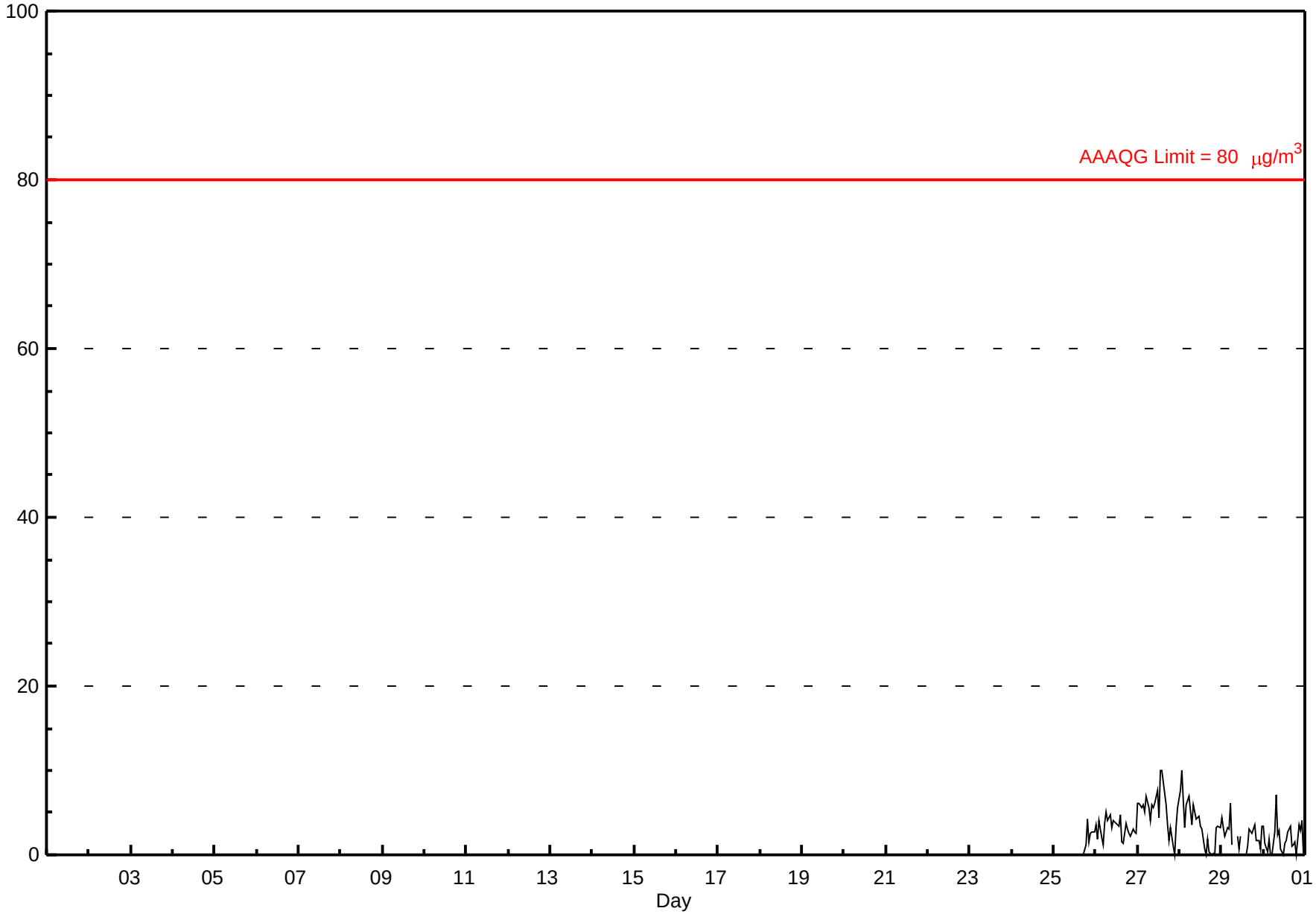
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

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

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - June 2014

Maximum Value: 12.5 $\mu g/m^3$ on Jun 27 15:00

Maximum Daily Average: 7.0 $\mu g/m^3$ on Jun 27

Minimum Value: 0 $\mu g/m^3$ on Jun 25 17:00

Minimum Daily Average: 3.4 $\mu g/m^3$ on Jun 29

Maximum Diurnal Average: 6.5 $\mu g/m^3$ at hour 7

Minimum Diurnal Average: 3.1 $\mu g/m^3$ at hour 21

Monthly Average: 4.73 $\mu g/m^3$

Percentiles: P_1 = 0.0 P_{10} = 1.8 Q_1 = 3.3 Median = 4.3 Q_3 = 6.3 P_{90} = 8.1 P_{99} = 12.5

Hours in Service:	720
Hours of Data:	128
Hours of Missing Data:	592
Hours of Calibration:	7
Percent Operational Time:	18.8

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-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	--	--
2-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	--	--
3-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	--	--
4-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	--	--
5-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	--	--
6-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	--	--
7-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	--	--
8-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	--	--
9-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	--	--
10-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	--	--
11-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	--	--
12-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	--	--
13-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	--	--
14-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	--	--
15-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	--	--
16-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	--	--
17-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	--	--
18-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	--	--
19-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	--	--
20-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	--	--
21-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	--	--
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	N	N	N	N	N	N	N	--	--
24-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	--	--
25-Jun	N	N	N	N	N	N	N	N	N	C	C	C	C	C	C	C	0	2	4	6	3	4	3	4	--	5.8
26-Jun	4	3	5	5	3	5	6	6	8	6	6	5	6	5	7	6	4	5	4	3	3	4	3	5	4.8	7.6
27-Jun	7	7	6	7	6	8	7	5	8	8	9	9	7	11	13	10	8	7	5	5	2	2	4	8	7.0	12.5
28-Jun	10	11	9	5	7	8	7	7	8	6	6	6	4	4	3	3	4	2	1	1	3	4	4	4	5.3	10.8
29-Jun	5	4	3	4	4	8	6	0	3	4	4	4	0	1	1	3	4	4	4	4	3	2	3	4	3.4	8.2
30-Jun	4	4	2	3	3	2	7	9	5	4	1	1	2	2	3	5	2	5	5	3	4	4	5	3	3.6	8.6
	6.0	5.7	5.0	4.7	4.5	6.4	6.5	5.3	6.3	5.4	5.2	5.1	3.8	4.8	5.4	5.4	3.8	3.9	3.6	3.7	3.1	3.3	3.8	4.7	Diurnal Average	
	9.6	10.8	8.7	6.5	7.3	8.2	7.4	8.6	8.3	8.3	9.1	9.3	6.8	11.1	12.5	9.5	8.5	6.9	4.7	5.8	4.4	4.0	5.2	7.9	Diurnal Maximum	

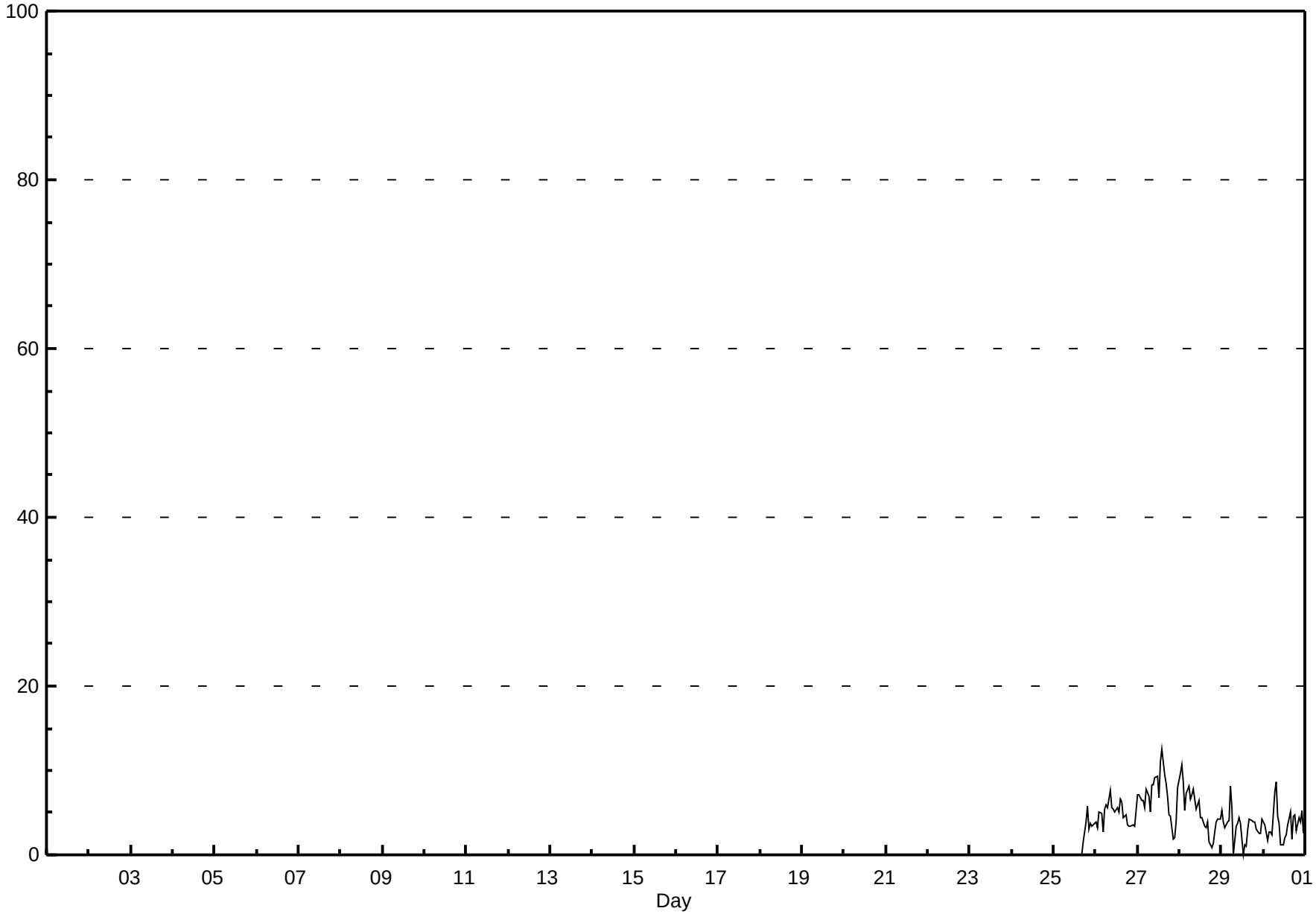
C - Calibration N - Not Valid

Peace Airshed Zone Association

Hourly Maximums

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

Beaverlodge - June 2014

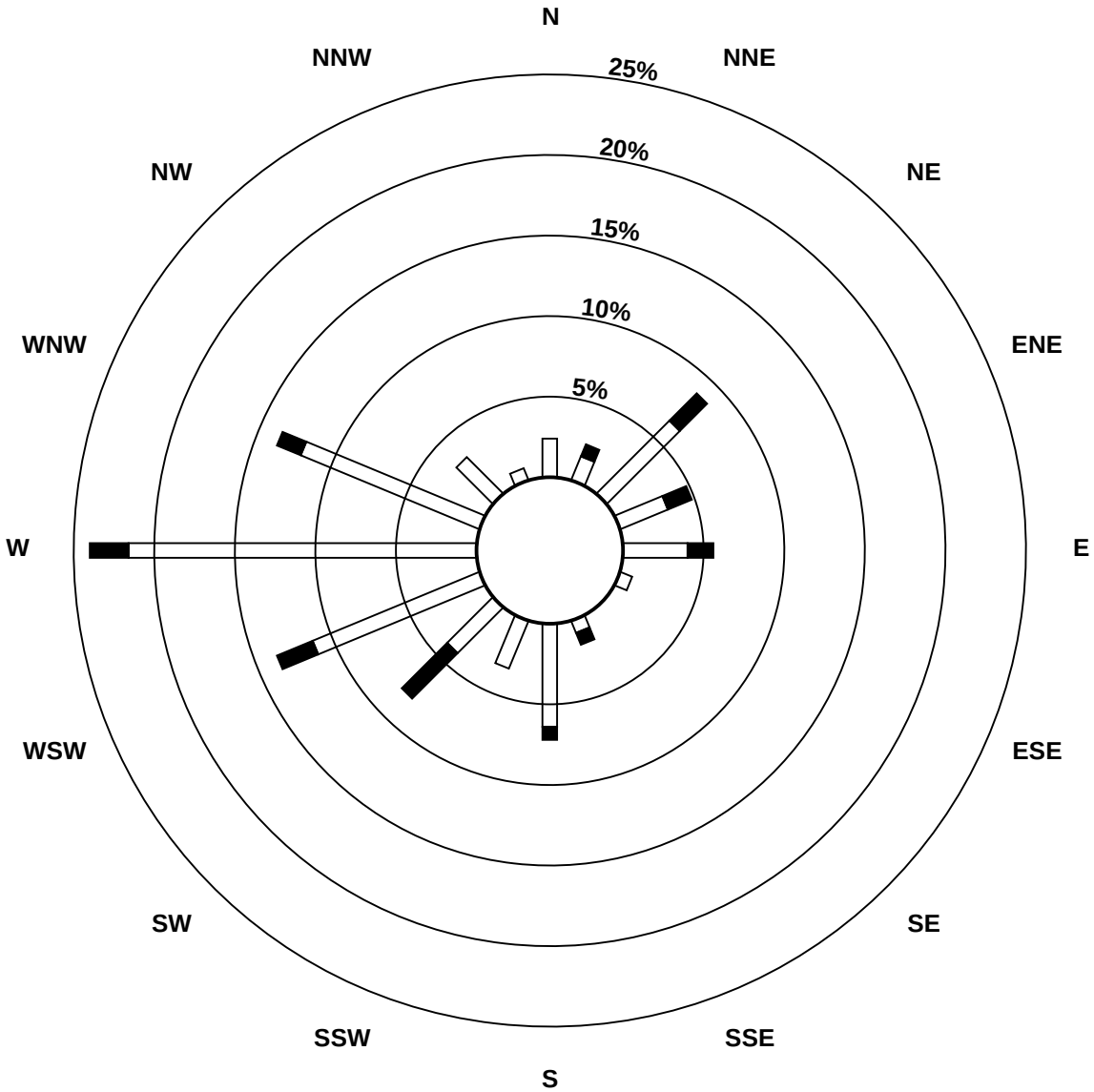


Peace Airshed Zone Association

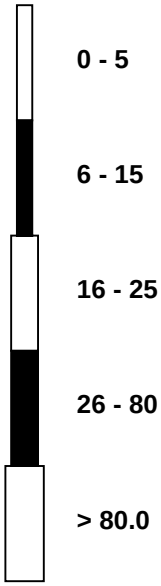
Pollutant Rose

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

Beaverlodge - June 2014



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



Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - June 2014

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

Maximum Value: 26.4 ^{o}C on Jun 23 17:00

Maximum Daily Average: 20.7 ^{o}C on Jun 23

Minimum Value: 1 ^{o}C on Jun 6 04:00

Minimum Daily Average: 4.7 ^{o}C on Jun 4

Maximum Diurnal Average: 19.2 ^{o}C at hour 16

Minimum Diurnal Average: 8.9 ^{o}C at hour 5

Monthly Average: 14.31 ^{o}C

Percentiles: P_1 = 2.6 P_{10} = 7.2 Q_1 = 10.4 Median = 14.2 Q_3 = 18.3 P_{90} = 21.6 P_{99} = 24.5

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

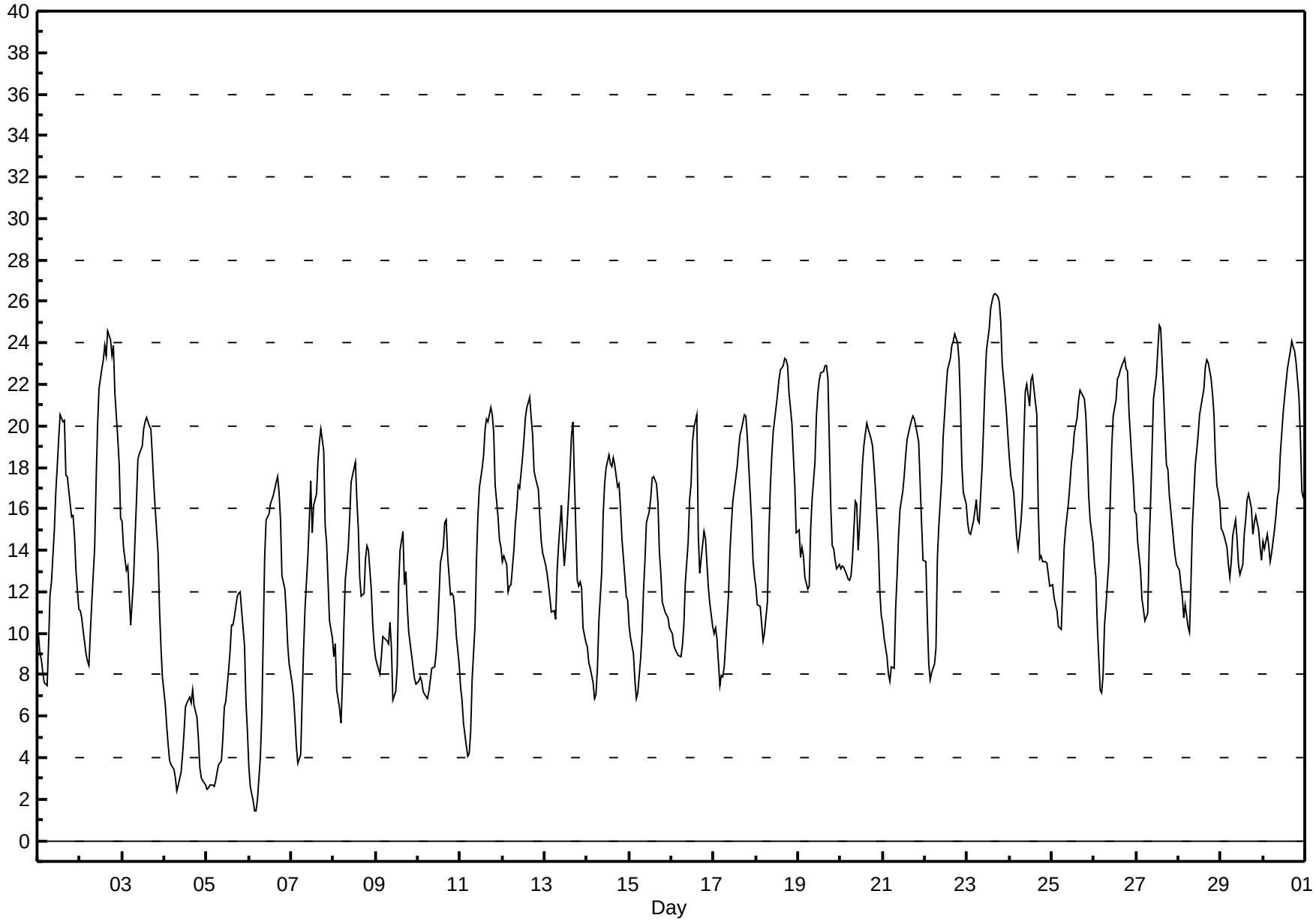
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Jun	10	9	9	8	8	7	10	12	12	15	17	18	19	21	20	20	18	18	16	16	16	15	13	11	14.0	20.6
2-Jun	11	11	10	9	9	8	10	12	14	17	20	22	23	23	24	23	25	24	23	24	22	19	18	16	17.4	24.6
3-Jun	15	14	13	13	12	10	13	15	16	18	19	19	20	20	20	20	20	19	17	16	14	11	9	8	15.5	20.4
4-Jun	7	6	5	4	4	3	3	2	3	3	4	5	6	7	7	7	7	7	6	5	4	3	3	3	4.7	7.3
5-Jun	2	3	3	3	3	3	3	4	4	5	6	7	8	9	10	10	11	12	12	12	11	9	7	5	6.8	12.0
6-Jun	4	3	2	1	1	2	4	6	10	14	15	16	16	16	17	17	18	17	15	13	12	11	9	9	10.3	17.5
7-Jun	8	7	6	5	4	4	7	9	11	14	15	17	15	16	17	18	19	20	19	15	14	12	11	10	12.2	19.8
8-Jun	9	9	7	6	6	8	10	13	14	16	17	18	18	16	15	13	12	12	14	14	14	12	10	9	12.2	18.2
9-Jun	9	9	8	9	10	10	10	10	11	9	7	7	8	12	14	15	12	13	11	10	9	8	8	8	9.8	14.9
10-Jun	8	8	8	7	7	7	7	8	8	8	9	10	12	13	14	15	15	14	12	12	12	11	10	9	10.2	15.4
11-Jun	7	7	6	5	4	4	5	8	10	13	16	17	18	19	20	20	20	21	21	20	17	16	15	14	13.4	20.9
12-Jun	13	14	13	12	12	12	14	15	16	17	17	18	19	20	21	21	20	20	18	17	17	16	14	14	16.4	21.4
13-Jun	13	13	12	12	11	11	11	13	14	16	14	13	14	15	18	20	20	17	13	12	12	12	10	10	13.7	20.2
14-Jun	9	9	8	8	7	7	8	11	13	16	17	18	19	18	18	18	18	17	17	16	15	13	12	12	13.5	18.6
15-Jun	10	10	9	8	7	7	9	10	12	14	15	16	16	17	18	17	16	14	13	11	11	11	11	10	12.2	17.5
16-Jun	10	9	9	9	9	9	9	10	12	14	16	17	19	20	21	15	13	14	15	15	13	12	11	10	13.1	20.5
17-Jun	10	10	10	7	8	8	8	10	12	14	15	16	18	18	19	20	20	21	20	20	18	15	14	13	14.3	20.6
18-Jun	12	11	11	10	10	10	11	15	17	19	20	21	22	22	23	23	23	23	23	22	20	19	17	15	17.4	23.2
19-Jun	15	14	14	14	13	12	12	15	16	18	20	22	22	23	23	23	23	22	16	14	14	14	13	13	16.9	22.9
20-Jun	13	13	13	13	13	13	13	14	16	16	14	15	18	19	20	20	20	19	19	18	17	14	12	11	15.5	20.1
21-Jun	10	10	9	8	8	8	8	11	13	15	16	17	18	19	19	20	20	20	20	20	19	17	15	14	14.8	20.5
22-Jun	13	11	8	8	8	9	9	14	15	17	20	21	22	23	23	24	24	24	24	23	21	18	17	16	17.2	24.5
23-Jun	15	15	15	15	16	16	15	15	18	20	22	24	25	26	26	26	26	26	26	25	23	21	21	19	20.7	26.4
24-Jun	18	18	17	16	15	14	15	16	19	22	22	21	22	22	22	21	16	14	14	13	13	13	13	12	17.0	22.5
25-Jun	12	12	11	11	10	10	12	14	15	16	17	18	19	20	20	21	22	22	21	21	19	17	15	14	16.3	21.7
26-Jun	13	13	10	7	7	8	10	11	13	16	19	20	21	22	22	23	23	23	23	23	21	18	17	16	16.8	23.3
27-Jun	16	14	13	12	11	11	11	14	16	19	21	22	24	25	25	22	20	18	18	17	15	14	14	13	16.9	24.9
28-Jun	13	12	12	11	11	10	10	12	15	18	19	20	21	21	22	23	23	23	22	22	21	18	17	16	17.2	23.2
29-Jun	15	15	15	14	13	13	13	15	15	15	13	13	13	15	16	16	17	16	15	15	16	15	14	14	14.6	16.7
30-Jun	14	14	15	14	13	14	15	16	17	17	19	21	21	22	23	24	24	24	24	23	21	19	17	16	18.6	24.1
	11.3	10.7	10.0	9.3	8.9	9.0	9.9	11.6	13.3	15.1	16.1	17.0	17.9	18.7	19.2	19.2	18.9	18.4	17.6	16.8	15.7	14.2	12.9	12.0	Diurnal Average	
	18.4	17.6	16.8	15.8	15.9	16.4	15.5	16.5	19.3	21.6	22.0	23.6	24.7	25.7	26.0	26.3	26.4	26.3	26.0	25.0	23.0	21.4	20.5	19.4	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 100.0 % on Jun 11 03:00 Maximum Daily Average: 85.9 % on Jun 10

Minimum Value: 22 % on Jun 18 15:00 Minimum Daily Average: 41.7 % on Jun 23
Maximum Diurnal Average: 82.2 % at hour 5 Minimum Diurnal Average: 41.1 % at hour 16
Monthly Average: 62.79 % Percentiles: P_1 = 25.7 P_{10} = 32.3 Q_1 = 44.0 Median = 63.0 Q_3 = 81.7 P_{90} = 95.5 P_{99} = 100.0

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

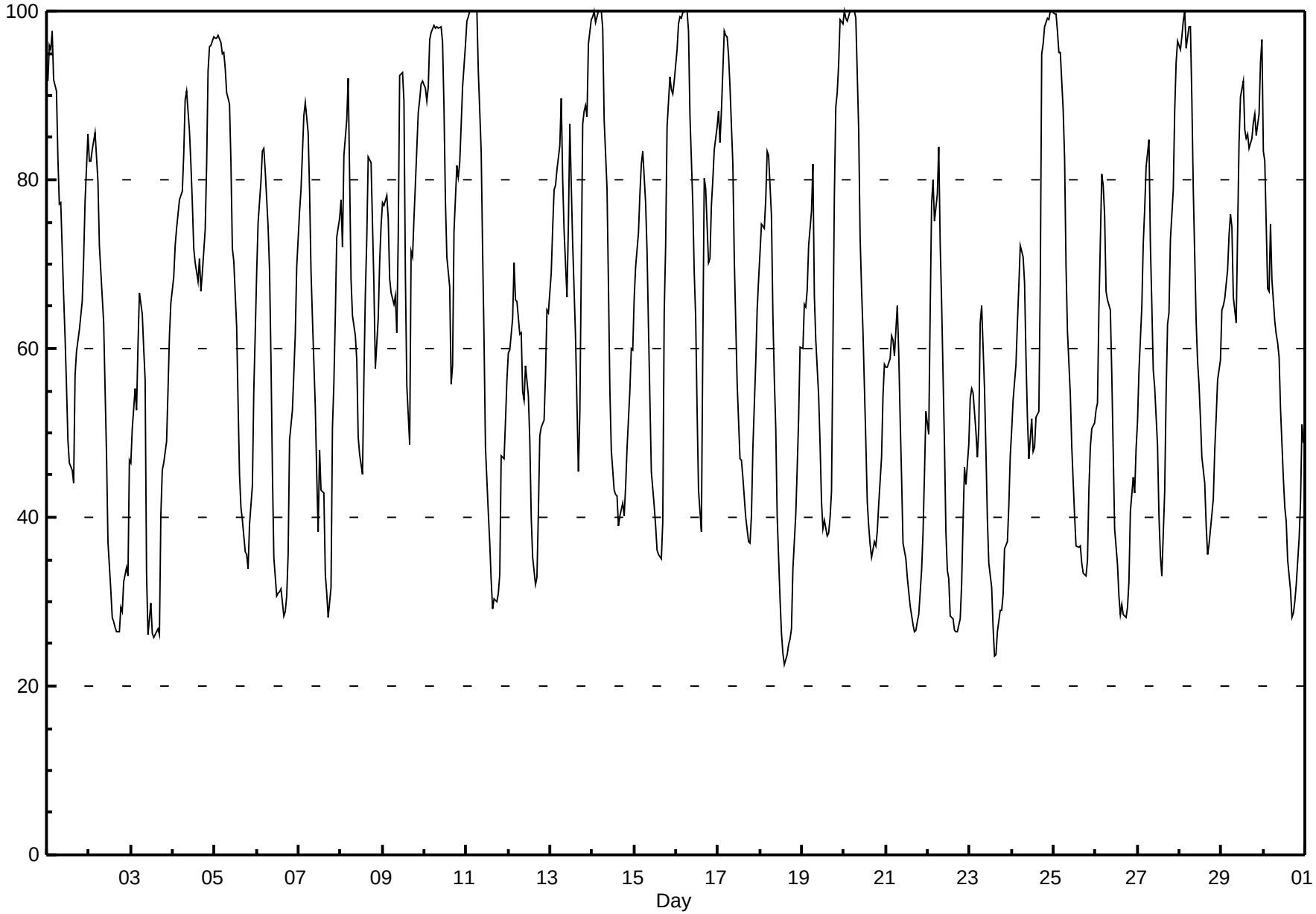
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	92	96	96	98	92	90	83	77	77	66	61	56	49	46	46	44	57	60	62	64	66	71	77	85	71.2	97.5
2-Jun	82	82	84	86	83	80	72	69	63	55	48	37	31	28	28	27	26	27	29	29	32	34	33	47	50.5	85.7
3-Jun	46	50	55	53	60	67	64	60	56	33	26	30	26	26	26	27	26	40	46	46	49	55	62	65	45.6	66.6
4-Jun	69	72	74	76	78	79	83	90	91	86	82	77	72	70	68	71	67	69	74	82	93	96	96	97	79.6	97.0
5-Jun	97	97	97	96	95	95	93	90	89	82	72	70	63	54	45	41	40	36	36	34	39	44	55	62	67.5	97.2
6-Jun	69	75	80	83	84	81	74	69	59	46	35	31	31	31	32	28	29	31	36	49	53	57	62	70	53.9	83.7
7-Jun	76	79	83	88	89	86	79	69	64	53	45	38	48	43	43	33	31	28	32	51	56	64	73	75	59.4	89.2
8-Jun	78	72	83	87	92	80	68	64	61	59	50	47	45	57	67	73	83	82	75	67	58	64	70	75	69.0	92.1
9-Jun	77	77	78	75	68	67	65	66	62	73	92	93	89	69	56	49	71	71	75	80	88	89	91	92	75.6	92.7
10-Jun	91	89	91	97	97	98	98	98	98	98	96	89	78	71	67	56	58	74	82	80	82	86	91	96	85.9	98.3
11-Jun	99	99	100	100	100	100	100	93	83	72	61	48	41	37	33	29	30	30	31	33	47	47	51	56	63.4	100.0
12-Jun	60	60	64	70	66	66	62	62	55	54	58	54	49	40	35	32	33	41	50	51	52	57	65	64	54.0	70.2
13-Jun	69	74	79	79	81	84	90	80	74	66	75	87	79	72	61	53	46	52	87	88	89	87	96	99	77.0	98.9
14-Jun	99	100	99	100	100	100	98	87	79	68	55	48	43	43	43	39	40	42	40	44	48	55	60	60	66.2	100.0
15-Jun	66	70	74	78	82	83	77	72	63	54	45	41	39	36	36	35	39	64	72	86	92	91	90	92	65.7	92.2
16-Jun	95	99	99	99	100	100	100	98	88	77	69	64	53	43	38	60	80	79	70	71	77	80	84	86	79.5	100.0
17-Jun	88	84	88	98	97	97	95	91	82	71	63	56	47	47	45	42	40	37	37	40	48	58	65	68	66.0	97.7
18-Jun	71	75	74	78	83	83	76	64	56	51	40	30	26	24	22	24	25	26	27	34	40	46	52	60	49.5	83.4
19-Jun	60	65	65	67	72	76	82	66	61	54	49	42	39	40	38	38	40	43	78	89	90	94	99	98	64.4	98.9
20-Jun	100	99	99	100	100	100	100	99	86	73	67	62	49	42	39	37	35	37	37	38	41	47	54	58	66.7	100.0
21-Jun	58	58	59	62	61	59	65	59	52	45	37	35	33	31	29	27	26	27	28	28	34	38	45	53	43.7	65.1
22-Jun	50	64	77	80	75	78	84	72	65	49	38	34	33	28	28	27	26	27	28	32	40	46	44	49	48.9	83.9
23-Jun	54	55	55	50	47	51	63	65	55	48	40	35	32	27	24	24	26	29	29	31	36	37	41	47	41.7	65.1
24-Jun	50	54	58	63	67	72	71	68	59	52	47	52	48	48	52	53	68	95	96	98	99	99	100	100	69.5	100.0
25-Jun	100	100	98	95	95	88	83	70	62	55	49	44	40	37	36	37	35	33	33	35	43	48	50	51	59.0	99.6
26-Jun	53	54	65	81	79	76	67	66	65	57	48	39	34	31	29	30	28	28	29	32	41	45	43	48	48.6	80.7
27-Jun	51	57	65	72	76	82	85	72	65	58	55	48	40	35	33	43	55	63	64	73	79	88	94	96	64.6	96.4
28-Jun	95	97	99	100	96	98	98	89	79	63	58	56	52	47	44	39	36	37	40	42	48	52	56	59	65.9	100.0
29-Jun	65	65	66	69	73	76	74	66	63	74	84	90	92	86	85	85	84	85	87	88	85	88	94	97	80.0	96.6
30-Jun	83	82	67	67	75	68	63	62	61	59	53	45	41	40	35	31	28	29	30	32	38	42	51	49	51.2	83.4
	74.8	76.7	78.9	81.6	82.2	82.0	80.4	75.2	69.1	61.6	56.6	52.6	48.1	44.3	42.0	41.1	43.6	47.3	51.3	54.9	59.4	63.5	68.2	71.8	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2	97.9	98.1	96.2	92.7	91.8	85.9	84.9	85.5	83.7	94.8	96.1	98.1	99.2	99.0	100.0	100.0	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - June 2014

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	4	2	2	2	0	5	3	2	4	13	9	7	6	5	10	12	12	10	16	12	11	5	6	2	2.9	16.0
Dir	229	168	54	77	28	54	65	167	246	284	277	295	243	305	293	286	56	64	30	315	12	358	229	60	328	30
2 Spd	2	5	3	3	3	3	5	6	5	4	3	4	6	3	4	3	5	6	11	10	14	9	8	3	3.4	14.1
Dir	85	52	101	119	147	112	197	202	188	201	222	209	245	256	174	120	61	213	217	245	192	208	239	80	199	192
3 Spd	4	4	1	3	1	2	2	4	9	31	30	25	22	21	22	20	18	21	21	20	20	16	12	15	10.2	30.9
Dir	82	106	218	313	131	191	234	240	260	265	275	270	265	285	283	287	295	357	13	7	355	346	341	341	304	265
4 Spd	15	15	14	13	11	11	12	11	11	11	13	14	16	16	17	18	20	17	19	21	19	17	17	17	14.9	21.0
Dir	340	341	335	334	332	332	315	313	320	323	329	325	322	325	311	318	304	310	310	313	305	299	295	300	317	313
5 Spd	17	16	16	15	11	11	11	13	12	10	8	5	6	4	10	12	14	16	13	11	8	5	1	3	9.4	16.8
Dir	300	304	306	314	317	305	301	300	309	289	261	301	36	306	298	313	298	285	268	285	263	238	207	66	298	300
6 Spd	3	2	2	3	2	3	4	6	9	11	13	18	17	17	17	15	19	24	8	15	11	4	2	4	6.3	23.7
Dir	83	129	100	77	138	85	188	199	220	248	259	269	254	288	296	269	262	270	319	41	268	188	143	256	266	270
7 Spd	1	3	1	2	0	0	3	2	4	6	6	4	14	5	4	9	2	5	9	18	8	7	7	9	0.7	17.6
Dir	277	39	320	275	310	51	48	246	255	160	185	229	197	183	246	261	242	245	352	53	54	107	110	64	135	53
8 Spd	3	4	4	3	3	3	2	6	13	8	23	22	21	16	16	21	11	11	15	15	20	19	12	10	9.4	23.0
Dir	25	70	151	173	72	100	135	196	216	215	249	259	268	242	255	254	185	185	195	213	240	243	242	227	233	249
9 Spd	7	14	11	8	20	20	22	22	27	31	18	10	7	27	34	32	10	9	16	16	17	10	8	9	14.4	33.9
Dir	234	240	235	224	253	266	258	261	275	290	274	259	221	257	266	264	25	23	331	321	311	289	281	281	273	266
10 Spd	12	14	14	13	13	14	7	15	15	12	11	11	7	8	9	5	5	10	14	6	2	2	4	2	5.9	14.8
Dir	282	294	290	284	284	283	358	297	309	313	313	333	0	30	56	39	136	198	221	254	340	58	225	41	299	297
11 Spd	4	3	2	3	2	1	3	4	4	4	5	5	3	5	3	3	4	4	5	4	7	7	9	7	2.7	8.6
Dir	62	116	87	69	70	67	62	206	182	149	167	155	160	96	113	286	64	90	61	40	47	44	56	77	87	56
12 Spd	1	5	11	15	12	9	5	8	10	10	13	21	29	30	26	25	19	17	17	7	9	11	19	10	11.3	30.3
Dir	202	65	341	40	43	40	65	74	111	98	72	86	85	80	78	81	83	125	151	219	2	40	63	33	76	80
13 Spd	4	6	7	6	8	3	6	5	4	2	9	5	7	7	8	9	11	9	18	9	8	4	6	3	4.4	17.8
Dir	83	79	91	71	60	89	291	281	108	125	127	152	136	114	113	115	105	144	92	82	269	319	96	171	105	92
14 Spd	1	6	4	2	2	3	5	6	9	15	18	25	29	29	26	35	34	27	27	24	26	18	16	15	14.6	35.4
Dir	178	58	104	118	83	153	188	164	199	231	250	252	262	276	260	255	266	258	260	250	250	248	253	268	253	255
15 Spd	2	3	2	2	2	2	3	7	6	8	6	3	4	4	5	13	10	18	11	6	3	6	3	7	1.4	17.9
Dir	100	141	165	96	148	118	237	253	276	288	270	301	6	68	60	85	122	223	207	179	270	304	325	295	223	223
16 Spd	2	4	2	0	4	5	4	9	10	6	3	4	7	9	8	12	17	13	6	7	9	9	11	13	2.7	17.5
Dir	313	218	209	158	24	290	324	321	355	9	66	73	112	91	99	47	120	145	235	308	333	350	350	17	31	120
17 Spd	14	13	9	8	8	9	3	5	5	4	5	7	6	6	7	5	7	5	8	12	12	12	12	11	3.2	13.8
Dir	26	24	25	302	329	321	15	318	250	210	171	166	134	130	123	121	145	138	133	130	131	113	105	103	101	26
18 Spd	9	7	3	2	2	2	3	2	13	19	24	25	24	21	20	17	11	14	15	13	7	6	9	7	7.9	24.7
Dir	99	101	137	155	154	128	183	233	244	245	247	264	266	263	277	292	296	261	273	319	338	329	341	20	271	264
19 Spd	7	9	6	8	4	4	1	3	6	6	4	12	15	18	22	20	17	4	19	14	9	7	5	7	2.3	21.5
Dir	342	317	329	334	25	310	199	221	292	283	74	101	101	105	104	104	83	70	247	317	307	334	6	314	44	104
20 Spd	10	2	3	7	7	6	1	6	3	20	17	13	22	24	23	25	23	20	24	20	16	12	11	11	11.5	25.2
Dir	55	277	39	315	20	238	117	18	12	275	249	259	264	272	273	263	264	264	275	262	270	263	254	271	271	263
21 Spd	9	8	8	4	2	8	7	9	18	22	31	27	25	24	18	20	16	15	16	14	7	7	8	10	12.1	30.6
Dir	272	273	255	267	312	301	279	236	236	248	264	262	266	265	255	271	285	283	279	273	344	339	0	26	271	264
22 Spd	9	2	3	2	3	1	2	2	7	14	14	17	14	14	13	9	9	11	15	13	11	11	10	14	7.7	16.5
Dir	27	27	332	344	38	325	210	164	139	129	125	124	116	110	104	100	88	82	85	71	69	76	77	89	95	124

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	12	7	7	7	8	3	4	4	10	12	19	23	23	20	13	14	17	24	24	21	16	18	25	25	14.2	25.1
Dir	91	88	90	74	75	105	218	196	111	108	104	98	95	97	91	95	96	85	79	79	74	79	85	96	91	85
24 Spd	21	20	15	9	3	3	2	5	6	7	13	12	17	14	19	26	24	14	12	7	1	2	5	4	4.1	25.7
Dir	102	101	106	110	170	336	235	248	284	306	272	273	297	297	287	271	263	248	237	231	353	180	125	71	262	271
25 Spd	2	3	3	3	2	3	3	13	16	20	24	20	17	18	16	14	16	19	18	17	14	9	9	10	10.8	24.0
Dir	137	162	164	174	103	141	198	259	266	275	271	268	269	270	258	273	265	260	254	259	259	277	316	306	265	271
26 Spd	11	9	2	4	4	3	2	4	4	5	4	4	2	2	4	4	8	7	10	12	8	9	9	6	2.0	12.1
Dir	304	298	218	80	65	67	169	175	161	190	211	233	266	245	245	37	35	43	46	88	61	41	52	79	53	88
27 Spd	5	1	6	4	3	2	4	5	5	3	3	8	14	16	14	9	3	13	7	10	3	4	8	5	2.1	16.5
Dir	60	185	39	29	3	47	235	243	220	287	46	64	83	94	82	276	239	71	359	15	329	276	252	239	49	94
28 Spd	5	3	5	2	4	2	5	7	6	17	22	16	10	9	8	12	14	12	25	20	11	11	9	8	9.3	25.0
Dir	263	230	285	277	269	154	181	213	228	271	276	284	302	302	295	275	283	287	266	265	247	257	265	257	269	266
29 Spd	8	8	11	8	6	6	7	10	15	15	11	4	5	5	8	6	7	8	8	6	2	5	0	2	3.4	15.4
Dir	236	254	265	250	226	232	255	263	280	292	279	357	91	120	176	181	189	45	54	224	179	14	200	80	254	292
30 Spd	2	5	6	6	1	5	6	9	8	9	12	20	18	15	9	8	14	17	19	18	10	6	4	7	9.3	19.8
Dir	265	239	313	292	209	276	275	252	257	274	281	281	280	272	316	301	277	259	266	273	277	287	303	292	277	281
Spd	1.7	1.2	1.5	1.7	1.5	1.8	2.3	4.5	5.3	7.6	7.8	5.9	4.4	3.8	4.5	6.1	2.9	3.6	4.7	4.6	4.5	2.9	1.6	2.2	Diurnal Average	
Dir	8	347	327	335	349	301	262	257	257	266	260	265	262	276	276	277	277	260	275	298	299	311	342	359		
Spd	21.3	20.1	15.9	15.2	20.0	20.5	22.2	22.4	26.7	31.4	30.6	27.4	28.8	30.3	33.9	35.4	34.1	27.1	26.7	23.7	25.6	18.6	25.1	25.0	Diurnal Maximum	
Dir	102	101	306	40	253	266	258	261	275	290	264	262	262	80	266	255	266	258	260	250	250	243	85	96		

Maximum Speed Value: 35 km/h on Jun 14 16:00
Maximum Daily Speed Average: 14.9 km/h on Jun 9
Maximum Diurnal Speed Average: 7.8 km/h at hour 11

Minimum Speed Value: 0 km/h on Jun 7 05:00
Minimum Daily Speed Average: 0.7 km/h on Jun 11
Minimum Diurnal Speed Average: 1.2 km/h at hour 2

Monthly Average Velocity: 3.27 km/h 280.6 deg

Speed Percentiles: $P_1 = 0.5$ $P_{10} = 2.4$ $Q_1 = 4.4$ Median = 8.5 $Q_3 = 14.4$ $P_{90} = 20.2$ $P_{99} = 30.4$

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

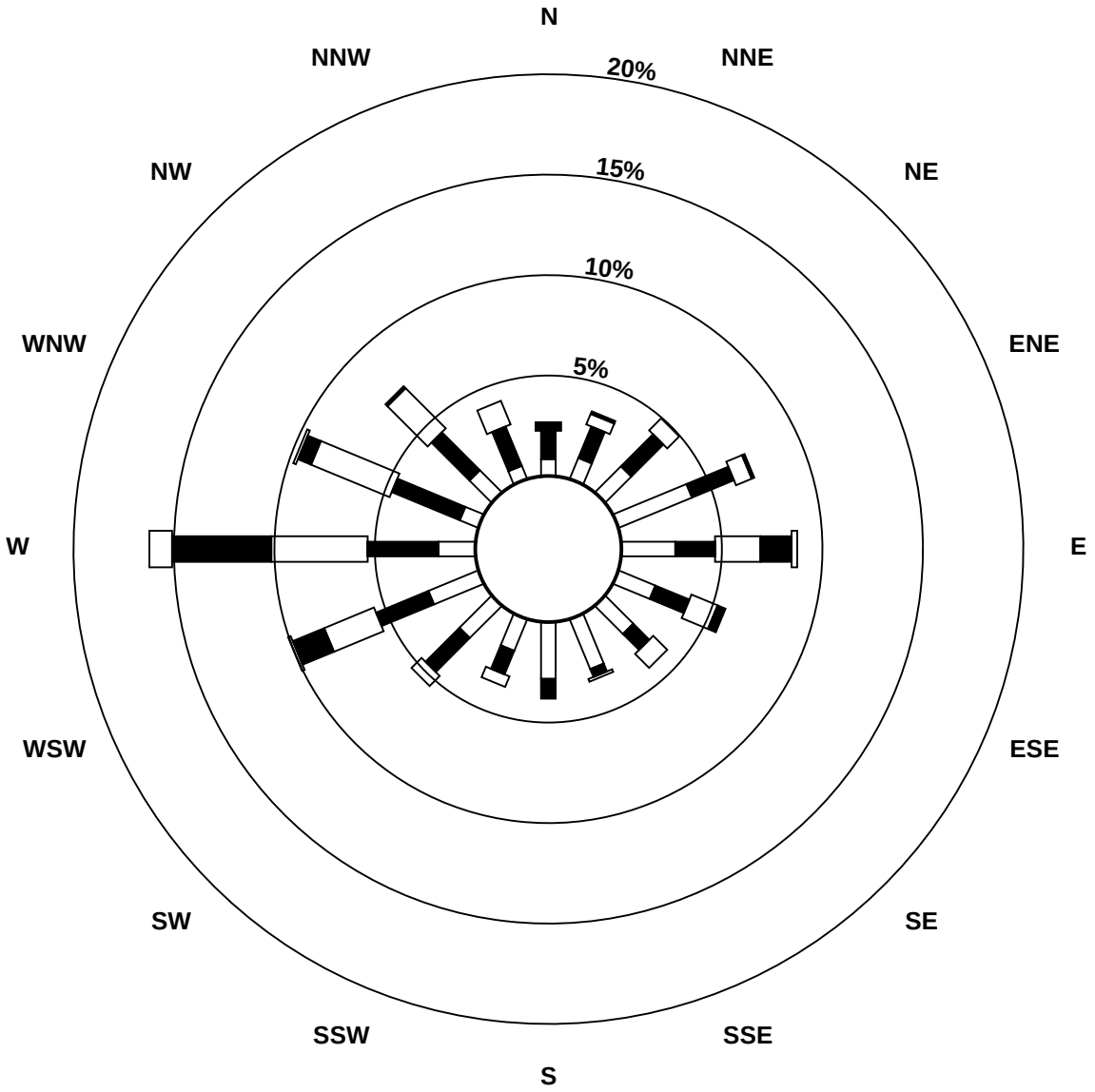
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	10	20	8	4	0	0	42
NorthEast	32	35	10	0	0	0	77
East	35	29	30	16	2	0	112
SouthEast	30	16	11	0	0	0	57
South	36	16	5	0	0	0	57
SouthWest	36	30	14	2	0	0	82
West	21	45	64	52	10	0	192
NorthWest	16	38	44	3	0	0	101
Total	216	229	186	77	12	0	720

Peace Airshed Zone Association

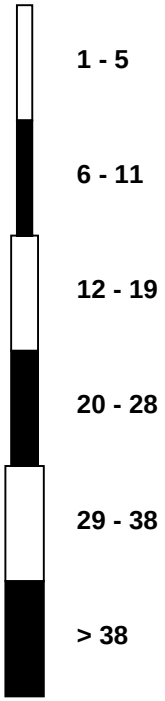
Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - June 2014



Wind Speed Classes (km/h)



Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - June 2014

Maximum Speed: 36 km/h on Jun 14 16:00

Maximum Daily Speed Average: 17.4 km/h on Jun 9

Minimum Speed: 2 km/h on Jun 7 05:00

Minimum Daily Speed Average: 5.0 km/h on Jun 11

Maximum Diurnal Speed Average: 16.3 km/h at hour 16

Minimum Diurnal Speed Average: 5.6 km/h at hour 7

Monthly Average Speed: 10.96 km/h

Percentiles: P_1 = 2.3 P_{10} = 3.6 Q_1 = 5.6 Median = 9.2 Q_3 = 15.1 P_{90} = 20.5 P_{99} = 30.7

Hours in Service: 720

Hours of Data: 720

Hours of Missing Data: 0

Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	6	3	3	2	4	5	3	3	5	13	9	9	8	7	11	14	12	10	17	13	12	7	6	3	7.7	16.5
2-Jun	3	5	3	4	3	3	5	6	5	5	5	6	8	5	8	7	7	8	11	11	15	10	9	5	6.5	14.6
3-Jun	4	4	4	4	5	3	3	5	10	31	31	26	23	21	23	21	18	22	21	20	20	16	12	15	15.1	31.3
4-Jun	15	15	15	13	11	11	12	11	11	12	14	14	16	17	18	19	20	18	19	21	19	17	17	17	15.5	21.1
5-Jun	17	17	16	15	11	11	11	14	12	10	9	11	7	8	11	14	15	16	14	12	8	5	2	3	11.1	16.9
6-Jun	4	4	2	3	2	3	4	6	10	12	14	19	18	18	17	17	20	24	17	15	15	5	3	5	10.7	24.0
7-Jun	5	3	4	4	2	2	3	4	5	7	7	6	19	10	6	12	7	6	13	18	9	8	8	9	7.4	18.9
8-Jun	6	4	4	3	3	3	2	6	13	9	23	22	22	18	17	21	11	11	15	16	20	19	12	10	12.2	23.3
9-Jun	8	14	11	9	20	21	22	23	27	32	18	10	8	28	34	33	12	11	16	16	18	10	8	9	17.4	34.3
10-Jun	13	14	14	13	13	14	11	15	15	12	11	12	8	9	9	8	8	11	14	7	4	5	5	3	10.4	15.0
11-Jun	4	3	3	3	3	2	3	4	5	5	5	6	6	7	6	5	6	5	5	4	7	7	9	7	5.0	8.7
12-Jun	6	10	12	15	12	9	5	8	10	11	14	21	29	31	27	25	20	19	17	8	10	11	19	10	15.0	30.7
13-Jun	5	7	7	6	8	3	6	6	4	4	10	8	8	8	8	10	12	16	18	9	9	5	6	5	7.8	18.3
14-Jun	4	6	5	3	3	4	6	6	9	15	19	25	29	29	26	36	34	28	27	24	26	18	16	15	17.2	35.8
15-Jun	4	5	4	3	4	3	4	7	6	9	7	7	6	7	8	13	14	18	12	7	6	6	4	7	7.1	18.0
16-Jun	5	5	3	2	6	5	4	9	11	7	5	6	9	11	11	24	20	15	6	8	9	9	11	13	8.8	23.6
17-Jun	14	13	9	8	8	9	4	5	6	5	7	8	8	8	8	6	9	7	9	12	12	12	12	11	8.7	14.0
18-Jun	9	7	4	3	3	2	3	5	13	19	24	26	25	22	21	18	12	15	15	14	7	6	9	8	12.1	25.5
19-Jun	8	9	6	9	4	4	4	3	6	6	6	13	16	18	22	20	18	13	26	14	11	9	6	8	10.9	26.2
20-Jun	10	5	4	8	9	6	5	7	4	20	18	13	23	25	24	26	23	21	24	21	16	13	11	11	14.4	25.9
21-Jun	10	8	8	4	4	9	7	10	18	22	31	28	25	25	19	20	17	16	16	14	7	7	8	10	14.3	30.9
22-Jun	9	6	6	5	4	2	3	3	7	14	15	17	15	15	14	10	10	12	16	13	11	11	10	14	10.0	17.0
23-Jun	12	7	7	7	8	4	4	4	10	12	19	24	24	21	15	15	18	24	24	21	16	18	25	25	15.2	25.2
24-Jun	21	20	15	9	4	5	2	5	6	7	13	12	18	15	19	26	24	14	13	7	4	3	5	4	11.4	26.3
25-Jun	3	4	3	3	2	4	4	13	17	20	24	21	18	19	17	15	17	20	19	17	14	9	9	10	12.5	24.4
26-Jun	11	9	5	4	4	4	3	5	4	5	5	6	6	6	6	8	9	8	11	12	8	9	10	7	6.8	12.4
27-Jun	5	2	6	4	7	4	4	5	6	5	5	9	15	17	15	17	16	16	8	10	8	7	8	5	8.5	17.3
28-Jun	6	3	5	3	5	2	5	7	6	18	22	17	11	10	10	13	15	14	25	20	11	11	9	8	10.7	25.4
29-Jun	8	8	11	8	6	6	7	10	15	16	14	8	5	6	8	7	7	12	11	6	3	6	4	4	8.1	15.8
30-Jun	3	6	7	6	3	6	6	9	8	9	12	20	19	16	11	9	15	17	19	18	10	6	4	7	10.2	20.2
	7.8	7.5	6.9	6.1	6.1	5.6	5.6	7.5	9.5	12.4	13.9	14.3	15.0	15.2	15.0	16.3	14.9	14.9	15.9	13.6	11.5	9.6	9.3	8.9	Diurnal Average	
	21.3	20.1	16.0	15.2	20.1	20.6	22.3	22.5	27.3	31.8	30.9	28.1	29.2	30.7	34.3	35.8	34.4	27.8	27.2	23.9	25.7	18.6	25.2	25.1	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - June 2014

Maximum Value: 95.4 deg on Jun 7 05:00

Minimum Value: 2.2 deg on Jun 24 02:00

Percentiles: P_1 = 2.9 P_{10} = 6.7 Q_1 = 10.4 Median = 19.3 Q_3 = 38.3 P_{90} = 62.8 P_{99} = 91.6

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

Day	Hourly Period Ending At (MST)																								Daily 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	56	56	84	57	85	12	16	47	28	14	21	36	60	49	30	44	10	22	16	18	19	56	34	40	85.3
2-Jun	29	11	19	43	17	40	10	10	18	33	52	61	43	81	76	86	48	60	11	15	16	21	12	63	85.8
3-Jun	23	23	77	43	90	63	70	34	24	9	10	15	16	11	11	14	14	23	10	9	8	7	6	7	90.4
4-Jun	7	7	8	11	10	9	9	9	10	12	14	15	14	15	13	10	14	16	10	7	6	6	6	5	15.5
5-Jun	5	6	5	8	14	7	7	8	13	11	31	63	49	93	31	23	15	15	16	15	16	6	83	14	93.2
6-Jun	26	45	26	15	35	16	19	13	14	21	25	19	19	21	17	30	22	10	59	13	50	47	37	69	69.3
7-Jun	75	16	75	64	95	78	54	60	42	25	45	79	53	64	55	41	78	49	54	13	54	26	25	6	95.4
8-Jun	58	45	21	14	52	30	30	26	8	15	9	8	18	28	29	16	14	6	6	16	3	3	12	12	58.4
9-Jun	36	3	11	32	5	6	5	6	12	10	9	7	19	9	9	9	27	38	19	8	15	12	6	6	38.0
10-Jun	8	8	4	4	4	6	53	8	5	9	8	21	23	33	25	53	55	23	8	34	61	77	69	77	77.3
11-Jun	10	27	48	25	41	79	39	25	46	20	29	50	63	53	73	71	55	47	28	20	12	11	9	8	79.0
12-Jun	82	86	22	3	5	14	10	10	20	19	18	12	10	10	11	13	8	34	11	30	32	14	12	25	86.2
13-Jun	52	30	16	17	9	35	31	22	43	74	21	58	15	19	26	22	15	53	17	20	22	49	18	48	74.3
14-Jun	86	17	35	48	30	29	22	15	22	15	19	12	10	9	14	8	9	13	12	7	5	5	6	10	85.8
15-Jun	73	51	70	43	59	42	67	17	21	24	39	74	78	70	64	18	45	7	25	14	58	7	35	9	77.6
16-Jun	87	24	40	84	41	31	28	13	21	33	59	52	62	32	50	93	38	25	20	21	11	20	8	9	92.9
17-Jun	8	5	6	32	22	44	42	20	29	38	40	39	45	47	36	51	47	52	29	10	7	3	3	3	52.0
18-Jun	5	8	31	36	34	34	33	84	11	9	8	15	12	21	19	19	25	24	12	18	11	10	10	26	84.2
19-Jun	31	29	38	36	15	37	78	41	14	21	78	23	15	14	11	10	11	79	46	14	36	45	62	44	79.1
20-Jun	25	87	56	33	53	11	80	16	71	17	9	9	13	11	15	14	11	13	7	8	5	7	5	5	86.9
21-Jun	8	9	15	58	90	10	11	19	9	11	8	13	12	13	20	17	15	14	9	9	12	8	23	6	90.0
22-Jun	2	92	66	64	63	92	33	47	24	10	13	14	21	22	23	38	38	24	17	3	3	6	3	5	92.0
23-Jun	3	8	15	4	11	47	20	35	11	14	13	8	10	20	28	21	20	12	7	4	2	3	3	5	46.6
24-Jun	2	2	3	26	33	79	62	26	25	18	16	12	13	17	10	12	9	11	8	19	89	57	9	15	88.5
25-Jun	41	10	31	10	42	32	18	10	10	9	10	15	17	14	18	25	22	15	7	6	4	8	15	4	42.4
26-Jun	4	4	68	23	12	23	38	15	25	28	47	60	93	92	63	77	31	25	16	13	12	6	7	35	92.8
27-Jun	48	82	14	27	61	74	14	21	19	57	68	35	22	19	20	82	83	34	30	16	61	64	12	33	83.2
28-Jun	37	37	25	61	47	53	33	16	23	12	8	18	30	42	45	25	19	26	10	7	4	5	7	20	60.7
29-Jun	9	10	8	12	20	13	9	5	6	12	50	57	35	28	10	18	12	70	57	33	36	76	88	72	87.7
30-Jun	59	33	14	9	86	68	9	11	8	10	18	12	15	24	31	31	30	12	10	5	5	11	46	13	85.6
	86.8	92.0	83.6	84.1	95.4	91.7	80.5	84.2	71.3	74.3	78.1	78.8	92.8	93.2	76.3	92.9	83.2	79.1	59.4	33.9	88.5	76.9	87.7	77.3	

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 36.8 ppb on Jun 9 09:00 Maximum Daily Average: 3.9 ppb on Jun 9

Minimum Value: 0 ppb on Jun 1 02:00 Minimum Daily Average: 0.0 ppb on Jun 16
Maximum Diurnal Average: 2.2 ppb at hour 9 Minimum Diurnal Average: 0.2 ppb at hour 23
Monthly Average: 0.63 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.2 $Q_3 = 0.5$ $P_{90} = 1.5$ $P_{99} = 8.8$

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) 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	A	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.9
2-Jun	0	0	0	0	0	0	A	0	0	0	0	C	C	C	C	1	1	0	0	0	0	0	0	0	0.2	0.8
3-Jun	0	0	0	0	0	A	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0.1	2.1
4-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0.2	1.4
5-Jun	0	0	0	A	0	0	0	0	0	0	0	0	4	1	0	0	0	2	1	0	0	0	0	0	0.4	3.9
6-Jun	0	0	A	0	0	0	0	0	1	0	1	2	1	2	1	4	2	2	0	0	0	0	0	0	0.8	3.9
7-Jun	0	A	0	0	0	0	0	11	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	11.1
8-Jun	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0.2	0.6
9-Jun	0	0	0	0	5	3	6	17	37	12	0	0	0	0	1	1	2	0	0	0	0	1	A	4	3.9	36.8
10-Jun	3	7	9	9	9	1	1	0	2	3	2	3	1	3	1	0	0	0	1	0	0	A	0	0	2.5	9.5
11-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	0.2	0.4
12-Jun	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	1.2
13-Jun	0	0	0	0	0	0	0	0	0	0	0	4	3	0	0	0	0	2	A	0	0	0	0	0	0.5	4.1
14-Jun	0	0	1	0	0	0	0	1	1	1	0	0	0	0	3	1	0	A	0	0	0	0	0	0	0.4	3.2
15-Jun	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	2.1
16-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	0.3
17-Jun	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0.1	1.0
18-Jun	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.5
19-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	0.2
20-Jun	0	0	0	0	0	0	0	0	1	2	0	A	0	1	0	0	0	1	1	0	0	0	0	0	0.4	1.7
21-Jun	0	0	0	3	1	1	0	0	0	0	A	0	2	1	0	1	0	1	0	0	0	0	0	0	0.6	3.3
22-Jun	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0.3	1.3
23-Jun	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	1	0	1	1	1	2	2	2	0.5	2.4
24-Jun	1	1	1	1	1	1	1	A	1	1	1	2	1	1	0	1	1	1	3	1	1	1	1	1	0.9	2.9
25-Jun	1	0	1	0	0	0	A	2	2	2	0	0	1	0	0	2	1	0	0	0	0	0	0	0	0.7	2.5
26-Jun	0	0	0	0	0	A	0	0	0	0	2	1	1	0	0	1	0	0	0	0	0	0	0	0	0.3	1.9
27-Jun	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	5	1	1	0	1	0	0	0	0.6	5.2
28-Jun	0	0	0	A	0	0	0	2	8	2	4	2	1	0	2	0	1	0	0	0	0	0	0	0	1.0	7.7
29-Jun	0	0	A	0	0	0	0	0	0	4	7	3	5	1	0	1	1	2	5	3	1	0	0	0	1.5	7.3
30-Jun	0	A	0	0	0	0	0	2	1	0	0	0	1	0	4	2	2	0	0	0	0	0	0	0	0.5	3.7
	0.3	0.4	0.5	0.6	0.7	0.4	0.5	1.4	2.2	1.2	0.8	0.8	0.8	0.5	0.6	0.6	0.7	0.5	0.5	0.3	0.3	0.2	0.2	0.3	Diurnal Average	
	3.5	6.6	8.8	9.5	9.0	3.3	5.5	16.6	36.8	12.0	7.3	4.1	5.4	3.3	3.7	3.9	5.2	2.0	5.0	2.6	1.4	1.7	2.4	4.2	Diurnal Maximum	

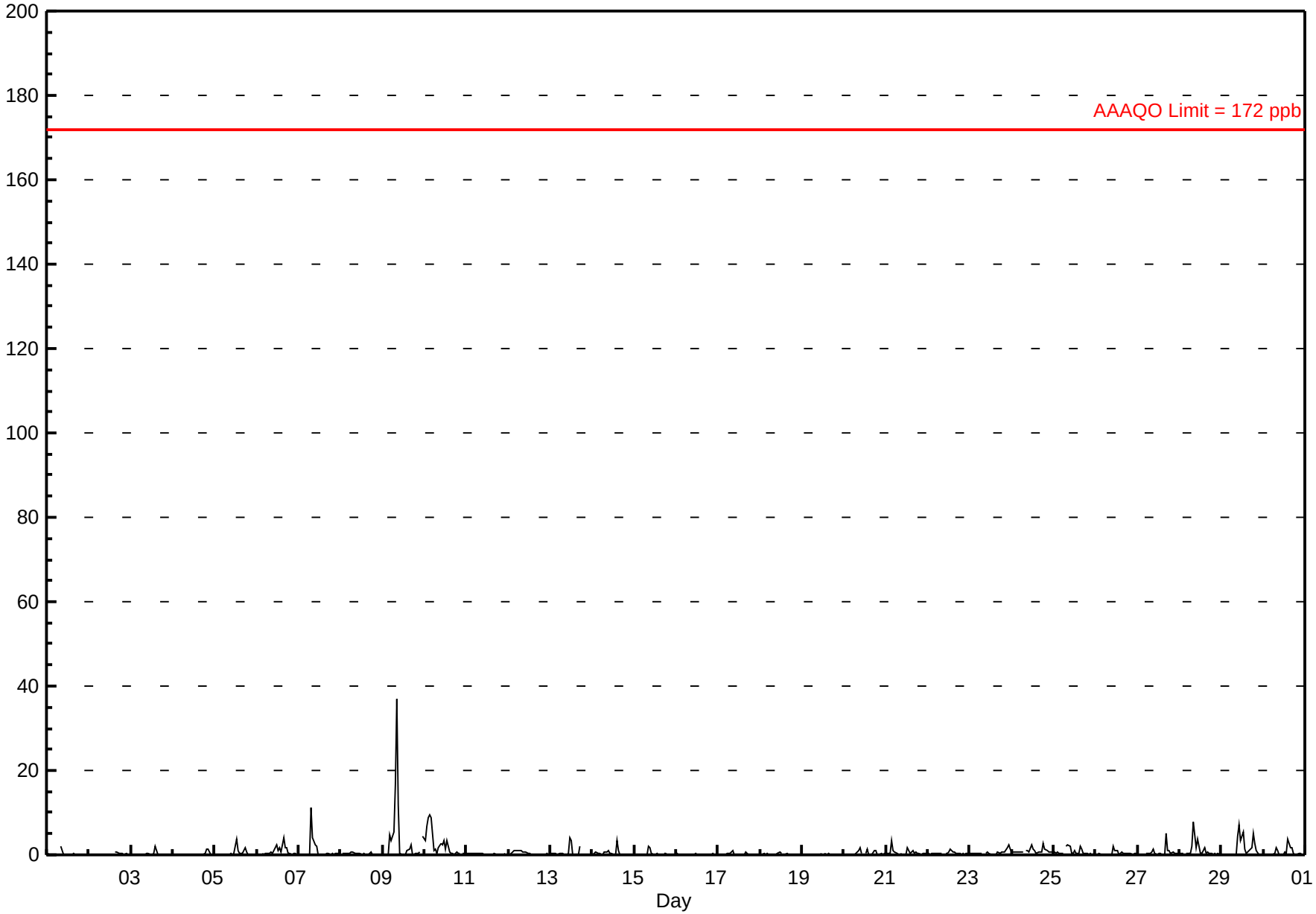
C - Calibration A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2014

Maximum Value: 99.4 ppb on Jun 9 09:00

Maximum Daily Average: 13.1 ppb on Jun 9

Minimum Value: 0 ppb on Jun 1 22:00

Minimum Daily Average: 1.0 ppb on Jun 2

Maximum Diurnal Average: 7.8 ppb at hour 9

Minimum Diurnal Average: 1.4 ppb at hour 23

Monthly Average: 3.29 ppb

Percentiles: P_1 = 0.0 P_{10} = 1.0 Q_1 = 1.2 Median = 1.5 Q_3 = 2.2 P_{90} = 8.4 P_{99} = 22.7

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) 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	2	1	1	1	1	1	1	A	16	2	4	1	5	2	4	4	2	1	0	1	1	0	0	0	2.2	16.3
2-Jun	0	0	0	0	0	0	A	0	0	0	0	C	C	C	C	4	4	2	2	2	1	2	1	1	1.0	4.1
3-Jun	1	1	1	1	1	A	1	1	2	2	15	1	1	23	32	1	1	1	1	1	1	2	1	1	4.1	31.6
4-Jun	1	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	4	4	3	1	1	1.4	4.4
5-Jun	1	1	2	A	1	1	1	2	1	2	1	4	13	7	6	1	4	10	4	1	1	1	1	1	3.0	13.3
6-Jun	1	1	A	1	2	2	1	2	6	2	19	16	18	18	12	14	12	13	2	1	1	2	2	2	6.4	18.5
7-Jun	1	A	2	1	2	1	1	31	20	8	12	1	1	1	1	1	4	8	1	1	1	2	1	2	4.6	31.2
8-Jun	A	1	1	2	1	2	2	2	2	1	4	3	1	3	4	1	1	4	1	1	1	1	1	A	1.9	4.3
9-Jun	1	1	1	1	13	14	17	55	99	41	2	1	1	1	7	8	11	1	1	5	2	4	A	14	13.1	99.4
10-Jun	14	18	15	17	18	3	11	3	6	7	8	14	9	21	2	1	1	1	3	2	1	A	2	2	7.8	21.3
11-Jun	2	1	1	2	1	2	2	1	1	2	1	1	1	1	1	2	1	2	1	1	A	1	1	1	1.4	2.1
12-Jun	2	1	2	3	2	2	2	3	2	2	2	2	2	2	1	1	1	1	1	A	2	2	1	1	1.7	2.7
13-Jun	1	2	2	2	2	2	1	1	1	1	2	10	15	1	1	1	1	8	A	1	1	1	1	1	2.6	15.1
14-Jun	1	2	2	2	2	2	1	3	2	3	3	1	2	1	20	10	1	A	2	1	1	1	2	1	2.8	19.5
15-Jun	1	1	2	1	1	2	2	2	6	4	2	1	2	2	1	2	A	2	2	1	2	2	2	1	1.9	6.2
16-Jun	2	2	1	1	1	1	1	1	1	1	1	3	1	2	1	A	1	2	1	1	1	1	1	1	1.2	2.6
17-Jun	1	1	1	1	1	1	1	2	7	2	1	1	1	2	A	1	8	2	1	1	1	1	2	1	1.8	7.7
18-Jun	1	1	2	1	2	1	2	1	1	1	2	4	3	A	2	5	1	1	1	2	2	1	1	2	1.8	4.7
19-Jun	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1.3	1.7
20-Jun	1	1	1	1	2	1	2	2	6	13	2	A	2	12	1	1	1	3	3	1	1	1	1	2	2.6	12.6
21-Jun	1	1	1	13	4	2	1	1	2	8	A	2	19	6	5	13	4	6	1	1	1	2	2	1	4.3	19.0
22-Jun	1	2	2	1	2	2	2	1	1	A	2	2	2	3	2	2	2	1	1	1	1	1	2	1	1.6	3.2
23-Jun	2	2	1	1	1	1	1	1	A	2	2	2	1	1	1	1	2	1	2	2	2	3	3	3	1.7	3.4
24-Jun	2	2	2	2	2	2	2	A	2	2	2	5	3	2	1	2	2	2	13	8	3	2	2	2	2.9	12.8
25-Jun	2	1	2	2	1	1	A	4	7	10	1	2	12	1	3	14	20	1	2	2	1	1	1	1	4.1	19.8
26-Jun	1	1	2	1	1	A	1	1	1	1	8	3	3	3	2	4	1	1	2	1	1	1	1	1	1.9	8.4
27-Jun	2	1	1	1	A	3	1	1	3	2	2	1	1	1	1	1	21	4	3	2	2	2	2	1	2.6	21.3
28-Jun	1	2	2	A	1	2	2	15	23	15	12	6	3	1	9	2	5	1	2	1	1	1	1	1	4.8	22.8
29-Jun	1	1	A	1	1	1	1	1	3	18	15	14	13	3	2	2	4	3	12	9	7	2	1	1	5.1	18.2
30-Jun	1	A	1	1	1	1	3	4	4	2	1	2	10	9	18	19	15	12	2	1	2	1	1	1	4.9	18.7
	1.7	1.9	1.9	2.3	2.5	2.0	2.4	5.2	7.8	5.3	4.4	3.7	5.2	4.8	5.0	4.2	4.6	3.4	2.4	2.1	1.7	1.6	1.4	1.8	Diurnal Average	
	14.0	17.8	15.3	17.5	17.8	14.5	16.6	54.6	99.4	40.5	18.5	16.2	19.0	23.0	31.6	18.7	21.3	13.1	12.8	8.5	6.9	3.7	3.4	14.4	Diurnal Maximum	

C - Calibration

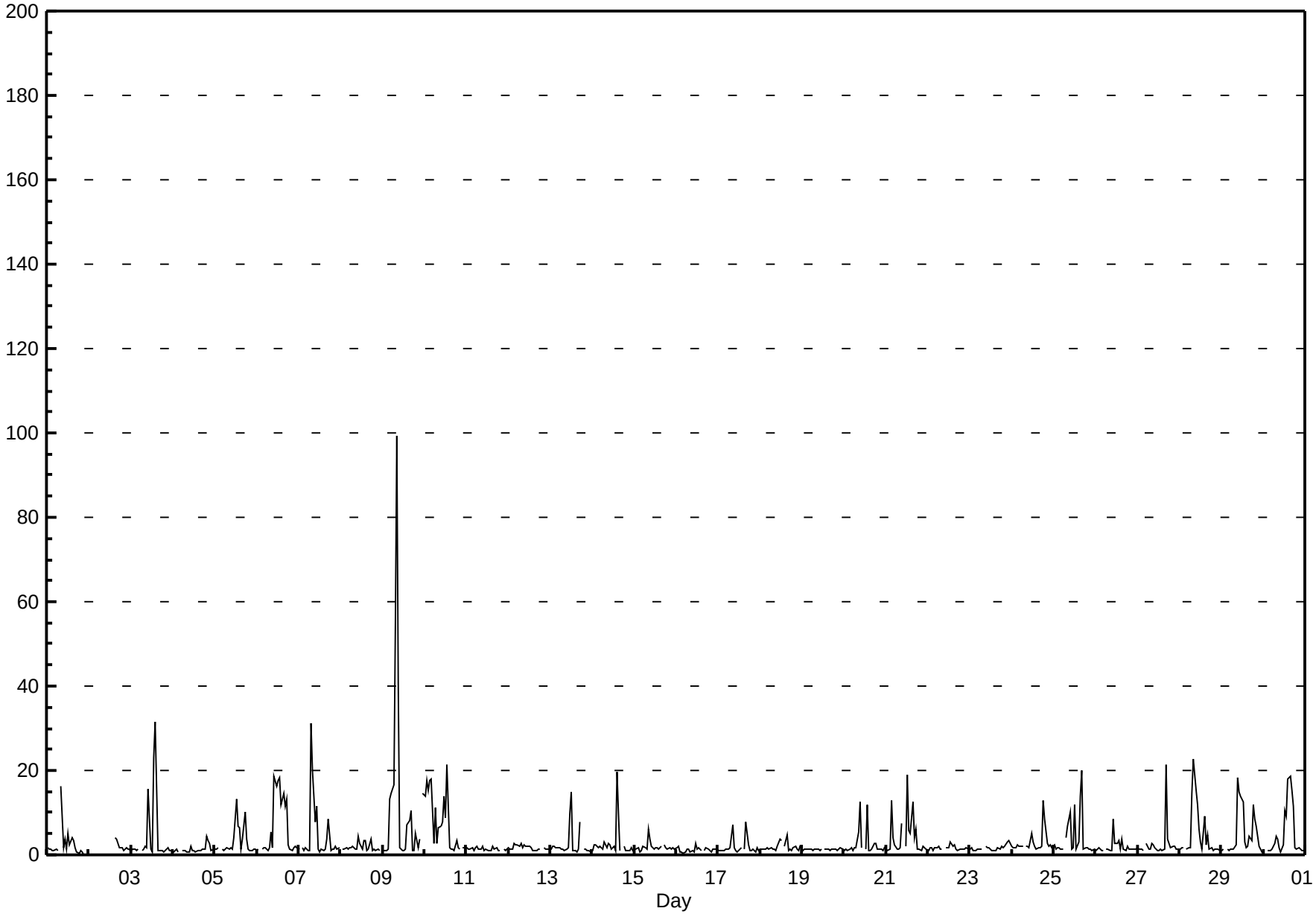
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

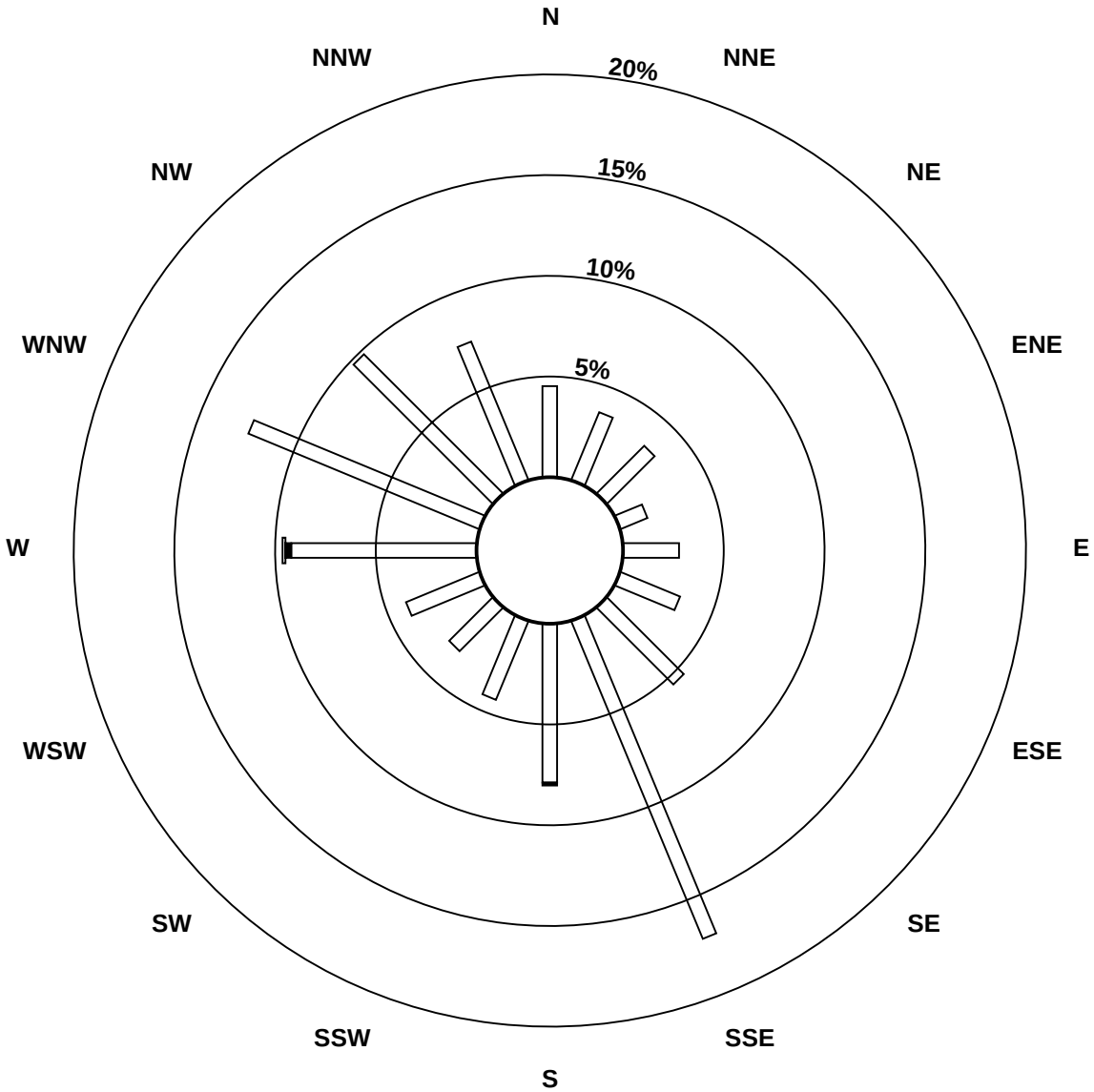
Valleyview - June 2014



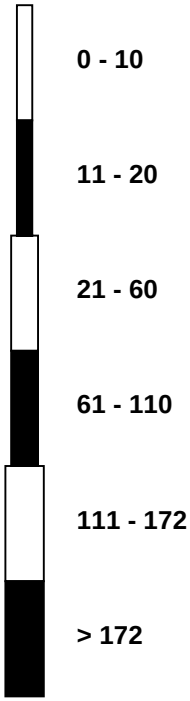
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Valleyview - June 2014



Pollutant Classes (ppb)

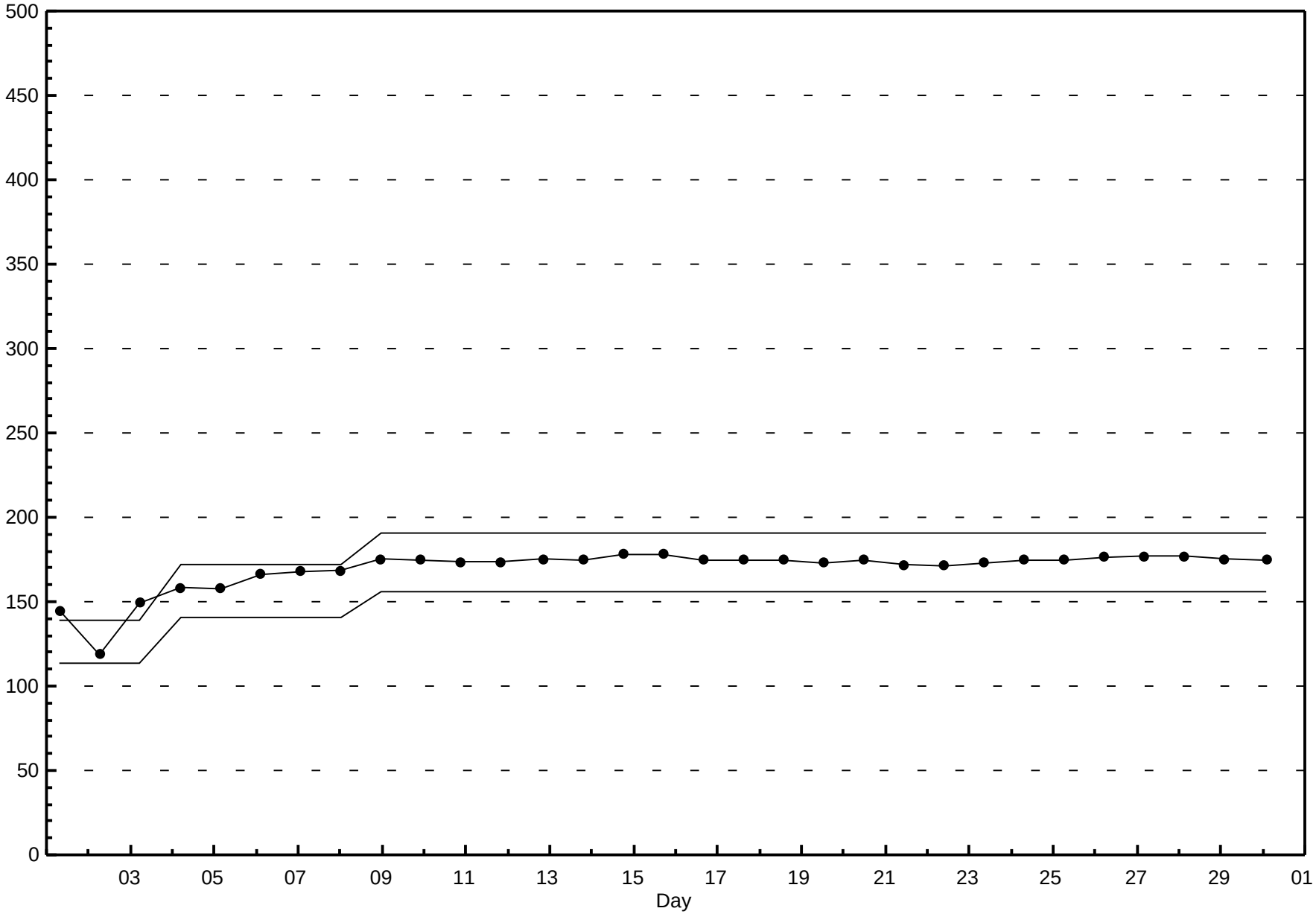


Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Valleyview - June 2014



Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2014

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

Maximum Value: 2.5 ppb on Jun 19 06:00

Maximum Daily Average: 0.5 ppb on Jun 19

Minimum Value: 0 ppb on Jun 9 18:00

Minimum Daily Average: 0.1 ppb on Jun 14

Maximum Diurnal Average: 0.4 ppb at hour 4

Minimum Diurnal Average: 0.1 ppb at hour 15

Monthly Average: 0.19 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.1$ Median = 0.1 $Q_3 = 0.2$ $P_{90} = 0.4$ $P_{99} = 1.3$

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) 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	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
2-Jun	0	0	0	0	0	0	A	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
3-Jun	1	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
4-Jun	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	0.5
5-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
6-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
7-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	0.1	0.3
8-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	0.4
9-Jun	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0.2	0.7
10-Jun	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.6
11-Jun	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.6
12-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	0.2	0.3
13-Jun	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.8
14-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	0.1	0.2
15-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
16-Jun	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.7
17-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
18-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0.2	0.6
19-Jun	0	1	1	1	1	2	2	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	2.5
20-Jun	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
21-Jun	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
22-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	0.2	0.3
23-Jun	0	1	1	2	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7
24-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	0.4
25-Jun	0	0	0	0	0	0	A	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7
26-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
27-Jun	0	1	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
28-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	0.2	0.4
29-Jun	0	0	A	0	0	0	0	0	0	0	1	1	1	1	0	0	1	1	1	0	0	0	0	0	0.4	1.1
30-Jun	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Diurnal Average	
	0.5	0.9	1.4	1.7	1.2	2.5	1.9	1.7	1.5	0.6	0.6	0.7	0.6	0.8	0.2	0.5	0.7	1.1	1.1	0.6	0.6	0.6	0.5	0.5	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

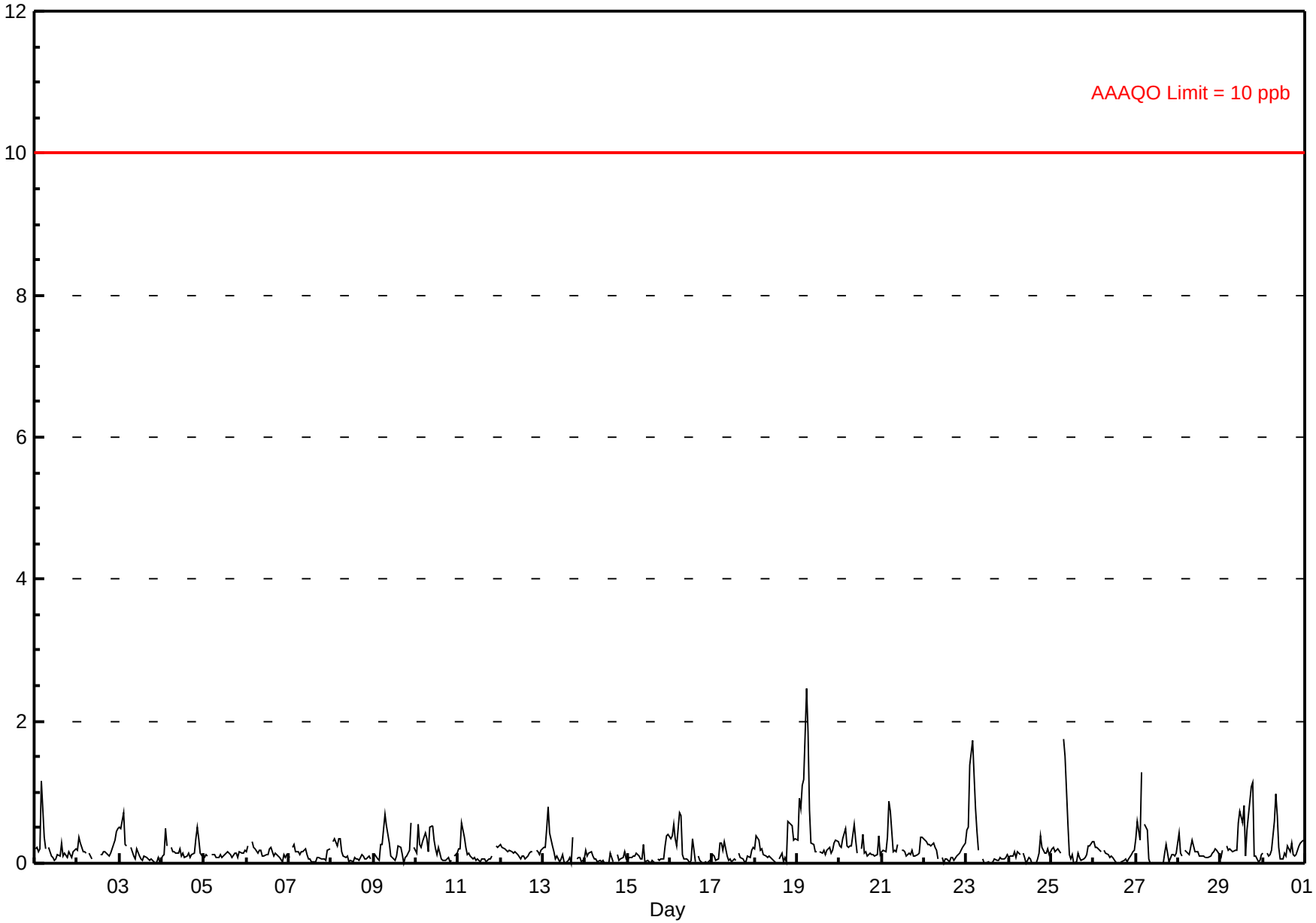
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2014



Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2014

Maximum Value: 4.8 ppb on Jun 19 06:00

Maximum Daily Average: 1.1 ppb on Jun 19

Minimum Value: 0 ppb on Jun 23 12:00

Maximum Diurnal Average: 0.9 ppb at hour 6

Monthly Average: 0.64 ppb

Minimum Daily Average: 0.4 ppb on Jun 14

Minimum Diurnal Average: 0.5 ppb at hour 13

Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.5 $Q_3 = 0.6$ $P_{90} = 1.0$ $P_{99} = 2.6$

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) 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	2	1	1	A	1	0	1	0	0	0	0	1	0	1	0	1	0	0	0	1	0.6	2.3
2-Jun	0	1	1	1	0	0	A	0	0	C	C	C	C	0	0	1	1	0	0	0	1	1	1	1	0.6	1.1
3-Jun	1	2	1	1	1	A	1	1	0	0	1	1	1	1	1	0	1	0	0	0	0	1	0	0	0.6	2.1
4-Jun	0	1	2	1	A	1	0	0	1	0	1	1	0	0	1	1	0	1	1	1	1	2	1	0	0.7	1.7
5-Jun	0	1	0	A	0	0	1	0	0	1	0	1	0	1	0	0	0	1	1	0	1	0	0	1	0.5	0.6
6-Jun	0	0	A	1	1	1	1	1	1	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0.5	1.3
7-Jun	0	A	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.6
8-Jun	A	1	1	1	1	1	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	1	0	A	0.5	0.8
9-Jun	1	0	0	0	1	1	1	1	1	1	1	0	0	1	1	1	0	0	0	1	1	2	A	1	0.7	1.6
10-Jun	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	A	0	0	0.6	1.3
11-Jun	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	1	0.6	2.1
12-Jun	1	1	1	1	0	0	1	0	0	1	0	0	1	0	0	0	1	0	1	A	1	0	1	0	0.5	0.7
13-Jun	1	1	2	2	1	1	0	0	1	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0.6	1.6
14-Jun	1	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	1	0.4	0.6
15-Jun	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	A	0	1	0	0	1	2	1	0.5	1.6
16-Jun	1	1	1	1	1	3	1	1	0	0	0	0	0	2	0	A	0	0	0	0	0	0	0	0	0.7	3.1
17-Jun	0	0	0	0	1	1	1	1	1	0	0	1	0	0	A	0	0	0	1	0	0	0	0	1	0.5	1.5
18-Jun	1	1	1	1	1	1	0	0	0	0	0	0	0	A	1	1	0	0	0	1	2	1	1	1	0.6	1.7
19-Jun	1	2	1	2	2	5	3	2	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	1	1.1	4.8
20-Jun	1	1	1	1	1	1	1	1	2	1	0	A	1	1	0	1	0	0	0	0	1	0	1	1	0.7	1.6
21-Jun	1	1	0	1	2	2	1	0	0	1	A	1	1	1	1	1	1	1	0	1	0	1	1	1	0.7	2.2
22-Jun	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.9
23-Jun	1	1	3	2	2	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.6
24-Jun	0	0	0	0	0	1	0	A	0	1	0	0	0	0	0	0	0	0	1	1	0	1	1	0	0.5	0.8
25-Jun	1	1	0	1	1	1	A	3	3	2	0	0	1	0	0	1	1	0	0	0	0	1	1	1	0.7	2.7
26-Jun	1	1	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.7
27-Jun	4	4	1	4	A	1	1	0	0	0	0	0	0	0	0	0	2	1	1	0	0	1	0	0	1.0	4.4
28-Jun	2	1	0	A	0	1	0	1	1	0	1	0	1	0	1	0	0	0	0	1	1	0	1	1	0.6	1.7
29-Jun	0	0	A	1	1	1	0	1	0	1	2	2	2	2	1	1	1	2	2	1	0	0	0	0	0.9	2.1
30-Jun	0	A	0	0	0	1	2	2	2	1	0	0	0	0	1	1	1	0	1	0	1	1	1	1	0.7	2.3
	0.7	0.9	0.9	0.9	0.8	0.9	0.7	0.7	0.7	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	Diurnal Average	
	3.6	4.4	2.6	3.7	2.3	4.8	3.0	2.7	2.6	1.6	1.6	1.5	1.5	2.1	1.2	1.0	1.6	1.6	1.9	1.5	1.7	1.7	1.6	1.1	Diurnal Maximum	

C - Calibration

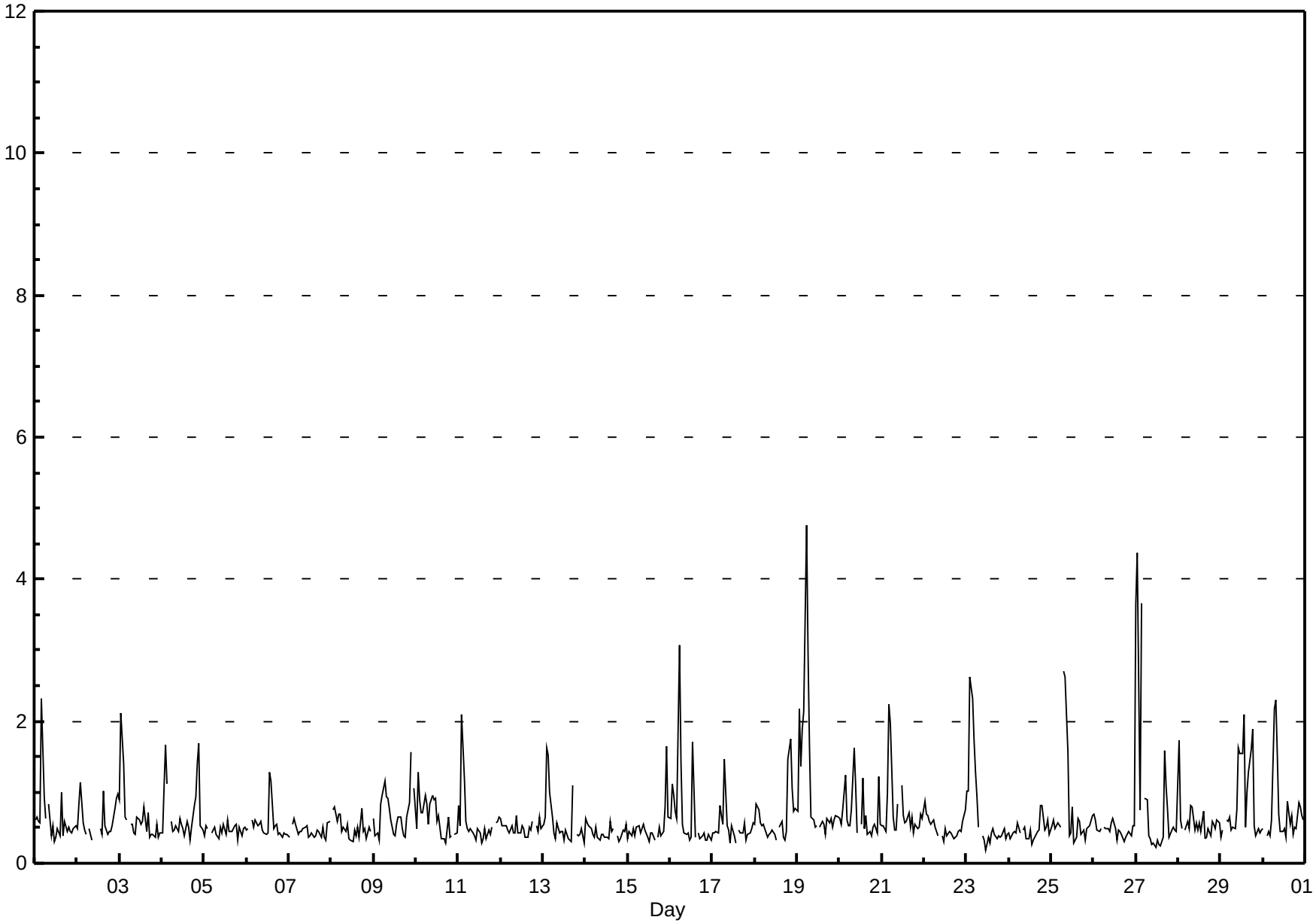
A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

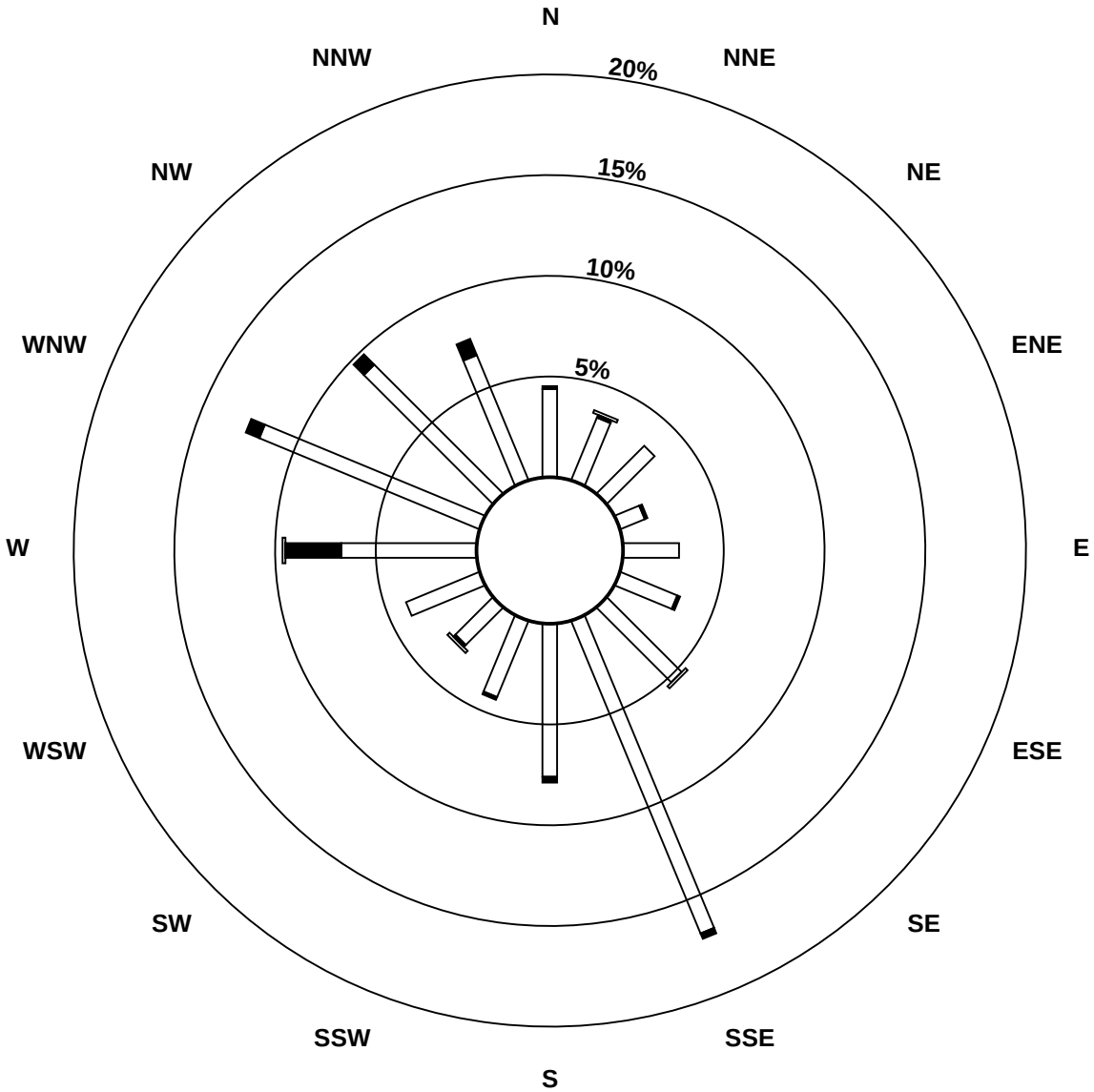
Valleyview - June 2014



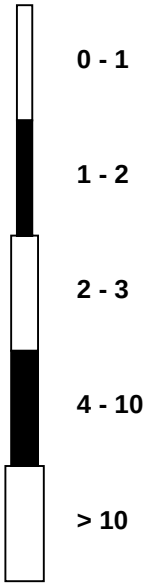
Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Valleyview - June 2014



Pollutant Classes (ppb)

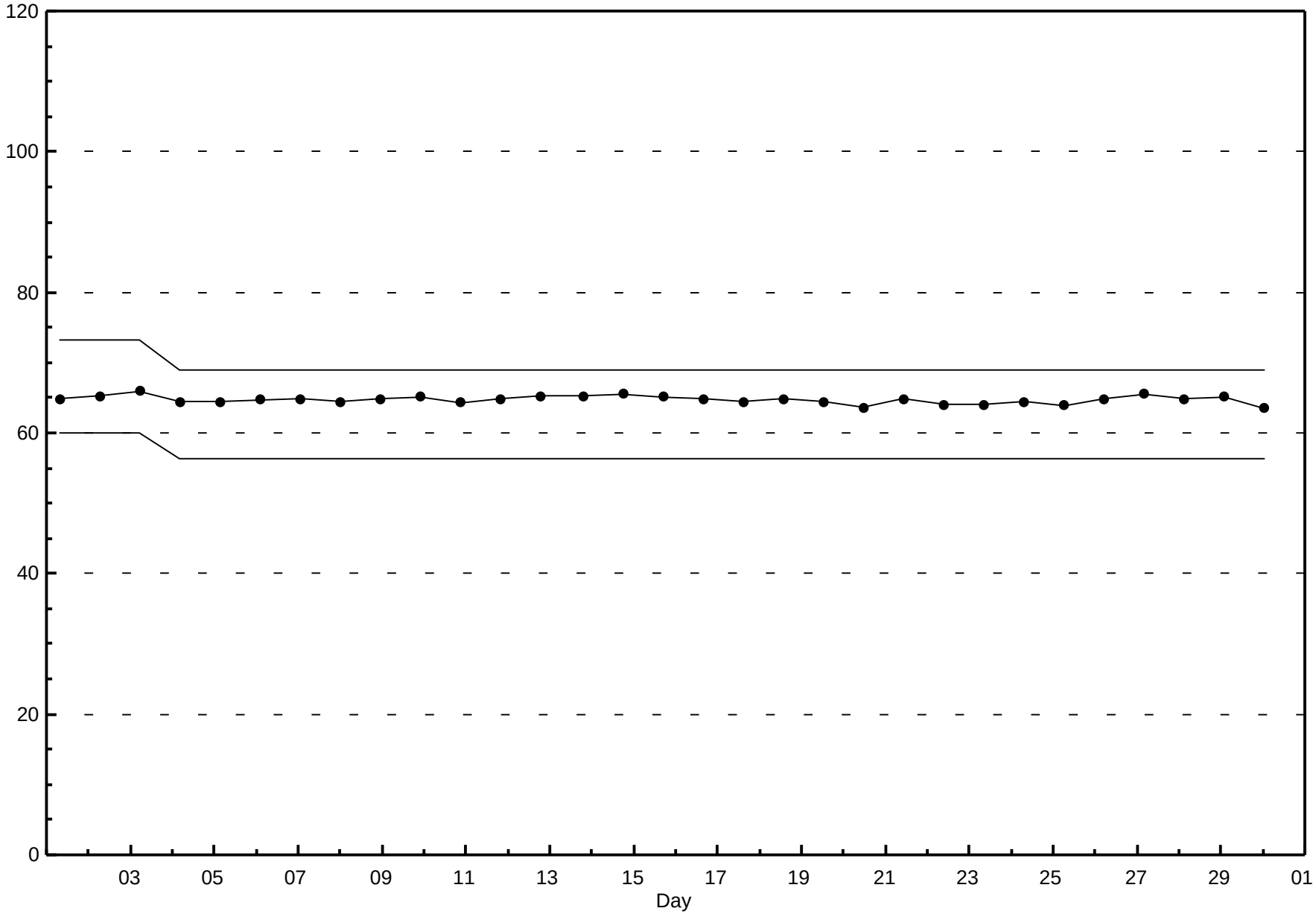


Peace Airshed Zone Association

Span Responses

Hydrogen Sulphide (H_2S)

Valleyview - June 2014



Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - June 2014

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

Maximum Value: 28.3 ^{o}C on Jun 24 16:00

Maximum Daily Average: 20.1 ^{o}C on Jun 23

Minimum Value: 1 ^{o}C on Jun 6 05:00

Minimum Daily Average: 5.9 ^{o}C on Jun 5

Maximum Diurnal Average: 19.2 ^{o}C at hour 16

Minimum Diurnal Average: 9.0 ^{o}C at hour 5

Monthly Average: 14.83 ^{o}C

Percentiles: P_1 = 3.0 P_{10} = 7.4 Q_1 = 11.0 Median = 14.3 Q_3 = 19.1 P_{90} = 22.7 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

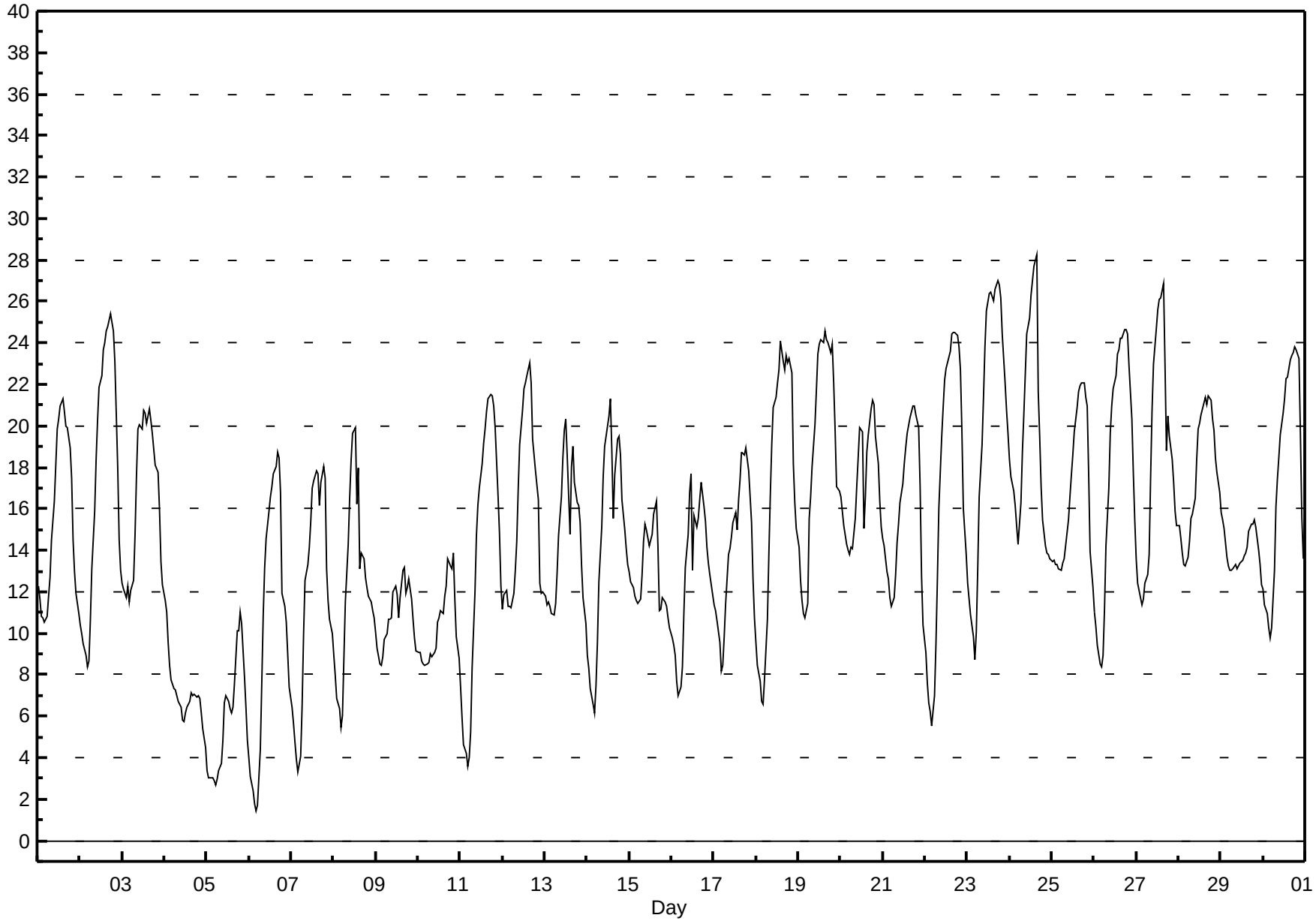
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	12	12	11	11	11	11	12	13	15	16	18	20	20	21	21	21	20	20	19	18	15	13	12	11	15.4	21.3
2-Jun	10	10	10	9	8	9	11	13	16	18	20	22	22	24	24	25	25	25	25	25	23	18	15	13	17.5	25.4
3-Jun	12	12	12	12	12	12	13	15	18	20	20	20	21	21	20	21	20	20	19	18	18	16	13	12	16.5	20.8
4-Jun	12	11	10	8	8	7	7	7	7	6	6	6	6	6	7	7	7	7	7	7	7	6	5	4	7.2	11.6
5-Jun	3	3	3	3	3	3	3	3	4	5	7	7	7	6	6	6	8	10	10	11	10	8	6	5	5.9	11.1
6-Jun	4	3	2	2	1	2	4	8	11	13	15	16	17	17	18	18	19	18	17	12	11	11	9	7	10.6	18.7
7-Jun	6	6	5	4	3	4	7	10	13	13	14	15	17	17	18	18	16	17	18	17	13	12	11	10	11.8	18.0
8-Jun	9	8	7	6	5	6	9	12	14	17	18	20	20	16	18	13	14	14	13	12	12	12	11	11	12.3	19.9
9-Jun	10	9	9	8	9	10	10	11	11	11	12	12	12	11	12	13	13	12	12	13	12	11	10	9	10.8	13.2
10-Jun	9	9	9	9	8	9	9	9	9	9	9	11	11	11	11	12	12	14	13	13	14	12	10	9	10.4	13.8
11-Jun	7	6	5	4	4	4	5	8	12	15	16	17	18	19	20	21	21	21	21	21	20	17	15	12	13.7	21.5
12-Jun	11	12	12	11	11	11	12	13	14	17	19	21	22	22	22	23	22	19	19	18	16	12	12	12	16.0	23.1
13-Jun	12	11	12	11	11	11	11	13	15	17	18	20	20	19	15	18	19	17	16	16	15	13	12	10	14.7	20.3
14-Jun	9	8	7	7	6	8	10	12	15	18	19	20	20	21	19	16	18	19	19	19	16	15	14	13	14.5	21.3
15-Jun	13	12	12	12	12	11	12	13	14	15	15	14	15	15	16	16	14	11	11	12	12	11	11	10	12.9	16.3
16-Jun	10	9	9	8	7	7	8	11	13	15	17	18	13	16	15	16	16	17	16	15	14	13	13	12	12.9	17.7
17-Jun	11	11	11	10	8	8	10	11	14	14	15	15	16	15	16	17	19	19	19	18	18	15	13	11	13.9	19.0
18-Jun	10	8	8	7	7	8	11	14	17	19	21	21	22	23	24	23	23	23	23	23	23	18	16	15	16.9	24.1
19-Jun	14	13	12	11	11	11	16	17	18	20	22	23	24	24	24	25	24	24	24	24	22	20	17	17	19.0	24.6
20-Jun	17	16	15	14	14	14	14	14	16	17	18	20	20	15	17	19	20	21	21	21	19	18	16	15	17.1	21.3
21-Jun	15	14	13	13	12	11	12	13	14	15	16	17	18	19	20	20	21	21	21	21	20	17	13	10	16.1	20.9
22-Jun	9	8	7	6	6	7	9	13	16	19	21	22	23	23	24	24	25	24	24	24	23	20	16	14	16.9	24.5
23-Jun	12	12	11	10	9	10	13	17	19	21	24	26	26	26	26	26	27	27	27	26	24	22	21	20	20.1	27.0
24-Jun	18	18	17	16	15	14	16	19	21	22	24	25	26	27	28	28	22	19	17	15	14	14	14	14	19.4	28.3
25-Jun	13	14	13	13	13	13	13	14	14	15	17	18	19	20	21	22	22	22	22	21	21	18	14	12	16.8	22.1
26-Jun	11	10	9	9	8	9	11	14	17	20	21	22	22	23	24	24	24	25	25	24	23	20	18	15	17.9	24.6
27-Jun	14	12	12	11	12	12	13	14	17	21	23	25	26	26	26	27	23	19	20	20	18	17	16	15	18.3	26.9
28-Jun	15	15	14	13	13	14	14	16	16	17	18	20	20	21	21	21	21	21	21	20	20	18	18	17	17.7	21.5
29-Jun	16	15	15	14	13	13	13	13	13	13	13	13	14	14	14	14	15	15	15	15	15	14	13	12	14.0	15.8
30-Jun	12	11	11	10	10	10	13	16	17	18	20	21	21	22	22	23	23	24	24	24	23	20	16	14	17.7	23.8
	11.3	10.6	10.0	9.4	9.0	9.3	10.7	12.4	14.3	15.9	17.2	18.2	18.6	18.7	18.9	19.2	19.1	18.9	18.6	18.1	17.1	15.0	13.3	12.1	Diurnal Average	
	18.4	17.6	16.9	16.1	15.2	14.3	16.3	18.8	20.5	22.5	24.4	25.5	26.4	27.0	27.7	28.3	26.6	27.0	26.8	26.2	24.4	22.1	20.8	19.6	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Valleyview - June 2014



Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - June 2014

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

Maximum Value: 100.0 % on Jun 9 01:00 Maximum Daily Average: 88.4 % on Jun 29

Minimum Value: 17 % on Jun 2 17:00 Minimum Daily Average: 40.0 % on Jun 21

Maximum Diurnal Average: 91.3 % at hour 5 Minimum Diurnal Average: 45.0 % at hour 16

Monthly Average: 65.83 % Percentiles: P_1 = 21.0 P_{10} = 29.7 Q_1 = 45.4 Median = 68.7 Q_3 = 88.9 P_{90} = 96.5 P_{99} = 100.0

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

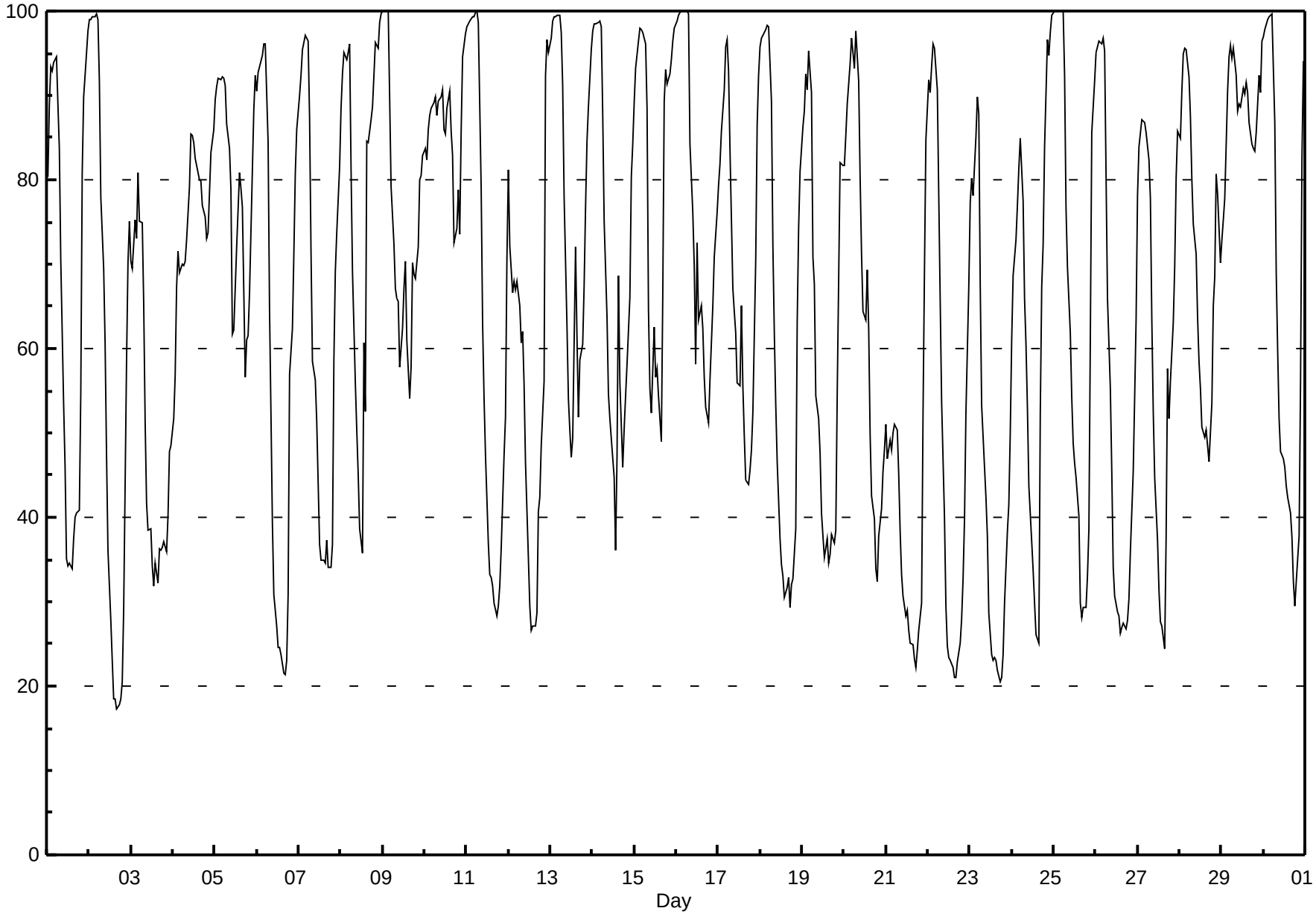
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	80	89	93	93	94	95	89	84	71	53	46	35	34	35	34	37	40	41	41	55	81	90	92	98	66.6	97.6
2-Jun	99	99	99	99	100	99	92	78	70	61	47	36	28	23	19	18	17	18	19	21	29	59	70	75	57.2	99.6
3-Jun	70	69	75	73	81	75	75	65	51	42	39	39	34	32	35	32	36	36	36	37	36	40	48	48	50.2	80.9
4-Jun	52	57	67	72	69	70	70	70	73	79	85	85	84	83	81	80	80	77	76	73	74	78	83	86	75.2	85.9
5-Jun	90	91	92	92	92	92	91	87	84	79	62	62	72	76	81	79	77	57	61	62	67	81	88	92	79.4	92.4
6-Jun	91	93	94	95	96	96	84	65	52	39	31	27	25	24	24	22	21	23	31	57	62	71	81	86	57.9	96.2
7-Jun	90	92	95	96	97	96	87	71	58	56	51	44	37	35	35	35	37	34	34	37	59	69	74	81	62.6	97.2
8-Jun	89	93	95	94	95	96	81	69	56	50	45	39	36	61	53	85	84	87	89	92	96	96	99	100	78.3	99.6
9-Jun	100	100	100	100	90	79	72	67	66	66	58	62	67	70	61	54	58	70	69	68	72	80	81	83	74.7	100.0
10-Jun	84	82	86	88	88	89	90	88	89	90	91	86	85	88	91	86	83	73	74	79	74	86	95	97	85.9	97.3
11-Jun	98	98	99	99	99	100	100	99	79	63	54	47	37	33	33	32	30	28	29	32	36	47	52	71	62.3	100.0
12-Jun	81	72	67	68	67	68	65	61	62	56	46	35	29	27	27	27	29	41	42	48	56	92	97	95	56.6	96.6
13-Jun	97	99	99	99	100	100	98	91	78	63	54	50	47	49	72	61	52	59	60	67	77	85	89	95	76.7	99.5
14-Jun	98	98	98	99	99	98	88	75	64	55	52	49	45	36	47	69	56	46	51	54	58	66	80	84	69.4	98.9
15-Jun	89	93	96	98	98	98	96	88	65	55	52	63	57	58	54	49	66	89	93	91	93	94	96	98	80.4	97.9
16-Jun	99	99	100	100	100	100	100	100	84	76	70	58	73	63	65	62	57	53	51	56	61	65	71	76	76.7	100.0
17-Jun	79	82	86	91	96	97	93	84	67	64	62	56	56	65	56	50	44	44	46	48	52	70	87	92	69.4	96.6
18-Jun	96	97	97	98	98	98	89	72	62	53	47	37	34	33	30	32	33	29	32	33	39	63	74	81	60.8	98.3
19-Jun	86	88	92	91	95	90	71	68	54	52	48	40	38	35	37	34	36	38	37	38	55	68	82	82	60.7	95.3
20-Jun	82	85	89	94	97	95	93	98	92	80	71	64	63	69	62	50	43	40	34	32	38	41	45	48	66.9	97.6
21-Jun	51	47	49	48	50	51	50	45	38	33	31	28	29	27	25	25	23	22	24	27	30	52	69	85	40.0	84.8
22-Jun	92	90	93	96	96	91	78	66	54	40	29	25	23	23	22	21	21	23	25	28	33	40	52	67	51.2	96.2
23-Jun	77	80	78	85	90	88	68	53	46	42	38	29	24	23	23	23	22	21	21	24	30	38	41	50	46.4	89.7
24-Jun	61	69	73	77	81	85	78	66	60	53	44	37	34	30	26	25	52	67	72	84	97	95	97	99	65.1	99.5
25-Jun	100	100	100	100	100	100	92	77	70	62	54	49	46	45	40	30	28	29	29	33	39	61	86	92	65.1	100.0
26-Jun	95	96	96	96	97	95	81	66	55	45	34	31	29	28	26	27	27	27	28	30	36	45	54	63	54.5	96.7
27-Jun	78	84	87	87	87	86	82	78	63	53	45	37	31	28	27	24	38	58	52	56	63	70	80	86	61.6	87.1
28-Jun	85	90	95	96	95	92	87	80	75	71	64	58	55	51	49	50	49	47	54	65	68	81	78	70	71.1	95.6
29-Jun	73	75	78	91	95	96	94	96	92	88	89	89	91	90	92	90	87	84	84	83	86	92	90	96	88.4	96.4
30-Jun	97	98	99	99	100	100	87	69	60	52	48	47	46	44	42	41	38	32	29	32	38	56	83	94	63.7	99.7
	85.3	86.9	89.0	90.4	91.3	90.5	84.1	75.8	66.3	59.0	52.9	48.2	46.3	46.1	45.7	45.0	45.4	46.4	47.4	51.5	57.7	69.1	77.2	82.4	Diurnal Average	
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.7	92.3	89.9	90.6	88.6	90.9	90.2	91.5	90.4	86.8	89.3	93.0	92.3	96.5	95.6	98.7	99.6	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

Relative Humidity (RH) - %

Valleyview - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - June 2014

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	3	1	1	1	0	1	1	1	2	5	2	7	6	5	4	3	1	1	1	2	2	1	0	0	1.5	7.4
Dir	304	160	170	298	201	138	157	159	258	306	259	280	286	264	275	249	164	257	211	229	143	172	144	129	260	280
2 Spd	1	0	1	0	1	0	1	2	2	2	1	1	3	0	2	2	3	1	2	1	0	0	0	1	0.1	3.4
Dir	153	233	201	210	165	188	158	161	170	173	226	234	322	293	332	261	37	9	8	96	99	167	134	170	212	322
3 Spd	0	1	1	1	1	1	2	2	2	7	13	13	11	11	9	9	13	13	14	9	13	9	6	4	5.2	14.2
Dir	185	291	188	223	170	191	153	153	141	306	294	326	309	290	315	341	343	10	18	15	9	359	341	345	338	18
4 Spd	3	4	3	5	8	5	7	7	6	5	4	5	6	8	6	4	9	6	7	4	6	6	7	11	5.7	11.3
Dir	332	320	310	326	331	323	338	330	299	311	299	317	313	336	324	335	314	344	312	286	278	291	297	291	315	291
5 Spd	10	9	9	9	10	11	11	13	12	10	10	10	9	5	4	6	1	5	2	1	1	1	1	2	5.5	12.7
Dir	291	290	289	301	305	309	319	327	324	309	316	299	285	336	264	41	43	245	233	172	199	166	175	160	305	327
6 Spd	2	1	1	0	1	1	1	2	3	6	8	8	7	6	6	7	7	11	11	13	4	1	1	1	2.8	12.9
Dir	158	155	160	161	153	157	163	167	234	252	248	272	290	277	281	277	282	282	325	20	9	194	181	183	283	20
7 Spd	1	0	0	1	0	0	1	1	1	2	3	3	4	6	7	5	7	4	1	1	14	2	0	1	1.6	14.4
Dir	157	125	312	169	155	120	163	177	16	270	300	334	318	348	15	340	241	13	43	80	18	123	339	51	352	18
8 Spd	0	0	0	1	1	0	1	1	1	1	1	3	3	3	0	2	2	4	4	0	1	1	1	1	0.6	4.1
Dir	47	185	138	237	10	77	152	158	183	292	244	304	318	272	143	343	54	288	310	157	171	163	156	160	285	310
9 Spd	1	1	1	1	4	5	10	12	13	13	17	17	17	15	16	18	15	13	7	2	8	5	8	5	8.5	18.0
Dir	164	159	153	170	254	261	276	274	269	276	288	313	305	286	280	275	312	324	303	264	302	273	262	249	287	275
10 Spd	5	7	7	7	7	8	8	8	7	8	10	9	7	3	3	3	1	1	4	2	2	1	0	0	4.2	10.1
Dir	257	270	264	260	267	282	282	291	275	275	277	276	288	297	35	46	113	326	257	221	209	234	171	145	275	277
11 Spd	0	0	0	0	0	2	2	1	1	3	3	2	3	1	2	2	1	1	2	2	1	1	0	0	0.7	3.1
Dir	185	322	322	202	225	158	162	184	189	156	155	181	162	191	124	48	133	264	22	32	49	80	56	173	143	156
12 Spd	0	2	2	1	0	1	1	2	2	2	2	4	5	4	5	5	5	4	3	2	6	5	3	1	2.2	5.6
Dir	153	146	134	138	209	235	145	121	39	42	97	124	138	89	90	75	110	127	119	135	148	147	41	15	112	148
13 Spd	1	2	1	0	1	0	0	2	3	2	2	1	3	4	2	3	4	4	5	0	0	1	0	0	1.0	5.1
Dir	326	5	257	310	350	321	11	20	355	23	58	318	339	81	22	31	98	281	286	291	169	171	8	163	2	286
14 Spd	1	1	1	0	1	2	3	3	3	4	3	2	2	2	6	0	4	2	1	2	1	0	0	1	1.0	6.2
Dir	206	184	204	254	161	157	161	164	164	163	164	157	226	271	270	355	341	313	171	167	253	95	156	165	198	270
15 Spd	1	1	1	1	0	1	1	1	0	1	1	2	1	3	6	6	3	3	3	2	2	1	1	0	0.4	6.0
Dir	179	203	163	153	160	160	213	163	321	267	123	162	276	341	346	2	135	162	10	3	8	242	12	201	7	346
16 Spd	0	1	1	0	1	1	2	2	2	2	0	3	3	4	1	6	8	10	12	5	4	1	1	3	1.9	11.6
Dir	193	346	58	112	72	336	17	47	37	52	222	10	172	173	88	331	327	340	7	54	86	79	17	356	10	7
17 Spd	4	4	1	2	2	1	0	2	3	7	6	3	4	4	4	3	3	3	3	1	1	1	0	0	1.9	7.2
Dir	8	11	22	315	338	307	296	274	319	337	340	344	328	312	278	323	273	289	59	105	110	150	174	213	331	337
18 Spd	0	0	0	0	0	0	1	3	2	1	1	4	4	4	2	8	7	6	3	2	1	0	0	0	1.4	8.0
Dir	257	316	274	202	154	182	167	164	170	210	83	293	311	315	210	277	301	302	293	318	265	156	156	294	283	277
19 Spd	0	1	0	1	0	0	0	0	3	1	2	1	5	3	3	6	5	3	3	4	3	0	0	1	1.2	6.1
Dir	115	329	101	308	263	219	138	353	15	332	340	30	351	13	48	23	91	59	102	113	137	42	163	160	46	23
20 Spd	2	1	1	0	0	2	0	1	1	2	5	5	6	15	12	10	7	8	11	7	4	5	6	5	4.0	14.5
Dir	164	164	262	151	165	237	159	167	265	300	339	2	341	285	317	335	335	331	321	309	336	291	287	299	314	285
21 Spd	4	8	5	3	5	7	6	8	12	13	14	13	10	11	10	10	10	10	8	6	2	0	0	0	7.1	14.2
Dir	304	293	290	275	280	284	297	292	297	283	292	296	287	281	296	298	305	299	321	334	337	164	187	46	296	292
22 Spd	0	0	1	1	0	0	1	1	1	1	0	1	1	3	1	1	2	3	2	2	1	0	1	0	0.3	3.1
Dir	173	176	165	168	199	192	152	133	148	144	186	192	67	307	79	114	303	42	75	88	77	332	334	351	76	307

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	1	1	0	0	1	0	1	1	1	1	1	2	2	3	3	4	4	4	4	4	3	4	5	6	2.1	5.5
Dir	158	311	341	13	332	333	121	143	151	122	212	166	170	120	167	128	133	136	129	139	139	143	147	147	142	147
24 Spd	4	3	4	2	2	1	2	6	5	4	2	3	2	2	3	1	8	3	15	4	4	2	1	1	1.1	15.4
Dir	154	160	154	161	167	181	160	164	164	160	163	359	0	46	321	354	136	137	277	256	334	314	175	171	188	277
25 Spd	1	0	1	0	1	1	2	7	8	9	9	11	9	8	8	8	7	8	8	6	2	0	0	1	4.4	10.7
Dir	227	182	171	192	154	183	273	278	272	295	303	297	296	300	299	284	296	305	306	323	343	180	178	168	294	297
26 Spd	1	1	1	1	1	1	2	1	2	1	1	2	2	1	2	2	4	3	3	1	2	0	1	1	0.5	3.5
Dir	165	163	159	165	163	158	153	146	156	145	270	12	312	292	316	3	1	331	353	49	25	91	342	324	351	1
27 Spd	1	1	0	0	0	0	1	1	2	1	2	3	4	3	3	4	9	6	3	3	3	2	0	1	0.9	8.8
Dir	261	157	116	343	262	300	279	158	154	153	161	165	137	127	132	115	260	264	119	162	10	87	254	220	171	260
28 Spd	2	1	1	2	1	1	1	4	5	4	3	3	4	3	2	1	5	2	1	0	0	0	1	2	1.6	5.1
Dir	248	217	157	224	156	186	216	261	268	251	251	320	302	298	272	311	284	302	219	151	192	162	207	181	263	268
29 Spd	1	1	2	0	1	1	1	1	2	6	5	7	6	5	4	5	5	5	5	1	1	1	2	1	2.3	6.7
Dir	153	156	150	142	210	185	163	167	229	250	260	275	265	282	290	280	277	277	268	254	215	193	234	154	259	275
30 Spd	1	1	1	1	1	1	1	7	7	11	13	10	10	9	10	9	9	10	8	4	1	0	0	0	4.7	12.8
Dir	189	160	176	181	155	158	231	282	281	290	291	293	299	297	277	292	277	300	292	308	289	198	117	151	287	291
Spd	0.7	0.7	0.7	0.7	0.9	1.1	1.0	1.4	2.1	3.0	3.5	3.7	3.9	3.5	3.1	3.1	2.8	3.4	3.0	1.1	1.3	0.2	0.6	0.5	Diurnal Average	
Dir	261	275	244	269	282	271	271	272	279	283	287	302	300	299	304	319	308	314	323	357	2	253	283	266		
Spd	10.0	8.9	8.7	9.1	9.9	10.7	10.8	12.7	13.1	12.9	17.3	17.0	17.1	15.1	15.6	18.0	14.9	13.3	15.4	12.9	14.4	8.8	7.5	11.3	Diurnal Maximum	
Dir	291	290	289	301	305	309	319	327	269	283	288	313	305	286	280	275	312	10	277	20	18	359	262	291		

Maximum Speed Value: 18 km/h on Jun 9 16:00
Maximum Daily Speed Average: 8.5 km/h on Jun 9
Maximum Diurnal Speed Average: 3.9 km/h at hour 13

Minimum Speed Value: 0 km/h on Jun 23 00:00
Minimum Daily Speed Average: 0.1 km/h on Jun 22
Minimum Diurnal Speed Average: 0.2 km/h at hour 22

Monthly Average Velocity: 1.78 km/h 298.8 deg

Speed Percentiles: $P_1 = 0.1$ $P_{10} = 0.4$ $Q_1 = 0.8$ Median = 2.1 $Q_3 = 4.9$ $P_{90} = 8.7$ $P_{99} = 14.9$

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

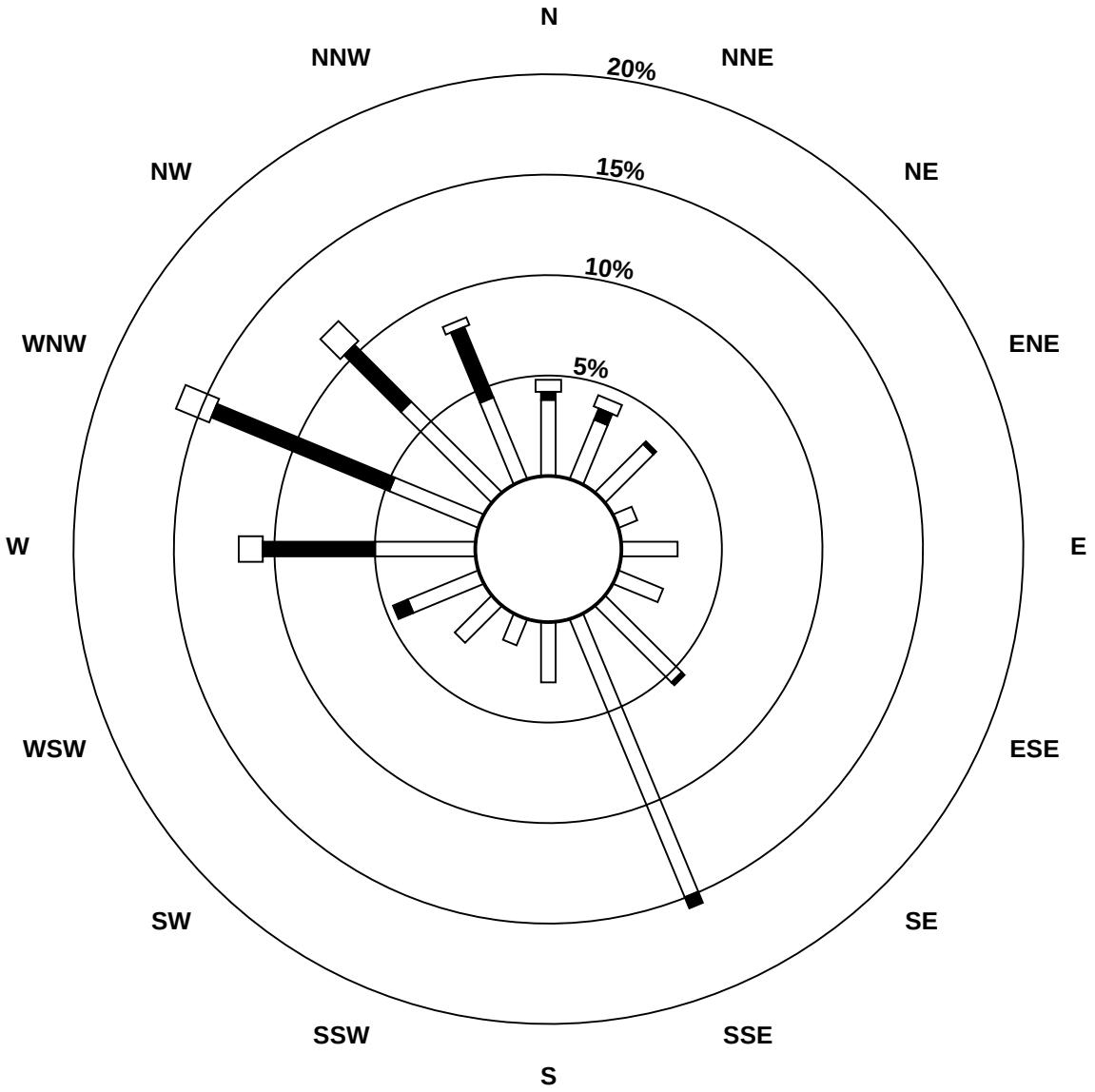
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	55	16	7	0	0	0	78
NorthEast	34	2	0	0	0	0	36
East	29	1	0	0	0	0	30
SouthEast	102	4	0	0	0	0	106
South	147	1	0	0	0	0	148
SouthWest	43	1	0	0	0	0	44
West	58	64	14	0	0	0	136
NorthWest	75	55	12	0	0	0	142
Total	543	144	33	0	0	0	720

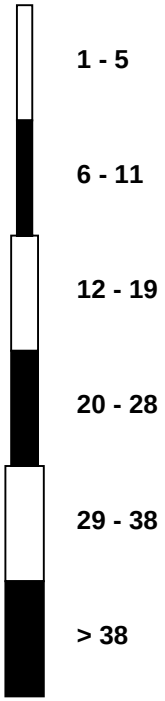
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - June 2014



Wind Speed Classes (km/h)



Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - June 2014

Maximum Speed: 18 km/h on Jun 9 16:00

Maximum Daily Speed Average: 9.7 km/h on Jun 9

Minimum Speed: 0 km/h on Jun 18 00:00

Minimum Daily Speed Average: 1.7 km/h on Jun 22

Maximum Diurnal Speed Average: 6.5 km/h at hour 17

Minimum Diurnal Speed Average: 1.7 km/h at hour 4

Monthly Average Speed: 3.95 km/h

Percentiles: $P_1 = 0.2$ $P_{10} = 0.6$ $Q_1 = 1.1$ Median = 3.0 $Q_3 = 5.5$ $P_{90} = 9.0$ $P_{99} = 15.9$

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

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	4	2	2	2	1	1	1	1	3	5	4	8	7	5	5	4	2	4	4	4	2	1	1	1	3.0	8.4
2-Jun	1	0	1	0	1	0	1	2	2	2	3	3	5	3	4	4	4	2	3	2	0	0	0	1	1.9	4.8
3-Jun	1	1	2	1	1	2	2	2	3	8	14	13	12	11	10	9	13	13	14	10	13	9	6	5	7.2	14.4
4-Jun	4	5	3	5	8	6	8	7	7	6	4	5	6	9	7	5	10	7	7	5	6	6	8	12	6.3	11.6
5-Jun	10	9	9	9	10	11	11	13	12	10	11	11	10	7	6	8	3	6	3	1	1	1	1	2	7.3	12.8
6-Jun	2	1	1	0	1	1	2	2	4	7	9	10	8	7	7	8	8	11	14	13	6	2	1	1	5.2	14.4
7-Jun	1	0	0	1	1	1	1	1	2	3	4	5	6	7	8	7	7	4	2	2	16	3	1	1	3.5	15.9
8-Jun	1	0	0	2	1	1	1	2	2	3	3	5	4	7	3	4	2	5	4	0	1	1	1	1	2.3	7.1
9-Jun	1	1	1	1	4	6	10	12	13	13	18	17	18	16	16	18	18	13	7	2	9	5	8	5	9.7	18.3
10-Jun	6	7	7	7	7	9	8	8	8	8	10	9	7	4	4	3	2	3	4	3	2	2	0	0	5.2	10.3
11-Jun	0	0	1	0	0	2	2	1	1	3	3	4	4	4	3	4	3	3	3	2	1	1	1	0	2.0	4.1
12-Jun	0	2	2	1	1	1	1	2	2	3	3	5	5	5	6	6	6	5	4	2	6	5	3	2	3.2	6.1
13-Jun	2	2	1	1	1	0	1	3	3	3	3	3	5	5	4	4	5	5	5	1	0	1	0	0	2.4	5.4
14-Jun	1	1	1	1	1	2	3	3	4	4	4	3	3	4	7	3	5	3	3	2	5	1	1	1	2.7	6.6
15-Jun	1	2	1	1	1	1	1	1	1	1	1	2	1	4	7	6	6	3	3	2	3	1	1	0	2.1	6.6
16-Jun	1	1	1	1	2	2	2	2	2	2	2	5	4	5	4	6	8	11	12	6	4	2	2	3	3.7	11.7
17-Jun	4	4	1	2	2	1	1	2	3	8	6	4	5	4	5	4	5	4	4	2	1	1	0	0	3.0	7.7
18-Jun	0	1	0	0	0	1	1	3	2	2	2	5	5	6	3	9	7	7	3	2	1	0	0	1	2.5	8.8
19-Jun	1	2	2	1	0	1	1	1	4	3	3	3	6	5	3	7	5	3	4	5	3	0	0	1	2.7	7.2
20-Jun	2	1	1	0	1	2	1	1	1	3	5	6	6	15	13	10	8	9	11	8	4	5	6	5	5.1	14.9
21-Jun	5	8	5	3	5	7	6	8	12	13	15	13	12	12	11	11	11	11	9	6	2	0	0	1	7.8	14.8
22-Jun	0	0	1	1	0	0	1	1	1	1	2	3	3	4	4	3	4	4	3	2	1	0	1	0	1.7	4.2
23-Jun	1	1	2	1	1	1	1	1	2	2	2	3	3	4	3	5	4	4	5	4	4	4	5	6	2.8	5.6
24-Jun	4	3	4	2	2	1	2	6	5	4	2	4	3	3	4	4	8	5	16	5	5	3	1	1	4.0	16.0
25-Jun	1	0	1	1	1	1	3	7	8	9	10	11	9	8	9	9	8	9	9	7	2	0	0	1	5.1	11.2
26-Jun	1	1	1	1	1	1	2	1	2	2	3	3	4	3	4	3	4	4	3	1	2	0	1	1	2.0	4.4
27-Jun	1	1	0	1	0	0	1	1	2	2	3	3	4	4	3	5	10	7	4	3	4	3	1	1	2.8	10.0
28-Jun	2	2	1	2	1	1	1	4	5	5	4	4	5	4	3	2	5	2	1	0	0	0	1	2	2.4	5.5
29-Jun	1	1	2	2	1	1	1	1	2	6	6	7	6	6	5	6	5	5	5	1	1	1	2	1	3.1	7.0
30-Jun	1	1	1	1	1	1	2	7	7	11	13	11	11	10	11	10	10	10	8	4	1	1	0	1	5.6	13.2
	2.0	2.0	1.8	1.7	1.9	2.1	2.6	3.6	4.2	5.1	5.7	6.2	6.3	6.3	6.0	6.2	6.5	6.0	5.9	3.6	3.4	2.0	1.8	1.8	Diurnal Average	
	10.1	9.1	8.9	9.2	10.2	10.9	11.1	12.8	13.4	13.3	17.7	17.4	17.7	15.6	15.9	18.3	17.6	13.5	16.0	13.2	15.9	8.8	7.7	11.6	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - June 2014

Maximum Value: 97.3 deg on Jun 7 06:00

Minimum Value: 5.5 deg on Jun 17 01:00

Percentiles: P_1 = 8.6 P_{10} = 13.3 Q_1 = 19.3 Median = 36.3 Q_3 = 59.7 P_{90} = 79.2 P_{99} = 94.1

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

Day	Hourly Period Ending At (MST)																								Daily 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	41	34	44	97	77	61	15	22	50	24	77	31	30	42	48	54	50	72	76	77	36	26	71	53	96.7
2-Jun	30	66	25	32	30	47	29	19	37	43	74	92	55	92	83	74	66	92	49	27	34	69	86	24	92.3
3-Jun	62	91	80	65	37	47	9	22	33	78	22	14	25	19	30	15	15	9	10	13	10	7	9	12	90.8
4-Jun	21	31	36	15	8	17	12	17	18	19	24	19	24	17	24	27	21	22	23	12	17	15	13	12	35.5
5-Jun	11	13	12	11	12	10	13	9	12	17	26	28	27	94	60	55	92	40	49	27	44	19	17	10	94.3
6-Jun	6	13	12	59	12	10	11	14	48	25	30	37	32	47	38	32	30	19	34	13	68	33	40	36	67.7
7-Jun	29	69	87	34	75	97	18	65	66	36	61	73	76	44	37	52	37	45	71	45	38	84	69	85	97.3
8-Jun	90	81	75	83	71	73	34	35	64	82	89	76	51	93	73	70	52	60	23	52	60	42	14	22	92.9
9-Jun	32	28	12	38	37	17	12	13	12	13	13	13	14	14	12	12	33	13	19	56	20	14	12	13	56.3
10-Jun	17	12	14	11	14	12	14	13	15	13	12	18	19	44	31	48	45	85	28	43	34	39	28	50	85.0
11-Jun	56	93	73	58	37	12	11	58	62	36	37	57	65	75	56	83	86	91	49	29	48	43	64	67	92.6
12-Jun	63	13	14	57	68	81	41	28	47	52	55	34	23	47	38	37	37	23	28	44	17	17	33	68	80.7
13-Jun	40	40	53	81	36	52	60	28	24	40	56	88	54	49	80	33	36	73	37	70	58	19	92	65	92.0
14-Jun	41	47	47	68	22	15	13	19	19	14	34	35	75	69	31	89	34	61	66	41	75	89	60	21	89.1
15-Jun	44	55	60	20	36	35	42	25	84	81	36	16	85	25	30	26	67	30	53	36	45	28	74	83	85.5
16-Jun	88	79	70	60	76	64	34	33	47	59	94	62	37	20	89	29	15	15	9	37	30	37	32	9	93.6
17-Jun	5	25	61	19	15	37	75	32	46	22	29	41	38	37	50	54	60	35	30	32	15	22	72	70	75.0
18-Jun	74	92	81	67	46	47	24	15	35	49	67	47	37	60	50	32	18	22	22	20	56	62	81	87	92.3
19-Jun	90	85	84	82	86	79	76	93	32	79	63	78	49	70	37	38	25	36	24	32	16	85	88	19	92.9
20-Jun	10	14	48	53	30	43	54	40	57	52	37	54	15	14	19	20	20	19	12	13	22	17	13	11	57.1
21-Jun	17	12	16	51	21	11	15	14	15	14	17	19	30	27	28	24	26	19	21	14	24	51	19	94	94.2
22-Jun	61	39	15	17	55	60	30	54	69	56	94	85	95	58	76	85	73	59	36	41	51	51	62	91	95.5
23-Jun	81	94	95	89	79	75	41	34	50	71	83	58	49	41	33	12	24	22	20	15	10	8	10	8	94.6
24-Jun	11	11	11	15	20	28	17	12	14	14	41	49	72	55	52	78	44	47	18	62	48	84	32	41	84.1
25-Jun	52	39	29	42	18	34	44	14	11	21	19	16	19	22	24	24	30	22	16	20	27	26	12	12	51.9
26-Jun	42	44	36	19	18	16	13	19	33	60	77	66	75	94	78	63	59	56	46	42	53	89	60	61	93.8
27-Jun	67	52	86	93	69	69	62	17	21	46	28	40	39	40	48	40	57	57	57	14	57	54	83	61	93.2
28-Jun	45	37	12	36	36	60	35	40	29	26	36	71	49	39	66	91	23	31	48	32	35	27	35	27	90.6
29-Jun	16	39	30	76	29	28	30	36	45	15	14	18	18	18	20	17	29	19	17	57	39	31	45	18	76.4
30-Jun	22	17	27	14	20	20	68	15	17	14	13	20	20	27	24	21	18	18	19	15	54	37	50	78	78.4
	89.8	93.8	94.6	96.7	85.6	97.3	76.5	92.9	84.4	81.9	94.3	91.9	95.5	94.3	88.8	90.6	92.5	91.6	75.7	76.7	75.1	89.1	92.0	94.2	

PAZA
Portable – Reno Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable Reno - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.0 ppb on Jun 8 02:00 Maximum Daily Average: 0.3 ppb on Jun 13

Minimum Value: 0 ppb on Jun 1 19:00 Minimum Daily Average: 0.0 ppb on Jun 5
Maximum Diurnal Average: 0.2 ppb at hour 7 Minimum Diurnal Average: 0.0 ppb at hour 19
Monthly Average: 0.12 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.0 $Q_3 = 0.1$ $P_{90} = 0.3$ $P_{99} = 0.8$

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	0	0	0	0	0	0	1	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
2-Jun	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
3-Jun	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
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	0.0	0.1
5-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	0.1
6-Jun	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
7-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	0.1	0.2
8-Jun	A	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	2.0
9-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	0.2
10-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	0.0	0.2
11-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	0.0	0.1
12-Jun	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.7
13-Jun	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.9
14-Jun	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.5
15-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	0.2	0.3
16-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
17-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	0.1
18-Jun	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.0	0.3
19-Jun	0	0	0	0	0	0	0	0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.2
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	0.0	0.2	0.2	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	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	Diurnal Average	
	0.2	2.0	1.5	0.4	0.8	0.9	0.9	0.7	0.7	0.7	0.6	0.7	0.3	0.4	0.2	0.3	0.4	0.1	0.1	0.4	0.4	0.2	0.2	0.2	Diurnal Maximum	

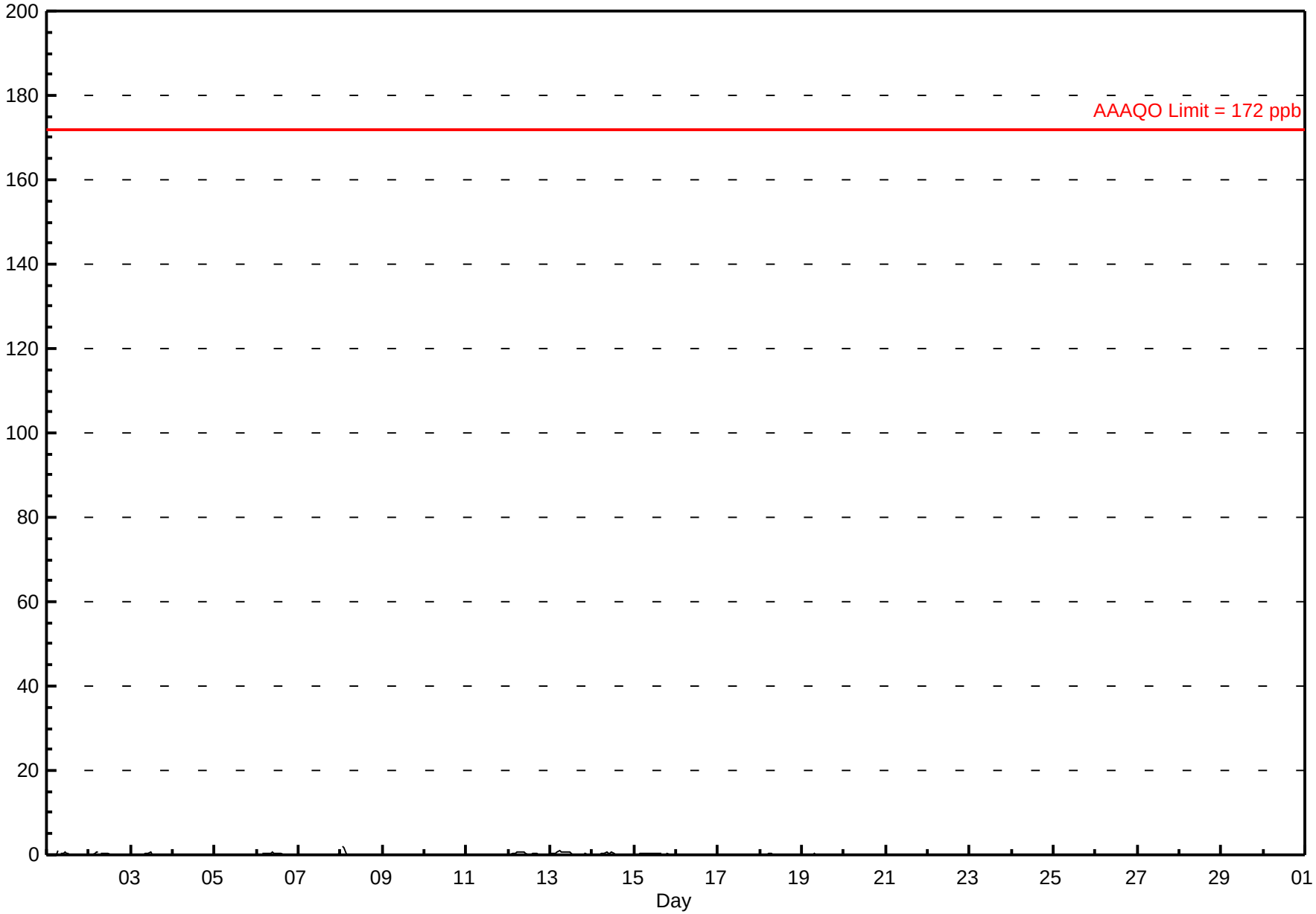
C - Calibration NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable Reno - June 2014

Maximum Value: 3.9 ppb on Jun 8 02:00

Maximum Daily Average: 1.0 ppb on Jun 13

Minimum Value: 0 ppb on Jun 11 10:00

Minimum Daily Average: 0.3 ppb on Jun 11

Maximum Diurnal Average: 0.9 ppb at hour 7

Minimum Diurnal Average: 0.5 ppb at hour 17

Monthly Average: 0.66 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.6 $Q_3 = 0.8$ $P_{90} = 1.0$ $P_{99} = 2.4$

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	0	1	1	0	1	1	2	A	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	1	0.7	2.4
2-Jun	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	1	0.7	1.4
3-Jun	0	1	1	0	1	A	1	1	1	1	1	2	1	1	1	1	1	0	1	1	1	1	1	1	0.7	2.4
4-Jun	0	1	1	1	A	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.5	0.8
5-Jun	0	1	0	A	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0.5	0.8
6-Jun	0	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	1.2
7-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	1.4
8-Jun	A	4	3	1	1	0	1	1	1	1	1	1	1	1	1	0	0	0	2	1	0	0	0	A	0.9	3.9
9-Jun	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	0	0	1	A	0	0.6	0.9
10-Jun	1	0	1	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	1	1	1	A	0	1	0.5	0.9
11-Jun	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	1	1	0.3	1.1
12-Jun	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.5
13-Jun	1	1	1	1	1	2	1	1	1	1	2	1	1	1	0	0	0	1	A	1	1	1	0	0	1.0	1.8
14-Jun	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.1
15-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	0.8	1.2
16-Jun	1	0	0	1	0	0	1	0	1	1	0	1	1	0	0	A	0	1	0	1	0	0	0	0	0.5	0.9
17-Jun	1	0	0	1	0	0	1	0	0	0	0	0	1	1	A	0	0	1	0	0	1	1	1	0	0.5	0.9
18-Jun	0	1	0	0	1	1	1	1	C	C	C	C	C	C	0	0	0	0	0	1	0	0	1	1	0.5	1.0
19-Jun	1	0	1	0	0	0	1	1	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.8
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	0.5	0.7	0.7	0.6	0.7	0.7	0.9	0.7	0.8	0.7	0.7	0.8	0.7	0.7	0.5	0.6	0.5	0.5	0.7	0.7	0.6	0.5	0.5	0.6	Diurnal Average	
	0.8	3.9	3.5	1.2	1.5	1.8	2.4	1.3	1.4	1.3	1.6	2.4	1.1	1.2	0.8	1.0	1.1	0.7	2.4	1.4	1.3	0.7	0.9	1.4	Diurnal Maximum	

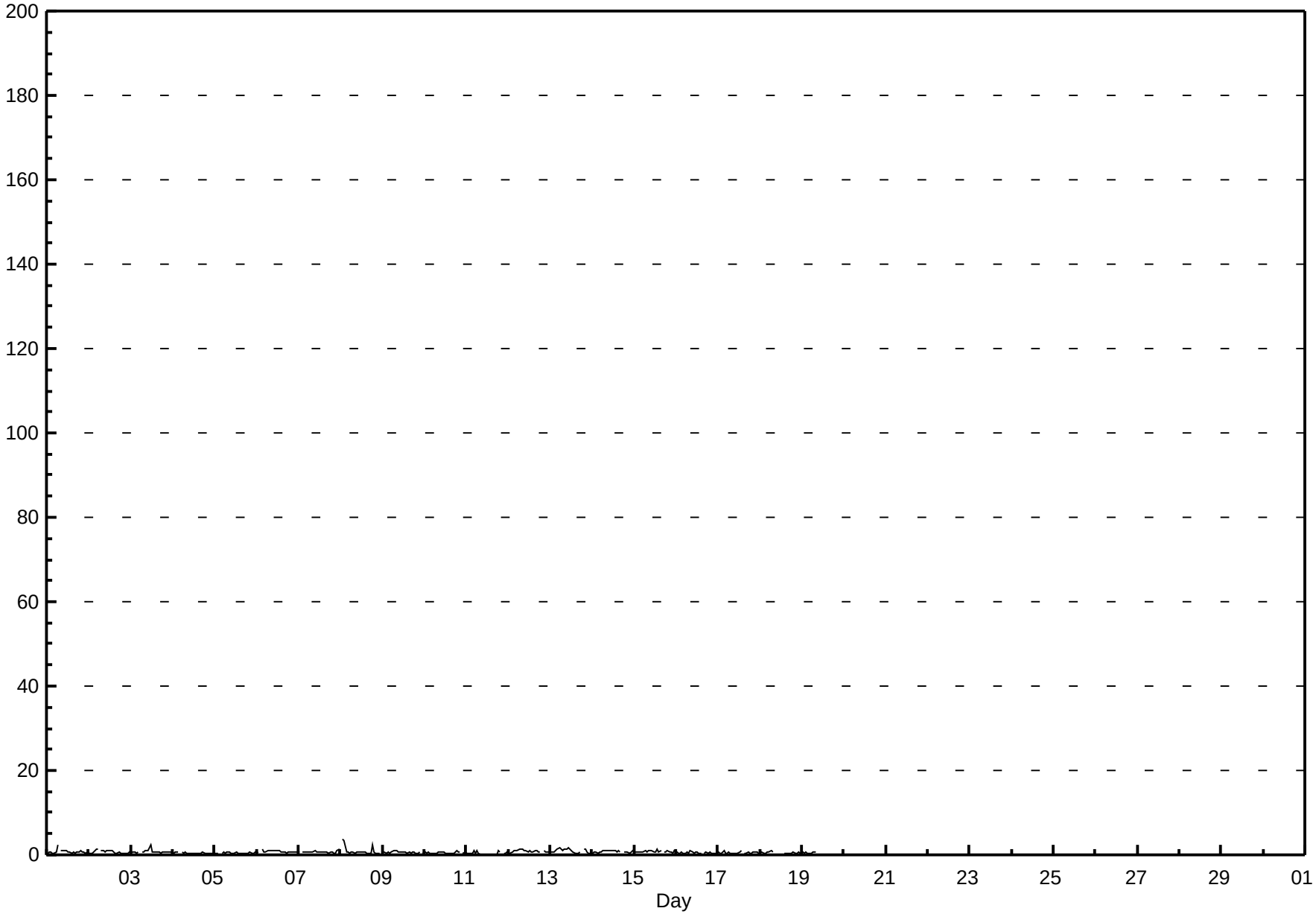
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

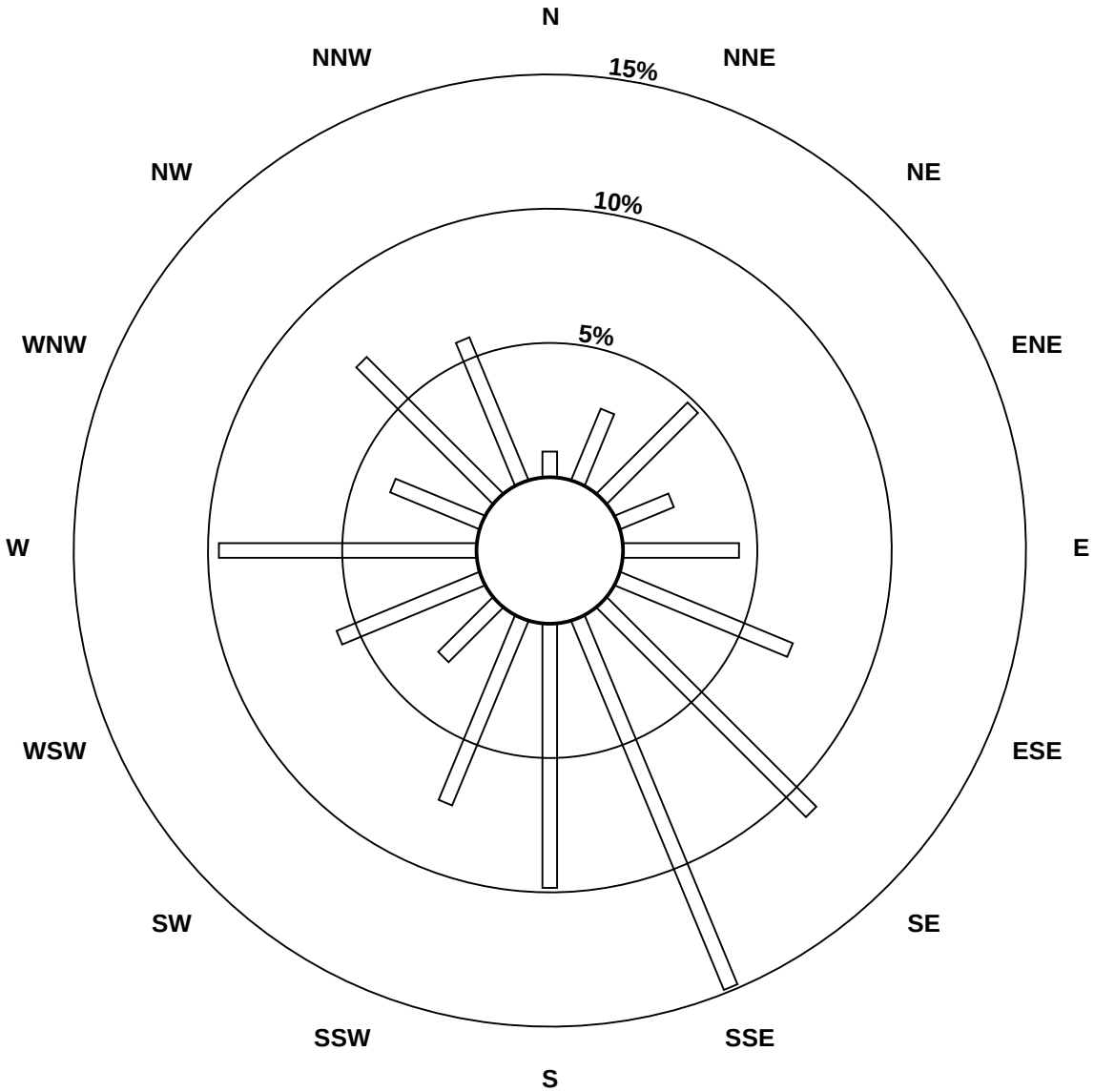
Portable Reno - June 2014



Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable Reno - June 2014



Pollutant Classes (ppb)

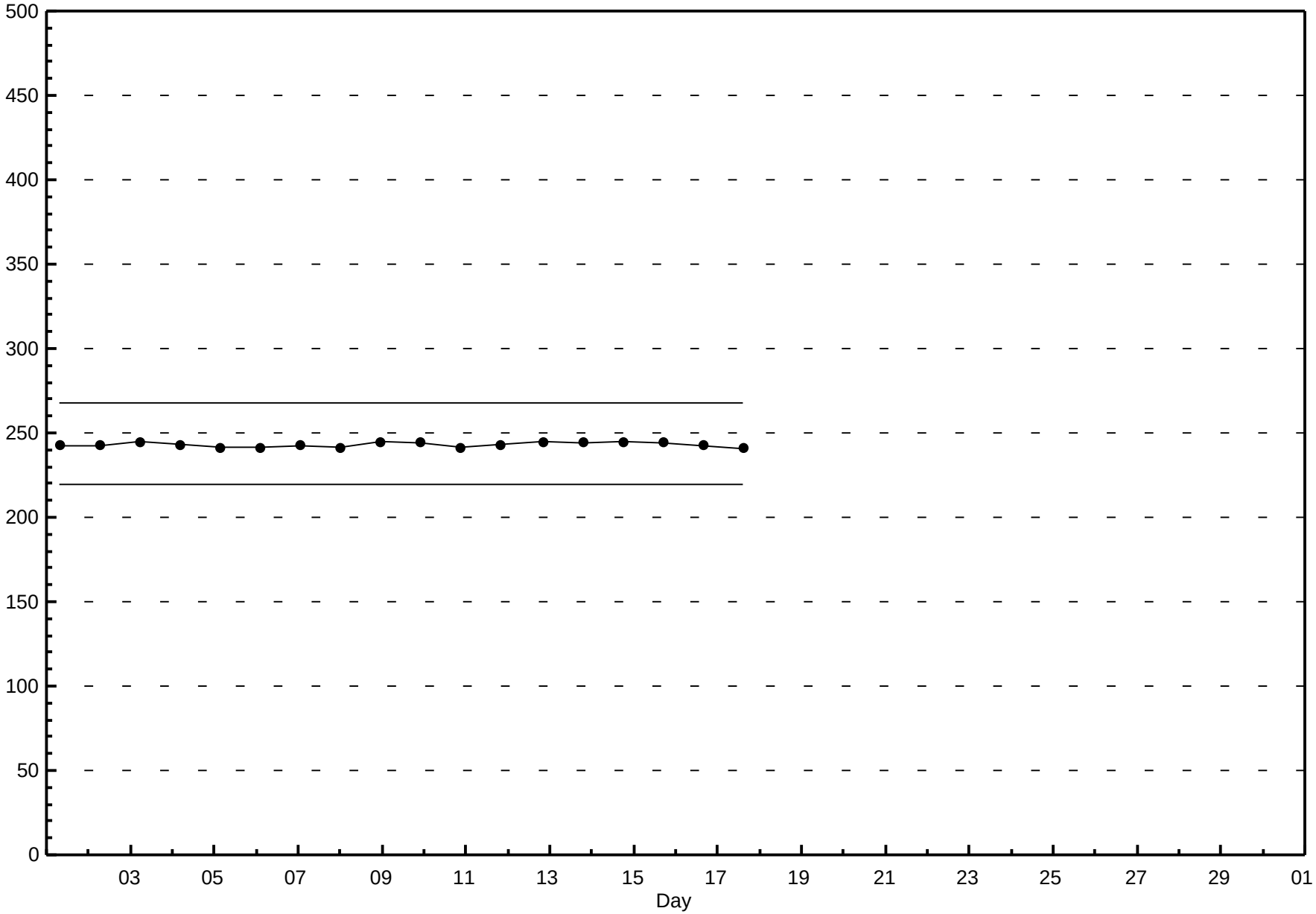
- 0 - 10
- 11 - 20
- 21 - 60
- 61 - 110
- 111 - 172
- > 172

Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Reno - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 0.8 ppb on Jun 11 07:00 Maximum Daily Average: 0.5 ppb on Jun 12

Minimum Value: 0 ppb on Jun 13 21:00 Minimum Daily Average: 0.2 ppb on Jun 16
Maximum Diurnal Average: 0.4 ppb at hour 7 Minimum Diurnal Average: 0.2 ppb at hour 13
Monthly Average: 0.31 ppb Percentiles: $P_1 = 0.1$ $P_{10} = 0.2$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 0.7$

Hours in Service:	441
Hours of Data:	420
Hours of Missing Data:	21
Hours of Calibration:	21
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	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
2-Jun	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
3-Jun	0	0	1	1	1	A	1	0	1	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	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-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	0.2	0.3
6-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	0.3	0.4
7-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	0.3	0.4
8-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
9-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
10-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	0.3	0.5
11-Jun	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.8
12-Jun	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	0.5	0.6
13-Jun	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.6
14-Jun	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.8
15-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	0.2	0.4
16-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	0.4
17-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	0.3
18-Jun	0	0	0	0	0	0	0	1	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0.3	0.5
19-Jun	0	0	0	0	0	1	1	0	0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.7
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.4	0.6	0.5	0.6	0.6	Diurnal Maximum	

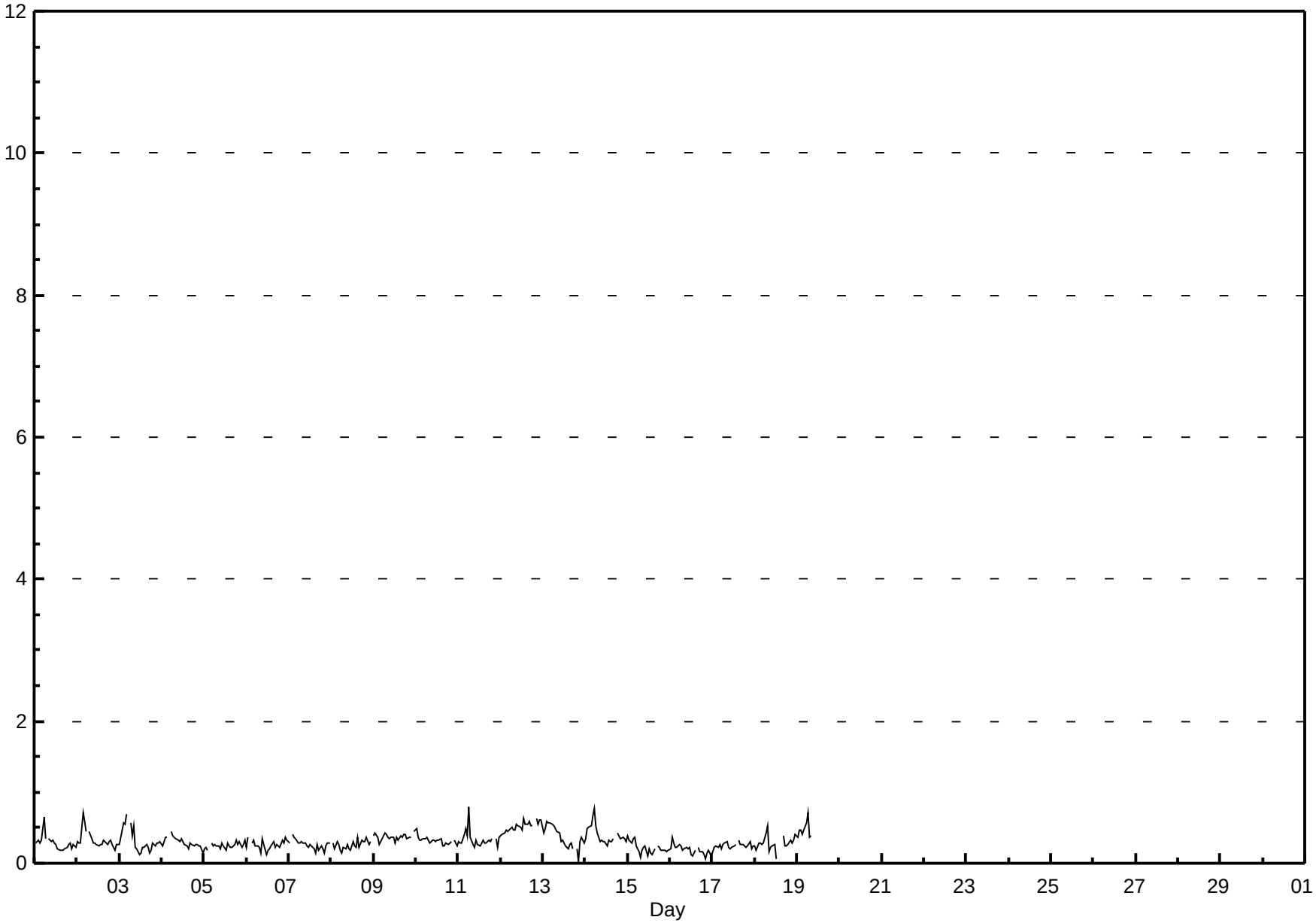
C - Calibration NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable Reno - June 2014

Maximum Value: 6.5 ppb on Jun 8 19:00

Maximum Daily Average: 0.9 ppb on Jun 8

Minimum Value: 0 ppb on Jun 16 21:00

Maximum Diurnal Average: 1.0 ppb at hour 19

Monthly Average: 0.69 ppb

Minimum Daily Average: 0.6 ppb on Jun 15

Minimum Diurnal Average: 0.6 ppb at hour 14

Percentiles: $P_1 = 0.4$ $P_{10} = 0.5$ $Q_1 = 0.6$ Median = 0.6 $Q_3 = 0.7$ $P_{90} = 0.9$ $P_{99} = 1.2$

Hours in Service:	441
Hours of Data:	420
Hours of Missing Data:	21
Hours of Calibration:	21
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	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.6	1.0
2-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
3-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.7	1.1
4-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	0.7	0.8
5-Jun	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.6	0.8
6-Jun	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.6	0.8
7-Jun	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	1	1	0.6	0.9
8-Jun	A	1	1	1	1	0	0	1	1	1	0	1	1	1	1	1	1	1	6	1	1	1	1	A	0.9	6.5
9-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	0.9
10-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	0.7	0.8
11-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	0.7	1.1
12-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	0.9	1.1
13-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	0.7	1.1
14-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	1.2
15-Jun	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	A	1	1	0	1	1	1	0	0.6	0.7
16-Jun	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	0	0	0	0	1	0	0	0.6	1.2
17-Jun	0	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	0.6	0.9
18-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	0.7	0.9
19-Jun	1	1	1	1	1	1	1	1	1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	1.1
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	0.7	0.7	0.8	0.7	0.8	0.7	0.8	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	1.0	0.6	0.6	0.6	0.7	0.7	Diurnal Average	
	0.8	1.2	1.1	1.2	1.1	1.2	1.1	0.9	0.9	0.9	0.8	0.8	0.8	1.1	0.9	0.9	0.9	0.8	6.5	0.8	1.0	1.0	0.9	0.9	Diurnal Maximum	

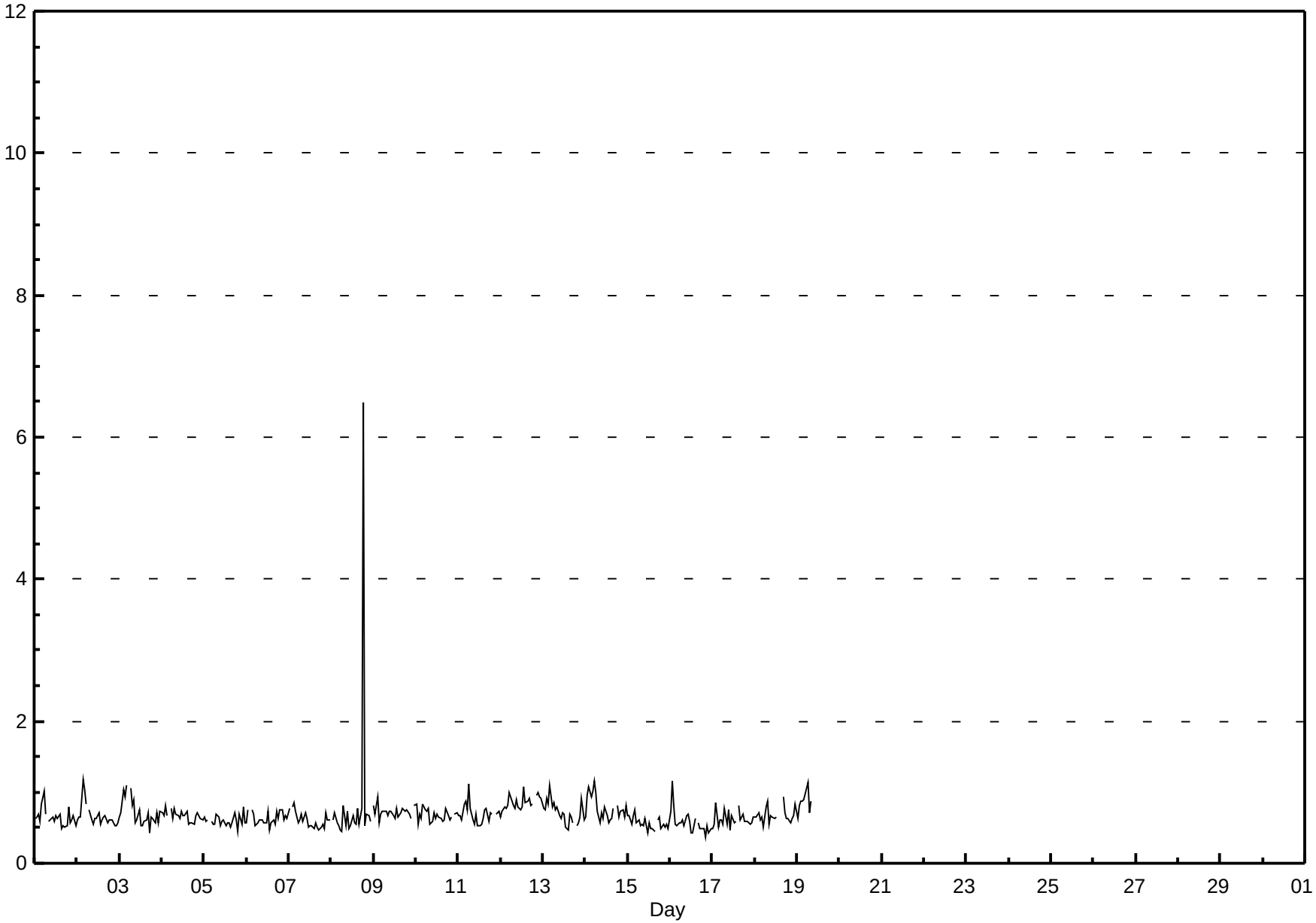
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

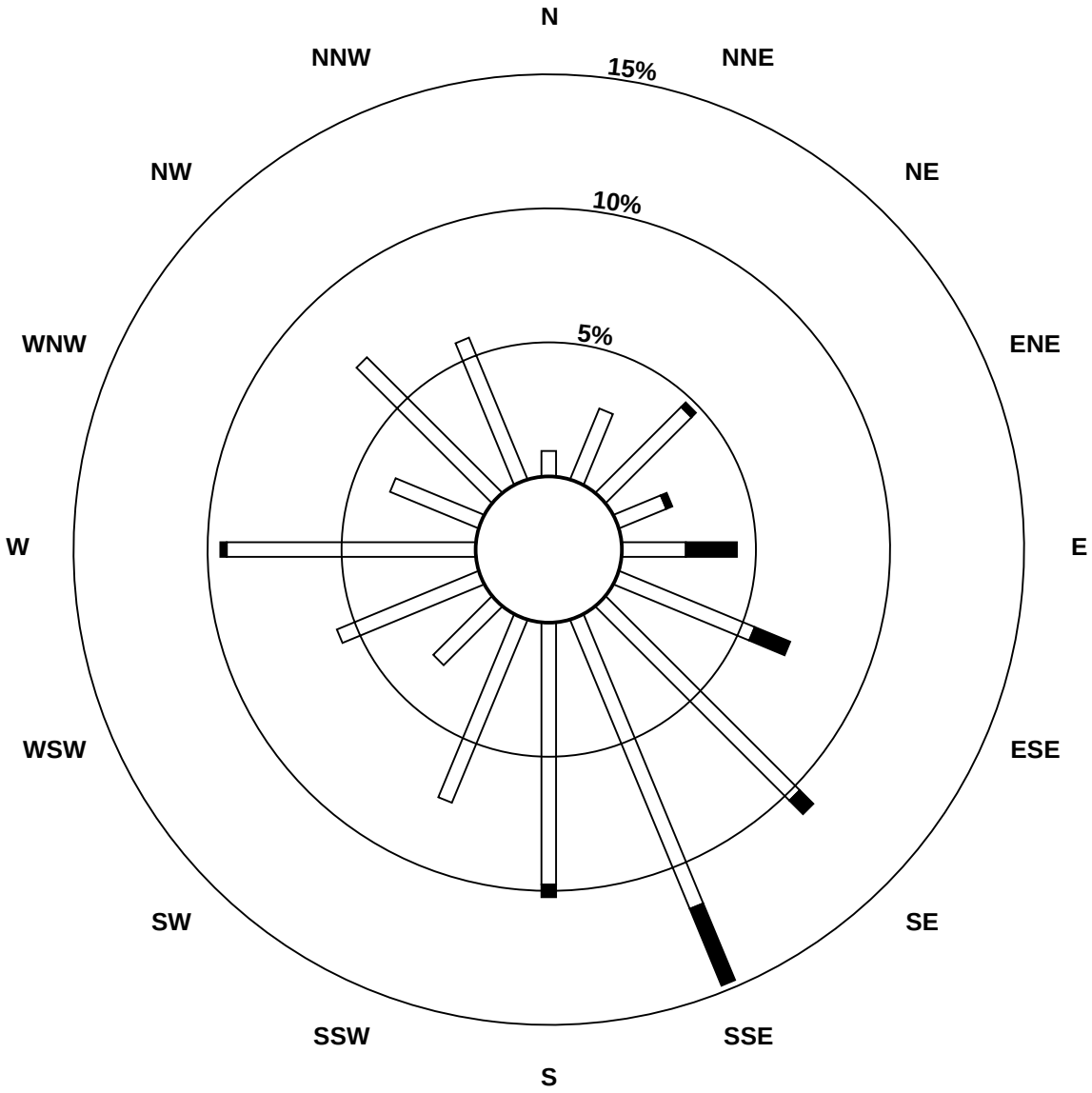
Portable Reno - June 2014



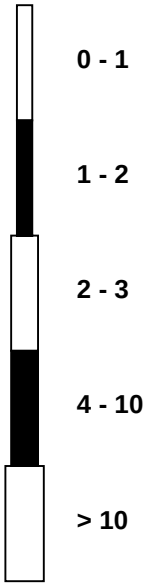
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable Reno - June 2014



Pollutant Classes (ppb)

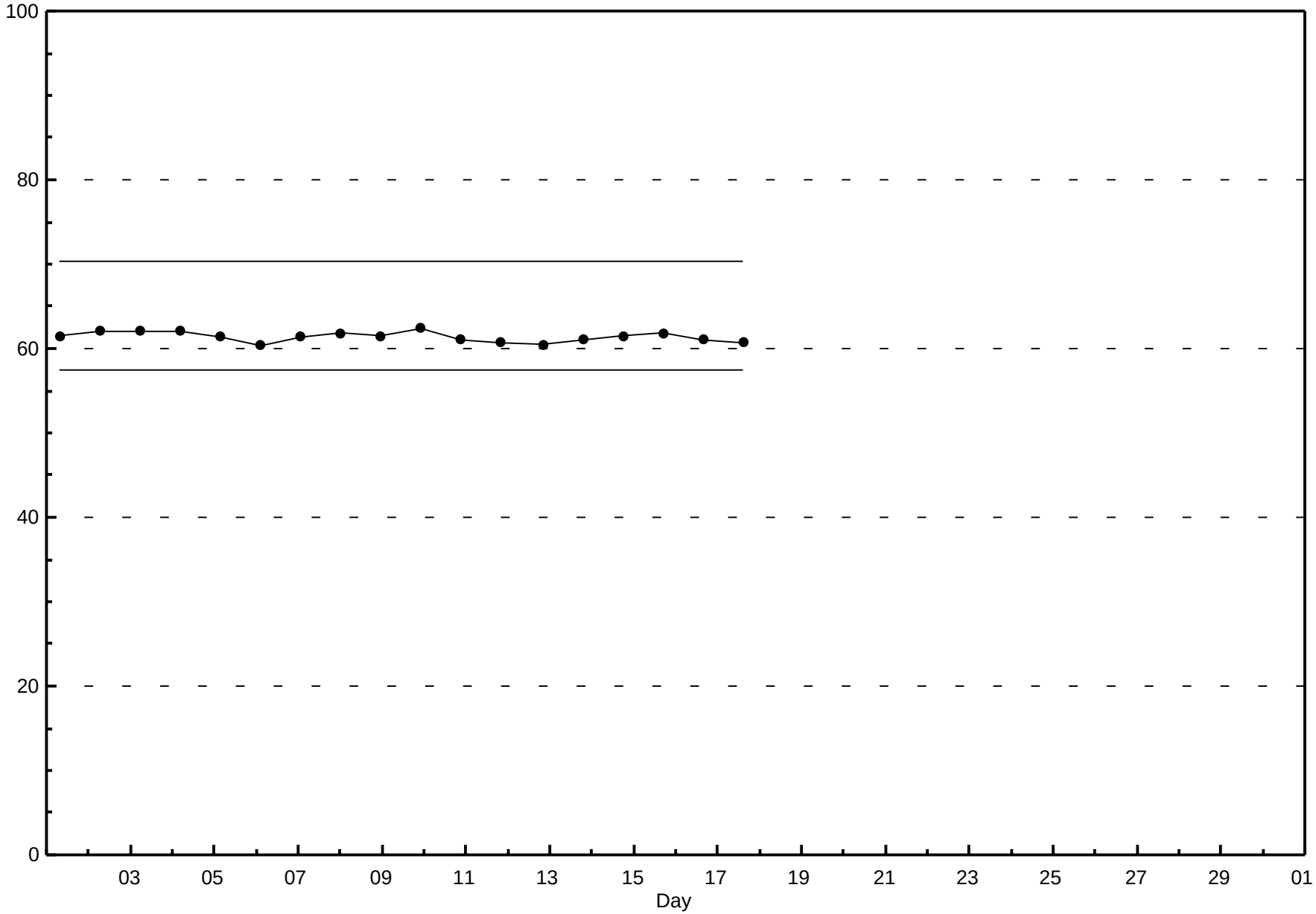


Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable Reno - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 21.9 ppb on Jun 19 03:00 Maximum Daily Average: 5.7 ppb on Jun 1

Minimum Value: 0 ppb on Jun 17 12:00 Minimum Daily Average: 1.5 ppb on Jun 12
Maximum Diurnal Average: 7.4 ppb at hour 1 Minimum Diurnal Average: 1.3 ppb at hour 14
Monthly Average: 3.72 ppb Percentiles: $P_1 = 0.5$ $P_{10} = 0.9$ $Q_1 = 1.3$ Median = 2.2 $Q_3 = 5.0$ $P_{90} = 8.9$ $P_{99} = 17.9$

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	8	6	3	5	5	5	7	A	6	5	4	3	2	2	2	2	3	3	3	2	10	15	11	17	5.7	17.2
2-Jun	17	13	10	15	11	9	A	7	5	4	2	2	2	2	1	1	1	2	3	5	3	2	3	2	5.3	16.7
3-Jun	1	2	5	3	3	A	8	3	3	4	3	3	3	2	2	2	2	2	2	3	3	7	7	9	3.6	8.7
4-Jun	10	4	4	5	A	3	3	2	2	2	2	2	1	1	1	1	1	2	2	1	1	1	1	1	2.4	9.7
5-Jun	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	6	4	4	1.5	6.1
6-Jun	3	3	A	5	5	5	4	4	3	2	2	2	2	2	2	2	2	2	1	1	3	3	7	7	3.1	7.5
7-Jun	7	A	10	7	6	6	5	3	3	2	1	1	2	1	1	2	2	2	3	3	6	9	9	5	4.2	9.7
8-Jun	A	6	4	3	5	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	A	1.8	6.4
9-Jun	2	2	3	5	5	3	2	2	2	1	1	1	2	2	2	2	2	2	2	2	2	4	A	5	2.4	5.1
10-Jun	5	4	4	5	5	5	3	1	1	1	1	1	1	1	1	1	1	1	1	2	5	A	6	10	2.7	9.9
11-Jun	10	4	4	2	4	2	2	2	2	1	1	1	1	1	1	1	1	1	2	2	A	6	5	2	2.5	9.6
12-Jun	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	3	1.5	3.4
13-Jun	12	10	8	10	2	1	1	1	1	1	1	1	1	1	1	3	5	5	A	5	9	19	18	9	5.4	19.2
14-Jun	9	7	7	4	3	3	3	2	2	2	2	2	2	1	1	3	2	A	4	4	5	9	11	13	4.3	13.3
15-Jun	11	11	13	11	9	6	8	6	3	3	2	2	1	1	1	1	A	2	1	3	3	4	6	11	5.2	12.8
16-Jun	11	9	7	5	7	6	5	5	3	4	3	3	2	1	1	A	2	1	1	1	1	6	3	2	3.9	11.4
17-Jun	9	12	11	11	12	12	9	7	2	1	0	0	0	1	A	1	1	1	1	2	2	2	1	1	4.3	12.3
18-Jun	1	1	1	1	1	1	1	0	C	C	C	C	C	C	2	2	2	3	2	5	8	9	12	17	3.9	16.8
19-Jun	15	20	22	13	7	9	10	6	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	21.9
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	7.4	6.5	6.5	6.1	5.2	4.4	4.1	3.1	2.6	2.1	1.7	1.5	1.4	1.3	1.4	1.7	1.7	1.8	1.8	2.5	4.0	6.2	6.4	7.0	Diurnal Average	
	16.7	19.5	21.9	15.2	12.3	11.5	9.9	7.5	6.3	5.3	3.5	3.1	3.0	2.4	2.4	3.1	4.5	4.7	4.1	5.3	10.2	19.2	18.4	17.2	Diurnal Maximum	

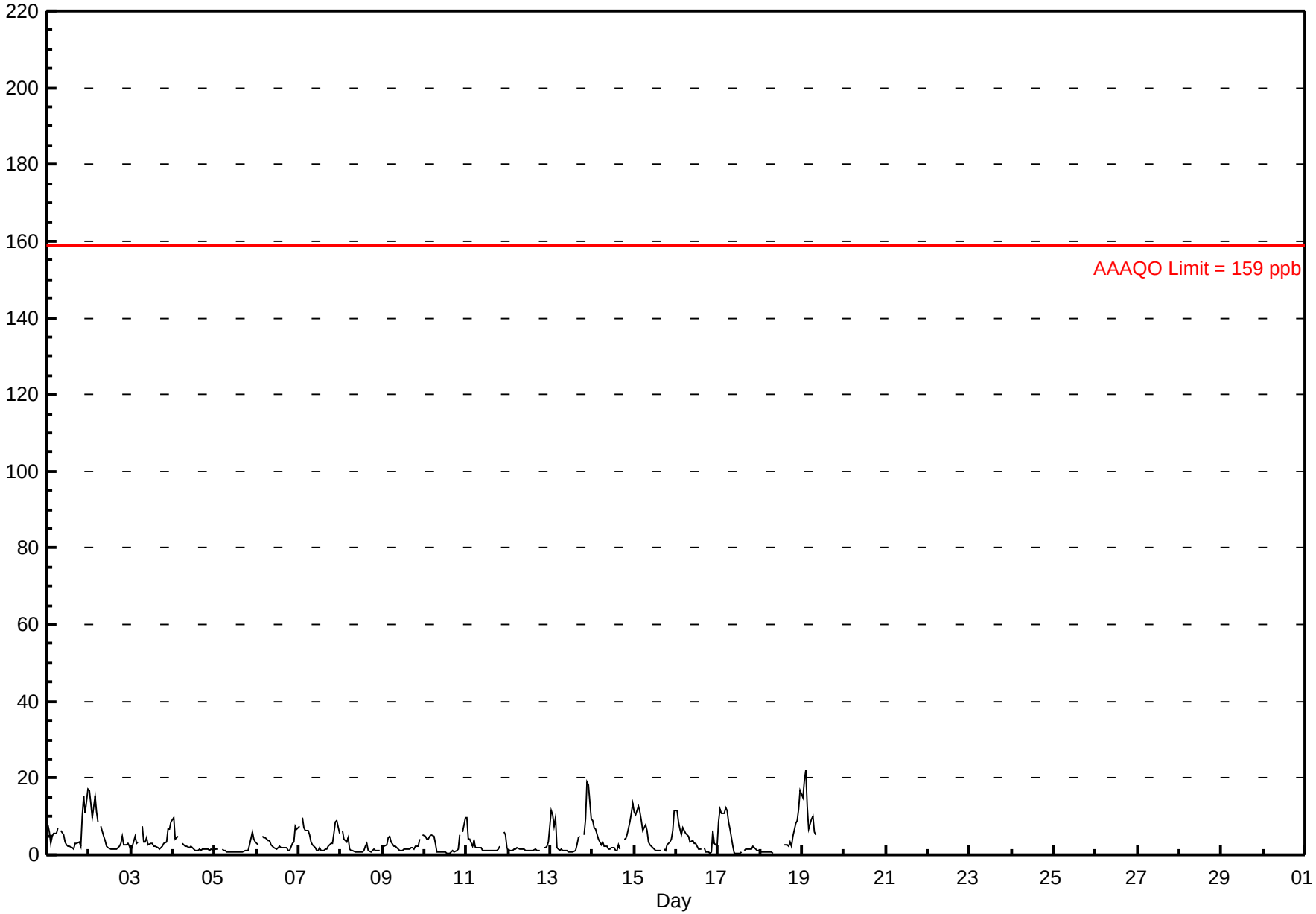
C - Calibration NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable Reno - June 2014

Maximum Value: 26.5 ppb on Jun 1 22:00

Maximum Daily Average: 9.1 ppb on Jun 1

Minimum Value: 1 ppb on Jun 17 12:00

Minimum Daily Average: 2.8 ppb on Jun 5

Maximum Diurnal Average: 11.6 ppb at hour 1

Minimum Diurnal Average: 2.3 ppb at hour 13

Monthly Average: 6.00 ppb

Percentiles: $P_1 = 0.8$ $P_{10} = 1.3$ $Q_1 = 2.0$ Median = 3.7 $Q_3 = 7.9$ $P_{90} = 14.8$ $P_{99} = 24.5$

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	10	12	5	12	9	7	9	A	8	6	5	4	4	3	3	3	4	4	6	4	22	27	17	24	9.1	26.5
2-Jun	21	15	13	18	13	9	A	9	7	5	4	5	3	9	4	3	3	4	6	16	4	4	4	4	7.8	21.2
3-Jun	1	13	16	5	6	A	18	7	7	8	4	4	5	4	3	3	2	4	15	7	6	11	15	11	7.6	18.3
4-Jun	13	8	5	7	A	6	4	6	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	3.6	12.9
5-Jun	2	2	2	A	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	4	24	5	5	2.8	24.0
6-Jun	5	10	A	5	5	5	5	5	3	3	2	2	4	3	3	4	4	3	2	2	9	8	12	15	5.2	14.8
7-Jun	9	A	14	10	9	7	7	5	3	3	2	2	3	2	2	4	3	4	6	4	9	12	12	7	6.0	13.8
8-Jun	A	9	6	6	11	2	1	2	1	1	1	1	1	1	4	5	2	1	2	2	1	1	1	A	2.9	11.5
9-Jun	3	3	3	7	7	5	3	3	2	2	2	2	2	2	2	2	2	2	2	3	3	5	A	6	3.2	6.9
10-Jun	6	5	5	5	6	6	5	2	1	1	1	1	1	1	1	1	6	1	2	3	11	A	10	16	4.1	15.8
11-Jun	16	8	6	3	5	3	2	2	2	2	2	3	2	1	3	2	2	2	2	9	A	16	9	5	4.6	16.0
12-Jun	2	2	1	2	2	2	2	2	2	2	2	3	2	3	1	10	2	2	2	A	3	2	10	6	2.9	10.0
13-Jun	24	14	10	17	4	2	2	2	2	2	1	1	1	1	3	4	6	7	A	7	16	26	25	18	8.4	26.2
14-Jun	23	11	11	4	4	3	4	5	3	4	2	2	3	5	2	6	3	A	6	7	7	10	15	17	6.8	22.6
15-Jun	15	14	16	13	10	7	10	9	5	3	3	2	1	2	1	2	A	3	2	4	5	7	11	25	7.4	25.2
16-Jun	18	13	11	12	17	7	7	9	8	4	4	6	3	3	2	A	4	1	1	1	2	22	10	7	7.6	21.8
17-Jun	14	17	16	16	18	17	12	12	4	1	1	1	1	2	A	3	2	2	6	2	3	3	2	1	6.8	18.0
18-Jun	1	1	1	1	1	1	1	1	C	C	C	C	C	C	4	3	4	14	5	11	15	16	24	25	7.2	24.5
19-Jun	22	24	26	21	13	16	12	7	6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	26.3
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	11.6	9.9	9.2	9.2	7.9	6.0	5.8	4.8	3.8	3.0	2.4	2.6	2.3	2.6	2.5	3.3	3.1	3.5	4.0	5.0	7.2	11.5	10.8	11.4	Diurnal Average	
	24.4	23.7	26.3	21.4	18.0	17.1	18.3	11.8	8.5	7.8	5.4	6.0	5.3	8.8	4.1	10.0	6.1	13.8	14.6	15.7	22.1	26.5	24.7	25.2	Diurnal Maximum	

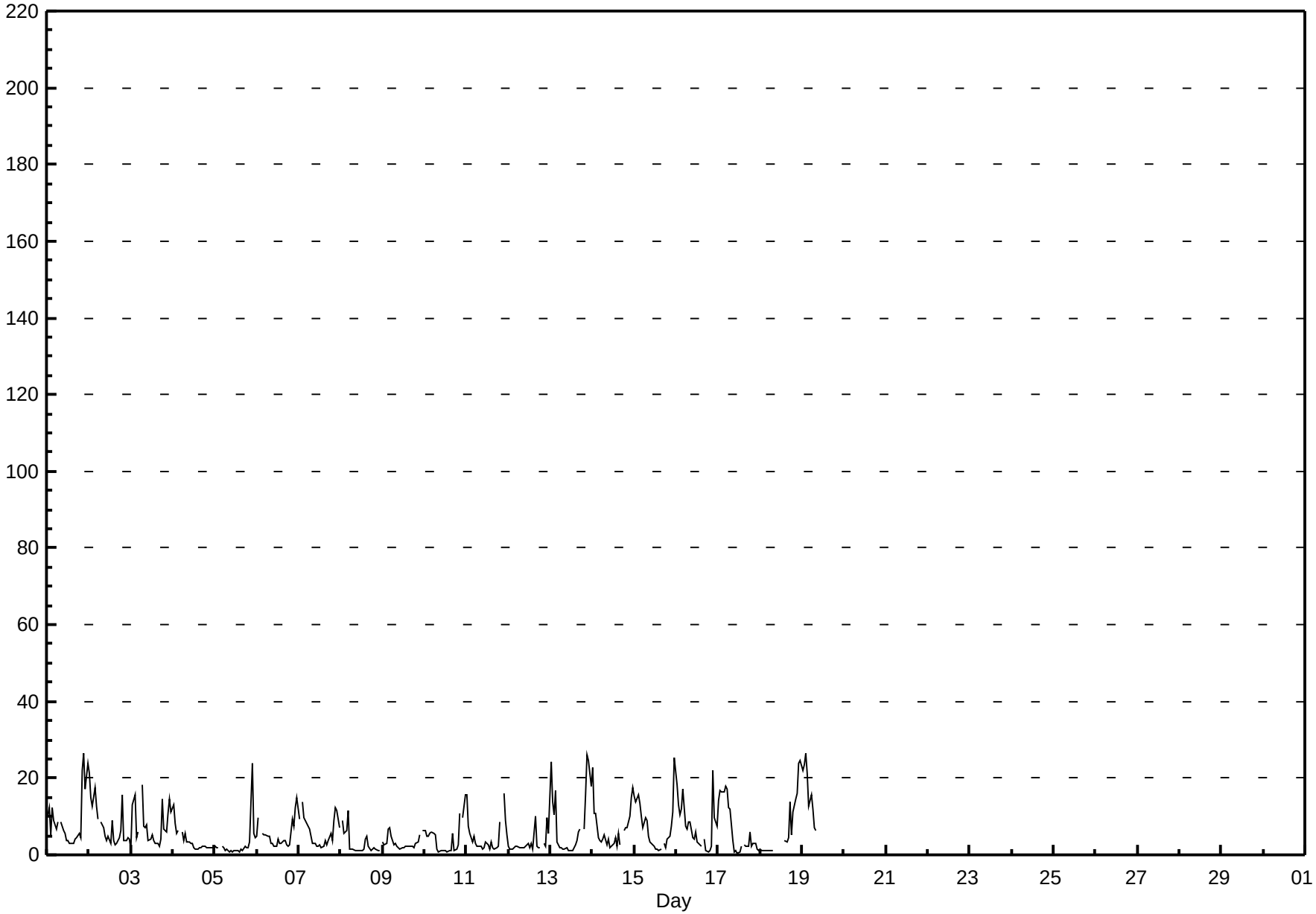
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

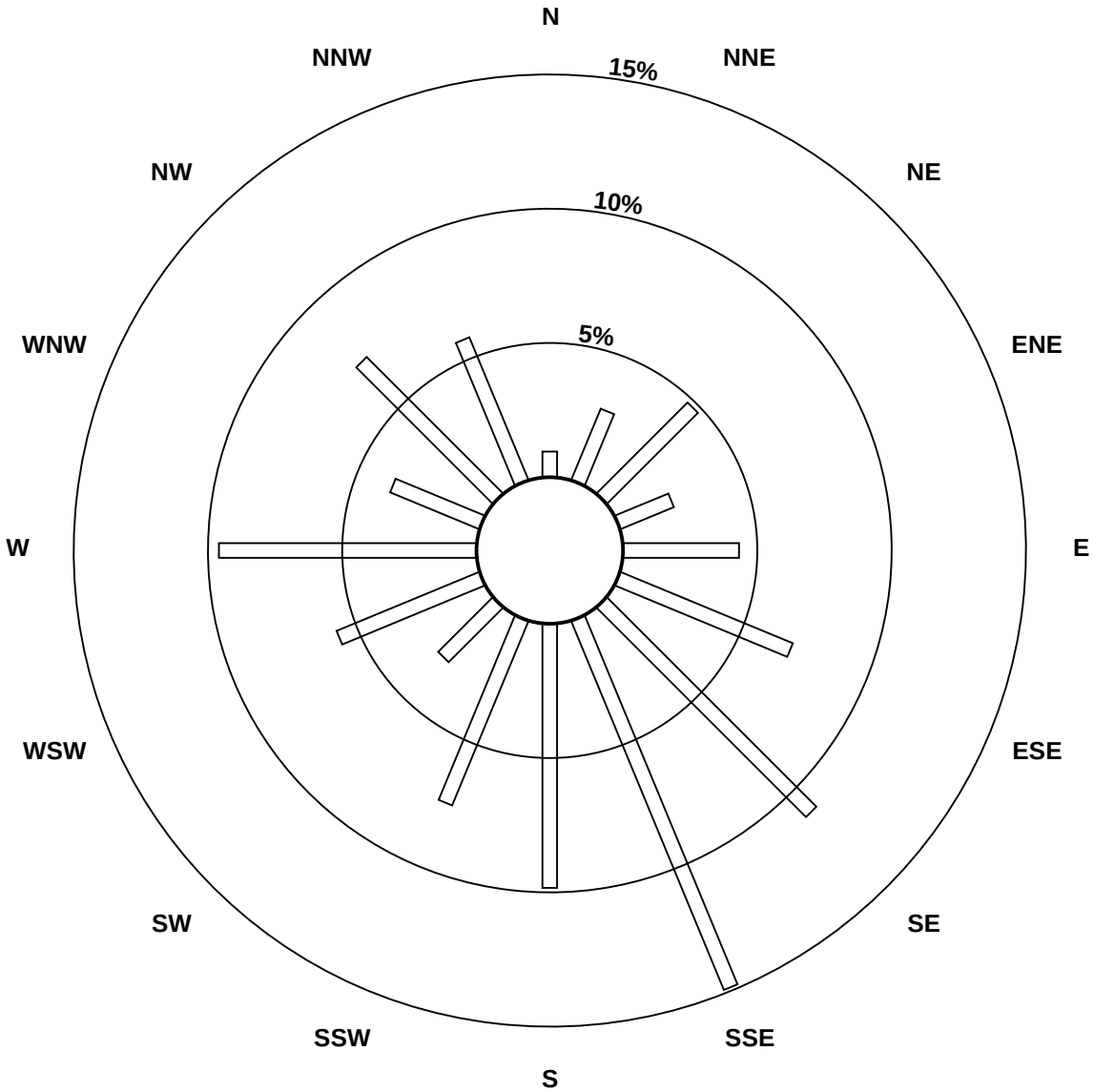
Portable Reno - June 2014



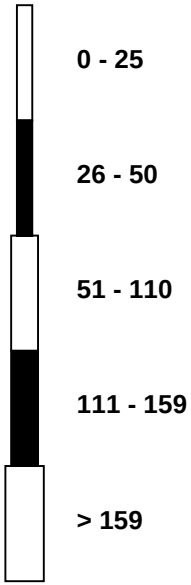
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable Reno - June 2014



Pollutant Classes (ppb)

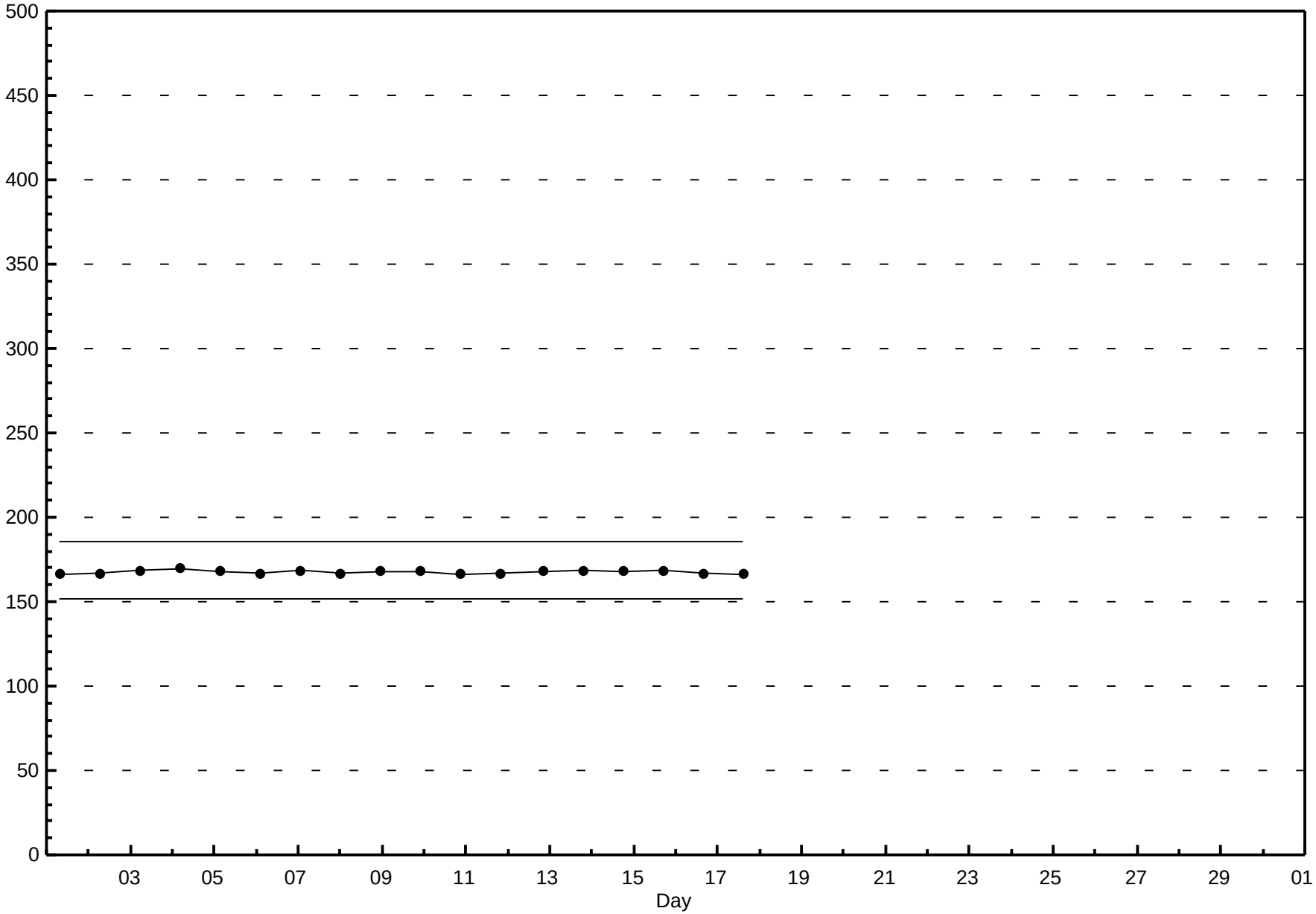


Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Reno - June 2014

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

Maximum Value: 14.9 ppb on Jun 19 03:00

Maximum Daily Average: 1.3 ppb on Jun 1

Minimum Value: 0 ppb on Jun 18 01:00

Minimum Daily Average: 0.2 ppb on Jun 12

Maximum Diurnal Average: 1.5 ppb at hour 7

Minimum Diurnal Average: 0.5 ppb at hour 14

Monthly Average: 0.85 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.1$ $Q_1 = 0.2$ Median = 0.5 $Q_3 = 1.1$ $P_{90} = 1.9$ $P_{99} = 5.7$

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	1	4	1	2	2	2	3	A	2	2	1	1	1	1	1	0	1	1	1	0	3	1	0	0	1.3	3.9
2-Jun	2	1	0	2	1	2	A	3	2	2	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0.9	3.3
3-Jun	0	0	0	0	0	A	3	1	1	2	2	2	2	1	1	1	1	1	1	1	0	1	2	3	1.2	3.3
4-Jun	4	1	1	2	A	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	3.9
5-Jun	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.6
6-Jun	0	0	A	0	0	1	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	0.7	1.8
7-Jun	0	A	2	2	2	3	3	2	1	1	0	0	1	0	0	1	1	0	1	1	1	0	0	0	1.0	2.8
8-Jun	A	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0.3	1.2
9-Jun	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.2
10-Jun	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0.5	1.2
11-Jun	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0.5	1.4
12-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	0.2	0.3
13-Jun	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	1	6	2	0.8	5.7
14-Jun	2	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	0	A	1	1	1	1	0	1	0.6	1.7
15-Jun	1	0	0	0	1	1	2	3	2	1	1	1	0	0	0	0	A	0	0	0	0	0	0	1	0.8	3.3
16-Jun	1	1	1	0	1	2	3	3	2	2	1	1	0	0	0	A	0	0	0	0	0	1	0	0	0.9	3.3
17-Jun	1	3	2	3	3	3	2	2	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.9	3.0
18-Jun	0	0	0	0	0	0	0	0	C	C	C	C	C	C	1	1	1	2	1	1	1	0	1	5	0.7	5.5
19-Jun	3	6	15	3	4	9	5	2	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	14.9
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	1.1	1.1	1.5	1.1	1.0	1.5	1.5	1.4	1.1	0.9	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.8	1.0	Diurnal Average	
	3.9	5.7	14.9	3.4	3.5	8.9	5.2	3.3	2.0	2.2	1.9	1.6	1.7	1.4	1.3	1.3	1.0	1.8	1.1	1.0	2.7	1.4	5.7	5.5	Diurnal Maximum	

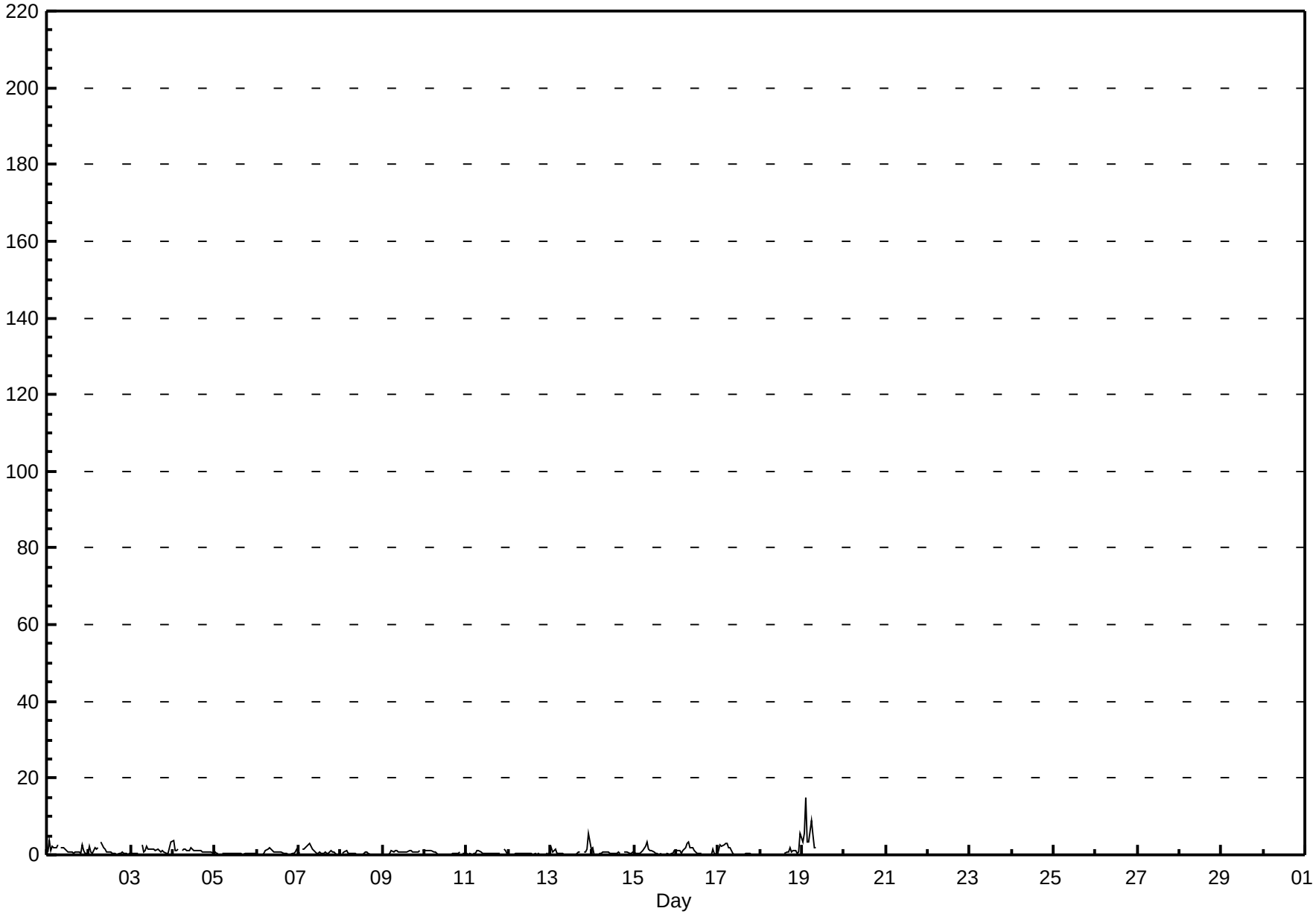
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Reno - June 2014

Maximum Value: 48.3 ppb on Jun 13 23:00

Maximum Daily Average: 4.7 ppb on Jun 13

Minimum Value: 0 ppb on Jun 18 05:00

Minimum Daily Average: 0.8 ppb on Jun 8

Maximum Diurnal Average: 5.2 ppb at hour 24

Minimum Diurnal Average: 1.2 ppb at hour 20

Monthly Average: 2.68 ppb

Percentiles: $P_1 = 0.1$ $P_{10} = 0.3$ $Q_1 = 0.5$ Median = 1.3 $Q_3 = 2.5$ $P_{90} = 6.2$ $P_{99} = 23.3$

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	3	12	4	12	4	3	4	A	3	3	3	2	2	1	1	1	2	2	2	1	20	9	2	2	4.2	19.9
2-Jun	4	2	1	3	2	3	A	4	7	2	2	3	1	7	1	1	1	1	1	4	1	0	1	0	2.2	6.9
3-Jun	0	1	1	1	1	A	13	2	3	4	2	2	6	4	2	2	2	2	11	2	1	2	8	5	3.3	13.2
4-Jun	10	3	2	3	A	7	5	6	2	3	3	2	2	2	1	2	3	2	1	1	1	1	2	2	2.8	9.8
5-Jun	2	1	1	A	1	1	1	1	0	1	0	1	2	1	1	1	0	1	1	1	0	5	1	1	0.9	4.6
6-Jun	0	0	A	0	1	2	2	2	2	1	1	1	2	1	2	1	1	1	0	2	2	1	4	7	1.6	6.7
7-Jun	2	A	6	6	5	6	4	3	2	1	1	1	2	1	1	2	1	1	2	1	2	1	1	0	2.3	6.5
8-Jun	A	2	2	4	1	1	1	1	0	0	0	0	0	0	2	1	1	0	1	0	0	0	0	A	0.8	4.3
9-Jun	0	0	0	0	1	1	1	2	2	1	1	1	2	2	1	1	1	1	1	1	1	2	A	1	1.2	2.1
10-Jun	2	2	2	2	2	2	1	1	0	0	0	0	0	0	0	0	6	1	1	1	2	A	3	3	1.3	5.6
11-Jun	3	0	1	0	1	1	1	2	1	1	1	10	4	0	4	2	1	1	1	1	A	13	3	1	2.3	12.8
12-Jun	0	0	0	0	0	0	1	1	1	1	1	1	1	6	0	5	1	1	0	A	0	0	2	0	1.0	5.9
13-Jun	14	2	2	4	1	0	1	1	0	0	0	0	0	0	1	1	1	1	A	1	2	5	48	23	4.7	48.3
14-Jun	22	0	0	0	0	1	1	2	6	12	1	1	3	3	2	2	1	A	2	1	1	2	1	2	2.9	22.4
15-Jun	2	1	1	1	1	2	4	5	2	2	1	1	1	1	0	0	A	0	0	1	1	1	1	18	2.0	18.2
16-Jun	7	6	4	2	6	4	5	8	6	3	3	2	1	1	1	A	1	0	0	0	0	16	1	1	3.4	15.9
17-Jun	5	17	13	7	10	7	5	5	1	0	0	0	0	1	A	0	1	1	5	0	0	0	0	0	3.4	17.1
18-Jun	0	0	0	0	0	0	0	0	C	C	C	C	C	C	1	1	4	13	3	3	4	2	9	22	3.5	22.3
19-Jun	8	17	23	15	27	24	7	4	4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	26.6
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	4.7	3.6	3.5	3.4	3.5	3.6	3.1	2.6	2.4	2.1	1.2	1.7	1.7	1.8	1.2	1.4	1.5	1.6	1.8	1.2	2.3	3.5	5.1	5.2	Diurnal Average	
	22.4	17.1	23.4	15.5	26.6	23.5	13.2	7.6	6.9	12.2	3.0	9.6	6.2	6.8	3.7	4.8	5.6	13.2	10.8	3.7	19.9	15.9	48.3	22.7	Diurnal Maximum	

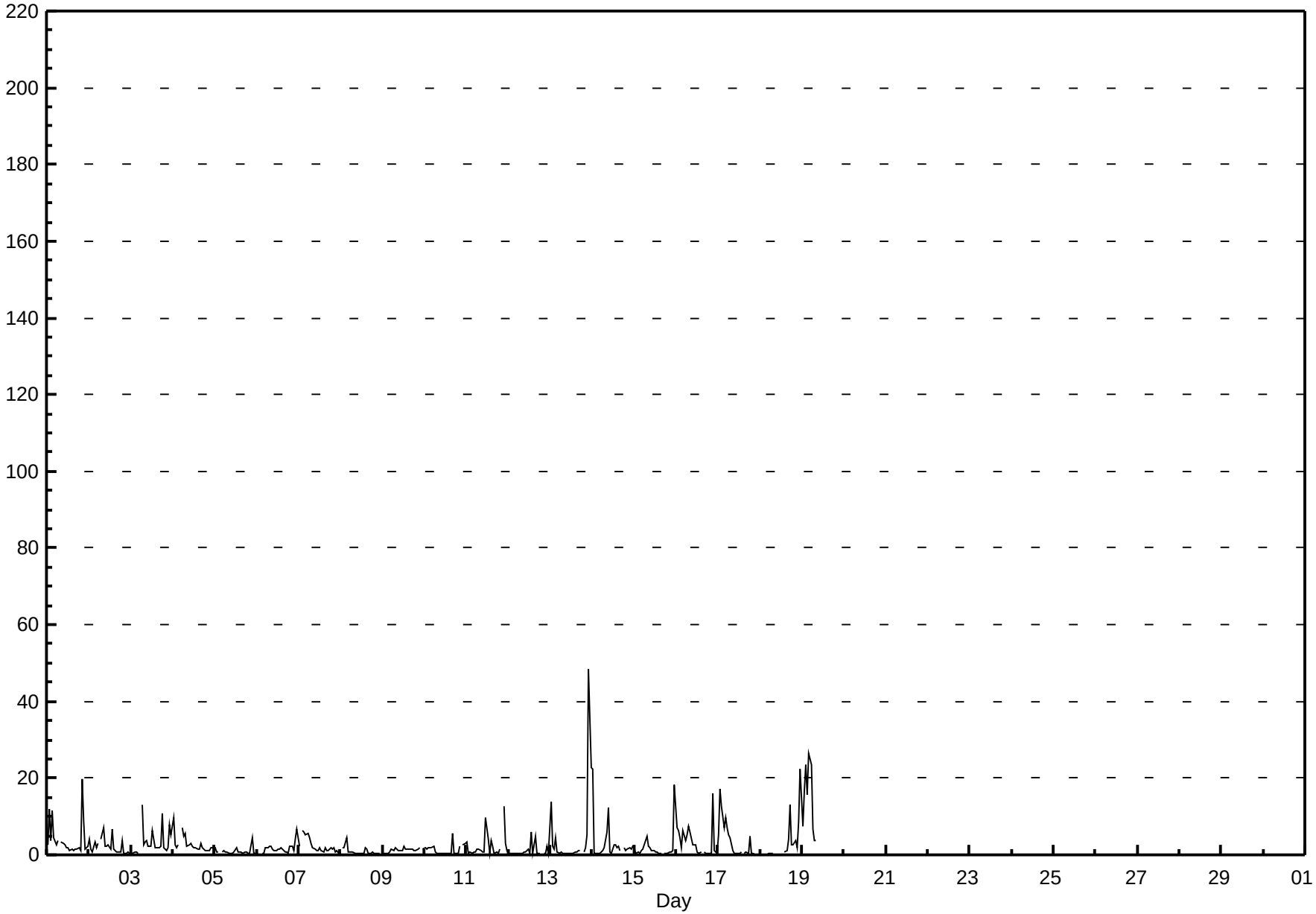
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Reno - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 37.1 ppb on Jun 19 03:00 Maximum Daily Average: 7.0 ppb on Jun 1

Minimum Value: 0 ppb on Jun 17 12:00 Minimum Daily Average: 1.6 ppb on Jun 12
Maximum Diurnal Average: 8.6 ppb at hour 1 Minimum Diurnal Average: 1.7 ppb at hour 14
Monthly Average: 4.57 ppb Percentiles: $P_1 = 0.6$ $P_{10} = 1.0$ $Q_1 = 1.6$ Median = 2.9 $Q_3 = 5.9$ $P_{90} = 10.4$ $P_{99} = 21.3$

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	9	10	4	7	7	7	10	A	8	7	5	4	3	3	3	2	4	3	4	3	13	17	11	18	7.0	17.7
2-Jun	19	14	10	17	13	10	A	11	7	5	3	3	2	2	2	2	2	3	3	6	3	3	3	2	6.3	18.9
3-Jun	1	2	5	3	4	A	10	4	4	7	4	5	5	4	3	3	3	3	3	4	4	7	9	12	4.8	12.1
4-Jun	14	5	5	6	A	4	4	4	3	3	4	3	3	2	2	2	2	2	2	2	2	2	2	2	3.5	13.7
5-Jun	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	3	7	4	4	1.8	6.7
6-Jun	3	3	A	5	5	6	5	5	4	3	3	2	2	3	3	2	2	2	1	1	3	4	8	8	3.7	8.3
7-Jun	8	A	11	9	8	9	8	6	4	3	2	2	3	1	1	2	2	2	4	4	7	9	9	5	5.2	11.3
8-Jun	A	7	5	5	5	2	1	1	1	1	1	1	1	1	3	4	1	1	1	1	1	1	1	A	2.1	6.8
9-Jun	2	2	3	5	5	4	3	3	3	2	2	2	2	2	2	3	3	3	2	3	3	5	A	6	3.2	6.2
10-Jun	6	5	5	6	6	6	3	1	1	1	1	1	1	1	1	1	1	1	1	2	6	A	7	10	3.2	10.4
11-Jun	10	4	4	3	4	2	3	3	3	2	2	2	1	1	2	1	2	1	2	2	A	7	7	2	3.0	10.0
12-Jun	1	1	1	2	2	2	2	2	2	2	2	1	1	1	1	2	1	1	1	A	2	2	2	3	1.6	3.5
13-Jun	14	11	9	11	2	1	2	1	1	1	1	1	1	1	1	3	5	5	A	6	10	21	24	11	6.3	24.3
14-Jun	11	7	7	4	3	3	4	3	3	2	2	2	2	2	1	4	2	A	5	5	6	9	11	14	4.9	14.2
15-Jun	12	11	13	12	10	7	10	10	5	4	3	2	1	1	1	1	A	2	1	3	3	4	7	13	6.0	13.4
16-Jun	13	10	8	6	8	8	8	8	5	6	4	4	2	2	2	A	2	1	1	1	1	8	3	2	4.8	12.6
17-Jun	10	15	13	14	15	14	10	9	3	1	1	0	0	1	A	1	2	2	2	2	2	2	1	1	5.2	15.4
18-Jun	1	1	1	1	1	1	1	0	C	C	C	C	C	C	3	3	3	5	3	6	10	9	13	22	4.6	22.5
19-Jun	18	26	37	16	10	18	15	8	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	37.1
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	8.6	7.6	8.0	7.3	6.2	6.0	5.7	4.5	3.6	2.9	2.3	2.0	1.9	1.7	1.9	2.2	2.2	2.3	2.3	3.0	4.7	6.8	7.2	8.1	Diurnal Average	
	18.9	25.5	37.1	17.3	15.4	18.1	15.3	10.8	8.3	7.2	5.0	4.6	4.7	3.8	3.4	3.9	5.1	5.4	4.9	5.8	12.9	20.8	24.3	22.5	Diurnal Maximum	

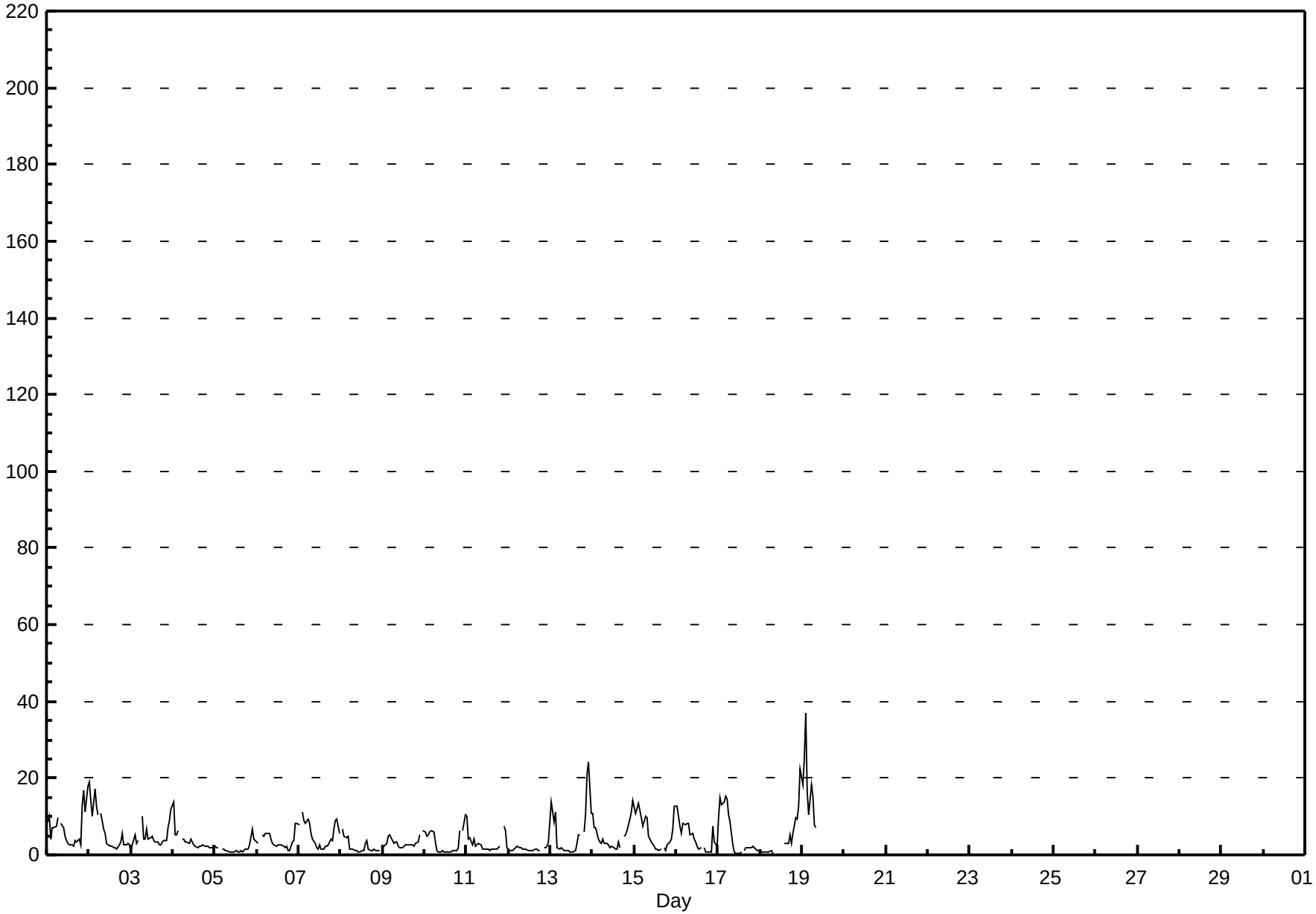
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Reno - June 2014

Maximum Value: 71.5 ppb on Jun 13 23:00

Maximum Daily Average: 13.0 ppb on Jun 1

Minimum Value: 1 ppb on Jun 17 12:00

Minimum Daily Average: 3.5 ppb on Jun 5

Maximum Diurnal Average: 15.5 ppb at hour 1

Minimum Diurnal Average: 3.4 ppb at hour 11

Monthly Average: 8.31 ppb

Percentiles: P_1 = 0.9 P_{10} = 1.6 Q_1 = 2.6 Median = 5.0 Q_3 = 11.1 P_{90} = 18.7 P_{99} = 40.7

Hours in Service:	441
Hours of Data:	417
Hours of Missing Data:	24
Hours of Calibration:	24
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	13	24	9	23	13	9	12	A	12	9	8	6	5	4	5	4	6	6	7	5	42	36	17	25	13.0	41.9
2-Jun	24	16	13	20	14	12	A	12	14	7	5	7	4	16	5	4	4	5	7	20	4	4	5	4	9.8	24.3
3-Jun	2	13	16	5	6	A	32	10	10	12	6	6	12	8	5	5	4	7	25	8	7	12	23	16	10.9	31.7
4-Jun	23	11	7	9	A	13	8	11	6	6	6	5	3	3	3	3	5	4	3	3	3	3	3	3	6.2	22.5
5-Jun	4	2	2	A	3	2	2	2	1	1	1	2	2	2	1	2	1	3	2	2	4	29	6	5	3.5	28.8
6-Jun	5	10	A	6	6	7	7	7	5	4	3	3	6	4	4	5	4	3	3	4	12	8	13	22	6.5	21.8
7-Jun	11	A	18	14	13	12	9	8	5	4	3	3	4	3	3	5	4	5	7	5	10	13	12	7	7.8	18.4
8-Jun	A	10	6	11	12	2	2	2	1	1	1	1	1	2	6	6	3	1	2	2	2	1	1	A	3.5	12.2
9-Jun	3	3	3	7	7	6	4	5	4	3	3	3	4	4	3	3	3	3	3	4	5	7	A	8	4.2	7.5
10-Jun	8	6	6	7	8	8	6	2	1	1	1	1	1	1	1	1	11	2	2	3	13	A	12	16	5.2	16.2
11-Jun	16	8	6	4	5	3	3	3	3	2	2	12	6	2	6	4	2	3	3	10	A	28	11	7	6.5	28.0
12-Jun	3	2	2	2	2	2	2	2	2	2	3	4	2	9	2	14	3	2	2	A	3	2	12	6	3.7	14.3
13-Jun	38	16	12	21	4	2	3	2	2	2	1	1	2	1	3	4	7	8	A	7	17	32	72	38	12.9	71.5
14-Jun	39	11	11	5	4	4	5	7	4	11	2	2	6	7	4	8	4	A	8	8	8	12	17	19	8.9	38.9
15-Jun	17	14	17	14	11	8	13	14	7	5	4	3	2	2	1	2	A	3	2	5	5	8	12	31	8.7	30.8
16-Jun	24	19	15	13	20	11	12	16	15	7	6	8	4	3	3	A	4	1	1	1	2	37	10	8	10.5	37.1
17-Jun	20	31	29	23	27	24	17	17	4	1	1	1	1	3	A	3	3	3	11	2	3	3	2	1	9.9	30.6
18-Jun	1	1	1	1	1	1	1	2	C	C	C	C	C	C	4	4	8	27	8	14	18	17	32	44	10.2	43.6
19-Jun	28	36	46	34	36	38	18	11	9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	46.2
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	15.5	13.0	12.2	12.1	10.7	9.1	8.6	7.3	5.8	4.6	3.4	4.2	3.8	4.3	3.5	4.5	4.3	5.0	5.6	6.1	9.3	14.8	15.2	15.2	Diurnal Average	
	38.9	36.1	46.2	33.6	36.0	38.1	31.7	16.6	14.6	11.7	7.9	12.4	11.7	15.8	6.4	14.3	11.3	27.1	25.5	19.6	41.9	37.1	71.5	43.6	Diurnal Maximum	

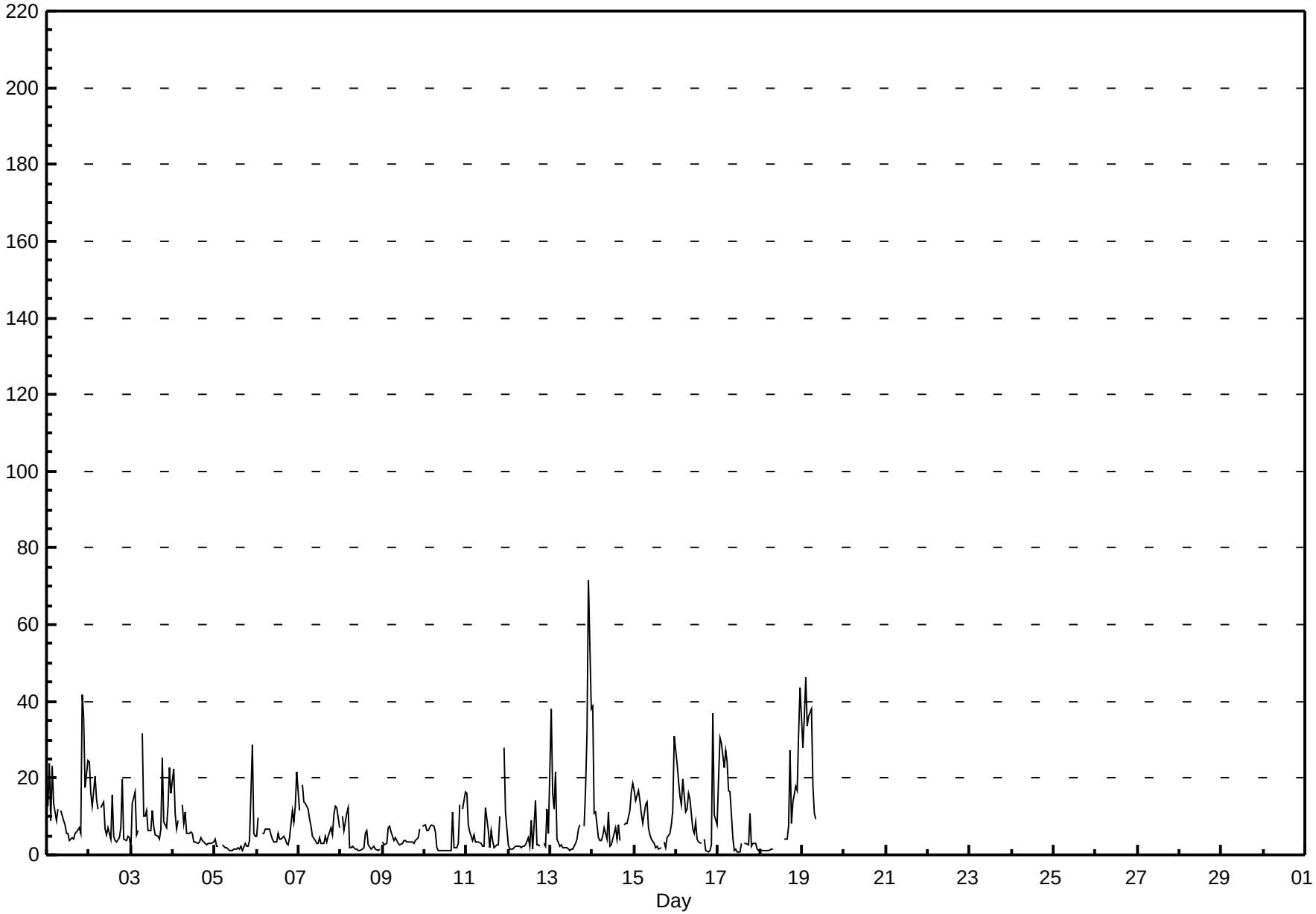
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Reno - June 2014

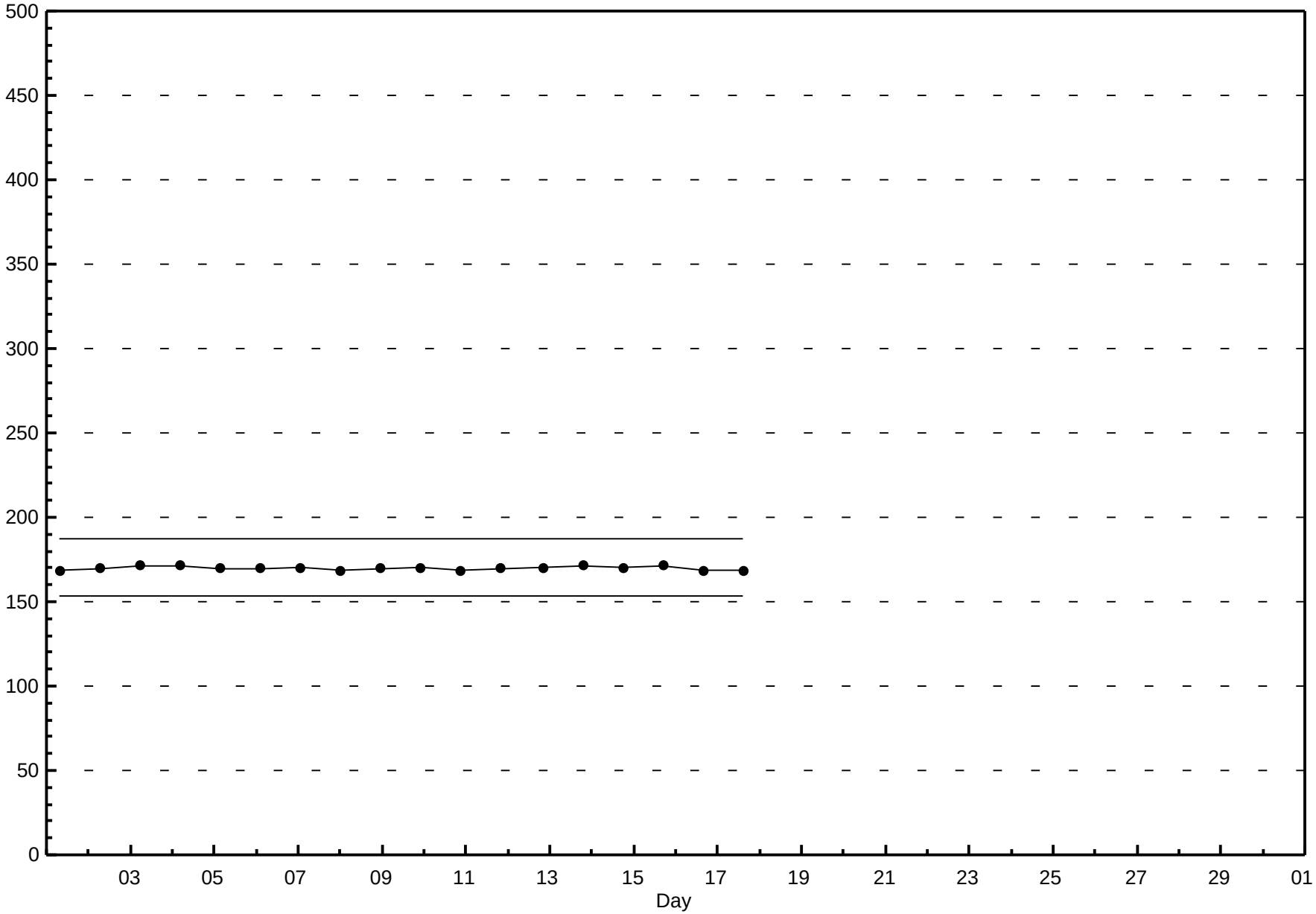


Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable Reno - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 55.8 ppb on Jun 12 17:00 Maximum Daily Average: 42.0 ppb on Jun 12

Minimum Value: 1 ppb on Jun 19 03:00 Minimum Daily Average: 13.3 ppb on Jun 4
Maximum Diurnal Average: 40.9 ppb at hour 15 Minimum Diurnal Average: 18.2 ppb at hour 4
Monthly Average: 29.58 ppb Percentiles: P_1 = 8.1 P_{10} = 13.4 Q_1 = 19.8 Median = 29.6 Q_3 = 38.4 P_{90} = 44.8 P_{99} = 54.0

Hours in Service:	441
Hours of Data:	420
Hours of Missing Data:	21
Hours of Calibration:	21
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	17	10	19	12	10	13	17	A	27	31	36	42	47	49	49	51	49	47	38	39	27	18	22	19	29.9	51.1
2-Jun	11	17	20	8	14	19	A	25	32	34	40	44	49	51	53	53	54	51	48	43	42	40	38	39	35.8	54.2
3-Jun	39	37	31	32	30	A	22	28	32	38	40	37	37	42	43	42	41	42	38	29	28	20	13	8	32.5	43.3
4-Jun	7	14	13	12	A	14	14	15	14	14	12	11	13	13	15	16	13	13	15	15	14	13	13	13	13.3	16.1
5-Jun	12	12	12	A	24	29	29	26	30	34	34	35	35	37	37	36	36	35	35	35	30	21	20	18	28.3	36.8
6-Jun	22	22	A	18	19	19	22	23	26	29	34	37	38	42	42	40	38	29	29	27	23	18	11	8	26.8	42.4
7-Jun	15	A	11	14	12	13	17	21	26	30	33	36	36	41	42	40	41	38	36	36	28	20	21	22	27.4	42.3
8-Jun	A	24	27	21	23	24	25	31	33	38	40	40	40	38	35	32	31	29	28	29	25	26	22	A	30.1	40.2
9-Jun	23	21	17	13	13	16	21	22	23	28	34	34	33	33	32	29	30	30	31	28	26	21	A	19	25.1	33.7
10-Jun	17	18	16	14	12	12	13	23	32	37	38	38	38	38	37	38	37	38	38	37	28	A	28	22	28.3	38.5
11-Jun	22	26	27	24	18	19	17	19	26	36	38	39	39	39	40	43	45	49	50	48	A	40	36	39	33.8	50.1
12-Jun	31	31	32	31	28	31	31	33	36	40	44	45	49	53	53	55	56	54	53	A	50	45	43	43	42.0	55.8
13-Jun	28	24	28	25	33	34	34	37	40	45	47	50	52	52	51	45	42	42	A	44	31	16	14	24	36.4	52.4
14-Jun	19	21	22	24	27	27	30	34	38	44	47	46	46	45	44	36	37	A	32	31	27	18	15	14	31.5	46.6
15-Jun	14	13	10	11	13	15	15	18	26	28	30	33	37	38	38	34	A	40	44	43	45	46	35	22	28.2	46.2
16-Jun	24	24	25	25	16	19	17	20	25	30	40	46	46	41	41	A	43	43	42	42	42	32	34	29	32.4	46.1
17-Jun	19	14	17	13	13	14	17	19	33	37	37	38	36	33	A	33	40	43	44	42	33	28	27	26	28.4	44.2
18-Jun	25	24	23	21	21	22	24	25	27	25	25	C	C	C	42	44	43	41	43	39	28	29	24	12	28.9	44.4
19-Jun	12	6	1	11	15	9	13	21	20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	20.8
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	19.9	19.8	19.5	18.2	18.8	19.4	21.0	24.4	28.7	33.2	36.0	38.3	39.5	40.3	40.9	39.3	39.8	39.0	37.9	35.7	31.1	26.5	24.5	22.2	Diurnal Average	
	39.4	37.1	31.6	31.9	33.2	33.8	33.9	36.9	40.3	45.2	46.7	50.1	52.0	53.1	53.0	54.5	55.8	54.1	52.7	48.3	49.6	46.2	43.4	42.8	Diurnal Maximum	

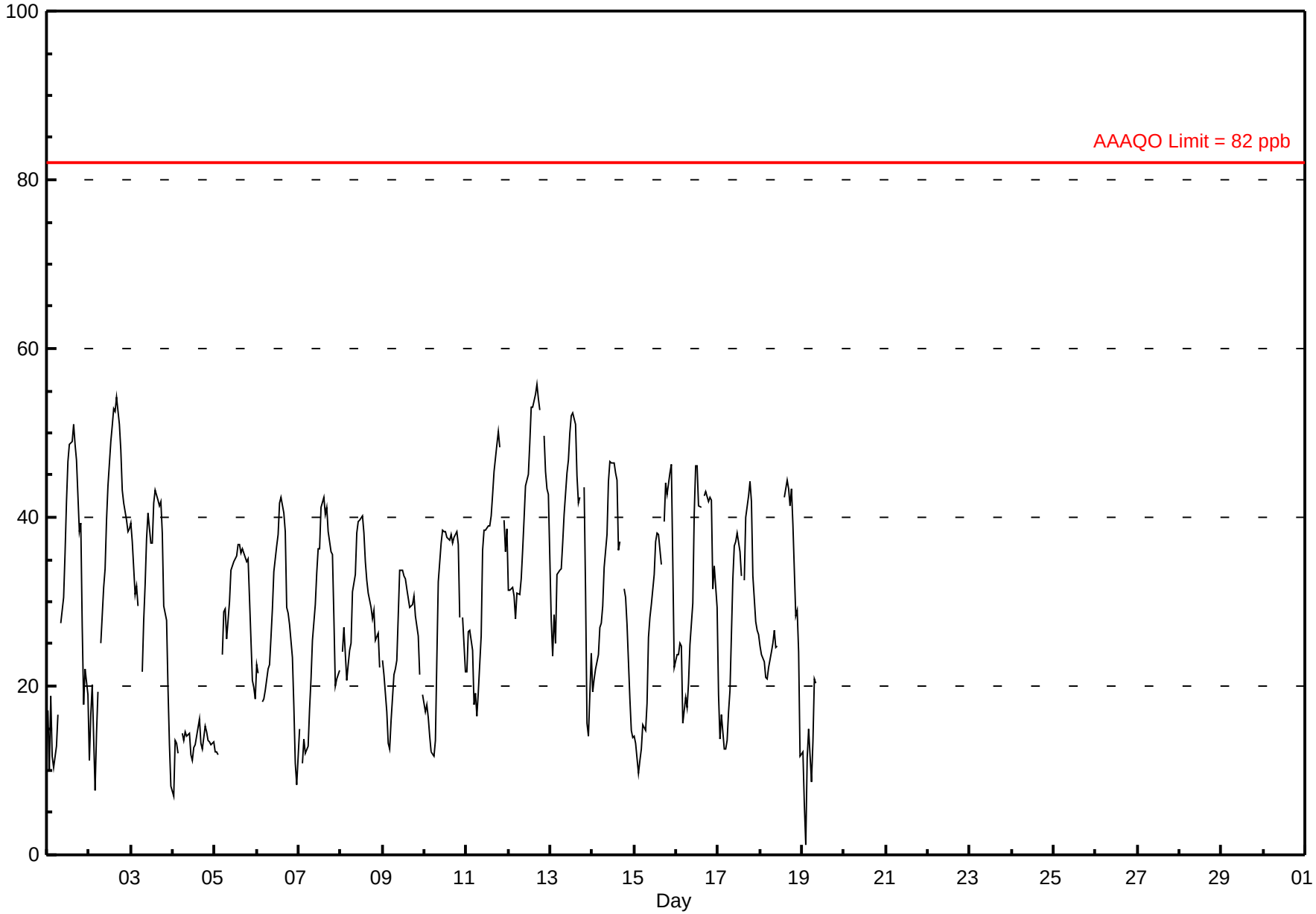
C - Calibration NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable Reno - June 2014

Maximum Value: 61.1 ppb on Jun 15 21:00

Maximum Daily Average: 44.5 ppb on Jun 12

Minimum Value: 6 ppb on Jun 19 03:00

Minimum Daily Average: 15.2 ppb on Jun 4

Maximum Diurnal Average: 43.3 ppb at hour 15

Minimum Diurnal Average: 22.7 ppb at hour 6

Monthly Average: 33.37 ppb

Percentiles: P_1 = 12.7 P_{10} = 17.3 Q_1 = 24.3 Median = 33.9 Q_3 = 42.2 P_{90} = 48.0 P_{99} = 57.4

Hours in Service:	441
Hours of Data:	420
Hours of Missing Data:	21
Hours of Calibration:	21
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	21	14	23	21	14	19	19	A	31	34	40	46	49	51	51	53	51	50	47	42	42	28	29	22	34.7	53.1
2-Jun	18	21	24	16	19	21	A	28	34	36	43	46	52	54	55	55	56	55	52	54	45	41	41	41	39.4	56.0
3-Jun	40	39	35	34	34	A	31	32	35	43	43	40	40	46	47	44	43	44	40	34	30	27	19	10	36.1	47.0
4-Jun	11	17	15	14	A	16	16	16	15	16	14	13	15	15	17	17	17	16	18	16	15	14	14	14	15.2	18.3
5-Jun	13	13	12	A	28	31	31	28	32	36	36	38	37	41	39	39	37	37	37	37	33	28	22	20	30.7	40.6
6-Jun	24	26	A	21	22	22	25	24	29	32	36	38	41	44	45	44	42	42	31	29	27	27	22	16	30.9	45.2
7-Jun	18	A	17	20	18	17	19	24	29	33	36	38	39	43	44	43	43	42	39	38	38	28	25	25	31.2	43.6
8-Jun	A	28	31	32	30	26	31	37	37	41	41	43	42	40	38	38	34	31	30	32	28	29	24	A	33.9	42.6
9-Jun	24	24	19	16	15	21	23	24	24	32	36	36	35	34	34	31	31	31	32	31	29	24	A	21	27.4	36.5
10-Jun	19	19	18	15	14	13	16	30	37	40	41	40	40	39	39	39	38	39	40	39	36	A	32	25	30.8	40.9
11-Jun	26	30	29	27	22	21	19	22	34	39	41	40	40	40	42	45	49	51	52	52	A	49	47	45	37.4	51.8
12-Jun	34	33	34	33	30	32	32	36	39	43	45	48	52	55	55	57	57	56	55	A	52	48	47	46	44.5	57.4
13-Jun	43	28	31	32	35	35	36	40	44	47	49	52	54	54	55	47	45	46	A	46	42	23	31	35	41.3	54.5
14-Jun	35	24	28	28	30	29	33	36	41	48	48	48	49	47	47	44	40	A	35	34	32	24	18	20	35.6	48.5
15-Jun	21	17	13	15	15	18	16	24	29	30	32	36	39	39	39	36	A	43	49	46	61	58	45	37	33.0	61.1
16-Jun	31	32	37	39	24	24	22	25	28	34	48	50	49	46	45	A	49	48	44	44	45	41	41	35	38.2	49.7
17-Jun	29	22	25	21	23	23	24	32	38	39	38	41	38	35	A	35	44	44	46	45	39	32	29	27	33.4	46.1
18-Jun	26	25	24	22	22	25	25	27	28	28	28	C	C	C	45	46	46	44	46	46	37	38	28	26	32.5	46.4
19-Jun	25	13	6	22	25	15	18	23	22	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	25.1
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	25.5	23.6	23.4	23.8	23.3	22.7	24.2	28.3	32.0	36.1	38.6	40.7	41.8	42.6	43.3	42.1	42.5	42.3	40.8	39.2	37.1	32.9	30.3	27.5	Diurnal Average	
	43.0	39.4	37.3	39.0	34.9	34.8	35.9	39.9	44.3	48.0	49.3	52.3	53.6	55.2	55.5	57.4	57.4	56.2	54.5	54.3	61.1	58.0	47.3	46.0	Diurnal Maximum	

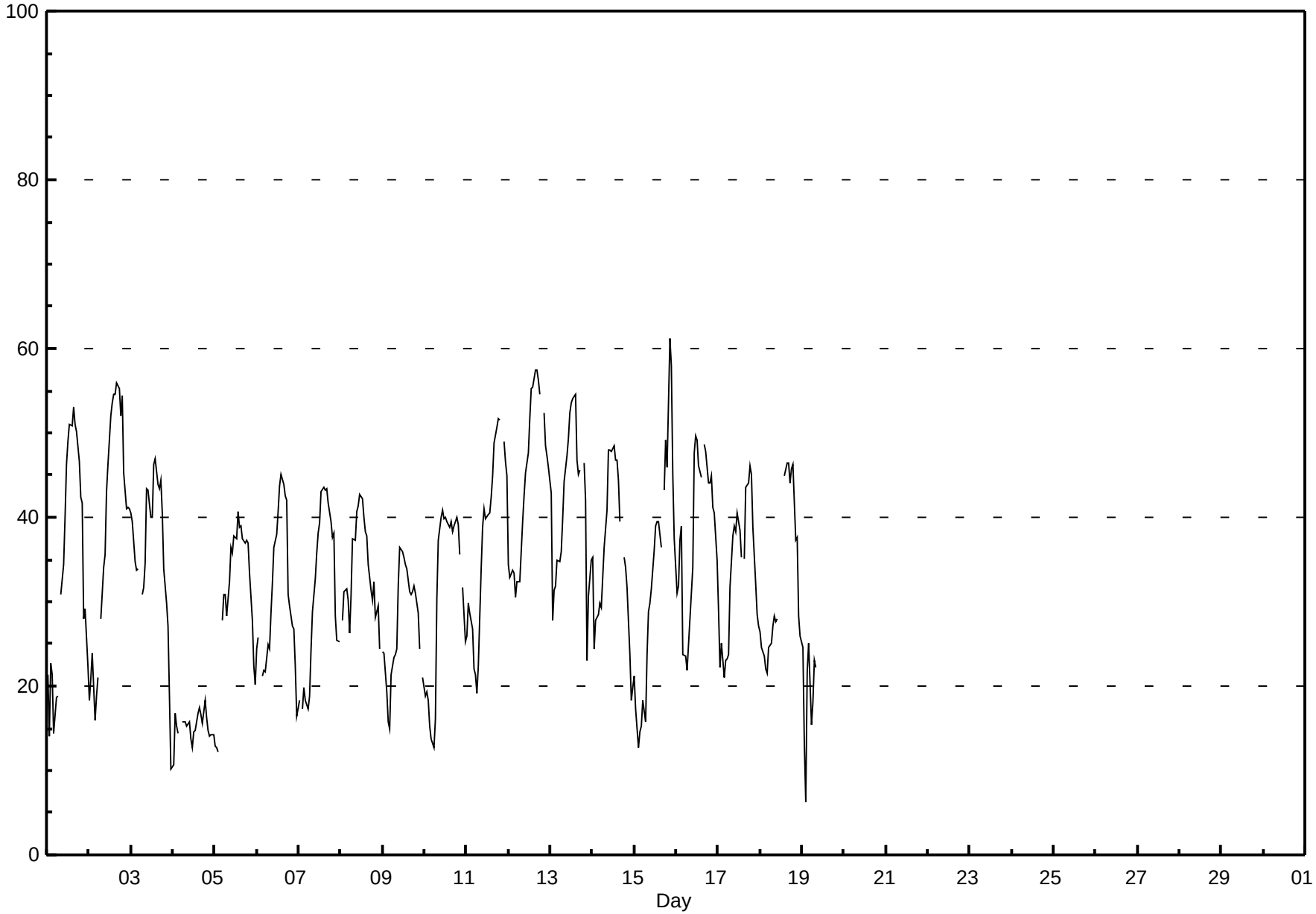
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

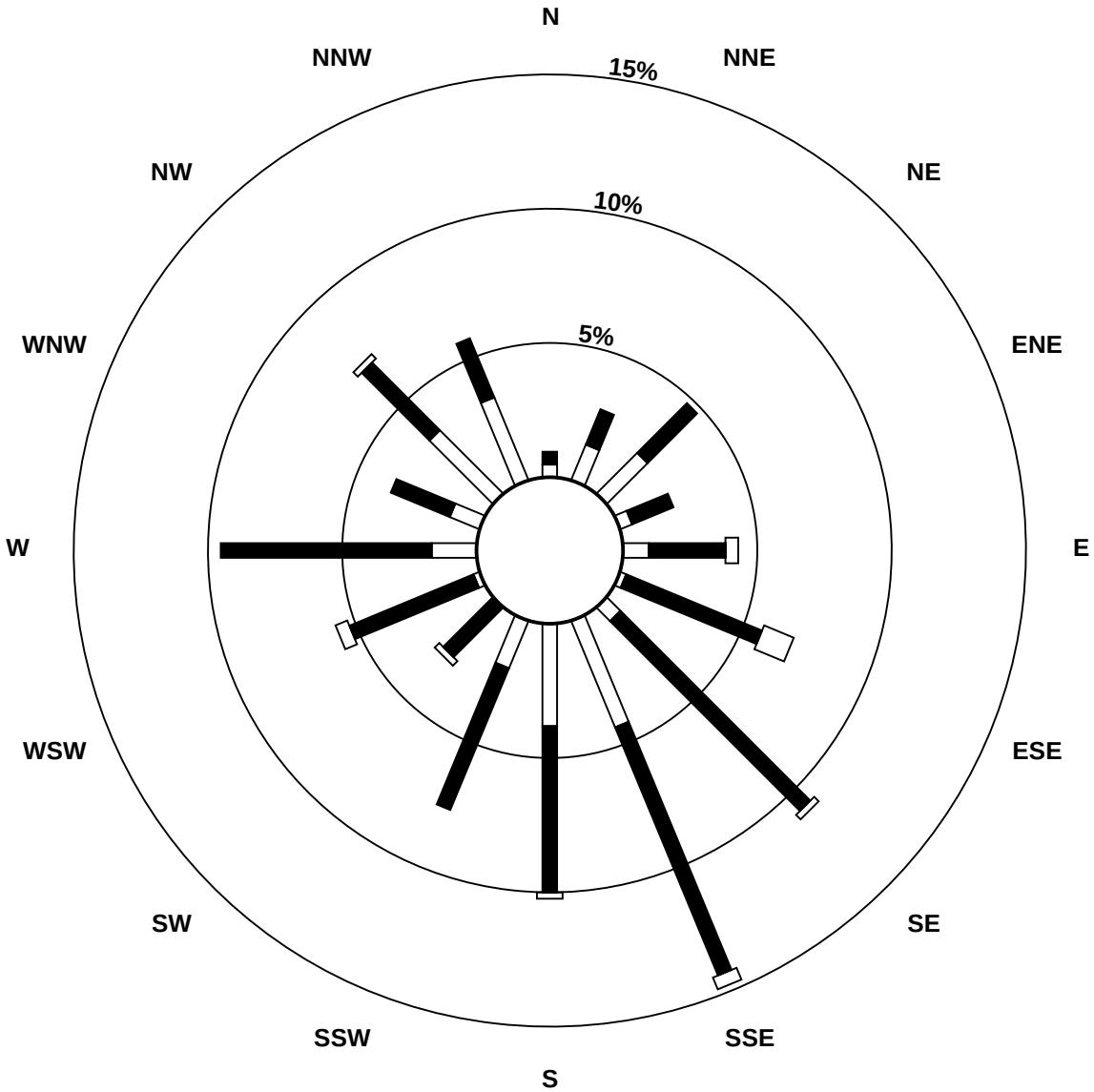
Portable Reno - June 2014



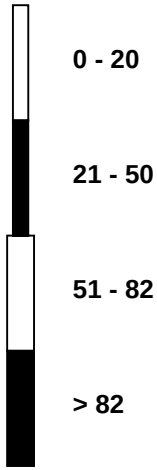
Pollutant Rose

Ozone (O_3) - ppb

Portable Reno - June 2014



Pollutant Classes (ppb)



Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Portable Reno - June 2014

Maximum Value: 53.3 ppb on Jun 12 21:00

Minimum Value: 9.9 ppb on Jun 19 07:00

Percentiles: P_1 = 11.7 P_{10} = 14.9 Q_1 = 21.7 Median = 30.3 Q_3 = 37.1 P_{90} = 42.9 P_{99} = 52.1

Hours in Service:	443
Hours of Data:	437
Hours of Missing Data:	6
Hours of Calibration:	6
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Maximum
1-Jun	33	29	27	23	20	17	15	14	15	18	21	25	30	35	40	41	44	46	46	46	44	40	36	32	46.4
2-Jun	28	24	22	18	16	16	15	16	19	22	24	30	35	39	41	44	47	49	50	50	49	48	46	44	50.3
3-Jun	43	41	39	37	36	35	33	31	30	30	32	32	33	34	37	39	40	41	40	39	38	35	32	27	42.5
4-Jun	23	20	16	14	12	12	12	13	14	14	14	13	13	13	13	14	13	13	14	14	14	14	14	14	23.1
5-Jun	14	13	13	13	14	16	19	21	23	26	29	30	31	32	33	35	35	36	36	36	35	33	31	29	35.8
6-Jun	27	25	24	22	20	20	20	21	21	22	24	26	28	31	34	36	38	38	37	36	34	31	27	23	37.5
7-Jun	20	19	16	14	13	12	13	15	16	18	21	23	27	30	33	36	38	39	39	39	38	35	33	30	39.0
8-Jun	29	27	25	23	22	23	24	25	26	28	29	32	34	36	37	37	37	36	34	33	31	30	28	27	37.0
9-Jun	26	25	23	21	19	18	18	18	18	19	21	24	26	28	30	31	31	32	31	31	30	28	28	26	31.7
10-Jun	25	23	21	19	17	15	15	16	18	20	23	26	29	32	35	37	38	38	38	38	36	36	35	33	37.8
11-Jun	30	29	27	25	24	23	22	21	22	23	25	26	29	32	35	37	40	41	43	44	45	45	44	44	45.0
12-Jun	42	39	37	34	33	32	32	31	32	33	34	36	39	41	44	47	49	51	52	53	53	52	51	49	53.3
13-Jun	45	41	37	36	34	32	31	30	32	35	37	40	42	45	47	48	48	48	48	47	44	39	33	30	48.0
14-Jun	27	24	24	21	21	22	24	25	28	31	34	37	39	41	43	43	43	43	41	39	36	32	28	25	43.4
15-Jun	21	20	18	15	13	13	13	14	15	17	19	22	25	28	31	33	34	36	38	39	40	41	41	39	41.5
16-Jun	37	35	33	31	27	24	21	21	21	22	24	27	30	33	36	39	41	43	43	43	42	41	40	38	43.2
17-Jun	35	32	29	25	21	19	17	16	17	20	23	26	29	31	33	35	36	37	38	39	38	37	36	35	38.6
18-Jun	33	31	28	26	24	24	23	23	23	23	24	24	25	N	N	N	N	N	N	42	40	39	37	33	42.3
19-Jun	29	24	19	15	14	11	10	11	12	13	15	N	N	N	N	N	N	N	N	N	N	N	N	N	28.7
20-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	--
21-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	--
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	N	N	N	N	N	N	N	--
24-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	--
25-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	--
26-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	--
27-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	--
28-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	--
29-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	--
30-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	--
Diurnal Maximums	45.1	40.8	38.6	37.2	35.7	35.1	32.8	31.2	31.9	34.6	36.9	40.0	42.3	44.7	46.8	47.8	49.2	51.0	52.1	53.1	53.3	52.2	50.8	49.1	

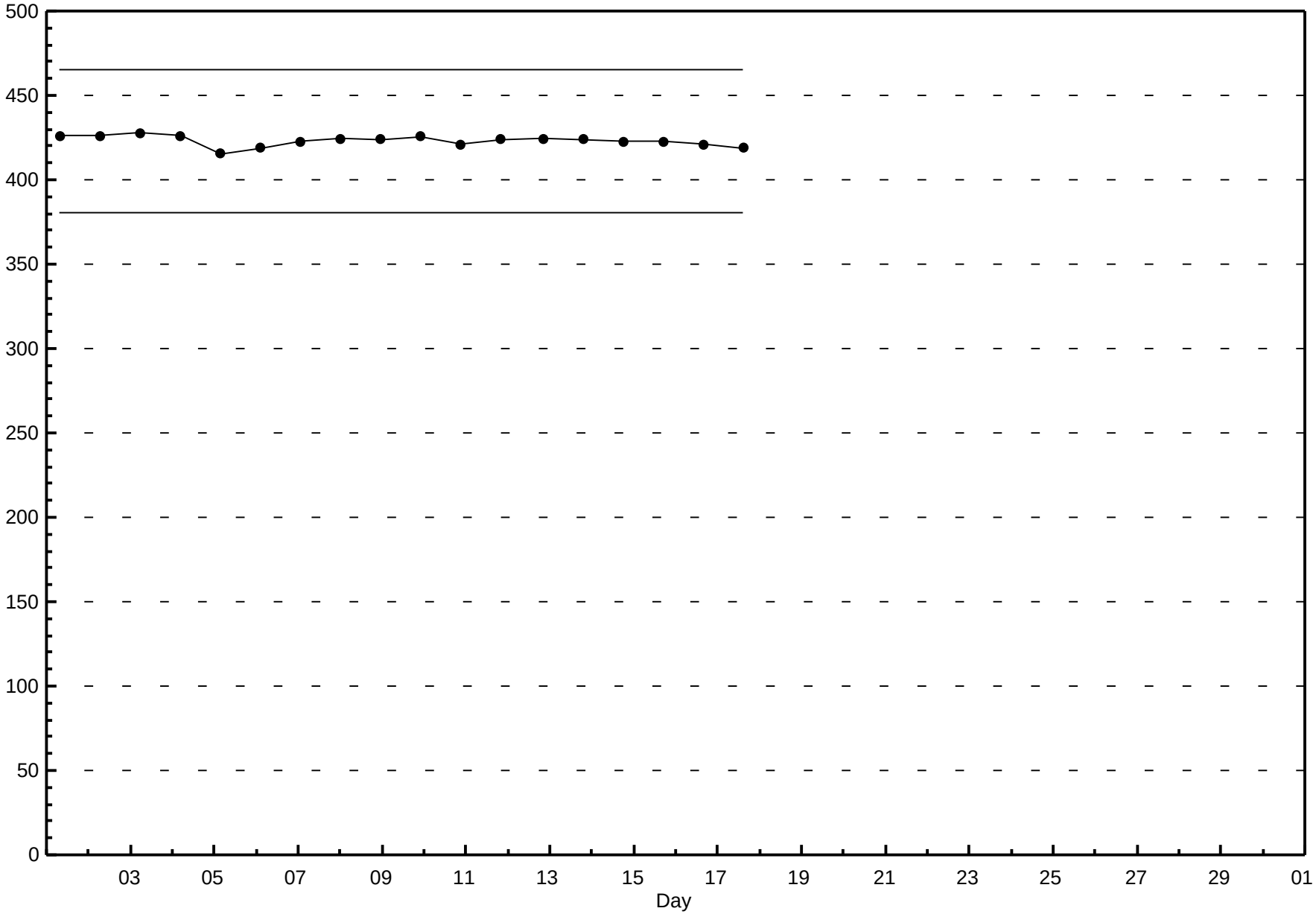
N - Not Valid

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Reno - June 2014

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

Maximum Value: 2.25 ppm on Jun 2 02:00

Maximum Daily Average: 2.06 ppm on Jun 6

Minimum Value: 1.4 ppm on Jun 12 14:00

Minimum Daily Average: 1.97 ppm on Jun 12

Maximum Diurnal Average: 2.04 ppm at hour 5

Minimum Diurnal Average: 1.96 ppm at hour 14

Monthly Average: 2.010 ppm

Percentiles: P_1 = 1.93 P_{10} = 1.96 Q_1 = 1.98 Median = 2.01 Q_3 = 2.03 P_{90} = 2.06 P_{99} = 2.16

Hours in Service:	441
Hours of Data:	419
Hours of Missing Data:	22
Hours of Calibration:	22
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	2.0	2.0	2.0	2.0	2.0	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	2.1	2.1	2.01	2.12
2-Jun	2.2	2.2	2.1	2.1	2.1	2.1	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.05	2.25
3-Jun	2.0	2.0	2.0	2.0	2.0	A	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.06
4-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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.03
5-Jun	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	2.1	2.1	2.04	2.08
6-Jun	2.1	2.1	A	2.1	2.2	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	2.0	2.0	2.0	2.0	2.1	2.1	2.06	2.17
7-Jun	2.2	A	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.04	2.25
8-Jun	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.00	2.09
9-Jun	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	1.98	2.05
10-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.00	2.07
11-Jun	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.04	2.10
12-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.4	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.97	2.05
13-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.99	2.03
14-Jun	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.0	2.0	1.99	2.07
15-Jun	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	A	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.00	2.14
16-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.05
17-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.02
18-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	C	C	C	C	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.01	2.06
19-Jun	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	2.05
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	2.04	2.04	2.03	2.04	2.04	2.04	2.03	2.03	2.02	2.01	2.00	2.00	1.99	1.96	1.99	1.99	1.99	1.98	1.98	1.98	1.98	2.00	2.02	2.03	Diurnal Average	
	2.18	2.25	2.25	2.14	2.17	2.16	2.12	2.11	2.08	2.06	2.06	2.04	2.04	2.03	2.04	2.03	2.03	2.03	2.04	2.03	2.03	2.04	2.11	2.12	Diurnal Maximum	

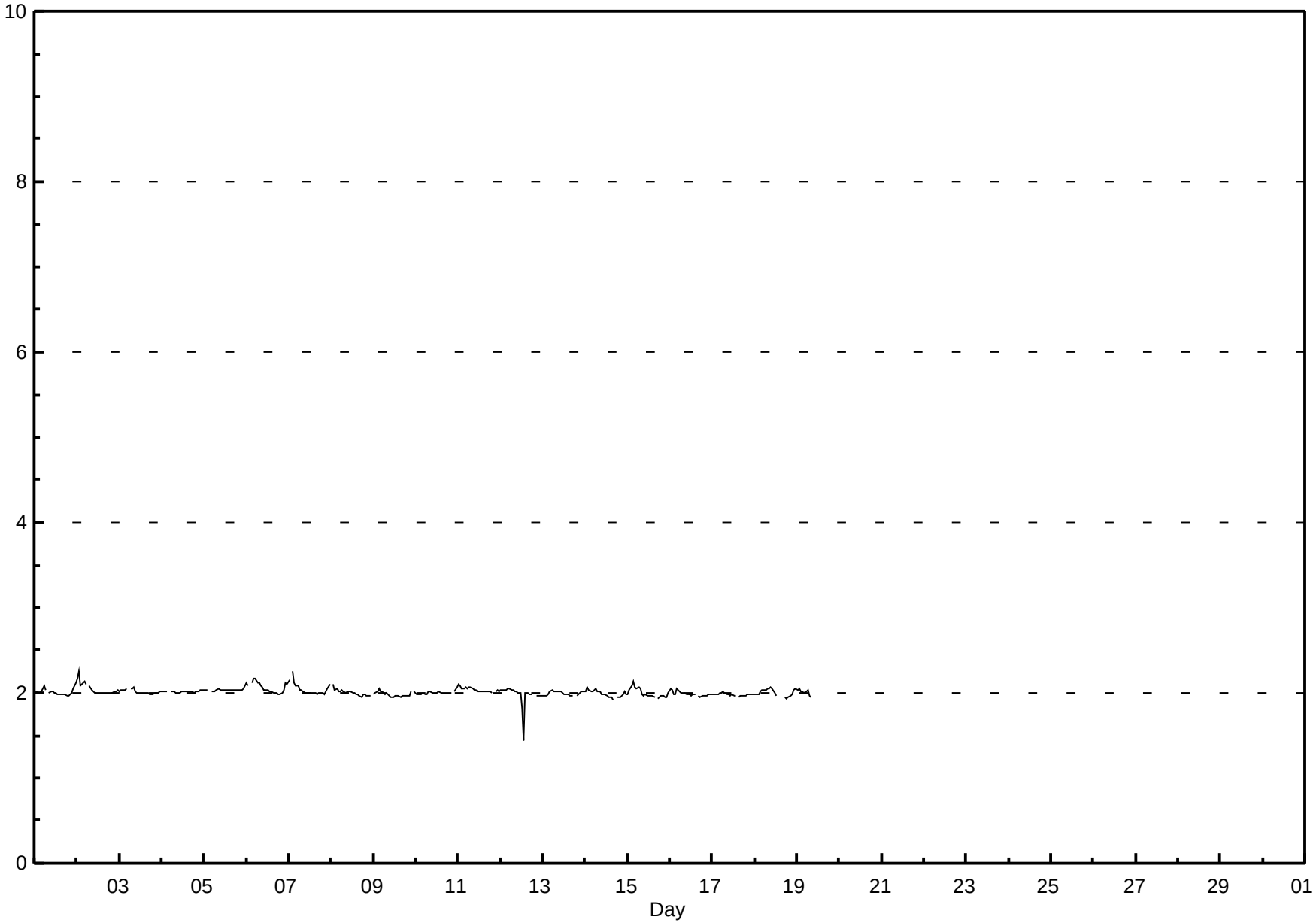
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Portable Reno - June 2014

Maximum Value: 2.41 ppm on Jun 2 02:00

Maximum Daily Average: 2.10 ppm on Jun 6

Minimum Value: 1.9 ppm on Jun 14 17:00

Maximum Diurnal Average: 2.08 ppm at hour 24

Monthly Average: 2.041 ppm

Minimum Daily Average: 2.00 ppm on Jun 17

Minimum Diurnal Average: 2.00 ppm at hour 18

Percentiles: P_1 = 1.96 P_{10} = 1.99 Q_1 = 2.01 Median = 2.03 Q_3 = 2.06 P_{90} = 2.10 P_{99} = 2.22

Hours in Service:	441
Hours of Data:	419
Hours of Missing Data:	22
Hours of Calibration:	22
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	2.1	2.0	2.0	2.0	2.0	2.2	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	2.1	2.2	2.04	2.18
2-Jun	2.4	2.4	2.1	2.2	2.2	2.1	A	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	2.0	2.0	2.0	2.09	2.41
3-Jun	2.0	2.0	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.04	2.09
4-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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.04	2.05
5-Jun	2.1	2.0	2.1	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.06	2.13
6-Jun	2.2	2.1	A	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.10	2.22
7-Jun	2.2	A	2.3	2.2	2.1	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.08	2.29
8-Jun	A	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.03	2.13
9-Jun	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.1	2.01	2.09
10-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.02	2.11
11-Jun	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.06	2.13
12-Jun	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0	2.03	2.07
13-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.02	2.09
14-Jun	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.1	2.0	2.02	2.13
15-Jun	2.1	2.1	2.2	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	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.04	2.20
16-Jun	2.1	2.1	2.0	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.02	2.18
17-Jun	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.04
18-Jun	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	C	C	C	C	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.03	2.09
19-Jun	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.0	2.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	2.10
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	2.08	2.08	2.07	2.08	2.08	2.07	2.06	2.06	2.04	2.03	2.03	2.03	2.01	2.02	2.01	2.01	2.01	2.00	2.00	2.00	2.02	2.03	2.05	2.08	Diurnal Average	
	2.37	2.41	2.29	2.25	2.20	2.19	2.16	2.18	2.09	2.09	2.08	2.07	2.06	2.08	2.05	2.05	2.06	2.04	2.07	2.05	2.14	2.13	2.22	2.19	Diurnal Maximum	

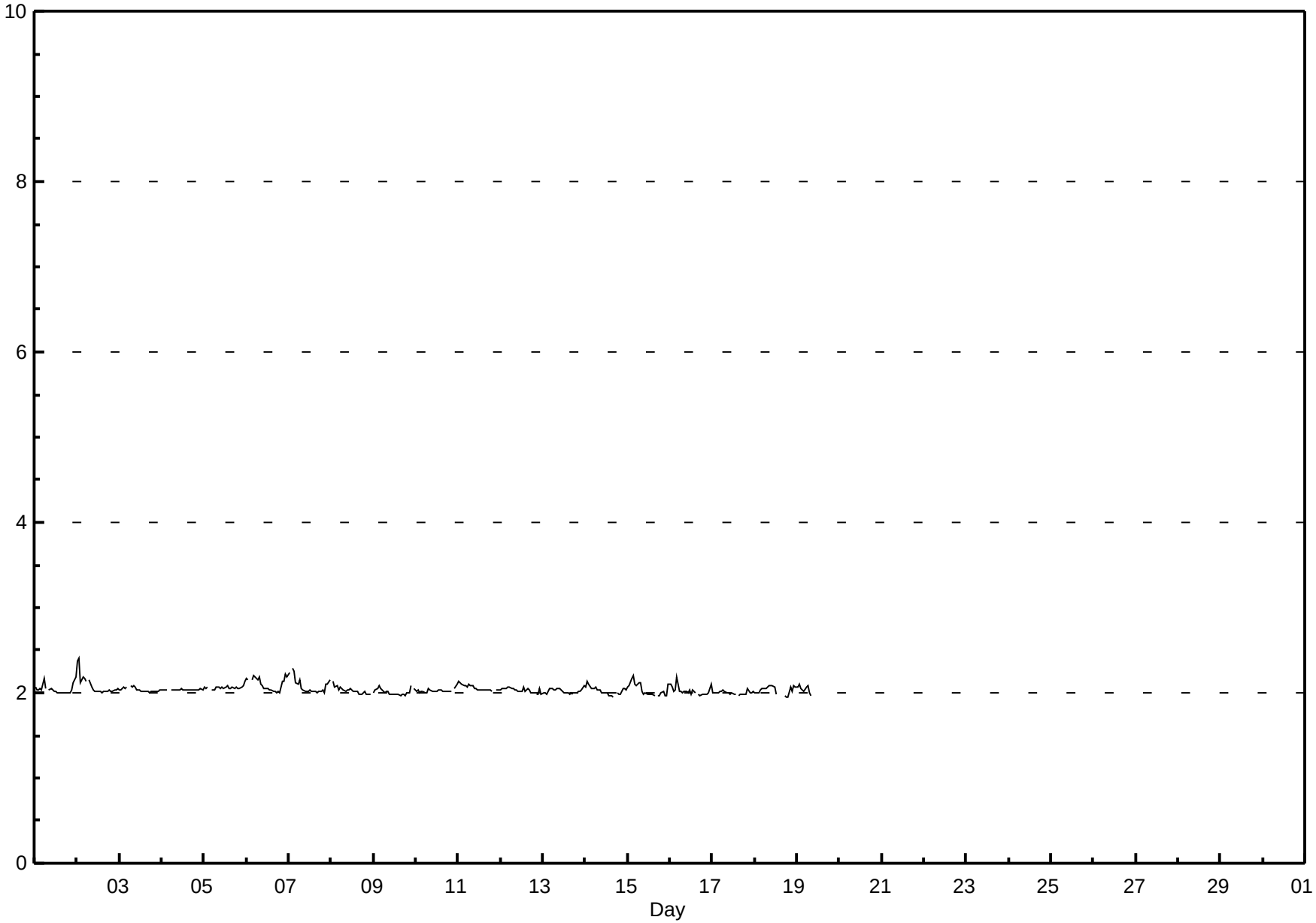
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

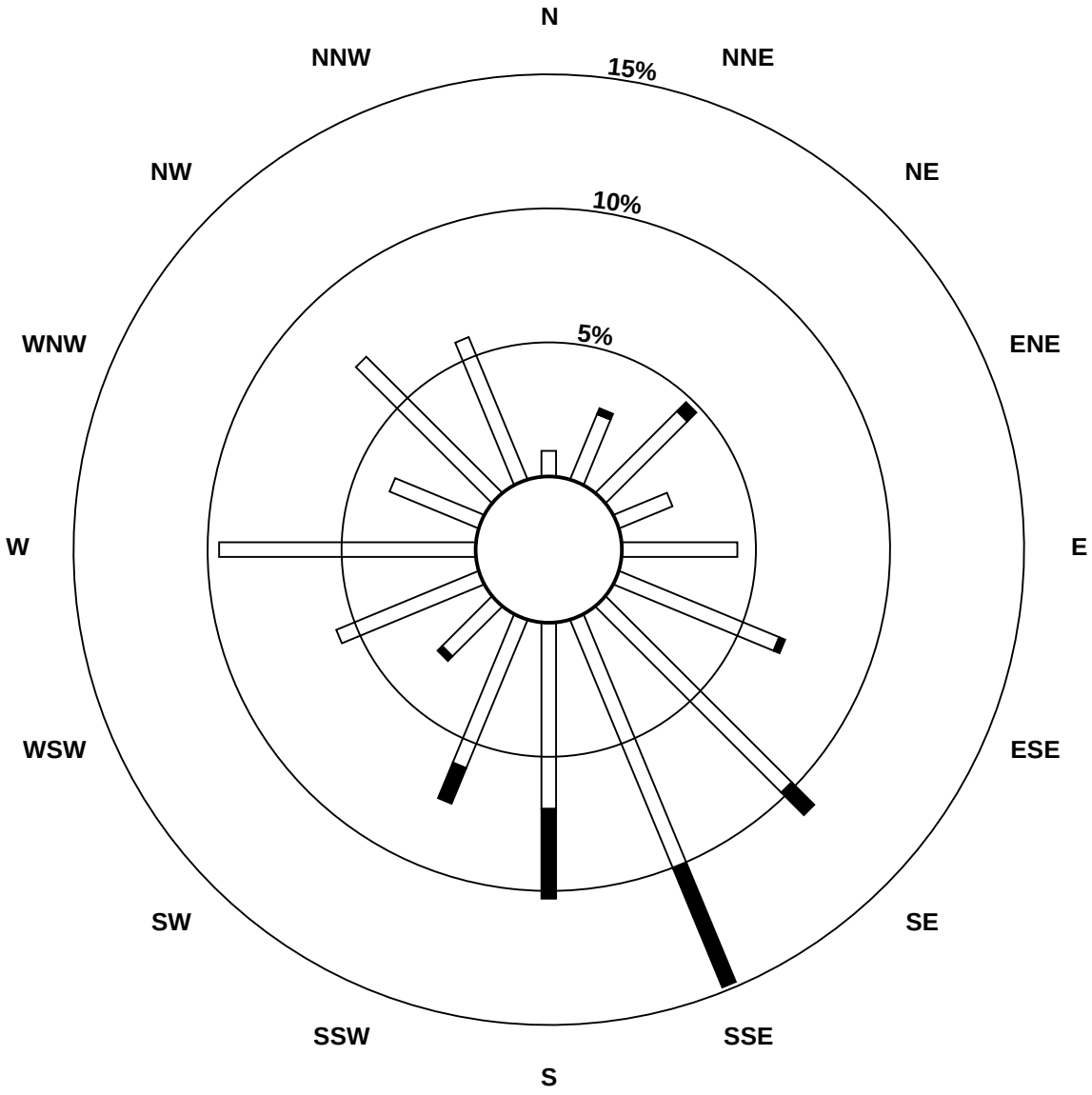
Portable Reno - June 2014



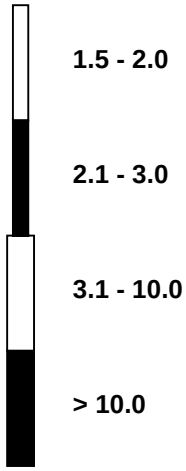
Pollutant Rose

Total Hydrocarbons (THC) - ppm

Portable Reno - June 2014



Pollutant Classes (ppm)

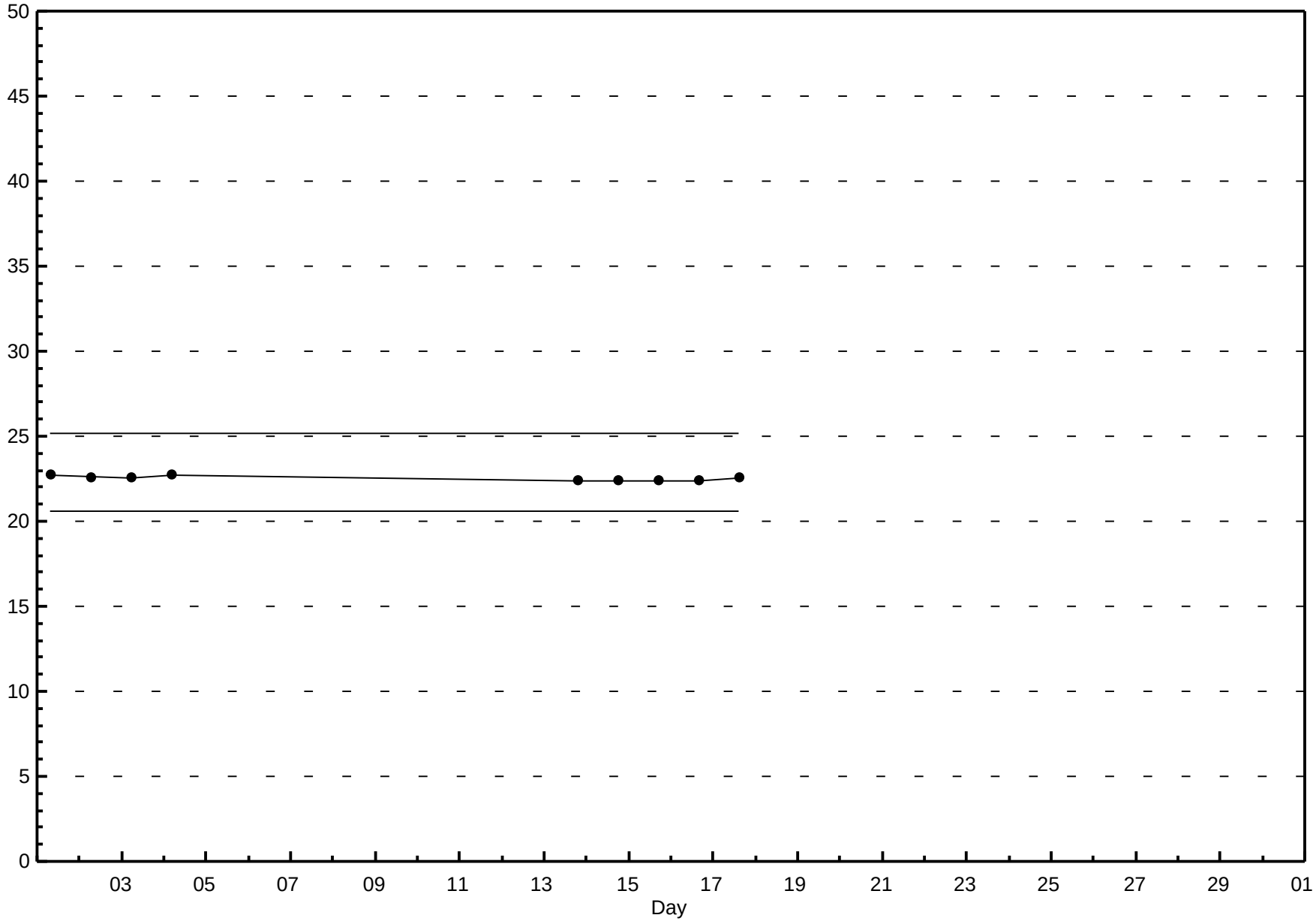


Peace Airshed Zone Association

Span Responses

Total Hydrocarbons (THC)

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Reno - June 2014

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 12.4 $\mu g/m^3$ on Jun 3 19:00

Maximum Daily Average: 5.2 $\mu g/m^3$ on Jun 3

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

Maximum Diurnal Average: 3.4 $\mu g/m^3$ at hour 7

Monthly Average: 2.09 $\mu g/m^3$

Minimum Daily Average: 0.0 $\mu g/m^3$ on Jun 4

Minimum Diurnal Average: 1.5 $\mu g/m^3$ at hour 17

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.4 Median = 1.7 Q_3 = 3.3 P_{90} = 4.6 P_{99} = 7.0

Hours in Service:	441
Hours of Data:	441
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	4	3	5	4	7	7	6	6	5	5	4	4	2	3	1	2	4	3	4	1	2	3	2	3	3.7	6.9
2-Jun	2	2	3	4	5	5	5	5	5	4	3	2	1	4	3	5	1	2	2	3	2	2	2	1	3.1	5.5
3-Jun	3	4	4	4	6	5	4	5	5	3	3	9	8	3	7	10	6	5	12	6	2	4	6	1	5.2	12.4
4-Jun	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	0.9
5-Jun	0	0	0	1	1	2	2	1	1	0	1	1	3	0	0	2	0	0	1	0	1	1	1	1	0.8	2.5
6-Jun	0	1	1	1	2	3	3	4	3	2	2	2	3	0	0	2	3	6	0	1	0	0	2	0	1.8	6.0
7-Jun	1	2	0	1	2	3	1	2	1	0	0	0	0	0	0	1	0	1	2	0	1	1	1	2	0.9	2.7
8-Jun	4	3	1	2	1	2	3	2	1	0	1	0	2	2	4	2	0	1	0	0	0	0	0	0	1.3	3.6
9-Jun	0	0	1	1	2	1	1	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.4	1.8
10-Jun	0	0	0	0	1	1	2	1	0	1	2	3	2	1	2	2	2	2	2	2	3	1	1	1	1.4	3.2
11-Jun	2	2	2	3	3	3	4	4	2	1	1	0	0	0	0	0	0	1	1	1	0	0	1	2	1.4	3.9
12-Jun	2	3	3	3	4	4	4	4	4	3	0	1	2	0	2	2	1	0	2	4	5	3	3	2	2.5	4.8
13-Jun	3	2	2	2	4	5	5	4	4	2	2	0	1	1	3	3	4	3	3	3	6	5	3	3	3.0	6.5
14-Jun	3	4	4	4	4	4	4	3	2	1	4	5	2	0	3	8	3	4	0	3	2	5	2	2	3.1	8.0
15-Jun	0	1	2	2	2	2	2	2	0	0	0	0	0	0	2	4	1	0	2	2	2	4	2	3	1.4	4.4
16-Jun	3	2	3	3	5	6	5	6	5	4	1	1	0	8	2	4	0	0	0	1	0	2	2	2	2.7	8.2
17-Jun	0	1	0	2	2	2	3	0	1	0	1	1	4	3	2	1	0	1	2	4	1	0	1	2	1.5	4.3
18-Jun	0	1	1	1	1	3	4	4	4	4	5	1	2	0	0	5	2	0	3	5	5	4	4	4	2.6	5.4
19-Jun	4	4	4	4	3	4	6	0	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	6.3
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	1.8	1.9	1.9	2.2	2.8	3.3	3.4	2.7	2.4	1.7	1.7	1.7	1.7	1.6	1.8	3.1	1.5	1.6	2.0	2.0	1.9	1.9	1.9	1.6	Diurnal Average	
	4.4	4.4	5.2	4.3	6.7	6.9	6.3	5.7	5.4	5.1	5.4	9.4	7.7	8.2	6.6	9.7	6.2	6.0	12.4	6.3	6.5	4.5	5.7	4.3	Diurnal Maximum	

NS - Not in service

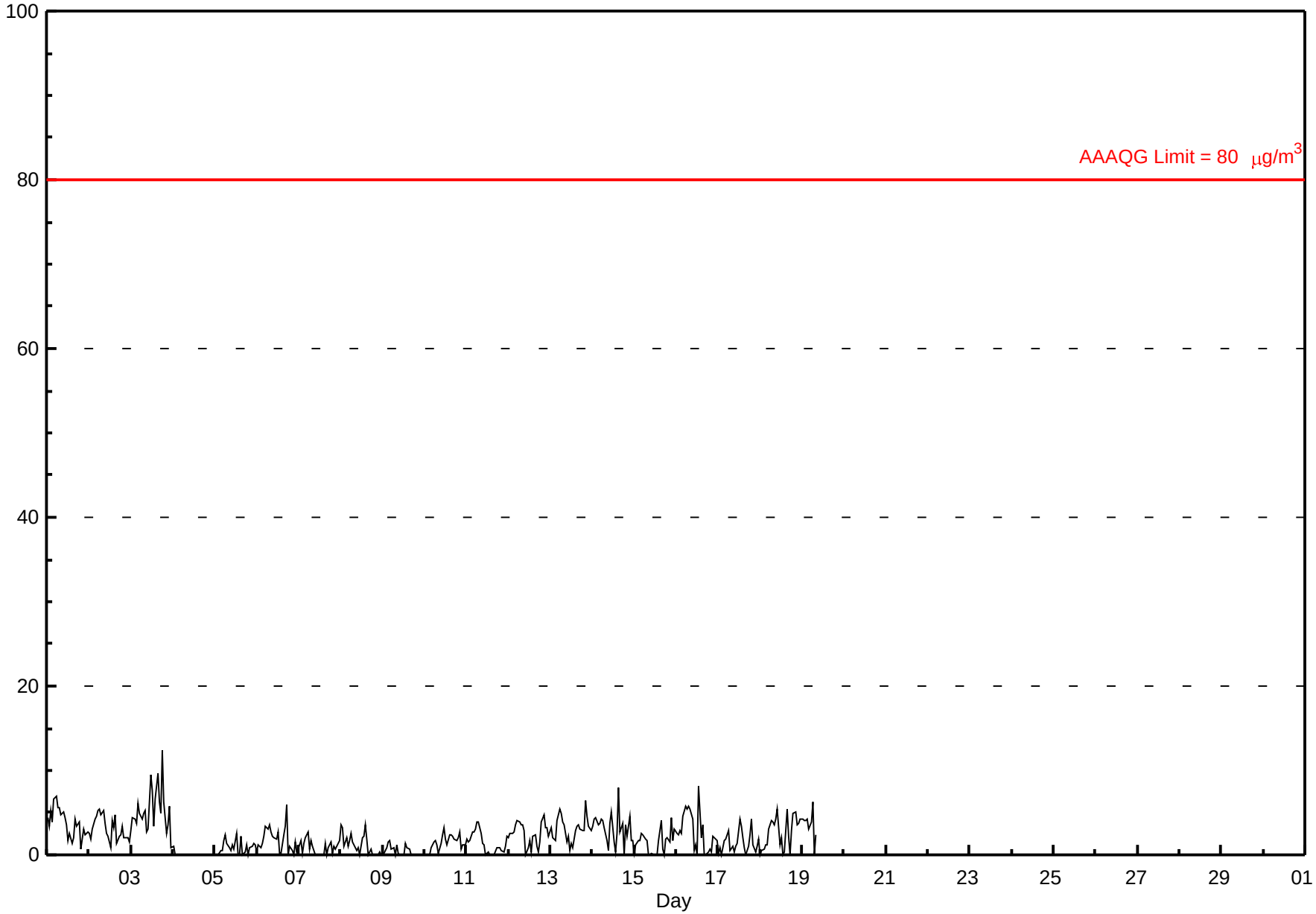
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Maximums

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Reno - June 2014

Maximum Value: 41.6 $\mu g/m^3$ on Jun 3 19:00

Maximum Daily Average: 9.9 $\mu g/m^3$ on Jun 3

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

Maximum Diurnal Average: 9.1 $\mu g/m^3$ at hour 16

Monthly Average: 5.62 $\mu g/m^3$

Minimum Daily Average: 1.5 $\mu g/m^3$ on Jun 4

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

Percentiles: P_1 = 0.0 P_{10} = 2.0 Q_1 = 3.3 Median = 5.0 Q_3 = 7.0 P_{90} = 9.6 P_{99} = 14.0

Hours in Service:	441
Hours of Data:	441
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	7	6	7	7	9	11	8	8	7	7	7	7	6	5	4	5	7	7	9	4	4	5	4	4	6.4	11.0
2-Jun	4	3	5	6	6	8	7	7	8	6	7	11	10	17	9	22	5	6	7	7	4	4	4	3	7.3	22.4
3-Jun	4	6	6	6	10	10	9	7	10	6	6	15	11	6	9	13	8	9	42	16	4	6	14	2	9.9	41.6
4-Jun	4	2	1	1	2	5	1	2	2	0	1	1	1	1	0	1	1	1	3	2	1	2	1	0	1.5	4.6
5-Jun	0	0	1	2	2	3	5	4	4	2	3	3	6	3	3	10	3	3	6	4	3	3	4	3	3.3	10.3
6-Jun	2	4	2	4	4	5	6	8	4	5	5	5	5	4	4	6	10	16	2	5	3	1	4	5	5.0	15.7
7-Jun	4	3	2	4	5	6	3	5	5	3	3	3	2	2	2	8	1	5	6	5	3	5	3	5	3.9	8.3
8-Jun	6	6	5	5	4	4	5	6	5	3	5	2	5	5	12	7	3	3	3	2	3	1	2	2	4.3	11.7
9-Jun	0	2	3	3	3	2	3	1	3	2	2	4	4	7	5	6	2	2	4	2	1	1	1	1	2.8	6.6
10-Jun	1	1	1	2	3	3	4	4	2	5	5	5	4	4	5	6	8	5	5	6	5	5	3	4	3.9	7.8
11-Jun	4	5	4	6	5	5	6	6	6	4	4	4	4	3	2	3	4	4	5	5	11	6	5	5	4.8	11.1
12-Jun	4	4	4	4	5	6	6	6	7	6	5	6	6	6	6	6	5	4	8	7	10	5	5	6	5.8	9.7
13-Jun	9	4	3	4	6	7	7	6	6	5	5	4	5	5	13	8	6	8	10	7	9	7	9	9	6.8	13.5
14-Jun	11	8	8	6	6	6	7	6	4	5	6	8	8	6	7	14	13	12	7	9	8	13	6	4	7.8	14.3
15-Jun	4	3	3	3	5	6	4	4	3	3	3	2	2	4	5	10	5	4	7	7	10	13	7	6	5.1	13.0
16-Jun	5	4	5	8	9	11	8	9	9	9	7	8	6	13	11	18	16	6	3	4	7	8	5	7	8.1	18.0
17-Jun	6	6	2	4	3	6	8	3	4	6	3	8	11	8	7	7	5	6	6	10	6	2	3	3	5.5	10.6
18-Jun	2	3	2	3	3	6	7	8	8	8	9	11	12	6	7	11	7	4	16	10	26	8	8	8	8.1	26.2
19-Jun	8	7	6	8	9	13	12	4	7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	12.8
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	4.4	4.0	3.7	4.4	5.2	6.5	6.0	5.5	5.5	4.8	4.8	6.0	5.9	5.7	6.2	9.1	6.1	5.8	8.3	6.2	6.5	5.3	5.0	4.4	Diurnal Average	
	10.6	7.7	7.6	8.0	9.9	12.8	12.0	9.2	10.0	8.7	9.2	14.6	11.6	16.6	13.5	22.4	15.6	15.7	41.6	16.5	26.2	13.4	14.4	9.4	Diurnal Maximum	

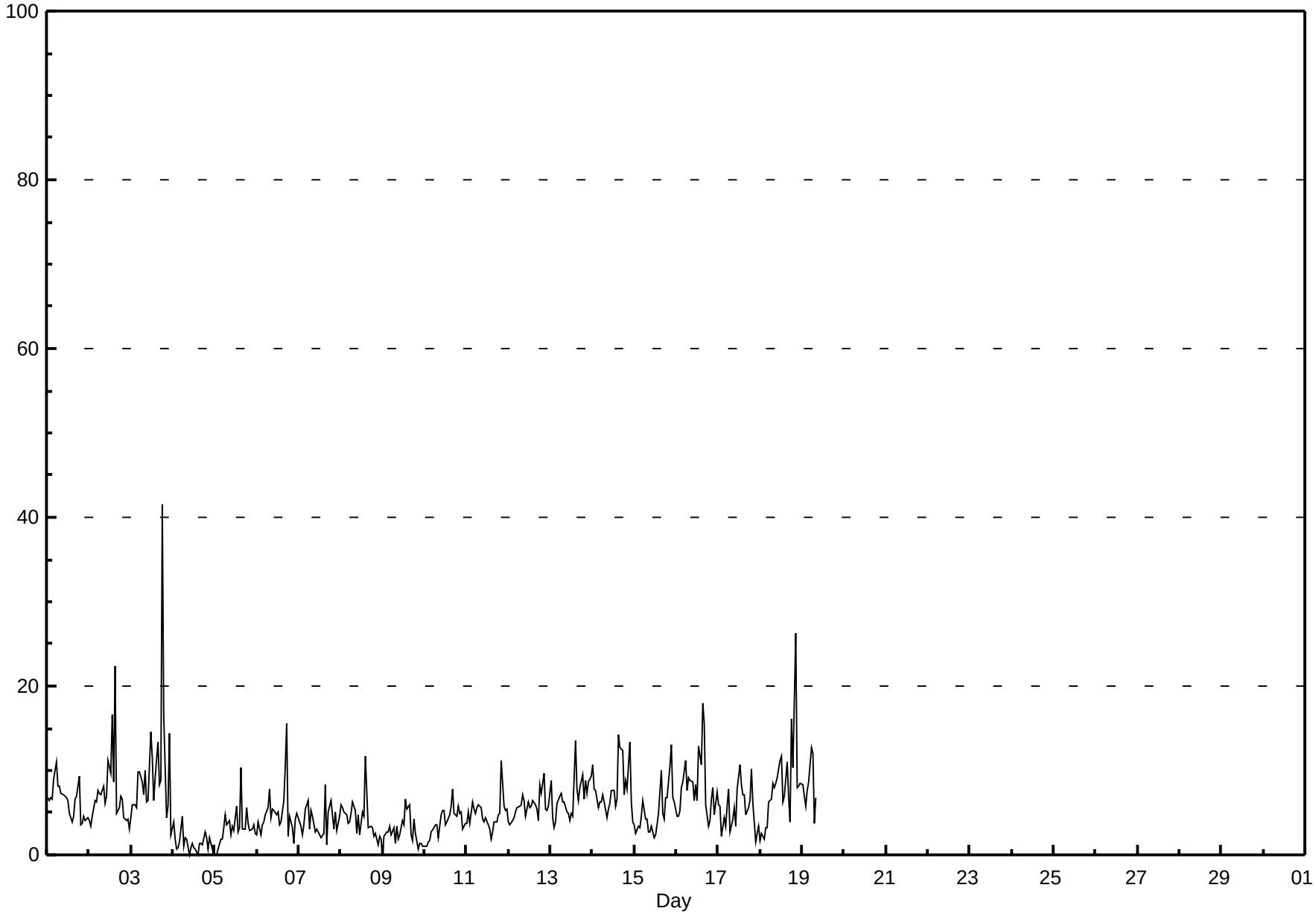
NS - Not in service

Peace Airshed Zone Association

Hourly Maximums

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

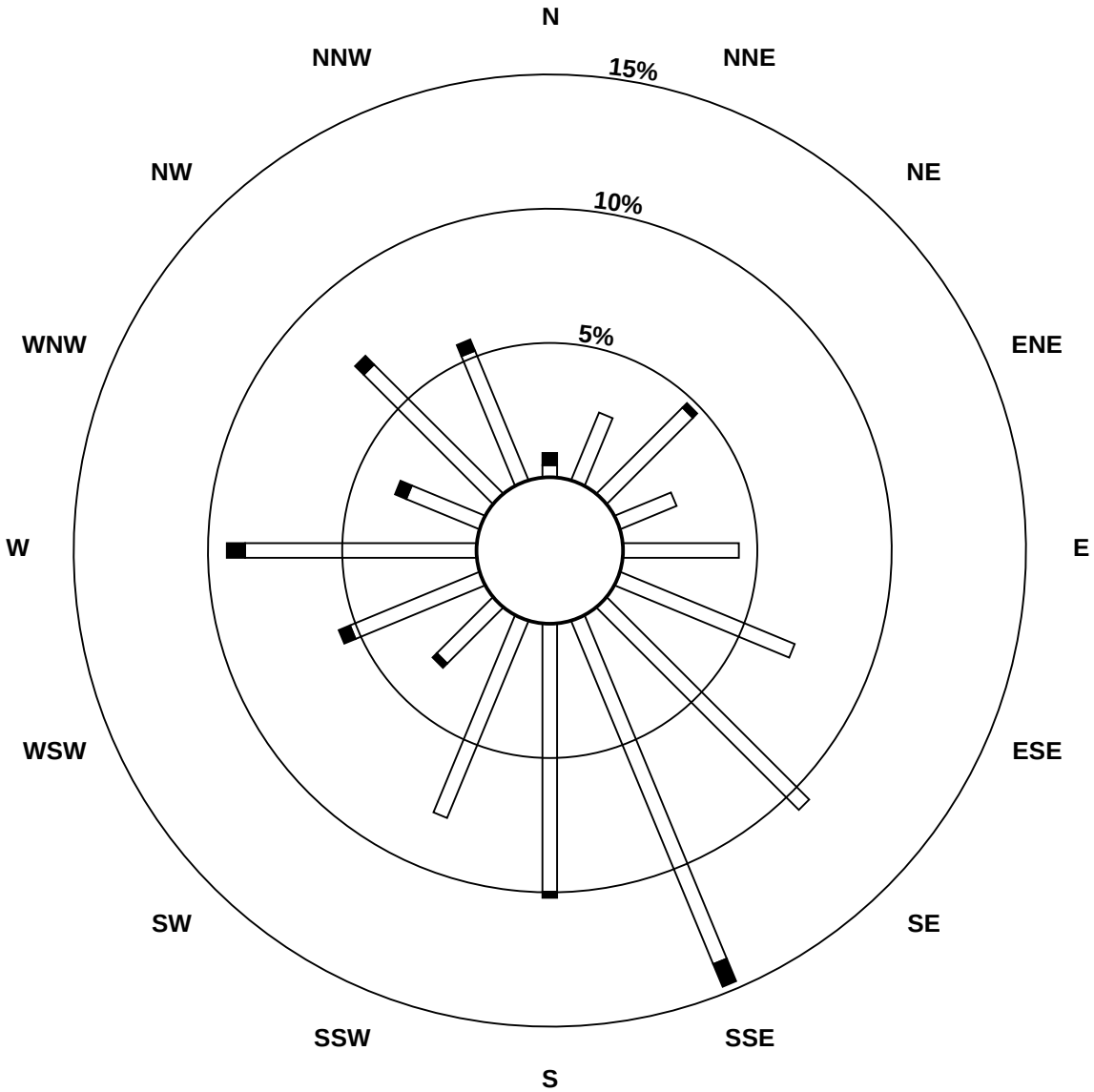
Portable Reno - June 2014



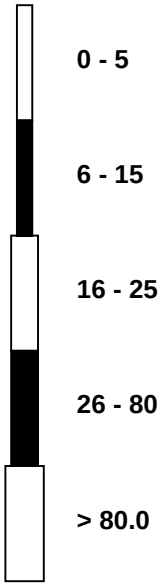
Pollutant Rose

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Reno - June 2014



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



Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable Reno - June 2014

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

Maximum Value: 25.8 ^{o}C on Jun 2 16:00

Maximum Daily Average: 18.2 ^{o}C on Jun 2

Minimum Value: 0 ^{o}C on Jun 5 02:00

Minimum Daily Average: 5.4 ^{o}C on Jun 4

Maximum Diurnal Average: 17.8 ^{o}C at hour 15

Minimum Diurnal Average: 7.5 ^{o}C at hour 4

Monthly Average: 13.17 ^{o}C

Percentiles: P_1 = 1.9 P_{10} = 6.1 Q_1 = 9.0 Median = 12.7 Q_3 = 17.3 P_{90} = 20.5 P_{99} = 24.0

Hours in Service:	441
Hours of Data:	441
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	9	8	9	8	8	10	12	14	14	16	17	19	20	21	21	22	21	21	19	18	16	13	12	12	15.0	22.0
2-Jun	9	10	10	8	9	11	14	16	19	21	22	23	24	25	26	26	26	24	23	23	21	18	16	15	18.2	25.8
3-Jun	15	15	14	13	13	13	13	15	17	20	20	18	19	20	20	20	20	20	18	17	16	13	11	9	16.3	20.4
4-Jun	7	7	6	5	5	5	5	6	6	6	6	5	5	5	6	7	7	6	6	5	4	4	3	1	5.4	7.3
5-Jun	0	0	1	2	2	2	3	4	6	8	8	9	8	8	10	8	9	10	8	9	9	6	6	5	5.9	9.7
6-Jun	5	5	4	3	3	5	7	8	11	13	14	15	16	17	18	16	14	10	9	10	9	7	6	5	9.6	17.9
7-Jun	5	5	4	4	4	7	9	11	12	13	15	16	16	17	17	15	17	15	14	14	13	10	8	7	11.1	17.2
8-Jun	6	6	7	5	6	8	11	14	15	15	17	18	18	19	17	12	13	12	11	11	11	11	10	10	11.8	18.9
9-Jun	9	9	8	8	8	9	11	10	11	13	14	15	14	15	14	14	13	13	13	12	11	9	10	9	11.3	14.7
10-Jun	9	8	8	8	8	8	9	9	9	10	10	11	11	12	14	14	15	16	16	15	13	11	9	8	10.9	16.0
11-Jun	8	7	7	6	6	8	10	12	14	15	16	18	18	19	19	20	21	20	20	20	18	14	12	13	14.3	20.6
12-Jun	10	11	10	10	10	11	12	15	16	18	20	20	21	21	22	21	22	21	21	20	19	15	13	14	16.4	21.5
13-Jun	13	12	11	10	11	12	14	16	18	20	20	21	22	22	23	19	18	19	20	21	17	15	14	13	16.7	22.5
14-Jun	11	10	10	9	9	11	13	14	16	18	19	20	21	22	23	19	16	17	18	18	17	13	12	12	15.4	23.0
15-Jun	11	9	8	7	7	9	10	13	15	15	16	17	19	18	18	15	16	16	17	16	14	13	11	9	13.3	18.9
16-Jun	9	9	8	7	6	9	12	15	16	18	20	21	20	18	16	18	17	17	16	15	14	13	12	11	14.0	21.0
17-Jun	11	10	10	9	9	11	11	12	14	16	17	18	17	15	15	16	19	20	20	19	16	13	12	12	14.2	20.0
18-Jun	11	10	9	9	9	11	13	14	17	17	17	21	22	23	23	23	25	24	24	24	21	18	17	13	17.3	24.6
19-Jun	12	11	10	10	10	10	16	17	18	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	17.5
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	9.0	8.4	8.1	7.5	7.5	9.1	10.8	12.3	13.9	15.1	16.1	17.0	17.3	17.7	17.8	17.0	17.0	16.7	16.4	15.9	14.4	11.9	10.8	10.0	Diurnal Average	
	15.2	14.8	14.3	13.2	13.2	13.1	15.9	17.4	18.8	20.7	22.1	23.2	24.1	24.8	25.6	25.8	25.6	24.5	24.4	23.5	21.4	18.0	16.6	15.4	Diurnal Maximum	

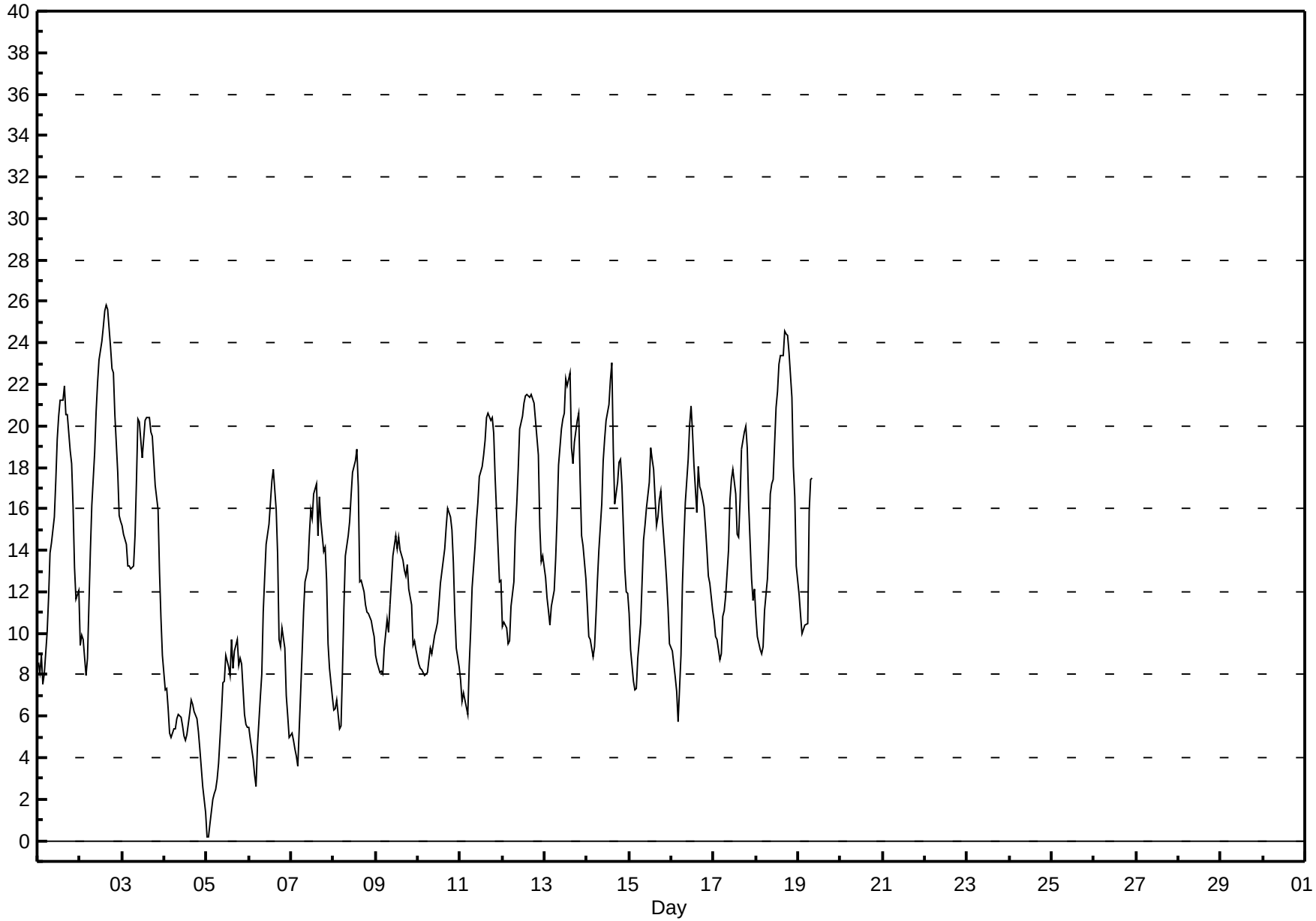
NS - Not in service

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable Reno - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Reno - June 2014

Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1 Spd	4	8	9	7	7	11	8	8	7	8	8	9	8	11	14	12	16	14	9	12	5	2	5	4	2.4	15.8
Dir	149	82	95	147	154	166	179	239	250	253	271	275	301	310	306	315	311	317	356	36	48	198	167	169	287.1	311.4
2 Spd	9	9	10	11	13	10	9	11	10	9	10	11	11	9	7	10	7	8	6	7	13	13	13	15	7.1	15.5
Dir	170	157	147	168	166	178	186	193	211	224	242	260	263	233	241	248	180	166	117	110	130	132	140	131	179.4	130.9
3 Spd	18	17	16	18	13	5	8	9	13	22	28	25	26	29	29	32	29	28	20	7	5	1	3	5	7.6	32.3
Dir	124	142	158	153	160	107	119	138	172	268	276	270	275	281	284	291	309	311	320	2	13	13	347	341	273.0	291.0
4 Spd	6	15	13	12	12	13	10	11	7	4	9	13	13	12	9	10	11	6	9	11	10	13	12	13	10.4	15.2
Dir	332	320	323	321	316	326	332	326	329	335	302	308	303	304	303	305	309	298	321	330	335	332	332	328	319.4	320.4
5 Spd	10	11	12	7	7	12	13	17	15	13	14	13	12	12	6	14	3	7	14	11	5	8	9	10	7.2	16.9
Dir	316	309	314	343	344	335	328	315	327	323	320	323	294	296	320	304	200	243	267	240	220	125	157	153	305.0	315.2
6 Spd	12	13	12	12	11	10	10	12	10	10	10	14	10	17	15	12	2	10	10	3	2	3	3	1	5.5	17.3
Dir	153	165	167	172	172	168	186	196	213	220	224	246	249	265	280	247	30	345	83	104	336	190	140	208	207.3	265.5
7 Spd	3	2	2	1	0	1	4	2	3	7	5	7	16	8	6	15	7	9	17	11	9	7	6	6	4.8	17.3
Dir	182	221	37	31	161	35	331	328	313	288	263	254	253	247	264	271	279	314	274	257	249	185	152	174	261.5	273.7
8 Spd	6	7	8	8	10	9	8	10	15	20	17	17	18	16	18	11	13	12	11	13	13	15	16	16	10.8	20.0
Dir	158	140	126	110	126	127	132	149	160	169	167	170	162	152	249	267	131	120	140	159	125	147	159	163	154.8	168.7
9 Spd	16	14	13	11	10	9	14	17	20	20	28	32	32	39	37	39	34	34	35	24	22	20	21	15	20.1	39.3
Dir	167	177	172	183	194	201	229	260	282	288	279	276	262	267	263	271	273	275	274	273	274	269	270	270	262.0	271.4
10 Spd	14	17	16	13	8	4	11	18	19	13	14	13	10	6	4	5	7	11	12	12	7	1	3	5	0.4	19.0
Dir	275	264	265	266	279	306	41	46	52	64	52	59	69	90	93	109	218	211	198	211	245	311	159	157	341.9	51.6
11 Spd	6	8	8	9	10	11	12	12	12	14	12	11	12	13	13	14	15	11	8	3	4	5	7	11	8.6	15.5
Dir	154	152	143	142	137	149	164	162	174	189	187	178	185	185	200	207	207	177	206	156	96	90	103	116	169.4	206.8
12 Spd	11	14	13	13	14	14	10	13	13	12	18	19	18	18	15	16	17	18	13	11	16	13	14	9	13.3	19.2
Dir	128	130	134	128	112	110	111	107	104	103	81	90	95	121	123	107	106	85	94	108	133	140	151	180	113.3	89.8
13 Spd	4	8	12	11	21	21	20	18	15	17	18	17	16	15	18	28	15	6	8	10	9	4	4	4	8.6	28.1
Dir	33	31	56	70	92	93	91	94	103	110	122	130	128	115	163	204	205	207	197	189	214	255	71	138	124.5	204.0
14 Spd	7	10	11	14	14	16	19	22	24	29	29	23	19	22	17	21	5	10	18	17	15	7	8	9	14.2	29.3
Dir	144	152	136	156	155	163	164	164	171	174	182	181	195	216	211	247	281	190	206	211	235	180	186	206	186.2	174.2
15 Spd	11	10	10	9	9	10	9	8	8	6	5	6	6	4	5	10	5	3	7	17	12	8	4	4	5.6	16.9
Dir	212	182	166	179	163	171	198	202	239	243	208	161	189	192	147	135	41	102	122	189	170	39	54	187	175.7	188.6
16 Spd	1	5	5	1	3	4	3	3	5	6	7	11	7	14	12	14	18	23	18	17	12	6	6	6	4.7	23.1
Dir	16	53	70	59	151	53	337	354	327	327	327	326	43	158	165	144	110	122	125	128	144	54	88	158	114.7	122.0
17 Spd	4	3	3	7	1	3	3	4	7	5	3	7	9	8	10	7	2	2	3	5	8	12	14	16	3.7	16.4
Dir	339	47	35	35	23	25	5	35	75	162	147	131	134	130	65	124	285	267	236	162	152	140	141	149	120.2	148.6
18 Spd	13	13	13	14	15	18	21	22	18	16	10	8	12	19	25	19	14	15	11	9	4	4	4	1	10.3	24.5
Dir	136	130	130	126	128	141	154	162	180	209	187	222	207	210	206	206	229	247	246	246	185	172	157	117	181.7	205.6
19 Spd	2	3	4	5	10	4	3	5	4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	9.7
Dir	48	326	27	64	85	100	272	29	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	84.7
20 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Reno - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Spd	4.1	3.9	4.3	4.9	5.8	5.0	4.1	3.7	3.4	5.1	4.6	4.8	5.8	7.3	7.7	9.0	4.2	3.4	4.0	4.3	3.6	2.9	4.2	4.8	Diurnal Average	
Dir	159.1	155.3	139.4	145.1	139.7	137.6	153.9	160.2	177.4	212.2	227.7	236.2	228.6	228.4	238.4	245.7	249.9	251.8	235.4	201.9	189.0	152.3	153.5	166.7		
Spd	17.9	16.9	16.5	18.1	20.6	20.5	21.1	22.4	23.9	29.3	28.5	31.7	31.8	38.8	37.0	39.3	34.0	33.6	34.9	24.2	22.5	20.2	21.5	16.4	Diurnal Maximum	
Dir	124.4	142.0	264.8	152.9	91.8	93.1	154.3	164.0	171.5	174.2	181.6	276.1	261.7	266.6	262.6	271.4	272.7	275.4	274.4	272.6	274.0	268.8	270.4	148.6		

Maximum Speed Value: 39 km/h on Jun 9 16:00
Maximum Daily Speed Average: 20.1 km/h on Jun 9
Maximum Diurnal Speed Average: 9.0 km/h at hour 16

Minimum Speed Value: 0 km/h on Jun 7 05:00
Minimum Daily Speed Average: 0.4 km/h on Jun 17
Minimum Diurnal Speed Average: 2.9 km/h at hour 22

Monthly Average Velocity: 3.59 km/h 195.09 deg

Speed Percentiles: P_1 = 1.1 P_{10} = 3.6 Q_1 = 6.8 Median = 10.6 Q_3 = 14.5 P_{90} = 19.2 P_{99} = 32.9

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

Hours in Service:	441
Hours of Data:	441
Hours of Missing Data:	0
Percent Operational Time:	100.0

NS - Not in service

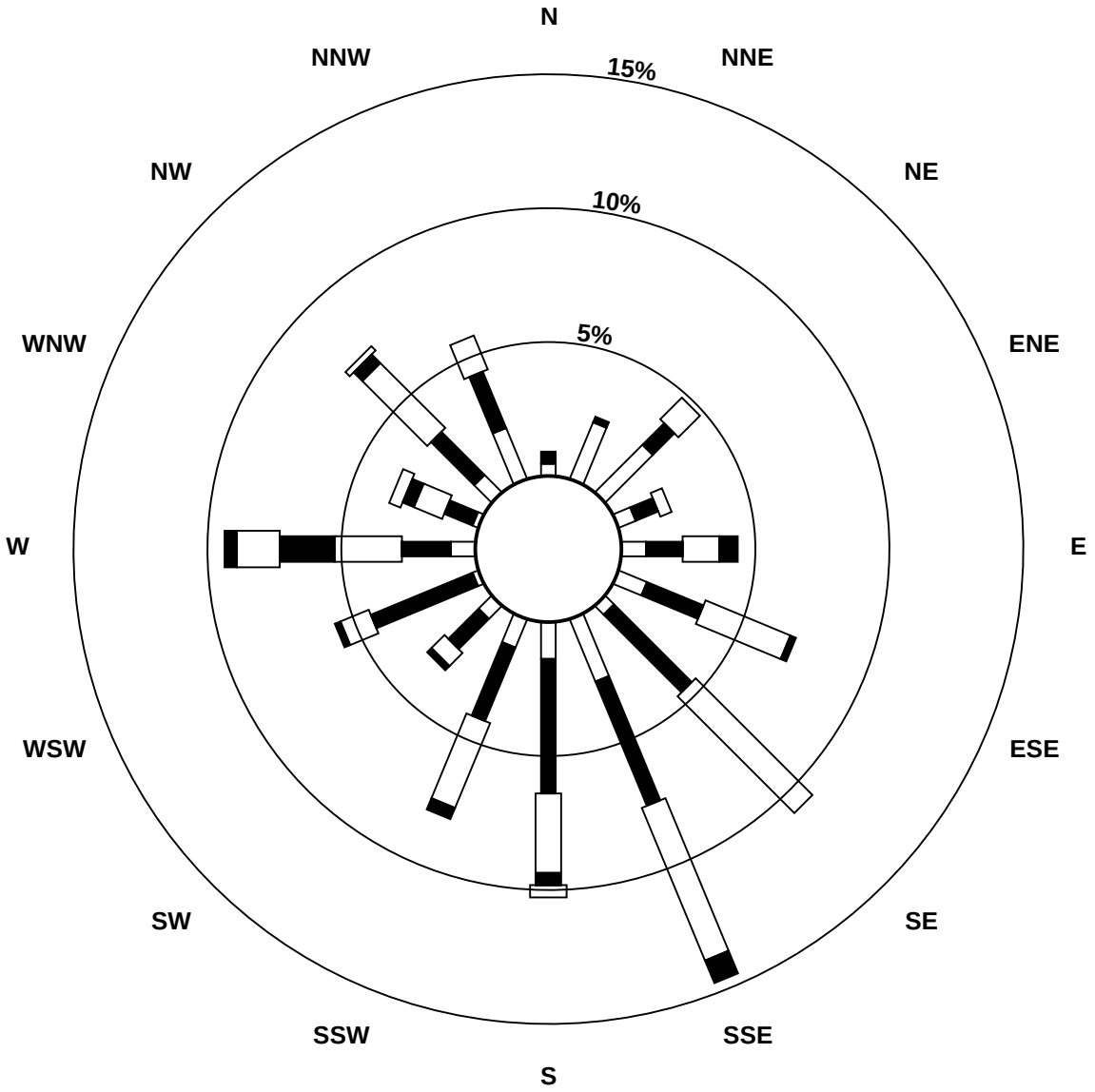
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	8	5	0	0	0	0	13
NorthEast	19	9	6	1	0	0	35
East	8	16	15	4	0	0	43
SouthEast	9	34	43	2	0	0	88
South	12	35	38	7	2	0	94
SouthWest	5	22	18	5	1	0	51
West	4	17	14	9	11	2	57
NorthWest	9	19	29	1	2	0	60
Total	74	157	163	29	16	2	441

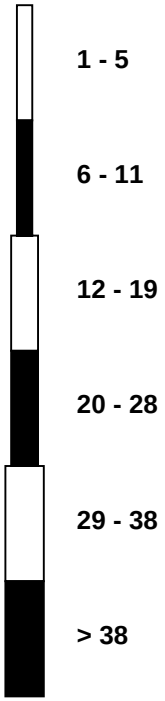
Wind Rose

Wind Speed (WS) (km/h)

Portable Reno - June 2014



Wind Speed Classes (km/h)



Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Reno - June 2014

Maximum Speed: 40 km/h on Jun 9 16:00

Maximum Daily Speed Average: 23.5 km/h on Jun 9

Minimum Speed: 1 km/h on Jun 7 05:00

Minimum Daily Speed Average: 6.8 km/h on Jun 17

Maximum Diurnal Speed Average: 17.6 km/h at hour 16

Minimum Diurnal Speed Average: 8.5 km/h at hour 22

Monthly Average Speed: 12.00 km/h

Percentiles: $P_1 = 1.6$ $P_{10} = 4.5$ $Q_1 = 7.4$ Median = 11.2 $Q_3 = 15.0$ $P_{90} = 20.0$ $P_{99} = 32.9$

Hours in Service: 441

Hours of Data: 441

Hours of Missing Data: 0

Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	5	8	9	7	7	11	8	8	7	9	9	9	9	12	15	13	16	14	9	12	5	2	5	4	8.9	15.9
2-Jun	9	9	10	11	13	10	9	11	11	10	11	11	12	11	10	11	9	9	6	7	13	13	13	16	10.6	15.6
3-Jun	18	17	16	18	14	8	9	9	15	23	29	26	27	30	29	33	29	29	20	8	5	2	4	5	17.6	32.6
4-Jun	6	15	14	12	12	13	10	11	7	5	9	13	13	12	9	10	11	6	10	12	11	13	12	13	10.8	15.3
5-Jun	10	11	12	7	8	12	13	17	15	13	14	14	14	13	9	17	4	8	15	11	5	8	9	10	11.2	17.1
6-Jun	12	13	12	12	11	10	10	13	11	10	10	15	11	18	16	15	8	11	11	4	3	5	4	2	10.3	18.4
7-Jun	3	3	2	1	1	1	4	3	4	7	6	8	16	9	8	17	9	10	18	11	9	7	6	6	7.0	17.8
8-Jun	6	7	8	8	10	9	8	11	15	20	18	17	19	16	19	16	14	12	11	14	13	15	16	16	13.4	20.3
9-Jun	16	14	13	11	10	10	14	18	20	20	29	32	32	39	37	40	34	34	35	24	23	20	22	15	23.5	39.5
10-Jun	14	17	17	13	8	4	11	18	19	13	15	13	10	7	6	7	8	12	13	13	8	2	3	5	10.6	19.3
11-Jun	6	8	8	9	10	11	12	12	13	14	12	13	13	14	13	15	16	11	9	4	4	5	7	11	10.5	16.2
12-Jun	11	14	13	13	14	14	10	14	14	12	19	20	19	19	16	17	18	18	13	11	16	13	14	9	14.6	20.1
13-Jun	6	8	13	11	21	21	20	18	15	17	18	18	17	16	20	28	15	6	9	10	9	4	5	4	13.7	28.2
14-Jun	7	10	11	15	14	16	19	23	24	30	29	23	20	23	18	24	7	13	19	17	15	8	9	9	16.7	29.7
15-Jun	12	10	10	9	9	10	9	8	8	7	6	6	7	6	6	10	6	4	8	17	20	10	6	5	8.7	19.5
16-Jun	1	5	6	3	4	4	3	3	6	6	7	11	12	17	15	19	20	24	19	17	12	7	6	9	9.8	23.6
17-Jun	5	3	3	7	2	3	4	5	7	5	5	8	9	10	11	7	4	5	4	6	8	12	14	16	6.8	16.4
18-Jun	13	13	13	15	15	18	21	22	19	16	10	9	13	20	25	20	15	15	11	9	5	5	5	3	13.8	25.1
19-Jun	2	3	4	5	10	9	4	6	5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	9.8
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
	8.6	9.9	10.2	9.9	10.1	10.3	10.5	12.0	12.4	13.3	14.2	14.9	15.2	16.2	15.6	17.6	13.5	13.4	13.3	11.5	10.1	8.5	8.9	8.9	Diurnal Average	
	17.9	17.3	16.5	18.2	20.6	20.6	21.2	22.6	24.0	29.7	29.0	32.0	32.2	39.1	37.3	39.5	34.1	33.8	35.0	24.3	22.5	20.2	21.6	16.4	Diurnal Maximum	

NS - Not in service

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable Reno - June 2014

Maximum Value: 94.0 deg on Jun 16 04:00

Minimum Value: 2.2 deg on Jun 3 01:00

Percentiles: P_1 = 3.2 P_{10} = 5.3 Q_1 = 8.5 Median = 14.3 Q_3 = 27.8 P_{90} = 45.9 P_{99} = 88.0

Hours in Service:	441
Hours of Data:	441
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Jun	14	12	5	25	12	7	9	20	17	17	24	27	29	26	17	21	7	10	17	17	52	37	13	13	52.2
2-Jun	7	4	6	9	4	7	9	7	16	19	21	23	23	42	52	37	54	32	11	25	5	3	4	7	54.0
3-Jun	2	12	6	5	14	67	44	11	29	18	11	13	10	12	12	9	11	9	12	26	37	85	39	29	85.2
4-Jun	53	6	6	6	6	15	14	15	40	39	7	9	13	11	18	12	13	35	35	14	19	14	17	8	52.6
5-Jun	5	4	6	19	25	10	10	8	11	17	15	17	34	23	42	48	42	36	18	15	32	11	13	7	47.8
6-Jun	4	8	4	4	4	4	9	11	15	14	23	19	22	20	14	38	73	26	26	44	50	68	45	76	76.4
7-Jun	39	32	34	36	89	25	24	53	38	25	40	39	16	28	48	45	46	27	14	9	15	14	12	13	88.6
8-Jun	8	13	10	5	8	6	7	21	11	9	11	13	14	13	21	74	18	18	17	20	13	4	6	5	74.2
9-Jun	3	4	7	8	6	24	10	11	8	10	6	8	8	7	6	7	6	6	5	5	4	4	5	7	23.7
10-Jun	7	5	4	5	9	29	23	8	9	11	10	10	18	30	51	50	24	22	13	14	15	89	11	12	89.1
11-Jun	9	13	6	7	4	14	7	10	14	13	20	29	27	24	21	28	18	24	28	38	13	9	7	6	37.8
12-Jun	6	4	3	7	4	5	7	7	7	12	14	18	17	22	23	18	14	15	16	11	18	9	9	10	22.8
13-Jun	74	15	12	12	4	3	4	5	8	13	12	11	17	17	29	6	7	23	25	12	14	34	23	16	74.0
14-Jun	11	8	10	9	7	5	4	5	6	10	10	14	19	13	17	30	49	34	15	7	15	31	18	9	48.7
15-Jun	13	6	6	7	11	8	10	10	13	30	32	32	40	58	46	18	50	45	24	17	64	43	68	46	67.9
16-Jun	69	19	28	94	37	16	44	32	23	26	27	14	55	78	36	64	23	11	10	9	13	40	25	62	94.0
17-Jun	63	33	40	9	38	35	38	51	12	31	59	26	22	50	26	19	93	79	48	17	7	4	3	3	92.6
18-Jun	4	3	6	4	4	8	6	5	16	13	14	29	28	16	12	16	22	9	15	9	33	49	44	76	76.2
19-Jun	64	30	21	20	11	79	46	14	42	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	79.0
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
22-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
23-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
24-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
25-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
26-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
27-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
28-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
29-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
30-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
	74.0	33.3	40.2	94.0	88.6	79.0	46.5	52.6	42.3	39.4	59.0	39.3	55.0	77.7	51.8	74.2	92.6	79.2	47.7	44.3	64.2	89.1	67.9	76.4	

NS - Not in service

PAZA
Falher Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Falher - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.1 ppb on Jun 27 10:00 Maximum Daily Average: 0.4 ppb on Jun 12

Minimum Value: 0 ppb on Jun 1 06:00 Minimum Daily Average: 0.0 ppb on Jun 4
Maximum Diurnal Average: 0.3 ppb at hour 10 Minimum Diurnal Average: 0.0 ppb at hour 20
Monthly Average: 0.14 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.2 P_{90} = 0.4 P_{99} = 0.8

Hours in Service:	720
Hours of Data:	680
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-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	0.4
2-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
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	0.3
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	0.0	0.1
5-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	0.1
6-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
7-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	0.1	0.3
8-Jun	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.7
9-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	0.1
10-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	0.0	0.2
11-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
12-Jun	0	0	0	0	0	1	1	1	1	1	1	0	C	C	C	C	0	0	0	A	0	0	0	0	0.4	0.9
13-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0.1	0.5
14-Jun	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.5
15-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0.2	0.6
16-Jun	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.5
17-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	0.1
18-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0.2	0.7
19-Jun	1	1	0	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
20-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	0.1	0.2
21-Jun	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.6
22-Jun	0	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
23-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	0.2	0.5
24-Jun	0	0	0	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	P	P	P	P	P	0.3	0.8
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
26-Jun	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
27-Jun	0	0	0	0	A	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.1
28-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
29-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	0.1
30-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	0.0	0.2
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.2	Diurnal Average	
	0.7	0.7	0.6	0.7	0.7	0.9	0.7	0.8	1.7	3.1	0.8	0.8	0.7	0.3	0.6	0.3	0.2	0.2	0.2	0.1	0.4	0.4	0.6	0.7	Diurnal Maximum	

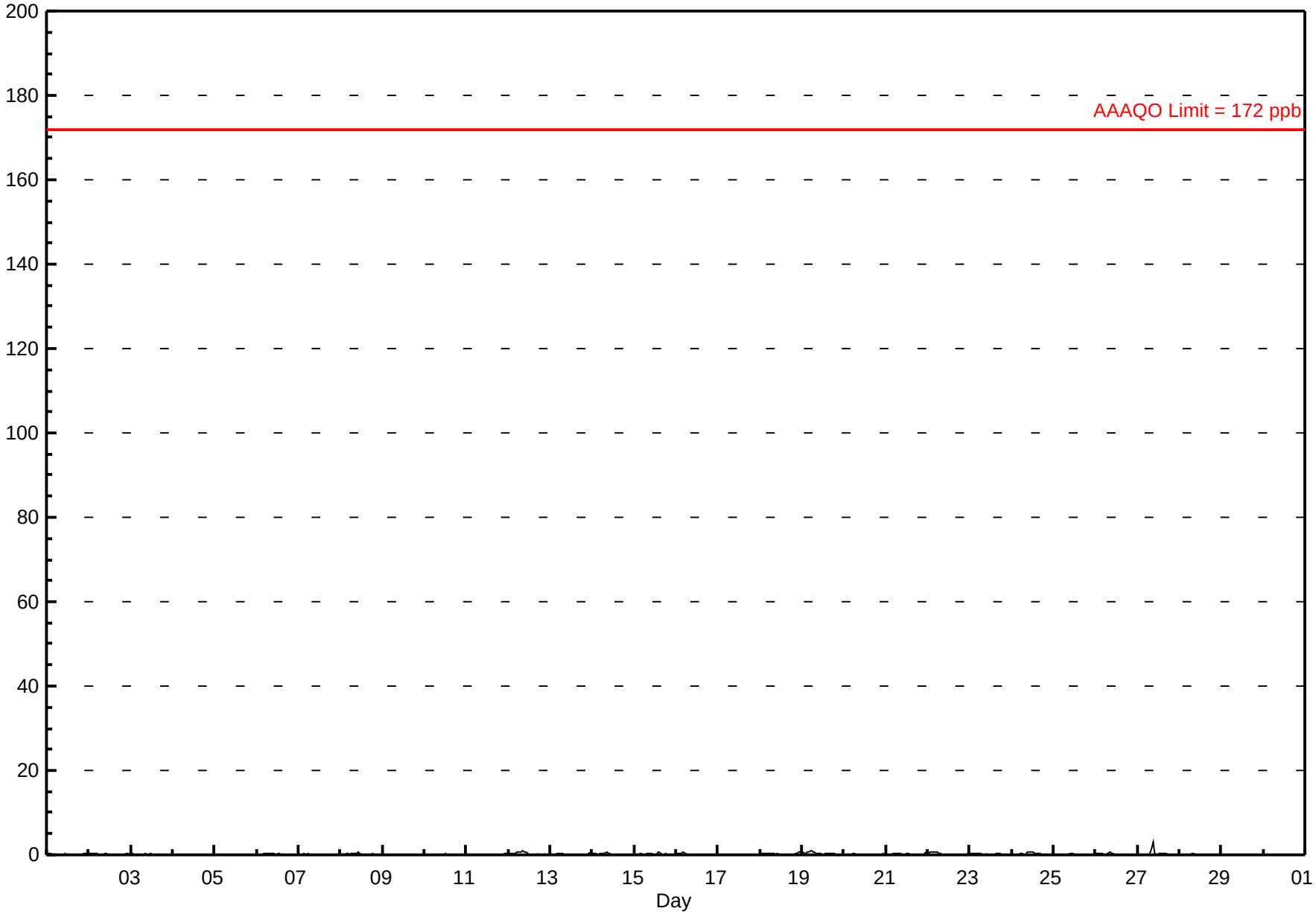
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Falher - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Falher - June 2014

Maximum Value: 6.4 ppb on Jun 27 10:00

Maximum Daily Average: 1.1 ppb on Jun 27

Minimum Value: 0 ppb on Jun 5 01:00

Minimum Daily Average: 0.3 ppb on Jun 5

Maximum Diurnal Average: 0.8 ppb at hour 10

Minimum Diurnal Average: 0.5 ppb at hour 18

Monthly Average: 0.64 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.3$ $Q_1 = 0.4$ Median = 0.6 $Q_3 = 0.7$ $P_{90} = 1.0$ $P_{99} = 2.1$

Hours in Service:	720
Hours of Data:	680
Hours of Missing Data:	40
Hours of Calibration:	35
Percent Operational Time:	99.3

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	1	1	1	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2	1	0.5	1.6
2-Jun	1	1	1	1	1	1	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0.5	1.0
3-Jun	0	1	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
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	0.3	0.5
5-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
6-Jun	2	0	A	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.6	2.1
7-Jun	1	A	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8
8-Jun	A	1	1	1	1	1	1	1	1	1	2	1	0	0	0	0	0	0	3	0	0	0	0	A	0.8	3.0
9-Jun	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	A	0	0.4	0.5
10-Jun	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	A	0	0	0.4	0.8
11-Jun	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	0	1	1	A	1	1	1	0.5	0.6
12-Jun	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	1	1	0	A	2	1	1	1	0.9	1.7
13-Jun	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	1	1	1	1	0.7	1.1
14-Jun	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	A	1	1	1	0	1	1	0.7	1.0
15-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	0.7	1.0
16-Jun	1	1	2	1	1	1	1	1	1	0	0	1	1	2	2	A	1	0	1	1	0	1	1	0	0.8	2.2
17-Jun	1	0	0	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0.6	0.8
18-Jun	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	0.8	1.4
19-Jun	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	0	0.9	1.3
20-Jun	0	0	1	1	1	1	1	1	0	0	1	A	0	0	1	1	1	1	0	1	1	1	1	1	0.6	0.8
21-Jun	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	0.7	1.0
22-Jun	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0.8	1.0
23-Jun	1	1	1	1	1	1	1	2	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.8	1.6
24-Jun	1	1	1	0	1	1	1	A	1	1	2	1	2	1	1	1	1	0	1	P	P	P	P	P	0.9	1.7
25-Jun	1	1	0	0	0	1	A	1	1	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1	0.6	0.8
26-Jun	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0	1	0	1	2	1	1	1	1	0.7	1.7
27-Jun	1	1	0	1	A	0	1	1	4	6	1	1	1	1	1	1	1	1	0	1	1	0	1	0	1.1	6.4
28-Jun	0	1	0	A	1	1	1	1	1	1	1	0	0	1	0	0	0	1	1	1	1	1	1	1	0.6	1.0
29-Jun	1	1	A	1	1	4	1	1	1	1	1	0	0	1	1	0	1	0	0	1	0	1	0	1	0.7	4.0
30-Jun	0	A	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0.5	0.7
	0.7	0.7	0.7	0.6	0.7	0.8	0.7	0.7	0.8	0.8	0.7	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.6	0.6	Diurnal Average	
	2.1	1.0	2.2	1.2	1.1	4.0	1.2	1.6	4.5	6.4	2.1	1.4	1.5	1.5	1.8	0.9	0.8	0.8	3.0	1.7	1.7	1.3	1.6	1.3	Diurnal Maximum	

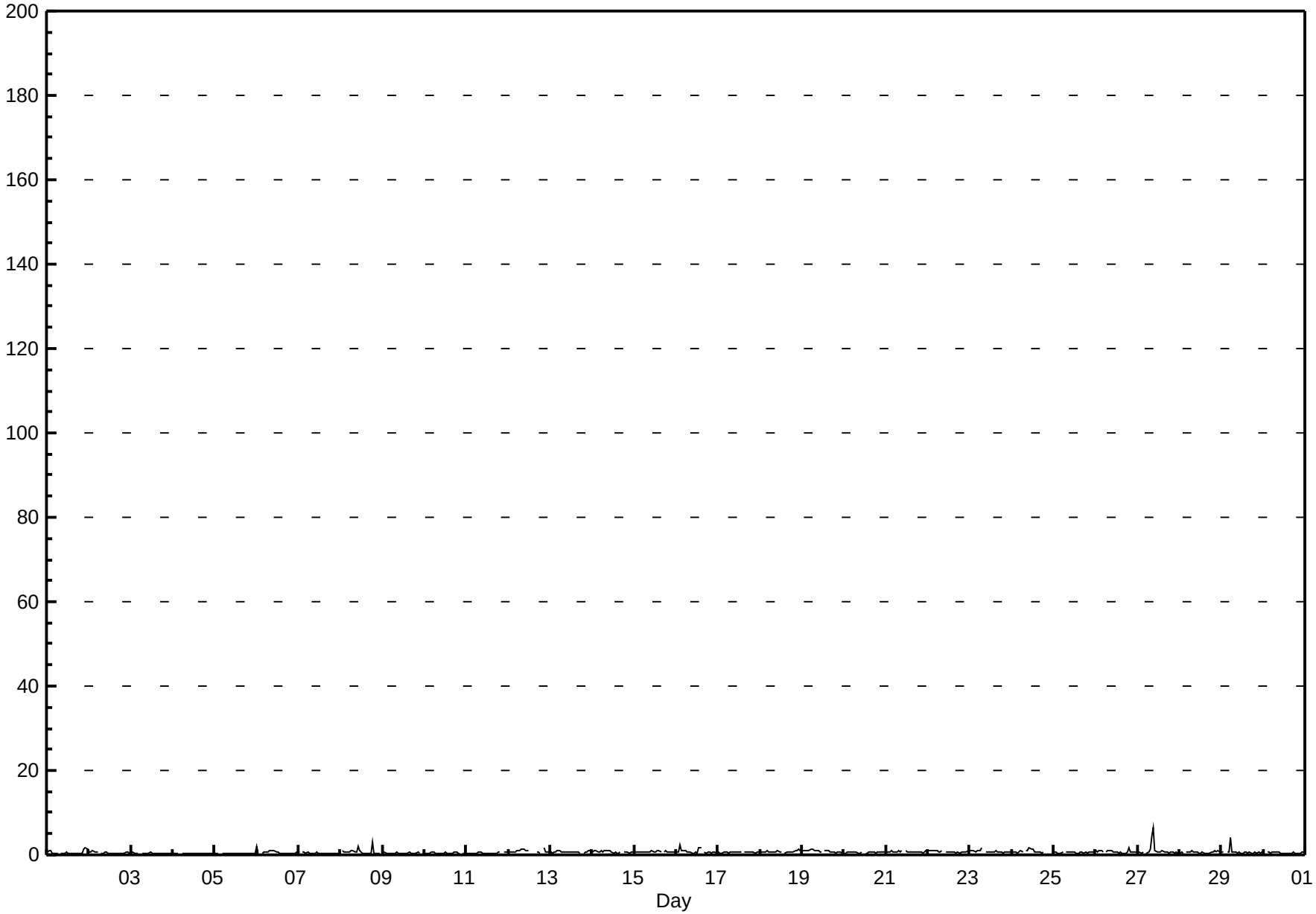
C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

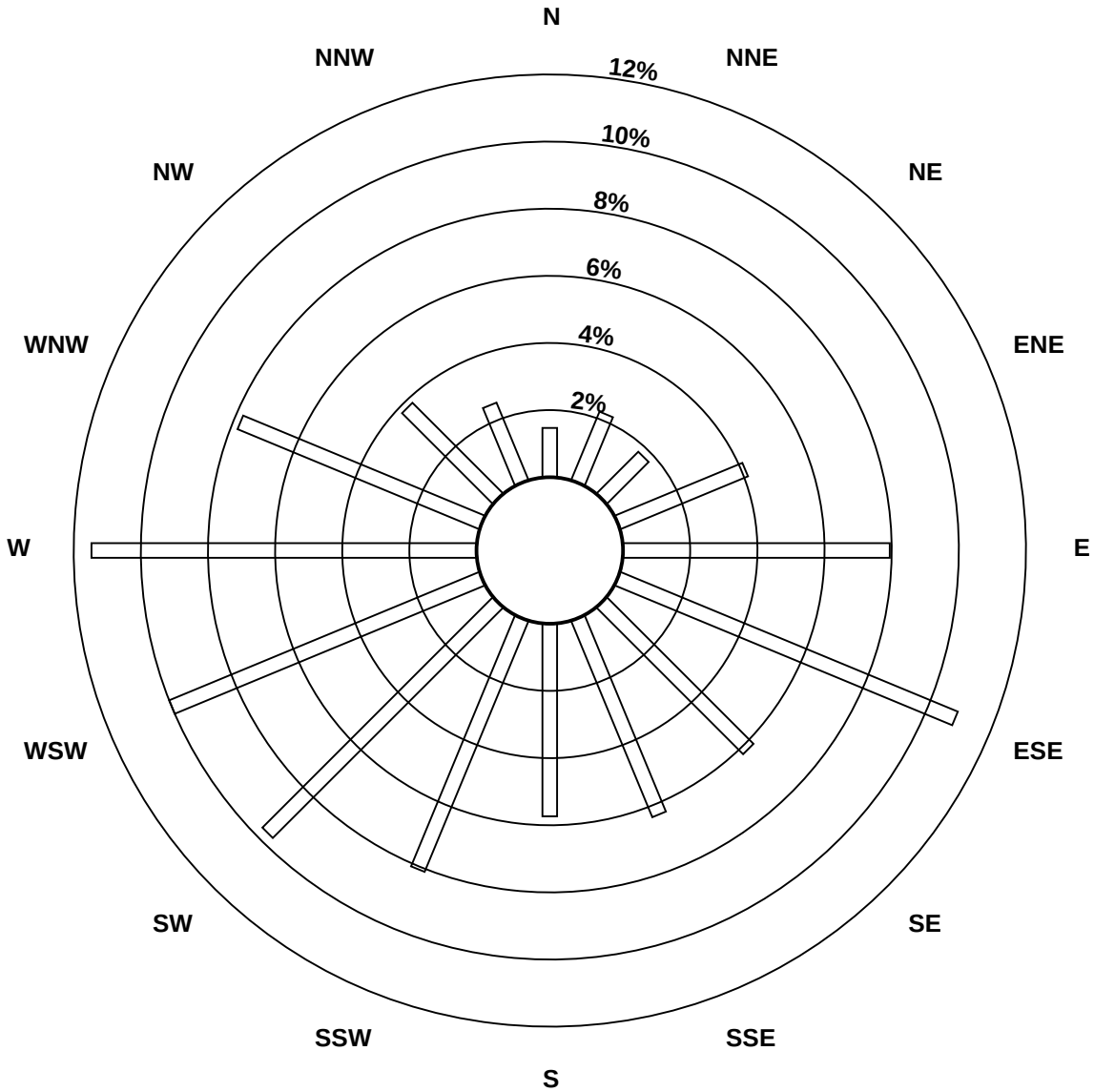
Falher - June 2014



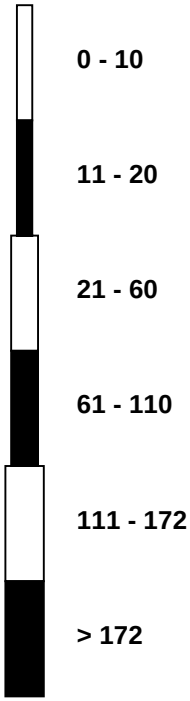
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Falher - June 2014



Pollutant Classes (ppb)

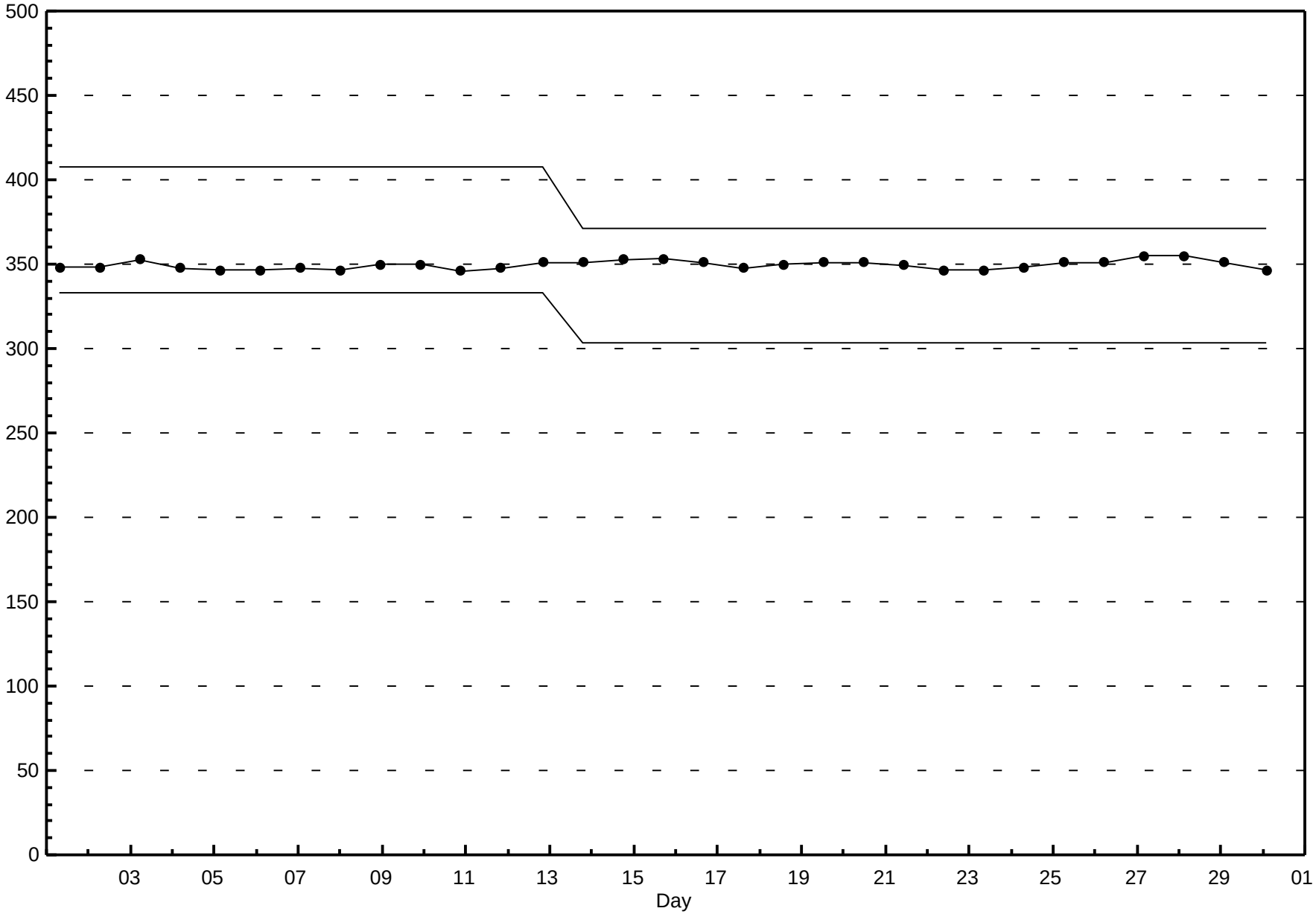


Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Falher - June 2014



Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Falher - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 2.6 ppb on Jun 23 07:00 Maximum Daily Average: 0.5 ppb on Jun 23

Minimum Value: 0 ppb on Jun 1 10:00 Minimum Daily Average: 0.0 ppb on Jun 5
Maximum Diurnal Average: 0.5 ppb at hour 6 Minimum Diurnal Average: 0.0 ppb at hour 12
Monthly Average: 0.21 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 0.5 P_{99} = 1.3

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	37
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	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	0.8
2-Jun	1	1	1	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	1.0
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	0.2	0.4
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	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
6-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
7-Jun	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
8-Jun	A	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.6
9-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	0.2	0.3
10-Jun	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.8
11-Jun	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	1.3
12-Jun	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	A	0	0	0	0	--	0.5
13-Jun	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0.1	1.0
14-Jun	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.6
15-Jun	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.6
16-Jun	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	1.1
17-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	0.4
18-Jun	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0.2	0.8
19-Jun	1	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
20-Jun	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
21-Jun	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	1.1
22-Jun	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.3
23-Jun	1	1	1	1	1	2	3	2	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.6
24-Jun	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	P	P	P	P	P	0.1	0.3
25-Jun	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.7
26-Jun	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
27-Jun	0	0	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4
28-Jun	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
29-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	0.4
30-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	0.1	0.4
	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.3	0.4	Diurnal Average	
	1.0	1.3	1.1	1.1	1.3	2.2	2.6	1.7	0.5	0.7	0.3	0.2	0.4	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.6	0.8	1.1	Diurnal Maximum	

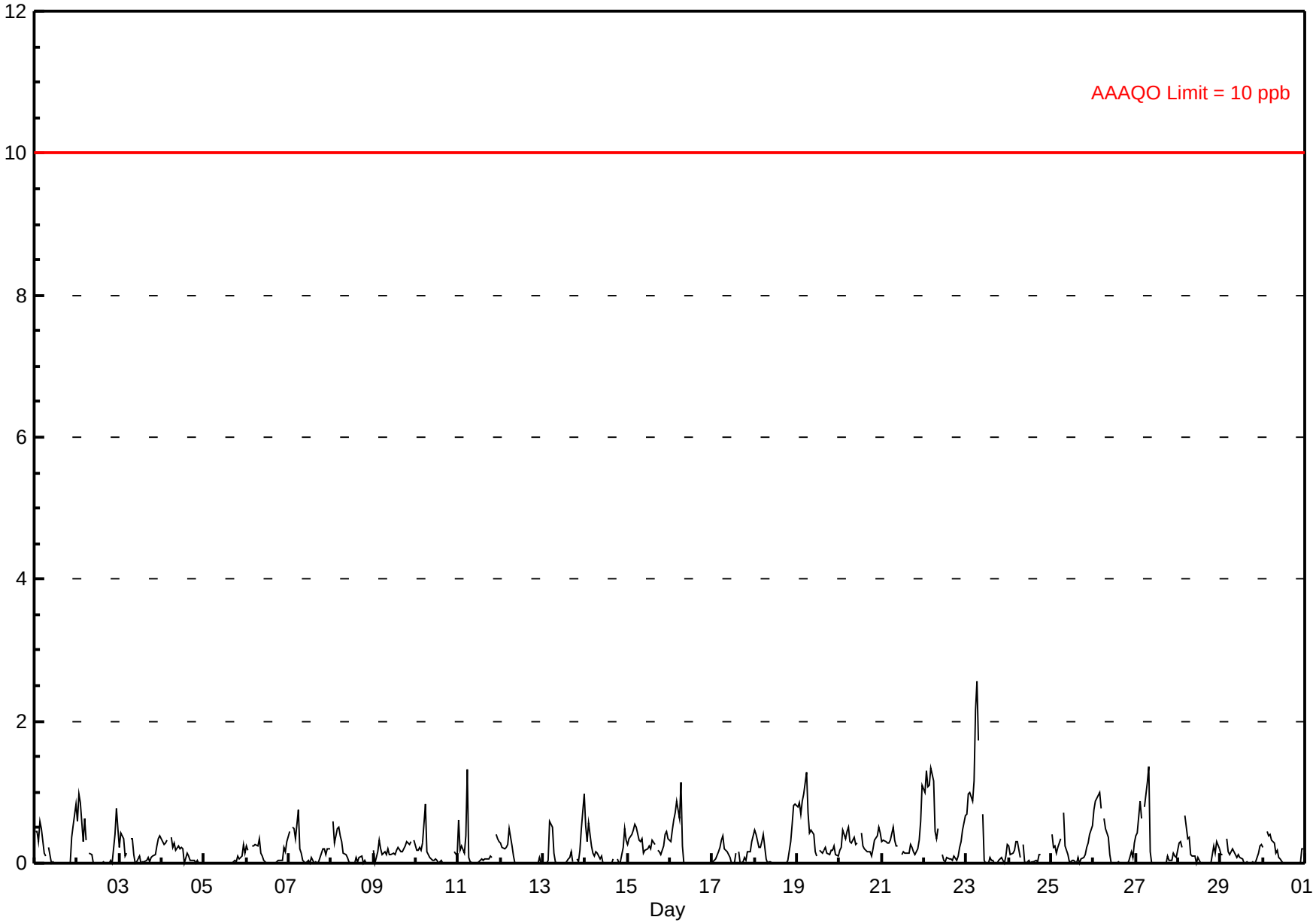
C - Calibration P - Power Failure A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb

Falher - June 2014



Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

Falher - June 2014

Maximum Value: 4.1 ppb on Jun 23 06:00

Maximum Daily Average: 1.4 ppb on Jun 23

Minimum Value: 0 ppb on Jun 16 18:00

Minimum Daily Average: 0.7 ppb on Jun 5

Maximum Diurnal Average: 1.5 ppb at hour 6

Minimum Diurnal Average: 0.7 ppb at hour 17

Monthly Average: 0.95 ppb

Percentiles: $P_1 = 0.4$ $P_{10} = 0.6$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 1.0$ $P_{90} = 1.5$ $P_{99} = 2.7$

Hours in Service:	720
Hours of Data:	678
Hours of Missing Data:	42
Hours of Calibration:	37
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	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	2	2	3	1.1	2.5
2-Jun	1	2	2	1	1	1	A	1	1	1	0	1	0	1	0	1	1	1	1	1	1	1	2	1	0.9	2.0
3-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	1.5
4-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	1.2
5-Jun	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	1.0
6-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
7-Jun	2	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6
8-Jun	A	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	0.9	2.8
9-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	0.9	1.3
10-Jun	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	A	1	1	0.9	3.1
11-Jun	2	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.0	3.3
12-Jun	1	1	1	1	1	1	1	1	1	C	C	C	C	C	C	1	0	0	0	A	0	1	1	1	--	1.4
13-Jun	1	1	1	1	1	2	1	1	1	1	0	1	0	1	1	1	1	1	A	1	1	1	1	2	0.8	1.8
14-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	1.5
15-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	1.0	1.4
16-Jun	1	1	4	2	2	2	2	1	1	1	1	1	0	1	1	A	1	0	0	1	1	1	1	1	1.1	3.6
17-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
18-Jun	2	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	0	0	1	1	1	2	2	2	1.0	2.4
19-Jun	2	1	1	2	2	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.2	2.1
20-Jun	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1.0	1.7
21-Jun	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	2.0
22-Jun	2	2	2	2	2	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.4
23-Jun	1	2	2	2	2	4	4	3	A	2	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1.4	4.1
24-Jun	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	P	P	P	P	P	0.8	1.2
25-Jun	2	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6
26-Jun	2	1	2	3	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.7
27-Jun	1	1	2	1	A	2	2	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1.1	2.4
28-Jun	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.9	1.5
29-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
30-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	1.3
	1.2	1.1	1.2	1.3	1.4	1.5	1.2	1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.9	1.1	1.2	Diurnal Average	
	2.2	2.1	3.6	2.8	2.5	4.1	3.7	2.7	1.3	1.8	1.1	1.1	1.1	1.1	1.0	1.1	0.9	1.1	0.9	1.1	1.3	2.4	2.4	2.5	Diurnal Maximum	

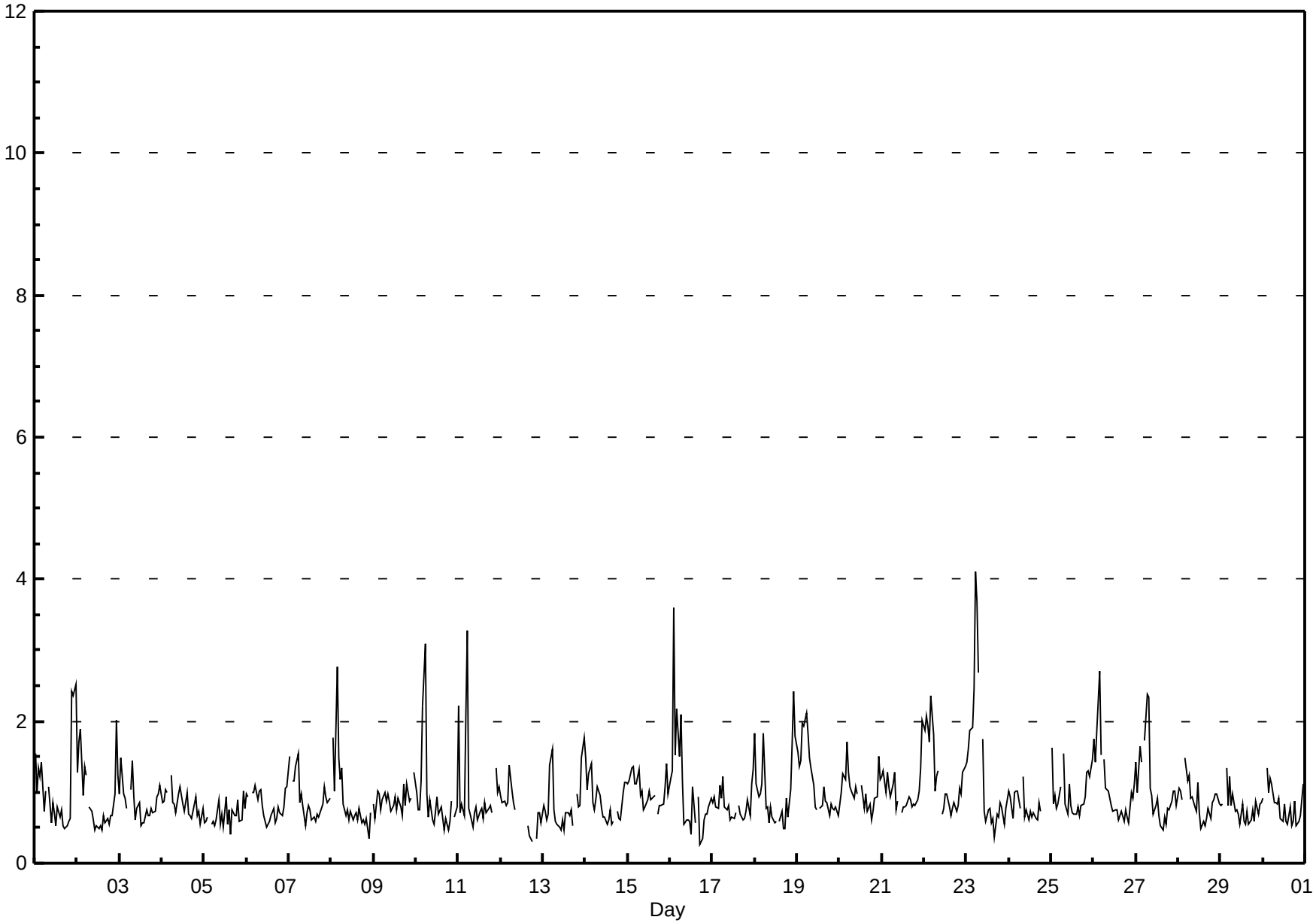
C - Calibration P - Power Failure A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Hydrogen Sulphide (H_2S) - ppb

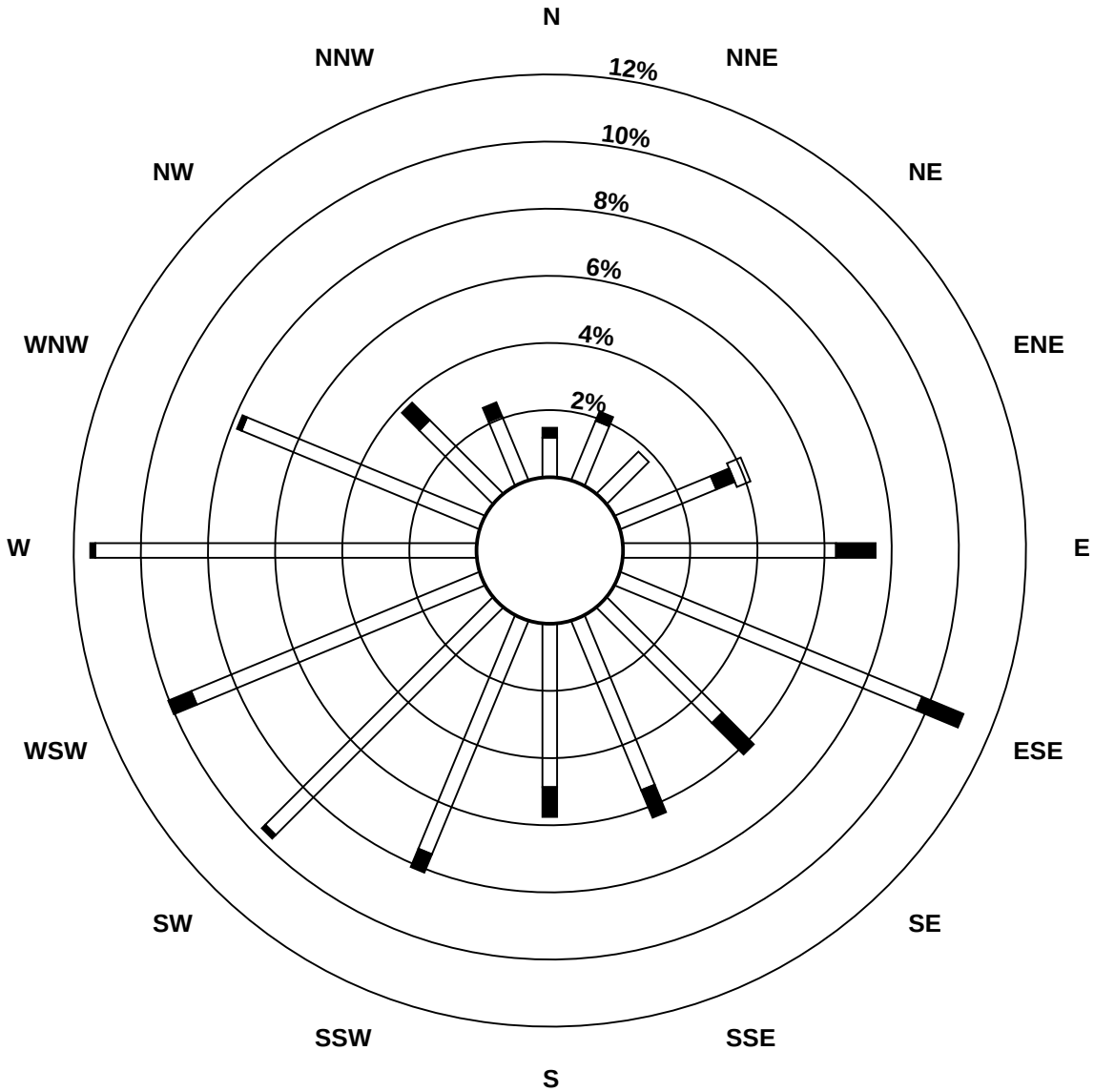
Falher - June 2014



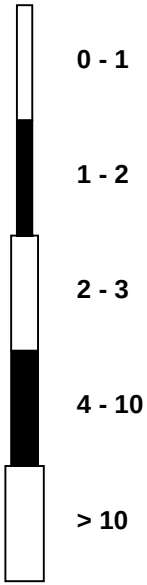
Pollutant Rose

Hydrogen Sulphide (H_2S) - ppb

Falher - June 2014



Pollutant Classes (ppb)

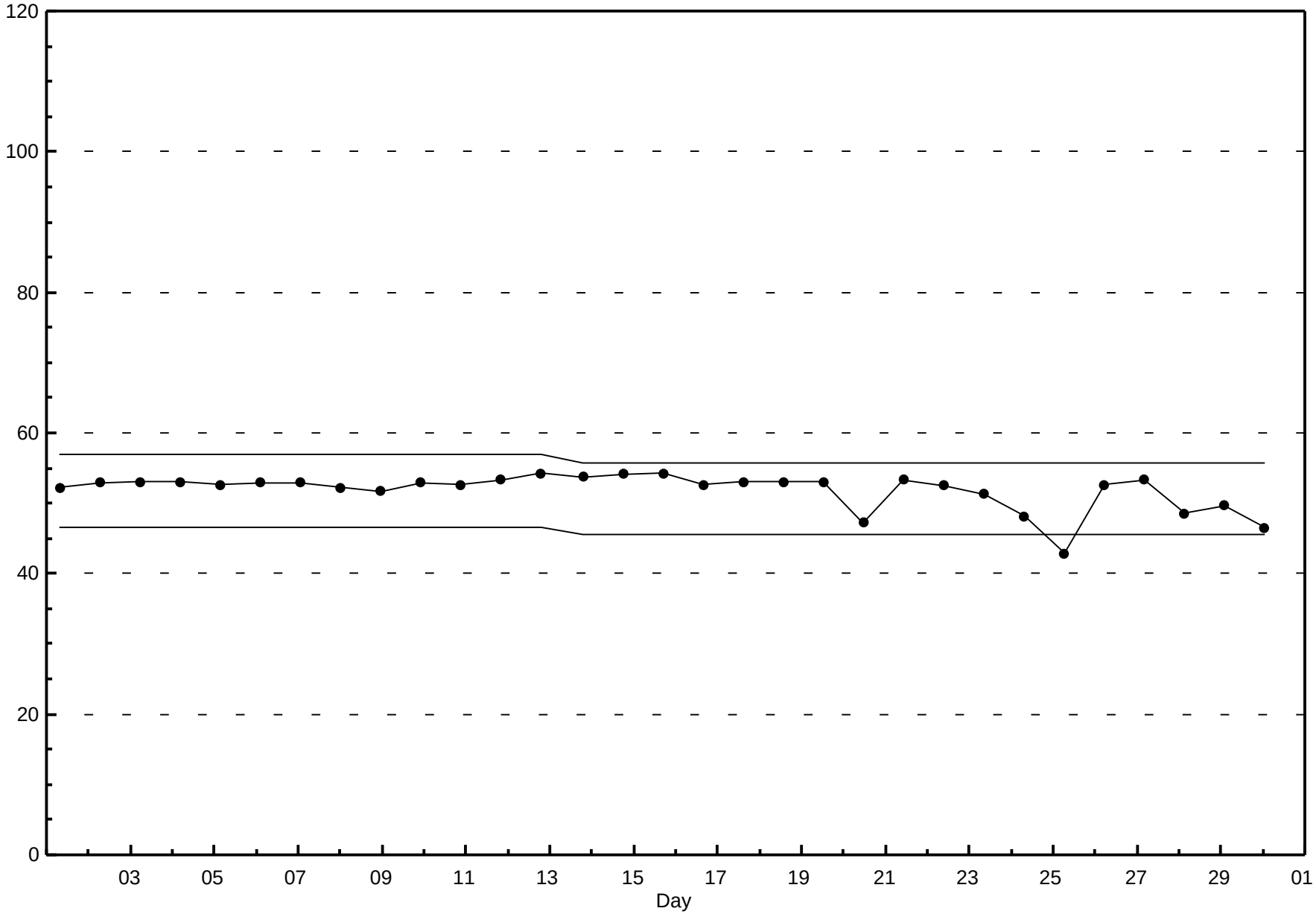


Peace Airshed Zone Association

Span Responses

Hydrogen Sulphide (H_2S)

Falher - June 2014



Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Falher - June 2014

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

Maximum Value: 28.3 ^{o}C on Jun 24 16:00

Maximum Daily Average: 19.8 ^{o}C on Jun 24

Minimum Value: 0 ^{o}C on Jun 5 03:00

Minimum Daily Average: 5.9 ^{o}C on Jun 4

Maximum Diurnal Average: 20.0 ^{o}C at hour 17

Minimum Diurnal Average: 8.5 ^{o}C at hour 5

Monthly Average: 14.91 ^{o}C

Percentiles: P_1 = 2.8 P_{10} = 6.9 Q_1 = 10.5 Median = 14.7 Q_3 = 19.3 P_{90} = 22.7 P_{99} = 26.2

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

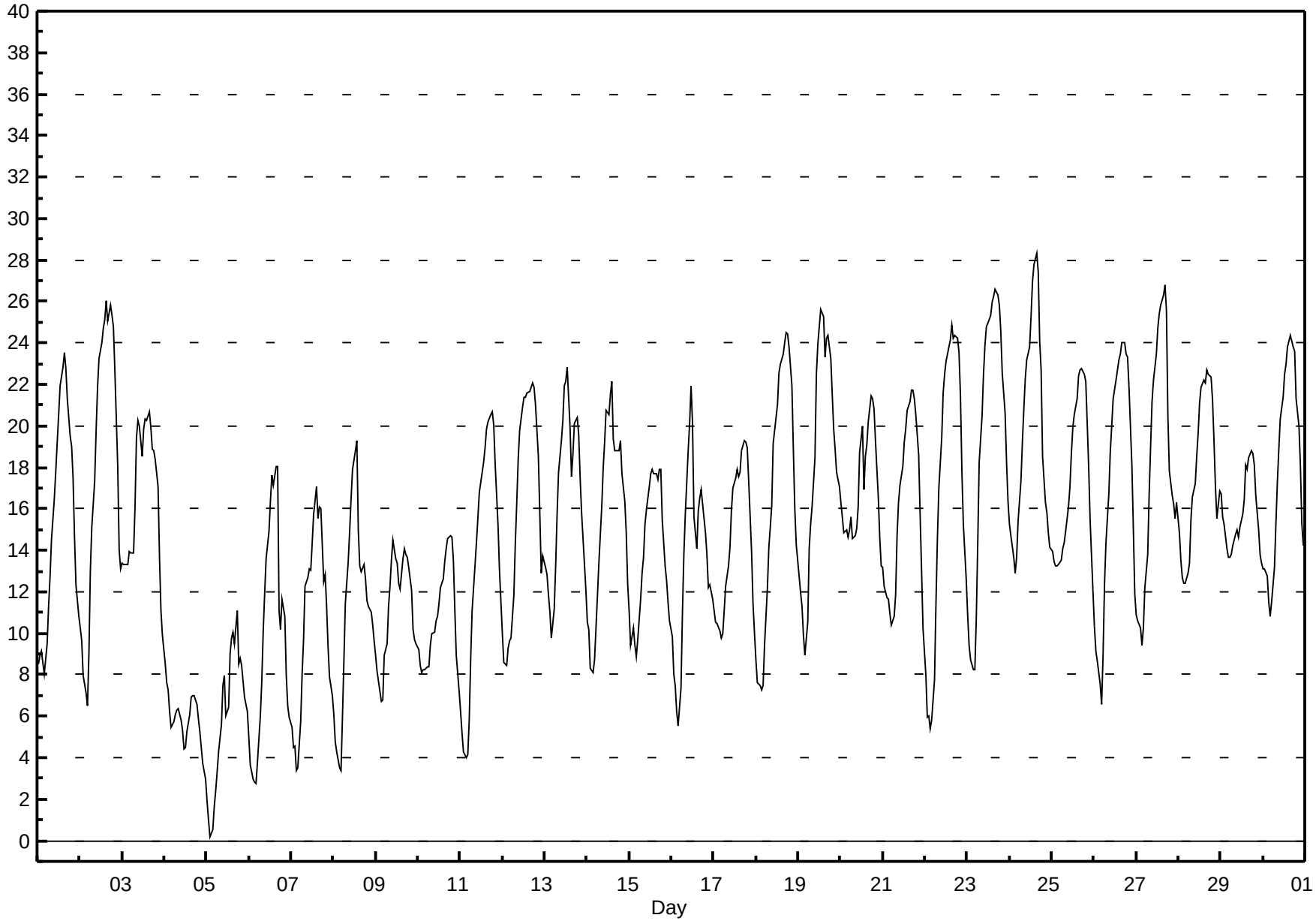
Day	Hourly Period Ending At (MST)																								Daily	Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Average	Maximum
1-Jun	9	9	9	9	8	10	11	13	15	16	18	19	21	22	23	24	23	21	20	19	17	15	12	11	15.5	23.5
2-Jun	10	10	8	7	6	9	13	15	17	20	22	23	24	25	25	26	25	26	25	25	23	18	14	13	17.9	26.1
3-Jun	13	13	13	13	14	14	14	16	19	20	20	19	20	20	20	21	20	19	19	18	17	14	11	10	16.6	20.7
4-Jun	9	8	7	6	5	6	6	6	6	6	5	4	4	5	6	7	7	7	7	6	5	4	4	3	5.9	8.5
5-Jun	2	1	0	1	2	2	3	4	6	7	8	6	6	9	10	10	9	11	9	9	8	7	7	6	6.0	11.1
6-Jun	5	4	3	3	3	4	6	8	10	12	14	15	16	18	17	18	18	11	10	12	11	8	7	6	9.9	18.1
7-Jun	5	5	5	3	4	6	8	10	12	13	13	13	14	16	17	16	16	16	12	13	11	9	8	7	10.5	17.0
8-Jun	6	5	4	4	3	6	9	11	13	15	16	18	19	19	15	13	13	13	13	12	11	11	10	10	11.3	19.3
9-Jun	9	8	7	7	7	9	9	11	12	14	15	14	13	12	12	14	14	14	14	13	12	10	10	10	11.2	14.5
10-Jun	9	8	8	8	8	8	8	9	10	10	11	11	11	12	13	13	14	15	15	15	14	11	9	7	10.8	14.7
11-Jun	6	5	4	4	4	6	9	11	13	14	16	17	18	18	19	20	20	21	21	20	18	15	13	11	13.5	20.7
12-Jun	10	9	8	9	10	10	12	14	16	18	20	21	21	21	22	22	22	22	22	21	19	16	13	14	16.3	22.0
13-Jun	13	13	12	11	10	11	13	16	18	19	20	22	22	23	20	18	19	20	20	20	17	16	15	12	16.6	22.9
14-Jun	11	10	8	8	9	10	12	13	16	18	19	21	21	22	22	19	19	19	19	19	18	16	15	12	15.7	22.1
15-Jun	11	9	10	9	9	10	12	13	14	15	16	17	18	18	18	18	17	18	18	15	13	13	11	11	13.9	17.9
16-Jun	10	8	7	6	6	7	11	14	16	19	20	22	20	16	14	16	16	17	16	15	14	12	12	12	13.6	21.9
17-Jun	11	11	10	10	10	10	11	12	13	14	16	17	17	18	18	18	19	19	19	19	17	14	11	10	14.4	19.3
18-Jun	9	8	7	7	8	9	12	14	15	16	19	20	21	23	23	23	24	24	24	24	22	19	16	14	16.8	24.5
19-Jun	13	12	11	10	9	11	14	15	16	18	22	24	25	26	25	23	24	24	23	21	20	19	18	17	18.4	25.6
20-Jun	16	16	15	15	15	15	16	15	15	15	16	19	20	17	19	19	20	21	21	21	19	17	15	13	17.0	21.4
21-Jun	13	12	12	12	11	10	11	12	15	16	17	18	19	20	21	21	22	22	21	21	19	16	13	10	16.0	21.7
22-Jun	8	6	6	5	6	8	11	15	17	19	22	22	23	23	24	25	24	24	24	24	21	18	15	13	16.9	24.8
23-Jun	11	9	9	8	8	11	14	18	20	22	24	25	25	25	26	26	27	26	26	25	23	21	18	16	19.3	26.6
24-Jun	15	15	14	13	14	15	17	19	21	22	23	24	25	27	28	28	27	24	23	19	16	16	15	14	19.8	28.3
25-Jun	14	13	13	13	13	14	14	14	15	16	17	19	20	21	21	22	23	23	22	22	20	18	15	12	17.3	22.7
26-Jun	10	9	9	8	7	9	12	14	17	19	20	21	22	23	23	23	24	24	23	23	22	18	15	12	17.0	24.0
27-Jun	11	11	10	9	10	12	14	17	19	21	22	23	25	25	26	26	27	26	20	18	17	16	16	16	18.2	26.8
28-Jun	15	14	13	12	12	13	13	15	17	17	18	20	21	22	22	22	23	22	22	21	19	17	16	17	17.7	22.7
29-Jun	17	16	15	14	14	14	14	14	15	15	15	15	16	16	18	18	18	19	19	18	17	15	14	13	15.7	18.8
30-Jun	13	13	13	12	11	11	13	15	17	19	20	21	22	23	24	24	24	24	24	21	20	18	15	14	18.0	24.3
	10.5	9.6	9.1	8.6	8.5	9.6	11.5	13.2	14.9	16.3	17.5	18.3	19.1	19.5	19.7	19.8	20.0	19.8	19.0	18.2	16.7	14.5	12.7	11.6	Diurnal Average	
	16.7	15.6	15.3	15.0	14.6	15.4	17.3	19.2	20.8	22.5	23.9	24.8	25.3	26.9	27.8	28.3	27.5	26.3	25.8	24.8	22.7	20.6	18.3	17.1	Diurnal Maximum	

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Falher - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Falher - June 2014

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	5	7	5	7	11	12	13	11	8	8	6	7	8	10	15	14	14	15	14	12	6	2	2	8	3.8	14.7
Dir	68	50	86	136	151	160	187	210	245	283	243	250	269	293	284	277	301	282	305	360	346	6	311	180	265	284
2 Spd	3	6	9	10	10	10	10	12	12	9	8	11	10	9	8	10	8	6	10	14	14	14	14	16	6.8	16.1
Dir	132	121	167	140	119	158	191	212	215	233	242	248	225	232	197	268	209	258	205	190	161	145	116	98	184	98
3 Spd	18	11	6	15	14	7	8	5	16	24	26	23	30	30	29	30	30	27	29	29	23	15	14	15	13.0	30.4
Dir	99	121	115	155	158	168	131	162	259	281	272	271	282	275	280	290	297	311	307	307	300	294	286	294	283	297
4 Spd	15	15	15	13	12	14	17	15	11	11	11	17	15	14	15	14	16	13	16	15	14	18	19	19	13.9	19.2
Dir	293	306	296	282	280	286	283	287	298	256	238	237	271	270	285	294	283	277	288	275	311	317	311	303	286	303
5 Spd	18	19	18	17	17	19	19	20	21	16	15	11	15	16	15	10	16	12	13	9	5	10	9	10	11.3	20.6
Dir	286	271	254	258	279	287	282	269	281	294	284	245	245	243	273	310	262	256	295	212	158	130	106	122	267	281
6 Spd	10	12	13	16	16	12	14	13	12	8	9	13	13	17	20	20	23	35	13	10	4	9	1	5	7.1	35.2
Dir	111	145	169	181	185	191	201	204	204	212	227	233	238	251	222	227	231	329	25	65	329	207	259	342	218	329
7 Spd	1	5	6	1	0	5	6	5	4	6	6	8	9	8	11	20	15	15	16	10	11	12	11	3	3.1	20.4
Dir	66	155	193	232	163	269	280	290	304	270	240	244	229	262	266	353	36	344	309	212	192	174	174	123	265	353
8 Spd	5	6	8	9	9	9	11	13	17	22	19	19	13	10	20	1	9	14	12	7	13	13	15	13	8.1	21.5
Dir	72	65	69	95	68	88	105	134	145	141	134	158	185	204	282	65	47	136	207	160	119	132	145	145	136	141
9 Spd	15	13	12	11	11	13	18	20	26	27	28	25	29	18	27	35	33	31	28	26	21	21	17	16	19.5	35.2
Dir	159	173	185	184	196	222	217	256	277	265	257	233	236	252	253	259	260	260	265	263	258	249	243	247	246	259
10 Spd	18	17	15	15	13	12	10	11	19	18	16	15	11	9	13	9	8	10	9	9	10	8	1	4	0.1	18.7
Dir	248	251	243	246	250	255	272	22	37	26	42	49	41	67	75	81	108	145	175	161	204	212	225	95	15	37
11 Spd	6	9	9	8	6	7	10	9	8	14	12	12	14	13	13	9	9	6	3	5	8	9	10	10	6.9	13.6
Dir	102	91	85	84	99	112	147	172	143	160	170	148	141	150	184	210	179	149	179	109	71	68	74	83	133	160
12 Spd	10	10	11	14	13	10	13	17	18	20	21	24	26	22	21	17	18	17	18	19	18	15	12	16	15.9	25.9
Dir	87	87	77	91	90	103	88	99	96	100	89	85	75	97	103	118	95	83	73	110	122	116	130	153	98	75
13 Spd	6	8	10	3	4	5	16	17	19	17	21	25	22	22	27	25	9	14	14	19	8	3	4	8	7.9	27.2
Dir	195	346	31	207	250	79	83	101	104	102	105	101	106	94	165	200	206	196	182	207	234	334	64	137	133	165
14 Spd	10	8	10	10	15	15	21	26	28	30	22	21	20	17	17	20	26	22	20	22	19	14	14	13	15.1	29.6
Dir	138	95	128	133	141	149	152	160	158	177	189	202	219	196	205	264	228	224	199	212	219	212	212	204	190	177
15 Spd	15	13	13	10	7	6	9	12	9	7	4	3	7	4	10	10	12	11	8	26	3	8	5	6	5.3	26.5
Dir	191	183	189	199	183	151	188	205	203	233	230	187	161	122	111	67	28	72	144	182	196	289	242	290	180	182
16 Spd	8	7	5	1	3	6	7	8	7	3	4	7	8	21	18	17	4	25	23	19	11	5	8	7	4.3	25.4
Dir	345	17	181	197	332	2	356	10	22	15	314	318	69	143	175	183	154	102	124	115	127	15	88	42	104	102
17 Spd	1	8	8	6	6	5	4	8	3	4	5	6	6	9	3	7	5	5	5	6	10	12	13	14	1.7	14.3
Dir	16	306	324	329	331	336	273	295	280	210	231	118	120	135	108	233	197	181	156	161	136	121	112	111	152	111
18 Spd	12	13	13	12	12	15	21	21	14	12	8	9	13	21	19	15	13	14	9	9	8	7	2	6	8.1	21.2
Dir	104	98	102	100	106	124	143	157	182	206	222	224	204	202	198	216	225	231	228	230	196	200	289	323	178	143
19 Spd	7	8	9	6	4	1	3	7	6	9	8	5	5	3	9	13	13	14	17	22	19	21	18	19	4.9	21.9
Dir	341	324	312	342	201	225	324	304	327	313	318	360	100	107	45	25	28	37	109	116	108	105	104	97	61	116
20 Spd	15	13	13	14	12	11	11	9	8	7	9	8	7	17	18	12	6	7	9	13	11	10	10	11	3.3	18.0
Dir	98	95	107	111	107	116	158	223	253	265	297	286	284	261	281	311	301	262	285	306	293	278	283	264	267	281
21 Spd	11	11	13	14	14	13	10	9	18	22	22	20	22	20	20	19	18	20	20	19	11	6	6	5	14.7	22.4
Dir	263	264	272	263	263	256	247	230	242	259	258	258	253	248	258	263	271	268	283	291	286	286	245	251	262	258
22 Spd	4	7	4	6	6	4	6	8	9	10	10	8	6	4	4	6	5	2	3	5	5	6	3	5	1.1	9.7
Dir	71	151	154	80	141	132	212	243	240	241	266	273	293	292	279	304	16	328	298	2	62	111	85	68	249	266

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Falher - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	5	3	7	6	7	6	6	6	6	8	13	14	14	15	11	13	10	15	18	17	17	17	16	16	10.6	17.9
Dir	80	105	85	81	89	67	73	73	78	91	108	119	122	98	111	112	138	120	108	102	99	93	90	107	102	108
24 Spd	17	17	15	15	15	17	21	25	24	23	21	16	12	10	9	7	8	22	21	29	18	9	8	7	10.7	28.9
Dir	105	102	100	105	99	105	109	111	121	146	139	130	152	224	263	265	145	103	110	224	238	208	200	205	136	224
25 Spd	12	13	12	10	8	10	12	13	12	14	12	12	13	11	13	12	14	12	14	9	5	7	10	6	10.0	14.4
Dir	187	178	221	229	201	186	199	214	229	234	241	250	263	251	257	255	246	248	260	264	233	205	205	180	229	246
26 Spd	5	3	4	8	8	6	5	9	8	7	8	9	14	14	11	14	10	9	9	5	4	4	8	9	5.3	13.8
Dir	189	148	94	127	144	151	176	210	219	233	232	228	230	225	217	215	232	233	230	249	297	80	98	94	204	215
27 Spd	7	8	5	8	11	9	11	11	9	7	9	9	6	6	7	5	5	9	18	21	18	19	21	14	5.3	21.4
Dir	61	40	30	34	74	98	106	114	127	104	98	102	124	101	102	91	108	116	212	236	246	151	58	57	108	58
28 Spd	9	11	6	4	8	9	10	10	12	9	11	10	12	10	10	11	6	6	6	6	8	11	11	3	6.1	11.6
Dir	196	227	36	119	165	186	217	243	261	261	253	255	273	264	255	248	242	218	209	167	163	154	164	317	224	261
29 Spd	6	11	17	11	2	7	9	9	8	8	12	16	16	17	17	19	17	16	12	9	13	7	7	6	8.8	18.8
Dir	58	129	193	222	163	176	205	222	217	225	250	254	259	269	263	280	270	278	276	252	235	231	222	231	243	280
30 Spd	6	7	7	6	6	7	8	12	16	16	19	19	17	17	18	20	19	14	11	18	7	3	6	9	9.7	19.6
Dir	229	238	244	234	230	241	247	256	256	268	267	261	275	261	262	267	272	267	294	355	25	59	355	347	271	267
Spd	2.7	2.3	2.6	3.4	3.9	3.8	5.1	5.2	4.6	5.3	5.4	5.6	6.0	6.5	7.9	7.7	5.9	3.6	4.3	5.2	3.6	3.7	2.8	2.3	Diurnal Average	
Dir	137	142	163	161	157	167	179	197	211	224	228	220	228	225	237	258	257	257	239	219	209	168	141	130		
Spd	18.4	18.6	17.7	16.8	17.1	19.4	21.2	25.9	28.2	29.6	28.1	25.4	30.0	30.0	29.3	35.2	32.9	35.2	29.3	28.9	23.3	21.0	21.4	19.2	Diurnal Maximum	
Dir	286	271	254	258	279	287	143	160	158	177	257	101	282	275	280	259	260	329	307	224	300	105	58	303		

Maximum Speed Value: 35 km/h on Jun 6 18:00
Maximum Daily Speed Average: 19.5 km/h on Jun 9
Maximum Diurnal Speed Average: 7.9 km/h at hour 15

Minimum Speed Value: 0 km/h on Jun 7 05:00
Minimum Daily Speed Average: 0.1 km/h on Jun 22
Minimum Diurnal Speed Average: 2.3 km/h at hour 24

Monthly Average Velocity: 3.66 km/h 210.3 deg

Speed Percentiles: $P_1 = 1.4$ $P_{10} = 5.0$ $Q_1 = 7.6$ Median = 11.1 $Q_3 = 15.7$ $P_{90} = 20.4$ $P_{99} = 29.9$

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

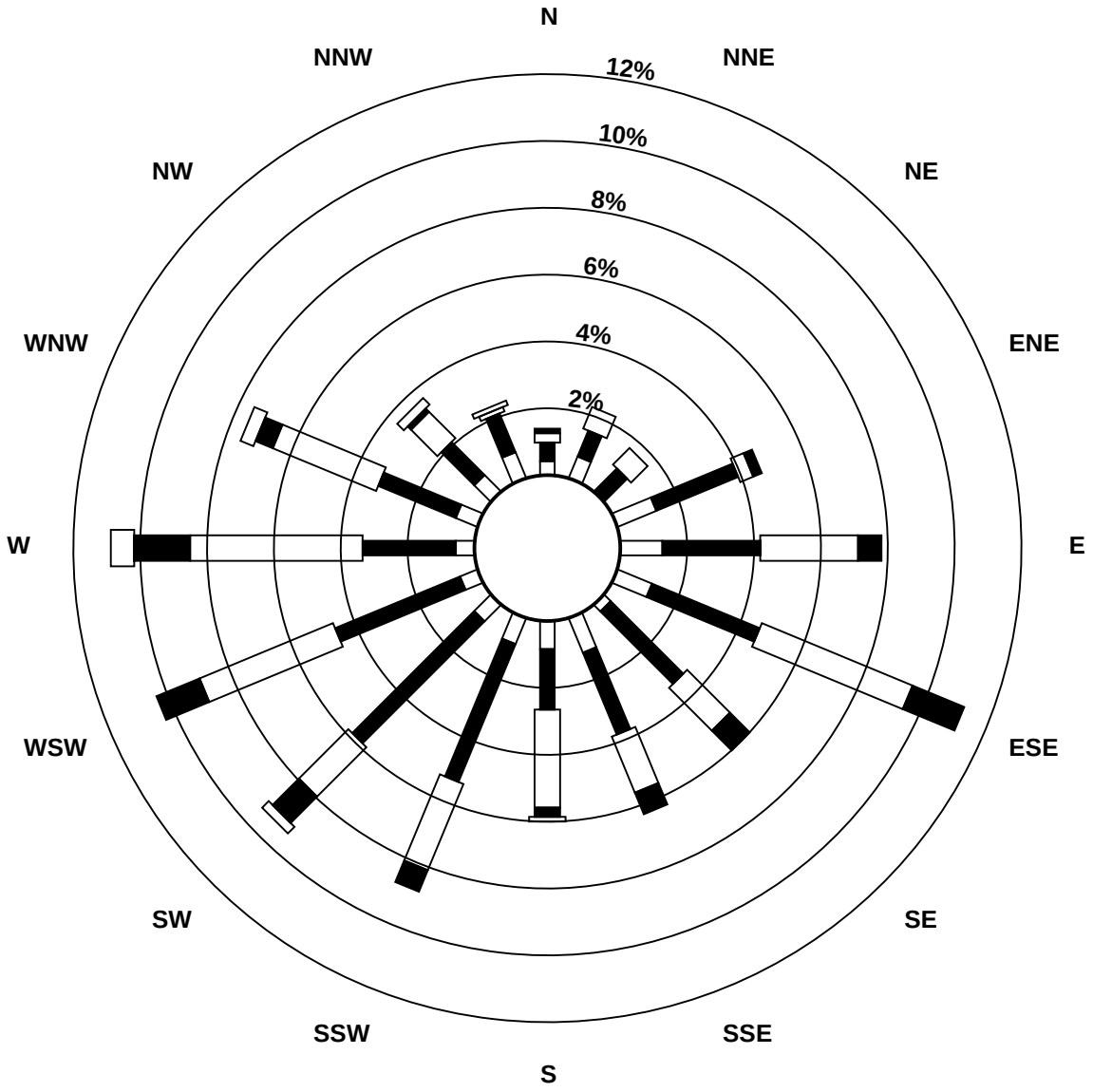
Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	5	15	4	1	0	0	25
NorthEast	4	19	11	1	0	0	35
East	15	46	51	17	0	0	129
SouthEast	9	36	33	12	0	0	90
South	11	34	37	9	2	0	93
SouthWest	7	73	47	9	2	0	138
West	10	36	71	28	8	0	153
NorthWest	11	21	18	3	4	0	57
Total	72	280	272	80	16	0	720

Peace Airshed Zone Association

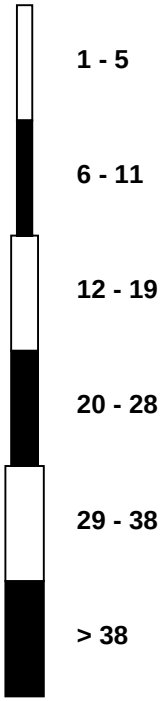
Wind Rose

Wind Speed (WS) (km/h)

Falher - June 2014



Wind Speed Classes (km/h)



Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Falher - June 2014

Maximum Speed: 36 km/h on Jun 6 18:00

Maximum Daily Speed Average: 22.0 km/h on Jun 9

Minimum Speed: 1 km/h on Jun 7 05:00

Minimum Daily Speed Average: 6.9 km/h on Jun 22

Maximum Diurnal Speed Average: 16.1 km/h at hour 15

Minimum Diurnal Speed Average: 9.7 km/h at hour 6

Monthly Average Speed: 12.69 km/h

Percentiles: $P_1 = 2.8$ $P_{10} = 6.0$ $Q_1 = 8.1$ Median = 11.7 $Q_3 = 16.3$ $P_{90} = 21.0$ $P_{99} = 30.4$

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

Day	Hourly Period Ending At (MST) 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	7	6	7	11	13	13	11	9	8	7	9	9	12	16	15	15	16	19	13	6	3	4	9	10.1	19.2
2-Jun	7	6	9	11	10	11	11	13	12	10	9	12	11	10	11	13	9	8	12	14	14	14	15	16	11.0	16.1
3-Jun	18	11	7	15	15	8	8	7	17	24	26	24	30	30	30	30	31	28	30	29	23	15	14	15	20.2	30.8
4-Jun	15	15	15	13	13	14	17	16	11	12	11	17	16	14	16	15	16	13	16	15	15	18	19	19	15.0	19.3
5-Jun	19	19	18	17	17	19	19	20	21	17	16	13	16	16	17	14	17	12	15	9	6	10	10	10	15.3	21.0
6-Jun	11	12	13	16	16	12	14	13	12	9	10	14	13	18	21	21	24	36	15	11	6	9	2	5	13.8	35.6
7-Jun	3	5	6	2	1	5	6	6	5	6	7	10	10	9	13	26	16	17	18	11	11	12	11	5	9.2	25.5
8-Jun	5	6	8	10	9	9	12	14	17	22	20	19	13	11	21	6	14	14	12	10	13	13	15	13	12.8	21.8
9-Jun	15	13	13	11	11	13	18	21	26	27	28	25	29	19	28	35	33	31	28	27	21	21	17	16	22.0	35.4
10-Jun	18	17	15	15	13	12	10	13	19	18	17	15	11	10	13	10	9	11	10	9	10	8	2	5	12.1	18.8
11-Jun	7	9	9	8	6	8	11	9	9	14	13	13	14	14	14	11	10	8	5	6	8	9	10	10	9.7	14.4
12-Jun	10	10	11	14	13	10	13	17	18	20	21	24	26	23	22	18	19	18	19	20	18	15	12	17	17.1	26.4
13-Jun	8	8	10	4	4	5	16	17	19	17	22	26	23	22	29	26	10	14	14	20	9	4	5	8	14.2	29.1
14-Jun	10	8	10	10	15	15	21	26	28	30	22	23	20	18	19	21	26	22	21	22	19	14	14	13	18.7	29.9
15-Jun	15	13	13	10	7	6	9	12	9	8	5	6	8	6	11	11	13	12	9	27	9	9	6	7	10.0	26.7
16-Jun	8	7	5	2	3	6	7	9	8	4	6	8	18	25	20	18	9	28	23	19	11	7	12	8	11.2	27.8
17-Jun	8	10	9	6	6	5	5	8	3	5	6	7	7	11	6	9	7	6	6	6	10	12	13	14	7.7	14.3
18-Jun	12	13	13	12	12	15	21	21	15	12	9	9	14	21	20	16	14	14	9	10	8	7	5	7	12.9	21.3
19-Jun	8	8	9	7	6	2	4	7	7	9	9	8	7	6	12	14	13	15	19	22	19	21	18	19	11.2	21.9
20-Jun	15	13	13	14	12	11	13	10	8	7	10	9	8	18	18	12	7	7	10	13	12	10	10	11	11.4	18.2
21-Jun	11	11	13	14	14	13	10	9	18	22	23	21	23	21	20	20	18	21	20	19	11	6	6	5	15.4	22.9
22-Jun	6	7	5	6	6	4	6	8	9	10	11	10	8	8	7	7	8	7	6	6	6	6	4	5	6.9	10.5
23-Jun	5	3	7	6	8	6	6	6	7	9	13	15	15	16	13	13	11	16	18	17	17	17	16	16	11.5	18.0
24-Jun	17	17	15	15	15	17	21	25	24	23	21	16	15	11	10	8	13	23	22	29	18	10	8	8	16.8	29.4
25-Jun	12	13	12	10	8	10	13	13	12	14	13	12	13	12	13	13	15	13	14	10	5	7	10	6	11.4	14.9
26-Jun	5	4	4	8	8	6	6	9	8	7	8	10	14	14	12	15	11	9	10	5	5	5	8	9	8.4	14.8
27-Jun	7	8	6	8	12	9	11	11	9	8	10	10	7	7	8	7	6	10	21	21	19	21	22	14	11.3	21.9
28-Jun	11	11	6	6	9	9	10	10	12	9	11	11	12	11	11	11	7	7	6	7	8	12	11	8	9.4	11.9
29-Jun	7	12	18	11	6	8	9	9	8	8	12	16	16	17	17	19	17	17	12	9	13	8	7	6	11.7	18.9
30-Jun	6	7	7	6	6	7	8	12	16	16	19	19	17	17	18	20	20	15	13	18	8	3	6	9	12.3	20.0
	10.2	10.2	10.2	9.8	9.8	9.7	11.5	12.8	13.3	13.5	13.8	14.4	14.9	15.0	16.1	15.8	14.6	15.5	15.1	15.1	11.9	10.8	10.4	10.4	Diurnal Average	
	18.6	18.8	17.8	17.0	17.2	19.5	21.3	26.0	28.4	29.9	28.4	26.0	30.3	30.5	29.9	35.4	33.1	35.6	29.7	29.4	23.3	21.1	21.9	19.3	Diurnal Maximum	

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Falher - June 2014

Maximum Value: 89.7 deg on Jun 8 16:00

Minimum Value: 1.7 deg on Jun 6 05:00

Percentiles: P_1 = 2.6 P_{10} = 4.7 Q_1 = 7.6 Median = 13.5 Q_3 = 23.8 P_{90} = 41.8 P_{99} = 78.1

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

Day	Hourly Period Ending At (MST)																								Daily 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	15	45	7	18	8	14	7	23	20	42	43	35	28	22	26	25	27	47	15	12	71	77	21	77.0
2-Jun	62	25	16	23	4	18	8	9	13	16	35	28	33	42	45	46	39	54	32	13	10	3	8	3	61.9
3-Jun	4	10	19	7	20	38	13	43	14	9	10	10	9	10	11	11	9	9	9	6	4	6	3	3	43.1
4-Jun	4	9	4	11	8	11	7	11	13	17	7	9	10	10	12	12	9	13	6	11	15	5	5	4	17.3
5-Jun	7	8	3	6	4	3	5	5	11	16	15	36	14	16	49	48	23	10	37	9	31	3	8	16	48.8
6-Jun	19	7	10	5	2	4	3	8	10	21	17	16	17	19	18	15	15	9	29	15	52	8	65	16	65.5
7-Jun	53	24	12	40	76	10	12	15	32	22	33	35	27	38	27	48	15	29	29	22	10	4	7	45	75.5
8-Jun	12	15	12	14	13	17	11	9	8	10	14	17	19	28	19	90	60	14	20	41	7	6	7	4	89.7
9-Jun	5	5	12	8	4	6	5	15	7	6	8	6	4	12	11	7	6	6	7	7	5	4	3	3	14.9
10-Jun	3	5	3	3	5	4	9	40	7	10	13	13	18	32	13	25	32	22	20	17	13	8	87	24	87.0
11-Jun	26	7	5	6	16	12	13	18	20	13	16	22	22	26	19	39	36	51	74	44	10	5	14	3	73.9
12-Jun	10	12	5	5	4	11	8	6	7	10	11	10	11	15	17	15	21	18	9	13	7	6	12	15	20.7
13-Jun	61	18	10	48	28	58	8	8	10	11	8	12	14	16	23	11	27	13	10	20	28	30	36	7	61.4
14-Jun	14	13	18	19	7	4	5	5	7	8	9	20	11	19	21	17	6	8	12	11	8	7	3	5	21.2
15-Jun	3	3	4	7	19	18	8	8	12	24	50	76	38	55	34	35	17	22	34	8	82	18	43	18	82.4
16-Jun	19	39	24	77	18	5	7	14	18	56	45	45	63	36	28	15	70	25	5	6	10	60	46	17	77.4
17-Jun	79	39	10	12	16	15	18	6	19	30	27	40	42	36	74	44	59	45	43	20	12	3	4	3	78.9
18-Jun	7	2	3	4	5	10	4	8	12	10	26	16	16	12	14	23	24	17	21	11	6	11	88	30	88.0
19-Jun	18	13	14	37	77	39	44	9	31	17	26	58	68	79	67	4	9	7	29	3	2	3	6	3	79.2
20-Jun	5	6	4	5	3	3	27	22	10	14	32	28	31	23	7	14	28	22	16	14	10	9	6	8	31.6
21-Jun	3	4	4	3	3	5	10	8	6	11	11	15	13	17	15	17	17	14	14	7	5	4	21	33	33.1
22-Jun	42	18	24	20	24	27	15	11	11	14	22	36	55	73	74	53	71	88	67	31	23	5	31	15	88.0
23-Jun	11	20	10	19	32	11	14	16	21	17	18	22	28	25	50	19	28	23	7	4	5	4	6	10	50.0
24-Jun	3	2	2	3	3	4	3	5	6	12	10	14	32	36	23	39	80	21	21	11	5	21	7	14	79.9
25-Jun	8	13	6	6	10	6	6	7	7	7	12	13	19	15	14	16	14	13	9	8	18	4	4	20	20.4
26-Jun	39	32	20	20	19	15	16	9	15	20	18	22	19	21	25	26	29	25	11	17	16	33	11	6	39.3
27-Jun	25	12	31	11	19	10	8	11	15	17	26	28	54	39	34	55	63	42	34	14	24	40	13	14	63.1
28-Jun	50	23	34	58	24	7	13	9	10	11	14	15	14	21	17	13	25	22	20	28	7	8	8	84	84.4
29-Jun	46	22	14	10	69	14	15	12	12	11	9	7	7	7	8	7	8	7	9	12	4	6	9	7	69.0
30-Jun	6	5	32	10	13	10	10	6	6	7	8	11	12	12	11	12	10	7	30	8	22	32	46	8	45.7
	78.9	39.0	45.3	77.4	77.1	58.3	43.6	43.1	31.6	55.9	50.4	76.3	67.8	79.2	74.4	89.7	79.9	88.0	73.9	43.6	82.4	71.1	88.0	84.4	

PAZA
Portable – Clairmont Station
Monthly Summary Tables, Graphs and Roses

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 6.7 ppb on Jun 24 11:00 Maximum Daily Average: 1.1 ppb on Jun 21

Minimum Value: 0 ppb on Jun 21 18:00 Minimum Daily Average: 0.0 ppb on Jun 22
Maximum Diurnal Average: 0.9 ppb at hour 11 Minimum Diurnal Average: 0.1 ppb at hour 14
Monthly Average: 0.40 ppb Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.0 Median = 0.1 Q_3 = 0.3 P_{90} = 1.4 P_{99} = -1.2

Hours in Service:	252
Hours of Data:	239
Hours of Missing Data:	13
Hours of Calibration:	13
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	2	2	2	2	2	2	2	2	2	--	2.4
21-Jun	2	2	3	2	2	3	2	2	2	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	2.5
22-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	0.2
23-Jun	0	0	1	1	1	2	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0
24-Jun	1	1	2	1	1	1	0	A	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	6.7
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
26-Jun	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1
27-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	0.7
28-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	0.2	0.4
29-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
30-Jun	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.6
	0.4	0.7	0.7	0.6	0.6	0.6	0.6	0.4	0.5	0.5	0.9	0.1	0.1	0.1	0.1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	Diurnal Average	
	2.4	2.4	2.5	2.5	2.4	2.5	2.5	2.4	2.4	2.3	6.7	0.3	0.3	0.2	0.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	Diurnal Maximum	

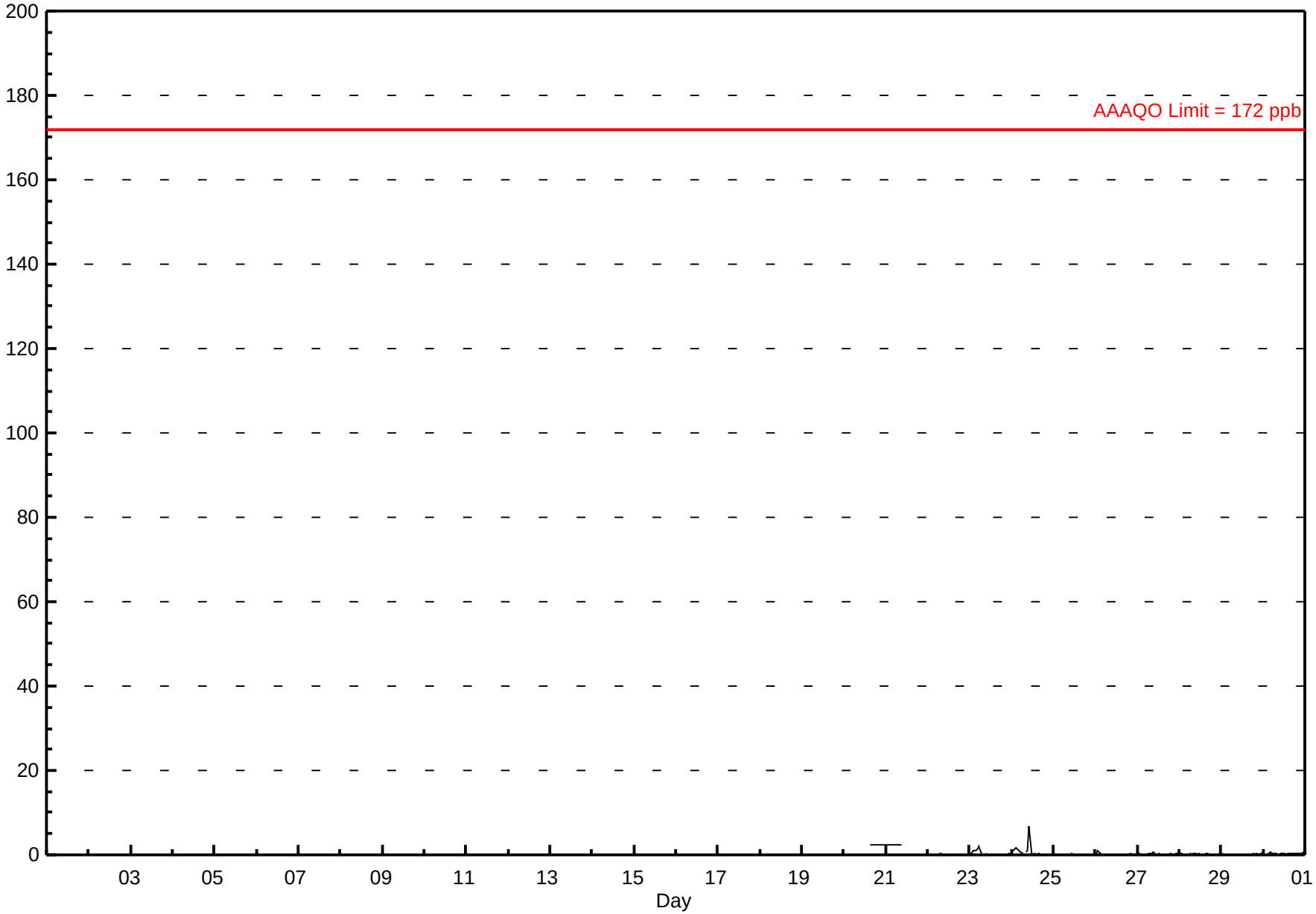
C - Calibration NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - June 2014

Maximum Value: 22.4 ppb on Jun 24 11:00

Maximum Daily Average: 2.1 ppb on Jun 24

Minimum Value: 0 ppb on Jun 23 19:00

Minimum Daily Average: 0.6 ppb on Jun 22

Maximum Diurnal Average: 3.1 ppb at hour 11

Minimum Diurnal Average: 0.6 ppb at hour 14

Monthly Average: 1.08 ppb

Percentiles: P_1 = 0.5 P_{10} = 0.5 Q_1 = 0.5 Median = 0.7 Q_3 = 1.0 P_{90} = 2.9 P_{99} = -9.4

Hours in Service:	252
Hours of Data:	239
Hours of Missing Data:	13
Hours of Calibration:	13
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	3	3	3	3	3	3	3	3	3	--	2.9
21-Jun	3	3	3	3	3	3	3	3	3	3	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1.6	3.4
22-Jun	1	0	0	0	0	1	0	1	1	A	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0.6	1.0
23-Jun	1	2	2	2	3	6	5	1	A	1	1	1	1	1	1	0	1	0	0	1	0	1	1	1	1.4	5.5
24-Jun	1	2	2	2	2	1	1	A	1	2	22	4	1	1	1	1	0	1	0	0	0	0	1	1	2.1	22.4
25-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0.6	1.5
26-Jun	1	2	1	1	0	A	0	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0.7	2.3
27-Jun	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.6
28-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
29-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	0.7	1.0
30-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	1.3
	1.0	1.4	1.3	1.2	1.4	1.5	1.4	1.0	1.1	1.2	3.1	1.0	0.7	0.6	0.6	0.8	0.9	0.8	0.8	0.8	0.9	0.8	0.9	1.0	Diurnal Average	
	2.9	2.9	3.4	2.9	3.4	5.5	4.8	2.9	3.0	2.9	22.4	4.2	0.9	0.9	0.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	Diurnal Maximum	

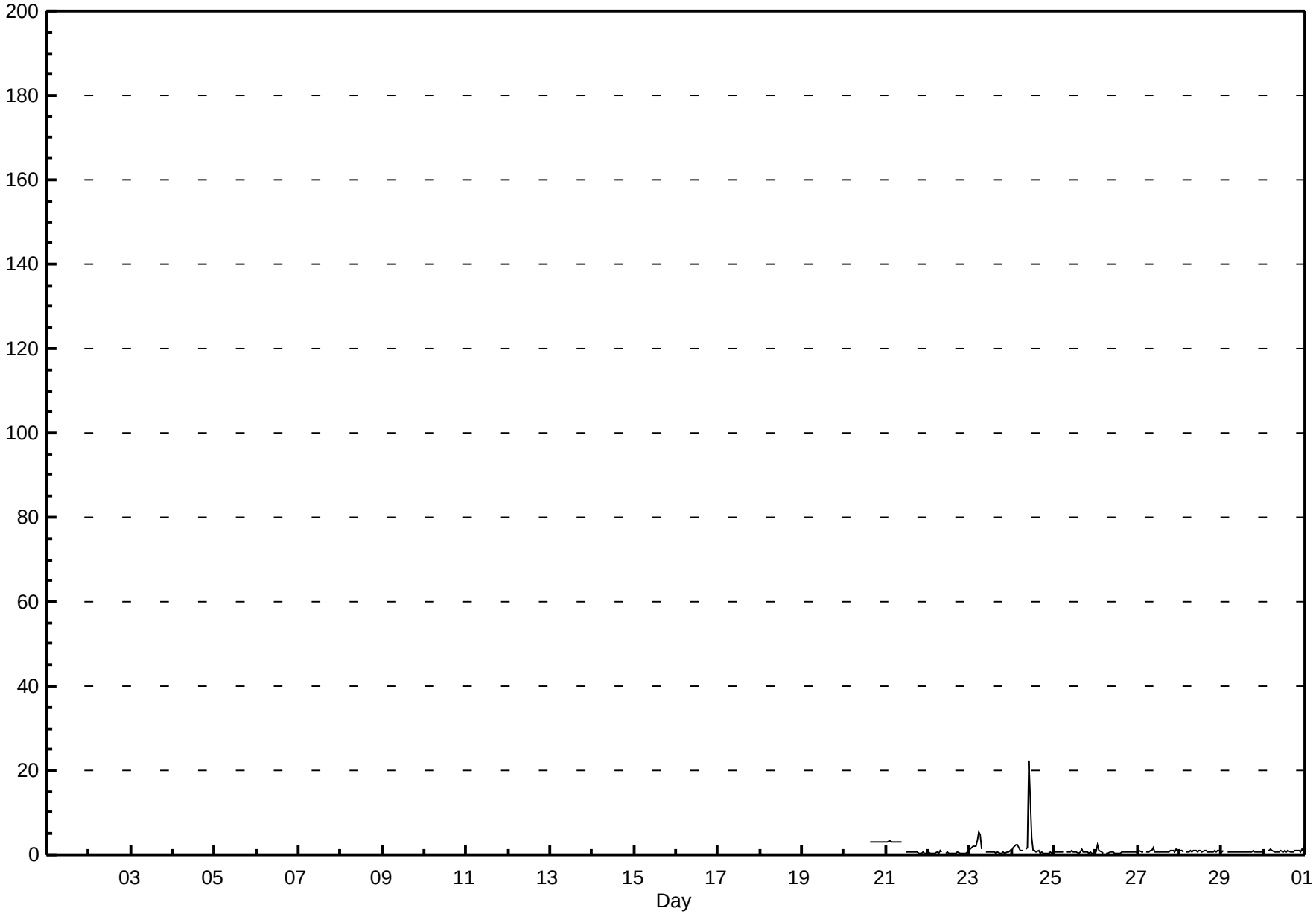
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Sulphur Dioxide (SO_2) - ppb

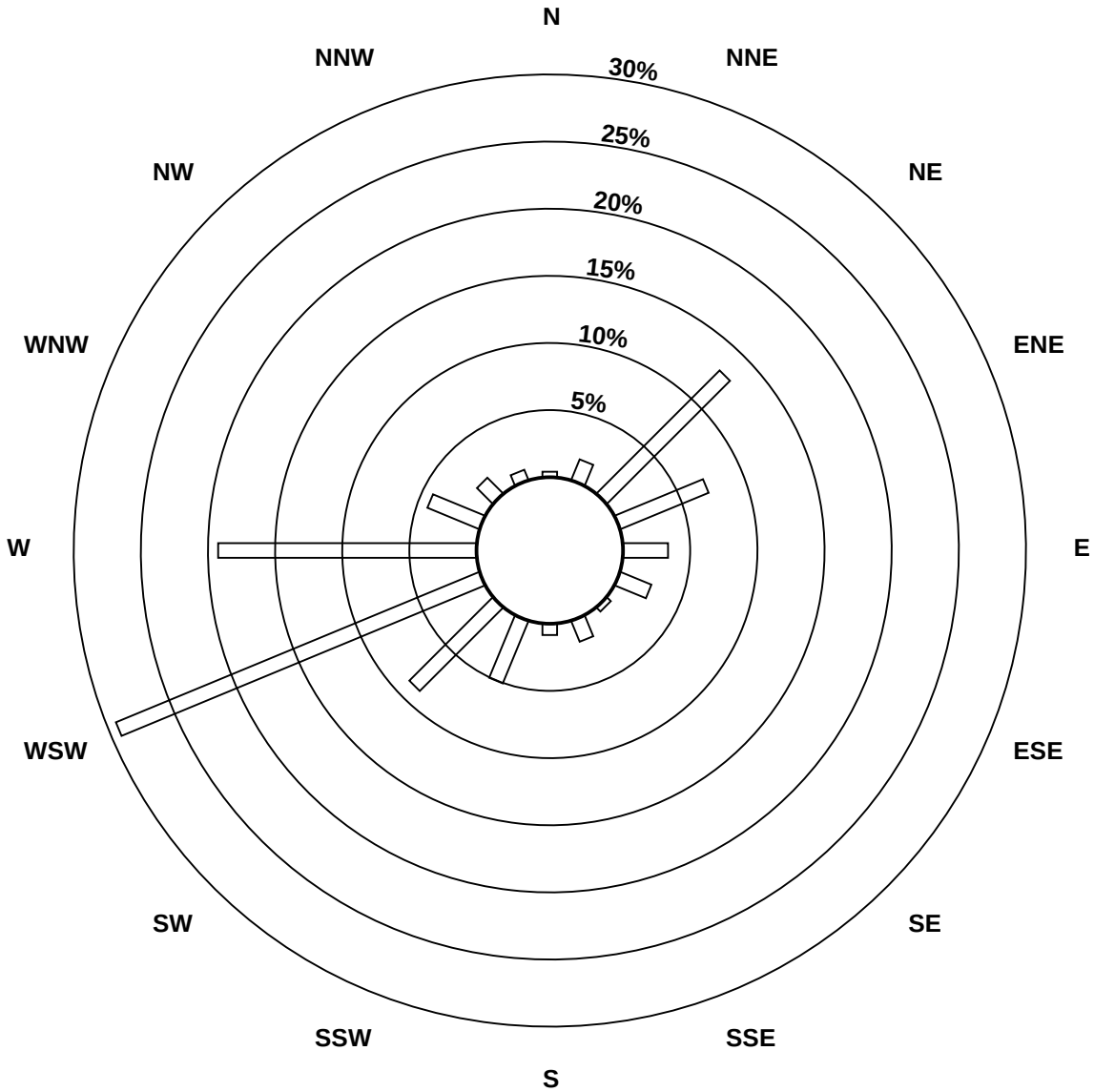
Portable Clairmont - June 2014



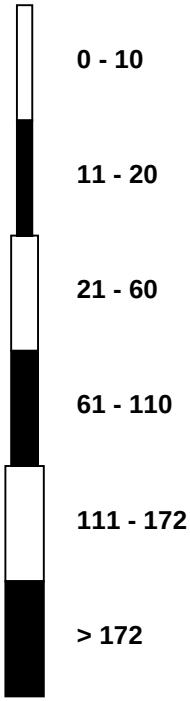
Pollutant Rose

Sulphur Dioxide (SO_2) - ppb

Portable Clairmont - June 2014



Pollutant Classes (ppb)

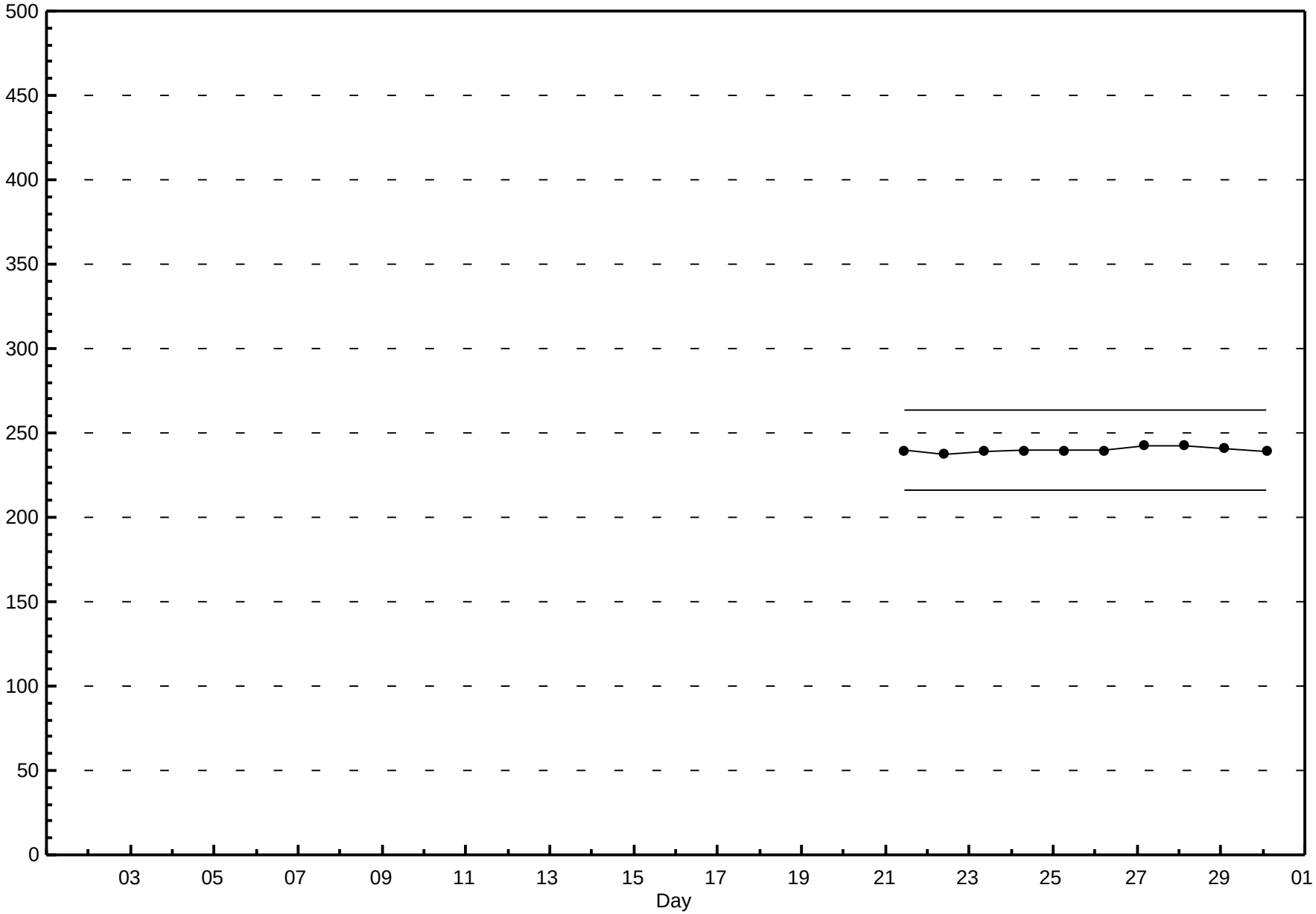


Peace Airshed Zone Association

Span Responses

Sulphur Dioxide (SO_2)

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - June 2014

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

Maximum Value: 2.0 ppb on Jun 27 06:00

Maximum Daily Average: 0.5 ppb on Jun 30

Minimum Value: 0 ppb on Jun 21 18:00

Minimum Daily Average: 0.1 ppb on Jun 22

Maximum Diurnal Average: 0.7 ppb at hour 6

Minimum Diurnal Average: 0.2 ppb at hour 14

Monthly Average: 0.31 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.2$ Median = 0.3 $Q_3 = 0.4$ $P_{90} = 0.5$ $P_{99} = 1.3$

Hours in Service:	226
Hours of Data:	214
Hours of Missing Data:	12
Hours of Calibration:	12
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	0	0	0	0	0	0	0	--	0.0
22-Jun	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
23-Jun	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
24-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	0.5
25-Jun	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	0.7
26-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
27-Jun	1	0	1	1	A	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.0
28-Jun	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.8
29-Jun	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.4	0.9
30-Jun	1	A	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.5	1.2
	0.3	0.4	0.4	0.4	0.5	0.7	0.6	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.4	Diurnal Average	
	0.5	1.0	1.2	0.9	1.1	2.0	1.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.9	0.4	1.0	0.8	0.9	Diurnal Maximum	

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

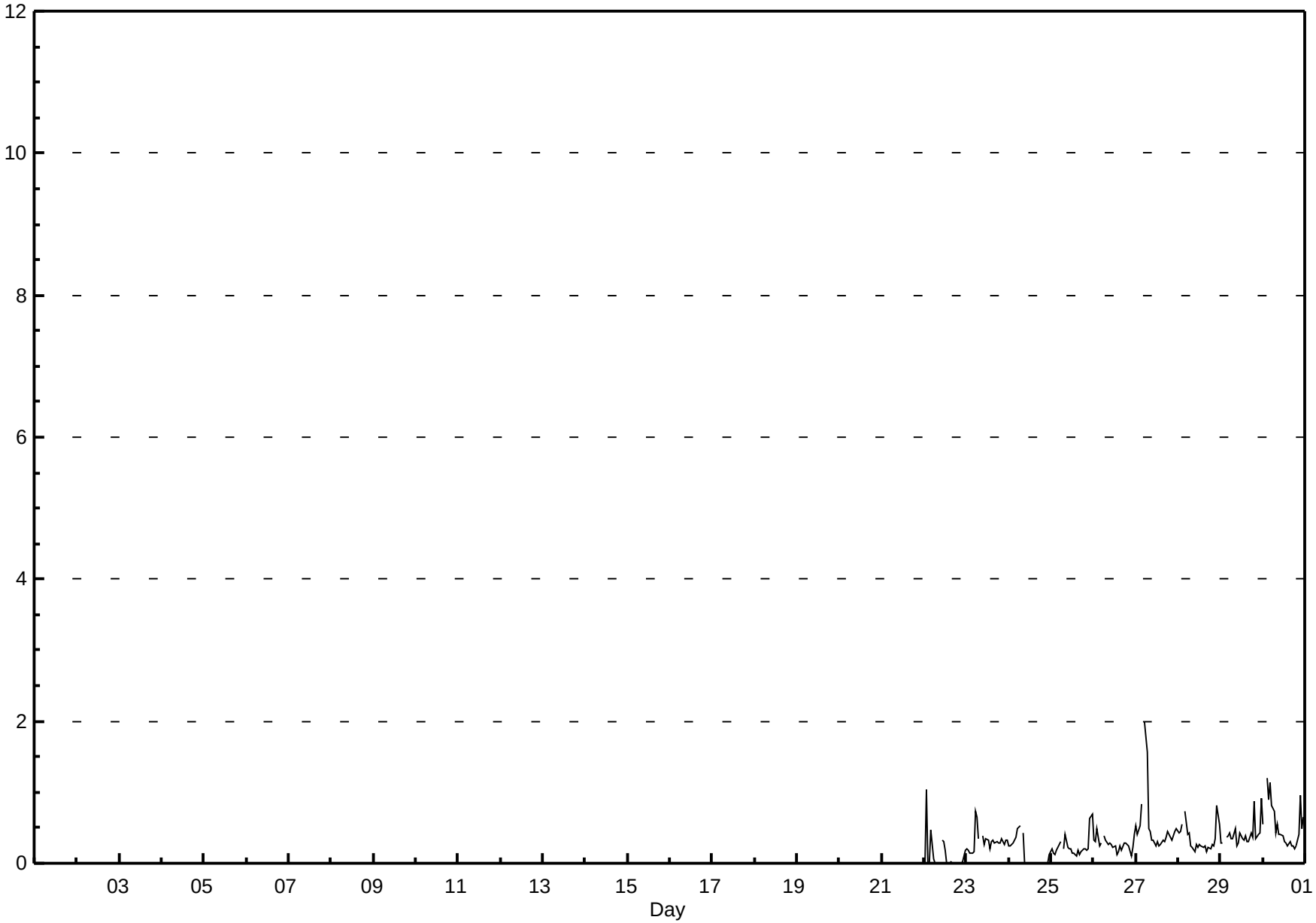
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

Peace Airshed Zone Association

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - June 2014

Maximum Value: 4.3 ppb on Jun 22 02:00

Maximum Daily Average: 1.3 ppb on Jun 30

Minimum Value: 0 ppb on Jun 21 20:00

Minimum Daily Average: 0.6 ppb on Jun 24

Maximum Diurnal Average: 1.6 ppb at hour 7

Minimum Diurnal Average: 0.6 ppb at hour 18

Monthly Average: 0.89 ppb

Percentiles: $P_1 = 0.0$ $P_{10} = 0.4$ $Q_1 = 0.7$ Median = 0.8 $Q_3 = 1.0$ $P_{90} = 1.4$ $P_{99} = 3.4$

Hours in Service:	226
Hours of Data:	214
Hours of Missing Data:	12
Hours of Calibration:	12
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	0	0	0	0	0	0	0	--	0.4
22-Jun	0	4	0	0	1	0	0	0	0	A	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0.6	4.3
23-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	0.8	1.4
24-Jun	1	1	1	1	1	1	1	A	1	0	1	1	1	0	0	0	1	0	0	1	0	0	0	1	0.6	1.0
25-Jun	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	0.8	1.9
26-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
27-Jun	1	1	1	2	A	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	3.8
28-Jun	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1.0	2.3
29-Jun	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	1.1	2.3
30-Jun	1	A	2	2	2	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1.3	3.0
	0.8	1.3	1.0	1.0	1.1	1.4	1.6	0.8	1.0	0.7	0.8	0.9	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.8	0.7	0.9	1.0	1.2	Diurnal Average	
	1.1	4.3	2.2	2.1	2.0	3.8	3.7	1.2	2.1	0.9	0.9	1.3	0.9	0.9	1.1	0.9	0.9	1.1	1.5	1.9	1.4	2.0	2.3	2.3	Diurnal Maximum	

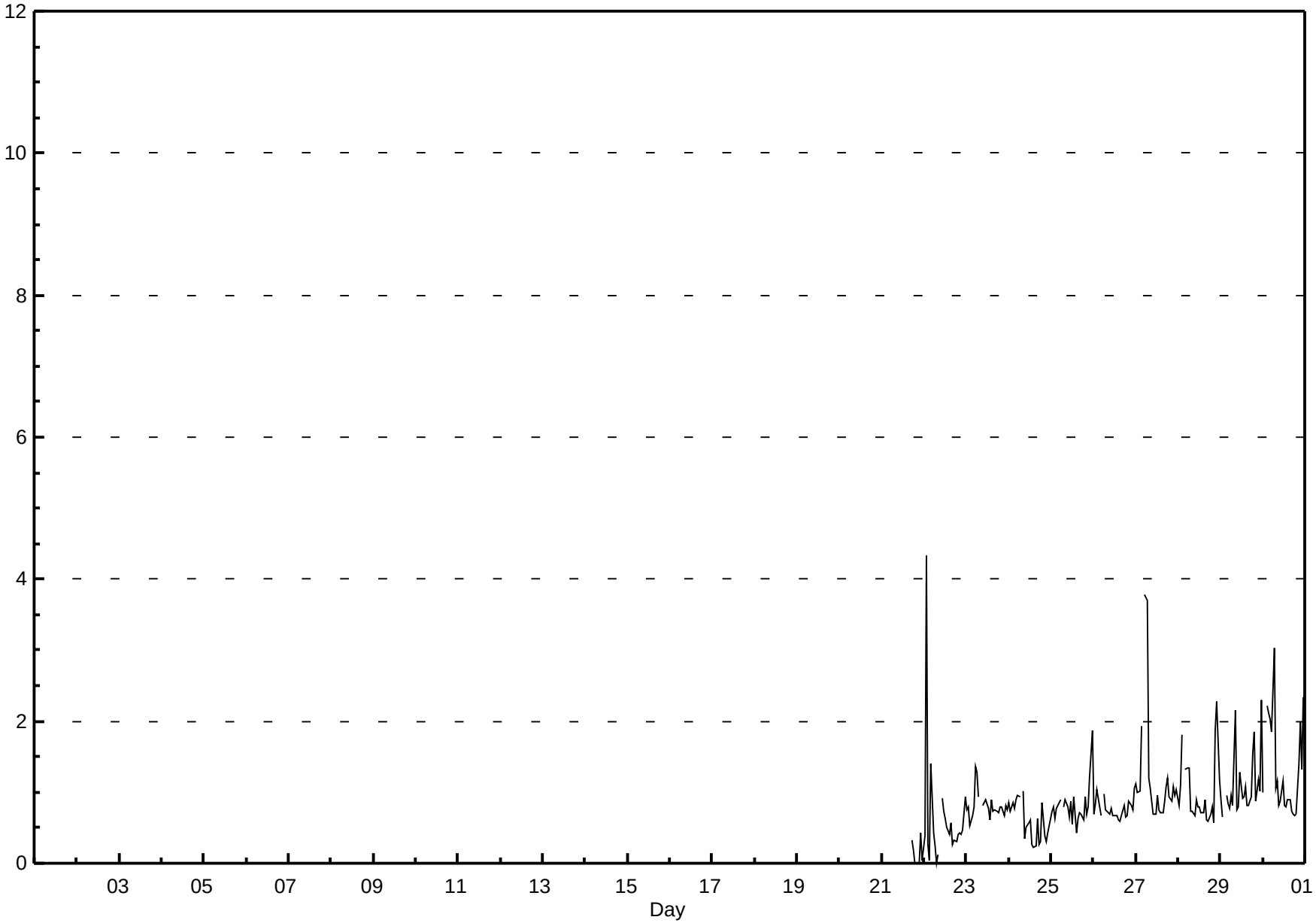
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

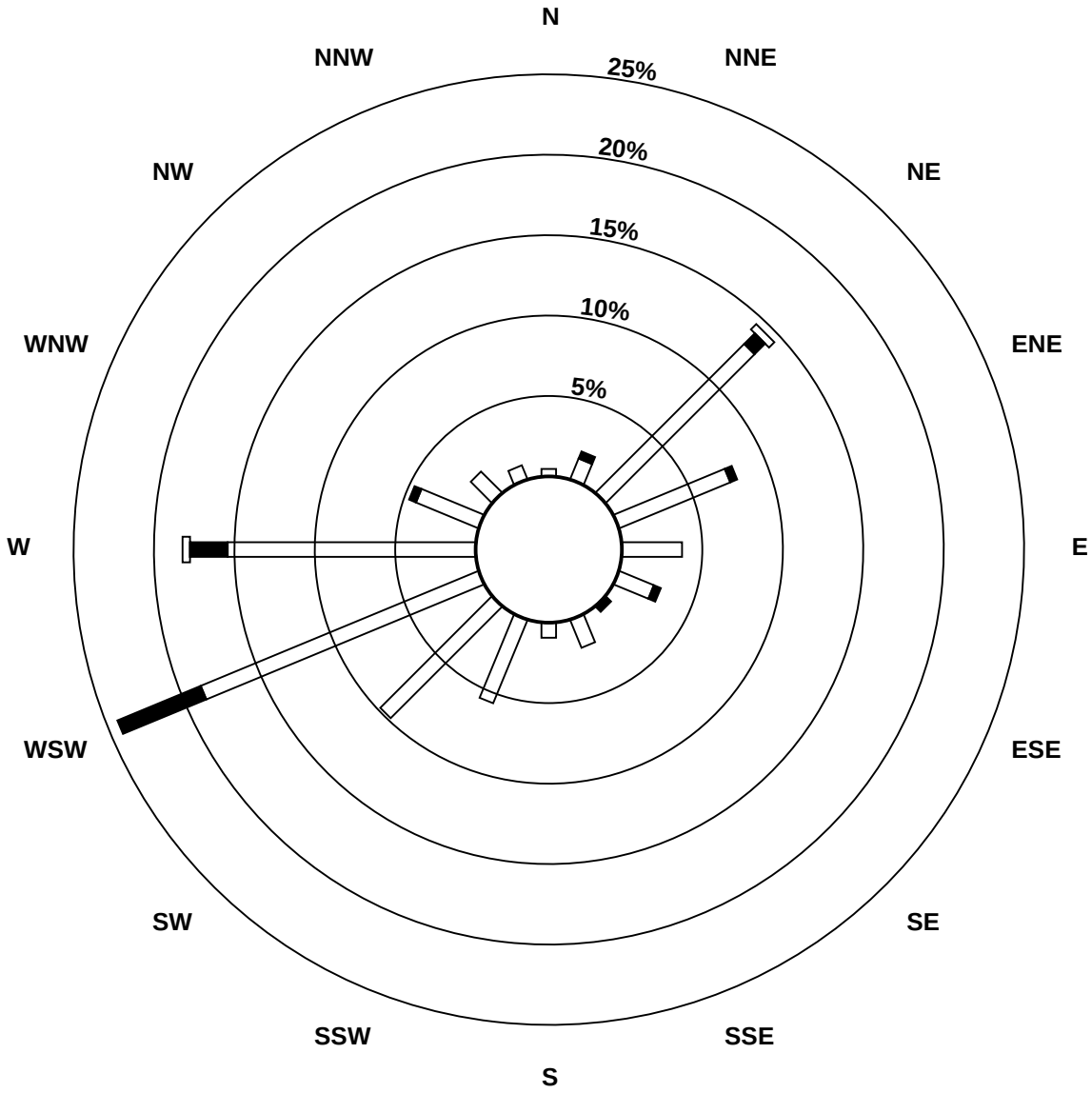
Portable Clairmont - June 2014



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - June 2014



Pollutant Classes (ppb)

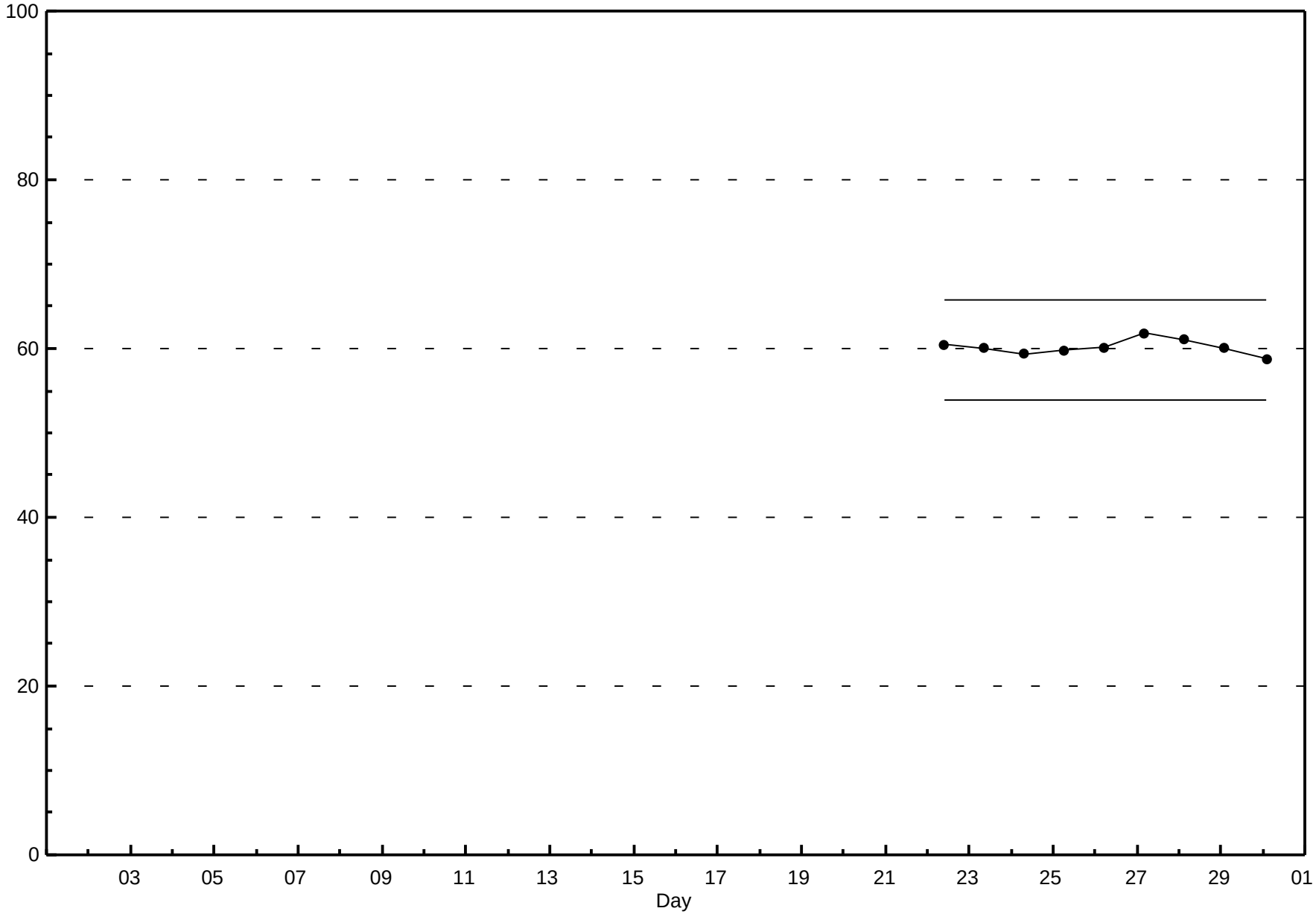
- 0 - 1
- 1 - 2
- 2 - 3
- 4 - 10
- > 10

Peace Airshed Zone Association

Span Responses

Total Reduced Sulphur (TRS)

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 18.2 ppb on Jun 21 23:00 Maximum Daily Average: 5.0 ppb on Jun 27

Minimum Value: 0 ppb on Jun 21 09:00 Minimum Daily Average: 2.7 ppb on Jun 29
Maximum Diurnal Average: 7.6 ppb at hour 23 Minimum Diurnal Average: 1.0 ppb at hour 14
Monthly Average: 3.64 ppb Percentiles: P_1 = 0.6 P_{10} = 0.9 Q_1 = 1.3 Median = 2.8 Q_3 = 5.1 P_{90} = 7.3 P_{99} = 10.8

Hours in Service:	253
Hours of Data:	237
Hours of Missing Data:	16
Hours of Calibration:	16
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	1	1	1	1	2	4	5	--	5.0
21-Jun	5	6	4	4	6	4	1	1	0	1	A	2	1	1	1	1	1	1	1	2	3	11	18	5	3.6	18.2
22-Jun	6	11	9	12	13	12	12	5	5	A	2	1	1	1	1	1	1	0	2	1	2	4	6	6	4.9	12.5
23-Jun	6	6	6	8	6	6	6	4	A	3	3	2	1	1	1	1	1	2	1	2	2	5	4	4	3.5	7.5
24-Jun	4	4	4	5	5	5	6	A	8	5	4	2	2	1	1	2	1	1	2	3	3	3	5	5	3.6	7.7
25-Jun	6	4	3	3	4	4	A	4	2	2	1	2	1	1	1	1	1	1	1	2	4	5	8	9	3.0	8.8
26-Jun	6	7	7	8	6	A	8	7	4	3	2	1	1	1	1	1	1	1	1	1	2	6	8	7	3.9	8.4
27-Jun	7	4	12	14	A	11	11	5	3	2	2	1	1	1	1	2	4	4	4	3	5	5	7	7	5.0	14.3
28-Jun	6	6	6	A	8	5	4	3	2	2	1	2	1	1	1	1	1	1	1	2	3	4	7	5	3.2	7.6
29-Jun	4	2	A	3	5	5	3	2	2	2	3	2	1	1	1	1	2	2	2	4	4	3	4	4	2.7	5.1
30-Jun	4	A	5	5	5	5	3	2	2	1	1	1	1	1	1	1	1	1	1	2	4	12	12	9	3.6	12.4
	5.4	5.5	6.2	7.0	6.3	6.3	5.9	3.7	3.0	2.3	2.3	1.6	1.2	1.0	1.1	1.3	1.4	1.5	1.6	1.9	3.1	5.5	7.6	6.0	Diurnal Average	
	6.8	11.3	12.0	14.3	12.5	12.0	11.6	7.2	7.7	5.4	3.7	2.1	1.9	1.4	1.4	2.3	3.6	4.1	3.7	4.2	5.1	11.8	18.2	9.0	Diurnal Maximum	

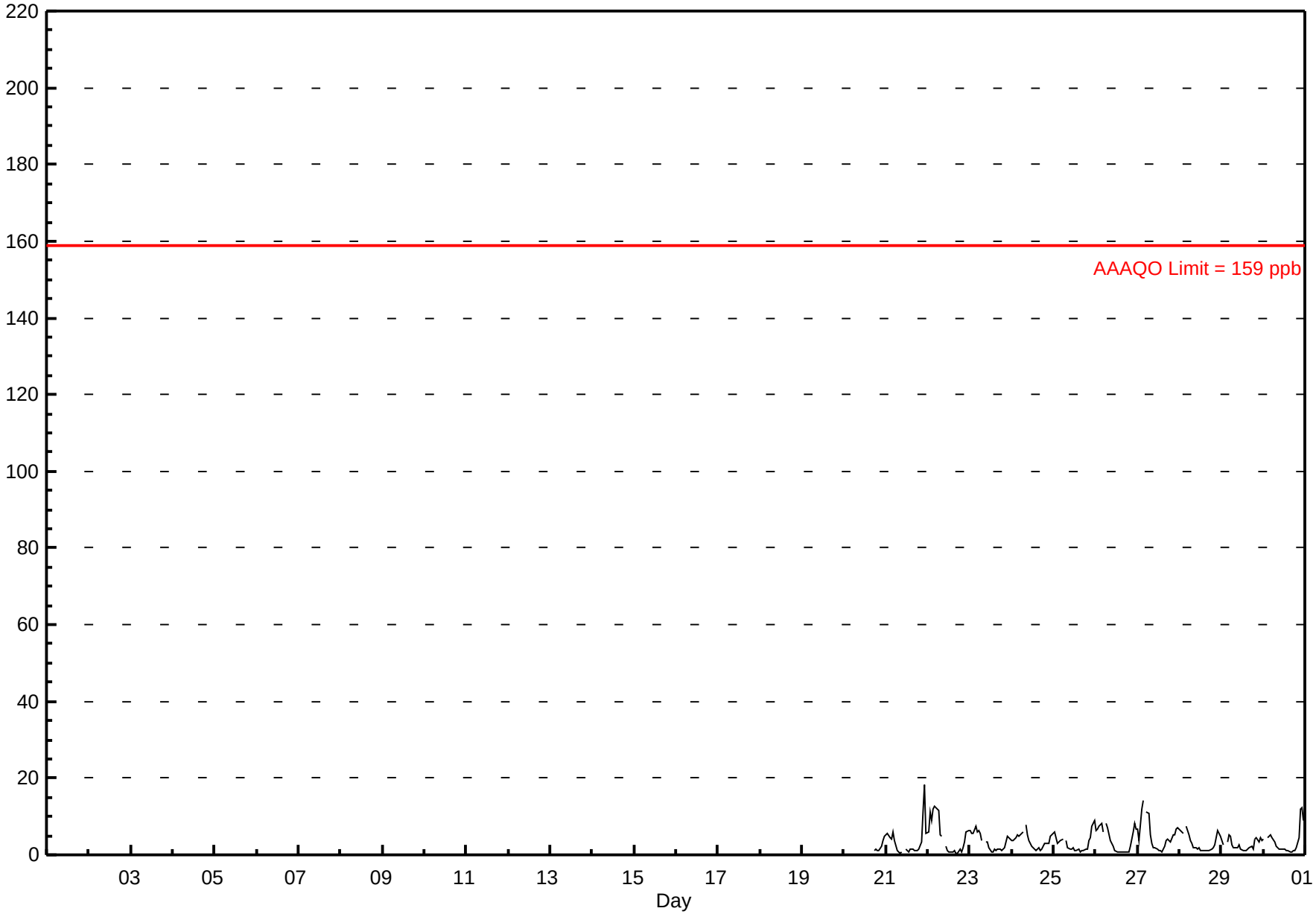
C - Calibration NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - June 2014

Maximum Value: 55.8 ppb on Jun 22 19:00

Maximum Daily Average: 11.8 ppb on Jun 22

Minimum Value: 1 ppb on Jun 22 20:00

Minimum Daily Average: 5.4 ppb on Jun 30

Maximum Diurnal Average: 13.5 ppb at hour 23

Minimum Diurnal Average: 3.2 ppb at hour 13

Monthly Average: 7.81 ppb

Percentiles: P_1 = 1.5 P_{10} = 2.1 Q_1 = 3.2 Median = 6.0 Q_3 = 10.7 P_{90} = 15.9 P_{99} = 10.6

Hours in Service:	253
Hours of Data:	237
Hours of Missing Data:	16
Hours of Calibration:	16
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	3	2	2	3	4	28	8	--	27.8
21-Jun	7	13	9	5	11	7	2	3	1	7	A	4	4	2	3	2	3	2	3	5	8	17	26	10	6.7	25.8
22-Jun	13	22	11	19	14	17	13	9	6	A	6	3	3	12	10	8	5	3	56	1	8	15	10	7	11.8	55.8
23-Jun	7	7	7	11	17	15	9	10	A	4	7	6	2	3	13	5	9	25	12	3	4	8	5	7	8.5	24.5
24-Jun	5	5	5	6	6	6	16	A	13	7	11	3	8	5	2	3	2	3	4	4	6	4	7	6	6.0	15.9
25-Jun	11	12	3	4	5	6	A	8	3	14	2	21	2	6	6	2	2	3	7	3	26	7	11	12	7.6	26.5
26-Jun	11	8	8	22	8	A	11	14	8	4	13	3	3	2	2	2	6	4	4	4	32	12	15	12	9.0	31.6
27-Jun	10	5	28	18	A	15	17	27	14	6	9	3	2	5	4	12	12	7	7	5	8	15	11	11	11.0	28.2
28-Jun	19	8	8	A	11	8	5	5	3	3	2	16	3	2	5	9	2	2	3	3	5	7	11	9	6.5	18.8
29-Jun	7	4	A	4	19	8	4	3	3	3	4	4	2	2	2	3	3	4	3	8	14	17	8	5	5.9	19.4
30-Jun	5	A	5	5	11	8	4	4	3	2	4	2	3	2	2	2	2	2	2	3	10	16	16	11	5.4	16.2
	9.6	9.2	9.4	10.7	11.3	10.1	9.1	9.0	6.0	5.6	6.5	6.5	3.2	4.0	4.8	4.8	4.4	5.2	9.3	3.9	11.3	11.1	13.5	8.9	Diurnal Average	
	18.8	21.5	28.2	22.0	19.4	17.5	17.0	26.6	13.7	13.6	13.2	20.8	8.0	11.5	12.6	12.2	11.7	24.5	55.8	8.3	31.6	17.5	27.8	11.9	Diurnal Maximum	

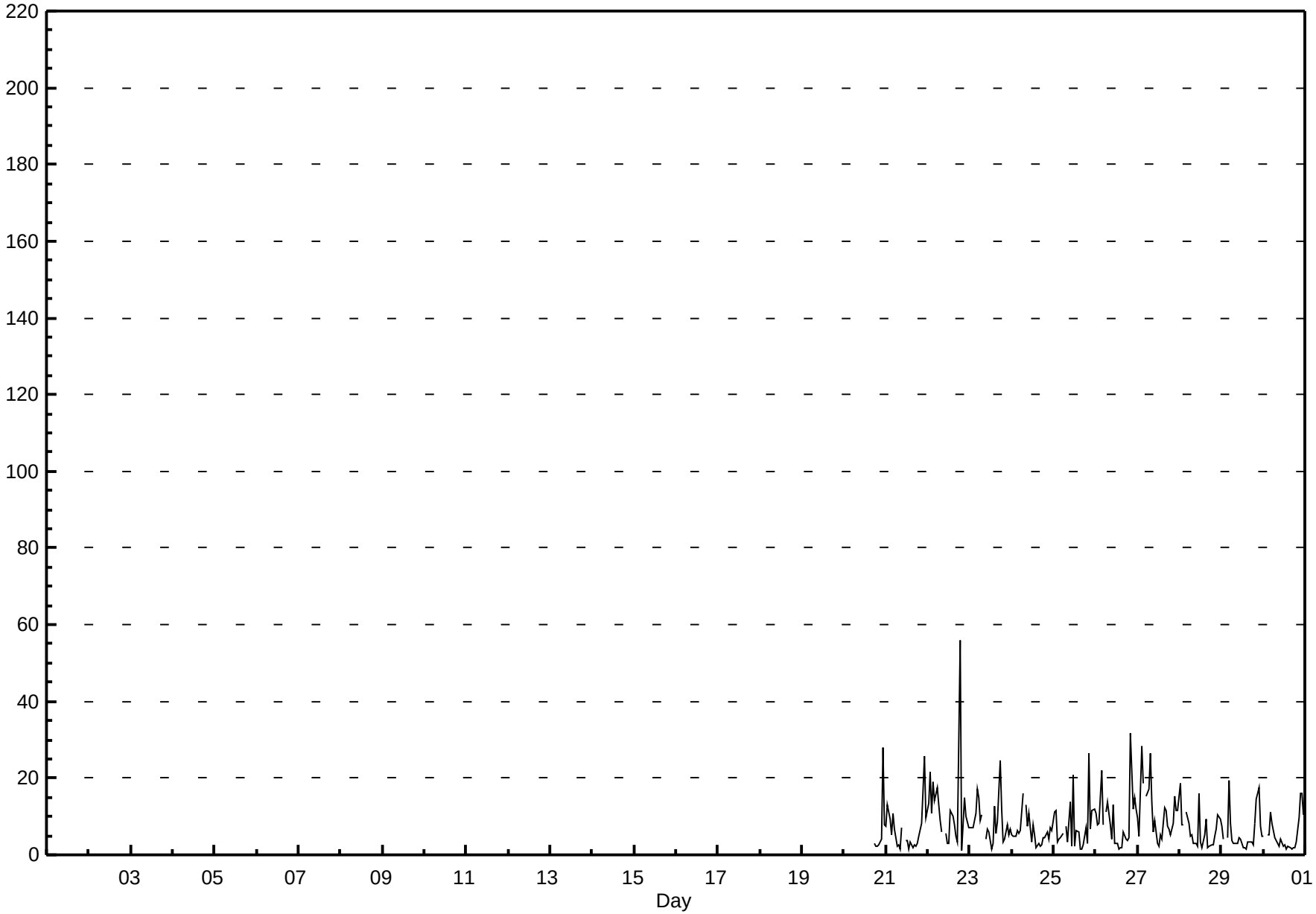
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Dioxide (NO_2) - ppb

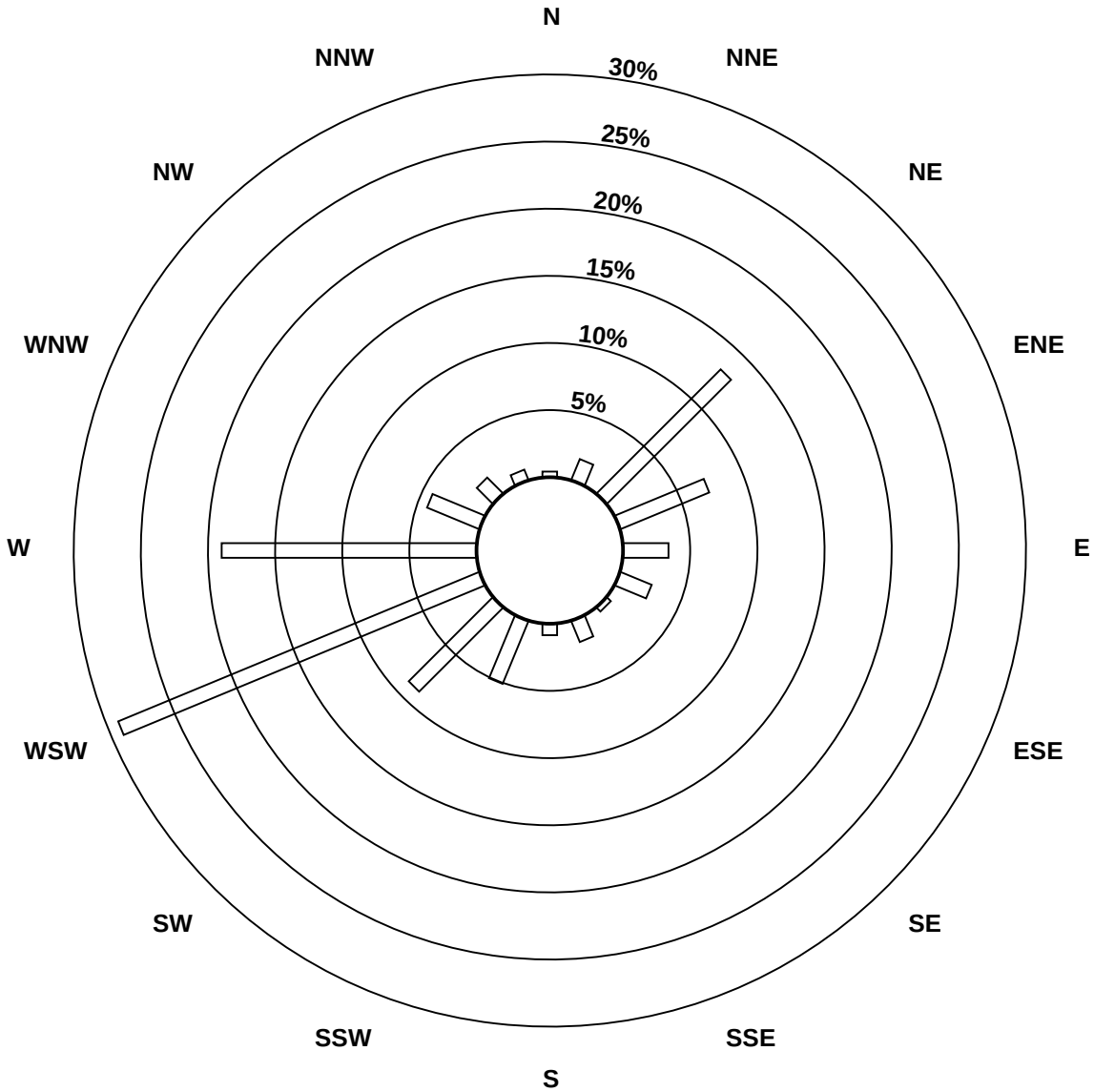
Portable Clairmont - June 2014



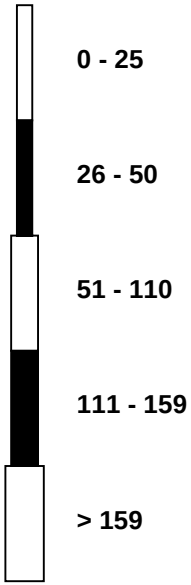
Pollutant Rose

Nitrogen Dioxide (NO_2) - ppb

Portable Clairmont - June 2014



Pollutant Classes (ppb)

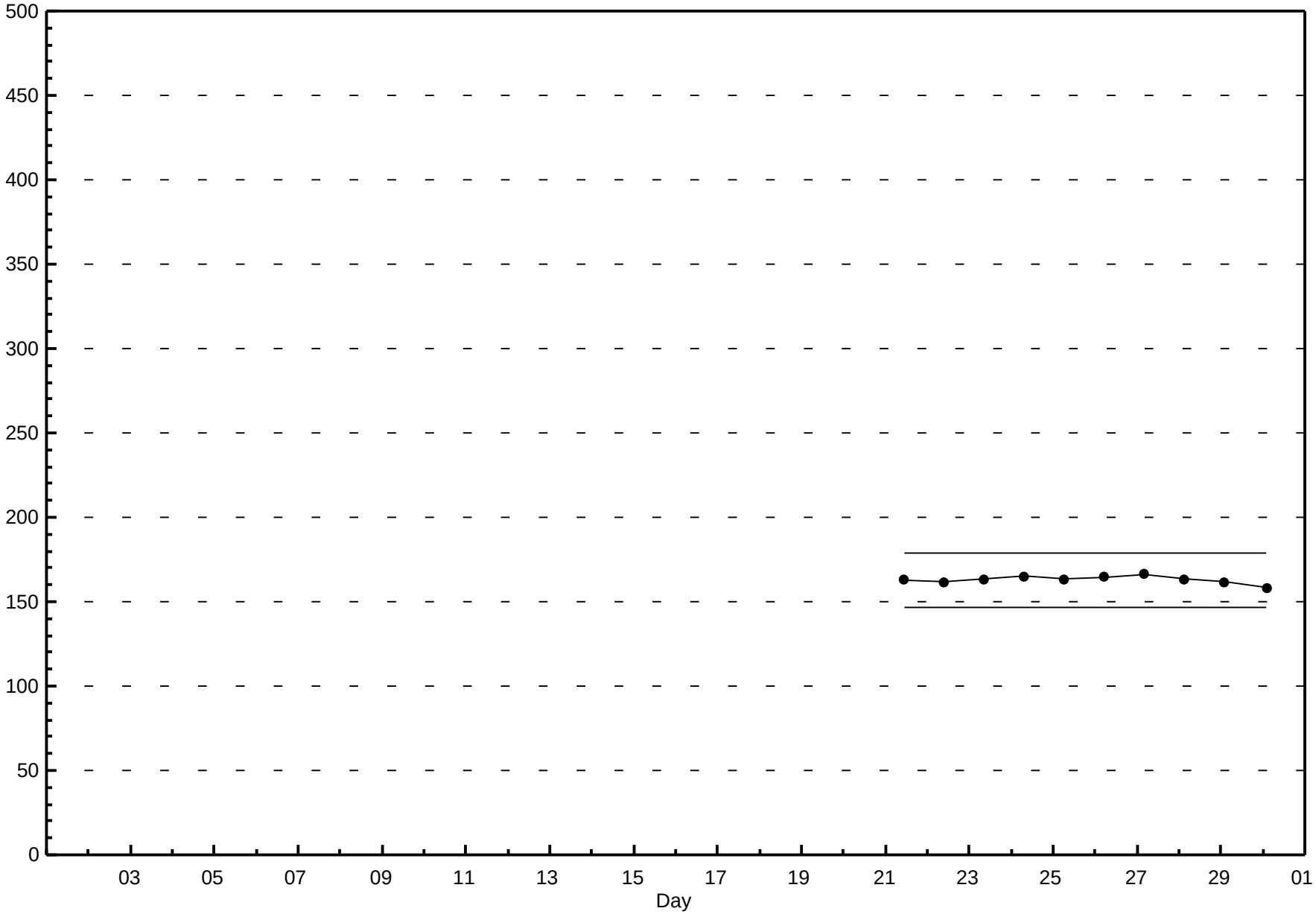


Peace Airshed Zone Association

Span Responses

Nitrogen Dioxide (NO_2)

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Clairmont - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 11.3 ppb on Jun 27 07:00 Maximum Daily Average: 1.8 ppb on Jun 22

Minimum Value: 0 ppb on Jun 27 02:00 Minimum Daily Average: 0.4 ppb on Jun 24
Maximum Diurnal Average: 3.5 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 13
Monthly Average: 0.94 ppb Percentiles: $P_1 = 0.0$ $P_{10} = 0.2$ $Q_1 = 0.3$ Median = 0.4 $Q_3 = 1.0$ $P_{90} = 2.1$ $P_{99} = 6.7$

Hours in Service:	253
Hours of Data:	237
Hours of Missing Data:	16
Hours of Calibration:	16
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	2	2	2	2	2	3	2	--	3.0
21-Jun	2	2	2	2	3	3	2	2	2	3	A	1	1	0	0	0	0	0	0	0	1	1	5	0	1.5	4.6
22-Jun	0	5	0	3	5	6	9	4	3	A	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1.8	8.8
23-Jun	0	0	0	0	0	1	1	1	A	1	1	0	0	0	1	0	0	1	2	0	0	0	0	0	0.5	1.5
24-Jun	0	0	0	0	0	0	1	A	2	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	1.8
25-Jun	0	0	0	0	0	1	A	2	1	1	1	1	1	1	1	0	0	0	0	0	2	0	0	0	0.7	2.2
26-Jun	0	0	0	2	1	A	4	5	3	2	1	0	0	0	0	1	1	0	0	0	1	1	0	0	1.0	5.1
27-Jun	0	0	3	1	A	6	11	2	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1.4	11.3
28-Jun	1	0	0	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0
29-Jun	0	0	A	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	2	0	0	0.5	1.5
30-Jun	0	A	0	0	2	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1	2	3	1	0.9	2.9
	0.4	0.9	0.7	1.0	1.4	2.3	3.5	2.2	1.5	1.1	0.7	0.6	0.4	0.4	0.5	0.5	0.4	0.5	0.7	0.5	0.7	0.8	1.1	0.4	Diurnal Average	
	2.0	5.2	3.0	3.1	4.6	6.5	11.3	5.1	3.1	3.0	1.1	1.3	0.7	0.9	1.1	1.2	0.6	2.0	2.0	2.0	2.2	2.0	4.6	1.9	Diurnal Maximum	

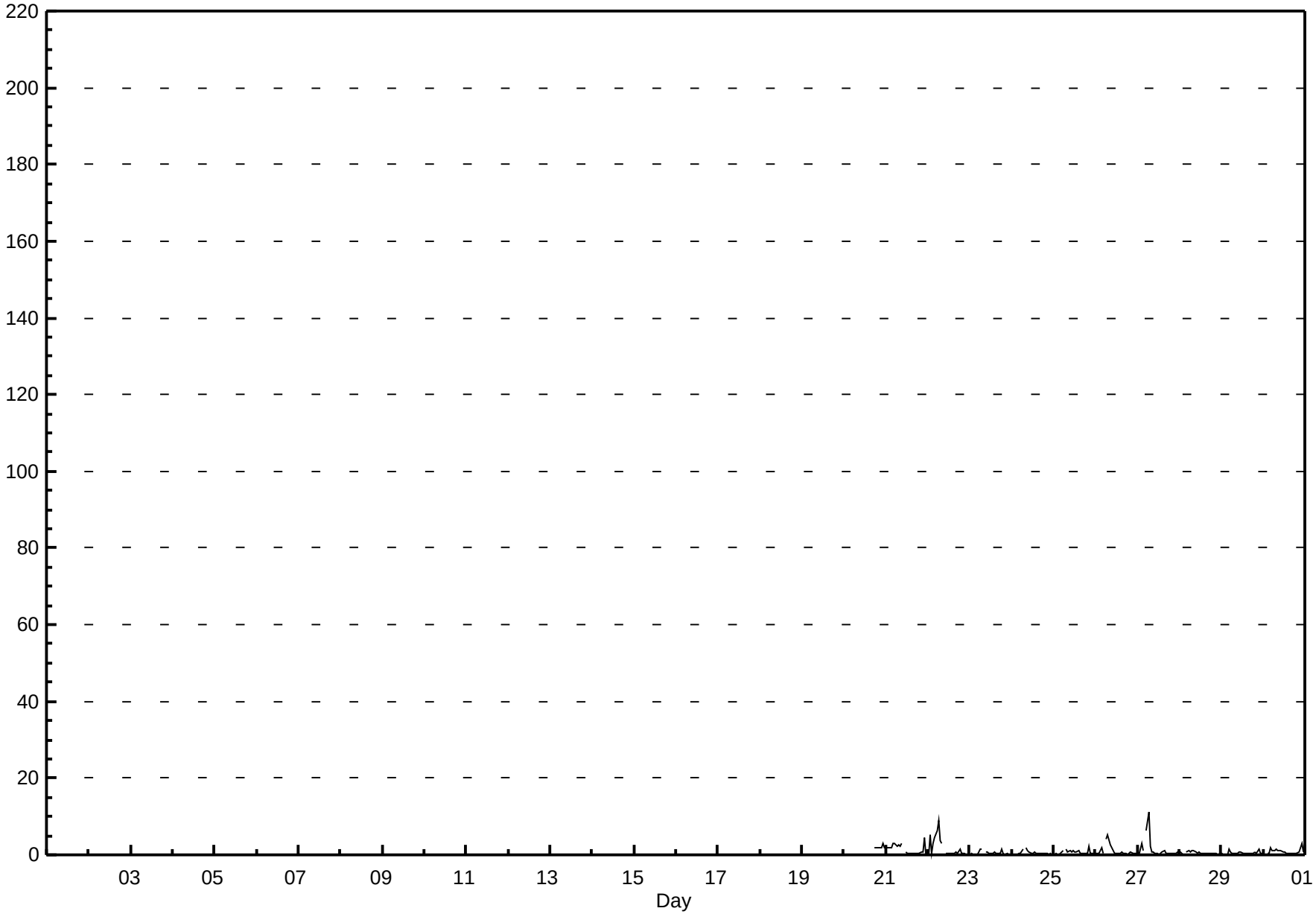
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Clairmont - June 2014

Maximum Value: 68.3 ppb on Jun 22 02:00

Maximum Daily Average: 10.7 ppb on Jun 22

Minimum Value: 0 ppb on Jun 24 04:00

Minimum Daily Average: 2.5 ppb on Jun 28

Maximum Diurnal Average: 11.2 ppb at hour 2

Minimum Diurnal Average: 1.5 ppb at hour 24

Monthly Average: 5.76 ppb

Percentiles: $P_1 = 0.2$ $P_{10} = 0.7$ $Q_1 = 1.1$ Median = 2.6 $Q_3 = 6.6$ $P_{90} = 13.3$ $P_{99} = 49.1$

Hours in Service:	253
Hours of Data:	237
Hours of Missing Data:	16
Hours of Calibration:	16
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	3	3	2	2	3	39	3	--	39.0
21-Jun	3	4	3	2	7	4	3	4	3	12	A	2	3	1	1	1	1	2	3	4	7	5	18	1	4.0	18.0
22-Jun	1	68	1	22	8	15	11	9	5	A	2	1	2	7	7	11	8	6	44	3	5	6	3	1	10.7	68.3
23-Jun	1	13	0	2	2	7	7	8	A	3	5	4	17	4	8	4	9	9	27	4	1	2	2	1	6.1	27.2
24-Jun	0	0	0	0	4	1	7	A	4	2	4	1	2	14	1	1	2	1	3	1	4	0	6	1	2.6	14.0
25-Jun	0	13	0	0	1	3	A	7	2	16	1	31	5	10	7	1	1	1	3	1	58	1	1	1	7.1	58.0
26-Jun	8	1	0	28	1	A	7	13	6	3	6	2	2	1	1	16	13	6	1	7	12	11	11	4	7.0	28.4
27-Jun	1	0	28	4	A	17	30	11	5	13	8	7	1	5	17	22	3	1	3	1	2	8	1	1	8.2	30.4
28-Jun	10	1	0	A	2	3	1	2	2	2	1	11	2	1	4	3	1	1	1	1	3	2	1	2	2.5	11.1
29-Jun	4	0	A	0	28	2	1	4	1	1	2	4	1	2	1	1	1	1	4	6	6	38	1	1	4.7	37.6
30-Jun	1	A	1	0	27	4	2	2	2	2	6	2	2	1	1	1	1	1	3	1	8	8	17	2	4.1	27.0
	2.9	11.2	3.8	6.7	9.0	6.2	7.7	6.6	3.3	5.9	3.8	6.4	3.6	4.5	4.9	6.1	3.9	2.8	8.6	2.8	9.8	7.7	9.1	1.5	Diurnal Average	
	10.1	68.3	28.4	28.4	27.7	17.3	30.4	13.4	5.7	16.4	7.7	30.6	16.9	14.0	17.1	22.2	12.8	8.8	43.7	7.4	58.0	37.6	39.0	3.7	Diurnal Maximum	

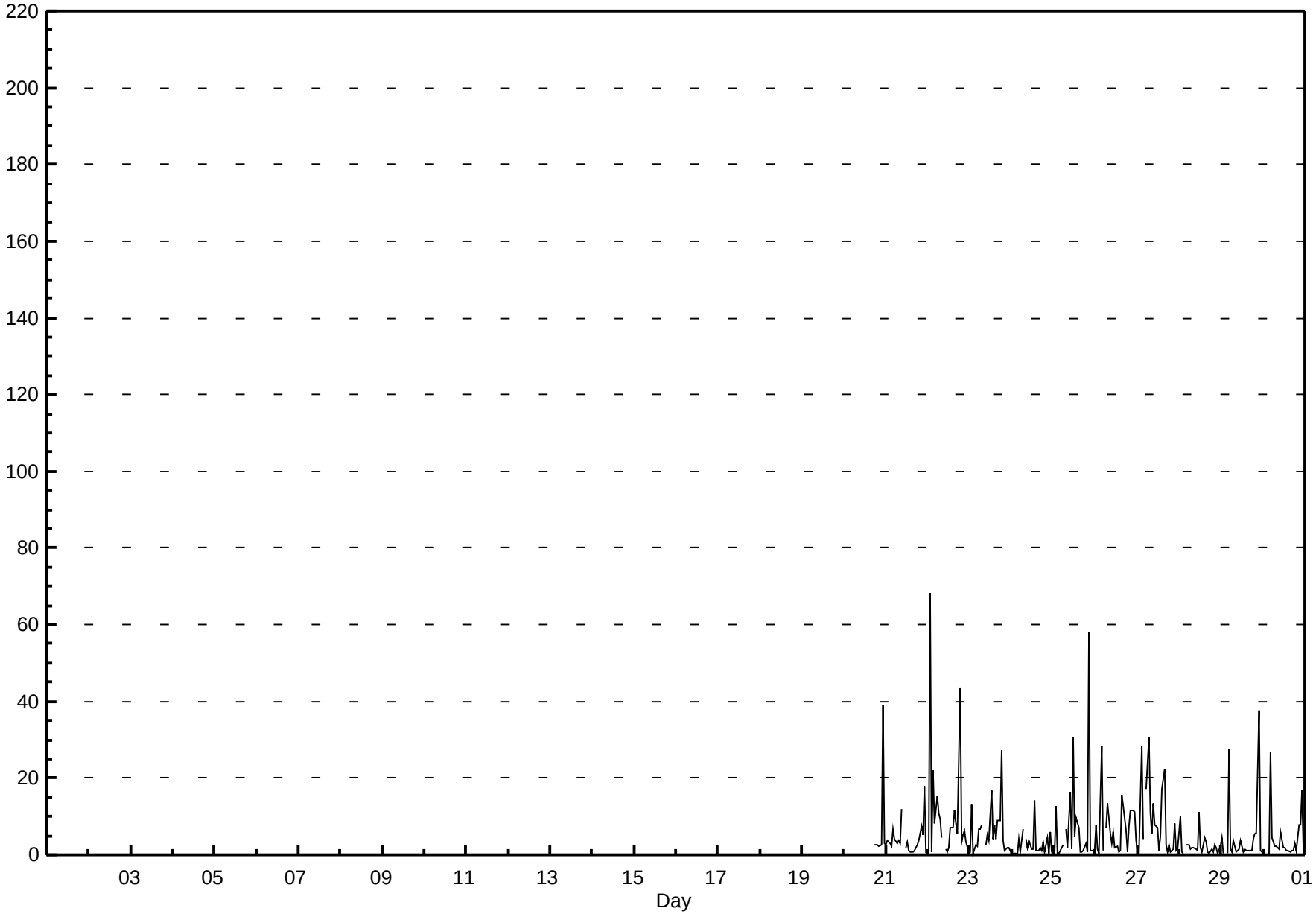
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 23.1 ppb on Jun 21 23:00 Maximum Daily Average: 6.7 ppb on Jun 22

Minimum Value: 1 ppb on Jun 22 18:00 Minimum Daily Average: 3.2 ppb on Jun 29
Maximum Diurnal Average: 9.5 ppb at hour 7 Minimum Diurnal Average: 1.5 ppb at hour 14
Monthly Average: 4.60 ppb Percentiles: $P_1 = 0.9$ $P_{10} = 1.4$ $Q_1 = 1.9$ Median = 3.5 $Q_3 = 6.1$ $P_{90} = 8.5$ $P_{99} = 21.6$

Hours in Service:	253
Hours of Data:	237
Hours of Missing Data:	16
Hours of Calibration:	16
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	3	4	3	3	4	7	7	--	7.1
21-Jun	7	8	6	6	9	7	4	4	3	4	A	2	2	1	2	2	2	1	2	2	4	12	23	6	5.1	23.1
22-Jun	6	17	9	15	17	19	21	9	8	A	3	1	1	1	1	1	1	1	3	1	2	4	6	6	6.7	20.6
23-Jun	6	6	6	8	6	7	7	5	A	4	4	2	1	1	2	2	2	2	3	2	2	5	5	4	4.0	7.7
24-Jun	4	4	4	5	5	5	7	A	10	6	4	3	2	2	1	2	2	2	3	3	3	3	5	5	4.0	9.6
25-Jun	6	5	3	4	4	5	A	5	2	3	2	3	2	2	2	1	1	2	2	2	6	5	8	9	3.6	9.2
26-Jun	7	7	8	10	7	A	12	12	6	5	3	2	1	1	1	1	1	1	1	1	3	7	9	7	4.9	12.4
27-Jun	7	4	15	16	A	17	22	8	4	2	2	2	1	2	2	3	4	4	4	3	5	5	7	8	6.4	22.3
28-Jun	7	6	6	A	9	6	4	4	3	3	2	3	1	1	2	1	1	1	2	2	3	5	7	5	3.7	8.5
29-Jun	4	3	A	3	7	6	3	2	2	2	3	2	1	2	1	2	2	3	2	5	5	5	5	4	3.2	6.5
30-Jun	4	A	5	5	7	6	5	4	3	2	2	2	2	1	2	1	1	1	1	2	5	14	15	10	4.4	15.3
	5.9	6.4	6.9	8.0	7.8	8.7	9.5	5.8	4.5	3.5	2.9	2.2	1.6	1.5	1.6	1.7	1.8	2.0	2.3	2.4	3.8	6.3	8.8	6.5	Diurnal Average	
	7.2	16.6	15.1	15.6	17.2	18.7	22.3	12.4	9.6	6.4	4.4	3.0	2.5	2.0	2.5	3.5	4.0	4.5	3.9	4.8	6.1	14.0	23.1	9.6	Diurnal Maximum	

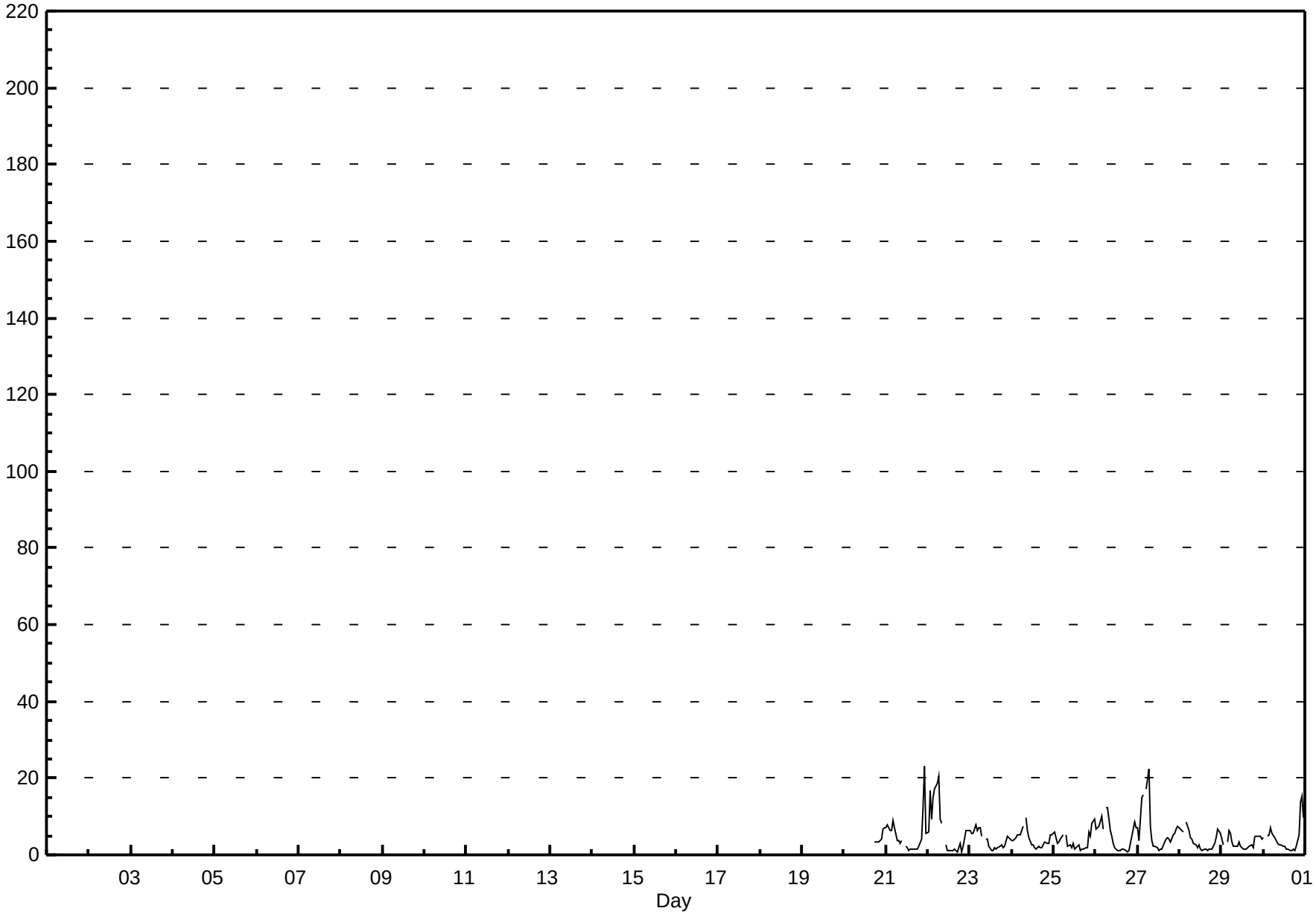
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - June 2014

Maximum Value: 99.6 ppb on Jun 22 19:00

Maximum Daily Average: 21.7 ppb on Jun 22

Minimum Value: 2 ppb on Jun 26 14:00

Minimum Daily Average: 7.8 ppb on Jun 24

Maximum Diurnal Average: 21.7 ppb at hour 23

Minimum Diurnal Average: 5.2 ppb at hour 13

Monthly Average: 12.71 ppb

Percentiles: P_1 = 2.2 P_{10} = 3.4 Q_1 = 4.7 Median = 8.5 Q_3 = 14.4 P_{90} = 26.5 P_{99} = 77.1

Hours in Service:	253
Hours of Data:	237
Hours of Missing Data:	16
Hours of Calibration:	16
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	C	C	6	5	4	5	7	63	10	--	63.2
21-Jun	10	17	13	7	18	11	5	6	5	17	A	6	7	3	3	3	4	3	5	9	12	22	44	10	10.4	44.1
22-Jun	15	88	12	41	22	33	24	16	11	A	6	3	5	13	17	19	11	9	100	3	11	22	13	7	21.7	99.6
23-Jun	8	14	7	13	20	18	15	12	A	7	12	7	6	4	17	9	13	28	27	6	4	9	6	8	11.8	27.8
24-Jun	5	5	5	6	7	6	20	A	17	9	15	4	10	16	3	4	4	3	6	5	9	4	9	6	7.8	19.9
25-Jun	11	24	4	5	6	8	A	12	5	30	3	52	6	16	13	2	2	4	10	4	85	8	12	13	14.6	84.6
26-Jun	19	9	8	47	9	A	18	27	14	7	19	4	5	2	3	12	12	10	4	11	43	23	26	15	15.2	46.9
27-Jun	10	5	57	22	A	32	47	35	18	13	16	7	3	7	9	18	14	8	9	6	9	24	12	13	17.1	57.0
28-Jun	29	9	8	A	14	11	6	7	4	4	3	27	5	2	9	13	2	2	4	3	7	9	11	10	8.7	29.3
29-Jun	10	4	A	4	44	10	4	6	3	4	5	7	2	3	2	4	4	5	4	11	20	55	8	5	9.9	54.6
30-Jun	6	A	5	6	37	13	7	6	5	4	10	4	4	3	3	3	3	3	5	4	18	23	33	12	9.3	37.1
	12.3	19.5	13.2	16.8	19.5	15.7	16.4	14.3	9.1	10.6	10.1	12.2	5.2	6.9	8.0	8.7	7.0	7.4	16.2	6.0	20.3	18.7	21.7	10.0	Diurnal Average	
	29.3	87.5	57.0	46.9	44.2	32.8	47.2	35.1	18.2	30.1	19.3	51.6	9.5	16.1	17.1	19.1	14.0	27.8	99.6	11.3	84.6	54.6	63.2	15.3	Diurnal Maximum	

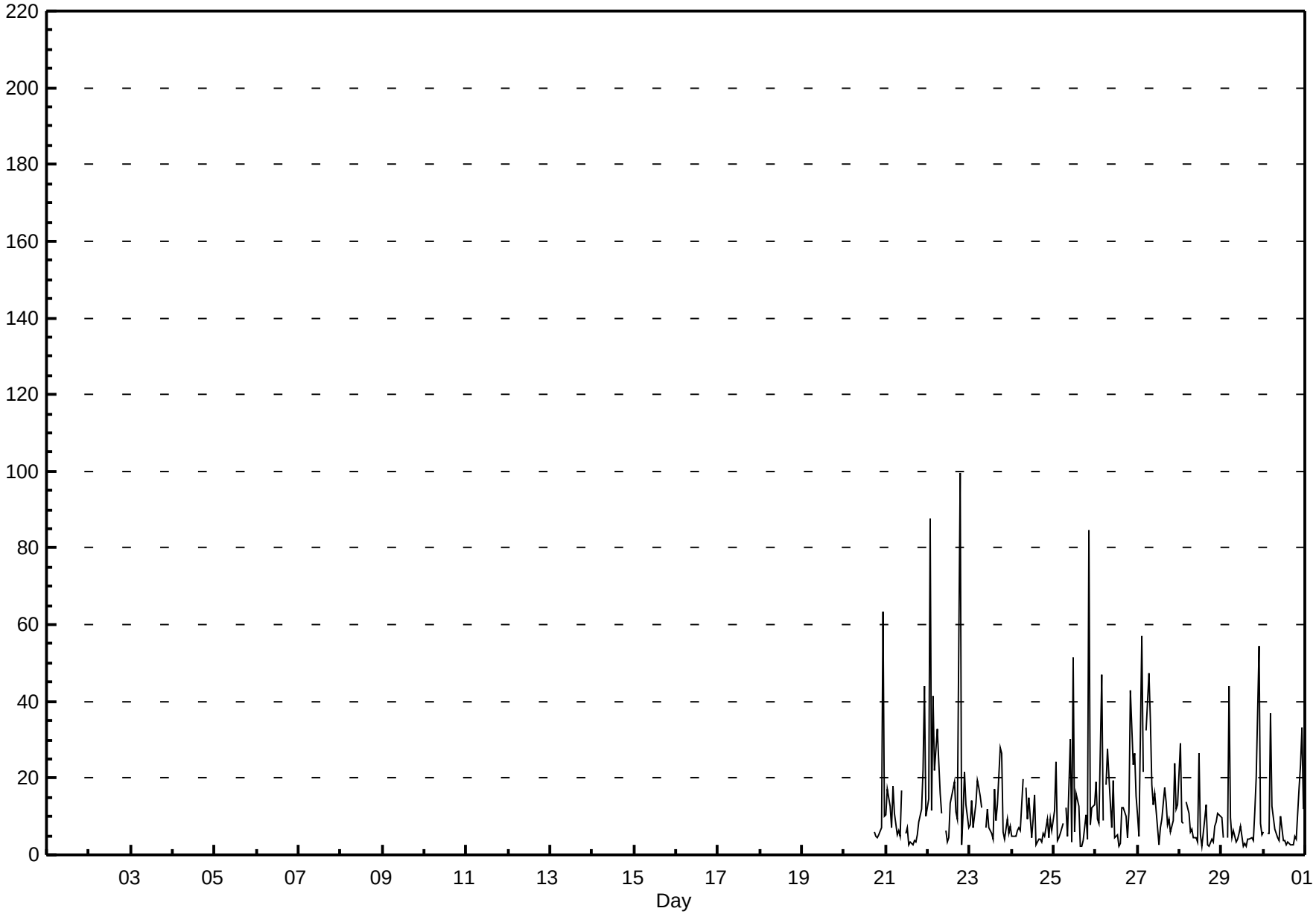
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Oxides of Nitrogen (NO_X) - ppb

Portable Clairmont - June 2014

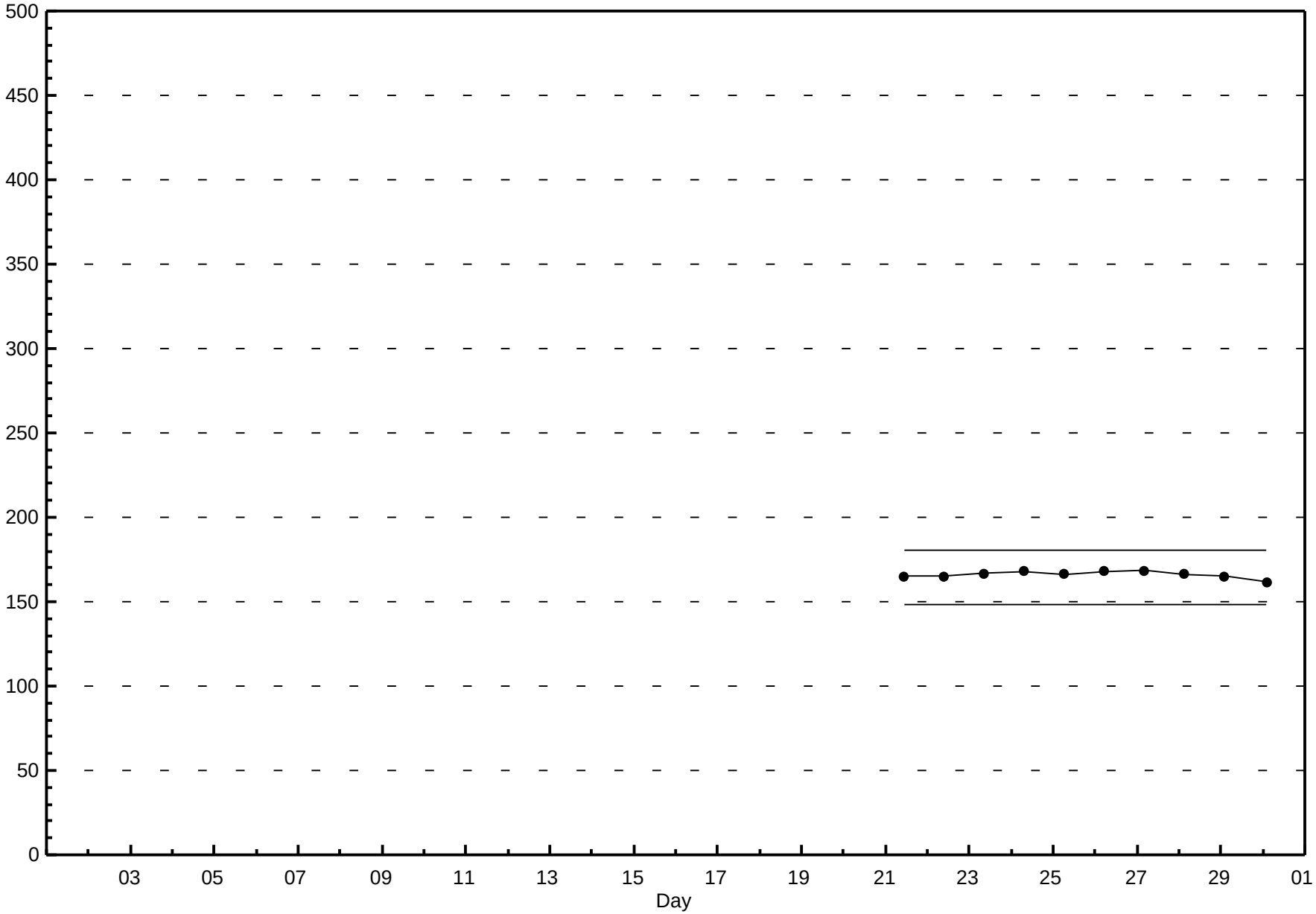


Peace Airshed Zone Association

Span Responses

Oxides of Nitrogen (NO_X)

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable Clairmont - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 49.2 ppb on Jun 23 19:00 Maximum Daily Average: 36.7 ppb on Jun 23

Minimum Value: 3 ppb on Jun 22 05:00 Minimum Daily Average: 18.4 ppb on Jun 30
Maximum Diurnal Average: 34.8 ppb at hour 15 Minimum Diurnal Average: 15.6 ppb at hour 6
Monthly Average: 26.57 ppb Percentiles: P_1 = 6.1 P_{10} = 12.1 Q_1 = 19.1 Median = 26.9 Q_3 = 34.5 P_{90} = 40.6 P_{99} = 47.5

Hours in Service:	248
Hours of Data:	236
Hours of Missing Data:	12
Hours of Calibration:	12
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	39	38	37	33	28	22	--	39.3
21-Jun	21	18	19	18	15	18	25	27	30	29	A	31	31	32	32	33	33	34	34	33	28	16	8	21	25.5	33.7
22-Jun	19	6	11	6	3	7	11	20	23	A	36	37	36	37	38	39	40	42	41	41	37	32	26	26	26.7	41.7
23-Jun	26	27	28	26	27	24	28	32	A	36	41	43	42	44	45	46	47	48	49	48	44	35	30	29	36.7	49.2
24-Jun	36	40	42	38	35	31	29	A	38	44	46	43	38	38	39	35	29	31	26	22	24	22	18	14	33.0	45.5
25-Jun	13	13	12	12	13	14	A	19	26	27	27	29	30	32	32	32	32	32	30	29	24	21	13	10	22.7	32.1
26-Jun	13	14	12	13	15	A	15	17	21	25	29	31	32	33	34	35	36	36	37	37	33	24	20	20	25.3	37.0
27-Jun	20	25	13	7	A	6	10	26	32	38	41	44	45	45	43	42	39	35	33	34	31	30	27	27	30.2	45.3
28-Jun	22	19	16	A	10	13	15	14	20	25	30	33	35	37	36	35	35	34	34	31	28	23	21	23	25.5	36.7
29-Jun	23	25	A	23	19	17	20	22	21	20	18	21	26	24	22	21	20	19	24	19	18	16	13	11	20.1	25.6
30-Jun	9	A	9	7	7	10	12	15	18	19	21	22	24	26	28	29	30	30	31	28	22	9	7	10	18.4	30.8
	20.3	20.9	18.0	16.6	15.9	15.6	18.4	21.4	25.4	29.3	32.0	33.3	34.0	34.7	34.8	34.7	34.0	34.1	34.4	32.6	29.6	23.9	19.2	19.2	Diurnal Average	
	36.1	40.3	41.8	38.0	34.9	31.5	29.3	31.9	38.0	44.3	45.5	43.6	45.3	45.3	44.6	45.8	47.5	48.0	49.2	48.3	43.6	34.9	30.2	28.8	Diurnal Maximum	

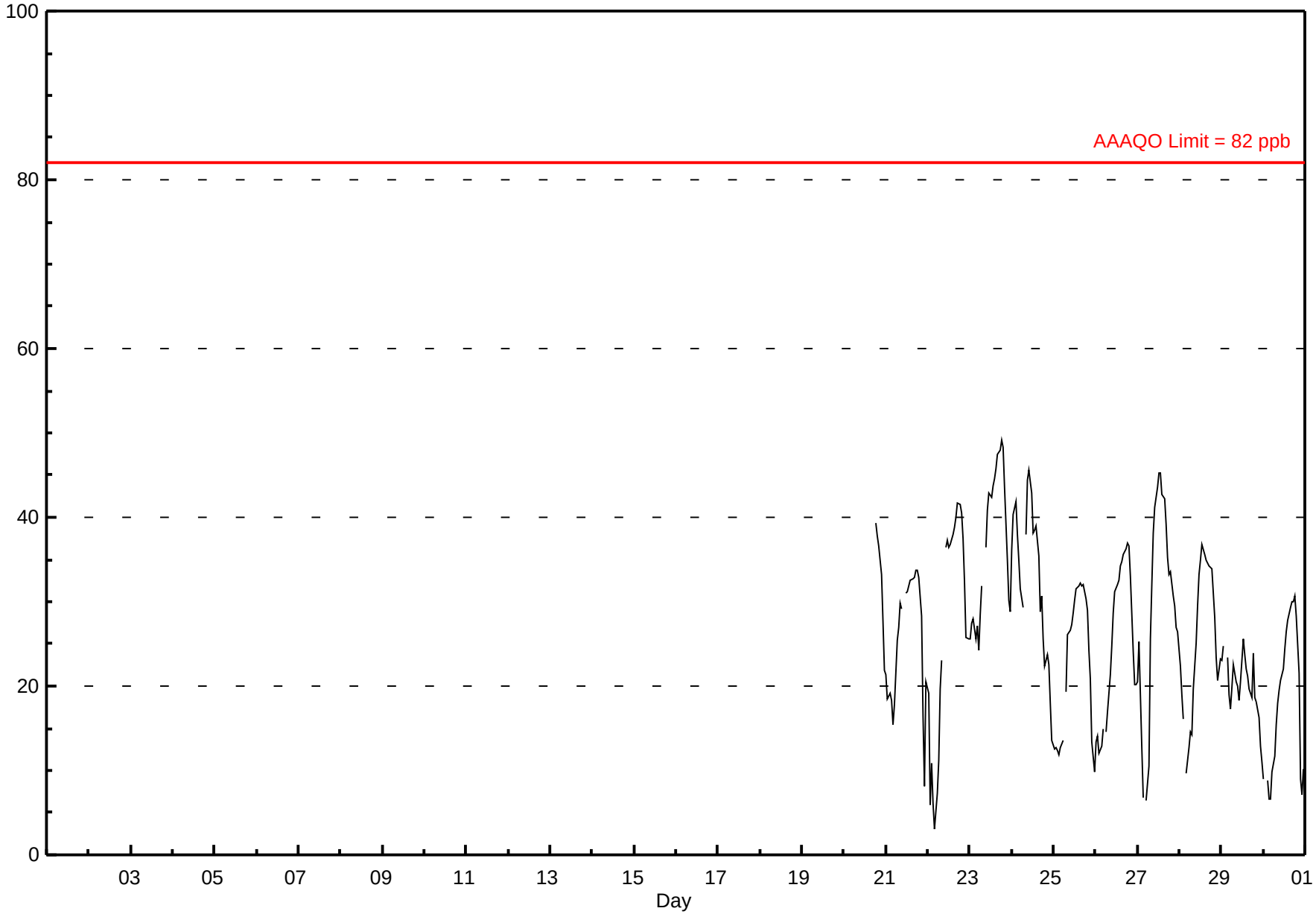
C - Calibration NS - Not in service A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

Peace Airshed Zone Association

Hourly Averages

Ozone (O_3) - ppb

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

Portable Clairmont - June 2014

Maximum Value: 55.5 ppb on Jun 27 23:00

Maximum Daily Average: 39.3 ppb on Jun 23

Minimum Value: 6 ppb on Jun 22 05:00

Minimum Daily Average: 20.7 ppb on Jun 30

Maximum Diurnal Average: 36.5 ppb at hour 19

Minimum Diurnal Average: 18.5 ppb at hour 6

Monthly Average: 29.44 ppb

Percentiles: P_1 = 8.6 P_{10} = 14.5 Q_1 = 22.8 Median = 30.3 Q_3 = 36.8 P_{90} = 43.1 P_{99} = 46.5

Hours in Service:	248
Hours of Data:	236
Hours of Missing Data:	12
Hours of Calibration:	12
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	41	39	38	35	32	25	--	41.4
21-Jun	24	23	21	20	19	24	27	29	32	30	A	32	32	33	34	34	34	35	35	35	32	24	23	23	28.4	35.0
22-Jun	25	10	14	11	6	12	14	26	27	A	38	38	38	38	39	40	42	43	44	42	40	37	28	27	29.5	43.6
23-Jun	27	29	30	29	31	26	32	35	A	39	44	45	44	45	46	47	49	50	51	50	47	37	34	38	39.3	50.7
24-Jun	39	43	44	41	37	34	31	A	42	47	47	47	40	41	41	39	31	32	31	24	25	24	24	15	35.6	47.1
25-Jun	17	14	13	14	14	15	A	23	28	28	29	30	32	33	33	33	33	33	32	30	28	23	18	12	24.7	33.1
26-Jun	16	15	13	16	17	A	16	21	24	28	30	33	34	34	36	36	37	37	38	38	36	34	26	24	27.8	37.9
27-Jun	25	28	26	12	A	10	23	28	36	40	43	46	47	47	46	45	43	40	36	37	34	38	56	36	35.7	55.5
28-Jun	32	22	18	A	14	16	15	16	23	29	32	36	36	38	38	36	36	35	35	34	31	27	23	28	28.4	37.8
29-Jun	24	27	A	25	22	20	23	24	22	22	22	23	27	26	24	23	22	26	27	23	24	20	16	12	22.8	27.3
30-Jun	11	A	10	7	9	11	14	18	19	21	22	24	26	28	29	30	31	31	31	32	26	18	13	14	20.7	32.0
	24.1	23.6	21.0	19.4	18.8	18.5	21.7	24.5	28.3	31.6	34.1	35.4	35.7	36.2	36.4	36.3	35.7	36.2	36.5	34.9	32.8	28.9	26.6	23.3	Diurnal Average	
	39.5	43.1	43.6	40.6	37.2	33.5	31.5	35.0	42.1	47.1	47.1	46.6	47.0	46.6	46.0	47.3	49.0	49.6	50.7	50.1	46.6	38.0	55.5	37.7	Diurnal Maximum	

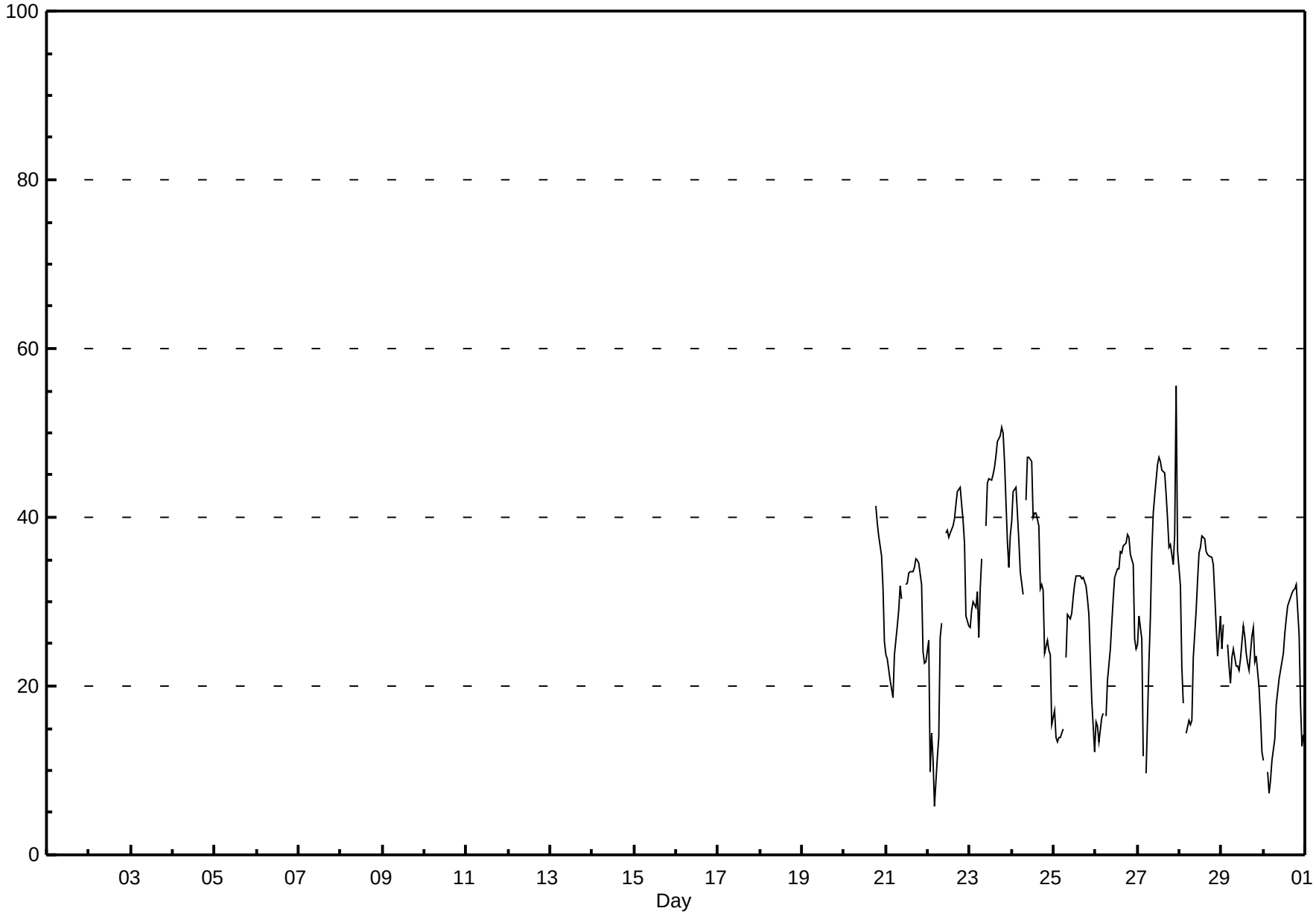
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Ozone (O_3) - ppb

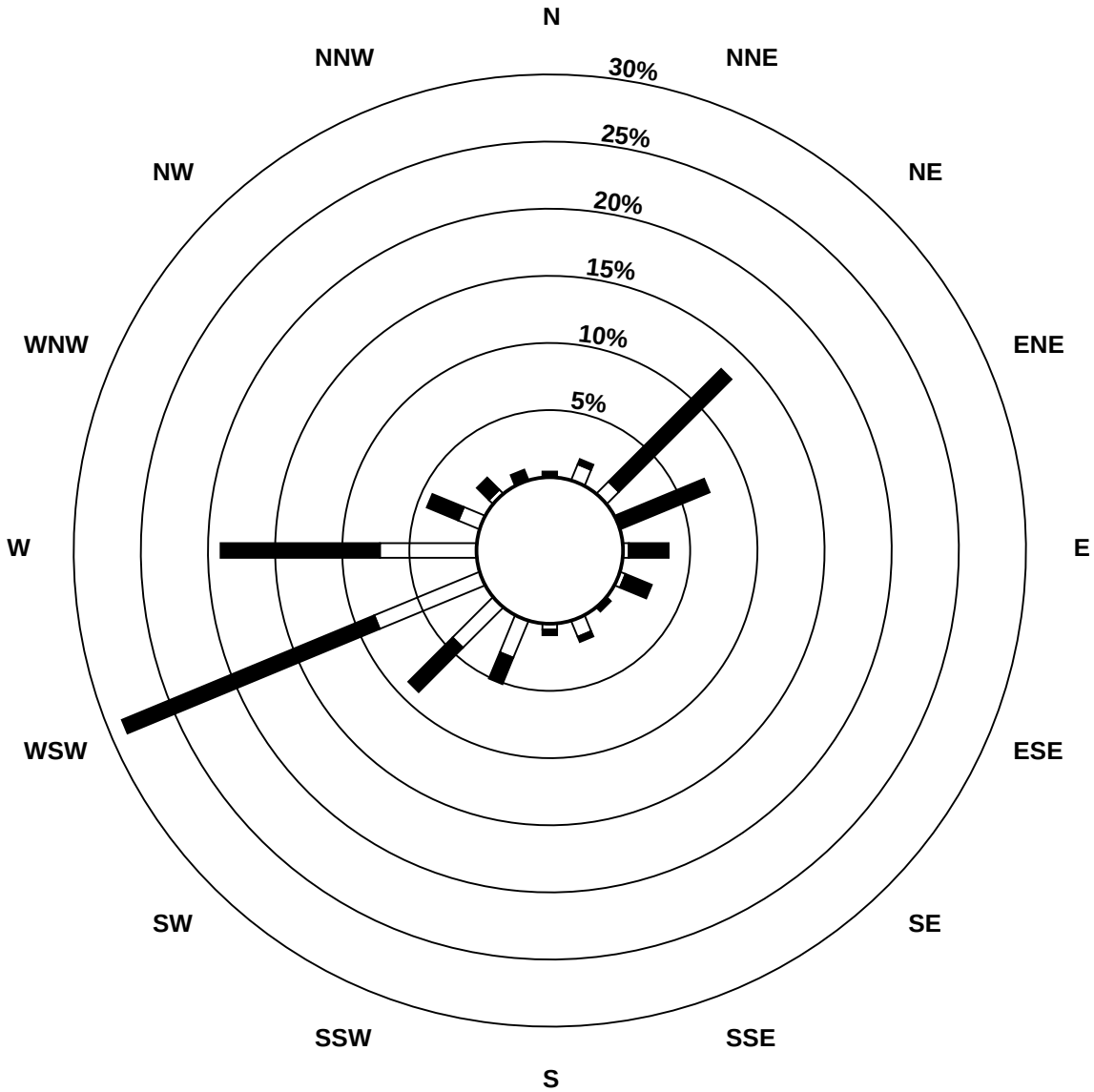
Portable Clairmont - June 2014



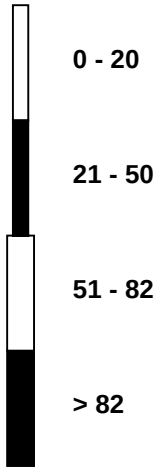
Pollutant Rose

Ozone (O_3) - ppb

Portable Clairmont - June 2014



Pollutant Classes (ppb)



Peace Airshed Zone Association

Eight Hour Running Averages

Ozone (O_3) - ppb

Portable Clairmont - June 2014

Maximum Value: 46.3 ppb on Jun 23 21:00

Minimum Value: 9.1 ppb on Jun 30 07:00

Percentiles: P_1 = 9.7 P_{10} = 14.4 Q_1 = 19.8 Median = 26.8 Q_3 = 32.8 P_{90} = 38.8 P_{99} = 46.0

Hours in Service:	248
Hours of Data:	241
Hours of Missing Data:	7
Hours of Calibration:	0
Percent Operational Time:	97.2

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Maximum
1-Jun	MS	MS	MS	MS	MS	MS	MS	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
2-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	--
3-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	--
4-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	--
5-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	--
6-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	--
7-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	--
8-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	--
9-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	--
10-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	--
11-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	--
12-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	--
13-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	--
14-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	--
15-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	--
16-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	--
17-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	--
18-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	--
19-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	--
20-Jun	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	33	32.7
21-Jun	31	30	27	25	22	20	20	20	21	23	23	25	27	29	30	31	32	32	32	33	32	30	27	26	32.7
22-Jun	24	21	18	14	11	10	11	10	11	12	15	20	24	29	33	35	38	38	39	39	39	39	37	36	39.3
23-Jun	34	32	30	28	27	26	26	27	28	29	31	33	35	38	40	42	43	44	46	46	46	45	43	41	46.3
24-Jun	40	39	38	37	36	35	35	36	36	37	37	38	39	40	41	40	39	37	35	32	31	29	26	23	40.9
25-Jun	21	19	17	16	15	13	13	14	16	18	20	22	25	27	28	29	30	31	31	31	30	29	27	24	31.1
26-Jun	22	19	17	15	14	13	13	14	15	17	19	22	24	25	28	30	32	33	34	35	35	34	32	30	35.0
27-Jun	28	27	24	20	19	16	15	15	17	19	23	28	30	35	39	41	42	42	41	40	38	36	34	32	42.2
28-Jun	30	28	26	24	21	19	17	16	15	16	18	20	23	26	29	31	33	34	35	34	34	32	30	29	34.7
29-Jun	27	26	25	24	23	22	22	21	21	20	20	20	21	21	22	22	21	21	22	22	21	20	19	17	27.2
30-Jun	16	16	14	12	10	9	9	10	11	12	14	15	18	20	22	23	25	26	28	28	28	26	23	21	28.4
Diurnal Maximums	39.9	38.9	38.0	36.7	35.6	35.2	35.1	36.0	36.2	36.8	37.4	38.1	38.5	39.5	40.9	42.4	43.0	44.5	45.5	46.2	46.3	45.2	43.4	41.3	

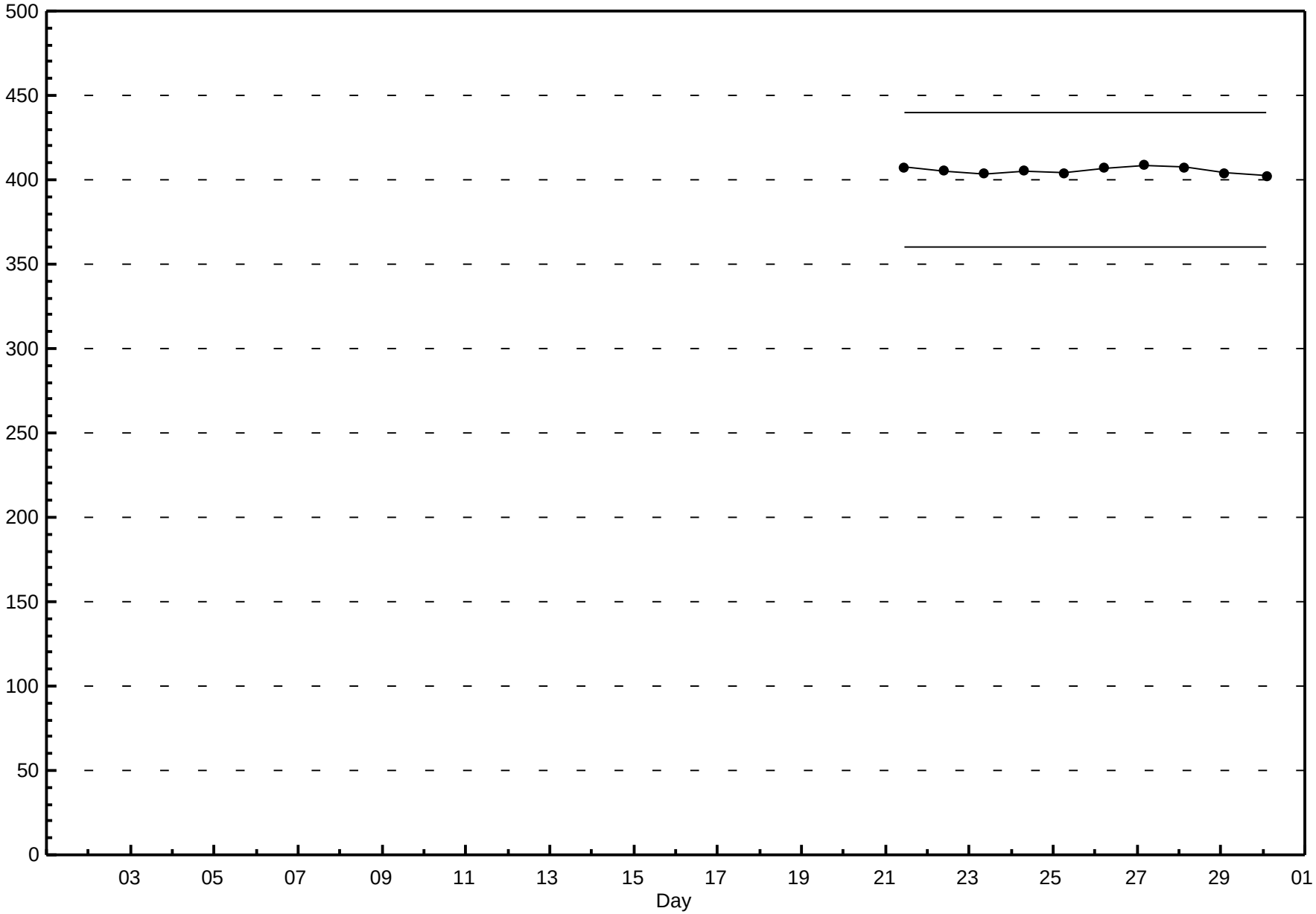
N - Not Valid MS - Missing

Peace Airshed Zone Association

Span Responses

Ozone (O_3)

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Clairmont - June 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0
Maximum Value: 3.02 ppm on Jun 27 06:00
Maximum Daily Average: 2.22 ppm on Jun 27

Minimum Value: 2.0 ppm on Jun 24 18:00
Maximum Diurnal Average: 2.39 ppm at hour 6
Monthly Average: 2.143 ppm

Minimum Daily Average: 2.08 ppm on Jun 29
Minimum Diurnal Average: 2.03 ppm at hour 19
Percentiles: P_1 = 1.99 P_{10} = 2.01 Q_1 = 2.03 Median = 2.09 Q_3 = 2.20 P_{90} = 2.33 P_{99} = 2.66

Hours in Service:	230
Hours of Data:	217
Hours of Missing Data:	13
Hours of Calibration:	13
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.2	--	2.26
22-Jun	2.3	2.5	2.4	2.5	2.7	2.6	2.3	2.3	2.3	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.22	2.73
23-Jun	2.2	2.2	2.2	2.2	2.2	2.4	2.4	2.2	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.16	2.38
24-Jun	2.2	2.2	2.2	2.2	2.2	2.2	2.3	A	2.2	2.2	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.10	2.27
25-Jun	2.1	2.2	2.1	2.1	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	2.1	2.1	2.3	2.3	2.08	2.34
26-Jun	2.3	2.3	2.4	2.2	2.2	A	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.2	2.3	2.3	2.3	2.17	2.39
27-Jun	2.3	2.2	2.5	2.8	A	3.0	2.8	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.22	3.02
28-Jun	2.2	2.3	2.4	A	2.4	2.3	2.2	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.1	2.11	2.37
29-Jun	2.1	2.1	A	2.1	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	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.08	2.34
30-Jun	2.2	A	2.4	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.3	2.6	2.16	2.57
	2.21	2.24	2.31	2.30	2.30	2.39	2.31	2.16	2.15	2.09	2.06	2.04	2.04	2.03	2.03	2.03	2.03	2.03	2.03	2.05	2.10	2.18	2.22	2.27	Diurnal Average	
	2.31	2.51	2.50	2.81	2.73	3.02	2.80	2.30	2.28	2.18	2.10	2.08	2.07	2.06	2.07	2.07	2.10	2.10	2.12	2.14	2.18	2.41	2.33	2.57	Diurnal Maximum	

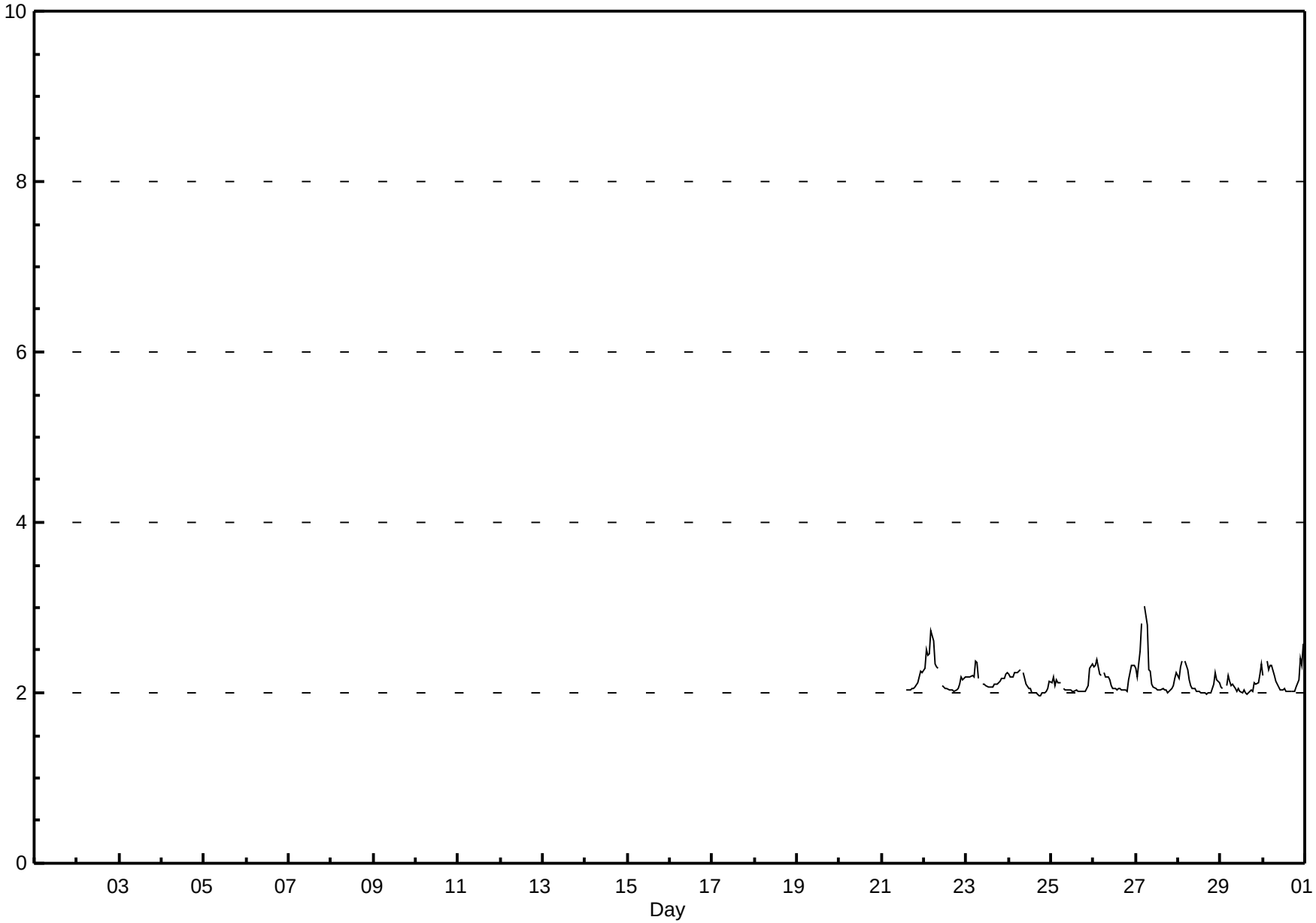
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

Portable Clairmont - June 2014

Maximum Value: 3.36 ppm on Jun 27 06:00

Maximum Daily Average: 2.36 ppm on Jun 22

Minimum Value: 2.0 ppm on Jun 24 18:00

Minimum Daily Average: 2.15 ppm on Jun 25

Maximum Diurnal Average: 2.52 ppm at hour 6

Minimum Diurnal Average: 2.07 ppm at hour 15

Monthly Average: 2.249 ppm

Percentiles: P_1 = 2.01 P_{10} = 2.05 Q_1 = 2.08 Median = 2.17 Q_3 = 2.33 P_{90} = 2.55 P_{99} = 3.16

Hours in Service:	230
Hours of Data:	217
Hours of Missing Data:	13
Hours of Calibration:	13
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
20-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
21-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	C	C	C	C	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.4	2.4	--	2.43
22-Jun	2.8	2.8	2.6	2.6	3.2	2.8	2.6	2.5	2.4	A	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.4	2.2	2.2	2.36	3.23
23-Jun	2.2	2.2	2.3	2.2	2.2	2.5	2.5	2.3	A	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.24	2.55
24-Jun	2.3	2.2	2.3	2.3	2.3	2.3	2.3	A	2.3	2.3	2.2	2.1	2.9	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.2	2.20	2.90
25-Jun	2.3	2.3	2.1	2.2	2.2	2.2	A	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.5	2.5	2.15	2.51
26-Jun	2.5	2.5	2.6	2.3	2.3	A	2.4	2.2	2.6	2.2	2.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.4	2.6	2.4	2.5	2.30	2.62
27-Jun	2.4	2.4	2.6	3.2	A	3.4	3.1	2.4	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	2.3	2.35	3.36
28-Jun	2.3	2.4	2.6	A	2.5	2.4	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.3	2.2	2.2	2.5	2.4	2.2	2.21	2.56
29-Jun	2.1	2.2	A	2.1	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.2	2.4	2.4	2.5	2.16	2.52
30-Jun	2.3	A	2.6	2.4	2.4	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.0	2.0	2.1	2.3	2.5	3.1	2.7	2.8	2.29	3.13
	2.36	2.39	2.46	2.42	2.43	2.52	2.44	2.25	2.26	2.15	2.16	2.09	2.19	2.08	2.07	2.07	2.07	2.07	2.11	2.13	2.24	2.41	2.38	2.41	Diurnal Average	
	2.79	2.82	2.64	3.24	3.23	3.36	3.10	2.46	2.62	2.25	2.58	2.14	2.90	2.21	2.14	2.14	2.18	2.20	2.30	2.29	2.52	3.13	2.68	2.82	Diurnal Maximum	

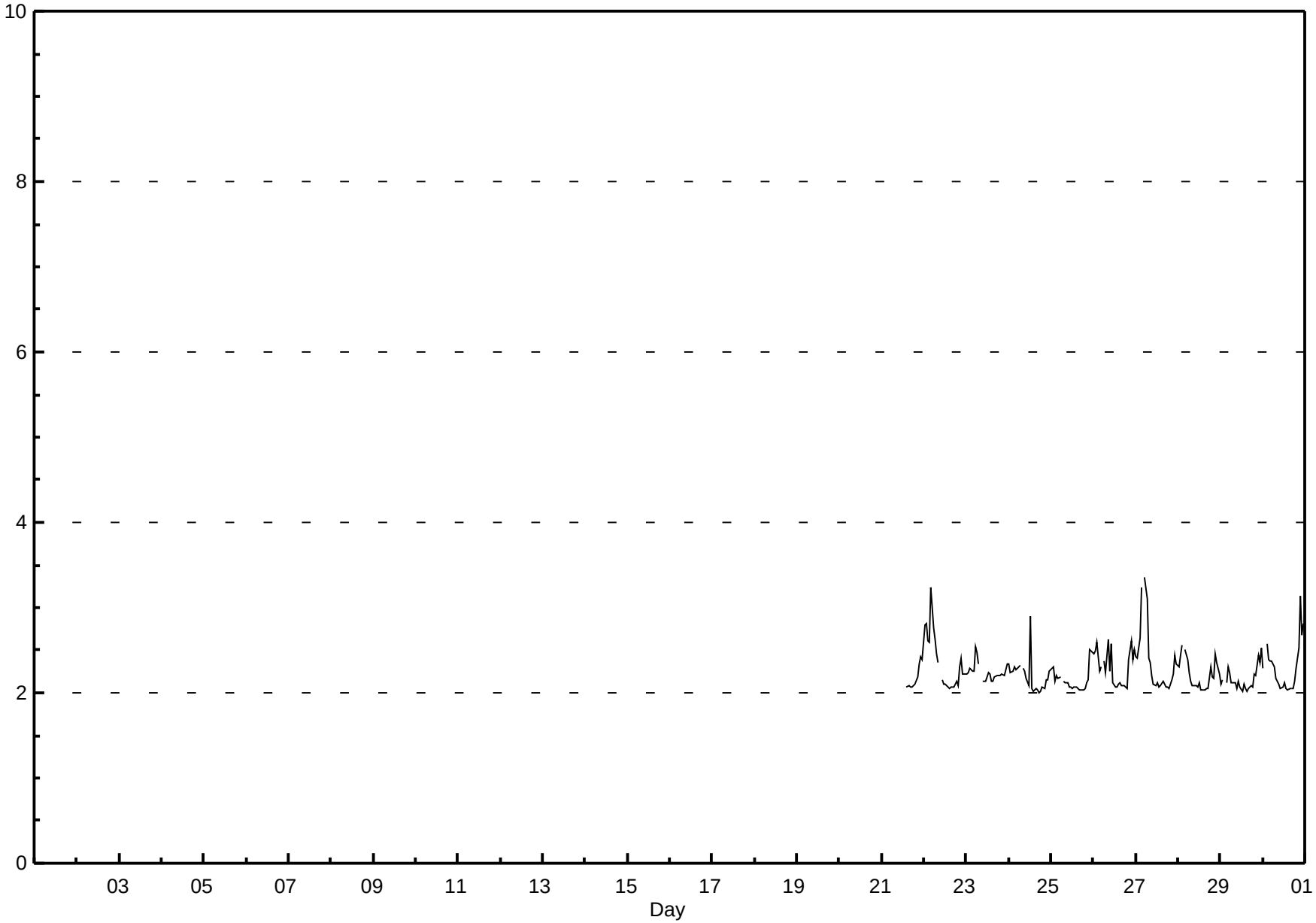
C - Calibration NS - Not in service A - Automated Daily Zero Span

Peace Airshed Zone Association

Hourly Maximums

Total Hydrocarbons (THC) - ppm

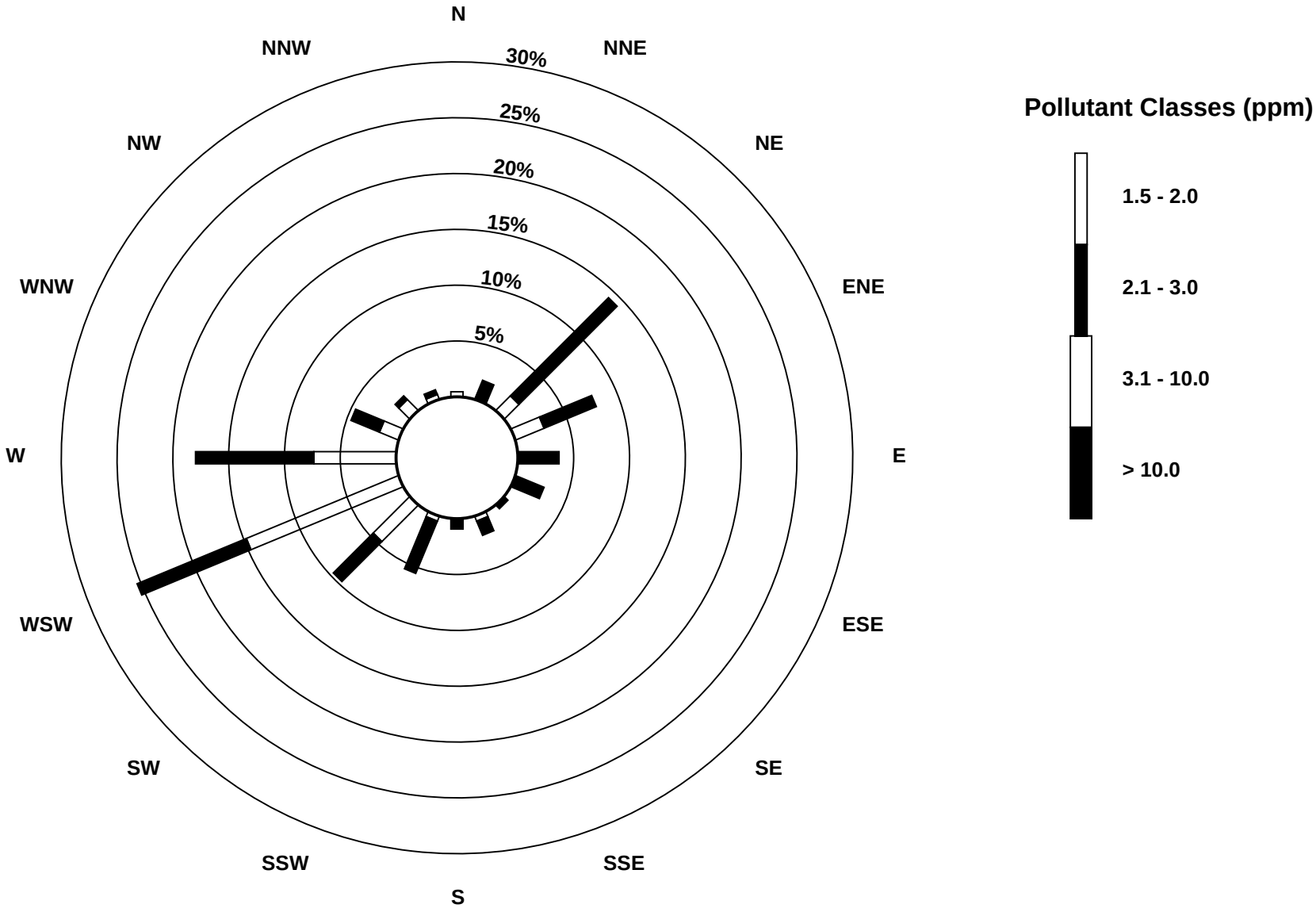
Portable Clairmont - June 2014



Pollutant Rose

Total Hydrocarbons (THC) - ppm

Portable Clairmont - June 2014

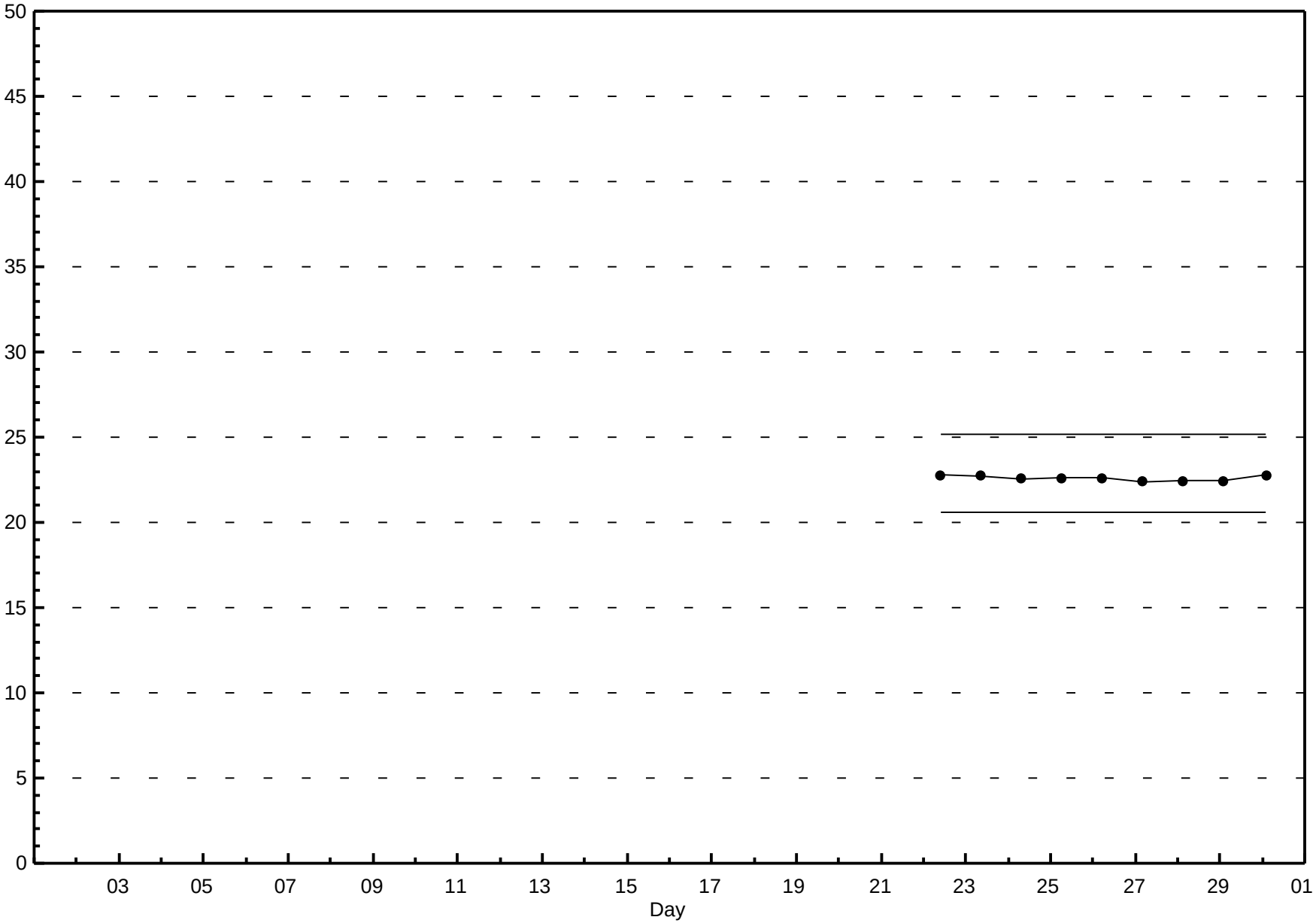


Peace Airshed Zone Association

Span Responses

Total Hydrocarbons (THC)

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - June 2014

Number of Exceedences: 1-hr: 0 24-hr: 0

Maximum Value: 24.2 $\mu g/m^3$ on Jun 28 00:00

Maximum Daily Average: 6.8 $\mu g/m^3$ on Jun 27

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

Maximum Diurnal Average: 6.7 $\mu g/m^3$ at hour 22

Monthly Average: 3.13 $\mu g/m^3$

Minimum Daily Average: 0.6 $\mu g/m^3$ on Jun 25

Minimum Diurnal Average: 1.0 $\mu g/m^3$ at hour 13

Percentiles: P_1 = 0.0 P_{10} = 0.0 Q_1 = 0.2 Median = 1.7 Q_3 = 4.5 P_{90} = 8.7 P_{99} = 15.2

Hours in Service:	272
Hours of Data:	269
Hours of Missing Data:	3
Hours of Calibration:	0
Percent Operational Time:	98.9

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	M	10	9	9	9	6	1	4	--	9.9
20-Jun	4	5	1	5	5	4	7	7	4	5	0	N	0	0	0	0	0	0	1	1	0	1	1	1	2.2	7.4
21-Jun	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	6	8	6	1.1	7.6
22-Jun	3	4	2	4	2	4	3	2	5	2	0	1	3	5	1	2	1	1	4	3	5	7	10	6	3.4	9.5
23-Jun	3	3	5	2	4	6	4	8	8	6	6	2	0	1	5	6	5	4	7	7	9	17	11	7	5.7	16.6
24-Jun	5	8	9	10	10	11	12	11	15	14	8	4	6	3	3	4	1	5	3	1	0	0	1	0	6.0	14.9
25-Jun	0	0	0	0	0	0	0	0	N	0	0	0	0	0	0	0	0	1	1	2	3	1	4	1	0.6	4.1
26-Jun	0	1	1	1	1	3	5	4	2	2	0	0	0	0	0	0	0	1	0	1	8	17	10	11	2.8	16.5
27-Jun	4	2	5	4	4	5	8	9	6	4	4	3	2	3	5	5	10	10	5	3	4	12	24	24	6.8	24.2
28-Jun	11	3	0	0	1	2	2	1	1	0	0	0	0	0	2	0	0	0	0	3	0	3	1	11	1.8	11.1
29-Jun	4	0	0	0	1	2	2	2	1	3	3	2	0	0	1	0	4	0	0	4	5	1	5	1	1.7	4.9
30-Jun	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	5	11	0	3	1.1	10.5
	3.2	2.4	2.1	2.5	2.8	3.4	4.0	4.2	4.2	3.1	2.0	1.2	1.0	1.1	1.5	1.6	2.0	2.7	2.5	3.1	4.2	6.7	6.2	6.1	Diurnal Average	
	10.9	7.6	8.6	10.2	10.3	11.2	12.1	11.3	14.9	14.1	8.3	4.2	5.5	4.7	5.1	6.0	10.3	10.4	8.9	8.7	8.9	16.6	23.8	24.2	Diurnal Maximum	

M - Maintenance N - Not Valid NS - Not in service

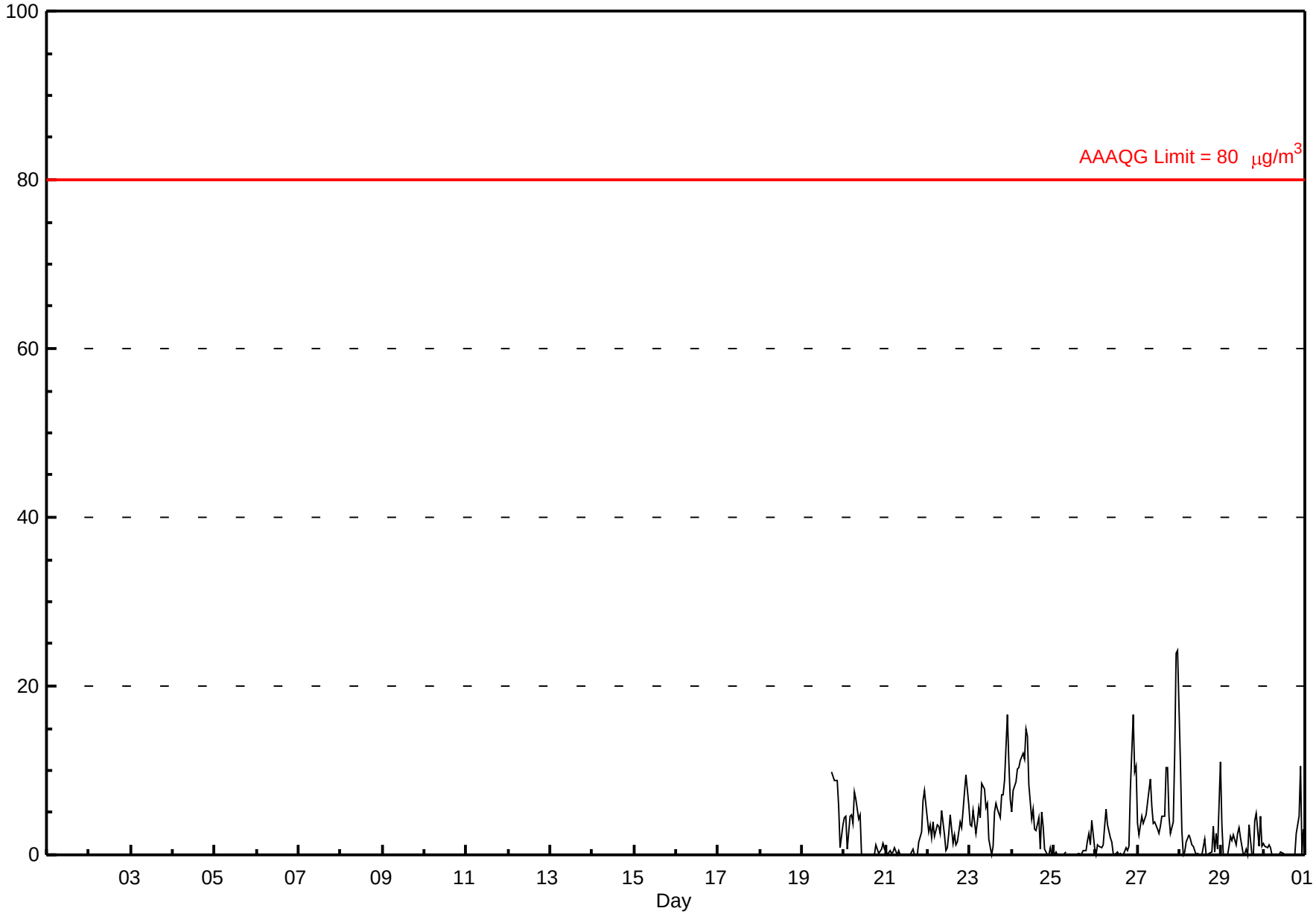
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 $\mu g/m^3$ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 $\mu g/m^3$

Peace Airshed Zone Association

Hourly Averages

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Maximums

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - June 2014

Maximum Value: 64.0 $\mu g/m^3$ on Jun 27 23:00

Maximum Daily Average: 16.8 $\mu g/m^3$ on Jun 27

Minimum Value: 0 $\mu g/m^3$ on Jun 20 12:00

Maximum Diurnal Average: 15.5 $\mu g/m^3$ at hour 23

Monthly Average: 8.74 $\mu g/m^3$

Minimum Daily Average: 3.8 $\mu g/m^3$ on Jun 25

Minimum Diurnal Average: 5.6 $\mu g/m^3$ at hour 12

Percentiles: P_1 = 1.0 P_{10} = 2.8 Q_1 = 3.8 Median = 6.7 Q_3 = 12.7 P_{90} = 16.3 P_{99} = 36.4

Hours in Service:	272
Hours of Data:	271
Hours of Missing Data:	1
Hours of Calibration:	0
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	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	M	15	13	14	14	10	9	8	--	15.2
20-Jun	6	12	4	8	9	8	11	11	9	11	9	0	6	3	1	1	2	2	4	5	3	3	3	7	5.9	12.2
21-Jun	3	4	4	4	3	4	3	3	3	4	2	3	5	5	3	5	3	2	4	3	5	13	12	14	4.7	13.7
22-Jun	17	19	9	8	10	6	15	15	15	6	4	5	5	10	7	8	7	5	12	9	11	13	13	9	9.9	19.3
23-Jun	6	8	10	7	11	10	9	13	13	10	9	10	8	9	12	17	18	15	16	14	15	23	17	14	12.2	22.5
24-Jun	17	13	14	14	13	13	17	20	21	18	16	11	13	9	8	16	5	15	16	4	4	3	4	2	12.1	21.4
25-Jun	3	3	1	3	1	1	2	5	3	3	4	2	5	5	4	4	4	6	5	6	6	6	6	5	3.8	6.5
26-Jun	1	4	5	3	3	5	9	7	5	5	7	4	7	4	4	4	4	6	4	9	16	39	16	20	7.9	38.8
27-Jun	9	5	11	12	12	9	13	14	17	7	7	10	12	13	19	14	18	24	12	10	13	30	64	50	16.8	64.0
28-Jun	26	17	1	3	4	4	5	7	8	5	8	6	6	3	6	5	2	5	3	10	4	8	16	19	7.5	26.0
29-Jun	14	18	2	2	3	4	4	13	5	6	9	7	4	3	12	5	7	6	3	13	16	9	11	7	7.7	18.0
30-Jun	4	3	3	4	3	4	5	2	7	6	6	3	11	4	6	4	5	6	3	9	19	20	15	13	6.8	19.7
	9.7	9.8	5.9	6.2	6.5	6.3	8.6	9.9	9.5	7.4	7.3	5.6	7.5	6.1	7.4	7.4	6.8	8.8	8.1	8.8	10.5	14.6	15.5	14.0	Diurnal Average	
	26.0	19.3	14.5	14.3	13.4	13.3	16.8	20.5	21.4	18.4	16.2	11.1	13.1	12.9	19.2	16.7	17.6	23.6	16.1	14.1	19.0	38.8	64.0	50.1	Diurnal Maximum	

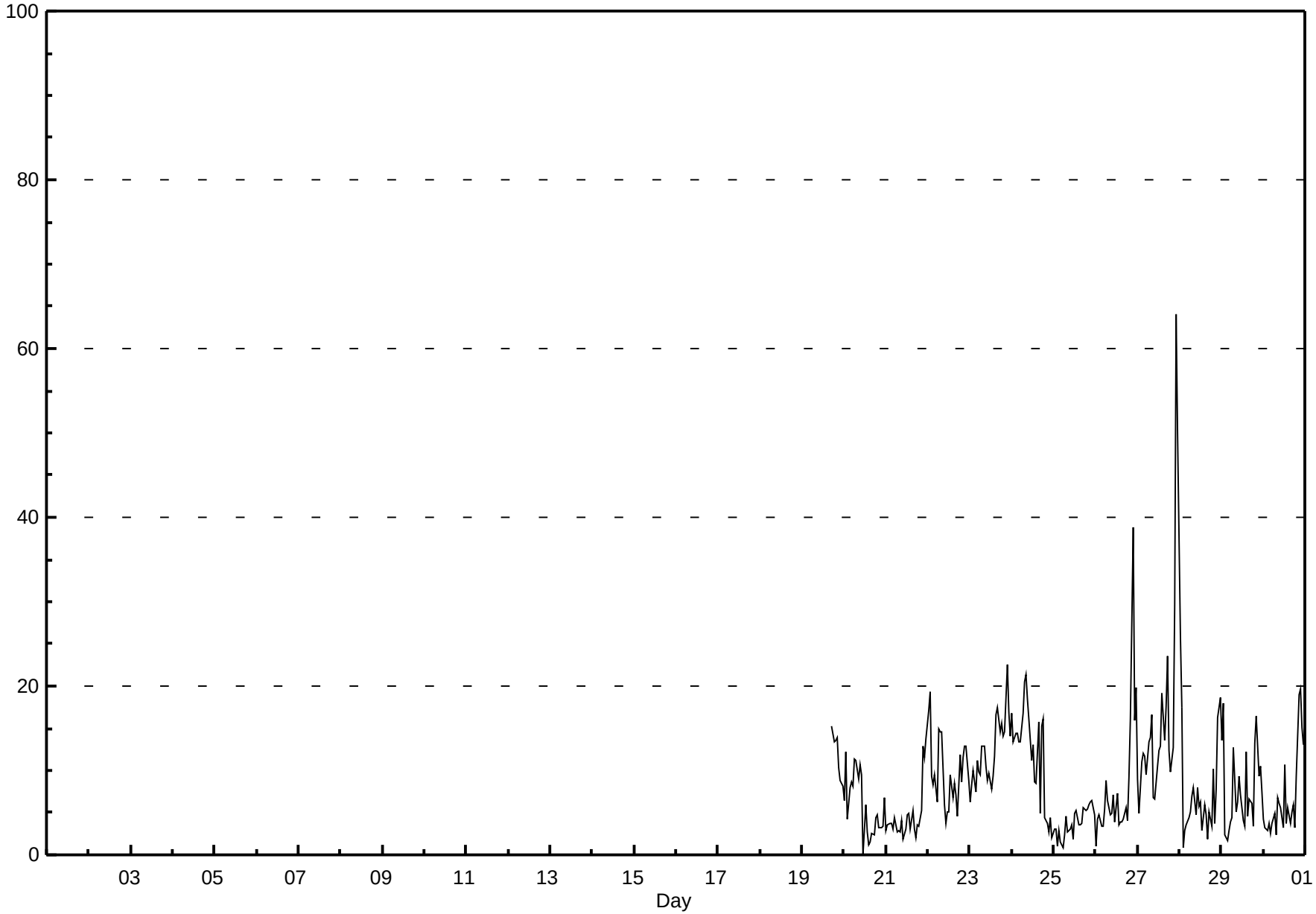
M - Maintenance NS - Not in service

Peace Airshed Zone Association

Hourly Maximums

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

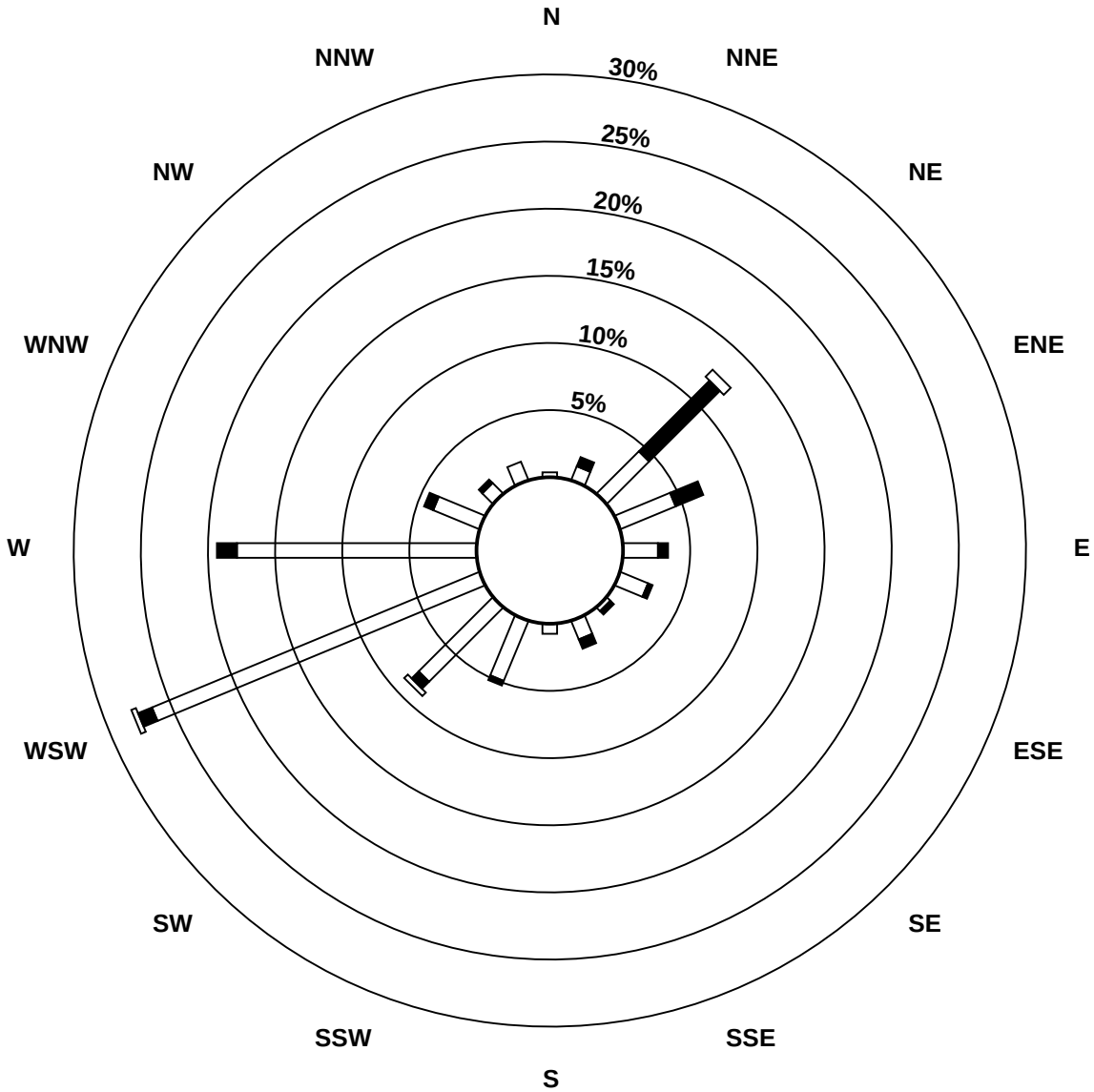
Portable Clairmont - June 2014



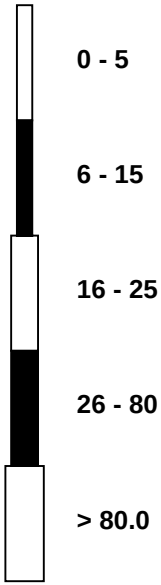
Pollutant Rose

PM2.5 ($PM_{2.5}$) - $\mu g/m^3$

Portable Clairmont - June 2014



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



Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable Clairmont - June 2014

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

Maximum Value: 27.1 ^{o}C on Jun 23 14:00

Maximum Daily Average: 20.9 ^{o}C on Jun 23

Minimum Value: 7 ^{o}C on Jun 21 05:00

Maximum Diurnal Average: 23.1 ^{o}C at hour 16

Monthly Average: 17.87 ^{o}C

Minimum Daily Average: 14.8 ^{o}C on Jun 29

Minimum Diurnal Average: 11.8 ^{o}C at hour 5

Percentiles: P_1 = 8.6 P_{10} = 12.6 Q_1 = 14.4 Median = 17.1 Q_3 = 21.8 P_{90} = 24.3 P_{99} = 26.9

Hours in Service:	272
Hours of Data:	272
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	24	23	23	20	18	16	16	15	--	23.5
20-Jun	15	14	14	14	14	14	14	15	17	19	17	16	18	20	21	21	22	21	20	20	18	17	14	12	16.9	21.7
21-Jun	11	10	9	8	7	9	12	13	15	16	17	18	19	20	21	21	22	22	22	21	20	17	14	14	15.7	21.8
22-Jun	13	9	9	9	8	11	14	17	17	19	21	22	23	24	24	25	25	24	24	24	22	20	17	16	18.2	25.0
23-Jun	16	16	15	15	14	14	15	17	19	21	24	24	25	27	27	27	27	26	26	25	23	21	19	18	20.9	27.1
24-Jun	19	18	17	16	15	15	16	20	20	22	24	25	25	25	26	25	22	17	15	14	14	14	14	14	18.8	25.6
25-Jun	14	14	13	13	12	12	13	15	17	17	19	19	20	21	22	22	23	23	23	22	20	18	15	14	17.4	23.0
26-Jun	13	12	11	10	10	12	14	16	17	19	21	23	23	23	23	24	24	24	24	24	22	19	17	16	18.3	24.5
27-Jun	15	15	13	12	11	12	15	16	19	21	23	24	25	25	26	25	20	18	16	16	16	16	15	15	18.0	26.1
28-Jun	14	14	13	13	12	12	13	14	16	18	19	21	22	23	23	24	23	23	23	23	21	20	18	17	18.3	23.6
29-Jun	17	16	16	14	13	13	14	14	13	13	14	14	14	15	15	16	16	16	15	16	15	15	15	15	14.8	16.7
30-Jun	14	14	14	14	14	14	14	16	17	18	19	20	21	22	24	24	24	25	24	24	22	19	16	15	18.7	24.5
	14.5	13.7	13.1	12.4	11.8	12.5	14.1	15.6	17.0	18.5	19.8	20.6	21.4	22.3	22.8	23.1	22.6	22.0	21.4	20.7	19.4	17.6	15.9	15.0	Diurnal Average	
	18.6	17.8	16.8	15.7	15.2	15.4	16.4	19.6	20.1	22.1	23.9	24.8	25.4	27.1	26.9	26.9	26.9	26.4	26.0	25.3	23.5	20.6	18.9	18.5	Diurnal Maximum	

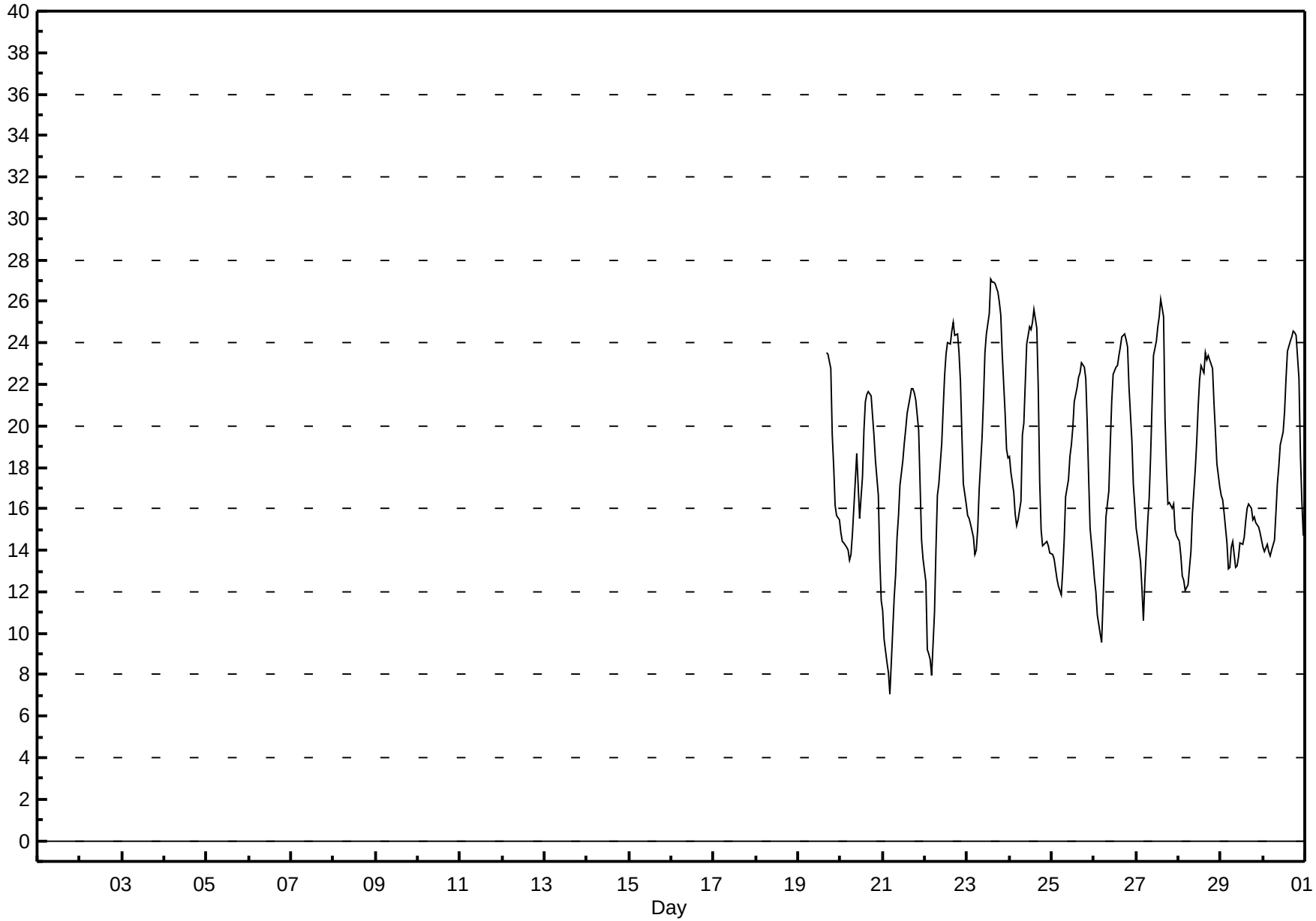
NS - Not in service

Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - ^{o}C

Portable Clairmont - June 2014



Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Clairmont - June 2014

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 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16	14	12	8	11	12	12	11	--	15.6
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	56	52	73	261	293	257	293	280	--	56.0
20 Spd	9	7	6	3	5	5	7	6	5	1	16	18	16	14	16	19	18	18	16	16	14	11	8	6	8.6	18.5
Dir	269	277	347	267	129	327	30	38	98	150	245	247	251	255	259	260	258	249	273	259	252	243	243	273	259.6	260.0
21 Spd	9	5	7	7	8	10	16	14	17	20	20	21	19	19	16	13	12	12	9	10	6	4	3	4	11.0	21.0
Dir	255	270	270	280	255	246	249	259	241	240	230	251	236	246	241	240	238	249	260	263	286	296	317	52	249.6	250.7
22 Spd	1	6	4	2	4	2	2	4	8	11	13	12	8	5	7	7	6	6	7	11	9	8	9	9	4.7	13.5
Dir	42	264	261	216	277	281	14	99	100	104	102	106	111	87	60	73	68	45	51	57	61	44	41	42	72.3	101.9

Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Clairmont - June 2014

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
23 Spd	7	8	7	6	8	11	13	11	11	11	15	13	12	9	7	10	12	13	16	14	12	13	14	11	10.0	16.5
Dir	58	51	47	35	42	40	38	49	47	97	115	94	85	115	74	86	87	75	77	73	51	38	38	54	66.5	77.0
24 Spd	10	12	13	11	11	9	7	5	5	6	10	15	14	12	12	18	29	25	16	8	9	3	7	6	4.4	28.8
Dir	76	65	47	50	51	46	60	162	242	265	264	260	272	281	275	262	248	245	233	236	291	225	153	150	260.6	247.7
25 Spd	7	9	10	9	8	10	10	13	18	20	19	18	15	13	12	13	12	10	12	12	9	8	6	6	10.5	19.6
Dir	157	175	199	207	203	202	206	225	258	255	252	256	251	250	243	244	247	243	241	237	236	242	259	274	237.0	254.6
26 Spd	6	7	4	5	6	6	3	5	6	5	6	10	7	10	7	7	5	5	4	5	5	5	5	6	3.1	9.7
Dir	280	274	210	207	229	218	241	210	217	220	209	192	236	259	256	273	264	268	316	4	43	46	33	53	246.5	192.2
27 Spd	6	3	0	4	4	4	3	9	9	5	4	10	11	12	13	11	27	15	18	4	2	4	8	8	1.8	27.0
Dir	18	25	102	238	262	261	35	43	57	55	54	70	70	62	46	49	157	211	337	284	331	222	231	257	55.9	157.3
28 Spd	4	4	5	5	5	5	7	10	13	13	12	10	11	11	8	8	6	6	6	7	9	4	4	10	6.7	13.0
Dir	222	269	243	233	265	270	233	220	252	260	255	260	258	256	251	261	262	312	316	274	278	260	242	141	254.8	259.6
29 Spd	9	7	10	12	7	7	8	11	11	10	9	13	17	15	10	7	6	9	12	4	6	7	4	6	8.1	16.7
Dir	171	209	197	202	219	236	237	267	238	217	220	247	251	254	248	231	222	234	245	283	287	254	276	250	236.3	250.9
30 Spd	7	7	8	9	7	8	9	11	13	17	16	16	14	16	14	12	12	11	9	7	5	3	5	6	9.7	17.2
Dir	251	258	260	253	251	256	243	251	257	250	256	255	266	272	259	257	275	281	297	296	255	248	286	250	261.2	250.4
Spd	1.3	1.9	1.7	3.0	2.3	2.9	2.0	3.0	4.4	6.0	7.5	7.8	7.4	7.4	6.2	6.2	5.4	5.8	4.3	3.8	4.2	2.8	2.3	0.8	Diurnal Average	
Dir	227.9	261.1	247.2	231.8	240.8	261.2	259.5	243.4	245.2	235.0	230.8	240.5	247.8	256.3	260.2	256.9	228.5	252.4	289.9	275.4	292.6	271.1	297.4	285.0		
Spd	10.4	11.5	12.5	11.8	10.7	11.4	15.7	14.4	17.9	19.8	20.3	21.0	19.2	18.9	16.3	18.5	28.8	25.1	17.8	15.9	14.4	12.7	14.1	11.3	Diurnal Maximum	
Dir	75.6	64.9	47.3	202.1	51.2	39.6	249.2	259.0	258.3	239.6	229.8	250.7	236.5	246.3	258.6	260.0	247.7	245.5	337.5	258.6	252.2	38.4	37.7	279.8		

Maximum Speed Value: 29 km/h on Jun 24 17:00
Maximum Daily Speed Average: 11.0 km/h on Jun 21
Maximum Diurnal Speed Average: 7.8 km/h at hour 12

Minimum Speed Value: 0 km/h on Jun 27 03:00
Minimum Daily Speed Average: 1.8 km/h on Jun 26
Minimum Diurnal Speed Average: 0.8 km/h at hour 24

Monthly Average Velocity: 3.96 km/h 253.00 deg

Speed Percentiles: $P_1 = 2.2$ $P_{10} = 4.1$ $Q_1 = 5.7$ Median = 8.8 $Q_3 = 12.2$ $P_{90} = 15.9$ $P_{99} = 24.7$

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

Hours in Service:	272
Hours of Data:	272
Hours of Missing Data:	0
Percent Operational Time:	100.0

NS - Not in service

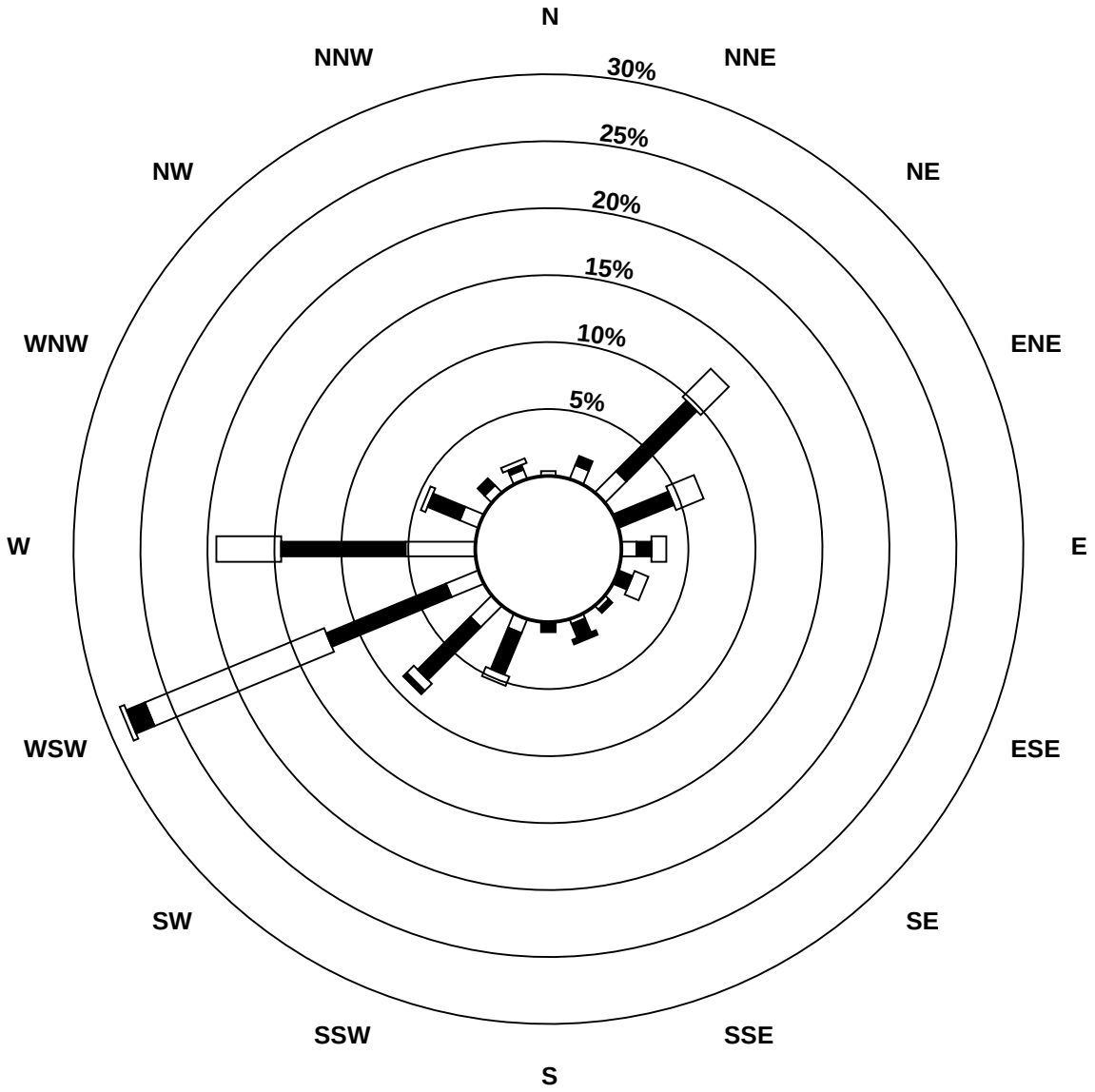
Frequency Distribution

Direction	Speed Range (km/h) 0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total
North	1	3	0	0	0	0	4
NorthEast	6	25	15	0	0	0	46
East	2	10	12	0	0	0	24
SouthEast	1	6	1	1	0	0	9
South	0	7	1	0	0	0	8
SouthWest	9	32	19	4	0	0	64
West	16	44	41	3	1	0	105
NorthWest	5	4	3	0	0	0	12
Total	40	131	92	8	1	0	272

Wind Rose

Wind Speed (WS) (km/h)

Portable Clairmont - June 2014



Wind Speed Classes (km/h)

Peace Airshed Zone Association

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Clairmont - June 2014

Maximum Speed: 29 km/h on Jun 24 17:00

Maximum Daily Speed Average: 12.1 km/h on Jun 21

Minimum Speed: 2 km/h on Jun 22 06:00

Minimum Daily Speed Average: 6.6 km/h on Jun 26

Maximum Diurnal Speed Average: 14.7 km/h at hour 12

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

Monthly Average Speed: 10.10 km/h

Percentiles: $P_1 = 3.2$ $P_{10} = 5.1$ $Q_1 = 6.7$ Median = 9.2 $Q_3 = 12.8$ $P_{90} = 16.6$ $P_{99} = 24.8$

Hours in Service:	272
Hours of Data:	272
Hours of Missing Data:	0
Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	16	15	13	11	12	14	13	12	--	15.9
20-Jun	9	9	7	3	7	7	7	7	6	5	16	19	16	14	17	19	19	18	17	16	15	11	8	7	11.6	19.0
21-Jun	9	6	7	7	8	11	16	15	17	20	21	22	20	19	16	14	13	13	10	11	6	4	3	4	12.1	21.5
22-Jun	3	6	6	3	4	2	3	4	9	11	14	13	9	8	8	8	7	7	7	11	9	8	9	9	7.5	13.6
23-Jun	7	8	7	6	8	11	13	11	12	13	15	13	13	11	8	11	13	13	17	15	12	13	14	12	11.5	16.8
24-Jun	11	12	13	11	11	9	7	7	5	7	11	15	14	13	13	19	29	25	18	9	10	4	7	7	11.9	29.3
25-Jun	7	10	10	9	8	10	10	13	18	20	19	19	16	13	12	13	12	10	13	12	9	8	6	6	11.8	19.9
26-Jun	6	7	6	5	6	6	3	6	6	6	7	10	8	11	10	9	7	6	4	5	6	6	5	7	6.6	11.5
27-Jun	6	4	3	5	4	5	4	9	9	6	5	11	12	13	13	17	28	19	18	7	5	5	8	8	9.3	27.8
28-Jun	5	4	5	6	5	6	7	10	13	13	13	11	12	11	9	10	7	7	6	7	10	5	5	10	8.2	13.4
29-Jun	9	8	10	12	8	7	8	11	11	10	9	13	17	15	10	7	6	9	13	4	7	7	4	6	9.3	16.9
30-Jun	7	7	8	9	8	8	10	11	13	17	16	16	14	16	14	13	12	11	9	7	5	4	5	6	10.2	17.4
	7.1	7.4	7.4	6.9	7.0	7.4	8.0	9.5	10.9	11.8	13.2	14.7	13.7	13.2	11.9	12.8	14.0	12.8	12.1	9.6	8.8	7.4	7.4	7.7	Diurnal Average	
	10.7	12.0	12.7	11.8	10.8	11.5	15.8	14.6	18.1	20.2	20.8	21.5	19.7	19.3	16.8	19.0	29.3	25.4	18.4	16.1	14.6	13.8	14.1	12.5	Diurnal Maximum	

NS - Not in service

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

Peace Airshed Zone Association

Hourly Standard Deviations

Wind Direction (WD) - deg

Portable Clairmont - June 2014

Maximum Value: 92.6 deg on Jun 27 03:00

Minimum Value: 3.8 deg on Jun 23 22:00

Percentiles: P_1 = 5.6 P_{10} = 8.3 Q_1 = 10.3 Median = 15.5 Q_3 = 26.3 P_{90} = 42.9 P_{99} = 67.8

Hours in Service:	272
Hours of Data:	272
Hours of Missing Data:	0
Hours of Calibration:	0
Percent Operational Time:	100.0

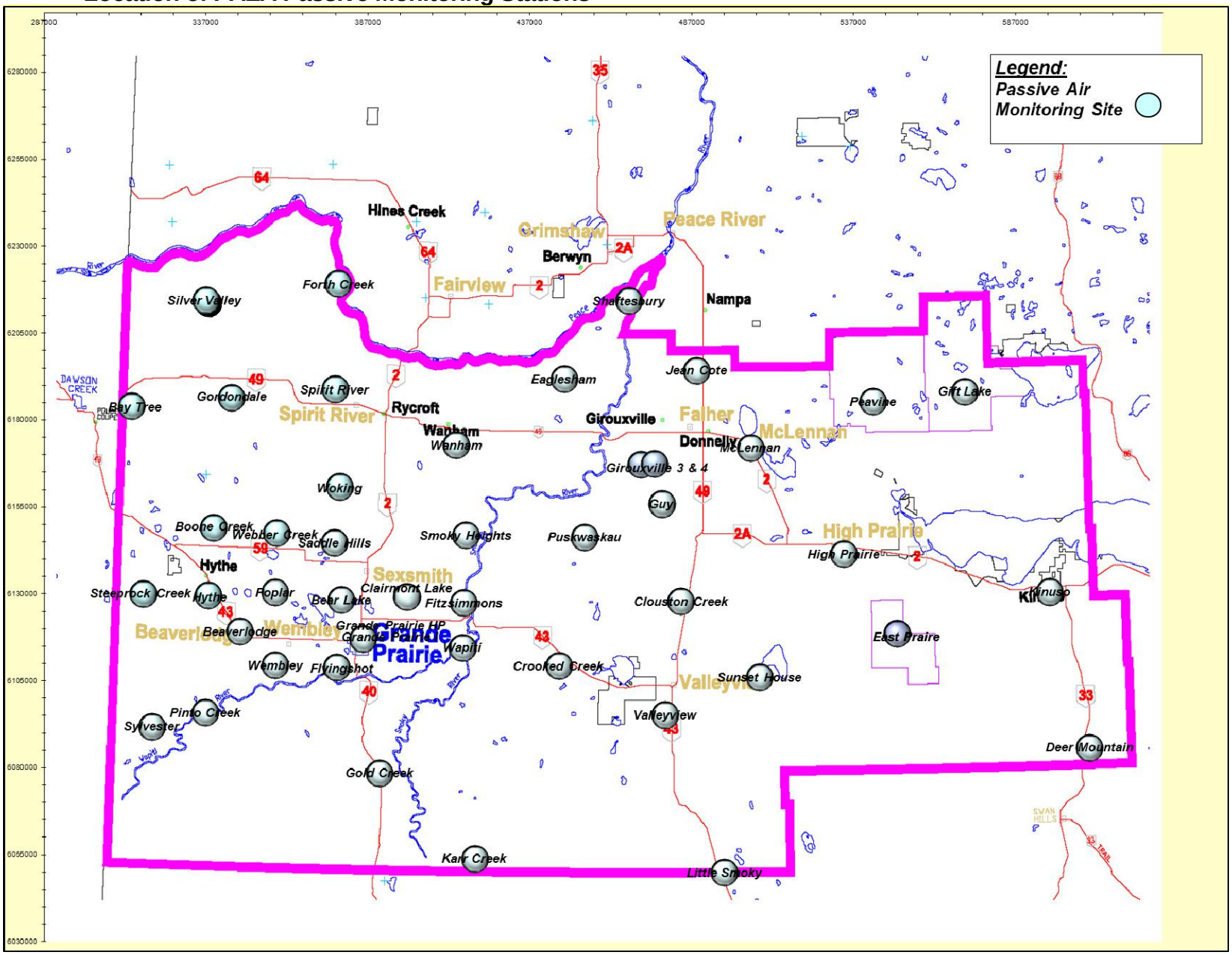
Day	Hourly Period Ending At (MST) 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Maximum
1-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
2-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
3-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
4-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
5-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
6-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
7-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
8-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
9-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
10-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
11-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
12-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
13-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
14-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
15-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
16-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
17-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
18-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
19-Jun	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	9	11	12	64	17	30	18	27	64.4
20-Jun	17	39	32	42	46	48	11	19	35	84	18	9	11	14	14	13	18	10	10	8	8	8	14	16	83.6
21-Jun	8	21	13	16	14	8	7	10	13	11	14	13	13	13	16	19	24	22	22	15	8	16	53	36	53.2
22-Jun	69	12	47	51	15	19	45	16	11	9	9	14	40	60	28	31	37	23	21	11	10	9	4	6	69.3
23-Jun	15	7	10	17	15	6	8	9	10	30	7	13	19	39	43	28	17	15	11	9	11	4	4	18	43.1
24-Jun	14	17	10	9	9	9	25	40	28	24	16	12	16	18	19	13	12	8	29	31	18	50	13	9	50.1
25-Jun	14	14	10	8	9	6	8	13	10	10	10	12	12	17	20	19	20	19	15	9	7	8	10	16	20.0
26-Jun	9	8	40	10	11	12	39	23	27	32	37	24	37	36	49	38	70	48	39	19	32	27	15	28	70.0
27-Jun	9	57	93	47	23	25	71	8	12	25	47	20	18	18	20	47	13	36	17	69	64	53	10	14	92.6
28-Jun	31	19	16	27	14	29	9	10	17	11	14	26	25	19	27	38	35	30	18	27	12	21	44	11	44.0
29-Jun	12	43	9	6	26	7	11	10	8	15	15	13	7	8	16	16	19	17	13	43	34	22	23	18	43.1
30-Jun	8	10	10	9	12	14	8	8	9	8	10	9	11	13	16	17	15	14	15	15	23	26	19	6	26.2
	69.3	56.6	92.6	51.4	45.9	47.6	70.6	40.2	34.8	83.6	46.7	25.8	40.2	59.9	48.8	47.2	70.0	48.1	39.3	69.5	64.0	53.1	53.2	35.9	

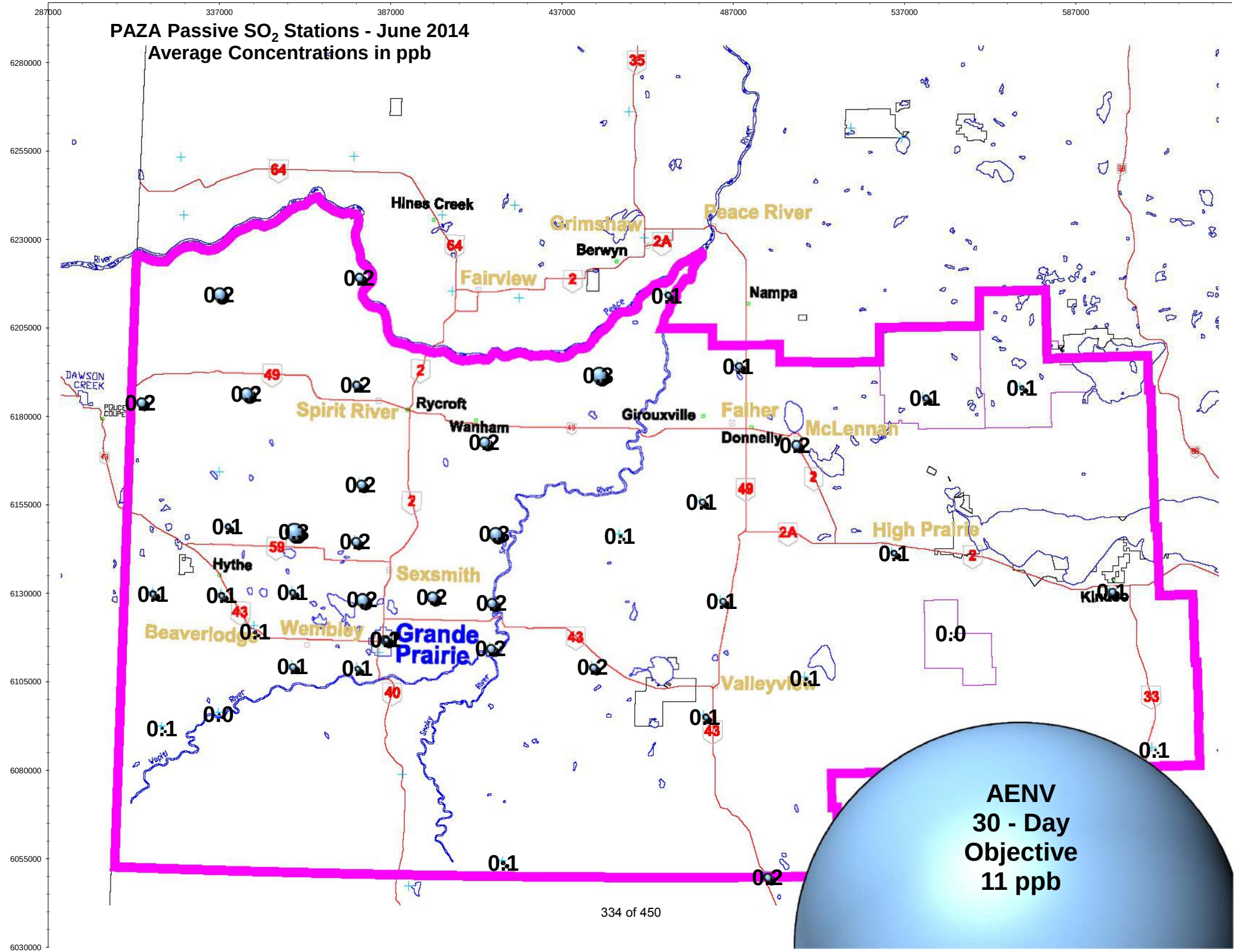
NS - Not in service

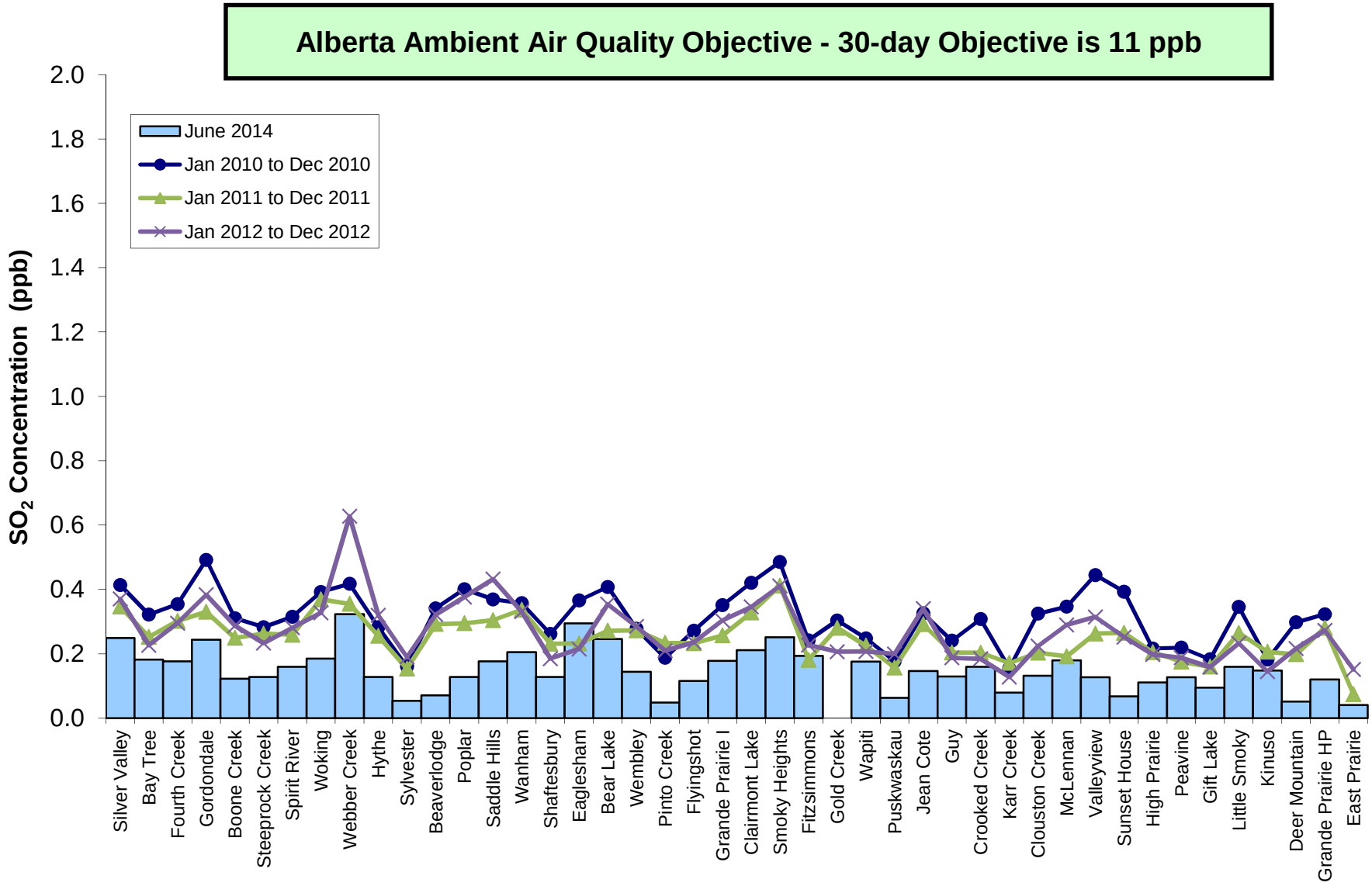
PAZA

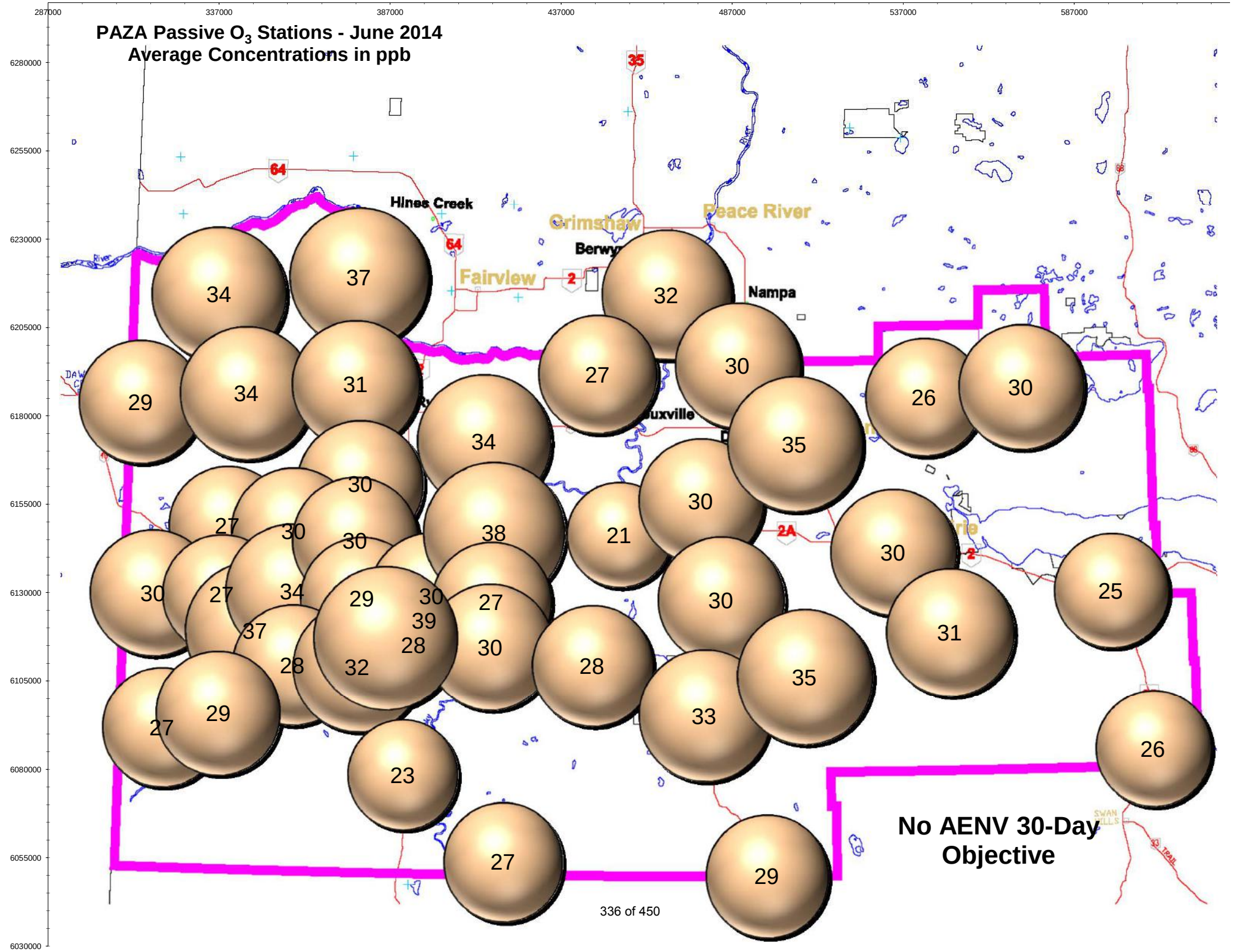
Monthly Passive Data Summary

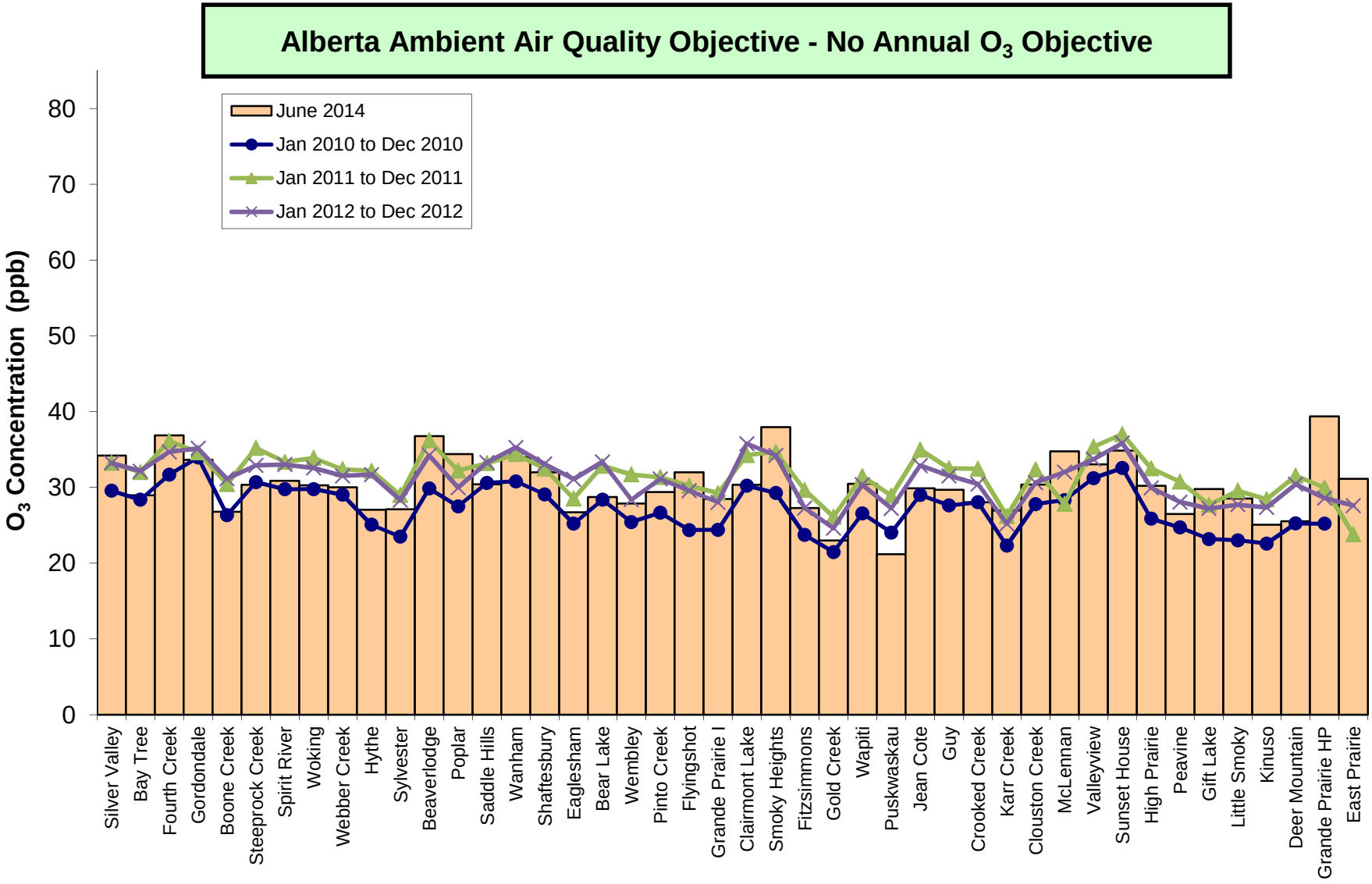
Location of PAZA Passive Monitoring Stations

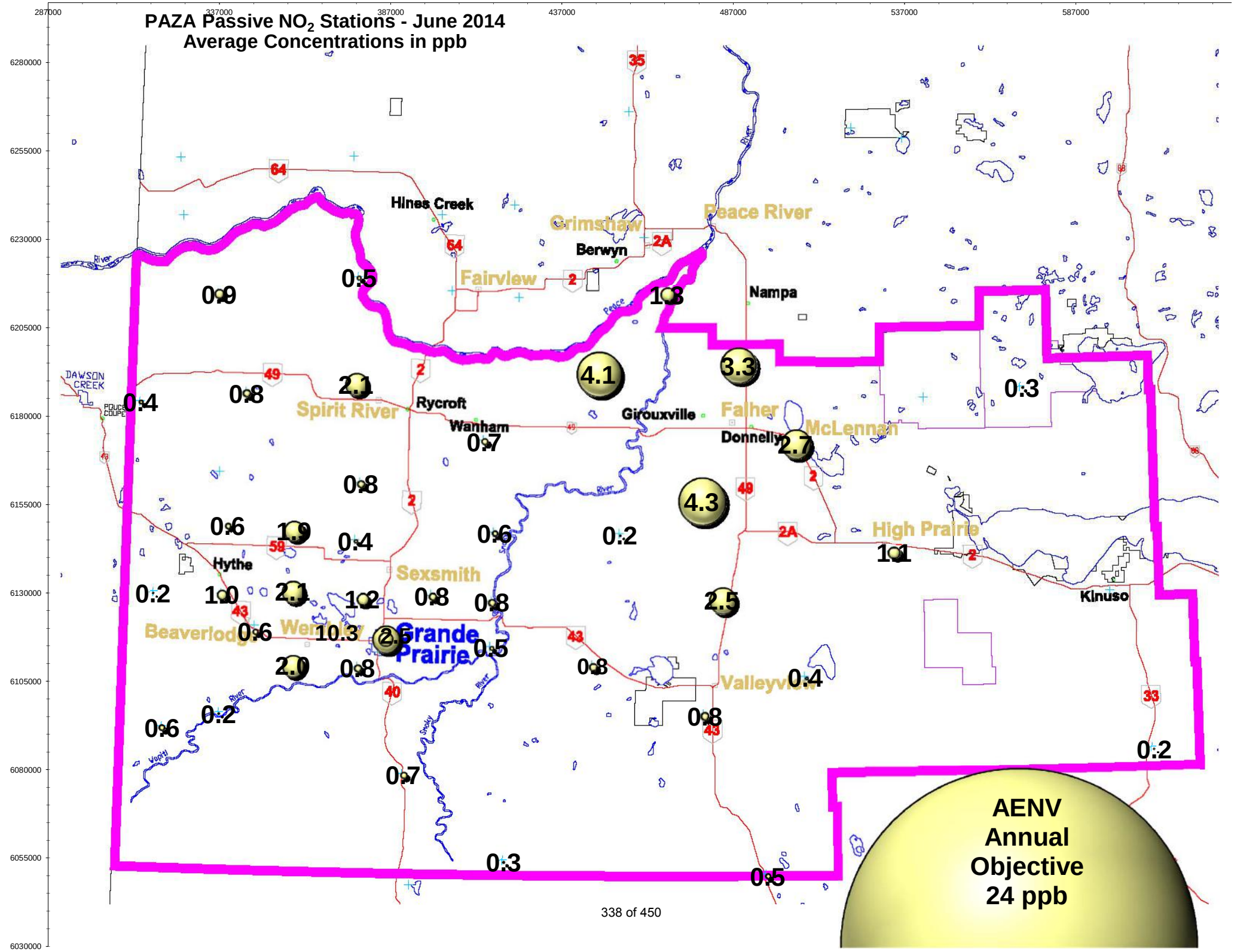


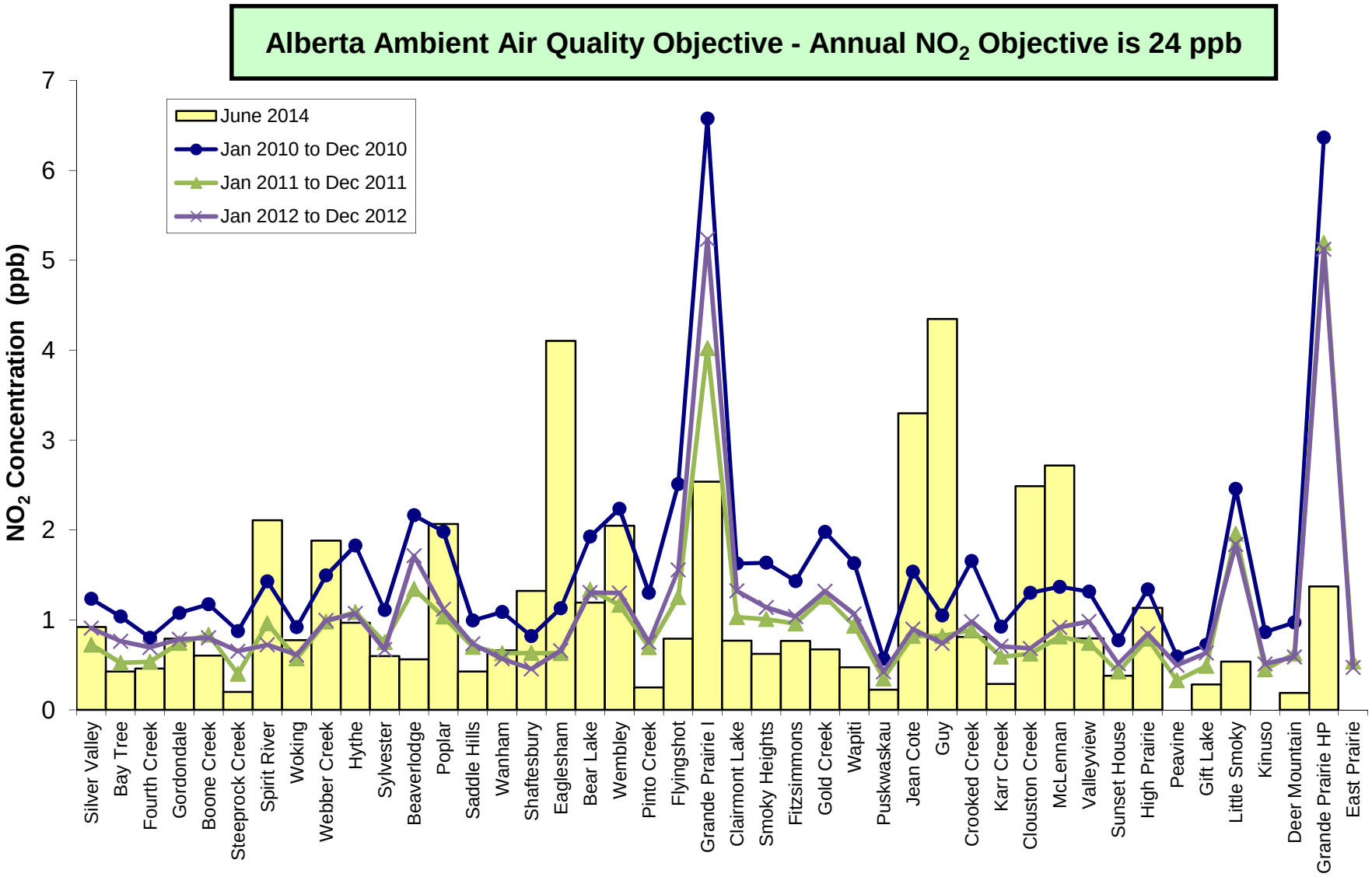

PAZA Passive SO_2 Stations - June 2014
Average Concentrations in ppb
287000
337000
387000
437000
487000
537000
587000
6280000
6255000
6230000
6205000
6180000
6155000
6130000
6105000
6080000
6055000
6030000
Hines Creek
Grimshaw
Peace River
Berwyn
Fairview
Nampa
DAWSON CREEK
POUCE COUPE
Spirit River
Rycroft
Wanham
Girouxville
Falher
Donnelly
McLennan
High Prairie
Hythe
Sexsmith
Beaverlodge
Wembley
Grande Prairie
Valleyview
Kinuso
0:2
0:1
0:3
0:0
AENV
30 - Day
Objective
11 ppb


Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb
June 2014
Jan 2010 to Dec 2010
Jan 2011 to Dec 2011
Jan 2012 to Dec 2012
SO2 Concentration (ppb)
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Silver Valley
Bay Tree
Fourth Creek
Gordondale
Boone Creek
Steeprock Creek
Spirit River
Woking
Webber Creek
Hythe
Sylvester
Beaverlodge
Poplar
Saddle Hills
Wanham
Shaftesbury
Eaglesham
Bear Lake
Wembley
Pinto Creek
Flyingshot
Grande Prairie I
Clairmont Lake
Smoky Heights
Fitzsimmons
Gold Creek
Wapiti
Puskwaskau
Jean Cote
Guy
Crooked Creek
Karr Creek
Clouston Creek
McLennan
Valleyview
Sunset House
High Prairie
Peavine
Gift Lake
Little Smoky
Kinuso
Deer Mountain
Grande Prairie HP
East Prairie

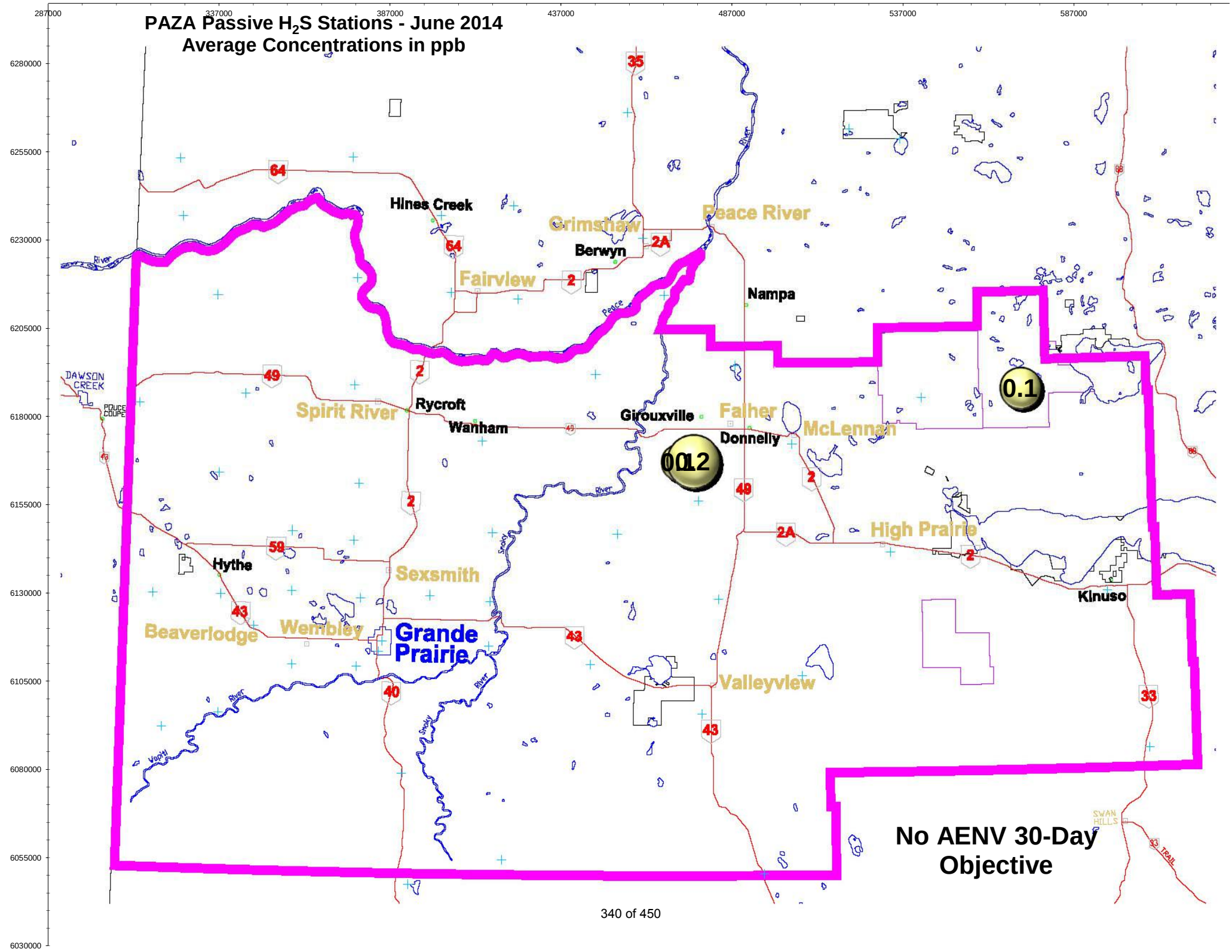

PAZA Passive O_3 Stations - June 2014
Average Concentrations in ppb
287000
337000
387000
437000
487000
537000
587000
6280000
6255000
6230000
6205000
6180000
6155000
6130000
6105000
6080000
6055000
6030000
Hines Creek
Grimshaw
Peace River
Berwyn
Fairview
Nampa
Buxville
64
35
2
2A
34
37
32
29
34
31
27
30
26
30
34
35
30
27
30
30
38
21
30
30
27
34
29
30
27
30
25
37
39
28
30
28
31
28
32
28
35
29
27
33
26
23
27
29
No AENV 30-Day Objective

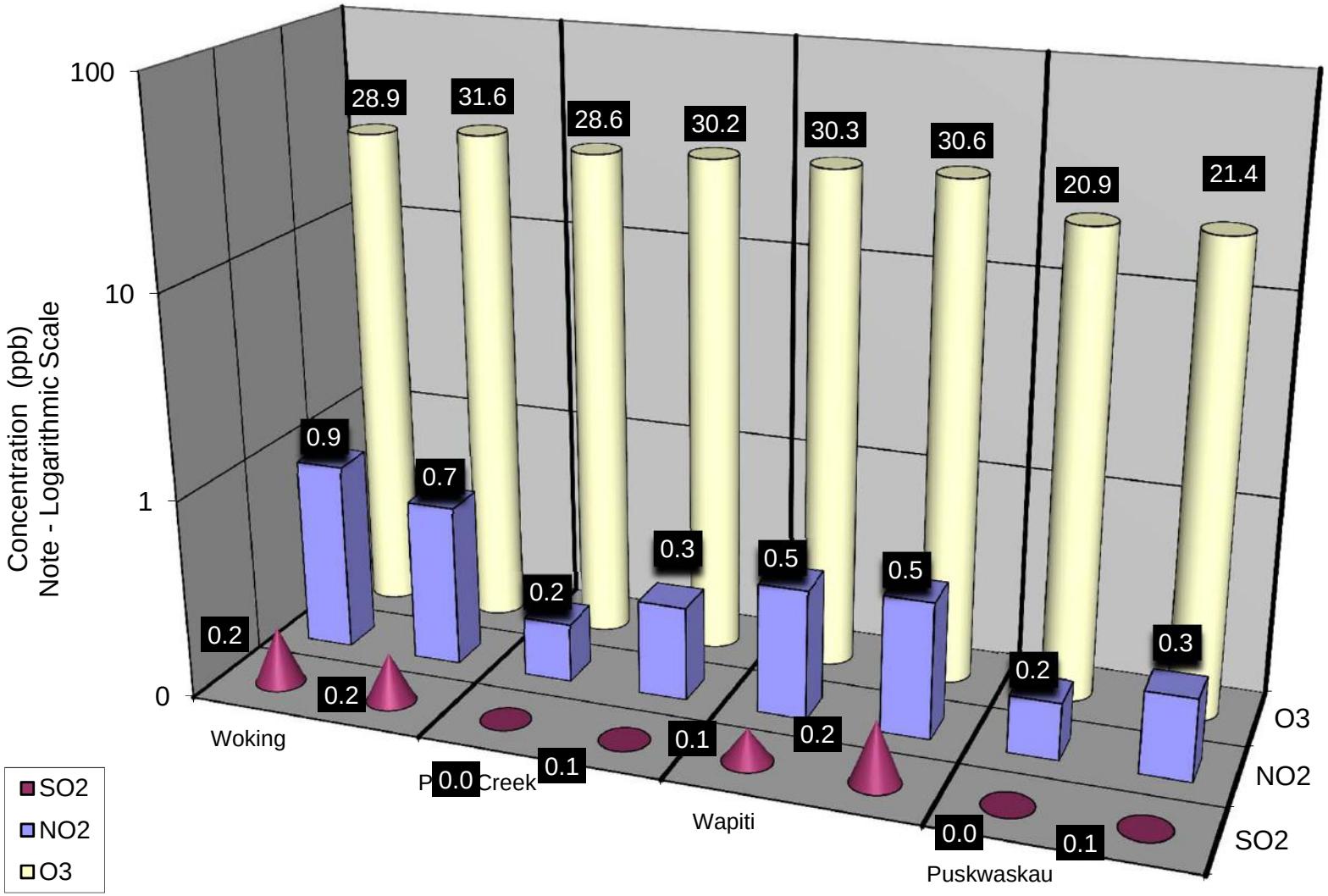

Alberta Ambient Air Quality Objective - No Annual O_3 Objective
June 2014
Jan 2010 to Dec 2010
Jan 2011 to Dec 2011
Jan 2012 to Dec 2012
O_3 Concentration (ppb)
0
10
20
30
40
50
60
70
80
Silver Valley
Bay Tree
Fourth Creek
Gordondale
Boone Creek
Steeprock Creek
Spirit River
Woking
Webber Creek
Hythe
Sylvester
Beaverlodge
Poplar
Saddle Hills
Wanham
Shaftesbury
Eaglesham
Bear Lake
Wembley
Pinto Creek
Flyingshot
Grande Prairie I
Clairmont Lake
Smoky Heights
Fitzsimmons
Gold Creek
Wapiti
Puskwaskau
Jean Cote
Guy
Crooked Creek
Karr Creek
Clouston Creek
McLennan
Valleyview
Sunset House
High Prairie
Peavine
Gift Lake
Little Smoky
Kinuso
Deer Mountain
Grande Prairie HP
East Prairie


PAZA Passive NO_2 Stations - June 2014
Average Concentrations in ppb
287000
337000
387000
437000
487000
537000
587000
6280000
6255000
6230000
6205000
6180000
6155000
6130000
6105000
6080000
6055000
6030000
Hines Creek
Grimshaw
Berwyn
Peace River
Fairview
Nampa
DAWSON CREEK
Spirit River
Rycroft
Wanham
Girouxville
Falher
Donnelly
McLennan
High Prairie
Hythe
Sexsmith
Beaverlodge
Wembley
Grande Prairie
Valleyview
Kinuso
0.9
0.5
1.3
4.1
3.3
0.3
0.4
0.8
2.1
0.7
2.7
0.8
4.3
0.6
1.9
0.4
0.6
0.2
1.1
0.2
1.0
2.1
1.2
0.8
0.8
2.5
0.6
10.3
2.5
0.5
2.0
0.8
0.8
0.4
0.6
0.2
0.8
0.2
0.7
0.3
0.5
AENV
Annual
Objective
24 ppb


Alberta Ambient Air Quality Objective - Annual NO2 Objective is 24 ppb
NO2 Concentration (ppb)
0
1
2
3
4
5
6
7
June 2014
Jan 2010 to Dec 2010
Jan 2011 to Dec 2011
Jan 2012 to Dec 2012
Silver Valley
Bay Tree
Fourth Creek
Gordondale
Boone Creek
Steeprock Creek
Spirit River
Woking
Webber Creek
Hythe
Sylvester
Beaverlodge
Poplar
Saddle Hills
Wanham
Shaftesbury
Eaglesham
Bear Lake
Wembley
Pinto Creek
Flyingshot
Grande Prairie I
Clairmont Lake
Smoky Heights
Fitzsimmons
Gold Creek
Wapiti
Puskwaskau
Jean Cote
Guy
Crooked Creek
Karr Creek
Clouston Creek
McLennan
Valleyview
Sunset House
High Prairie
Peavine
Gift Lake
Little Smoky
Kinuso
Deer Mountain
Grande Prairie HP
East Prairie

PAZA Passive H_2S Stations - June 2014
Average Concentrations in ppb





Duplicate Summary Chart

PAZA Passive Results for June 2014

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
10a	Woking	**0.2**	**28.9**	**0.9**		
10b	Woking	**0.2**	**31.6**	**0.7**		
25a	Pinto Creek	**BDL**	**28.6**	**0.2**		
25b	Pinto Creek	**0.1**	**30.2**	**0.3**		
33a	Wapiti	**0.1**	**30.3**	**0.5**		
33b	Wapiti	**0.2**	**30.6**	**0.5**		
34a	Puskwaskau	**0.0**	**20.9**	**0.2**		
34b	Puskwaskau	**0.1**	**21.4**	**0.3**		
64a	Girouxville 4				**0.2**	
64b	Girouxville 4				**0.2**	
1	Silver Valley	**0.2**	**34.2**	**0.9**		08-27-081-11 W6M
2	Bay Tree	**0.2**	**29.0**	**0.4**		13-16-078-13 W6M
3	Fourth Creek	**0.2**	**36.9**	**0.5**		04-13-082-07 W6M
4	Gordondale	**0.2**	**33.6**	**0.8**		04-34-078-10 W6M
5	Boone Creek	**0.1**	**26.8**	**0.6**		16-36-074-11 W6M
7	Steeprock Creek	**0.1**	**30.3**	**0.2**		09-35-072-13 W6M
9	Spirit River	**0.2**	**30.9**	**2.1**		08-12-079-07 W6M
10	Woking	**0.2**	**30.3**	**0.8**		01-13-076-07 W6M
11	Webber Creek	**0.3**	**30.0**	**1.9**		09-36-074-09 W6M
12	Hythe	**0.1**	**27.0**	**1.0**		14-36-072-11 W6M
14	Sylvester	**0.1**	**27.1**	**0.6**		08-06-069-12 W6M
16	Beaverlodge	**0.1**	**36.8**	**0.6**		15-36-071-10 W6M
17	Poplar	**0.1**	**34.4**	**2.1**		13-06-073-08 W6M
18	Saddle Hills	**0.2**	**30.4**	**0.4**		04-25-074-07 W6M
19	Wanham	**0.2**	**34.0**	**0.7**		16-22-077-03 W6M
20	Shaftesbury	**0.1**	**32.0**	**1.3**		04-03-082-23 W5M
21	Eaglesham	**0.3**	**26.7**	**4.1**		16-21-079-25 W5M
23	Bear Lake	**0.2**	**28.7**	**1.2**		15-31-072-06 W6M
24	Wembley	**0.1**	**27.9**	**2.0**		12-31-070-08 W6M
25	Pinto Creek	**0.1**	**29.4**	**0.2**		04-24-069-11 W6M
26	Flyingshot	**0.1**	**32.0**	**0.8**		15-36-070-07 W6M
27	Grande Prairie I	**0.2**	**28.5**	**2.5**		08-15-071-06 W6M

PAZA Passive Results for June 2014 (Continued)

28	Clairmont Lake	**0.2**	**30.3**	**0.8**		09-06-073-04 W6M
29	Smoky Heights	**0.3**	**37.9**	**0.6**		04-06-075-02 W6M
30	Fitzsimmons	**0.2**	**27.3**	**0.8**		15-36-072-03 W6M
32	Gold Creek	**N/S**	**23.0**	**0.7**		06-33-067-05 W6M
33	Wapiti	**0.2**	**30.5**	**0.5**		02-25-071-03 W6M
34	Puskwaskau	**0.1**	**21.2**	**0.2**		15-35-074-25 W5M
35	Jean Cote	**0.1**	**29.9**	**3.3**		12-35-079-21 W5M
36	Guy	**0.1**	**29.7**	**4.3**		03-04-076-22 W5M
37	Crooked Creek	**0.2**	**28.0**	**0.8**		16-01-071-26 W5M
38	Karr Creek	**0.1**	**26.9**	**0.3**		10-16-065-02 W6M
39	Clouston Creek	**0.1**	**30.4**	**2.5**		12-01-073-22 W5M
40	McLennan	**0.2**	**34.7**	**2.7**		03-29-077-19 W5M
41	Valleyview	**0.1**	**33.0**	**0.8**		09-30-069-22 W5M
42	Sunset House	**0.1**	**34.9**	**0.4**		05-32-070-19 W5M
43	High Prairie	**0.1**	**30.2**	**1.1**		16-13-074-17 W5M
44	Peavine	**0.1**	**26.5**	**BDL**		03-05-079-15 W5M
45	Gift Lake	**0.1**	**29.8**	**0.3**	**0.1**	10-07-079-12 W5M
46	Little Smoky	**0.2**	**28.5**	**0.5**		12-01-065-21 W5M
47	Kinuso	**0.1**	**25.1**	**BDL**		12-10-073-10 W5M
48	Deer Mountain	**0.1**	**25.5**	**0.2**		15-22-068-09 W5M
49	Grande Prairie HP	**0.1**	**39.4**	**1.4**		17-26-071-06 W6M
50	East Prairie	**BDL**	**31.1**	**BDL**		13-02-072-15 W5M
63	Girouxville 3				**0.1**	14-02-077-23 W5M
64	Girouxville 4				**0.2**	4-08-077-22 W5M

*BDL = Below Detection Level

*N/S - No sample

Passive Summary for June 2014

Stats	Sulphur Dioxide SO_2	Ozone O_3	Nitrogen Dioxide NO_2	Hydrogen Sulphide H_2S
	ppb	ppb	ppb	ppb
	Passive Summary for June 2014 (PAZA Zone)			
Mean	**0.2**	**30.2**	**1.2**	**0.2**
Standard Deviation	**0.1**	**3.8**	**1.0**	**0.0**
Minimum	**0.1**	**21.2**	**0.2**	**0.1**
Minimum At	**Deer Mountain (#48)**	**Puskwaskau (#34)**	**Deer Mountain (#48)**	**Girouxville 3 (#63)**
Maximum	**0.3**	**39.4**	**4.3**	**0.2**
Maximum At	**Webber Creek (#11)**	**Grande Prairie HP**	**Guy (#36)**	**Girouxville 4 (#64)**

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

	SO_2	O_3	NO_2
PAZA Beaverlodge station	**0.1**	**30.1**	**2.0**
PAZA Beaverlodge passive	**0.1**	**36.8**	**0.6**

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

	SO_2	O_3	NO_2
PAZA Henry Pirker station	**0.1**	**27.9**	**4.5**
PAZA Grande Prairie passive	**0.1**	**39.4**	**1.4**

PAZA

ALBERTA ENVIRONMENT AND SUSTAINABLE RESOURCES INCIDENCE REPORT

June 2014

Air Monitoring Directive Exceedence Report

Alberta Environment and Sustainable Resource Development
Energy & Environmental Response
111 Twin Atria Building
4999 – 98th Avenue
Edmonton, Alberta T6B 2X3
erc.environment@gov.ab.ca
Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	**286016**	**Reported To (AESRD Contact):**	Jasmina
Date & Time Incident Reported to AESRD:	June 30th, 2014 15:50	**Reported By:**	Patrick Andersen
Reported on Behalf of:	PAZA	**Approval Number (if applicable):**	Not Applicable
Location(s) of Incident:	Beaverlodge Station		
Start Date & Time of Incident:	May 12, 2014	**End Date & Time of Incident:**	June 23, 2014

Reason or Nature of Incident:

Switching valve found seized. ESRD owned equipment, replacement part ordered from them same day, received June 19th, installed June 23rd.

Immediate Actions Taken:

Contacted Alberta Environment

Actions Taken to Prevent Reoccurrence (if any):

N/A

Additional Actions Required (if any):

N/A

Report Completed By:	Patrick Andersen	Date Report Submitted:	June 30, 2014
7-Day Letter Due Date:	July 6,2014		

June 2014 Calibration Reports

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

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

PAZA – Smoky Heights Station with the following calibrations:
SO_2, TRS, $PM_{2.5}$

PAZA – Beaverlodge Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, $PM_{2.5}$

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

PAZA – Reno Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, TRS

PAZA – Falher Station with the following calibrations:
SO_2 & H_2S

PAZA – Clairmont Station with the following calibrations:
SO_2, NO, NO_2, NO_x, O_3, TRS

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	10:30	End Time (MST)	14:30:00 PM
Barometric Pressure	717.000 mm	Station Temperature	20.5 Deg C
Calibrator		Serial Number	3016
Cal Gas Conc	49.8 ppm	Cal Gas Cert Date	March 12, 2014
		Cal Gas Cylinder #	LL105159
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.996544	Calculated slope	0.994695
Calculated intercept	1.989159	Calculated intercept	2.056631
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	9.4		9.4	
Coefficient	0.781		0.781	
Pressure	645.9	mm Hg	641.0	mm Hg
Flow	0.477	lpm	0.475	lpm
Lamp intensity	44460	Hz	44016	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)
4995	0.00	0.0	0.2	N/A
4995	39.93	394.9	396.2	0.9968
4995	19.97	198.3	195.7	1.0132
4995	9.97	99.2	95.8	1.0359
4995	0.00	0.0	0.2	As Found Zero
4995	39.93	394.9	396.2	As Found Span
			Average Correction Factor	1.0153

Calculated value of As Found Response: 396.7 ppb Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	250.7	ppb	256.6	ppb

Notes: No adjustments made.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

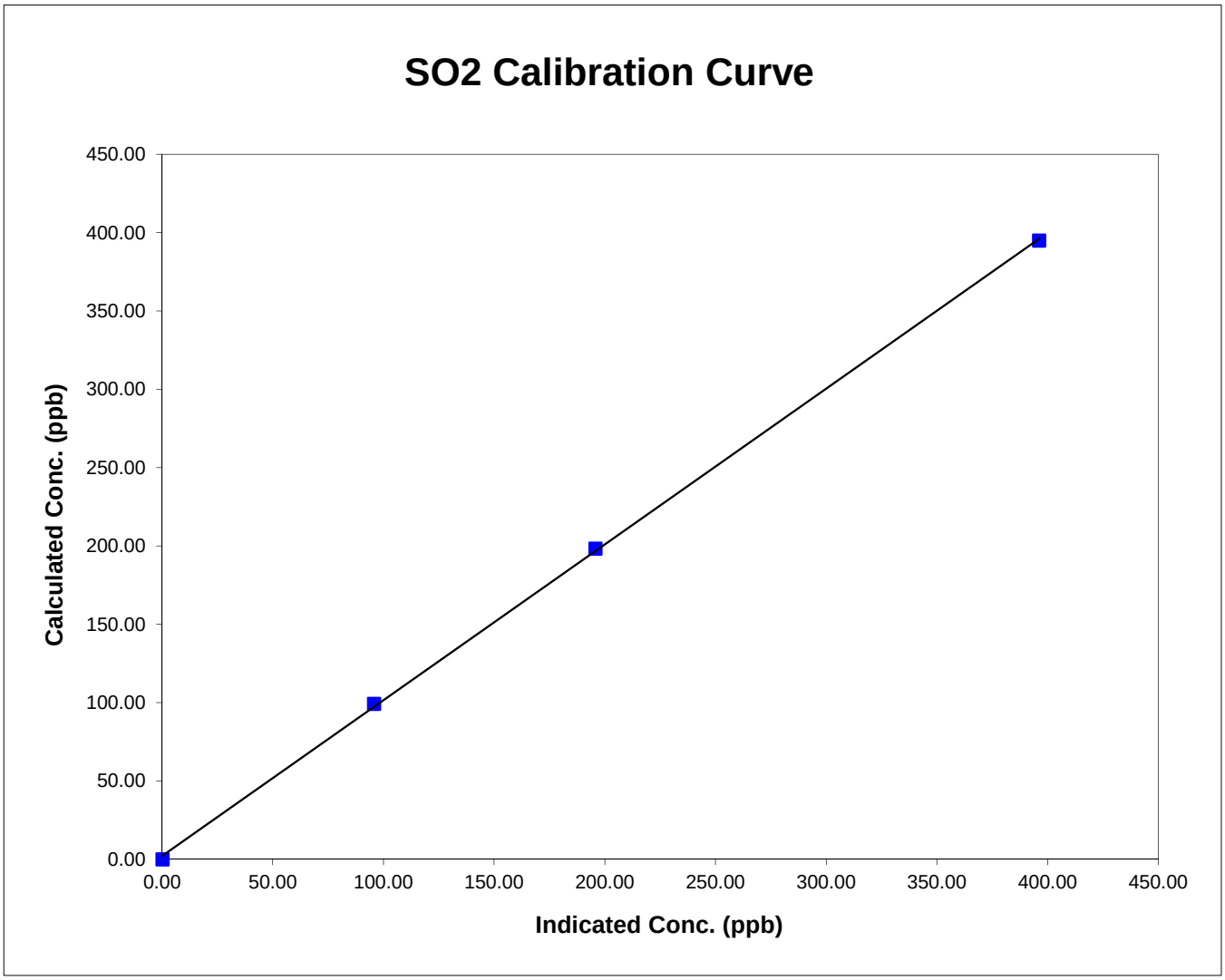
Air Monitoring Network **PAZA**

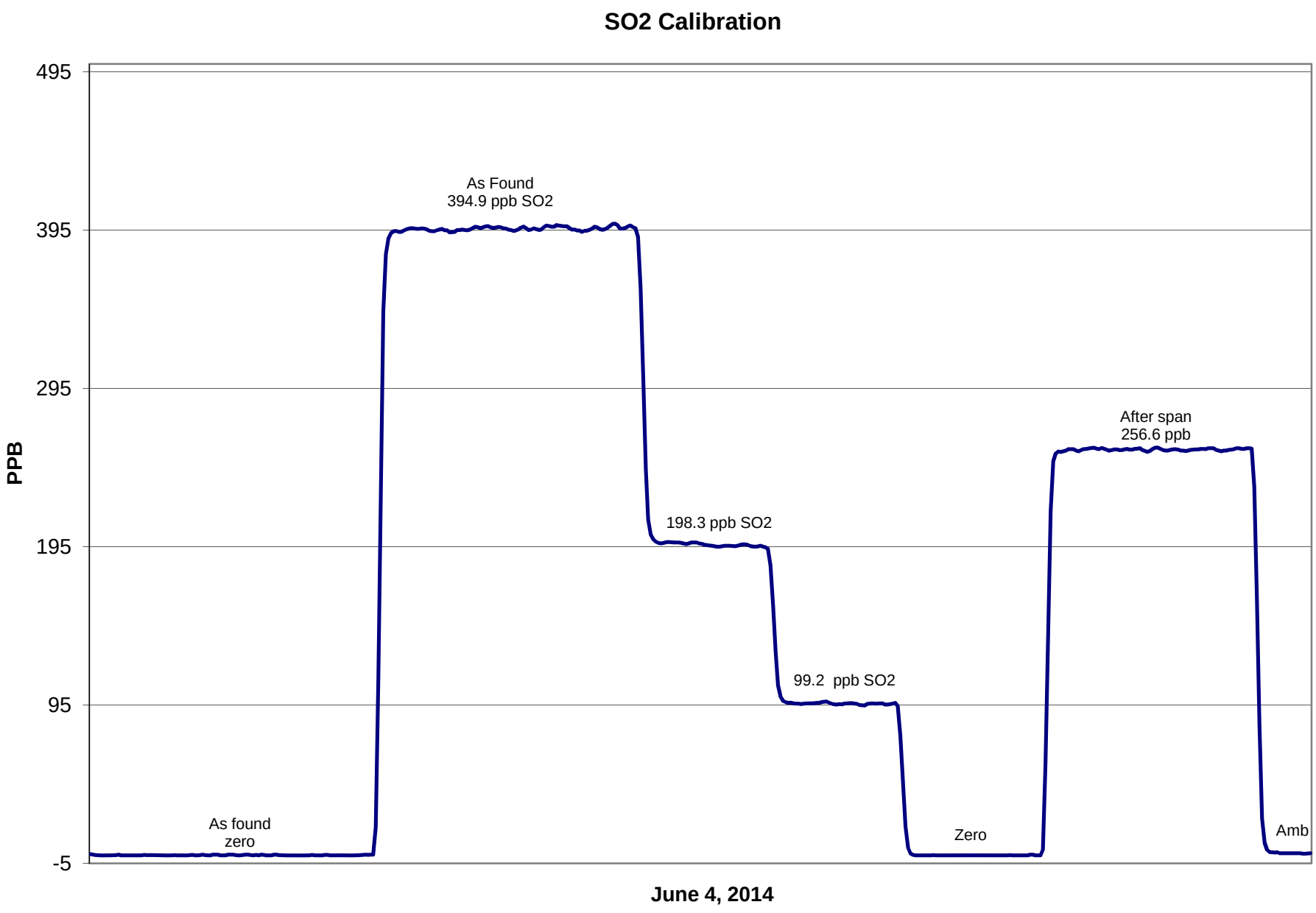
Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:30	End Time (MST)	14:30:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
394.9	396.2	0.9968	Correlation Coefficient	0.999853
198.3	195.7	1.0132		
99.2	95.8	1.0359	Slope	0.994695
			Intercept	2.056631




SO2 Calibration
495
395
295
195
95
-5
PPB
As Found
394.9 ppb SO2
198.3 ppb SO2
99.2 ppb SO2
After span
256.6 ppb
As found
zero
Zero
Amb
June 4, 2014

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker

Reason: Routine Installation Removal Other:

Start Time (MST)	10:30		End Time (MST)	16:15:00 PM	
Barometric Pressure	717.000	mm	Station Temperature	20.5	Deg C
Calibrator	Environics		Serial Number	3016	
NO Cal Gas Conc	52.1	ppm	Cal Gas Expiry Date	March 12, 2014	
NOx Cal Gas Conc	52.4	ppm	Cal Gas Serial #	LL105159	

DACS Information

DACS make	CR3000	DACS serial No.	5408

Parameter		NO2	NOx	NO
Before	Data Slope	0.997642	0.995667	0.995102
	Data Offset	-0.167972	1.311673	1.698860
After	Data Slope	0.995378	0.997178	0.993273
	Data Offset	0.245102	1.463553	1.638851
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 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	13.8	mV
NOx bkgnd	10.8	mV	14.2	mV
NO coefficient	1.097		1.126	
NOx coefficient	1.000		1.000	
NO2 conv temp	318.0	Deg C	318.0	Deg C
Cooler	-2.5	Deg C	-2.5	Deg C
PMT Volt	-774.0	mV	-774.0	mV
R Cell Press	209.5	in Hg	210.0	in Hg

Calibration Report

Parameter **NOx-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Calibration Date: June 4, 2014 Station Location: Henry Pirker

	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	4995	0.00	0.0	0.0	0.0	0.0	-0.1	0.0	N/A	N/A
1	4995	39.93	415.6	413.2	2.4	416.0	415.1	0.8	0.9990	0.9954
2	4995	19.97	208.7	207.5	1.2	207.1	206.5	0.5	1.0073	1.0046
3	4995	9.97	104.4	103.8	0.6	101.6	101.2	0.4	1.0271	1.0256
AFZ	4995	0.00	0.0	0.0	0.0	3.1	2.8	0.4	0.0000	0.0000
AFS	4995	39.93	415.6	413.2	2.4	405.5	404.0	1.3	1.0248	1.0227
							Average Correction Factor		1.0111	1.0085

As Found Concentrations: NO_X= 403.8 NO= 402.9 As Found Percent Change NO_X= -2.8% NO= -2.5%

Dilution Flow 4995 ccm Source Gas Flow 39.93 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	2.8	2.8	0.0	0.0	-0.1	0.0	N/A	N/A	N/A	N/A
NO point	415.0	415.0	0.0	415.7	415.0	0.6	0.9984	1.0000	N/A	N/A
300	415.0	103.6	311.4	415.7	103.6	312.4	0.9982	1.0000	0.9969	100.3%
200	415.0	205.5	209.5	416.4	205.5	210.9	0.9967	1.0000	0.9931	100.7%
100	415.0	305.2	109.8	414.5	305.2	109.3	1.0012	1.0000	1.0044	99.6%
					Average Correction Factor		0.9987	1.0000	0.9981	100.2%

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.0	0.0	-0.1	ppb	0.1	0.0	0.0	ppb
Auto span	329.9	327.5	2.4	ppb	327.1	325.1	2.2	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

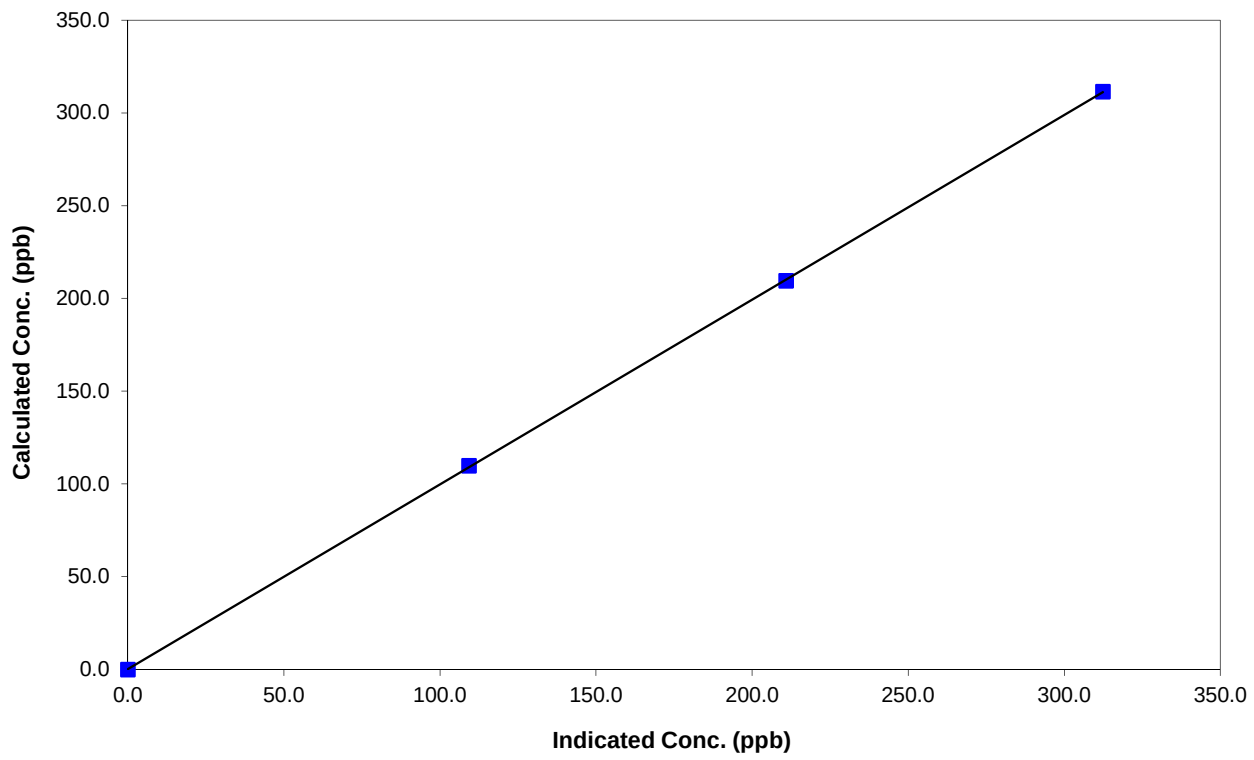
Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:30	End Time (MST)	16:15:00 PM
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		
311.4	312.4	0.9969	Correlation Coefficient	0.999978
209.5	210.9	0.9931		
109.8	109.3	1.0044	Slope	0.995378
			Intercept	0.245102

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

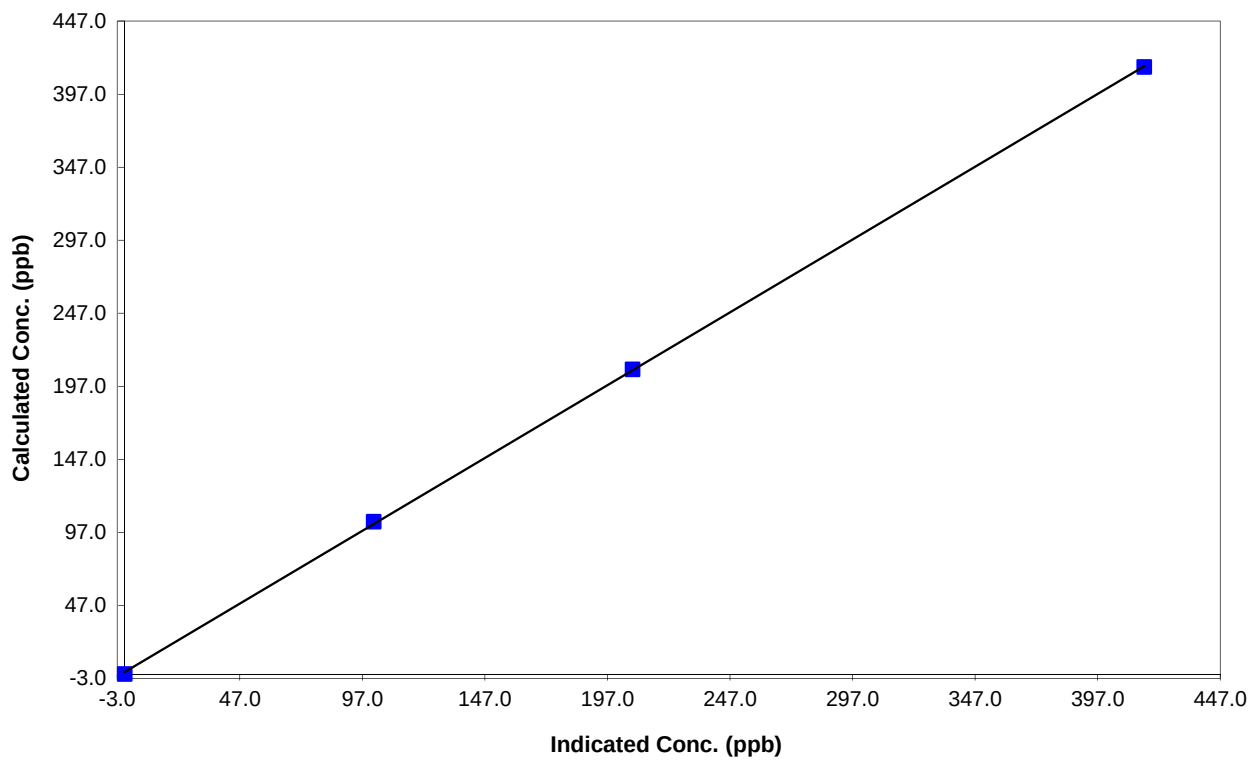
Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:30	End Time (MST)	16:15:00 PM
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		
415.6	416.0	0.9990	Correlation Coefficient	0.999940
208.7	207.1	1.0073		
104.4	101.6	1.0271	Slope	0.997178
			Intercept	1.463553

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

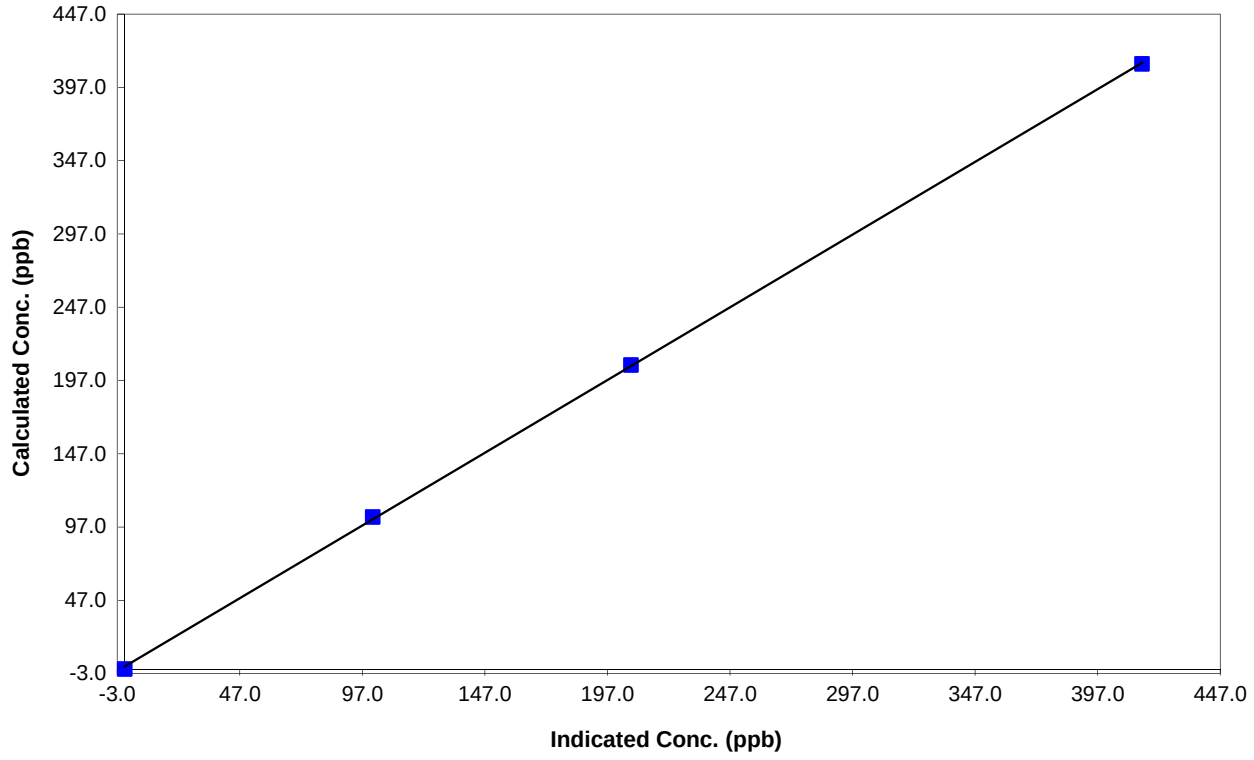
Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:30	End Time (MST)	16:15:00 PM
Analyzer make	TEI 42C	Analyzer serial #	508011073

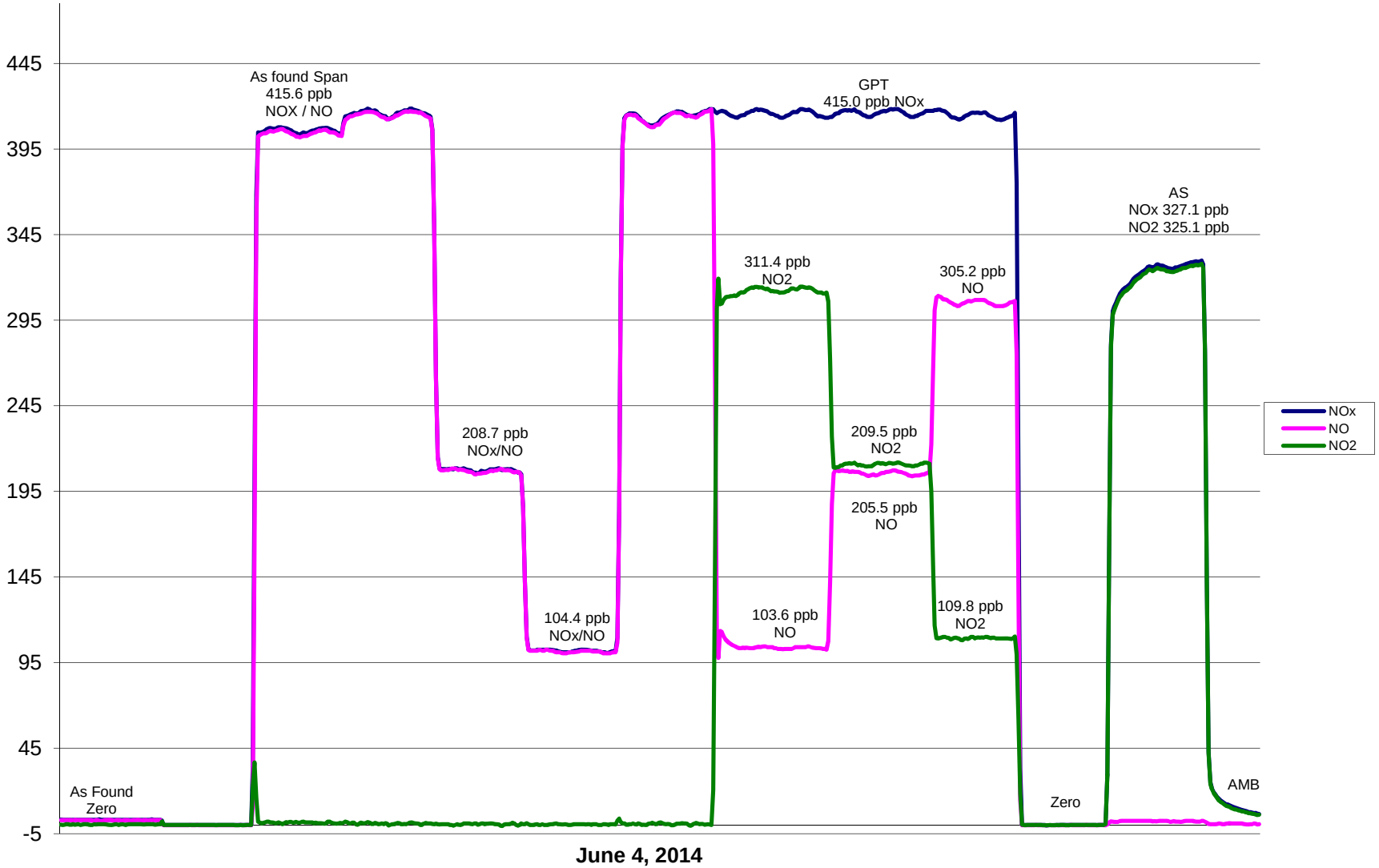
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
413.2	415.1	0.9954	Correlation Coefficient	0.999933
207.5	206.5	1.0046		
103.8	101.2	1.0256	Slope	0.993273
			Intercept	1.638851

NO Calibration Curve



PAZA
NO_X Calibration



Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	Routine / Install	Removal	Other:
Start Time (MST)	14:50:00 PM	End Time (MST)	17:40:00 PM
Barometric Pressure	mm	Station Temperature	20.5 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	0.998603	Calculated slope	0.995640
Calculated intercept	0.234986	Calculated intercept	0.340371
Analyzer make	Teco 49C	Analyzer serial #	607415761

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	1.031		1.031	
Lamp temp	56.7	mV	56.7	mV
Lamp Intensity A/B	60337/74991`	mV	60681/75378	mV
Pressure	669.5	mm Hg	670.5	mm Hg
Flow A	0.833	ccm	0.832	ccm
Flow B	0.822	ccm	0.823	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)
5035	0.0	0.0	0.2	N/A
5035	0.3	311.4	312.8	0.9957
5035	0.2	209.5	210.0	0.9978
5035	0.1	109.8	109.2	1.0057
5035	0.0	0.0	0.2	As found zero
5035	0.3	311.4	312.8	As found span
			Average Correction Factor	0.9997

Calculated value of As Found Response: 312.4 ppm Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	1.0	ppb	0.4	ppb
Auto span	355.0	ppb	284.2	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

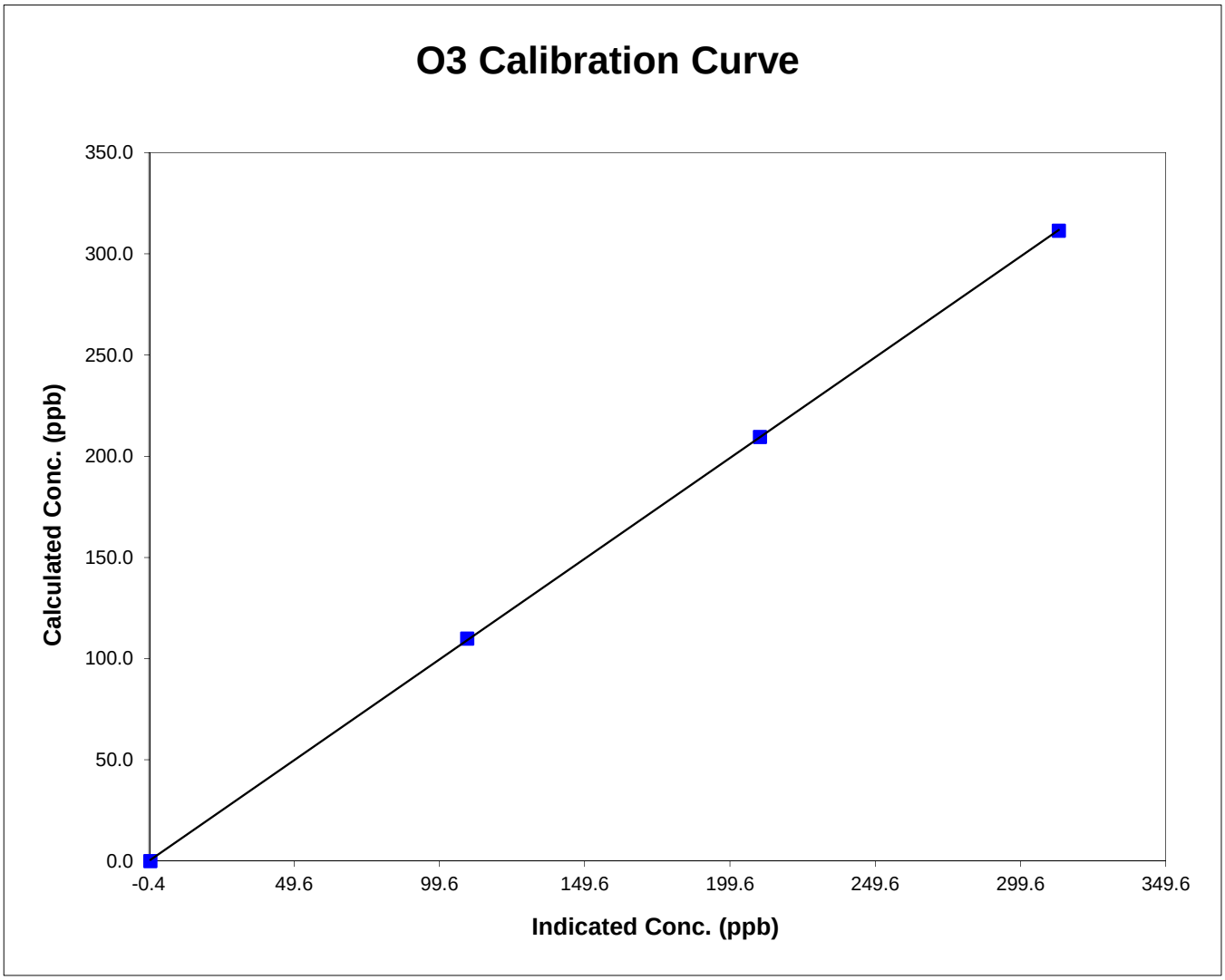
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 4, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:50:00 PM	End Time (MST)	17:40:00 PM
Analyzer make/model	Teco 49C	Analyzer serial #	607415761

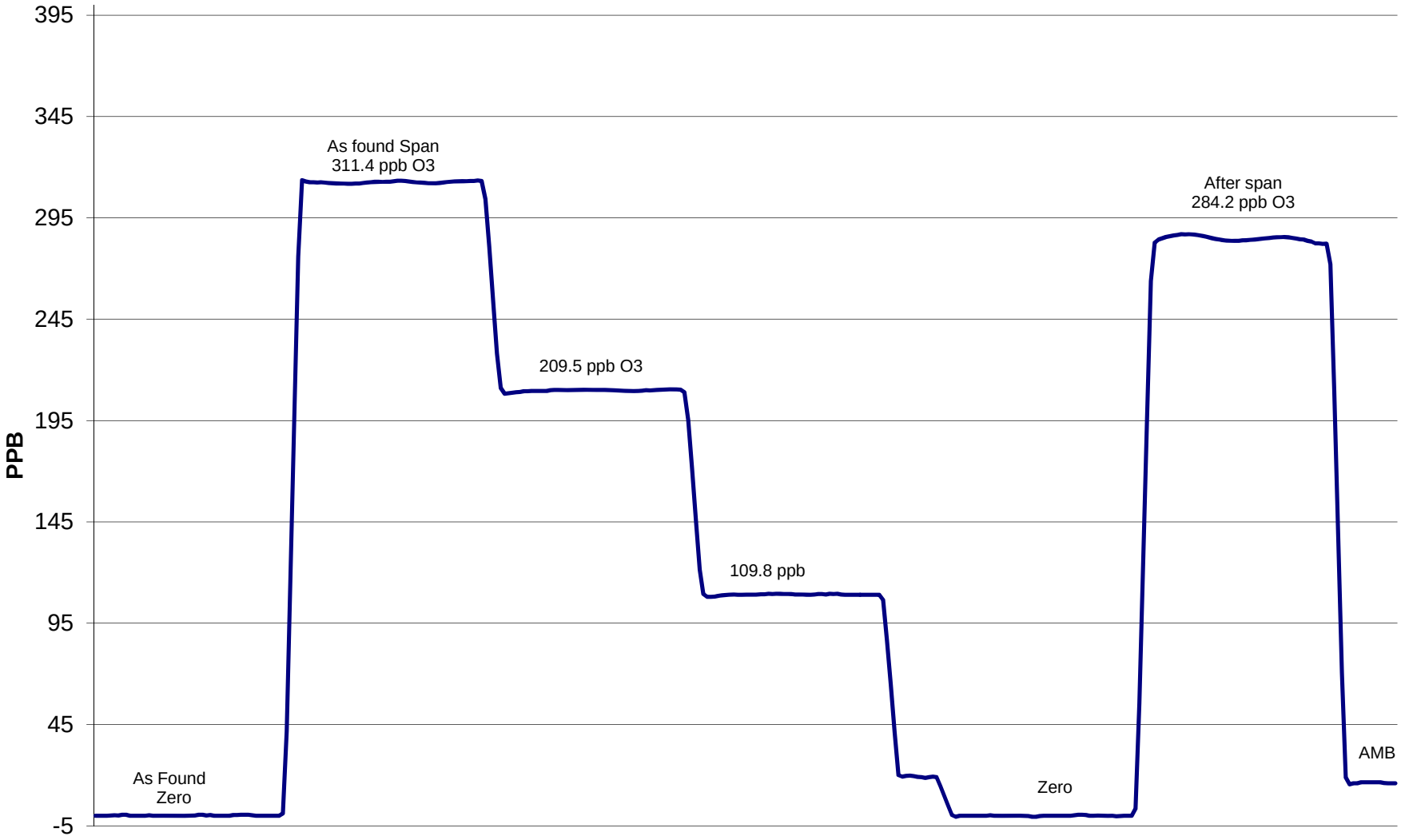
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA		
311.4	312.8	0.9957	Correlation Coefficient	0.999982
209.5	210.0	0.9978		
109.8	109.2	1.0057	Slope	0.995640
			Intercept	0.340371



As Found
Zero

O3 Calibration



June 4, 2014

Calibration Report

Parameter **CO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 2, 2014
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	14:40:00 PM	End Time (MST)	17:46:00 PM
Barometric Pressure	704.0 mm/hg	Station Temperature	21.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Conc	2898 ppm	Cal Gas Expiry Date	04/02/2013
		Cal Gas Cylinder #	LL83909
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.001376	Calculated slope	0.993459
Calculated intercept	0.144770	Calculated intercept	0.064063
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.120		1.120	
CO zero setting	1.014		1.292	
Sample pressure	679.9	mm Hg	682.1	mm Hg
Sample Flow	1.117	LPM	1.119	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)
4995	0.00	0.00	0.01	N/A
4995	69.94	40.02	40.26	0.9941
4995	34.96	20.14	20.17	0.9988
4995	17.96	10.38	10.32	1.0065
4995	0.00	0.00	0.23	As Found Zero
4995	69.94	40.02	40.26	As Found Span
			Average Correction Factor	0.9998

Calculated value of As Found Response: 40.225 ppm Percent Change of As Found: -0.5%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.81	ppm	19.86	ppm

Notes: Adjust zero from 0.168 to 0.001

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **CO**

Air Monitoring Network **PAZA**

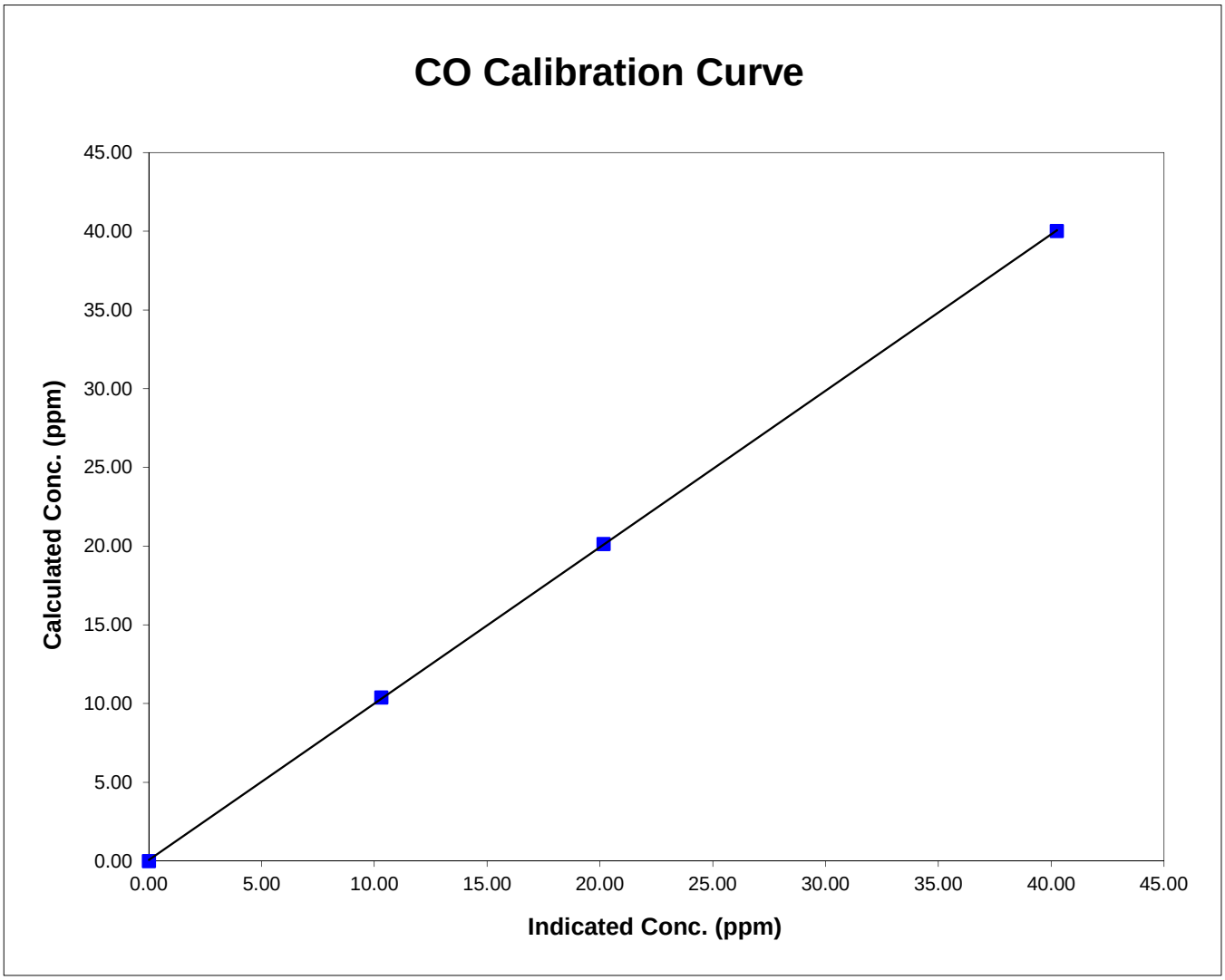
FOCUS AIR QUALITY MONITORING

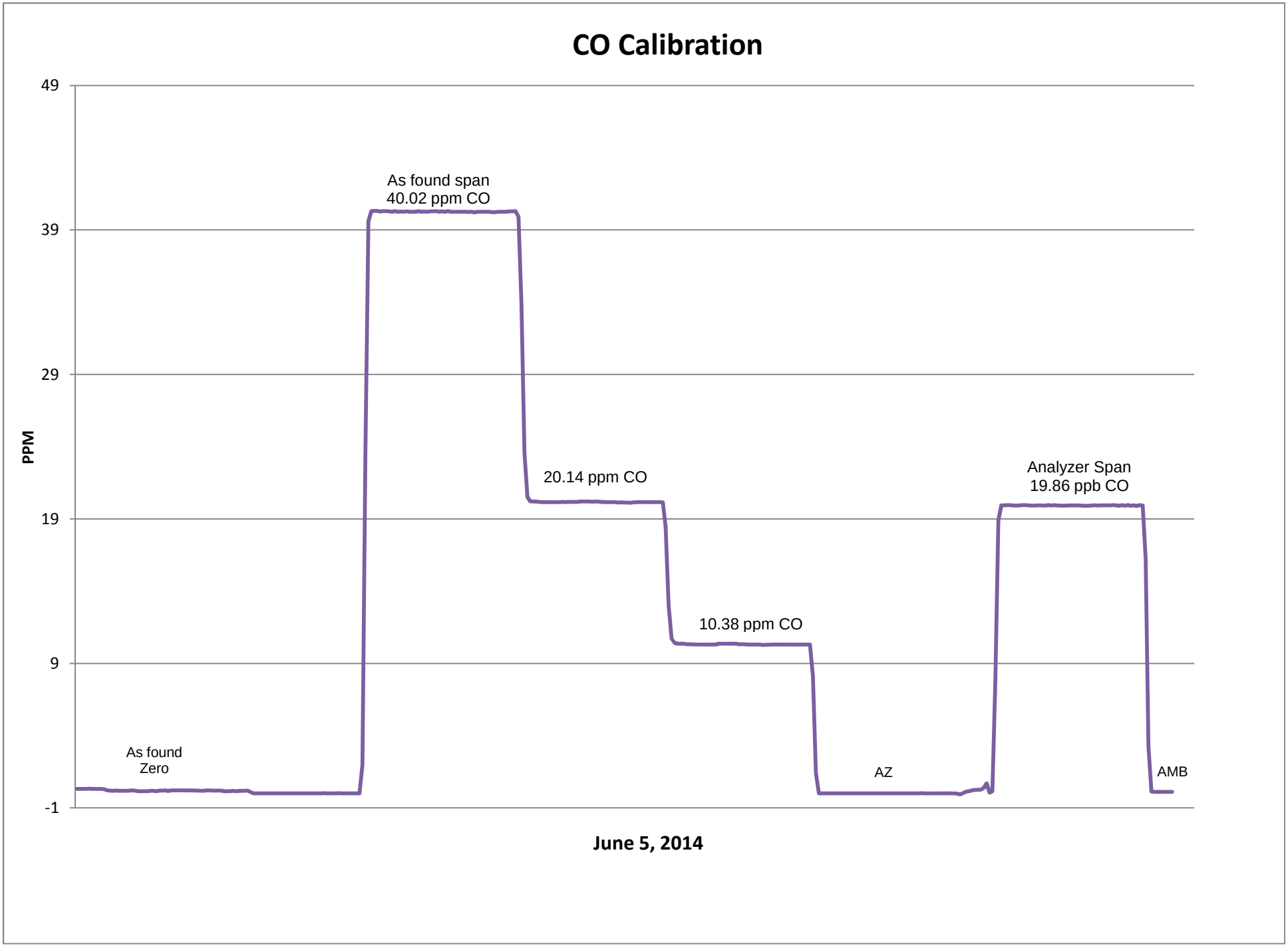
Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 2, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:40:00 PM	End Time (MST)	17:46:00 PM
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	0.010	N/A		
40.017	40.257	0.9941	Correlation Coefficient	0.999984
20.142	20.166	0.9988		
10.383	10.316	1.0065	Slope	0.993459
			Intercept	0.064063




CO Calibration
49
39
29
19
9
-1
PPM
As found span
40.02 ppm CO
20.14 ppm CO
10.38 ppm CO
Analyzer Span
19.86 ppb CO
As found
Zero
AZ
AMB
June 5, 2014

Calibration Report

Parameter **CH4 / NMHC / THC**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 2, 2014
Station Number	1	Station Location	Henry Pirker

Reason: Routine | Install | Removal | Other:

Start Time (MST)	11:22	End Time (MST)	15:45:00 PM
Barometric Pressure	NA inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas CH4 Conc	386 ppm CH4	Cal Gas Expiry Date	28/03/2014
Cal Gas C3H8 Conc	207 569.25 ppm CH4	Cal Gas Cylinder #	LL34318
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 11,12,13

Analyzer make	TEI 55I	Analyzer serial #	1134650658

	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	27.9	PSI	27.9	PSI
Fuel pressure	42.1	PSI	42.1	PSI
Carrier pressure	30.3	PSI	30.3	PSI
CH4 cal factor	5.68		5.68	E^{-4}
NMHC cal factor	1.64		1.64	E^{-4}
Rt	12.60	Sec	12.60	Sec
Pk Index	23.00		23.00	

CH4 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)
1996	0.00	0.00	0.02	N/A
1996	68.96	12.89	12.94	0.9962
1996	40.96	7.76	8.38	0.9268
1996	15.99	3.07	4.28	0.7169
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	14.77	As Found Span
			Average Correction Factor	0.8799

Calculated value of As Found Response: 14.742 ppm Percent Change of As Found: -14.4%

	Before		After
Calculated slope	0.997837	Calculated slope	1.012644
Calculated intercept	0.019727	Calculated intercept	-0.554212

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	9.11	ppm	7.56	ppm

NMHC 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)
1996	0.00	0.00	0.02	N/A
1996	68.96	19.01	19.14	0.9932
1996	40.96	11.45	11.65	0.9824
1996	15.99	4.52	4.68	0.9663
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	18.79	As Found Span
			Average Correction Factor	0.9806

Calculated value of As Found Response: 18.741 ppm Percent Change of As Found: 1.4%

	Before		After
Calculated slope	0.999452	Calculated slope	0.994818
Calculated intercept	-0.021668	Calculated intercept	-0.081654

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.55	ppm	11.95	ppm

THC 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)
1996	0.00	0.00	0.03	N/A
1996	68.96	31.90	32.06	0.9951
1996	40.96	19.21	20.01	0.9598
1996	15.99	7.59	8.94	0.8496
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	33.54	As Found Span
			Average Correction Factor	0.9348

Calculated value of As Found Response: 33.491 ppm Percent Change of As Found: -5.0%

	Before		After
Calculated slope	0.999184	Calculated slope	1.004366
Calculated intercept	0.007799	Calculated intercept	-0.650813

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	21.66	ppm	19.50	ppm

Notes: Span adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **CH4**

Air Monitoring Network **PAZA**

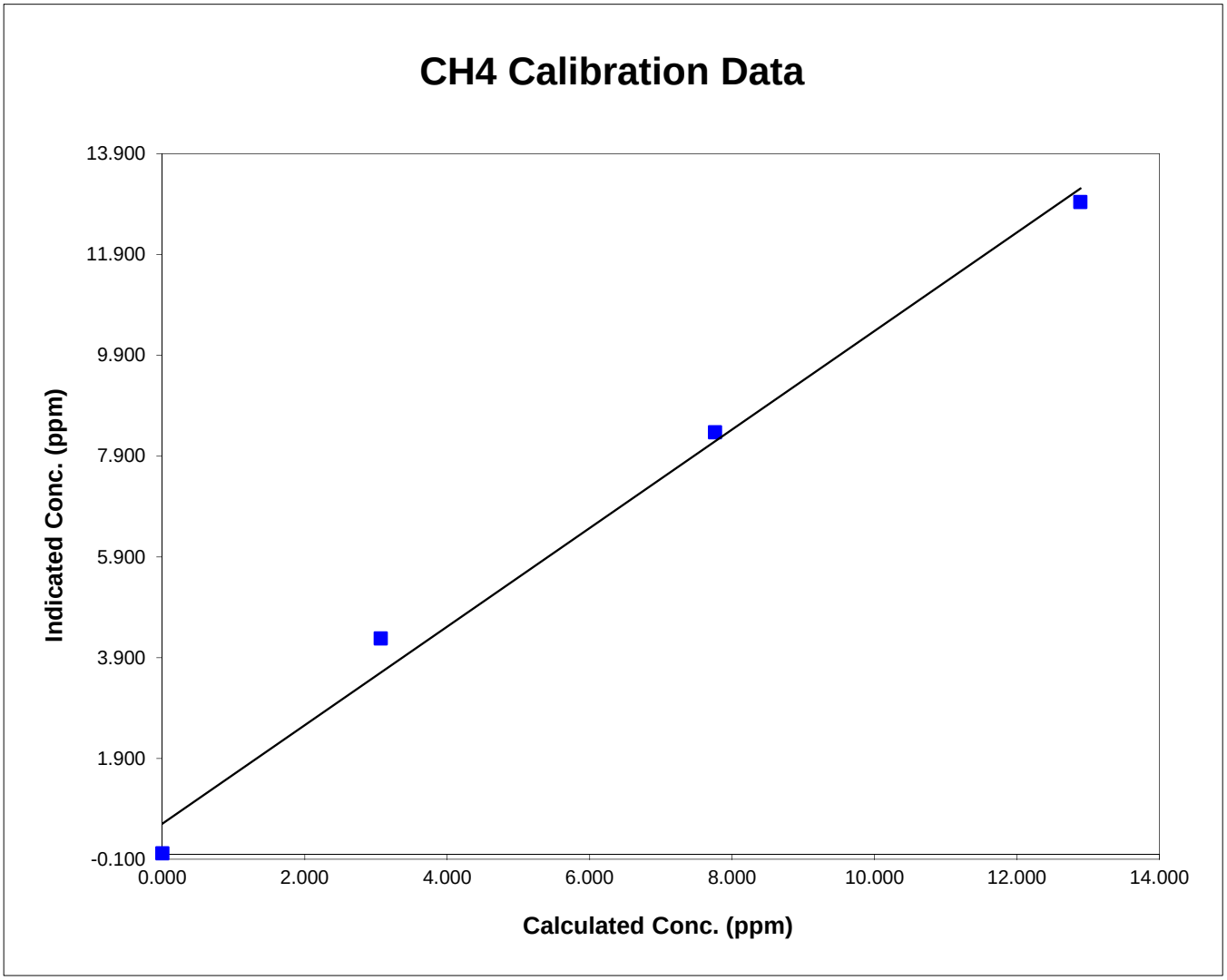
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 2, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:22	End Time (MST)	15:45:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.019	N/A		
12.891	12.940	0.9962	Correlation Coefficient	0.990163
7.762	8.375	0.9268		
3.068	4.279	0.7169	Slope	1.012644
			Intercept	-0.554212



Calibration Summary

Parameter **NMHC**

Air Monitoring Network **PAZA**

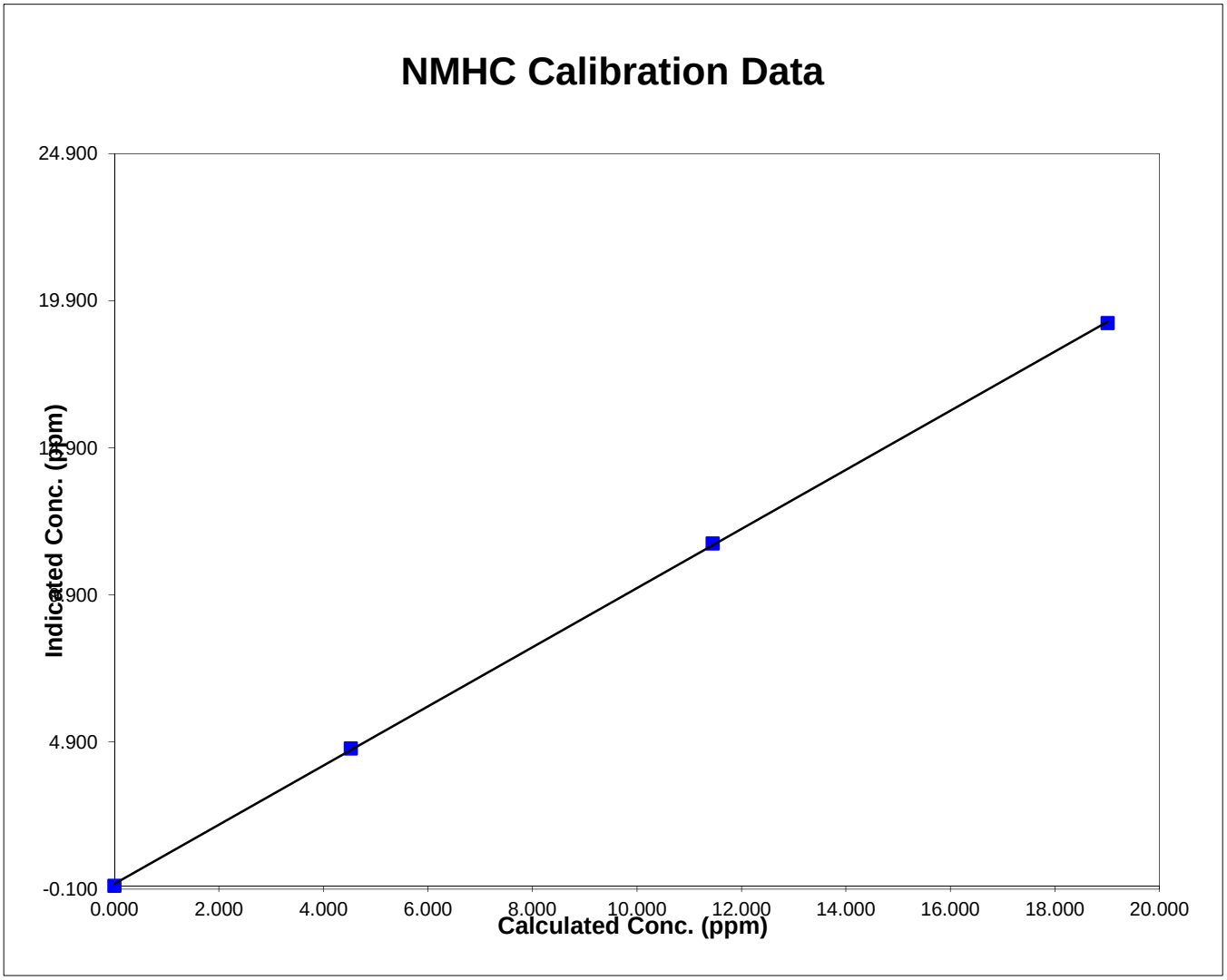
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 2, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:22	End Time (MST)	15:45:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.018	N/A		
19.010	19.140	0.9932	Correlation Coefficient	0.999935
11.447	11.652	0.9824		
4.524	4.682	0.9663	Slope	0.994818
			Intercept	-0.081654



Calibration Summary

Parameter **THC**

Air Monitoring Network **PAZA**

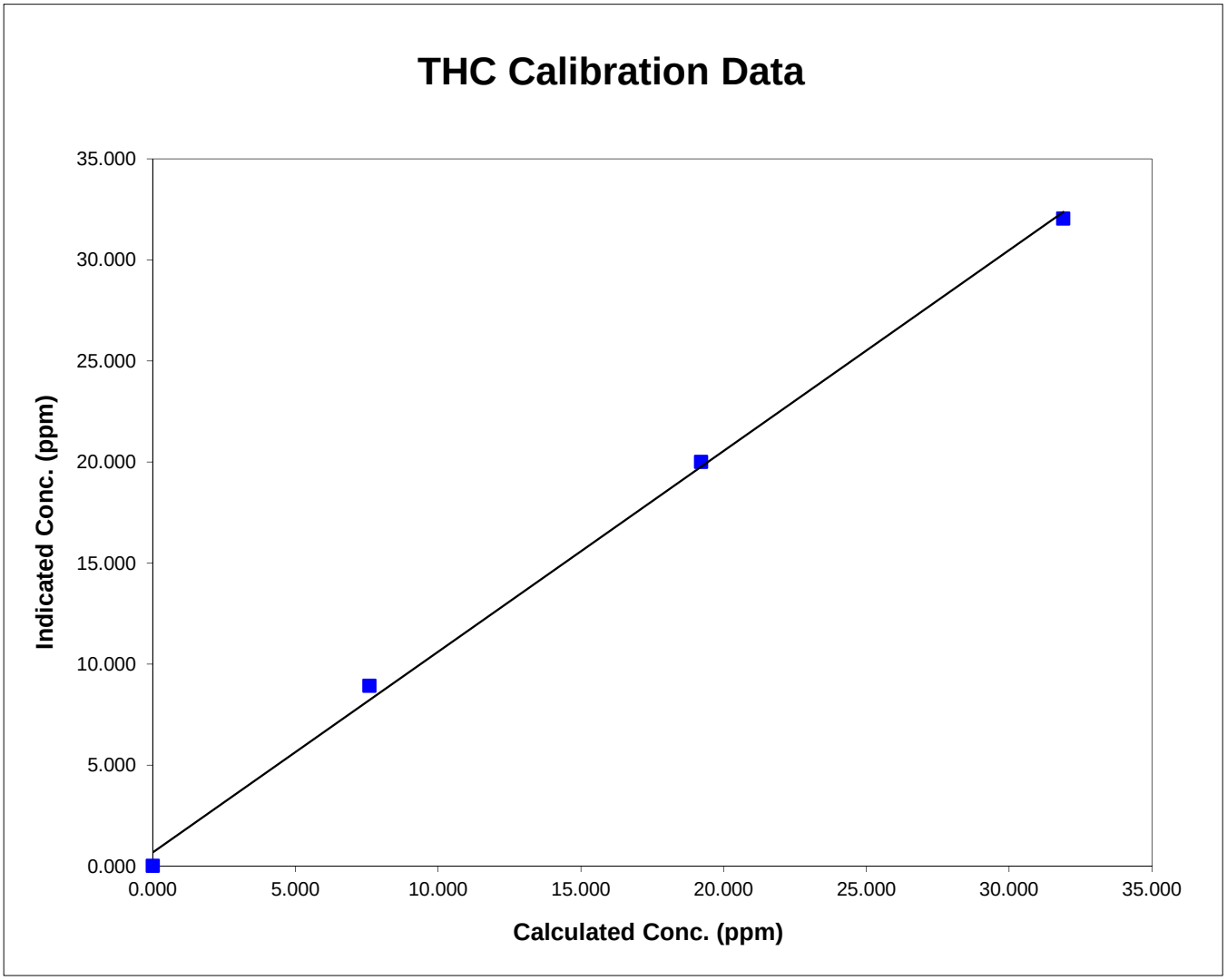
FOCUS AIR QUALITY MONITORING

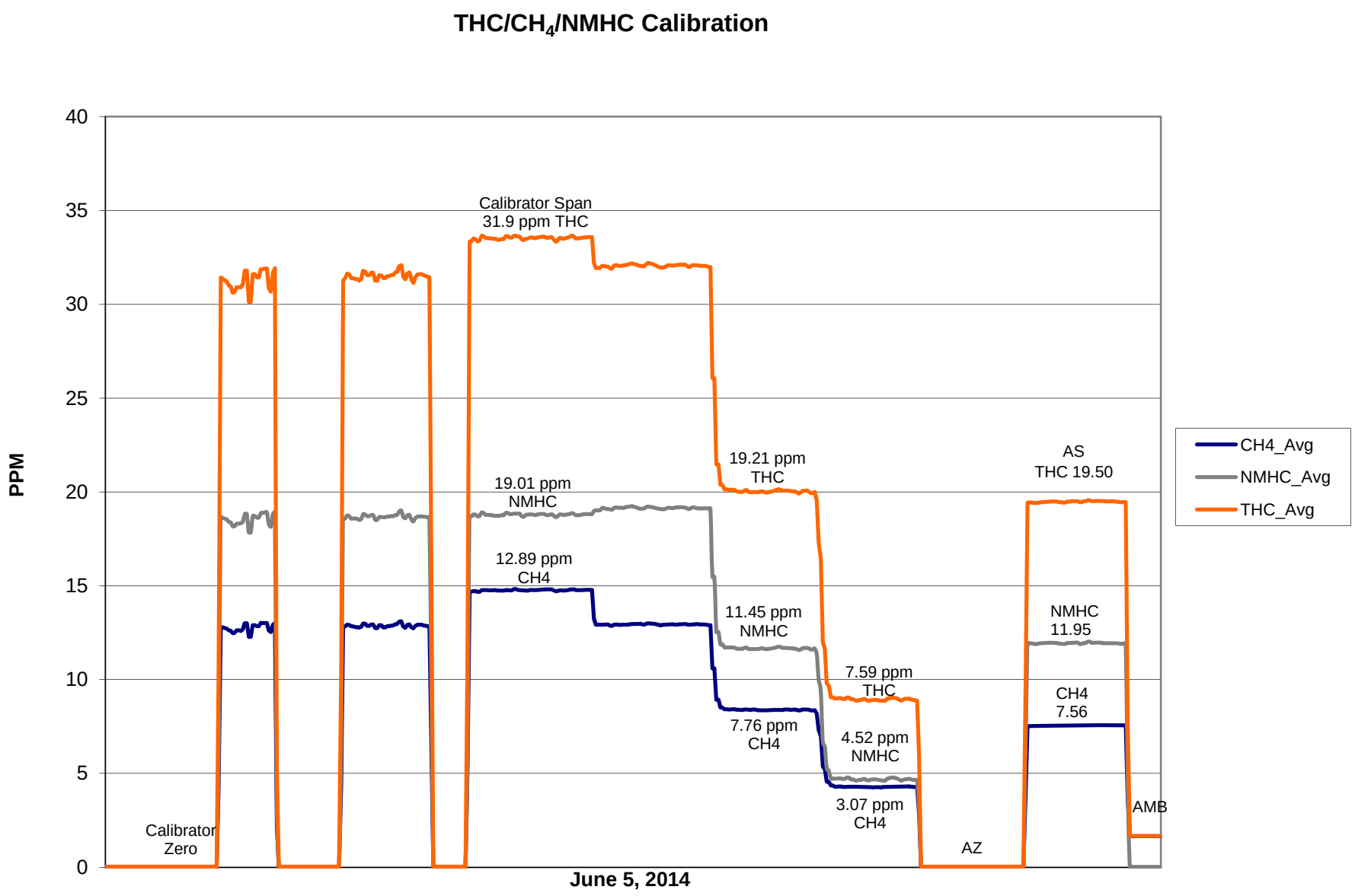
Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 2, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:22	End Time (MST)	15:45:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.031	N/A		
31.901	32.058	0.9951	Correlation Coefficient	0.998107
19.209	20.012	0.9598		
7.592	8.936	0.8496	Slope	1.004366
			Intercept	-0.650813




THC/CH4/NMHC Calibration
PPM
40
35
30
25
20
15
10
5
0
Calibrator Span
31.9 ppm THC
19.21 ppm
THC
19.01 ppm
NMHC
12.89 ppm
CH4
11.45 ppm
NMHC
7.76 ppm
CH4
7.59 ppm
THC
4.52 ppm
NMHC
3.07 ppm
CH4
AS
THC 19.50
NMHC
11.95
CH4
7.56
AMB
AZ
Calibrator
Zero
June 5, 2014
CH4_Avg
NMHC_Avg
THC_Avg

Calibration Report

Parameter **CH4 / NMHC / THC**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 26, 2014	Previous Calibration	June 5, 2014
Station Number	1	Station Location	Henry Pirker

Reason: Routine | Install | Removal | Other:

Start Time (MST)	7:59	End Time (MST)	11:15
Barometric Pressure	NA inches Hg	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas CH4 Conc	386 ppm CH4	Cal Gas Expiry Date	28/03/2014
Cal Gas C3H8 Conc	207 569.25 ppm CH4	Cal Gas Cylinder #	LL34318
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 11,12,13

Analyzer make	TEI 55I	Analyzer serial #	1134650658

	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	27.9	PSI	27.9	PSI
Fuel pressure	42.1	PSI	42.1	PSI
Carrier pressure	30.3	PSI	30.3	PSI
CH4 cal factor	5.68		5.68	E^{-4}
NMHC cal factor	1.64		1.64	E^{-4}
Rt	12.60	Sec	12.60	Sec
Pk Index	23.00		23.00	

CH4 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)
1996	0.00	0.00	0.02	N/A
1996	68.96	12.89	12.88	1.0011
1996	40.96	7.76	7.71	1.0069
1996	15.99	3.07	3.01	1.0200
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	11.31	As Found Span
			Average Correction Factor	1.0094

Calculated value of As Found Response: 10.879 ppm Percent Change of As Found: 15.6%

	Before		After
Calculated slope	1.012644	Calculated slope	1.001390
Calculated intercept	-0.554212	Calculated intercept	0.019210

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	9.11	ppm	8.47	ppm

NMHC 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)
1996	0.00	0.00	0.02	N/A
1996	68.96	19.01	18.88	1.0069
1996	40.96	11.45	11.46	0.9992
1996	15.99	4.52	4.44	1.0193
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	19.17	As Found Span
			Average Correction Factor	1.0085

Calculated value of As Found Response: 18.969 ppm Percent Change of As Found: 0.2%

	Before		After
Calculated slope	0.994818	Calculated slope	1.005379
Calculated intercept	-0.081654	Calculated intercept	0.000611

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.55	ppm	11.65	ppm

THC 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)
1996	0.00	0.00	0.03	N/A
1996	68.96	31.90	31.73	1.0054
1996	40.96	19.21	19.15	1.0033
1996	15.99	7.59	7.43	1.0211
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	30.45	As Found Span
			Average Correction Factor	1.0099

Calculated value of As Found Response: 29.903 ppm Percent Change of As Found: 6.2%

	Before		After
Calculated slope	1.004366	Calculated slope	1.004443
Calculated intercept	-0.650813	Calculated intercept	0.025695

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	21.66	ppm	20.12	ppm

Notes: Analyzer seems to be reading low values in sample since last cal. Suspect zero air supply. Recalibrate THC using site zero air supply & perform span adjust. Ambient values now reading expected background. New H2 cylinder installed 23rd- new quarter inch teflon tubing to analyzer.

Calibration Performed By: Dmytro Dolotii,Grover Christiansen

Calibration Summary

Parameter **CH4**

Air Monitoring Network **PAZA**

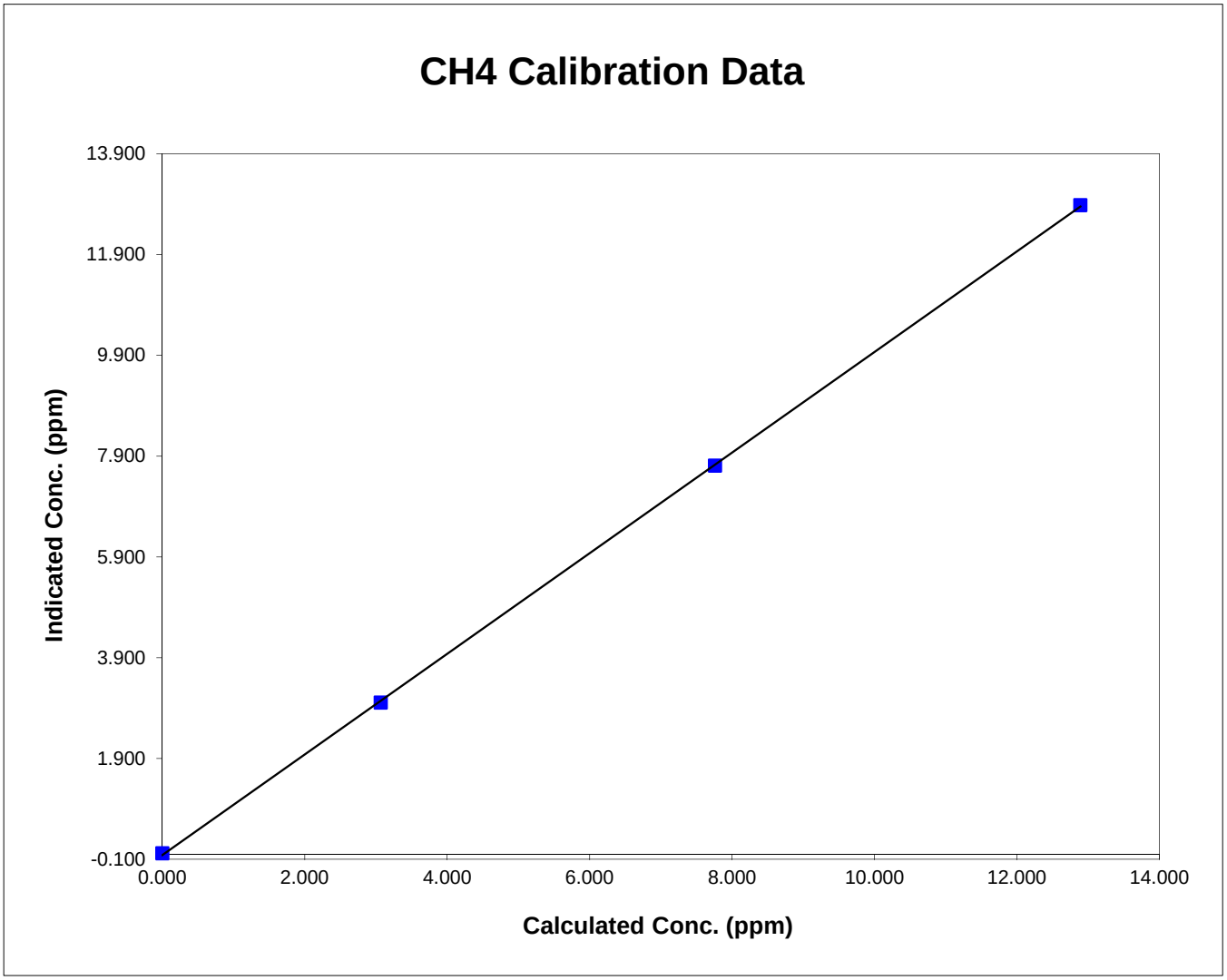
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 26, 2014	Previous Calibration	June 5, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:59	End Time (MST)	11:15
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.018	N/A		
12.891	12.876	1.0011	Correlation Coefficient	0.999960
7.762	7.708	1.0069		
3.068	3.008	1.0200	Slope	1.001390
			Intercept	0.019210



Calibration Summary

Parameter **NMHC**

Air Monitoring Network **PAZA**

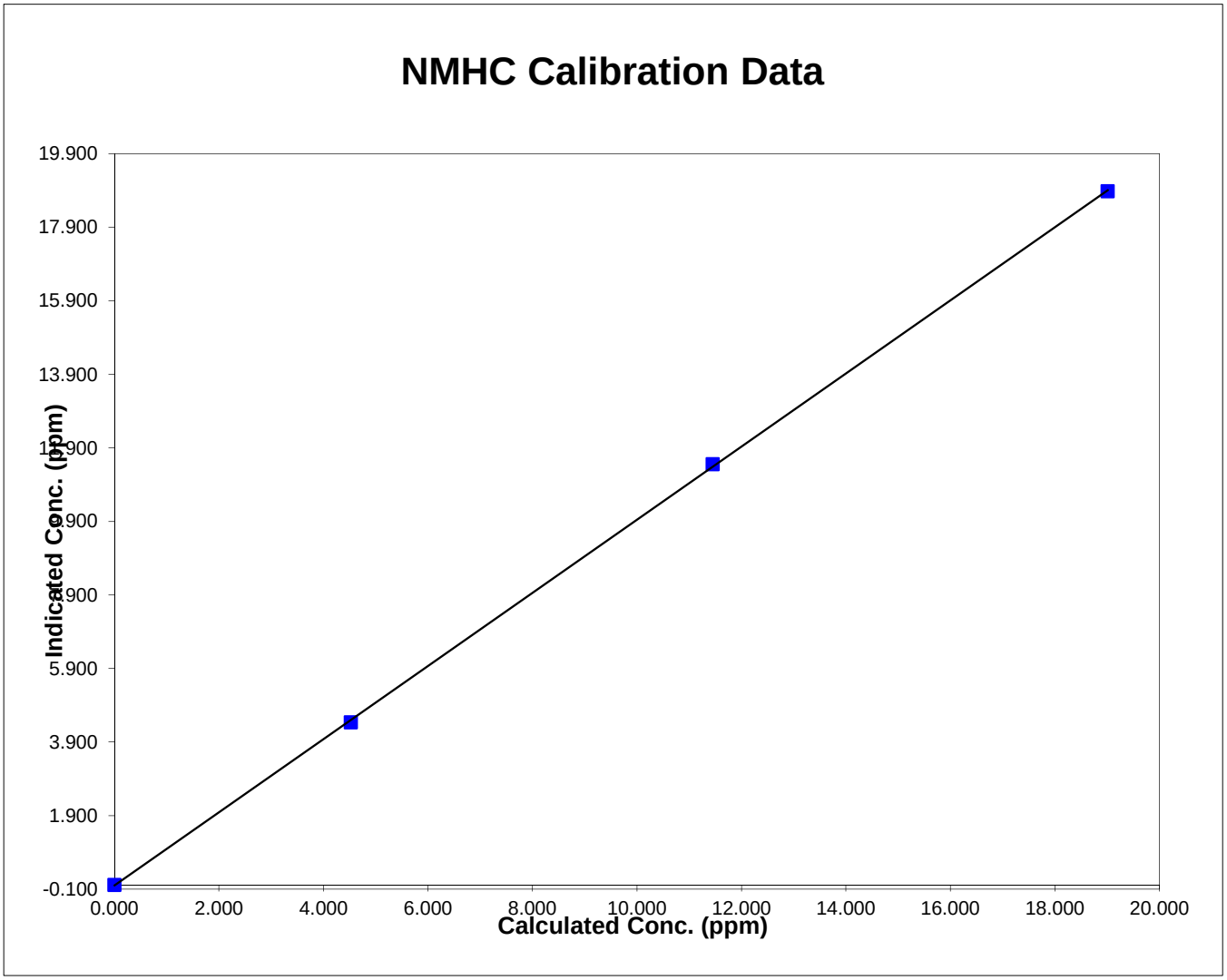
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 26, 2014	Previous Calibration	June 5, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:59	End Time (MST)	11:15
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.018	N/A		
19.010	18.879	1.0069	Correlation Coefficient	0.999952
11.447	11.456	0.9992		
4.524	4.438	1.0193	Slope	1.005379
			Intercept	0.000611



Calibration Summary

Parameter **THC**

Air Monitoring Network **PAZA**

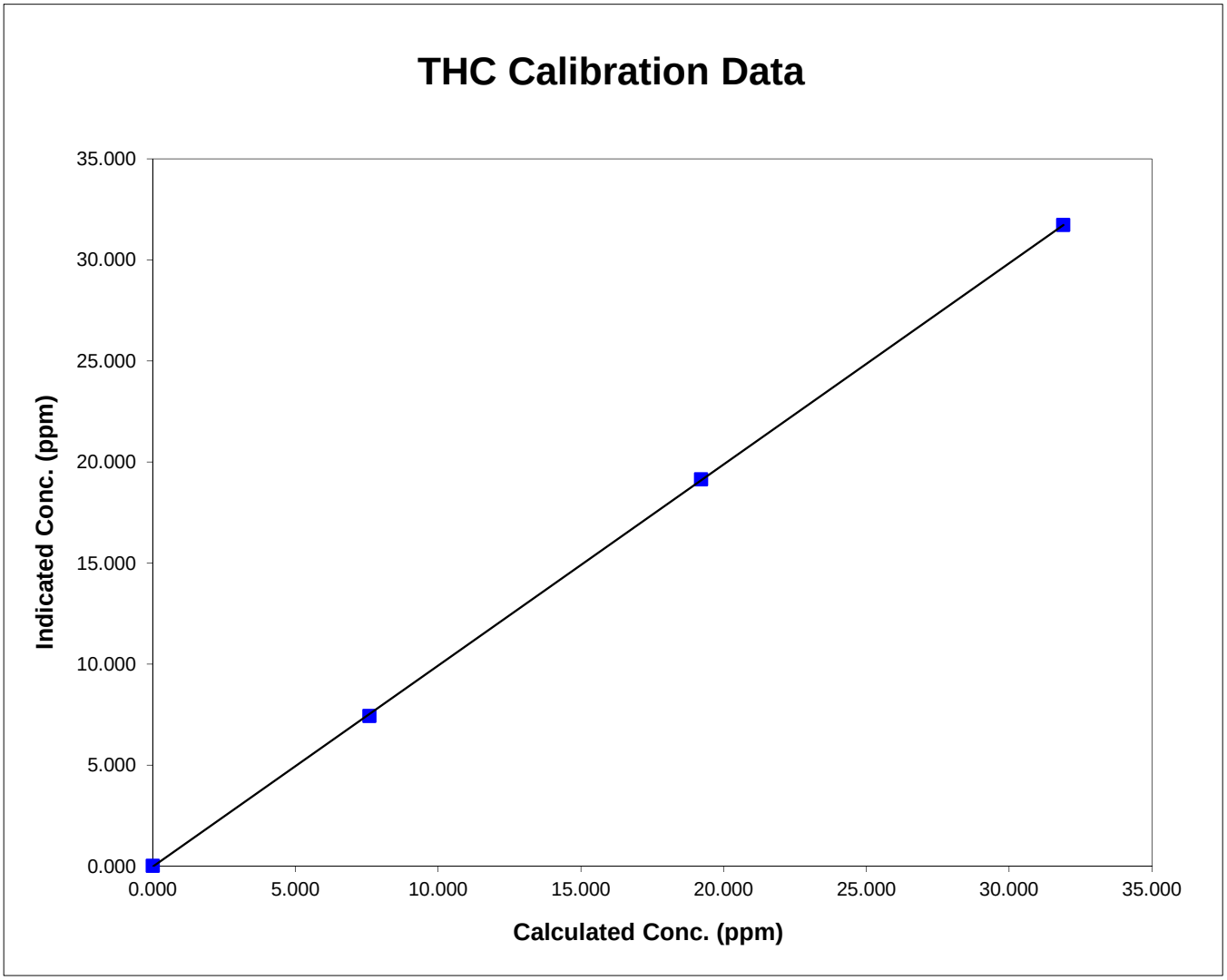
FOCUS AIR QUALITY MONITORING

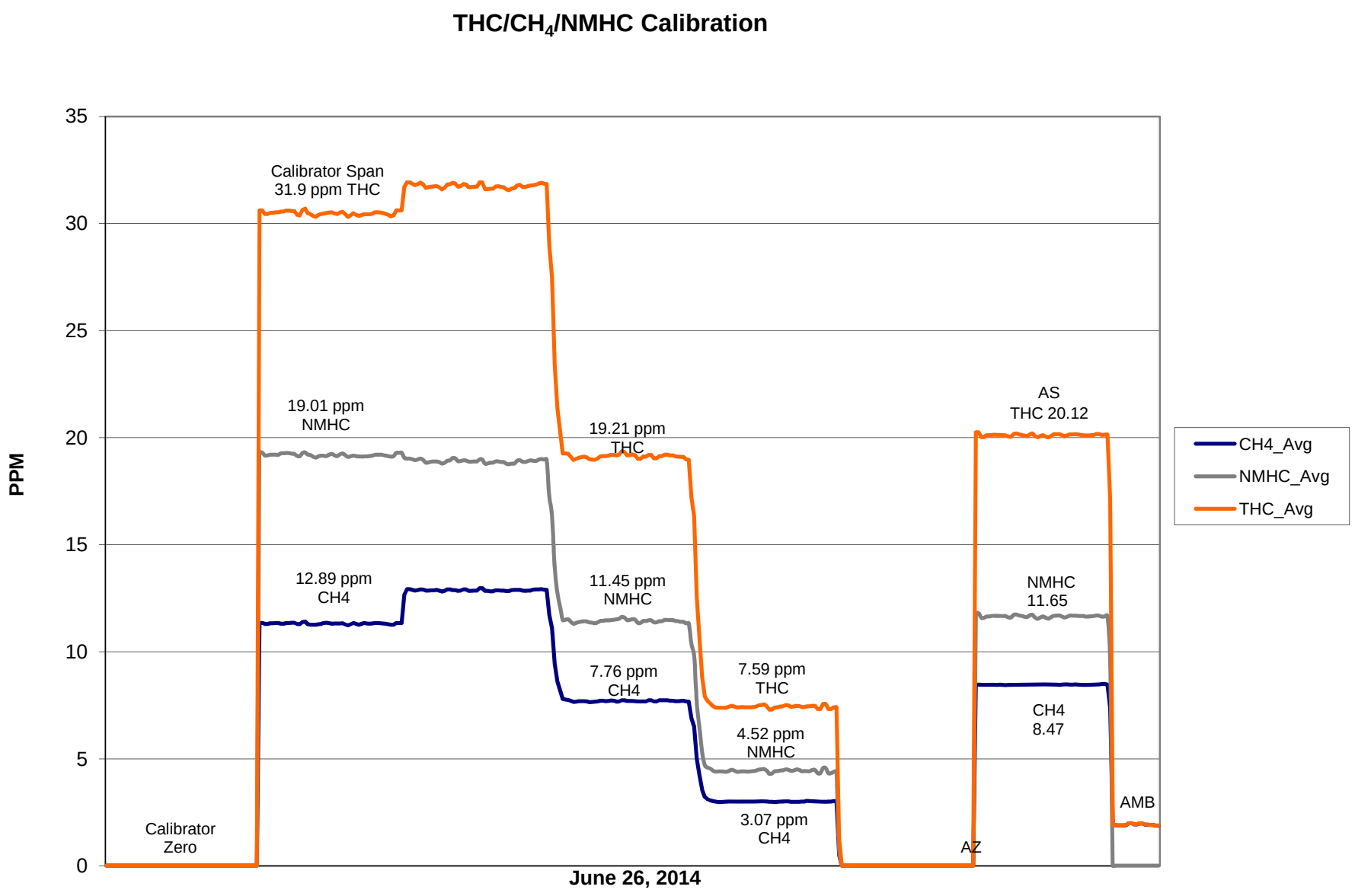
Station Information

Calibration Date	June 26, 2014	Previous Calibration	June 5, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:59	End Time (MST)	11:15
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.031	N/A		
31.901	31.728	1.0054	Correlation Coefficient	0.999974
19.209	19.145	1.0033		
7.592	7.435	1.0211	Slope	1.004443
			Intercept	0.025695




THC/CH4/NMHC Calibration
PPM
35
30
25
20
15
10
5
0
Calibrator Span
31.9 ppm THC
19.01 ppm
NMHC
19.21 ppm
THC
AS
THC 20.12
12.89 ppm
CH4
11.45 ppm
NMHC
NMHC
11.65
7.76 ppm
CH4
7.59 ppm
THC
CH4
8.47
4.52 ppm
NMHC
AMB
3.07 ppm
CH4
Calibrator
Zero
AZ
June 26, 2014
CH4_Avg
NMHC_Avg
THC_Avg

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Reason: Routine	Install	Removal	Other:
Start Time (MST)	7:25	End Time (MST)	12:55
Barometric Pressure	704.00 mm/Hg	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Conc	10.4 ppb	Cal Gas Expiry Date	08/07/2016
		Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.024703	Calculated slope	0.970619
Calculated intercept	0.371170	Calculated intercept	0.503366
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.988		0.988	
Background	17.5		17.5	
Pressure	663.5	mm Hg	665.8	mm Hg
Flow	0.454	ccm	0.454	ccm
Lamp Voltage	880	V	881	V

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	-0.35	N/A
4995	39.93	82.48	84.68	0.9740
4995	19.95	41.37	41.63	0.9938
8995	8.95	10.34	10.21	1.0127
4995	0.00	0.00	-0.35	As Found Zero
4995	39.93	82.48	84.68	As Found Span
			Average Correction Factor	0.9935

Calculated value of As Found Response: 87.5 ppb Percent Change of As Found: -6.1%

	before calibration		after calibration	
Auto zero	-0.92	ppb	0.27	ppb
Auto span	33.06	ppb	36.84	ppb

Notes: No adjustments made.
Sox scrubber check performed.
The as found span needed to be restarted 3 times due to line & calibrator conditioning..

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

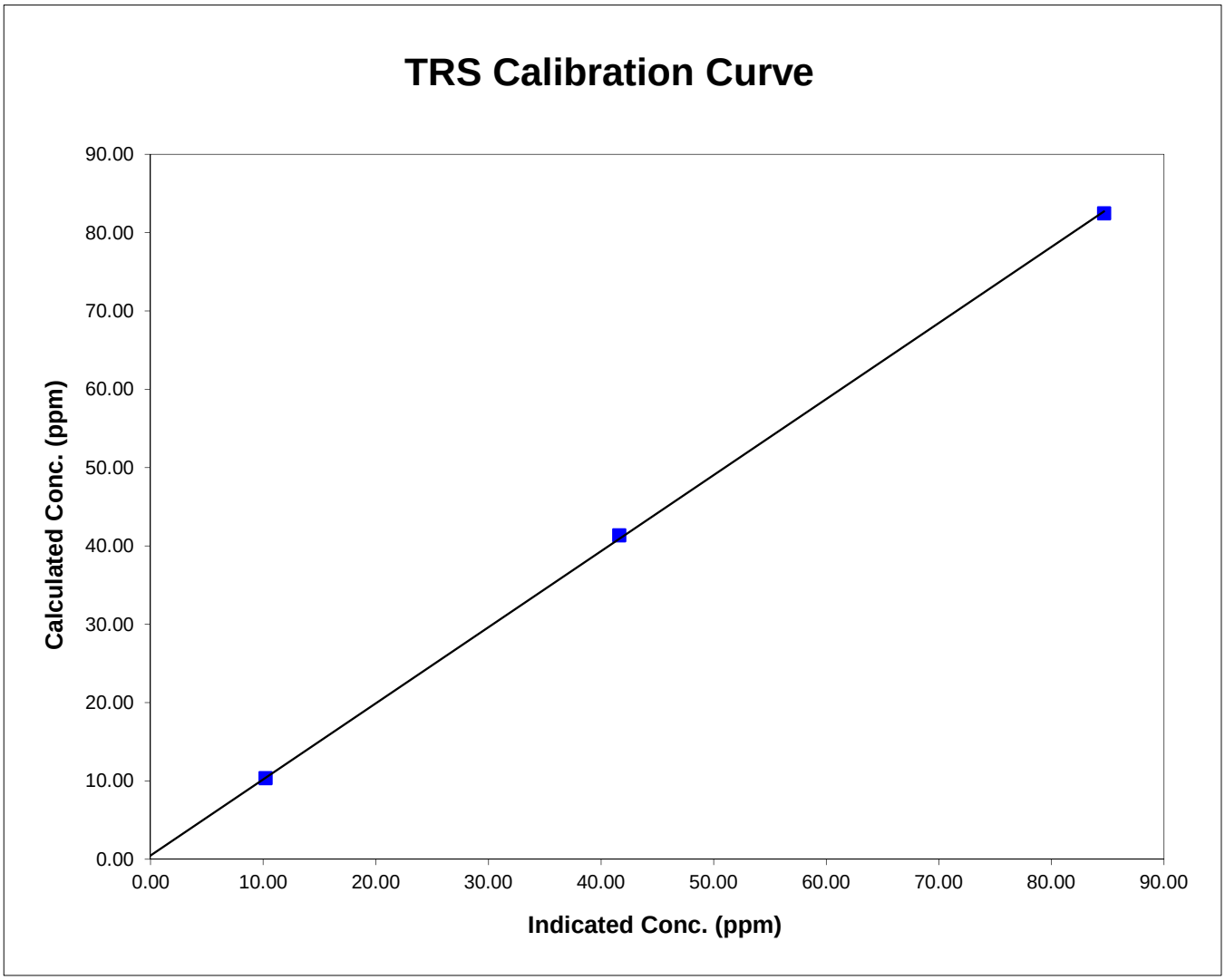
FOCUS AIR QUALITY MONITORING

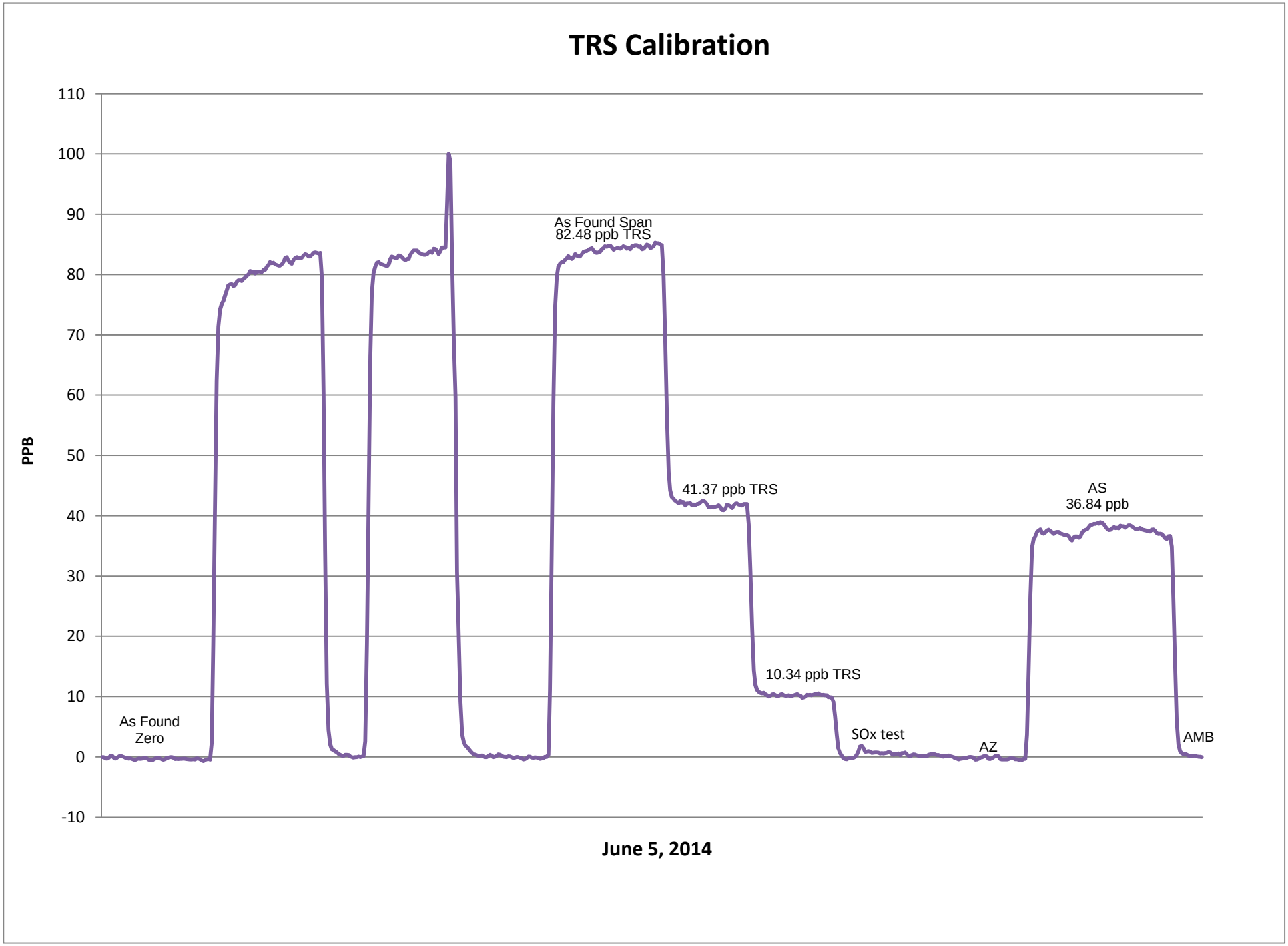
Station Information

Calibration Date	June 5, 2014	Previous Calibration	May 1, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:25	End Time (MST)	12:55
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	-0.345	N/A		
82.478	84.681	0.9740	Correlation Coefficient	0.999929
41.372	41.632	0.9938		
10.338	10.208	1.0127	Slope	0.970619
			Intercept	0.503366




TRS Calibration
110
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
As Found Span
82.48 ppb TRS
41.37 ppb TRS
AS
36.84 ppb
10.34 ppb TRS
SOx test
AZ
AMB
As Found
Zero
June 5, 2014

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 7 2014	Previous Calibration	May 5 2014
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:
Start Time (MST)	11:05	End Time (MST)	14:00:00 PM
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	25/02/2025
Correction factor	0.031409	Cal Gas Cylinder #	LL105159
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.998149	Calculated slope	0.987344
Calculated intercept	1.437503	Calculated intercept	2.288524
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.4		11.4	
coefficient	1.22		1.22	
Lamp Voltage	828	volts	830	volts
Chamber Temp	45.1	Deg C	45.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	670.1	mm Hg	670.7	mm Hg
Sample Flow	0.454	ccm	0.455	ccm
Lamp Intensity	89	%	89	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.2	N/A
4995	39.93	394.9	399.1	0.9897
4995	19.97	198.3	196.8	1.0079
4995	9.97	99.2	96.1	1.0326
4995	0.0	0.0	0.2	As Found Zero
4995	39.93	408.4	399.0	As Found Span
			Average Correction Factor	1.0101

Calculated value of As Found Response: 399.542 ppm Percent Change of As Found: 2.2%

	before calibration		after calibration	
Auto zero	1.8	ppm	0.2	ppm
Auto span	290.1	ppm	281.0	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

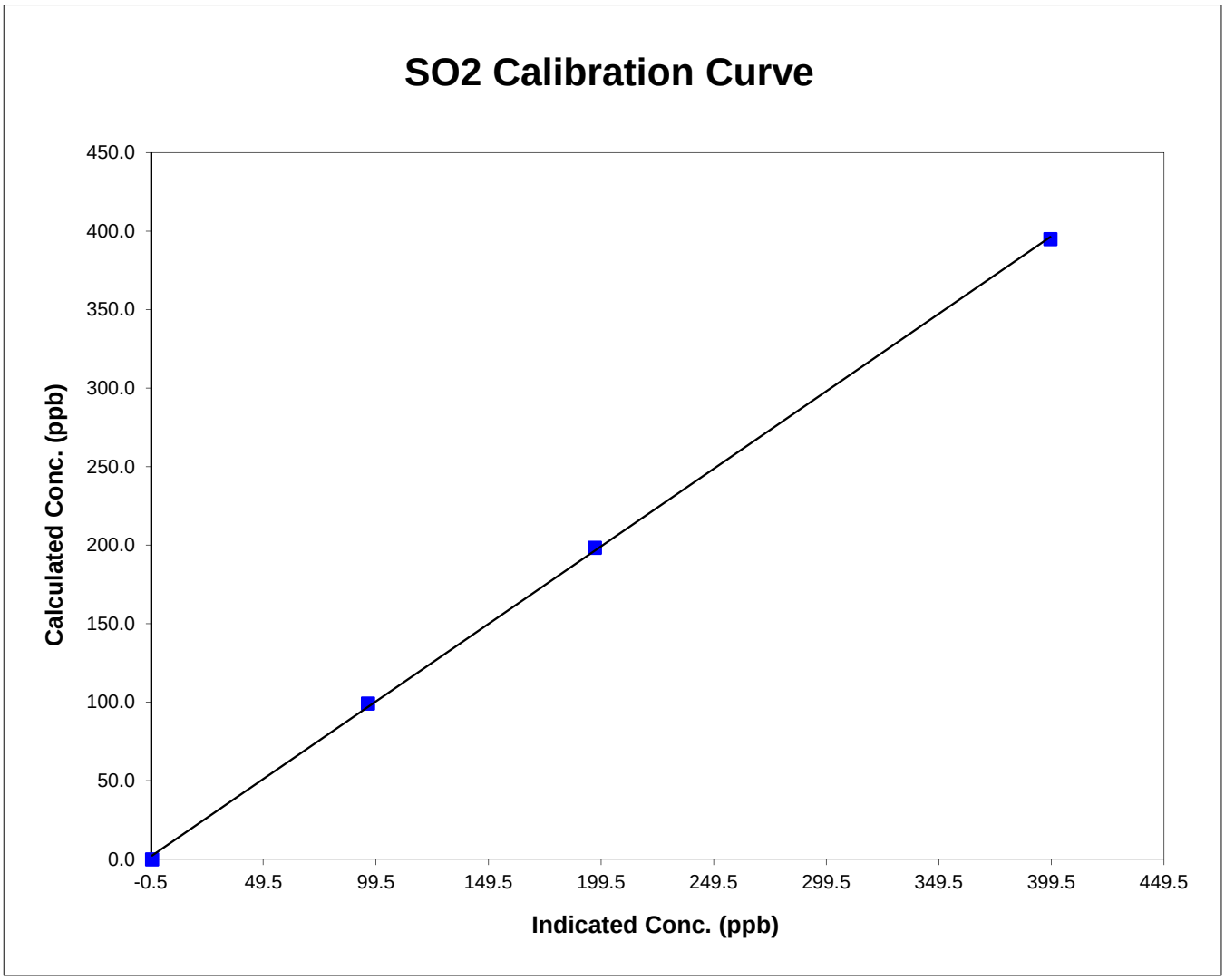
Air Monitoring Network **PAZA**

Station Information

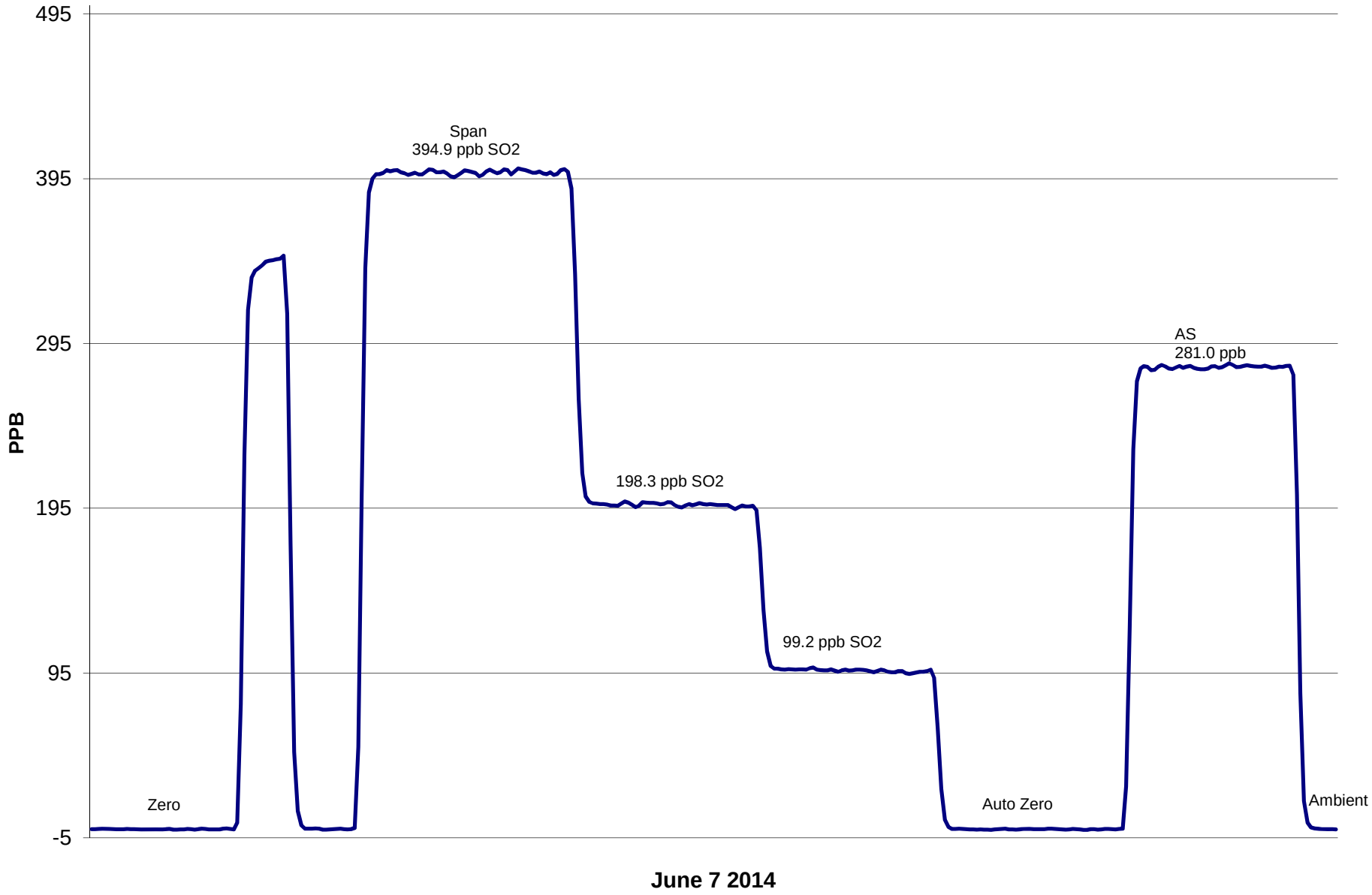
Calibration Date	June 7 2014	Previous Calibration	May 5 2014
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	11:05	End Time (MST)	14:00:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
394.9	399.1	0.9897	Correlation Coefficient	0.999821
198.3	196.8	1.0079		
99.2	96.1	1.0326	Slope	0.987344
			Intercept	2.288524



SO2 Calibration



Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 7 2014	Previous Calibration	May 5 2014
Station Number	2	Station Location	Evergreen Park
Reason: Routine	Install	Removal	Other:
Start Time (MST)	8:25	End Time (MST)	12:00
Barometric Pressure	0.907 ATM	Station Temperature	22.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Conc	10.4 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.030622	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.983698	Calculated slope	0.983226
Calculated intercept	-0.082037	Calculated intercept	0.161616
Analyzer make	TEI Model 43C	Analyzer serial #	3.199E+13

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	39.3	ppb	39.8	ppb
coefficient	1.043		1.043	
Lamp Voltage	1037	volts	1037	volts
Chamber Temp	44.5	Deg C	44.5	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	633.7	mm Hg	639.1	mm Hg
Sample Flow	0.638	ccm	0.641	ccm
Lamp Intensity	31,607	mv	31,700	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)
4995	0.00	0.00	0.0	N/A
4995	39.93	82.48	83.9	0.9835
4995	19.97	41.41	41.7	0.9941
8995	8.97	10.36	10.4	0.9973
4995	9.97	102.79	2.9	Sox Test
4995	0.00	0.00	0.9	As Found Zero
4995	39.93	82.48	83.9	As Found Span
			Average Correction Factor	0.9916

Calculated value of As Found Response: 81.56 ppm Percent Change of As Found: 1.1%

	before calibration		after calibration	
Auto zero	-0.2	ppm	0.2	ppm
Auto span	82.2	ppm	73.8	ppm

Notes: Slight zero adjustment made.
Sox scrubber check performed.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

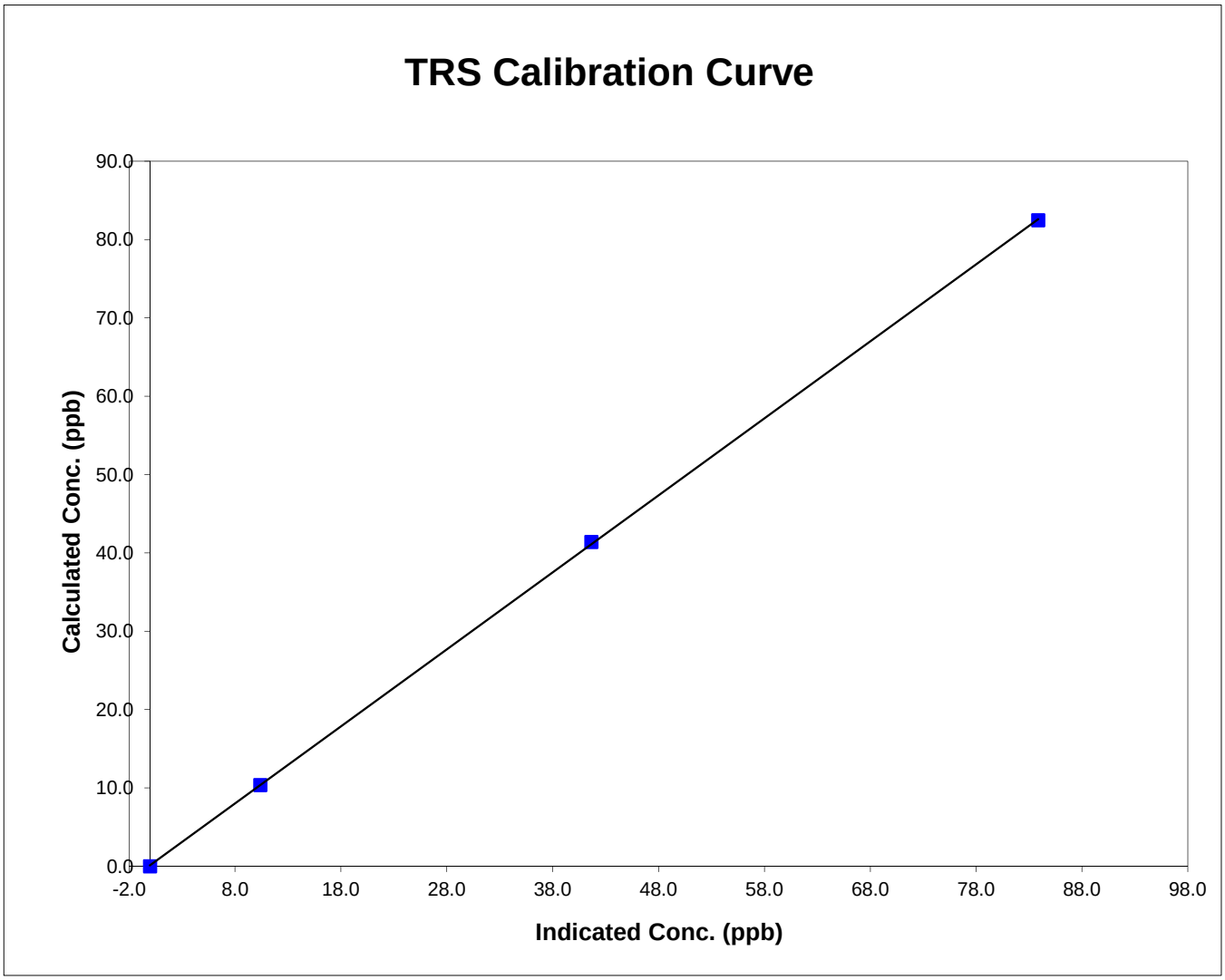
Air Monitoring Network **PAZA**

Station Information

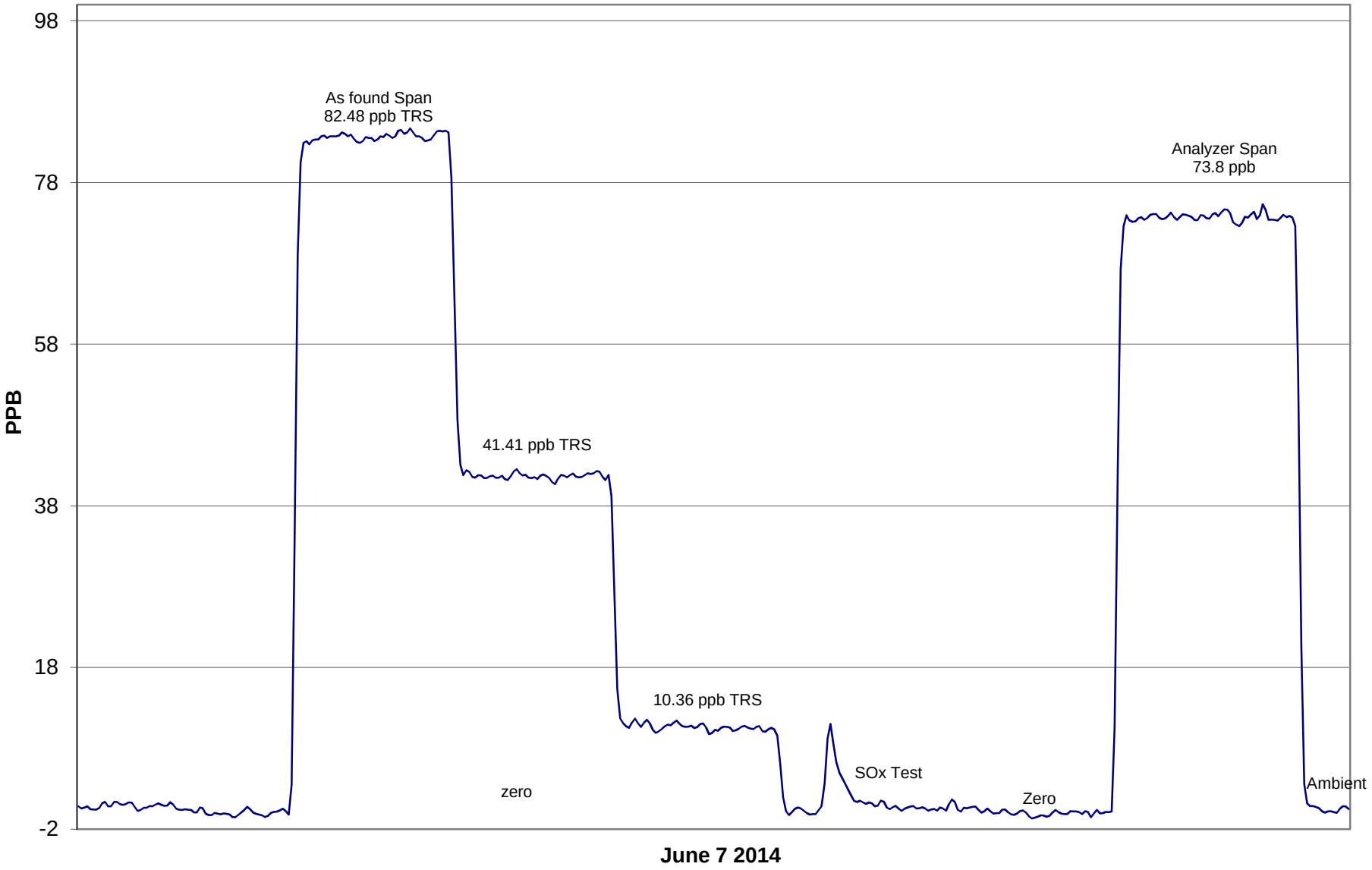
Calibration Date	June 7 2014	Previous Calibration	May 5 2014
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:25	End Time (MST)	12:00
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
82.5	83.9	0.9835	Correlation Coefficient	0.999970
41.4	41.7	0.9941		
10.4	10.4	0.9973	Slope	0.983226
			Intercept	0.161616



TRS Calibration



Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 6, 2014	Previous Calibration	May 16, 2014
Station Number	3	Station Location	Smokey Heights
Reason: Routine	Install	Removal	Other:

Start Time (MST)	11:44	End Time (MST)	15:05:00 PM
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	2844
Cal Gas Concentration	49.8 ppm	Cal Gas Cert Date	20/01/2016
Correction factor	0.031783	Cal Gas Cylinder #	LL1105159
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	1.004281	Calculated slope	0.995695
Calculated intercept	-1.999742	Calculated intercept	2.112191

Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	10.7		12.1	
coefficient	0.920		0.952	
Lamp Voltage	929	volts	928	volts
Chamber Temp	45.1	Deg C	45	Deg C
Perm Gas Temp	45.1	Deg C	45	Deg C
Pressure	669	mm Hg	668.1	mm Hg
Sample Flow	0.447	lpm	0.447	lpm
Lamp Intensity	88	%	88	%

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)
4995	0.0	0.00	0.5	N/A
4995	39.93	394.94	395.8	0.9979
4995	19.97	198.31	195.7	1.0132
4995	9.97	99.20	95.0	1.0445
4995	0.0	0.00	1.3	As Found Zero
4995	39.93	394.94	381.5	As Found Span
			Average Correction Factor	1.0185

Calculated value of As Found Response: 379.772 ppm Percent Change of As Found: 3.8%

	before calibration		after calibration	
Auto zero	1.6	ppb	0.2	ppb
Auto span	248.2	ppb	253.6	ppb

Notes: Span and zero adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

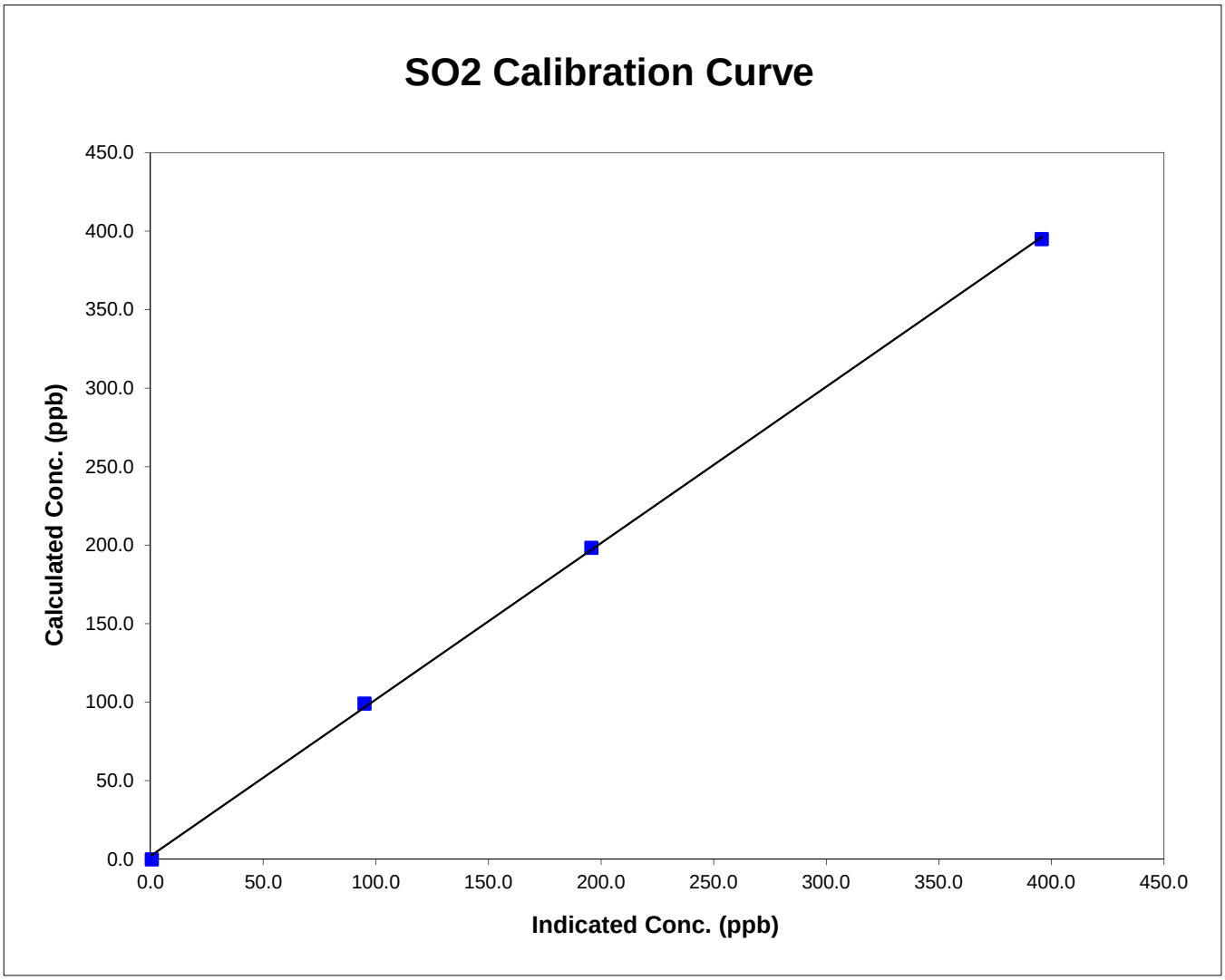
Air Monitoring Network **PAZA**

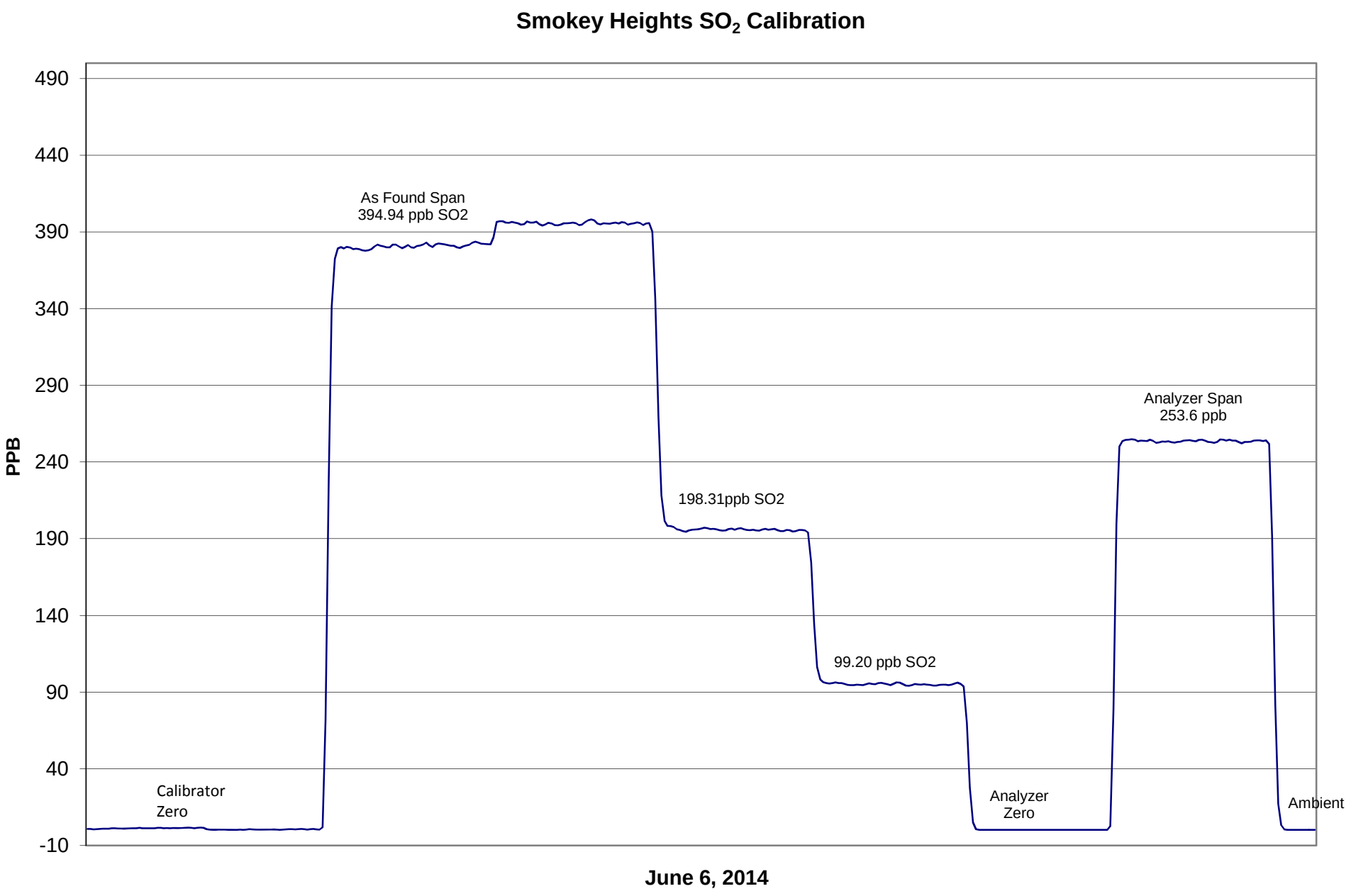
Station Information

Calibration Date	June 6, 2014	Previous Calibration	May 16, 2014
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	11:44	End Time (MST)	15:05:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A		
394.9	395.8	0.9979	Correlation Coefficient	0.999808
198.3	195.7	1.0132		
99.2	95.0	1.0445	Slope	0.995695
			Intercept	2.112191




Smokey Heights SO_2 Calibration
490
440
390
340
290
240
190
140
90
40
-10
PPB
As Found Span
394.94 ppb SO2
198.31ppb SO2
99.20 ppb SO2
Analyzer Span
253.6 ppb
Calibrator
Zero
Analyzer
Zero
Ambient
June 6, 2014

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 6, 2014	Previous Calibration	May 16, 2014
Station Number	3	Station Location	Smokey Heights
Reason: Routine	Install	Removal	Other:

Start Time (MST)	8:55	End Time (MST)	12:43
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	2844
Cal Gas Conc	10.4 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031783	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.992241	Calculated slope	0.984828
Calculated intercept	-0.093572	Calculated intercept	0.606017

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	18.2	ppb	19	ppb
coefficient	0.944		0.983	
Lamp Voltage	830	volts	830	volts
Chamber Temp	43.8	Deg C	43.8	Deg C
Perm Gas Temp	44.99	Deg C	45	Deg C
Pressure	607.1	mm Hg	606.3	mm Hg
Sample Flow	0.636	lpm	0.637	lpm
Lamp Intensity	34,999	mv	35,521	mv

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	-0.2	N/A
4995	39.91	82.44	83.3	0.9897
4995	19.93	41.33	41.0	1.0078
8995	8.97	10.36	9.6	1.0779
4995	9.97	102	3.6	Sox test
4995	0.0	0.00	-0.2	As Found Zero
4995	39.91	82.44	79.3	As Found Span
			Average Correction Factor	1.0252

Calculated value of As Found Response: 78.73 ppm Percent Change of As Found: 4.5%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.6	ppm
Auto span	29.5	ppm	32.3	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**

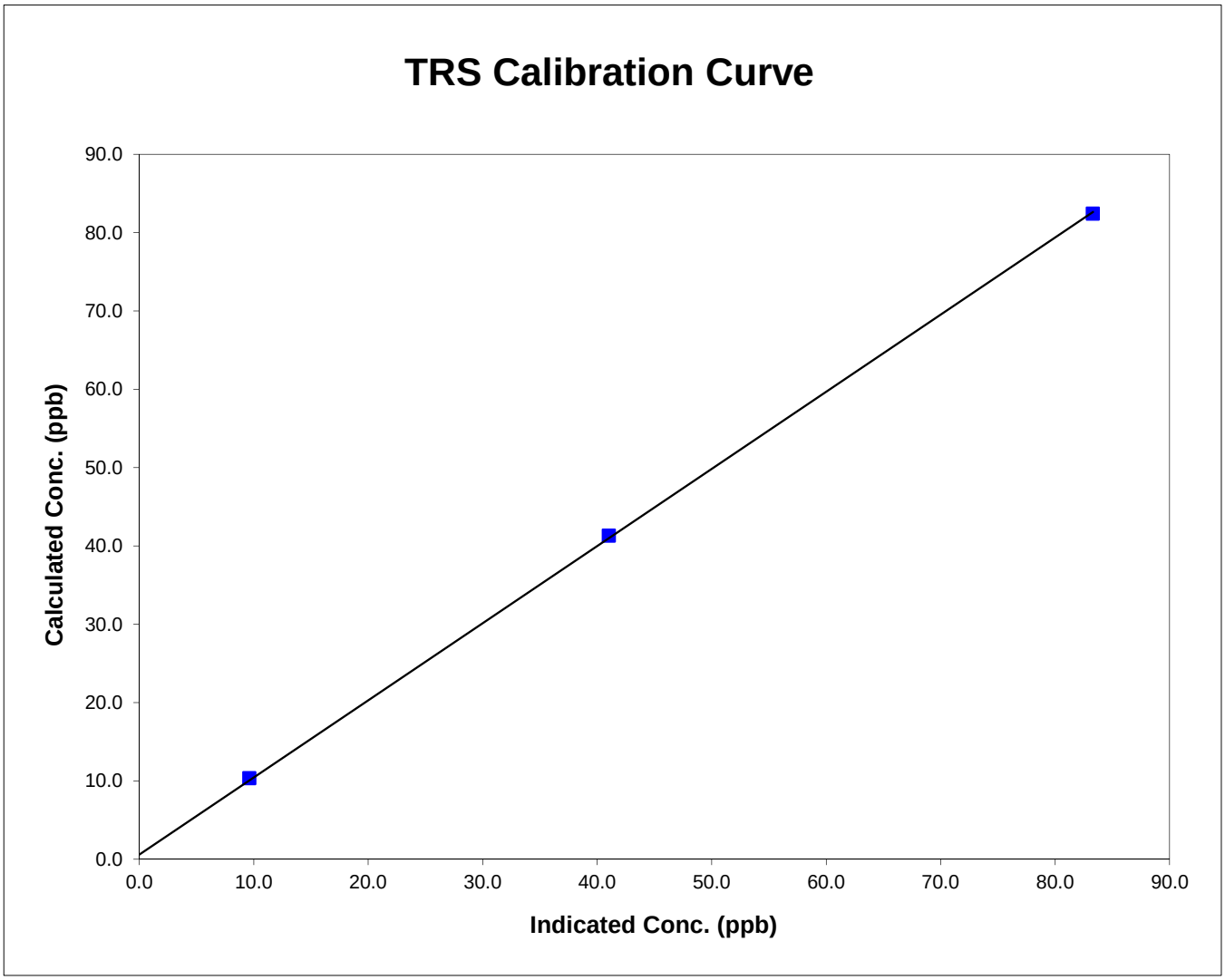
Air Monitoring Network **PAZA**

Station Information

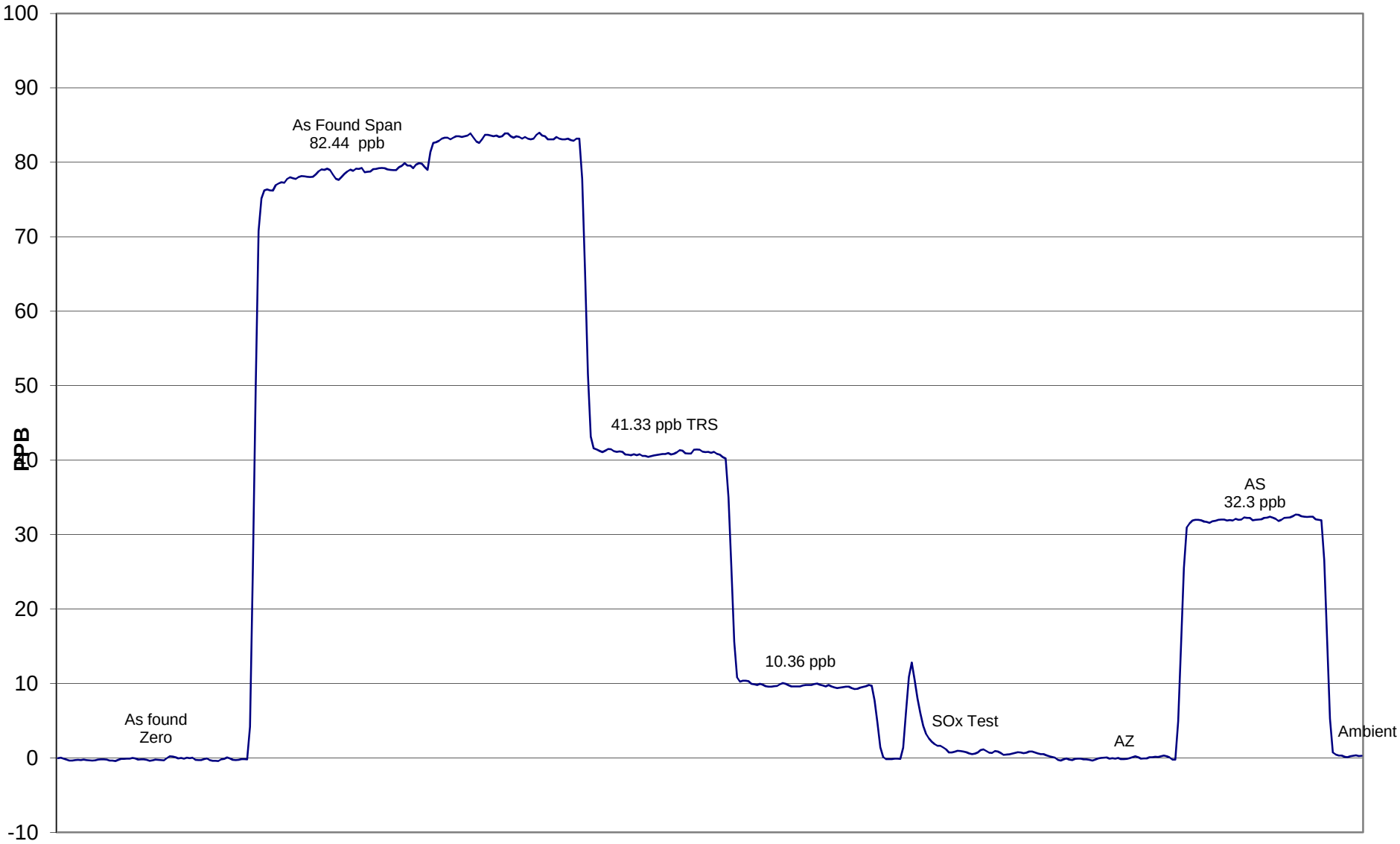
Calibration Date	June 6, 2014	Previous Calibration	May 16, 2014
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	8:55	End Time (MST)	12:43
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
82.4	83.3	0.9897	Correlation Coefficient	0.999898
41.3	41.0	1.0078		
10.4	9.6	1.0779	Slope	0.984828
			Intercept	0.606017



Smokey Heights TRS Calibration



June 6, 2014

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2014	Previous Calibration	May 12, 2014
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:50:00 PM	End Time (MST)	16:35:00 PM
Barometric Pressure	0.908 atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	2844
Cal Gas Concentration	10.8 ppm	Cal Gas Expiry Date	28/09/2012
Gas Cert Reference	FF14871		
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.009327	Calculated slope	0.995405
Calculated intercept	-0.308235	Calculated intercept	0.219002
	-0.308235		
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.7		2.7	
Coefficient	1.042		1.042	
PMT	-767.8	V	-767.8	V
UV Lamp Voltage	1059	V	1060	V
Chamber Temp	45	Deg C	45	Deg C
Pressure	665.5	mm Hg	662.8	mm Hg
Sample Flow	0.483	LPM	0.481	LPM
Lamp Intensity	97	%	96	%

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)
4994	0.00	0.0	0.0	N/A
4994	39.92	85.6	85.9	0.9969
4994	19.96	43.0	42.9	1.0030
4994	9.96	21.5	21.2	1.0132
4994	0.00	0.0	0.0	As found zero
4994	39.92	85.6	85.9	As found span
			Average Correction Factor	1.0044

Calculated value of As Found Response: 86.455 ppm Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	0.2	ppb	0.3	ppb
Auto span	59.9	ppb	59.4	ppb

Notes: No adsustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

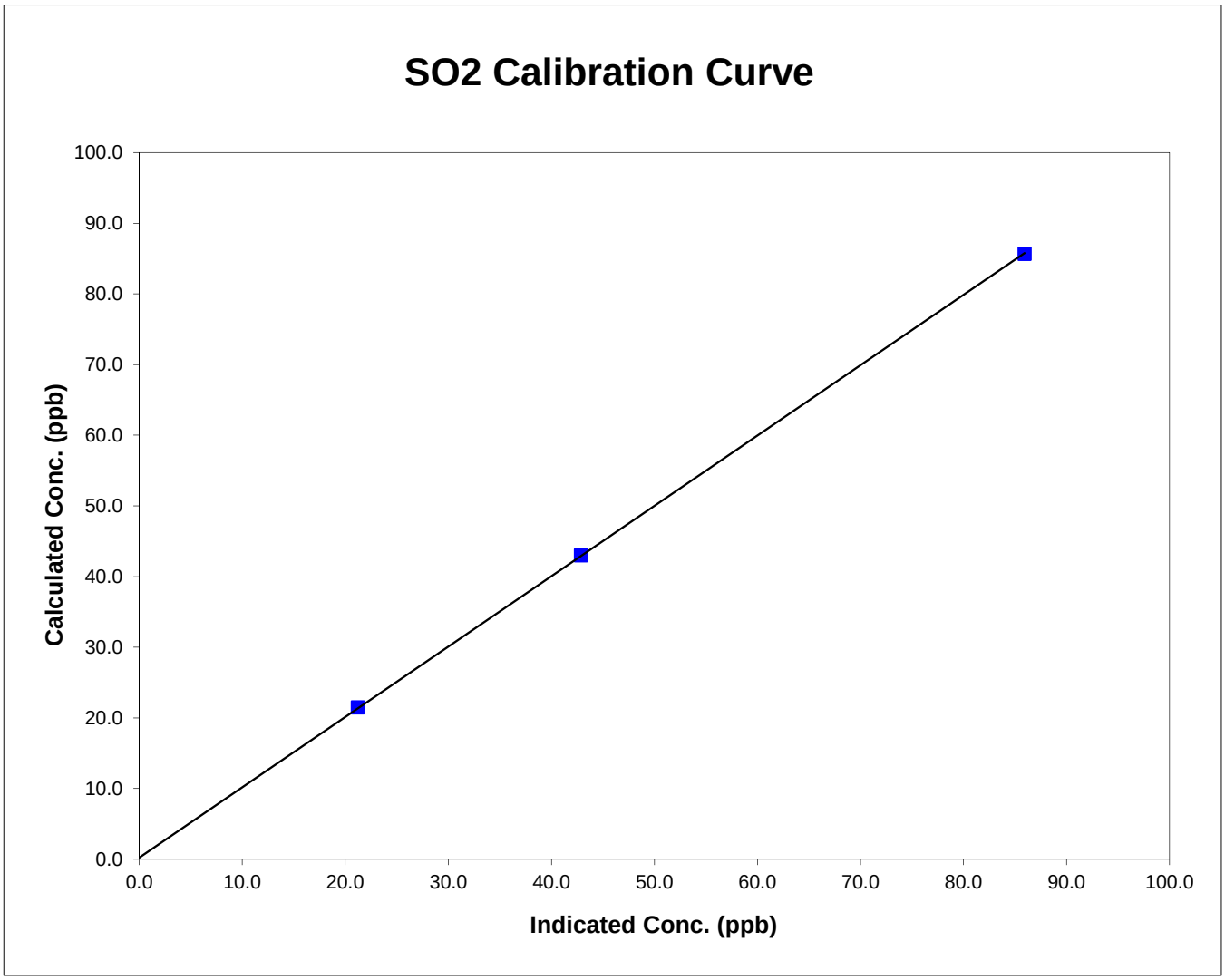
FOCUS AIR QUALITY MONITORING

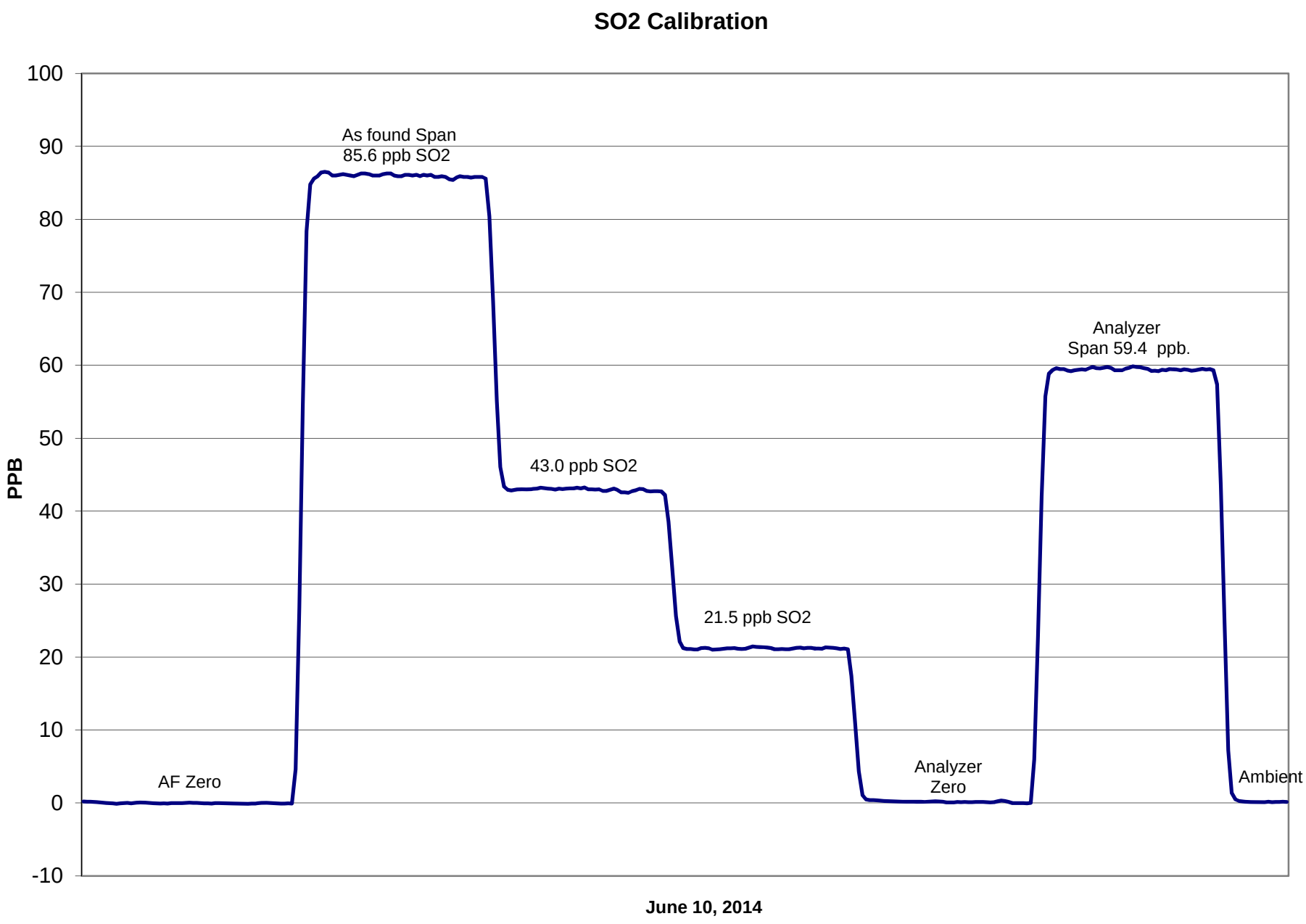
Station Information

Calibration Date	June 10, 2014	Previous Calibration	May 12, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:50:00 PM	End Time (MST)	16:35:00 PM
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
85.6	85.9	0.9969	Correlation Coefficient	0.999981
43.0	42.9	1.0030		
21.5	21.2	1.0132	Slope	0.995405
			Intercept	0.219002




SO2 Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
As found Span
85.6 ppb SO2
43.0 ppb SO2
21.5 ppb SO2
Analyzer
Span 59.4 ppb.
AF Zero
Analyzer
Zero
Ambient
June 10, 2014

Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2014	Previous Calibration	May 13, 2014
Station Number	4	Station Location	Beaverlodge

Reason: Routine Installation Removal Other:

Start Time (MST)	8:10		End Time (MST)	13:25:00 AM	
Barometric Pressure	0.904	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	2844	
NO Cal Gas Conc	52.1	ppm	Cal Gas Expiry Date	March 1, 2017	
NOx Cal Gas Conc	52.4	ppm	Cal Gas Serial #	LL105159	

DACS Information

DACS make: CR3000 DACS serial No.: 5237

Parameter		NO2	NOx	NO
Before	Data Slope	1.002286	1.001610	1.000563
	Data Offset	-0.184543	-1.983296	-1.675587
After	Data Slope	0.999131	0.998657	0.994858
	Data Offset	-0.339346	1.530935	1.915016
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

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

Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	2.8	mV	2.8	mV
NOx bkgnd	2.9	mV	3.0	mV
NO coefficient	1.002		1.027	
NOx coefficient	1.000		1.000	
NO2 conv temp	324.7	Deg C	326.3	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-740.4	mV	-740.4	mV
R Cell Press	203.4	in Hg	204.6	in Hg
Sample Flow	0.703	LPM	0.704	LPM

Notes: Span adjustment made
After span peak climing gradualy,analyzer needs new perm tube soon.

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 10, 2014 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	4995	0.00	0.0	0.0	0.0	0.1	-0.1	0.1	N/A	N/A
1	4995	39.92	415.5	413.1	2.4	415.2	414.3	0.2	1.0006	0.9971
2	4995	19.96	208.6	207.4	1.2	206.7	205.3	0.5	1.0091	1.0101
3	4995	9.93	104.0	103.4	0.6	100.9	100.4	0.3	1.0307	1.0296
AFZ	4995	0.00	0.0	0.0	0.0	0.1	-0.1	0.1	0.0000	0.0000
AFS	4995	39.92	415.5	413.1	0.8	405.0	404.4	-0.1	1.0257	1.0215
							Average Correction Factor		1.0135	1.0123

As Found Concentrations: NO_X= 403.0 NO= 402.8 As Found Percent Change NO_X= -3.0% NO= -2.5%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 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	0.1	-0.1	0.1	N/A	N/A	N/A	N/A
NO point	413.9	413.9	0.0	414.5	413.9	-0.2	0.9986	1.0000	N/A	N/A
300	413.9	105.3	308.5	414.9	105.3	309.0	0.9975	1.0000	0.9983	100.2%
200	413.9	205.8	208.0	415.2	205.8	208.5	0.9969	1.0000	0.9979	100.2%
100	413.9	306.2	107.6	415.2	306.2	108.5	0.9968	1.0000	0.9920	100.8%
					Average Correction Factor		0.9971	1.0000	0.9961	100.4%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	-0.1	-0.1	ppb	0.0	0.0	-0.1	ppb
Auto span	168.3	166.9	1.1	ppb	184.7	183.3	0.9	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

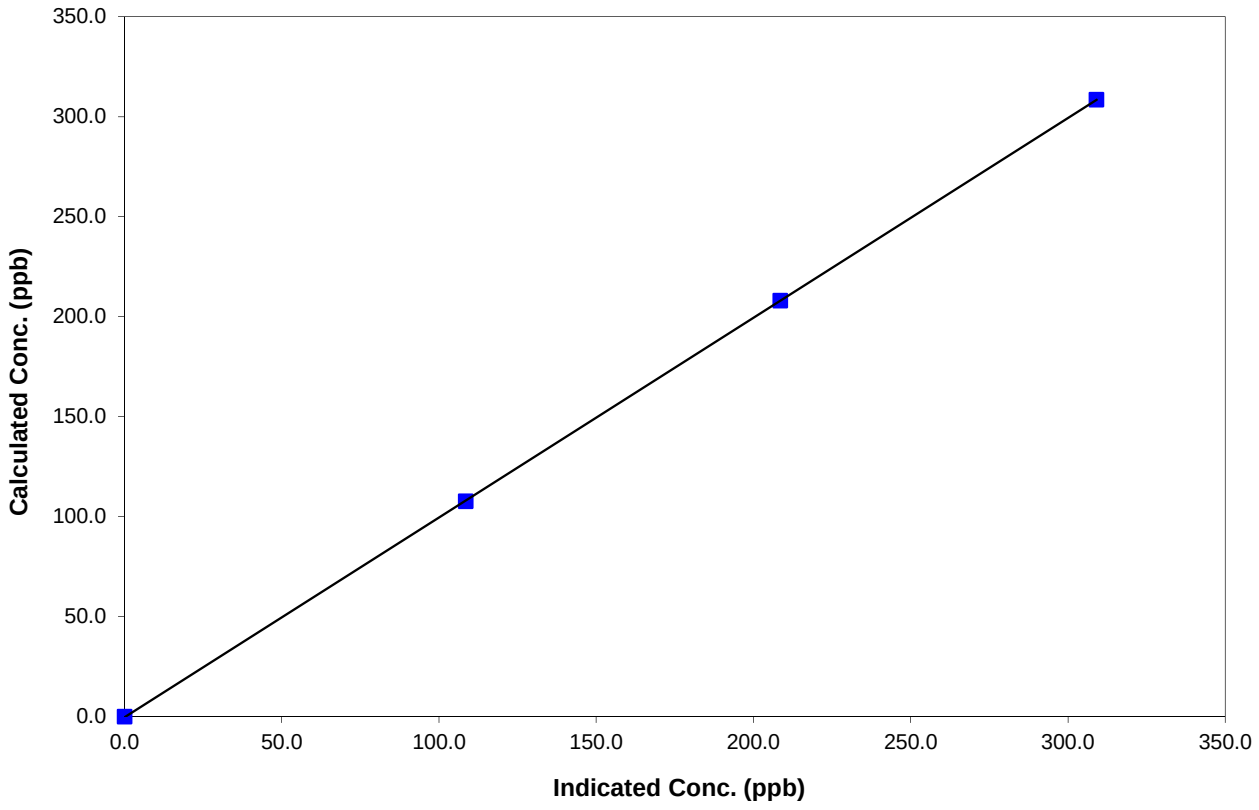
Station Information

Calibration Date	June 10, 2014	Previous Calibration	May 13, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:10	End Time (MST)	13:25:00 AM
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		
308.5	309.0	0.9983	Correlation Coefficient	0.999995
208.0	208.5	0.9979		
107.6	108.5	0.9920	Slope	0.999131
			Intercept	-0.339346

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

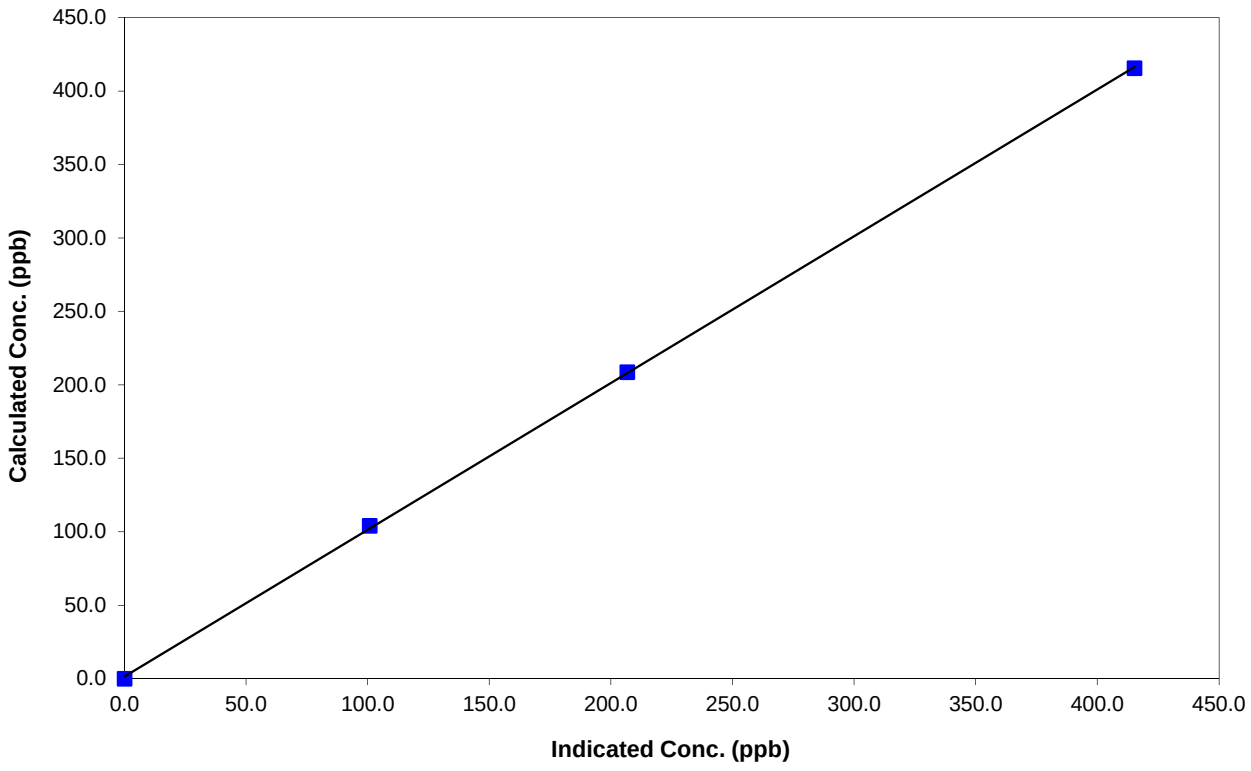
Station Information

Calibration Date	June 10, 2014	Previous Calibration	May 13, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:10	End Time (MST)	13:25:00 AM
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		
415.5	415.2	1.0006	Correlation Coefficient	0.999933
208.6	206.7	1.0091		
104.0	100.9	1.0307	Slope	0.998657
			Intercept	1.530935

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

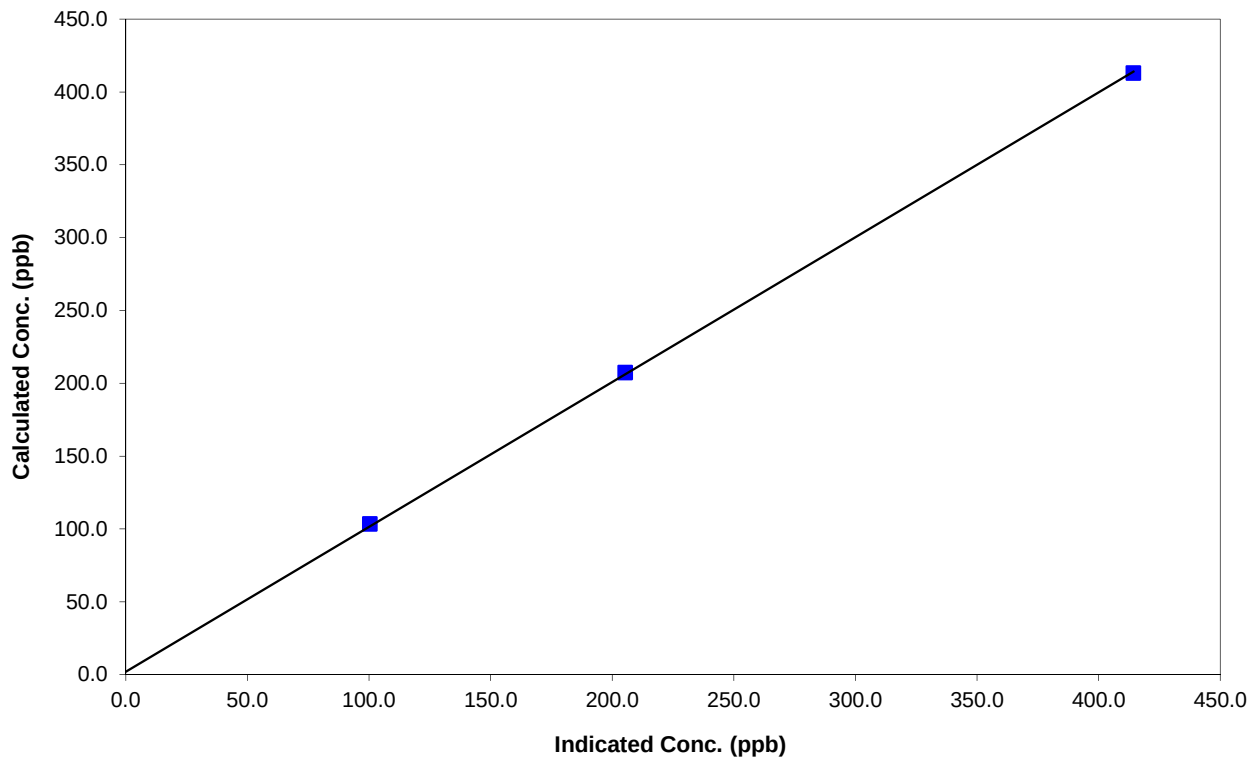
Station Information

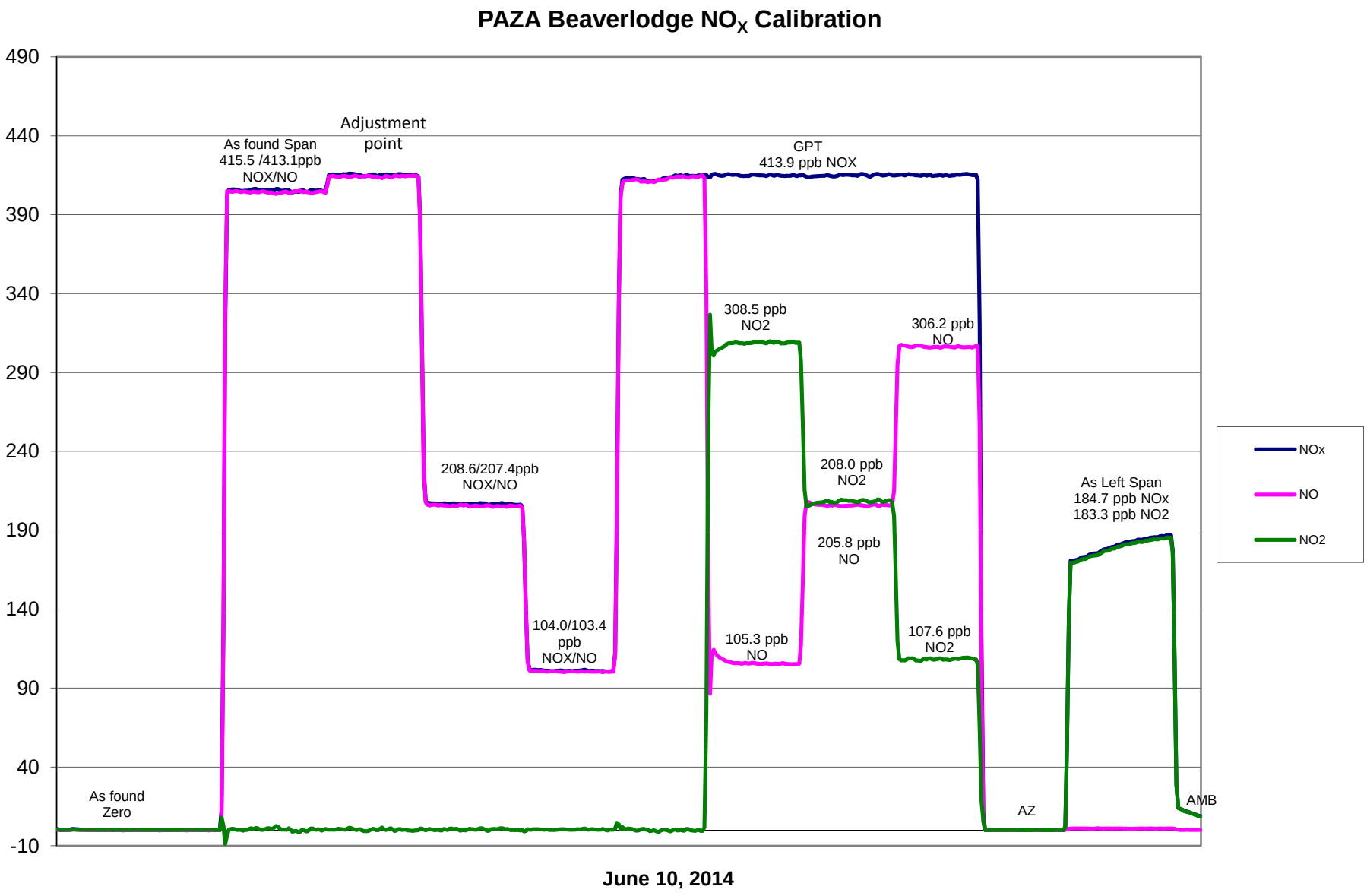
Calibration Date	June 10, 2014	Previous Calibration	May 13, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:10	End Time (MST)	13:25:00 AM
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
413.1	414.3	0.9971	Correlation Coefficient	0.999913
207.4	205.3	1.0101		
103.4	100.4	1.0296	Slope	0.994858
			Intercept	1.915016

NO Calibration Curve




PAZA Beaverlodge NOx Calibration
490
440
390
340
290
240
190
140
90
40
-10
As found Span
415.5 /413.1ppb
NOX/NO
Adjustment
point
GPT
413.9 ppb NOX
308.5 ppb
NO2
306.2 ppb
NO
208.6/207.4ppb
NOX/NO
208.0 ppb
NO2
As Left Span
184.7 ppb NOx
183.3 ppb NO2
205.8 ppb
NO
104.0/103.4
ppb
NOX/NO
105.3 ppb
NO
107.6 ppb
NO2
As found
Zero
AZ
AMB
NOx
NO
NO2
June 10, 2014

Calibration Report

Parameter **O3**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 10, 2014	Previous Calibration	May 13, 2014
Station Number	4	Station Location	Beaverlodge
Reason: Routine	Install	Removal	Other:
Start Time (MST)	12:18	End Time (MST)	15:05:00 PM
Barometric Pressure	0.904 atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.004788	Calculated slope	1.001277
Calculated intercept	-0.024794	Calculated intercept	-0.389607
Analyzer make	Teco 49i	Analyzer serial #	1136451236

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	0.00	ppb	-0.60	ppb
slope	1.028		1.028	
Lamp temp	53.8	mV	53.9	mV
Lamp Intensity A/B	83155/84265	mV	83130/84218	mV
Pressure	674.5	mm Hg	684.8	mm Hg
Flow A	0.755	LPM	0.763	LPM
Flow B	0.738	LPM	0.744	LPM

Calibration Data

Dilution air flow rate (cc/min)	Calibrator Setting	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5035	0.00	0.0	0.5	N/A
5035	0.30	308.5	308.9	0.9985
5035	0.20	208.0	207.4	1.0031
5035	0.10	107.6	108.0	0.9961
5035	0.00	0.0	0.1	As found zero
5035	0.30	308.5	308.9	As found span
			Average Correction Factor	0.9992

Calculated value of As Found Response: 310.3 ppm Percent Change of As Found: 0.6%

	before calibration		after calibration	
Auto zero	-1.2	ppb	0.2	ppb
Auto span	277.9	ppb	273.0	ppb

Notes: Slight zero adjustment made. From 0.8 ppb to 0.0 ppb.
Because of the MDS offset,zero after adjustment look higher than it was before adjustment

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **O3**

Air Monitoring Network **PAZA**

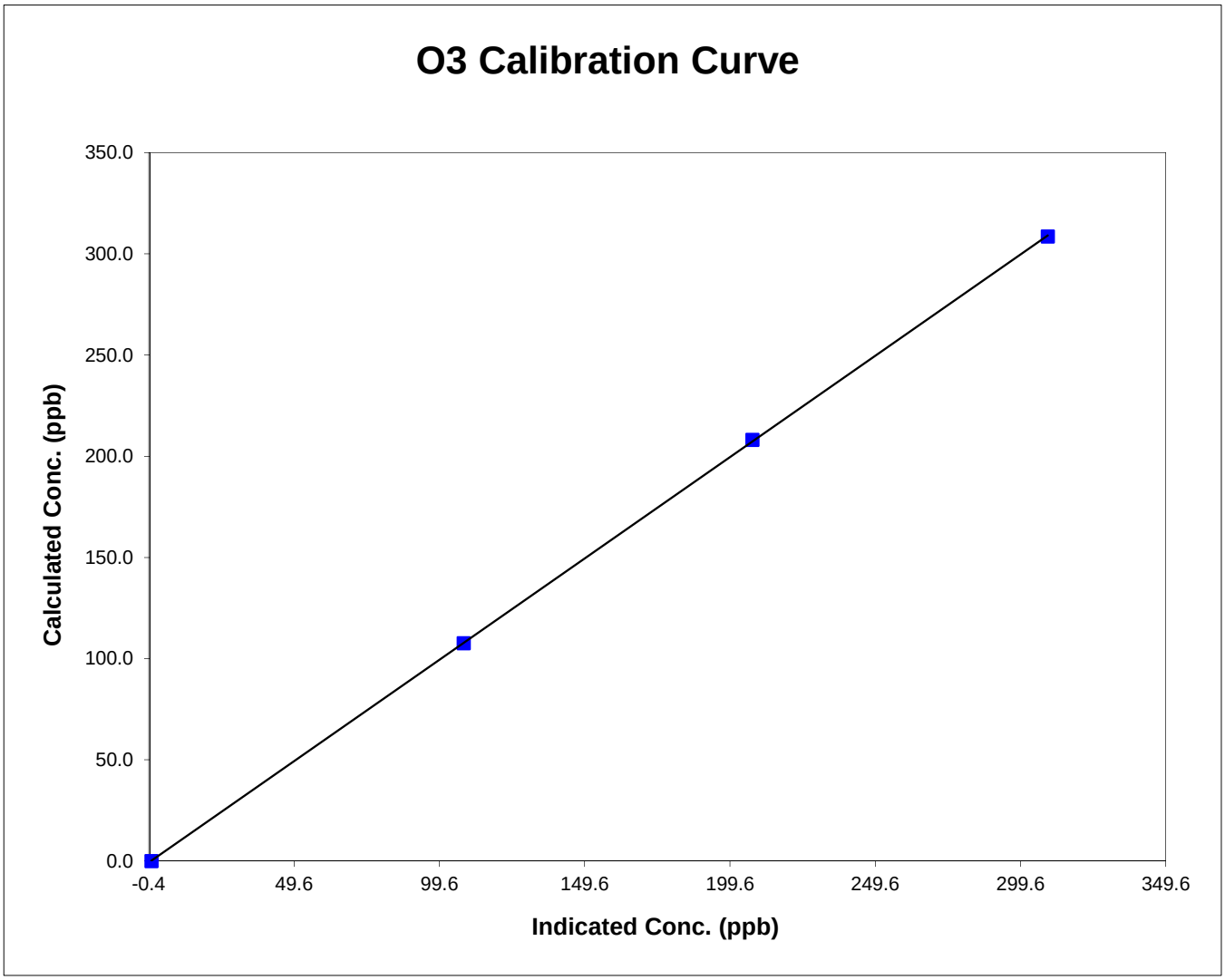
FOCUS AIR QUALITY MONITORING

Station Information

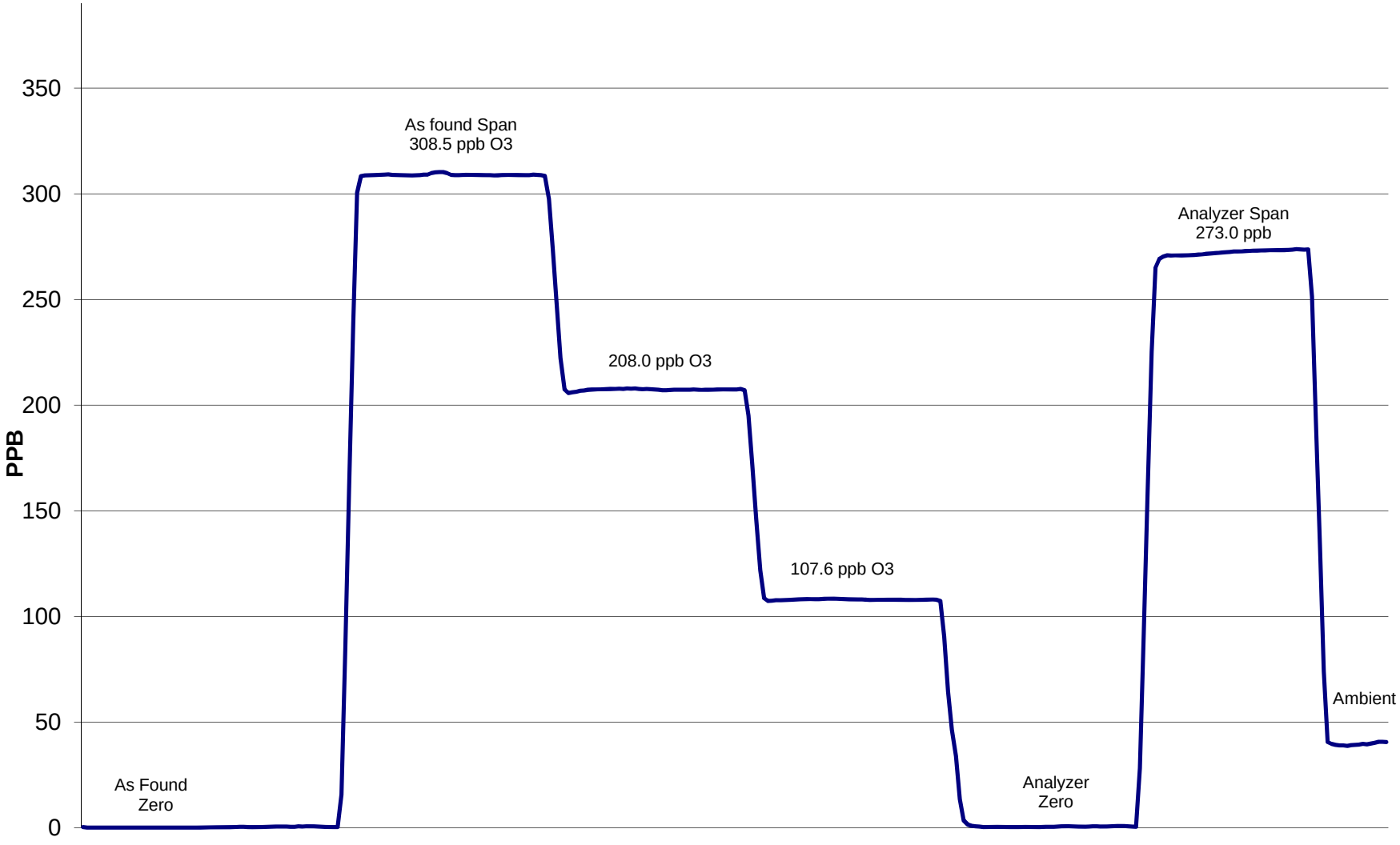
Calibration Date	June 10, 2014	Previous Calibration	May 13, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:18	End Time (MST)	15:05:00 PM
Analyzer make/model	Teco 49i	Analyzer serial #	1136451236

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	NA		
308.5	308.9	0.9985	Correlation Coefficient	0.999984
208.0	207.4	1.0031		
107.6	108.0	0.9961	Slope	1.001277
			Intercept	-0.389607



O3 Calibration



June 10, 2014

FDMS TEOM PM2.5 AUDIT

FOCUS AIR QUALITY MONITORING

STATION: **BeaverLodge**

LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen

DATE: 24-Jun-14

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	1.050
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	26-Mar-14
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	0.00	-0.03
PUMP OFF	0.00	0.00
NET	0.00	-0.03
LIMITS	*<0.15*	*<0.60*

		Ambient Temp. (^{0} C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
	SET POINT (S)	na	na	15818	13.67	3.00
	INDICATED (I)	20.2	0.908		13.68	2.99
As Found Data	MEASURED (AF)	20.4	0.911		13.30	3.02
Adjusted Data	MEASURED (M)	20.4	0.911	15968	13.66	3.03
	DIFFERENCE (M-I)	0.2	0.003	0.9%	-0.02	0.04
	LIMITS	*± 2 ^{0} C*	*± 0.005 atm*	*± 2.5 %*	*± 1.0 L/min*	*± 0.2 L/min*

Ko Audit Filter data *Weight:* 0.11251 *Serial #:* *CVK 3316*

COMMENTS:

Sample heads were cleaned.

Base leak check: Main: 0.00 Aux: 0.03

Referense leak check: Main: 0.00 Aux: -0.01

See service report.

Sample Head Inspection Or Cleaning: TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACI

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 2 2014	Previous Calibration	May 15 2014
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	12:50	End Time (MST)	14:35:00 PM
Barometric Pressure	702.00 mmHg	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	2844
Cal Gas Concentration	51.5 ppm	Cal Gas Exp Date	February 25, 2021
Gas Cylinder Num.	LL105159		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.002425	Calculated slope	0.994556
Calculated intercept	-1.950266	Calculated intercept	1.499521
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	59.8		64.5	
Coefficient	0.996		1.073	
UV Lamp Voltage	834	LPM	833	LPM
Chamber Temp	44.4	V	43.9	V
Perm Gas Temp	37	C	37	C
Pressure	604.3	in Hg	603.5	in Hg
Sample Flow	0.534	LPM	0.526	LPM
Lamp Intensity	41804	Hz	41878	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)
4995	0.00	0.0	0.0	N/A
4995	39.91	408.2	409.9	0.9959
4995	19.97	205.1	203.4	1.0084
4995	9.95	102.4	100.3	1.0210
4995	0.00	0.0	0.0	As found zero
4995	39.91	408.2	379.5	As found span
			Average Correction Factor	1.0084

Calculated value of As Found Response: 378.4 ppm Percent Change of As Found: 7.3%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	150.2	ppm	136.3	ppm

Notes: Internal span box adjustment and maintenance made
Span adjustment made 80% point.

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

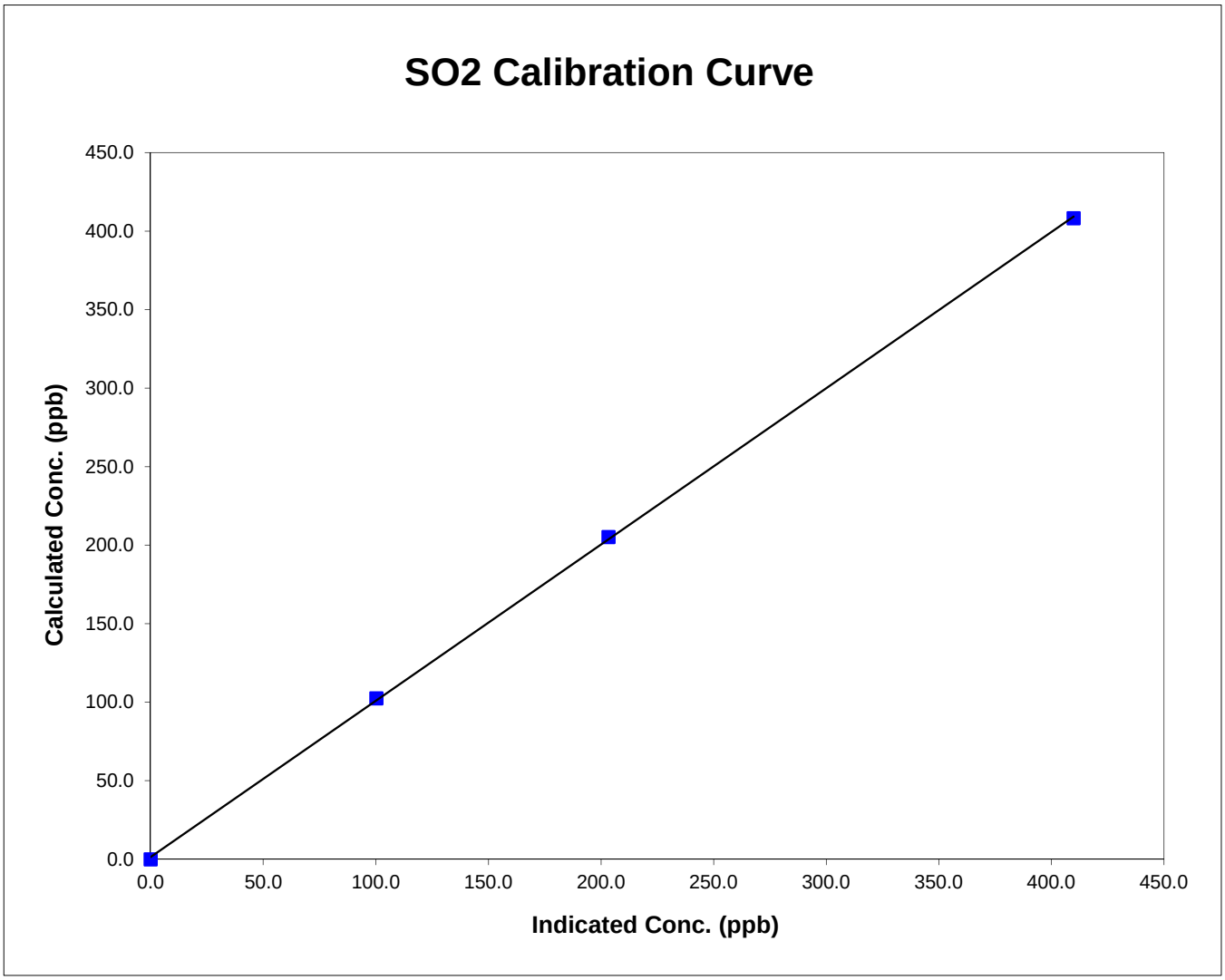
FOCUS AIR QUALITY MONITORING

Station Information

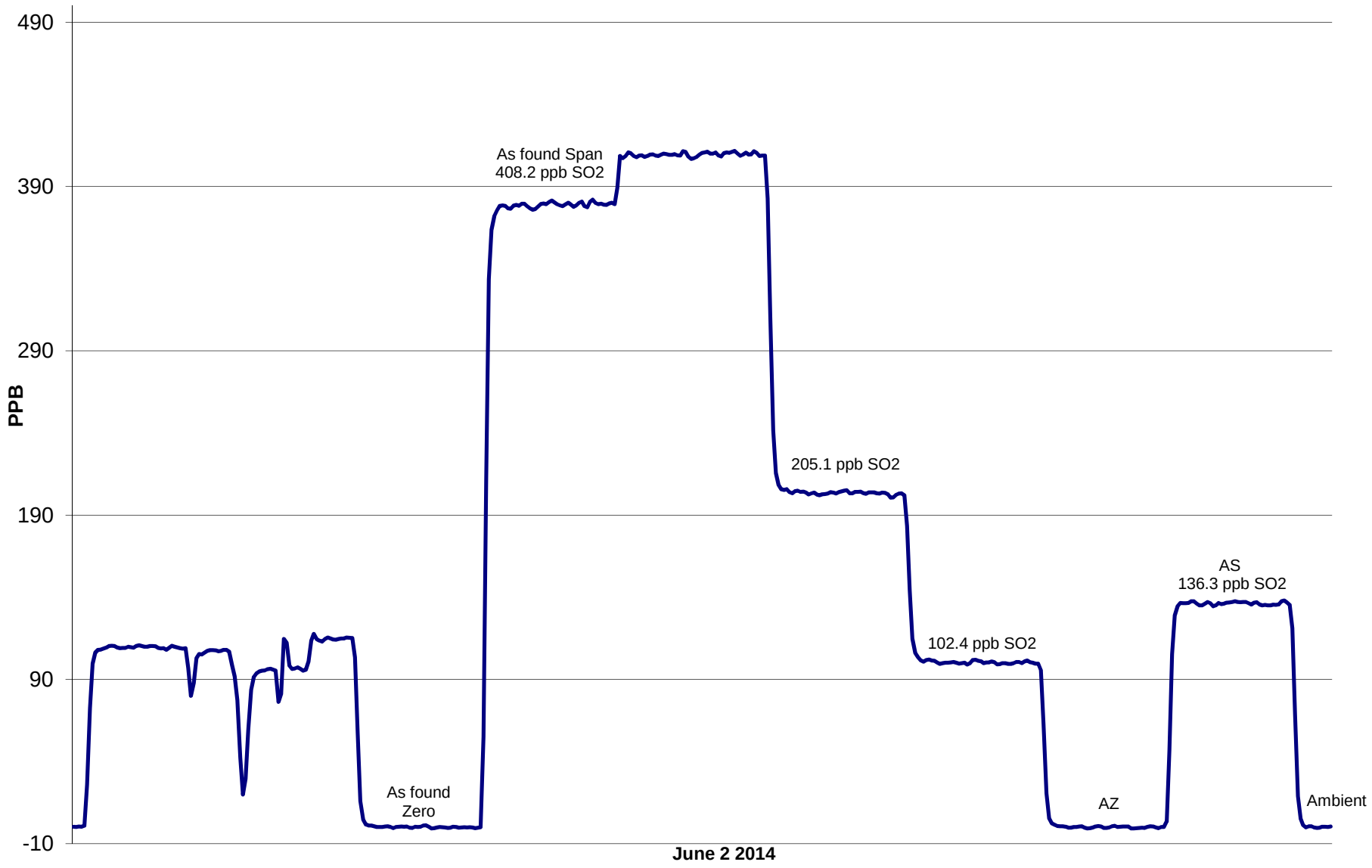
Calibration Date	June 2 2014	Previous Calibration	May 15 2014
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:50	End Time (MST)	14:35:00 PM
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
408.2	409.9	0.9959	Correlation Coefficient	0.999932
205.1	203.4	1.0084		
102.4	100.3	1.0210	Slope	0.994556
			Intercept	1.499521



SO2 Calibration



Calibration Report

Parameter **H2S**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 2 2014	Previous Calibration	May 15 2014
Station Number	6	Station Location	Valleyview
Reason: Routine	Install	Removal	Other:
Start Time (MST)	9:05	End Time (MST)	12:35
Barometric Pressure	702.00 mm	Station Temperature	23.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	10.4 ppm	Cal Gas Expiry Date	July 03 2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.963324	Calculated slope	0.989497
Calculated intercept	0.103512	Calculated intercept	0.375073
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	7.9	ppb	7.9	ppb
Coefficient	0.915		0.915	
Lamp Voltage	787	V	788	V
Chamber Temp	45.1	c	45.0	c
Perm Oven Temp	45	c	45	c
Pressure	582.80	mm Hg	579.30	mm Hg
Sample Flow	0.398	ccm	0.397	lpm
Lamp Intensity	91	%	91	%

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)
4995	0.00	0.0	-0.3	N/A
4997	39.91	82.4	83.0	0.9927
4997	19.94	41.3	41.2	1.0040
8996	8.96	10.3	10.1	1.0257
4997	9.97	102.5	2.8	Sox Test
4997	0.00	0.0	-0.3	As found zero
4997	39.93	82.4	83.0	As found span
			Average Correction Factor	1.0075

Calculated value of As Found Response: 80.33 ppm Percent Change of As Found: 2.6%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.3	ppm
Auto span	67.3	ppm	65.8	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PAZA**

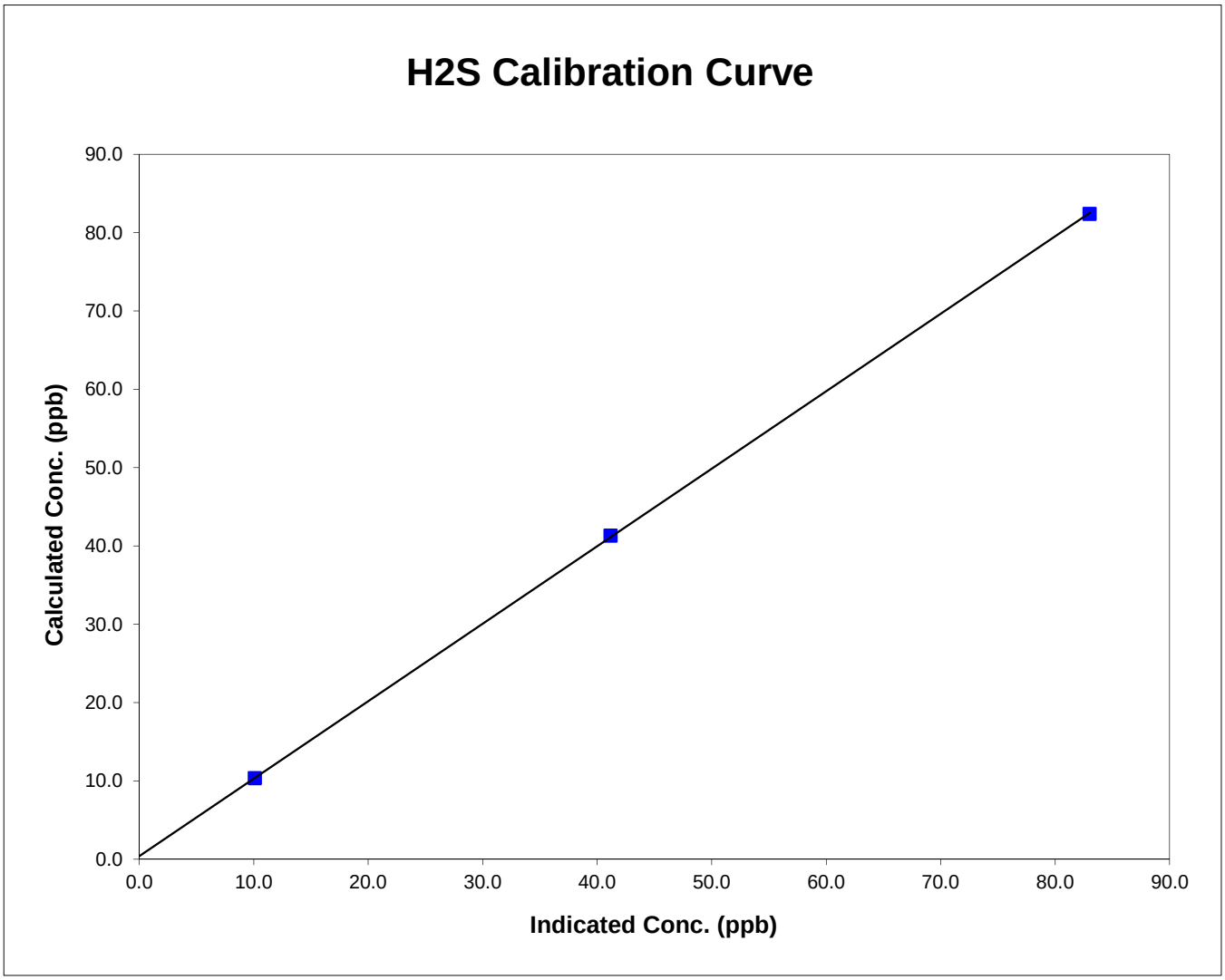
FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 2 2014	Previous Calibration	May 15 2014
Station Number	6	Station Location	Valleyview
Start Time (MST)	9:05	End Time (MST)	12:35
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

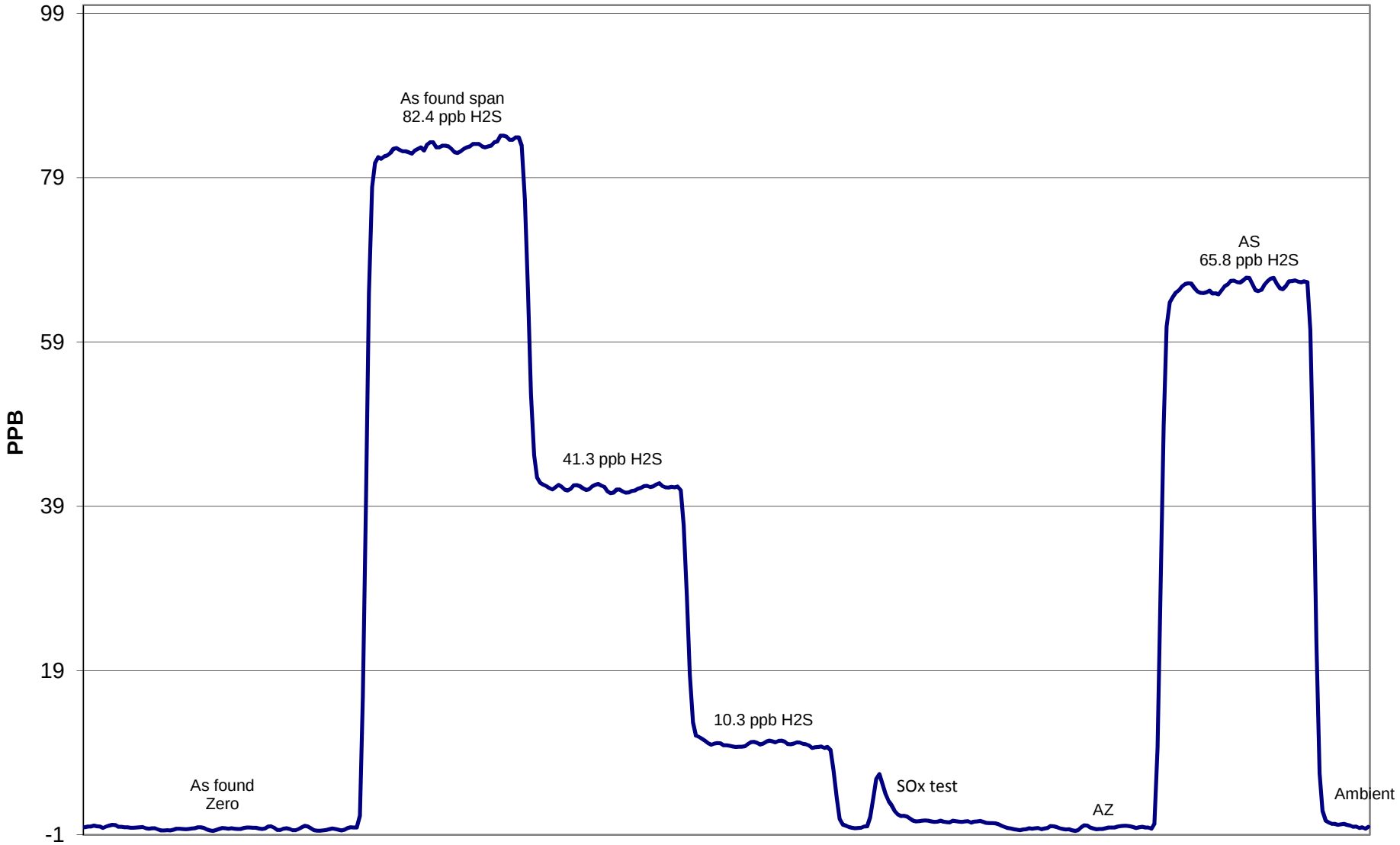
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
82.4	83.0	0.9927	Correlation Coefficient	0.999982
41.3	41.2	1.0040		
10.3	10.1	1.0257	Slope	0.989497
			Intercept	0.375073



10.4 ppb H2S

H2S Calibration



June 2 2014

Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2014	Previous Calibration	May 22, 2014
Station Number	10	Station Location	Reno
Reason: Routine	Install	Removal	Other:
Start Time (MST)	7:40	End Time (MST)	10:40
Barometric Pressure	0.926 Atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	01/03/2017
Gas Cert Reference	LL105159		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	2
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.999064	Calculated slope	0.987662
Calculated intercept	2.333932	Calculated intercept	2.196273
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	21.2		21.2	
Coefficient	1.059		1.059	
UV Lamp Voltage	864	V	864	V
Chamber Temp	44.9	C	44.9	C
Perm Gas Temp	45	C	45	C
Pressure	671.8	mm Hg	672	mm Hg
Sample Flow	0.465	LPM	0.465	LPM
Lamp Intesity	30663	Hz	30623	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)
4995	0.00	0.0	-0.1	N/A
4995	39.93	394.9	398.7	0.9906
4995	19.97	198.3	197.4	1.0044
4995	9.97	99.2	96.1	1.0320
4995	0.00	0.0	-0.1	As found zero
4995	39.93	394.9	398.7	As found span
			Average Correction Factor	1.0090

Calculated value of As Found Response: 400.747 ppm Percent Change of As Found: -1.5%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	259.1	ppm	240.9	ppm

Notes: No adjustments made

Calibration Performed By: Grover Christiansen,Dmytro Dolotii.

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

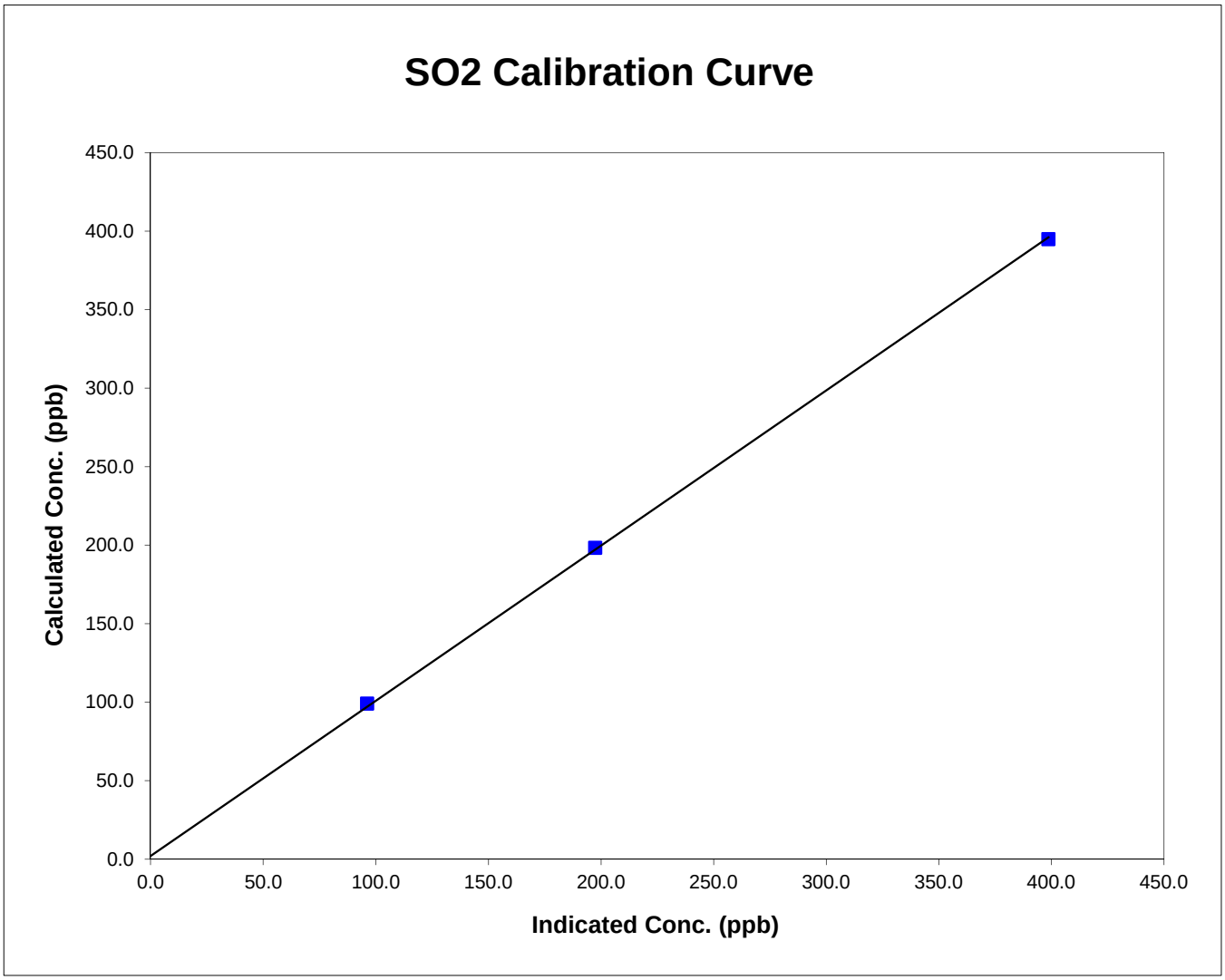
FOCUS AIR QUALITY MONITORING

Station Information

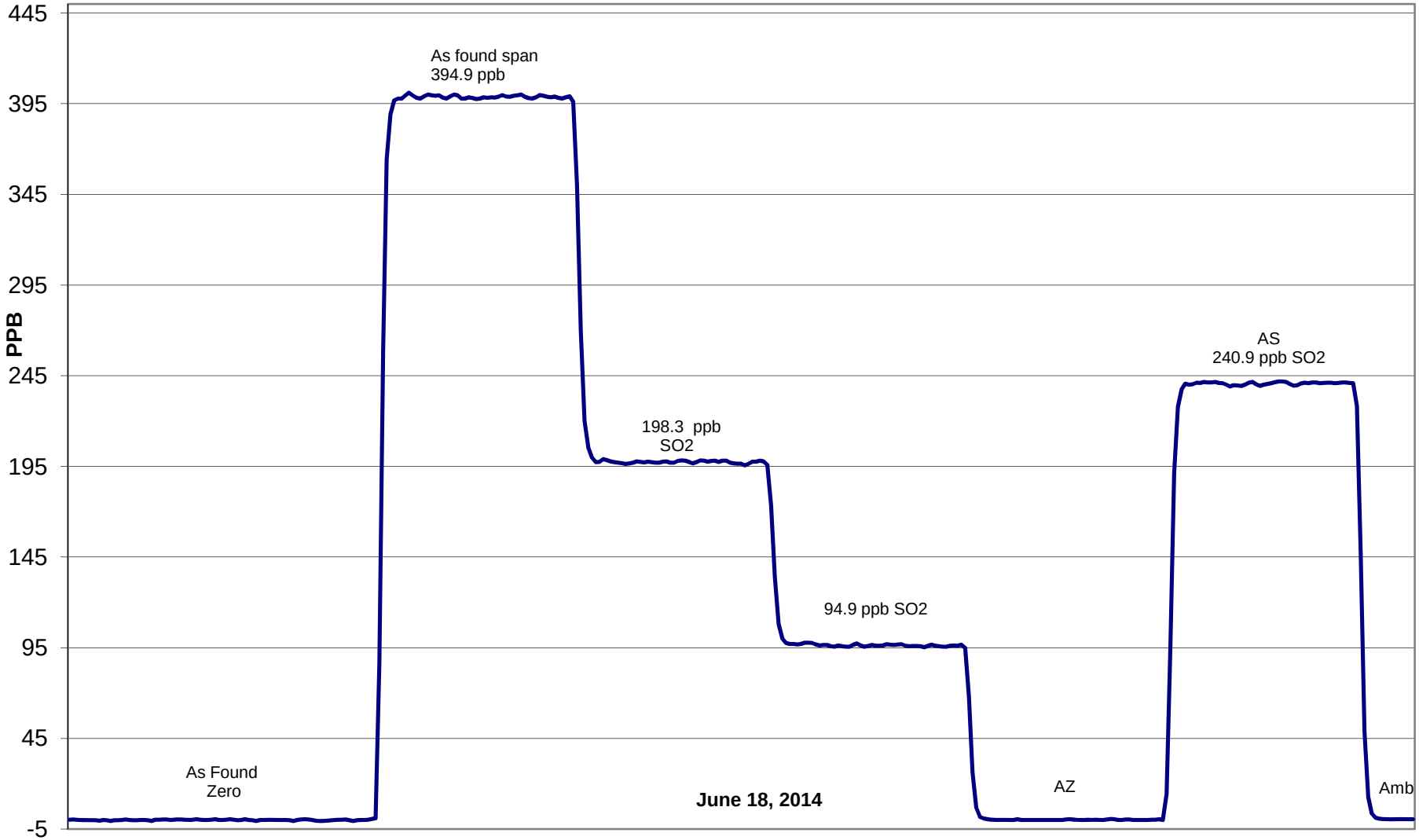
Calibration Date	June 18, 2014	Previous Calibration	May 22, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	7:40	End Time (MST)	10:40
Analyzer make/model	TEI 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
394.9	398.7	0.9906	Correlation Coefficient	0.999870
198.3	197.4	1.0044		
99.2	96.1	1.0320	Slope	0.987662
			Intercept	2.196273



SO2 Calibration



Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2014	Previous Calibration	May 22, 2014
Station Number	10	Station Location	Reno

Reason: Routine Install Removal Other:

Start Time (MST)	7:40		End Time (MST)	12:30	
Barometric Pressure	0.926	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3016	
NO Cal Gas Conc	52.1	ppm	Cal Gas Expiry Date	March 12, 2014	
NOx Cal Gas Conc	52.4	ppm	Cal Gas Serial #	LL105159	

DACS Information

DACS make CR3000 DACS serial No. 5407

Parameter		NO2	NOx	NO
Before	Data Slope	1.002160	0.997785	0.998063
	Data Offset	0.218324	1.315684	1.004530
After	Data Slope	1.001530	1.006212	1.004288
	Data Offset	0.163782	1.473001	1.374317
Channel #		5	3	4
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model TEI 42i Analyzer serial # 0701120011

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	6.1	mV	6.1	mV
NOx bkgnd	6.3	mV	6.3	mV
NO coefficient	1.077		1.077	
NOx coefficient	0.999		0.999	
NO2 conv temp	323.7	Deg C	323.7	Deg C
Cooler Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	845.8	mV	846.2	mV
R Cell Press	202.0	in Hg	201.7	in Hg
Sample Flow	0.704	ccm	0.706	ccm

NOTES: No adjustments made

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 18, 2014 Station Location: Reno

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	4995	0.00	0.0	0.0	0.0	0.2	0.2	0.1	N/A	N/A
1	4995	39.93	415.6	413.2	2.4	412.3	410.8	-0.1	1.0079	1.0058
2	4995	19.97	208.7	207.5	1.2	205.2	204.4	0.0	1.0168	1.0148
3	4995	9.97	104.4	103.8	0.6	100.6	100.4	0.3	1.0378	1.0336
AFZ	4995	0.00	0.0	0.0	0.0	0.2	0.2	0.1	0.0000	0.0000
AFS	4995	39.93	415.6	413.2	2.4	412.3	410.8	-0.1	1.0079	1.0058
							Average Correction Factor		1.0209	1.0181

As Found Concentrations: NO_X= 413.4 NO= 411.6 As Found Percent Change NO_X= -0.5% NO= -0.4%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.2	0.2	0.0	0.2	0.2	0.1	N/A	N/A	N/A	N/A
NO point	410.7	410.7	0.0	412.2	410.7	-0.5	0.9963	1.0000	N/A	N/A
300	410.7	104.7	306.0	411.8	104.7	305.5	0.9974	1.0000	1.0014	99.9%
200	410.7	203.8	206.9	412.2	203.8	206.3	0.9964	1.0000	1.0027	99.7%
100	410.7	302.7	108.0	411.9	302.7	107.3	0.9971	1.0000	1.0067	99.3%
					Average Correction Factor		0.9969	1.0000	1.0036	99.6%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.8	0.9	0.0	ppb	0.2	0.1	0.3	ppb
Auto span	166.3	164.3	1.4	ppb	167.6	165.5	1.4	ppb

Calibration Performed By: Grover Christiansen, Dmytro Dolotii.

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

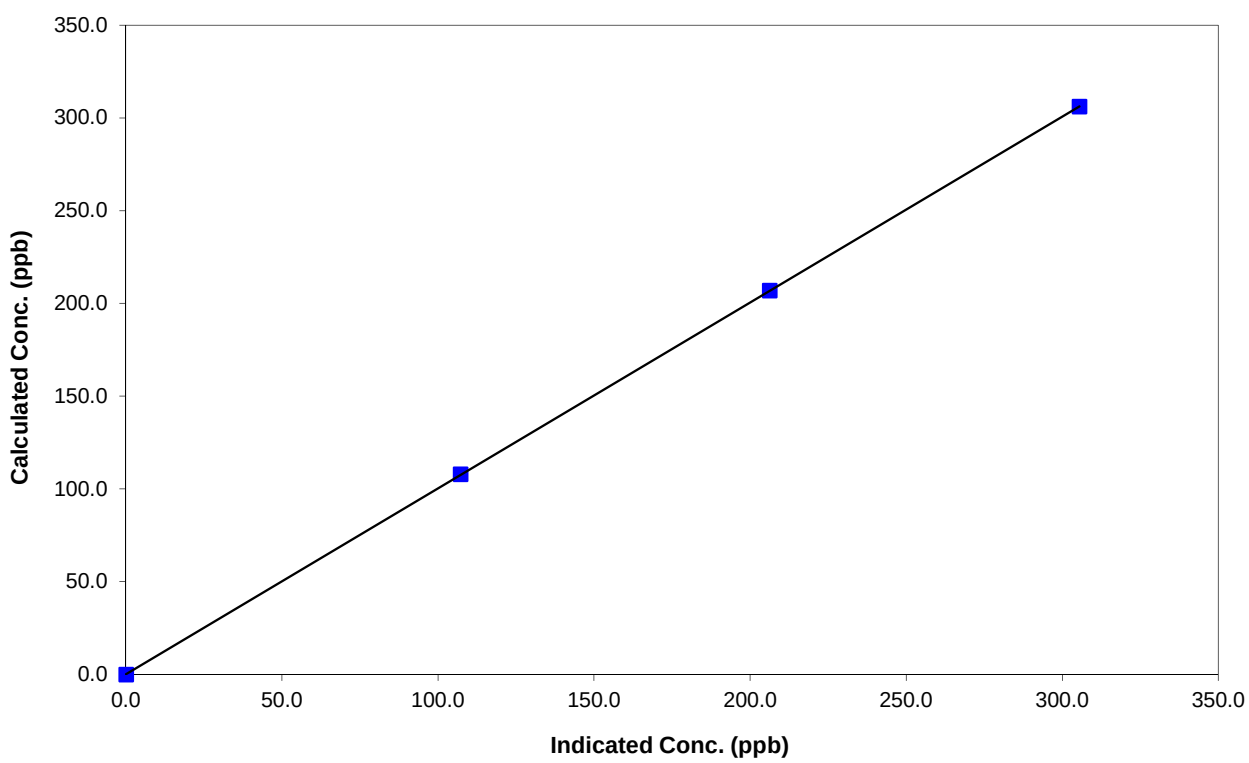
Station Information

Calibration Date	June 18, 2014	Previous Calibration	May 22, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	7:40	End Time (MST)	12:30
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
306.0	305.5	1.0014	Correlation Coefficient	0.999995
206.9	206.3	1.0027		
108.0	107.3	1.0067	Slope	1.001530
			Intercept	0.163782

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

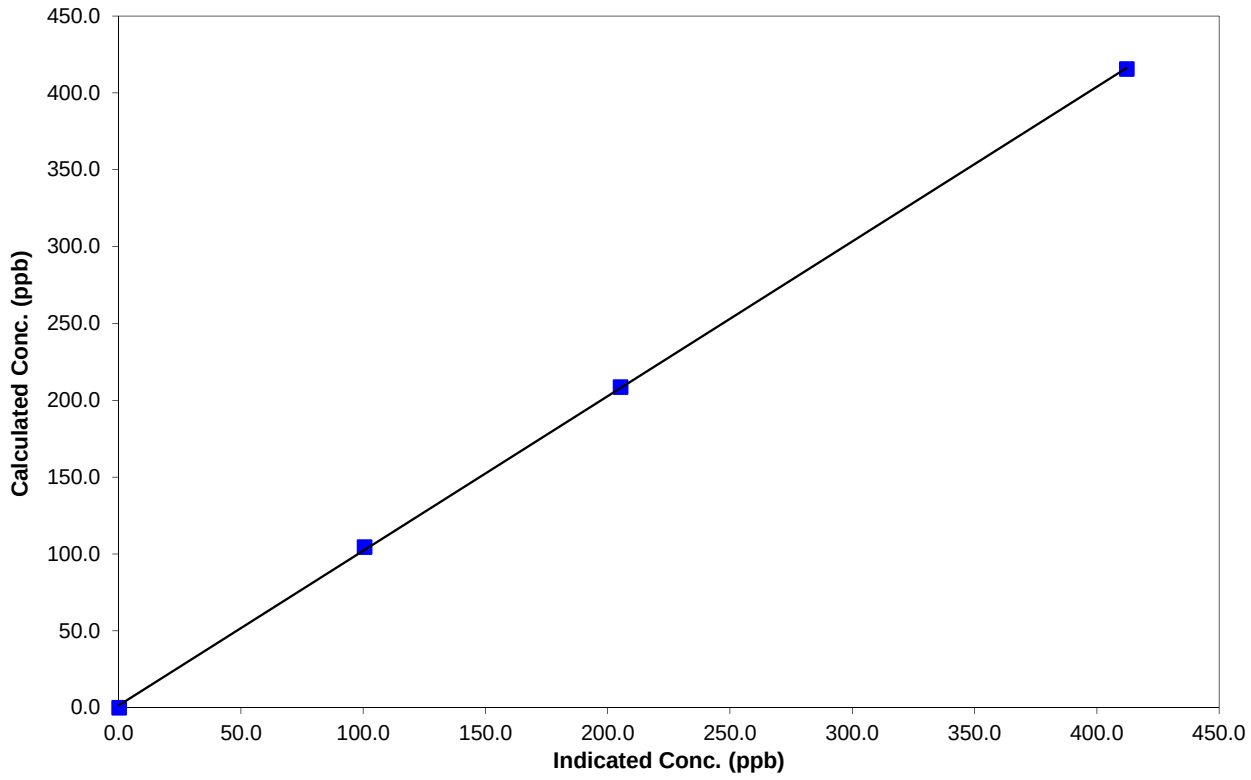
Station Information

Calibration Date	June 18, 2014	Previous Calibration	May 22, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	7:40	End Time (MST)	12:30
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
415.6	412.3	1.0079	Correlation Coefficient	0.999929
208.7	205.2	1.0168		
104.4	100.6	1.0378	Slope	1.006212
			Intercept	1.473001

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

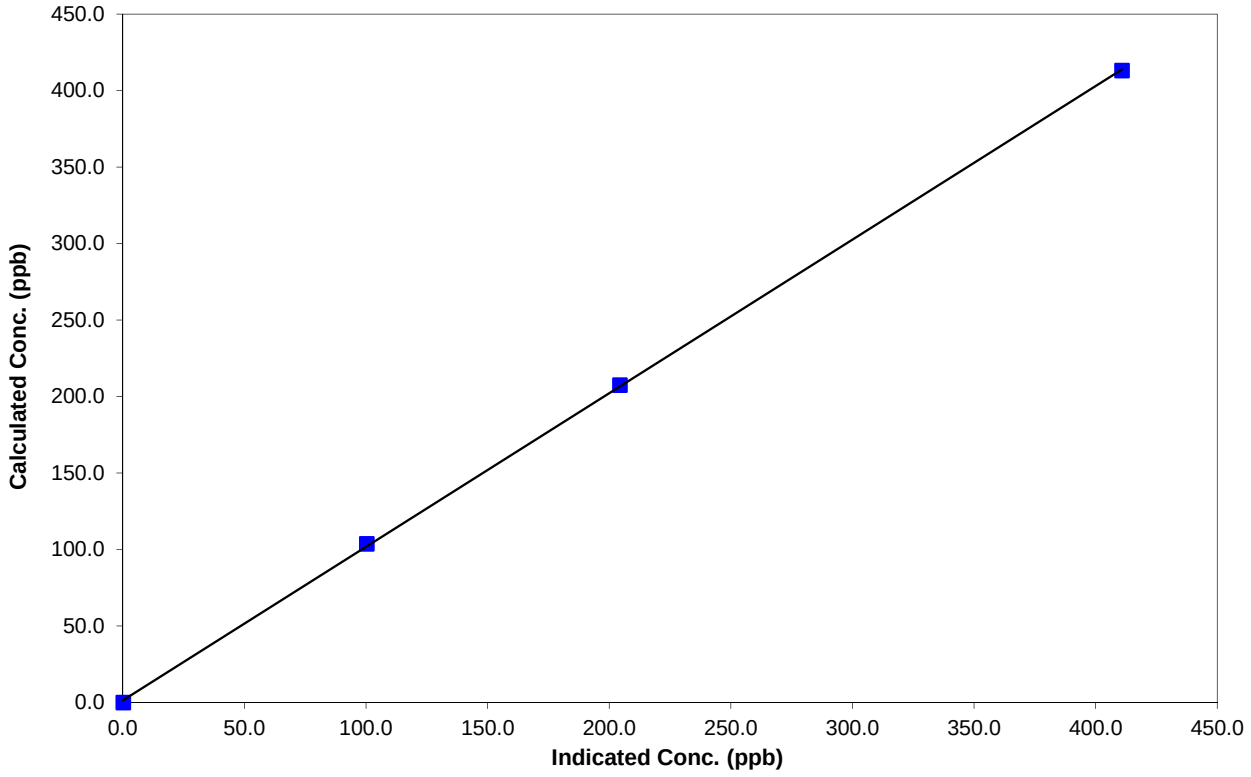
Station Information

Calibration Date	June 18, 2014	Previous Calibration	May 22, 2014
Station Number	10	Station Location	Reno
Start Time (MST)	7:40	End Time (MST)	12:30
Analyzer make	TEI 42i	Analyzer serial #	0701120011

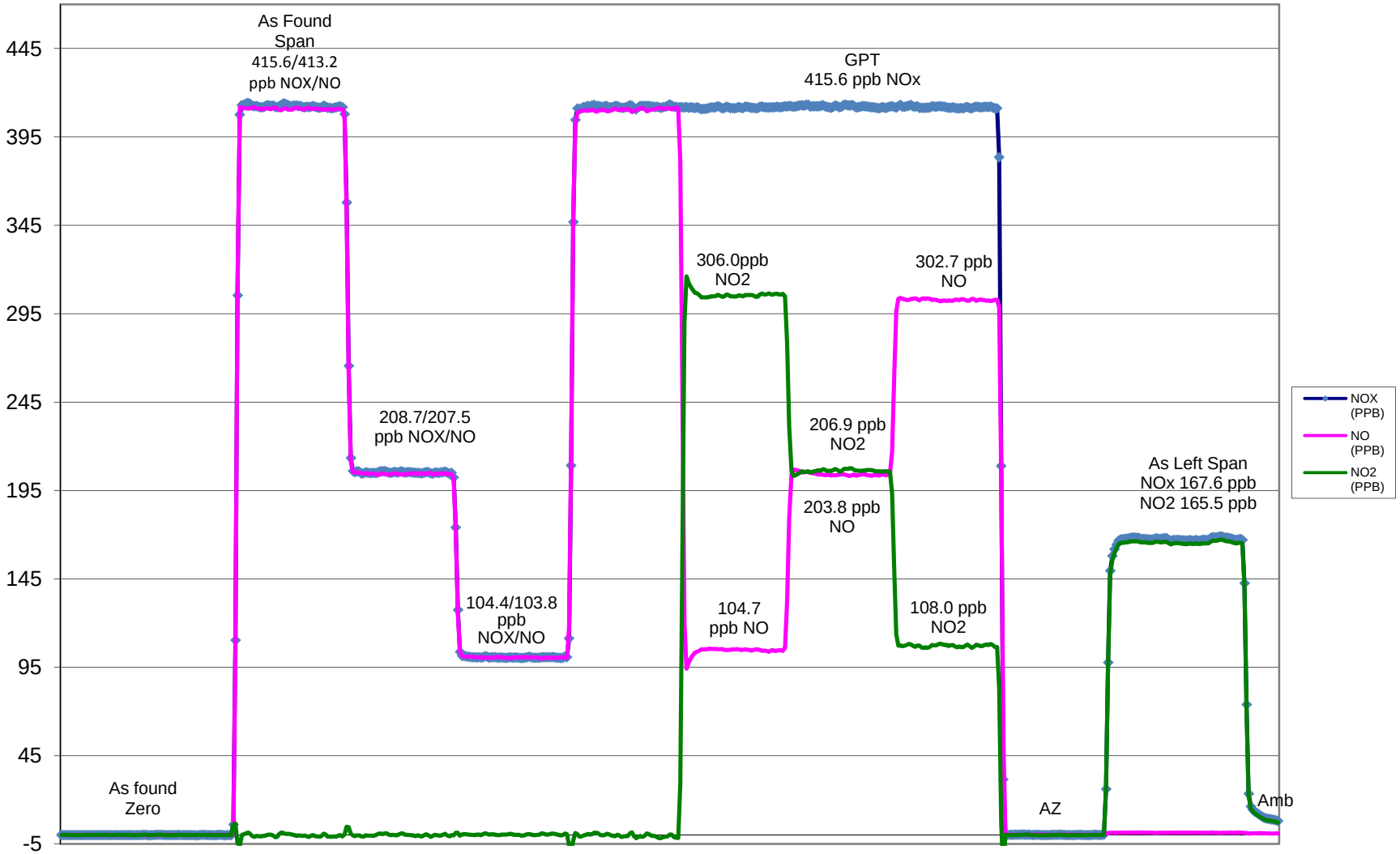
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
413.2	410.8	1.0058	Correlation Coefficient	0.999934
207.5	204.4	1.0148		
103.8	100.4	1.0336	Slope	1.004288
			Intercept	1.374317

NO Calibration Curve



PAZA Reno NO_X Calibration



June 18, 2014

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 18 2014	Previous Calibration	May 22 2014
Station Number	10	Station Location	Reno
Reason: Routine	Install	Removal remove	Other:
Start Time (MST)	11:09	End Time (MST)	13:35:00 PM
Barometric Pressure	0.926 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	1.008064	Calculated slope	0.972336
Calculated intercept	1.121873	Calculated intercept	0.418778
Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	1.007		1.007	
Cell A intensity	101710	Hz	101702	Hz
Cell B intensity	98337	Hz	98330	Hz
Pressure	667.40	in Hg	668.10	in Hg
CellA Flow	0.696	ccm	0.702	ccm
Cell B Flow	0.692	cmm	0.696	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)
5035	0.00	0.0	0.2	N/A
5035	0.30	306.0	314.9	0.9717
5035	0.20	206.9	211.8	0.9770
5035	0.10	108.0	109.9	0.9823
5035	0.00	0.0	0.2	As found zero
5035	0.30	307.0	314.9	As found span
			Average Correction Factor	0.9770

Calculated value of As Found Response: 318.4 ppm Percent Change of As Found: 3.7%

	before calibration		after calibration	
Auto zero	-0.1	ppb	0.6	ppb
Auto span	403.2	ppb	425.6	ppb

Notes: No adjustments made

Calibration Performed By: Grover Christiansen, Dmytro Dolotii.

Calibration Summary

Parameter **O3**

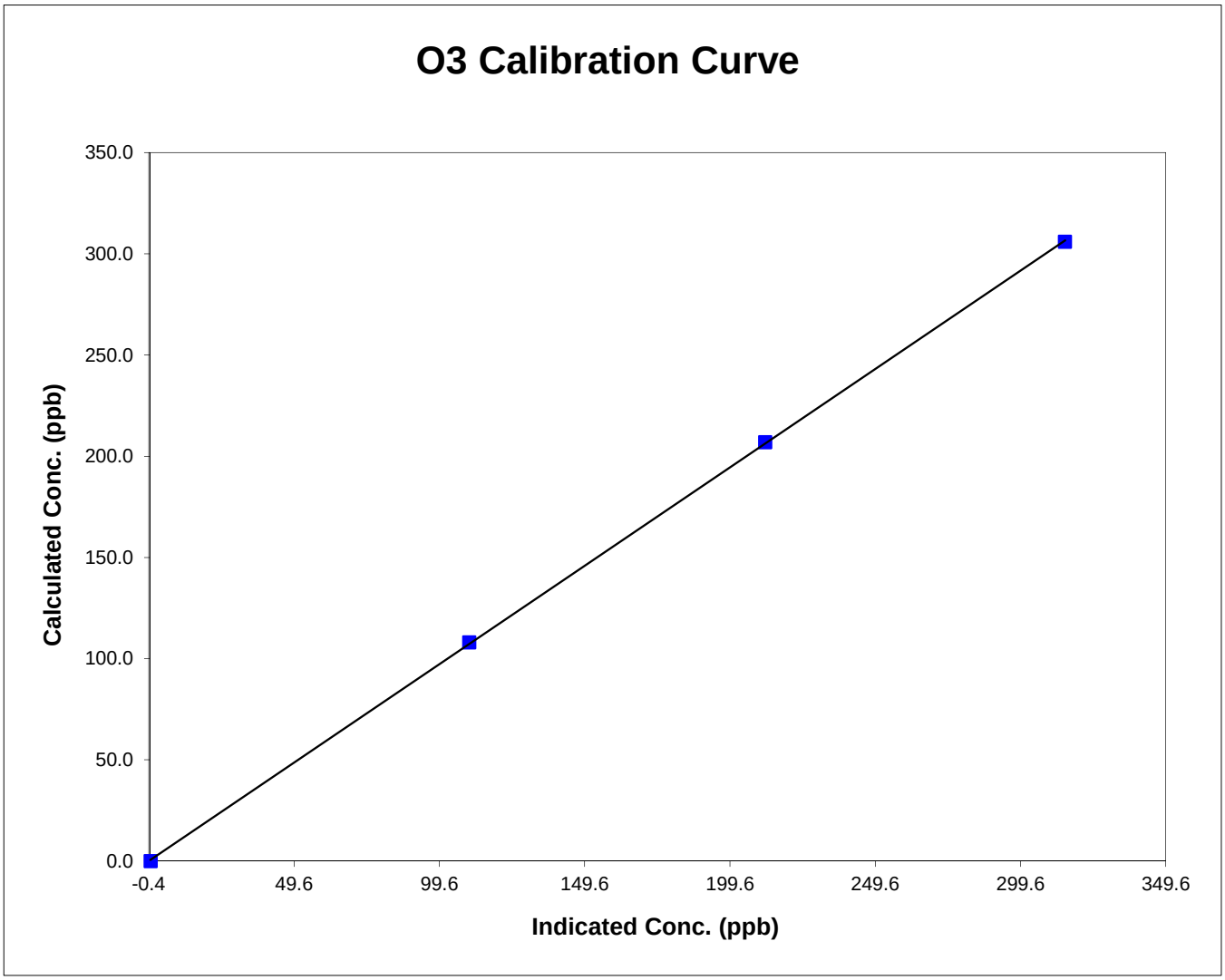
Air Monitoring Network **PAZA**

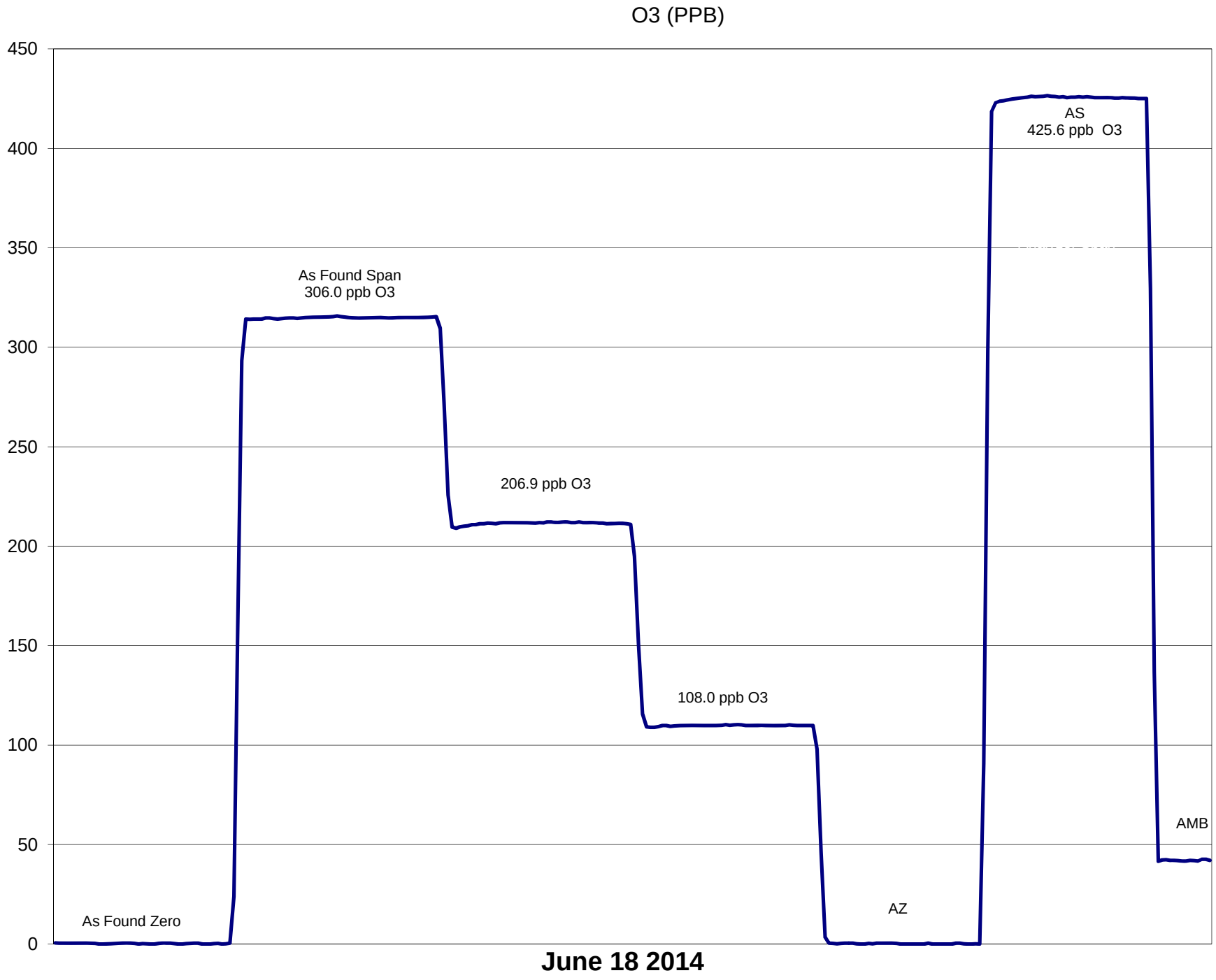
Station Information

Calibration Date	June 18 2014	Previous Calibration	May 22 2014
Station Number	10	Station Location	Reno
Start Time (MST)	11:09	End Time (MST)	13:35:00 PM
Analyzer make/model	TEI Model 49C	Analyzer serial #	49C-0609716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA		
306.0	314.9	0.9717	Correlation Coefficient	0.999970
206.9	211.8	0.9770		
108.0	109.9	0.9823	Slope	0.972336
			Intercept	0.418778




O3 (PPB)
450
400
350
300
250
200
150
100
50
0
As Found Zero
As Found Span
306.0 ppb O3
206.9 ppb O3
108.0 ppb O3
AZ
AS
425.6 ppb O3
AMB
June 18 2014

Calibration Report

Parameter **THC**

Air Monitoring Network **PASZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18, 2014	Previous Calibration	May 23, 2014
Station Number	10	Station Location	Rover Reno
Reason: Routine	Install	Removal	Other:
Start Time (MST)	14:05:00 PM	End Time (MST)	16:45:00 PM
Barometric Pressure	0.926 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	404 ppm CH4/ 201 ppm C3H8	Cal Gas Expiry Date	28/03/2014
Cal Gas CH4 equiv	956.75 ppm	Cal Gas Cylinder #	LL34989
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 1 volt	DACS channel #	12
	Before		After
Calculated slope	0.981408	Calculated slope	0.973456
Calculated intercept	0.134140	Calculated intercept	0.114860
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.52	psi	6.52	psi
THC span counts	2370	capture	2370	capture
THC zero counts	908	capture	908	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)
2996	0.00	0.00	-0.05	N/A
2996	69.93	21.82	22.33	0.9772
2996	29.96	9.47	9.55	0.9917
2996	9.97	3.17	3.11	1.0215
2996	0.00	0.00	-0.05	As Found Zero
2996	69.93	21.82	22.33	As Found Span
			Average Correction Factor	0.9968

Calculated value of As Found Response: 22.101 ppm Percent Change of As Found: -1.3%

	before calibration		after calibration	
Auto zero	0.10	ppm	0.09	ppm
Auto span	21.83	ppm	22.73	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii,Grover Christiansen

Calibration Summary

Parameter **THC**

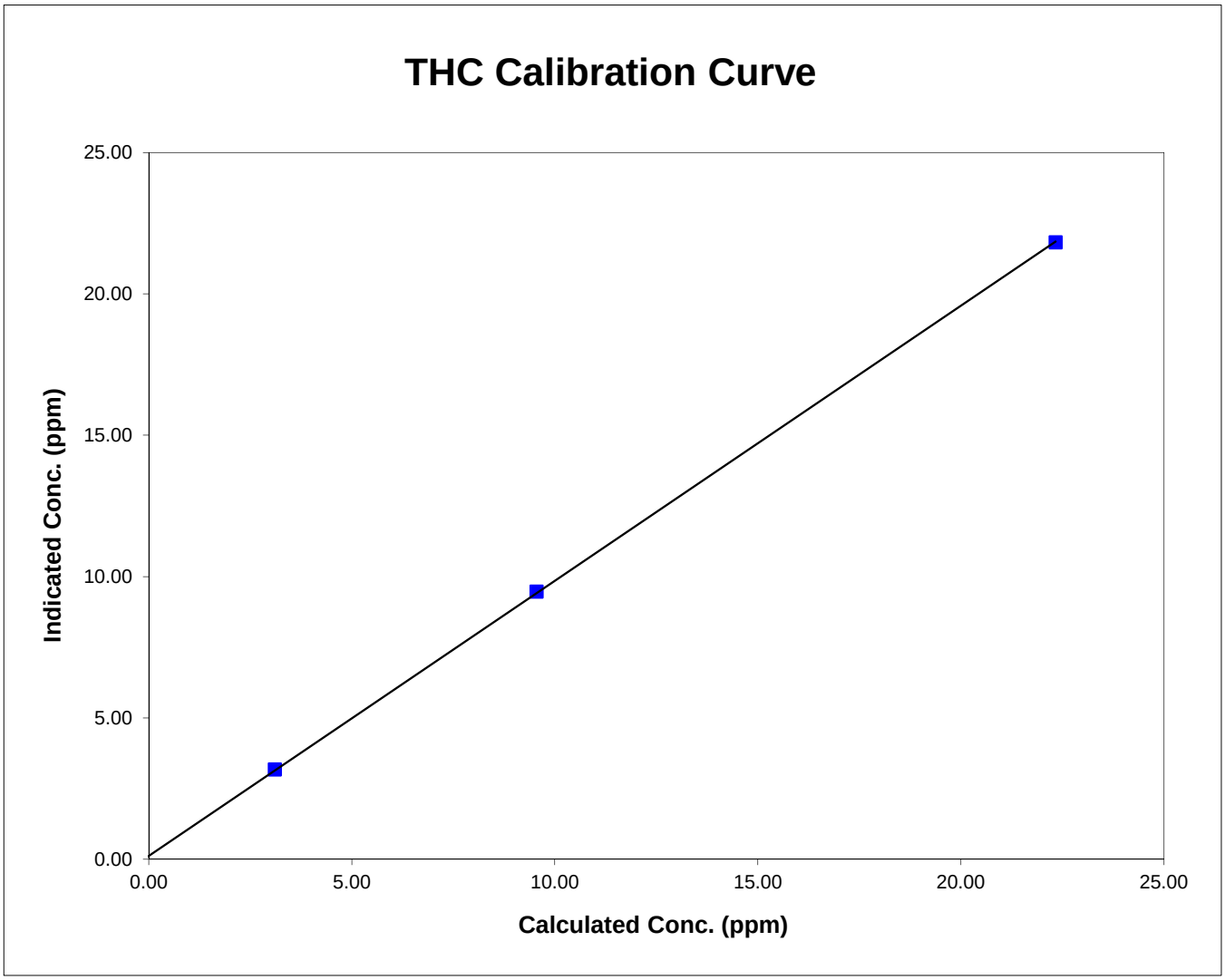
Air Monitoring Network **PASZA**

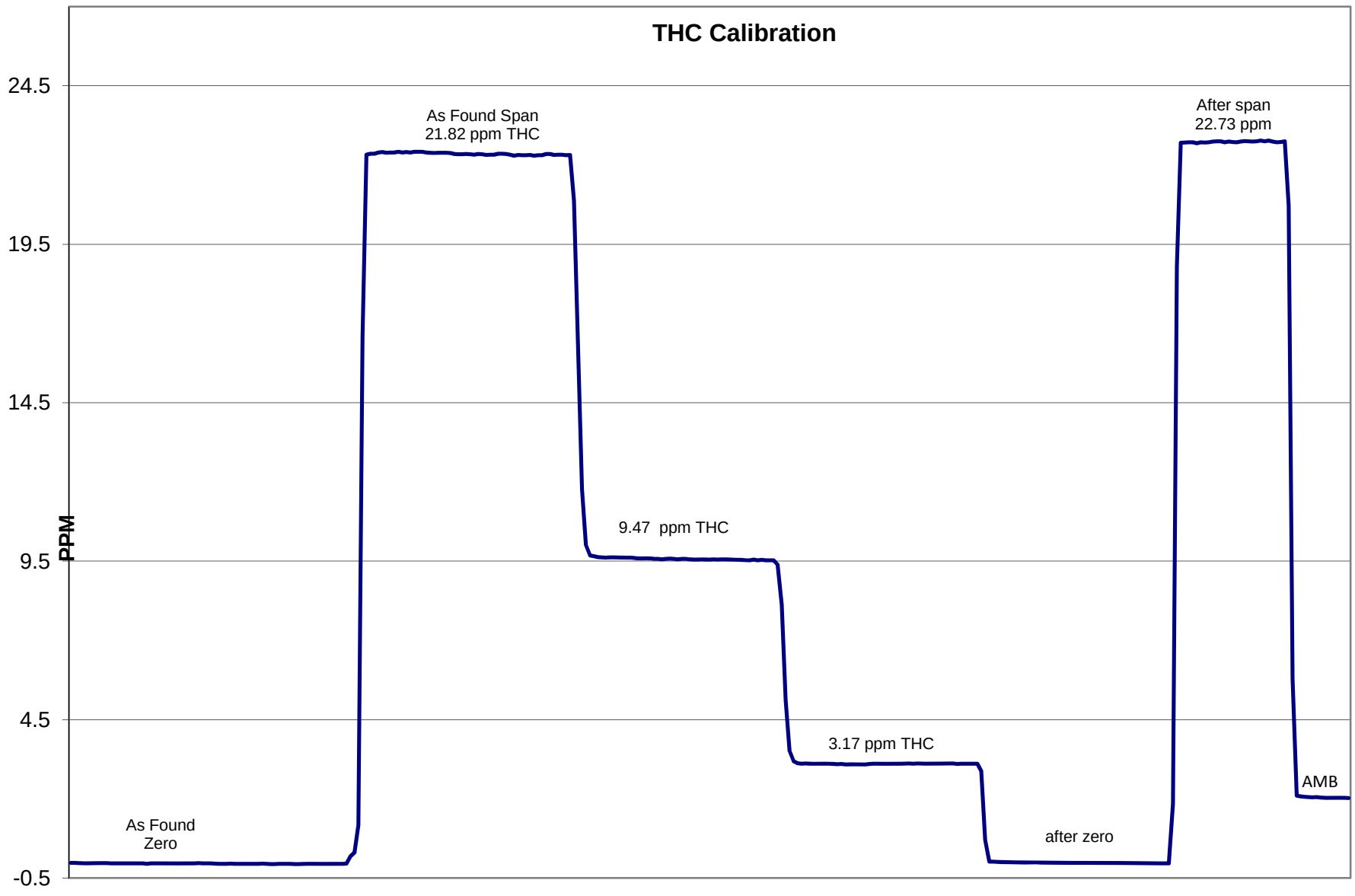
Station Information

Calibration Date	June 18, 2014	Previous Calibration	May 23, 2014
Station Number	10	Station Location	Rover Reno
Start Time (MST)	14:05:00 PM	End Time (MST)	16:45:00 PM
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	-0.053	N/A		
21.82	22.33	0.9772	Correlation Coefficient	0.999966
9.47	9.55	0.9917		
3.17	3.11	1.0215	Slope	0.973456
			Intercept	0.114860




THC Calibration
24.5
19.5
14.5
9.5
4.5
-0.5
PPM
As Found Span
21.82 ppm THC
After span
22.73 ppm
9.47 ppm THC
3.17 ppm THC
AMB
As Found
Zero
after zero

June 18, 2014

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 18 2014	Previous Calibration	May 22 2014
Station Name	PAZA Rover	Station Location	Reno
Reason: Routine	Install	Removal	Other:
Start Time (MST)	12:30 PM	End Time (MST)	15:45:00 PM
Barometric Pressure	0.923 Atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	10.44 ppm	Cal Gas Expiry Date	July/08/2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	1
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.983216	Calculated slope	0.996017
Calculated intercept	-0.170628	Calculated intercept	-0.124251
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.9	ppb	15.9	ppb
Coefficient	0.935		0.935	
Lamp Voltage	802	V	803	V
Chamber Temp	43.9	C	44	C
Perm gas Temp	45	C	45	C
Pressure	653.7	mmHg	655.9	mmHg
Sample Flow	0.442	lpm	0.442	lpm
Lamp Intensity	38984	Hz	43448	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)
4995	0.0	0.0	0.1	N/A
4995	39.93	82.8	83.2	0.9946
4995	19.97	41.6	41.9	0.9932
8995	8.97	10.4	10.6	0.9776
4995	9.97			Sox Test
4995	0.00	0.0	0.1	As found zero
4995	39.93	82.8	83.2	As found span
			Average Correction Factor	0.9885

Calculated value of As Found Response: 81.61 ppm Percent Change of As Found: 1.4%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.1	ppm
Auto span	65.4	ppm	64.8	ppm

Notes:
Intensity is moving around from 38984 HZ to 43448 HZ,so as lamp voltage from +/-5V.
Lamp and socket ordered,will be put into analyzer after the station moving on the install cal.
No adjustments made
Scrubber check wasn't performed on the previous calibration.Due to the lamp and socket issues wasn't done this time. Will do it after the new parts instalation.

Calibration Performed By: Grover Christiansen,Dmytro Dolotii

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PAZA**

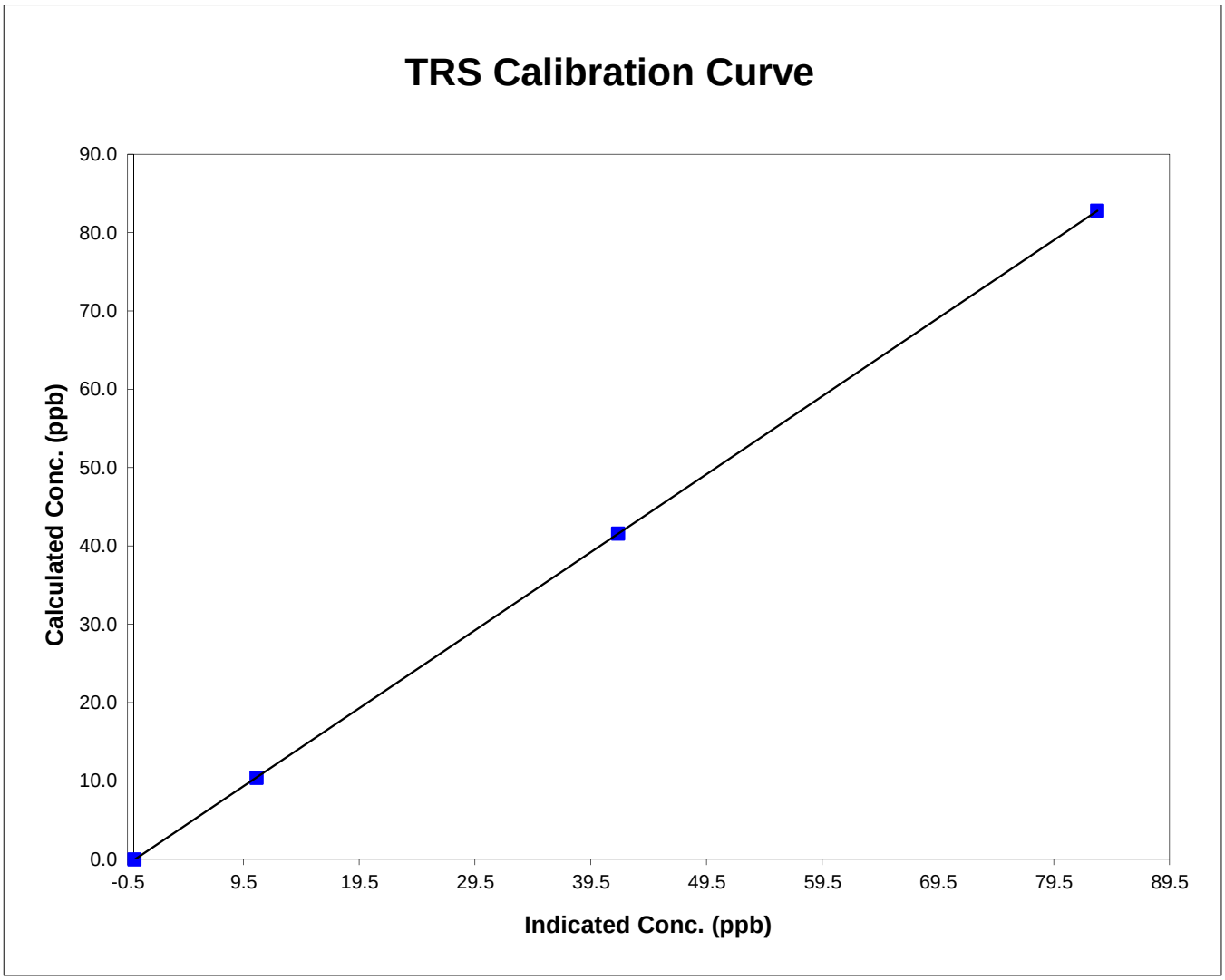
FOCUS AIR QUALITY MONITORING

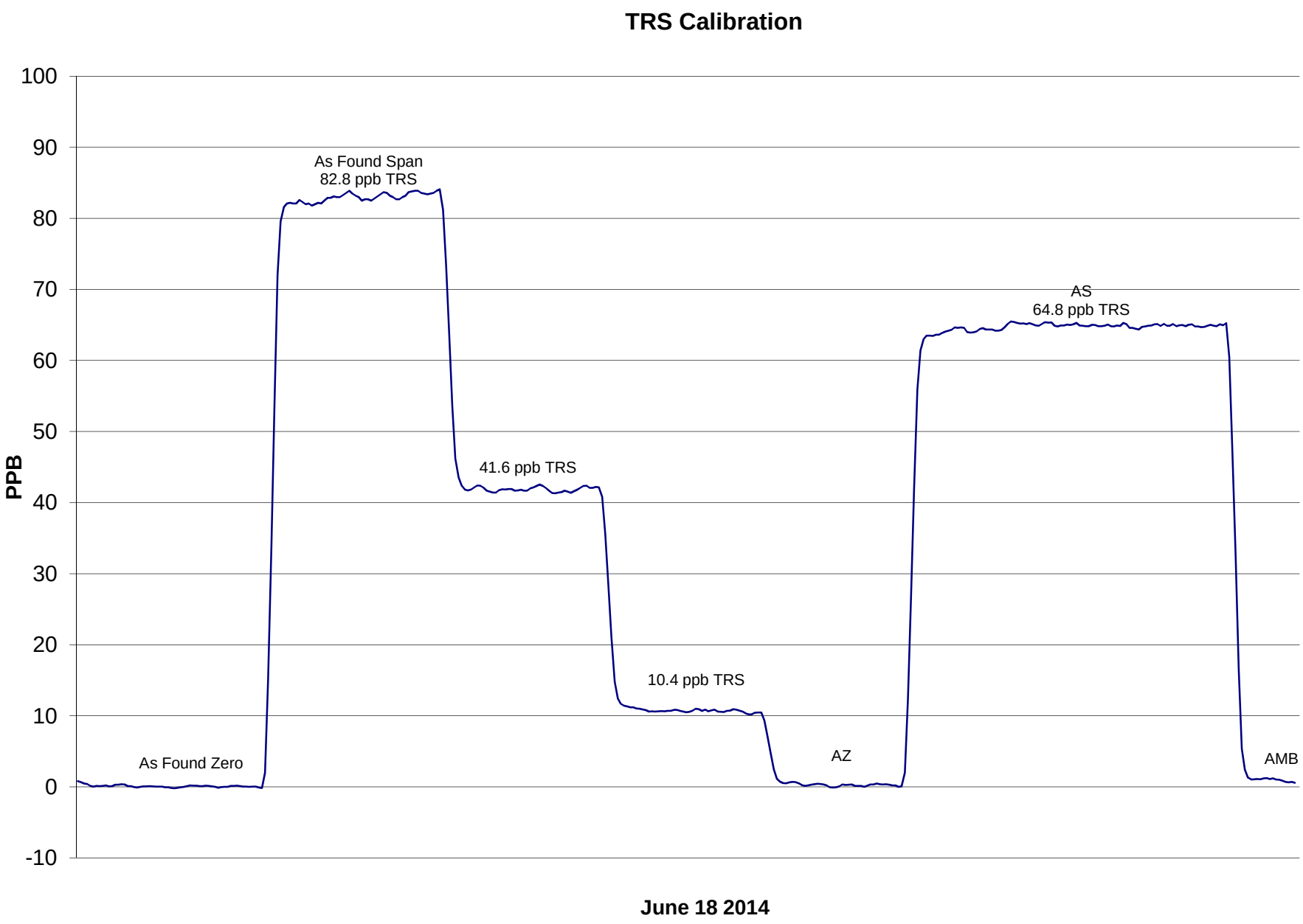
Station Information

Calibration Date	June 18 2014	Previous Calibration	May 22 2014
Station Number	PAZA Rover	Station Location	Reno
Start Time (MST)	12:30	End Time (MST)	15:45:00 PM
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		
82.8	83.2	0.9946	Correlation Coefficient	0.999998
41.6	41.9	0.9932		
10.4	10.6	0.9776	Slope	0.996017
			Intercept	-0.124251




TRS Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
As Found Span
82.8 ppb TRS
41.6 ppb TRS
10.4 ppb TRS
AS
64.8 ppb TRS
As Found Zero
AZ
AMB
June 18 2014

Calibration Report

Parameter **SO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 12, 2014	Previous Calibration	May 21, 2014
Station Number	1	Station Location	Falher
Reason: Routine	Install	Removal	Other:

Start Time (MST)	12:00	End Time (MST)	15:25:00 PM
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3474
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	01/02/2017
Correction factor	0.031647	Cal Gas Cylinder #	LL105159
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.953558	Calculated slope	0.991830
Calculated intercept	2.155036	Calculated intercept	2.231596

Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.1		7.2	
coefficient	0.892		0.922	
Lamp Voltage	843	volts	844	volts
Chamber Temp	45.3	Deg C	45	Deg C
Perm Gas Temp	45.01	Deg C	45	Deg C
Pressure	676.4	mm Hg	680.9	mm Hg
Sample Flow	0.411	ccm	0.415	ccm
Lamp Intensity	97	%	97	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.3	N/A
4995	39.93	394.9	397.1	0.9946
4995	19.96	198.2	196.6	1.0081
4995	9.97	99.2	95.1	1.0435
4995	0.0	0.0	0.3	As Found Zero
4995	39.93	394.9	408.7	As Found Span
			Average Correction Factor	1.0154

Calculated value of As Found Response: 391.552 ppm Percent Change of As Found: 0.9%

	before calibration		after calibration	
Auto zero	0.5	ppm	-0.3	ppm
Auto span	359.4	ppm	351.4	ppm

Notes: PMT and span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **SO2**

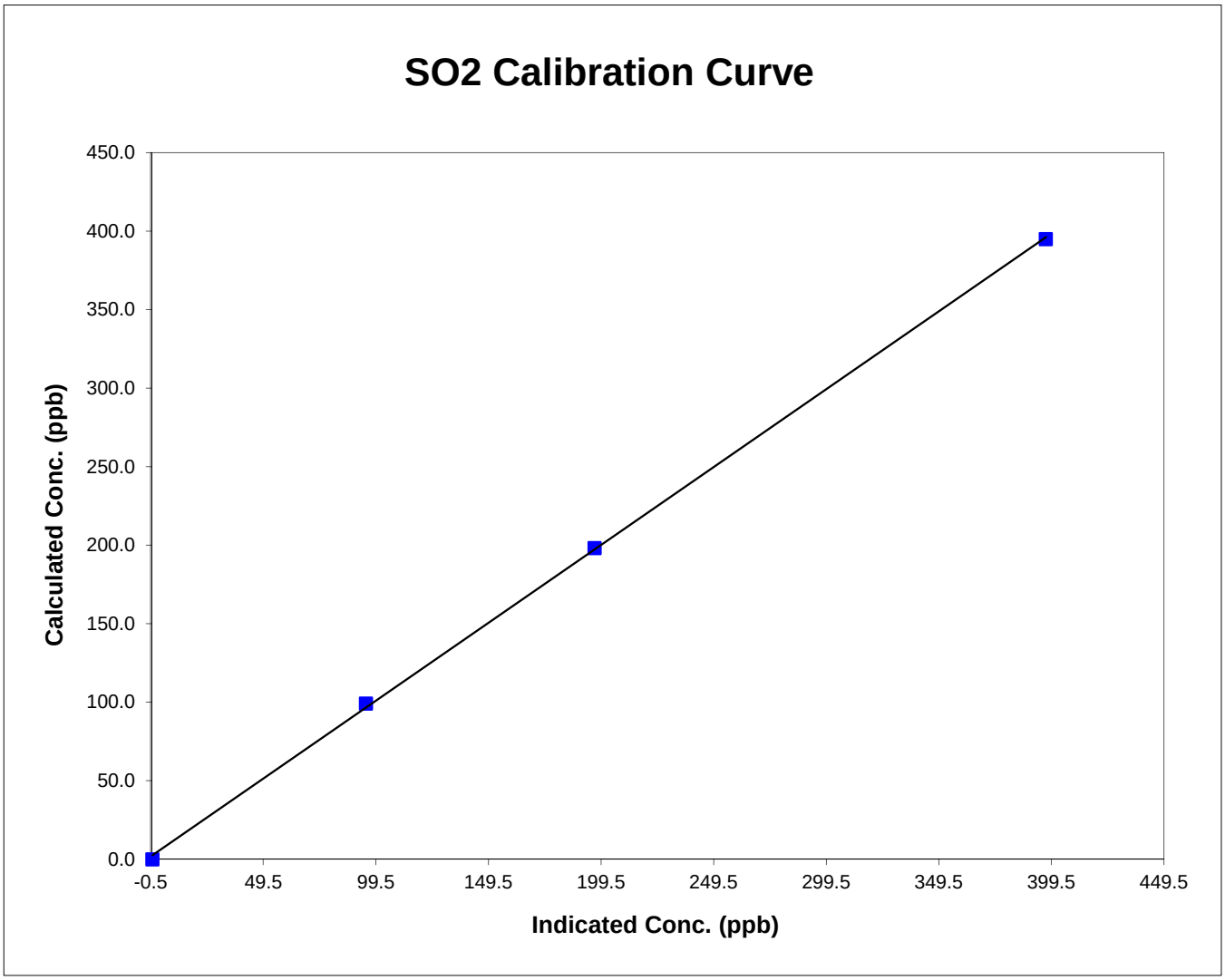
Air Monitoring Network **PAZA**

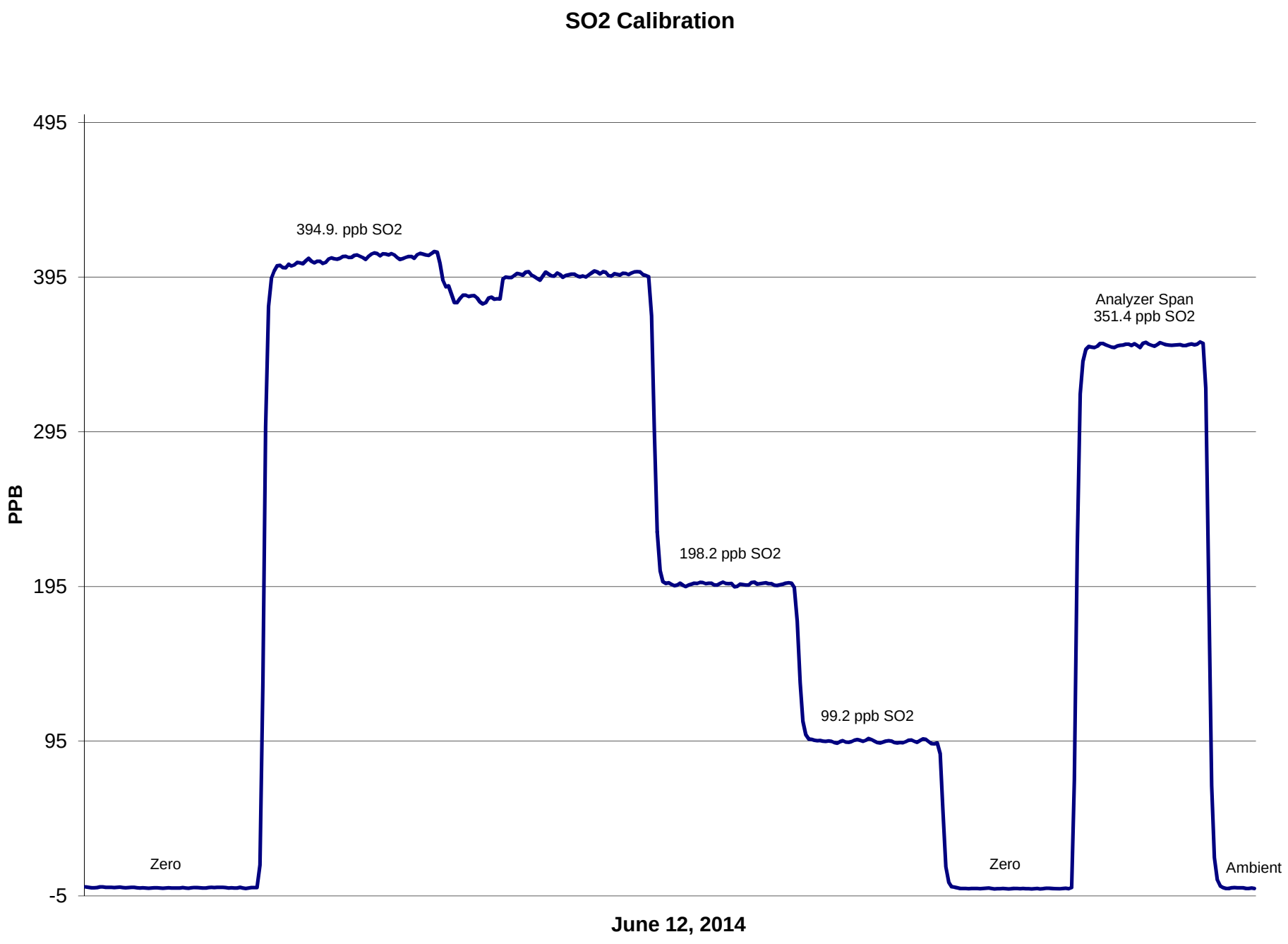
Station Information

Calibration Date	June 12, 2014	Previous Calibration	May 21, 2014
Station Number	1	Station Location	Falher
Start Time (MST)	12:00	End Time (MST)	15:25:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	1207452008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
394.9	397.1	0.9946	Correlation Coefficient	0.999815
198.2	196.6	1.0081		
99.2	95.1	1.0435	Slope	0.991830
			Intercept	2.231596




SO2 Calibration
495
395
295
195
95
-5
PPB
394.9. ppb SO2
198.2 ppb SO2
99.2 ppb SO2
Analyzer Span
351.4 ppb SO2
Zero
Zero
Ambient
June 12, 2014

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **H2S**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 12, 2014	Previous Calibration	May 21, 2014
Station Number	1	Station Location	Falher
Reason:	Routine / Install	Removal	Other:

Start Time (MST)	9:35	End Time (MST)	13:20:00 PM
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Conc	10.4 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031647	Cal Gas Cylinder #	LL110781
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	1.004667	Calculated slope	1.005005
Calculated intercept	-0.296249	Calculated intercept	-0.346665

Analyzer make	Thermo 450i	Analyzer serial #	1207452006

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	12.9	ppb	13	ppb
coefficient	1.112		1.129	
Lamp Voltage	800	volts	800	volts
Chamber Temp	45.2	Deg C	44.9	Deg C
Perm Gas Temp	45	Deg C	45.1	Deg C
Pressure	566.7	mm Hg	561.6	mm Hg
Sample Flow	0.885	lpm	0.881	lpm
Lamp Intensity	90	mv	90	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)
4995	0.00	0.00	0.7	N/A
4995	39.93	82.48	82.5	0.9995
4995	19.96	41.39	41.4	1.0002
8994	8.97	10.36	10.4	0.9971
4995	0.00	0.00	0.7	As Found Zero
4995	39.93	82.48	80.9	As Found Span
			Average Correction Factor	0.9989

Calculated value of As Found Response: 80.38 ppm Percent Change of As Found: 2.5%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.3	ppm
Auto span	51.2	ppm	54.2	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **H2S**

Air Monitoring Network **PAZA**

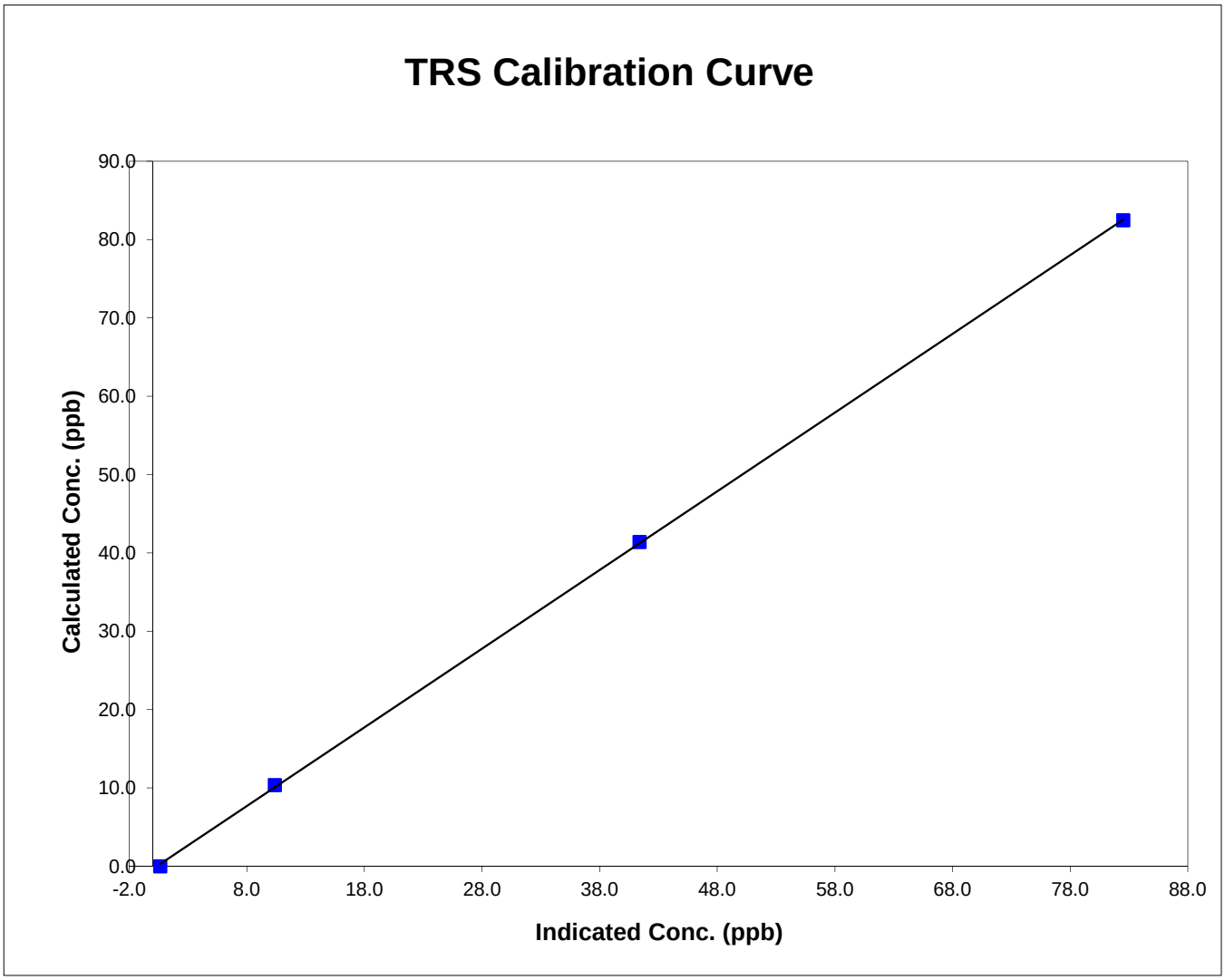
FOCUS AIR QUALITY MONITORING

Station Information

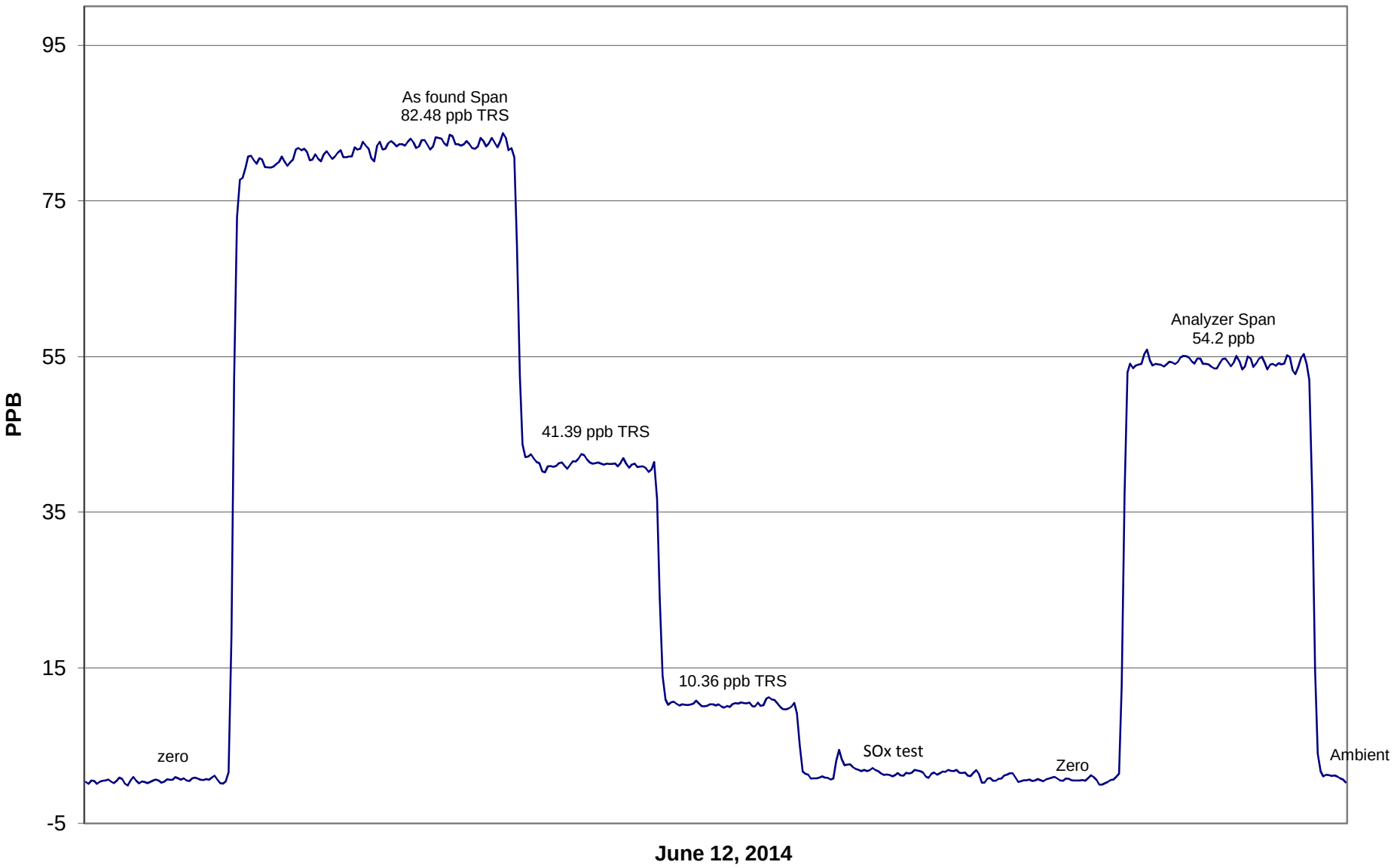
Calibration Date	June 12, 2014	Previous Calibration	May 21, 2014
Station Number	1	Station Location	Falher
Start Time (MST)	9:35	End Time (MST)	13:20:00 PM
Analyzer make/model	Thermo 450i	Analyzer serial #	1207452006

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	N/A		
82.5	82.5	0.9995	Correlation Coefficient	0.999952
41.4	41.4	1.0002		
10.4	10.4	0.9971	Slope	1.005005
			Intercept	-0.346665



H2S Calibration



Calibration Report

Parameter **SO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont
Reason: Routine	Install	Removal	Other:
Start Time (MST)	12:10	End Time (MST)	14:45:00 PM
Barometric Pressure	0.926 Atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	01/03/2017
Gas Cert Reference	LL105159		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	2
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.987662	Calculated slope	0.983252
Calculated intercept	2.196273	Calculated intercept	2.430027
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	21.2		21.2	
Coefficient	1.059		1.059	
UV Lamp Voltage	863	V	864	V
Chamber Temp	44.5	C	44.5	C
Perm Gas Temp	45.06	C	45	C
Pressure	668.9	mm Hg	668.7	mm Hg
Sample Flow	0.464	LPM	0.464	LPM
Lamp Intesity	30655	Hz	30639	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)
4995	0.00	0.0	0.0	N/A
4995	39.93	394.9	400.4	0.9863
4995	19.97	198.3	197.8	1.0024
4995	9.97	99.2	96.1	1.0324
4995	0.00	0.0	0.0	As found zero
4995	39.93	394.9	400.4	As found span
			Average Correction Factor	1.0070

Calculated value of As Found Response: 397.697 ppm Percent Change of As Found: -0.7%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	259.1	ppm	243.7	ppm

Notes: No adjustments made

Calibration Performed By: Grover Christiansen,Dmytro Dolotii.

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PAZA**

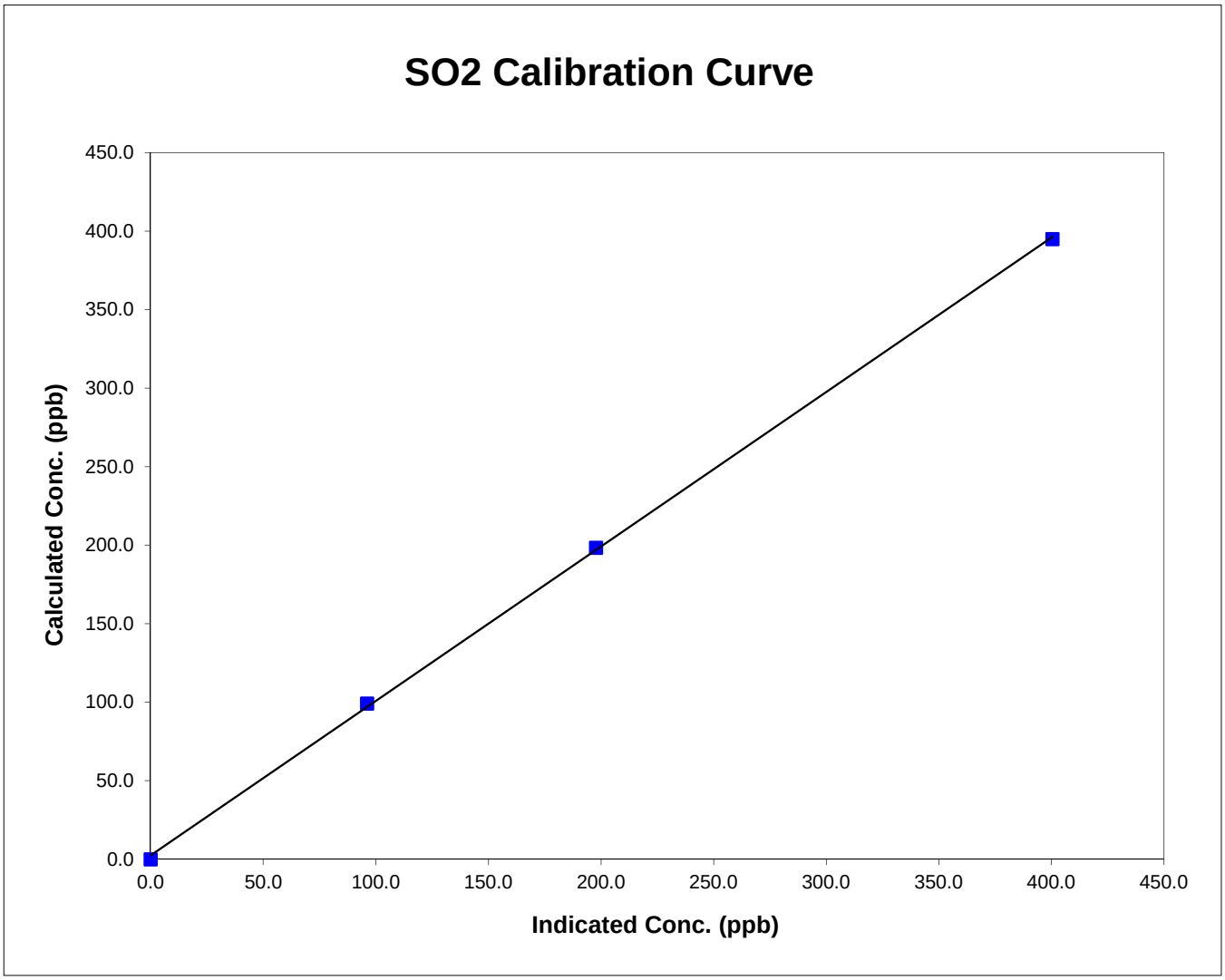
FOCUS AIR QUALITY MONITORING

Station Information

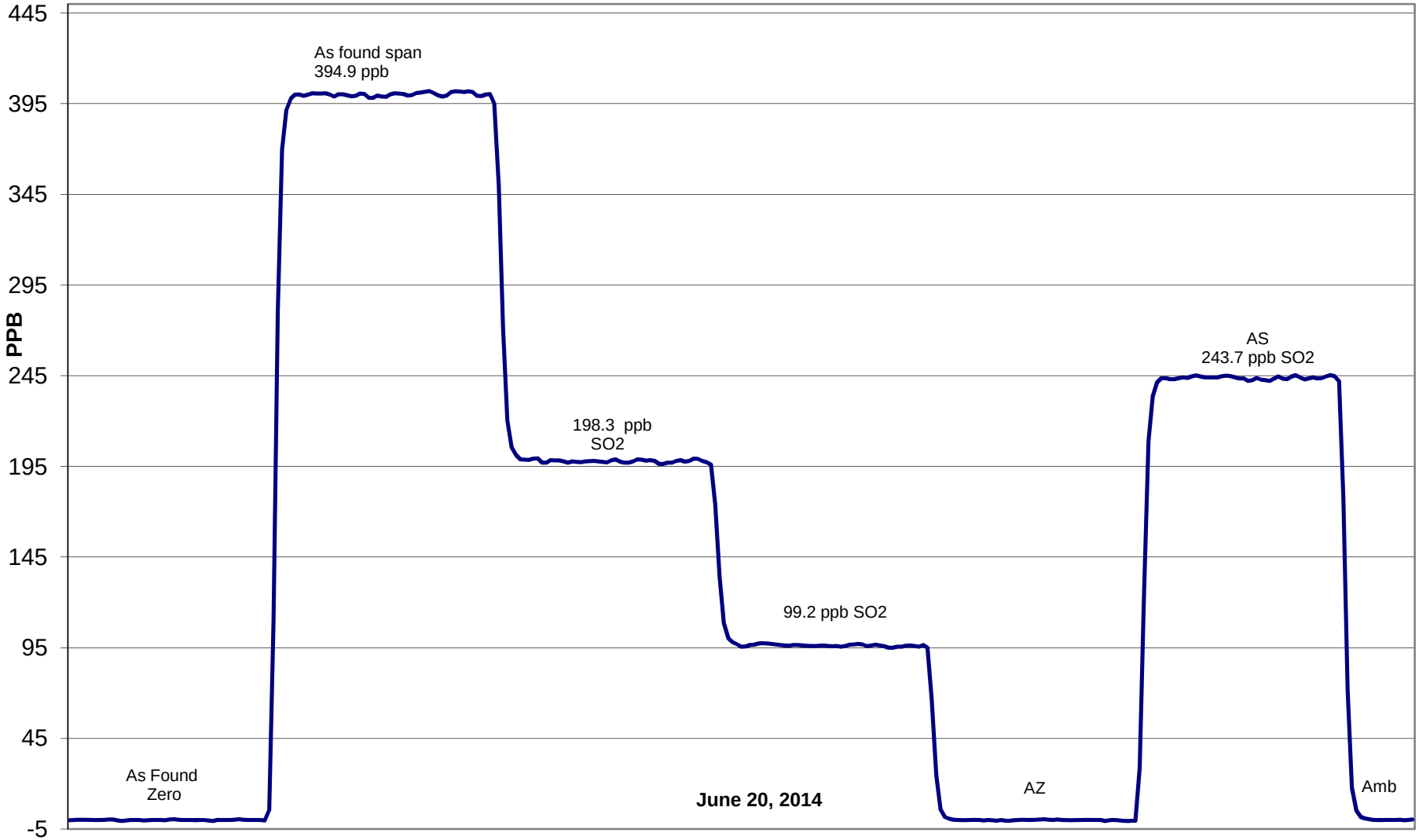
Calibration Date	June 20, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	12:10	End Time (MST)	14:45:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
394.9	400.4	0.9863	Correlation Coefficient	0.999830
198.3	197.8	1.0024		
99.2	96.1	1.0324	Slope	0.983252
			Intercept	2.430027



SO2 Calibration



Calibration Report

Parameter **NO_X-NO-NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 20, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont

Reason: Routine Install Removal Other:

Start Time (MST)	11:55		End Time (MST)	16:20:00 PM	
Barometric Pressure	0.926	Atm	Station Temperature	20.0	Deg C
Calibrator	Environics		Serial Number	3016	
NO Cal Gas Conc	52.1	ppm	Cal Gas Expiry Date	March 12, 2014	
NOx Cal Gas Conc	52.4	ppm	Cal Gas Serial #	LL105159	

DACS Information

DACS make	CR3000	DACS serial No.	5407

Parameter		NO2	NOx	NO
Before	Data Slope	1.001530	1.006212	1.004288
	Data Offset	0.163782	1.473001	1.374317
After	Data Slope	1.005498	1.001345	0.998323
	Data Offset	0.411797	2.334894	1.601071
Channel #		5	3	4
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	0701120011

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	6.1	mV	6.3	mV
NOx bkgnd	6.3	mV	7.8	mV
NO coefficient	1.077		1.077	
NOx coefficient	0.999		0.999	
NO2 conv temp	323.4	Deg C	323.7	Deg C
Cooler Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-846.2	mV	-846.2	mV
R Cell Press	201.1	in Hg	201.1	in Hg
Sample Flow	0.703	ccm	0.703	ccm

NOTES: Slight zero adjustment

Calibration Report

Parameter **NOX-NO-NO2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date: June 20, 2014 Station Location: Clairmont

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	4995	0.00	0.0	0.0	0.0	-0.1	0.1	0.0	N/A	N/A
1	4995	39.93	415.6	413.2	2.4	413.7	413.1	-1.0	1.0046	1.0002
2	4995	19.97	208.7	207.5	1.2	205.1	205.3	-0.9	1.0171	1.0104
3	4995	9.97	104.4	103.8	0.6	99.6	100.7	-0.9	1.0479	1.0303
AFZ	4995	0.00	0.0	0.0	0.0	1.9	0.2	1.8	0.0000	0.0000
AFS	4995	39.93	415.6	413.2	2.4	413.7	413.1	-1.0	1.0046	1.0002
							Average Correction Factor		1.0232	1.0136

As Found Concentrations: NO_X= 413.2 NO= 414.2 As Found Percent Change NO_X= -0.6% NO= 0.3%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.2	0.2	0.0	-0.1	0.1	0.0	N/A	N/A	N/A	N/A
NO point	412.8	412.8	0.0	413.3	412.8	-1.5	0.9989	1.0000	N/A	N/A
300	412.8	103.0	309.8	412.6	103.0	308.1	1.0006	1.0000	1.0055	99.4%
200	412.8	204.0	208.9	413.0	204.0	207.0	0.9996	1.0000	1.0092	99.1%
100	412.8	303.8	109.1	413.3	303.8	107.6	0.9989	1.0000	1.0135	98.7%
					Average Correction Factor		0.9997	1.0000	1.0094	99.1%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.8	0.9	0.0	ppb	-0.8	-0.8	0.2	ppb
Auto span	166.3	164.3	1.4	ppb	167.8	165.7	1.5	ppb

Calibration Performed By: Grover Christiansen, Dmytro Dolotii.

Calibration Summary

Parameter **NO_2**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

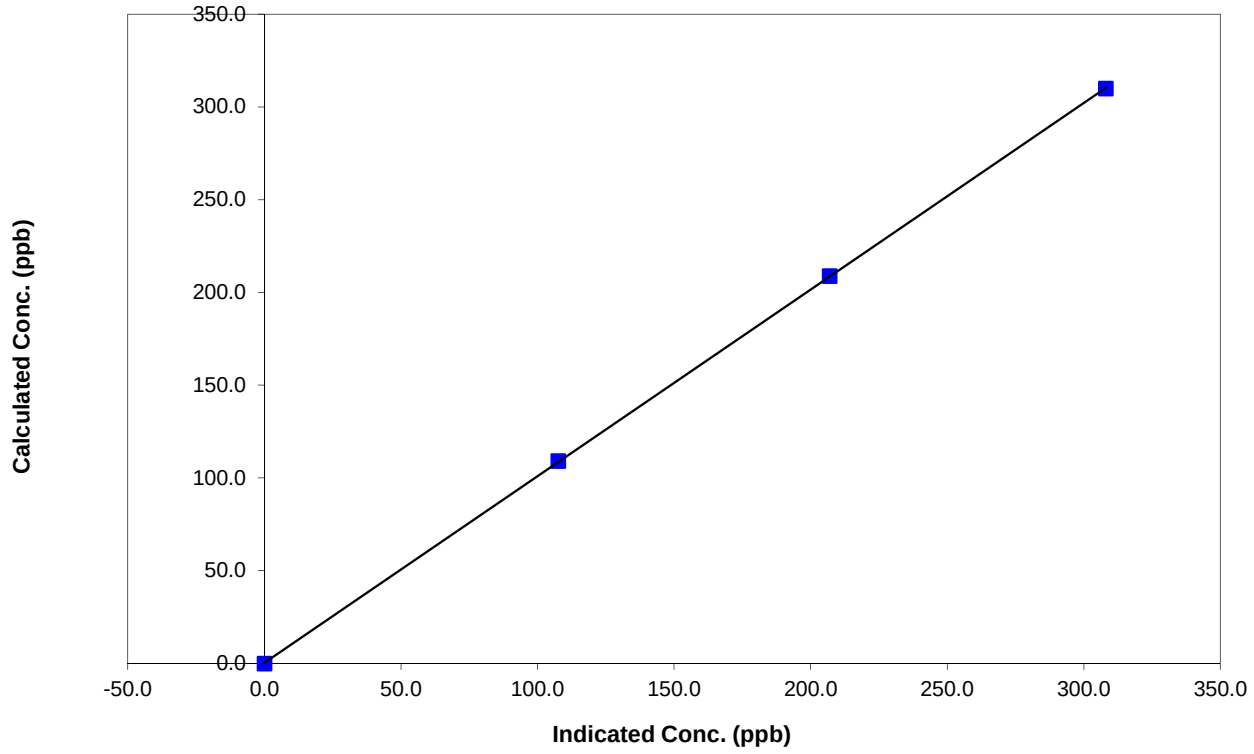
Station Information

Calibration Date	June 20, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	11:55	End Time (MST)	16:20:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
309.8	308.1	1.0055	Correlation Coefficient	0.999988
208.9	207.0	1.0092		
109.1	107.6	1.0135	Slope	1.005498
			Intercept	0.411797

NO_2 Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

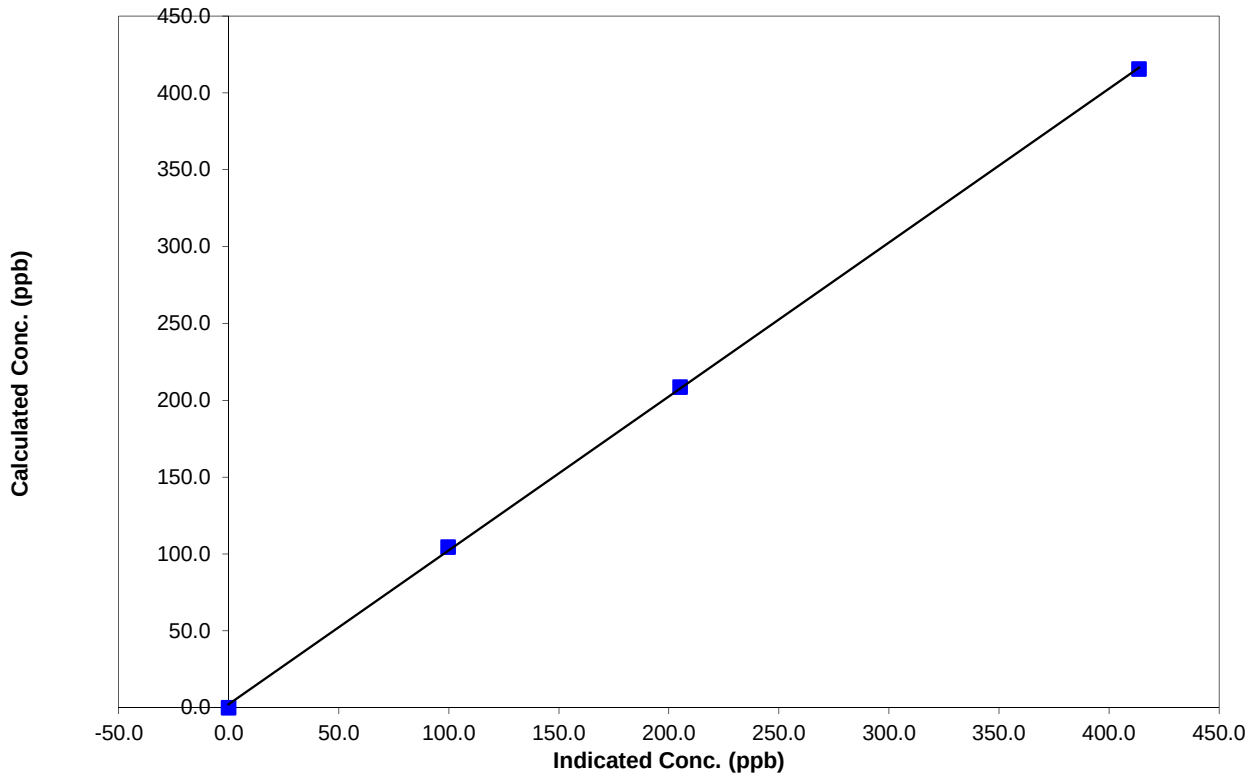
Station Information

Calibration Date	June 20, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	11:55	End Time (MST)	16:20:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
415.6	413.7	1.0046	Correlation Coefficient	0.999873
208.7	205.1	1.0171		
104.4	99.6	1.0479	Slope	1.001345
			Intercept	2.334894

NOx Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

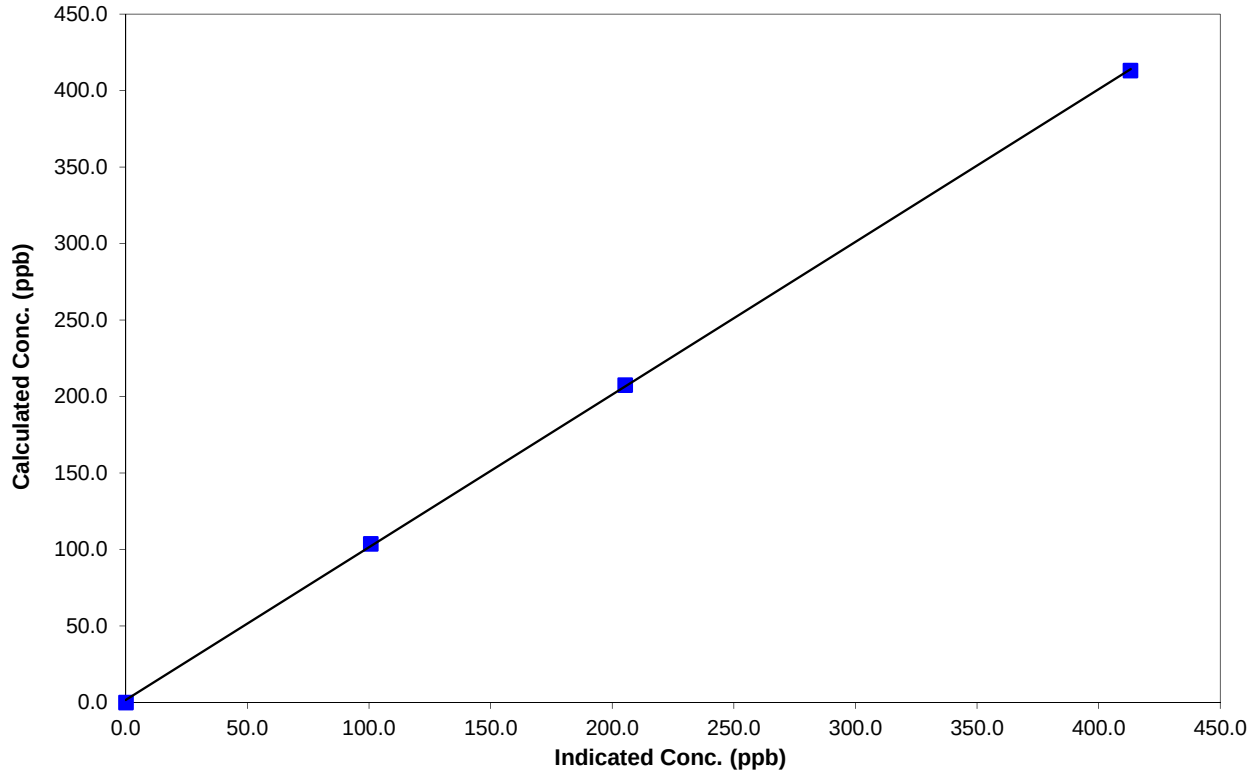
Station Information

Calibration Date	June 20, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	11:55	End Time (MST)	16:20:00 PM
Analyzer make	TEI 42i	Analyzer serial #	0701120011

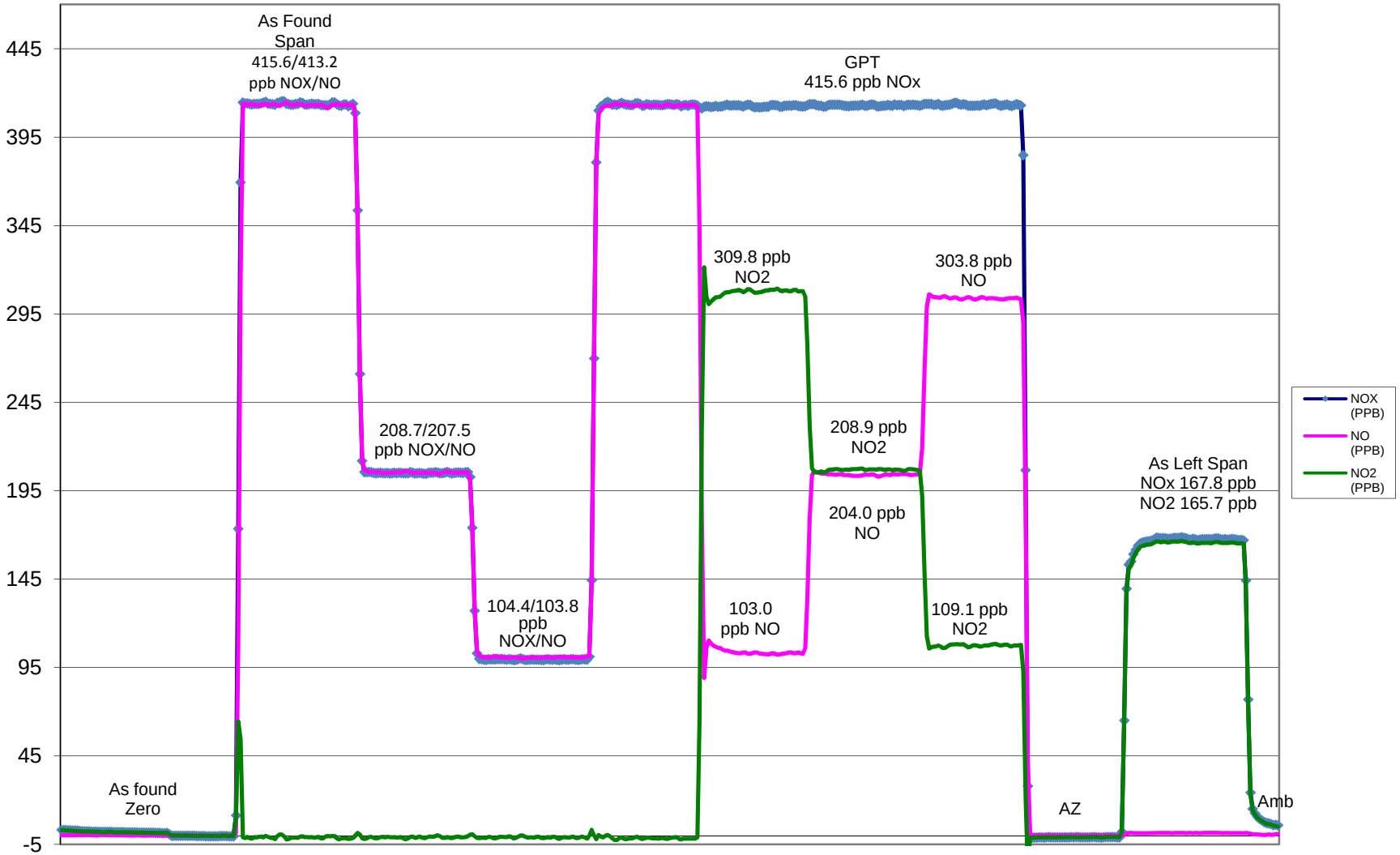
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
413.2	413.1	1.0002	Correlation Coefficient	0.999927
207.5	205.3	1.0104		
103.8	100.7	1.0303	Slope	0.998323
			Intercept	1.601071

NO Calibration Curve



PAZA Clairmont NO_X Calibration



June 20, 2014

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **O3**

Air Monitoring Network **PAZA**

Station Information

Calibration Date	June 20 2014	Previous Calibration	June 18 2014
Station Number	10	Station Location	Clairmont
Reason: Routine	Install	Removal remove	Other:
Start Time (MST)	15:13:00 PM	End Time (MST)	18:00:00 PM
Barometric Pressure	0.926 atm	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3016
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	0.972336	Calculated slope	1.008898
Calculated intercept	0.418778	Calculated intercept	0.106076
Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	1.007		0.984	
Cell A intensity	100662	Hz	100677	Hz
Cell B intensity	98160	Hz	98105	Hz
Pressure	664.90	in Hg	665.30	in Hg
CellA Flow	0.700	ccm	0.701	ccm
Cell B Flow	0.694	cmm	0.694	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)
5035	0.00	0.0	0.0	N/A
5035	0.30	309.8	307.2	1.0084
5035	0.20	208.9	206.6	1.0113
5035	0.10	109.1	108.0	1.0100
5035	0.00	0.0	0.0	As found zero
5035	0.30	309.8	314.3	As found span
			Average Correction Factor	1.0099

Calculated value of As Found Response: 306.0 ppm Percent Change of As Found: -1.2%

	before calibration		after calibration	
Auto zero	-0.1	ppb	0.2	ppb
Auto span	403.2	ppb	408.1	ppb

Notes: Span adjustment made

Calibration Performed By: Grover Christiansen, Dmytro Dolotii.

Calibration Summary

Parameter **O3**

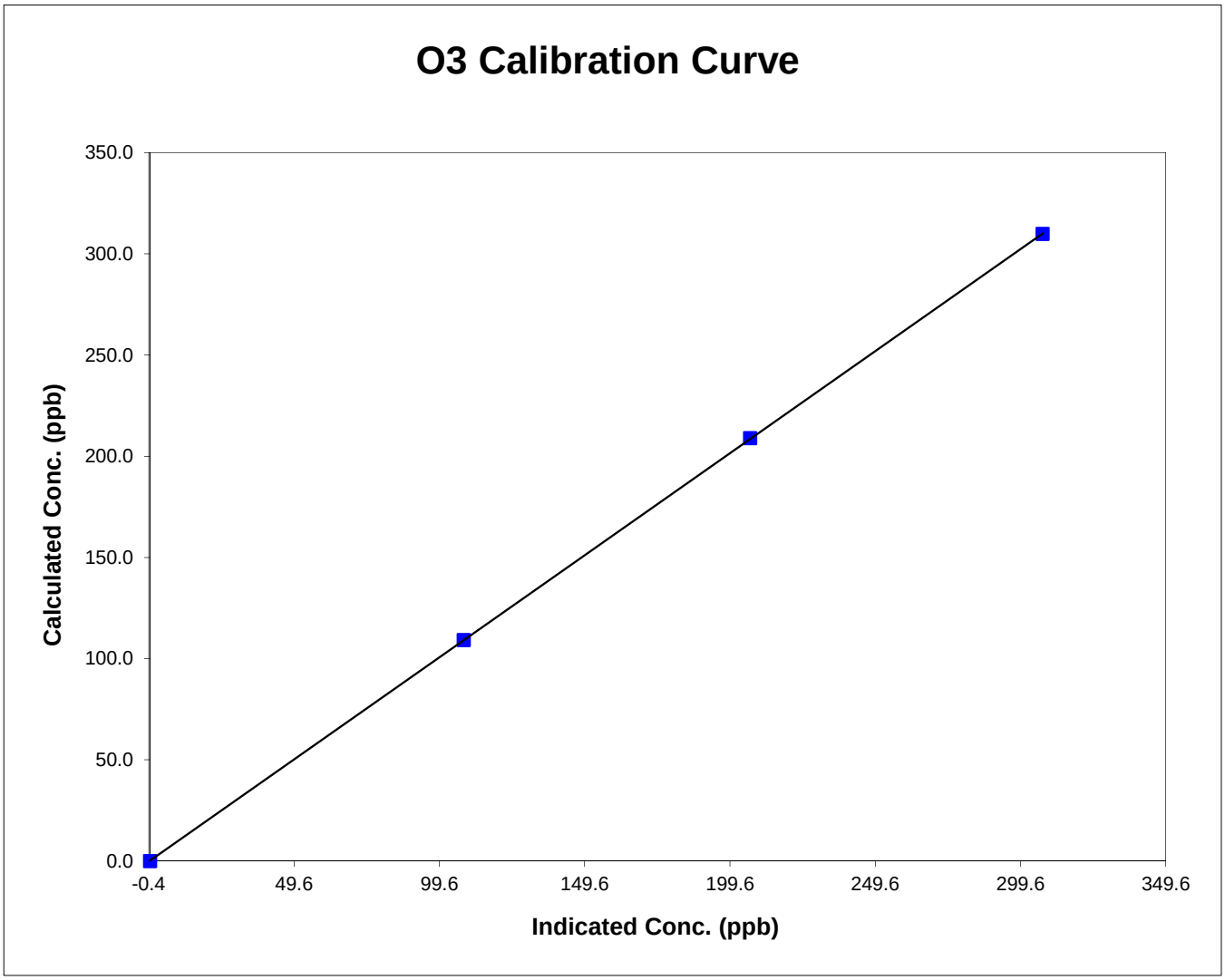
Air Monitoring Network **PAZA**

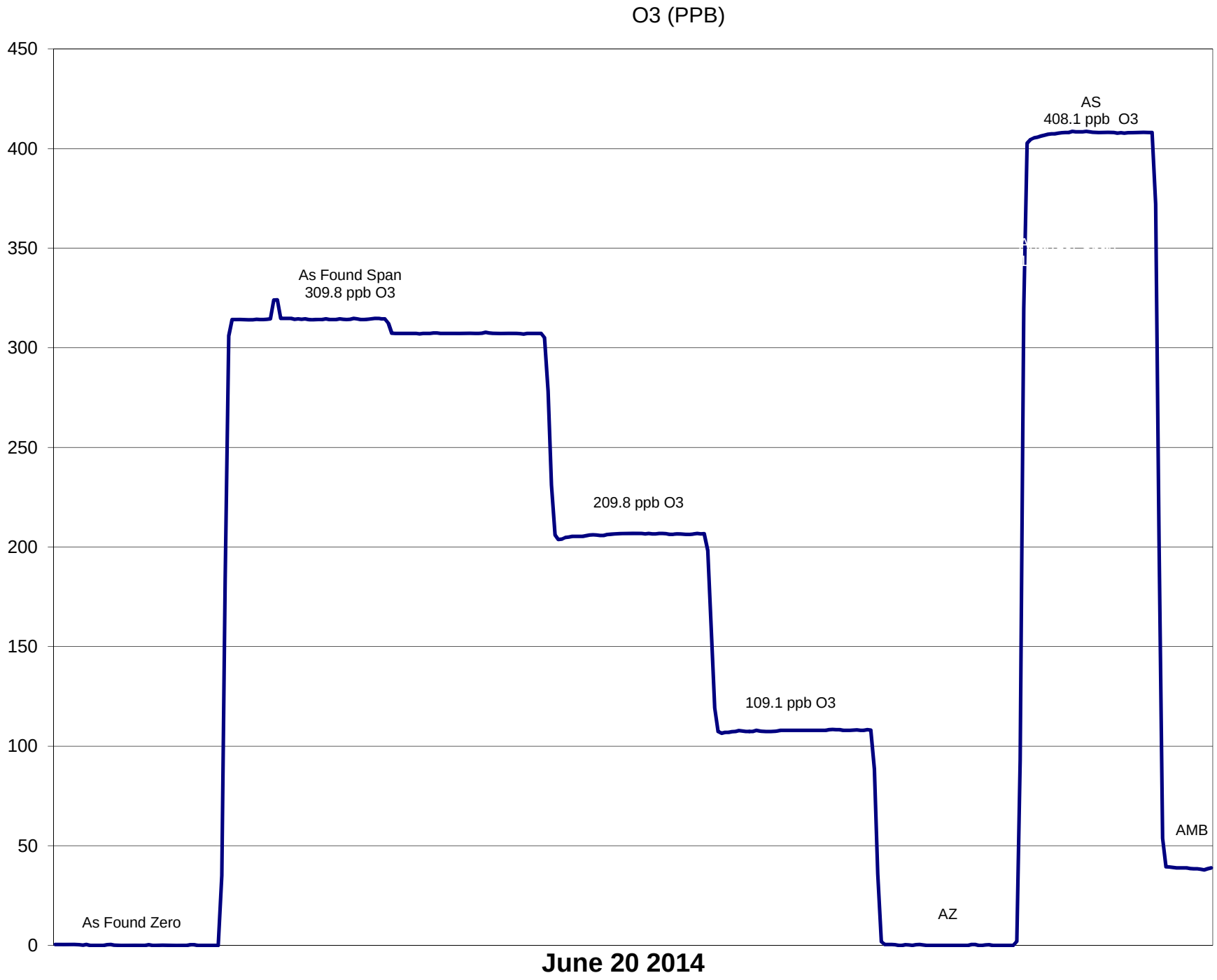
Station Information

Calibration Date	June 20 2014	Previous Calibration	June 18 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	15:13:00 PM	End Time (MST)	18:00:00 PM
Analyzer make/model	TEI Model 49C	Analyzer serial #	49C-0609716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	NA		
309.8	307.2	1.0084	Correlation Coefficient	0.999996
208.9	206.6	1.0113		
109.1	108.0	1.0100	Slope	1.008898
			Intercept	0.106076




O3 (PPB)
450
400
350
300
250
200
150
100
50
0
As Found Span
309.8 ppb O3
209.8 ppb O3
109.1 ppb O3
AS
408.1 ppb O3
AMB
AZ
As Found Zero
June 20 2014

Calibration Report

FOCUS AIR QUALITY MONITORING

Parameter **THC**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	June 21, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont
Reason: Routine	Install	Removal	Other:

Start Time (MST)	10:20	End Time (MST)	14:20:00 PM
Barometric Pressure	0.926 ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100	Serial Number	3474
Cal Gas Concentratior	404 ppm CH4/ 201 ppm C3H8	Cal Gas Expiry Date	28/03/2014
Cal Gas CH4 equiv	956.75 ppm	Cal Gas Cylinder #	LL34989
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 1 volt	DACS channel #	12
	Before		After
Calculated slope	0.973456	Calculated slope	0.994022
Calculated intercept	0.114860	Calculated intercept	0.057086

Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.52	psi	6.52	psi
THC span counts	2370	capture	2370	capture
THC zero counts	908	capture	908	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)
2996	0.00	0.00	0.01	N/A
2996	69.93	21.82	21.92	0.9955
2996	29.96	9.47	9.43	1.0045
2996	9.97	3.17	3.08	1.0301
2996	0.00	0.00	0.01	As Found Zero
2996	69.93	21.82	21.92	As Found Span
			Average Correction Factor	1.0100

Calculated value of As Found Response: 21.442 ppm Percent Change of As Found: 1.7%

	before calibration		after calibration	
Auto zero	0.10	ppm	0.05	ppm
Auto span	21.83	ppm	22.33	ppm

Notes: Had problems with zero air supply to calibrator. Switch to site zero air supply & restart.
No adjustments made to the analyzer.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **THC**

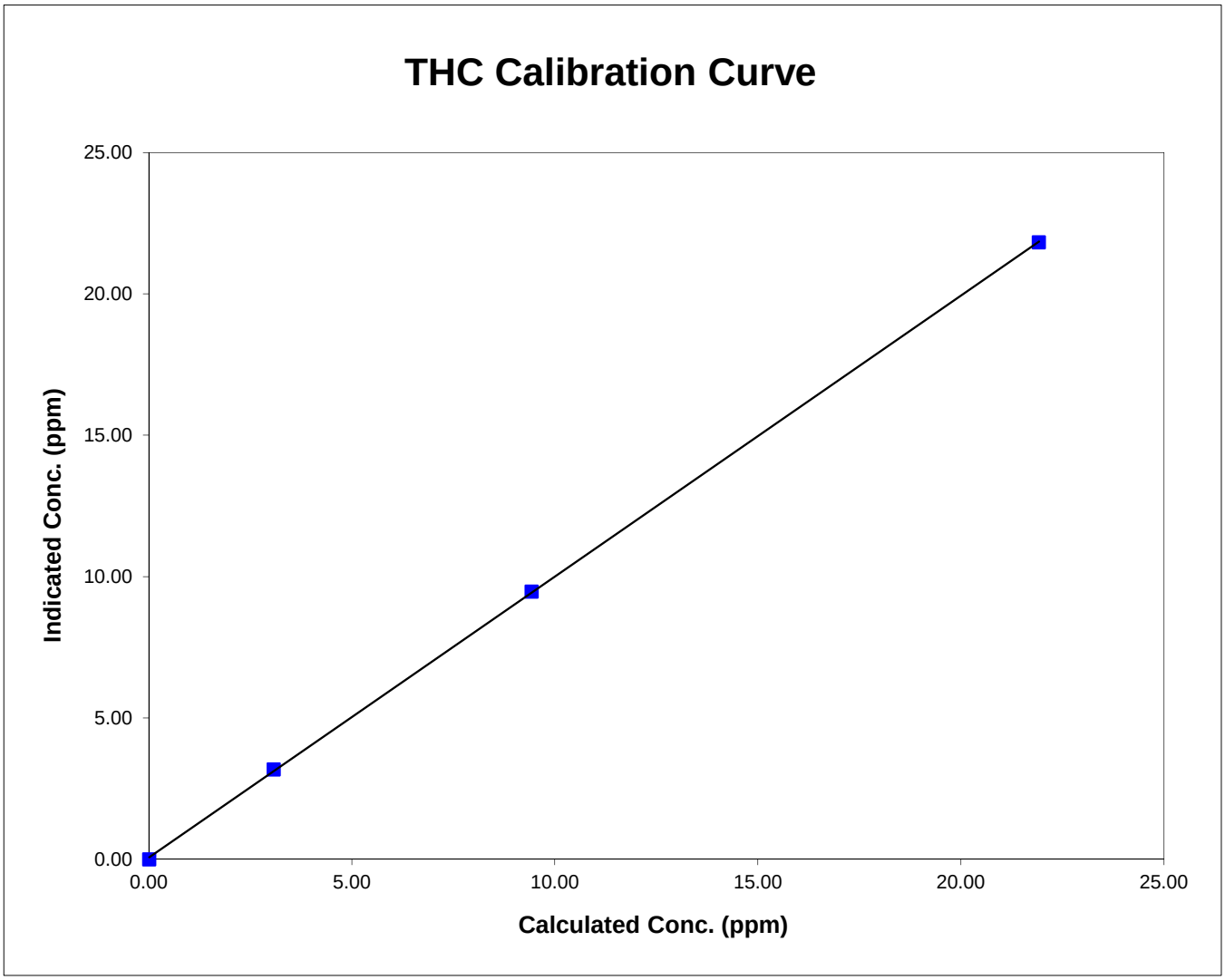
Air Monitoring Network **PASZA**

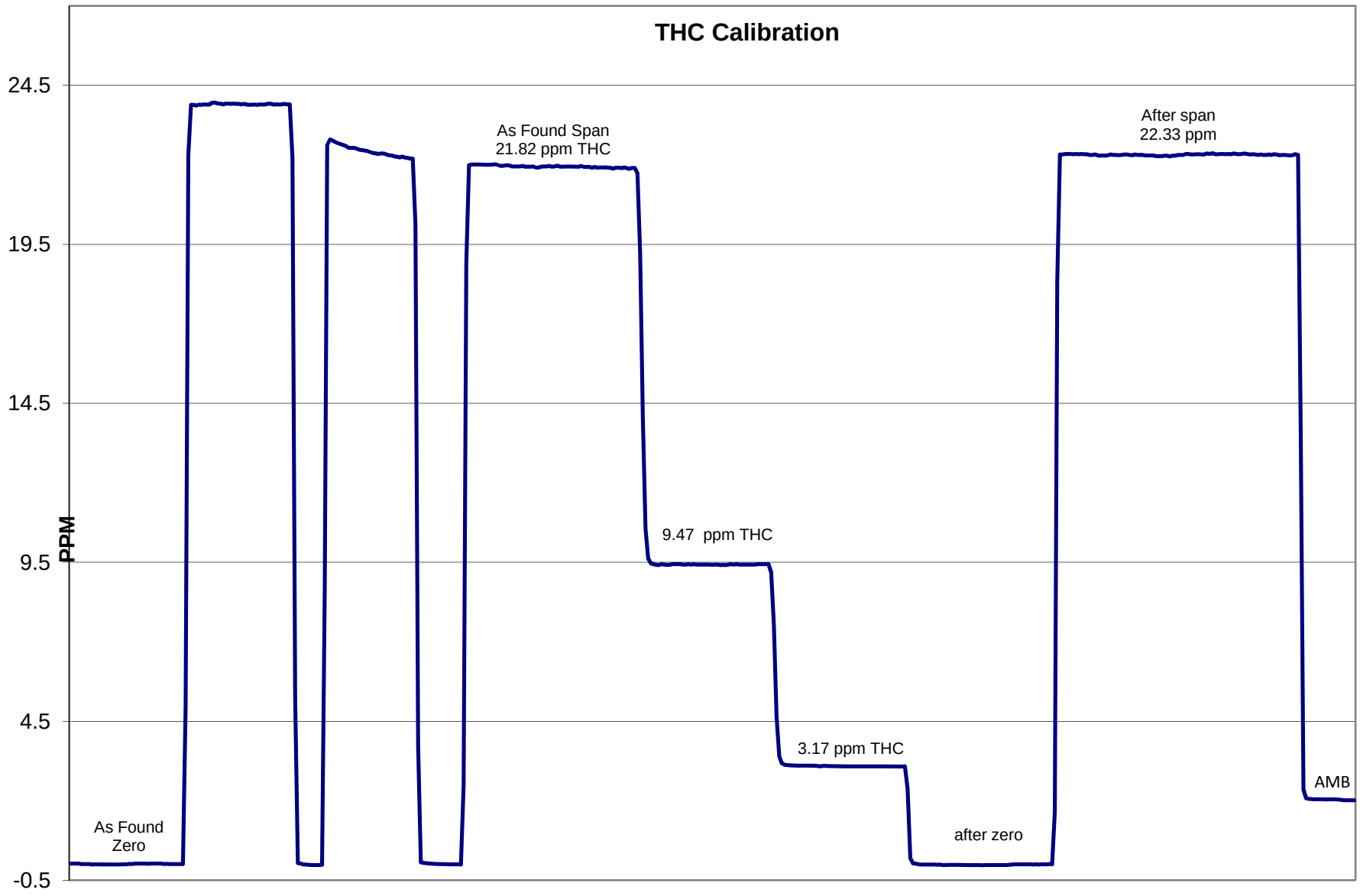
Station Information

Calibration Date	June 21, 2014	Previous Calibration	June 18, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	10:20	End Time (MST)	14:20:00 PM
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	0.013	N/A		
21.82	21.92	0.9955	Correlation Coefficient	0.999963
9.47	9.43	1.0045		
3.17	3.08	1.0301	Slope	0.994022
			Intercept	0.057086




THC Calibration
24.5
19.5
14.5
9.5
4.5
-0.5
PPM
As Found Span
21.82 ppm THC
After span
22.33 ppm
9.47 ppm THC
3.17 ppm THC
AMB
As Found
Zero
after zero

June 21, 2014

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**

FOCUS AIR QUALITY MONITORING

Station Information

Calibration Date	June 21 2014	Previous Calibration	June 18 2014
Station Name	PAZA Rover	Station Location	Clairmont
Reason: Routine	Install	Removal	Other:
Start Time (MST)	13:16:00 PM	End Time (MST)	17:05:00 PM
Barometric Pressure	0.923 Atm	Station Temperature	20.0 Deg C
Calibrator	Environics	Serial Number	3016
Cal Gas Concentration	10.44 ppm	Cal Gas Expiry Date	July/08/2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	1
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.996017	Calculated slope	0.999015
Calculated intercept	-0.124251	Calculated intercept	0.268999
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.9	ppb	27.6	ppb
Coefficient	0.935		0.972	
Lamp Voltage	803	V	819	V
Chamber Temp	44.1	C	43.9	C
Perm gas Temp	45	C	45	C
Pressure	653.1	mmHg	656.8	mmHg
Sample Flow	0.436	lpm	0.444	lpm
Lamp Intensity	41471	Hz	44003	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)
4995	0.0	0.0	0.0	N/A
4995	39.93	82.8	82.7	1.0006
4995	19.97	41.6	41.1	1.0113
8995	8.97	10.4	10.0	1.0393
4995	9.97		1.9	Sox Test
4995	0.00	0.0	0.0	As found zero
4995	39.93	82.8		As found span
			Average Correction Factor	1.0171

Calculated value of As Found Response: #VALUE! ppm Percent Change of As Found: NA

	before calibration		after calibration	
Auto zero	0.1	ppm	-0.4	ppm
Auto span	65.4	ppm	61.8	ppm

Notes: Lamp and socket replaced.
PMT and a regular adjustment made.
Sox scrubber check performed.

Calibration Performed By: Grover Christiansen,Dmytro Dolotii

Calibration Summary

Parameter **TRS**

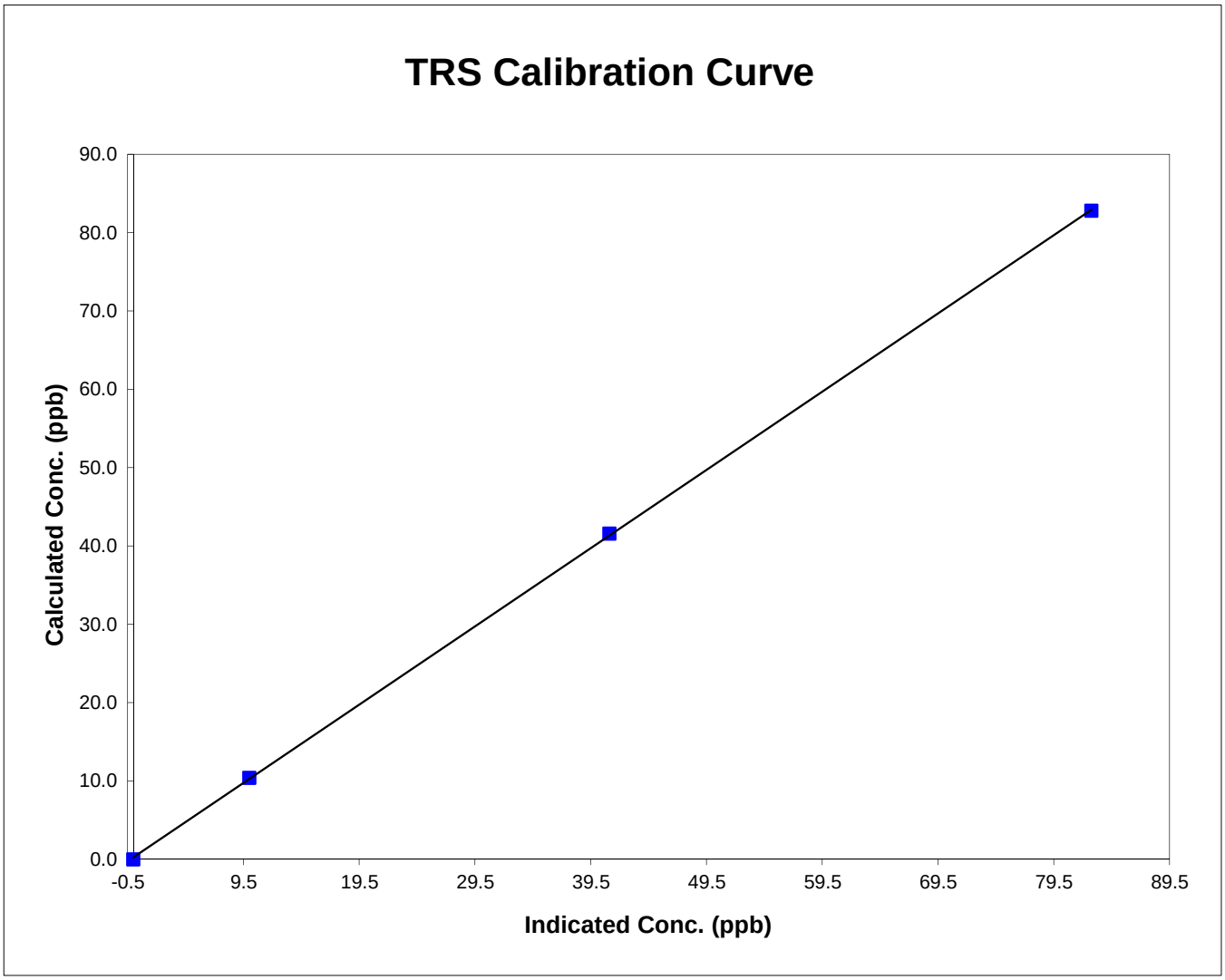
Air Monitoring Network **PAZA**

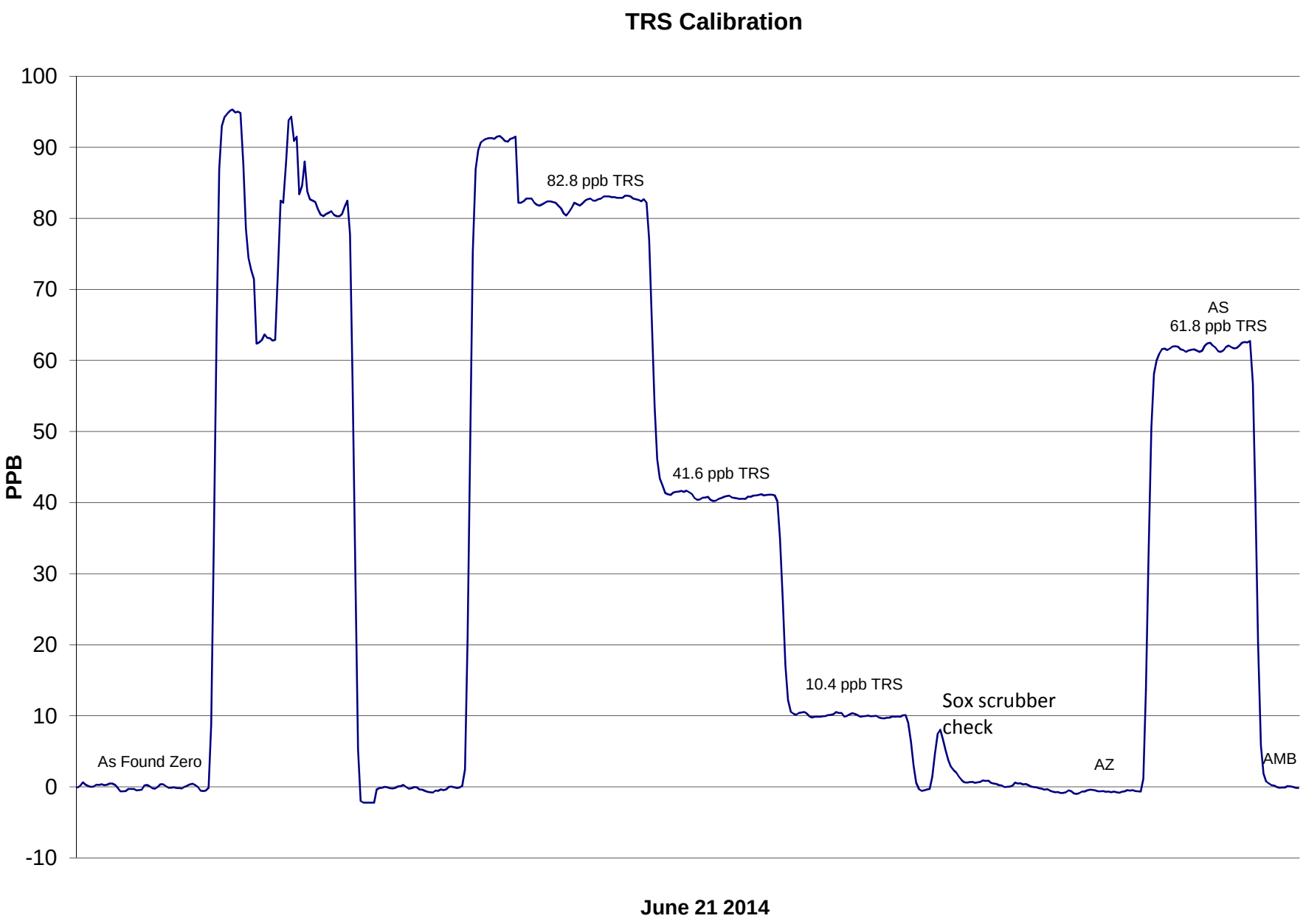
Station Information

Calibration Date	June 21 2014	Previous Calibration	June 18 2014
Station Number	PAZA Rover	Station Location	Clairmont
Start Time (MST)	13:16:00 PM	End Time (MST)	17:05:00 PM
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		
82.8	82.7	1.0006	Correlation Coefficient	0.999964
41.6	41.1	1.0113		
10.4	10.0	1.0393	Slope	0.999015
			Intercept	0.268999




TRS Calibration
100
90
80
70
60
50
40
30
20
10
0
-10
PPB
82.8 ppb TRS
41.6 ppb TRS
10.4 ppb TRS
Sox scrubber check
AZ
AS
61.8 ppb TRS
AMB
As Found Zero
June 21 2014