



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
August 2014**

September 30th, 2014

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

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

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **August 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: Seven(7) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, Falher, and Portable-Clairmont.

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

Henry Pirker Station:

- ◆ The measured ambient air quality was within the AAAQO for the Henry Pirker station with the exception of the PM_{2.5} analyzer, which recorded eight (8) 1-hour exceedences of the guideline of 80 µg/m³ and six (6) 24-hour exceedences of the guideline of 30 µg/m³:
 - August 01 06:00 82.3 µg/m³ Alberta Environment Reference # 287608
 - August 01 07:00 86.5 µg/m³ Alberta Environment Reference # 287608
 - August 01 08:00 87.7 µg/m³ Alberta Environment Reference # 287608
 - August 04 10:00 89.1 µg/m³ Alberta Environment Reference # 287834

- August 04 11:00 86.6 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 287834
 - August 04 12:00 88.3 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 287834
 - August 04 13:00 94.8 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 287834
 - August 17 13:00 92.3 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288391
 - August 01 24h 34.9 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 287608
 - August 04 24h 47.0 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 287834
 - August 13 24h 34.7 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288201
 - August 14 24h 42.3 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288273
 - August 15 24h 38.5 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288339
 - August 16 24h 35.9 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288373
- ◆ All analyzers and sensors at the Henry Pirker station had an operational uptime greater than 90% for the month of August.

Evergreen Park Station:

- ◆ The measured ambient air quality was within the AAAQO for the Evergreen Park station with the exception of the $\text{PM}_{2.5}$ analyzer, four (4) 24-hour exceedences of the guideline of $30 \mu\text{g}/\text{m}^3$:
- August 13 24h 34.8 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288200
 - August 13 24h 34.7 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288274
 - August 15 24h 38.4 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288340
 - August 18 24h 31.9 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288375
- ◆ All analyzers and sensors at the Evergreen Park station had an operational uptime greater than 90% for the month of August.

Smoky Heights Station:

- ◆ The measured ambient air quality was within the AAAQO for the Smoky Heights station with the exception of the $\text{PM}_{2.5}$ analyzer, which recorded five (5) 1-hour exceedences of the guideline of $80 \mu\text{g}/\text{m}^3$ and four (4) 24-hour exceedences of the guideline of $30 \mu\text{g}/\text{m}^3$:
- August 13 20:00 87.7 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288198
 - August 13 21:00 85.6 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288198
 - August 14 01:00 92.8 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288204
 - August 14 20:00 94.3 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288204
 - August 14 21:00 89.7 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288204
 - August 01 24h 31.9 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 287671
 - August 13 24h 31.5 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288198
 - August 14 24h 45.5 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288204
 - August 16 24h 144.3 $\mu\text{g}/\text{m}^3$ Alberta Environment Reference # 288369
- ◆ All analyzers and sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of August.

Beaverlodge Station:

- ◆ The measured ambient air quality was within the AAAQO for the Beaverlodge station with the exception of the PM_{2.5} analyzer, which recorded six (6) 1-hour exceedences of the guideline of 80 µg/m³ and two (2) 24-hour exceedences of the guideline of 30 µg/m³:
 - August 14 18:00 81.9 µg/m³ Alberta Environment Reference # 288269
 - August 14 19:00 102.5 µg/m³ Alberta Environment Reference # 288269
 - August 14 20:00 103.2 µg/m³ Alberta Environment Reference # 288269
 - August 14 21:00 90.7 µg/m³ Alberta Environment Reference # 288269
 - August 14 22:00 85.5 µg/m³ Alberta Environment Reference # 288269
 - August 17 12:00 100.4 µg/m³ Alberta Environment Reference # 288393
 - August 14 24h 41.1 µg/m³ Alberta Environment Reference # 288269
 - August 15 24h 36.8 µg/m³ Alberta Environment Reference # 288341
- ◆ All analyzers and sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of August.

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 August.

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 August.

Clairmont Station:

- ◆ The measured ambient air quality was within the AAAQO for the Clairmont station with the exception of the PM_{2.5} analyzer, which recorded three (3) 1-hour exceedences of the guideline of 80 µg/m³ and three (3) 24-hour exceedences of the guideline of 30 µg/m³:
 - August 13 20:00 81.2 µg/m³ Alberta Environment Reference # 288199
 - August 13 22:00 81.2 µg/m³ Alberta Environment Reference # 288199
 - August 14 20:00 102 µg/m³ Alberta Environment Reference # 288270
 - August 13 24h 32.2 µg/m³ Alberta Environment Reference # 288199
 - August 14 24h 41.0 µg/m³ Alberta Environment Reference # 288270
 - August 16 24h 32.6 µg/m³ Alberta Environment Reference # 288374
- ◆ All analyzers and sensors at the Clairmont station had an operational uptime greater than 90% for the month of August.

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of August: Silver Valley, Steeprock Creek, Eaglesham, Deer Mountain, 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 SO₂ passives ranged from 0.1 ppb to 0.3 ppb, with a mean of 0.1 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.2 ppb to 2.3 ppb, with a mean of 0.7 ppb.
- Monthly average concentrations for O₃ passives ranged from 14.6 ppb to 35.8 ppb, with a mean of 23.7 ppb.
- Monthly average concentrations for H₂S ranged from 0.1 ppb to 0.2 ppb, with a mean of 0.2 ppb.

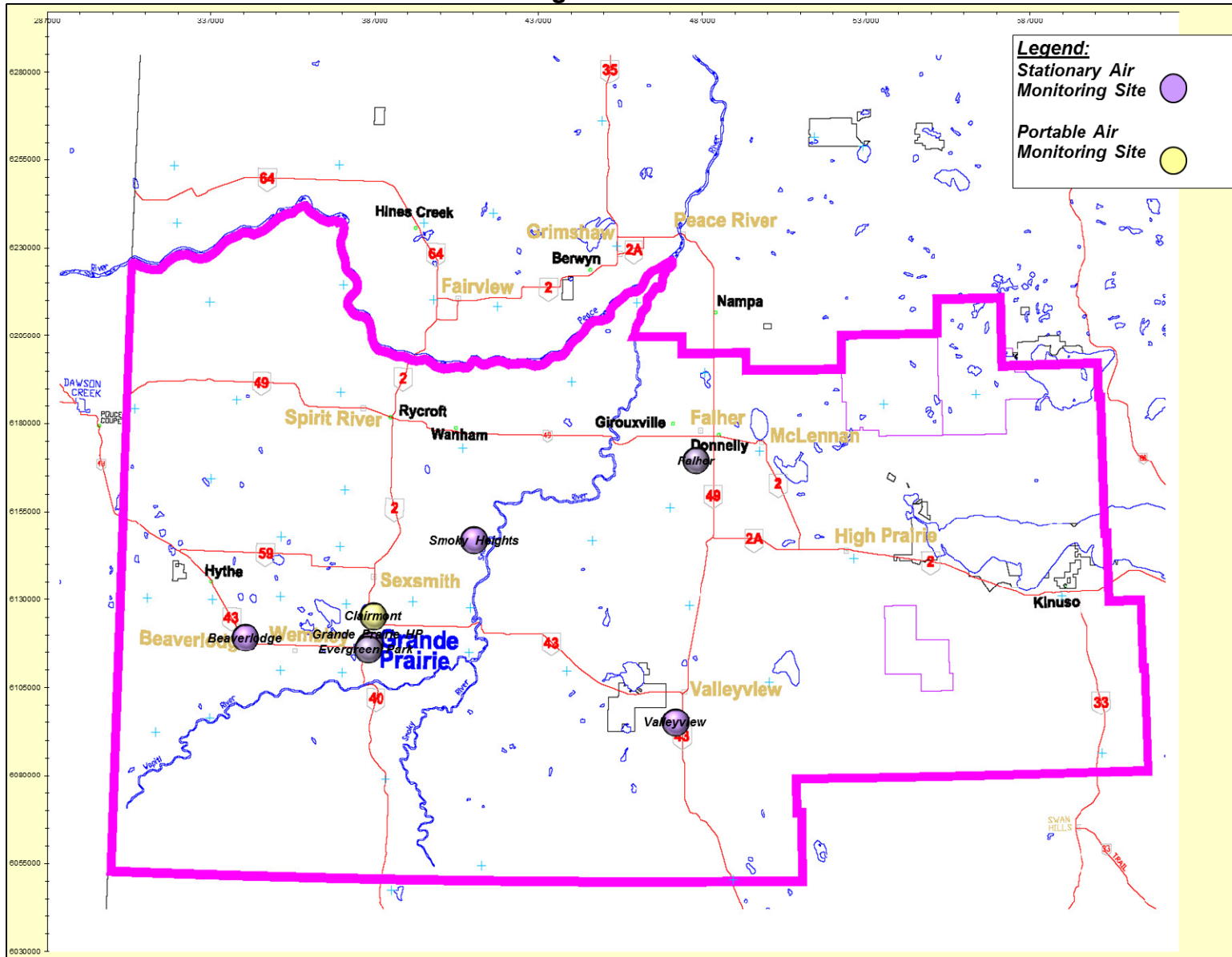
If you have any questions or concerns, please contact Patrick Andersen at 403.505.1041 or the PAZA office at 780.833.4343.

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

Aug-2014		Peace Airshed Zone Association					Maximum Recorded Values				Operational Time (%)
							1-hr		24-hr / 8-hr		
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	Conc	Day	
	1-hr	24-hr			1-hr	24-hr					
SO ₂ (ppb)	172	48	Henry Pirker	0.1	0	0	2.4	Aug-09 07:00	0.6	Aug-09	99%
SO ₂ (ppb)	172	48	Evergreen Park	0.2	0	0	2.3	Aug-02 13:00	0.5	Aug-13	100%
SO ₂ (ppb)	172	48	Smoky Heights	0.2	0	0	4.9	Aug-30 01:00	0.8	Aug-19	100%
SO ₂ (ppb)	172	48	Beaverlodge	0.5	0	0	3.0	Aug-13 23:00	1.4	Aug-15	100%
SO ₂ (ppb)	172	48	Valleyview	0.7	0	0	8.1	Aug-26 15:00	1.7	Aug-18	100%
SO ₂ (ppb)	172	48	Falher	0.2	0	0	2.5	Aug-14 17:00	0.7	Aug-14	100%
SO ₂ (ppb)	172	48	Clairmont	0.3	0	0	2.3	Aug-11 10:00	0.5	Aug-14	100%
NO (ppb)			Henry Pirker	1.0	0	0	25.4	Aug-15 08:00	3.5	Aug-22	99%
NO ₂ (ppb)	159	106	Henry Pirker	5.2	0	0	23.0	Aug-13 23:00	11.1	Aug-13	99%
NO _x (ppb)			Henry Pirker	6.2	0	0	44.4	Aug-15 08:00	12.6	Aug-13	99%
NO (ppb)			Beaverlodge	0.3	0	0	12.5	Aug-22 08:00	1.2	Aug-13	100%
NO ₂ (ppb)	159	106	Beaverlodge	2.5	0	0	12.8	Aug-13 09:00	4.6	Aug-13	100%
NO _x (ppb)			Beaverlodge	2.8	0	0	21.9	Aug-22 08:00	5.8	Aug-13	100%
NO (ppb)			Clairmont	0.8	0	0	22.2	Aug-14 08:00	2.6	Aug-14	100%
NO ₂ (ppb)	159	106	Clairmont	3.6	0	0	17.4	Aug-14 08:00	6.9	Aug-13	100%
NO _x (ppb)			Clairmont	4.5	0	0	39.8	Aug-14 08:00	9.3	Aug-14	100%
O ₃ (ppb)	82		Henry Pirker	24.1	0	-	55.8	Aug-02 14:00	34.9	Aug-05	100%
O ₃ (ppb) - 8-hr			Henry Pirker		0				48.2	Aug-02	
O ₃ (ppb)	82		Beaverlodge	28.1	0	-	59.1	Aug-05 16:00	39.7	Aug-05	100%
O ₃ (ppb) - 8-hr			Beaverlodge		0				53.2	Aug-05	
O ₃ (ppb)	82		Clairmont	25.0	0	-	52.4	Aug-02 16:00	35.8	Aug-05	100%
O ₃ (ppb) - 8-hr			Clairmont		0				48.7	Aug-12	
CO (ppm)	13		Henry Pirker	0.21	0	-	0.8	Aug-01 07:00	0.4	Aug-01	100%
CO (ppm) - 8-hr		5	Henry Pirker		0				0.7	Aug-01	

PAZA Monthly Continuous Data Summary – continued

Aug-2014		Peace Airshed Zone Association					Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
THC (ppm)			Henry Pirker	2.0	-	-	4.3	Aug-25 06:00	2.4	Aug-25	100%
CH ₄ (ppm)			Henry Pirker	2.0	-	-	4.3	Aug-25 06:00	2.4	Aug-25	100%
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	Aug-21 17:00	0.0	Aug-21	100%
THC (ppm)			Clairmont	2.03	-	-	3.8	Aug-13 02:00	2.4	Aug-13	100%
TRS (ppb)			Henry Pirker	0.2	-	-	1.6	Aug-02 09:00	0.4	Aug-02	100%
TRS (ppb)			Evergreen Park	0.3	-	-	2.7	Aug-02 08:00	0.7	Aug-15	100%
TRS (ppb)			Smoky Heights	0.1	-	-	1.6	Aug-03 06:00	0.3	Aug-03	100%
TRS (ppb)			Clairmont	0.4	-	-	3.7	Aug-08 04:00	0.7	Aug-16	100%
H ₂ S (ppb)	10	3	Valleyview	0.2	0	0	1.2	Aug-28 01:00	0.4	Aug-03	100%
H ₂ S (ppb)	10	3	Falher	0.3	0	0	3.0	Aug-22 05:00	0.6	Aug-22	100%
PM _{2.5} (µg/m ³)	80	30	Henry Pirker	15.2	8	6	94.8	Aug-04 13:00	48.0	Aug-04	99%
PM _{2.5} (µg/m ³)	80	30	Evergreen Park	12.9	0	4	74.0	Aug-01 08:00	38.4	Aug-15	100%
PM _{2.5} (µg/m ³)	80	30	Smoky Heights	12.5	5	4	94.3	Aug-14 20:00	45.5	Aug-14	100%
PM _{2.5} (µg/m ³)	80	30	Beaverlodge	14.2	6	2	133.8	Jul-15 10:00	49.1	Jul-15	100%
PM _{2.5} (µg/m ³)	80	30	Clairmont	11.3	3	3	102.0	Aug-14 20:00	41.0	Aug-14	100%
RH (%)			Henry Pirker	55.2	-	-	89.2	Aug-13 06:00	68.8	Aug-20	100%
RH (%)			Evergreen Park	59.4	-	-	95.8	Aug-02 08:00	73.3	Aug-20	100%
RH (%)			Beaverlodge	62.2	-	-	100.0	Aug-04 05:00	80.3	Aug-20	100%
RH (%)			Valleyview	68.7	-	-	99.7	Aug-03 07:00	86.4	Aug-20	100%
SR (W/m ²)			Henry Pirker	188.9	-	-	739.6	Aug-07 14:00	267.8	Aug-07	100%
Temp (°C)			Henry Pirker	18.2	-	-	32.5	Aug-13 16:00	23.7	Aug-12	100%
Temp (°C)			Evergreen Park	17.8	-	-	31.6	Aug-12 18:00	22.5	Aug-13	100%
Temp (°C)			Smoky Heights	17.3	-	-	32.0	Aug-12 16:00	23.6	Aug-12	100%
Temp (°C)			Beaverlodge	17.3	-	-	30.5	Aug-12 18:00	23.0	Aug-12	100%
Temp (°C)			Valleyview	17.2	-	-	31.2	Aug-12 16:00	22.6	Aug-13	100%
Temp (°C)			Falher	17.2	-	-	31.6	Aug-13 17:00	22.8	Aug-13	100%
Temp (°C)			Clairmont	17.9	-	-	31.3	Aug-03 16:00	23.4	Aug-15	100%

PAZA Monthly Continuous Data Summary – continued

Aug-2014		Peace Airshed Zone Association					Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
WSPD s (km/hr)			Henry Pirker	8.6	-	-	30.0	Aug-27 16:00	17.0	Aug-31	100%
WSPD s (km/hr)			Evergreen Park	10.6	-	-	37.0	Aug-27 12:00	24.5	Aug-31	100%
WSPD s (km/hr)			Smoky Heights	12.7	-	-	46.0	Aug-31 10:00	22.9	Aug-31	100%
WSPD s (km/hr)			Beaverlodge	10.7	-	-	37.0	Aug-27 15:00	20.2	Aug-27	100%
WSPD s (km/hr)			Valleyview	3.2	-	-	18.0	Aug-18 11:00	6.4	Aug-31	100%
WSPD s (km/hr)			Falher	11.8	-	-	27.0	Aug-18 12:00	17.1	Aug-26	100%
WSPD s (km/hr)			Clairmont	10.0	-	-	28.0	Aug-18 10:00	16.0	Aug-18	100%
WSPD v (km/hr)			Henry Pirker	4.0	-	-	29.0	Aug-27 16:00	16.2	Aug-31	100%
WSPD v (km/hr)			Evergreen Park	6.4	-	-	37.0	Aug-27 12:00	23.3	Aug-31	100%
WSPD v (km/hr)			Smoky Heights	6.5	-	-	46.0	Aug-31 10:00	22.3	Aug-31	100%
WSPD v (km/hr)			Beaverlodge	4.4	-	-	36.0	Aug-27 15:00	19.6	Aug-27	100%
WSPD v (km/hr)			Valleyview	1.3	-	-	18.0	Aug-18 11:00	5.4	Aug-31	100%
WSPD v (km/hr)			Falher	3.8	-	-	26.0	Aug-18 12:00	15.7	Aug-26	100%
WSPD v (km/hr)			Clairmont	3.2	-	-	28.0	Aug-18 10:00	15.5	Aug-18	100%
WDIR			Henry Pirker	WSW	-	-	-	-	-	-	100%
WDIR			Evergreen Park	WSW	-	-	-	-	-	-	100%
WDIR			Smoky Heights	WSW	-	-	-	-	-	-	100%
WDIR			Beaverlodge	WSW	-	-	-	-	-	-	100%
WDIR			Valleyview	WSW	-	-	-	-	-	-	100%
WDIR			Falher	S	-	-	-	-	-	-	100%
WDIR			Clairmont	WSW	-	-	-	-	-	-	100%

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on August 1st (CO, THC, TRS) and 5th (SO₂, NO_x, O₃). Three hours of data lost due to power failure on August 4.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	Analyzer failed to gather valid data for one hour on August 3 rd . Zero-air system maintenance on August 21 st .
NO _x /NO/NO ₂	TEI	42C	Zero-air system maintenance on August 21 st .
O ₃	TEI	49C	Returned repaired analyzer to service August 11 th , removed loaned analyzer.
CO	TEI	48C	No operational issues observed.
THC/CH ₄ /NMHC	TEI	55I	Hydrogen cylinder replaced August 11 th .
TRS	TEI	45C/43C	No operational issues observed.
PM _{2.5}	Sharp	5030	Heads cleaned August 27 th . Eight 1-hour and six 24-hour exceedences recorded. AE Reference #287608, 287834, 288201, 288273, 288339, 288373, 288391
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 August 15th (SO₂, TRS). Spray-paint vandalism to trailer in overnight period of August 25-26. Covered over August 29.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
TRS	TEI	43C	Irregular span August 2 nd checked, no adjustment made.
PM _{2.5}	R&P	1400AB	Four 24-hour exceedences recorded. AE Reference #288200, 288274, 288340, 288375
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 August 22nd (SO₂) and 25th (TRS). Brief power outage August 15th caused loss of one (1) hour of data.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	Calibration started and aborted August 22 nd due to leaking regulator. Completed August 25 th .
PM _{2.5}	R&P	1400AB	Analyzer failed to capture one hour of data on August 16 th . Glassware cleaned during calibration period. Five 1-hour and four 24-hour exceedences recorded. AE Reference #287671, 288198, 288204, 288369
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 August 7th (SO₂, NO_x, O₃) and 8th (SO₂).

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No operational issues observed.
NO _x /NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Glassware cleaned during calibration period. Six 1-hour and two 24-hour exceedences recorded. AE Reference #288269, 288341, 288393
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 August 6th (SO₂ & H₂S).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	Analyzer with internal span system installed August 6 th . Removal calibration indicates satisfactory performance, no data discarded due to missing spans.
H ₂ S	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 – Falher Station

General Station Issues

Routine monthly calibrations were performed on August 8th (SO₂ & H₂S).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	Thermo	450i	Irregular span August 6-7 th checked and adjusted at 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

Routine monthly calibrations were performed on August 19th (SO₂, NO_x, O₃) and 21st (THC, TRS).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	Manifold cleaned August 21 st during calibration.
NO _x	TEI	42i	Manifold cleaned August 21 st during calibration.
O ₃	TEI	49C	Manifold cleaned August 21 st during calibration.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Glassware cleaned during calibration period. Three 1-hour and three 24-hour exceedences recorded. AE Reference #288199, 288270, 288374
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

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - August 2014

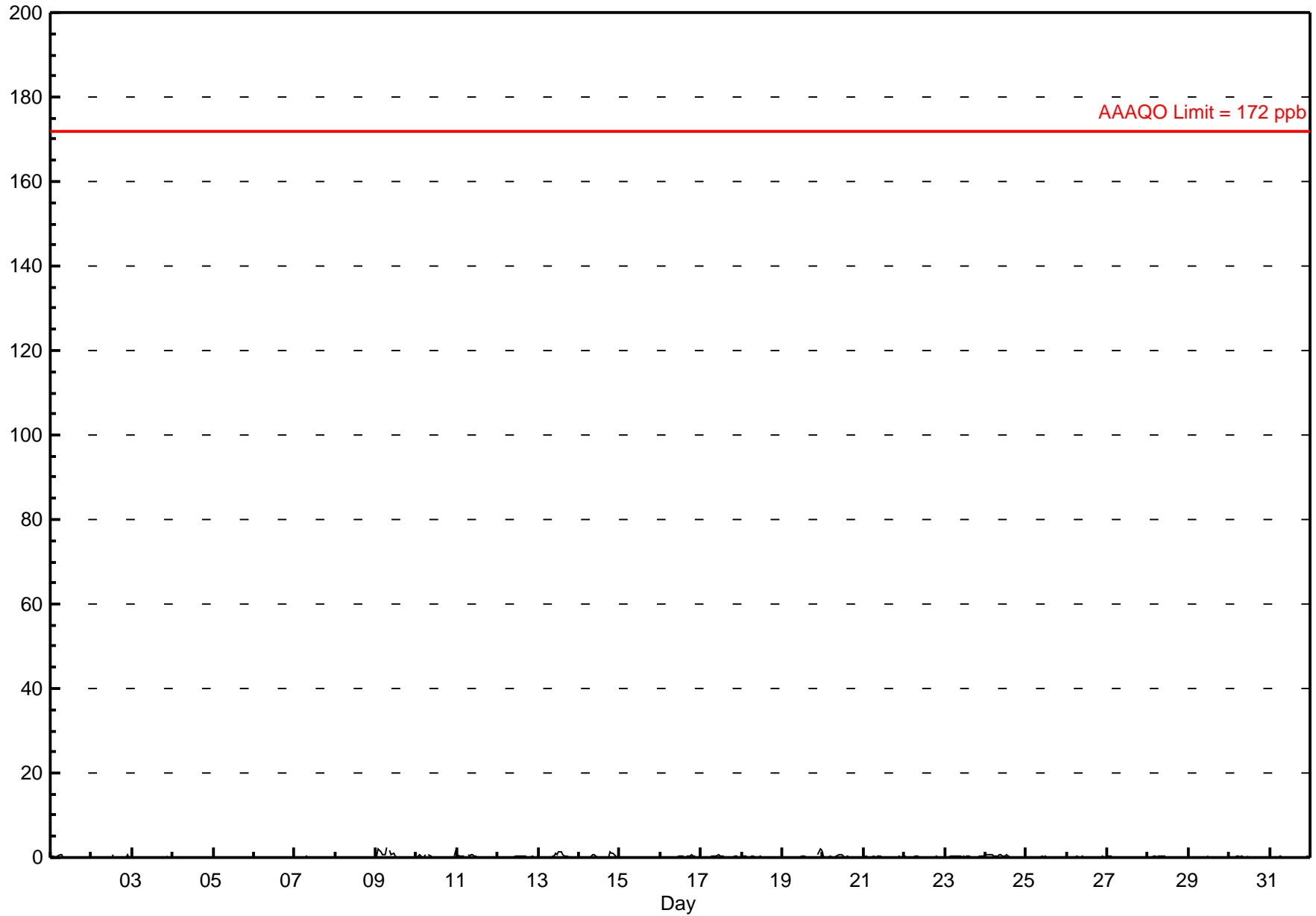
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 2.4 ppb on Aug 9 07:00	Maximum Daily Average: 0.6 ppb on Aug 9		Hours of Data:	702
Minimum Value: 0 ppb on Aug 1 09:00	Minimum Daily Average: 0.0 ppb on Aug 4		Hours of Missing Data:	42
Maximum Diurnal Average: 0.3 ppb at hour 9	Minimum Diurnal Average: 0.0 ppb at hour 17		Hours of Calibration:	35
Monthly Average: 0.14 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 1.4		Percent Operational Time:	99.1

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.8
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	1	0	0	0.1	0.7
3-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	N	0	0.0	0.3
4-Aug	0	0	0	0	0	0	P	P	P	R	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
5-Aug	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
6-Aug	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
7-Aug	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
8-Aug	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
9-Aug	0	2	2	1	1	1	2	A	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.4
10-Aug	0	0	1	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0.2	1.5
11-Aug	1	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
12-Aug	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
13-Aug	0	0	0	A	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.5
14-Aug	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0.3	1.3
15-Aug	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
16-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0.1	0.6
17-Aug	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
19-Aug	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	2.2
20-Aug	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	A	0	1	2	2	0.2	0.8
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	M	M	M	0	0	0	0	0	0	0.1	0.3
22-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.3
23-Aug	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	0.5
24-Aug	1	1	1	1	1	0	0	0	1	1	1	0	1	0	0	A	0	0	0	0	0	0	0	0	0.3	0.7
25-Aug	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	0.5
26-Aug	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
27-Aug	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	0.5
28-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
29-Aug	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	0.3
30-Aug	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
31-Aug	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.2	Diurnal Average	
	0.8	2.2	1.8	1.3	0.7	0.8	2.4	0.7	1.6	0.8	1.1	0.7	1.5	1.4	0.6	0.4	0.3	0.3	1.3	1.0	1.1	0.6	2.2	1.7	Diurnal Maximum	

C - Calibration R - Recovery P - Power Failure M - Maintenance N - Not Valid
A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - August 2014



Hourly Maximums

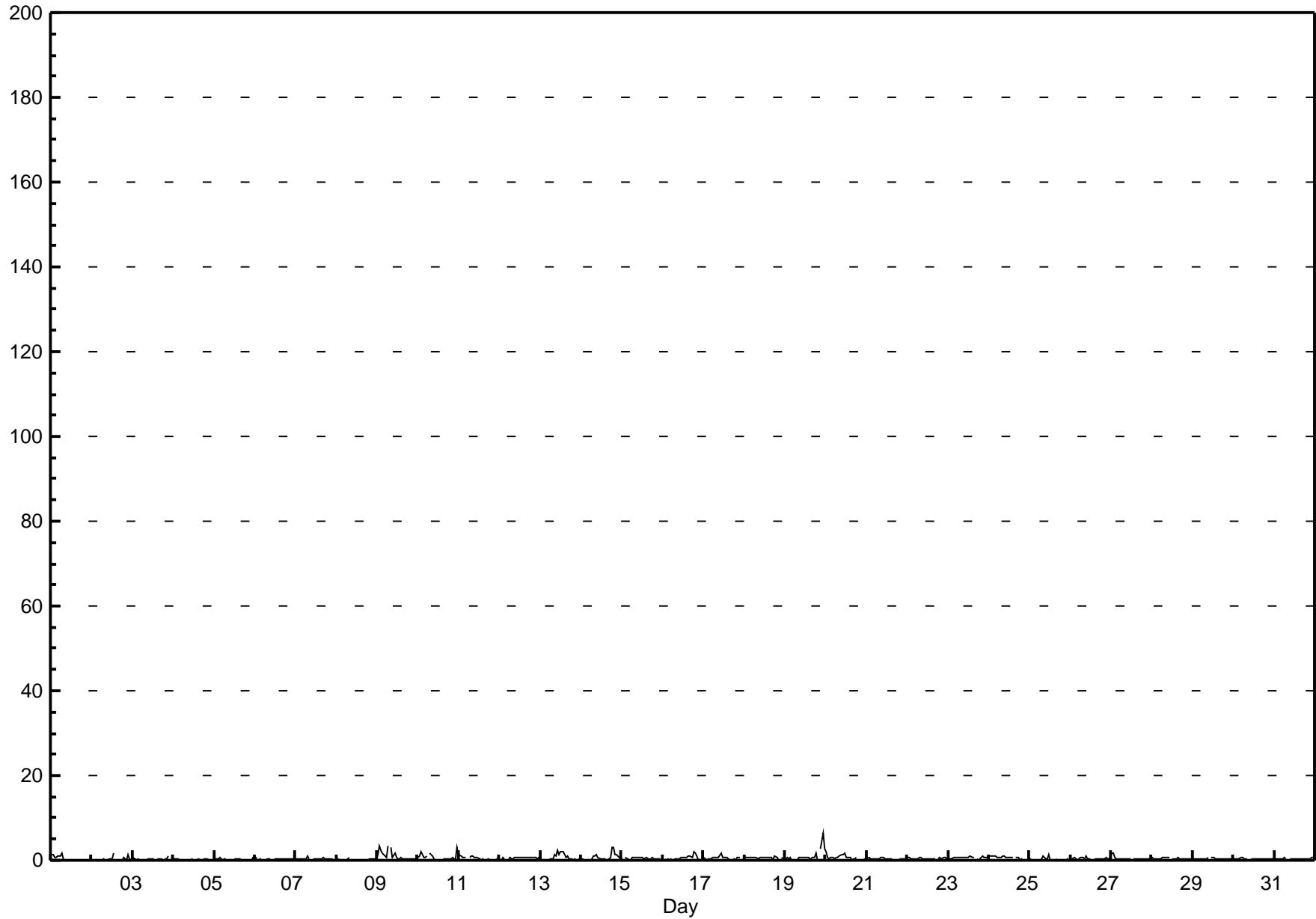
Sulphur Dioxide (SO₂) - ppb

Henry Pirker - August 2014

Maximum Value: 6.5 ppb on Aug 19 23:00		Maximum Daily Average: 1.0 ppb on Aug 9		Hours in Service: 744																						
Minimum Value: 0 ppb on Aug 4 06:00		Minimum Daily Average: 0.2 ppb on Aug 8		Hours of Data: 702																						
Maximum Diurnal Average: 0.7 ppb at hour 9		Minimum Diurnal Average: 0.3 ppb at hour 18		Hours of Missing Data: 42																						
Monthly Average: 0.47 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 0.9 P ₉₉ = 3.0		Hours of Calibration: 35																						
				Percent Operational Time: 99.1																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	1	1	1	1	1	2	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	1.6
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	2	A	0	0	0	0	1	0	1	0	0	0.3	1.6
3-Aug	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	N	1	0.3	0.9	
4-Aug	0	0	0	0	0	0	P	P	P	R	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
5-Aug	0	0	0	1	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	1	0.2	0.6	
6-Aug	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6	
7-Aug	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0.3	1.0	
8-Aug	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
9-Aug	1	3	2	2	1	1	3	A	3	1	2	1	0	0	1	0	0	0	0	0	0	0	0	1.0	3.5	
10-Aug	1	1	2	1	1	1	A	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0.7	3.1	
11-Aug	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0.5	1.3	
12-Aug	0	0	1	0	A	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	0.7	
13-Aug	0	0	0	A	0	0	0	0	1	1	2	1	2	2	1	1	1	0	0	0	0	0	0	0.7	2.4	
14-Aug	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	0	1	3	3	1	1	1	1	0.8	3.0	
15-Aug	0	A	1	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	1	1	0	0	0	0.4	0.5	
16-Aug	A	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	2	1	0	0	0.6	2.0	
17-Aug	1	0	0	0	0	1	1	1	1	1	2	1	1	1	1	0	0	0	0	1	1	A	1	0.5	1.7	
18-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	1	0	0.5	1.1	
19-Aug	0	1	0	1	0	0	0	0	1	1	1	1	1	1	1	0	1	1	2	0	A	3	7	0.9	6.5	
20-Aug	2	1	0	1	1	0	1	1	1	2	2	2	1	1	1	0	0	0	1	A	0	0	0	0.7	2.1	
21-Aug	0	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	M	M	M	0	0	0	0	0.4	0.8	
22-Aug	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	A	0	1	0	1	1	0.4	0.8	
23-Aug	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	1	1	1	1	0.6	1.1	
24-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0.7	1.1	
25-Aug	0	0	0	0	0	0	0	0	1	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0.2	1.5	
26-Aug	0	0	1	0	0	0	1	1	0	1	0	0	0	A	0	0	0	0	0	0	0	1	0	0.4	1.0	
27-Aug	2	2	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	1.8	
28-Aug	1	0	0	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0.4	0.8	
29-Aug	0	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
30-Aug	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
31-Aug	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.8	
		0.6	0.6	0.5	0.4	0.4	0.3	0.5	0.5	0.7	0.6	0.7	0.6	0.4	0.5	0.4	0.3	0.3	0.3	0.5	0.4	0.4	0.5	0.5	0.5	Diurnal Average
		2.1	3.5	2.2	1.8	1.3	1.1	3.3	1.6	3.1	1.5	2.4	1.6	2.1	2.0	1.5	0.9	1.0	0.8	3.0	3.0	1.5	2.6	6.5	3.1	Diurnal Maximum
C - Calibration		R - Recovery						P - Power Failure						M - Maintenance						N - Not Valid						
A - Automated Daily Zero Span																										

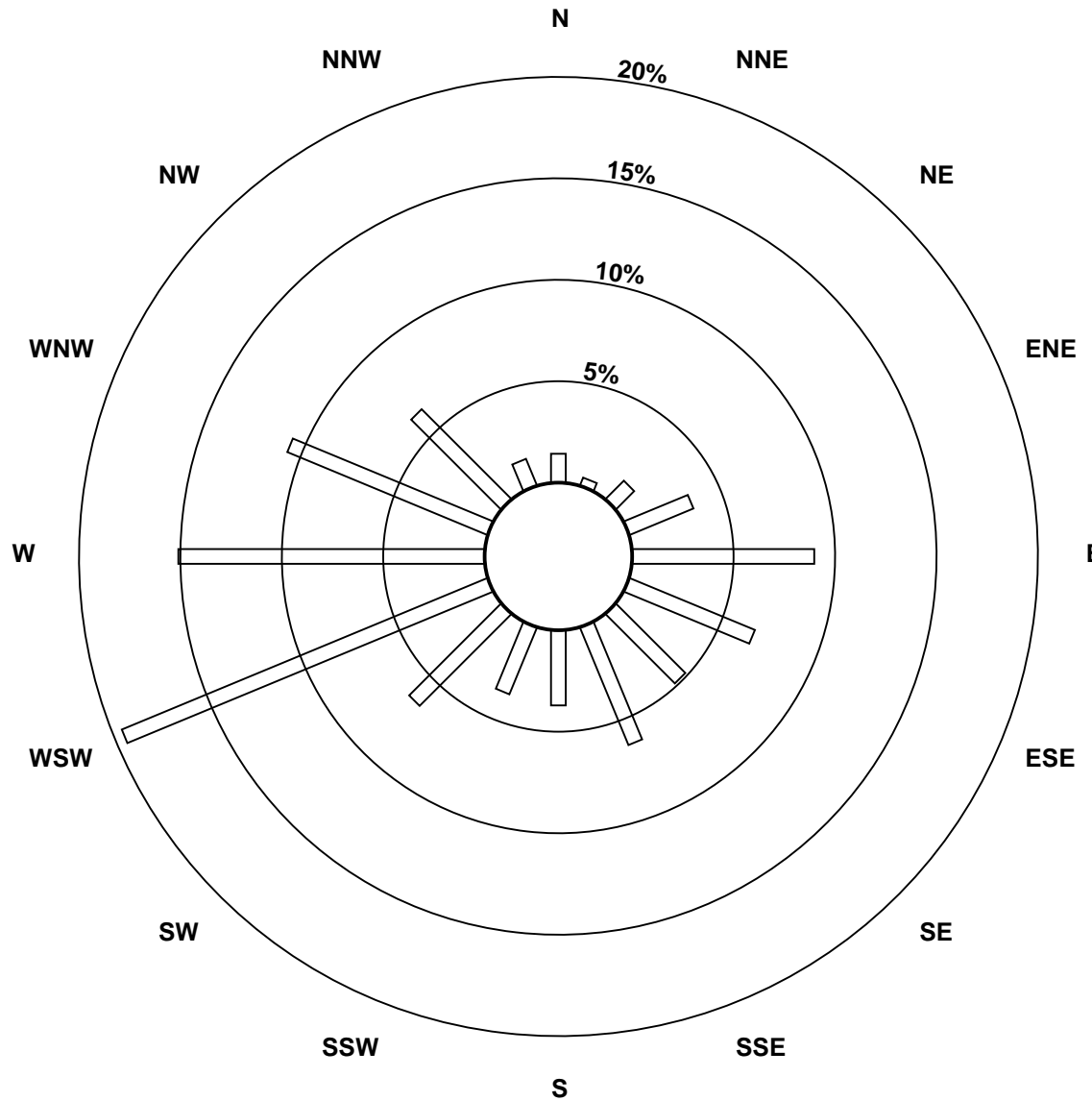
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - August 2014

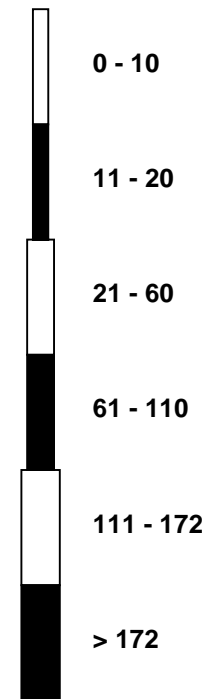


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - August 2014

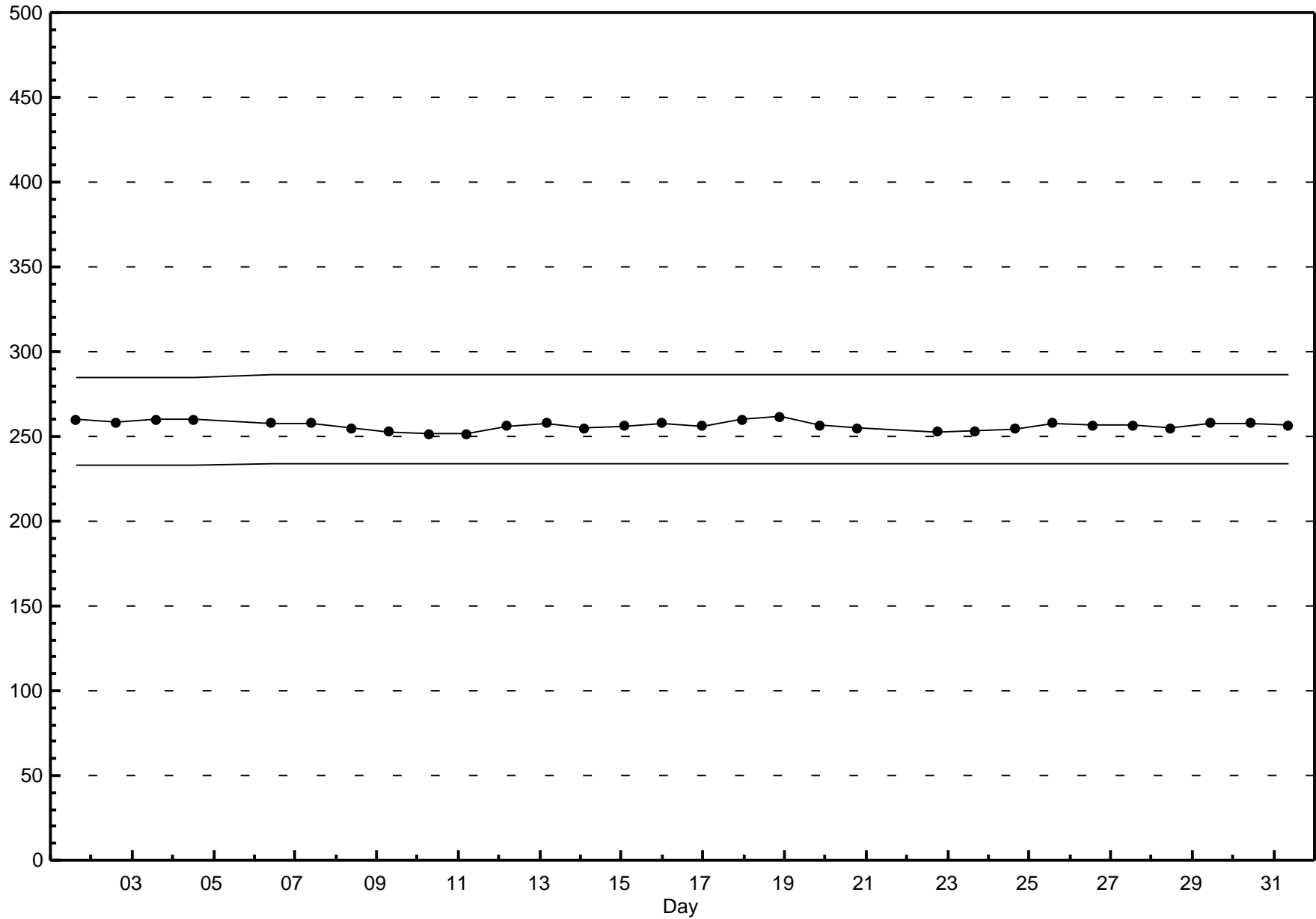


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Henry Pirker - August 2014



Hourly Averages

Total Reduced Sulphur (TRS) - ppb

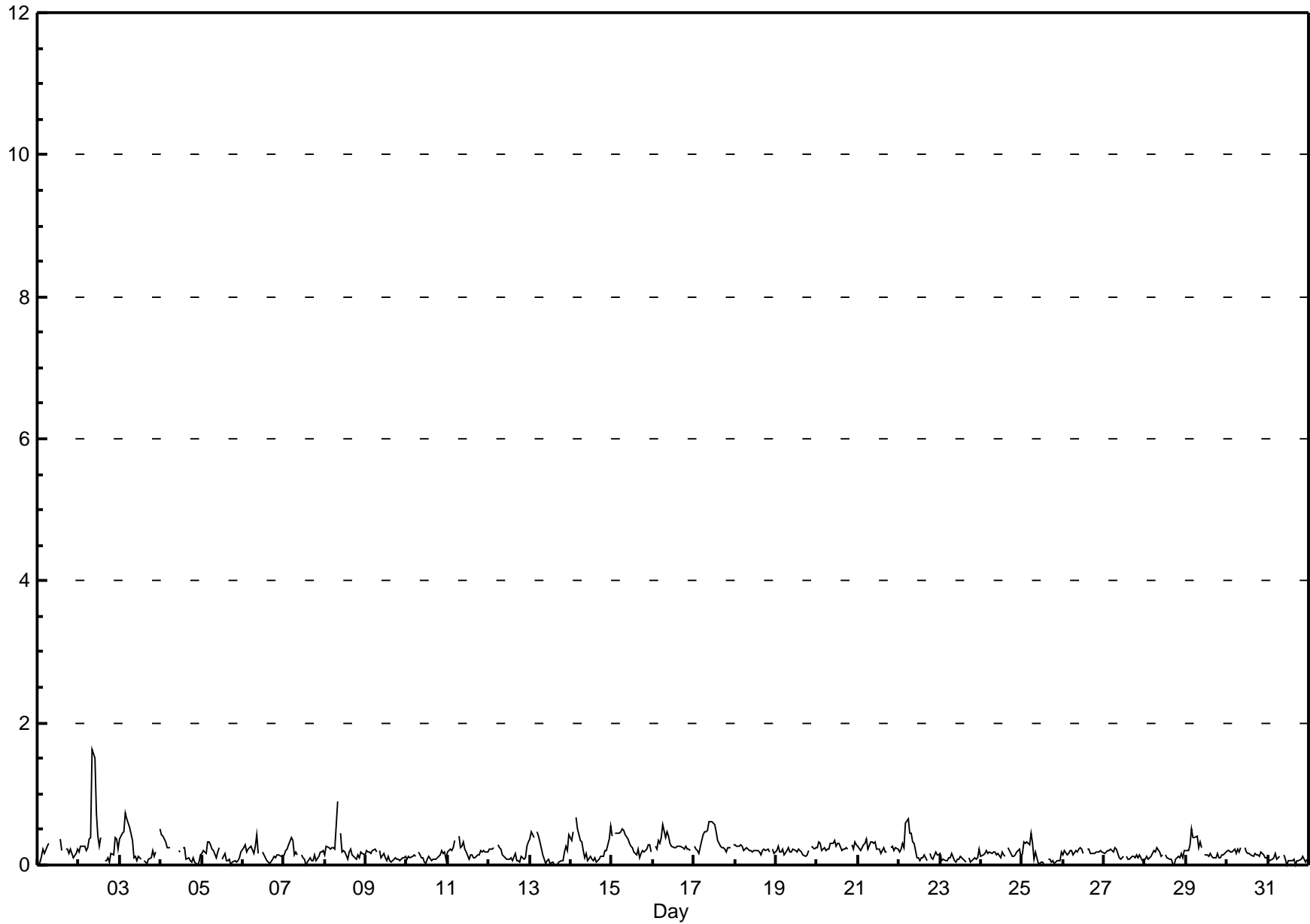
Henry Pirker - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 1.6 ppb on Aug 2 09:00	Maximum Daily Average: 0.4 ppb on Aug 2		Hours of Data:	701
Minimum Value: 0 ppb on Aug 1 01:00	Minimum Daily Average: 0.1 ppb on Aug 31		Hours of Missing Data:	43
Maximum Diurnal Average: 0.3 ppb at hour 5	Minimum Diurnal Average: 0.1 ppb at hour 17		Hours of Calibration:	39
Monthly Average: 0.20 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 0.6		Percent Operational Time:	99.5

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	A	0	0	0	0	0	0	0	0	0	--	0.4
2-Aug	0	0	0	0	0	0	0	0	2	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	1.6
3-Aug	0	0	0	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	N	1	0.3	0.7
4-Aug	0	0	0	0	0	0	P	P	P	R	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
5-Aug	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	0.3
6-Aug	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	0.2	0.4
7-Aug	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	0.2	0.4
8-Aug	0	0	0	0	0	0	0	1	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
9-Aug	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	0.2
10-Aug	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	0.1	0.2
11-Aug	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	0.4
12-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
13-Aug	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	0.5
14-Aug	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.7
15-Aug	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
16-Aug	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
17-Aug	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0.2	0.3
20-Aug	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	0.3	0.3
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0.3	0.4
22-Aug	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.6
23-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2
24-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.2
25-Aug	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	0.5
26-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
27-Aug	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	0.1	0.2
28-Aug	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	0.2
29-Aug	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
30-Aug	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	0.2	0.3
31-Aug	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	0.2

0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	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	Diurnal Average
0.4	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.9	1.6	1.5	0.7	0.6	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4	0.4	0.5	Diurnal Maximum		

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

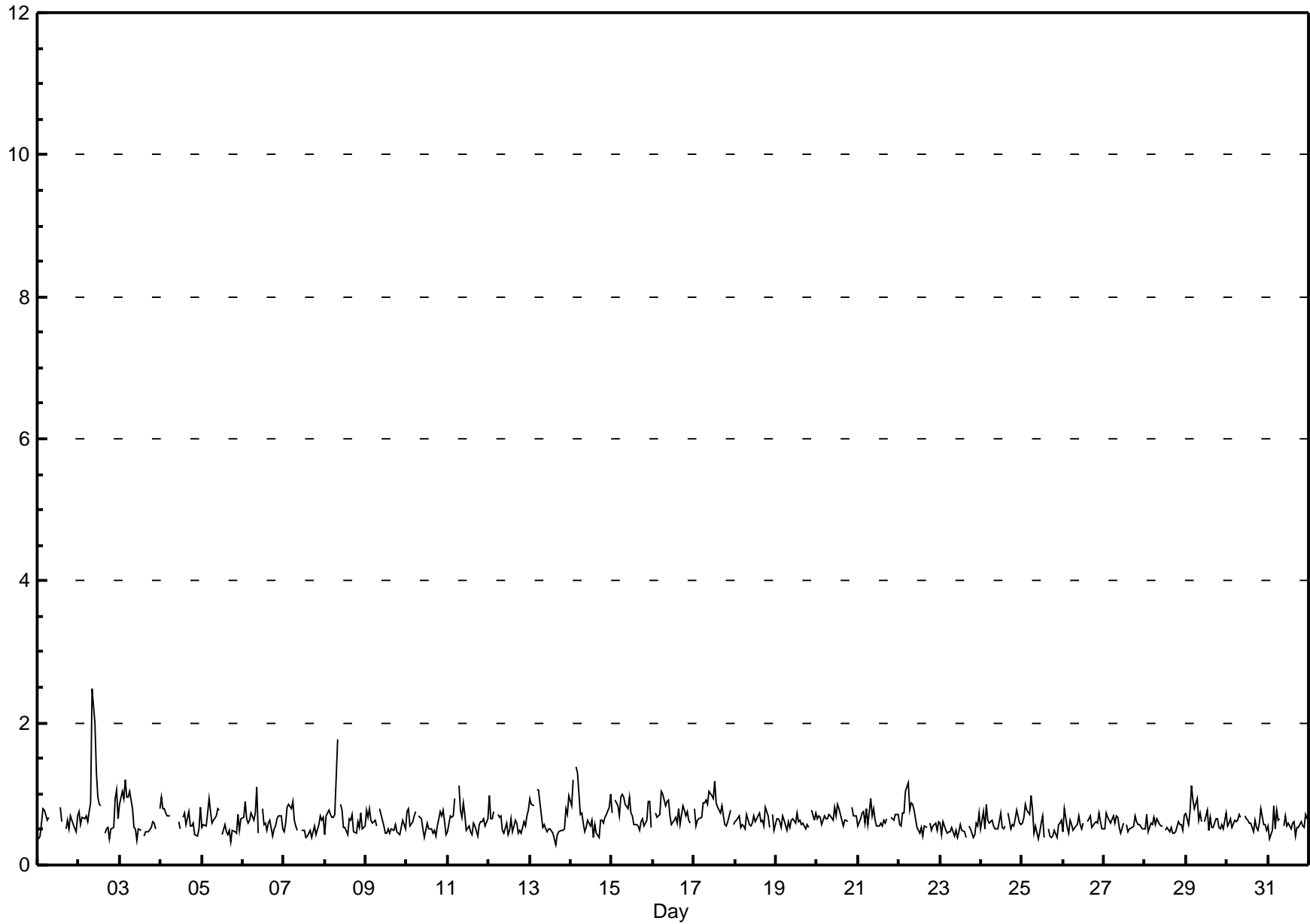


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

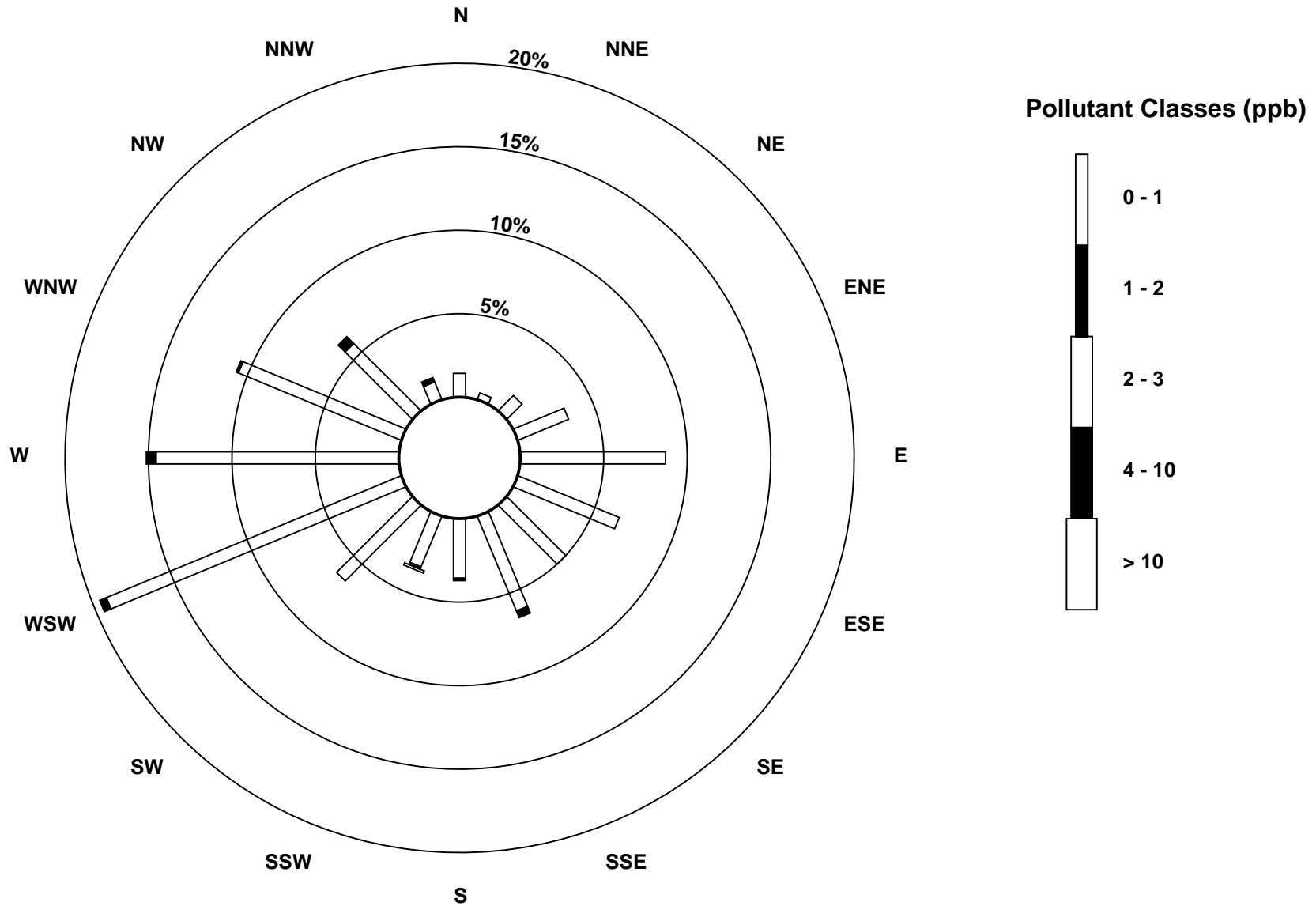
Henry Pirker - August 2014

Maximum Value: 2.5 ppb on Aug 2 09:00		Maximum Daily Average: 0.8 ppb on Aug 2		Hours in Service: 744																																																																																																																				
Minimum Value: 0 ppb on Aug 13 16:00		Minimum Daily Average: 0.5 ppb on Aug 23		Hours of Data: 701																																																																																																																				
Maximum Diurnal Average: 0.8 ppb at hour 6		Minimum Diurnal Average: 0.5 ppb at hour 18		Hours of Missing Data: 43																																																																																																																				
Monthly Average: 0.64 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.2		Hours of Calibration: 39																																																																																																																				
Percent Operational Time: 99.5																										Daily Average	Daily Maximum																																																																																													
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																																																																																																
1-Aug	0	0	1	1	1	1	1	C	C	C	C	C	C	1	1	A	1	1	1	1	1	1	0	1	--	0.8																																																																																														
2-Aug	1	1	1	1	1	1	1	1	2	2	1	1	1	1	A	0	0	1	0	1	1	1	1	1	0.8	2.5																																																																																														
3-Aug	1	1	1	1	1	1	1	1	1	1	0	1	0	A	0	0	0	0	1	1	1	1	N	1	0.7	1.2																																																																																														
4-Aug	1	1	1	1	1	1	P	P	P	R	1	1	A	1	1	1	1	1	1	1	0	0	1	1	0.6	1.0																																																																																														
5-Aug	1	1	1	1	1	1	1	1	1	1	A	0	0	1	0	0	0	0	0	0	0	1	0	1	0.6	0.9																																																																																														
6-Aug	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0	1	1	0	1	1	1	1	1	1	0.6	1.1																																																																																														
7-Aug	0	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0.6	0.9																																																																																														
8-Aug	0	1	1	1	1	1	1	1	2	A	1	1	1	0	1	1	1	0	0	1	1	1	1	1	0.7	1.8																																																																																														
9-Aug	1	1	1	1	1	1	1	A	2	1	1	0	0	1	0	1	0	1	0	0	0	1	1	1	0.6	0.8																																																																																														
10-Aug	1	1	1	1	1	1	A	1	1	1	0	0	1	1	1	0	0	0	1	1	1	1	1	0	0.6	0.8																																																																																														
11-Aug	0	1	1	1	1	A	1	1	1	1	1	0	1	0	0	1	1	0	1	1	1	1	1	1	0.6	1.1																																																																																														
12-Aug	1	1	1	1	A	1	1	1	0	0	1	0	0	1	0	1	1	0	0	0	1	1	1	1	0.6	1.0																																																																																														
13-Aug	1	1	1	A	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	1	1	1	1	0.6	1.1																																																																																														
14-Aug	1	1	A	1	1	1	1	1	0	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	0.7	1.4																																																																																														
15-Aug	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.7	1.0																																																																																														
16-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0																																																																																														
17-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2																																																																																														
18-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.6	0.8																																																																																														
19-Aug	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.8																																																																																														
20-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	0.8																																																																																														
21-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	0.9																																																																																														
22-Aug	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	A	1	0	1	1	0	1	0	0.6	1.2																																																																																														
23-Aug	1	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	A	1	1	0	0	1	1	1	0.5	0.7																																																																																														
24-Aug	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	0.8																																																																																														
25-Aug	1	1	1	1	1	1	1	0	1	0	0	1	1	0	A	1	0	0	0	0	0	1	1	1	0.6	1.0																																																																																														
26-Aug	0	1	1	0	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.8																																																																																														
27-Aug	1	1	1	1	1	1	1	1	1	1	0	1	A	1	0	0	1	1	1	1	1	1	1	0	0.6	0.7																																																																																														
28-Aug	1	1	0	1	1	1	1	1	1	1	1	A	0	1	0	1	0	0	0	1	1	1	0	1	0.6	0.7																																																																																														
29-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.1																																																																																														
30-Aug	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	0	1	1	1	1	0	0.6	0.8																																																																																														
31-Aug	1	0	0	1	0	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.8																																																																																														
	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.7	Diurnal Average																																																																																														
	1.0	1.2	0.9	1.4	1.3	1.2	1.1	1.8	2.5	2.0	1.3	1.0	1.2	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.9	1.1	1.0	Diurnal Maximum																																																																																														
	C - Calibration																								R - Recovery																								P - Power Failure																								N - Not Valid																								A - Automated Daily Zero Span																							



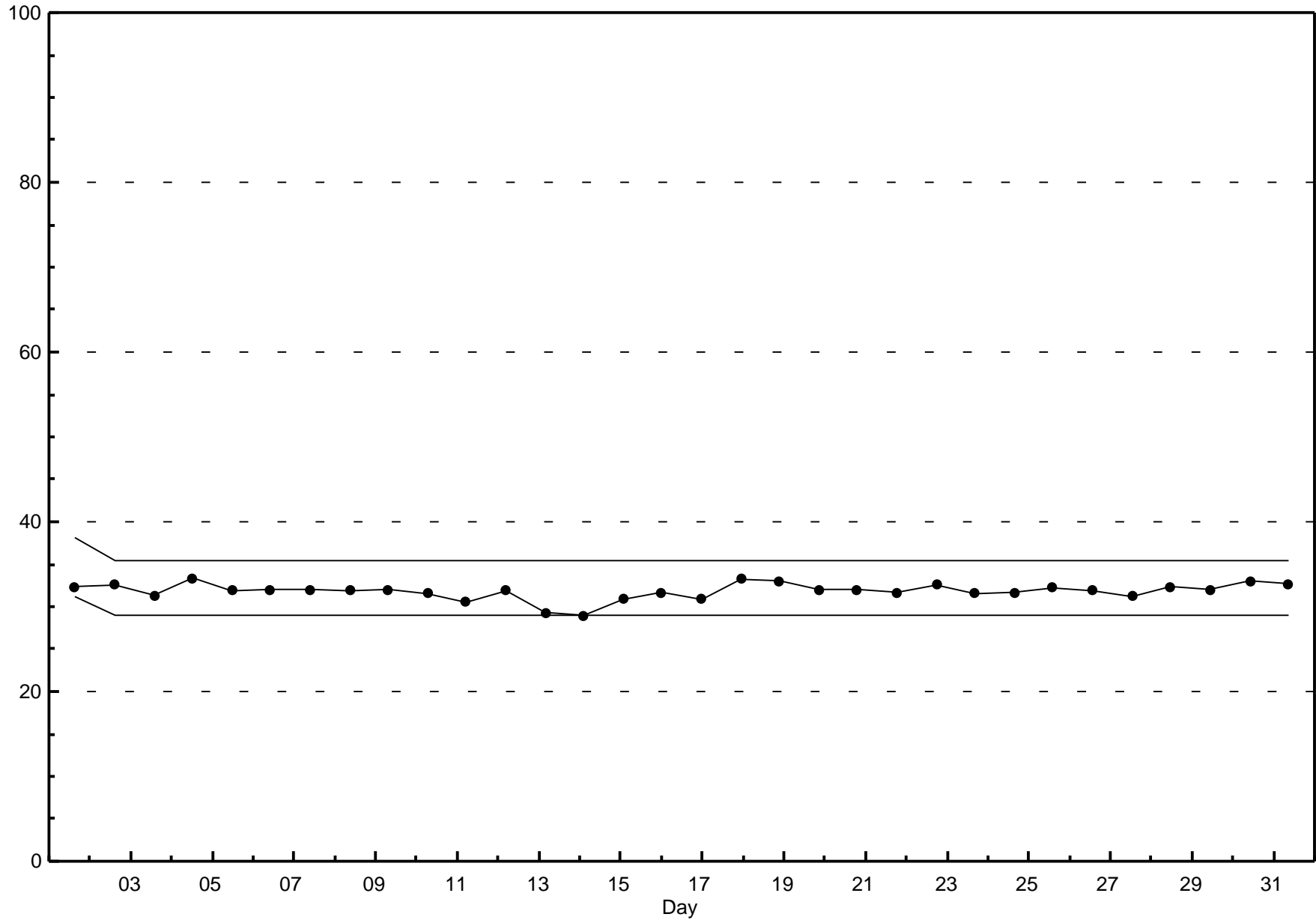
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Henry Pirker - August 2014



Span Responses

**Total Reduced Sulphur (TRS)
Henry Pirker - August 2014**





Peace Airshed Zone Association

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 23.0 ppb on Aug 13 23:00	Maximum Daily Average: 11.1 ppb on Aug 13
Minimum Value: 1 ppb on Aug 31 03:00	Hours of Data: 700
Maximum Diurnal Average: 10.4 ppb at hour 7	Hours of Missing Data: 44
Monthly Average: 5.17 ppb	Hours of Calibration: 38
Minimum Daily Average: 1.6 ppb on Aug 31	Percent Operational Time: 99.2
Minimum Diurnal Average: 2.3 ppb at hour 18	
Percentiles: P ₁ = 1.0 P ₁₀ = 1.7 Q ₁ = 2.5 Median = 3.8 Q ₃ = 6.6 P ₉₀ = 10.8 P ₉₉ = 20.0	

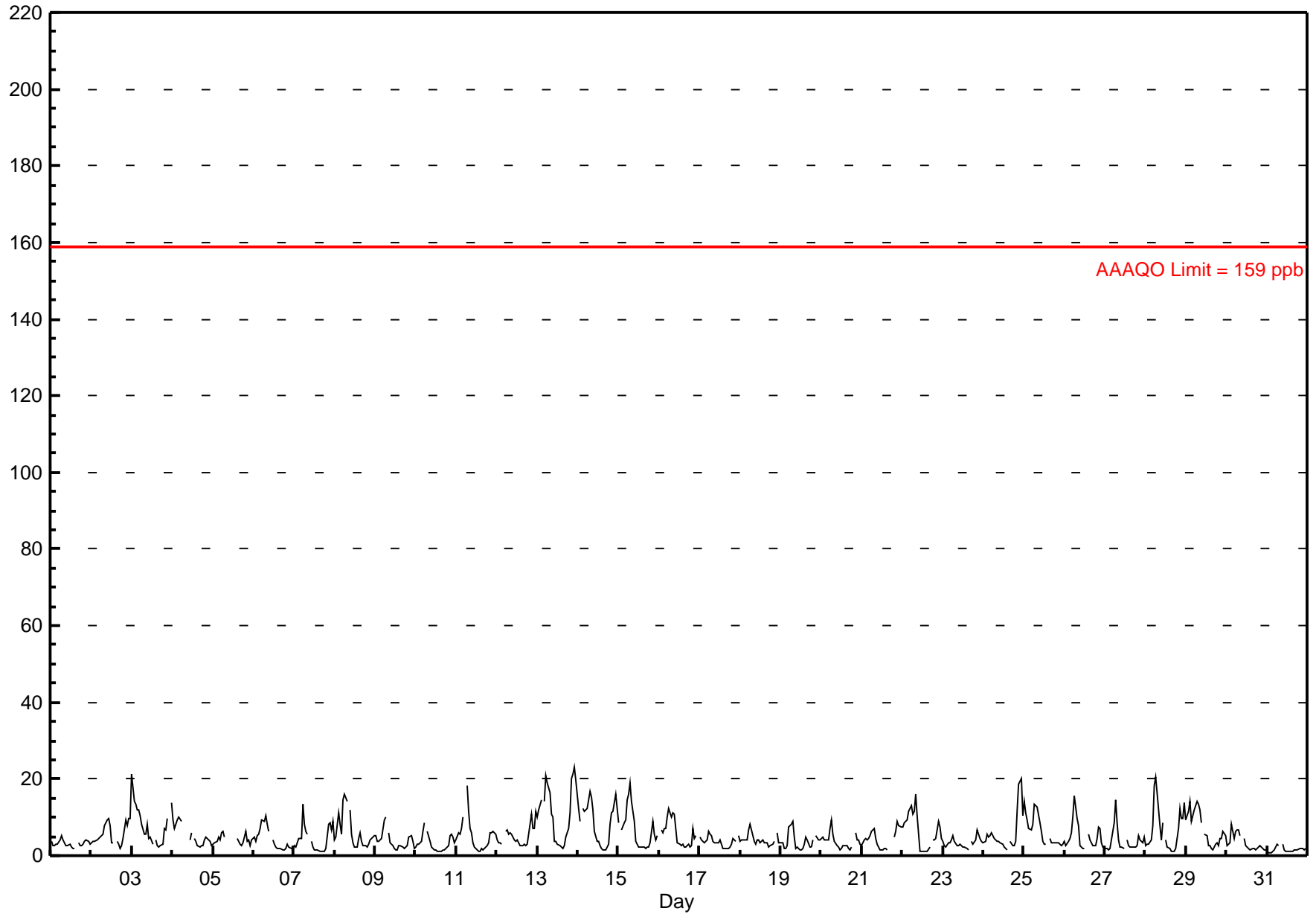
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	4	3	3	3	3	4	5	4	3	3	2	3	2	2	2	A	3	3	2	3	4	4	4	3	3.1	5.4	
2-Aug	3	4	4	4	4	5	5	6	8	9	10	8	3	3	A	4	3	2	2	4	9	8	10	10	5.6	9.9	
3-Aug	21	14	14	12	12	10	8	6	6	8	5	5	3	A	4	3	2	3	3	7	7	10	N	14	8.0	21.4	
4-Aug	9	7	8	9	10	9	P	P	P	R	4	6	A	4	4	2	2	3	3	4	5	4	4	3	5.3	9.9	
5-Aug	3	3	4	5	4	6	6	5	C	C	C	C	C	C	4	4	3	2	3	6	4	4	3	4	4.1	6.4	
6-Aug	5	4	5	6	7	9	9	10	8	6	A	4	3	2	2	2	2	2	2	2	3	2	2	2	4.3	10.5	
7-Aug	3	2	3	5	5	14	8	6	5	A	4	2	2	2	2	1	1	1	1	2	8	8	7	9	4.4	13.6	
8-Aug	4	5	11	8	6	15	16	14	A	A	12	6	3	2	2	5	6	4	3	3	2	3	4	4	5	6.2	16.1
9-Aug	5	4	4	4	5	9	10	A	A	6	3	3	2	1	1	2	3	2	2	2	3	5	5	4	2	3.8	10.2
10-Aug	2	3	3	4	6	9	A	6	4	4	2	2	1	1	1	1	1	1	2	2	3	5	5	5	3	3.2	8.6
11-Aug	4	6	5	7	10	A	18	12	7	6	3	2	1	1	2	2	2	2	2	3	6	6	6	5	5.2	18.1	
12-Aug	4	3	3	3	A	6	7	6	6	6	4	4	4	3	3	3	3	3	3	6	11	7	7	12	5.0	11.5	
13-Aug	10	12	15	A	14	21	19	16	11	10	4	4	3	3	2	2	3	5	7	11	20	21	23	20	11.1	23.0	
14-Aug	12	9	A	12	11	12	14	17	15	12	6	4	4	3	2	2	2	2	3	8	11	11	16	12	8.8	16.8	
15-Aug	9	A	7	9	9	15	16	19	14	9	4	3	2	2	2	2	2	2	2	4	9	5	4	5	6.7	19.0	
16-Aug	A	7	6	7	7	10	12	10	11	11	7	3	3	3	3	2	2	3	2	3	7	4	5	A	5.9	12.4	
17-Aug	5	4	4	3	4	6	5	5	4	3	3	4	4	3	2	2	2	2	2	3	5	4	A	5	3.6	6.2	
18-Aug	4	4	4	4	4	7	8	7	4	3	4	4	3	4	3	3	4	2	3	3	4	A	6	3	4.1	8.4	
19-Aug	3	3	2	2	3	7	8	9	5	2	2	2	2	2	3	5	4	2	2	4	A	5	4	4	3.7	9.0	
20-Aug	4	5	4	4	4	7	9	6	4	3	2	2	2	2	2	3	2	1	2	A	6	4	4	3	3.7	9.4	
21-Aug	3	4	4	4	5	5	6	7	5	3	2	2	2	2	2	2	M	M	A	5	6	9	8	7	4.4	9.1	
22-Aug	7	9	9	9	11	13	11	12	16	10	1	1	1	1	1	1	2	A	4	4	5	9	7	5	6.5	15.9	
23-Aug	4	3	2	3	4	4	5	4	3	3	3	3	2	2	2	2	A	4	3	4	7	6	4	4	3.4	6.8	
24-Aug	3	4	6	5	5	6	4	4	4	4	3	3	2	2	2	A	4	3	3	4	12	19	20	10	5.7	20.2	
25-Aug	14	11	9	7	7	8	13	13	13	9	6	4	3	3	A	5	4	3	3	4	4	3	3	3	6.6	14.2	
26-Aug	4	2	4	4	6	10	16	10	8	3	2	2	2	A	6	4	3	2	3	5	7	7	3	2	5.0	15.7	
27-Aug	2	2	1	2	4	8	15	9	4	2	2	2	A	4	3	2	2	2	2	3	5	4	3	5	3.9	14.7	
28-Aug	3	3	3	4	8	18	20	16	8	4	8	A	4	2	2	1	1	1	2	7	12	10	10	14	7.1	20.4	
29-Aug	9	12	14	9	10	12	14	13	12	8	A	6	5	3	3	2	2	3	3	3	4	5	6	5	7.1	14.3	
30-Aug	3	3	3	8	5	6	7	7	5	A	4	2	2	2	2	2	2	2	2	2	3	2	1	2	3.3	8.1	
31-Aug	1	1	1	1	2	2	3	3	A	3	1	1	1	1	1	1	2	1	1	2	2	2	2	2	1.6	3.1	

5.6	5.1	5.5	5.6	6.5	9.2	10.4	9.0	7.3	5.8	3.9	3.1	2.5	2.4	2.4	2.5	2.4	2.3	2.6	4.1	6.6	6.6	6.4	6.1	Diurnal Average	
21.4	14.3	14.6	12.3	14.0	21.0	20.4	19.0	15.9	12.0	9.9	7.8	5.3	4.4	5.7	6.1	4.0	4.7	7.2	11.1	20.1	21.1	23.0	19.7	Diurnal Maximum	

C - Calibration R - Recovery P - Power Failure M - Maintenance N - Not Valid
 A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - August 2014



Hourly Maximums

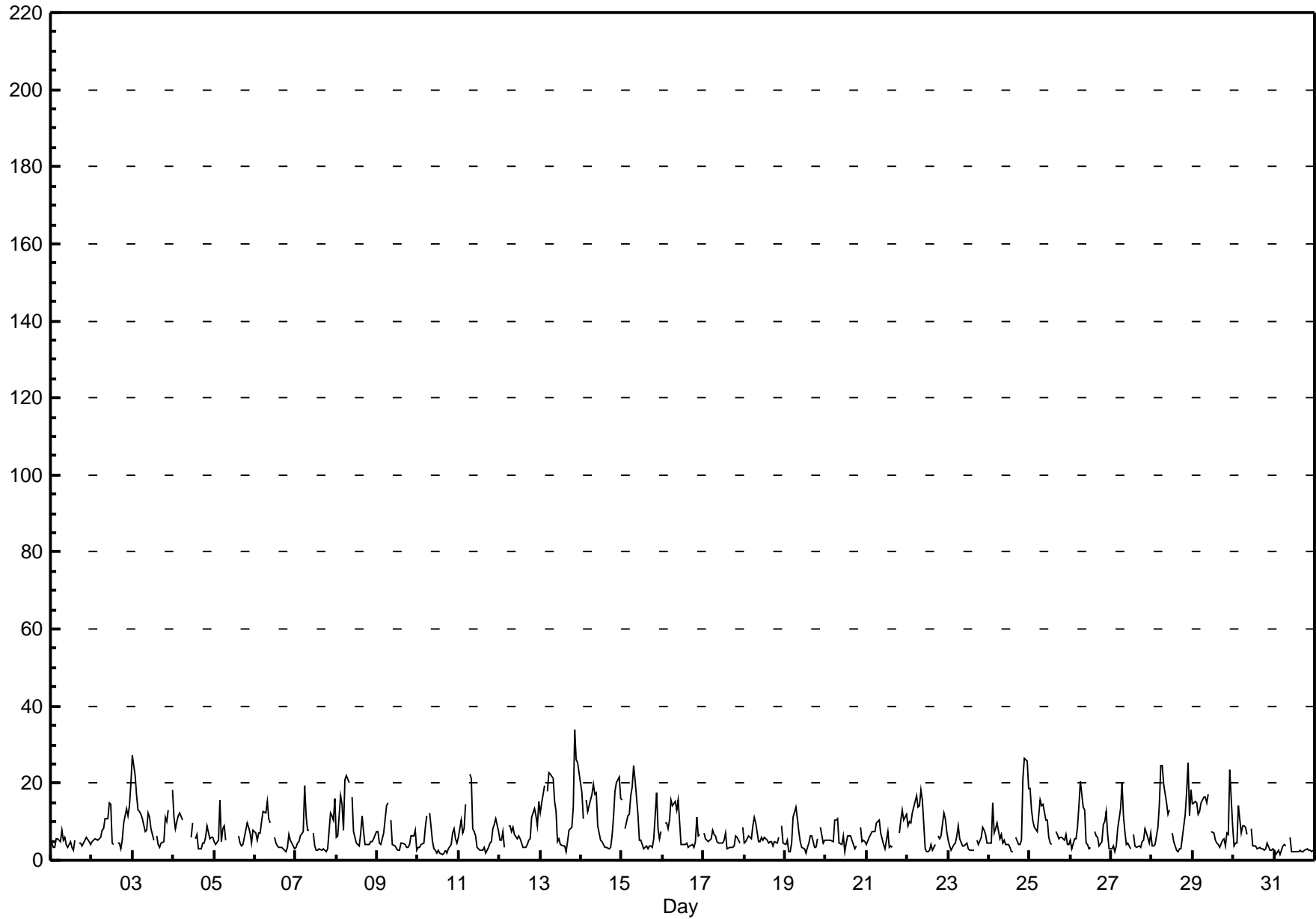
Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - August 2014

Maximum Value: 34.0 ppb on Aug 13 21:00		Maximum Daily Average: 14.2 ppb on Aug 13		Hours in Service: 744																							
Minimum Value: 2 ppb on Aug 31 02:00		Minimum Daily Average: 2.7 ppb on Aug 31		Hours of Data: 700																							
Maximum Diurnal Average: 13.5 ppb at hour 7		Minimum Diurnal Average: 3.8 ppb at hour 18		Hours of Missing Data: 44																							
Monthly Average: 7.53 ppb		Percentiles: P ₁ = 2.0 P ₁₀ = 2.9 Q ₁ = 4.0 Median = 5.6 Q ₃ = 9.6 P ₉₀ = 15.0 P ₉₉ = 25.2		Hours of Calibration: 38																							
				Percent Operational Time: 99.2																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	4	4	3	5	5	5	8	5	6	4	3	5	3	3	5	A	4	4	4	4	5	6	5	4	4.7	7.9	
2-Aug	5	5	6	5	6	6	8	8	11	11	15	15	4	4	A	5	4	3	5	10	14	12	14	20	8.4	19.6	
3-Aug	27	22	17	13	13	12	11	7	8	12	11	8	5	A	6	4	3	4	5	11	10	13	N	18	11.0	27.1	
4-Aug	11	8	10	12	12	11	P	P	P	R	6	10	A	6	7	3	3	5	5	6	9	6	6	6	7.4	12.1	
5-Aug	5	4	5	16	5	8	9	5	C	C	C	C	C	C	6	5	4	4	6	10	9	7	5	8	6.7	15.8	
6-Aug	7	5	7	7	10	13	12	15	11	10	A	6	5	4	3	3	3	3	2	3	7	5	4	3	6.5	15.2	
7-Aug	3	4	5	6	7	19	11	8	8	A	7	4	2	2	3	2	3	2	2	3	12	11	10	16	6.8	19.5	
8-Aug	6	6	17	14	8	21	22	20	A	16	7	6	4	4	7	12	7	4	4	4	5	5	6	8	9.3	22.0	
9-Aug	8	5	4	5	7	14	15	A	10	4	4	3	2	3	5	5	4	3	4	4	7	7	8	3	5.7	15.1	
10-Aug	4	4	4	4	9	11	A	12	5	3	2	2	2	2	2	2	2	3	4	7	8	6	5	4.6	12.3		
11-Aug	6	11	7	8	15	A	23	21	8	7	6	3	2	2	2	3	2	3	4	5	8	9	11	7	7.7	22.6	
12-Aug	5	5	7	3	A	9	9	7	8	7	6	6	5	4	3	3	4	5	5	11	13	11	9	15	7.2	15.4	
13-Aug	12	15	19	A	18	23	22	21	15	13	5	6	4	4	4	2	5	8	9	14	34	26	25	23	14.2	34.0	
14-Aug	18	11	A	16	13	16	17	20	17	17	9	5	5	4	3	4	3	4	6	11	18	20	22	16	11.9	21.6	
15-Aug	16	A	8	12	12	17	19	24	21	12	5	5	4	3	4	3	4	4	3	6	17	8	5	8	9.6	24.4	
16-Aug	A	10	10	8	10	16	14	15	13	15	10	4	4	4	5	3	4	4	3	5	11	6	7	A	8.3	15.8	
17-Aug	7	6	5	5	6	8	7	6	5	4	5	5	5	7	3	3	3	3	4	6	6	4	A	9	5.3	8.5	
18-Aug	4	5	6	6	5	9	11	10	5	5	6	5	6	5	4	5	5	4	5	4	6	A	A	9	4	5.9	11.1
19-Aug	4	5	2	2	4	11	14	11	7	5	3	2	3	5	6	6	3	3	6	A	9	5	5	5	5.5	13.9	
20-Aug	5	5	5	5	5	10	11	11	5	4	6	2	4	6	6	5	4	3	4	A	9	5	5	5	5.7	10.6	
21-Aug	4	6	7	7	7	7	10	10	7	5	4	3	8	3	4	3	M	M	A	7	10	13	10	12	7.1	13.0	
22-Aug	9	10	10	12	14	17	14	14	18	16	3	2	2	3	4	3	4	A	6	6	6	12	11	8	8.8	18.1	
23-Aug	5	4	3	4	5	6	9	6	4	4	4	5	3	3	3	3	A	5	4	6	9	8	7	5	4.8	9.0	
24-Aug	5	5	15	7	8	10	6	7	4	5	4	4	3	2	2	A	6	4	4	5	21	27	26	18	8.6	26.6	
25-Aug	19	13	10	9	8	12	16	14	15	11	10	6	5	4	A	7	7	6	6	6	5	7	4	4	8.7	18.6	
26-Aug	5	3	6	6	8	14	21	14	13	5	4	3	3	A	8	6	6	4	5	9	10	13	7	3	7.6	20.6	
27-Aug	3	4	2	4	8	14	20	11	7	4	4	3	A	7	4	3	4	4	5	5	8	7	5	7	6.2	20.1	
28-Aug	4	4	4	9	15	25	24	20	15	12	13	A	7	5	3	2	3	3	6	12	18	25	12	18	11.1	25.2	
29-Aug	15	15	15	12	13	15	16	17	15	17	A	8	7	5	5	4	3	5	5	4	7	7	23	9	10.5	23.4	
30-Aug	4	4	5	14	7	9	9	9	7	A	8	4	4	4	3	3	3	3	3	3	5	3	3	3	5.1	14.1	
31-Aug	3	2	2	2	3	4	4	4	A	6	2	2	2	2	2	3	2	2	3	3	3	3	2	3	2.7	6.2	
		7.7	6.9	7.6	8.0	8.8	12.4	13.5	12.2	9.9	8.7	6.2	4.9	4.2	3.8	4.1	4.0	4.0	3.8	4.5	6.4	10.3	10.1	9.2	9.1	Diurnal Average	
		27.1	22.0	19.4	15.8	17.9	24.6	24.5	24.4	20.8	17.4	15.0	14.6	7.6	7.2	7.5	11.5	7.4	7.7	8.6	13.7	34.0	26.6	25.6	22.7	Diurnal Maximum	
C - Calibration		R - Recovery					P - Power Failure					M - Maintenance					N - Not Valid										
A - Automated Daily Zero Span																											

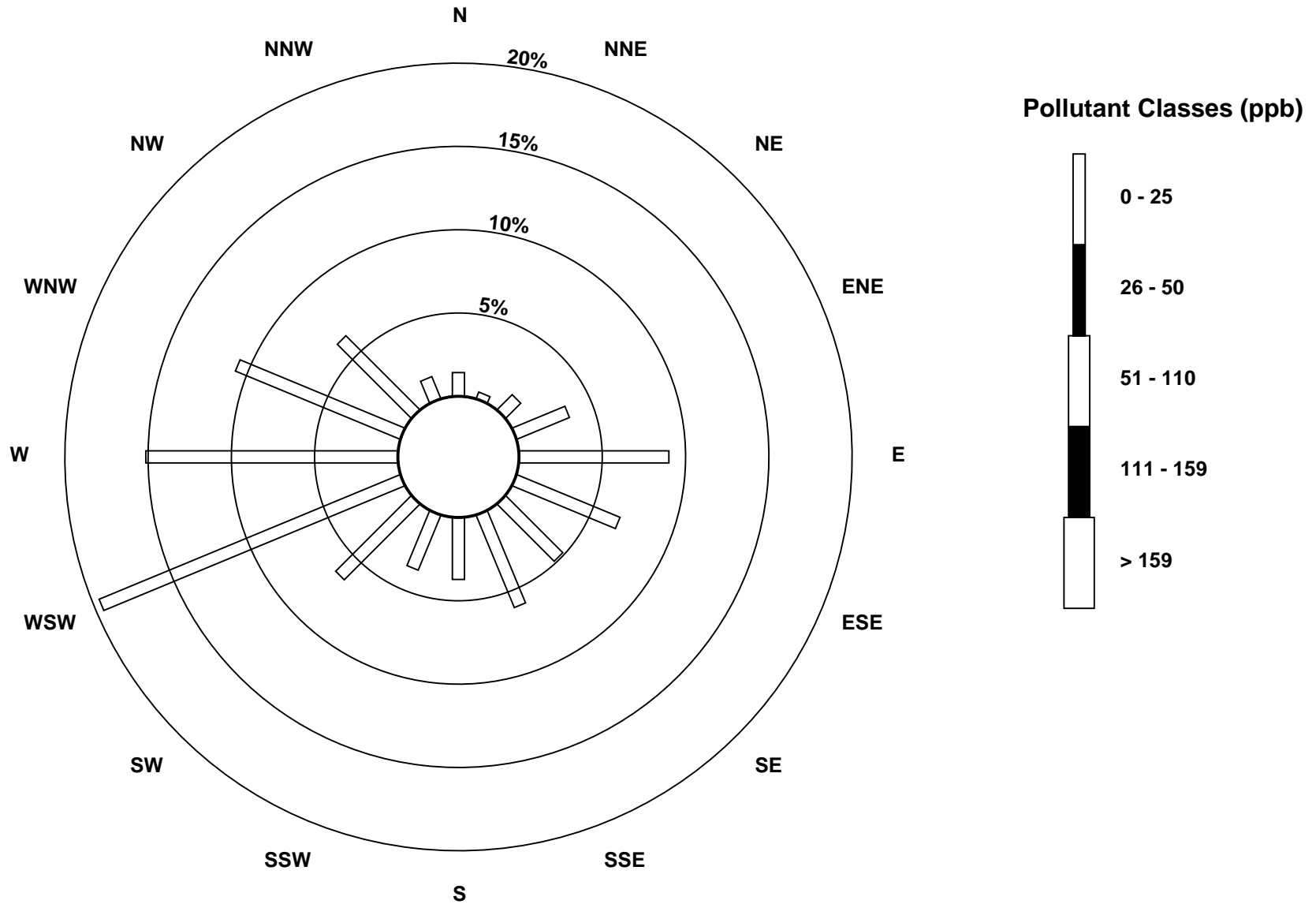
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - August 2014



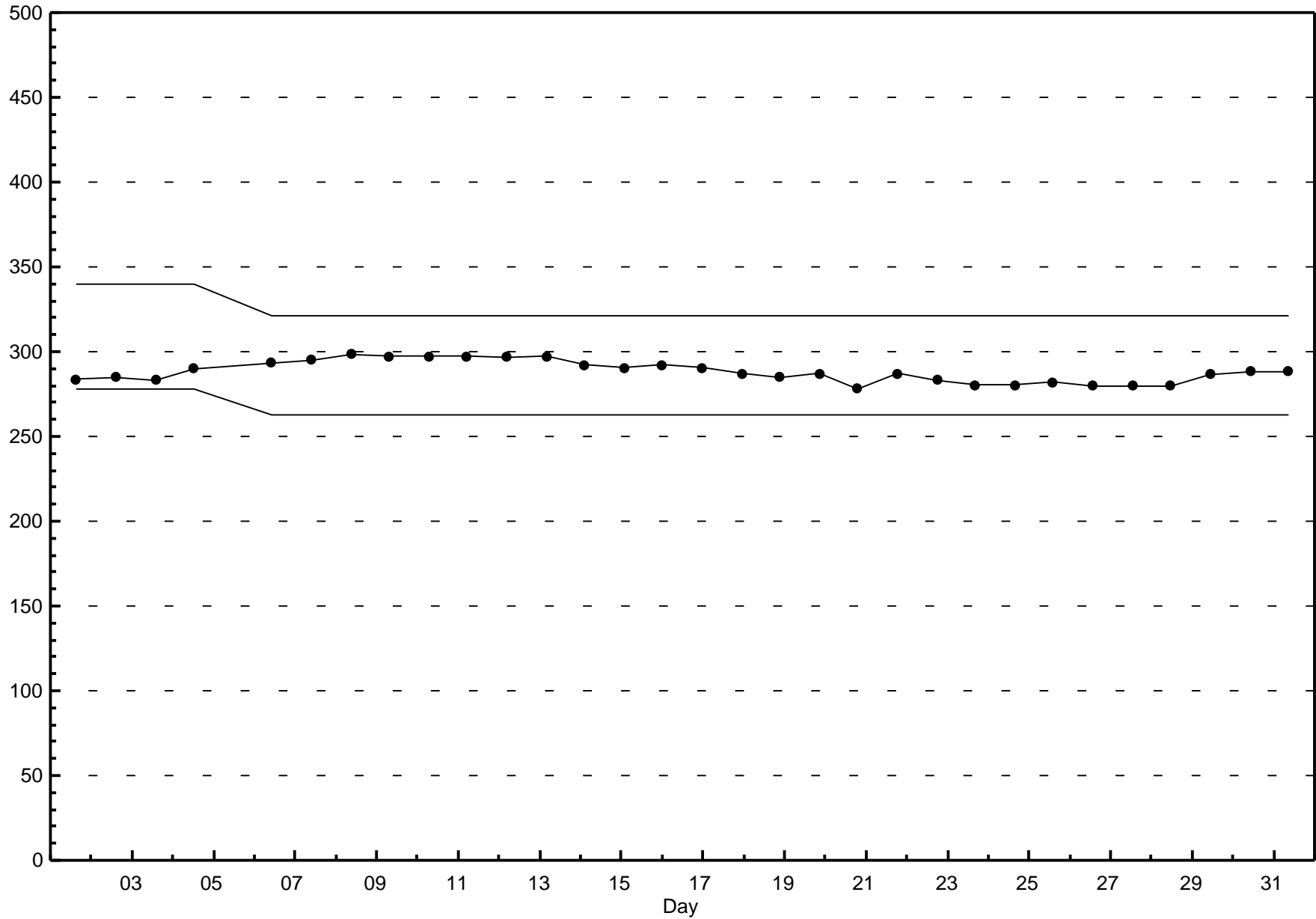
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - August 2014



Span Responses

Nitrogen Dioxide (NO₂)
Henry Pirker - August 2014





Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - August 2014

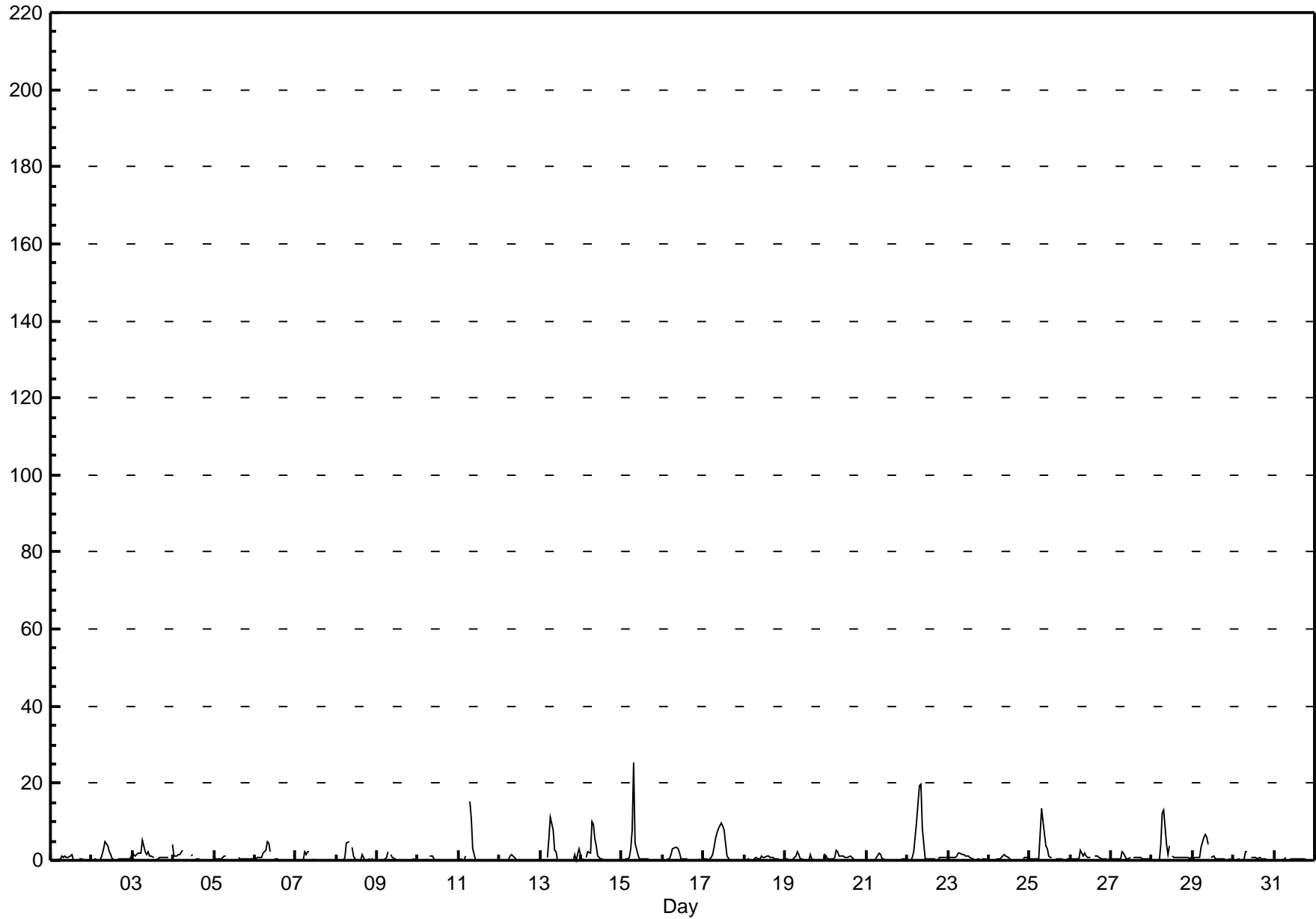
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 25.4 ppb on Aug 15 08:00	Maximum Daily Average: 3.5 ppb on Aug 22		Hours of Data:	700
Minimum Value: 0 ppb on Aug 1 14:00	Minimum Daily Average: 0.1 ppb on Aug 10		Hours of Missing Data:	44
Maximum Diurnal Average: 5.2 ppb at hour 8	Minimum Diurnal Average: 0.2 ppb at hour 20		Hours of Calibration:	38
Monthly Average: 1.01 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.3 Q ₃ = 0.8 P ₉₀ = 2.2 P ₉₉ = 13.1		Percent Operational Time:	99.2

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	0	1	1	1	1	1	1	2	0	0	A	0	0	0	0	0	0	0	0	0.4	1.6
2-Aug	0	0	0	0	0	0	1	3	5	4	2	1	1	0	A	0	1	0	0	0	0	1	1	1	1.0	4.8
3-Aug	2	1	2	2	2	2	5	2	2	2	1	1	1	A	0	1	1	1	1	1	1	1	1	N	1.5	5.4
4-Aug	1	1	1	1	2	3	P	P	P	R	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.7	2.6
5-Aug	1	0	0	0	0	1	1	1	C	C	C	C	C	C	1	0	0	0	0	0	0	0	0	0	0.4	1.3
6-Aug	0	1	1	1	1	2	2	5	4	2	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.9	5.0
7-Aug	0	0	0	0	0	2	2	2	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.2
8-Aug	0	0	0	0	0	1	4	5	A	A	3	1	0	0	0	1	1	0	0	0	0	0	0	0	0.8	4.8
9-Aug	0	0	0	0	0	1	2	A	A	2	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	2.4
10-Aug	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1
11-Aug	0	0	0	0	1	A	15	11	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.4	15.3
12-Aug	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3
13-Aug	0	0	0	A	1	6	11	8	3	2	0	0	0	0	0	0	0	0	0	0	2	0	2	3	1.6	11.1
14-Aug	0	0	A	1	2	2	10	9	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	10.0
15-Aug	0	A	0	0	1	3	8	25	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.0	25.4
16-Aug	A	0	0	0	0	1	3	3	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	A	0.9	3.5
17-Aug	0	0	0	0	1	2	4	5	7	8	10	9	8	4	1	0	0	0	0	0	0	0	0	A	2.6	9.7
18-Aug	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0.5	1.1
19-Aug	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	1	0	0	0	0	0	A	0	1	0.5	2.2
20-Aug	1	1	0	0	1	1	3	2	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0.8	2.7
21-Aug	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	M	M	A	0	0	0	0	0	0.3	1.7
22-Aug	0	0	0	1	2	10	15	19	20	8	0	0	0	0	0	0	1	A	0	1	1	1	1	1	3.5	19.9
23-Aug	1	1	1	1	1	1	2	2	2	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0.8	2.0
24-Aug	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	A	0	0	0	0	0	1	1	0	0.4	1.4
25-Aug	0	0	0	0	0	0	7	13	10	4	3	1	1	1	A	1	0	0	0	0	0	0	0	0	1.9	13.3
26-Aug	0	0	0	0	0	0	3	1	2	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0.7	2.7
27-Aug	0	0	0	0	0	0	2	2	1	0	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0.6	2.1
28-Aug	0	0	0	0	0	4	12	13	4	2	4	A	1	1	1	1	1	1	1	1	1	1	1	1	2.1	13.1
29-Aug	1	1	1	1	1	3	6	7	6	4	A	1	1	0	1	0	0	0	0	0	0	0	0	0	1.5	6.8
30-Aug	0	0	0	0	0	0	1	2	2	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	2.3
31-Aug	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
	0.3	0.3	0.3	0.3	0.5	1.6	4.3	5.2	3.6	2.2	1.2	0.8	0.7	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	Diurnal Average	
	1.7	1.3	1.6	1.8	2.2	9.9	15.3	25.4	19.9	8.3	9.7	8.9	7.7	4.5	1.2	1.3	1.2	0.7	0.6	0.7	1.7	0.9	1.6	3.9	Diurnal Maximum	

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

Hourly Averages

Nitrogen Oxide (NO) - ppb
Henry Pirker - August 2014



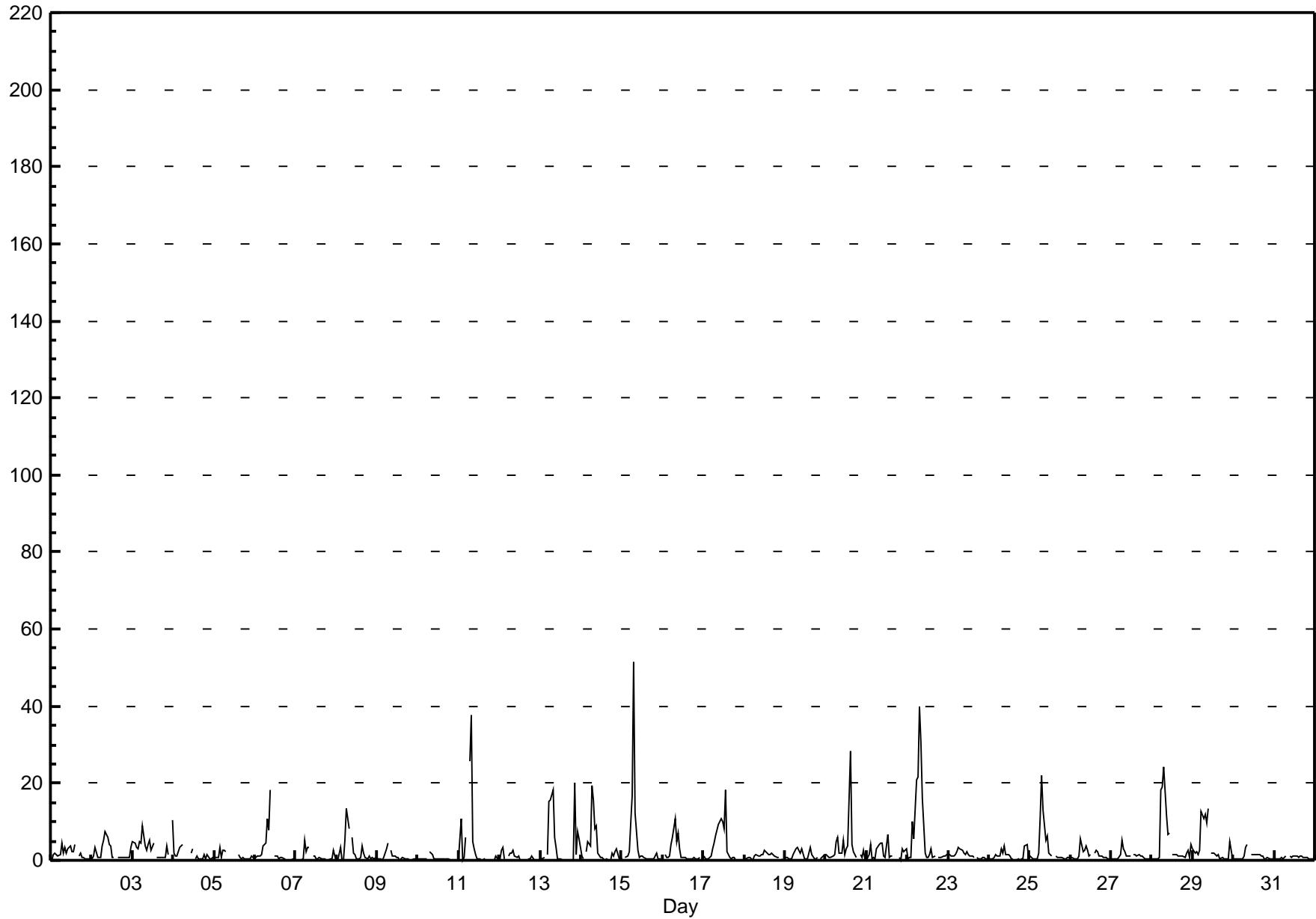
Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - August 2014

Maximum Value: 51.5 ppb on Aug 15 08:00		Maximum Daily Average: 7.1 ppb on Aug 22		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 7 19:00		Minimum Daily Average: 0.4 ppb on Aug 10		Hours of Data: 700																							
Maximum Diurnal Average: 10.7 ppb at hour 8		Minimum Diurnal Average: 0.5 ppb at hour 20		Hours of Missing Data: 44																							
Monthly Average: 2.38 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.5 Median = 0.9 Q ₃ = 2.1 P ₉₀ = 5.2 P ₉₉ = 23.6		Hours of Calibration: 38																							
				Percent Operational Time: 99.2																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0	2	2	1	1	1	4	2	4	2	3	4	2	2	4	A	1	2	1	1	1	1	1	1	1.8	4.3	
2-Aug	1	1	3	1	1	1	4	5	8	6	4	4	1	1	A	1	1	1	1	1	1	1	1	1	2.0	7.6	
3-Aug	5	4	3	3	5	5	9	4	3	4	5	3	4	A	1	1	1	1	1	1	4	1	N	10	3.5	10.4	
4-Aug	2	1	1	2	3	4	P	P	P	R	2	3	A	1	1	1	0	0	1	0	1	0	0	1.4	4.2		
5-Aug	1	1	1	3	1	3	3	2	C	C	C	C	C	C	1	1	0	1	0	0	0	0	1	1	1.1	3.2	
6-Aug	1	1	1	1	2	4	4	11	8	18	A	1	1	1	1	1	1	1	0	0	0	0	0	2.5	18.1		
7-Aug	0	0	0	0	0	5	2	3	3	A	1	1	0	0	1	0	0	0	0	0	0	0	3	1	1.1	5.4	
8-Aug	0	0	3	0	0	5	14	8	A	6	2	1	0	0	1	4	2	1	0	1	0	1	0	1	2.2	13.6	
9-Aug	0	0	0	0	1	3	5	A	3	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.8	4.5	
10-Aug	0	0	0	0	0	1	A	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.4	
11-Aug	0	11	0	1	6	A	26	37	5	3	2	0	0	0	0	0	0	0	0	0	0	0	1	0	4.0	37.5	
12-Aug	1	3	3	0	A	1	2	2	3	1	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0.9	3.5	
13-Aug	0	1	1	A	1	15	16	18	6	3	0	0	0	0	0	0	0	0	0	20	2	7	6	4.2	20.0		
14-Aug	1	0	A	2	5	4	19	16	8	9	2	1	1	0	0	0	0	0	2	1	2	3	1	1	3.4	19.2	
15-Aug	1	A	1	1	2	10	17	52	12	3	1	1	1	1	0	0	0	0	0	0	2	1	1	1	4.7	51.5	
16-Aug	A	2	1	1	1	4	6	11	5	7	3	1	1	1	1	1	1	1	1	1	1	1	1	A	2.1	10.8	
17-Aug	1	1	1	0	1	3	4	6	8	9	11	10	8	18	2	1	1	1	1	0	0	0	A	0	3.8	18.4	
18-Aug	0	1	1	1	1	0	1	2	1	1	2	1	3	2	2	1	2	1	1	1	1	A	1	0	1.0	2.5	
19-Aug	1	1	1	1	1	2	3	3	3	2	3	1	0	1	2	4	2	1	0	1	A	0	1	2	1.4	3.5	
20-Aug	2	1	1	1	1	2	5	6	2	2	5	1	3	4	28	4	2	1	1	A	1	1	3	0	3.3	28.4	
21-Aug	0	2	4	0	1	0	3	4	4	4	1	1	7	1	1	M	M	A	1	0	3	2	3	2.1	6.8		
22-Aug	0	1	1	10	5	21	21	40	30	16	2	1	1	2	3	1	1	A	1	1	1	1	1	2	7.1	39.9	
23-Aug	2	2	1	1	2	2	4	3	3	2	2	2	2	1	1	A	1	0	0	1	1	1	1	1	1.5	3.5	
24-Aug	1	0	1	1	1	1	1	3	2	4	1	1	1	1	1	A	0	0	0	0	1	4	4	0	1.3	4.1	
25-Aug	1	1	0	0	0	2	11	22	13	5	6	2	1	1	A	1	1	1	1	1	0	0	1	1	3.2	22.2	
26-Aug	1	1	1	0	0	1	6	2	3	4	3	1	2	A	2	3	2	1	1	1	1	1	0	0	1.5	5.7	
27-Aug	0	0	0	0	0	1	5	3	2	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	1.1	5.3	
28-Aug	0	0	0	0	1	18	19	24	12	7	A	2	2	1	1	1	1	1	1	1	1	2	3	1	4	4.7	24.4
29-Aug	3	2	2	2	3	13	11	12	10	13	A	2	2	1	1	1	0	1	1	0	0	0	5	1	3.7	13.5	
30-Aug	0	0	0	1	0	1	1	3	4	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1.1	4.0	
31-Aug	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.1	
		0.8	1.3	1.1	1.2	1.5	4.4	7.8	10.7	6.1	5.0	2.6	1.7	1.7	1.6	2.0	1.1	0.8	0.7	0.6	0.5	1.4	0.9	1.3	1.3	Diurnal Average	
		4.7	10.6	4.0	9.9	5.9	21.0	25.9	51.5	30.5	18.1	10.7	10.2	8.3	18.4	28.4	4.3	2.3	1.8	1.8	1.2	20.0	3.6	7.3	10.4	Diurnal Maximum	
C - Calibration		R - Recovery					P - Power Failure					M - Maintenance					N - Not Valid										
A - Automated Daily Zero Span																											

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - August 2014



Hourly Averages

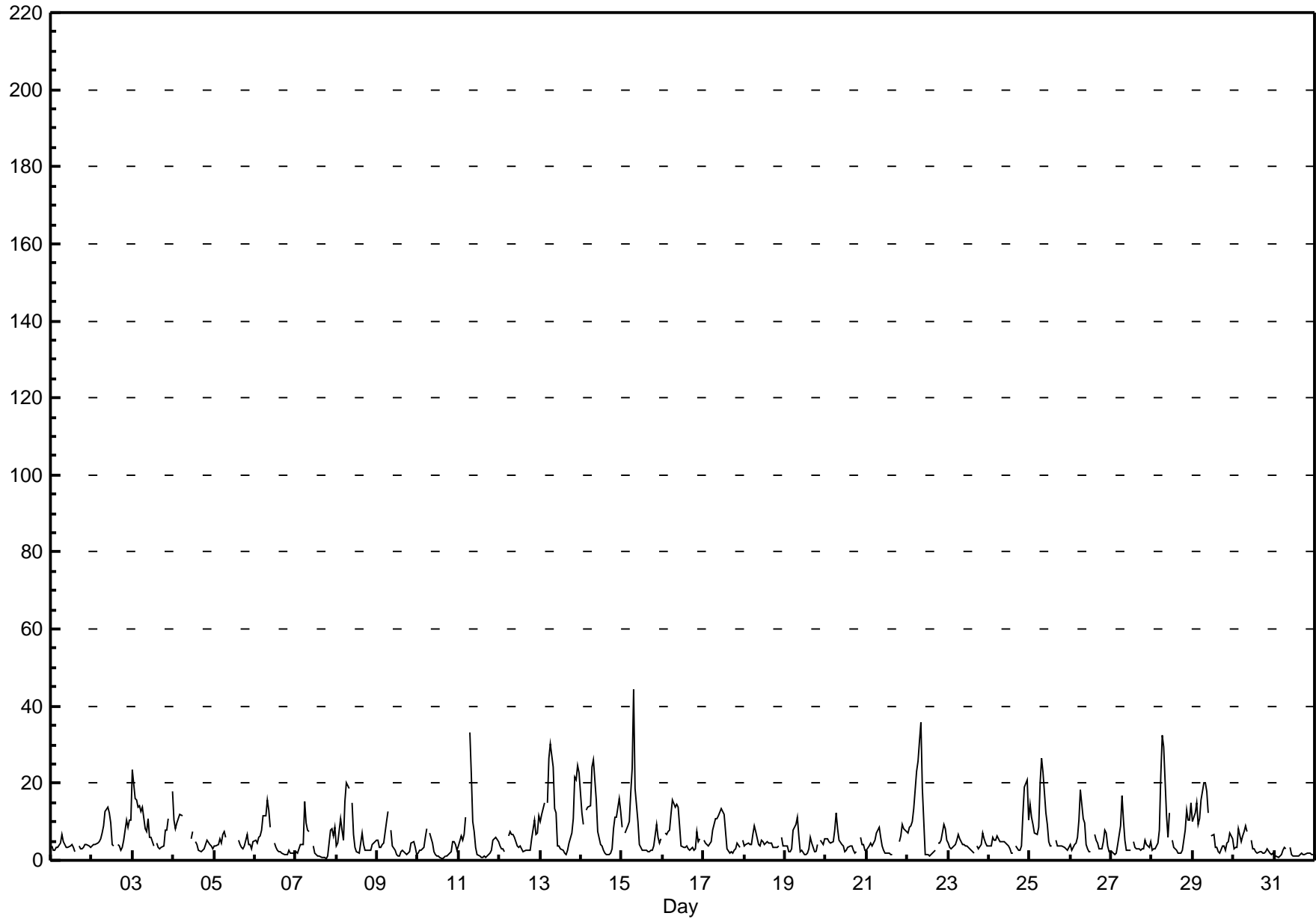
Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 44.4 ppb on Aug 15 08:00	Maximum Daily Average: 12.6 ppb on Aug 13		Hours of Data:	700
Minimum Value: 1 ppb on Aug 7 19:00	Minimum Daily Average: 1.7 ppb on Aug 31		Hours of Missing Data:	44
Maximum Diurnal Average: 14.7 ppb at hour 7	Minimum Diurnal Average: 2.5 ppb at hour 18		Hours of Calibration:	38
Monthly Average: 6.15 ppb	Percentiles: P ₁ = 0.8 P ₁₀ = 1.8 Q ₁ = 2.8 Median = 4.2 Q ₃ = 7.6 P ₉₀ = 12.6 P ₉₉ = 29.1		Percent Operational Time:	99.2

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	4	3	3	3	3	5	7	5	4	4	3	4	4	3	2	A	4	3	3	3	4	4	4	3	3.7	6.6
2-Aug	4	4	4	5	5	6	7	9	13	14	12	10	4	4	A	4	4	3	3	5	10	9	11	10	6.9	13.6
3-Aug	24	16	16	14	14	13	14	8	8	11	6	6	4	A	5	3	3	3	4	8	8	11	N	18	9.8	23.6
4-Aug	11	8	10	11	12	12	P	P	P	R	5	7	A	5	4	3	2	3	3	4	5	4	4	3	6.0	11.8
5-Aug	4	4	4	5	4	7	7	6	C	C	C	C	C	C	5	4	3	3	4	7	4	4	3	5	4.7	7.5
6-Aug	5	5	6	6	8	11	12	16	13	9	A	5	3	3	2	2	2	2	1	1	2	2	2	1	5.2	15.7
7-Aug	2	2	3	4	4	15	10	8	7	A	4	2	1	1	1	1	1	1	1	1	8	8	6	8	4.4	15.4
8-Aug	4	5	11	8	5	15	20	19	A	15	7	3	2	2	4	7	4	2	2	3	3	4	5	5	6.7	20.2
9-Aug	5	4	3	4	5	10	13	A	8	4	3	2	1	1	2	2	2	2	2	2	4	5	3	1	3.8	12.5
10-Aug	2	3	3	3	6	8	A	7	5	2	1	1	1	1	1	1	1	1	1	2	5	5	4	3	2.9	8.4
11-Aug	4	6	5	7	11	A	33	22	10	7	3	2	1	1	1	1	2	2	3	5	5	6	5	6.2	33.3	
12-Aug	4	3	3	2	A	6	7	7	7	6	4	4	4	3	2	2	3	2	3	6	11	7	7	11	4.9	11.5
13-Aug	10	12	15	A	15	26	30	24	13	12	4	4	3	3	2	1	2	4	7	11	22	21	25	23	12.6	30.2
14-Aug	12	9	A	13	14	14	24	26	21	16	7	4	4	3	2	1	1	2	3	8	11	11	16	13	10.3	26.1
15-Aug	9	A	7	9	10	18	24	44	18	10	4	3	3	2	3	2	2	2	3	4	9	6	5	6	8.8	44.4
16-Aug	A	7	7	8	8	12	15	14	15	14	9	4	3	3	4	3	3	3	3	3	7	5	6	A	7.0	15.5
17-Aug	5	5	4	4	5	8	9	11	11	12	13	13	12	8	3	2	2	2	2	3	5	4	A	5	6.4	13.2
18-Aug	4	4	5	4	4	7	9	8	4	4	5	5	4	5	4	4	3	3	3	3	4	A	6	4	4.7	8.8
19-Aug	4	4	2	2	3	8	9	11	6	2	3	2	2	2	3	6	5	2	2	4	A	5	4	6	4.2	11.2
20-Aug	6	5	5	5	5	8	12	8	5	4	4	2	3	3	4	4	3	2	2	A	6	4	4	3	4.6	12.2
21-Aug	2	4	4	4	4	5	7	9	6	4	3	2	2	2	2	1	M	M	A	5	6	9	8	7	4.6	9.3
22-Aug	7	9	9	10	14	23	26	31	36	18	2	1	1	1	2	2	3	A	5	5	5	9	8	5	10.0	35.8
23-Aug	4	3	3	4	4	5	7	6	4	4	4	4	3	3	2	2	A	4	3	4	7	6	5	4	4.1	7.1
24-Aug	4	4	6	5	5	6	5	5	5	5	4	4	3	2	2	A	4	3	3	4	12	19	21	10	6.0	20.8
25-Aug	15	11	9	7	7	9	20	26	23	12	9	5	4	4	A	5	4	4	4	4	4	3	3	3	8.4	26.4
26-Aug	4	3	4	4	6	10	18	11	10	4	3	2	2	A	7	5	5	3	3	5	8	7	4	2	5.7	18.3
27-Aug	2	2	2	2	4	9	17	10	5	3	3	2	A	5	3	3	3	3	3	3	5	4	3	5	4.4	16.7
28-Aug	3	3	3	4	8	22	33	29	12	6	12	A	5	3	3	2	2	2	3	8	13	10	10	15	9.2	32.5
29-Aug	10	12	15	9	11	15	20	18	12	A	6	7	3	3	2	2	4	4	4	3	4	5	7	6	8.7	20.3
30-Aug	3	3	3	8	5	7	7	9	7	A	5	3	3	2	2	2	2	2	2	2	3	2	1	2	3.8	8.9
31-Aug	1	1	1	1	2	3	3	3	A	3	2	1	1	1	1	1	2	2	2	2	2	2	2	2	1.7	3.4
	5.8	5.4	5.8	5.9	7.0	10.8	14.7	14.2	10.9	8.0	5.2	3.9	3.2	2.8	2.8	2.8	2.7	2.5	2.8	4.2	6.7	6.7	6.6	6.5	Diurnal Average	
	23.6	16.1	15.5	13.9	14.9	26.5	33.3	44.4	35.8	18.5	13.2	12.6	11.9	7.6	6.7	7.2	4.5	4.4	7.0	10.9	21.7	21.0	24.6	22.8	Diurnal Maximum	

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



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

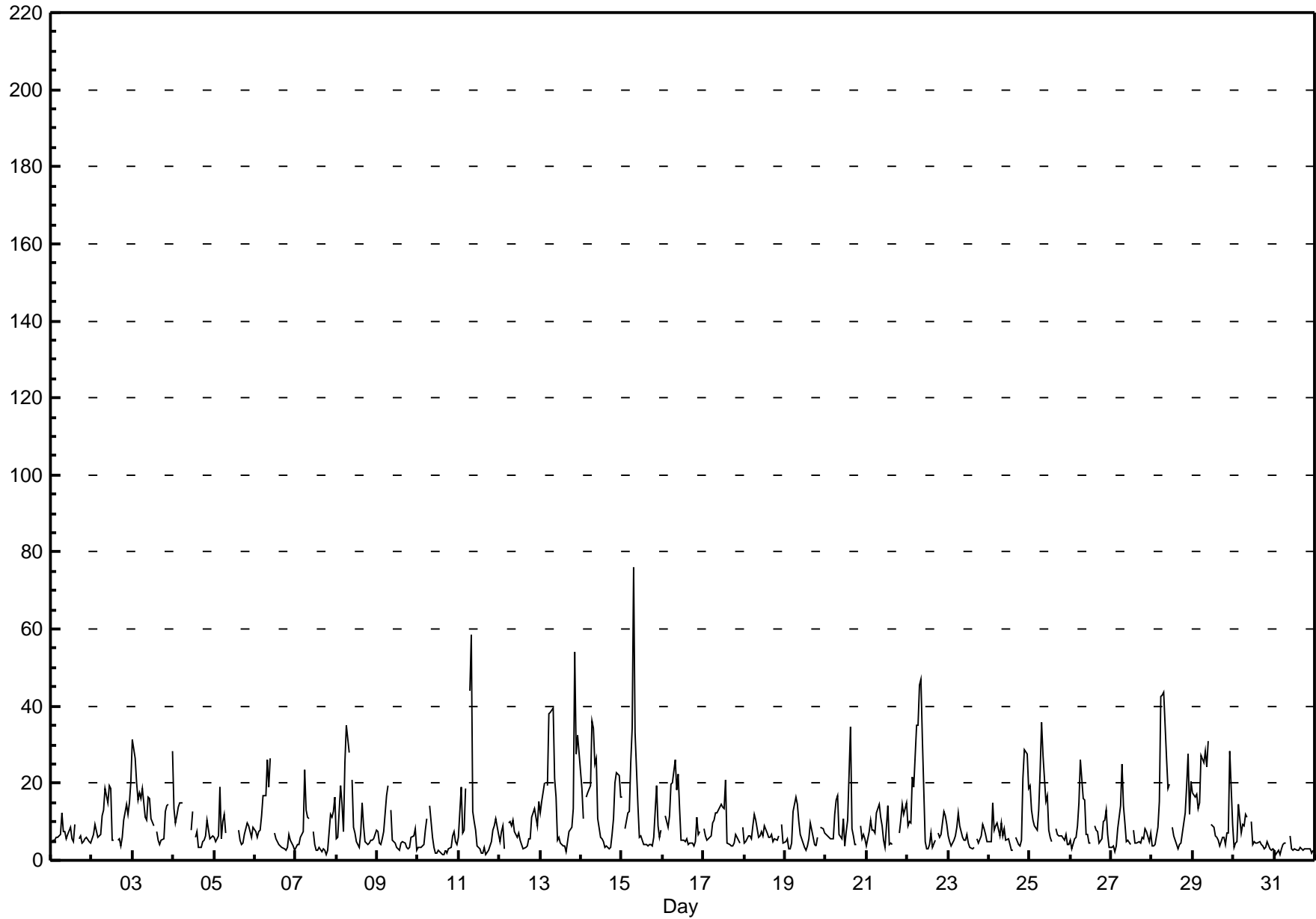
Henry Pirker - August 2014

Maximum Value: 75.9 ppb on Aug 15 08:00		Maximum Daily Average: 18.4 ppb on Aug 13		Hours in Service: 744																						
Minimum Value: 1 ppb on Aug 11 17:00		Minimum Daily Average: 3.0 ppb on Aug 31		Hours of Data: 700																						
Maximum Diurnal Average: 22.4 ppb at hour 8		Minimum Diurnal Average: 4.4 ppb at hour 18		Hours of Missing Data: 44																						
Monthly Average: 9.63 ppb		Percentiles: P ₁ = 1.7 P ₁₀ = 3.2 Q ₁ = 4.5 Median = 6.5 Q ₃ = 11.8 P ₉₀ = 19.4 P ₉₉ = 43.5		Hours of Calibration: 38																						
Percent Operational Time: 99.2																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	5	5	5	6	6	7	12	7	8	6	7	8	5	5	9	A	6	6	4	5	6	6	5	4	6.2	12.2
2-Aug	5	7	9	6	7	7	12	13	19	15	19	19	5	5	A	5	6	4	6	11	15	12	15	21	10.4	20.6
3-Aug	31	26	20	16	17	16	19	11	11	16	16	11	9	A	8	5	4	5	6	13	14	14	N	28	14.4	31.2
4-Aug	13	10	11	14	15	15	P	P	P	R	8	13	A	6	7	3	4	5	5	6	11	5	6	6	8.6	14.9
5-Aug	6	5	6	19	5	10	12	7	C	C	C	C	C	C	8	5	4	5	7	10	9	8	6	9	7.7	18.9
6-Aug	8	6	8	8	12	17	17	26	19	26	A	7	6	5	4	4	3	3	3	3	7	5	4	3	8.7	26.4
7-Aug	3	4	4	6	8	24	13	11	11	A	7	4	3	2	3	2	3	3	2	3	12	11	13	17	7.3	23.5
8-Aug	5	6	19	15	8	26	35	28	A	21	9	7	5	3	7	15	9	5	4	4	5	5	6	8	11.1	35.0
9-Aug	8	5	4	5	7	17	19	A	13	5	4	3	3	3	5	5	4	3	3	3	6	6	8	2	6.2	19.4
10-Aug	3	3	4	4	8	11	A	14	6	4	2	2	2	2	1	2	2	2	3	3	6	7	5	4	4.5	14.3
11-Aug	6	19	7	8	18	A	44	59	13	10	8	4	3	2	2	3	1	3	4	5	8	9	11	7	11.0	58.7
12-Aug	5	7	9	3	A	10	10	9	11	8	6	7	5	4	3	3	4	6	6	11	13	11	9	15	7.6	15.3
13-Aug	12	15	20	A	19	38	38	40	21	16	5	6	4	4	4	2	5	8	9	14	54	27	32	28	18.4	53.9
14-Aug	19	11	A	16	17	19	36	34	25	26	11	6	5	5	3	4	3	3	7	11	20	23	22	17	15.0	36.2
15-Aug	16	A	8	12	13	25	34	76	33	14	6	6	5	4	4	4	4	4	4	6	19	9	6	8	14.0	75.9
16-Aug	A	11	10	8	12	20	20	26	18	22	13	5	5	5	6	4	4	4	4	5	11	7	7	A	10.5	26.2
17-Aug	8	6	5	5	6	10	11	12	12	13	15	14	14	21	5	4	4	4	5	7	6	4	A	9	8.6	20.9
18-Aug	4	5	6	6	5	9	12	11	6	6	7	6	9	7	6	6	7	5	6	5	6	A	9	4	6.8	12.0
19-Aug	5	6	3	3	4	13	16	14	10	7	5	3	2	4	5	10	8	4	4	6	A	8	8	7	6.8	16.4
20-Aug	7	6	6	6	6	12	15	17	7	6	11	4	8	10	35	8	6	4	4	A	9	6	7	6	8.9	34.8
21-Aug	4	7	10	8	8	7	12	15	11	9	5	3	14	4	5	4	M	M	A	7	10	14	12	15	8.9	14.9
22-Aug	9	10	10	22	19	35	35	45	47	32	5	3	3	4	7	3	5	A	7	6	7	13	12	9	15.1	47.1
23-Aug	6	5	4	5	6	9	12	9	6	5	5	7	5	4	3	3	A	5	4	6	9	8	7	5	6.1	12.2
24-Aug	5	5	15	8	9	10	6	10	7	8	5	6	4	3	3	A	6	4	4	5	21	29	28	19	9.4	28.6
25-Aug	19	13	10	9	8	13	23	36	27	15	17	8	6	5	A	8	7	6	6	6	5	7	4	4	11.5	35.9
26-Aug	5	3	5	6	9	15	26	16	16	7	7	4	5	A	9	8	8	5	6	10	11	13	7	3	8.8	26.0
27-Aug	3	4	2	4	8	14	25	14	10	5	5	4	A	8	4	4	5	4	6	5	8	7	5	7	7.1	24.9
28-Aug	4	4	4	9	15	42	43	44	26	19	20	A	9	6	4	3	4	4	7	12	19	28	12	21	15.6	43.7
29-Aug	18	17	17	13	15	27	26	28	24	31	A	9	9	6	6	5	4	6	6	4	7	7	28	10	14.0	30.9
30-Aug	4	4	5	14	7	9	9	12	11	A	10	4	5	4	4	5	4	4	3	3	5	3	3	3	5.9	14.5
31-Aug	2	2	3	2	3	4	5	5	A	7	3	3	3	3	3	4	3	3	3	3	3	3	2	3	3.0	6.5
8.3		7.9	8.4	8.9	10.0	16.3	20.6	22.4	15.8	13.3	8.7	6.4	5.7	5.1	6.0	4.9	4.7	4.4	4.8	6.7	11.4	10.6	10.3	10.0	Diurnal Average	
31.2		26.3	20.0	21.6	19.4	42.4	43.9	75.9	47.1	31.6	19.9	18.8	14.3	20.9	34.8	15.0	9.0	7.6	8.6	13.6	53.9	28.6	32.4	28.2	Diurnal Maximum	
C - Calibration		R - Recovery					P - Power Failure					M - Maintenance					N - Not Valid									
A - Automated Daily Zero Span																										

Hourly Maximums

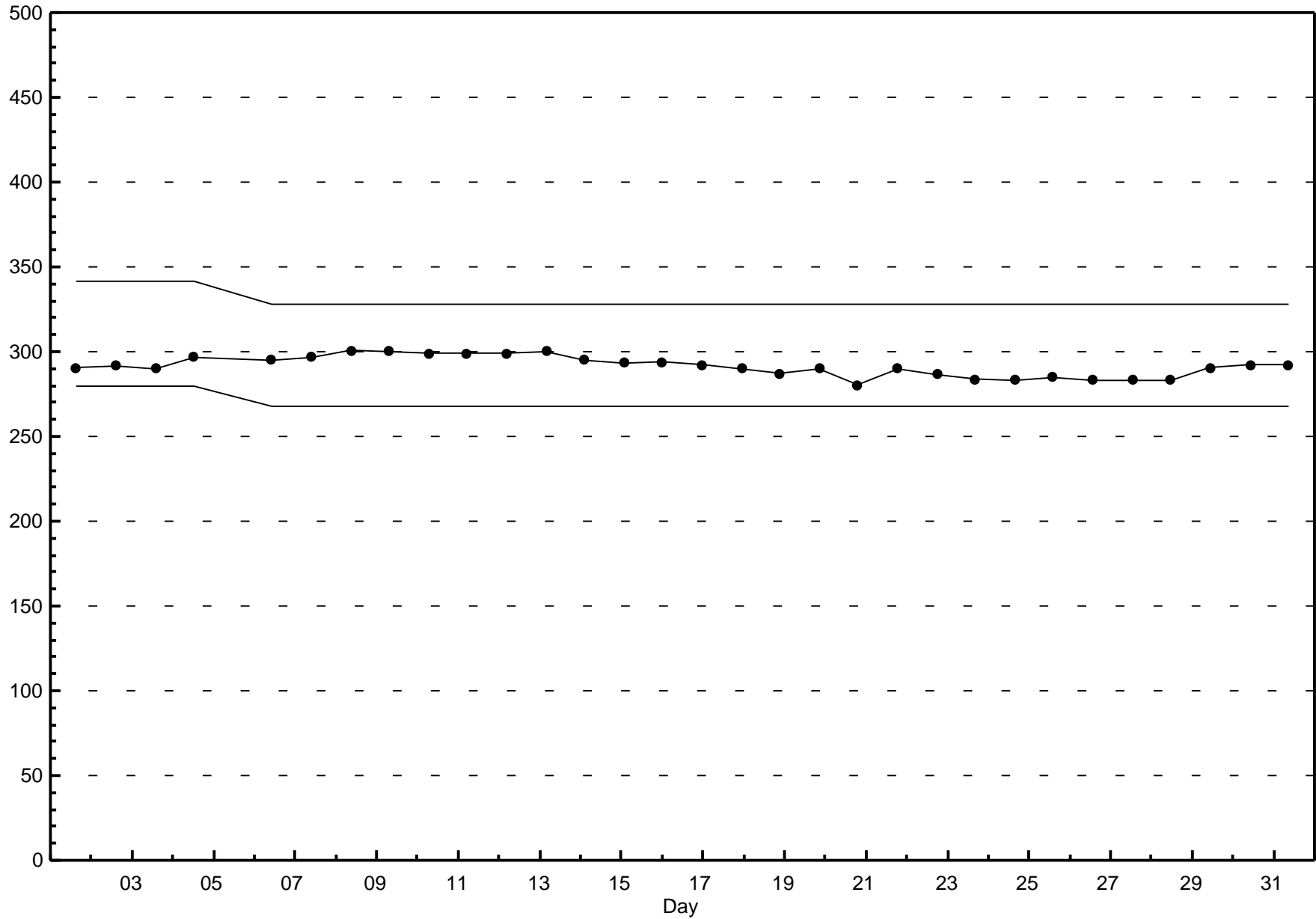
Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - August 2014



Span Responses

Oxides of Nitrogen (NO_x)
Henry Pirker - August 2014



Hourly Averages

Ozone (O₃) - ppb

Henry Pirker - August 2014

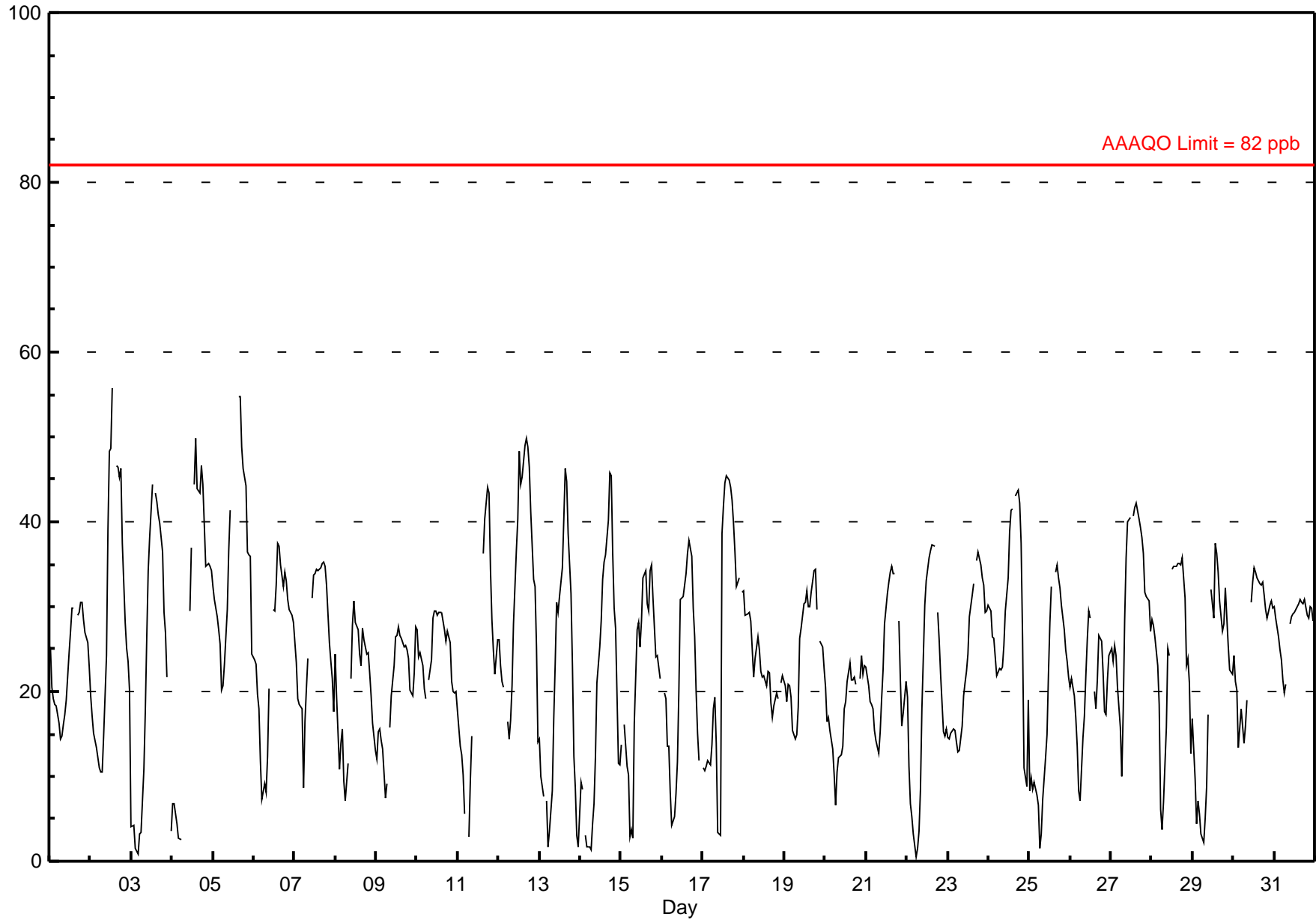
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 55.8 ppb on Aug 2 14:00	Maximum Daily Average: 34.9 ppb on Aug 5		Hours of Data:	698
Minimum Value: 1 ppb on Aug 22 06:00	Minimum Daily Average: 17.6 ppb on Aug 20		Hours of Missing Data:	46
Maximum Diurnal Average: 35.4 ppb at hour 17	Minimum Diurnal Average: 10.0 ppb at hour 7		Hours of Calibration:	42
Monthly Average: 24.10 ppb	Percentiles: P ₁ = 1.7 P ₁₀ = 8.6 Q ₁ = 16.2 Median = 24.3 Q ₃ = 31.4 P ₉₀ = 37.4 P ₉₉ = 48.8		Percent Operational Time:	99.5

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	25	21	19	19	18	16	14	15	16	17	19	25	27	30	30	A	29	29	31	30	28	27	26	23	23.2	30.5																						
2-Aug	20	17	15	13	12	11	10	10	15	24	39	48	49	56	A	47	46	45	46	37	28	25	24	20	28.6	55.8																						
3-Aug	4	4	2	1	1	3	3	11	18	26	34	38	44	A	43	42	41	40	36	29	27	22	N	4	21.6	44.4																						
4-Aug	7	7	6	4	3	3	P	P	P	R	30	37	A	44	50	44	43	47	44	40	35	35	35	34	28.8	49.8																						
5-Aug	32	31	29	27	26	20	21	23	30	37	41	A	C	C	C	55	55	49	46	44	36	36	36	24	34.9	54.8																						
6-Aug	24	23	20	18	12	7	9	8	12	20	A	30	29	33	37	37	35	32	34	33	31	30	29	28	24.9	37.4																						
7-Aug	26	23	19	19	18	9	16	20	24	A	31	34	34	34	34	35	35	35	35	32	26	23	21	18	26.2	35.2																						
8-Aug	24	19	11	14	16	9	7	12	A	21	28	31	28	27	24	23	27	26	24	25	22	19	16	13	20.4	30.7																						
9-Aug	12	15	16	14	13	8	9	A	16	20	23	26	27	28	27	26	25	25	25	24	20	20	22	28	20.3	27.7																						
10-Aug	27	24	25	23	20	19	A	21	24	29	30	30	29	29	29	28	27	26	27	26	21	20	20	20	25.0	29.5																						
11-Aug	18	14	13	10	6	A	3	9	15	C	C	C	C	C	C	36	40	44	43	34	29	25	22	26	--	44.0																						
12-Aug	26	23	21	21	A	16	14	17	21	28	37	40	48	44	45	49	50	49	47	41	33	32	25	14	32.3	49.8																						
13-Aug	14	10	8	A	7	2	4	8	17	23	31	29	31	35	40	46	45	39	31	23	12	9	3	2	20.4	46.3																						
14-Aug	9	8	A	3	2	2	1	4	7	12	21	25	28	33	35	36	40	46	45	36	30	27	11	11	20.7	45.8																						
15-Aug	14	A	16	11	10	3	4	3	16	27	28	25	28	33	34	30	30	34	35	31	24	24	23	22	22.0	34.8																						
16-Aug	A	20	19	13	14	8	4	5	8	12	20	31	31	33	34	36	38	36	30	26	20	15	12	A	21.1	37.8																						
17-Aug	11	11	11	12	11	14	18	19	14	3	3	39	42	45	45	44	43	40	36	32	33	A	32	26.2	45.4																							
18-Aug	32	29	29	29	28	25	22	24	26	25	22	22	22	21	22	22	19	17	18	20	19	A	21	22	23.3	31.8																						
19-Aug	21	19	21	21	19	15	14	15	18	26	27	30	31	32	30	30	32	34	34	30	A	26	25	23	24.9	34.4																						
20-Aug	21	16	17	15	13	10	7	10	12	13	14	18	19	21	23	21	21	22	21	A	21	24	22	23	17.6	24.3																						
21-Aug	23	21	19	18	18	15	14	13	15	19	23	28	31	33	34	35	34	34	A	28	22	16	17	21	23.1	34.8																						
22-Aug	19	11	7	5	3	1	2	4	8	18	30	33	34	36	37	37	37	A	29	26	22	15	15	16	19.3	37.2																						
23-Aug	14	14	15	16	15	14	13	13	16	20	21	22	24	29	31	33	A	35	36	35	33	33	29	29	23.6	36.5																						
24-Aug	30	30	26	26	24	22	23	23	23	25	30	33	39	41	42	A	43	44	42	37	26	11	9	19	29.0	43.7																						
25-Aug	8	10	8	9	8	7	2	3	7	12	15	22	28	32	A	34	35	33	32	30	27	25	24	22	18.9	34.9																						
26-Aug	21	22	19	17	14	8	7	15	17	22	26	29	29	A	20	18	21	27	26	22	18	17	21	24	20.0	29.5																						
27-Aug	25	24	25	24	20	16	10	18	28	36	40	41	A	41	42	42	40	39	38	36	32	31	31	27	30.7	42.2																						
28-Aug	28	28	26	23	19	6	4	7	16	25	24	A	34	35	35	35	35	35	36	31	23	24	21	13	24.5	35.8																						
29-Aug	17	10	4	7	6	3	2	5	9	17	A	32	29	37	36	34	31	27	28	32	29	25	23	22	20.2	37.4																						
30-Aug	24	21	20	13	18	16	14	16	19	A	31	33	35	34	33	33	33	33	31	30	29	30	31	30	26.3	34.5																						
31-Aug	30	29	26	25	24	21	20	21	A	28	29	29	29	30	30	31	31	30	31	29	29	30	30	28	27.8	30.9																						
																								20.2	18.4	17.1	15.8	13.9	11.0	10.0	12.8	16.7	21.7	26.6	30.7	31.9	34.3	34.3	35.2	35.4	35.2	34.2	31.2	26.2	24.4	22.2	21.2	Diurnal Average
																								32.4	30.8	29.2	29.3	28.3	25.1	22.7	24.0	29.7	36.6	41.4	48.2	48.7	55.8	49.8	54.7	54.8	48.8	46.5	44.3	36.5	36.2	35.9	34.2	Diurnal Maximum

C - Calibration R - Recovery P - Power Failure N - Not Valid A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na

Hourly Averages

Ozone (O₃) - ppb
Henry Pirker - August 2014



Hourly Maximums

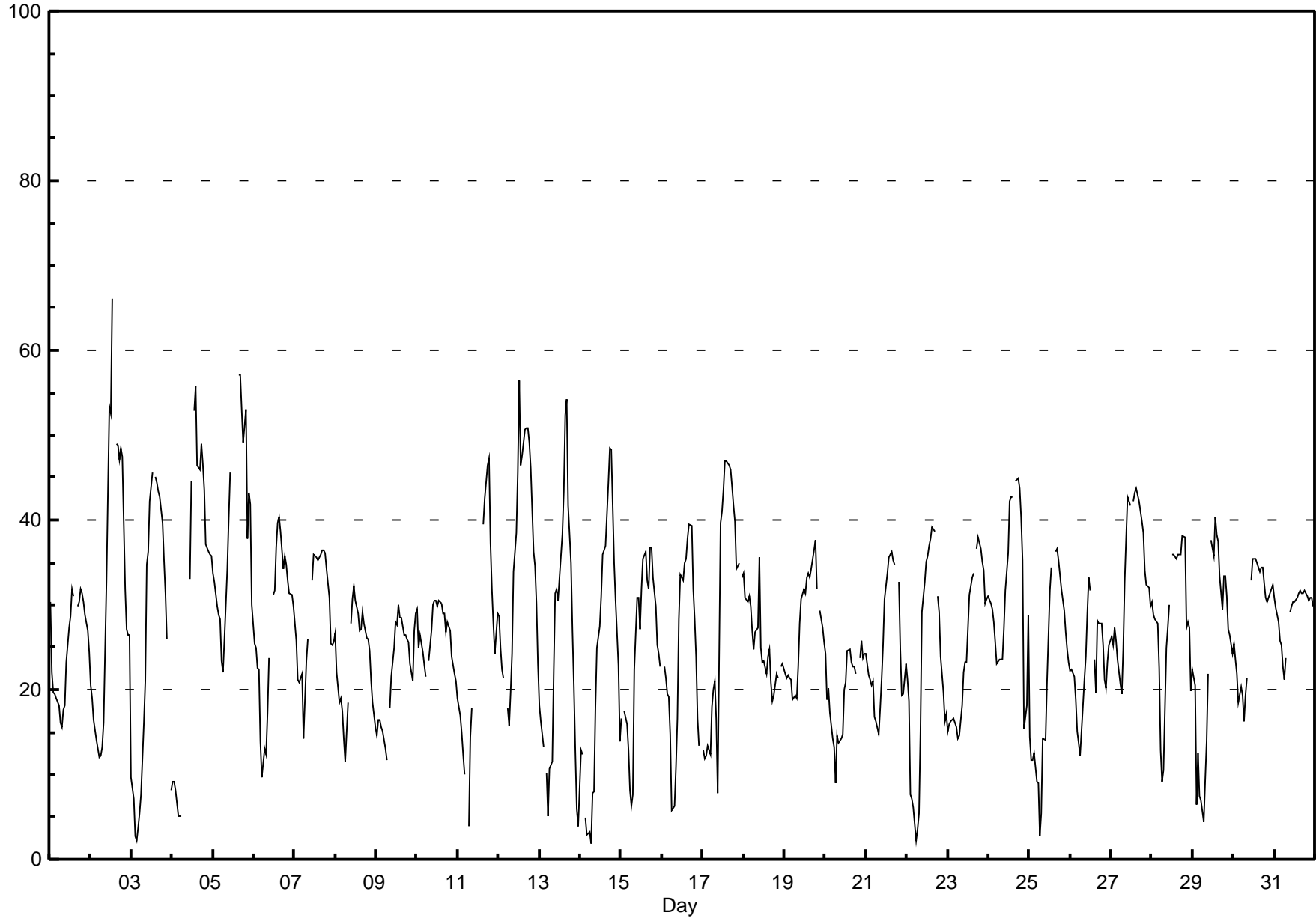
Ozone (O₃) - ppb

Henry Pirker - August 2014

Maximum Value: 66.1 ppb on Aug 2 14:00		Maximum Daily Average: 38.4 ppb on Aug 5		Hours in Service: 744																							
Minimum Value: 2 ppb on Aug 14 07:00		Minimum Daily Average: 19.7 ppb on Aug 20		Hours of Data: 698																							
Maximum Diurnal Average: 37.7 ppb at hour 17		Minimum Diurnal Average: 12.9 ppb at hour 7		Hours of Missing Data: 46																							
Monthly Average: 26.83 ppb		Percentiles: P ₁ = 3.6 P ₁₀ = 12.8 Q ₁ = 19.4 Median = 27.0 Q ₃ = 33.9 P ₉₀ = 41.6 P ₉₉ = 53.1		Hours of Calibration: 42																							
				Percent Operational Time: 99.5																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	30	22	20	20	19	18	16	16	18	18	23	27	29	32	31	A	30	30	32	31	30	29	27	24	24.9	31.9	
2-Aug	21	19	16	14	13	12	12	13	16	33	43	53	52	66	A	49	49	47	49	47	32	27	26	26	32.1	66.1	
3-Aug	10	7	3	2	4	5	8	16	21	35	36	42	46	A	45	44	43	43	40	35	31	26	N	8	25.0	45.7	
4-Aug	9	9	8	7	5	5	P	P	P	R	33	45	A	53	56	47	46	49	47	44	37	36	36	36	31.9	55.7	
5-Aug	34	33	30	29	28	23	22	26	34	40	46	A	C	C	C	57	57	53	49	53	38	43	42	30	38.4	57.1	
6-Aug	25	25	22	22	14	10	13	12	17	24	A	31	32	37	40	40	39	34	36	35	33	31	31	30	27.5	40.3	
7-Aug	28	26	21	21	22	14	19	23	26	A	33	36	36	36	35	36	36	36	36	34	31	25	25	26	28.8	36.4	
8-Aug	27	22	18	19	17	14	12	19	A	28	31	32	30	29	27	27	29	28	26	26	25	21	19	16	23.5	32.2	
9-Aug	15	17	17	16	15	13	12	A	18	22	25	28	28	30	28	28	26	26	26	26	23	21	27	29	22.3	29.9	
10-Aug	29	25	26	24	23	21	A	23	27	30	30	30	30	30	30	29	29	27	28	27	24	23	22	21	26.6	30.5	
11-Aug	19	17	15	12	10	A	4	14	18	C	C	C	C	C	C	39	42	46	47	37	32	28	24	29	--	47.3	
12-Aug	29	25	22	21	A	18	16	20	24	34	38	46	56	46	48	51	51	51	49	46	36	35	30	23	35.4	56.5	
13-Aug	18	16	13	A	10	5	11	12	22	31	32	31	33	38	43	52	54	42	35	27	20	13	6	4	24.7	54.3	
14-Aug	13	12	A	5	3	3	2	8	8	18	25	27	31	36	36	37	44	49	48	42	35	30	23	14	23.9	48.5	
15-Aug	17	A	17	16	13	8	6	8	22	31	31	27	32	35	36	33	32	37	37	33	30	25	24	23	24.9	36.8	
16-Aug	A	23	21	19	19	15	6	6	11	17	28	34	33	35	35	38	39	39	32	28	24	17	13	A	24.2	39.5	
17-Aug	13	12	12	13	12	18	20	21	16	8	40	41	43	47	47	46	46	44	42	40	34	35	A	33	29.7	47.0	
18-Aug	34	31	30	31	30	27	25	27	27	36	25	23	23	22	24	25	21	19	19	22	21	A	23	23	25.5	35.5	
19-Aug	22	21	22	21	21	19	19	19	23	28	31	32	31	33	34	33	34	36	38	32	A	29	27	26	27.4	37.5	
20-Aug	24	19	20	17	14	13	9	15	14	14	15	20	21	25	25	23	23	23	22	A	24	26	24	24	19.7	25.7	
21-Aug	24	22	21	21	21	17	16	15	18	21	25	31	34	36	36	36	35	35	A	33	25	19	20	23	25.3	36.2	
22-Aug	21	19	8	7	6	2	4	5	15	29	33	35	36	37	38	39	39	A	31	29	24	20	16	17	22.1	39.2	
23-Aug	15	16	16	17	16	16	14	15	18	22	23	23	27	31	33	34	A	37	38	37	35	34	30	31	25.1	38.0	
24-Aug	31	30	29	28	26	23	24	24	24	27	32	36	42	43	43	A	45	45	44	40	35	15	18	29	31.8	44.9	
25-Aug	14	12	12	13	9	9	3	5	14	14	21	26	32	34	A	36	37	35	33	32	29	27	25	23	21.5	36.6	
26-Aug	22	22	22	19	15	14	12	18	21	24	29	33	32	A	24	20	28	28	28	25	21	20	23	25	22.8	33.2	
27-Aug	26	25	27	26	24	21	19	25	33	38	43	42	A	42	43	44	42	41	40	39	34	32	32	30	33.3	43.7	
28-Aug	30	29	28	28	23	13	9	10	25	27	30	A	36	36	35	36	36	36	38	38	27	28	27	20	28.1	38.1	
29-Aug	22	20	6	13	7	7	4	9	14	22	A	38	36	40	38	37	33	29	33	33	31	27	26	24	24.1	40.4	
30-Aug	25	24	22	18	20	19	16	19	21	A	33	35	35	35	35	34	34	34	33	31	30	31	32	32	28.4	35.4	
31-Aug	31	30	28	26	25	23	21	24	A	29	30	30	30	31	31	32	31	31	32	31	30	31	31	30	29.0	31.8	
		22.6	21.0	19.2	18.1	16.2	14.2	12.9	16.1	20.2	25.9	30.8	33.4	34.3	36.9	36.2	37.4	37.7	37.0	36.2	34.4	29.4	26.9	25.2	24.3	Diurnal Average	
		33.8	32.8	30.4	31.0	29.9	26.9	24.7	26.9	34.3	40.2	45.6	53.5	56.5	66.1	55.7	57.0	57.1	53.1	49.1	53.1	37.9	43.2	41.8	35.7	Diurnal Maximum	
C - Calibration		R - Recovery					P - Power Failure					N - Not Valid					A - Automated Daily Zero Span										

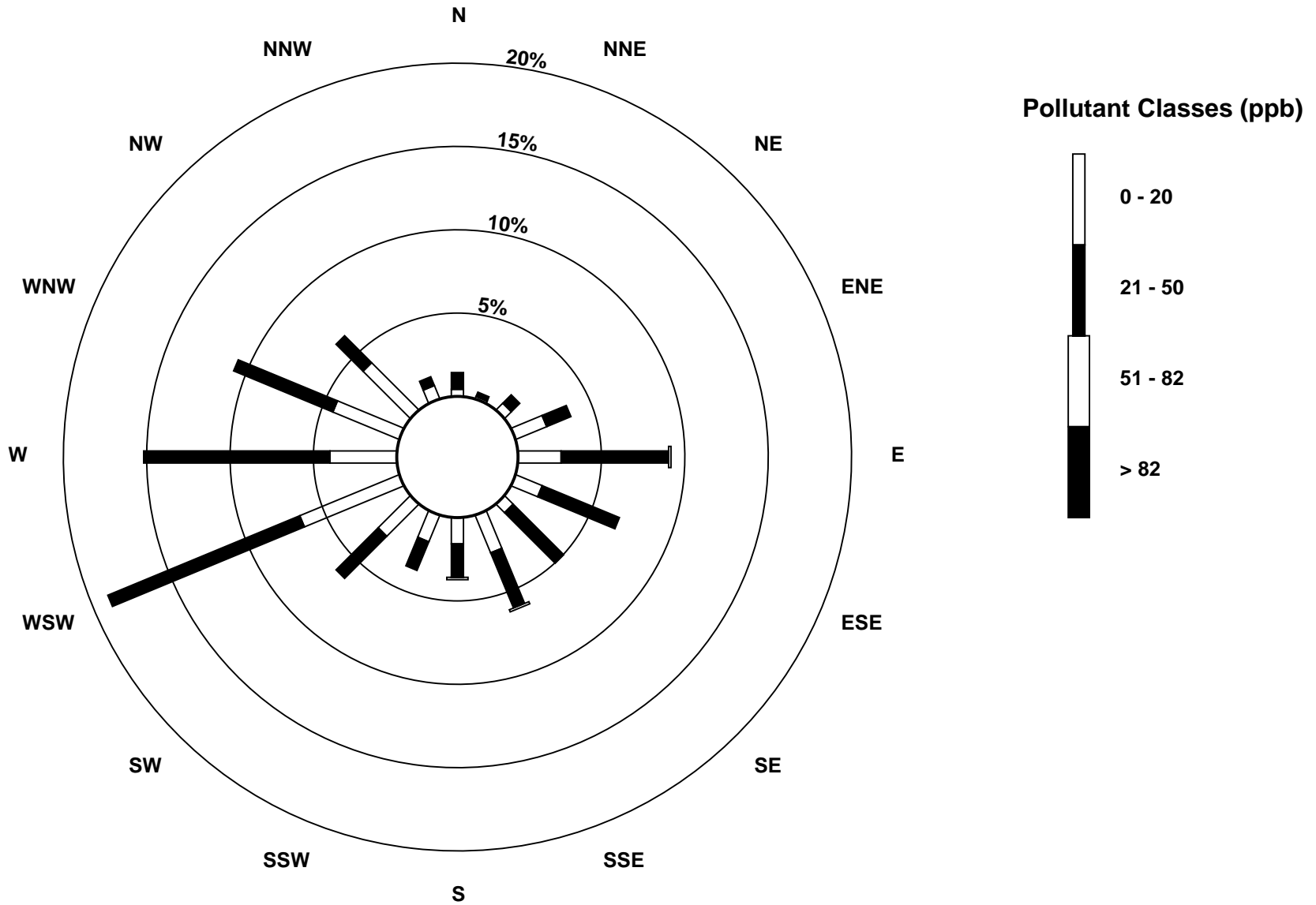
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - August 2014



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - August 2014



Eight Hour Running Averages

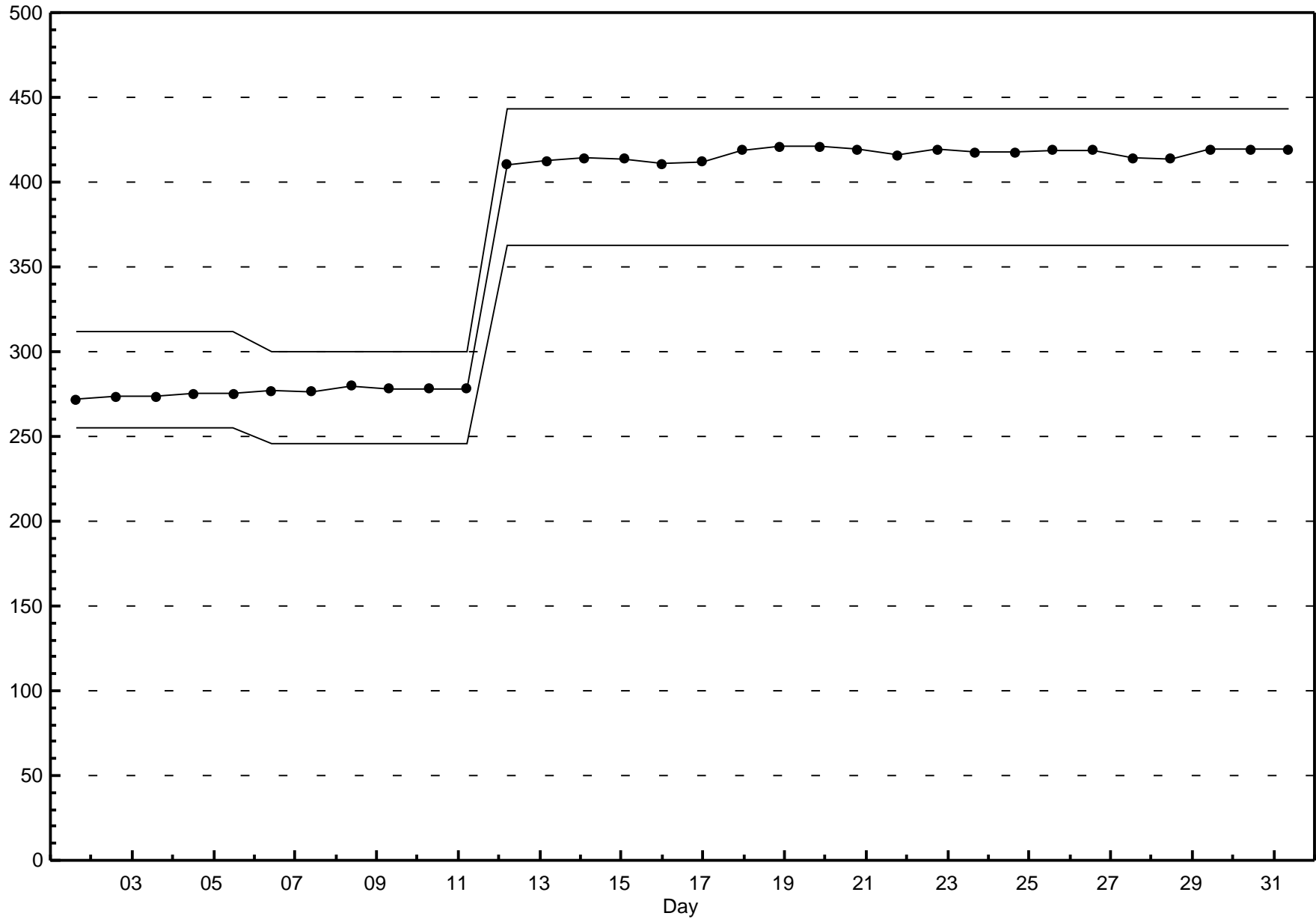
Ozone (O₃) - ppb

Henry Pirker - August 2014

Maximum Value: 48.2 ppb on Aug 2 19:00																					Hours in Service:	744			
Minimum Value: 3.7 ppb on Aug 3 08:00																					Hours of Data:	719			
Percentiles: P ₁ = 4.6 P ₁₀ = 12.4 Q ₁ = 17.8 Median = 23.9 Q ₃ = 30.3 P ₉₀ = 35.0 P ₉₉ = 45.5																					Hours of Missing Data:	25			
																					Hours of Calibration:	17			
																					Percent Operational Time:	98.9			
Day	Hourly Period Ending At (MST)																								Daily Maximum
1-Aug	32	29	27	24	22	21	20	18	17	17	17	18	19	20	22	23	25	27	29	29	30	29	29	28	31.8
2-Aug	27	25	23	21	19	17	15	14	13	14	17	21	26	31	34	40	44	47	48	47	44	39	37	34	48.2
3-Aug	29	24	18	14	10	7	5	4	5	8	12	17	22	25	31	35	39	40	41	40	37	35	34	28	40.8
4-Aug	24	19	14	11	7	5	5	5	N	N	N	N	N	N	N	N	41	42	44	45	43	42	40	39	44.6
5-Aug	38	36	34	32	31	29	27	26	26	27	28	28	29	N	N	N	N	N	N	N	48	46	45	41	47.6
6-Aug	37	34	30	27	24	21	17	15	14	13	12	14	17	20	24	28	32	33	33	34	34	34	33	32	37.0
7-Aug	30	29	27	26	24	21	20	19	19	18	20	22	24	28	30	32	34	34	35	34	33	32	30	28	34.5
8-Aug	27	25	22	20	18	17	15	14	13	13	15	18	19	22	24	26	26	27	26	26	25	24	23	22	26.9
9-Aug	20	18	17	16	15	13	12	12	13	14	15	16	18	21	24	24	25	26	26	26	25	24	23	24	26.2
10-Aug	24	24	24	24	24	24	24	23	22	23	24	25	26	27	28	28	29	29	28	28	27	26	24	23	28.9
11-Aug	22	21	19	17	15	14	12	10	10	9	N	N	N	N	N	N	N	N	N	N	38	36	34	33	37.8
12-Aug	31	29	26	24	23	22	21	20	19	20	22	25	28	31	35	39	43	45	47	47	45	43	41	36	46.6
13-Aug	32	27	22	20	16	11	8	8	8	10	13	15	18	22	27	32	35	37	37	36	34	31	26	20	37.1
14-Aug	16	12	10	7	5	4	4	4	4	5	7	9	13	17	21	25	29	33	36	38	38	37	34	31	37.8
15-Aug	28	25	21	17	15	11	10	9	9	11	13	15	17	21	24	28	30	30	31	32	31	30	29	28	32.0
16-Aug	28	26	23	21	19	17	14	12	11	10	11	13	15	18	22	26	29	32	34	33	32	29	27	25	33.5
17-Aug	21	18	15	13	12	12	13	13	14	13	12	15	19	23	26	29	33	38	43	42	41	40	39	37	42.7
18-Aug	35	34	32	31	30	29	28	27	27	26	25	24	23	23	23	23	22	21	20	20	20	19	19	19	35.5
19-Aug	20	20	20	20	20	20	19	18	18	19	20	21	22	24	26	28	30	31	32	32	32	31	30	29	31.7
20-Aug	28	25	23	20	20	18	15	14	13	12	12	12	13	14	16	18	19	20	21	21	22	22	22	22	27.6
21-Aug	22	22	22	21	21	20	19	18	17	16	17	18	20	22	25	27	30	31	33	33	31	29	27	25	32.7
22-Aug	23	19	18	15	13	11	9	6	5	6	9	12	16	21	25	29	33	35	35	34	32	29	26	23	34.9
23-Aug	20	19	17	16	15	15	15	14	15	15	16	17	18	20	22	25	26	28	30	32	33	34	34	33	33.8
24-Aug	33	32	31	30	28	27	26	25	25	24	24	25	27	30	32	33	36	39	41	41	39	35	30	29	41.2
25-Aug	25	20	16	13	10	10	9	7	7	7	8	9	12	15	17	22	26	29	31	32	32	31	30	28	32.2
26-Aug	27	25	24	22	20	18	16	15	15	15	16	17	19	21	23	23	24	24	24	23	22	21	21	22	26.7
27-Aug	23	22	22	22	23	23	21	20	21	22	24	26	27	30	35	38	40	41	40	40	39	38	36	34	40.7
28-Aug	33	31	30	28	27	24	20	18	16	16	15	14	17	21	25	29	32	33	35	34	33	32	30	27	35.0
29-Aug	25	22	18	15	13	10	8	7	6	7	7	11	14	19	24	28	31	32	32	32	32	30	29	27	32.3
30-Aug	26	26	25	22	21	20	19	18	17	17	18	21	23	26	29	31	33	33	33	33	32	31	31	31	33.0
31-Aug	30	30	29	29	28	27	26	24	24	24	24	25	25	27	28	29	30	30	30	30	30	30	30	30	30.4
37.7 35.8 33.8 32.3 31.1 29.3 28.3 27.3 26.6 26.5 28.1 28.2 28.6 31.4 35.0 39.6 44.1 47.1 48.2 46.6 47.6 45.9 44.7 40.9																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Henry Pirker - August 2014

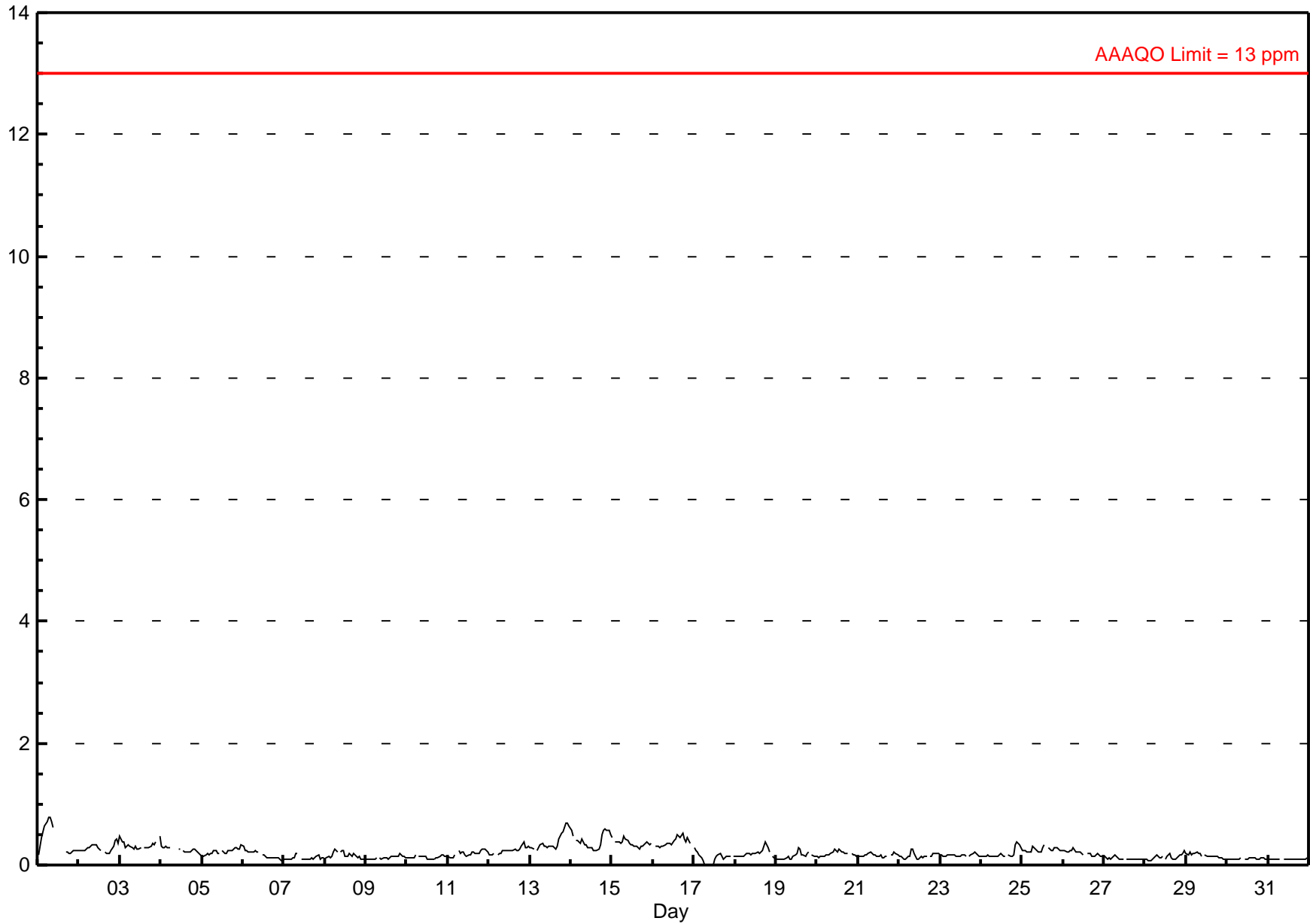


Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0										Hours in Service: 744																																						
Maximum Value: 0.79 ppm on Aug 1 07:00										Maximum Daily Average: 0.42 ppm on Aug 1										Hours of Data: 702																												
Minimum Value: 0.0 ppm on Aug 17 07:00										Minimum Daily Average: 0.10 ppm on Aug 31										Hours of Missing Data: 42																												
Maximum Diurnal Average: 0.25 ppm at hour 21										Minimum Diurnal Average: 0.19 ppm at hour 13										Hours of Calibration: 38																												
Monthly Average: 0.207 ppm										Percentiles: P ₁ = 0.07 P ₁₀ = 0.10 Q ₁ = 0.13 Median = 0.18 Q ₃ = 0.26 P ₉₀ = 0.34 P ₉₉ = 0.63										Percent Operational Time: 99.5																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	0.2	0.3	0.5	0.5	0.6	0.7	0.8	0.8	0.7	0.6	C	C	C	C	C	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.42	0.79																						
2-Aug	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.28	0.42																					
3-Aug	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	N	0.5	0.33	0.48																						
4-Aug	0.3	0.3	0.3	0.3	0.3	0.3	P	P	P	R	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.25	0.31																						
5-Aug	0.1	0.1	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	0.3	0.3	0.3	0.3	0.22	0.33																						
6-Aug	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.17	0.32																						
7-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.11	0.19																						
8-Aug	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	A	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.16	0.25																						
9-Aug	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	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.12	0.18																						
10-Aug	0.1	0.1	0.1	0.1	0.1	0.2	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.13	0.17																						
11-Aug	0.1	0.1	0.1	0.1	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.19	0.26																						
12-Aug	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	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.24	0.38																						
13-Aug	0.3	0.3	0.3	A	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.6	0.39	0.69																						
14-Aug	0.6	0.5	A	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.5	0.6	0.6	0.6	0.6	0.5	0.40	0.59																						
15-Aug	0.5	A	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.36	0.48																						
16-Aug	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	A	0.38	0.52																						
17-Aug	0.3	0.2	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	A	0.1	0.11	0.28																						
18-Aug	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	0.3	0.4	0.3	0.2	A	0.2	A	0.1	0.20	0.37																						
19-Aug	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	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.1	0.15	0.27																						
20-Aug	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.19	0.26																						
21-Aug	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	0.2	0.1	0.1	0.1	0.1	0.1	A	0.2	0.2	0.2	0.2	0.16	0.22																						
22-Aug	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	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	0.15	0.27																						
23-Aug	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	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.21																						
24-Aug	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	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	0.3	0.4	0.3	0.19	0.38																						
25-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	A	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.25	0.33																						
26-Aug	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	A	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.20	0.28																						
27-Aug	0.1	0.1	0.1	0.1	0.1	0.1	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	0.11	0.16																						
28-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	A	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.13	0.23																						
29-Aug	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	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.16	0.21																						
30-Aug	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	0.1	0.1	0.1	0.11	0.13																						
31-Aug	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	0.1	0.1	0.1	0.1	0.10	0.11																						
																								0.20	0.19	0.19	0.19	0.20	0.21	0.23	0.23	0.23	0.22	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.21	0.22	0.25	0.24	0.23	0.22	Diurnal Average
																								0.56	0.47	0.46	0.54	0.64	0.71	0.79	0.79	0.71	0.62	0.35	0.34	0.39	0.42	0.49	0.47	0.46	0.52	0.52	0.57	0.63	0.68	0.69	0.65	Diurnal Maximum
C - Calibration																								R - Recovery				P - Power Failure				N - Not Valid				A - Automated Daily Zero Span												
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na																																																



Hourly Maximums

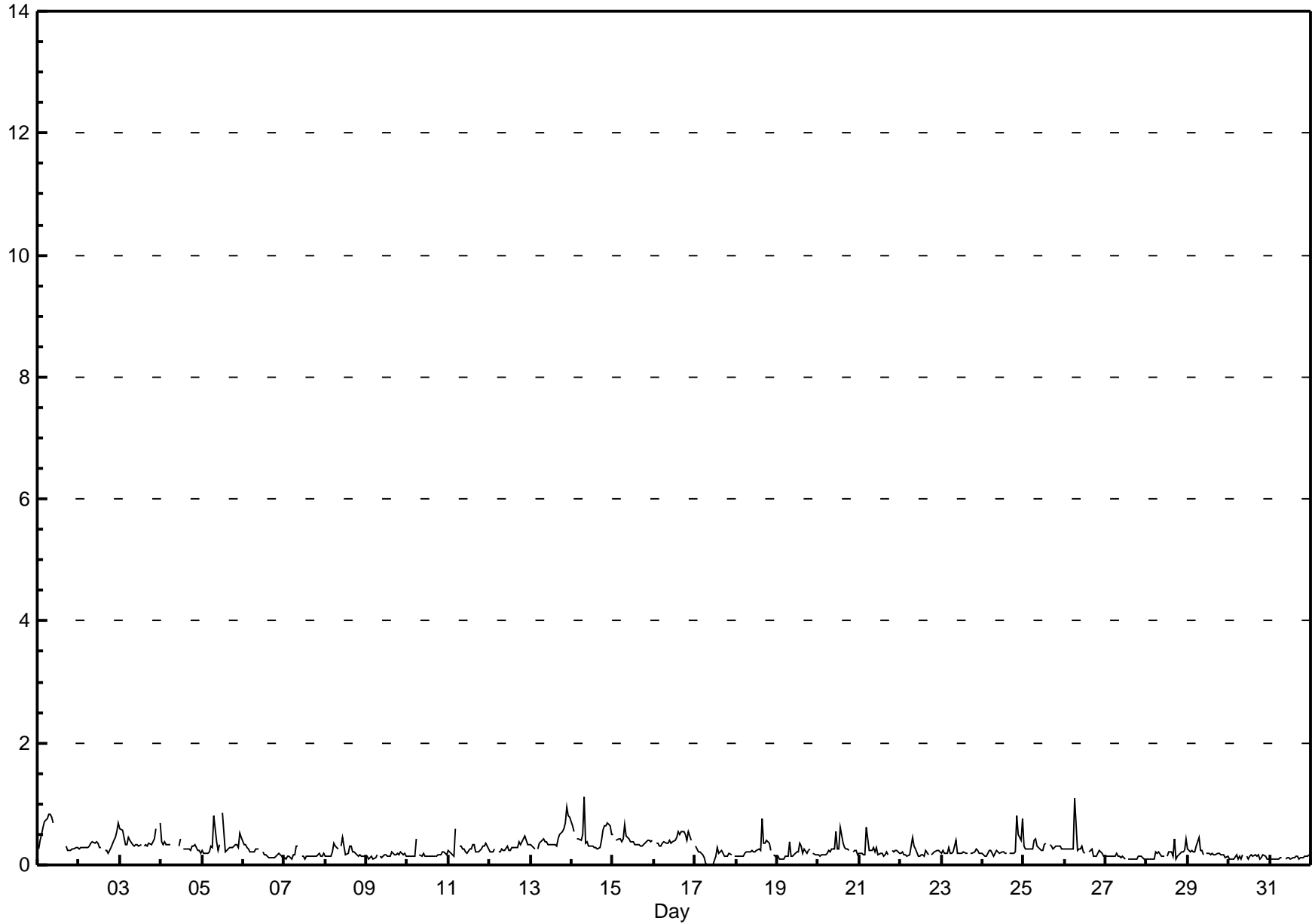
Carbon Monoxide (CO) - ppm

Henry Pirker - August 2014

Maximum Value: 1.12 ppm on Aug 14 08:00		Maximum Daily Average: 0.47 ppm on Aug 14		Hours in Service: 744																							
Minimum Value: 0.0 ppm on Aug 17 08:00		Minimum Daily Average: 0.12 ppm on Aug 31		Hours of Data: 702																							
Maximum Diurnal Average: 0.34 ppm at hour 8		Minimum Diurnal Average: 0.22 ppm at hour 3		Hours of Missing Data: 42																							
Monthly Average: 0.260 ppm		Percentiles: P ₁ = 0.09 P ₁₀ = 0.13 Q ₁ = 0.15 Median = 0.22 Q ₃ = 0.31 P ₉₀ = 0.43 P ₉₉ = 0.81		Hours of Calibration: 38																							
				Percent Operational Time: 99.5																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0.2	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.7	C	C	C	C	C	A	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.47	0.83	
2-Aug	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	A	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.7	0.33	0.68	
3-Aug	0.6	0.6	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.6	N	0.7	0.40	0.68	
4-Aug	0.4	0.3	0.4	0.3	0.3	0.3	P	P	P	R	0.3	0.4	A	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.30	0.42	
5-Aug	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.8	0.4	0.2	0.3	A	0.9	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.34	0.86	
6-Aug	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	A	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.20	0.33	
7-Aug	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	A	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.16	0.30	
8-Aug	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	A	0.3	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.22	0.45	
9-Aug	0.2	0.1	0.1	0.1	0.1	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	0.2	0.15	0.21	
10-Aug	0.2	0.2	0.2	0.1	0.2	0.4	A	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.42	
11-Aug	0.2	0.2	0.2	0.2	0.6	A	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.27	0.59	
12-Aug	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.5	0.4	0.3	0.29	0.47	
13-Aug	0.3	0.3	0.3	A	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.7	0.9	0.8	0.8	0.45	0.94	
14-Aug	0.7	0.5	A	0.4	0.4	0.4	0.5	1.1	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.6	0.6	0.6	0.7	0.6	0.5	0.47	1.12	
15-Aug	0.5	A	0.4	0.4	0.4	0.4	0.4	0.7	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.40	0.66	
16-Aug	A	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.5	0.4	0.6	0.5	0.4	A	0.42	0.55	
17-Aug	0.3	0.3	0.2	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	A	0.2	0.15	0.31	
18-Aug	0.2	0.2	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	0.7	0.3	0.4	0.4	0.4	0.4	A	0.2	0.2	0.25	0.75	
19-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.4	0.1	0.1	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.2	0.2	0.3	A	0.2	0.2	0.19	0.39	
20-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.3	0.6	0.4	0.3	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.25	0.62	
21-Aug	0.2	0.2	0.2	0.2	0.6	0.4	0.2	0.2	0.3	0.2	0.3	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	0.23	0.62	
22-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.45	
23-Aug	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.22	0.40	
24-Aug	0.2	0.2	0.2	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	0.8	0.5	0.4	0.27	0.80	
25-Aug	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.3	0.4	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29	0.42	
26-Aug	0.3	0.3	0.3	0.3	0.3	0.3	1.1	0.2	0.3	0.3	0.3	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	1.09	
27-Aug	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.13	0.20	
28-Aug	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.2	0.4	0.1	0.1	0.2	0.2	0.2	0.2	0.4	0.19	0.44	
29-Aug	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.20	0.46	
30-Aug	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	A	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.13	0.16
31-Aug	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	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.12	0.16	
		0.25	0.23	0.22	0.22	0.26	0.27	0.31	0.34	0.28	0.25	0.25	0.22	0.24	0.25	0.23	0.25	0.25	0.23	0.25	0.26	0.31	0.30	0.28	0.29	Diurnal Average	
		0.65	0.58	0.51	0.61	0.70	0.76	1.09	1.12	0.78	0.68	0.53	0.42	0.86	0.62	0.54	0.75	0.55	0.55	0.57	0.65	0.80	0.94	0.80	0.79	Diurnal Maximum	
C - Calibration		R - Recovery						P - Power Failure						N - Not Valid						A - Automated Daily Zero Span							

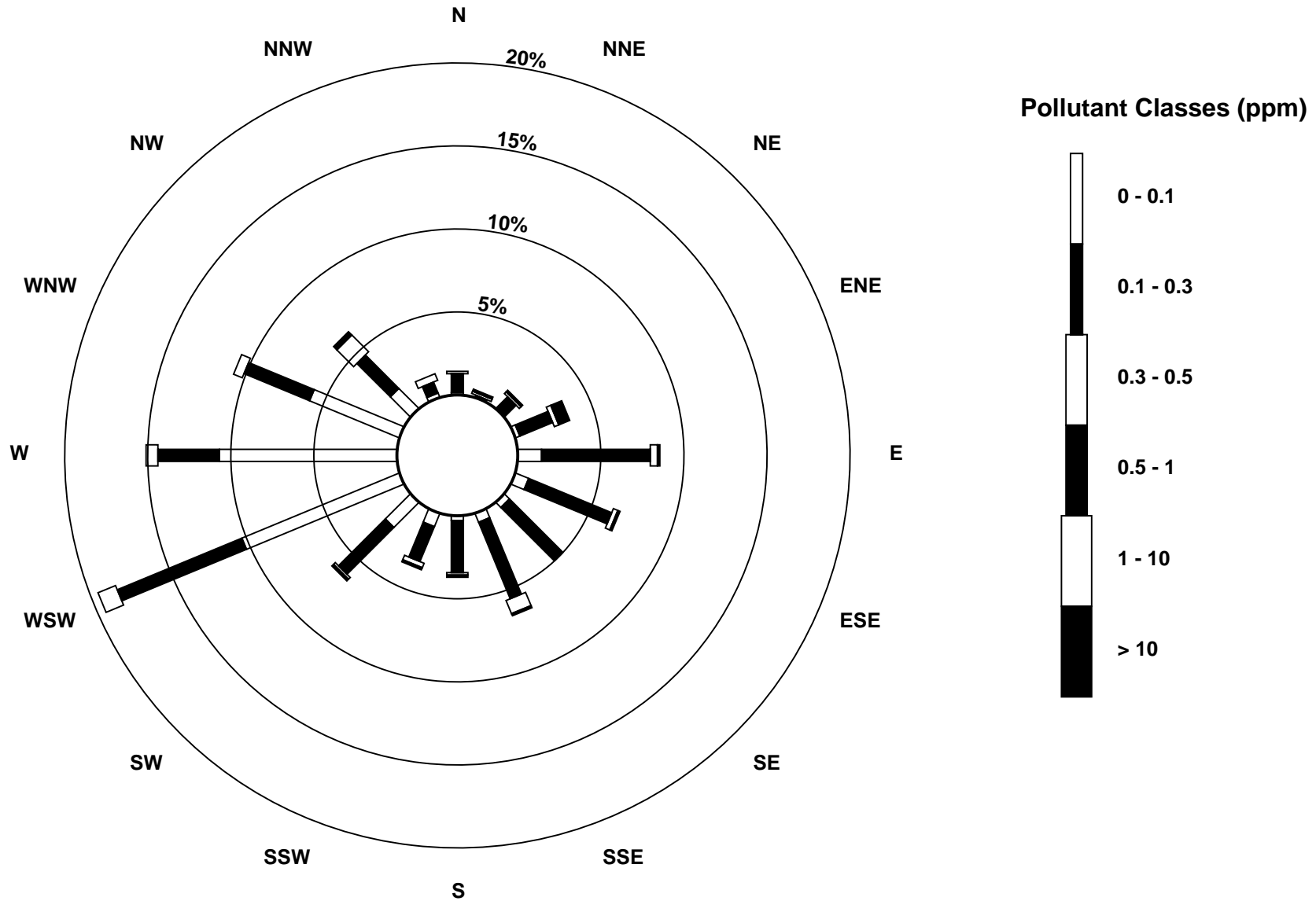
Hourly Maximums

Carbon Monoxide (CO) - ppm
Henry Pirker - August 2014



Pollutant Rose

Carbon Monoxide (CO) - ppm
Henry Pirker - August 2014



Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - August 2014

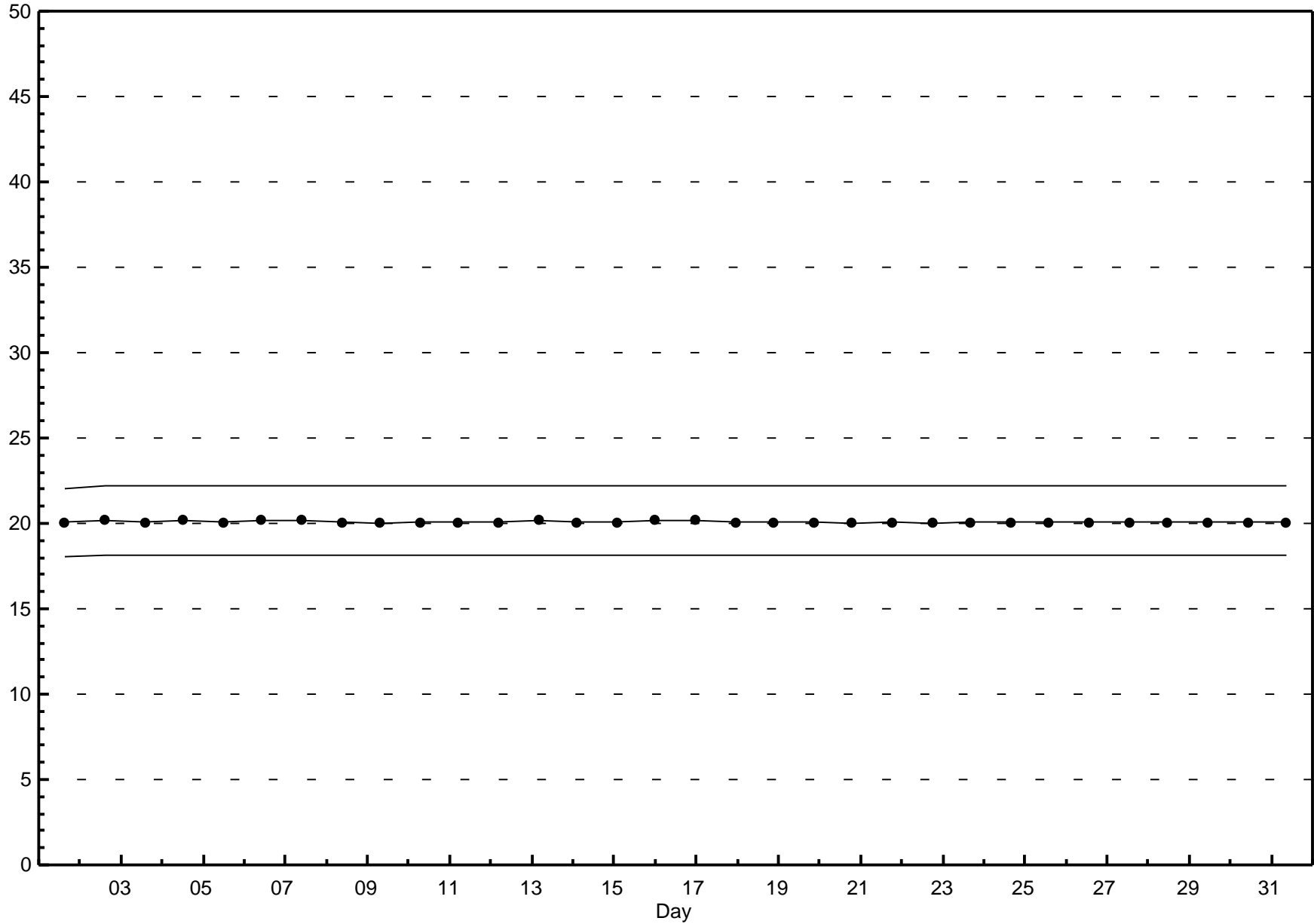
Number of Exceedences (AAAQO): 8-hr: 0	Hours in Service: 744
Maximum Value: 0.71 ppm on Aug 1 12:00	Hours of Data: 727
Minimum Value: 0.00 ppm on Aug 17 11:00	Hours of Missing Data: 17
	Hours of Calibration: 9
	Percent Operational Time: 98.9
Percentiles: P ₁ = 0.05 P ₁₀ = 0.10 Q ₁ = 0.13 Median = 0.17 Q ₃ = 0.26 P ₉₀ = 0.34 P ₉₉ = 0.58	

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-Aug	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7	N	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.71
2-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.30
3-Aug	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.38
4-Aug	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	N	N	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.35
5-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.27
6-Aug	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.28
7-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.13
8-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.22
9-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.15
10-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15
11-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
12-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.29
13-Aug	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.55
14-Aug	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.60
15-Aug	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.53
16-Aug	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.45
17-Aug	0.4	0.4	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.40
18-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.26
19-Aug	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	0.2	0.22
20-Aug	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
21-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.17
22-Aug	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	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.17
23-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
24-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
25-Aug	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.28
26-Aug	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
27-Aug	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.15
28-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.15
29-Aug	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.20
30-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.12
31-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.10
	0.59	0.59	0.60	0.58	0.55	0.51	0.47	0.55	0.62	0.66	0.68	0.71	0.38	0.37	0.38	0.39	0.41	0.43	0.44	0.44	0.45	0.46	0.51	0.55	
	Diurnal Maximums																								

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

Span Responses

Carbon Monoxide (CO)
Henry Pirker - August 2014





Peace Airshed Zone Association

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 4.33 ppm on Aug 25 06:00	Maximum Daily Average: 2.35 ppm on Aug 25
Minimum Value: 1.8 ppm on Aug 18 17:00	Hours of Data: 704
Maximum Diurnal Average: 2.19 ppm at hour 6	Hours of Missing Data: 40
Monthly Average: 1.978 ppm	Hours of Calibration: 35
Percentiles: P ₁ = 1.81 P ₁₀ = 1.84 Q ₁ = 1.86 Median = 1.91 Q ₃ = 1.96 P ₉₀ = 2.20 P ₉₉ = 2.99	Percent Operational Time: 99.3

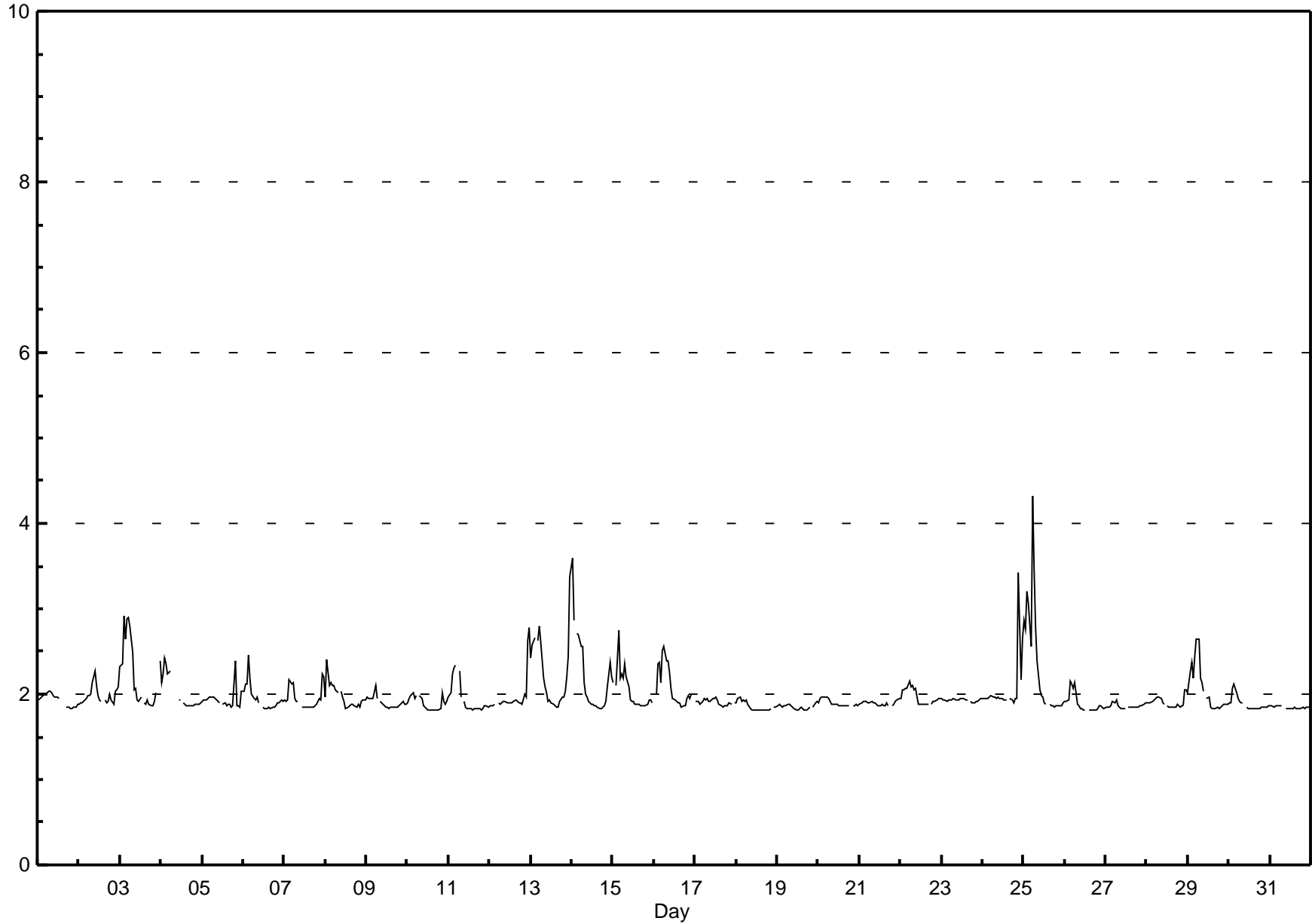
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	C	C	C	1.8	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.93	2.04
2-Aug	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.3	2.1	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.1	2.1	1.98	2.28
3-Aug	2.3	2.4	2.9	2.6	2.9	2.9	2.8	2.5	2.0	2.1	1.9	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	N	2.4	2.22	2.92	
4-Aug	2.1	2.2	2.4	2.4	2.2	2.3	P	P	P	R	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	2.01	2.43	
5-Aug	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	1.9	1.9	1.8	2.0	1.93	2.39	
6-Aug	2.0	2.1	2.1	2.5	2.2	2.0	2.0	1.9	2.0	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.46	
7-Aug	1.9	1.9	1.9	2.2	2.1	2.1	1.9	1.9	1.9	A	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.9	2.2	2.2	1.95	2.24	
8-Aug	2.0	2.4	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.40	
9-Aug	2.0	1.9	1.9	1.9	2.0	2.1	1.9	A	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.90	2.10	
10-Aug	1.9	2.0	2.0	2.0	1.9	2.0	A	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.9	1.9	1.89	2.02	
11-Aug	2.0	2.0	2.2	2.3	2.3	A	2.3	2.0	M	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.94	2.35	
12-Aug	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	2.0	2.0	2.6	2.8	1.97	2.79	
13-Aug	2.4	2.6	2.7	A	2.6	2.8	2.6	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.2	2.4	3.4	2.22	3.37	
14-Aug	3.6	2.9	A	2.7	2.7	2.6	2.6	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.1	2.4	2.2	2.19	3.59	
15-Aug	2.1	A	2.1	2.7	2.2	2.2	2.2	2.3	2.2	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	2.03	2.74	
16-Aug	A	2.0	2.4	2.4	2.1	2.5	2.6	2.4	2.4	2.3	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	A	2.09	2.56	
17-Aug	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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.91	1.96	
18-Aug	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.8	1.85	1.97	
19-Aug	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.9	1.9	1.85	1.91	
20-Aug	1.9	1.9	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	A	1.9	1.9	1.9	1.9	1.89	1.97	
21-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.89	1.94	
22-Aug	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.15	
23-Aug	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	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.95	
24-Aug	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	2.0	1.9	1.9	2.0	2.0	3.4	2.2	2.7	2.05	3.42	
25-Aug	2.9	2.8	3.2	3.1	2.6	4.3	3.5	2.8	2.4	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	2.35	4.33	
26-Aug	1.9	1.9	1.9	2.1	2.1	2.1	2.1	1.9	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.90	2.15	
27-Aug	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.86	1.93	
28-Aug	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2.1	2.0	1.91	2.06	
29-Aug	2.0	2.3	2.4	2.2	2.4	2.6	2.6	2.2	2.1	2.0	A	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	2.05	2.64	
30-Aug	1.9	1.9	2.1	2.1	2.0	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.9	1.89	2.12	
31-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.85	1.87	

2.05	2.07	2.11	2.14	2.12	2.19	2.15	2.04	1.99	1.96	1.91	1.89	1.88	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.89	1.90	1.97	1.99	2.05	Diurnal Average	
3.59	2.87	3.20	3.06	2.87	4.33	3.46	2.78	2.38	2.28	2.10	1.98	1.97	1.95	1.93	1.94	1.95	1.94	2.00	2.39	2.04	3.42	2.62	3.37	Diurnal Maximum		

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

Hourly Averages

Total Hydrocarbons (THC) - ppm
Henry Pirker - August 2014



Hourly Maximums

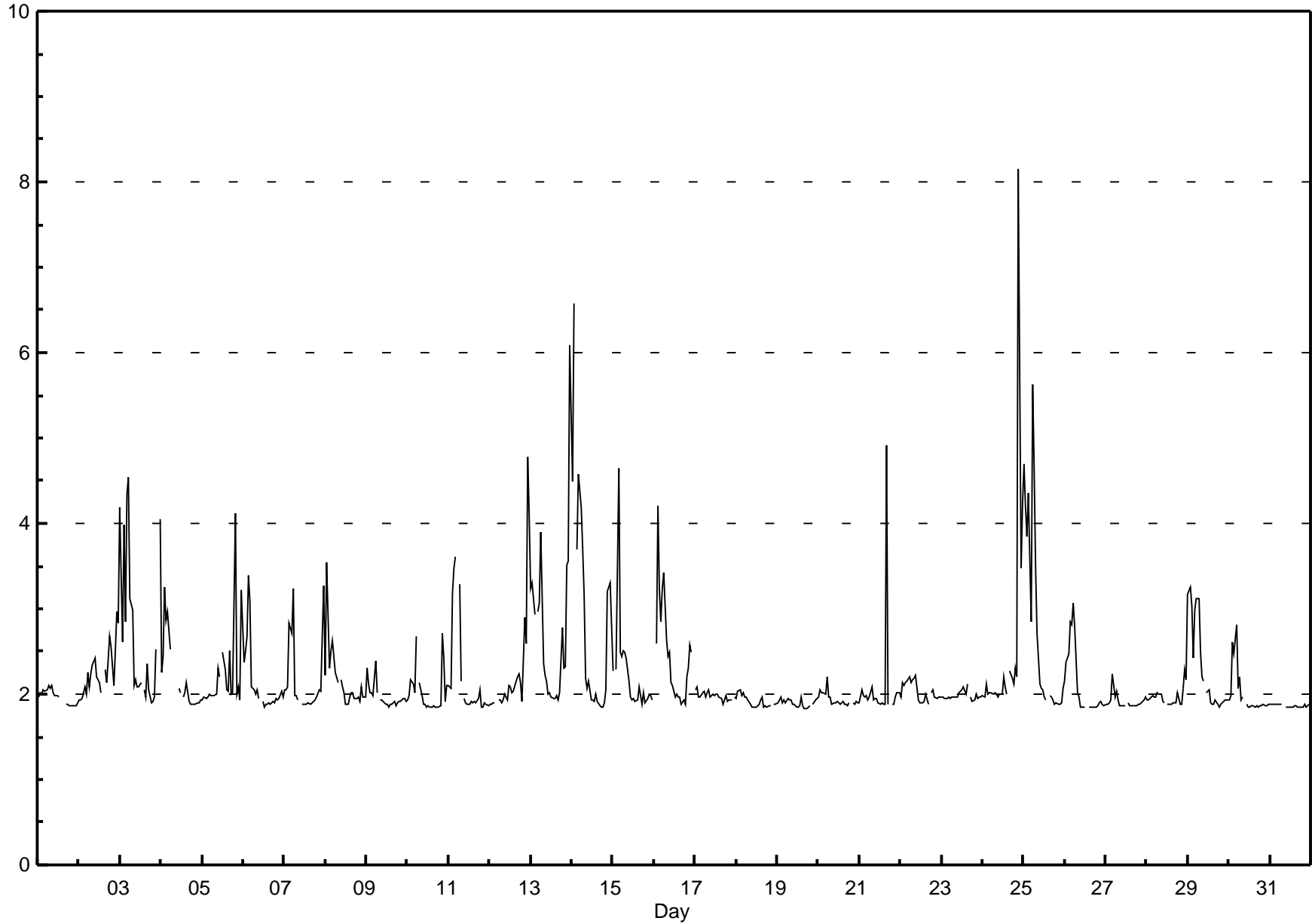
Total Hydrocarbons (THC) - ppm

Henry Pirker - August 2014

Maximum Value: 8.16 ppm on Aug 24 22:00		Maximum Daily Average: 2.84 ppm on Aug 14		Hours in Service: 744																							
Minimum Value: 1.8 ppm on Aug 19 17:00		Minimum Daily Average: 1.87 ppm on Aug 31		Hours of Data: 704																							
Maximum Diurnal Average: 2.57 ppm at hour 6		Minimum Diurnal Average: 1.93 ppm at hour 15		Hours of Missing Data: 40																							
Monthly Average: 2.188 ppm		Percentiles: P ₁ = 1.84 P ₁₀ = 1.87 Q ₁ = 1.89 Median = 1.97 Q ₃ = 2.14 P ₉₀ = 2.84 P ₉₉ = 4.64		Hours of Calibration: 35																							
				Percent Operational Time: 99.3																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	C	C	C	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.10	
2-Aug	1.9	1.9	1.9	2.1	2.0	2.3	2.1	2.2	2.3	2.4	2.2	2.2	2.1	2.0	A	2.3	2.1	2.4	2.7	2.6	2.1	2.5	3.0	2.8	2.27	2.96	
3-Aug	4.2	2.6	4.0	2.8	4.3	4.5	3.1	3.0	2.1	2.2	2.1	2.1	2.1	A	2.1	2.0	2.4	2.0	1.9	1.9	2.0	2.5	N	4.1	2.73	4.54	
4-Aug	2.2	2.4	3.2	2.9	3.0	2.5	P	P	P	R	2.1	2.0	A	2.0	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.19	3.25	
5-Aug	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.2	A	2.5	2.3	2.1	2.0	2.5	2.0	2.0	4.1	2.0	2.1	1.9	3.2	2.22	4.11	
6-Aug	2.4	2.5	2.7	3.4	3.1	2.1	2.1	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	2.0	2.0	2.14	3.39	
7-Aug	2.0	2.0	2.1	2.8	2.7	3.2	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	2.0	2.1	2.0	2.7	3.3	2.17	3.27	
8-Aug	2.2	3.5	2.3	2.5	2.6	2.4	2.3	2.1	A	2.2	2.1	2.0	1.9	1.9	2.0	2.0	2.0	1.9	1.9	2.0	1.9	2.1	2.0	2.0	2.17	3.55	
9-Aug	2.3	2.1	2.0	2.0	2.0	2.4	2.0	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	1.97	2.40	
10-Aug	1.9	2.0	2.2	2.1	2.0	2.7	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.8	1.9	2.7	2.4	1.9	2.1	2.03	2.72	
11-Aug	2.1	2.1	3.2	3.5	3.6	A	3.3	2.2	M	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.8	1.8	1.9	1.9	1.9	2.20	3.62	
12-Aug	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	1.9	2.1	2.1	2.0	2.0	2.2	2.2	2.2	2.1	1.9	2.9	2.6	4.8	4.1	2.28	4.78	
13-Aug	3.2	3.3	2.9	A	3.0	3.1	3.9	2.4	2.2	2.2	2.0	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.8	2.3	2.3	3.5	3.6	6.1	2.72	6.08	
14-Aug	4.5	6.6	A	3.7	4.6	4.2	3.7	3.2	2.2	2.1	2.2	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	3.2	3.3	2.8	2.84	6.58	
15-Aug	2.3	A	2.3	4.6	2.5	2.4	2.5	2.5	2.4	2.2	2.0	1.9	1.9	1.9	1.9	2.1	2.0	1.9	2.0	1.9	1.9	2.0	2.0	1.9	2.22	4.64	
16-Aug	A	2.6	4.2	3.2	2.9	3.2	3.4	2.6	2.4	2.5	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.2	2.3	2.6	2.5	A	2.48	4.20	
17-Aug	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	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	2.0	1.98	2.09	
18-Aug	1.9	2.0	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.91	2.06	
19-Aug	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2.0	1.9	1.8	1.8	1.9	1.9	A	1.9	1.9	1.9	1.90	1.97	
20-Aug	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.94	2.20	
21-Aug	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	4.9	1.9	A	1.9	1.9	2.0	2.0	2.0	2.08	4.92	
22-Aug	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	2.0	2.1	2.0	1.9	2.0	2.0	2.03	2.22	
23-Aug	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	A	2.0	1.9	1.9	2.0	1.9	2.0	1.9	2.0	1.98	2.11	
24-Aug	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.0	A	2.3	2.2	2.1	2.3	2.2	8.2	3.5	4.2	2.49	8.16		
25-Aug	4.7	4.2	3.9	4.4	2.9	5.6	4.7	3.5	2.7	2.1	2.1	2.1	2.0	1.9	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.78	5.63	
26-Aug	2.2	2.4	2.5	2.9	2.8	3.1	2.8	2.0	2.0	1.9	1.9	1.8	1.9	A	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	2.11	3.08	
27-Aug	1.9	1.9	1.9	1.9	2.2	2.0	2.0	1.9	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	2.0	1.91	2.23	
28-Aug	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.1	2.3	2.2	1.96	2.29	
29-Aug	3.2	3.3	3.0	2.4	3.0	3.1	3.1	2.5	2.2	2.1	A	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.30	3.25	
30-Aug	1.9	2.0	2.6	2.5	2.8	2.1	2.2	1.9	2.0	A	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.01	2.82	
31-Aug	1.9	1.9	1.9	1.9	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	1.87	1.89	
		2.35	2.44	2.42	2.51	2.53	2.57	2.45	2.21	2.08	2.04	1.98	1.96	1.96	1.94	1.93	1.96	2.06	1.94	1.98	2.03	2.02	2.34	2.28	2.45	Diurnal Average	
		4.69	6.58	4.20	4.64	4.57	5.63	4.66	3.49	2.72	2.48	2.21	2.16	2.50	2.28	2.06	2.29	4.92	2.40	2.79	4.11	2.90	8.16	4.78	6.08	Diurnal Maximum	
C - Calibration		R - Recovery					P - Power Failure					M - Maintenance					N - Not Valid										
A - Automated Daily Zero Span																											

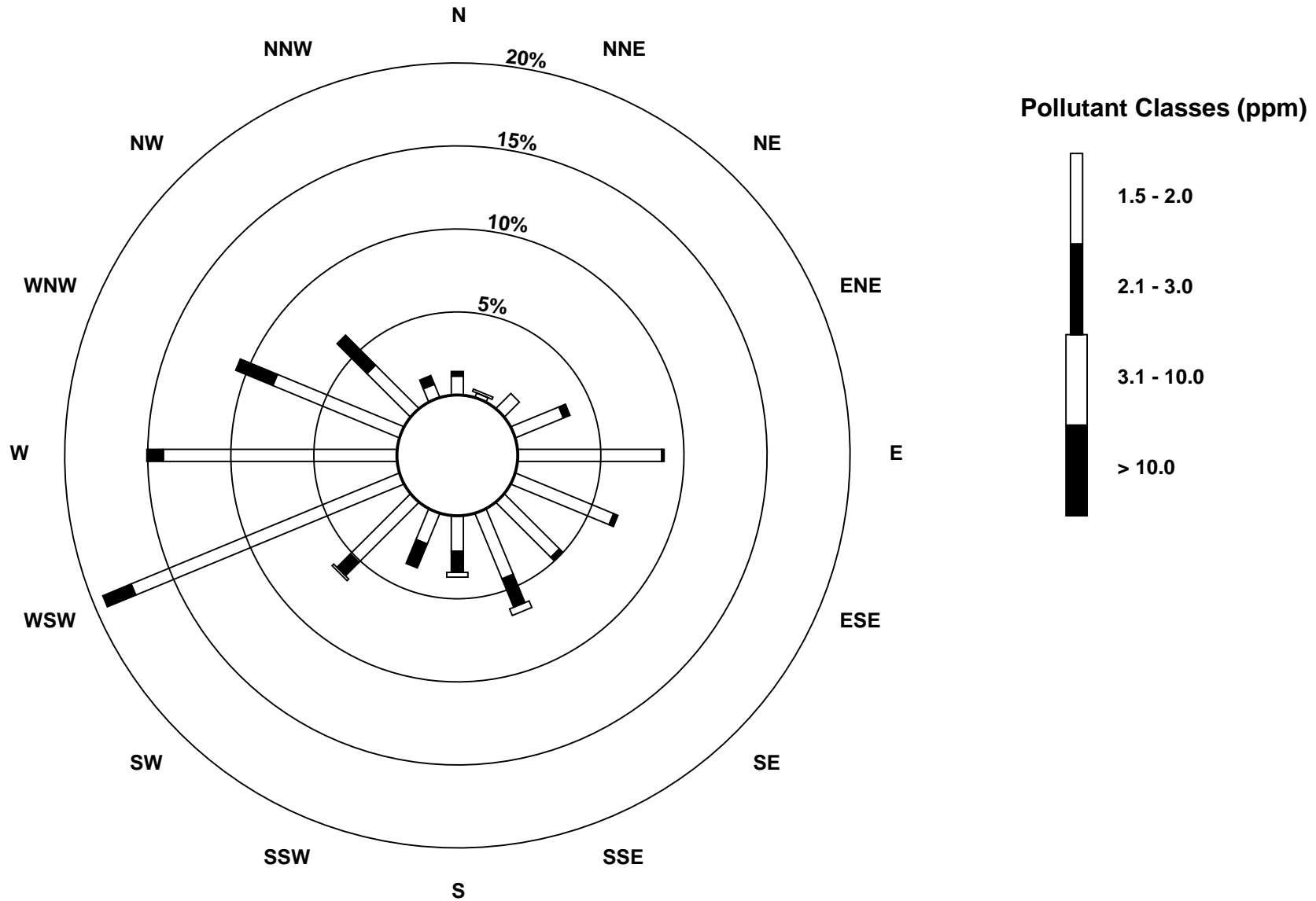
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Henry Pirker - August 2014



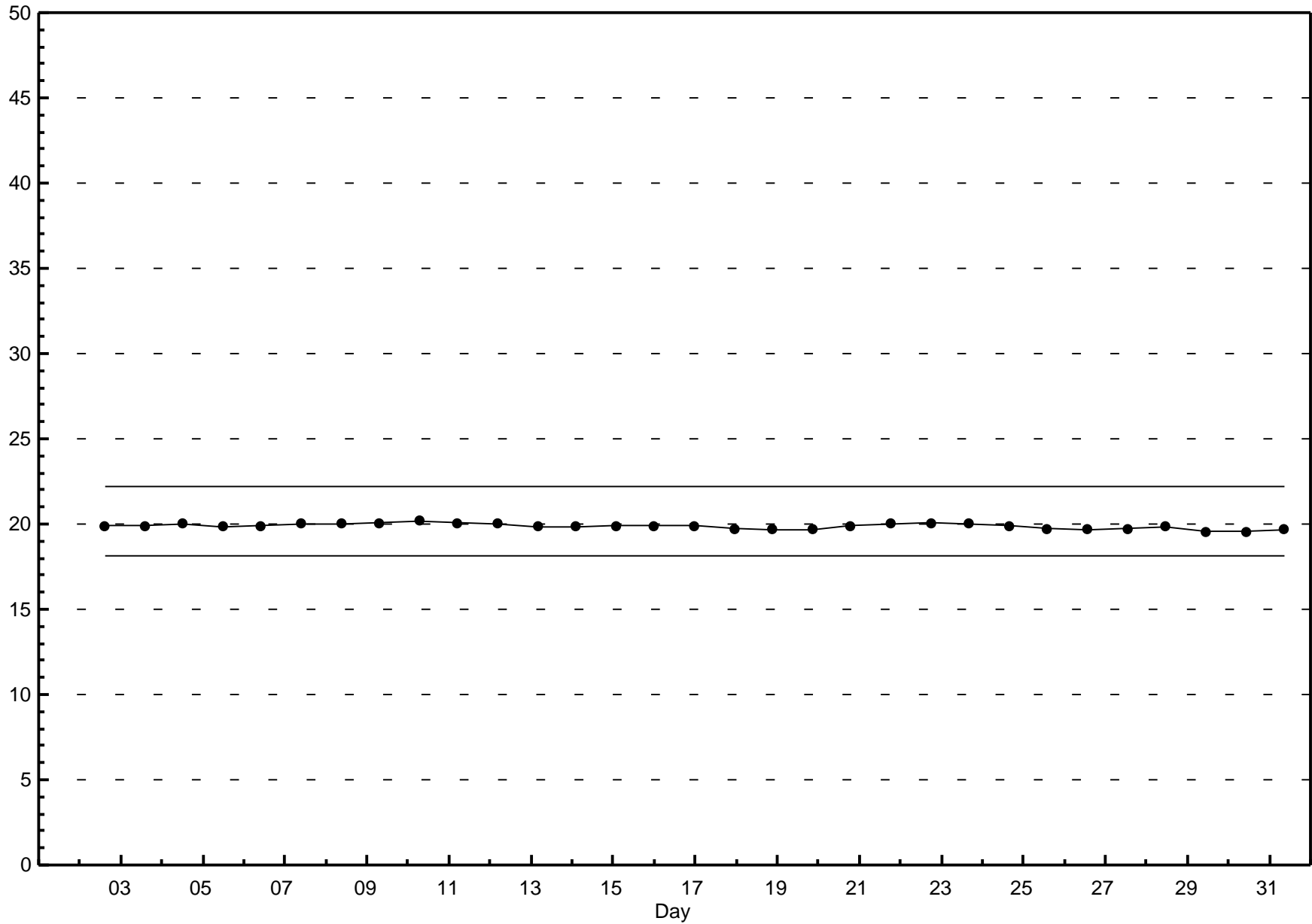
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Henry Pirker - August 2014



Span Responses

Total Hydrocarbons (THC)
Henry Pirker - August 2014



Hourly Averages

Methane (CH₄) - ppm

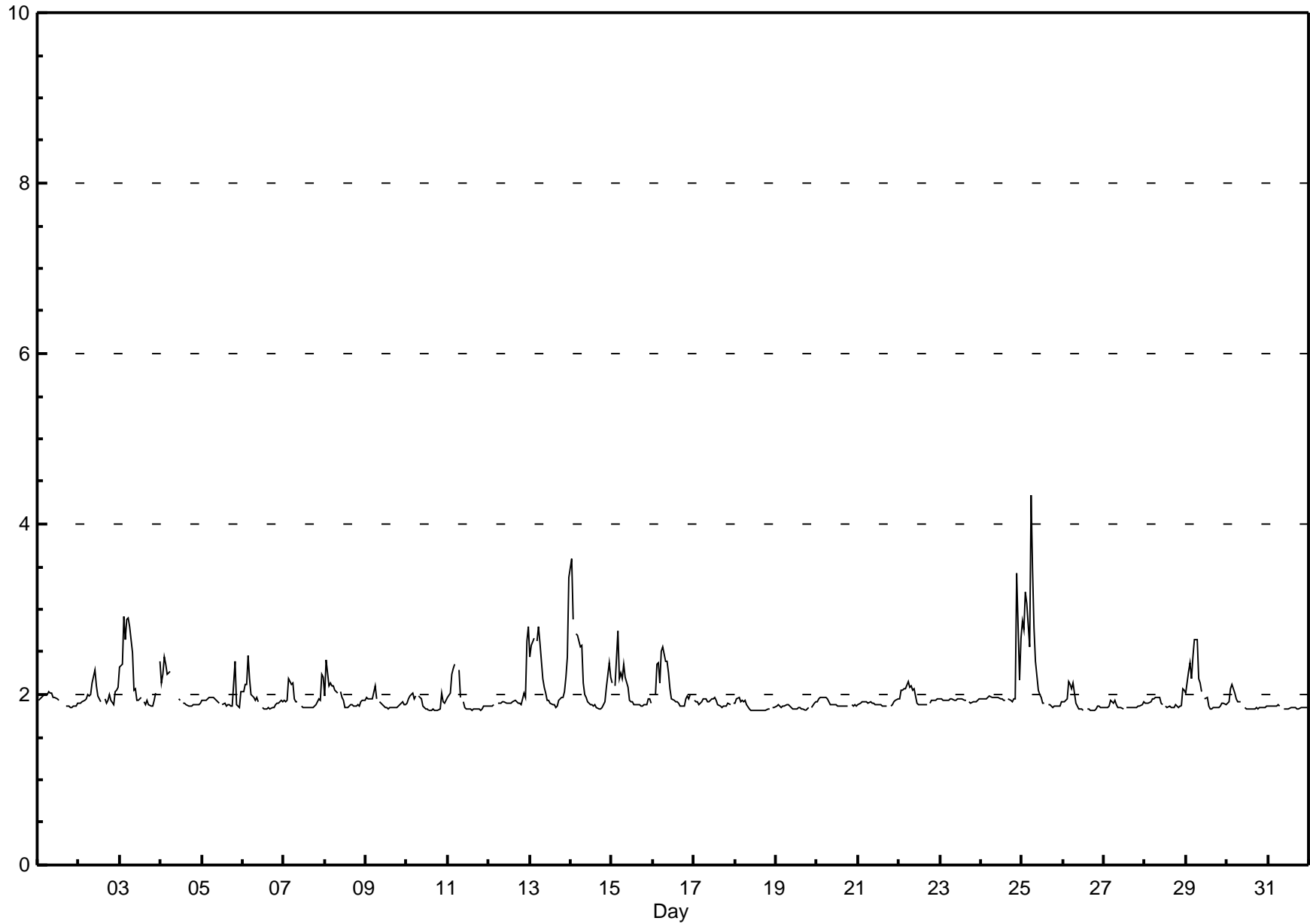
Henry Pirker - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 4.34 ppm on Aug 25 06:00	Maximum Daily Average: 2.35 ppm on Aug 25		Hours of Data:	704
Minimum Value: 1.8 ppm on Aug 18 17:00	Minimum Daily Average: 1.85 ppm on Aug 31		Hours of Missing Data:	40
Maximum Diurnal Average: 2.20 ppm at hour 6	Minimum Diurnal Average: 1.86 ppm at hour 17		Hours of Calibration:	35
Monthly Average: 1.981 ppm	Percentiles: P ₁ = 1.82 P ₁₀ = 1.84 Q ₁ = 1.86 Median = 1.91 Q ₃ = 1.97 P ₉₀ = 2.20 P ₉₉ = 2.99		Percent Operational Time:	99.3

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	C	C	C	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.93	2.03
2-Aug	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.1	2.0	1.9	1.9	A	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.1	2.1	1.99	2.28
3-Aug	2.3	2.4	2.9	2.6	2.9	2.9	2.8	2.5	2.0	2.1	1.9	1.9	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	N	2.4	2.22	2.92	
4-Aug	2.1	2.2	2.4	2.4	2.2	2.3	P	P	P	R	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	2.01	2.43	
5-Aug	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.4	1.9	1.9	1.9	2.0	1.94	2.39	
6-Aug	2.0	2.1	2.1	2.5	2.2	2.0	2.0	1.9	2.0	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.46	
7-Aug	1.9	1.9	1.9	2.2	2.1	2.1	1.9	1.9	1.9	A	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.9	1.9	1.9	2.0	1.9	2.2	2.2	1.95	2.24	
8-Aug	2.0	2.4	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.40	
9-Aug	2.0	1.9	1.9	1.9	2.0	2.1	2.0	A	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.90	2.10	
10-Aug	1.9	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.9	1.9	1.90	2.02	
11-Aug	2.0	2.0	2.2	2.3	2.3	A	2.3	2.0	M	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.94	2.35	
12-Aug	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	2.0	2.0	2.6	2.8	1.97	2.79	
13-Aug	2.4	2.6	2.7	A	2.6	2.8	2.6	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.2	2.4	3.4	2.22	3.37	
14-Aug	3.6	2.9	A	2.7	2.7	2.6	2.6	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.1	2.4	2.2	2.19	3.59	
15-Aug	2.1	A	2.1	2.7	2.2	2.2	2.2	2.3	2.2	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	2.04	2.74	
16-Aug	A	2.0	2.4	2.4	2.1	2.5	2.6	2.4	2.4	2.3	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	A	2.10	2.56	
17-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.91	1.96	
18-Aug	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.8	1.86	1.97	
19-Aug	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.9	1.9	1.86	1.91	
20-Aug	1.9	1.9	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	A	1.9	1.9	1.9	1.9	1.90	1.97	
21-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.89	1.95	
22-Aug	2.0	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	1.97	2.15	
23-Aug	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	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.96	
24-Aug	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	2.0	1.9	1.9	2.0	2.0	3.4	2.2	2.7	2.06	3.43	
25-Aug	2.9	2.8	3.2	3.1	2.6	4.3	3.5	2.8	2.4	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.35	4.34	
26-Aug	1.9	1.9	1.9	2.1	2.1	2.1	2.1	1.9	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.90	2.15	
27-Aug	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.86	1.94	
28-Aug	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.0	1.91	2.06	
29-Aug	2.0	2.3	2.4	2.2	2.4	2.6	2.6	2.2	2.1	2.0	A	1.9	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.05	2.64	
30-Aug	1.9	1.9	2.1	2.1	2.0	1.9	1.9	1.9	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.89	2.12	
31-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.85	1.88	

2.06	2.07	2.11	2.14	2.13	2.20	2.15	2.04	2.00	1.96	1.91	1.89	1.88	1.87	1.86	1.86	1.86	1.86	1.86	1.87	1.89	1.90	1.97	1.99	2.05	Diurnal Average	
3.59	2.87	3.20	3.06	2.87	4.34	3.47	2.78	2.39	2.28	2.10	1.98	1.97	1.95	1.93	1.94	1.95	1.94	2.00	2.39	2.04	3.43	2.62	3.37	Diurnal Maximum		

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



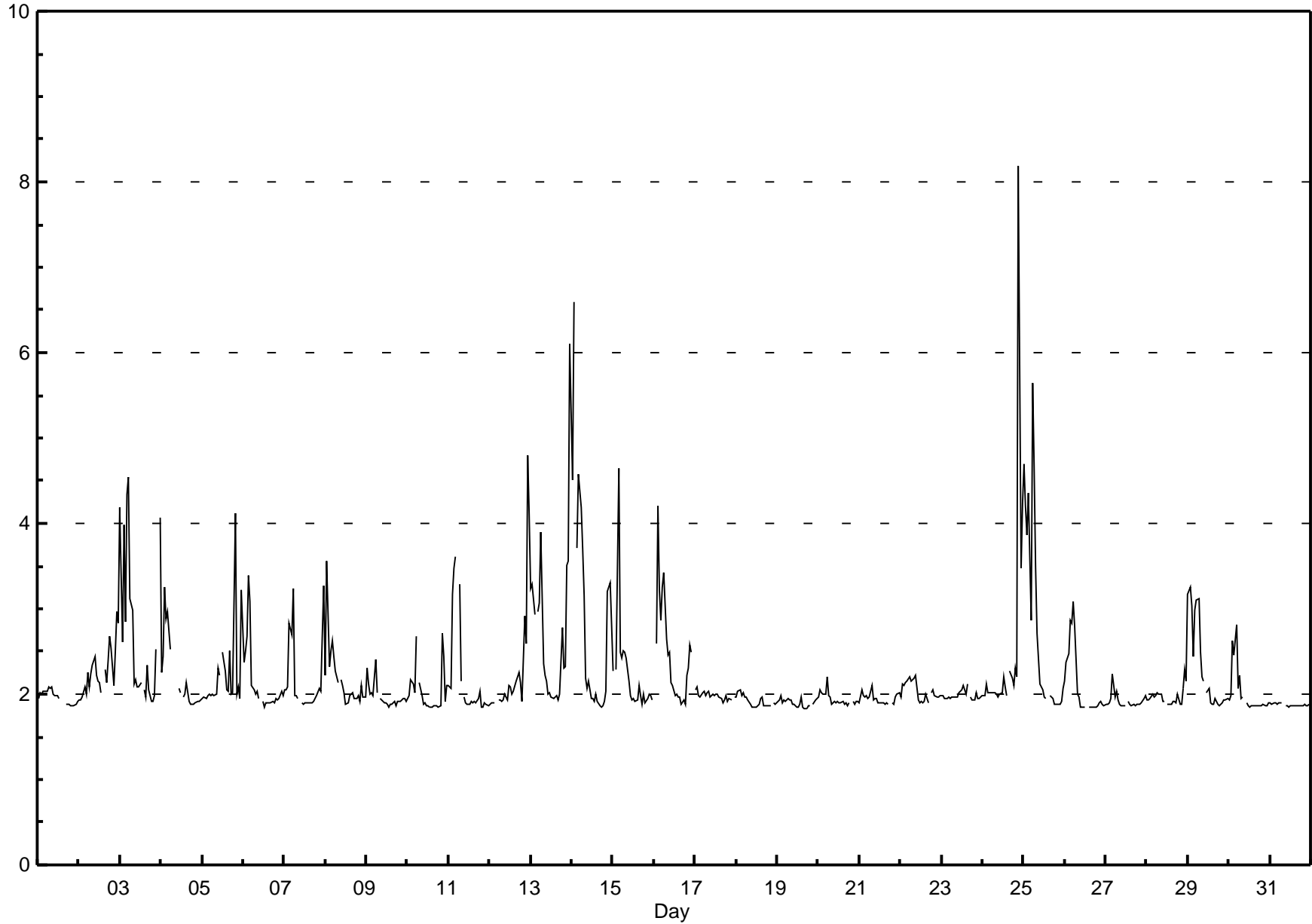
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - August 2014

Maximum Value: 8.19 ppm on Aug 24 22:00		Maximum Daily Average: 2.84 ppm on Aug 14		Hours in Service: 744																																												
Minimum Value: 1.8 ppm on Aug 19 17:00		Minimum Daily Average: 1.87 ppm on Aug 31		Hours of Data: 704																																												
Maximum Diurnal Average: 2.57 ppm at hour 6		Minimum Diurnal Average: 1.94 ppm at hour 15		Hours of Missing Data: 40																																												
Monthly Average: 2.186 ppm		Percentiles: P ₁ = 1.84 P ₁₀ = 1.87 Q ₁ = 1.90 Median = 1.97 Q ₃ = 2.13 P ₉₀ = 2.82 P ₉₉ = 4.66		Hours of Calibration: 35																																												
Percentiles: P ₁ = 1.84 P ₁₀ = 1.87 Q ₁ = 1.90 Median = 1.97 Q ₃ = 2.13 P ₉₀ = 2.82 P ₉₉ = 4.66		Percent Operational Time: 99.3																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	C	C	C	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.09																						
2-Aug	1.9	1.9	2.0	2.1	2.0	2.3	2.1	2.2	2.3	2.4	2.2	2.2	2.1	2.0	A	2.3	2.1	2.4	2.7	2.5	2.1	2.5	3.0	2.8	2.27	2.97																						
3-Aug	4.2	2.6	4.0	2.9	4.3	4.5	3.1	3.0	2.1	2.2	2.1	2.1	2.1	A	2.1	2.0	2.3	2.0	1.9	1.9	2.0	2.5	N	4.1	2.73	4.55																						
4-Aug	2.2	2.4	3.2	2.9	3.0	2.5	P	P	P	R	2.1	2.0	A	2.0	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.20	3.25																						
5-Aug	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.2	A	2.5	2.3	2.1	2.0	2.5	2.0	2.0	4.1	2.0	2.1	1.9	3.2	2.22	4.12																						
6-Aug	2.4	2.5	2.7	3.4	3.1	2.1	2.1	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.14	3.39																						
7-Aug	2.0	2.0	2.1	2.8	2.7	3.2	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	2.0	2.1	2.0	2.7	3.3	2.17	3.27																						
8-Aug	2.2	3.6	2.3	2.5	2.6	2.4	2.3	2.1	A	2.2	2.1	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.1	2.0	2.0	2.17	3.56																						
9-Aug	2.3	2.1	2.0	2.0	2.0	2.4	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.97	2.40																						
10-Aug	1.9	2.0	2.2	2.1	2.0	2.7	A	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.8	1.9	2.7	2.4	1.9	2.1	2.03	2.72																						
11-Aug	2.1	2.1	3.2	3.5	3.6	A	3.3	2.2	M	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.8	1.8	1.9	1.9	1.9	2.20	3.62																						
12-Aug	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	1.9	2.1	2.1	2.0	2.0	2.1	2.2	2.2	2.1	1.9	2.9	2.6	4.8	4.1	2.28	4.80																						
13-Aug	3.2	3.3	2.9	A	3.0	3.1	3.9	2.4	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.8	2.3	2.3	3.5	3.6	6.1	2.72	6.10																						
14-Aug	4.5	6.6	A	3.7	4.6	4.2	3.7	3.2	2.2	2.1	2.2	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	3.2	3.3	2.8	2.8	2.84	6.59																						
15-Aug	2.3	A	2.3	4.6	2.5	2.4	2.5	2.5	2.4	2.1	2.0	1.9	2.0	1.9	1.9	2.1	2.0	1.9	2.0	1.9	2.0	2.0	2.0	1.9	2.22	4.65																						
16-Aug	A	2.6	4.2	3.2	2.9	3.2	3.4	2.6	2.5	2.5	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.2	2.3	2.6	2.5	A	2.48	4.21																						
17-Aug	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	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	2.0	1.98	2.09																						
18-Aug	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.92	2.06																						
19-Aug	1.9	1.9	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.8	1.9	1.9	2.0	1.9	1.8	1.8	1.9	1.9	A	1.9	1.9	2.0	1.90	1.98																						
20-Aug	2.0	2.0	2.0	2.0	2.0	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.94	2.21																						
21-Aug	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.1	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	1.95	2.09																						
22-Aug	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.2	2.2	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	2.0	2.1	2.0	2.0	2.0	2.0	2.03	2.23																						
23-Aug	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.1	A	2.0	1.9	1.9	2.0	2.0	2.0	2.0	1.99	2.11																						
24-Aug	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.0	A	2.3	2.2	2.1	2.3	2.2	8.2	3.5	4.2	2.49	8.19																						
25-Aug	4.7	4.2	3.9	4.4	2.9	5.6	4.7	3.5	2.7	2.1	2.1	2.1	2.0	1.9	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.79	5.64																						
26-Aug	2.2	2.4	2.5	2.9	2.8	3.1	2.8	2.0	2.0	1.9	1.9	1.8	1.9	A	1.8	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	2.11	3.09																						
27-Aug	1.9	1.9	1.9	1.9	2.2	2.0	2.0	1.9	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	2.0	1.92	2.24																						
28-Aug	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.1	2.3	2.2	1.97	2.29																						
29-Aug	3.2	3.3	3.0	2.4	3.0	3.1	3.1	2.5	2.2	2.2	A	2.0	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.30	3.25																						
30-Aug	1.9	2.0	2.6	2.5	2.8	2.1	2.2	1.9	2.0	A	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.01	2.82																						
31-Aug	1.9	1.9	1.9	1.9	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	1.87	1.90																						
																								2.35	2.45	2.43	2.52	2.53	2.57	2.45	2.21	2.08	2.04	1.98	1.96	1.97	1.94	1.94	1.96	1.97	1.94	1.98	2.04	2.03	2.35	2.28	2.46	Diurnal Average
																								4.69	6.59	4.21	4.65	4.58	5.64	4.67	3.49	2.72	2.48	2.22	2.16	2.49	2.28	2.05	2.29	2.51	2.40	2.79	4.12	2.91	8.19	4.80	6.10	Diurnal Maximum
C - Calibration																								R - Recovery				P - Power Failure				M - Maintenance				N - Not Valid												
A - Automated Daily Zero Span																																																

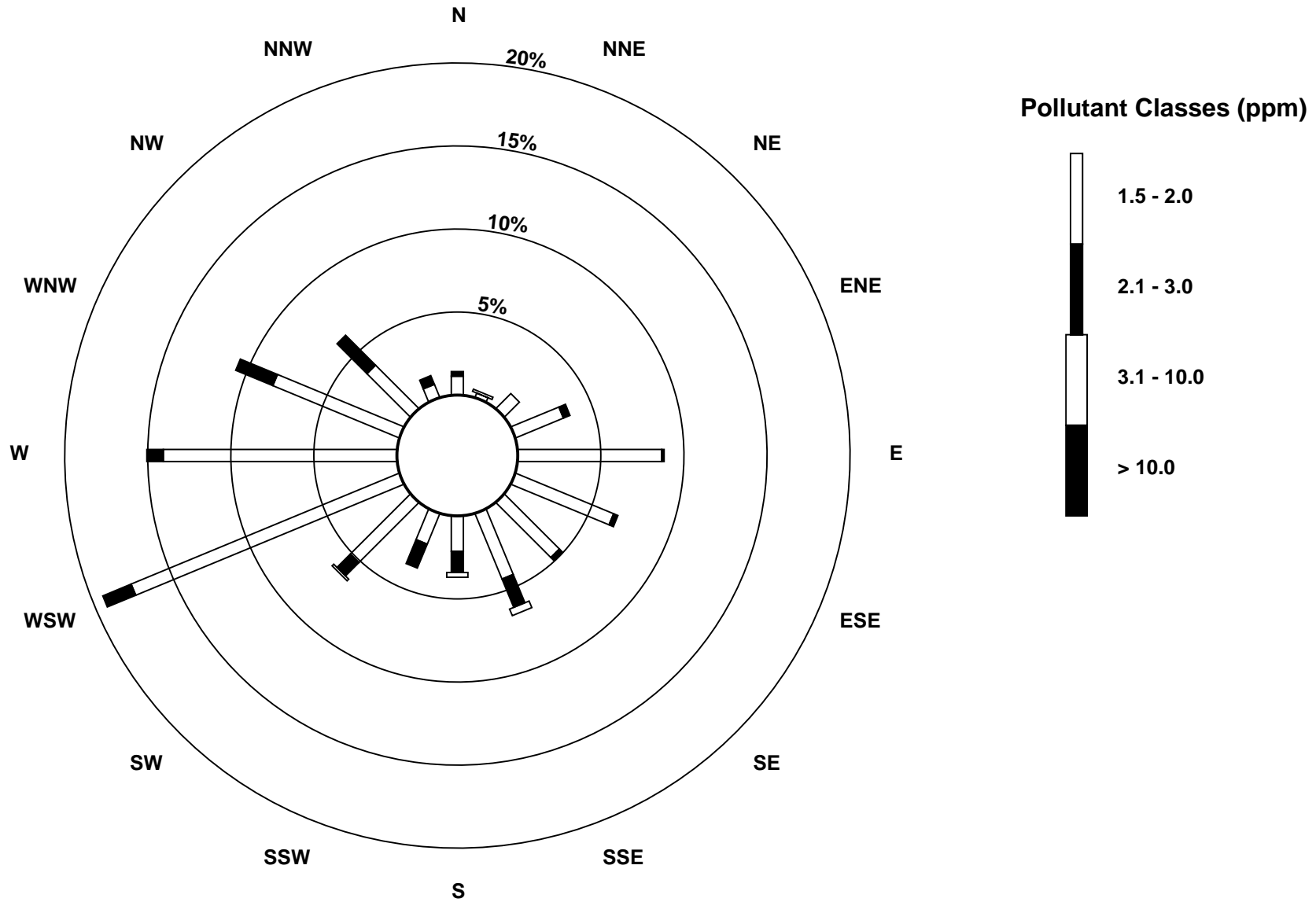
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - August 2014



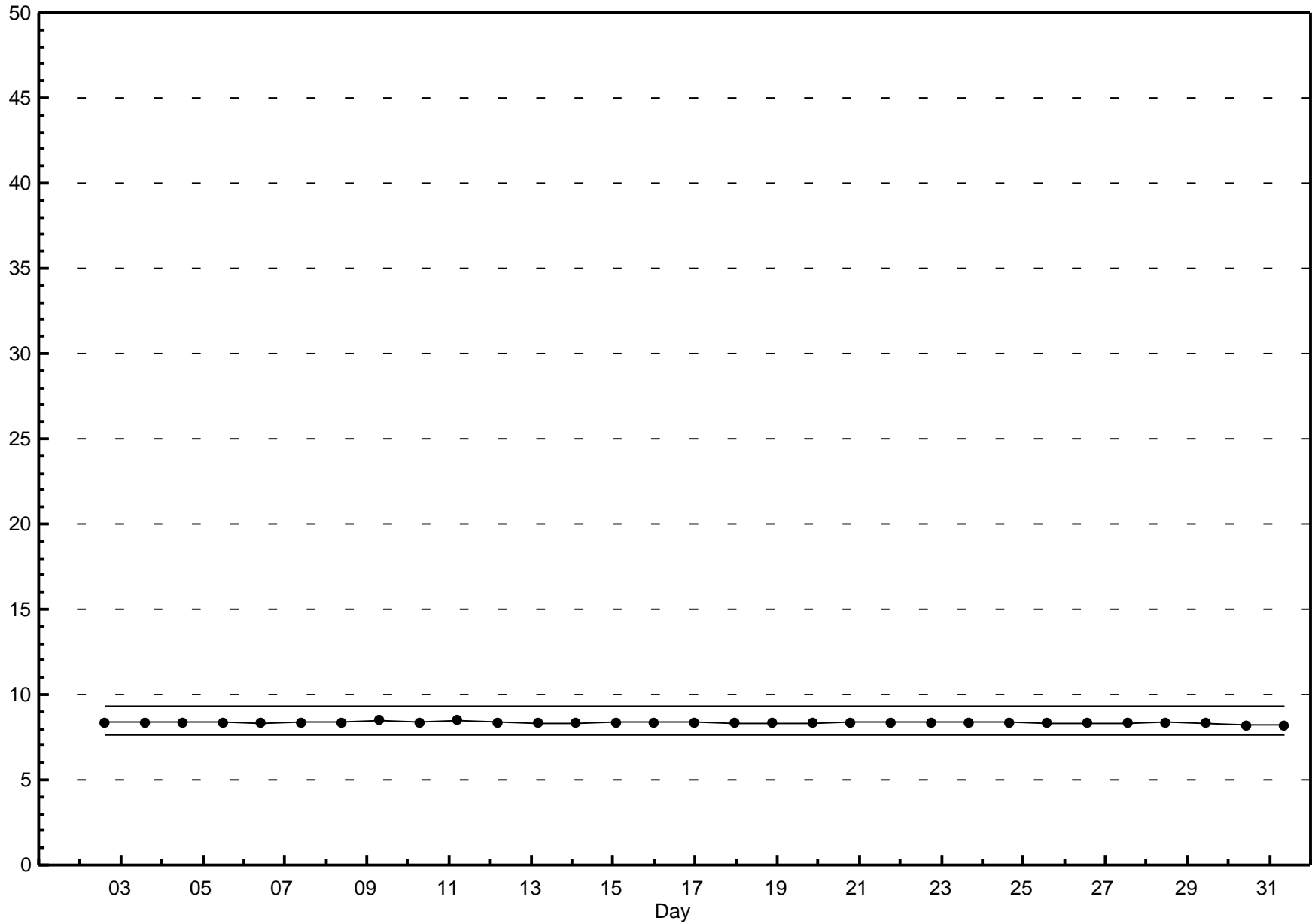
Pollutant Rose

Methane (CH₄) - ppm
Henry Pirker - August 2014



Span Responses

Methane (CH₄)
Henry Pirker - August 2014





Peace Airshed Zone Association

Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

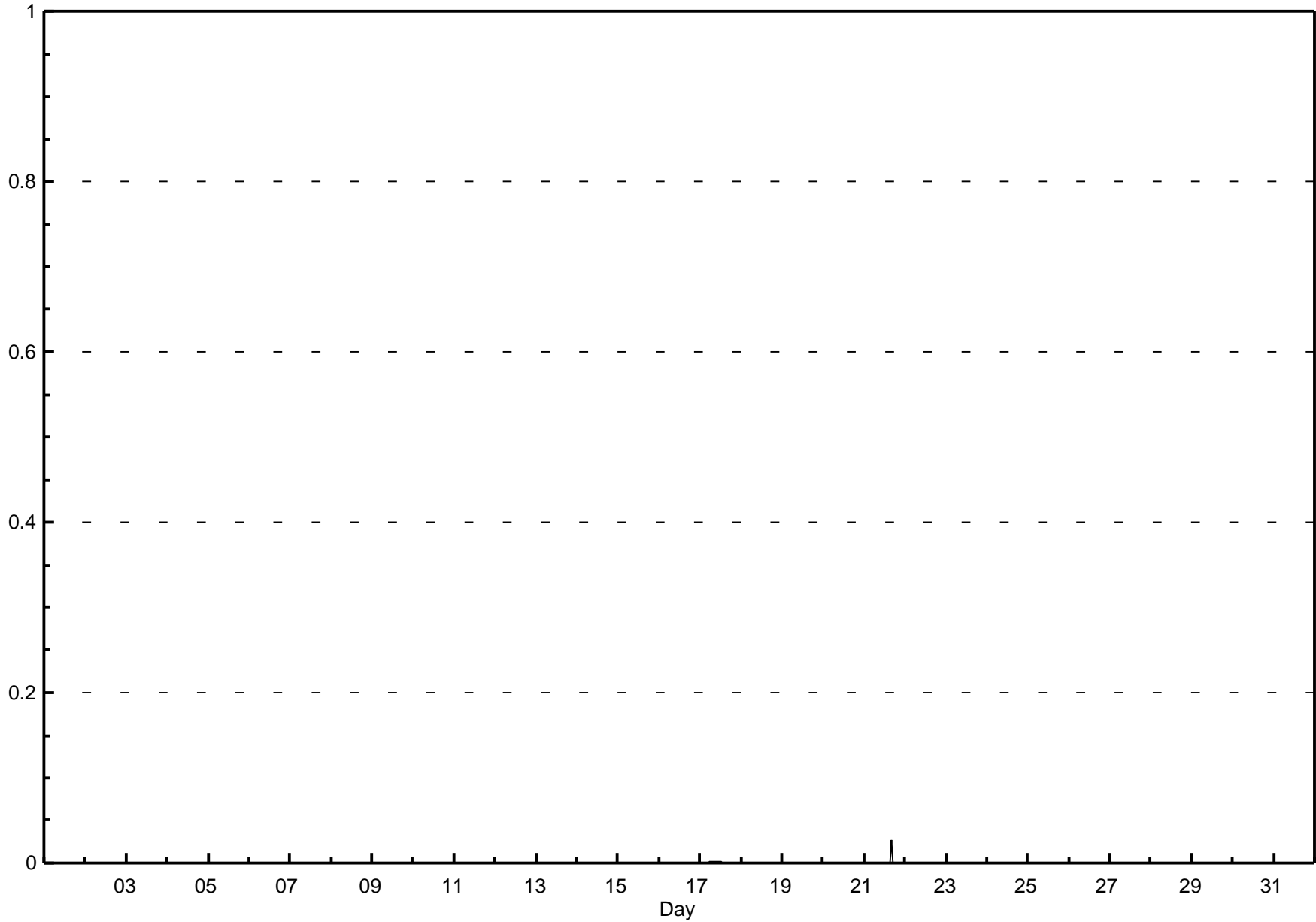
Henry Pirker - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 0.03 ppm on Aug 21 17:00	Maximum Daily Average: 0.00 ppm on Aug 21		Hours of Data:	704
Minimum Value: 0.0 ppm on Aug 1 17:00	Minimum Daily Average: 0.00 ppm on Aug 10		Hours of Missing Data:	40
Maximum Diurnal Average: 0.00 ppm at hour 17	Minimum Diurnal Average: 0.00 ppm at hour 18		Hours of Calibration:	35
Monthly Average: 0.000 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 = 0.00		Percent Operational Time:	99.3

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-Aug	0.0	0.0	0.0	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
3-Aug	0.0	0.0	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	N	0.00	0.00
4-Aug	0.0	0.0	0.0	0.0	0.0	0.0	P	P	P	R	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
5-Aug	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	0.0	0.00	0.00
6-Aug	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	0.0	0.00	0.00
7-Aug	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	0.0	0.00	0.00
8-Aug	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	0.0	0.00	0.00
9-Aug	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	0.0	0.00	0.00
10-Aug	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	0.0	0.00	0.00
11-Aug	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	0.0	0.00	0.00
12-Aug	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	0.0	0.00	0.00
13-Aug	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	0.0	0.00	0.00
14-Aug	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	0.0	0.00	0.00
15-Aug	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	0.0	0.00	0.00
16-Aug	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	0.0	0.0	0.00	0.00
17-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
18-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
19-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
20-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
21-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.03
22-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
23-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
24-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
25-Aug	0.0	0.0	0.0	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
26-Aug	0.0	0.0	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
27-Aug	0.0	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
28-Aug	0.0	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
29-Aug	0.0	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
30-Aug	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	0.0	0.00	0.00
31-Aug	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	0.0	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Diurnal Maximum

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



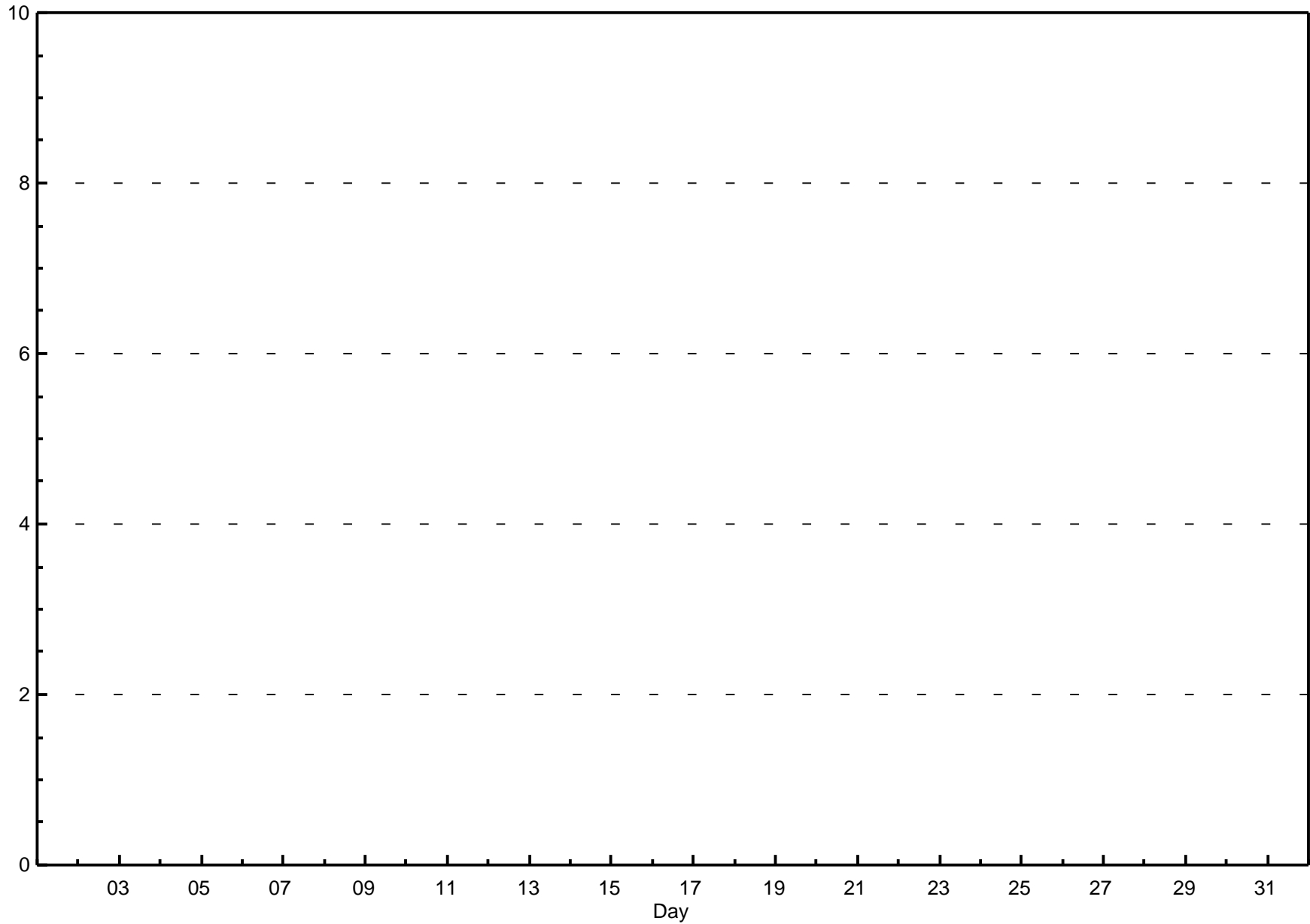
Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - August 2014

Maximum Value: 0.00 ppm on Aug 17 09:00 Maximum Daily Average: 0.00 ppm on Aug 17 Minimum Value: 0.0 ppm on Aug 4 18:00 Minimum Daily Average: 0.00 ppm on Aug 10 Maximum Diurnal Average: 0.00 ppm at hour 10 Minimum Diurnal Average: 0.00 ppm at hour 22 Monthly Average: 0.001 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 = 0.00																								Hours in Service: 744 Hours of Data: 704 Hours of Missing Data: 40 Hours of Calibration: 35 Percent Operational Time: 99.3			
Day	Hourly Period Ending At (MST)																								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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
2-Aug	0.0	0.0	0.0	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
3-Aug	0.0	0.0	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	N	0.00	0.00
4-Aug	0.0	0.0	0.0	0.0	0.0	0.0	P	P	P	R	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
5-Aug	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	0.0	0.00	0.00
6-Aug	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	0.0	0.00	0.00
7-Aug	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	0.0	0.00	0.00
8-Aug	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	0.0	0.00	0.00
9-Aug	0.0	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
10-Aug	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	0.0	0.00	0.00
11-Aug	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	0.0	0.00	0.00
12-Aug	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	0.0	0.00	0.00
13-Aug	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	0.0	0.00	0.00
14-Aug	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	0.0	0.00	0.00
15-Aug	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	0.0	0.00	0.00
16-Aug	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	0.0	0.0	0.00	0.00
17-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
18-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
19-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
20-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
21-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
22-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
24-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Aug	0.0	0.0	0.0	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
26-Aug	0.0	0.0	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
27-Aug	0.0	0.0	0.0	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
28-Aug	0.0	0.0	0.0	0.0	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
29-Aug	0.0	0.0	0.0	0.0	0.0	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
30-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
31-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
																								Diurnal Average			
																								Diurnal Maximum			

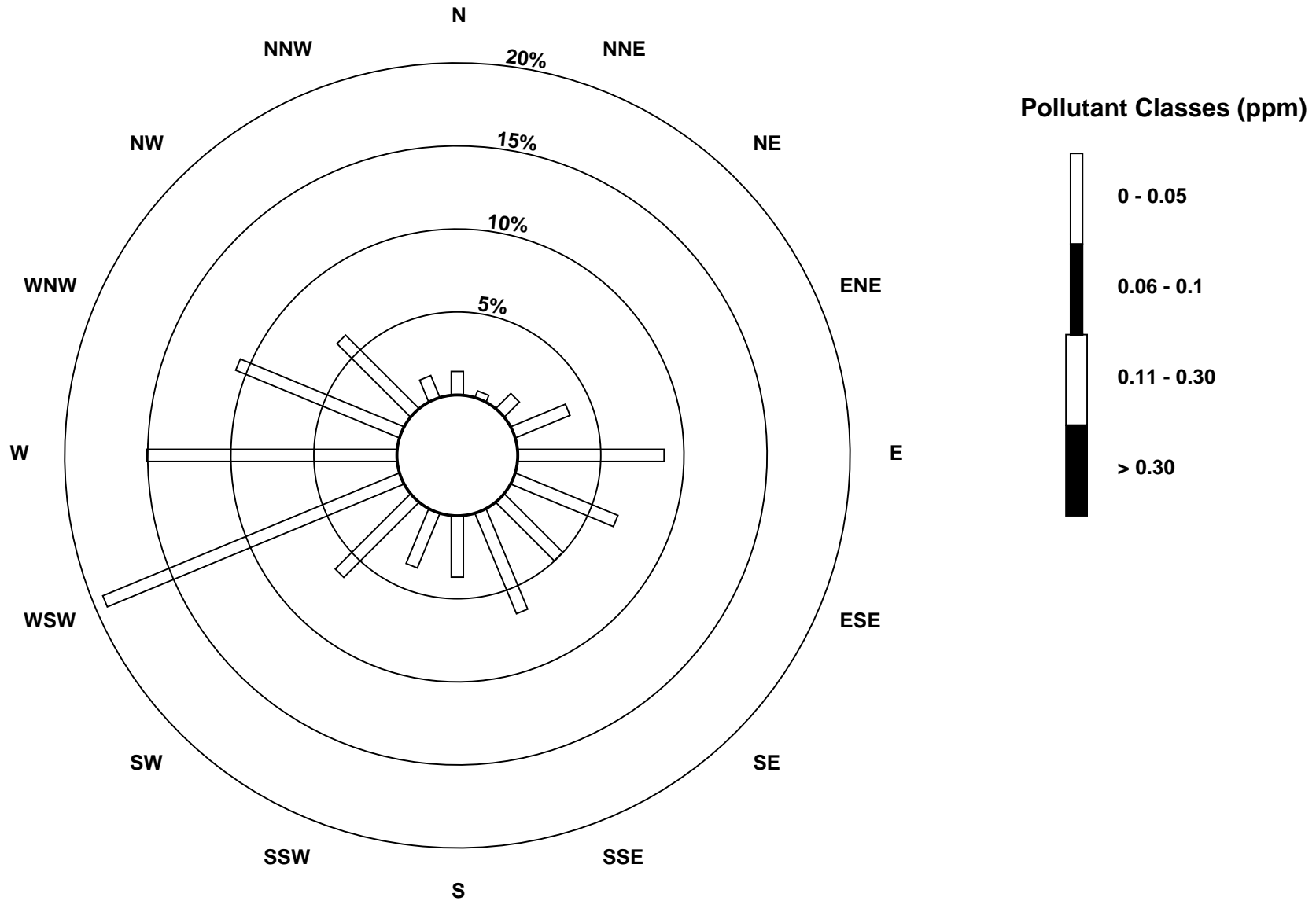
C - Calibration R - Recovery P - Power Failure M - Maintenance N - Not Valid
 A - Automated Daily Zero Span

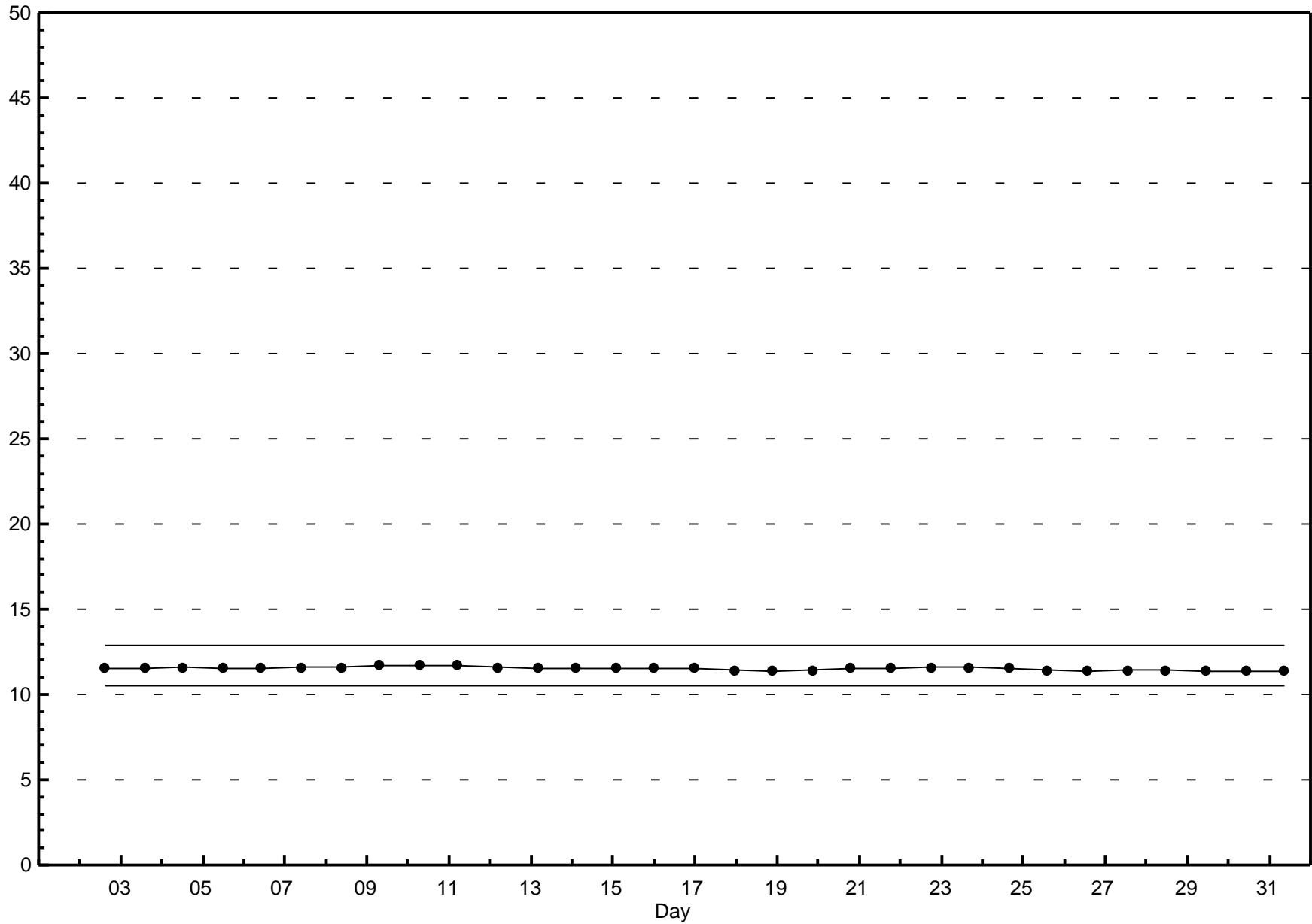


Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - August 2014





Hourly Averages

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

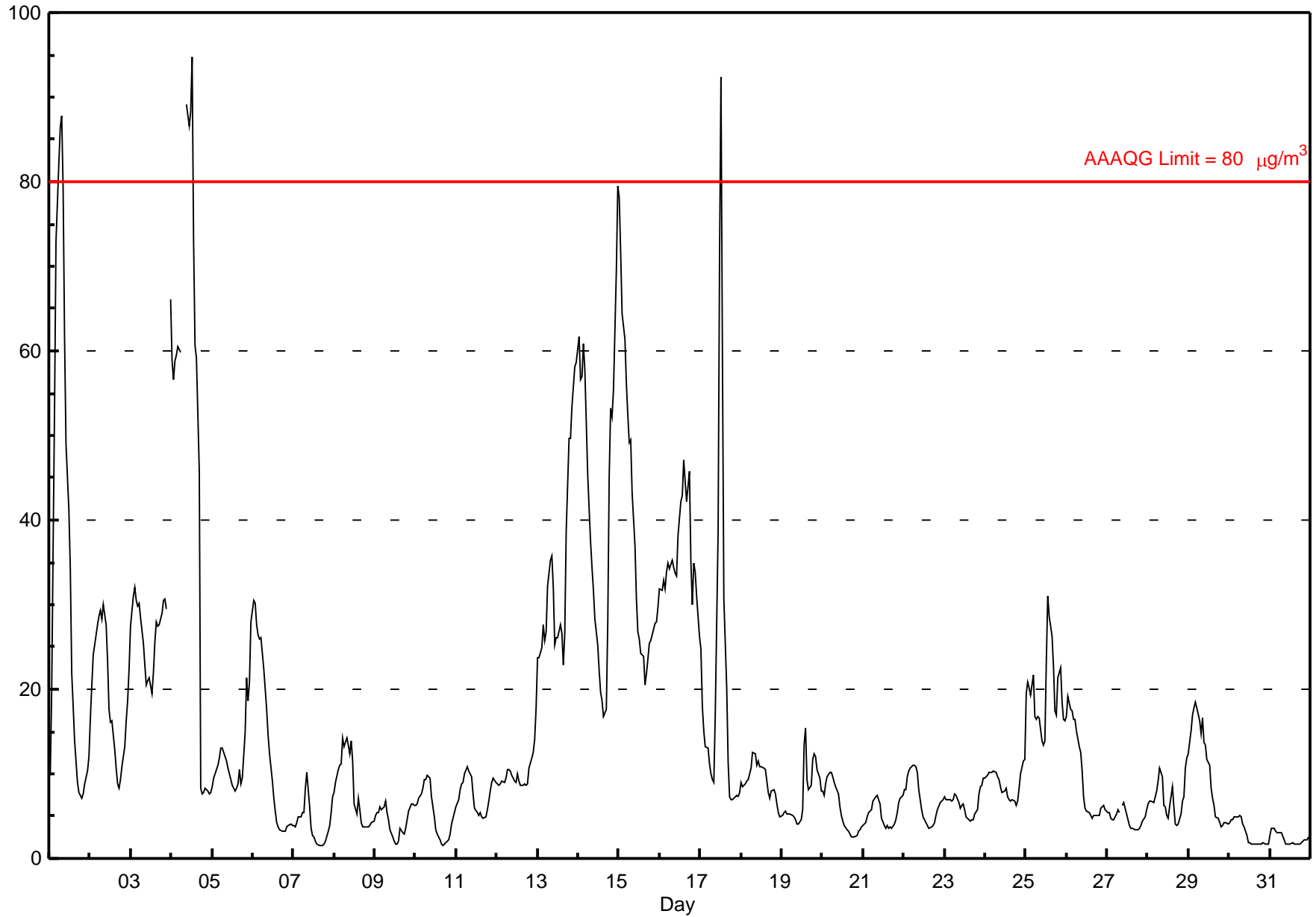
Henry Pirker - August 2014

Number of Exceedences: 1-hr: 8 24-hr: 6	Hours in Service: 744
Maximum Value: 94.8 µg/m ³ on Aug 4 13:00	Maximum Daily Average: 48.0 µg/m ³ on Aug 4
Minimum Value: 2 µg/m ³ on Aug 7 18:00	Hours of Data: 739
Maximum Diurnal Average: 19.3 µg/m ³ at hour 5	Hours of Missing Data: 5
Monthly Average: 15.21 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 2.3 µg/m ³ on Aug 31	Percent Operational Time: 99.3
Minimum Diurnal Average: 9.9 µg/m ³ at hour 18	
Percentiles: P ₁ = 1.6 P ₁₀ = 3.4 Q ₁ = 5.1 Median = 8.8 Q ₃ = 19.1 P ₉₀ = 34.2 P ₉₉ = 86.4	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	10	20	37	53	73	82	86	88	79	61	49	41	34	22	18	14	9	8	7	7	8	9	10	12	34.9	87.7
2-Aug	17	21	24	26	28	29	29	28	30	28	23	18	16	16	13	11	9	8	9	11	13	16	19	22	19.4	30.0
3-Aug	27	31	32	31	30	30	29	25	23	20	21	21	20	22	26	28	27	28	29	31	31	30	N	66	28.6	66.2
4-Aug	59	57	59	60	60	60	P	P	P	89	87	88	95	73	61	59	46	8	8	8	8	8	8	8	48.0	94.8
5-Aug	8	9	11	11	12	13	13	12	12	11	10	9	9	8	8	9	10	9	9	15	21	19	21	28	12.4	28.0
6-Aug	31	30	28	26	26	26	22	20	18	15	12	9	7	6	4	4	3	3	3	3	4	4	4	4	13.0	30.6
7-Aug	4	4	4	5	5	5	5	8	10	6	4	3	2	2	2	2	2	2	2	2	3	4	5	7	4.1	10.1
8-Aug	8	9	11	11	11	14	13	14	13	12	14	12	7	5	7	6	4	4	4	4	4	4	4	4	8.3	14.2
9-Aug	5	5	5	6	6	6	7	5	5	3	2	2	2	2	2	4	3	3	4	5	6	6	6	6	4.4	6.7
10-Aug	6	6	7	8	8	9	9	10	9	7	6	5	3	3	2	2	2	2	2	2	3	4	5	5	5.3	9.9
11-Aug	6	7	8	9	9	10	11	10	10	10	8	6	5	5	5	5	5	5	6	7	8	9	9	9	7.6	10.8
12-Aug	9	9	9	9	9	9	11	11	10	10	9	9	10	9	9	9	9	9	9	11	12	12	14	18	10.1	17.7
13-Aug	24	24	25	28	26	27	32	35	36	32	25	26	26	28	27	23	27	39	50	50	53	56	58	59	34.7	58.7
14-Aug	62	57	57	61	58	45	41	37	34	32	28	25	22	20	19	17	18	28	45	53	52	55	70	80	42.3	79.5
15-Aug	78	72	64	61	56	52	49	50	43	37	31	27	26	24	24	21	22	24	25	26	27	28	28	30	38.5	78.1
16-Aug	32	32	33	32	34	35	34	35	34	34	33	38	42	43	47	44	42	46	35	30	35	34	31	26	35.9	47.1
17-Aug	25	18	15	13	13	11	10	9	9	17	39	71	92	60	31	20	11	7	7	7	7	8	7	8	21.5	92.3
18-Aug	9	8	9	9	9	10	11	13	12	11	12	11	11	10	9	8	7	8	8	8	8	6	5	5	9.2	12.5
19-Aug	5	5	6	5	5	5	5	5	5	4	4	5	6	13	15	9	8	9	12	12	10	9	8	8	7.7	15.4
20-Aug	8	7	9	10	10	10	10	9	8	8	6	5	4	4	3	3	3	2	2	3	3	3	3	4	5.8	10.2
21-Aug	4	4	5	5	6	6	7	7	7	7	6	5	4	4	4	3	4	4	4	5	5	7	7	7	5.3	7.4
22-Aug	8	8	10	10	11	11	11	11	10	8	6	5	5	4	4	4	4	4	4	5	6	7	7	7	7.0	11.0
23-Aug	7	7	7	7	7	7	8	7	7	6	6	6	6	5	5	4	5	5	5	6	8	8	9	9	6.5	9.4
24-Aug	10	10	10	10	10	10	10	10	9	8	8	8	8	7	7	7	7	7	6	7	8	10	12	12	8.8	11.7
25-Aug	20	21	20	19	22	17	16	17	17	14	13	14	23	31	29	26	23	17	17	21	23	18	17	16	19.6	31.1
26-Aug	17	19	18	17	16	16	15	13	13	10	7	6	6	5	5	5	5	5	5	5	6	6	6	6	9.7	19.1
27-Aug	5	5	5	5	5	5	6	5	M	6	7	5	5	4	4	4	3	3	3	4	4	4	5	6	4.7	6.6
28-Aug	6	7	7	7	7	8	9	11	10	6	6	5	5	6	8	6	4	4	4	5	7	7	11	12	7.0	11.9
29-Aug	12	15	17	18	18	18	16	15	17	14	13	12	11	8	7	6	5	5	4	4	4	4	4	4	10.5	18.5
30-Aug	4	4	5	5	5	5	5	5	4	4	3	2	2	2	2	2	2	2	2	2	2	2	2	2	3.0	5.0
31-Aug	3	4	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2.3	3.6

17.0	17.3	18.0	18.7	19.3	19.3	17.8	17.7	17.1	17.2	16.2	16.1	16.6	14.6	13.2	11.8	10.6	9.9	10.7	11.5	12.6	13.0	13.3	15.9	Diurnal Average
78.1	71.7	64.3	61.4	72.8	82.3	86.5	87.7	79.0	89.1	86.6	88.3	94.8	73.2	60.6	59.2	45.7	45.7	49.6	53.3	53.3	55.7	69.6	79.5	Diurnal Maximum

P - Power Failure M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

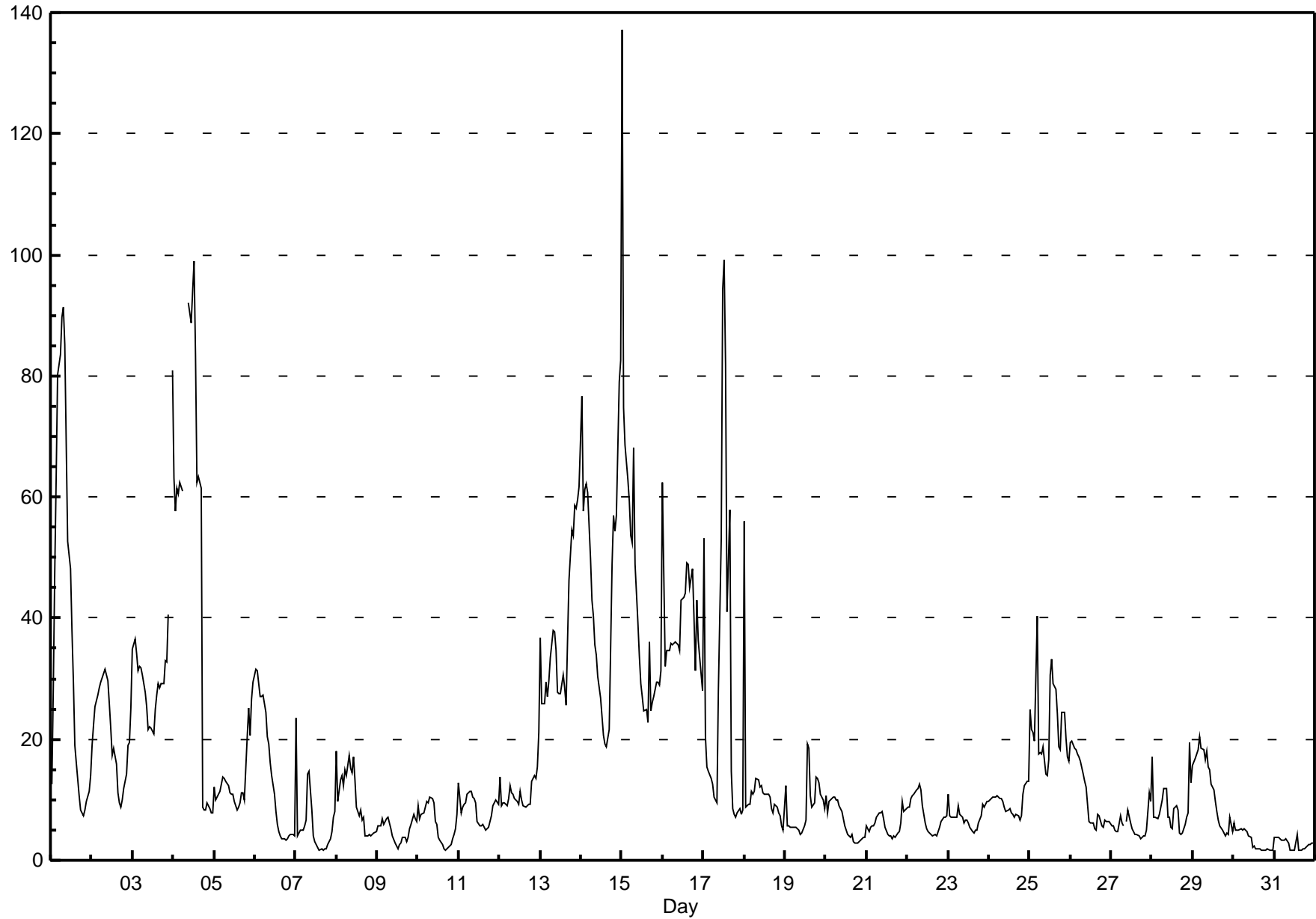


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Henry Pirker - August 2014

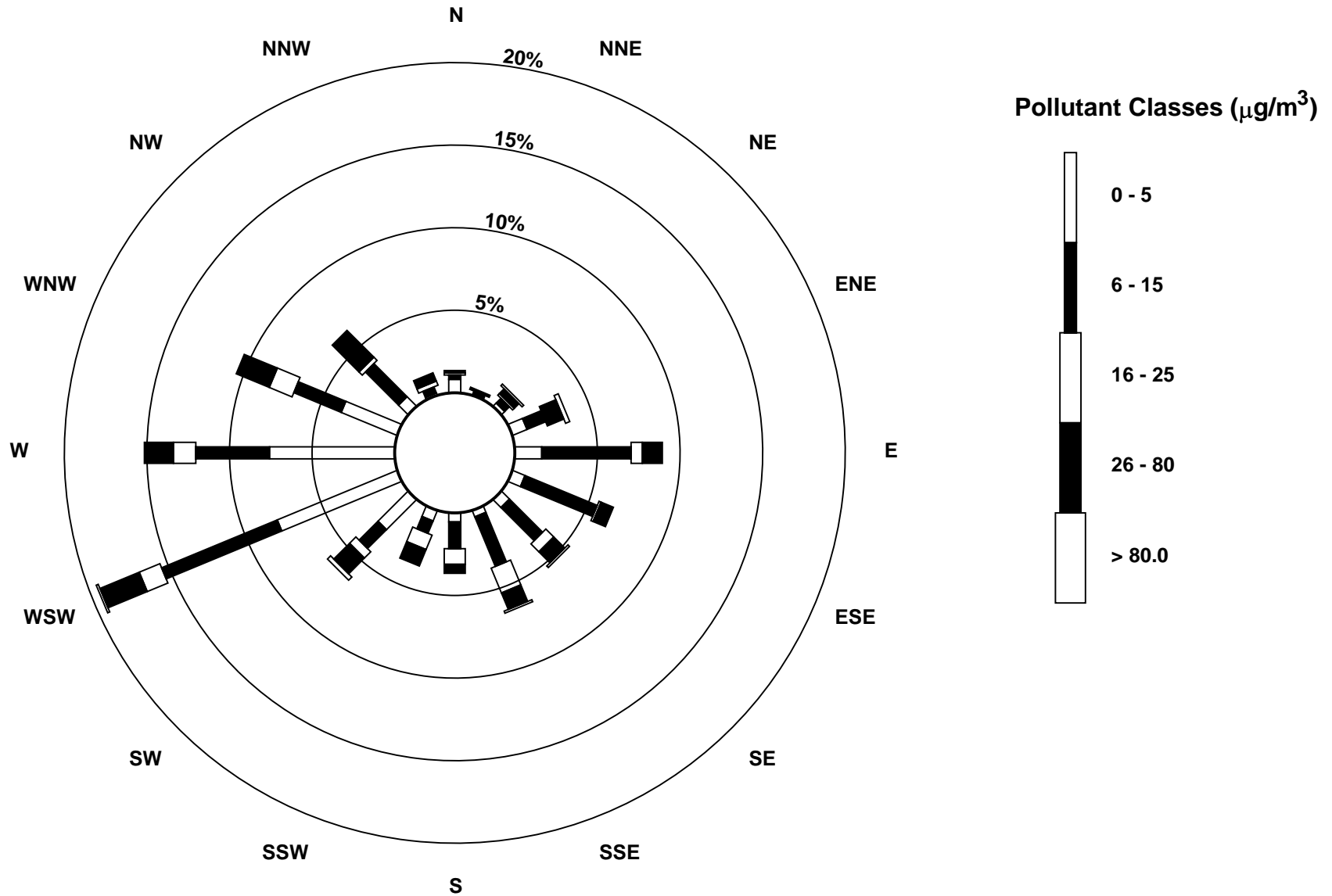
Maximum Value: 137.1 µg/m ³ on Aug 15 01:00		Maximum Daily Average: 50.9 µg/m ³ on Aug 4		Hours in Service: 744																							
Minimum Value: 2 µg/m ³ on Aug 31 10:00		Minimum Daily Average: 2.6 µg/m ³ on Aug 31		Hours of Data: 739																							
Maximum Diurnal Average: 26.7 µg/m ³ at hour 1		Minimum Diurnal Average: 11.0 µg/m ³ at hour 18		Hours of Missing Data: 5																							
Monthly Average: 17.08 µg/m ³		Percentiles: P ₁ = 1.7 P ₁₀ = 3.7 Q ₁ = 5.7 Median = 9.7 Q ₃ = 21.0 P ₉₀ = 40.4 P ₉₉ = 90.7		Hours of Calibration: 0																							
		Percent Operational Time: 99.3																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	12	28	48	63	80	84	90	91	85	69	53	48	38	30	19	16	11	8	8	7	8	10	11	14	38.8	91.3	
2-Aug	19	22	26	27	28	29	30	31	31	30	26	22	17	18	16	11	9	9	10	12	14	19	19	25	20.9	31.5	
3-Aug	35	36	34	31	32	32	31	28	25	21	22	22	21	25	27	29	29	29	29	33	33	41	N	81	31.6	81.0	
4-Aug	63	58	61	61	62	61	P	P	P	92	89	94	99	84	63	63	62	9	8	8	10	8	8	8	50.9	98.9	
5-Aug	12	10	11	12	13	14	13	13	12	11	11	11	10	8	9	10	11	11	10	20	25	21	27	30	13.9	29.5	
6-Aug	31	31	29	27	27	27	24	21	19	16	14	11	8	6	5	4	3	3	3	3	4	4	4	4	13.8	31.5	
7-Aug	23	4	5	5	5	6	7	14	15	8	4	3	3	2	2	2	2	2	2	3	4	5	7	8	5.8	23.4	
8-Aug	18	10	13	14	12	15	14	17	15	14	17	13	9	7	8	7	7	4	4	4	4	4	5	5	10.1	18.0	
9-Aug	6	6	6	7	6	7	7	6	5	4	3	2	2	3	3	4	4	3	4	5	6	8	7	7	4.9	7.6	
10-Aug	9	7	7	8	9	10	10	10	10	9	6	6	4	3	3	2	2	2	2	3	4	4	5	8	5.9	10.4	
11-Aug	13	8	9	9	9	11	12	11	10	10	10	7	6	6	6	5	5	5	7	7	9	9	10	9	8.5	12.7	
12-Aug	14	9	9	10	9	10	12	11	11	10	10	9	12	10	9	9	9	9	9	13	14	14	15	21	11.2	21.1	
13-Aug	37	26	26	29	27	30	34	38	38	35	28	28	27	31	28	26	36	46	55	54	59	58	59	62	38.1	61.7	
14-Aug	77	58	61	62	61	50	43	40	36	34	30	27	24	21	19	19	21	35	49	57	54	57	79	83	45.7	82.6	
15-Aug	137	75	69	63	59	54	52	68	49	39	34	29	27	25	25	23	36	25	26	27	29	30	29	31	44.2	137.1	
16-Aug	62	32	35	35	35	36	35	36	36	36	35	43	43	44	49	49	45	48	40	31	43	36	33	28	39.4	62.3	
17-Aug	53	21	16	15	13	13	11	10	10	28	53	94	99	82	41	58	15	9	8	7	8	9	8	8	28.6	99.2	
18-Aug	56	9	9	9	11	11	11	13	13	12	12	11	11	11	11	10	8	8	9	9	8	7	6	5	11.8	56.1	
19-Aug	12	6	6	6	6	5	5	5	5	4	5	6	7	19	19	11	9	9	14	14	13	11	10	9	8.9	19.2	
20-Aug	11	8	10	10	10	10	10	10	9	8	7	6	5	4	4	4	3	3	3	3	3	3	4	4	6.3	10.7	
21-Aug	6	5	5	6	6	6	7	8	8	8	7	5	4	4	4	4	4	4	5	5	6	10	8	8	5.9	9.8	
22-Aug	9	9	10	11	11	12	12	13	12	9	6	5	5	5	4	4	4	4	5	6	6	7	7	7	7.6	12.6	
23-Aug	11	7	7	7	7	7	9	8	7	6	7	7	6	5	5	5	5	5	6	7	9	9	9	10	7.2	11.0	
24-Aug	10	10	10	10	10	11	10	10	10	9	8	8	9	8	7	7	7	7	7	7	11	12	13	13	9.4	13.1	
25-Aug	25	21	21	20	40	18	18	17	19	14	14	17	31	33	29	28	24	19	18	25	24	20	17	16	22.0	40.2	
26-Aug	20	20	19	18	18	17	16	14	13	12	9	7	6	6	5	5	8	7	6	6	7	6	7	6	10.7	19.8	
27-Aug	6	6	5	5	5	7	6	6	M	7	8	6	5	5	4	4	4	4	4	4	4	5	11	10	5.7	11.3	
28-Aug	17	7	7	7	8	9	10	12	12	7	7	5	5	8	9	8	5	4	4	6	7	8	20	13	8.6	19.5	
29-Aug	16	17	18	18	21	19	18	17	18	16	15	12	12	10	8	7	6	5	5	4	4	4	7	5	11.6	20.5	
30-Aug	6	5	5	5	5	5	5	5	5	4	4	2	2	2	2	2	2	2	2	2	2	2	2	2	3.3	6.3	
31-Aug	4	4	4	4	3	3	3	3	3	2	2	2	2	4	2	2	2	2	2	2	2	3	3	3	2.6	4.3	
		26.7	18.5	19.3	19.7	20.9	20.2	18.9	19.6	18.7	18.9	17.9	18.3	18.0	17.1	14.3	14.1	12.8	11.0	11.7	12.7	14.0	14.3	15.0	17.5	Diurnal Average	
		137.1	74.7	68.5	63.0	80.2	83.5	89.8	91.3	85.3	92.0	88.7	94.3	99.2	83.6	62.5	63.4	61.6	48.2	54.6	57.0	58.5	58.0	79.1	82.6	Diurnal Maximum	
P - Power Failure		M - Maintenance				N - Not Valid																					



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³

Henry Pirker - August 2014



Hourly Averages

External Temperature (ET) - °C

Henry Pirker - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 32.5 °C on Aug 13 16:00	Maximum Daily Average: 23.7 °C on Aug 12
Minimum Value: 2 °C on Aug 22 06:00	Hours of Data: 741
Minimum Daily Average: 11.3 °C on Aug 22	Hours of Missing Data: 3
Maximum Diurnal Average: 24.4 °C at hour 17	Hours of Calibration: 0
Monthly Average: 18.17 °C	Percent Operational Time: 99.6
Percentiles: P ₁ = 5.8 P ₁₀ = 10.3 Q ₁ = 13.8 Median = 17.6 Q ₃ = 22.2 P ₉₀ = 27.3 P ₉₉ = 31.3	

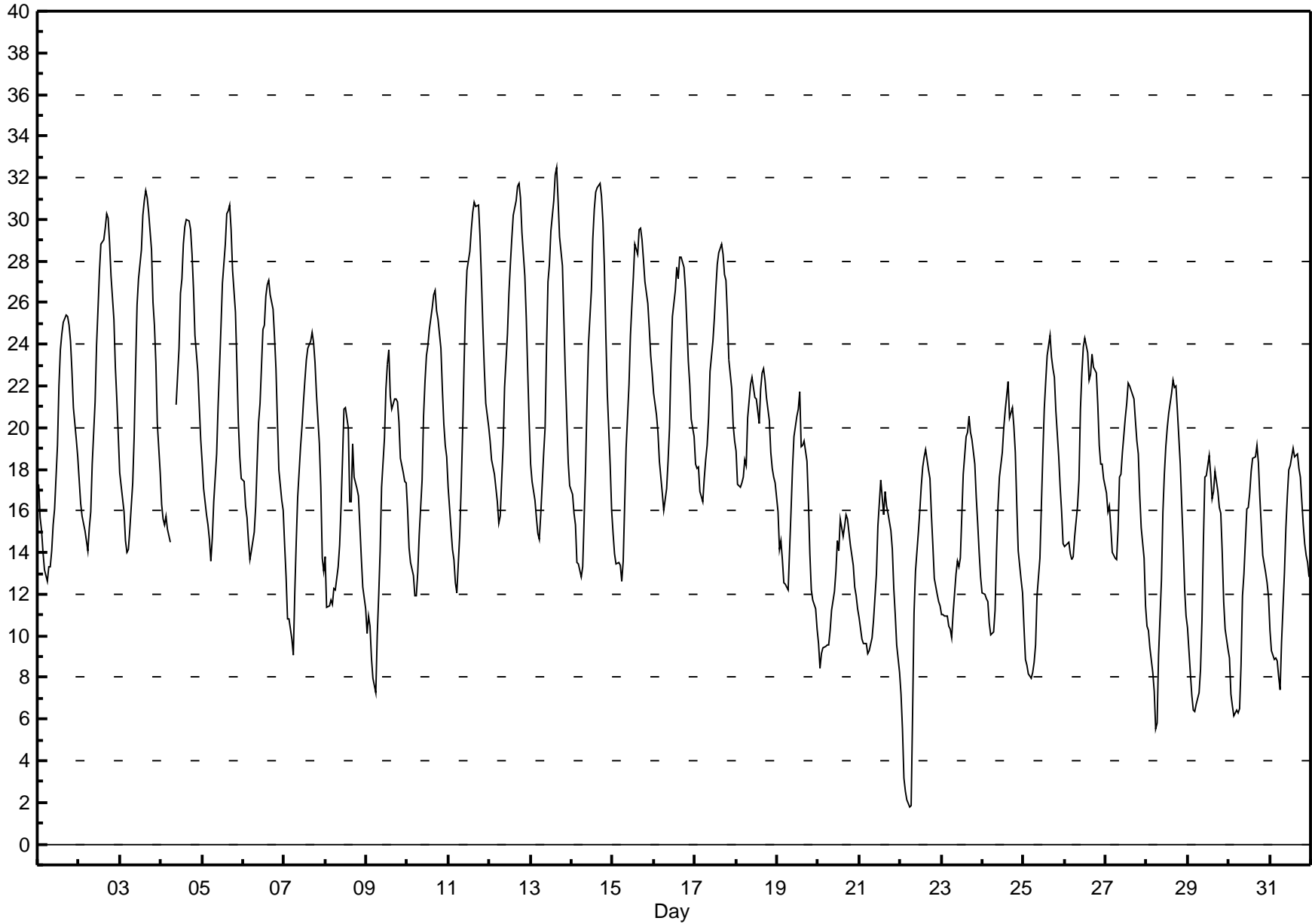
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	17	16	15	14	13	13	13	13	14	15	16	19	22	24	24	25	25	25	25	24	23	21	19	19	19.0	25.4																						
2-Aug	17	16	16	15	15	14	15	16	18	21	24	26	28	29	29	30	30	30	29	27	25	23	21	20	22.2	30.2																						
3-Aug	18	17	16	15	14	14	15	17	20	23	26	27	29	30	31	31	31	30	29	26	25	23	20	18	22.7	31.4																						
4-Aug	16	16	15	16	15	15	P	P	P	21	24	26	27	29	30	30	30	29	28	27	24	23	21	19	22.9	30.0																						
5-Aug	18	17	16	15	15	14	15	16	19	21	23	25	27	29	30	30	31	29	28	26	23	20	19	18	21.8	30.7																						
6-Aug	17	16	16	15	14	14	15	16	18	20	21	25	25	26	27	27	26	26	24	23	20	18	16	16	20.1	27.1																						
7-Aug	14	13	11	11	10	9	12	15	17	19	20	21	22	23	24	24	25	24	23	22	19	17	14	13	17.6	24.6																						
8-Aug	14	11	11	12	12	12	12	13	14	16	18	21	21	20	16	16	19	18	17	17	15	14	12	11	15.2	20.9																						
9-Aug	10	11	10	9	8	7	10	12	14	17	19	22	23	24	22	21	21	21	21	20	19	18	17	17	16.5	23.7																						
10-Aug	16	14	14	13	12	12	13	15	17	21	22	23	24	25	26	26	27	26	25	24	22	20	19	19	19.7	26.6																						
11-Aug	17	15	14	14	13	12	15	17	20	23	26	28	28	29	30	31	31	31	29	27	25	23	21	20	22.4	30.8																						
12-Aug	19	18	18	18	16	15	16	17	19	22	24	26	28	29	30	31	32	32	31	29	27	25	23	20	23.7	31.7																						
13-Aug	18	17	16	16	15	15	16	19	20	24	27	28	29	31	32	33	31	29	28	25	23	20	18	17	22.8	32.5																						
14-Aug	17	16	15	14	13	13	13	16	18	21	24	27	29	30	31	32	32	31	30	28	24	22	18	16	22.1	31.7																						
15-Aug	15	14	13	14	13	13	14	16	19	22	24	26	27	29	28	30	30	29	28	27	26	25	23	23	22.0	29.6																						
16-Aug	22	21	20	18	18	17	16	17	18	20	23	25	27	28	27	28	28	28	27	25	23	22	20	20	22.4	28.2																						
17-Aug	18	18	18	17	16	18	18	19	21	23	24	25	27	28	28	29	28	27	27	25	23	22	20	19	22.5	28.8																						
18-Aug	19	17	17	17	18	18	18	20	22	22	21	21	20	22	23	23	22	21	20	19	18	18	17	17	19.9	22.8																						
19-Aug	16	14	15	14	13	12	12	14	16	18	20	21	21	22	19	19	19	18	16	14	12	12	11	10	15.8	21.7																						
20-Aug	10	8	9	9	9	10	10	10	11	12	13	15	14	16	15	15	16	16	15	14	13	12	12	11	12.3	15.9																						
21-Aug	11	10	10	10	10	9	9	10	11	12	13	15	17	17	16	17	16	16	15	14	12	11	10	8	12.4	17.5																						
22-Aug	7	6	3	3	2	2	2	6	11	13	15	16	17	18	19	19	18	18	16	14	13	12	12	11	11.3	18.9																						
23-Aug	11	11	11	11	10	10	10	11	13	14	13	14	16	18	20	20	21	20	19	18	17	15	14	13	14.6	20.5																						
24-Aug	12	12	12	12	11	10	10	11	14	16	18	19	20	21	22	22	20	21	20	19	16	14	13	12	15.7	22.2																						
25-Aug	10	9	9	8	8	8	9	10	12	14	16	19	21	22	23	24	23	23	22	21	19	17	16	14	15.7	24.4																						
26-Aug	14	14	14	14	14	14	15	16	17	21	23	24	24	24	22	23	24	23	23	21	19	18	18	18	19.0	24.3																						
27-Aug	17	16	16	15	14	14	14	15	18	18	19	20	21	22	22	22	21	20	19	19	17	15	14	11	17.5	22.2																						
28-Aug	10	10	9	8	7	6	6	6	9	13	16	18	19	20	21	22	22	22	21	18	16	15	12	11	14.7	22.3																						
29-Aug	10	8	7	6	6	7	7	8	11	15	18	18	19	18	17	17	18	17	16	16	14	12	10	9	12.7	18.7																						
30-Aug	9	7	7	6	6	6	7	9	12	13	16	16	17	18	19	19	19	18	17	15	14	13	13	12	12.8	19.2																						
31-Aug	10	9	9	9	9	8	7	10	13	15	17	18	19	19	19	19	19	18	18	15	14	14	14	13	13.9	19.0																						
																								14.6	13.5	13.0	12.4	11.9	11.6	12.1	13.9	16.0	18.3	20.2	21.8	22.9	23.8	23.9	24.3	24.4	23.8	22.8	21.3	19.4	17.9	16.4	15.4	Diurnal Average
																								21.7	20.6	19.8	18.4	17.6	18.4	18.5	20.5	22.0	23.8	27.0	27.8	29.5	30.9	32.2	32.5	31.7	31.7	31.1	29.4	27.3	25.3	23.5	22.6	Diurnal Maximum

P - Power Failure

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - August 2014



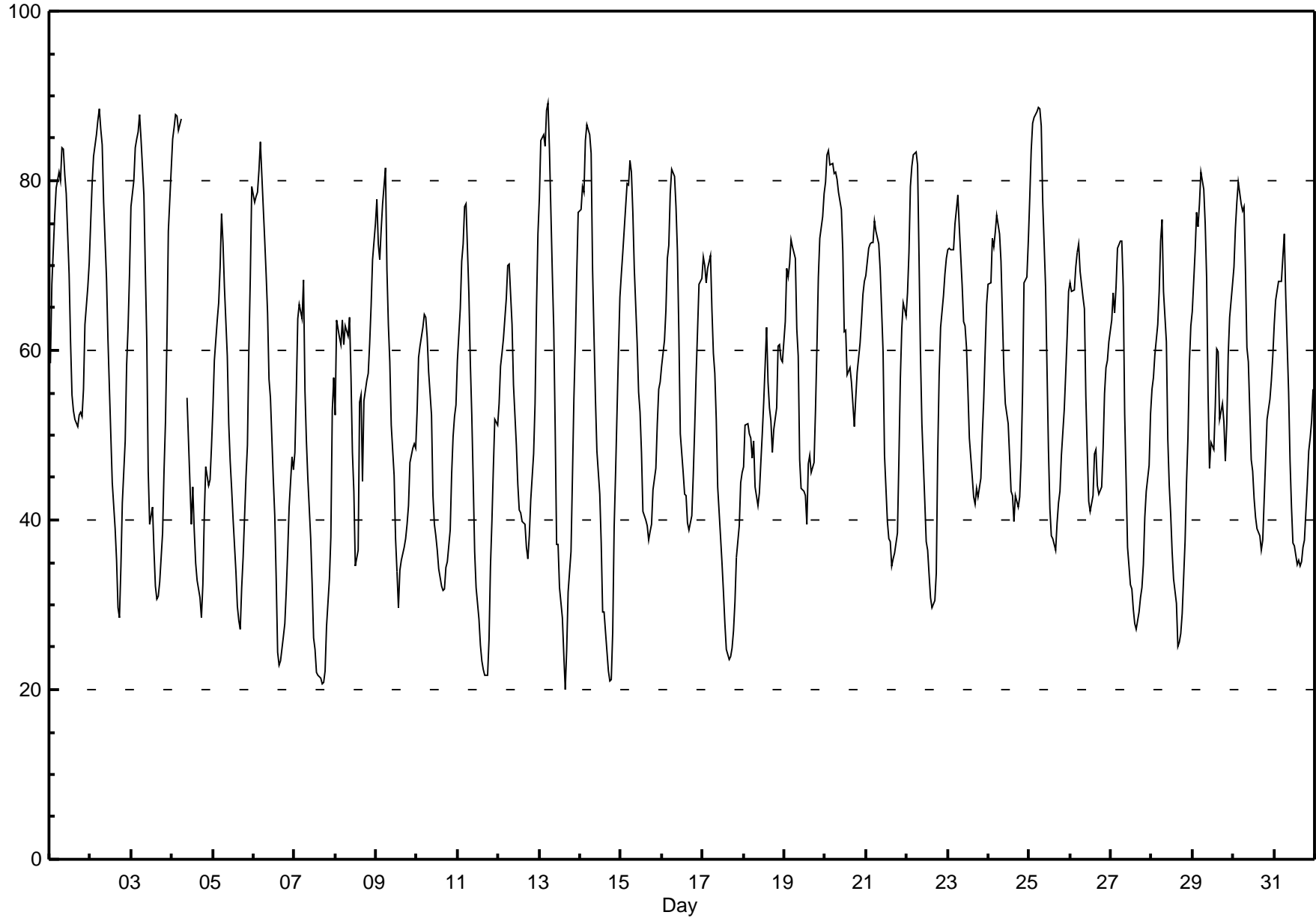
Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 89.2 % on Aug 13 06:00 Maximum Daily Average: 68.8 % on Aug 20		Hours in Service: 744 Hours of Data: 741 Hours of Missing Data: 3 Hours of Calibration: 0 Percent Operational Time: 99.6																									
Minimum Value: 20 % on Aug 13 16:00 Maximum Diurnal Average: 76.5 % at hour 6 Monthly Average: 55.23 %		Minimum Daily Average: 40.5 % on Aug 7 Minimum Diurnal Average: 35.4 % at hour 17 Percentiles: P ₁ = 21.7 P ₁₀ = 32.3 Q ₁ = 41.6 Median = 54.7 Q ₃ = 69.1 P ₉₀ = 78.6 P ₉₉ = 87.6																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	58	68	72	76	79	81	80	84	84	81	78	69	61	55	53	52	51	52	53	52	55	63	67	70	66.5	84.0	
2-Aug	75	80	83	85	87	88	86	84	78	68	61	56	50	44	39	35	30	28	34	42	49	58	63	69	61.4	88.5	
3-Aug	77	80	84	85	86	88	85	78	70	61	46	40	41	36	32	31	31	33	38	46	52	61	74	81	59.8	87.8	
4-Aug	85	86	88	88	86	87	P	P	P	54	44	39	44	39	35	33	31	29	32	40	46	44	45	49	53.6	87.7	
5-Aug	53	59	64	66	70	76	73	67	59	51	47	44	40	34	30	28	27	32	36	45	49	60	69	79	52.4	79.3	
6-Aug	77	78	79	81	85	81	73	69	64	57	54	45	40	33	24	23	23	26	28	32	36	42	47	46	51.8	84.6	
7-Aug	48	55	64	65	64	68	55	49	45	38	32	26	25	22	22	21	21	21	22	27	33	38	53	57	40.5	68.2	
8-Aug	52	64	62	61	64	61	63	62	64	57	48	43	35	36	54	55	45	54	56	57	61	65	71	75	56.8	74.9	
9-Aug	78	72	71	74	77	81	70	63	59	51	45	38	34	30	34	35	37	38	40	42	47	49	49	48	52.6	81.5	
10-Aug	53	59	61	63	64	64	61	58	52	43	39	38	36	34	32	32	34	35	39	45	50	52	54	47.1	64.3		
11-Aug	59	65	70	73	77	77	67	58	52	45	36	32	28	25	23	22	22	22	26	35	40	46	52	51	46.0	77.3	
12-Aug	54	58	60	61	66	70	70	67	63	56	49	44	41	41	40	39	37	36	38	42	48	54	65	74	53.0	73.7	
13-Aug	78	85	85	84	88	89	84	69	63	51	37	37	32	29	24	20	25	31	36	45	54	61	69	76	56.4	89.2	
14-Aug	77	79	79	85	87	85	83	69	62	54	48	43	37	29	29	27	22	21	21	27	39	46	60	66	53.2	86.7	
15-Aug	69	71	74	80	79	82	81	76	70	61	55	53	48	41	40	39	38	39	40	44	46	51	56	56	57.9	82.4	
16-Aug	58	61	65	71	72	78	81	81	77	72	62	50	46	43	43	40	39	41	45	51	57	62	68	68	59.6	81.3	
17-Aug	71	70	68	70	71	65	60	57	52	44	38	35	32	28	25	24	24	25	27	30	36	39	44	46	44.9	71.2	
18-Aug	46	51	51	50	50	47	49	44	42	43	47	50	54	63	56	53	52	48	51	53	60	61	59	59	51.7	62.7	
19-Aug	63	70	69	70	73	72	71	63	59	47	44	43	43	40	47	48	46	47	53	60	69	73	76	79	59.3	78.5	
20-Aug	80	83	84	82	82	81	81	80	79	77	72	62	62	57	58	56	54	51	54	57	61	64	67	68	68.8	83.5	
21-Aug	69	72	73	73	73	75	74	72	70	65	60	48	40	38	37	35	35	36	38	47	57	63	66	64	57.4	75.2	
22-Aug	67	72	79	82	83	83	82	71	59	51	42	38	36	34	31	30	30	34	48	57	63	66	69	71	57.4	83.4	
23-Aug	72	72	72	72	75	77	78	75	68	63	63	60	55	50	45	43	42	44	43	45	50	54	60	66	60.1	78.4	
24-Aug	68	68	73	72	74	76	74	71	64	58	54	51	48	43	43	40	43	41	43	47	55	68	69	73	58.9	75.9	
25-Aug	78	84	87	87	88	89	88	86	78	67	58	48	41	38	38	36	40	42	43	48	53	57	62	67	62.7	88.6	
26-Aug	68	67	67	70	71	73	69	66	65	55	48	42	41	43	48	48	44	43	44	48	55	58	59	61	56.4	72.6	
27-Aug	64	67	64	67	72	73	73	67	53	45	37	32	32	30	28	27	29	31	32	35	40	43	47	53	47.5	72.9	
28-Aug	55	57	60	63	67	73	75	67	61	49	44	41	36	33	30	25	26	27	29	37	44	50	58	63	48.8	75.4	
29-Aug	65	72	76	75	77	81	79	75	69	55	46	49	48	53	60	60	52	54	52	47	51	59	64	68	61.9	81.0	
30-Aug	70	74	77	80	77	76	77	69	60	59	47	46	43	40	39	38	36	38	42	47	52	54	56	59	56.6	79.8	
31-Aug	63	66	68	68	68	71	74	66	55	47	41	37	37	35	35	35	35	37	38	44	48	50	52	55	51.1	73.7	
		66.1	69.8	71.8	73.5	75.3	76.5	73.9	68.8	63.1	55.6	49.1	44.5	41.5	38.6	37.9	36.4	35.4	36.5	39.3	44.2	50.1	55.1	60.2	63.6	Diurnal Average	
		84.9	86.3	87.7	87.6	88.3	89.2	88.4	86.4	83.8	80.6	78.5	69.0	62.4	62.7	60.2	59.8	53.7	54.0	56.4	60.3	68.6	73.3	75.7	81.4	Diurnal Maximum	
P - Power Failure																											

Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - August 2014



Hourly Averages

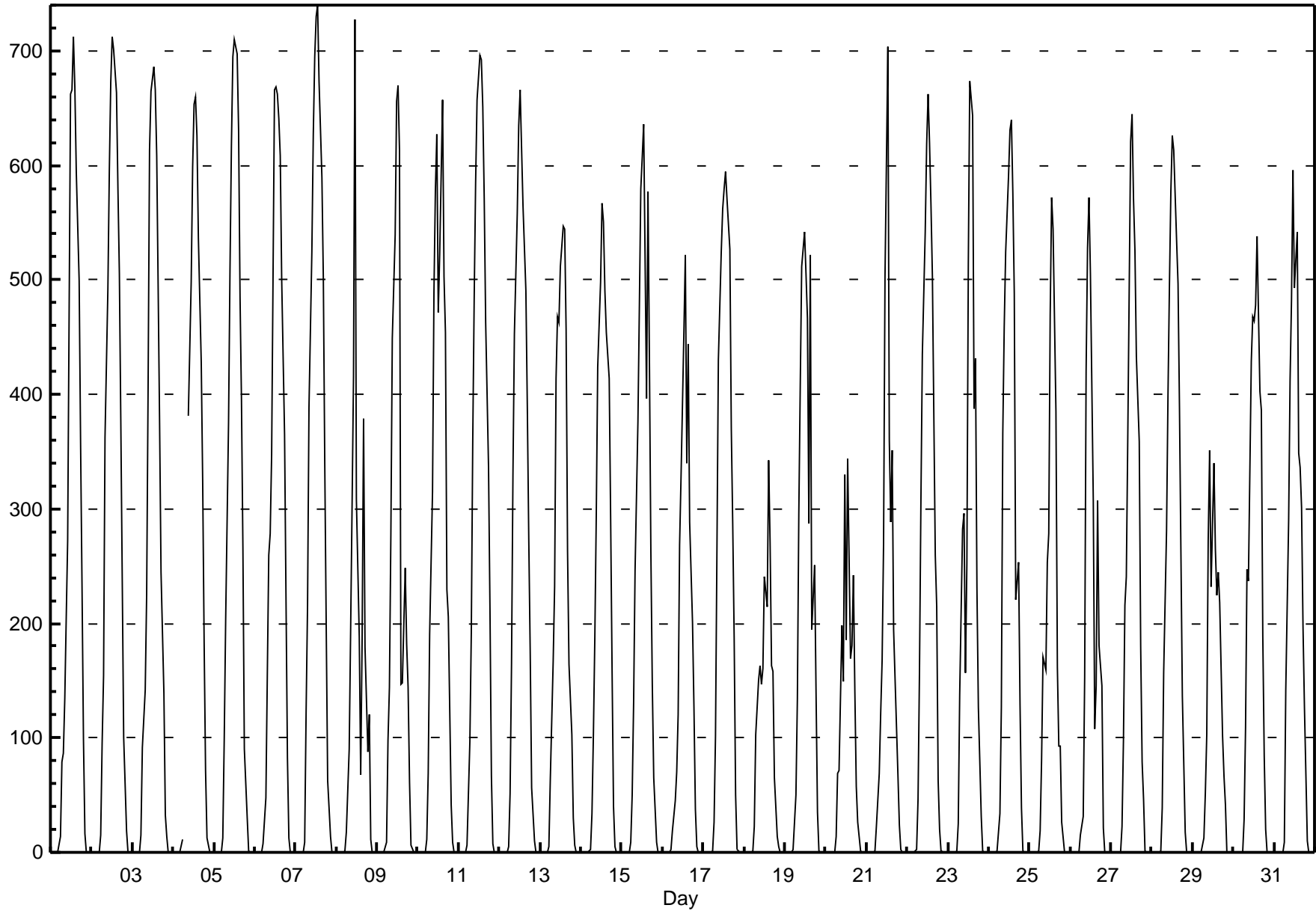
Solar Radiation (SR) - W/m²

Henry Pirker - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 739.6 W/m ² on Aug 7 14:00	Maximum Daily Average: 267.8 W/m ² on Aug 7		Hours of Data:	741
Minimum Value: 0 W/m ² on Aug 1 01:00	Minimum Daily Average: 90.8 W/m ² on Aug 20		Hours of Missing Data:	3
Maximum Diurnal Average: 559.4 W/m ² at hour 13	Minimum Diurnal Average: 0.0 W/m ² at hour 1		Hours of Calibration:	0
Monthly Average: 188.92 W/m ²	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 70.7 Q ₃ = 358.3 P ₉₀ = 569.7 P ₉₉ = 697.4		Percent Operational Time:	99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Aug	0	0	0	0	0	14	79	86	135	204	272	663	666	713	669	594	499	357	231	100	17	0	0	0	220.8	712.6																							
2-Aug	0	0	0	0	0	15	96	154	362	492	595	672	713	701	664	580	505	376	239	101	19	1	0	0	261.8	712.5																							
3-Aug	0	0	0	0	0	16	92	141	226	407	613	665	686	665	609	492	374	245	139	32	14	0	0	0	225.7	686.2																							
4-Aug	0	0	0	0	0	11	P	P	P	381	498	598	653	660	625	537	428	324	185	72	12	0	0	0	237.3	659.6																							
5-Aug	0	0	0	0	0	12	99	203	375	507	617	694	710	698	631	485	395	266	90	30	2	0	0	0	242.2	710.5																							
6-Aug	0	0	0	0	0	8	47	155	259	278	348	667	668	662	641	609	500	365	223	83	12	0	0	0	230.2	668.3																							
7-Aug	0	0	0	0	0	9	123	216	389	525	628	695	730	740	673	589	500	337	197	63	13	0	0	0	267.8	739.6																							
8-Aug	0	0	0	0	0	2	17	90	195	302	415	728	309	189	68	187	379	179	88	121	11	0	0	0	136.6	727.6																							
9-Aug	0	0	0	0	0	8	98	144	278	450	540	656	670	613	146	148	248	182	145	61	7	0	0	0	183.1	670.3																							
10-Aug	0	0	0	0	0	11	69	191	315	489	578	627	472	523	657	503	455	229	206	42	9	0	0	0	223.9	656.7																							
11-Aug	0	0	0	0	0	6	96	192	358	483	584	657	696	692	651	570	463	336	212	66	8	0	0	0	253.0	695.9																							
12-Aug	0	0	0	0	0	5	51	165	331	452	558	635	666	614	565	491	389	275	176	57	10	0	0	0	226.7	666.0																							
13-Aug	0	0	0	0	0	5	63	167	233	414	468	463	512	547	545	456	264	165	102	30	6	0	0	0	185.0	547.5																							
14-Aug	0	0	0	0	0	3	34	103	188	294	424	498	567	551	490	455	414	292	159	40	5	0	0	0	188.2	567.1																							
15-Aug	0	0	0	0	0	9	50	130	245	376	477	580	607	636	396	576	429	263	146	65	8	0	0	0	208.1	635.9																							
16-Aug	0	0	0	0	0	2	19	45	71	121	268	327	454	522	339	444	289	201	127	38	5	0	0	0	136.3	521.9																							
17-Aug	0	0	0	0	0	1	26	101	263	430	525	562	579	595	570	527	370	286	187	50	3	0	0	0	211.4	594.8																							
18-Aug	0	0	0	0	0	1	22	103	150	163	147	160	241	215	342	271	163	158	65	14	4	0	0	0	92.5	342.4																							
19-Aug	0	0	0	0	0	3	50	134	296	408	512	542	506	467	287	522	195	251	140	35	2	0	0	0	181.1	541.7																							
20-Aug	0	0	0	0	0	0	14	69	72	198	150	329	186	343	169	181	241	142	57	26	1	0	0	0	90.8	343.1																							
21-Aug	0	0	0	0	0	1	22	68	121	168	270	503	704	360	289	352	195	152	67	24	2	0	0	0	137.4	703.6																							
22-Aug	0	0	0	0	0	2	46	158	307	435	542	618	663	619	565	503	260	214	62	20	2	0	0	0	209.0	662.7																							
23-Aug	0	0	0	0	0	1	26	137	283	295	156	252	512	673	643	387	432	231	127	31	1	0	0	0	174.5	673.4																							
24-Aug	0	0	0	0	0	1	34	127	366	459	524	591	631	640	575	488	221	253	129	38	1	0	0	0	211.6	640.1																							
25-Aug	0	0	0	0	0	1	18	80	171	160	253	279	469	572	545	385	162	93	93	26	1	0	0	0	137.8	571.8																							
26-Aug	0	0	0	0	0	0	15	32	153	420	528	572	505	307	108	146	308	181	145	21	1	0	0	0	143.4	571.6																							
27-Aug	0	0	0	0	0	0	22	98	216	241	361	621	645	571	526	433	359	179	79	47	1	0	0	0	183.3	644.6																							
28-Aug	0	0	0	0	0	1	39	156	280	399	494	577	625	614	534	497	388	262	137	17	0	0	0	0	209.2	625.5																							
29-Aug	0	0	0	0	0	0	13	51	103	272	351	232	340	265	224	244	218	101	66	42	0	0	0	0	105.1	351.2																							
30-Aug	0	0	0	0	0	0	29	110	247	237	429	468	465	477	538	403	386	190	84	20	0	0	0	0	170.0	537.6																							
31-Aug	0	0	0	0	0	0	9	142	290	413	482	596	493	542	349	336	302	197	127	10	0	0	0	0	178.6	595.6																							
																								0.0	0.0	0.0	0.0	0.0	4.8	47.3	124.9	242.5	350.8	438.9	539.5	559.4	547.9	472.1	431.9	346.2	234.9	136.5	45.8	5.7	0.1	0.0	0.0	Diurnal Average	
																								0.0	0.0	0.0	0.0	0.2	15.6	122.6	215.7	389.1	524.6	627.5	727.6	730.4	739.6	673.5	608.6	505.5	376.5	238.9	120.7	18.6	0.6	0.0	0.0	Diurnal Maximum	

P - Power Failure





Peace Airshed Zone Association

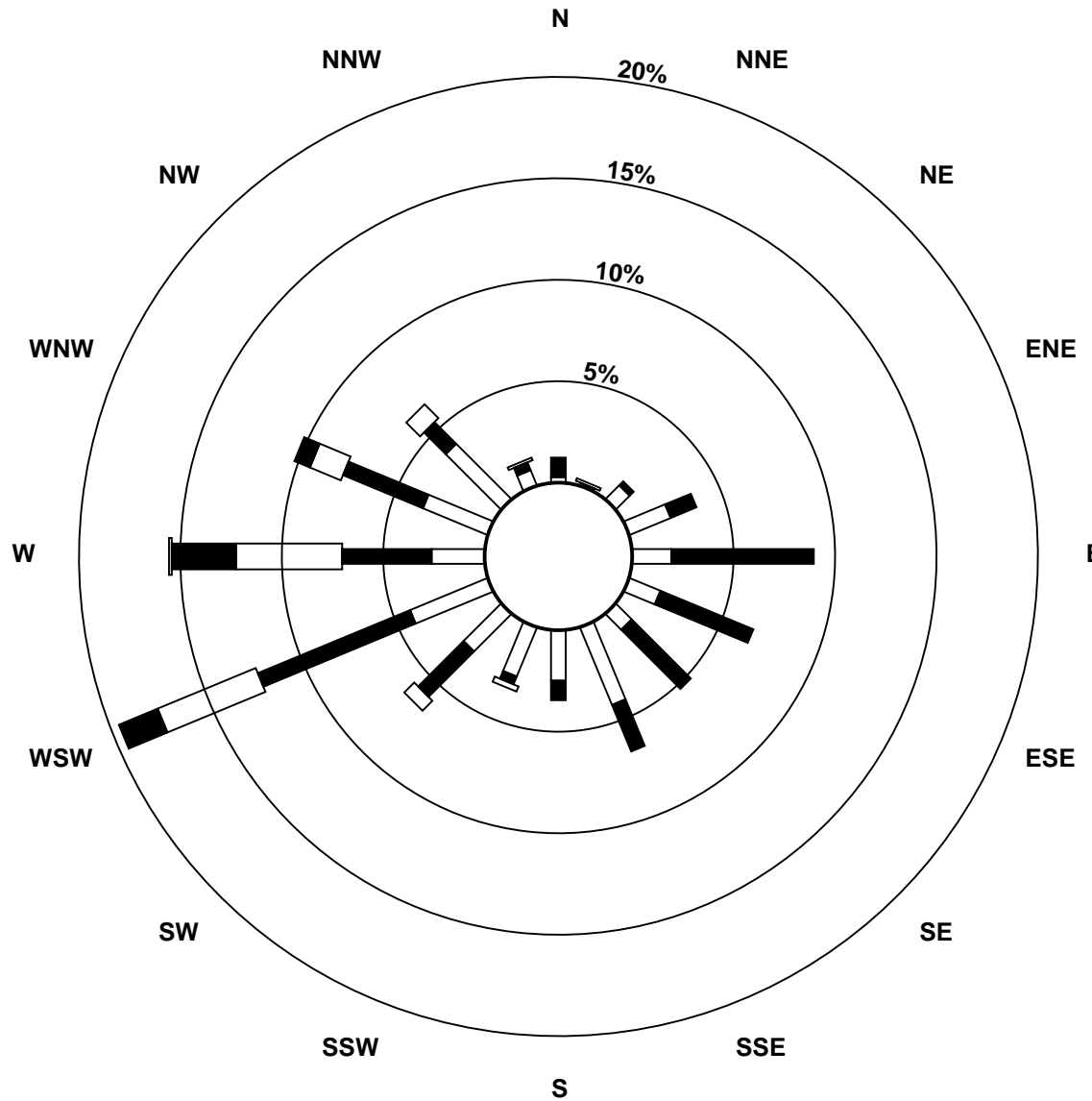
Hourly Averages

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

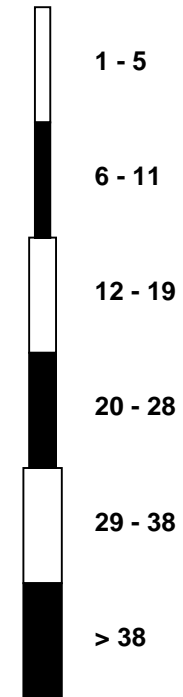
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	6	7	7	8	9	9	8	9	9	7	9	10	7	7	5	4	2	6	6	6	6	8	10	10	6.6	10.1
Dir	99	102	108	100	99	96	101	104	113	138	144	154	150	173	145	172	129	110	98	87	81	83	94	95	112.7	95.2
24 Spd	10	9	3	3	2	3	6	5	5	3	4	6	7	7	5	6	4	7	7	6	2	1	2	3	4.3	9.8
Dir	96	103	129	102	73	71	80	88	118	104	132	139	128	129	125	135	166	156	147	145	148	23	64	122	120.3	96.2
25 Spd	2	0	3	2	4	4	3	3	3	6	8	8	14	15	12	10	11	14	16	18	17	14	10	3	7.3	18.1
Dir	296	297	173	175	164	161	167	159	195	239	236	239	232	228	241	242	278	274	260	259	259	256	251	278	245.7	259.1
26 Spd	2	4	2	2	2	4	4	7	6	16	22	22	22	24	17	15	21	26	21	12	8	8	12	12	11.6	25.8
Dir	245	234	201	151	166	170	228	249	234	254	259	262	263	257	250	248	257	270	261	250	243	239	243	242	252.8	270.1
27 Spd	11	10	12	7	5	5	5	7	14	21	25	26	24	22	27	29	27	26	22	18	13	11	10	5	15.8	29.1
Dir	246	245	268	279	243	271	279	272	270	279	269	265	269	271	272	270	271	275	274	275	271	259	261	233	268.8	269.6
28 Spd	6	6	7	6	5	4	3	3	5	3	3	5	3	5	5	5	3	6	8	7	5	2	3	2.6	8.5	
Dir	267	258	268	275	271	305	297	306	294	269	252	237	194	203	226	213	206	218	163	146	134	131	189	61	228.7	146.2
29 Spd	2	3	1	3	1	3	3	3	3	2	4	6	5	12	12	9	7	11	12	16	11	9	8	6	5.1	15.7
Dir	71	293	288	330	196	159	170	290	350	257	263	263	258	298	301	305	284	241	254	267	258	240	239	235	267.3	266.8
30 Spd	7	2	3	5	3	4	2	8	8	9	16	22	24	21	22	21	19	19	21	17	14	14	12	11	12.4	24.0
Dir	250	310	253	216	219	213	187	227	242	239	245	248	259	257	253	255	259	259	263	254	248	253	252	248	251.4	259.0
31 Spd	10	10	11	11	13	12	10	11	17	24	22	21	20	20	20	19	23	22	22	18	19	18	16	13	16.2	24.4
Dir	241	239	244	244	242	242	249	252	262	274	285	288	284	276	283	272	253	254	255	258	259	265	264	253	263.0	274.2
Spd	1.6	1.0	1.7	1.1	1.0	1.6	1.7	2.6	3.8	6.0	6.4	6.5	6.8	6.7	6.7	5.7	6.1	6.7	6.0	4.6	3.8	3.1	2.9	2.5	Diurnal Average	
Dir	257.9	269.7	263.5	258.8	243.7	242.9	235.1	242.8	244.7	253.1	249.7	249.9	256.3	256.5	255.1	255.9	259.6	263.8	259.6	244.8	234.7	234.2	246.5	239.1	Diurnal Maximum	
Spd	11.2	10.1	11.9	11.4	12.8	11.8	11.4	14.5	20.9	24.4	25.3	26.0	24.1	23.7	27.0	29.1	27.5	26.0	24.4	18.1	18.5	18.0	16.4	13.1	Diurnal Maximum	
Dir	246.3	245.4	268.2	243.9	242.3	241.7	99.1	245.3	253.8	274.2	268.7	265.4	269.3	257.5	272.4	269.6	271.3	274.9	281.5	259.1	258.6	264.7	263.6	258.8	Diurnal Maximum	
Maximum Speed Value: 29 km/h on Aug 27 16:00																		Minimum Speed Value: 0 km/h on Aug 3 03:00						Hours in Service: 744		
Maximum Daily Speed Average: 16.2 km/h on Aug 31																		Minimum Daily Speed Average: 1.6 km/h on Aug 3						Hours of Data: 741		
Maximum Diurnal Speed Average: 6.8 km/h at hour 13																		Minimum Diurnal Speed Average: 1.0 km/h at hour 2						Hours of Missing Data: 3		
Monthly Average Velocity: 3.99 km/h 252.01 deg																		Speed Percentiles: P ₁ = 0.8 P ₁₀ = 2.4 Q ₁ = 4.0 Median = 6.9 Q ₃ = 10.4 P ₉₀ = 16.1 P ₉₉ = 25.6						Percent Operational Time: 99.6		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
P - Power Failure																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	4	8	2	0	0	0	14																			
NorthEast	15	10	0	0	0	0	25																			
East	28	84	1	0	0	0	113																			
SouthEast	25	52	2	0	0	0	79																			
South	41	18	0	0	0	0	59																			
SouthWest	37	57	27	1	0	0	122																			
West	40	82	73	47	1	0	243																			
NorthWest	49	23	14	0	0	0	86																			
Total	239	334	119	48	1	0	741																			

Wind Rose

Wind Speed (WS) (km/h)
Henry Pirker - August 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - August 2014

Maximum Speed: 30 km/h on Aug 27 16:00	Maximum Daily Speed Average: 17.0 km/h on Aug 31	Hours in Service: 744
Minimum Speed: 1 km/h on Aug 3 05:00	Minimum Daily Speed Average: 4.0 km/h on Aug 3	Hours of Data: 741
Maximum Diurnal Speed Average: 12.3 km/h at hour 18	Minimum Diurnal Speed Average: 4.5 km/h at hour 5	Hours of Missing Data: 3
Monthly Average Speed: 8.57 km/h	Percentiles: P ₁ = 1.3 P ₁₀ = 2.9 Q ₁ = 4.5 Median = 7.3 Q ₃ = 10.8 P ₉₀ = 16.7 P ₉₉ = 25.8	Percent Operational Time: 99.6

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	9	9	8	7	5	4	5	7	7	7	8	8	7	10	10	10	10	10	9	9	7	8	8	8	8.0	10.1
2-Aug	6	5	4	3	3	2	3	3	4	3	3	4	5	6	7	6	5	5	4	8	7	6	4	2	4.5	7.6
3-Aug	1	1	1	2	1	3	5	5	4	3	6	6	8	7	6	5	4	4	5	4	5	3	2	3	4.0	8.1
4-Aug	3	3	2	4	3	3	F	F	F	4	4	4	7	7	9	11	10	12	9	8	8	10	9	7	6.6	11.7
5-Aug	6	7	7	10	10	7	11	10	10	10	12	11	10	9	6	5	4	7	4	5	14	10	13	5	8.5	13.5
6-Aug	6	4	3	2	4	7	8	7	6	10	11	11	17	15	19	18	21	23	25	18	12	11	9	11	11.6	24.9
7-Aug	6	6	5	3	3	5	8	8	10	16	18	17	16	16	15	14	13	12	11	8	7	6	2	4	9.5	17.5
8-Aug	3	2	2	2	4	2	4	5	5	7	7	10	12	9	14	9	11	14	12	15	10	7	7	6	7.5	15.2
9-Aug	4	7	6	5	4	3	6	6	7	9	12	11	14	15	16	16	12	10	8	11	7	8	9	13	9.2	16.3
10-Aug	9	7	6	5	5	4	6	7	10	19	16	17	19	23	21	18	21	19	21	15	7	7	8	7	12.4	23.4
11-Aug	6	4	4	3	2	3	1	6	6	5	6	6	10	8	7	7	6	4	7	8	7	6	5	5	5.4	9.6
12-Aug	6	7	6	8	6	6	6	7	7	5	7	8	7	7	7	7	5	4	4	5	3	4	2	2	5.7	7.7
13-Aug	3	4	3	3	3	2	2	4	5	4	12	10	9	9	8	7	9	7	5	3	3	2	1	4	5.1	11.8
14-Aug	2	2	3	1	2	2	3	4	3	5	7	9	8	12	9	8	10	9	9	6	3	2	3	3	5.2	11.6
15-Aug	4	4	4	3	2	3	3	2	3	4	8	10	10	10	10	10	10	8	8	5	4	7	7	4	5.9	10.4
16-Aug	2	1	1	2	1	4	2	5	4	4	5	10	11	12	14	14	12	13	12	6	6	7	6	7	6.8	14.4
17-Aug	6	6	7	5	3	6	11	9	14	19	20	19	15	13	14	15	17	16	16	16	11	14	9	8	12.1	20.0
18-Aug	8	6	7	8	7	9	10	15	21	24	20	19	18	12	9	11	15	26	21	17	15	11	11	13	13.8	26.3
19-Aug	11	6	11	9	8	9	7	6	8	15	15	13	13	11	17	13	10	13	18	7	7	8	8	6	10.4	17.8
20-Aug	6	3	5	7	9	9	8	10	10	9	9	11	12	8	9	8	8	6	7	5	7	7	6	6	7.7	11.6
21-Aug	6	5	4	4	4	5	6	6	7	9	9	8	8	8	9	10	8	9	8	9	6	4	3	2	6.5	9.7
22-Aug	2	3	3	3	3	3	4	3	3	5	9	10	10	8	8	8	7	8	11	11	7	6	4	6	6.0	11.2
23-Aug	6	7	7	9	9	9	8	9	10	7	9	10	8	8	7	5	6	7	6	7	6	9	10	10	8.0	10.5
24-Aug	10	9	4	3	2	3	6	5	6	4	5	7	8	9	7	7	5	7	8	6	2	1	2	3	5.4	9.8
25-Aug	3	1	3	2	4	4	3	3	3	6	8	8	14	16	13	11	11	15	16	18	17	15	10	4	8.8	18.3
26-Aug	3	4	2	2	2	4	4	7	6	16	22	23	23	24	17	16	22	26	21	12	8	8	12	12	12.4	26.1
27-Aug	11	10	12	7	5	6	5	8	14	22	26	27	25	23	28	30	28	26	22	18	13	11	11	6	16.4	29.6
28-Aug	6	6	7	6	5	4	3	3	5	3	4	6	6	6	7	7	5	7	9	7	5	2	3	3	5.4	8.6
29-Aug	2	3	2	3	1	4	3	4	4	3	4	7	6	12	12	10	8	12	12	16	11	9	8	6	6.7	15.9
30-Aug	7	3	3	5	4	4	3	8	9	9	16	23	25	22	22	22	20	20	21	17	14	14	13	11	13.1	24.6
31-Aug	10	10	11	12	13	12	10	11	17	25	22	21	21	21	21	20	23	22	22	18	19	18	17	13	17.0	24.7
	5.7	5.0	4.9	4.8	4.5	4.8	5.6	6.4	7.5	9.3	11.0	11.7	12.3	12.2	12.2	11.5	11.6	12.3	11.9	10.3	8.4	7.9	7.2	6.4	Diurnal Average	
	11.4	10.4	12.4	11.6	13.0	11.9	11.5	14.7	21.1	24.7	25.8	26.6	24.7	24.3	27.5	29.6	28.0	26.4	24.9	18.3	18.7	18.1	16.6	13.3	Diurnal Maximum	

P - Power Failure
 All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg
Henry Pirker - August 2014

Maximum Value: 97.9 deg on Aug 11 18:00																						Hours in Service:	744		
Minimum Value: 5.1 deg on Aug 25 05:00																						Hours of Data:	741		
Percentiles: P ₁ = 6.6 P ₁₀ = 9.5 Q ₁ = 11.8 Median = 17.2 Q ₃ = 27.8 P ₉₀ = 49.1 P ₉₉ = 82.4																						Hours of Missing Data:	3		
																						Hours of Calibration:	0		
																						Percent Operational Time:	99.6		
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	13	12	15	17	24	19	19	17	19	20	19	20	22	20	21	18	18	22	19	13	8	8	8	7	24.0
2-Aug	10	10	12	12	13	36	23	25	45	27	55	47	57	49	23	50	52	37	34	25	10	8	6	37	57.0
3-Aug	83	71	73	41	86	22	11	30	16	41	31	33	24	31	34	35	56	57	12	23	13	50	52	73	85.8
4-Aug	24	41	56	22	83	49	P	P	P	17	22	81	36	34	22	22	17	17	11	10	10	7	7	6	83.1
5-Aug	7	10	6	6	8	10	7	10	17	16	18	18	22	35	57	72	62	18	22	36	12	40	46	55	72.1
6-Aug	30	41	59	22	18	15	12	17	17	18	19	19	17	22	17	16	13	11	11	8	8	8	8	9	58.8
7-Aug	37	34	34	37	59	25	12	24	14	13	14	17	20	17	23	18	18	16	15	7	12	32	55	26	59.0
8-Aug	75	74	63	49	67	53	16	18	9	24	24	41	14	35	10	26	17	16	12	12	10	13	11	28	74.5
9-Aug	22	13	14	15	13	25	10	16	18	20	15	17	20	22	18	11	22	15	16	15	10	17	14	12	24.8
10-Aug	14	10	17	12	12	24	16	24	12	13	13	15	17	17	17	17	17	16	10	10	24	13	8	15	24.1
11-Aug	22	20	40	81	41	42	60	21	22	27	32	48	27	42	36	34	67	98	21	10	7	8	13	9	97.9
12-Aug	8	10	12	9	11	10	14	15	19	46	30	28	27	39	43	29	52	60	60	11	20	21	62	58	62.0
13-Aug	32	23	28	11	19	22	25	25	18	34	10	17	17	22	22	34	16	6	36	18	10	42	64	33	64.4
14-Aug	28	49	32	34	59	16	22	14	26	21	16	18	20	16	29	27	27	15	14	21	19	43	25	32	59.3
15-Aug	25	15	19	67	35	23	31	54	52	28	25	17	21	25	20	22	21	21	17	13	13	7	7	9	66.7
16-Aug	41	25	40	85	69	60	82	24	12	22	23	14	15	15	11	16	11	10	8	8	28	19	22	17	85.0
17-Aug	10	12	12	23	14	11	7	14	12	11	12	14	13	16	23	20	15	11	14	10	9	10	10	11	23.4
18-Aug	14	17	15	10	24	13	20	10	7	9	10	10	11	12	17	18	18	9	9	8	10	10	11	10	23.5
19-Aug	10	38	10	20	15	14	14	19	14	11	11	17	14	21	23	13	31	14	10	12	13	12	9	13	37.6
20-Aug	20	58	25	14	11	10	12	14	11	14	17	18	18	35	20	26	30	24	20	22	16	12	11	9	57.9
21-Aug	11	14	20	16	19	21	21	14	14	19	17	24	37	34	38	40	22	23	21	16	15	16	11	19	39.7
22-Aug	26	37	10	21	19	25	19	51	34	40	22	23	27	37	45	40	27	21	15	11	11	13	11	11	51.2
23-Aug	9	10	9	9	9	7	8	10	14	23	20	23	34	37	53	63	84	39	23	13	11	8	8	7	84.0
24-Aug	6	12	35	41	35	16	13	15	22	55	45	47	32	38	61	37	38	23	16	14	20	58	40	34	61.4
25-Aug	65	84	17	37	5	12	13	11	35	15	14	24	18	22	20	23	14	16	11	10	10	8	12	43	83.6
26-Aug	52	21	35	30	48	20	12	13	15	12	13	13	13	13	10	11	14	9	11	14	9	10	13	11	52.5
27-Aug	10	14	18	29	17	24	29	25	13	10	11	12	14	16	11	11	12	10	7	8	8	10	17	17	29.5
28-Aug	20	12	10	21	18	15	13	20	15	35	60	48	68	59	65	48	44	55	31	9	9	10	61	30	67.8
29-Aug	44	54	76	28	73	37	19	48	38	62	25	30	39	15	12	15	25	15	13	10	14	10	9	14	76.4
30-Aug	14	57	61	20	63	31	66	11	13	11	11	12	13	14	16	13	14	10	10	8	11	10	10	12	66.4
31-Aug	10	10	10	10	8	8	11	12	7	10	12	12	12	15	13	16	9	9	10	8	9	7	8	9	15.6
82.7 83.6 76.4 85.0 85.8 59.8 81.7 54.5 52.3 62.0 60.1 80.6 67.8 58.6 65.0 72.1 84.0 97.9 59.7 35.9 28.1 57.6 64.4 73.4																									
P - Power Failure																									

PAZA

Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

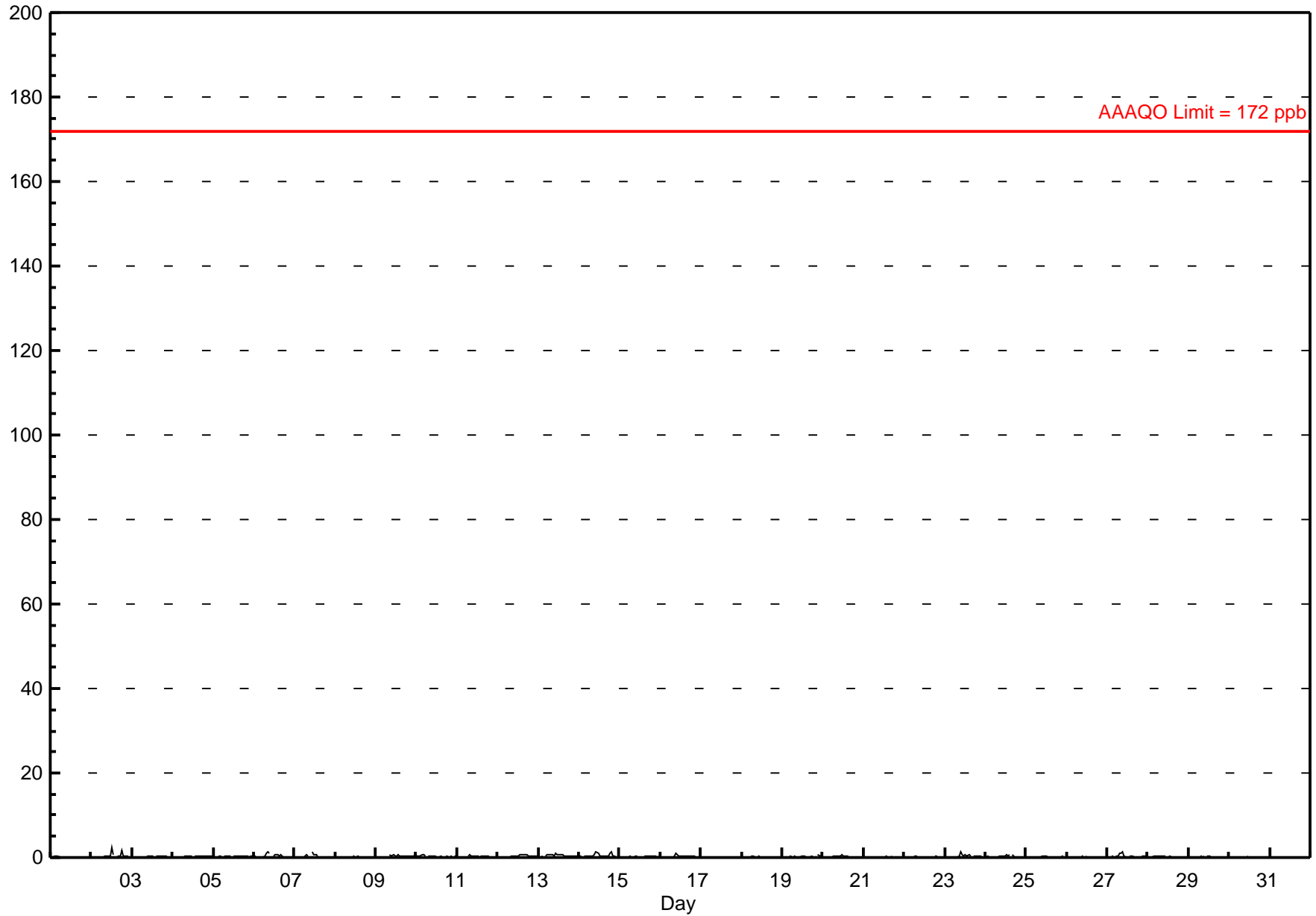
Sulphur Dioxide (SO₂) - ppb Evergreen Park - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.3 ppb on Aug 2 13:00 Maximum Daily Average: 0.5 ppb on Aug 13		Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0																								
Minimum Value: 0 ppb on Aug 2 06:00 Maximum Diurnal Average: 0.4 ppb at hour 11 Monthly Average: 0.20 ppb		Minimum Daily Average: 0.0 ppb on Aug 17 Minimum Diurnal Average: 0.1 ppb at hour 3 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 1.2																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	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
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0	2	1	A	0	0	0	2	0	1	0	0	0	0.3	2.3
3-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.4
4-Aug	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-Aug	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
6-Aug	0	0	0	0	0	0	0	1	1	1	A	0	1	1	1	0	1	0	0	0	0	0	0	0	0.3	1.3
7-Aug	0	0	0	0	0	0	0	1	0	A	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	1.5
8-Aug	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
9-Aug	0	0	0	0	0	0	0	0	A	1	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0.3	0.7
10-Aug	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
11-Aug	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
12-Aug	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0.3	0.7
13-Aug	0	0	0	A	0	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.1
14-Aug	0	0	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	2	0	0	0	0	0.4	1.5
15-Aug	0	A	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0.2	0.4
16-Aug	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.9
17-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0.2	0.5
20-Aug	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.5
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2
22-Aug	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
23-Aug	0	0	0	0	0	0	0	0	0	1	1	0	1	0	1	0	A	0	0	0	0	0	0	0	0.3	1.3
24-Aug	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	A	1	0	0	0	0	0	0	0	0.2	0.6
25-Aug	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
26-Aug	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
27-Aug	0	0	0	0	0	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
28-Aug	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
29-Aug	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
30-Aug	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
31-Aug	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	0.1
																								Diurnal Average	Diurnal Maximum	
																								0.1	0.3	
																								0.1	0.2	
																								0.1	0.2	
																								0.1	0.5	
																								0.1	0.6	
																								0.1	0.6	
																								0.1	0.6	
																								0.3	0.9	
																								0.3	1.3	
																								0.4	1.5	
																								0.4	1.5	
																								0.3	0.9	
																								0.4	2.3	
																								0.3	0.8	
																								0.3	0.7	
																								0.2	0.7	
																								0.2	0.6	
																								0.2	0.6	
																								0.2	1.6	
																								0.2	1.5	
																								0.1	0.5	
																								0.2	0.5	
																								0.1	0.4	
																								0.1	0.7	

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

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - August 2014



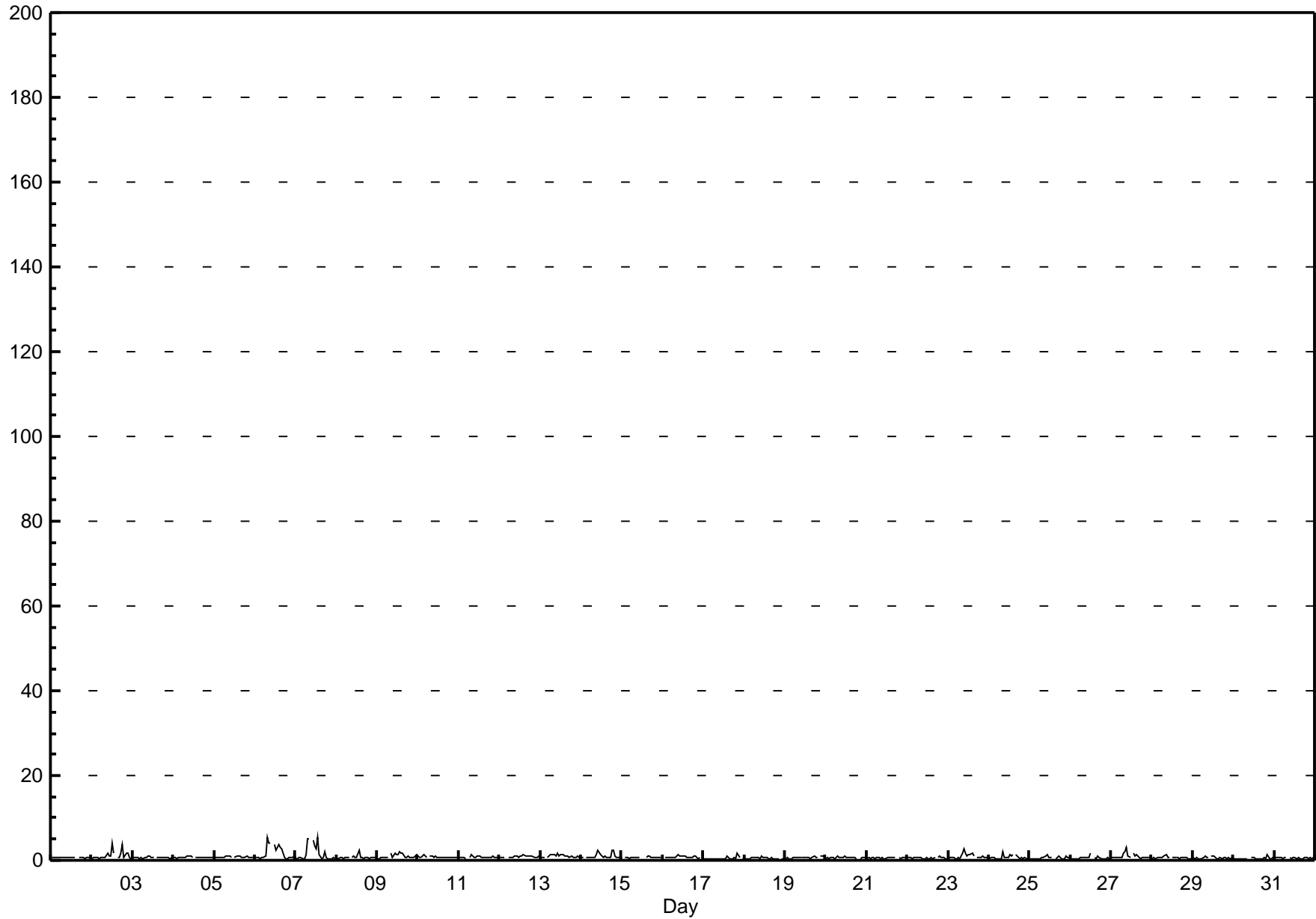
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Evergreen Park - August 2014

Maximum Value: 5.5 ppb on Aug 7 14:00		Maximum Daily Average: 1.8 ppb on Aug 6		Hours in Service: 744																						
Minimum Value: 0 ppb on Aug 30 08:00		Minimum Daily Average: 0.5 ppb on Aug 30		Hours of Data: 709																						
Maximum Diurnal Average: 1.2 ppb at hour 9		Minimum Diurnal Average: 0.6 ppb at hour 3		Hours of Missing Data: 35																						
Monthly Average: 0.79 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.8 P ₉₀ = 1.2 P ₉₉ = 4.2		Hours of Calibration: 35																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	1	1	0.6	0.7
2-Aug	0	1	1	1	0	1	1	1	1	2	1	1	4	2	A	1	1	2	4	1	2	2	1	0	1.1	4.2
3-Aug	1	1	1	1	0	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0.6	1.0	
4-Aug	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.1	
5-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
6-Aug	1	1	1	0	1	1	1	6	4	4	A	4	2	3	4	3	3	1	0	0	1	1	1	1.8	5.5	
7-Aug	0	0	1	1	0	0	1	5	5	A	5	3	3	6	1	0	1	2	1	0	0	0	1	1.7	5.5	
8-Aug	0	0	1	1	0	1	1	1	A	1	1	1	1	2	1	1	0	1	1	0	1	1	1	0.7	2.3	
9-Aug	1	0	1	1	1	1	1	A	2	1	2	1	1	2	2	2	1	1	1	1	1	1	1	1.0	2.0	
10-Aug	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4	
11-Aug	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2	
12-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
13-Aug	1	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7	
14-Aug	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	2	2	1	1	1	1.0	2.4	
15-Aug	1	A	1	1	0	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	0.7	0.9	
16-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	0.8	1.4	
17-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2	1	A	0.5	1.6
18-Aug	1	0	0	0	1	1	1	1	1	0	1	1	1	1	0	0	1	0	0	0	0	A	0	0.5	1.0	
19-Aug	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	0.7	1.2	
20-Aug	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	1	1	0.7	1.0	
21-Aug	0	1	0	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	A	1	1	1	1	0.5	0.7	
22-Aug	1	1	1	0	1	1	1	1	1	0	0	1	0	0	1	0	1	A	1	1	1	1	0	0.6	0.9	
23-Aug	0	1	1	1	0	0	1	1	2	3	2	1	1	1	2	1	A	1	1	1	1	1	1	1.0	2.8	
24-Aug	0	1	1	1	0	0	0	1	2	1	1	1	1	1	1	A	1	1	0	1	0	1	0	0.8	2.1	
25-Aug	0	0	0	0	0	1	0	1	1	1	1	1	1	1	A	0	1	1	1	0	0	1	1	0.7	1.3	
26-Aug	0	0	0	0	0	0	1	1	1	1	1	1	2	A	1	0	1	1	0	0	0	0	0	0.6	1.6	
27-Aug	1	1	1	1	1	1	1	2	2	3	1	1	A	2	1	1	1	1	1	1	1	1	1	1.0	3.0	
28-Aug	0	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	1	1	1	0	0	0.6	1.3	
29-Aug	1	0	1	0	0	0	1	1	1	1	1	A	1	1	0	0	1	0	1	1	0	1	0	0.6	1.0	
30-Aug	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	1	0	1	0	0.5	1.4	
31-Aug	0	1	1	1	1	0	1	1	A	1	0	1	1	0	1	0	1	0	1	1	0	1	0	0.5	0.8	
		0.6	0.6	0.6	0.6	0.6	0.6	0.7	1.1	1.2	1.1	1.1	1.0	1.1	1.2	0.9	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.6	Diurnal Average
		1.0	0.8	0.8	1.4	1.2	1.1	1.2	5.5	5.2	4.2	4.8	3.6	4.2	5.5	3.7	3.1	2.6	2.1	3.7	2.3	1.7	1.6	1.2	1.2	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

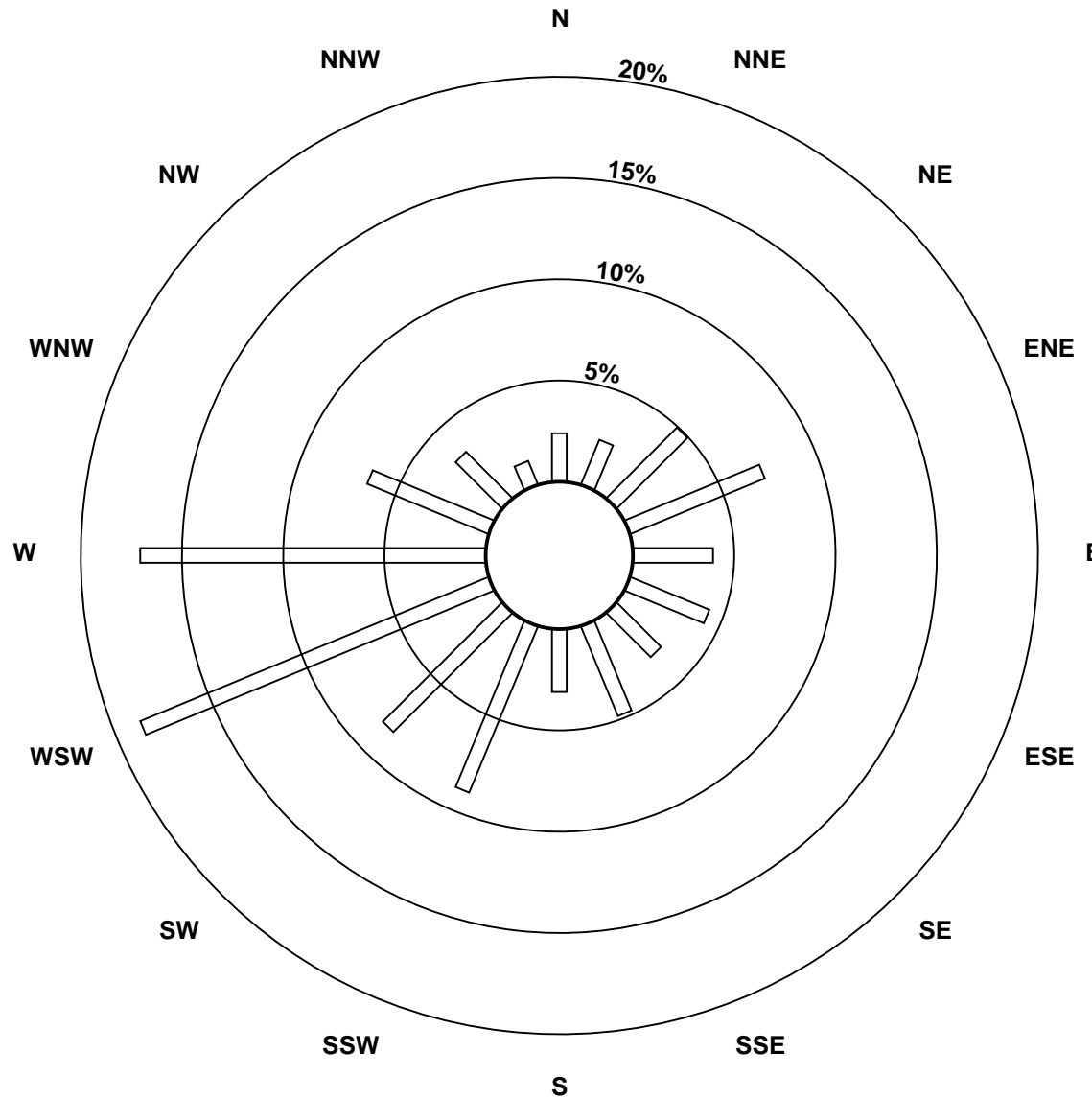
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - August 2014

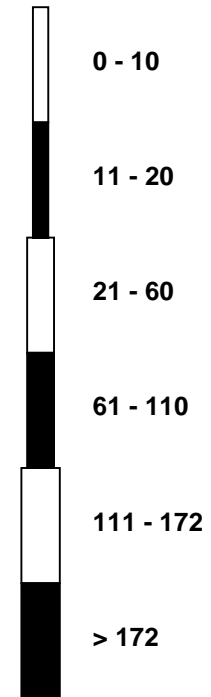


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - August 2014

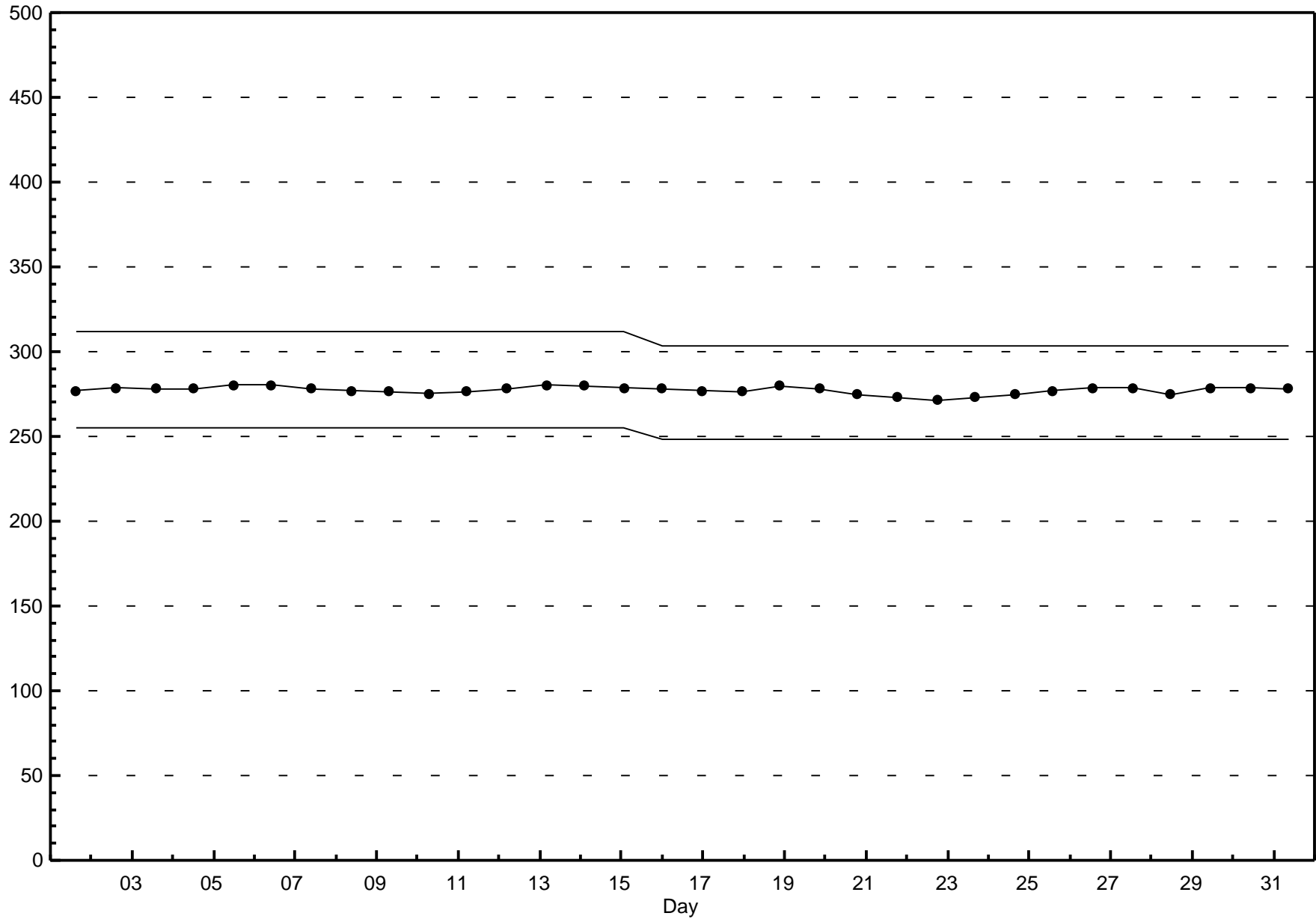


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Evergreen Park - August 2014



Hourly Averages

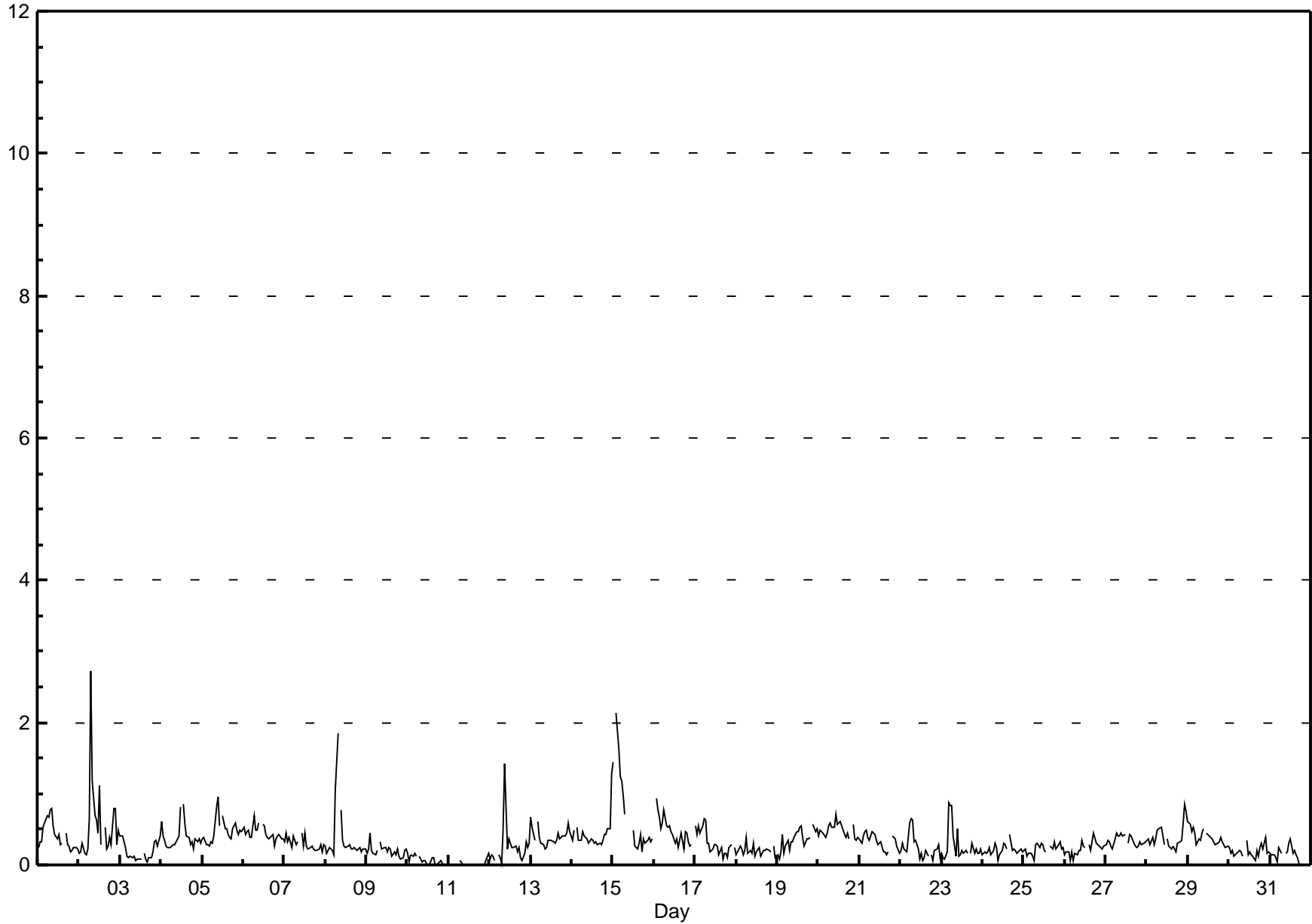
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 2.7 ppb on Aug 2 08:00	Maximum Daily Average: 0.7 ppb on Aug 15		Hours of Data:	708
Minimum Value: 0 ppb on Aug 10 13:00	Minimum Daily Average: 0.0 ppb on Aug 11		Hours of Missing Data:	36
Maximum Diurnal Average: 0.5 ppb at hour 8	Minimum Diurnal Average: 0.2 ppb at hour 18		Hours of Calibration:	36
Monthly Average: 0.32 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.5 P ₉₉ = 1.2		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-Aug	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.8
2-Aug	0	0	0	0	0	0	1	3	1	1	1	0	1	0	A	1	0	0	0	0	1	1	0	0	0.6	2.7
3-Aug	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	
4-Aug	1	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0.4	0.8	
5-Aug	0	0	0	0	0	0	0	0	1	1	1	A	1	1	1	0	0	0	1	1	0	0	0	0.5	1.0	
6-Aug	1	0	0	0	0	0	1	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
7-Aug	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	
8-Aug	0	0	0	0	0	0	1	2	A	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.9	
9-Aug	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
10-Aug	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	
11-Aug	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	
12-Aug	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4	
13-Aug	1	1	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.7	
14-Aug	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.3	
15-Aug	1	A	2	2	1	1	1	1	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.7	2.1	
16-Aug	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.5	0.9	
17-Aug	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.7	
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	A	0	0.4	0.6	
20-Aug	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	A	1	0	0	0.5	0.7	
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0.3	0.5	
22-Aug	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.7	
23-Aug	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.9	
24-Aug	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	
25-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3	
26-Aug	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	
27-Aug	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
28-Aug	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0.4	0.9	
29-Aug	1	1	0	1	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
30-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
31-Aug	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	
	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	Diurnal Average	
	1.4	0.9	2.1	1.6	1.2	1.2	1.0	2.7	1.2	1.4	0.7	0.8	1.1	0.8	0.6	0.5	0.5	0.4	0.5	0.6	0.8	0.8	0.9	1.3	Diurnal Maximum	

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



Hourly Maximums

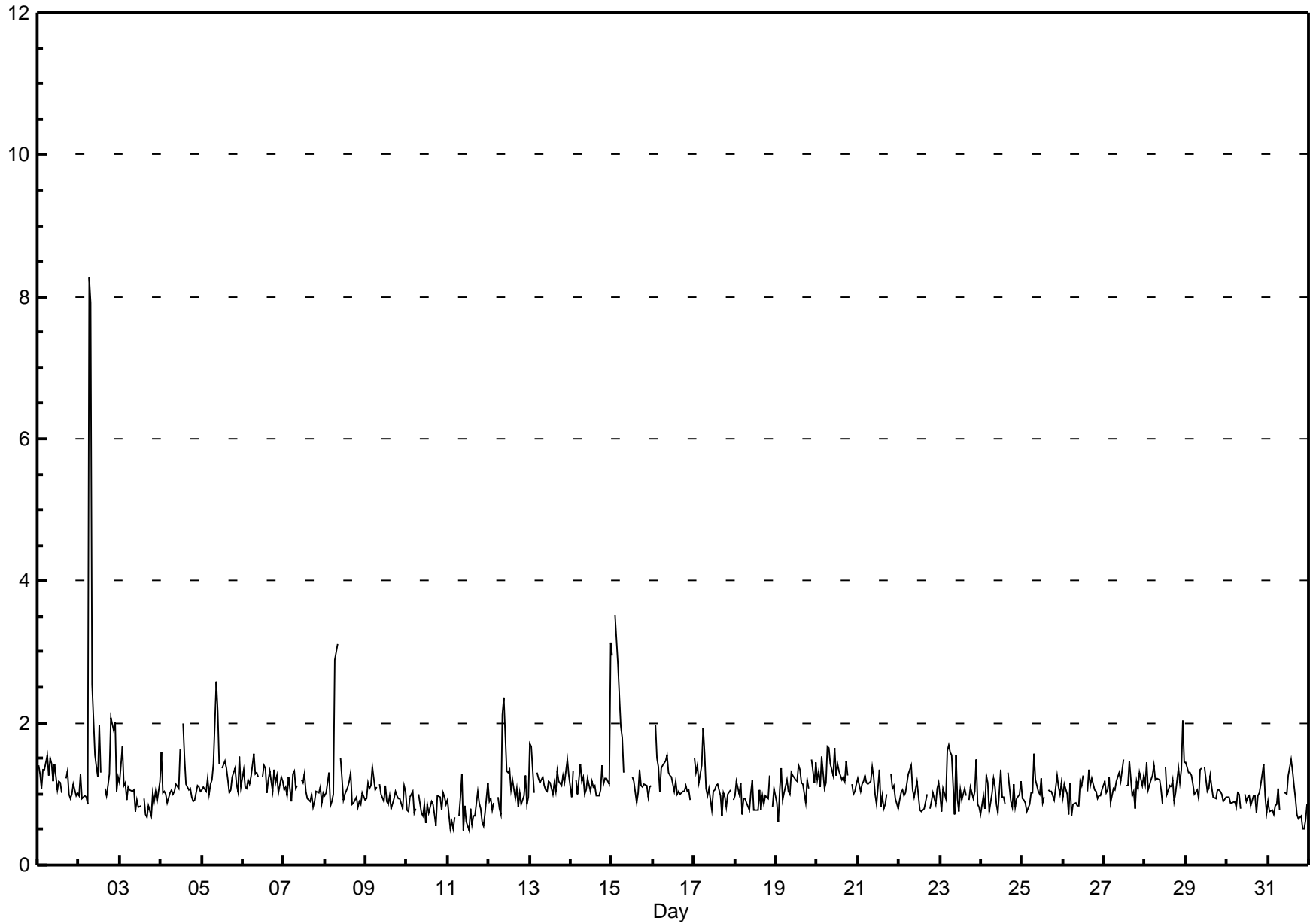
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - August 2014

Maximum Value: 8.3 ppb on Aug 2 07:00		Maximum Daily Average: 1.9 ppb on Aug 2		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 11 13:00		Minimum Daily Average: 0.7 ppb on Aug 11		Hours of Data: 708																							
Maximum Diurnal Average: 1.5 ppb at hour 7		Minimum Diurnal Average: 1.0 ppb at hour 18		Hours of Missing Data: 36																							
Monthly Average: 1.13 ppb		Percentiles: P ₁ = 0.6 P ₁₀ = 0.8 Q ₁ = 0.9 Median = 1.1 Q ₃ = 1.2 P ₉₀ = 1.4 P ₉₉ = 2.9		Hours of Calibration: 36																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	1	1	1	1	1	2	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	1.5	
2-Aug	1	1	1	1	1	1	8	8	3	2	1	1	2	1	A	1	1	1	1	2	2	2	1	1	1.9	8.3	
3-Aug	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	1.7	
4-Aug	2	1	1	1	1	1	1	1	1	1	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1.1	2.0	
5-Aug	1	1	1	1	1	1	1	1	3	2	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1.3	2.6	
6-Aug	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6	
7-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3	
8-Aug	1	1	1	1	1	1	3	3	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	3.1	
9-Aug	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
10-Aug	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
11-Aug	1	1	1	1	1	A	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3	
12-Aug	1	1	1	1	A	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.4	
13-Aug	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.7	
14-Aug	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1.2	3.1	
15-Aug	3	A	4	3	2	2	2	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1.6	3.5	
16-Aug	A	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.2	2.0	
17-Aug	2	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9	
18-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
19-Aug	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	1.5	
20-Aug	1	1	1	2	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1.3	1.7	
21-Aug	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	1.4	
22-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.0	1.4	
23-Aug	1	1	1	1	2	2	2	2	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.1	1.7	
24-Aug	1	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	1.3	
25-Aug	1	1	1	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	1.6	
26-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	1.3	
27-Aug	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5	
28-Aug	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1.2	2.0	
29-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4	
30-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
31-Aug	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5	
		1.2	1.1	1.1	1.1	1.1	1.2	1.5	1.5	1.3	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.1	1.0	1.1	1.0	1.1	Diurnal Average		
		2.9	2.0	3.5	2.8	2.4	1.9	8.3	7.9	2.6	2.4	1.6	1.6	2.0	2.0	1.5	1.5	1.3	1.5	1.4	2.1	1.9	2.0	2.0	3.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

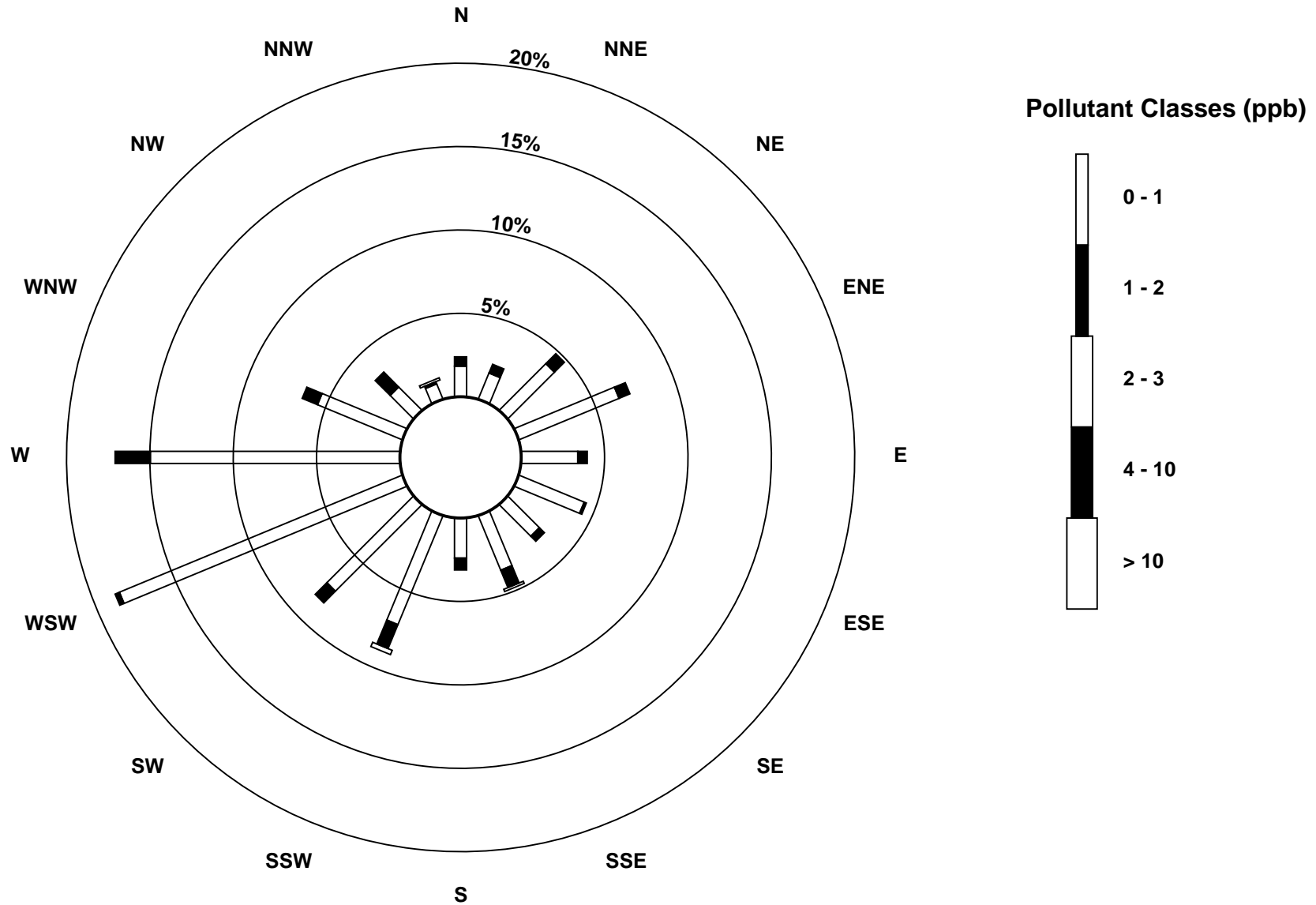
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - August 2014



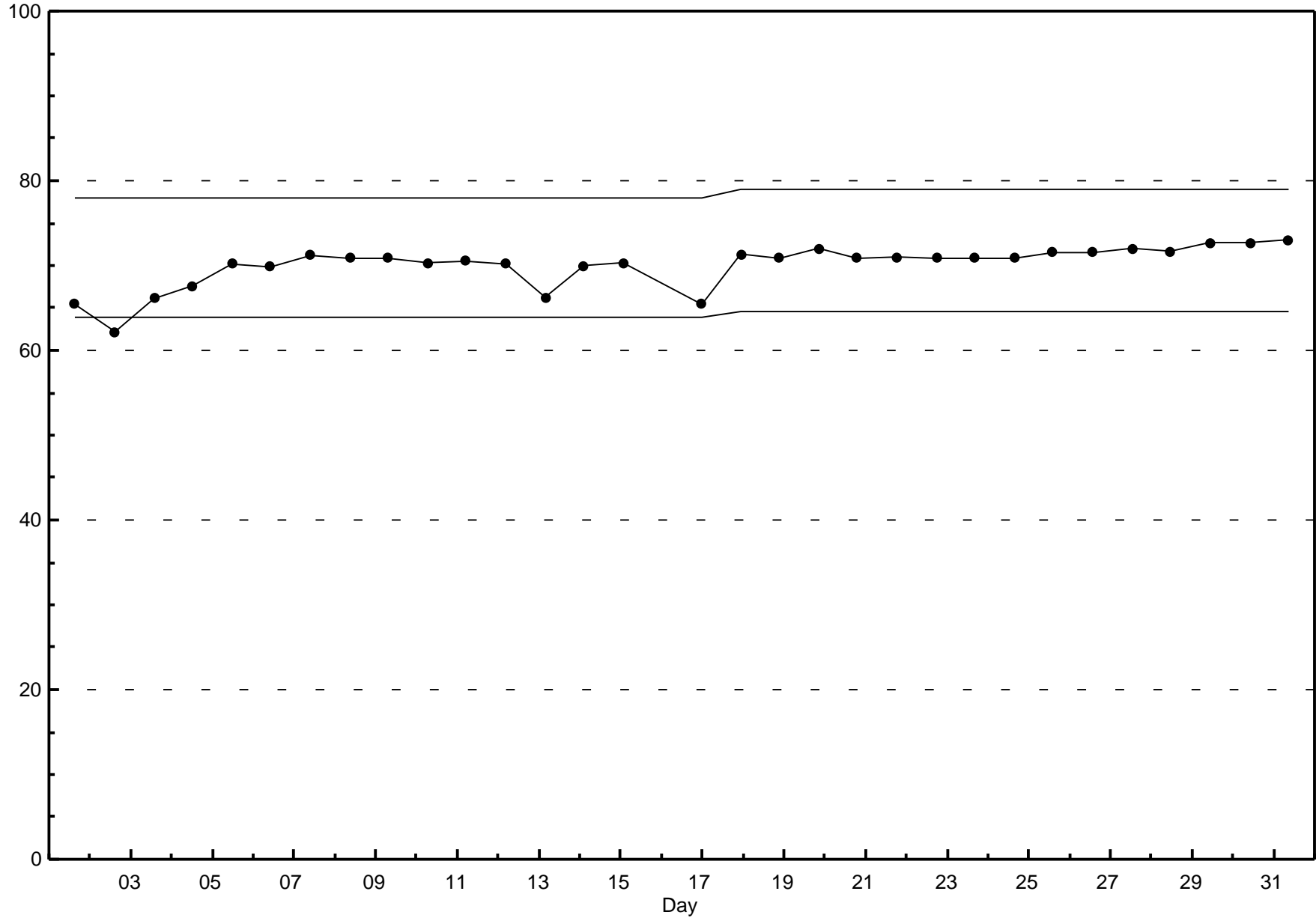
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - August 2014



Span Responses

**Total Reduced Sulphur (TRS)
Evergreen Park - August 2014**



Hourly Averages

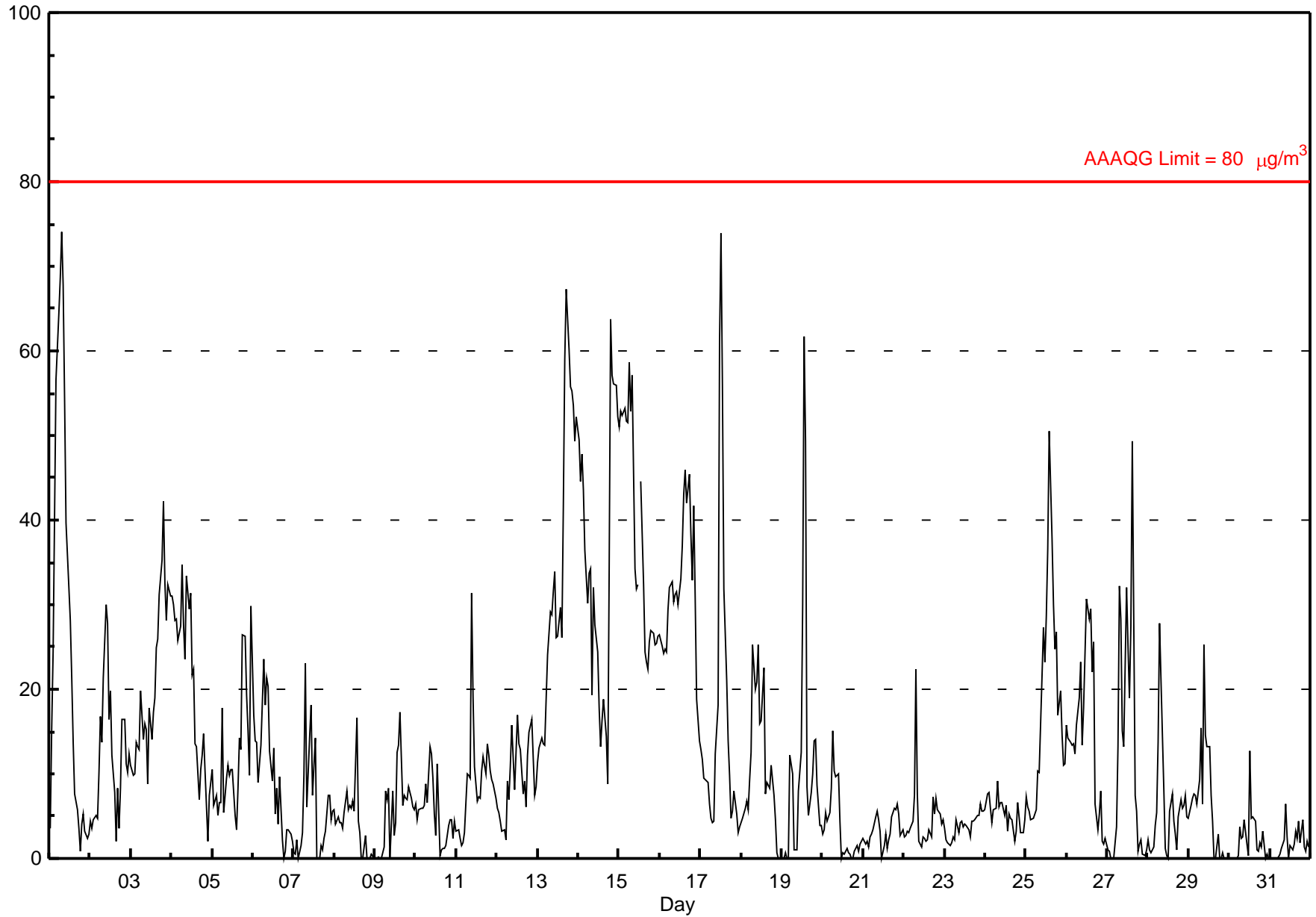
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - August 2014

Number of Exceedences: 1-hr: 0 24-hr: 4	Hours in Service: 744
Maximum Value: 74.0 µg/m ³ on Aug 1 08:00	Maximum Daily Average: 38.4 µg/m ³ on Aug 15
Minimum Value: 0 µg/m ³ on Aug 6 19:00	Hours of Data: 743
Maximum Diurnal Average: 17.8 µg/m ³ at hour 8	Hours of Missing Data: 1
Monthly Average: 12.92 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.6 µg/m ³ on Aug 31	Percent Operational Time: 99.9
Minimum Diurnal Average: 9.4 µg/m ³ at hour 23	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.8 Q ₁ = 3.3 Median = 7.4 Q ₃ = 17.2 P ₉₀ = 32.0 P ₉₉ = 63.1	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	4	15	24	40	57	64	69	74	68	54	40	32	28	21	14	8	6	4	1	4	5	3	2	3	26.7	74.0																						
2-Aug	4	4	5	5	5	10	17	14	21	30	28	16	20	12	8	2	8	4	8	16	16	11	10	12	12.0	30.0																						
3-Aug	11	10	10	14	13	13	20	14	16	15	9	18	14	17	19	25	26	31	35	42	32	28	32	31	20.7	42.2																						
4-Aug	31	30	28	28	26	27	35	28	24	33	29	31	22	22	13	13	7	11	12	15	10	2	7	9	20.6	34.8																						
5-Aug	11	6	7	5	7	7	18	5	9	11	10	11	11	5	3	8	14	13	26	26	19	15	10	30	12.0	29.9																						
6-Aug	17	14	14	9	11	13	24	18	21	20	13	9	13	5	8	4	10	2	0	1	3	3	3	2	9.9	23.6																						
7-Aug	1	0	2	0	2	3	10	23	6	14	18	8	11	14	0	0	1	1	2	3	7	8	5	6	6.1	23.1																						
8-Aug	6	4	5	4	4	4	5	8	6	6	6	7	6	17	4	3	0	0	3	0	0	0	1	0	4.1	16.6																						
9-Aug	0	0	0	0	0	1	8	7	8	0	8	3	4	13	13	17	6	7	7	7	9	7	6	6	5.8	17.3																						
10-Aug	6	5	6	6	6	6	9	7	13	12	10	5	3	11	0	1	1	1	2	4	4	4	2	4	5.4	13.3																						
11-Aug	3	3	2	2	2	3	10	10	10	31	19	11	7	7	7	10	12	10	14	12	10	9	9	7	9.2	31.4																						
12-Aug	6	5	4	3	3	2	9	7	11	16	8	12	17	14	13	8	9	6	12	15	16	12	8	9	9.4	17.0																						
13-Aug	11	13	14	14	13	19	24	29	29	32	34	26	26	30	26	42	59	67	60	56	55	54	49	52	34.8	67.3																						
14-Aug	49	45	48	44	37	30	34	34	19	32	28	24	18	13	16	19	14	9	35	64	57	56	56	52	34.7	63.7																						
15-Aug	51	53	52	53	52	51	59	53	57	34	32	32	M	45	32	24	23	22	26	27	27	25	25	26	38.4	58.7																						
16-Aug	26	25	24	25	24	29	32	33	30	31	32	30	33	37	43	46	42	45	38	33	42	31	19	14	31.9	45.9																						
17-Aug	13	12	10	9	9	6	5	4	4	12	18	61	74	56	32	21	14	10	5	6	8	5	3	4	16.7	73.9																						
18-Aug	4	5	6	7	6	9	13	25	20	21	25	16	16	23	8	9	9	8	11	7	5	1	0	0	10.6	25.2																						
19-Aug	0	0	1	0	0	12	10	1	1	1	8	13	30	62	49	8	5	8	10	14	14	9	4	4	11.0	61.8																						
20-Aug	3	3	5	4	5	8	15	10	10	10	4	0	1	0	1	1	1	0	0	1	2	1	2	2	3.7	15.1																						
21-Aug	2	2	2	1	2	3	3	5	6	5	3	0	2	3	1	2	3	5	6	6	6	5	3	3	3.3	6.4																						
22-Aug	2	3	3	3	3	4	8	22	8	2	1	3	2	2	2	3	3	7	5	7	6	5	4	5	4.8	22.3																						
23-Aug	3	2	2	2	2	3	2	5	3	4	4	4	4	4	3	3	4	4	5	5	5	6	6	6	3.8	6.5																						
24-Aug	6	8	8	6	4	6	6	9	6	7	7	5	6	3	5	5	5	2	3	7	5	3	3	5	5.3	9.1																						
25-Aug	7	6	6	5	5	5	6	10	10	22	27	23	29	37	51	38	30	25	27	17	20	15	11	11	18.3	50.6																						
26-Aug	16	14	14	13	13	12	16	19	23	13	18	24	31	28	29	22	26	6	3	5	8	2	2	2	15.1	30.8																						
27-Aug	1	1	0	0	0	4	13	32	28	15	13	32	25	19	27	49	7	6	1	2	2	1	0	1	11.7	49.4																						
28-Aug	2	1	1	1	4	5	14	28	15	8	1	0	0	6	8	4	3	1	5	7	6	6	7	5	5.8	27.8																						
29-Aug	5	6	7	8	7	7	9	15	6	25	15	13	13	8	4	0	0	3	0	0	1	0	0	0	6.4	25.3																						
30-Aug	0	0	0	0	0	0	4	2	3	5	2	0	13	5	5	4	1	1	2	1	3	0	0	0	2.1	12.7																						
31-Aug	0	0	0	0	0	0	1	1	2	6	3	0	2	1	2	3	2	4	2	5	1	1	2	1	1.6	6.4																						
																								9.8	9.5	10.0	10.0	10.4	11.9	16.3	17.8	15.9	17.1	15.2	15.2	16.0	17.4	14.5	13.0	11.3	10.5	11.8	13.4	13.1	10.6	9.4	10.0	Diurnal Average
																								51.1	53.0	52.3	53.2	56.6	64.4	68.6	74.0	67.7	54.5	39.6	61.0	73.9	61.8	50.6	49.4	59.0	67.3	60.1	63.7	57.2	56.2	56.0	52.3	Diurnal Maximum

M - Maintenance
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³



Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

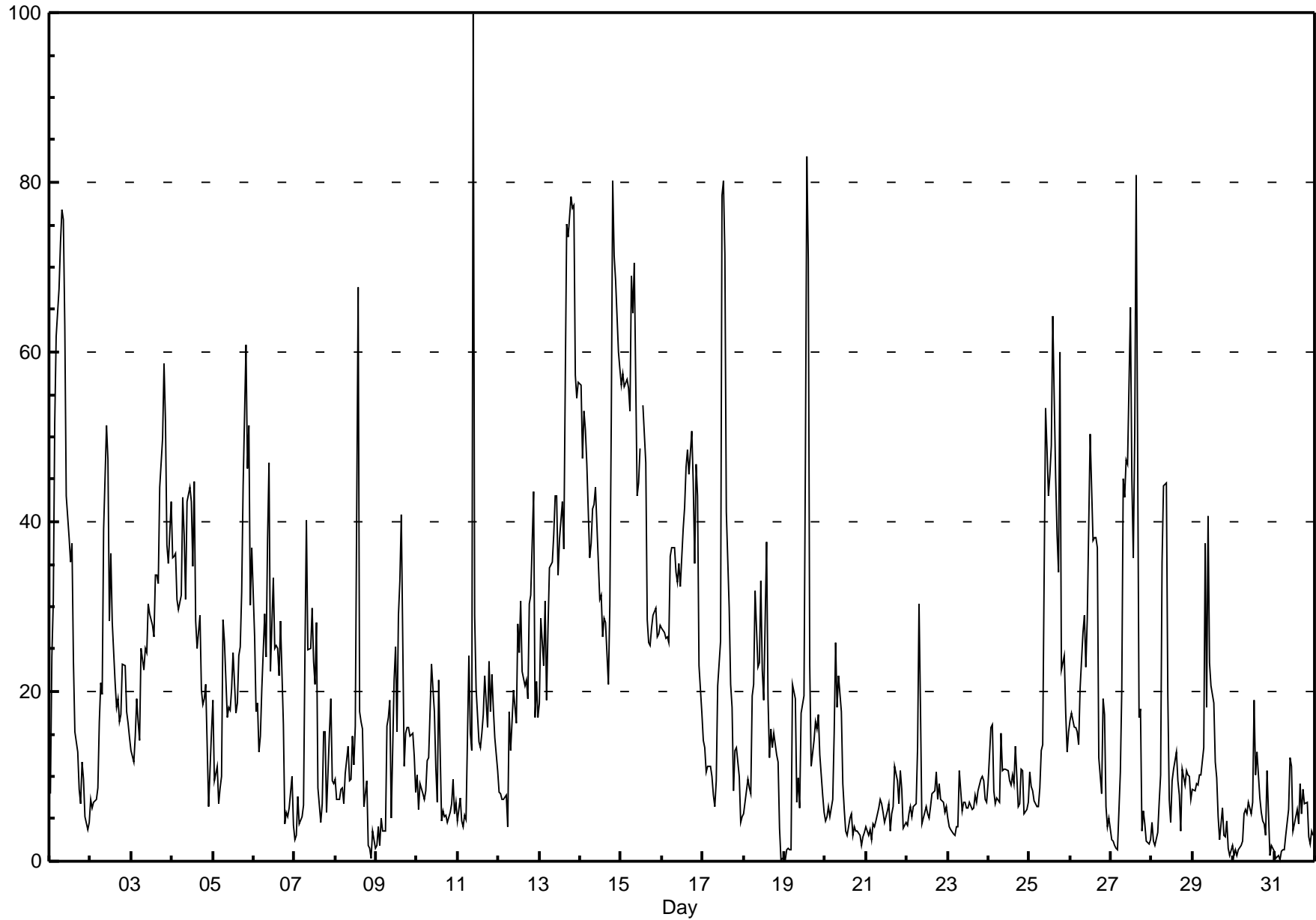
Evergreen Park - August 2014

Maximum Value: 99.9 µg/m ³ on Aug 11 10:00		Maximum Daily Average: 45.8 µg/m ³ on Aug 13		Hours in Service: 744																							
Minimum Value: 0 µg/m ³ on Aug 31 04:00		Minimum Daily Average: 4.4 µg/m ³ on Aug 31		Hours of Data: 743																							
Maximum Diurnal Average: 29.6 µg/m ³ at hour 14		Minimum Diurnal Average: 12.8 µg/m ³ at hour 1		Hours of Missing Data: 1																							
Monthly Average: 19.92 µg/m ³		Percentiles: P ₁ = 0.6 P ₁₀ = 3.7 Q ₁ = 6.7 Median = 14.6 Q ₃ = 28.4 P ₉₀ = 45.1 P ₉₉ = 78.0		Hours of Calibration: 0																							
				Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	8	24	31	52	62	67	73	77	76	63	43	38	35	37	24	15	13	8	7	12	10	5	4	5	32.8	76.8	
2-Aug	7	6	7	7	9	16	21	20	39	51	47	28	36	28	21	18	19	17	17	23	23	18	16	15	21.3	51.4	
3-Aug	13	12	15	19	16	14	25	23	25	25	30	29	28	26	34	34	33	44	50	59	52	37	35	42	30.0	58.7	
4-Aug	36	36	36	31	30	31	43	38	31	42	44	42	35	45	28	25	29	20	18	19	21	7	11	15	29.8	44.8	
5-Aug	19	9	11	7	9	10	28	26	17	18	18	20	25	17	19	24	25	32	44	61	46	51	30	37	25.2	60.9	
6-Aug	27	18	19	13	15	20	29	24	38	47	22	33	25	25	25	22	28	16	4	6	5	6	10	4	20.1	47.0	
7-Aug	3	3	8	4	5	7	25	40	25	25	30	24	21	28	9	5	7	15	15	6	15	19	9	9	14.8	40.1	
8-Aug	10	7	7	8	9	7	10	14	9	10	15	11	16	68	18	16	16	7	9	2	2	0	4	2	11.5	67.7	
9-Aug	2	4	2	5	4	4	16	17	19	5	21	25	15	29	33	41	11	15	16	16	15	15	12	8	14.6	40.9	
10-Aug	10	6	9	8	7	8	12	12	23	20	18	11	7	21	5	6	5	5	5	6	7	10	6	7	9.8	23.2	
11-Aug	5	7	5	4	5	5	24	15	13	100	29	20	14	13	15	17	22	16	24	18	22	18	15	11	18.2	99.9	
12-Aug	8	8	7	7	8	4	18	13	16	20	16	28	25	31	22	21	21	19	30	31	44	17	21	17	18.9	43.6	
13-Aug	19	29	23	31	19	27	35	35	38	43	43	34	38	42	37	56	75	74	78	77	77	57	55	56	45.8	78.2	
14-Aug	56	48	53	51	47	36	37	42	42	44	40	31	31	27	29	28	21	30	52	80	71	68	60	58	45.1	80.2	
15-Aug	56	57	56	57	56	53	69	65	70	43	45	49	M	54	47	28	26	26	27	29	30	26	27	28	44.5	70.4	
16-Aug	28	27	26	26	26	36	37	37	34	33	35	32	39	42	47	48	46	51	45	35	47	43	23	17	35.8	50.7	
17-Aug	14	13	10	11	11	10	8	7	9	21	26	78	80	72	41	30	21	18	8	13	13	10	5	5	22.3	80.2	
18-Aug	6	7	10	9	8	19	21	32	23	23	33	23	19	38	19	12	16	13	15	13	12	4	0	0	15.6	37.7	
19-Aug	0	1	2	1	1	21	19	7	10	6	17	19	48	83	71	23	11	14	16	16	17	13	8	6	18.0	83.1	
20-Aug	5	5	7	5	7	15	26	18	22	18	9	6	4	3	5	6	3	4	4	4	3	2	3	3	7.7	25.8	
21-Aug	4	3	4	3	4	4	5	6	7	7	6	5	6	7	4	6	7	11	9	7	11	8	4	5	5.9	11.2	
22-Aug	4	6	6	5	6	7	13	30	18	4	6	7	6	5	6	8	8	10	7	9	7	7	6	7	8.3	30.4	
23-Aug	5	4	4	3	3	4	4	11	6	7	7	6	6	7	6	6	8	7	8	10	10	9	7	7	6.5	10.7	
24-Aug	9	16	16	8	7	7	7	15	11	11	11	11	9	9	10	9	14	6	7	11	11	6	6	7	9.7	16.0	
25-Aug	10	9	8	7	7	6	9	13	14	53	48	43	46	49	64	45	38	34	60	23	24	17	13	15	27.4	64.3	
26-Aug	17	17	16	16	15	14	20	27	29	23	29	39	50	38	38	38	37	12	8	19	17	7	4	5	22.3	50.4	
27-Aug	3	2	2	2	1	10	20	45	43	47	47	65	45	36	50	81	17	18	4	6	4	2	2	3	23.2	80.9	
28-Aug	5	2	2	3	7	10	35	44	45	20	7	5	9	11	13	9	8	4	11	9	11	10	10	7	12.4	44.6	
29-Aug	8	8	9	9	10	10	13	37	18	41	23	21	19	12	10	5	3	6	3	3	5	2	1	2	11.6	40.7	
30-Aug	1	1	1	1	2	2	6	6	6	7	6	7	19	10	13	7	6	5	4	3	11	1	2	2	5.3	18.9	
31-Aug	1	0	1	0	1	1	1	3	6	12	11	4	4	6	4	9	6	8	7	7	3	2	4	3	4.4	12.1	
		12.8	12.8	13.3	13.4	13.4	15.8	22.9	25.8	25.2	28.7	25.2	25.7	25.3	29.6	24.7	22.6	19.3	18.3	19.8	20.3	20.8	16.1	13.2	13.2	Diurnal Average	
		56.0	57.5	56.0	56.7	61.9	67.5	72.9	76.8	75.6	99.9	48.4	78.5	80.2	83.1	70.9	80.9	75.1	73.6	78.2	80.2	77.2	68.5	60.0	58.0	Diurnal Maximum	
M - Maintenance																											

Hourly Maximums

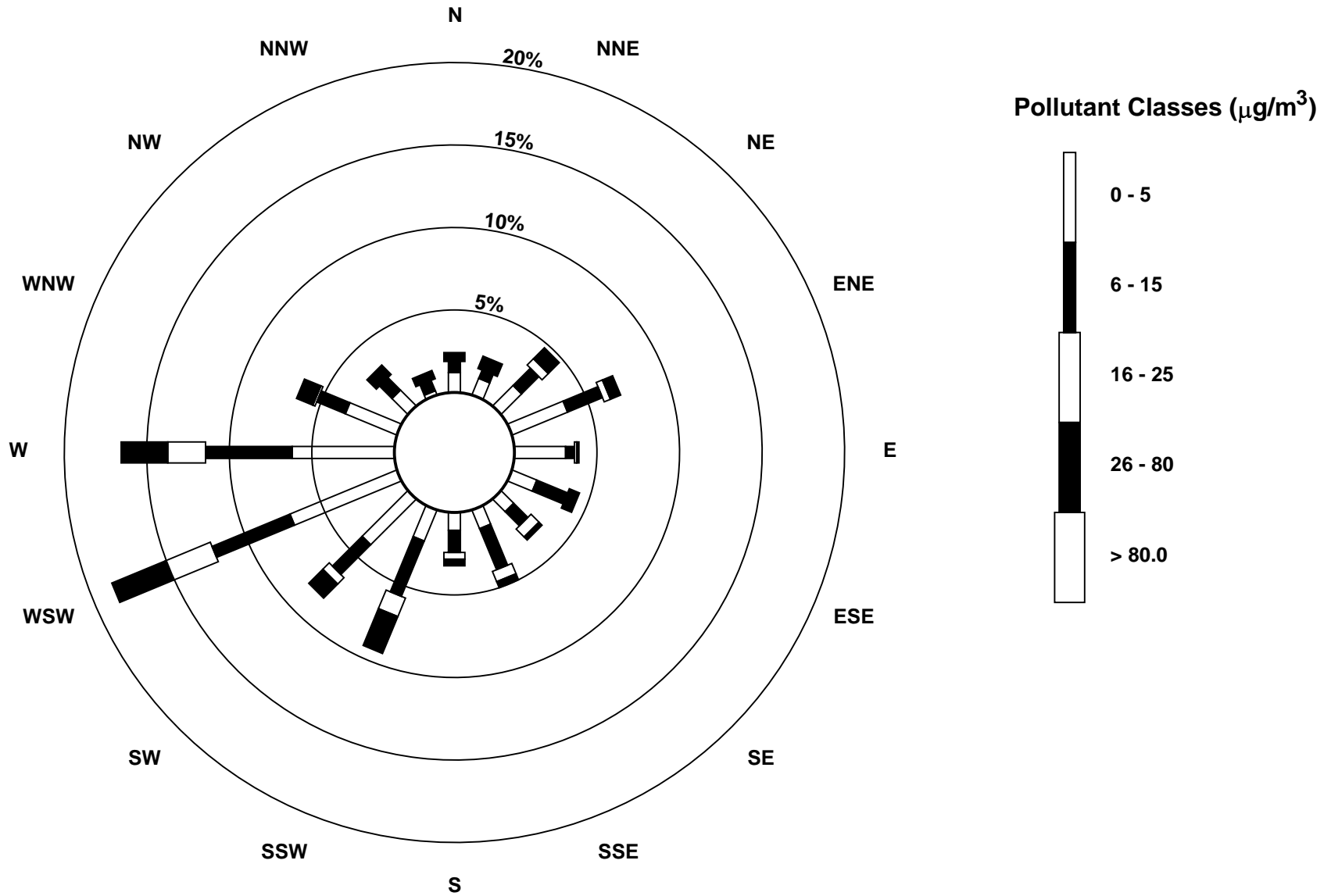
Particulate Matter 2.5 (PM_{2.5}) - μg/m³

Evergreen Park - August 2014



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Evergreen Park - August 2014





Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Evergreen Park - August 2014

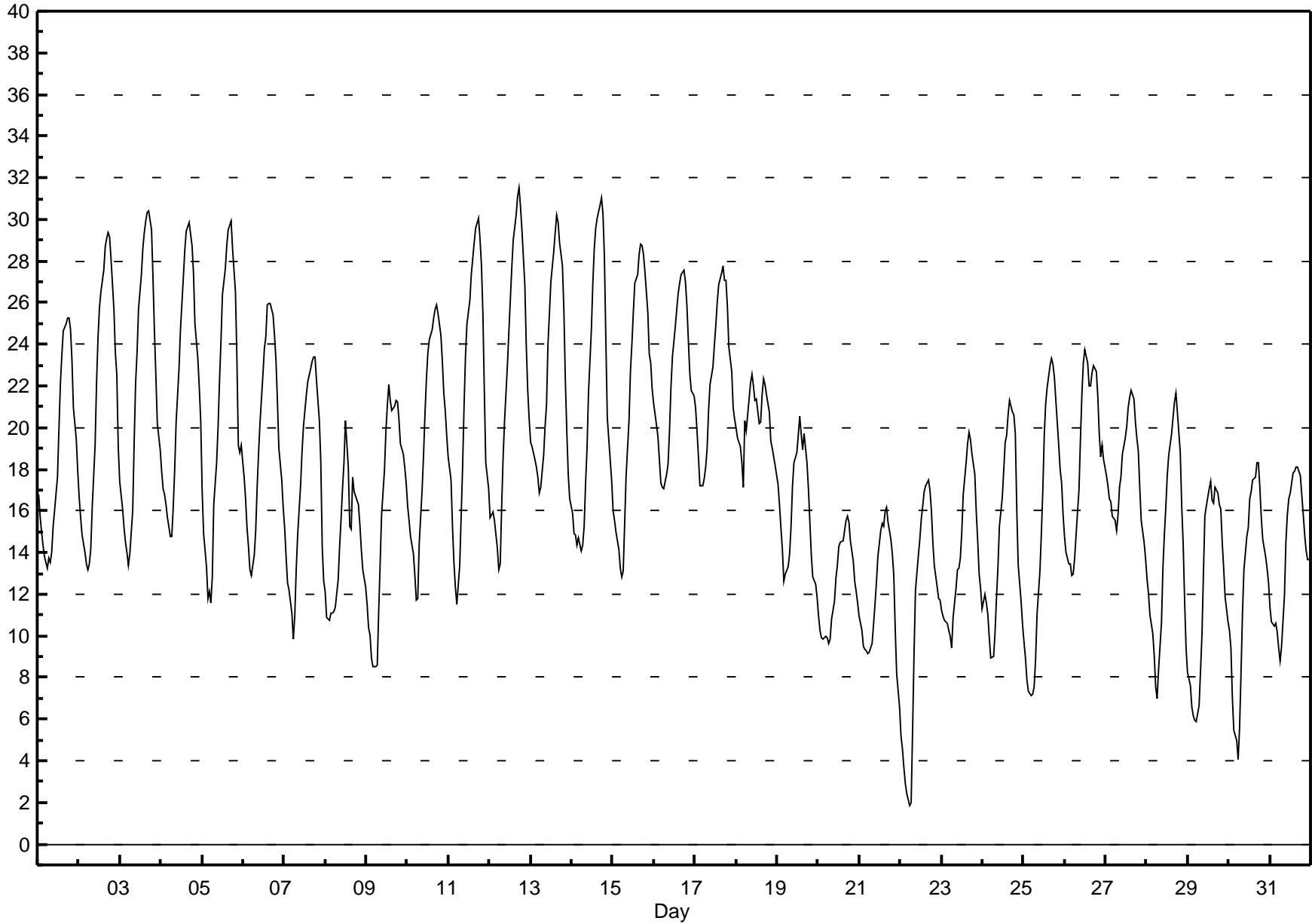
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 31.6 °C on Aug 12 18:00	Maximum Daily Average: 22.5 °C on Aug 13		Hours of Data:	744
Minimum Value: 2 °C on Aug 22 06:00	Minimum Daily Average: 10.8 °C on Aug 22		Hours of Missing Data:	0
Maximum Diurnal Average: 23.8 °C at hour 17	Minimum Diurnal Average: 11.6 °C at hour 6		Hours of Calibration:	0
Monthly Average: 17.80 °C	Percentiles: P ₁ = 5.0 P ₁₀ = 10.4 Q ₁ = 13.5 Median = 17.3 Q ₃ = 21.8 P ₉₀ = 26.2 P ₉₉ = 30.3		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-Aug	17	16	15	14	14	13	14	13	14	15	16	18	20	22	23	25	25	25	25	25	23	21	19	18	18.8	25.3
2-Aug	17	16	15	14	13	13	13	14	16	19	22	24	26	27	28	29	29	29	29	28	26	24	23	19	21.4	29.4
3-Aug	17	16	15	14	14	13	14	16	19	22	24	26	27	29	29	30	30	30	29	27	25	22	20	19	22.1	30.4
4-Aug	18	17	17	16	16	15	15	16	18	20	23	25	26	27	29	29	30	29	29	27	25	23	22	20	22.2	29.9
5-Aug	17	15	13	12	12	12	13	16	18	20	22	24	26	28	29	29	30	30	29	26	23	19	19	19	20.9	29.9
6-Aug	18	17	15	14	13	13	14	15	17	19	20	23	24	24	26	26	26	25	24	23	21	19	17	16	19.6	26.0
7-Aug	15	14	13	12	11	10	11	13	15	17	19	20	21	22	22	23	23	23	23	22	20	18	14	13	17.3	23.4
8-Aug	12	11	11	11	11	11	11	13	14	16	17	18	20	18	15	15	18	17	16	16	15	14	13	12	14.5	20.3
9-Aug	12	10	10	9	9	9	9	11	13	16	18	20	21	22	21	21	21	21	21	20	19	19	18	17	16.1	22.1
10-Aug	16	16	15	14	13	12	12	14	17	19	21	22	24	24	25	25	26	26	25	24	23	22	21	20	19.8	25.9
11-Aug	19	17	15	14	12	11	13	16	18	21	23	25	26	27	28	29	30	30	29	28	26	22	18	17	21.5	30.0
12-Aug	16	16	16	16	14	13	13	16	19	20	23	25	26	28	29	30	31	32	31	30	27	24	22	20	22.3	31.6
13-Aug	19	19	18	18	18	17	17	19	20	21	24	26	27	28	29	30	30	29	28	26	22	20	18	17	22.5	30.2
14-Aug	16	15	15	14	15	14	14	15	17	19	22	25	27	29	30	30	31	31	30	28	24	20	18	17	21.5	31.0
15-Aug	16	16	15	14	13	13	13	15	18	20	23	24	26	27	27	28	29	29	28	27	26	24	23	22	21.5	28.8
16-Aug	21	20	20	18	17	17	17	18	18	20	22	23	25	26	26	27	27	28	27	26	24	23	22	22	22.2	27.6
17-Aug	21	20	19	17	17	18	18	19	21	22	23	24	25	26	27	27	28	27	27	26	24	23	21	20	22.5	27.8
18-Aug	20	19	19	18	17	20	20	21	22	23	22	21	21	20	20	22	22	22	22	21	19	19	19	18	20.3	22.5
19-Aug	17	16	15	14	13	13	13	14	15	17	18	19	20	21	20	19	20	18	17	15	14	13	12	12	16.1	20.6
20-Aug	11	10	10	10	10	10	10	10	11	12	13	13	14	15	15	15	16	16	15	15	14	13	12	12	12.4	15.7
21-Aug	11	10	9	9	9	9	9	10	11	11	13	14	15	15	16	16	16	16	15	14	13	10	8	7	11.9	16.2
22-Aug	5	5	4	3	2	2	2	5	9	12	14	15	16	16	17	17	18	17	16	14	13	12	12	12	10.8	17.5
23-Aug	11	11	11	11	10	10	9	11	12	13	13	14	15	17	18	19	20	19	19	18	16	15	13	12	14.1	19.8
24-Aug	11	12	12	11	10	9	9	10	12	13	15	17	18	19	20	21	21	21	21	20	16	13	12	11	14.7	21.3
25-Aug	10	9	8	7	7	7	8	9	11	13	15	17	20	21	22	23	23	23	22	21	19	18	17	16	15.3	23.3
26-Aug	15	14	13	13	13	13	14	16	17	19	22	23	24	23	22	22	23	23	23	22	20	19	19	18	18.7	23.8
27-Aug	18	17	17	16	16	16	15	16	17	18	19	19	20	21	21	22	21	20	20	19	17	16	14	14	17.8	21.8
28-Aug	13	12	11	10	9	8	7	8	11	13	15	16	18	19	20	20	21	22	21	19	16	14	12	9	14.3	21.6
29-Aug	8	8	7	6	6	6	7	8	10	13	16	16	17	17	17	16	17	17	16	16	14	13	12	11	12.3	17.4
30-Aug	10	9	7	5	5	4	6	8	11	13	15	15	17	17	17	18	18	18	17	16	15	14	13	13	12.6	18.3
31-Aug	11	11	10	11	10	9	9	9	12	14	16	17	17	18	18	18	18	18	18	16	15	14	14	14	14.0	18.1

14.8	14.0	13.2	12.5	11.9	11.6	11.9	13.4	15.3	17.2	18.9	20.2	21.5	22.3	22.8	23.3	23.8	23.6	23.0	21.8	19.8	18.0	16.7	15.7		Diurnal Average
21.1	20.1	19.6	18.5	17.6	20.4	19.9	20.6	22.1	22.5	24.0	25.7	27.3	28.6	29.6	30.2	31.1	31.6	30.6	29.5	26.8	24.0	23.1	21.8		Diurnal Maximum

Hourly Averages

External Temperature (ET) - °C
Evergreen Park - August 2014



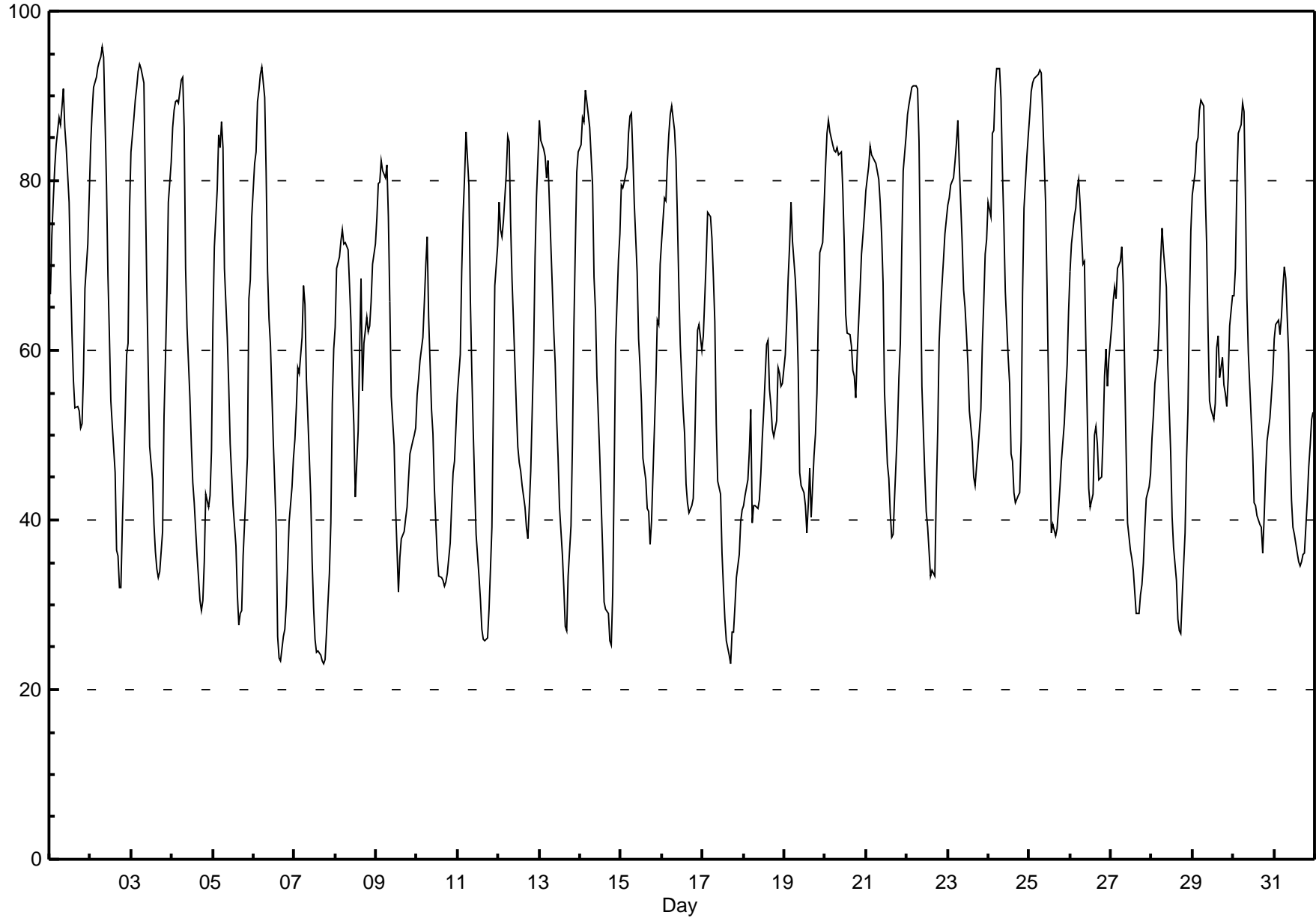
Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0		Hours in Service: 744																								
Maximum Value: 95.8 % on Aug 2 08:00		Maximum Daily Average: 73.3 % on Aug 20																								
Minimum Value: 23 % on Aug 17 17:00		Hours of Data: 744																								
Maximum Diurnal Average: 81.7 % at hour 6		Hours of Missing Data: 0																								
Monthly Average: 59.39 %		Hours of Calibration: 0																								
Minimum Daily Average: 42.1 % on Aug 7		Percent Operational Time: 100.0																								
Minimum Diurnal Average: 37.6 % at hour 17																										
Percentiles: P ₁ = 24.0 P ₁₀ = 34.2 Q ₁ = 43.0 Median = 59.0 Q ₃ = 75.8 P ₉₀ = 85.9 P ₉₉ = 93.3																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	67	74	78	82	84	88	87	89	91	86	84	77	69	62	56	53	53	53	51	51	57	67	73	78	71.2	90.8
2-Aug	84	88	91	92	93	94	95	96	95	79	69	62	54	51	46	36	36	32	32	39	52	59	61	76	67.2	95.8
3-Aug	83	87	89	91	93	94	93	91	80	68	58	49	45	40	36	34	33	34	39	52	59	67	77	82	65.6	93.8
4-Aug	86	88	89	90	89	92	92	86	70	63	54	49	44	42	39	36	30	29	31	35	43	42	43	48	58.8	92.3
5-Aug	63	72	79	85	84	87	84	70	61	56	49	45	42	37	31	28	29	29	36	43	48	66	68	76	57.0	86.9
6-Aug	82	83	89	91	93	93	90	81	69	64	61	49	44	39	26	24	23	26	27	30	35	40	44	47	56.3	93.3
7-Aug	50	53	58	57	62	68	65	57	52	43	35	30	26	24	25	24	23	23	27	34	40	54	60	60	42.1	67.6
8-Aug	63	70	71	73	74	73	73	72	68	63	56	51	43	50	60	69	55	61	64	62	63	66	70	72	64.2	74.2
9-Aug	76	80	80	82	81	80	82	76	66	55	49	42	37	31	36	38	39	40	41	45	48	49	50	51	56.3	82.3
10-Aug	55	57	59	61	66	70	73	64	53	50	44	40	36	33	33	33	32	33	34	37	42	46	47	51	47.8	73.4
11-Aug	55	60	69	76	80	86	80	66	58	51	44	38	33	31	27	26	26	26	30	34	39	54	68	72	51.2	85.8
12-Aug	78	74	73	75	81	85	85	75	68	63	53	49	47	46	44	42	39	38	42	46	60	71	78	83	62.2	85.2
13-Aug	87	85	84	83	80	82	77	68	62	58	52	47	42	36	32	27	27	33	39	49	63	72	81	83	60.4	87.1
14-Aug	84	87	87	91	89	86	83	80	69	65	57	48	42	37	30	30	29	26	25	31	45	61	71	74	59.4	90.6
15-Aug	80	79	80	81	86	88	88	83	77	69	61	58	54	47	45	41	41	37	40	45	56	63	63	70	63.9	88.0
16-Aug	73	78	78	82	86	88	89	86	83	75	67	61	53	50	44	42	41	42	43	48	57	62	63	60	64.6	88.8
17-Aug	62	66	71	76	76	73	69	63	51	45	43	36	32	28	26	24	23	27	27	30	33	36	40	41	45.7	76.2
18-Aug	42	43	45	48	53	40	42	42	41	42	45	50	53	61	61	55	54	51	50	52	58	57	56	56	49.8	61.2
19-Aug	59	63	69	72	77	73	68	64	58	46	44	43	42	38	42	46	40	48	50	55	64	72	73	77	57.7	77.4
20-Aug	82	86	87	86	84	84	83	84	83	83	79	73	64	62	62	60	58	57	54	60	67	71	74	76	73.3	87.1
21-Aug	79	82	84	83	83	82	82	80	77	74	68	55	47	45	41	38	38	43	51	57	61	72	81	85	66.1	85.3
22-Aug	88	89	90	91	91	91	91	85	70	56	46	41	39	36	33	34	33	43	51	61	65	71	74	75	64.3	91.2
23-Aug	77	78	79	80	82	84	87	82	73	67	65	62	58	53	49	45	44	46	48	53	60	66	71	73	66.0	87.1
24-Aug	77	76	86	86	91	93	93	90	81	75	67	59	56	48	47	43	42	43	43	49	67	77	83	85	69.1	93.2
25-Aug	88	90	92	92	92	93	93	93	88	77	68	56	48	39	40	38	39	41	44	47	51	55	58	65	66.1	93.0
26-Aug	69	73	76	77	79	80	77	70	70	61	52	44	42	43	50	51	49	45	45	50	57	60	56	59	59.8	80.2
27-Aug	63	66	68	66	70	71	72	68	58	48	40	36	35	34	32	29	29	31	32	35	39	43	44	45	48.0	72.2
28-Aug	50	52	56	59	63	71	74	72	67	58	53	48	40	37	33	28	27	27	31	39	47	53	65	74	51.0	74.3
29-Aug	78	81	84	85	88	89	89	79	73	62	54	53	52	54	60	62	57	59	56	55	53	57	63	66	67.1	89.4
30-Aug	66	70	80	86	87	89	88	78	66	60	52	48	42	42	40	39	39	36	40	45	49	52	55	57	58.6	89.1
31-Aug	61	63	64	62	64	67	70	69	60	49	42	39	38	36	35	35	35	36	36	42	46	49	52	53	50.1	69.8
		71.2	73.9	76.9	78.8	80.7	81.7	81.1	76.0	69.0	61.6	55.2	49.6	45.1	42.3	40.7	39.1	37.6	38.5	40.5	45.3	52.2	58.5	63.0	66.9	Diurnal Average
		87.9	90.5	91.6	92.3	93.3	94.1	94.6	95.8	94.6	86.3	83.9	77.4	68.9	62.1	61.9	68.5	57.6	60.9	64.0	62.1	67.1	76.8	82.9	85.4	Diurnal Maximum

Hourly Averages

**Relative Humidity (RH) - %
Evergreen Park - August 2014**





Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	8	7	5	6	3	2	2	8	7	7	7	8	10	12	11	10	9	11	10	8	5	4	5	4	6.4	12.2
Dir	49	52	52	55	55	14	41	62	84	107	61	66	64	79	73	111	116	111	107	113	91	87	87	72	80.8	78.7
2 Spd	3	2	1	1	0	1	2	3	3	5	2	5	6	7	7	6	6	7	6	6	5	6	3	2	2.7	7.0
Dir	70	61	49	38	9	215	213	207	223	290	325	166	165	195	176	207	214	182	197	163	160	174	178	47	185.4	194.7
3 Spd	0	1	0	3	0	1	2	4	3	3	4	7	10	11	7	7	3	3	4	1	2	1	0	2	2.8	10.7
Dir	27	61	69	209	148	155	212	209	245	225	192	208	203	209	214	189	245	223	173	335	4	210	34	226	208.7	208.9
4 Spd	1	4	3	3	2	1	3	5	7	2	2	5	7	9	11	11	10	13	9	6	6	8	6	4	4.5	12.5
Dir	183	213	205	211	206	214	193	199	249	328	156	158	144	145	147	134	160	125	123	105	104	138	130	109	149.0	124.6
5 Spd	3	1	2	2	2	2	3	6	11	12	11	10	10	9	7	7	4	2	3	6	26	21	10	7	3.9	26.1
Dir	51	57	37	55	73	60	69	127	141	166	158	161	137	171	207	200	105	189	231	280	236	225	295	280	192.9	235.6
6 Spd	7	2	2	1	2	4	7	8	13	13	10	17	21	23	24	26	26	27	27	23	15	10	10	11	12.9	27.2
Dir	205	158	207	192	224	215	264	279	260	275	289	275	263	260	274	282	280	285	284	287	271	275	248	250	271.5	284.9
7 Spd	9	7	2	7	1	2	3	8	12	22	27	23	27	22	20	16	15	15	15	13	6	3	0	2	11.1	27.3
Dir	265	290	278	269	247	235	296	285	314	279	268	264	269	283	295	297	294	299	295	289	276	246	168	205	281.6	267.8
8 Spd	0	0	3	2	1	4	2	1	5	11	8	13	7	11	24	9	16	21	20	21	14	13	10	7	8.7	23.8
Dir	174	198	193	191	46	153	76	163	199	205	196	206	241	251	229	196	214	223	230	225	227	230	231	220	219.9	229.3
9 Spd	2	2	3	5	5	3	3	1	7	17	17	16	21	25	21	15	11	10	11	11	10	3	7	10	9.2	24.7
Dir	238	306	323	338	325	267	208	345	259	252	261	278	267	268	250	261	272	243	241	234	229	275	256	251	260.4	267.8
10 Spd	7	8	5	3	3	5	4	8	19	18	23	26	27	34	24	26	31	25	27	18	8	9	10	9	15.0	33.6
Dir	239	244	260	258	254	215	204	240	255	249	253	262	273	273	292	267	260	274	268	258	240	234	232	235	260.3	273.1
11 Spd	7	3	1	1	1	3	2	10	10	8	7	8	10	8	8	9	3	4	9	7	4	1	2	1	2.8	10.5
Dir	230	232	1	192	201	206	223	253	260	281	258	255	277	268	296	299	355	164	131	117	102	62	47	48	254.1	259.8
12 Spd	1	3	3	3	0	1	1	1	5	5	8	7	7	6	4	3	5	2	7	3	0	0	1	1	1.8	7.6
Dir	36	70	73	80	10	48	343	116	166	213	139	160	161	106	161	200	155	31	45	47	41	230	52	230	126.9	138.7
13 Spd	1	4	3	6	8	5	5	11	10	10	12	15	16	16	18	16	19	10	5	1	3	0	1	1	7.8	19.1
Dir	279	243	262	288	267	268	276	256	260	246	244	256	262	264	250	246	251	261	226	197	199	5	218	191	254.7	251.4
14 Spd	3	0	3	5	4	2	3	6	7	9	13	17	15	14	16	15	10	7	6	4	1	0	1	0	5.3	16.9
Dir	214	207	196	201	200	205	212	210	254	256	249	252	244	254	273	259	238	322	19	43	167	49	9	2	251.4	251.8
15 Spd	1	0	1	1	0	0	3	2	3	3	4	10	11	8	8	9	8	9	4	1	1	2	3	1	3.1	10.9
Dir	21	336	342	193	306	304	202	215	23	53	109	132	112	108	122	133	126	135	141	102	59	58	86	33	118.4	111.9
16 Spd	1	1	0	1	1	4	5	7	8	11	13	17	20	20	21	17	16	13	15	7	6	7	9	13	8.9	20.6
Dir	26	42	209	35	175	285	235	267	286	269	263	252	270	269	270	298	290	294	313	298	242	255	255	254	274.1	269.7
17 Spd	10	5	4	1	1	3	4	7	18	31	28	31	28	24	22	22	25	20	19	17	16	17	15	17	15.4	31.2
Dir	263	309	282	346	352	319	314	282	267	258	256	261	257	258	248	261	268	275	273	255	253	244	232	228	259.6	258.1
18 Spd	16	14	5	2	7	20	18	25	32	34	32	32	30	24	19	16	18	30	34	24	22	13	19	16	20.5	34.1
Dir	226	225	233	213	206	242	235	249	254	256	255	255	254	256	250	240	244	261	257	258	257	245	254	260	250.2	256.3
19 Spd	16	12	5	4	4	14	11	12	14	20	20	21	19	17	22	18	13	18	30	12	9	13	8	9	12.0	30.3
Dir	254	253	321	295	228	255	276	299	291	289	298	318	313	291	312	10	6	351	340	331	309	319	309	287	308.4	340.1
20 Spd	8	4	6	10	11	12	15	15	11	8	10	15	15	8	7	9	7	5	5	5	5	4	4	4	5.0	15.4
Dir	285	262	272	260	271	281	272	276	279	290	304	329	349	22	25	18	13	35	18	61	86	82	78	75	315.6	328.9
21 Spd	3	3	3	3	3	5	5	7	6	7	7	10	7	6	12	12	11	8	6	3	3	2	1	1	5.1	12.4
Dir	75	73	66	68	73	70	66	73	73	72	96	127	79	81	82	99	107	99	147	158	114	54	39	51	90.5	98.6
22 Spd	0	0	1	1	0	0	0	3	2	3	9	12	11	12	10	5	9	11	12	10	4	3	3	4	4.1	12.3
Dir	3	6	51	18	25	254	268	206	193	67	108	111	95	93	128	88	149	173	177	174	166	119	105	108	130.1	93.3

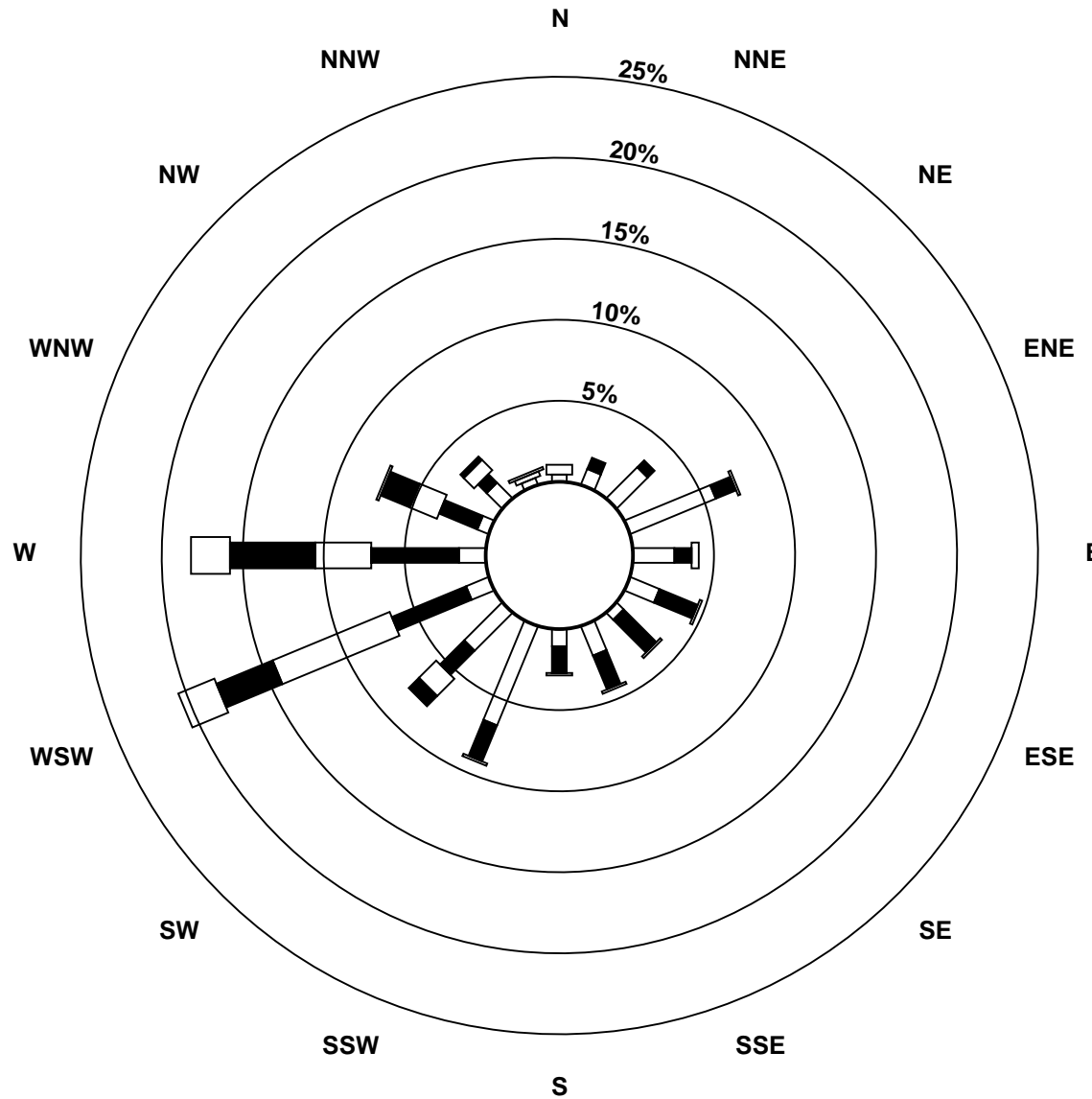
Hourly Averages

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

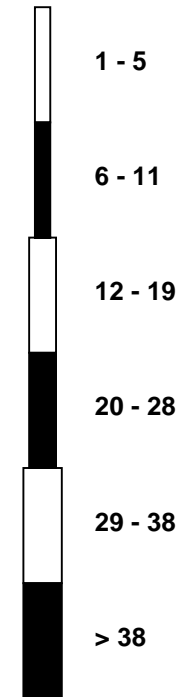
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	4	3	3	3	4	5	4	5	11	7	9	10	7	6	6	5	4	7	5	3	3	4	4	5	3.8	10.9
Dir	80	79	67	78	81	78	80	94	119	155	170	184	175	167	96	120	85	64	62	51	60	66	68	81	108.1	119.3
24 Spd	4	1	4	1	1	2	2	1	3	5	4	8	8	9	6	6	4	5	6	2	0	1	0	1	2.5	8.5
Dir	68	99	106	59	6	38	68	5	65	57	155	145	155	180	166	157	138	88	132	142	359	44	23	159	127.7	179.7
25 Spd	1	1	1	1	1	0	0	1	3	2	11	13	14	29	23	18	17	18	17	19	26	22	18	6	10.4	28.8
Dir	188	200	218	220	212	103	239	173	194	267	243	252	243	239	252	251	254	277	261	262	262	264	253	203	252.5	239.2
26 Spd	3	2	1	0	2	0	2	8	5	21	29	33	33	31	18	19	23	24	21	11	6	8	21	23	13.7	33.2
Dir	207	105	84	159	76	99	187	245	259	255	260	268	269	257	251	252	251	263	259	259	240	228	246	250	255.5	267.7
27 Spd	19	15	16	17	8	5	5	12	20	21	33	37	33	26	29	34	31	28	22	19	11	11	11	11	19.4	36.9
Dir	249	252	245	253	251	262	264	267	266	276	267	254	255	249	264	274	281	287	281	277	272	269	256	259	264.9	253.5
28 Spd	12	9	8	8	7	8	8	8	5	3	5	5	6	10	9	7	7	4	8	3	3	2	1	2	4.3	12.5
Dir	255	293	309	276	281	290	274	271	316	258	221	201	220	231	254	279	247	196	145	136	114	176	14	61	256.7	254.8
29 Spd	0	0	1	1	2	0	2	6	1	1	5	10	8	15	17	13	9	15	17	13	10	13	12	8	6.3	16.7
Dir	71	219	219	192	204	76	214	292	27	225	219	238	280	301	315	305	296	254	253	256	261	250	234	216	265.5	315.3
30 Spd	8	0	2	0	1	3	2	6	13	12	23	30	35	36	34	31	26	29	27	23	19	22	18	19	17.1	35.9
Dir	246	218	202	164	177	196	209	221	229	257	254	248	253	245	257	254	252	268	268	256	256	252	251	251	252.3	245.2
31 Spd	15	17	19	24	23	20	19	19	25	34	28	25	23	25	31	27	30	33	32	24	23	20	15	22	23.3	33.5
Dir	251	245	244	246	245	248	251	256	262	268	280	291	283	282	269	272	264	260	260	261	264	265	248	258	262.7	268.0
Spd	3.5	2.4	1.7	2.3	1.9	2.8	3.0	4.9	6.5	8.9	9.9	11.0	10.9	11.5	10.5	8.7	8.9	8.5	8.3	6.7	6.2	5.5	5.2	5.1	Diurnal Average	
Dir	247.7	254.4	258.5	256.5	248.2	251.6	250.8	255.6	256.7	259.6	254.4	252.2	257.6	254.9	260.0	261.8	257.8	265.5	263.2	257.3	249.6	247.7	247.5	246.0	Diurnal Maximum	
Spd	19.0	17.4	19.2	23.5	23.0	20.2	19.3	24.5	32.3	34.1	32.9	36.9	35.5	35.9	33.6	34.4	30.7	32.7	33.7	24.2	26.1	21.6	21.1	23.0	Diurnal Maximum	
Dir	249.5	245.0	243.5	246.4	244.6	247.9	251.2	249.2	253.7	256.3	266.6	253.5	253.0	245.2	257.0	273.5	281.5	259.6	257.1	258.3	235.6	251.7	246.3	250.0	Diurnal Maximum	
Maximum Speed Value: 37 km/h on Aug 27 12:00		Minimum Speed Value: 0 km/h on Aug 15 05:00		Hours in Service: 744																						
Maximum Daily Speed Average: 23.3 km/h on Aug 31		Minimum Daily Speed Average: 1.8 km/h on Aug 12		Hours of Data: 744																						
Maximum Diurnal Speed Average: 11.5 km/h at hour 14		Minimum Diurnal Speed Average: 1.7 km/h at hour 3		Hours of Missing Data: 0																						
Monthly Average Velocity: 6.42 km/h 255.92 deg				Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.9 Q ₁ = 3.1 Median = 7.1 Q ₃ = 15.0 P ₉₀ = 23.4 P ₉₉ = 33.6				Percent Operational Time: 100.0																		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
Direction	Speed Range (km/h)							Total																		
	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38																				
North	24	4	4	0	1	0	33																			
NorthEast	56	12	0	0	0	0	68																			
East	51	22	6	0	0	0	79																			
SouthEast	14	32	1	0	0	0	47																			
South	48	30	2	0	0	0	80																			
SouthWest	59	45	22	11	2	0	139																			
West	18	58	74	68	33	0	251																			
NorthWest	16	11	15	5	0	0	47																			
Total	286	214	124	84	36	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - August 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - August 2014

Maximum Speed: 37 km/h on Aug 27 12:00	Maximum Daily Speed Average: 24.5 km/h on Aug 31	Hours in Service: 744
Minimum Speed: 0 km/h on Aug 13 22:00	Minimum Daily Speed Average: 4.3 km/h on Aug 3	Hours of Data: 744
Maximum Diurnal Speed Average: 18.2 km/h at hour 14	Minimum Diurnal Speed Average: 4.1 km/h at hour 5	Hours of Missing Data: 0
Monthly Average Speed: 10.64 km/h	Percentiles: P ₁ = 0.5 P ₁₀ = 1.7 Q ₁ = 3.6 Median = 8.5 Q ₃ = 15.5 P ₉₀ = 24.0 P ₉₉ = 34.1	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-Aug	9	7	5	6	4	3	2	8	8	8	8	11	11	14	13	12	11	12	11	9	5	4	5	4	7.8	13.8
2-Aug	3	2	1	1	1	1	2	4	4	6	4	8	9	9	9	8	9	8	7	6	5	6	4	2	4.9	9.2
3-Aug	1	1	2	3	2	2	3	4	4	4	5	8	12	12	9	8	6	4	4	2	2	2	2	3	4.3	11.8
4-Aug	2	4	3	3	2	1	3	5	7	3	4	7	9	10	13	12	11	13	9	6	6	8	6	4	6.5	13.3
5-Aug	3	1	2	2	3	2	3	6	11	13	12	12	11	12	9	9	6	5	6	7	27	26	16	8	8.8	26.7
6-Aug	7	3	4	2	2	4	7	8	14	14	11	19	22	24	26	27	27	28	27	23	16	11	10	12	14.5	28.1
7-Aug	10	9	5	7	2	3	4	9	13	23	28	24	28	24	21	19	17	17	16	13	7	3	1	2	12.8	28.4
8-Aug	2	1	3	2	2	4	3	1	5	11	9	14	12	13	24	10	17	21	20	21	14	13	10	7	10.0	24.1
9-Aug	3	3	4	5	5	4	3	2	8	17	18	18	23	26	22	16	12	11	11	12	10	4	7	11	10.6	26.2
10-Aug	7	8	5	4	3	5	4	8	19	19	23	27	28	35	26	27	32	26	28	18	8	10	10	9	16.3	35.3
11-Aug	7	4	2	2	1	3	2	10	11	10	9	10	13	11	12	11	7	6	10	7	4	1	2	1	6.6	13.2
12-Aug	1	3	3	3	1	1	1	2	7	6	9	10	10	8	9	7	7	5	7	3	0	1	2	2	4.5	9.9
13-Aug	2	5	4	7	9	5	5	11	10	10	12	16	16	17	18	16	20	10	5	1	3	0	1	1	8.6	19.5
14-Aug	3	1	3	5	4	3	3	6	7	9	13	17	16	15	18	16	11	9	7	4	3	2	1	1	7.4	17.9
15-Aug	1	1	2	2	2	0	4	2	4	4	8	12	12	11	9	11	9	10	5	1	2	2	3	1	4.9	12.4
16-Aug	1	1	0	1	2	5	6	7	8	11	14	17	21	21	21	18	16	14	15	8	6	7	9	13	10.2	21.5
17-Aug	10	6	4	2	1	3	4	8	19	32	29	32	29	25	23	24	27	21	19	17	16	17	15	17	16.6	31.9
18-Aug	16	14	6	3	8	20	18	25	33	34	33	32	31	25	19	17	19	30	34	24	23	13	19	16	21.3	34.4
19-Aug	16	12	6	5	4	14	13	13	15	21	23	23	21	20	25	20	14	19	31	12	10	14	9	10	15.3	30.7
20-Aug	9	5	6	10	11	12	15	15	11	8	11	16	16	9	9	10	8	6	5	5	5	4	4	4	9.0	16.3
21-Aug	3	3	3	3	3	5	6	7	7	7	8	11	10	9	14	14	13	10	7	4	3	2	1	1	6.4	14.1
22-Aug	1	0	1	1	1	1	1	4	3	5	11	14	14	14	12	9	11	11	13	11	5	3	3	4	6.3	14.4
23-Aug	4	3	3	4	4	5	4	5	12	8	10	11	9	10	11	9	8	9	5	3	3	4	4	5	6.4	11.9
24-Aug	4	4	5	2	2	2	2	1	4	6	6	10	10	11	8	9	6	7	6	2	1	1	1	1	4.7	10.8
25-Aug	1	1	1	1	1	0	1	1	3	3	11	14	15	30	24	18	18	18	18	19	26	22	18	7	11.4	29.7
26-Aug	3	3	2	1	2	1	3	9	6	21	29	35	34	32	18	19	24	26	22	12	7	8	21	23	15.0	34.5
27-Aug	19	16	16	17	8	5	6	12	20	22	34	37	34	27	30	36	32	29	23	19	12	11	11	11	20.4	37.4
28-Aug	13	10	9	9	8	8	8	8	6	5	7	7	9	12	12	10	10	6	8	3	3	2	2	2	7.4	12.6
29-Aug	1	1	1	1	2	1	3	7	4	4	7	11	10	17	18	14	11	15	17	14	11	13	12	9	8.5	17.6
30-Aug	8	4	2	1	3	3	2	6	14	12	24	31	37	37	35	32	27	30	27	23	19	22	18	19	18.1	36.6
31-Aug	15	18	19	24	23	20	19	19	26	34	30	27	25	27	32	28	31	33	32	24	24	20	16	23	24.5	34.1
	6.0	4.9	4.2	4.5	4.1	4.8	5.2	7.6	10.5	12.6	14.9	17.4	17.9	18.2	17.8	16.1	15.3	15.1	14.7	10.8	9.1	8.3	7.8	7.5	Diurnal Average	
	19.1	17.6	19.4	23.7	23.2	20.4	19.4	24.7	32.5	34.4	33.8	37.4	36.6	36.6	35.0	35.8	31.8	33.1	34.0	24.5	26.7	26.0	21.2	23.2	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - August 2014

Maximum Value: 99.8 deg on Aug 25 01:00																						Hours in Service:	744		
Minimum Value: 4.9 deg on Aug 8 22:00																						Hours of Data:	744		
Percentiles: P ₁ = 6.7 P ₁₀ = 10.6 Q ₁ = 15.4 Median = 25.4 Q ₃ = 49.7 P ₉₀ = 73.0 P ₉₉ = 93.2																						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-Aug	14	15	15	28	40	69	35	28	33	36	33	41	29	30	38	35	35	31	25	22	11	11	11	12	68.7
2-Aug	15	23	39	59	58	61	34	23	55	51	74	66	64	48	57	58	55	36	43	16	20	12	74	63	73.7
3-Aug	67	54	94	50	87	66	77	18	32	61	41	43	33	29	55	35	61	65	21	58	41	84	68	91	93.6
4-Aug	73	33	24	31	38	76	42	14	19	59	85	55	48	33	34	32	37	20	14	13	16	23	19	19	84.9
5-Aug	26	56	24	18	32	28	22	21	22	21	30	32	37	49	51	41	63	86	64	50	12	56	66	29	86.0
6-Aug	28	71	70	86	67	62	20	23	16	14	28	23	23	16	18	18	17	15	13	14	13	31	44	21	85.5
7-Aug	25	34	70	20	69	57	34	25	29	17	17	21	14	25	23	29	33	25	19	15	20	57	89	33	89.4
8-Aug	78	86	26	74	59	63	46	73	18	13	23	18	59	46	9	35	12	9	7	6	5	8	12	12	85.5
9-Aug	64	48	24	22	20	43	27	96	38	12	18	23	21	21	17	18	25	21	18	18	13	23	18	16	96.0
10-Aug	10	8	18	15	48	14	20	54	12	13	14	18	17	18	20	21	16	17	13	11	13	19	10	17	54.4
11-Aug	21	81	80	80	74	40	57	11	23	32	49	44	45	48	60	47	87	58	33	15	11	78	73	40	86.7
12-Aug	49	15	25	24	87	91	79	82	38	45	41	55	50	63	74	81	55	76	16	16	63	87	75	89	91.3
13-Aug	88	21	32	28	25	28	24	13	16	18	17	16	15	24	16	18	12	14	24	82	43	60	80	84	87.9
14-Aug	55	98	30	24	17	38	38	7	19	28	14	14	15	23	26	28	34	53	28	14	75	80	41	70	98.0
15-Aug	74	92	84	87	86	77	78	74	49	44	64	36	31	50	33	49	36	31	23	40	61	51	16	24	91.7
16-Aug	47	34	80	67	76	42	41	25	24	15	15	13	16	20	17	24	16	19	13	19	14	18	12	8	79.8
17-Aug	11	39	28	71	43	26	18	27	13	9	13	13	14	14	19	21	19	15	16	10	8	10	8	5	70.9
18-Aug	5	6	53	55	23	10	12	7	7	8	8	7	9	11	14	16	14	11	8	9	12	11	8	10	55.2
19-Aug	7	9	35	50	31	12	29	23	24	20	28	25	25	27	28	25	28	19	10	27	17	18	18	21	50.3
20-Aug	18	31	20	12	17	14	10	14	16	25	29	21	22	36	34	29	34	51	28	32	23	21	19	19	51.3
21-Aug	22	20	21	20	20	20	18	29	26	34	41	37	59	66	28	30	33	35	38	33	34	11	63	87	87.2
22-Aug	55	31	58	34	80	94	89	54	61	69	46	40	38	35	43	67	40	24	19	17	28	38	12	13	94.2
23-Aug	14	11	13	18	16	14	11	31	27	48	28	28	52	63	62	73	69	42	20	15	16	23	11	12	73.1
24-Aug	18	97	64	56	79	30	45	48	39	34	65	50	52	45	46	52	68	52	22	67	54	23	91	72	96.6
25-Aug	100	63	80	46	37	89	88	61	29	71	24	17	29	15	17	13	24	17	14	10	8	10	10	22	99.8
26-Aug	46	51	54	75	45	87	65	36	59	11	13	16	15	10	9	11	10	17	17	21	38	37	8	8	87.2
27-Aug	8	11	9	8	15	18	30	14	14	16	13	11	13	16	18	16	15	15	14	12	11	9	10	10	30.4
28-Aug	8	25	17	27	23	20	15	16	38	66	54	62	68	45	53	59	50	62	28	20	23	49	61	35	68.4
29-Aug	82	90	94	46	46	80	58	47	94	90	52	29	36	29	19	26	33	14	13	16	13	11	9	35	94.1
30-Aug	20	84	66	82	77	60	51	16	16	15	10	10	15	11	16	13	15	14	13	10	9	8	9	7	84.2
31-Aug	10	8	8	8	7	7	6	7	10	11	20	21	18	21	17	17	13	9	9	9	13	10	11	9	21.2
	99.8	98.0	93.6	86.6	87.1	94.2	89.0	96.0	94.1	89.7	84.9	66.0	68.4	65.6	74.2	80.7	86.7	86.0	64.2	82.1	74.9	87.4	90.9	91.5	

PAZA

Smoky Heights Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - August 2014

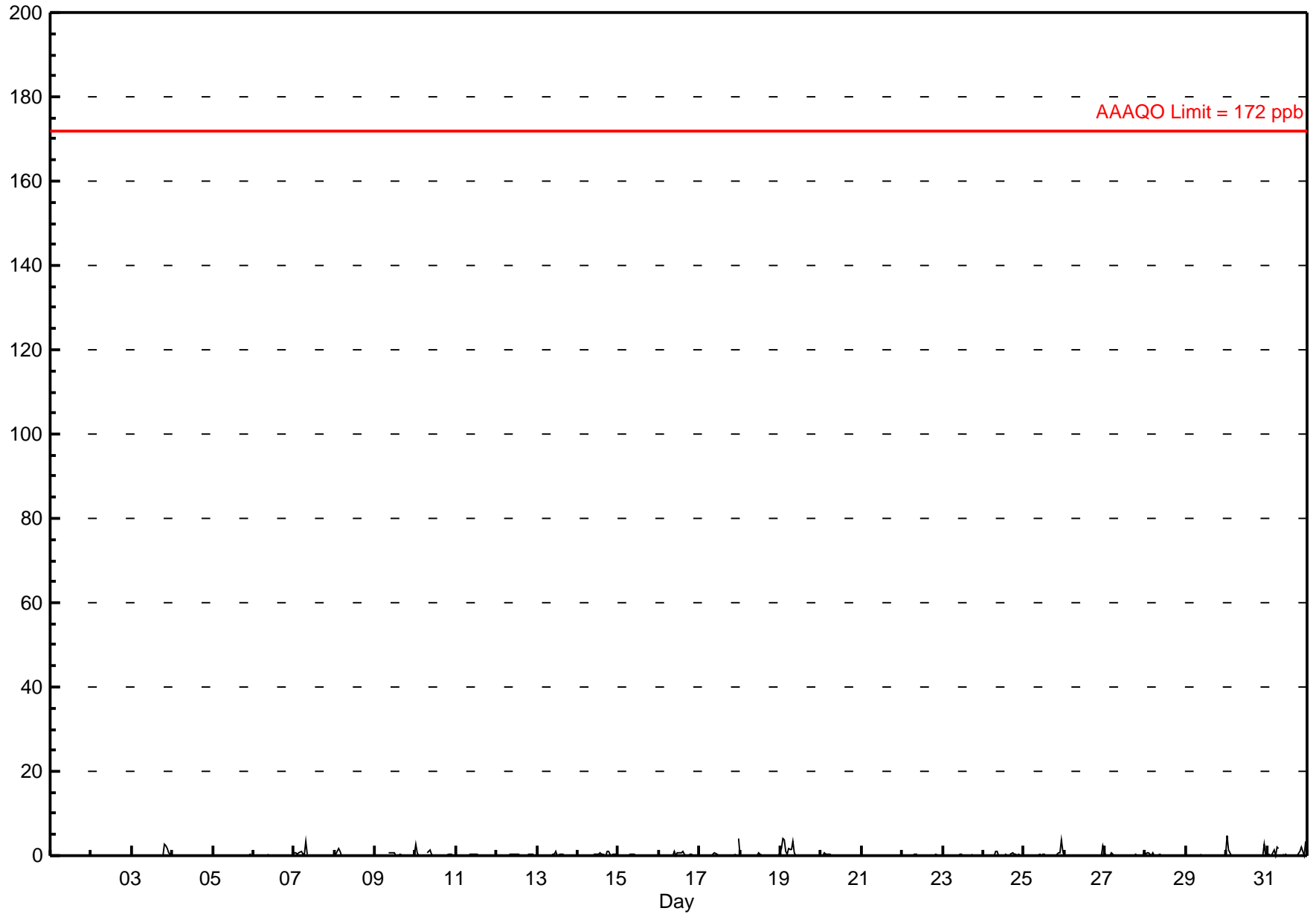
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 4.9 ppb on Aug 30 01:00	Maximum Daily Average: 0.8 ppb on Aug 19
Minimum Value: 0 ppb on Aug 1 10:00	Hours of Data: 709
Maximum Diurnal Average: 0.5 ppb at hour 24	Hours of Missing Data: 35
Monthly Average: 0.20 ppb	Hours of Calibration: 35
Minimum Daily Average: 0.0 ppb on Aug 2	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.1 ppb at hour 17	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.1 P ₉₀ = 0.5 P ₉₉ = 3.2	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	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
2-Aug	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
3-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	3	2	2	1	0	0.3	2.7
4-Aug	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
5-Aug	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	0.2
6-Aug	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	0.4
7-Aug	1	1	0	1	1	0	0	3	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.3
8-Aug	0	0	2	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
9-Aug	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
10-Aug	3	1	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.6
11-Aug	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
12-Aug	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
13-Aug	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
14-Aug	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0.2	1.1
15-Aug	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
16-Aug	A	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	A	0.3	1.2
17-Aug	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	4.0
18-Aug	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
19-Aug	2	4	4	1	0	2	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.8	4.1
20-Aug	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.6
21-Aug	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	0.1
22-Aug	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	A	0	0	0	0	0	0	0.1	0.2
23-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.3
24-Aug	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0.2	1.1
25-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	4	1	0.3	3.7
26-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	2	0.1	2.4
27-Aug	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.1	1.0
28-Aug	0	1	1	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
29-Aug	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	0.4
30-Aug	5	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	3	0	0.5	4.9
31-Aug	0	0	0	1	1	0	2	2	A	0	0	0	0	0	0	0	0	0	0	1	2	1	0	3	0.6	3.3
	0.4	0.3	0.3	0.2	0.2	0.1	0.2	0.4	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.5	Diurnal Average	
	4.9	4.1	3.8	1.1	1.2	1.7	1.9	3.5	1.3	1.2	0.8	1.0	0.8	0.7	0.9	0.2	0.4	1.0	1.1	2.7	2.2	1.5	3.7	4.0	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

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - August 2014



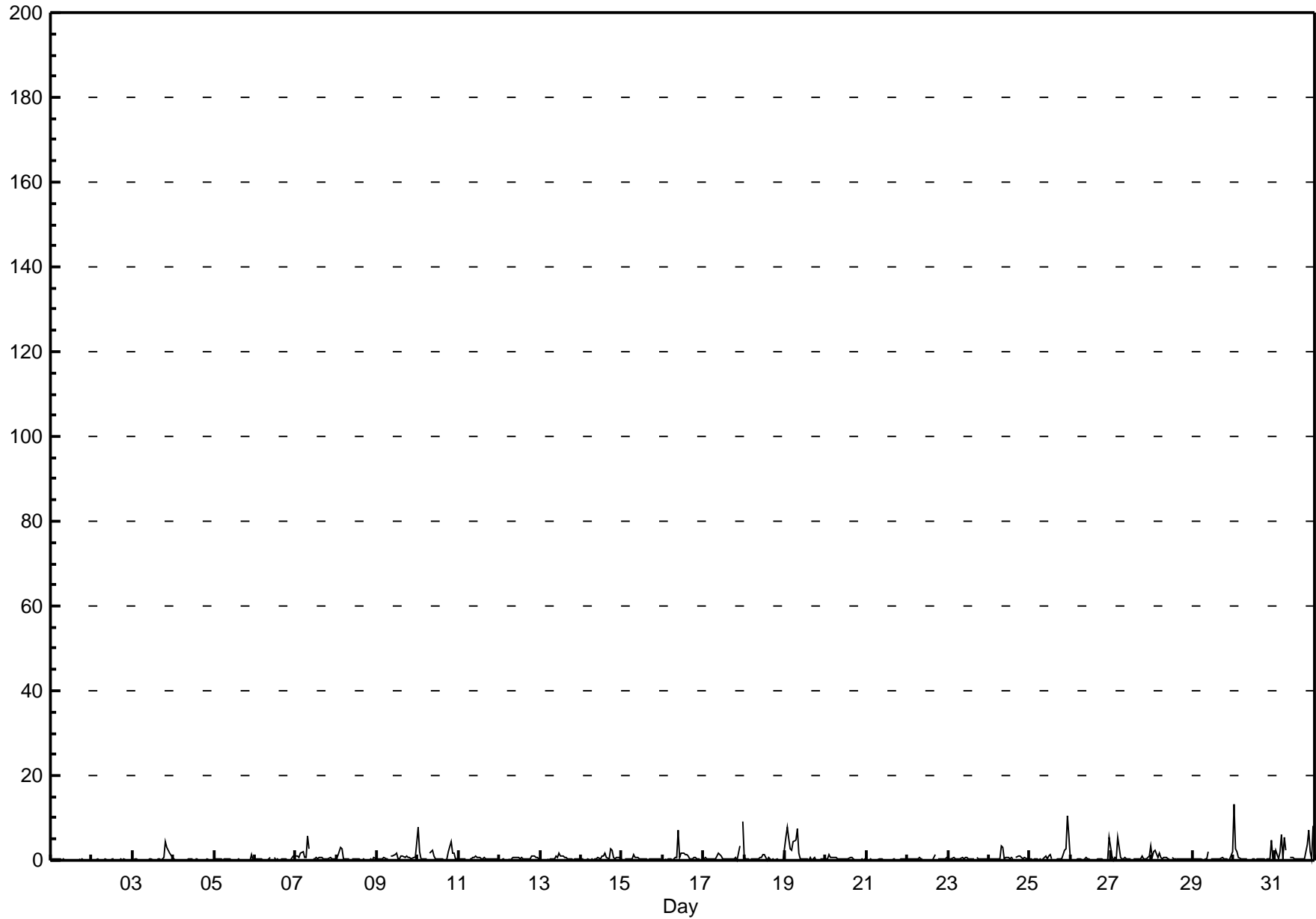
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Smoky Heights - August 2014

Maximum Value: 13.1 ppb on Aug 30 01:00 Minimum Value: 0 ppb on Aug 3 05:00 Maximum Diurnal Average: 1.5 ppb at hour 24 Monthly Average: 0.67 ppb		Maximum Daily Average: 2.0 ppb on Aug 19 Minimum Daily Average: 0.1 ppb on Aug 2 Minimum Diurnal Average: 0.3 ppb at hour 17 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 1.3 P ₉₉ = 7.1		Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								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-Aug	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	0.3
2-Aug	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	0.3
3-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	4	3	2	2	1	0.7	4.4	
4-Aug	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
5-Aug	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0.3	1.5	
6-Aug	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	1	1	0.3	1.2	
7-Aug	1	1	1	2	2	1	1	6	3	A	0	0	1	0	1	1	0	0	0	0	1	0	0	0	1.0	5.9	
8-Aug	1	1	3	3	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	2.9	
9-Aug	0	0	0	0	1	1	0	A	1	1	1	2	0	0	1	1	1	1	1	1	1	1	1	4	0.8	3.9	
10-Aug	8	2	0	0	0	0	A	2	2	1	0	0	0	0	0	0	0	0	2	4	2	2	0	0	1.2	7.6	
11-Aug	0	0	0	0	0	A	0	0	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.4	1.0	
12-Aug	0	0	0	0	A	0	0	0	1	1	1	1	0	1	0	0	0	0	0	1	1	1	1	0	0.5	1.1	
13-Aug	0	0	0	A	0	0	0	0	0	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0.5	1.9	
14-Aug	0	0	A	0	0	0	0	0	0	0	1	1	1	1	2	1	1	3	2	1	0	1	1	0	0.7	2.9	
15-Aug	1	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2	
16-Aug	A	0	0	0	0	0	0	1	1	7	1	2	2	1	1	1	0	0	1	1	0	0	0	A	0.9	7.2	
17-Aug	0	1	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	1	0	3	A	9	1.0	9.0	
18-Aug	1	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	A	0	0	0.4	1.5	
19-Aug	5	8	5	3	2	4	5	7	2	0	0	0	0	0	0	1	0	1	0	0	A	0	0	0	2.0	7.7	
20-Aug	0	0	1	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	0	0.4	1.3	
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.3	
22-Aug	0	0	0	0	0	0	0	1	0	0	C	C	C	0	0	0	1	A	0	0	0	0	0	1	0.4	1.3	
23-Aug	0	0	0	1	0	0	0	0	1	0	1	1	0	1	0	0	A	1	0	0	0	0	0	0	0.4	0.8	
24-Aug	0	0	0	0	0	0	0	3	3	0	1	1	0	1	0	A	1	1	1	1	1	1	0	0	0.7	3.3	
25-Aug	0	0	0	0	0	0	0	0	0	1	0	1	1	0	A	0	0	0	0	0	2	3	11	6	1.2	10.6	
26-Aug	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	6	0.4	5.5	
27-Aug	1	0	1	0	5	1	0	0	1	0	0	0	A	0	0	0	0	0	1	0	0	0	1	3	0.8	5.3	
28-Aug	1	2	2	1	2	1	0	1	1	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0.6	2.3	
29-Aug	0	0	0	0	0	0	0	0	0	2	A	0	1	0	0	0	0	1	0	0	0	0	0	2	0.4	2.0	
30-Aug	13	3	2	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	5	0	1.2	13.1	
31-Aug	0	2	0	2	6	0	5	2	A	1	1	1	0	0	0	0	0	0	0	4	7	2	0	8	1.9	8.1	
	1.2	0.8	0.7	0.6	0.8	0.4	0.6	1.0	0.7	0.8	0.5	0.6	0.5	0.4	0.4	0.3	0.3	0.4	0.5	0.7	0.7	0.6	0.9	1.5	Diurnal Average		
	13.1	7.7	5.1	2.8	6.0	4.3	5.3	7.3	3.2	7.2	1.5	1.9	1.8	1.3	1.5	1.1	1.3	2.9	2.5	4.5	7.1	3.4	10.6	9.0	Diurnal Maximum		
C - Calibration																								A - Automated Daily Zero Span			

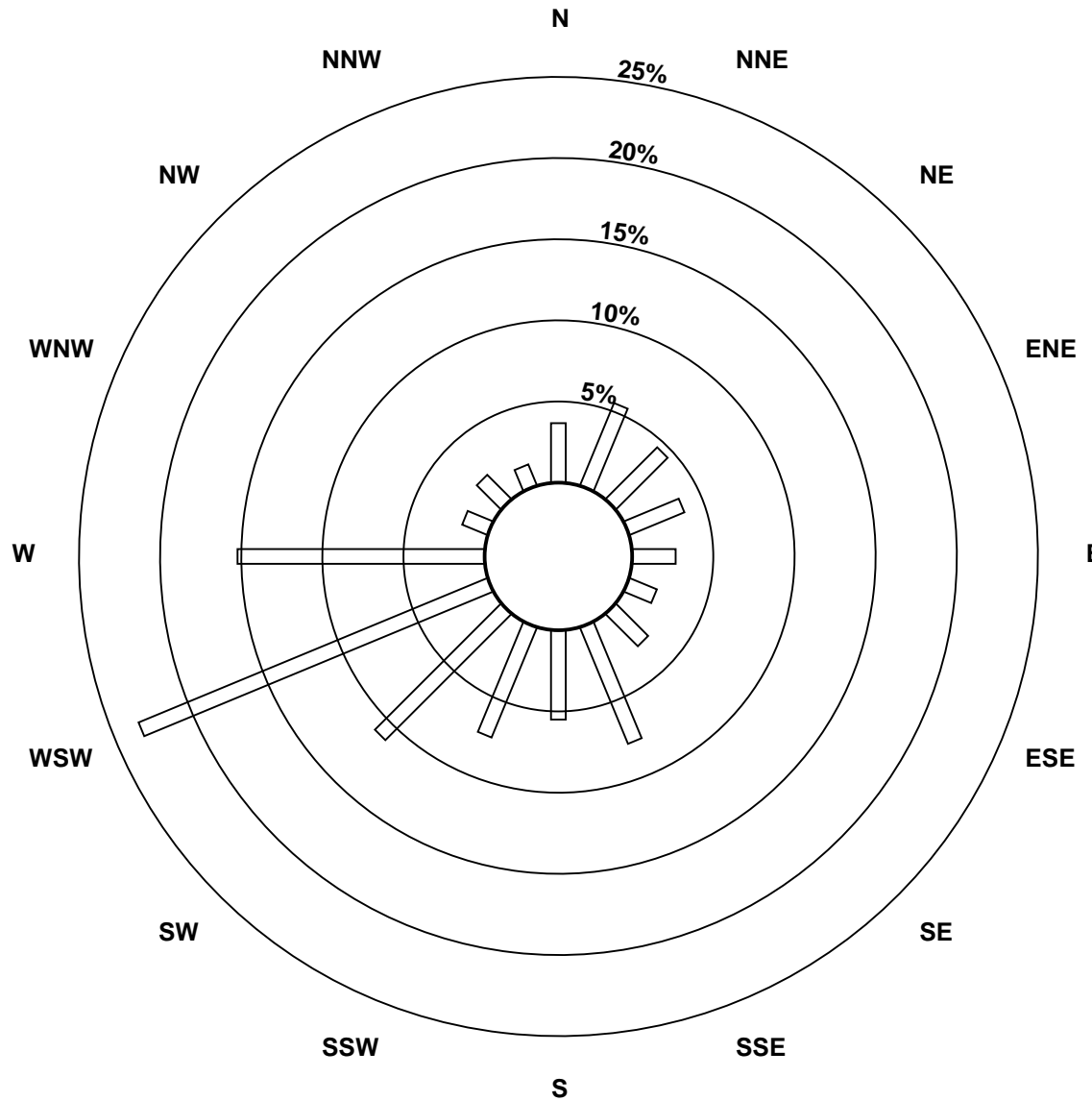
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - August 2014

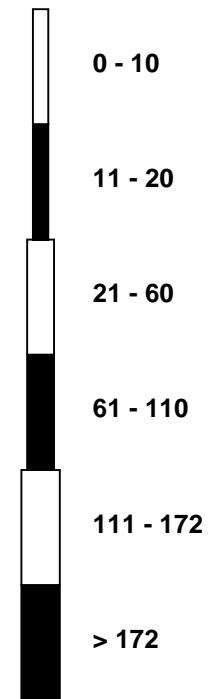


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - August 2014

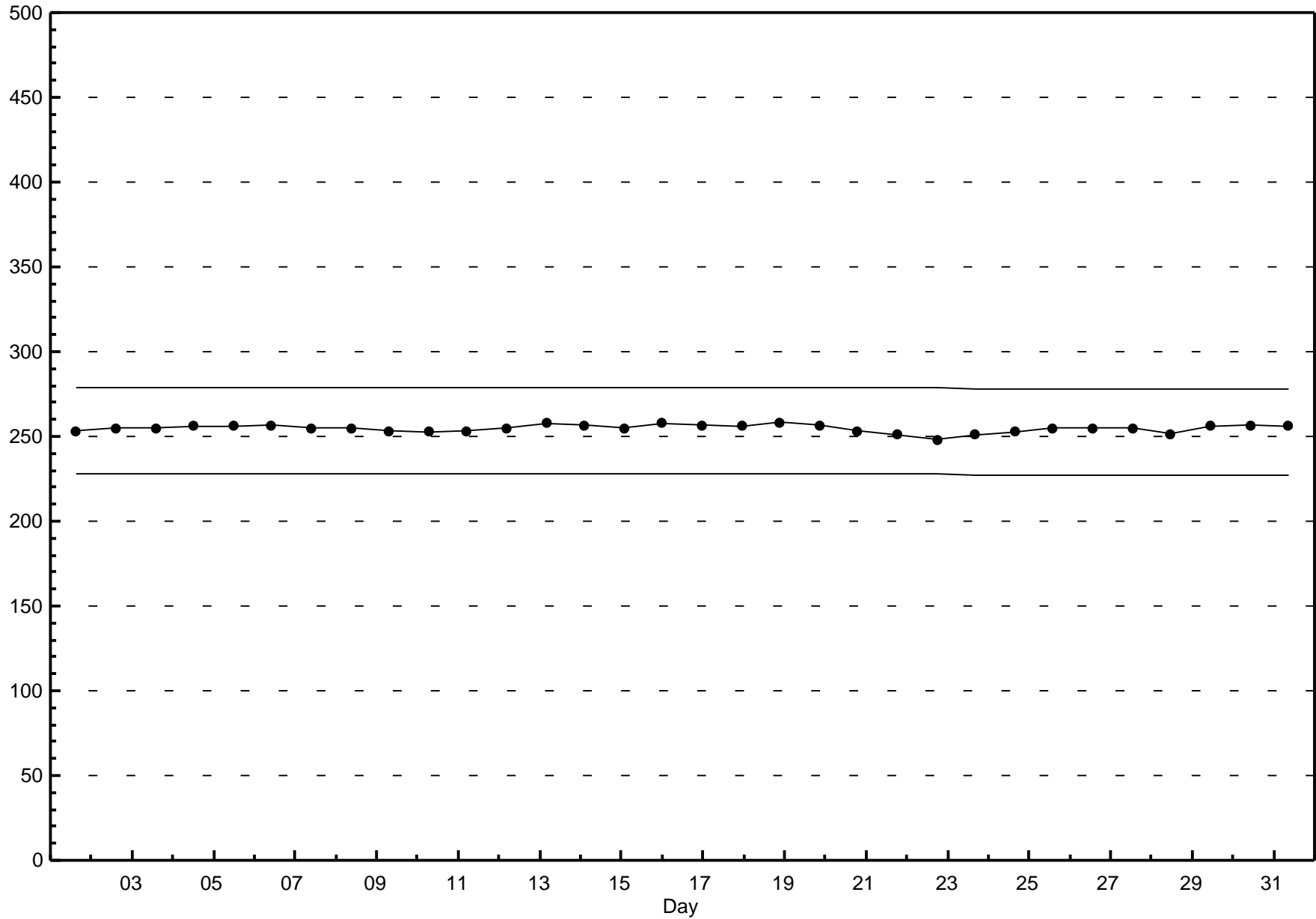


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Smoky Heights - August 2014



Hourly Averages

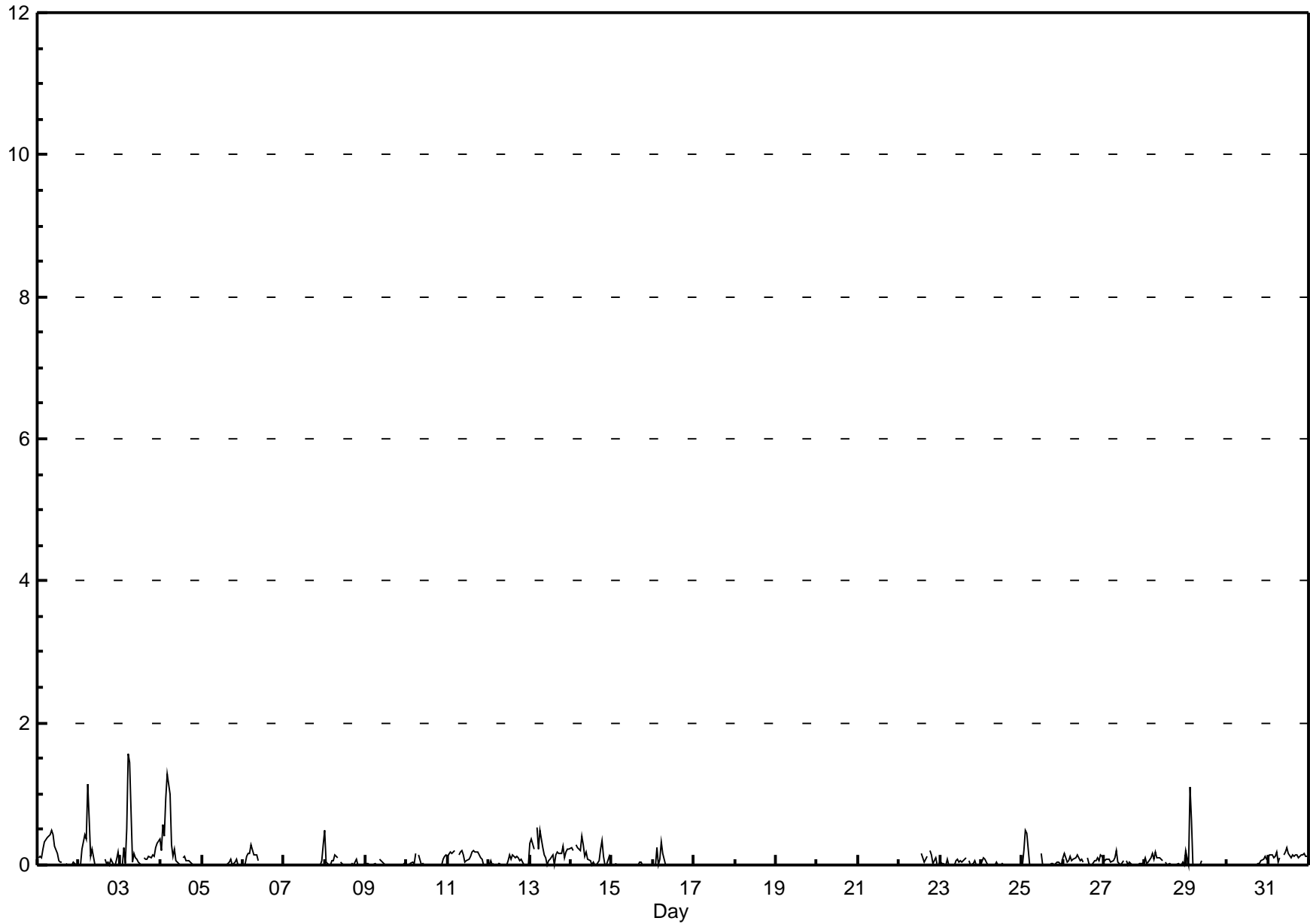
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 1.6 ppb on Aug 3 06:00	Maximum Daily Average: 0.3 ppb on Aug 3		Hours of Data:	704
Minimum Value: 0 ppb on Aug 1 18:00	Minimum Daily Average: 0.0 ppb on Aug 17		Hours of Missing Data:	40
Maximum Diurnal Average: 0.2 ppb at hour 6	Minimum Diurnal Average: 0.0 ppb at hour 13		Hours of Calibration:	36
Monthly Average: 0.07 ppb	Percentiles: $P_1 = 0.0$ $P_{10} = 0.0$ $Q_1 = 0.0$ Median = 0.0 $Q_3 = 0.1$ $P_{90} = 0.2$ $P_{99} = 0.9$		Percent Operational Time:	99.5

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

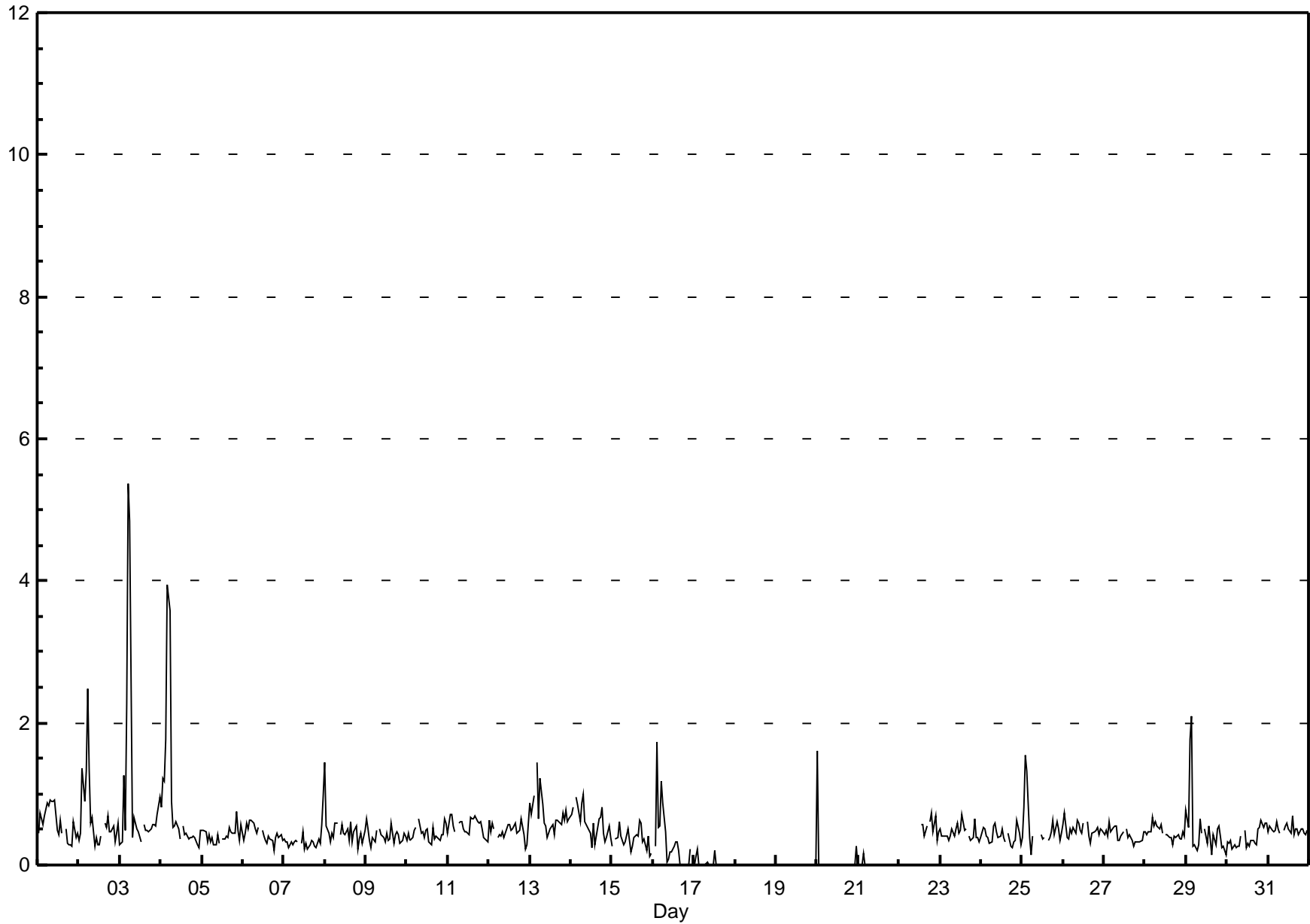


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

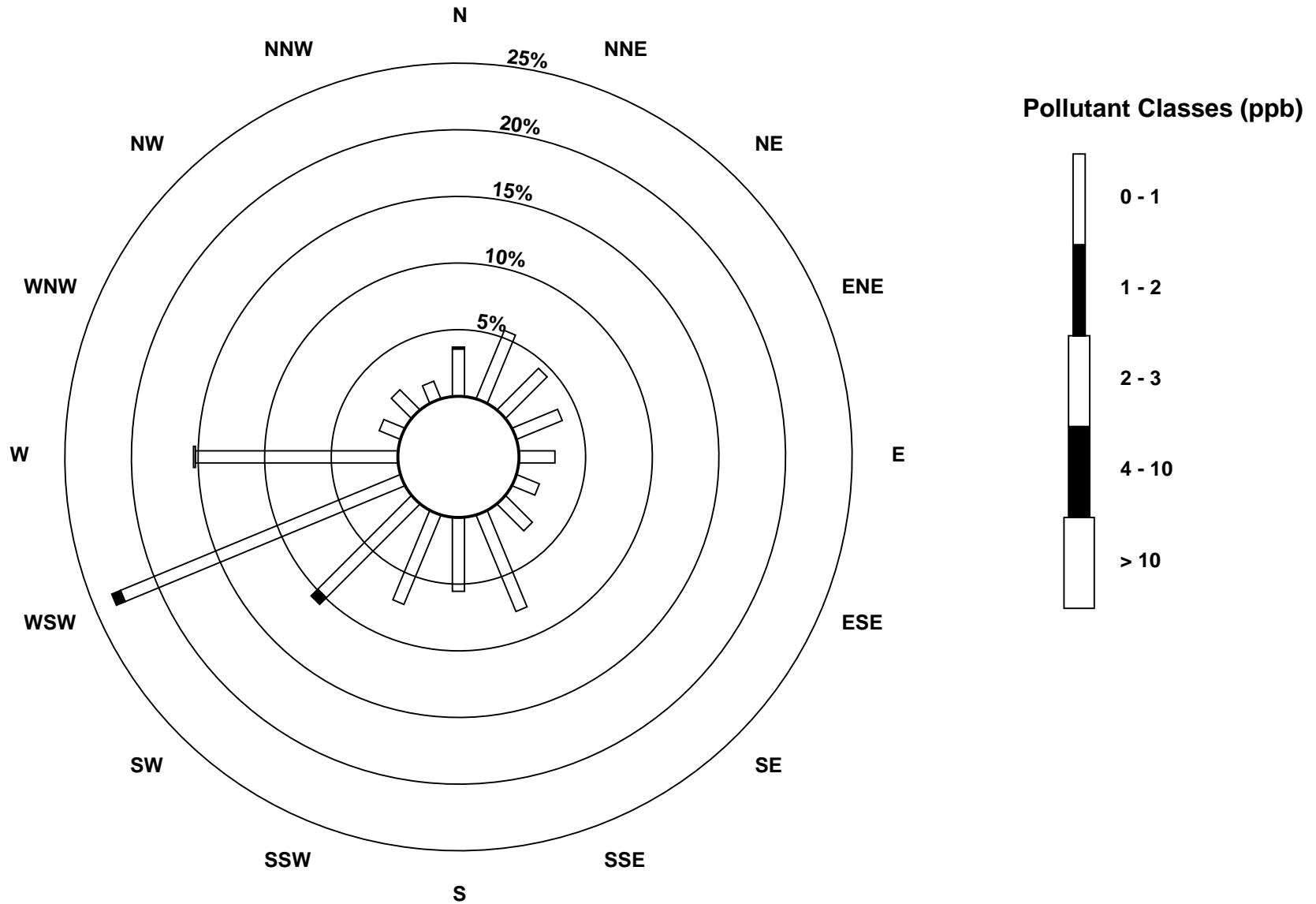
Smoky Heights - August 2014

Maximum Value: 5.4 ppb on Aug 3 06:00		Maximum Daily Average: 1.0 ppb on Aug 3		Hours in Service: 744																						
Minimum Value: 0 ppb on Aug 16 17:00		Minimum Daily Average: 0.0 ppb on Aug 18		Hours of Data: 704																						
Maximum Diurnal Average: 0.7 ppb at hour 6		Minimum Diurnal Average: 0.3 ppb at hour 13		Hours of Missing Data: 40																						
Monthly Average: 0.43 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.7 P ₉₉ = 2.0		Hours of Calibration: 36																						
				Percent Operational Time: 99.5																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	A	0	0	0	0	0	1	0	0	0.6	0.9
2-Aug	0	0	1	1	1	2	1	1	1	0	0	0	0	0	A	1	1	1	0	0	1	0	0	1	0.7	2.5
3-Aug	0	0	1	0	2	5	5	0	1	1	1	0	0	A	1	0	0	0	1	1	1	1	1	1	1.0	5.4
4-Aug	1	1	1	2	4	4	1	1	1	1	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0.9	4.0
5-Aug	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	1	0	0	1	0.4	0.8
6-Aug	0	0	1	1	1	1	1	1	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
7-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.0
8-Aug	1	1	0	0	0	0	1	1	A	A	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0.5	1.4
9-Aug	1	1	0	0	0	0	0	0	A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	0.6
10-Aug	0	0	0	0	0	1	A	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0.4	0.7
11-Aug	0	1	1	1	0	A	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0.5	0.7
12-Aug	1	0	1	1	A	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0.5	0.7
13-Aug	1	1	1	A	1	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	0.7	1.4
14-Aug	1	1	A	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	1	0	0	0	1	0	0.6	1.0
15-Aug	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.4	0.6
16-Aug	A	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7
17-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
19-Aug	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
20-Aug	2	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	1.6
21-Aug	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	0.2
22-Aug	0	0	0	0	0	0	0	0	0	M	M	M	M	1	1	0	1	A	1	1	0	1	0	0	0.3	0.7
23-Aug	1	0	0	0	0	0	0	1	0	1	1	0	0	1	0	1	A	0	0	0	1	0	0	0	0.5	0.7
24-Aug	0	1	1	0	0	0	0	1	1	0	0	0	1	0	0	A	0	0	0	0	0	1	0	0	0.4	0.6
25-Aug	0	1	2	1	0	0	0	C	C	C	C	0	0	0	A	0	0	0	1	0	1	1	0	0	0.5	1.5
26-Aug	1	1	0	0	1	0	1	0	1	1	0	0	1	A	1	0	0	0	0	0	1	0	1	0	0.5	0.7
27-Aug	0	0	0	1	0	1	1	1	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6
28-Aug	0	0	0	0	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	0.7
29-Aug	1	1	2	2	0	0	0	0	1	0	A	1	0	1	0	0	0	0	1	1	1	0	0	0	0.5	2.1
30-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.4	0.6
31-Aug	0	1	0	0	0	1	1	0	A	0	1	1	1	0	1	0	1	1	0	1	1	0	0	0	0.5	0.7
		0.5	0.4	0.6	0.5	0.6	0.7	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average
		1.6	1.2	1.8	2.1	4.0	5.4	4.9	1.0	0.9	0.9	0.9	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.7	Diurnal Maximum
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																		



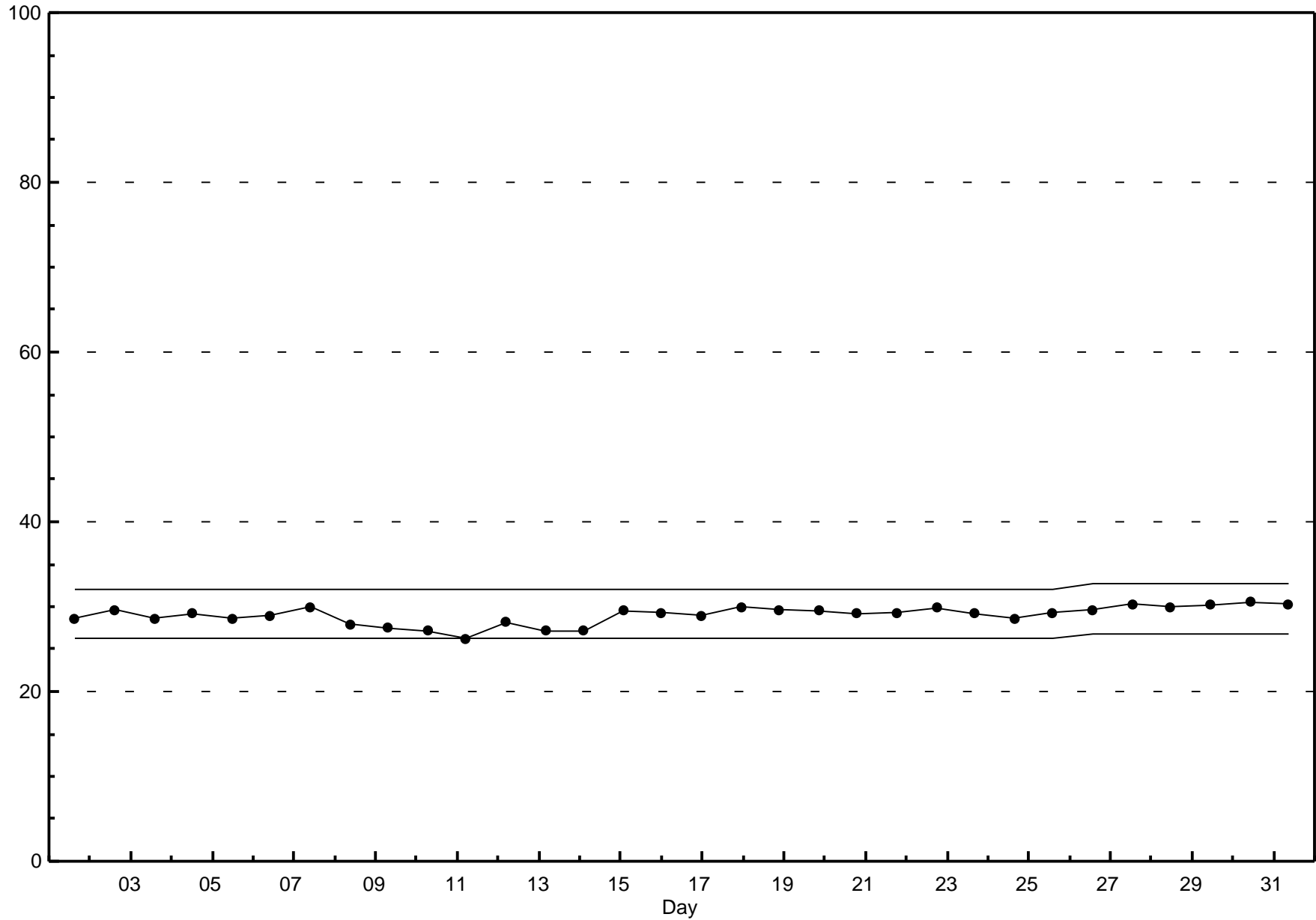
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - August 2014



Span Responses

Total Reduced Sulphur (TRS)
Smoky Heights - August 2014



Hourly Averages

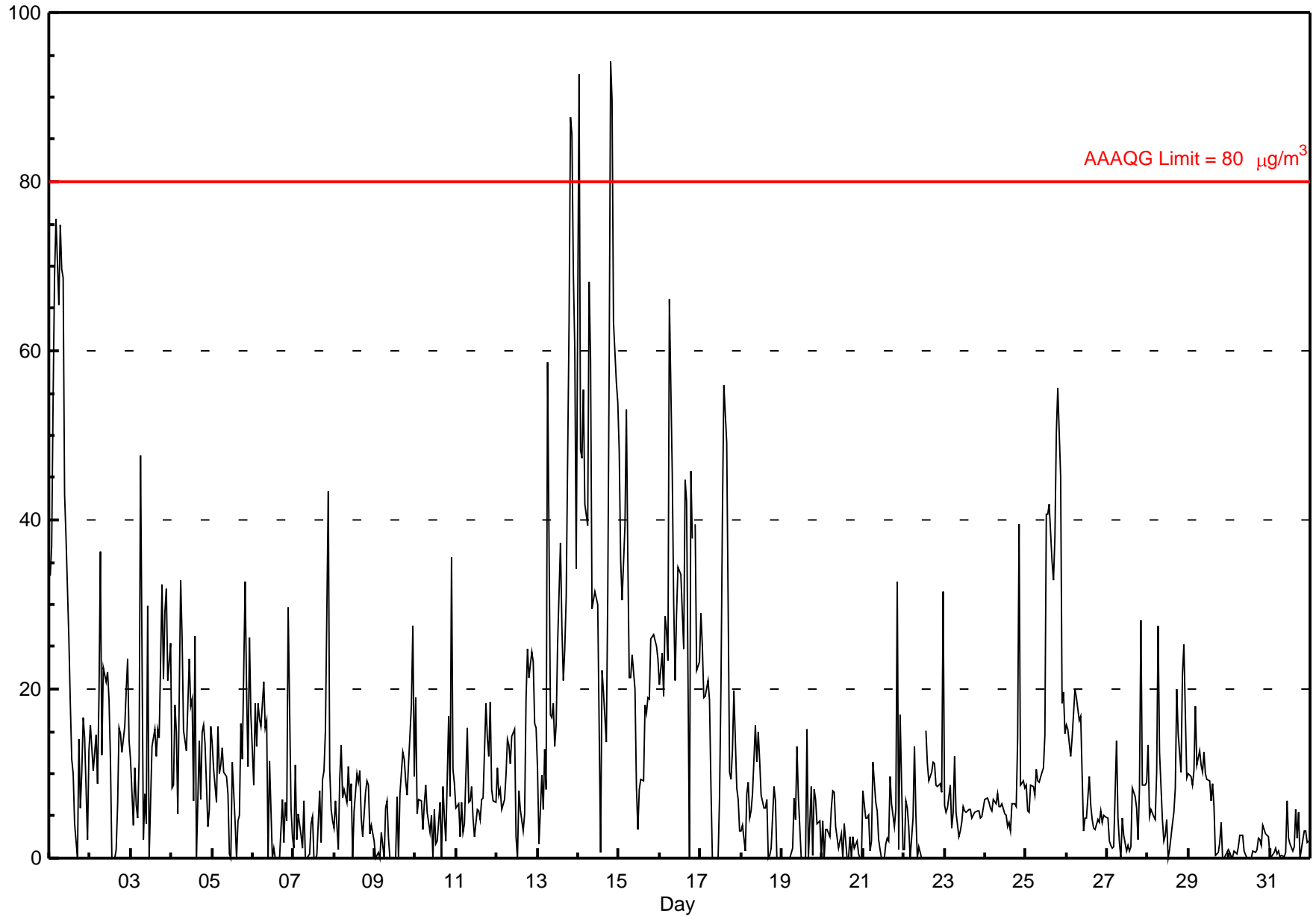
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Smoky Heights - August 2014

Number of Exceedences: 1-hr: 5 24-hr: 4	Hours in Service: 744
Maximum Value: 94.3 µg/m ³ on Aug 14 20:00	Maximum Daily Average: 45.5 µg/m ³ on Aug 14
Minimum Value: 0 µg/m ³ on Aug 1 17:00	Hours of Data: 741
Maximum Diurnal Average: 21.5 µg/m ³ at hour 21	Hours of Missing Data: 3
Monthly Average: 12.51 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.4 µg/m ³ on Aug 30	Percent Operational Time: 99.6
Minimum Diurnal Average: 7.7 µg/m ³ at hour 12	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 3.2 Median = 7.6 Q ₃ = 15.7 P ₉₀ = 30.2 P ₉₉ = 74.3	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	33	37	54	69	76	66	75	70	69	43	38	26	18	12	10	4	0	14	6	10	17	14	2	13	32.3	75.7																						
2-Aug	16	13	10	15	9	19	36	12	22	21	22	19	12	0	0	1	6	15	15	13	16	20	24	14	14.5	36.3																						
3-Aug	12	4	11	6	5	12	48	2	8	4	30	0	13	14	15	12	15	14	32	21	29	32	21	25	16.1	47.7																						
4-Aug	8	9	18	15	5	33	26	15	14	13	24	18	19	7	26	0	14	7	15	16	14	4	6	16	14.1	32.9																						
5-Aug	14	10	7	16	10	11	13	10	10	8	1	0	11	4	0	4	5	16	12	33	20	11	26	17	11.1	32.7																						
6-Aug	9	18	13	18	16	16	21	15	16	0	11	0	1	0	0	0	0	7	2	7	4	30	6	3	8.9	29.7																						
7-Aug	1	11	2	5	3	1	7	0	0	1	4	5	0	0	0	8	2	9	10	15	43	10	6	4	6.2	43.4																						
8-Aug	3	7	1	9	13	7	8	7	11	7	9	0	6	10	9	10	5	3	8	9	9	3	4	2	6.6	13.4																						
9-Aug	0	0	1	0	3	0	6	7	2	0	0	0	0	7	0	8	12	12	9	7	11	18	27	10	5.9	27.5																						
10-Aug	19	5	7	7	3	7	9	5	3	5	0	6	2	2	7	0	9	5	2	17	7	36	10	9	7.5	35.6																						
11-Aug	6	6	2	7	3	4	15	7	7	8	5	3	6	6	5	7	7	18	14	12	18	8	7	7	7.8	18.4																						
12-Aug	11	7	8	6	7	10	14	13	11	14	15	3	0	8	6	3	5	19	25	21	24	23	16	15	11.9	24.7																						
13-Aug	10	2	10	6	13	8	59	17	17	18	13	16	25	37	27	21	25	31	63	88	86	69	60	34	31.5	87.7																						
14-Aug	93	48	47	55	42	39	68	59	30	30	32	30	16	1	22	20	14	31	59	94	90	63	56	54	45.5	94.3																						
15-Aug	48	35	30	39	53	35	21	21	24	20	9	3	8	9	9	18	17	19	19	26	26	26	25	24	23.6	53.1																						
16-Aug	21	24	19	29	27	23	66	46	30	21	29	34	34	29	25	45	42	0	46	38	N	39	22	23	31.0	66.1																						
17-Aug	29	25	19	19	21	19	8	0	0	0	0	7	20	40	56	49	30	10	9	13	20	8	7	3	17.3	55.9																						
18-Aug	3	4	1	8	9	5	6	8	16	11	15	12	7	6	6	7	0	0	1	8	7	0	0	0	5.8	15.8																						
19-Aug	0	0	0	0	0	0	1	7	4	13	7	0	0	0	0	15	0	8	0	8	7	4	4	0	3.4	15.2																						
20-Aug	4	0	3	3	3	6	8	8	4	1	2	3	0	4	0	0	3	0	2	1	2	0	0	0	2.4	7.9																						
21-Aug	8	5	5	5	1	2	11	7	6	2	1	0	0	2	2	2	10	6	4	6	33	1	17	1	5.7	32.7																						
22-Aug	1	7	6	4	0	5	13	5	0	1	0	M	M	15	11	9	10	11	11	9	8	9	8	32	8.0	31.5																						
23-Aug	6	5	6	9	3	5	12	5	3	3	4	6	6	5	6	6	5	5	5	6	6	5	5	6	5.5	12.0																						
24-Aug	7	7	7	6	6	7	6	8	6	6	6	5	5	4	4	3	6	6	6	14	39	9	9	8	8.0	39.5																						
25-Aug	9	6	5	9	9	8	11	9	9	10	11	15	41	41	42	35	33	38	50	56	45	18	20	15	22.6	55.6																						
26-Aug	16	15	12	14	17	20	19	16	17	10	3	5	5	10	6	5	4	3	5	4	6	4	5	5	9.4	20.1																						
27-Aug	5	2	1	1	1	14	5	2	0	5	3	1	2	1	1	8	7	6	2	8	28	9	9	9	5.4	28.1																						
28-Aug	13	5	6	5	5	10	27	13	5	2	3	5	0	1	4	5	8	20	15	10	22	25	17	10	9.8	27.4																						
29-Aug	10	10	9	10	18	11	13	11	10	12	10	9	9	7	9	6	0	1	2	4	0	0	0	1	7.2	18.0																						
30-Aug	1	0	0	1	1	1	3	3	3	1	0	0	0	0	1	1	1	2	2	2	4	3	3	3	1.4	3.9																						
31-Aug	0	0	1	1	1	1	0	0	0	1	7	2	2	1	1	6	2	5	0	2	3	3	2	2	1.9	6.8																						
																								13.4	10.6	10.4	12.8	12.3	13.0	20.5	13.2	11.5	9.4	10.1	7.7	8.9	9.1	10.0	10.3	9.6	11.1	14.6	18.6	21.5	16.3	13.7	11.7	Diurnal Average
																								92.8	48.4	54.5	68.8	75.7	65.5	75.0	69.6	68.6	43.0	38.0	34.4	40.7	40.7	55.9	49.2	42.2	38.0	63.3	94.3	89.7	69.2	60.2	53.9	Diurnal Maximum

M - Maintenance N - Not Valid
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

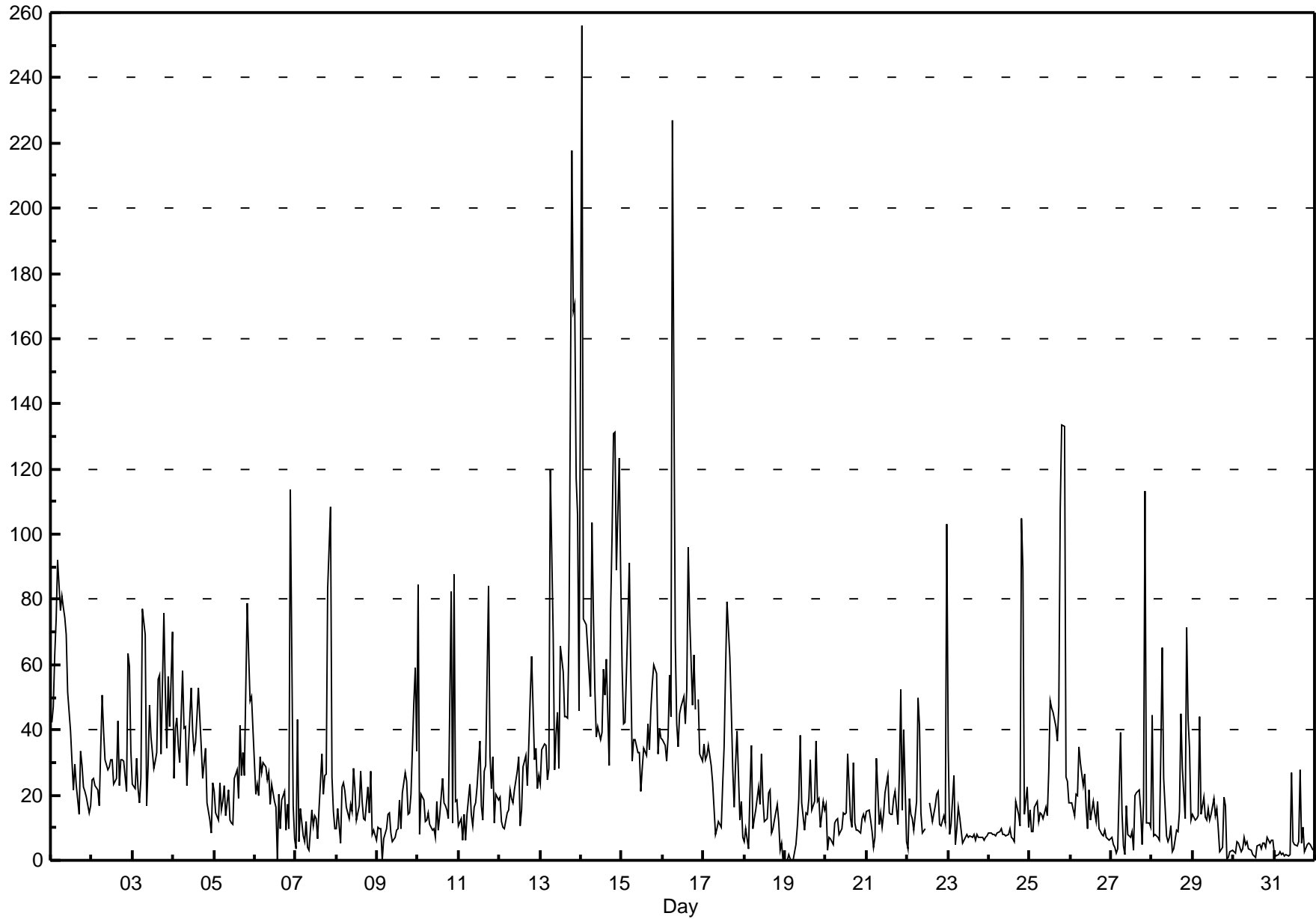


Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

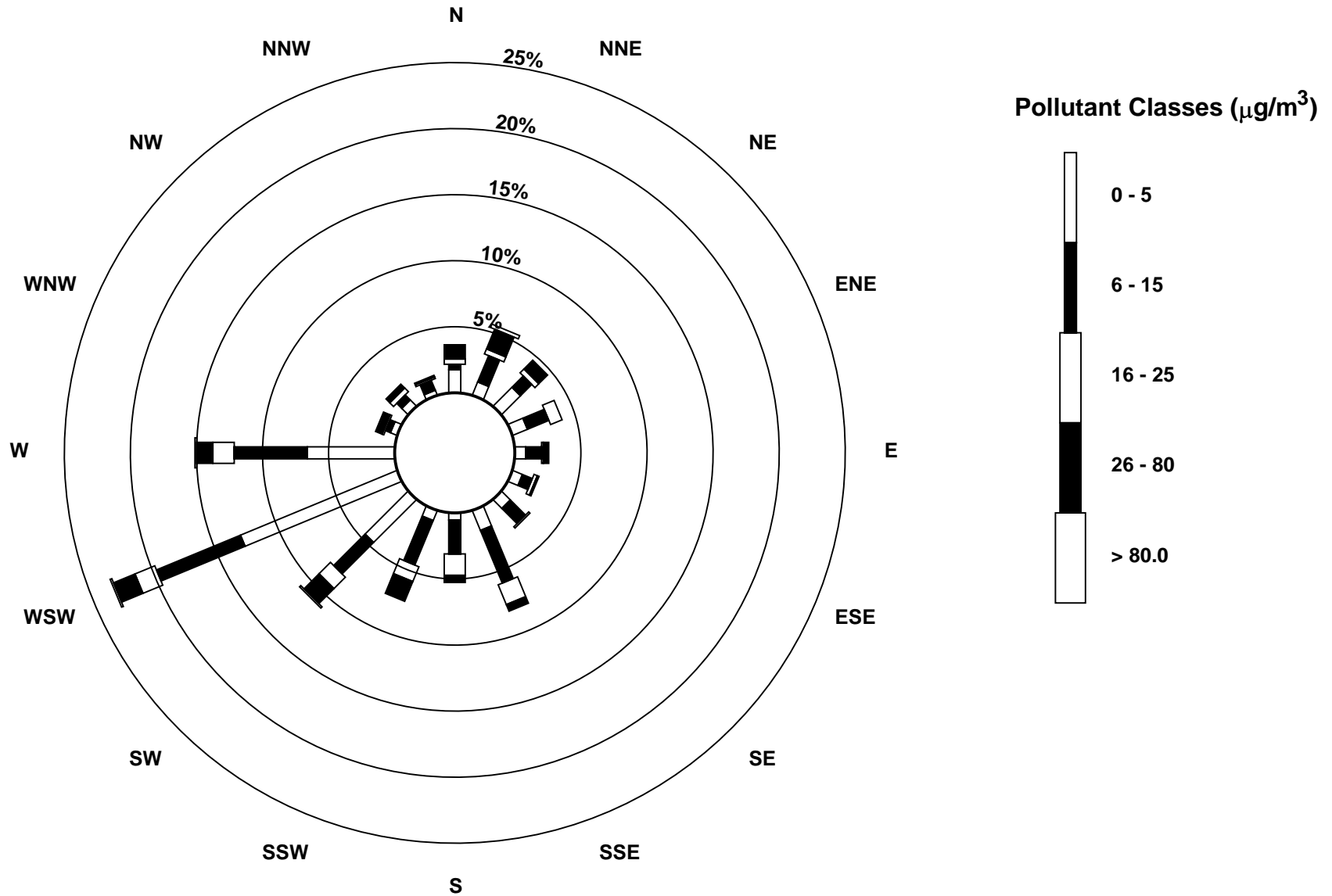
Smoky Heights - August 2014

Maximum Value: 256.1 µg/m ³ on Aug 14 01:00 Minimum Value: 0 µg/m ³ on Aug 6 14:00 Maximum Diurnal Average: 44.5 µg/m ³ at hour 21 Monthly Average: 26.52 µg/m ³		Maximum Daily Average: 79.9 µg/m ³ on Aug 14 Minimum Daily Average: 4.2 µg/m ³ on Aug 30 Minimum Diurnal Average: 18.6 µg/m ³ at hour 3 Percentiles: P ₁ = 0.3 P ₁₀ = 5.4 Q ₁ = 9.8 Median = 17.9 Q ₃ = 33.4 P ₉₀ = 57.4 P ₉₉ = 132.6		Hours in Service: 744 Hours of Data: 741 Hours of Missing Data: 3 Hours of Calibration: 0 Percent Operational Time: 99.6																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	42	47	63	74	92	77	81	77	75	69	51	40	30	22	30	23	14	34	29	23	21	20	14	17	44.3	91.9
2-Aug	25	25	23	22	17	34	51	40	31	28	29	31	31	23	25	43	23	31	31	31	21	63	59	33	32.0	63.3
3-Aug	23	22	31	22	18	25	77	69	17	29	48	38	28	30	33	56	57	33	76	52	34	56	41	70	41.0	77.2
4-Aug	25	41	44	35	30	58	41	41	23	34	53	40	34	36	44	53	35	25	30	34	18	12	8	24	34.0	58.2
5-Aug	21	14	12	24	15	18	23	14	22	13	11	11	25	28	19	42	26	33	26	79	63	49	50	40	28.2	78.9
6-Aug	20	23	20	32	27	30	29	25	27	17	23	18	16	0	20	10	19	21	9	17	10	114	17	7	22.9	113.9
7-Aug	4	43	6	16	8	6	12	4	3	15	11	14	13	6	16	33	20	26	26	83	108	26	15	10	21.8	108.3
8-Aug	9	16	5	22	24	21	16	13	17	15	28	22	12	17	27	18	13	12	22	14	27	8	9	6	16.6	28.4
9-Aug	10	10	10	0	7	10	14	14	9	6	7	9	10	19	10	21	27	24	14	15	20	49	59	34	16.9	58.9
10-Aug	85	8	20	18	12	12	14	11	9	10	7	18	9	14	25	18	17	16	13	82	11	88	18	19	23.1	87.7
11-Aug	11	13	6	14	6	14	23	14	11	16	18	22	37	17	12	27	29	84	32	22	32	12	20	18	21.3	84.1
12-Aug	20	12	10	10	14	16	22	19	18	22	27	32	11	16	29	32	23	35	50	63	31	34	22	26	24.6	62.6
13-Aug	23	34	35	35	25	28	120	69	28	39	45	28	66	58	44	44	44	68	218	168	171	117	106	46	69.0	217.7
14-Aug	256	74	73	72	65	50	104	76	53	38	41	37	39	59	51	62	29	77	100	131	131	89	124	87	79.9	256.1
15-Aug	59	42	42	73	91	59	30	37	37	33	33	21	28	34	32	42	34	46	54	60	57	33	41	38	44.0	91.4
16-Aug	37	35	30	38	57	44	227	67	42	35	45	47	50	42	52	96	75	48	63	46	N	49	32	31	56.1	227.0
17-Aug	36	31	32	35	29	24	16	8	10	12	10	23	35	58	79	62	46	28	16	30	40	12	18	7	29.1	79.4
18-Aug	6	10	3	21	35	10	13	16	22	17	32	19	12	13	21	22	8	10	13	17	12	3	5	0	14.2	35.2
19-Aug	0	0	2	0	0	0	5	11	19	38	18	9	15	14	19	31	16	18	36	18	19	10	18	16	13.8	38.2
20-Aug	17	3	7	7	5	11	13	13	8	10	14	14	14	32	13	10	30	12	9	9	9	13	14	12	12.5	32.5
21-Aug	15	16	12	9	4	7	31	11	14	10	14	21	26	15	14	14	19	21	11	26	52	15	40	6	17.7	52.2
22-Aug	3	19	14	13	9	18	50	42	14	9	10	M	M	18	15	12	17	20	21	11	10	14	11	103	20.6	103.1
23-Aug	35	8	11	26	5	10	16	13	5	6	7	8	7	8	7	8	6	8	7	7	7	6	7	7	9.8	34.7
24-Aug	9	9	8	8	7	8	9	10	8	8	7	8	10	7	6	6	18	14	11	105	89	14	23	10	17.1	104.7
25-Aug	16	9	9	16	18	12	15	14	13	16	14	27	49	47	45	41	37	47	108	134	133	26	24	18	37.0	133.5
26-Aug	18	18	14	20	20	35	30	23	27	16	10	22	12	18	14	12	18	10	8	8	9	7	7	6	15.8	34.7
27-Aug	7	5	4	2	3	39	14	4	2	17	8	7	9	3	20	21	22	15	5	18	113	11	11	10	15.5	113.2
28-Aug	45	7	8	7	6	33	65	25	7	6	7	11	2	3	9	9	15	45	28	13	71	43	35	12	21.4	71.4
29-Aug	14	12	13	13	44	14	20	13	12	16	12	14	19	14	16	10	2	4	19	17	1	1	3	3	12.7	44.0
30-Aug	2	2	6	5	2	4	7	5	6	3	3	2	1	1	4	5	3	5	5	4	7	5	6	6	4.2	7.0
31-Aug	2	1	2	2	2	2	1	2	1	2	27	6	5	4	6	28	5	10	3	5	5	5	4	3	5.6	27.9
		28.9	19.6	18.6	22.4	22.5	23.5	38.3	25.8	19.0	19.5	21.6	20.6	21.9	21.7	24.5	29.3	24.1	28.4	35.3	43.3	44.5	32.4	27.8	23.4	Diurnal Average
		256.1	74.0	73.1	73.9	91.9	76.5	227.0	77.5	74.6	69.2	53.1	47.4	65.5	58.7	79.4	96.2	75.1	84.1	217.7	168.4	170.6	117.0	123.6	103.1	Diurnal Maximum
M - Maintenance		N - Not Valid																								



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Smoky Heights - August 2014



Hourly Averages

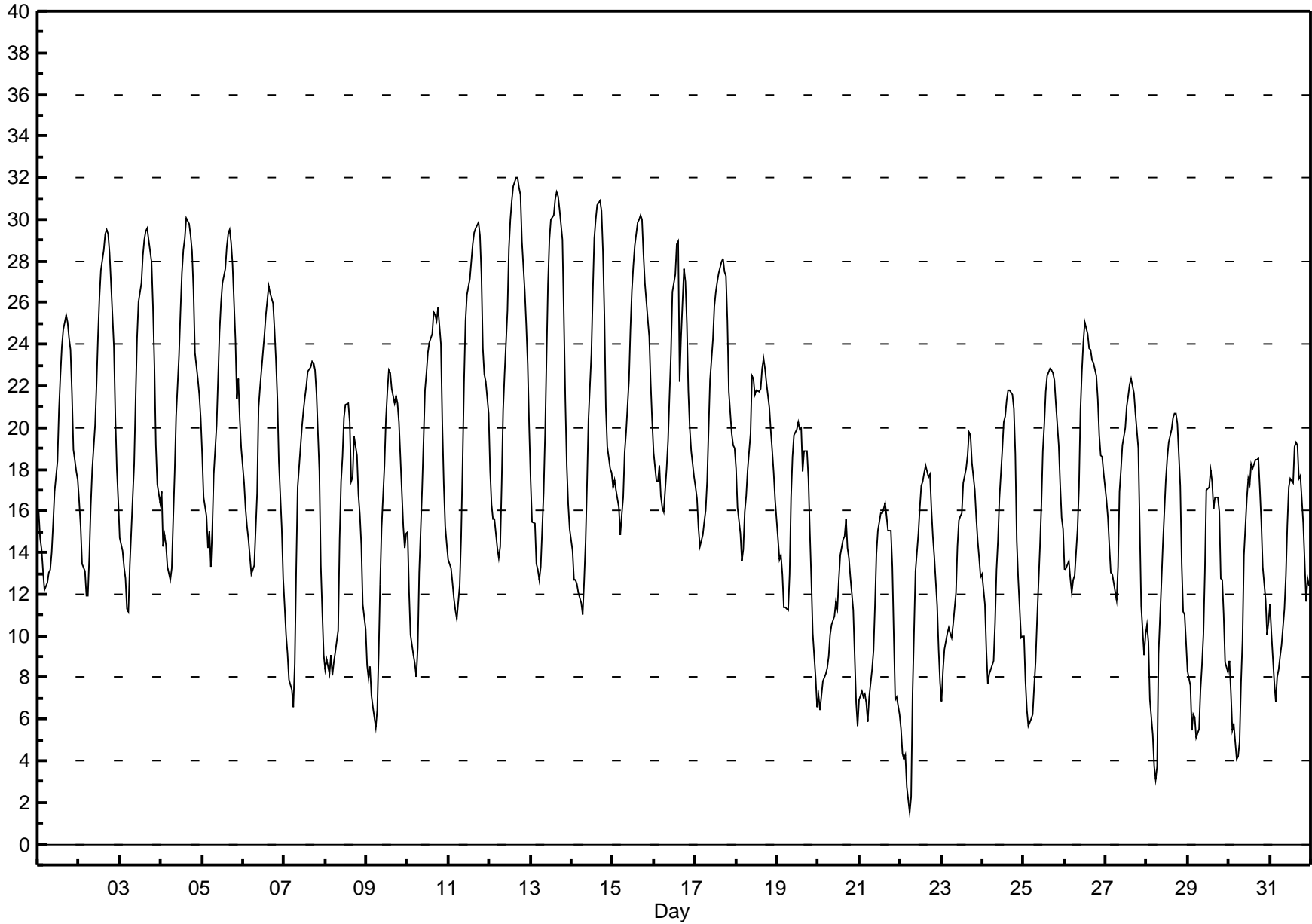
External Temperature (ET) - °C

Smoky Heights - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 32.0 °C on Aug 12 16:00 Maximum Daily Average: 23.6 °C on Aug 12		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																									
Minimum Value: 1 °C on Aug 22 06:00 Maximum Diurnal Average: 23.8 °C at hour 17 Monthly Average: 17.29 °C		Minimum Daily Average: 10.6 °C on Aug 20 Minimum Diurnal Average: 10.1 °C at hour 6 Percentiles: P ₁ = 4.1 P ₁₀ = 8.4 Q ₁ = 12.7 Median = 17.1 Q ₃ = 21.8 P ₉₀ = 27.0 P ₉₉ = 31.0																									
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-Aug	16	15	14	13	12	13	13	13	14	15	17	18	21	23	24	25	25	25	24	24	22	19	18	18	18.3	25.4	
2-Aug	16	15	13	13	12	12	14	16	18	20	22	24	26	28	29	29	30	29	28	27	24	21	18	17	20.9	29.5	
3-Aug	15	14	13	13	11	11	13	17	18	21	24	26	27	28	29	29	30	29	28	26	23	19	17	16	20.8	29.6	
4-Aug	17	14	15	14	13	13	13	16	18	21	23	26	27	29	29	30	30	29	28	27	24	22	22	20	21.7	30.0	
5-Aug	19	17	16	14	15	13	15	18	20	22	25	26	27	28	29	29	29	29	28	24	21	22	20	19	21.9	29.5	
6-Aug	17	16	15	15	14	13	13	15	17	21	22	24	24	25	26	27	26	26	25	23	21	18	15	13	19.7	26.8	
7-Aug	11	10	9	8	7	7	9	13	17	19	20	21	21	22	23	23	23	23	23	22	18	13	11	9	16.0	23.2	
8-Aug	8	9	8	9	8	9	9	10	15	17	19	20	21	21	20	17	18	20	19	17	16	14	11	10	14.4	21.1	
9-Aug	9	8	9	7	7	6	6	9	13	15	18	20	22	23	23	22	21	21	21	20	19	15	14	15	15.1	22.8	
10-Aug	15	12	10	9	9	8	9	13	17	19	22	23	24	24	24	26	25	25	26	24	20	17	15	14	18.0	25.8	
11-Aug	14	13	13	12	11	11	12	15	18	22	25	26	27	28	29	29	30	30	29	27	24	23	22	21	21.3	29.9	
12-Aug	18	16	16	16	14	14	14	17	21	23	26	29	30	31	32	32	32	32	31	29	27	25	23	20	23.6	32.0	
13-Aug	17	15	15	13	13	13	13	17	20	23	27	29	30	30	31	31	31	31	29	25	21	18	16	15	21.9	31.3	
14-Aug	14	13	13	12	12	12	11	13	15	17	20	24	27	29	30	31	31	30	28	25	21	19	18	18	20.1	30.9	
15-Aug	17	17	17	16	15	16	17	19	20	22	25	27	28	29	30	30	30	30	28	27	25	24	22	20	23.0	30.2	
16-Aug	19	17	17	18	17	16	16	18	19	22	24	26	27	29	29	22	24	28	27	25	22	20	19	18	21.6	28.9	
17-Aug	17	17	15	14	15	15	16	17	20	22	24	26	27	27	27	28	28	27	27	25	22	20	19	19	21.5	28.2	
18-Aug	18	16	15	14	14	16	17	18	20	22	22	22	22	22	23	23	23	23	22	21	20	19	18	17	19.3	23.3	
19-Aug	15	14	14	13	11	11	11	13	17	19	20	20	20	20	20	18	19	19	18	15	13	10	8	7	15.1	20.3	
20-Aug	7	6	7	8	8	8	9	10	11	11	12	11	13	14	15	15	16	14	14	13	11	9	7	6	10.6	15.6	
21-Aug	7	7	7	7	7	6	7	8	9	11	14	15	16	16	16	16	16	15	15	13	10	7	7	6	10.8	16.4	
22-Aug	5	4	4	4	3	1	2	7	10	13	15	16	17	17	18	18	18	18	16	15	14	11	9	8	11.1	18.2	
23-Aug	7	8	9	10	10	10	10	11	12	14	16	16	16	17	18	19	20	20	18	17	16	15	14	13	14.0	19.8	
24-Aug	13	12	9	8	8	8	9	11	13	15	17	19	20	21	21	22	22	22	21	19	15	13	10	10	14.8	21.8	
25-Aug	10	8	6	6	6	6	8	9	11	14	16	19	20	22	23	23	23	23	22	21	19	17	16	15	15.1	22.9	
26-Aug	13	13	14	13	12	13	13	15	17	21	23	24	25	25	24	24	23	23	22	21	20	19	19	18	18.9	25.0	
27-Aug	17	16	14	13	13	12	12	13	17	18	19	20	21	22	22	22	22	21	20	19	15	11	9	10	16.6	22.4	
28-Aug	11	10	7	5	4	3	4	9	13	14	16	17	19	19	20	20	21	21	20	17	13	11	11	10	13.1	20.7	
29-Aug	8	8	5	6	6	5	6	7	9	10	13	17	17	18	17	16	17	17	16	13	13	11	9	8	11.3	18.0	
30-Aug	9	7	5	6	4	4	5	8	10	14	17	18	17	18	18	18	18	18	19	17	15	13	12	10	12.2	18.6	
31-Aug	12	10	8	7	8	8	9	10	11	13	15	17	18	17	19	19	19	18	18	15	14	12	13	12	13.4	19.3	
		13.2	12.2	11.4	10.9	10.3	10.1	10.8	13.1	15.4	17.8	19.9	21.5	22.5	23.2	23.7	23.7	23.8	23.7	22.9	21.0	18.5	16.4	14.9	13.9	Diurnal Average	
		18.8	17.5	17.4	18.2	16.7	16.1	16.7	18.8	20.8	23.4	26.9	29.1	30.0	30.9	31.6	32.0	32.0	31.5	31.2	28.9	26.5	24.9	23.0	20.7	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Smoky Heights - August 2014



Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1 Spd	11	11	11	8	7	9	9	4	6	7	8	9	9	10	8	9	9	10	9	8	10	7	6	6	6.7	11.0	
Dir	19	19	22	24	21	19	30	54	30	42	49	40	33	38	51	61	90	103	102	104	92	93	142	147	54.4	22.5	
2 Spd	6	4	4	5	5	5	4	6	8	7	7	6	6	6	7	8	6	9	12	9	8	9	8	8	5.5	11.9	
Dir	161	205	244	266	260	246	228	183	178	168	178	177	152	158	166	186	171	183	160	155	174	188	242	271	188.5	159.8	
3 Spd	3	2	1	3	0	3	5	9	9	11	9	11	13	13	12	7	6	7	5	6	4	2	1	2	4.1	13.2	
Dir	192	229	254	339	353	268	239	187	208	226	198	160	161	166	181	169	165	155	156	340	354	8	357	202	187.4	166.2	
4 Spd	1	5	3	4	4	4	5	8	9	11	9	9	13	16	14	17	17	16	11	7	8	14	17	15	8.7	17.5	
Dir	278	247	223	242	226	230	211	193	194	208	188	167	160	174	171	159	155	153	149	120	136	149	150	148	168.3	158.8	
5 Spd	10	8	7	7	8	1	3	11	16	18	21	21	19	17	12	9	7	8	6	1	4	25	18	9	8.2	24.9	
Dir	150	159	163	157	155	151	160	149	149	152	150	150	154	149	158	175	172	148	151	154	288	244	271	313	167.7	244.0	
6 Spd	3	8	10	12	9	8	8	10	8	11	16	25	29	27	22	26	28	27	30	27	21	13	6	14	15.5	30.2	
Dir	97	219	243	262	238	216	225	214	197	230	254	264	264	259	274	258	256	257	271	274	277	275	260	257	257.2	271.3	
7 Spd	13	11	12	13	7	12	10	16	15	21	18	17	18	21	19	18	18	18	15	6	1	4	2	4	12.4	21.3	
Dir	256	262	274	269	258	251	255	253	258	266	250	246	254	236	236	269	270	280	283	307	205	248	274	289	259.8	236.1	
8 Spd	3	11	4	6	5	4	6	3	6	11	15	14	12	15	18	21	16	12	18	16	17	17	13	13	10.2	21.0	
Dir	221	266	269	195	199	209	237	183	204	211	161	196	203	185	191	214	227	214	219	225	226	247	257	261	217.2	213.6	
9 Spd	5	8	13	7	4	7	6	6	10	12	11	16	19	19	21	24	25	20	18	13	12	8	7	10	12.1	25.4	
Dir	245	240	266	243	267	250	200	206	217	213	238	246	262	255	248	244	260	249	254	244	244	227	228	248	240	244.9	259.7
10 Spd	12	12	12	13	11	11	8	9	15	18	28	27	27	29	24	30	28	15	24	20	11	11	11	12	16.9	29.6	
Dir	251	252	255	261	260	263	246	228	223	235	263	267	261	266	281	262	276	296	260	265	246	259	261	267	261.1	261.9	
11 Spd	13	14	13	11	10	9	8	9	9	9	7	9	13	10	7	8	6	4	6	8	9	13	13	9	4.8	14.3	
Dir	267	263	265	250	238	223	188	177	195	184	204	243	247	262	251	234	215	215	181	137	62	70	82	100	218.6	263.4	
12 Spd	3	7	7	6	6	7	8	7	7	8	9	11	22	22	20	17	18	12	7	7	11	13	9	2	6.8	22.5	
Dir	85	15	16	17	19	23	26	31	62	65	86	104	132	134	135	139	153	167	174	118	137	150	151	235	117.4	132.3	
13 Spd	6	4	2	3	4	4	4	8	8	8	7	8	10	14	13	11	10	8	4	6	8	7	7	5	5.2	14.0	
Dir	260	226	234	275	214	209	238	190	206	191	188	252	272	301	313	307	312	312	300	239	259	254	225	214	258.6	301.2	
14 Spd	6	9	8	9	8	3	3	7	7	9	8	6	9	11	15	11	8	9	8	4	3	5	4	6	3.4	14.8	
Dir	214	211	214	201	197	220	212	188	197	191	189	168	167	230	243	268	325	345	356	23	31	14	4	6	225.8	243.5	
15 Spd	5	6	5	5	5	7	5	7	6	7	9	14	11	10	10	11	10	9	10	8	10	9	3	3	6.9	14.1	
Dir	8	6	5	18	16	17	33	36	70	53	54	79	77	80	75	73	69	61	77	79	96	92	48	357	60.0	78.5	
16 Spd	3	2	2	2	4	5	5	5	8	7	6	4	10	6	2	10	6	10	15	12	6	12	13	12	4.6	15.5	
Dir	14	350	244	281	258	254	247	201	193	222	211	222	150	122	175	222	278	306	305	302	263	263	273	275	256.3	304.7	
17 Spd	14	7	9	10	14	14	9	9	16	23	22	18	18	21	22	23	21	19	20	11	15	15	14	19	15.6	22.9	
Dir	273	279	271	263	267	267	261	235	240	249	254	253	254	231	233	239	258	252	254	254	240	254	254	252	251.6	249.1	
18 Spd	15	16	13	11	11	14	15	10	13	28	30	31	31	32	29	26	27	29	26	23	20	24	19	18	21.0	32.4	
Dir	248	243	236	255	221	232	231	208	229	252	252	253	252	247	251	242	247	253	252	243	237	244	246	256	245.6	247.0	
19 Spd	18	19	21	21	18	23	14	12	16	11	10	11	11	14	13	11	9	10	11	10	10	6	8	10	9.1	22.7	
Dir	260	261	257	248	258	250	270	251	269	311	332	352	350	1	17	343	55	345	314	320	335	298	233	247	289.7	250.2	
20 Spd	12	11	11	5	7	8	9	10	10	8	10	11	10	12	12	12	10	9	8	12	8	4	5	4	5.8	12.4	
Dir	275	267	256	230	251	264	256	271	313	318	322	343	352	6	343	350	356	21	45	56	49	1	352	330	326.6	5.8	
21 Spd	5	5	5	5	5	4	7	7	7	7	6	7	11	11	11	10	11	11	12	6	3	3	6	3	6.7	12.4	
Dir	10	16	19	22	21	7	24	34	42	73	72	43	52	64	69	53	28	52	66	61	47	19	61	50	46.1	65.9	
22 Spd	4	5	4	3	3	5	14	18	13	13	15	21	18	23	19	8	7	19	26	25	26	18	5	2	7.3	26.0	
Dir	3	15	11	19	7	36	357	38	51	47	55	62	86	74	47	58	51	77	145	164	177	182	288	35	78.5	145.3	



Peace Airshed Zone Association

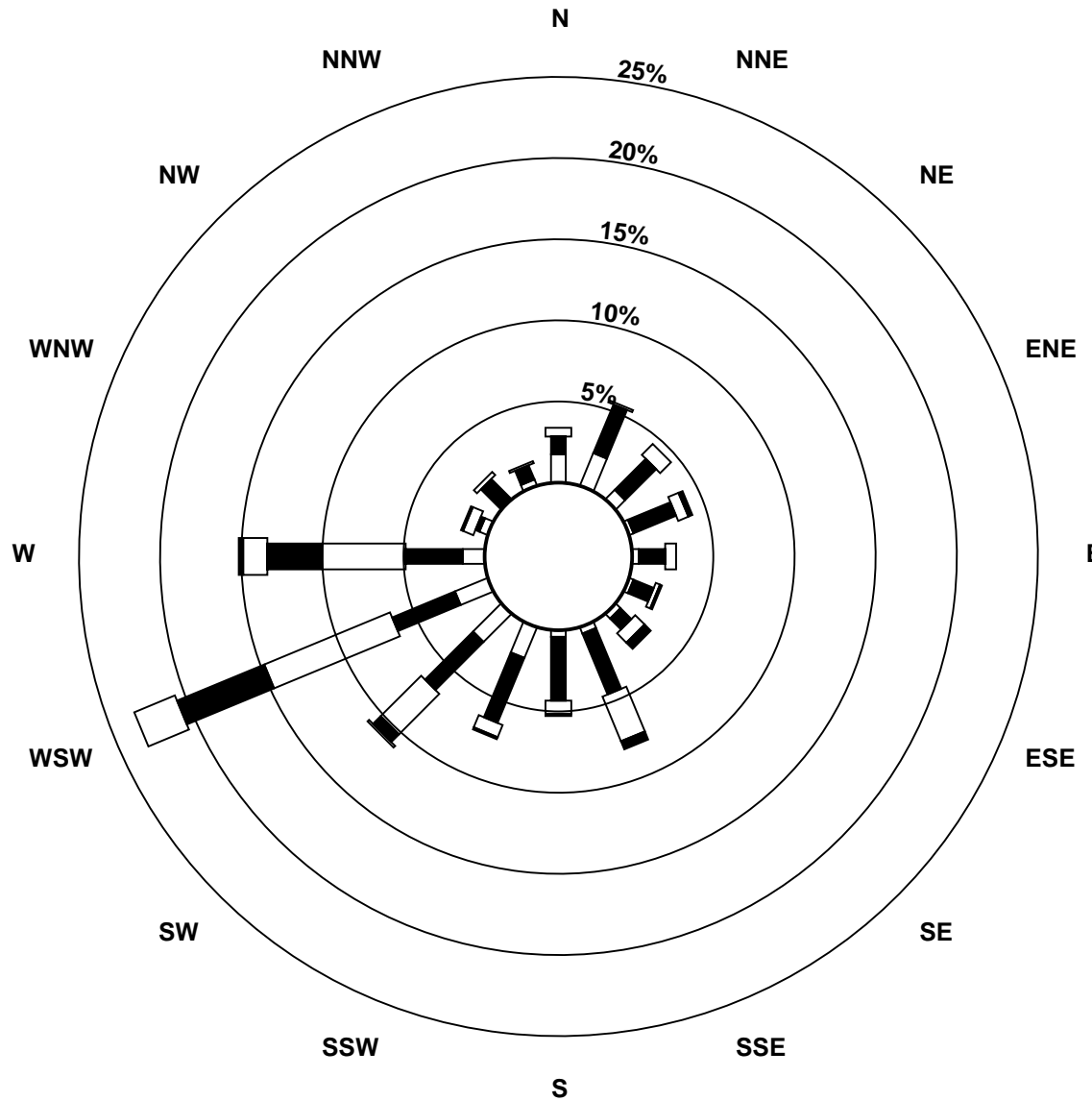
Hourly Averages

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

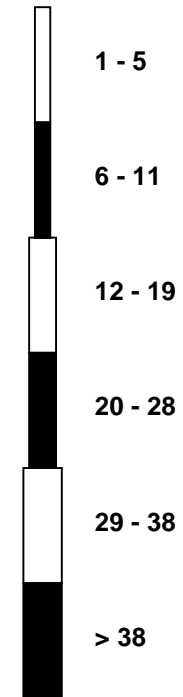
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	3	2	3	5	6	6	7	12	20	15	17	20	18	17	16	13	13	13	13	11	12	11	11	9	9.3	20.5
Dir	68	124	126	67	76	55	24	41	103	127	142	154	153	156	133	130	104	92	83	74	75	77	93	105	109.0	154.1
24 Spd	12	6	8	6	6	7	7	5	6	7	7	3	5	9	12	10	11	11	12	8	5	3	2	2	4.2	12.3
Dir	133	87	37	24	21	18	8	17	128	125	127	112	129	105	96	151	176	158	148	165	193	237	194	111	119.2	147.7
25 Spd	3	4	4	5	7	8	7	9	13	17	16	19	24	25	25	20	17	16	10	4	16	21	21	20	13.1	25.3
Dir	220	222	213	215	218	207	225	222	204	214	228	239	239	233	244	240	226	269	287	266	252	254	260	257	239.2	244.0
26 Spd	12	14	10	9	11	10	8	8	13	25	30	32	32	28	31	35	33	35	34	27	23	20	21	21	20.7	35.1
Dir	253	243	225	201	194	192	204	196	201	246	253	263	260	261	243	240	252	249	244	246	245	245	239	256	243.7	240.1
27 Spd	18	15	14	15	16	13	8	10	19	30	28	30	30	31	34	34	32	27	27	22	16	12	15	15	21.1	34.5
Dir	244	243	251	246	258	267	247	257	261	270	267	258	246	256	255	261	266	253	256	272	268	261	258	271	258.6	254.6
28 Spd	10	8	10	9	5	4	0	3	3	8	4	8	9	11	12	14	12	9	11	11	9	7	8	4	5.4	14.4
Dir	271	265	262	278	267	328	50	181	99	105	199	218	250	221	250	218	230	203	163	152	158	178	174	239	217.6	218.0
29 Spd	7	3	5	6	8	6	6	7	9	13	18	6	10	7	17	19	12	14	13	9	17	14	13	16	7.8	18.6
Dir	268	213	239	222	226	223	212	221	211	169	110	92	204	188	268	285	270	236	226	195	233	246	255	255	230.6	284.7
30 Spd	15	13	13	14	14	16	12	13	16	25	30	34	31	32	27	29	23	24	20	23	19	16	15	18	20.1	33.7
Dir	255	257	247	246	223	224	218	218	221	240	233	246	238	240	261	254	258	247	233	243	243	245	253	244	242.2	245.9
31 Spd	22	21	17	12	13	14	21	24	30	46	40	25	25	20	25	26	30	22	27	17	19	16	19	15	22.3	45.5
Dir	251	248	245	235	238	259	259	261	259	267	275	271	266	288	271	268	260	248	258	255	256	259	259	250	260.7	266.5
Spd	5.5	5.8	5.7	5.1	4.8	5.0	4.2	4.2	6.0	8.1	7.6	7.6	8.7	8.2	8.6	10.2	8.9	7.1	7.5	5.4	5.7	6.6	6.1	6.7	Diurnal Average	
Dir	254.0	254.6	257.1	253.4	244.4	251.4	251.0	221.4	215.7	231.5	232.2	239.6	232.3	232.0	243.5	242.5	249.2	245.1	237.3	237.1	231.6	236.8	244.6	253.5	Diurnal Maximum	
Spd	21.7	20.8	20.7	20.7	17.6	22.7	20.6	24.1	30.1	45.5	40.3	33.7	31.6	32.4	34.5	35.1	33.0	34.7	34.4	26.7	25.8	24.9	21.3	20.7	Diurnal Maximum	
Dir	250.8	247.8	257.2	247.8	258.2	250.2	259.1	260.8	259.5	266.5	274.5	245.9	259.9	247.0	254.6	240.1	252.4	249.2	243.7	274.0	177.1	244.0	260.4	256.2	Diurnal Maximum	
Maximum Speed Value: 46 km/h on Aug 31 10:00																		Minimum Speed Value: 0 km/h on Aug 3 05:00						Hours in Service:		744
Maximum Daily Speed Average: 22.3 km/h on Aug 31																		Minimum Daily Speed Average: 3.4 km/h on Aug 3						Hours of Data:		744
Maximum Diurnal Speed Average: 10.2 km/h at hour 16																		Minimum Diurnal Speed Average: 4.2 km/h at hour 7						Hours of Missing Data:		0
Monthly Average Velocity: 6.54 km/h 240.97 deg																		Speed Percentiles: P ₁ = 1.5 P ₁₀ = 4.3 Q ₁ = 6.8 Median = 10.4 Q ₃ = 16.0 P ₉₀ = 23.7 P ₉₉ = 33.6						Percent Operational Time:		100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38																		Total		
North	21	32	8	0	0	0																		61		
NorthEast	9	40	9	2	0	0																		60		
East	6	27	14	3	0	0																		50		
SouthEast	6	25	19	8	0	0																		58		
South	9	58	21	2	0	0																		90		
SouthWest	35	59	58	26	9	0																		187		
West	14	41	79	53	25	2																		214		
NorthWest	3	16	5	0	0	0																		24		
Total	103	298	213	94	34	2																		744		

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - August 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - August 2014

Maximum Speed: 46 km/h on Aug 31 10:00	Maximum Daily Speed Average: 22.9 km/h on Aug 31	Hours in Service: 744
Minimum Speed: 1 km/h on Aug 3 05:00	Minimum Daily Speed Average: 6.3 km/h on Aug 3	Hours of Data: 744
Maximum Diurnal Speed Average: 18.4 km/h at hour 14	Minimum Diurnal Speed Average: 8.1 km/h at hour 7	Hours of Missing Data: 0
Monthly Average Speed: 12.73 km/h	Percentiles: P ₁ = 1.8 P ₁₀ = 4.8 Q ₁ = 7.3 Median = 11.0 Q ₃ = 16.4 P ₉₀ = 24.3 P ₉₉ = 34.5	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-Aug	11	11	11	9	7	10	9	4	6	7	9	9	10	10	9	10	10	10	9	8	10	7	7	6	8.6	11.1
2-Aug	6	4	4	5	5	5	4	6	8	7	8	7	6	7	8	9	7	10	12	9	8	9	9	8	7.2	12.1
3-Aug	4	2	3	3	1	4	5	9	9	11	10	12	13	14	12	8	7	7	6	6	5	2	1	3	6.3	13.6
4-Aug	1	5	3	4	4	4	5	9	9	11	9	10	13	16	14	18	17	16	11	7	8	14	17	15	10.1	17.9
5-Aug	10	8	7	7	9	1	3	11	17	18	21	22	20	18	13	10	7	8	6	2	5	25	20	10	11.7	25.2
6-Aug	6	10	10	12	9	9	8	10	8	12	16	25	29	28	23	27	28	27	30	27	21	13	6	14	17.0	30.4
7-Aug	13	11	12	13	8	12	10	16	16	21	18	18	19	22	20	19	19	18	15	6	2	4	5	5	13.5	22.1
8-Aug	3	11	5	7	5	5	7	3	6	12	16	14	13	16	18	21	16	12	18	16	17	17	13	13	11.8	21.2
9-Aug	6	8	14	8	6	8	6	6	10	12	12	17	20	21	21	25	26	21	19	13	12	8	7	10	13.1	25.7
10-Aug	12	12	12	13	11	12	8	10	15	19	28	28	28	30	25	30	28	15	24	20	11	11	11	12	17.8	30.3
11-Aug	14	14	13	11	11	9	9	9	10	10	8	11	15	11	9	10	8	6	9	9	9	13	13	10	10.6	14.6
12-Aug	6	7	7	6	6	7	8	7	8	8	10	12	23	23	21	18	18	13	8	7	11	14	9	3	10.8	22.9
13-Aug	6	4	2	5	4	4	5	8	9	8	10	9	10	14	14	12	11	9	5	7	9	7	7	6	7.7	14.5
14-Aug	6	9	9	9	8	3	4	7	7	9	9	6	10	13	16	12	10	9	8	4	3	5	4	6	7.6	15.5
15-Aug	5	6	5	5	5	7	6	7	6	7	10	15	12	11	11	11	11	9	10	8	10	9	3	3	8.1	14.8
16-Aug	3	3	3	2	4	5	5	5	8	7	7	5	10	7	7	14	6	10	16	12	6	12	13	12	7.6	15.6
17-Aug	14	8	9	10	14	14	9	9	16	23	22	19	19	22	23	24	21	20	20	12	15	15	14	19	16.2	23.5
18-Aug	16	16	13	11	12	14	15	10	14	28	30	31	31	33	29	26	27	29	26	23	20	24	19	18	21.4	32.5
19-Aug	18	19	21	21	18	23	14	12	17	12	11	12	12	15	13	12	9	11	11	11	10	7	8	11	13.7	22.8
20-Aug	12	11	11	5	7	8	9	11	11	8	10	11	10	13	13	12	11	10	8	12	8	5	5	5	9.4	13.2
21-Aug	5	5	5	5	5	4	7	7	7	8	8	8	13	11	12	11	11	12	13	6	3	3	7	3	7.6	12.7
22-Aug	4	5	4	4	4	5	15	18	13	14	16	23	21	27	26	13	8	22	27	25	26	22	6	3	14.7	27.5
23-Aug	4	3	3	6	6	7	8	12	22	16	17	21	18	18	17	14	14	13	13	11	12	11	11	10	12.0	22.3
24-Aug	12	7	8	6	7	7	7	5	7	8	8	7	9	12	13	13	13	12	13	8	5	3	2	3	8.1	12.9
25-Aug	4	4	5	5	7	8	7	9	13	17	17	19	25	26	26	21	17	16	10	5	16	21	21	20	14.2	26.1
26-Aug	12	14	10	9	11	10	9	9	13	26	31	33	33	29	31	35	33	35	35	27	23	20	21	21	22.0	35.4
27-Aug	18	15	14	15	16	13	9	10	19	30	29	31	31	32	35	34	33	28	27	23	16	12	15	15	21.7	35.1
28-Aug	11	8	10	9	6	5	2	3	4	10	9	10	10	13	14	15	14	11	12	11	9	8	9	5	9.0	15.5
29-Aug	7	4	5	6	8	7	6	8	9	14	20	19	11	7	19	19	13	14	14	9	18	14	13	16	11.6	20.1
30-Aug	15	13	13	14	15	16	13	13	16	25	30	35	32	33	28	29	24	25	21	23	19	16	15	18	20.8	34.5
31-Aug	22	21	17	12	13	14	21	24	30	46	41	26	26	20	26	27	31	22	27	18	19	16	19	15	22.9	45.8
	9.1	8.9	8.6	8.3	8.2	8.3	8.1	9.3	11.7	15.0	16.1	16.9	17.8	18.4	18.3	18.0	16.4	15.5	15.6	12.4	11.8	11.8	10.7	10.1	Diurnal Average	
	21.8	20.8	20.8	20.7	17.8	22.8	20.7	24.1	30.1	45.8	40.7	34.5	32.5	32.9	35.1	35.4	33.4	35.0	34.6	26.9	26.1	25.2	21.3	20.8	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg
Smoky Heights - August 2014

Maximum Value: 90.5 deg on Aug 16 15:00																								Hours in Service: 744	
Minimum Value: 1.8 deg on Aug 10 04:00																								Hours of Data: 744	
Percentiles: P ₁ = 3.2 P ₁₀ = 5.7 Q ₁ = 8.5 Median = 13.0 Q ₃ = 21.6 P ₉₀ = 36.8 P ₉₉ = 73.7																								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-Aug	9	7	7	8	9	10	11	19	14	17	17	19	19	25	32	20	25	19	8	9	6	9	17	44	
2-Aug	12	24	15	10	7	14	16	11	13	19	31	32	39	41	39	29	45	31	11	6	10	12	24	6	
3-Aug	26	24	84	33	76	16	7	8	17	15	29	15	13	14	18	38	36	18	65	9	15	39	45	27	
4-Aug	68	24	20	23	18	22	8	8	11	12	21	16	13	16	17	14	14	9	10	12	7	7	3	4	
5-Aug	4	6	6	9	15	52	16	8	8	11	9	13	16	17	29	37	39	20	9	71	30	9	26	31	
6-Aug	55	37	9	6	12	16	8	15	13	24	11	14	9	12	14	15	12	11	5	5	5	5	19	6	
7-Aug	10	6	6	5	52	6	9	4	14	10	12	21	21	17	19	18	14	11	12	11	46	23	69	41	
8-Aug	68	8	52	28	17	28	31	42	26	20	13	20	24	19	12	8	8	16	17	11	13	4	8	5	
9-Aug	29	25	7	32	75	26	14	15	14	14	17	18	17	25	14	10	9	9	9	12	13	10	9	7	
10-Aug	5	6	11	2	7	7	12	7	9	17	11	12	13	12	9	13	12	12	9	11	14	8	7	9	
11-Aug	7	7	9	21	23	15	17	17	15	23	46	40	26	44	61	44	53	59	54	29	10	8	13	26	
12-Aug	55	11	6	8	9	11	6	13	28	23	24	27	11	15	19	19	14	20	12	14	8	3	6	27	
13-Aug	16	22	70	76	40	23	27	9	14	17	48	35	24	14	20	22	25	18	32	21	6	26	10	21	
14-Aug	16	11	11	13	7	25	20	9	8	7	21	20	17	33	19	28	39	29	16	8	23	11	11	8	
15-Aug	11	11	16	10	7	9	24	14	16	22	15	17	20	30	27	21	22	16	9	8	5	13	37	12	
16-Aug	20	33	54	22	12	14	19	17	11	14	19	51	26	36	91	54	17	11	7	7	21	7	5	9	
17-Aug	4	28	11	11	6	6	7	19	9	9	10	17	17	17	12	14	13	11	10	15	6	5	6	7	
18-Aug	5	4	5	10	13	4	6	6	13	5	6	6	6	8	9	8	9	6	6	6	6	6	4	5	
19-Aug	2	3	4	3	8	4	12	12	18	28	19	27	23	20	20	44	18	22	14	17	12	46	25	20	
20-Aug	6	5	8	48	11	6	5	13	18	15	18	16	15	21	17	22	26	15	12	10	9	25	10	30	
21-Aug	11	13	8	11	12	18	11	10	15	28	43	31	28	25	26	32	18	18	12	13	7	6	29	34	
22-Aug	9	8	17	30	13	33	18	15	15	21	20	28	31	37	46	53	41	31	17	8	8	40	38	22	
23-Aug	43	46	22	20	10	29	15	16	31	20	14	15	13	17	20	21	20	16	8	8	8	8	11	12	
24-Aug	7	36	9	9	10	11	10	15	48	35	43	85	71	48	27	40	32	23	13	10	20	20	34	55	
25-Aug	52	25	15	15	11	5	8	5	5	6	10	13	11	13	14	17	13	12	12	49	8	9	3	4	
26-Aug	6	5	7	9	8	9	11	13	9	14	9	11	14	9	8	7	9	9	6	5	5	5	7	4	
27-Aug	8	8	10	7	14	10	13	9	8	6	14	12	12	12	11	9	10	8	9	6	4	14	7	14	
28-Aug	10	8	12	7	21	42	63	19	46	43	63	41	42	46	40	27	30	36	17	6	6	12	7	33	
29-Aug	12	36	10	12	6	10	10	12	17	24	26	74	25	23	32	9	16	9	17	21	10	6	4	5	
30-Aug	4	5	6	6	10	7	10	6	10	11	10	13	11	11	11	10	12	17	15	4	4	6	9	6	
31-Aug	5	3	3	5	7	8	5	4	4	6	8	12	14	14	15	12	9	9	4	5	3	3	6	6	
68.1	45.8	83.8	75.5	76.3	51.6	62.8	42.3	48.2	43.1	63.1	84.8	70.8	47.8	90.5	54.4	53.0	59.0	64.8	71.3	45.6	46.1	69.0	54.9		

PAZA

Beaverlodge Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

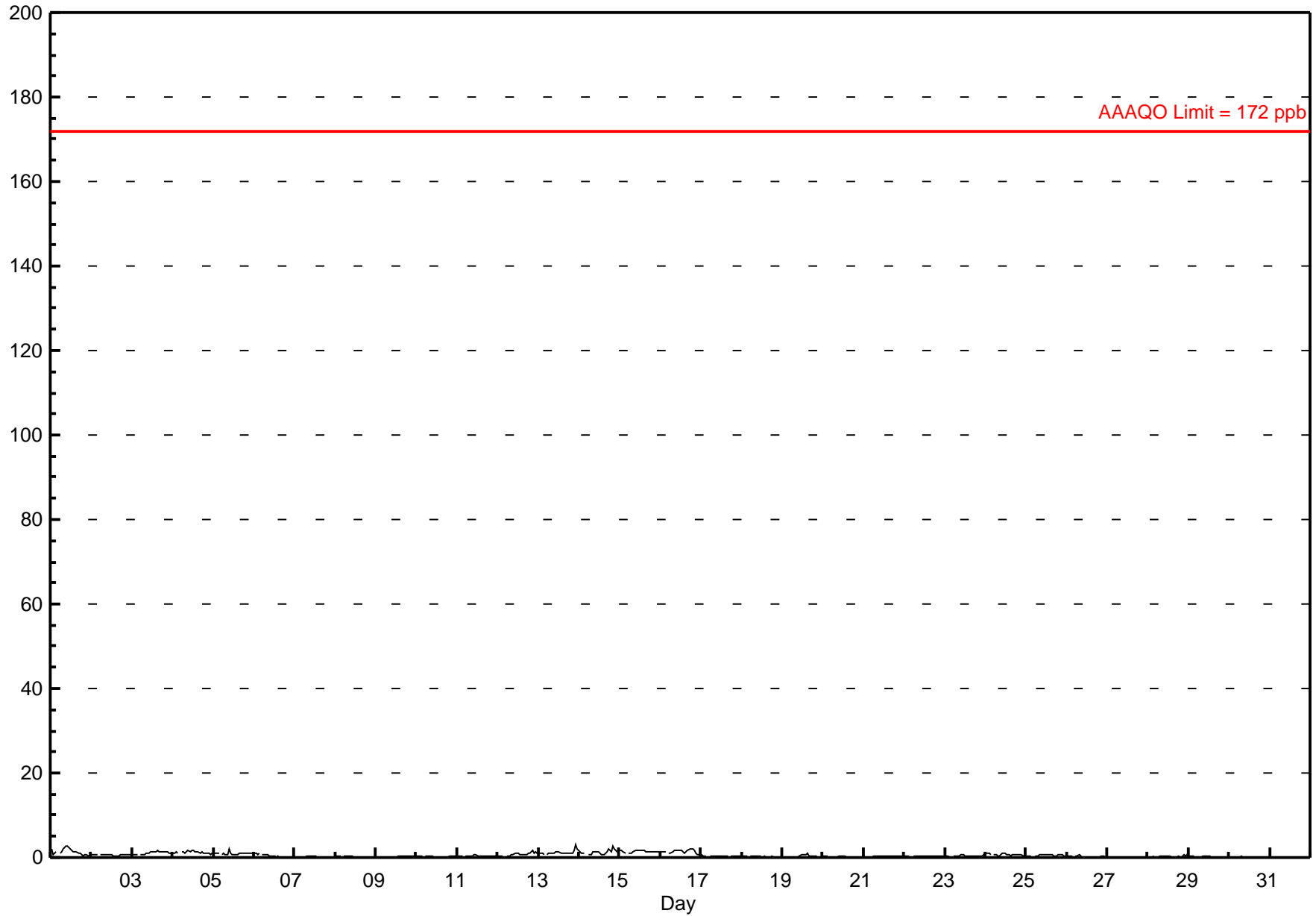
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 3.0 ppb on Aug 13 23:00	Maximum Daily Average: 1.4 ppb on Aug 15		Hours of Data:	710
Minimum Value: 0 ppb on Aug 31 09:00	Minimum Daily Average: 0.0 ppb on Aug 31		Hours of Missing Data:	34
Maximum Diurnal Average: 0.7 ppb at hour 10	Minimum Diurnal Average: 0.4 ppb at hour 6		Hours of Calibration:	34
Monthly Average: 0.54 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.3 Q ₃ = 0.8 P ₉₀ = 1.3 P ₉₉ = 2.0		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-Aug	2	1	1	1	A	1	1	2	2	3	3	2	2	2	1	1	1	1	1	0	1	1	0	1	1.3	2.8
2-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0.6	0.8
3-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	2	2	2	2	1	1	1	1	1.1	1.6
4-Aug	1	1	1	1	A	1	1	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.2	1.8
5-Aug	1	1	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.1
6-Aug	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
7-Aug	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
8-Aug	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
9-Aug	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
10-Aug	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
11-Aug	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
12-Aug	0	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	0.8	1.6
13-Aug	1	1	1	1	A	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	3	2	1.2	3.0
14-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	1	3	2	2	2	2	1.3	2.7
15-Aug	2	2	1	1	A	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	2	1	1.4	1.7
16-Aug	1	1	1	1	A	1	1	1	2	2	2	2	2	1	1	1	2	2	2	2	2	1	1	1	1.4	1.9
17-Aug	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
18-Aug	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
19-Aug	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	1.1
20-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
21-Aug	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
22-Aug	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
23-Aug	0	0	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.7
24-Aug	1	1	1	1	A	1	1	0	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0	0.7	1.1
25-Aug	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0.5	0.8
26-Aug	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
27-Aug	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
28-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.2	0.6
29-Aug	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
30-Aug	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
31-Aug	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
	0.6	0.5	0.5	0.5	--	0.4	0.5	0.5	0.6	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5		Diurnal Average
	1.9	1.6	1.5	1.2	--	1.2	1.3	2.2	2.4	2.8	2.6	2.0	1.8	1.7	1.6	1.6	1.6	2.1	1.9	1.9	2.7	1.9	3.0	2.1		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



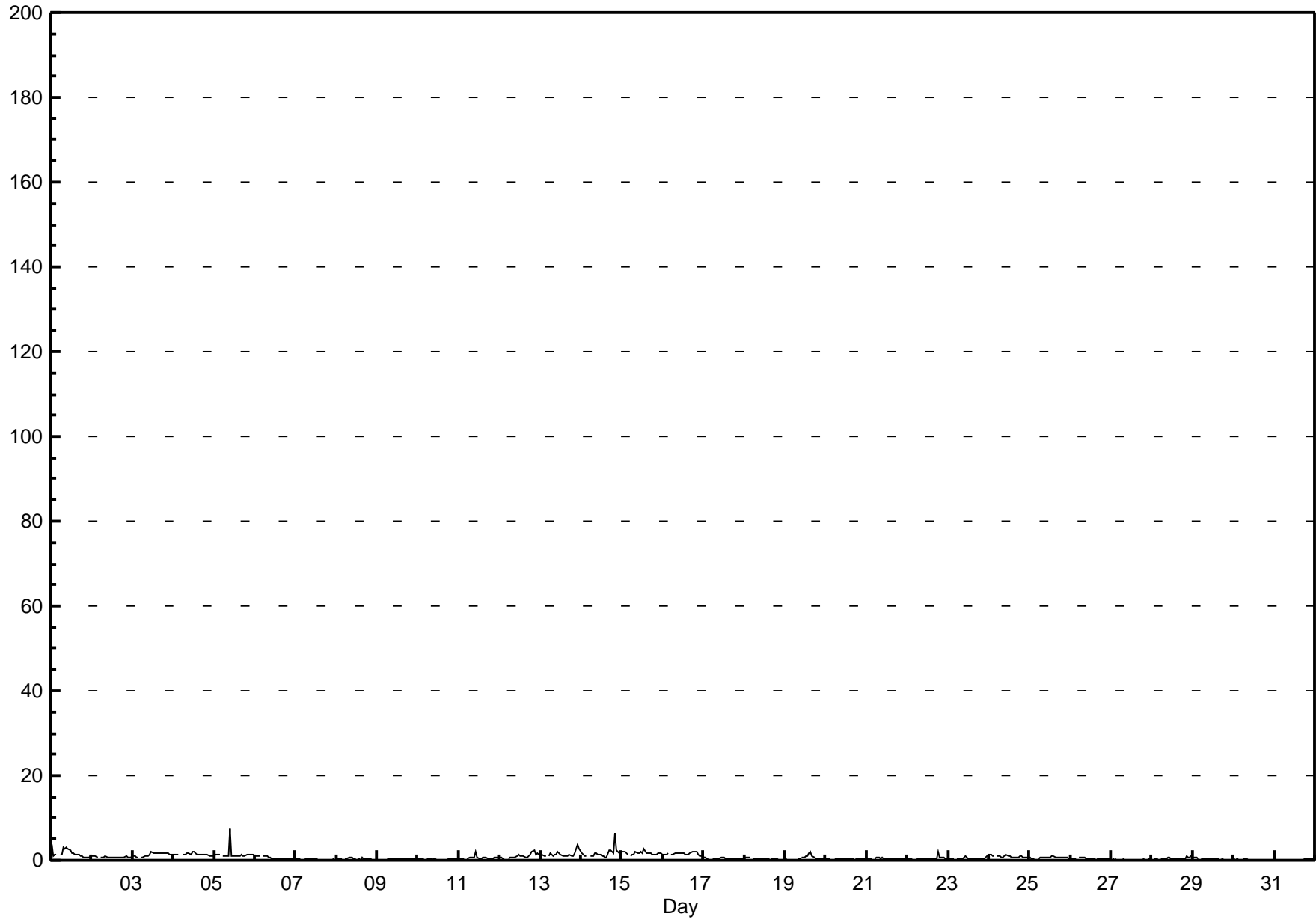
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Beaverlodge - August 2014

Maximum Value: 7.6 ppb on Aug 5 10:00 Minimum Value: 0 ppb on Aug 7 20:00 Maximum Diurnal Average: 1.0 ppb at hour 10 Monthly Average: 0.70 ppb		Maximum Daily Average: 1.7 ppb on Aug 15 Minimum Daily Average: 0.1 ppb on Aug 31 Minimum Diurnal Average: 0.5 ppb at hour 6 Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.5 Q ₃ = 1.0 P ₉₀ = 1.6 P ₉₉ = 2.7		Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								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-Aug	4	1	1	1	A	1	1	3	3	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.6	3.8
2-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
3-Aug	1	1	1	1	A	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1.3	2.2
4-Aug	1	1	1	1	A	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.4	2.1
5-Aug	1	1	1	1	A	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	7.6
6-Aug	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.1
7-Aug	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	0.2	0.4
8-Aug	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.7
9-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
10-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
11-Aug	0	0	0	0	A	0	1	1	1	1	2	1	0	0	1	1	1	1	0	0	0	1	1	1	1	0.6	1.9
12-Aug	1	1	1	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1	1	1.0	2.2
13-Aug	1	1	1	1	A	1	2	1	1	1	2	2	1	1	1	1	1	1	1	1	2	3	4	3	1	1.5	3.7
14-Aug	2	1	1	1	A	1	1	1	2	2	1	1	1	1	1	1	2	2	2	2	6	2	2	2	2	1.7	6.3
15-Aug	2	2	2	1	A	1	1	1	2	2	2	2	2	3	2	2	2	2	2	2	2	1	2	2	2	1.7	2.6
16-Aug	1	2	1	2	A	1	1	2	2	2	2	2	1	1	1	2	2	2	2	2	2	1	1	1	1	1.6	2.1
17-Aug	1	1	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
18-Aug	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
19-Aug	0	0	0	0	A	0	0	0	0	0	1	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0.5	2.1
20-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
21-Aug	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6
22-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	0	0	0	0.4	2.2
23-Aug	0	0	0	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0.4	0.9
24-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
25-Aug	1	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9
26-Aug	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	0.3	0.6
27-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
28-Aug	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.4	1.0
29-Aug	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
30-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
31-Aug	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	0.2
	0.8	0.7	0.7	0.6	--	0.5	0.6	0.7	0.7	1.0	0.8	0.8	0.7	0.7	0.6	0.7	0.7	0.6	0.7	0.7	0.9	0.7	0.7	0.7	0.7		Diurnal Average
	3.8	2.0	2.1	1.5	--	1.4	1.6	3.0	2.8	7.6	2.8	2.3	2.1	2.6	1.7	2.1	2.2	2.2	2.2	2.2	2.1	6.3	2.6	3.7	2.8		Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span			

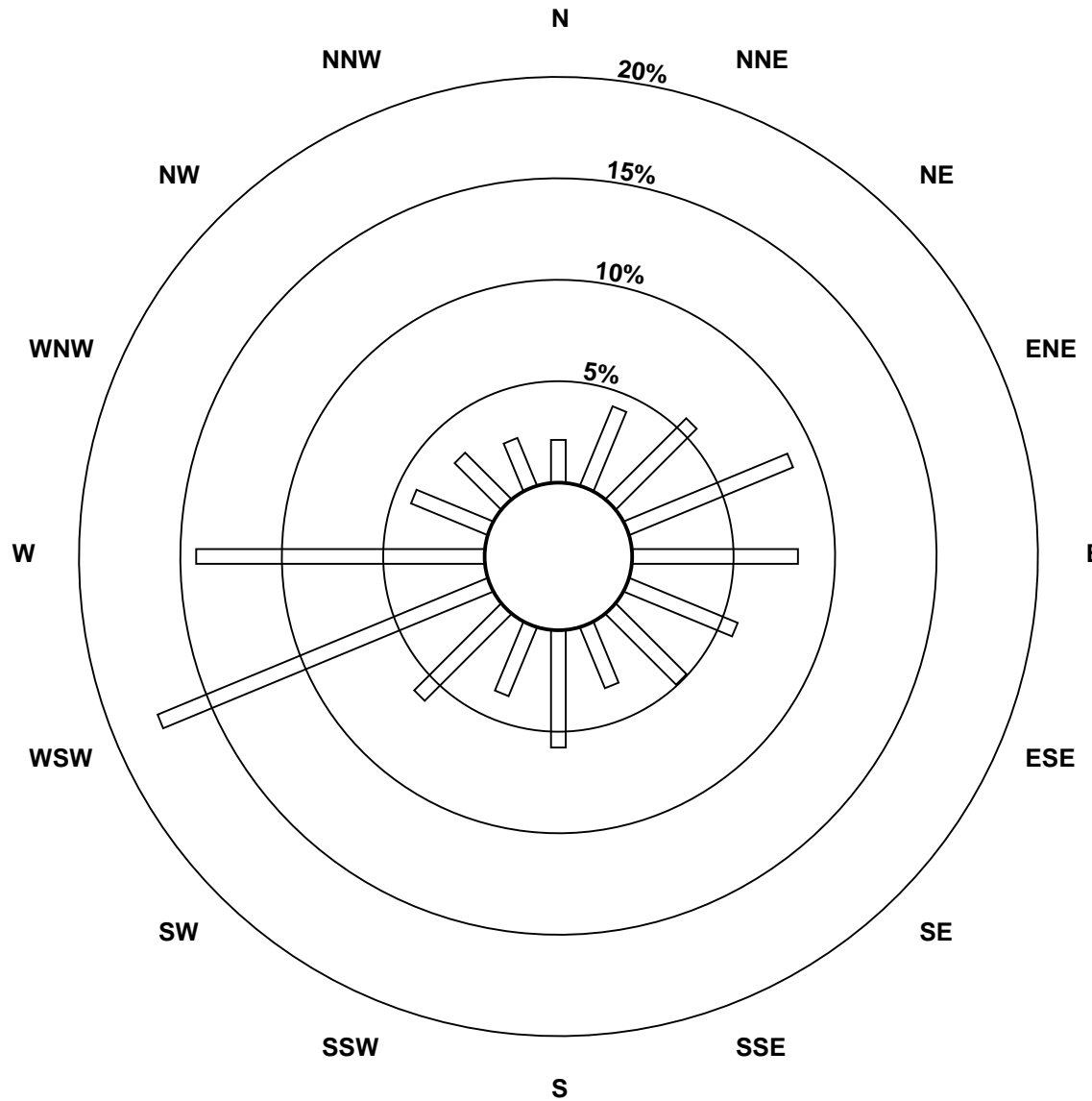
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - August 2014

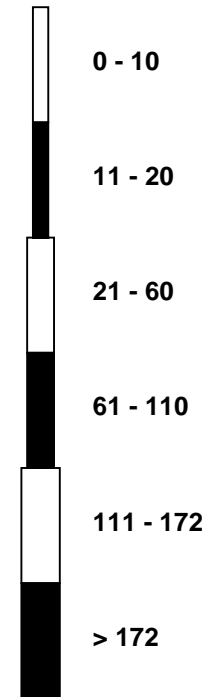


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - August 2014

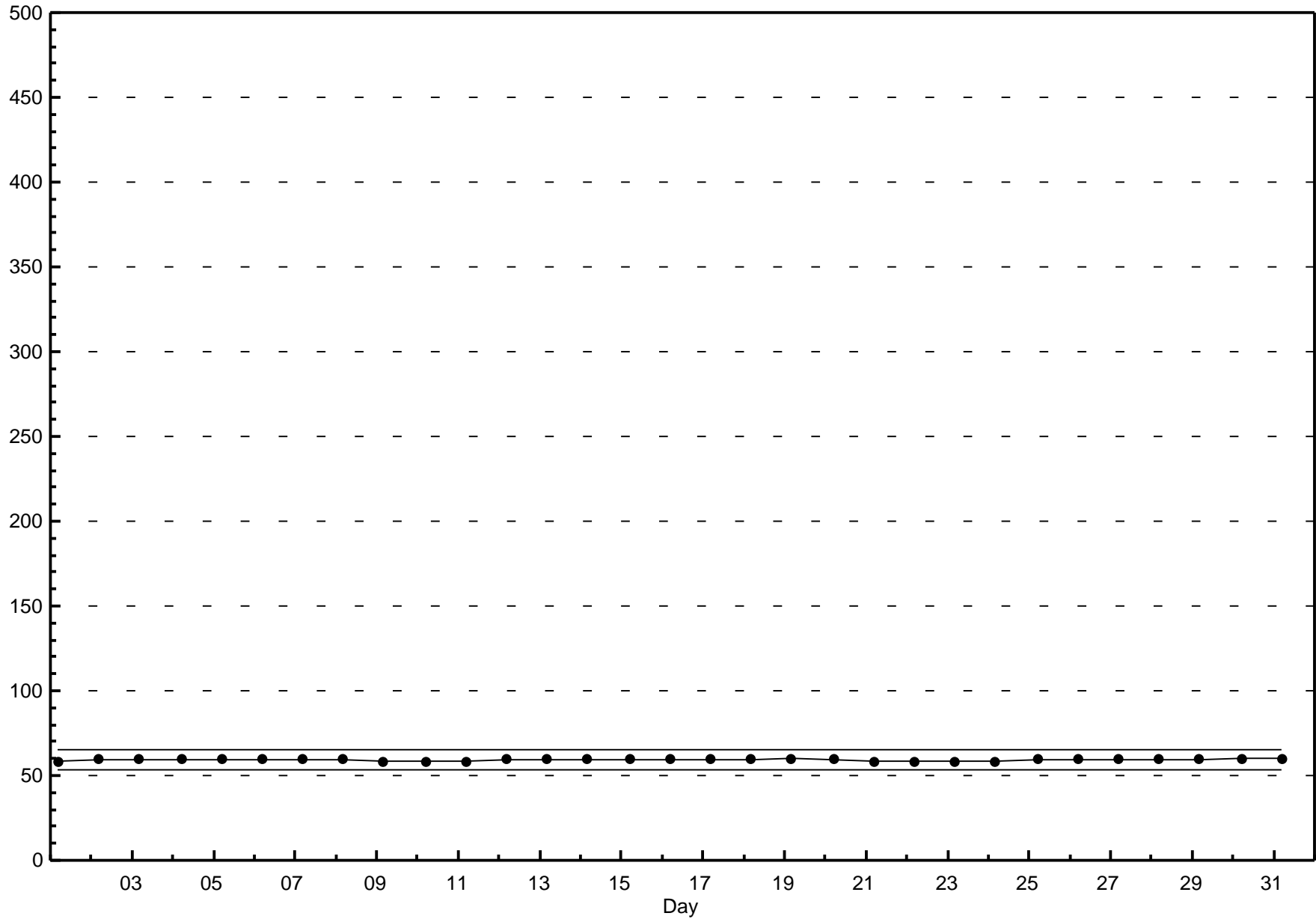


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Beaverlodge - August 2014



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb Beaverlodge - August 2014

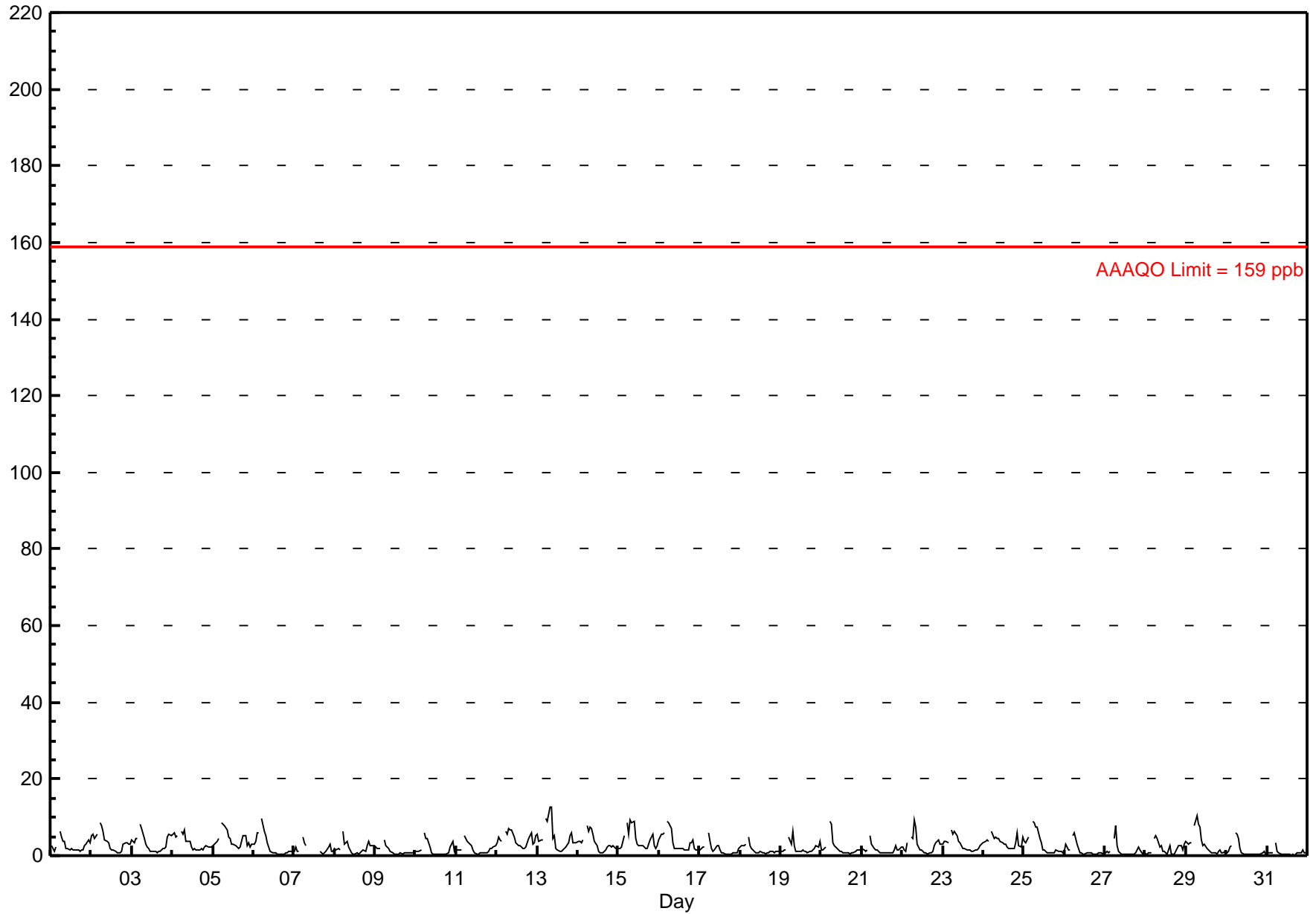
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 12.8 ppb on Aug 13 09:00	Maximum Daily Average: 4.6 ppb on Aug 13		Hours of Data:	706
Minimum Value: 0 ppb on Aug 31 17:00	Minimum Daily Average: 0.7 ppb on Aug 31		Hours of Missing Data:	38
Maximum Diurnal Average: 6.6 ppb at hour 6	Minimum Diurnal Average: 1.0 ppb at hour 16		Hours of Calibration:	38
Monthly Average: 2.50 ppb	Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.9 Median = 1.8 Q ₃ = 3.4 P ₉₀ = 5.5 P ₉₉ = 9.3		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-Aug	2	2	1	2	A	6	5	4	4	2	2	2	1	1	1	2	1	1	1	2	3	3	4	4	2.5	6.5
2-Aug	5	6	5	5	A	9	8	6	4	4	3	2	1	1	1	1	1	1	1	3	4	3	3	3	3.5	8.7
3-Aug	4	4	4	4	A	8	7	4	3	2	2	1	1	1	1	1	1	1	2	2	2	5	6	5	3.1	8.3
4-Aug	5	6	5	5	A	6	6	7	4	4	4	2	1	2	2	1	2	2	2	2	3	2	2	2	3.3	6.8
5-Aug	3	3	4	4	A	9	8	8	7	5	4	3	3	2	2	2	2	4	5	5	2	3	2	3	4.1	8.7
6-Aug	3	4	6	6	A	10	6	5	4	2	1	1	1	1	0	0	0	0	0	1	1	1	1	1	2.4	9.6
7-Aug	1	2	1	1	A	5	3	3	C	C	C	C	C	C	C	1	1	1	1	1	2	3	1	1	--	4.8
8-Aug	2	1	2	1	A	6	3	4	2	2	1	0	0	1	0	1	1	1	1	2	4	3	3	3	1.9	6.3
9-Aug	2	2	2	2	A	4	3	2	2	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1.3	4.2
10-Aug	1	1	1	1	A	6	4	4	2	1	0	0	0	0	0	0	0	0	0	1	2	3	4	1	1.6	6.1
11-Aug	2	2	1	1	A	5	4	3	3	3	1	1	1	1	1	1	1	1	1	1	2	2	2	3	1.8	5.3
12-Aug	3	5	4	4	A	6	5	7	7	7	5	3	3	2	2	2	2	2	3	4	6	3	3	5	4.1	7.0
13-Aug	6	4	4	4	A	10	9	13	13	4	5	2	1	1	1	1	2	2	3	5	6	3	3	3	4.6	12.8
14-Aug	4	4	3	4	A	8	6	8	7	5	4	3	1	1	1	1	2	2	3	2	2	3	2	2	3.3	7.8
15-Aug	2	2	2	5	A	8	6	9	9	9	5	3	3	2	2	2	2	2	3	4	5	3	2	3	4.0	9.3
16-Aug	4	6	6	6	A	9	9	7	3	2	2	2	2	2	1	2	2	3	3	4	2	1	1	1	3.5	9.0
17-Aug	2	2	2	2	A	6	4	2	1	1	3	2	1	1	1	0	0	0	0	1	1	1	1	2	1.6	6.1
18-Aug	2	2	3	3	A	5	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	5.0
19-Aug	1	1	2	1	A	5	3	6	3	1	1	1	1	1	1	1	1	1	1	1	2	2	2	4	1.9	6.2
20-Aug	2	1	2	2	A	9	8	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2.0	8.8
21-Aug	2	1	1	1	A	5	3	2	2	1	1	1	1	1	1	1	1	1	1	1	3	1	1	2	1.5	5.1
22-Aug	2	1	1	3	A	5	5	9	8	3	2	1	1	1	1	0	1	1	1	2	3	4	3	3	2.7	9.3
23-Aug	3	4	4	3	A	7	5	6	5	4	3	3	2	2	2	2	1	1	1	1	2	2	3	3	2.9	6.5
24-Aug	3	4	4	4	A	6	5	5	5	5	4	3	3	3	2	2	2	2	2	3	6	2	2	5	3.5	6.5
25-Aug	4	3	4	5	A	9	8	8	8	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	3.0	8.8
26-Aug	1	3	2	1	A	5	6	3	2	1	1	0	1	1	1	1	1	0	0	0	1	1	1	0	1.4	6.0
27-Aug	1	1	1	1	A	5	8	2	1	1	0	0	0	0	0	0	0	0	1	1	2	1	1	1	1.3	7.9
28-Aug	1	1	1	1	A	4	5	4	2	2	1	1	1	1	3	1	0	1	1	3	3	3	2	3	1.8	5.1
29-Aug	4	3	3	3	A	8	10	8	8	4	3	3	2	2	1	1	1	1	0	1	1	1	1	1	3.0	10.3
30-Aug	1	1	2	2	A	6	5	5	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1.4	6.1
31-Aug	1	1	1	1	A	3	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.7	3.3
	2.5	2.6	2.7	3.0	--	6.6	5.5	5.2	4.1	2.8	2.1	1.6	1.3	1.2	1.1	1.0	1.0	1.0	1.4	2.0	2.4	2.2	2.0	2.3	Diurnal Average	
	5.6	5.9	6.1	6.0	--	9.8	10.3	12.5	12.8	8.8	5.1	3.4	3.1	2.9	2.6	2.3	2.4	3.7	5.3	5.4	6.0	4.7	5.5	5.1	Diurnal Maximum	

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

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - August 2014



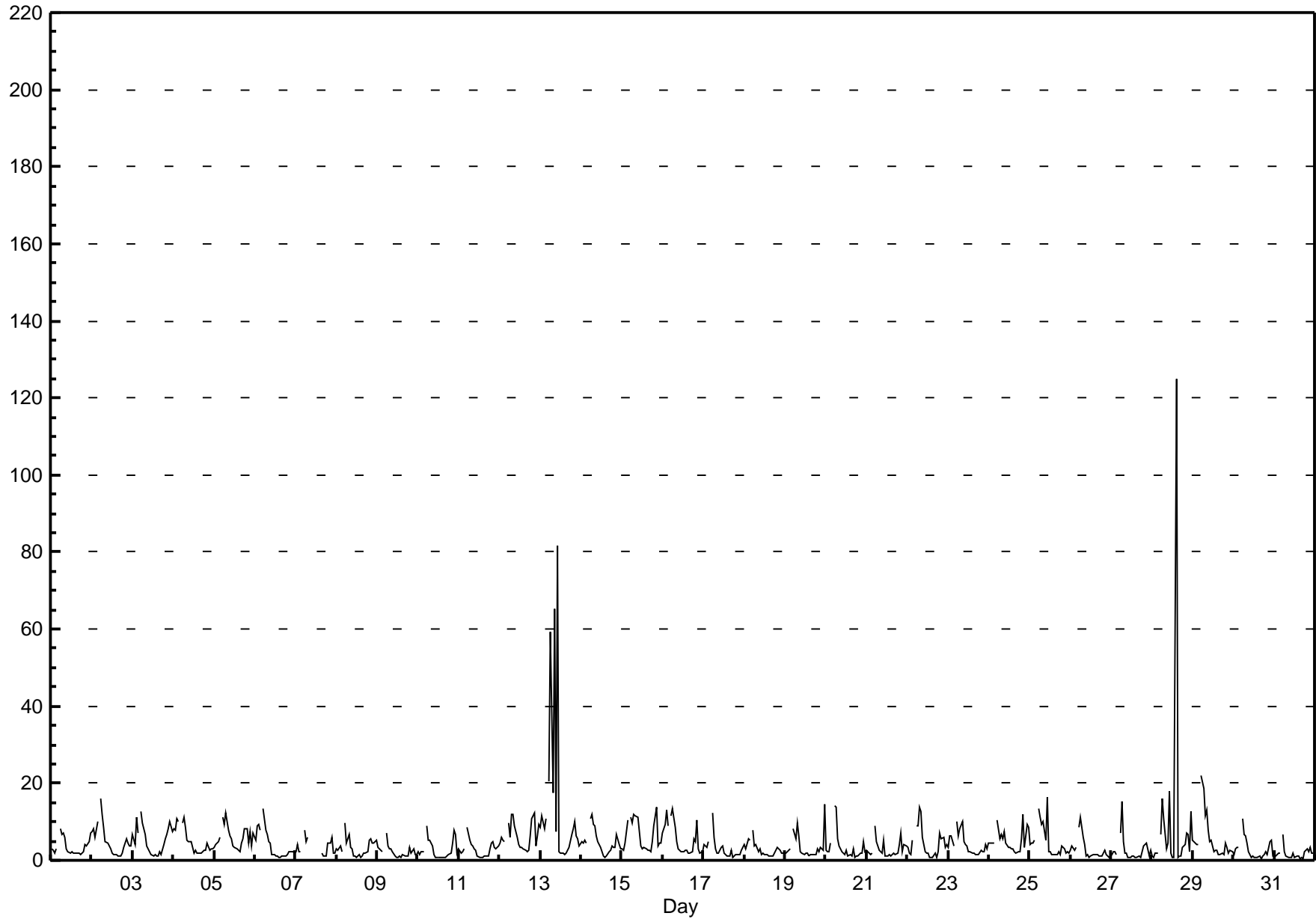
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb Beaverlodge - August 2014

Maximum Value: 125.0 ppb on Aug 28 15:00 Minimum Value: 1 ppb on Aug 30 17:00 Maximum Diurnal Average: 10.8 ppb at hour 6 Monthly Average: 4.55 ppb		Maximum Daily Average: 15.1 ppb on Aug 13 Minimum Daily Average: 1.7 ppb on Aug 31 Minimum Diurnal Average: 1.4 ppb at hour 16 Percentiles: P ₁ = 0.6 P ₁₀ = 1.0 Q ₁ = 1.7 Median = 2.9 Q ₃ = 5.4 P ₉₀ = 9.4 P ₉₉ = 17.4		Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	3	3	2	3	A	8	7	7	6	3	2	2	2	2	2	2	2	2	2	4	4	5	7	3.5	8.3		
2-Aug	7	8	6	10	A	16	12	8	5	4	4	3	2	2	2	1	1	1	2	3	6	5	4	4	5.0	16.2	
3-Aug	7	4	11	7	A	13	10	7	4	3	2	2	1	1	1	1	2	1	4	6	7	8	10	8	5.2	12.8	
4-Aug	8	8	11	10	A	10	11	8	5	5	5	3	2	3	2	2	2	2	3	3	4	3	3	3	5.0	11.0	
5-Aug	3	4	5	6	A	11	10	12	8	6	6	4	3	3	2	2	5	6	8	8	5	7	4	7	5.9	12.3	
6-Aug	5	9	9	8	A	14	8	7	5	4	2	1	1	1	1	1	1	1	1	2	2	2	2	2	3.9	13.6	
7-Aug	2	4	2	2	A	8	5	6	C	C	C	C	C	C	C	2	1	1	1	5	5	6	2	2	--	7.8	
8-Aug	3	2	4	2	A	10	5	7	3	3	1	1	1	1	1	1	2	2	2	5	6	4	5	5	3.3	9.7	
9-Aug	3	3	3	2	A	7	4	3	3	2	1	1	1	1	1	1	1	1	1	3	2	3	2	2	2.2	7.2	
10-Aug	2	1	2	2	A	9	5	5	4	2	1	1	1	1	1	1	1	1	1	2	4	8	7	2	2.7	9.0	
11-Aug	3	2	2	3	A	9	5	4	4	3	3	1	1	1	1	1	1	1	3	4	5	3	3	4	2.9	8.7	
12-Aug	5	6	5	5	A	10	6	12	12	9	6	4	3	3	3	2	2	2	6	11	12	4	6	9	6.3	12.5	
13-Aug	9	12	8	11	A	21	59	17	65	7	82	2	2	2	2	2	3	3	7	8	10	6	5	4	15.1	81.5	
14-Aug	5	4	5	5	A	11	12	9	9	6	5	3	2	1	1	1	2	2	4	3	3	7	4	3	4.8	12.1	
15-Aug	3	2	4	10	A	11	10	12	12	11	7	4	3	3	3	3	3	2	5	9	14	4	5	4	6.3	13.8	
16-Aug	7	9	13	9	A	12	14	9	5	3	3	2	2	2	2	2	2	2	6	5	10	3	2	2	5.5	13.6	
17-Aug	4	4	4	5	A	12	6	3	2	2	3	4	2	1	1	1	3	1	1	1	2	2	3	3	3.0	12.2	
18-Aug	4	3	5	5	A	8	4	4	2	3	2	2	1	2	1	1	1	1	2	3	3	2	2	2	2.8	7.8	
19-Aug	2	2	3	3	A	8	6	10	6	2	2	2	2	2	1	2	1	1	1	2	3	2	3	3	15	3.6	14.7
20-Aug	3	2	2	5	A	14	14	6	4	2	2	1	3	1	1	1	3	1	1	1	2	2	5	2	3.4	14.2	
21-Aug	2	2	2	2	A	9	5	3	2	2	5	1	1	1	2	2	2	2	4	7	2	4	4	4	2.9	8.9	
22-Aug	3	2	2	5	A	9	9	14	13	6	2	2	2	1	1	1	2	1	2	7	5	6	3	4	4.4	13.8	
23-Aug	3	6	6	4	A	10	6	8	10	5	4	4	2	2	2	2	2	1	1	2	2	2	4	3	4.1	10.2	
24-Aug	4	4	4	4	A	10	5	7	5	7	4	3	3	3	3	2	2	2	2	6	12	3	9	9	5.1	12.1	
25-Aug	4	4	4	5	A	14	11	9	10	5	17	2	2	1	1	2	1	2	2	4	3	2	2	2	4.8	16.6	
26-Aug	3	4	3	3	A	9	11	6	4	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	2.7	11.2	
27-Aug	1	2	2	2	A	7	15	5	2	2	1	1	1	1	1	1	1	1	2	4	4	4	1	2	2.8	15.5	
28-Aug	1	1	2	2	A	7	16	11	3	4	18	2	1	1	125	1	1	1	3	4	7	7	2	13	10.1	125.0	
29-Aug	5	5	4	4	A	22	19	12	13	8	5	5	2	3	3	2	1	2	1	4	3	2	3	2	5.6	22.0	
30-Aug	1	3	3	3	A	11	7	6	4	2	1	1	1	1	1	1	1	1	1	2	2	5	5	1	2.9	11.0	
31-Aug	1	1	2	2	A	7	2	1	1	1	1	2	1	1	1	1	1	1	2	3	2	4	2	2	1.7	6.6	
	3.8	4.1	4.5	4.8	--	10.8	10.2	7.7	7.7	4.2	6.5	2.2	1.8	1.7	5.6	1.4	1.7	1.7	2.7	4.2	5.1	4.0	3.8	4.3		Diurnal Average	
	8.7	11.7	12.9	10.7	--	22.0	59.3	17.4	65.4	11.3	81.5	5.1	3.4	3.3	125.0	2.6	4.6	5.6	8.2	10.7	13.8	8.3	10.2	14.7		Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

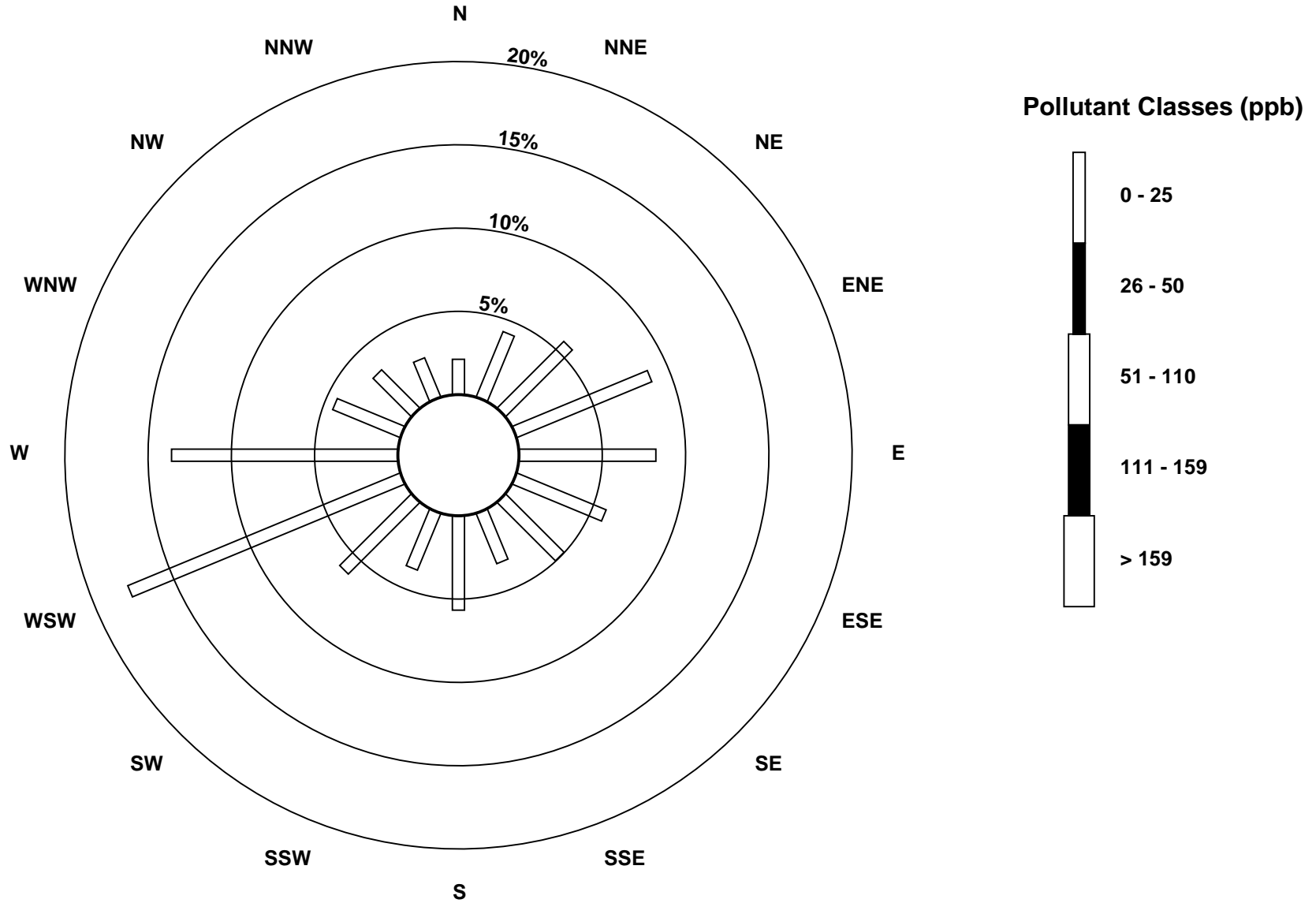
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - August 2014



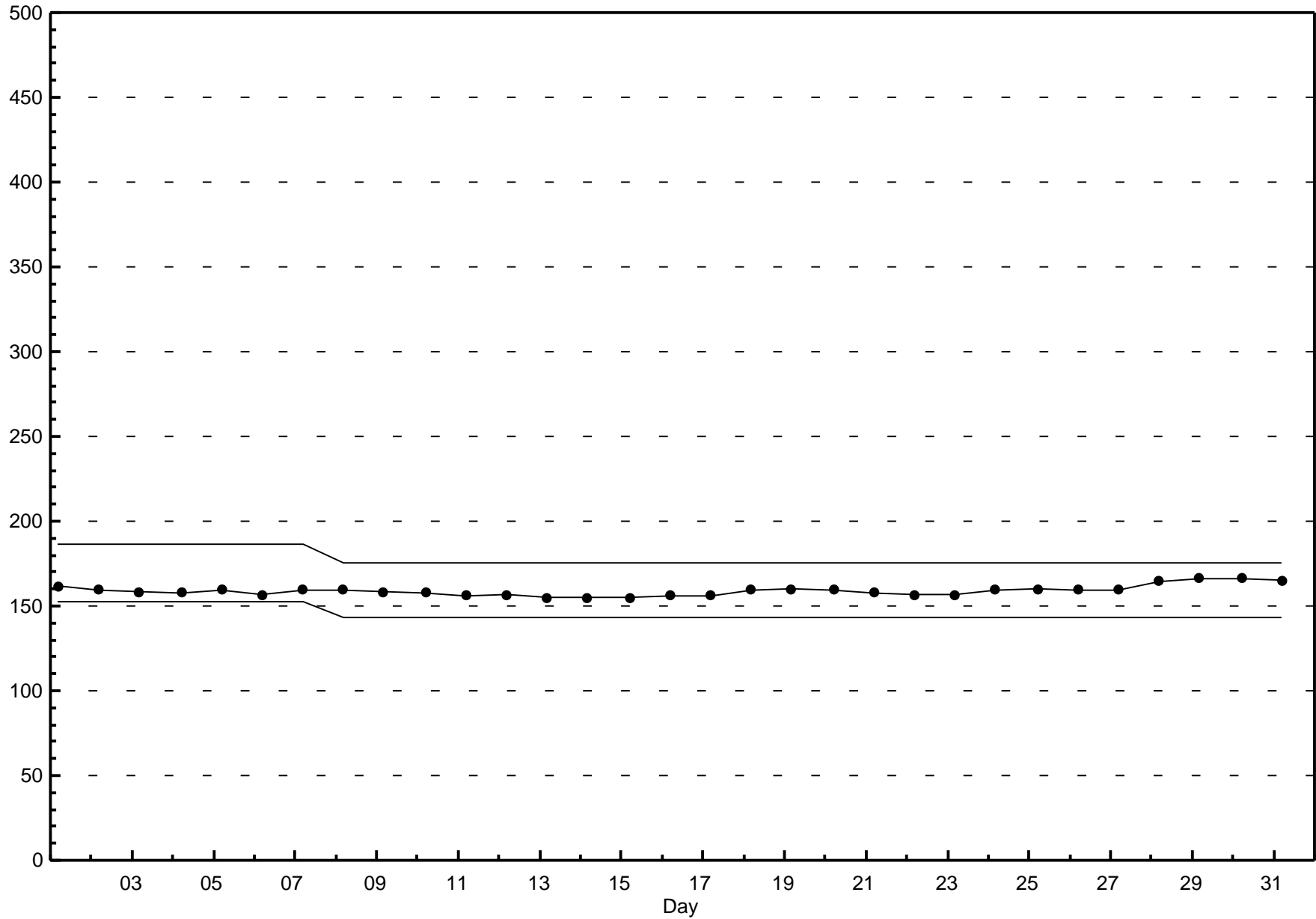
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - August 2014



Span Responses

Nitrogen Dioxide (NO₂)
Beaverlodge - August 2014



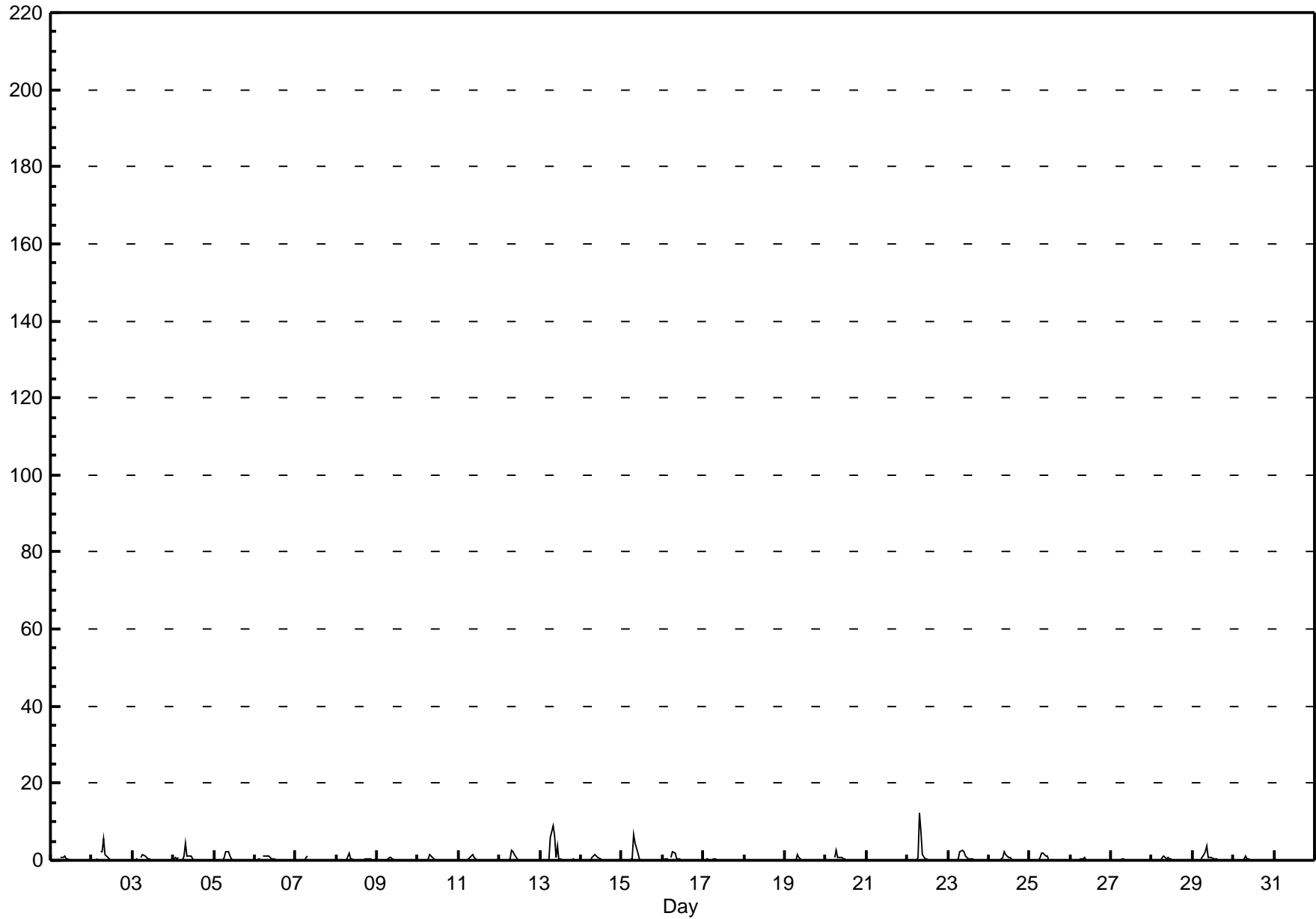
Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - August 2014

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 12.5 ppb on Aug 22 08:00 Maximum Daily Average: 1.2 ppb on Aug 13		Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0																										
Minimum Value: 0 ppb on Aug 2 16:00 Maximum Diurnal Average: 2.2 ppb at hour 8 Monthly Average: 0.32 ppb		Minimum Daily Average: 0.0 ppb on Aug 31 Minimum Diurnal Average: 0.0 ppb at hour 23 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.8 P ₉₉ = 5.6																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1-Aug	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9		
2-Aug	0	0	0	0	A	2	2	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	5.7		
3-Aug	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.4		
4-Aug	0	1	0	1	A	0	1	5	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.6		
5-Aug	0	0	0	0	A	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.3		
6-Aug	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	1.3		
7-Aug	0	0	0	0	A	0	1	1	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	1.0		
8-Aug	0	0	0	0	A	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.7		
9-Aug	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9		
10-Aug	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5		
11-Aug	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.4		
12-Aug	0	0	0	0	A	0	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.7		
13-Aug	0	0	0	0	A	0	6	9	6	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	8.9		
14-Aug	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.3		
15-Aug	0	0	0	0	A	0	0	7	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	6.8		
16-Aug	0	0	0	0	A	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.4		
17-Aug	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		
18-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2		
19-Aug	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5		
20-Aug	0	0	0	0	A	1	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.8		
21-Aug	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-Aug	0	0	0	0	A	0	1	12	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	12.5		
23-Aug	0	0	0	0	A	0	0	2	3	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	2.6		
24-Aug	0	0	0	0	A	0	0	1	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	2.1		
25-Aug	0	0	0	0	A	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8		
26-Aug	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6		
27-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3		
28-Aug	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0		
29-Aug	0	0	0	0	A	0	2	2	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.8		
30-Aug	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.2		
31-Aug	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		
		0.0	0.1	0.1	0.1	--	0.3	0.9	2.2	1.5	0.7	0.5	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	Diurnal Average		
		0.4	0.6	0.4	0.7	--	2.1	5.9	12.5	7.4	2.2	3.6	0.9	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.1	0.1	0.3	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - August 2014



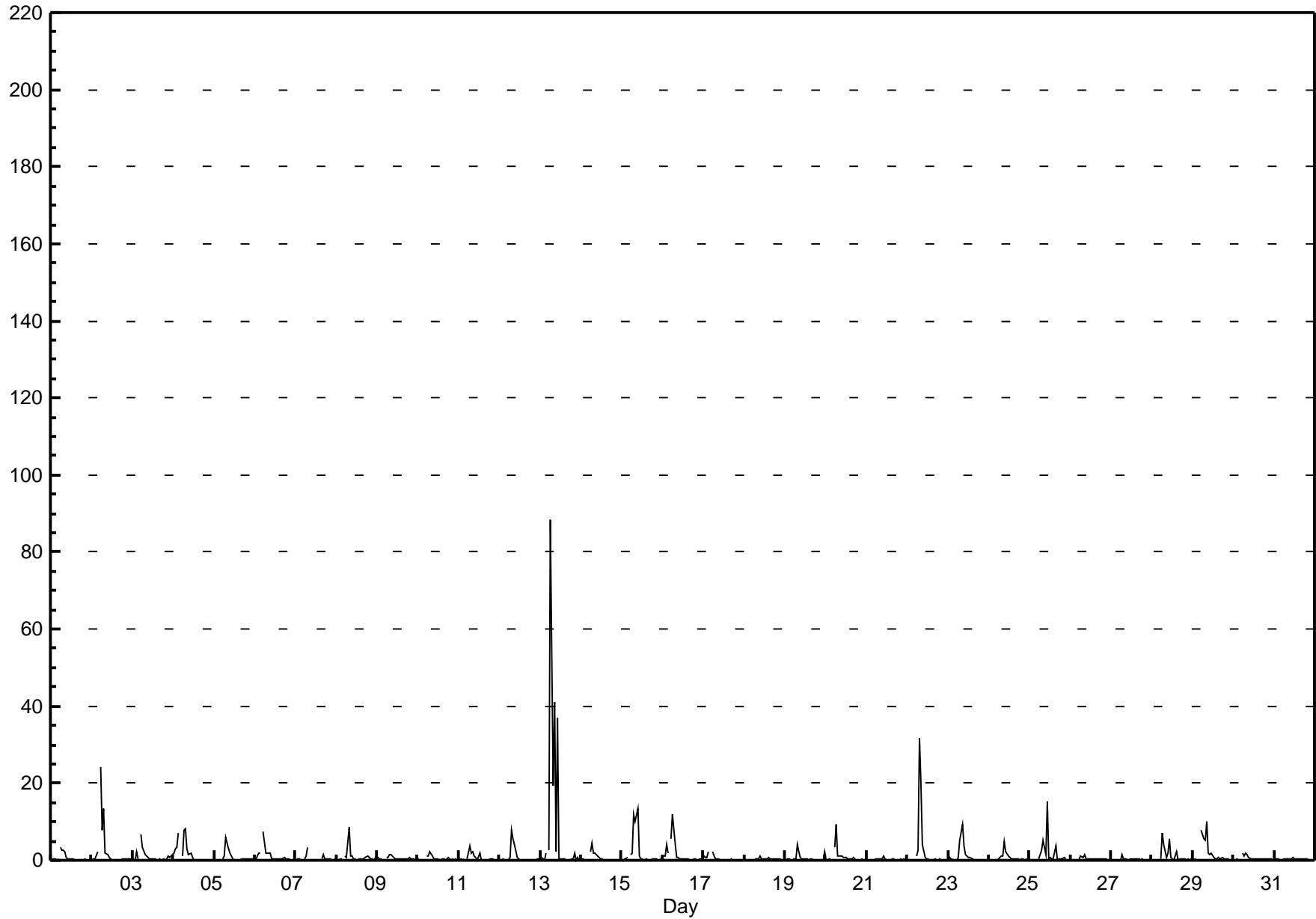
Hourly Maximums

Nitrogen Oxide (NO) - ppb Beaverlodge - August 2014

Maximum Value: 88.4 ppb on Aug 13 07:00		Maximum Daily Average: 8.7 ppb on Aug 13		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 18 03:00		Minimum Daily Average: 0.2 ppb on Aug 21		Hours of Data: 706																							
Maximum Diurnal Average: 5.6 ppb at hour 7		Minimum Diurnal Average: 0.2 ppb at hour 22		Hours of Missing Data: 38																							
Monthly Average: 1.21 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 2.1 P ₉₉ = 19.1		Hours of Calibration: 38																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0	0	0	0	A	3	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.2	
2-Aug	0	1	0	2	A	24	8	14	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	24.3	
3-Aug	0	0	2	0	A	7	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1.0	6.9	
4-Aug	2	3	3	7	A	1	8	8	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1.8	8.0	
5-Aug	0	0	0	0	A	0	1	6	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	6.1	
6-Aug	0	1	2	2	A	8	2	2	2	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1.1	7.6	
7-Aug	0	0	0	0	A	0	1	3	C	C	C	C	C	C	C	0	2	0	0	0	0	0	0	0	--	3.3	
8-Aug	0	0	0	0	A	1	1	9	1	1	1	0	0	0	0	0	0	1	1	1	0	0	0	1	0.9	8.8	
9-Aug	1	0	1	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.5	1.4	
10-Aug	0	0	0	0	A	1	1	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	2.2	
11-Aug	0	0	0	1	A	1	4	2	2	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0.7	3.7	
12-Aug	0	0	0	0	A	0	1	8	6	4	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1.0	7.7	
13-Aug	0	1	0	2	A	2	88	19	41	2	37	0	0	0	0	0	0	0	0	2	0	1	0	8.7	88.4		
14-Aug	1	0	0	0	A	2	5	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.5	
15-Aug	0	0	0	1	A	1	2	12	10	13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.9	13.5	
16-Aug	1	1	4	2	A	6	12	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	11.9	
17-Aug	1	1	1	2	A	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.4	
18-Aug	0	0	0	0	A	0	0	0	0	1	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0.4	1.1	
19-Aug	0	0	0	0	A	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0.6	4.1	
20-Aug	0	0	0	0	A	4	9	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	1.0	9.4	
21-Aug	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2	
22-Aug	0	0	0	0	A	1	2	32	20	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.7	31.8	
23-Aug	0	1	0	0	A	0	1	5	9	4	2	1	1	1	0	0	0	0	0	0	0	0	0	0	1.1	9.3	
24-Aug	0	0	0	0	A	0	1	1	1	5	2	1	1	0	0	0	0	0	0	0	0	0	1	0	0.7	4.7	
25-Aug	0	0	0	0	A	0	1	2	5	1	15	0	1	0	0	4	0	0	0	0	1	0	0	0	1.5	15.4	
26-Aug	0	0	0	0	A	0	1	1	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	1.5	
27-Aug	0	0	0	0	A	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6	
28-Aug	0	0	0	0	A	0	7	4	1	2	6	1	0	0	2	0	0	0	0	0	0	0	0	0	1.1	7.1	
29-Aug	0	0	0	0	A	8	6	5	10	2	1	2	1	0	0	1	0	1	0	0	0	0	0	0	1.7	9.9	
30-Aug	0	0	0	0	A	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.0	
31-Aug	0	0	0	0	A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
		0.3	0.4	0.6	0.7	--	2.5	5.6	5.0	4.4	1.9	2.6	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	Diurnal Average		
		1.9	3.1	4.0	7.0	--	24.3	88.4	31.8	41.2	13.5	37.1	1.8	1.8	0.6	2.3	3.7	1.6	0.6	1.0	0.8	1.8	1.2	0.7	2.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - August 2014

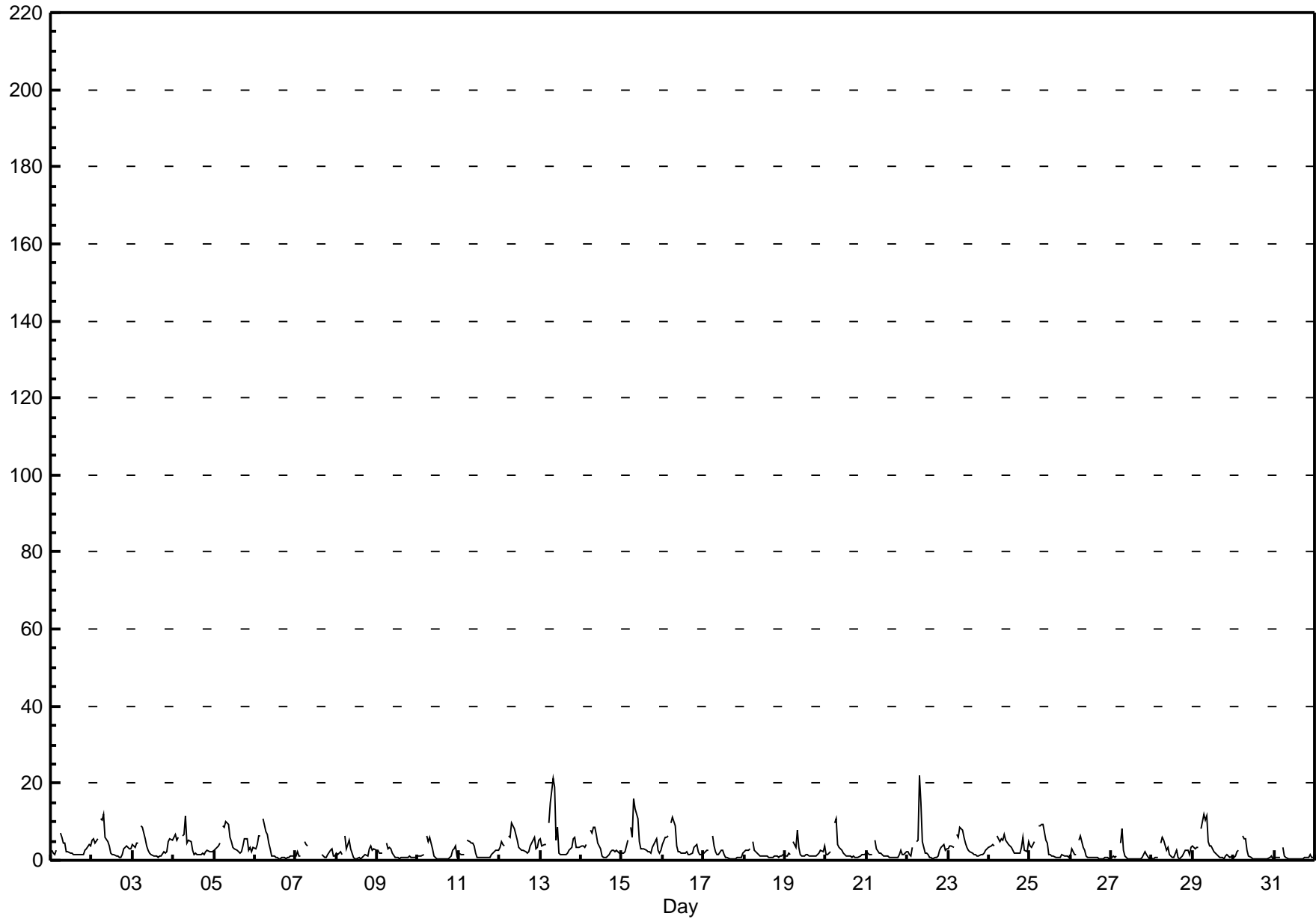


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - August 2014

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 21.9 ppb on Aug 22 08:00 Maximum Daily Average: 5.8 ppb on Aug 13		Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0																									
Minimum Value: 0 ppb on Aug 31 15:00 Maximum Diurnal Average: 7.4 ppb at hour 8 Monthly Average: 2.84 ppb		Minimum Daily Average: 0.7 ppb on Aug 31 Minimum Diurnal Average: 1.0 ppb at hour 16 Percentiles: P ₁ = 0.3 P ₁₀ = 0.6 Q ₁ = 1.0 Median = 1.9 Q ₃ = 3.7 P ₉₀ = 5.9 P ₉₉ = 12.5																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	3	2	1	3	A	7	6	4	5	2	2	2	2	2	2	2	2	1	1	2	3	3	4	4	2.7	7.1	
2-Aug	5	6	5	6	A	11	10	12	6	5	4	2	2	1	1	1	1	1	1	3	4	3	3	3	4.1	12.0	
3-Aug	4	4	5	5	A	9	9	5	4	3	2	1	1	1	1	1	1	1	2	2	2	5	6	5	3.4	9.1	
4-Aug	6	7	5	6	A	6	7	12	5	5	5	3	1	2	2	2	2	2	2	2	3	2	2	2	3.9	11.5	
5-Aug	3	3	4	4	A	9	9	10	9	6	5	3	3	3	2	2	2	4	5	6	2	3	2	3	4.5	10.2	
6-Aug	3	4	6	6	A	11	8	7	5	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2.8	10.7	
7-Aug	1	2	1	1	A	5	4	4	C	C	C	C	C	C	C	1	1	1	1	2	2	3	1	1	--	4.9	
8-Aug	2	1	2	1	A	6	3	5	3	2	1	1	0	1	0	1	1	2	1	3	4	3	3	3	2.1	6.4	
9-Aug	2	2	2	2	A	4	3	3	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	4.3	
10-Aug	1	1	1	1	A	6	5	6	3	1	1	0	0	0	0	0	0	0	1	1	2	3	4	1	1.8	6.2	
11-Aug	2	2	1	1	A	5	5	5	4	4	2	1	1	1	1	1	1	1	1	1	2	2	2	3	2.1	5.4	
12-Aug	3	5	4	4	A	7	6	10	9	8	5	4	3	3	3	2	2	2	4	4	6	3	3	5	4.5	9.7	
13-Aug	6	4	4	4	A	10	15	21	19	5	9	2	2	1	1	1	2	2	3	5	6	3	3	3	5.8	21.4	
14-Aug	4	4	3	4	A	8	7	9	9	7	4	3	1	1	1	1	2	2	3	3	2	3	2	2	3.6	8.8	
15-Aug	2	2	2	5	A	9	6	16	13	11	5	3	3	3	3	2	2	2	3	4	5	3	2	3	4.7	16.2	
16-Aug	4	6	6	6	A	10	11	9	4	2	2	2	2	2	2	2	2	2	3	4	4	2	1	1	3.9	11.1	
17-Aug	2	2	3	3	A	6	4	2	2	2	3	3	1	1	1	0	1	0	0	1	1	1	1	2	1.7	6.3	
18-Aug	2	2	3	3	A	5	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	5.0	
19-Aug	1	1	2	1	A	5	3	8	3	1	1	1	1	1	1	1	1	1	1	1	2	3	2	4	2.1	7.7	
20-Aug	2	1	2	2	A	10	11	4	4	2	2	2	1	1	1	1	1	1	1	1	1	1	2	2	2.4	10.8	
21-Aug	2	1	1	1	A	5	3	2	2	2	1	1	1	1	1	1	1	1	1	2	3	1	1	2	1.6	5.2	
22-Aug	2	1	1	3	A	5	5	22	15	5	2	2	1	1	1	0	1	1	1	3	3	4	3	3	3.7	21.9	
23-Aug	3	4	4	3	A	7	6	8	8	6	5	3	3	2	2	2	1	1	1	1	2	2	3	3	3.4	8.5	
24-Aug	3	4	4	4	A	6	5	6	5	7	5	4	4	3	3	2	2	2	2	3	6	2	2	5	3.9	6.8	
25-Aug	4	3	4	5	A	9	9	9	9	5	4	2	2	1	1	1	1	1	1	1	1	1	1	1	3.3	9.4	
26-Aug	1	3	2	1	A	5	6	3	3	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1.5	6.2	
27-Aug	1	1	1	1	A	5	8	3	1	1	1	0	0	0	0	0	1	0	1	1	2	1	0	1	1.4	8.2	
28-Aug	0	0	1	1	A	5	6	5	3	3	1	1	1	1	3	1	1	1	1	3	3	3	2	3	2.0	6.0	
29-Aug	4	3	3	3	A	8	12	10	11	5	4	4	2	2	1	1	1	1	1	1	1	1	1	1	3.5	11.8	
30-Aug	1	1	2	2	A	6	6	6	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	1.5	6.2	
31-Aug	1	1	1	1	A	3	1	1	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	0.7	3.3	
		2.6	2.7	2.8	3.1	--	6.9	6.5	7.4	5.7	3.6	2.7	1.8	1.4	1.3	1.2	1.0	1.1	1.1	1.5	2.1	2.5	2.2	2.0	2.3	Diurnal Average	
		5.9	6.6	6.5	6.3	--	10.8	14.8	21.9	19.0	10.8	8.7	4.1	3.8	3.2	2.7	2.4	2.4	3.8	5.5	5.5	6.1	4.8	5.6	5.4	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Hourly Maximums

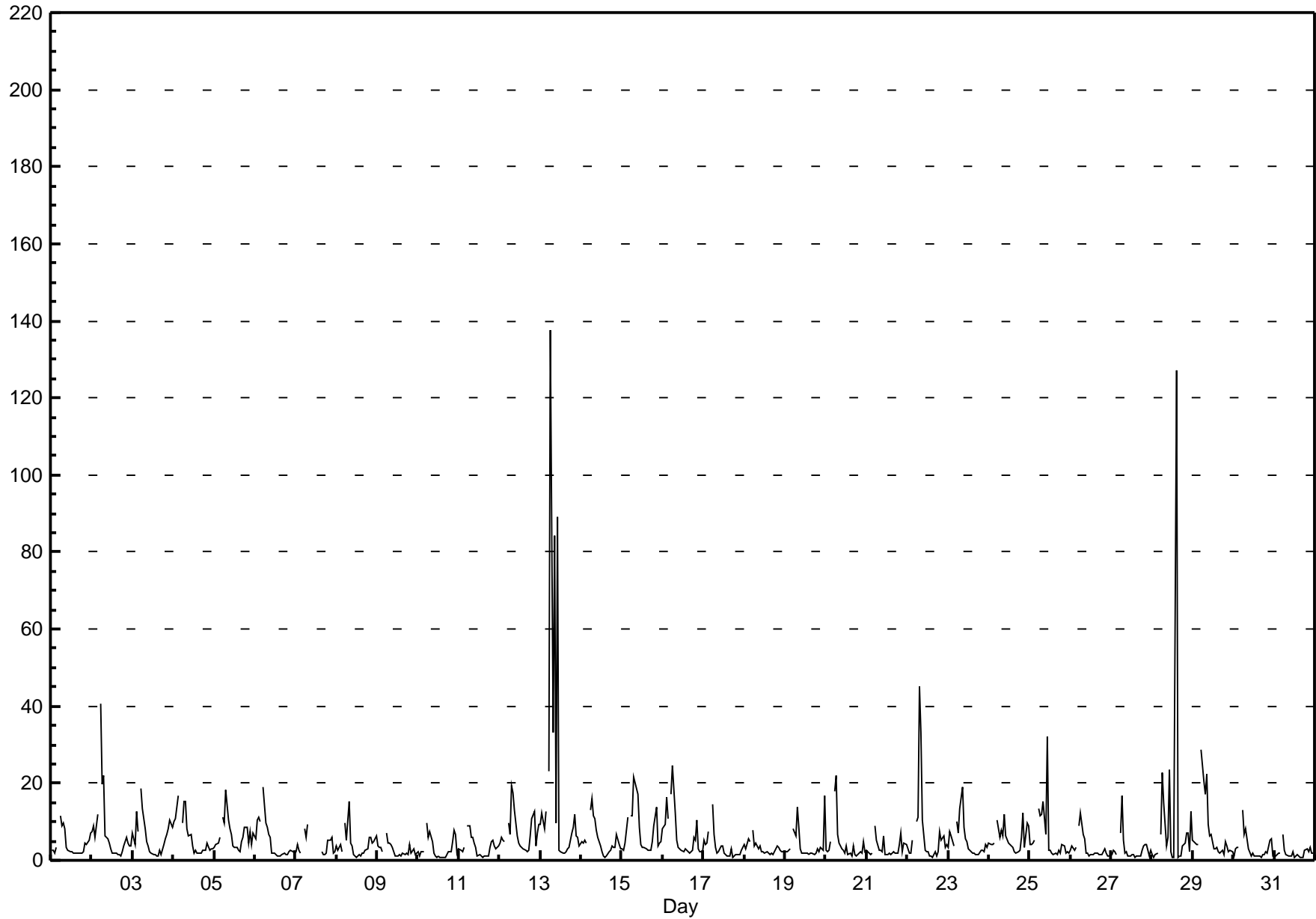
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - August 2014

Maximum Value: 137.6 ppb on Aug 13 07:00		Maximum Daily Average: 20.9 ppb on Aug 13		Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0																							
Minimum Value: 1 ppb on Aug 30 17:00		Minimum Daily Average: 1.9 ppb on Aug 31																									
Maximum Diurnal Average: 15.0 ppb at hour 7		Minimum Diurnal Average: 1.6 ppb at hour 16																									
Monthly Average: 5.55 ppb		Percentiles: P ₁ = 0.8 P ₁₀ = 1.3 Q ₁ = 1.9 Median = 3.2 Q ₃ = 6.1 P ₉₀ = 11.0 P ₉₉ = 29.0																									
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-Aug	3	3	2	3	A	12	9	10	8	3	2	2	2	2	2	2	2	2	2	2	4	4	5	7	4.1	11.6	
2-Aug	8	9	6	12	A	41	20	22	7	6	4	3	2	2	2	1	1	1	2	4	6	5	4	4	7.4	40.6	
3-Aug	7	4	13	7	A	19	13	8	5	4	2	2	1	1	1	1	2	2	4	6	7	8	10	9	6.0	18.5	
4-Aug	10	11	14	17	A	10	15	15	8	6	7	4	2	3	2	2	2	2	3	3	4	3	3	3	6.5	16.9	
5-Aug	3	4	5	6	A	11	10	18	11	8	7	4	3	3	3	2	5	6	9	8	5	7	4	7	6.5	18.4	
6-Aug	5	10	11	10	A	19	10	9	7	6	2	2	1	1	1	1	1	2	2	1	2	2	2	2	4.8	18.9	
7-Aug	2	4	3	2	A	8	6	9	C	C	C	C	C	C	C	2	1	1	2	5	5	6	2	2	--	9.3	
8-Aug	4	3	4	2	A	10	5	15	4	4	2	1	1	2	1	2	2	3	3	6	6	4	5	6	4.1	15.3	
9-Aug	4	3	3	2	A	7	4	5	4	3	1	1	1	2	1	2	1	2	1	4	2	3	2	2	2.7	7.2	
10-Aug	2	1	2	2	A	10	6	7	5	2	1	1	1	1	1	1	1	2	2	2	5	8	7	2	3.1	9.6	
11-Aug	3	2	2	3	A	9	9	6	6	5	3	1	2	1	1	1	1	1	3	5	5	4	3	4	3.5	8.9	
12-Aug	5	6	5	5	A	10	7	19	17	13	6	5	4	3	3	3	2	3	6	11	13	4	7	9	7.2	19.4	
13-Aug	9	12	8	13	A	23	138	33	84	10	89	3	2	2	2	2	3	3	7	9	12	6	6	4	20.9	137.6	
14-Aug	5	5	5	5	A	13	16	11	11	8	6	4	2	1	1	1	2	3	4	4	3	7	4	3	5.4	15.8	
15-Aug	3	3	4	11	A	11	12	22	20	17	9	4	3	3	3	3	3	3	5	9	14	4	5	5	7.5	21.7	
16-Aug	8	9	16	11	A	17	25	12	5	3	3	3	2	3	3	2	2	3	6	5	11	3	2	2	6.8	24.7	
17-Aug	5	4	4	7	A	14	7	3	2	2	4	4	2	1	1	1	3	1	1	2	2	2	3	3	3.4	14.5	
18-Aug	4	3	5	5	A	8	4	5	3	4	2	2	2	2	2	2	2	2	2	4	3	3	2	2	3.1	7.8	
19-Aug	2	2	3	3	A	8	6	14	8	3	2	2	2	2	1	2	2	2	2	3	2	3	3	17	4.1	16.8	
20-Aug	2	2	3	5	A	18	22	7	4	3	3	2	4	1	2	1	4	1	1	1	2	2	5	2	4.2	22.1	
21-Aug	3	2	2	2	A	9	5	3	3	2	6	1	2	1	2	2	2	2	2	4	7	2	4	4	3.1	9.1	
22-Aug	3	2	2	5	A	10	11	45	33	10	3	2	2	1	1	1	2	1	2	8	5	6	3	4	7.1	45.1	
23-Aug	3	7	7	4	A	10	7	13	19	9	6	5	3	3	2	2	1	1	1	3	2	2	4	3	5.1	19.2	
24-Aug	4	4	4	4	A	10	6	8	6	12	6	5	4	4	3	2	2	2	2	6	12	3	10	9	5.7	12.3	
25-Aug	4	4	4	5	A	14	12	12	15	7	32	3	3	2	2	2	2	3	2	4	4	2	2	2	6.0	32.0	
26-Aug	3	4	3	3	A	9	12	7	6	2	2	1	2	2	2	2	2	2	1	2	3	2	1	1	3.1	12.3	
27-Aug	1	2	2	2	A	7	17	5	2	2	1	1	2	1	1	1	1	1	3	4	4	4	1	2	3.0	16.8	
28-Aug	1	1	2	2	A	7	23	15	4	6	23	2	1	1	127	1	1	1	4	5	7	7	2	13	11.1	127.2	
29-Aug	5	5	4	4	A	29	20	17	23	10	6	7	3	3	3	2	2	3	2	5	4	2	3	2	7.1	28.9	
30-Aug	1	3	3	3	A	13	7	8	6	3	1	2	1	1	1	1	1	1	2	2	2	5	6	1	3.3	12.9	
31-Aug	1	1	2	2	A	7	2	1	1	1	1	2	1	1	1	1	1	1	3	3	2	4	2	2	1.9	6.7	
		4.1	4.4	4.9	5.4	--	13.0	15.0	12.4	11.2	5.8	8.1	2.7	2.1	1.9	5.9	1.6	1.9	1.9	2.9	4.5	5.3	4.1	3.9	4.5	Diurnal Average	
		10.2	12.4	16.4	16.9	--	40.6	137.6	45.1	84.3	17.0	89.2	6.9	4.1	3.6	127.2	2.8	4.9	5.9	8.6	10.9	13.8	8.3	10.5	16.8	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

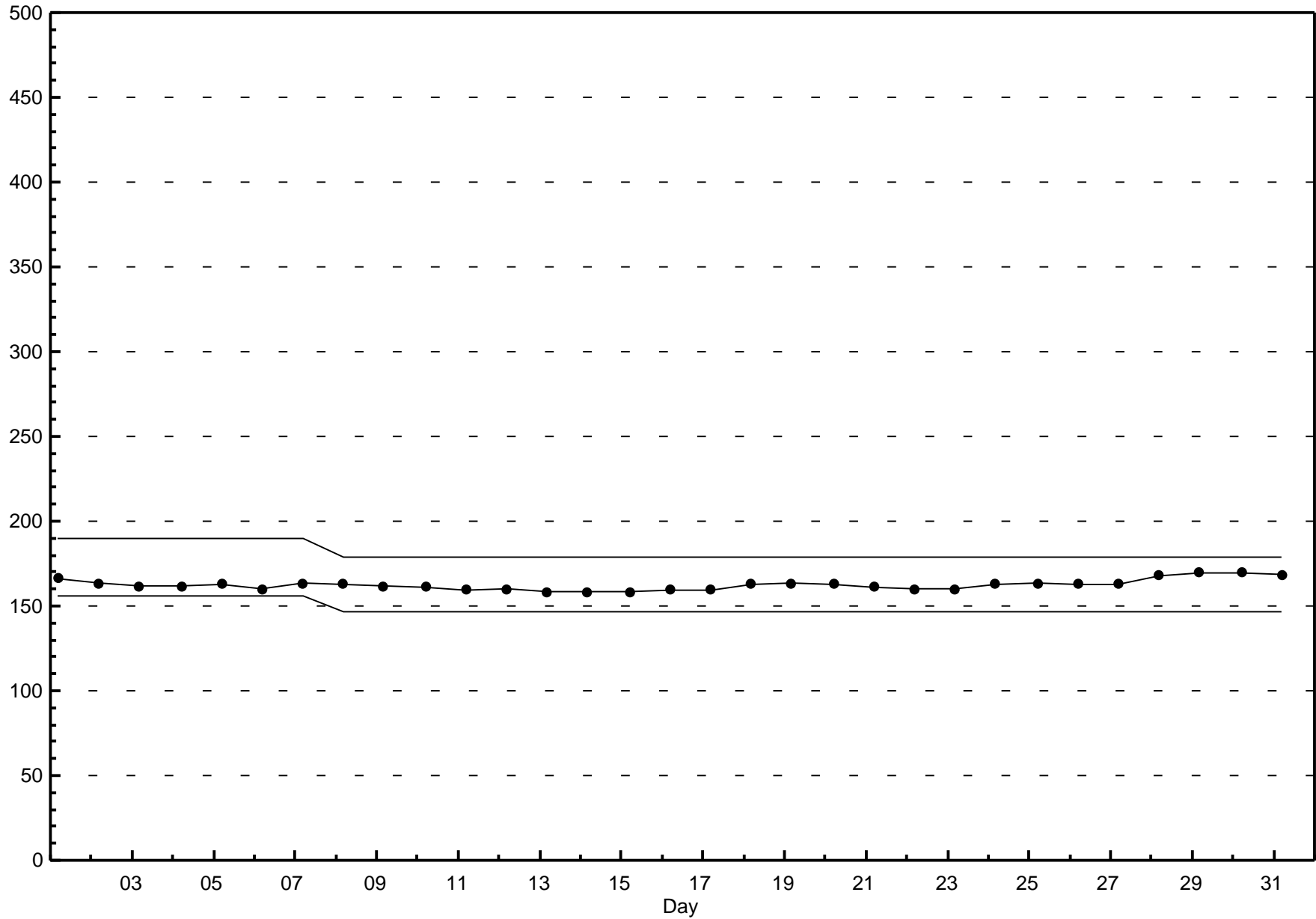
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - August 2014



Span Responses

Oxides of Nitrogen (NO_x)
Beaverlodge - August 2014



Hourly Averages

Ozone (O₃) - ppb

Beaverlodge - August 2014

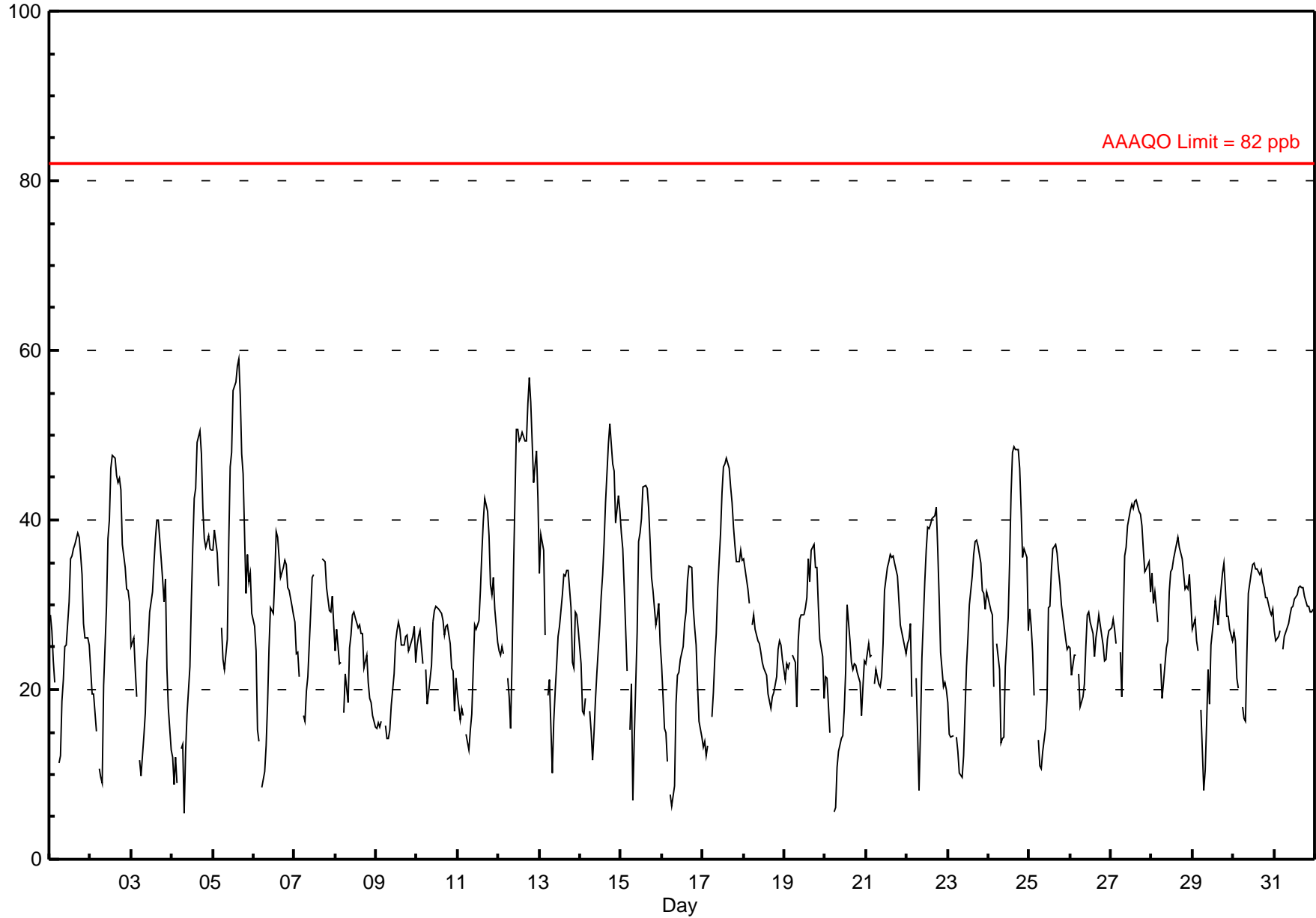
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 59.1 ppb on Aug 5 16:00	Maximum Daily Average: 39.7 ppb on Aug 5		Hours of Data:	709
Minimum Value: 5 ppb on Aug 4 08:00	Minimum Daily Average: 18.7 ppb on Aug 20		Hours of Missing Data:	35
Maximum Diurnal Average: 37.0 ppb at hour 17	Minimum Diurnal Average: 15.7 ppb at hour 8		Hours of Calibration:	35
Monthly Average: 28.05 ppb	Percentiles: P ₁ = 8.0 P ₁₀ = 15.3 Q ₁ = 21.7 Median = 27.5 Q ₃ = 34.2 P ₉₀ = 41.0 P ₉₉ = 53.5		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-Aug	29	27	23	21	A	11	12	19	21	25	30	35	36	37	37	38	38	36	34	28	26	26	25	27.8	38.5	
2-Aug	22	20	20	15	A	11	10	9	20	30	38	40	46	48	47	45	44	45	44	37	34	32	32	30	31.2	47.6
3-Aug	25	26	22	19	A	12	10	15	17	23	26	29	32	35	38	40	40	38	33	30	33	22	18	13	25.9	40.1
4-Aug	12	9	12	9	A	13	14	5	13	17	23	31	37	43	44	49	50	48	41	38	37	38	37	36	28.5	50.5
5-Aug	36	39	36	32	A	27	24	22	26	37	46	48	55	56	58	59	55	48	45	31	36	33	34	29	39.7	59.1
6-Aug	27	25	15	14	A	9	10	13	18	25	30	29	33	39	38	36	33	34	35	35	32	32	30	29	27.0	38.7
7-Aug	28	24	24	22	A	17	16	20	22	29	33	34	C	C	C	C	35	35	35	32	29	29	31	28	27.5	35.5
8-Aug	25	27	23	23	A	17	22	18	25	26	29	29	28	27	28	27	27	23	24	21	19	18	17	16	23.4	29.1
9-Aug	15	16	16	16	A	16	14	14	15	18	22	26	27	28	27	25	25	26	26	25	25	26	27	23	21.8	27.9
10-Aug	25	26	27	23	A	22	18	20	23	28	29	30	30	29	29	28	26	28	28	25	22	22	17	21	25.2	29.9
11-Aug	20	16	18	17	A	15	13	15	17	22	28	27	28	32	36	40	43	41	38	32	31	33	30	26	26.8	42.6
12-Aug	25	24	25	24	A	21	19	15	23	34	51	51	49	50	50	49	49	54	57	54	44	46	48	42	39.4	56.8
13-Aug	34	38	36	26	A	19	21	10	16	20	23	26	27	31	34	33	34	34	30	23	23	29	29	27	27.2	38.3
14-Aug	23	17	17	19	A	18	15	12	15	19	22	28	31	34	37	42	49	51	49	47	46	40	43	41	31.0	51.3
15-Aug	38	37	32	22	A	15	21	7	14	27	37	39	40	44	44	44	41	37	33	32	28	29	30	25	31.2	44.1
16-Aug	23	15	15	11	A	8	6	9	18	22	22	24	25	28	29	33	35	34	30	27	25	21	16	14	21.3	34.6
17-Aug	13	14	12	13	A	17	20	24	27	32	38	43	46	47	47	46	44	42	39	37	35	35	36	35	32.3	47.3
18-Aug	35	34	32	30	A	28	29	27	26	25	24	23	23	22	20	19	18	19	20	22	25	26	25	23	25.0	35.5
19-Aug	21	23	23	23	A	24	23	18	26	28	29	29	30	31	35	33	36	37	34	34	30	26	24	19	27.7	37.0
20-Aug	22	21	18	15	A	6	6	11	13	14	15	18	22	30	26	23	22	23	23	22	21	17	20	23	18.7	30.0
21-Aug	23	26	24	24	A	21	22	21	20	22	25	32	34	35	36	36	36	35	33	30	28	27	26	24	27.8	36.0
22-Aug	25	26	28	19	A	21	15	8	15	24	33	36	39	39	39	40	41	41	37	31	24	20	21	20	28.0	41.5
23-Aug	18	15	14	15	A	14	13	10	10	12	18	23	26	30	33	36	38	38	37	35	32	31	30	31	24.3	37.7
24-Aug	31	29	29	20	A	25	22	14	14	14	23	29	35	43	48	49	48	48	46	41	36	37	36	27	32.3	48.6
25-Aug	30	27	24	19	A	14	11	11	13	15	19	30	30	34	37	37	36	34	32	30	27	26	25	25	25.5	37.1
26-Aug	25	22	24	24	A	22	18	19	21	25	29	29	28	27	24	26	27	29	26	25	23	24	26	27	24.8	29.2
27-Aug	27	28	27	25	A	24	19	28	36	37	39	41	42	41	42	42	41	41	39	36	34	34	35	32	34.5	42.4
28-Aug	34	30	32	28	A	23	19	21	25	26	32	34	34	35	37	38	37	36	35	32	32	32	34	30	31.1	38.0
29-Aug	27	28	26	25	A	18	8	11	16	22	18	25	29	31	29	28	30	34	35	32	29	29	27	26	25.2	34.9
30-Aug	27	26	21	20	A	18	17	16	24	31	34	35	35	34	34	34	34	34	33	32	31	29	29	29	28.4	34.9
31-Aug	27	26	26	27	A	25	26	27	28	29	30	30	31	31	32	32	32	32	31	30	30	29	29	30	29.1	32.3
	25.6	24.6	23.3	20.7	--	17.8	16.6	15.7	19.9	24.5	28.6	31.5	33.6	35.6	36.5	36.9	37.0	36.6	35.0	32.0	30.0	29.0	28.6	26.7	Diurnal Average	
	38.5	38.8	36.4	32.2	--	27.6	28.8	28.1	35.8	37.4	50.7	50.6	55.2	56.3	58.2	59.1	54.7	53.7	56.8	53.9	45.8	46.5	48.1	42.5	Diurnal Maximum	

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

Hourly Averages

Ozone (O₃) - ppb
Beaverlodge - August 2014



Hourly Maximums

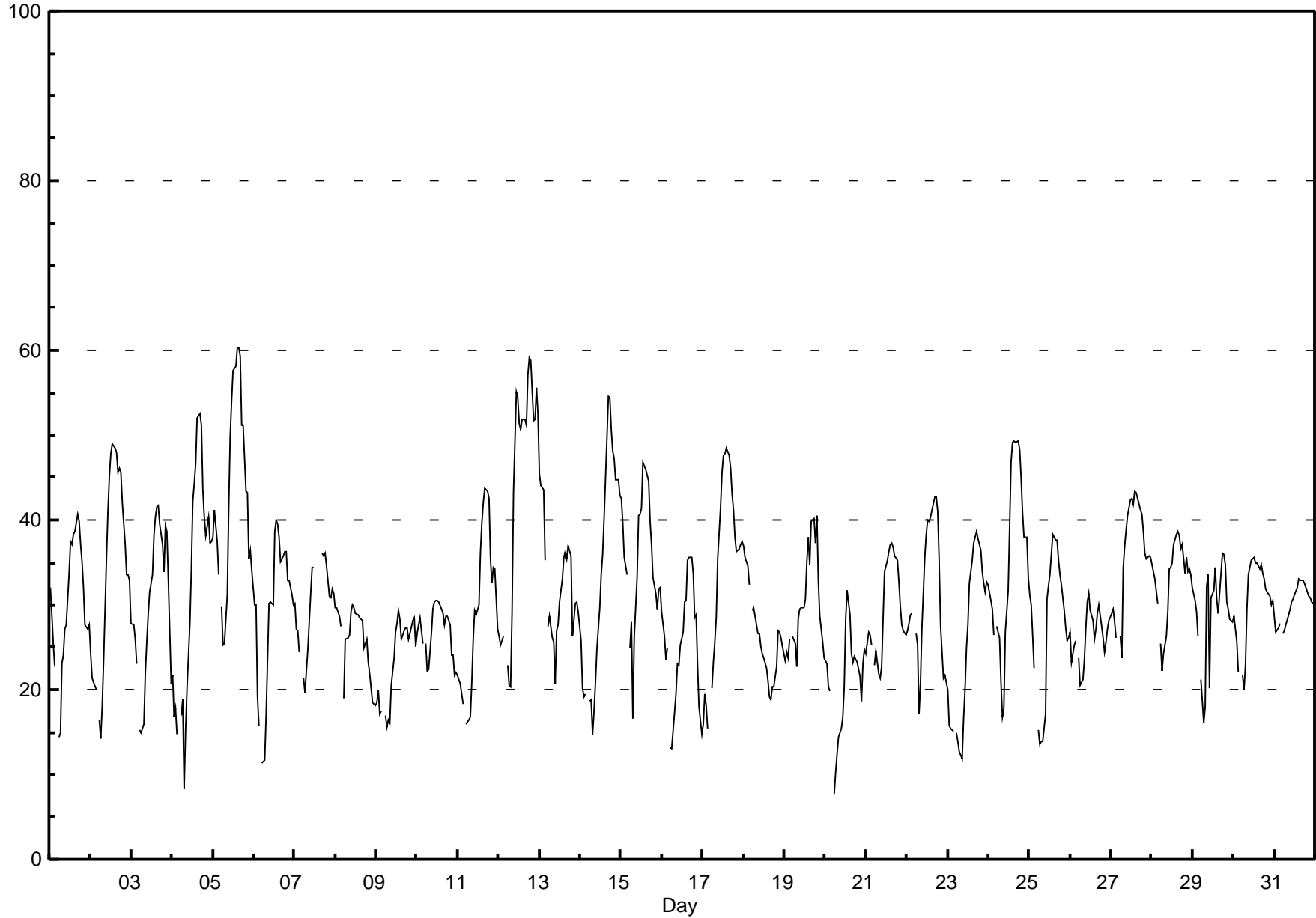
Ozone (O₃) - ppb

Beaverlodge - August 2014

Maximum Value: 60.4 ppb on Aug 5 16:00		Maximum Daily Average: 43.4 ppb on Aug 5		Hours in Service: 744																							
Minimum Value: 8 ppb on Aug 20 06:00		Minimum Daily Average: 20.8 ppb on Aug 20		Hours of Data: 709																							
Maximum Diurnal Average: 38.7 ppb at hour 17		Minimum Diurnal Average: 20.3 ppb at hour 8		Hours of Missing Data: 35																							
Monthly Average: 30.69 ppb		Percentiles: P ₁ = 12.5 P ₁₀ = 19.0 Q ₁ = 24.7 Median = 29.6 Q ₃ = 36.1 P ₉₀ = 43.2 P ₉₉ = 57.3		Hours of Calibration: 35																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	32	29	25	23	A	14	15	23	24	27	28	34	38	37	38	39	41	40	37	35	32	28	27	28	30.1	40.7	
2-Aug	24	21	21	20	A	16	14	18	23	36	41	45	48	49	49	48	46	46	46	42	37	34	34	33	34.4	49.0	
3-Aug	28	28	26	23	A	15	15	16	22	26	29	31	34	38	40	41	42	39	37	34	39	39	33	21	30.2	41.7	
4-Aug	22	17	18	15	A	17	19	8	15	20	28	34	42	44	47	52	52	51	43	40	38	40	37	37	32.1	52.5	
5-Aug	38	41	38	34	A	30	25	25	31	42	50	54	58	58	60	60	59	51	51	43	43	35	36	34	43.4	60.4	
6-Aug	30	30	19	16	A	11	12	17	24	30	30	30	39	40	40	38	35	36	36	36	33	33	31	30	29.4	40.0	
7-Aug	30	27	27	24	A	21	20	22	25	31	34	34	C	C	C	C	36	36	36	35	31	31	32	31	29.7	36.1	
8-Aug	30	30	29	27	A	19	26	26	26	29	30	30	29	29	28	28	28	25	26	23	22	20	19	18	26.0	30.0	
9-Aug	18	20	17	17	A	17	16	16	16	21	24	27	28	29	28	26	27	27	27	26	27	28	29	25	23.3	29.4	
10-Aug	27	28	28	25	A	25	22	22	27	30	30	31	31	30	30	29	28	29	29	28	24	24	22	22	26.9	30.6	
11-Aug	22	21	19	18	A	16	17	17	21	26	29	29	30	36	40	42	44	43	43	35	33	34	34	27	29.4	43.7	
12-Aug	26	25	26	26	A	23	21	20	29	43	55	54	51	51	52	52	51	57	59	59	52	52	56	53	43.2	59.1	
13-Aug	45	44	43	35	A	27	29	26	26	21	27	28	30	33	36	36	35	37	36	26	28	30	30	29	32.1	45.4	
14-Aug	26	20	19	19	A	19	19	15	18	21	25	30	34	36	40	45	55	54	51	48	47	45	45	43	33.5	54.6	
15-Aug	43	40	36	34	A	25	28	17	26	33	41	41	41	47	46	45	45	40	37	33	31	30	32	32	35.7	46.8	
16-Aug	29	26	24	25	A	13	13	17	19	23	23	25	27	30	31	35	36	36	34	28	29	23	18	15	25.2	35.6	
17-Aug	16	19	18	15	A	20	23	26	28	35	42	46	48	48	49	48	46	43	41	38	36	37	37	37	34.6	48.5	
18-Aug	37	36	35	32	A	29	30	29	27	27	25	24	24	23	21	19	19	20	20	23	27	27	26	25	26.2	37.0	
19-Aug	23	24	24	26	A	26	25	23	28	29	30	30	31	35	38	35	40	40	37	40	33	29	26	24	30.2	40.5	
20-Aug	23	23	20	20	A	8	10	12	14	15	17	20	28	32	29	24	23	24	24	23	22	19	23	25	20.8	31.7	
21-Aug	24	27	26	25	A	23	25	22	21	23	28	34	35	36	37	37	37	36	35	33	30	28	27	26	29.4	37.3	
22-Aug	27	28	29	29	A	27	25	17	21	27	36	38	40	40	40	41	43	43	41	35	27	21	22	21	31.2	42.8	
23-Aug	20	16	15	15	A	15	14	13	12	17	20	25	28	33	35	37	38	39	38	36	34	33	31	33	25.9	38.6	
24-Aug	32	30	30	26	A	27	26	21	17	18	27	32	39	47	49	49	49	49	48	45	41	38	38	33	35.3	49.4	
25-Aug	31	30	26	23	A	15	14	14	14	17	31	32	34	36	38	38	38	35	34	32	29	27	26	26	27.8	38.3	
26-Aug	27	23	25	26	A	24	21	21	24	27	30	31	29	28	26	27	29	30	28	26	24	26	27	28	26.4	31.4	
27-Aug	29	29	28	26	A	26	24	34	37	39	41	42	43	42	43	43	42	41	41	39	36	35	36	36	36.2	43.3	
28-Aug	35	34	33	30	A	25	22	24	26	29	34	34	35	37	38	39	38	37	37	34	36	34	34	34	33.0	38.6	
29-Aug	32	30	29	26	A	21	16	18	32	34	20	31	32	34	31	29	31	36	36	35	30	30	28	28	29.1	36.0	
30-Aug	29	27	26	22	A	22	20	23	29	34	35	35	36	35	35	34	35	34	33	32	32	31	30	31	30.3	35.6	
31-Aug	29	27	27	28	A	27	27	28	29	30	30	31	31	32	33	33	33	33	33	32	31	31	30	30	30.1	33.0	
		28.5	27.4	26.0	24.3	--	20.8	20.3	20.3	23.6	27.7	31.3	33.6	35.7	37.5	38.2	38.4	38.7	38.3	37.2	34.7	32.7	31.3	30.8	29.5	Diurnal Average	
		45.4	44.0	43.5	35.2	--	29.9	29.7	34.3	37.0	43.2	55.2	54.4	57.6	58.2	60.3	60.4	59.2	57.0	59.1	58.8	51.7	51.8	55.7	52.6	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

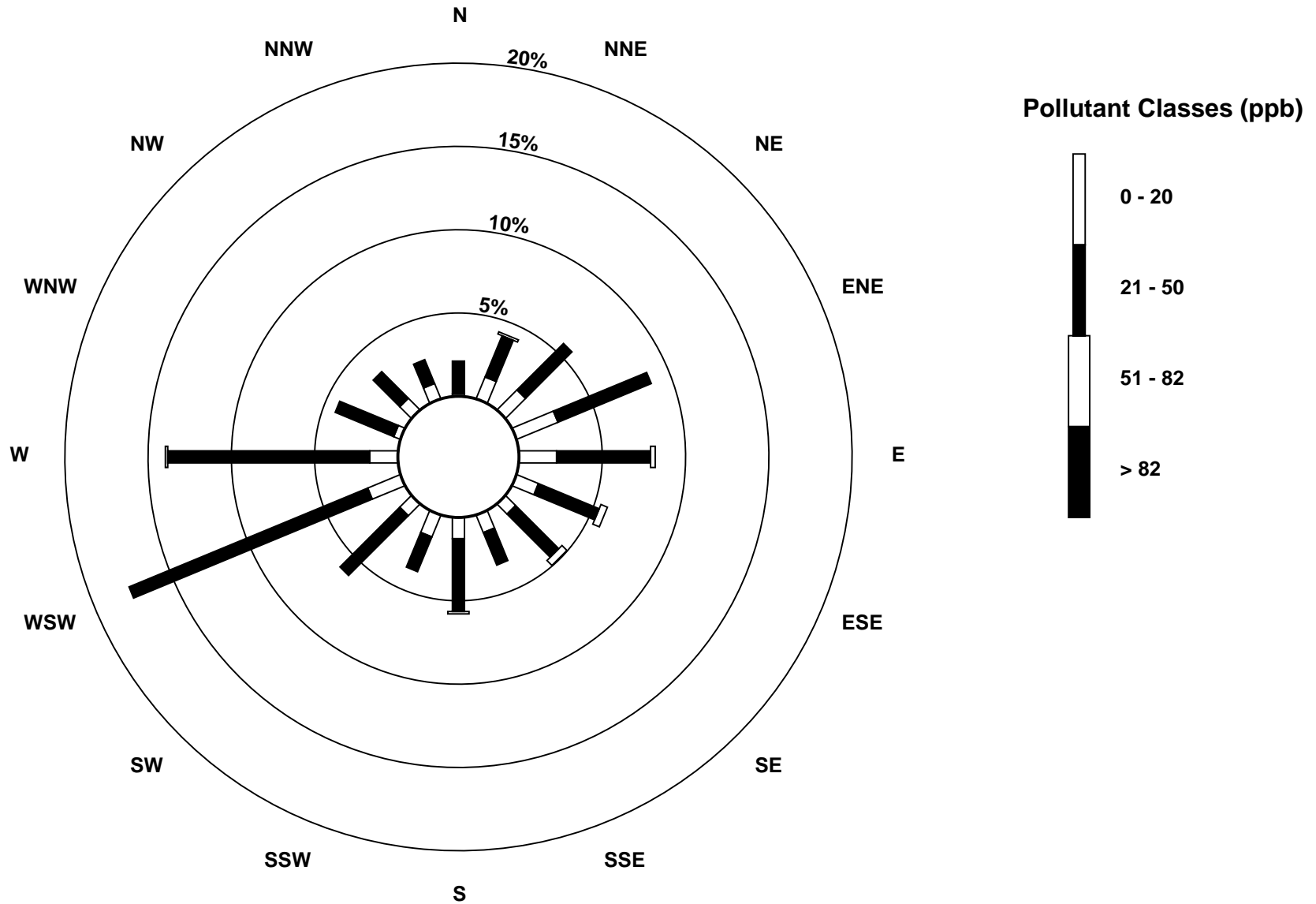
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - August 2014



Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - August 2014



Eight Hour Running Averages

Ozone (O₃) - ppb

Beaverlodge - August 2014

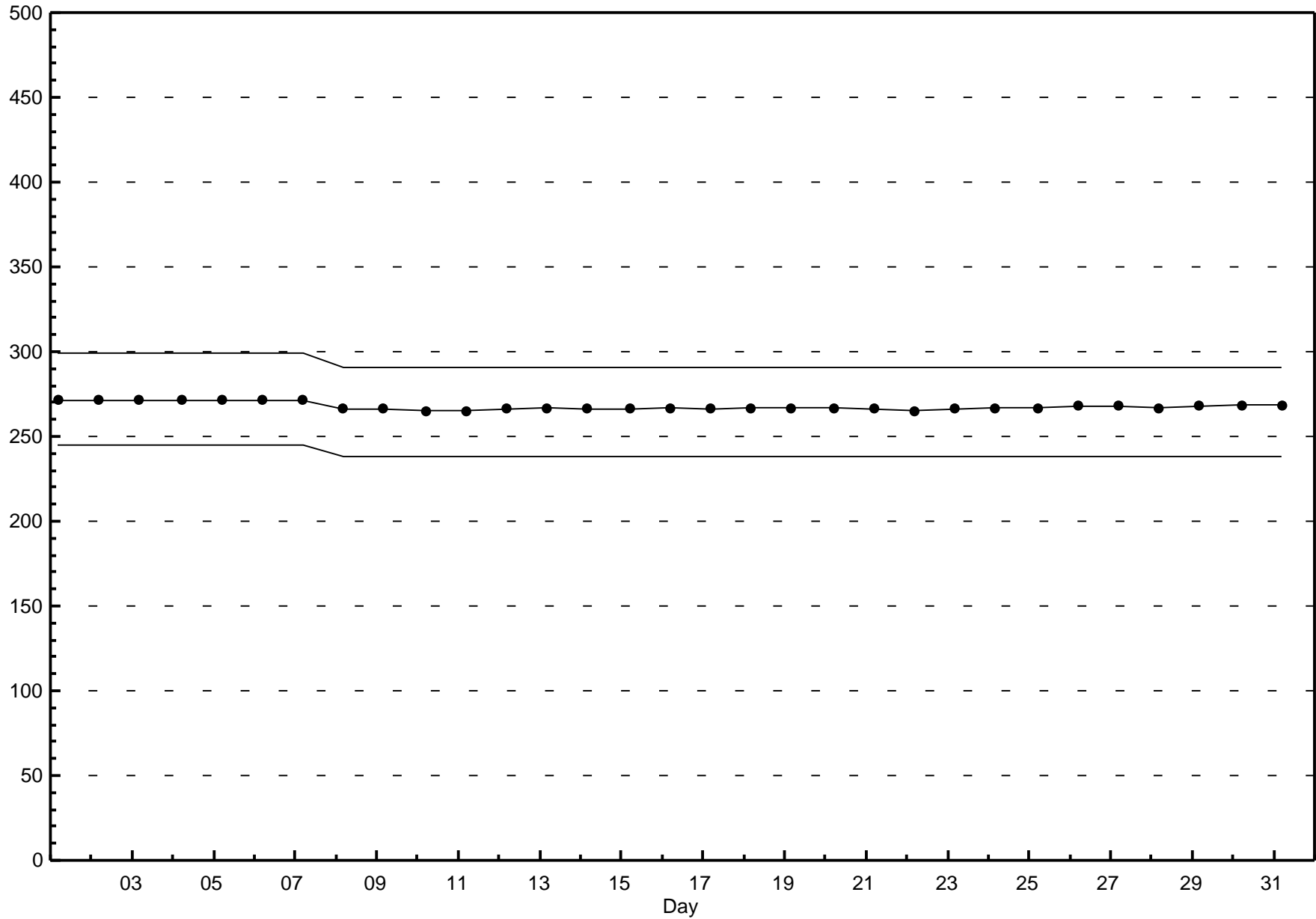
Maximum Value: 53.2 ppb on Aug 5 18:00	Hours in Service: 744
Minimum Value: 10.5 ppb on Aug 4 08:00	Hours of Data: 737
Percentiles: P ₁ = 11.8 P ₁₀ = 17.8 Q ₁ = 22.1 Median = 26.8 Q ₃ = 32.8 P ₉₀ = 39.1 P ₉₉ = 50.9	Hours of Missing Data: 7
	Hours of Calibration: 7
	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	34	33	30	28	28	25	22	20	19	19	19	21	22	26	29	31	33	35	36	36	35	34	33	31	36.4	
2-Aug	29	27	25	23	22	20	17	15	15	16	19	22	25	30	35	39	42	44	45	45	43	41	39	37	44.9	
3-Aug	35	33	30	28	27	24	21	18	17	17	17	19	20	23	27	30	33	35	36	36	36	34	32	28	35.9	
4-Aug	25	21	19	16	14	12	12	11	11	12	13	16	19	23	26	32	37	40	43	44	44	43	42	41	43.7	
5-Aug	39	38	37	36	36	35	33	31	29	29	31	33	36	39	44	48	52	53	53	51	49	46	43	39	53.2	
6-Aug	35	33	29	27	25	22	18	16	15	15	17	19	21	25	28	31	33	34	35	35	35	34	33	32	35.4	
7-Aug	32	31	29	28	27	25	23	22	21	21	23	24	24	26	N	N	N	N	N	N	N	33	32	32	32.7	
8-Aug	30	29	28	27	27	25	24	22	22	22	23	24	24	26	26	27	28	27	27	26	24	23	22	20	30.5	
9-Aug	19	18	17	17	16	16	16	15	15	16	17	18	19	21	22	24	25	26	26	26	26	26	26	26	26	26.4
10-Aug	26	26	26	25	26	25	24	23	23	23	23	24	25	26	27	28	29	29	28	28	27	26	25	24	28.8	
11-Aug	23	22	20	19	19	18	17	16	16	17	18	20	21	23	26	29	32	34	36	36	37	37	36	34	36.8	
12-Aug	32	30	28	27	27	25	23	22	22	23	27	31	33	37	40	45	48	50	51	52	51	51	50	49	51.5	
13-Aug	47	46	43	40	39	35	31	27	24	21	19	19	20	22	23	26	29	30	31	31	30	30	29	29	47.5	
14-Aug	27	25	24	23	23	21	19	17	16	16	17	18	20	22	25	28	33	37	40	42	44	45	46	46	45.8	
15-Aug	44	42	40	37	36	33	29	25	21	20	21	23	25	29	32	36	40	41	40	39	38	36	34	32	44.3	
16-Aug	30	27	25	22	21	18	15	12	12	13	14	15	17	19	22	25	27	29	30	30	30	29	28	25	30.1	
17-Aug	23	20	18	16	15	14	15	16	18	21	24	29	31	35	38	41	43	44	44	44	42	41	39	38	44.4	
18-Aug	37	36	35	34	34	33	32	31	29	28	27	26	26	25	24	23	22	21	20	20	20	21	22	22	36.9	
19-Aug	23	23	23	24	24	23	23	22	23	24	24	25	26	27	28	30	31	32	33	34	34	33	32	30	33.9	
20-Aug	28	26	24	22	21	18	15	14	13	12	11	12	13	16	18	20	21	22	23	24	24	22	21	22	28.2	
21-Aug	22	22	22	22	22	23	23	23	22	22	22	23	25	26	28	30	32	34	35	34	34	33	31	30	34.6	
22-Aug	29	27	27	25	25	24	23	20	19	19	19	22	24	26	29	33	36	39	39	38	37	34	32	29	39.1	
23-Aug	27	23	21	18	18	17	16	14	13	13	13	14	16	18	20	23	27	30	33	34	35	35	34	34	34.9	
24-Aug	33	32	31	29	29	28	27	24	22	20	19	20	22	24	27	32	36	40	43	45	45	44	43	40	44.9	
25-Aug	37	35	32	29	29	25	22	19	17	15	15	16	18	20	23	27	30	32	34	34	33	32	31	29	37.5	
26-Aug	28	27	25	25	24	24	23	22	21	22	23	23	24	24	25	26	27	27	27	27	26	26	26	26	28.1	
27-Aug	26	26	26	26	26	27	26	26	27	28	30	32	33	35	38	40	41	41	41	41	40	39	38	37	41.2	
28-Aug	36	34	33	32	32	30	28	27	25	25	26	27	28	30	33	34	35	36	36	35	35	34	34	34	35.9	
29-Aug	32	31	30	29	29	27	23	20	19	18	17	17	18	20	23	25	26	28	30	31	31	31	30	30	32.3	
30-Aug	30	29	27	26	25	24	22	21	20	21	23	25	26	28	30	33	34	34	34	33	33	32	32	31	34.0	
31-Aug	30	29	29	28	28	27	27	26	26	27	27	28	28	29	30	30	31	31	31	31	31	31	31	30	31.4	
	47.5	45.5	43.0	39.5	38.9	35.0	33.0	30.9	29.4	29.2	30.7	32.9	35.7	39.3	43.7	48.3	51.9	53.2	53.1	51.5	50.9	50.5	50.3	49.4		
Diurnal Maximums																										

N - Not Valid

Span Responses

Ozone (O₃)
Beaverlodge - August 2014



Hourly Averages

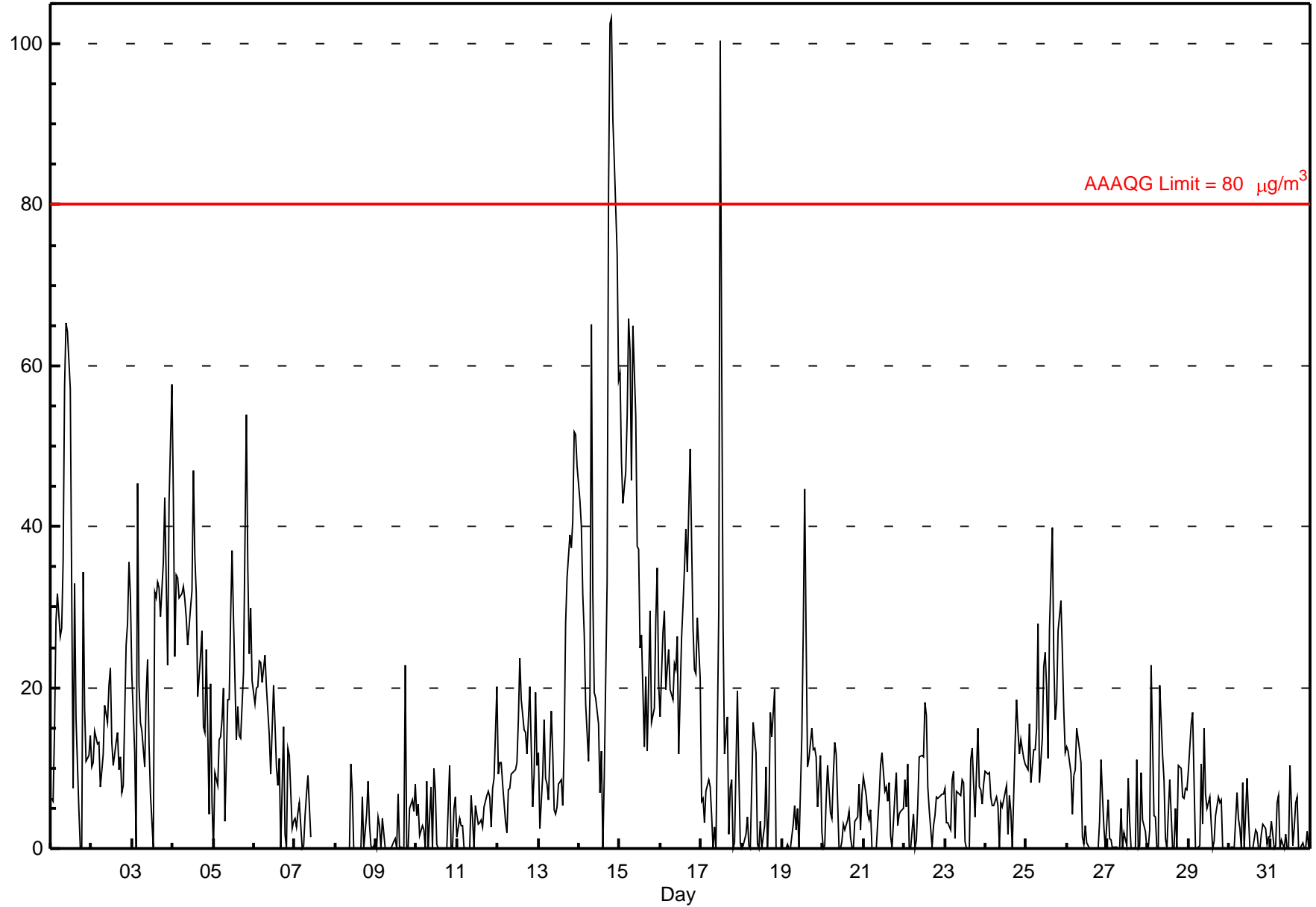
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Beaverlodge - August 2014

Number of Exceedences: 1-hr: 6 24-hr: 2	Hours in Service: 744
Maximum Value: 103.2 µg/m ³ on Aug 14 20:00	Maximum Daily Average: 41.5 µg/m ³ on Aug 14
Minimum Value: 0 µg/m ³ on Aug 1 18:00	Hours of Data: 741
Maximum Diurnal Average: 16.6 µg/m ³ at hour 20	Hours of Missing Data: 3
Monthly Average: 12.12 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.7 µg/m ³ on Aug 8	Percent Operational Time: 99.6
Minimum Diurnal Average: 9.4 µg/m ³ at hour 17	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 1.4 Median = 7.3 Q ₃ = 16.2 P ₉₀ = 31.2 P ₉₉ = 66.4	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	6	6	15	28	32	26	27	36	57	65	64	57	32	7	33	16	5	0	0	34	18	11	12	14	25.1	65.3																						
2-Aug	10	11	15	13	13	8	10	12	18	16	20	22	13	10	13	14	10	11	7	8	25	28	36	31	15.6	35.6																						
3-Aug	21	12	0	45	20	16	15	10	19	24	13	7	0	32	31	33	32	29	36	44	33	23	43	58	24.8	57.7																						
4-Aug	44	24	34	34	31	32	33	31	29	25	30	32	47	36	32	19	24	27	15	14	25	4	20	6	26.9	46.9																						
5-Aug	0	9	8	14	14	16	20	3	18	19	29	37	29	14	18	14	14	18	22	54	35	24	30	21	19.9	53.8																						
6-Aug	18	20	20	23	23	21	24	20	17	14	9	20	16	10	8	11	0	15	2	0	12	12	3	3	13.4	24.0																						
7-Aug	4	3	4	6	0	0	4	7	9	1	M	M	M	0	0	0	0	0	0	0	0	0	0	0	1.8	9.1																						
8-Aug	0	0	0	0	0	0	0	0	0	11	7	0	0	0	0	0	6	0	4	8	3	0	0	1	1.7	10.5																						
9-Aug	0	4	3	0	4	0	0	0	0	0	1	1	0	7	0	0	0	23	0	0	5	6	5	8	2.8	22.8																						
10-Aug	4	6	2	3	2	0	8	0	8	0	10	7	1	0	0	0	0	0	0	10	0	0	5	6	3.0	10.4																						
11-Aug	1	4	3	3	0	0	0	0	7	4	0	5	3	3	4	3	5	7	7	6	3	7	9	20	4.3	20.1																						
12-Aug	9	11	11	8	3	2	7	7	9	9	10	11	16	24	18	15	14	12	16	20	5	9	19	10	11.5	23.7																						
13-Aug	12	3	9	16	9	8	6	17	12	5	4	5	8	9	5	13	28	34	39	37	41	52	51	47	19.6	51.8																						
14-Aug	43	40	31	27	18	11	19	65	32	19	19	15	7	12	0	9	33	82	103	103	91	85	74	58	41.5	103.2																						
15-Aug	59	48	43	47	54	66	62	46	65	54	38	37	25	27	13	21	12	20	30	16	17	28	35	20	36.7	65.8																						
16-Aug	16	27	29	20	22	25	20	19	23	22	26	12	26	30	35	40	34	50	38	27	22	22	29	21	26.5	49.6																						
17-Aug	6	6	3	7	8	8	4	0	3	0	30	100	62	28	12	16	2	7	9	0	1	20	9	1	14.2	100.4																						
18-Aug	0	0	2	4	0	0	8	16	12	1	0	3	0	3	10	0	5	17	14	20	0	0	0	0	4.8	19.8																						
19-Aug	0	0	0	1	0	0	3	5	2	5	0	14	27	45	26	10	11	15	12	13	11	5	12	2	9.2	44.7																						
20-Aug	0	0	6	10	4	4	9	13	12	0	0	1	3	2	4	5	1	0	0	3	4	8	2	7	4.1	13.1																						
21-Aug	9	7	4	4	5	0	0	0	3	6	10	12	7	8	6	8	2	0	7	9	3	4	5	5	5.1	11.9																						
22-Aug	9	5	11	0	0	4	0	1	6	11	11	11	18	16	8	5	0	3	4	6	6	7	7	7	6.5	18.1																						
23-Aug	7	3	3	2	9	10	1	7	7	7	9	8	1	0	0	11	12	8	4	15	8	7	6	8	6.3	14.9																						
24-Aug	10	9	9	6	5	5	6	5	0	6	5	7	8	2	7	5	0	13	19	15	12	13	11	11	7.9	18.5																						
25-Aug	10	10	15	8	12	12	15	28	8	14	23	24	20	11	27	40	24	16	18	27	31	24	17	12	18.6	39.8																						
26-Aug	13	12	9	4	9	10	15	12	11	1	1	3	1	0	0	0	0	0	0	3	11	7	3	0	5.2	15.0																						
27-Aug	6	1	1	0	0	0	0	0	5	0	2	0	9	3	0	0	0	11	0	0	9	3	2	0	2.3	11.1																						
28-Aug	0	2	23	4	4	0	0	20	12	9	1	0	4	9	0	0	5	0	10	10	6	6	7	7	5.9	22.8																						
29-Aug	10	15	17	8	0	0	10	3	15	7	5	6	3	0	1	4	6	6	6	0	0	0	0	0	5.1	16.9																						
30-Aug	0	0	0	0	7	4	3	0	8	0	9	4	0	0	0	2	2	0	0	2	3	3	1	1	2.0	8.7																						
31-Aug	1	3	0	0	6	7	0	1	0	2	0	0	10	0	3	6	6	0	0	1	0	0	2	0	2.0	10.3																						
																								10.6	9.7	10.7	11.1	10.2	9.5	10.3	12.7	13.3	11.7	12.9	15.4	13.3	11.3	10.0	10.2	9.4	13.7	13.5	16.6	14.2	13.5	14.6	12.5	Diurnal Average
																								59.0	48.1	43.0	46.8	53.7	65.8	61.9	65.2	65.0	65.3	64.2	100.4	61.6	44.7	34.7	39.8	34.4	81.9	102.5	103.2	90.7	85.5	73.8	58.2	Diurnal Maximum

M - Maintenance
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³



Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - µg/m³

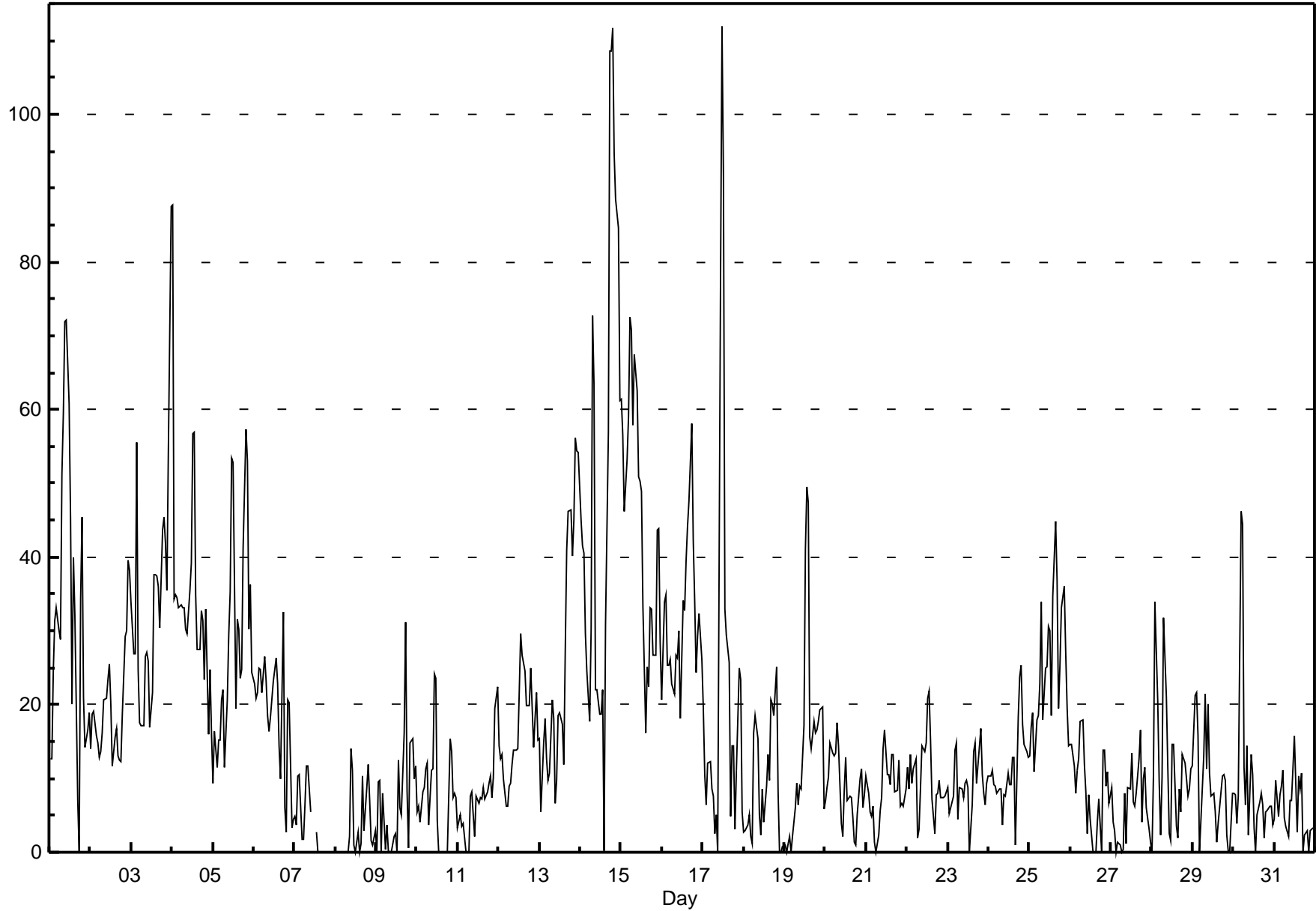
Beaverlodge - August 2014

Maximum Value: 111.8 µg/m ³ on Aug 17 12:00		Maximum Daily Average: 50.6 µg/m ³ on Aug 14		Hours in Service: 744																							
Minimum Value: 0 µg/m ³ on Aug 1 18:00		Minimum Daily Average: 3.3 µg/m ³ on Aug 8		Hours of Data: 741																							
Maximum Diurnal Average: 22.1 µg/m ³ at hour 13		Minimum Diurnal Average: 14.1 µg/m ³ at hour 6		Hours of Missing Data: 3																							
Monthly Average: 17.39 µg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 1.4 Q ₁ = 6.3 Median = 12.1 Q ₃ = 23.3 P ₉₀ = 39.0 P ₉₉ = 85.4		Hours of Calibration: 0																							
				Percent Operational Time: 99.6																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	13	13	25	31	33	30	29	51	59	72	72	61	45	20	40	32	7	0	34	45	21	14	17	19	32.7	72.2	
2-Aug	14	19	19	16	15	13	14	16	21	21	23	25	20	12	16	17	13	13	12	19	29	30	40	38	19.7	39.5	
3-Aug	34	27	27	56	25	17	17	17	27	27	26	17	22	38	38	38	36	30	44	45	42	35	54	88	34.4	87.6	
4-Aug	88	34	35	35	33	34	33	33	30	30	36	39	57	57	35	28	28	33	31	23	33	16	25	16	35.0	87.8	
5-Aug	9	16	12	15	15	21	22	11	21	30	35	53	53	20	32	30	24	25	41	57	53	30	36	24	28.6	57.3	
6-Aug	23	21	22	25	25	22	27	23	18	16	18	23	25	26	23	14	10	33	6	3	21	20	3	4	18.8	32.6	
7-Aug	5	4	10	10	2	2	6	12	12	5	M	M	M	3	0	0	0	0	0	0	0	0	0	0	3.4	11.8	
8-Aug	0	0	0	0	0	0	0	0	2	14	11	1	0	3	0	1	10	3	9	12	7	2	1	3	3.3	14.1	
9-Aug	0	10	10	0	8	0	4	0	0	2	3	0	13	6	5	16	31	8	1	15	15	10	12	7.0	31.1		
10-Aug	5	6	4	8	9	11	12	4	11	11	24	24	4	0	0	0	0	0	0	15	14	7	8	7	7.8	24.2	
11-Aug	3	5	4	4	2	0	0	8	8	5	2	8	7	7	7	9	7	8	9	10	7	10	19	22	7.2	22.4	
12-Aug	14	13	13	10	6	6	9	9	12	14	14	14	22	30	27	25	20	20	20	25	14	18	22	15	16.3	29.7	
13-Aug	15	5	15	18	13	10	11	21	18	7	10	18	19	17	12	27	41	46	46	40	45	56	54	54	25.8	56.1	
14-Aug	45	42	41	30	25	18	30	73	63	22	22	19	19	22	0	31	57	109	109	112	95	88	85	61	50.6	111.6	
15-Aug	61	56	46	53	59	73	71	58	67	63	51	50	49	33	16	25	22	33	33	27	27	44	44	28	45.4	72.6	
16-Aug	21	34	35	25	25	26	23	21	27	26	30	18	34	33	39	44	48	58	42	34	24	29	32	26	31.5	58.0	
17-Aug	19	11	7	12	12	9	8	3	5	0	78	112	92	33	29	26	5	14	14	3	11	25	23	5	23.2	111.8	
18-Aug	3	3	4	5	2	1	16	19	15	5	2	9	4	9	13	10	21	20	19	25	8	0	0	1	8.9	25.2	
19-Aug	1	0	1	2	0	2	6	9	7	9	9	17	41	49	47	16	14	18	16	17	18	19	20	6	14.3	49.5	
20-Aug	7	9	10	15	13	13	13	18	14	4	2	8	13	7	8	7	5	1	1	5	10	11	6	8	8.7	17.5	
21-Aug	10	8	6	5	6	1	0	2	6	7	14	17	11	11	9	13	13	8	8	12	6	7	6	9	8.2	16.6	
22-Aug	11	9	13	9	11	13	2	3	9	14	14	15	21	22	15	7	3	8	8	10	7	7	8	8	10.3	21.8	
23-Aug	9	5	6	8	14	15	5	9	9	7	9	10	9	0	6	14	15	9	12	17	10	8	6	9	9.2	16.8	
24-Aug	10	10	11	9	9	8	9	9	4	8	8	11	9	9	13	13	1	18	24	25	17	15	14	13	11.5	25.3	
25-Aug	13	17	19	11	18	18	23	34	18	25	25	31	30	18	35	45	37	20	25	33	36	27	19	14	24.6	44.9	
26-Aug	15	15	12	8	11	13	18	18	12	8	3	8	4	0	0	0	4	7	0	14	14	9	11	7	8.7	17.9	
27-Aug	9	4	3	0	1	1	0	0	8	1	9	9	13	7	6	8	13	17	4	10	11	6	3	1	6.0	16.6	
28-Aug	0	10	34	20	10	2	10	32	21	11	3	1	15	15	4	2	9	6	13	12	10	8	9	11	11.1	33.9	
29-Aug	12	21	22	16	0	4	13	21	11	20	11	8	8	5	1	4	6	10	11	10	2	0	0	8	9.4	21.7	
30-Aug	8	8	4	8	46	44	11	6	14	2	13	11	3	0	5	7	8	6	2	6	6	6	6	4	9.8	46.2	
31-Aug	4	10	5	8	9	11	5	3	2	7	7	11	16	3	10	9	11	0	2	3	0	3	3	3	6.0	15.8	
		15.6	14.3	15.2	15.2	14.8	14.1	14.3	17.5	17.8	15.9	19.4	21.6	22.1	16.8	15.9	16.3	16.2	19.5	19.5	21.6	19.8	18.3	18.9	17.0	Diurnal Average	
		87.8	56.4	46.3	55.5	59.0	72.6	70.7	72.7	67.5	72.0	78.3	111.8	91.7	56.8	47.3	44.9	57.0	108.5	108.5	111.6	94.7	88.4	84.5	87.6	Diurnal Maximum	
M - Maintenance																											

Hourly Maximums

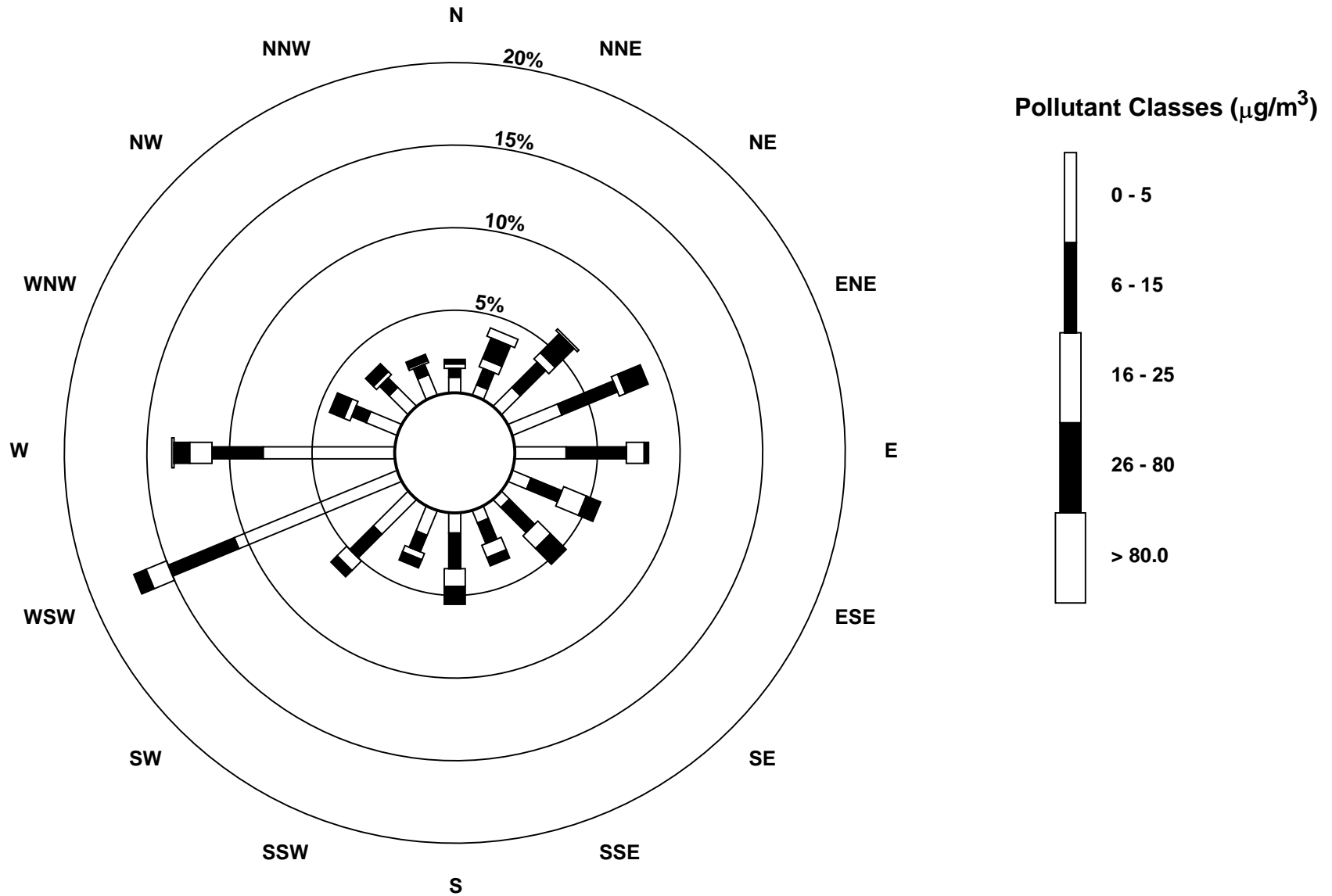
Particulate Matter 2.5 (PM_{2.5}) - μg/m³

Beaverlodge - August 2014



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Beaverlodge - August 2014





Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Beaverlodge - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 30.5 °C on Aug 12 18:00	Maximum Daily Average: 23.0 °C on Aug 12
Minimum Value: 4 °C on Aug 22 07:00	Hours of Data: 744
Maximum Diurnal Average: 23.0 °C at hour 17	Hours of Missing Data: 0
Monthly Average: 17.26 °C	Hours of Calibration: 0
Minimum Daily Average: 11.4 °C on Aug 22	Percent Operational Time: 100.0
Minimum Diurnal Average: 11.4 °C at hour 6	
Percentiles: P ₁ = 6.1 P ₁₀ = 9.5 Q ₁ = 13.3 Median = 16.9 Q ₃ = 21.1 P ₉₀ = 25.3 P ₉₉ = 29.2	

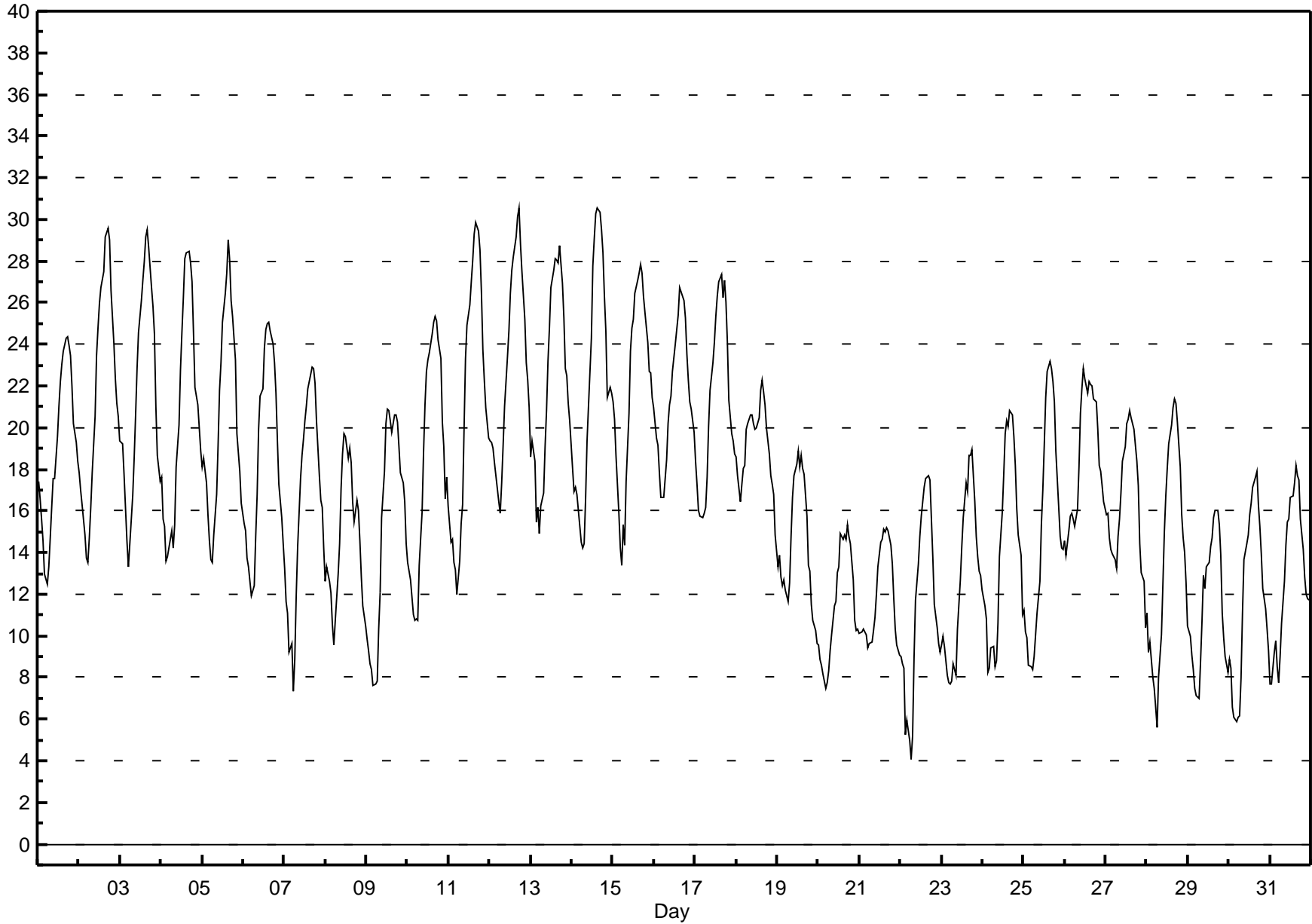
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	17	17	16	15	13	13	13	15	16	18	18	20	21	22	23	24	24	24	24	23	22	20	19	18	18.9	24.4
2-Aug	18	17	16	15	14	14	15	16	18	21	23	25	26	27	28	29	29	30	29	27	24	22	21	21	21.8	29.6
3-Aug	19	19	18	16	15	13	14	17	19	21	23	25	26	27	28	29	29	29	27	26	25	21	19	17	21.7	29.5
4-Aug	18	16	15	14	14	15	15	14	15	18	20	23	25	26	28	28	28	28	27	25	22	21	20	19	20.5	28.4
5-Aug	18	19	17	16	15	14	14	15	17	19	22	23	25	26	27	29	28	26	25	23	20	19	18	16	20.4	29.0
6-Aug	15	15	14	13	13	12	12	15	17	20	22	22	24	25	25	25	25	24	23	22	19	17	16	14	18.7	25.1
7-Aug	13	12	11	9	10	7	9	12	14	18	19	19	20	21	22	23	23	23	22	20	18	17	16	14	16.3	22.9
8-Aug	13	13	13	12	11	10	11	13	14	17	19	20	20	18	19	18	16	16	17	16	15	13	11	10	14.7	19.7
9-Aug	10	9	9	8	8	8	8	10	12	16	18	20	21	21	20	20	21	21	20	19	18	17	16	14	15.2	20.9
10-Aug	14	13	13	11	11	11	11	13	16	19	21	23	23	24	24	25	25	25	24	23	20	19	17	18	18.4	25.4
11-Aug	16	15	15	14	13	12	14	15	16	20	23	25	26	27	28	29	30	29	29	27	24	22	21	20	21.2	29.9
12-Aug	19	19	19	18	17	16	16	17	19	21	23	25	26	28	28	29	30	31	29	28	25	23	22	21	23.0	30.5
13-Aug	19	19	18	15	16	15	16	17	19	21	23	25	27	28	28	28	28	28	29	27	25	23	22	21	22.1	28.7
14-Aug	18	17	17	17	16	14	14	14	17	19	21	24	28	29	30	31	30	29	28	26	25	21	22	22	22.1	30.5
15-Aug	21	20	19	16	14	13	15	14	17	21	24	25	25	26	27	27	28	27	26	26	24	23	23	21	21.8	27.8
16-Aug	21	20	19	18	17	17	17	18	20	21	22	23	24	25	25	27	26	26	25	24	22	21	21	20	21.6	26.7
17-Aug	18	17	16	16	16	16	16	18	20	22	23	24	25	26	27	27	26	27	26	24	21	20	19	19	21.3	27.4
18-Aug	19	18	16	17	18	18	20	20	21	20	20	20	20	21	22	22	21	20	19	18	17	17	15	15	19.2	22.3
19-Aug	13	14	13	12	13	12	12	13	15	17	18	18	19	18	19	18	18	16	13	13	12	11	10	10	14.4	18.8
20-Aug	10	9	9	8	7	8	8	9	10	11	12	13	13	15	15	15	15	15	15	14	13	11	10	10	11.5	15.3
21-Aug	10	10	10	10	10	9	10	10	10	11	12	13	15	15	15	15	15	15	14	13	12	10	10	9	11.8	15.2
22-Aug	9	9	8	5	6	5	4	5	9	12	13	15	16	16	17	18	18	18	16	14	12	10	10	9	11.4	17.7
23-Aug	10	10	10	8	8	8	8	9	8	10	12	13	14	16	17	17	19	19	19	16	15	14	13	13	12.6	18.9
24-Aug	12	11	11	8	8	9	9	9	9	11	14	16	18	20	20	20	21	21	20	18	16	15	14	11	14.2	20.8
25-Aug	11	10	10	9	9	8	9	10	11	13	15	17	19	21	23	23	23	22	21	19	16	15	14	14	15.1	23.2
26-Aug	15	14	15	16	16	16	15	16	18	21	22	23	22	22	22	22	22	21	21	20	18	18	17	16	18.7	22.8
27-Aug	16	16	15	14	14	14	13	15	16	17	18	19	20	20	21	20	20	19	18	17	14	13	13	10	16.4	20.8
28-Aug	11	9	10	8	7	7	6	8	10	12	15	17	18	19	20	21	21	21	20	18	16	15	14	13	14.0	21.4
29-Aug	10	10	9	8	7	7	7	7	9	11	13	12	13	14	14	15	16	16	16	15	14	11	10	9	11.5	16.0
30-Aug	9	8	7	6	6	6	6	8	11	14	14	15	16	16	17	18	18	16	15	14	12	11	10	9	11.8	17.9
31-Aug	8	8	9	10	9	8	9	11	13	14	15	16	17	17	17	18	18	17	16	14	13	12	12	12	12.9	18.2

14.5	14.0	13.4	12.4	11.9	11.4	11.8	13.1	14.8	16.9	18.6	19.9	21.0	21.8	22.5	23.0	23.0	22.6	21.7	20.2	18.2	16.8	16.0	15.0	14.0	12.9	18.2
21.3	20.4	19.1	18.3	18.0	18.2	19.9	20.2	20.6	21.8	23.7	24.9	27.8	29.1	30.3	30.5	30.3	30.5	29.0	27.5	25.2	23.1	22.6	21.6	20.5	21.6	21.6

																								Diurnal Average	Diurnal Maximum
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Hourly Averages

External Temperature (ET) - °C
Beaverlodge - August 2014



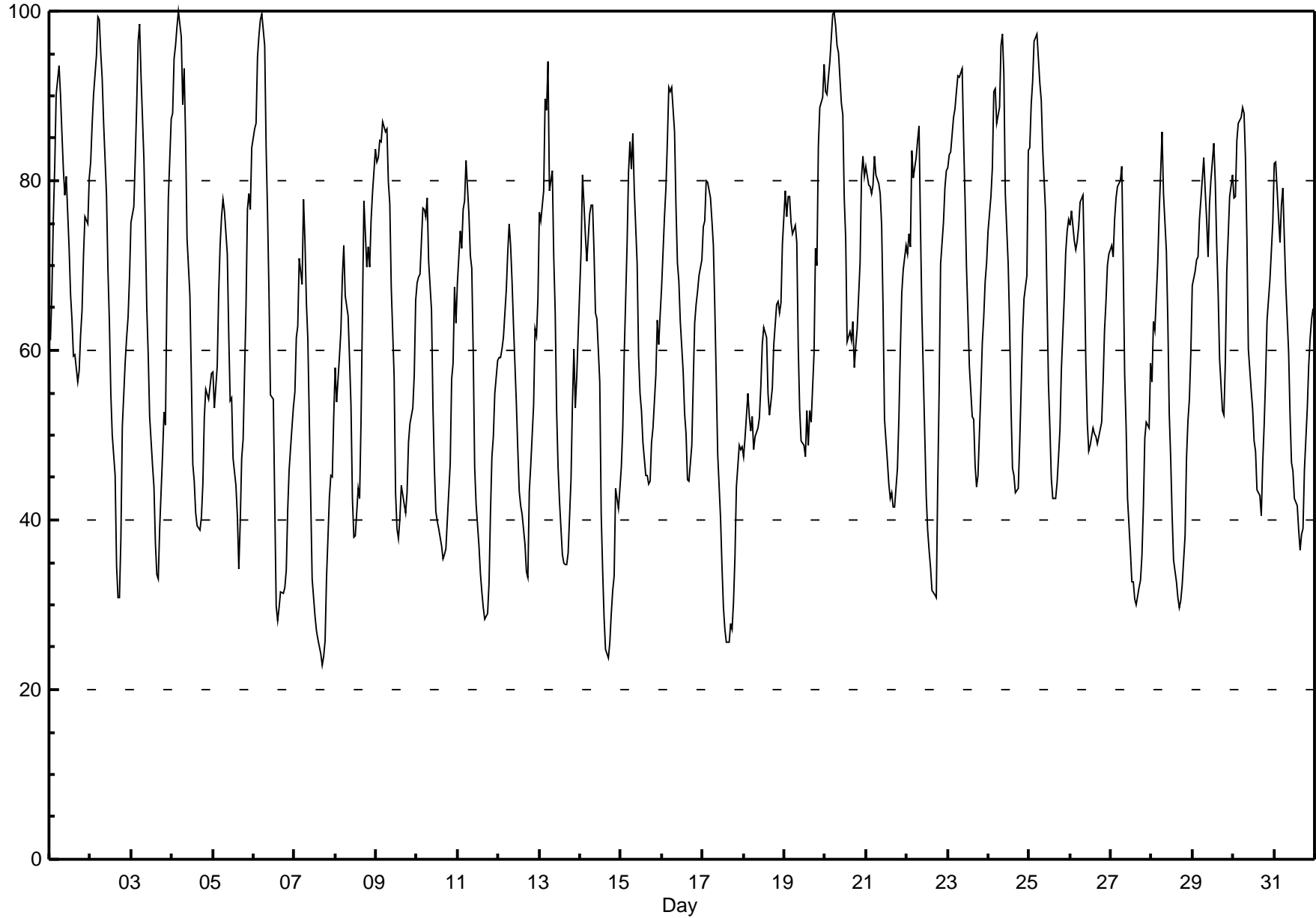
Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 100.0 % on Aug 4 05:00 Maximum Daily Average: 80.3 % on Aug 20																	Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0									
Minimum Value: 23 % on Aug 7 17:00 Minimum Daily Average: 45.8 % on Aug 7 Maximum Diurnal Average: 83.7 % at hour 6 Minimum Diurnal Average: 40.5 % at hour 17 Monthly Average: 62.15 % Percentiles: P ₁ = 25.6 P ₁₀ = 36.4 Q ₁ = 47.4 Median = 62.5 Q ₃ = 77.1 P ₉₀ = 86.7 P ₉₉ = 98.9																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	61	67	75	82	90	94	90	86	81	78	81	72	67	63	59	60	56	58	62	65	71	76	75	80	72.8	93.6
2-Aug	82	87	90	95	99	99	95	92	87	78	70	63	55	50	45	35	31	31	38	51	59	62	64	69	67.7	99.4
3-Aug	75	77	83	89	96	98	92	83	74	65	59	52	46	44	37	33	33	39	48	53	51	67	78	87	65.1	98.5
4-Aug	88	94	96	98	100	97	89	93	85	73	66	57	47	44	41	39	39	40	44	52	55	54	56	57	66.9	100.0
5-Aug	57	53	58	67	72	76	78	76	71	62	54	54	47	44	40	34	40	47	49	65	77	78	77	84	60.9	83.9
6-Aug	86	87	95	97	99	100	96	84	76	67	55	54	42	30	28	30	32	31	32	34	41	46	51	53	60.2	99.7
7-Aug	55	62	63	71	68	78	73	66	61	42	33	31	29	27	26	24	23	24	26	33	43	45	45	52	45.8	77.8
8-Aug	58	54	59	62	69	72	66	64	59	54	43	38	38	44	43	52	65	78	70	72	70	75	79	84	61.1	83.7
9-Aug	82	83	85	85	87	86	86	80	77	67	57	43	39	38	40	44	42	41	43	49	51	53	57	66	61.7	87.0
10-Aug	68	69	69	77	77	76	78	70	65	53	46	41	40	39	37	35	36	37	40	47	57	59	67	63	56.0	78.0
11-Aug	68	74	72	77	78	82	76	71	70	60	46	42	37	34	32	30	28	29	33	41	47	50	55	59	53.7	82.4
12-Aug	59	59	60	61	67	71	75	72	68	63	54	48	43	42	41	37	34	33	43	46	54	62	62	66	55.1	74.9
13-Aug	76	75	79	90	88	94	79	81	71	65	53	46	42	36	35	35	35	36	45	54	60	53	57	62	60.3	94.1
14-Aug	72	81	77	73	71	76	77	77	72	64	64	56	41	34	28	25	24	26	29	32	33	44	41	44	52.5	80.7
15-Aug	46	51	60	73	81	85	81	86	79	70	59	55	53	49	45	45	44	45	49	51	57	64	61	64	60.5	85.6
16-Aug	67	76	79	85	91	91	91	86	77	70	68	63	57	53	50	45	45	49	56	63	65	67	69	71	68.1	91.0
17-Aug	75	75	80	80	78	75	72	65	57	48	40	34	30	27	26	26	28	27	30	36	44	49	48	49	49.9	80.0
18-Aug	47	50	55	52	51	52	48	50	51	52	56	61	63	61	55	52	54	56	61	65	66	64	66	72	56.7	72.5
19-Aug	79	76	78	78	75	74	75	73	61	53	49	49	47	53	49	53	52	60	72	70	84	89	90	94	67.9	93.8
20-Aug	91	90	92	94	100	100	98	96	95	89	88	78	73	61	62	61	63	58	60	62	70	80	83	81	80.3	99.8
21-Aug	82	80	79	79	80	83	81	80	78	75	65	52	47	44	43	43	42	42	46	52	60	67	69	72	64.1	83.0
22-Aug	71	74	72	84	80	83	85	86	75	64	50	43	39	36	34	32	31	31	44	55	70	75	79	81	61.5	86.4
23-Aug	81	83	83	87	89	90	92	92	93	85	78	70	64	58	52	52	46	44	45	55	61	64	68	70	71.1	93.2
24-Aug	74	78	82	91	91	87	89	96	97	93	78	70	63	53	46	45	43	44	49	55	62	66	69	84	71.0	97.3
25-Aug	84	89	92	96	97	94	92	89	84	76	66	56	51	45	43	43	44	48	51	58	66	71	74	75	70.2	97.4
26-Aug	75	77	73	72	73	75	78	78	70	58	52	48	49	51	50	50	49	50	52	56	62	66	70	71	62.6	78.4
27-Aug	72	71	75	78	79	80	82	70	57	51	43	36	33	33	31	30	32	33	36	42	50	52	51	59	53.1	81.7
28-Aug	56	63	62	70	76	81	86	78	72	64	52	47	41	35	33	31	30	31	32	38	47	52	54	60	53.8	85.8
29-Aug	68	69	71	71	75	78	83	79	75	71	77	80	84	80	72	67	59	53	52	59	69	74	78	81	71.9	84.5
30-Aug	78	78	85	87	88	89	88	83	73	60	55	53	49	48	44	43	40	47	51	57	63	68	72	75	65.6	88.7
31-Aug	82	82	76	73	77	79	73	68	60	52	47	46	43	42	39	36	38	39	46	53	58	61	64	65	58.3	82.2
																	Diurnal Average				Diurnal Maximum					
																	71.5 73.6 76.0 79.7 82.0 83.7 82.1 79.1 73.3 65.3 58.2 52.9 48.3 45.1 42.1 40.8 40.5 42.0 46.3 52.3 58.9 63.0 65.4 69.4				90.5 94.3 95.9 98.2 100.0 99.8 98.3 96.0 97.3 92.5 87.8 80.2 84.5 79.9 72.3 66.8 64.8 77.6 72.0 72.2 84.1 88.6 89.9 93.8					

Hourly Averages

**Relative Humidity (RH) - %
Beaverlodge - August 2014**



Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	15	15	13	5	7	3	1	2	2	5	10	9	11	13	18	20	17	13	12	10	6	9	10	10	7.7	19.7
Dir	33	57	44	19	251	266	14	326	167	140	119	124	102	93	85	80	101	108	120	116	77	73	81	80	86	80
2 Spd	9	4	1	2	4	1	1	3	3	3	4	8	9	11	9	5	7	2	5	7	5	5	5	5	3.0	11.3
Dir	80	101	223	251	40	30	69	183	170	155	146	181	178	187	180	162	254	307	141	140	123	82	75	77	148	187
3 Spd	4	4	3	2	1	2	3	3	3	5	4	5	5	7	6	4	4	7	5	4	4	3	2	6	0.9	7.3
Dir	102	51	59	124	127	26	46	191	183	188	176	195	208	220	219	182	7	63	56	30	20	9	231	33	120	63
4 Spd	3	3	2	3	3	5	2	2	4	3	5	5	7	6	8	12	13	13	13	11	13	15	15	13	5.8	15.1
Dir	326	20	39	53	57	45	48	201	187	164	174	172	183	174	128	125	122	124	103	98	90	103	103	99	113	103
5 Spd	8	7	9	6	3	5	3	2	5	7	6	6	9	8	8	6	3	6	7	3	8	10	13	2	2.5	13.0
Dir	87	75	73	112	140	176	198	195	145	126	130	160	117	142	129	95	134	263	277	185	231	297	3	173	129	3
6 Spd	4	3	1	2	1	2	5	2	3	9	25	19	25	27	31	25	29	32	32	26	20	18	13	9	13.8	32.2
Dir	208	205	117	156	96	81	55	83	219	262	272	269	266	256	258	261	242	248	261	265	273	274	277	276	260	248
7 Spd	8	1	5	2	4	3	3	3	6	21	27	26	22	18	17	17	18	21	20	14	11	9	8	2	10.0	26.9
Dir	246	243	40	81	53	92	73	209	179	263	264	276	274	275	271	286	286	277	269	258	258	290	309	273	273	264
8 Spd	1	4	1	1	5	3	2	1	5	11	20	22	14	9	8	11	12	8	11	6	4	4	2	3	3.9	22.4
Dir	251	286	352	144	46	84	76	116	223	233	270	279	282	302	252	193	184	171	186	184	181	198	200	57	237	279
9 Spd	3	2	3	3	4	4	4	2	3	6	10	20	24	27	27	17	19	22	20	15	16	16	12	2	9.4	27.4
Dir	65	78	92	76	75	83	85	132	157	215	233	261	260	261	253	253	253	253	251	263	269	256	244	216	253	261
10 Spd	9	2	3	1	2	1	2	2	7	18	23	28	29	28	28	30	30	31	23	13	9	8	1	10	13.4	30.7
Dir	238	225	216	99	224	187	106	125	220	245	247	268	264	258	264	265	261	258	252	246	241	249	269	248	255	258
11 Spd	1	5	3	5	2	4	2	2	5	4	3	5	10	10	6	1	4	8	10	8	7	8	9	5	1.8	10.3
Dir	305	64	75	62	107	66	58	120	166	175	220	276	257	267	287	244	93	68	60	54	50	67	77	93	68	257
12 Spd	6	6	5	7	3	3	4	0	3	3	6	9	10	9	7	8	8	10	5	4	4	6	5	1	4.0	10.2
Dir	93	91	122	124	152	138	210	140	98	157	115	119	111	130	123	101	88	93	189	271	335	33	33	285	110	93
13 Spd	4	1	2	3	1	1	3	1	4	7	14	14	14	13	12	11	6	1	4	4	5	4	5	2	3.2	13.8
Dir	36	64	16	54	45	116	2	280	276	277	304	308	296	301	284	287	291	45	116	159	74	70	59	124	311	296
14 Spd	4	3	3	4	3	6	5	2	3	3	7	9	15	16	9	10	12	11	9	11	12	4	2	4	2.4	16.0
Dir	62	64	69	52	65	41	54	122	168	167	189	209	246	258	309	335	13	22	29	27	25	41	49	62	10	258
15 Spd	5	5	5	3	1	2	2	2	0	3	11	15	14	12	12	11	9	7	6	6	4	6	5	3	4.3	15.1
Dir	47	38	25	238	199	14	292	17	206	197	122	130	120	131	119	114	145	159	172	134	82	48	37	43	115	130
16 Spd	1	4	1	3	9	3	3	1	7	13	13	14	14	14	13	18	13	11	8	6	5	9	8	8	7.2	17.7
Dir	350	19	327	339	325	18	237	111	247	281	287	286	286	290	296	292	314	314	277	256	243	252	247	258	287	292
17 Spd	3	2	2	2	2	4	5	11	16	22	26	26	23	21	19	24	23	22	23	21	16	15	11	8	13.5	26.0
Dir	271	285	99	82	127	179	212	236	242	254	260	260	263	270	265	268	264	252	243	237	241	247	246	208	252	260
18 Spd	12	5	8	9	7	7	12	15	19	27	27	20	20	16	28	30	31	31	20	17	19	16	10	5	16.8	31.2
Dir	216	212	222	227	229	209	235	236	238	243	243	238	248	239	252	258	259	247	238	240	245	248	253	232	243	259
19 Spd	1	4	1	2	10	8	3	3	7	17	17	13	13	11	13	16	19	16	9	14	22	12	7	6	8.8	21.8
Dir	191	253	288	306	282	273	339	241	297	283	293	312	313	307	344	327	0	358	350	339	341	315	318	278	319	341
20 Spd	7	8	9	4	3	5	6	6	9	12	12	13	9	10	12	14	9	8	9	7	7	9	6	7	6.2	13.9
Dir	331	319	308	280	220	278	272	270	298	309	316	312	338	341	7	12	6	5	10	9	19	38	73	77	341	12
21 Spd	9	9	7	8	4	6	7	9	9	13	15	15	9	8	11	16	15	13	12	8	4	5	7	8	9.2	15.6
Dir	75	70	79	79	38	39	69	72	70	83	88	93	93	69	57	64	67	67	74	98	76	66	73	53	73	64
22 Spd	9	9	9	1	0	2	0	3	3	7	12	13	13	15	12	12	10	11	13	8	5	6	7	7	5.9	15.4
Dir	38	34	35	51	340	278	24	233	237	175	122	104	105	89	105	87	101	90	150	150	135	80	78	72	98	89



Peace Airshed Zone Association

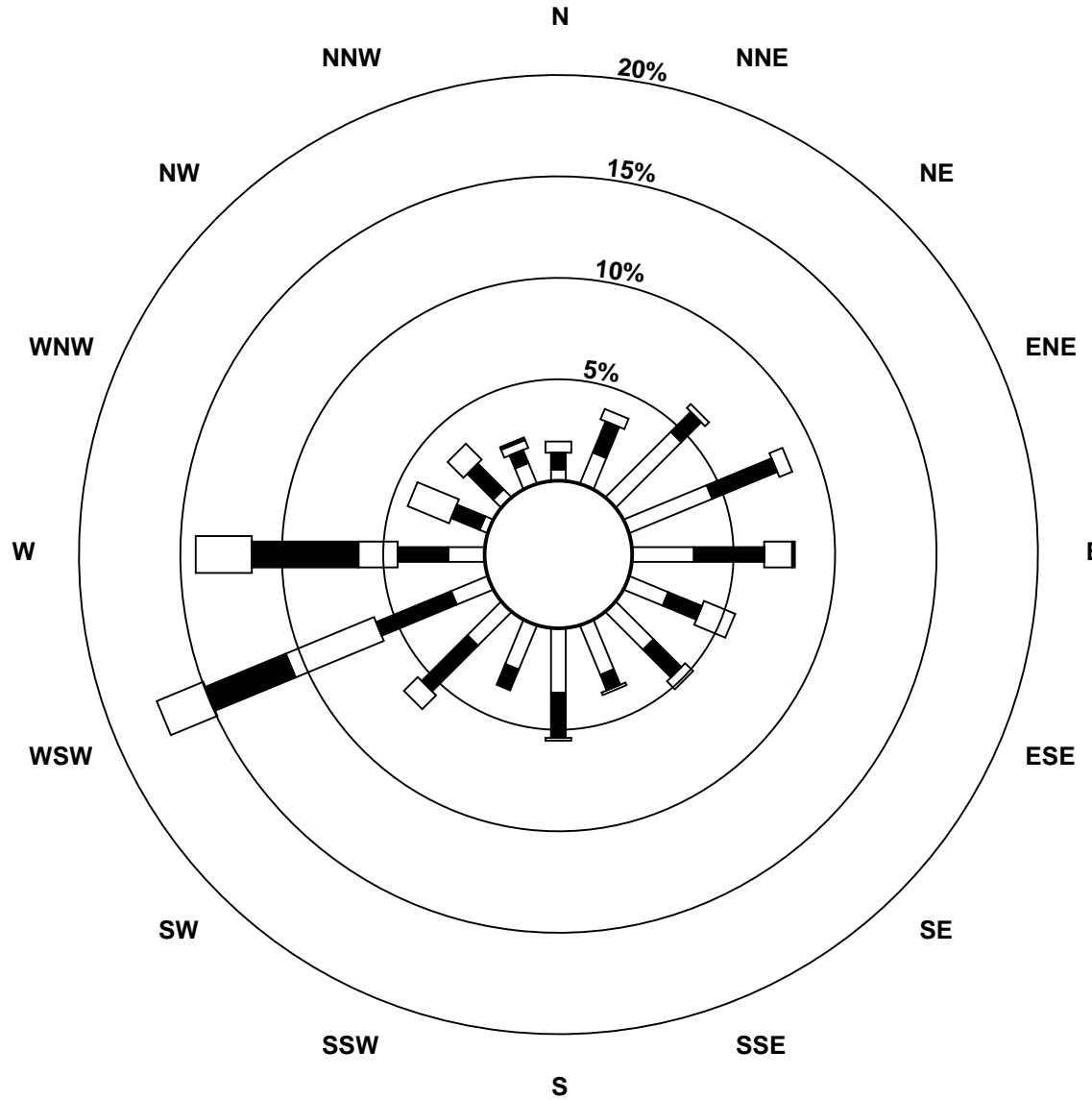
Hourly Averages

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

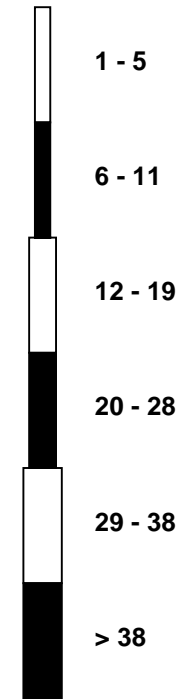
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	8	9	8	8	8	7	8	4	6	3	8	8	9	7	5	3	1	3	4	6	8	10	12	10	4.5	11.7
Dir	66	86	89	81	88	75	94	150	239	178	182	150	114	136	109	38	125	83	36	13	23	32	38	57	83	38
24 Spd	10	7	5	8	9	11	7	2	7	1	1	3	4	5	6	4	6	9	11	6	4	5	3	2	2.3	10.6
Dir	78	98	134	321	15	18	13	331	302	246	253	215	233	177	127	83	91	108	134	168	113	65	96	129	86	134
25 Spd	1	2	2	3	3	3	3	4	5	5	7	15	18	23	19	24	22	23	21	18	15	9	10	9	9.1	23.7
Dir	71	81	184	117	139	110	124	143	162	200	214	231	225	252	260	263	271	263	264	250	245	234	244	239	245	263
26 Spd	6	4	9	9	9	8	7	7	16	26	28	29	29	28	32	30	30	34	32	24	15	19	19	18	18.7	33.5
Dir	214	169	219	229	217	213	205	221	231	253	259	258	253	253	261	259	257	250	250	248	240	243	240	239	247	250
27 Spd	9	12	9	9	6	4	5	16	23	28	32	34	35	33	36	35	33	32	28	21	12	11	11	1	19.6	36.4
Dir	245	249	241	274	268	237	242	259	268	259	260	259	276	271	261	264	260	263	260	260	267	276	272	95	263	261
28 Spd	7	1	6	5	10	9	6	8	6	4	5	5	6	3	5	5	8	10	9	8	8	5	5	2	2.0	10.1
Dir	260	37	285	337	316	322	351	324	321	273	197	172	234	262	232	168	212	173	169	162	198	67	53	48	248	316
29 Spd	3	5	3	5	2	4	5	1	7	4	6	5	10	12	11	15	20	26	26	15	14	13	10	5	7.3	26.1
Dir	67	48	73	57	158	35	336	339	329	214	261	253	256	269	264	256	258	260	249	246	249	245	226	261	260	
30 Spd	9	11	1	2	2	1	2	3	12	24	28	28	32	25	32	28	32	29	26	22	20	13	11	13	16.2	32.1
Dir	235	242	164	112	152	68	101	210	228	246	239	243	257	258	260	251	255	245	242	248	239	240	248	247	247	260
31 Spd	7	8	11	16	13	14	18	23	30	32	30	23	29	28	29	32	29	29	21	18	15	7	8	9	19.4	31.9
Dir	242	244	247	256	249	255	263	266	265	266	269	276	269	268	262	261	256	256	249	238	240	215	230	234	258	261
Spd	0.7	1.4	0.9	0.3	0.5	0.5	0.4	2.4	5.0	8.3	9.3	9.4	10.0	9.8	9.2	8.3	8.2	8.0	7.7	5.8	4.2	2.8	1.4	0.8	Diurnal Average	
Dir	63	60	66	48	296	4	307	238	243	248	250	253	256	257	261	265	260	254	243	243	259	274	284	211	Diurnal Maximum	
Spd	14.9	15.3	12.9	15.5	13.5	14.0	18.5	22.5	29.6	31.5	32.4	34.4	34.5	33.4	36.4	35.1	33.3	33.5	31.8	26.5	21.8	18.6	18.7	18.4	Diurnal Maximum	
Dir	33	57	44	256	249	255	263	266	265	266	260	259	276	271	261	264	260	250	261	265	341	243	240	239	Diurnal Maximum	
Maximum Speed Value: 36 km/h on Aug 27 15:00																		Minimum Speed Value: 0 km/h on Aug 22 05:00						Hours in Service: 744		
Maximum Daily Speed Average: 19.6 km/h on Aug 27																		Minimum Daily Speed Average: 0.9 km/h on Aug 3						Hours of Data: 744		
Maximum Diurnal Speed Average: 10.0 km/h at hour 13																		Minimum Diurnal Speed Average: 0.3 km/h at hour 4						Hours of Missing Data: 0		
Monthly Average Velocity: 4.44 km/h 255.2 deg																		Speed Percentiles: P ₁ = 0.7 P ₁₀ = 2.2 Q ₁ = 4.0 Median = 7.7 Q ₃ = 13.4 P ₉₀ = 23.2 P ₉₉ = 33.3						Percent Operational Time: 100.0		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	17	14	9	1	0	0	41																			
NorthEast	49	29	10	0	0	0	88																			
East	45	49	19	1	0	0	114																			
SouthEast	38	25	11	0	0	0	74																			
South	39	25	4	0	0	0	68																			
SouthWest	30	51	28	11	4	0	124																			
West	21	36	38	55	40	0	190																			
NorthWest	8	22	15	0	0	0	45																			
Total	247	251	134	68	44	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - August 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - August 2014

Maximum Speed: 37 km/h on Aug 27 15:00	Maximum Daily Speed Average: 20.2 km/h on Aug 27	Hours in Service: 744
Minimum Speed: 1 km/h on Aug 2 07:00	Minimum Daily Speed Average: 4.9 km/h on Aug 3	Hours of Data: 744
Maximum Diurnal Speed Average: 16.9 km/h at hour 16	Minimum Diurnal Speed Average: 5.1 km/h at hour 6	Hours of Missing Data: 0
Monthly Average Speed: 10.74 km/h	Percentiles: P ₁ = 2.0 P ₁₀ = 3.2 Q ₁ = 4.8 Median = 8.2 Q ₃ = 13.7 P ₉₀ = 23.7 P ₉₉ = 33.4	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-Aug	15	16	13	9	7	4	3	3	3	6	10	9	11	13	19	20	18	14	13	10	7	9	10	10	10.5	20.1
2-Aug	9	5	2	2	4	2	1	3	4	4	4	8	9	12	10	6	8	8	6	7	6	5	5	5	5.7	11.8
3-Aug	5	5	4	2	2	4	3	3	4	6	5	6	6	7	7	5	6	8	5	4	4	4	4	7	4.9	8.1
4-Aug	7	4	3	3	3	5	3	2	4	3	5	5	7	6	9	12	13	13	13	11	13	15	15	13	7.9	15.1
5-Aug	8	7	9	7	5	5	3	4	5	8	6	7	10	10	9	8	5	6	7	6	9	13	15	7	7.5	15.1
6-Aug	5	4	3	3	3	3	5	3	4	11	25	20	25	28	32	26	30	32	32	27	21	18	14	9	15.8	32.4
7-Aug	8	5	5	3	4	3	3	4	6	21	27	26	22	19	18	18	21	20	14	11	9	8	3	12.5	27.3	
8-Aug	3	5	3	4	6	4	3	3	5	12	20	23	15	10	9	13	13	8	11	7	4	4	2	3	7.9	23.0
9-Aug	4	3	3	3	4	4	4	3	4	7	10	21	24	27	28	18	19	22	20	15	16	16	12	4	12.2	27.6
10-Aug	9	3	4	3	3	1	3	5	7	18	24	29	30	29	28	30	31	31	24	13	9	8	4	10	14.7	30.9
11-Aug	4	5	5	5	3	4	2	3	6	4	6	7	11	11	7	8	7	10	11	8	8	8	9	5	6.5	11.3
12-Aug	6	7	5	8	4	4	4	2	4	4	7	10	10	10	8	9	9	11	6	4	6	6	6	4	6.3	11.0
13-Aug	5	2	4	3	2	3	5	3	5	8	14	14	14	13	12	11	6	2	5	4	5	4	5	2	6.3	14.1
14-Aug	4	3	4	4	3	6	5	3	4	3	8	9	16	17	13	12	14	12	9	11	12	5	3	5	7.7	16.6
15-Aug	6	6	6	4	3	4	3	3	2	4	12	15	14	13	12	11	10	8	6	6	4	6	5	3	6.9	15.5
16-Aug	2	5	3	7	11	4	4	2	8	13	13	15	14	15	13	18	13	11	9	6	6	9	8	8	9.0	18.3
17-Aug	4	4	3	3	3	4	5	11	16	22	26	26	23	21	20	24	23	23	23	21	16	15	11	9	14.9	26.2
18-Aug	12	5	8	9	8	7	12	15	19	27	28	20	20	16	29	30	31	31	20	17	19	17	10	5	17.2	31.5
19-Aug	3	4	3	4	10	9	6	5	7	17	18	14	13	13	14	17	19	17	10	14	22	12	7	7	11.1	22.3
20-Aug	8	8	9	6	3	5	6	6	9	12	12	14	10	11	12	14	10	9	9	7	7	9	6	7	8.7	14.3
21-Aug	9	9	7	8	5	6	8	9	9	13	16	15	10	9	12	16	15	13	12	9	4	5	7	8	9.8	16.0
22-Aug	9	9	9	3	2	3	2	3	3	7	12	13	14	16	13	13	11	12	14	9	6	6	7	8	8.5	15.9
23-Aug	8	9	8	9	8	7	8	4	6	4	8	9	10	10	7	5	5	6	4	6	8	10	12	11	7.5	11.8
24-Aug	10	7	5	9	10	11	8	6	7	3	6	6	6	7	7	5	7	10	11	6	5	5	5	3	7.0	10.8
25-Aug	2	3	3	3	4	4	3	4	5	5	8	16	19	24	20	24	23	23	21	18	15	9	10	9	11.5	24.4
26-Aug	7	5	9	9	9	8	7	7	16	26	28	29	29	28	32	31	31	34	32	24	15	19	19	18	19.6	33.7
27-Aug	9	12	9	9	6	5	5	17	23	28	33	35	35	34	37	35	34	32	28	21	12	11	11	5	20.2	36.7
28-Aug	7	5	6	6	10	10	7	9	6	5	5	6	8	6	9	8	10	10	9	8	9	5	5	5	7.4	10.5
29-Aug	3	5	3	5	3	5	8	4	8	6	7	6	10	13	11	15	20	26	26	16	14	13	10	6	10.2	26.2
30-Aug	9	11	4	3	2	2	3	3	12	24	28	28	32	26	33	29	32	29	26	23	20	13	11	13	17.3	32.6
31-Aug	7	8	11	16	14	14	19	23	30	32	30	24	29	28	29	32	29	30	21	18	15	7	8	9	20.0	32.3
	6.7	6.1	5.5	5.5	5.3	5.1	5.2	5.7	8.1	11.8	14.9	15.6	16.4	16.2	16.7	16.9	16.7	16.8	14.9	11.9	10.6	9.6	8.5	7.1	Diurnal Average	
	15.0	15.7	13.2	15.6	13.5	14.1	18.5	22.6	29.8	31.7	32.7	34.8	34.8	33.6	36.7	35.4	33.5	33.7	31.9	26.6	22.3	18.6	18.8	18.5	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg
Beaverlodge - August 2014

Maximum Value: 98.0 deg on Aug 23 17:00		Hours in Service: 744																								
Minimum Value: 2.0 deg on Aug 4 23:00		Hours of Data: 744																								
Percentiles: P ₁ = 2.9 P ₁₀ = 5.5 Q ₁ = 8.9 Median = 16.8 Q ₃ = 36.3 P ₉₀ = 61.4 P ₉₉ = 89.4		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-Aug	5	14	17	77	11	66	87	54	72	63	13	17	18	20	12	13	17	17	8	7	20	10	6	4	87.0	
2-Aug	4	42	70	56	35	68	50	18	19	40	33	19	18	20	29	40	46	83	27	10	28	12	8	9	82.7	
3-Aug	27	22	16	40	49	90	57	21	26	21	27	29	31	22	27	42	61	28	18	29	57	46	90	37	89.7	
4-Aug	63	50	58	21	35	7	58	20	25	25	16	19	13	23	20	15	12	10	3	6	3	4	2	5	62.7	
5-Aug	9	8	6	24	51	16	42	75	29	17	21	31	22	34	27	53	47	21	19	91	68	42	31	89	91.5	
6-Aug	23	38	61	48	71	53	11	39	43	45	6	11	10	10	10	14	9	7	5	5	12	7	9	22	71.1	
7-Aug	9	84	44	66	19	38	43	54	20	23	9	12	13	18	17	21	15	11	6	6	12	3	14	57	83.9	
8-Aug	98	41	80	75	34	22	59	66	19	27	18	14	23	22	38	43	71	43	11	22	14	28	54	58	97.9	
9-Aug	55	51	25	29	15	17	15	42	24	31	16	14	11	9	7	15	15	7	6	6	4	4	12	76	76.4	
10-Aug	15	35	32	77	76	79	36	62	28	12	14	10	12	8	13	8	8	6	8	5	5	16	88	10	88.1	
11-Aug	79	28	44	14	37	13	45	63	23	44	57	63	28	35	51	81	68	35	17	9	11	5	4	10	80.7	
12-Aug	11	24	15	10	39	55	30	82	36	58	34	17	17	17	23	29	35	32	15	34	49	7	32	82	82.3	
13-Aug	46	87	60	27	55	82	64	79	40	19	10	8	11	13	20	14	12	74	37	21	8	16	22	40	86.7	
14-Aug	12	15	29	11	10	8	10	37	16	25	14	18	16	19	58	36	23	12	5	3	3	33	41	56	58.0	
15-Aug	16	24	61	58	79	63	70	57	93	42	22	14	15	17	16	17	24	20	6	10	31	8	15	21	93.5	
16-Aug	73	48	76	64	48	43	53	70	16	9	7	7	9	10	12	15	11	12	20	11	13	4	6	12	75.7	
17-Aug	61	84	65	31	41	22	19	6	7	10	8	8	12	16	15	11	5	9	8	3	3	3	5	50	84.1	
18-Aug	8	17	18	12	31	20	4	5	3	3	3	5	10	7	9	8	7	5	4	4	4	5	11	11	31.3	
19-Aug	67	49	89	78	8	45	57	46	23	8	13	15	16	68	17	14	15	18	22	21	13	13	8	26	89.3	
20-Aug	13	16	6	58	29	10	10	9	20	11	12	15	20	27	15	13	17	24	15	9	7	10	24	8	57.9	
21-Aug	9	11	7	7	29	13	13	8	12	7	11	13	25	25	29	13	12	11	15	26	29	9	8	14	29.2	
22-Aug	4	3	3	80	86	60	90	29	37	35	16	19	23	17	22	29	33	25	15	6	34	6	5	7	90.1	
23-Aug	7	5	6	5	6	8	12	26	13	41	17	23	20	43	58	61	98	66	24	12	5	3	8	9	98.0	
24-Aug	6	18	37	35	13	4	45	73	21	89	84	63	56	62	37	34	26	34	13	7	33	9	42	54	89.2	
25-Aug	60	40	60	29	42	36	18	19	12	26	25	11	20	16	20	14	10	6	9	10	4	6	8	6	60.0	
26-Aug	37	36	11	12	6	9	11	15	15	9	8	9	10	5	7	7	8	6	6	5	5	4	4	5	37.0	
27-Aug	11	5	11	13	11	31	13	16	5	6	9	9	8	7	7	7	6	5	5	4	7	6	5	79	79.3	
28-Aug	20	81	31	36	7	55	33	35	14	27	40	52	46	78	56	68	43	27	9	15	30	32	8	72	81.0	
29-Aug	37	9	23	9	59	41	47	80	26	73	19	26	10	19	11	14	9	9	5	4	3	3	6	35	79.9	
30-Aug	15	7	65	61	33	83	45	46	16	8	6	13	9	11	10	11	9	6	4	3	3	4	4	4	82.8	
31-Aug	9	9	4	6	5	6	3	4	5	6	10	8	12	8	10	9	11	8	9	7	12	7	12	11	12.3	
		97.9	86.7	89.3	80.3	85.6	89.7	90.1	82.3	93.5	89.2	83.6	62.9	56.3	78.2	58.3	80.7	98.0	82.7	36.6	91.5	68.0	46.1	89.6	88.7	

PAZA

Valleyview Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

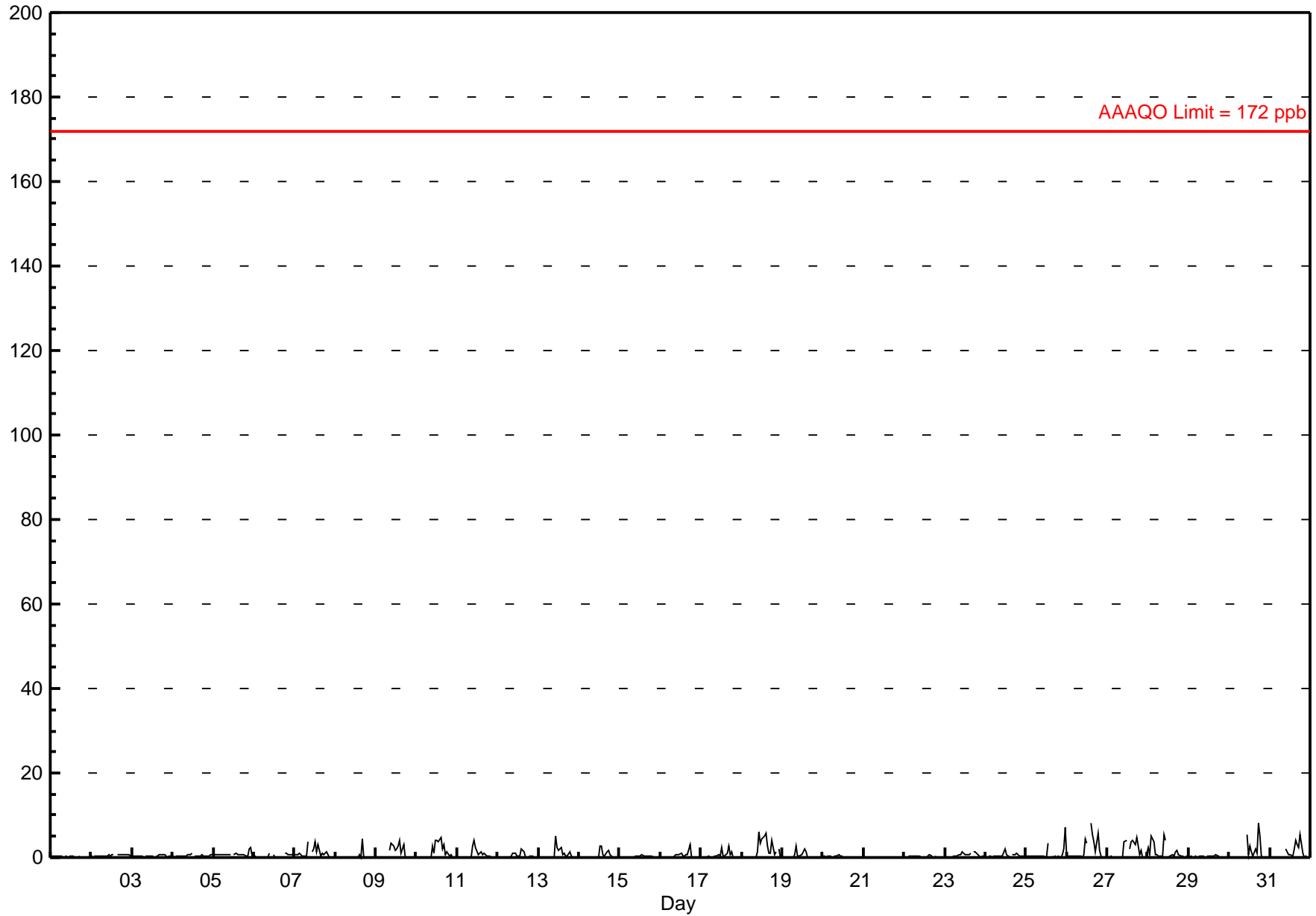
Sulphur Dioxide (SO₂) - ppb

Valleyview - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 8.1 ppb on Aug 26 15:00	Maximum Daily Average: 1.7 ppb on Aug 18		Hours of Data:	707
Minimum Value: 0 ppb on Aug 1 19:00	Minimum Daily Average: 0.0 ppb on Aug 21		Hours of Missing Data:	37
Maximum Diurnal Average: 1.6 ppb at hour 15	Minimum Diurnal Average: 0.2 ppb at hour 2		Hours of Calibration:	37
Monthly Average: 0.66 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.6 P ₉₀ = 2.0 P ₉₉ = 5.4		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-Aug	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
2-Aug	0	0	0	0	0	0	0	0	0	0	1	0	1	1	A	1	1	1	1	1	1	1	1	1	0.4	0.7
3-Aug	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	1	1	1	1	0	0	0	0.4	0.8	
4-Aug	0	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0	0	1	0	0	0	1	1	0.4	1.0	
5-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	2	2	0.8	2.4	
6-Aug	0	0	0	0	0	0	0	0	0	1	A	1	0	C	C	C	C	C	1	1	1	1	1	0.4	1.1	
7-Aug	1	1	1	1	0	0	0	0	4	A	1	2	4	1	3	0	1	1	1	1	0	0	0	1.1	3.8	
8-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	5	0	0	0	0	0	0	0.3	4.5	
9-Aug	0	0	0	0	0	0	0	0	0	A	2	3	3	2	2	3	4	1	3	0	0	0	0	1.0	4.0	
10-Aug	0	0	0	0	0	0	0	0	A	0	2	3	1	4	4	4	5	2	3	1	1	0	1	1.3	4.8	
11-Aug	0	0	0	0	0	0	0	0	0	A	3	4	2	1	1	1	1	1	0	0	0	0	0	0.6	4.0	
12-Aug	0	0	0	0	0	0	0	0	0	A	1	1	0	0	2	1	0	0	0	0	0	0	0	0.3	2.1	
13-Aug	0	0	0	0	0	0	0	0	0	0	0	5	2	2	2	1	1	0	0	1	0	0	0	0.7	5.2	
14-Aug	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	0	1	2	1	0	0	0	0	0.5	2.7	
15-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.7	
16-Aug	A	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	1	3	0	0	0	0	0.4	3.0	
17-Aug	0	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0	1	3	1	1	0	0	0	0.5	2.7	
18-Aug	0	0	0	0	0	0	0	0	0	0	1	6	3	4	5	6	3	1	1	4	1	1	2	1.7	6.0	
19-Aug	0	0	0	0	0	0	0	0	0	0	1	3	0	0	1	2	1	0	0	0	0	0	0	0.4	2.9	
20-Aug	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.6	
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
22-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.6	
23-Aug	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.5	
24-Aug	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	1	1	1	1	0	0.4	2.1	
25-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	A	0	0	0	0	0	0	1	0.7	7.0	
26-Aug	0	0	0	0	0	0	0	0	0	0	1	4	3	A	8	5	4	1	6	2	0	0	0	1.6	8.1	
27-Aug	0	0	0	0	0	0	0	0	0	0	4	4	A	2	4	4	3	5	3	1	2	0	1	1.4	4.6	
28-Aug	2	1	5	4	1	1	0	0	0	0	5	4	A	0	0	1	0	1	2	1	0	0	0	1.3	5.3	
29-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.5	
30-Aug	0	0	0	0	0	0	0	0	0	0	0	A	5	1	3	1	0	2	1	8	5	0	0	1.2	8.1	
31-Aug	0	0	0	0	0	0	0	0	0	0	A	2	1	1	1	0	2	4	3	2	6	1	0	1.0	5.5	
	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.5	0.9	1.5	1.2	1.2	1.2	1.6	1.1	1.2	1.1	1.2	0.4	0.3	0.2	0.3	0.4	Diurnal Average	
	2.4	0.6	5.0	3.7	0.8	0.7	0.7	0.8	3.7	5.3	6.0	4.4	4.2	5.2	8.1	5.3	4.5	8.1	5.7	1.9	1.6	2.1	2.4	7.0	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



Hourly Maximums

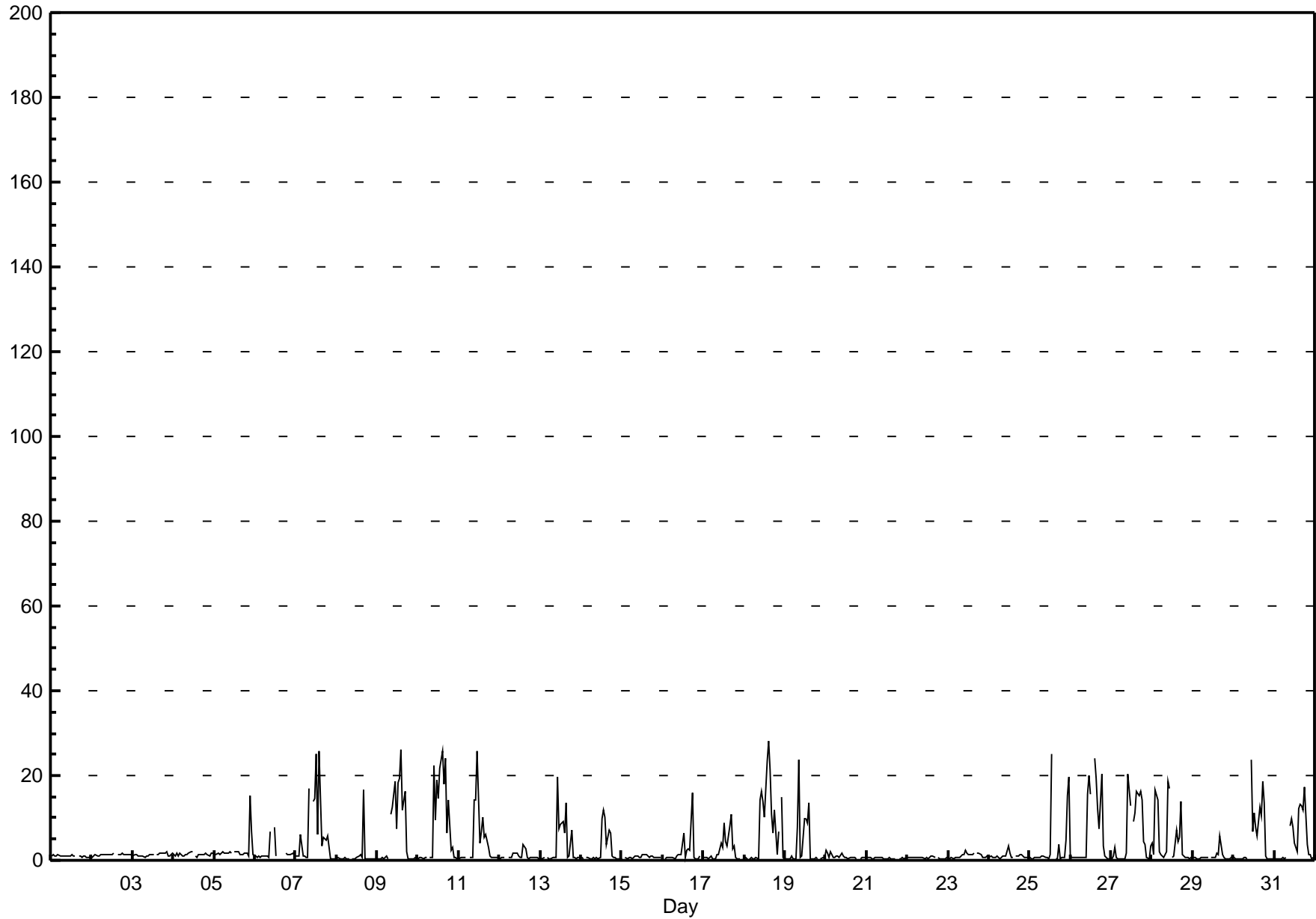
Sulphur Dioxide (SO₂) - ppb

Valleyview - August 2014

Maximum Value: 28.0 ppb on Aug 18 15:00		Maximum Daily Average: 8.1 ppb on Aug 10		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 18 03:00		Minimum Daily Average: 0.5 ppb on Aug 21		Hours of Data: 707																							
Maximum Diurnal Average: 8.2 ppb at hour 15		Minimum Diurnal Average: 0.7 ppb at hour 7		Hours of Missing Data: 37																							
Monthly Average: 3.08 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.6 Median = 0.9 Q ₃ = 1.7 P ₉₀ = 11.2 P ₉₉ = 25.0		Hours of Calibration: 37																							
				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-Aug	1	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	1.5	
2-Aug	1	1	1	1	1	1	2	1	1	1	1	1	1	2	A	1	1	1	2	1	1	1	1	1	1.3	1.7	
3-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	2	2	2	2	2	1	1	1.3	1.9	
4-Aug	1	1	2	1	2	1	1	1	1	2	2	2	A	1	1	1	1	1	1	2	1	1	2	2	1.4	2.1	
5-Aug	1	1	2	1	2	2	2	2	2	2	2	A	2	2	2	1	1	2	2	2	1	15	7	2	2.4	15.1	
6-Aug	1	1	1	1	1	1	1	1	1	7	A	8	1	C	C	C	C	C	2	1	1	1	2	1	1.8	7.8	
7-Aug	1	1	1	6	1	1	1	1	17	A	14	14	25	6	26	3	5	5	5	6	0	0	0	0	6.1	25.7	
8-Aug	0	1	0	0	0	1	0	0	A	A	0	0	0	1	1	1	17	0	0	0	0	0	0	0	1.2	16.6	
9-Aug	0	0	0	1	0	1	0	A	11	13	19	7	18	19	26	12	16	2	1	1	1	1	1	1	6.5	26.0	
10-Aug	0	1	1	0	1	1	A	1	1	22	9	19	15	22	26	18	24	7	14	3	3	1	1	0	8.1	25.7	
11-Aug	0	1	1	1	1	A	1	1	1	14	14	26	4	7	10	6	6	3	1	1	1	1	1	1	4.3	25.9	
12-Aug	0	1	1	1	A	1	1	1	2	2	2	1	1	1	4	3	1	0	1	1	1	1	1	0	1.0	3.8	
13-Aug	0	0	1	A	1	0	0	1	1	1	20	8	8	9	6	13	1	1	7	1	1	0	1	1	3.5	19.7	
14-Aug	1	0	A	1	1	0	0	1	1	1	0	1	10	12	10	4	7	7	1	1	1	0	0	0	2.5	11.7	
15-Aug	0	A	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
16-Aug	A	0	1	1	1	1	1	0	1	1	1	1	6	1	2	3	2	16	1	0	0	0	1	A	1.9	15.9	
17-Aug	1	1	1	0	1	0	0	0	1	1	4	3	9	4	4	8	11	3	3	1	0	0	A	0	2.5	10.7	
18-Aug	0	1	0	0	1	0	0	1	0	14	16	14	10	23	28	21	11	6	12	1	7	A	15	1	8.0	28.0	
19-Aug	0	0	0	0	1	0	0	8	24	1	1	10	10	9	14	0	0	0	1	0	A	0	1	1	3.6	23.8	
20-Aug	2	2	1	2	1	1	1	1	1	2	1	1	1	0	1	1	1	1	0	A	0	1	1	1	0.9	2.3	
21-Aug	1	1	1	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0	A	1	0	1	0	1	0.5	0.8	
22-Aug	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	A	1	0	0	0	0	1	0.7	1.1	
23-Aug	1	0	1	0	1	1	1	1	1	1	2	2	1	1	1	2	A	2	2	1	1	1	1	1	1.1	2.3	
24-Aug	1	1	1	1	1	1	0	1	1	1	1	3	2	1	1	A	1	1	1	1	1	1	1	1	1.0	3.4	
25-Aug	1	0	0	1	1	1	1	1	1	1	1	0	1	25	A	0	0	4	1	1	1	5	15	20	3.5	25.2	
26-Aug	1	1	1	1	1	1	1	1	1	1	15	20	15	A	24	19	12	7	20	3	1	1	1	0	6.4	24.2	
27-Aug	0	1	3	1	0	0	0	0	0	2	20	13	A	9	11	16	15	16	14	4	4	1	0	3	6.0	20.4	
28-Aug	4	1	16	14	2	1	1	1	1	2	19	17	A	1	1	7	4	5	14	1	1	1	0	1	5.0	18.6	
29-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	6	1	1	0	0	0	0	1	1.0	5.8	
30-Aug	1	0	0	0	0	0	1	1	0	A	24	7	11	8	6	13	11	19	13	1	0	0	0	0	5.1	23.6	
31-Aug	0	0	0	0	0	1	0	1	A	8	10	8	4	2	12	13	13	12	17	4	1	1	0	1	4.8	17.2	
		0.8	0.8	1.3	1.3	0.8	0.8	0.7	1.0	2.6	4.2	6.9	6.0	5.6	6.1	8.2	6.1	6.0	4.7	4.3	1.4	1.1	1.3	1.8	1.4	Diurnal Average	
		4.1	1.8	16.5	14.3	1.9	1.9	1.7	8.0	23.8	22.2	23.6	25.9	25.1	25.2	28.0	21.3	24.0	18.8	20.4	5.9	6.7	15.1	15.2	19.5	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

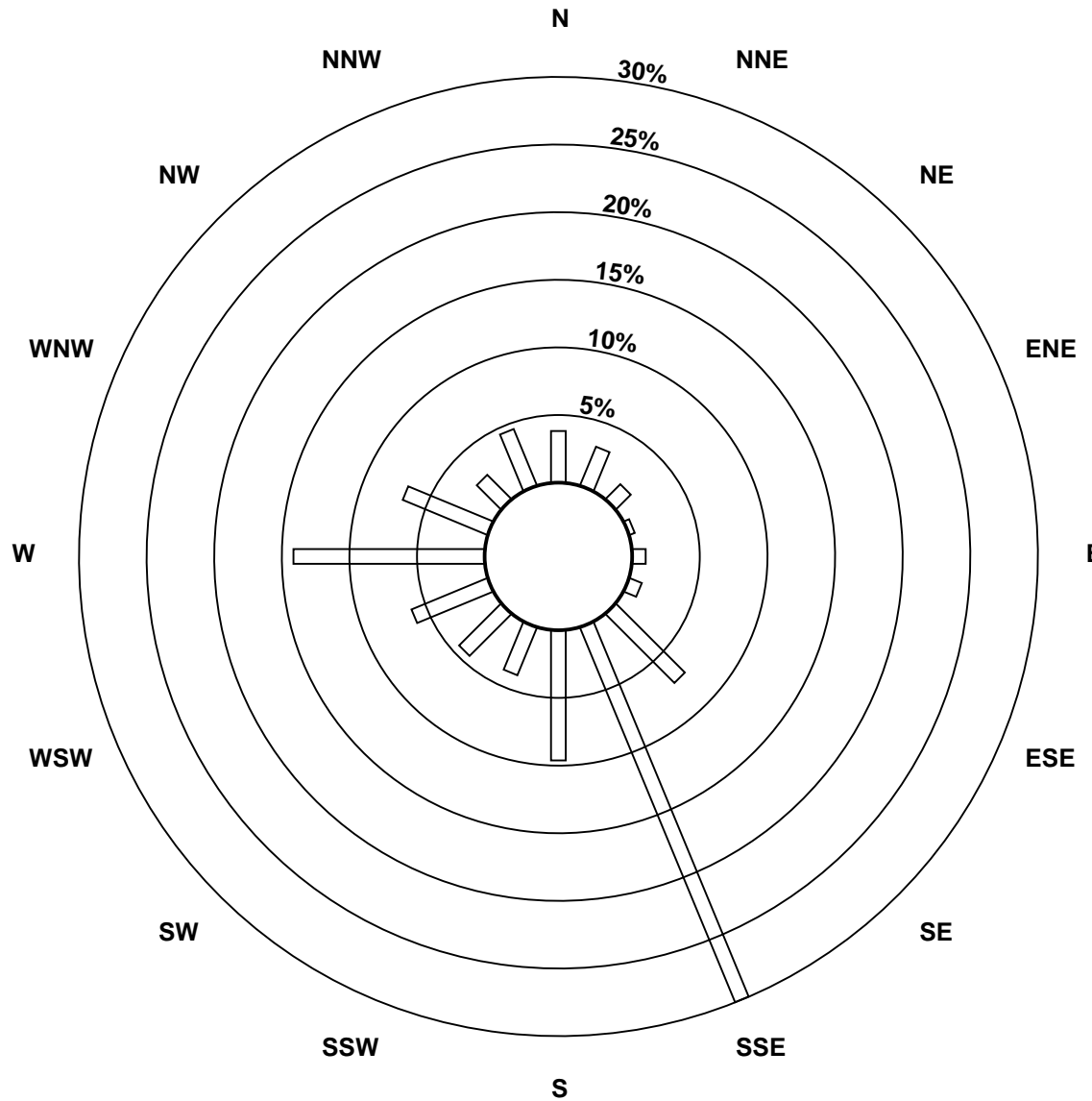
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Valleyview - August 2014

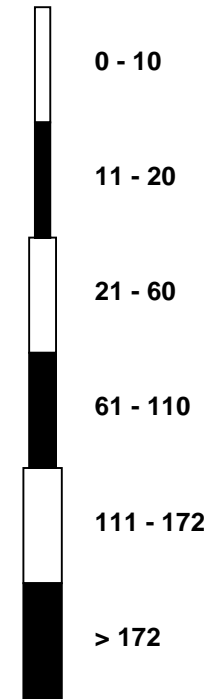


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - August 2014

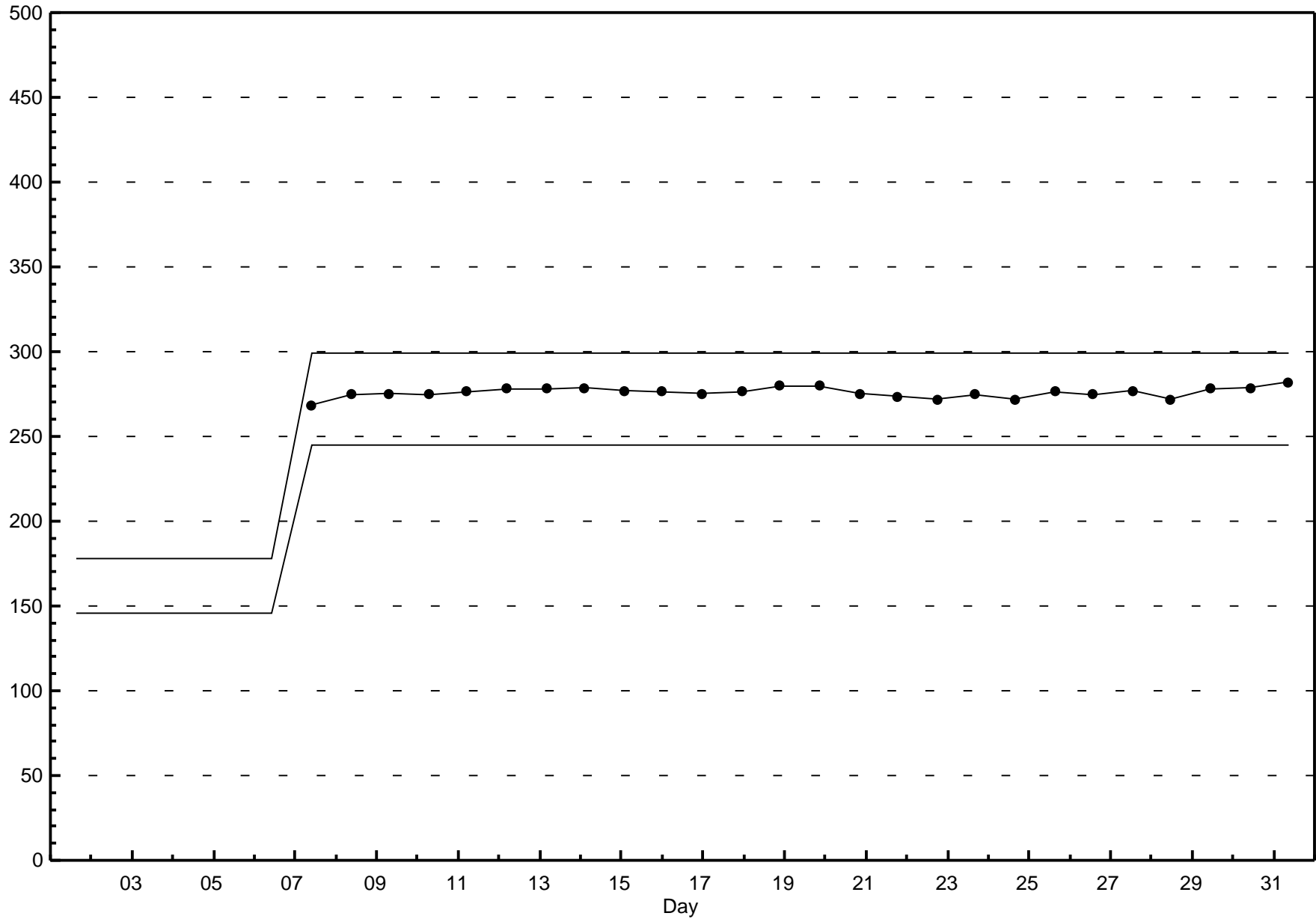


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - August 2014



Hourly Averages

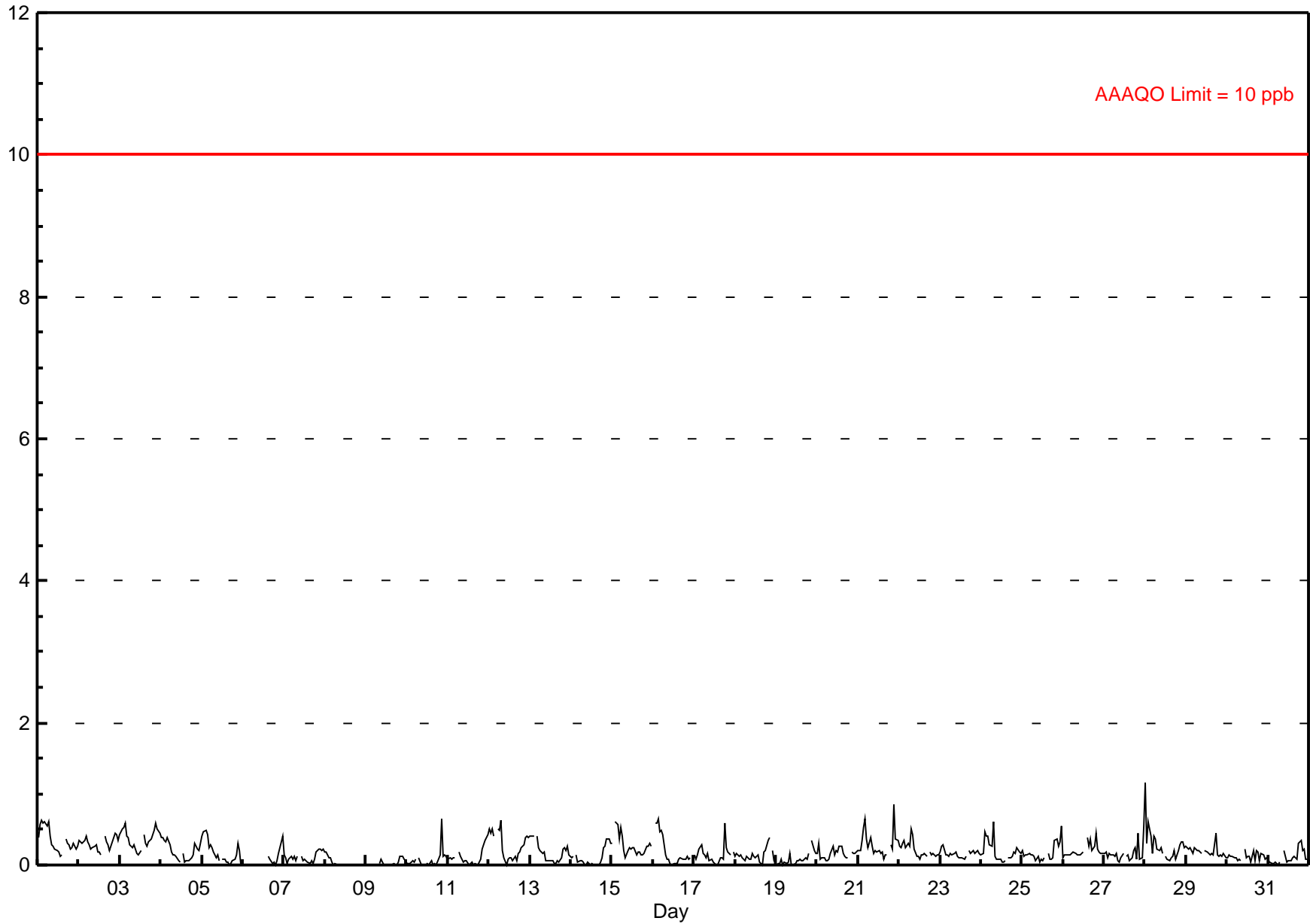
Hydrogen Sulphide (H₂S) - ppb

Valleyview - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 1.2 ppb on Aug 28 01:00	Maximum Daily Average: 0.4 ppb on Aug 3		Hours of Data:	707
Minimum Value: 0 ppb on Aug 6 00:00	Minimum Daily Average: 0.0 ppb on Aug 9		Hours of Missing Data:	37
Maximum Diurnal Average: 0.3 ppb at hour 3	Minimum Diurnal Average: 0.1 ppb at hour 14		Hours of Calibration:	37
Monthly Average: 0.18 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 0.6		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-Aug	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.6
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
3-Aug	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0.4	0.6
4-Aug	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
5-Aug	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
6-Aug	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0.1	0.4
7-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
8-Aug	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
9-Aug	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	0.1
10-Aug	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.1	0.6
11-Aug	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
12-Aug	1	0	1	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
13-Aug	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
14-Aug	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
15-Aug	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
16-Aug	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.7
17-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.1	0.6
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4
19-Aug	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
20-Aug	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
21-Aug	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0.3	0.9
22-Aug	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.5
23-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3
24-Aug	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.6
25-Aug	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	0.5
26-Aug	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
27-Aug	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	0.5
28-Aug	1	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
29-Aug	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
30-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
31-Aug	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
	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	Diurnal Average
	1.2	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.4	0.3	0.3	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.6	0.9	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



Hourly Maximums

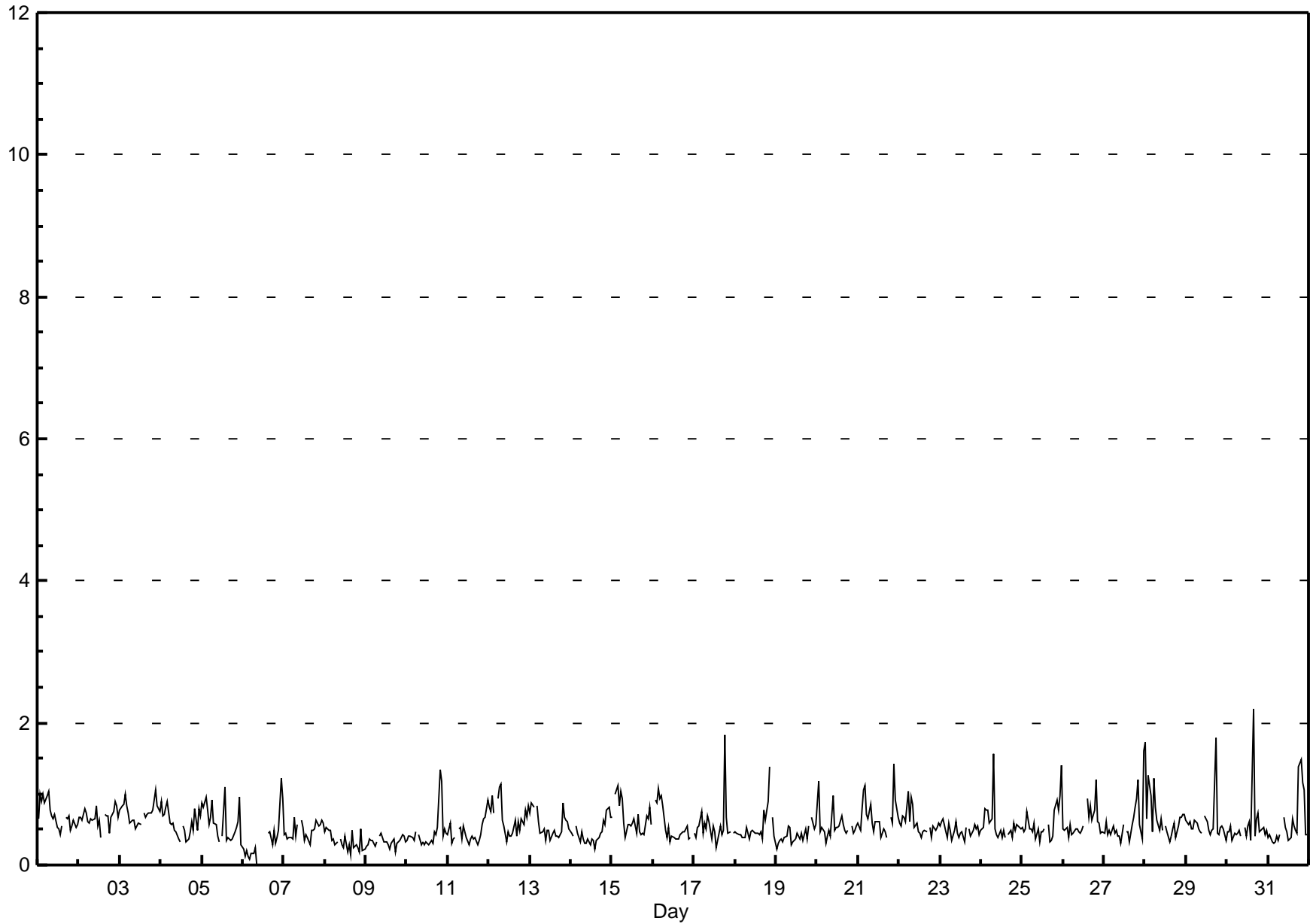
Hydrogen Sulphide (H₂S) - ppb

Valleyview - August 2014

Maximum Value: 2.2 ppb on Aug 30 16:00		Maximum Daily Average: 0.7 ppb on Aug 3		Hours in Service: 744																						
Minimum Value: 0 ppb on Aug 6 09:00		Minimum Daily Average: 0.3 ppb on Aug 9		Hours of Data: 707																						
Maximum Diurnal Average: 0.7 ppb at hour 21		Minimum Diurnal Average: 0.4 ppb at hour 15		Hours of Missing Data: 37																						
Monthly Average: 0.55 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.6 P ₉₀ = 0.8 P ₉₉ = 1.4		Hours of Calibration: 37																						
				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-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	0	1	1	1	1	0.7	1.0
2-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0	1	1	1	1	1	0.7	0.9
3-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.1
4-Aug	1	1	1	1	1	1	1	1	0	0	0	0	A	1	0	0	0	0	1	0	1	0	1	1	0.6	0.9
5-Aug	1	1	1	1	1	1	1	1	1	0	0	A	0	1	0	0	0	0	0	0	1	1	1	0	0.6	1.1
6-Aug	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	1	1	0.3	1.2
7-Aug	0	0	0	0	0	0	1	0	1	A	1	1	0	0	0	0	0	0	1	1	1	1	1	1	0.5	0.7
8-Aug	0	1	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.5
9-Aug	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
10-Aug	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0.5	1.4
11-Aug	0	1	0	0	0	A	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.9
12-Aug	1	1	1	1	A	1	1	1	1	1	0	0	0	0	1	0	1	0	1	0	1	1	1	1	0.7	1.1
13-Aug	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.6	0.9
14-Aug	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0.4	0.8
15-Aug	1	A	1	1	1	1	1	1	0	1	1	1	1	1	0	1	0	0	0	1	1	1	1	1	0.7	1.1
16-Aug	A	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0.6	1.1
17-Aug	0	0	1	1	1	0	1	1	1	1	0	1	0	0	0	1	0	0	2	1	0	0	A	0	0.6	1.8
18-Aug	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	0	0.5	1.4
19-Aug	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	A	1	1	1	0.4	0.7
20-Aug	1	1	0	1	0	0	0	0	0	1	0	1	1	1	1	1	0	0	0	A	1	0	0	1	0.6	1.2
21-Aug	1	0	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	A	1	1	1	1	1	0.7	1.4
22-Aug	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	1	0	1	0	1	1	0.6	1.0
23-Aug	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	1	A	1	0	0	1	1	1	0	0.5	0.7
24-Aug	0	1	1	1	1	1	1	2	1	0	0	0	0	0	A	1	0	0	0	1	0	1	1	1	0.6	1.6
25-Aug	1	0	1	1	1	1	0	1	0	1	0	0	0	1	A	1	0	0	0	1	1	1	1	1	0.6	1.4
26-Aug	1	0	1	0	1	0	0	1	1	0	0	0	1	A	1	1	1	1	1	1	1	1	0	0	0.6	1.2
27-Aug	0	1	0	0	0	1	0	0	0	0	0	1	A	0	0	0	1	1	1	1	1	1	0	2	0.6	1.6
28-Aug	2	1	1	1	0	1	1	1	1	0	1	0	A	1	0	0	0	1	1	0	1	1	1	1	0.7	1.7
29-Aug	1	1	1	1	1	1	1	1	0	0	A	1	1	0	0	0	1	2	0	0	1	1	1	0	0.6	1.8
30-Aug	0	0	1	0	0	0	0	0	0	A	1	0	1	1	0	2	0	1	1	0	0	1	0	0	0.6	2.2
31-Aug	0	0	0	0	0	0	0	0	A	1	1	0	0	0	1	1	0	0	1	1	1	1	0	0	0.6	1.5
		0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.6	0.6	0.6	Diurnal Average
		1.7	1.2	1.3	1.1	1.1	1.2	1.1	1.6	0.8	1.0	0.8	0.7	0.6	1.1	0.9	2.2	0.8	1.8	1.8	1.5	1.4	1.4	1.2	1.6	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

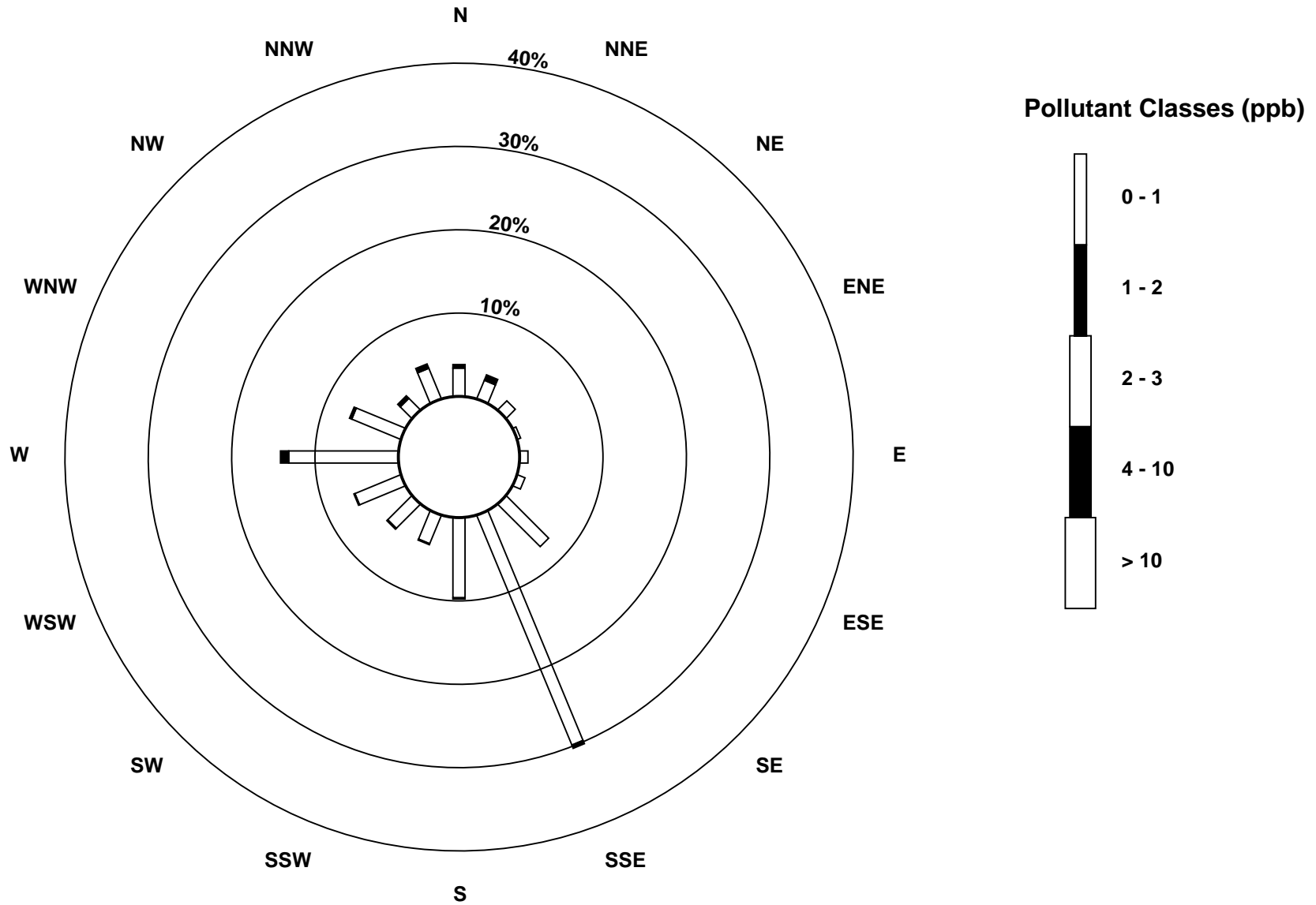
Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb
Valleyview - August 2014



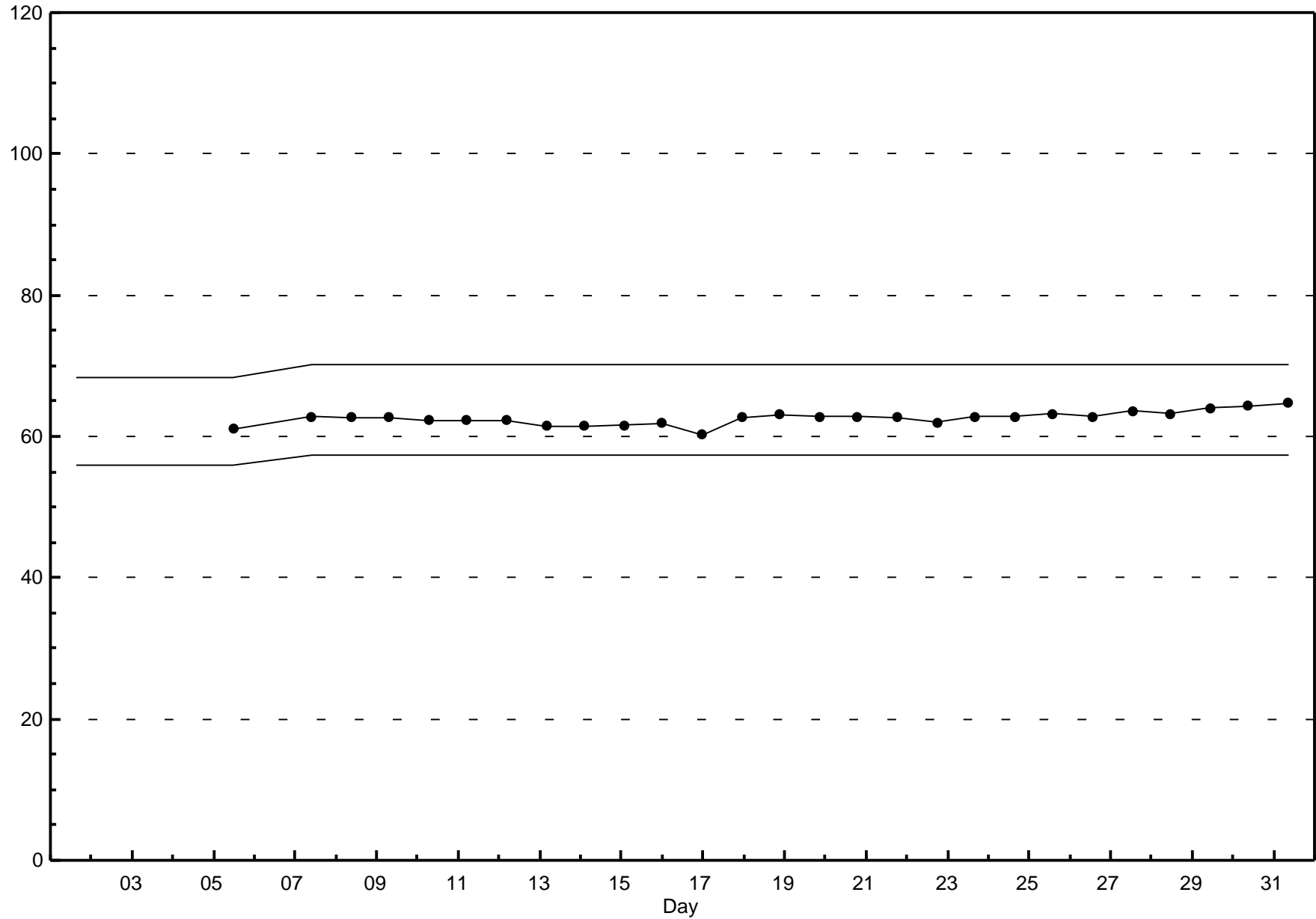
Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb
Valleyview - August 2014



Span Responses

Hydrogen Sulphide (H₂S)
Valleyview - August 2014



Hourly Averages

External Temperature (ET) - °C

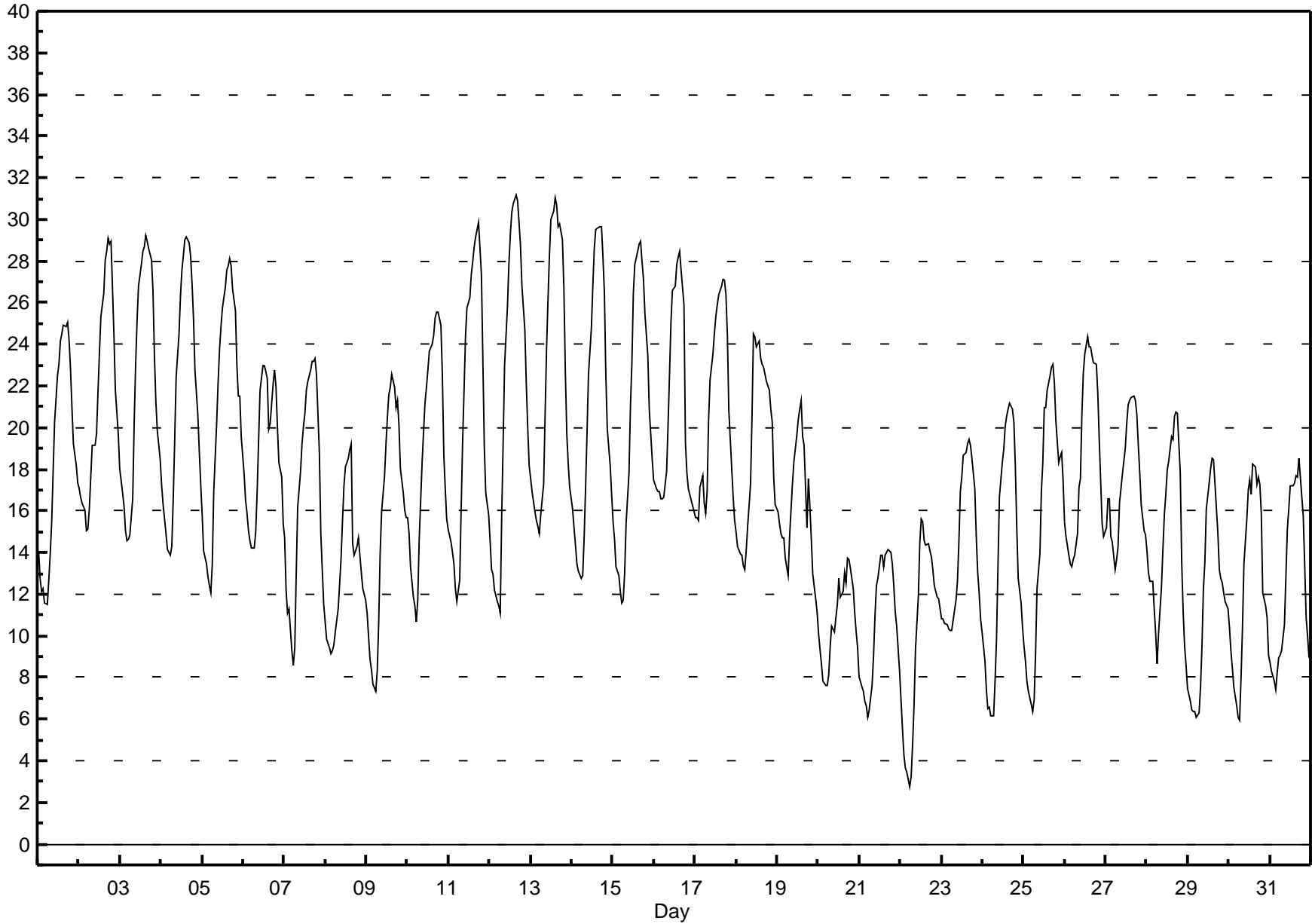
Valleyview - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 31.2 °C on Aug 12 16:00 Maximum Daily Average: 22.6 °C on Aug 13																	Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0									
Minimum Value: 3 °C on Aug 22 06:00 Minimum Daily Average: 10.0 °C on Aug 22 Maximum Diurnal Average: 23.2 °C at hour 16 Minimum Diurnal Average: 10.9 °C at hour 6 Monthly Average: 17.23 °C Percentiles: P ₁ = 6.0 P ₁₀ = 9.3 Q ₁ = 12.8 Median = 16.8 Q ₃ = 21.6 P ₉₀ = 26.5 P ₉₉ = 30.3																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	14	13	12	12	12	12	13	14	16	18	20	23	23	24	25	25	25	25	24	23	21	19	18	17	18.6	25.1
2-Aug	17	17	16	16	15	15	16	18	19	19	20	22	24	25	26	28	28	29	29	29	25	22	21	20	21.5	29.1
3-Aug	18	17	16	15	15	15	15	17	20	23	25	27	28	28	29	29	29	29	28	27	23	21	20	18	22.1	29.2
4-Aug	17	16	16	15	14	14	14	17	19	22	24	26	28	28	29	29	29	28	27	25	23	21	19	17	21.6	29.2
5-Aug	16	14	13	13	12	12	13	17	20	22	24	25	26	27	28	28	28	28	27	26	23	22	22	20	21.0	28.1
6-Aug	18	17	16	15	15	14	14	15	17	19	22	23	23	23	22	20	20	22	23	22	20	18	18	15	18.8	23.0
7-Aug	15	12	11	11	9	9	9	13	16	18	19	20	21	22	22	23	23	23	23	23	19	15	13	12	16.7	23.3
8-Aug	11	10	9	9	9	10	10	11	12	14	16	17	18	19	19	19	14	14	14	15	14	13	12	12	13.4	19.2
9-Aug	11	10	9	8	8	7	8	11	14	16	18	19	20	22	22	23	22	21	21	20	18	17	16	16	15.7	22.6
10-Aug	16	15	13	12	11	11	12	15	18	20	21	22	23	24	24	24	25	26	26	25	23	19	17	16	19.0	25.6
11-Aug	15	14	14	13	12	12	13	16	19	22	24	26	26	27	28	29	29	30	29	27	23	19	17	16	20.9	29.9
12-Aug	15	13	13	12	12	11	11	16	19	23	26	28	29	30	31	31	31	30	29	27	25	22	20	18	21.7	31.2
13-Aug	18	17	16	16	15	15	16	17	21	24	26	28	30	30	31	31	30	30	29	27	23	20	18	17	22.6	31.1
14-Aug	16	15	14	13	13	13	13	15	17	20	23	25	27	29	30	30	30	30	28	26	22	20	18	17	20.9	29.7
15-Aug	15	15	13	13	12	12	12	13	15	18	21	23	26	28	28	29	29	28	27	25	23	21	20	19	20.2	29.0
16-Aug	17	17	17	17	17	17	17	18	20	23	25	27	27	28	28	28	28	26	19	18	17	17	17	16	20.8	28.5
17-Aug	16	16	16	17	18	16	16	17	20	22	24	24	25	26	26	27	27	27	26	24	21	18	17	16	20.9	27.2
18-Aug	15	14	14	14	13	13	14	15	17	20	24	24	24	24	23	23	23	22	22	21	20	18	16	16	19.1	24.5
19-Aug	16	15	15	15	15	14	13	15	16	17	18	20	20	21	21	20	19	15	18	16	15	13	12	11	16.2	21.3
20-Aug	10	9	9	8	8	8	8	9	10	10	11	11	13	12	12	13	13	14	14	13	12	11	10	9	10.7	13.7
21-Aug	8	8	7	7	7	6	6	8	9	11	12	13	14	14	13	14	14	14	14	13	12	11	10	8	10.6	14.1
22-Aug	7	6	4	4	3	3	3	5	7	9	12	14	16	15	15	14	14	14	14	13	12	12	12	11	10.0	15.6
23-Aug	11	11	11	11	10	10	10	11	12	13	14	17	18	19	19	19	19	19	19	17	15	13	12	11	14.1	19.4
24-Aug	10	9	7	7	7	6	6	8	10	13	17	18	19	20	21	21	21	21	20	18	15	13	12	10	13.7	21.1
25-Aug	9	9	8	7	7	6	7	9	12	14	17	18	21	21	22	22	23	23	22	20	18	19	19	18	15.5	23.1
26-Aug	15	15	14	13	13	14	14	15	17	18	21	23	24	24	24	24	23	23	23	22	19	17	15	15	18.6	24.4
27-Aug	15	17	17	15	15	13	14	14	16	17	18	19	20	21	21	21	21	21	19	18	16	15	15	15	17.5	21.5
28-Aug	14	13	13	13	11	10	9	10	12	14	16	17	18	18	20	19	21	21	21	18	13	11	9	9	14.6	20.7
29-Aug	8	7	6	6	6	6	6	8	9	12	14	16	17	18	19	18	17	15	13	13	13	12	11	11	11.8	18.5
30-Aug	10	9	8	8	7	6	6	8	10	13	16	17	17	17	18	18	17	18	17	16	12	11	11	9	12.5	18.2
31-Aug	9	8	8	7	8	9	9	9	11	13	15	16	17	17	17	18	18	19	18	16	13	11	10	9	12.7	18.5
																								Diurnal Average		
																								Diurnal Maximum		

Hourly Averages

External Temperature (ET) - °C

Valleyview - August 2014



Hourly Averages

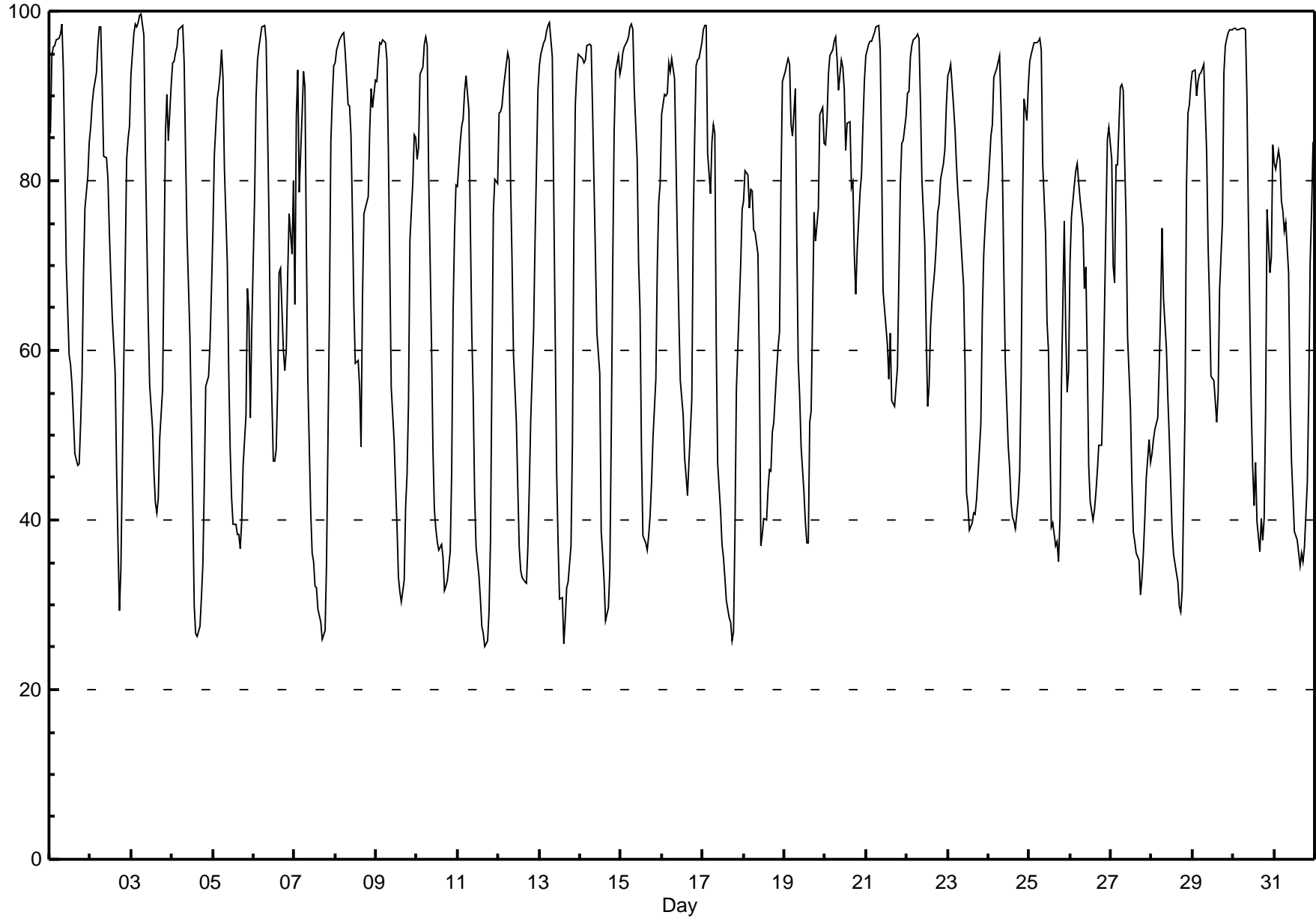
Relative Humidity (RH) - %

Valleyview - August 2014

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 99.7 % on Aug 3 07:00 Maximum Daily Average: 86.4 % on Aug 20		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																								
Minimum Value: 25 % on Aug 11 17:00 Maximum Diurnal Average: 92.1 % at hour 6 Monthly Average: 68.66 %		Minimum Daily Average: 54.4 % on Aug 28 Minimum Diurnal Average: 41.5 % at hour 16 Percentiles: P ₁ = 26.6 P ₁₀ = 36.4 Q ₁ = 46.8 Median = 73.5 Q ₃ = 90.5 P ₉₀ = 96.0 P ₉₉ = 98.4																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	86	95	96	96	97	97	97	98	93	82	70	60	58	56	52	48	46	47	51	57	69	77	81	85	74.7	98.5
2-Aug	86	89	91	93	96	98	98	91	83	83	80	74	69	64	58	46	37	29	34	46	70	83	85	86	73.7	98.2
3-Aug	93	97	98	98	99	99	100	97	84	73	64	56	51	46	42	41	42	50	55	71	86	90	85	91	75.3	99.7
4-Aug	94	94	95	96	98	98	98	94	83	74	62	52	42	30	27	26	27	31	35	44	56	57	61	67	64.2	98.3
5-Aug	74	83	90	91	93	95	92	81	70	57	48	42	40	39	38	38	37	40	46	52	67	65	52	62	62.3	95.4
6-Aug	78	90	94	96	97	98	98	96	86	75	61	47	47	48	55	69	70	60	58	60	69	76	71	80	74.2	98.3
7-Aug	65	88	93	79	88	93	91	72	56	41	36	35	32	32	30	28	26	26	27	35	64	85	90	94	58.5	93.5
8-Aug	94	95	97	97	97	97	95	89	89	85	76	65	58	59	56	49	66	76	78	78	86	91	89	92	81.4	97.4
9-Aug	92	94	96	96	97	96	94	84	70	56	49	44	39	33	31	30	33	42	45	54	73	80	85	85	66.6	96.5
10-Aug	83	84	93	93	96	97	96	81	61	48	41	39	38	36	37	36	32	32	33	36	45	64	74	80	60.6	96.9
11-Aug	79	85	86	87	90	92	88	75	62	55	43	37	33	31	27	27	25	26	29	37	57	76	80	80	58.7	92.4
12-Aug	88	88	89	91	94	95	94	80	70	60	51	44	37	34	33	33	33	37	44	52	62	73	82	91	64.7	95.1
13-Aug	94	95	96	97	98	98	99	95	78	62	46	37	31	31	25	28	32	33	37	49	74	89	93	95	67.1	98.6
14-Aug	95	94	94	94	96	96	96	88	80	71	62	57	39	36	33	28	30	34	50	70	86	93	95	93	71.2	96.1
15-Aug	93	95	96	96	97	98	99	98	91	82	70	65	48	38	37	36	38	41	44	50	57	70	78	80	70.7	98.5
16-Aug	88	90	90	90	94	93	94	92	82	73	64	56	52	47	45	43	47	54	75	85	94	94	94	96	76.4	96.2
17-Aug	98	98	98	83	78	85	87	86	61	47	41	37	36	33	30	28	28	26	27	39	55	65	70	77	58.9	98.3
18-Aug	78	81	81	77	79	79	74	74	71	58	37	38	40	40	44	46	46	50	51	58	60	62	80	92	62.3	91.8
19-Aug	93	94	94	94	87	85	91	73	59	55	49	43	40	37	37	51	53	76	73	75	77	88	89	84	70.6	94.4
20-Aug	84	87	93	95	95	96	97	94	91	94	93	91	84	87	87	79	80	71	67	72	79	81	87	92	86.4	96.9
21-Aug	95	96	96	96	97	98	98	98	95	82	67	65	61	57	62	54	54	53	58	69	79	84	85	88	78.6	98.3
22-Aug	90	90	95	96	97	97	97	97	89	80	72	62	53	56	63	66	70	73	76	77	80	82	84	89	80.5	97.3
23-Aug	92	93	94	89	86	82	79	76	70	68	58	43	42	39	40	41	41	42	45	51	64	71	75	78	64.9	93.7
24-Aug	79	85	87	92	93	93	95	89	81	69	59	49	46	42	40	40	39	42	46	56	77	90	87	91	69.5	94.7
25-Aug	94	95	96	96	96	96	97	95	82	74	63	60	50	39	40	37	37	35	40	56	75	62	55	57	67.9	96.7
26-Aug	70	76	79	81	82	80	78	75	67	70	59	46	42	40	41	43	46	49	49	55	65	75	85	86	64.2	86.3
27-Aug	83	70	68	82	82	91	91	91	82	75	62	53	45	39	37	36	35	31	33	36	40	45	50	47	58.5	91.4
28-Aug	48	50	51	52	58	65	74	66	60	55	44	39	36	34	33	30	29	32	53	80	88	89	91	54.4	91.3	
29-Aug	93	93	90	92	93	93	94	89	83	72	66	57	57	54	52	55	67	75	93	96	97	97	98	98	81.3	97.9
30-Aug	98	98	98	98	98	98	98	98	90	76	53	46	42	47	40	36	40	38	40	53	77	69	71	84	70.2	98.0
31-Aug	82	81	84	82	78	76	74	75	69	55	47	43	39	38	36	35	36	35	37	44	55	71	77	85	59.7	84.7
		85.7	88.5	90.2	90.2	91.1	92.1	92.1	86.7	77.1	67.9	58.1	51.3	46.0	43.3	42.3	41.5	42.7	44.6	48.7	57.0	70.2	77.2	79.8	83.7	Diurnal Average
		98.0	98.3	98.4	98.2	98.7	99.4	99.7	98.5	95.5	94.3	93.3	90.8	83.5	86.8	87.0	79.1	79.8	76.2	92.7	95.9	96.8	97.5	97.9	97.8	Diurnal Maximum

Hourly Averages

Relative Humidity (RH) - %
Valleyview - August 2014





Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	0	2	2	0	0	0	1	3	4	1	2	3	2	3	3	4	5	4	4	4	3	2	1	2	1.5	4.6
Dir	190	349	339	166	193	353	17	41	37	69	131	157	98	139	112	126	135	146	153	149	150	155	162	162	125	135
2 Spd	4	4	4	2	0	3	3	3	5	5	4	3	3	2	2	1	1	1	1	0	1	2	2	1	2.2	5.0
Dir	162	162	166	165	142	154	161	162	163	158	163	165	161	170	171	142	128	50	29	61	155	163	157	172	160	163
3 Spd	1	1	0	0	0	1	0	1	1	2	2	2	2	2	2	1	1	0	0	0	0	1	0	0	0.7	2.2
Dir	335	14	183	225	168	159	258	163	155	159	163	161	165	162	157	164	157	144	135	127	177	158	156	122	160	163
4 Spd	0	0	0	0	0	0	1	1	2	2	3	4	5	6	4	4	4	3	3	2	1	1	1	0	1.9	6.0
Dir	164	199	174	305	340	173	163	165	162	166	166	163	157	156	156	160	161	163	163	162	161	154	166	247	161	156
5 Spd	1	0	1	0	1	0	0	1	3	7	7	8	8	6	5	5	5	4	3	1	0	4	3	2	2.6	7.9
Dir	259	173	162	246	238	256	174	186	159	161	155	146	146	147	161	159	155	152	141	137	293	267	247	167	161	146
6 Spd	3	1	1	1	1	2	1	1	2	1	1	7	8	4	2	3	3	4	2	2	1	1	1	1	1.2	7.7
Dir	202	232	199	166	157	161	159	155	155	230	231	295	306	298	171	173	161	163	163	159	177	226	259	192	213	306
7 Spd	2	1	1	1	1	1	1	2	2	7	10	7	8	7	11	7	5	4	3	1	0	0	0	1	2.9	10.6
Dir	203	156	163	214	174	163	157	160	241	293	285	270	263	266	265	267	276	292	287	242	174	187	174	341	266	265
8 Spd	0	0	1	0	1	1	1	2	1	2	2	3	5	4	3	3	2	3	4	3	1	1	1	0	1.8	4.8
Dir	233	175	162	179	163	161	154	155	178	159	161	161	155	153	160	190	245	152	165	160	163	177	162	107	164	155
9 Spd	1	0	1	1	1	1	1	1	1	5	4	5	8	8	9	7	6	2	1	1	1	0	1	1	2.2	8.7
Dir	150	173	161	161	150	147	159	152	204	273	279	249	273	262	268	271	259	228	213	219	176	179	157	178	253	268
10 Spd	1	1	0	1	1	1	1	2	1	5	7	10	12	11	11	12	10	8	4	2	1	1	1	1	4.0	12.3
Dir	153	155	196	178	173	175	168	155	158	260	259	266	270	261	275	292	283	290	286	286	257	214	180	169	269	283
11 Spd	2	2	1	1	0	0	0	1	2	1	1	3	5	3	5	3	2	1	2	1	0	0	1	1	0.8	5.4
Dir	163	161	163	169	216	207	229	159	158	218	279	283	272	246	269	276	282	157	128	96	81	268	337	323	243	272
12 Spd	0	1	0	0	1	0	1	0	1	0	3	6	7	6	6	4	5	3	3	2	1	0	0	0	1.9	6.7
Dir	348	337	307	285	167	253	338	11	148	167	141	142	147	138	136	140	153	156	155	140	155	332	217	21	144	147
13 Spd	0	1	0	0	0	1	1	2	2	2	4	4	4	8	8	9	8	3	3	2	1	1	0	0	1.8	8.8
Dir	114	284	297	214	357	178	165	159	163	156	260	266	267	273	303	304	329	321	258	241	162	164	166	178	281	304
14 Spd	0	0	0	0	0	0	1	2	1	1	1	2	4	1	1	4	2	1	0	0	0	0	0	0	0.5	3.9
Dir	172	169	221	180	185	173	170	159	162	163	158	152	276	235	135	277	312	261	134	111	166	279	188	354	219	276
15 Spd	1	0	1	0	0	1	0	0	1	2	2	4	6	6	7	6	5	6	3	1	0	1	0	1	2.1	7.0
Dir	332	223	312	295	16	327	249	145	22	16	2	2	17	22	11	11	10	10	43	15	357	341	335	310	11	11
16 Spd	0	0	0	0	1	0	1	1	2	2	2	2	3	3	4	4	7	2	2	1	2	1	1	1	0.7	6.5
Dir	181	25	284	274	331	335	236	178	158	161	165	187	302	282	317	286	285	269	139	172	149	158	164	163	246	285
17 Spd	1	1	1	2	2	1	1	1	6	10	10	10	8	7	8	9	9	8	5	1	0	1	1	2	3.7	9.9
Dir	159	157	188	280	282	149	156	153	280	292	287	281	265	243	254	265	273	285	272	219	194	183	165	160	267	287
18 Spd	2	2	2	3	2	2	2	1	2	3	18	17	16	16	13	11	9	3	4	1	4	7	4	1	5.1	17.7
Dir	159	161	161	162	165	163	161	155	155	251	271	275	270	271	261	257	254	263	265	262	264	265	243	160	258	271
19 Spd	1	1	2	1	1	1	1	5	11	11	10	10	10	10	8	13	10	9	1	2	2	1	1	0	3.5	12.5
Dir	170	176	160	174	209	215	174	258	283	309	294	305	286	271	305	8	19	1	335	337	294	276	351	246	309	8
20 Spd	4	2	1	0	1	1	1	1	3	4	5	6	7	11	4	5	2	3	3	1	3	1	0	0	2.0	10.5
Dir	295	272	176	246	157	158	157	268	281	282	296	304	330	5	353	8	308	17	15	16	9	8	14	301	331	5
21 Spd	0	0	1	1	1	1	1	1	2	4	4	5	3	4	4	5	2	1	1	0	0	1	0	2	1.6	4.8
Dir	87	283	342	323	348	338	335	339	358	35	35	13	47	13	16	27	40	48	114	125	321	15	95	354	18	27
22 Spd	1	2	1	3	0	2	2	1	2	2	0	1	2	2	2	1	1	1	1	1	1	1	0	0	0.3	2.9
Dir	302	342	324	341	291	333	346	3	7	37	120	144	98	114	132	130	150	160	157	154	154	131	5	58	58	341



Peace Airshed Zone Association

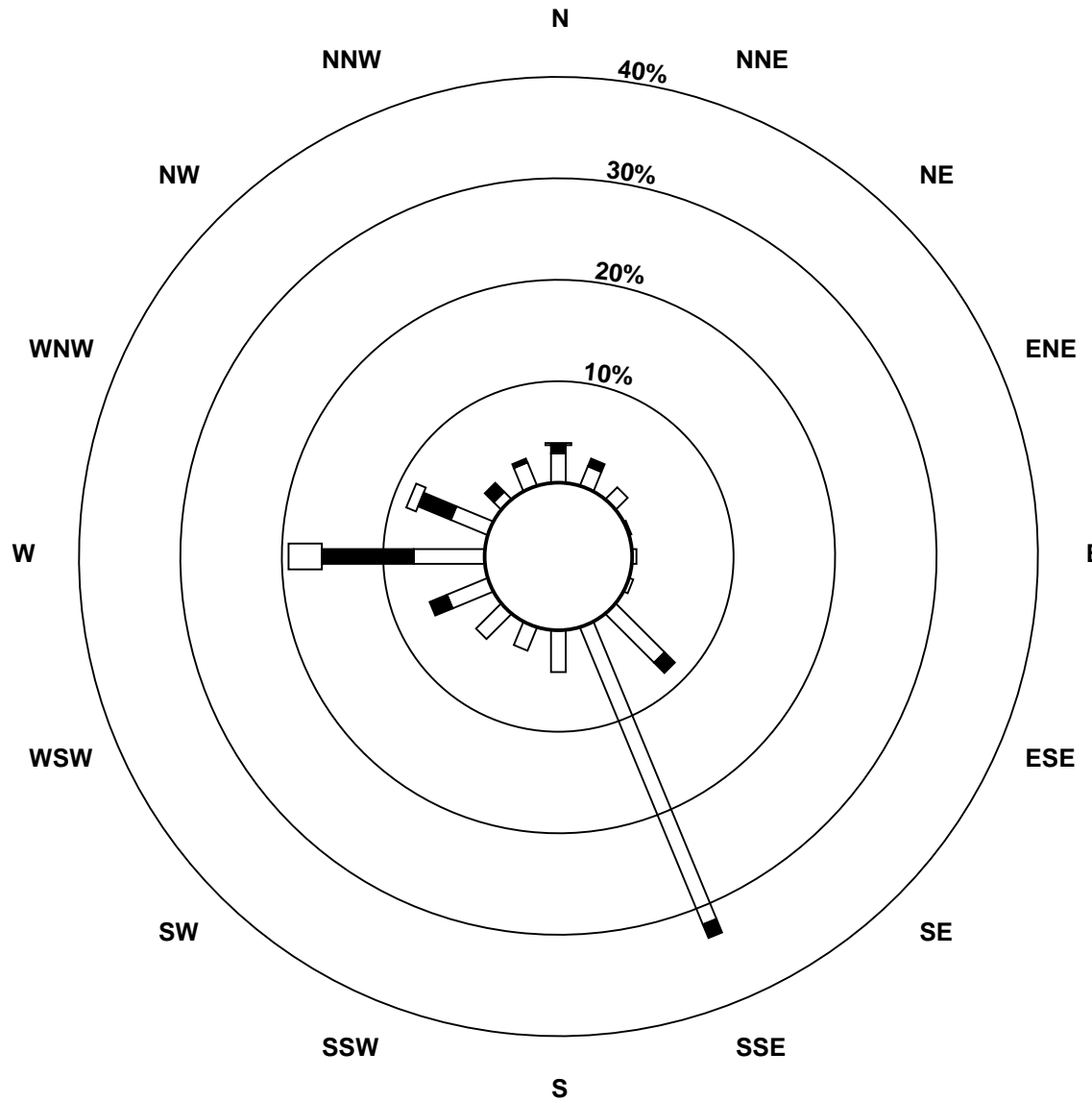
Hourly Averages

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

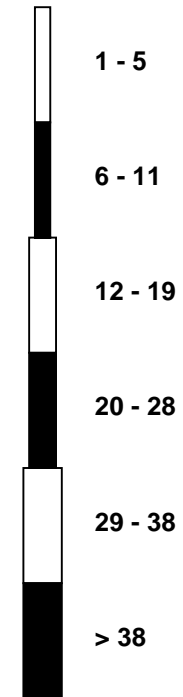
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	0	0	0	2	2	2	2	2	4	4	5	8	6	7	6	5	5	5	5	3	1	1	0	0	3.1	7.6
Dir	1	41	74	134	136	136	132	137	142	141	133	154	145	155	141	149	135	136	131	135	128	135	158	180	141	154
24 Spd	0	0	1	1	1	0	0	1	2	0	1	4	4	5	3	4	3	1	2	1	0	0	0	0	1.1	4.8
Dir	125	229	336	328	359	235	178	264	252	227	152	138	147	153	145	127	163	174	151	142	174	194	238	170	156	153
25 Spd	0	1	0	0	0	0	0	2	3	3	2	2	1	7	2	4	4	7	3	1	0	3	10	8	2.0	10.0
Dir	200	276	162	267	211	243	163	157	158	159	166	165	217	273	200	236	216	248	235	187	165	262	279	264	240	279
26 Spd	2	1	2	2	2	1	1	2	2	2	5	12	13	11	11	10	6	6	6	2	1	1	1	1	3.3	13.2
Dir	176	164	162	158	161	168	167	161	161	162	229	261	273	269	265	264	283	287	270	263	217	177	182	164	254	273
27 Spd	1	3	3	0	1	1	1	1	2	2	7	9	11	13	14	14	11	12	8	5	3	2	5	6	5.2	13.8
Dir	160	241	242	191	222	183	130	150	191	228	263	264	253	259	271	271	263	274	281	298	254	246	249	279	262	271
28 Spd	7	6	8	3	1	1	1	1	1	1	2	3	2	3	2	4	2	2	0	0	0	0	0	0	1.8	8.3
Dir	275	284	264	277	9	242	260	339	352	295	189	276	294	341	301	295	281	276	85	138	167	201	159	172	282	264
29 Spd	0	1	1	0	1	0	0	1	1	3	3	2	1	1	1	2	1	5	1	2	1	1	1	0	1.0	4.8
Dir	211	244	261	218	229	195	176	197	162	163	166	199	196	181	203	140	210	276	163	154	164	164	164	159	190	276
30 Spd	1	1	1	0	0	0	1	1	2	2	9	9	11	11	9	13	9	12	8	2	1	1	1	1	3.8	12.7
Dir	157	159	159	157	156	164	159	149	152	207	271	255	259	259	269	290	277	268	263	244	222	205	195	169	261	290
31 Spd	1	2	1	1	2	1	2	1	3	12	14	16	14	12	12	11	9	11	9	4	2	1	1	1	5.4	15.6
Dir	168	160	163	209	229	199	185	174	267	281	283	277	286	292	266	272	269	272	270	269	239	189	183	159	270	277
Spd	0.6	0.5	0.6	0.4	0.4	0.5	0.6	0.8	0.9	1.3	2.7	3.4	3.6	3.5	3.2	3.0	2.5	2.2	1.3	0.6	0.6	0.7	0.8	0.5	Diurnal Average	
Dir	212	219	215	206	192	176	163	167	204	250	255	257	263	260	262	274	268	272	239	207	204	226	235	223		
Spd	6.7	6.3	8.3	2.9	2.2	2.9	3.4	4.6	11.1	12.0	17.7	17.2	15.6	16.4	13.6	13.8	12.3	12.1	8.6	5.3	4.3	7.3	10.0	7.8	Diurnal Maximum	
Dir	275	284	264	341	229	154	161	258	283	281	271	275	270	271	271	271	283	268	270	298	264	265	279	264		
Maximum Speed Value: 18 km/h on Aug 18 11:00		Minimum Speed Value: 0 km/h on Aug 14 20:00																Hours in Service: 744								
Maximum Daily Speed Average: 5.4 km/h on Aug 31		Minimum Daily Speed Average: 0.3 km/h on Aug 3																Hours of Data: 744								
Maximum Diurnal Speed Average: 3.6 km/h at hour 13		Minimum Diurnal Speed Average: 0.4 km/h at hour 4																Hours of Missing Data: 0								
Monthly Average Velocity: 1.30 km/h 249.4 deg		Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.7 Median = 1.6 Q ₃ = 3.8 P ₉₀ = 7.9 P ₉₉ = 14.2																Percent Operational Time: 100.0								
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	52	9	1	0	0	0	62																			
NorthEast	15	0	0	0	0	0	15																			
East	12	0	0	0	0	0	12																			
SouthEast	119	17	0	0	0	0	136																			
South	235	3	0	0	0	0	238																			
SouthWest	69	1	0	0	0	0	70																			
West	68	60	29	0	0	0	157																			
NorthWest	40	14	0	0	0	0	54																			
Total	610	104	30	0	0	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Valleyview - August 2014



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - August 2014

Maximum Speed: 18 km/h on Aug 18 11:00		Maximum Daily Speed Average: 6.4 km/h on Aug 31		Hours in Service: 744																						
Minimum Speed: 0 km/h on Aug 14 20:00		Minimum Daily Speed Average: 1.0 km/h on Aug 3		Hours of Data: 744																						
Maximum Diurnal Speed Average: 7.1 km/h at hour 14		Minimum Diurnal Speed Average: 1.0 km/h at hour 6		Hours of Missing Data: 0																						
Monthly Average Speed: 3.17 km/h		Percentiles: P ₁ = 0.1 P ₁₀ = 0.4 Q ₁ = 0.9 Median = 1.8 Q ₃ = 4.3 P ₉₀ = 8.5 P ₉₉ = 14.6		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-Aug	0	2	2	0	0	1	2	4	4	2	2	3	3	3	3	4	5	4	4	4	3	2	2	2	2.6	4.7
2-Aug	4	4	4	2	1	3	3	3	5	5	4	4	3	2	2	1	1	1	1	0	1	2	2	1	2.5	5.1
3-Aug	1	1	0	0	1	1	1	1	1	2	2	2	2	2	2	1	1	0	0	0	0	1	1	0	1.0	2.4
4-Aug	0	0	0	0	0	0	1	1	2	2	3	4	5	6	5	4	4	3	3	2	1	1	1	0	2.1	6.1
5-Aug	1	0	1	0	1	0	0	1	4	7	7	8	8	6	5	5	5	4	3	1	0	5	3	3	3.2	8.0
6-Aug	4	2	1	1	2	2	1	1	2	2	2	8	9	5	3	3	4	4	3	2	2	2	1	1	2.8	8.5
7-Aug	2	1	1	1	1	1	1	2	2	8	10	8	9	8	12	8	6	5	3	1	0	0	0	1	3.8	11.6
8-Aug	0	0	1	1	1	1	2	2	2	3	2	3	5	4	3	5	5	3	4	3	1	1	1	1	2.2	4.9
9-Aug	1	0	1	1	1	1	1	1	2	5	5	6	9	9	10	8	6	2	1	1	1	0	1	1	3.1	9.5
10-Aug	1	1	1	1	1	1	1	2	1	6	7	10	12	12	11	11	13	10	8	4	2	2	1	1	5.0	12.9
11-Aug	2	2	1	1	0	0	0	1	2	2	2	5	7	4	6	4	3	1	2	1	1	1	1	1	2.0	6.8
12-Aug	0	1	0	0	1	0	1	1	1	1	3	6	7	6	6	5	5	3	3	2	1	1	0	1	2.3	6.9
13-Aug	0	1	1	0	0	1	1	2	2	2	4	5	5	8	9	9	9	3	4	2	1	1	0	0	2.9	9.5
14-Aug	0	0	0	0	1	0	1	2	1	1	1	2	4	2	2	4	2	1	0	0	0	0	0	0	1.2	4.5
15-Aug	1	0	1	0	1	1	1	1	1	3	2	4	6	7	7	6	6	6	3	1	1	1	1	1	2.6	7.2
16-Aug	0	0	0	0	1	0	1	1	2	2	3	2	4	4	5	4	7	6	6	1	2	1	1	1	2.3	6.8
17-Aug	1	1	1	2	2	1	1	1	6	10	10	10	9	8	9	10	9	9	5	1	0	1	1	2	4.6	10.3
18-Aug	2	2	2	3	2	2	2	2	1	2	4	18	18	16	17	13	11	9	3	4	1	4	8	5	6.2	18.0
19-Aug	1	1	2	1	2	1	1	5	12	11	10	11	11	11	10	13	11	10	2	3	2	1	2	1	5.5	12.8
20-Aug	5	2	1	1	1	1	1	2	3	4	5	6	8	11	4	5	3	3	3	1	3	1	1	0	3.1	10.7
21-Aug	0	0	1	1	1	1	1	1	2	4	5	5	4	5	4	5	2	1	1	0	0	2	0	2	2.1	5.2
22-Aug	1	2	1	3	0	2	2	2	2	2	0	1	3	3	2	1	1	1	1	2	1	1	0	0	1.4	3.1
23-Aug	0	0	1	2	2	2	2	2	4	4	5	8	6	7	7	5	5	6	5	3	1	1	1	1	3.3	7.9
24-Aug	0	1	1	1	1	0	0	1	2	1	2	4	4	5	4	4	3	1	2	1	0	0	0	0	1.7	5.1
25-Aug	0	1	0	1	0	0	0	2	3	3	3	2	3	8	3	5	4	7	3	1	0	3	10	8	3.0	10.2
26-Aug	2	1	2	2	2	1	1	2	2	2	6	13	14	12	12	11	6	6	6	2	1	1	1	1	4.5	13.6
27-Aug	1	3	3	1	2	1	1	1	2	3	7	10	12	14	14	14	11	12	8	6	3	2	5	6	6.0	14.4
28-Aug	7	6	8	3	2	2	1	1	2	2	3	4	4	4	4	3	3	1	0	0	0	0	0	0	2.7	8.5
29-Aug	0	1	1	1	1	0	0	2	1	3	3	2	1	2	1	2	2	5	1	2	1	1	1	0	1.5	5.2
30-Aug	1	1	1	0	0	0	1	1	2	3	9	10	11	12	11	13	10	12	8	2	1	1	1	1	4.7	13.4
31-Aug	1	2	1	2	2	1	2	1	4	12	15	16	15	13	13	12	10	12	9	5	3	2	1	1	6.4	16.1
		1.3	1.4	1.4	1.1	1.0	1.0	1.1	1.6	2.6	3.8	5.3	6.5	7.0	7.1	6.5	6.5	5.5	4.8	3.4	1.8	1.3	1.4	1.4	1.3	Diurnal Average
		6.8	6.4	8.5	3.1	2.4	2.9	3.4	5.1	11.7	12.3	18.0	17.7	16.1	16.8	14.0	14.4	12.9	12.4	8.8	5.6	4.4	7.5	10.2	8.1	Diurnal Maximum

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

Hourly Standard Deviations

Wind Direction (WD) - deg
Valleyview - August 2014

Maximum Value: 95.8 deg on Aug 11 11:00																						Hours in Service:	744		
Minimum Value: 5.2 deg on Aug 31 02:00																						Hours of Data:	744		
Percentiles: P ₁ = 7.4 P ₁₀ = 12.3 Q ₁ = 17.1 Median = 28.7 Q ₃ = 50.9 P ₉₀ = 72.1 P ₉₉ = 90.9																						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-Aug	90	82	67	75	58	88	69	29	23	63	61	46	57	37	46	24	16	19	12	10	8	12	12	10	89.5
2-Aug	9	7	8	24	67	11	13	14	12	13	14	21	25	30	64	65	47	61	57	71	30	9	11	58	70.6
3-Aug	50	65	66	46	49	42	61	23	35	32	26	33	41	27	25	21	29	29	32	42	46	16	54	85	84.9
4-Aug	79	46	67	59	72	22	29	16	15	18	16	17	13	15	18	19	18	13	10	14	12	12	64	52	79.1
5-Aug	60	79	41	79	51	76	78	44	15	10	11	11	13	20	15	14	17	17	11	58	67	34	42	17	78.8
6-Aug	35	92	45	24	27	48	24	21	18	50	59	26	26	39	49	28	12	11	13	10	44	66	48	51	92.1
7-Aug	34	21	21	34	57	18	13	24	59	23	20	31	27	34	25	42	44	33	22	26	29	15	15	89	89.4
8-Aug	81	35	43	44	22	16	22	19	81	22	17	18	16	16	21	42	78	17	17	11	21	27	39	65	81.1
9-Aug	64	58	17	30	22	29	20	11	49	28	39	36	27	24	27	43	27	37	32	33	16	18	27	39	63.7
10-Aug	15	13	39	32	31	34	37	19	35	49	40	19	18	19	21	20	17	18	15	15	44	27	33	13	49.0
11-Aug	18	8	14	44	64	59	56	30	29	59	96	68	41	63	44	57	73	58	16	26	69	81	54	82	95.8
12-Aug	89	59	94	78	51	84	21	69	33	72	45	14	14	16	15	18	14	14	13	12	36	82	68	94	94.5
13-Aug	91	78	76	82	75	25	10	8	12	21	45	28	45	23	20	23	12	20	18	23	27	38	59	37	90.7
14-Aug	22	38	55	30	34	26	22	8	15	16	17	22	37	63	79	28	50	59	40	74	64	86	46	91	91.1
15-Aug	53	61	80	75	87	67	82	70	76	53	91	28	33	24	21	17	18	8	33	73	60	50	82	59	91.0
16-Aug	82	81	72	73	90	70	61	31	20	29	29	56	51	64	77	29	19	88	71	33	9	30	20	13	89.6
17-Aug	11	28	27	42	53	49	28	18	25	17	17	20	26	29	22	23	20	14	16	29	21	21	10	6	52.9
18-Aug	8	8	7	7	9	6	10	19	12	51	12	14	14	13	10	11	16	25	14	35	11	14	42	17	51.2
19-Aug	17	23	14	19	33	34	22	32	19	16	23	28	23	22	43	12	22	26	94	31	42	74	41	89	93.7
20-Aug	28	57	28	71	30	22	23	66	25	22	19	21	31	11	39	31	34	39	15	15	16	50	76	74	76.3
21-Aug	79	61	24	34	56	30	29	73	62	29	38	21	63	64	14	19	24	34	26	66	78	36	78	24	78.5
22-Aug	67	13	13	30	39	32	11	48	23	31	64	35	50	56	13	27	15	7	7	8	10	23	79	66	78.5
23-Aug	37	37	84	12	12	12	16	26	13	14	15	16	18	17	19	19	16	13	12	8	25	24	66	89	89.3
24-Aug	90	87	65	73	65	63	38	20	34	72	67	24	23	20	35	38	23	28	17	10	35	43	50	51	89.6
25-Aug	77	54	56	66	74	49	64	10	12	14	33	32	56	25	45	42	42	28	23	29	18	41	12	17	77.4
26-Aug	31	16	8	8	8	12	14	16	15	22	48	14	16	18	12	16	17	16	19	45	26	44	40	59	59.3
27-Aug	33	31	27	68	63	38	43	12	37	41	17	16	22	18	15	17	15	15	13	19	16	20	9	14	68.2
28-Aug	10	12	11	74	77	69	53	46	66	77	56	62	73	78	74	31	73	50	58	53	31	31	80	53	79.6
29-Aug	58	51	46	51	48	53	45	49	17	14	17	52	48	37	66	20	46	25	32	14	20	21	25	42	65.8
30-Aug	41	13	13	18	43	53	34	36	15	47	20	30	20	37	36	18	20	12	16	40	46	23	33	10	52.9
31-Aug	12	5	14	31	33	21	27	33	55	14	17	14	20	20	21	17	27	22	11	26	32	30	36	18	54.5
90.7	92.1	94.5	82.4	89.6	88.2	81.6	72.8	81.1	76.7	95.8	67.6	73.2	78.4	79.1	64.8	77.8	87.6	93.7	73.6	78.2	86.4	81.9	93.9		

PAZA

Falher Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

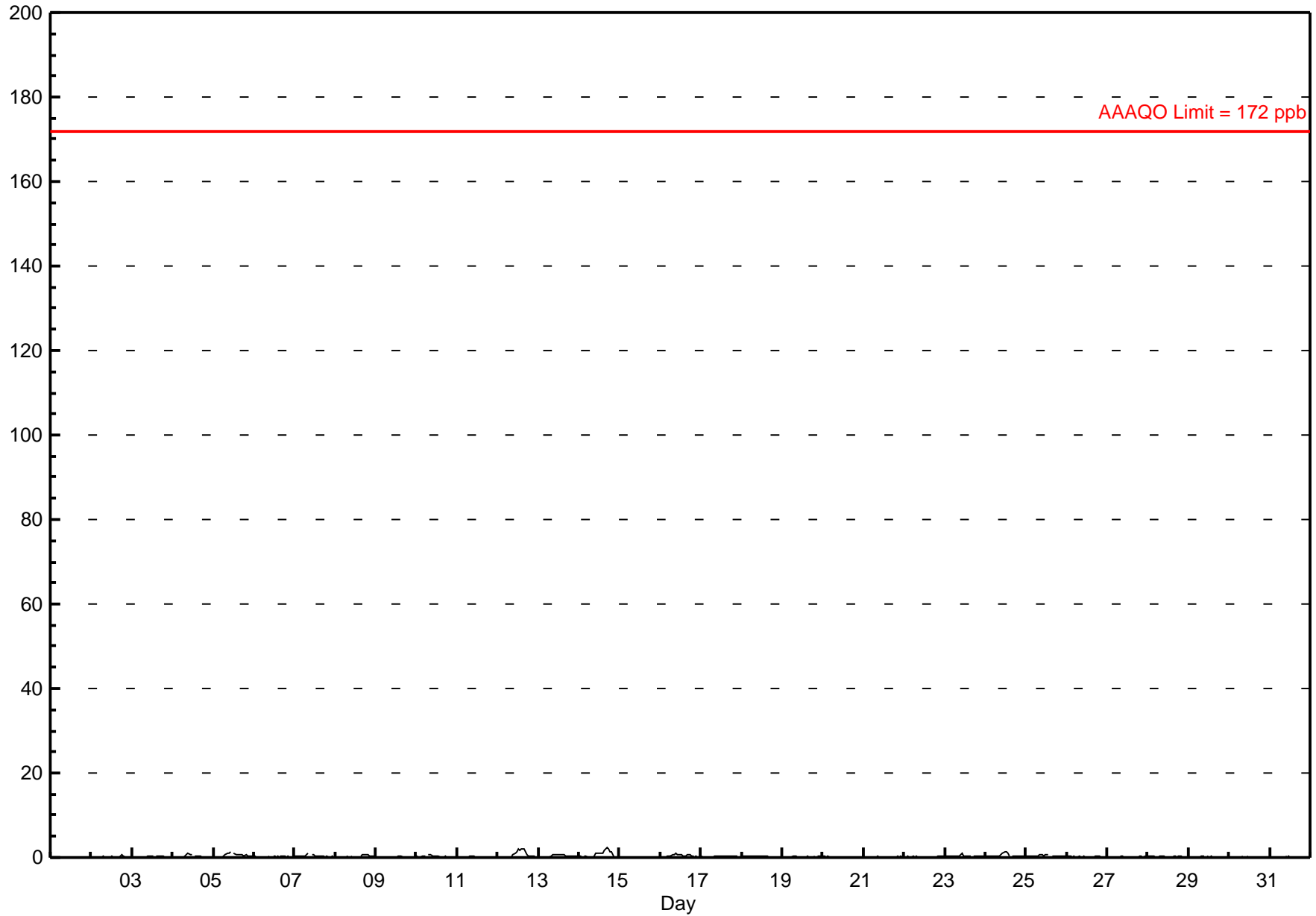
Sulphur Dioxide (SO₂) - ppb

Falher - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 2.5 ppb on Aug 14 17:00	Maximum Daily Average: 0.7 ppb on Aug 14		Hours of Data:	709
Minimum Value: 0 ppb on Aug 8 11:00	Minimum Daily Average: 0.0 ppb on Aug 15		Hours of Missing Data:	35
Maximum Diurnal Average: 0.4 ppb at hour 11	Minimum Diurnal Average: 0.1 ppb at hour 3		Hours of Calibration:	35
Monthly Average: 0.24 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 1.5		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-Aug	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	0.1
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0.1	0.5
3-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.4
4-Aug	0	0	0	0	0	0	0	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
5-Aug	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	1.3
6-Aug	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
7-Aug	0	0	0	0	0	0	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
8-Aug	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	0	1	1	1	1	0	0	0	0	0.2	0.6
9-Aug	0	0	0	0	0	0	0	A	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
10-Aug	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
11-Aug	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
12-Aug	0	0	0	0	A	0	0	0	0	1	1	1	2	2	2	2	1	1	0	0	0	0	0	0	0.6	2.2
13-Aug	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	0.7
14-Aug	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	2	2	2	1	1	1	0	0	0	0.7	2.5
15-Aug	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
16-Aug	A	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	A	0.4	0.9
17-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3
20-Aug	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
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2
22-Aug	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
23-Aug	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.9
24-Aug	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0.4	1.3
25-Aug	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0.4	0.7
26-Aug	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	0.4
27-Aug	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
28-Aug	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2
29-Aug	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	0.2
30-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
31-Aug	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	Diurnal Average
	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.7	1.0	1.1	1.3	1.5	2.1	1.6	2.2	2.1	2.5	2.2	1.5	1.3	0.6	0.4	0.3	0.4	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



Hourly Maximums

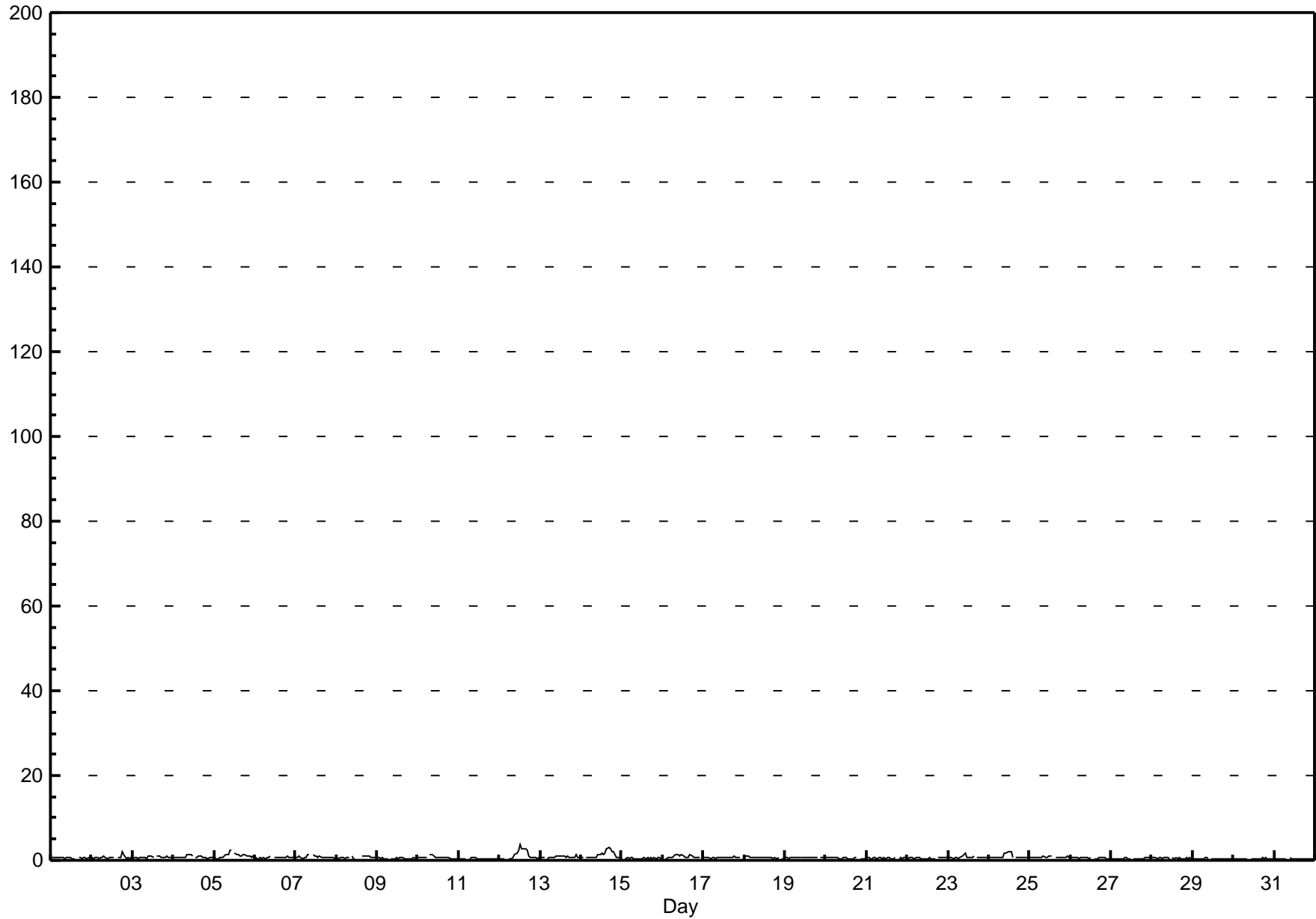
Sulphur Dioxide (SO₂) - ppb

Falher - August 2014

Maximum Value: 3.7 ppb on Aug 12 13:00		Maximum Daily Average: 1.2 ppb on Aug 14		Hours in Service: 744																																													
Minimum Value: 0 ppb on Aug 12 03:00		Minimum Daily Average: 0.4 ppb on Aug 31		Hours of Data: 709																																													
Maximum Diurnal Average: 0.9 ppb at hour 11		Minimum Diurnal Average: 0.5 ppb at hour 6		Hours of Missing Data: 35																																													
Monthly Average: 0.67 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 1.0 P ₉₉ = 2.5		Hours of Calibration: 35																																													
				Percent Operational Time: 100.0																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Aug	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	A	1	1	0	1	1	0	1	1	0.6	0.8																							
2-Aug	1	0	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	0	1	0	1	0.7	2.1																							
3-Aug	0	1	1	0	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.0																							
4-Aug	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	0.8	1.4																							
5-Aug	1	0	0	1	1	1	1	1	1	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1.1	2.3																							
6-Aug	1	0	0	1	0	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1																							
7-Aug	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4																							
8-Aug	1	0	1	1	1	0	1	1	A	A	1	0	0	C	C	C	1	1	1	1	1	1	1	1	0.7	1.1																							
9-Aug	1	1	1	1	0	0	0	A	0	0	0	0	0	1	1	1	1	0	1	0	0	1	0	1	0.5	0.7																							
10-Aug	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.6	1.3																							
11-Aug	0	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8																							
12-Aug	0	0	0	0	A	0	0	0	0	1	1	2	2	4	3	3	3	2	1	1	1	1	0	1	1.2	3.7																							
13-Aug	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5																							
14-Aug	1	1	A	1	1	1	1	1	1	1	1	1	2	1	2	3	3	3	2	2	2	1	1	1	1.2	3.1																							
15-Aug	0	A	0	1	0	1	1	0	0	0	0	0	0	1	0	1	0	1	1	1	0	1	1	0	0.5	0.6																							
16-Aug	A	0	0	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																							
17-Aug	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9																							
18-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.6	0.9																							
19-Aug	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.7																							
20-Aug	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	1	1	A	0	0	0	0	0.5	0.7																							
21-Aug	1	1	0	0	1	1	0	1	1	1	1	0	1	1	0	1	0	1	A	1	1	0	1	1	0.5	0.6																							
22-Aug	0	1	1	1	0	1	1	1	0	0	0	0	0	1	0	0	0	A	1	1	1	1	1	1	0.5	0.8																							
23-Aug	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.7																							
24-Aug	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	A	1	1	1	1	1	1	1	1	0.9	2.1																							
25-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.1																							
26-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	1	1	1	1	1	0	0	0.6	0.8																							
27-Aug	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0.5	0.6																							
28-Aug	1	1	1	1	1	1	0	1	1	1	0	A	1	0	1	1	1	0	0	1	1	0	1	0	0.5	0.6																							
29-Aug	0	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5																							
30-Aug	1	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0.4	0.6																							
31-Aug	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6																							
																								0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.7	0.7	0.9	0.9	0.8	0.9	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	Diurnal Average	
																								0.9	0.9	0.9	0.8	0.7	0.7	0.9	1.3	1.4	2.2	2.3	2.4	3.7	2.6	2.7	2.7	3.1	2.7	2.1	1.9	1.5	1.5	0.9	1.0	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									

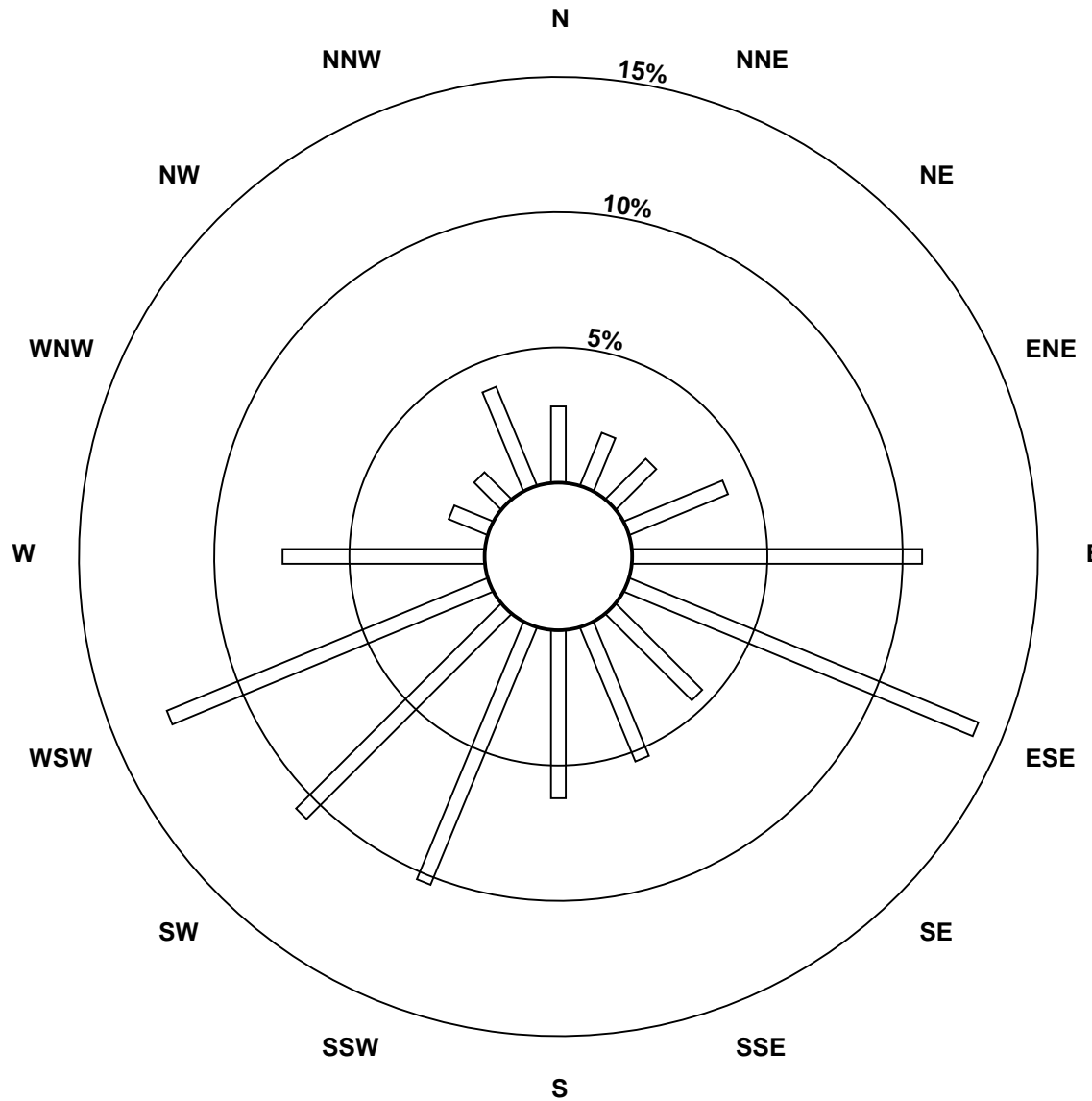
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Falher - August 2014

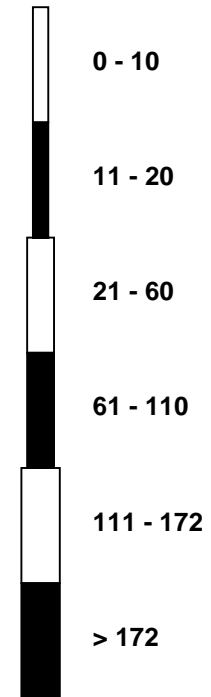


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Falher - August 2014

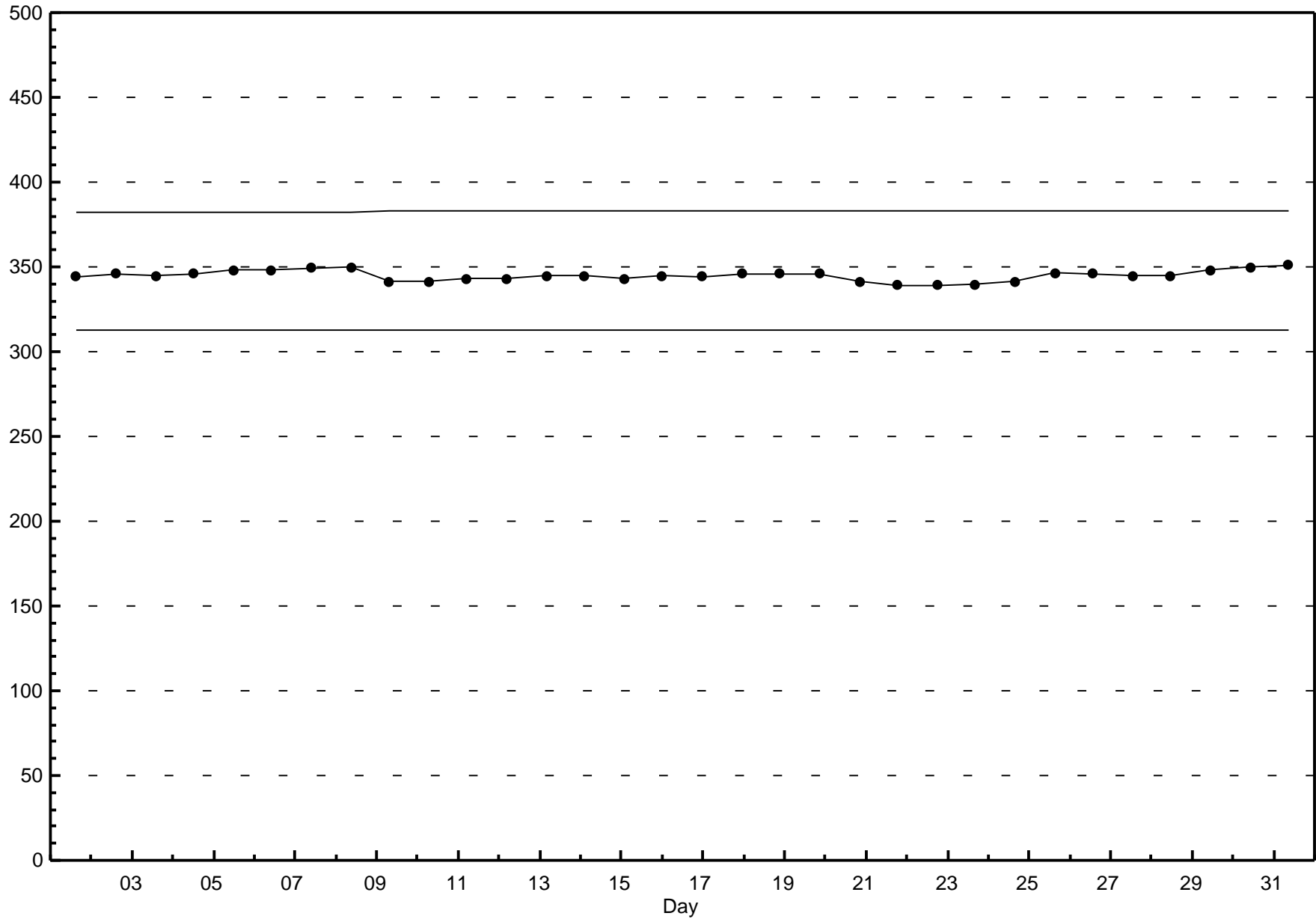


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Falher - August 2014



Hourly Averages

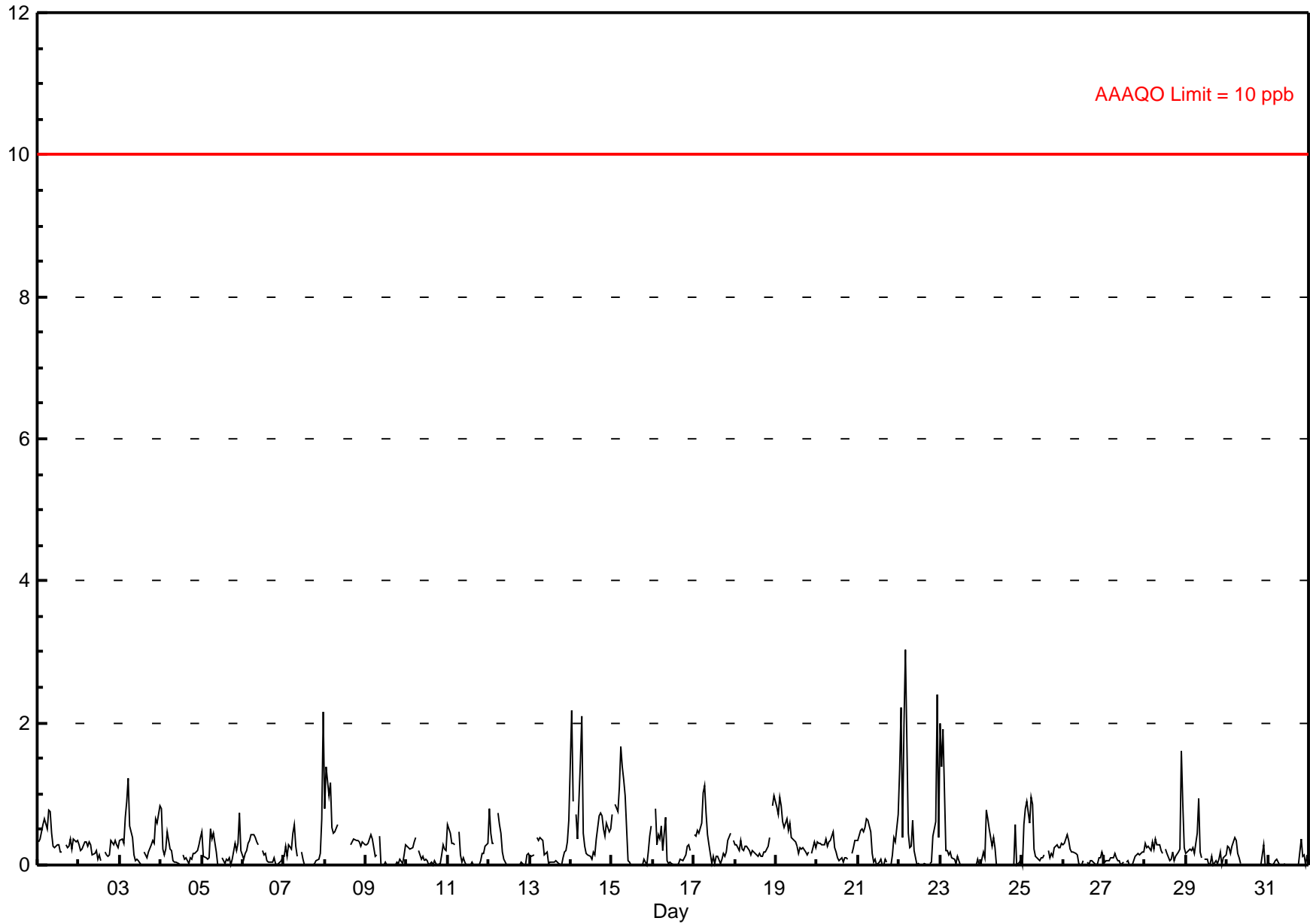
Hydrogen Sulphide (H₂S) - ppb

Falher - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 3.0 ppb on Aug 22 05:00	Maximum Daily Average: 0.6 ppb on Aug 22		Hours of Data:	706
Minimum Value: 0 ppb on Aug 4 12:00	Minimum Daily Average: 0.0 ppb on Aug 31		Hours of Missing Data:	38
Maximum Diurnal Average: 0.5 ppb at hour 6	Minimum Diurnal Average: 0.1 ppb at hour 15		Hours of Calibration:	38
Monthly Average: 0.26 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.6 P ₉₉ = 1.9		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-Aug	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.8
2-Aug	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
3-Aug	0	0	0	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0.4	1.2
4-Aug	1	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	0.8
5-Aug	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.7
6-Aug	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Aug	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	2	0.3	2.1
8-Aug	1	1	1	1	1	0	0	1	A	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	--	1.4
9-Aug	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
10-Aug	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
11-Aug	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
12-Aug	1	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	0.8
13-Aug	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.6
14-Aug	2	1	A	1	0	1	2	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0.6	2.2
15-Aug	1	A	1	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
16-Aug	A	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.8
17-Aug	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
18-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
19-Aug	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	1.0
20-Aug	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
21-Aug	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0.3	0.7
22-Aug	1	2	0	2	3	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	1	2	0.6	3.0
23-Aug	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	2.0
24-Aug	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0.2	0.8
25-Aug	0	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	1.0
26-Aug	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	0.4
27-Aug	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
28-Aug	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	2	1	0.3	1.6
29-Aug	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
30-Aug	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	0.4
31-Aug	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
	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	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	0.3	0.4	0.4	Diurnal Average
	2.2	2.2	1.9	2.0	3.0	1.7	2.1	1.2	1.0	0.5	0.4	0.3	0.3	0.2	0.2	0.4	0.7	0.7	0.7	0.5	0.6	1.6	2.4	2.1	Diurnal Maximum	

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



Hourly Maximums

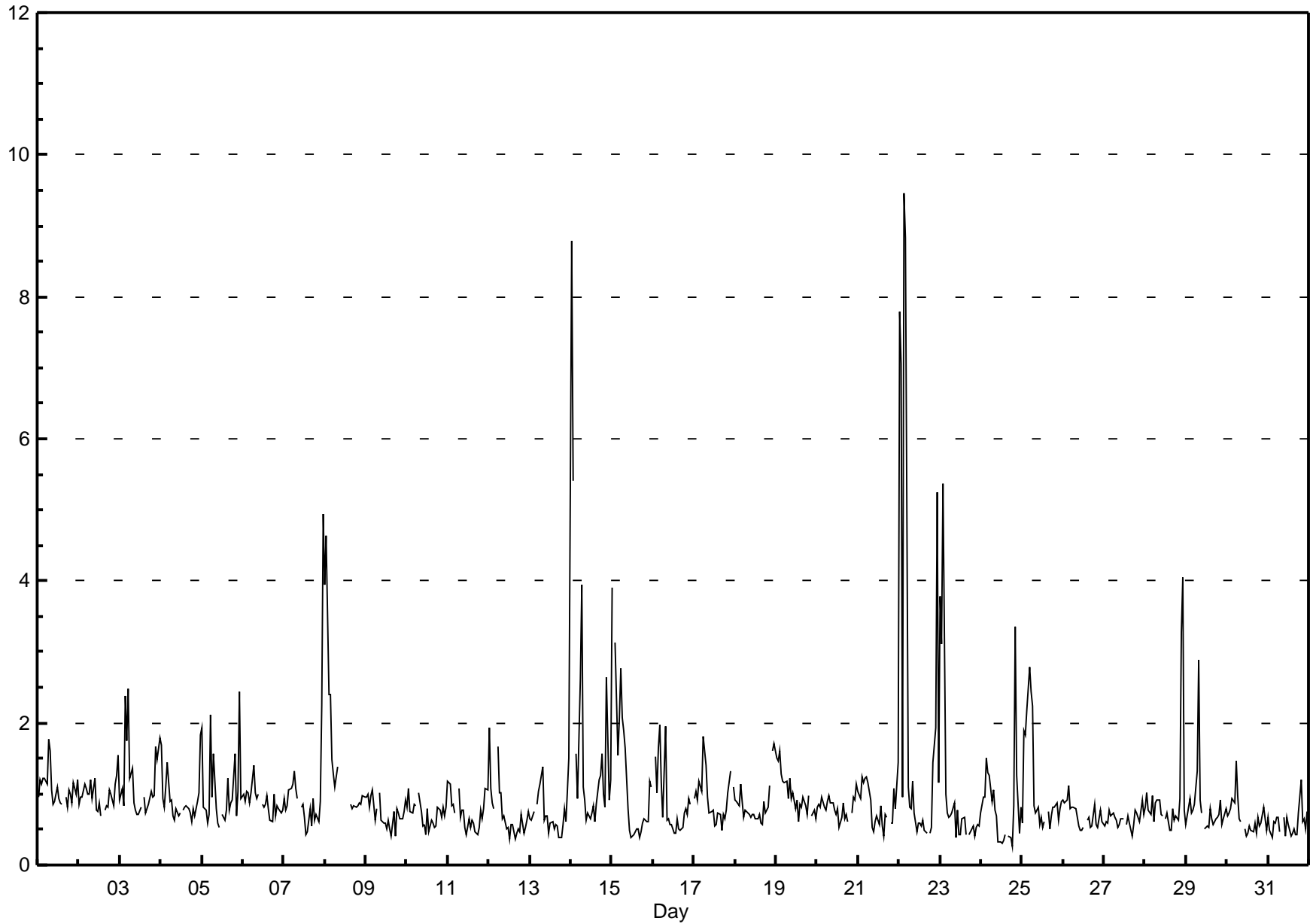
Hydrogen Sulphide (H₂S) - ppb

Falher - August 2014

Maximum Value: 9.5 ppb on Aug 22 04:00		Maximum Daily Average: 2.3 ppb on Aug 22		Hours in Service:	744																						
Minimum Value: 0 ppb on Aug 24 19:00		Minimum Daily Average: 0.6 ppb on Aug 31		Hours of Data:	706																						
Maximum Diurnal Average: 1.8 ppb at hour 1		Minimum Diurnal Average: 0.6 ppb at hour 14		Hours of Missing Data:	38																						
Monthly Average: 0.98 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.8 Q ₃ = 1.0 P ₉₀ = 1.5 P ₉₉ = 5.4		Hours of Calibration:	38																						
				Percent Operational Time:	100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.1	1.8	
2-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1.0	1.5	
3-Aug	1	1	1	2	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1	2	1.2	2.5	
4-Aug	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	0.9	1.8		
5-Aug	2	1	1	1	1	2	1	2	1	1	1	A	1	1	1	1	1	1	1	2	1	1	2	1.0	2.4		
6-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4		
7-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	1	1	1	1	1	2	5	1.1	4.9		
8-Aug	4	5	2	2	1	1	1	1	A	C	C	C	C	C	C	1	1	1	1	1	1	1	1	--	4.6		
9-Aug	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0.7	1.1		
10-Aug	1	1	1	1	1	1	A	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0.7	1.1		
11-Aug	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	1	1	0.7	1.2		
12-Aug	2	1	1	1	A	2	1	1	1	1	1	1	0	1	1	0	0	0	0	1	0	1	1	0.7	1.9		
13-Aug	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	1	1	1	1	0.7	1.5		
14-Aug	9	5	A	2	1	3	4	1	1	1	1	1	1	1	1	1	1	1	2	1	1	3	1	1.8	8.8		
15-Aug	4	A	3	2	2	3	2	2	2	1	0	0	0	0	1	1	0	0	1	1	1	1	1	1.2	3.9		
16-Aug	A	2	1	2	2	1	1	2	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	0.9	2.0		
17-Aug	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1.0	1.8		
18-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.9	1.7		
19-Aug	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.6		
20-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.1		
21-Aug	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	A	1	1	1	1	0.8	1.5		
22-Aug	8	7	1	9	9	1	1	1	1	1	0	1	1	1	1	0	0	A	0	1	1	2	5	2.3	9.5		
23-Aug	4	3	5	1	1	1	1	1	1	0	1	0	0	1	1	0	A	0	0	1	0	1	1	1.1	5.4		
24-Aug	1	1	1	2	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	1	3	1	0	0.9	3.3		
25-Aug	1	2	2	2	3	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.1	2.8		
26-Aug	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	1	1	1	1	1	1	1	1	0.7	1.1		
27-Aug	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	0.6	0.9		
28-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0	1	1	1	1	1	3	4	1.0	4.0		
29-Aug	1	1	1	1	1	1	1	3	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.9		
30-Aug	1	1	1	1	1	1	1	1	1	A	1	0	0	1	0	0	1	0	1	1	1	1	1	0.7	1.5		
31-Aug	1	0	0	1	1	1	1	0	A	1	0	1	1	0	0	1	0	0	1	1	1	1	1	0.6	1.2		
		1.8	1.5	1.2	1.5	1.4	1.3	1.2	1.1	0.9	0.7	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.8	0.9	1.0	1.2	1.2	Diurnal Average		
		8.8	7.1	5.4	9.5	8.8	2.8	3.9	2.9	1.6	1.2	1.0	1.1	0.9	0.9	1.0	1.2	1.2	1.3	1.6	3.3	3.3	5.3	4.9	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									

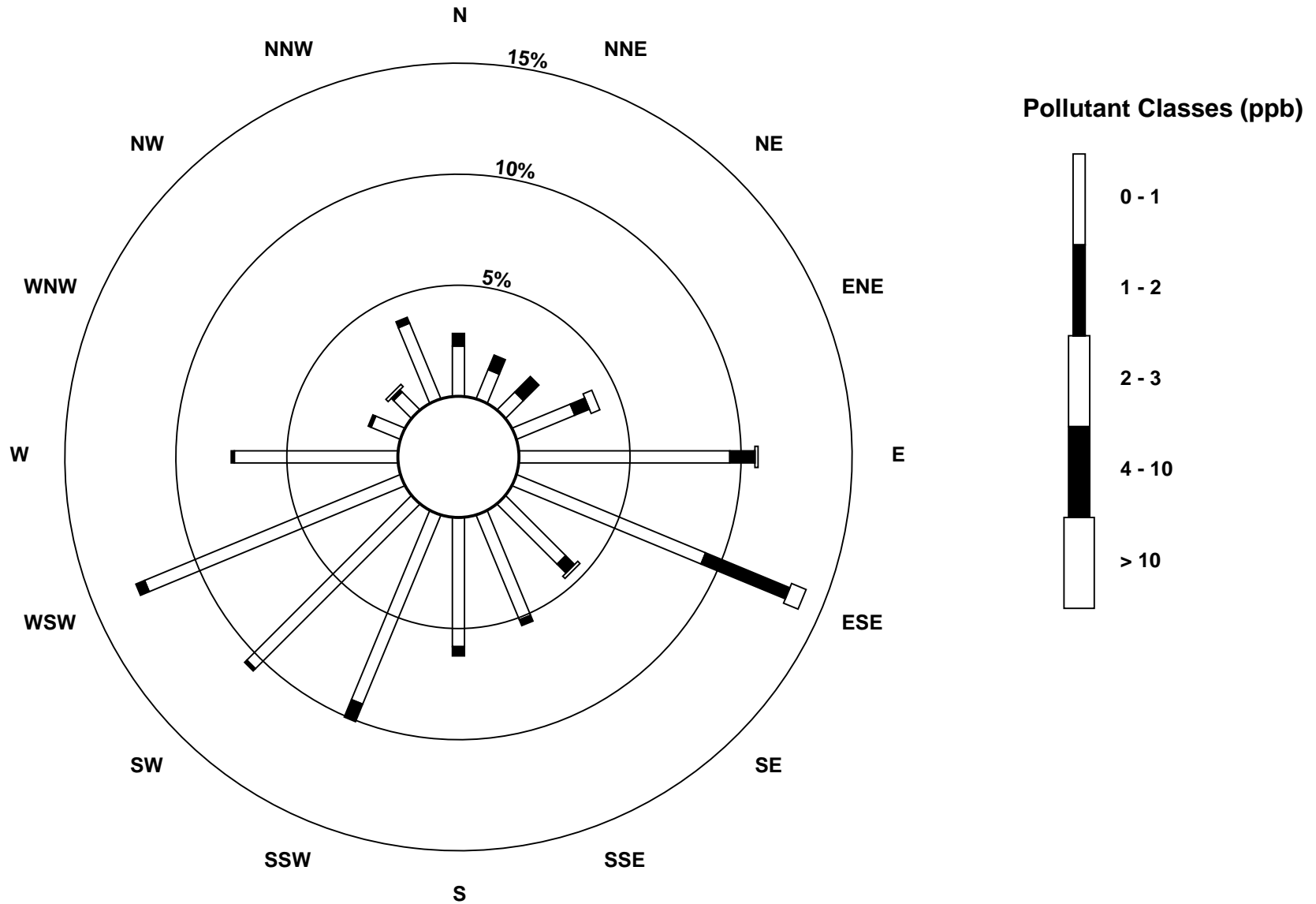
Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb
Falher - August 2014



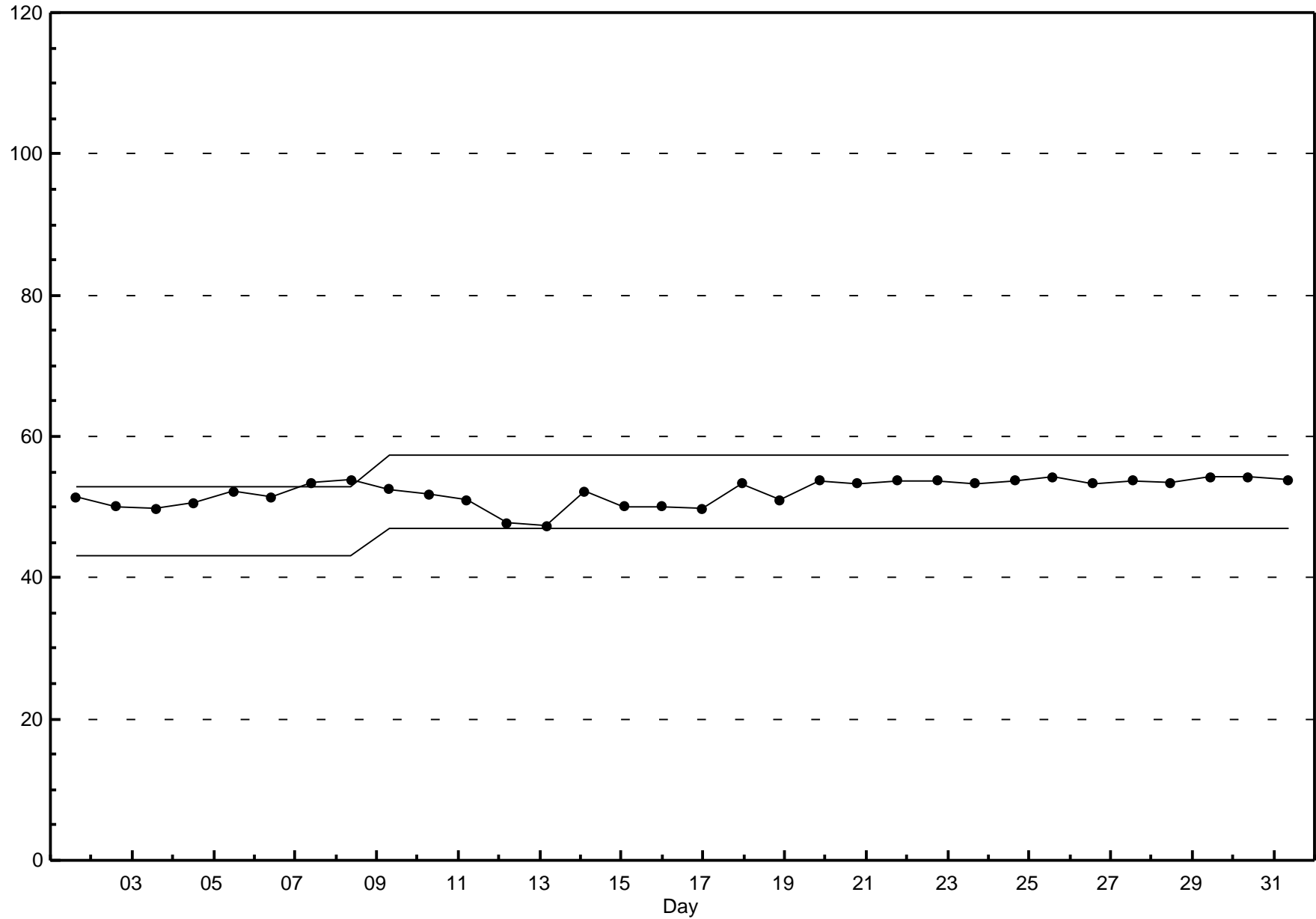
Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb
Falher - August 2014



Span Responses

Hydrogen Sulphide (H₂S)
Falher - August 2014





Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

Falher - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 31.6 °C on Aug 13 17:00	Maximum Daily Average: 22.8 °C on Aug 13
Minimum Value: 0 °C on Aug 22 06:00	Hours of Data: 744
Maximum Diurnal Average: 24.1 °C at hour 16	Hours of Missing Data: 0
Monthly Average: 17.15 °C	Hours of Calibration: 0
Minimum Daily Average: 10.4 °C on Aug 22	Percent Operational Time: 100.0
Minimum Diurnal Average: 10.0 °C at hour 6	
Percentiles: P ₁ = 3.6 P ₁₀ = 8.6 Q ₁ = 12.4 Median = 16.9 Q ₃ = 21.9 P ₉₀ = 27.0 P ₉₉ = 30.5	

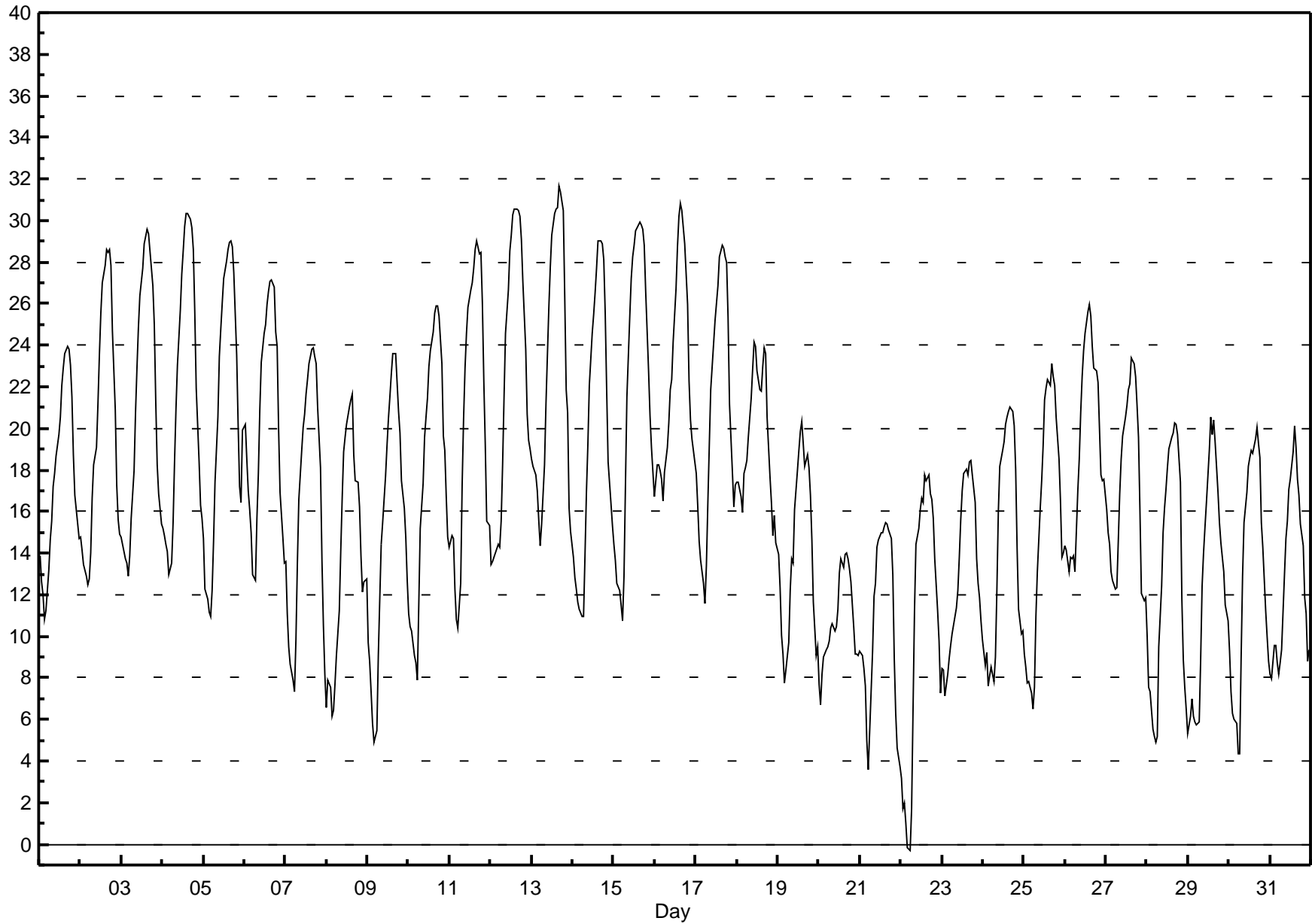
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	14	13	12	11	11	13	15	16	17	18	19	20	21	22	23	24	24	24	23	22	19	17	15	15	17.7	23.9
2-Aug	15	14	13	13	12	13	14	17	18	19	21	24	26	27	28	29	28	29	28	25	21	17	16	15	20.0	28.6
3-Aug	15	14	14	14	13	14	16	18	21	23	25	26	28	29	29	30	29	29	27	25	21	18	17	15	21.2	29.5
4-Aug	15	15	14	14	13	14	15	18	21	23	26	27	29	30	30	30	30	30	29	26	22	18	16	16	21.7	30.4
5-Aug	15	12	12	11	11	12	15	17	21	23	25	26	27	28	29	29	29	29	27	24	20	17	16	20	20.6	29.0
6-Aug	20	19	17	16	15	13	13	16	18	21	23	25	25	26	27	27	27	27	25	24	20	17	15	14	20.3	27.1
7-Aug	14	11	9	9	8	7	10	14	17	19	20	21	22	22	23	24	24	23	23	21	18	14	11	8	16.3	23.9
8-Aug	7	8	8	6	6	8	9	11	14	17	19	20	20	21	21	22	19	17	17	16	14	12	13	13	14.1	21.6
9-Aug	10	9	7	6	5	5	9	12	14	16	18	19	20	22	23	24	24	22	21	20	18	16	15	13	15.2	23.6
10-Aug	11	10	10	9	9	8	12	15	17	20	21	21	23	24	25	26	26	26	25	23	20	19	17	15	17.9	25.9
11-Aug	14	15	15	12	11	10	13	17	20	23	25	26	27	27	28	29	29	28	28	26	22	19	16	15	20.6	29.0
12-Aug	13	14	14	14	14	14	16	18	22	25	27	29	29	30	31	31	31	30	29	27	24	21	19	19	22.5	30.5
13-Aug	19	18	18	17	16	14	15	18	21	24	26	28	29	30	31	31	32	31	30	26	22	21	16	15	22.8	31.6
14-Aug	14	13	12	12	11	11	11	14	17	19	22	25	25	27	28	29	29	29	28	26	22	18	16	15	19.7	29.0
15-Aug	14	14	13	12	12	11	13	17	22	25	27	28	29	29	30	30	30	30	29	27	23	21	19	18	21.7	29.9
16-Aug	17	18	18	18	18	17	18	19	20	22	22	24	27	29	30	31	31	29	27	26	22	20	19	18	22.5	30.8
17-Aug	18	16	15	14	13	12	13	16	19	22	24	25	26	27	28	29	29	28	28	25	21	18	16	17	20.8	28.8
18-Aug	17	17	17	16	18	18	18	20	21	23	24	24	23	22	22	23	24	24	21	18	16	15	16	15	19.6	24.1
19-Aug	14	12	10	9	8	8	10	12	14	14	16	18	19	20	20	19	18	19	18	17	15	12	9	9	14.2	20.3
20-Aug	8	7	8	9	9	10	10	10	11	10	10	11	13	14	13	14	14	14	13	13	10	9	9	9	10.8	14.0
21-Aug	9	9	8	8	5	4	5	9	12	13	14	15	15	15	15	15	15	15	15	13	9	6	5	4	10.6	15.4
22-Aug	3	2	2	1	0	0	2	7	11	14	15	16	17	16	18	17	18	17	17	16	14	11	10	7	10.4	17.8
23-Aug	8	8	7	8	9	10	10	11	11	12	14	16	17	18	18	18	18	18	18	16	14	13	12	11	13.1	18.5
24-Aug	10	9	9	8	8	9	8	9	12	16	18	19	19	20	21	21	21	21	20	18	14	11	10	10	14.2	21.0
25-Aug	9	8	8	8	7	7	8	11	13	16	18	19	21	22	22	22	23	22	22	21	19	16	14	14	15.4	23.1
26-Aug	14	14	13	14	14	14	13	17	19	21	22	24	25	26	26	25	24	23	23	22	20	18	17	18	19.4	26.0
27-Aug	16	15	14	13	13	12	12	15	17	19	20	21	21	22	22	23	23	22	21	20	16	12	12	12	17.2	23.4
28-Aug	10	8	7	6	5	5	5	9	12	15	16	17	18	19	20	20	20	20	20	17	12	9	8	7	12.7	20.3
29-Aug	5	6	7	6	6	6	6	9	12	14	15	16	19	21	20	20	19	17	15	14	14	13	12	11	12.7	20.5
30-Aug	9	7	6	6	6	4	4	9	13	15	17	18	19	19	19	20	20	19	19	15	14	11	10	9	12.9	20.0
31-Aug	8	8	10	10	9	8	9	9	13	15	16	17	18	19	20	19	18	17	15	14	12	11	9	9	13.0	20.1

12.4	11.7	11.2	10.6	10.1	10.0	11.1	13.9	16.5	18.5	20.1	21.4	22.4	23.3	23.8	24.1	24.0	23.5	22.6	20.7	17.6	15.2	13.7	13.1		Diurnal Average
20.2	18.5	18.2	18.0	17.8	18.1	18.4	19.6	21.5	25.4	27.2	28.6	29.3	30.3	30.5	30.8	31.6	31.4	30.5	27.1	23.8	20.8	19.5	19.9		Diurnal Maximum

Hourly Averages

External Temperature (ET) - °C

Falher - August 2014





Peace Airshed Zone Association

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	9	8	6	6	6	2	6	10	14	13	14	14	15	12	11	11	11	12	15	13	11	12	11	12	8.8	15.2
Dir	9	356	2	351	23	333	53	62	94	106	100	87	90	91	97	99	98	115	109	114	106	102	108	105	88	90
2 Spd	12	12	11	10	12	11	10	13	15	11	9	10	8	7	8	8	8	4	6	9	12	12	8	11	8.3	14.7
Dir	102	101	98	97	102	101	106	137	153	156	152	149	178	178	199	204	179	185	154	135	145	132	91	98	133	153
3 Spd	9	7	8	10	10	9	7	9	12	15	14	13	13	14	13	15	12	9	7	8	11	12	13	9	8.8	14.6
Dir	83	57	38	104	106	106	109	139	140	158	176	172	175	168	164	176	173	198	157	144	120	117	112	118	141	158
4 Spd	11	10	10	11	12	10	10	13	14	13	16	21	20	17	17	16	16	13	10	12	13	12	13	12	11.9	21.2
Dir	130	133	91	101	118	122	123	147	167	182	190	172	171	176	163	166	170	158	143	112	105	125	128	121	147	172
5 Spd	11	13	12	9	8	14	14	14	12	19	22	21	22	20	19	19	17	15	11	10	11	12	10	17	12.6	21.8
Dir	111	100	95	87	81	105	104	111	112	145	147	139	135	142	145	151	152	159	148	113	106	103	127	246	130	135
6 Spd	15	9	8	7	8	8	8	9	12	10	14	17	15	19	18	20	18	18	9	12	12	11	10	11	10.8	19.9
Dir	282	183	149	190	228	183	175	196	198	241	268	270	234	231	240	254	254	247	247	253	234	241	244	241	237	254
7 Spd	10	9	6	9	8	8	5	5	6	10	11	13	13	14	15	13	15	13	11	8	5	3	9	10	7.4	15.0
Dir	240	235	242	222	226	206	194	208	235	270	258	234	242	245	237	257	257	262	274	297	309	342	111	112	243	257
8 Spd	9	7	7	4	4	5	4	6	9	12	19	19	17	14	12	11	11	5	12	10	11	9	7	6	7.3	19.0
Dir	119	98	123	116	116	162	167	190	214	226	210	194	200	208	207	181	236	163	137	145	180	190	337	192	185	210
9 Spd	9	4	4	3	6	5	3	4	2	6	5	9	10	11	12	13	16	16	15	11	9	10	10	11	7.7	16.5
Dir	204	214	1	198	219	254	256	254	230	190	193	199	216	241	250	237	233	220	227	232	192	189	192	197	220	233
10 Spd	12	10	11	12	9	7	9	13	12	16	14	17	20	21	17	20	19	14	8	7	10	11	11	11	11.9	20.7
Dir	194	188	181	194	194	175	205	228	250	258	250	238	247	249	251	255	244	253	247	231	203	202	205	211	230	249
11 Spd	11	9	7	3	6	6	8	8	8	7	8	7	7	7	8	3	7	7	4	3	8	9	11	11	3.1	11.4
Dir	209	219	208	163	184	178	187	228	260	263	271	263	262	236	258	289	275	223	255	346	95	88	73	71	222	73
12 Spd	9	10	11	11	11	11	11	15	18	18	16	16	21	21	21	19	19	21	19	14	12	12	13	13	14.8	21.4
Dir	103	88	75	82	87	89	91	98	105	108	115	124	113	110	102	104	106	108	104	95	102	109	105	104	103	113
13 Spd	13	13	13	12	9	8	5	5	8	10	10	12	13	14	16	15	14	15	10	8	3	3	7	7	3.0	15.7
Dir	106	101	102	105	106	103	119	155	227	261	264	261	261	254	272	271	270	288	269	242	3	147	161	110	230	272
14 Spd	9	10	8	7	7	8	6	6	6	10	12	11	12	10	10	9	6	6	7	9	7	7	6	6	2.0	11.9
Dir	98	100	103	138	134	119	125	145	186	215	236	258	238	255	259	260	241	257	288	309	5	55	33	48	211	236
15 Spd	5	5	5	4	4	1	5	4	6	11	14	14	14	15	15	16	17	15	15	10	10	9	8	7	8.6	16.6
Dir	49	38	27	35	152	73	7	358	28	63	88	93	91	92	87	76	75	78	82	110	103	80	64	49	76	75
16 Spd	9	12	11	10	11	10	9	8	9	14	11	10	8	8	6	9	11	16	8	8	9	9	10	10	3.0	15.7
Dir	86	96	106	109	106	100	105	114	141	158	174	165	173	258	260	279	273	274	268	241	238	243	284	293	183	274
17 Spd	10	6	7	5	3	6	4	4	8	11	13	13	12	14	15	16	14	15	8	6	12	11	14	13	8.0	16.1
Dir	294	264	244	268	68	139	84	120	196	217	238	249	224	219	246	253	256	259	261	235	210	207	200	208	232	253
18 Spd	13	13	14	11	13	14	14	15	18	19	20	26	26	21	20	22	23	24	17	11	6	7	2	10	15.0	26.4
Dir	208	209	205	191	221	216	212	226	231	246	250	247	238	232	232	232	230	271	247	248	208	264	198	230	250	
19 Spd	6	8	6	7	8	9	10	8	11	10	10	14	14	14	20	20	15	10	9	7	12	7	9	10	6.1	19.8
Dir	209	217	197	185	162	179	196	233	258	306	321	325	344	342	330	328	327	341	338	330	292	262	233	253	294	328
20 Spd	9	7	5	4	4	5	7	9	13	16	18	17	17	18	15	16	17	13	11	9	5	5	2	1	8.1	18.2
Dir	252	226	252	234	224	248	261	272	303	336	329	329	339	331	336	335	344	347	357	1	4	342	8	24	323	331
21 Spd	2	2	3	5	5	5	3	2	5	6	6	8	6	11	8	12	15	14	11	13	10	6	7	7	6.2	14.8
Dir	350	156	331	16	9	17	19	53	34	350	7	34	333	10	5	12	22	22	39	67	77	75	61	55	29	22
22 Spd	7	8	3	6	3	3	5	6	4	8	10	8	10	7	9	6	10	8	11	8	9	9	9	12	6.3	11.7
Dir	72	71	45	78	320	356	4	31	43	68	82	36	44	80	92	111	54	61	51	101	107	105	103	105	72	105

Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	9	9	8	7	6	7	9	11	10	13	16	19	23	22	21	21	19	20	22	18	14	16	16	16	14.3	22.6
Dir	110	121	106	84	71	74	83	91	92	96	104	104	113	114	117	101	102	99	96	93	76	77	86	93	98	113
24 Spd	13	12	13	12	14	14	10	12	15	13	9	9	12	15	15	12	11	15	16	14	13	12	14	14	12.2	16.1
Dir	88	73	75	63	72	81	86	88	105	124	131	112	119	99	84	82	127	130	119	110	111	100	101	100	99	119
25 Spd	12	13	13	9	12	13	12	15	17	14	14	15	14	15	19	19	18	18	13	8	10	10	11	11	9.5	19.1
Dir	96	106	102	119	117	107	116	147	160	179	200	215	243	229	220	214	211	218	219	201	189	197	196	220	183	220
26 Spd	11	11	11	10	9	10	9	16	19	24	23	18	19	22	22	20	24	24	19	21	16	15	16	16	15.7	24.2
Dir	210	199	206	205	174	171	174	211	215	229	245	248	250	244	263	254	240	233	235	231	225	213	213	222	228	229
27 Spd	11	12	12	10	9	9	6	7	11	17	18	17	15	16	18	23	22	21	17	14	11	9	9	7	12.7	22.7
Dir	236	227	227	237	249	230	227	231	257	268	268	264	258	266	263	252	257	265	280	278	249	224	268	316	256	252
28 Spd	1	5	9	7	8	8	1	3	5	3	8	8	10	8	10	4	9	8	7	12	14	14	14	14	1.9	14.2
Dir	224	287	317	337	333	323	251	271	306	257	248	254	268	282	246	239	340	207	209	156	129	112	102	98	246	102
29 Spd	13	12	14	11	11	12	12	10	14	15	15	9	8	5	12	8	12	17	7	8	10	12	12	12	5.4	16.6
Dir	91	82	88	94	88	94	95	112	135	131	137	160	167	206	241	266	264	265	244	204	193	203	197	202	155	265
30 Spd	10	11	11	10	9	7	7	9	17	21	21	21	20	22	25	19	20	17	16	11	13	13	13	11	13.8	25.3
Dir	208	195	194	190	197	174	161	216	229	236	243	236	234	212	214	246	248	252	235	218	207	202	220	221	222	214
31 Spd	11	11	14	14	11	11	12	13	19	22	24	22	20	19	20	17	15	8	6	6	8	8	11	12	9.6	23.7
Dir	214	202	209	214	205	201	207	212	249	261	271	261	256	266	264	285	343	33	104	85	164	184	171	202	239	271
Spd	3.5	4.1	3.5	3.7	3.7	4.4	4.3	4.6	5.2	5.6	6.2	6.2	6.3	6.2	6.4	5.9	5.5	5.3	2.8	2.9	4.3	5.0	4.4	4.2	Diurnal Average	
Dir	149	141	131	136	137	136	138	163	187	205	217	217	214	218	226	236	238	229	204	168	154	151	145	158	Diurnal Maximum	
Spd	14.6	13.3	14.0	13.9	13.6	14.3	14.4	16.2	18.7	24.2	23.7	26.4	26.0	22.4	25.3	22.7	23.7	23.8	22.1	21.1	15.8	15.9	15.6	17.0	Diurnal Maximum	
Dir	282	209	88	214	72	216	212	211	249	229	271	250	247	114	214	252	240	230	96	231	225	77	213	246	Diurnal Maximum	
Maximum Speed Value: 26 km/h on Aug 18 12:00																		Minimum Speed Value: 1 km/h on Aug 21 00:00						Hours in Service:		744
Maximum Daily Speed Average: 15.7 km/h on Aug 26																		Minimum Daily Speed Average: 1.9 km/h on Aug 21						Hours of Data:		744
Maximum Diurnal Speed Average: 6.4 km/h at hour 15																		Minimum Diurnal Speed Average: 2.8 km/h at hour 19						Hours of Missing Data:		0
Monthly Average Velocity: 3.78 km/h 185.5 deg																		Speed Percentiles: P ₁ = 2.0 P ₁₀ = 5.6 Q ₁ = 8.0 Median = 11.0 Q ₃ = 14.2 P ₉₀ = 18.4 P ₉₉ = 23.6						Percent Operational Time:		100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	12	17	10	0	0	0	39																			
NorthEast	8	22	4	0	0	0	34																			
East	3	66	96	8	0	0	173																			
SouthEast	6	35	34	8	0	0	83																			
South	7	58	37	2	0	0	104																			
SouthWest	7	62	73	24	0	0	166																			
West	10	41	48	16	0	0	115																			
NorthWest	4	15	9	2	0	0	30																			
Total	57	316	311	60	0	0	744																			

Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Falher - August 2014

Maximum Speed: 27 km/h on Aug 18 12:00	Maximum Daily Speed Average: 17.1 km/h on Aug 26	Hours in Service: 744
Minimum Speed: 2 km/h on Aug 1 06:00	Minimum Daily Speed Average: 7.7 km/h on Aug 21	Hours of Data: 744
Maximum Diurnal Speed Average: 15.8 km/h at hour 15	Minimum Diurnal Speed Average: 8.1 km/h at hour 7	Hours of Missing Data: 0
Monthly Average Speed: 11.79 km/h	Percentiles: P ₁ = 3.0 P ₁₀ = 6.2 Q ₁ = 8.6 Median = 11.3 Q ₃ = 14.4 P ₉₀ = 18.9 P ₉₉ = 23.6	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-Aug	9	9	6	6	6	2	6	10	14	13	14	15	16	13	12	12	13	15	13	11	12	11	12	10.9	15.6	
2-Aug	12	12	11	10	12	11	10	13	15	11	9	10	8	8	9	8	8	5	6	9	12	12	9	11	10.2	14.9
3-Aug	9	7	8	11	10	10	7	9	13	15	14	14	14	15	14	15	12	9	7	9	12	12	13	9	11.1	15.0
4-Aug	11	10	10	11	12	10	10	13	14	13	16	22	21	18	18	17	16	13	11	12	13	12	13	12	13.7	21.6
5-Aug	12	13	12	10	8	14	14	14	12	19	22	21	23	21	19	20	17	15	11	10	12	12	12	19	15.1	22.6
6-Aug	15	11	9	7	8	8	9	9	12	11	14	18	16	19	18	20	18	18	9	12	12	11	10	12	12.8	20.3
7-Aug	10	9	6	9	8	8	5	5	7	11	12	13	14	15	15	14	16	14	11	8	5	4	9	10	9.9	16.0
8-Aug	9	7	7	5	5	5	4	6	9	12	19	19	17	15	12	12	14	6	12	11	11	11	8	7	10.2	19.3
9-Aug	9	9	4	4	6	6	3	4	3	6	5	10	11	12	13	14	17	17	15	11	9	10	10	11	9.1	17.1
10-Aug	12	10	11	12	9	7	9	13	12	16	15	17	21	22	18	18	21	19	15	8	7	10	11	11	13.5	21.6
11-Aug	11	10	7	3	7	6	9	8	8	7	8	8	9	10	10	7	9	8	5	3	8	9	12	11	8.0	11.8
12-Aug	10	10	11	11	11	11	11	15	18	18	16	16	22	22	21	19	20	21	19	14	12	13	13	13	15.2	22.0
13-Aug	13	13	13	12	10	8	5	5	9	11	10	12	13	14	16	15	14	15	10	9	5	4	7	7	10.5	16.3
14-Aug	9	10	9	7	8	8	6	6	7	10	12	11	12	10	10	11	10	7	6	7	9	8	7	7	8.7	12.2
15-Aug	6	5	5	4	7	3	5	5	7	12	14	15	15	16	16	17	17	16	15	10	10	9	8	7	10.1	17.1
16-Aug	9	12	11	11	11	10	9	8	9	14	11	10	9	10	7	10	11	16	9	8	9	9	11	10	10.1	15.8
17-Aug	10	7	7	5	4	7	5	5	8	11	13	14	13	14	16	17	15	15	8	7	12	11	14	13	10.4	16.8
18-Aug	13	13	14	11	13	14	14	15	18	19	21	27	26	22	20	22	23	24	20	12	6	7	5	10	16.2	26.6
19-Aug	6	9	6	7	8	9	10	9	12	10	11	15	15	15	20	20	16	11	9	7	13	7	9	11	11.0	20.3
20-Aug	9	7	5	5	5	5	7	9	14	16	18	17	18	19	16	17	17	14	12	9	5	5	3	3	10.5	18.5
21-Aug	2	3	3	5	5	5	3	3	5	7	8	9	8	12	9	13	15	15	12	13	10	6	7	7	7.7	15.4
22-Aug	7	8	4	7	4	4	5	6	4	9	12	10	11	8	11	8	11	8	11	8	9	9	9	12	8.2	11.7
23-Aug	9	9	8	7	6	8	10	11	10	13	16	19	23	23	22	21	20	20	22	18	14	16	16	16	14.8	23.1
24-Aug	14	12	13	12	14	14	10	12	15	13	10	10	13	16	16	14	11	15	16	14	13	12	14	14	13.2	16.3
25-Aug	12	13	13	9	12	13	12	16	17	15	14	15	14	16	19	19	19	18	13	8	10	10	11	12	13.8	19.4
26-Aug	11	12	11	10	9	10	9	16	19	24	24	19	20	22	23	21	24	24	19	21	16	15	16	16	17.1	24.4
27-Aug	11	12	12	10	9	9	6	7	11	17	18	18	16	17	18	24	23	21	17	14	12	9	11	8	13.8	23.8
28-Aug	6	5	9	7	8	8	3	4	6	5	9	11	10	11	11	6	10	8	8	12	14	14	14	14	8.6	14.3
29-Aug	13	12	14	11	11	12	12	10	14	15	15	10	9	6	12	9	12	17	8	8	10	12	12	12	11.4	16.7
30-Aug	10	11	12	10	9	8	8	9	17	21	21	21	20	22	26	20	21	17	16	11	14	13	13	11	15.1	25.8
31-Aug	11	11	14	14	11	11	12	13	19	23	24	22	21	20	21	17	17	10	6	7	10	8	11	12	14.4	24.0
	10.0	9.7	9.2	8.5	8.6	8.5	8.1	9.3	11.5	13.4	14.4	15.0	15.4	15.5	15.8	15.5	15.6	14.5	12.1	10.3	10.4	10.1	10.5	11.0	Diurnal Average	
	15.0	13.3	14.1	14.0	13.6	14.3	14.4	16.3	19.2	24.4	24.0	26.6	26.3	22.9	25.8	23.8	23.8	24.0	22.3	21.1	15.8	15.9	15.6	18.7	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg

Falher - August 2014

Maximum Value: 91.7 deg on Aug 9 04:00																	Hours in Service: 744					Hours of Data: 744				
Minimum Value: 1.6 deg on Aug 24 22:00																	Hours of Missing Data: 0					Hours of Calibration: 0				
Percentiles: P ₁ = 2.2 P ₁₀ = 3.8 Q ₁ = 6.7 Median = 11.9 Q ₃ = 18.3 P ₉₀ = 29.7 P ₉₉ = 72.4																	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-Aug	11	12	4	7	16	46	15	12	12	10	14	14	14	21	20	23	22	15	8	5	3	3	2	2	45.7	
2-Aug	2	3	4	6	3	3	3	14	8	16	18	18	26	32	39	26	17	37	18	6	8	8	19	4	38.9	
3-Aug	13	20	18	14	8	6	11	5	7	13	11	13	17	16	22	12	16	10	18	8	9	4	4	8	21.9	
4-Aug	10	7	8	6	2	3	5	12	6	17	12	11	13	15	17	19	15	13	24	4	2	7	4	3	23.8	
5-Aug	8	3	6	14	21	4	3	7	8	10	9	10	15	15	16	19	14	13	9	12	5	4	34	28	34.1	
6-Aug	13	39	22	19	13	19	24	17	16	17	11	16	23	12	14	13	12	10	5	5	9	6	4	8	38.5	
7-Aug	3	2	7	14	6	11	8	16	26	16	21	18	22	19	17	21	20	17	12	12	9	42	9	5	42.1	
8-Aug	6	8	11	26	42	7	13	17	12	13	10	10	13	18	20	29	51	61	10	15	4	44	30	49	60.8	
9-Aug	8	69	17	92	7	21	14	22	74	30	40	24	27	24	23	24	18	6	7	5	10	8	4	9	91.7	
10-Aug	3	4	3	2	4	11	5	8	13	11	13	18	14	16	16	15	13	13	14	11	9	7	16	10	18.0	
11-Aug	5	9	7	40	13	14	17	12	11	23	23	48	55	54	48	90	42	46	42	35	20	10	14	6	90.3	
12-Aug	11	8	4	5	5	5	3	4	4	9	10	15	15	12	13	10	10	8	6	4	4	5	4	3	14.8	
13-Aug	2	4	3	5	4	8	19	14	22	21	16	16	19	17	15	8	12	14	9	5	62	41	21	16	62.4	
14-Aug	7	12	34	16	10	6	8	12	19	8	14	18	14	20	15	20	21	23	14	7	21	21	11	30	34.1	
15-Aug	31	14	28	18	71	80	13	9	23	14	14	19	21	20	20	16	14	11	10	7	5	13	10	9	80.2	
16-Aug	13	6	3	4	3	8	7	8	10	7	11	14	28	47	39	30	20	6	9	10	7	7	18	13	47.2	
17-Aug	4	24	9	17	45	21	36	37	9	15	20	14	23	16	15	16	20	11	10	20	7	10	4	4	45.5	
18-Aug	6	3	3	13	4	2	2	5	6	9	8	7	9	6	6	9	8	6	30	21	15	15	73	8	73.3	
19-Aug	8	14	15	18	15	9	5	11	18	21	22	18	18	20	15	12	12	20	12	9	13	14	12	5	22.5	
20-Aug	6	19	10	28	19	7	7	8	23	6	8	12	13	11	15	13	15	14	8	9	9	12	72	92	91.5	
21-Aug	29	70	38	17	10	13	27	18	29	29	60	28	40	31	27	23	17	23	15	6	9	11	8	7	69.8	
22-Aug	20	15	26	35	60	40	18	15	33	22	29	39	48	41	41	51	28	23	19	12	6	7	5	2	60.3	
23-Aug	6	7	14	13	10	10	7	5	6	7	9	11	12	11	16	12	15	11	7	4	4	2	3	3	16.0	
24-Aug	6	4	3	6	4	3	5	5	5	17	30	36	23	15	21	29	24	14	6	2	3	2	2	2	36.3	
25-Aug	3	5	3	13	9	6	7	11	7	14	10	12	19	15	10	11	20	9	7	6	5	8	5	10	19.5	
26-Aug	7	6	4	8	6	5	7	6	6	8	9	13	13	11	12	12	6	6	5	4	7	6	4	8	13.5	
27-Aug	5	5	2	11	17	19	44	21	9	11	13	15	18	16	14	18	15	8	7	7	10	5	36	31	43.8	
28-Aug	90	27	4	7	8	7	61	24	21	68	25	40	27	35	36	26	55	28	17	22	10	4	6	2	90.2	
29-Aug	3	3	5	4	3	4	5	8	6	7	12	16	30	60	16	28	14	7	11	13	7	3	4	4	59.8	
30-Aug	6	8	6	7	4	21	16	10	7	8	10	13	13	12	12	18	12	11	7	10	21	6	4	6	21.3	
31-Aug	7	6	2	4	2	3	3	4	13	7	8	13	12	13	14	15	29	38	26	36	34	8	7	8	38.4	
90.2	69.8	38.2	91.7	70.8	80.2	60.8	37.4	74.3	67.9	60.1	48.2	55.0	59.8	48.5	90.3	55.1	60.8	42.1	35.6	62.4	44.4	73.3	91.5			

PAZA

Portable – Clairmont Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb Portable Clairmont - August 2014

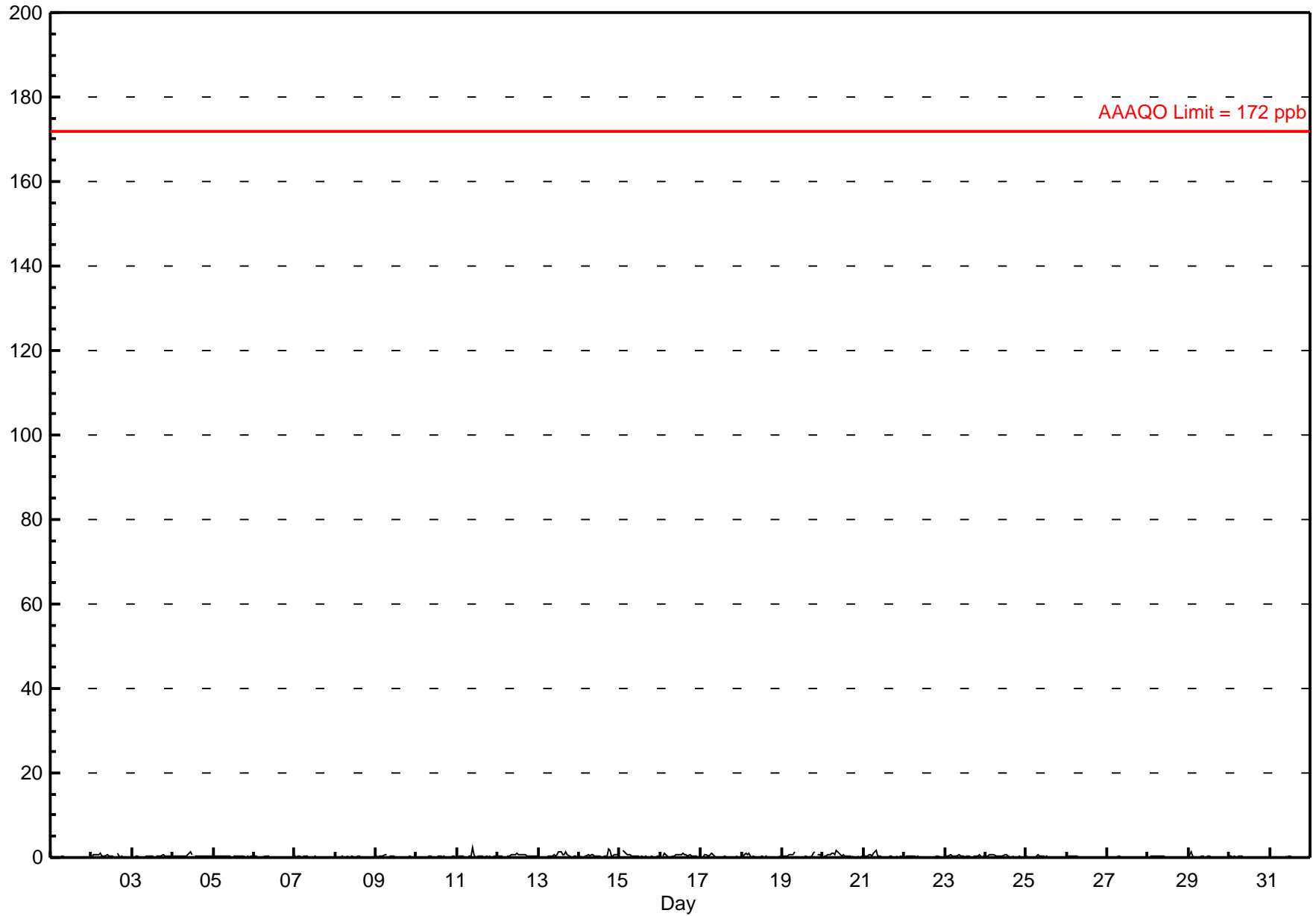
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 2.3 ppb on Aug 11 10:00	Maximum Daily Average: 0.5 ppb on Aug 14		Hours of Data:	705
Minimum Value: 0 ppb on Aug 1 12:00	Minimum Daily Average: 0.0 ppb on Aug 27		Hours of Missing Data:	39
Maximum Diurnal Average: 0.4 ppb at hour 8	Minimum Diurnal Average: 0.2 ppb at hour 21		Hours of Calibration:	37
Monthly Average: 0.27 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.6 P ₉₉ = 1.3		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-Aug	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
2-Aug	0	1	1	1	1	1	0	0	0	1	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0.4	1.1
3-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0.3	0.5
4-Aug	0	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2
5-Aug	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
6-Aug	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	0.4
7-Aug	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	0.5
8-Aug	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	0.4
9-Aug	0	0	0	0	0	1	1	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
10-Aug	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
11-Aug	0	0	0	0	0	A	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.3
12-Aug	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	0.9
13-Aug	0	0	0	A	0	0	0	0	0	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.4
14-Aug	0	0	A	0	0	1	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	1	1	1	0.5	1.9
15-Aug	1	A	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
16-Aug	A	0	1	1	0	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	0	0	A	0.5	0.9
17-Aug	0	0	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
18-Aug	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	1.0
19-Aug	0	0	0	0	1	1	1	1	C	C	C	C	C	0	0	0	0	0	1	1	A	1	1	0	0.5	1.4
20-Aug	0	0	0	1	1	1	1	1	2	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0.5	1.5
21-Aug	0	0	0	1	1	0	1	2	0	0	0	0	0	M	M	0	0	0	A	A	0	0	0	0	0.4	1.6
22-Aug	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
23-Aug	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0.3	0.7
24-Aug	0	1	1	1	1	1	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0.4	0.8
25-Aug	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.6
26-Aug	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	0.5
27-Aug	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	0.5
28-Aug	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	0.5
29-Aug	0	1	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0.2	1.3
30-Aug	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	0.5
31-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
	1.0	1.3	1.7	1.0	0.9	1.1	1.1	1.6	1.5	2.3	1.2	0.9	1.4	1.4	0.8	1.1	1.4	1.9	1.7	1.4	0.6	0.8	0.6	1.1	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

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Portable Clairmont - August 2014



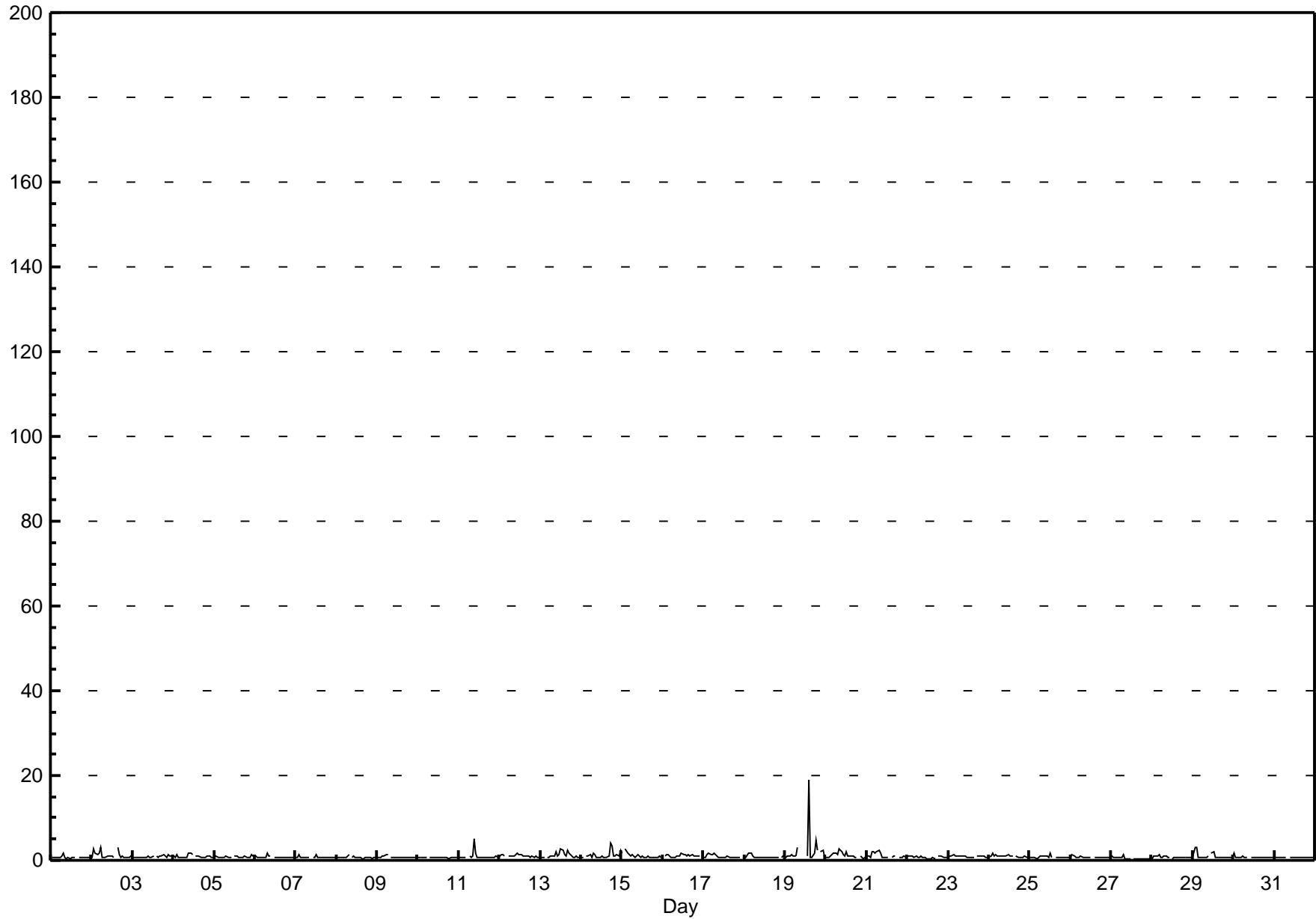
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Portable Clairmont - August 2014

Maximum Value: 18.9 ppb on Aug 19 15:00		Maximum Daily Average: 2.5 ppb on Aug 19		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 8 22:00		Minimum Daily Average: 0.6 ppb on Aug 27		Hours of Data: 705																							
Maximum Diurnal Average: 1.4 ppb at hour 15		Minimum Diurnal Average: 0.7 ppb at hour 21		Hours of Missing Data: 39																							
Monthly Average: 0.94 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 1.0 P ₉₀ = 1.4 P ₉₉ = 3.1		Hours of Calibration: 37																							
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-Aug	1	1	1	1	1	1	1	2	1	0	1	0	1	1	1	A	1	1	1	1	1	1	1	1	0.7	1.6	
2-Aug	1	3	2	1	2	3	1	1	1	1	1	1	1	1	A	3	1	1	1	1	1	1	1	1	1.2	3.2	
3-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
4-Aug	1	1	1	1	1	1	1	1	1	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8	
5-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	1	0.9	1.5	
6-Aug	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.6	
7-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
8-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	1	1	1	0	1	1	0.7	1.4	
9-Aug	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5	
10-Aug	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.7	0.8	
11-Aug	1	1	1	1	1	A	1	1	1	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	5.2	
12-Aug	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6	
13-Aug	1	1	1	A	1	1	1	1	1	2	1	1	3	2	1	1	2	2	1	1	1	1	1	1	1.2	2.6	
14-Aug	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	4	3	1	1	1	2	1.3	4.0		
15-Aug	2	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.6	
16-Aug	A	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	A	1.1	1.5	
17-Aug	1	1	2	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6	
18-Aug	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7	
19-Aug	1	1	1	1	1	1	1	3	C	C	C	C	C	1	19	1	1	2	5	2	A	2	2	1	2.5	18.9	
20-Aug	1	1	1	1	2	2	2	2	3	2	1	1	2	1	1	1	1	1	1	A	1	1	0	1	1.2	2.6	
21-Aug	1	1	1	2	2	2	2	2	2	1	1	1	1	M	M	1	1	1	1	A	1	1	1	1	1.1	2.4	
22-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	A	1	1	1	1	1	1	0.7	1.1	
23-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.2	
24-Aug	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	1.6	
25-Aug	1	1	1	1	0	1	1	1	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1	0.7	1.6	
26-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	1.3	
27-Aug	1	1	1	1	1	1	1	2	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0.6	1.5	
28-Aug	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3	
29-Aug	1	3	3	1	1	1	1	1	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1.0	3.1	
30-Aug	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.7	
31-Aug	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.7	
		0.8	1.0	1.1	1.0	1.0	1.0	1.1	0.9	1.1	0.9	0.8	1.0	0.8	1.4	0.8	0.8	0.9	1.0	0.8	0.7	0.8	0.8	0.8	Diurnal Average		
		1.7	3.1	2.9	2.0	2.0	3.1	2.0	3.0	2.6	5.2	1.8	1.7	2.6	2.5	18.9	3.2	2.5	4.0	4.8	2.2	1.1	2.0	2.2	2.2	Diurnal Maximum	
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																			

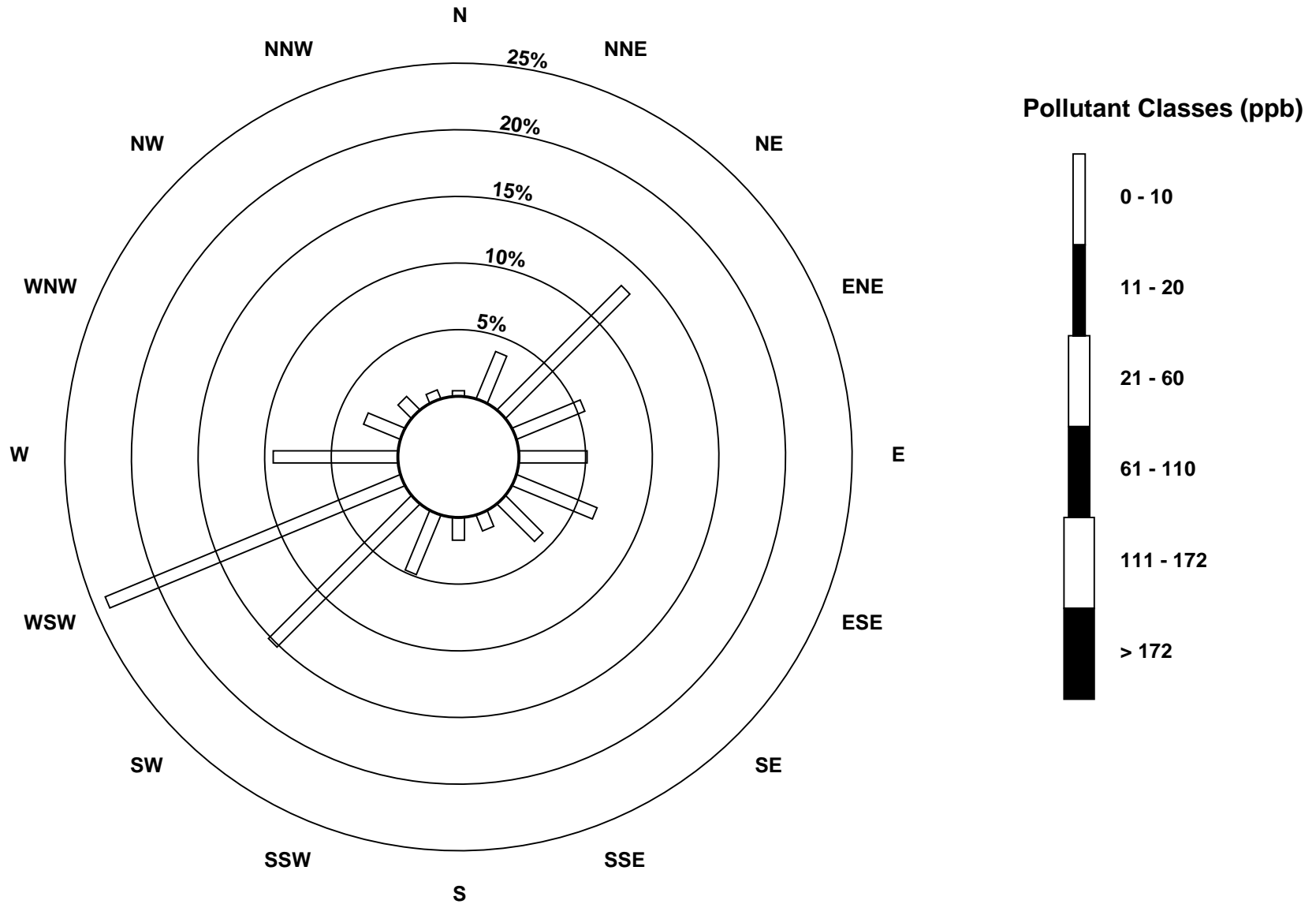
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Portable Clairmont - August 2014



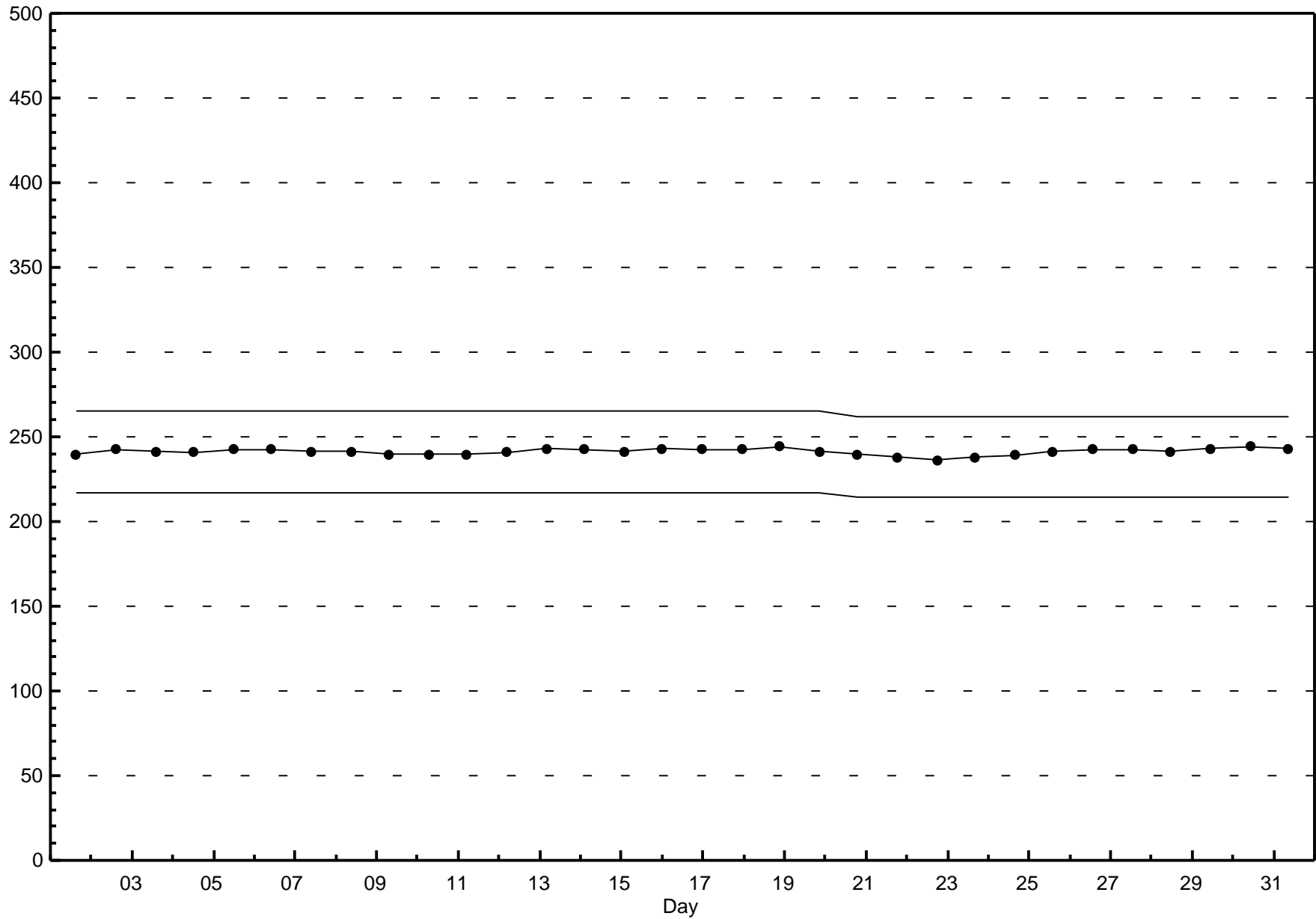
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Portable Clairmont - August 2014



Span Responses

Sulphur Dioxide (SO₂)
Portable Clairmont - August 2014



Hourly Averages

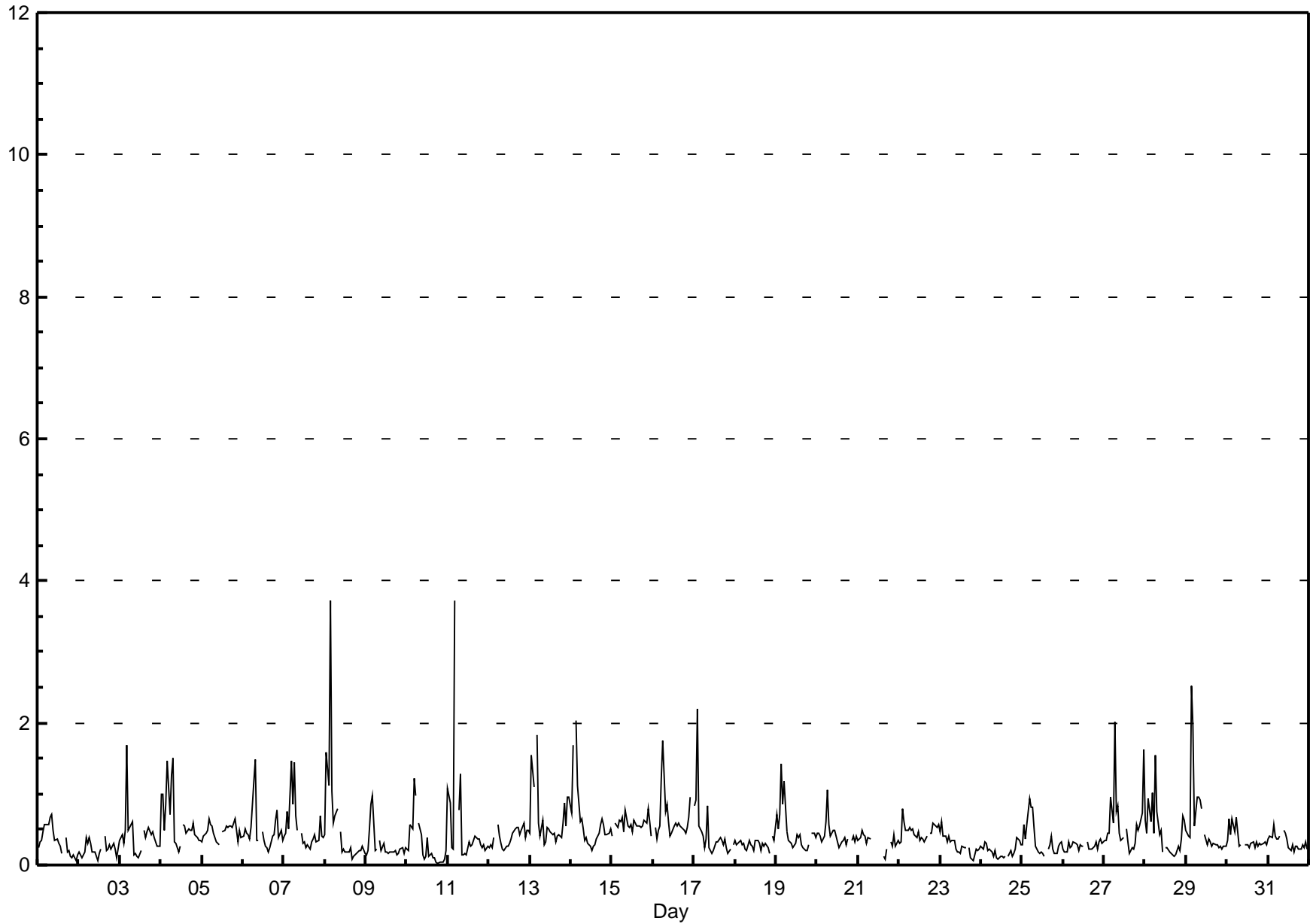
Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 3.7 ppb on Aug 8 04:00	Maximum Daily Average: 0.7 ppb on Aug 16		Hours of Data:	705
Minimum Value: 0 ppb on Aug 10 19:00	Minimum Daily Average: 0.2 ppb on Aug 24		Hours of Missing Data:	39
Maximum Diurnal Average: 0.9 ppb at hour 5	Minimum Diurnal Average: 0.3 ppb at hour 11		Hours of Calibration:	39
Monthly Average: 0.44 ppb	Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.7 P ₉₉ = 1.9		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-Aug	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.7
2-Aug	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
3-Aug	0	0	0	0	2	0	1	1	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0.4	1.7
4-Aug	1	1	0	1	1	1	1	2	0	0	0	0	A	1	1	0	1	0	0	1	0	0	0	0	0.6	1.5
5-Aug	0	0	0	0	1	1	1	0	0	0	0	A	0	0	1	1	1	1	1	1	0	0	0	0	0.5	0.7
6-Aug	0	0	0	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0.5	1.5
7-Aug	0	0	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.5	1.5
8-Aug	0	2	1	4	1	1	1	1	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.7
9-Aug	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
10-Aug	0	0	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
11-Aug	1	1	0	0	4	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	3.7
12-Aug	0	0	0	0	A	1	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0.4	0.6
13-Aug	0	2	1	A	2	1	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0.7	1.8
14-Aug	1	2	A	2	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0.6	2.0
15-Aug	0	A	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0.6	0.8
16-Aug	A	1	0	0	1	1	2	1	1	1	0	0	1	1	1	1	1	1	0	0	1	1	1	A	0.7	1.8
17-Aug	1	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	2.2
18-Aug	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
19-Aug	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.5	1.4
20-Aug	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.4	1.1
21-Aug	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	0	0	0	A	0	0	0	0	0	--	0.5
22-Aug	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	0.5	0.8
23-Aug	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.6
24-Aug	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
25-Aug	0	1	0	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.9
26-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4
27-Aug	0	0	0	0	1	1	2	1	1	0	0	0	A	1	0	0	0	0	0	1	0	1	1	2	0.6	2.0
28-Aug	1	0	1	1	1	0	2	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0.5	1.5
29-Aug	0	0	0	3	2	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.5
30-Aug	0	1	0	1	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
31-Aug	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6

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



Hourly Maximums

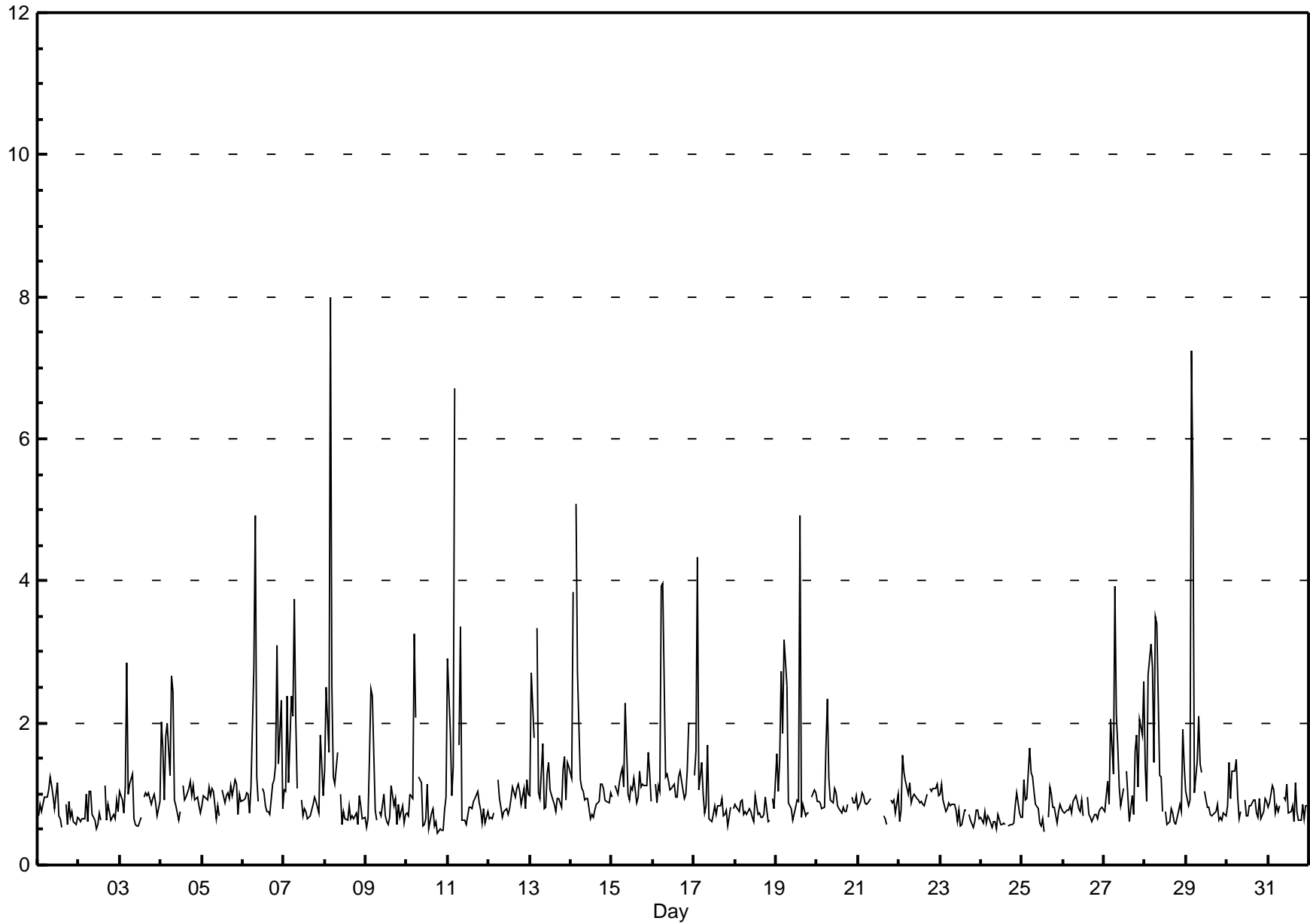
Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - August 2014

Maximum Value: 8.0 ppb on Aug 8 04:00		Maximum Daily Average: 1.4 ppb on Aug 27		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 10 19:00		Minimum Daily Average: 0.6 ppb on Aug 24		Hours of Data: 705																							
Maximum Diurnal Average: 1.9 ppb at hour 5		Minimum Diurnal Average: 0.8 ppb at hour 11		Hours of Missing Data: 39																							
Monthly Average: 1.07 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.9 Q ₃ = 1.1 P ₉₀ = 1.6 P ₉₉ = 4.9		Hours of Calibration: 39																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.2	
2-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.1	
3-Aug	1	1	1	1	3	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	2.8	
4-Aug	2	2	1	2	2	1	3	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.2	2.7	
5-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2	
6-Aug	1	1	1	1	1	1	3	5	1	1	A	1	1	1	1	1	1	1	1	1	3	1	2	1	1.4	4.9	
7-Aug	1	1	2	1	2	2	4	2	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.3	3.7	
8-Aug	1	3	2	8	3	1	1	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	8.0	
9-Aug	1	1	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	2.5	
10-Aug	1	1	1	1	3	2	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	1	0.9	3.3	
11-Aug	3	2	1	1	7	A	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	6.7	
12-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
13-Aug	1	3	2	A	3	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1.3	3.3	
14-Aug	1	4	A	5	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	5.1	
15-Aug	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1.2	2.3	
16-Aug	A	1	1	1	1	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	A	1.4	4.0	
17-Aug	1	2	4	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.1	4.3	
18-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.0	
19-Aug	2	1	2	3	2	3	3	1	1	1	1	1	1	1	5	1	1	1	1	1	1	A	1	1	1.4	4.9	
20-Aug	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.0	2.3	
21-Aug	1	1	1	1	1	1	1	1	C	C	C	C	C	C	C	1	1	1	1	A	1	1	1	1	--	1.0	
22-Aug	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.5	
23-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.1	
24-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	1.0	
25-Aug	1	1	1	1	2	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	0.9	1.7	
26-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
27-Aug	1	1	1	1	2	1	4	2	2	1	1	1	A	1	1	1	1	1	1	2	2	1	2	2	1.4	3.9	
28-Aug	1	1	3	3	3	1	3	3	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1.4	3.5	
29-Aug	1	1	1	7	5	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	7.2	
30-Aug	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5	
31-Aug	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	1.2	
		1.0	1.2	1.2	1.8	1.9	1.3	1.6	1.5	1.0	0.9	0.8	0.8	0.8	0.8	1.0	0.8	0.9	0.8	0.9	0.9	0.9	1.0	1.0	0.9	Diurnal Average	
		2.9	3.8	4.3	8.0	6.7	3.9	4.0	4.9	2.3	1.3	1.3	1.4	1.1	1.3	4.9	1.2	1.3	1.2	1.6	1.8	3.1	2.1	2.3	2.6	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

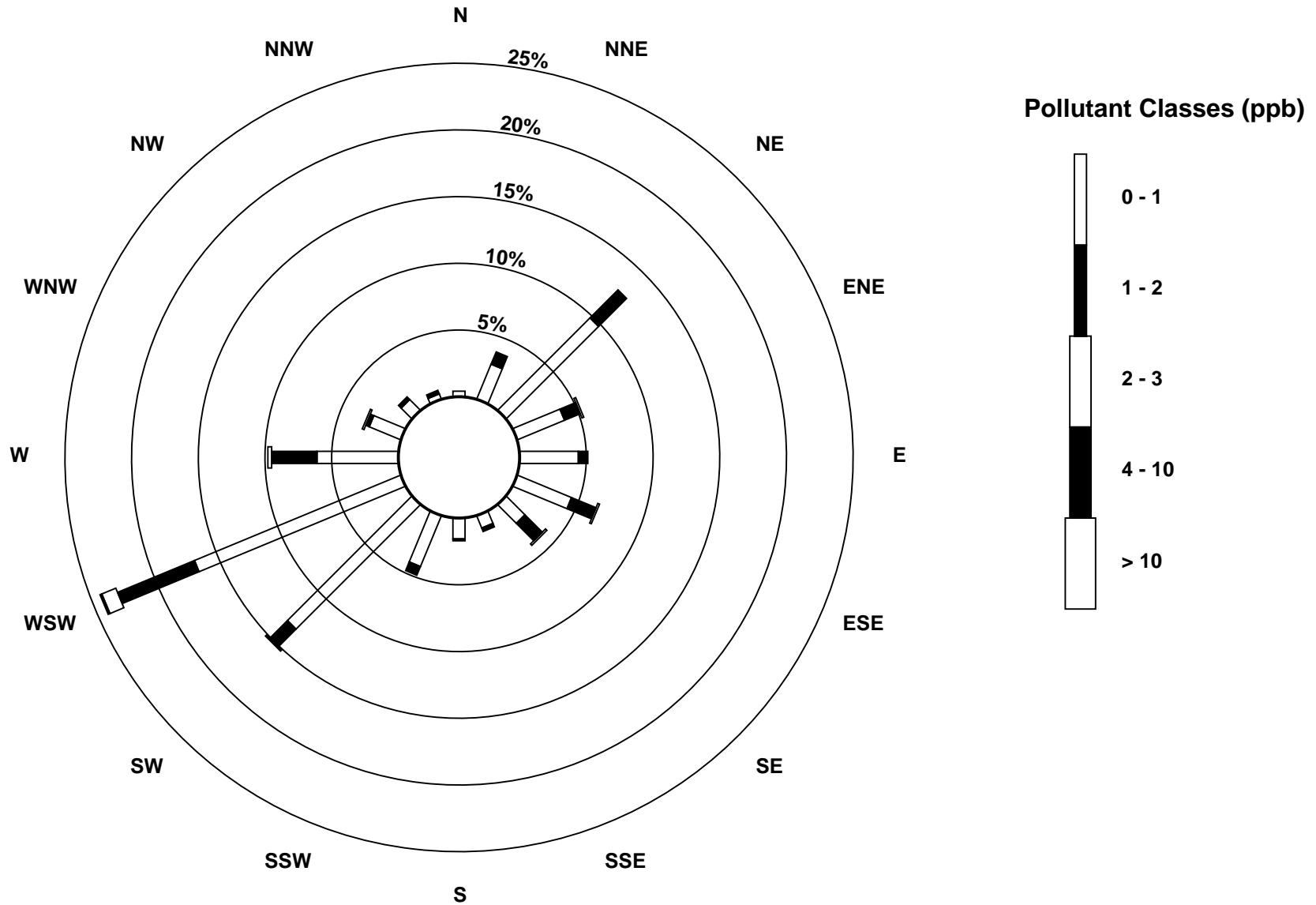
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Portable Clairmont - August 2014



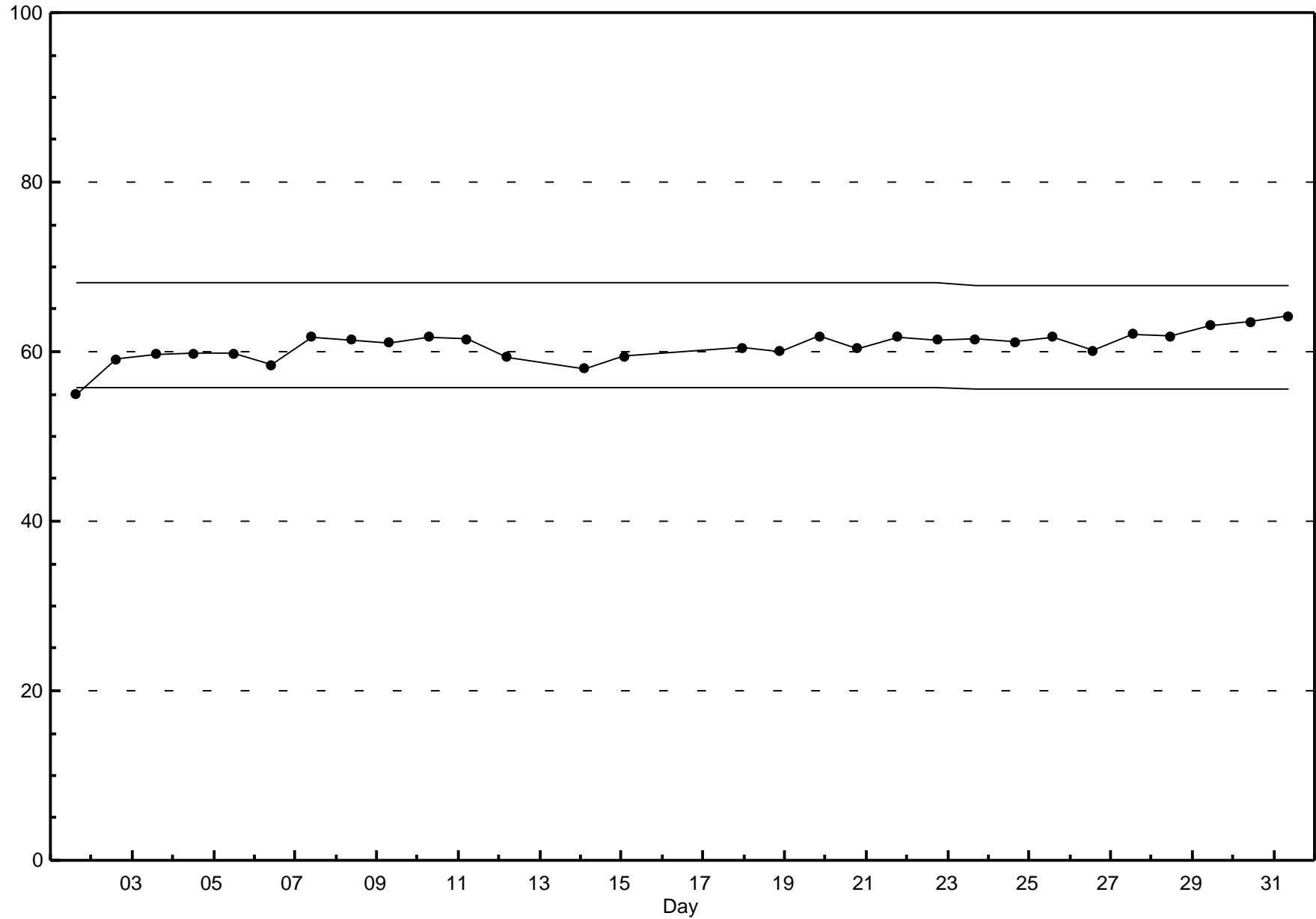
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Portable Clairmont - August 2014



Span Responses

**Total Reduced Sulphur (TRS)
Portable Clairmont - August 2014**





Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Peace Airshed Zone Association

Portable Clairmont - August 2014

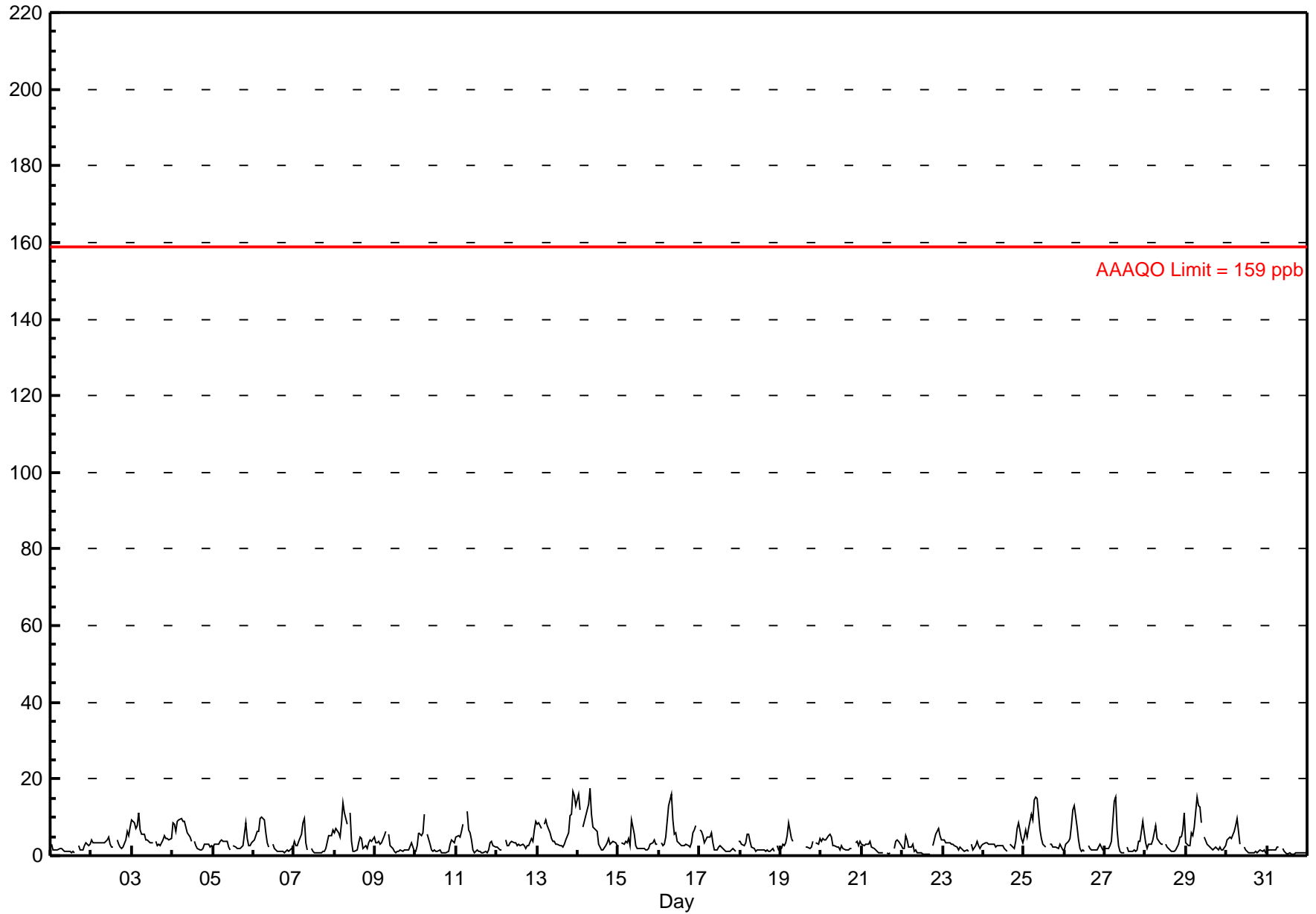
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 17.4 ppb on Aug 14 08:00	Maximum Daily Average: 6.9 ppb on Aug 13
Minimum Value: 0 ppb on Aug 22 17:00	Hours of Data: 703
Maximum Diurnal Average: 7.3 ppb at hour 7	Hours of Missing Data: 41
Monthly Average: 3.63 ppb	Hours of Calibration: 39
Minimum Daily Average: 1.1 ppb on Aug 31	Percent Operational Time: 99.7
Minimum Diurnal Average: 1.7 ppb at hour 15	
Percentiles: P ₁ = 0.5 P ₁₀ = 1.1 Q ₁ = 1.6 Median = 2.8 Q ₃ = 4.4 P ₉₀ = 7.6 P ₉₉ = 15.3	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	A	3	2	1	1	3	3	3	3	1.8	3.5	
2-Aug	4	3	4	3	3	3	3	3	3	4	5	3	2	2	A	4	3	2	2	2	4	6	5	7	3.7	7.3	
3-Aug	9	9	7	8	11	7	5	6	4	4	4	3	3	A	4	3	3	3	4	5	5	4	4	4	5.2	11.3	
4-Aug	8	8	7	9	9	10	9	9	8	6	5	4	A	4	2	2	2	2	2	3	3	3	2	3	5.1	9.6	
5-Aug	2	3	3	3	4	4	4	4	4	2	2	A	3	2	2	2	2	2	3	8	4	3	3	3	3.1	8.5	
6-Aug	4	5	6	6	10	10	9	6	3	2	A	3	2	2	1	1	1	1	1	1	2	1	2	2	3.6	10.1	
7-Aug	4	3	3	4	6	8	10	3	2	A	2	1	1	1	1	1	1	1	1	2	5	5	5	7	3.2	9.8	
8-Aug	6	7	6	5	8	14	11	8	A	11	4	1	1	1	3	5	5	2	3	2	3	4	4	5	5.2	13.7	
9-Aug	4	3	4	3	3	5	6	A	8	5	3	2	1	1	1	1	1	1	2	1	1	3	2	1	2.5	6.2	
10-Aug	1	3	6	5	6	11	A	6	3	1	1	1	1	1	2	1	1	1	1	1	3	4	4	3	2.9	10.9	
11-Aug	5	5	5	6	8	A	12	7	6	4	1	1	1	1	1	1	1	1	1	1	3	4	3	2	3.5	11.6	
12-Aug	2	2	1	2	A	4	3	3	4	4	3	3	3	3	3	3	3	2	3	3	5	4	7	9	3.3	8.9	
13-Aug	8	9	7	A	8	9	8	6	4	4	4	3	3	2	2	2	3	4	6	10	11	17	15	13	6.9	16.8	
14-Aug	16	12	A	7	9	12	14	17	11	8	7	6	3	2	2	1	3	3	5	3	4	4	3	3	6.7	17.4	
15-Aug	3	A	3	3	4	3	5	3	9	6	3	2	2	2	2	2	2	2	2	3	3	4	3	3	3.1	9.4	
16-Aug	A	4	3	3	5	9	13	16	9	5	6	4	3	3	3	2	3	3	2	3	6	7	8	A	5.4	16.0	
17-Aug	7	6	5	3	5	5	5	6	3	1	2	2	3	2	2	1	1	1	1	1	2	1	A	4	3.1	6.9	
18-Aug	4	3	2	3	6	5	4	2	2	1	1	1	1	2	2	1	2	1	1	2	1	A	3	2	2.3	5.7	
19-Aug	2	3	2	3	5	8	4	4	C	C	C	C	C	C	C	2	2	2	2	4	A	3	3	4	--	8.4	
20-Aug	4	4	4	4	5	6	5	3	3	2	2	1	3	2	2	2	2	2	2	2	A	3	4	3	4	3.0	5.6
21-Aug	3	3	3	3	3	4	2	2	1	1	1	1	1	M	M	1	0	1	A	2	4	4	4	2	2.2	4.3	
22-Aug	2	2	5	4	2	2	3	1	1	1	1	1	0	0	0	0	0	A	3	4	5	7	5	4	2.4	7.2	
23-Aug	4	4	3	3	3	3	3	2	2	2	2	2	2	1	2	1	A	3	2	2	4	2	2	3	2.5	4.2	
24-Aug	3	3	3	3	3	3	3	2	2	2	3	3	2	2	1	A	3	2	2	4	7	9	5	3	3.1	8.7	
25-Aug	5	7	5	7	11	9	14	15	15	7	4	3	3	2	A	3	3	2	2	2	2	3	2	2	5.6	15.4	
26-Aug	2	3	4	5	8	12	13	7	4	2	1	1	1	A	3	2	2	1	1	1	2	3	2	1	3.5	12.9	
27-Aug	2	2	2	3	4	14	15	7	3	1	1	1	A	2	1	1	1	1	1	2	4	4	9	6	3.7	15.2	
28-Aug	3	2	3	3	4	6	8	5	3	3	A	3	2	2	1	1	1	1	1	3	5	5	7	11	3.7	11.1	
29-Aug	3	3	3	6	5	7	15	13	13	9	A	5	3	3	2	2	1	2	2	2	2	2	2	3	4.7	15.4	
30-Aug	4	4	5	4	6	8	10	6	3	A	2	1	1	1	1	1	1	1	1	1	2	1	1	1	2.9	9.8	
31-Aug	1	2	2	2	1	1	2	2	A	2	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1.1	2.4	
	4.2	4.3	3.9	4.2	5.6	6.9	7.3	5.9	4.7	3.5	2.6	2.2	1.9	1.8	1.7	1.7	1.8	1.7	2.0	2.7	3.6	4.2	4.0	4.0	Diurnal Average		
	16.0	12.0	7.0	9.1	11.3	14.2	15.4	17.4	14.8	11.0	7.1	6.2	3.4	3.7	3.6	4.9	4.6	4.2	6.1	10.3	11.0	16.8	15.5	13.2	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

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Portable Clairmont - August 2014



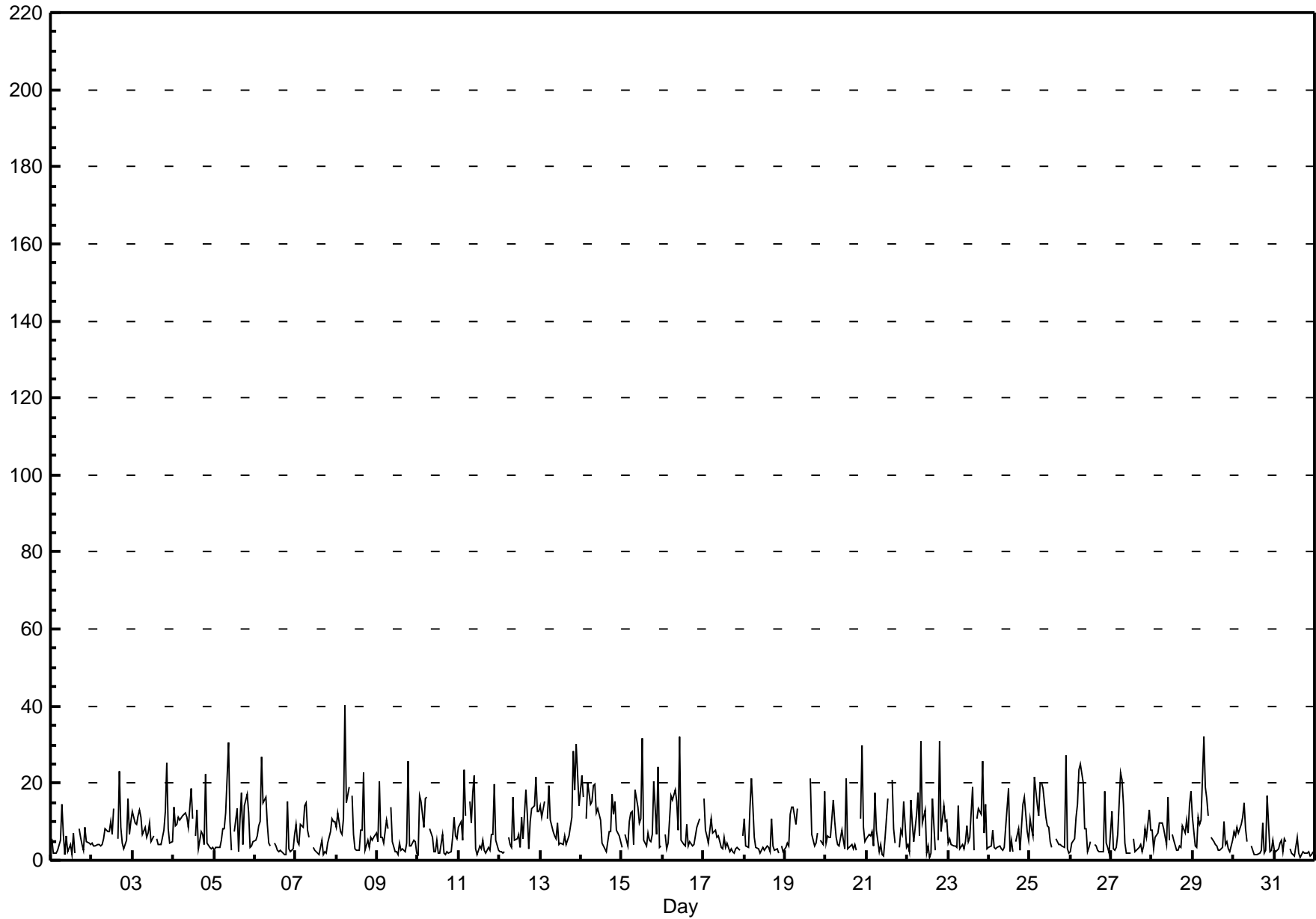
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb Portable Clairmont - August 2014

Maximum Value: 40.4 ppb on Aug 8 06:00		Maximum Daily Average: 11.7 ppb on Aug 13		Hours in Service: 744																							
Minimum Value: 1 ppb on Aug 22 14:00		Minimum Daily Average: 2.6 ppb on Aug 31		Hours of Data: 703																							
Maximum Diurnal Average: 12.6 ppb at hour 6		Minimum Diurnal Average: 4.6 ppb at hour 18		Hours of Missing Data: 41																							
Monthly Average: 7.79 ppb		Percentiles: P ₁ = 1.3 P ₁₀ = 2.2 Q ₁ = 3.3 Median = 5.7 Q ₃ = 10.5 P ₉₀ = 16.2 P ₉₉ = 30.5		Hours of Calibration: 39																							
				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-Aug	5	2	2	2	3	5	15	7	2	6	2	4	1	7	2	A	8	6	4	3	9	5	4	4	4.7	14.7	
2-Aug	5	4	4	4	4	4	4	6	8	8	8	10	7	13	A	6	23	8	5	3	5	16	7	10	7.4	23.3	
3-Aug	13	10	9	12	13	11	7	8	6	7	10	5	6	A	5	4	4	4	8	13	26	8	5	5	8.6	25.5	
4-Aug	14	9	9	11	10	12	12	12	11	9	19	11	A	6	13	3	7	7	4	23	4	3	3	3	9.4	22.5	
5-Aug	3	3	3	3	5	8	8	12	31	10	3	A	7	13	2	11	18	4	14	17	12	3	4	5	8.8	30.7	
6-Aug	5	6	9	10	27	15	17	9	4	4	A	4	4	3	2	3	2	2	2	15	3	2	3	7	6.9	26.7	
7-Aug	9	5	4	9	9	14	15	8	6	A	3	3	2	2	1	5	2	2	2	5	7	11	10	10	6.3	15.0	
8-Aug	9	12	7	7	11	40	15	19	A	17	7	3	3	3	8	8	23	3	5	3	6	5	6	7	9.8	40.4	
9-Aug	5	21	6	6	5	11	8	A	14	5	2	2	2	5	3	3	2	4	26	4	4	5	5	2	6.4	25.6	
10-Aug	2	17	15	8	16	16	A	8	6	2	2	5	2	2	7	2	2	2	2	2	6	11	6	6	6.4	16.8	
11-Aug	9	10	5	24	12	A	15	10	18	22	3	2	4	3	5	3	2	3	3	7	7	20	5	3	8.4	23.5	
12-Aug	2	2	2	2	A	6	4	3	16	5	6	7	3	11	5	18	12	3	10	13	14	21	13	13	8.4	21.5	
13-Aug	14	11	15	A	11	20	11	8	6	6	10	4	5	4	6	4	5	6	11	28	18	30	22	14	11.7	30.1	
14-Aug	22	16	A	11	20	15	15	19	20	12	14	10	5	4	3	2	7	7	17	12	15	8	6	5	11.6	22.1	
15-Aug	3	A	7	4	10	12	13	4	18	14	10	11	32	5	4	7	5	5	7	20	7	24	3	4	10.0	31.8	
16-Aug	A	7	3	4	11	17	16	18	15	8	32	5	4	4	9	4	5	4	4	6	9	10	11	A	9.3	32.1	
17-Aug	16	8	6	4	11	7	8	8	6	6	3	3	6	3	4	2	3	2	2	3	3	3	A	6	5.4	16.0	
18-Aug	11	4	4	14	21	14	6	4	3	2	3	3	3	4	4	2	11	4	2	3	2	A	4	2	5.5	21.2	
19-Aug	3	5	4	12	14	14	9	14	C	C	C	C	C	C	C	21	7	4	5	7	A	5	4	18	--	21.2	
20-Aug	5	6	6	6	16	10	6	4	4	8	5	3	21	3	4	4	3	4	3	A	11	30	8	5	7.6	30.0	
21-Aug	6	7	6	7	4	18	8	2	4	2	1	6	16	M	M	21	8	5	A	3	8	7	15	3	7.4	20.8	
22-Aug	4	2	15	10	5	12	18	6	31	10	13	2	4	1	2	16	3	A	5	31	7	14	10	10	10.0	31.1	
23-Aug	4	5	4	4	4	4	14	3	4	3	5	9	5	6	19	3	A	11	13	12	26	7	15	3	7.9	25.7	
24-Aug	3	4	8	3	3	3	4	3	3	3	9	19	2	5	2	A	5	8	3	9	14	17	7	5	6.2	18.7	
25-Aug	11	8	6	22	14	11	20	20	19	11	9	9	5	4	A	6	5	4	4	4	3	27	3	2	9.9	27.3	
26-Aug	2	4	5	11	15	23	25	20	8	8	2	3	5	A	4	4	3	2	2	2	18	5	3	2	7.8	25.1	
27-Aug	13	3	3	3	7	23	21	15	4	2	2	2	A	6	2	3	3	4	2	4	8	6	13	8	6.8	22.7	
28-Aug	8	3	6	7	10	10	10	8	4	16	5	A	7	5	3	3	4	3	9	7	11	7	14	18	7.7	17.9	
29-Aug	11	4	3	11	9	10	32	19	16	12	A	6	5	4	4	3	3	10	4	5	3	2	5	5	8.1	32.2	
30-Aug	8	6	9	7	9	11	15	8	5	A	4	2	2	1	2	2	3	10	2	3	17	2	3	5	5.8	16.7	
31-Aug	3	2	3	4	5	2	5	5	A	3	2	1	1	6	2	1	2	2	2	2	2	1	2	2	2	2.6	6.1
		7.5	6.9	6.3	8.1	10.4	12.6	12.5	9.7	10.5	7.9	6.8	5.5	6.0	4.9	4.7	5.9	6.3	4.6	6.3	8.9	9.5	10.6	7.2	6.4	Diurnal Average	
		22.1	20.5	15.5	23.5	26.7	40.4	32.2	20.3	31.1	21.8	32.1	18.7	31.8	13.5	18.8	21.2	23.3	10.7	25.6	31.0	25.7	30.1	22.3	17.9	Diurnal Maximum	
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																			

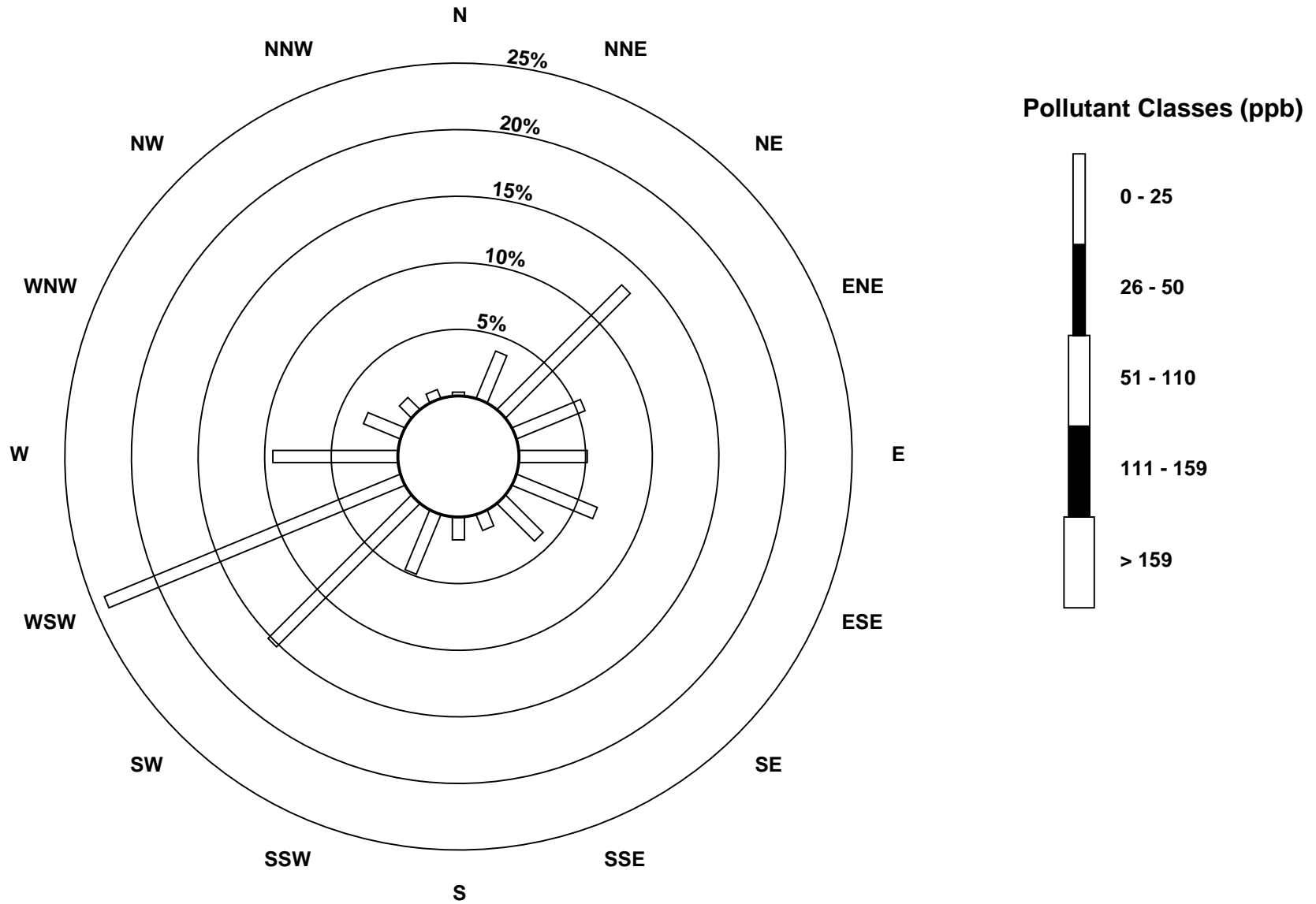
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Portable Clairmont - August 2014



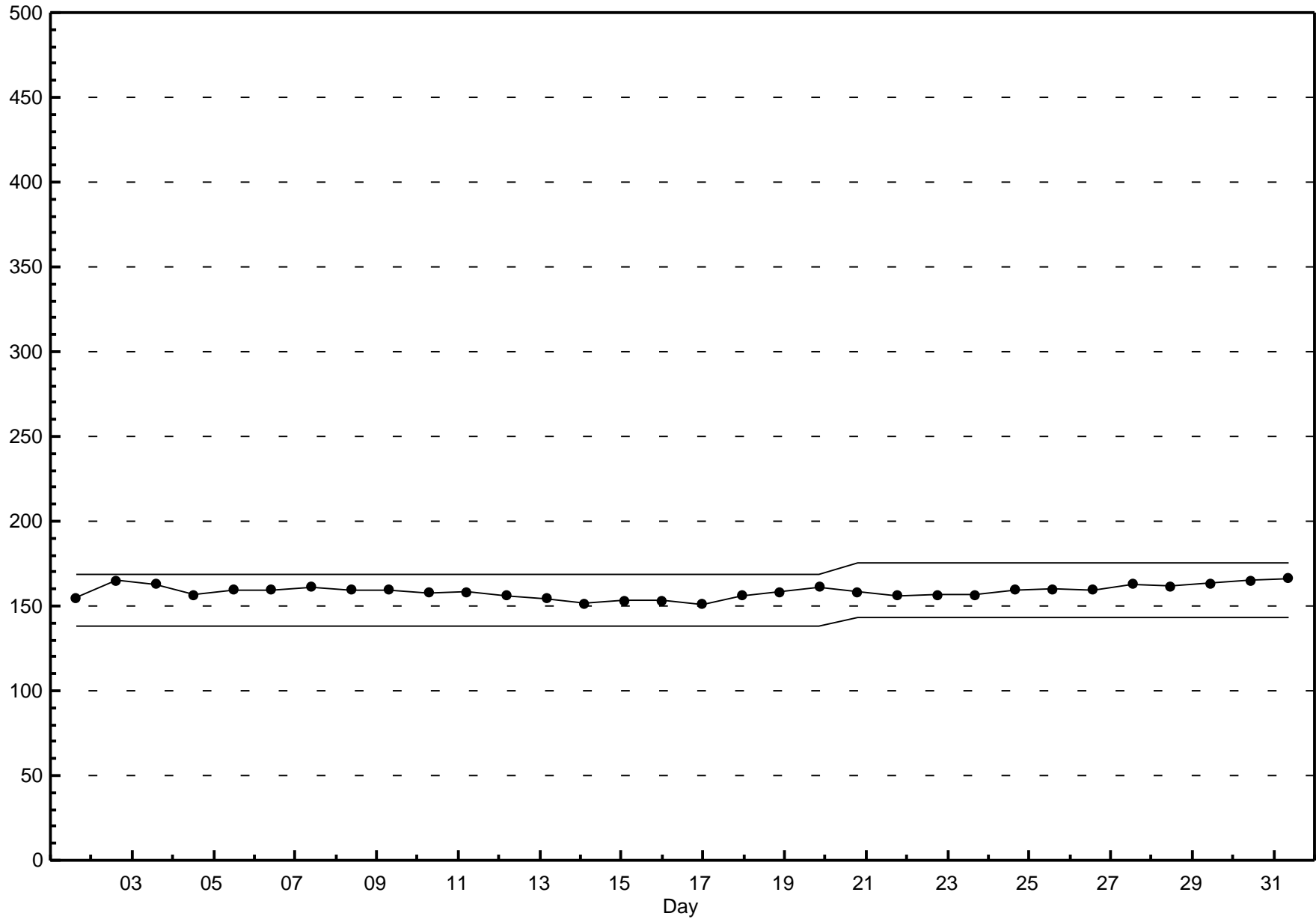
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Portable Clairmont - August 2014



Span Responses

Nitrogen Dioxide (NO₂)
Portable Clairmont - August 2014





Peace Airshed Zone Association

Hourly Averages

Nitrogen Oxide (NO) - ppb

Portable Clairmont - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 22.2 ppb on Aug 14 08:00	Maximum Daily Average: 2.6 ppb on Aug 14		Hours of Data:	703
Minimum Value: 0 ppb on Aug 1 02:00	Minimum Daily Average: 0.2 ppb on Aug 1		Hours of Missing Data:	41
Maximum Diurnal Average: 3.3 ppb at hour 8	Minimum Diurnal Average: 0.2 ppb at hour 24		Hours of Calibration:	39
Monthly Average: 0.80 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.7 P ₉₀ = 1.7 P ₉₉ = 7.6		Percent Operational Time:	99.7

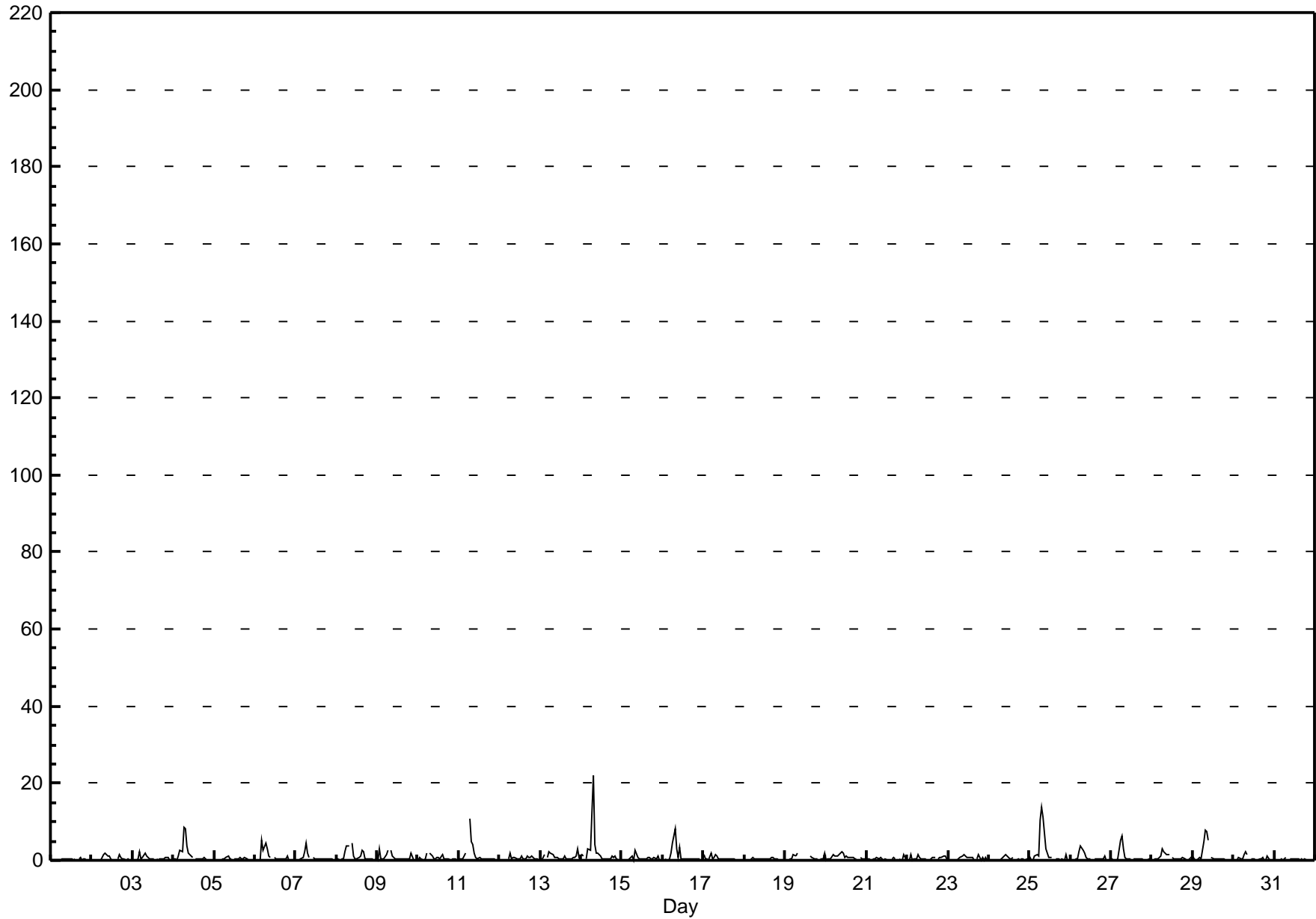
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0.2	0.7
2-Aug	0	0	0	0	0	0	1	2	2	1	1	0	0	0	A	0	1	1	0	0	0	0	0	0	0.5	1.8
3-Aug	0	0	0	0	2	0	1	2	1	1	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0.5	2.4
4-Aug	1	0	0	1	3	2	9	8	4	2	1	1	A	0	0	0	1	0	1	0	0	0	0	0	1.5	8.6
5-Aug	0	0	0	0	0	0	1	1	1	1	0	A	0	0	0	1	1	0	1	0	0	0	0	0	0.3	1.0
6-Aug	0	0	0	0	5	2	4	3	1	1	A	1	1	1	0	0	0	0	0	1	0	0	0	0	1.0	5.3
7-Aug	0	0	0	0	1	2	5	2	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	4.6
8-Aug	0	0	0	0	1	2	4	4	A	A	5	1	0	0	1	1	3	2	1	1	0	0	0	0	1.1	4.5
9-Aug	0	3	0	0	0	2	2	A	A	3	1	1	0	0	1	0	0	0	0	0	2	0	0	0	0.8	3.0
10-Aug	0	1	0	0	0	2	A	A	2	1	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0.5	1.9
11-Aug	0	0	0	1	2	A	A	11	5	4	2	1	0	1	0	0	0	0	0	0	0	0	0	0	1.3	10.7
12-Aug	0	0	0	0	A	0	2	0	1	1	0	0	0	1	0	1	1	1	1	1	0	0	0	0	0.5	1.7
13-Aug	0	0	2	A	1	2	2	2	1	1	1	0	1	0	1	0	0	0	1	1	1	1	3	1	0.9	3.0
14-Aug	2	1	A	1	3	3	13	22	4	2	2	1	0	0	1	0	1	1	1	1	1	0	0	0	2.6	22.2
15-Aug	0	A	0	0	0	1	1	0	3	1	0	1	0	0	0	1	1	0	0	1	1	1	0	0	0.5	2.5
16-Aug	A	0	0	0	0	2	4	8	3	1	3	0	0	0	1	0	1	0	0	0	0	1	0	A	1.2	8.1
17-Aug	2	0	0	0	2	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.7
18-Aug	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	A	0	0	0.3	0.6
19-Aug	0	0	0	1	0	1	1	2	C	C	C	C	C	C	C	1	1	0	0	1	A	0	0	2	--	1.9
20-Aug	0	0	0	0	1	1	1	1	1	2	2	1	1	1	1	1	1	1	0	A	1	0	0	0	0.8	2.3
21-Aug	0	1	0	0	0	0	1	0	1	0	0	0	0	M	M	0	1	0	A	0	0	0	2	0	0.4	1.5
22-Aug	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	1	1	A	0	1	1	1	1	0	0.5	1.5
23-Aug	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	A	0	1	0	1	0	1	0	0.5	1.4
24-Aug	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	A	0	0	0	1	0	0	0	0	0.3	1.4
25-Aug	1	0	0	1	1	1	11	14	11	3	2	1	1	1	A	0	0	0	0	0	0	2	0	0	2.2	13.6
26-Aug	0	0	0	0	0	2	4	3	2	1	0	1	1	A	0	0	0	0	0	0	1	0	0	0	0.7	3.9
27-Aug	1	0	0	0	0	5	6	3	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.9	6.3
28-Aug	0	0	0	0	1	1	3	2	2	2	A	A	1	1	0	0	0	0	1	0	0	0	1	0	0.7	3.1
29-Aug	1	0	0	0	1	0	5	8	7	5	A	1	0	0	0	0	0	0	1	0	0	0	0	0	1.4	7.7
30-Aug	0	0	0	1	0	0	2	2	1	A	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0.5	2.3
31-Aug	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7

0.3	0.3	0.2	0.3	0.9	1.2	3.2	3.3	2.1	1.3	0.8	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.2	Diurnal Average	
1.6	3.0	1.6	1.0	5.3	5.3	12.7	22.2	11.3	5.2	3.3	1.2	1.2	0.9	1.5	2.6	2.2	0.8	1.4	1.1	1.9	1.6	3.0	1.8	Diurnal Maximum	

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

Hourly Averages

Nitrogen Oxide (NO) - ppb
Portable Clairmont - August 2014



Hourly Maximums

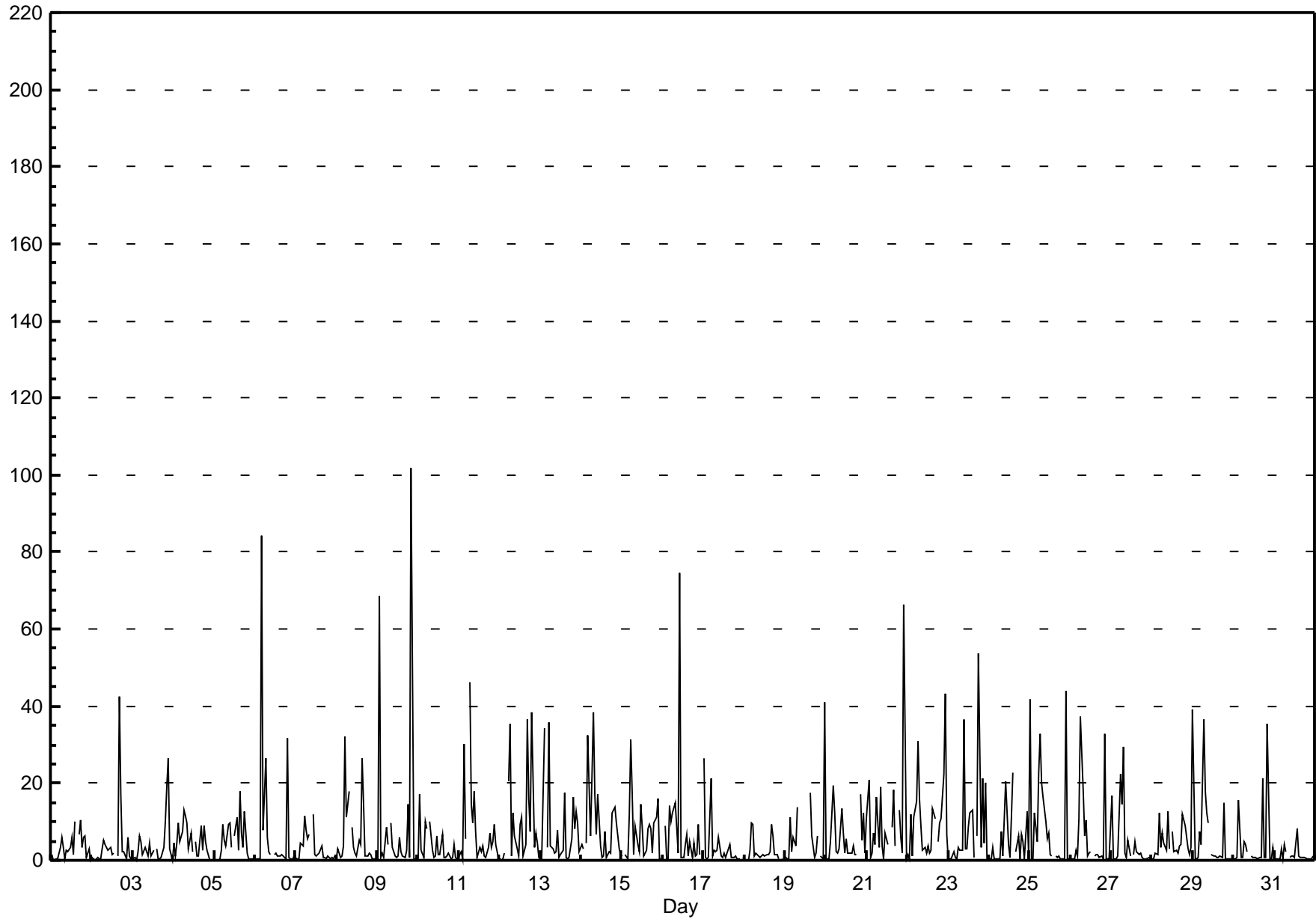
Nitrogen Oxide (NO) - ppb

Portable Clairmont - August 2014

Maximum Value: 101.7 ppb on Aug 9 21:00		Maximum Daily Average: 10.4 ppb on Aug 21		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 4 00:00		Minimum Daily Average: 1.3 ppb on Aug 31		Hours of Data: 703																							
Maximum Diurnal Average: 13.8 ppb at hour 7		Minimum Diurnal Average: 2.3 ppb at hour 3		Hours of Missing Data: 41																							
Monthly Average: 6.17 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.8 Median = 2.2 Q ₃ = 7.3 P ₉₀ = 16.2 P ₉₉ = 42.2		Hours of Calibration: 39																							
				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-Aug	1	0	0	0	0	3	6	3	0	3	2	3	6	2	10	A	7	11	4	6	6	1	3	0	3.4	10.6	
2-Aug	1	0	0	1	0	0	3	5	4	2	3	3	1	2	A	1	43	17	2	2	0	6	1	0	4.4	42.6	
3-Aug	0	1	0	2	6	5	2	3	2	1	5	1	2	A	3	0	0	1	3	10	19	26	3	0	4.3	26.3	
4-Aug	5	1	4	10	5	7	13	11	10	3	7	2	A	5	1	1	9	2	9	5	3	0	0	0	5.0	13.2	
5-Aug	0	0	0	0	3	9	5	4	9	10	3	A	7	11	3	18	7	3	13	2	0	0	0	0	4.7	18.0	
6-Aug	0	0	0	0	84	8	26	6	2	2	A	1	2	1	1	1	1	1	0	32	1	0	0	2	7.6	84.4	
7-Aug	0	0	0	4	4	12	8	5	7	A	12	1	1	1	2	4	1	1	1	1	1	1	0	1	2.9	12.0	
8-Aug	0	3	1	1	4	32	11	18	A	9	3	2	1	5	4	27	15	1	1	2	2	1	1	1	6.2	32.2	
9-Aug	0	68	1	2	1	8	4	A	18	10	3	1	1	1	6	2	1	1	3	15	1	102	0	0	10.1	101.7	
10-Aug	0	17	3	1	10	8	A	10	10	2	1	1	6	1	2	7	1	1	1	2	0	1	4	1	0	3.5	17.1
11-Aug	1	2	0	30	5	A	46	14	10	18	8	1	3	2	4	1	1	4	7	3	5	9	4	0	7.8	46.2	
12-Aug	0	0	0	2	A	20	35	1	12	6	3	1	9	11	1	4	37	16	8	38	3	7	4	1	9.7	38.3	
13-Aug	1	0	34	A	3	36	4	3	2	2	8	1	2	3	17	1	1	1	6	16	8	13	10	2	7.5	35.8	
14-Aug	4	3	A	4	32	6	22	38	17	7	17	4	1	1	7	1	2	2	12	13	14	10	3	1	9.7	38.3	
15-Aug	1	A	2	0	12	31	17	1	9	4	2	14	8	1	3	8	9	8	2	10	11	16	0	0	7.5	31.4	
16-Aug	A	9	0	0	14	10	12	15	9	2	75	1	1	4	7	1	5	1	5	1	2	9	2	A	8.3	74.5	
17-Aug	27	1	0	1	21	1	3	2	3	6	1	1	2	1	2	4	1	1	1	1	0	0	A	1	3.5	26.7	
18-Aug	0	0	0	3	10	9	1	2	1	1	1	2	1	1	1	2	9	6	1	1	0	A	0	0	2.4	9.7	
19-Aug	1	0	0	11	2	6	4	14	C	C	C	C	C	C	C	18	6	1	2	6	A	1	1	41	--	40.8	
20-Aug	1	0	1	5	19	12	2	2	3	14	7	2	5	2	2	2	4	2	1	A	17	5	12	2	5.3	19.3	
21-Aug	11	21	1	2	7	4	16	3	19	4	0	7	4	M	M	9	18	4	A	13	6	2	66	1	10.4	66.3	
22-Aug	1	0	12	1	11	15	31	16	9	3	3	2	4	2	3	13	11	A	5	10	11	22	43	7	10.2	43.4	
23-Aug	0	0	0	2	1	0	3	3	3	37	3	3	8	12	13	1	A	6	54	3	21	4	20	0	8.7	53.9	
24-Aug	0	0	3	0	0	0	0	7	1	10	20	4	1	11	23	A	2	6	0	7	5	0	13	2	5.1	22.6	
25-Aug	42	0	0	12	5	23	33	20	17	10	5	7	2	1	A	1	1	1	0	0	0	44	0	0	9.8	44.1	
26-Aug	0	0	0	3	1	11	37	18	6	11	1	2	2	A	1	1	1	1	1	1	33	0	0	0	5.7	37.2	
27-Aug	17	0	0	0	1	23	15	30	2	1	5	1	A	2	5	2	2	2	1	1	0	0	1	0	4.8	29.6	
28-Aug	0	0	2	1	12	3	7	5	2	13	3	A	7	2	2	2	4	4	12	9	6	3	1	3	4.6	12.7	
29-Aug	39	0	0	1	8	4	36	18	12	10	A	1	1	1	1	1	1	1	15	1	0	0	0	0	6.6	39.0	
30-Aug	0	0	1	16	1	1	5	4	2	A	1	1	1	1	0	1	1	1	21	1	1	35	0	0	3	4.2	35.2
31-Aug	0	0	0	0	3	0	4	2	A	1	1	1	1	8	1	1	1	1	1	0	0	0	0	1	1.3	8.2	
		5.2	4.4	2.3	3.9	9.5	10.3	13.8	9.5	6.6	6.8	7.3	2.8	3.1	3.7	4.7	4.4	6.7	4.3	6.1	6.5	10.5	6.3	6.4	2.4	Diurnal Average	
		41.8	68.5	34.4	30.4	84.4	35.8	46.2	38.3	19.0	36.7	74.5	14.4	9.4	12.2	22.6	26.6	42.6	21.3	53.9	38.3	101.7	44.1	66.3	40.8	Diurnal Maximum	
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																			

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Portable Clairmont - August 2014





Peace Airshed Zone Association

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
 Portable Clairmont - August 2014

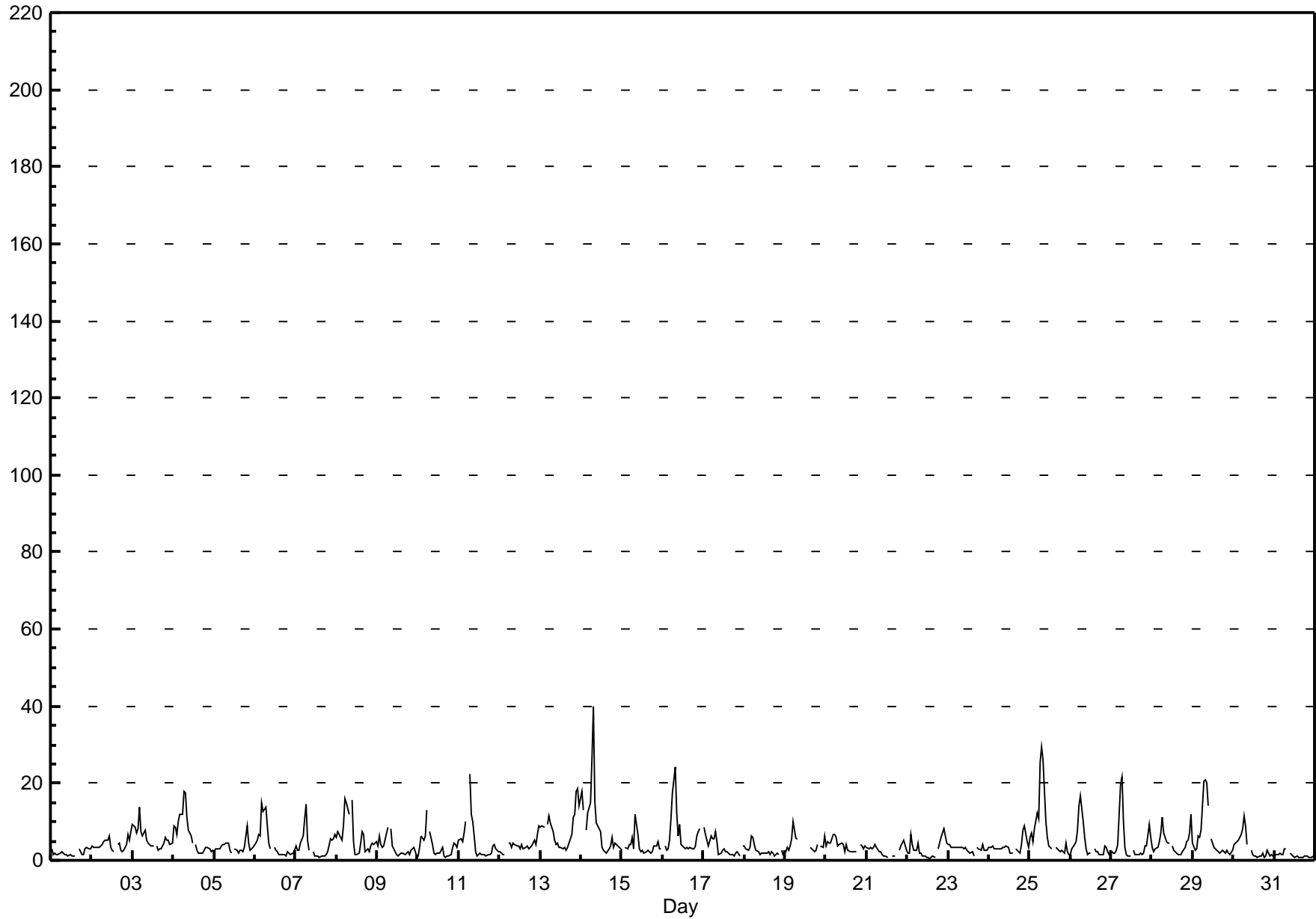
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 39.8 ppb on Aug 14 08:00	Maximum Daily Average: 9.3 ppb on Aug 14
Minimum Value: 0 ppb on Aug 22 14:00	Hours of Data: 703
Maximum Diurnal Average: 10.6 ppb at hour 7	Hours of Missing Data: 41
Monthly Average: 4.46 ppb	Hours of Calibration: 39
Minimum Daily Average: 1.3 ppb on Aug 31	Percent Operational Time: 99.7
Minimum Diurnal Average: 2.2 ppb at hour 18	
Percentiles: P ₁ = 0.8 P ₁₀ = 1.3 Q ₁ = 2.0 Median = 3.2 Q ₃ = 5.1 P ₉₀ = 8.9 P ₉₉ = 21.6	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	A	3	2	2	2	3	4	3	3	2.0	3.5
2-Aug	4	3	4	3	3	4	4	5	5	5	6	3	2	2	A	4	5	3	2	2	4	7	5	7	4.1	7.4
3-Aug	9	9	7	8	14	7	6	8	5	5	4	4	4	A	4	3	3	3	4	6	5	5	4	4	5.7	13.8
4-Aug	9	9	7	10	12	12	18	17	11	8	6	4	A	4	3	2	2	2	3	3	3	3	2	3	6.7	17.8
5-Aug	2	3	3	3	4	4	4	4	5	3	2	A	3	3	2	3	3	2	3	9	5	3	3	3	3.4	9.0
6-Aug	4	5	7	6	15	13	14	9	5	3	A	4	2	2	2	2	1	1	1	2	2	1	2	3	4.6	15.0
7-Aug	4	3	3	4	6	11	15	5	2	A	2	1	1	1	1	1	1	1	2	5	5	5	7	3.9	14.6	
8-Aug	6	8	6	5	9	16	15	12	A	16	5	1	2	2	5	8	7	2	3	2	4	4	4	5	6.4	16.1
9-Aug	4	6	4	3	4	7	9	A	8	4	2	2	1	2	2	2	1	2	2	2	3	3	2	1	3.3	8.7
10-Aug	1	3	6	5	6	13	A	7	4	2	2	2	2	2	3	1	1	1	1	1	3	4	4	3	3.5	12.9
11-Aug	5	6	5	7	10	A	23	12	10	6	2	1	2	1	2	1	1	1	1	2	4	4	3	2	4.9	22.5
12-Aug	2	2	2	2	A	5	4	3	4	4	4	4	3	4	3	3	4	3	3	4	5	4	7	9	3.8	9.0
13-Aug	8	9	9	A	9	11	10	8	5	4	4	3	4	3	3	2	3	5	7	11	12	18	19	14	7.9	18.7
14-Aug	18	13	A	8	12	15	26	40	15	10	9	7	3	3	2	2	3	4	6	4	5	4	4	3	9.3	39.8
15-Aug	3	A	3	3	4	4	6	3	12	7	3	2	2	2	2	3	2	2	2	4	4	5	3	3	3.7	12.0
16-Aug	A	4	3	3	5	11	18	24	12	6	9	4	3	3	3	3	3	3	3	4	6	7	8	A	6.7	24.3
17-Aug	9	7	5	4	7	5	6	7	5	2	2	3	3	2	2	1	1	1	1	2	2	1	A	4	3.6	8.5
18-Aug	4	3	3	3	6	6	4	3	2	2	2	2	2	2	2	2	2	2	1	2	1	A	3	2	2.6	6.3
19-Aug	2	3	3	4	6	10	6	5	C	C	C	C	C	C	C	3	3	2	3	4	A	4	3	6	--	10.0
20-Aug	4	5	4	4	7	7	6	4	4	4	4	2	4	3	2	2	2	2	2	A	4	4	3	4	3.8	6.8
21-Aug	3	3	3	3	3	4	3	2	2	2	1	1	1	M	M	1	1	1	A	2	4	4	5	3	2.6	5.2
22-Aug	2	2	7	4	3	3	4	2	2	1	1	1	1	0	1	1	1	A	3	5	6	8	6	4	3.0	8.2
23-Aug	4	4	4	3	3	3	3	3	3	3	3	3	2	2	2	1	A	3	3	3	4	3	3	3	3.0	4.3
24-Aug	3	3	4	3	3	3	3	3	3	4	4	3	2	2	2	A	3	2	2	4	8	9	5	3	3.5	8.9
25-Aug	6	7	5	8	12	11	25	29	26	10	6	4	3	3	A	3	3	3	2	3	2	4	2	2	7.8	29.3
26-Aug	2	3	4	5	8	14	17	10	6	3	2	2	2	A	3	2	2	2	2	2	4	3	2	1	4.3	17.0
27-Aug	2	2	2	3	4	20	22	10	3	2	1	1	A	2	2	2	2	2	2	2	4	4	9	6	4.6	21.8
28-Aug	3	2	3	3	5	7	11	7	5	5	A	4	3	2	1	1	1	2	3	5	5	7	12	4.5	11.9	
29-Aug	4	3	3	6	6	8	21	21	20	14	A	5	4	3	3	2	2	2	2	2	3	2	2	3	6.1	20.8
30-Aug	4	5	5	5	7	8	12	9	4	A	3	2	1	1	1	1	1	2	1	1	3	1	2	1	3.4	11.5
31-Aug	1	2	2	2	2	2	3	3	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.1
	4.5	4.5	4.1	4.5	6.6	8.2	10.6	9.3	6.9	4.8	3.5	2.6	2.3	2.2	2.2	2.2	2.3	2.2	2.4	3.2	4.1	4.5	4.4	4.2	Diurnal Average	
	17.8	13.0	8.6	10.1	15.0	19.8	26.5	39.8	26.2	15.7	9.3	7.4	4.0	4.1	4.6	7.5	6.8	4.6	6.7	11.2	11.8	18.1	18.7	14.0	Diurnal Maximum	

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

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
Portable Clairmont - August 2014



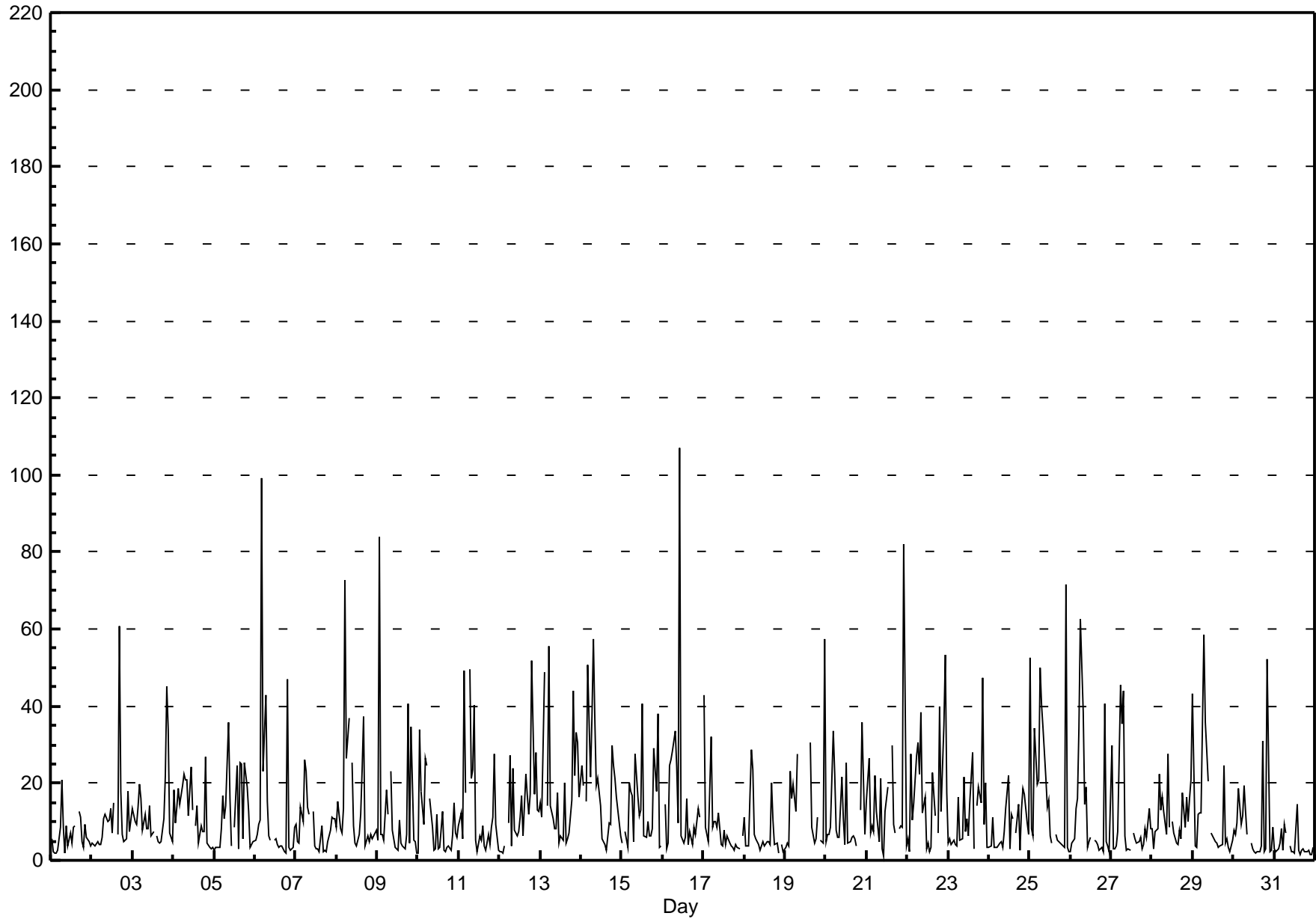
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb Portable Clairmont - August 2014

Maximum Value: 107.1 ppb on Aug 16 11:00		Maximum Daily Average: 20.1 ppb on Aug 14		Hours in Service: 744																						
Minimum Value: 1 ppb on Aug 21 11:00		Minimum Daily Average: 3.8 ppb on Aug 31		Hours of Data: 703																						
Maximum Diurnal Average: 23.3 ppb at hour 7		Minimum Diurnal Average: 7.6 ppb at hour 12		Hours of Missing Data: 41																						
Monthly Average: 12.63 ppb		Percentiles: P ₁ = 1.8 P ₁₀ = 3.0 Q ₁ = 4.3 Median = 7.8 Q ₃ = 16.2 P ₉₀ = 28.1 P ₉₉ = 57.9		Hours of Calibration: 39																						
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-Aug	6	2	2	2	3	9	21	9	2	9	4	7	5	9	9	A	13	11	5	3	9	6	5	4	6.6	21.0
2-Aug	5	4	4	5	4	4	6	11	12	10	10	13	7	15	A	7	61	18	7	5	6	18	7	10	10.8	60.9
3-Aug	13	10	9	14	20	16	8	12	8	8	14	6	7	A	6	5	5	5	11	22	45	34	7	5	12.6	45.0
4-Aug	18	10	14	19	15	19	22	21	21	11	24	13	A	9	14	4	9	8	7	27	4	3	3	3	13.0	26.9
5-Aug	3	3	3	3	8	17	11	14	36	16	4	A	8	25	3	25	25	6	25	19	13	3	4	5	12.2	35.6
6-Aug	5	7	9	11	99	23	43	15	6	5	A	5	6	4	3	4	4	2	2	47	3	3	3	8	13.9	99.4
7-Aug	9	5	4	14	10	26	23	14	12	A	13	4	3	3	2	9	2	3	2	5	8	11	11	11	8.9	26.2
8-Aug	9	15	8	7	13	73	27	37	A	25	9	5	4	7	12	24	37	4	6	5	7	6	6	8	15.3	72.9
9-Aug	5	84	7	7	5	18	12	A	23	8	3	3	3	11	4	4	3	7	41	4	35	5	5	2	13.0	84.0
10-Aug	2	34	18	9	26	25	A	16	9	3	3	12	3	3	13	3	2	3	4	3	7	15	7	6	9.8	34.1
11-Aug	9	12	6	49	17	A	50	21	23	40	5	2	6	5	9	4	3	7	4	9	11	28	9	3	14.5	49.5
12-Aug	2	2	2	4	A	10	27	4	24	8	6	7	11	17	6	23	17	12	17	52	17	28	13	13	14.0	51.9
13-Aug	15	11	49	A	14	56	14	11	8	8	18	5	6	5	20	5	6	7	16	44	22	33	30	16	18.2	55.6
14-Aug	25	19	A	15	51	22	37	58	37	20	21	14	5	5	4	3	10	9	30	25	21	16	10	6	20.1	57.5
15-Aug	4	A	7	4	20	18	17	5	27	16	12	13	41	6	6	10	6	6	8	29	18	38	3	4	13.9	40.6
16-Aug	A	15	3	4	25	26	28	34	24	10	107	6	4	6	16	4	7	4	9	7	10	13	11	A	17.0	107.1
17-Aug	43	8	7	5	32	8	10	10	9	12	4	4	8	4	6	4	4	3	3	4	3	3	A	6	8.8	42.9
18-Aug	11	4	4	17	29	23	7	5	4	3	4	5	4	5	5	4	20	10	4	4	2	A	4	2	7.8	28.7
19-Aug	3	5	4	23	16	20	13	28	C	C	C	C	C	C	C	30	9	5	5	11	A	5	4	57	--	57.4
20-Aug	5	7	7	9	34	22	8	6	6	22	11	4	25	5	5	6	6	6	4	A	13	36	21	7	11.8	35.9
21-Aug	15	26	7	9	8	22	13	5	21	3	1	13	19	M	M	30	9	7	A	8	9	9	82	4	15.2	81.9
22-Aug	5	2	28	10	15	27	31	23	38	12	16	3	5	2	3	23	12	A	7	40	13	35	53	17	18.3	53.4
23-Aug	4	6	4	5	4	4	16	5	5	22	7	11	6	15	28	3	A	14	19	15	47	9	20	3	11.9	47.2
24-Aug	4	4	11	3	3	3	4	5	4	8	14	22	3	12	11	A	7	15	3	13	19	17	10	7	8.7	21.9
25-Aug	53	8	6	34	20	21	50	40	34	21	14	16	6	5	A	7	5	5	4	4	4	72	3	2	18.9	71.6
26-Aug	2	5	6	13	16	34	63	38	14	19	4	5	6	A	5	5	4	3	3	2	41	5	4	2	13.0	62.6
27-Aug	30	3	3	4	7	45	35	44	6	2	3	3	A	7	6	4	5	6	3	4	8	6	14	8	11.2	45.5
28-Aug	8	3	7	8	22	13	16	13	7	28	9	A	10	7	5	4	8	5	17	9	16	10	16	21	11.4	27.5
29-Aug	43	4	3	12	12	12	58	36	28	20	A	7	6	5	4	3	4	25	4	5	3	2	5	5	13.4	58.4
30-Aug	8	7	10	19	10	11	20	13	7	A	5	3	2	2	2	2	4	31	2	3	52	2	3	9	9.7	52.1
31-Aug	3	2	3	5	8	3	9	7	A	4	2	2	2	14	3	1	2	3	2	2	3	1	2	3	3.8	14.4
		12.3	10.9	8.5	11.4	18.9	21.0	23.3	18.6	16.3	13.3	12.4	7.6	7.9	7.9	7.8	8.9	10.2	7.6	9.9	14.3	15.7	15.8	12.4	8.6	Diurnal Average
		52.7	84.0	48.9	49.1	99.4	72.9	62.6	57.5	38.4	40.1	107.1	21.9	40.6	24.6	28.1	30.5	60.9	31.0	40.5	51.9	52.1	71.6	81.9	57.4	Diurnal Maximum
C - Calibration		M - Maintenance						A - Automated Daily Zero Span																		

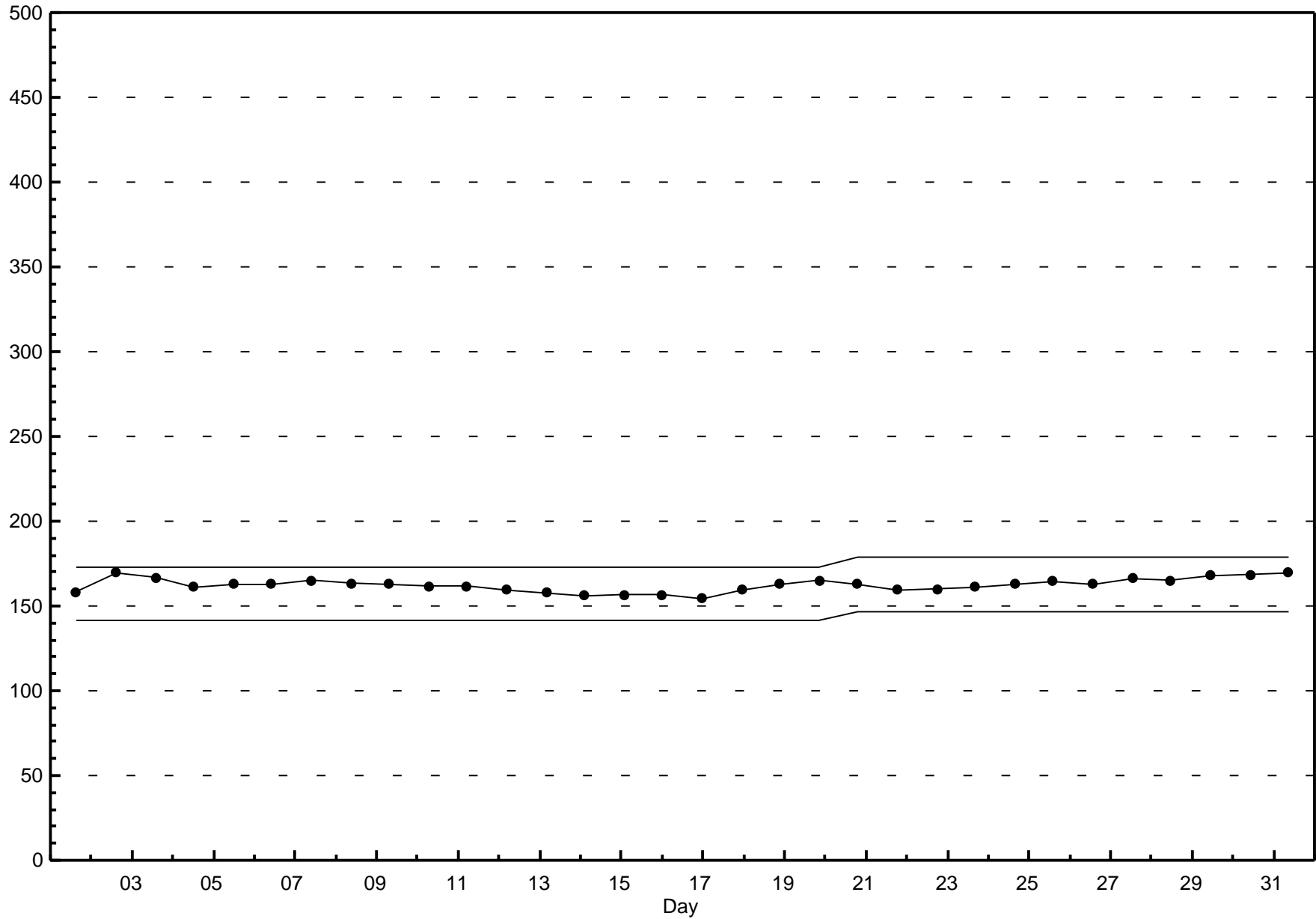
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Portable Clairmont - August 2014



Span Responses

Oxides of Nitrogen (NO_x)
Portable Clairmont - August 2014





Hourly Averages

Ozone (O₃) - ppb

Peace Airshed Zone Association

Portable Clairmont - August 2014

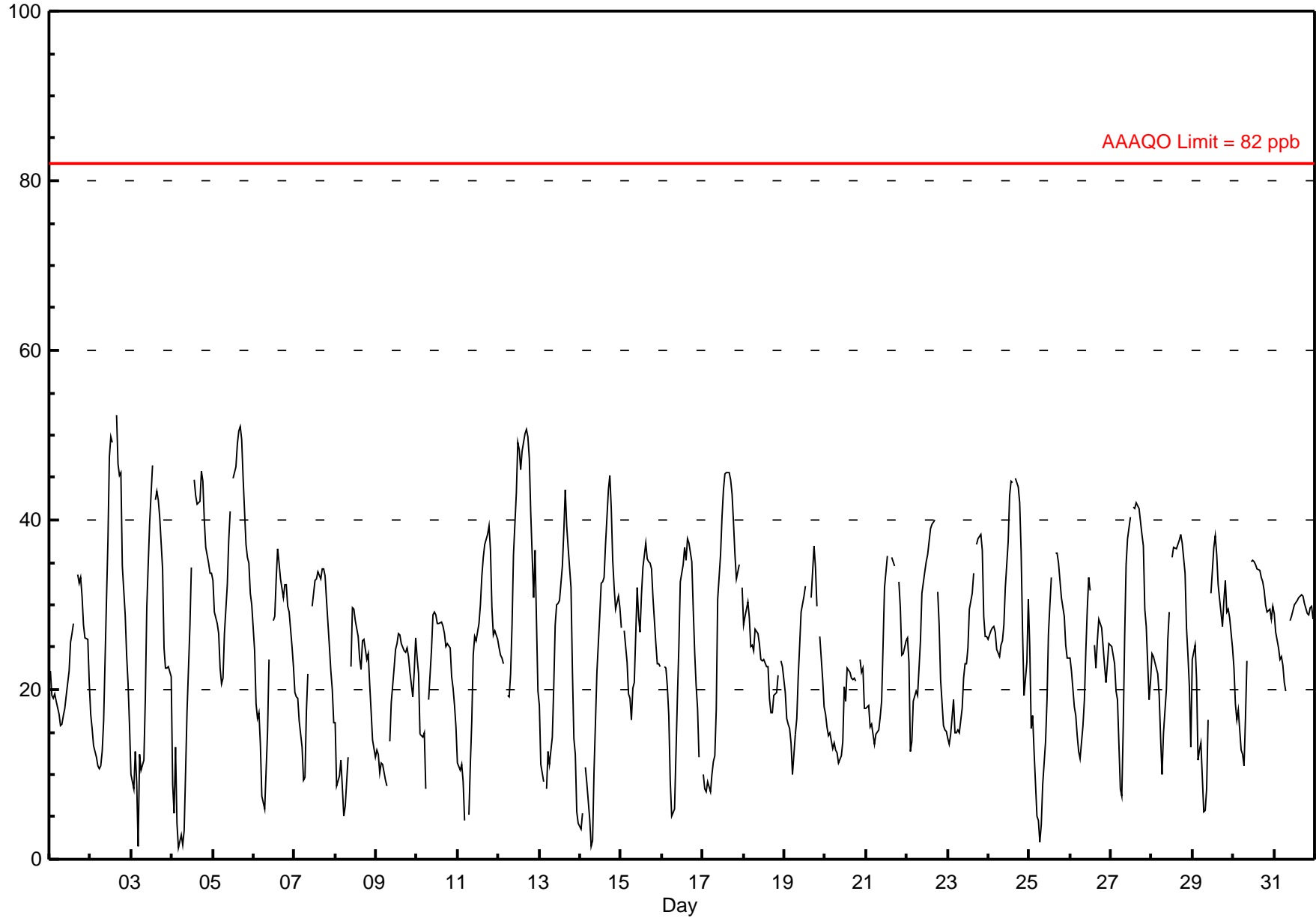
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 52.4 ppb on Aug 2 16:00	Maximum Daily Average: 35.8 ppb on Aug 5		Hours of Data:	707
Minimum Value: 1 ppb on Aug 4 05:00	Minimum Daily Average: 17.7 ppb on Aug 20		Hours of Missing Data:	37
Maximum Diurnal Average: 35.8 ppb at hour 17	Minimum Diurnal Average: 11.8 ppb at hour 7		Hours of Calibration:	35
Monthly Average: 25.01 ppb	Percentiles: P ₁ = 3.2 P ₁₀ = 11.2 Q ₁ = 17.2 Median = 25.0 Q ₃ = 32.4 P ₉₀ = 38.4 P ₉₉ = 49.7		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-Aug	22	19	19	20	19	17	16	16	17	18	19	22	26	27	28	A	34	33	33	31	28	26	26	21	23.2	33.6
2-Aug	17	15	13	12	11	11	11	13	16	31	38	48	50	49	A	52	47	45	46	35	29	24	21	16	28.2	52.4
3-Aug	10	8	13	9	1	12	11	12	19	30	35	40	46	A	42	43	42	40	34	25	22	23	23	22	24.5	46.4
4-Aug	9	5	13	4	1	3	2	3	10	17	28	34	A	45	43	42	42	46	45	40	37	35	34	34	24.9	45.8
5-Aug	33	29	28	27	23	21	21	27	32	38	41	A	45	46	49	50	51	49	45	37	36	35	31	30	35.8	51.1
6-Aug	25	18	17	17	14	7	6	10	15	24	A	28	29	33	37	35	33	31	32	32	30	29	25	23	23.9	36.7
7-Aug	20	19	19	16	13	9	10	17	22	A	30	31	33	33	34	33	34	34	33	31	25	22	20	16	24.1	34.2
8-Aug	16	9	10	12	9	5	6	12	A	23	30	30	28	26	24	22	26	26	24	24	21	18	14	12	18.5	29.7
9-Aug	13	12	10	11	11	9	9	A	14	18	23	25	25	27	26	25	25	24	25	24	22	19	22	26	19.4	26.6
10-Aug	24	22	15	14	15	8	A	19	25	29	29	29	28	28	28	27	27	25	25	25	21	20	18	16	22.5	29.1
11-Aug	11	10	11	9	5	A	5	11	16	24	26	26	28	30	33	36	37	38	39	37	30	26	27	26	23.6	39.3
12-Aug	25	24	24	23	A	19	19	22	28	36	43	49	48	46	48	50	51	50	47	41	31	37	28	20	35.1	50.8
13-Aug	18	11	9	A	8	13	11	14	20	28	30	30	31	35	39	44	39	37	32	22	14	12	6	4	22.1	43.6
14-Aug	4	5	A	11	9	5	1	2	10	16	22	29	33	33	33	37	44	45	41	35	32	29	31	30	23.4	45.3
15-Aug	27	A	27	23	20	19	16	20	21	32	29	27	31	34	37	35	35	35	34	31	25	23	23	23	27.3	37.3
16-Aug	A	23	23	20	17	9	5	6	13	19	25	33	35	37	35	38	37	35	29	24	21	18	12	A	23.3	37.8
17-Aug	10	8	8	9	8	10	11	12	18	31	36	40	43	45	46	46	45	43	40	36	33	35	A	32	28.0	45.6
18-Aug	28	29	30	29	25	25	25	27	27	26	24	23	24	23	23	19	17	17	19	20	22	A	23	23	23.7	30.3
19-Aug	20	17	16	15	14	10	15	17	22	25	29	31	32	C	C	C	31	37	34	30	A	26	21	18	23.0	37.0
20-Aug	17	16	15	15	13	14	13	13	11	12	14	20	19	23	22	21	21	21	21	A	24	22	23	18	17.7	23.5
21-Aug	18	18	16	16	15	14	15	15	17	19	25	32	36	M	M	36	35	35	A	33	30	24	24	26	23.6	35.7
22-Aug	26	23	13	14	19	20	19	23	26	31	34	35	36	37	39	40	40	A	32	28	21	16	15	15	26.1	40.0
23-Aug	14	14	15	19	15	15	15	15	18	21	23	23	25	30	31	34	A	37	38	38	36	29	26	26	24.2	38.4
24-Aug	26	27	27	28	27	25	24	25	26	28	32	37	43	45	44	A	45	44	42	36	27	19	23	31	31.8	45.0
25-Aug	25	15	17	13	5	5	2	4	9	14	19	27	30	33	A	36	36	35	33	31	29	25	24	24	21.3	36.1
26-Aug	24	22	18	17	15	13	12	16	19	25	30	33	32	A	25	23	26	28	27	25	23	21	23	25	22.6	33.2
27-Aug	25	24	23	20	19	8	7	16	26	35	38	40	A	42	41	42	41	40	38	37	29	28	19	21	28.7	42.0
28-Aug	24	24	23	22	19	14	10	15	20	26	29	A	36	37	37	37	38	38	37	34	27	24	20	13	26.3	38.4
29-Aug	24	25	21	12	13	14	6	6	8	16	A	31	37	38	36	32	31	27	30	33	29	29	28	25	24.0	38.1
30-Aug	23	18	16	18	13	12	11	17	23	A	35	35	35	35	34	34	33	33	32	30	29	29	28	30	26.3	35.2
31-Aug	29	27	25	23	24	23	21	20	A	28	29	29	30	31	31	31	31	31	30	29	29	30	30	28	27.8	31.3
	20.2	18.0	17.8	16.6	13.9	13.0	11.8	14.8	18.9	24.7	29.1	31.7	33.5	35.0	35.0	35.8	35.8	35.4	34.0	31.1	27.0	25.1	23.0	22.4	Diurnal Average	
	32.9	29.2	30.3	28.5	26.8	25.3	24.5	27.1	32.3	37.7	43.2	49.2	49.9	49.1	49.0	52.4	51.1	49.8	47.3	40.8	36.8	36.5	33.7	33.8	Diurnal Maximum	

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

Hourly Averages

Ozone (O₃) - ppb
Portable Clairmont - August 2014



Hourly Maximums

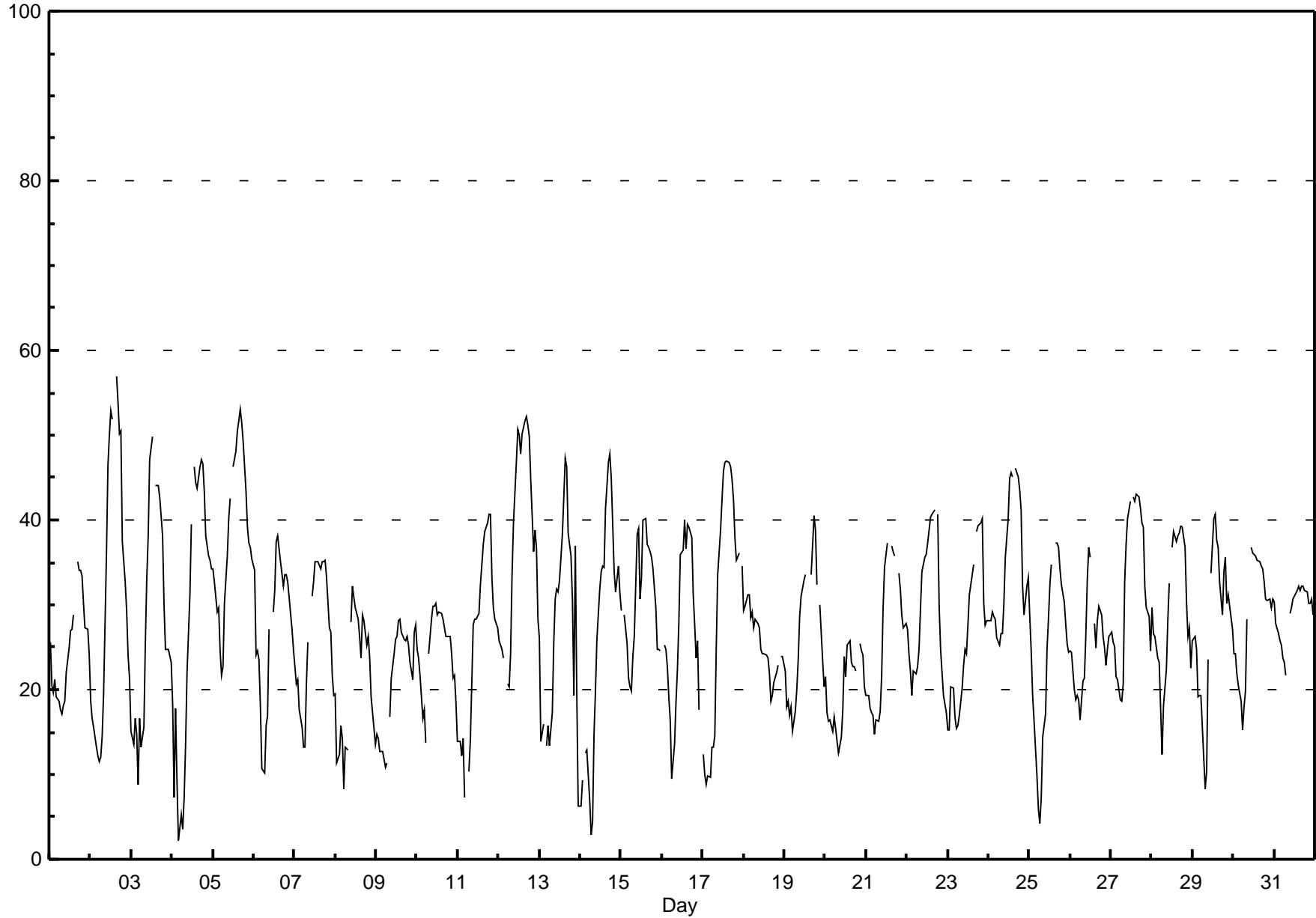
Ozone (O₃) - ppb

Portable Clairmont - August 2014

Maximum Value: 56.9 ppb on Aug 2 16:00		Maximum Daily Average: 38.5 ppb on Aug 5		Hours in Service: 744																						
Minimum Value: 2 ppb on Aug 4 05:00		Minimum Daily Average: 20.0 ppb on Aug 20		Hours of Data: 707																						
Maximum Diurnal Average: 37.9 ppb at hour 17		Minimum Diurnal Average: 15.0 ppb at hour 7		Hours of Missing Data: 37																						
Monthly Average: 27.72 ppb		Percentiles: P ₁ = 6.2 P ₁₀ = 14.6 Q ₁ = 20.4 Median = 27.3 Q ₃ = 34.7 P ₉₀ = 40.7 P ₉₉ = 51.6		Hours of Calibration: 35																						
				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-Aug	26	20	20	21	19	19	18	17	18	19	22	25	27	27	29	A	35	34	34	33	30	27	27	24	24.9	35.2
2-Aug	19	17	16	13	12	11	12	15	20	36	46	50	53	52	A	57	54	50	50	38	33	29	24	21	31.7	56.9
3-Aug	15	14	17	15	9	17	13	16	25	33	38	47	50	A	44	44	44	43	38	30	25	25	23	28.2	49.8	
4-Aug	18	7	18	9	2	5	4	7	14	22	31	39	A	46	44	44	46	47	47	43	38	36	35	34	27.7	47.2
5-Aug	34	33	29	30	25	22	23	30	36	40	42	A	46	48	51	52	53	52	49	43	39	37	37	35	38.5	53.0
6-Aug	34	24	25	24	18	11	10	16	17	27	A	29	32	37	38	37	35	32	34	34	33	31	27	25	27.3	38.1
7-Aug	23	21	21	18	16	13	13	21	26	A	31	33	35	35	35	34	35	35	35	33	27	27	22	19	26.4	35.2
8-Aug	19	11	12	16	14	8	13	13	A	28	32	31	30	28	26	24	29	28	25	26	24	19	17	13	21.3	32.3
9-Aug	15	14	13	13	13	11	11	A	17	21	24	26	26	28	28	27	26	26	26	25	23	21	27	28	21.3	28.2
10-Aug	25	24	22	17	18	14	A	24	28	30	30	30	29	29	29	28	27	26	26	26	24	21	22	18	24.7	30.2
11-Aug	14	14	12	14	7	A	10	14	21	28	28	28	29	32	35	37	39	40	41	41	33	30	28	27	26.2	40.7
12-Aug	26	25	25	24	A	21	20	24	33	40	47	51	50	48	50	52	52	51	50	45	36	39	37	28	37.9	52.2
13-Aug	26	14	16	A	13	16	13	17	25	31	32	31	33	38	43	47	46	38	36	30	19	37	20	6	27.4	47.3
14-Aug	6	9	A	13	13	7	3	4	15	20	26	32	34	35	34	41	47	48	45	39	34	32	35	31	26.2	47.8
15-Aug	29	A	29	25	21	20	20	24	26	38	39	31	33	40	40	37	37	36	36	34	30	25	25	24	30.4	40.1
16-Aug	A	25	25	23	19	16	9	14	18	22	28	36	37	40	37	40	39	38	31	28	24	26	18	A	26.9	39.9
17-Aug	12	10	9	10	10	13	13	15	25	34	39	42	46	47	47	47	46	45	42	38	35	36	A	35	30.2	46.9
18-Aug	29	30	31	31	28	29	27	28	28	27	25	24	24	24	22	19	19	21	22	23	A	24	24	24	25.4	31.2
19-Aug	22	18	19	17	18	15	18	20	24	29	31	33	34	C	C	C	34	41	39	32	A	30	23	20	25.7	40.6
20-Aug	22	17	16	16	15	17	15	14	13	14	18	24	22	25	26	23	23	23	22	A	25	25	24	20	20.0	25.8
21-Aug	19	19	18	17	17	15	16	16	18	22	29	34	37	M	M	37	36	36	A	34	32	29	27	28	25.6	37.2
22-Aug	27	24	22	19	22	22	23	25	29	34	36	36	37	39	40	41	41	A	41	30	25	19	18	17	29.0	41.2
23-Aug	15	15	20	20	17	15	16	17	20	23	25	24	28	31	34	35	A	39	39	40	40	30	28	28	26.0	40.1
24-Aug	28	28	29	29	28	26	25	27	27	30	36	40	45	46	45	A	46	45	43	41	32	29	32	33	34.4	46.1
25-Aug	29	25	19	16	10	6	4	7	14	17	25	28	32	35	A	37	37	37	34	32	30	28	25	24	24.1	37.3
26-Aug	25	24	20	19	19	19	16	21	21	26	33	37	36	A	28	25	28	30	29	26	25	23	25	26	25.3	36.8
27-Aug	27	26	25	22	21	19	19	21	33	37	40	42	A	43	42	43	43	41	40	39	32	30	29	25	32.0	43.0
28-Aug	30	27	26	24	23	18	12	18	22	28	33	A	37	39	37	38	38	39	39	37	30	26	27	23	29.2	39.4
29-Aug	26	26	25	19	19	19	12	8	10	24	A	34	40	41	38	37	33	29	34	36	30	31	30	27	27.2	40.6
30-Aug	24	24	22	21	19	15	18	20	28	A	37	36	36	36	35	35	35	34	33	31	31	31	30	31	28.7	36.7
31-Aug	30	28	27	26	25	24	23	22	A	29	30	31	31	32	32	32	32	32	32	32	30	30	31	29	29.0	32.2
		23.1	20.5	20.9	19.3	17.1	16.1	15.0	17.8	22.5	27.9	32.1	34.0	35.4	37.0	36.7	37.5	37.9	37.1	36.4	33.9	29.8	28.6	26.6	25.0	Diurnal Average
		34.2	32.7	31.2	31.2	28.4	29.1	27.3	30.1	35.8	40.2	46.7	50.7	52.9	51.9	50.5	56.9	54.0	51.5	50.5	44.8	40.1	38.8	36.8	35.4	Diurnal Maximum
C - Calibration		M - Maintenance					A - Automated Daily Zero Span																			

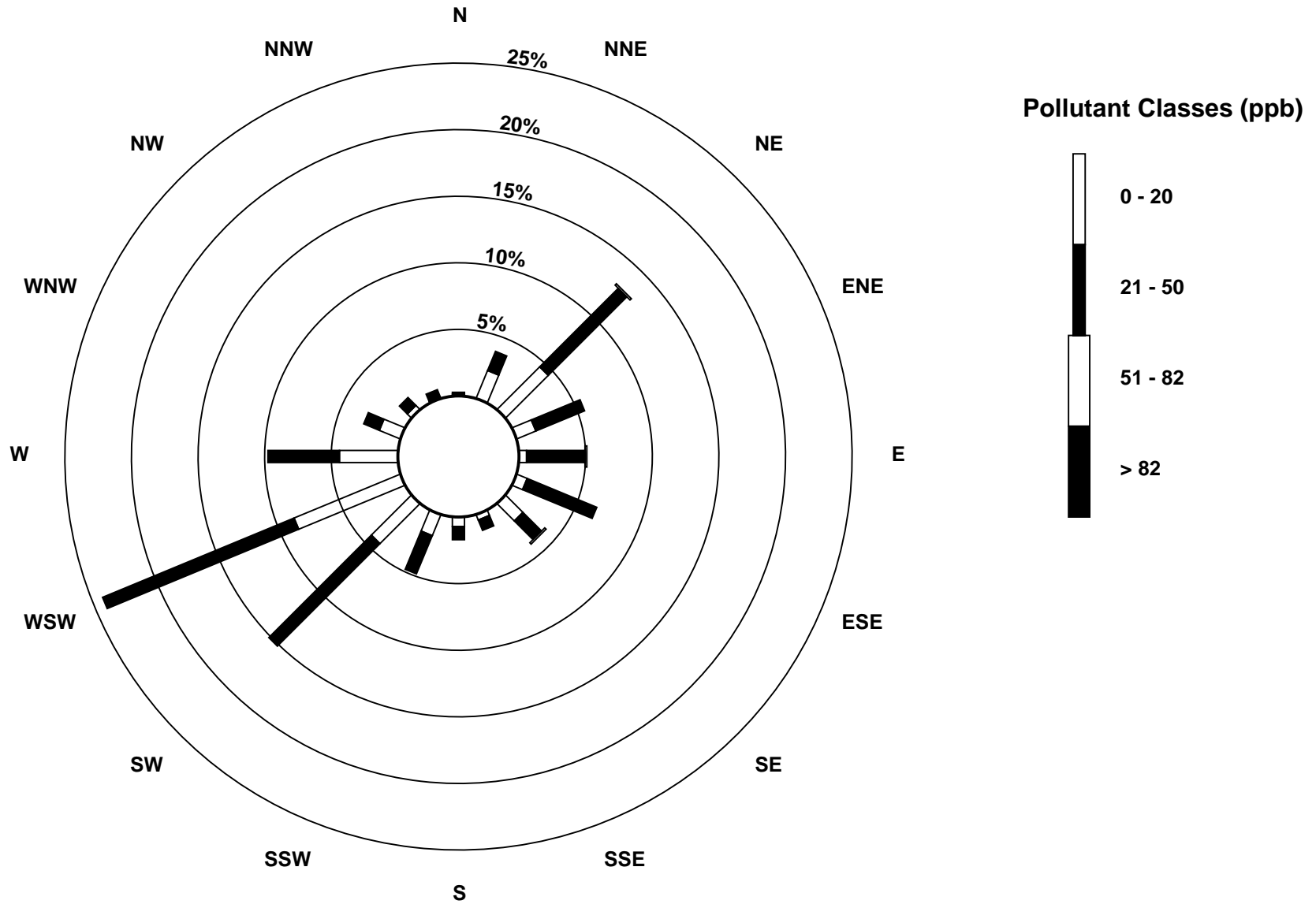
Hourly Maximums

Ozone (O₃) - ppb
Portable Clairmont - August 2014



Pollutant Rose

Ozone (O₃) - ppb
Portable Clairmont - August 2014



Eight Hour Running Averages

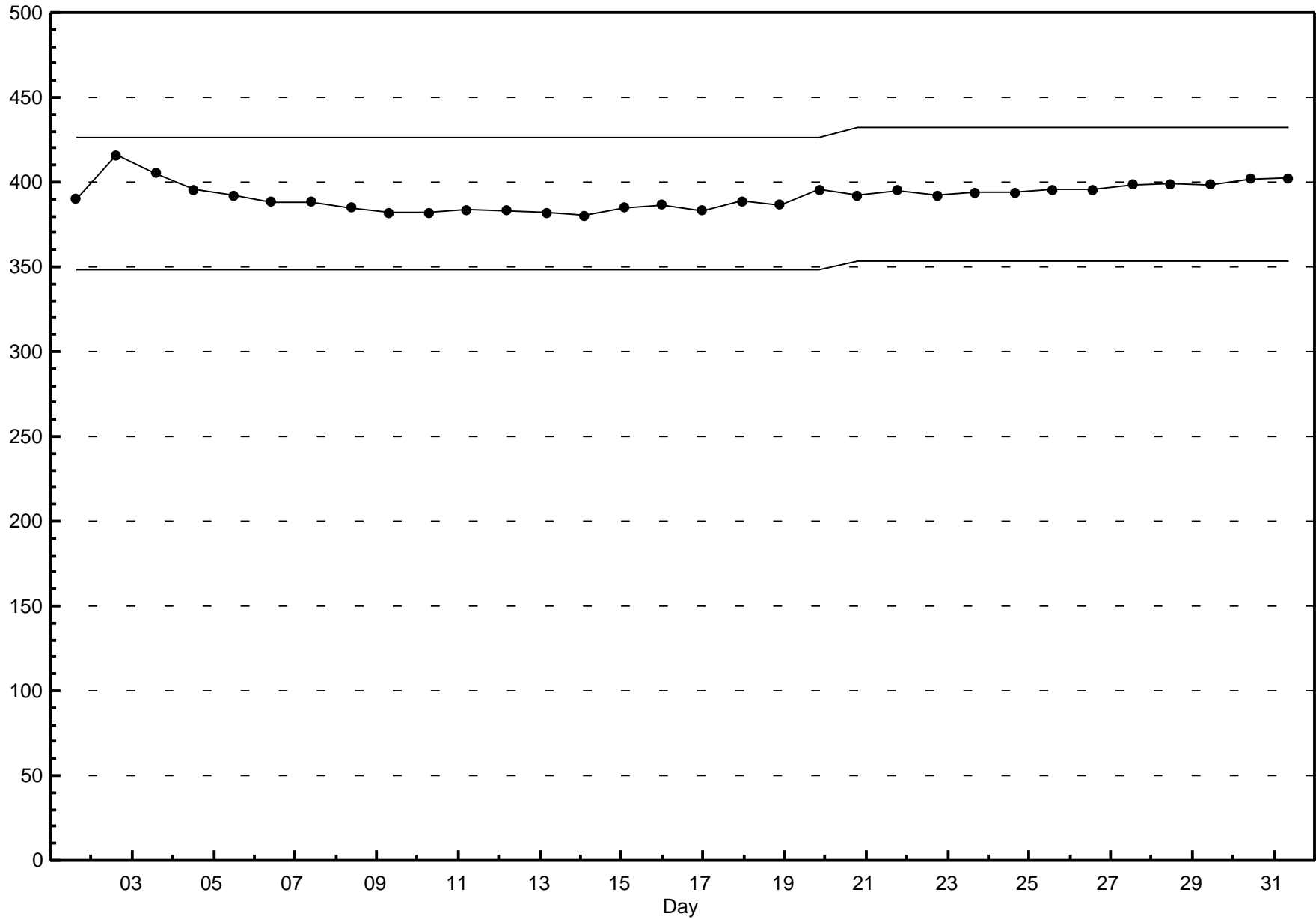
Ozone (O₃) - ppb

Portable Clairmont - August 2014

Maximum Value: 48.7 ppb on Aug 12 19:00																					Hours in Service:	744			
Minimum Value: 5.1 ppb on Aug 4 08:00																					Hours of Data:	734			
Percentiles: P ₁ = 7.3 P ₁₀ = 13.8 Q ₁ = 18.4 Median = 24.8 Q ₃ = 31.0 P ₉₀ = 36.4 P ₉₉ = 46.5																					Hours of Missing Data:	10			
																					Hours of Calibration:	7			
																					Percent Operational Time:	99.6			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	32	29	26	24	22	21	20	18	18	18	18	18	19	20	22	22	25	27	29	30	30	30	30	29	32.0
2-Aug	27	25	22	20	18	16	14	13	13	15	18	22	27	32	35	40	45	47	48	46	43	40	37	33	48.1
3-Aug	28	23	19	16	13	11	10	10	11	13	16	20	26	27	32	36	40	41	41	39	36	34	32	29	41.3
4-Aug	25	20	18	15	12	10	7	5	5	7	9	12	14	20	26	31	36	40	42	43	42	41	40	39	43.2
5-Aug	38	36	34	32	30	28	27	26	26	27	29	29	32	36	40	43	46	47	48	47	45	44	42	39	48.0
6-Aug	36	32	29	26	23	20	17	14	13	14	13	15	17	21	25	29	31	32	32	33	33	32	31	29	36.0
7-Aug	28	26	25	23	21	18	16	15	16	15	17	19	22	25	29	31	33	33	33	33	32	31	29	27	33.3
8-Aug	25	22	19	16	14	12	10	10	9	11	14	16	19	22	25	26	26	26	25	24	23	22	20	20	26.4
9-Aug	19	17	16	14	13	12	11	11	11	12	14	16	18	20	23	23	24	25	25	25	25	24	23	23	25.3
10-Aug	23	23	22	21	20	18	18	17	17	18	20	22	24	27	27	28	28	28	27	27	26	25	24	22	28.0
11-Aug	20	18	17	15	13	11	10	9	10	12	14	16	20	21	24	27	30	32	33	35	35	35	34	33	35.0
12-Aug	31	29	27	26	25	24	23	22	23	24	27	31	33	36	40	44	46	48	49	48	45	44	42	38	48.7
13-Aug	34	29	24	22	19	15	13	12	12	15	18	19	22	25	28	32	34	35	36	35	33	30	26	21	35.7
14-Aug	16	12	10	8	7	6	6	5	6	8	10	12	15	18	22	27	31	34	37	38	38	37	37	36	37.6
15-Aug	34	32	30	29	27	25	23	22	21	22	22	23	24	26	29	31	33	33	34	34	33	32	30	29	34.1
16-Aug	28	26	24	23	22	20	17	15	14	14	14	16	18	22	25	29	32	34	35	34	32	30	27	25	34.9
17-Aug	21	17	14	12	10	9	9	10	11	13	17	21	25	30	34	38	41	43	43	43	42	40	40	38	43.5
18-Aug	35	33	32	31	30	28	28	27	27	26	25	25	25	24	23	22	21	21	20	20	20	20	20	20	35.2
19-Aug	21	20	20	19	18	17	16	15	16	17	18	20	23	24	26	N	N	N	N	N	N	N	30	28	29.9
20-Aug	26	23	20	18	18	16	15	14	14	13	13	14	14	16	17	18	19	20	21	21	22	22	22	21	26.2
21-Aug	21	20	20	19	18	17	16	16	16	16	17	19	22	23	24	27	30	33	N	N	N	32	31	29	33.0
22-Aug	28	27	25	22	21	21	20	20	20	21	23	26	28	30	33	35	37	37	37	36	34	31	27	24	37.3
23-Aug	20	19	17	16	15	15	15	15	16	17	18	18	19	21	23	26	27	29	31	33	35	35	34	33	34.9
24-Aug	32	31	30	28	27	26	26	26	26	26	27	28	30	32	35	36	39	41	43	43	40	37	34	33	42.9
25-Aug	31	27	24	21	19	17	14	11	9	9	9	10	14	17	19	24	28	31	33	33	33	32	31	29	33.4
26-Aug	28	26	25	23	21	19	18	17	16	17	18	20	22	24	26	27	28	28	28	27	25	25	24	25	28.1
27-Aug	25	24	24	23	23	21	19	18	18	19	21	24	24	29	34	38	40	41	41	40	39	37	34	32	40.7
28-Aug	29	28	26	24	22	21	20	19	18	19	19	19	21	25	28	32	34	36	37	37	36	34	32	29	37.1
29-Aug	27	26	24	21	19	18	16	15	13	12	11	13	17	20	25	28	32	33	33	33	32	31	30	29	33.2
30-Aug	28	27	25	23	21	19	17	16	16	16	18	21	24	27	31	33	35	34	34	33	32	32	31	31	34.5
31-Aug	30	29	28	28	27	26	25	24	23	23	24	25	26	27	28	30	30	30	31	30	30	30	30	30	30.5
37.8 35.7 33.7 32.0 30.2 28.4 27.8 27.1 27.0 27.0 28.6 30.9 33.1 36.4 40.0 43.5 46.4 48.2 48.7 47.6 45.5 44.3 41.9 39.3																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Portable Clairmont - August 2014



Hourly Averages

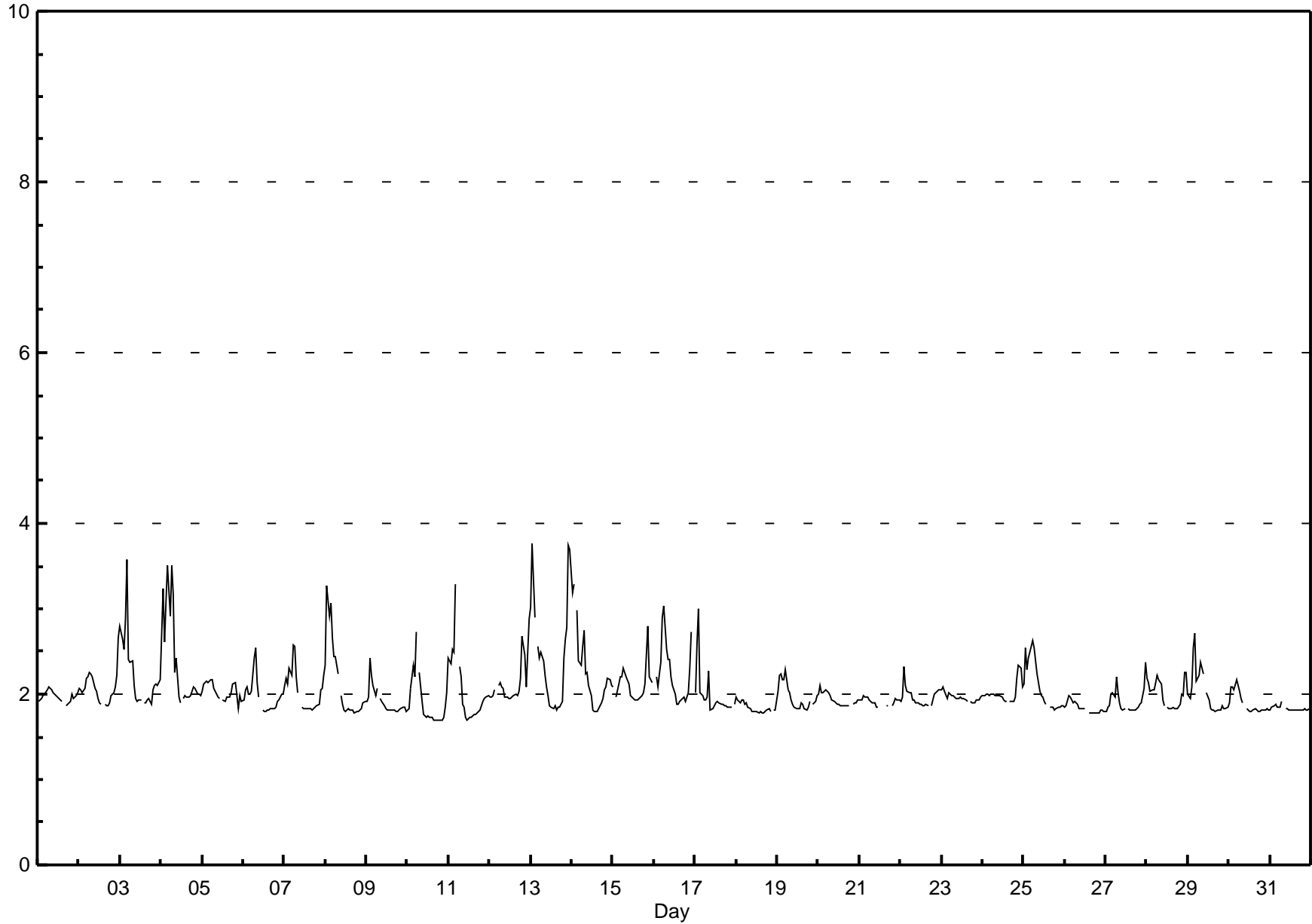
Total Hydrocarbons (THC) - ppm

Portable Clairmont - August 2014

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.77 ppm on Aug 13 02:00 Maximum Daily Average: 2.43 ppm on Aug 13		Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0																																														
Minimum Value: 1.7 ppm on Aug 10 18:00 Maximum Diurnal Average: 2.29 ppm at hour 5 Monthly Average: 2.033 ppm		Minimum Daily Average: 1.83 ppm on Aug 31 Minimum Diurnal Average: 1.85 ppm at hour 16 Percentiles: P ₁ = 1.72 P ₁₀ = 1.81 Q ₁ = 1.85 Median = 1.95 Q ₃ = 2.09 P ₉₀ = 2.38 P ₉₉ = 3.16																																														
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-Aug	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.97	2.08																						
2-Aug	2.1	2.1	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.2	2.7	2.07	2.66																						
3-Aug	2.8	2.7	2.5	2.9	3.6	2.4	2.4	2.4	2.1	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.2	2.24	3.58																							
4-Aug	2.7	3.2	2.6	3.1	3.5	2.9	3.5	3.2	2.3	2.4	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.40	3.50																							
5-Aug	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.1	2.0	2.0	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.0	1.8	2.0	1.9	2.03	2.18																						
6-Aug	1.9	2.0	2.1	2.0	2.0	2.0	2.4	2.5	2.1	2.0	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	1.97	2.55																							
7-Aug	2.1	2.2	2.1	2.3	2.2	2.6	2.6	2.2	2.0	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.1	2.1	2.2	2.04	2.58																						
8-Aug	2.3	3.3	2.9	3.1	2.7	2.4	2.4	2.2	A	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.13	3.26																							
9-Aug	1.9	2.0	2.4	2.2	2.1	2.0	2.1	A	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.91	2.42																							
10-Aug	1.8	1.8	2.1	2.3	2.2	2.7	A	2.3	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	2.0	1.88	2.72																							
11-Aug	2.4	2.3	2.5	2.5	3.3	A	2.3	2.2	1.9	1.8	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.0	2.03	3.28																						
12-Aug	2.0	2.0	2.0	2.0	A	2.1	2.1	2.1	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.7	2.5	2.1	2.5	2.9	2.13	2.88																						
13-Aug	3.0	3.8	2.9	A	2.6	2.4	2.5	2.4	2.2	2.1	2.0	1.9	1.8	1.8	1.9	1.8	1.8	1.9	1.9	2.4	2.6	2.8	3.7	3.7	2.43	3.77																						
14-Aug	3.2	3.3	A	3.0	2.4	2.3	2.6	2.7	2.2	2.3	2.1	2.0	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.1	2.1	2.2	2.2	2.1	2.24	3.29																						
15-Aug	2.1	A	2.0	2.1	2.2	2.2	2.3	2.3	2.2	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.8	2.2	2.2	2.1	2.11	2.79																							
16-Aug	A	2.2	2.1	2.2	2.4	2.9	3.0	2.5	2.4	2.4	2.2	2.1	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.3	2.7	A	2.23	3.04																						
17-Aug	2.0	2.6	3.0	2.0	2.0	1.9	1.9	2.0	2.3	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.8	A	1.9	1.99	3.00																						
18-Aug	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.84	1.97																						
19-Aug	2.0	2.2	2.2	2.2	2.2	2.3	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.9	A	1.9	1.9	2.0	1.97	2.29																						
20-Aug	2.0	2.1	2.0	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.93	2.09																						
21-Aug	1.9	1.9	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	C	C	C	C	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.92	1.98																						
22-Aug	1.9	2.0	2.3	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.1	2.1	1.96	2.33																					
23-Aug	2.0	2.1	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.96	2.09																						
24-Aug	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	2.2	2.3	2.3	2.1	2.01	2.34																						
25-Aug	2.1	2.5	2.3	2.4	2.6	2.6	2.5	2.4	2.2	2.0	2.0	2.0	1.9	1.9	A	1.9	1.8	1.8	1.8	1.8	1.9	1.8	1.9	1.9	2.09	2.63																						
26-Aug	1.8	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.84	1.99																						
27-Aug	1.8	1.8	1.9	2.0	2.0	2.0	2.2	2.0	1.9	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.1	2.4	1.91	2.37																						
28-Aug	2.2	2.1	2.0	2.1	2.0	2.1	2.2	2.2	2.1	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.3	2.2	2.00	2.26																						
29-Aug	2.0	2.0	2.1	2.5	2.7	2.2	2.2	2.4	2.3	2.2	A	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	2.02	2.70																						
30-Aug	1.9	2.1	2.1	2.0	2.2	2.1	2.0	1.9	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.90	2.18																						
31-Aug	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.83	1.91																						
																								2.13	2.26	2.20	2.23	2.29	2.21	2.25	2.19	2.06	1.99	1.91	1.88	1.87	1.86	1.86	1.85	1.85	1.86	1.88	1.94	1.99	1.99	2.08	2.10	Diurnal Average
																								3.19	3.77	3.00	3.08	3.58	2.92	3.50	3.16	2.40	2.42	2.20	2.11	2.00	1.97	1.98	2.00	1.99	2.03	2.19	2.68	2.79	2.77	3.74	3.70	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

Hourly Averages

Total Hydrocarbons (THC) - ppm
Portable Clairmont - August 2014



Hourly Maximums

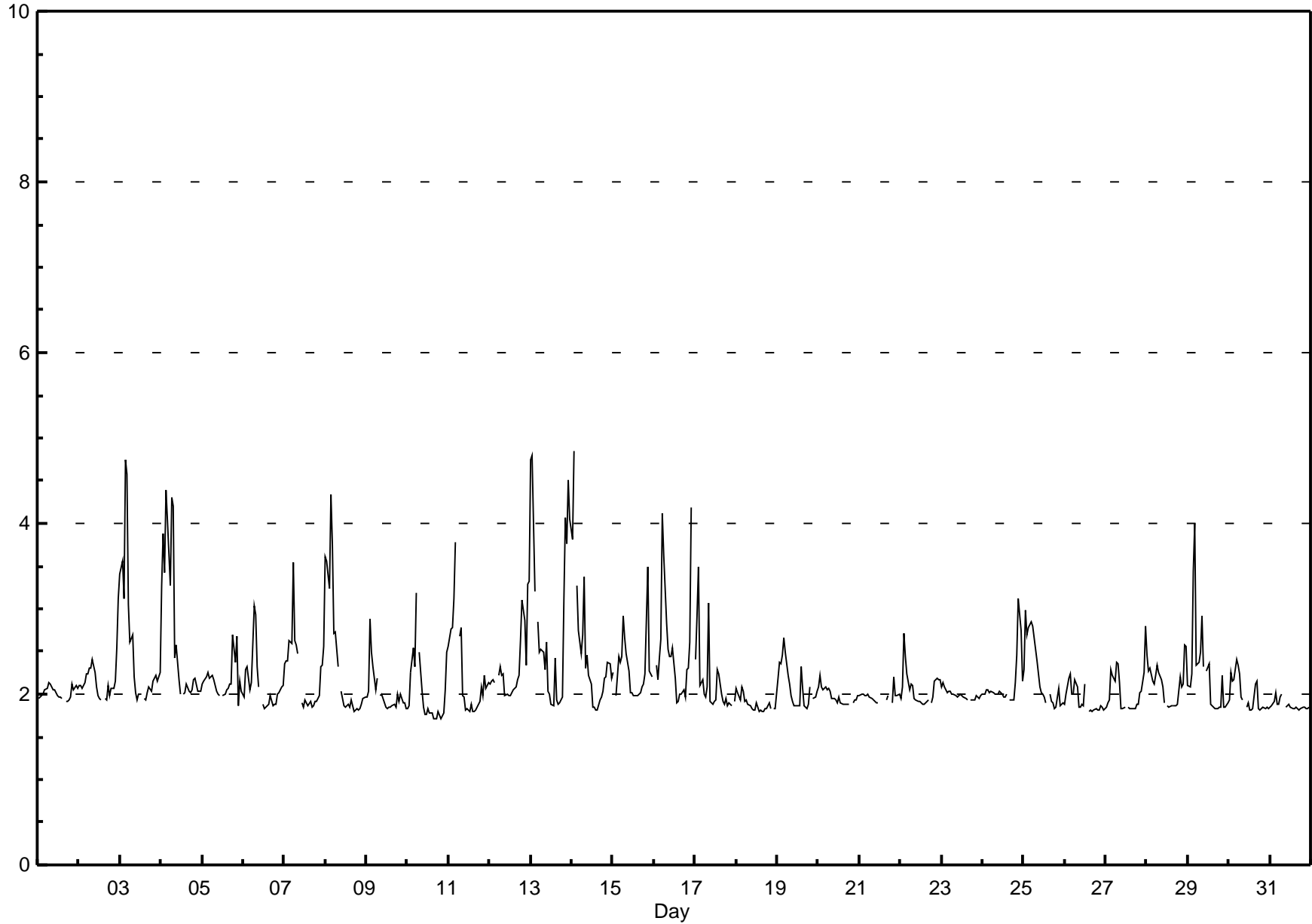
Total Hydrocarbons (THC) - ppm

Portable Clairmont - August 2014

Maximum Value: 4.85 ppm on Aug 14 02:00		Maximum Daily Average: 2.84 ppm on Aug 13		Hours in Service: 744																							
Minimum Value: 1.7 ppm on Aug 10 18:00		Minimum Daily Average: 1.87 ppm on Aug 31		Hours of Data: 708																							
Maximum Diurnal Average: 2.58 ppm at hour 4		Minimum Diurnal Average: 1.91 ppm at hour 14		Hours of Missing Data: 36																							
Monthly Average: 2.185 ppm		Percentiles: P ₁ = 1.77 P ₁₀ = 1.84 Q ₁ = 1.89 Median = 2.01 Q ₃ = 2.24 P ₉₀ = 2.70 P ₉₉ = 4.33		Hours of Calibration: 36																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.02	2.13	
2-Aug	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.2	2.1	2.0	2.0	1.9	A	1.9	1.9	2.1	2.0	2.1	2.1	2.2	2.5	3.1	2.17	3.12	
3-Aug	3.4	3.6	3.1	4.7	4.6	3.1	2.6	2.7	2.2	2.0	1.9	2.0	2.0	A	1.9	1.9	2.0	2.1	2.0	2.2	2.2	2.2	2.2	2.2	2.56	4.74	
4-Aug	3.3	3.9	3.4	4.4	4.0	3.3	4.3	4.2	2.4	2.6	2.2	2.0	A	2.0	2.0	2.1	2.0	2.0	2.1	2.2	2.2	2.0	2.0	2.0	2.73	4.39	
5-Aug	2.1	2.1	2.2	2.3	2.2	2.2	2.2	2.2	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.7	2.4	2.7	1.9	2.1	2.0	2.16	2.70	
6-Aug	2.0	2.3	2.3	2.2	2.1	2.1	3.0	2.9	2.3	2.1	A	1.9	1.8	1.8	1.9	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.11	3.04	
7-Aug	2.4	2.4	2.4	2.6	2.6	3.5	2.6	2.6	2.5	A	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	2.0	2.3	2.3	2.6	2.25	3.54	
8-Aug	3.6	3.6	3.2	4.3	3.7	2.7	2.3	A	2.0	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.37	4.35	
9-Aug	2.0	2.0	2.9	2.5	2.3	2.0	2.2	A	2.0	2.0	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.8	2.0	1.9	2.0	1.9	1.8	1.8	2.01	2.88	
10-Aug	1.8	1.9	2.3	2.5	2.3	3.2	A	2.5	2.0	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.8	1.7	1.7	1.8	2.1	2.5	2.00	3.19		
11-Aug	2.6	2.8	2.8	3.1	3.8	A	2.7	2.8	2.0	2.0	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.9	2.1	2.0	2.2	2.1	2.1	2.23	3.78	
12-Aug	2.1	2.2	2.2	2.1	A	2.2	2.3	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.6	3.1	2.9	2.3	3.3	3.3	2.33	3.33	
13-Aug	4.7	4.8	3.2	A	2.8	2.5	2.5	2.5	2.3	2.6	2.0	2.0	1.9	1.9	2.4	1.9	1.9	1.9	2.0	3.1	4.1	3.8	4.5	4.1	2.84	4.80	
14-Aug	3.8	4.9	A	3.3	2.7	2.5	2.7	3.4	2.3	2.5	2.2	2.1	1.8	1.8	1.8	1.8	1.9	2.0	2.0	2.2	2.2	2.4	2.4	2.2	2.47	4.85	
15-Aug	2.3	A	2.0	2.4	2.4	2.4	2.9	2.7	2.5	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	3.5	2.3	2.2	2.2	2.28	3.48	
16-Aug	A	2.3	2.2	2.4	2.6	4.1	3.6	2.8	2.5	2.4	2.4	2.6	2.2	1.9	1.9	2.0	2.0	2.0	2.0	2.3	2.3	2.6	4.2	A	2.52	4.18	
17-Aug	2.4	2.9	3.5	2.1	2.2	2.0	2.0	2.1	3.1	1.9	1.9	1.9	1.9	2.3	2.2	2.0	1.9	1.9	2.0	1.9	1.9	1.9	A	1.9	2.16	3.50	
18-Aug	2.1	2.0	1.9	2.1	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	A	1.8	1.8	1.89	2.08	
19-Aug	2.2	2.4	2.4	2.5	2.7	2.5	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.3	2.1	1.9	1.8	1.9	2.1	A	1.9	2.0	2.0	2.10	2.65	
20-Aug	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	2.0	1.98	2.23	
21-Aug	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	C	C	C	C	1.9	2.0	A	1.9	2.2	2.0	2.0	2.0	1.97	2.21	
22-Aug	2.0	2.1	2.7	2.4	2.2	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.2	2.2	2.2	2.2	2.06	2.71
23-Aug	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	1.9	A	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.99	2.14	
24-Aug	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	A	1.9	1.9	1.9	2.1	2.5	3.1	2.7	2.2	2.11	3.12	
25-Aug	2.3	3.0	2.7	2.8	2.8	2.8	2.7	2.5	2.4	2.1	2.0	2.0	2.0	1.9	A	2.0	1.9	1.9	1.8	1.8	2.1	1.9	1.9	1.9	2.22	2.98	
26-Aug	1.9	2.0	2.2	2.2	2.0	2.0	2.2	2.1	1.9	1.9	1.9	1.9	2.1	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.93	2.24	
27-Aug	1.8	1.9	1.9	2.3	2.2	2.2	2.4	2.4	2.1	1.8	1.8	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	2.0	2.0	2.3	2.8	2.03	2.79
28-Aug	2.5	2.3	2.3	2.2	2.1	2.2	2.3	2.2	2.2	2.1	1.9	A	1.9	1.8	1.9	1.9	1.9	1.9	1.9	2.2	2.1	2.1	2.6	2.6	2.12	2.58	
29-Aug	2.1	2.1	2.2	3.4	4.0	2.3	2.4	2.5	2.9	2.3	A	2.3	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	2.2	1.9	1.8	1.9	2.25	4.01	
30-Aug	1.9	2.3	2.1	2.2	2.4	2.3	2.2	2.0	1.9	A	1.8	1.9	1.8	1.8	1.8	2.1	2.2	1.8	1.8	1.8	1.9	1.8	1.9	1.8	1.99	2.40	
31-Aug	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	A	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.87	2.02	
		2.37	2.53	2.41	2.58	2.57	2.42	2.44	2.40	2.20	2.07	1.96	1.96	1.94	1.91	1.94	1.92	1.92	1.92	1.97	2.07	2.20	2.14	2.29	2.23	Diurnal Average	
		4.75	4.85	3.50	4.74	4.58	4.12	4.31	4.21	3.07	2.61	2.45	2.55	2.35	2.29	2.42	2.11	2.17	2.21	2.70	3.10	4.06	3.76	4.50	4.05	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

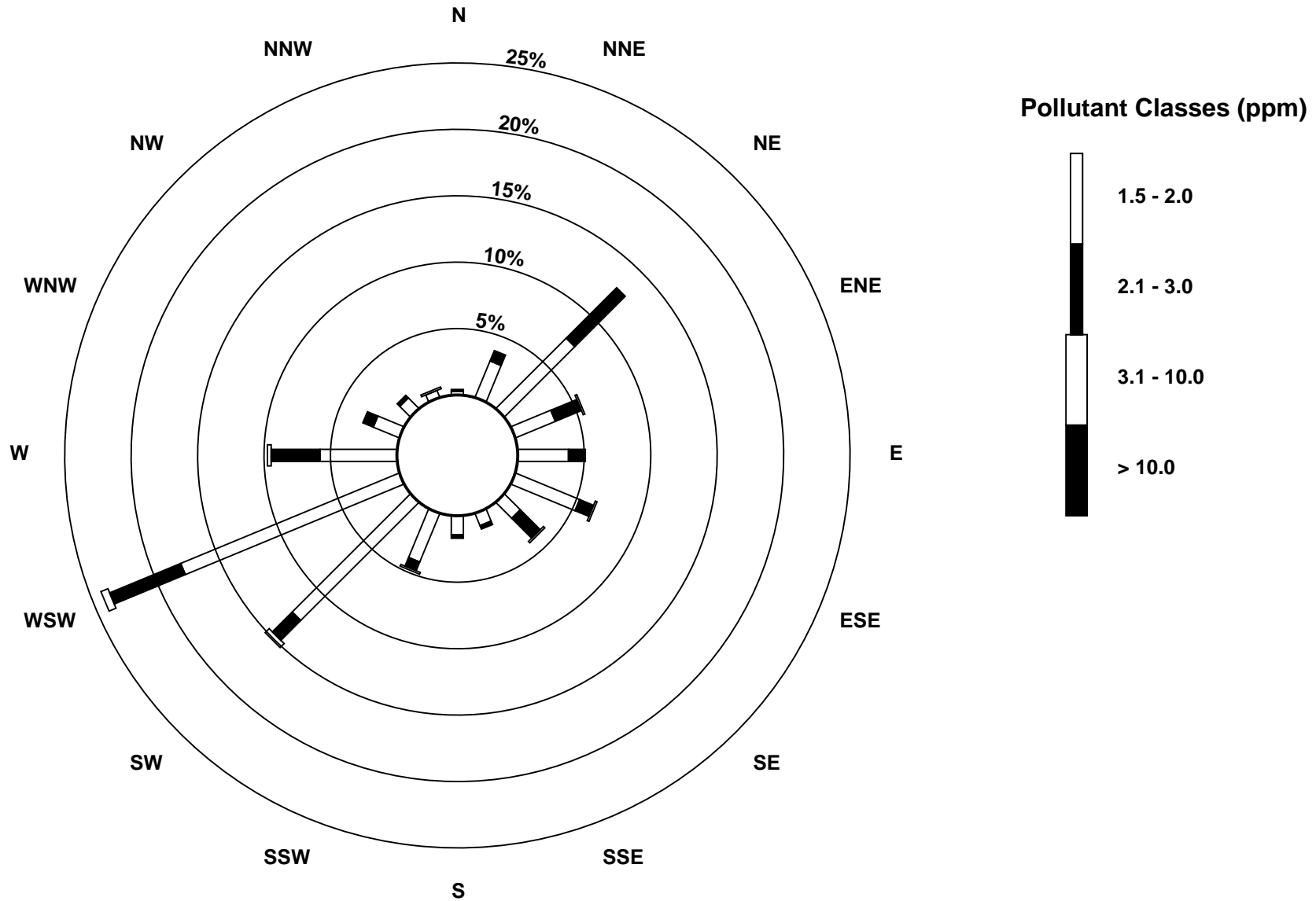
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Portable Clairmont - August 2014



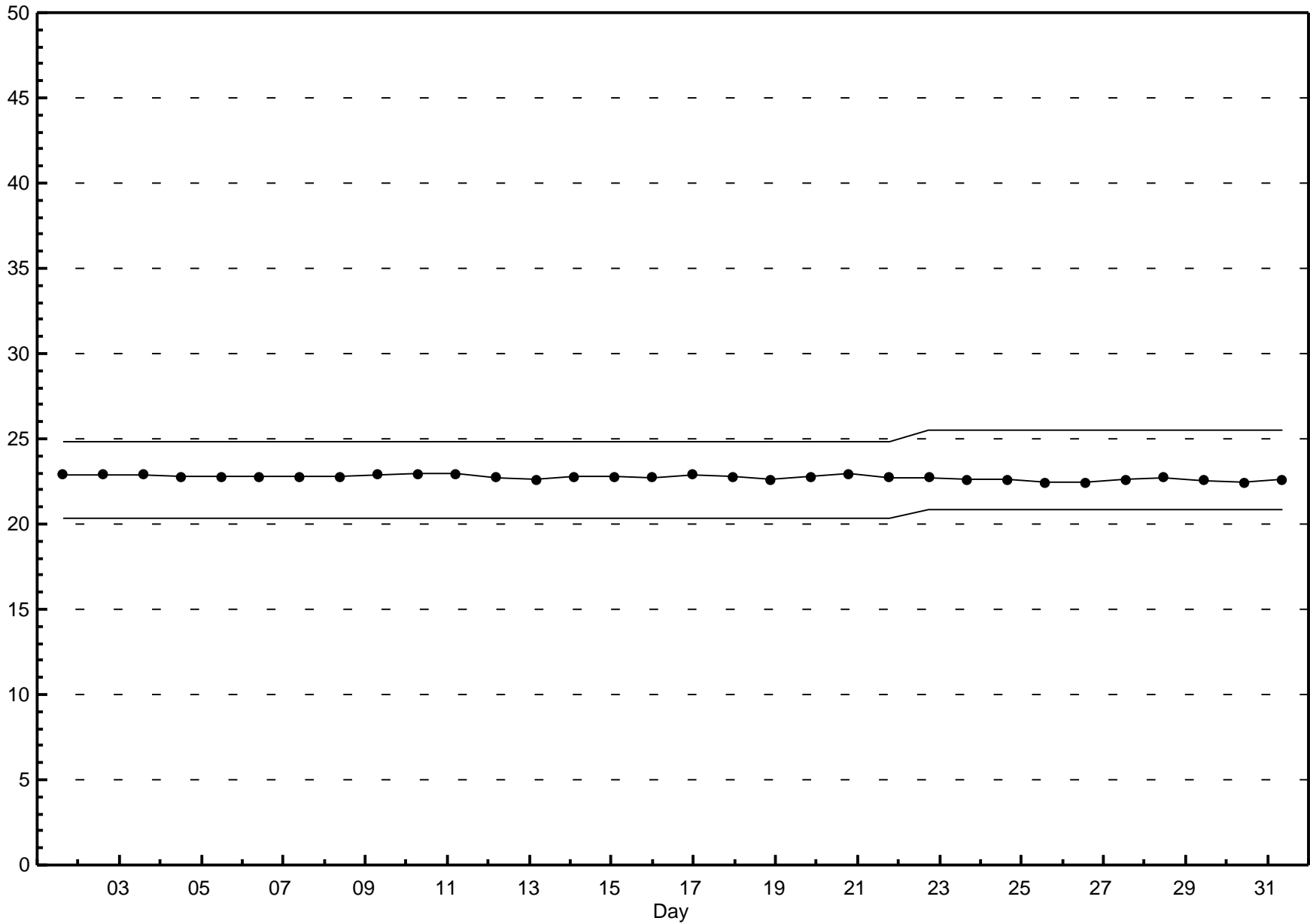
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Portable Clairmont - August 2014



Span Responses

Total Hydrocarbons (THC)
Portable Clairmont - August 2014



Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³

Portable Clairmont - August 2014

Number of Exceedences: 1-hr: 3 24-hr: 3	Hours in Service: 744
Maximum Value: 102.0 µg/m ³ on Aug 14 20:00	Maximum Daily Average: 41.0 µg/m ³ on Aug 14
Minimum Value: 0 µg/m ³ on Aug 6 12:00	Hours of Data: 740
Maximum Diurnal Average: 16.4 µg/m ³ at hour 21	Hours of Missing Data: 4
Monthly Average: 11.28 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 0.6 µg/m ³ on Aug 31	Percent Operational Time: 99.5
Minimum Diurnal Average: 8.3 µg/m ³ at hour 16	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 2.1 Median = 6.3 Q ₃ = 14.2 P ₉₀ = 29.2 P ₉₉ = 74.1	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	10	24	34	47	57	64	76	74	60	50	40	36	29	21	12	6	8	6	3	3	4	4	2	7	28.3	75.7																						
2-Aug	5	10	11	14	14	12	10	14	19	20	21	12	10	2	10	8	5	4	20	21	6	15	14	11	12.0	21.1																						
3-Aug	9	17	8	8	6	17	13	14	11	11	15	15	20	17	23	29	31	24	35	49	47	29	25	23	20.7	48.7																						
4-Aug	16	22	21	13	20	24	18	26	29	27	13	21	32	27	16	12	11	16	17	12	6	5	5	6	17.3	31.8																						
5-Aug	7	8	9	7	10	11	11	7	10	8	10	11	7	6	5	3	9	14	15	13	21	24	31	6	11.0	31.4																						
6-Aug	24	23	11	15	13	15	14	12	17	4	0	0	0	0	0	0	2	0	1	0	5	0	3	1	6.8	24.4																						
7-Aug	0	2	0	2	0	4	2	0	0	0	0	0	0	0	0	0	0	0	2	4	12	6	3	4	1.7	11.8																						
8-Aug	9	8	4	0	5	8	12	8	12	10	9	3	0	1	10	4	0	8	7	0	1	1	1	0	5.1	12.1																						
9-Aug	0	0	1	0	0	1	5	3	2	1	1	0	0	0	3	9	7	7	3	9	6	7	5	3	3.1	9.3																						
10-Aug	4	5	6	7	2	6	6	3	6	1	3	4	0	0	0	0	0	2	1	1	2	3	5	8	3.1	7.8																						
11-Aug	6	1	4	6	6	2	5	9	7	6	2	0	2	0	1	2	2	2	5	22	21	3	12	11	5.8	21.9																						
12-Aug	8	3	5	3	3	8	9	10	12	10	11	11	15	12	12	8	9	8	15	32	21	13	5	16	10.8	32.5																						
13-Aug	17	0	9	5	9	15	14	16	14	15	19	24	30	24	21	21	45	42	53	81	77	81	72	71	32.3	81.2																						
14-Aug	56	46	39	39	36	43	48	36	34	33	29	22	21	5	12	0	20	47	62	102	74	73	53	53	41.0	102.0																						
15-Aug	45	45	38	30	31	30	32	30	28	30	25	17	8	14	14	19	19	13	21	29	53	28	24	17	26.6	52.8																						
16-Aug	17	28	17	21	25	19	20	32	30	34	27	27	22	39	47	40	44	40	34	28	33	49	65	45	32.6	64.8																						
17-Aug	18	27	15	8	8	0	3	6	5	0	18	48	70	57	33	20	8	0	2	2	4	21	9	13	16.4	70.1																						
18-Aug	6	1	3	11	5	3	8	12	15	13	10	8	9	8	6	0	3	0	3	4	4	0	0	0	5.5	14.8																						
19-Aug	1	0	0	0	0	0	2	0	0	0	5	3	3	4	20	11	0	0	14	9	11	4	4	0	3.8	19.8																						
20-Aug	0	0	2	2	4	4	6	7	6	3	0	0	2	0	0	0	0	1	1	1	3	2	1	2	2.0	6.5																						
21-Aug	0	2	3	0	4	2	4	7	6	6	M	M	M	M	7	8	6	7	7	8	7	8	7	7	5.2	7.9																						
22-Aug	7	6	6	6	6	5	6	5	5	3	4	5	3	3	3	3	3	4	9	8	11	9	7	4	5.5	11.3																						
23-Aug	5	5	4	3	4	4	4	5	5	5	6	6	5	4	4	3	5	5	5	6	7	6	5	6	4.8	7.4																						
24-Aug	6	7	7	7	7	7	6	7	7	7	7	7	5	5	5	5	5	5	4	6	11	25	12	5	7.2	24.8																						
25-Aug	5	5	6	6	7	8	11	14	14	12	12	17	28	39	34	31	27	20	15	20	26	20	17	14	17.1	39.3																						
26-Aug	12	10	13	13	12	11	14	16	13	5	0	0	3	2	2	0	0	3	2	2	3	4	5	2	6.1	16.4																						
27-Aug	1	1	0	0	0	2	3	5	1	0	0	0	0	0	0	0	2	2	3	2	15	10	9	11	2.7	14.9																						
28-Aug	5	5	2	2	3	4	6	7	7	2	3	1	1	3	10	13	6	6	5	10	11	10	11	13	6.1	13.3																						
29-Aug	6	6	13	11	9	10	15	14	19	13	11	12	8	6	2	0	0	0	0	0	0	0	0	0	6.6	18.7																						
30-Aug	1	1	1	0	1	1	4	3	3	0	0	0	0	0	0	0	0	1	1	1	2	1	1	0	0.9	3.6																						
31-Aug	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	1	3	2	1	1	2	0.6	2.8																						
																								9.9	10.2	9.5	9.3	9.8	11.1	12.5	13.1	12.8	10.5	10.1	10.3	11.1	10.0	10.1	8.3	9.0	9.2	11.7	15.8	16.4	15.0	13.4	11.6	Diurnal Average
																								56.0	45.7	38.9	47.4	56.8	64.2	75.7	74.2	60.3	50.3	39.7	47.6	70.1	56.8	47.2	40.2	44.9	46.7	61.6	102.0	76.7	81.2	71.6	71.1	Diurnal Maximum

M - Maintenance
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³

Hourly Averages

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Clairmont - August 2014



Hourly Maximums

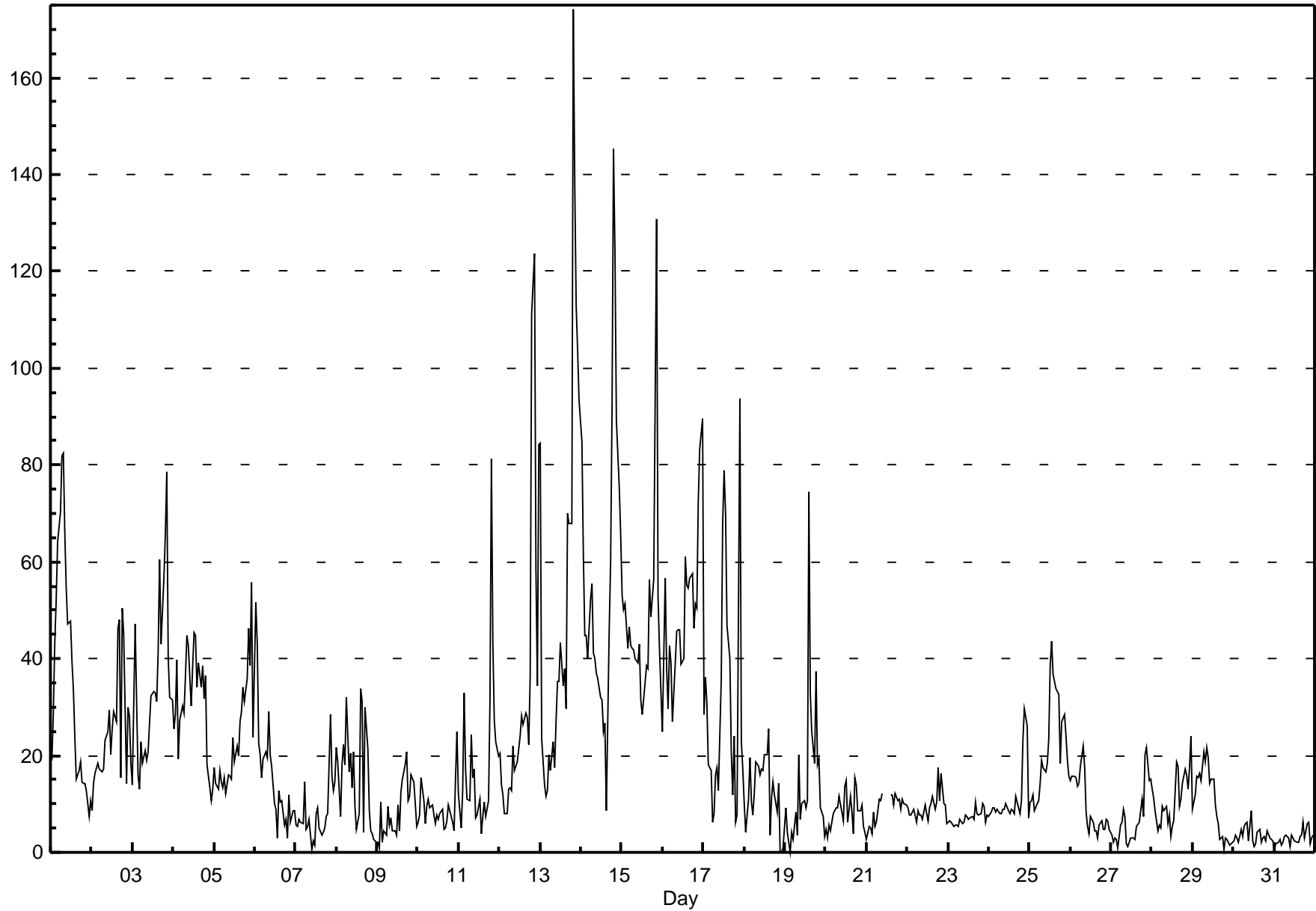
PM2.5 (PM_{2.5}) - µg/m³

Portable Clairmont - August 2014

Maximum Value: 174.1 µg/m ³ on Aug 13 20:00		Maximum Daily Average: 56.7 µg/m ³ on Aug 14		Hours in Service: 744 Hours of Data: 740 Hours of Missing Data: 4 Hours of Calibration: 0 Percent Operational Time: 99.5																																												
Minimum Value: 0 µg/m ³ on Aug 18 22:00 Maximum Diurnal Average: 33.6 µg/m ³ at hour 21 Monthly Average: 20.57 µg/m ³		Minimum Daily Average: 3.0 µg/m ³ on Aug 31 Minimum Diurnal Average: 15.1 µg/m ³ at hour 4 Percentiles: P ₁ = 1.0 P ₁₀ = 3.5 Q ₁ = 6.9 Median = 13.1 Q ₃ = 26.9 P ₉₀ = 46.0 P ₉₉ = 103.1																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	19	28	43	52	64	70	82	83	66	55	47	48	40	34	24	15	17	19	15	14	14	13	7	11	36.6	82.6																						
2-Aug	9	14	16	18	17	17	17	17	23	25	29	20	25	29	27	46	48	15	50	45	14	30	28	18	25.0	50.4																						
3-Aug	14	47	31	16	13	23	18	21	19	21	27	32	33	33	31	41	60	43	57	66	79	40	32	32	34.6	78.7																						
4-Aug	25	28	40	19	27	30	29	37	45	43	30	38	45	45	34	39	34	38	32	37	18	13	11	13	31.3	45.5																						
5-Aug	17	14	13	17	15	13	15	12	16	16	15	24	19	22	20	27	29	34	31	36	46	39	56	24	23.8	55.9																						
6-Aug	52	43	23	20	15	19	21	20	29	20	18	10	9	3	13	11	11	6	7	3	12	6	9	9	16.1	51.6																						
7-Aug	5	5	7	6	6	14	5	5	7	1	3	2	8	9	5	4	4	5	7	8	28	16	13	15	7.8	28.5																						
8-Aug	22	19	7	18	22	18	32	17	21	13	21	9	5	8	34	31	4	30	21	9	5	4	3	2	15.6	33.7																						
9-Aug	2	1	10	2	5	4	10	6	7	4	4	4	10	5	12	15	18	21	11	12	16	15	10	5	8.7	20.9																						
10-Aug	6	8	16	11	6	10	11	9	10	8	6	8	7	8	9	5	5	6	10	7	6	5	15	25	9.0	24.8																						
11-Aug	12	5	13	33	17	11	11	24	15	17	7	8	11	4	7	10	7	11	31	81	43	27	23	20	18.8	81.3																						
12-Aug	20	14	12	8	8	13	13	13	22	17	19	21	24	28	26	29	28	22	36	111	124	58	35	84	32.8	123.8																						
13-Aug	85	23	14	11	13	20	17	23	17	27	35	35	43	34	38	30	70	68	68	174	139	113	104	93	53.9	174.1																						
14-Aug	85	62	45	45	40	52	55	41	40	37	36	32	32	25	27	8	46	60	93	145	124	89	75	66	56.7	145.4																						
15-Aug	53	50	51	42	47	43	42	42	40	39	43	31	29	32	39	38	56	49	53	56	131	53	42	33	47.2	130.9																						
16-Aug	25	57	38	30	43	39	27	39	46	46	46	39	40	61	55	55	57	58	46	51	50	72	83	90	49.7	89.7																						
17-Aug	29	36	31	18	17	6	8	16	18	13	36	68	79	70	47	40	21	12	24	6	8	94	23	17	30.7	93.7																						
18-Aug	10	4	11	20	10	8	12	19	18	16	17	17	20	20	26	3	11	15	12	8	14	0	0	1	12.2	25.6																						
19-Aug	9	4	2	0	4	3	8	4	20	7	10	11	9	11	75	33	25	18	37	18	19	9	7	3	14.4	74.6																						
20-Aug	5	3	6	5	8	9	9	9	12	8	7	14	15	6	12	8	4	16	14	8	9	10	5	4	8.5	15.6																						
21-Aug	3	5	5	4	8	5	6	11	11	12	M	M	M	M	12	12	10	12	11	11	9	11	10	10	8.9	12.1																						
22-Aug	9	8	8	8	9	6	9	8	8	7	10	8	7	9	10	12	9	10	17	11	16	10	10	6	9.3	17.5																						
23-Aug	6	7	6	5	6	6	5	7	6	6	8	7	7	7	7	7	10	8	8	8	10	9	6	8	7.2	10.4																						
24-Aug	7	8	9	9	8	9	8	8	9	9	10	9	8	9	9	8	11	9	8	11	23	30	26	7	10.9	29.7																						
25-Aug	11	11	12	9	10	11	14	19	17	17	18	24	38	44	37	34	33	33	18	27	29	24	19	16	21.8	43.7																						
26-Aug	15	16	16	15	14	14	18	22	17	8	5	4	7	6	5	4	3	6	7	5	5	7	7	5	9.6	21.9																						
27-Aug	3	2	3	3	1	6	6	9	8	2	1	3	3	3	3	5	6	9	11	7	20	22	15	15	6.9	21.7																						
28-Aug	13	11	9	4	6	5	9	9	9	6	8	3	5	7	19	18	9	11	14	17	16	13	18	24	11.0	23.9																						
29-Aug	9	12	16	15	16	15	21	19	22	20	14	15	15	10	7	6	3	3	1	3	3	2	2	2	10.4	21.7																						
30-Aug	2	4	3	2	5	3	5	6	6	2	9	2	1	2	4	5	2	3	3	2	4	3	3	2	3.5	8.7																						
31-Aug	1	2	2	3	2	2	3	3	3	1	4	3	2	2	2	3	3	6	3	6	6	2	3	4	3.0	6.2																						
																								18.8	17.8	16.6	15.1	15.5	16.3	17.7	18.6	19.6	16.8	18.1	18.3	19.9	19.5	21.7	19.5	21.2	21.1	24.4	32.4	33.6	27.1	22.5	21.4	Diurnal Average
																								84.8	61.7	51.3	51.9	64.0	70.2	81.8	82.6	66.2	54.7	47.1	68.1	78.9	70.1	74.6	54.6	70.0	67.8	92.5	174.1	138.8	112.9	103.7	93.3	Diurnal Maximum
M - Maintenance																																																

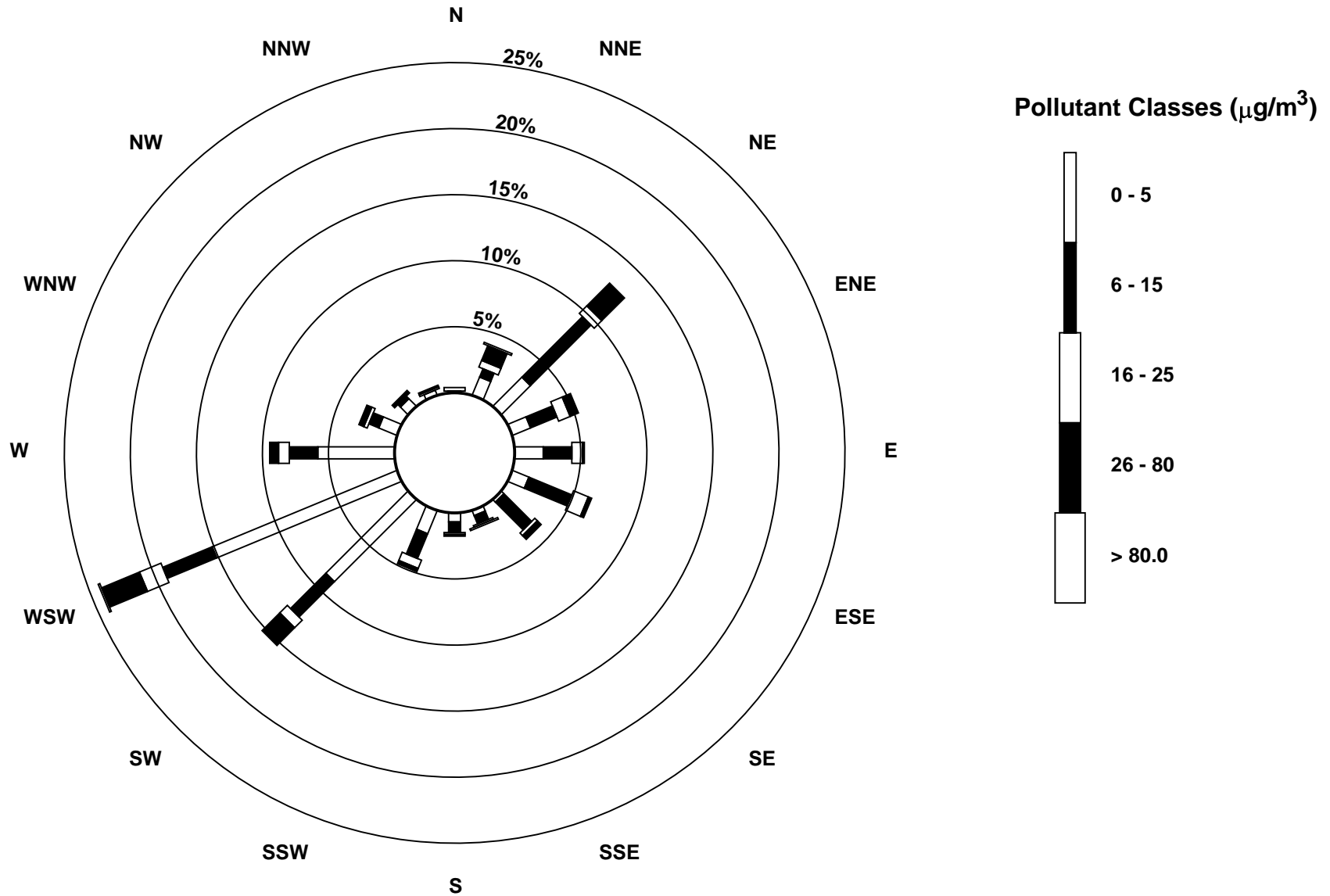
Hourly Maximums

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Clairmont - August 2014



Pollutant Rose

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Clairmont - August 2014





Peace Airshed Zone Association

Hourly Averages

External Temperature (ET) - °C

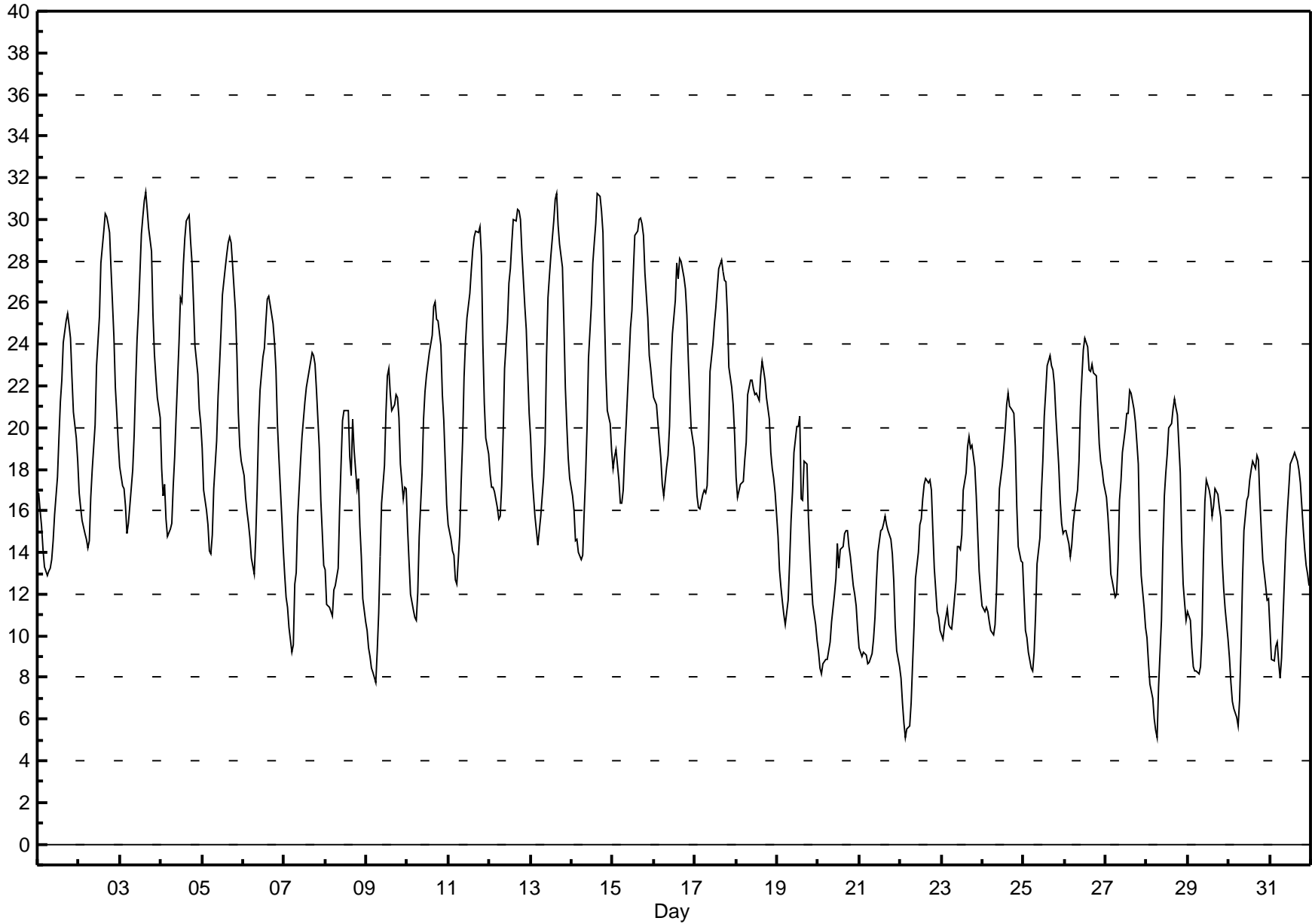
Portable Clairmont - August 2014

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 31.3 °C on Aug 3 16:00	Maximum Daily Average: 23.4 °C on Aug 15		Hours of Data:	744
Minimum Value: 5 °C on Aug 28 07:00	Minimum Daily Average: 11.7 °C on Aug 21		Hours of Missing Data:	0
Maximum Diurnal Average: 23.9 °C at hour 17	Minimum Diurnal Average: 11.9 °C at hour 6		Hours of Calibration:	0
Monthly Average: 17.93 °C	Percentiles: P ₁ = 6.0 P ₁₀ = 10.0 Q ₁ = 13.6 Median = 17.4 Q ₃ = 21.9 P ₉₀ = 27.0 P ₉₉ = 30.1		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-Aug	17	16	15	14	13	13	13	13	14	15	16	18	20	21	22	24	25	25	25	24	22	21	19	18	18.5	25.4
2-Aug	17	16	16	15	15	14	15	17	18	20	23	24	25	28	29	30	30	30	29	28	24	22	21	19	21.9	30.3
3-Aug	18	17	17	16	15	15	16	18	20	22	24	26	29	30	31	31	31	30	28	25	24	22	21	20	22.8	31.3
4-Aug	18	17	17	16	15	15	15	17	19	21	24	26	26	28	29	30	30	29	28	26	24	23	21	20	22.2	30.2
5-Aug	19	17	16	15	14	14	15	17	19	22	23	25	26	28	28	29	29	29	28	26	24	21	19	18	21.7	29.2
6-Aug	18	17	16	15	15	14	13	15	17	20	22	23	24	25	26	26	26	25	24	23	20	19	16	14	19.7	26.3
7-Aug	13	12	11	10	9	10	12	13	16	18	20	20	21	22	22	23	24	23	23	22	19	17	15	13	17.1	23.6
8-Aug	13	12	11	11	11	12	12	13	16	18	20	21	21	21	19	18	20	19	17	18	15	14	12	11	15.6	20.9
9-Aug	10	9	9	8	8	8	9	11	14	16	18	21	22	23	22	21	21	22	21	20	18	17	17	17	16.0	22.8
10-Aug	15	13	12	11	11	11	12	15	18	20	22	22	23	24	24	26	26	25	25	24	22	20	18	16	19.0	26.0
11-Aug	15	15	14	14	13	12	15	17	19	22	24	25	26	28	29	29	29	29	30	28	24	21	20	19	21.6	29.6
12-Aug	18	17	17	17	16	16	16	17	20	23	25	27	28	29	30	30	30	30	30	28	26	25	23	21	23.2	30.5
13-Aug	20	18	16	15	14	15	16	18	19	23	26	27	28	30	31	31	30	29	28	25	22	20	19	18	22.4	31.2
14-Aug	17	16	15	15	14	14	14	16	18	20	23	26	28	29	30	31	31	30	29	26	23	21	20	19	21.8	31.3
15-Aug	18	19	19	18	16	16	17	19	20	23	25	26	28	29	29	30	30	30	29	27	25	23	23	22	23.4	30.1
16-Aug	21	21	20	19	19	17	17	18	19	20	23	25	26	28	27	28	28	27	27	25	23	21	20	19	22.5	28.1
17-Aug	18	17	16	16	17	17	17	17	19	23	24	25	26	27	28	28	27	27	27	25	23	22	21	20	22.0	28.1
18-Aug	18	17	17	17	17	18	19	22	22	22	22	22	22	21	23	23	23	22	21	20	19	18	18	17	20.0	23.2
19-Aug	15	13	12	12	11	11	12	14	16	17	19	20	20	21	17	17	18	18	16	14	13	11	11	10	14.8	20.5
20-Aug	9	8	8	9	9	9	9	10	11	12	13	14	13	14	14	15	15	15	14	14	12	12	11	10	11.8	15.0
21-Aug	9	9	9	9	9	9	9	9	10	11	13	14	15	15	15	16	15	15	15	14	13	10	9	9	11.7	15.8
22-Aug	8	7	6	5	5	6	7	9	10	13	14	15	16	17	17	18	17	18	17	15	13	11	11	10	11.8	17.5
23-Aug	10	10	10	11	11	10	10	11	13	14	14	14	15	17	18	19	20	19	19	18	17	15	13	12	14.2	19.6
24-Aug	11	11	11	11	11	10	10	11	12	15	17	18	19	20	21	22	21	21	21	19	16	14	14	14	15.4	21.6
25-Aug	12	10	10	9	8	8	9	11	13	15	17	18	21	22	23	23	23	23	22	21	18	17	15	15	16.0	23.5
26-Aug	15	15	14	14	14	15	16	17	18	21	22	24	24	24	23	23	23	23	22	21	19	18	18	17	19.3	24.3
27-Aug	17	16	15	13	13	12	12	14	17	17	19	20	21	21	22	22	21	20	19	18	15	13	11	10	16.5	21.8
28-Aug	10	9	8	7	6	5	5	8	11	14	17	18	19	20	21	21	21	21	18	15	12	12	11	11	13.6	21.4
29-Aug	11	11	9	9	8	8	8	9	10	14	16	17	17	17	16	16	17	17	16	16	14	12	11	10	12.9	17.5
30-Aug	9	8	7	7	6	6	7	9	13	15	16	17	18	18	18	18	19	18	17	15	14	12	12	12	12.9	18.7
31-Aug	10	9	9	9	10	9	8	9	13	15	16	17	18	19	19	19	18	18	17	15	14	13	13	12	13.7	18.8
	14.5	13.6	13.0	12.5	12.0	11.9	12.4	13.9	15.9	18.1	19.9	21.1	22.1	23.0	23.3	23.7	23.9	23.5	22.8	21.3	19.0	17.4	16.2	15.3		Diurnal Average
	21.5	21.1	20.2	19.4	18.6	18.5	19.3	21.6	22.3	23.4	26.2	27.3	29.3	30.1	31.0	31.3	31.1	30.4	30.0	28.4	25.8	24.7	22.8	22.1		Diurnal Maximum

Hourly Averages

External Temperature (ET) - °C
Portable Clairmont - August 2014





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)

Wind Direction (deg)

Portable Clairmont - August 2014

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1 Spd	17	19	20	21	20	12	11	18	15	12	13	15	15	18	15	12	12	12	11	10	7	8	7	8	12.5	21.5	
Dir	28	29	26	24	26	34	33	34	38	44	35	36	41	33	35	63	94	106	92	90	79	86	75	52	45.1	23.6	
2 Spd	11	9	8	9	9	8	5	3	4	4	4	5	8	7	8	8	5	3	2	4	11	9	6	3	2	4.9	11.5
Dir	42	40	34	37	37	44	64	66	53	80	91	78	62	111	134	141	124	140	98	118	131	138	110	145	80.2	117.9	
3 Spd	2	1	4	1	1	5	7	6	7	7	6	2	8	7	8	5	4	6	6	6	6	4	5	4	1.3	8.5	
Dir	312	83	77	269	63	111	123	170	216	201	201	278	154	201	188	187	253	275	317	15	34	41	50	63	172.2	154.4	
4 Spd	3	0	4	3	1	2	2	5	5	3	5	5	7	9	10	12	14	15	12	9	10	13	11	13	5.8	14.9	
Dir	263	207	87	258	331	137	277	144	216	227	157	145	78	94	100	106	112	102	104	85	96	106	107	106	109.4	102.1	
5 Spd	8	10	8	9	10	9	10	11	14	13	13	12	11	8	8	7	6	7	5	4	12	12	11	2	5.4	13.8	
Dir	61	51	51	39	39	42	46	82	102	108	103	98	101	94	71	60	82	111	118	245	211	209	288	292	83.6	102.2	
6 Spd	8	0	3	2	5	6	6	8	10	11	15	18	18	18	19	17	17	22	23	22	14	13	9	8	11.7	22.6	
Dir	196	30	222	180	199	219	254	268	259	254	250	257	258	252	255	250	249	254	251	255	251	264	272	278	251.9	251.4	
7 Spd	5	6	8	7	6	3	3	7	10	16	17	16	17	16	19	15	14	15	12	10	5	6	5	4	9.9	19.0	
Dir	286	271	255	270	248	263	227	281	259	253	254	251	251	256	258	249	247	251	256	248	228	266	282	208	254.6	257.7	
8 Spd	4	3	3	5	2	3	3	6	4	7	9	11	10	11	12	13	12	17	13	16	12	13	6	5	6.9	16.8	
Dir	237	259	210	247	209	134	109	141	162	189	206	252	254	264	204	164	171	198	191	193	190	193	249	240	203.2	197.5	
9 Spd	6	7	6	7	8	8	5	4	5	4	8	10	14	14	16	15	14	12	14	11	9	5	10	10	9.1	16.3	
Dir	233	250	266	250	251	238	252	229	227	260	269	259	245	250	248	247	250	226	229	233	247	224	239	233	243.8	248.1	
10 Spd	9	7	3	3	4	4	4	2	9	19	20	16	16	14	18	18	19	18	17	13	8	9	7	4	10.4	19.7	
Dir	224	241	283	250	238	262	251	244	244	242	239	251	266	265	261	249	244	246	241	234	213	201	237	269	245.3	239.2	
11 Spd	3	3	5	3	4	5	3	5	5	6	7	8	11	10	9	9	7	7	4	7	7	5	8	7	3.0	10.8	
Dir	258	261	253	270	230	268	235	213	226	233	263	274	283	263	274	274	280	296	85	107	105	44	35	41	269.9	282.5	
12 Spd	8	9	9	11	10	11	11	10	8	10	12	12	10	8	8	5	4	5	4	4	3	5	2	2	6.3	12.5	
Dir	44	38	48	44	45	45	49	50	83	116	116	118	104	107	110	52	53	57	63	49	48	91	217	5	71.4	118.2	
13 Spd	2	5	6	7	8	11	12	12	10	11	12	12	12	10	9	10	13	8	6	1	1	2	2	2	7.3	12.5	
Dir	269	245	245	249	247	249	254	248	244	249	260	249	251	256	254	242	249	243	235	152	44	244	217	109	248.1	249.2	
14 Spd	2	4	5	7	6	5	3	4	5	4	3	2	7	11	10	10	12	9	7	5	5	4	4	4	3.5	11.7	
Dir	220	258	250	244	245	228	237	215	237	255	254	230	253	258	247	232	290	308	335	20	44	51	45	72	269.0	308.5	
15 Spd	4	13	14	6	4	6	3	7	7	6	10	10	10	10	10	10	12	9	9	6	5	6	6	6	6.5	13.5	
Dir	48	21	27	58	23	54	49	57	114	125	71	67	94	105	116	119	104	105	117	125	71	45	46	49	77.9	26.8	
16 Spd	4	5	5	5	4	2	3	3	5	7	10	11	13	13	17	15	13	13	12	6	6	5	4	4	5.6	16.7	
Dir	31	46	39	75	78	249	299	218	238	236	231	259	246	237	235	265	268	272	284	283	248	249	264	226	257.2	235.4	
17 Spd	5	4	5	6	5	6	5	4	6	18	18	17	16	15	14	15	16	17	15	15	13	17	14	9	11.2	18.2	
Dir	246	252	239	241	245	234	238	246	265	245	248	248	252	253	250	255	253	249	243	224	222	227	224	205	242.0	248.1	
18 Spd	3	5	6	6	6	10	13	22	25	28	26	25	24	18	14	20	20	22	19	17	15	13	11	11	15.5	27.8	
Dir	263	208	203	200	226	213	228	226	225	227	226	228	229	229	227	236	239	244	231	224	219	227	224	231	227.8	227.3	
19 Spd	5	3	3	5	4	7	8	9	13	17	13	12	12	12	6	9	11	14	16	8	8	9	10	7	7.7	17.2	
Dir	257	245	212	235	252	246	265	278	259	256	266	266	279	315	352	40	331	317	300	289	289	278	274	264	281.5	256.3	
20 Spd	9	5	7	7	8	9	9	12	10	9	11	11	14	9	13	11	9	8	11	10	12	9	10	9	6.3	13.6	
Dir	282	277	228	240	248	252	257	270	278	291	301	302	324	322	340	335	326	316	350	21	34	43	41	28	314.8	323.8	
21 Spd	6	10	11	12	11	10	11	12	14	12	11	11	11	13	12	12	13	13	14	12	8	4	3	10	10.4	14.1	
Dir	26	27	31	30	36	39	31	38	44	48	70	69	54	57	39	41	37	40	38	65	83	43	58	23	43.7	37.9	
22 Spd	9	5	2	5	5	6	4	8	9	10	10	11	9	12	10	9	8	8	13	14	10	7	3	7	6.4	14.1	
Dir	30	77	319	23	35	30	93	24	50	54	74	95	66	53	26	54	74	79	128	135	132	136	54	42	70.4	134.5	



Peace Airshed Zone Association

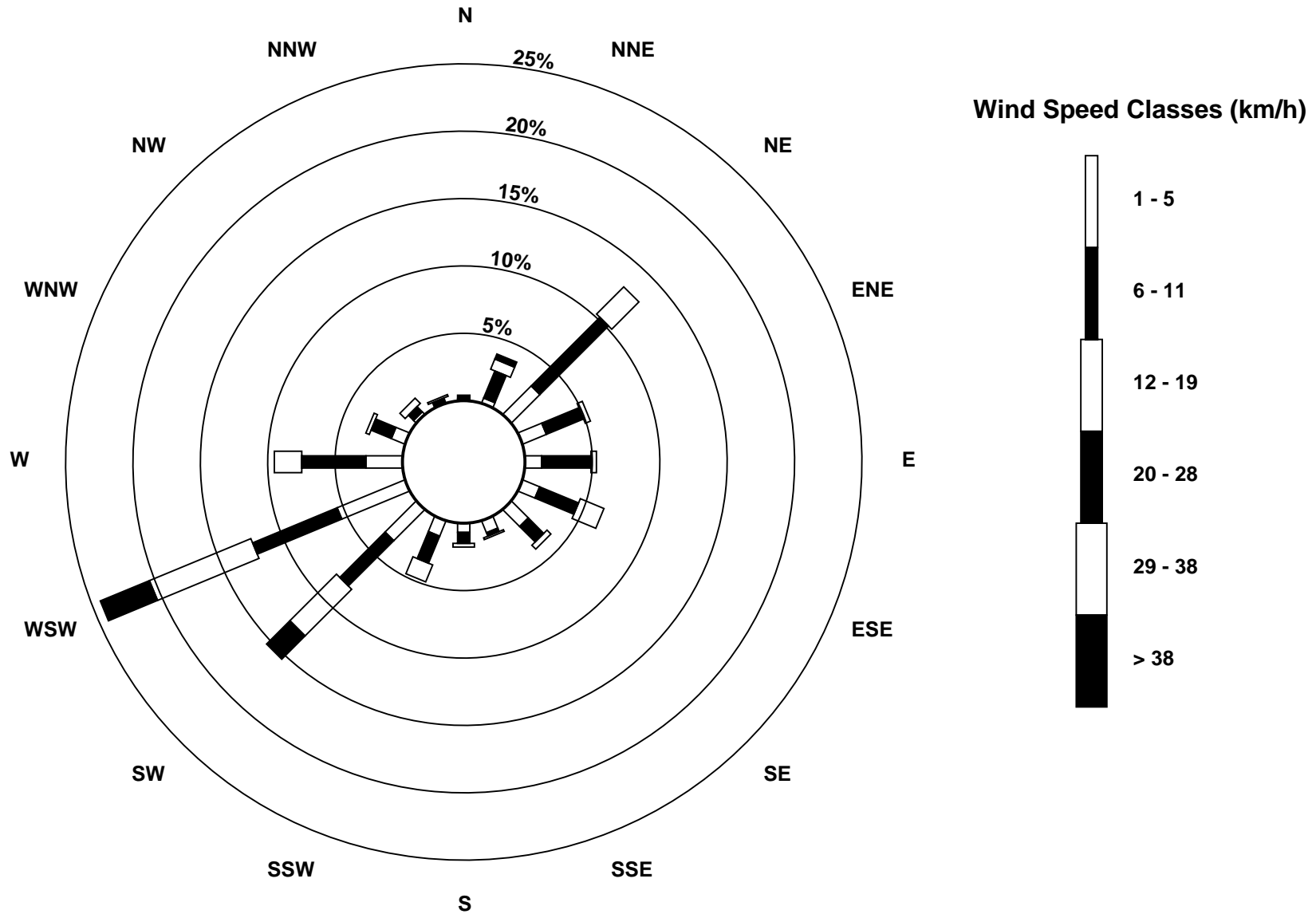
Hourly Averages

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

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	7	10	8	10	9	9	10	9	13	11	13	14	11	9	8	6	6	8	7	9	9	13	12	11	8.4	13.5
Dir	39	40	56	77	44	43	45	67	99	118	106	128	99	111	85	95	86	69	89	75	45	38	36	42	72.5	127.9
24 Spd	12	11	10	9	11	11	11	10	9	4	5	9	11	11	9	7	5	8	11	6	2	1	4	6	6.8	11.9
Dir	38	36	41	44	31	37	37	42	41	63	108	98	88	96	113	117	110	91	117	125	98	65	62	62	68.8	38.2
25 Spd	4	1	5	4	5	7	5	5	7	7	8	8	14	17	12	12	12	14	13	16	16	12	9	9	7.6	16.9
Dir	129	31	126	128	139	143	149	144	174	197	224	234	209	213	225	238	251	254	235	228	228	237	226	231	216.1	213.0
26 Spd	8	5	3	5	6	5	6	9	9	18	20	22	20	21	20	20	24	26	21	17	13	11	14	16	13.5	26.1
Dir	208	189	147	153	174	211	220	227	220	233	248	249	233	230	233	239	243	231	231	235	227	218	227	227	229.8	231.1
27 Spd	12	8	7	4	5	3	4	6	12	20	21	21	24	21	22	24	24	21	18	15	8	6	4	5	12.9	24.2
Dir	248	243	264	287	237	249	247	272	260	253	249	252	248	256	251	242	246	239	244	253	249	237	290	271	250.3	248.4
28 Spd	6	5	7	8	10	8	9	9	7	3	5	6	5	7	6	4	1	6	6	10	6	7	2	3	2.8	9.6
Dir	281	266	257	252	256	270	256	266	265	220	172	179	147	168	202	211	224	82	82	121	127	137	230	36	217.3	121.1
29 Spd	6	5	4	1	3	4	4	5	1	0	5	6	11	13	12	11	10	12	14	15	10	12	10	7	5.2	15.0
Dir	47	45	55	245	114	105	139	257	56	127	250	227	259	269	275	267	251	248	240	239	221	229	230	198	243.5	238.8
30 Spd	8	4	4	4	3	3	4	8	11	15	22	24	23	22	21	21	18	19	21	17	15	12	10	13	13.2	23.6
Dir	232	267	215	239	283	270	186	195	226	213	229	234	232	236	235	248	238	226	231	227	225	218	228	233	230.6	233.8
31 Spd	12	9	7	7	11	10	7	6	14	24	22	21	20	22	21	20	20	20	18	16	17	16	13	11	15.0	24.5
Dir	227	236	250	233	226	222	241	282	256	251	257	257	249	242	243	239	245	239	234	231	232	234	232	229	241.7	251.4
Spd	1.2	1.8	1.2	0.9	0.9	0.5	0.8	1.3	3.0	5.7	6.0	5.9	5.8	5.9	6.0	5.8	6.0	6.1	5.2	4.4	3.6	3.3	2.3	1.1	Diurnal Average	
Dir	310.7	353.4	356.1	334.5	320.1	281.0	267.8	256.1	233.6	231.4	234.2	239.0	241.8	242.8	242.4	239.5	244.6	242.0	232.3	213.9	206.3	210.5	247.8	238.6	Diurnal Maximum	
Spd	17.2	19.1	19.8	21.5	19.9	11.9	13.2	22.3	24.7	27.8	25.8	24.6	24.2	22.3	22.3	24.0	24.3	26.1	22.6	21.6	16.9	16.9	14.4	15.6	Diurnal Maximum	
Dir	28.5	29.4	25.9	23.6	25.7	34.1	228.3	225.6	225.4	227.3	225.7	227.6	248.4	236.3	251.5	241.8	243.3	231.1	251.4	254.6	232.0	227.3	224.1	226.8	Diurnal Maximum	
Maximum Speed Value: 28 km/h on Aug 18 10:00																			Minimum Speed Value: 0 km/h on Aug 6 02:00					Hours in Service: 744		
Maximum Daily Speed Average: 15.5 km/h on Aug 18																			Minimum Daily Speed Average: 1.3 km/h on Aug 3					Hours of Data: 744		
Maximum Diurnal Speed Average: 6.1 km/h at hour 18																			Minimum Diurnal Speed Average: 0.5 km/h at hour 6					Hours of Missing Data: 0		
Monthly Average Velocity: 3.17 km/h 240.16 deg																			Speed Percentiles: P ₁ = 0.8 P ₁₀ = 3.5 Q ₁ = 5.4 Median = 8.9 Q ₃ = 12.4 P ₉₀ = 17.2 P ₉₉ = 24.2					Percent Operational Time: 100.0		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	1	5	2	0	0	0	8																			
NorthEast	32	72	37	4	0	0	145																			
East	17	50	21	0	0	0	88																			
SouthEast	16	30	7	0	0	0	53																			
South	5	19	7	0	0	0	31																			
SouthWest	43	67	62	33	0	0	205																			
West	37	77	65	16	0	0	195																			
NorthWest	4	8	7	0	0	0	19																			
Total	155	328	208	53	0	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Portable Clairmont - August 2014



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Clairmont - August 2014

Maximum Speed: 28 km/h on Aug 18 10:00	Maximum Daily Speed Average: 16.0 km/h on Aug 18	Hours in Service: 744
Minimum Speed: 1 km/h on Aug 13 21:00	Minimum Daily Speed Average: 5.6 km/h on Aug 3	Hours of Data: 744
Maximum Diurnal Speed Average: 13.9 km/h at hour 13	Minimum Diurnal Speed Average: 6.7 km/h at hour 4	Hours of Missing Data: 0
Monthly Average Speed: 10.03 km/h	Percentiles: P ₁ = 2.3 P ₁₀ = 4.2 Q ₁ = 5.9 Median = 9.2 Q ₃ = 12.8 P ₉₀ = 17.6 P ₉₉ = 24.6	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-Aug	17	19	20	22	20	13	12	18	15	12	13	15	15	18	15	13	12	12	12	10	7	9	7	8	13.9	21.5
2-Aug	11	9	8	9	10	8	5	3	5	5	6	8	8	9	9	7	6	6	6	11	9	6	3	3	7.1	11.5
3-Aug	2	2	4	2	2	5	7	7	7	8	7	5	9	8	8	7	6	6	6	6	6	4	5	4	5.6	9.3
4-Aug	4	2	4	3	2	3	3	5	5	4	6	6	8	9	11	12	14	15	12	9	10	13	11	14	7.8	15.0
5-Aug	9	10	8	9	10	9	11	12	14	13	14	12	11	9	8	7	7	7	6	5	12	13	13	6	9.7	14.0
6-Aug	8	5	4	3	5	6	6	8	10	11	15	18	19	19	19	18	17	22	23	22	14	14	9	9	12.7	22.9
7-Aug	6	6	8	7	6	5	4	7	10	16	18	17	18	17	19	15	15	15	13	10	6	6	5	5	10.5	19.4
8-Aug	4	4	3	6	4	3	4	6	6	8	11	12	11	11	14	14	13	17	14	16	12	13	6	5	9.0	17.3
9-Aug	6	7	6	7	8	8	5	4	5	5	8	11	15	15	17	15	14	13	14	11	9	6	10	11	9.7	16.8
10-Aug	9	7	4	4	4	4	4	3	10	19	20	17	16	15	18	18	19	18	17	13	9	9	7	4	11.1	20.2
11-Aug	4	4	6	4	4	5	4	5	6	6	8	9	11	11	10	10	8	7	5	8	7	6	8	7	6.8	11.2
12-Aug	8	10	9	11	10	11	11	10	9	10	12	13	10	8	9	6	5	5	4	4	3	5	5	3	7.9	12.6
13-Aug	3	6	6	7	8	11	12	12	10	11	12	12	12	11	10	11	13	9	6	3	1	3	3	3	8.0	12.6
14-Aug	3	5	5	7	6	5	3	4	5	5	4	5	8	11	12	11	11	12	9	7	5	6	5	4	6.7	11.9
15-Aug	6	13	14	7	5	6	4	7	7	7	11	10	11	11	11	10	12	10	9	6	5	6	6	6	8.3	13.6
16-Aug	4	5	6	5	4	4	4	4	5	7	10	11	14	14	17	15	13	13	12	7	6	5	4	5	8.1	17.0
17-Aug	5	4	5	6	5	6	5	5	7	18	18	17	16	15	15	15	17	17	15	15	13	17	15	9	11.7	18.4
18-Aug	3	5	7	6	6	10	13	22	25	28	26	25	24	18	15	21	20	22	20	17	15	13	12	11	16.0	28.0
19-Aug	5	4	3	5	5	7	9	10	14	17	13	13	13	13	13	9	13	14	17	8	9	10	11	8	10.1	17.5
20-Aug	9	5	7	7	8	9	9	12	10	9	12	12	14	10	14	11	10	9	11	10	12	9	10	9	9.9	14.1
21-Aug	6	10	12	12	11	11	11	12	14	12	11	12	12	14	13	12	13	13	14	12	8	4	4	10	11.0	14.2
22-Aug	10	6	2	5	5	6	5	8	9	10	10	12	10	14	12	11	9	9	14	14	10	7	4	7	8.7	14.2
23-Aug	8	10	8	10	9	9	10	10	13	11	13	14	11	10	9	7	7	9	8	9	9	13	13	11	10.1	13.9
24-Aug	12	11	10	9	11	11	11	10	9	6	7	10	12	11	10	8	7	9	11	6	3	2	4	6	8.5	11.9
25-Aug	4	2	5	4	5	7	5	6	8	8	8	8	15	17	13	13	12	14	14	16	16	12	9	9	9.6	17.5
26-Aug	8	6	3	5	6	6	6	10	10	18	21	22	21	21	20	20	25	26	22	17	13	11	14	16	14.4	26.4
27-Aug	12	8	7	5	5	3	5	7	12	20	21	22	25	22	23	24	24	21	19	16	8	6	4	5	13.5	24.7
28-Aug	6	5	7	8	10	8	9	9	8	5	6	7	8	9	9	7	6	7	7	10	7	7	4	4	7.1	9.7
29-Aug	6	5	4	2	4	5	4	6	3	4	6	7	11	13	12	11	11	12	14	15	10	12	10	7	8.1	15.1
30-Aug	8	4	4	4	4	4	5	8	12	16	23	24	24	23	22	22	19	20	21	17	16	13	11	14	13.9	24.1
31-Aug	12	9	7	8	11	10	9	6	15	25	23	22	21	23	21	20	20	21	18	16	17	16	13	11	15.6	24.7
	7.1	6.8	6.7	6.7	6.9	7.0	7.0	8.2	9.5	11.4	12.7	13.1	13.9	13.8	13.8	12.9	12.8	13.3	12.6	11.2	9.2	8.8	7.9	7.5	Diurnal Average	
	17.2	19.1	19.8	21.5	20.0	12.6	13.4	22.5	24.9	28.0	26.0	24.8	24.7	22.8	22.8	24.3	24.6	26.4	22.9	21.7	17.1	17.0	14.6	15.9	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg

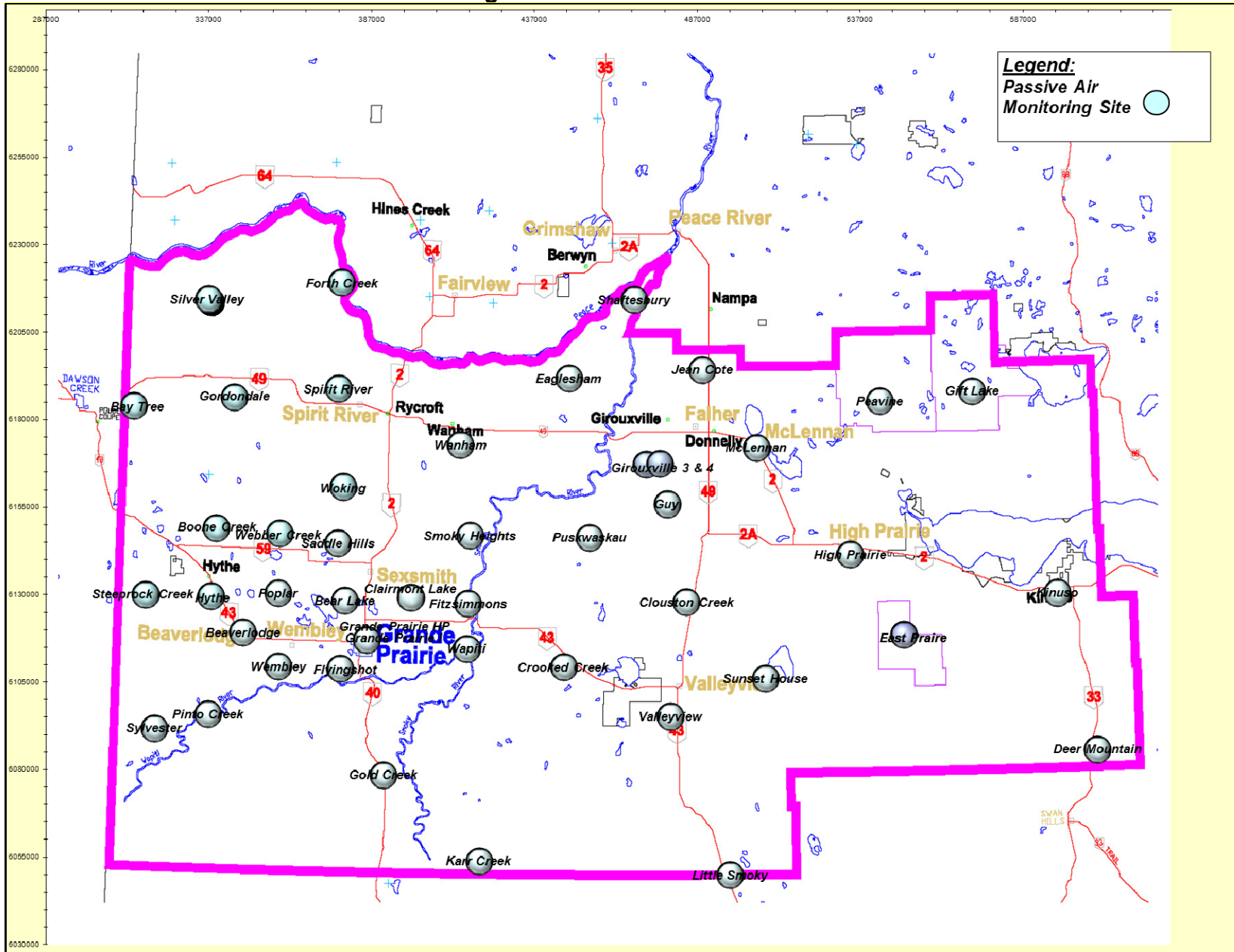
Portable Clairmont - August 2014

Maximum Value: 97.7 deg on Aug 25 02:00																								Hours in Service: 744	
Minimum Value: 3.9 deg on Aug 1 01:00																								Hours of Data: 744	
Percentiles: P ₁ = 4.3 P ₁₀ = 7.0 Q ₁ = 9.6 Median = 13.5 Q ₃ = 23.1 P ₉₀ = 39.3 P ₉₉ = 83.0																								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-Aug	4	4	5	5	6	23	13	8	9	9	11	8	8	9	12	21	13	11	12	9	10	10	12	13	22.6
2-Aug	5	7	5	5	7	8	17	27	25	34	36	18	16	32	40	48	71	93	49	5	8	11	12	65	92.6
3-Aug	20	67	23	78	83	14	11	28	15	18	33	78	26	28	33	52	57	27	21	6	6	13	11	14	82.9
4-Aug	79	85	38	24	76	37	63	30	41	53	34	37	17	19	12	11	9	6	5	7	13	4	6	5	85.2
5-Aug	25	5	7	12	6	6	5	18	9	10	10	12	16	26	17	16	22	10	10	35	12	21	26	89	88.7
6-Aug	13	91	55	43	14	13	11	11	14	11	13	12	12	13	13	13	12	9	9	6	7	9	12	16	90.8
7-Aug	21	18	19	11	19	55	36	13	14	10	14	15	16	16	12	14	15	12	11	8	10	22	18	39	55.0
8-Aug	36	31	33	21	71	33	62	12	37	19	36	20	24	21	33	24	14	14	15	8	9	8	24	12	70.5
9-Aug	13	10	10	10	7	7	14	23	18	47	19	19	26	23	14	12	10	16	12	9	7	27	10	10	46.6
10-Aug	7	12	21	24	22	26	20	37	19	12	13	10	12	14	14	14	11	11	9	10	13	8	26	34	37.4
11-Aug	35	51	27	61	47	13	53	21	25	31	20	18	15	24	24	21	29	23	43	13	7	27	10	9	60.9
12-Aug	9	7	11	5	4	6	10	8	23	10	6	9	15	21	26	37	37	20	17	20	14	14	74	60	73.5
13-Aug	79	27	23	16	9	4	5	9	6	10	11	9	11	17	19	23	7	8	9	72	34	74	53	25	78.9
14-Aug	52	30	23	10	19	15	25	21	18	21	54	73	33	14	17	27	22	10	24	13	23	33	38	25	73.4
15-Aug	46	4	5	37	31	25	54	15	26	16	24	16	15	23	13	21	13	11	8	7	21	10	7	11	54.1
16-Aug	15	9	18	15	27	67	27	42	17	12	14	12	13	15	10	10	9	9	7	21	11	18	37	41	66.6
17-Aug	16	15	18	7	7	8	16	14	15	12	10	12	12	15	17	13	11	9	12	8	8	7	10	12	18.1
18-Aug	23	15	14	27	12	10	9	8	7	8	7	8	8	13	18	13	10	9	10	8	9	8	9	10	26.9
19-Aug	14	34	20	18	32	12	13	15	11	10	14	22	28	20	62	15	40	12	12	14	20	21	14	21	62.3
20-Aug	12	18	11	9	6	9	10	9	9	12	12	19	15	26	16	18	19	22	11	12	8	7	6	5	25.7
21-Aug	13	4	5	5	5	6	7	5	7	9	21	21	21	17	17	19	13	7	6	12	14	24	42	6	42.2
22-Aug	27	19	58	13	12	10	38	11	11	11	24	19	27	29	29	34	24	21	11	8	8	7	36	6	57.9
23-Aug	6	4	19	13	7	5	6	18	11	13	11	14	16	30	26	36	28	30	19	9	17	6	6	5	36.2
24-Aug	5	5	6	10	5	4	5	8	10	45	42	17	19	16	26	24	46	14	9	9	44	89	10	11	88.6
25-Aug	22	98	22	10	9	7	10	21	16	15	21	23	16	15	17	17	14	8	9	7	7	8	9	8	97.7
26-Aug	13	28	27	10	11	27	26	16	11	11	11	12	14	10	10	8	8	9	8	9	10	9	11	11	28.1
27-Aug	11	16	22	38	34	42	36	18	11	9	10	11	11	11	13	10	9	8	10	8	12	10	22	16	41.6
28-Aug	11	15	19	10	8	10	6	9	13	54	44	40	60	43	48	59	86	41	29	7	7	5	59	43	85.7
29-Aug	12	22	26	73	55	19	33	38	97	84	23	25	17	14	12	12	16	10	9	8	11	8	10	11	96.5
30-Aug	18	24	31	23	45	45	69	15	17	16	12	11	14	12	15	12	16	10	8	8	8	9	11	9	68.9
31-Aug	10	11	13	22	9	9	38	11	11	7	11	12	15	11	11	11	10	11	10	7	7	6	7	9	37.7
78.9	97.7	57.9	78.4	82.9	66.6	68.9	42.4	96.5	83.7	54.0	78.2	60.3	43.4	62.3	59.3	85.7	92.6	48.9	71.6	43.9	88.6	73.5	88.7		

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for August 2014

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
1a	Silver Valley	0.1	25.1	0.7		
1b	Silver Valley	0.2	26.7	0.6		
7a	Steeprock Creek	BDL	28.9	0.3		
7b	Steeprock Creek	BDL	24.7	0.3		
21a	Eaglesham	0.1	21.3	0.4		
21b	Eaglesham	0.1	21.6	0.3		
48a	Deer Mountain	BDL	16.0	0.4		
48b	Deer Mountain	BDL	19.4	0.2		
64a	Girouxville 4				0.2	
64b	Girouxville 4				0.2	
1	Silver Valley	0.2	25.9	0.7		08-27-081-11 W6M
2	Bay Tree	0.2	27.8	0.2		13-16-078-13 W6M
3	Fourth Creek	0.1	29.9	0.4		04-13-082-07 W6M
4	Gordondale	0.3	28.5	0.7		04-34-078-10 W6M
5	Boone Creek	0.1	19.3	0.5		16-36-074-11 W6M
7	Steeprock Creek	BDL	26.8	0.3		09-35-072-13 W6M
9	Spirit River	0.1	27.3	0.7		08-12-079-07 W6M
10	Woking	0.1	26.8	0.4		01-13-076-07 W6M
11	Webber Creek	0.1	21.9	0.8		09-36-074-09 W6M
12	Hythe	0.1	23.6	0.6		14-36-072-11 W6M
14	Sylvester	BDL	17.8	0.3		08-06-069-12 W6M
16	Beaverlodge	0.1	27.4	1.0		15-36-071-10 W6M
17	Poplar	0.1	24.2	0.5		13-06-073-08 W6M
18	Saddle Hills	0.2	23.9	0.3		04-25-074-07 W6M
19	Wanham	0.2	32.5	0.3		16-22-077-03 W6M
20	Shaftesbury	0.1	33.6	0.4		04-03-082-23 W5M
21	Eaglesham	0.1	21.5	0.4		16-21-079-25 W5M
23	Bear Lake	0.1	24.9	1.1		15-31-072-06 W6M
24	Wembley	0.1	21.2	1.2		12-31-070-08 W6M
25	Pinto Creek	BDL	21.4	0.4		04-24-069-11 W6M
26	Flyingshot	0.1	20.4	0.7		15-36-070-07 W6M
27	Grande Prairie I	0.1	25.0	2.3		08-15-071-06 W6M

PAZA Passive Results for August 2014 (Continued)

28	Clairmont Lake	0.1	27.3	1.2		09-06-073-04 W6M
29	Smoky Heights	0.2	35.8	0.5		04-06-075-02 W6M
30	Fitzsimmons	0.1	22.3	0.6		15-36-072-03 W6M
32	Gold Creek	0.1	16.6	1.3		06-33-067-05 W6M
33	Wapiti	0.2	26.1	0.8		02-25-071-03 W6M
34	Puskwaskau	0.1	19.3	0.2		15-35-074-25 W5M
35	Jean Cote	0.2	25.1	0.9		12-35-079-21 W5M
36	Guy	0.1	22.9	0.7		03-04-076-22 W5M
37	Crooked Creek	0.1	19.2	0.6		16-01-071-26 W5M
38	Karr Creek	BDL	16.7	0.7		10-16-065-02 W6M
39	Clouston Creek	0.1	22.2	0.4		12-01-073-22 W5M
40	McLennan	0.2	24.7	0.6		03-29-077-19 W5M
41	Valleyview	0.1	26.3	0.5		09-30-069-22 W5M
42	Sunset House	0.2	28.6	0.6		05-32-070-19 W5M
43	High Prairie	0.1	20.3	0.5		16-13-074-17 W5M
44	Peavine	0.1	20.2	0.3		03-05-079-15 W5M
45	Gift Lake	0.1	19.8	0.3	0.1	10-07-079-12 W5M
46	Little Smoky	0.1	18.6	1.2		12-01-065-21 W5M
47	Kinuso	BDL	16.4	0.2		12-10-073-10 W5M
48	Deer Mountain	BDL	17.7	0.3		15-22-068-09 W5M
49	Grande Prairie HP	0.1	27.2	1.9		17-26-071-06 W6M
50	East Prairie	0.1	17.6	0.3		13-02-072-15 W5M
63	Girouxville 3				0.2	14-02-077-23 W5M
64	Girouxville 4				0.2	4-08-077-22 W5M

*BDL = Below Detection Level

*NS - No sample

Passive Summary for August 2014

Stats	Sulphur Dioxide SO ₂	Ozone O ₃	Nitrogen Dioxide NO ₂	Hydrogen Sulphide H ₂ S
	ppb	ppb	ppb	ppb

Passive Summary for August 2014 (PAZA Zone)				
Mean	0.1	23.7	0.7	0.2
Standard Deviation	0.1	4.7	0.4	0.0
Minimum	0.1	16.4	0.2	0.1
Minimum At	Hythe (#12)	Kinuso (#47)	Kinuso (#47)	Gift Lake (#45)
Maximum	0.3	35.8	2.3	0.2
Maximum At	Gordondale (#4)	Smoky Heights (#29)	Grande Prairie I (#27)	Girouxville 3 (#63)

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

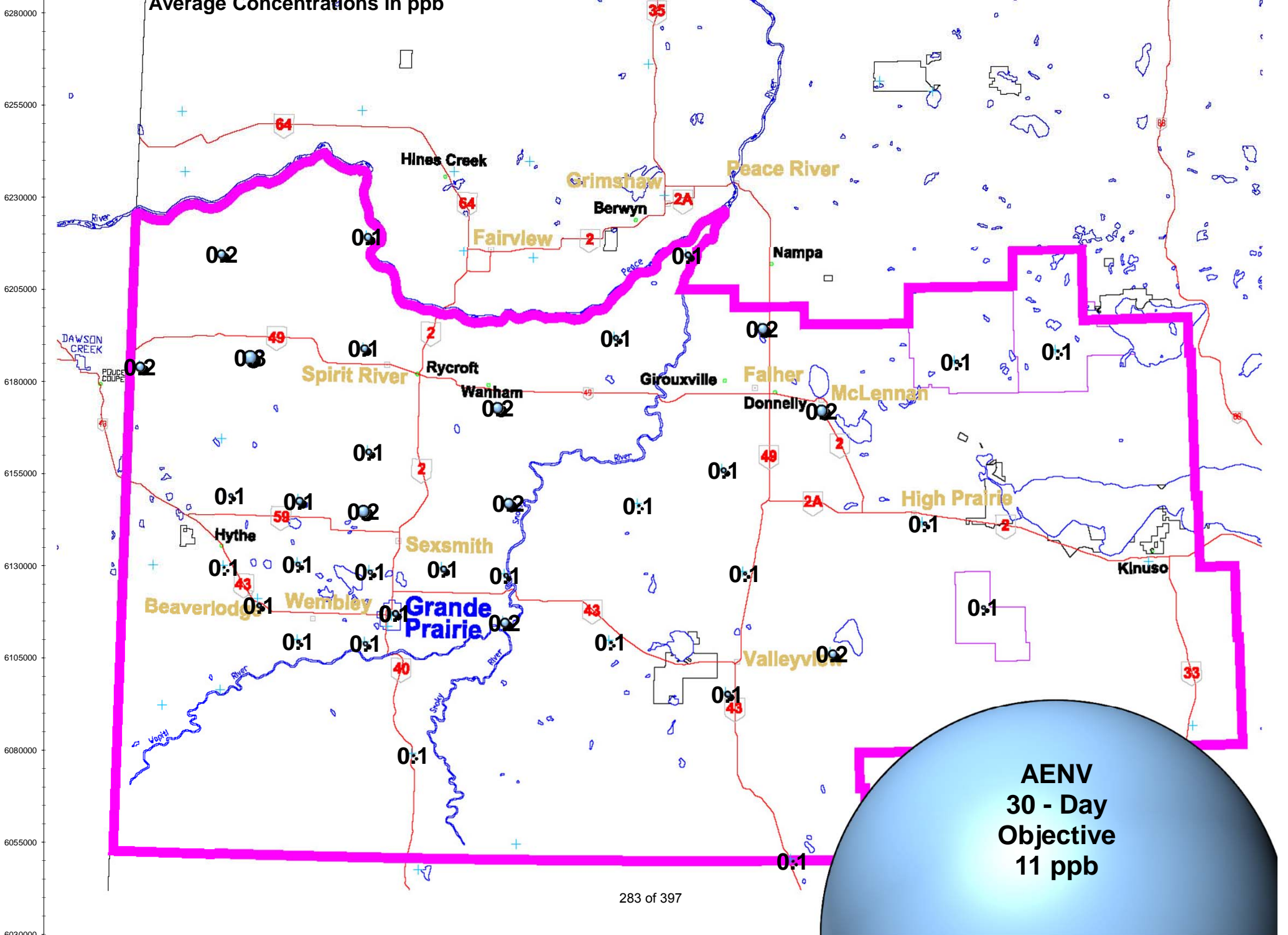
	SO ₂	O ₃	NO ₂
PAZA Beaverlodge station	0.5	28.1	2.5
PAZA Beaverlodge passive	0.1	27.4	1.0

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	24.1	5.2
PAZA Grande Prairie passive	0.1	27.2	1.9

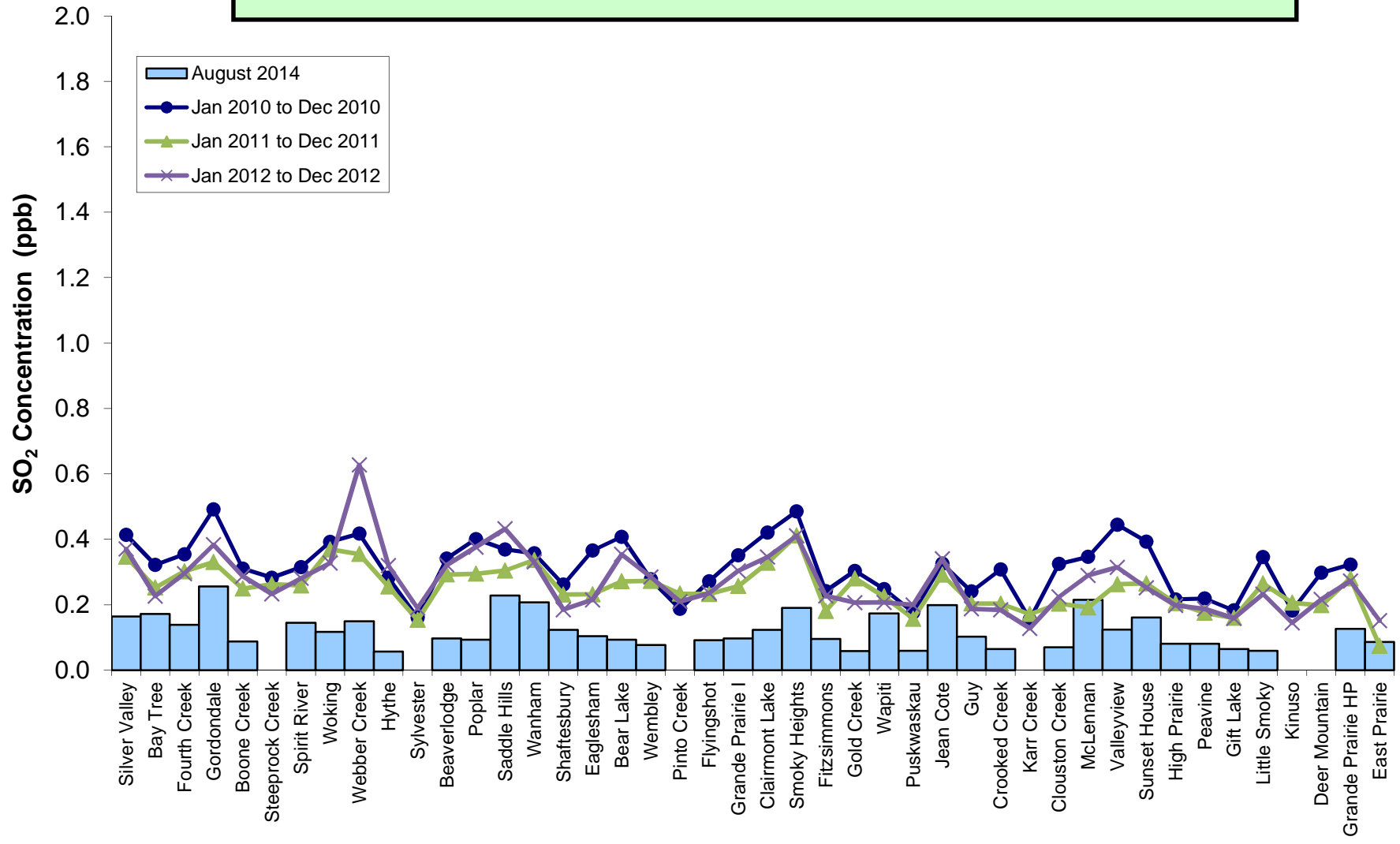
PAZA Passive SO₂ Stations - August 2014

Average Concentrations in ppb



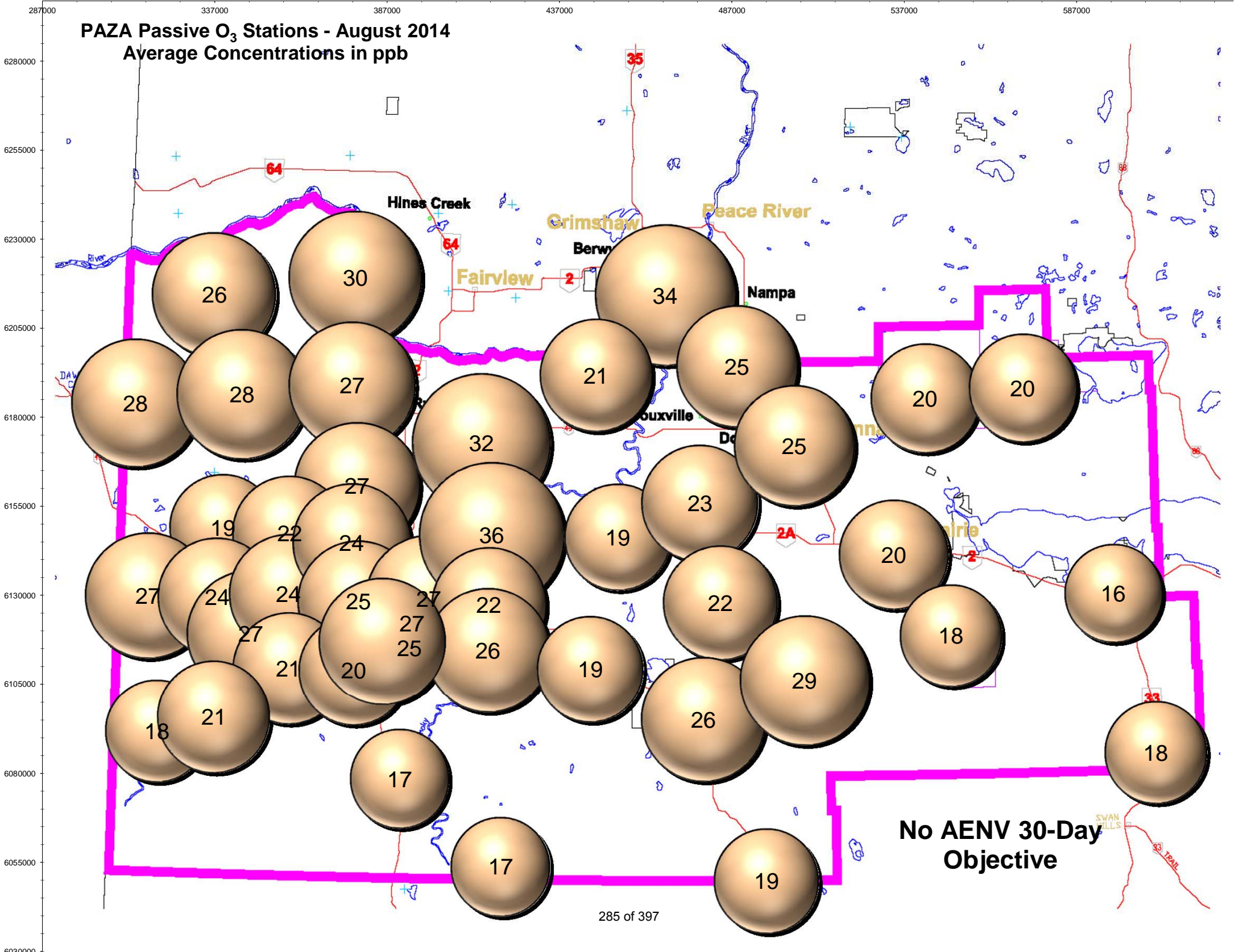
**AENV
30 - Day
Objective
11 ppb**

Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb



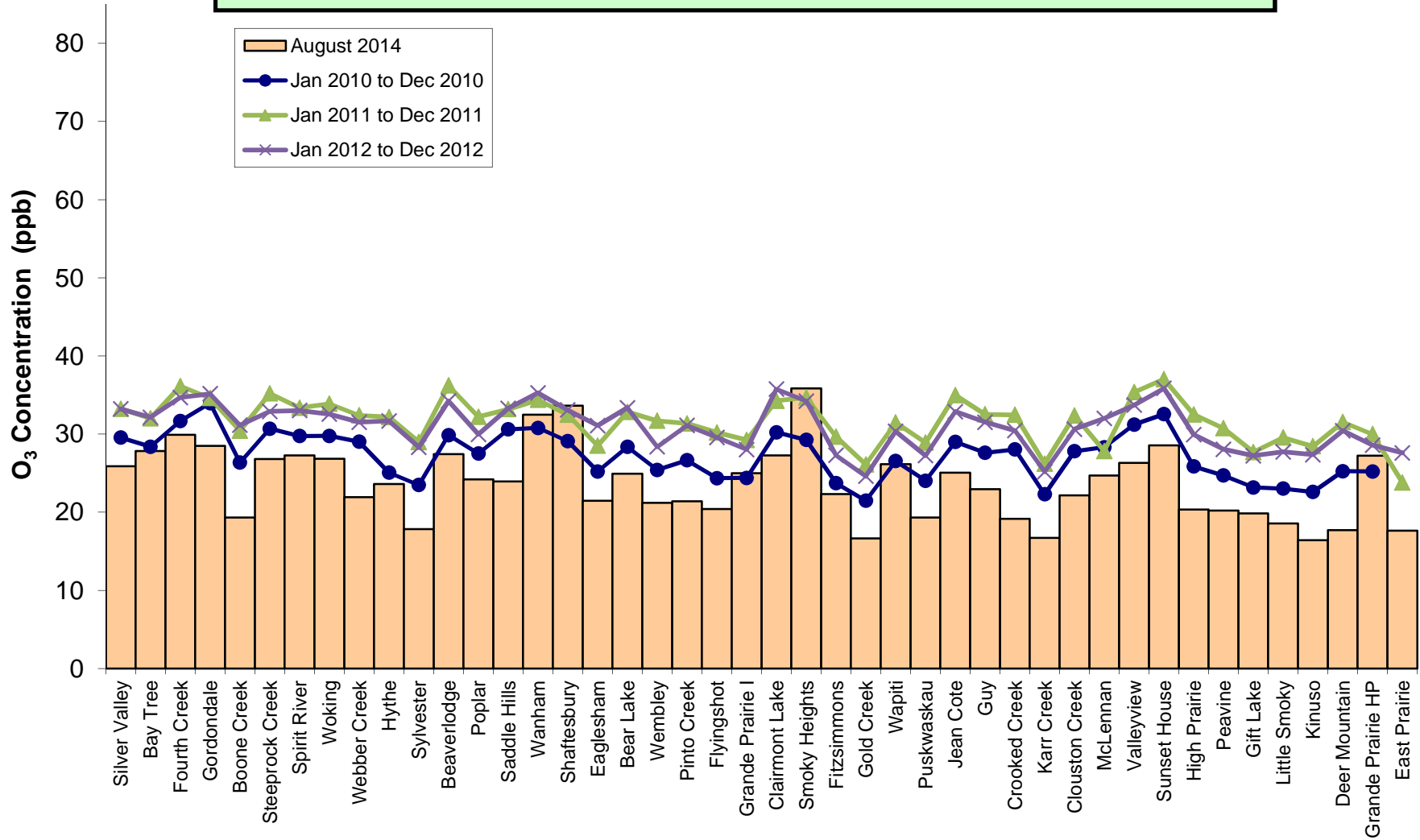
PAZA Passive O₃ Stations - August 2014

Average Concentrations in ppb

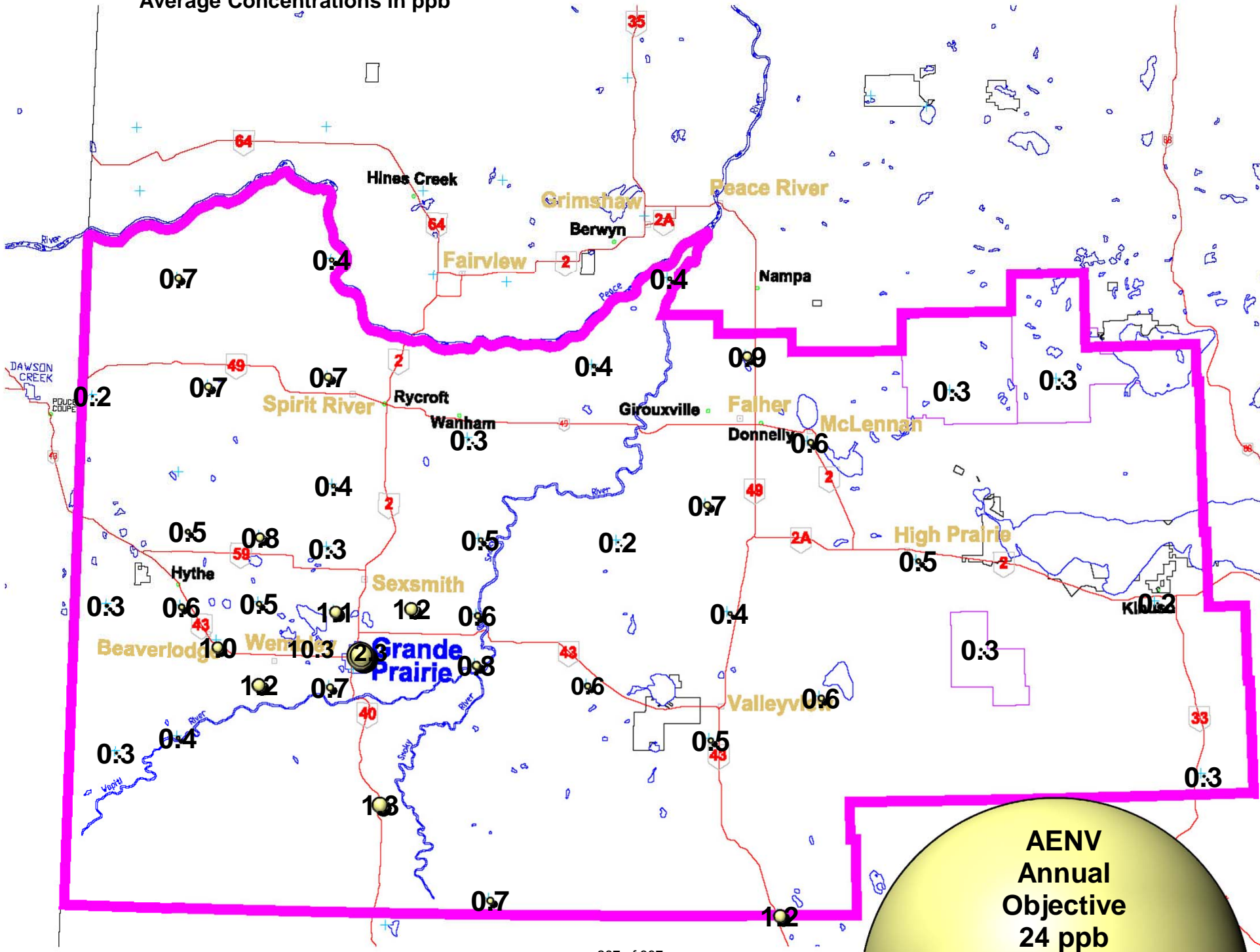


No AENV 30-Day Objective

Alberta Ambient Air Quality Objective - No Annual O₃ Objective

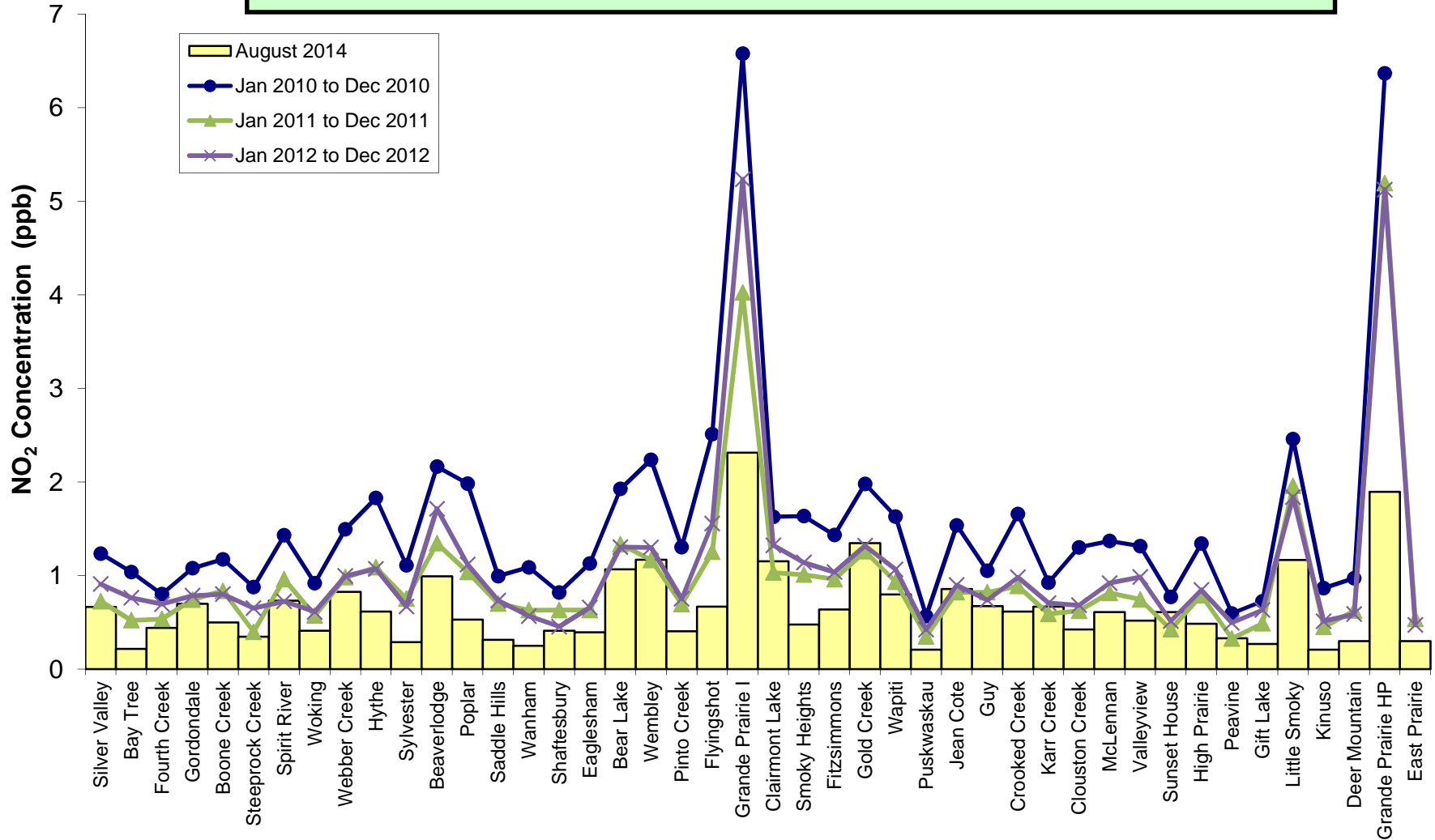


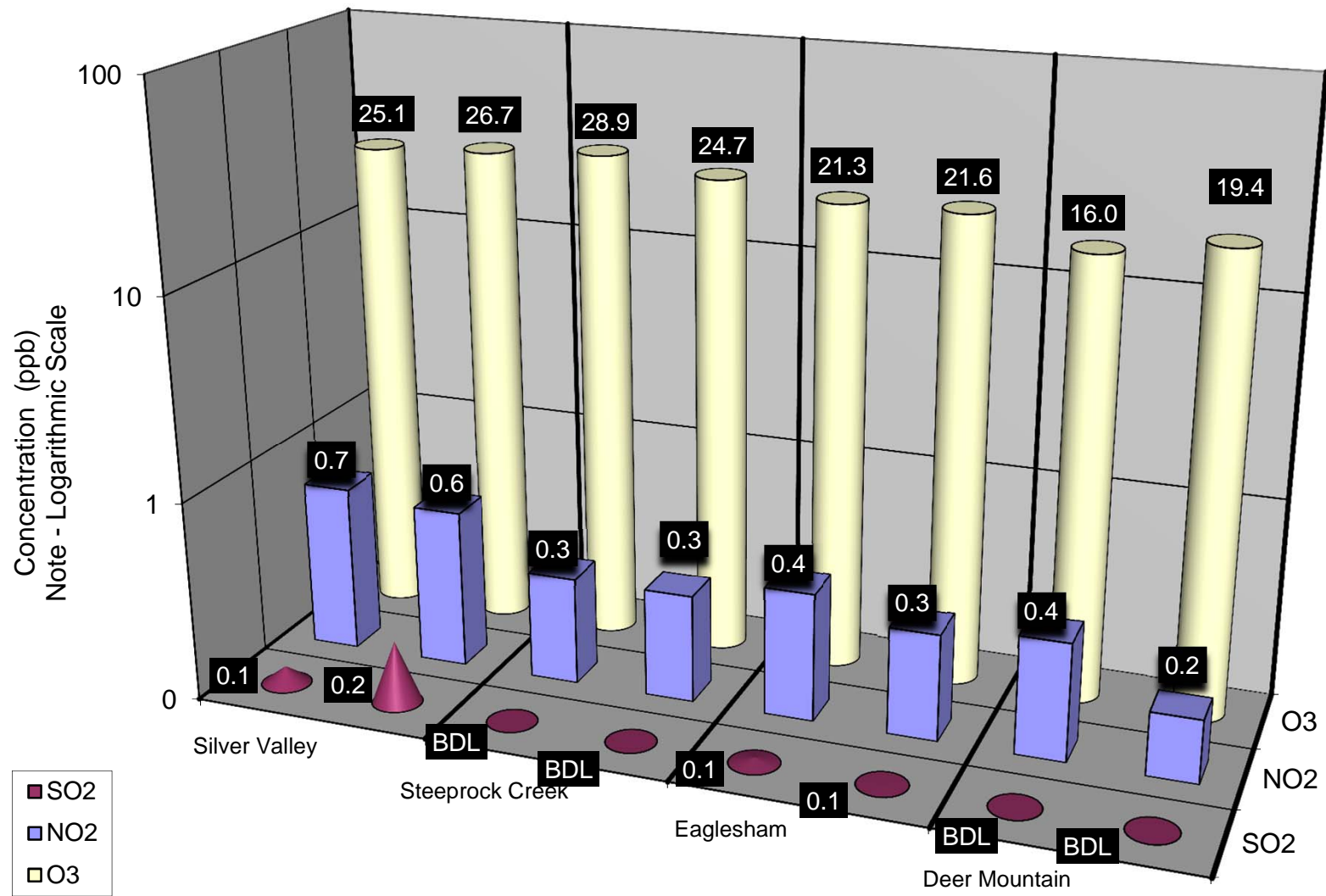
PAZA Passive NO₂ Stations - August 2014
Average Concentrations in ppb



AENV
Annual
Objective
24 ppb

Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 24 ppb





Duplicate Summary Chart

PAZA

ALBERTA ENVIRONMENT AND SUSTAINABLE RESOURCES INCIDENCE REPORT

August 2014

Air Monitoring Directive Exceedence Report

**Alberta Environmental Monitoring, Evaluation and Reporting Agency
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:	287608	Reported To (AESRD Contact):	Nancy/Taren
Date & Time Incident Reported to AESRD:	Aug 1, 2014 08:30/ Aug 2, 2014 12:30	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Henry Pirker Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 1, 2014 06:00MST	End Date & Time of Incident:	Aug 1, 2014 00:00 MST
Reason or Nature of Incident:			
On Aug 1, 2014 the PM2.5 analyzer exceeded three times the 1-hour AAAQ Guideline of 80µg/m ³ and the 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
06:00 HRS MST	PM2.5 =82.3 µg/m ³	WS=4.2 km/hr	WD=45.5 degrees
07:00 HRS MST	PM2.5 =86.5 µg/m ³	WS=5.1 km/hr	WD=64.5 degrees
08:00 HRS MST	PM2.5 =87.7 µg/m ³	WS=6.4 km/hr	WD=71.1 degrees
<u>24 HR Average</u>	PM2.5 =34.9 µg/m ³	WS=7.7 km/hr	WD=83.9 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 1, 2014
7-Day Letter Due Date:	Aug 7, 2014		

Air Monitoring Directive Exceedence Report

**Alberta Environmental Monitoring, Evaluation and Reporting Agency
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:	287834	Reported To (AESRD Contact):	Tim
Date & Time Incident Reported to AESRD:	Aug 6, 2014 08: 45	Reported By:	Grover Christiansen
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Henry Pirker Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 4, 2014 10:00MST	End Date & Time of Incident:	Aug 4, 2014 00:00
Reason or Nature of Incident:			
On Aug 4, 2014 the PM2.5 analyzer exceeded the 1-hour AAAQ Guideline of 80µg/m ³ and the 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
10:00 MST	PM2.5 = 89.1 ug/m3	WS = 4.3 km/hr	WD = 235.5 degrees
11:00 MST	PM2.5 = 86.6 ug/m3	WS = 4.1 km/hr	WD = 235.5 degrees
12:00 MST	PM2.5 = 88.3 ug/m3	WS = 1.4 km/hr	WD = 165 degrees
13:00 MST	PM2.5 = 94.8 ug/m3	WS = 5.6 km/hr	WD = 136.3 degrees
<u>24 HR Exceedence:</u> PM2.5 = 47.0 µg/m ³ WS= 5.6 km/hr WD= 177.3 degrees			
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires affecting the area.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Grover Christiansen	Date Report Submitted:	Aug 6, 2014
7-Day Letter Due Date:			

Air Monitoring Directive Exceedence Report

**Alberta Environmental Monitoring, Evaluation and Reporting Agency
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:	288201	Reported To (AESRD Contact):	Nancy
Date & Time Incident Reported to AESRD:	Aug 14, 2014 00:45	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Henry Pirker Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 13, 2014 01:00MST	End Date & Time of Incident:	Aug 13, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 13, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =34.7 µg/m ³	WS=4.8 km/hr	WD=265.5 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 13, 2014
7-Day Letter Due Date:	Aug 20, 2014		

Air Monitoring Directive Exceedence Report

**Alberta Environmental Monitoring, Evaluation and Reporting Agency
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:	288273	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 15, 2014 01:00	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Henry Pirker Air Quality monitoring station		
Start Date & Time of Incident:	Aug 14, 2014 01:00MST	End Date & Time of Incident:	Aug 14, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 14, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =42.3 µg/m ³	WS= 4.8 km/hr	WD=234.1 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 14, 2014
7-Day Letter Due Date:	Aug 21, 2014		

Air Monitoring Directive Exceedence Report

**Alberta Environmental Monitoring, Evaluation and Reporting Agency
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:	288339	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 16, 2014 01:00	Reported By:	Dmytro Dolotii
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Henry Pirker Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 15, 2014 01:00MST	End Date & Time of Incident:	Aug 15, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 15, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =38.5 µg/m ³	WS= 5.5 km/hr	WD=183.2 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 16, 2014
7-Day Letter Due Date:	Aug 23, 2014		

Air Monitoring Directive Exceedence Report

**Alberta Environmental Monitoring, Evaluation and Reporting Agency
Energy & Environmental Response**

111 Twin Atria Building
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Edmonton, Alberta T6B 2X3
erc.environment@gov.ab.ca
Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	288373	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 17, 2014 01:10	Reported By:	Dmytro Dolotii
Reported on Behalf of:	Paza	Approval Number (if applicable):	N/A
Location(s) of Incident:	Henry Pirker Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 16, 2014 01:00MST	End Date & Time of Incident:	Aug 16, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 16, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =35.9 µg/m ³	WS= 6.3 km/hr	WD=236.2 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 17, 2014
7-Day Letter Due Date:	Aug 24, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288391	Reported To (AESRD Contact):	Aona
Date & Time Incident Reported to AESRD:	Aug 17, 2014 14:00	Reported By:	Dmytro Dolotii
Reported on Behalf of:	Paza	Approval Number (if applicable):	N/A
Location(s) of Incident:	Henry Pirker Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 17, 2014 12:00MST	End Date & Time of Incident:	Aug 17, 2014 13:00
Reason or Nature of Incident:			
On Aug 17, 2014 the PM2.5 analyzer exceeded 1-hour AAAQ Guideline of 80µg/m ³ , details as follows:			
<u>13:00 HR Average</u>	PM2.5 =92.3 µg/m ³	WS=14.6 km/hr	WD=242.9 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 18, 2014
7-Day Letter Due Date:	Aug 25, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288200	Reported To (AESRD Contact):	Nancy
Date & Time Incident Reported to AESRD:	Aug 14, 2014 00:45	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Evergreen Park Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 13, 2014 01:00MST	End Date & Time of Incident:	Aug 13, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 13, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =34.8 µg/m ³	WS=8.1 km/hr	WD=238.2 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 13, 2014
7-Day Letter Due Date:	Aug 20, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288274	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 15, 2014 01:05	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Evergreen Park Air Quality monitoring station		
Start Date & Time of Incident:	Aug 14, 2014 01:00MST	End Date & Time of Incident:	Aug 14, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 14, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =34.7 µg/m ³	WS=6.7 km/hr	WD=184 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 14, 2014
7-Day Letter Due Date:	Aug 21, 2014		

Air Monitoring Directive Exceedence Report

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Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	288340	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 16, 2014 01:05	Reported By:	Dmytro Dolotii
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Evergreen Park Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 15, 2014 01:00MST	End Date & Time of Incident:	Aug 15, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 15, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =38.4 µg/m ³	WS=3.9 km/hr	WD=143.7 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 16, 2014
7-Day Letter Due Date:	Aug 23, 2014		

Air Monitoring Directive Exceedence Report

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Phone: (780) 422-4505
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Reference Number:	288375	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 17, 2014 01:10	Reported By:	Dmytro Dolotii
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Evergreen Park Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 16, 2014 01:00MST	End Date & Time of Incident:	Aug 16, 2014 00:00
Reason or Nature of Incident:			
On Aug 16, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =31.9 µg/m ³	WS=9.7 km/hr	WD=235.5 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 17, 2014
7-Day Letter Due Date:	Aug 24, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	87671	Reported To (AESRD Contact):	Taryn
Date & Time Incident Reported to AESRD:	Aug 2, 2014 12:30	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Smoky Heights Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 1, 2014 01:00MST	End Date & Time of Incident:	Aug 1, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 1, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =31.9 µg/m ³	WS=8.3 km/hr	WD=59.4 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 1, 2014
7-Day Letter Due Date:	Aug 7, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288198	Reported To (AESRD Contact):	Nancy
Date & Time Incident Reported to AESRD:	Aug 14, 2014 12:44	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Smoky Heights Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 13, 2014 01:00MST	End Date & Time of Incident:	Aug 13, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 13, 2014 the PM2.5 analyzer exceeded 1-hour AAAQ Objective of 80µg/m ³ , details as follows: PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows			
<u>20:00 HR Average</u>	PM2.5 =87.7 µg/m ³	WS=6.4 km/hr	WD=238.6 degrees
<u>21:00 HR Average</u>	PM2.5 =85.6 µg/m ³	WS=8.5 km/hr	WD=259.4 degrees
<u>24 HR Average</u>	PM2.5 =31.5 µg/m ³	WS=7.1 km/hr	WD=249.7 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 1, 2014
7-Day Letter Due Date:	Aug 7, 2014		

Air Monitoring Directive Exceedence Report

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Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	288204	Reported To (AESRD Contact):	Nancy/Raymon
Date & Time Incident Reported to AESRD:	Aug 15, 2014 01:05	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Smoky Heights Air Quality monitoring station		
Start Date & Time of Incident:	Aug 14, 2014 00:00MST	End Date & Time of Incident:	Aug 14, 2014 01:00
Reason or Nature of Incident:			
On Aug 14, 2014 the PM2.5 analyzer exceeded 1-hour AAAQ Guideline of 80µg/m ³ and the 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>1:00 HR Average</u>	PM2.5 =92.8 µg/m ³	WS=5.6 km/hr	WD=214.5 degrees
<u>20:00 HR Average</u>	PM2.5 =94.3 µg/m ³	WS=3.6 km/hr	WD=28.6 degrees
<u>21:00 HR Average</u>	PM2.5 =89.7 µg/m ³	WS=3.2 km/hr	WD=30.6 degrees
<u>24 HR Average</u>	PM2.5 =45.5 µg/m ³	WS=7.3 km/hr	WD=184 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 14, 2014
7-Day Letter Due Date:	Aug 21, 2014		

Air Monitoring Directive Exceedence Report

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Phone: (780) 422-4505
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Reference Number:	288369	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 17, 2014 01:10	Reported By:	Dmytro Dolotii
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Smoky Heights Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 16, 2014 01:00MST	End Date & Time of Incident:	Aug 16, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 16, 2014 the PM _{2.5} analyzer exceeded 1-hour AAAQ Guideline of 80µg/m ³ and the 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
21:00 HR Average	PM _{2.5} = 144.3 µg/m ³	WS = 5.8 km/hr	WD = 263.0 degrees
<u>24 HR Average</u>	PM _{2.5} = 35.4 µg/m ³	WS = 7.0 km/hr	WD = 234.5 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 17, 2014
7-Day Letter Due Date:	Aug 24, 2014		

Air Monitoring Directive Exceedence Report

**Alberta Environmental Monitoring, Evaluation and Reporting Agency
Energy & Environmental Response**

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Phone: (780) 422-4505
Fax: (780) 427-1044

Reference Number:	288269	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 15, 2014 01:05	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Beaverlodge Air Quality monitoring station		
Start Date & Time of Incident:	Aug 14, 2014 01:00MST	End Date & Time of Incident:	Aug 14, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 14, 2014 the PM2.5 analyzer exceeded the 1-hour AAAQ Guideline of 80µg/m ³ , and the 24-hour AAAQ Objective of 30µg/m ³ details as follows:			
18:00 HR Average	PM2.5 =81.9 µg/m ³	WS=11.2 km/hr	WD=21.9 degrees
19:00 HR Average	PM2.5 =102.5 µg/m ³	WS=8.9 km/hr	WD=28.6 degrees
20:00 HR Average	PM2.5 =103.2 µg/m ³	WS=11.4 km/hr	WD=26.6 degrees
21:00 HR Average	PM2.5 =90.7 µg/m ³	WS=12.5 km/hr	WD=25 degrees
22:00 HR Average	PM2.5 =85.5 µg/m ³	WS=4.2 km/hr	WD=40.8 degrees
<u>24 HR Average</u>	PM2.5 =41.1 µg/m ³	WS=7.3 km/hr	WD=62 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 14, 2014
7-Day Letter Due Date:	Aug 21, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288341	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 16, 2014 00:15	Reported By:	Dmytro Dolotii
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Beaverlodge Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 15, 2014 01:00MST	End Date & Time of Incident:	Aug 15, 2014 00:00 MST
Reason or Nature of Incident:			
On Aug 15, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30 µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 =36.8 µg/m ³	WS=6.2 km/hr	WD=117.9 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 16, 2014
7-Day Letter Due Date:	Aug 23, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288393	Reported To (AESRD Contact):	Aona
Date & Time Incident Reported to AESRD:	Aug 17, 2014 14:00	Reported By:	Dmytro Dolotii
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Beaverlodge Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 17, 2014 11:00MST	End Date & Time of Incident:	Aug 17, 2014 12:00 MST
Reason or Nature of Incident:			
On Aug 17, 2014 the PM2.5 analyzer exceeded 1-hour AAAQ Guideline of 80µg/m ³			
<u>12:00 HR Average</u>	PM2.5 =100.4 µg/m ³	WS=25.6 km/hr	WD=259.7 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 18, 2014
7-Day Letter Due Date:	Aug 25, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288199	Reported To (AESRD Contact):	Nancy
Date & Time Incident Reported to AESRD:	Aug 14, 2014 00:45	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Clairmont Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 13, 2014 01:00MST	End Date & Time of Incident:	Aug 13, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 13, 2014 the PM2.5 analyzer exceeded the 1-hour AAAQ Objective of 80µg/m ³ , details as follows, it also exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
20:00 HRS Average	PM2.5 =81.2 µg/m ³	WS=1.2 km/hr	WD=151.7 degrees
22:00 HRS Average	PM2.5 =81.2 µg/m ³	WS=1.9 km/hr	WD=243.8 degrees
24 HR Average	PM2.5 =32.2 µg/m ³	WS=7.6 km/hr	WD=229.3 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 13, 2014
7-Day Letter Due Date:	Aug 20, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288270	Reported To (AESRD Contact):	Raymon
Date & Time Incident Reported to AESRD:	Aug 15, 2014 01:05	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Clairmont Air Quality monitoring station		
Start Date & Time of Incident:	Aug 14, 2014 01:00MST	End Date & Time of Incident:	Aug 14, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 14, 2014 the PM2.5 analyzer exceeded 1-hour AAAQ Guideline of 80µg/m ³ and the 24-hour AAAQ Objective of 30µg/m ³ details as follows:			
20:00 HRS	PM2.5 = 102 µg/m ³	WS= 7.0 km/hr	WD=19.7 degrees
<u>24 HR Average</u>	PM2.5 = 41 µg/m ³	WS=6 km/hr	WD=209.6 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	Aug 14, 2014
7-Day Letter Due Date:	Aug 21, 2014		

Air Monitoring Directive Exceedence Report

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Reference Number:	288374	Reported To (AESRD Contact):	Raymond
Date & Time Incident Reported to AESRD:	Aug 17, 2014 01:10	Reported By:	Dmytro Dolotii
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Clairmont Air Quality Monitoring station		
Start Date & Time of Incident:	Aug 16, 2014 01:00MST	End Date & Time of Incident:	Aug 16, 2014 00:00MST
Reason or Nature of Incident:			
On Aug 16, 2014 the PM2.5 analyzer exceeded 24-hour AAAQ Objective of 30µg/m ³ , details as follows:			
<u>24 HR Average</u>	PM2.5 = 32.6 µg/m ³	WS=7.7 km/hr	WD=211.4 degrees
Reviewed and confirmed the data as valid, called it in to AESRD.			
Investigation Details:			
Forest fires reported in the region.			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Dmytro Dolotii	Date Report Submitted:	Aug 17, 2014
7-Day Letter Due Date:	Aug 24, 2014		

August 2014 Calibration Reports

**PAZA - Henry Pirker Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃, CO, THC, TRS**

**PAZA – Evergreen Park Station with the following calibrations:
SO₂, TRS**

**PAZA – Smoky Heights Station with the following calibrations:
SO₂, TRS**

**PAZA – Beaverlodge Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃**

**PAZA – Valleyview Station with the following calibrations:
SO₂ & H₂S**

**PAZA – Falher Station with the following calibrations:
SO₂ & H₂S**

**PAZA – Clairmont Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃, TRS**

Calibration Report



Parameter SO2

Air Monitoring Network PAZA

Station Information

Calibration Date	August 5, 2014	Previous Calibration	July 3, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	8:25	End Time (MST)	11:20
Barometric Pressure	717.000 mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	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	0.994942	Calculated slope	0.986420
Calculated intercept	2.270281	Calculated intercept	2.002224
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	646.2	mm Hg	641.1	mm Hg
Flow	0.479	lpm	0.473	lpm
Lamp intensity	44027	Hz	43459	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	0.5	N/A
4995	39.93	394.9	399.6	0.9884
4995	19.97	198.3	197.8	1.0027
4995	9.97	99.2	96.0	1.0333
4995	0.00	0.0	0.5	As Found Zero
4995	39.93	394.9	399.6	As Found Span
Average Correction Factor				1.0081

Calculated value of As Found Response: 399.3 ppb Percent Change of As Found: -1.1%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	250.7	ppb	259.4	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2
 Air Monitoring Network PAZA



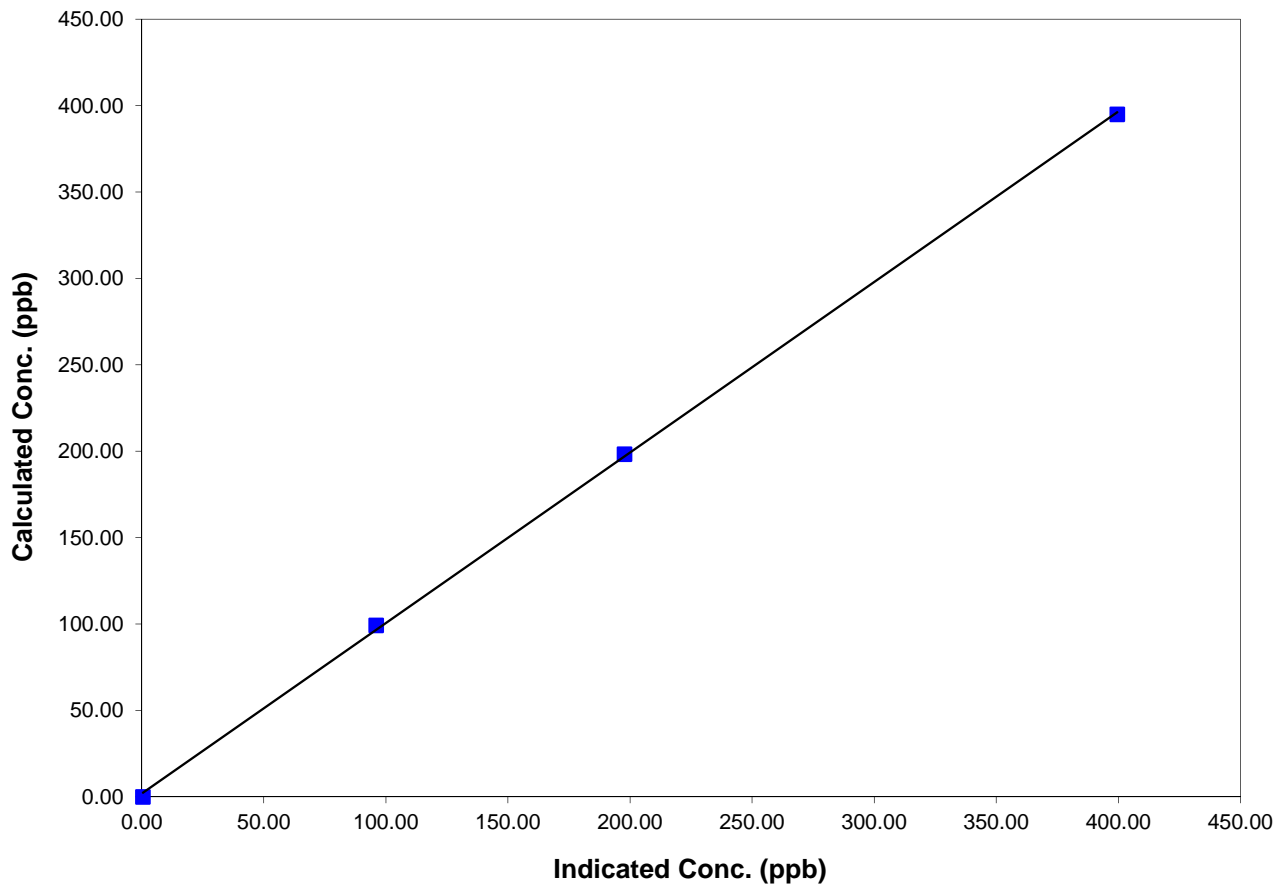
Station Information

Calibration Date	August 5, 2014	Previous Calibration	July 3, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:25	End Time (MST)	11:20
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

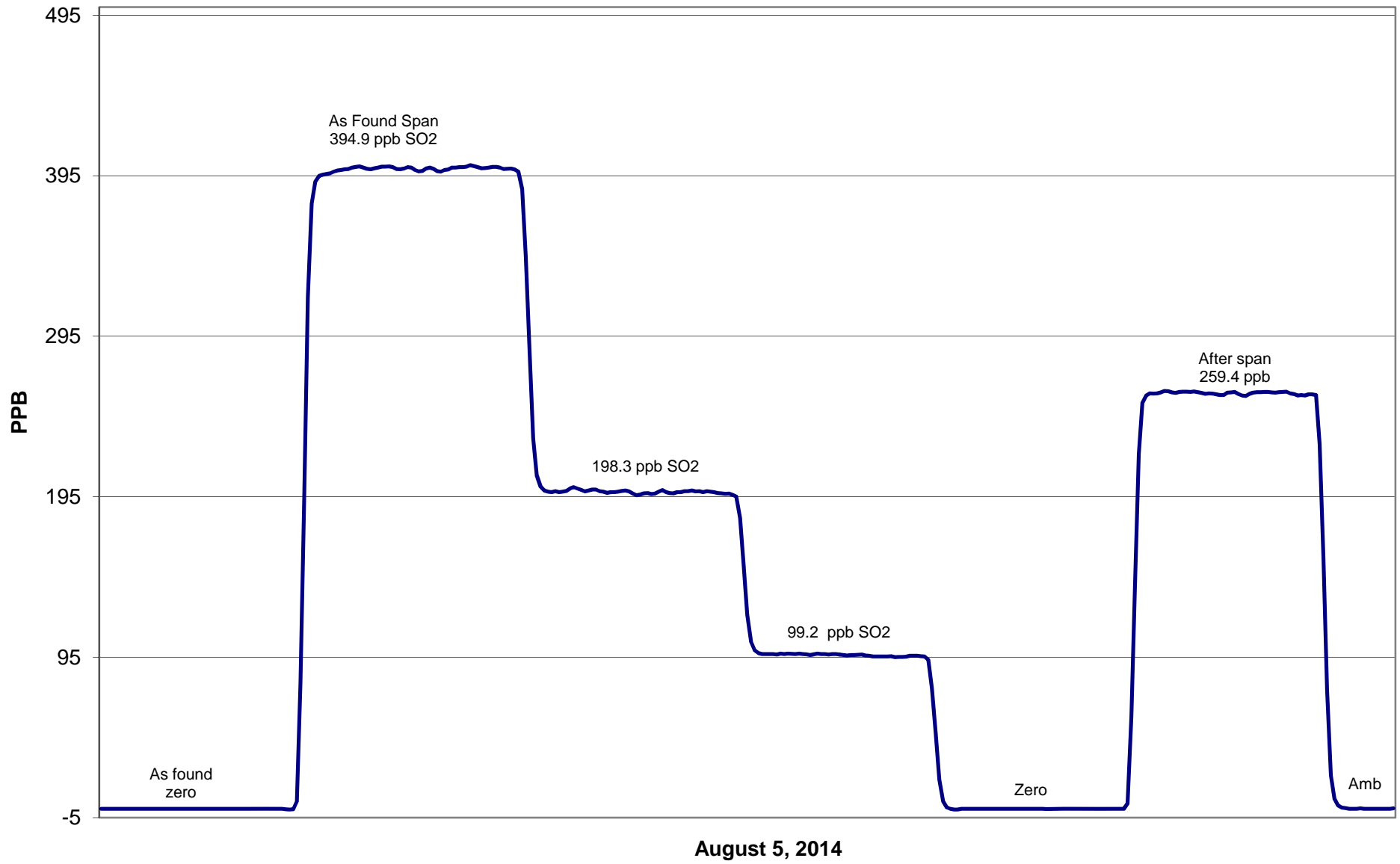
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999819
394.9	399.6	0.9884		
198.3	197.8	1.0027	Slope	0.986420
99.2	96.0	1.0333		
			Intercept	2.002224

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	August 5, 2014	Previous Calibration	July 3, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Installation	Removal
Start Time (MST)	8:25	End Time (MST)	13:40
Barometric Pressure	717.000 Atm	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
NO _x 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	0.995831	1.006817	1.003545
	Data Offset	-0.101189	1.544427	1.652440
After	Data Slope	1.002353	0.996407	0.994180
	Data Offset	-0.327684	2.293307	2.381566
	Channel #	8	6	7
	Voltage Range	0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	CR3000	Analyzer serial #	5408	
Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	4.6	mV	4.6	mV
NO _x bkgnd	4.8	mV	4.8	mV
NO coefficient	1.000		1.000	
NO _x coefficient	1.000		1.000	
NO2 conv temp	319.0	Deg C	319.0	Deg C
Cooler Temp	-0.7	Deg C	-0.6	Deg C
PMT Volt	-789.0	mV	-789.0	mV
R Cell Press	221.6	in Hg	222.2	in Hg
Sample Flow	0.669	LPM	0.667	LPM

Notes: No adjustments made

Calibration Report



Parameter **NOX-NO-NO2**
 Air Monitoring Network **PAZA**

Station Information

Calibration Date: August 5, 2014 Station Location: Henry Pirker

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4995	0.00	0.0	0.0	0.0	-1.0	-1.1	0.3	N/A	N/A
1	4995	39.92	415.5	413.1	2.4	415.4	413.8	1.5	1.0002	0.9983
2	4995	19.96	208.6	207.4	1.2	206.1	205.4	0.5	1.0117	1.0096
3	4995	9.93	104.0	103.4	0.6	100.9	100.4	0.4	1.0309	1.0300
AFZ	4995	0.00	0.0	0.0	0.0	-1.0	-1.1	0.3	0.0000	0.0000
AFS	4995	39.92	415.5	413.1	0.8	415.4	413.8	1.5	1.0002	0.9983
Average Correction Factor									1.0143	1.0126

As Found Concentrations: NO_x= 420.7 NO= 418.0 As Found Percent Change NO_x= 1.3% NO= 1.2%

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	-1.1	-1.1	0.0	-1.0	-1.1	0.3	N/A	N/A	N/A	N/A
NO point	413.2	413.2	0.0	414.3	413.2	0.9	0.9975	1.0000	N/A	N/A
300	413.2	103.5	309.7	412.6	103.5	309.4	1.0015	1.0000	1.0012	99.9%
200	413.2	203.6	209.6	412.9	203.6	209.4	1.0007	1.0000	1.0012	99.9%
100	413.2	304.0	109.2	413.4	304.0	109.4	0.9996	1.0000	0.9984	100.2%
Average Correction Factor							1.0006	1.0000	1.0003	100.0%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	-0.1	ppb	-0.5	0.1	-1.1	ppb
Auto span	317.2	315.2	2.4	ppb	308.8	307.5	1.4	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter NO₂

Air Monitoring Network PAZA

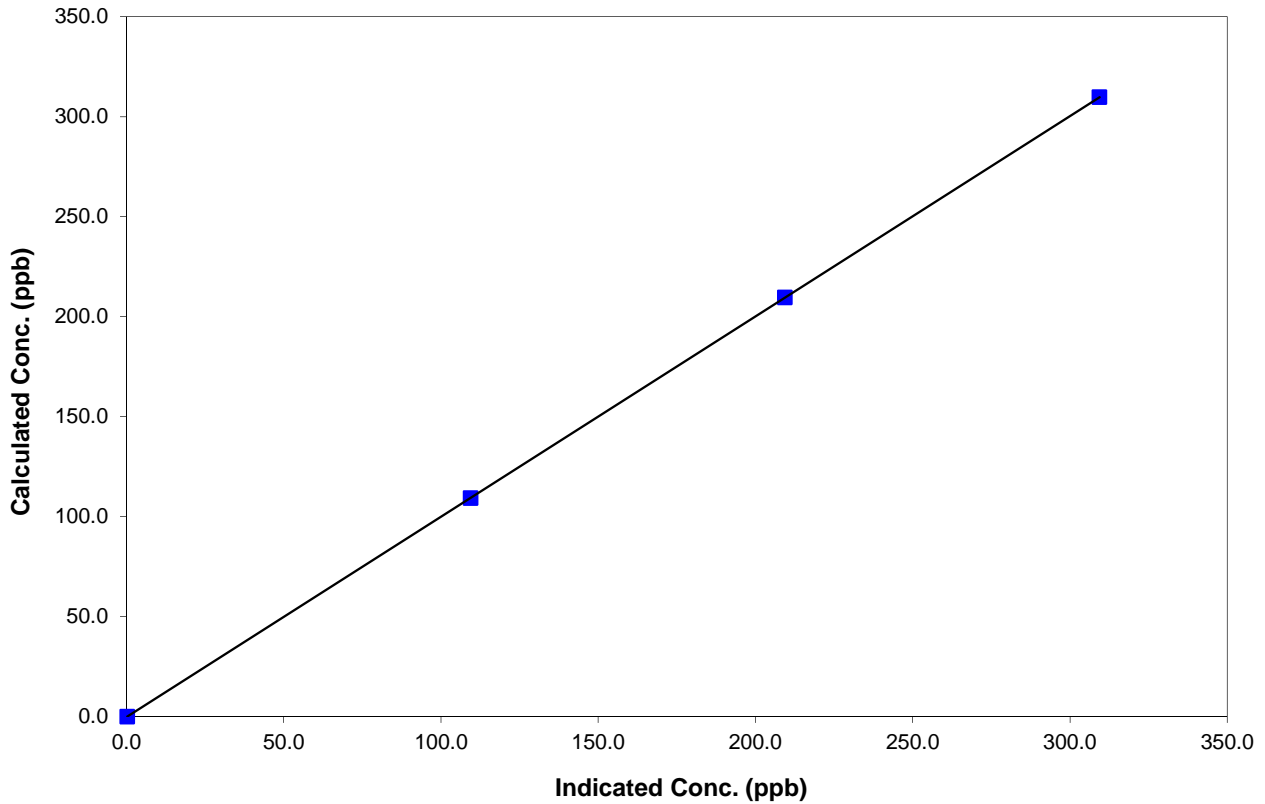
Station Information

Calibration Date	August 5, 2014	Previous Calibration	July 3, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:25	End Time (MST)	13:40
Analyzer make	CR3000	Analyzer serial #	5408

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	1.000000
309.7	309.4	1.0012		
209.6	209.4	1.0012	Slope	1.002353
109.2	109.4	0.9984		
			Intercept	-0.327684

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



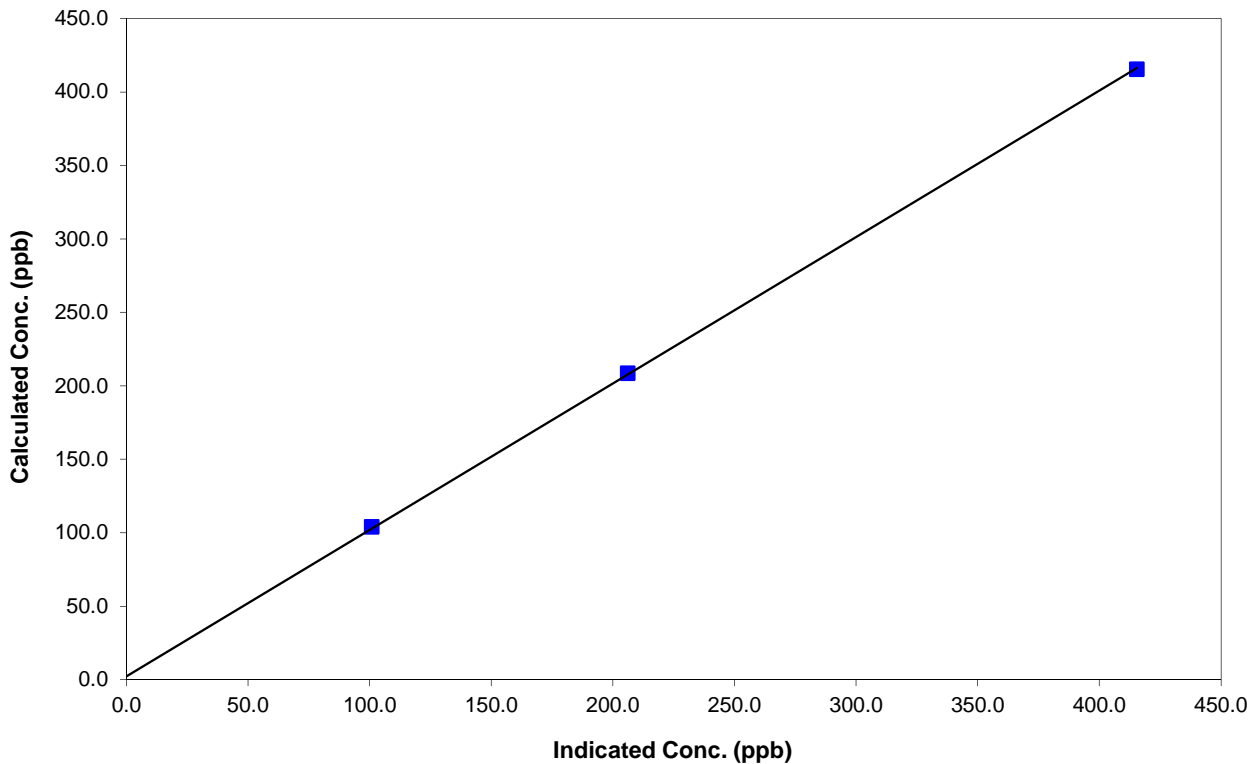
Station Information

Calibration Date	August 5, 2014	Previous Calibration	July 3, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:25	End Time (MST)	13:40
Analyzer make	CR3000	Analyzer serial #	5408

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.0	N/A	Correlation Coefficient	0.999953
415.5	415.4	1.0002		
208.6	206.1	1.0117	Slope	0.996407
104.0	100.9	1.0309		
			Intercept	2.293307

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



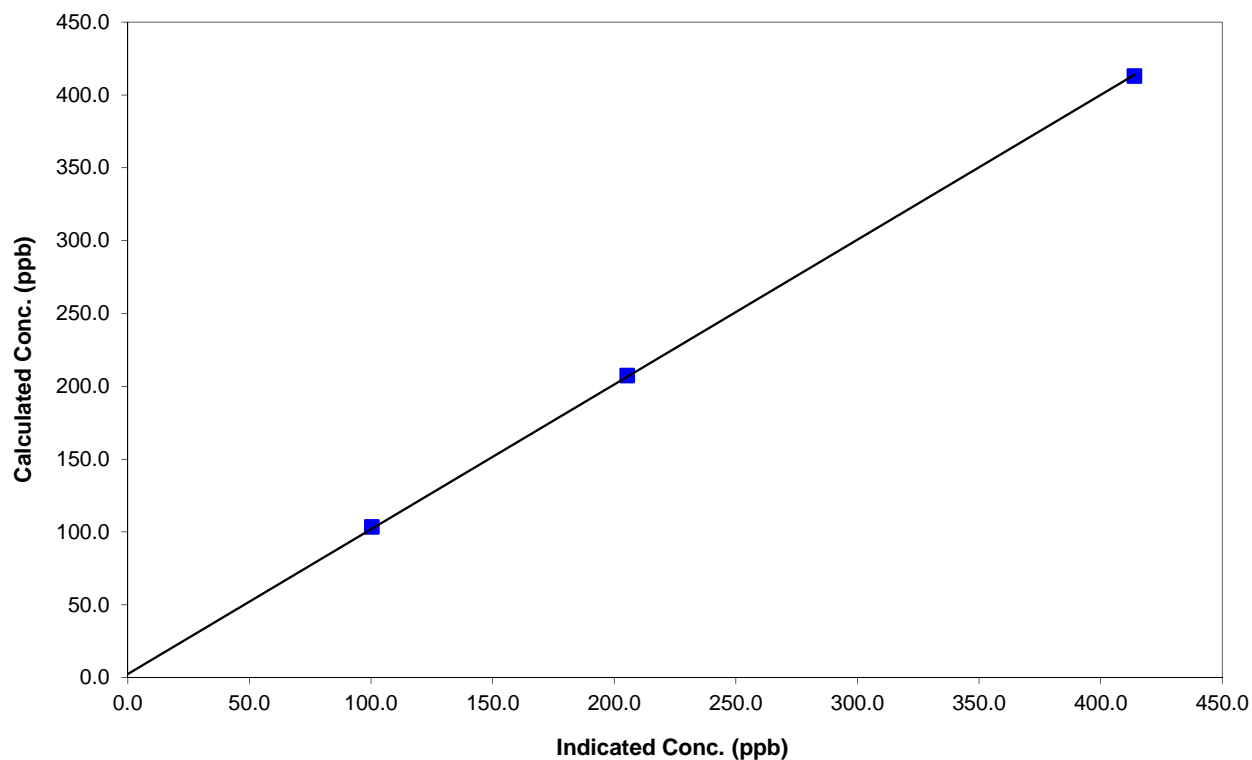
Station Information

Calibration Date	August 5, 2014	Previous Calibration	July 3, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:25	End Time (MST)	13:40
Analyzer make	CR3000	Analyzer serial #	5408

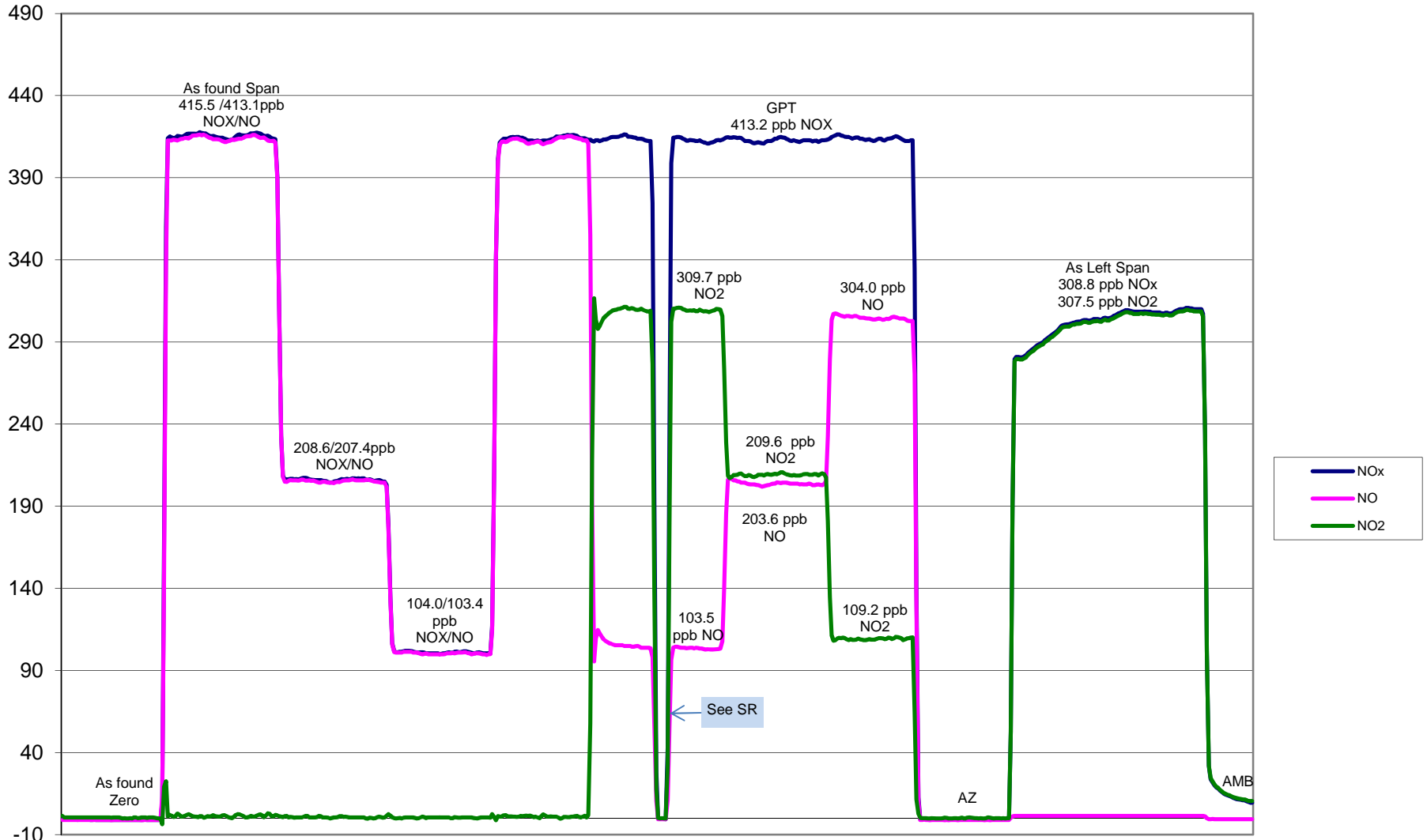
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.1	N/A	Correlation Coefficient	0.999954
413.1	413.8	0.9983		
207.4	205.4	1.0096		
103.4	100.4	1.0300	Slope	0.994180
			Intercept	2.381566

NO Calibration Curve



NO_x Calibration



August 5, 2014

Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	August 5, 2014	Previous Calibration	July 3, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	12:05	End Time (MST)	15:10
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	0.985684	Calculated slope	0.999808
Calculated intercept	0.153084	Calculated intercept	0.593949
Analyzer make	Teco 49C	Analyzer serial #	68463360

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	1.031		1.013	
Lamp temp	56.7	mV	56.7	mV
Lamp Intensity A/B	58954/73470	mV	59684/74433	mV
Pressure	690	mm Hg	696.1	mm Hg
Flow A	0.829	ccm	0.831	ccm
Flow B	0.838	ccm	0.842	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	309.7	309.8	0.9997
5035	0.2	209.6	208.6	1.0048
5035	0.1	109.2	107.7	1.0139
5035	0.0	0.0	0.2	As found zero
5035	0.3	309.7	314.6	As found span
Average Correction Factor				1.0061

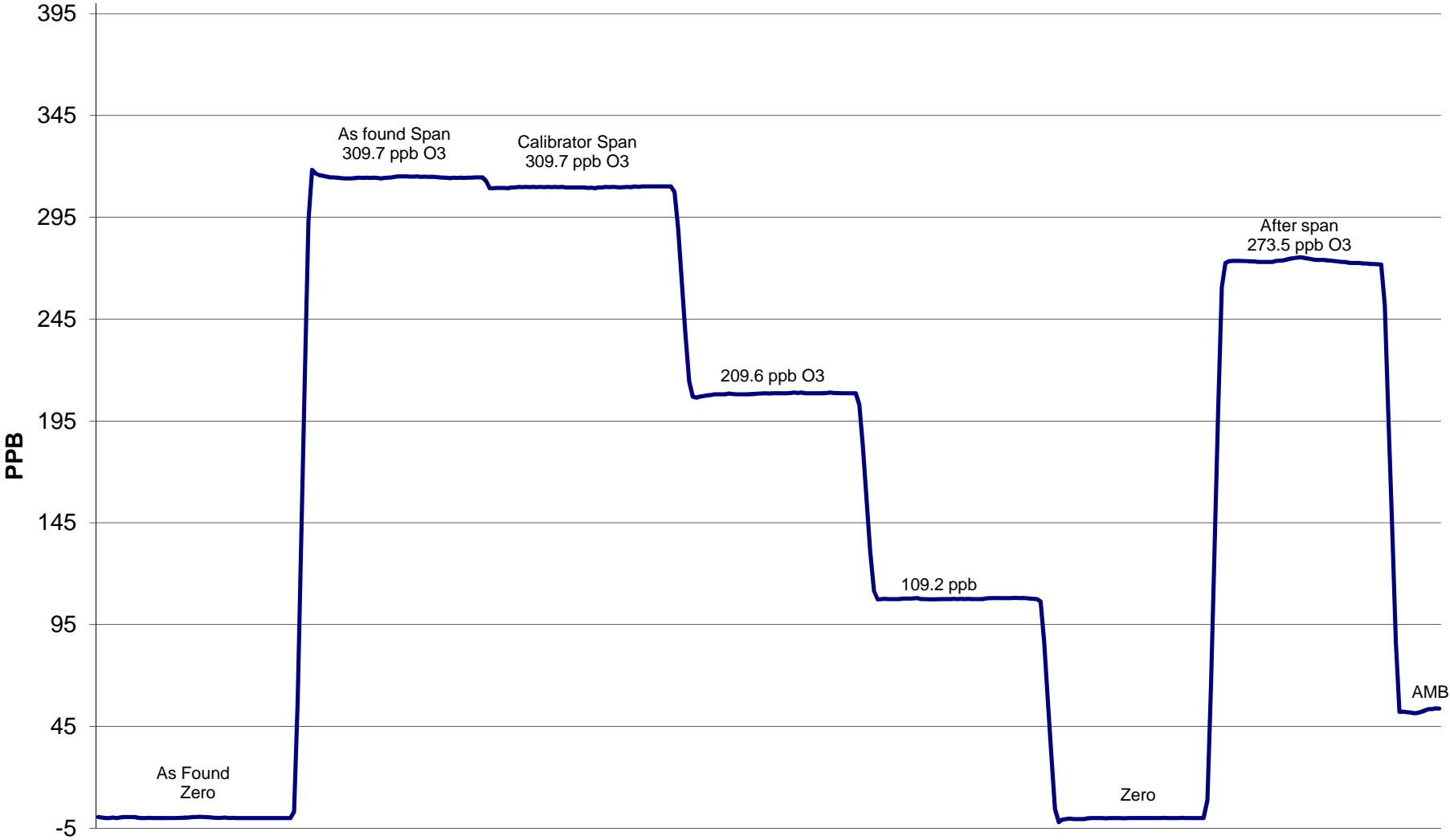
Calculated value of As Found Response: 310.1 ppm Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	1.0	ppb	0.6	ppb
Auto span	355.0	ppb	273.5	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

O3 Calibration



August 5, 2014

Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	August 11, 2014	Previous Calibration	August 5, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	10:10	End Time (MST)	14:42
Barometric Pressure	mm	Station Temperature	20.5 Deg C
Calibrator	Envionics	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	0.999808	Calculated slope	1.003357
Calculated intercept	0.593949	Calculated intercept	0.064002
Analyzer make	Teco 49C	Analyzer serial #	607415761

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	NA	ppb	-1.40	ppb
slope	NA		0.979	
Lamp temp	NA	mV	56.8	mV
Lamp Intensity A/B	NA	mV	98125/91533	mV
Pressure	NA	mm Hg	675.3	mm Hg
Flow A	NA	ccm	0.725	ccm
Flow B	NA	ccm	0.725	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	0.3	N/A
5035	0.3	309.7	309.1	1.0019
5035	0.2	209.6	208.2	1.0070
5035	0.1	109.2	108.6	1.0057
5035	0.0	0.0	0.1	As found zero
5035	0.3	309.7	313.6	As found span
Average Correction Factor				1.0048

Calculated value of As Found Response: 314.1 ppm Percent Change of As Found: 1.4%

	before calibration		after calibration	
Auto zero	na	ppb	1.1	ppb
Auto span	na	ppb	386.7	ppb

Notes: Reinstall original analyzer following repairs. Span/zero adjustment made during setup.
AESRD loaner will be shipped back to Al Clark including any boards that weren't used.

Calibration Performed By: Dmytro Dolotii, Grover Chrisriansen

Calibration Summary

Parameter **03**
 Air Monitoring Network **PAZA**



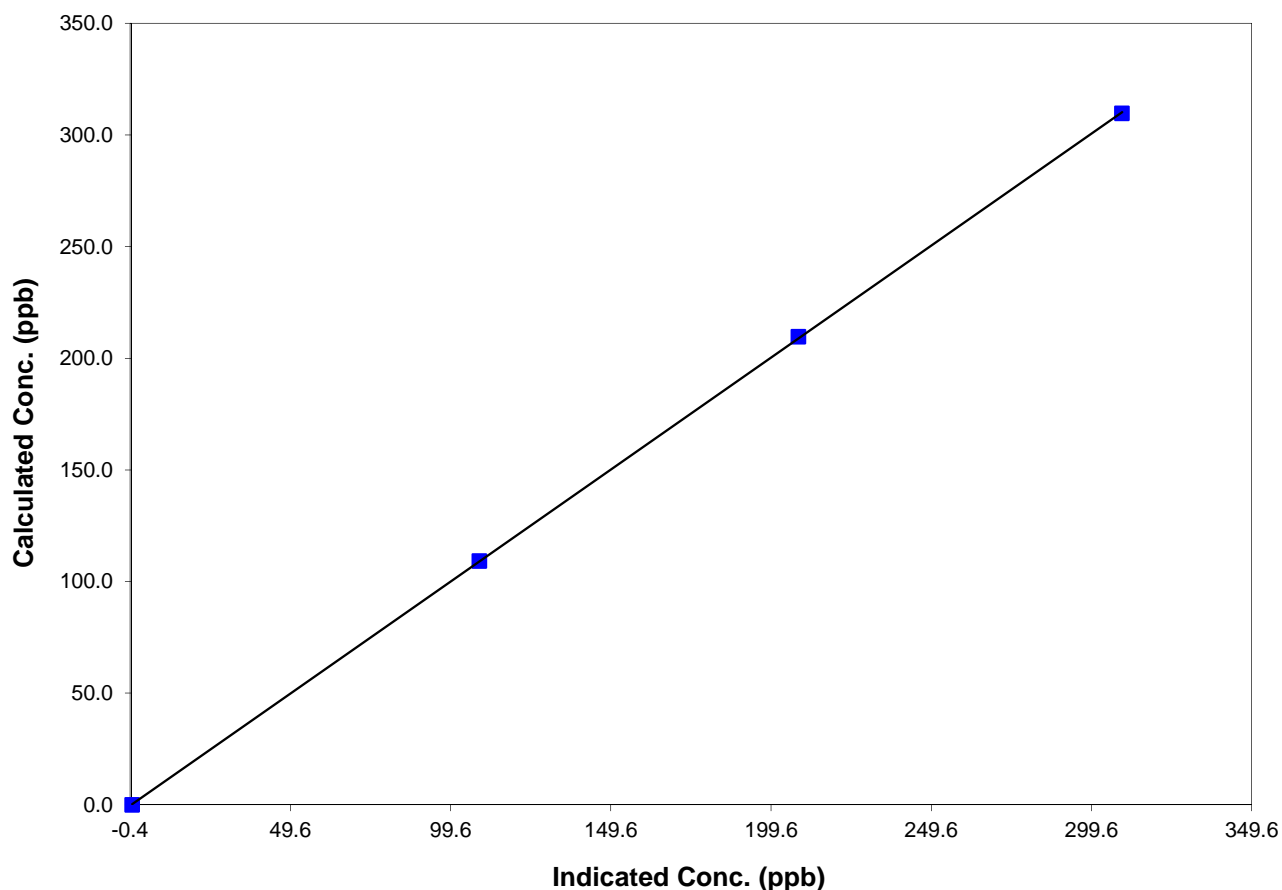
Station Information

Calibration Date	<u> </u> August 11, 2014	Previous Calibration	<u> </u> August 5, 2014
Station Number	<u> </u> 1	Station Location	<u> </u> Henry Pirker
Start Time (MST)	<u> </u> 10:10	End Time (MST)	<u> </u> 14:42
Analyzer make/model	<u> </u> Teco 49C	Analyzer serial #	<u> </u> 607415761

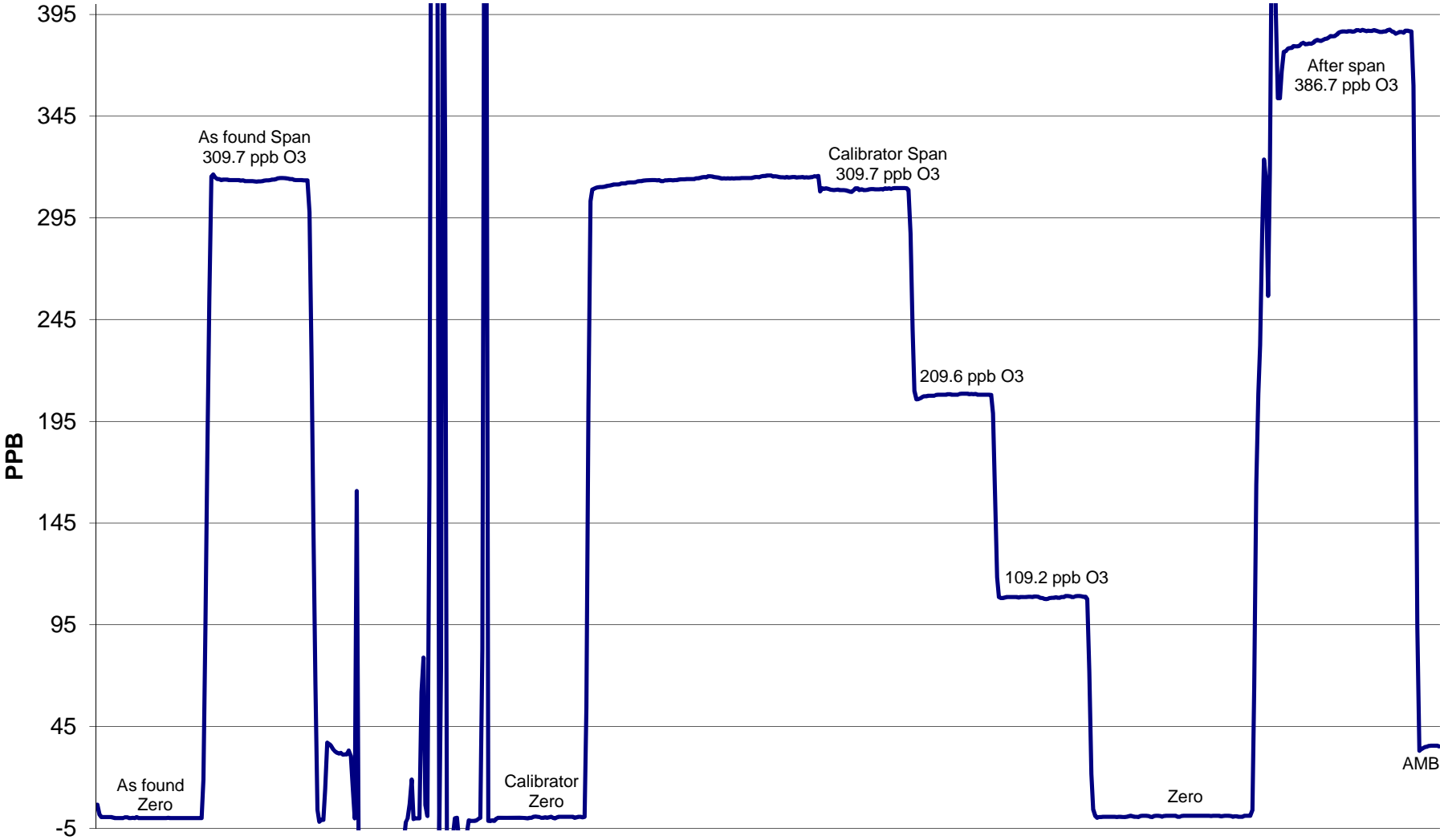
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	NA		
309.7	309.1	1.0019	Correlation Coefficient	0.999983
209.6	208.2	1.0070		
109.2	108.6	1.0057		
			Slope	1.003357
			Intercept	0.064002

O3 Calibration Curve



O3 Calibration



August 11, 2014

Calibration Report



Parameter CO

Air Monitoring Network PAZA

Station Information

Calibration Date	August 1, 2014	Previous Calibration	July 4, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:30	End Time (MST)	14:45
Barometric Pressure	708.0 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	1.000912	Calculated slope	1.002324
Calculated intercept	0.183974	Calculated intercept	0.183721
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO zero setting	1.398		1.473	
CO span setting	1.014		1.014	
Sample pressure	684.5	mm Hg	692.6	mm Hg
Sample Flow	1.125	LPM	1.133	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	39.84	1.0043
4995	34.96	20.14	19.80	1.0175
4995	17.96	10.38	9.99	1.0390
4995	0.00	0.00	0.09	As Found Zero
4995	69.94	40.02	40.12	As Found Span
Average Correction Factor				1.0203

Calculated value of As Found Response: 40.254 ppm Percent Change of As Found: -0.6%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.81	ppm	20.08	ppm

Notes: Adjusted zero

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter CO
 Air Monitoring Network PAZA

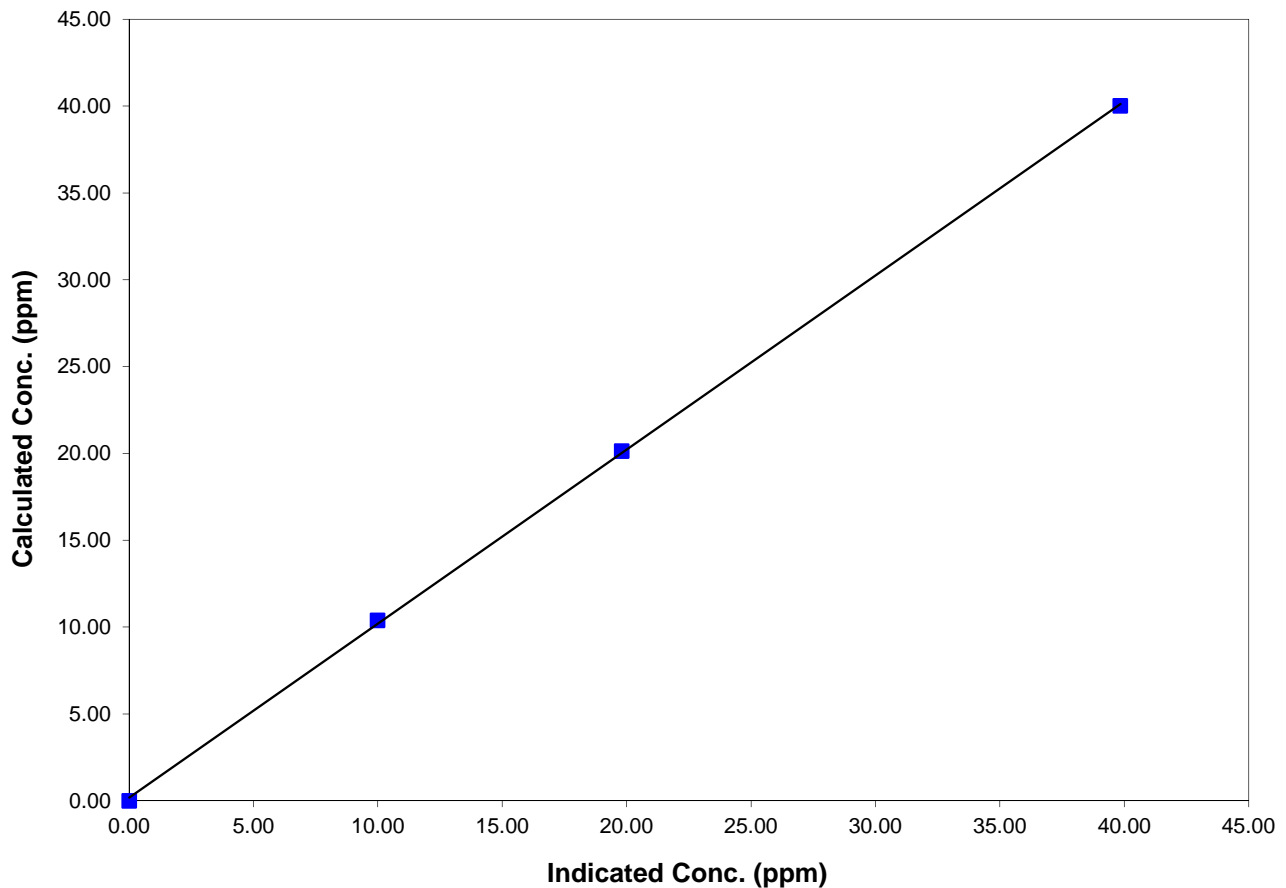
Station Information

Calibration Date	August 1, 2014	Previous Calibration	July 4, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:30	End Time (MST)	14:45
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

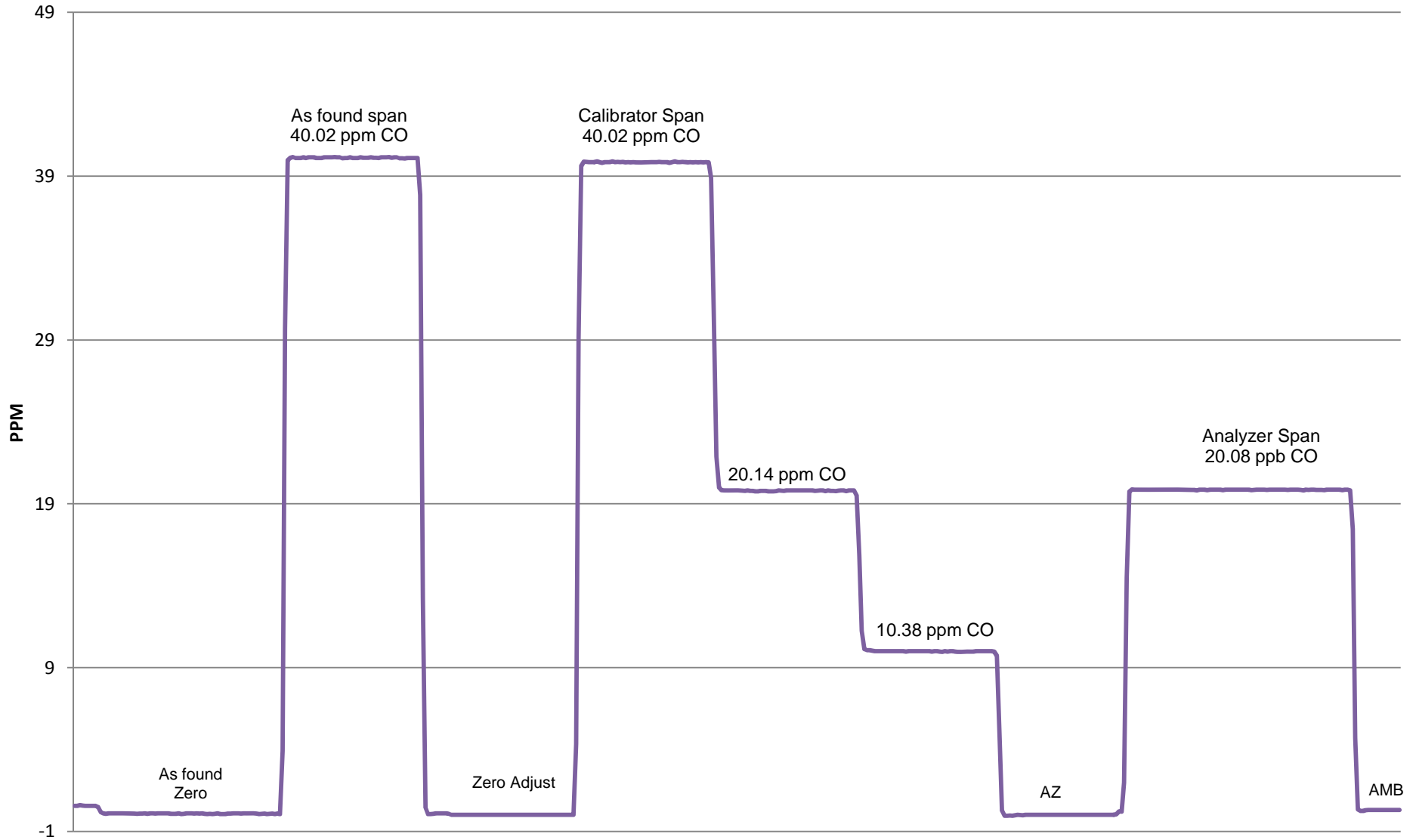
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.012	N/A	Correlation Coefficient	0.999890
40.017	39.845	1.0043		
20.142	19.796	1.0175	Slope	1.002324
10.383	9.993	1.0390		
			Intercept	0.183721

CO Calibration Curve



CO Calibration



August 1, 2014

Calibration Report

Parameter CH4 / NMHC / THC

Air Monitoring Network PAZA



Station Information

Calibration Date	August 1, 2014	Previous Calibration	July 4, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	<input type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:25:00 PM	End Time (MST)	15:50
Barometric Pressure	704.00 mm/hg	Station Temperature	20.0 Deg C
Calibrator	Envionics	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	12.93	0.9970
1996	40.96	7.76	7.70	1.0074
1996	15.99	3.07	3.01	1.0185
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	12.93	As Found Span
Average Correction Factor				1.0076

Calculated value of As Found Response: 13.007 ppm Percent Change of As Found: -0.9%

	Before		After
Calculated slope	1.005023	Calculated slope	0.997674
Calculated intercept	0.031599	Calculated intercept	0.027377

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	9.11	ppm	8.41	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	19.13	0.9936
1996	40.96	11.45	11.57	0.9892
1996	15.99	4.52	4.61	0.9808
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	19.13	As Found Span
Average Correction Factor				0.9879

Calculated value of As Found Response: 19.196 ppm Percent Change of As Found: -1.0%

	<u>Before</u>		<u>After</u>
Calculated slope	1.005391	Calculated slope	0.994890
Calculated intercept	-0.021311	Calculated intercept	-0.043133

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.55	ppm	11.66	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	32.04	0.9957
1996	40.96	19.21	19.26	0.9971
1996	15.99	7.59	7.61	0.9970
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	32.04	As Found Span
Average Correction Factor				0.9966

Calculated value of As Found Response: 32.212 ppm Percent Change of As Found: -1.0%

	<u>Before</u>		<u>After</u>
Calculated slope	1.005869	Calculated slope	0.996534
Calculated intercept	0.015413	Calculated intercept	-0.010835

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	21.66	ppm	20.07	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CH4

Air Monitoring Network PAZA



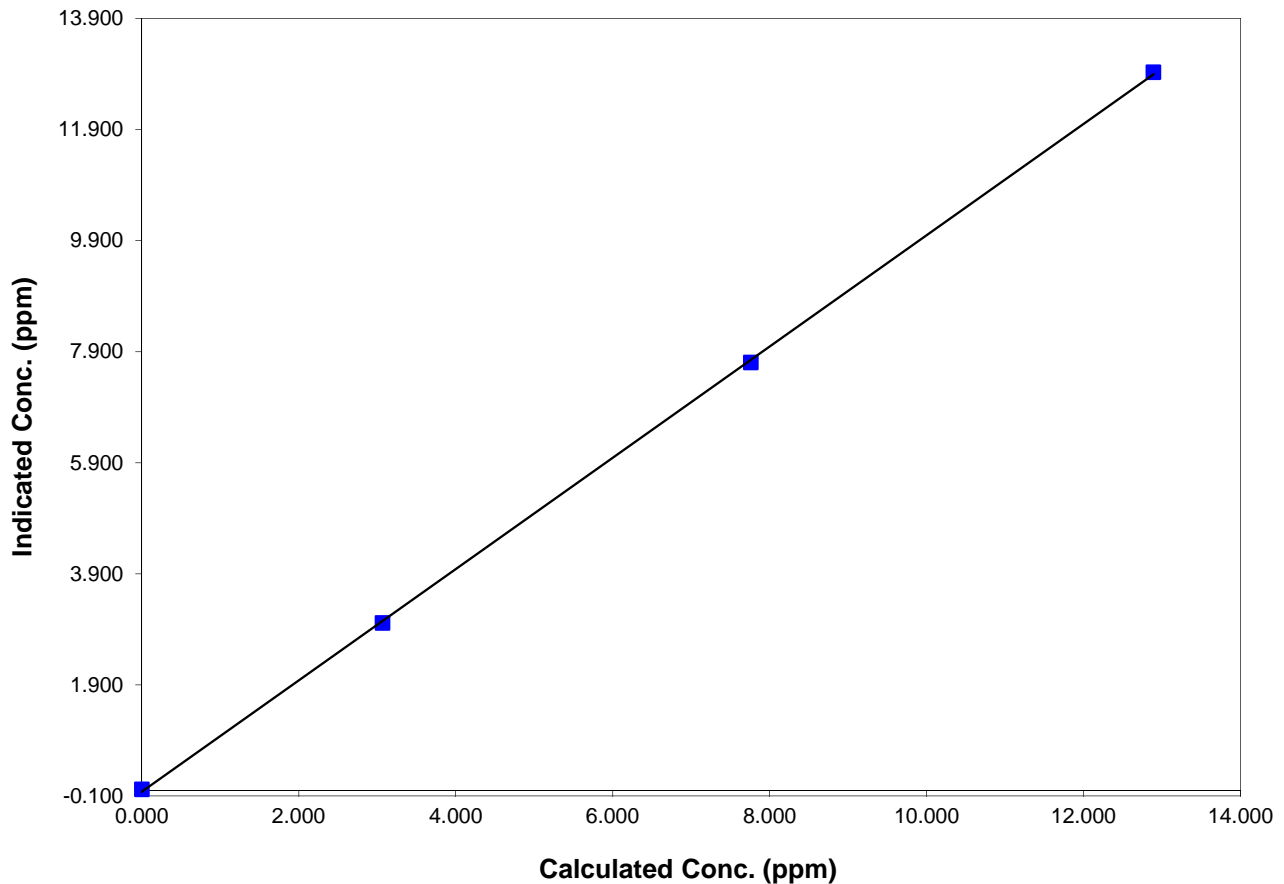
Station Information

Calibration Date	August 1, 2014	Previous Calibration	July 4, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:25:00 PM	End Time (MST)	15:50
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	Correlation Coefficient	0.999927
12.891	12.930	0.9970		
7.762	7.705	1.0074	Slope	0.997674
3.068	3.012	1.0185		
			Intercept	0.027377

CH4 Calibration Data



Calibration Summary

Parameter **NMHC**

Air Monitoring Network **PAZA**



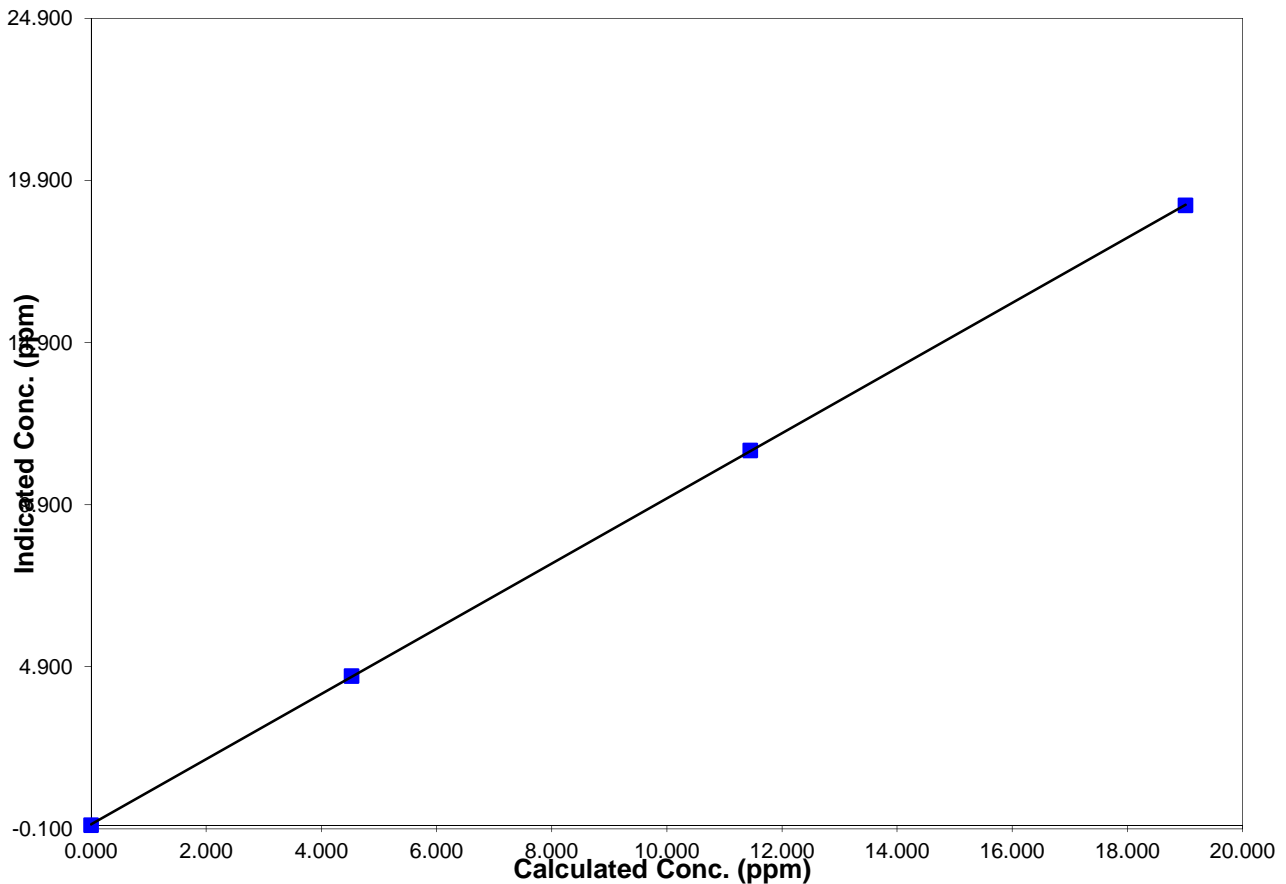
Station Information

Calibration Date	<u> </u> August 1, 2014	Previous Calibration	<u> </u> July 4, 2014
Station Number	<u> </u> 1	Station Location	<u> </u> Henry Pirker
Start Time (MST)	<u> </u> 13:25:00 PM	End Time (MST)	<u> </u> 15:50
Analyzer make/model	<u> </u> TEI 55I	Analyzer serial #	<u> </u> 1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.018	N/A	Correlation Coefficient	0.999990
19.010	19.132	0.9936		
11.447	11.572	0.9892	Slope	0.994890
4.524	4.612	0.9808		
			Intercept	-0.043133

NMHC Calibration Data



Calibration Summary

Parameter THC

Air Monitoring Network PAZA



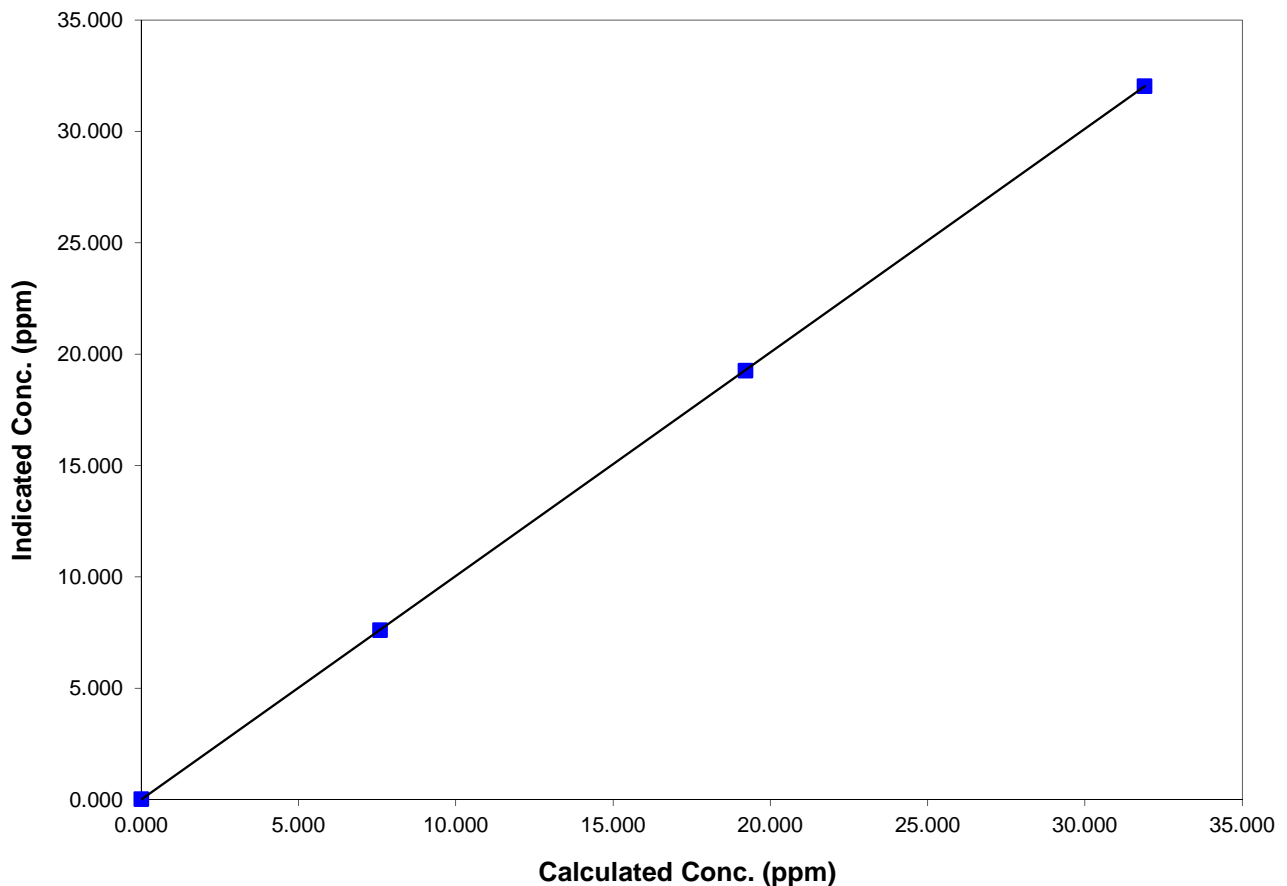
Station Information

Calibration Date	<u>August 1, 2014</u>	Previous Calibration	<u>July 4, 2014</u>
Station Number	<u>1</u>	Station Location	<u>Henry Pirker</u>
Start Time (MST)	<u>13:25:00 PM</u>	End Time (MST)	<u>15:50</u>
Analyzer make/model	<u>TEI 55I</u>	Analyzer serial #	<u>1134650658</u>

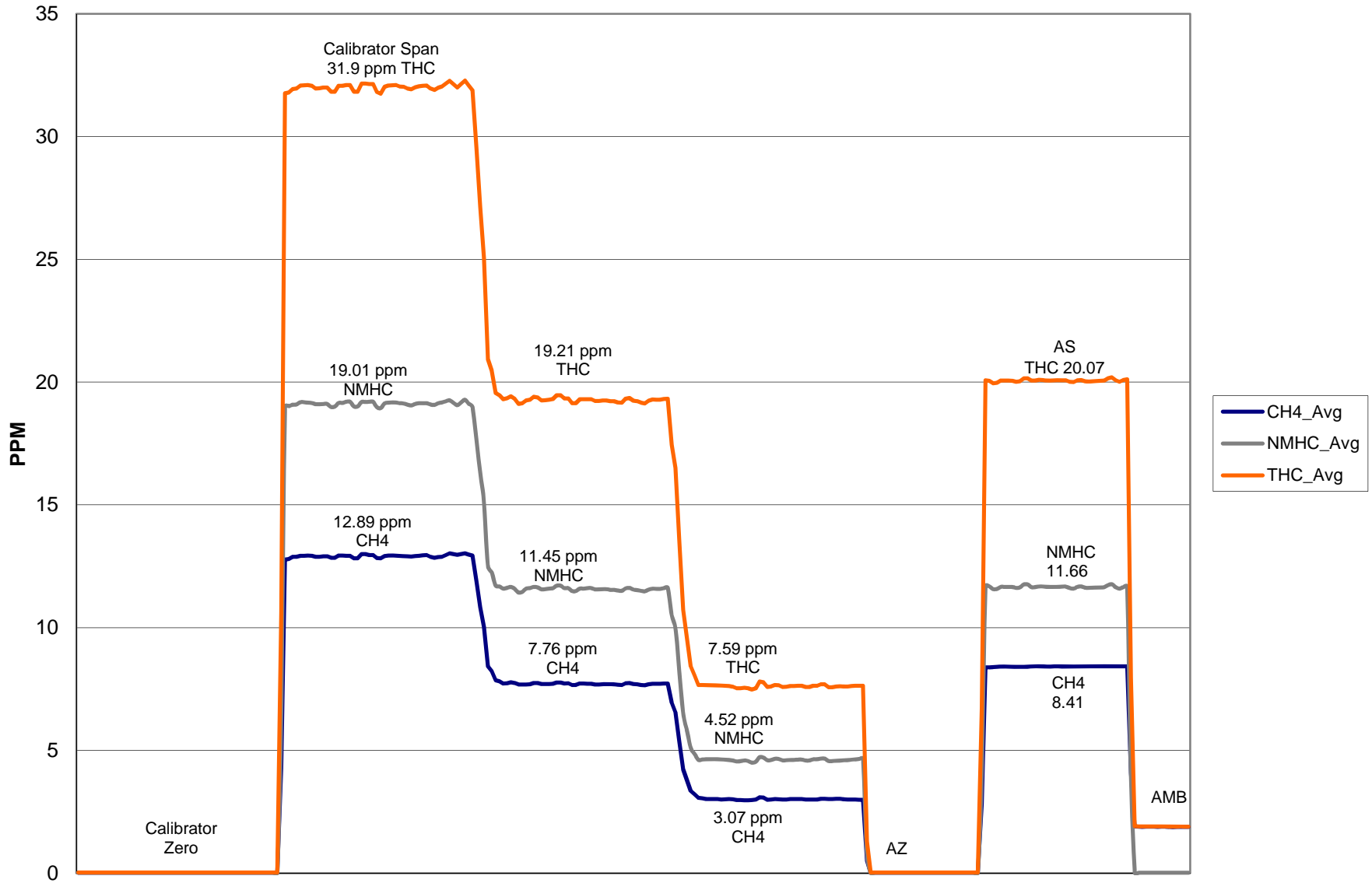
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.031	N/A	Correlation Coefficient	0.999998
31.901	32.040	0.9957		
19.209	19.264	0.9971	Slope	0.996534
7.592	7.615	0.9970		
			Intercept	-0.010835

THC Calibration Data



THC/CH₄/NMHC Calibration



Calibration Report



Parameter
 Air Monitoring Network

Station Information

Calibration Date	August 1, 2014	Previous Calibration	July 4, 2014
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	7:20	End Time (MST)	12:05:00 PAM
Barometric Pressure	708.00 mm/Hg	Station Temperature	20.0 Deg C
Calibrator	Enviroics 6100	Serial Number	3016
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	0.977556	Calculated slope	0.986302
Calculated intercept	0.381393	Calculated intercept	0.697298
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.985		0.975	
Background	17.4		17.3	
Pressure	665.9	mm Hg	665.4	mm Hg
Flow	0.454	ccm	0.453	ccm
Lamp Voltage	880	v	880	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	-0.22	N/A
4995	39.93	82.48	83.21	0.9912
4995	19.95	41.37	40.70	1.0165
8995	8.95	10.34	9.53	1.0842
4995	0.00	0.00	-0.22	As Found Zero
4995	39.93	82.48	78.98	As Found Span
Average Correction Factor				1.0307

Calculated value of As Found Response: 77.8 ppb Percent Change of As Found: 5.7%

	before calibration		after calibration	
Auto zero	-0.92	ppb	0.59	ppb
Auto span	33.06	ppb	36.74	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS
 Air Monitoring Network PAZA



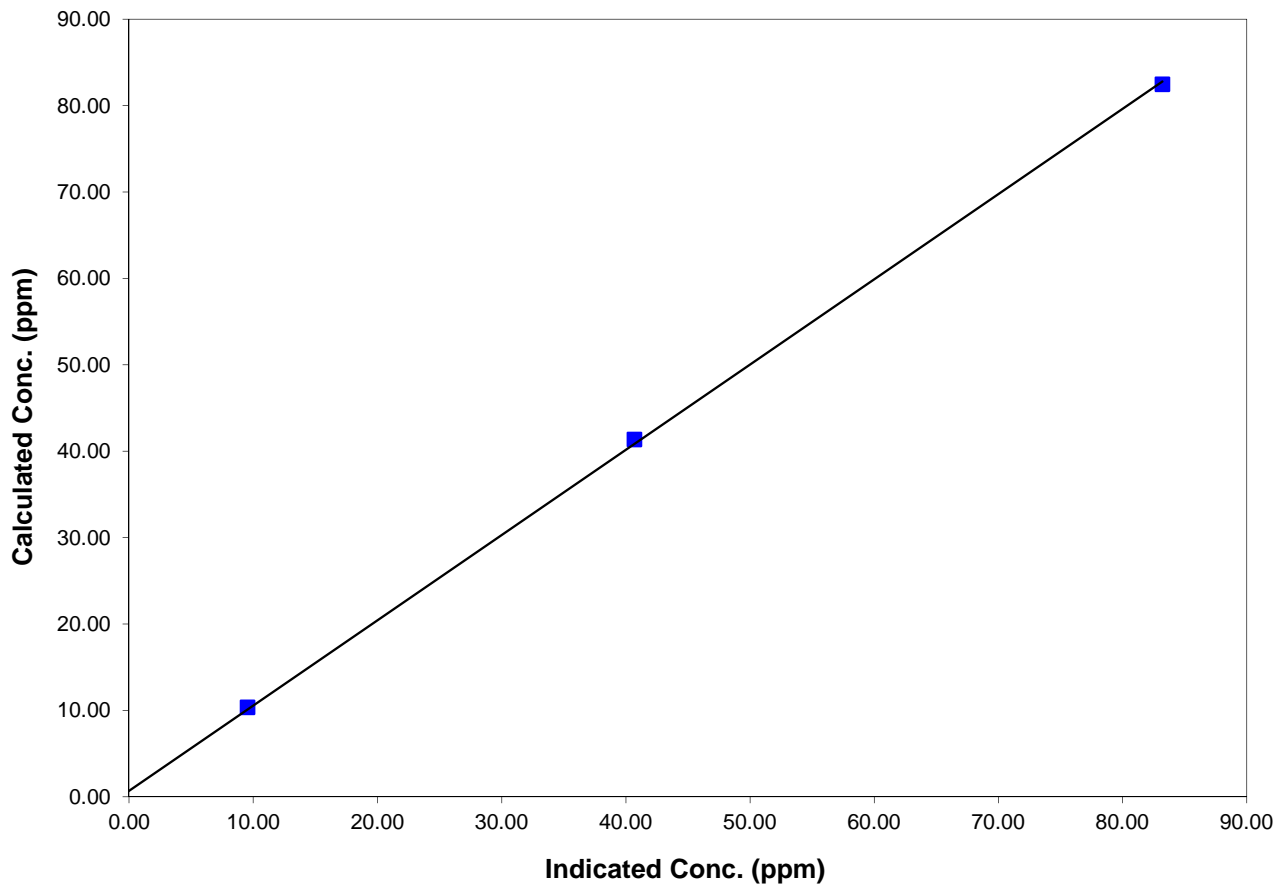
Station Information

Calibration Date	August 1, 2014	Previous Calibration	July 4, 2014
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:20	End Time (MST)	12:05:00 P\M
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

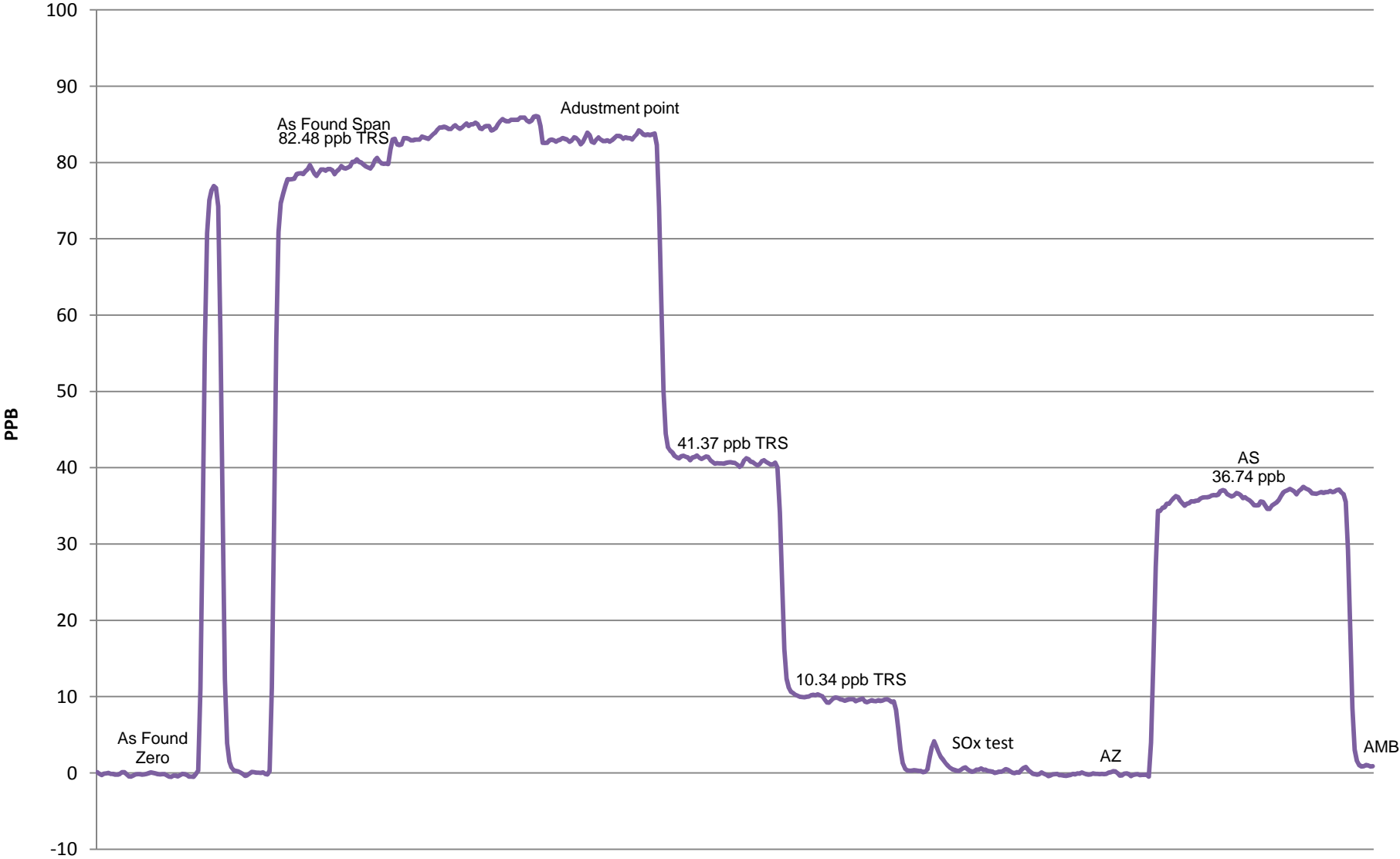
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			0.000	-0.220
82.478	83.210	0.9912	Correlation Coefficient	0.999841
41.372	40.700	1.0165		
10.338	9.535	1.0842	Slope	0.986302
			Intercept	0.697298

TRS Calibration Curve



TRS Calibration



August 1, 2014

Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	August 15 2014	Previous Calibration	July 5 2014
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	10:45	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	0.981951	Calculated slope	0.984918
Calculated intercept	2.223372	Calculated intercept	2.385640
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.5		11.3	
coefficient	1.22		1.205	
Lamp Voltage	827	volts	825	volts
Chamber Temp	44.8	Deg C	44.9	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	667.4	mm Hg	668.9	mm Hg
Sample Flow	0.451	ccm	0.453	ccm
Lamp Intensity	89	%	88	%

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	-0.1	N/A
4995	39.93	394.9	399.7	0.9882
4995	19.97	198.3	197.8	1.0026
4995	9.97	99.2	96.0	1.0332
4995	0.0	0.0	-0.1	As Found Zero
4995	39.93	394.9	402.8	As Found Span
Average Correction Factor				1.0080

Calculated value of As Found Response: 397.892 ppm Percent Change of As Found: -0.8%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.1	ppm
Auto span	282.3	ppm	278.6	ppm

Notes: Span adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



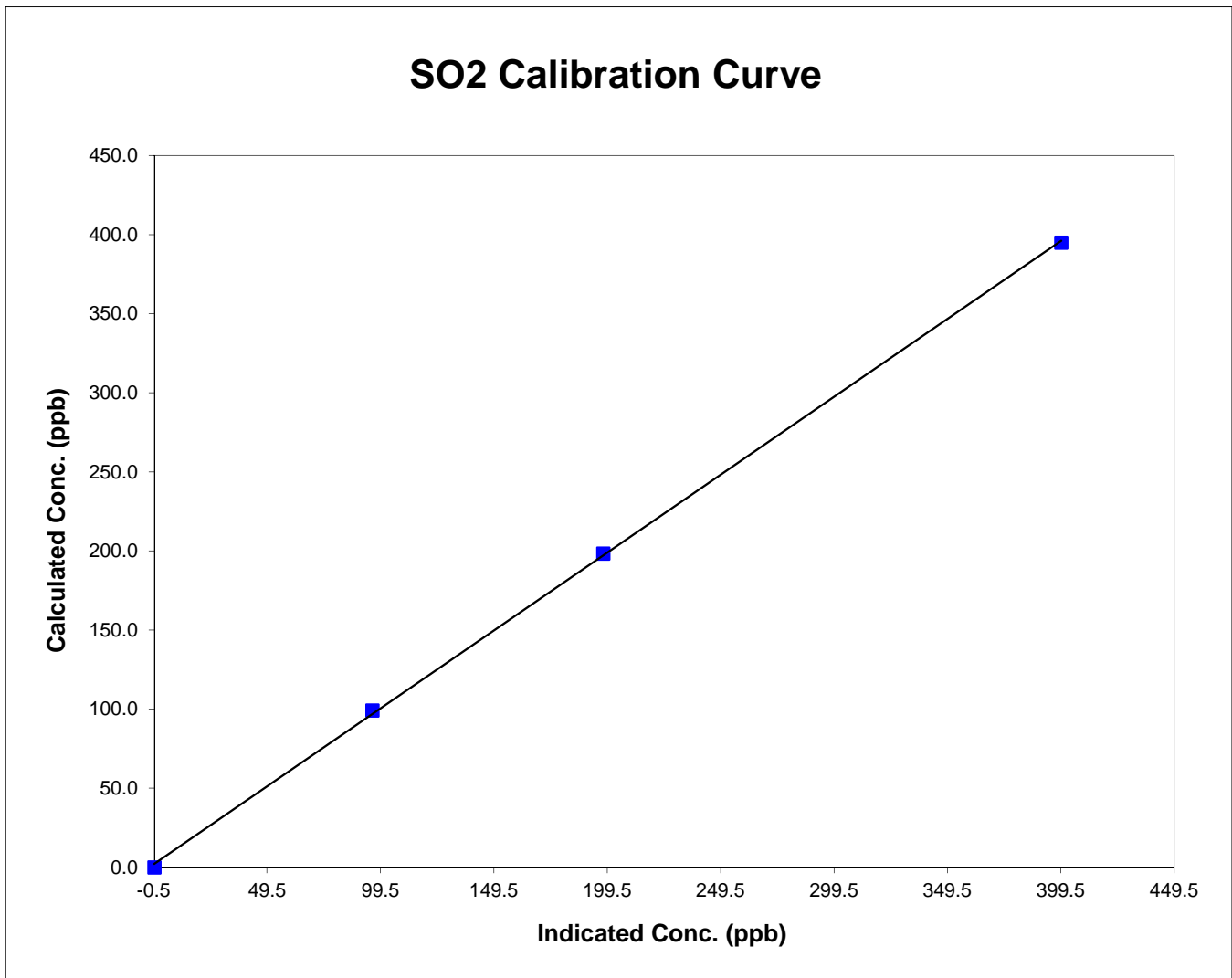
Parameter SO2
 Air Monitoring Network PAZA

Station Information

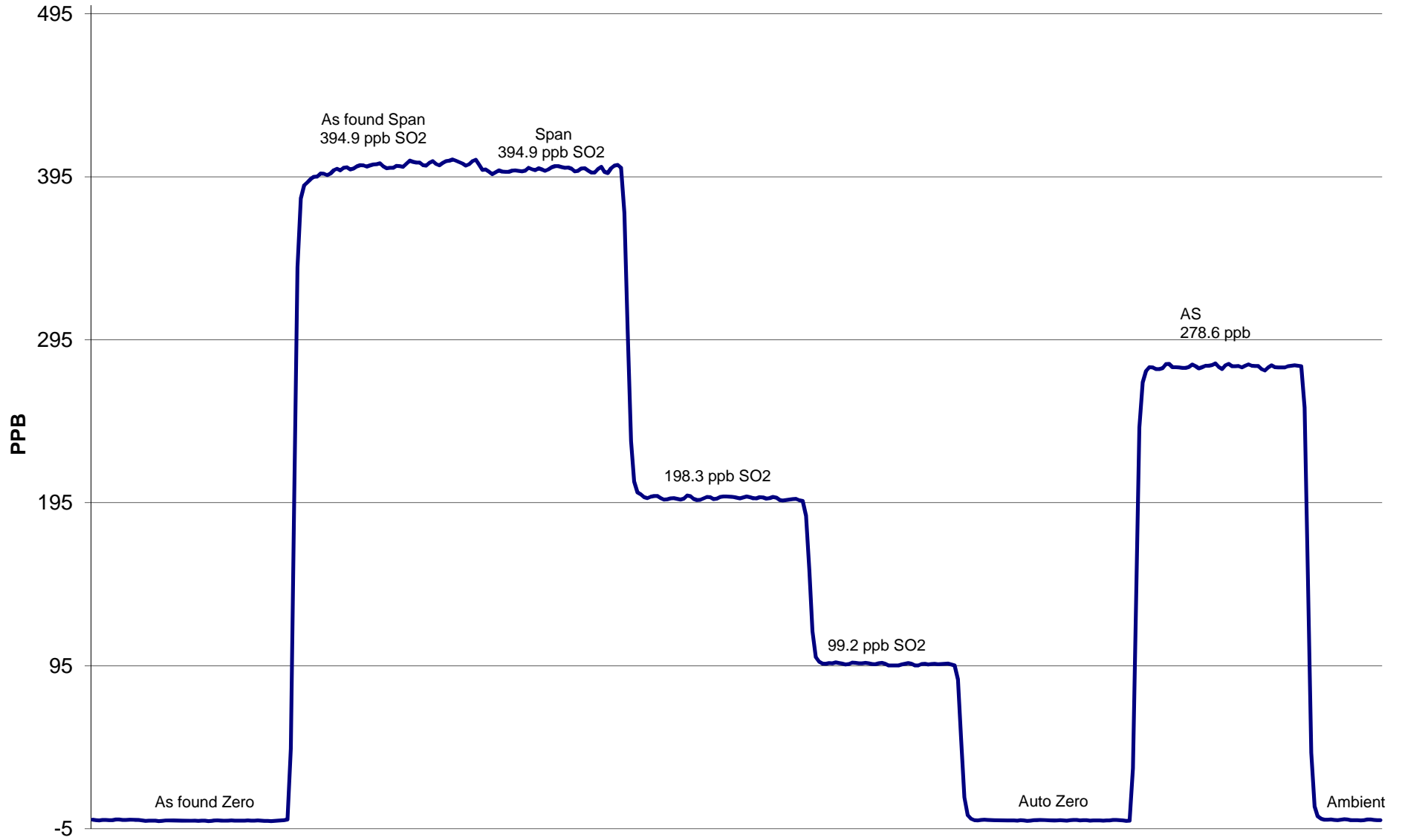
Calibration Date	August 15 2014	Previous Calibration	July 5 2014
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:45	End Time (MST)	14:00:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
394.9	399.7	0.9882	Correlation Coefficient	0.999851
198.3	197.8	1.0026		
99.2	96.0	1.0332	Slope	0.984918
			Intercept	2.385640



SO2 Calibration



August 15 2014

Calibration Report

Parameter **TRS**

Air Monitoring Network **PAZA**



Station Information

Calibration Date	August 15 2014		Previous Calibration	July 5 2014	
Station Number	2		Station Location	Evergreen Park	
Reason:	Routine	Install	Removal	Other:	
Start Time (MST)	8:20		End Time (MST)	12:05	
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	
	<u>Before</u>			<u>After</u>	
Calculated slope	0.996998		Calculated slope	0.995363	
Calculated intercept	-0.407578		Calculated intercept	-0.711325	
Analyzer make	TEI Model 43C		Analyzer serial #	3.199E+13	

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	38.5	ppb	38.8	ppb
coefficient	1.01		1.01	
Lamp Voltage	1031	volts	1030	volts
Chamber Temp	44.4	Deg C	44.4	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	639.3	mm Hg	631.1	mm Hg
Sample Flow	0.630	ccm	0.615	ccm
Lamp Intensity	31,753	mv	31,455	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	0.6	N/A
4995	39.93	82.48	83.6	0.9871
4995	19.97	41.41	42.3	0.9781
8995	8.97	10.36	11.2	0.9221
4995	9.97	102.79	2.1	Sox Test
4995	0.00	0.00	0.6	As Found Zero
4995	39.93	82.48	83.6	As Found Span
Average Correction Factor				0.9625

Calculated value of As Found Response: **82.29 ppm** Percent Change of As Found: **0.2%**

	before calibration		after calibration	
Auto zero	-0.2	ppm	0.1	ppm
Auto span	72.8	ppm	73.4	ppm

Notes: No adjustments made
 Sox scrubber check performed

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter **TRS**
 Air Monitoring Network **PAZA**

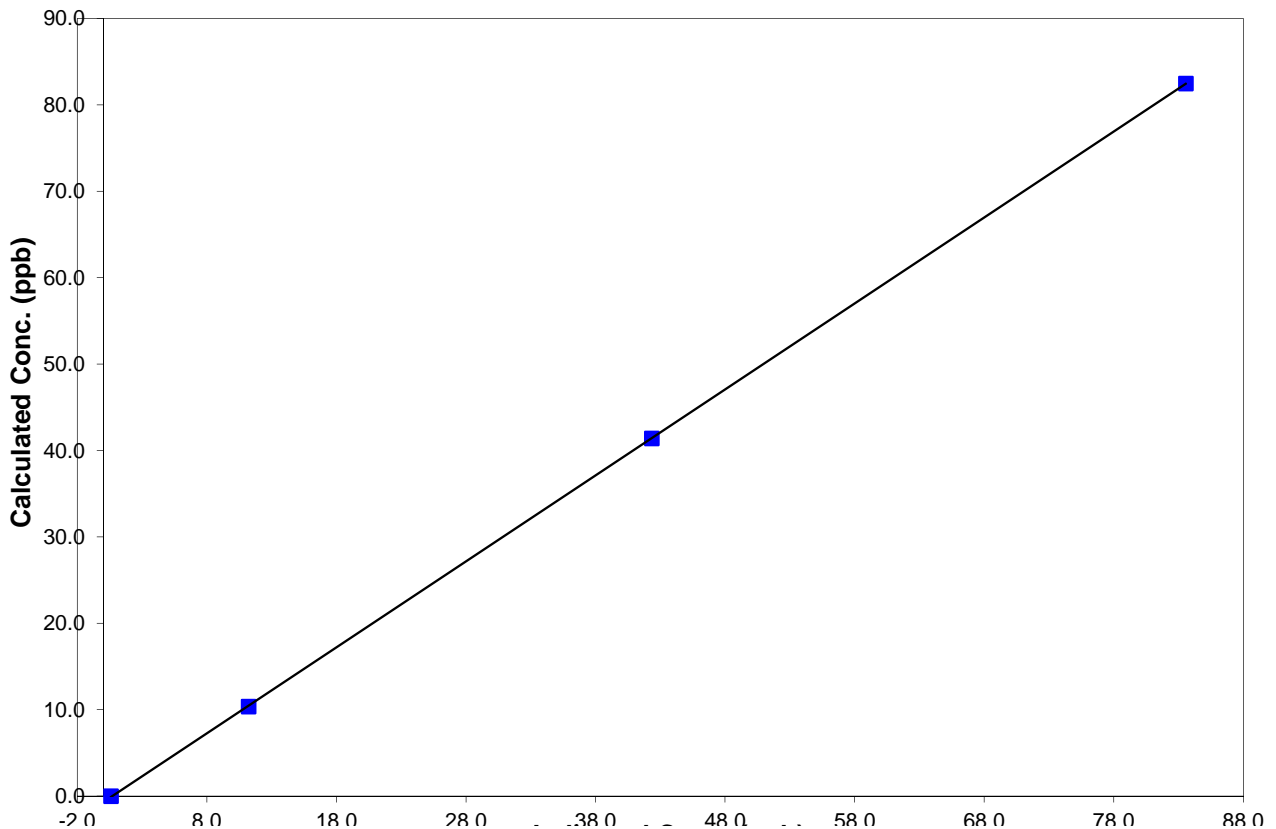
Station Information

Calibration Date	<u> </u> August 15 2014	Previous Calibration	<u> </u> July 5 2014
Station Number	<u> </u> 2	Station Location	<u> </u> Evergreen Park
Start Time (MST)	<u> </u> 8:20	End Time (MST)	<u> </u> 12:05
Analyzer make/model	<u> </u> TEI Model 43C	Analyzer serial #	<u> </u> 31990000000491

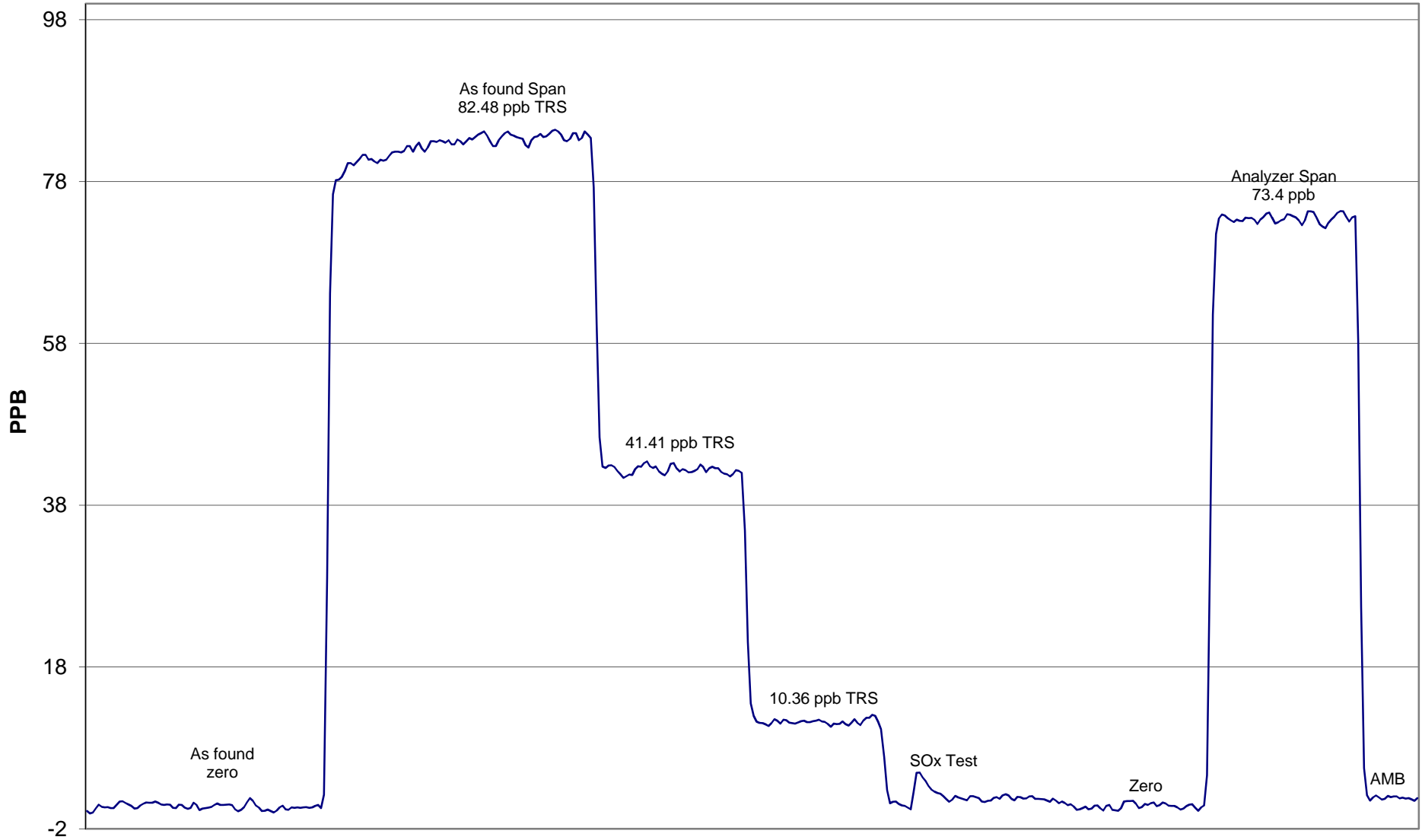
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A		
82.5	83.6	0.9871	Correlation Coefficient	0.999994
41.4	42.3	0.9781		
10.4	11.2	0.9221		
			Slope	0.995363
			Intercept	-0.711325

TRS Calibration Curve



TRS Calibration



August 15 2014

Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	August 22, 2014	Previous Calibration	July 10, 2014
Station Number	3	Station Location	Smokey Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	10:10	End Time (MST)	12:55
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
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
	<u>Before</u>		<u>After</u>
Calculated slope	0.985408	Calculated slope	0.981883
Calculated intercept	2.962567	Calculated intercept	2.683319
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	12.1		12.2	
coefficient	0.952		0.952	
Lamp Voltage	928	volts	928	volts
Chamber Temp	44.9	Deg C	45	Deg C
Perm Gas Temp	45.01	Deg C	45	Deg C
Pressure	675.9	mm Hg	677.1	mm Hg
Sample Flow	0.452	lpm	0.454	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	0.2	N/A
4995	39.93	394.94	400.9	0.9852
4995	19.97	198.31	197.9	1.0021
4995	9.97	99.20	95.3	1.0406
4995	0.0	0.00	0.2	As Found Zero
4995	39.93	394.94	400.9	As Found Span
Average Correction Factor				1.0093

Calculated value of As Found Response: 397.771 ppm Percent Change of As Found: -0.7%

	before calibration		after calibration	
Auto zero	0.2	ppb	0.2	ppb
Auto span	255.3	ppb	250.5	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



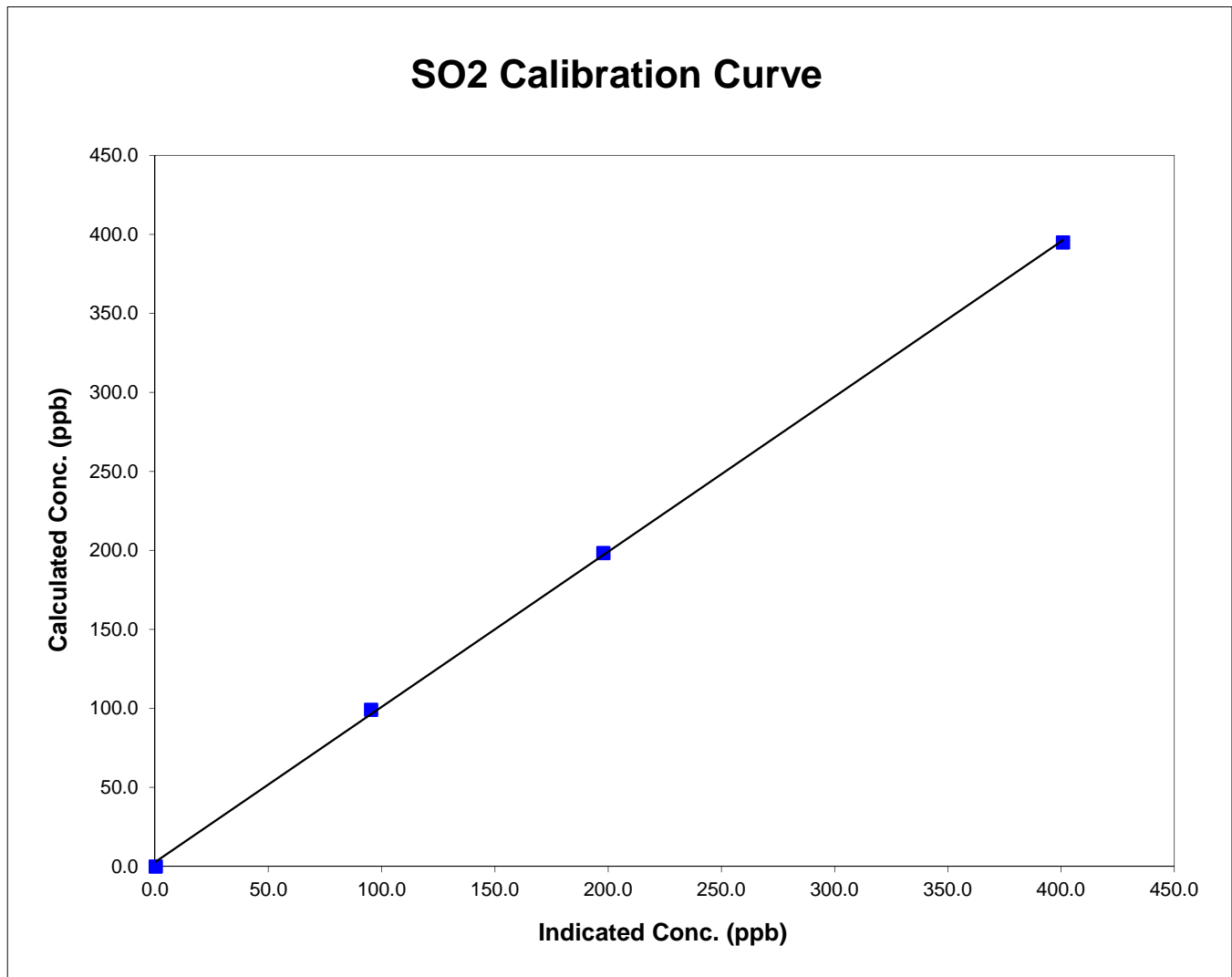
Parameter SO2
 Air Monitoring Network PAZA

Station Information

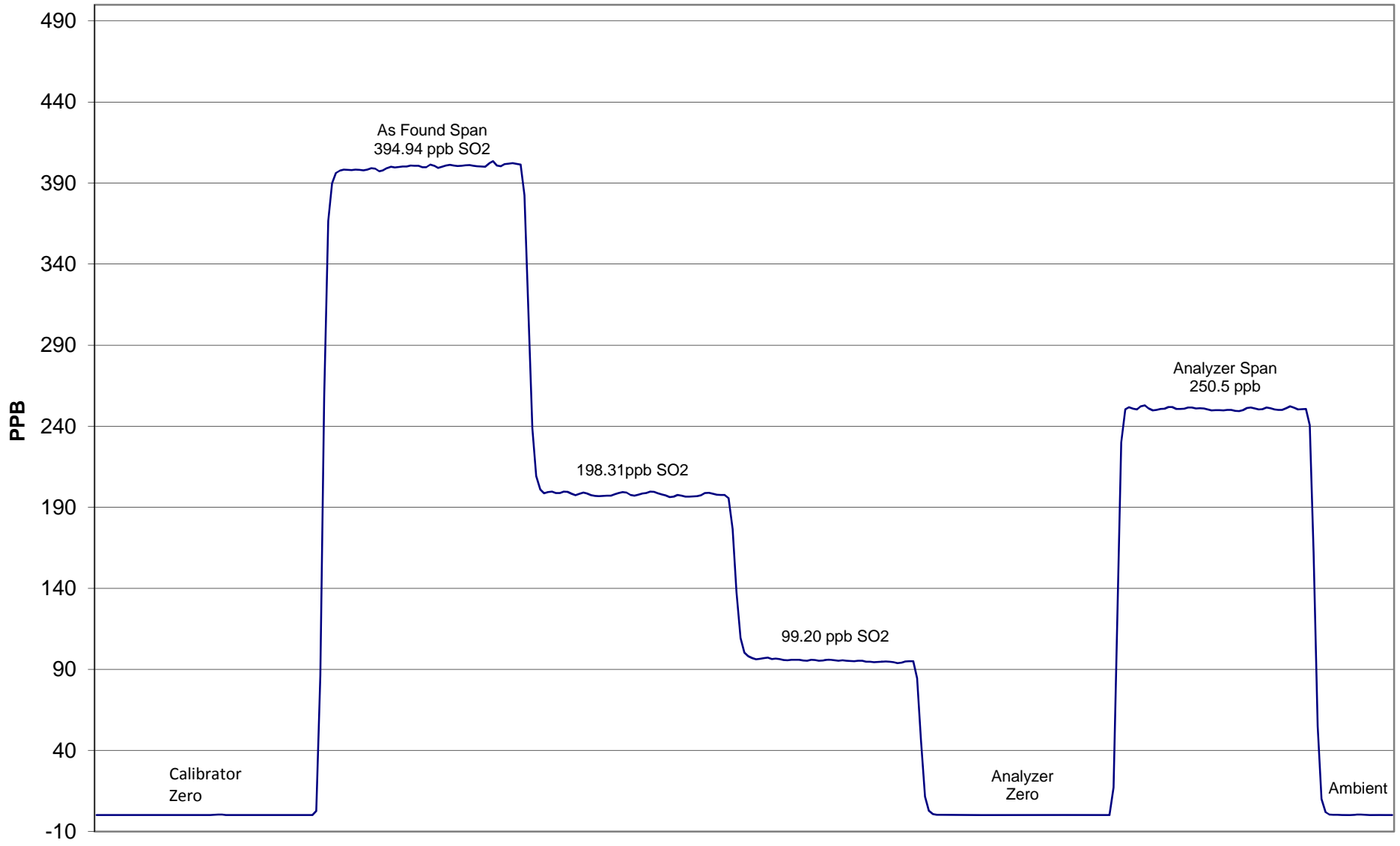
Calibration Date	August 22, 2014	Previous Calibration	July 10, 2014
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	10:10	End Time (MST)	12:55
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999761
394.9	400.9	0.9852		
198.3	197.9	1.0021	Slope	0.981883
99.2	95.3	1.0406		
			Intercept	2.683319



Smokey Heights SO₂ Calibration



August 22, 2014

Calibration Report



Parameter TR3

Air Monitoring Network PAZA

Station Information

Calibration Date	August 25, 2014	Previous Calibration	July 10, 2014
Station Number	3	Station Location	Smokey Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	

Start Time (MST)	7:10	End Time (MST)	11:15
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	2844
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031783	Cal Gas Cylinder #	BLM00586
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.995059	Calculated slope	0.987147
Calculated intercept	0.657011	Calculated intercept	0.837675

Analyzer make TEI Model 43C Analyzer serial # 0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	18.8	ppb	18.9	ppb
coefficient	0.983		0.983	
Lamp Voltage	827	volts	831	volts
Chamber Temp	43.8	Deg C	43.8	Deg C
Perm Gas Temp	44.9	Deg C	45.01	Deg C
Pressure	614.8	mm Hg	610.5	mm Hg
Sample Flow	0.637	lpm	0.641	lpm
Lamp Intensity	35,244	mv	35,252	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	81.80	82.4	0.9934
4995	19.93	41.01	40.1	1.0225
8995	8.97	10.28	9.2	1.1182
4995	9.97	99.20	0.9	Sox test
4995	0.0	0.00	-0.2	As Found Zero
4995	39.91	81.80	82.4	As Found Span
Average Correction Factor				1.0447

Calculated value of As Found Response: 82.82 ppm Percent Change of As Found: -1.2%

	before calibration		after calibration	
Auto zero	0.4	ppm	0.8	ppm
Auto span	31.2	ppm	30.8	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter **TRS**
 Air Monitoring Network **PAZA**

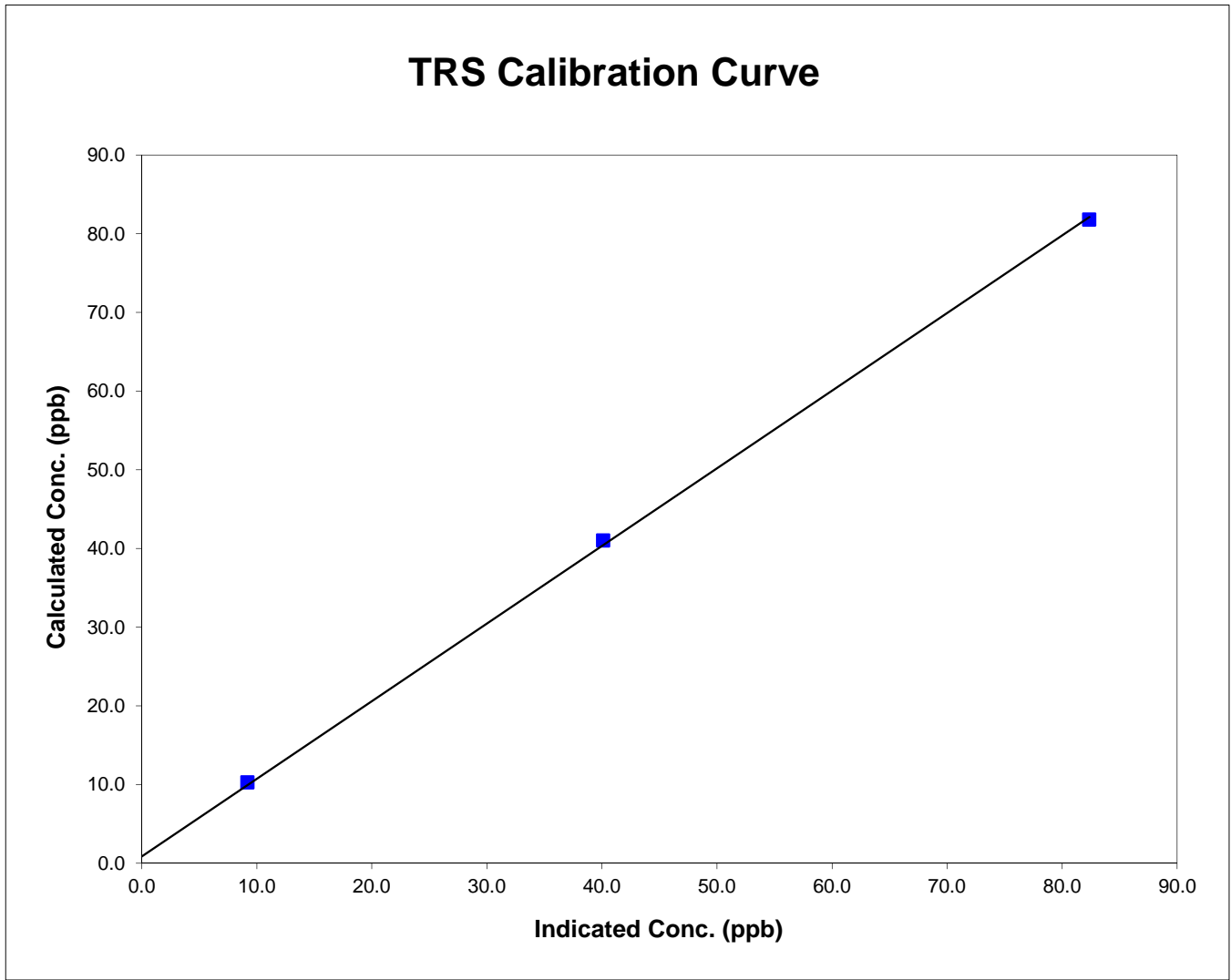
Station Information

Calibration Date	August 25, 2014	Previous Calibration	July 10, 2014
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	7:10	End Time (MST)	11:15
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	Correlation Coefficient	0.999761
81.8	82.4	0.9934		
41.0	40.1	1.0225		
10.3	9.2	1.1182	Slope	0.987147
			Intercept	0.837675

TRS Calibration Curve



Smokey Heights TRS Calibration



August 25, 2014

Calibration Report



Parameter SO2

Air Monitoring Network PAZA

Station Information

Calibration Date	August 8, 2014	Previous Calibration	July 8, 2014
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	14:15	End Time (MST)	16:56
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
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.985200	Calculated slope	0.987217
Calculated intercept	0.322092	Calculated intercept	0.084221
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	-768.1	V	-768.1	V
UV Lamp Voltage	1066	V	1067	V
Chamber Temp	45.1	Deg C	45	Deg C
Pressure	664	mm Hg	664	mm Hg
Sample Flow	0.504	LPM	0.506	LPM
Lamp Intensity	96	%	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	86.7	0.9876
4994	19.96	43.0	43.4	0.9899
4994	9.96	21.5	21.5	0.9977
4994	0.00	0.0	0.0	As found zero
4994	39.92	85.6	86.7	As found span
Average Correction Factor				0.9917

Calculated value of As Found Response: 85.723 ppm Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.1	ppb
Auto span	59.1	ppb	59.2	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2
 Air Monitoring Network PAZA



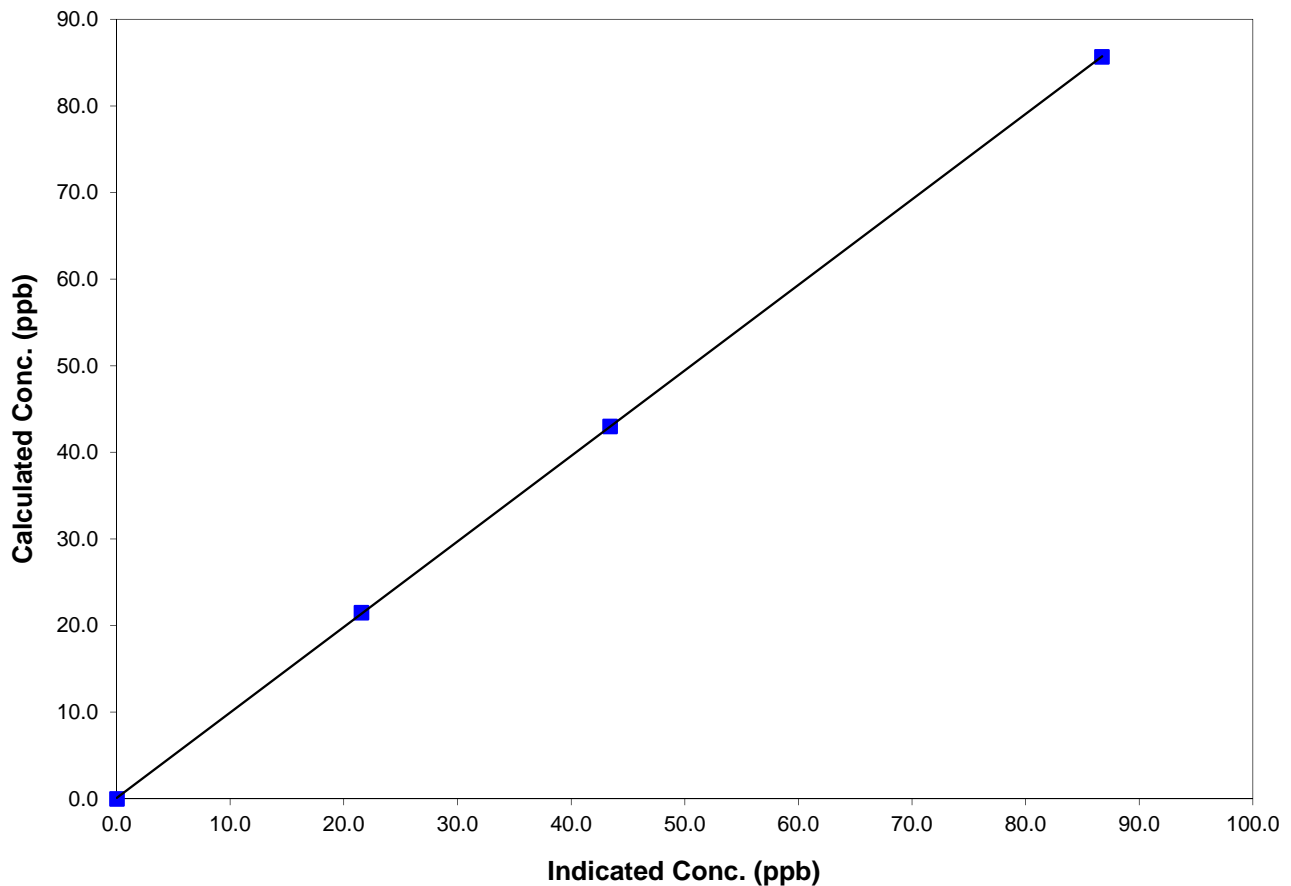
Station Information

Calibration Date	August 8, 2014	Previous Calibration	July 8, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	14:15	End Time (MST)	16:56
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

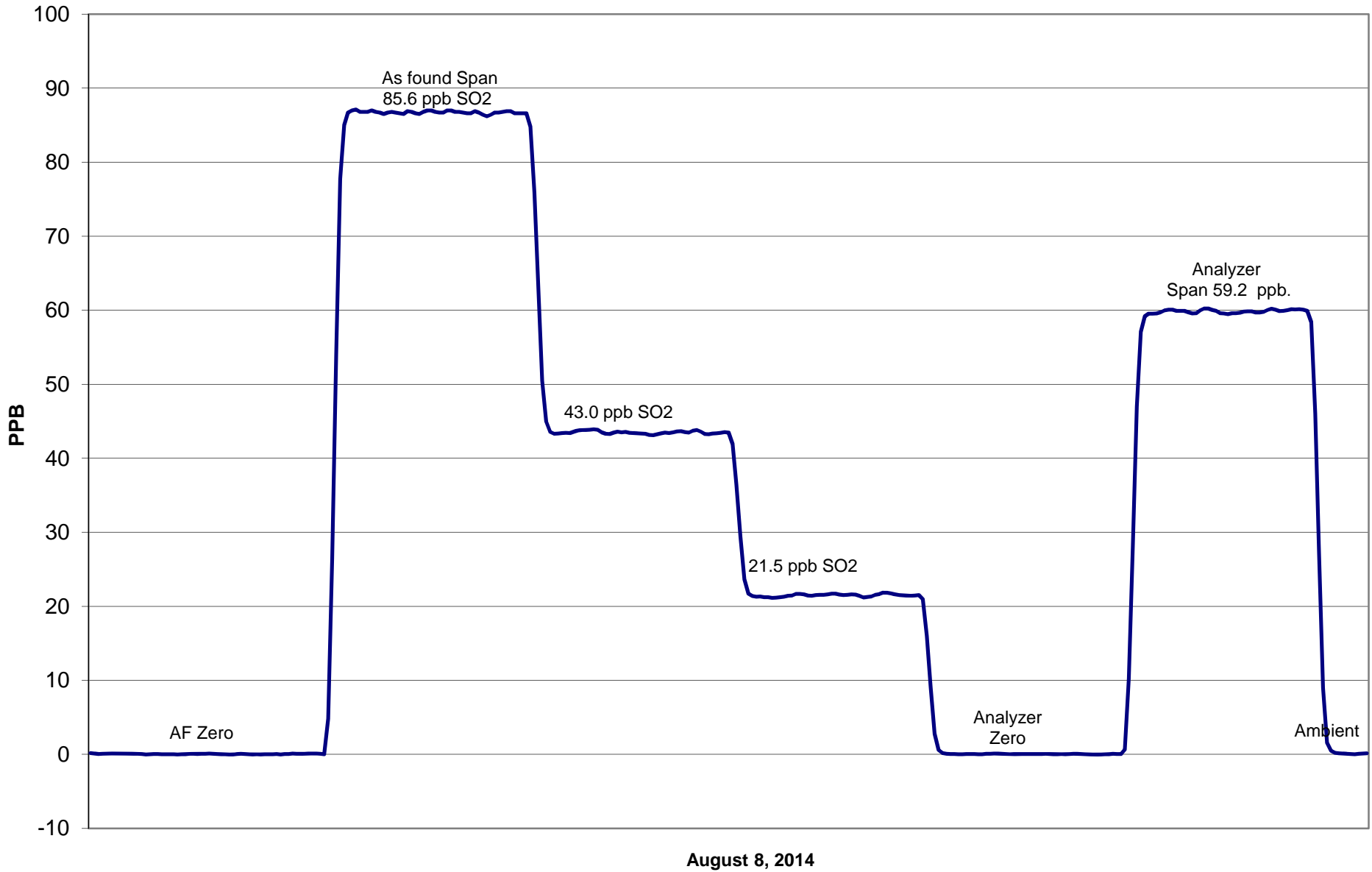
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999990
85.6	86.7	0.9876		
43.0	43.4	0.9899		
21.5	21.5	0.9977		
			Slope	0.987217
			Intercept	0.084221

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	August 7, 2014	Previous Calibration	July 7, 2014		
Station Number	4	Station Location	Beaverlodge		
Reason:	Routine	Installation	Removal	Other:	
Start Time (MST)	8:15	End Time (MST)	13:45		
Barometric Pressure	0.904	Atm	Station Temperature	20.0	Deg C
Calibrator	EnviroNics	Serial Number	3016		
NO Cal Gas Conc	52.1	ppm	Cal Gas Expiry Date	March 1, 2017	
NO _x Cal Gas Conc	52.4	ppm	Cal Gas Serial #	LL105159	

DACS Information

DACS make	CR3000	DACS serial No.	5237	
Parameter		NO₂	NO_x	NO
Before	Data Slope	0.996708	1.000944	0.996469
	Data Offset	-0.128317	1.484190	1.745672
After	Data Slope	0.999179	0.999488	0.996462
	Data Offset	-0.276236	1.786987	1.806679
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	3.1	mV	3.0	mV
NO _x bkgnd	3.4	mV	3.3	mV
NO coefficient	1.027		1.013	
NO _x coefficient	1.000		1.000	
NO ₂ conv temp	326.0	Deg C	326.7	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-748.0	mV	-747.8	mV
R Cell Press	219.0	in Hg	219.6	in Hg
Sample Flow	0.642	LPM	0.641	LPM

Notes: Span/zero adjustment made

Calibration Report



Parameter **NOX-NO-NO2**
 Air Monitoring Network **PAZA**

Station Information

Calibration Date: August 7, 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	0.0	-0.1	0.0	N/A	N/A
1	4995	39.92	415.5	413.1	2.4	414.8	413.6	0.3	1.0016	0.9986
2	4995	19.96	208.6	207.4	1.2	205.9	205.2	-0.2	1.0128	1.0105
3	4995	9.93	104.0	103.4	0.6	100.5	100.4	-0.1	1.0348	1.0298
AFZ	4995	0.00	0.0	0.0	0.0	0.5	-0.1	0.5	0.0000	0.0000
AFS	4995	39.92	415.5	413.1	0.8	420.6	419.7	0.0	0.9878	0.9842
Average Correction Factor									1.0164	1.0130

As Found Concentrations: NO_x= 422.0 NO= 420.1 As Found Percent Change NO_x= 1.6% NO= 1.7%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NOx high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	-0.1	-0.1	0.0	0.0	-0.1	0.0	N/A	N/A	N/A	N/A
NO point	413.7	413.7	0.0	414.6	413.7	0.1	0.9978	1.0000	N/A	N/A
300	413.7	105.0	308.7	414.8	105.0	309.2	0.9974	1.0000	0.9984	100.2%
200	413.7	204.8	208.9	414.9	204.8	209.1	0.9972	1.0000	0.9990	100.1%
100	413.7	305.0	108.7	415.2	305.0	109.7	0.9964	1.0000	0.9914	100.9%
Average Correction Factor							0.9970	1.0000	0.9963	100.4%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.1	-0.2	ppb	0.0	0.0	-0.1	ppb
Auto span	176.0	174.8	0.9	ppb	165.3	164.0	1.1	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



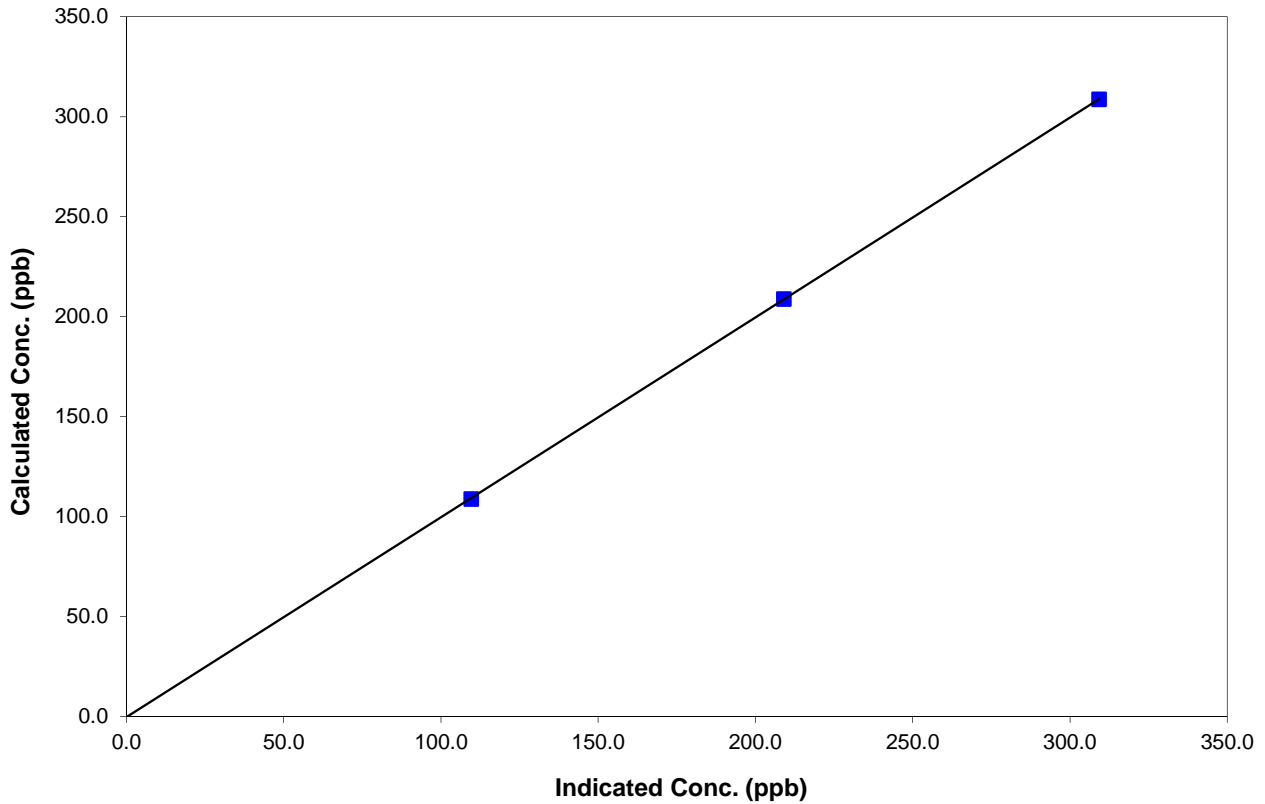
Station Information

Calibration Date	August 7, 2014	Previous Calibration	July 7, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:15	End Time (MST)	13:45
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
308.7	309.2	0.9984	Correlation Coefficient	0.999991
208.9	209.1	0.9990		
108.7	109.7	0.9914		
			Slope	0.999179
			Intercept	-0.276236

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x

Air Monitoring Network PAZA

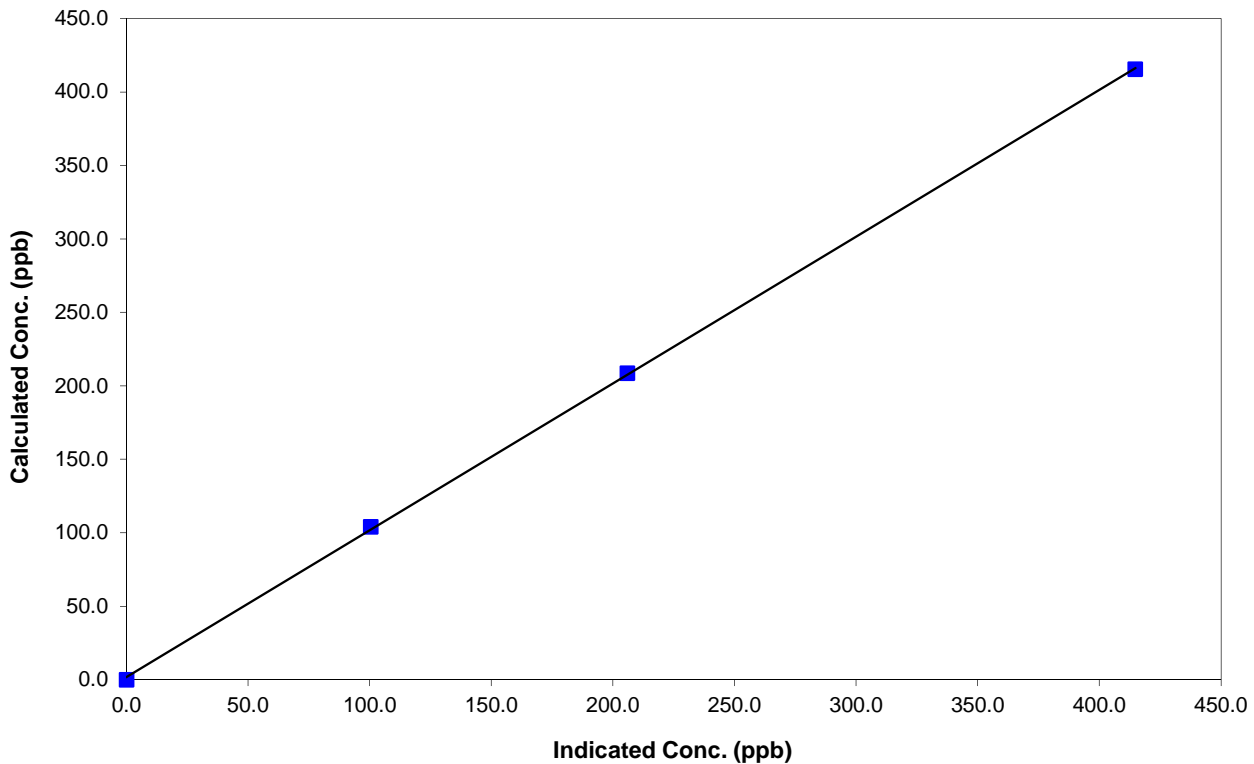
Station Information

Calibration Date	August 7, 2014	Previous Calibration	July 7, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:15	End Time (MST)	13:45
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999914
415.5	414.8	1.0016		
208.6	205.9	1.0128	Slope	0.999488
104.0	100.5	1.0348		
			Intercept	1.786987

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



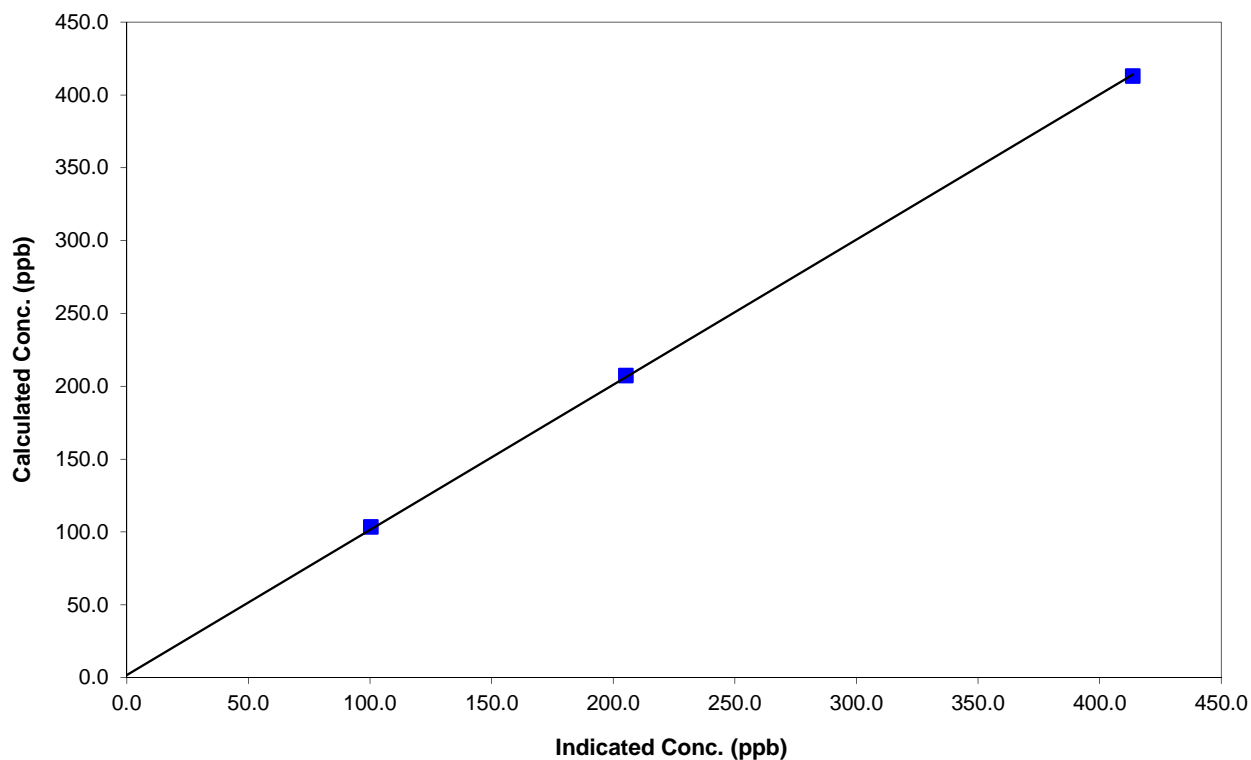
Station Information

Calibration Date	August 7, 2014	Previous Calibration	July 7, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:15	End Time (MST)	13:45
Analyzer make	TEI 42i	Analyzer serial #	906535068

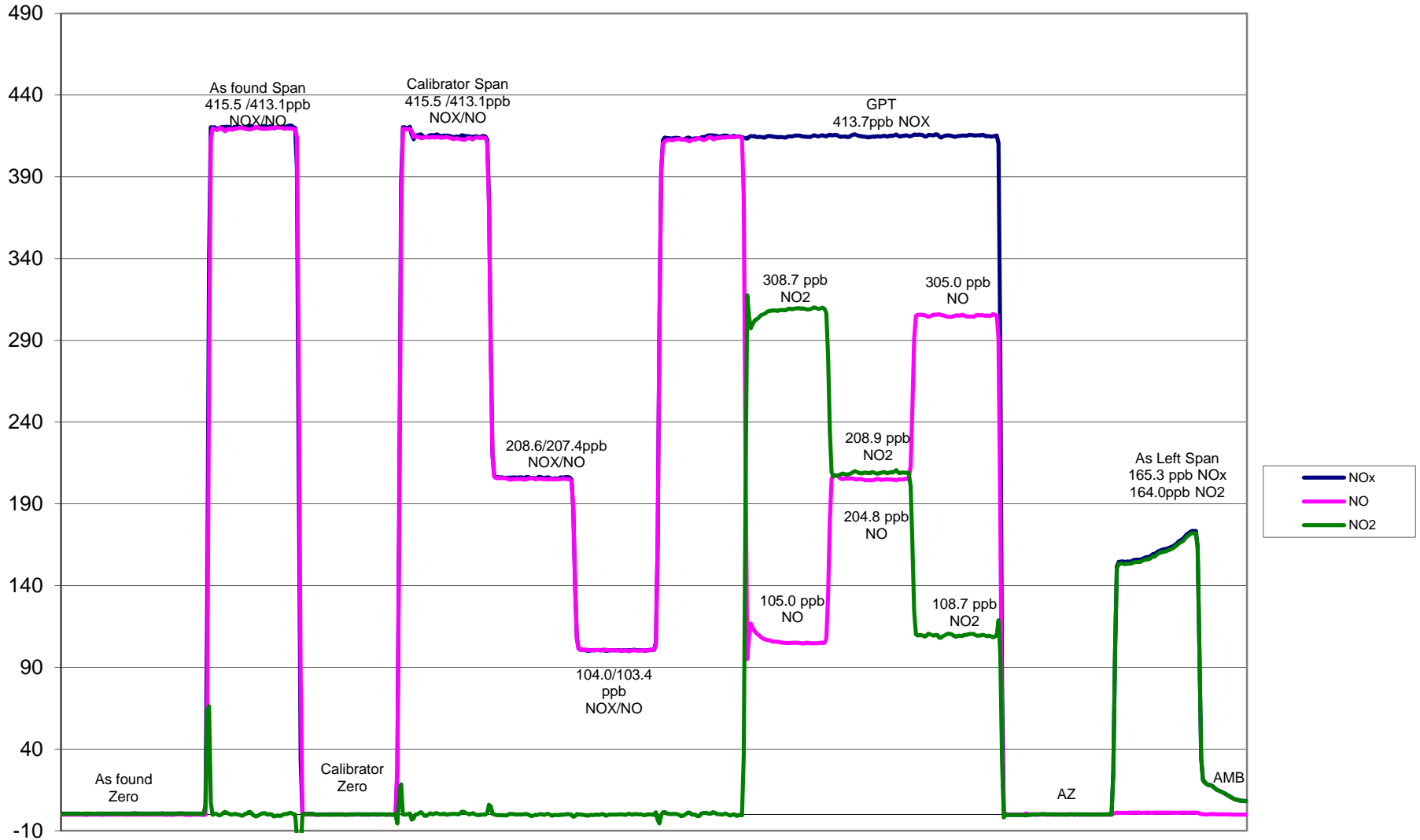
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999922
413.1	413.6	0.9986		
207.4	205.2	1.0105	Slope	0.996462
103.4	100.4	1.0298		
			Intercept	1.806679

NO Calibration Curve



NO_x Calibration



August 7, 2014

Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	August 7, 2014	Previous Calibration	July 7, 2014
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	12:20	End Time (MST)	15:30
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	0.995296	Calculated slope	1.000785
Calculated intercept	0.101175	Calculated intercept	-0.028173
Analyzer make	Teco 49i	Analyzer serial #	1136451236

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.60	ppb	-0.60	ppb
slope	1.028		1.002	
Lamp temp	53.9	mV	53.9	mV
Lamp Intensity A/B	79264/80448	mV	79247/80428	mV
Pressure	671.2	mm Hg	683.9	mm Hg
Flow A	0.75	LPM	0.76	LPM
Flow B	0.731	LPM	0.740	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	0.1	N/A
5035	0.30	308.7	308.8	0.9997
5035	0.20	208.9	208.3	1.0031
5035	0.10	108.7	108.7	0.9999
5035	0.00	0.0	0.1	As found zero
5035	0.30	308.7	316.3	As found span
Average Correction Factor				1.0009

Calculated value of As Found Response: 314.8 ppm Percent Change of As Found: 2.0%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.1	ppb
Auto span	273.9	ppb	267.2	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter 03

Air Monitoring Network PAZA



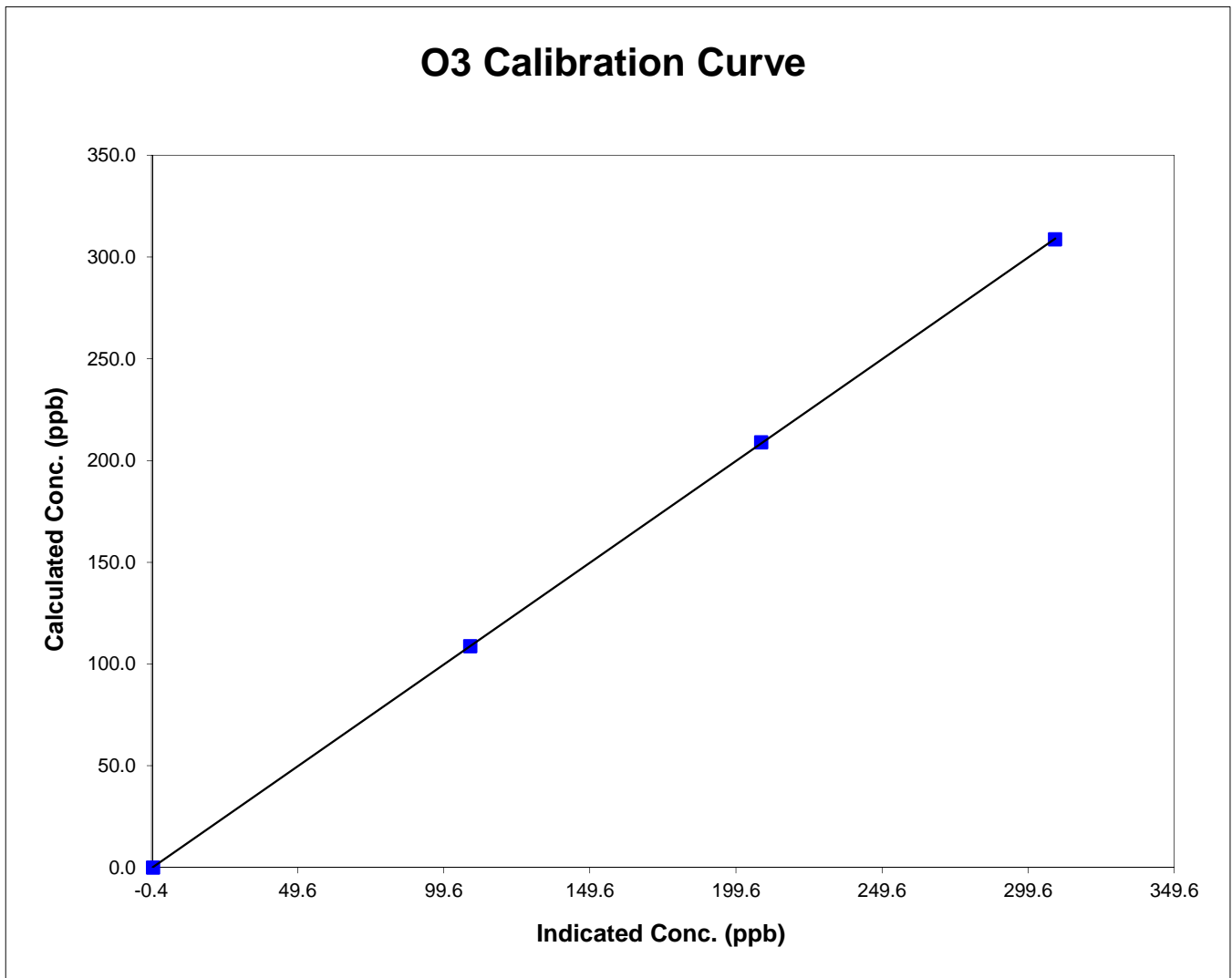
Station Information

Calibration Date	<u>August 7, 2014</u>	Previous Calibration	<u>July 7, 2014</u>
Station Number	<u>4</u>	Station Location	<u>Beaverlodge</u>
Start Time (MST)	<u>12:20</u>	End Time (MST)	<u>15:30</u>
Analyzer make/model	<u>Teco 49i</u>	Analyzer serial #	<u>1136451236</u>

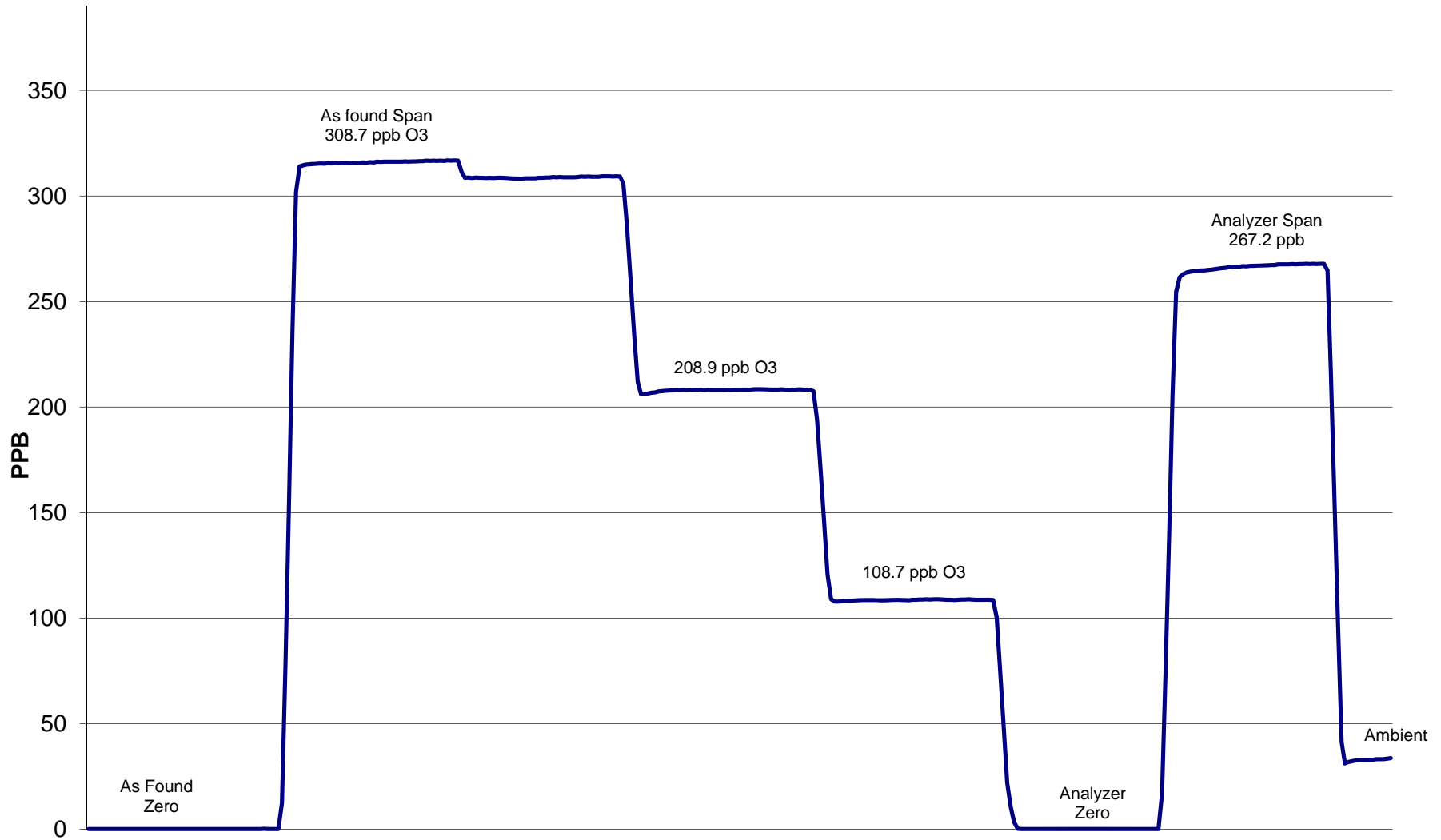
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			Correlation Coefficient	
0.0	0.1	NA	Correlation Coefficient	0.999993
308.7	308.8	0.9997		
208.9	208.3	1.0031	Slope	1.000785
108.7	108.7	0.9999		
			Intercept	-0.028173

O3 Calibration Curve



O3 Calibration



August 7, 2014

Calibration Report



Parameter SO2

Air Monitoring Network PAZA

Station Information

Calibration Date	July 22 2014	Previous Calibration	July 22 2014
Station Number	6	Station Location	Valleyview
Reason:	<input type="checkbox"/> Routine	<input type="checkbox"/> Install	<input checked="" type="checkbox"/> Removal
Other:			
Start Time (MST)	12:45	End Time (MST)	14:55
Barometric Pressure	706.00 mmHg	Station Temperature	23.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	49.8 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
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.986981	Calculated slope	0.997076
Calculated intercept	1.814780	Calculated intercept	2.901219
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	62.5			
Coefficient	1.02			
UV Lamp Voltage	832	LPM		LPM
Chamber Temp	44.4	V		V
Perm Gas Temp	35	C		C
Pressure	600.9	in Hg		in Hg
Sample Flow	0.532	LPM		LPM
Lamp Intensity	41762	Hz		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	-1.1	N/A
4995	39.91	394.7	393.8	1.0023
4995	19.97	198.3	195.1	1.0162
4995	9.95	99.0	94.6	1.0464
4995	0.00	0.0	-1.1	As found zero
4995	39.91	394.7	393.8	As found span
Average Correction Factor				1.0216

Calculated value of As Found Response: 391.7 ppm Percent Change of As Found: 0.8%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	158.8	ppm	#DIV/0!	ppm

Notes: No adjustment made
No after span due to the span box issues

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter SO2
 Air Monitoring Network PAZA

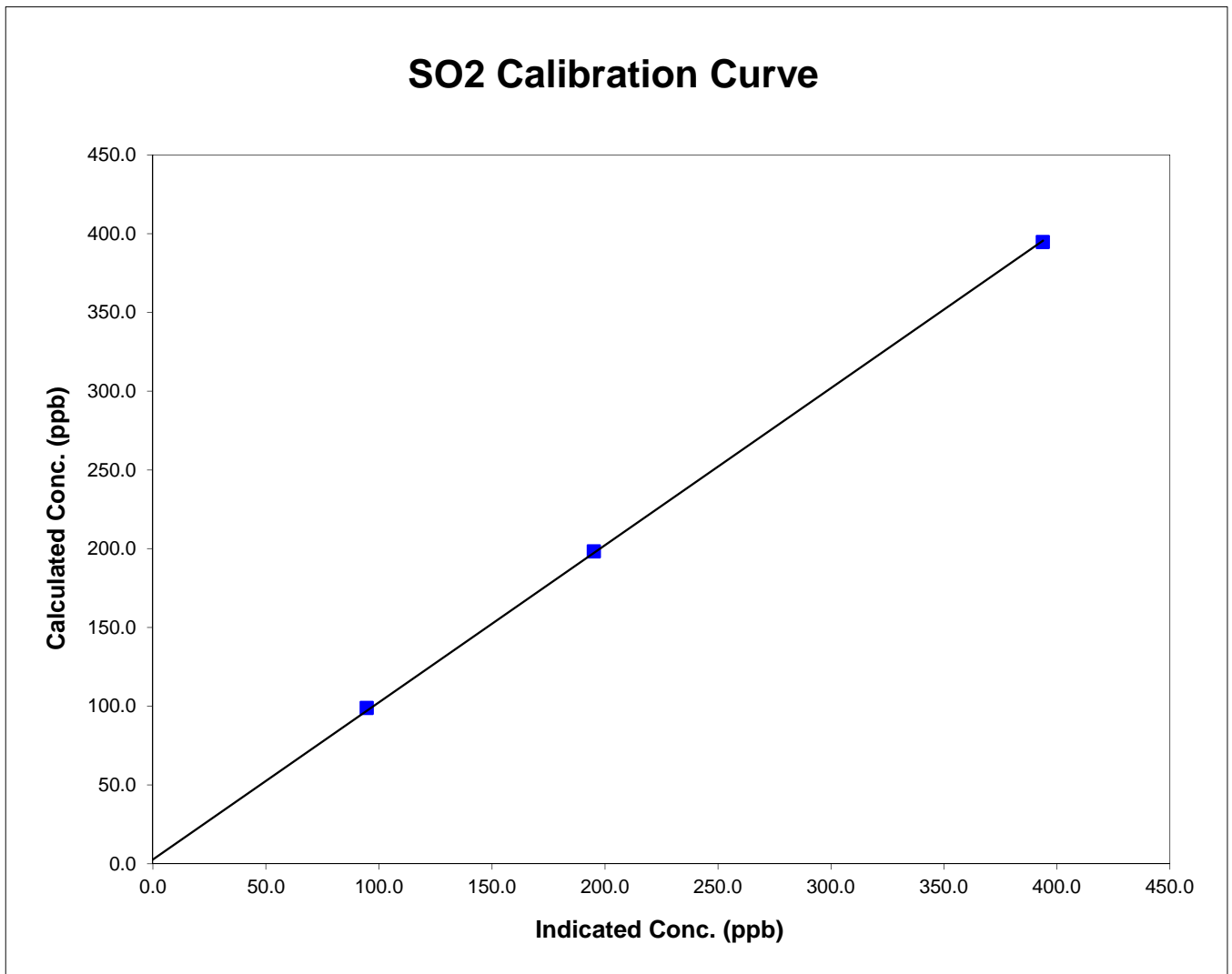


Station Information

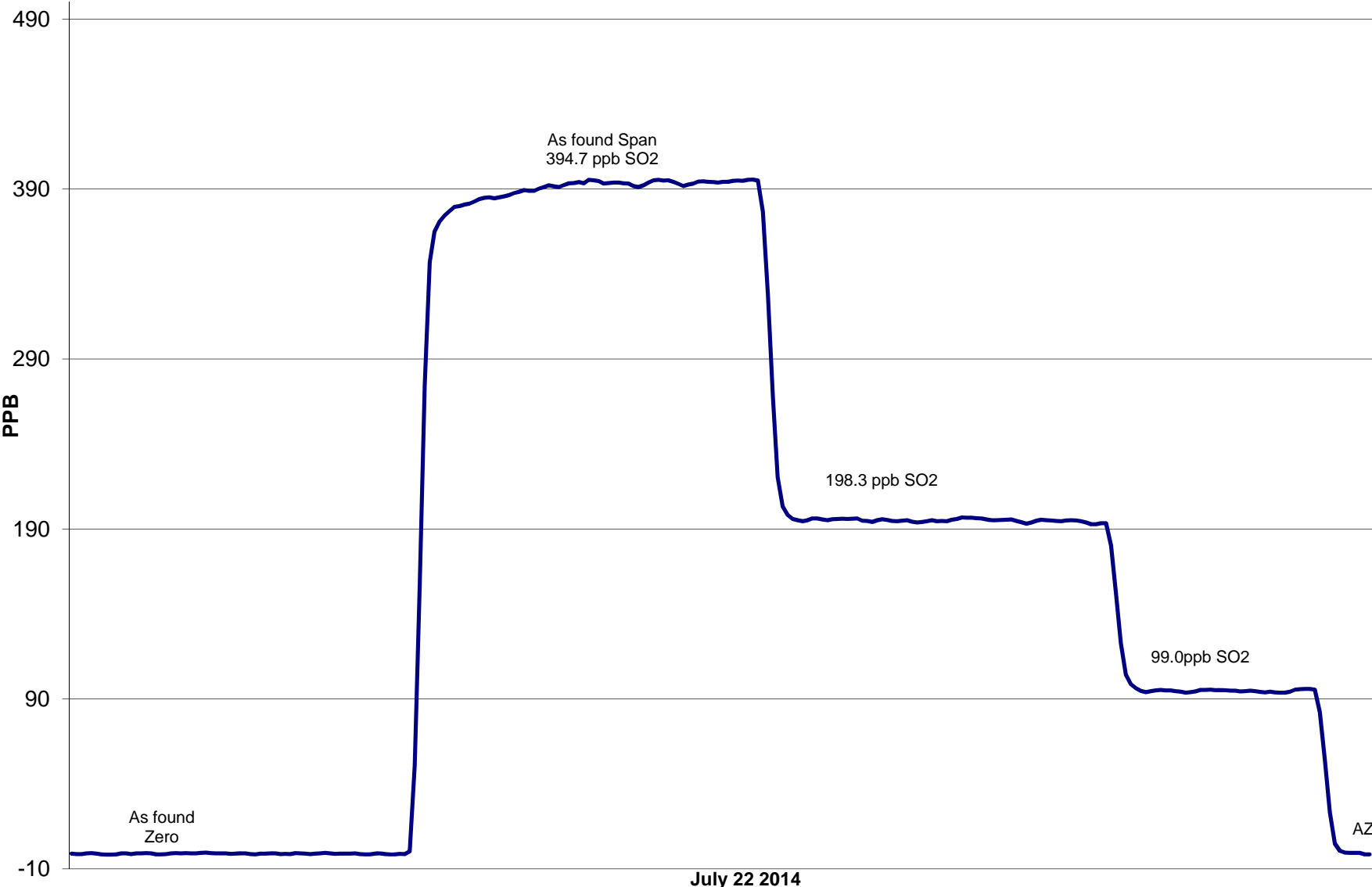
Calibration Date	July 22 2014	Previous Calibration	July 22 2014
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:45	End Time (MST)	14:55
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.1	N/A	Correlation Coefficient	0.999911
394.7	393.8	1.0023		
198.3	195.1	1.0162		
99.0	94.6	1.0464		
			Slope	0.997076
			Intercept	2.901219



SO2 Calibration



Calibration Report



Parameter SO2
 Air Monitoring Network PAZA

Station Information

Calibration Date	July 22 2014	Previous Calibration	NA
Station Number	6	Station Location	Valleyview
Reason:	<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Install	<input type="checkbox"/> Removal
Other:			
Start Time (MST)	15:00	End Time (MST)	17:40
Barometric Pressure	706.00 mmHg	Station Temperature	23.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	49.8 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
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	NA	Calculated slope	0.993614
Calculated intercept	NA	Calculated intercept	2.277996
Analyzer make	TEI 43C	Analyzer serial #	609716239

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	NA		15.8	
Coefficient	NA		0.972	
UV Lamp Voltage	NA	LPM	731	LPM
Chamber Temp	NA	V	43.1	V
Perm Gas Temp	NA	C	45	C
Pressure	NA	in Hg	672.4	in Hg
Sample Flow	NA	LPM	0.486	LPM
Lamp Intensity	NA	Hz	47675	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	39.91	394.7	396.2	0.9964
4995	19.97	198.3	195.9	1.0121
4995	9.95	99.0	95.1	1.0409
				As found zero
				As found span
Average Correction Factor				1.0165

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

	before calibration		after calibration	
Auto zero		ppm	0.0	ppm
Auto span		ppm	238.5	ppm

Notes: Span and zero adjustment made during install set up.
Note serial number change.

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter SO2
 Air Monitoring Network PAZA



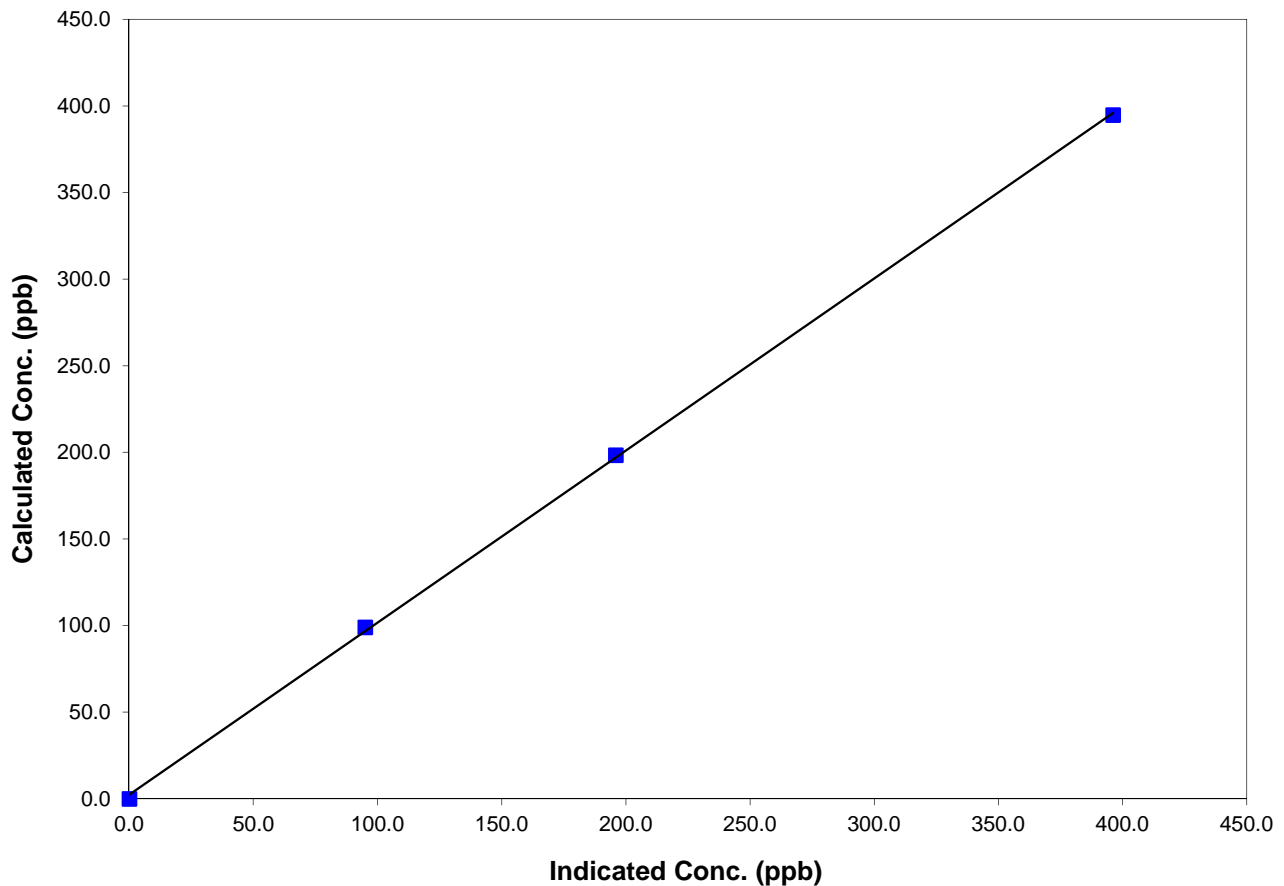
Station Information

Calibration Date	July 22 2014	Previous Calibration	NA
Station Number	6	Station Location	Valleyview
Start Time (MST)	15:00	End Time (MST)	17:40
Analyzer make/model	TEI 43C	Analyzer serial #	609716239

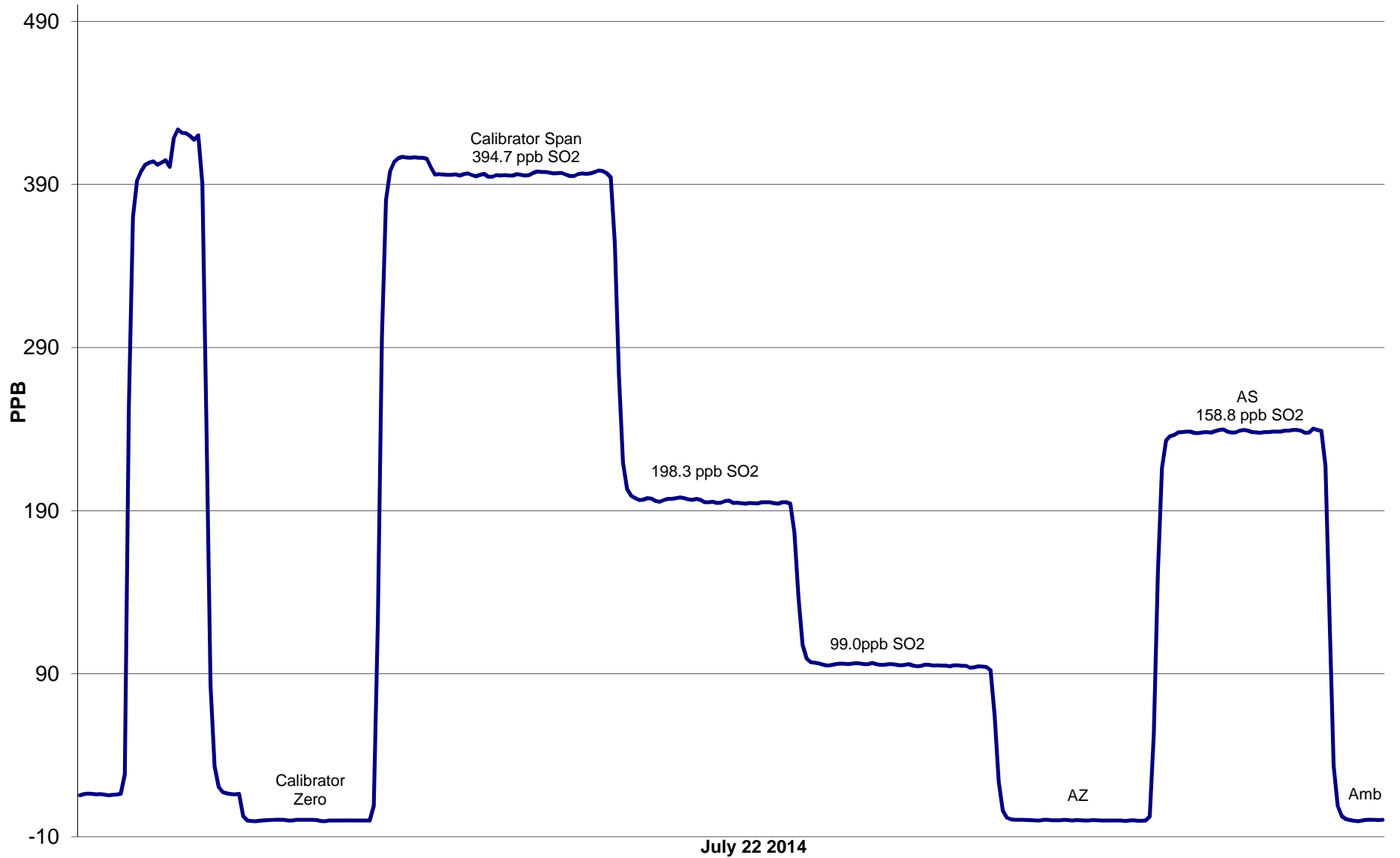
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999839
394.7	396.2	0.9964		
198.3	195.9	1.0121	Slope	0.993614
99.0	95.1	1.0409		
			Intercept	2.277996

SO2 Calibration Curve



SO2 Calibration



Calibration Summary

Parameter H2S

Air Monitoring Network PAZA



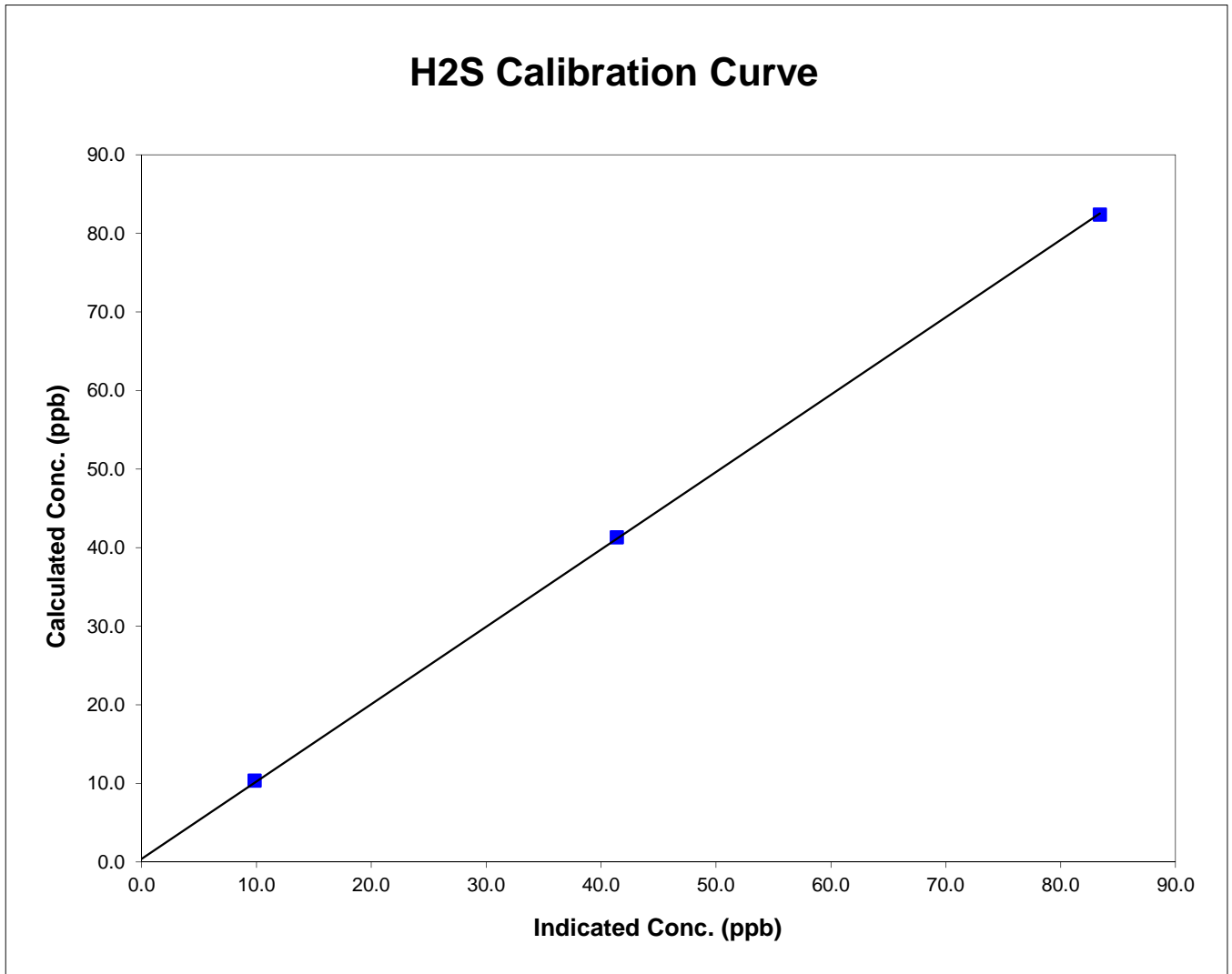
Station Information

Calibration Date	<u> August 6 2014 </u>	Previous Calibration	<u> July 22 2014 </u>
Station Number	<u> 6 </u>	Station Location	<u> Valleyview </u>
Start Time (MST)	<u> 9:45 </u>	End Time (MST)	<u> 14:00 </u>
Analyzer make/model	<u> TEI Model 43i - APSCB </u>	Analyzer serial #	<u> 701120010 </u>

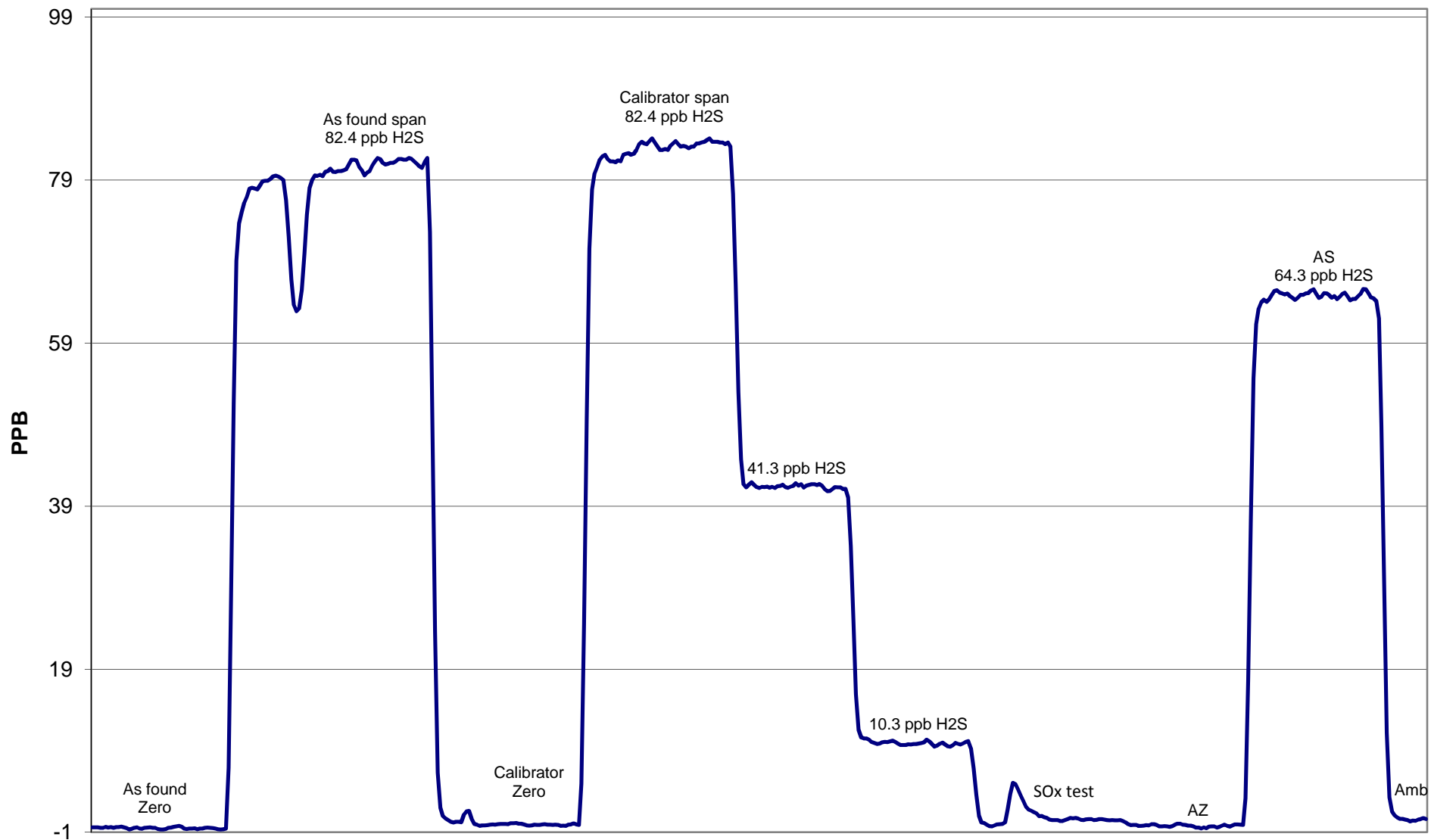
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999945
82.4	83.4	0.9880		
41.3	41.4	0.9988	Slope	0.984903
10.3	9.9	1.0502		
			Intercept	0.384096

H2S Calibration Curve



H2S Calibration



August 6 2014

Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	August 8, 2014	Previous Calibration	July 24, 2014
Station Number	1	Station Location	Falher
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:20	End Time (MST)	15:07
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
	<u>Before</u>		<u>After</u>
Calculated slope	1.000404	Calculated slope	0.980690
Calculated intercept	2.528839	Calculated intercept	2.787580
Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.3		7.3	
coefficient	0.922		0.922	
Lamp Voltage	833	volts	832	volts
Chamber Temp	45.01	Deg C	45	Deg C
Perm Gas Temp	44.3	Deg C	45	Deg C
Pressure	678.2	mm Hg	678.5	mm Hg
Sample Flow	0.412	ccm	0.412	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	-0.5	N/A
4995	39.93	394.9	401.0	0.9848
4995	19.96	198.2	198.0	1.0010
4995	9.97	99.2	96.1	1.0323
4995	0.0	0.0	-0.5	As Found Zero
4995	39.93	394.9	401.0	As Found Span
Average Correction Factor				1.0060

Calculated value of As Found Response: 404.249 ppm Percent Change of As Found: -2.4%

	before calibration		after calibration	
Auto zero	0.5	ppm	-0.5	ppm
Auto span	349.6	ppm	346.0	ppm

Notes: No adjustments made.

Calibration Performed By: Dmytro Dolotii

Calibration Summary



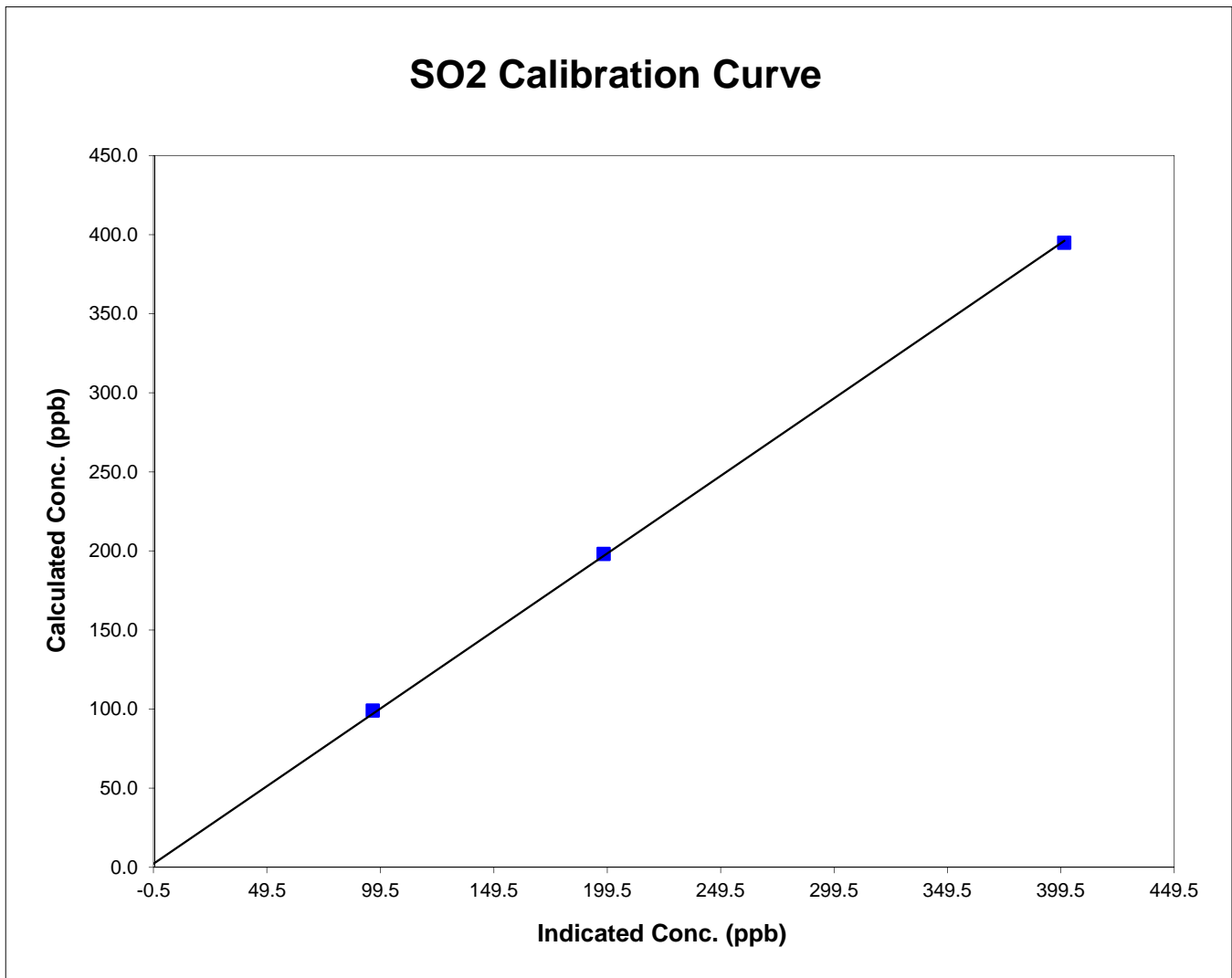
Parameter SO2
 Air Monitoring Network PAZA

Station Information

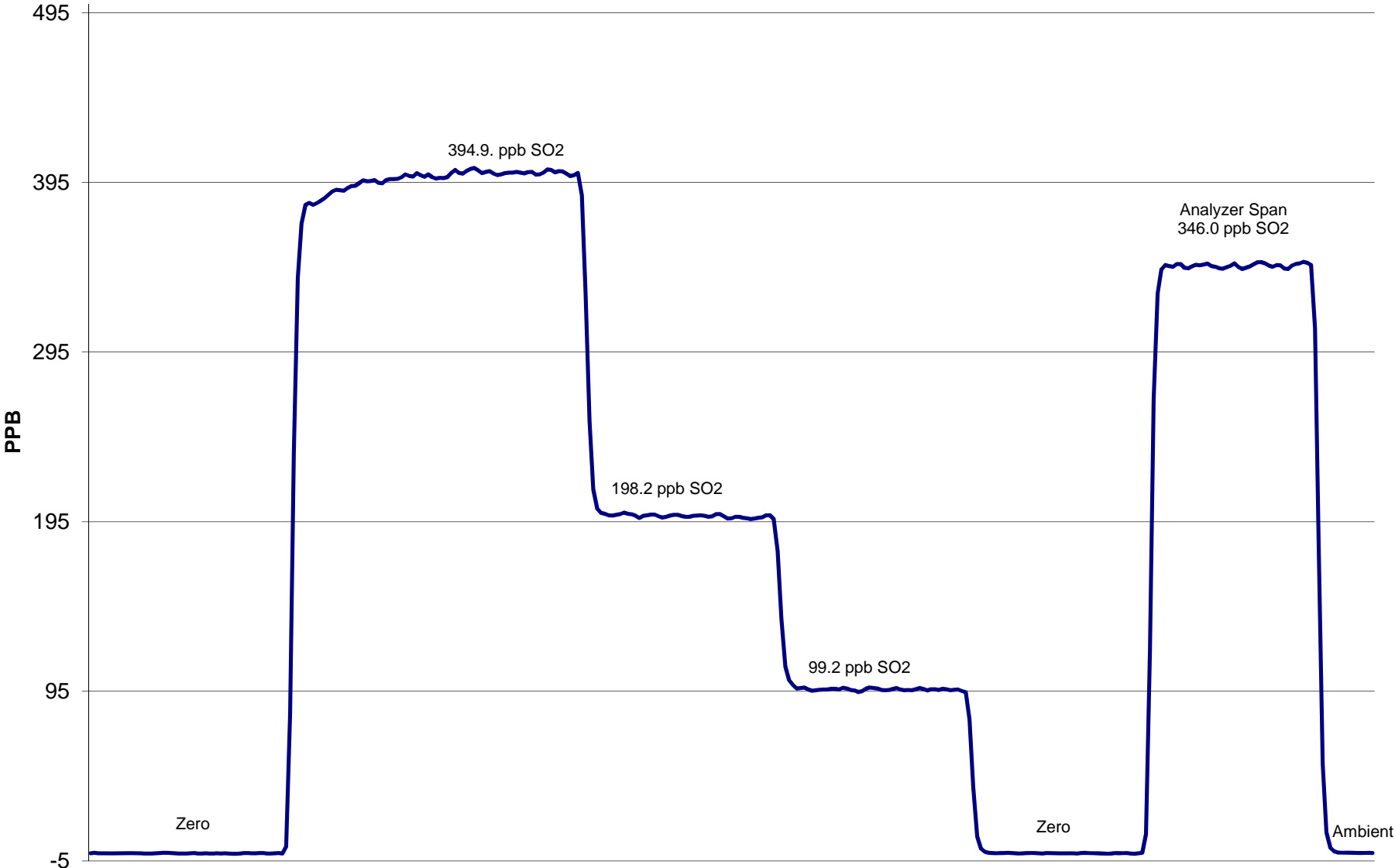
Calibration Date	August 8, 2014	Previous Calibration	July 24, 2014
Station Number	1	Station Location	Falher
Start Time (MST)	12:20	End Time (MST)	15:07
Analyzer make/model	Teco 43i	Analyzer serial #	1207452008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.5	N/A	Correlation Coefficient	0.999851
394.9	401.0	0.9848		
198.2	198.0	1.0010		
99.2	96.1	1.0323	Slope	0.980690
			Intercept	2.787580



SO2 Calibration



August 8, 2014

Calibration Report



Parameter H2S
 Air Monitoring Network PAZA

Station Information

Calibration Date	<u> August 8, 2014 </u>	Previous Calibration	<u> July 24, 2014 </u>
Station Number	<u> 1 </u>	Station Location	<u> Falher </u>
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	<u> </u>
Start Time (MST)	<u> 9:35 </u>	End Time (MST)	<u> 13:55 </u>
Barometric Pressure	<u> 0.931 ATM </u>	Station Temperature	<u> 20.0 Deg C </u>
Calibrator	<u> Envionics </u>	Serial Number	<u> 3016 </u>
Cal Gas Conc	<u> 10.4 ppm </u>	Cal Gas Expiry Date	<u> 08/07/2016 </u>
Correction factor	<u> 0.031647 </u>	Cal Gas Cylinder #	<u> LL110781 </u>
DACS make	<u> CR1000 </u>	DACS serial No.	<u> 3980 </u>
DACS voltage range	<u> 0 - 5 volt </u>	DACS channel #	<u> 5 </u>
	<u> Before </u>		<u> After </u>
Calculated slope	<u> 0.995196 </u>	Calculated slope	<u> 0.995818 </u>
Calculated intercept	<u> -0.298053 </u>	Calculated intercept	<u> 0.022474 </u>
Analyzer make	<u> Thermo 450i </u>	Analyzer serial #	<u> 1207452006 </u>

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	14.1	ppb	13.6	ppb
coefficient	1.171		1.13	
Lamp Voltage	796	volts	795	volts
Chamber Temp	45.01	Deg C	45.01	Deg C
Perm Gas Temp	44.15	Deg C	44.9	Deg C
Pressure	563.4	mm Hg	558.9	mm Hg
Sample Flow	0.887	lpm	0.874	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	0.3	N/A
4995	39.93	82.48	83.0	0.9935
4995	19.96	41.39	41.2	1.0058
8994	8.97	10.36	10.2	1.0169
4995	0.00	0.00	0.3	As Found Zero
4995	39.93	82.48	85.3	As Found Span
Average Correction Factor				1.0054

Calculated value of As Found Response: 84.23 ppm Percent Change of As Found: -2.1%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.4	ppm
Auto span	56.5	ppm	54.2	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



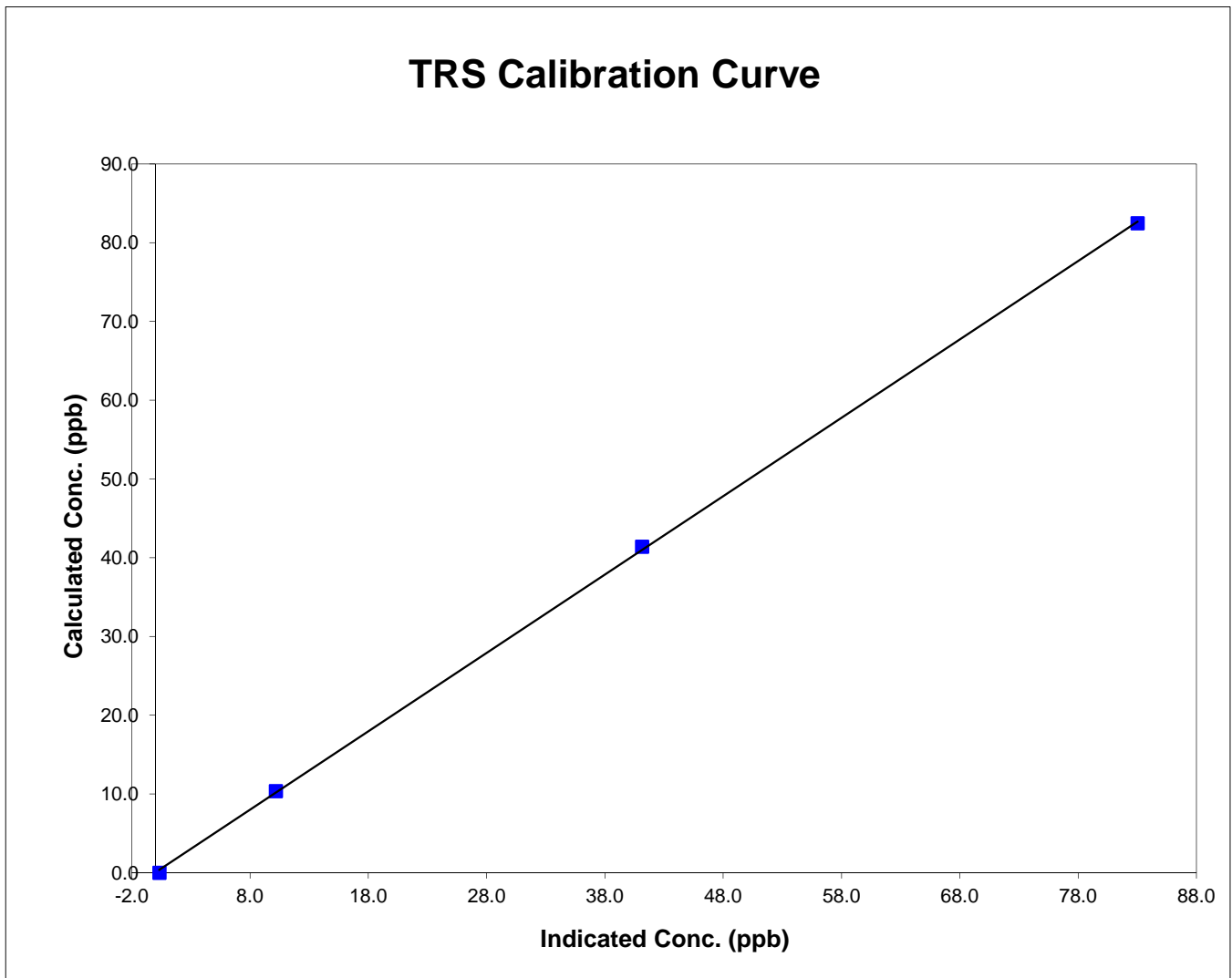
Parameter H2S
 Air Monitoring Network PAZA

Station Information

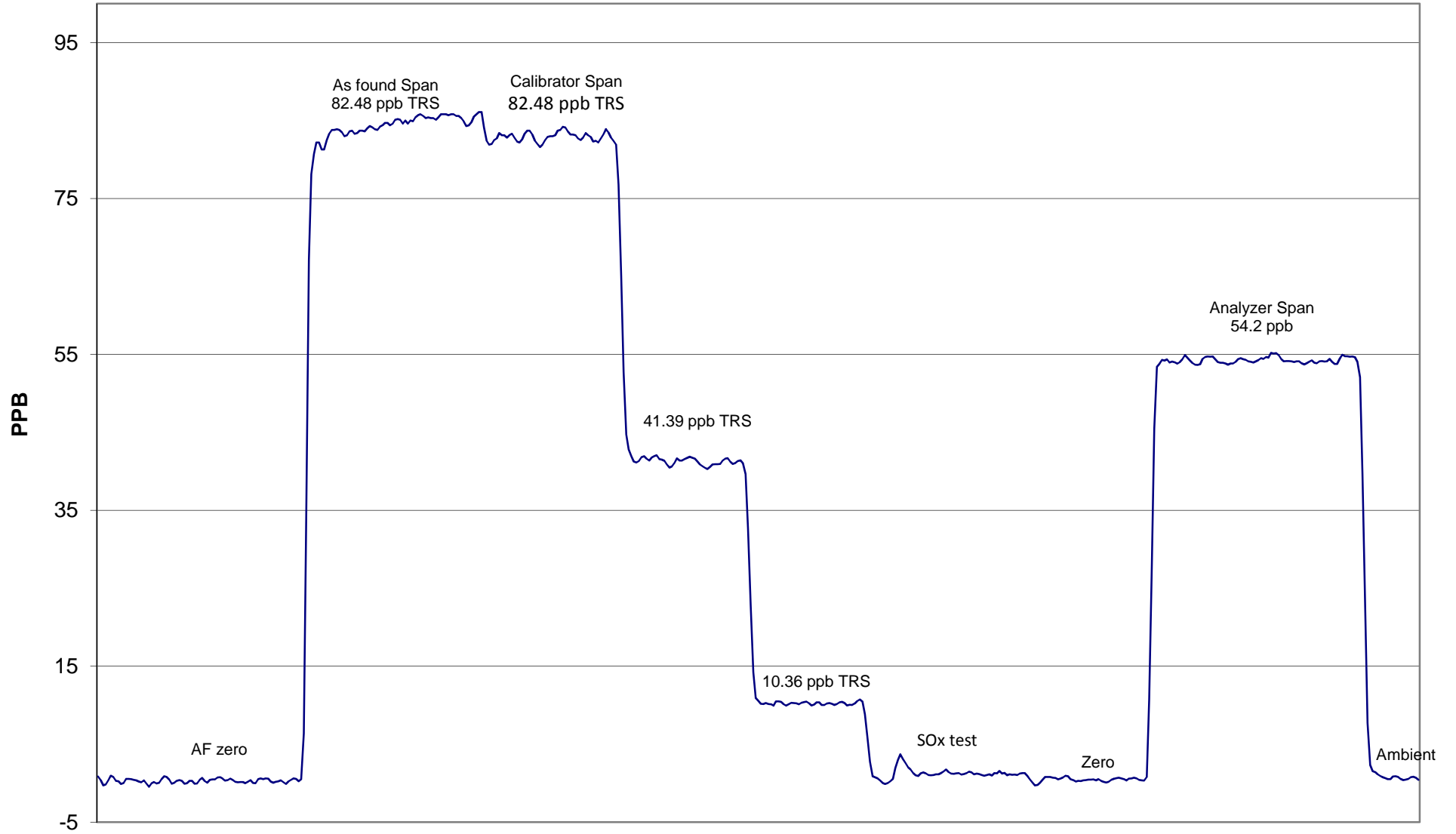
Calibration Date	<u>August 8, 2014</u>	Previous Calibration	<u>July 24, 2014</u>
Station Number	<u>1</u>	Station Location	<u>Falher</u>
Start Time (MST)	<u>9:35</u>	End Time (MST)	<u>13:55</u>
Analyzer make/model	<u>Thermo 450i</u>	Analyzer serial #	<u>1207452006</u>

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			Correlation Coefficient	
0.0	0.3	N/A	0.999910	Slope
82.5	83.0	0.9935		
41.4	41.2	1.0058		
10.4	10.2	1.0169	Intercept	0.995818
				0.022474



H2S Calibration



August 8, 2014

Calibration Report



Parameter SO2
 Air Monitoring Network PAZA

Station Information

Calibration Date	August 19, 2014	Previous Calibration	July 15, 2014
Station Number	10	Station Location	Clairmont
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	8:25	End Time (MST)	12:15
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
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.985989	Calculated slope	0.996010
Calculated intercept	2.835755	Calculated intercept	2.262576
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	21.4		21	
Coefficient	1.059		1.044	
UV Lamp Voltage	866	V	866	V
Chamber Temp	44.5	C	44.6	C
Perm Gas Temp	45	C	45	C
Pressure	661.5	mm Hg	666.6	mm Hg
Sample Flow	0.462	LPM	0.463	LPM
Lamp Intesity	30513	Hz	30606	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	0.3	N/A
4995	39.93	394.9	395.5	0.9986
4995	19.97	198.3	195.5	1.0143
4995	9.97	99.2	94.8	1.0466
4995	0.00	0.0	0.3	As found zero
4995	39.93	394.9	400.8	As found span
Average Correction Factor				1.0198

Calculated value of As Found Response: 397.703 ppm Percent Change of As Found: -0.7%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	245.5	ppm	241.9	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii.

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



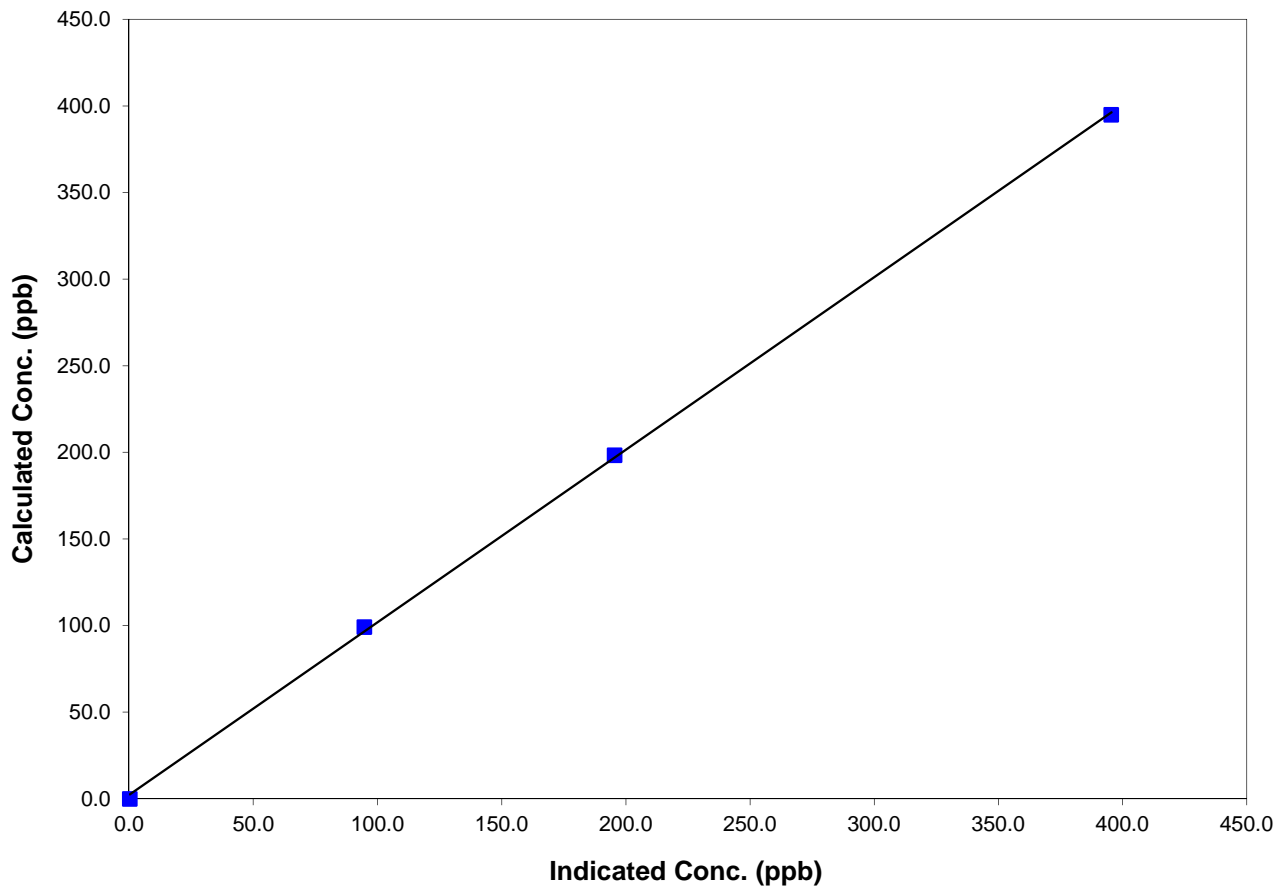
Station Information

Calibration Date	August 19, 2014	Previous Calibration	July 15, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	8:25	End Time (MST)	12:15
Analyzer make/model	TEI 43C	Analyzer serial #	436610005

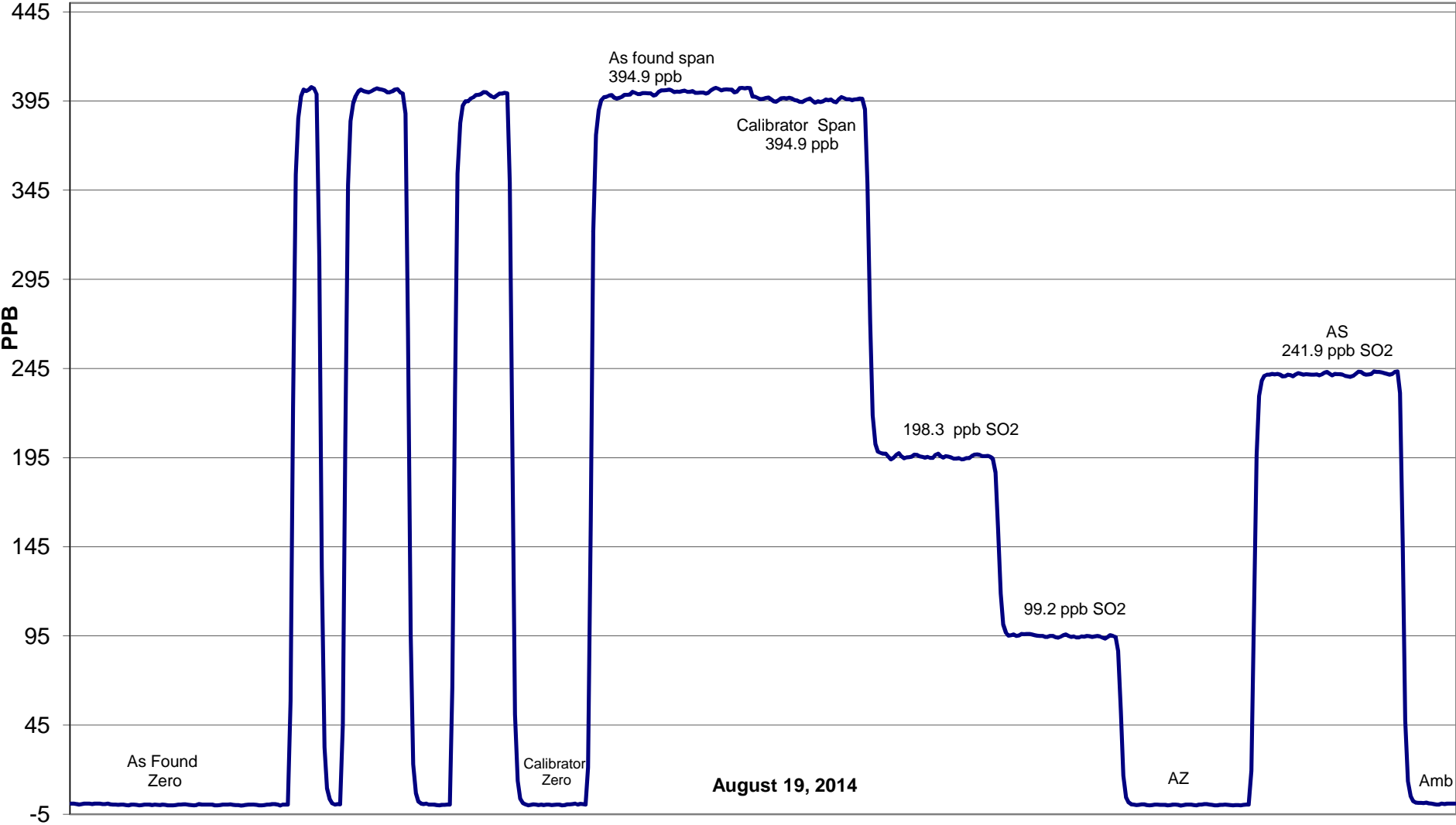
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999808
394.9	395.5	0.9986		
198.3	195.5	1.0143	Slope	0.996010
99.2	94.8	1.0466		
			Intercept	2.262576

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter **NO_x-NO-NO₂**
Air Monitoring Network



Station Information

Calibration Date	August 19, 2014	Previous Calibration	July 15, 2014
Station Number	10	Station Location	Clairmont
Reason:	Routine	Installation	Removal
Start Time (MST)	8:35	End Time (MST)	14:20
Barometric Pressure	0.925 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
NO _x Cal Gas Conc	52.4 ppm	Cal Gas Serial #	LL105159

DACS Information

DACS make	CR3000	DACS serial No.	5407	
Parameter		NO ₂	NO _x	NO
Before	Data Slope	1.003152	1.001211	0.997766
	Data Offset	0.228420	2.170560	1.973631
After	Data Slope	1.000442	1.000015	0.997667
	Data Offset	0.393157	2.360744	1.861478
Channel #		8	6	7
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	6.6	mV	6.7	mV
NO _x bkgnd	7.4	mV	7.5	mV
NO coefficient	1.137		1.149	
NO _x coefficient	0.999		0.999	
NO ₂ conv temp	326.3	Deg C	326.6	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-846.2	mV	-846.2	mV
R Cell Press	205.3	in Hg	206.2	in Hg
Sample Flow	0.672	LPM	0.685	LPM

Notes: Span adjustment made

Calibration Report



Parameter **NOX-NO-NO2**
 Air Monitoring Network **0**

Station Information

Calibration Date: August 19, 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	-0.4	0.0	-0.2	N/A	N/A
1	4995	39.92	415.5	413.1	2.4	414.0	413.2	-0.8	1.0036	0.9997
2	4995	19.96	208.6	207.4	1.2	205.5	204.8	-0.1	1.0150	1.0126
3	4995	9.93	104.0	103.4	0.6	99.5	100.0	-0.4	1.0452	1.0332
AFZ	4995	0.00	0.0	0.0	0.0	-0.4	0.0	-0.2	0.0000	0.0000
AFS	4995	39.92	415.5	413.1	0.8	409.8	408.6	-0.4	1.0137	1.0109
Average Correction Factor									1.0213	1.0152

As Found Concentrations: NO_x= 412.9 NO= 409.7 As Found Percent Change NO_x= -0.6% NO= -0.8%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NOx high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	-0.4	0.0	-0.2	N/A	N/A	N/A	N/A
NO point	413.5	413.5	0.0	414.3	413.5	-1.1	0.9979	1.0000	N/A	N/A
300	413.5	107.2	306.2	414.6	107.2	305.7	0.9974	1.0000	1.0017	99.8%
200	413.5	206.6	206.8	415.2	206.6	206.5	0.9958	1.0000	1.0017	99.8%
100	413.5	305.9	107.6	414.6	305.9	106.9	0.9972	1.0000	1.0071	99.3%
Average Correction Factor							0.9968	1.0000	1.0035	99.7%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.9	0.6	0.4	ppb	-0.1	-0.1	0.1	ppb
Auto span	172.3	169.6	2.0	ppb	168.5	166.3	1.6	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network 0



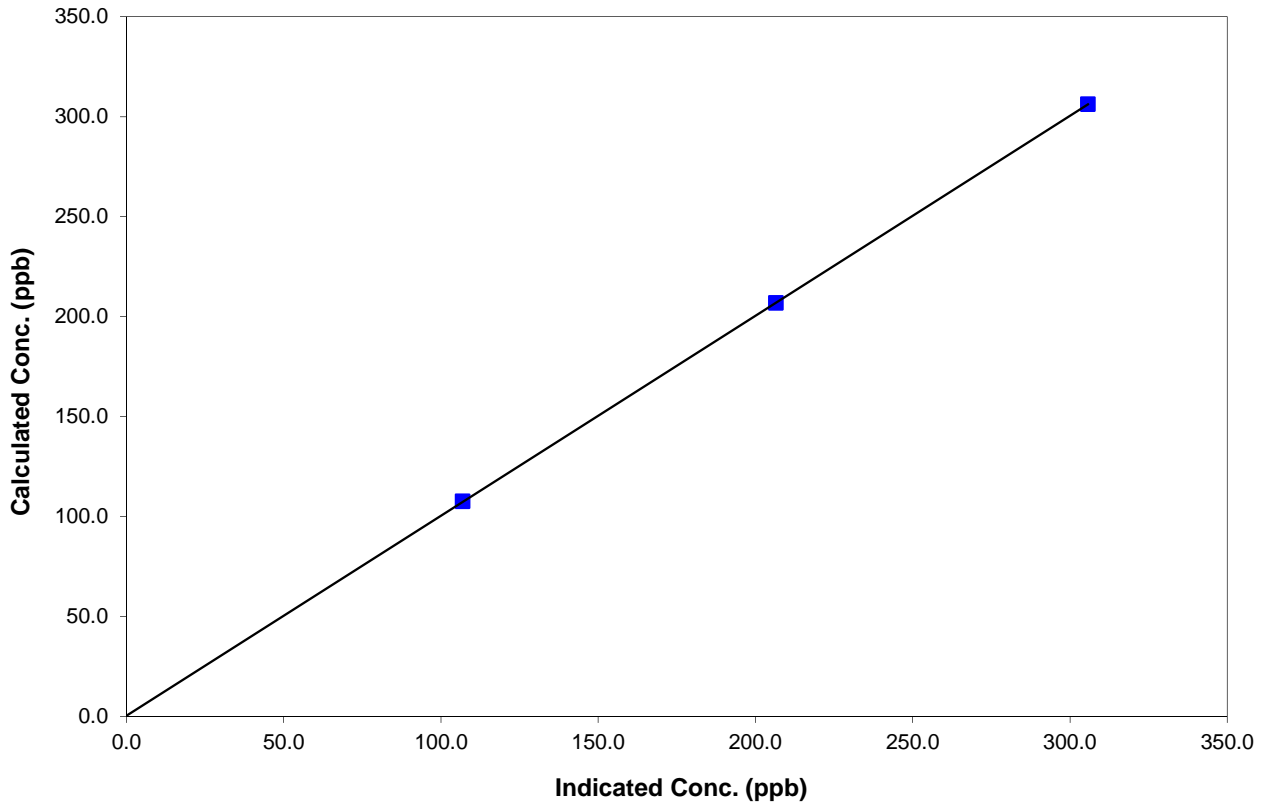
Station Information

Calibration Date	August 19, 2014	Previous Calibration	July 15, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	8:35	End Time (MST)	14:20
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	Correlation Coefficient	0.999997
306.2	305.7	1.0017		
206.8	206.5	1.0017		
107.6	106.9	1.0071	Slope	1.000442
			Intercept	0.393157

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x
 Air Monitoring Network 0



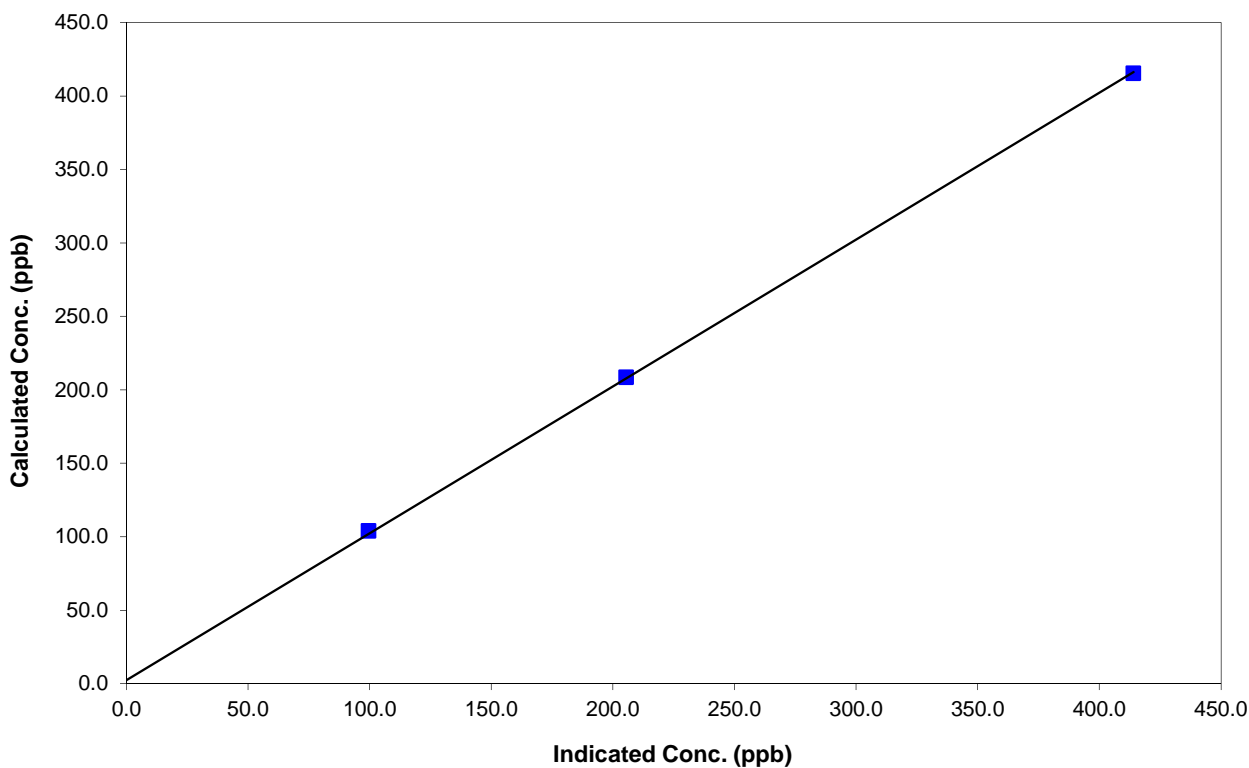
Station Information

Calibration Date	August 19, 2014	Previous Calibration	July 15, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	8:35	End Time (MST)	14:20
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A	Correlation Coefficient	0.999896
415.5	414.0	1.0036		
208.6	205.5	1.0150	Slope	1.000015
104.0	99.5	1.0452		
			Intercept	2.360744

NO_x Calibration Curve



Calibration Summary

Parameter NO
 Air Monitoring Network 0



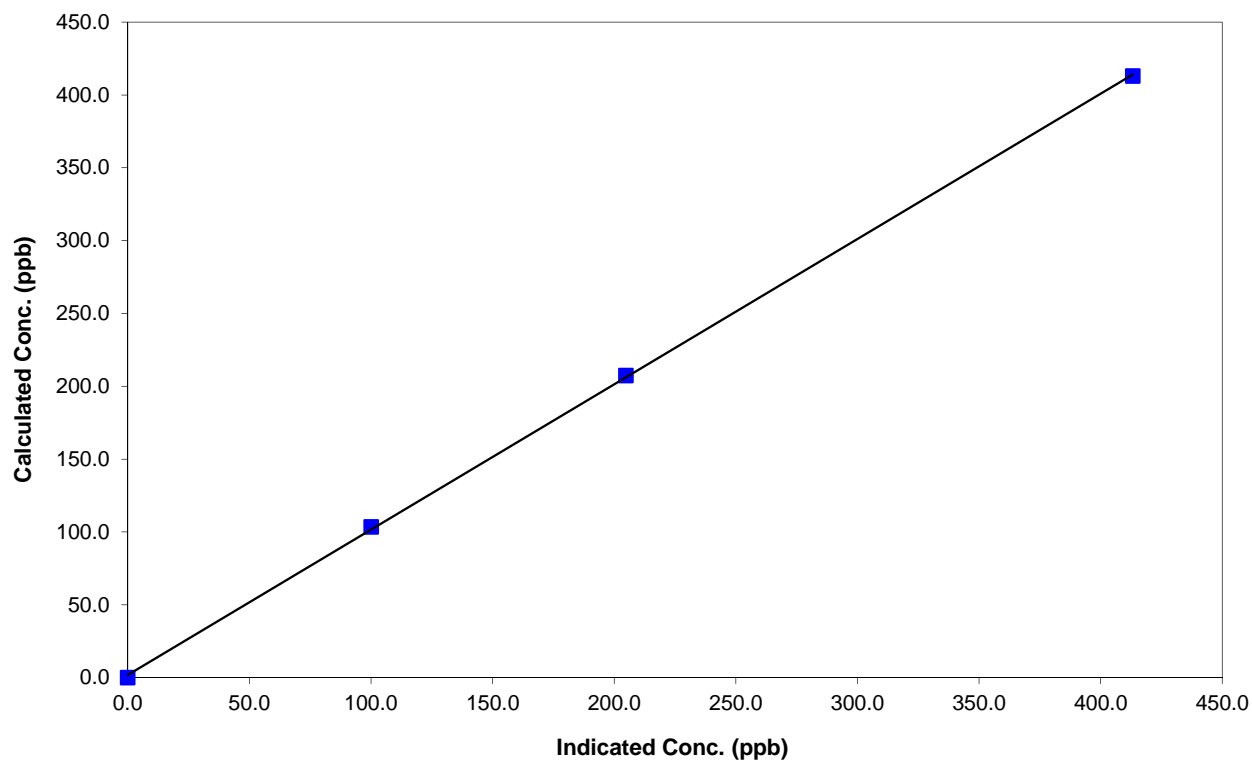
Station Information

Calibration Date	August 19, 2014	Previous Calibration	July 15, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	8:35	End Time (MST)	14:20
Analyzer make	TEI 42i	Analyzer serial #	0701120011

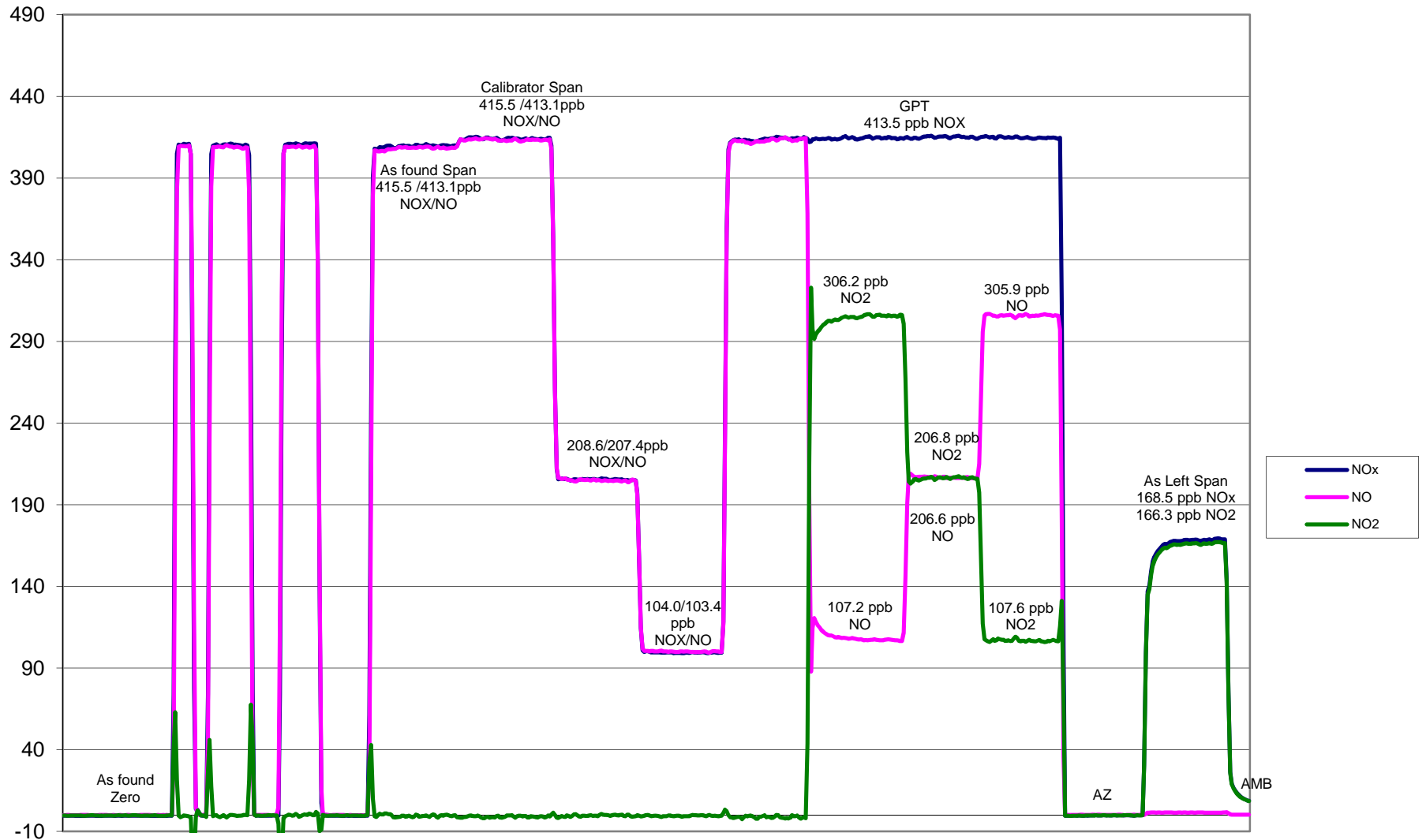
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999905
413.1	413.2	0.9997		
207.4	204.8	1.0126	Slope	0.997667
103.4	100.0	1.0332		

NO Calibration Curve



NO_x Calibration



August 19, 2014

Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	August 19 2014	Previous Calibration	July 16 2014
Station Number	10	Station Location	Clairmont
Reason:	Routine	Install	Removal remove Other:
Start Time (MST)	13:15	End Time (MST)	16:10
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	0.997910	Calculated slope	0.997831
Calculated intercept	0.346045	Calculated intercept	-0.086839
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	0.953		0.984	
Cell A intensity	95021	Hz	95031	Hz
Cell B intensity	92522	Hz	92525	Hz
Pressure	649.10	in Hg	661.00	in Hg
CellA Flow	0.685	ccm	0.695	ccm
Cell B Flow	0.683	cmm	0.690	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	0.1	N/A
5035	0.30	306.2	307.0	0.9973
5035	0.20	206.8	207.2	0.9981
5035	0.10	107.6	108.0	0.9962
5035	0.00	0.0	0.1	As found zero
5035	0.30	306.2	296.2	As found span
Average Correction Factor				0.9972

Calculated value of As Found Response: 295.8 ppm Percent Change of As Found: -3.4%

	before calibration		after calibration	
Auto zero	-0.3	ppb	0.0	ppb
Auto span	409.2	ppb	395.2	ppb

Notes: Span adjustment made
Second cal point interrupted by daily span sequence.

Calibration Performed By: Dmytro Dolotii.

Calibration Summary

Parameter O3
 Air Monitoring Network PAZA

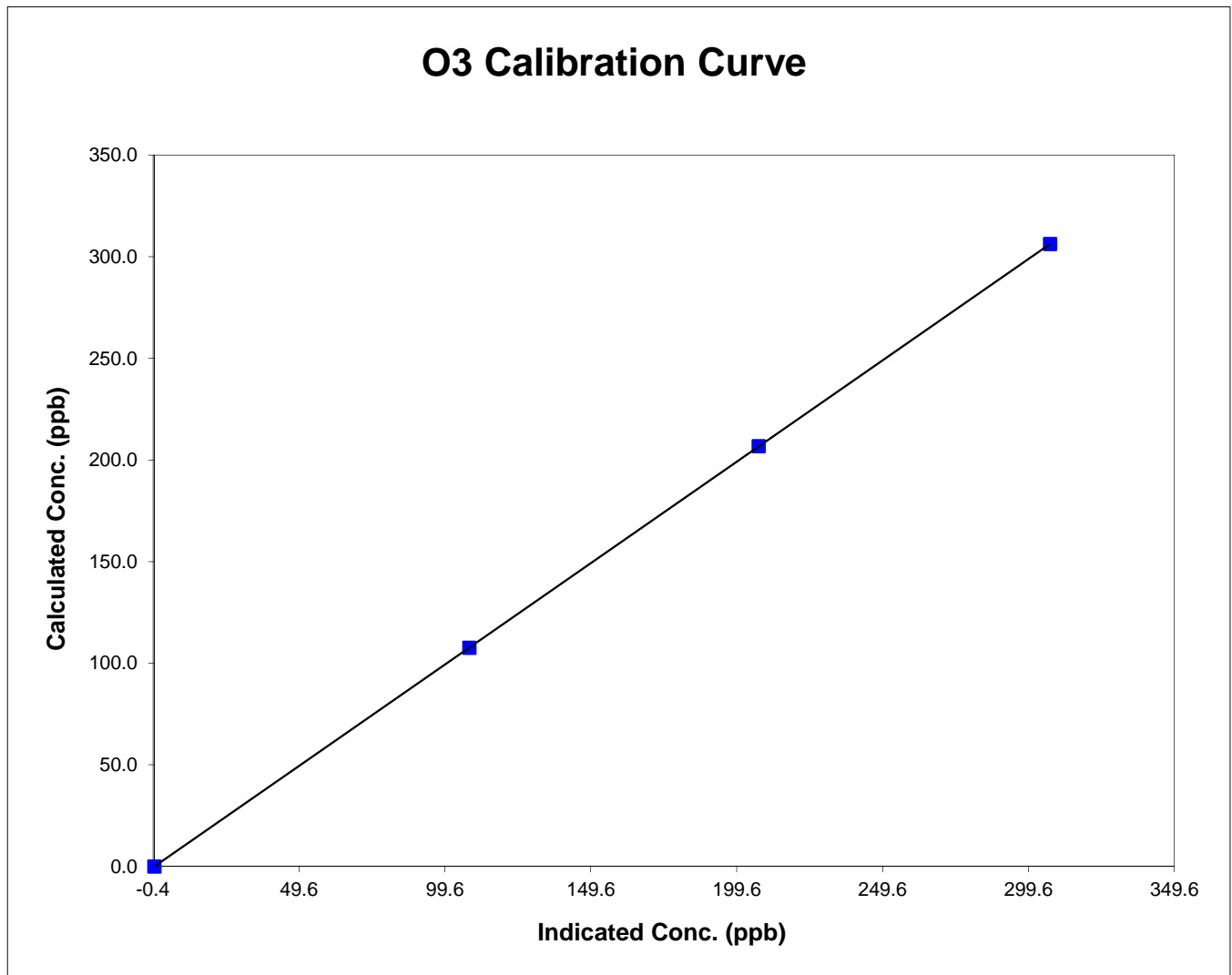


Station Information

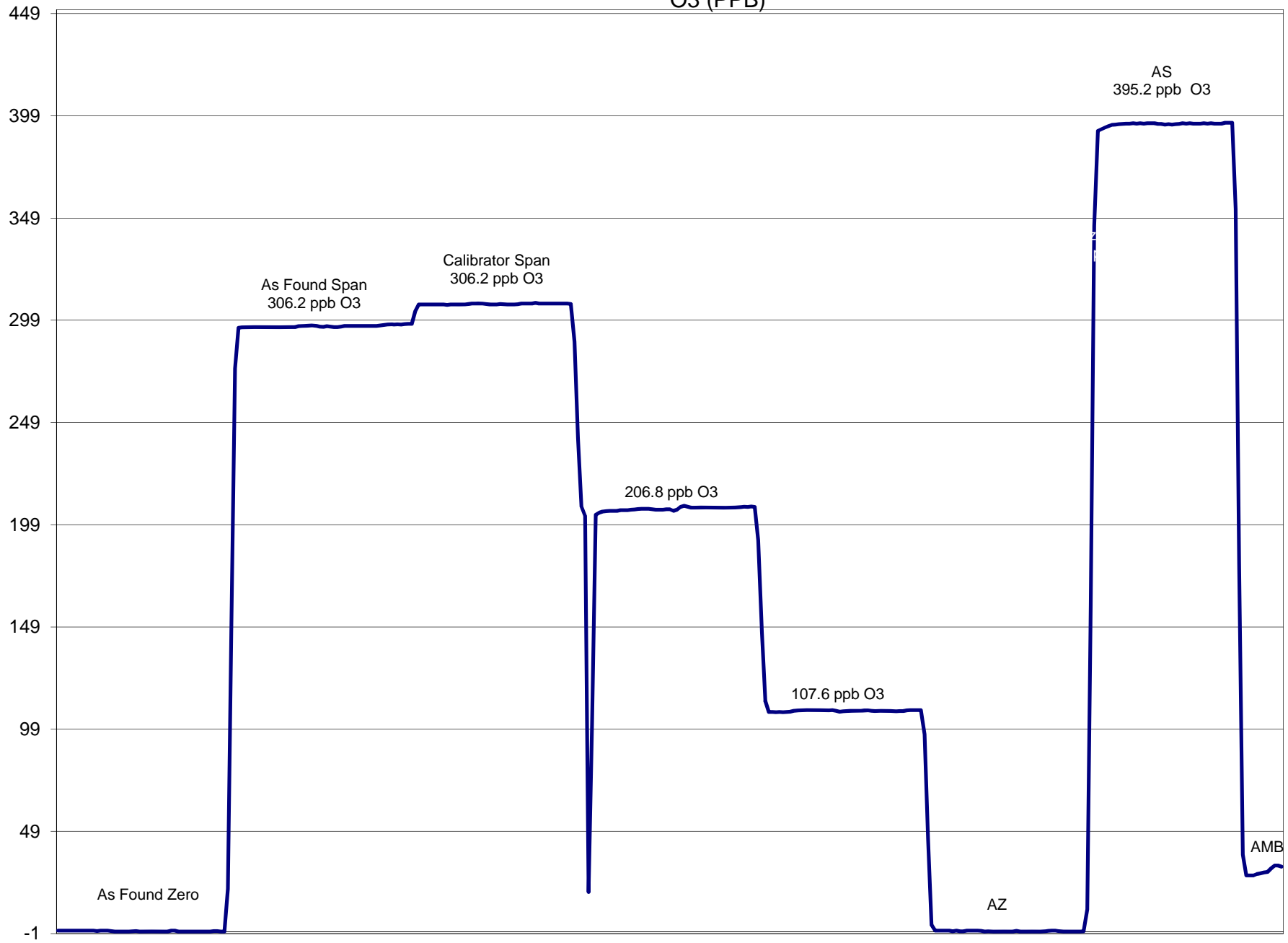
Calibration Date	August 19 2014	Previous Calibration	July 16 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	13:15	End Time (MST)	16:10
Analyzer make/model	TEI Model 49C	Analyzer serial #	49C-0609716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA	Correlation Coefficient	0.999999
306.2	307.0	0.9973		
206.8	207.2	0.9981		
107.6	108.0	0.9962		
			Slope	0.997831
			Intercept	-0.086839



O3 (PPB)



August 19 2014

Calibration Report

Parameter THC
 Air Monitoring Network PASZA



Station Information

Calibration Date	August 21, 2014	Previous Calibration	July 17, 2014
Station Number	10	Station Location	Clairmont
Reason:	<input type="checkbox"/> Routine	<input checked="" type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	11:55	End Time (MST)	15:35:00 PM
Barometric Pressure	0.921 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	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
	<u>Before</u>		<u>After</u>
Calculated slope	0.996799	Calculated slope	0.980572
Calculated intercept	0.132563	Calculated intercept	0.158493
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.50	psi	6.50	psi
THC zero counts	2345	capture	2345	capture
THC span 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	22.15	0.9853
2996	29.96	9.47	9.41	1.0066
2996	9.97	3.17	2.94	1.0791
2996	0.00	0.00	-0.07	As Found Zero
2996	69.93	21.82	22.39	As Found Span
Average Correction Factor				1.0237

Calculated value of As Found Response: 22.522 ppm Percent Change of As Found: -3.2%

	before calibration		after calibration	
Auto zero	0.10	ppm	0.17	ppm
Auto span	22.33	ppm	22.97	ppm

Notes: Zero adjustment made using zero valve on the back of the analyzer

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter THC
 Air Monitoring Network PASZA

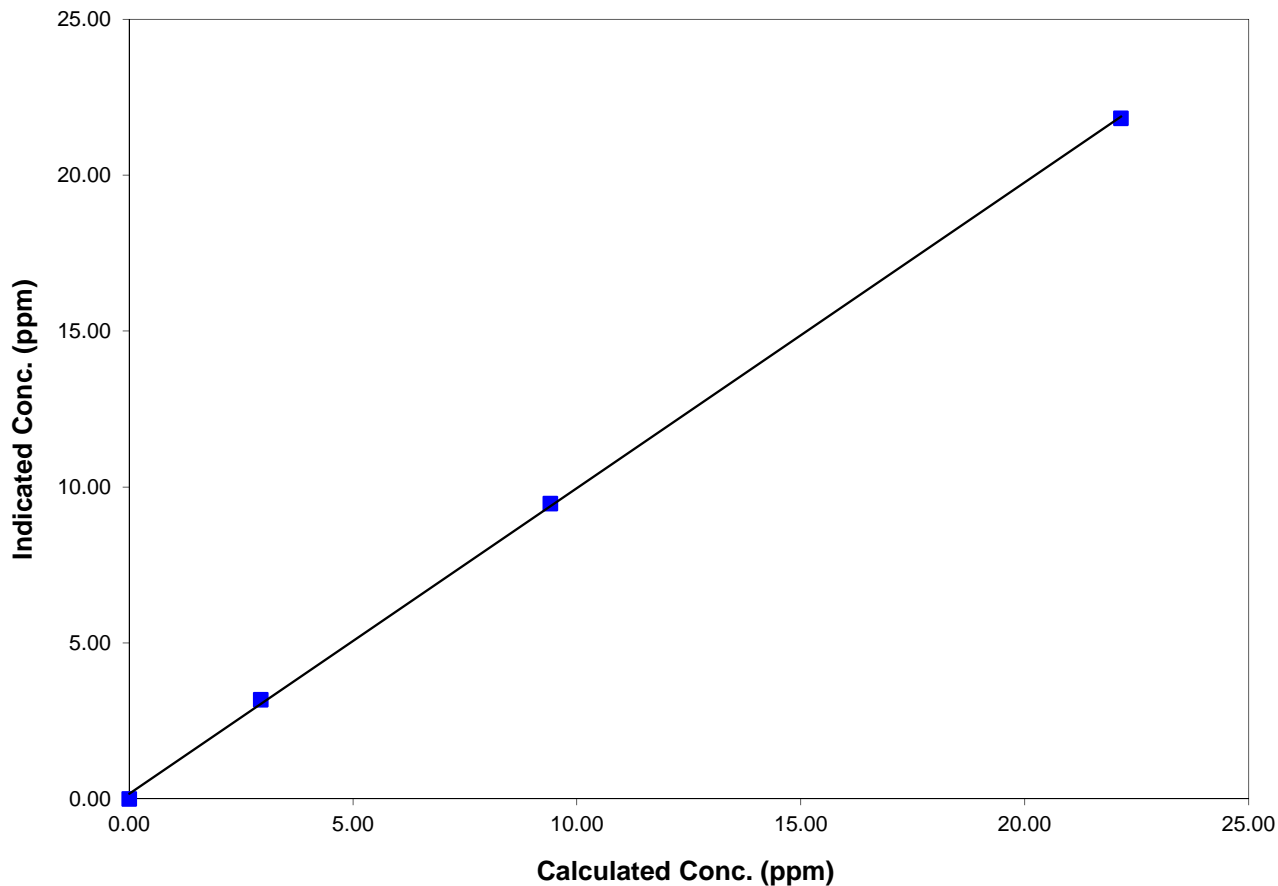
Station Information

Calibration Date	August 21, 2014	Previous Calibration	July 17, 2014
Station Number	10	Station Location	Clairmont
Start Time (MST)	11:55	End Time (MST)	15:35:00 PM
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

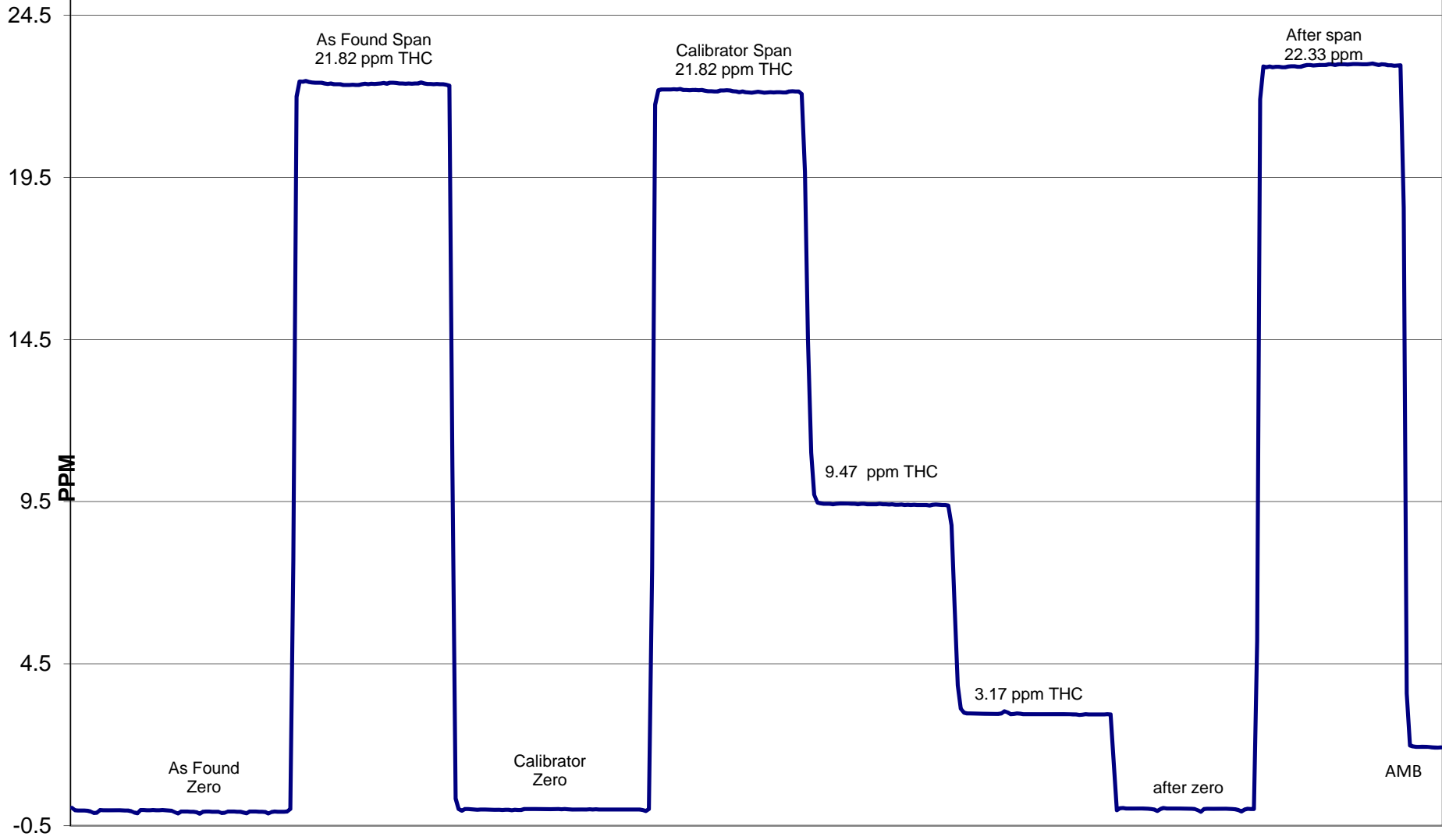
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.005	N/A	Correlation Coefficient	0.999805
21.82	22.15	0.9853		
9.47	9.41	1.0066	Slope	0.980572
3.17	2.94	1.0791		
			Intercept	0.158493

THC Calibration Curve



THC Calibration



August 21, 2014

Calibration Report



Parameter
 Air Monitoring Network

Station Information

Calibration Date	Agust 21 2014	Previous Calibration	July 15 2014
Station Name	PAZA Rover	Station Location	Clairmont
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	8:40	End Time (MST)	13:10
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
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.992380	Calculated slope	0.994481
Calculated intercept	0.738403	Calculated intercept	0.032964
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	26.6	ppb	26.3	ppb
Coefficient	0.972		0.992	
Lamp Voltage	791	V	792	V
Chamber Temp	44.0	C	43.9	C
Perm gas Temp	45	C	45	C
Pressure	667.1	mmHg	667.5	mmHg
Sample Flow	0.434	lpm	0.435	lpm
Lamp Intensity	43083	Hz	43897	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	0.3	N/A
4995	39.93	82.8	83.4	0.9926
4995	19.97	41.6	41.4	1.0038
8995	8.97	10.4	10.3	1.0134
4995	9.97	99.2	1.9	Sox Test
4995	0.00	0.0	-1.0	As found zero
4995	39.93	82.8	79.6	As found span
Average Correction Factor				1.0033

Calculated value of As Found Response: 80.71 ppm Percent Change of As Found: 2.5%

	before calibration		after calibration	
Auto zero	0.1	ppm	-0.1	ppm
Auto span	63.6	ppm	63.3	ppm

Notes: Zero & span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter **TRS**
 Air Monitoring Network **PAZA**



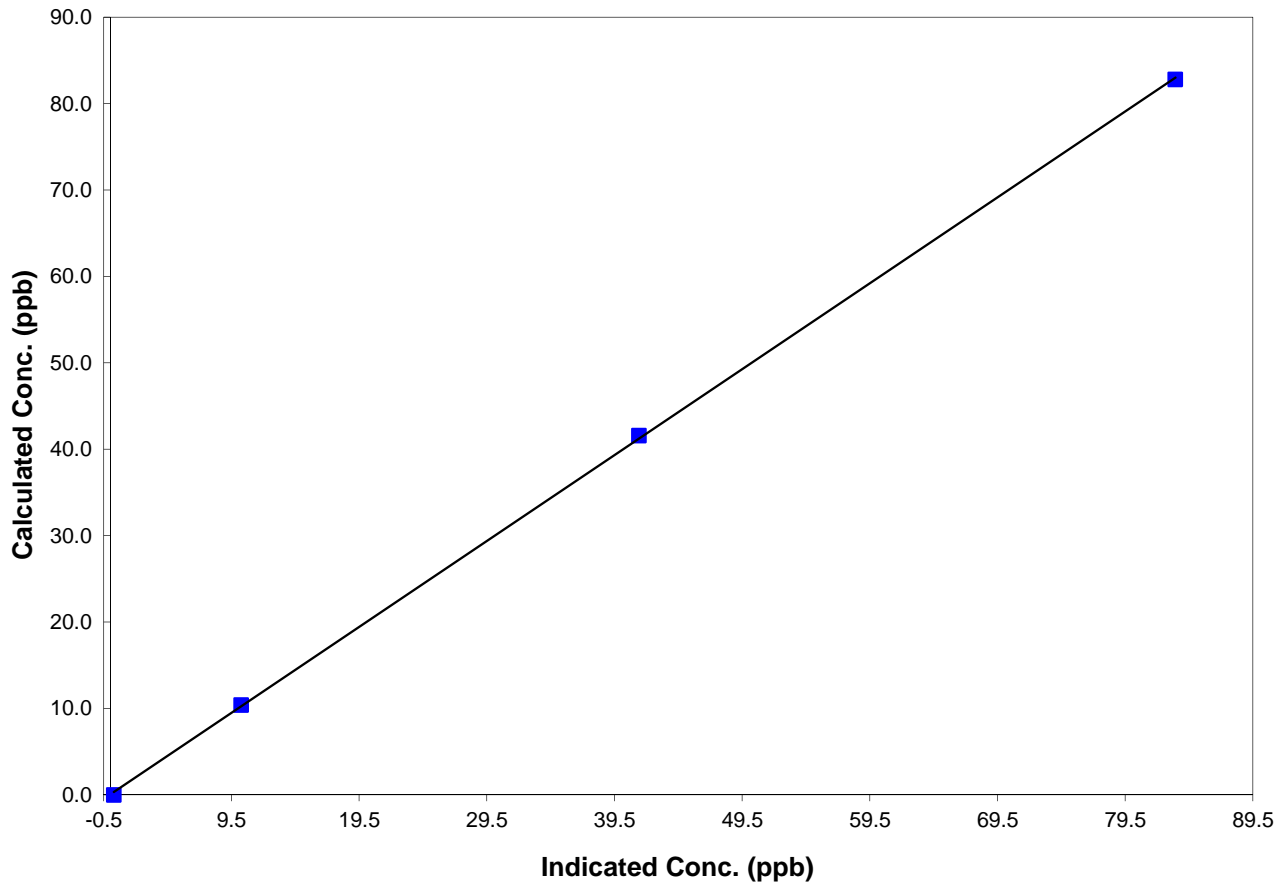
Station Information

Calibration Date	<u> </u> Agust 21 2014	Previous Calibration	<u> </u> July 15 2014
Station Number	<u> </u> PAZA Rover	Station Location	<u> </u> Clairmont
Start Time (MST)	<u> </u> 8:40	End Time (MST)	<u> </u> 13:10
Analyzer make/model	<u> </u> TEI 43C	Analyzer serial #	<u> </u> 609716238

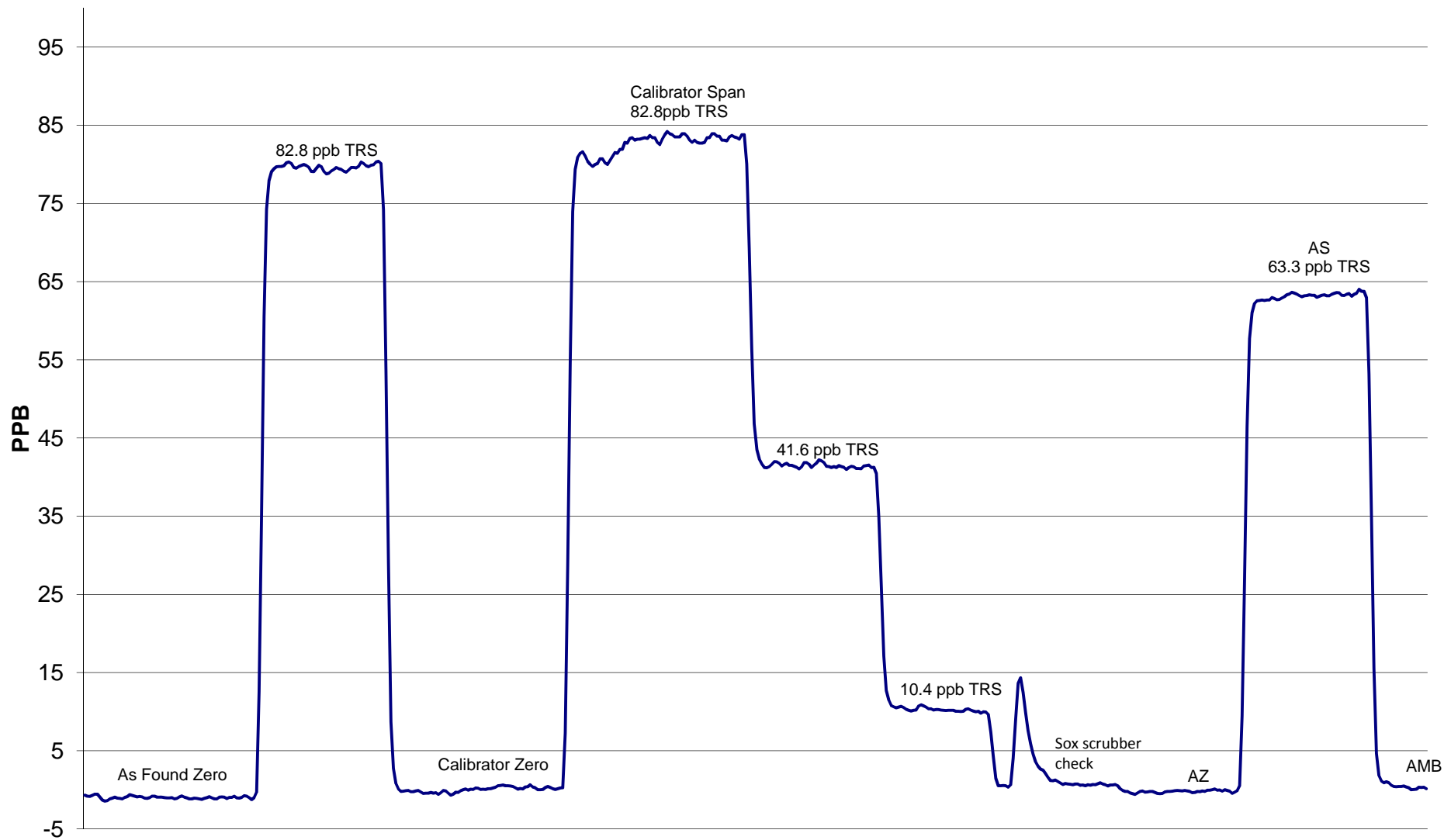
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999930
82.8	83.4	0.9926		
41.6	41.4	1.0038		
10.4	10.3	1.0134	Slope	0.994481
			Intercept	0.032964

TRS Calibration Curve



TRS Calibration



August 21 2014