



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program

Monthly Report

March 2015

April 30th, 2015

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

RE: Peace Airshed Zone Association (PAZA) – March 2015 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **March 2015**.

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
Exshaw Oil Corporation	Spirit River	03-10-077-07-W6	344521-00-00
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

Company	Facility	LSD	EPEA Approval Number
	Pouce Coupe	16-07-078-11-W6	00000614-01-00
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 **March** the following events were noted:

Henry Pirker Station:

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

Evergreen Park Station:

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

Smoky Heights Station:

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

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 two (2) 1-hour exceedences of the guideline of 80 µg/m³;
 - o March 21 1000h 86.2 µg/m³ Alberta Environment Reference # 296205
 - o March 22 0100h 81.9 µg/m³ Alberta Environment Reference # 296212
- ◆ All analyzers and sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of March.

Valleyview Station:

- ◆ The measured ambient air quality was within the AAAQO for the Valleyview station with the exception of the H₂S analyzer, which recorded (1) 1-hour exceedence of the guideline of 10 ppb;
 - o March 22 2300h 13.2 ppb Alberta Environment Reference # 296232
- ◆ All analyzers and sensors at the Valleyview station had an operational uptime greater than 90% for the month of March.

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 March.

Clairmont Station:

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

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of March: Spirit River, Shaftesbury, Flyingshot, Guy and Girouxville 3. 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 0.8 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.3 ppb to 4.3 ppb, with a mean of 1.0 ppb.
- Monthly average concentrations for O₃ passives ranged from 15.5 ppb to 44.2 ppb, with a mean of 36.4 ppb.
- Monthly average concentrations for H₂S ranged from 0.1 ppb to 0.3 ppb, with a mean of 0.2 ppb.



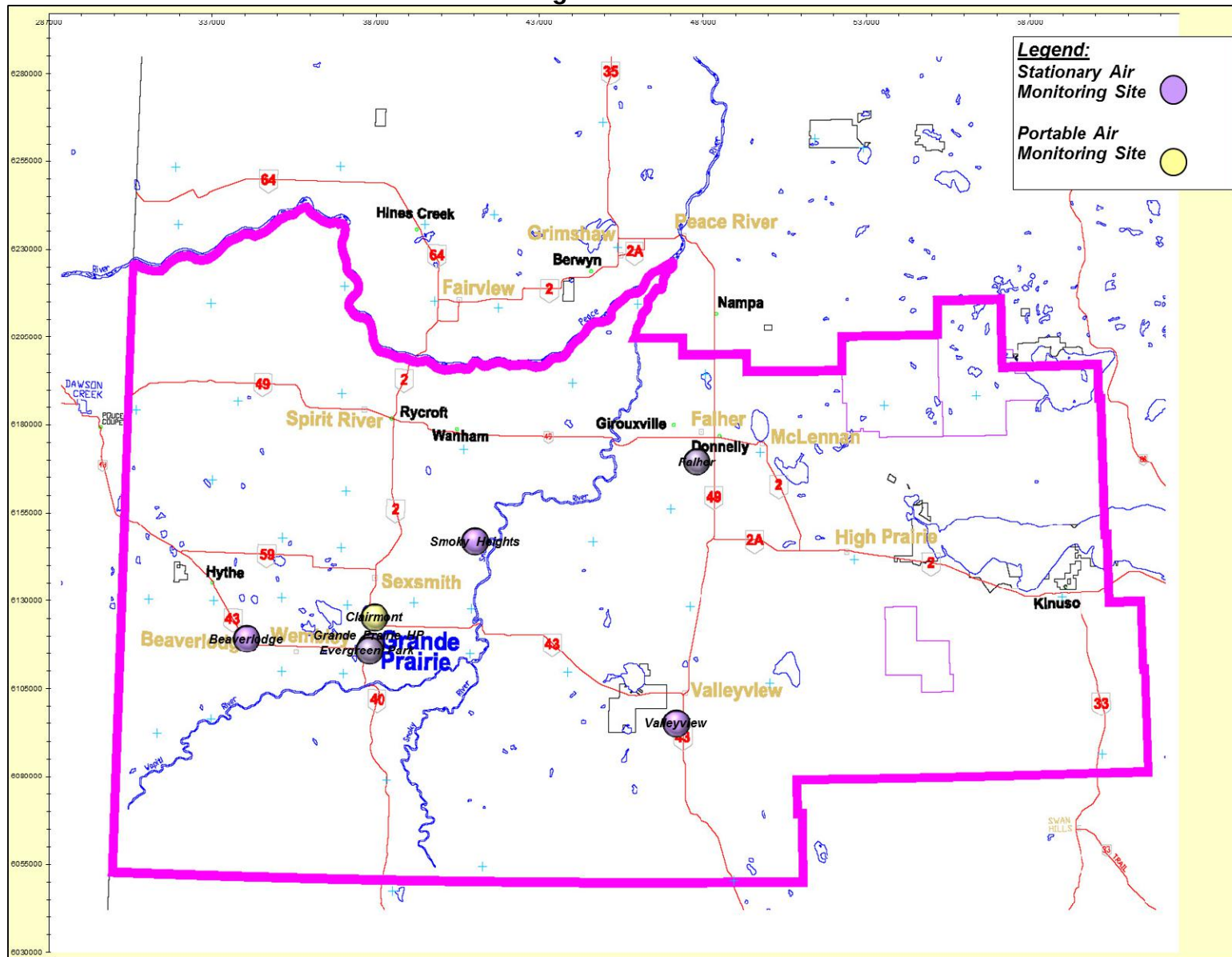
www.paza.ca

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

Mar-2014 Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	Conc	Day	Operational Time (%)
	1-hr	24-hr			1-hr	24-hr					
SO ₂ (ppb)	172	48	Henry Pirker	0.2	0	0	10.9	Mar-03 15:00	1.1	Mar-03	100%
SO ₂ (ppb)	172	48	Evergreen Park	0.2	0	0	2.8	Mar-01 16:00	0.6	Mar-03	100%
SO ₂ (ppb)	172	48	Smoky Heights	0.6	0	0	17.4	Mar-30 08:00	1.7	Mar-30	100%
SO ₂ (ppb)	172	48	Beaverlodge	0.3	0	0	3.2	Mar-03 20:00	1.0	Mar-03	100%
SO ₂ (ppb)	172	48	Valleyview	0.8	0	0	112.0	Mar-12 10:00	5.6	Mar-12	100%
SO ₂ (ppb)	172	48	Falher	0.1	0	0	0.9	Mar-18 12:00	0.4	Mar-18	100%
SO ₂ (ppb)	172	48	Clairmont	0.4	0	0	4.2	Mar-03 16:00	1.3	Mar-03	100%
NO (ppb)			Henry Pirker	2.9	0	0	62.3	Mar-16 08:00	10.4	Mar-14	100%
NO ₂ (ppb)	159	106	Henry Pirker	11.2	0	0	46.2	Mar-14 08:00	22.1	Mar-13	100%
NO _x (ppb)			Henry Pirker	14.1	0	0	108.2	Mar-14 10:00	31.0	Mar-14	100%
NO (ppb)			Beaverlodge	0.4	0	0	12.0	Mar-03 11:00	2.3	Mar-23	100%
NO ₂ (ppb)	159	106	Beaverlodge	2.6	0	0	19.6	Mar-23 06:00	6.3	Mar-23	100%
NO _x (ppb)			Beaverlodge	3.1	0	0	27.4	Mar-23 09:00	8.7	Mar-23	100%
NO (ppb)			Clairmont	2.0	0	0	33.5	Mar-25 09:00	5.7	Mar-03	100%
NO ₂ (ppb)	159	106	Clairmont	6.2	0	0	34.0	Mar-05 09:00	13.7	Mar-03	100%
NO _x (ppb)			Clairmont	8.2	0	0	63.9	Mar-14 10:00	19.6	Mar-03	100%
O ₃ (ppb)	82		Henry Pirker	28.9	0	-	48.7	Mar-17 17:00	40.6	Mar-08	100%
O ₃ (ppb) - 8-hr			Henry Pirker		0				47.1	Mar-30	
O ₃ (ppb)	82		Beaverlodge	38.5	0	-	52.3	Mar-17 18:00	45.8	Mar-30	100%
O ₃ (ppb) - 8-hr			Beaverlodge		0				49.7	Mar-30	
O ₃ (ppb)	82		Clairmont	33.0	0	-	50.4	Mar-17 17:00	40.2	Mar-10	100%
O ₃ (ppb) - 8-hr			Clairmont		0				47.0	Mar-30	
CO (ppm)	13		Henry Pirker	0.24	0	-	0.9	Mar-16 08:00	0.3	Mar-13	100%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.5	Mar-14	

PAZA Monthly Continuous Data Summary – continued

Mar-2014Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
THC (ppm)			Henry Pirker	2.0	-	-	4.1	Mar-30 08:00	2.3	Mar-29	100%
CH ₄ (ppm)			Henry Pirker	2.0	-	-	4.1	Mar-30 08:00	2.3	Mar-29	100%
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	Mar-22 11:00	0.0	Mar-23	100%
THC (ppm)			Clairmont	2.25	-	-	3.7	Mar-04 09:00	2.5	Mar-04	92%
TRS (ppb)			Henry Pirker	0.2	-	-	0.9	Mar-03 23:00	0.4	Mar-03	100%
TRS (ppb)			Evergreen Park	0.3	-	-	2.9	Mar-30 23:00	0.7	Mar-31	100%
TRS (ppb)			Smoky Heights	0.1	-	-	0.2	Mar-25 12:00	0.1	Mar-19	100%
TRS (ppb)			Clairmont	0.4	-	-	1.5	Mar-25 02:00	0.5	Mar-27	100%
H ₂ S (ppb)	10	3	Valleyview	0.2	1	0	13.1	Mar-22 23:00	0.9	Mar-22	100%
H ₂ S (ppb)	10	3	Falher	0.1	0	0	1.1	Mar-24 07:00	0.2	Mar-24	100%
PM _{2.5} (µg/m3)	80	30	Henry Pirker	4.6	0	0	28.5	Mar-04 01:00	11.6	Mar-01	100%
PM _{2.5} (µg/m3)	80	30	Evergreen Park	2.6	0	0	63.8	Mar-14 06:00	10.0	Mar-14	100%
PM _{2.5} (µg/m3)	80	30	Smoky Heights	1.8	0	0	30.9	Mar-23 00:00	5.5	Mar-22	100%
PM _{2.5} (µg/m3)	80	30	Beaverlodge	3.8	2	0	85.8	Mar-21 10:00	8.5	Mar-24	100%
PM _{2.5} (µg/m3)	80	30	Clairmont	2.3	0	0	18.9	Mar-01 19:00	5.7	Mar-01	98%
RH (%)			Henry Pirker	62.4	-	-	88.8	Mar-31 09:00	84.9	Mar-31	100%
RH (%)			Evergreen Park	64.2	-	-	94.8	Mar-28 05:00	91.4	Mar-31	100%
RH (%)			Beaverlodge	64.5	-	-	97.9	Mar-27 23:00	92.9	Mar-31	100%
RH (%)			Valleyview	60.3	-	-	98.3	Mar-28 07:00	86.7	Mar-21	100%
SR (W/m ²)			Henry Pirker	113.1	-	-	617.9	Mar-28 13:00	163.0	Mar-28	100%
Temp (°C)			Henry Pirker	1.2	-	-	17.8	Mar-13 16:00	7.6	Mar-27	100%
Temp (°C)			Evergreen Park	1.5	-	-	19.1	Mar-13 16:00	8.8	Mar-13	100%
Temp (°C)			Smoky Heights	-0.2	-	-	15.1	Mar-13 18:00	6.3	Mar-27	99%
Temp (°C)			Beaverlodge	1.2	-	-	15.5	Mar-13 18:00	8.3	Mar-13	100%
Temp (°C)			Valleyview	1.9	-	-	17.3	Mar-13 18:00	9.4	Mar-14	100%
Temp (°C)			Falher	-0.2	-	-	13.2	Mar-27 15:00	7.2	Mar-27	100%
Temp (°C)			Clairmont	-0.2	-	-	12.5	Mar-13 17:00	5.3	Mar-26	100%

PAZA Monthly Continuous Data Summary – continued

Mar-2014Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
WSPD s (km/hr)			Henry Pirker	8.5	-	-	39.0	Mar-14 20:00	17.6	Mar-09	100%
WSPD s (km/hr)			Evergreen Park	12.3	-	-	68.0	Mar-14 20:00	29.3	Mar-08	100%
WSPD s (km/hr)			Smoky Heights	11.9	-	-	40.0	Mar-14 21:00	21.8	Mar-06	100%
WSPD s (km/hr)			Beaverlodge	12.0	-	-	49.0	Mar-08 18:00	30.3	Mar-08	100%
WSPD s (km/hr)			Valleyview	5.4	-	-	26.0	Mar-14 21:00	14.9	Mar-02	100%
WSPD s (km/hr)			Falher	13.5	-	-	53.0	Mar-14 22:00	21.2	Mar-21	100%
WSPD s (km/hr)			Clairmont	8.9	-	-	37.0	Mar-14 21:00	17.9	Mar-20	100%
WSPD v (km/hr)			Henry Pirker	4.2	-	-	39.0	Mar-14 20:00	16.7	Mar-09	100%
WSPD v (km/hr)			Evergreen Park	6.5	-	-	67.0	Mar-14 20:00	28.3	Mar-08	100%
WSPD v (km/hr)			Smoky Heights	5.2	-	-	40.0	Mar-14 21:00	20.8	Mar-06	100%
WSPD v (km/hr)			Beaverlodge	5.0	-	-	49.0	Mar-08 18:00	29.9	Mar-08	100%
WSPD v (km/hr)			Valleyview	2.3	-	-	26.0	Mar-14 21:00	13.3	Mar-02	100%
WSPD v (km/hr)			Falher	2.0	-	-	53.0	Mar-14 22:00	20.5	Mar-21	100%
WSPD v (km/hr)			Clairmont	1.8	-	-	36.0	Mar-14 21:00	17.8	Mar-20	100%
WDIR			Henry Pirker	W	-	-	-	-	-	-	100%
WDIR			Evergreen Park	W	-	-	-	-	-	-	100%
WDIR			Smoky Heights	W	-	-	-	-	-	-	100%
WDIR			Beaverlodge	W	-	-	-	-	-	-	100%
WDIR			Valleyview	WNW	-	-	-	-	-	-	100%
WDIR			Falher	SSW	-	-	-	-	-	-	100%
WDIR			Clairmont	NW	-	-	-	-	-	-	100%

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on March 2nd (SO₂, THC, TRS) and 3rd (NO_x, O₃, CO).

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
NOx/NO/NO ₂	TEI	42C/42i	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
CO	TEI	48C	No operational issues observed.
THC/CH ₄ /NMHC	TEI	55I	No operational issues observed.
TRS	TEI	45C/43C	No operational issues observed.
PM _{2.5}	Sharp	5030	No operational issues observed.
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	Met pole found to be bent on March 17 th , repaired.

PAZA – Evergreen Park Station

General Station Issues

Routine monthly calibration performed on March 10th (SO₂, TRS).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Manifold cleaning during calibration. Irregular behaviour invalidated data on March 28 th .
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 March 20th (SO₂, TRS).

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Manifold cleaned during calibration period. One hour of data on March 20 th invalidated.
ET	Met One	083D	No operational issues observed.
WS / WD	Met One	010C/020C	Replacement wind system installed March 25 th .

PAZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations performed on March 4th (O₃, NO_x) and 5th (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/Sharp	1400AB/5030	Analyzer changed to Sharp on March 30 th . Two (2) 1-hour exceedances recorded AE Reference #296205, 296212
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 March 12th (SO₂ & H₂S).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	TEI	43A	One (1) 1-hour exceedance recorded AE Reference #296232
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 March 11th (SO₂ & H₂S).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	Thermo	450i	No operational issues observed.
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 March 6th (SO₂, NO_x, O₃) and 9th (THC, TRS).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
NO _x	TEI	42i	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	Analyzer running on bottled zero air until new zero air supply can be installed. Bottled air depleted before replacement on March 6 th , 12 th , 18 th and 24 th . Zero Air supply installed March 24 th .
PM _{2.5}	R&P	1400AB	Irregular readings March 20 th . Analyzer put in to maintenance mode during Zero Air bottle swap
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

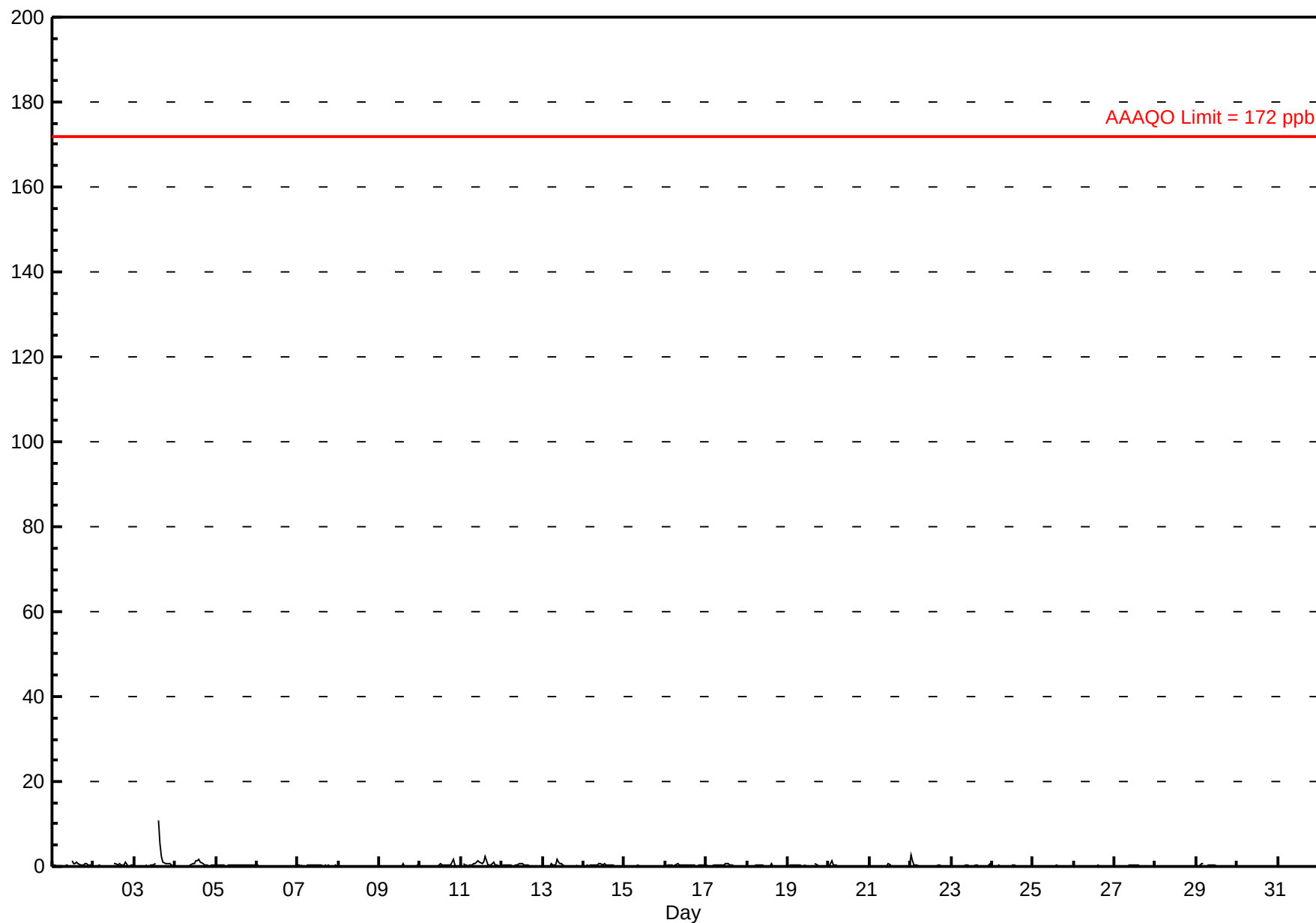
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 10.9 ppb on Mar 3 15:00 Maximum Daily Average: 1.1 ppb on Mar 3																				Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 34 Percent Operational Time: 99.9						
Minimum Value: 0 ppb on Mar 1 05:00 Maximum Diurnal Average: 0.7 ppb at hour 15 Monthly Average: 0.21 ppb										Minimum Daily Average: 0.0 ppb on Mar 28 Minimum Diurnal Average: 0.1 ppb at hour 22 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.5 P ₉₉ = 1.5																
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-Mar	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0	0	0	1	1	0	0	0	0.4	1.3
2-Mar	0	0	0	0	0	0	0	0	0	C	C	C	1	1	0	1	0	0	0	1	0	0	0	0	0.3	1.0
3-Mar	0	0	0	0	0	0	0	0	A	0	0	0	1	M	11	5	3	1	1	1	1	1	0	0	1.1	10.9
4-Mar	0	0	0	0	0	0	0	A	0	0	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0.4	1.6
5-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
6-Mar	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
7-Mar	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
8-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
9-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.5
10-Mar	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0.2	1.8
11-Mar	A	1	0	0	0	0	0	1	1	1	2	1	1	1	2	1	1	0	1	1	1	0	0	A	0.7	2.2
12-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0.2	0.7
13-Mar	0	0	0	0	0	1	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.6
14-Mar	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	A	0	0	0	0.3	0.8
15-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.3
16-Mar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.6
17-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0.2	0.6
18-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0.1	0.6
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0.2	0.5
20-Mar	0	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	1.4
21-Mar	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.6
22-Mar	3	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	2.8
23-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0.1	0.6
24-Mar	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
25-Mar	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
26-Mar	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	0.2
27-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
28-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
29-Mar	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
30-Mar	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-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
0.2 0.2 0.2 0.2 0.1 0.1 0.1 0.2 0.2 0.3 0.3 0.3 0.3 0.3 0.7 0.4 0.2 0.2 0.1 0.2 0.1 0.1 0.1 0.1																								Diurnal Average		
2.8 1.2 1.4 0.8 0.6 0.5 0.5 0.8 1.6 1.1 1.5 1.3 1.2 1.3 10.9 5.5 2.5 0.9 0.6 1.8 0.6 0.5 0.4 0.6																								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

Henry Pirker - March 2015



Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

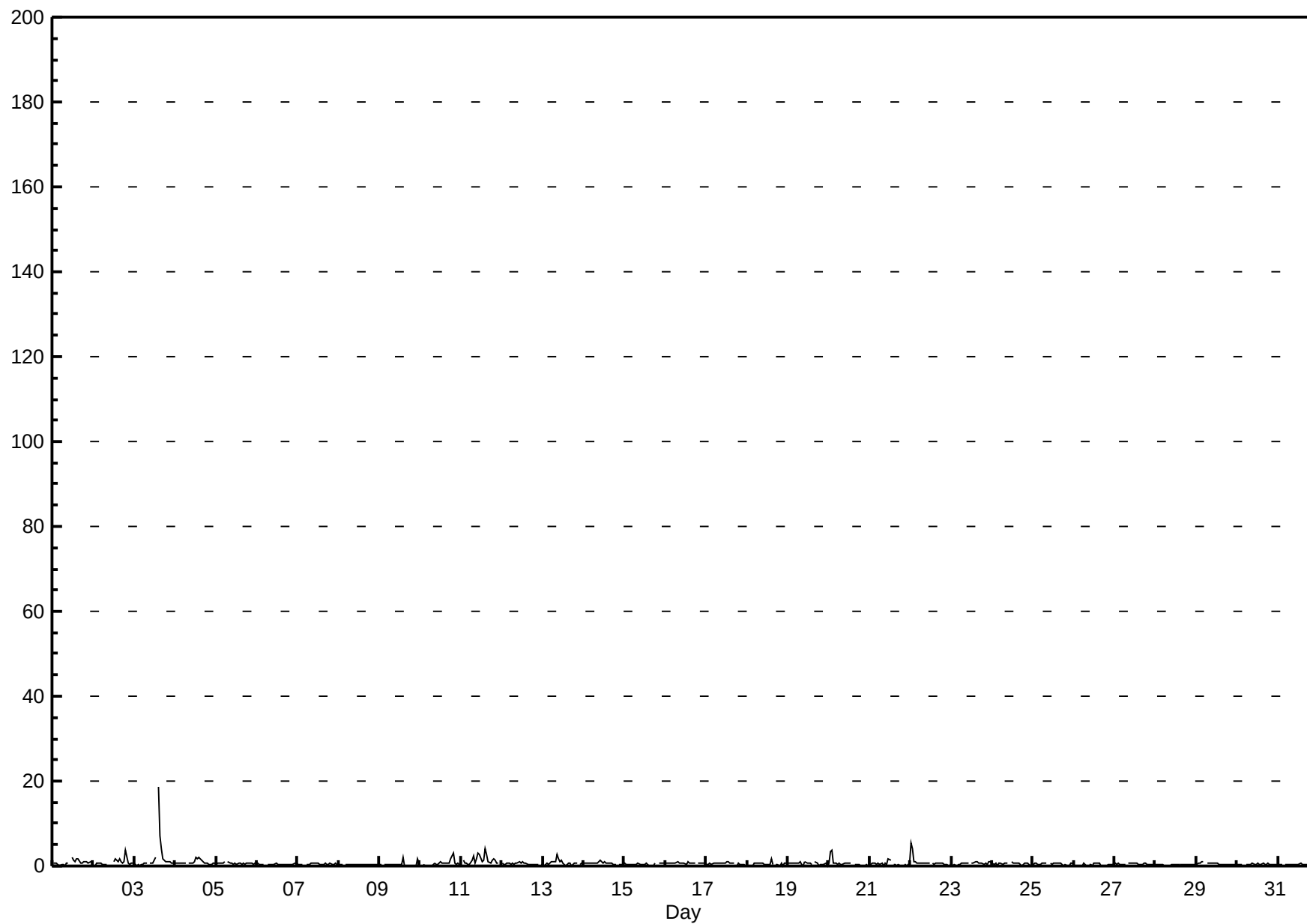
Henry Pirker - March 2015

Maximum Value: 18.6 ppb on Mar 3 15:00																				Maximum Daily Average: 2.0 ppb on Mar 3					Hours in Service: 744														
Minimum Value: 0 ppb on Mar 24 18:00																				Minimum Daily Average: 0.2 ppb on Mar 28					Hours of Data: 709														
Maximum Diurnal Average: 1.4 ppb at hour 15																				Minimum Diurnal Average: 0.4 ppb at hour 22					Hours of Missing Data: 35														
Monthly Average: 0.59 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.5 Q ₃ = 0.6 P ₉₀ = 1.1 P ₉₉ = 3.4					Hours of Calibration: 34														
																				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-Mar	1	1	1	0	0	0	0	0	1	1	A	2	1	1	2	2	1	1	1	1	1	1	1	1	0.8	2.1													
2-Mar	0	0	1	1	1	0	0	0	0	C	C	C	1	2	1	2	1	1	1	4	1	0	1	1	0.8	3.6													
3-Mar	1	0	0	0	0	0	1	1	A	1	1	1	2	M	19	7	4	2	1	1	1	1	1	1	2.0	18.6													
4-Mar	1	1	1	1	1	1	1	A	1	1	1	1	2	2	2	2	1	1	1	1	0	0	1	1	0.9	2.1													
5-Mar	0	1	1	1	1	1	A	1	1	1	1	1	0	1	1	0	1	0	1	1	1	1	0	1	0.6	0.9													
6-Mar	1	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.7													
7-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	1	0	0	1	0	0	1	0	0.5	0.8													
8-Mar	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5													
9-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	1	0.4	2.1													
10-Mar	1	A	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1	2	3	1	0	1	0	0.7	3.2													
11-Mar	A	1	1	1	0	0	1	2	1	2	3	3	1	1	4	3	1	1	1	2	1	1	1	A	1.4	4.2													
12-Mar	1	0	0	1	1	0	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0.5	1.2													
13-Mar	0	0	1	0	1	1	1	1	3	2	1	1	1	0	0	1	1	0	1	1	1	A	0	1	0.7	2.6													
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0.6	1.2													
15-Mar	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	A	1	1	1	1	0.3	0.7													
16-Mar	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	0.7	1.2													
17-Mar	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	0	0	0	0	0.5	1.1													
18-Mar	0	0	0	0	1	1	1	1	1	1	0	0	0	0	2	0	A	0	0	0	1	0	0	1	0.4	1.7													
19-Mar	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	A	1	1	0	0	0	0	1	0	0.5	1.1													
20-Mar	1	4	4	1	1	0	1	0	0	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0.7	3.6													
21-Mar	0	1	1	1	0	1	0	1	0	1	0	2	1	A	0	0	0	0	0	0	0	0	0	1	0.5	1.6													
22-Mar	6	4	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	0	0	0	0	0.9	5.6													
23-Mar	1	0	0	0	0	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	0.5	1.0													
24-Mar	1	0	1	0	1	1	0	1	1	1	A	1	1	1	1	1	1	0	0	1	1	1	0	0	0.4	1.0													
25-Mar	0	1	1	0	0	1	1	1	1	A	1	0	1	1	1	1	1	0	0	0	0	0	1	1	0.4	0.5													
26-Mar	0	0	0	0	0	0	1	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0.3	0.6													
27-Mar	1	0	1	0	0	0	0	A	1	1	1	1	1	1	0	0	0	1	1	0	0	0	1	0	0.4	0.7													
28-Mar	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	0.5													
29-Mar	0	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	1.2													
30-Mar	0	0	0	0	A	0	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0.3	0.6													
31-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7													
																									Diurnal Average														
																									Diurnal Maximum														
C - Calibration																									M - Maintenance					A - Automated Daily Zero Span									

Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

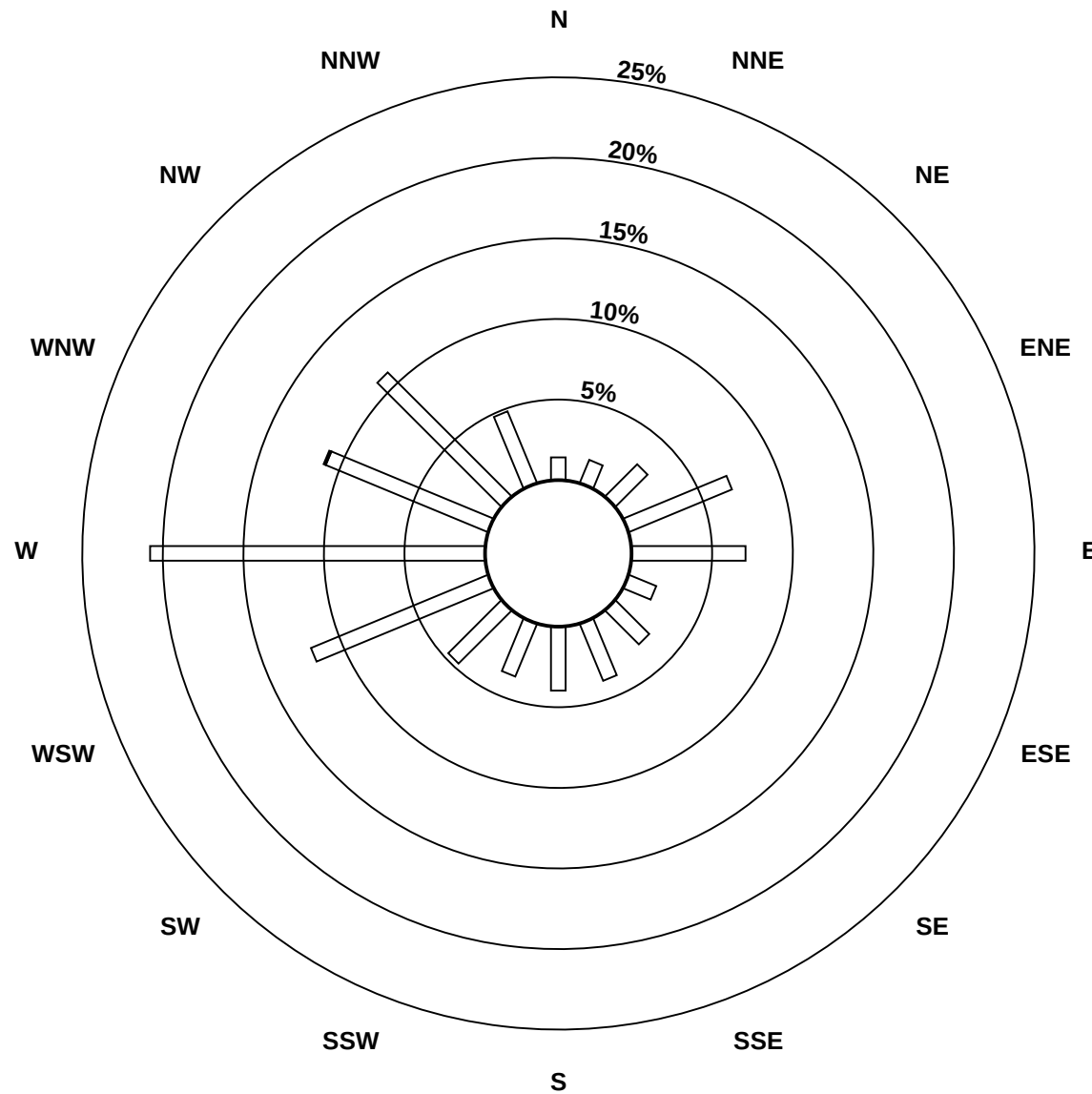
Henry Pirker - March 2015



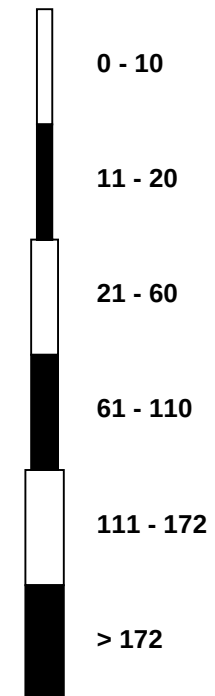
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - March 2015

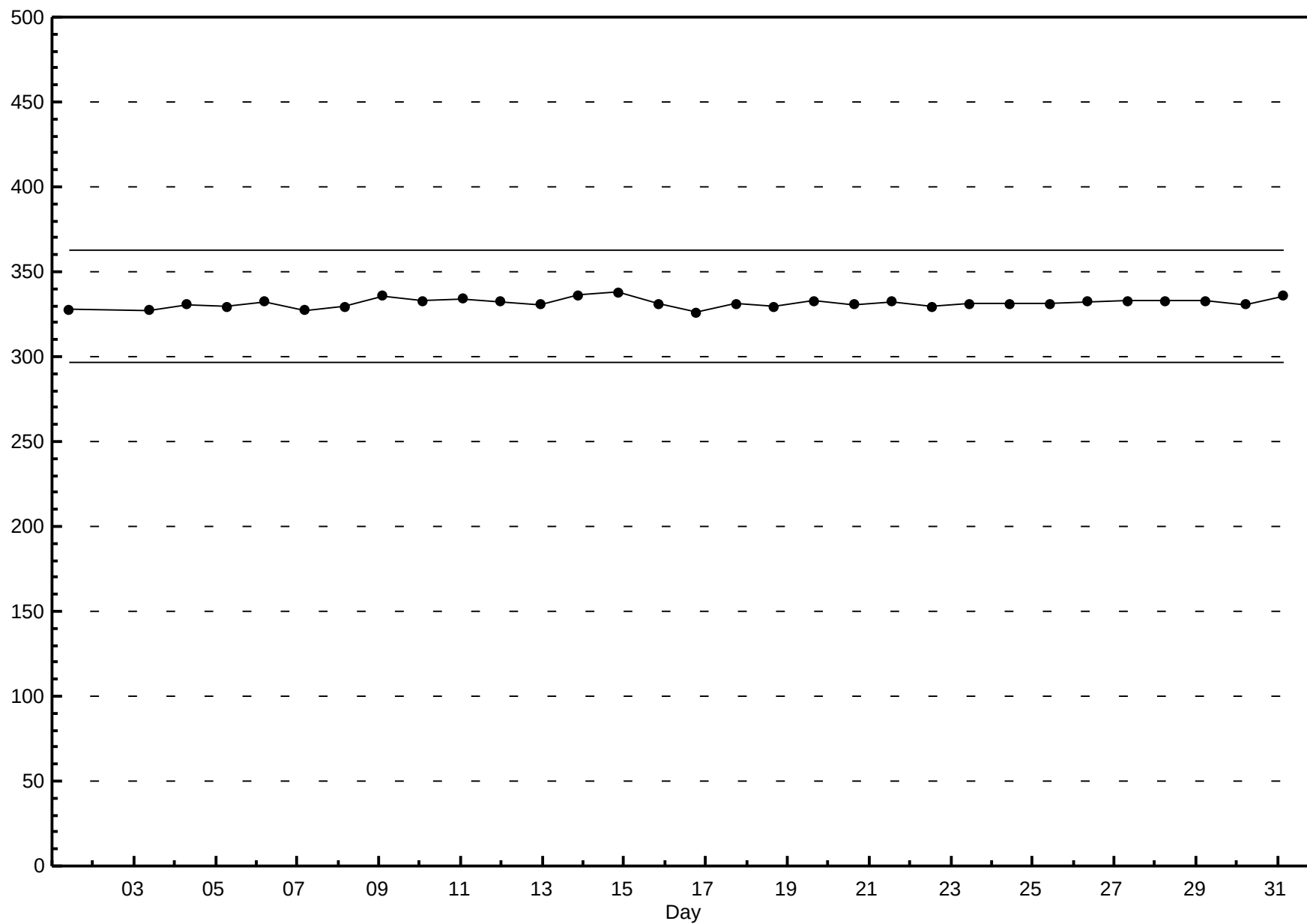


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Henry Pirker - March 2015



Hourly Averages

Total Reduced Sulphur (TRS) - ppb

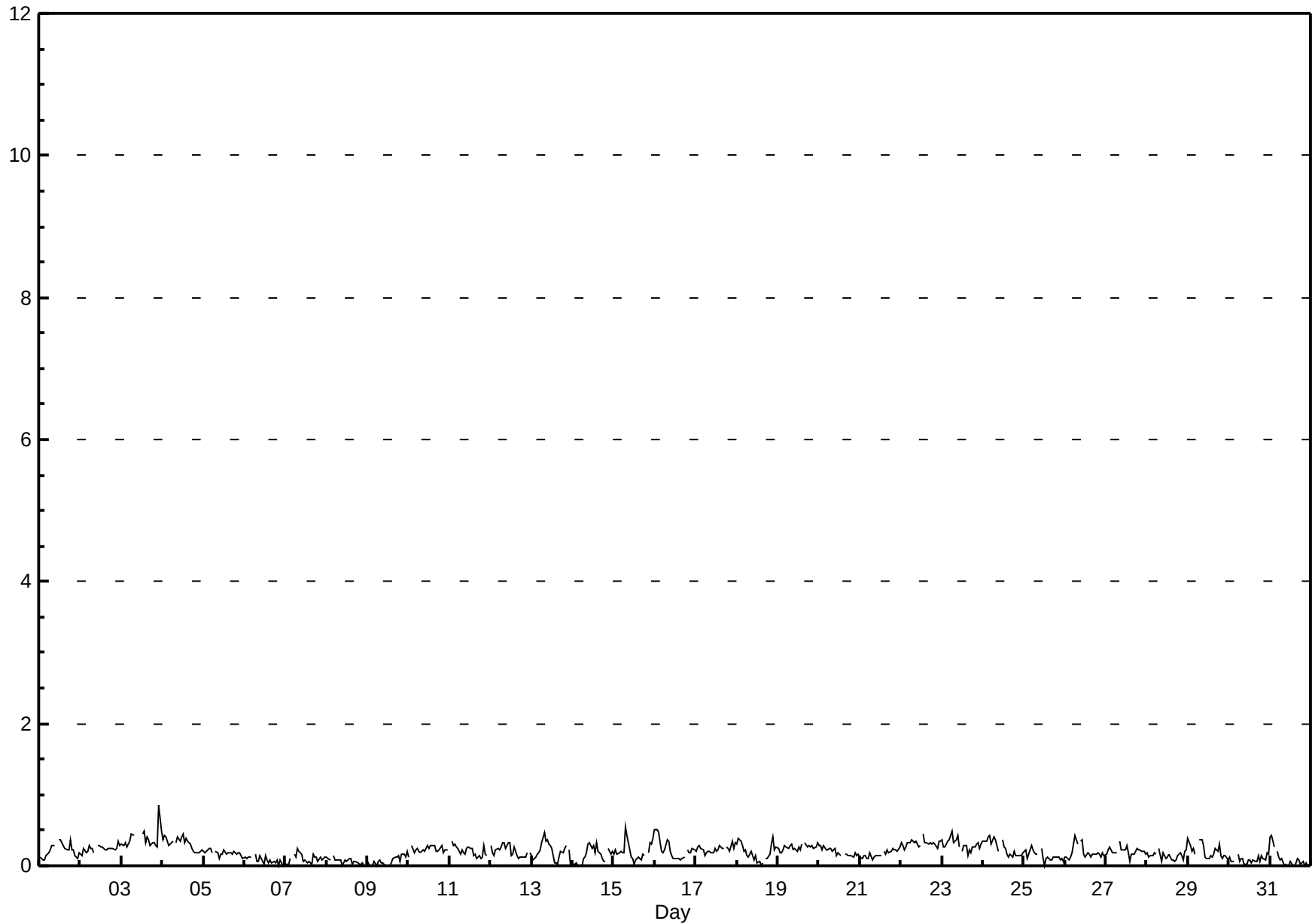
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744						
Maximum Value: 0.9 ppb on Mar 3 23:00																				Maximum Daily Average: 0.4 ppb on Mar 3		Hours of Data: 709				
Minimum Value: 0 ppb on Mar 6 21:00																				Minimum Daily Average: 0.1 ppb on Mar 8		Hours of Missing Data: 35				
Maximum Diurnal Average: 0.2 ppb at hour 8																				Minimum Diurnal Average: 0.2 ppb at hour 16		Hours of Calibration: 35				
Monthly Average: 0.19 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.3 P ₉₉ = 0.5		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-Mar	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
2-Mar	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
3-Mar	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.9
4-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-Mar	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
6-Mar	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
7-Mar	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
8-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
9-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
10-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
11-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.3
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.3
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.5
14-Mar	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	0.3
15-Mar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.6
16-Mar	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.5
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.4
18-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.4
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.3
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
21-Mar	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	0.3
22-Mar	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
23-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
24-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
25-Mar	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
26-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
27-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
28-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
30-Mar	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-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
0.2 0.2																									Diurnal Average	
0.5 0.5 0.5 0.4 0.4 0.4 0.5 0.6 0.4 0.4 0.4 0.4 0.5 0.5 0.4 0.4 0.4 0.3 0.4 0.3 0.3 0.4 0.9 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 Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2015



Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

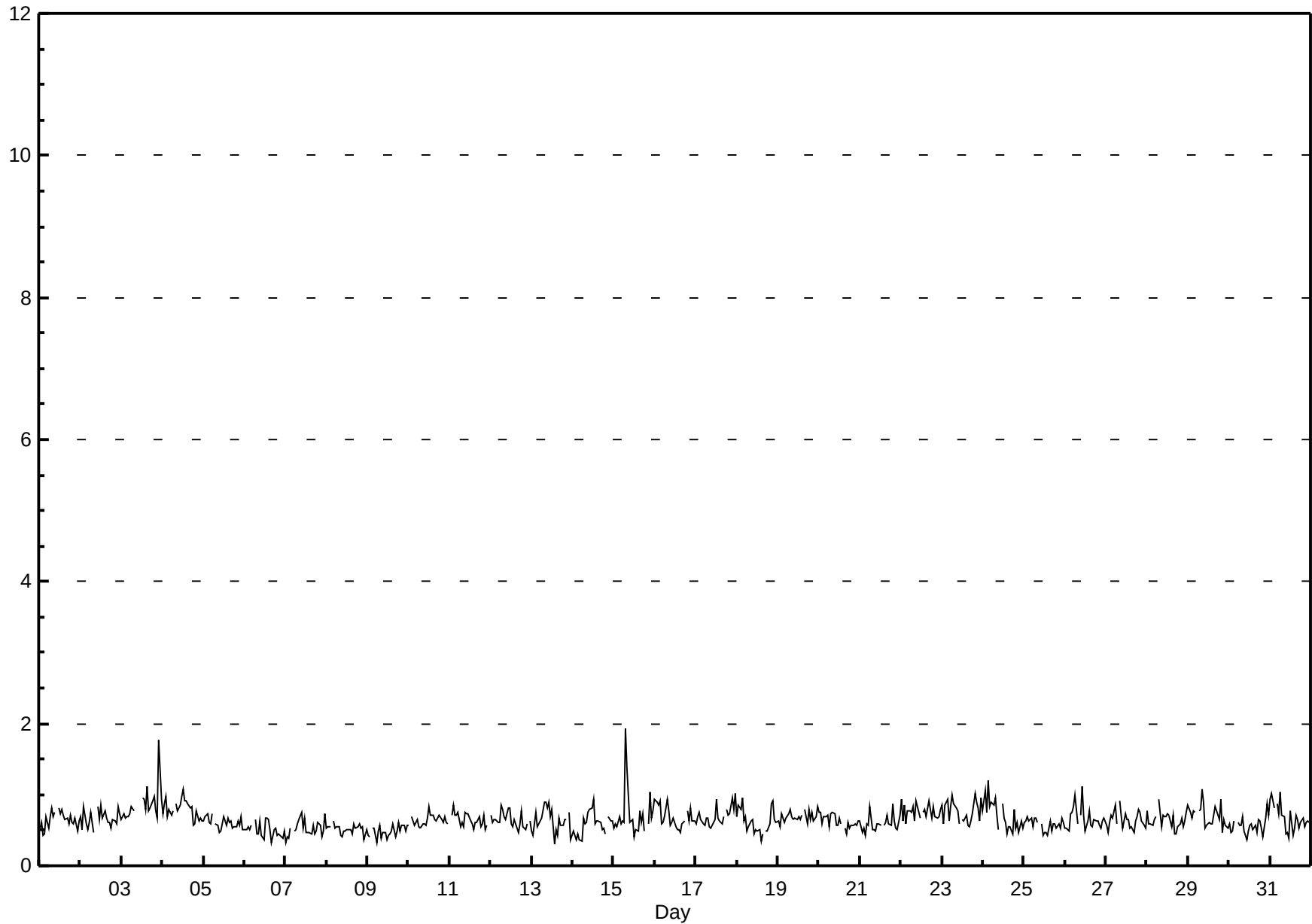
Henry Pirker - March 2015

Maximum Value: 1.9 ppb on Mar 15 08:00																				Maximum Daily Average: 0.9 ppb on Mar 3										Hours in Service: 744									
Minimum Value: 0 ppb on Mar 13 14:00																				Minimum Daily Average: 0.5 ppb on Mar 9										Hours of Data: 709									
Maximum Diurnal Average: 0.7 ppb at hour 8																				Minimum Diurnal Average: 0.6 ppb at hour 17										Hours of Missing Data: 35									
Monthly Average: 0.65 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 = 1.1										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-Mar	1	1	0	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	0.6	0.8													
2-Mar	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8													
3-Mar	1	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	2	1	0.9	1.8													
4-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1													
5-Mar	1	1	1	1	1	1	A	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7													
6-Mar	1	1	1	1	1	A	1	0	0	1	0	0	1	1	1	1	0	1	1	0	0	0	0	0	0.5	0.7													
7-Mar	0	0	0	1	A	0	1	1	1	1	1	1	0	0	0	0	1	0	0	1	1	0	0	1	0.5	0.7													
8-Mar	1	1	1	A	1	1	1	1	0	0	0	0	1	1	1	0	1	1	1	1	1	1	0	0	0.5	0.6													
9-Mar	0	0	A	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	1	0.5	0.6													
10-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8													
11-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.6	0.8													
12-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	0.6	0.8													
13-Mar	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	A	1	0	0.6	0.9													
14-Mar	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0.6	0.9													
15-Mar	1	1	1	1	1	1	1	2	1	1	1	1	0	1	0	1	1	1	0	A	1	1	1	1	0.7	1.9													
16-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	1	1	1	1	1	0.7	0.9													
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	1.0													
18-Mar	1	1	1	1	1	1	0	1	1	1	0	1	0	1	0	0	A	0	0	1	1	1	1	1	0.6	0.9													
19-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	0.8													
20-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	0.6	0.8													
21-Mar	1	0	1	0	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.9													
22-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9													
23-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0													
24-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	0	1	1	1	0	1	1	0.7	1.2													
25-Mar	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	1	0	1	1	1	1	1	1	1	0.6	0.7													
26-Mar	1	1	0	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1													
27-Mar	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	0.9													
28-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0.6	0.9													
29-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.7	1.1													
30-Mar	1	0	0	1	A	1	1	1	1	0	0	0	1	1	1	1	0	1	1	1	0	1	1	1	0.6	0.9													
31-Mar	1	1	1	A	1	1	1	1	1	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.0													
0.6 0.6 0.7 0.7 0.6 0.7 0.7 0.7 0.7 0.7 0.6 0.6 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.6 0.6 0.7 0.7																									Diurnal Average														
0.9 1.1 1.0 1.2 0.9 0.9 1.0 1.9 1.4 0.9 1.1 1.0 1.1 0.9 0.9 1.1 0.9 0.8 0.9 1.0 0.9 1.0 1.8 1.0																									Diurnal Maximum														
C - Calibration																									A - Automated Daily Zero Span														

Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

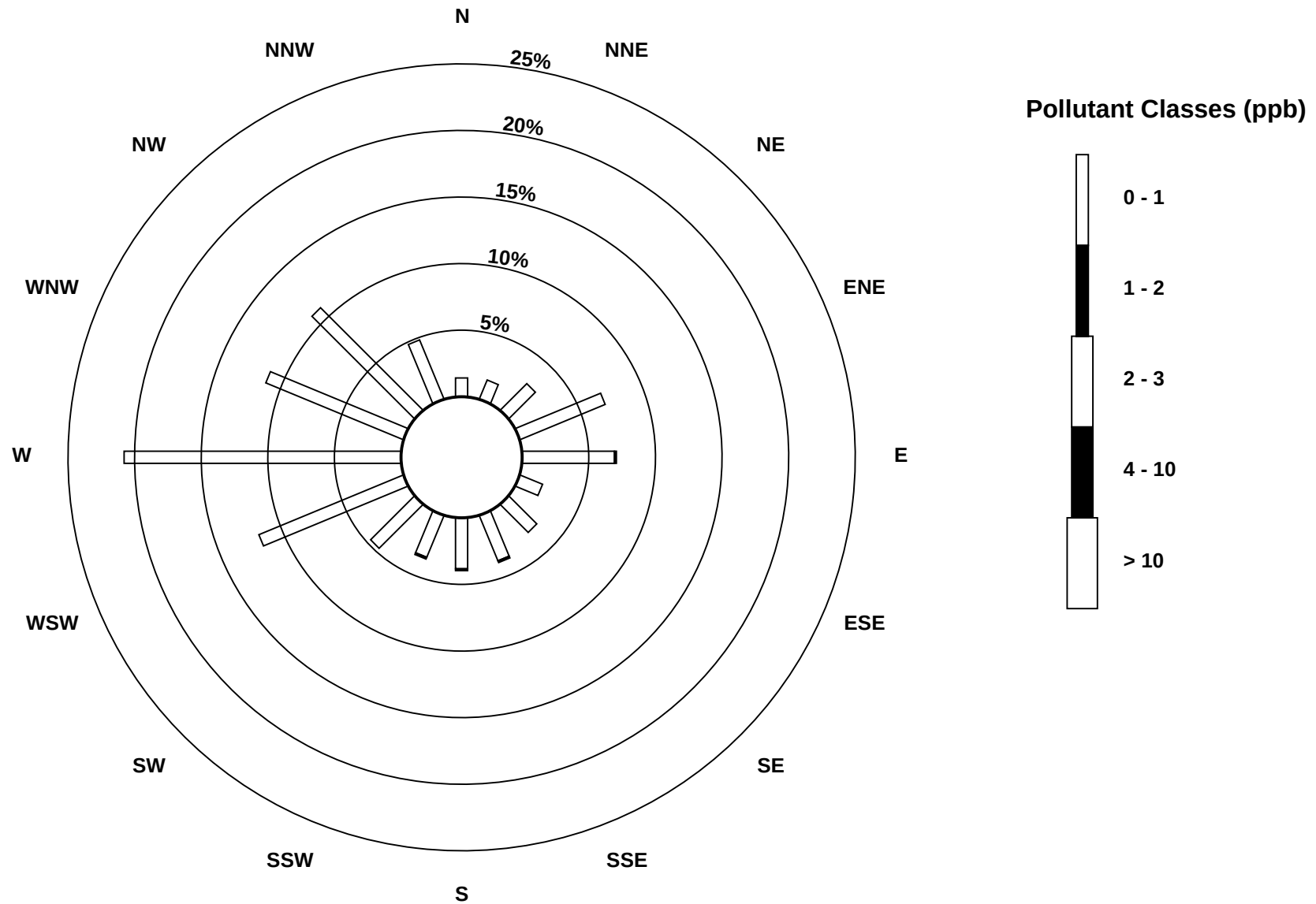
Henry Pirker - March 2015

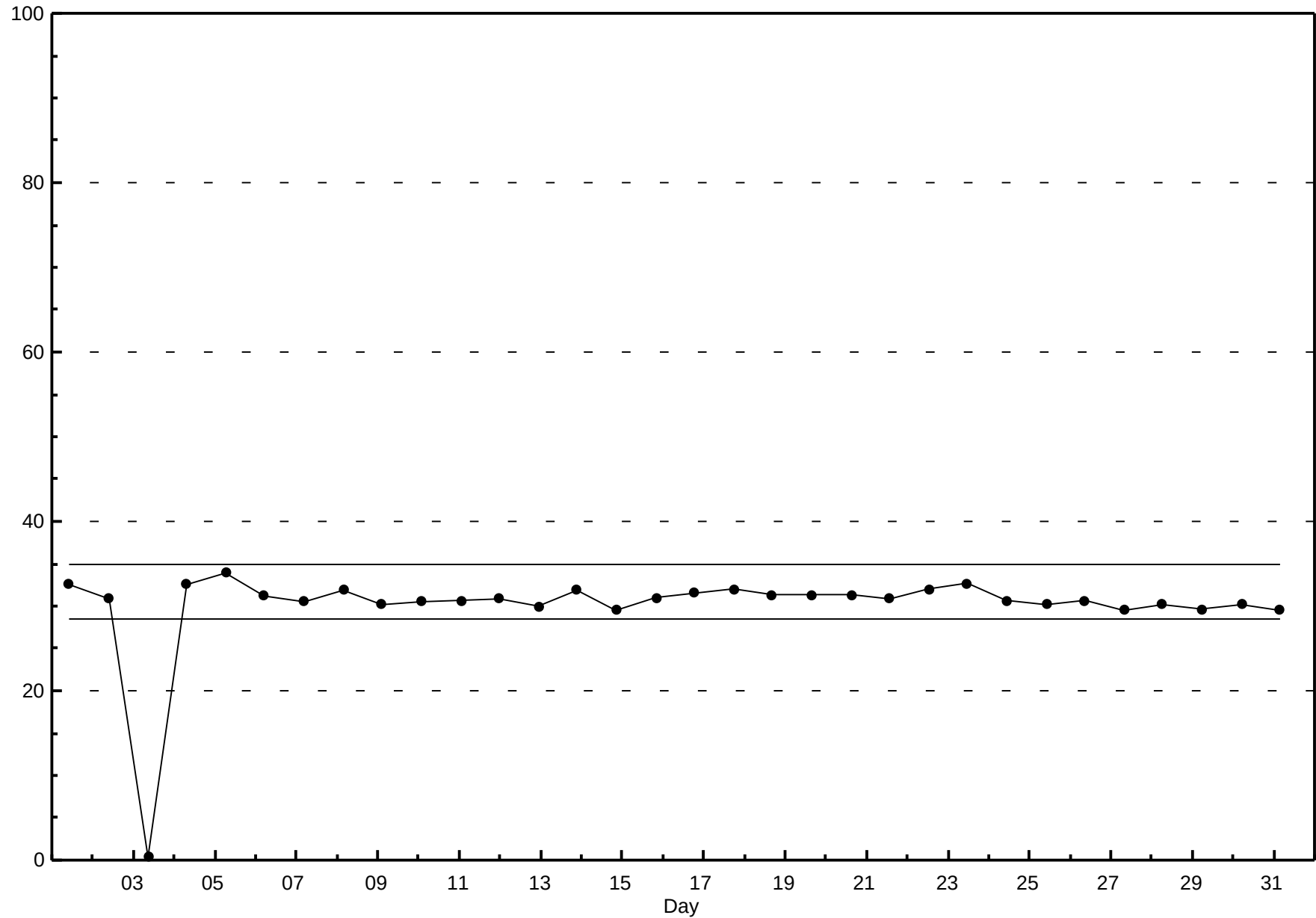


Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2015





Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

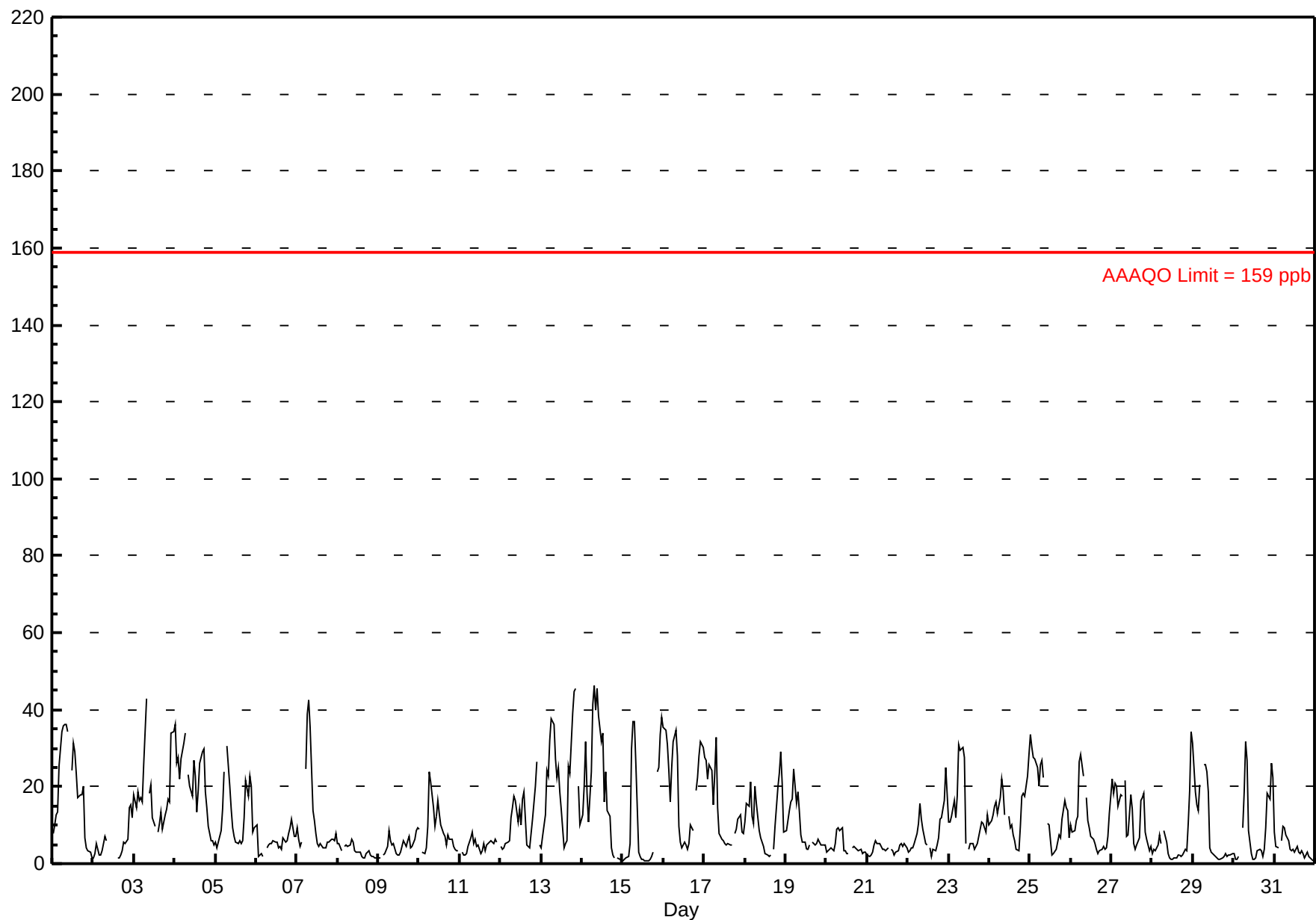
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 46.2 ppb on Mar 14 08:00 Maximum Daily Average: 22.1 ppb on Mar 13																								Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 36 Percent Operational Time: 99.9		
Minimum Value: 1 ppb on Apr 1 00:00 Minimum Daily Average: 3.3 ppb on Mar 8 Maximum Diurnal Average: 22.2 ppb at hour 8 Minimum Diurnal Average: 5.6 ppb at hour 16 Monthly Average: 11.16 ppb Percentiles: P ₁ = 0.9 P ₁₀ = 2.3 Q ₁ = 3.9 Median = 6.8 Q ₃ = 16.7 P ₉₀ = 26.3 P ₉₉ = 40.5																										
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-Mar	8	10	13	14	25	34	36	36	36	34	A	24	31	29	23	17	18	18	20	7	4	3	3	1	19.4	36.2
2-Mar	1	2	5	2	2	3	5	7	6	C	C	C	C	C	1	1	2	3	6	5	6	14	15	12	5.4	15.4
3-Mar	18	15	19	16	17	16	26	43	A	18	20	12	10	M	8	10	14	9	13	14	17	16	34	34	18.1	42.9
4-Mar	36	26	28	22	27	31	34	A	23	20	18	27	23	13	19	26	29	30	19	15	10	6	6	5	21.4	36.0
5-Mar	6	4	7	9	14	24	A	31	20	14	9	7	6	5	6	5	6	12	22	17	23	20	8	9	12.4	30.6
6-Mar	10	2	2	3	2	A	4	5	5	5	6	5	6	4	5	4	7	6	6	8	9	11	7	7	5.6	11.4
7-Mar	9	6	5	5	A	25	39	43	36	14	11	8	5	5	5	4	4	4	6	6	6	6	6	8	11.5	42.6
8-Mar	5	5	4	A	5	5	5	5	6	6	3	3	3	3	2	2	2	3	3	2	2	2	2	1	3.3	6.4
9-Mar	1	2	A	2	3	4	9	6	5	5	3	2	2	3	4	6	5	6	7	4	5	6	9	9	4.7	9.3
10-Mar	9	A	3	3	4	10	24	21	15	10	12	17	13	10	8	7	5	7	6	6	5	4	3	3	8.9	24.0
11-Mar	A	3	2	2	3	5	7	8	5	6	4	5	2	3	5	3	5	6	6	6	5	6	6	A	4.7	8.1
12-Mar	5	4	4	5	6	6	12	15	18	17	11	14	10	17	18	5	4	4	8	12	20	26	A	5	10.6	26.3
13-Mar	4	7	13	24	23	32	38	36	27	23	25	19	14	4	5	6	25	24	39	45	45	A	20	10	22.1	45.3
14-Mar	13	20	32	18	11	24	41	46	40	45	38	32	34	16	24	14	12	4	2	2	A	2	1	1	20.5	46.2
15-Mar	1	1	2	2	5	30	37	37	26	3	2	1	1	1	1	1	1	2	3	A	24	25	34	38	12.0	37.9
16-Mar	35	35	31	24	16	25	32	35	28	10	6	4	5	5	4	5	10	9	A	19	23	28	32	30	19.5	35.4
17-Mar	28	27	22	26	24	15	23	33	14	8	6	6	5	5	5	5	5	A	8	9	12	13	8	8	13.7	32.7
18-Mar	11	16	15	21	12	10	20	15	8	7	6	4	3	2	2	2	A	4	10	20	24	29	21	8	11.7	29.2
19-Mar	9	11	14	16	17	25	15	19	13	8	6	6	4	4	5	A	6	5	5	6	6	5	5	5	9.2	24.6
20-Mar	3	3	4	4	3	5	9	9	9	9	3	3	3	3	A	4	4	4	4	4	4	3	3	3	4.5	9.4
21-Mar	2	2	2	3	5	6	5	5	5	4	4	3	4	A	4	3	2	3	4	5	5	5	5	4	3.9	6.1
22-Mar	3	3	4	4	5	8	10	16	11	9	5	5	A	4	2	4	4	5	7	12	12	17	25	18	8.4	25.1
23-Mar	11	11	12	16	12	18	31	29	30	28	5	A	4	5	5	4	5	5	7	11	11	9	8	13	12.6	31.0
24-Mar	10	11	13	15	16	13	17	22	19	13	A	12	9	10	8	6	4	4	10	18	18	17	23	28	13.7	28.2
25-Mar	34	30	27	27	25	20	26	27	22	A	11	10	6	2	2	4	6	8	7	12	16	14	14	7	15.5	33.6
26-Mar	10	8	9	11	12	26	28	23	A	17	11	9	7	6	5	4	3	3	4	5	4	4	7	13	10.0	28.4
27-Mar	22	18	21	20	15	18	17	A	22	7	8	18	14	5	4	5	7	16	17	18	8	6	3	4	12.8	21.9
28-Mar	3	4	3	5	8	5	A	9	6	3	1	1	1	1	2	2	2	2	2	4	3	11	19	34	5.7	34.2
29-Mar	31	19	15	14	21	A	26	26	24	19	4	3	2	2	1	1	1	1	2	2	2	2	2	2	9.7	31.3
30-Mar	3	1	1	2	A	9	19	32	27	8	2	1	1	2	3	4	3	2	4	9	18	17	26	22	9.4	31.7
31-Mar	8	4	4	A	6	10	9	7	6	4	3	4	3	4	3	3	3	3	2	3	2	1	1	1	4.1	9.6
11.6 10.4 11.2 11.6 11.8 16.0 20.8 22.2 17.7 12.8 8.7 9.1 8.0 6.2 6.4 5.6 6.8 7.0 8.5 10.1 11.6 11.0 11.9 11.5																								Diurnal Average		
36.0 34.6 31.8 27.0 27.1 34.2 41.3 46.2 39.7 45.4 38.4 31.6 33.8 29.2 24.0 26.0 29.0 29.8 39.2 44.7 45.3 29.2 33.8 37.9																								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

Henry Pirker - March 2015



Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

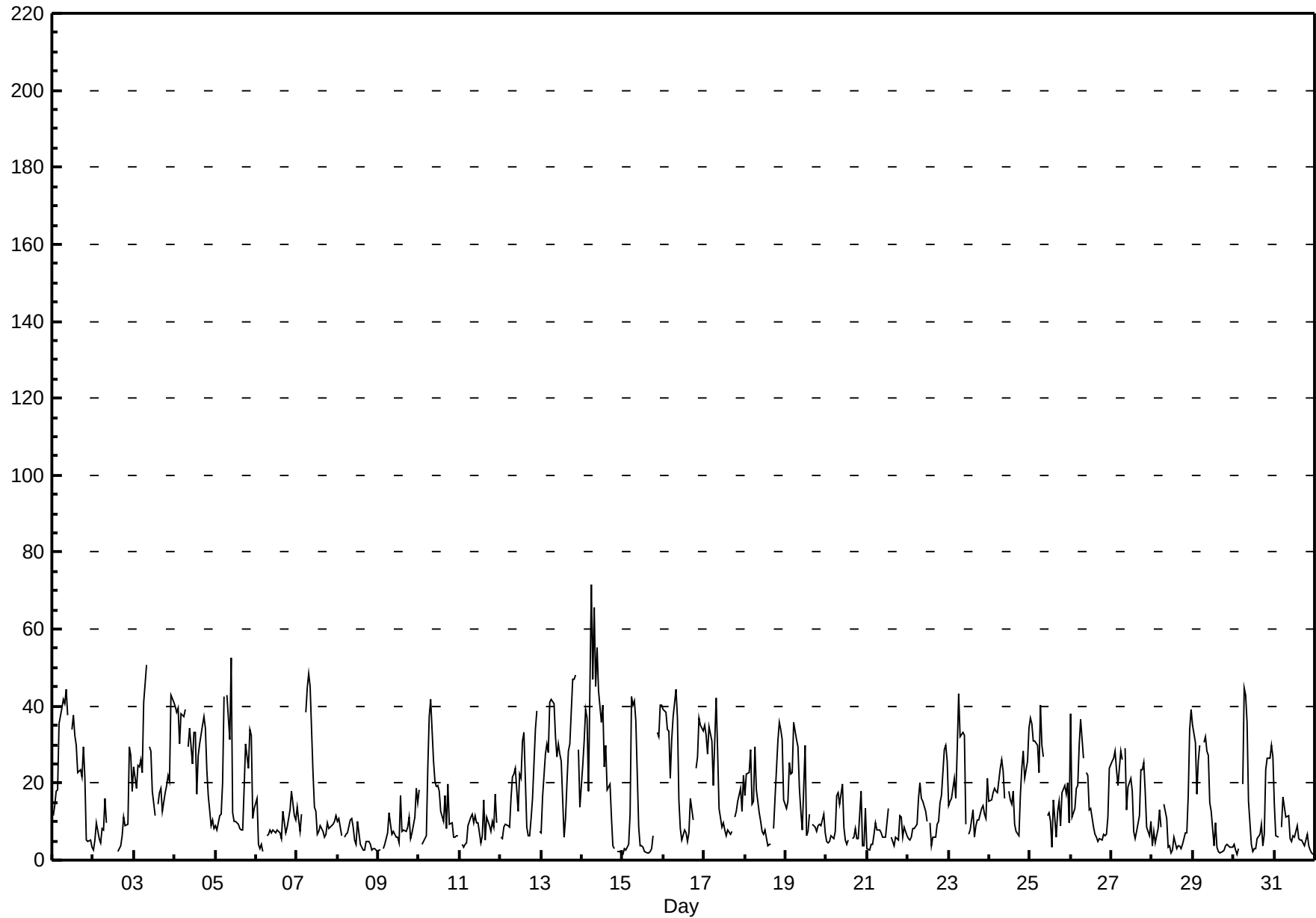
Henry Pirker - March 2015

Maximum Value: 71.7 ppb on Mar 14 06:00																				Maximum Daily Average: 29.1 ppb on Mar 14					Hours in Service: 744	
Minimum Value: 1 ppb on Mar 30 03:00																				Minimum Daily Average: 5.8 ppb on Mar 8					Hours of Data: 707	
Maximum Diurnal Average: 29.1 ppb at hour 8																				Minimum Diurnal Average: 8.7 ppb at hour 16					Hours of Missing Data: 37	
Monthly Average: 16.20 ppb																				Percentiles: P ₁ = 1.9 P ₁₀ = 3.8 Q ₁ = 6.4 Median = 11.7 Q ₃ = 24.0 P ₉₀ = 35.1 P ₉₉ = 47.7					Hours of Calibration: 36	
																				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-Mar	12	14	18	18	35	40	42	41	44	38	A	34	38	32	30	23	23	22	29	22	5	5	5	3	24.9	44.3
2-Mar	3	5	10	6	4	8	8	16	10	C	C	C	C	C	2	3	4	6	11	9	9	30	27	18	10.0	29.6
3-Mar	24	19	25	24	26	23	41	51	A	30	28	18	12	M	15	17	19	13	17	19	22	20	43	41	24.8	50.7
4-Mar	40	38	40	30	38	37	39	A	29	34	25	33	33	17	27	30	35	37	34	23	17	9	10	8	29.0	39.9
5-Mar	9	8	12	12	20	42	A	43	31	53	12	10	10	9	8	8	8	19	30	24	34	32	11	14	20.0	52.6
6-Mar	16	4	3	4	2	A	7	7	8	7	8	7	8	7	7	5	13	7	8	11	13	18	12	10	8.3	17.8
7-Mar	14	10	7	12	A	38	45	48	45	23	14	13	7	7	9	8	6	7	10	8	9	9	10	11	16.1	48.4
8-Mar	10	11	6	A	6	7	7	10	11	9	5	4	10	4	3	3	2	5	5	4	3	3	3	2	5.8	10.9
9-Mar	3	2	A	3	4	7	12	9	7	7	6	6	4	17	7	8	8	8	11	5	7	11	19	15	8.1	18.7
10-Mar	18	A	4	5	6	24	37	42	26	20	19	20	18	12	10	17	8	20	9	10	6	6	6	6	15.2	41.7
11-Mar	A	4	3	4	4	9	11	12	10	12	10	10	5	6	16	5	11	9	8	10	9	17	10	A	8.8	17.0
12-Mar	6	6	8	9	9	9	16	22	22	24	13	23	21	31	33	8	6	6	11	16	34	39	A	7	16.5	38.8
13-Mar	7	16	28	30	28	41	42	41	32	27	30	27	26	6	11	20	28	30	47	47	48	A	29	14	28.5	47.9
14-Mar	25	31	39	37	18	72	47	66	45	55	44	36	40	24	30	18	20	11	4	3	A	2	2	2	29.1	71.7
15-Mar	2	3	3	4	12	43	40	42	36	9	4	4	3	2	2	2	2	3	6	A	33	32	40	40	15.9	42.6
16-Mar	39	38	34	34	21	31	37	44	37	16	8	5	8	7	5	7	16	11	A	24	27	37	35	34	24.2	44.5
17-Mar	35	32	28	35	31	19	31	42	28	13	9	10	8	6	8	7	7	A	11	13	15	19	13	22	19.2	42.2
18-Mar	17	22	23	29	15	15	29	18	12	10	7	7	8	4	4	4	A	8	16	31	36	34	31	16	17.3	35.9
19-Mar	13	15	26	22	23	36	31	29	18	13	8	30	6	7	12	A	9	8	8	9	9	9	12	7	15.7	35.6
20-Mar	5	5	5	6	6	7	17	18	15	20	9	5	4	5	A	6	6	8	5	6	18	4	4	13	8.5	19.7
21-Mar	3	3	4	4	7	10	8	8	7	6	6	6	13	A	6	5	4	6	5	11	11	6	8	6	6.7	13.3
22-Mar	5	5	6	8	8	9	16	20	16	15	13	10	A	10	4	6	6	9	10	15	17	29	30	26	12.8	29.9
23-Mar	14	15	16	21	16	29	43	32	33	32	9	A	7	8	13	6	9	10	10	13	14	12	11	21	17.3	43.1
24-Mar	15	16	17	19	18	18	24	26	23	16	A	18	15	14	18	9	7	6	17	24	28	21	26	34	18.7	34.2
25-Mar	37	35	31	31	30	23	40	30	27	A	12	12	10	3	16	6	13	15	9	17	19	17	20	10	20.1	40.1
26-Mar	38	11	13	19	19	30	36	26	A	23	22	13	14	9	7	6	5	6	5	7	6	7	11	24	15.4	37.9
27-Mar	26	27	28	23	19	28	26	A	29	13	19	21	18	7	6	7	12	23	23	25	18	9	6	10	18.5	28.9
28-Mar	4	8	5	8	13	9	A	15	11	4	4	2	3	6	3	4	4	3	4	7	7	17	34	39	9.1	39.1
29-Mar	35	31	17	26	30	A	31	32	28	27	15	13	4	10	3	2	2	2	3	4	4	4	3	3	14.3	35.1
30-Mar	4	3	1	3	A	20	45	43	36	15	4	2	3	3	5	7	9	4	7	23	26	27	30	27	15.1	44.6
31-Mar	15	6	6	A	9	17	14	11	12	5	5	6	6	9	6	5	5	5	4	7	4	2	2	1	7.0	16.5
16.4 14.8 15.6 16.8 16.5 24.1 28.3 29.1 23.7 19.8 13.1 14.0 12.4 10.2 10.8 8.7 10.3 11.0 12.6 14.9 17.0 16.2 16.8 16.2																								Diurnal Average		
39.9 38.4 39.6 36.9 38.0 71.7 47.0 65.8 45.0 55.1 43.9 35.9 40.2 32.3 33.3 30.1 34.9 37.3 46.9 46.8 47.9 38.8 42.8 40.9																								Diurnal Maximum		
C - Calibration M - Maintenance A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

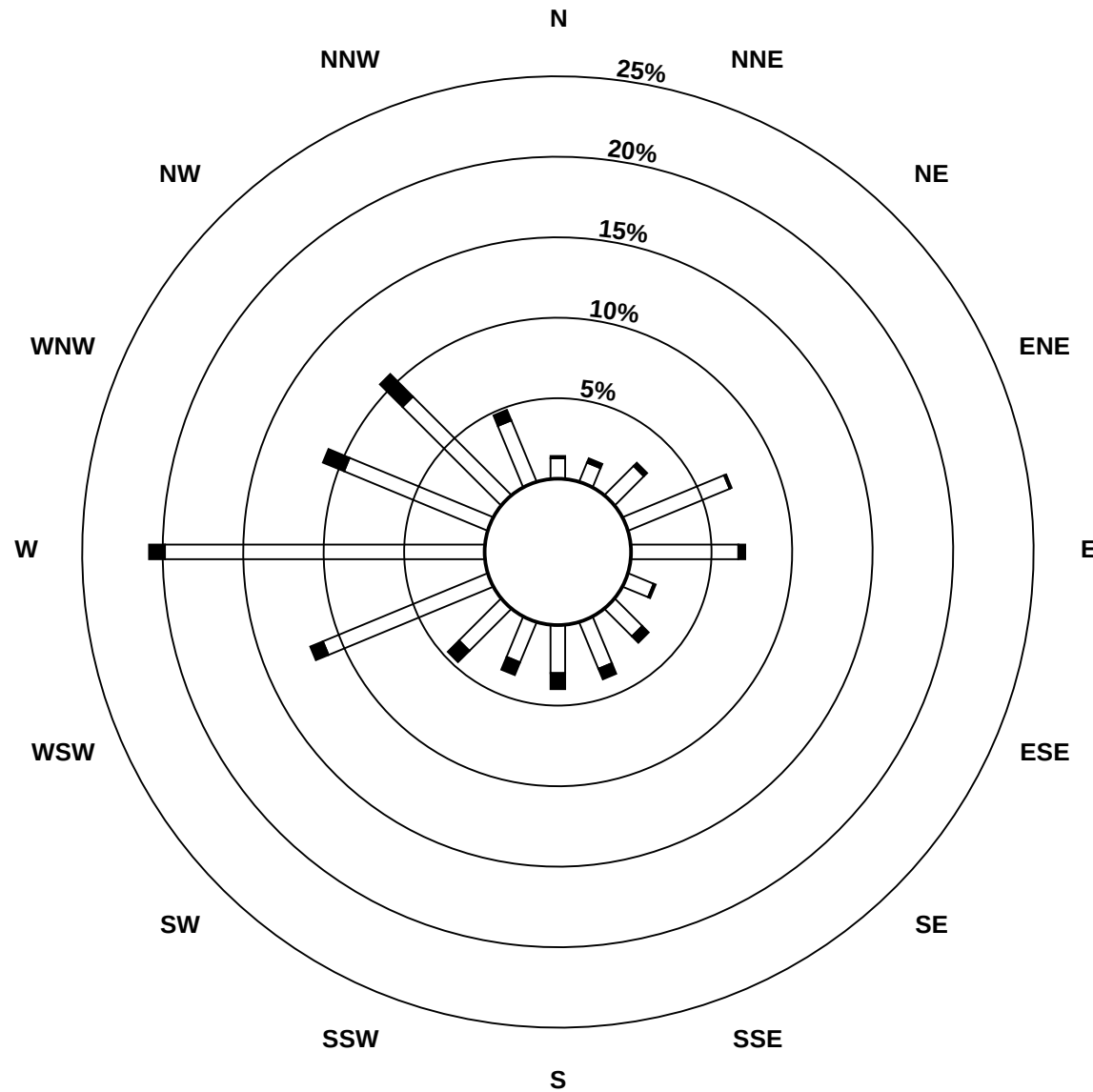
Henry Pirker - March 2015



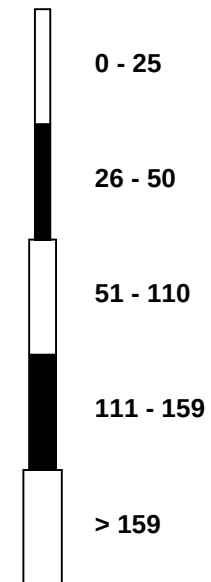
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - March 2015

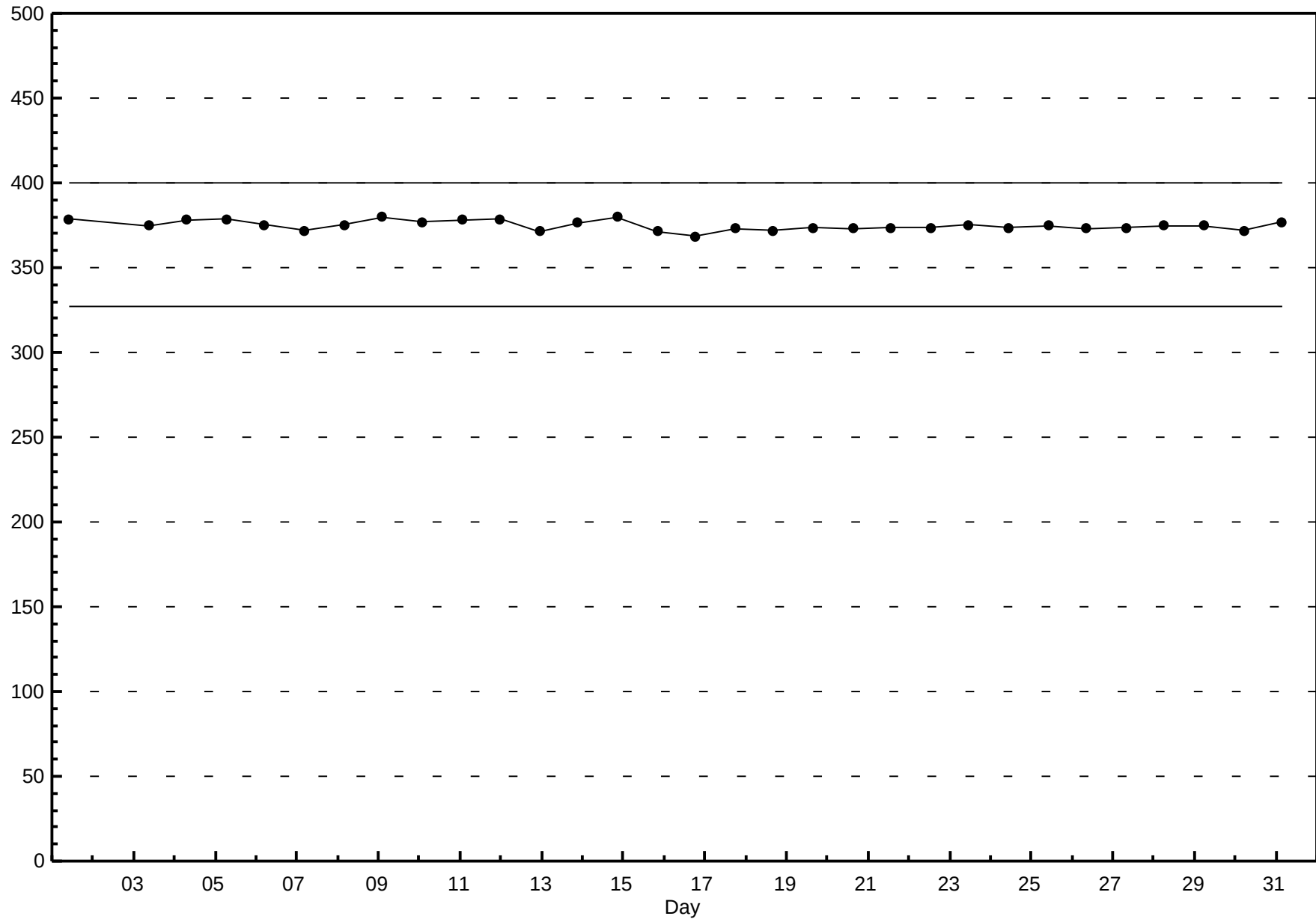


Pollutant Classes (ppb)



Span Responses

Nitrogen Dioxide (NO₂)
Henry Pirker - March 2015



Hourly Averages

Nitrogen Oxide (NO) - ppb

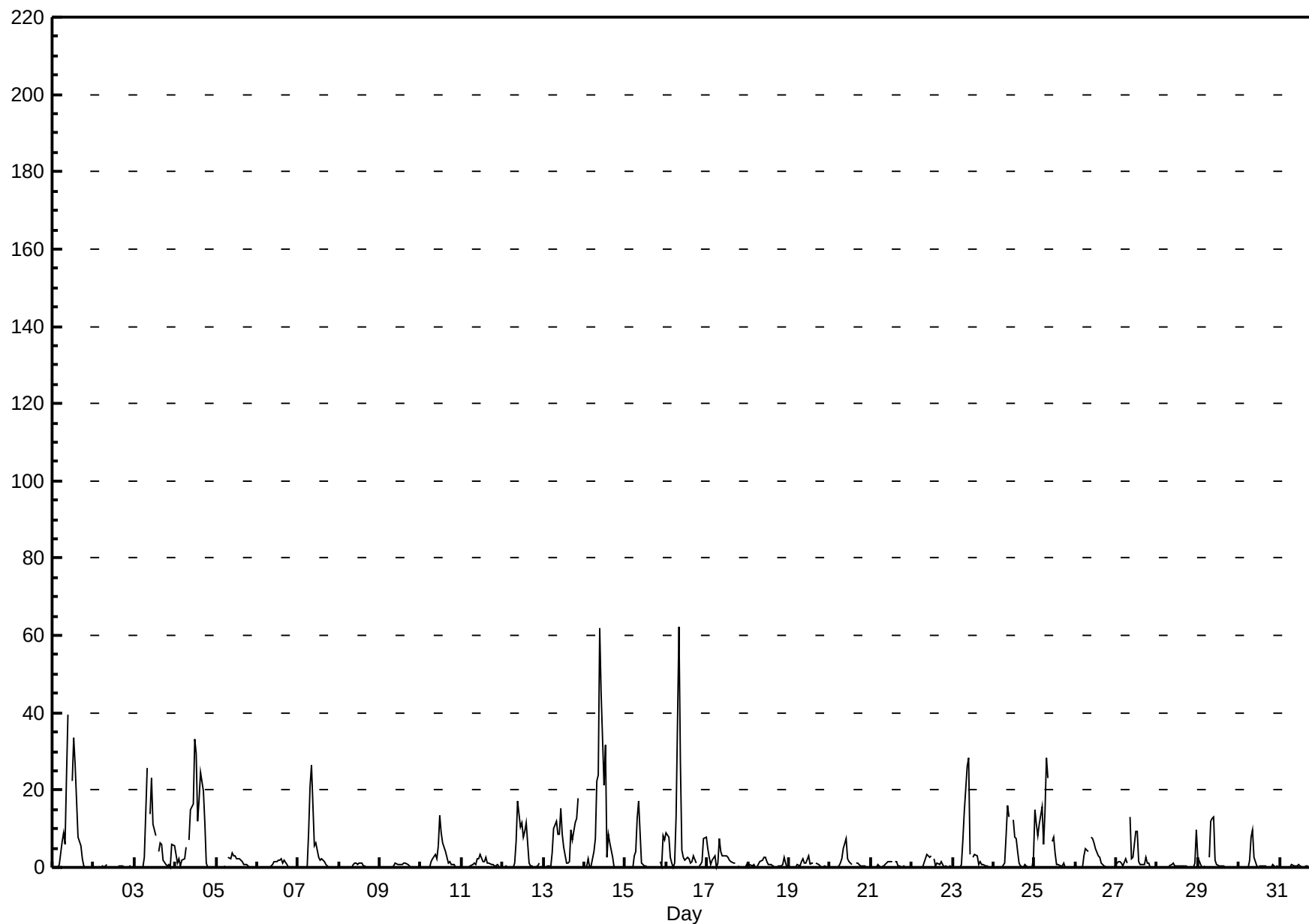
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 62.3 ppb on Mar 16 08:00 Maximum Daily Average: 10.4 ppb on Mar 14																					Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 36 Percent Operational Time: 99.9					
Minimum Value: 0 ppb on Mar 12 06:00 Minimum Daily Average: 0.2 ppb on Mar 31 Maximum Diurnal Average: 9.2 ppb at hour 9 Minimum Diurnal Average: 0.3 ppb at hour 22 Monthly Average: 2.93 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.5 Q ₃ = 2.3 P ₉₀ = 8.8 P ₉₉ = 30.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	0	0	0	1	7	9	6	23	40	A	22	34	26	17	8	6	2	0	0	0	0	0	0	8.7	39.5
2-Mar	0	0	0	0	0	0	0	0	1	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.2	0.6
3-Mar	0	0	0	0	0	0	3	26	A	14	23	11	8	M	4	6	6	2	1	0	1	0	6	5	5.2	25.6
4-Mar	3	1	2	0	2	2	5	A	7	15	16	33	30	12	17	24	20	11	1	0	0	0	0	0	8.9	33.3
5-Mar	0	0	0	0	0	1	A	3	2	4	3	3	2	2	2	1	1	1	1	0	0	0	0	0	1.1	3.6
6-Mar	0	0	0	0	0	A	0	0	0	1	1	1	2	2	2	1	2	1	0	0	0	0	0	0	0.6	2.1
7-Mar	0	0	0	0	A	0	9	21	26	5	6	5	2	2	2	1	1	0	0	0	0	0	0	0	3.6	26.5
8-Mar	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.2
9-Mar	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.3	1.2
10-Mar	0	A	0	0	0	0	2	2	3	2	6	13	9	6	4	2	1	1	1	1	0	0	0	0	2.4	13.3
11-Mar	A	0	0	0	0	0	1	1	1	2	2	4	1	1	3	1	1	1	1	0	1	1	0	A	1.0	3.5
12-Mar	0	0	0	0	0	0	0	1	7	17	10	12	8	9	11	1	1	0	0	0	0	1	A	0	3.4	17.1
13-Mar	0	0	0	0	0	4	10	12	9	8	15	9	5	1	1	2	10	7	12	13	18	A	0	0	5.9	18.0
14-Mar	0	0	2	0	0	4	7	22	24	62	45	21	32	3	8	6	3	0	0	0	A	0	0	0	10.4	62.1
15-Mar	0	0	0	0	0	3	4	13	17	1	1	0	0	0	0	0	0	0	0	A	2	0	8	7	2.5	17.2
16-Mar	9	8	3	1	0	1	13	62	27	5	3	2	3	2	1	2	3	1	A	0	1	2	7	8	7.1	62.3
17-Mar	5	3	1	2	3	0	1	8	4	3	3	3	3	2	2	1	1	A	0	0	0	0	0	1	1.9	7.6
18-Mar	0	1	0	1	0	0	1	2	2	3	3	2	1	1	0	0	A	0	0	0	1	3	1	0	0.9	2.8
19-Mar	0	0	0	0	0	1	0	2	2	1	1	3	1	1	1	A	1	1	0	0	0	0	0	0	0.7	3.0
20-Mar	0	0	0	0	0	0	1	2	5	7	2	2	1	1	A	1	1	1	0	0	0	0	0	0	1.1	7.5
21-Mar	0	0	0	0	1	0	0	0	1	1	2	1	2	A	1	1	0	0	0	0	0	0	0	0	0.5	1.5
22-Mar	0	0	0	0	0	0	0	1	2	3	2	3	A	2	0	1	1	2	1	0	0	0	0	0	0.9	3.2
23-Mar	0	0	0	0	0	1	7	15	26	28	3	A	2	3	3	1	1	1	1	0	0	0	0	0	4.1	28.5
24-Mar	0	0	0	0	0	0	1	8	16	13	A	12	8	7	4	1	0	0	1	0	0	0	0	3	3.3	16.2
25-Mar	15	11	8	11	15	6	14	28	23	A	7	8	4	1	1	0	1	1	0	0	0	0	0	0	6.7	28.4
26-Mar	1	0	0	0	0	3	5	4	A	8	7	6	5	3	3	1	1	0	0	0	0	0	0	0	2.1	7.9
27-Mar	1	1	2	1	0	2	1	A	13	2	3	9	9	2	1	1	1	3	1	1	0	0	0	0	2.4	13.0
28-Mar	0	0	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	10	0.7	9.9
29-Mar	3	1	0	0	0	A	2	12	13	13	2	1	0	0	0	0	0	0	0	0	0	0	0	0	2.1	13.0
30-Mar	0	0	0	0	A	0	2	8	10	2	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1.1	9.6
31-Mar	0	0	0	A	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
1.2 0.9 0.6 0.6 0.8 1.2 3.4 9.0 9.2 9.1 6.0 6.5 6.0 3.3 3.1 2.3 2.1 1.2 0.7 0.6 0.8 0.3 0.9 1.2 14.9 11.2 8.2 11.0 15.5 6.7 14.4 62.3 27.2 62.1 44.7 33.3 33.5 26.4 17.4 24.4 19.7 11.4 11.7 12.8 18.0 2.8 8.1 9.9																									Diurnal Average	Diurnal Maximum
C - Calibration M - Maintenance A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2015



Hourly Maximums

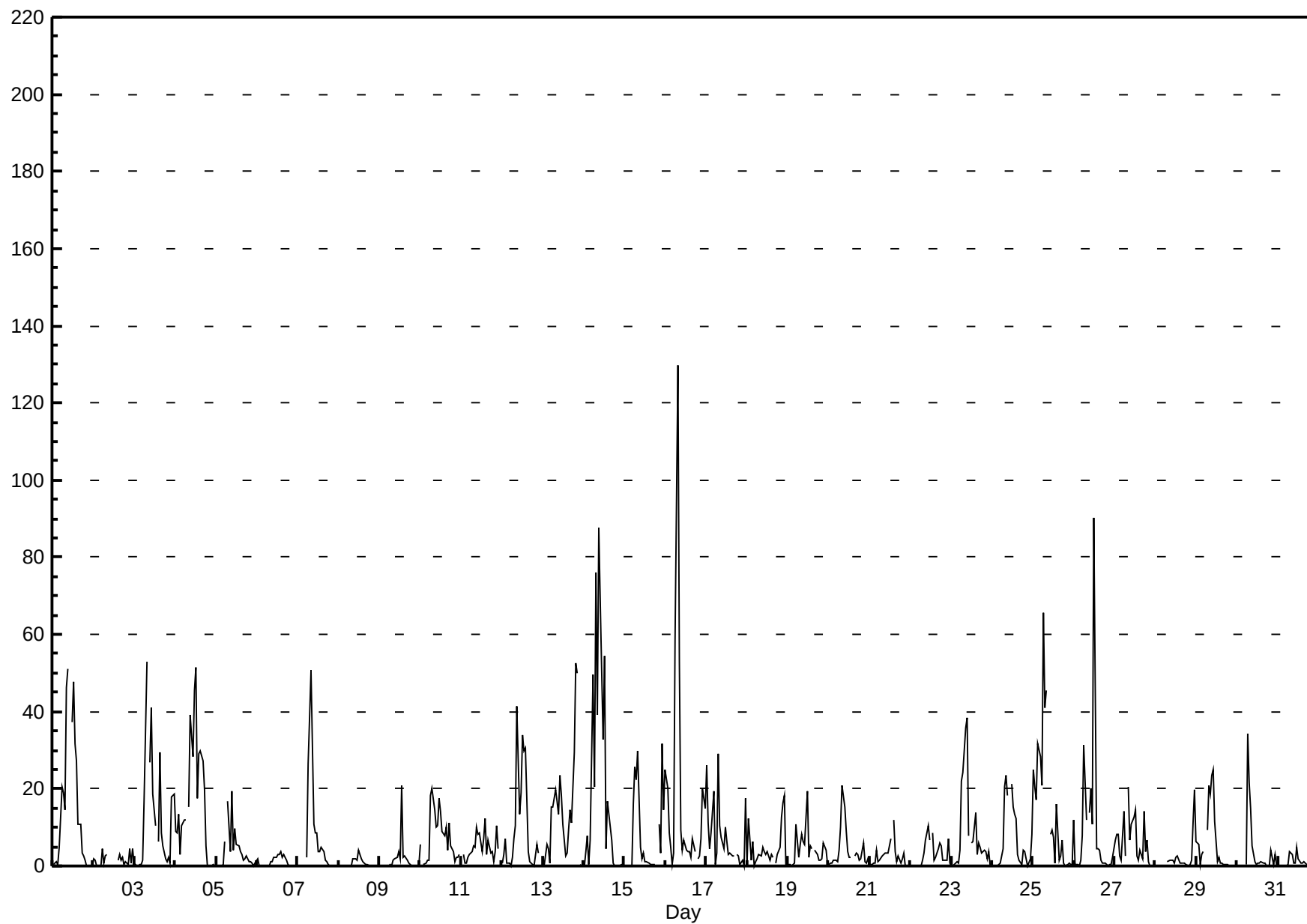
Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2015

Maximum Value: 129.7 ppb on Mar 16 08:00																				Maximum Daily Average: 21.3 ppb on Mar 14					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 12 06:00																				Minimum Daily Average: 0.7 ppb on Mar 8					Hours of Data: 707	
Maximum Diurnal Average: 20.8 ppb at hour 8																				Minimum Diurnal Average: 2.1 ppb at hour 22					Hours of Missing Data: 37	
Monthly Average: 7.31 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 2.5 Q ₃ = 8.4 P ₉₀ = 20.5 P ₉₉ = 54.3					Hours of Calibration: 36	
																									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-Mar	0	1	1	1	5	20	19	15	46	51	A	37	48	32	27	11	11	3	3	2	0	0	0	0	14.5	51.3
2-Mar	2	1	0	0	0	4	1	3	3	C	C	C	C	C	1	3	2	2	0	1	0	4	1	4	1.7	4.4
3-Mar	1	0	0	0	0	2	17	53	A	27	41	19	10	M	6	30	9	5	2	1	2	1	18	19	11.9	52.9
4-Mar	9	8	14	3	10	12	12	A	15	39	28	45	51	18	29	30	27	20	5	0	0	0	0	0	16.4	51.5
5-Mar	0	0	0	0	0	6	A	17	4	19	4	10	5	5	4	3	2	2	3	1	1	1	0	1	3.8	19.3
6-Mar	2	0	0	0	0	A	0	0	1	1	2	2	3	3	4	2	3	1	0	0	0	0	0	0	1.1	3.6
7-Mar	0	0	0	0	A	2	26	38	51	11	8	8	4	4	5	4	1	1	0	0	0	0	0	0	7.1	50.6
8-Mar	0	0	0	A	0	0	0	0	2	2	2	2	4	2	1	1	1	0	0	0	0	0	0	0	0.7	3.9
9-Mar	0	0	A	0	0	0	0	0	1	2	2	4	2	21	2	3	1	1	0	0	0	0	0	0	1.7	20.8
10-Mar	6	A	0	1	2	2	18	20	15	10	10	18	14	9	8	10	4	11	5	4	1	2	2	3	7.6	20.0
11-Mar	A	3	1	1	2	3	4	5	5	10	8	9	4	7	12	3	7	3	4	1	4	10	4	A	5.0	12.3
12-Mar	1	3	7	1	1	0	2	7	10	42	13	19	34	30	31	4	1	1	0	0	5	3	A	0	9.4	41.6
13-Mar	0	0	5	5	1	15	15	20	17	13	23	18	11	3	3	9	15	11	29	52	50	A	1	0	13.8	52.5
14-Mar	0	4	8	0	7	49	21	76	39	87	69	33	54	4	17	13	7	1	0	0	A	0	1	0	21.3	87.5
15-Mar	0	0	0	0	0	16	26	22	30	5	2	3	1	1	1	0	1	0	0	A	11	3	32	15	7.4	31.9
16-Mar	25	20	9	5	0	3	58	130	53	9	4	7	4	4	4	2	7	4	A	2	3	7	20	15	17.2	129.7
17-Mar	26	11	4	8	20	0	3	29	10	8	5	10	6	3	3	3	3	A	3	2	0	1	0	17	7.7	29.2
18-Mar	0	12	2	6	0	1	2	3	3	5	4	3	4	1	3	2	A	1	3	5	13	16	18	0	4.7	18.2
19-Mar	0	1	0	0	1	11	2	5	8	6	5	20	2	5	4	A	4	3	1	1	2	6	4	0	4.1	19.5
20-Mar	0	1	1	1	2	1	4	10	21	15	9	4	2	2	A	2	3	3	2	2	6	1	1	2	4.1	20.9
21-Mar	0	0	1	1	4	1	1	3	3	3	3	3	7	A	12	4	1	3	1	2	3	0	0	0	2.5	11.8
22-Mar	0	0	0	0	0	0	0	2	3	7	11	7	A	9	1	2	4	6	5	1	2	1	7	1	3.0	10.5
23-Mar	0	0	1	1	1	4	22	24	36	38	8	A	6	6	14	3	6	5	3	4	4	2	4	0	8.3	38.3
24-Mar	0	0	0	0	1	1	4	20	24	18	A	21	15	13	12	3	1	1	4	4	2	0	2	8	6.8	23.5
25-Mar	25	21	17	32	28	21	65	41	46	A	8	9	8	1	16	1	3	7	1	0	1	1	0	0	15.3	65.5
26-Mar	12	0	0	0	1	8	31	12	A	14	20	11	90	4	4	4	2	1	1	0	0	0	0	2	9.5	90.3
27-Mar	7	8	8	3	2	14	3	A	21	7	11	13	15	3	1	4	2	14	4	7	1	0	0	0	6.3	20.7
28-Mar	0	0	0	0	0	0	A	1	2	1	1	1	2	3	1	1	1	1	1	0	0	2	11	20	2.1	19.6
29-Mar	7	6	0	3	4	A	9	21	19	23	25	12	1	2	1	1	0	0	0	0	0	0	0	0	5.9	25.0
30-Mar	0	0	0	0	A	1	34	21	15	5	1	1	1	1	1	1	1	0	0	0	4	0	3	0	3.9	34.1
31-Mar	0	0	0	A	0	0	0	4	3	1	1	5	2	1	1	1	1	0	0	0	0	0	0	0	0.9	4.8
4.1 3.4 2.6 2.5 3.2 6.9 13.9 20.8 17.4 16.6 11.8 12.1 14.1 7.0 7.7 5.3 4.3 3.7 2.7 3.1 3.9 2.1 4.3 3.6																									Diurnal Average	
26.1 20.5 17.1 31.7 28.3 49.4 65.5 129.7 52.9 87.5 68.7 45.4 90.3 31.8 30.6 29.8 27.4 19.7 29.3 52.5 50.0 16.4 31.9 19.6																									Diurnal Maximum	
C - Calibration M - Maintenance A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - March 2015



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

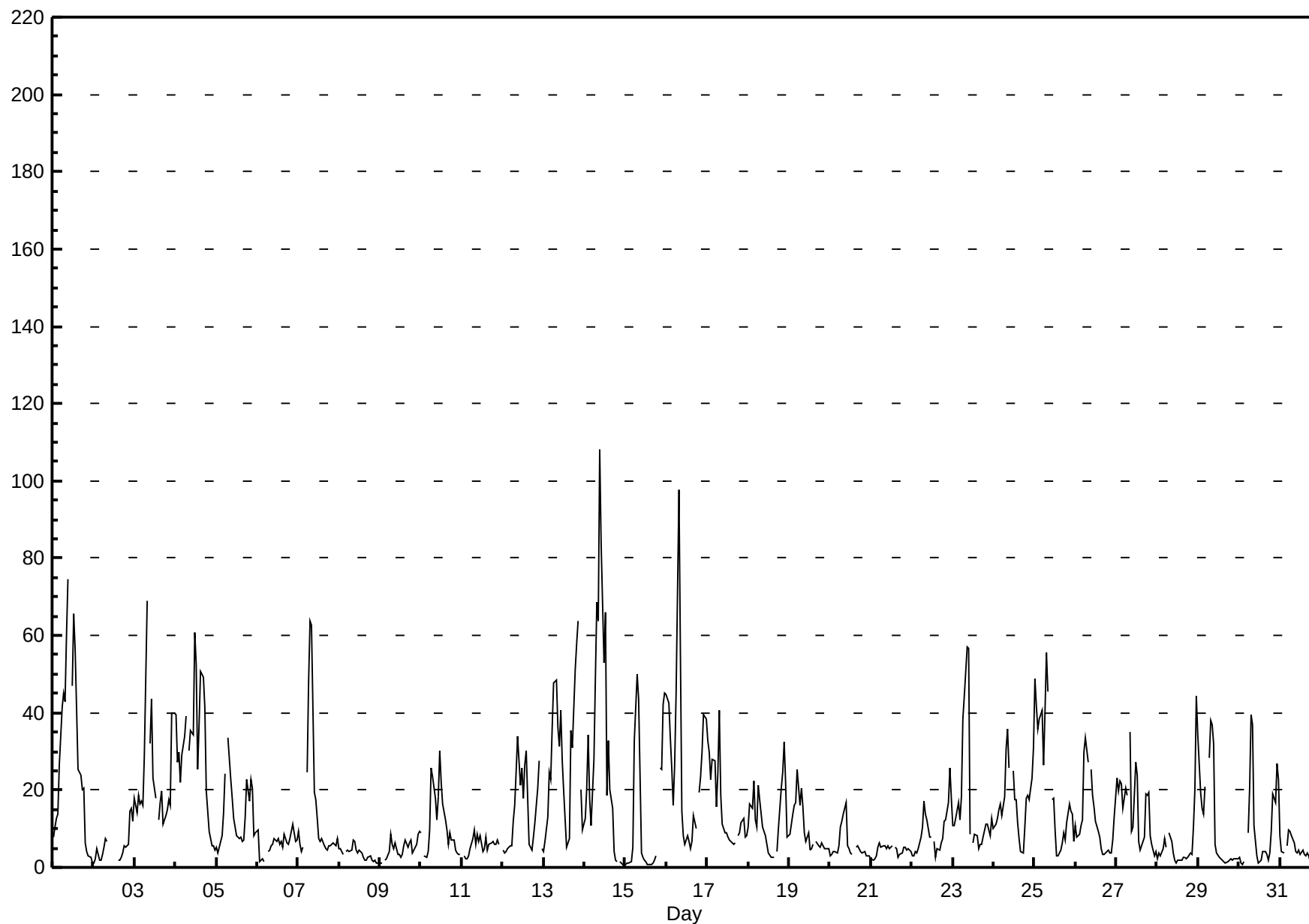
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 108.2 ppb on Mar 14 10:00 Maximum Daily Average: 31.0 ppb on Mar 14																								Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 36 Percent Operational Time: 99.9		
Minimum Value: 0 ppb on Apr 1 00:00 Minimum Daily Average: 3.5 ppb on Mar 8 Maximum Diurnal Average: 31.4 ppb at hour 8 Minimum Diurnal Average: 8.0 ppb at hour 16 Monthly Average: 14.13 ppb Percentiles: P ₁ = 0.9 P ₁₀ = 2.4 Q ₁ = 4.3 Median = 8.0 Q ₃ = 18.7 P ₉₀ = 35.3 P ₉₉ = 64.4																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	8	10	13	14	26	41	45	43	60	74	A	47	65	56	41	25	24	20	21	6	4	3	3	1	28.3	74.5
2-Mar	1	2	5	2	2	3	5	7	7	C	C	C	C	C	2	2	3	4	6	5	6	15	15	12	5.4	15.4
3-Mar	18	14	19	16	17	16	29	69	A	32	44	23	18	M	12	17	20	11	13	15	18	16	40	40	23.5	68.9
4-Mar	40	27	30	22	29	34	39	A	30	35	34	61	53	25	37	51	49	41	20	14	9	6	6	4	30.3	60.6
5-Mar	5	4	7	8	14	24	A	33	23	18	13	10	8	8	8	7	7	13	23	17	23	20	8	9	13.5	33.5
6-Mar	10	2	2	2	1	A	4	4	6	6	7	7	8	6	7	5	9	6	6	7	9	11	7	7	6.0	11.3
7-Mar	9	6	4	5	A	25	48	64	62	19	18	13	8	7	8	6	5	4	5	5	6	6	6	8	15.1	63.8
8-Mar	5	5	3	A	4	5	4	4	7	7	4	4	4	4	3	2	2	3	3	2	1	2	1	1	3.5	7.1
9-Mar	1	1	A	2	2	4	8	6	5	6	3	3	3	3	6	7	5	6	7	4	4	6	8	9	4.9	9.2
10-Mar	9	A	3	3	4	10	26	24	18	12	18	30	22	17	12	10	6	9	7	7	5	4	3	3	11.4	30.1
11-Mar	A	3	2	2	3	5	8	10	6	9	7	8	4	5	8	5	6	6	7	6	6	7	6	A	5.8	9.6
12-Mar	5	4	4	5	5	5	12	16	24	34	21	26	18	27	30	6	5	4	8	12	20	28	A	5	14.1	33.9
13-Mar	4	7	13	25	23	36	48	48	36	31	41	28	20	5	6	8	35	31	51	58	64	A	20	10	28.1	63.7
14-Mar	13	21	34	18	11	28	49	69	64	108	84	53	66	19	33	20	15	4	2	2	A	1	1	1	31.0	108.2
15-Mar	1	1	1	2	5	33	41	50	44	4	3	2	1	1	1	1	1	2	3	A	26	25	42	45	14.5	49.9
16-Mar	45	43	34	26	16	26	45	98	55	15	8	6	8	7	5	7	13	10	A	19	23	30	39	39	26.8	97.6
17-Mar	33	30	23	28	28	16	25	41	19	11	9	9	8	7	7	6	6	A	8	9	11	13	8	8	15.7	40.6
18-Mar	11	17	15	22	12	11	21	17	11	9	8	6	4	3	2	3	A	4	10	20	25	32	22	8	12.7	32.3
19-Mar	8	11	14	16	17	25	16	21	16	9	7	9	5	5	6	A	7	6	5	6	6	5	5	5	9.9	25.4
20-Mar	3	3	4	4	4	6	10	12	14	17	6	5	4	3	A	5	6	5	4	4	4	3	3	3	5.7	16.8
21-Mar	2	2	2	3	5	6	5	5	6	5	5	5	6	A	5	5	3	3	4	5	5	4	5	4	4.4	6.4
22-Mar	3	3	4	4	5	8	10	17	14	12	8	8	A	7	3	5	5	7	7	12	12	17	26	18	9.3	25.8
23-Mar	11	11	13	17	12	18	38	44	57	57	9	A	6	9	8	5	6	6	8	11	11	10	8	13	16.8	56.9
24-Mar	10	11	12	15	16	13	18	31	36	26	A	25	17	18	12	7	4	4	10	18	19	17	23	31	17.1	35.6
25-Mar	49	42	36	38	41	26	40	56	46	A	18	18	10	3	3	4	6	9	7	12	16	14	14	7	22.4	55.7
26-Mar	11	8	9	11	12	30	33	27	A	25	19	16	12	9	8	5	3	4	4	5	4	4	7	13	12.1	33.5
27-Mar	23	20	23	21	15	20	19	A	35	9	10	27	24	7	4	6	8	19	19	19	8	6	3	4	15.2	35.0
28-Mar	2	4	3	5	7	5	A	9	7	4	2	1	2	2	2	3	3	2	2	4	3	11	20	44	6.4	44.3
29-Mar	34	20	15	14	21	A	28	38	37	32	6	4	3	2	2	1	1	2	2	2	2	2	2	2	11.8	38.1
30-Mar	3	1	1	1	A	9	21	40	37	11	3	1	2	2	4	4	3	2	4	9	19	17	27	23	10.5	39.6
31-Mar	8	4	4	A	6	10	9	8	6	4	4	4	4	5	3	3	4	3	2	3	2	1	1	0	4.2	9.5
12.8 11.2 11.7 12.1 12.6 17.2 24.4 31.4 27.1 22.2 14.9 15.8 14.1 9.6 9.6 8.0 9.0 8.3 9.3 10.7 12.4 11.2 12.7 12.6																									Diurnal Average	
48.7 42.6 35.9 38.3 40.7 41.4 48.9 97.6 63.9 108.2 83.7 60.6 66.0 56.1 40.8 50.8 49.1 41.4 51.1 57.8 63.7 32.3 42.0 45.1																									Diurnal Maximum	
C - Calibration M - Maintenance A - Automated Daily Zero Span																										

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - March 2015



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

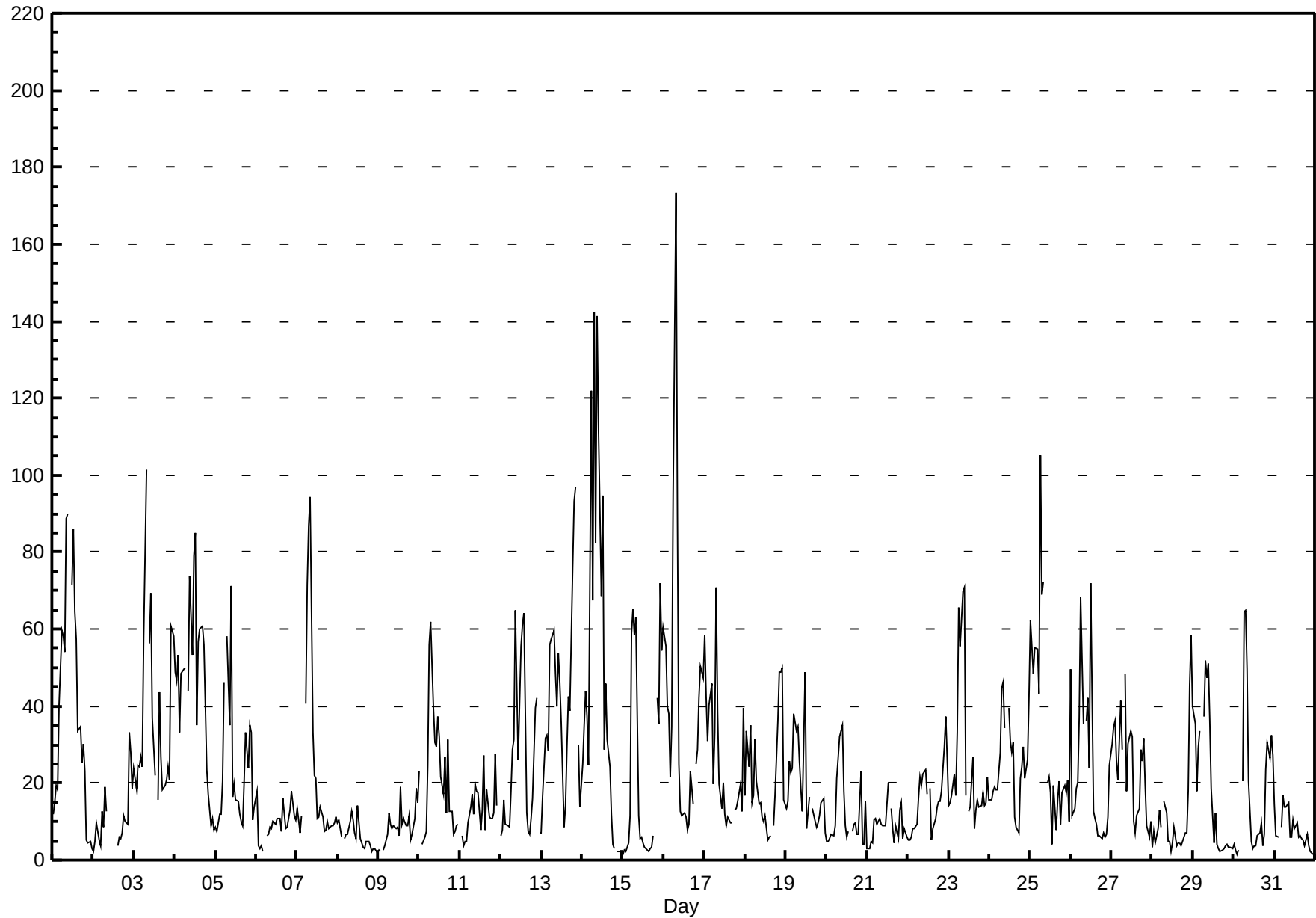
Henry Pirker - March 2015

Maximum Value: 173.3 ppb on Mar 16 08:00																					Maximum Daily Average: 50.1 ppb on Mar 14				Hours in Service: 744	
Minimum Value: 1 ppb on Mar 30 03:00																					Minimum Daily Average: 6.3 ppb on Mar 8				Hours of Data: 707	
Maximum Diurnal Average: 49.1 ppb at hour 8																					Minimum Diurnal Average: 13.8 ppb at hour 16				Hours of Missing Data: 37	
Monthly Average: 23.00 ppb																					Percentiles: P ₁ = 2.1 P ₁₀ = 4.4 Q ₁ = 8.1 Median = 14.8 Q ₃ = 31.6 P ₉₀ = 55.5 P ₉₉ = 99.5				Hours of Calibration: 36	
																									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-Mar	12	15	19	18	40	60	58	54	89	90	A	72	86	65	58	34	35	25	30	23	5	5	5	3	39.1	89.9
2-Mar	2	5	10	5	4	13	8	19	13	C	C	C	C	C	4	6	6	7	12	10	9	33	28	19	11.2	33.4
3-Mar	24	19	25	24	27	24	58	102	A	56	70	37	22	M	16	43	27	18	19	21	24	21	61	58	36.2	101.5
4-Mar	49	47	53	33	49	49	50	A	44	74	53	79	85	35	57	60	61	56	40	24	17	9	11	8	45.3	85.1
5-Mar	9	7	12	12	21	46	A	58	35	71	16	20	16	15	12	10	9	20	33	24	35	33	11	14	23.4	71.3
6-Mar	18	4	3	4	2	A	7	7	9	8	10	9	11	11	11	8	16	8	9	11	13	18	11	10	9.4	17.9
7-Mar	14	10	7	12	A	41	72	87	94	33	22	21	11	11	14	11	7	8	10	8	9	9	10	11	23.1	94.5
8-Mar	10	10	6	A	6	7	7	10	13	10	7	6	14	6	5	4	3	5	5	4	2	3	3	2	6.3	14.3
9-Mar	3	2	A	3	4	7	12	9	8	9	8	9	6	19	9	11	9	9	11	5	7	11	19	15	8.9	19.0
10-Mar	23	A	4	6	7	25	56	62	39	31	30	37	32	22	17	27	12	32	13	13	7	7	9	9	22.6	62.0
11-Mar	A	6	4	5	5	10	14	17	12	20	18	17	8	13	27	8	18	11	11	11	12	27	14	A	13.1	27.5
12-Mar	6	8	16	9	9	8	18	29	31	65	26	41	56	61	64	12	7	7	11	16	39	42	A	7	25.6	65.0
13-Mar	7	16	32	33	28	56	57	60	48	40	54	46	36	9	14	29	43	39	76	93	97	A	30	14	41.6	97.0
14-Mar	25	35	44	37	24	122	67	143	83	141	112	69	95	29	46	31	24	12	4	3	A	2	2	2	50.1	142.5
15-Mar	1	3	2	4	12	59	65	59	63	12	6	6	5	3	3	2	3	3	6	A	42	35	72	54	22.7	72.0
16-Mar	60	55	40	38	22	35	95	173	90	25	13	12	12	11	8	9	23	15	A	25	29	42	50	47	40.4	173.3
17-Mar	59	43	31	40	46	20	33	71	38	20	13	20	12	9	11	10	10	A	13	14	15	20	13	40	26.1	70.9
18-Mar	17	34	24	35	15	17	31	21	14	15	11	10	12	5	6	6	A	9	17	36	49	49	50	16	21.6	49.9
19-Mar	13	15	26	23	24	38	33	35	26	19	13	49	8	12	16	A	13	10	9	10	11	15	16	7	19.2	48.9
20-Mar	5	5	6	7	6	9	21	27	32	35	18	9	6	7	A	7	9	10	7	7	23	4	4	15	12.1	34.9
21-Mar	3	3	5	4	10	11	9	11	9	9	9	9	20	A	13	8	5	9	6	13	15	6	8	6	8.8	20.3
22-Mar	5	5	6	8	8	9	16	22	19	23	23	17	A	18	5	8	11	14	15	15	18	29	37	26	15.7	37.2
23-Mar	14	15	17	22	17	33	66	55	70	71	17	A	13	14	27	8	13	16	14	14	17	14	15	22	25.3	70.8
24-Mar	15	16	18	19	18	18	28	45	46	34	A	40	31	28	30	11	9	7	21	24	29	21	26	42	25.1	46.3
25-Mar	62	55	48	55	55	43	105	69	72	A	20	22	18	4	19	8	16	20	9	18	19	18	21	10	34.2	105.1
26-Mar	50	12	14	19	20	37	68	35	A	36	42	24	72	13	11	9	6	6	6	7	6	7	11	25	23.3	72.1
27-Mar	30	35	36	26	21	41	29	A	48	18	30	34	32	10	7	12	14	29	26	32	19	9	6	10	24.0	48.5
28-Mar	3	7	4	8	13	9	A	15	12	5	5	2	4	9	4	4	4	4	5	7	7	18	46	59	11.1	58.6
29-Mar	40	35	18	29	34	A	37	52	47	51	37	19	5	12	4	3	2	3	3	4	4	3	3	3	19.5	51.9
30-Mar	4	2	1	3	A	21	65	65	49	21	5	3	4	4	6	7	10	4	7	24	31	27	32	27	18.3	64.9
31-Mar	15	6	6	A	9	17	14	14	15	6	6	10	8	10	6	6	6	5	4	7	4	2	2	1	7.7	16.7
20.0 17.7 17.8 18.7 19.1 30.5 41.4 49.1 40.4 36.1 24.8 25.8 25.5 16.6 17.7 13.8 14.3 14.0 15.0 17.3 20.6 18.0 20.8 19.4																								Diurnal Average		
62.2 55.5 53.3 55.3 54.7 122.1 105.1 173.3 94.5 141.4 111.9 79.0 94.6 64.6 64.2 60.0 60.9 55.8 75.9 93.2 97.0 48.7 72.0 58.6																								Diurnal Maximum		
C - Calibration M - Maintenance A - Automated Daily Zero Span																										

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

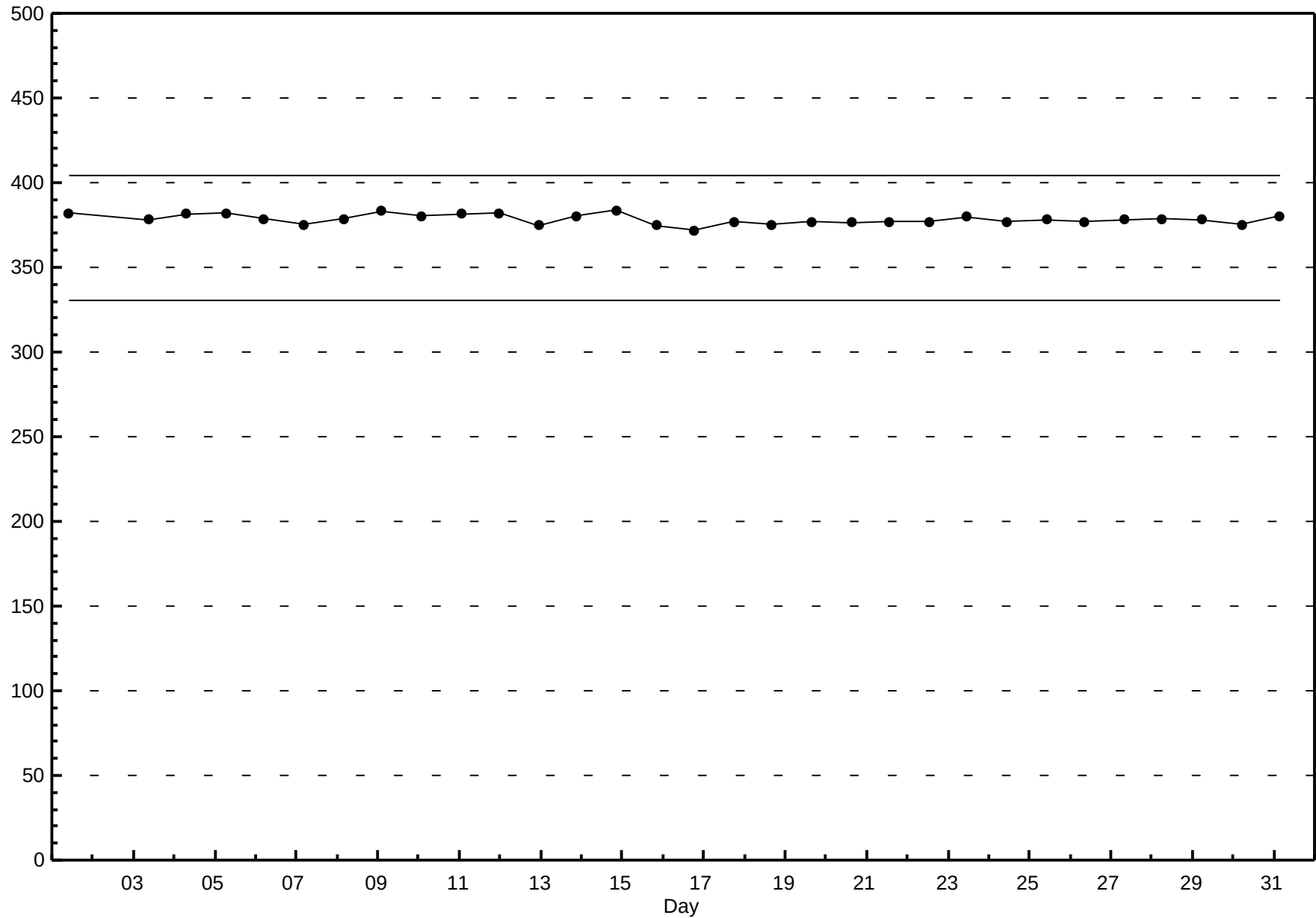
Henry Pirker - March 2015



Span Responses

Oxides of Nitrogen (NO_x)

Henry Pirker - March 2015



Hourly Averages

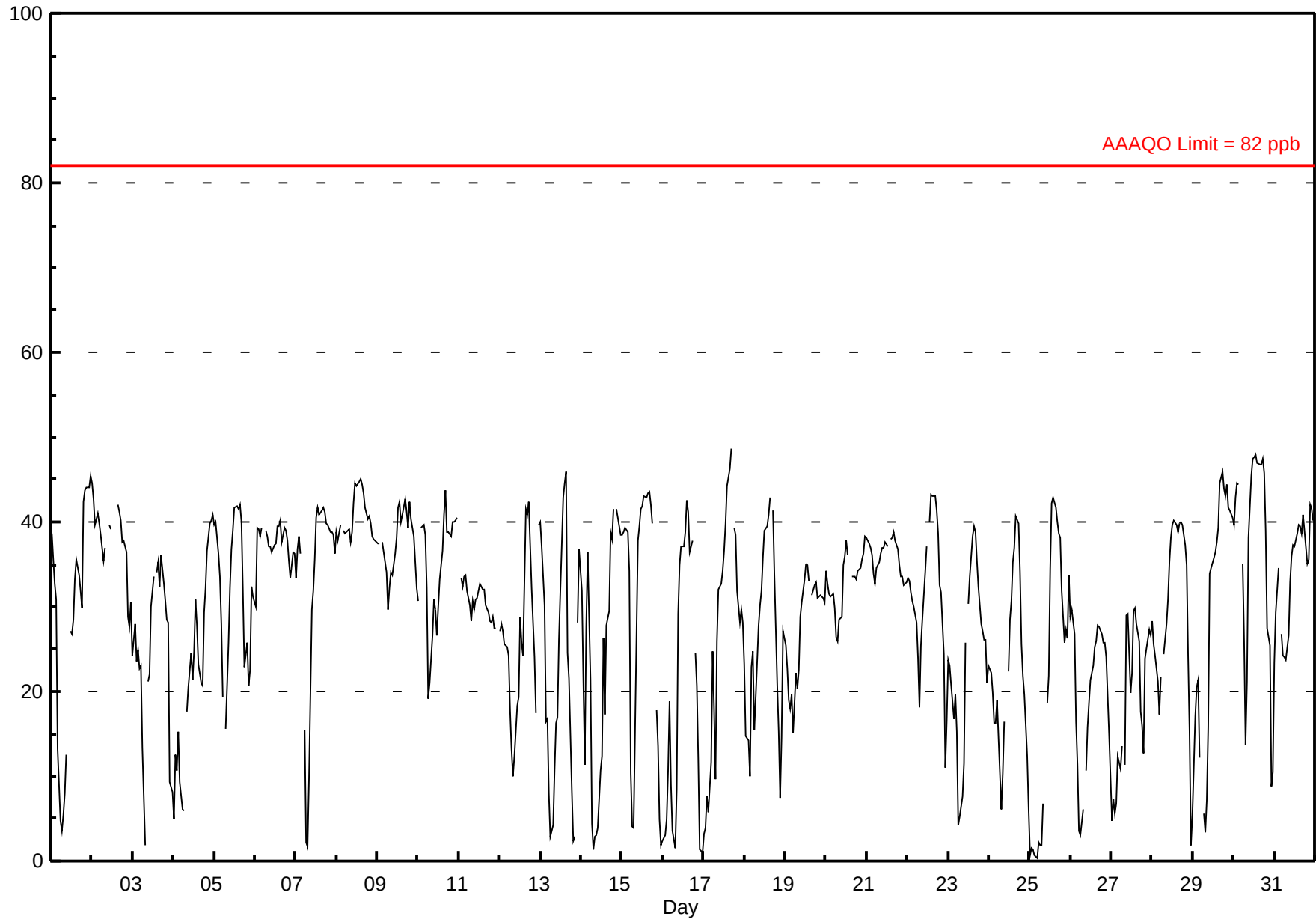
Ozone (O₃) - ppb

Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 48.7 ppb on Mar 17 17:00 Maximum Daily Average: 40.6 ppb on Mar 8																								Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 35 Percent Operational Time: 99.9		
Minimum Value: 0 ppb on Mar 25 05:00 Minimum Daily Average: 18.9 ppb on Mar 27 Maximum Diurnal Average: 38.6 ppb at hour 16 Minimum Diurnal Average: 15.7 ppb at hour 8 Monthly Average: 28.87 ppb Percentiles: P ₁ = 1.4 P ₁₀ = 9.9 Q ₁ = 21.8 Median = 31.8 Q ₃ = 38.4 P ₉₀ = 41.5 P ₉₉ = 46.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	39	36	33	31	13	5	4	5	8	12	A	27	27	28	33	36	34	32	30	42	44	44	44	45	28.3	45.4
2-Mar	45	43	40	41	40	38	37	35	37	A	40	39	C	C	C	42	41	40	38	38	36	29	28	30	37.8	44.5
3-Mar	24	28	24	25	23	23	13	2	A	21	22	30	34	M	34	35	32	36	33	31	29	28	9	8	24.7	36.1
4-Mar	5	13	11	15	9	6	6	A	18	21	25	21	25	31	28	23	21	21	29	32	37	40	40	41	22.5	40.9
5-Mar	40	40	36	34	28	19	A	16	26	32	37	39	42	42	42	42	40	32	23	26	21	23	32	31	32.2	42.0
6-Mar	30	39	39	38	39	A	39	38	37	37	37	37	38	40	39	40	38	39	39	38	35	33	36	36	37.5	40.2
7-Mar	33	37	38	36	A	15	2	2	10	30	32	36	41	42	41	41	42	41	40	40	39	39	38	36	32.6	41.7
8-Mar	39	38	40	A	39	39	39	39	38	39	42	45	44	45	45	44	43	42	40	41	40	38	38	38	40.6	45.2
9-Mar	37	37	A	38	36	34	30	32	34	34	36	38	42	42	40	41	43	41	39	42	40	38	35	32	37.6	42.7
10-Mar	31	A	39	40	39	32	19	21	27	31	30	27	30	33	37	41	44	39	39	38	40	40	40	41	34.6	43.7
11-Mar	A	33	32	34	34	32	30	28	31	30	31	31	33	32	32	32	30	29	28	28	29	28	27	A	30.7	33.7
12-Mar	27	28	27	26	25	24	18	13	10	12	18	19	29	26	24	42	41	42	37	32	24	18	A	40	26.2	42.3
13-Mar	40	37	30	16	17	8	3	4	11	16	17	26	32	43	45	46	25	22	8	2	3	A	28	37	22.4	45.9
14-Mar	32	21	11	28	36	21	4	1	3	3	4	11	12	26	17	28	30	39	38	41	A	41	40	38	22.9	41.5
15-Mar	38	39	39	39	34	10	4	4	15	38	40	41	42	43	43	43	44	42	40	A	18	14	5	2	29.4	43.6
16-Mar	2	3	5	11	19	9	4	2	9	29	35	37	37	39	42	41	36	38	A	25	21	12	1	1	19.9	42.5
17-Mar	3	4	8	6	12	25	18	10	26	32	33	34	37	40	44	46	49	A	39	38	32	28	30	28	27.0	48.7
18-Mar	23	15	14	10	23	25	15	19	28	30	32	36	39	39	41	43	A	41	34	21	15	7	15	27	25.8	42.9
19-Mar	25	23	19	18	20	15	22	20	23	29	31	33	35	35	33	A	31	33	33	31	31	31	31	30	27.5	35.1
20-Mar	34	33	32	31	32	30	26	26	28	29	35	36	38	36	A	34	34	33	33	34	35	36	36	38	33.0	38.2
21-Mar	38	37	37	36	34	33	35	35	36	37	37	38	37	A	38	38	39	38	37	35	34	34	33	33	36.0	38.9
22-Mar	33	33	32	31	30	28	24	18	25	29	34	37	A	40	43	43	43	41	39	32	32	24	11	17	31.3	43.2
23-Mar	24	23	21	17	20	15	4	5	8	12	26	A	30	34	38	40	39	35	32	28	27	26	26	21	23.9	39.5
24-Mar	23	22	20	16	16	19	10	6	10	16	A	22	28	31	35	37	41	40	34	26	22	20	12	6	22.3	40.6
25-Mar	1	1	1	1	0	2	2	2	7	A	19	22	34	42	43	42	40	39	38	32	26	27	26	34	20.9	42.9
26-Mar	29	30	27	17	11	4	3	6	A	11	16	19	21	23	25	26	28	28	27	26	26	24	19	15	20.0	29.7
27-Mar	5	7	6	7	12	11	14	A	11	29	29	20	22	29	30	28	26	18	16	13	24	25	27	27	18.9	29.8
28-Mar	28	26	24	21	17	22	A	24	28	31	35	38	40	40	40	39	40	40	40	37	35	24	15	2	29.8	40.1
29-Mar	5	17	20	21	12	A	6	3	7	16	34	35	36	37	38	39	45	46	44	43	44	42	41	41	29.2	45.9
30-Mar	40	43	45	44	A	35	26	14	21	38	45	48	48	48	47	47	47	48	46	39	27	25	9	11	36.5	47.9
31-Mar	23	29	35	A	27	24	24	24	27	33	36	37	37	39	40	39	39	41	39	35	36	42	42	40	34.2	42.1
26.6 27.2 26.1 25.0 24.0 20.8 16.6 15.7 20.6 26.1 30.5 32.0 34.1 36.6 37.1 38.6 37.4 36.5 34.4 32.2 30.0 29.4 27.2 27.5																								Diurnal Average		
44.5 42.8 44.5 44.4 39.8 38.7 39.1 39.1 37.6 38.8 45.5 47.5 47.6 47.9 47.0 46.8 48.7 47.5 45.7 43.0 44.4 44.1 44.1 45.4																								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
Henry Pirker - March 2015



Hourly Maximums

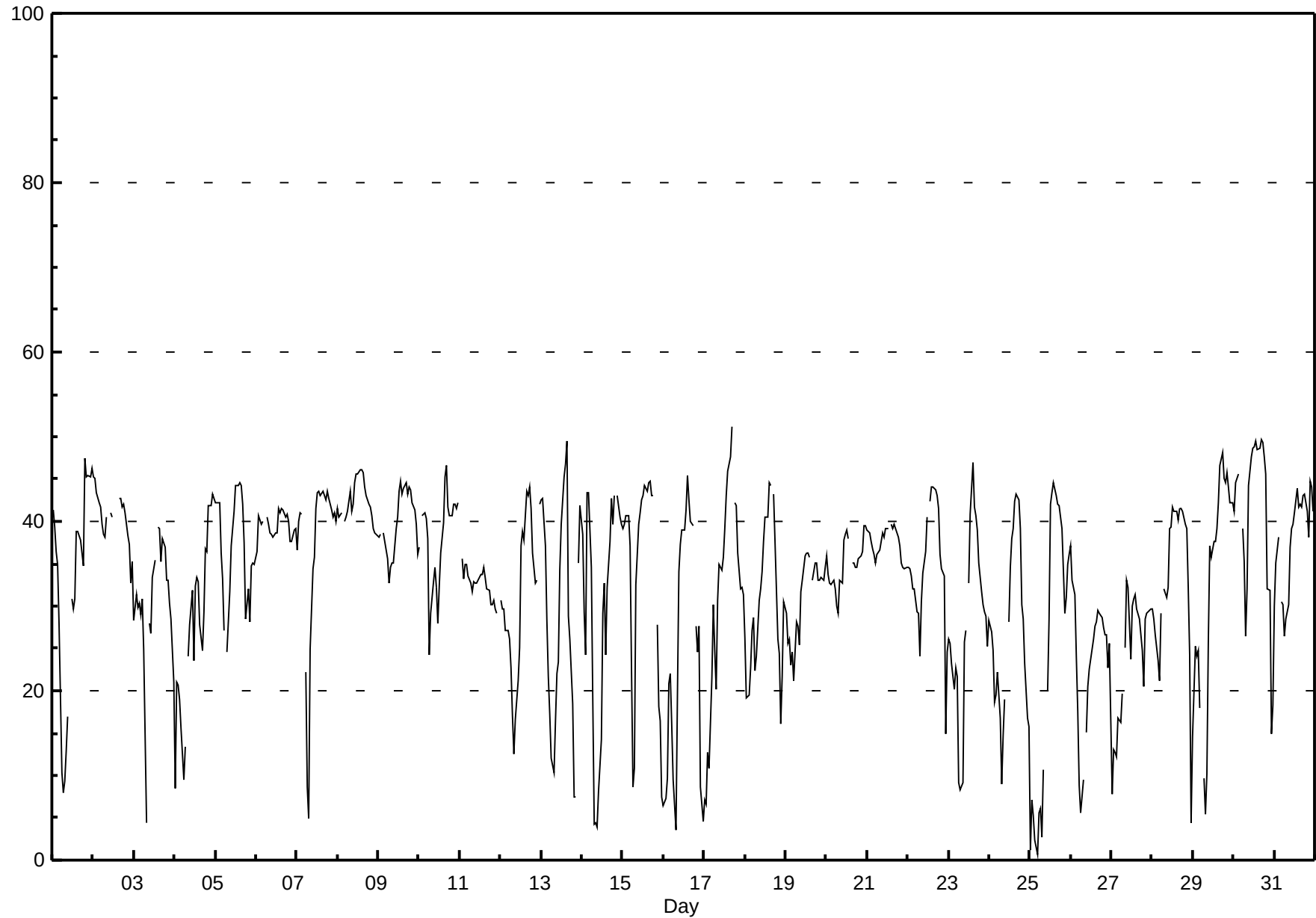
Ozone (O₃) - ppb

Henry Pirker - March 2015

Maximum Value: 51.2 ppb on Mar 17 17:00																								Hours in Service: 744		
Maximum Daily Average: 42.3 ppb on Mar 8																								Hours of Data: 708		
Minimum Value: 1 ppb on Mar 25 05:00																								Hours of Missing Data: 36		
Maximum Diurnal Average: 40.9 ppb at hour 16																								Hours of Calibration: 35		
Monthly Average: 32.65 ppb																								Percent Operational Time: 99.9		
Minimum Daily Average: 23.8 ppb on Mar 26																										
Minimum Diurnal Average: 20.3 ppb at hour 8																										
Percentiles: P ₁ = 4.3 P ₁₀ = 16.7 Q ₁ = 27.3 Median = 35.0 Q ₃ = 40.9 P ₉₀ = 43.6 P ₉₉ = 48.4																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	41	39	36	35	28	10	8	9	13	17	A	31	30	31	39	39	38	36	35	47	45	45	45	46	32.4	47.4
2-Mar	45	45	43	42	42	40	39	38	41	A	41	41	C	C	C	43	43	42	42	41	38	37	33	35	40.5	45.2
3-Mar	28	31	30	30	29	31	25	4	A	28	27	33	35	M	39	39	35	38	37	33	33	30	28	21	30.3	39.3
4-Mar	9	21	21	19	16	10	13	A	24	28	32	24	32	33	33	28	25	29	37	37	42	42	43	43	27.8	43.3
5-Mar	42	42	42	36	33	27	A	25	32	37	39	41	44	44	45	44	42	37	28	32	28	35	35	35	36.8	44.6
6-Mar	36	41	40	40	40	A	41	40	39	38	38	39	39	42	41	42	41	41	41	40	38	38	39	39	39.6	41.6
7-Mar	37	40	41	41	A	22	9	5	25	34	36	42	43	44	43	44	43	43	44	43	41	41	41	40	36.5	43.6
8-Mar	42	41	41	A	40	41	41	44	41	42	45	46	46	46	46	46	44	43	42	42	41	39	39	38	42.3	46.1
9-Mar	38	38	A	39	38	36	33	35	35	35	39	41	44	45	43	44	45	43	44	44	42	41	40	36	39.8	44.8
10-Mar	37	A	41	41	40	38	24	29	33	35	32	28	32	36	40	45	47	42	41	41	42	42	42	42	37.8	46.5
11-Mar	A	36	33	35	35	34	33	32	33	33	33	33	34	34	35	33	32	32	30	30	31	30	29	A	32.6	35.6
12-Mar	31	30	30	27	27	26	23	17	13	17	21	25	37	39	38	44	43	44	42	36	33	33	A	42	31.1	44.0
13-Mar	43	43	37	28	22	17	12	10	16	22	23	34	40	45	47	49	29	26	18	7	7	A	35	42	28.5	49.5
14-Mar	38	29	24	43	43	34	19	4	4	4	8	14	29	33	24	32	38	43	40	43	A	43	41	40	29.2	43.3
15-Mar	39	40	41	41	37	22	9	11	33	40	41	43	43	44	44	45	45	43	43	A	28	18	16	7	33.5	44.8
16-Mar	6	7	10	21	22	16	10	4	20	34	37	39	39	41	45	43	40	40	A	28	25	28	9	5	24.6	45.4
17-Mar	7	7	13	11	21	30	25	20	31	35	34	36	39	43	46	48	51	A	42	42	36	32	32	31	31.0	51.2
18-Mar	26	19	19	23	27	29	22	24	31	32	34	38	41	41	45	44	A	43	38	26	24	16	22	31	30.2	44.6
19-Mar	29	26	26	23	25	21	28	28	25	32	33	36	36	36	36	A	33	35	35	33	33	33	33	35	30.9	36.3
20-Mar	36	34	33	33	33	32	30	29	33	33	38	38	39	38	A	35	35	35	35	36	36	36	40	40	35.0	39.6
21-Mar	39	39	38	37	36	35	36	37	38	39	38	39	39	A	40	39	40	39	38	37	35	35	34	35	37.4	39.6
22-Mar	35	34	34	32	32	29	29	24	31	34	36	41	A	42	44	44	44	43	42	36	34	34	15	25	34.5	44.1
23-Mar	26	26	23	20	23	22	9	8	9	26	27	A	33	41	47	42	41	39	35	32	30	29	29	25	27.9	47.0
24-Mar	28	27	25	19	20	22	17	9	15	19	A	28	35	38	39	42	43	43	39	30	28	23	17	16	27.0	43.1
25-Mar	1	7	5	2	1	6	6	3	11	A	20	28	42	43	45	43	42	42	41	39	29	31	35	36	24.3	44.6
26-Mar	37	33	31	24	18	9	6	9	A	15	21	23	24	26	28	28	29	29	29	27	27	27	23	26	23.8	37.0
27-Mar	8	13	13	12	17	16	20	A	25	33	32	24	30	31	31	30	29	27	25	21	28	29	29	30	24.0	33.1
28-Mar	30	28	27	24	21	29	A	32	31	32	39	39	42	41	41	40	41	41	41	40	39	32	24	4	33.0	41.6
29-Mar	15	25	24	25	18	A	10	5	10	26	37	36	38	38	39	42	47	48	45	45	46	44	42	42	32.4	48.1
30-Mar	41	45	45	46	A	39	35	26	32	44	48	49	49	50	48	49	50	49	48	46	32	32	15	18	40.6	49.7
31-Mar	30	35	38	A	31	30	27	28	30	37	39	40	41	44	42	42	42	43	43	41	38	45	44	41	37.9	44.8
30.0 30.7 30.1 29.2 28.0 26.0 21.9 20.3 25.9 30.3 33.4 34.9 37.7 39.6 40.4 40.9 39.8 39.2 37.9 35.8 33.7 34.0 31.6 31.5																								Diurnal Average		
45.2 45.0 45.1 45.6 43.3 40.6 41.1 43.6 41.1 44.2 47.6 48.6 48.8 49.6 48.4 49.5 51.2 49.4 47.6 47.4 45.8 45.4 45.2 46.2																								Diurnal Maximum		
C - Calibration M - Maintenance A - Automated Daily Zero Span																										

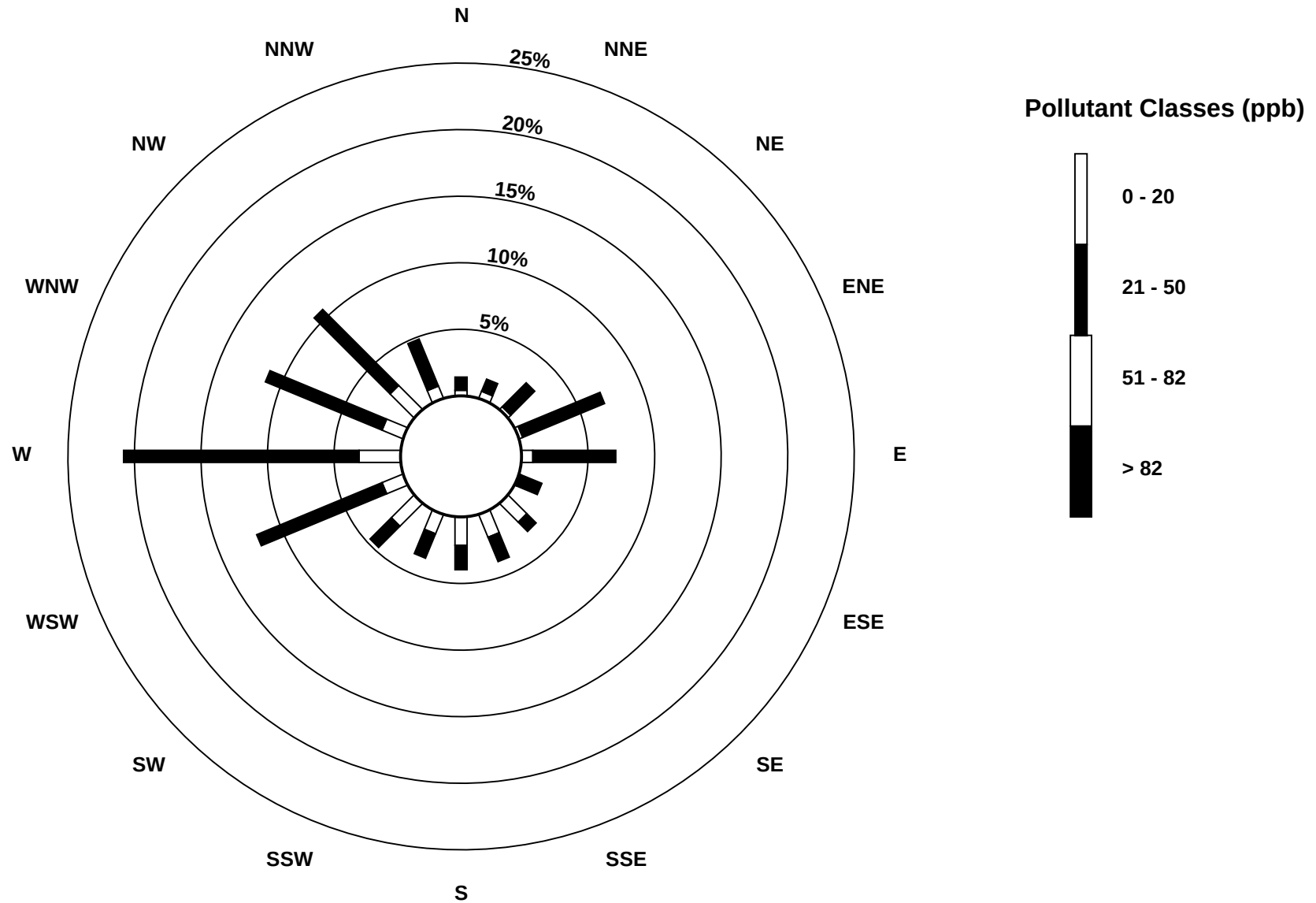
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - March 2015



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - March 2015



Eight Hour Running Averages

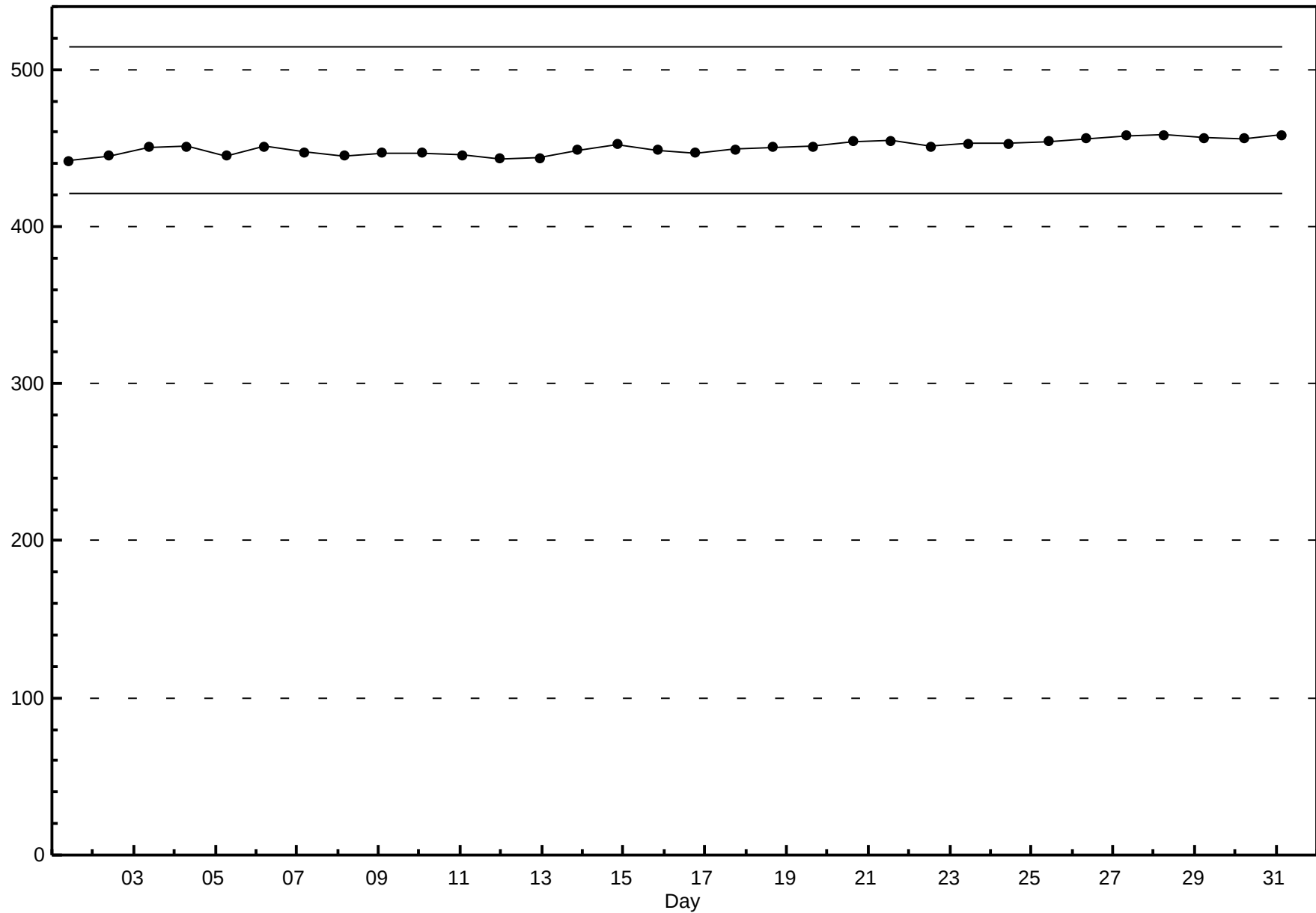
Ozone (O₃) - ppb

Henry Pirker - March 2015

Maximum Value: 47.1 ppb on Mar 30 19:00																					Hours in Service: 744					
Minimum Value: 1.3 ppb on Mar 25 08:00																					Hours of Data: 737					
																					Hours of Missing Data: 7					
Percentiles: P ₁ = 5.7 P ₁₀ = 14.3 Q ₁ = 22.3 Median = 30.5 Q ₃ = 36.7 P ₉₀ = 39.4 P ₉₉ = 43.5																					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-Mar	23	23	23	25	25	25	24	21	17	14	11	11	13	16	20	25	28	31	31	33	35	37	38	39	39	39.4
2-Mar	41	42	43	43	43	42	41	40	39	38	38	38	38	N	N	N	N	N	N	N	39	38	36	35	35	43.3
3-Mar	33	31	30	28	26	26	24	20	20	19	18	19	21	20	24	29	30	32	33	34	33	32	29	26	26	33.5
4-Mar	22	19	17	15	12	10	9	9	11	12	14	15	17	21	24	24	24	24	25	26	28	29	30	33	33	32.6
5-Mar	35	37	38	38	37	35	34	30	28	27	27	28	30	33	34	38	39	39	38	36	33	31	30	28	28	39.4
6-Mar	27	28	30	32	34	36	37	38	39	38	38	38	38	38	38	38	38	38	39	39	39	38	37	37	37	38.8
7-Mar	36	36	36	36	36	33	28	23	20	19	18	18	21	24	29	34	38	39	40	41	41	40	40	39	39	40.8
8-Mar	39	39	39	38	38	38	38	39	39	39	39	40	41	41	42	43	43	44	44	43	43	42	41	40	40	43.8
9-Mar	39	39	38	38	38	37	36	35	35	34	34	34	35	36	37	38	39	40	41	41	41	41	40	39	39	41.3
10-Mar	37	37	37	37	36	35	33	32	31	31	30	28	27	27	29	32	34	35	36	38	39	40	40	40	40	40.1
11-Mar	40	39	38	37	36	35	34	32	32	31	31	31	31	31	31	31	31	31	31	31	30	30	29	29	29	39.5
12-Mar	28	28	28	27	27	26	25	24	21	19	18	18	18	18	19	23	26	30	33	34	34	33	34	33	33	34.2
13-Mar	33	33	32	29	28	27	24	19	16	13	12	13	15	19	24	29	31	32	31	28	24	21	19	18	18	33.3
14-Mar	19	19	19	23	28	27	24	19	16	14	13	11	7	8	10	13	16	21	25	29	31	33	37	38	38	38.2
15-Mar	39	39	40	39	39	35	30	26	23	23	23	23	24	28	33	38	42	42	42	42	39	35	29	23	23	42.4
16-Mar	17	12	7	7	8	7	7	7	8	11	15	18	20	24	29	34	37	38	39	37	35	31	25	19	19	38.7
17-Mar	14	10	9	7	6	7	9	11	13	17	20	24	27	29	32	37	39	40	41	42	41	40	37	35	35	41.9
18-Mar	31	29	26	22	21	21	19	18	19	21	23	26	28	30	33	36	37	39	39	37	33	29	25	23	23	39.0
19-Mar	23	21	19	19	19	20	21	20	20	21	22	24	26	28	30	31	32	33	33	33	32	32	32	31	31	33.3
20-Mar	32	32	32	32	32	32	31	30	30	29	30	30	31	32	33	34	34	35	35	35	34	34	34	35	35	35.0
21-Mar	35	36	36	37	37	36	36	36	35	35	35	36	36	36	37	37	38	38	38	37	37	36	36	35	35	37.8
22-Mar	34	34	33	33	32	32	30	29	28	27	27	28	28	30	32	36	38	40	41	40	39	37	33	30	30	40.9
23-Mar	27	25	23	21	19	18	17	16	14	13	13	13	14	17	22	27	31	35	35	35	34	33	32	29	29	35.5
24-Mar	27	26	24	23	21	20	18	17	15	14	14	14	16	18	21	26	30	33	34	34	33	32	29	25	25	33.9
25-Mar	20	15	11	8	5	3	2	1	2	2	5	8	13	18	24	30	35	35	37	39	38	36	34	33	33	38.7
26-Mar	31	30	29	27	25	22	19	16	14	11	10	10	11	14	17	20	21	23	25	25	26	26	25	24	24	31.3
27-Mar	21	19	16	14	12	10	9	9	10	13	16	18	19	22	24	25	27	25	24	23	23	22	22	22	22	26.7
28-Mar	22	23	24	25	24	24	24	23	23	24	26	28	31	34	35	36	38	39	39	39	39	37	34	29	29	39.5
29-Mar	25	22	20	18	15	13	12	12	12	12	14	16	19	22	26	30	35	38	40	41	42	43	43	43	43	43.2
30-Mar	43	42	42	42	42	41	39	35	33	32	32	32	34	36	39	43	46	47	47	46	44	41	36	31	31	47.1
31-Mar	28	26	25	23	23	22	25	27	27	28	28	29	30	32	34	36	37	38	39	39	38	39	39	39	39	39.1
Diurnal Maximums																										
N - Not Valid																										

Span Responses

Ozone (O₃)
Henry Pirker - March 2015



Hourly Averages

Carbon Monoxide (CO) - ppm

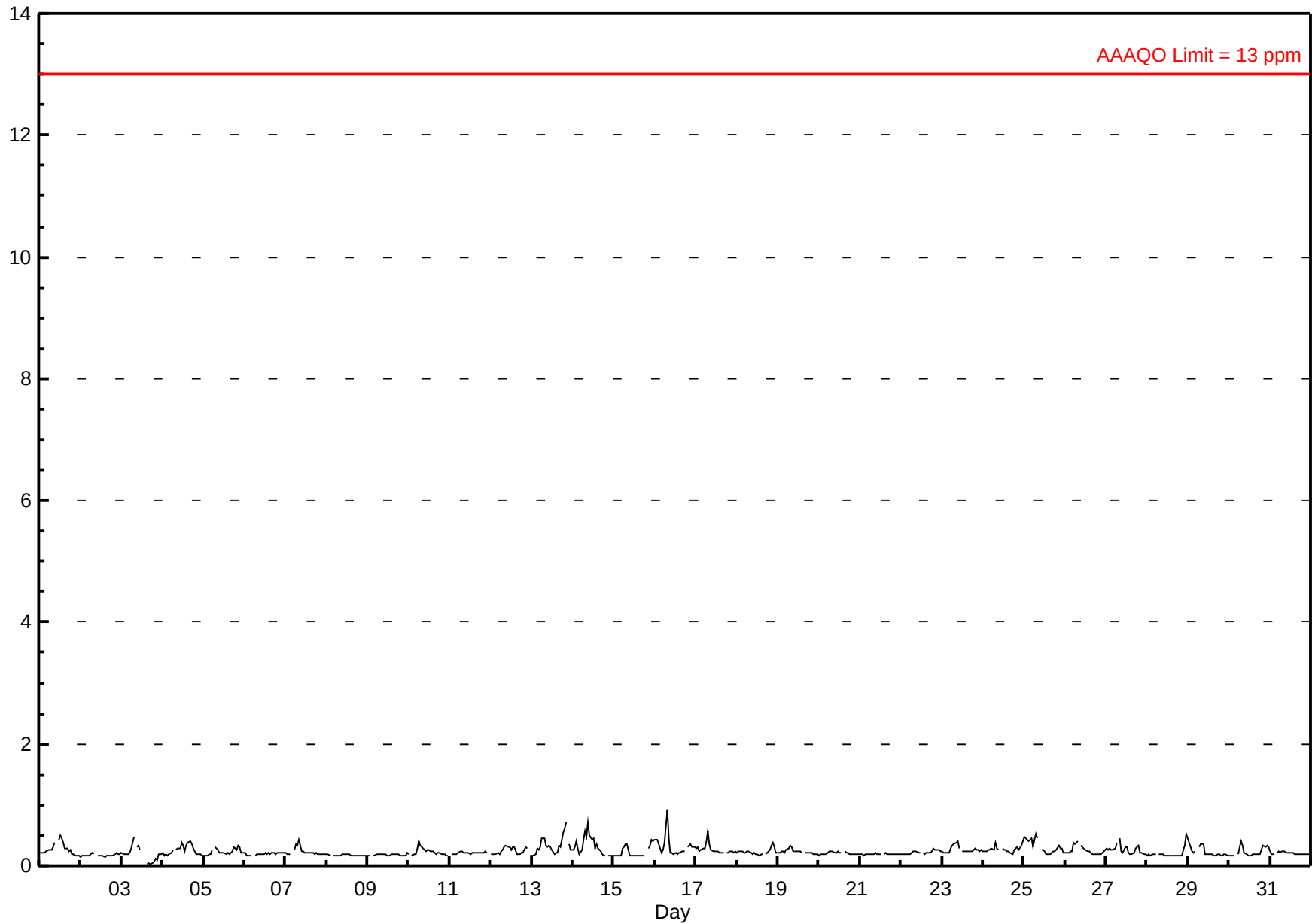
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.92 ppm on Mar 16 08:00 Maximum Daily Average: 0.33 ppm on Mar 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: 0.0 ppm on Mar 3 16:00 Maximum Diurnal Average: 0.34 ppm at hour 8 Monthly Average: 0.237 ppm										Minimum Daily Average: 0.17 ppm on Mar 2 Minimum Diurnal Average: 0.20 ppm at hour 16 Percentiles: P ₁ = 0.15 P ₁₀ = 0.17 Q ₁ = 0.19 Median = 0.21 Q ₃ = 0.26 P ₉₀ = 0.34 P ₉₉ = 0.53																	
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-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	A	0.4	0.5	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.27	0.49
2-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.21
3-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	A	0.3	0.3	0.3	C	C	C	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.18	0.48	
4-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.25	0.39	
5-Mar	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.23	0.32	
6-Mar	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.23	
7-Mar	0.2	0.2	0.2	0.2	A	0.3	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.43	
8-Mar	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.19	
9-Mar	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.21	
10-Mar	0.2	A	0.2	0.2	0.2	0.3	0.4	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.40	
11-Mar	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.21	0.24	
12-Mar	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	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.2	0.24	0.34	
13-Mar	0.2	0.2	0.2	0.3	0.3	0.3	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	0.7	A	0.3	0.3	0.33	0.72	
14-Mar	0.3	0.3	0.4	0.3	0.2	0.3	0.4	0.6	0.5	0.7	0.5	0.4	0.5	0.3	0.4	0.3	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.33	0.70	
15-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.4	0.4	0.23	0.42	
16-Mar	0.4	0.4	0.3	0.3	0.2	0.3	0.4	0.9	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.4	0.3	0.3	0.31	0.92	
17-Mar	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.6	0.4	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	0.2	0.27	0.56	
18-Mar	0.2	0.2	0.2	0.2	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	0.3	0.3	0.4	0.3	0.2	0.23	0.38	
19-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.34	
20-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.25	
21-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.21	
22-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.22	0.28	
23-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	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	0.3	0.26	0.41	
24-Mar	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	A	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.27	0.39	
25-Mar	0.5	0.5	0.4	0.4	0.5	0.3	0.4	0.5	0.4	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.32	0.53	
26-Mar	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4	A	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.39	
27-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.4	A	0.4	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.26	0.45	
28-Mar	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.20	0.52	
29-Mar	0.4	0.3	0.2	0.2	0.2	A	0.3	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.44	
30-Mar	0.2	0.2	0.2	0.2	A	0.2	0.3	0.4	0.3	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	0.3	0.23	0.41	
31-Mar	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.24	
0.23 0.22 0.22 0.22 0.22 0.24 0.29 0.34 0.30 0.27 0.24 0.24 0.24 0.22 0.22 0.20 0.21 0.21 0.22 0.23 0.24 0.23 0.23 0.23 0.23 0.48 0.46 0.42 0.41 0.46 0.37 0.44 0.92 0.48 0.70 0.50 0.43 0.49 0.44 0.37 0.39 0.39 0.34 0.54 0.62 0.72 0.38 0.42 0.52 Diurnal Average Diurnal Maximum																											
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na																											

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2015



Hourly Maximums

Carbon Monoxide (CO) - ppm

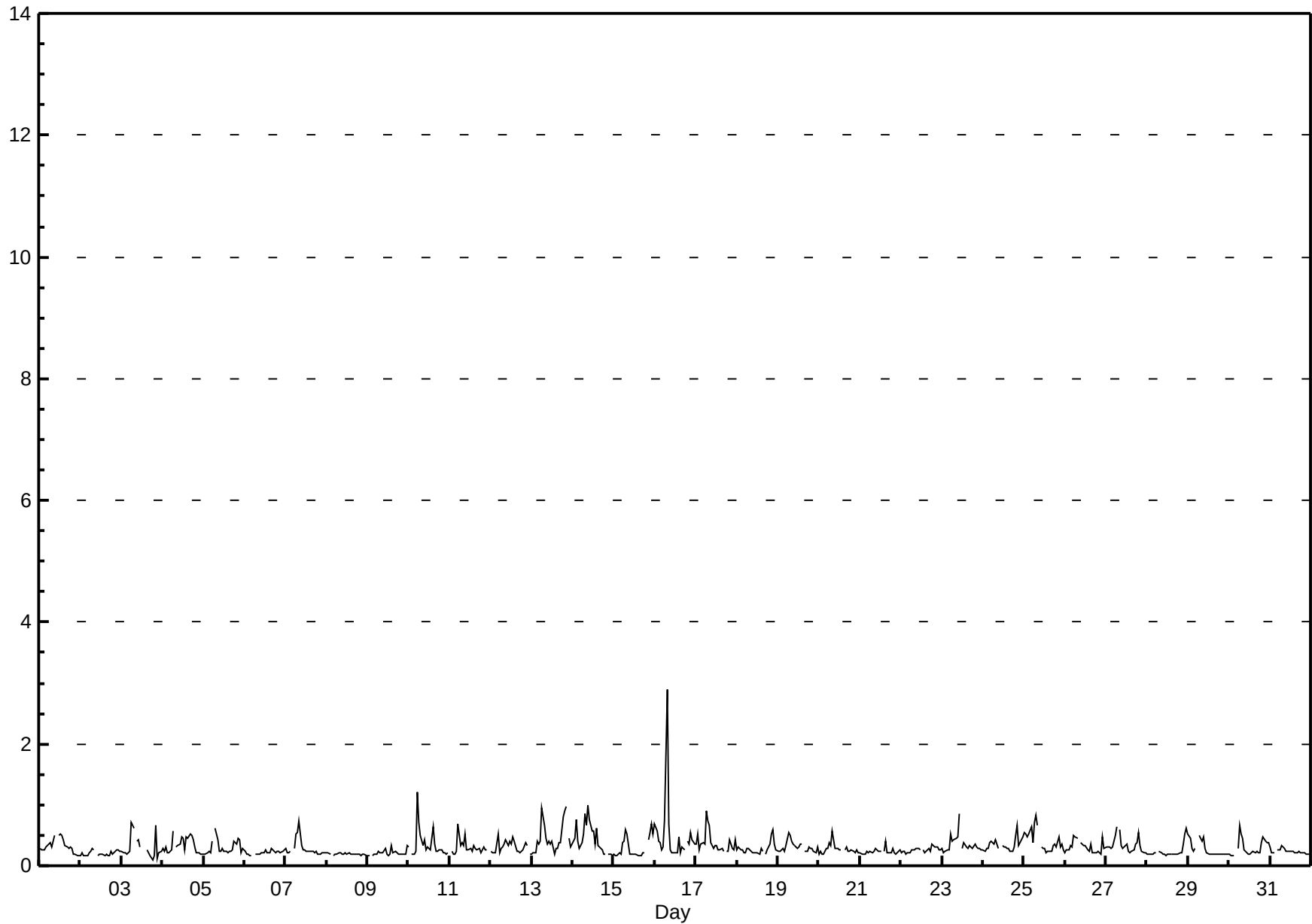
Henry Pirker - March 2015

Maximum Value: 2.89 ppm on Mar 16 08:00																					Maximum Daily Average: 0.50 ppm on Mar 16					Hours in Service: 744	
Minimum Value: 0.1 ppm on Mar 3 19:00																					Minimum Daily Average: 0.19 ppm on Mar 8					Hours of Data: 709	
Maximum Diurnal Average: 0.52 ppm at hour 8																					Minimum Diurnal Average: 0.25 ppm at hour 18					Hours of Missing Data: 35	
Monthly Average: 0.308 ppm																					Percentiles: P ₁ = 0.17 P ₁₀ = 0.19 Q ₁ = 0.21 Median = 0.25 Q ₃ = 0.35 P ₉₀ = 0.50 P ₉₉ = 0.90					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-Mar	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.5	A	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.33	0.53	
2-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.20	0.29	
3-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.7	0.6	A	0.4	0.4	0.3	C	C	C	0.2	0.2	0.2	0.1	0.2	0.7	0.1	0.2	0.2	0.29	0.71	
4-Mar	0.3	0.2	0.3	0.2	0.2	0.3	0.6	A	0.3	0.3	0.4	0.5	0.5	0.3	0.5	0.4	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.34	0.57	
5-Mar	0.2	0.2	0.2	0.2	0.2	0.4	A	0.6	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.4	0.4	0.2	0.3	0.30	0.62	
6-Mar	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.22	0.29	
7-Mar	0.3	0.2	0.2	0.2	A	0.3	0.5	0.5	0.7	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28	0.74	
8-Mar	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.22	
9-Mar	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.21	0.34	
10-Mar	0.3	A	0.2	0.2	0.2	1.2	0.7	0.5	0.3	0.4	0.3	0.3	0.3	0.3	0.6	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.35	1.21	
11-Mar	A	0.2	0.2	0.2	0.2	0.7	0.3	0.4	0.3	0.5	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	A	0.30	0.68	
12-Mar	0.2	0.2	0.2	0.2	0.5	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.3	0.4	0.3	A	0.2	0.31	0.53	
13-Mar	0.2	0.2	0.2	0.4	0.4	0.4	0.9	0.7	0.5	0.4	0.4	0.4	0.4	0.2	0.3	0.3	0.4	0.4	0.8	0.9	1.0	A	0.5	0.3	0.45	0.97	
14-Mar	0.4	0.4	0.8	0.4	0.3	0.4	0.5	0.9	0.7	1.0	0.7	0.6	0.6	0.4	0.6	0.3	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.45	0.99	
15-Mar	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.6	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.4	0.5	0.7	0.5	0.30	0.69	
16-Mar	0.7	0.6	0.4	0.4	0.3	0.3	0.7	2.9	0.7	0.3	0.2	0.2	0.2	0.2	0.5	0.2	0.3	0.3	A	0.4	0.4	0.5	0.4	0.4	0.50	2.89	
17-Mar	0.4	0.5	0.3	0.3	0.4	0.4	0.9	0.7	0.7	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.2	A	0.2	0.2	0.4	0.3	0.3	0.4	0.38	0.91	
18-Mar	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.3	0.3	0.5	0.6	0.4	0.3	0.28	0.60	
19-Mar	0.2	0.2	0.3	0.3	0.2	0.3	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	A	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.31	0.54	
20-Mar	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.6	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.27	0.57	
21-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	A	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.23	0.40	
22-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.2	0.2	0.3	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.26	0.35	
23-Mar	0.3	0.2	0.2	0.3	0.3	0.5	0.4	0.4	0.5	0.5	0.8	A	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.35	0.85	
24-Mar	0.3	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.5	0.7	0.3	0.4	0.5	0.35	0.67	
25-Mar	0.5	0.5	0.5	0.5	0.6	0.4	0.7	0.8	0.7	A	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.5	0.3	0.3	0.3	0.41	0.82	
26-Mar	0.2	0.3	0.3	0.3	0.3	0.5	0.5	0.5	A	0.4	0.4	0.3	0.3	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.3	0.31	0.50	
27-Mar	0.3	0.3	0.3	0.3	0.3	0.5	0.6	A	0.6	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.3	0.2	0.2	0.2	0.34	0.64	
28-Mar	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.6	0.23	0.61	
29-Mar	0.5	0.5	0.3	0.2	0.3	A	0.5	0.4	0.4	0.5	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	0.28	0.52	
30-Mar	0.2	0.2	0.2	0.2	A	0.3	0.7	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.4	0.4	0.30	0.66	
31-Mar	0.3	0.2	0.2	A	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.32	
																									Diurnal Average		
																									Diurnal Maximum		
C - Calibration																									A - Automated Daily Zero Span		

Hourly Maximums

Carbon Monoxide (CO) - ppm

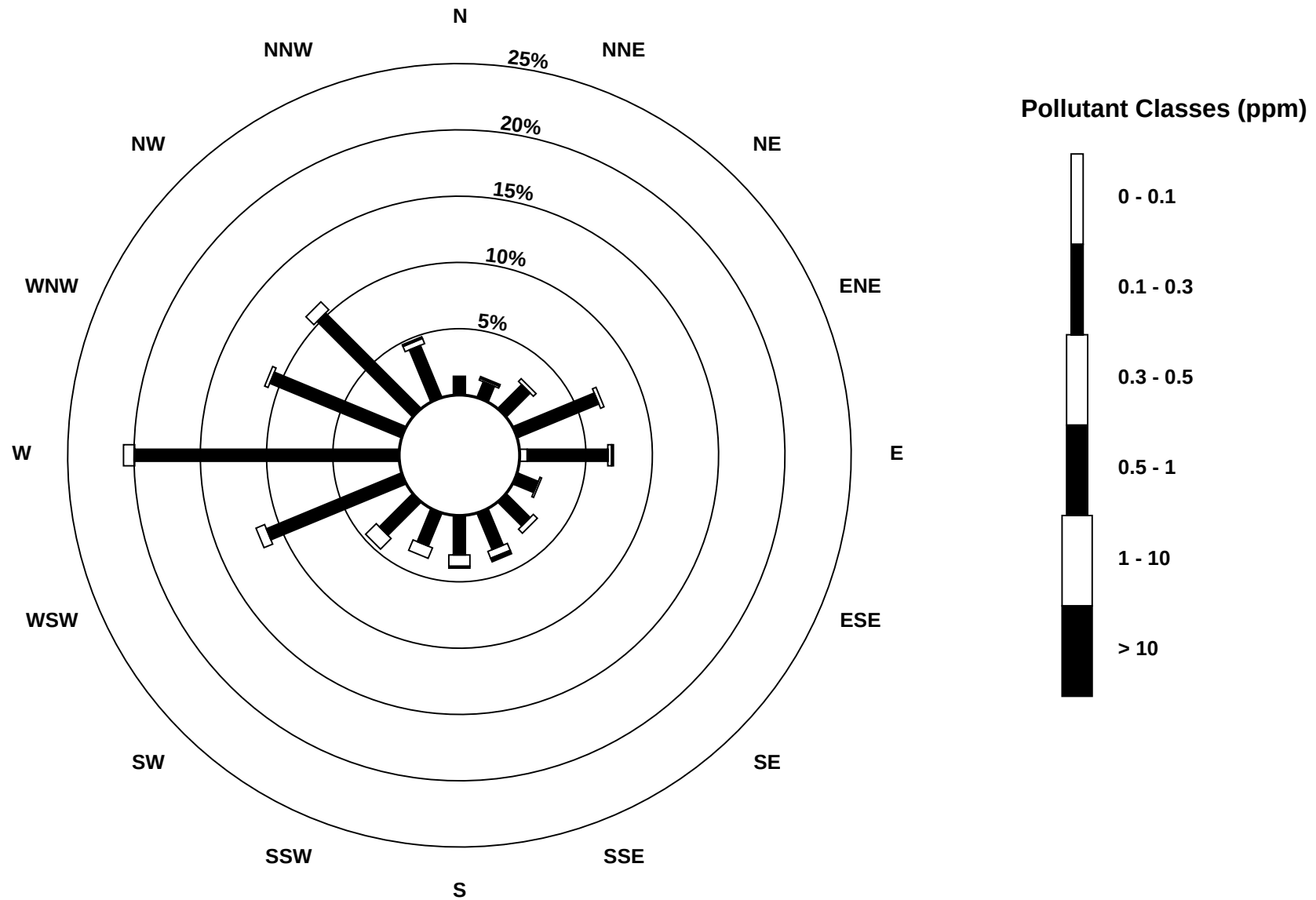
Henry Pirker - March 2015



Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2015



Eight Hour Running Averages

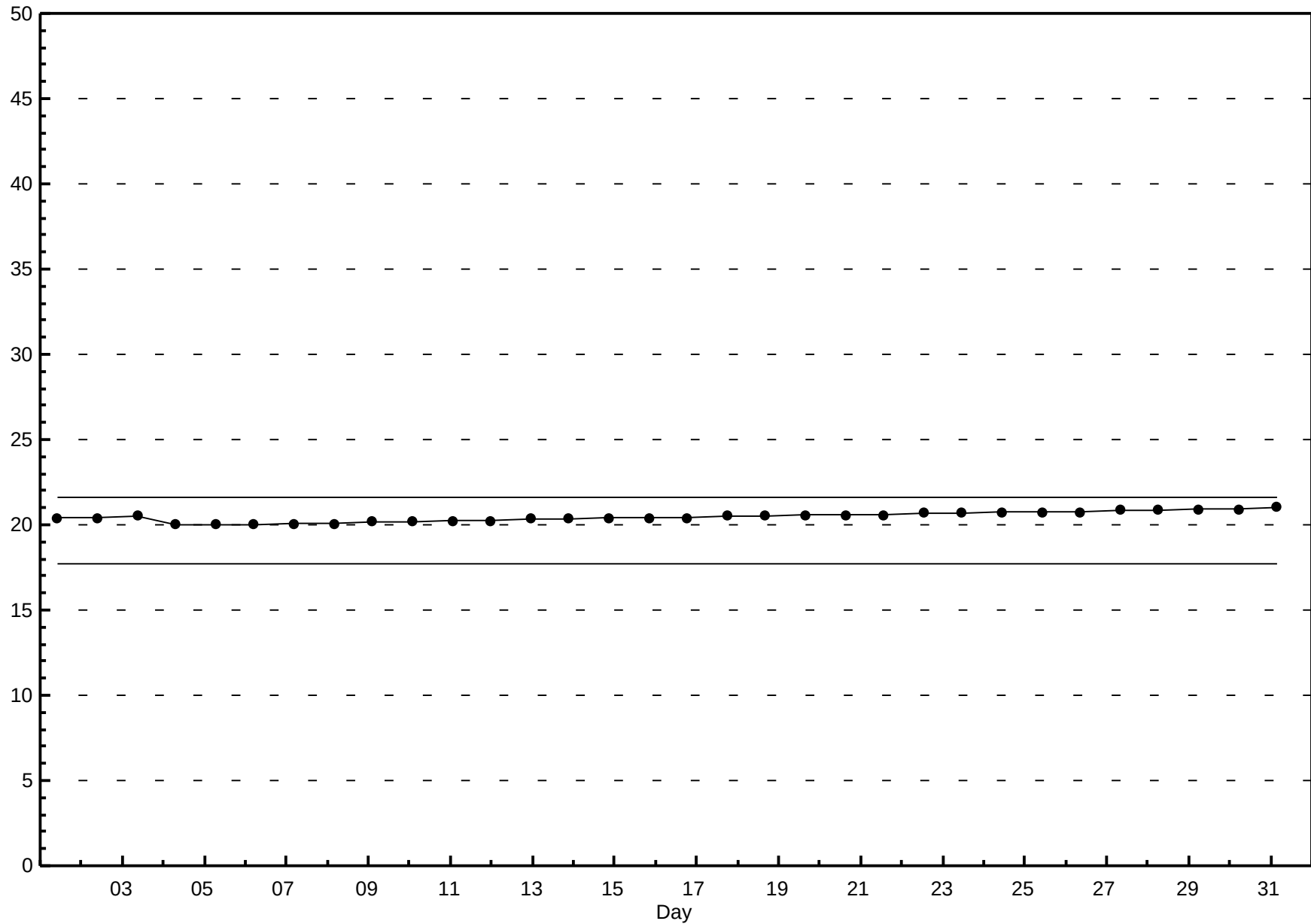
Carbon Monoxide (CO) - ppm

Henry Pirker - March 2015

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 0.48 ppm on Mar 14 14:00																							Hours in Service: 744			
Minimum Value: 0.06 ppm on Mar 3 21:00																							Hours of Data: 737			
Percentiles: P ₁ = 0.16 P ₁₀ = 0.18 Q ₁ = 0.19 Median = 0.22 Q ₃ = 0.27 P ₉₀ = 0.32 P ₉₉ = 0.44																							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-Mar	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.40
2-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
3-Mar	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	N	N	N	N	N	N	0.1	0.1	0.1	0.1	0.1	0.31
4-Mar	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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.34
5-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.26
6-Mar	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
7-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.30
8-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
9-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
10-Mar	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.29
11-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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-Mar	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	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.30
13-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.45
14-Mar	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.48
15-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.28
16-Mar	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.41
17-Mar	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34
18-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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
19-Mar	0.3	0.3	0.3	0.3	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.27
20-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
22-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
23-Mar	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	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.32
24-Mar	0.3	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	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.29
25-Mar	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	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.44
26-Mar	0.3	0.3	0.3	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	0.2	0.2	0.2	0.33
27-Mar	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	0.3	0.2	0.2	0.2	0.2	0.2	0.31
28-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
29-Mar	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
30-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.27
31-Mar	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
0.44 0.44 0.42 0.38 0.40 0.41 0.42 0.44 0.43 0.43 0.43 0.45 0.48 0.48 0.47 0.43 0.41 0.36 0.35 0.33 0.39 0.42 0.44 0.45																										
Diurnal Maximums																										
N - Not Valid																										
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																										

Span Responses

Carbon Monoxide (CO)
Henry Pirker - March 2015



Hourly Averages

Total Hydrocarbons (THC) - ppm

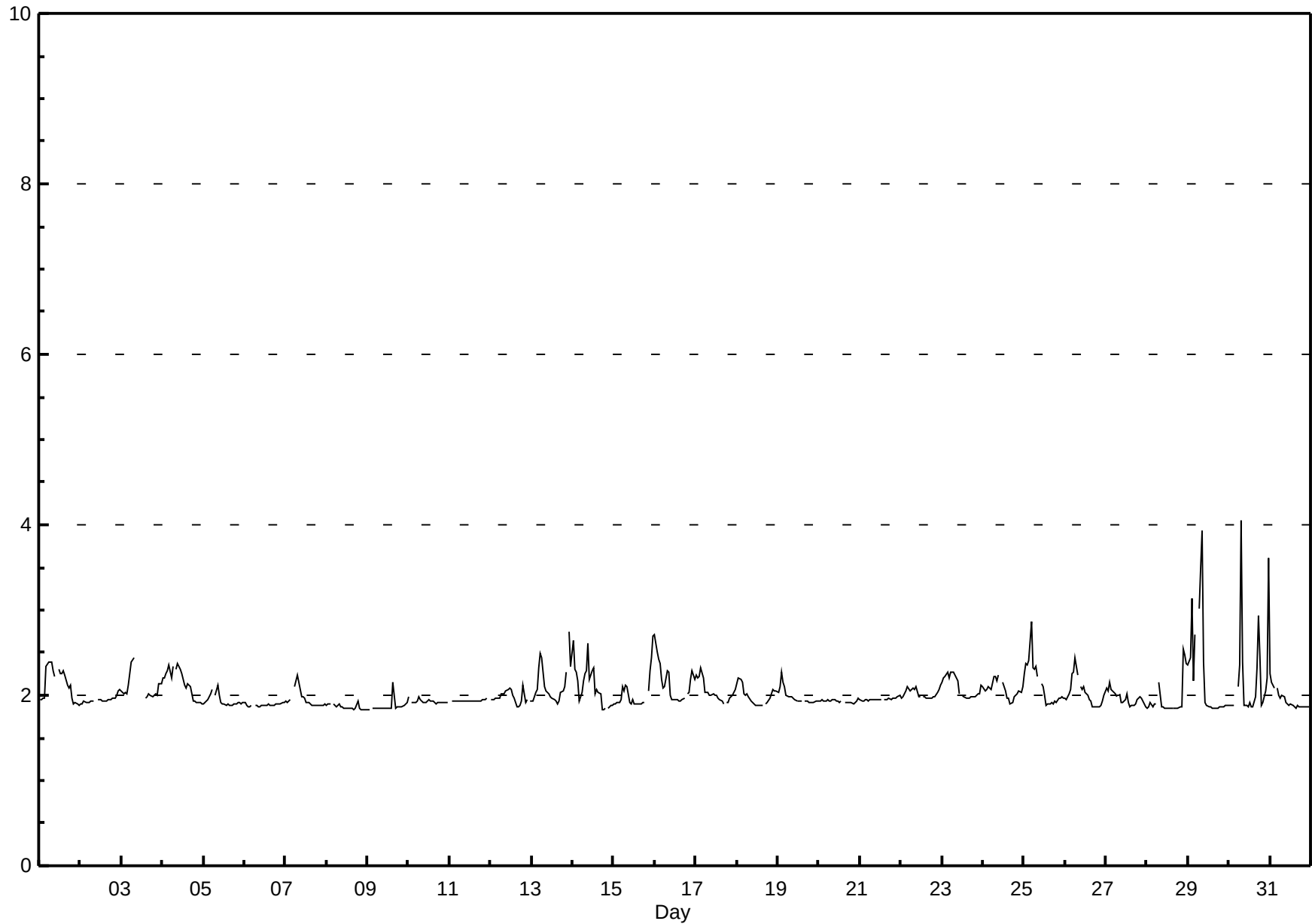
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 4.05 ppm on Mar 30 08:00 Maximum Daily Average: 2.25 ppm on Mar 29																								Hours in Service: 744		
Minimum Value: 1.8 ppm on Mar 14 19:00 Minimum Daily Average: 1.86 ppm on Mar 8 Maximum Diurnal Average: 2.21 ppm at hour 8 Minimum Diurnal Average: 1.93 ppm at hour 20 Monthly Average: 2.020 ppm Percentiles: P ₁ = 1.84 P ₁₀ = 1.87 Q ₁ = 1.90 Median = 1.95 Q ₃ = 2.07 P ₉₀ = 2.26 P ₉₉ = 2.89																								Hours of Data: 708		
																								Hours of Missing Data: 36		
																								Hours of Calibration: 36		
																								Percent Operational Time: 100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	2.0	2.0	2.0	2.0	2.3	2.4	2.4	2.4	2.3	2.2	A	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	2.14	2.40
2-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.1	1.95	2.06	
3-Mar	2.0	2.0	2.0	2.0	2.1	2.3	2.4	2.4	A	2.4	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.10	2.43	
4-Mar	2.2	2.2	2.3	2.3	2.3	2.2	2.3	A	2.3	2.4	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	2.14	2.37	
5-Mar	1.9	1.9	1.9	2.0	2.0	2.1	A	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.12	
6-Mar	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	1.9	1.9	1.89	1.92	
7-Mar	1.9	1.9	1.9	1.9	A	2.1	2.2	2.2	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	1.96	2.23	
8-Mar	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	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.86	1.92	
9-Mar	1.8	1.8	A	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.8	1.8	1.8	1.9	1.9	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.87	2.15
10-Mar	2.0	A	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.98	
11-Mar	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	1.93	1.96
12-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.1	1.9	1.9	A	1.9	1.98	2.11
13-Mar	1.9	1.9	2.0	2.1	2.3	2.5	2.4	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.3	A	2.7	2.3	2.11	2.75
14-Mar	2.6	2.3	2.3	2.2	1.9	2.0	2.2	2.3	2.3	2.6	2.2	2.3	2.3	2.0	2.1	2.0	2.0	1.8	1.8	1.8	A	1.9	1.9	1.9	2.12	2.65
15-Mar	1.9	1.9	1.9	1.9	1.9	2.1	2.1	2.1	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.1	2.3	2.4	2.7	2.02	2.69
16-Mar	2.7	2.5	2.4	2.4	2.2	2.1	2.1	2.3	2.3	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.2	2.3	2.2	2.14	2.71
17-Mar	2.2	2.2	2.2	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	2.1	2.04	2.31
18-Mar	2.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	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	2.0	2.0	1.99	2.20
19-Mar	2.0	2.1	2.3	2.1	2.1	2.0	2.0	2.0	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	1.99	2.26
20-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.93	1.96	
21-Mar	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	2.0	2.0	2.0	2.0	2.0	2.0	1.95	2.00	
22-Mar	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.02	2.12
23-Mar	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.10	2.28
24-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	A	2.1	2.1	2.1	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.07	2.24	
25-Mar	2.3	2.4	2.4	2.4	2.9	2.3	2.3	2.3	2.2	A	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.13	2.86
26-Mar	2.0	1.9	2.0	2.1	2.2	2.3	2.4	2.2	A	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.02	2.45	
27-Mar	2.1	2.0	2.2	2.1	2.1	2.0	2.0	A	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.97	2.16
28-Mar	1.9	1.9	1.9	1.9	1.9	1.9	A	2.2	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2.5	2.5	2.4	1.95	2.54	
29-Mar	2.4	2.4	3.1	2.2	2.7	A	3.0	3.5	3.9	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.25	3.92	
30-Mar	1.9	1.9	1.9	1.9	A	2.1	2.4	4.0	2.4	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.9	2.5	1.9	1.9	2.0	2.2	3.6	2.22	4.05
31-Mar	2.3	2.1	2.1	A	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.26
																								Diurnal Average		
																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2015



Hourly Maximums

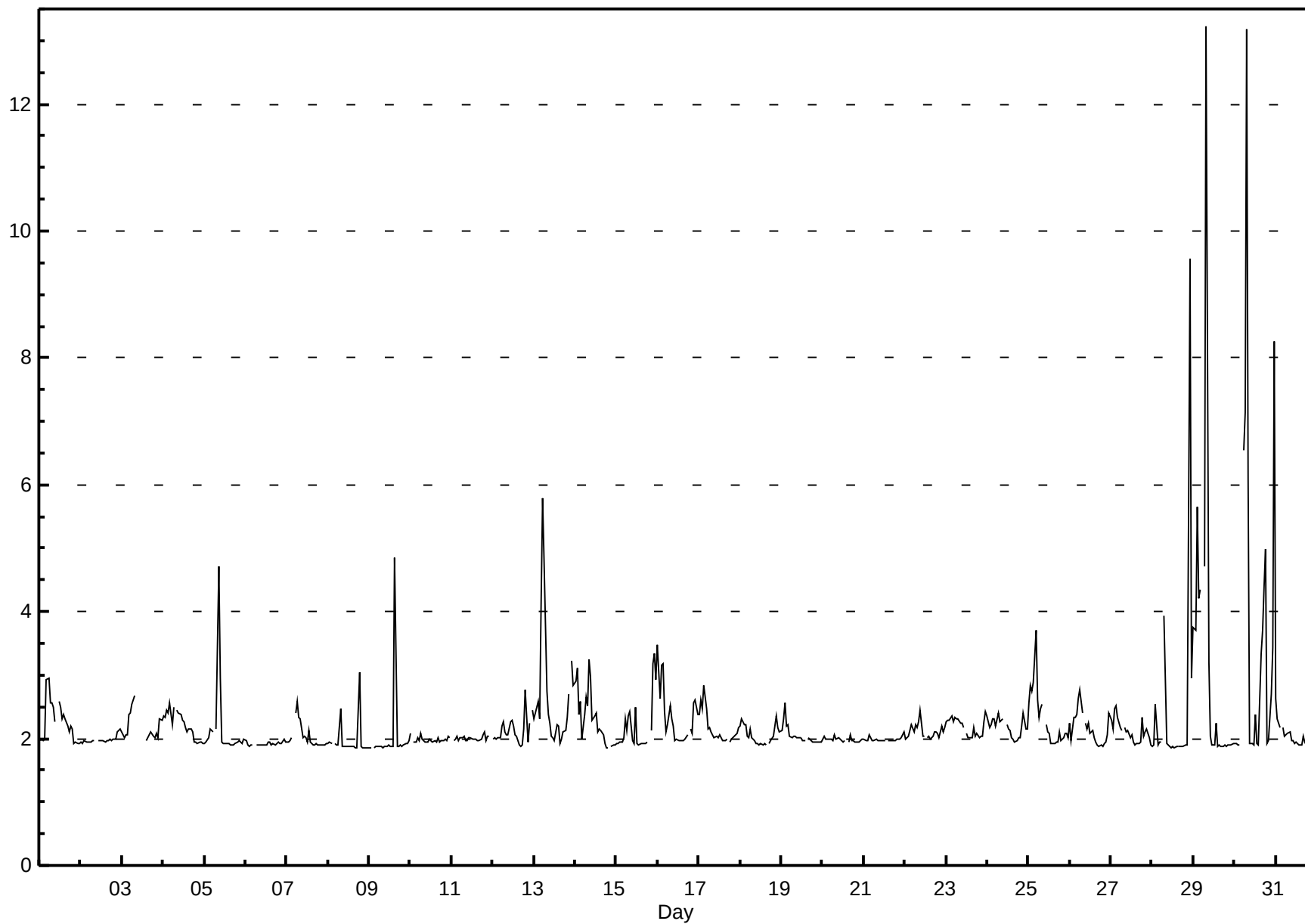
Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2015

Maximum Value: 13.24 ppm on Mar 29 08:00																					Maximum Daily Average: 3.79 ppm on Mar 30					Hours in Service: 744	
Minimum Value: 1.9 ppm on Mar 14 20:00																					Minimum Daily Average: 1.92 ppm on Mar 6					Hours of Data: 708	
Maximum Diurnal Average: 3.05 ppm at hour 8																					Minimum Diurnal Average: 1.98 ppm at hour 15					Hours of Missing Data: 36	
Monthly Average: 2.239 ppm																					Percentiles: P ₁ = 1.86 P ₁₀ = 1.89 Q ₁ = 1.94 Median = 2.01 Q ₃ = 2.21 P ₉₀ = 2.56 P ₉₉ = 6.21					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-Mar	2.0	2.0	2.0	2.0	2.9	2.9	2.6	2.6	2.5	2.3	A	2.6	2.5	2.3	2.4	2.3	2.2	2.1	2.2	2.1	1.9	1.9	1.9	1.9	2.27	2.94	
2-Mar	1.9	1.9	2.0	1.9	1.9	1.9	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	1.98	2.14	
3-Mar	2.1	2.0	2.1	2.1	2.4	2.4	2.5	2.7	A	2.5	C	C	C	C	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.3	2.3	2.19	2.68	
4-Mar	2.4	2.3	2.4	2.4	2.6	2.2	2.5	A	2.4	2.4	2.4	2.3	2.3	2.2	2.1	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.21	2.57	
5-Mar	1.9	1.9	2.0	2.1	2.1	2.1	A	2.2	4.7	3.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.13	4.72	
6-Mar	2.0	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.92	2.00	
7-Mar	1.9	1.9	2.0	2.0	A	2.4	2.6	2.3	2.3	2.0	2.0	2.0	1.9	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.03	2.59	
8-Mar	1.9	2.0	1.9	A	1.9	1.9	1.9	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.0	1.9	1.9	1.9	1.9	1.9	1.96	3.04	
9-Mar	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	4.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.01	4.86	
10-Mar	2.1	A	1.9	2.0	2.0	2.0	2.1	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.98	2.09	
11-Mar	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	A	2.01	2.09	
12-Mar	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.1	2.1	2.1	2.3	2.3	2.2	2.1	2.0	1.9	1.9	1.9	2.1	2.8	1.9	2.2	A	2.4	2.12	2.77	
13-Mar	2.3	2.4	2.6	2.3	4.2	5.8	4.8	2.7	2.4	2.2	2.0	2.0	2.0	2.2	2.2	1.9	2.0	2.1	2.1	2.3	2.7	A	3.2	2.8	2.67	5.78	
14-Mar	2.9	3.1	2.4	2.6	2.0	2.4	2.7	2.5	3.3	3.0	2.3	2.4	2.4	2.1	2.2	2.1	2.1	1.9	1.9	1.9	A	1.9	1.9	1.9	2.33	3.25	
15-Mar	1.9	1.9	1.9	1.9	2.0	2.3	2.1	2.4	2.4	2.0	1.9	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.1	3.2	3.3	2.9	2.19	3.34	
16-Mar	3.5	2.6	3.2	3.2	2.4	2.1	2.2	2.5	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.1	2.1	2.6	2.6	2.4	2.34	3.49	
17-Mar	2.4	2.6	2.5	2.8	2.5	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	A	1.9	2.0	2.0	2.1	2.1	2.2	2.16	2.84	
18-Mar	2.2	2.3	2.2	2.2	2.0	2.0	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	2.0	2.0	2.2	2.4	2.2	2.1	2.05	2.37	
19-Mar	2.1	2.3	2.6	2.2	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.9	2.0	1.9	1.9	2.0	2.0	2.05	2.56	
20-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	1.9	2.0	A	2.0	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.98	2.06	
21-Mar	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	1.99	2.09	
22-Mar	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.2	2.3	2.4	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.2	2.1	2.2	2.11	2.44	
23-Mar	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.2	2.2	2.2	A	2.1	2.0	2.0	2.0	2.2	2.0	2.1	2.0	2.0	2.0	2.3	2.4	2.19	2.44	
24-Mar	2.4	2.2	2.2	2.3	2.3	2.2	2.4	2.3	2.3	2.3	A	2.2	2.1	2.1	2.0	2.0	1.9	2.0	2.0	2.0	2.2	2.4	2.2	2.2	2.18	2.40	
25-Mar	2.6	2.8	2.7	2.9	3.7	2.6	2.3	2.5	2.5	A	2.2	2.1	2.1	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.0	2.1	2.1	2.0	2.31	3.71	
26-Mar	2.2	2.0	2.3	2.3	2.4	2.6	2.8	2.4	A	2.2	2.2	2.2	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.4	2.16	2.78	
27-Mar	2.3	2.2	2.5	2.5	2.3	2.2	2.1	A	2.2	2.1	2.1	2.0	2.1	1.9	1.9	1.9	1.9	1.9	2.3	2.0	2.1	2.2	2.0	1.9	2.12	2.52	
28-Mar	1.9	1.9	2.5	1.9	2.0	1.9	A	3.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	5.5	9.6	3.0	2.54	9.57		
29-Mar	3.8	3.7	5.7	4.2	4.3	A	4.7	13.2	8.2	3.2	2.0	1.9	1.9	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.39	13.24	
30-Mar	1.9	1.9	1.9	1.9	A	6.6	7.1	13.2	6.1	1.9	1.9	1.9	2.4	1.9	1.9	3.3	3.7	4.4	5.0	1.9	2.0	2.7	3.4	8.3	3.79	13.19	
31-Mar	2.6	2.3	2.2	A	2.2	2.0	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.02	2.63	
2.24 2.21 2.33 2.28 2.37 2.46 2.56 3.05 2.61 2.19 2.03 2.06 2.04 2.01 1.98 2.11 2.04 2.05 2.13 2.01 2.01 2.22 2.42 2.36																									Diurnal Average		
3.76 3.71 5.65 4.21 4.34 6.55 7.15 13.24 8.20 3.20 2.38 2.58 2.50 2.32 2.38 4.86 3.70 4.38 4.98 2.77 2.70 5.52 9.57 8.26																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											

Hourly Maximums

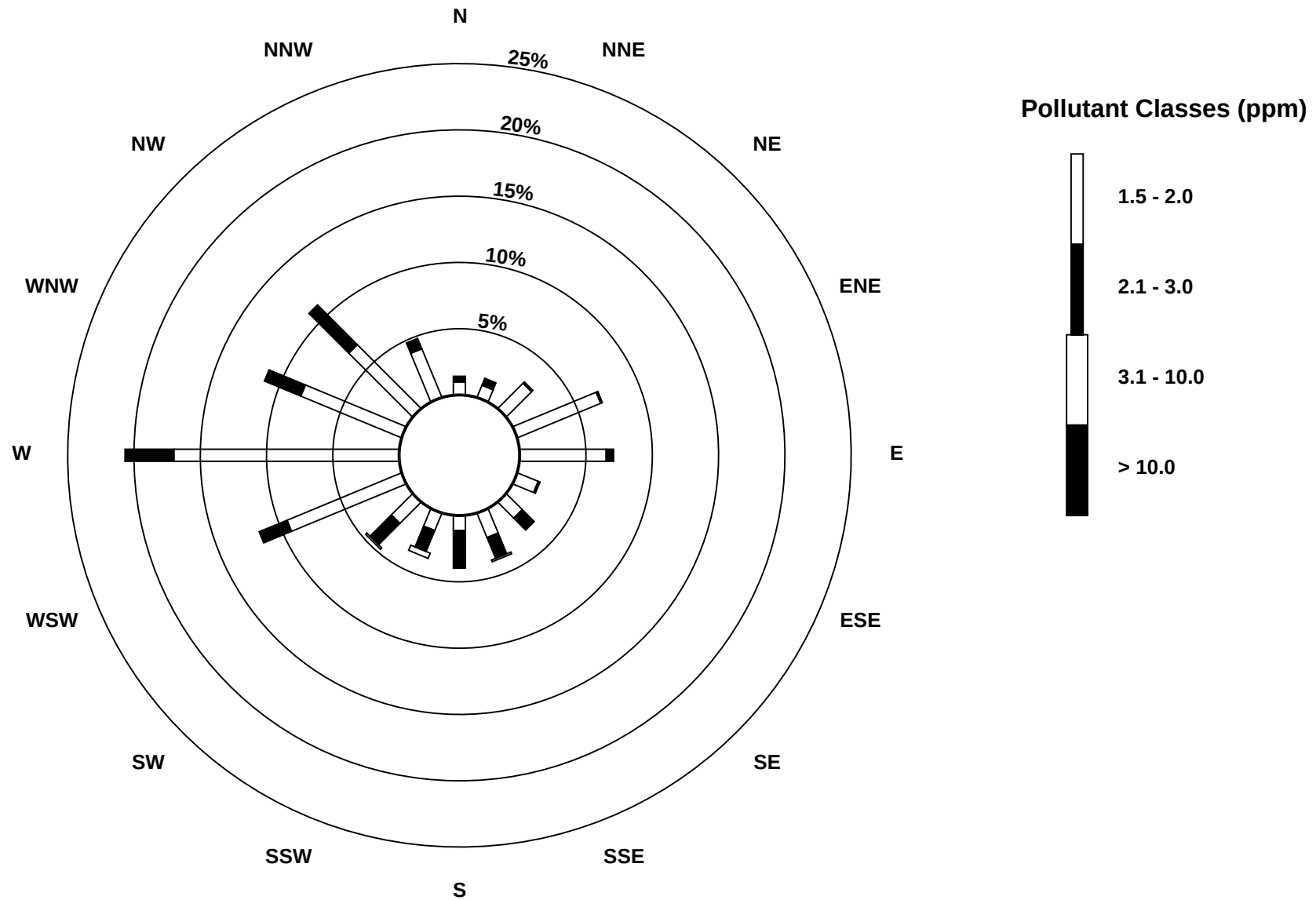
Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2015



Pollutant Rose

Total Hydrocarbons (THC) - ppm

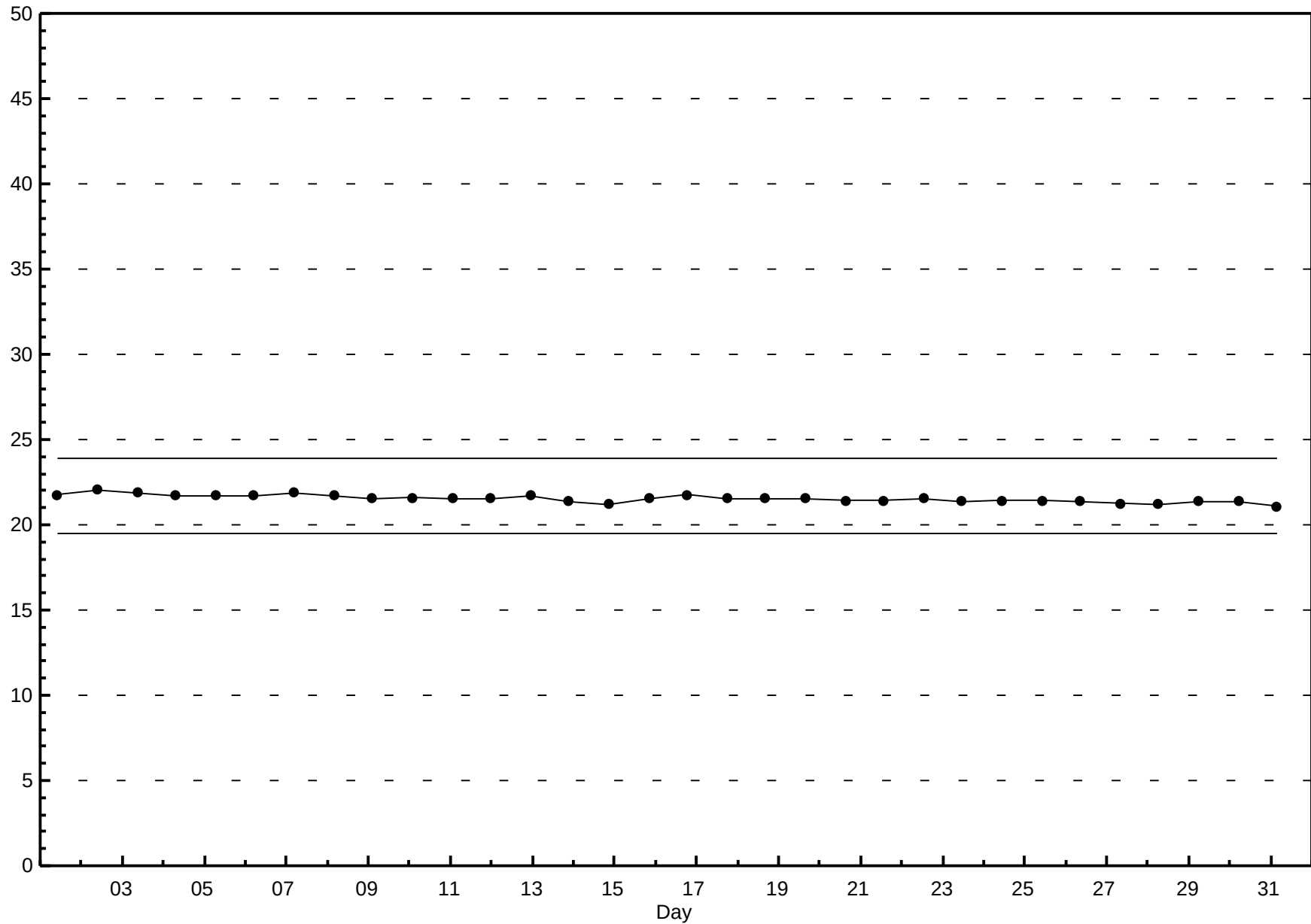
Henry Pirker - March 2015



Span Responses

Total Hydrocarbons (THC)

Henry Pirker - March 2015



Hourly Averages

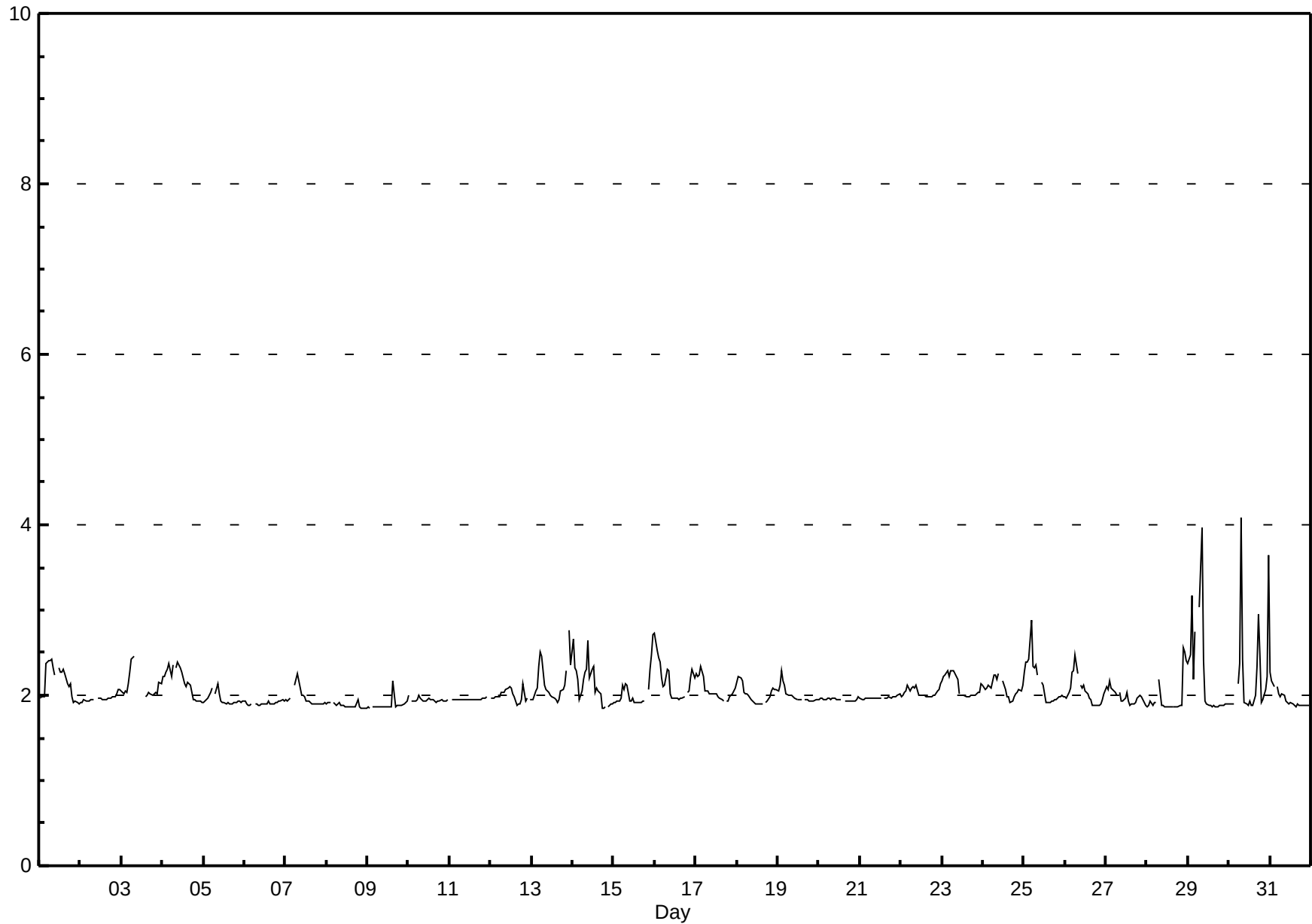
Methane (CH₄) - ppm

Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 4.08 ppm on Mar 30 08:00 Maximum Daily Average: 2.27 ppm on Mar 29																								Hours in Service: 744 Hours of Data: 708		
Minimum Value: 1.8 ppm on Mar 14 19:00 Minimum Daily Average: 1.88 ppm on Mar 8 Maximum Diurnal Average: 2.23 ppm at hour 8 Minimum Diurnal Average: 1.95 ppm at hour 20 Monthly Average: 2.038 ppm Percentiles: P ₁ = 1.86 P ₁₀ = 1.88 Q ₁ = 1.92 Median = 1.97 Q ₃ = 2.08 P ₉₀ = 2.28 P ₉₉ = 2.91																								Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	2.0	2.0	2.0	2.0	2.4	2.4	2.4	2.4	2.3	2.2	A	2.3	2.3	2.3	2.3	2.3	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	2.15	2.42
2-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	1.96	2.08
3-Mar	2.1	2.0	2.0	2.0	2.1	2.3	2.4	2.5	A	2.4	C	C	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.12	2.45	
4-Mar	2.2	2.2	2.3	2.3	2.4	2.2	2.4	A	2.3	2.4	2.3	2.3	2.2	2.1	2.1	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.16	2.39
5-Mar	1.9	1.9	2.0	2.0	2.0	2.1	A	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.14
6-Mar	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	1.9	1.9	1.9	1.91	1.94
7-Mar	1.9	1.9	1.9	2.0	A	2.1	2.2	2.2	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	1.9	1.9	1.97	2.25
8-Mar	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.94
9-Mar	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	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	2.17
10-Mar	2.0	A	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	1.99
11-Mar	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.95	1.98
12-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	2.1	1.9	2.0	A	2.0	2.00	2.13
13-Mar	1.9	1.9	2.0	2.1	2.3	2.5	2.5	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.1	2.1	2.1	2.3	A	2.8	2.4	2.13	2.77
14-Mar	2.7	2.3	2.3	2.2	2.0	2.1	2.2	2.3	2.3	2.6	2.2	2.3	2.3	2.0	2.1	2.1	2.0	1.9	1.8	1.9	A	1.9	1.9	1.9	2.14	2.67
15-Mar	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.1	2.3	2.5	2.7	2.04	2.71
16-Mar	2.7	2.5	2.4	2.4	2.2	2.1	2.1	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.2	2.3	2.2	2.16	2.73
17-Mar	2.3	2.2	2.2	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	A	1.9	1.9	2.0	2.0	2.1	2.1	2.06	2.33
18-Mar	2.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	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	2.1	2.1	2.1	2.01	2.21
19-Mar	2.1	2.1	2.3	2.2	2.1	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	1.9	1.9	1.9	1.9	1.9	2.00	2.28
20-Mar	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	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.95	1.98	
21-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.02
22-Mar	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.04	2.14
23-Mar	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.2	2.2	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.11	2.30
24-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	A	2.2	2.1	2.1	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.0	2.1	2.08	2.26
25-Mar	2.3	2.4	2.4	2.4	2.9	2.3	2.3	2.4	2.2	A	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.14	2.88
26-Mar	2.0	2.0	2.0	2.1	2.3	2.3	2.5	2.2	A	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.04	2.47	
27-Mar	2.1	2.1	2.2	2.1	2.1	2.0	2.0	A	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.99	2.17	
28-Mar	1.9	1.9	1.9	1.9	1.9	1.9	A	2.2	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.6	2.5	2.4	1.97	2.56	
29-Mar	2.4	2.5	3.2	2.2	2.7	A	3.0	3.5	4.0	2.4	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.27	3.96	
30-Mar	1.9	1.9	1.9	1.9	A	2.1	2.4	4.1	2.4	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	3.0	2.5	1.9	1.9	2.1	2.2	3.6	2.24	4.08
31-Mar	2.3	2.2	2.1	A	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.96	2.28
2.08 2.06 2.11 2.07 2.12 2.09 2.16 2.23 2.14 2.06 1.99 2.00 1.99 1.96 1.95 1.96 1.96 1.97 1.96 1.95 1.96 2.00 2.05 2.09																								Diurnal Average		
2.73 2.53 3.17 2.43 2.88 2.52 3.04 4.08 3.96 2.64 2.33 2.32 2.34 2.28 2.31 2.26 2.34 2.96 2.48 2.13 2.28 2.56 2.77 3.64																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Methane (CH₄) - ppm
Henry Pirker - March 2015



Hourly Maximums

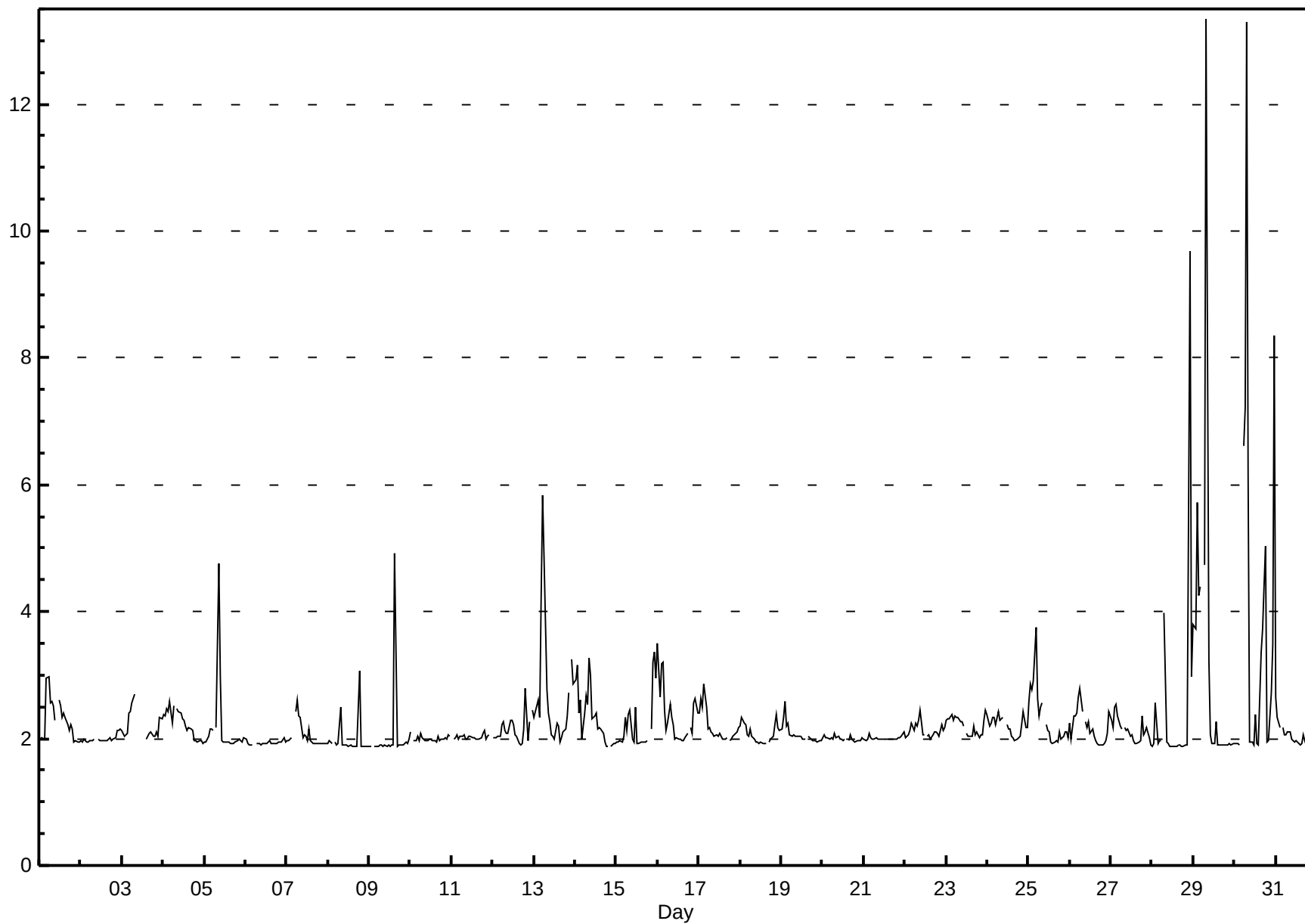
Methane (CH₄) - ppm

Henry Pirker - March 2015

Maximum Value: 13.35 ppm on Mar 29 08:00																								Maximum Daily Average: 3.82 ppm on Mar 30										Hours in Service: 744	
Minimum Value: 1.9 ppm on Mar 14 20:00																								Minimum Daily Average: 1.93 ppm on Mar 6										Hours of Data: 708	
Maximum Diurnal Average: 3.08 ppm at hour 8																								Minimum Diurnal Average: 2.00 ppm at hour 15										Hours of Missing Data: 36	
Monthly Average: 2.258 ppm																								Percentiles: P ₁ = 1.87 P ₁₀ = 1.91 Q ₁ = 1.95 Median = 2.03 Q ₃ = 2.23 P ₉₀ = 2.57 P ₉₉ = 6.26										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-Mar	2.0	2.0	2.0	2.0	3.0	3.0	2.6	2.6	2.5	2.3	A	2.6	2.5	2.3	2.4	2.3	2.2	2.1	2.2	2.2	1.9	2.0	1.9	1.9	2.29	2.97									
2-Mar	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.00	2.16									
3-Mar	2.1	2.0	2.1	2.1	2.4	2.4	2.6	2.7	A	2.5	C	C	C	C	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.0	2.3	2.3	2.21	2.70									
4-Mar	2.4	2.4	2.5	2.4	2.6	2.3	2.5	A	2.5	2.4	2.4	2.3	2.3	2.2	2.1	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	1.9	2.23	2.58									
5-Mar	1.9	2.0	2.0	2.2	2.1	2.1	A	2.2	4.8	3.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	2.15	4.76									
6-Mar	2.0	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	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	1.93	2.01									
7-Mar	2.0	2.0	2.0	2.0	A	2.4	2.6	2.4	2.3	2.0	2.1	2.0	2.0	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.05	2.61									
8-Mar	1.9	2.0	1.9	A	1.9	1.9	1.9	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.1	1.9	1.9	1.9	1.9	1.9	1.98	3.06									
9-Mar	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	4.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.03	4.91									
10-Mar	2.1	A	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.00	2.12									
11-Mar	A	2.0	2.0	2.1	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	2.1	2.1	2.0	2.0	2.1	A	2.02	2.12									
12-Mar	2.0	2.0	2.0	2.0	2.0	2.2	2.3	2.1	2.1	2.1	2.3	2.3	2.2	2.1	2.0	1.9	1.9	1.9	2.2	2.8	2.0	2.3	A	2.5	2.14	2.79									
13-Mar	2.3	2.4	2.6	2.3	4.2	5.8	4.9	2.8	2.4	2.3	2.1	2.0	2.0	2.2	2.2	1.9	2.0	2.1	2.1	2.4	2.7	A	3.2	2.9	2.69	5.83									
14-Mar	2.9	3.1	2.4	2.6	2.0	2.4	2.7	2.5	3.3	3.0	2.3	2.4	2.4	2.1	2.2	2.1	2.1	1.9	1.9	1.9	A	1.9	1.9	1.9	2.35	3.28									
15-Mar	1.9	1.9	2.0	1.9	2.0	2.3	2.1	2.4	2.4	2.0	1.9	2.5	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.1	3.2	3.4	3.0	2.21	3.37									
16-Mar	3.5	2.6	3.2	3.2	2.5	2.1	2.2	2.5	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.2	2.1	2.6	2.6	2.4	2.36	3.51									
17-Mar	2.4	2.6	2.5	2.9	2.5	2.2	2.2	2.1	2.1	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.1	2.2	2.17	2.86									
18-Mar	2.2	2.3	2.2	2.2	2.1	2.0	2.2	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	2.0	2.0	2.2	2.4	2.2	2.1	2.07	2.38									
19-Mar	2.1	2.3	2.6	2.2	2.2	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.58									
20-Mar	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.08									
21-Mar	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.01	2.11									
22-Mar	2.0	2.0	2.1	2.1	2.3	2.1	2.2	2.2	2.3	2.5	2.1	2.1	A	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.0	2.2	2.1	2.2	2.13	2.45									
23-Mar	2.3	2.3	2.3	2.4	2.3	2.4	2.3	2.3	2.3	2.3	2.2	A	2.1	2.0	2.0	2.0	2.2	2.1	2.1	2.0	2.1	2.1	2.3	2.5	2.21	2.46									
24-Mar	2.4	2.2	2.2	2.3	2.3	2.2	2.4	2.3	2.3	2.3	A	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.2	2.2	2.20	2.42									
25-Mar	2.6	2.9	2.8	2.9	3.7	2.6	2.4	2.5	2.6	A	2.2	2.1	2.1	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.32	3.75									
26-Mar	2.2	2.0	2.3	2.3	2.4	2.6	2.8	2.4	A	2.3	2.2	2.3	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.4	2.18	2.80									
27-Mar	2.3	2.2	2.5	2.5	2.4	2.2	2.1	A	2.2	2.1	2.1	2.0	2.1	2.0	1.9	1.9	1.9	2.0	2.4	2.1	2.1	2.2	2.0	1.9	2.13	2.54									
28-Mar	1.9	1.9	2.6	1.9	2.0	2.0	A	4.0	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	5.6	9.7	3.0	2.57	9.67									
29-Mar	3.8	3.7	5.7	4.2	4.4	A	4.7	13.3	8.3	3.2	2.1	1.9	1.9	2.3	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.42	13.35									
30-Mar	1.9	1.9	1.9	1.9	A	6.6	7.2	13.3	6.1	1.9	1.9	1.9	2.4	1.9	1.9	3.4	3.7	4.4	5.0	1.9	2.0	2.7	3.5	8.3	3.82	13.30									
31-Mar	2.6	2.3	2.2	A	2.2	2.1	2.1	2.1	2.1	2.0	2.0	1.9	2.0	1.9	1.9	1.9	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.03	2.64									
2.26 2.23 2.35 2.30 2.39 2.48 2.58 3.08 2.64 2.20 2.05 2.07 2.05 2.03 2.00 2.13 2.05 2.06 2.15 2.02 2.03 2.24 2.44 2.38																									Diurnal Average										
3.79 3.73 5.71 4.25 4.38 6.61 7.22 13.35 8.30 3.23 2.39 2.61 2.52 2.33 2.40 4.91 3.73 4.41 5.03 2.79 2.73 5.58 9.67 8.35																									Diurnal Maximum										
C - Calibration A - Automated Daily Zero Span																																			

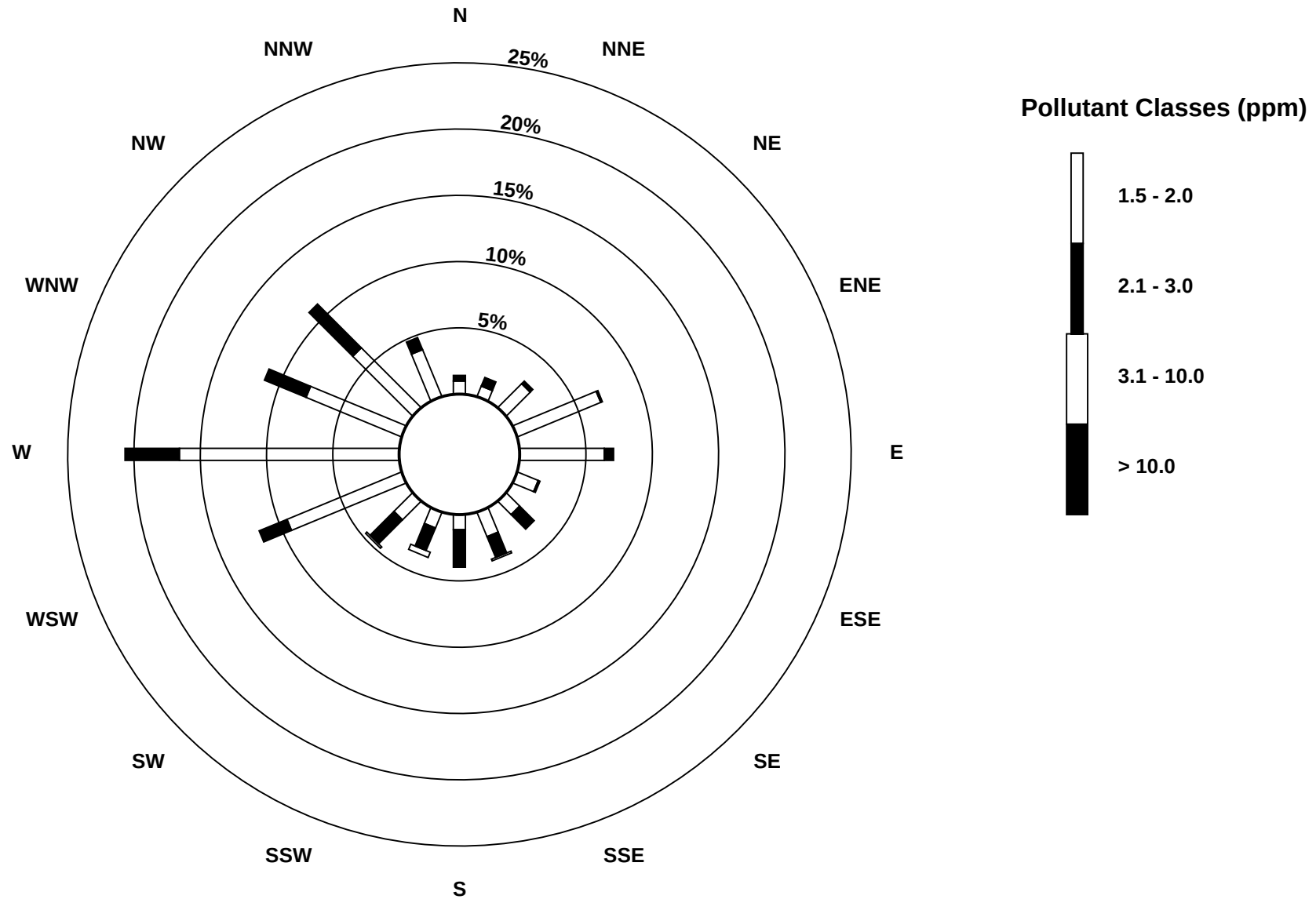
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - March 2015



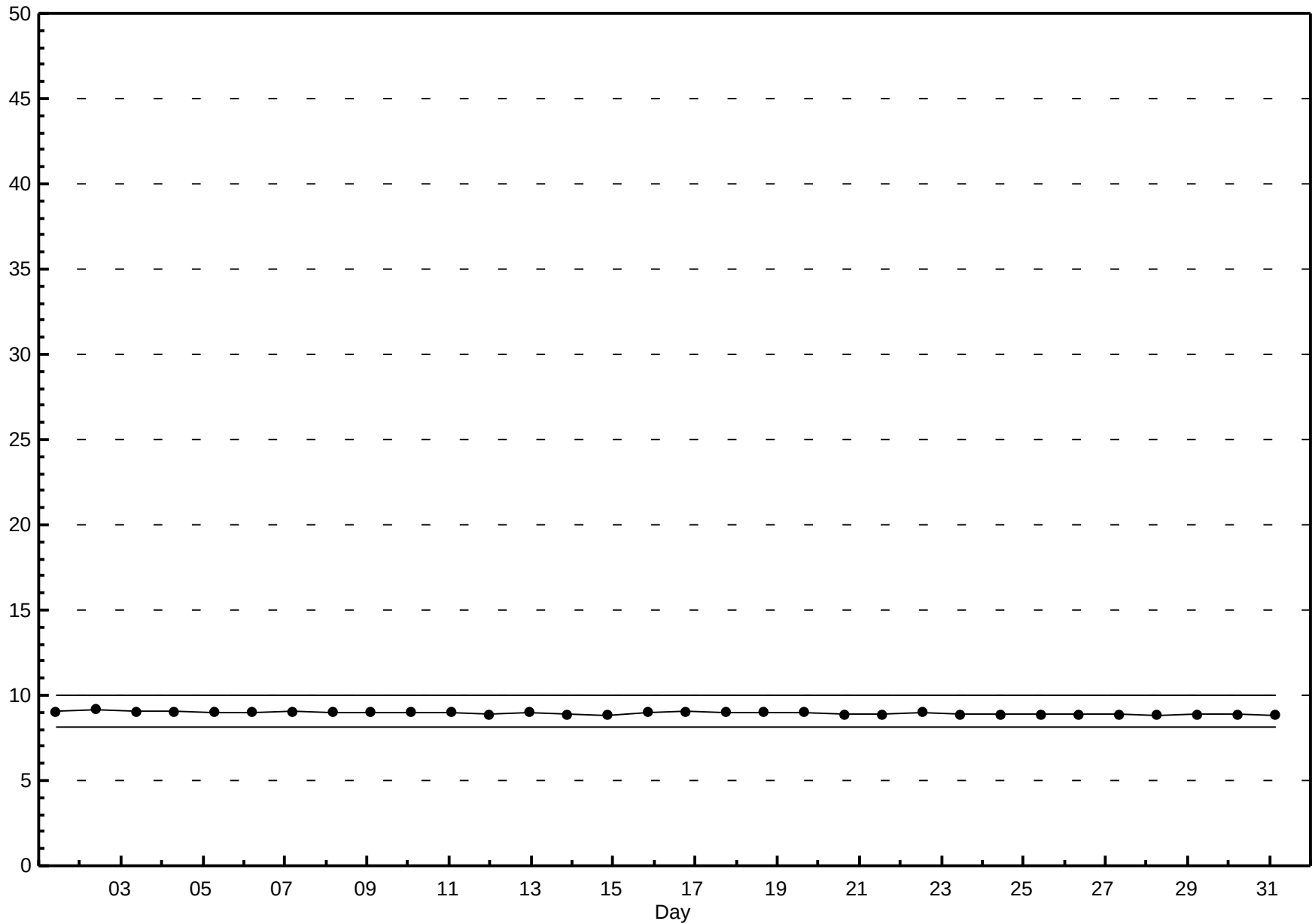
Pollutant Rose

Methane (CH₄) - ppm
Henry Pirker - March 2015



Span Responses

Methane (CH₄)
Henry Pirker - March 2015

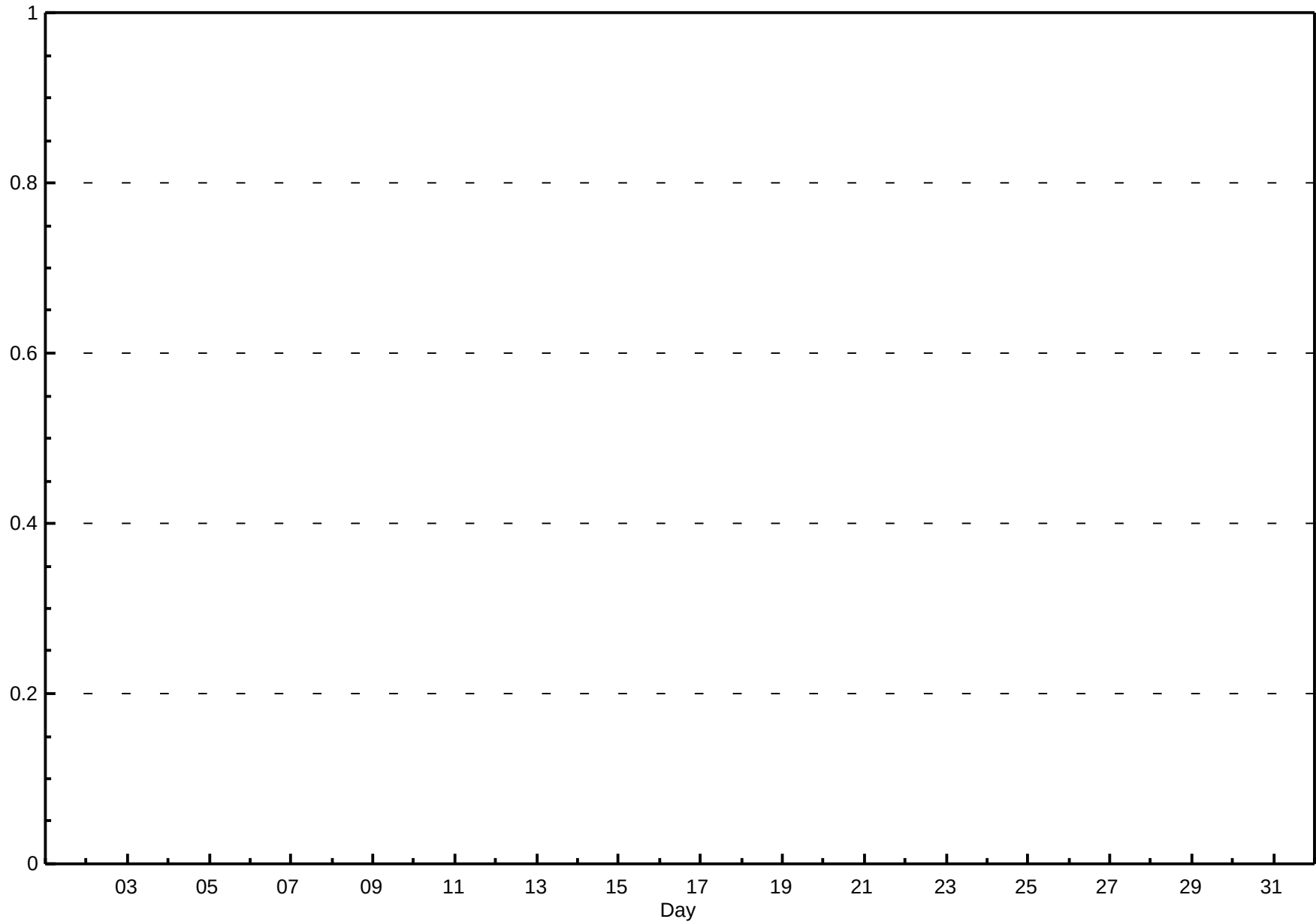


Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.00 ppm on Mar 22 11:00 Maximum Daily Average: 0.00 ppm on Mar 23																								Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0		
Minimum Value: 0.0 ppm on Mar 1 01:00 Maximum Diurnal Average: 0.00 ppm at hour 11 Monthly Average: 0.000 ppm												Minimum Daily Average: 0.00 ppm on Mar 1 Minimum Diurnal Average: 0.00 ppm at hour 13 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														
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-Mar	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
2-Mar	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
3-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
5-Mar	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
6-Mar	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
7-Mar	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
8-Mar	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
9-Mar	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
10-Mar	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
11-Mar	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
12-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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
13-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00
14-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.00	0.00
15-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
16-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00
17-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
18-Mar	0.0	0.0	0.0	0.0	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
19-Mar	0.0	0.0	0.0	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
20-Mar	0.0	0.0	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
21-Mar	0.0	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
22-Mar	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
23-Mar	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
24-Mar	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
25-Mar	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
26-Mar	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
27-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Mar	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
29-Mar	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
30-Mar	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
31-Mar	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
0.00 0.00																								Diurnal Average		
0.00 0.00																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

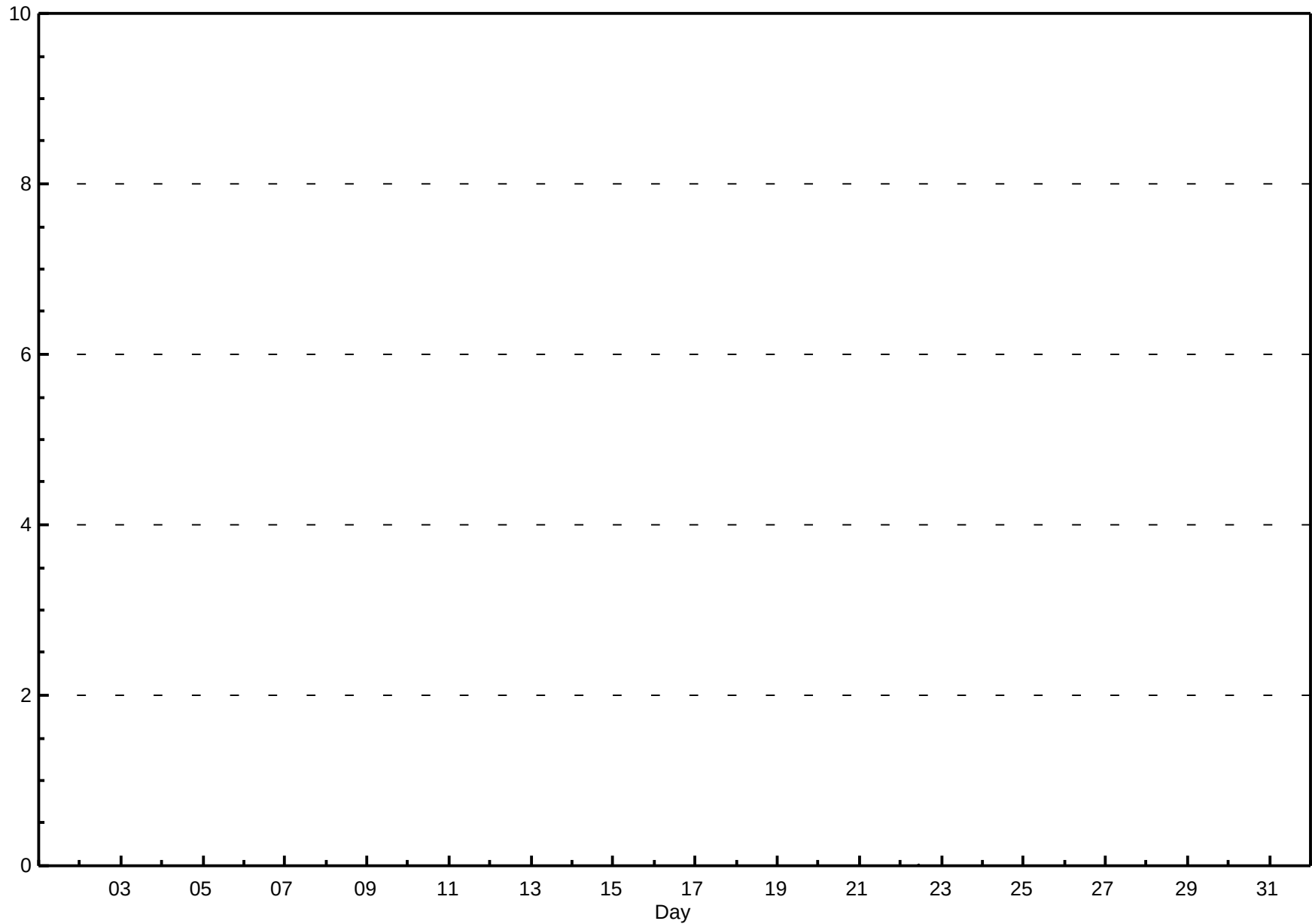


Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2015

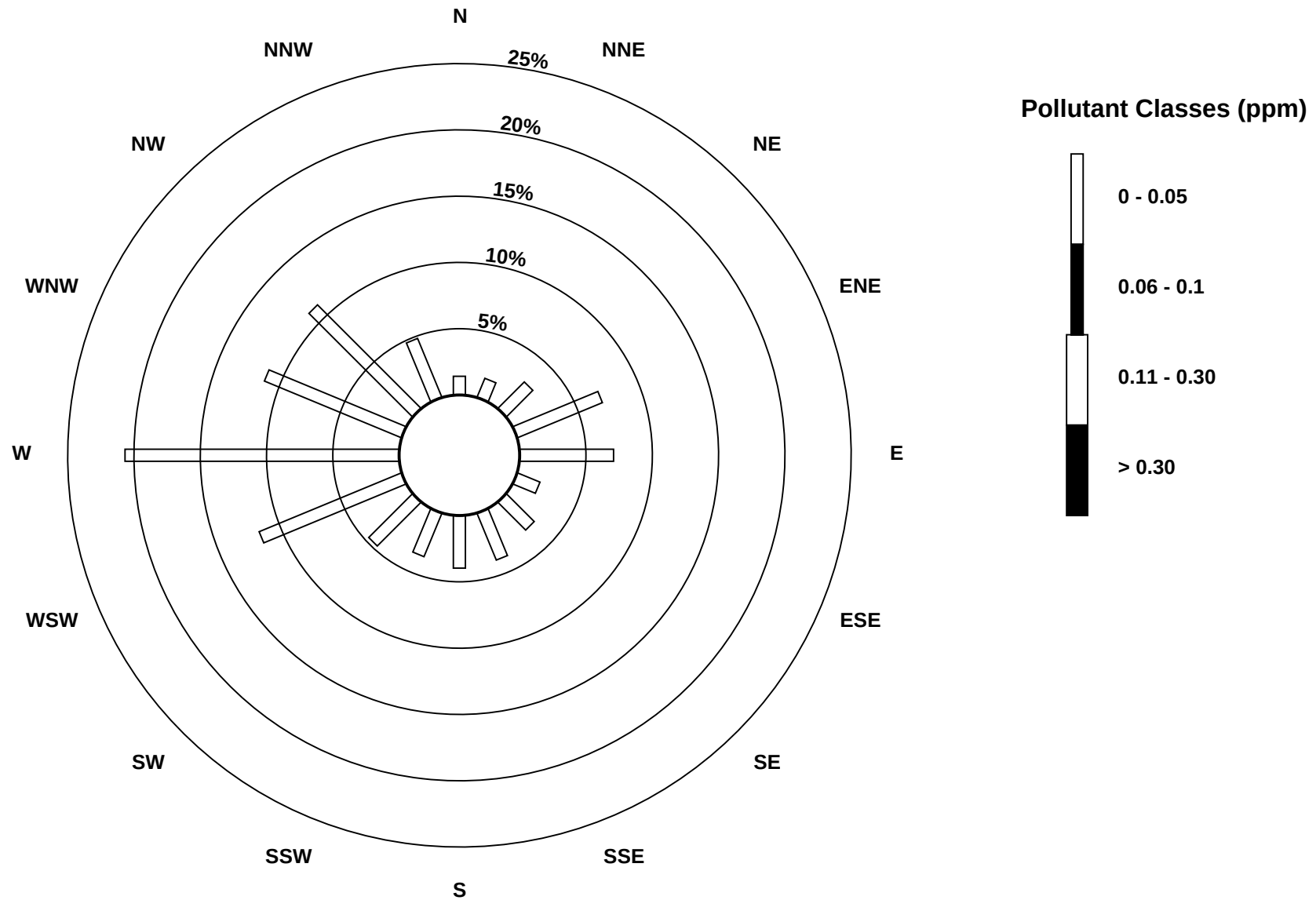
Maximum Value: 0.02 ppm on Mar 22 11:00																					Maximum Daily Average: 0.00 ppm on Mar 22					Hours in Service: 744	
Minimum Value: 0.0 ppm on Mar 3 15:00																					Minimum Daily Average: 0.00 ppm on Mar 21					Hours of Data: 708	
Maximum Diurnal Average: 0.00 ppm at hour 11																					Minimum Diurnal Average: 0.00 ppm at hour 7					Hours of Missing Data: 36	
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 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-Mar	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	
2-Mar	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	
3-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
4-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
5-Mar	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
6-Mar	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	
7-Mar	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	
8-Mar	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	
9-Mar	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	
10-Mar	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	
11-Mar	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00	
12-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	
13-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.00	0.00	
14-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.00	0.00	
15-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00	
16-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
17-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
18-Mar	0.0	0.0	0.0	0.0	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	
19-Mar	0.0	0.0	0.0	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	
20-Mar	0.0	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	
21-Mar	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	
22-Mar	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	0.02	
23-Mar	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	
24-Mar	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	
25-Mar	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	
26-Mar	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	
27-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
28-Mar	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	
29-Mar	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	
30-Mar	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	
31-Mar	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	
0.00 0.00																									Diurnal Average		
0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											

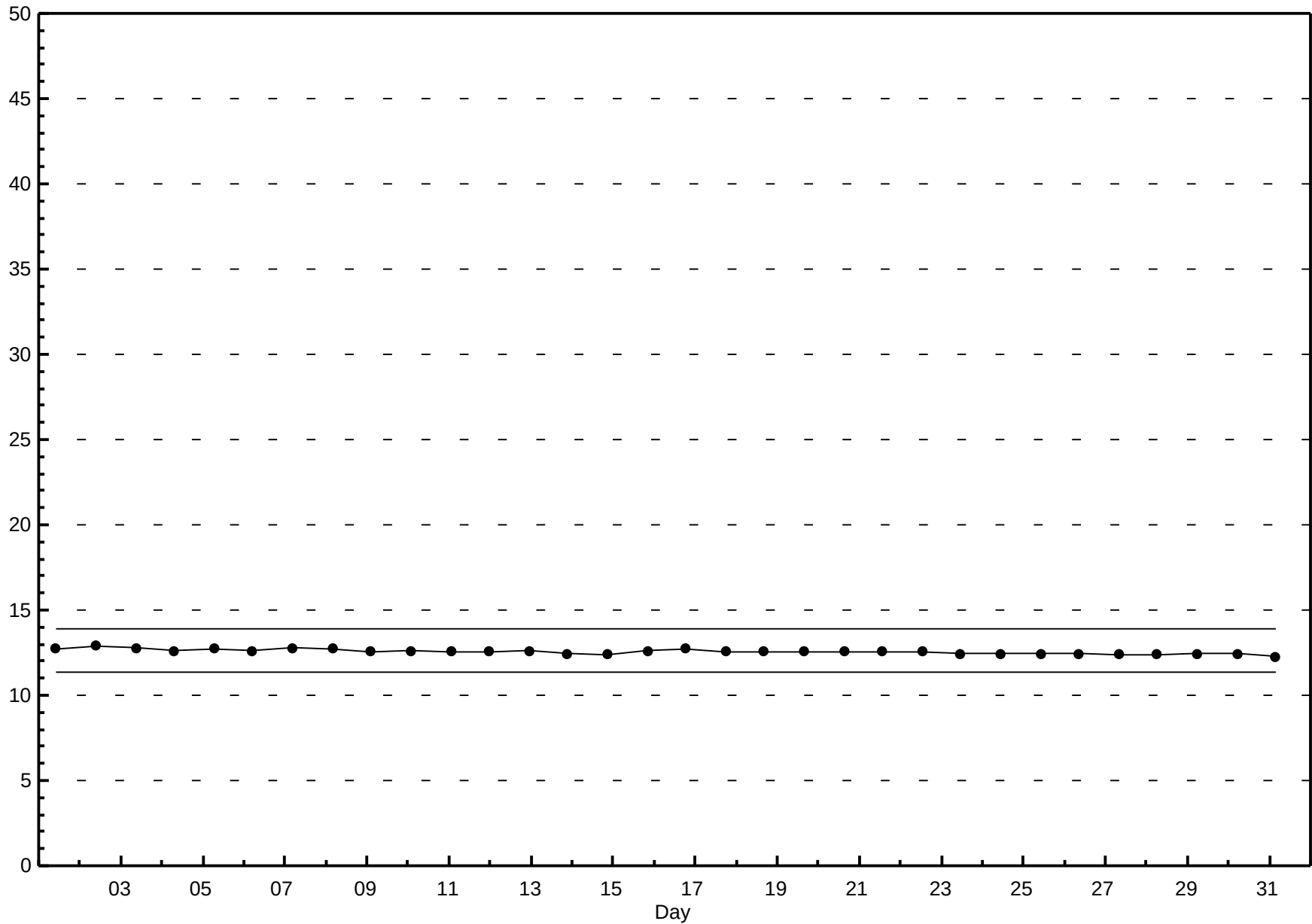


Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2015



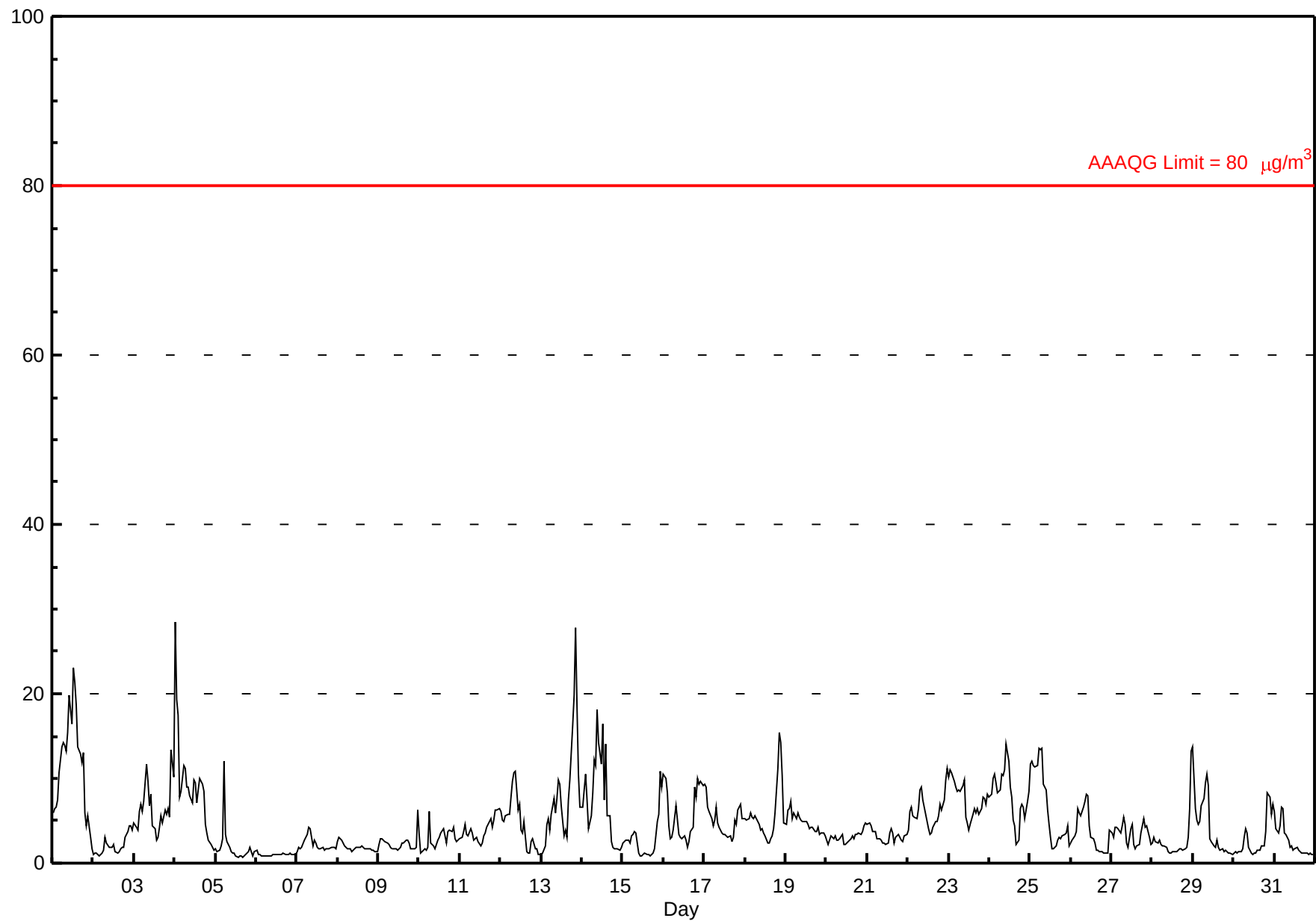


Hourly Averages

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

Henry Pirker - March 2015

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 28.5 µg/m³ on Mar 4 01:00 Maximum Daily Average: 11.6 µg/m³ on Mar 1																								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 µg/m³ on Mar 5 14:00 Maximum Diurnal Average: 6.1 µg/m³ at hour 8 Monthly Average: 4.64 µg/m³												Minimum Daily Average: 1.0 µg/m³ on Mar 6 Minimum Diurnal Average: 3.3 µg/m³ at hour 16 Percentiles: P ₁ = 0.8 P ₁₀ = 1.2 Q ₁ = 1.9 Median = 3.5 Q ₃ = 6.1 P ₉₀ = 9.7 P ₉₉ = 19.0														
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-Mar	6	6	7	7	11	14	14	14	13	15	20	16	23	21	19	14	13	12	13	6	4	6	3	2	11.6	23.0
2-Mar	1	1	1	1	1	1	2	3	2	2	2	2	2	1	1	1	2	2	2	3	4	4	4	4	2.1	4.5
3-Mar	5	4	4	6	7	6	7	12	10	7	8	4	4	3	3	4	6	5	6	6	7	5	13	10	6.3	13.4
4-Mar	29	19	18	8	9	11	11	9	9	8	7	10	10	7	9	10	9	9	5	4	3	2	2	2	9.1	28.5
5-Mar	2	1	1	2	3	12	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1.9	12.0
6-Mar	1	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	1.5
7-Mar	1	2	2	2	3	3	3	4	4	2	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2.2	4.2
8-Mar	2	3	3	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1.8	3.0
9-Mar	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2	2	2	2	6	2.3	6.2
10-Mar	3	1	1	2	2	2	6	2	2	2	2	3	3	4	4	3	2	4	4	4	4	3	3	3	2.8	6.1
11-Mar	3	3	4	5	3	3	4	4	3	3	3	2	2	2	3	4	4	5	5	4	5	6	6	6	3.9	6.5
12-Mar	6	5	5	6	6	6	8	10	11	11	6	7	4	4	5	1	1	1	3	3	2	2	1	1	4.7	10.8
13-Mar	1	1	2	5	5	4	6	8	6	8	10	9	7	3	4	3	7	10	16	20	28	18	11	7	8.2	27.8
14-Mar	7	9	11	8	4	6	8	12	12	18	14	12	16	8	14	6	6	2	2	2	2	2	1	2	7.5	18.2
15-Mar	2	3	3	3	2	3	3	4	4	1	1	1	1	1	1	1	1	1	1	2	5	6	11	9	2.9	10.8
16-Mar	10	10	8	4	3	3	4	7	5	3	3	3	3	3	2	3	4	4	9	8	10	9	10	9	5.7	10.5
17-Mar	9	9	7	6	5	4	5	7	5	4	4	3	3	3	3	3	3	3	5	5	6	7	5	5	5.0	9.4
18-Mar	5	5	5	6	5	5	6	5	5	4	4	4	3	2	2	3	3	4	6	11	15	14	10	5	5.8	15.4
19-Mar	5	6	6	7	5	6	5	6	5	5	5	5	5	5	4	4	4	4	4	4	3	4	4	3	4.8	7.3
20-Mar	3	2	3	3	3	3	3	3	3	3	2	2	2	3	3	3	3	3	3	4	3	4	4	5	3.1	4.7
21-Mar	5	5	4	4	4	4	3	3	3	2	2	2	2	4	4	4	2	3	3	3	3	2	3	3	3.2	4.7
22-Mar	4	6	7	6	5	5	6	9	9	7	6	5	4	3	4	4	5	5	6	7	6	7	10	11	6.2	11.2
23-Mar	10	11	11	10	9	9	9	8	9	10	5	5	4	5	6	7	6	6	6	6	8	8	7	8	7.5	11.1
24-Mar	8	8	10	10	10	8	9	10	10	11	14	12	9	8	5	4	2	3	6	7	7	5	7	9	8.0	14.1
25-Mar	12	12	12	11	12	14	13	14	9	9	6	5	3	2	2	2	3	3	3	3	3	4	4	2	6.7	13.6
26-Mar	2	3	3	4	6	6	6	7	7	8	8	4	3	3	2	2	1	1	1	1	1	1	1	4	3.6	8.1
27-Mar	3	3	4	4	4	3	4	5	5	2	2	4	5	2	2	2	2	3	4	5	4	4	3	2	3.5	5.5
28-Mar	2	3	3	2	3	2	2	2	2	1	1	1	1	1	1	2	2	2	2	2	2	3	6	13	2.6	13.2
29-Mar	14	7	5	5	5	7	8	9	11	9	3	2	2	2	3	2	1	2	1	1	1	1	1	1	4.3	13.7
30-Mar	1	1	1	1	1	2	3	4	4	2	1	1	1	1	2	2	2	2	2	4	8	8	6	7	2.8	8.3
31-Mar	6	4	4	4	7	6	4	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	2.6	6.5
5.5 5.1 5.1 4.8 4.8 5.3 5.5 6.1 5.6 5.4 4.8 4.3 4.3 3.5 3.8 3.3 3.3 3.5 4.1 4.3 5.0 4.7 4.7 4.7 28.5 19.4 17.5 11.3 11.5 13.8 14.3 14.0 13.3 18.2 19.8 16.4 23.0 21.3 18.7 13.7 12.9 11.9 16.3 19.9 27.8 18.5 13.4 13.2																								Diurnal Average	Diurnal Maximum	
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³																										

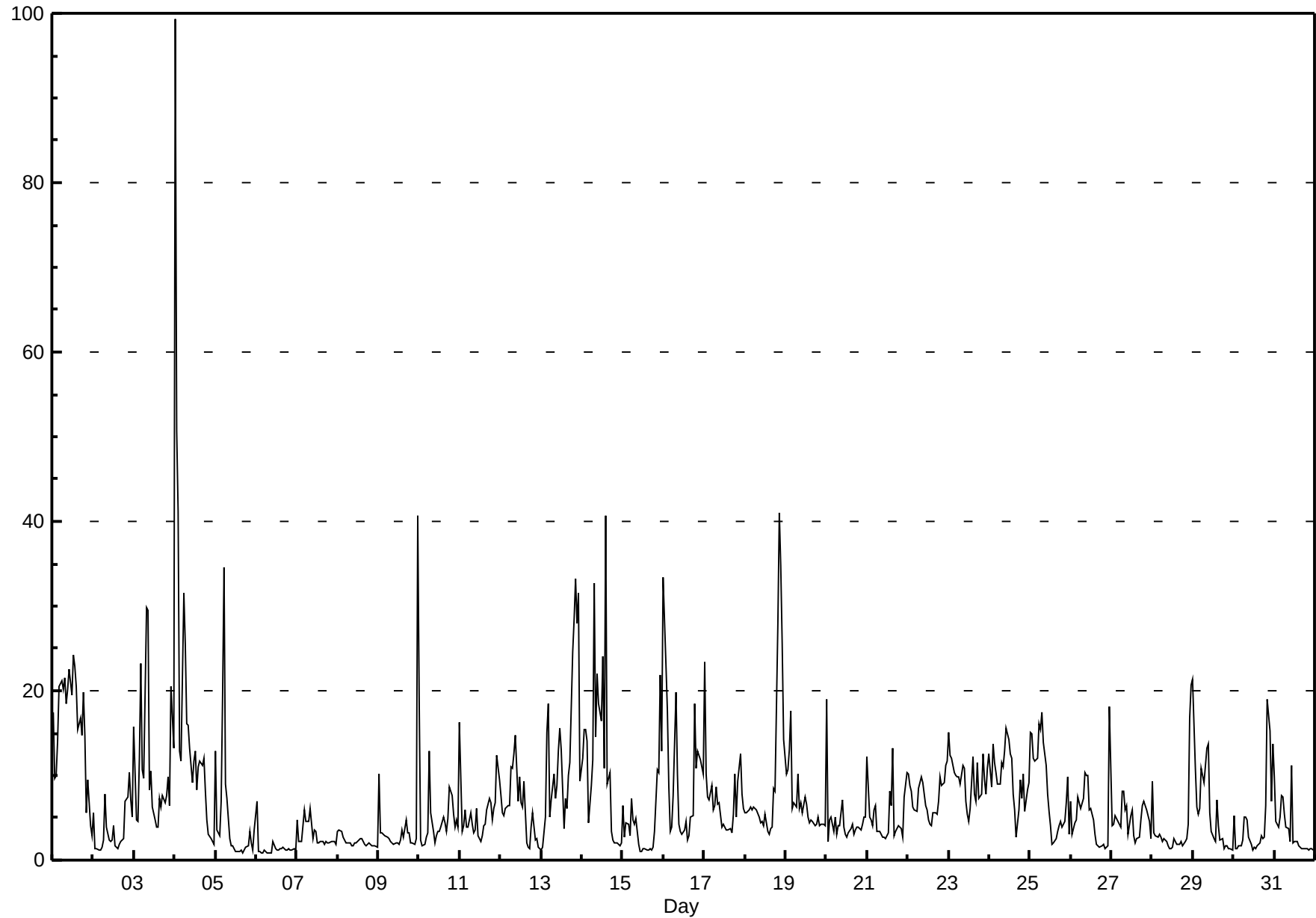


Hourly Maximums

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

Henry Pirker - March 2015

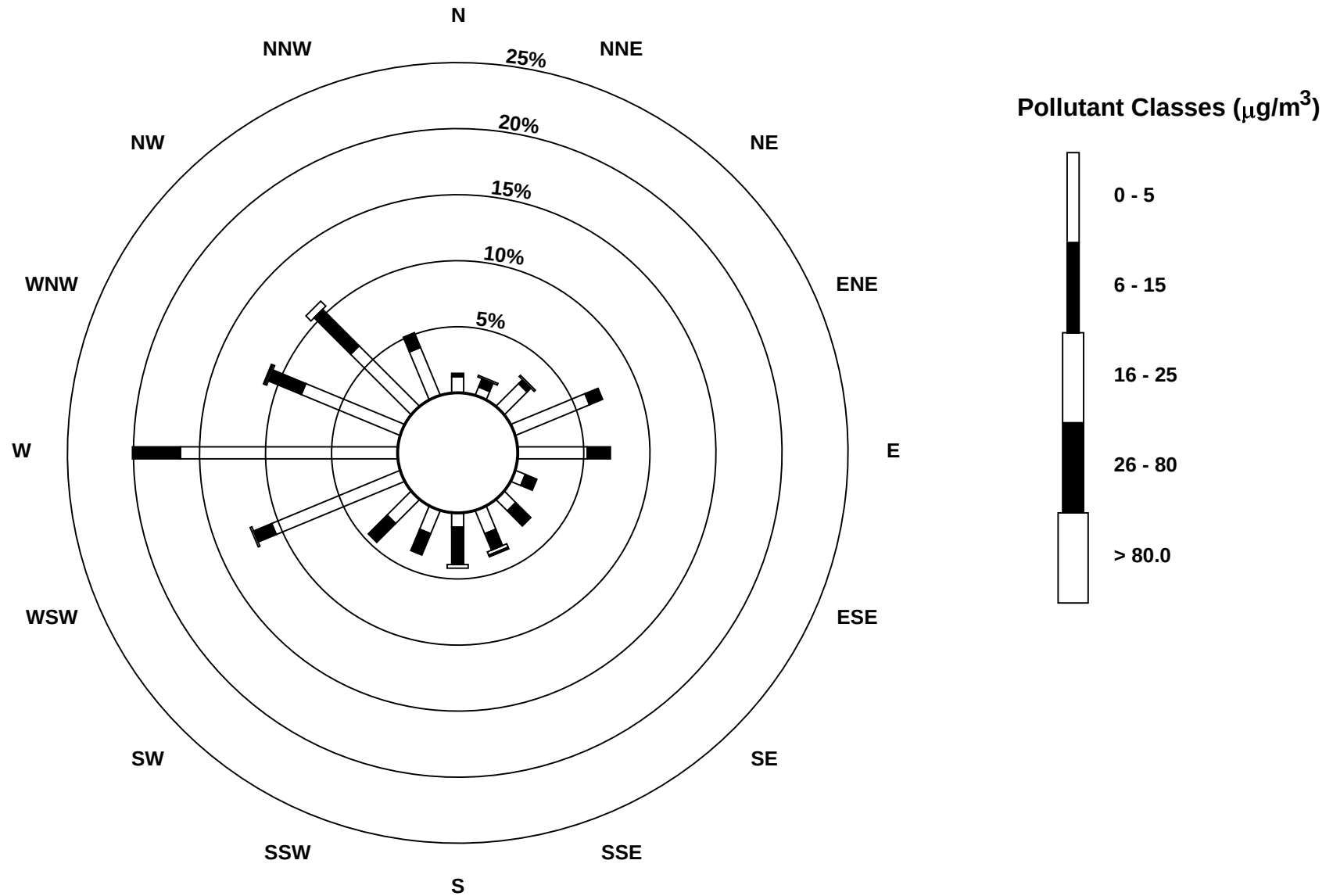
Maximum Value: 99.3 μg/m³ on Mar 4 01:00																								Maximum Daily Average: 17.9 μg/m³ on Mar 4						Hours in Service: 744	
Minimum Value: 1 μg/m³ on Mar 5 17:00																								Minimum Daily Average: 1.4 μg/m³ on Mar 6						Hours of Data: 744	
Maximum Diurnal Average: 14.6 μg/m³ at hour 1																								Minimum Diurnal Average: 4.3 μg/m³ at hour 17						Hours of Missing Data: 0	
Monthly Average: 7.09 μg/m³																								Percentiles: P ₁ = 1.0 P ₁₀ = 1.5 Q ₁ = 2.5 Median = 4.8 Q ₃ = 9.3 P ₉₀ = 14.8 P ₉₉ = 29.2						Hours of Calibration: 0	
																								Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	17	10	10	14	21	21	20	22	18	20	23	19	24	23	21	15	17	15	20	15	6	10	4	3	16.1	24.2					
2-Mar	6	1	1	1	1	1	2	8	4	2	2	2	4	2	1	2	2	2	2	7	7	10	7	5	3.6	10.3					
3-Mar	16	5	5	12	23	11	10	30	30	8	11	6	5	4	4	7	6	8	7	8	10	7	21	13	11.0	29.9					
4-Mar	99	51	41	13	12	32	25	16	16	13	9	12	13	8	11	12	11	12	8	5	3	3	2	2	17.9	99.3					
5-Mar	13	4	3	7	19	35	9	7	2	2	2	1	1	1	1	1	1	1	2	2	3	2	1	4	5.2	34.5					
6-Mar	7	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1.4	7.0					
7-Mar	5	2	2	2	6	5	5	5	6	2	4	3	2	2	2	2	2	2	2	2	2	2	2	2	3.0	6.1					
8-Mar	3	4	3	3	2	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	2.2	3.6					
9-Mar	10	3	3	3	3	3	2	2	2	2	2	2	2	2	4	3	5	3	3	2	2	2	2	41	4.5	40.6					
10-Mar	19	2	2	2	3	3	13	6	3	2	3	3	3	4	5	4	3	5	9	8	5	4	5	4	5.0	19.0					
11-Mar	16	3	4	6	4	4	6	4	3	4	6	3	2	3	4	4	6	7	7	5	6	7	12	9	5.7	16.3					
12-Mar	8	6	5	6	6	6	11	11	12	15	7	10	7	6	9	2	2	1	4	6	2	2	2	1	6.1	14.7					
13-Mar	1	2	5	15	18	5	7	10	7	9	13	16	13	4	7	6	10	12	25	28	33	28	32	9	13.1	33.3					
14-Mar	12	15	15	14	4	9	12	33	15	22	19	16	24	11	41	9	10	3	2	2	2	2	2	2	12.4	40.6					
15-Mar	6	3	4	4	3	7	5	4	5	2	1	1	1	1	1	1	1	1	2	3	11	10	22	13	4.7	21.9					
16-Mar	33	23	18	9	3	4	8	20	10	4	3	3	4	5	2	3	5	5	19	11	13	12	12	10	10.0	33.4					
17-Mar	23	10	7	7	9	6	7	9	7	7	4	4	4	4	4	4	3	5	10	5	9	13	8	6	7.2	23.3					
18-Mar	6	6	6	6	6	6	6	6	5	4	5	4	5	3	3	4	4	8	8	28	41	35	26	14	10.2	41.1					
19-Mar	10	11	13	18	6	7	6	10	6	7	6	7	7	5	4	5	5	4	4	5	4	4	4	4	6.8	17.7					
20-Mar	19	2	5	5	3	5	3	4	4	7	4	3	3	3	4	4	3	4	4	4	4	4	5	5	4.6	18.9					
21-Mar	12	5	5	4	6	6	3	3	3	3	3	3	3	8	6	13	3	3	4	4	4	3	7	10	5.2	13.2					
22-Mar	10	9	8	6	6	6	8	9	10	9	6	6	5	4	4	6	6	5	7	10	9	9	11	12	7.5	11.6					
23-Mar	15	12	12	10	10	10	10	9	11	11	7	5	5	6	12	8	7	12	7	8	13	10	8	11	9.5	15.0					
24-Mar	13	9	14	12	10	9	9	12	11	13	16	14	13	12	8	6	3	6	10	7	10	6	8	9	9.9	15.7					
25-Mar	15	15	12	12	12	16	16	17	14	11	8	6	4	2	2	2	3	4	5	4	5	7	10	3	8.5	17.5					
26-Mar	7	3	4	5	7	7	6	7	10	10	10	6	6	5	3	2	2	2	2	2	1	2	2	18	5.4	18.2					
27-Mar	4	4	5	5	5	4	8	8	6	7	3	5	6	3	2	3	3	5	6	7	6	6	5	3	4.9	8.1					
28-Mar	9	3	3	3	3	3	2	2	2	2	1	1	2	3	2	2	2	2	2	2	2	4	17	21	4.0	20.6					
29-Mar	21	11	6	5	6	11	9	11	13	14	6	3	3	2	7	4	2	2	1	2	2	1	1	1	6.1	21.4					
30-Mar	5	1	1	2	2	2	5	5	5	3	2	1	2	1	2	2	3	3	3	6	19	15	7	14	4.6	19.0					
31-Mar	10	5	4	5	8	7	5	4	4	2	11	2	2	2	2	2	1	1	1	1	1	1	1	1	3.5	11.1					
14.6 7.7 7.4 7.0 7.4 8.2 7.8 9.6 8.0 7.1 6.4 5.6 5.7 4.6 5.9 4.6 4.3 4.8 6.0 6.5 7.7 7.2 8.0 8.2																									Diurnal Average						
99.3 50.7 41.2 17.7 23.2 34.5 25.4 32.7 29.5 22.1 22.6 19.4 24.2 22.8 40.6 15.4 16.9 14.8 24.6 28.4 41.1 34.7 31.6 40.6																									Diurnal Maximum						



Pollutant Rose

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

Henry Pirker - March 2015



Hourly Averages

External Temperature (ET) - °C

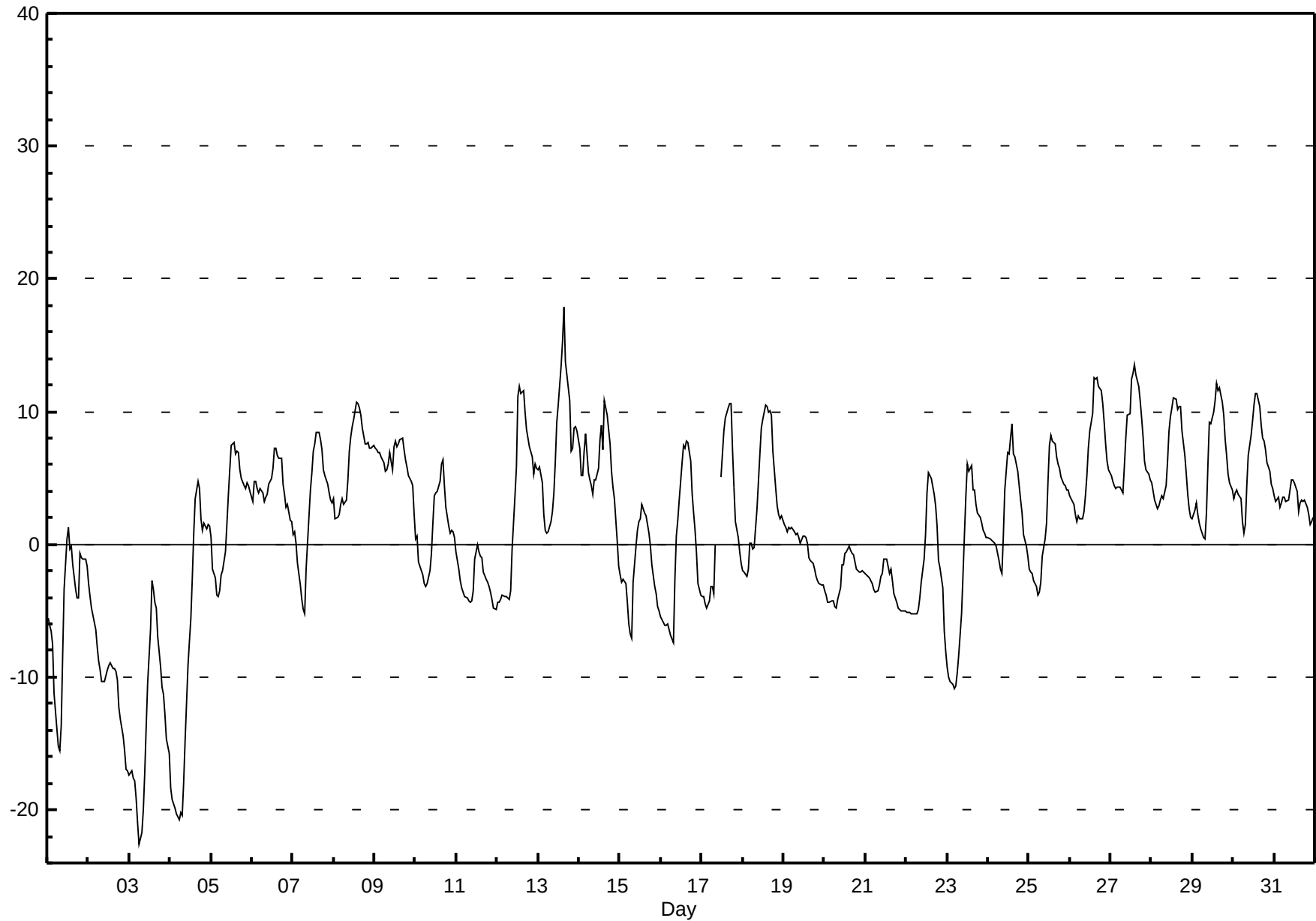
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 17.8 °C on Mar 13 16:00 Maximum Daily Average: 7.6 °C on Mar 27																								Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7		
Minimum Value: -23 °C on Mar 3 07:00 Minimum Daily Average: -13.3 °C on Mar 3 Maximum Diurnal Average: 6.0 °C at hour 16 Minimum Diurnal Average: -3.1 °C at hour 8 Monthly Average: 1.15 °C Percentiles: P ₁ = -20.1 P ₁₀ = -6.5 Q ₁ = -2.8 Median = 2.0 Q ₃ = 5.7 P ₉₀ = 8.8 P ₉₉ = 12.7																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	-6	-6	-7	-8	-11	-14	-15	-15	-14	-8	-3	0	1	0	0	-2	-3	-4	-4	-1	-1	-1	-1	-2	-5.2	1.3
2-Mar	-3	-4	-5	-6	-6	-8	-9	-9	-10	-10	-10	-10	-9	-9	-9	-9	-10	-10	-12	-13	-14	-16	-17	-17	-9.8	-2.9
3-Mar	-17	-17	-18	-18	-19	-21	-23	-22	-20	-17	-14	-10	-6	-3	-3	-4	-5	-7	-9	-11	-11	-13	-15	-16	-13.3	-2.8
4-Mar	-18	-19	-20	-20	-20	-21	-20	-20	-18	-15	-9	-7	-6	-2	1	3	5	4	2	1	2	1	2	1	-8.1	4.7
5-Mar	0	-2	-3	-4	-4	-3	-2	-2	-1	1	4	6	7	8	7	7	7	6	5	4	4	5	4	4	2.5	7.7
6-Mar	3	5	5	4	4	4	4	3	4	4	5	5	6	7	7	7	6	6	5	4	3	3	2	2	4.4	7.3
7-Mar	1	1	0	-1	-3	-4	-5	-5	-2	2	4	5	7	8	8	8	7	6	5	5	4	3	3	3	2.7	8.5
8-Mar	3	2	2	2	3	3	3	3	5	7	8	9	9	11	11	10	10	9	8	8	8	7	7	7	6.5	10.7
9-Mar	7	7	7	7	7	6	6	6	6	7	6	7	8	7	8	8	7	6	6	5	5	4	2	2	6.3	8.0
10-Mar	0	1	-1	-2	-2	-3	-3	-3	-2	-1	2	4	4	4	5	6	6	4	3	1	1	1	1	0	1.1	6.3
11-Mar	-1	-2	-3	-3	-4	-4	-4	-4	-4	-4	-4	-1	0	-1	-1	-1	-2	-3	-3	-3	-4	-4	-5	-5	-2.8	0.0
12-Mar	-4	-4	-4	-4	-4	-4	-4	-4	-4	0	4	6	11	12	11	12	10	9	8	7	7	5	6	6	3.2	11.9
13-Mar	6	6	5	2	1	1	1	2	3	4	6	9	10	13	15	18	14	13	11	7	7	9	9	8	7.5	17.8
14-Mar	7	5	5	7	8	5	5	4	4	5	5	6	8	9	7	11	10	9	8	5	4	3	0	-2	5.8	10.9
15-Mar	-2	-3	-3	-3	-4	-6	-7	-7	-3	0	1	2	2	3	2	2	2	1	0	-2	-3	-4	-5	-5	-1.7	3.0
16-Mar	-5	-6	-6	-6	-6	-6	-7	-7	-3	1	2	3	6	7	7	8	8	6	4	2	1	-1	-3	-4	-0.2	7.7
17-Mar	-4	-4	-4	-5	-4	-3	-3	-4	0	M	M	5	7	9	10	10	11	11	7	4	2	1	-1	-1	1.9	10.6
18-Mar	-2	-2	-2	-2	0	0	0	0	3	5	7	9	9	10	10	10	10	7	4	3	2	2	2	2	4.0	10.5
19-Mar	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0	-1	-1	-1	-2	-2	-3	-3	-3	-3	-0.3	1.5
20-Mar	-3	-4	-4	-4	-4	-4	-5	-5	-4	-3	-2	-1	-1	-1	0	0	-1	-1	-1	-2	-2	-2	-2	-2	-2.5	-0.2
21-Mar	-2	-2	-3	-3	-3	-3	-4	-4	-3	-2	-2	-1	-1	-2	-2	-2	-3	-4	-4	-5	-5	-5	-5	-5	-3.1	-1.1
22-Mar	-5	-5	-5	-5	-5	-5	-5	-5	-4	-3	-1	1	4	5	5	5	4	3	1	-1	-2	-3	-7	-8	-1.7	5.4
23-Mar	-9	-10	-10	-11	-11	-11	-10	-8	-5	-2	1	4	6	6	6	4	4	3	2	2	2	1	1	1	-1.9	6.0
24-Mar	0	0	0	0	0	0	-1	-2	-2	1	4	7	7	8	9	7	7	5	4	3	2	1	0	-1	2.5	9.1
25-Mar	-2	-2	-2	-3	-3	-4	-4	-3	-1	0	2	5	7	8	8	8	7	6	6	5	5	4	4	4	2.3	8.2
26-Mar	4	3	3	2	2	2	2	2	3	4	5	7	9	10	13	12	13	12	12	11	9	8	6	6	6.6	12.6
27-Mar	5	5	4	4	4	4	4	4	6	8	10	10	12	13	14	13	12	11	9	8	6	6	5	5	7.6	13.5
28-Mar	5	4	3	3	3	3	4	3	4	6	9	10	10	11	11	10	10	10	9	7	5	4	3	2	6.2	11.0
29-Mar	2	3	3	2	2	1	0	0	2	6	9	9	10	11	12	12	12	11	10	8	7	5	5	4	6.1	12.1
30-Mar	3	4	4	4	3	2	1	2	4	7	8	9	10	11	11	10	9	8	8	7	6	5	5	4	6.1	11.4
31-Mar	4	3	4	3	3	4	4	3	3	4	5	5	5	4	3	3	3	3	3	3	2	2	2	2	3.3	4.9
																								Diurnal Average		
																								7.3 8.5		
M - Maintenance																										

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - March 2015



Hourly Averages

Relative Humidity (RH) - %

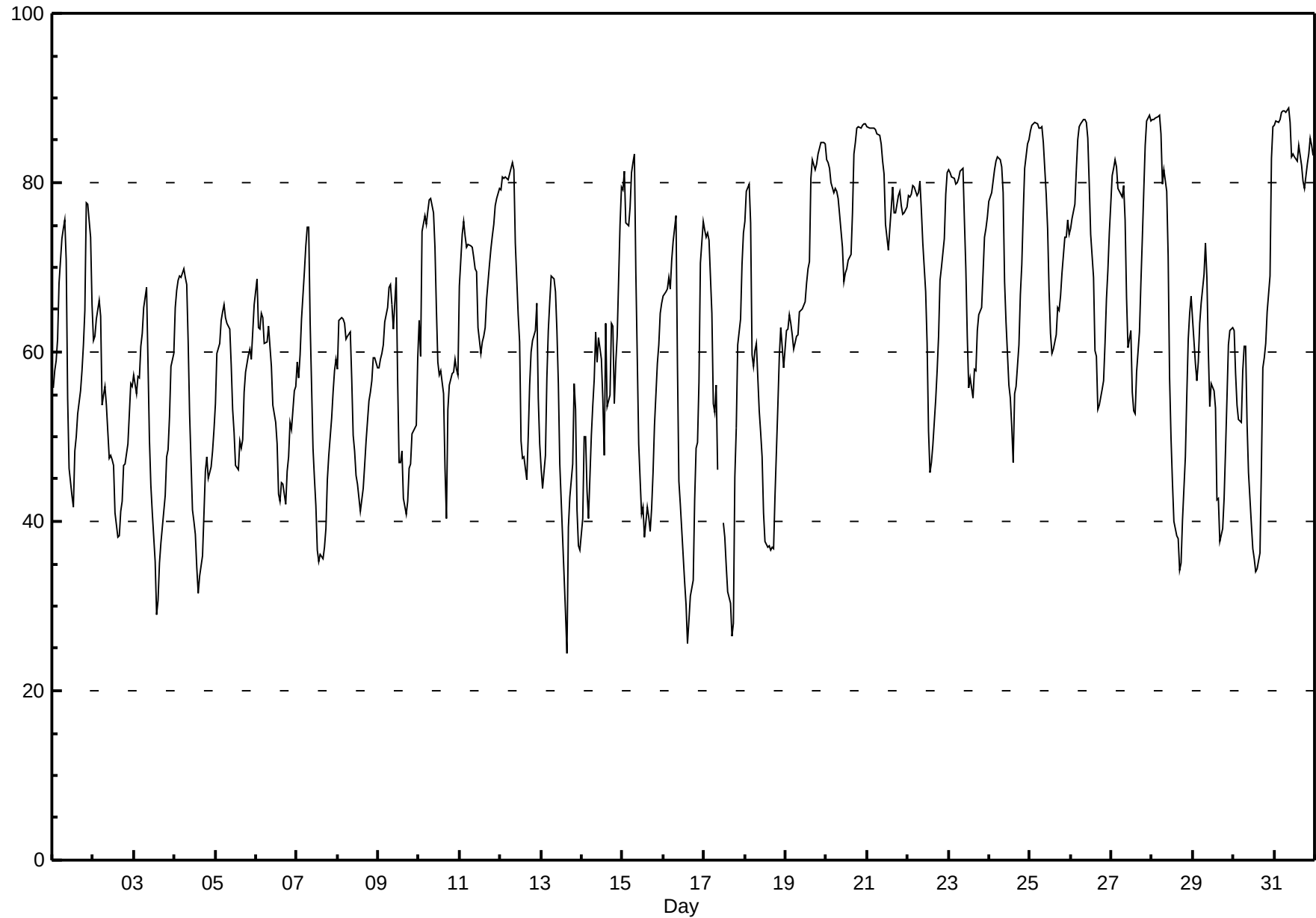
Henry Pirker - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 88.8 % on Mar 31 09:00 Maximum Daily Average: 84.9 % on Mar 31																								Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7		
Minimum Value: 24 % on Mar 13 16:00 Maximum Diurnal Average: 72.9 % at hour 8 Monthly Average: 62.41 %												Minimum Daily Average: 49.0 % on Mar 13 Minimum Diurnal Average: 48.5 % at hour 15 Percentiles: P ₁ = 30.2 P ₁₀ = 41.3 Q ₁ = 51.0 Median = 62.1 Q ₃ = 75.4 P ₉₀ = 82.7 P ₉₉ = 87.9														
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-Mar	56	58	59	62	68	73	75	76	71	55	46	43	42	48	50	53	55	58	61	65	78	77	73	66	61.1	77.5
2-Mar	61	62	64	66	64	54	55	56	54	47	48	47	47	41	38	38	41	42	47	47	49	53	56	56	51.4	66.1
3-Mar	57	55	57	57	61	62	65	68	59	50	44	41	35	29	31	35	37	39	43	48	48	52	58	60	49.7	67.6
4-Mar	65	67	68	69	69	70	69	68	61	53	41	40	38	35	31	34	36	41	46	48	45	47	48	51	51.7	69.8
5-Mar	54	60	61	64	65	66	64	63	63	58	53	51	47	46	49	49	50	55	58	60	60	59	62	66	57.6	65.6
6-Mar	69	63	63	65	64	61	61	63	61	58	54	52	49	43	42	45	44	42	46	48	52	51	55	56	54.4	68.6
7-Mar	59	57	60	64	69	73	75	75	64	49	45	42	37	35	36	36	37	39	45	48	52	55	58	59	52.8	74.8
8-Mar	58	64	64	64	63	61	62	62	57	50	48	45	44	41	42	44	47	50	54	55	57	59	59	58	54.6	64.1
9-Mar	58	59	60	61	64	65	68	68	66	63	69	57	47	47	48	43	41	42	46	47	50	51	51	59	55.4	68.8
10-Mar	64	60	74	76	75	77	78	78	76	72	65	59	57	58	55	46	40	53	56	57	58	59	58	57	62.9	78.2
11-Mar	68	74	75	74	72	73	72	72	71	70	69	63	60	61	62	63	66	70	72	74	75	77	78	79	70.5	79.3
12-Mar	79	81	80	81	80	81	82	82	82	73	64	61	50	48	48	45	50	56	60	61	63	66	55	49	65.6	82.3
13-Mar	46	44	48	57	63	66	69	69	67	62	56	47	42	34	29	24	39	43	47	56	53	41	37	37	49.0	68.9
14-Mar	40	50	50	44	40	50	54	57	62	59	62	59	54	48	63	54	55	63	63	54	59	62	75	79	56.5	79.5
15-Mar	79	81	75	75	77	81	82	83	69	49	45	41	42	38	42	41	39	42	46	51	59	61	65	66	59.5	83.4
16-Mar	67	67	67	69	67	71	73	76	59	45	42	39	33	30	26	28	31	33	43	49	49	56	71	75	52.8	76.1
17-Mar	74	74	74	73	65	54	53	56	46	M	M	40	38	35	32	30	26	28	45	51	61	64	70	74	52.9	74.3
18-Mar	75	79	80	75	60	58	60	61	53	50	48	41	38	37	37	37	37	43	54	59	63	61	58	54.2	79.8	
19-Mar	62	63	64	63	62	60	62	62	65	65	65	66	68	70	71	81	83	81	82	83	84	85	85	85	71.6	84.7
20-Mar	83	82	82	80	79	79	79	78	76	72	68	69	70	71	71	76	83	85	86	87	86	87	87	87	79.4	87.0
21-Mar	87	87	86	86	86	86	86	86	85	83	81	75	72	75	77	80	76	77	78	79	77	76	76	77	80.6	86.7
22-Mar	79	78	79	80	80	78	79	80	77	73	67	61	51	46	47	49	54	58	62	69	70	73	79	81	68.7	81.1
23-Mar	81	81	81	80	80	80	81	81	82	76	70	62	56	57	55	58	58	63	64	65	69	74	75	76	71.0	81.7
24-Mar	78	79	80	82	83	83	83	82	79	68	63	56	55	51	47	55	56	61	67	70	76	82	84	85	71.0	85.1
25-Mar	86	87	87	87	87	86	86	87	85	79	75	67	62	60	60	62	65	65	67	69	74	74	76	74	75.2	87.1
26-Mar	75	76	77	82	85	87	87	88	88	87	85	80	74	69	60	60	53	54	56	57	61	66	70	74	72.8	87.5
27-Mar	81	82	83	82	79	79	78	80	76	66	61	63	55	53	53	58	62	68	73	79	84	87	88	87	73.2	88.0
28-Mar	88	87	88	88	88	86	80	81	79	71	57	50	45	40	38	38	34	35	40	48	55	62	65	67	62.8	88.0
29-Mar	64	59	57	59	63	66	69	73	69	60	54	56	55	53	43	43	38	39	43	48	55	61	62	63	56.3	72.9
30-Mar	63	57	54	52	52	58	61	61	52	46	40	37	36	34	34	36	46	58	59	61	65	69	83	87	54.1	86.6
31-Mar	87	87	87	88	88	88	89	88	89	87	83	83	83	82	84	83	82	80	79	82	83	85	84	83	84.9	88.8
69.1 69.6 70.4 71.0 70.9 71.4 72.1 72.9 69.0 63.2 59.0 54.6 51.0 48.9 48.5 49.1 50.5 53.5 57.3 60.3 63.5 65.6 67.9 68.7																								Diurnal Average		
87.5 87.5 87.5 87.8 88.3 88.5 88.5 88.3 88.8 87.2 85.3 83.4 83.1 82.5 84.3 83.2 83.3 84.7 86.4 86.6 86.4 87.3 88.0 87.3																								Diurnal Maximum		
M - Maintenance																										

Hourly Averages

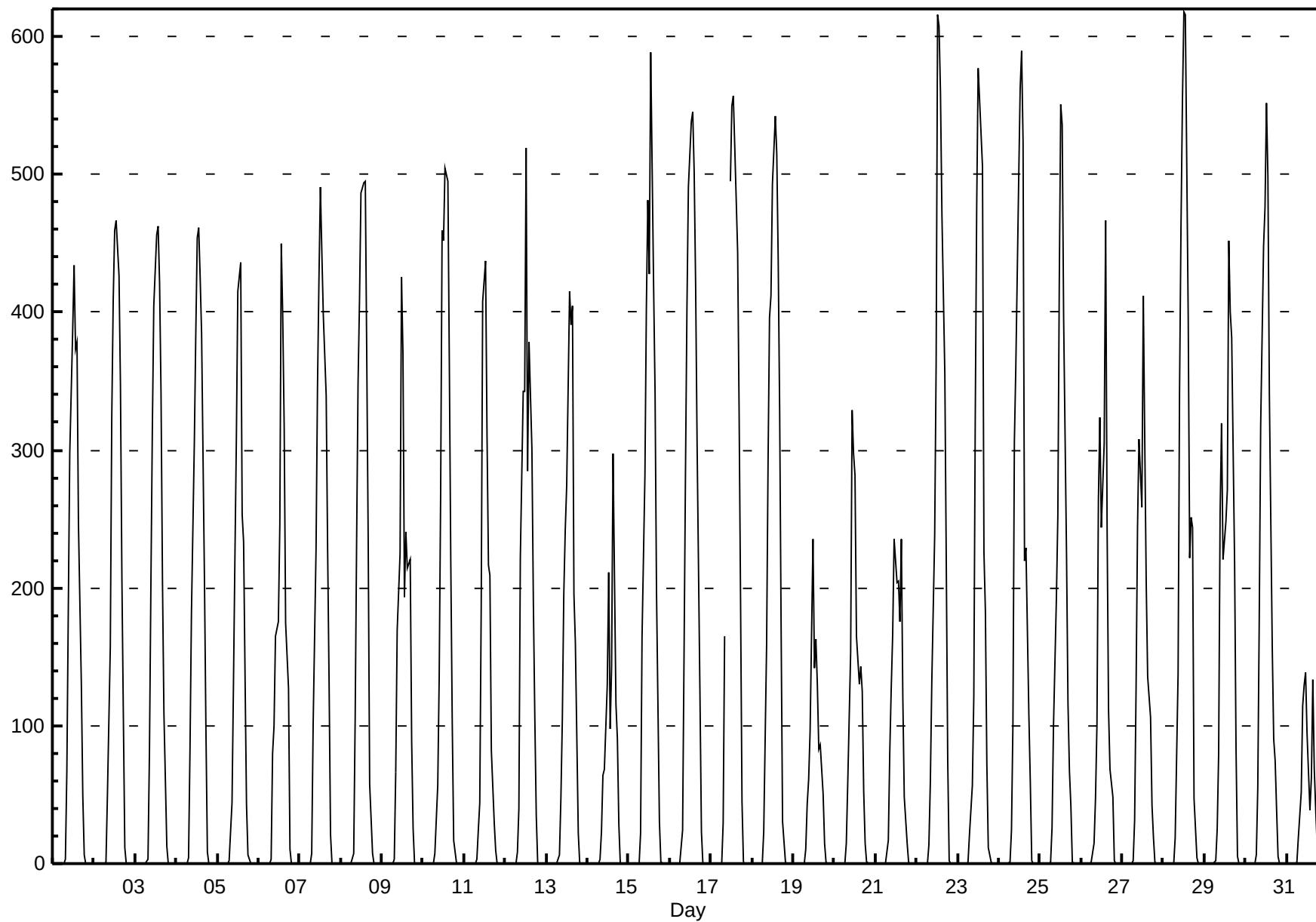
Relative Humidity (RH) - %

Henry Pirker - March 2015



Hourly Averages

Solar Radiation (SR) - W/m²
Henry Pirker - March 2015



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2015

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	6	6	4	0	3	3	2	2	1	1	2	4	6	8	6	6	5	6	20	17	15	14	20	4.6	19.8
Dir	116	117	116	113	19	311	298	329	301	262	241	155	302	318	322	313	309	316	312	316	302	312	308	338	318.3	337.8
2 Spd	18	13	9	12	14	14	11	9	11	14	19	20	21	22	21	21	16	14	12	12	9	5	4	5	12.8	22.4
Dir	350	355	329	324	342	357	356	334	329	327	306	303	309	311	314	315	306	304	286	311	306	325	314	321	320.8	311.1
3 Spd	3	5	3	3	3	3	2	2	4	4	4	6	4	2	3	3	4	8	7	7	6	1	2	1	0.8	7.7
Dir	276	258	247	289	306	311	322	305	317	310	272	237	246	280	298	336	67	83	88	88	87	110	98	307	315.2	83.1
4 Spd	4	3	3	3	3	2	4	3	4	4	2	3	5	3	3	4	4	6	10	11	17	17	16	16	5.7	17.2
Dir	299	308	322	310	332	295	316	325	307	321	292	304	295	290	281	268	276	286	260	251	264	259	260	269	276.5	259.0
5 Spd	14	8	4	3	3	2	4	6	7	7	10	8	13	16	18	20	18	10	5	3	3	7	7	3	7.6	20.2
Dir	277	292	317	308	338	19	354	286	296	269	266	287	263	272	278	275	260	269	236	253	261	241	252	302	275.0	275.4
6 Spd	1	20	21	19	20	22	22	21	21	18	17	18	16	17	16	14	12	18	17	14	11	13	11	10	16.2	22.0
Dir	245	269	265	262	256	261	260	258	258	261	267	260	260	262	271	287	278	263	261	263	265	262	281	264	264.1	260.0
7 Spd	10	10	8	3	1	2	3	2	3	6	6	7	9	8	7	16	19	18	15	19	16	11	11	10	8.8	19.0
Dir	247	268	301	298	348	295	309	300	242	274	288	263	264	291	281	261	257	256	256	269	271	264	260	263	267.4	268.8
8 Spd	12	7	10	10	12	11	11	13	11	8	12	17	17	18	24	27	24	20	17	25	25	27	24	25	16.7	26.9
Dir	266	239	247	241	246	245	246	266	255	245	263	269	275	265	268	266	270	269	278	265	259	252	250	251	260.2	251.9
9 Spd	25	23	20	20	20	18	12	17	20	18	20	25	25	17	14	16	19	16	14	17	15	11	11	4	16.7	24.8
Dir	252	256	256	259	259	257	267	256	255	261	289	291	295	294	294	276	259	259	266	263	257	264	260	309	267.7	294.8
10 Spd	5	8	8	6	5	3	3	5	3	2	2	4	5	7	7	4	6	7	8	7	8	8	7	7	3.8	8.4
Dir	320	39	66	76	69	88	70	101	104	135	255	294	313	326	324	16	77	74	69	68	67	69	73	65	54.0	66.0
11 Spd	8	8	10	10	8	6	7	6	7	7	7	6	6	7	6	6	6	5	6	6	7	6	5	4	6.5	10.5
Dir	57	62	64	66	76	74	69	63	56	51	62	71	64	39	46	72	82	65	62	75	85	81	65	67	65.6	64.3
12 Spd	4	6	1	1	2	4	5	5	5	3	3	3	5	3	7	19	20	17	10	7	7	9	13	10	4.7	19.5
Dir	50	94	94	47	88	162	165	158	160	136	164	183	158	285	288	264	246	226	208	203	247	228	227	230	219.8	246.4
13 Spd	12	10	5	3	5	4	5	5	8	8	8	9	10	13	10	6	6	2	2	1	5	4	4	3	4.1	12.9
Dir	232	243	207	84	132	131	132	126	131	142	132	140	147	159	150	87	334	328	48	152	147	176	172	157	154.7	158.6
14 Spd	4	1	2	9	3	1	3	1	1	1	3	3	1	1	3	7	6	23	30	39	37	33	27	21	8.8	38.9
Dir	180	324	117	212	245	15	56	21	202	190	338	324	25	103	347	290	298	251	258	254	255	269	314	312	270.3	254.5
15 Spd	16	13	11	7	3	2	2	2	4	15	20	22	18	21	19	18	17	12	8	6	3	2	2	4	8.8	21.9
Dir	309	315	320	331	288	194	317	192	251	284	273	287	291	291	301	312	315	336	323	348	352	140	148	155	301.2	287.3
16 Spd	2	3	3	4	4	3	3	2	1	5	7	6	3	4	4	3	3	5	4	4	4	1	3	2	0.9	7.1
Dir	156	171	184	236	230	246	258	334	334	249	233	228	277	278	303	329	50	73	78	76	79	67	318	352	256.0	232.6
17 Spd	1	0	0	1	4	5	4	2	5	M	M	8	10	10	11	10	11	8	5	4	1	0	0	0	4.1	10.9
Dir	299	278	9	95	90	90	95	86	93	M	M	93	78	75	63	62	74	63	45	11	318	303	296	282	70.7	74.3
18 Spd	0	0	0	0	6	10	7	10	13	12	12	15	20	16	10	10	10	7	3	3	3	3	4	4	6.5	20.4
Dir	296	269	263	257	260	250	240	234	246	279	257	268	280	291	322	332	326	322	296	261	269	269	312	300	279.8	280.5
19 Spd	4	2	2	3	3	1	1	4	4	7	8	9	9	9	8	8	9	10	9	8	7	6	5	4	3.9	10.0
Dir	275	257	216	299	316	274	171	135	105	62	66	72	66	71	58	56	49	41	34	17	1	348	340	343	41.2	40.6
20 Spd	4	2	4	4	5	5	6	7	7	8	11	12	12	15	13	12	11	12	13	16	15	14	13	14	9.6	16.1
Dir	29	34	81	107	90	82	95	91	80	72	85	84	82	91	87	78	77	83	83	83	84	87	93	93	84.2	83.0
21 Spd	13	12	10	9	6	5	8	8	9	8	8	9	8	10	11	10	11	11	11	9	7	5	3	4	5.7	12.8
Dir	90	87	87	81	65	51	39	40	41	44	40	38	9	340	340	346	331	329	333	342	327	307	276	268	19.5	90.1
22 Spd	5	5	3	4	2	1	1	2	2	4	4	4	4	4	4	2	5	6	5	3	5	2	3	3	1.5	5.6
Dir	272	287	264	262	248	236	225	217	209	183	182	184	210	218	202	175	101	69	98	138	108	169	264	276	197.6	69.2

Hourly Averages

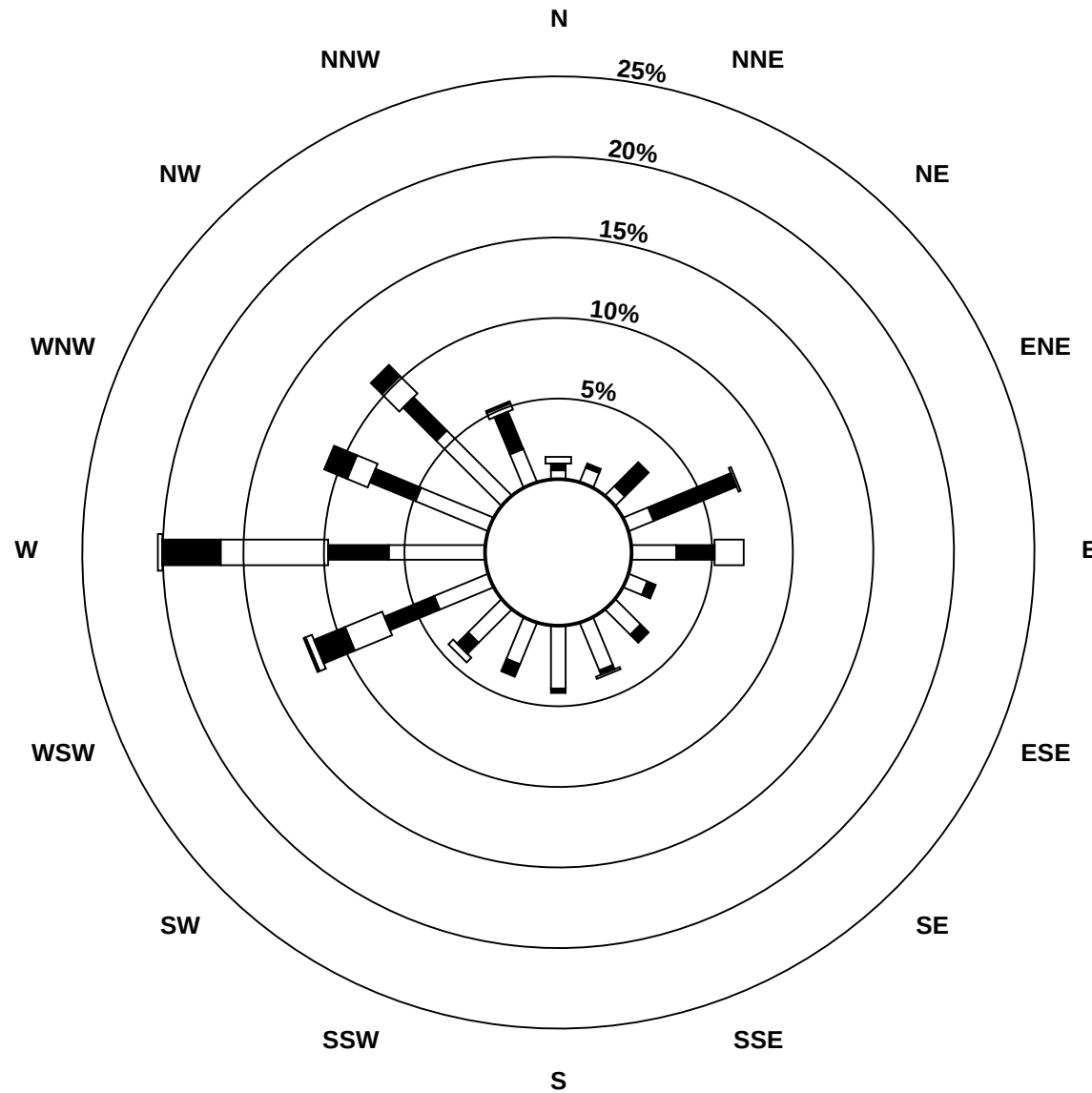
Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2015

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	3	3	3	3	3	3	2	2	1	5	3	3	5	6	5	5	6	4	2	1	2	2	2	0.3	6.3									
Dir	274	258	276	274	269	279	279	254	242	253	110	97	71	6	29	75	80	83	95	172	174	222	192	203	70.5	82.5									
24 Spd	3	2	2	2	3	3	3	3	5	4	2	2	4	1	3	6	6	7	3	2	3	2	3	2	2.4	6.7									
Dir	199	205	209	216	190	187	271	266	269	266	248	252	260	241	271	276	258	295	336	334	309	200	197	282	258.0	295.3									
25 Spd	1	2	1	1	2	3	2	1	2	4	4	4	5	6	6	5	4	4	4	3	3	4	2	6	1.2	6.1									
Dir	216	210	229	217	226	272	272	234	226	301	303	275	265	288	308	306	321	82	148	152	165	158	157	107	253.6	106.5									
26 Spd	6	3	1	2	2	3	4	4	2	4	5	6	6	7	7	11	23	19	17	17	9	4	2	2	5.3	23.3									
Dir	142	165	237	263	247	186	179	187	204	171	173	194	212	212	262	289	279	260	261	258	279	306	304	219	248.1	278.6									
27 Spd	2	2	4	3	4	4	4	1	1	1	3	4	3	6	4	4	3	4	1	4	7	7	8	7	2.0	7.7									
Dir	257	310	158	161	145	136	132	178	230	178	198	272	231	265	282	307	301	329	157	303	307	287	283	240	258.5	282.8									
28 Spd	8	6	5	5	6	8	10	5	10	16	17	20	21	23	24	22	23	24	22	11	7	2	3	3	11.8	24.1									
Dir	247	234	244	267	271	290	300	227	241	255	280	285	273	271	268	259	254	256	263	272	280	225	185	171	264.1	268.3									
29 Spd	3	3	4	4	3	2	2	1	2	2	9	8	10	8	25	28	30	29	22	19	19	14	14	11	10.2	29.6									
Dir	174	143	155	143	176	183	224	212	202	235	241	260	282	263	262	265	270	254	254	264	260	250	246	235	253.1	270.4									
30 Spd	7	14	17	13	13	3	2	3	5	8	9	8	6	4	2	5	9	8	5	3	1	1	2	2	5.1	17.1									
Dir	245	249	251	251	250	288	272	212	233	241	260	270	246	282	274	205	183	175	149	133	128	230	314	232	239.1	251.3									
31 Spd	6	6	4	5	7	4	5	8	8	8	9	9	10	14	21	21	22	24	22	15	19	17	21	23	12.1	23.6									
Dir	324	323	303	288	282	276	292	313	316	315	319	331	336	280	287	276	271	272	284	271	284	280	285	292	289.4	272.3									
Spd	2.9	2.8	2.3	2.3	2.4	2.0	1.8	2.0	2.6	3.6	4.3	4.7	5.3	5.8	6.8	7.3	7.0	6.1	5.2	5.6	5.5	5.1	4.8	3.9	Diurnal Average										
Dir	272.7	273.6	265.5	267.7	265.6	267.1	281.8	260.7	261.5	272.9	274.6	279.8	284.0	287.6	293.7	289.6	280.9	274.5	272.3	275.1	274.2	265.5	273.0	279.2	Diurnal Maximum										
Spd	24.7	22.9	20.9	19.5	20.3	21.6	22.0	21.2	21.1	18.4	20.2	24.6	24.8	22.7	24.7	28.1	29.6	29.0	30.3	38.9	37.1	33.0	26.7	24.7	Diurnal Maximum										
Dir	251.9	255.7	264.7	259.0	256.4	260.5	260.0	257.5	258.1	261.5	273.5	291.1	294.8	271.3	261.7	264.6	270.4	253.7	258.4	254.5	254.7	268.9	313.8	250.7											
Maximum Speed Value: 39 km/h on Mar 14 20:00																		Minimum Speed Value: 0 km/h on Mar 18 01:00																Hours in Service: 744	
Maximum Daily Speed Average: 16.7 km/h on Mar 9																		Minimum Daily Speed Average: 0.3 km/h on Mar 24																Hours of Data: 742	
Maximum Diurnal Speed Average: 7.3 km/h at hour 16																		Minimum Diurnal Speed Average: 1.8 km/h at hour 7																Hours of Missing Data: 2	
Monthly Average Velocity: 4.21 km/h 277.04 deg																		Speed Percentiles: P ₁ = 0.4 P ₁₀ = 1.8 Q ₁ = 3.2 Median = 6.0 Q ₃ = 11.0 P ₉₀ = 18.8 P ₉₉ = 27.3																Percent Operational Time: 99.7	
All monthly, daily, and diurnal averages have been calculated using vector methods																																			
M - Maintenance																																			
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	15		11		5		1		0		0		32																						
NorthEast	12		38		0		0		0		0		50																						
East	29		45		15		0		0		0		89																						
SouthEast	27		14		0		0		0		0		41																						
South	46		7		1		0		0		0		54																						
SouthWest	47		31		8		1		0		0		87																						
West	71		49		69		52		6		1		248																						
NorthWest	74		40		18		9		0		0		141																						
Total	321		235		116		63		6		1		742																						

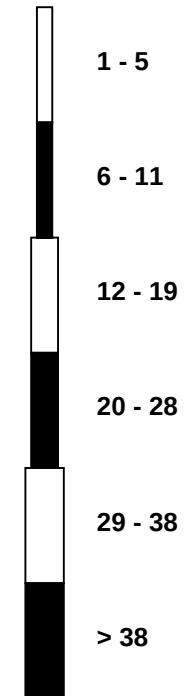
Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - March 2015



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - March 2015

Maximum Speed: 39 km/h on Mar 14 20:00																				Maximum Daily Speed Average: 17.6 km/h on Mar 9										Hours in Service: 744	
Minimum Speed: 0 km/h on Mar 18 01:00																				Minimum Daily Speed Average: 3.7 km/h on Mar 25										Hours of Data: 742	
Maximum Diurnal Speed Average: 12.3 km/h at hour 17																				Minimum Diurnal Speed Average: 5.5 km/h at hour 7										Hours of Missing Data: 2	
Monthly Average Speed: 8.52 km/h																				Percentiles: P ₁ = 0.6 P ₁₀ = 2.5 Q ₁ = 3.7 Median = 6.4 Q ₃ = 11.2 P ₉₀ = 19.0 P ₉₉ = 27.7										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-Mar	8	6	6	4	2	3	3	2	2	1	2	3	4	6	8	6	6	5	6	20	17	15	14	21	7.1	21.4					
2-Mar	19	13	9	12	14	14	11	9	12	15	19	20	21	23	21	21	16	14	12	12	9	5	4	6	13.8	22.5					
3-Mar	4	5	3	4	3	3	2	3	4	4	4	7	4	2	3	4	4	8	7	7	6	2	2	3	4.2	7.8					
4-Mar	4	4	3	3	3	2	4	3	4	4	2	3	5	3	3	4	4	6	10	12	17	17	16	16	6.3	17.3					
5-Mar	14	8	5	3	4	2	4	6	7	8	10	8	13	16	18	20	18	10	5	4	3	7	7	4	8.5	20.4					
6-Mar	3	20	21	19	20	22	22	21	21	19	17	18	16	18	17	14	13	18	18	14	11	13	11	11	16.5	22.1					
7-Mar	10	10	8	4	3	2	3	3	3	6	6	7	9	9	8	17	19	19	15	19	16	11	11	10	9.5	19.2					
8-Mar	12	7	11	10	12	12	11	13	11	8	12	17	18	19	24	27	24	20	18	25	26	27	24	25	17.2	27.1					
9-Mar	25	23	20	20	20	18	13	17	20	18	21	25	25	18	14	17	19	16	14	17	15	11	11	6	17.6	25.0					
10-Mar	5	9	9	7	5	3	3	5	3	3	2	4	5	7	7	5	6	7	8	7	8	8	7	7	5.9	9.0					
11-Mar	8	8	11	10	8	6	7	7	7	7	8	7	7	7	6	7	7	5	6	6	7	6	5	4	6.9	10.7					
12-Mar	4	7	2	2	2	4	5	5	5	4	3	4	5	5	7	19	20	17	10	7	7	9	13	10	7.4	20.0					
13-Mar	12	11	6	3	5	4	5	5	8	8	8	9	10	13	10	7	6	3	3	2	6	5	5	3	6.5	13.0					
14-Mar	5	3	3	9	6	3	3	2	2	2	4	4	2	4	5	7	8	23	31	39	37	33	27	21	11.8	39.2					
15-Mar	16	13	11	8	4	3	3	3	5	15	20	22	18	21	19	18	17	12	8	6	3	3	2	4	10.7	22.3					
16-Mar	3	3	3	4	4	3	3	2	2	5	8	7	4	4	5	4	4	5	4	4	4	2	3	2	3.8	7.6					
17-Mar	2	1	1	1	4	5	5	3	5	M	M	9	10	10	11	10	11	8	6	7	2	0	0	0	5.1	11.1					
18-Mar	0	0	0	0	6	10	7	10	13	12	12	15	21	16	11	11	10	8	4	3	3	4	5	5	7.7	20.7					
19-Mar	4	3	3	4	4	2	3	4	5	7	8	9	9	9	9	9	11	10	9	8	7	6	5	5	6.5	10.6					
20-Mar	6	5	5	5	6	6	7	8	7	8	11	12	12	15	13	12	11	13	14	16	15	14	13	14	10.3	16.3					
21-Mar	13	12	11	9	7	7	9	9	10	9	9	10	8	10	11	10	11	11	11	9	8	5	4	4	9.0	13.0					
22-Mar	5	5	3	4	2	1	1	2	2	4	4	4	4	4	4	4	6	6	6	4	6	4	3	3	3.9	6.2					
23-Mar	3	3	3	3	3	3	3	2	2	2	6	5	5	7	7	7	7	7	5	3	3	2	3	2	4.1	7.5					
24-Mar	3	2	2	2	3	3	3	3	5	4	2	3	6	4	4	8	6	7	4	4	4	3	3	2	3.8	7.5					
25-Mar	2	2	1	1	2	3	2	2	3	5	4	4	6	6	6	5	5	5	5	4	4	4	3	7	3.7	6.6					
26-Mar	6	4	2	3	2	3	4	4	2	4	6	6	6	7	8	12	23	19	17	17	10	4	3	2	7.3	23.5					
27-Mar	2	3	4	3	4	5	4	3	2	3	4	4	4	6	5	4	4	5	3	5	7	7	8	7	4.3	7.8					
28-Mar	8	6	5	5	6	8	10	5	10	16	18	20	21	23	25	22	24	24	22	11	7	4	3	3	12.8	24.6					
29-Mar	3	4	5	4	4	3	2	1	2	2	9	8	10	9	25	28	30	29	23	19	19	14	14	11	11.6	30.0					
30-Mar	7	14	17	13	13	4	3	4	5	9	10	8	7	5	4	7	10	8	5	4	3	1	3	2	6.9	17.2					
31-Mar	6	6	4	6	7	4	5	8	8	8	9	9	11	14	21	21	23	24	22	16	20	17	21	23	13.0	23.8					
																									Diurnal Average						
																									Diurnal Maximum						
M - Maintenance																															
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - March 2015

Maximum Value: 96.3 deg on Mar 6 01:00																			Hours in Service: 744						
Minimum Value: 4.0 deg on Mar 22 08:00																			Hours of Data: 742						
																			Hours of Missing Data: 2						
																			Hours of Calibration: 0						
Percentiles: P ₁ = 5.2 P ₁₀ = 7.1 Q ₁ = 10.1 Median = 16.3 Q ₃ = 29.0 P ₉₀ = 48.8 P ₉₉ = 85.1																			Percent Operational Time: 99.7						
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Mar	6	8	8	24	75	18	12	24	50	32	62	65	11	6	5	15	18	16	21	8	5	6	9	23	75.2
2-Mar	11	11	8	6	15	8	9	14	16	17	6	7	6	6	6	5	6	9	13	16	12	12	19	19	19.2
3-Mar	35	13	29	17	28	13	63	80	8	9	26	12	25	42	36	46	36	12	9	7	8	68	34	79	80.1
4-Mar	8	15	22	14	12	23	21	10	13	15	30	23	15	38	27	20	17	9	12	12	7	6	8	6	38.1
5-Mar	9	10	31	46	56	39	21	14	9	18	20	7	11	11	6	6	6	11	10	30	28	9	14	37	56.4
6-Mar	96	9	8	8	5	6	6	6	6	6	8	6	8	6	9	8	12	9	7	8	11	6	7	12	96.3
7-Mar	7	12	20	41	75	52	34	25	19	11	9	21	16	24	21	8	6	11	17	6	7	6	7	12	75.1
8-Mar	12	14	7	7	7	7	9	21	8	7	17	11	9	14	10	8	7	7	13	11	8	6	7	6	21.1
9-Mar	6	5	6	6	7	6	11	5	7	14	13	11	5	18	9	13	7	8	8	6	6	9	10	43	42.8
10-Mar	30	32	16	14	11	14	21	19	34	35	40	19	23	10	14	48	21	14	10	9	10	12	13	11	48.3
11-Mar	14	14	12	13	12	17	22	26	23	19	17	23	23	26	23	23	23	19	21	23	15	24	15	24	26.0
12-Mar	34	37	84	84	64	17	12	12	10	27	30	29	18	55	17	11	13	8	8	17	9	9	11	15	84.4
13-Mar	12	16	53	41	16	30	42	21	8	12	7	9	15	10	14	34	24	49	41	86	17	25	27	17	86.0
14-Mar	35	85	57	7	65	93	33	79	54	83	52	27	95	86	55	12	36	10	8	7	7	8	8	6	95.3
15-Mar	8	11	13	19	61	74	66	67	65	11	8	11	12	10	16	10	14	9	13	11	13	58	21	7	73.8
16-Mar	22	13	19	21	10	19	25	26	48	34	24	20	48	41	38	55	64	29	21	17	11	70	16	34	69.9
17-Mar	46	89	85	82	17	12	25	30	22	M	M	19	14	15	18	17	12	32	45	54	26	23	14	17	89.4
18-Mar	20	14	14	15	11	9	16	6	14	10	12	10	9	11	20	9	12	13	38	19	25	27	33	29	38.0
19-Mar	26	39	41	40	49	53	60	35	37	37	28	29	27	31	39	33	28	28	28	30	20	22	35	47	59.7
20-Mar	68	90	57	52	40	41	34	24	33	21	14	14	14	10	13	11	14	9	10	8	10	10	8	7	90.4
21-Mar	9	9	10	13	41	51	37	40	25	37	37	36	30	11	11	12	10	8	7	14	14	21	23	12	50.7
22-Mar	8	14	14	9	10	4	5	4	6	14	21	26	20	19	20	60	47	31	37	46	25	63	14	23	62.9
23-Mar	20	12	29	14	15	27	25	15	8	42	43	81	72	53	53	55	50	33	49	44	60	42	27	11	81.3
24-Mar	13	9	8	7	19	23	28	21	9	11	15	39	48	70	45	34	23	26	64	72	58	28	33	45	72.1
25-Mar	28	9	12	8	24	20	34	17	39	23	26	11	19	17	22	16	55	50	32	32	29	25	53	28	55.2
26-Mar	24	28	19	17	24	21	20	11	14	26	17	14	12	15	24	20	7	9	10	9	20	33	44	23	44.5
27-Mar	18	45	23	27	18	31	51	60	44	55	23	21	18	20	27	29	31	41	63	30	11	10	11	8	63.0
28-Mar	9	12	19	15	15	24	11	26	8	9	18	12	11	11	11	12	7	8	9	13	18	40	22	27	40.2
29-Mar	21	38	22	35	36	36	24	12	18	11	8	18	9	22	12	9	10	7	7	8	9	10	8	6	37.7
30-Mar	16	8	8	12	14	46	45	19	11	12	16	20	25	41	64	51	33	10	18	39	60	12	52	38	63.8
31-Mar	10	20	27	12	10	13	15	10	10	11	12	14	16	16	11	11	7	8	8	14	17	8	12	5	27.1
96.3 90.4 85.3 84.1 75.2 93.4 65.7 80.1 64.7 82.7 61.6 81.3 95.3 85.6 63.8 59.7 63.7 50.2 64.3 86.0 60.2 69.9 53.1 79.0																									
M - Maintenance																									

PAZA

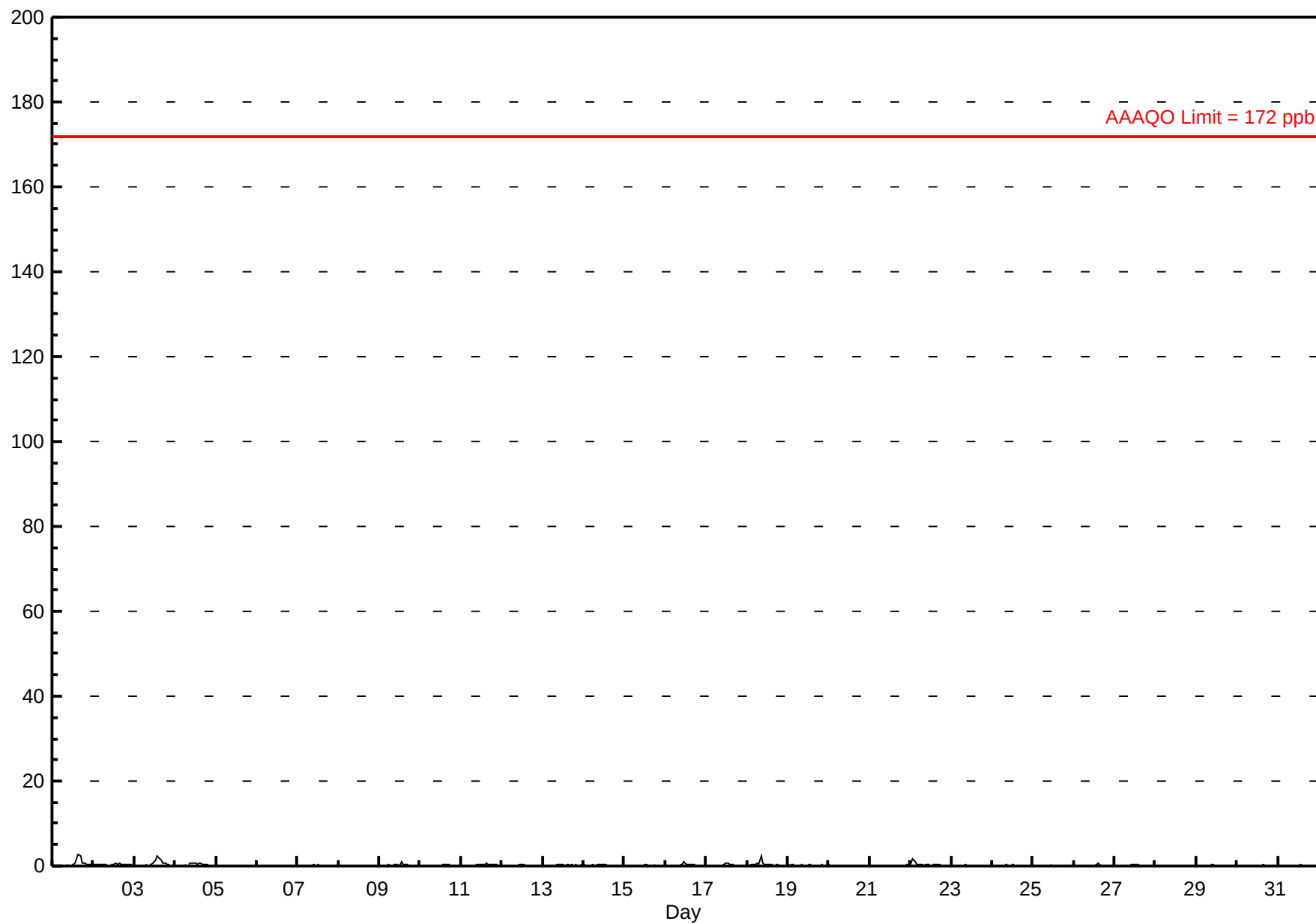
Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

[illegible]

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2015



Hourly Maximums

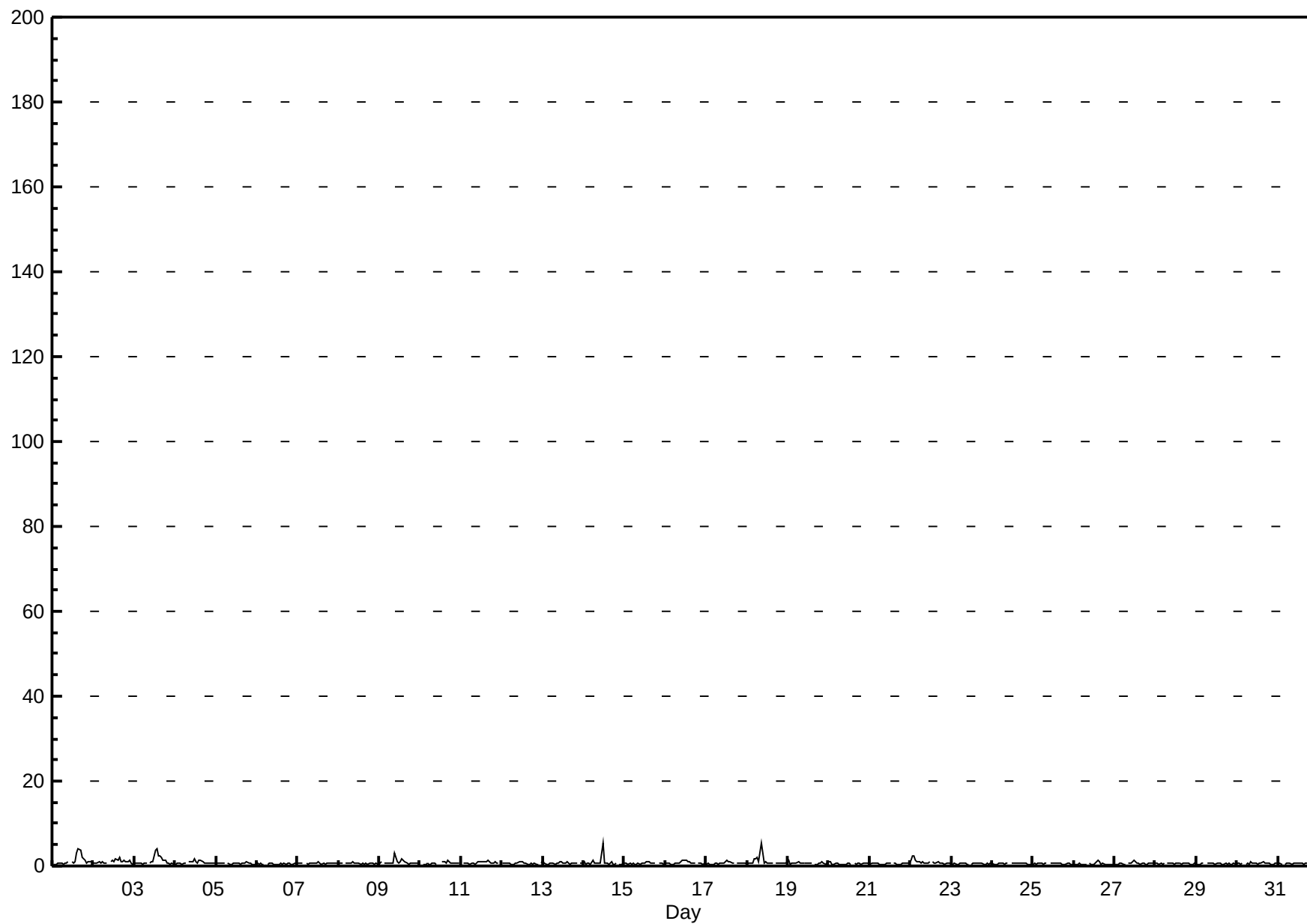
Sulphur Dioxide (SO₂) - ppb

Evergreen Park - March 2015

Maximum Value: 5.5 ppb on Mar 18 09:00																				Maximum Daily Average: 1.2 ppb on Mar 1										Hours in Service: 744									
Minimum Value: 0 ppb on Mar 23 23:00																				Minimum Daily Average: 0.5 ppb on Mar 6										Hours of Data: 709									
Maximum Diurnal Average: 1.0 ppb at hour 12																				Minimum Diurnal Average: 0.6 ppb at hour 23										Hours of Missing Data: 35									
Monthly Average: 0.71 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.8 P ₉₀ = 1.0 P ₉₉ = 2.9										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-Mar	0	0	0	1	1	1	0	1	1	1	A	1	1	1	3	4	4	2	2	1	1	1	1	1	1.2	4.0													
2-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	2	1	1	1	1	1	1	1	0	1.0	2.1													
3-Mar	1	1	1	1	1	0	1	1	A	1	1	1	4	4	2	2	2	1	1	1	1	0	1	1	1.2	3.9													
4-Mar	0	1	1	1	0	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.7													
5-Mar	1	1	1	1	1	1	A	1	0	0	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0.6	0.9													
6-Mar	1	0	1	0	0	A	0	1	1	1	0	0	0	0	1	0	1	0	1	1	0	0	1	1	0.5	0.8													
7-Mar	1	1	1	1	A	1	0	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	0.6	1.0													
8-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	1	1	1	1	0	0.6	1.1													
9-Mar	1	1	A	1	1	1	1	1	1	3	1	1	1	2	1	1	1	0	1	1	1	1	1	1	0.9	3.2													
10-Mar	1	A	0	0	1	0	0	1	1	0	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2													
11-Mar	A	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.3													
12-Mar	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	1	0	1	0	0	A	1	0.6	1.0													
13-Mar	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.3													
14-Mar	1	0	1	1	0	1	1	1	1	1	1	5	1	1	1	0	1	0	0	1	A	1	0	1	0.9	5.3													
15-Mar	1	1	0	1	0	1	0	0	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0.6	1.0													
16-Mar	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	0.7	1.5													
17-Mar	0	1	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	1.3													
18-Mar	0	1	1	1	2	2	2	1	5	3	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	5.5													
19-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	1	1	1	1	0	1	0.7	1.2													
20-Mar	1	1	0	0	1	1	0	0	0	0	0	1	1	0	A	1	0	1	1	0	1	1	1	1	0.6	1.0													
21-Mar	0	1	1	1	1	1	0	0	0	0	1	1	1	A	1	1	0	0	0	1	1	1	1	1	0.5	0.7													
22-Mar	1	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	0.9	2.5													
23-Mar	0	0	1	0	0	1	1	1	1	0	0	A	0	1	1	1	1	1	1	0	0	1	0	1	0.5	0.8													
24-Mar	1	0	0	0	1	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0.6	0.8													
25-Mar	0	1	0	1	1	1	0	1	1	A	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0.5	0.8													
26-Mar	0	0	0	1	0	1	0	0	A	1	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0.5	1.5													
27-Mar	0	0	0	1	1	0	0	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0.6	1.2													
28-Mar	1	1	0	1	0	1	A	1	1	1	1	0	1	1	1	0	1	1	1	1	0	0	0	1	0.6	0.8													
29-Mar	0	0	0	1	1	A	1	1	1	1	1	0	1	1	1	0	0	1	0	1	0	0	1	0	0.6	0.8													
30-Mar	1	1	0	1	A	0	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0	0	1	1	0.6	0.9													
31-Mar	1	1	0	A	0	1	1	1	0	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	0.6	0.9													
0.6 0.6 0.6 0.6 0.6 0.7 0.6 0.6 0.8 0.8 0.7 1.0 0.9 0.9 0.9 0.9 0.9 0.8 0.7 0.7 0.6 0.6 0.6 0.6 0.6																									Diurnal Average														
1.3 2.5 2.3 1.5 1.5 1.7 2.1 1.0 5.5 3.2 1.2 5.3 3.6 3.9 3.2 4.0 3.7 2.1 1.6 1.2 0.9 1.3 1.0 1.0																									Diurnal Maximum														
C - Calibration																									A - Automated Daily Zero Span														

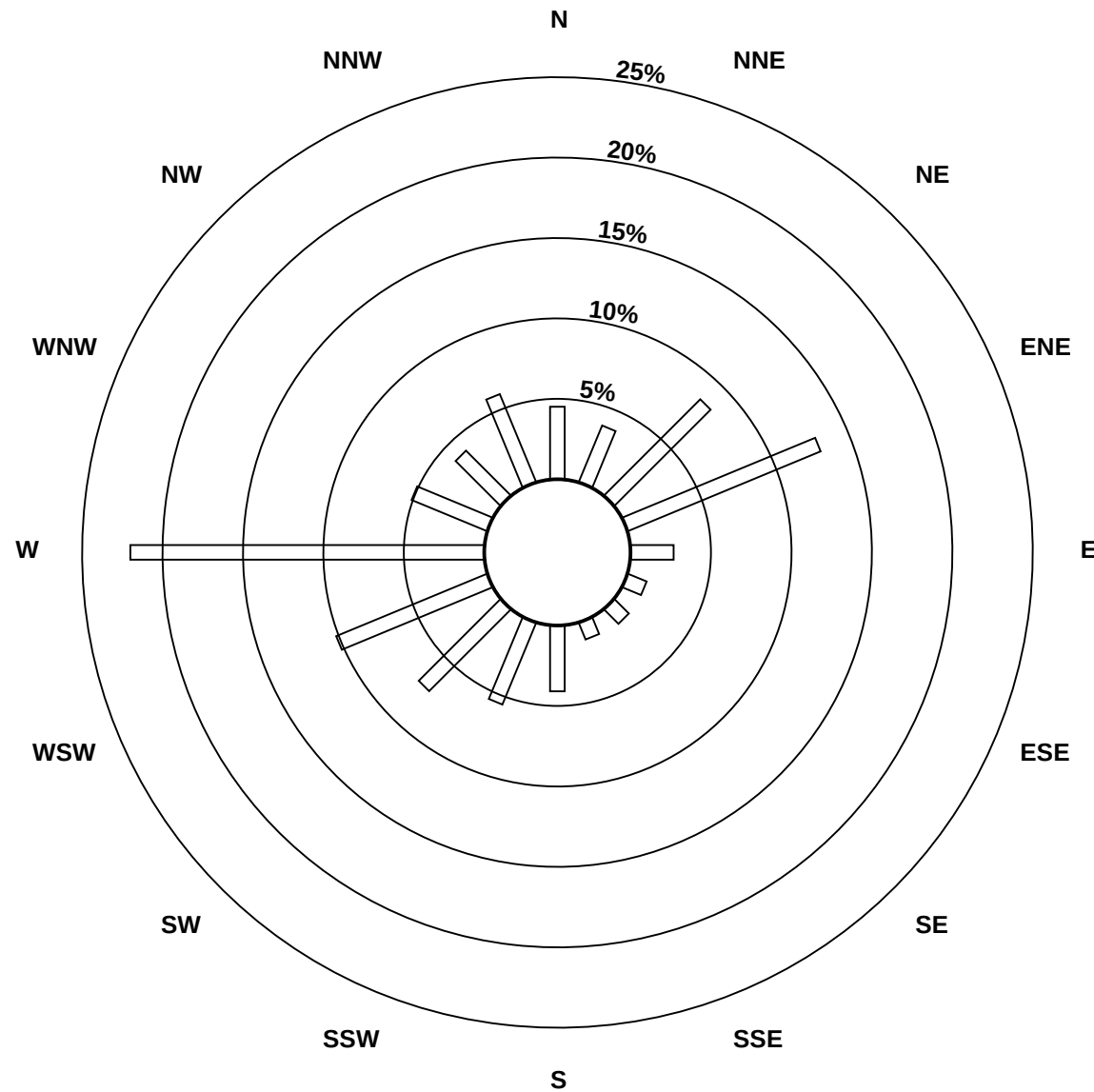
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2015

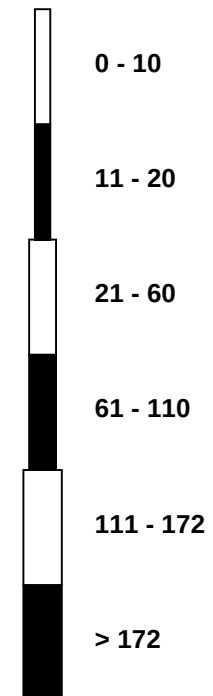


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2015

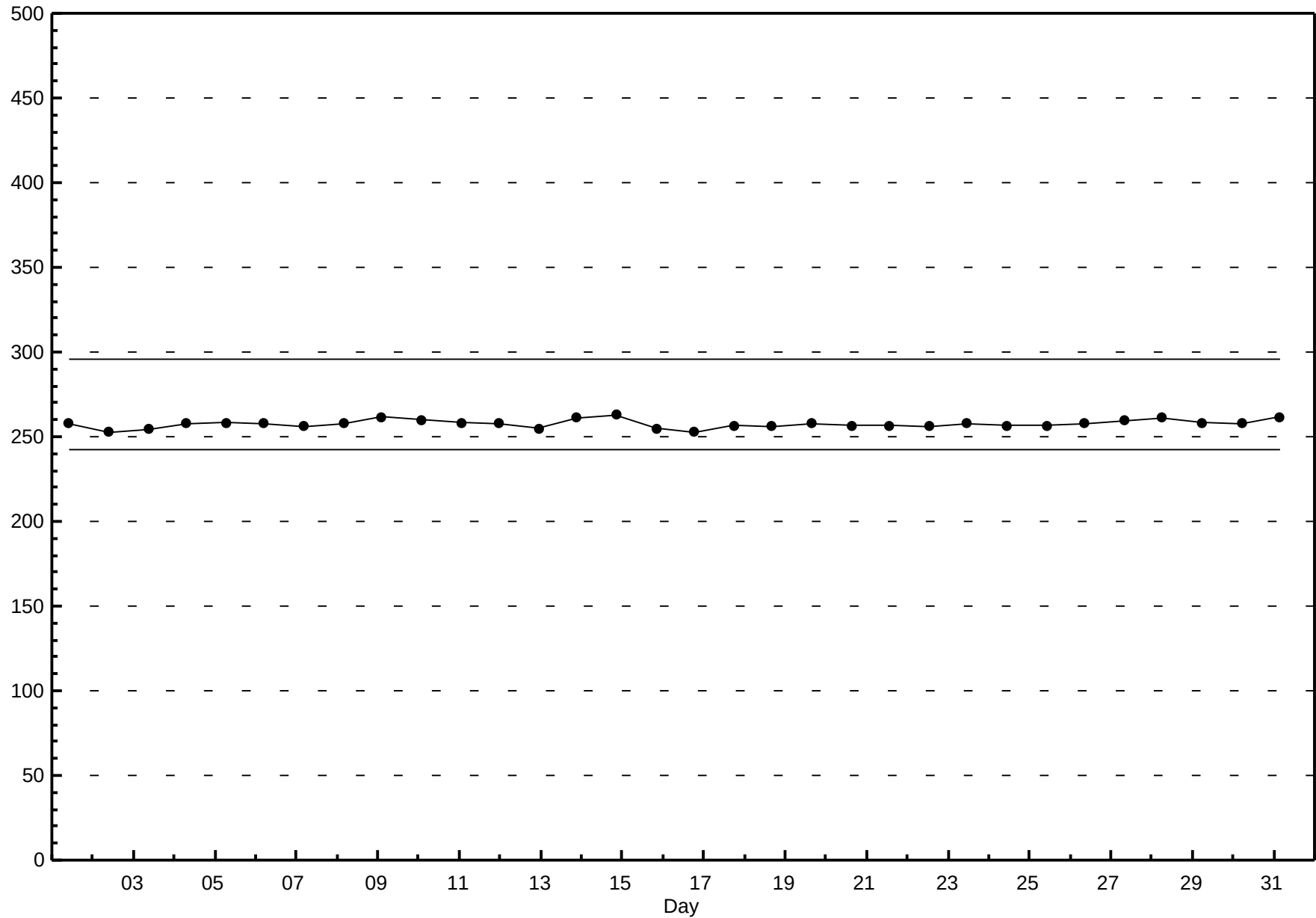


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Evergreen Park - March 2015



Hourly Averages

Total Reduced Sulphur (TRS) - ppb

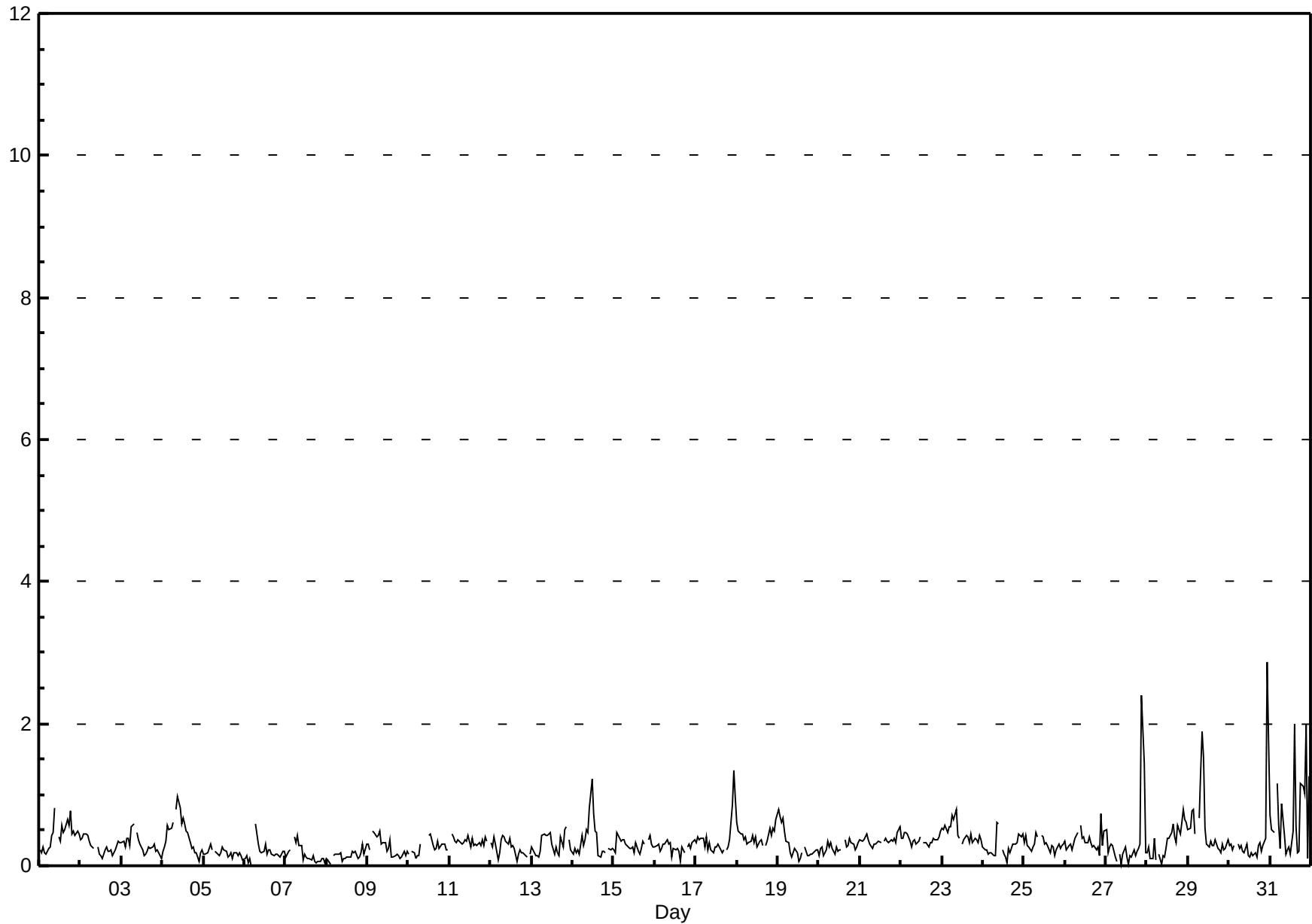
Evergreen Park - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744						
Maximum Value: 2.9 ppb on Mar 30 23:00																				Maximum Daily Average: 0.7 ppb on Mar 31		Hours of Data: 708				
Minimum Value: 0 ppb on Mar 6 05:00																				Minimum Daily Average: 0.1 ppb on Mar 8		Hours of Missing Data: 36				
Maximum Diurnal Average: 0.5 ppb at hour 22																				Minimum Diurnal Average: 0.2 ppb at hour 17		Hours of Calibration: 36				
Monthly Average: 0.33 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 = 1.4		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-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	1	1	1	1	0	0	0	0	0	0.4	0.8
2-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
3-Mar	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
4-Mar	0	0	0	1	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	1.0
5-Mar	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
6-Mar	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
7-Mar	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
8-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
9-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
10-Mar	0	A	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
11-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.4
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0.3	0.6
14-Mar	0	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0.4	1.2
15-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.5
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0.4	1.3
18-Mar	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	1	0	1	0.4	0.7
19-Mar	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.8
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
21-Mar	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	0.5
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
23-Mar	1	1	1	0	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8
24-Mar	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
25-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
26-Mar	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.7
27-Mar	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0.3	2.4
28-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1	1	0.3	0.8
29-Mar	1	1	1	1	0	A	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	1.9
30-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0.4	2.9
31-Mar	1	1	0	A	1	1	0	1	0	0	0	0	0	0	2	1	0	0	1	1	1	2	0	1	0.7	2.0
																									Diurnal Average	
																									Diurnal Maximum	
C - Calibration																									A - Automated Daily Zero Span	
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2015



Hourly Maximums

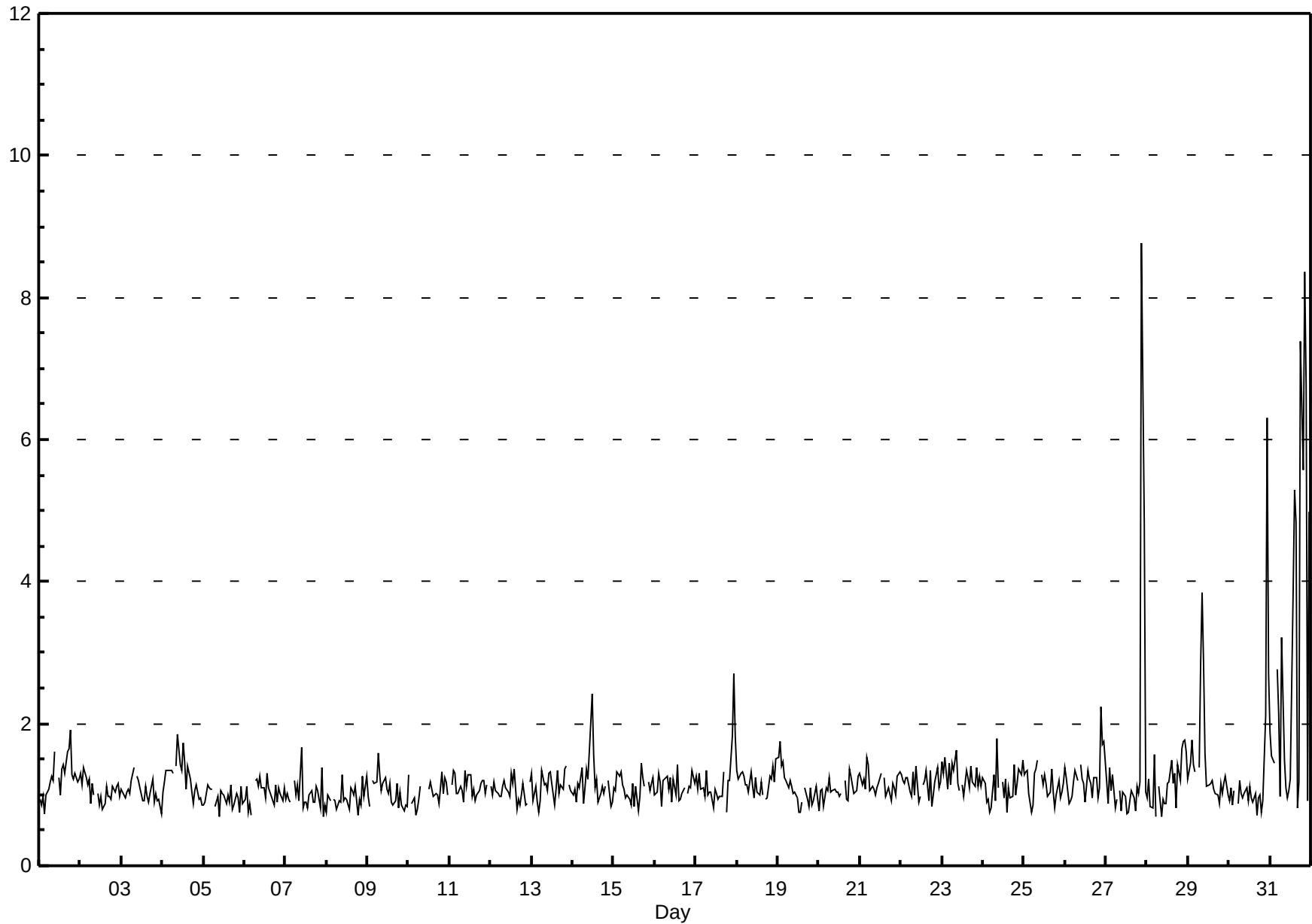
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2015

Maximum Value: 8.8 ppb on Mar 27 22:00																				Maximum Daily Average: 3.0 ppb on Mar 31										Hours in Service: 744									
Minimum Value: 1 ppb on Mar 5 10:00																				Minimum Daily Average: 1.0 ppb on Mar 5										Hours of Data: 708									
Maximum Diurnal Average: 1.7 ppb at hour 22																				Minimum Diurnal Average: 1.1 ppb at hour 17										Hours of Missing Data: 36									
Monthly Average: 1.21 ppb																				Percentiles: P ₁ = 0.7 P ₁₀ = 0.9 Q ₁ = 1.0 Median = 1.1 Q ₃ = 1.2 P ₉₀ = 1.4 P ₉₉ = 5.1										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-Mar	1	1	1	1	1	1	1	1	1	2	A	1	1	1	1	1	2	2	2	1	1	1	1	1	1.2	1.9													
2-Mar	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	1.4													
3-Mar	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													
4-Mar	1	1	1	1	1	1	1	A	1	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1.2	1.9													
5-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.1													
6-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3													
7-Mar	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	1.7													
8-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3													
9-Mar	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6													
10-Mar	1	A	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3													
11-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.3													
12-Mar	1	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	1.4													
13-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.4													
14-Mar	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	A	1	1	1	1.2	2.4													
15-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.1	1.5													
16-Mar	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	1.4													
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	3	2	1.2	2.7													
18-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	1.2	1.5													
19-Mar	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.1	1.7													
20-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.1	1.4													
21-Mar	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.2	1.5													
22-Mar	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	1.4													
23-Mar	1	1	2	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.3	1.6													
24-Mar	1	1	1	1	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8													
25-Mar	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	1.5													
26-Mar	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1.2	2.2													
27-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	9	5	1	1.5	8.8													
28-Mar	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1.2	1.8													
29-Mar	1	1	2	1	1	A	1	3	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.5	3.8													
30-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	6	3	1.3	6.3													
31-Mar	2	2	1	A	3	2	1	3	1	1	1	1	1	4	5	5	1	1	7	6	8	7	1	5	3.0	8.4													
1.2 1.1 1.2 1.1 1.2 1.1 1.1 1.3 1.2 1.2 1.1 1.1 1.1 1.2 1.2 1.2 1.1 1.1 1.3 1.2 1.3 1.7 1.5 1.3																									Diurnal Average														
1.9 1.7 1.8 1.5 2.8 2.1 1.6 3.2 3.8 2.9 1.6 2.4 1.7 3.9 5.3 4.8 1.6 1.7 7.4 5.6 8.4 8.8 6.3 5.0																									Diurnal Maximum														
C - Calibration A - Automated Daily Zero Span																																							

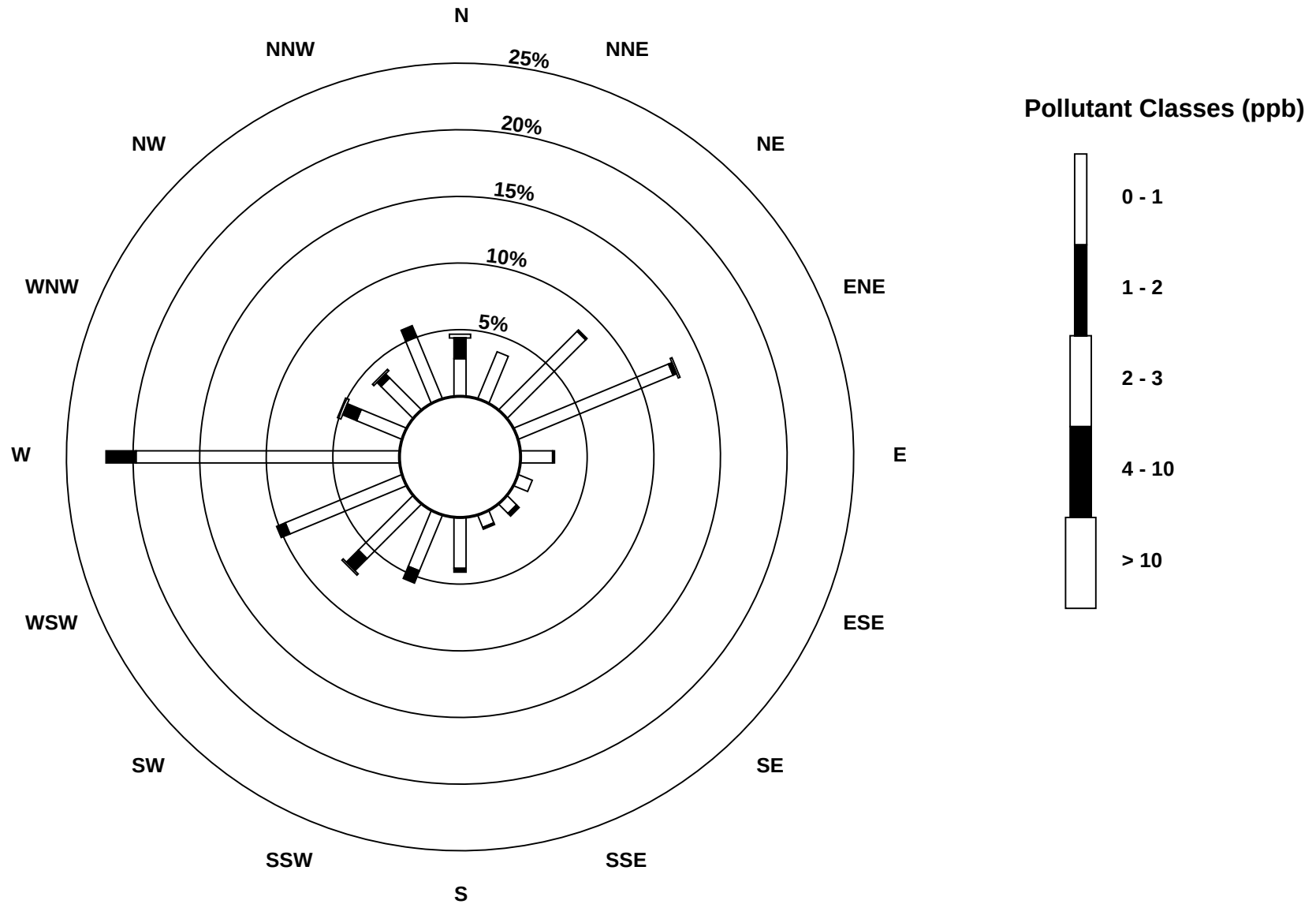
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2015



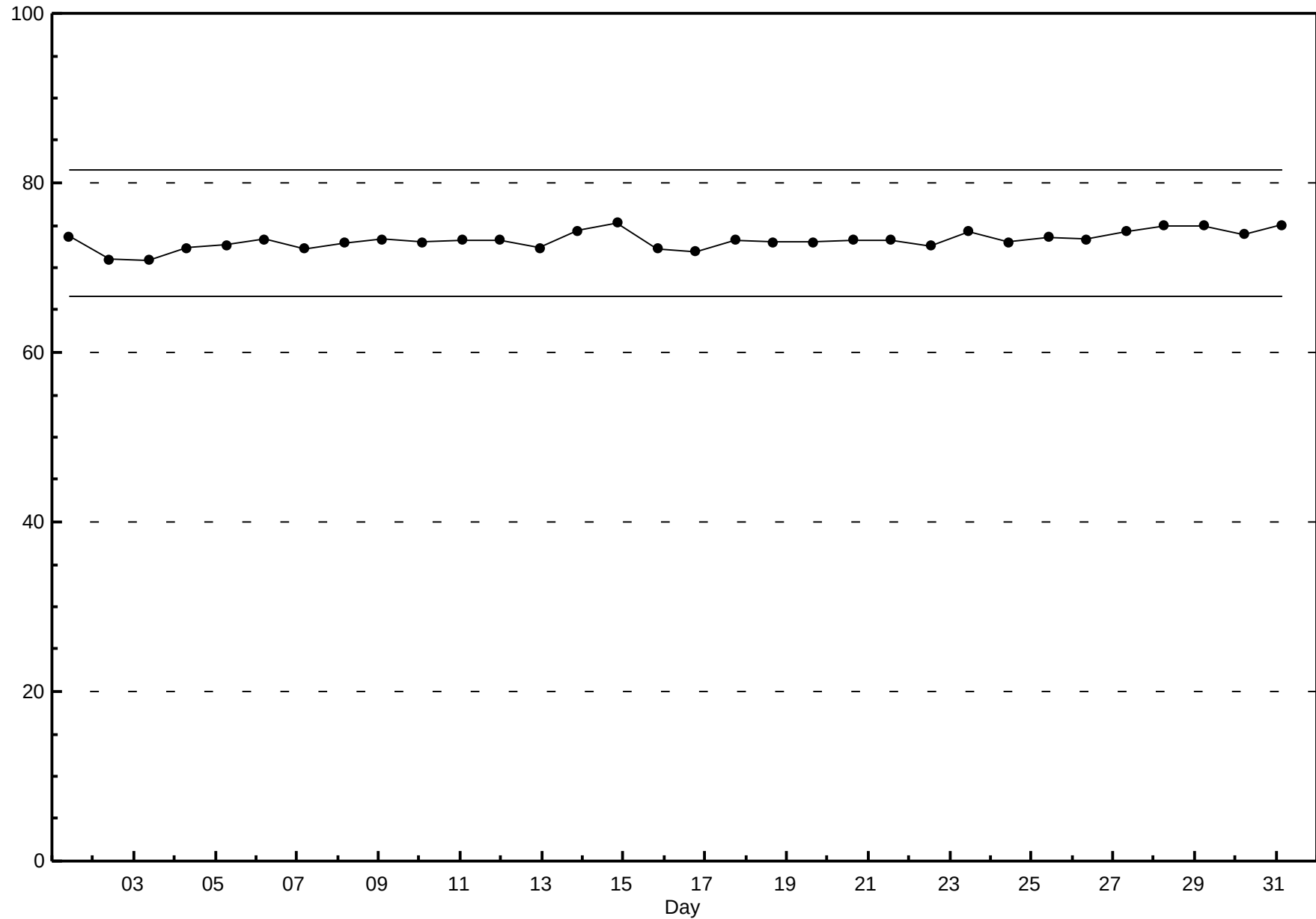
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2015



Span Responses

Total Reduced Sulphur (TRS)
Evergreen Park - March 2015

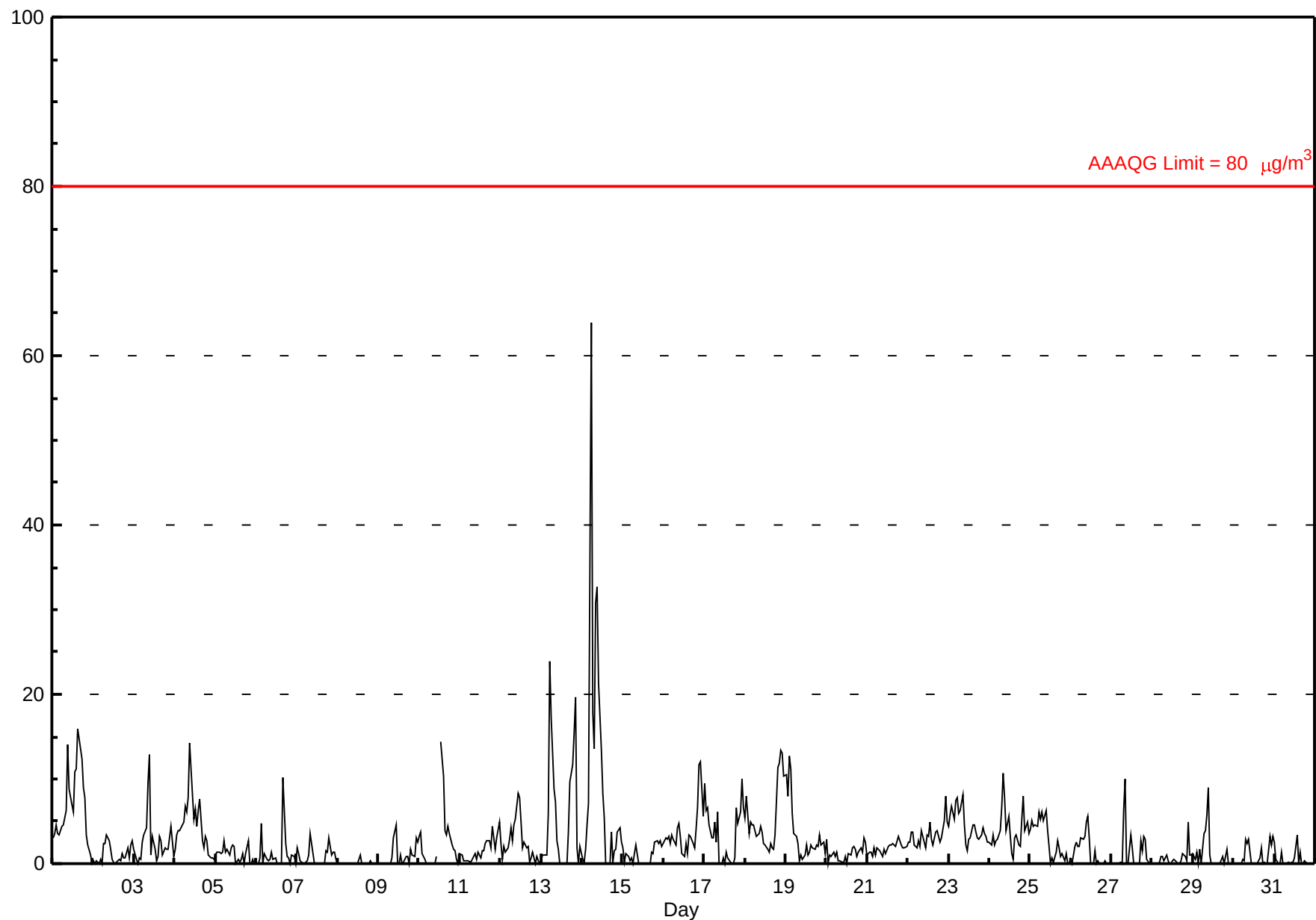


Hourly Averages

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

Evergreen Park - March 2015

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 63.8 µg/m³ on Mar 14 06:00 Maximum Daily Average: 10.0 µg/m³ on Mar 14																								Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7		
Minimum Value: 0 µg/m³ on Mar 2 00:00 Maximum Diurnal Average: 4.7 µg/m³ at hour 6 Monthly Average: 2.64 µg/m³ Minimum Daily Average: 0.1 µg/m³ on Mar 8 Minimum Diurnal Average: 1.6 µg/m³ at hour 13 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.2 Median = 1.6 Q ₃ = 3.3 P ₉₀ = 6.2 P ₉₉ = 16.0																										
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-Mar	3	4	5	4	3	4	5	5	6	14	9	7	6	11	11	16	14	12	9	8	3	2	1	0	6.7	15.9
2-Mar	0	0	0	0	1	0	2	2	3	3	2	0	0	0	0	1	0	1	1	1	2	1	2	3	1.1	3.4
3-Mar	2	1	0	1	0	3	3	4	10	13	1	3	2	0	1	3	3	1	2	2	2	3	4	1	2.7	12.8
4-Mar	2	3	4	4	4	5	7	6	8	14	8	5	6	4	6	8	3	2	3	3	1	1	1	1	4.5	14.2
5-Mar	1	1	1	1	1	3	1	2	1	2	2	2	0	0	0	1	1	0	1	3	0	0	0	0	1.1	2.7
6-Mar	0	0	1	5	0	1	1	0	0	1	0	1	0	0	0	0	10	2	1	1	0	1	1	0	1.1	10.2
7-Mar	2	1	0	0	0	0	0	1	4	1	0	0	0	0	0	0	0	1	1	3	1	1	1	1	0.8	3.5
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.1	1.0
9-Mar	0	0	0	0	0	0	0	0	1	3	5	0	0	1	0	0	1	1	0	2	1	1	3	3	0.8	4.5
10-Mar	3	4	1	0	0	0	0	0	0	0	1	M	M	14	10	4	3	4	4	2	2	2	0	0	2.5	14.4
11-Mar	1	1	0	0	0	0	0	1	1	1	1	1	1	2	2	2	3	3	2	4	3	2	3	5	1.6	5.0
12-Mar	2	0	2	1	2	3	4	3	5	5	8	8	5	2	3	2	2	0	1	1	0	1	0	0	2.5	8.3
13-Mar	0	1	1	1	6	24	17	9	7	3	2	0	0	0	0	0	4	10	12	15	20	2	0	2	5.6	23.9
14-Mar	0	0	2	4	7	64	18	14	31	33	21	13	8	6	0	0	0	4	0	2	2	4	4	3	10.0	63.8
15-Mar	2	0	1	1	0	1	0	1	2	0	0	0	0	0	0	0	0	1	1	3	3	2	3	2	1.0	2.7
16-Mar	2	3	3	3	2	3	3	2	4	5	3	1	1	2	1	3	3	2	2	4	7	12	12	6	3.8	12.0
17-Mar	9	6	7	5	3	3	5	3	6	0	0	1	0	1	1	0	0	0	1	7	5	6	10	7	3.5	10.0
18-Mar	5	8	4	5	5	5	4	3	4	4	4	2	2	2	1	2	2	2	3	11	12	13	13	10	5.3	13.4
19-Mar	10	8	13	11	6	4	3	2	0	1	1	1	2	1	1	2	2	2	2	2	3	2	2	1	3.5	12.8
20-Mar	3	0	1	1	1	1	1	0	0	0	0	1	0	1	1	2	2	2	1	1	2	1	3	2	1.2	3.1
21-Mar	1	1	1	1	2	1	2	1	1	1	2	1	2	2	2	2	2	2	3	3	2	2	2	2	1.8	3.2
22-Mar	3	3	4	4	2	2	3	2	4	3	2	3	3	5	3	2	4	4	3	3	3	5	8	5	3.4	7.9
23-Mar	4	6	7	5	7	8	6	6	8	5	2	2	3	3	5	5	4	3	3	3	4	4	3	3	4.5	8.1
24-Mar	3	2	3	2	3	3	4	7	11	8	4	6	3	1	1	3	3	2	2	5	8	4	5	4	4.0	10.7
25-Mar	4	5	4	4	4	6	5	6	5	6	4	2	0	1	0	1	3	2	1	1	0	1	0	0	2.8	6.2
26-Mar	0	0	2	2	2	2	3	3	3	5	6	3	0	0	1	0	0	0	0	0	0	0	0	0	1.4	5.6
27-Mar	0	0	0	0	0	0	0	6	10	0	0	3	2	0	0	0	0	3	1	3	3	0	0	0	1.3	9.9
28-Mar	0	0	0	0	0	1	1	0	1	0	0	0	0	1	0	0	0	0	1	1	0	5	1	1	0.6	4.9
29-Mar	1	0	1	0	2	0	4	4	6	9	1	0	0	0	0	0	0	1	0	1	2	0	0	0	1.3	9.0
30-Mar	0	0	0	0	0	0	0	3	2	3	0	0	0	0	0	1	2	0	0	0	0	3	2	3	0.8	3.2
31-Mar	2	0	0	0	1	0	0	0	0	0	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0.4	3.4
2.2 1.9 2.2 2.1 2.1 4.7 3.3 3.1 4.7 4.6 2.8 2.2 1.6 2.1 1.6 2.0 2.3 2.2 2.0 3.0 2.9 2.6 2.8 2.0 10.5 8.0 12.8 11.2 7.4 63.8 17.8 13.6 30.8 32.7 21.3 13.5 8.2 14.4 11.2 15.9 13.5 12.3 11.7 15.4 19.7 13.4 13.0 10.3																								Diurnal Average	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

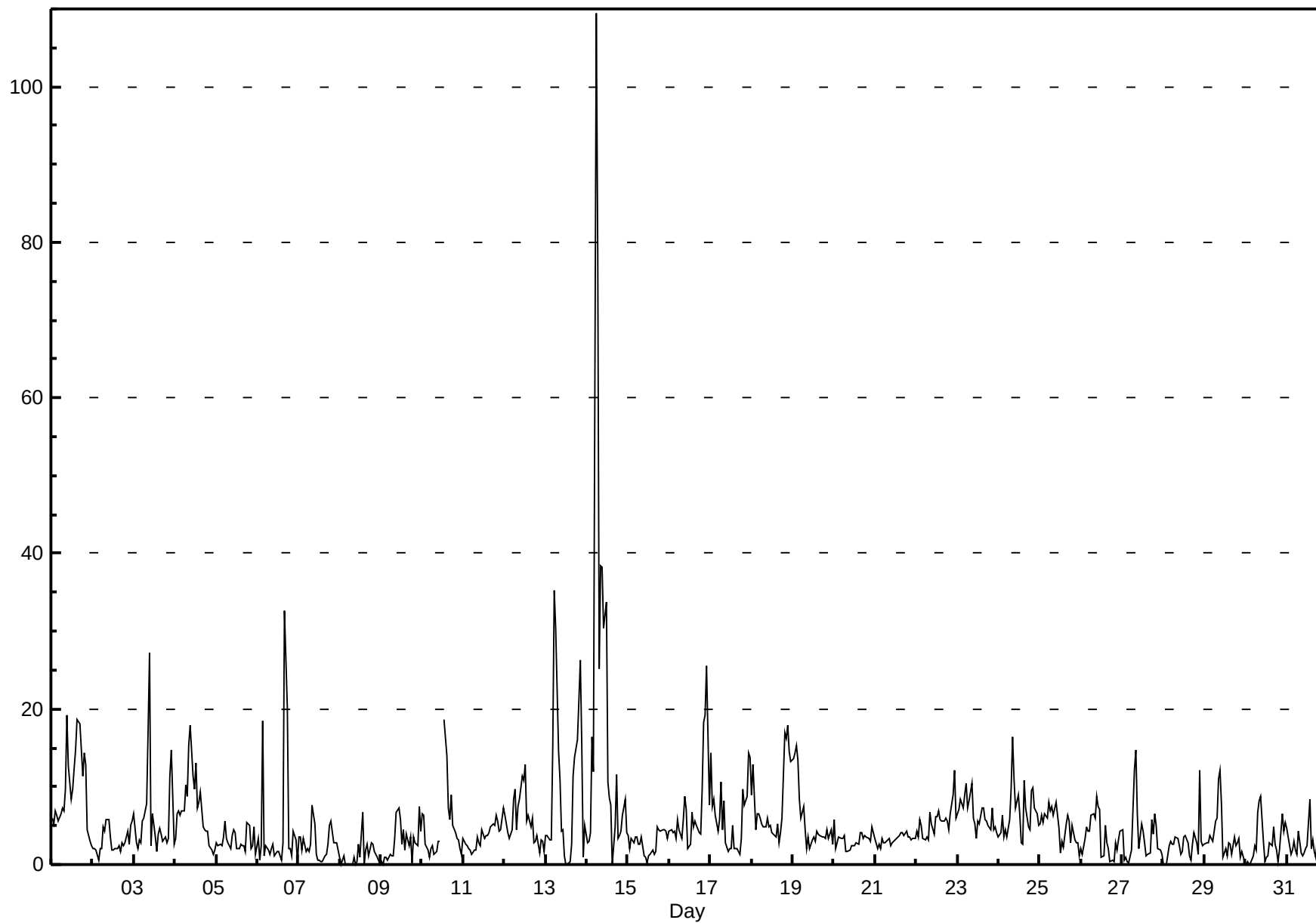
Evergreen Park - March 2015

Maximum Value: 109.4 μg/m ³ on Mar 14 06:00																					Maximum Daily Average: 19.4 μg/m ³ on Mar 14					Hours in Service: 744	
Minimum Value: 0 μg/m ³ on Mar 8 02:00																					Minimum Daily Average: 1.2 μg/m ³ on Mar 8					Hours of Data: 742	
Maximum Diurnal Average: 8.5 μg/m ³ at hour 6																					Minimum Diurnal Average: 3.8 μg/m ³ at hour 3					Hours of Missing Data: 2	
Monthly Average: 5.27 μg/m ³																					Percentiles: P ₁ = 0.0 P ₁₀ = 1.1 Q ₁ = 2.1 Median = 3.6 Q ₃ = 6.0 P ₉₀ = 10.6 P ₉₉ = 31.5					Hours of Calibration: 0	
																					Percent Operational Time: 99.7						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	6	5	7	6	6	7	7	7	10	19	13	8	10	12	15	19	18	15	11	14	13	5	3	2	9.9	19.2	
2-Mar	2	2	2	1	2	2	5	4	6	6	4	2	2	2	2	2	2	3	2	3	4	3	5	6	3.0	5.8	
3-Mar	7	3	2	3	3	6	6	8	17	27	2	7	4	2	4	5	4	3	4	3	3	11	15	3	6.2	27.2	
4-Mar	3	7	7	6	7	7	10	9	15	18	11	10	13	7	8	9	5	5	4	4	2	2	1	2	7.2	18.0	
5-Mar	3	2	3	2	4	6	3	3	2	4	5	4	2	2	3	2	2	2	5	5	2	2	5	1	3.1	5.5	
6-Mar	3	1	2	18	1	2	2	1	2	3	1	2	2	1	1	3	33	20	2	2	1	4	3	0	4.6	32.6	
7-Mar	4	4	2	3	2	2	2	3	8	5	1	1	1	0	0	1	1	3	5	6	3	3	3	2	2.6	7.7	
8-Mar	1	0	1	0	0	0	0	0	1	0	0	3	1	7	0	2	3	1	3	3	2	1	1	0	1.2	6.8	
9-Mar	0	0	1	1	1	1	1	1	3	7	7	6	3	5	2	4	2	4	0	4	3	2	7	4	2.9	7.5	
10-Mar	6	6	3	2	1	2	2	1	2	3	3	M	M	19	14	7	6	9	5	4	3	3	2	1	4.8	18.7	
11-Mar	3	3	3	2	2	1	2	2	4	3	2	5	3	4	4	4	5	5	5	6	6	4	5	7	3.7	7.2	
12-Mar	6	5	4	3	5	8	10	5	7	8	11	11	13	6	6	5	6	3	3	4	2	3	3	2	5.8	12.9	
13-Mar	4	4	3	3	15	35	30	15	11	4	5	1	0	0	0	3	11	14	16	21	26	15	1	5	10.1	35.3	
14-Mar	3	3	4	17	12	109	79	25	38	38	30	34	11	9	8	0	5	12	3	4	4	6	8	4	19.4	109.4	
15-Mar	4	2	3	3	4	4	3	3	4	1	1	0	1	1	2	1	2	5	5	4	5	5	4	3	2.8	4.8	
16-Mar	4	5	4	4	3	6	5	3	6	9	7	2	3	7	5	6	5	4	4	10	18	19	26	8	7.1	25.5	
17-Mar	14	7	8	6	4	6	11	5	8	3	2	2	2	5	2	2	2	1	3	10	8	9	14	14	6.2	14.3	
18-Mar	9	13	5	6	6	6	5	5	5	6	5	5	4	4	4	5	3	4	6	17	16	18	15	13	7.7	18.0	
19-Mar	14	14	15	14	8	6	7	5	2	3	2	3	3	3	4	4	4	4	4	3	5	3	5	3	5.7	15.3	
20-Mar	6	2	3	4	3	3	4	2	2	2	2	2	2	3	3	4	4	3	4	4	3	3	5	4	3.2	5.8	
21-Mar	3	2	3	2	3	3	3	3	3	2	3	3	3	4	4	4	4	4	4	4	4	3	3	3	3.2	4.3	
22-Mar	4	4	6	5	3	3	4	3	7	5	4	6	6	7	6	6	6	6	6	5	7	9	12	6	5.6	12.2	
23-Mar	6	7	8	7	9	10	7	8	10	6	5	3	6	5	7	7	6	6	5	5	7	5	5	4	6.5	10.4	
24-Mar	4	4	6	3	5	4	6	10	16	11	7	9	6	3	3	11	7	5	5	9	10	7	6	5	6.7	16.5	
25-Mar	5	6	5	6	6	8	7	7	6	8	6	5	2	3	2	5	6	6	3	5	3	3	3	1	5.0	8.0	
26-Mar	2	1	3	5	4	4	6	6	6	9	7	7	1	1	5	3	2	0	1	0	3	2	3	4	3.6	8.7	
27-Mar	5	1	1	0	0	2	7	12	15	7	2	5	4	3	1	1	2	6	4	7	5	2	2	1	3.9	14.8	
28-Mar	0	0	0	2	3	3	3	4	3	2	1	2	4	4	3	1	1	3	4	3	1	12	3	2	2.6	12.2	
29-Mar	3	3	3	4	3	3	6	6	11	12	8	1	2	1	3	3	1	4	2	3	3	1	2	0	3.6	12.1	
30-Mar	0	0	0	0	1	2	2	7	8	9	3	0	1	1	3	2	5	3	2	0	2	6	4	5	2.8	8.7	
31-Mar	5	3	1	2	3	2	1	4	2	1	2	2	2	8	2	3	2	1	3	2	2	1	1	1	2.3	8.5	
4.5 3.9 3.8 4.6 4.2 8.5 7.9 5.7 7.7 7.8 5.3 5.0 3.8 4.4 4.0 4.3 5.2 5.1 4.3 5.5 5.7 5.6 5.6 3.8																									Diurnal Average		
14.3 14.3 15.3 18.4 15.3 109.4 78.7 25.3 38.4 38.2 30.3 33.7 13.1 18.7 14.8 18.7 32.6 20.2 16.0 21.1 26.2 19.2 25.5 13.8																									Diurnal Maximum		
M - Maintenance																											

Hourly Maximums

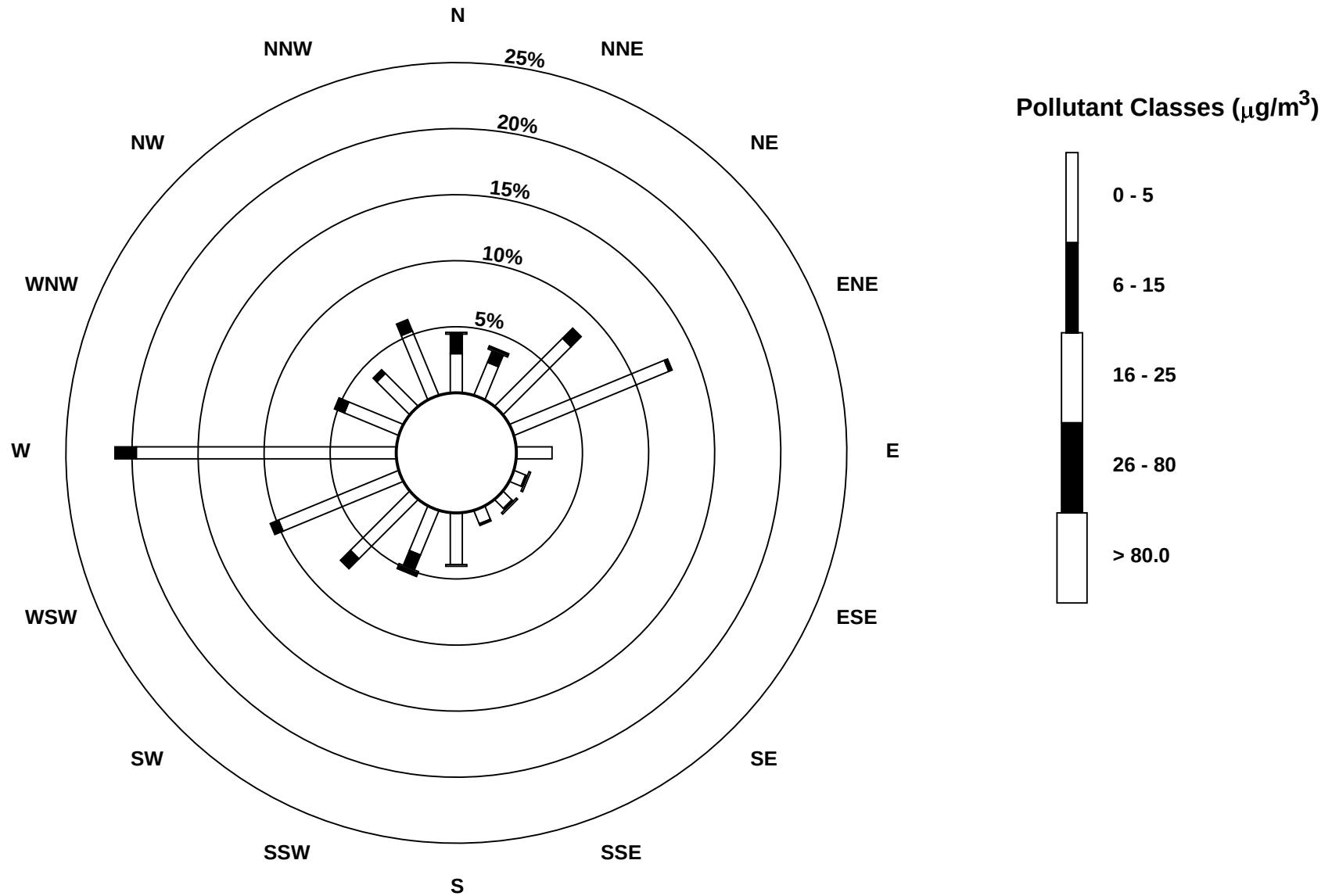
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Evergreen Park - March 2015



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Evergreen Park - March 2015



Hourly Averages

External Temperature (ET) - °C

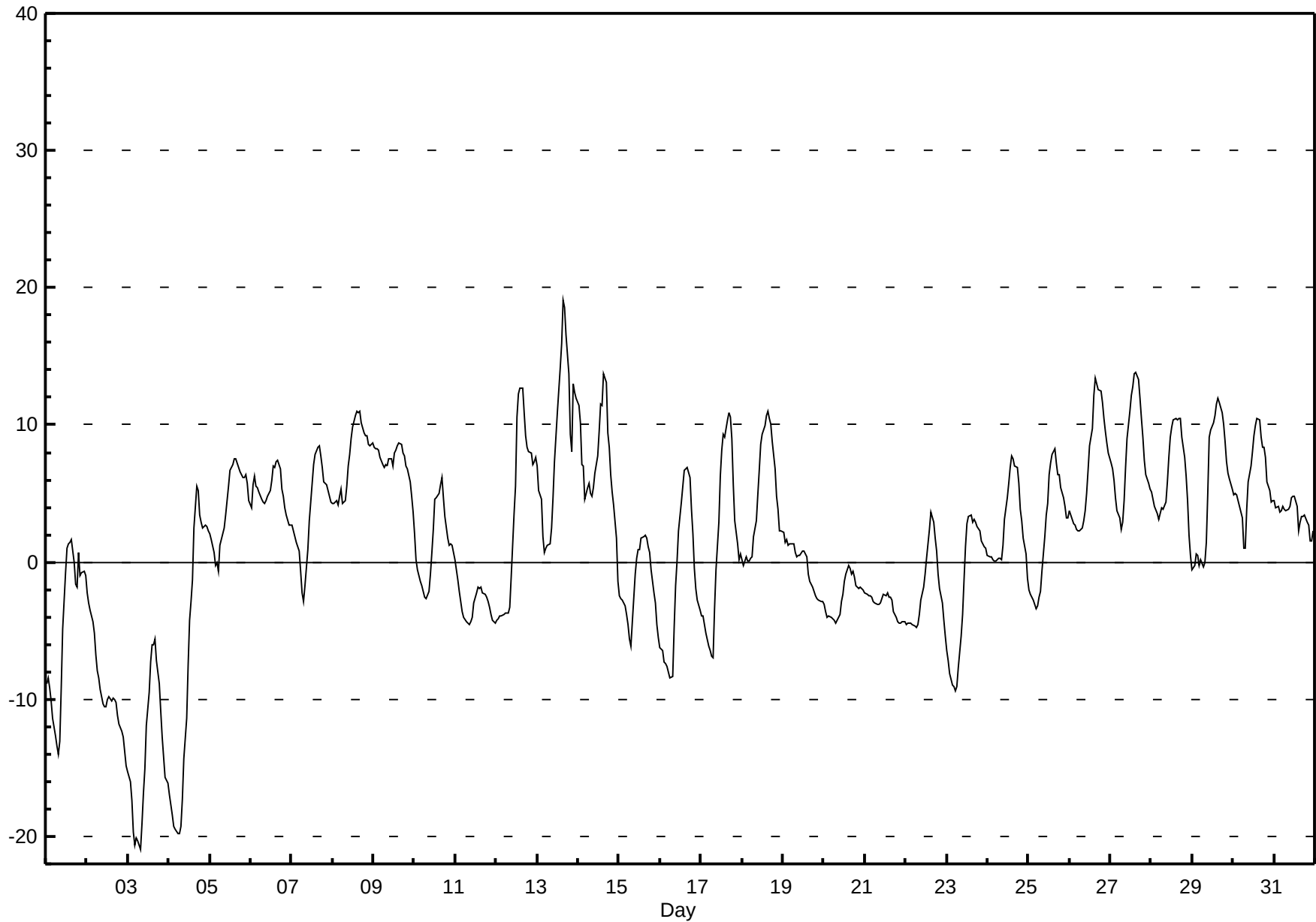
Evergreen Park - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 19.1 °C on Mar 13 16:00 Maximum Daily Average: 8.8 °C on Mar 13																			Hours in Service: 744 Hours of Data: 744							
Minimum Value: -21 °C on Mar 3 08:00 Minimum Daily Average: -13.9 °C on Mar 3 Maximum Diurnal Average: 6.2 °C at hour 16 Minimum Diurnal Average: -2.6 °C at hour 7 Monthly Average: 1.49 °C Percentiles: P ₁ = -19.5 P ₁₀ = -7.0 Q ₁ = -2.6 Median = 2.3 Q ₃ = 6.4 P ₉₀ = 9.4 P ₉₉ = 13.7																			Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	-9	-8	-9	-10	-11	-13	-13	-14	-13	-9	-5	-1	1	1	1	2	0	-2	-2	1	-1	-1	-1	-1	-4.9	1.7
2-Mar	-2	-3	-3	-4	-5	-7	-8	-8	-9	-10	-11	-11	-10	-10	-10	-10	-10	-10	-11	-12	-12	-13	-14	-15	-9.1	-2.2
3-Mar	-15	-16	-17	-20	-21	-20	-20	-21	-19	-17	-15	-12	-9	-7	-6	-6	-6	-7	-9	-11	-13	-14	-16	-16	-13.9	-5.6
4-Mar	-17	-18	-18	-19	-20	-20	-20	-19	-17	-14	-11	-8	-4	-3	-1	2	6	5	3	3	2	3	3	2	-7.5	5.6
5-Mar	2	2	1	0	0	-1	1	2	2	3	5	5	7	7	8	8	7	7	7	6	6	6	6	4	4.2	7.6
6-Mar	4	6	6	6	5	5	5	4	4	4	5	5	6	7	7	7	7	7	5	5	4	3	3	3	5.2	7.4
7-Mar	3	2	2	1	1	-1	-2	-3	-2	1	3	4	6	7	8	8	9	8	7	6	6	5	5	4	3.7	8.5
8-Mar	4	4	4	4	5	5	4	5	6	7	8	9	10	11	11	11	10	9	9	9	9	8	8	9	7.6	11.0
9-Mar	8	8	8	8	8	7	7	7	7	7	7	8	8	8	9	9	8	8	7	7	6	5	4	4	7.4	8.7
10-Mar	2	0	-1	-1	-2	-2	-3	-3	-2	-1	1	2	5	5	5	6	6	5	3	2	1	1	1	1	1.3	6.2
11-Mar	0	-1	-2	-3	-4	-4	-4	-4	-5	-4	-4	-3	-2	-2	-2	-2	-2	-2	-3	-3	-3	-4	-4	-4	-3.0	0.1
12-Mar	-4	-4	-4	-4	-4	-4	-4	-4	-3	-1	3	6	11	12	13	13	11	9	8	8	8	7	7	8	3.7	12.6
13-Mar	7	5	5	2	1	1	1	1	2	5	7	9	11	14	16	19	19	17	14	9	8	13	12	12	8.8	19.1
14-Mar	11	10	7	7	5	5	6	5	5	5	7	8	10	12	11	14	13	9	8	6	5	4	2	-1	7.3	13.8
15-Mar	-2	-3	-3	-3	-4	-5	-6	-6	-4	-1	0	1	1	2	2	2	2	1	1	-1	-2	-3	-5	-6	-1.7	2.0
16-Mar	-6	-6	-7	-7	-8	-8	-8	-8	-5	-2	0	2	4	6	7	7	7	6	4	2	0	-2	-3	-4	-1.3	6.9
17-Mar	-4	-4	-5	-5	-6	-6	-7	-7	-3	-1	3	6	8	9	9	10	11	11	9	6	3	1	0	1	1.6	10.9
18-Mar	0	0	0	0	0	0	0	2	3	5	7	9	9	10	11	11	10	10	9	7	5	4	2	2	4.8	11.0
19-Mar	2	1	2	1	1	1	1	1	0	0	0	1	1	1	0	-1	-1	-2	-2	-2	-3	-3	-3	-3	-0.2	2.2
20-Mar	-3	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-2	-1	-1	0	0	-1	-1	-1	-2	-2	-2	-2	-2	-2.5	-0.3
21-Mar	-2	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-3	-3	-3	-4	-4	-4	-4	-4	-4	-4	-3.1	-2.2
22-Mar	-5	-4	-4	-4	-5	-5	-5	-5	-4	-3	-2	-1	0	1	2	4	3	2	1	-1	-2	-3	-4	-5	-2.0	3.7
23-Mar	-6	-7	-8	-9	-9	-9	-9	-8	-5	-4	-1	1	3	3	3	3	3	3	3	2	2	1	1	1	-2.0	3.4
24-Mar	1	0	0	0	0	0	0	0	0	1	3	5	6	7	8	8	7	7	6	4	3	2	1	-1	2.8	7.7
25-Mar	-2	-2	-3	-3	-3	-3	-3	-2	-1	2	3	4	6	7	8	8	7	6	6	5	5	4	3	3	2.4	8.2
26-Mar	4	3	3	3	2	2	2	2	3	4	5	7	8	10	12	13	13	13	12	12	10	10	9	8	7.1	13.4
27-Mar	7	7	6	5	4	3	2	3	5	7	9	11	12	13	14	14	13	12	10	9	7	6	6	5	7.9	13.8
28-Mar	5	5	4	3	3	4	4	4	4	6	8	9	10	10	10	10	11	10	9	8	6	5	2	0	6.3	10.5
29-Mar	-1	0	1	1	0	0	0	0	1	5	9	10	10	11	12	12	12	11	10	9	7	6	6	5	5.7	11.9
30-Mar	5	5	5	4	4	3	1	1	4	6	7	8	9	10	10	10	9	8	8	8	6	5	4	4	6.1	10.5
31-Mar	4	4	4	4	4	4	4	4	4	4	5	5	5	4	2	3	3	3	3	3	3	2	2	2	3.5	4.8
-0.3 -0.7 -1.1 -1.6 -2.1 -2.3 -2.6 -2.6 -1.6 0.0 1.6 3.0 4.4 5.3 5.7 6.2 6.0 5.2 4.3 3.2 2.3 1.8 1.0 0.5 Diurnal Average																										
11.4 10.1 8.3 8.2 7.6 7.1 6.9 7.1 7.1 7.5 9.2 11.0 12.2 14.2 15.9 19.1 18.6 16.6 13.7 11.6 10.4 13.0 12.4 11.9 Diurnal Maximum																										

Hourly Averages

External Temperature (ET) - °C

Evergreen Park - March 2015



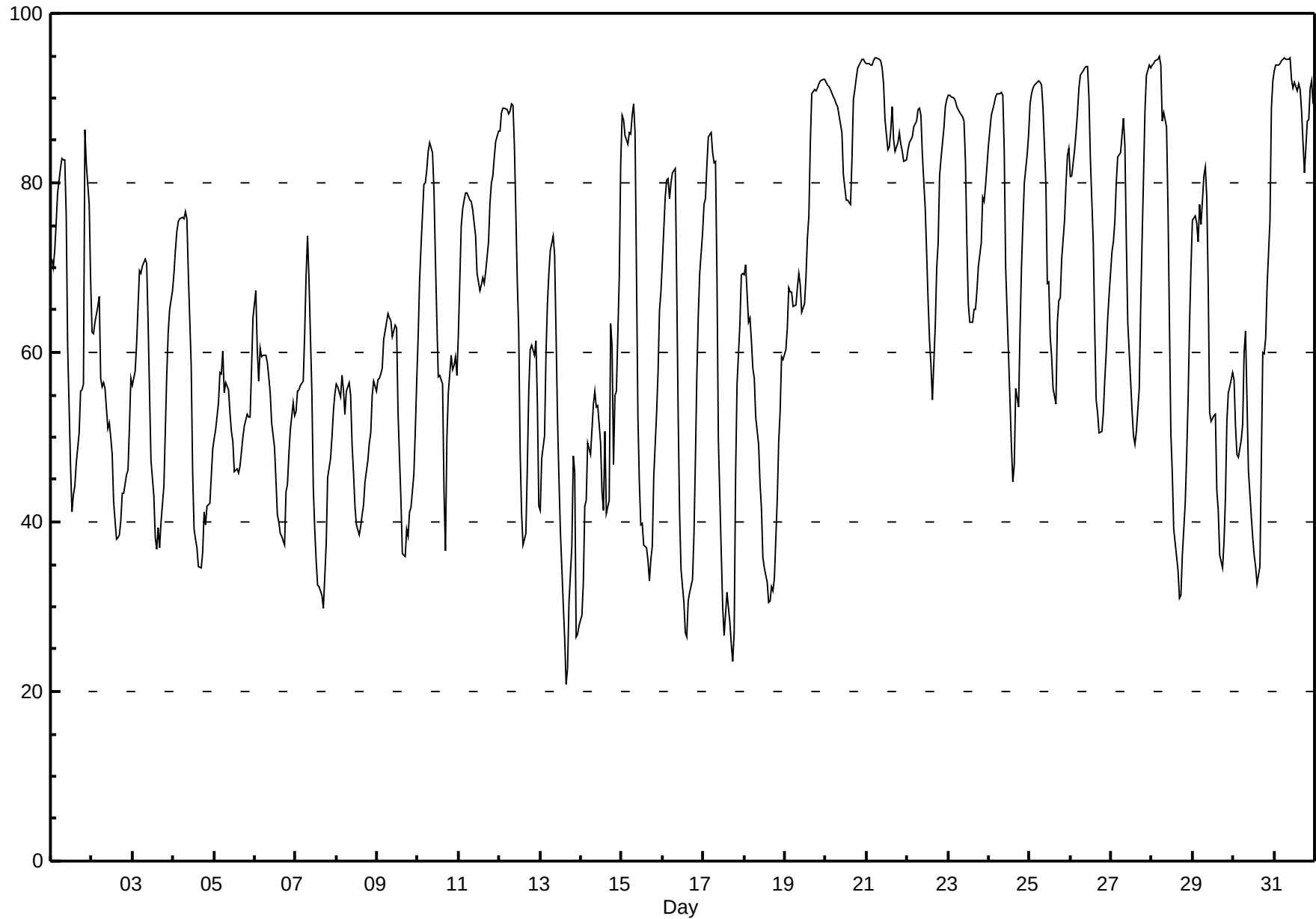
Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 94.8 % on Mar 28 05:00 Maximum Daily Average: 91.4 % on Mar 31																						Hours in Service: 744 Hours of Data: 744				
Minimum Value: 21 % on Mar 13 16:00 Minimum Daily Average: 45.5 % on Mar 13 Maximum Diurnal Average: 77.4 % at hour 8 Minimum Diurnal Average: 47.5 % at hour 16 Monthly Average: 64.16 % Percentiles: P ₁ = 26.7 P ₁₀ = 38.2 Q ₁ = 49.2 Median = 63.2 Q ₃ = 82.5 P ₉₀ = 90.4 P ₉₉ = 94.6																						Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	71	70	72	75	79	82	83	83	83	76	61	47	41	43	44	47	51	55	56	56	86	82	77	68	66.2	86.3
2-Mar	62	62	64	65	67	57	56	56	56	51	52	50	48	42	38	38	38	40	43	43	46	46	51	57	51.2	66.6
3-Mar	56	58	61	65	70	69	70	71	70	64	55	47	43	38	37	39	37	40	44	51	57	62	65	67	55.8	71.0
4-Mar	69	72	74	75	76	76	76	77	76	69	58	46	39	38	37	35	35	36	41	40	42	42	45	49	55.2	76.5
5-Mar	50	51	54	58	57	60	55	56	56	53	51	50	46	46	46	47	48	50	51	53	52	52	58	64	52.7	64.0
6-Mar	67	60	57	61	60	60	60	59	57	55	52	49	45	41	40	39	38	37	43	44	48	51	54	53	51.2	67.3
7-Mar	53	55	56	56	57	62	69	74	69	55	44	39	35	33	32	31	30	34	38	45	47	50	53	55	48.9	73.8
8-Mar	56	56	55	57	56	53	55	56	55	49	46	42	40	38	40	41	42	45	47	49	50	55	57	55	49.8	57.3
9-Mar	57	57	58	58	61	63	65	64	64	62	63	63	53	48	43	36	36	39	38	41	42	46	51	57	52.6	64.6
10-Mar	62	69	73	80	80	82	84	85	84	79	71	64	57	57	56	44	37	50	55	60	58	59	60	57	65.0	84.7
11-Mar	62	75	77	78	79	79	78	78	77	75	74	69	67	68	69	68	69	73	78	80	81	83	85	86	75.3	86.1
12-Mar	86	88	89	89	89	88	89	89	89	84	69	63	48	41	37	39	46	55	60	61	60	61	54	42	67.4	89.2
13-Mar	41	48	50	60	66	69	72	74	71	62	52	45	39	30	26	21	23	30	37	48	46	26	27	28	45.5	73.8
14-Mar	29	33	42	43	49	48	51	54	55	54	54	49	43	41	51	41	43	63	61	47	55	55	69	82	50.5	82.2
15-Mar	88	88	86	85	86	86	88	89	86	52	45	40	40	37	37	35	33	36	37	45	53	58	65	67	60.8	89.3
16-Mar	71	78	80	81	78	80	81	82	68	53	41	34	30	27	26	31	32	33	39	47	57	64	69	74	56.5	81.7
17-Mar	78	78	82	85	86	84	82	83	69	50	36	30	27	29	32	28	26	24	27	46	56	63	69	69	55.8	85.9
18-Mar	69	70	64	64	61	58	57	52	49	45	42	36	34	33	30	31	32	32	33	43	50	53	59	59	48.2	70.4
19-Mar	60	63	68	67	67	65	66	68	69	68	65	66	69	74	76	85	90	91	91	91	92	92	92	92	76.1	92.2
20-Mar	92	91	91	91	90	90	89	89	88	86	81	80	78	78	77	83	90	91	92	94	94	95	95	94	88.3	94.6
21-Mar	94	94	94	94	94	95	95	95	94	94	92	88	84	84	86	89	85	84	85	86	85	84	82	83	89.1	94.8
22-Mar	84	85	85	85	87	87	89	89	88	83	77	72	66	62	58	54	63	70	73	81	83	86	89	90	78.6	89.9
23-Mar	90	90	90	90	90	89	89	88	88	87	83	73	66	64	64	65	65	67	70	73	78	78	80	82	79.1	90.4
24-Mar	84	88	89	89	90	90	91	91	90	84	70	60	54	49	45	47	56	54	63	70	75	80	83	86	74.1	90.7
25-Mar	89	91	91	92	92	92	92	91	89	80	68	68	62	59	56	54	64	66	66	71	76	80	83	84	77.3	92.1
26-Mar	81	81	84	86	88	91	93	93	94	94	94	90	83	73	63	54	53	51	51	53	57	60	64	67	74.8	93.8
27-Mar	72	73	75	80	83	84	86	88	84	73	64	57	53	50	49	51	56	65	73	81	89	93	94	93	73.6	93.8
28-Mar	94	94	94	95	95	94	87	88	87	77	64	50	46	39	36	34	31	31	36	42	48	54	63	70	64.6	94.8
29-Mar	76	76	75	73	77	75	81	82	78	68	53	52	52	53	44	41	36	35	38	43	52	55	56	58	59.5	81.9
30-Mar	57	51	48	48	50	52	60	63	54	46	41	38	36	35	33	35	47	60	60	62	68	76	89	92	54.1	92.1
31-Mar	93	94	94	94	94	95	95	95	95	95	92	91	92	91	92	91	89	85	81	87	87	91	92	89	91.4	94.8
70.8 72.2 73.2 74.8 75.9 75.9 76.8 77.4 75.2 68.5 61.5 56.3 52.2 49.7 48.4 47.5 49.0 52.3 55.1 59.1 63.5 65.6 68.7 70.0																									Diurnal Average	
94.1 94.1 94.5 94.6 94.8 94.8 94.8 94.6 94.6 94.7 93.7 91.2 91.9 90.8 91.7 91.1 90.5 91.1 92.4 93.5 94.2 94.6 94.6 94.3																									Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - March 2015



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2015

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	4	4	2	2	1	1	1	0	0	1	1	2	3	7	7	6	6	7	7	29	18	21	19	24	6.2	29.1
Dir	56	51	54	53	32	41	227	164	292	247	299	301	263	357	4	10	319	310	313	328	310	320	324	341	331.9	328.4
2 Spd	20	16	12	22	25	18	9	15	20	24	29	34	36	38	39	33	30	22	15	13	14	11	3	4	19.7	39.2
Dir	10	8	341	337	350	26	24	355	342	338	330	332	331	331	337	332	327	323	309	303	323	320	278	274	336.6	336.8
3 Spd	3	4	2	1	3	7	7	3	3	7	11	11	9	6	5	10	7	10	5	3	1	1	1	1	1.9	11.4
Dir	251	252	226	195	210	203	216	229	243	271	272	271	266	267	345	354	59	60	62	62	59	15	40	36	278.9	272.1
4 Spd	1	1	0	2	0	1	1	1	2	1	4	5	6	8	8	11	16	17	11	16	21	27	29	26	8.7	29.3
Dir	33	249	227	217	239	220	260	334	213	270	244	245	260	269	268	275	272	268	257	261	261	260	256	256	260.7	256.5
5 Spd	21	9	2	1	1	4	4	9	16	18	23	17	19	20	24	23	20	14	7	6	9	13	7	1	11.0	23.8
Dir	261	282	29	265	280	28	351	257	252	259	264	278	279	269	270	261	256	266	262	230	225	230	225	85	262.8	270.4
6 Spd	8	25	42	40	41	38	36	41	37	35	36	30	30	31	28	21	24	32	19	17	13	15	11	13	27.4	42.2
Dir	246	261	263	261	258	259	262	264	261	264	263	264	271	269	276	281	275	262	260	261	262	257	253	255	263.6	263.3
7 Spd	13	10	9	8	4	2	0	2	1	11	17	19	18	16	23	30	36	32	24	22	24	23	17	16	15.5	36.0
Dir	268	274	276	279	314	269	335	219	260	268	281	269	263	284	270	268	267	268	267	270	264	260	258	259	268.5	267.5
8 Spd	15	16	19	16	19	21	22	18	17	23	25	33	40	42	36	34	36	30	37	43	32	41	37	42	28.3	43.3
Dir	247	244	250	249	250	236	224	247	254	254	256	261	267	268	270	278	279	280	266	264	254	251	247	249	258.4	264.3
9 Spd	37	37	32	36	25	18	14	33	33	33	24	27	28	26	30	36	38	30	29	26	23	15	12	4	26.6	38.2
Dir	248	251	253	255	257	252	253	259	259	263	290	276	279	272	280	267	265	267	266	261	255	247	265	246	262.5	265.4
10 Spd	2	7	12	10	6	2	2	2	2	2	3	4	4	8	10	10	9	12	8	8	8	10	9	9	5.6	12.3
Dir	274	51	59	62	66	58	57	73	82	123	255	255	357	21	25	57	54	58	62	58	60	65	61	60	53.0	59.1
11 Spd	12	11	12	13	14	14	12	11	11	11	12	11	9	12	11	10	11	8	7	7	8	6	6	8	10.1	14.4
Dir	60	63	64	64	65	60	60	59	61	55	68	57	45	24	40	62	58	47	66	68	73	78	59	61	58.7	65.1
12 Spd	6	6	3	3	2	2	3	2	1	1	2	8	8	14	15	30	43	31	16	15	12	15	20	20	9.3	42.5
Dir	53	94	49	59	135	170	174	176	103	118	202	213	211	231	275	269	243	238	219	226	232	227	230	248	236.3	242.8
13 Spd	17	14	6	2	2	3	2	2	4	7	10	12	13	16	14	11	11	4	2	1	3	12	11	13	6.5	16.6
Dir	231	215	197	53	124	131	121	121	165	175	165	169	170	179	159	177	243	328	53	198	189	180	174	181	183.6	231.2
14 Spd	10	7	1	2	2	1	3	0	1	1	0	3	3	1	12	36	25	37	54	67	66	54	35	28	15.8	67.2
Dir	190	200	35	198	60	213	23	61	204	33	206	357	11	294	236	236	244	251	257	258	254	265	315	330	261.2	258.5
15 Spd	20	16	5	4	5	4	1	2	5	27	31	27	19	26	28	25	29	19	11	1	2	2	2	1	10.9	31.3
Dir	328	329	282	232	277	195	77	205	247	265	277	286	310	311	315	319	331	347	338	244	191	216	199	197	304.6	277.3
16 Spd	0	1	0	1	1	2	3	1	3	4	14	9	4	5	4	8	9	8	6	2	1	1	1	1	0.8	13.7
Dir	245	191	81	181	206	218	215	180	197	234	259	245	311	263	353	20	39	51	57	73	34	40	48	44	313.5	259.2
17 Spd	0	1	1	1	1	1	2	2	1	6	7	9	10	12	19	19	15	14	10	4	2	1	2	6	4.7	19.3
Dir	25	240	233	221	47	253	233	43	51	51	78	108	83	63	51	50	62	61	55	7	333	345	232	301	56.8	49.7
18 Spd	4	4	8	5	4	5	8	15	23	30	31	31	27	29	25	16	17	12	4	4	2	2	0	1	11.4	31.3
Dir	267	285	296	276	267	289	265	251	253	257	266	273	280	276	283	304	348	350	331	270	334	217	8	204	278.6	272.7
19 Spd	1	1	2	4	1	2	1	3	6	9	12	12	13	14	14	14	15	17	16	13	11	10	6	6	7.9	16.6
Dir	193	221	228	38	15	54	135	72	69	66	70	63	72	65	56	53	49	45	45	44	34	34	31	38	52.8	45.0
20 Spd	7	7	5	5	5	6	9	8	9	13	14	14	12	14	13	13	15	13	15	16	11	11	15	13	10.8	16.2
Dir	44	49	51	71	69	66	76	68	63	71	62	63	76	88	81	72	64	78	79	78	77	82	93	91	73.7	78.3
21 Spd	12	10	10	7	9	11	9	9	10	12	10	13	11	10	10	10	10	17	17	11	10	5	4	3	8.0	17.0
Dir	83	83	77	63	60	55	51	47	50	50	48	40	37	30	29	360	355	338	341	347	341	334	318	273	28.7	338.0
22 Spd	5	2	2	1	2	2	2	2	2	2	3	6	7	8	4	2	8	7	5	3	2	1	0	1	0.8	8.2
Dir	266	308	264	231	210	199	204	177	178	186	181	216	221	212	233	316	52	62	67	72	61	20	360	5	203.4	212.4

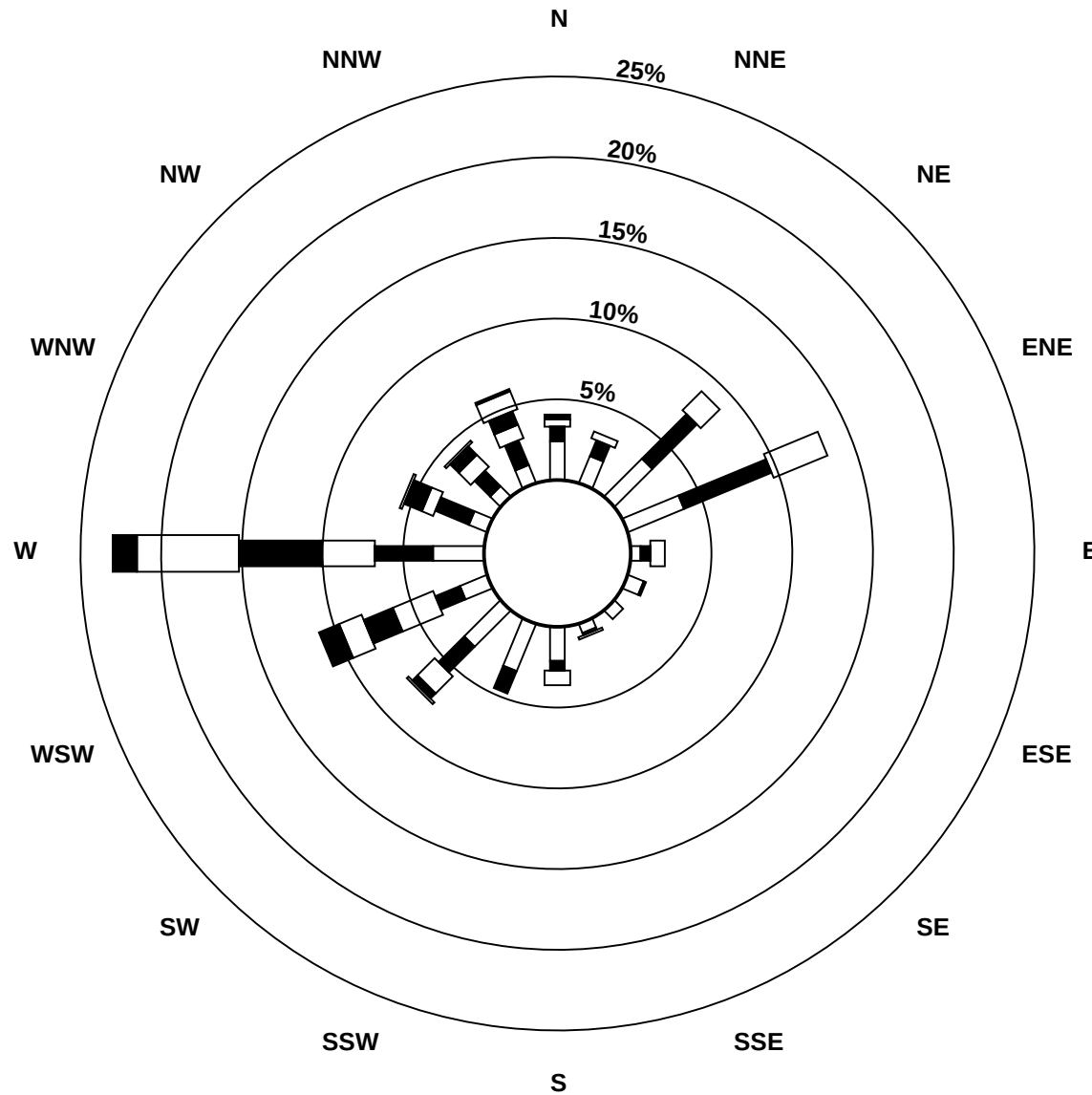
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2015

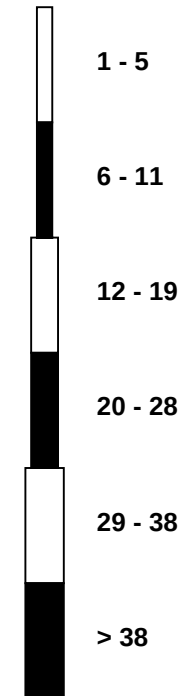
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	1	1	1	2	1	0	2	0	0	3	5	10	12	12	11	11	8	6	2	0	0	3	1	0	3.3	12.0
Dir	350	347	342	2	228	8	0	280	349	32	357	348	27	42	56	49	64	64	64	187	15	88	78	172	36.2	42.2
24 Spd	1	1	1	1	1	1	0	0	3	4	8	9	7	6	7	7	5	9	3	5	2	1	3	0	1.7	9.5
Dir	68	58	84	67	87	97	266	50	261	258	216	202	210	266	232	288	279	329	330	19	15	124	196	57	256.3	328.6
25 Spd	1	1	2	1	1	1	1	4	3	3	8	10	8	7	7	2	9	8	3	1	1	1	4	4	0.9	10.5
Dir	97	203	200	202	189	220	21	196	210	274	285	284	274	271	258	7	52	58	101	102	164	103	63	67	291.9	284.2
26 Spd	2	3	1	2	1	2	4	2	2	3	6	10	10	9	6	22	23	26	31	23	21	7	7	6	7.8	31.1
Dir	168	56	19	220	190	169	179	178	161	139	195	215	216	214	262	268	269	273	266	262	260	303	275	320	256.8	266.1
27 Spd	2	1	2	0	0	0	2	2	2	3	2	3	5	10	9	14	7	5	4	5	10	11	9	7	3.4	14.0
Dir	329	321	127	66	134	221	41	23	35	28	275	289	262	273	295	298	333	9	78	352	329	315	292	240	310.6	298.5
28 Spd	9	6	7	4	10	13	14	7	15	24	27	26	33	32	38	34	38	38	29	13	2	1	0	0	17.0	38.0
Dir	255	219	228	246	288	275	285	233	250	263	274	286	272	282	268	269	263	263	266	273	7	150	186	208	268.1	262.8
29 Spd	1	1	1	1	1	0	0	0	0	1	8	11	10	13	34	40	42	47	41	39	25	22	25	17	14.9	47.1
Dir	93	59	66	127	69	10	2	342	8	219	270	266	322	315	267	277	271	264	257	258	268	259	252	253	267.0	263.7
30 Spd	17	21	27	22	14	8	2	5	7	12	12	11	5	6	1	10	12	5	3	2	3	2	1	2	7.1	27.4
Dir	244	241	247	238	233	241	169	211	236	259	268	260	284	246	56	197	189	178	99	78	68	283	68	7	237.7	246.5
31 Spd	4	10	2	7	7	6	9	8	6	11	8	6	8	18	20	27	35	35	30	22	25	21	26	24	14.7	34.9
Dir	356	336	319	302	288	286	285	294	329	336	325	313	340	281	289	275	268	268	279	281	282	281	281	292	287.1	268.3
Spd	3.6	3.4	3.6	3.5	3.0	2.2	2.2	3.3	4.2	6.3	8.1	8.5	8.0	9.1	9.9	11.5	11.3	10.5	8.9	9.2	8.2	7.6	6.1	5.2	Diurnal Average	
Dir	271.5	271.9	267.4	271.9	277.5	264.9	264.6	263.1	265.7	274.5	277.2	278.6	286.8	288.2	292.9	288.6	285.2	286.1	277.6	276.1	272.2	267.3	269.3	278.4	Diurnal Maximum	
Spd	37.3	37.5	42.2	40.0	40.9	38.4	35.8	40.9	37.3	35.3	35.6	34.0	40.2	42.0	39.2	39.5	42.5	47.1	54.3	67.2	66.1	53.9	36.7	41.7	Diurnal Maximum	
Dir	248.5	251.0	263.3	260.7	258.2	259.3	262.2	263.7	260.9	263.9	263.2	332.0	266.7	267.7	336.8	277.0	242.8	263.7	257.2	258.5	253.8	265.5	246.5	248.7		
Maximum Speed Value: 67 km/h on Mar 14 20:00																								Hours in Service: 744		
Maximum Daily Speed Average: 28.3 km/h on Mar 8																								Hours of Data: 744		
Maximum Diurnal Speed Average: 11.5 km/h at hour 16																								Hours of Missing Data: 0		
Minimum Speed Value: 0 km/h on Mar 4 03:00																								Percent Operational Time: 100.0		
Minimum Daily Speed Average: 0.8 km/h on Mar 22																										
Minimum Diurnal Speed Average: 2.2 km/h at hour 7																										
Monthly Average Velocity: 6.49 km/h 278.70 deg																										
Speed Percentiles: P ₁ = 0.2 P ₁₀ = 1.0 Q ₁ = 2.5 Median = 8.3 Q ₃ = 16.1 P ₉₀ = 29.9 P ₉₉ = 41.8																										
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	35	13	9	6	0	0	63																			
NorthEast	52	57	36	1	0	0	146																			
East	27	13	16	0	0	0	56																			
SouthEast	14	0	0	0	0	0	14																			
South	40	11	7	0	0	0	58																			
SouthWest	49	27	16	7	3	1	103																			
West	38	37	37	55	48	21	236																			
NorthWest	18	20	12	8	8	2	68																			
Total	273	178	133	77	59	24	744																			

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - March 2015



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - March 2015

Maximum Speed: 68 km/h on Mar 14 20:00																			Maximum Daily Speed Average: 29.3 km/h on Mar 8																			Hours in Service: 744			
Minimum Speed: 0 km/h on Mar 27 06:00																			Minimum Daily Speed Average: 3.8 km/h on Mar 22																			Hours of Data: 744			
Maximum Diurnal Speed Average: 20.5 km/h at hour 17																			Minimum Diurnal Speed Average: 6.8 km/h at hour 7																			Hours of Missing Data: 0			
Monthly Average Speed: 12.28 km/h																			Percentiles: P ₁ = 0.6 P ₁₀ = 1.7 Q ₁ = 3.4 Median = 8.9 Q ₃ = 16.9 P ₉₀ = 30.4 P ₉₉ = 42.5																			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-Mar	4	4	3	3	1	2	1	1	1	1	2	2	5	7	7	7	6	8	7	30	18	21	19	27	7.8	30.2															
2-Mar	21	16	12	22	25	19	9	15	21	25	30	35	37	40	40	34	31	23	15	14	16	12	4	4	21.7	39.8															
3-Mar	4	4	2	1	3	7	7	3	3	7	12	11	10	6	7	11	8	10	5	3	1	1	1	2	5.5	11.9															
4-Mar	1	2	0	2	1	1	2	1	2	3	4	6	6	8	8	11	16	17	11	16	21	27	29	26	9.3	29.4															
5-Mar	21	9	4	2	4	5	5	9	16	18	24	18	20	20	24	23	20	14	7	6	9	13	7	2	12.5	24.1															
6-Mar	8	25	42	40	41	39	36	41	38	36	36	30	31	32	28	22	24	32	19	17	14	15	11	13	27.9	42.5															
7-Mar	13	10	9	8	5	3	2	2	1	11	18	20	19	17	23	30	36	32	25	22	24	23	17	16	16.1	36.2															
8-Mar	15	16	19	16	19	22	22	19	17	24	25	33	40	42	37	35	37	31	37	44	32	41	37	42	29.3	43.6															
9-Mar	37	38	32	37	26	18	15	33	34	33	27	27	28	26	31	37	38	30	30	26	23	15	12	6	27.5	38.5															
10-Mar	4	8	13	11	6	2	3	4	3	3	4	5	6	10	11	10	9	12	9	8	9	10	9	9	7.4	12.7															
11-Mar	12	11	13	14	15	14	13	12	11	11	13	12	11	13	12	11	11	8	7	8	9	7	7	8	10.9	14.9															
12-Mar	7	8	3	3	3	3	3	3	2	3	4	9	8	15	17	31	43	32	16	15	12	15	20	20	12.4	43.0															
13-Mar	17	14	7	3	4	4	4	4	5	7	10	12	13	17	15	12	17	5	3	2	3	12	11	13	8.9	17.4															
14-Mar	10	8	2	2	3	2	4	1	1	2	2	4	4	4	13	37	27	38	55	68	67	54	39	28	19.8	67.6															
15-Mar	21	16	7	6	7	6	5	4	5	27	32	28	20	27	29	26	30	20	11	2	2	2	2	1	14.0	31.8															
16-Mar	1	2	1	2	1	2	3	2	3	4	14	10	6	7	7	9	10	8	6	3	1	1	1	1	4.4	14.2															
17-Mar	0	1	1	1	2	2	3	2	2	6	8	10	11	13	19	20	15	15	10	5	3	1	2	6	6.6	19.7															
18-Mar	4	5	8	5	6	6	8	15	23	31	31	32	28	30	26	20	17	13	5	4	2	3	0	2	13.5	31.7															
19-Mar	2	3	3	4	2	2	2	3	7	9	12	13	14	14	15	14	15	17	16	13	11	10	7	6	9.0	17.0															
20-Mar	7	7	6	5	6	7	10	9	10	13	14	15	13	15	14	13	15	14	16	17	12	12	16	14	11.5	16.7															
21-Mar	12	11	11	8	9	12	9	9	10	13	10	14	11	11	10	11	11	17	17	12	10	6	4	3	10.5	17.3															
22-Mar	5	3	2	1	2	2	2	2	2	2	5	7	8	9	6	4	8	7	5	3	2	1	1	1	3.8	9.4															
23-Mar	1	1	1	2	3	1	2	1	0	3	6	10	13	13	13	11	9	6	2	1	1	3	1	0	4.4	13.2															
24-Mar	1	1	1	1	2	1	1	1	3	4	9	10	9	7	9	9	6	10	4	6	3	2	4	1	4.5	10.4															
25-Mar	2	2	2	2	2	1	3	5	3	3	9	11	9	8	8	6	10	8	3	2	1	1	4	4	4.6	11.1															
26-Mar	3	3	1	2	2	2	4	2	2	3	7	10	10	9	7	23	24	26	31	23	21	8	8	7	10.0	31.4															
27-Mar	4	4	2	1	1	0	3	3	3	4	5	4	6	11	10	15	8	5	4	6	10	11	10	7	5.7	15.3															
28-Mar	9	7	7	5	11	13	15	8	15	24	28	27	33	33	39	34	38	39	30	13	3	2	1	1	18.1	38.7															
29-Mar	3	2	2	2	3	2	1	2	1	1	9	12	12	15	35	40	43	48	42	39	25	22	25	17	16.8	47.6															
30-Mar	17	21	28	22	14	11	4	6	8	13	13	12	8	9	7	12	16	7	3	2	3	4	4	3	10.3	27.5															
31-Mar	4	10	3	7	7	6	10	8	7	11	8	7	8	19	21	27	35	35	32	23	27	22	27	25	16.2	35.2															
8.7		8.7	8.0	7.8	7.5	7.0	6.8	7.4	8.3	11.5	13.9	14.7	14.7	16.4	17.7	19.6	20.5	19.0	15.6	14.6	12.8	12.2	11.0	10.2	Diurnal Average																
37.4		37.6	42.5	40.2	41.2	38.6	36.0	41.1	37.6	35.5	35.7	34.8	40.5	42.4	39.8	40.3	43.0	47.6	54.9	67.6	66.6	54.4	39.1	41.9	Diurnal Maximum																
All monthly, daily, and diurnal averages have been calculated using scalar methods																																									

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - March 2015

Maximum Value: 98.6 deg on Mar 14 08:00																				Hours in Service: 744					
Minimum Value: 4.2 deg on Mar 4 23:00																				Hours of Data: 744					
																				Hours of Missing Data: 0					
Percentiles: P ₁ = 5.5 P ₁₀ = 7.6 Q ₁ = 12.7 Median = 21.6 Q ₃ = 46.3 P ₉₀ = 73.6 P ₉₉ = 92.0																				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-Mar	22	31	42	53	51	81	80	86	77	37	48	54	56	16	20	30	27	27	24	19	14	13	12	30	86.0
2-Mar	20	18	16	10	17	17	32	17	15	20	17	13	15	15	11	13	15	18	13	16	30	24	38	31	38.3
3-Mar	23	15	28	35	14	8	35	41	59	26	19	17	23	21	64	22	33	18	13	10	71	46	26	52	70.8
4-Mar	64	86	92	25	82	19	84	80	42	64	22	20	28	20	23	13	10	8	8	6	7	5	4	5	92.2
5-Mar	8	18	77	62	79	30	24	47	5	6	8	15	13	10	9	7	6	8	16	29	6	8	16	64	79.4
6-Mar	63	7	7	6	6	6	6	6	7	7	6	6	7	9	11	19	13	7	6	7	20	5	11	7	63.2
7-Mar	8	9	14	13	29	49	72	38	65	10	16	11	12	22	12	9	6	7	8	8	7	5	7	6	71.7
8-Mar	8	6	5	6	6	8	8	10	6	7	8	8	7	8	8	13	9	13	7	6	11	6	6	6	13.4
9-Mar	5	5	7	6	6	6	13	7	7	8	28	13	11	9	9	11	7	7	6	7	6	7	9	59	58.9
10-Mar	61	43	16	13	29	59	72	64	53	68	47	36	64	34	27	28	24	21	11	10	10	13	13	9	72.5
11-Mar	14	15	13	15	16	15	26	16	20	15	22	32	40	22	25	24	21	24	27	36	23	25	22	20	40.3
12-Mar	40	51	41	51	65	57	34	56	56	76	86	20	13	23	31	11	9	10	7	6	6	6	7	16	85.6
13-Mar	18	9	32	55	62	65	81	61	46	19	11	14	16	16	24	34	50	50	42	90	64	10	11	9	90.4
14-Mar	11	66	77	78	55	73	66	99	71	74	92	25	60	88	36	11	23	14	8	7	7	7	28	13	98.6
15-Mar	15	13	40	58	58	72	92	68	58	10	10	18	22	17	21	18	16	15	24	82	51	52	47	57	92.1
16-Mar	96	70	87	64	64	30	22	74	28	40	16	37	62	52	69	30	28	13	8	79	73	71	73	35	96.5
17-Mar	80	64	82	51	76	82	81	36	68	17	38	31	29	35	14	13	15	13	10	33	37	80	46	11	82.1
18-Mar	21	31	18	22	48	19	28	6	6	8	8	10	15	16	16	39	18	23	35	26	37	55	53	91	91.3
19-Mar	92	86	59	45	43	28	72	37	20	17	16	21	20	19	20	13	12	13	12	14	17	14	22	18	92.0
20-Mar	17	16	27	34	24	21	17	18	17	16	20	19	20	20	18	18	15	16	16	16	17	17	15	18	33.6
21-Mar	17	18	19	21	17	13	16	14	18	13	22	19	19	21	18	26	22	10	10	19	12	23	28	14	27.5
22-Mar	11	39	22	15	18	38	17	28	36	39	46	35	27	38	65	69	25	19	13	15	38	36	77	62	76.7
23-Mar	41	51	51	21	80	53	23	55	75	43	30	22	28	20	29	17	20	18	13	69	87	20	42	68	86.8
24-Mar	29	59	62	78	65	29	90	76	35	14	36	35	45	46	63	58	51	22	91	42	75	80	50	90	90.9
25-Mar	67	92	79	94	90	57	88	60	64	59	26	20	30	38	30	77	14	16	40	69	63	73	25	21	93.7
26-Mar	75	25	50	58	84	59	23	23	52	37	29	10	8	14	41	13	11	11	8	11	8	28	31	28	84.1
27-Mar	64	81	33	87	75	91	25	64	44	55	75	48	43	22	33	24	29	38	25	37	11	15	22	20	91.1
28-Mar	11	15	9	31	21	16	13	23	9	11	10	16	12	14	12	10	9	9	7	20	48	86	82	75	85.9
29-Mar	76	69	65	74	83	95	88	88	81	73	39	17	27	32	12	11	11	9	8	7	10	10	5	9	95.4
30-Mar	11	9	6	9	14	76	69	58	17	14	30	32	72	52	91	46	45	41	27	36	45	80	74	23	90.7
31-Mar	21	11	43	17	22	22	15	21	20	10	22	38	23	22	15	10	7	8	17	15	24	14	11	14	43.1
96.5 92.0 92.2 93.7 89.9 95.4 92.1 98.6 80.6 76.0 91.7 53.8 71.7 88.2 90.7 77.0 51.1 50.3 90.9 90.4 86.8 85.9 82.2 91.3																									

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

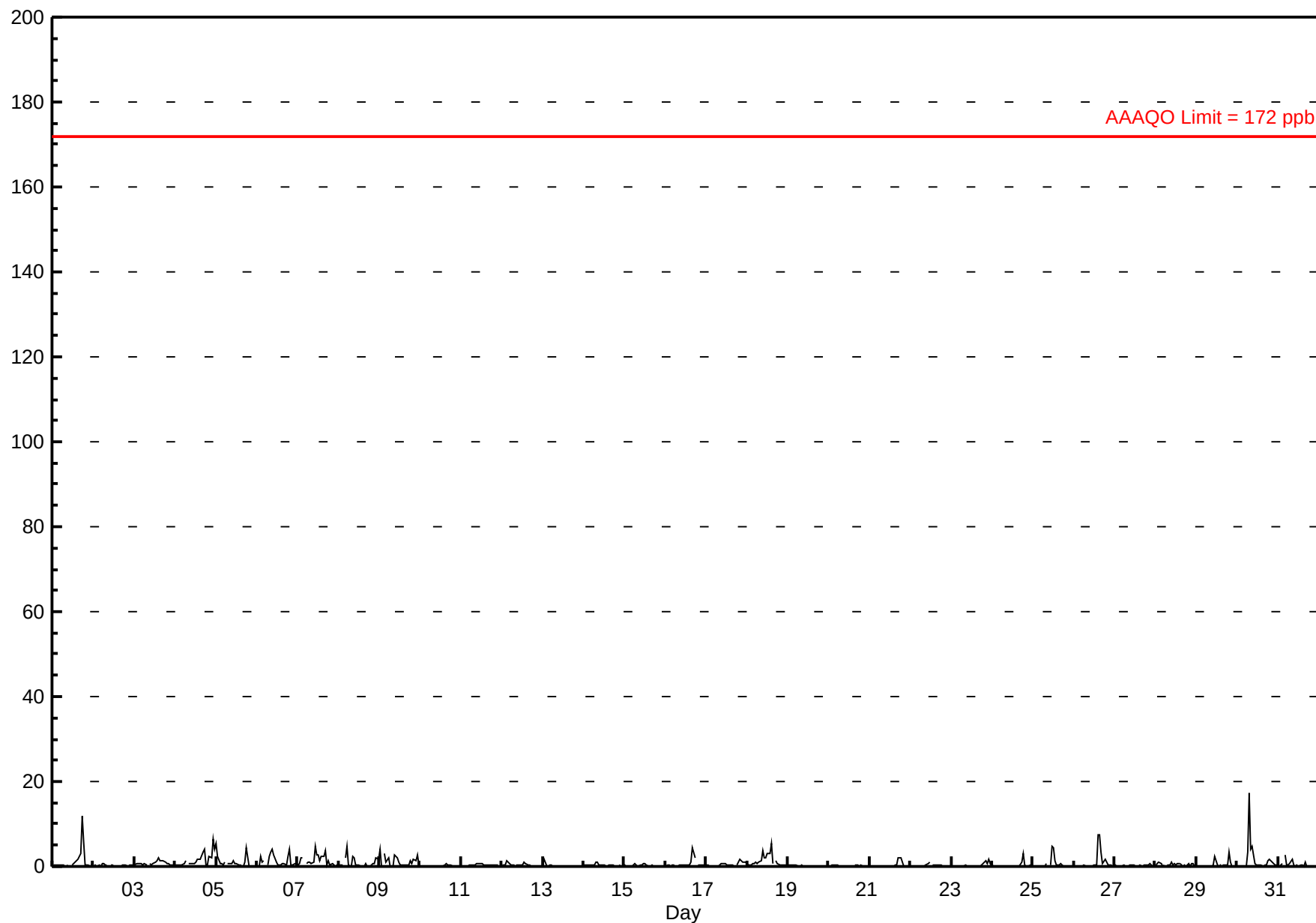
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 17.4 ppb on Mar 30 08:00 Maximum Daily Average: 1.7 ppb on Mar 30																				Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Mar 13 21:00 Maximum Diurnal Average: 1.0 ppb at hour 18 Monthly Average: 0.64 ppb										Minimum Daily Average: 0.1 ppb on Mar 20 Minimum Diurnal Average: 0.3 ppb at hour 2 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.6 P ₉₀ = 1.6 P ₉₉ = 5.3																
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-Mar	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	2	3	12	6	0	0	0	0	1	1.3	11.9
2-Mar	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
3-Mar	0	1	1	1	1	0	1	0	A	1	0	1	1	1	2	1	1	1	1	1	1	0	0	0	0.8	1.9
4-Mar	0	0	0	0	0	1	2	A	1	1	1	1	1	2	2	2	3	4	0	0	2	2	7	4	1.6	6.6
5-Mar	6	2	1	1	0	1	A	1	1	1	1	1	1	0	0	0	0	1	4	0	0	0	0	0	0.9	5.5
6-Mar	0	0	2	1	1	A	0	2	4	4	3	1	0	0	0	1	1	0	2	4	0	0	1	1	1.3	4.1
7-Mar	0	1	2	2	A	1	1	1	1	1	5	3	3	1	2	2	4	0	1	0	1	0	0	0	1.4	4.7
8-Mar	0	0	0	A	2	5	0	0	2	2	0	0	0	0	0	0	1	0	0	0	1	1	2	2	0.9	4.7
9-Mar	4	0	A	3	1	2	0	0	0	0	3	2	1	0	0	0	0	0	1	1	2	1	3	0	1.2	4.2
10-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.6
11-Mar	A	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0.3	0.7
12-Mar	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0.3	1.4
13-Mar	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	1.8
14-Mar	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	1.2
15-Mar	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0.2	0.7
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	2	A	0	0	0	0	0	0.5	4.3
17-Mar	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	A	0	1	2	1	1	1	0.5	1.6
18-Mar	1	0	0	1	1	1	1	1	1	4	2	2	3	3	5	1	A	1	1	0	0	0	0	0	1.3	5.3
19-Mar	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
20-Mar	0	0	0	0	0	0	0	0	0	0	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0.1	0.3
21-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	2	2	1	0	0	0	0	0.3	2.2
22-Mar	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
23-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	2	1	0.3	1.8
24-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	3	0	0	0	0	0	0.3	3.1
25-Mar	0	0	0	0	0	0	0	0	1	A	0	5	4	1	0	0	1	0	0	0	0	0	0	0	0.6	4.8
26-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	7	7	3	1	2	1	0	0	0	0	1.0	7.4
27-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.8
28-Mar	0	1	1	1	0	0	A	0	0	1	0	1	0	1	1	0	0	0	0	1	0	1	1	0	0.4	1.1
29-Mar	0	0	0	0	0	A	0	0	0	0	0	2	1	0	0	0	0	0	0	3	1	0	0	0	0.4	3.3
30-Mar	0	0	0	0	A	0	3	17	4	5	1	0	0	0	0	0	0	0	1	2	2	1	0	0	1.7	17.4
31-Mar	0	0	1	A	3	0	0	1	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	2.8
0.5 0.3 0.4 0.4 0.4 0.5 0.4 1.0 0.7 0.9 0.7 0.8 0.7 0.6 0.9 0.7 0.9 1.0 1.0 0.6 0.5 0.4 0.6 0.4																								Diurnal Average		
5.5 2.2 2.5 2.9 2.8 4.7 3.5 17.4 4.1 4.9 4.7 4.8 4.3 3.2 7.4 7.3 4.3 11.9 5.9 4.1 2.2 2.1 6.6 4.2																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2015



Hourly Maximums

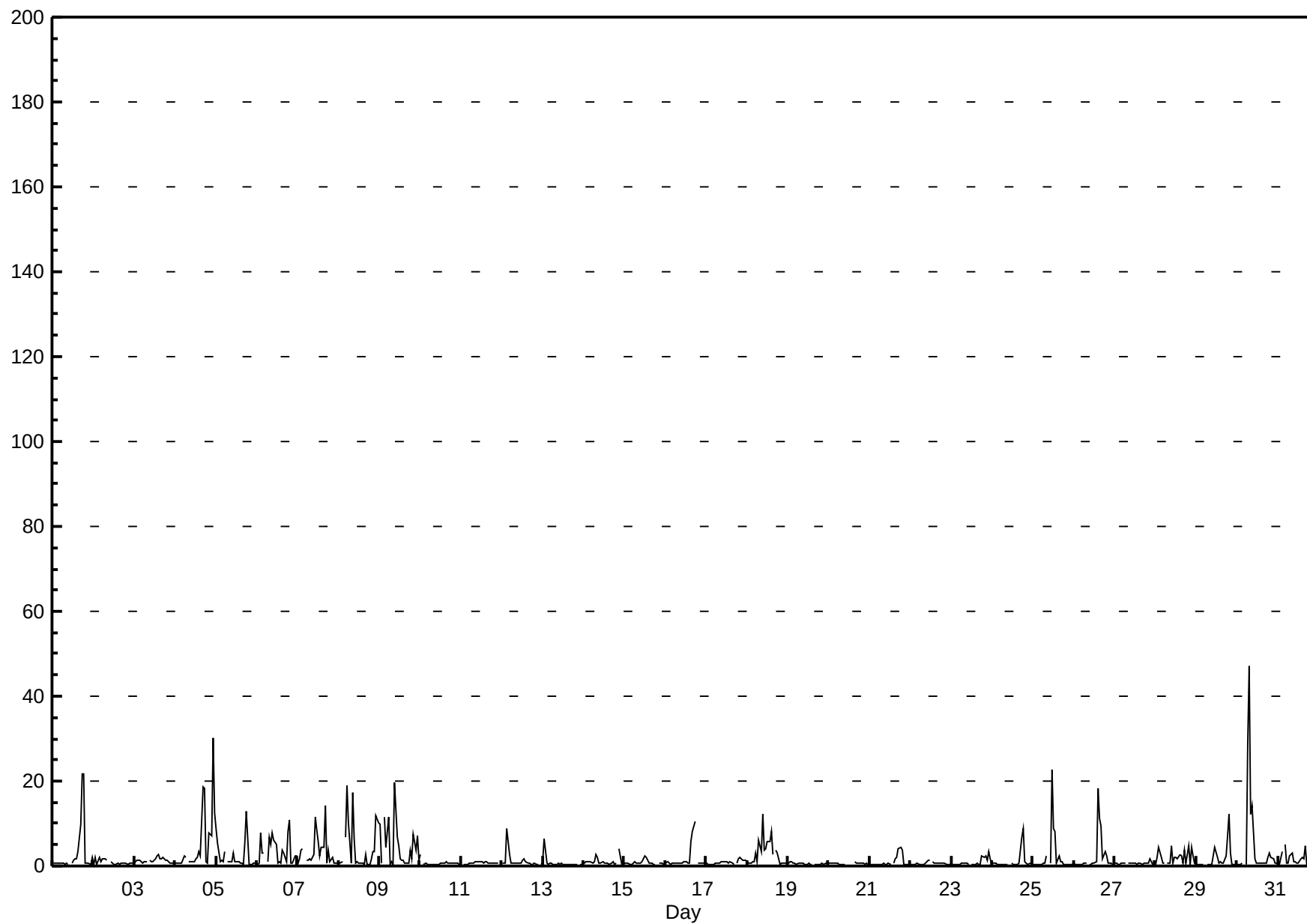
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - March 2015

Maximum Value: 47.2 ppb on Mar 30 08:00																				Maximum Daily Average: 5.3 ppb on Mar 30					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 13 18:00																				Minimum Daily Average: 0.6 ppb on Mar 20					Hours of Data: 708	
Maximum Diurnal Average: 3.1 ppb at hour 19																				Minimum Diurnal Average: 1.1 ppb at hour 2					Hours of Missing Data: 36	
Monthly Average: 1.94 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.7 Q ₃ = 1.5 P ₉₀ = 4.3 P ₉₉ = 18.3					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-Mar	1	1	1	1	1	1	1	1	1	0	A	1	1	2	2	3	10	22	22	1	1	1	0	2	3.2	21.8
2-Mar	0	2	0	2	1	2	2	2	1	A	1	1	0	0	1	0	1	1	1	1	0	1	1	1	0.9	2.1
3-Mar	1	1	1	1	1	1	1	1	A	1	1	1	2	2	3	2	2	2	1	1	1	1	1	1	1.3	2.6
4-Mar	1	1	1	1	1	2	2	A	1	1	1	1	2	2	3	2	19	18	1	1	8	7	30	12	5.1	30.3
5-Mar	9	5	1	1	1	3	A	1	1	1	3	1	1	1	1	1	0	6	13	0	0	0	1	1	2.3	12.9
6-Mar	0	1	8	3	3	A	1	7	5	8	6	5	1	1	1	4	3	1	8	11	1	1	2	2	3.5	10.8
7-Mar	1	2	4	4	A	1	1	2	1	3	12	9	6	2	4	4	14	1	4	1	2	1	1	1	3.4	14.1
8-Mar	1	1	1	A	7	19	10	1	17	6	1	1	1	1	0	3	0	0	2	3	3	12	10		4.4	18.9
9-Mar	10	1	A	11	4	12	0	1	0	20	7	5	2	1	1	1	1	4	2	8	4	7	1		4.4	19.5
10-Mar	3	A	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0.6	2.8
11-Mar	A	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	1.2
12-Mar	1	1	1	9	3	1	1	1	1	1	1	1	1	2	1	1	1	0	0	1	0	0	A	0	1.2	9.0
13-Mar	1	6	1	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0.7	6.4
14-Mar	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	0	1	A	4	0	0	1.0	4.0
15-Mar	1	1	1	0	0	1	1	1	1	1	1	2	3	2	1	1	1	0	0	A	1	1	1	0	0.8	2.5
16-Mar	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	6	8	10	A	1	1	1	1	1	1.7	10.4
17-Mar	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	A	1	2	2	1	1	1	0.9	2.1
18-Mar	1	1	1	1	1	3	1	6	3	12	4	4	6	6	8	3	A	4	3	0	1	1	1	1	3.1	12.0
19-Mar	1	1	1	1	1	0	1	1	1	1	0	0	1	0	0	A	0	0	0	0	1	0	1	1	0.6	1.0
20-Mar	1	1	1	1	1	1	1	0	0	0	C	C	C	C	A	1	1	1	1	1	1	0	1	0	0.6	0.8
21-Mar	0	0	0	0	0	0	0	0	1	0	0	1	1	A	1	2	2	4	4	4	0	0	0	0	1.0	4.3
22-Mar	0	0	0	0	1	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0.6	1.3
23-Mar	0	0	0	0	0	1	1	1	1	1	0	A	0	0	0	1	0	0	2	2	2	1	3	2	0.9	3.3
24-Mar	1	1	1	0	0	0	0	0	0	0	A	1	0	0	0	0	1	7	9	1	1	0	1	1	1.1	8.8
25-Mar	0	0	0	0	0	0	1	1	2	A	1	23	9	8	1	2	1	1	0	0	0	0	0	0	2.4	22.6
26-Mar	1	1	0	0	0	0	1	1	A	0	0	1	1	1	18	11	10	2	3	2	1	1	1	0	2.4	18.2
27-Mar	1	1	0	0	1	1	1	A	1	1	1	1	1	0	1	1	0	1	1	1	1	2	0	0	0.6	1.8
28-Mar	0	2	4	2	1	1	A	1	1	5	1	2	2	2	3	2	1	4	1	5	0	4	2	1	2.0	4.9
29-Mar	0	0	0	0	0	A	0	0	0	0	2	4	2	1	1	1	1	2	7	12	3	0	0	0	1.8	12.2
30-Mar	0	0	0	1	A	0	29	47	12	14	2	1	1	1	1	1	1	1	2	3	2	2	1	1	5.3	47.2
31-Mar	0	0	3	A	5	1	1	2	3	1	1	1	1	2	2	2	5	0	0	0	0	0	0	0	1.4	5.1
1.2 1.1 1.2 1.6 1.3 1.9 2.1 2.8 2.1 2.9 1.8 2.4 1.6 1.5 1.9 1.8 2.9 3.1 3.1 1.9 1.4 1.3 2.4 1.4																									Diurnal Average	
9.7 6.4 7.6 11.4 6.9 18.9 28.7 47.2 17.2 19.5 11.6 22.6 8.9 8.2 18.2 11.1 18.7 21.7 21.8 12.2 7.9 7.0 30.3 12.4																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

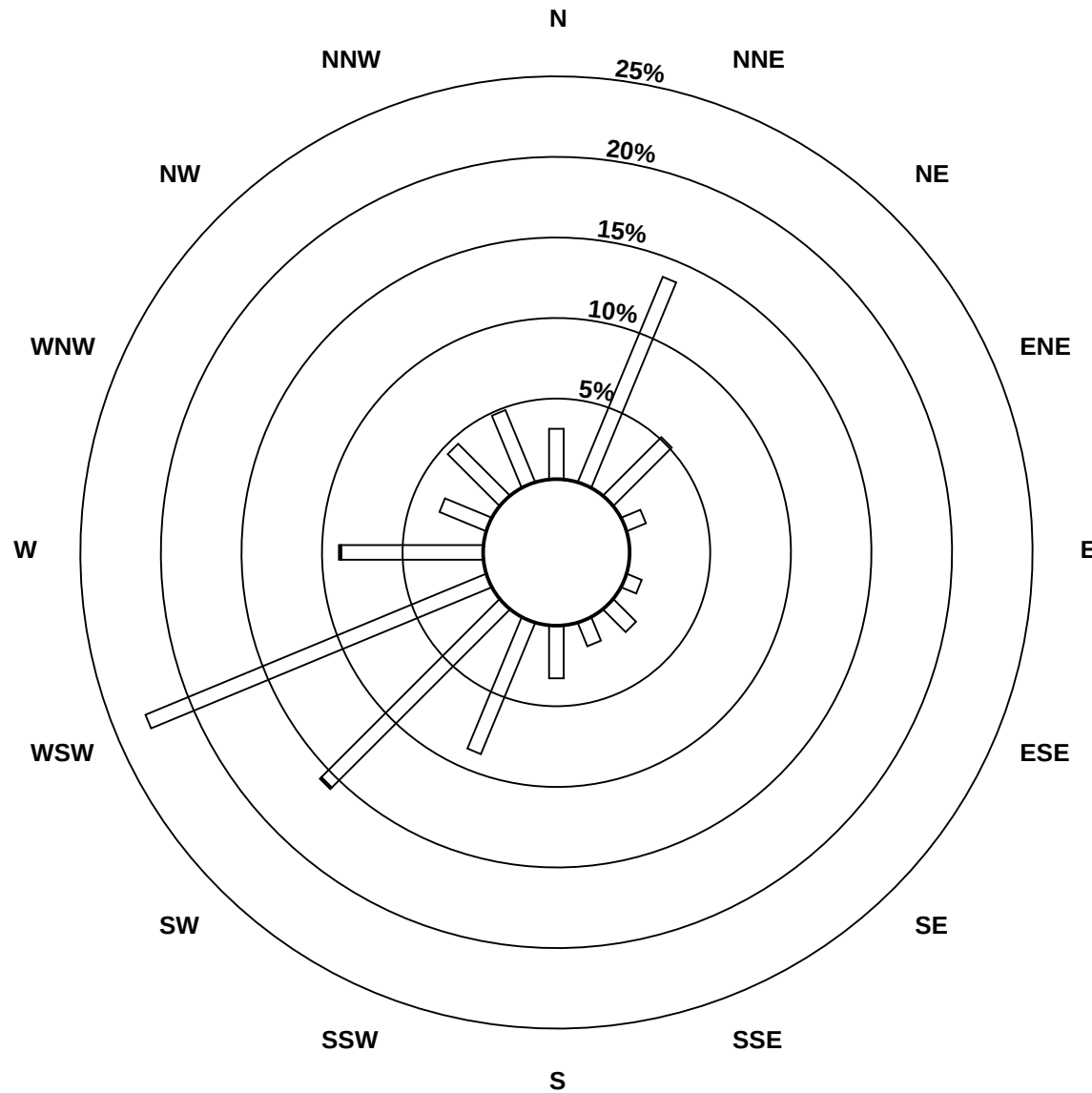
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2015

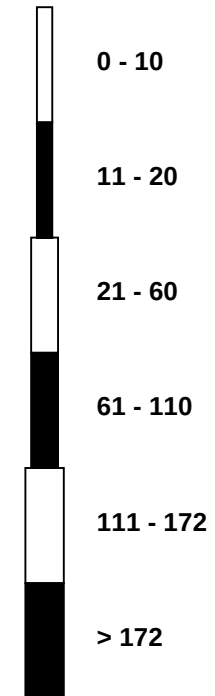


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2015

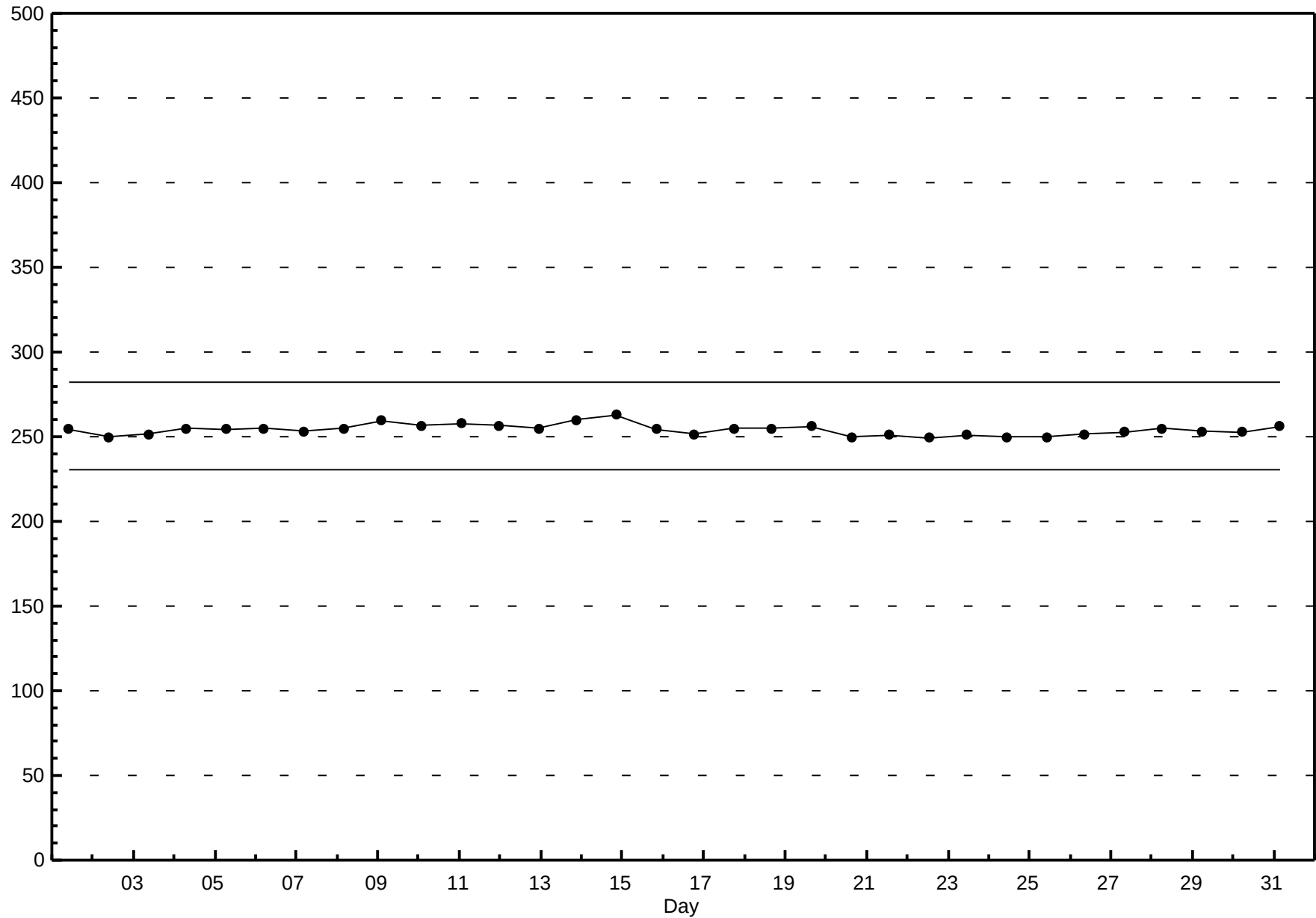


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Smoky Heights - March 2015



Hourly Averages

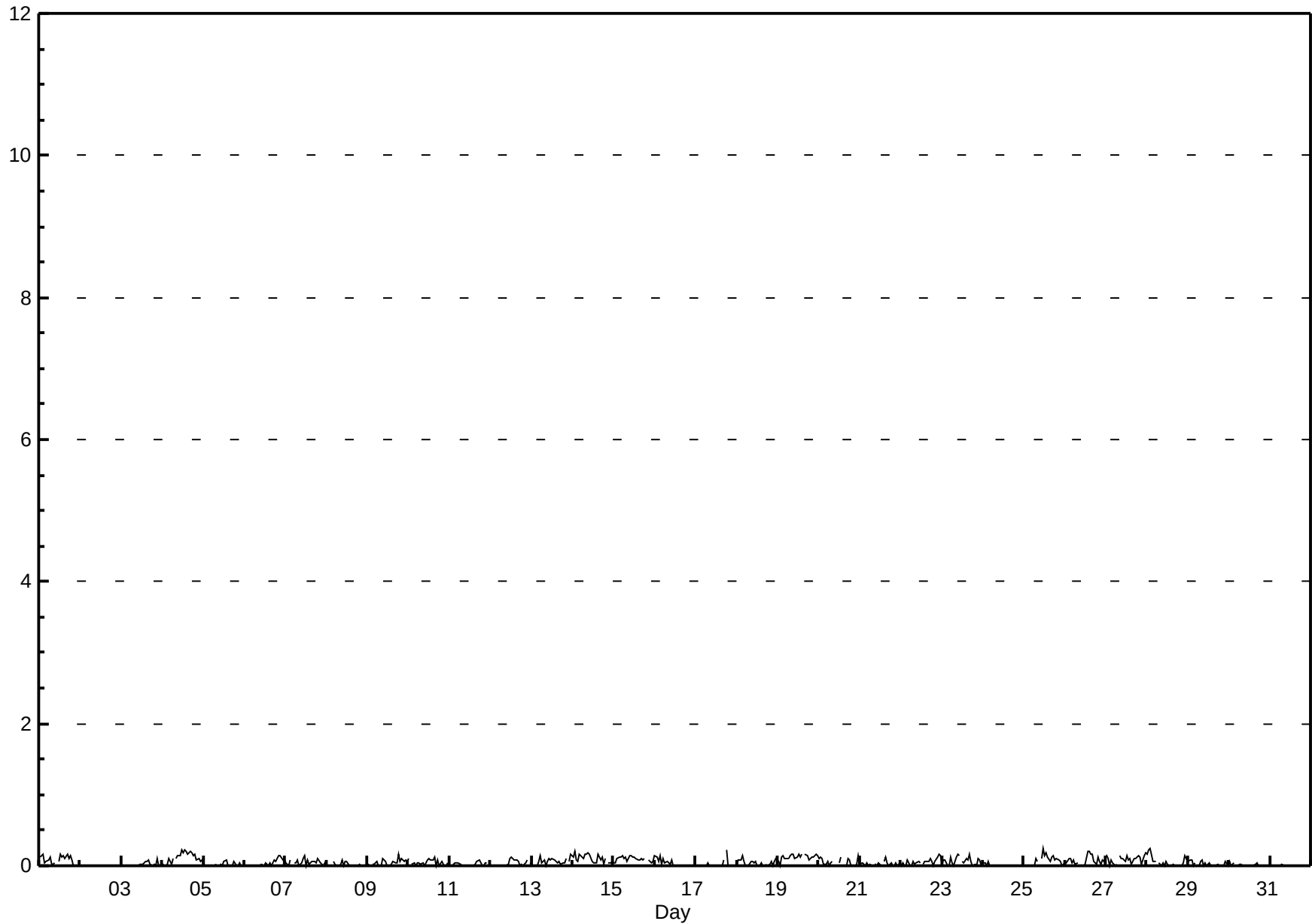
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744							
Maximum Value: 0.2 ppb on Mar 25 12:00																				Maximum Daily Average: 0.1 ppb on Mar 19		Hours of Data: 709					
Minimum Value: 0 ppb on Mar 1 21:00																				Minimum Daily Average: 0.0 ppb on Mar 2		Hours of Missing Data: 35					
Maximum Diurnal Average: 0.1 ppb at hour 17																				Minimum Diurnal Average: 0.0 ppb at hour 7		Hours of Calibration: 35					
Monthly Average: 0.05 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.1 P ₉₀ = 0.1 P ₉₉ = 0.2		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-Mar	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	
2-Mar	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	
3-Mar	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	0.1	
4-Mar	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	
5-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
6-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
7-Mar	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	
8-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
9-Mar	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	0.2	
10-Mar	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	
11-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.1	
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.1	
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2	
14-Mar	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	
15-Mar	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	0.1	
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.1	
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.2	
18-Mar	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	
19-Mar	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	
20-Mar	0	0	0	0	0	0	0	0	0	C	C	C	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.1	
21-Mar	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	0.1	
22-Mar	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	
23-Mar	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	
24-Mar	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	
25-Mar	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	
26-Mar	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	
27-Mar	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	
28-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
29-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
30-Mar	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	
31-Mar	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 0.1 0.1 0.1 0.1 0.1 0.0 0.1 0.1 0.1 0.0 0.0 0.0 0.0 0.1																									Diurnal Average		
0.2 0.2 0.2 0.1 0.2 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.1 0.1 0.2 0.2																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																											

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - March 2015



Hourly Maximums

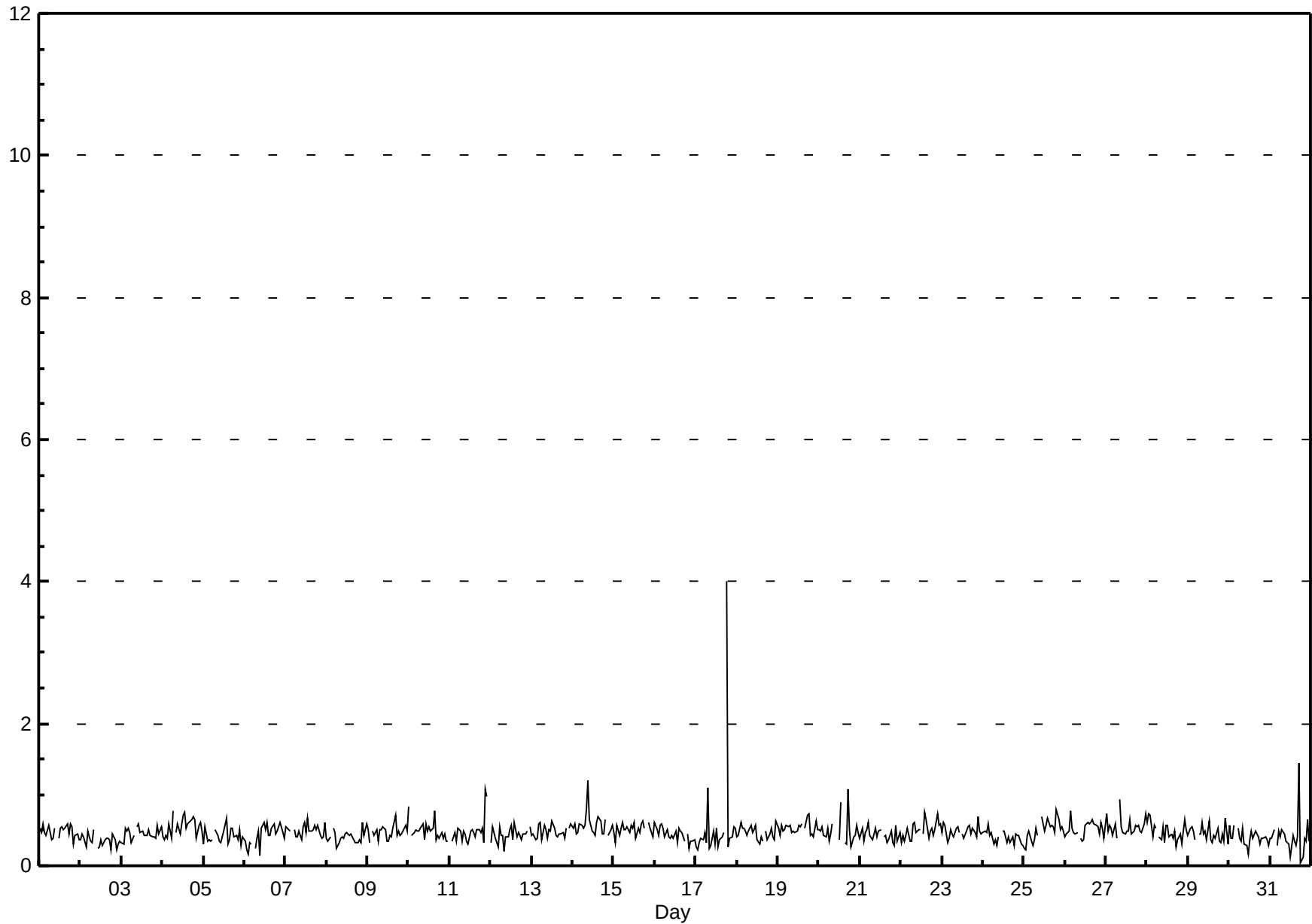
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2015

Maximum Value: 4.0 ppb on Mar 17 19:00																				Maximum Daily Average: 0.6 ppb on Mar 14										Hours in Service: 744									
Minimum Value: 0 ppb on Mar 31 19:00																				Minimum Daily Average: 0.4 ppb on Mar 2										Hours of Data: 709									
Maximum Diurnal Average: 0.6 ppb at hour 19																				Minimum Diurnal Average: 0.4 ppb at hour 7										Hours of Missing Data: 35									
Monthly Average: 0.47 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 0.9										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-Mar	0	0	1	0	0	1	0	0	0	1	A	0	1	1	1	1	1	0	1	1	0	0	0	0	0.5	0.6													
2-Mar	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5													
3-Mar	0	0	1	0	1	0	0	0	A	1	1	0	0	0	0	0	1	0	0	0	0	1	0	1	0.5	0.6													
4-Mar	0	0	0	0	1	0	1	A	0	1	0	1	1	1	1	1	1	1	1	1	0	1	1	0	0.6	0.8													
5-Mar	0	1	0	0	0	0	A	1	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0.4	0.7													
6-Mar	0	0	0	0	0	A	0	0	0	0	1	1	1	1	0	0	1	1	0	0	1	1	0	0	0.4	0.6													
7-Mar	1	1	1	0	A	1	0	0	0	0	1	1	0	1	0	0	0	1	1	1	0	0	0	1	0.5	0.7													
8-Mar	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4	0.6													
9-Mar	1	0	A	0	0	1	0	1	1	1	1	0	0	0	0	1	1	0	0	0	0	1	1	0	0.5	0.7													
10-Mar	1	A	0	0	0	0	0	1	1	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0.5	0.8													
11-Mar	A	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	1	1	A	0.5	1.1													
12-Mar	0	1	0	0	0	1	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	A	1	0.4	0.6													
13-Mar	0	0	0	0	1	1	0	1	1	0	0	0	1	1	0	0	0	0	0	0	1	A	1	1	0.5	0.6													
14-Mar	1	1	0	0	1	1	1	1	1	1	1	0	0	0	1	1	1	0	0	1	A	0	1	1	0.6	1.2													
15-Mar	0	0	1	0	1	1	1	1	1	0	1	1	1	0	1	0	1	1	1	A	1	1	0	0	0.5	0.6													
16-Mar	1	1	0	1	1	1	0	1	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0.4	0.6													
17-Mar	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	A	4	0	0	0	1	1	0.6	4.0													
18-Mar	0	0	1	1	1	0	0	0	1	0	1	1	0	0	0	0	A	0	0	0	1	0	0	1	0.5	0.6													
19-Mar	1	0	1	0	0	1	1	1	0	0	0	0	1	1	1	A	1	1	1	0	0	0	1	1	0.5	0.7													
20-Mar	1	0	1	0	0	1	0	0	1	C	C	C	0	1	A	0	0	1	1	0	0	0	1	0	0.5	1.1													
21-Mar	0	1	0	0	0	1	0	0	0	1	0	0	1	A	0	0	0	0	0	0	0	1	0	0	0.4	0.6													
22-Mar	0	0	0	0	1	0	0	1	1	0	1	1	A	0	1	1	0	0	1	0	1	1	1	1	0.5	0.7													
23-Mar	0	1	1	0	0	1	0	0	1	1	0	A	0	0	0	1	1	0	1	0	0	1	0	0	0.5	0.7													
24-Mar	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6													
25-Mar	0	0	0	0	0	0	0	1	0	A	1	1	0	1	1	1	1	1	0	1	1	1	1	0	0.5	0.8													
26-Mar	0	0	0	1	1	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	0	1	1	0	0.5	0.8													
27-Mar	1	0	1	1	0	1	0	A	1	1	0	0	0	0	1	0	0	1	1	1	0	0	1	1	0.5	0.9													
28-Mar	1	1	1	0	1	1	A	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	1	1	0.5	0.7													
29-Mar	0	1	1	0	0	A	0	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0.4	0.7													
30-Mar	1	0	0	1	A	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6													
31-Mar	0	0	1	A	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0.4	1.4													
Diurnal Average																									0.5	0.5													
Diurnal Maximum																									0.8	0.7													
C - Calibration																									A - Automated Daily Zero Span														

Hourly Maximums

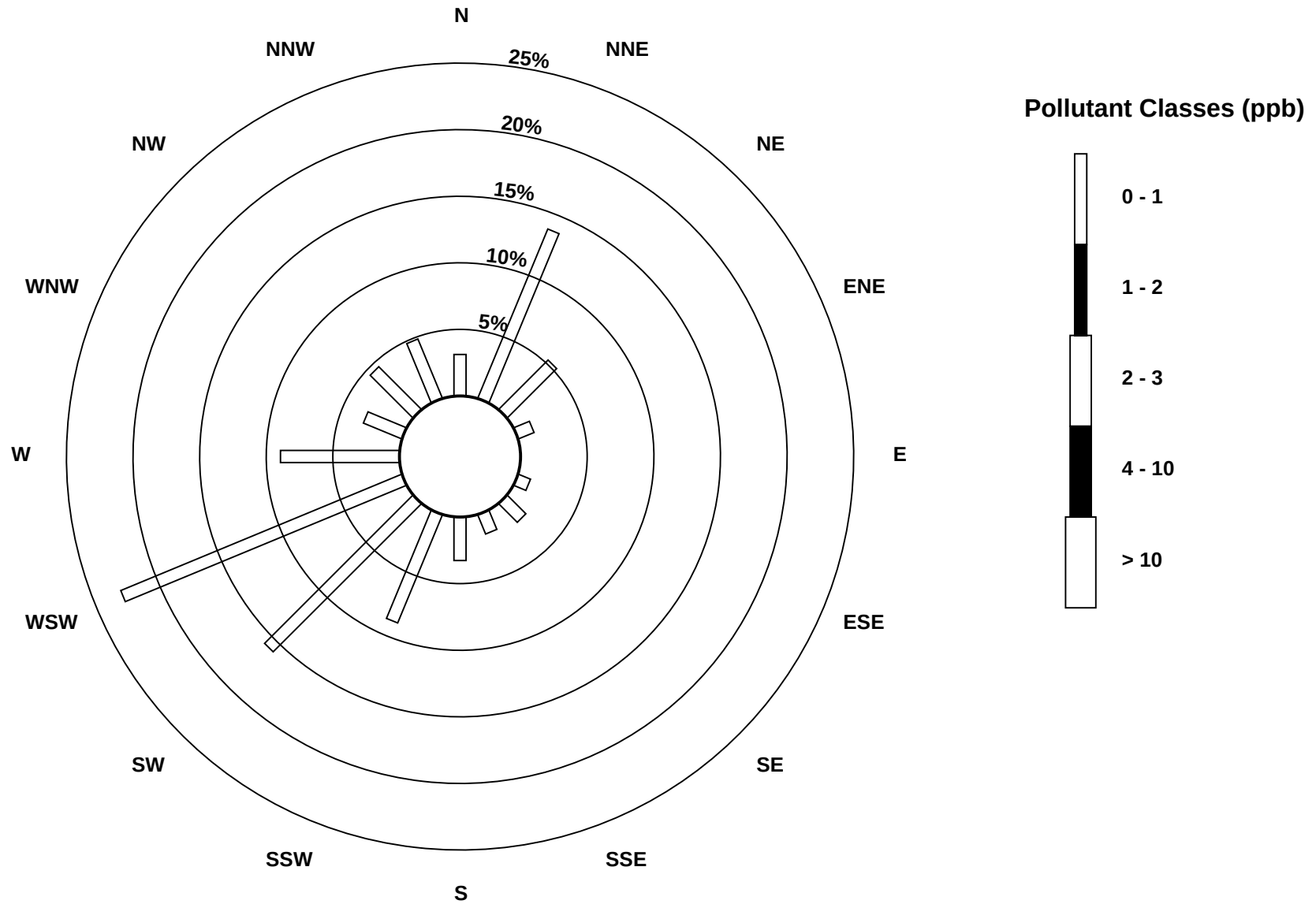
Total Reduced Sulphur (TRS) - ppb
Smoky Heights - March 2015



Pollutant Rose

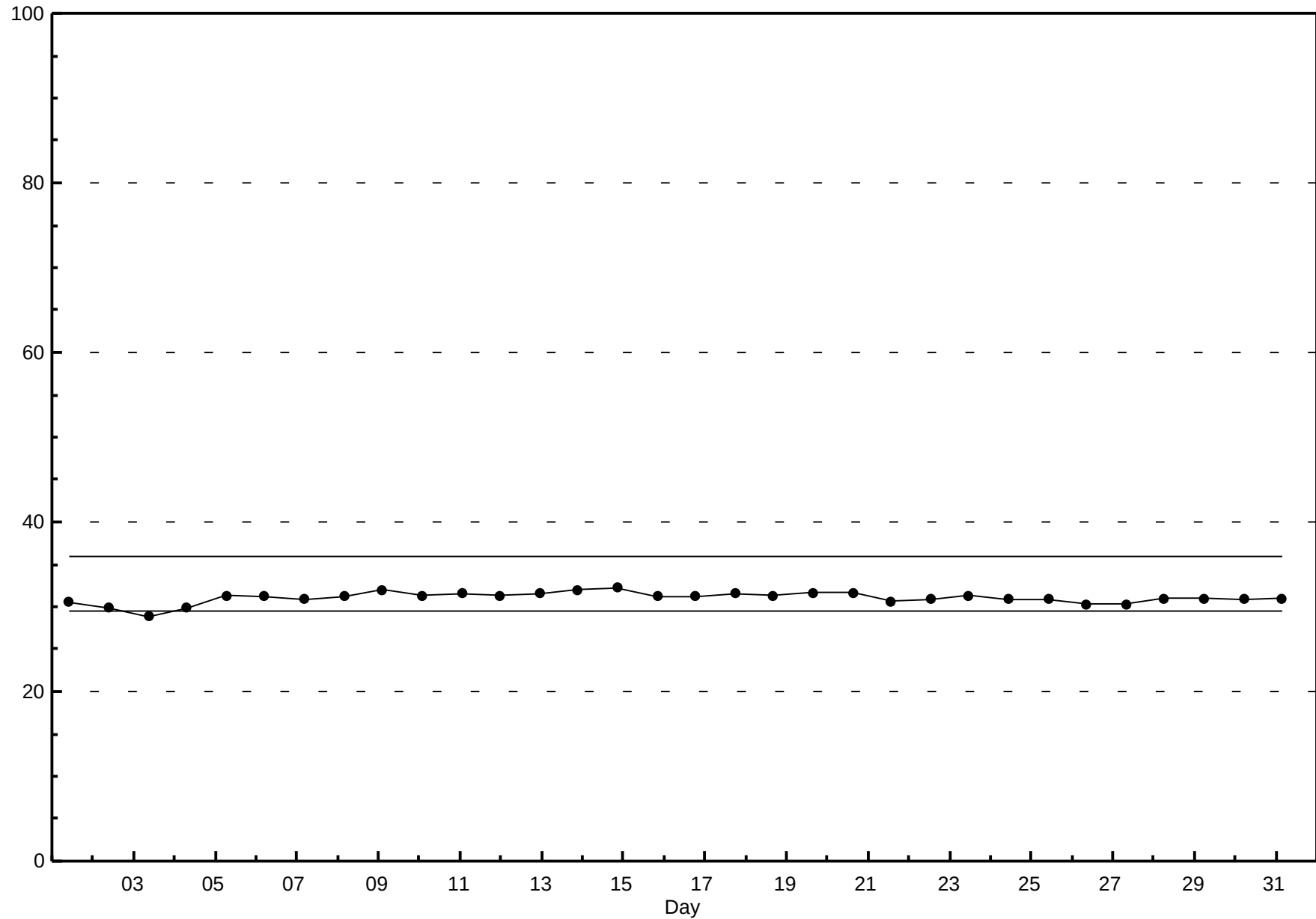
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2015



Span Responses

Total Reduced Sulphur (TRS)
Smoky Heights - March 2015

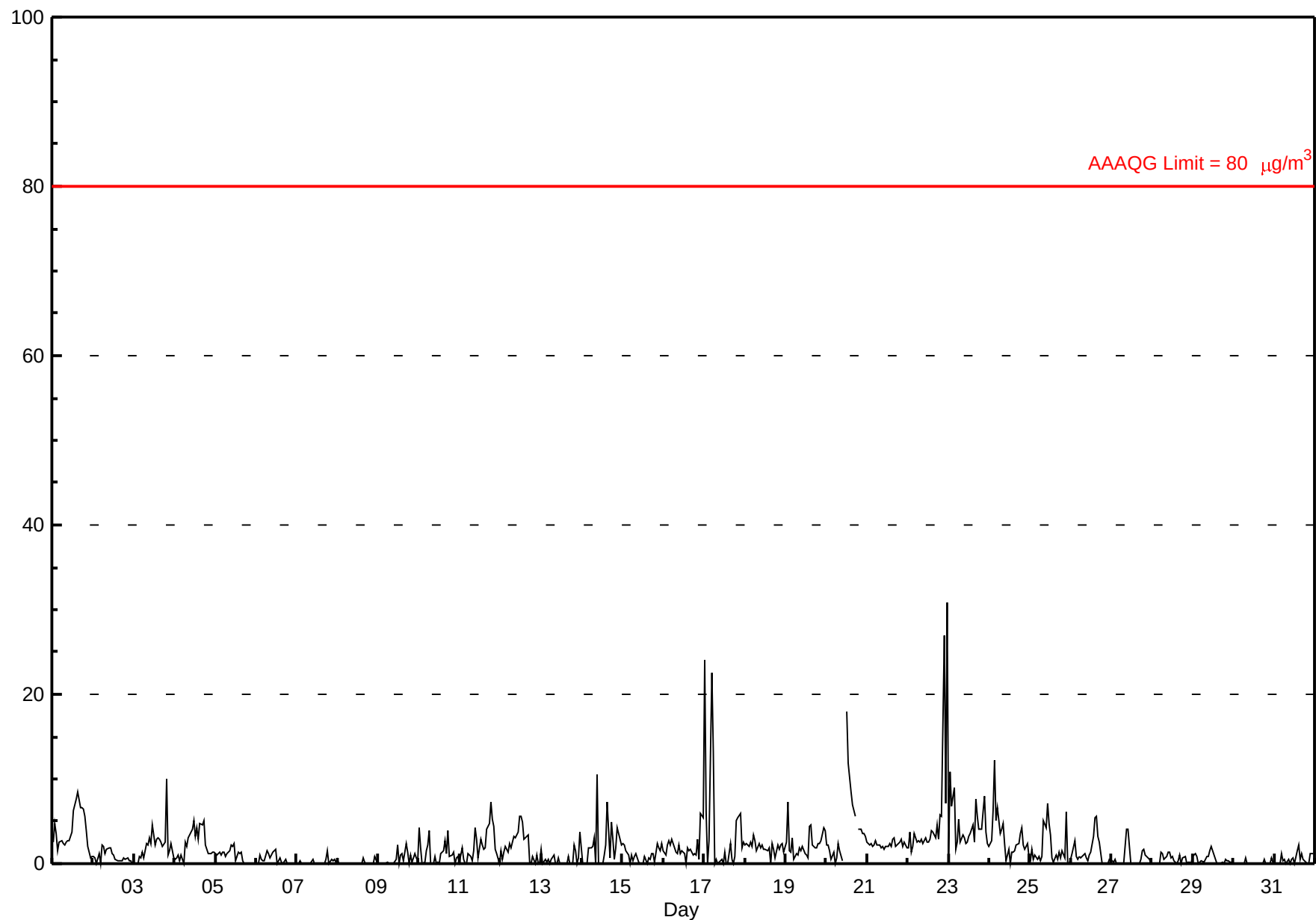


Hourly Averages

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

Smoky Heights - March 2015

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 30.9 µg/m³ on Mar 23 00:00 Maximum Daily Average: 5.5 µg/m³ on Mar 22																								Hours in Service: 744 Hours of Data: 741 Hours of Missing Data: 3 Hours of Calibration: 0 Percent Operational Time: 99.6		
Minimum Value: 0 µg/m³ on Mar 2 03:00 Maximum Diurnal Average: 2.5 µg/m³ at hour 22 Monthly Average: 1.80 µg/m³																								Minimum Daily Average: 0.1 µg/m³ on Mar 30 Minimum Diurnal Average: 1.3 µg/m³ at hour 8 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 1.1 Q ₃ = 2.4 P ₉₀ = 4.2 P ₉₉ = 11.2		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	3	5	4	2	3	3	2	2	3	3	3	4	6	7	8	8	7	7	6	6	4	2	1	1	4.0	8.5
2-Mar	1	1	0	1	0	2	2	1	2	2	2	1	1	1	0	0	0	0	1	1	1	0	0	0	0.8	2.2
3-Mar	0	0	0	1	1	1	1	2	2	3	2	5	2	3	3	3	3	2	3	10	1	2	2	1	2.2	10.1
4-Mar	0	1	1	0	1	0	2	2	3	3	4	5	3	4	3	5	5	5	2	2	1	1	1	1	2.4	5.1
5-Mar	1	1	1	1	1	1	1	1	1	2	2	2	0	1	1	1	0	0	0	0	0	0	0	0	0.9	2.4
6-Mar	0	0	1	0	0	0	1	1	1	1	1	2	0	0	1	0	0	1	0	0	0	0	0	0	0.5	1.8
7-Mar	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	1.5
8-Mar	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0.1	0.8
9-Mar	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	2	1	0	1	0	1	1	0	0.5	2.3
10-Mar	4	2	0	0	2	2	4	0	0	1	0	0	0	1	2	3	1	4	1	1	1	0	1	1	1.3	4.2
11-Mar	0	2	1	0	0	1	1	0	2	4	3	1	3	2	2	2	4	5	7	5	4	2	1	0	2.1	7.3
12-Mar	2	0	1	2	1	2	2	2	3	3	4	6	6	5	3	3	3	0	0	1	0	1	0	0	2.1	5.6
13-Mar	2	0	1	0	0	0	1	1	0	0	1	0	0	0	0	0	1	0	0	2	1	0	1	4	0.6	3.8
14-Mar	0	0	0	0	2	2	2	3	0	11	0	0	0	1	2	7	1	5	3	1	2	4	3	2	2.1	10.6
15-Mar	2	2	2	1	0	1	0	1	1	0	0	0	0	1	0	1	0	1	1	0	2	2	1	2	1.0	2.4
16-Mar	1	1	2	3	2	3	2	1	1	2	1	1	1	0	2	2	2	1	1	1	3	1	6	5	1.9	6.0
17-Mar	24	6	0	3	23	13	0	1	0	0	1	0	1	0	0	2	1	0	1	5	6	6	2	2	4.0	24.1
18-Mar	2	2	2	3	2	3	3	1	2	2	2	2	2	2	2	0	2	2	1	2	2	2	2	1	1.9	3.4
19-Mar	3	7	2	1	3	1	1	1	2	1	2	1	1	1	4	5	2	2	2	2	2	3	4	4	2.4	7.3
20-Mar	2	2	2	1	1	0	1	2	2	0	M	M	18	12	9	7	6	6	N	4	4	4	4	3	4.2	18.0
21-Mar	3	2	2	2	2	3	2	2	2	2	2	2	2	2	3	3	2	2	2	3	2	3	2	2	2.3	3.1
22-Mar	2	4	1	2	4	3	3	3	3	2	3	3	3	3	4	4	3	5	3	6	6	27	7	31	5.5	30.9
23-Mar	1	11	7	9	2	3	5	3	3	3	2	3	3	3	4	2	8	6	4	4	6	8	4	2	4.4	10.8
24-Mar	2	3	6	12	5	7	4	4	5	2	0	2	0	1	1	2	2	2	4	4	2	2	2	1	3.1	12.2
25-Mar	0	2	1	1	0	1	0	1	5	4	7	5	3	1	0	1	0	1	1	2	1	6	0	0	1.8	7.1
26-Mar	1	1	3	1	0	1	1	1	1	1	0	1	1	3	5	6	3	3	0	0	0	0	0	0	1.4	5.6
27-Mar	0	0	1	0	0	0	0	0	2	4	4	0	0	0	0	0	0	1	2	2	1	1	0	0	0.7	4.1
28-Mar	0	0	0	0	0	1	1	0	1	1	1	1	1	0	0	0	1	0	1	1	0	0	0	0	0.5	1.4
29-Mar	1	1	1	0	0	0	0	0	1	1	2	2	1	0	0	0	0	0	0	1	0	0	0	0	0.5	2.1
30-Mar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0.1	0.7
31-Mar	0	0	0	0	1	0	1	0	0	0	0	1	0	1	2	0	1	1	0	0	0	1	1	1	0.6	2.1
1.9 1.8 1.3 1.5 1.8 1.8 1.4 1.3 1.5 2.0 1.7 1.7 1.9 1.9 2.0 2.2 2.0 2.0 1.6 2.1 1.7 2.5 1.6 2.2																								Diurnal Average		
24.1 10.8 6.9 12.2 22.6 13.2 5.2 4.1 5.1 10.6 7.1 5.6 18.0 11.8 8.5 8.5 7.6 6.7 7.3 10.1 6.2 26.9 7.1 30.9																								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

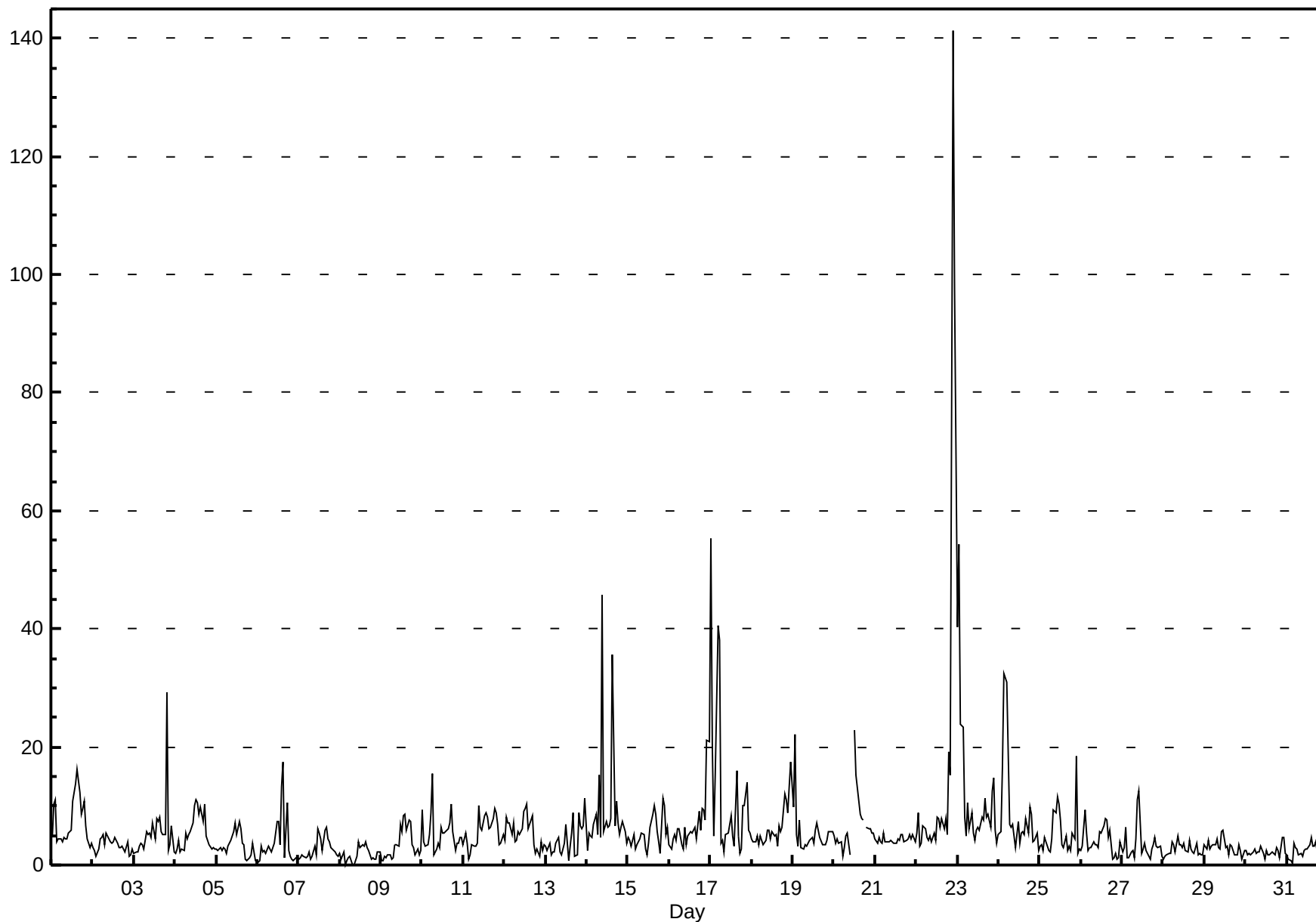
Smoky Heights - March 2015

Maximum Value: 141.2 $\mu\text{g}/\text{m}^3$ on Mar 22 22:00																				Maximum Daily Average: 18.9 $\mu\text{g}/\text{m}^3$ on Mar 22					Hours in Service: 744	
Minimum Value: 0 $\mu\text{g}/\text{m}^3$ on Mar 8 04:00																				Minimum Daily Average: 1.8 $\mu\text{g}/\text{m}^3$ on Mar 8					Hours of Data: 741	
Maximum Diurnal Average: 9.6 $\mu\text{g}/\text{m}^3$ at hour 22																				Minimum Diurnal Average: 3.9 $\mu\text{g}/\text{m}^3$ at hour 8					Hours of Missing Data: 3	
Monthly Average: 5.76 $\mu\text{g}/\text{m}^3$																				Percentiles: P ₁ = 0.7 P ₁₀ = 1.7 Q ₁ = 2.7 Median = 4.0 Q ₃ = 6.1 P ₉₀ = 9.5 P ₉₉ = 35.8					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-Mar	5	10	11	4	4	4	4	5	5	4	5	6	11	12	14	16	12	9	10	11	7	4	3	4	7.5	16.2
2-Mar	3	2	2	3	4	5	5	3	5	4	4	4	4	5	4	3	3	3	2	4	1	2	3	3	3.4	5.4
3-Mar	2	2	2	3	4	3	3	6	5	5	5	7	4	8	7	8	6	5	5	29	3	3	7	2	5.6	29.3
4-Mar	2	3	4	2	3	3	5	4	5	6	7	10	11	11	9	10	7	10	5	4	3	3	3	3	5.5	11.0
5-Mar	3	2	3	2	3	3	2	3	4	5	6	7	5	7	6	4	3	1	1	1	2	4	2	1	3.3	7.3
6-Mar	0	1	3	2	2	2	3	3	2	3	4	7	7	3	13	17	1	11	3	1	1	1	1	1	4.0	17.3
7-Mar	1	1	2	1	1	1	2	1	2	3	2	6	5	4	3	6	6	4	4	3	2	2	2	1	2.8	6.4
8-Mar	2	1	2	0	1	1	2	0	0	1	2	4	3	3	3	4	3	3	1	1	1	1	2	2	1.8	4.0
9-Mar	1	1	1	1	2	2	1	1	3	3	3	7	6	8	9	6	8	7	3	3	2	3	2	2	3.6	8.7
10-Mar	9	4	3	3	5	9	15	2	3	4	3	6	5	5	6	6	7	10	6	3	4	4	5	5	5.5	15.5
11-Mar	4	5	4	1	2	3	3	3	4	10	6	6	8	9	8	6	6	8	10	9	7	3	4	5	5.6	10.0
12-Mar	4	8	7	7	5	7	4	4	6	5	6	9	10	10	6	8	8	3	2	3	2	4	2	3	5.6	10.3
13-Mar	3	2	4	2	2	2	4	5	2	2	3	4	7	1	3	5	9	1	2	9	7	6	7	11	4.3	11.3
14-Mar	2	5	5	5	7	9	5	15	5	46	6	7	6	7	8	36	7	11	7	5	6	7	6	4	9.4	45.7
15-Mar	5	4	3	5	3	3	4	4	5	5	3	2	4	6	9	10	9	6	4	2	11	10	5	6	5.4	11.3
16-Mar	4	3	4	5	4	6	6	4	3	6	3	5	6	5	6	6	4	9	6	10	9	8	21	21	6.8	21.2
17-Mar	55	20	5	15	41	38	4	4	2	5	5	7	8	5	3	16	5	2	3	10	10	14	6	5	12.0	55.3
18-Mar	4	4	4	5	3	5	4	4	4	6	6	4	6	5	5	3	7	6	6	12	11	9	13	17	6.4	17.4
19-Mar	10	22	5	3	8	3	3	3	3	4	4	5	4	6	7	6	5	3	3	3	4	6	6	6	5.5	22.0
20-Mar	5	4	4	4	4	1	3	5	5	2	M	M	23	15	11	9	8	8	N	6	6	6	5	5	6.7	23.0
21-Mar	4	4	5	4	4	5	4	4	4	4	4	4	4	4	4	5	5	4	4	4	5	4	5	4	4.3	5.3
22-Mar	5	9	3	4	7	6	5	4	5	4	5	4	8	8	6	8	6	8	5	19	15	141	98	69	18.9	141.2
23-Mar	40	54	24	23	8	5	11	6	9	5	4	6	6	6	8	8	11	8	9	6	13	15	6	4	12.3	54.3
24-Mar	5	6	16	32	32	31	7	6	7	5	3	7	4	5	6	5	8	5	10	9	4	4	5	3	9.4	32.5
25-Mar	3	3	2	5	3	2	2	4	9	9	12	10	8	3	3	5	2	3	2	5	4	19	2	3	5.3	18.6
26-Mar	2	3	9	5	2	3	3	4	4	3	3	6	5	7	8	8	5	6	1	1	2	1	1	4	4.0	9.3
27-Mar	2	3	6	1	1	2	2	1	4	11	12	2	3	4	3	2	1	3	3	5	3	3	3	1	3.5	12.5
28-Mar	1	1	2	2	2	4	3	2	5	4	3	3	4	2	2	4	3	2	2	4	2	2	2	2	2.6	4.8
29-Mar	3	3	4	3	3	3	3	5	3	3	6	6	3	3	2	3	3	2	2	2	3	3	1	2	3.1	5.9
30-Mar	2	2	2	2	2	3	2	2	2	3	2	1	2	2	2	2	2	2	3	3	1	5	5	2	2.3	4.7
31-Mar	2	1	1	0	4	3	3	2	2	1	2	3	3	3	5	3	3	4	2	2	1	4	2	3	2.5	4.8
6.3 6.3 5.0 5.0 5.7 5.8 4.1 3.9 4.1 5.9 4.6 5.5 6.2 6.0 6.0 7.7 5.6 5.4 4.2 6.0 5.0 9.6 7.5 6.6																								Diurnal Average		
55.3 54.3 24.0 32.5 40.5 38.0 15.5 15.2 9.4 45.7 12.5 10.3 23.0 15.2 13.7 35.7 12.3 10.7 9.9 29.3 15.1 141.2 97.5 69.2																								Diurnal Maximum		
M - Maintenance N - Not Valid																										

Hourly Maximums

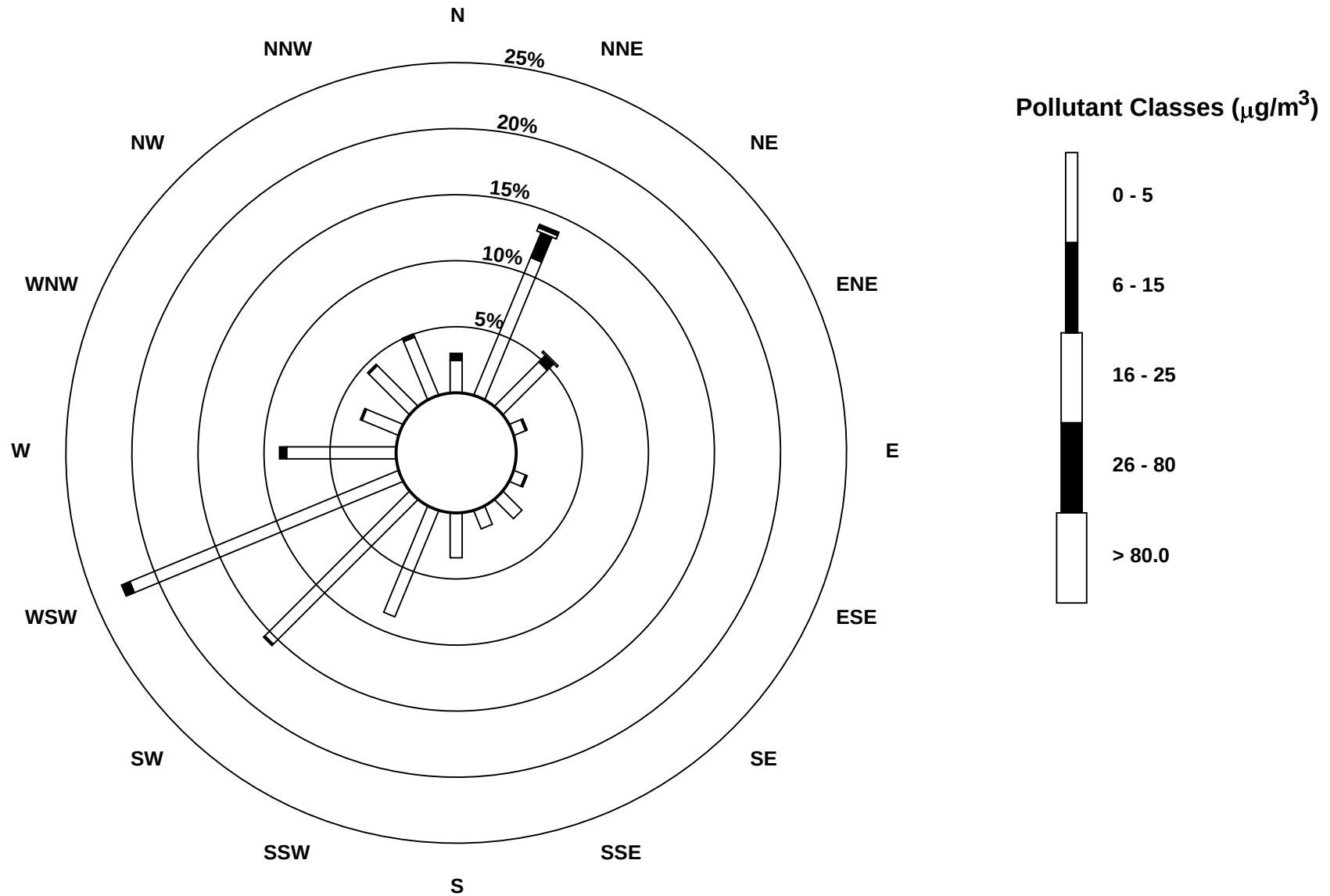
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Smoky Heights - March 2015



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Smoky Heights - March 2015



Hourly Averages

External Temperature (ET) - °C

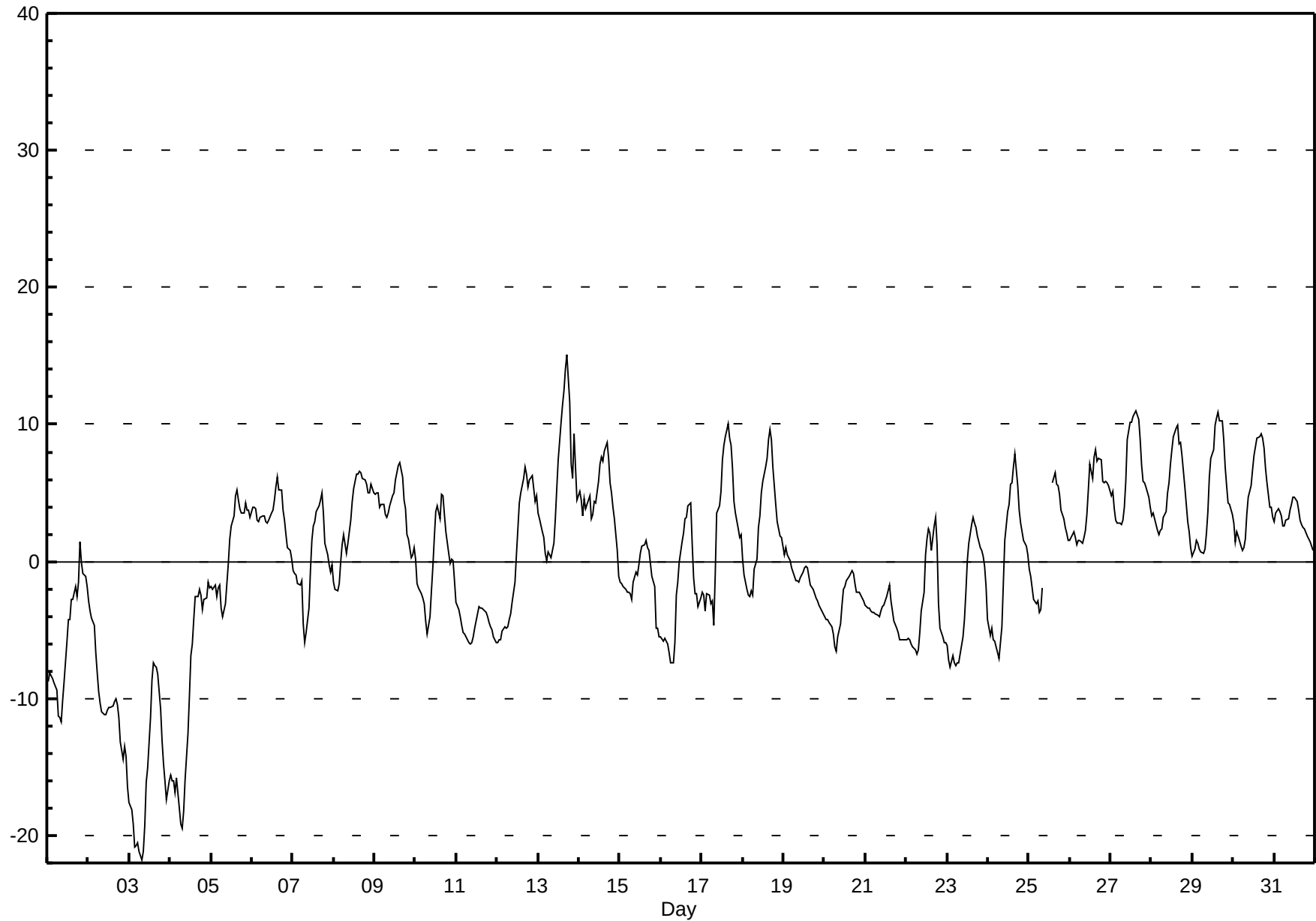
Smoky Heights - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 15.1 °C on Mar 13 18:00 Maximum Daily Average: 6.3 °C on Mar 27																								Hours in Service: 744 Hours of Data: 739 Hours of Missing Data: 5 Hours of Calibration: 0 Percent Operational Time: 99.3		
Minimum Value: -22 °C on Mar 3 08:00 Minimum Daily Average: -15.4 °C on Mar 3 Maximum Diurnal Average: 4.0 °C at hour 16 Minimum Diurnal Average: -3.7 °C at hour 8 Monthly Average: -0.16 °C Percentiles: P ₁ = -19.3 P ₁₀ = -7.2 Q ₁ = -3.6 Median = 0.8 Q ₃ = 4.0 P ₉₀ = 6.8 P ₉₉ = 10.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	-9	-8	-8	-9	-9	-9	-11	-11	-12	-10	-9	-6	-4	-4	-3	-3	-2	-3	-2	1	0	-1	-1	-2	-5.6	1.4
2-Mar	-3	-4	-4	-5	-7	-8	-10	-10	-11	-11	-11	-11	-11	-11	-10	-10	-10	-11	-13	-14	-13	-14	-16	-10.0	-2.9	
3-Mar	-18	-18	-19	-21	-21	-21	-21	-22	-21	-19	-16	-15	-11	-9	-7	-8	-8	-8	-11	-13	-15	-16	-17	-16	-15.4	-7.4
4-Mar	-16	-16	-16	-17	-16	-18	-19	-19	-18	-16	-13	-10	-7	-6	-4	-3	-3	-2	-2	-3	-3	-3	-2	-2	-9.7	-1.5
5-Mar	-2	-2	-2	-3	-2	-2	-3	-4	-3	-2	0	2	3	3	5	5	5	4	4	4	4	4	3	1.0	5.2	
6-Mar	4	4	4	3	3	3	3	3	3	3	3	4	4	4	5	6	5	5	4	3	2	1	1	0	3.4	6.2
7-Mar	-1	-1	-1	-2	-2	-1	-5	-6	-5	-3	-1	1	3	3	4	4	4	5	4	1	0	0	-1	0	0.0	5.0
8-Mar	-1	-2	-2	-2	0	1	2	1	1	2	3	4	5	6	6	7	6	6	6	6	5	5	6	5	3.2	6.6
9-Mar	5	5	5	4	4	4	3	3	4	4	5	5	6	6	7	7	6	4	4	2	2	0	1	1	4.1	7.2
10-Mar	0	-2	-2	-2	-3	-3	-4	-5	-4	-2	0	2	4	4	3	5	5	3	2	1	0	0	0	-1	0.0	4.9
11-Mar	-3	-4	-4	-5	-5	-5	-6	-6	-6	-6	-6	-5	-4	-3	-3	-3	-3	-4	-4	-4	-5	-5	-5	-6	-4.6	-2.9
12-Mar	-6	-6	-6	-5	-5	-5	-5	-4	-4	-3	-1	1	2	4	5	6	7	6	5	6	6	5	4	5	0.6	6.9
13-Mar	4	3	2	2	1	0	1	0	1	1	3	5	7	10	11	12	14	15	12	7	6	9	7	4	5.8	15.1
14-Mar	5	4	3	5	4	4	5	3	3	4	4	6	7	8	7	8	9	8	6	5	4	3	1	-1	4.8	8.7
15-Mar	-1	-2	-2	-2	-2	-2	-2	-3	-2	-1	-1	0	1	1	1	2	1	1	0	-1	-2	-5	-5	-5	-1.3	1.5
16-Mar	-6	-6	-6	-6	-6	-7	-7	-7	-6	-2	-2	0	1	2	3	3	4	4	1	-1	-2	-2	-3	-3	-2.2	4.3
17-Mar	-2	-2	-4	-2	-2	-3	-3	-5	-1	4	4	5	7	9	9	10	9	9	7	4	4	2	2	2	2.6	10.1
18-Mar	0	-1	-2	-2	-3	-2	-2	-1	0	2	3	5	6	7	8	9	10	9	7	4	3	2	2	2	2.7	9.7
19-Mar	1	1	0	0	0	0	-1	-1	-1	-2	-1	-1	0	0	0	-1	-2	-2	-2	-3	-3	-3	-4	-4	-1.3	1.0
20-Mar	-4	-4	-4	-4	-5	-5	-6	-7	-6	-5	-3	-2	-2	-1	-1	-1	-1	-1	-2	-2	-2	-2	-3	-3	-3.2	-0.6
21-Mar	-3	-3	-3	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-2	-2	-3	-4	-4	-5	-5	-6	-6	-6	-6	-3.9	-1.8
22-Mar	-6	-6	-6	-6	-6	-6	-7	-6	-5	-4	-2	1	2	2	2	1	3	3	1	-3	-5	-6	-6	-6	-3.0	3.3
23-Mar	-6	-7	-8	-7	-7	-8	-7	-7	-6	-5	-4	-2	0	1	3	3	3	3	2	1	1	0	0	-2	-2.5	3.2
24-Mar	-4	-5	-5	-6	-6	-6	-7	-6	-5	-2	1	4	4	6	6	7	8	5	4	3	2	2	1	0	0.1	7.9
25-Mar	-1	-1	-2	-3	-3	-3	-4	-3	-2	M	M	M	M	M	6	7	6	6	5	4	3	3	2	2	1.0	6.5
26-Mar	2	2	2	2	1	1	1	1	2	2	3	5	7	6	8	8	7	8	7	6	6	6	6	6	4.4	8.1
27-Mar	5	5	4	3	3	3	3	3	4	6	9	10	10	11	11	11	10	9	7	6	6	5	5	4	6.3	11.0
28-Mar	3	3	3	2	2	2	2	3	4	5	6	7	8	9	10	10	9	9	8	5	4	3	2	1	5.0	9.9
29-Mar	0	1	2	1	1	1	1	1	2	4	6	8	8	10	10	11	10	10	9	7	6	4	4	3	5.0	10.9
30-Mar	3	1	2	2	1	1	1	2	3	5	6	7	8	8	9	9	9	9	8	7	6	4	4	3	4.9	9.3
31-Mar	3	4	4	4	3	3	3	3	3	4	4	5	5	4	4	3	3	3	2	2	2	1	1	1	3.0	4.7
																								Diurnal Average		
																								Diurnal Maximum		
M - Maintenance																										

Hourly Averages

External Temperature (ET) - °C

Smoky Heights - March 2015



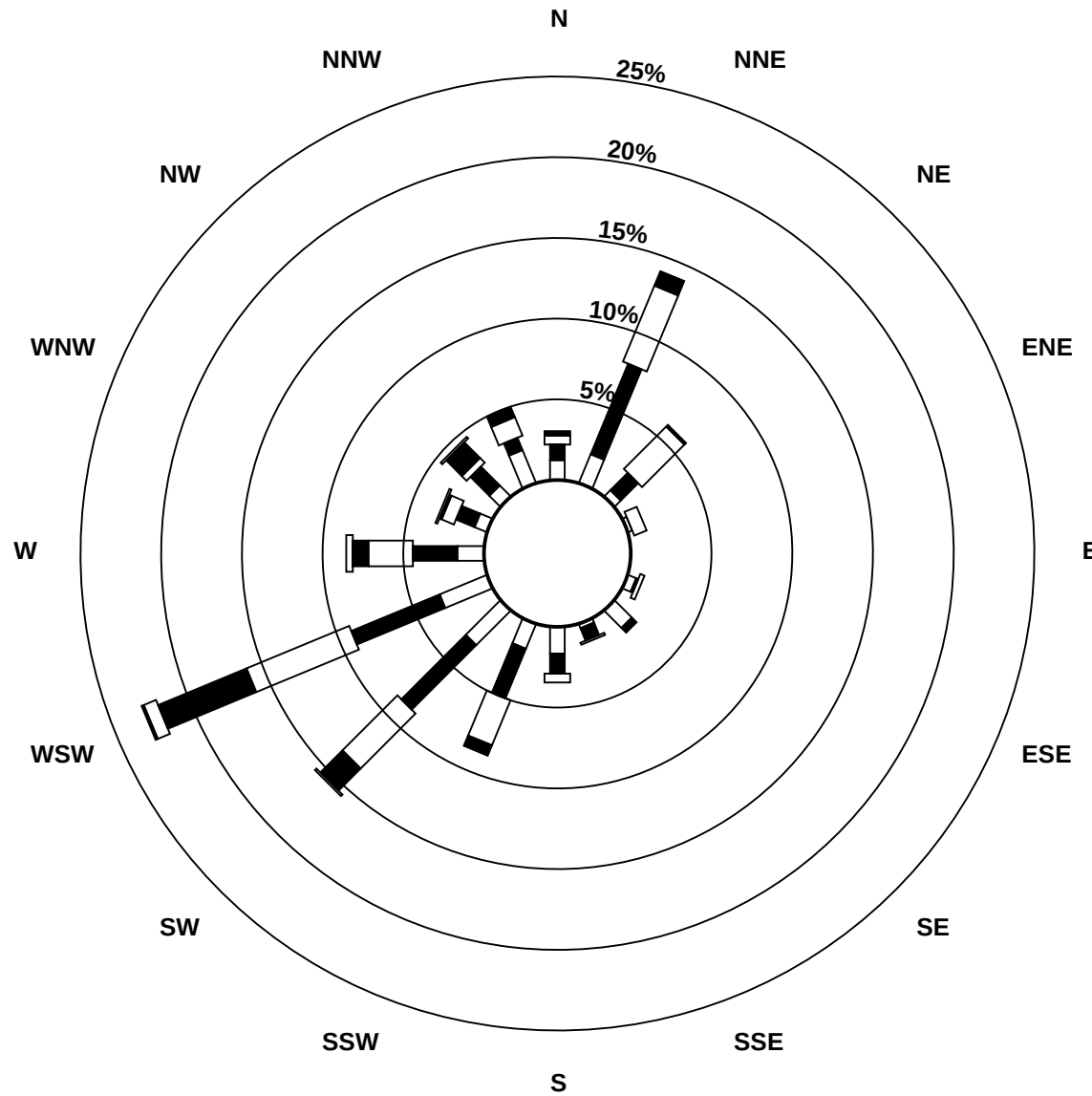
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2015

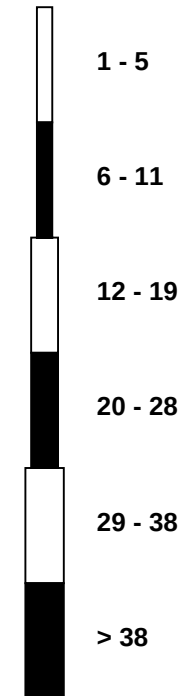
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	4	5	5	5	7	8	10	11	11	11	9	11	8	12	11	11	11	11	14	33	25	21	18	23	8.6	33.5
Dir	243	213	219	225	238	239	223	226	226	221	215	193	241	249	254	282	265	264	267	316	315	323	333	344	274.4	315.9
2 Spd	21	14	24	22	26	17	16	18	21	26	19	24	26	24	25	26	23	20	18	12	11	18	15	6	18.4	26.5
Dir	357	347	338	341	351	350	6	352	348	342	333	319	324	324	323	324	321	317	311	292	283	299	300	235	329.6	351.3
3 Spd	8	7	8	8	8	10	8	6	9	8	4	9	5	2	2	1	1	0	3	1	1	3	5	7	4.0	10.1
Dir	238	215	233	237	209	210	237	226	232	206	121	142	177	143	113	282	297	260	146	63	339	327	223	193	211.4	209.9
4 Spd	5	5	10	9	10	13	13	10	11	10	9	7	6	13	10	10	10	17	9	13	17	16	18	19	10.8	19.2
Dir	235	237	251	247	218	214	226	233	239	223	209	226	248	243	233	255	265	275	269	238	248	247	258	256	243.3	256.1
5 Spd	21	20	18	14	16	17	10	6	7	13	17	16	14	13	11	17	18	17	14	17	22	21	20	18	15.5	22.3
Dir	255	248	260	254	236	248	263	256	255	253	243	230	230	235	231	234	238	240	252	240	246	235	233	238	243.1	245.9
6 Spd	27	30	28	25	27	28	28	30	30	32	28	28	14	15	8	4	18	12	20	20	18	15	14	15	20.8	32.2
Dir	240	244	251	258	248	258	250	256	259	260	262	265	266	277	325	327	277	270	248	256	258	261	260	263	258.4	260.1
7 Spd	18	16	16	19	17	14	14	16	17	16	17	19	20	15	15	15	16	16	18	12	11	9	12	17	15.2	19.7
Dir	266	258	252	262	273	285	254	266	264	250	245	244	245	235	240	244	232	234	244	243	243	238	237	247	250.5	244.6
8 Spd	17	15	16	19	22	23	20	14	17	21	20	20	21	22	24	25	21	20	18	16	22	26	32	27	20.7	32.0
Dir	252	254	250	244	259	261	243	235	230	233	236	242	243	252	246	242	257	245	244	239	238	244	255	246	245.8	254.6
9 Spd	24	24	21	20	22	20	18	17	21	20	21	20	11	11	9	8	2	1	9	11	12	12	13	11	13.4	24.5
Dir	252	260	252	238	246	252	247	256	251	256	248	269	267	296	7	353	36	243	226	245	259	268	284	303	260.0	260.4
10 Spd	14	14	15	9	7	5	2	3	6	6	4	2	2	3	7	3	12	12	11	10	8	11	12	19	6.1	19.0
Dir	34	32	41	48	32	38	19	293	274	243	199	127	277	247	288	349	30	21	34	27	31	36	30	26	24.1	25.7
11 Spd	20	20	20	23	21	18	20	22	18	17	15	14	12	13	13	12	10	10	10	12	11	11	11	14	15.3	22.9
Dir	25	25	28	30	30	27	28	29	28	23	25	34	25	25	28	27	14	22	21	33	31	36	36	33	27.8	29.6
12 Spd	13	15	10	8	5	4	10	13	14	16	14	10	6	5	6	9	23	24	25	27	27	21	19	21	9.9	27.0
Dir	28	33	32	5	59	176	191	211	214	226	237	241	256	279	287	240	244	237	232	229	237	246	240	244	240.0	229.1
13 Spd	10	14	12	8	8	10	8	4	8	4	5	7	5	19	17	18	8	10	9	7	3	12	3	3	7.8	19.2
Dir	239	234	214	195	218	221	194	213	196	226	167	130	140	185	173	180	161	171	198	228	227	198	237	260	196.5	185.1
14 Spd	5	7	7	9	7	2	5	3	4	3	7	3	3	1	10	1	6	21	33	35	40	36	35	28	11.4	40.2
Dir	237	237	239	228	200	207	235	255	231	270	250	217	164	270	247	347	279	242	242	244	244	268	297	317	256.3	243.6
15 Spd	16	10	7	7	5	0	2	3	4	9	16	24	27	29	23	20	16	17	11	6	4	3	6	6	8.9	28.6
Dir	320	289	316	303	323	132	67	108	180	212	235	252	256	263	277	282	333	318	306	342	343	251	270	248	280.1	262.9
16 Spd	10	11	7	10	10	6	7	8	10	7	12	11	11	13	11	12	7	7	4	3	3	3	3	5	6.3	12.6
Dir	264	263	238	192	208	225	215	212	210	231	236	247	244	247	255	265	257	264	292	333	326	10	3	20	245.3	246.5
17 Spd	6	4	4	8	6	6	6	2	2	2	4	7	5	13	17	10	16	13	11	9	8	6	4	2	5.3	17.3
Dir	24	21	27	27	20	18	11	353	296	130	127	26	32	117	115	101	56	53	46	29	23	24	129	200	55.1	115.4
18 Spd	5	7	6	10	11	13	10	16	7	19	22	23	20	15	14	11	10	10	6	2	6	3	4	4	9.0	22.8
Dir	210	237	220	221	245	249	258	248	256	244	246	254	248	249	264	276	341	355	336	313	277	271	271	322	257.9	253.6
19 Spd	3	6	7	3	7	10	13	12	14	16	17	16	16	14	14	16	16	17	18	17	15	15	13	12	12.8	17.6
Dir	25	24	38	26	22	31	25	30	26	33	32	37	34	31	19	20	31	24	28	26	27	23	19	20	27.3	28.4
20 Spd	11	9	10	10	8	12	10	6	9	11	12	13	18	19	19	19	19	20	19	18	16	15	15	14	13.6	20.3
Dir	23	23	31	33	32	36	33	25	32	40	46	46	54	53	51	54	52	56	60	63	63	61	59	57	48.5	55.6
21 Spd	14	14	12	13	16	14	14	15	18	15	16	16	14	12	10	13	15	14	14	12	12	11	10	8	12.2	17.8
Dir	51	54	49	39	37	43	40	36	36	43	37	35	34	32	30	352	347	344	348	346	345	346	349	341	22.2	36.2
22 Spd	4	1	3	3	0	1	2	2	2	4	5	1	1	1	4	7	3	1	4	3	2	5	5	7	0.4	7.5
Dir	337	146	263	246	344	147	240	254	186	175	177	133	115	276	247	273	269	56	131	114	20	20	6	18	273.2	273.1

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - March 2015



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - March 2015

Maximum Speed: 40 km/h on Mar 14 21:00																				Maximum Daily Speed Average: 21.8 km/h on Mar 6										Hours in Service: 744	
Minimum Speed: 1 km/h on Mar 22 05:00																				Minimum Daily Speed Average: 3.2 km/h on Mar 22										Hours of Data: 739	
Maximum Diurnal Speed Average: 13.6 km/h at hour 14																				Minimum Diurnal Speed Average: 9.9 km/h at hour 8										Hours of Missing Data: 5	
Monthly Average Speed: 11.88 km/h																				Percentiles: P ₁ = 1.3 P ₁₀ = 3.5 Q ₁ = 6.2 Median = 10.9 Q ₃ = 16.4 P ₉₀ = 21.2 P ₉₉ = 31.3										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-Mar	4	5	5	5	7	8	10	11	11	11	9	11	9	12	12	12	12	16	34	25	21	19	23	12.6	33.7						
2-Mar	21	15	24	22	27	17	17	18	22	26	19	25	27	24	26	27	24	20	18	13	12	18	15	6	20.1	26.8					
3-Mar	8	7	8	8	8	10	8	7	9	9	5	9	5	2	2	2	1	2	4	1	1	3	5	7	5.6	10.3					
4-Mar	6	5	10	9	11	14	13	11	12	10	9	7	6	13	11	10	11	17	10	13	17	16	18	19	11.5	19.2					
5-Mar	21	20	18	14	16	17	10	6	8	13	17	16	14	14	11	17	18	17	14	17	22	21	20	18	15.8	22.4					
6-Mar	27	30	28	25	27	28	28	30	30	32	29	28	14	16	10	7	18	14	20	20	18	15	14	15	21.8	32.3					
7-Mar	18	16	16	19	17	14	14	16	17	16	17	19	20	15	15	15	16	16	18	12	11	9	13	17	15.7	19.7					
8-Mar	17	16	16	19	22	23	20	14	17	21	20	20	21	22	24	25	22	21	18	16	22	26	32	27	21.0	32.1					
9-Mar	24	24	21	20	22	20	18	17	21	20	21	21	12	13	10	8	4	2	9	11	12	12	13	12	15.4	24.5					
10-Mar	14	14	15	9	7	5	2	4	6	6	4	2	2	4	8	4	12	12	11	10	8	11	12	19	8.4	19.1					
11-Mar	20	20	20	23	21	18	20	22	18	17	15	14	12	13	13	12	10	10	10	12	11	11	11	14	15.4	23.0					
12-Mar	13	15	12	8	6	5	10	14	14	16	15	10	7	5	6	10	23	25	25	27	27	21	19	21	14.7	27.0					
13-Mar	10	14	13	9	9	10	8	4	8	4	6	7	5	19	18	18	9	10	9	7	4	12	5	3	9.3	19.3					
14-Mar	5	8	8	10	8	5	5	4	4	4	7	4	4	2	11	3	6	22	33	35	40	39	36	29	13.8	40.3					
15-Mar	17	11	7	7	6	2	3	4	5	10	16	24	27	29	24	21	17	17	11	7	4	4	6	6	11.8	28.9					
16-Mar	10	11	8	10	11	6	7	9	10	7	12	11	11	13	11	12	8	7	4	3	3	3	3	5	8.1	12.7					
17-Mar	6	4	4	8	6	6	6	2	2	3	4	7	6	14	18	12	17	13	11	9	8	6	5	3	7.5	17.6					
18-Mar	5	7	7	10	11	13	10	16	8	20	22	23	20	15	14	12	11	11	6	4	6	4	4	6	11.0	22.9					
19-Mar	3	6	7	3	7	10	13	12	14	16	17	16	17	15	15	16	16	17	18	17	15	15	13	12	12.9	17.7					
20-Mar	11	9	10	10	8	12	10	6	9	11	12	13	18	19	19	19	19	20	19	18	16	15	15	15	14.0	20.3					
21-Mar	14	14	12	13	16	14	14	15	18	15	16	16	15	12	10	13	15	14	14	12	12	12	10	8	13.6	17.9					
22-Mar	4	2	4	3	1	1	2	2	2	4	5	2	1	1	5	8	3	2	4	3	2	5	5	7	3.2	7.6					
23-Mar	7	6	6	8	9	10	11	10	12	8	11	9	11	11	12	12	9	8	9	8	5	3	2	3	8.3	12.1					
24-Mar	3	2	4	3	3	4	2	3	2	2	1	8	12	6	9	6	3	11	8	6	7	8	7	9	5.4	12.1					
25-Mar	7	9	8	6	6	6	5	6	5	C	C	C	C	C	7	4	5	4	3	5	4	4	3	3	5.2	8.6					
26-Mar	2	4	3	1	5	6	7	6	7	10	5	9	13	14	10	10	8	14	16	12	11	11	13	11	8.6	16.0					
27-Mar	10	10	7	5	3	3	4	4	3	2	2	6	5	8	6	9	7	6	7	6	9	7	6	5	5.8	10.5					
28-Mar	8	13	13	13	12	14	13	10	8	15	17	17	20	29	26	23	19	18	24	21	15	13	7	7	15.6	28.8					
29-Mar	7	3	4	2	3	4	5	4	2	5	8	11	13	18	18	24	20	18	19	20	21	22	25	20	12.2	24.7					
30-Mar	15	10	14	14	13	13	15	12	16	16	16	16	16	20	16	7	3	3	2	3	3	3	4	3	10.6	20.2					
31-Mar	5	7	8	8	7	4	6	10	10	11	10	10	14	11	14	16	21	18	17	17	17	14	17	14	11.9	20.8					
11.0 10.9 11.0 10.5 10.8 10.4 10.3 9.9 10.6 12.0 12.2 13.1 12.6 13.6 13.2 12.8 12.5 12.9 13.1 12.8 12.6 12.4 12.2 11.9																								Diurnal Average							
27.5 29.7 28.4 24.8 27.3 27.6 28.0 30.1 30.1 32.3 28.5 27.9 27.2 28.9 26.3 26.6 23.7 24.7 33.4 35.4 40.3 38.6 35.9 28.7																								Diurnal Maximum							
C - Calibration																															
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg
Smoky Heights - March 2015

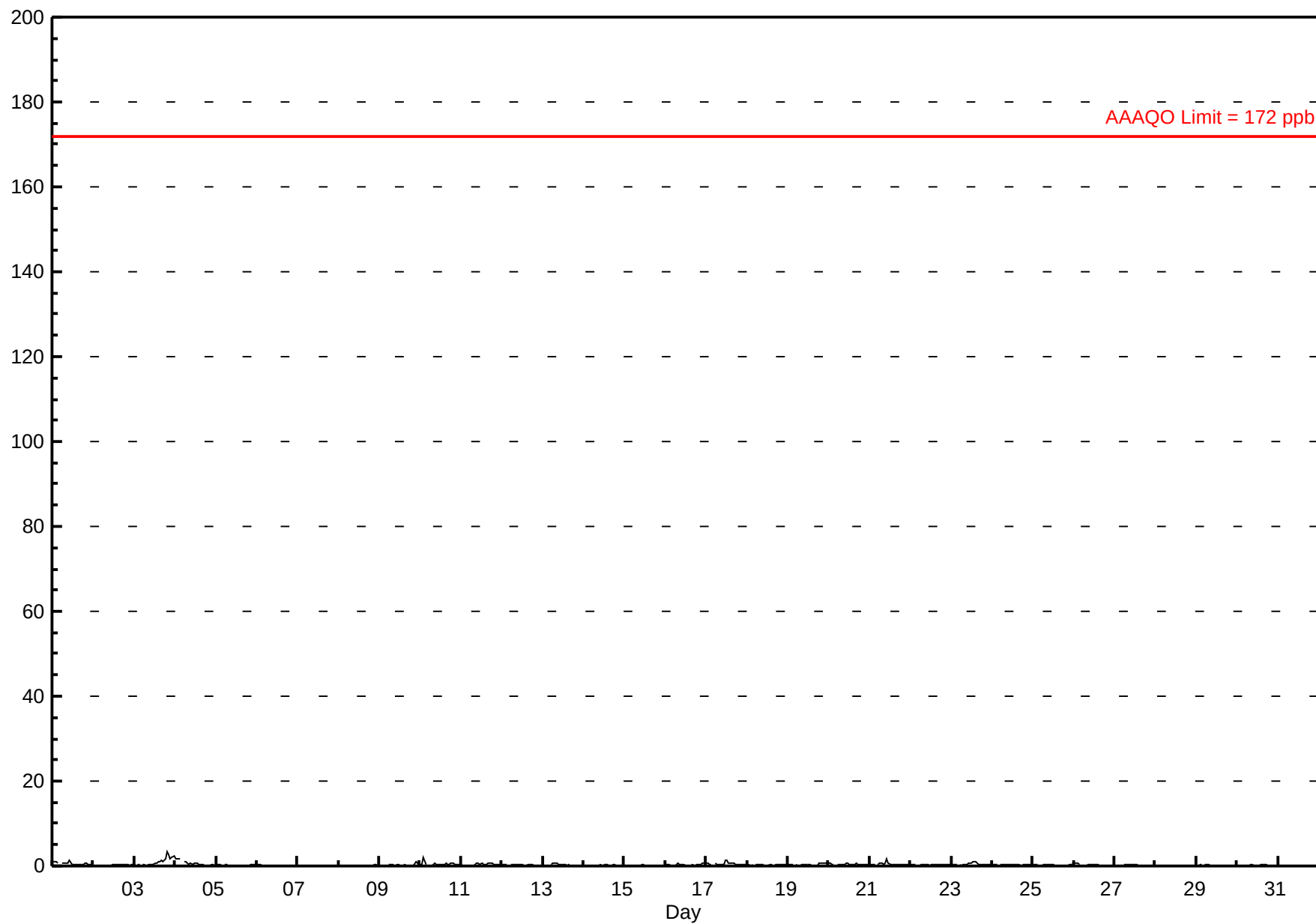
Maximum Value: 89.5 deg on Mar 15 06:00																		Hours in Service: 744							
Minimum Value: 1.9 deg on Mar 5 01:00																		Hours of Data: 739							
																		Hours of Missing Data: 5							
Percentiles: P ₁ = 2.7 P ₁₀ = 4.5 Q ₁ = 5.9 Median = 9.8 Q ₃ = 20.0 P ₉₀ = 37.3 P ₉₉ = 80.5																		Hours of Calibration: 5							
																		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-Mar	12	12	16	11	10	7	10	3	2	6	14	5	34	10	20	16	22	15	24	6	9	10	8	9	33.9
2-Mar	10	10	8	8	9	12	13	12	11	8	13	9	10	11	10	9	9	9	8	6	19	5	7	19	18.9
3-Mar	15	32	21	19	24	12	13	24	12	25	11	9	23	44	34	77	47	89	27	48	25	20	62	10	88.9
4-Mar	13	23	9	11	15	10	9	6	6	9	12	19	16	16	13	9	13	5	19	8	7	12	4	4	22.7
5-Mar	2	4	5	9	5	9	11	19	18	6	4	4	5	5	8	6	4	6	10	4	4	6	5	2	18.6
6-Mar	2	3	5	5	5	4	3	4	2	3	5	7	20	27	37	52	9	33	5	4	4	5	4	5	51.8
7-Mar	6	4	3	4	8	5	11	6	4	8	5	4	3	7	8	8	3	6	8	8	10	7	8	6	10.6
8-Mar	2	7	6	4	8	4	6	7	6	4	7	3	4	8	6	3	7	6	5	3	4	4	4	3	8.1
9-Mar	5	3	7	7	7	7	6	6	7	8	7	17	23	40	17	14	81	81	23	13	22	12	15	24	81.4
10-Mar	11	6	9	8	6	11	45	23	15	11	29	48	69	40	15	48	8	6	6	5	8	4	4	5	68.5
11-Mar	5	5	6	5	5	6	5	5	5	7	8	9	10	9	9	9	11	8	8	8	8	9	11	4	11.5
12-Mar	5	7	29	18	33	27	11	10	5	11	9	23	20	14	14	29	3	9	3	3	5	7	10	7	33.1
13-Mar	31	5	17	20	20	17	24	36	16	29	37	13	21	6	9	7	14	10	16	12	69	9	87	53	86.9
14-Mar	21	33	27	19	26	62	33	32	26	46	12	40	41	72	29	77	17	11	4	4	3	19	10	10	77.1
15-Mar	14	16	10	18	25	90	36	24	50	21	6	7	6	8	21	24	17	7	7	16	15	40	15	31	89.5
16-Mar	6	7	33	7	21	34	49	27	14	20	9	8	7	5	8	5	7	9	19	20	11	27	18	8	49.4
17-Mar	5	14	14	6	5	6	6	39	47	39	36	6	21	27	10	37	6	6	9	7	5	28	39	66	66.3
18-Mar	15	19	20	16	15	10	9	4	31	11	7	4	6	11	9	26	28	14	10	58	20	42	30	63	63.2
19-Mar	41	10	8	27	7	4	6	7	6	7	5	6	6	6	6	6	6	6	5	5	5	5	6	6	41.2
20-Mar	6	5	7	6	6	5	4	5	6	6	7	12	6	7	8	6	4	5	6	5	6	6	6	6	11.9
21-Mar	5	4	6	5	4	4	6	4	4	5	5	5	5	7	6	15	7	8	7	9	7	6	7	8	14.6
22-Mar	20	66	50	12	45	75	50	43	74	24	12	52	74	63	33	8	34	40	32	52	39	11	8	5	74.7
23-Mar	4	3	3	4	3	5	5	5	5	14	5	10	5	6	8	7	6	8	12	10	10	31	60	5	60.5
24-Mar	21	17	11	8	11	14	15	13	17	38	77	25	12	23	15	22	88	9	37	22	23	16	34	11	87.7
25-Mar	24	19	21	21	14	23	13	22	15	C	C	C	C	C	33	17	6	10	14	12	34	58	45	57	57.6
26-Mar	47	29	41	83	12	13	13	11	5	11	11	25	12	8	7	13	24	5	15	17	5	12	10	12	83.5
27-Mar	14	5	82	22	40	11	5	16	36	24	83	30	23	13	30	10	32	10	40	42	17	12	30	9	82.9
28-Mar	5	5	11	11	7	7	7	26	26	6	6	5	5	8	8	9	3	5	6	9	10	7	18	13	26.5
29-Mar	10	22	56	78	71	23	25	27	46	11	12	9	5	8	10	15	17	7	5	7	6	4	3	4	78.3
30-Mar	13	13	11	3	8	13	7	10	7	9	6	7	10	8	9	23	28	34	49	23	12	54	35	20	53.7
31-Mar	25	7	13	14	17	63	27	7	8	9	13	12	11	14	16	13	9	4	6	7	5	13	7	4	62.7
47.1 65.9 81.6 83.5 70.5 89.5 49.6 43.0 73.9 46.4 82.9 51.9 73.6 71.9 37.2 77.1 87.7 88.9 49.4 57.8 68.6 57.6 86.9 66.3																									
C - Calibration																									

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.2 ppb on Mar 3 20:00 Maximum Daily Average: 1.0 ppb on Mar 3																				Hours in Service: 744 Hours of Data: 709						
Minimum Value: 0 ppb on Mar 9 19:00 Minimum Daily Average: 0.1 ppb on Mar 31 Maximum Diurnal Average: 0.3 ppb at hour 11 Minimum Diurnal Average: 0.2 ppb at hour 7 Monthly Average: 0.28 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.6 P ₉₉ = 1.7																				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-Mar	1	1	1	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0.6	1.3
2-Mar	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
3-Mar	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	2	3	3	2	2	2	1.0	3.2
4-Mar	2	2	2	2	A	1	1	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	1.8
5-Mar	0	0	0	0	A	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
6-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
7-Mar	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
8-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.2	1.0
10-Mar	0	0	2	0	A	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0.4	1.9
11-Mar	0	0	0	0	A	0	0	0	0	1	1	0	1	0	0	0	1	1	1	0	0	0	0	0	0.4	0.8
12-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
13-Mar	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
14-Mar	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
15-Mar	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
16-Mar	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.8
17-Mar	1	1	0	0	A	1	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.4
18-Mar	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
19-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.3	0.8
20-Mar	1	1	1	0	A	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6
21-Mar	0	0	0	0	A	0	1	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.7
22-Mar	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-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.4	1.2
24-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
25-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
26-Mar	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
27-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
28-Mar	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
29-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
30-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
31-Mar	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
0.3 0.3 0.3 0.2 -- 0.2 0.2 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.2 0.2 0.2 0.3 0.3 0.3 0.3 0.3 0.3																									Diurnal Average	
1.7 1.7 1.9 1.8 -- 1.2 1.0 0.7 0.7 0.8 1.7 1.4 1.4 1.2 1.0 0.9 1.3 1.1 1.6 3.2 2.6 1.8 1.9 2.4																									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 Averages

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2015



Hourly Maximums

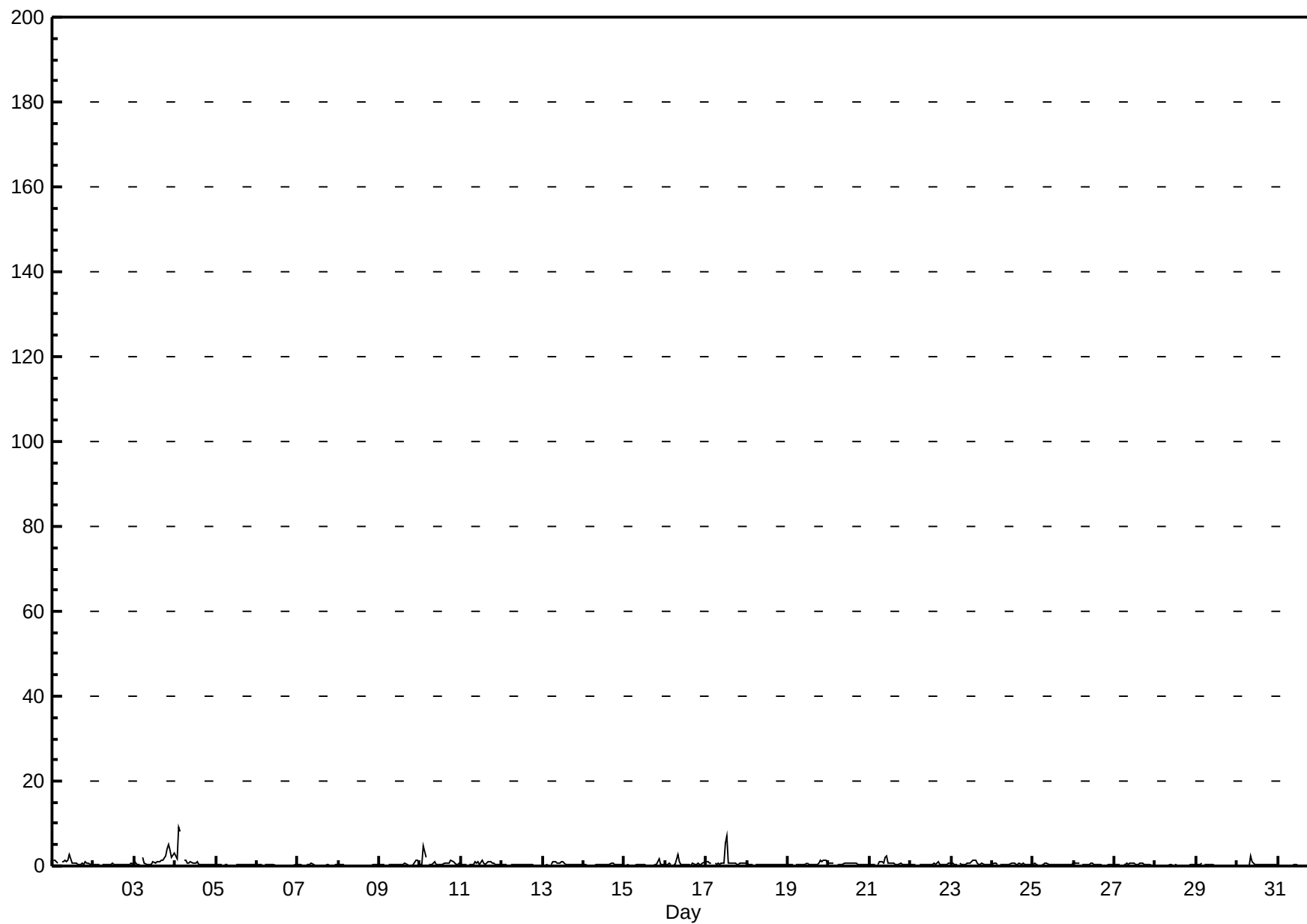
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - March 2015

Maximum Value: 9.0 ppb on Mar 4 03:00																				Maximum Daily Average: 1.5 ppb on Mar 3										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 9 19:00																				Minimum Daily Average: 0.1 ppb on Mar 31										Hours of Data: 709	
Maximum Diurnal Average: 0.8 ppb at hour 3																				Minimum Diurnal Average: 0.4 ppb at hour 18										Hours of Missing Data: 35	
Monthly Average: 0.49 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.5 P ₉₀ = 0.8 P ₉₉ = 4.0										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-Mar	1	1	1	1	A	1	1	1	1	1	3	1	1	1	1	0	0	1	0	1	1	1	0	0	0.9	2.7					
2-Mar	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.6					
3-Mar	1	0	0	0	A	2	1	0	0	0	0	1	1	1	1	1	1	1	2	4	5	4	2	3	1.5	5.0					
4-Mar	2	2	9	8	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1.4	9.0					
5-Mar	0	0	0	0	A	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5					
6-Mar	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					
7-Mar	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6					
8-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3					
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	0.4	1.3					
10-Mar	0	0	5	2	A	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0	1	0.8	4.6					
11-Mar	0	0	0	0	A	0	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	0	0.6	1.4					
12-Mar	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					
13-Mar	0	0	0	0	A	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9					
14-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.3	0.7					
15-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.3	1.9					
16-Mar	0	0	1	0	A	0	0	3	1	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0.5	2.6					
17-Mar	1	1	1	1	A	1	0	1	1	1	1	5	7	1	1	1	1	1	0	0	1	1	1	1	1.1	7.3					
18-Mar	1	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	0.6					
19-Mar	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	0.5	1.3					
20-Mar	1	1	1	1	A	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	0.8					
21-Mar	0	0	0	0	A	0	1	1	1	2	2	1	1	1	1	1	1	0	1	0	0	0	0	0	0.6	2.4					
22-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0.4	0.9					
23-Mar	1	1	0	0	A	1	0	0	0	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0.6	1.4					
24-Mar	0	1	1	0	A	0	0	0	0	0	0	1	1	1	0	0	1	0	1	0	0	0	0	0	0.4	0.7					
25-Mar	0	1	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8					
26-Mar	1	1	1	1	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9					
27-Mar	0	0	0	0	A	0	0	1	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0.4	0.8					
28-Mar	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					
29-Mar	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6					
30-Mar	0	0	0	0	A	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.5					
31-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2					
0.5 0.4 0.8 0.6 -- 0.4 0.4 0.5 0.5 0.5 0.5 0.6 0.7 0.4 0.4 0.4 0.4 0.4 0.4 0.5 0.5 0.5 0.4 0.4																									Diurnal Average						
2.3 1.8 9.0 8.2 -- 2.1 1.3 2.6 2.5 2.0 2.7 5.3 7.3 1.4 1.4 1.1 1.5 1.4 1.4 2.2 4.2 5.0 3.6 2.1 3.0																									Diurnal Maximum						
C - Calibration					A - Automated Daily Zero Span																										

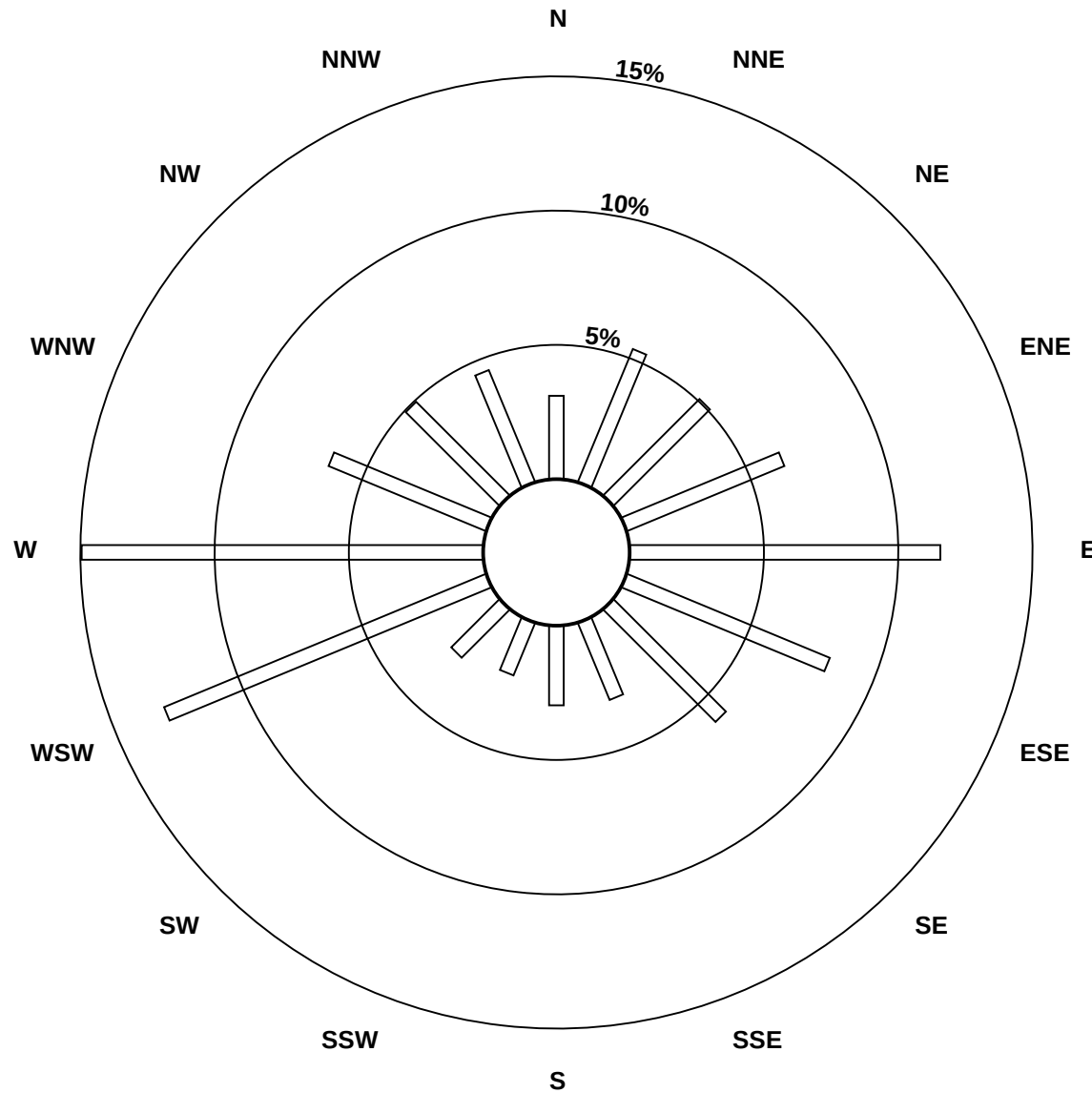
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2015

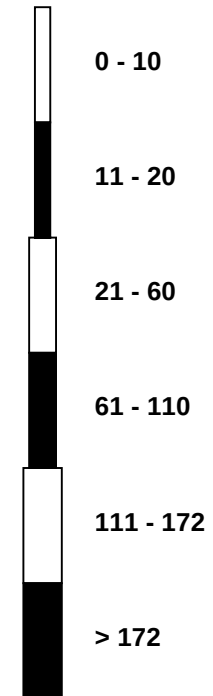


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2015

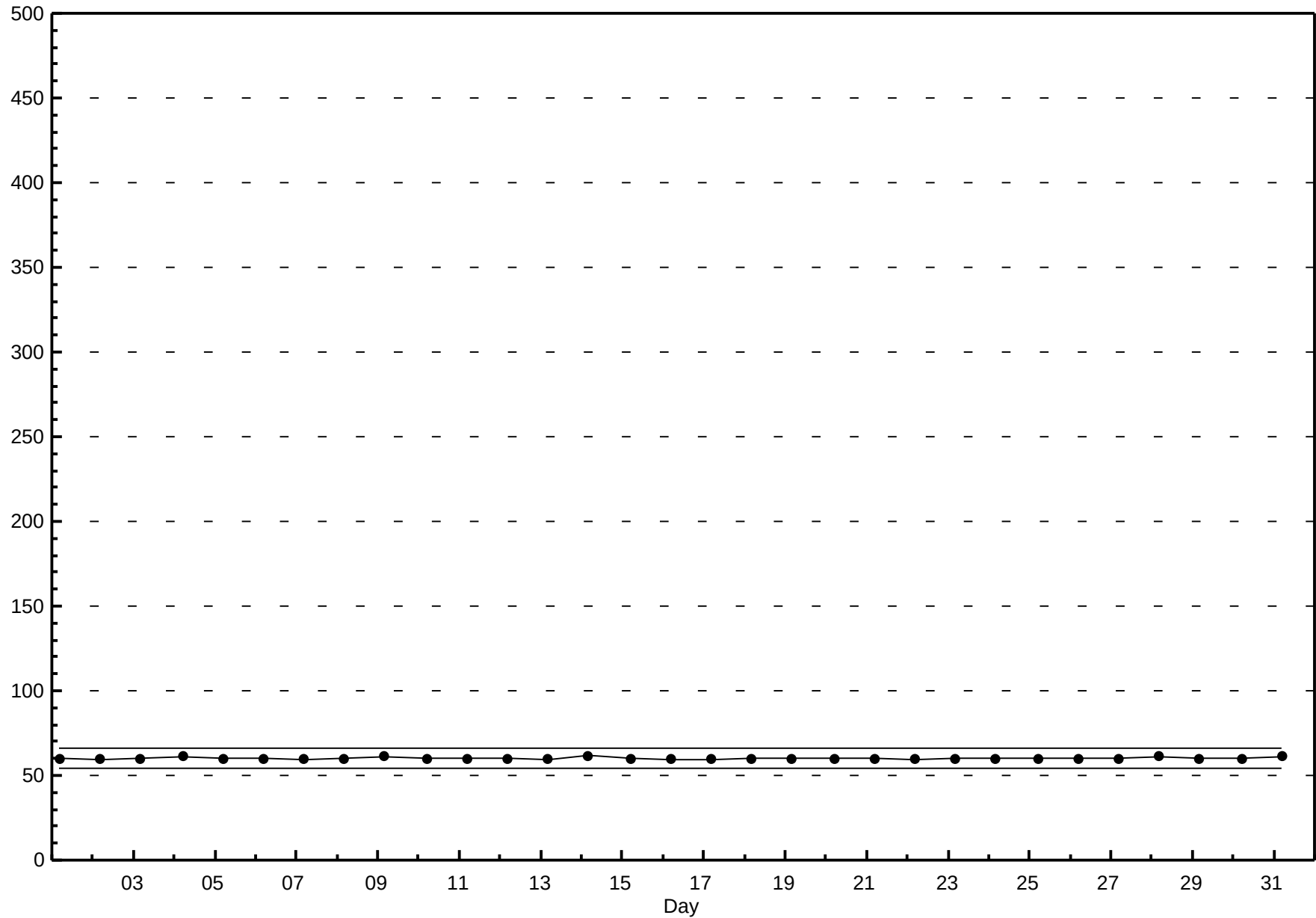


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Beaverlodge - March 2015



Hourly Averages

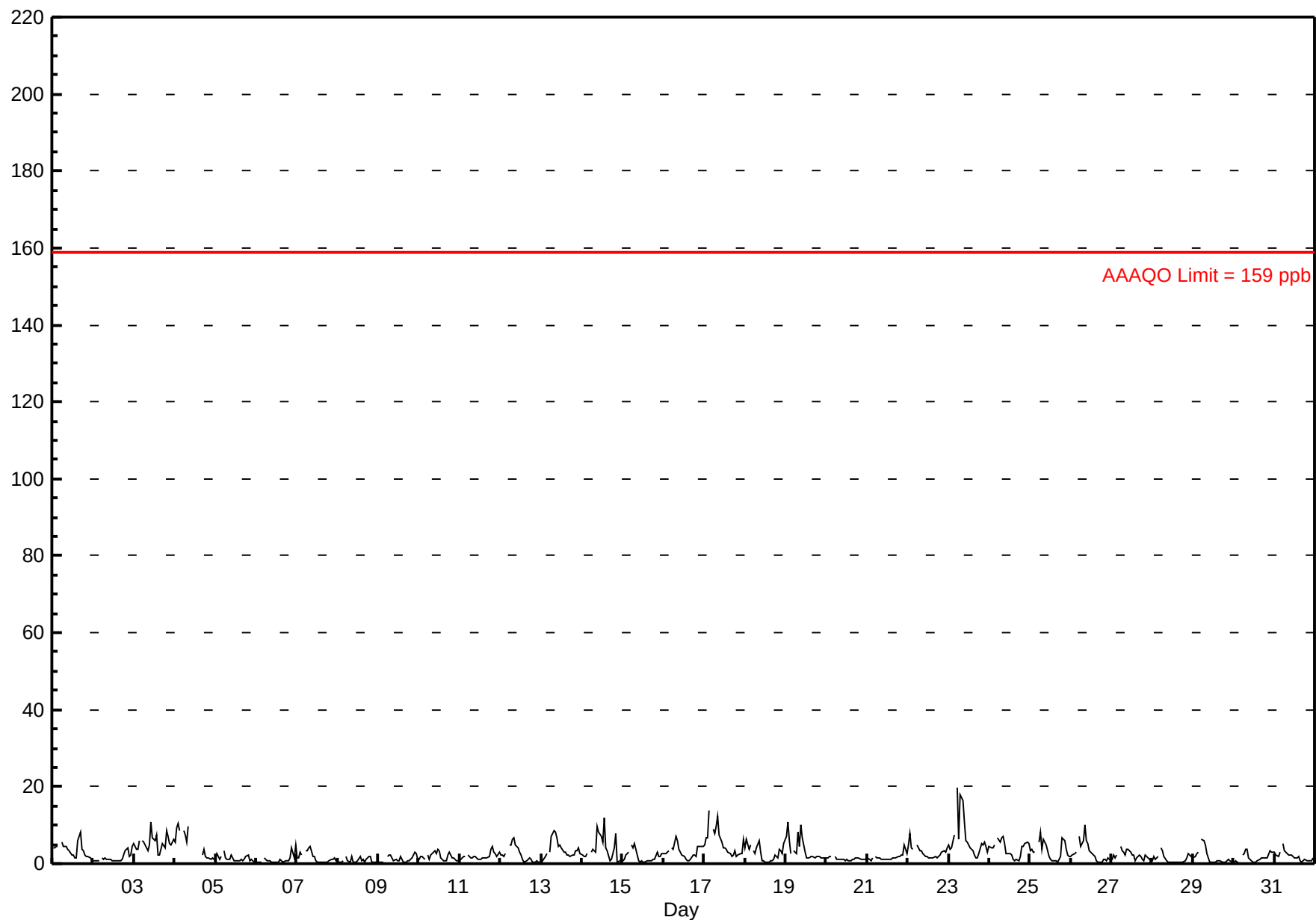
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 19.6 ppb on Mar 23 06:00 Maximum Daily Average: 6.3 ppb on Mar 23																								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 Mar 8 03:00 Minimum Daily Average: 0.8 ppb on Mar 8 Maximum Diurnal Average: 4.6 ppb at hour 6 Minimum Diurnal Average: 1.3 ppb at hour 15 Monthly Average: 2.63 ppb Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 1.0 Median = 1.9 Q ₃ = 3.6 P ₉₀ = 5.7 P ₉₉ = 10.0																										
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-Mar	4	4	4	4	A	6	4	4	5	4	3	2	2	2	6	8	4	4	2	2	2	2	1	3.5	8.3	
2-Mar	1	1	1	1	A	2	1	2	1	1	1	1	1	1	1	1	1	2	4	4	2	2	4	1.5	4.5	
3-Mar	5	4	4	6	A	6	6	4	4	5	11	7	6	8	2	2	4	5	4	9	7	5	5	6	5.4	10.7
4-Mar	6	9	11	9	A	9	7	5	10	C	C	C	C	C	C	C	2	4	2	1	1	1	1	1	--	10.6
5-Mar	1	3	1	2	A	3	1	1	1	2	2	1	1	1	1	1	1	1	2	2	1	1	1	0	1.3	3.2
6-Mar	0	0	0	0	A	1	1	1	1	0	1	0	1	0	1	1	1	1	1	1	2	4	1	5	1.0	4.7
7-Mar	1	1	3	2	A	3	3	4	5	2	2	1	1	1	0	0	0	0	0	1	1	1	2	1	1.6	4.5
8-Mar	1	0	0	1	A	2	1	0	2	0	0	0	1	2	1	1	0	1	2	2	0	0	0	0	0.8	1.9
9-Mar	0	0	0	0	A	2	2	2	1	1	1	1	1	2	1	1	0	1	1	1	2	3	3	1	1.2	2.9
10-Mar	1	2	2	1	A	2	1	2	3	3	2	4	3	2	1	1	1	2	3	2	1	1	1	1	1.8	3.6
11-Mar	1	1	2	2	A	2	2	2	2	2	1	1	1	1	1	1	2	2	4	4	3	3	2	3	2.0	4.3
12-Mar	2	2	2	2	A	5	5	7	7	5	4	3	2	1	1	1	1	1	1	0	0	1	1	0	2.4	6.7
13-Mar	1	1	2	3	A	3	7	9	8	7	4	5	4	3	3	2	2	2	2	2	3	3	4	3	3.6	8.5
14-Mar	2	2	2	3	A	3	4	3	3	10	8	7	5	12	4	3	1	1	3	4	8	0	1	1	3.9	12.1
15-Mar	1	1	2	3	A	5	4	5	4	1	0	1	1	0	1	1	1	1	1	1	3	2	2	2	1.8	5.4
16-Mar	3	3	3	3	A	4	4	7	6	4	3	2	2	1	1	1	1	2	2	2	4	5	5	5	3.1	7.1
17-Mar	5	7	7	14	A	9	8	10	12	7	5	4	4	4	3	3	2	2	3	2	2	3	3	6	5.4	13.7
18-Mar	4	7	4	5	A	3	3	4	6	3	1	1	1	0	0	1	1	1	2	2	4	3	3	5	2.7	6.5
19-Mar	7	11	6	3	A	3	2	8	5	10	7	3	1	1	1	2	2	2	2	2	2	2	1	2	3.7	10.7
20-Mar	1	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	1.9
21-Mar	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	5	2	1.6	4.7
22-Mar	5	8	4	4	A	5	4	3	3	2	2	2	1	1	1	1	2	2	2	2	3	3	3	4	3.0	8.0
23-Mar	5	4	4	7	A	20	6	18	16	11	6	5	5	4	3	2	2	2	3	5	5	6	4	3	6.3	19.6
24-Mar	4	4	4	5	A	7	6	7	7	5	3	3	3	2	1	1	1	1	2	5	4	5	5	5	3.9	7.0
25-Mar	3	4	3	3	A	6	8	4	6	5	3	2	1	1	1	1	1	1	2	7	6	4	2	2	3.2	8.1
26-Mar	2	2	3	3	A	7	4	6	10	6	5	3	3	2	2	1	0	0	0	1	1	1	1	1	2.9	10.2
27-Mar	1	2	1	2	A	4	3	3	2	4	4	3	2	2	1	1	2	2	1	1	2	2	1	1	2.1	4.3
28-Mar	1	2	1	2	A	4	3	2	1	0	0	0	0	0	0	0	0	0	0	1	1	3	2	2	1.2	4.3
29-Mar	1	2	3	3	A	6	6	5	2	2	1	0	0	0	1	1	1	0	0	0	1	1	1	1	1.7	6.2
30-Mar	0	1	1	1	A	2	2	4	4	2	1	0	0	0	1	1	1	2	1	2	1	3	3	3	1.6	3.9
31-Mar	3	2	2	3	A	5	4	3	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1.9	5.1
2.4 3.0 2.7 3.2 -- 4.6 3.7 4.4 4.5 3.6 2.9 2.2 1.9 2.0 1.3 1.4 1.4 1.5 1.9 2.3 2.6 2.4 2.2 2.4																								Diurnal Average		
6.9 10.7 10.6 13.7 -- 19.6 8.1 17.7 16.2 10.7 10.7 7.1 6.0 12.1 4.2 6.1 8.3 5.2 4.2 8.7 7.8 5.7 5.5 6.4																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb																										

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2015



Hourly Maximums

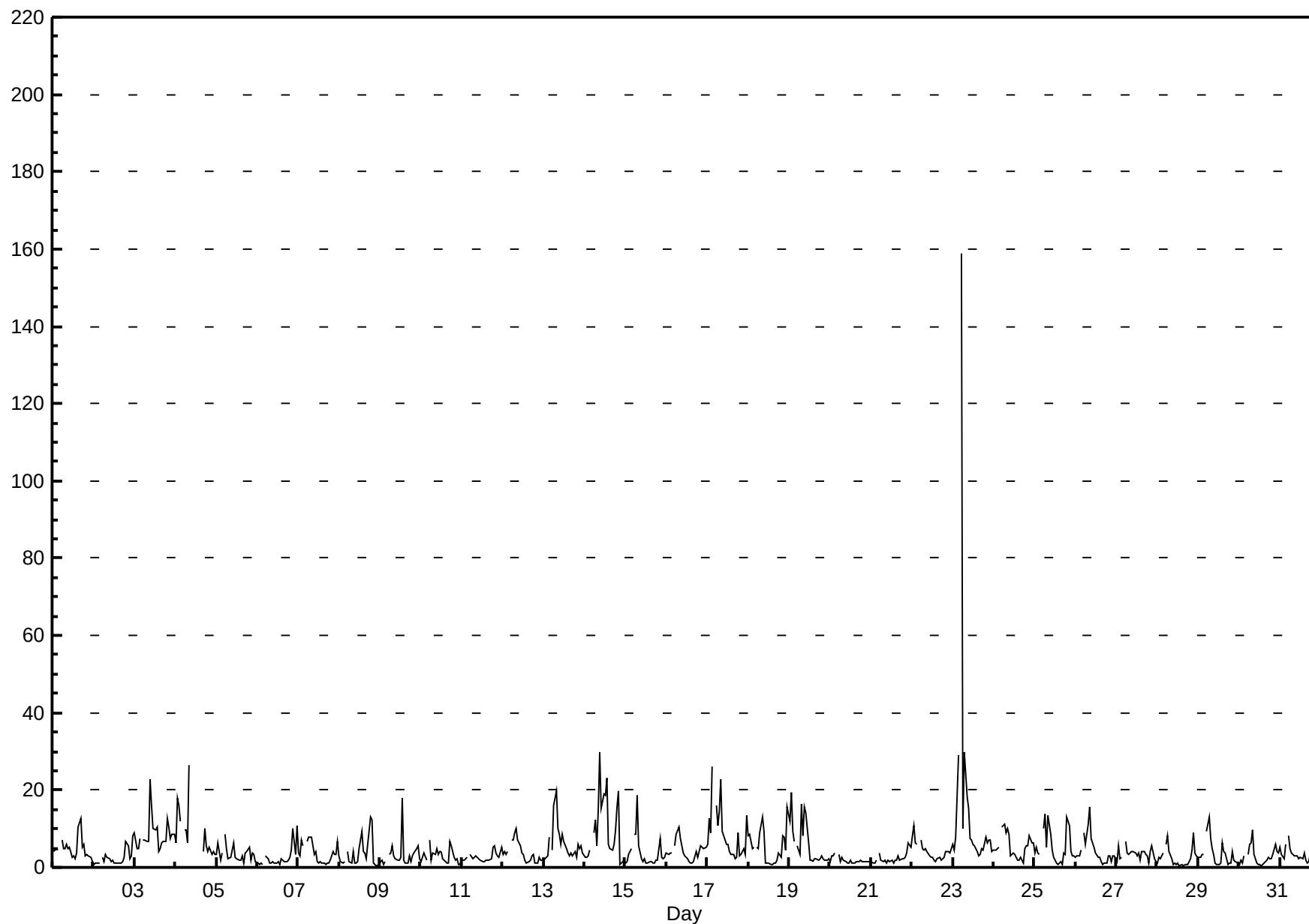
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2015

Maximum Value: 158.9 ppb on Mar 23 06:00																				Maximum Daily Average: 15.6 ppb on Mar 23										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 28 16:00																				Minimum Daily Average: 1.8 ppb on Mar 20										Hours of Data: 706	
Maximum Diurnal Average: 11.6 ppb at hour 6																				Minimum Diurnal Average: 2.3 ppb at hour 15										Hours of Missing Data: 38	
Monthly Average: 4.78 ppb																				Percentiles: P ₁ = 0.6 P ₁₀ = 1.2 Q ₁ = 1.8 Median = 3.3 Q ₃ = 5.6 P ₉₀ = 9.5 P ₉₉ = 21.7										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-Mar	4	5	5	5	A	7	5	5	6	5	5	2	3	2	4	11	13	5	6	3	3	3	2	2	4.8	12.6					
2-Mar	1	1	1	1	A	2	2	3	3	2	1	2	1	1	1	1	1	2	3	7	6	2	3	8	2.4	8.2					
3-Mar	9	5	5	8	A	7	7	7	7	23	16	10	10	11	4	5	6	7	7	13	11	7	8	9	8.7	22.9					
4-Mar	6	18	16	12	A	10	10	6	27	C	C	C	C	C	C	C	4	10	6	4	5	3	4	3	--	26.7					
5-Mar	3	6	2	4	A	9	5	2	3	4	6	3	2	2	2	3	1	4	4	5	2	4	3	2	3.5	8.7					
6-Mar	1	1	1	1	A	3	2	1	1	1	1	1	1	1	2	2	1	2	2	3	4	10	3	11	2.5	10.7					
7-Mar	4	3	7	5	A	7	8	8	8	4	4	2	1	1	1	1	1	1	1	2	4	3	3	7	3.7	7.8					
8-Mar	3	1	1	2	A	4	1	1	4	1	1	1	5	9	4	4	2	6	13	12	1	1	0	1	3.5	13.2					
9-Mar	2	2	1	1	A	3	4	6	3	2	2	2	3	18	2	1	1	3	2	3	4	5	6	2	3.3	17.8					
10-Mar	2	3	4	2	A	7	2	4	3	5	3	4	4	2	1	1	1	7	5	2	2	2	1	1	3.0	7.2					
11-Mar	2	2	2	3	A	3	2	3	3	2	2	2	2	2	2	2	2	2	5	6	4	3	3	5	2.7	5.7					
12-Mar	4	4	3	4	A	7	7	9	10	7	6	4	3	2	1	2	2	3	3	1	1	3	2	2	3.9	10.1					
13-Mar	2	2	3	8	A	4	16	20	10	8	6	9	7	5	4	3	4	3	4	3	6	5	5	4	6.1	19.6					
14-Mar	2	2	3	5	A	9	12	6	15	30	15	19	19	23	6	5	5	6	10	16	20	1	2	2	10.0	29.8					
15-Mar	1	2	3	5	A	8	9	19	6	2	1	2	1	1	1	1	1	1	2	2	7	2	2	3	3.7	18.8					
16-Mar	4	3	4	4	A	6	9	10	7	6	4	3	2	2	1	1	1	4	3	4	5	5	5	5	4.3	10.5					
17-Mar	6	13	9	26	A	16	11	15	23	9	7	6	6	4	3	3	2	3	9	3	3	5	3	13	8.7	26.0					
18-Mar	8	9	5	5	A	5	5	9	13	9	1	1	1	1	1	1	1	2	4	2	8	8	5	16	5.2	15.7					
19-Mar	12	19	9	7	A	5	3	16	8	16	14	6	2	2	2	2	2	2	2	3	2	2	2	2	6.2	19.4					
20-Mar	2	3	3	4	A	3	1	2	2	1	1	1	2	1	1	1	1	2	2	2	1	1	1	1	1.8	3.7					
21-Mar	2	1	1	2	A	4	2	2	2	1	2	1	2	1	2	2	3	2	2	2	3	4	6	5	2.3	6.4					
22-Mar	8	11	6	6	A	7	5	4	5	4	3	2	2	2	2	2	3	2	2	3	4	4	4	5	4.2	10.9					
23-Mar	6	5	8	29	A	159	10	30	18	15	7	7	6	6	4	3	3	5	5	8	6	7	7	4	15.6	158.9					
24-Mar	5	4	5	5	A	11	11	9	10	9	3	4	3	2	2	2	3	1	5	5	6	8	6	6	5.5	11.2					
25-Mar	4	5	4	3	A	10	14	5	13	9	5	2	2	1	1	1	1	4	3	13	11	4	3	3	5.3	13.9					
26-Mar	3	3	3	4	A	9	6	11	16	7	6	5	4	3	2	1	1	1	1	3	3	1	3	3	4.3	15.5					
27-Mar	2	5	2	3	A	7	4	3	4	4	4	4	3	4	2	4	4	3	3	1	4	6	2	2	3.4	6.6					
28-Mar	1	3	2	4	A	6	8	4	2	1	1	1	1	1	1	0	1	1	1	2	4	9	4	3	2.6	9.0					
29-Mar	2	2	3	3	A	9	13	8	5	3	1	1	1	1	7	4	4	1	1	1	4	2	2	1	3.5	13.2					
30-Mar	1	2	1	3	A	3	6	6	10	3	1	1	1	0	1	2	2	2	2	2	3	6	4	4	2.9	9.5					
31-Mar	5	3	2	6	A	8	5	4	3	3	3	2	2	2	4	2	1	2	3	2	1	2	2	3	3.1	8.3					
																									Diurnal Average						
																									Diurnal Maximum						
C - Calibration																									A - Automated Daily Zero Span						

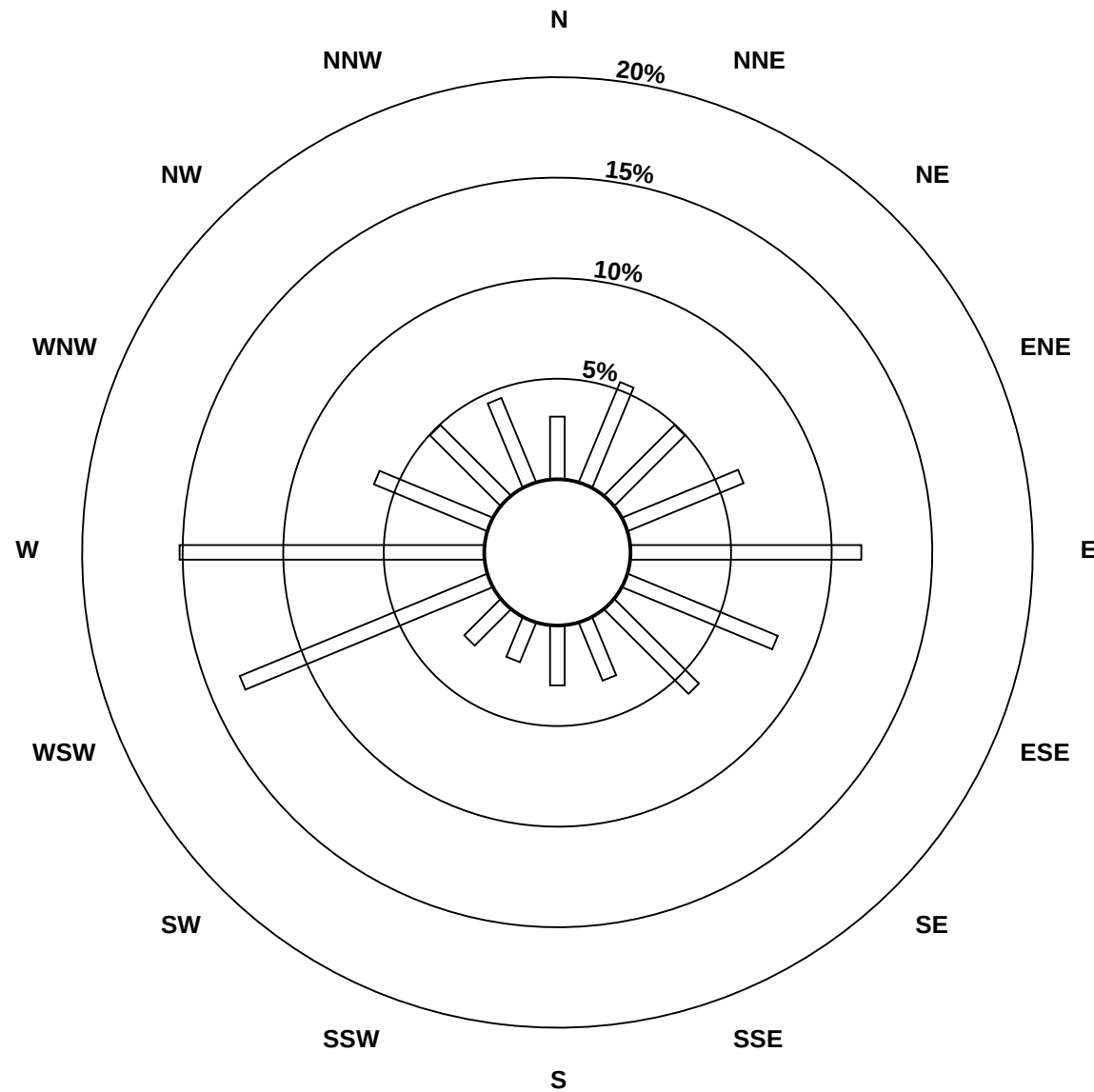
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2015

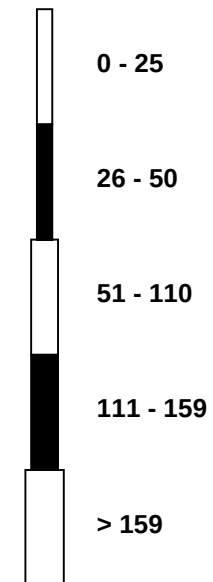


Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2015

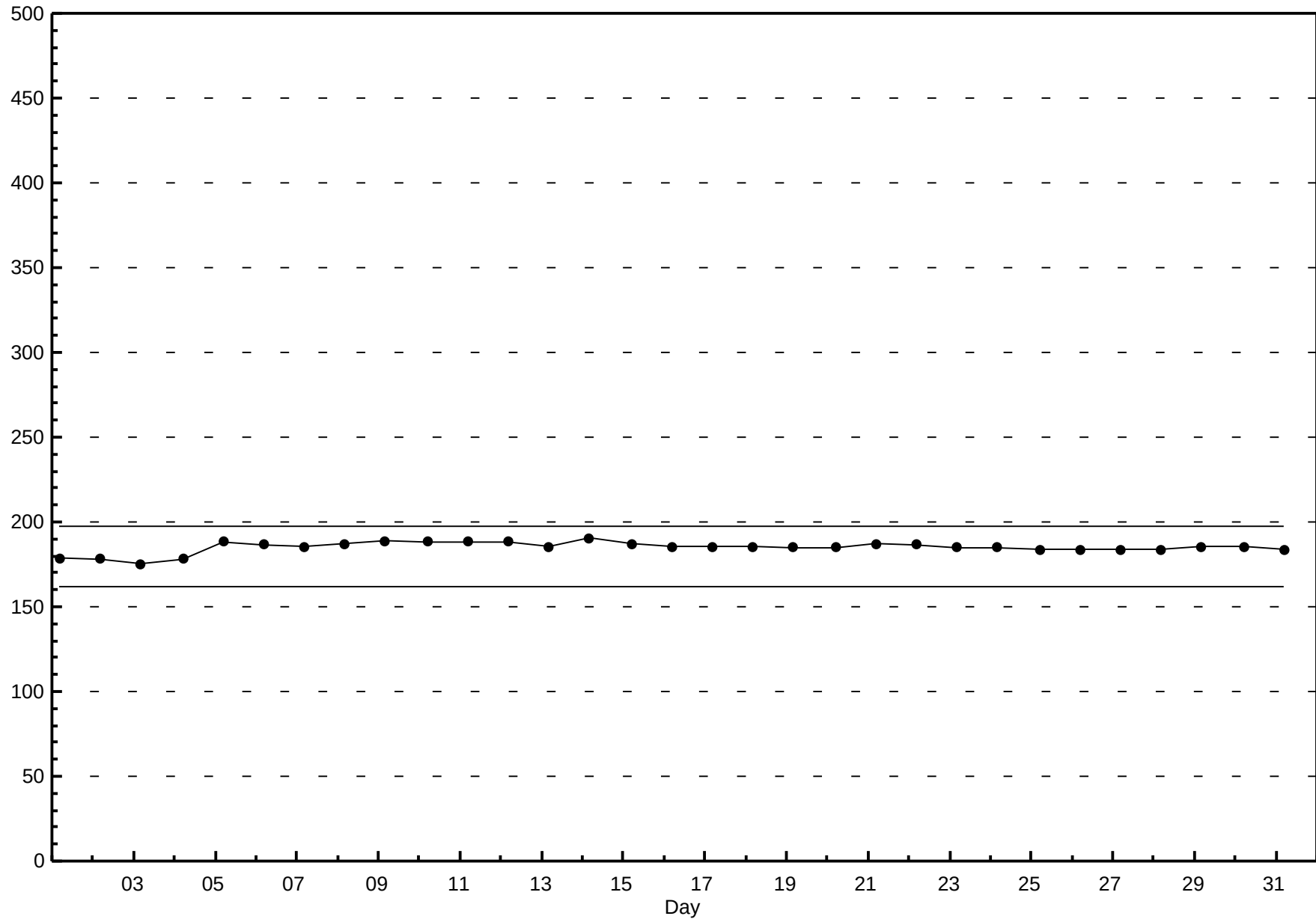


Pollutant Classes (ppb)



Span Responses

Nitrogen Dioxide (NO₂)
Beaverlodge - March 2015



Hourly Averages

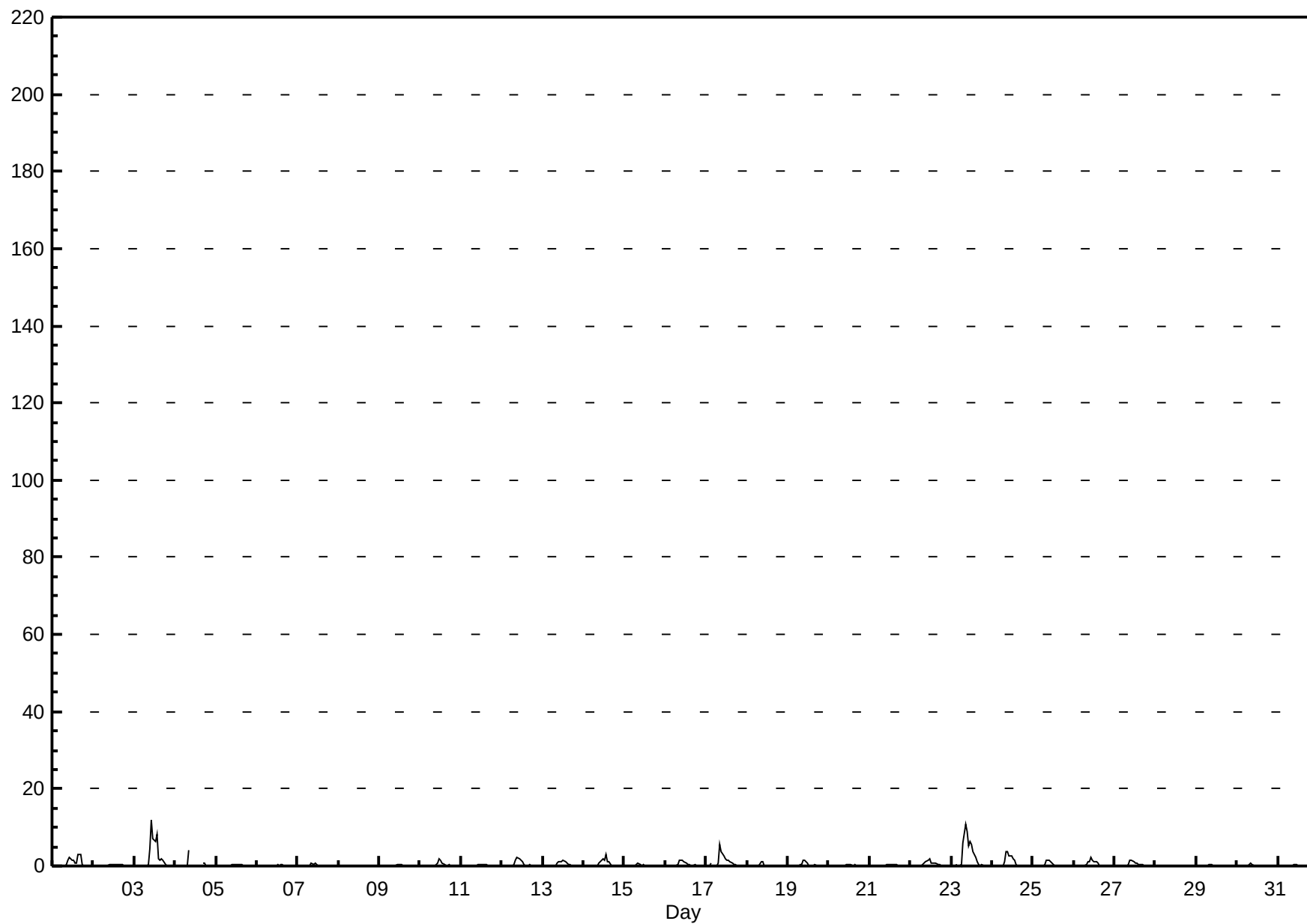
Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 12.0 ppb on Mar 3 11:00 Maximum Daily Average: 2.3 ppb on Mar 23																								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 Mar 6 02:00 Minimum Daily Average: 0.0 ppb on Mar 28 Maximum Diurnal Average: 1.4 ppb at hour 11 Minimum Diurnal Average: 0.0 ppb at hour 1 Monthly Average: 0.39 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 1.0 P ₉₉ = 6.2																										
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-Mar	0	0	0	0	A	0	0	0	1	1	2	1	2	1	1	3	3	0	0	0	0	0	0	0	0.7	2.9
2-Mar	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
3-Mar	0	0	0	0	A	0	0	0	1	5	12	7	6	8	2	2	2	1	0	0	0	0	0	0	2.0	12.0
4-Mar	0	0	0	0	A	0	0	0	4	C	C	C	C	C	C	C	1	1	0	0	0	0	0	0	--	4.3
5-Mar	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
6-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
7-Mar	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
8-Mar	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
9-Mar	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
10-Mar	0	0	0	0	A	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0.3	1.7
11-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
12-Mar	0	0	0	0	A	0	0	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	2.4
13-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.4
14-Mar	0	0	0	0	A	0	0	0	0	1	1	2	1	3	1	1	0	0	0	0	0	0	0	0	0.5	2.9
15-Mar	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	0.9
16-Mar	0	0	0	0	A	0	0	0	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.6
17-Mar	0	0	0	1	A	0	0	1	5	4	3	2	2	1	1	1	0	0	0	0	0	0	0	0	0.9	5.5
18-Mar	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1
19-Mar	0	0	0	0	A	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
20-Mar	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
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
22-Mar	0	0	0	0	A	0	0	0	1	1	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.7
23-Mar	0	0	0	1	A	0	0	6	11	9	5	6	5	4	2	1	0	0	0	0	0	0	0	0	2.3	10.9
24-Mar	0	0	0	0	A	0	0	1	4	4	3	3	2	1	0	0	0	0	0	0	0	0	0	0	0.8	3.8
25-Mar	0	0	0	0	A	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6
26-Mar	0	0	0	0	A	0	0	0	1	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0.4	2.3
27-Mar	0	0	0	0	A	0	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.5
28-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
29-Mar	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	0.5
30-Mar	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	0.7
31-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
0.0 0.0 0.0 0.1 -- 0.0 0.0 0.4 1.2 1.3 1.4 1.2 1.0 0.9 0.4 0.4 0.3 0.2 0.1 0.0 0.0 0.0 0.0 0.0																								Diurnal Average		
0.1 0.1 0.1 0.6 -- 0.3 0.1 5.9 10.9 9.0 12.0 7.2 6.3 8.2 2.4 2.9 2.8 1.4 0.3 0.1 0.1 0.1 0.1 0.1																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2015



Hourly Maximums

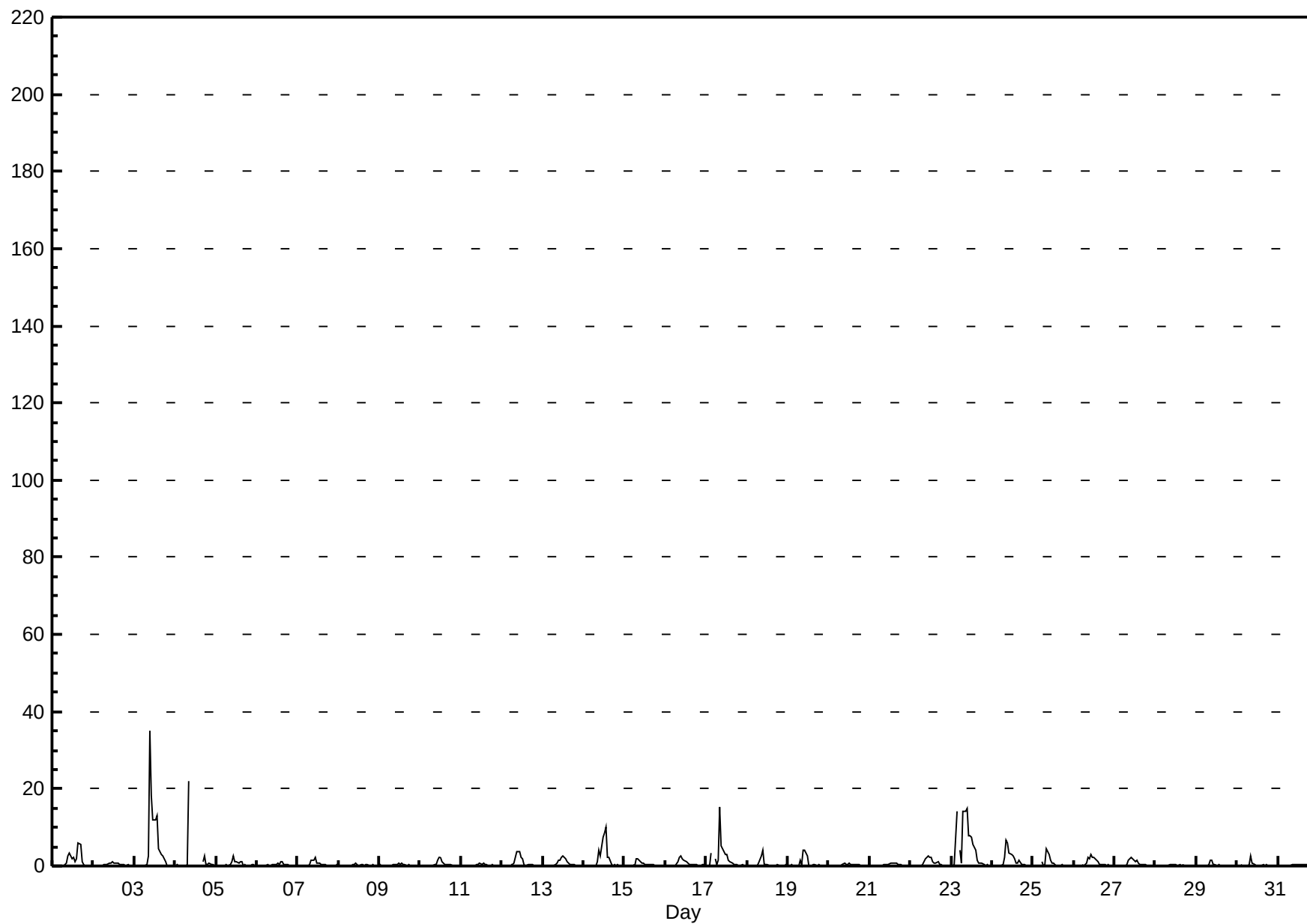
Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2015

Maximum Value: 35.1 ppb on Mar 3 10:00																				Maximum Daily Average: 4.8 ppb on Mar 3										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 11 02:00																				Minimum Daily Average: 0.2 ppb on Mar 28										Hours of Data: 706	
Maximum Diurnal Average: 3.4 ppb at hour 10																				Minimum Diurnal Average: 0.1 ppb at hour 1										Hours of Missing Data: 38	
Monthly Average: 0.88 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.6 P ₉₀ = 2.1 P ₉₉ = 14.1										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-Mar	0	0	0	0	A	0	0	0	1	3	3	2	2	1	2	6	6	1	0	0	0	0	0	0	1.2	5.9					
2-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.1					
3-Mar	0	0	0	0	A	0	0	0	2	35	18	12	12	13	4	4	3	3	1	0	0	0	0	0	4.8	35.1					
4-Mar	0	0	0	0	A	0	0	0	22	C	C	C	C	C	C	C	1	3	0	0	1	0	0	0	--	22.0					
5-Mar	0	0	0	0	A	0	0	0	0	1	3	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	2.5					
6-Mar	0	0	0	0	A	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0.3	1.2					
7-Mar	0	0	0	0	A	0	0	0	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	2.4					
8-Mar	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	0.7					
9-Mar	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7					
10-Mar	0	0	0	0	A	0	0	0	0	1	1	2	2	1	0	0	0	1	1	0	0	0	0	0	0.4	2.1					
11-Mar	0	0	0	0	A	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0.2	0.6					
12-Mar	0	0	0	0	A	0	0	1	2	4	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0.8	3.7					
13-Mar	0	0	0	0	A	0	0	0	1	1	1	2	3	2	1	1	1	0	0	0	0	0	0	0	0.7	2.5					
14-Mar	0	0	0	0	A	0	0	0	1	4	3	8	9	10	2	2	0	0	0	0	0	0	0	0	1.8	10.0					
15-Mar	0	0	0	0	A	0	0	2	2	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0.4	2.0					
16-Mar	0	0	0	0	A	0	0	1	2	3	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	2.5					
17-Mar	0	0	0	3	A	2	0	1	15	5	4	3	3	2	1	1	0	0	0	0	0	0	0	0	1.9	15.3					
18-Mar	0	0	0	0	A	0	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.3					
19-Mar	0	0	0	0	A	0	0	1	0	4	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.0					
20-Mar	0	0	0	0	A	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0.2	0.7					
21-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.3	0.9					
22-Mar	0	0	0	0	A	0	0	0	1	2	3	2	2	1	1	1	1	0	0	0	0	0	0	0	0.7	2.7					
23-Mar	0	0	0	14	A	4	1	14	14	15	8	8	7	6	4	1	1	1	1	0	0	0	0	0	4.3	15.0					
24-Mar	0	0	0	0	A	0	0	2	7	6	3	3	3	2	1	1	1	0	0	0	0	0	0	0	1.3	6.7					
25-Mar	0	0	0	0	A	1	0	0	4	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.6	4.3					
26-Mar	0	0	0	0	A	0	0	1	2	2	3	2	2	1	1	0	0	0	0	0	0	0	0	0	0.7	3.0					
27-Mar	0	0	0	0	A	0	0	0	1	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0.6	2.1					
28-Mar	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					
29-Mar	0	0	0	0	A	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6					
30-Mar	0	0	0	0	A	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.7					
31-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5					
0.1 0.1 0.1 0.6 -- 0.3 0.2 1.0 2.9 3.4 2.4 2.0 1.9 1.6 0.9 0.9 0.7 0.5 0.3 0.1 0.1 0.1 0.1 0.1																									Diurnal Average						
0.3 0.4 0.3 14.3 -- 4.3 0.7 14.1 22.0 35.1 18.3 11.9 11.9 12.9 4.4 5.9 5.7 2.8 0.9 0.3 0.6 0.3 0.3 0.5																									Diurnal Maximum						
C - Calibration																									A - Automated Daily Zero Span						

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2015



Hourly Averages

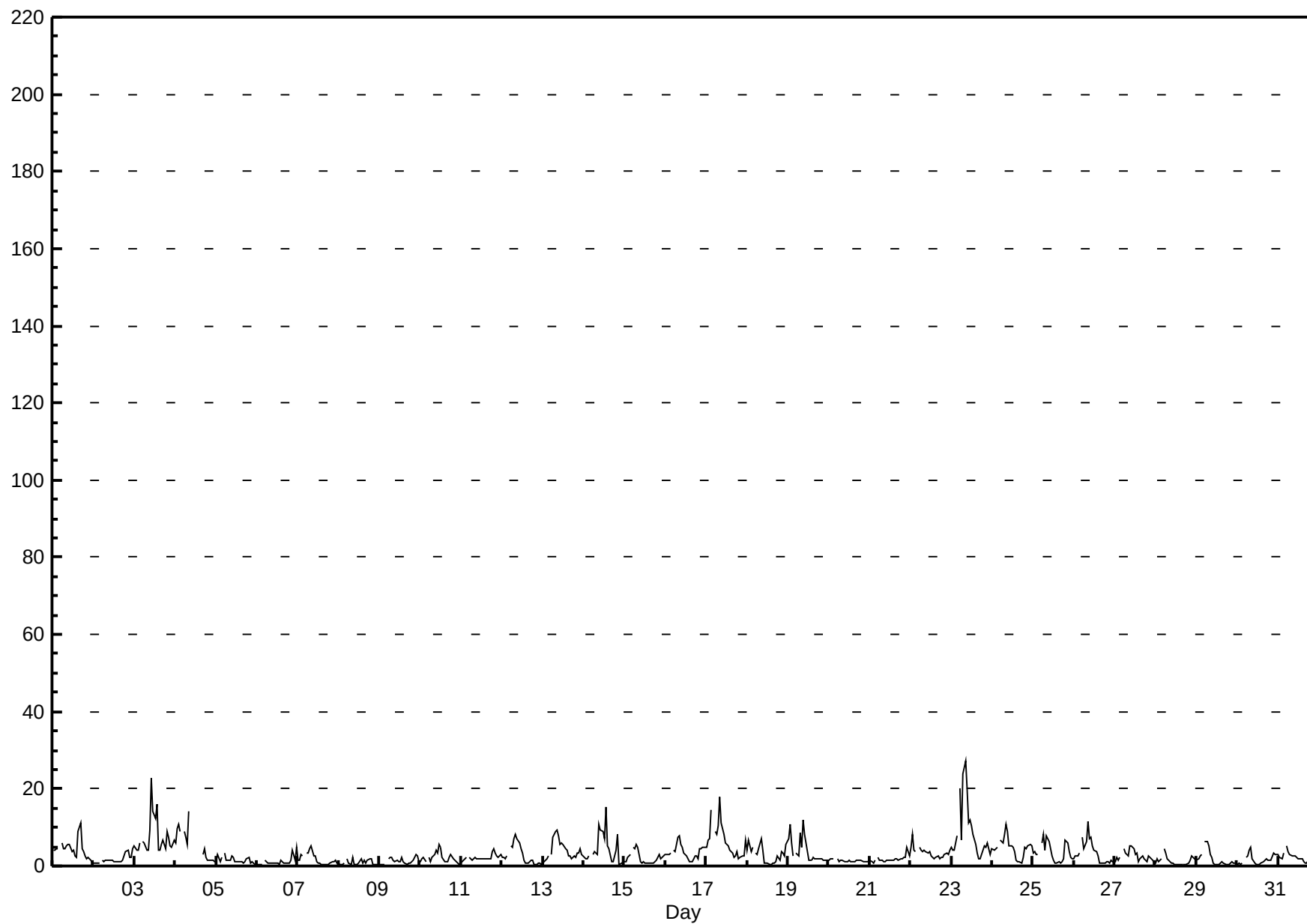
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 27.4 ppb on Mar 23 09:00 Maximum Daily Average: 8.7 ppb on Mar 23																				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 Mar 8 03:00 Maximum Diurnal Average: 5.9 ppb at hour 9 Monthly Average: 3.09 ppb										Minimum Daily Average: 0.9 ppb on Mar 8 Minimum Diurnal Average: 1.8 ppb at hour 18 Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 1.2 Median = 2.1 Q ₃ = 4.2 P ₉₀ = 6.6 P ₉₉ = 14.9																
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-Mar	4	4	4	4	A	6	4	5	5	5	6	4	4	2	2	9	11	4	4	2	2	2	2	1	4.3	11.3
2-Mar	1	1	1	1	A	2	1	2	1	2	1	1	1	1	1	1	1	2	2	4	4	2	2	5	1.7	4.6
3-Mar	5	4	4	6	A	6	6	4	4	9	23	14	12	16	4	4	6	7	5	9	7	5	5	7	7.5	22.9
4-Mar	6	10	11	9	A	9	7	6	14	C	C	C	C	C	C	C	3	4	2	2	2	1	1	1	--	14.3
5-Mar	1	3	1	2	A	3	1	1	1	3	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1.5	3.4
6-Mar	0	0	0	0	A	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	4	1	5	1.1	4.8
7-Mar	1	1	3	2	A	3	3	4	5	2	3	1	1	1	1	1	0	0	0	1	1	1	2	1	1.7	5.3
8-Mar	1	0	0	1	A	2	1	0	2	1	0	1	1	2	1	1	1	1	2	2	0	0	0	0	0.9	2.1
9-Mar	0	0	0	0	A	2	2	2	2	1	1	1	1	2	1	1	1	1	1	1	2	3	3	1	1.3	3.0
10-Mar	1	2	2	1	A	2	1	2	3	4	3	5	5	2	1	1	1	2	3	2	2	1	1	1	2.1	5.5
11-Mar	1	1	2	2	A	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	3	3	2	3	2.2	4.4
12-Mar	2	2	2	3	A	5	5	7	8	7	6	5	3	1	1	1	1	2	1	0	0	1	1	0	2.8	8.3
13-Mar	1	1	2	3	A	3	7	9	9	8	6	6	6	4	4	3	2	2	2	2	3	3	4	3	4.1	9.1
14-Mar	2	2	2	3	A	3	4	3	3	11	9	9	7	15	5	4	1	1	3	4	8	0	1	1	4.5	15.3
15-Mar	1	1	2	3	A	5	4	6	5	1	1	1	1	1	1	1	1	1	1	1	3	2	2	3	2.0	5.8
16-Mar	3	3	3	3	A	4	4	8	8	6	5	3	3	2	1	1	1	3	2	2	4	5	5	5	3.6	7.7
17-Mar	5	7	7	15	A	9	8	11	18	11	8	6	6	5	4	3	2	2	4	2	2	3	3	7	6.4	18.0
18-Mar	4	7	4	5	A	3	3	4	7	4	1	1	1	1	1	1	1	1	2	2	4	3	3	5	2.9	7.1
19-Mar	7	11	6	3	A	3	3	9	5	12	8	4	2	2	2	2	2	2	2	2	2	2	2	2	4.0	11.8
20-Mar	1	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1.4	2.0
21-Mar	1	1	1	1	A	2	2	1	1	1	2	2	1	1	2	2	2	2	2	2	2	2	5	3	1.8	4.8
22-Mar	5	8	4	4	A	5	4	4	4	4	3	4	2	2	2	2	3	2	2	2	3	3	3	4	3.5	8.1
23-Mar	5	4	4	8	A	20	7	24	27	20	11	12	11	8	6	3	2	2	3	5	5	6	5	3	8.7	27.4
24-Mar	4	4	4	5	A	7	6	8	11	9	5	5	5	4	1	1	1	1	2	5	4	5	6	5	4.7	10.9
25-Mar	3	4	3	3	A	6	8	4	8	6	4	3	2	1	1	1	1	1	2	7	6	4	2	2	3.5	8.3
26-Mar	2	3	3	3	A	7	5	6	12	7	8	5	4	4	3	1	1	1	1	1	1	1	2	1	3.4	11.6
27-Mar	1	2	1	2	A	4	3	3	3	5	5	4	3	3	1	2	3	2	1	1	2	2	1	1	2.5	5.3
28-Mar	1	2	1	2	A	4	3	2	1	1	1	0	0	0	0	0	0	0	0	1	2	3	2	2	1.3	4.4
29-Mar	1	2	3	3	A	6	6	5	3	2	1	0	0	0	1	1	1	0	0	0	1	1	1	1	1.8	6.3
30-Mar	1	1	1	1	A	2	3	4	5	2	1	0	0	0	1	1	2	2	2	2	1	3	3	3	1.7	4.8
31-Mar	3	2	2	3	A	5	4	3	3	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	2.0	5.2
2.4 3.1 2.8 3.3 -- 4.7 3.8 4.9 5.9 5.0 4.4 3.5 3.0 2.9 1.8 1.8 1.8 1.8 2.0 2.4 2.7 2.4 2.3 2.5																									Diurnal Average	
7.0 10.9 10.8 14.5 -- 20.2 8.3 23.9 27.4 19.9 22.9 14.2 12.4 16.0 5.7 9.1 11.3 6.7 4.5 9.0 8.0 5.9 5.6 6.6																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - March 2015



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

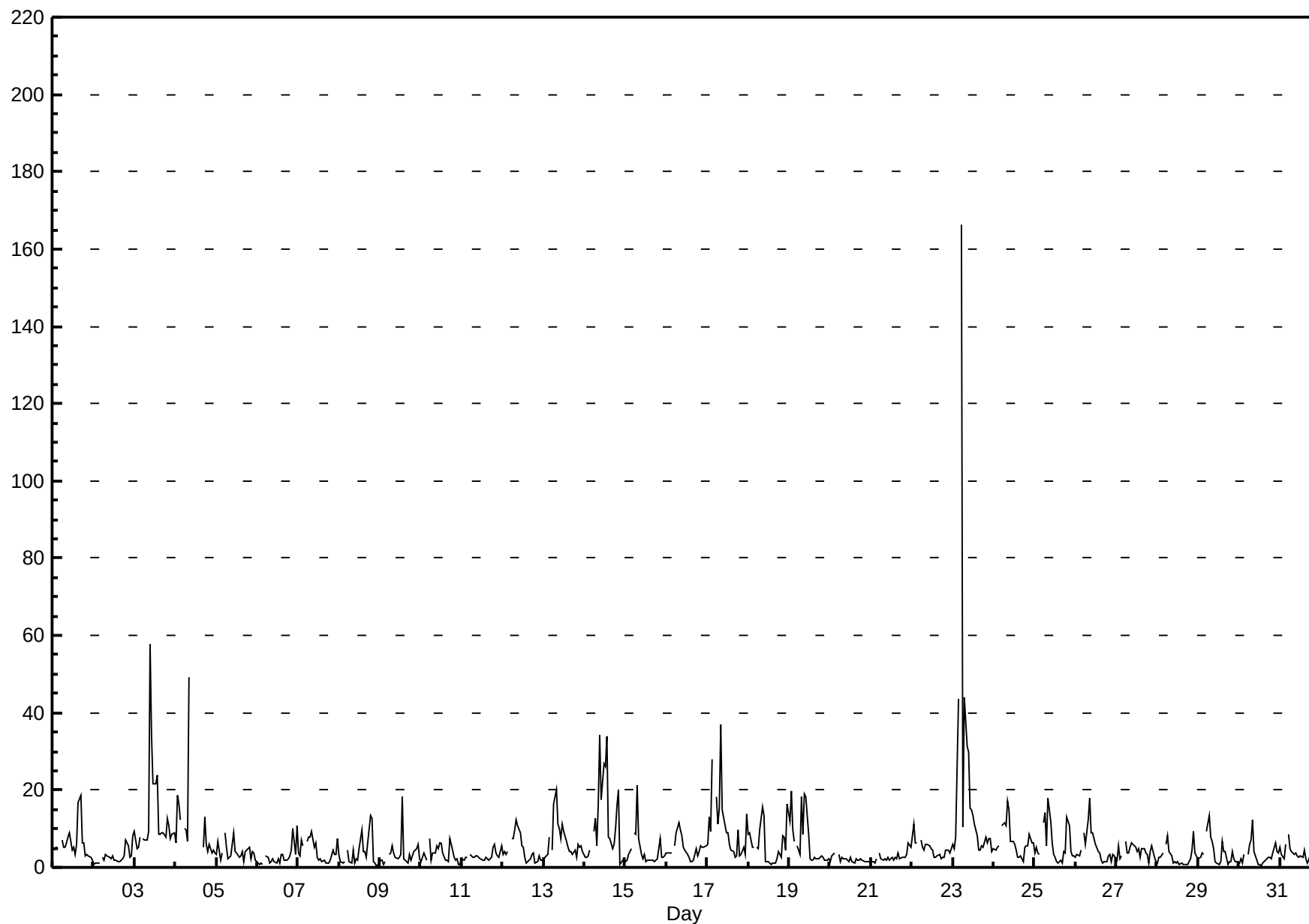
Beaverlodge - March 2015

Maximum Value: 166.2 ppb on Mar 23 06:00																				Maximum Daily Average: 20.0 ppb on Mar 23					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 30 14:00																				Minimum Daily Average: 2.1 ppb on Mar 20					Hours of Data: 706	
Maximum Diurnal Average: 12.1 ppb at hour 6																				Minimum Diurnal Average: 3.2 ppb at hour 17					Hours of Missing Data: 38	
Monthly Average: 5.69 ppb																				Percentiles: P ₁ = 0.6 P ₁₀ = 1.4 Q ₁ = 2.2 Median = 3.6 Q ₃ = 6.4 P ₉₀ = 10.9 P ₉₉ = 33.0					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-Mar	4	5	5	5	A	7	5	5	6	8	9	4	5	3	6	17	18	6	6	3	3	3	3	2	6.1	18.5
2-Mar	1	1	1	1	A	3	2	3	3	3	2	3	2	2	2	2	2	2	3	7	6	3	3	8	2.8	8.3
3-Mar	9	5	5	8	A	7	7	7	9	58	34	22	22	24	9	9	9	9	8	13	11	7	9	9	13.4	57.9
4-Mar	6	19	16	12	A	10	10	7	49	C	C	C	C	C	C	C	5	13	6	4	6	4	4	4	--	49.2
5-Mar	3	7	2	4	A	9	5	2	3	6	9	4	4	3	3	4	1	4	4	5	2	4	4	2	4.1	9.1
6-Mar	1	1	1	1	A	3	3	1	1	2	1	1	2	1	3	3	2	2	2	3	4	10	3	11	2.8	10.9
7-Mar	4	3	7	6	A	7	8	8	9	5	6	2	2	2	1	2	1	1	1	2	4	3	3	7	4.2	9.4
8-Mar	3	1	1	2	A	4	1	1	5	1	2	2	5	10	4	4	3	6	13	13	1	1	0	1	3.7	13.5
9-Mar	2	2	1	2	A	3	4	6	4	3	2	3	3	18	2	2	1	3	2	3	4	5	6	2	3.6	18.4
10-Mar	2	3	4	2	A	7	2	4	4	6	5	6	6	4	2	2	1	8	6	3	2	2	1	1	3.5	7.5
11-Mar	2	2	2	3	A	3	2	3	3	3	3	2	2	2	2	2	2	3	5	6	4	3	3	5	3.0	5.8
12-Mar	3	4	3	4	A	7	7	10	12	11	9	6	5	3	1	2	2	3	4	1	1	3	2	2	4.6	12.2
13-Mar	2	2	3	8	A	5	16	20	11	10	7	11	9	7	5	4	4	3	5	3	6	5	6	4	6.8	20.1
14-Mar	3	3	3	5	A	9	13	6	16	34	17	27	26	34	8	7	5	6	10	16	20	1	2	2	11.8	34.5
15-Mar	1	2	3	5	A	9	9	21	8	3	2	3	2	2	2	2	2	1	2	2	8	3	2	3	4.2	21.1
16-Mar	4	4	4	4	A	6	9	12	10	8	5	4	3	2	2	2	2	5	3	4	6	5	5	5	4.9	11.7
17-Mar	6	13	9	28	A	18	11	15	37	15	11	9	9	6	5	4	3	3	10	3	3	5	3	14	10.4	37.1
18-Mar	8	9	5	5	A	5	5	10	16	14	1	2	1	1	1	1	1	2	4	3	8	8	5	16	5.7	16.4
19-Mar	12	20	10	7	A	6	3	18	8	19	18	9	2	2	2	3	2	2	3	3	3	2	2	2	6.9	19.9
20-Mar	2	3	3	4	A	3	1	3	2	2	2	2	2	1	1	2	2	2	2	2	2	1	1	1	2.1	3.7
21-Mar	2	1	1	2	A	4	2	2	2	2	3	2	3	2	3	2	4	2	3	2	3	4	6	5	2.6	6.5
22-Mar	8	11	6	6	A	7	5	4	6	6	6	5	5	3	3	3	3	2	3	3	4	4	4	5	4.9	11.1
23-Mar	6	5	8	44	A	166	10	44	31	30	15	15	13	11	8	4	4	6	5	8	6	7	7	4	20.0	166.2
24-Mar	5	5	5	5	A	11	12	11	17	15	7	7	6	4	3	3	3	1	5	6	6	9	6	6	6.8	17.1
25-Mar	4	5	4	3	A	12	14	6	18	12	6	3	3	1	1	2	1	4	4	13	11	4	3	3	5.9	17.9
26-Mar	3	3	3	4	A	9	6	12	18	9	9	8	6	4	4	2	1	1	1	3	3	1	3	3	5.1	17.9
27-Mar	2	6	2	3	A	7	4	4	5	6	6	5	4	5	3	5	5	4	3	1	4	6	3	2	4.0	6.7
28-Mar	1	3	3	4	A	6	8	4	3	1	1	1	1	1	1	1	1	1	1	2	4	9	4	3	2.8	9.2
29-Mar	2	2	4	3	A	9	13	8	7	5	1	1	1	1	7	4	4	1	1	1	4	2	2	1	3.8	13.5
30-Mar	1	2	1	3	A	4	6	7	12	4	2	1	1	0	1	2	2	3	3	2	4	6	4	4	3.2	12.4
31-Mar	5	3	2	6	A	9	5	4	3	4	3	3	3	3	4	2	1	2	4	2	1	2	2	3	3.3	8.6
3.8 4.9 4.1 6.4 -- 12.1 6.8 8.7 11.0 10.1 6.9 5.8 5.3 5.4 3.3 3.4 3.2 3.6 4.2 4.6 5.0 4.3 3.6 4.6																									Diurnal Average	
12.1 19.9 16.4 43.7 -- 166.2 16.2 44.2 49.2 57.9 34.3 27.0 25.9 33.8 8.6 16.7 18.5 13.2 13.5 16.0 20.1 10.2 8.6 16.4																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

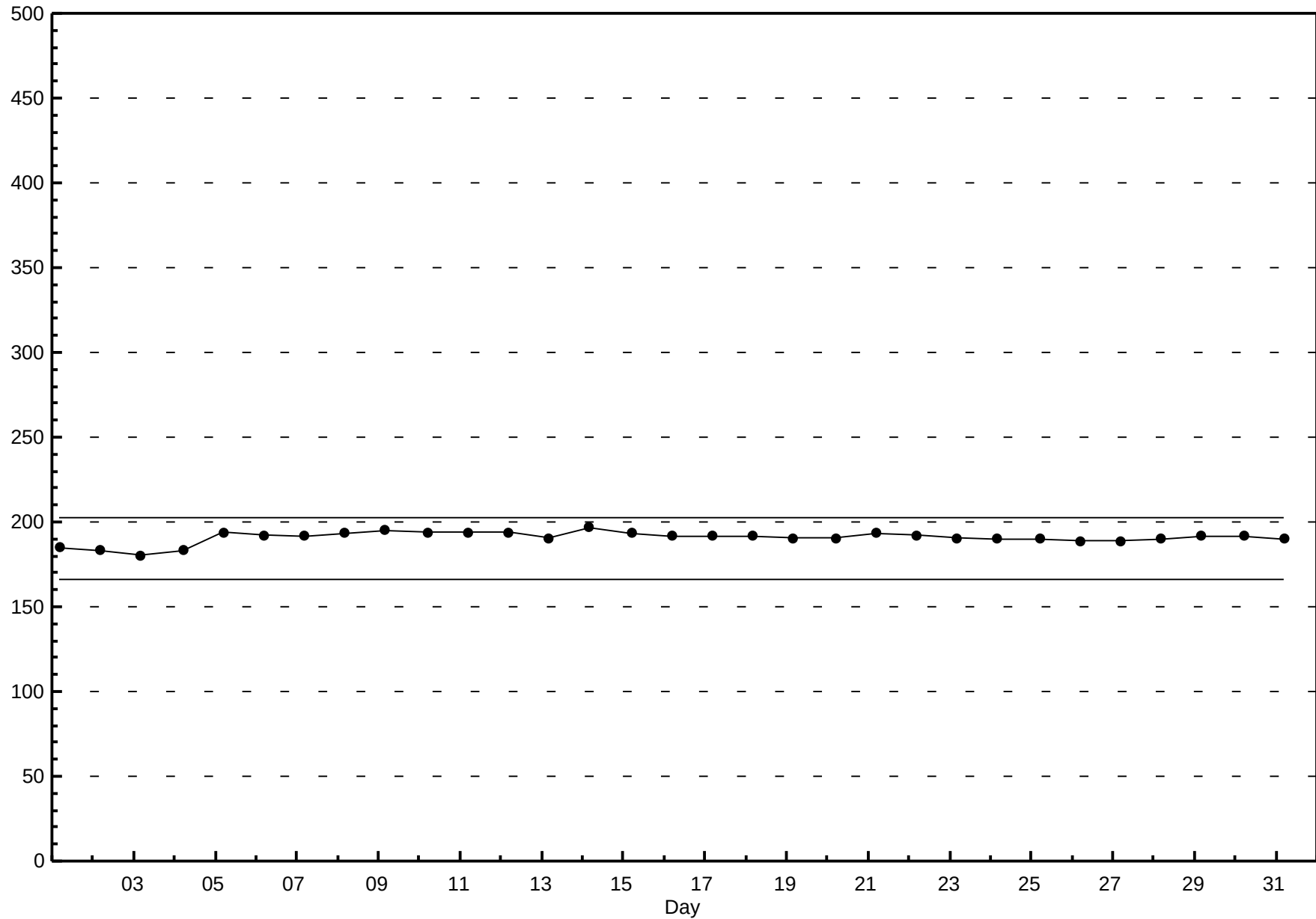
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - March 2015



Span Responses

Oxides of Nitrogen (NO_x)
Beaverlodge - March 2015



Hourly Averages

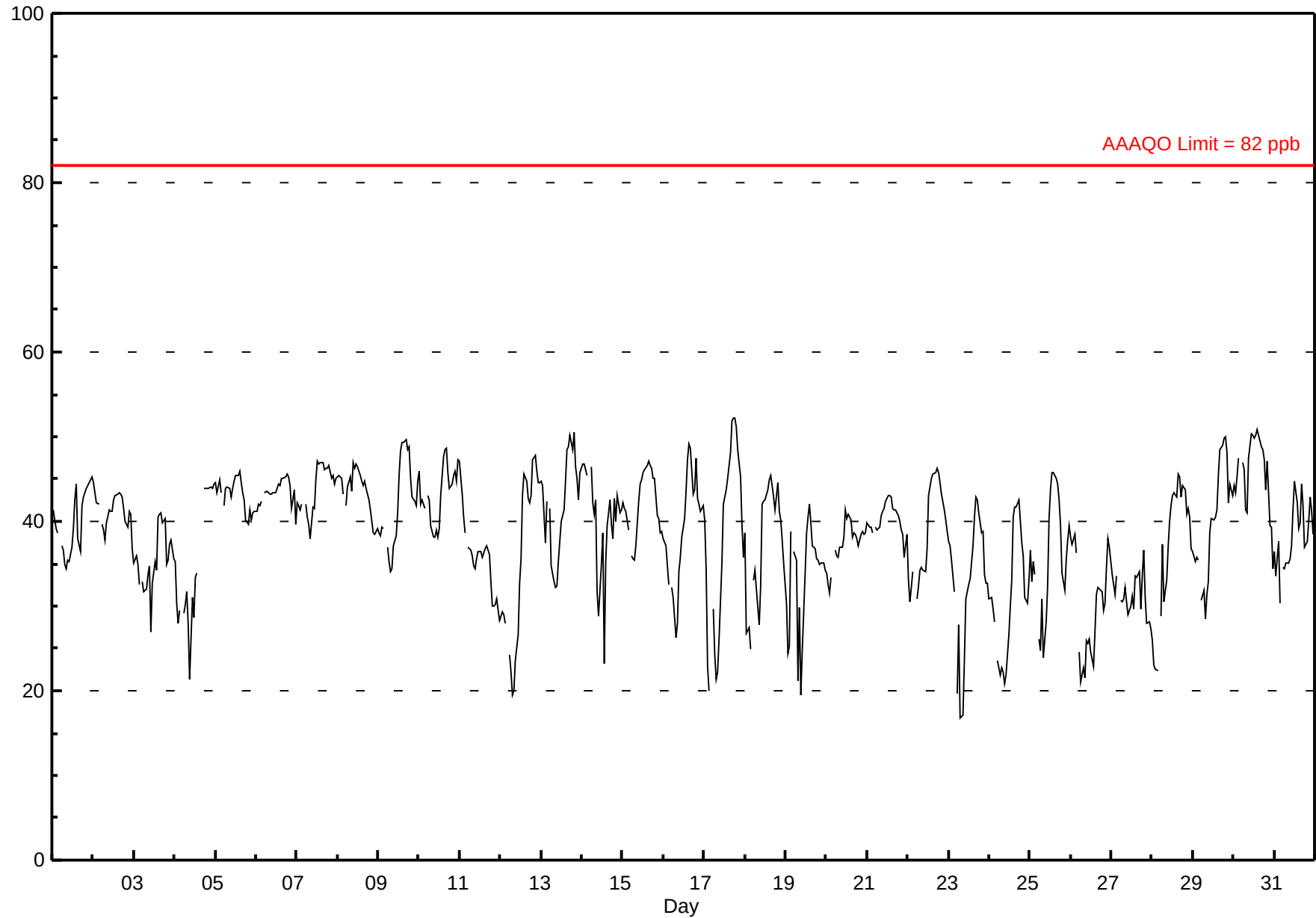
Ozone (O₃) - ppb

Beaverlodge - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 52.3 ppb on Mar 17 18:00 Maximum Daily Average: 45.8 ppb on Mar 30																								Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0		
Minimum Value: 17 ppb on Mar 23 08:00 Maximum Diurnal Average: 43.5 ppb at hour 17 Monthly Average: 38.49 ppb												Minimum Daily Average: 29.9 ppb on Mar 26 Minimum Diurnal Average: 32.8 ppb at hour 8 Percentiles: P ₁ = 20.8 P ₁₀ = 29.1 Q ₁ = 34.3 Median = 39.7 Q ₃ = 43.5 P ₉₀ = 46.0 P ₉₉ = 50.2														
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-Mar	41	40	39	39	A	37	37	35	34	35	35	37	39	43	44	38	36	42	43	43	44	44	45	45	39.9	45.2
2-Mar	45	43	42	42	A	40	39	38	40	41	41	41	42	43	43	43	43	43	42	40	39	41	41	37	41.3	44.6
3-Mar	35	36	35	33	A	33	32	32	34	35	27	33	35	34	41	41	41	40	40	35	35	37	38	36	35.5	41.0
4-Mar	35	30	28	29	A	29	30	32	28	21	31	29	33	34	C	C	C	44	44	44	44	44	44	44	34.9	44.4
5-Mar	45	43	45	43	A	42	44	44	44	43	44	45	45	45	46	45	43	43	40	40	41	40	41	41	43.2	45.8
6-Mar	41	42	42	42	A	43	44	43	43	43	43	43	44	44	44	45	45	45	46	45	44	42	44	40	43.4	45.6
7-Mar	42	42	41	42	A	42	41	40	38	42	42	45	47	47	47	47	46	46	46	47	45	45	44	45	43.9	47.0
8-Mar	45	45	45	43	A	42	44	45	44	47	46	47	46	45	45	44	45	44	43	41	40	39	38	39	43.6	47.0
9-Mar	39	38	39	39	A	37	35	34	34	37	38	41	45	48	49	49	50	48	49	45	43	42	42	45	42.1	49.7
10-Mar	46	42	43	42	A	43	43	39	38	38	39	38	39	43	48	49	49	46	44	44	45	46	45	47	43.3	48.7
11-Mar	47	43	41	39	A	37	37	36	35	34	36	36	36	36	36	37	37	36	33	30	30	30	31	28	35.7	47.1
12-Mar	29	29	29	28	A	24	22	19	20	24	27	33	36	43	46	45	43	42	43	47	48	46	45	45	35.3	47.8
13-Mar	45	44	37	42	A	42	35	33	32	32	35	38	40	41	45	48	49	50	48	51	46	45	43	46	42.1	50.6
14-Mar	47	47	46	45	A	46	42	41	43	32	29	35	39	23	35	40	43	40	38	43	40	43	41	41	39.9	46.8
15-Mar	42	41	41	39	A	36	36	35	37	42	44	45	46	46	47	47	47	46	45	45	41	40	39	39	42.0	47.1
16-Mar	38	37	35	33	A	32	31	26	28	34	36	38	40	43	47	49	49	43	44	47	43	42	41	42	39.1	49.2
17-Mar	40	34	23	20	A	30	24	21	22	26	35	42	43	44	45	48	52	52	52	51	48	45	39	36	38.0	52.3
18-Mar	39	27	27	25	A	33	34	32	28	32	42	42	43	44	45	45	44	43	41	45	41	40	38	35	37.6	45.5
19-Mar	30	24	25	39	A	36	35	21	30	20	25	34	39	41	42	40	37	37	36	35	35	35	35	34	33.3	42.0
20-Mar	34	33	31	33	A	37	36	36	37	37	38	41	40	41	40	38	39	39	38	37	39	39	39	39	37.4	41.3
21-Mar	40	39	39	39	A	39	39	39	41	41	42	42	43	43	43	42	41	41	41	40	39	38	36	39	40.3	43.1
22-Mar	33	31	32	34	A	31	32	34	35	34	34	37	43	44	45	46	46	46	46	45	43	41	40	39	38.7	46.2
23-Mar	38	37	35	32	A	20	28	17	17	24	31	32	33	33	37	40	43	43	41	39	39	34	33	33	32.9	43.0
24-Mar	31	31	30	28	A	24	22	23	22	21	22	27	30	33	40	42	42	43	40	37	36	31	30	33	31.2	42.6
25-Mar	37	33	35	34	A	26	25	31	24	28	32	40	44	46	46	45	44	42	39	34	32	36	38	39	36.1	45.8
26-Mar	38	37	39	36	A	25	21	23	22	26	26	26	25	23	27	31	32	32	32	29	30	35	38	37	29.9	38.5
27-Mar	34	32	31	34	A	31	31	31	32	31	29	30	31	30	33	33	34	30	34	37	31	28	28	27	31.3	36.7
28-Mar	26	23	23	22	A	29	37	30	33	37	40	42	43	43	43	46	45	43	44	44	41	42	40	37	37.1	45.6
29-Mar	36	35	36	35	A	31	32	29	31	33	39	40	40	40	41	45	48	49	50	50	48	42	44	43	40.0	50.0
30-Mar	44	43	45	47	A	47	46	41	41	47	50	50	50	50	51	50	49	48	47	44	47	39	39	34	45.8	50.8
31-Mar	36	34	38	30	A	35	34	35	35	36	37	41	45	42	39	40	44	42	37	38	40	43	41	39	38.3	44.7
38.6 36.7 36.1 35.8 -- 34.7 34.4 32.8 32.9 34.0 35.9 38.4 40.2 40.5 42.7 43.3 43.5 42.8 42.1 41.7 40.6 39.9 39.4 38.8																								Diurnal Average		
47.1 46.8 46.1 47.5 -- 47.0 46.1 45.2 43.9 47.4 50.3 50.2 49.8 50.2 50.8 49.5 51.8 52.3 52.1 51.2 48.4 46.0 44.9 47.3																								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 - March 2015



Hourly Maximums

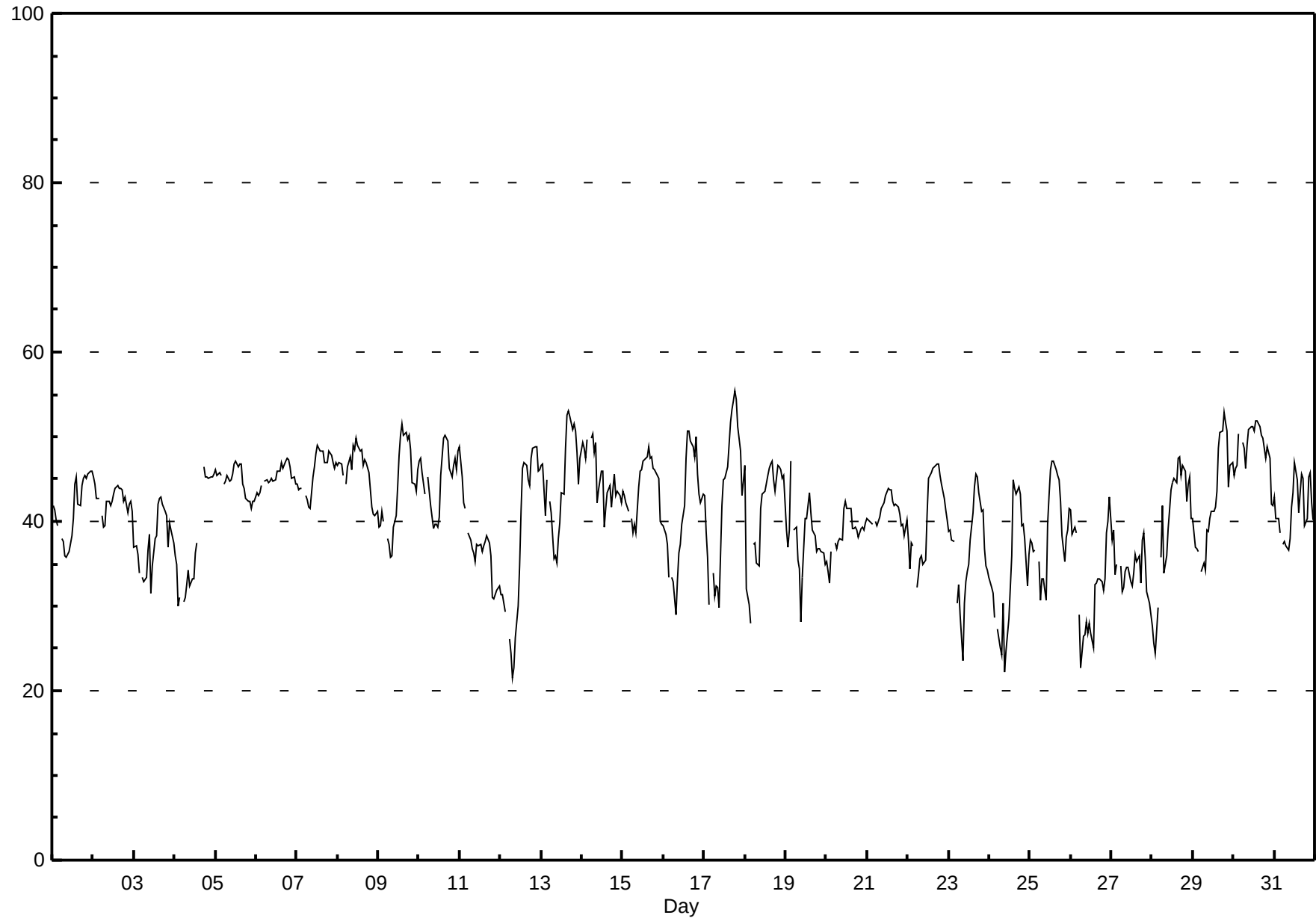
Ozone (O₃) - ppb

Beaverlodge - March 2015

Maximum Value: 55.5 ppb on Mar 17 19:00																								Hours in Service: 744		
Maximum Daily Average: 48.6 ppb on Mar 30																								Hours of Data: 710		
Minimum Value: 22 ppb on Mar 12 08:00																								Hours of Missing Data: 34		
Maximum Diurnal Average: 45.2 ppb at hour 16																								Hours of Calibration: 34		
Monthly Average: 41.07 ppb																								Percent Operational Time: 100.0		
Minimum Daily Average: 32.5 ppb on Mar 26																										
Minimum Diurnal Average: 36.2 ppb at hour 8																										
Percentiles: P ₁ = 24.3 P ₁₀ = 32.5 Q ₁ = 37.1 Median = 41.9 Q ₃ = 45.7 P ₉₀ = 48.3 P ₉₉ = 52.4																										
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-Mar	42	41	40	40	A	38	38	36	36	36	37	38	40	44	45	42	42	44	45	45	45	46	46	46	41.4	46.0
2-Mar	45	44	43	43	A	41	39	40	42	42	42	42	43	44	44	44	44	44	42	43	41	42	42	41	42.5	45.2
3-Mar	37	37	36	34	A	33	33	33	37	39	32	35	38	38	42	43	43	42	41	41	37	40	39	37	37.7	42.9
4-Mar	36	35	30	31	A	31	31	33	34	32	33	33	36	37	C	C	C	46	45	45	45	45	45	46	37.5	46.5
5-Mar	46	45	46	45	A	44	45	45	45	45	46	47	47	46	47	47	44	44	43	42	42	41	42	42	44.7	47.1
6-Mar	43	43	43	44	A	45	45	45	45	45	45	45	46	46	46	47	46	47	47	47	46	45	45	44	45.3	47.4
7-Mar	44	44	44	44	A	43	43	42	42	45	47	48	49	49	48	48	47	47	47	47	48	47	46	47	45.9	49.1
8-Mar	47	47	47	45	A	44	46	48	46	49	49	50	49	48	49	47	47	47	46	44	42	41	41	41	46.0	49.9
9-Mar	39	40	41	40	A	38	37	36	36	39	41	44	48	50	51	50	51	50	50	49	45	44	44	46	43.8	51.5
10-Mar	47	48	46	43	A	45	44	42	39	40	40	39	41	45	50	50	50	49	46	45	47	47	46	48	45.1	50.2
11-Mar	49	45	42	41	A	39	38	37	36	35	37	37	37	36	37	38	38	37	36	31	31	31	32	32	37.2	48.7
12-Mar	31	31	30	29	A	26	24	22	23	26	30	35	41	46	47	47	45	44	47	49	49	49	46	46	37.6	48.9
13-Mar	47	47	41	45	A	42	41	36	36	35	38	40	43	43	49	53	53	52	51	52	51	48	44	48	44.9	53.0
14-Mar	49	49	48	50	A	50	50	48	49	42	44	46	46	39	42	43	44	42	44	46	43	44	43	42	45.3	50.3
15-Mar	44	43	42	41	A	40	39	40	39	44	46	46	47	47	48	49	47	48	46	46	45	45	40	40	44.0	48.8
16-Mar	39	39	37	33	A	33	33	29	33	36	37	40	42	48	51	51	50	49	48	50	46	43	42	43	41.4	50.7
17-Mar	43	39	36	30	A	34	31	32	32	30	42	45	45	46	46	52	53	54	55	54	51	48	43	45	42.9	55.5
18-Mar	47	32	30	28	A	37	37	35	35	42	43	43	44	45	46	47	47	45	44	47	46	46	45	45	41.6	47.2
19-Mar	39	37	39	47	A	39	39	35	34	28	33	40	40	42	43	41	39	38	36	37	37	36	36	35	38.0	47.1
20-Mar	35	34	33	37	A	37	37	38	38	38	41	42	42	42	42	39	39	39	39	38	39	39	39	40	38.6	42.4
21-Mar	40	40	40	40	A	40	40	40	42	42	42	43	44	44	44	42	42	42	42	41	40	40	38	40	41.1	43.8
22-Mar	38	34	37	37	A	32	34	36	36	35	35	41	45	45	46	46	47	47	47	45	44	43	41	40	40.5	46.8
23-Mar	39	39	38	38	A	30	32	29	24	30	33	34	35	38	41	44	46	45	43	41	41	37	35	34	36.8	45.6
24-Mar	33	32	32	29	A	27	25	24	30	22	25	29	32	36	45	44	43	44	43	39	40	38	32	36	34.0	44.9
25-Mar	38	38	37	37	A	35	31	33	33	31	40	43	46	47	47	46	45	45	42	38	35	38	39	41	39.4	47.2
26-Mar	41	38	39	39	A	29	23	26	27	28	27	28	27	25	33	33	33	33	33	32	33	39	40	43	32.5	42.8
27-Mar	38	39	34	35	A	35	32	32	34	34	35	33	32	34	36	35	36	33	38	39	36	32	30	29	34.3	38.9
28-Mar	28	26	24	30	A	36	42	34	36	39	41	44	45	45	45	47	48	45	47	46	42	44	45	40	40.0	47.6
29-Mar	40	37	37	36	A	34	35	34	39	39	40	41	41	42	44	49	50	51	53	52	51	44	47	47	42.7	52.8
30-Mar	45	46	47	50	A	49	49	46	49	51	51	51	51	52	52	51	50	50	49	47	49	47	42	42	48.6	51.9
31-Mar	43	40	40	39	A	37	38	37	37	38	42	43	47	45	41	43	46	45	40	40	45	46	42	40	41.5	47.0
41.1 39.6 38.6 38.7 -- 37.6 37.1 36.2 36.8 37.4 39.1 40.8 42.2 43.1 44.8 45.2 45.2 44.8 44.4 43.9 43.0 42.5 41.3 41.6																								Diurnal Average		
49.4 48.6 47.5 50.3 -- 49.9 50.3 48.2 49.4 50.9 51.3 51.3 50.7 51.9 51.9 52.6 53.2 54.2 55.5 54.5 51.1 48.9 46.5 48.3																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

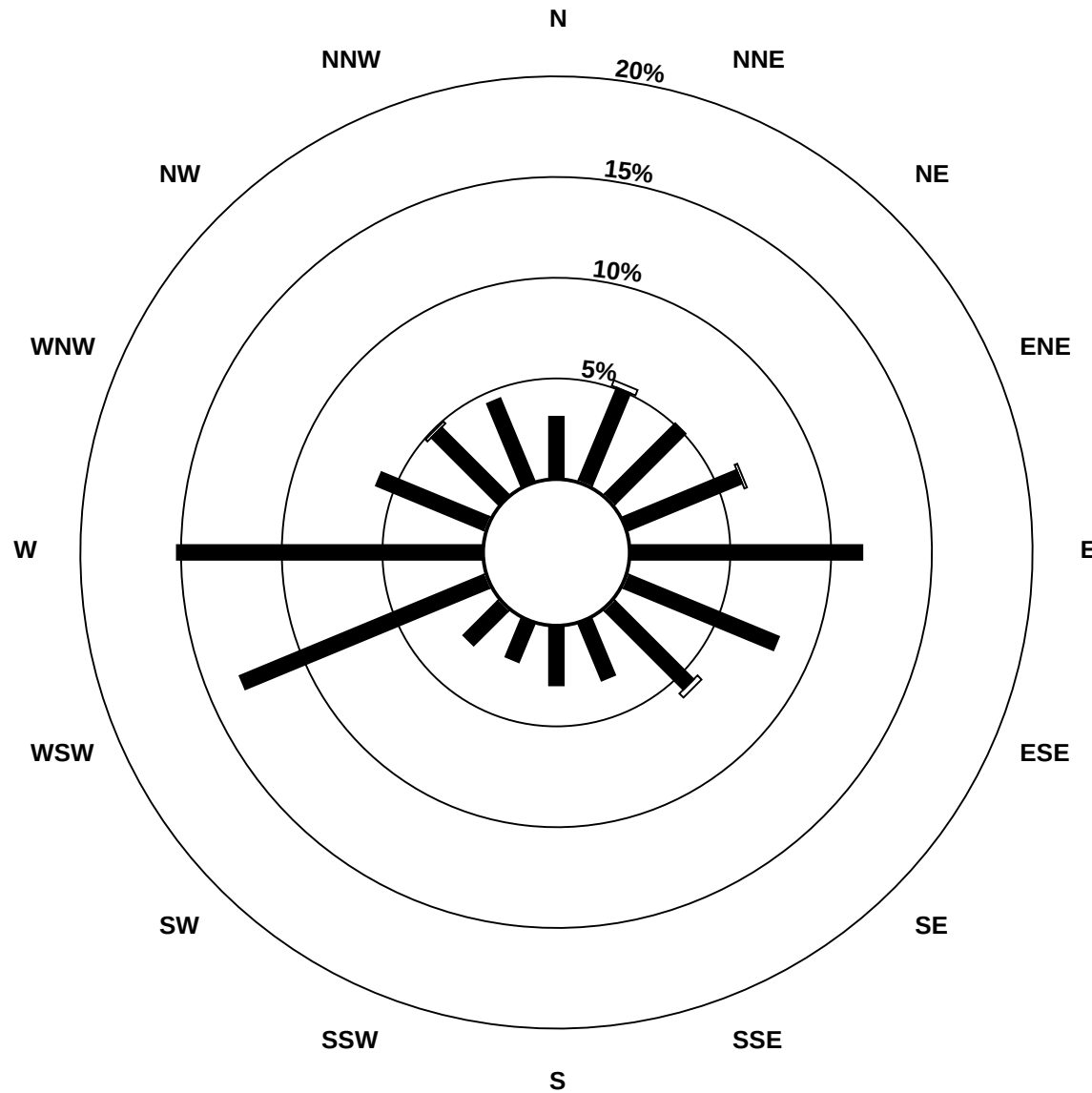
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - March 2015

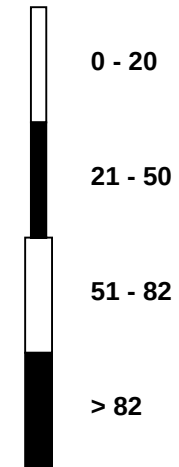


Pollutant Rose

Ozone (O_3) - ppb
Beaverlodge - March 2015



Pollutant Classes (ppb)



Eight Hour Running Averages

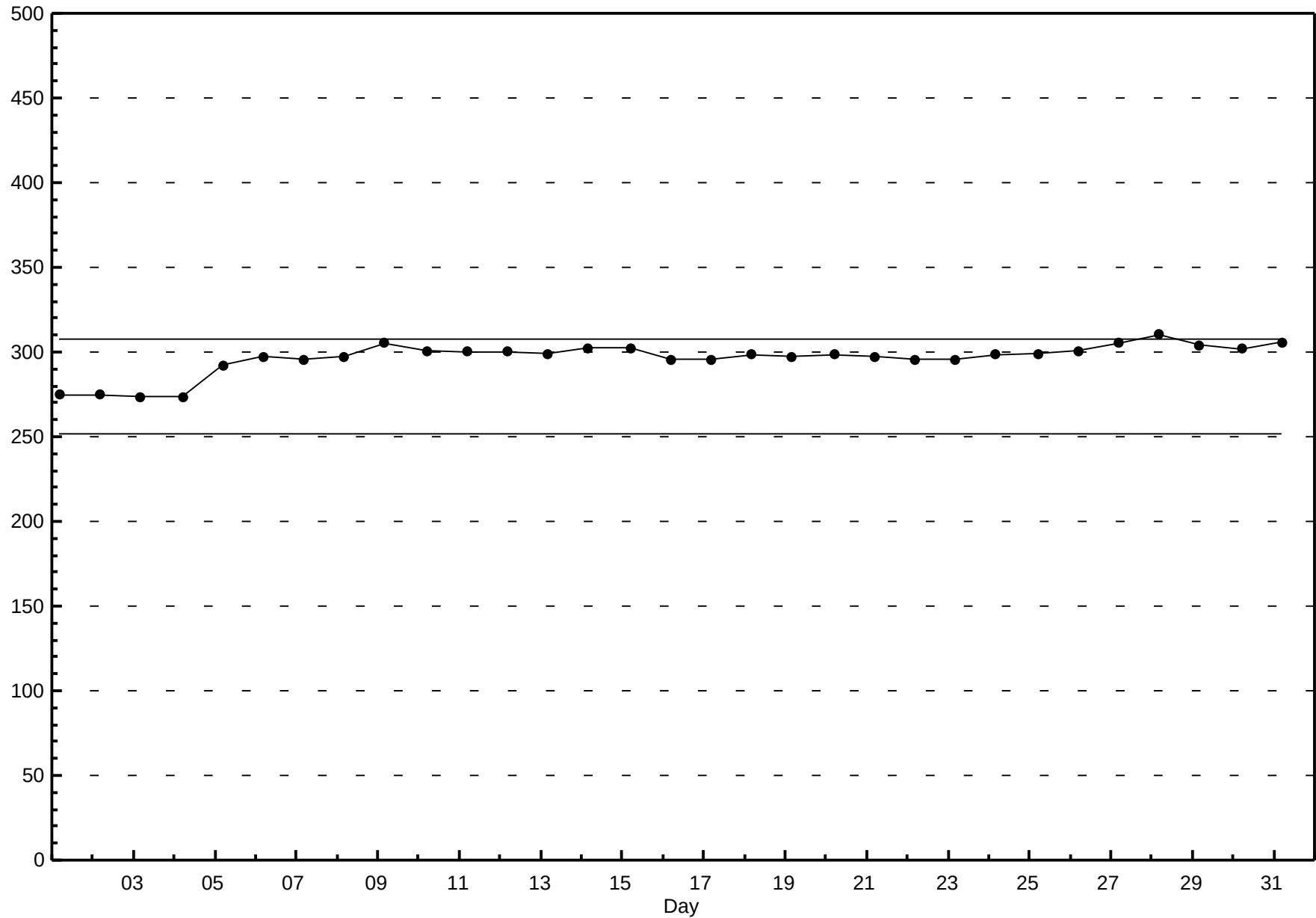
Ozone (O₃) - ppb

Beaverlodge - March 2015

Maximum Value: 49.7 ppb on Mar 30 18:00																				Hours in Service: 744					
Minimum Value: 22.8 ppb on Mar 24 12:00																				Hours of Data: 738					
																				Hours of Missing Data: 6					
Percentiles: P ₁ = 23.9 P ₁₀ = 30.0 Q ₁ = 34.3 Median = 39.1 Q ₃ = 43.4 P ₉₀ = 45.3 P ₉₉ = 48.5																				Hours of Calibration: 6					
																				Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	44	44	43	42	42	40	39	38	37	37	36	36	36	37	38	38	39	39	40	41	42	42	42	43	44.0
2-Mar	44	44	44	44	44	43	42	41	41	40	40	40	40	41	41	42	42	43	43	42	42	42	42	41	44.1
3-Mar	40	39	38	37	37	36	34	34	33	33	32	32	32	33	34	35	36	36	38	38	38	39	38	38	39.7
4-Mar	37	36	34	34	33	32	31	31	30	28	29	29	29	30	30	29	N	N	N	N	N	N	44	44	44.0
5-Mar	44	44	44	44	44	44	44	44	44	44	43	44	44	44	45	45	45	45	44	43	43	42	42	41	44.6
6-Mar	41	41	41	41	41	42	42	43	43	43	43	43	43	44	44	44	44	44	45	45	45	45	44	44	44.9
7-Mar	43	43	42	42	42	42	41	41	41	41	41	41	42	43	43	44	45	46	46	47	46	46	46	46	46.6
8-Mar	46	45	45	45	45	44	44	44	44	44	44	45	45	46	46	46	46	45	45	44	43	43	42	41	45.7
9-Mar	40	40	39	39	39	39	38	37	37	37	36	37	38	39	41	43	45	46	48	48	48	47	46	45	48.0
10-Mar	45	44	43	43	43	43	43	42	41	41	40	40	40	40	40	41	43	44	44	45	46	46	46	46	46.3
11-Mar	46	45	45	44	44	43	41	40	38	37	36	36	36	36	36	36	36	36	36	35	34	34	33	32	45.6
12-Mar	31	30	30	29	29	28	27	26	25	24	23	24	26	28	31	34	37	39	41	43	45	45	45	45	45.0
13-Mar	45	45	45	44	43	43	41	40	38	36	36	35	36	36	37	39	41	43	45	47	47	48	48	47	47.8
14-Mar	47	47	46	46	45	46	46	45	44	42	40	38	38	35	34	34	34	35	36	37	38	40	41	41	47.0
15-Mar	41	41	42	41	41	40	40	39	38	38	39	39	40	41	43	44	45	46	46	46	45	45	44	43	46.1
16-Mar	42	40	39	38	37	36	35	33	32	31	31	32	33	35	37	39	42	43	44	45	46	46	45	44	45.7
17-Mar	43	42	39	36	35	33	30	28	25	24	25	29	30	32	35	38	42	45	47	48	49	49	49	47	49.3
18-Mar	45	42	39	36	34	32	32	31	29	30	32	35	36	37	39	40	42	44	43	44	44	43	42	41	45.4
19-Mar	39	37	35	34	33	33	32	30	30	30	29	29	30	30	31	34	35	37	38	38	38	37	36	36	39.1
20-Mar	35	35	34	34	34	34	34	34	35	35	36	37	38	38	39	39	39	40	39	39	39	38	38	38	39.5
21-Mar	39	39	39	39	39	39	39	39	39	40	40	41	41	41	42	42	42	42	42	42	41	41	40	39	42.2
22-Mar	38	37	36	35	35	34	33	32	33	33	33	34	35	37	38	40	41	43	44	45	45	45	44	43	45.0
23-Mar	42	41	40	38	37	34	33	29	26	25	24	24	25	27	28	31	34	36	38	39	39	39	39	38	42.2
24-Mar	36	35	34	32	31	30	28	27	26	24	23	23	24	25	27	30	32	35	37	38	39	39	38	37	39.1
25-Mar	36	35	34	34	33	33	32	31	30	29	29	30	31	34	36	38	41	43	43	43	41	40	39	38	43.4
26-Mar	37	37	37	37	38	36	34	31	29	27	25	24	24	24	25	26	27	28	28	29	30	31	32	33	37.6
27-Mar	33	33	33	34	34	34	33	32	32	31	31	31	31	30	31	31	31	31	32	33	33	32	32	31	34.4
28-Mar	30	29	28	26	25	25	27	27	28	30	33	35	36	38	39	41	42	43	44	44	44	43	43	42	43.9
29-Mar	41	40	39	38	37	36	35	33	33	32	33	33	34	36	37	39	41	43	44	46	47	47	47	47	47.2
30-Mar	46	46	45	45	44	45	45	45	45	45	46	46	47	47	48	49	50	50	49	49	48	47	45	44	49.7
31-Mar	42	40	39	37	36	35	34	35	34	35	35	36	37	38	39	39	41	41	41	41	40	40	41	40	42.0
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Beaverlodge - March 2015

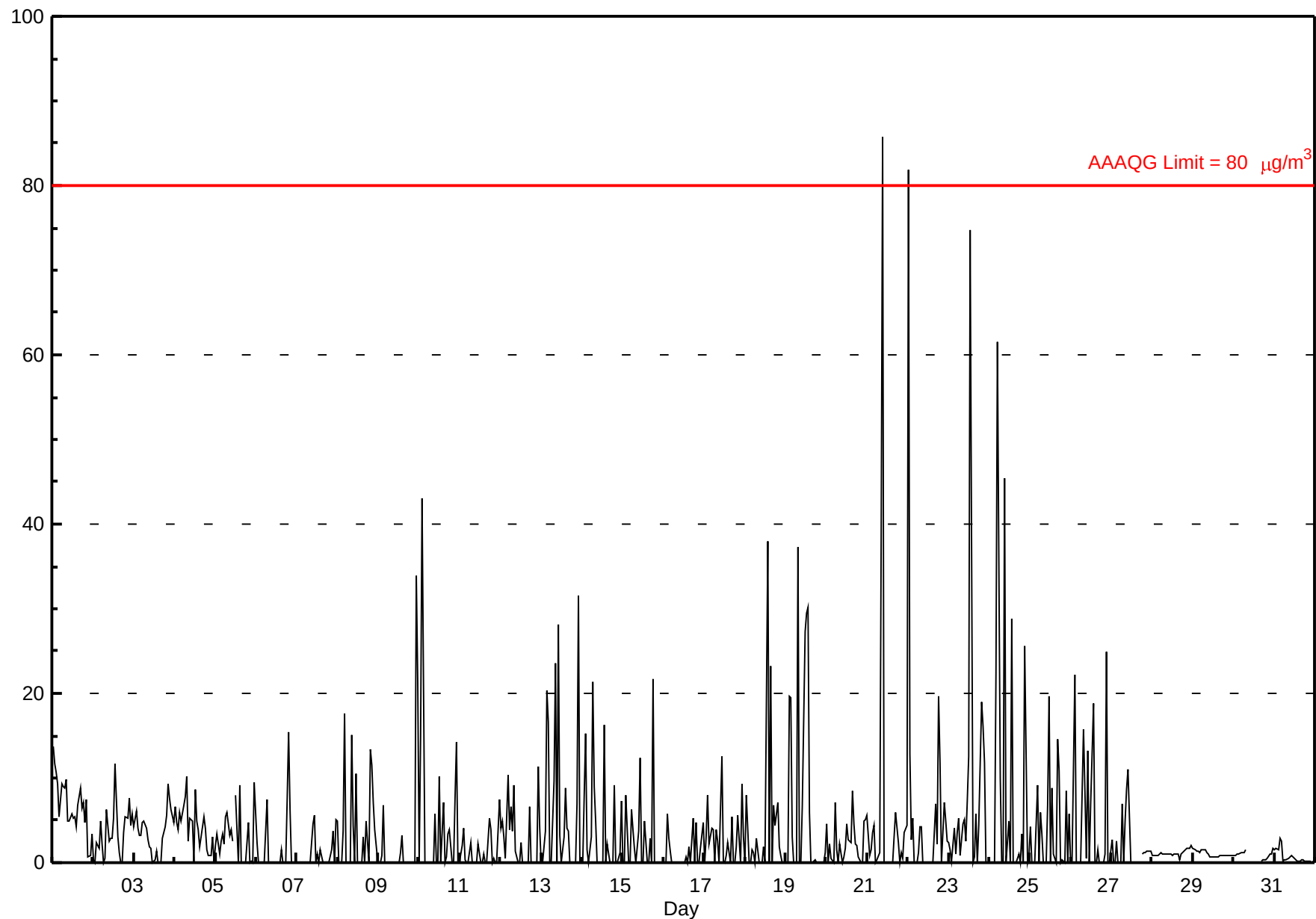


Hourly Averages

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

Beaverlodge - March 2015

Number of Exceedences: 1-hr: 2 24-hr: 0 Maximum Value: 85.8 µg/m³ on Mar 21 10:00 Minimum Value: 0 µg/m³ on Mar 2 02:00 Maximum Diurnal Average: 8.8 µg/m³ at hour 14 Monthly Average: 3.78 µg/m³																								Maximum Daily Average: 8.5 µg/m³ on Mar 24 Minimum Daily Average: 0.7 µg/m³ on Mar 31 Minimum Diurnal Average: 1.9 µg/m³ at hour 15 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 1.0 Q ₃ = 4.6 P ₉₀ = 9.1 P ₉₉ = 34.9																								Hours in Service: 744 Hours of Data: 730 Hours of Missing Data: 14 Hours of Calibration: 13 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-Mar	14	12	11	9	5	9	9	9	10	5	5	6	5	5	4	7	9	6	7	5	7	1	1	3	6.9	13.7																							
2-Mar	0	0	2	2	5	2	0	0	6	3	3	3	5	12	3	1	0	0	4	5	5	8	4	6	3.3	11.7																							
3-Mar	4	6	4	3	3	5	5	4	3	2	2	0	0	1	0	0	0	3	4	6	9	8	6	5	3.5	9.3																							
4-Mar	7	5	4	6	5	7	8	10	3	5	5	0	9	5	4	2	4	5	4	2	1	1	3	0	4.3	10.2																							
5-Mar	2	3	1	3	3	2	5	6	3	4	3	M	8	0	9	0	0	0	0	5	0	0	0	9	2.9	9.4																							
6-Mar	2	0	0	0	0	0	7	0	0	0	0	0	0	0	2	0	0	0	7	15	6	0	0	0	1.7	15.4																							
7-Mar	0	0	0	0	0	0	0	0	0	5	6	0	1	0	2	0	0	0	0	0	2	4	0	5	1.0	5.5																							
8-Mar	5	0	0	4	18	0	0	0	15	4	0	10	0	0	0	3	0	5	0	13	12	7	4	0	4.2	17.6																							
9-Mar	0	0	1	7	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	34	21	0	2.8	33.9																							
10-Mar	0	15	43	0	0	0	0	0	0	6	0	0	10	0	7	0	1	3	4	0	0	8	14	0	4.6	43.1																							
11-Mar	0	2	4	0	0	0	2	0	0	0	0	2	0	0	1	0	0	5	4	0	0	0	0	7	1.2	7.5																							
12-Mar	4	5	3	0	10	4	7	4	9	1	0	0	2	0	0	0	0	7	0	0	0	0	11	4	3.0	11.3																							
13-Mar	0	0	4	20	17	0	0	10	24	0	28	3	0	3	9	4	4	0	0	0	0	7	31	0	6.8	31.5																							
14-Mar	0	8	15	1	0	3	21	9	5	0	0	0	0	16	0	2	0	0	0	9	0	0	1	7	4.1	21.4																							
15-Mar	0	0	8	0	0	6	4	2	0	4	12	0	0	5	0	0	3	0	22	0	0	0	0	0	2.7	21.7																							
16-Mar	0	0	6	3	1	0	0	0	0	0	0	0	0	1	0	2	0	5	0	5	0	0	2	5	1.2	5.8																							
17-Mar	0	3	8	2	4	4	0	4	2	0	12	0	0	1	2	0	5	0	0	2	6	0	9	3	2.9	12.5																							
18-Mar	0	8	0	0	2	1	0	3	0	0	0	2	0	38	0	23	0	7	4	7	2	1	0	0	4.1	38.0																							
19-Mar	0	0	20	20	3	0	0	37	0	0	7	27	30	30	6	0	0	0	0	0	0	0	0	1	7.5	37.3																							
20-Mar	5	0	2	0	0	7	1	0	2	0	1	2	5	3	2	9	5	2	2	1	0	0	5	5	2.4	8.5																							
21-Mar	6	1	1	4	4	0	0	1	39	86	0	0	0	0	0	0	3	6	2	0	1	1	3	4	6.8	85.8																							
22-Mar	82	13	3	5	0	0	1	4	4	0	0	0	0	0	0	0	7	2	20	12	0	7	5	3	7.0	81.9																							
23-Mar	2	2	0	4	1	4	5	1	5	5	3	7	13	75	0	1	6	0	4	19	16	12	0	0	7.6	74.7																							
24-Mar	0	0	0	0	22	61	10	0	0	45	0	5	0	29	0	0	0	1	0	3	0	26	0	1	8.5	61.5																							
25-Mar	4	0	0	0	9	0	6	3	0	0	7	20	0	9	1	0	15	11	0	0	0	8	0	6	4.1	19.6																							
26-Mar	0	0	22	0	0	0	0	16	8	1	13	0	7	19	0	0	2	0	0	0	1	25	0	0	4.7	24.9																							
27-Mar	3	0	0	3	0	0	7	0	5	9	11	0	0	C	C	C	C	C	1	1	1	1	1	1	2.3	10.9																							
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	2	2	2	2	2	1.1	2.0																							
29-Mar	2	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6																							
30-Mar	1	1	1	1	1	1	1	2	C	C	C	C	C	C	C	C	0	0	0	0	1	1	1	2	--	1.7																							
31-Mar	1	2	2	3	3	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.9																							
4.7 2.8 5.4 3.3 3.9 3.9 3.4 4.1 4.8 6.2 4.0 3.1 3.2 8.8 1.9 2.0 2.1 2.4 3.0 3.6 2.4 4.1 4.5 3.3 Diurnal Average																																																	
81.9 14.8 43.1 20.3 22.4 61.5 21.4 37.3 38.6 85.8 28.2 27.3 29.5 74.7 9.1 23.3 14.6 10.8 21.7 19.0 16.1 25.5 33.9 21.3 Diurnal Maximum																																																	
C - Calibration 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

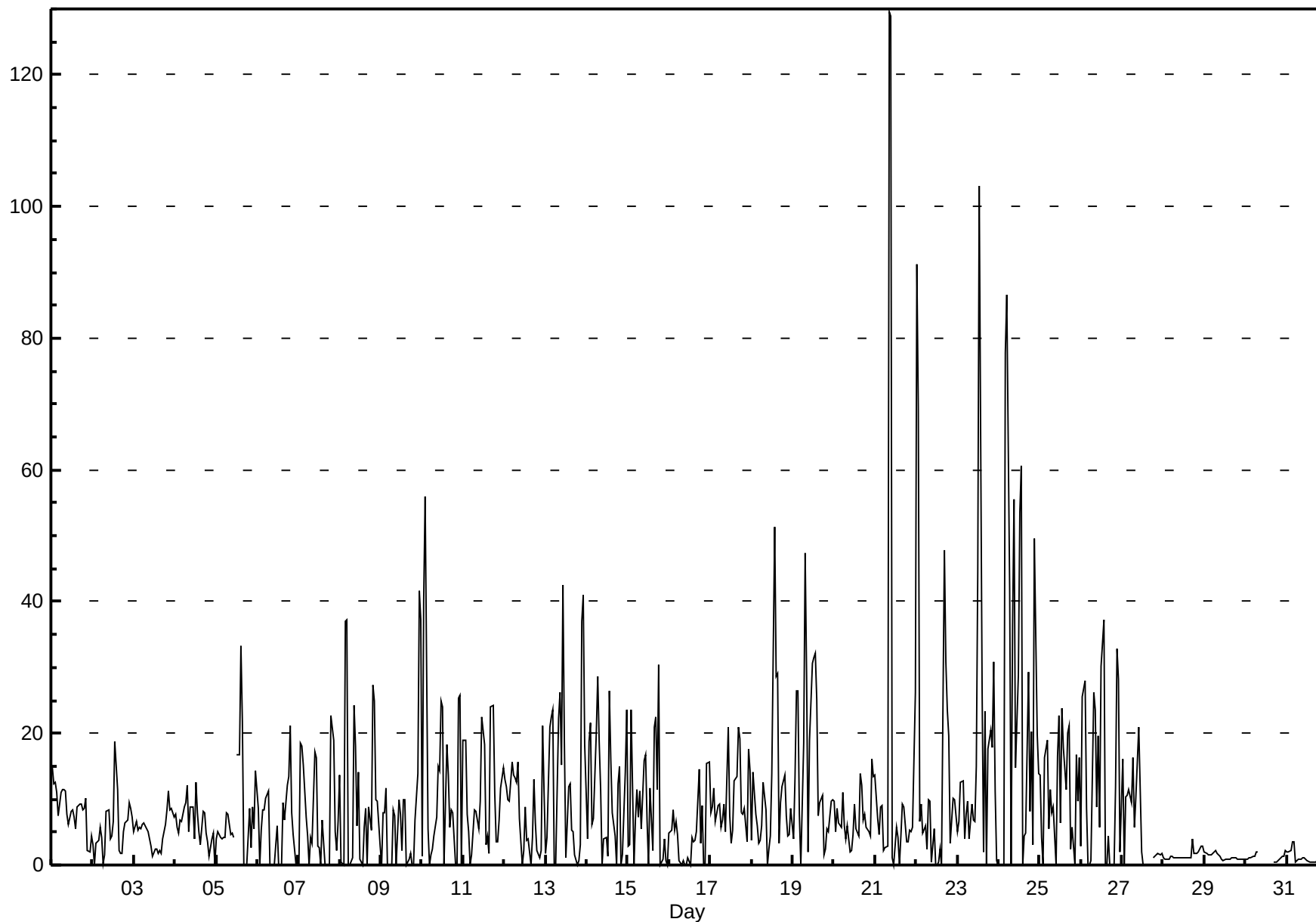
Beaverlodge - March 2015

Maximum Value: 129.5 µg/m³ on Mar 21 09:00																								Maximum Daily Average: 25.4 µg/m³ on Mar 24						Hours in Service: 744	
Minimum Value: 0 µg/m³ on Mar 2 02:00																								Minimum Daily Average: 1.0 µg/m³ on Mar 31						Hours of Data: 730	
Maximum Diurnal Average: 15.5 µg/m³ at hour 14																								Minimum Diurnal Average: 5.6 µg/m³ at hour 21						Hours of Missing Data: 14	
Monthly Average: 9.41 µg/m³																								Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 1.6 Median = 5.7 Q ₃ = 11.7 P ₉₀ = 22.5 P ₉₉ = 62.7						Hours of Calibration: 13	
																								Percent Operational Time: 99.9							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
1-Mar	15	12	13	11	7	11	11	12	11	8	6	8	8	7	5	9	9	9	8	9	10	2	2	4	8.7	14.9					
2-Mar	3	0	3	4	6	4	0	2	8	8	4	4	7	19	11	2	2	2	5	6	7	9	9	7	5.5	18.7					
3-Mar	5	7	5	6	6	6	6	6	5	4	3	1	2	2	2	2	4	6	8	11	8	9	7	5.2	11.2						
4-Mar	8	6	5	7	7	9	10	12	5	9	9	4	12	8	5	3	8	8	5	3	1	4	5	0	6.3	12.5					
5-Mar	4	5	4	4	4	4	8	8	5	5	4	M	17	17	33	22	0	0	0	9	3	9	5	14	8.0	33.3					
6-Mar	9	0	5	8	8	10	11	0	0	0	0	6	0	0	0	9	7	12	14	21	8	5	0	0	5.6	21.2					
7-Mar	0	19	18	15	7	4	0	4	3	17	16	3	3	0	7	0	0	0	0	23	19	5	2	7	7.2	22.8					
8-Mar	14	0	0	37	37	0	0	1	24	18	6	14	1	0	6	9	0	9	5	27	25	10	10	3	10.7	37.2					
9-Mar	0	8	8	12	0	0	0	8	8	0	10	8	2	10	10	0	1	2	0	0	7	14	42	37	7.7	41.6					
10-Mar	1	40	56	6	0	2	2	4	7	15	14	25	24	0	18	14	6	8	8	0	0	25	26	0	12.6	55.9					
11-Mar	19	19	8	5	0	2	8	8	7	5	10	23	18	3	5	2	24	24	11	3	4	7	12	15	10.0	24.1					
12-Mar	13	12	10	10	16	14	13	12	16	7	0	2	9	4	4	0	4	13	6	2	1	2	21	11	8.4	21.2					
13-Mar	2	4	21	22	24	0	0	22	26	15	43	19	1	12	12	5	5	2	0	1	3	37	41	18	14.0	42.6					
14-Mar	4	19	22	6	7	20	29	19	12	0	4	4	1	26	16	8	4	0	12	15	0	1	14	24	11.2	28.7					
15-Mar	3	3	24	0	7	12	7	11	6	16	17	7	0	12	2	21	23	11	30	0	1	4	1	0	9.0	30.4					
16-Mar	5	5	8	5	7	5	1	0	1	0	0	1	0	4	3	4	5	14	3	9	0	0	16	16	4.7	15.6					
17-Mar	8	9	12	7	9	9	6	7	9	5	21	8	3	5	13	13	21	19	8	8	9	3	18	14	10.1	21.0					
18-Mar	4	14	8	6	3	4	6	12	8	0	2	4	14	51	29	29	3	9	12	14	8	4	5	9	10.8	51.4					
19-Mar	4	13	26	26	8	0	19	47	29	2	19	31	31	32	25	8	10	11	2	2	5	5	10	10	15.6	47.3					
20-Mar	10	5	9	6	6	11	6	4	6	2	2	5	9	6	5	14	12	7	8	6	5	4	16	13	7.3	16.1					
21-Mar	14	7	5	9	9	2	3	3	130	129	1	0	6	4	0	4	9	9	4	3	5	5	6	26	16.3	129.5					
22-Mar	91	69	7	9	5	6	2	10	10	0	6	0	0	0	2	0	48	31	24	20	3	10	10	7	15.5	91.2					
23-Mar	5	7	12	13	4	8	10	4	9	7	7	15	45	103	26	2	23	0	18	21	18	31	11	1	16.6	103.1					
24-Mar	0	0	0	0	78	87	42	0	36	56	15	29	54	61	0	4	5	29	8	20	3	50	20	14	25.4	86.5					
25-Mar	14	4	0	16	19	5	11	8	9	0	16	23	6	24	18	12	20	21	2	6	0	17	10	16	11.6	23.8					
26-Mar	3	26	28	9	0	0	1	26	24	9	20	6	30	37	0	0	4	0	0	0	12	33	28	2	12.4	37.2					
27-Mar	16	0	10	11	11	10	16	6	10	16	21	2	0	C	C	C	C	C	1	1	2	2	2	2	7.3	20.8					
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	2	2	2	2	3	3	1.5	3.9					
29-Mar	2	2	2	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.1					
30-Mar	1	1	1	1	1	1	2	2	C	C	C	C	C	C	C	C	C	0	0	0	1	1	1	2	--	2.2					
31-Mar	2	2	2	4	4	0	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	1.0	3.6					
8.9 10.3 10.7 8.9 9.7 8.0 7.6 8.5 14.2 11.9 9.3 8.7 10.2 15.5 9.0 6.8 8.6 8.7 6.6 7.8 5.6 10.1 11.4 9.2																								Diurnal Average							
91.2 69.4 55.9 37.1 77.8 86.5 41.8 47.3 129.5 128.9 42.6 30.7 53.6 103.1 33.3 29.0 47.7 30.9 30.4 27.3 24.8 49.6 41.6 37.1																								Diurnal Maximum							
C - Calibration M - Maintenance																															

Hourly Maximums

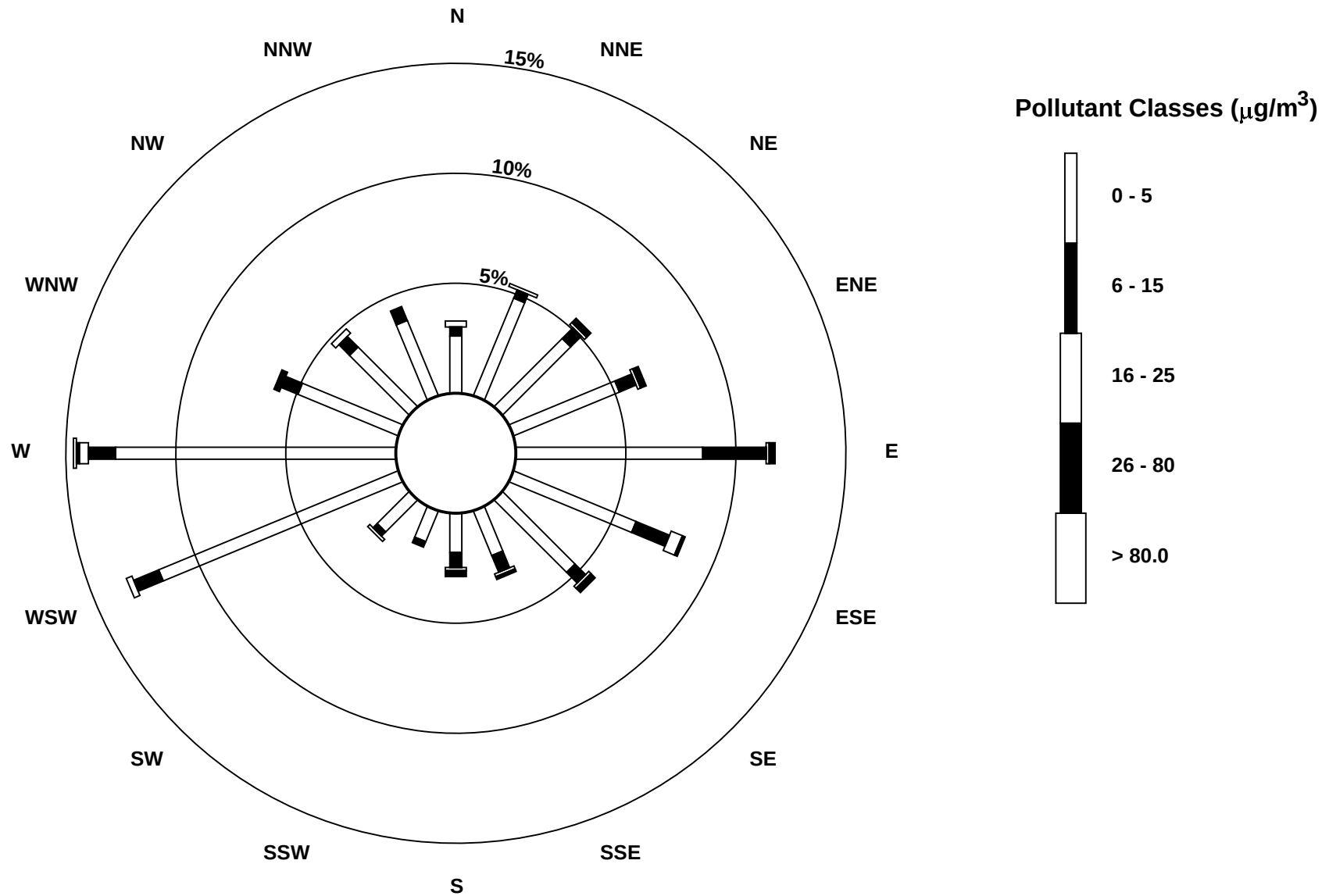
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Beaverlodge - March 2015



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Beaverlodge - March 2015



Hourly Averages

External Temperature (ET) - °C

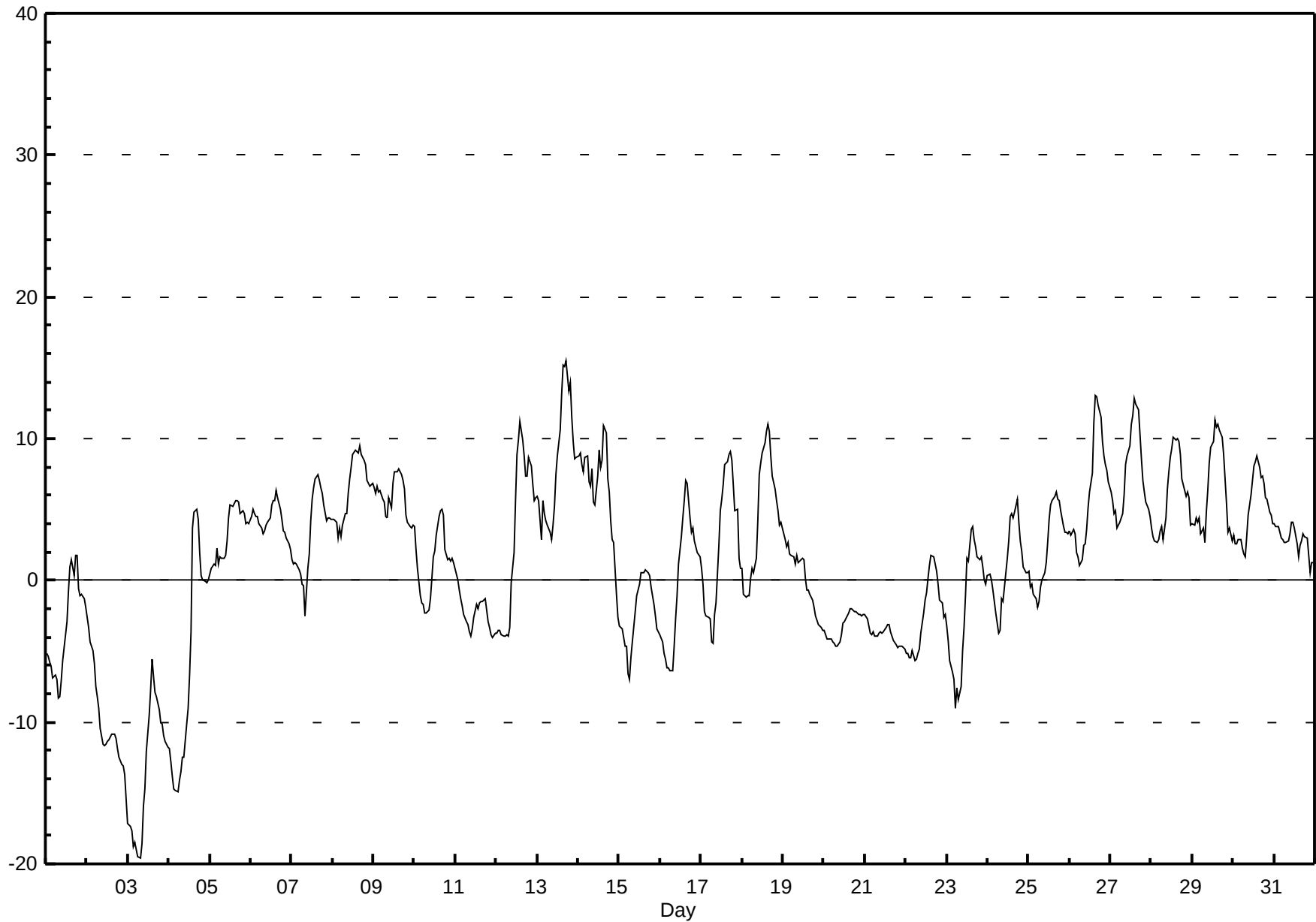
Beaverlodge - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 15.5 °C on Mar 13 18:00 Maximum Daily Average: 8.3 °C on Mar 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: -20 °C on Mar 3 08:00 Maximum Diurnal Average: 5.1 °C at hour 16 Monthly Average: 1.24 °C										Minimum Daily Average: -13.2 °C on Mar 3 Minimum Diurnal Average: -2.0 °C at hour 8 Percentiles: P ₁ = -17.3 P ₁₀ = -5.8 Q ₁ = -2.6 Median = 2.0 Q ₃ = 5.3 P ₉₀ = 8.4 P ₉₉ = 13.0																
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-Mar	-5	-5	-6	-6	-7	-7	-7	-8	-8	-7	-6	-4	-3	-1	1	2	0	2	2	-1	-1	-1	-1	-2	-3.3	1.8
2-Mar	-3	-3	-4	-5	-6	-7	-8	-9	-10	-12	-12	-12	-11	-11	-11	-11	-11	-11	-12	-13	-13	-13	-14	-15	-9.9	-2.6
3-Mar	-17	-17	-18	-19	-18	-19	-20	-20	-19	-16	-15	-12	-10	-8	-6	-7	-8	-8	-9	-10	-10	-11	-11	-12	-13.2	-5.6
4-Mar	-12	-13	-14	-15	-15	-15	-14	-14	-12	-13	-10	-9	-7	-4	4	5	5	4	2	0	0	0	0	0	-6.0	5.1
5-Mar	0	1	1	1	2	1	2	2	2	2	3	4	5	5	5	6	6	6	5	5	5	4	4	4	3.3	5.7
6-Mar	4	5	5	4	5	4	4	3	3	4	4	4	5	6	6	6	6	5	4	3	3	3	3	2	4.3	6.3
7-Mar	1	1	1	1	1	0	0	0	-2	1	2	4	6	7	7	7	7	7	6	5	4	4	4	4	3.3	7.5
8-Mar	4	4	4	3	4	3	4	5	5	6	7	8	9	9	9	9	10	9	8	8	7	7	7	7	6.5	9.5
9-Mar	7	6	7	6	6	6	6	5	4	6	5	7	8	8	8	8	7	7	6	5	4	4	4	4	5.9	7.8
10-Mar	4	2	1	-1	-2	-2	-2	-2	-2	-1	0	2	2	3	5	5	5	5	2	1	2	1	2	1	1.2	5.1
11-Mar	1	0	-1	-1	-2	-2	-3	-3	-4	-4	-3	-3	-2	-2	-2	-1	-2	-1	-2	-3	-3	-4	-4	-4	-2.3	0.8
12-Mar	-4	-4	-3	-4	-4	-4	-4	-4	-3	0	2	6	9	10	11	10	9	7	7	9	8	7	6	6	3.0	11.2
13-Mar	6	6	3	6	5	4	4	3	3	4	5	7	9	11	13	15	15	15	13	14	12	10	9	9	8.3	15.5
14-Mar	9	9	8	8	9	9	7	7	8	6	5	7	9	8	8	11	10	7	6	4	3	3	-1	-3	6.6	10.9
15-Mar	-3	-3	-3	-5	-5	-7	-7	-5	-4	-2	-1	-1	0	1	1	1	1	1	0	0	-2	-2	-3	-4	-2.3	0.7
16-Mar	-4	-4	-5	-6	-6	-6	-6	-6	-5	-3	-1	1	3	4	6	7	7	4	3	4	3	2	2	2	-0.2	7.1
17-Mar	1	0	-2	-3	-3	-3	-4	-4	-2	-2	2	5	6	7	8	8	9	9	8	7	5	5	2	1	2.5	9.1
18-Mar	1	-1	-1	-1	-1	0	1	1	2	4	7	8	9	10	10	11	10	9	7	6	6	5	4	4	4.6	11.0
19-Mar	3	3	2	3	2	2	2	1	2	1	1	2	1	0	-1	-1	-1	-1	-2	-2	-3	-3	-3	-3	0.2	3.3
20-Mar	-3	-4	-4	-4	-4	-4	-4	-5	-5	-4	-4	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-3.2	-2.0
21-Mar	-2	-3	-3	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-3	-4	-4	-4	-5	-5	-5	-5	-5	-5	-3.8	-2.4
22-Mar	-5	-5	-5	-5	-5	-6	-6	-5	-5	-4	-2	-1	-1	0	1	2	2	1	1	0	-1	-2	-3	-2	-2.4	1.8
23-Mar	-3	-4	-6	-6	-7	-9	-8	-8	-7	-5	-3	-1	2	1	4	4	3	2	2	1	2	1	0	0	-2.0	3.8
24-Mar	0	0	0	-1	-1	-2	-4	-4	-1	-1	0	2	3	4	5	4	5	6	4	3	2	1	1	1	1.1	5.7
25-Mar	1	0	0	-1	-1	-2	-1	-1	0	1	1	3	4	5	6	6	6	6	6	5	4	3	3	3	2.3	6.2
26-Mar	3	3	4	3	2	2	1	1	2	3	4	5	6	8	11	13	13	12	12	10	9	8	8	7	6.2	13.0
27-Mar	6	6	5	5	4	4	4	5	6	8	9	9	11	12	13	12	12	10	9	7	6	6	5	5	7.4	12.9
28-Mar	4	3	3	3	3	4	4	3	4	6	8	9	9	10	10	10	10	9	7	6	6	6	6	4	6.1	10.1
29-Mar	4	4	4	4	4	3	4	3	5	6	8	9	10	11	11	11	11	10	9	7	5	3	4	3	6.4	11.3
30-Mar	3	3	3	3	3	2	2	2	3	5	6	7	8	8	9	8	7	7	7	6	6	5	5	4	5.0	8.8
31-Mar	4	4	4	3	3	3	3	3	3	3	4	4	4	3	2	2	3	3	3	3	2	1	1	1	2.8	4.1
0.2 -0.3 -0.7 -1.1 -1.3 -1.7 -1.8 -2.0 -1.4 -0.4 0.8 2.1 3.2 3.8 4.8 5.1 4.9 4.4 3.5 2.7 2.0 1.5 0.9 0.6 Diurnal Average																										
8.8 9.0 8.2 7.6 8.6 8.8 7.0 6.6 7.8 8.2 8.7 9.4 11.0 11.7 13.1 15.2 15.1 15.5 13.4 13.9 11.6 9.8 8.6 8.7 Diurnal Maximum																										

Hourly Averages

External Temperature (ET) - °C

Beaverlodge - March 2015



Hourly Averages

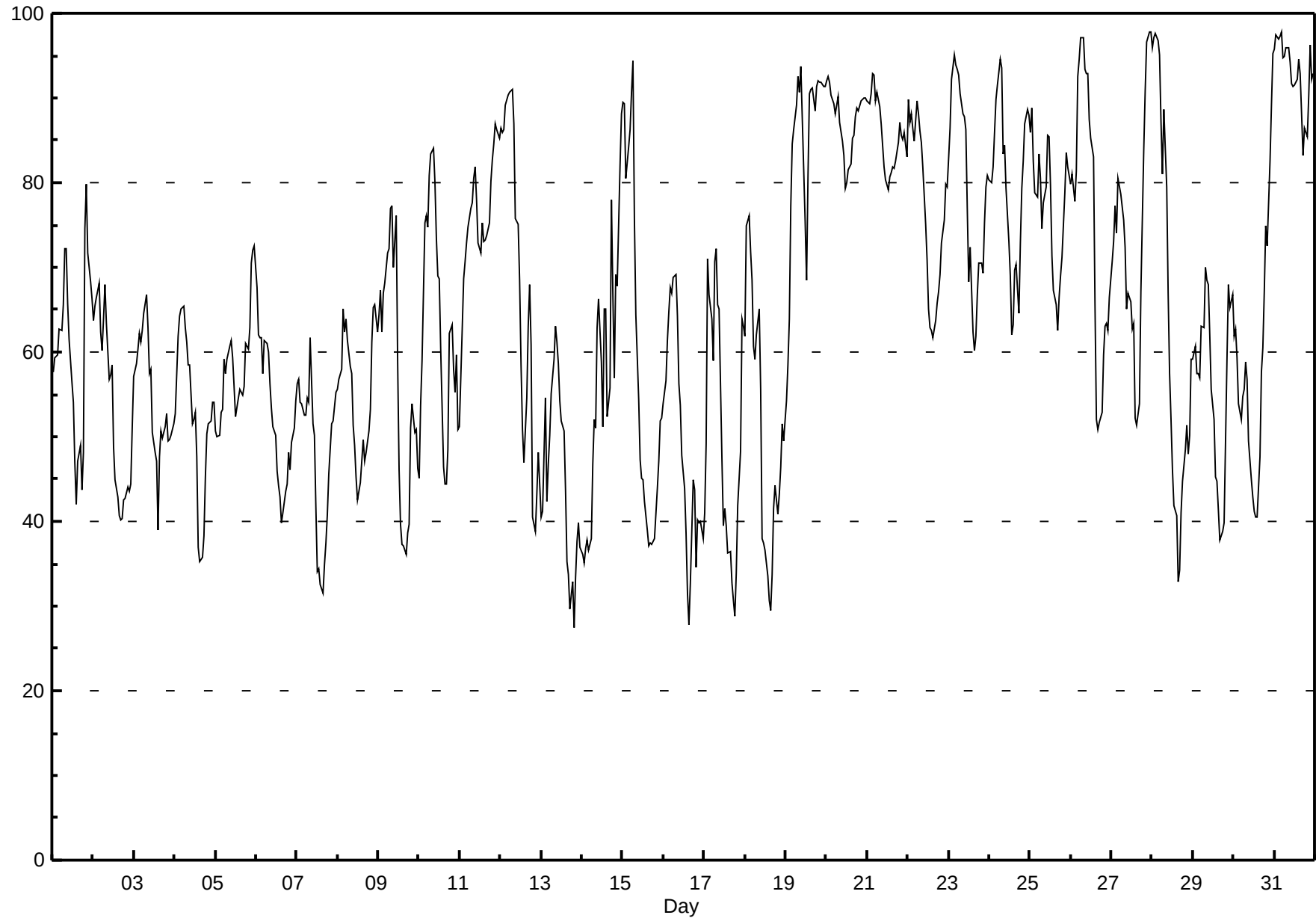
Relative Humidity (RH) - %

Beaverlodge - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 97.9 % on Mar 27 23:00 Maximum Daily Average: 92.9 % on Mar 31																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 28 % on Mar 13 20:00 Maximum Diurnal Average: 74.9 % at hour 8 Monthly Average: 64.54 %												Minimum Daily Average: 45.0 % on Mar 13 Minimum Diurnal Average: 51.9 % at hour 16 Percentiles: P ₁ = 31.5 P ₁₀ = 40.6 Q ₁ = 50.8 Median = 62.9 Q ₃ = 80.5 P ₉₀ = 89.9 P ₉₉ = 97.1														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	58	59	60	60	63	63	66	72	72	66	62	56	54	47	42	47	49	44	48	75	80	72	68	66	60.3	79.8
2-Mar	64	65	66	68	62	60	64	68	63	57	57	59	49	45	43	41	40	40	43	43	44	43	44	51	53.3	68.1
3-Mar	57	59	60	62	61	63	65	67	63	57	58	51	48	47	39	48	51	50	51	53	49	50	50	52	54.5	66.9
4-Mar	53	57	62	64	65	65	63	61	58	58	52	52	53	48	37	35	36	38	45	50	52	52	54	54	52.7	65.4
5-Mar	51	50	50	53	53	59	57	59	61	61	59	56	52	55	56	55	55	56	61	60	63	71	72	73	58.3	72.6
6-Mar	68	62	62	62	57	61	61	60	56	53	51	50	46	44	43	40	41	44	44	48	46	49	51	54	52.3	67.6
7-Mar	56	57	54	54	53	52	55	54	62	52	50	42	34	34	33	32	35	37	41	46	52	52	54	55	47.7	61.7
8-Mar	56	57	58	65	62	64	61	58	57	51	49	45	43	45	47	50	47	48	51	53	61	65	66	62	55.1	65.6
9-Mar	64	67	62	67	68	72	72	77	77	70	76	59	46	40	37	37	36	39	40	51	54	51	51	46	56.7	77.2
10-Mar	45	54	59	75	76	75	81	83	84	80	73	69	69	60	46	44	44	49	62	63	58	55	60	51	63.2	84.0
11-Mar	51	63	69	71	73	75	77	78	81	82	78	73	72	75	73	73	74	75	80	83	85	87	86	85	75.7	86.9
12-Mar	87	86	86	89	90	91	91	91	87	76	75	69	59	51	47	55	63	68	61	41	39	43	48	44	68.1	91.0
13-Mar	41	41	55	42	47	50	55	59	63	61	59	54	52	51	44	35	34	30	33	28	33	38	40	37	45.0	63.1
14-Mar	36	35	37	38	37	38	47	52	51	63	66	59	51	65	65	52	56	78	67	57	69	68	82	88	56.5	88.2
15-Mar	90	89	81	84	86	91	94	76	64	54	47	45	45	42	39	37	38	37	38	38	44	47	52	52	58.8	94.4
16-Mar	54	57	61	65	68	67	69	69	64	56	54	48	44	39	31	28	33	45	44	35	40	40	40	38	49.5	69.2
17-Mar	41	49	71	67	64	59	71	72	66	65	47	39	42	40	36	36	33	31	29	34	42	48	64	63	50.4	72.2
18-Mar	62	75	76	72	69	61	59	62	65	56	38	37	37	34	31	30	34	42	44	41	43	46	52	49	50.5	76.1
19-Mar	54	59	64	77	85	86	89	93	91	94	88	76	68	81	90	91	91	89	91	92	92	92	91	91	83.9	93.7
20-Mar	92	93	92	90	89	88	89	90	87	85	83	79	80	82	82	85	86	88	89	88	90	90	90	90	87.4	92.6
21-Mar	90	89	91	93	93	90	91	89	87	84	82	80	79	81	81	82	82	83	85	87	86	85	86	83	85.7	92.9
22-Mar	90	87	88	86	85	90	88	86	85	82	75	71	65	63	63	62	64	66	67	69	73	76	80	79	76.6	89.8
23-Mar	83	86	92	95	94	93	93	91	88	88	86	77	68	72	62	60	62	67	70	71	69	75	79	81	79.3	95.1
24-Mar	80	80	82	86	90	91	95	93	83	84	79	73	69	62	63	70	70	65	73	79	83	87	89	88	79.8	94.6
25-Mar	86	89	82	79	78	83	81	75	78	79	86	85	80	71	67	66	62	66	69	71	79	84	82	81	77.4	88.8
26-Mar	80	81	78	81	92	95	97	97	93	93	93	87	85	83	66	52	51	52	53	60	63	63	63	66	76.0	97.2
27-Mar	71	73	77	74	80	79	77	76	72	65	67	66	63	63	52	51	54	67	76	84	91	97	98	98	73.8	97.9
28-Mar	96	97	98	97	95	87	81	89	80	67	58	52	46	42	41	33	34	41	45	48	51	48	50	59	63.9	97.6
29-Mar	59	61	57	57	57	63	63	70	68	68	62	56	52	45	45	41	38	39	40	49	59	68	65	67	56.3	70.0
30-Mar	62	63	59	54	52	55	56	59	57	50	45	43	41	41	40	48	58	60	67	75	73	83	89	95	59.3	95.3
31-Mar	96	97	97	97	98	95	95	96	96	94	92	91	92	92	95	93	88	83	87	85	90	96	92	93	92.9	97.8
66.8 68.9 70.5 71.8 72.4 72.9 74.2 74.9 72.9 69.4 66.0 61.3 57.5 56.1 52.8 51.9 52.8 55.3 57.8 59.9 62.9 65.2 67.3 67.5																								Diurnal Average		
96.0 97.4 97.6 97.3 97.8 94.7 97.1 97.2 95.9 94.3 92.8 91.3 91.5 92.2 94.6 92.9 91.2 88.5 91.3 92.0 91.8 96.6 97.9 97.8																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - March 2015



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2015

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	9	8	6	4	3	3	4	5	4	4	5	6	5	4	4	7	9	15	19	15	15	16	19	3.8	18.8
Dir	105	110	111	121	153	100	94	128	94	121	99	87	54	50	50	300	309	342	325	328	324	333	332	346	7	346
2 Spd	19	15	16	16	20	19	18	14	18	21	21	22	22	24	20	19	18	15	12	8	12	11	7	2	15.8	24.0
Dir	357	347	343	350	354	355	355	341	348	330	331	316	317	319	326	326	322	318	327	352	338	341	344	289	336	319
3 Spd	2	3	3	4	3	3	3	1	5	5	3	3	1	3	2	6	11	8	8	8	8	6	7	4	3.6	11.0
Dir	132	86	117	125	90	65	69	322	40	351	304	99	124	164	121	103	122	124	100	81	81	90	100	137	98	122
4 Spd	4	3	3	1	0	2	2	3	0	1	1	3	4	4	16	21	14	14	13	18	20	18	16	16	5.8	21.1
Dir	155	200	221	106	123	104	83	70	235	117	262	82	45	60	297	293	293	280	250	255	249	247	246	252	264	293
5 Spd	12	10	9	13	23	11	18	21	18	6	11	15	24	19	23	20	22	17	11	8	15	16	22	26	16.0	26.4
Dir	252	272	284	278	268	260	264	265	265	241	259	251	260	255	245	245	264	266	247	258	246	245	246	246	257	246
6 Spd	28	40	30	32	44	40	40	33	30	32	30	25	24	29	20	22	30	25	29	22	13	8	13	9	26.9	43.9
Dir	250	257	258	268	271	269	268	267	270	269	269	268	272	265	279	277	260	258	263	264	266	287	270	279	266	271
7 Spd	7	8	10	4	7	7	4	5	1	10	9	16	24	26	32	33	34	38	33	24	16	18	16	17	16.2	38.1
Dir	260	247	282	304	295	310	298	287	84	258	239	262	279	271	271	265	262	265	268	269	264	272	277	269	269	265
8 Spd	20	21	16	10	15	10	20	27	13	28	30	41	40	48	40	43	37	49	48	43	33	33	33	25	29.9	48.9
Dir	271	267	262	239	244	249	258	267	275	263	257	264	258	260	251	248	256	263	261	258	248	245	243	248	257	263
9 Spd	27	18	18	19	26	20	13	12	17	19	20	31	33	28	23	37	34	24	24	15	12	5	7	7	19.4	36.6
Dir	247	247	245	247	249	252	258	254	244	260	297	289	290	289	276	255	264	263	253	251	264	277	298	310	265	255
10 Spd	7	0	12	14	11	6	8	7	4	3	3	3	6	8	10	10	10	4	13	12	13	14	10	11	7.4	14.1
Dir	331	190	38	93	74	87	105	107	107	91	94	98	73	28	43	40	34	64	98	75	60	62	62	67	67	93
11 Spd	12	10	9	3	3	3	6	3	9	10	9	7	3	9	8	7	4	2	9	11	10	11	10	5	5.3	11.9
Dir	54	44	37	28	61	87	35	75	31	41	111	133	74	23	22	23	38	101	134	120	110	105	100	301	69	54
12 Spd	4	6	5	9	7	9	6	6	6	3	5	4	5	16	27	29	23	21	17	37	30	23	17	17	10.2	37.1
Dir	334	272	197	151	171	151	154	140	111	113	72	103	185	243	247	246	229	212	234	268	263	249	245	254	236	268
13 Spd	11	13	3	2	4	7	6	5	5	6	4	9	15	10	9	5	5	21	3	3	4	4	4	7	3.9	21.1
Dir	236	255	236	249	158	78	132	134	123	166	78	116	129	96	128	138	131	231	117	130	121	110	108	102	147	231
14 Spd	4	3	4	5	0	4	5	3	2	1	4	5	1	7	3	13	27	35	45	46	47	44	21	15	10.1	46.9
Dir	93	188	84	52	253	351	54	51	38	276	31	50	66	315	84	233	245	248	249	249	250	269	325	324	263	250
15 Spd	7	6	8	5	7	1	1	10	13	19	24	22	23	25	20	20	17	11	5	4	2	4	3	5	8.8	25.2
Dir	250	337	340	345	352	57	282	268	258	262	276	289	286	282	296	309	314	331	352	351	4	62	100	74	297	282
16 Spd	3	2	2	2	5	4	2	3	2	3	4	5	5	5	6	5	8	9	9	6	7	5	2	3	3.8	9.0
Dir	89	104	95	82	52	54	147	154	127	165	176	160	105	118	139	111	90	101	77	80	94	107	122	111	106	101
17 Spd	2	4	2	3	0	6	9	8	7	6	3	8	13	11	7	10	8	5	4	7	10	10	6	2	1.8	12.9
Dir	155	229	8	223	249	300	308	34	268	286	143	131	131	132	88	54	62	12	324	15	343	336	16	325	23	131
18 Spd	2	2	2	2	2	10	14	9	3	2	25	28	27	22	17	18	11	8	8	8	1	2	5	2	6.5	28.0
Dir	309	185	118	114	46	224	233	244	51	70	274	275	274	269	267	275	341	20	17	8	350	333	34	19	281	275
19 Spd	0	1	3	6	6	7	5	2	2	4	4	8	10	10	11	6	12	14	12	11	8	8	8	7	5.4	14.5
Dir	136	67	276	349	29	33	36	125	89	249	2	128	94	75	52	65	41	43	23	28	27	16	25	25	42	43
20 Spd	4	5	4	6	9	12	15	15	15	14	14	13	16	20	22	21	23	25	29	27	25	25	22	23	16.4	28.9
Dir	32	19	33	127	106	74	90	91	88	78	63	69	90	84	84	79	74	71	70	75	79	80	82	86	79	70
21 Spd	22	17	13	15	15	16	15	15	14	12	11	12	11	11	12	13	10	11	9	7	4	2	2	3	10.3	21.7
Dir	85	70	60	40	37	37	32	34	38	28	10	12	21	20	20	15	4	13	12	3	350	346	316	344	32	85
22 Spd	2	4	3	2	1	3	3	2	3	3	4	5	6	7	8	8	8	9	7	7	6	5	3	3	3.7	8.5
Dir	259	292	3	57	126	73	76	97	68	154	145	130	140	111	105	109	110	99	77	83	80	96	100	117	101	99

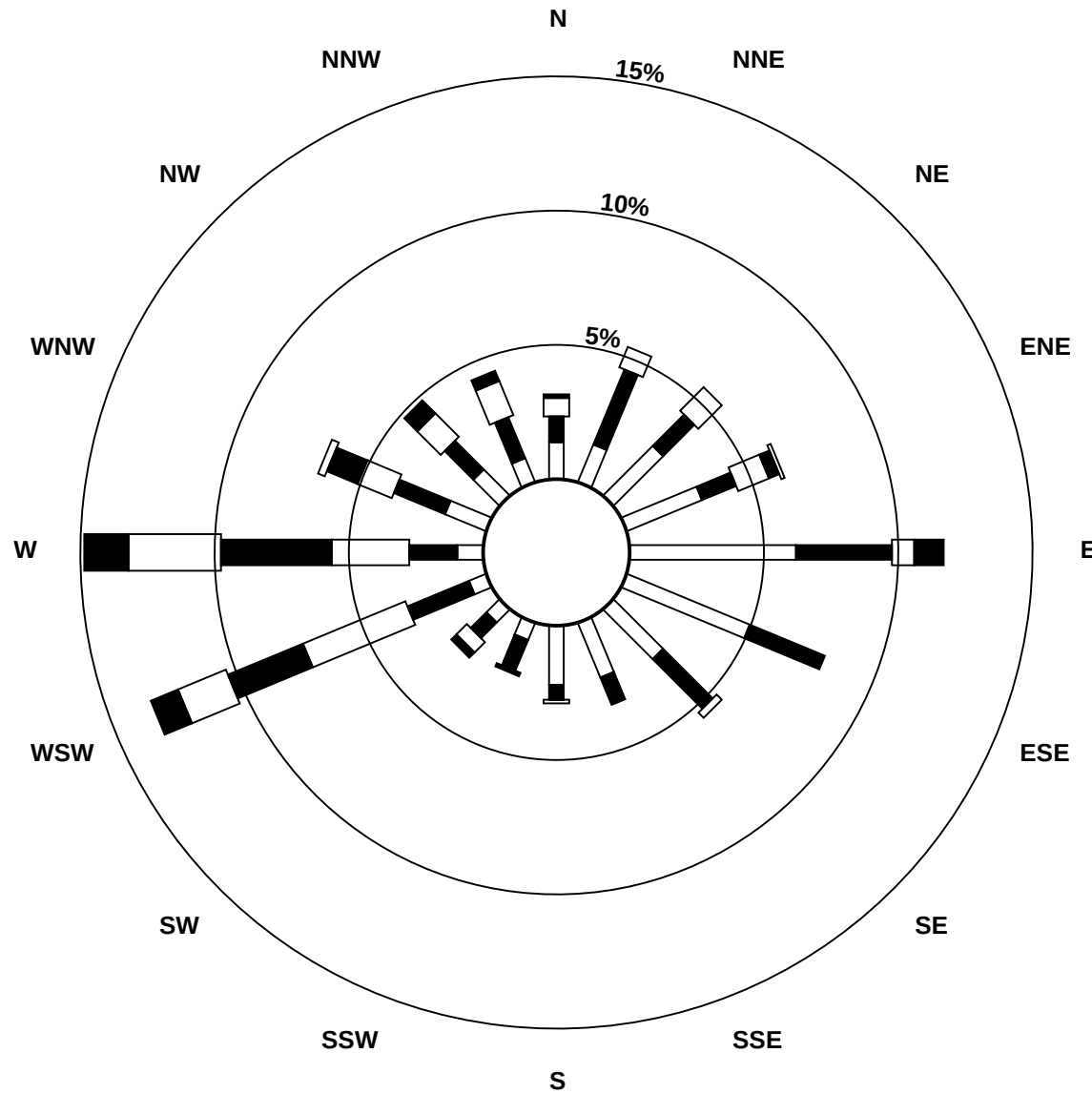
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2015

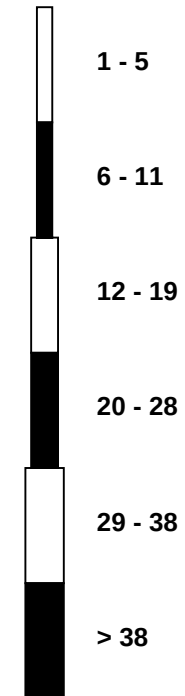
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	1	1	1	2	2	4	3	6	2	3	8	5	4	7	4	3	3	6	5	5	2	6	5	6	0.2	7.7
Dir	176	308	92	19	183	48	34	283	19	336	314	293	287	296	271	185	155	101	150	139	122	131	109	97	81	314
24 Spd	5	3	2	1	1	2	2	2	2	4	6	6	6	6	15	8	2	1	6	8	8	2	3	2	1.8	15.0
Dir	94	89	81	181	102	86	83	96	133	170	172	151	147	154	224	213	203	29	38	27	31	183	187	124	141	224
25 Spd	2	3	3	2	4	3	3	3	2	4	8	9	7	6	6	5	1	4	3	3	6	6	7	8	2.2	9.2
Dir	115	78	98	164	45	130	111	84	166	207	229	223	231	197	204	243	215	110	114	120	113	93	101	97	152	223
26 Spd	6	4	3	2	5	5	4	3	2	3	6	7	5	4	12	28	34	32	29	16	15	11	8	0	7.3	33.8
Dir	128	110	104	179	100	172	144	96	153	178	189	209	160	187	257	257	256	262	265	256	253	263	298	352	245	256
27 Spd	1	1	4	4	7	5	6	8	7	5	6	8	9	9	19	15	8	7	11	10	5	7	6	8	2.1	18.6
Dir	146	262	75	97	97	93	82	96	94	123	168	209	207	213	272	281	286	279	332	324	267	214	205	233	241	272
28 Spd	6	1	1	3	5	9	7	10	13	23	25	28	30	31	25	34	32	32	30	20	7	5	3	4	15.1	34.1
Dir	256	96	75	258	285	302	267	242	265	276	285	272	260	266	266	262	253	245	254	260	278	270	249	62	264	262
29 Spd	3	4	4	4	3	3	2	2	8	11	22	27	32	35	44	43	41	36	40	31	19	7	7	14	16.4	43.8
Dir	107	86	82	84	88	124	306	181	248	242	243	258	252	264	263	262	263	261	264	266	258	234	249	247	258	263
30 Spd	16	17	20	23	20	8	7	1	5	10	13	8	4	7	7	14	7	9	9	6	4	10	3	5	5.4	23.1
Dir	246	239	249	251	256	285	255	173	283	273	289	256	192	185	140	178	140	139	131	87	85	132	99	314	230	251
31 Spd	3	3	5	9	9	10	12	9	8	10	10	12	15	21	16	21	30	26	15	22	16	19	18	16	12.9	30.3
Dir	290	22	339	307	299	296	310	325	319	323	340	351	314	289	288	272	267	273	287	274	303	288	293	294	295	267
Spd	2.3	2.8	2.0	1.7	2.7	2.0	2.2	2.1	2.1	4.6	5.9	6.5	6.7	8.0	8.6	10.7	9.8	9.3	8.0	7.1	5.4	4.1	3.0	3.0	Diurnal Average	
Dir	259	268	296	278	286	306	293	278	294	274	278	270	267	272	271	266	269	265	270	277	273	270	283	283	Diurnal Maximum	
Spd	27.9	40.1	30.2	32.2	43.9	40.4	39.9	33.3	29.7	32.1	30.3	41.1	40.2	47.5	43.8	43.1	41.0	48.9	48.0	46.0	46.9	44.2	33.4	26.4	Diurnal Maximum	
Dir	250	257	258	268	271	269	268	267	270	269	257	264	258	260	263	262	263	263	261	249	250	269	243	246		
Maximum Speed Value: 49 km/h on Mar 8 18:00																			Minimum Speed Value: 0 km/h on Mar 4 09:00					Hours in Service: 744		
Maximum Daily Speed Average: 29.9 km/h on Mar 8																			Minimum Daily Speed Average: 0.2 km/h on Mar 23					Hours of Data: 744		
Maximum Diurnal Speed Average: 10.7 km/h at hour 16																			Minimum Diurnal Speed Average: 1.7 km/h at hour 4					Hours of Missing Data: 0		
Monthly Average Velocity: 4.98 km/h 273.0 deg																			Speed Percentiles: P ₁ = 0.5 P ₁₀ = 2.3 Q ₁ = 4.1 Median = 7.9 Q ₃ = 16.2 P ₉₀ = 26.7 P ₉₉ = 43.5					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	18		22		17		3		0		0		60													
NorthEast	30		31		17		0		0		0		78													
East	77		49		13		11		1		0		151													
SouthEast	47		34		2		0		0		0		83													
South	27		8		1		0		0		0		36													
SouthWest	9		23		17		12		4		0		65													
West	22		30		37		53		38		21		201													
NorthWest	16		24		19		11		0		0		70													
Total	246		221		123		90		43		21		744													

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - March 2015



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - March 2015

Maximum Speed: 49 km/h on Mar 8 18:00																			Maximum Daily Speed Average: 30.3 km/h on Mar 8											Hours in Service: 744	
Minimum Speed: 1 km/h on Mar 4 05:00																			Minimum Daily Speed Average: 4.7 km/h on Mar 23											Hours of Data: 744	
Maximum Diurnal Speed Average: 18.0 km/h at hour 16																			Minimum Diurnal Speed Average: 7.9 km/h at hour 3											Hours of Missing Data: 0	
Monthly Average Speed: 12.04 km/h																			Percentiles: P ₁ = 1.6 P ₁₀ = 3.2 Q ₁ = 4.7 Median = 8.4 Q ₃ = 16.3 P ₉₀ = 26.6 P ₉₉ = 43.3											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-Mar	9	9	8	6	4	4	4	4	5	4	4	5	6	5	4	5	8	9	15	19	15	15	16	19	8.4	19.0					
2-Mar	19	15	16	16	21	19	18	15	19	22	22	23	22	24	21	19	18	15	12	8	12	11	8	6	16.7	24.2					
3-Mar	2	3	3	4	4	3	4	3	5	7	4	3	3	4	3	8	11	8	8	8	8	7	8	5	5.2	11.1					
4-Mar	4	4	3	1	1	2	2	3	1	1	1	3	5	4	16	21	14	14	13	18	20	18	16	16	8.5	21.2					
5-Mar	12	10	9	13	23	11	18	21	18	8	12	15	24	20	23	20	22	17	11	9	15	16	22	26	16.5	26.4					
6-Mar	28	40	30	32	44	41	40	33	30	32	30	25	24	30	20	23	30	25	29	22	13	9	13	9	27.2	43.9					
7-Mar	7	8	10	4	7	7	5	5	3	11	10	16	24	26	32	33	35	38	34	24	16	18	16	17	17.0	38.1					
8-Mar	20	21	16	11	15	10	20	27	13	28	30	41	40	48	40	43	37	49	48	43	33	33	33	25	30.3	49.1					
9-Mar	27	18	18	19	26	20	13	12	17	20	20	32	34	28	24	37	34	25	24	15	12	5	8	7	20.5	36.7					
10-Mar	8	4	12	14	12	8	8	7	5	3	3	4	6	9	11	11	10	6	14	13	13	14	10	11	9.0	14.4					
11-Mar	12	10	9	4	4	4	6	4	10	10	9	8	5	10	8	7	5	2	9	11	10	12	10	5	7.7	12.1					
12-Mar	7	6	6	9	7	9	7	6	6	4	6	5	6	16	27	29	23	21	19	37	30	24	17	17	14.3	37.2					
13-Mar	11	13	9	6	7	7	6	5	6	6	5	9	15	10	9	9	8	21	5	4	5	4	6	7	8.1	21.3					
14-Mar	5	6	4	7	6	5	6	5	3	4	5	6	3	7	8	14	28	36	45	46	47	44	22	15	15.8	47.3					
15-Mar	12	6	8	6	7	3	3	10	13	19	24	22	24	26	20	21	17	11	6	4	5	4	4	5	11.8	25.6					
16-Mar	4	2	3	3	5	4	4	4	3	4	5	5	5	6	6	6	8	9	9	7	7	5	3	4	5.0	9.3					
17-Mar	2	4	4	4	3	6	9	8	7	7	5	8	13	11	8	10	8	5	4	7	10	10	8	4	7.0	13.2					
18-Mar	4	3	3	3	4	11	14	9	3	5	26	28	28	22	18	19	14	8	8	8	3	3	6	3	10.5	28.3					
19-Mar	2	3	6	7	6	7	5	3	3	5	5	9	10	11	11	6	13	15	12	11	8	8	8	7	7.4	14.6					
20-Mar	4	5	4	7	9	12	15	15	15	14	14	14	17	20	22	21	23	25	29	27	25	25	22	23	17.0	29.0					
21-Mar	22	17	13	15	15	16	15	15	14	13	11	12	11	11	12	13	10	11	10	7	4	2	2	3	11.4	21.8					
22-Mar	3	4	4	2	1	3	3	2	3	4	4	5	6	7	8	8	8	9	7	7	6	5	4	4	5.0	9.1					
23-Mar	3	3	2	3	2	5	4	7	3	4	8	6	4	8	4	4	6	7	5	5	2	6	6	7	4.7	7.8					
24-Mar	5	3	3	1	3	3	2	2	3	4	7	6	7	7	16	9	4	2	7	8	8	4	4	2	5.0	15.9					
25-Mar	3	4	4	5	4	4	4	3	3	5	8	9	7	7	6	5	2	4	3	4	6	6	7	8	4.9	9.3					
26-Mar	6	5	4	2	5	5	5	3	2	4	6	7	5	6	13	28	34	32	29	16	15	11	9	4	10.7	33.9					
27-Mar	2	3	5	4	7	5	6	8	7	6	7	9	10	9	19	16	8	8	12	10	6	7	6	8	7.8	18.8					
28-Mar	7	2	2	4	6	9	8	10	13	23	25	28	31	31	27	34	33	32	30	20	7	5	4	4	16.5	34.5					
29-Mar	3	4	4	5	4	3	4	3	9	11	22	27	32	36	44	44	42	36	40	31	19	8	7	14	18.8	44.0					
30-Mar	16	17	20	23	20	10	7	3	5	11	13	9	6	8	8	15	8	9	10	6	5	10	5	5	10.4	23.2					
31-Mar	4	4	5	9	9	10	12	9	9	10	10	12	16	21	16	21	30	26	16	22	17	20	18	16	14.3	30.4					
8.8 8.3 7.9 8.1 9.4 8.6 8.9 8.6 8.2 10.0 11.7 13.3 14.5 15.7 16.2 18.0 17.8 17.3 16.8 15.3 13.0 12.0 10.6 9.9																									Diurnal Average						
28.1 40.2 30.3 32.4 43.9 40.5 39.9 33.4 29.7 32.2 30.4 41.2 40.4 47.8 44.0 43.6 41.6 49.1 48.1 46.2 47.3 44.3 33.4 26.4																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - March 2015

Maximum Value: 94.5 deg on Mar 14 05:00																				Hours in Service: 744					
Minimum Value: 2.4 deg on Mar 8 23:00																				Hours of Data: 744					
																				Hours of Missing Data: 0					
Percentiles: P ₁ = 3.1 P ₁₀ = 4.7 Q ₁ = 7.1 Median = 13.8 Q ₃ = 30.8 P ₉₀ = 56.7 P ₉₉ = 90.5																				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-Mar	4	5	4	7	10	19	33	27	11	25	22	14	10	12	35	37	19	10	16	12	9	7	7	7	37.2
2-Mar	7	8	7	8	7	5	7	18	13	6	7	8	9	7	10	10	8	7	8	9	7	5	32	72	72.1
3-Mar	41	21	17	23	33	40	45	73	12	39	73	56	69	13	49	43	7	6	8	5	11	22	19	28	73.4
4-Mar	15	13	33	61	86	54	40	22	91	73	93	39	32	41	9	5	5	8	13	3	3	4	4	5	93.0
5-Mar	13	6	4	3	6	8	4	3	4	54	58	5	9	11	7	7	5	6	20	27	6	4	3	3	58.5
6-Mar	6	4	4	5	3	4	3	3	4	4	5	5	7	5	11	16	8	3	5	4	9	29	4	8	29.0
7-Mar	8	13	17	24	7	9	24	14	69	39	32	17	5	8	5	8	5	3	6	4	3	4	4	4	69.3
8-Mar	3	3	10	25	5	7	8	5	10	6	6	4	5	6	5	4	6	5	3	4	3	2	2	3	24.6
9-Mar	3	3	6	4	3	7	11	9	5	17	11	4	6	6	8	5	5	6	5	4	12	48	17	7	47.9
10-Mar	18	82	17	11	8	50	14	9	14	23	24	33	19	19	14	9	7	60	15	15	6	8	11	10	81.8
11-Mar	10	11	8	41	60	50	31	63	18	13	16	17	48	9	12	13	33	45	9	6	10	8	9	41	62.8
12-Mar	60	14	43	10	13	10	24	20	16	37	31	35	32	10	7	6	10	6	24	4	5	15	6	10	59.8
13-Mar	9	17	88	86	59	18	21	14	28	18	28	12	11	17	23	57	50	8	44	35	37	49	34	13	88.4
14-Mar	38	62	30	48	95	56	58	73	81	91	40	47	69	45	70	20	48	9	7	4	7	4	16	9	94.5
15-Mar	57	21	14	61	29	64	74	13	7	5	7	8	8	11	10	19	8	24	14	15	67	11	42	11	73.6
16-Mar	13	62	37	28	10	12	62	37	40	47	27	27	28	40	28	34	10	16	5	48	15	30	30	24	62.4
17-Mar	39	12	67	70	93	49	34	11	40	19	62	17	12	18	27	16	18	21	51	16	9	5	34	62	92.8
18-Mar	62	56	40	39	73	20	6	16	63	57	6	8	9	10	17	17	33	7	5	9	72	51	39	78	77.6
19-Mar	86	82	77	19	7	8	13	35	49	26	48	27	18	20	7	17	5	7	9	6	10	7	6	11	86.2
20-Mar	14	11	25	15	18	9	7	5	5	9	7	11	11	7	7	6	5	4	3	4	5	4	5	4	25.2
21-Mar	5	5	8	4	3	4	4	5	5	14	4	7	5	7	5	6	14	8	6	10	10	32	14	34	34.0
22-Mar	48	25	51	18	34	12	14	14	16	22	12	14	17	13	8	9	9	21	15	15	33	37	38	25	51.1
23-Mar	60	72	68	68	74	77	37	35	42	39	8	27	57	10	51	58	70	30	7	3	22	23	26	8	76.8
24-Mar	15	11	72	48	60	34	45	29	26	34	30	21	16	28	21	25	79	71	31	13	11	62	47	43	79.3
25-Mar	42	52	24	67	24	45	30	39	44	21	10	9	18	20	21	18	82	9	22	18	17	15	13	10	82.4
26-Mar	14	17	27	44	18	27	27	24	15	14	14	16	16	65	26	6	5	9	4	3	12	12	31	93	92.6
27-Mar	89	91	20	17	9	20	7	8	22	16	25	31	21	23	9	8	10	32	11	10	29	24	8	15	90.8
28-Mar	58	55	87	57	26	16	23	20	7	6	6	9	9	12	20	8	9	7	7	5	11	26	41	14	86.6
29-Mar	25	15	18	38	36	29	83	74	16	15	6	7	7	11	6	9	10	8	5	5	6	34	29	7	82.6
30-Mar	7	9	5	4	11	42	24	71	39	18	14	27	46	31	27	22	39	18	16	12	21	9	53	31	70.8
31-Mar	55	22	20	8	5	6	6	15	11	10	13	10	21	8	7	6	5	7	14	6	18	17	4	5	55.0
88.8 90.8 88.4 86.0 94.5 76.8 82.6 74.4 90.6 91.0 93.0 55.9 68.9 64.9 70.2 58.4 82.4 71.4 51.1 47.9 72.2 61.8 52.6 92.6																									

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

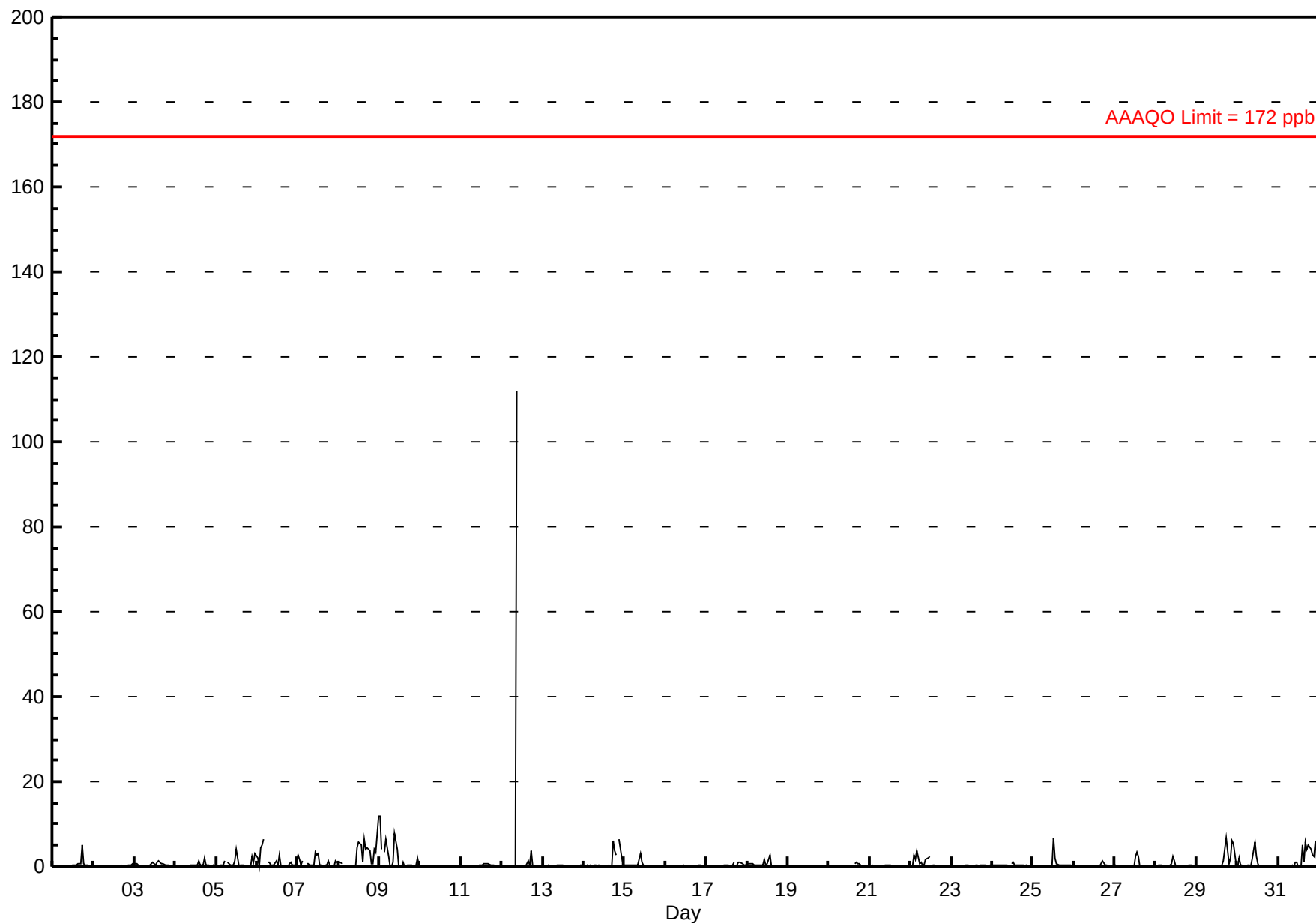
Valleyview - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 112.0 ppb on Mar 12 10:00 Maximum Daily Average: 5.6 ppb on Mar 12																								Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on Mar 1 03:00 Maximum Diurnal Average: 4.5 ppb at hour 10 Monthly Average: 0.75 ppb												Minimum Daily Average: 0.0 ppb on Mar 19 Minimum Diurnal Average: 0.2 ppb at hour 8 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.4 P ₉₀ = 1.6 P ₉₉ = 6.5														
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-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	5	1	0	0	0	0	0	0.5	5.1
2-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	0.7
3-Mar	1	1	0	0	0	0	0	0	A	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0.5	1.3
4-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0.3	2.0
5-Mar	0	0	0	0	0	1	A	1	1	0	0	1	4	0	0	1	0	0	0	0	0	2	1	3	0.8	4.0
6-Mar	2	0	4	5	6	A	1	1	0	0	0	1	0	3	0	0	0	0	0	1	1	0	0	1	1.2	6.4
7-Mar	3	2	0	1	A	1	1	0	0	0	3	3	3	0	0	0	0	0	2	0	0	0	1	1	1.0	3.4
8-Mar	1	1	1	A	0	0	0	0	0	0	0	4	6	5	1	6	4	5	4	1	1	4	3	12	2.5	11.7
9-Mar	12	4	A	3	7	2	0	0	0	1	8	4	0	0	1	0	0	0	0	0	0	0	2	0	2.0	11.9
10-Mar	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
11-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	A	0.2	0.6
12-Mar	0	0	0	0	0	0	0	0	0	112	C	C	0	0	0	1	0	4	0	0	0	0	A	0	5.6	112.0
13-Mar	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
14-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	3	A	7	2	0	1.1	6.5
15-Mar	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	3.2
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	1	1	1	1	0	0.3	1.1
18-Mar	1	1	1	1	1	0	0	0	0	0	2	0	1	3	0	0	A	0	0	0	0	0	0	0	0.4	2.7
19-Mar	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
20-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0.2	0.9
21-Mar	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
22-Mar	0	0	3	2	4	1	1	0	0	2	2	3	A	0	0	0	0	0	0	0	0	0	0	0	0.8	3.7
23-Mar	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
24-Mar	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1
25-Mar	0	0	0	0	0	0	0	0	0	A	0	0	7	2	1	0	0	0	0	0	0	0	0	0	0.6	6.7
26-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.2	1.3
27-Mar	0	0	0	0	0	0	0	A	0	0	0	0	2	3	2	0	0	0	0	0	0	0	0	0	0.4	3.4
28-Mar	0	0	0	0	0	0	A	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.5
29-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	2	7	4	1	2	6	5	0	1.2	6.8
30-Mar	0	2	0	0	A	0	0	0	0	2	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0.6	5.8
31-Mar	0	0	0	A	0	0	0	0	0	0	1	1	0	0	5	1	6	4	5	4	3	2	6	1	1.8	6.2
0.7 0.4 0.4 0.5 0.7 0.2 0.2 0.2 0.2 4.5 0.9 0.8 0.9 0.7 0.5 0.5 0.6 1.3 0.8 0.5 0.4 0.9 0.8 0.7																								Diurnal Average		
11.9 4.2 4.3 5.1 6.6 2.3 0.9 1.0 1.0 112.0 5.8 4.3 6.7 4.9 5.2 6.3 5.7 6.8 5.0 3.9 2.8 6.5 6.2 11.7																								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

Valleyview - March 2015



Hourly Maximums

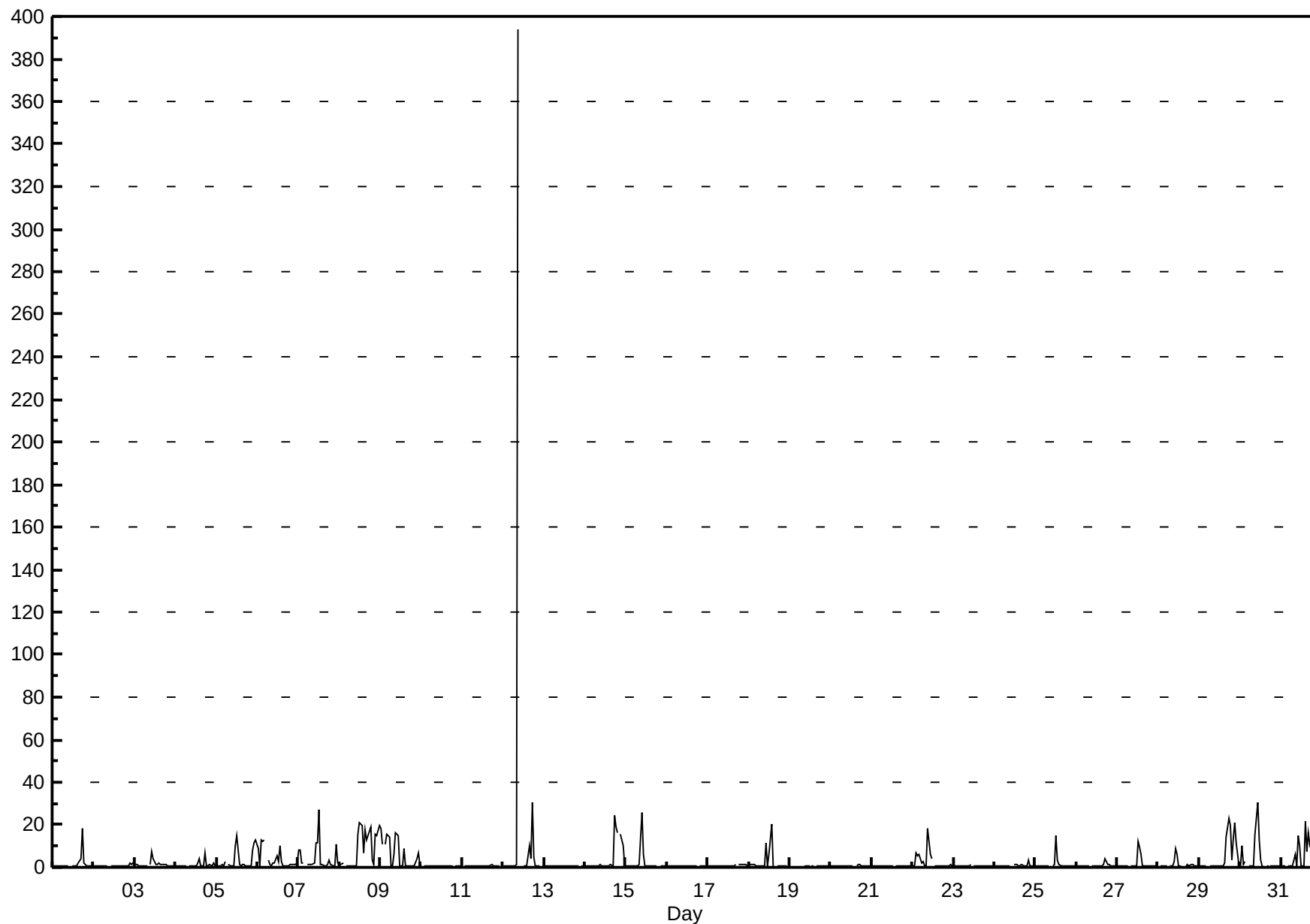
Sulphur Dioxide (SO₂) - ppb

Valleyview - March 2015

Maximum Value: 394.0 ppb on Mar 12 10:00																				Maximum Daily Average: 21.5 ppb on Mar 12										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 30 18:00																				Minimum Daily Average: 0.4 ppb on Mar 19										Hours of Data: 710	
Maximum Diurnal Average: 17.0 ppb at hour 10																				Minimum Diurnal Average: 0.7 ppb at hour 8										Hours of Missing Data: 34	
Monthly Average: 2.91 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 1.1 P ₉₀ = 7.7 P ₉₉ = 22.4										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-Mar	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	2	4	18	2	1	1	1	1	0	1.8	18.5					
2-Mar	0	1	1	0	0	0	0	0	0	A	1	0	0	0	0	0	1	0	1	1	1	2	1	2	0.7	1.8					
3-Mar	1	1	1	1	1	1	1	1	A	1	8	4	1	2	2	2	2	1	1	1	1	1	1	1	1.4	7.5					
4-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	2	4	1	1	7	1	1	1	1	2	1	1.2	6.9					
5-Mar	1	0	1	1	1	3	A	1	1	1	1	10	15	1	1	1	1	0	0	1	1	8	12	13	3.3	14.6					
6-Mar	9	0	13	12	13	A	3	2	1	2	2	5	3	10	2	1	0	1	1	2	2	2	1	3	3.9	13.2					
7-Mar	8	8	2	2	A	1	1	1	1	2	11	11	27	1	1	1	1	2	4	1	1	1	11	2	4.4	27.4					
8-Mar	2	2	2	A	1	1	1	1	1	1	1	15	21	19	7	18	13	15	19	3	1	16	15	20	8.3	21.1					
9-Mar	18	11	A	11	16	14	1	0	6	16	15	0	0	1	9	1	0	0	1	1	1	4	7	1	5.9	18.4					
10-Mar	1	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.5	1.0					
11-Mar	A	0	0	0	0	1	1	0	0	1	1	0	1	1	1	1	1	1	1	1	1	0	0	A	0.7	1.2					
12-Mar	1	1	1	1	0	0	0	0	1	394	C	C	0	0	0	11	4	31	5	1	1	1	A	1	21.5	394.0					
13-Mar	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.9					
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	24	19	16	A	16	10	1	4.3	24.4					
15-Mar	1	1	1	1	1	1	1	1	2	26	6	1	1	1	1	1	1	1	1	A	1	1	1	1	2.0	25.8					
16-Mar	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0	A	1	0	1	0	1	0.6	1.0					
17-Mar	1	0	1	1	0	0	0	1	1	0	1	1	0	1	0	1	2	A	1	1	1	1	1	1	0.8	1.6					
18-Mar	1	1	1	1	1	1	1	1	1	1	12	1	6	20	0	0	A	0	0	1	1	0	0	0	2.3	20.1					
19-Mar	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	A	0	1	0	0	1	0	0	0	0.4	0.8					
20-Mar	1	0	0	0	0	0	1	0	0	0	1	0	1	1	A	1	2	2	1	1	0	0	0	0	0.7	1.6					
21-Mar	1	1	1	0	0	0	0	0	0	1	1	1	0	A	0	0	1	0	1	1	1	1	1	1	0.6	1.0					
22-Mar	1	1	7	5	6	2	3	1	1	18	6	4	A	1	1	1	1	1	1	1	1	1	1	1	2.6	18.0					
23-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1					
24-Mar	1	1	1	1	1	1	1	1	1	1	A	1	2	2	1	1	1	1	1	1	3	1	1	1	0.9	3.1					
25-Mar	1	1	1	1	1	1	1	1	1	A	1	1	15	4	1	1	1	1	1	1	1	1	0	0	1.5	15.0					
26-Mar	1	1	0	1	1	1	1	1	A	1	1	0	0	0	0	0	1	4	2	1	1	0	0	1	0.9	4.4					
27-Mar	1	1	1	1	1	1	1	A	1	1	0	0	12	10	6	0	0	0	1	0	1	1	0	0	1.7	12.1					
28-Mar	0	0	1	1	0	1	A	0	1	3	9	6	1	1	0	0	0	1	1	1	1	1	1	0	1.3	8.7					
29-Mar	1	1	1	0	0	A	1	1	0	1	1	0	0	1	1	2	14	23	20	3	14	21	12	1	5.1	23.2					
30-Mar	1	11	2	3	A	1	1	1	1	16	31	13	4	1	0	0	0	0	0	1	1	1	0	0	3.7	30.7					
31-Mar	1	1	0	A	1	0	0	0	6	1	15	10	1	1	22	8	16	11	14	16	13	14	15	8	7.5	21.6					
1.8 1.5 1.3 1.6 1.7 1.2 0.8 0.7 1.1 17.0 4.5 3.2 3.9 2.8 2.2 1.9 2.3 5.0 3.3 2.0 1.7 3.2 3.3 2.1																									Diurnal Average						
18.4 11.0 13.2 11.9 15.6 14.0 3.3 1.6 5.9 394.0 30.7 15.4 27.4 20.1 21.6 17.9 16.0 30.6 19.6 16.2 13.8 20.9 14.8 19.6																									Diurnal Maximum						
C - Calibration																									A - Automated Daily Zero Span						

Hourly Maximums

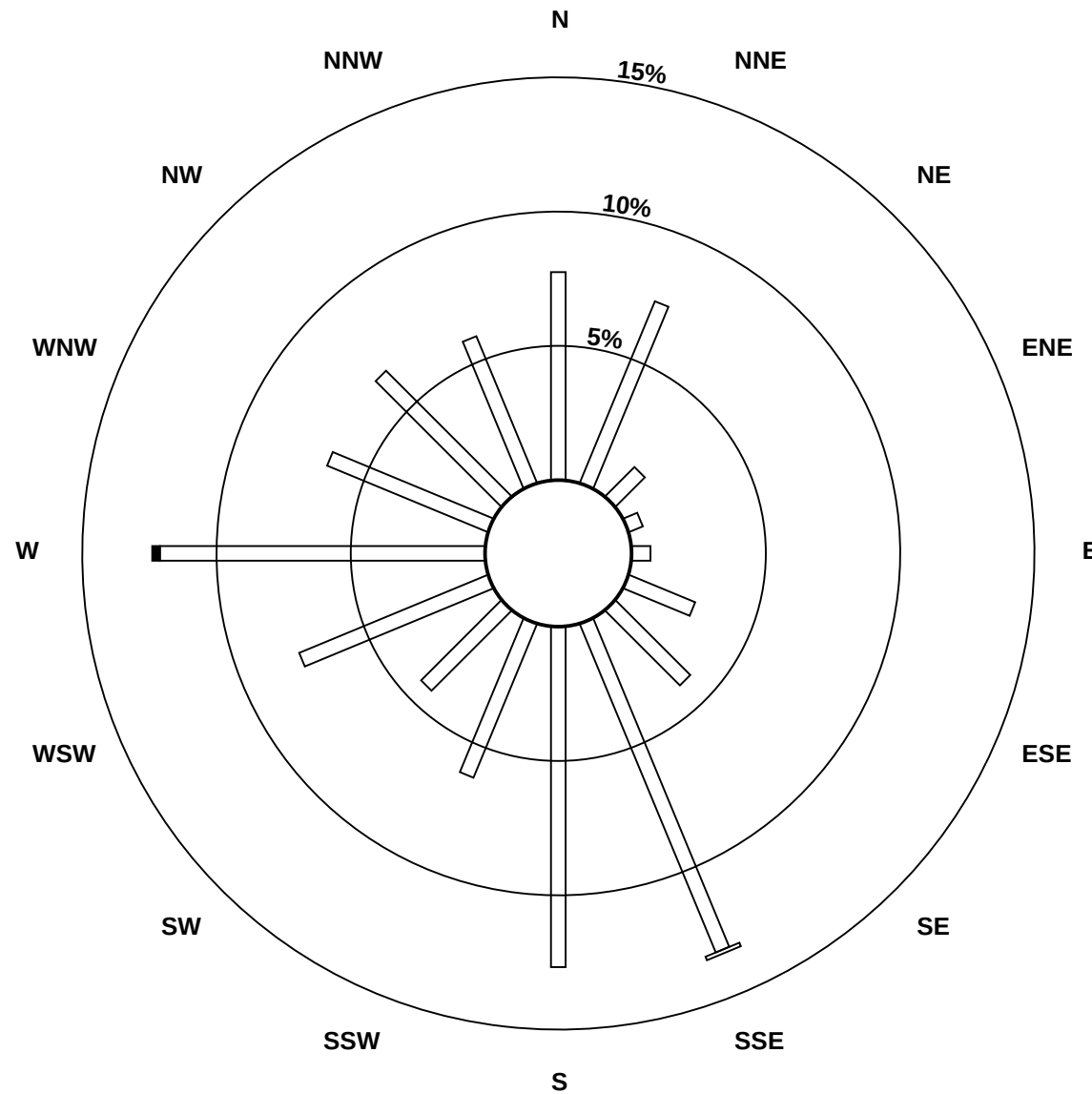
Sulphur Dioxide (SO₂) - ppb
Valleyview - March 2015



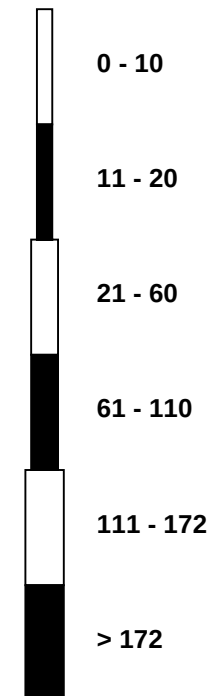
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Valleyview - March 2015

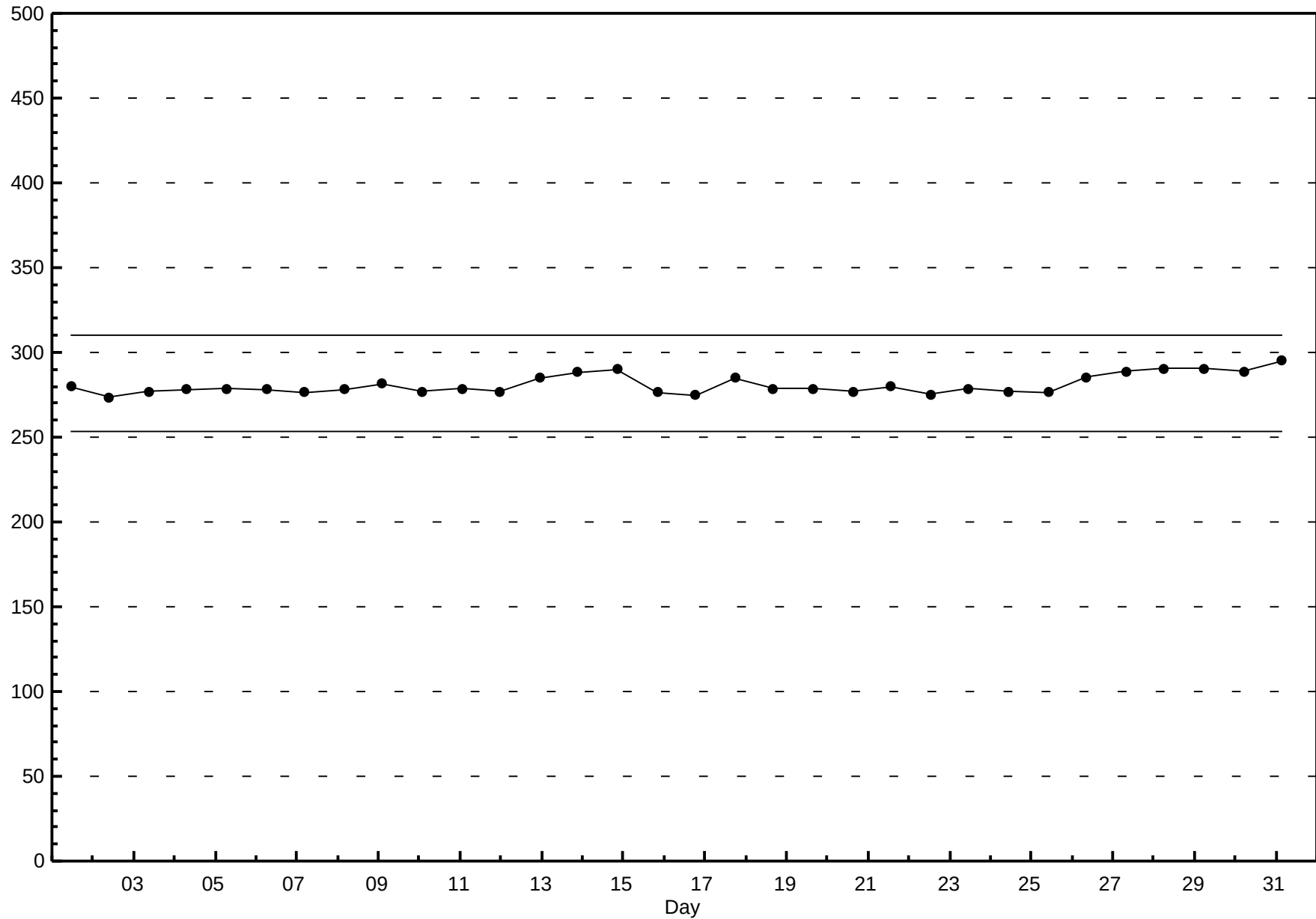


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - March 2015



Hourly Averages

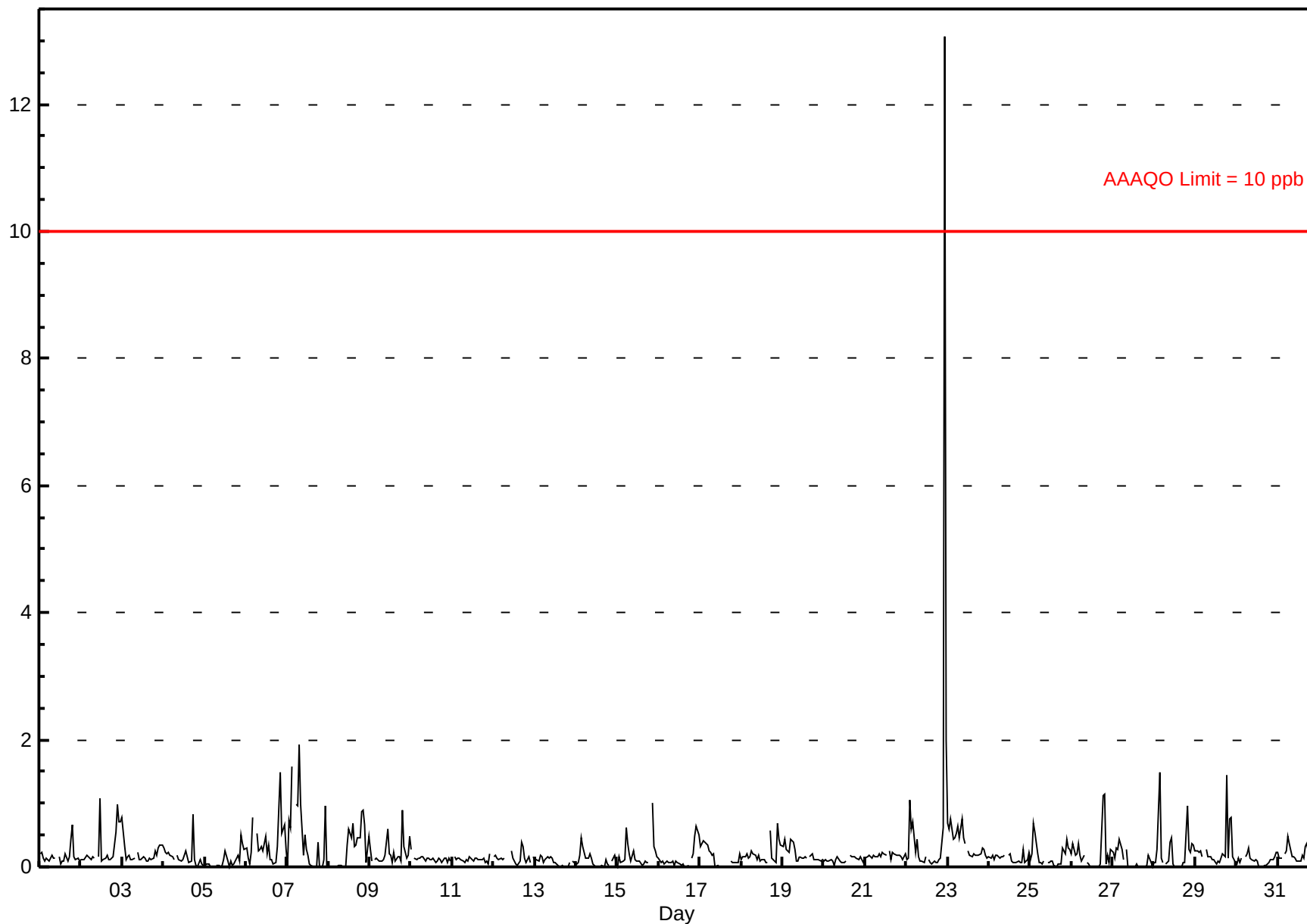
Hydrogen Sulphide (H₂S) - ppb

Valleyview - March 2015

Number of Exceedences (AAAQO): 1-hr: 1 24-hr: 0 Maximum Value: 13.1 ppb on Mar 22 23:00 Maximum Daily Average: 0.9 ppb on Mar 22																								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 Mar 5 01:00 Minimum Daily Average: 0.1 ppb on Mar 13 Maximum Diurnal Average: 0.7 ppb at hour 23 Minimum Diurnal Average: 0.1 ppb at hour 16 Monthly Average: 0.22 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.5 P ₉₉ = 1.4																										
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-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	0.7
2-Mar	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	1	1	1	1	0.3	1.1
3-Mar	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
4-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.8
5-Mar	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	0.5
6-Mar	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0.4	1.5
7-Mar	0	1	1	2	A	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	1.9
8-Mar	0	0	0	A	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	1	0	0	0.3	0.9
9-Mar	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	0.9
10-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.2
12-Mar	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2
14-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.5
15-Mar	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.2	1.0
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0.1	0.7
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.4
18-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	1	0	0	0.2	0.7
19-Mar	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
20-Mar	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	0.2
21-Mar	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	0.2
22-Mar	0	0	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	13	2	0.9	13.1
23-Mar	1	1	1	0	0	1	1	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
24-Mar	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
25-Mar	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
26-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.2	1.1
27-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
28-Mar	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.2	1.5
29-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0.3	1.5
30-Mar	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
31-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
0.2 0.2 0.2 0.3 0.2 0.2 0.2 0.2 0.2 0.1 0.2 0.2 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.3 0.3 0.3 0.7 0.3																								Diurnal Average		
0.8 0.7 1.1 1.6 0.8 1.0 1.0 1.9 1.0 0.5 0.6 1.1 0.6 0.5 0.7 0.3 0.4 0.8 1.5 1.1 1.5 1.0 13.1 2.0																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages

Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2015



Hourly Maximums

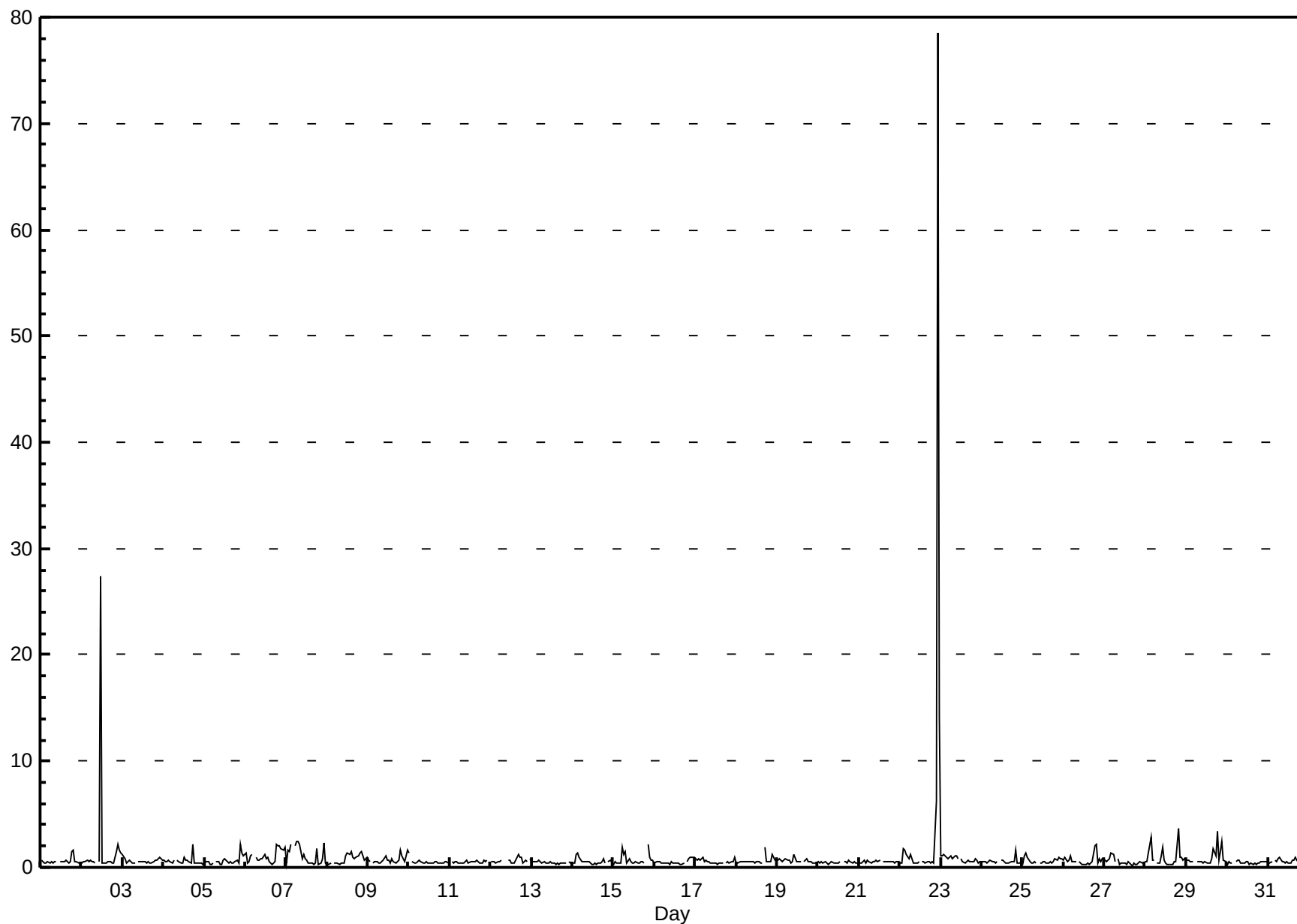
Hydrogen Sulphide (H₂S) - ppb

Valleyview - March 2015

Maximum Value: 78.5 ppb on Mar 22 23:00																				Maximum Daily Average: 4.9 ppb on Mar 22					Hours in Service: 744				
Minimum Value: 0 ppb on Mar 27 17:00																				Minimum Daily Average: 0.5 ppb on Mar 30					Hours of Data: 709				
Maximum Diurnal Average: 3.4 ppb at hour 23																				Minimum Diurnal Average: 0.5 ppb at hour 15					Hours of Missing Data: 35				
Monthly Average: 0.83 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 1.2 P ₉₉ = 2.6					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-Mar	1	1	0	0	0	0	1	0	1	1	A	1	1	1	1	1	0	1	2	2	1	1	0	0	0.6	1.7			
2-Mar	0	0	1	1	1	1	0	1	0	A	0	27	0	0	0	1	1	1	0	0	1	2	2	1	1.9	27.4			
3-Mar	1	1	0	0	1	1	0	0	A	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	0.6	1.2			
4-Mar	1	1	1	1	1	0	1	A	1	1	0	0	1	1	1	0	0	2	0	0	0	0	0	0	0.6	2.1			
5-Mar	0	1	0	0	0	0	A	1	0	0	0	1	1	1	0	0	0	0	1	1	0	2	1	1	0.6	2.2			
6-Mar	1	0	0	1	1	A	1	1	1	1	1	1	1	1	0	0	0	1	2	2	2	2	2	2	1.1	2.2			
7-Mar	0	2	2	2	A	2	2	2	2	1	1	1	1	0	0	0	0	0	2	0	0	1	2	0	1.1	2.5			
8-Mar	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5			
9-Mar	1	1	A	0	1	0	0	0	0	1	1	1	1	0	1	1	0	1	1	2	1	1	1	2	0.7	1.7			
10-Mar	1	A	1	0	0	1	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0.5	1.3			
11-Mar	A	1	0	1	1	0	0	0	0	1	1	0	1	1	0	0	1	0	0	0	1	1	1	A	0.5	0.7			
12-Mar	1	1	0	0	1	1	1	C	C	C	1	1	0	0	0	1	1	1	1	0	1	0	A	1	0.6	1.2			
13-Mar	1	1	1	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	A	1	0	0.5	0.7			
14-Mar	0	0	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1	1	0	A	1	1	0	0.6	1.3			
15-Mar	0	1	0	0	0	2	1	1	0	1	0	0	0	1	0	0	0	1	0	A	2	1	1	1	0.7	2.1			
16-Mar	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	1	1	1	1	0.5	1.0			
17-Mar	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0.5	0.9			
18-Mar	0	0	1	1	0	0	1	1	1	1	1	0	1	1	0	0	A	2	1	0	1	1	1	1	0.6	1.9			
19-Mar	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	A	1	1	0	1	0	0	0	0	0.6	1.2			
20-Mar	1	0	0	0	1	0	0	0	1	0	0	0	0	1	A	1	1	0	1	1	0	1	0	0	0.5	0.6			
21-Mar	0	0	1	1	0	1	1	0	1	1	1	1	1	A	1	0	1	1	1	1	1	0	0	1	0.5	0.7			
22-Mar	0	0	2	2	1	1	1	1	0	0	0	1	A	0	1	0	1	0	0	1	0	6	79	14	4.9	78.5			
23-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	0	1	0.8	1.2			
24-Mar	1	1	1	0	1	1	0	1	0	1	A	1	1	1	0	0	0	0	1	1	1	2	0	1	0.6	1.6			
25-Mar	0	1	1	1	1	0	0	1	0	A	0	0	1	1	0	0	0	0	1	1	1	1	1	1	0.6	1.4			
26-Mar	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	1	2	2	0	1	1	0.7	2.2			
27-Mar	1	1	1	1	1	1	1	A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.5	1.3			
28-Mar	1	1	1	3	1	1	A	0	0	1	2	1	0	0	0	0	0	1	1	4	1	1	1	1	0.9	3.7			
29-Mar	1	1	1	1	0	A	1	0	1	0	0	0	0	0	0	1	2	1	3	1	1	2	1	0	0.9	3.4			
30-Mar	0	1	0	0	A	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.7			
31-Mar	1	0	1	A	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0.7	1.1			
0.6 0.6 0.7 0.8 0.7 0.7 0.7 0.6 0.6 0.6 0.6 1.5 0.5 0.5 0.5 0.5 0.5 0.5 0.6 0.8 0.8 0.8 1.1 3.4 1.2																									Diurnal Average				
1.3 1.6 1.8 2.9 1.3 2.1 2.4 2.5 2.2 1.1 1.9 27.4 1.3 1.2 1.5 0.9 1.8 2.1 3.4 3.7 2.1 6.2 78.5 14.3																									Diurnal Maximum				
C - Calibration A - Automated Daily Zero Span																													

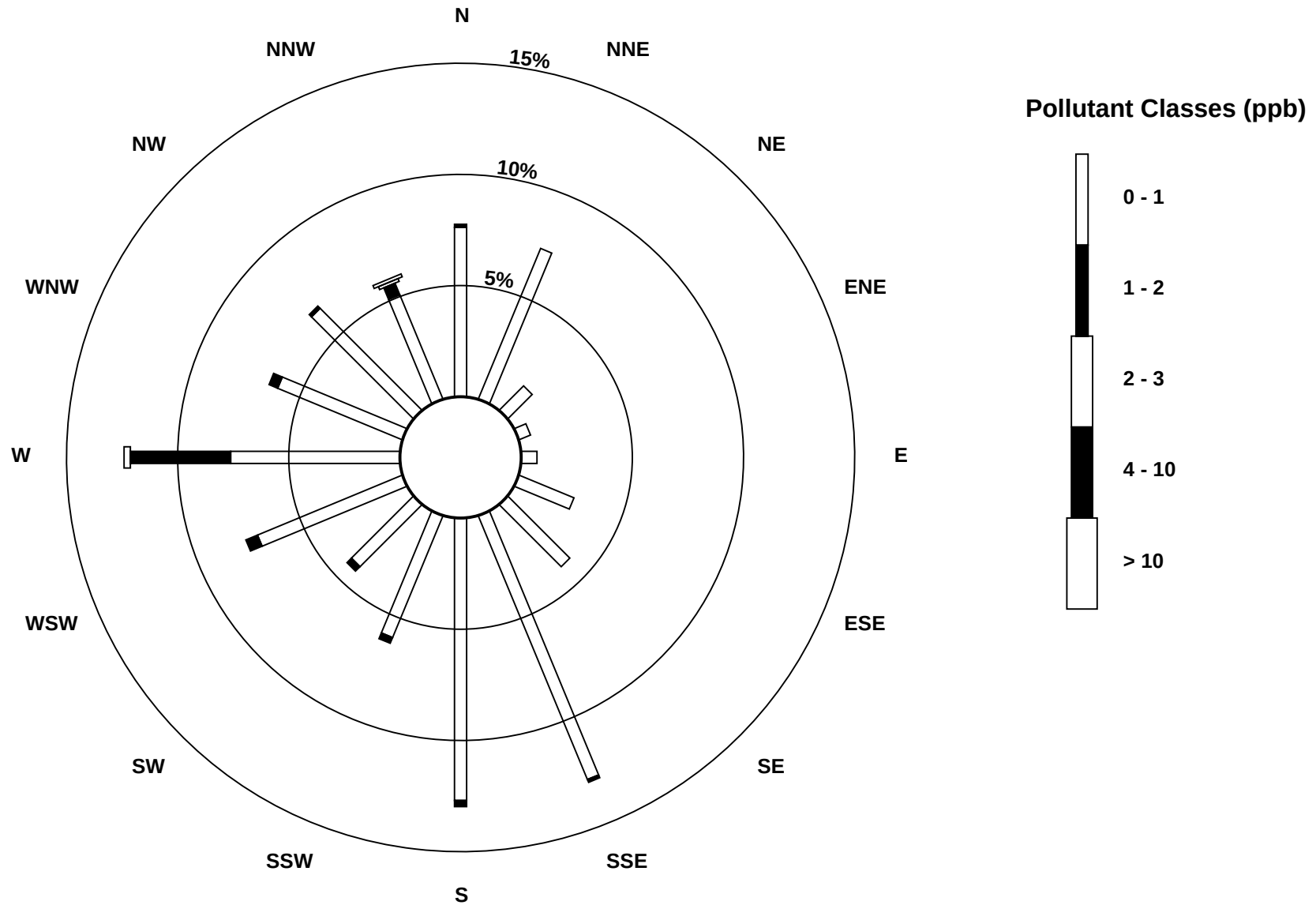
Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2015



Pollutant Rose

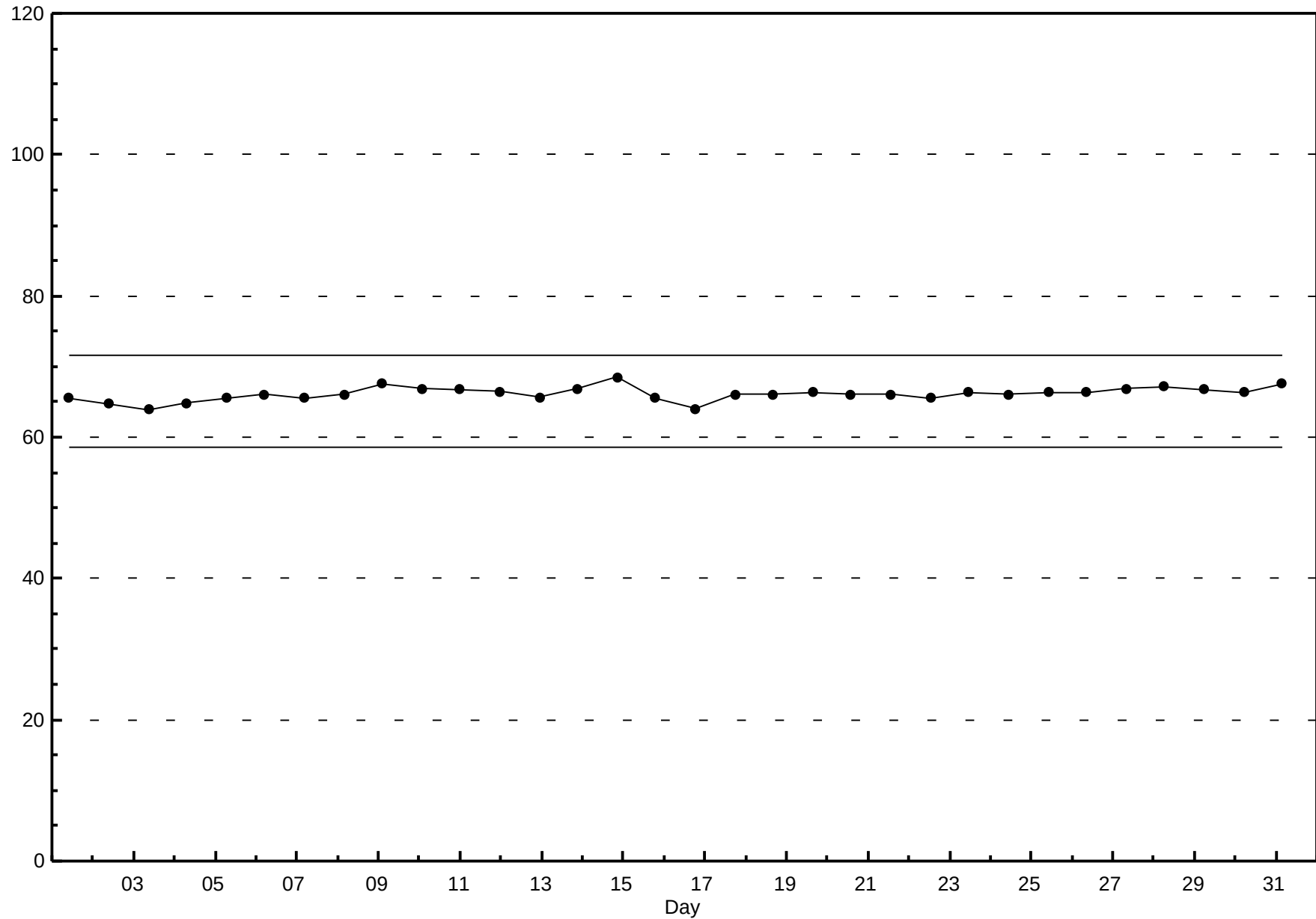
Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2015



Span Responses

Hydrogen Sulphide (H₂S)

Valleyview - March 2015



Hourly Averages

External Temperature (ET) - °C

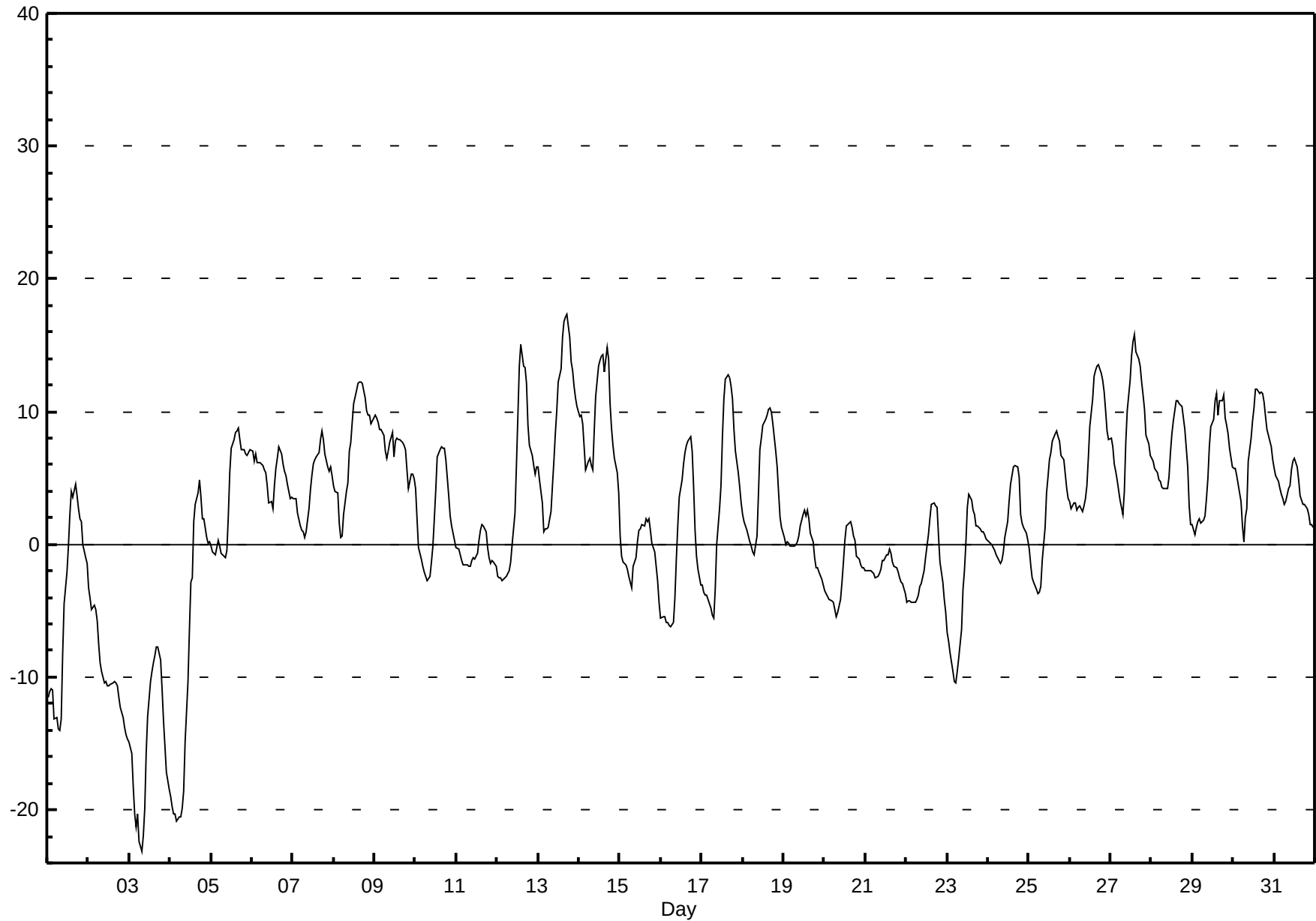
Valleyview - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 17.3 °C on Mar 13 18:00 Maximum Daily Average: 9.4 °C on Mar 14																				Hours in Service: 744 Hours of Data: 744						
Minimum Value: -23 °C on Mar 3 08:00 Minimum Daily Average: -15.1 °C on Mar 3 Maximum Diurnal Average: 6.6 °C at hour 17 Minimum Diurnal Average: -2.4 °C at hour 7 Monthly Average: 1.93 °C Percentiles: P ₁ = -20.3 P ₁₀ = -6.1 Q ₁ = -1.5 Median = 2.3 Q ₃ = 6.8 P ₉₀ = 10.3 P ₉₉ = 15.0																				Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	-12	-11	-11	-11	-13	-13	-14	-14	-13	-8	-4	-2	0	2	4	4	5	4	3	2	2	0	-1	-1	-4.4	4.6
2-Mar	-3	-4	-5	-5	-5	-6	-7	-9	-10	-10	-10	-11	-11	-11	-10	-10	-10	-11	-11	-12	-13	-14	-14	-15	-9.5	-3.3
3-Mar	-15	-16	-18	-20	-21	-20	-22	-23	-22	-20	-16	-13	-10	-10	-9	-8	-8	-8	-9	-11	-13	-15	-17	-18	-15.1	-7.7
4-Mar	-19	-20	-20	-20	-21	-21	-21	-20	-19	-15	-10	-6	-3	-2	2	3	4	5	4	2	2	1	0	0	-8.1	4.9
5-Mar	0	-1	-1	0	0	0	-1	-1	-1	0	2	5	7	8	8	9	9	8	7	7	7	7	7	7	3.9	8.8
6-Mar	7	6	7	6	6	6	6	6	5	4	3	3	3	4	6	7	7	7	6	5	5	4	3	4	5.3	7.3
7-Mar	3	3	3	2	1	1	1	1	1	3	4	5	6	6	7	7	8	8	8	7	6	5	6	5	4.5	8.5
8-Mar	4	4	4	2	0	1	2	4	5	7	8	9	11	12	12	12	12	12	11	10	10	10	9	10	7.5	12.3
9-Mar	10	9	9	9	9	8	7	6	7	8	8	7	8	8	8	8	8	7	7	6	4	5	5	5	7.3	9.8
10-Mar	4	2	0	-1	-2	-2	-2	-3	-2	-1	0	2	4	7	7	7	7	7	6	4	2	1	1	0	2.0	7.3
11-Mar	0	0	-1	-1	-2	-2	-2	-2	-2	-1	-1	-1	-1	0	1	2	1	1	0	-1	-1	-1	-1	-2	-0.7	1.5
12-Mar	-2	-2	-3	-3	-2	-2	-2	-2	-1	0	2	6	10	13	15	13	13	12	9	8	7	6	5	6	4.4	15.1
13-Mar	6	5	3	1	1	1	1	2	4	6	8	10	12	13	16	17	17	17	16	14	13	12	11	10	9.1	17.3
14-Mar	10	10	9	7	6	6	6	6	6	9	11	13	14	14	14	13	15	14	11	9	7	6	5	4	9.4	14.9
15-Mar	1	-1	-1	-2	-2	-2	-3	-3	-2	-1	0	1	1	2	1	2	2	2	1	0	-1	-2	-3	-4	-0.6	1.9
16-Mar	-6	-5	-5	-6	-6	-6	-6	-6	-4	-1	1	4	5	6	7	7	8	8	7	4	1	-1	-2	-3	0.0	8.1
17-Mar	-3	-4	-4	-4	-4	-5	-5	-6	-3	0	3	4	8	11	12	13	13	12	11	9	7	5	4	3	3.2	12.8
18-Mar	2	2	1	1	0	0	-1	-1	1	4	7	8	9	9	10	10	10	10	9	7	6	4	2	1	4.6	10.3
19-Mar	0	0	0	0	0	0	0	0	0	1	1	2	3	2	3	2	1	0	-1	-2	-2	-2	-3	-3	0.1	2.6
20-Mar	-3	-4	-4	-4	-4	-4	-5	-5	-5	-4	-3	-1	0	1	2	2	1	1	0	-1	-1	-2	-2	-2	-2.0	1.7
21-Mar	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	0	-1	-1	-2	-2	-2	-2	-3	-3	-4	-1.9	-0.3
22-Mar	-4	-4	-4	-4	-4	-4	-4	-4	-3	-3	-2	-1	0	1	2	3	3	3	3	1	-1	-3	-4	-5	-1.7	3.1
23-Mar	-7	-7	-8	-10	-10	-10	-10	-9	-6	-3	-2	0	3	4	3	3	2	1	1	1	1	1	1	0	-2.5	3.8
24-Mar	0	0	0	0	-1	-1	-1	-1	-1	-1	0	2	3	5	5	6	6	6	5	2	2	1	1	0	1.6	6.0
25-Mar	0	-2	-3	-3	-3	-4	-4	-3	-1	1	4	5	6	7	8	8	9	8	8	7	6	5	4	3	2.8	8.5
26-Mar	3	3	3	3	3	3	3	2	3	3	4	6	9	11	13	13	13	14	13	12	11	10	9	8	7.3	13.5
27-Mar	8	7	6	5	5	3	3	2	4	8	10	12	14	15	16	15	14	13	12	11	10	8	8	7	9.1	15.8
28-Mar	7	6	6	5	5	5	4	4	4	4	5	7	8	9	11	11	11	11	10	9	7	6	3	1	6.6	10.9
29-Mar	1	1	1	2	2	2	2	2	3	5	7	9	9	11	11	10	11	11	11	10	9	8	7	6	6.3	11.4
30-Mar	6	6	5	5	3	1	0	2	3	6	8	9	10	12	12	11	11	11	11	10	9	8	7	6	7.2	11.7
31-Mar	6	5	5	4	4	3	3	3	4	4	6	6	6	6	5	4	3	3	3	3	2	1	1	1	3.9	6.5
0.1 -0.4 -0.9 -1.4 -1.9 -2.1 -2.4 -2.3 -1.6 0.1 1.8 3.2 4.7 5.7 6.4 6.5 6.6 6.3 5.5 4.1 3.3 2.4 1.6 1.0 Diurnal Average																										
9.8 9.7 9.2 8.7 8.7 8.2 7.1 6.5 7.0 8.6 11.1 13.4 14.1 15.2 15.8 16.8 17.1 17.3 15.6 13.8 13.0 11.9 11.0 10.3 Diurnal Maximum																										

Hourly Averages

External Temperature (ET) - °C

Valleyview - March 2015



Hourly Averages

Relative Humidity (RH) - %

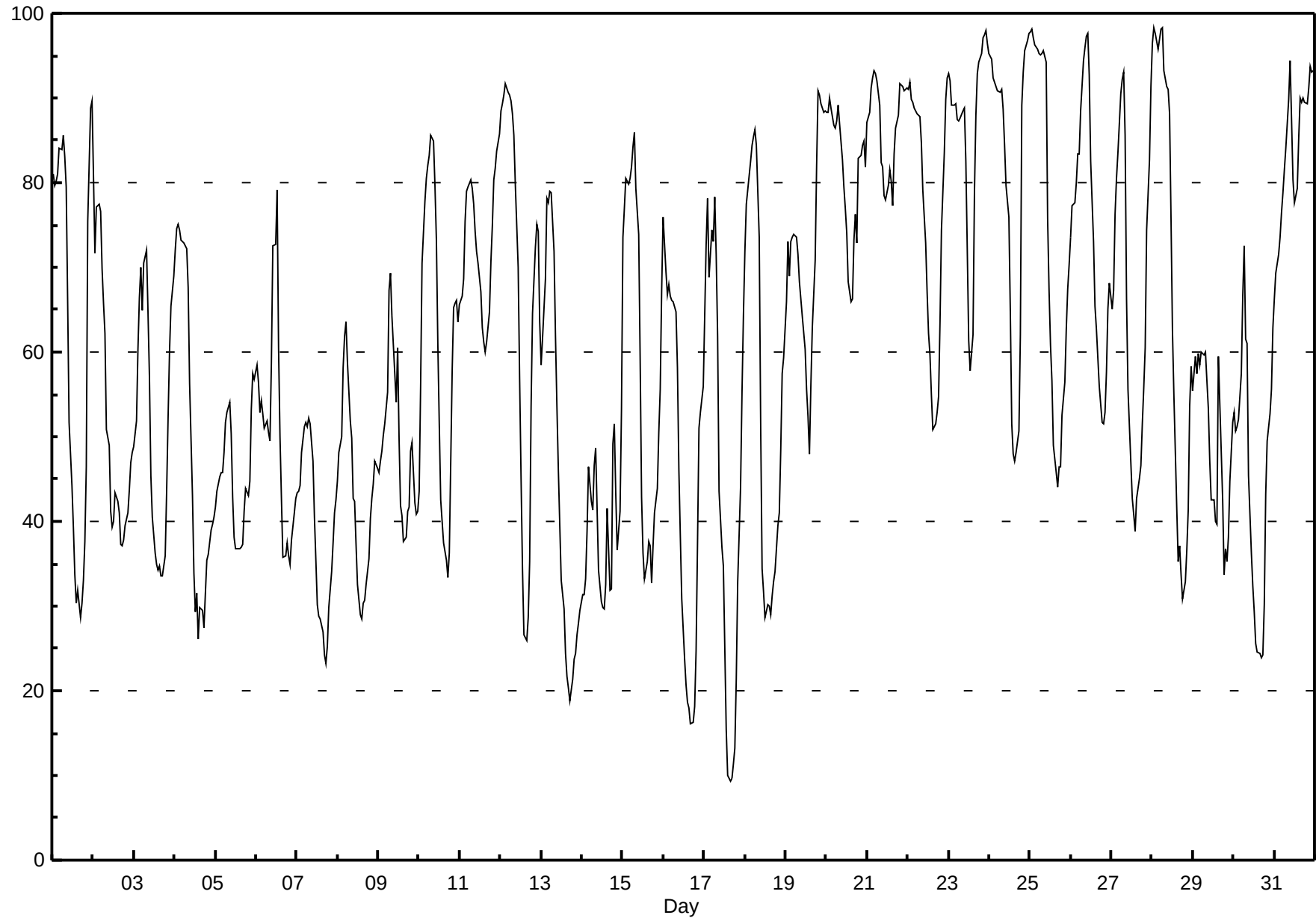
Valleyview - March 2015

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 98.3 % on Mar 28 07:00 Maximum Daily Average: 86.7 % on Mar 21																			Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0							
Minimum Value: 9 % on Mar 17 16:00 Maximum Diurnal Average: 76.5 % at hour 7 Monthly Average: 60.34 %										Minimum Daily Average: 38.9 % on Mar 7 Minimum Diurnal Average: 41.8 % at hour 15 Percentiles: P ₁ = 16.2 P ₁₀ = 32.1 Q ₁ = 41.6 Median = 59.7 Q ₃ = 79.6 P ₉₀ = 90.3 P ₉₉ = 97.5																
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-Mar	81	80	80	81	84	84	86	83	80	66	52	44	39	34	30	32	29	30	33	38	46	75	89	90	61.1	89.7
2-Mar	81	72	77	77	77	70	66	62	51	49	41	39	40	43	42	41	37	37	38	40	41	44	47	48	52.5	80.8
3-Mar	49	52	60	66	70	65	71	72	65	57	45	40	36	35	34	35	34	34	36	44	52	60	65	69	51.9	72.0
4-Mar	72	75	75	74	73	73	73	72	68	56	43	34	29	32	26	30	29	27	32	35	36	39	40	41	49.3	75.1
5-Mar	42	44	45	46	46	48	52	53	54	50	43	38	37	37	37	37	37	41	44	43	45	53	57	57	45.2	57.4
6-Mar	58	56	53	54	53	51	52	50	50	59	73	73	79	60	50	43	36	36	37	36	35	38	41	43	50.7	79.2
7-Mar	43	44	44	48	51	52	51	52	51	47	41	35	30	29	29	27	24	23	25	30	34	37	41	43	38.9	52.2
8-Mar	45	48	50	58	62	63	59	52	50	43	42	37	32	29	28	30	31	32	36	40	43	44	47	46	43.7	63.5
9-Mar	46	47	48	50	52	55	67	69	64	61	54	61	50	42	41	38	38	41	42	48	49	42	41	41	49.5	69.2
10-Mar	44	56	70	78	81	82	83	86	85	80	73	61	52	42	37	36	35	33	36	58	65	66	66	64	61.2	85.6
11-Mar	66	67	69	75	79	80	80	79	77	74	72	70	67	63	61	60	61	65	71	75	80	82	84	86	72.6	85.7
12-Mar	88	89	90	92	91	90	90	88	86	80	70	57	45	34	27	26	29	35	54	65	72	75	74	64	67.1	91.7
13-Mar	59	62	69	78	78	79	79	72	62	54	46	39	33	30	24	22	20	19	21	24	24	27	28	29	44.9	79.1
14-Mar	31	31	33	39	47	42	41	47	49	41	34	30	30	30	32	42	32	32	49	51	43	37	41	53	39.1	53.2
15-Mar	74	77	80	80	81	82	84	86	79	74	59	43	36	33	35	38	37	33	37	41	44	51	56	67	58.6	86.0
16-Mar	76	70	67	68	67	66	66	65	58	46	38	31	24	21	19	18	16	16	18	25	38	51	53	56	44.6	75.9
17-Mar	64	73	78	69	74	73	78	71	62	44	37	35	25	15	10	9	10	11	13	21	33	44	55	64	44.6	78.2
18-Mar	72	77	81	83	84	85	86	84	73	52	34	32	29	30	30	29	31	33	34	40	41	48	58	59	54.4	86.2
19-Mar	66	73	69	73	73	74	74	72	68	66	64	60	56	52	48	56	63	71	82	91	90	89	88	88	71.1	90.8
20-Mar	88	88	90	89	87	86	87	89	87	83	79	77	74	68	66	66	73	76	73	83	83	84	85	82	81.1	89.9
21-Mar	87	88	91	92	93	93	92	89	82	82	79	78	80	82	80	77	83	86	88	92	92	91	91	91	86.7	93.3
22-Mar	91	92	90	89	89	88	88	88	85	79	73	67	62	60	55	51	52	53	55	64	74	84	90	92	75.4	92.4
23-Mar	93	92	89	89	89	88	87	88	88	89	83	72	61	58	62	79	88	93	94	95	97	97	98	96	86.1	98.0
24-Mar	95	95	92	92	91	91	91	91	89	84	80	76	65	51	48	47	48	51	62	89	93	96	97	98	79.6	97.6
25-Mar	98	98	97	96	96	95	95	95	96	94	76	67	61	57	49	46	44	46	47	53	56	63	67	70	73.4	98.2
26-Mar	73	77	78	80	83	83	88	94	96	97	98	93	83	73	65	63	59	56	52	51	53	58	65	68	74.5	97.7
27-Mar	65	67	76	80	84	91	92	93	86	66	56	47	43	41	39	43	45	47	52	56	60	74	83	91	65.7	93.0
28-Mar	97	98	98	96	97	98	98	93	91	91	88	76	62	55	42	35	37	34	31	33	37	41	54	58	68.3	98.3
29-Mar	55	59	57	60	59	60	60	60	57	53	47	43	42	40	40	59	54	43	34	37	35	38	45	52	49.5	60.0
30-Mar	53	51	51	52	57	67	73	61	61	45	36	32	29	26	25	24	24	24	30	43	49	53	56	63	45.2	72.6
31-Mar	66	69	71	74	76	79	82	84	90	94	87	80	78	79	85	90	89	90	89	89	91	94	93	93	84.0	94.5
68.3 69.9 71.7 73.5 74.9 75.3 76.5 75.6 72.2 66.4 59.5 53.8 48.7 44.5 41.8 42.9 42.8 43.6 46.6 52.5 55.9 60.5 64.3 66.5																									Diurnal Average	
97.9 98.3 97.7 96.3 97.0 98.1 98.3 95.2 96.0 97.3 97.7 92.7 82.6 81.6 85.2 90.0 89.5 92.9 94.2 95.2 97.1 97.4 98.0 97.6																									Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %

Valleyview - March 2015



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2015

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	1	1	1	0	1	0	0	0	0	1	6	5	5	3	1	4	2	3	4	3	15	13	14	16	2.0	15.7
Dir	164	153	161	255	164	329	227	270	209	187	171	160	156	150	140	333	357	335	294	280	323	318	321	338	314	338
2 Spd	23	21	14	9	20	18	17	13	17	18	17	18	21	17	20	21	16	12	11	7	5	6	6	7	13.3	23.4
Dir	357	359	341	324	343	9	5	10	3	350	358	340	326	320	329	326	313	310	316	315	273	273	267	284	338	357
3 Spd	8	2	2	1	2	2	1	1	0	4	3	2	2	5	5	7	4	3	2	1	1	1	1	0	0.6	7.7
Dir	275	246	159	150	166	160	164	172	190	160	150	35	4	37	31	16	32	22	11	359	347	220	172	185	31	275
4 Spd	0	0	0	0	1	1	1	2	2	3	3	2	0	3	4	10	6	4	1	2	2	2	3	5	1.4	9.9
Dir	233	201	201	179	209	206	200	214	193	184	179	174	201	344	313	318	310	265	193	176	227	252	225	239	255	318
5 Spd	3	2	6	6	8	4	1	2	1	2	3	4	3	8	7	7	5	2	1	5	2	5	3	5	2.8	8.1
Dir	234	220	242	242	248	237	195	224	177	163	175	238	276	296	309	328	356	10	186	248	231	258	255	250	263	296
6 Spd	1	4	12	10	17	21	19	19	21	24	17	18	15	13	8	9	11	8	4	6	8	4	4	6	11.3	23.5
Dir	225	237	260	263	272	273	279	284	282	280	287	278	286	282	312	314	301	300	290	281	272	274	263	246	280	280
7 Spd	7	9	10	8	6	6	6	7	3	2	7	7	9	8	8	5	2	1	3	8	7	6	8	7	5.5	9.8
Dir	253	275	281	272	249	267	279	279	255	219	276	278	284	302	333	10	48	130	287	300	297	289	273	251	282	281
8 Spd	8	8	6	2	2	2	4	11	9	5	8	9	12	19	19	20	20	16	14	8	8	9	5	11	9.2	20.2
Dir	247	252	249	197	176	157	230	248	244	226	243	267	273	273	280	269	275	275	277	278	278	273	251	263	264	275
9 Spd	14	13	11	11	11	7	2	2	10	11	13	18	15	17	14	10	7	4	2	0	2	5	6	4	8.1	17.9
Dir	263	260	264	262	262	253	206	206	256	265	272	289	288	306	285	302	315	313	303	201	232	249	253	249	274	289
10 Spd	4	11	10	7	6	3	2	0	0	1	2	5	5	4	3	6	5	2	2	7	5	4	1	3	2.5	10.9
Dir	261	6	9	11	5	359	8	173	200	190	169	166	162	142	19	17	25	70	12	6	10	14	24	21	17	6
11 Spd	3	2	3	5	5	4	5	6	5	6	9	9	9	9	9	8	9	9	9	8	5	2	4	3	5.9	9.5
Dir	20	16	9	19	18	17	8	11	5	13	341	356	353	344	345	351	352	353	359	8	4	77	333	25	360	352
12 Spd	5	3	4	7	2	3	1	1	2	3	3	3	4	4	4	12	9	12	8	3	2	3	3	3	1.6	12.0
Dir	15	31	15	358	43	327	43	151	160	167	174	171	155	159	208	256	287	275	264	186	188	204	193	201	249	275
13 Spd	2	2	1	2	2	0	2	4	6	5	3	6	7	7	7	8	7	6	8	7	7	4	5	4	4.5	7.8
Dir	201	182	172	218	209	187	188	174	176	172	172	167	168	167	162	164	167	164	161	168	176	178	174	173	171	164
14 Spd	5	5	1	1	1	3	2	0	1	1	3	3	4	3	4	3	15	16	23	20	26	22	21	20	6.8	26.1
Dir	169	168	153	140	161	145	170	220	166	211	174	159	172	159	209	239	242	266	255	263	262	267	277	298	254	262
15 Spd	19	10	6	7	5	4	2	2	1	5	6	12	15	16	15	13	16	13	9	3	2	0	1	1	7.1	18.9
Dir	326	321	316	300	317	294	268	227	196	259	303	312	315	319	329	317	331	315	349	337	278	227	217	156	316	326
16 Spd	1	2	2	2	2	2	2	3	4	2	3	3	3	3	2	2	2	1	2	1	0	0	0	0	1.4	3.5
Dir	166	180	185	189	183	186	179	174	161	164	168	182	231	224	208	139	119	21	44	31	152	308	176	164	176	161
17 Spd	0	0	0	0	0	0	0	1	1	1	1	3	3	3	7	8	10	7	6	6	8	4	4	2	2.5	9.6
Dir	297	168	222	264	250	227	238	193	186	150	170	348	357	104	126	125	126	134	125	152	160	163	170	185	139	126
18 Spd	3	2	3	4	3	2	2	2	2	3	14	17	16	12	14	16	15	11	5	3	1	1	1	1	4.2	17.2
Dir	175	186	179	172	177	178	181	173	160	175	280	283	287	294	310	316	323	329	319	347	319	215	175	84	291	283
19 Spd	0	0	0	1	1	1	0	1	2	4	4	6	8	9	10	12	12	10	9	9	9	9	9	9	5.5	11.9
Dir	226	140	234	135	350	357	17	302	7	24	12	2	7	353	16	355	356	22	22	19	20	14	12	4	9	355
20 Spd	9	8	6	5	4	5	4	3	4	3	3	4	5	8	7	9	7	8	8	8	7	8	6	6	3.6	9.1
Dir	360	2	8	17	15	20	22	342	356	28	50	32	59	123	126	127	127	123	120	124	121	122	121	118	82	360
21 Spd	5	3	2	4	3	3	4	4	7	5	5	6	4	4	3	5	5	4	3	3	4	3	1	6	3.2	7.4
Dir	118	103	85	111	107	102	120	130	133	143	153	163	161	159	158	165	171	165	165	171	172	161	127	339	142	133
22 Spd	6	1	3	4	4	3	1	0	1	2	2	1	1	0	3	3	1	3	1	1	0	0	1	1	0.7	5.5
Dir	340	308	274	276	275	283	274	207	194	239	244	31	224	225	175	161	147	36	96	19	308	222	339	348	284	340

Hourly Averages

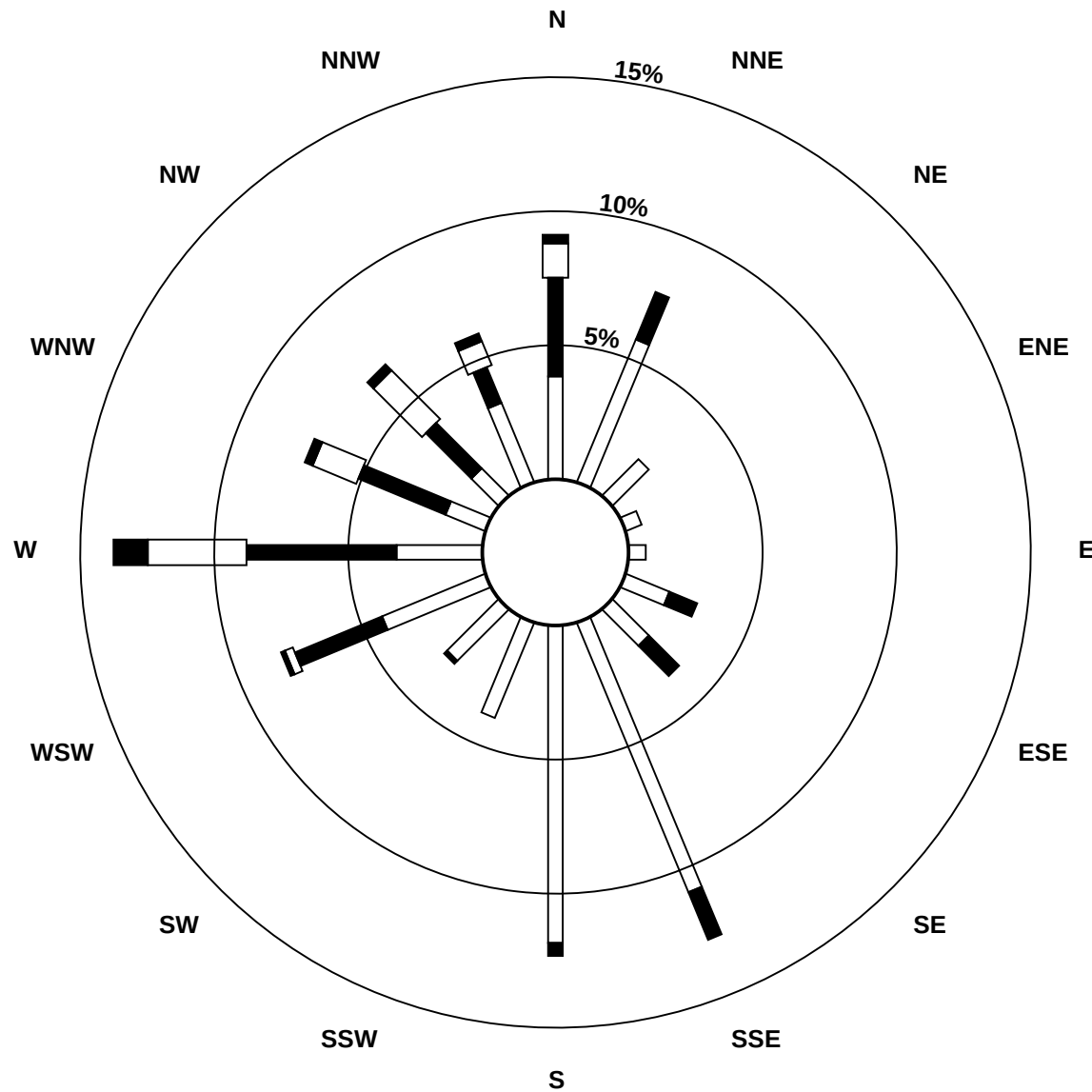
Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2015

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	2	1	0	2	2	0	0	0	0	1	3	4	1	4	5	3	0	0	0	1	1	0	1	1	0.3	4.7									
Dir	349	339	166	345	343	317	331	208	246	341	343	337	346	133	133	149	330	121	166	345	325	152	181	169	20	133									
24 Spd	1	2	1	1	2	3	4	3	4	3	2	2	3	5	5	4	4	4	4	4	3	3	0	1	2.7	5.3									
Dir	152	167	166	160	158	171	169	167	167	170	168	148	166	162	162	155	156	162	190	177	239	170	206	340	168	162									
25 Spd	1	3	0	0	1	0	1	0	0	1	1	1	1	3	3	2	1	2	1	1	3	1	1	0	0.4	3.3									
Dir	142	336	186	213	213	202	344	152	148	159	140	251	13	20	352	35	19	352	20	243	251	192	164	171	337	352									
26 Spd	1	1	0	0	1	2	1	1	1	3	4	5	4	5	3	2	1	1	5	4	2	1	1	1	1.3	5.3									
Dir	154	204	155	198	193	181	209	140	181	169	167	164	166	173	164	130	42	248	278	281	306	210	147	183	188	164									
27 Spd	1	1	1	0	0	1	0	0	1	1	1	3	1	1	2	8	6	4	7	4	1	4	5	10	1.5	9.8									
Dir	268	184	181	186	201	185	163	192	164	155	145	159	183	21	341	355	10	25	3	24	6	315	317	347	355	347									
28 Spd	1	0	2	3	2	0	5	10	7	8	5	7	10	10	14	12	8	6	6	3	2	1	1	1	4.7	13.8									
Dir	264	176	255	273	296	178	288	296	287	275	265	295	316	322	317	296	310	293	290	251	252	220	182	194	294	317									
29 Spd	2	2	1	2	3	2	2	2	2	3	2	3	2	1	3	7	7	12	10	7	15	16	11	7	3.9	16.0									
Dir	206	195	193	172	184	178	178	186	188	177	172	183	169	123	25	299	264	261	271	256	275	271	258	236	250	271									
30 Spd	10	8	10	7	1	1	1	2	2	5	11	9	6	3	2	2	2	1	1	1	1	1	1	2	2.5	11.0									
Dir	242	259	248	245	186	92	145	204	193	263	263	268	280	185	118	39	70	96	128	112	34	25	307	321	252	263									
31 Spd	2	3	3	4	0	2	1	1	5	5	3	6	8	10	13	9	14	13	11	11	9	8	12	14	6.2	14.2									
Dir	351	17	7	347	21	294	273	204	266	297	246	295	303	319	272	268	272	273	273	275	273	252	262	279	281	272									
Spd	2.2	1.8	2.0	1.8	1.6	1.2	1.0	1.4	1.5	1.7	2.4	3.2	3.4	3.1	3.3	4.0	3.7	3.2	2.7	2.0	2.9	2.6	2.6	2.8	Diurnal Average										
Dir	297	304	288	288	286	288	287	267	259	258	266	285	293	301	311	314	309	299	291	283	276	269	271	288											
Spd	23.4	21.3	14.1	10.5	19.7	20.9	19.4	18.9	21.3	23.5	17.4	18.2	20.7	18.8	19.6	21.4	20.2	16.1	23.5	20.3	26.1	22.4	21.4	19.9	Diurnal Maximum										
Dir	357	359	341	262	343	273	279	284	282	280	287	340	326	273	329	326	275	275	255	263	262	267	277	298											
Maximum Speed Value: 26 km/h on Mar 14 21:00																								Minimum Speed Value: 0 km/h on Mar 23 03:00										Hours in Service: 744	
Maximum Daily Speed Average: 13.3 km/h on Mar 2																								Minimum Daily Speed Average: 0.3 km/h on Mar 25										Hours of Data: 744	
Maximum Diurnal Speed Average: 4.0 km/h at hour 16																								Minimum Diurnal Speed Average: 1.0 km/h at hour 7										Hours of Missing Data: 0	
Monthly Average Velocity: 2.33 km/h 289.2 deg																								Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.6 Q ₁ = 1.5 Median = 3.5 Q ₃ = 7.4 P ₉₀ = 12.1 P ₉₉ = 21.4										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	65		46		11		3		0		0		125																						
NorthEast	25		3		0		0		0		0		28																						
East	14		0		0		0		0		0		14																						
SouthEast	50		20		0		0		0		0		70																						
South	175		20		0		0		0		0		195																						
SouthWest	65		10		1		0		0		0		76																						
West	42		55		37		11		0		0		145																						
NorthWest	32		32		23		4		0		0		91																						
Total	468		186		72		18		0		0		744																						

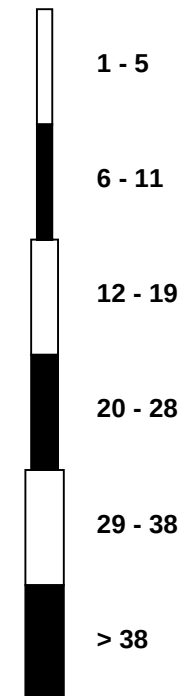
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - March 2015



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - March 2015

Maximum Speed: 26 km/h on Mar 14 21:00																				Maximum Daily Speed Average: 14.9 km/h on Mar 2										Hours in Service: 744	
Minimum Speed: 0 km/h on Mar 23 03:00																				Minimum Daily Speed Average: 1.4 km/h on Mar 25										Hours of Data: 744	
Maximum Diurnal Speed Average: 8.3 km/h at hour 16																				Minimum Diurnal Speed Average: 3.3 km/h at hour 7										Hours of Missing Data: 0	
Monthly Average Speed: 5.40 km/h																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.8 Q ₁ = 1.8 Median = 3.8 Q ₃ = 7.5 P ₉₀ = 12.6 P ₉₉ = 21.6										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-Mar	1	1	1	1	1	1	0	0	1	1	6	5	5	4	3	4	2	3	4	3	16	13	14	16	4.4	16.3					
2-Mar	24	22	14	9	20	18	17	13	17	19	17	19	21	18	20	22	16	12	11	7	5	6	6	7	14.9	23.5					
3-Mar	8	3	2	1	2	2	1	1	1	4	3	2	3	5	5	7	4	3	2	1	1	1	1	0	2.7	7.7					
4-Mar	0	0	0	0	1	1	1	2	2	4	3	2	2	3	4	10	6	4	2	2	2	2	3	5	2.6	10.0					
5-Mar	3	2	6	6	8	4	1	2	1	2	3	4	4	8	7	7	5	2	1	5	2	6	4	6	4.1	8.3					
6-Mar	2	5	12	10	17	21	20	19	22	24	18	18	16	14	9	9	11	8	5	6	8	5	4	6	12.0	23.8					
7-Mar	7	10	10	8	6	6	6	7	4	2	7	8	9	8	9	5	2	2	3	8	7	6	8	7	6.5	9.8					
8-Mar	8	8	6	2	2	3	4	11	9	5	8	9	13	19	19	20	20	16	15	8	9	9	5	11	10.0	20.5					
9-Mar	14	13	12	11	11	7	2	2	11	11	13	18	15	17	15	10	7	5	2	1	3	5	6	4	8.9	18.3					
10-Mar	5	11	10	7	6	3	2	0	0	1	2	5	5	4	4	6	5	3	3	7	5	5	1	3	4.3	11.0					
11-Mar	3	2	3	5	5	4	5	6	5	6	9	10	9	9	9	9	10	10	10	9	6	3	4	4	6.3	9.8					
12-Mar	5	4	5	7	3	3	1	1	2	3	3	3	4	4	5	12	9	12	9	3	2	3	3	3	4.6	12.3					
13-Mar	2	2	2	2	2	0	2	4	6	5	3	6	7	7	7	8	7	6	8	7	7	4	5	4	4.7	7.9					
14-Mar	5	5	2	1	1	3	2	0	2	1	3	3	4	3	5	4	16	16	24	21	26	23	22	21	8.9	26.5					
15-Mar	19	10	6	8	5	4	2	3	1	5	7	13	15	17	16	13	17	13	9	3	2	0	1	1	7.9	19.3					
16-Mar	1	2	2	2	2	2	3	3	4	2	3	4	4	4	3	3	2	2	2	1	0	1	0	0	2.1	4.2					
17-Mar	1	0	1	0	1	1	1	1	1	2	2	3	3	6	7	8	10	7	6	7	8	4	4	2	3.5	9.7					
18-Mar	3	3	3	4	3	2	2	2	2	3	14	17	16	13	15	16	15	11	5	3	1	1	1	1	6.6	17.4					
19-Mar	1	0	1	1	2	1	0	1	2	4	4	6	8	9	10	12	12	10	9	9	9	10	10	10	5.9	12.1					
20-Mar	9	8	6	5	4	5	4	3	4	3	3	4	5	8	8	9	8	8	9	8	7	8	6	6	6.2	9.1					
21-Mar	5	3	2	4	3	3	4	4	8	5	5	6	4	4	3	5	5	4	3	3	4	3	1	6	4.1	7.5					
22-Mar	6	1	3	4	4	3	1	0	1	2	2	2	3	3	3	3	2	3	2	2	0	0	1	1	2.2	5.6					
23-Mar	2	1	0	2	2	0	0	0	1	1	3	4	3	4	5	3	1	2	0	1	1	0	1	1	1.6	4.8					
24-Mar	1	2	1	1	2	3	4	3	4	3	2	2	3	5	5	4	4	4	4	4	5	3	2	1	3.1	5.5					
25-Mar	1	3	0	1	1	0	1	0	0	2	1	2	2	4	4	2	1	2	1	1	3	1	1	1	1.4	3.7					
26-Mar	1	1	0	0	1	2	1	1	1	3	4	5	5	3	2	1	1	5	4	3	1	1	1	1	2.2	5.3					
27-Mar	1	1	1	0	0	1	0	0	1	1	2	3	2	2	4	8	7	4	7	4	2	4	5	10	3.0	10.0					
28-Mar	2	1	3	3	3	0	6	10	7	8	5	7	11	11	14	12	9	6	6	3	3	1	1	1	5.5	14.5					
29-Mar	2	2	1	2	3	2	2	3	3	4	3	3	2	1	3	8	8	13	10	7	15	16	11	7	5.4	16.2					
30-Mar	10	9	10	7	2	2	2	2	2	6	11	9	7	3	3	3	2	1	1	2	2	2	1	2	4.3	11.3					
31-Mar	2	3	4	4	1	3	2	1	5	5	4	6	8	10	13	10	14	13	11	11	10	8	12	14	7.4	14.4					
4.9 4.4 4.1 3.9 3.9 3.6 3.3 3.4 4.2 4.7 5.7 6.8 7.0 7.4 7.8 8.3 7.7 6.6 6.0 5.2 5.6 4.9 4.7 5.4																									Diurnal Average						
23.5 21.6 14.2 10.6 20.1 21.0 19.6 19.1 21.6 23.8 18.0 18.7 21.0 19.0 19.8 21.6 20.5 16.4 23.9 20.7 26.5 22.7 21.6 20.7																									Diurnal Maximum						

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

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - March 2015

Maximum Value: 97.6 deg on Mar 22 14:00																			Hours in Service: 744						
Minimum Value: 4.6 deg on Mar 13 20:00																			Hours of Data: 744						
Percentiles: P ₁ = 6.1 P ₁₀ = 8.5 Q ₁ = 10.7 Median = 15.8 Q ₃ = 34.5 P ₉₀ = 60.9 P ₉₉ = 89.2																			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-Mar	38	13	20	61	15	56	61	87	68	32	9	10	12	15	84	9	46	29	11	24	8	14	11	15	87.4
2-Mar	7	9	8	9	11	9	11	10	10	10	10	15	10	13	8	9	11	9	8	11	15	12	10	16	16.0
3-Mar	8	43	10	15	9	29	24	16	80	11	34	15	25	20	13	11	16	14	13	59	32	61	20	41	79.8
4-Mar	30	51	56	38	41	21	23	22	24	11	18	41	80	32	61	10	16	21	37	30	18	22	17	10	80.3
5-Mar	11	10	8	7	6	11	29	12	17	10	11	34	37	15	12	14	11	30	34	9	20	30	51	34	50.6
6-Mar	28	25	9	7	7	7	8	9	9	9	14	12	21	18	38	24	12	13	17	10	10	37	26	10	38.4
7-Mar	8	12	7	7	10	13	9	7	38	36	18	15	18	14	29	23	20	70	44	9	10	13	11	6	70.5
8-Mar	5	6	13	8	13	20	24	6	8	19	10	19	13	10	8	10	10	11	12	12	10	16	32	9	32.4
9-Mar	8	9	8	8	7	11	30	10	31	10	10	13	11	12	21	15	11	14	14	70	33	10	14	15	69.8
10-Mar	33	7	9	9	7	15	20	88	63	44	19	9	11	22	27	14	17	43	56	8	12	15	47	17	87.8
11-Mar	13	8	11	10	9	11	16	13	12	15	9	12	13	15	13	13	10	13	16	20	26	65	32	21	65.0
12-Mar	13	32	36	20	69	40	48	32	21	14	14	16	11	14	29	11	16	12	34	9	16	14	11	11	68.8
13-Mar	8	17	39	36	17	60	9	12	7	7	11	7	7	7	11	8	7	10	9	5	6	9	6	9	60.4
14-Mar	8	6	81	77	48	17	35	65	58	54	8	17	10	13	26	76	17	11	10	12	10	9	9	16	81.2
15-Mar	12	11	16	12	16	17	37	27	35	26	30	15	12	13	11	16	11	10	13	28	13	43	54	26	53.7
16-Mar	14	9	11	10	7	8	6	9	8	17	19	29	40	37	66	36	35	47	18	47	81	79	27	55	81.4
17-Mar	55	79	32	68	76	88	68	33	23	24	65	16	21	64	12	13	9	12	8	9	10	14	12	8	88.2
18-Mar	6	12	7	10	16	10	13	23	28	22	12	9	13	22	11	11	10	8	9	15	53	44	43	60	59.8
19-Mar	42	50	76	63	83	51	83	55	26	11	17	11	11	7	14	10	8	14	8	9	9	10	9	8	83.5
20-Mar	8	8	9	10	12	13	13	16	23	20	27	23	19	19	12	8	9	8	9	8	10	9	11	8	26.9
21-Mar	10	19	21	20	22	21	11	11	11	12	17	13	13	14	22	12	8	9	11	10	8	15	39	14	39.2
22-Mar	10	28	14	9	15	13	28	26	32	34	52	46	82	98	69	48	60	13	32	52	90	53	56	18	97.6
23-Mar	11	35	85	20	10	57	60	71	63	26	7	6	86	30	14	21	86	86	39	55	38	54	15	13	86.0
24-Mar	25	14	15	13	18	9	8	10	8	12	14	25	31	21	17	32	18	13	22	9	53	12	82	95	95.2
25-Mar	41	60	44	38	34	56	89	78	92	19	89	64	59	23	30	23	30	15	37	67	20	20	28	27	92.4
26-Mar	24	14	37	62	52	15	31	23	17	9	37	8	11	13	25	29	51	61	13	11	14	42	46	37	62.3
27-Mar	97	48	27	75	58	19	52	75	81	35	55	27	67	70	90	12	12	11	9	16	58	21	21	11	97.3
28-Mar	79	66	25	15	54	77	22	10	11	12	22	24	18	18	17	13	16	16	16	26	63	62	20	12	78.6
29-Mar	17	15	15	35	13	7	23	14	24	39	54	26	38	41	66	31	50	13	12	12	10	10	8	14	65.8
30-Mar	13	13	7	10	20	63	36	11	15	46	14	20	35	40	67	49	35	48	55	59	64	82	67	63	81.9
31-Mar	56	37	47	26	92	49	68	28	31	20	41	29	15	15	17	28	11	10	15	11	13	14	9	9	92.3
97.3 79.3 84.9 77.3 92.3 88.2 88.7 87.8 92.4 54.4 89.4 63.6 86.0 97.6 90.2 76.5 85.9 86.0 55.7 69.8 89.7 81.9 82.4 95.2																									

PAZA

Falher Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

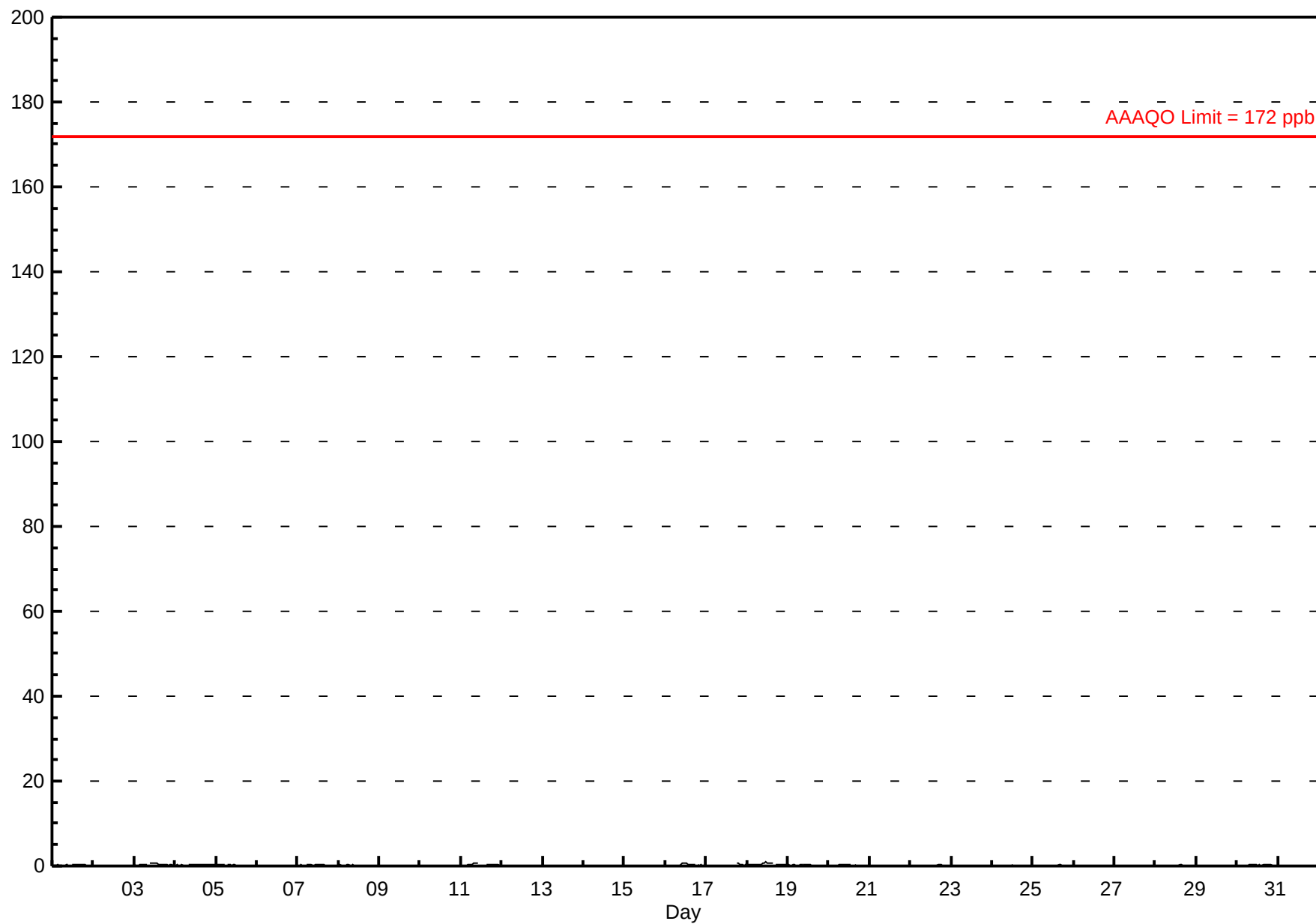
Falher - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744						
Maximum Value: 0.9 ppb on Mar 18 12:00																				Maximum Daily Average: 0.4 ppb on Mar 18		Hours of Data: 709				
Minimum Value: 0 ppb on Mar 1 22:00																				Minimum Daily Average: 0.0 ppb on Mar 26		Hours of Missing Data: 35				
Maximum Diurnal Average: 0.2 ppb at hour 12																				Minimum Diurnal Average: 0.1 ppb at hour 24		Hours of Calibration: 35				
Monthly Average: 0.12 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.7		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-Mar	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
2-Mar	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
3-Mar	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	0.7
4-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
5-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
6-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
7-Mar	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
8-Mar	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
9-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
10-Mar	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
11-Mar	A	0	0	0	0	0	0	1	1	1	1	C	C	C	C	0	0	0	0	0	0	0	0	0	0.3	0.7
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.1
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.1
14-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.1
15-Mar	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
16-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0.2	0.6
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0.2	0.8
18-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0.4	0.9
19-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3
20-Mar	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
21-Mar	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	0.1
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Mar	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
24-Mar	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
25-Mar	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	0.3
26-Mar	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	0.1
27-Mar	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
28-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
30-Mar	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
31-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1																									Diurnal Average	
0.3 0.3 0.3 0.2 0.3 0.3 0.4 0.7 0.7 0.6 0.7 0.9 0.8 0.7 0.5 0.5 0.4 0.5 0.8 0.8 0.4 0.4 0.4 0.3																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Falher - March 2015



Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

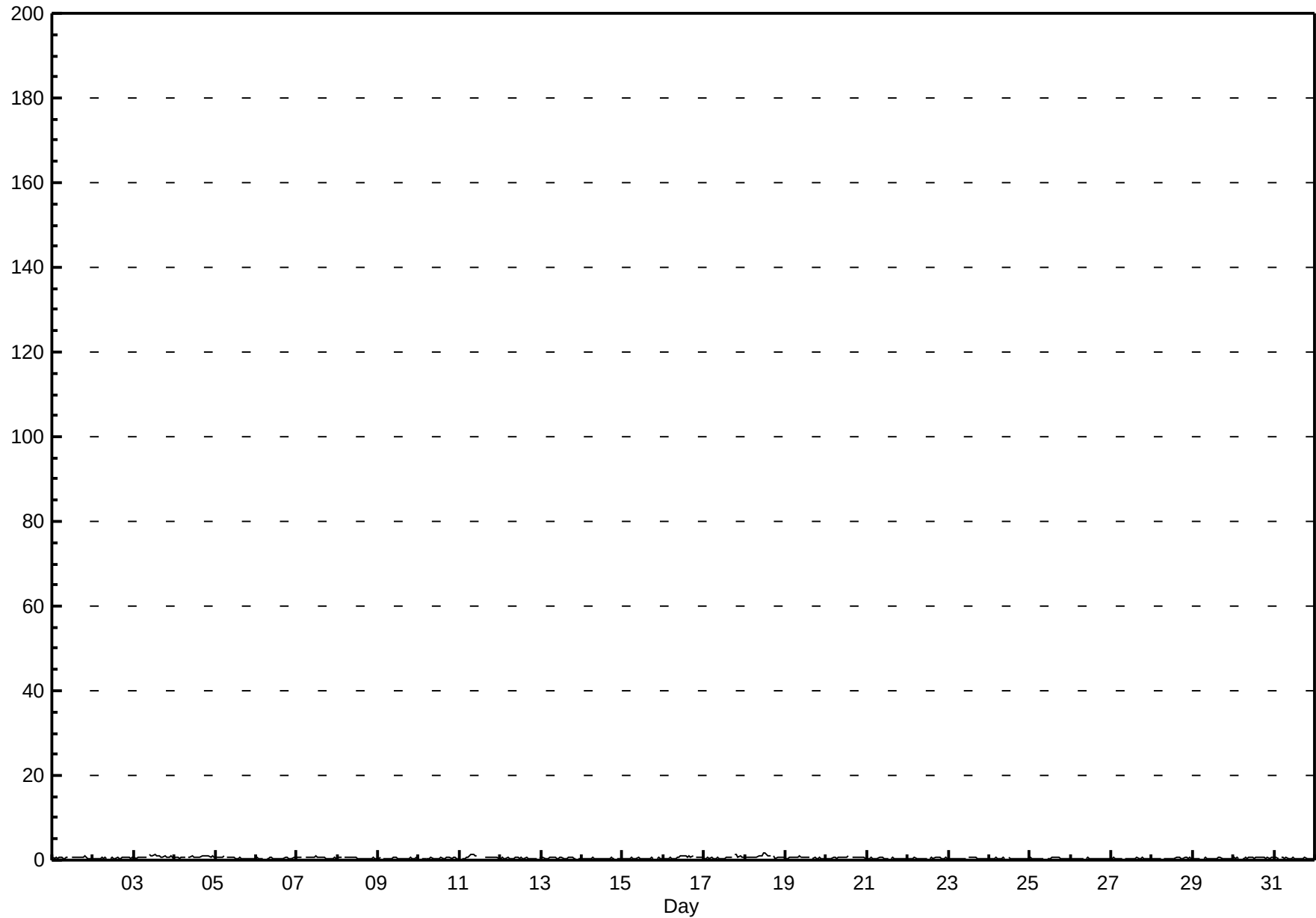
Falher - March 2015

Maximum Value: 1.7 ppb on Mar 18 13:00																				Maximum Daily Average: 0.8 ppb on Mar 18										Hours in Service: 744									
Minimum Value: 0 ppb on Mar 26 07:00																				Minimum Daily Average: 0.3 ppb on Mar 26										Hours of Data: 709									
Maximum Diurnal Average: 0.6 ppb at hour 12																				Minimum Diurnal Average: 0.4 ppb at hour 4										Hours of Missing Data: 35									
Monthly Average: 0.52 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 = 1.2										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-Mar	1	1	1	1	1	1	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0.6	1.1													
2-Mar	0	0	0	0	1	1	0	1	0	A	0	1	0	1	0	1	0	0	1	1	1	1	1	1	0.5	0.7													
3-Mar	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.3													
4-Mar	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1													
5-Mar	1	1	1	1	1	1	A	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0.6	0.9													
6-Mar	1	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0.4	0.6													
7-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0	0.6	0.9													
8-Mar	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0.5	0.7													
9-Mar	0	1	A	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0.4	0.6													
10-Mar	0	A	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	1	1	0	1	1	0	0	0.5	0.7													
11-Mar	A	0	0	0	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	0	0.8	1.3													
12-Mar	0	1	0	0	1	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	A	1	0.5	0.6													
13-Mar	0	1	0	0	0	1	1	1	1	0	0	1	1	0	0	0	1	1	1	0	0	A	0	0	0.5	0.7													
14-Mar	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0.4	0.6													
15-Mar	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	A	0	1	0	0	0.4	0.6													
16-Mar	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	1.0													
17-Mar	0	1	1	0	1	0	0	0	1	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	0.6	1.5													
18-Mar	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	A	1	1	1	1	1	1	1	0.8	1.7													
19-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	0	0	1	0	0	0	0.6	0.9													
20-Mar	0	0	0	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0.6	0.9													
21-Mar	0	0	1	0	0	0	0	1	1	1	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0.4	0.7													
22-Mar	0	0	0	0	1	0	0	0	0	0	0	0	A	0	1	0	1	1	1	1	1	0	1	0	0.5	0.8													
23-Mar	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0.4	0.7													
24-Mar	0	0	0	0	1	0	0	0	1	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7													
25-Mar	1	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	0	0	0.4	0.7													
26-Mar	0	0	1	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5													
27-Mar	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0.4	0.6													
28-Mar	0	0	0	0	0	0	A	1	0	0	0	0	0	0	1	1	1	0	0	1	1	0	1	0	0.4	0.7													
29-Mar	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.4	0.6													
30-Mar	1	0	1	0	A	0	0	1	0	1	1	1	0	1	1	1	1	1	1	1	0	1	0	1	0.6	0.7													
31-Mar	0	1	0	A	1	1	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.6													
0.5 0.4 0.5 0.4 0.5 0.5 0.5 0.5 0.6 0.6 0.6 0.6 0.6 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.4																									Diurnal Average														
0.7 0.7 0.8 0.7 0.8 0.9 1.3 1.2 1.2 1.3 1.1 1.6 1.7 1.1 0.9 0.9 0.9 0.9 1.5 1.4 0.9 0.9 1.1 0.7																									Diurnal Maximum														
C - Calibration																									A - Automated Daily Zero Span														

Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

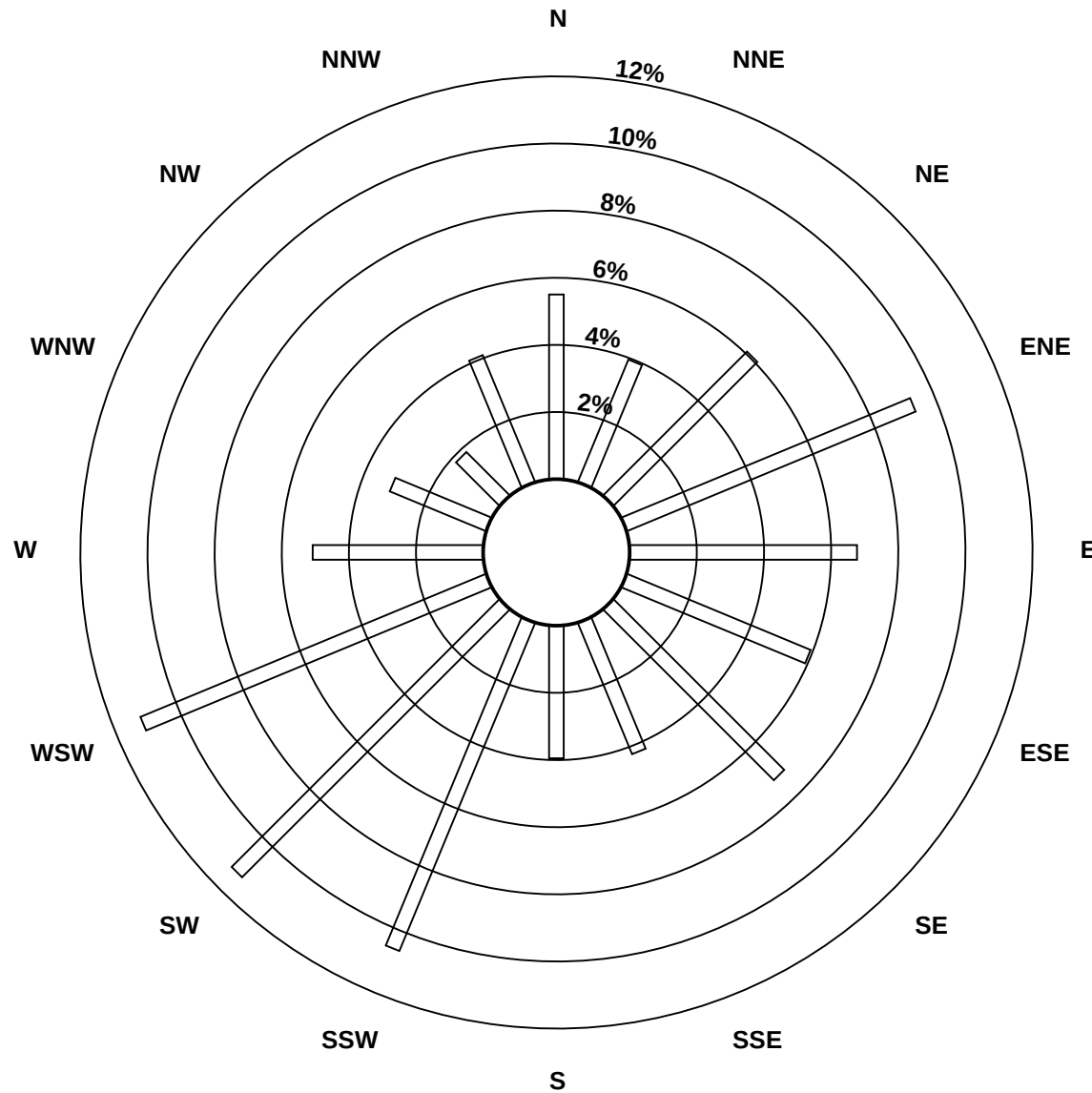
Falher - March 2015



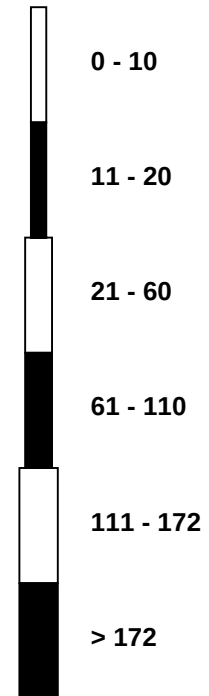
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Falher - March 2015



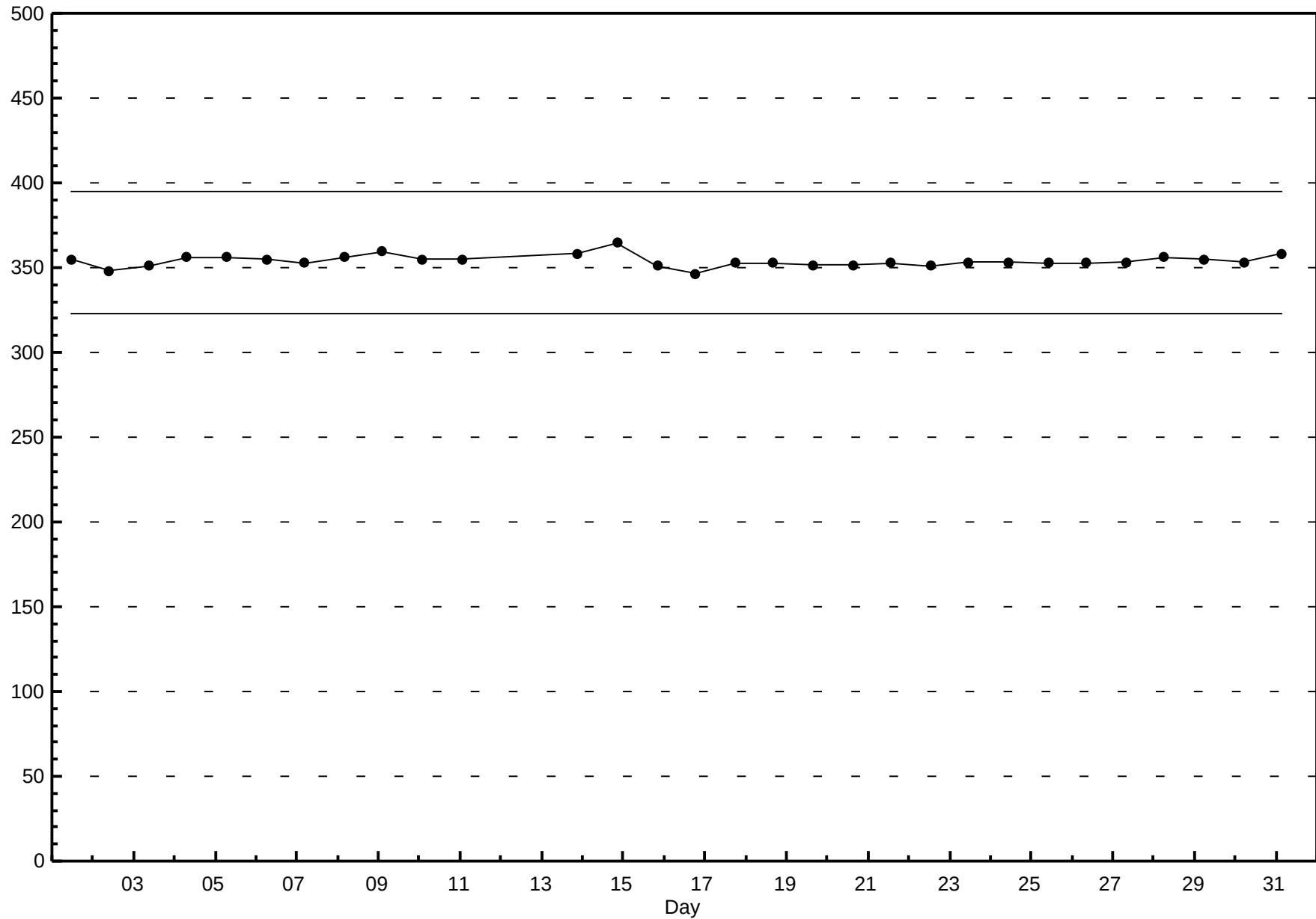
Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)

Falher - March 2015



Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

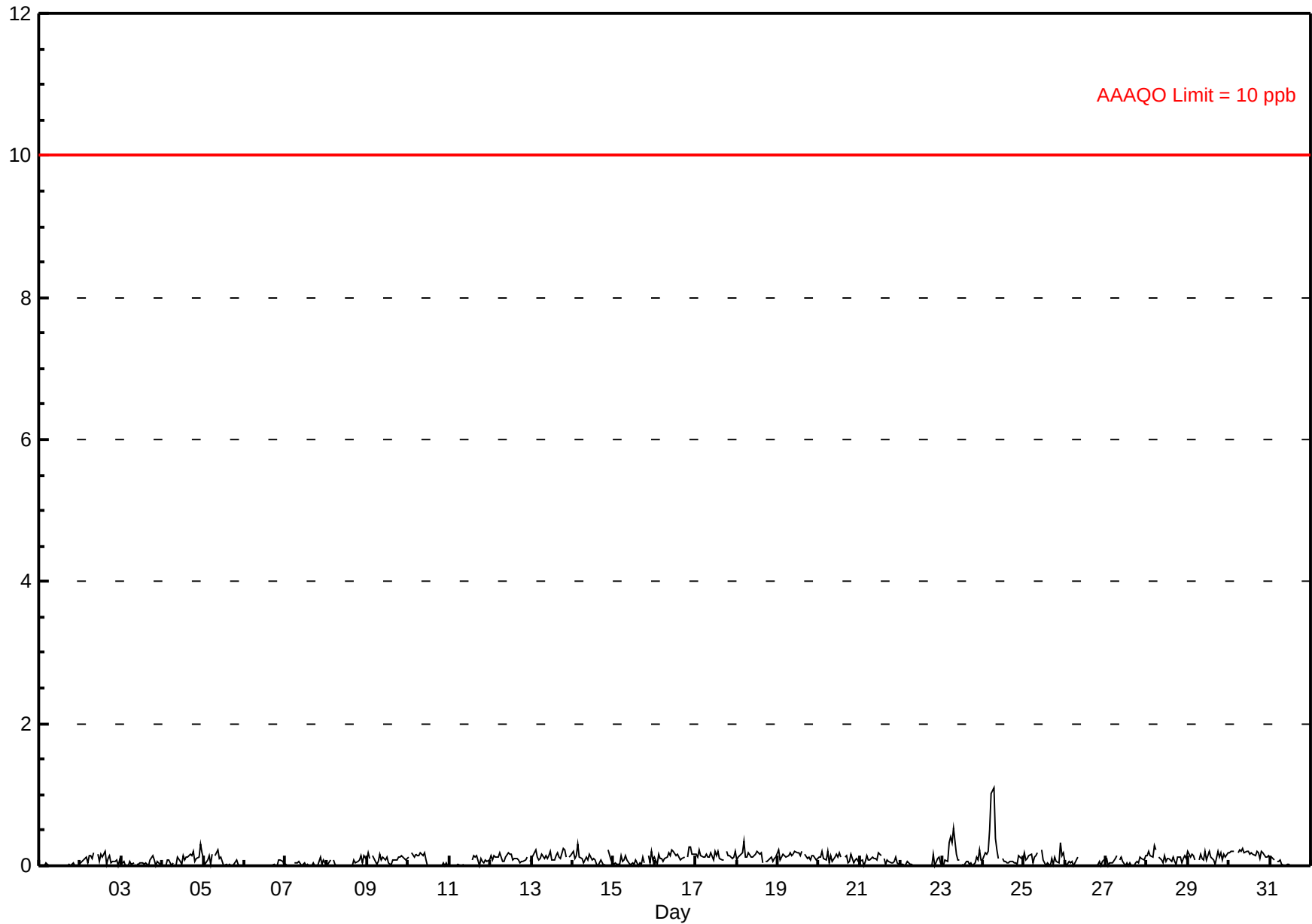
Falher - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.1 ppb on Mar 24 07:00 Maximum Daily Average: 0.2 ppb on Mar 24																								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 Mar 1 01:00 Maximum Diurnal Average: 0.1 ppb at hour 6 Monthly Average: 0.09 ppb												Minimum Daily Average: 0.0 ppb on Mar 1 Minimum Diurnal Average: 0.1 ppb at hour 16 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.1 P ₉₀ = 0.2 P ₉₉ = 0.3															
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-Mar	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	
2-Mar	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	
3-Mar	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	0.1	
4-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
5-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
6-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
7-Mar	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	
8-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
9-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
10-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
11-Mar	A	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.2	
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2	
14-Mar	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	0.3	
15-Mar	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	
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3	
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.2	
18-Mar	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	
19-Mar	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	
20-Mar	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	0.2	
21-Mar	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	
22-Mar	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	
23-Mar	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
24-Mar	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1	
25-Mar	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	
26-Mar	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	0.1	
27-Mar	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	0.1	
28-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
29-Mar	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	
30-Mar	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	
31-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
0.1 0.1																										Diurnal Average	
0.2 0.2 0.2 0.3 0.5 1.0 1.1 0.5 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.3 0.3 0.2 0.1																										Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																											

Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

Falher - March 2015



Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

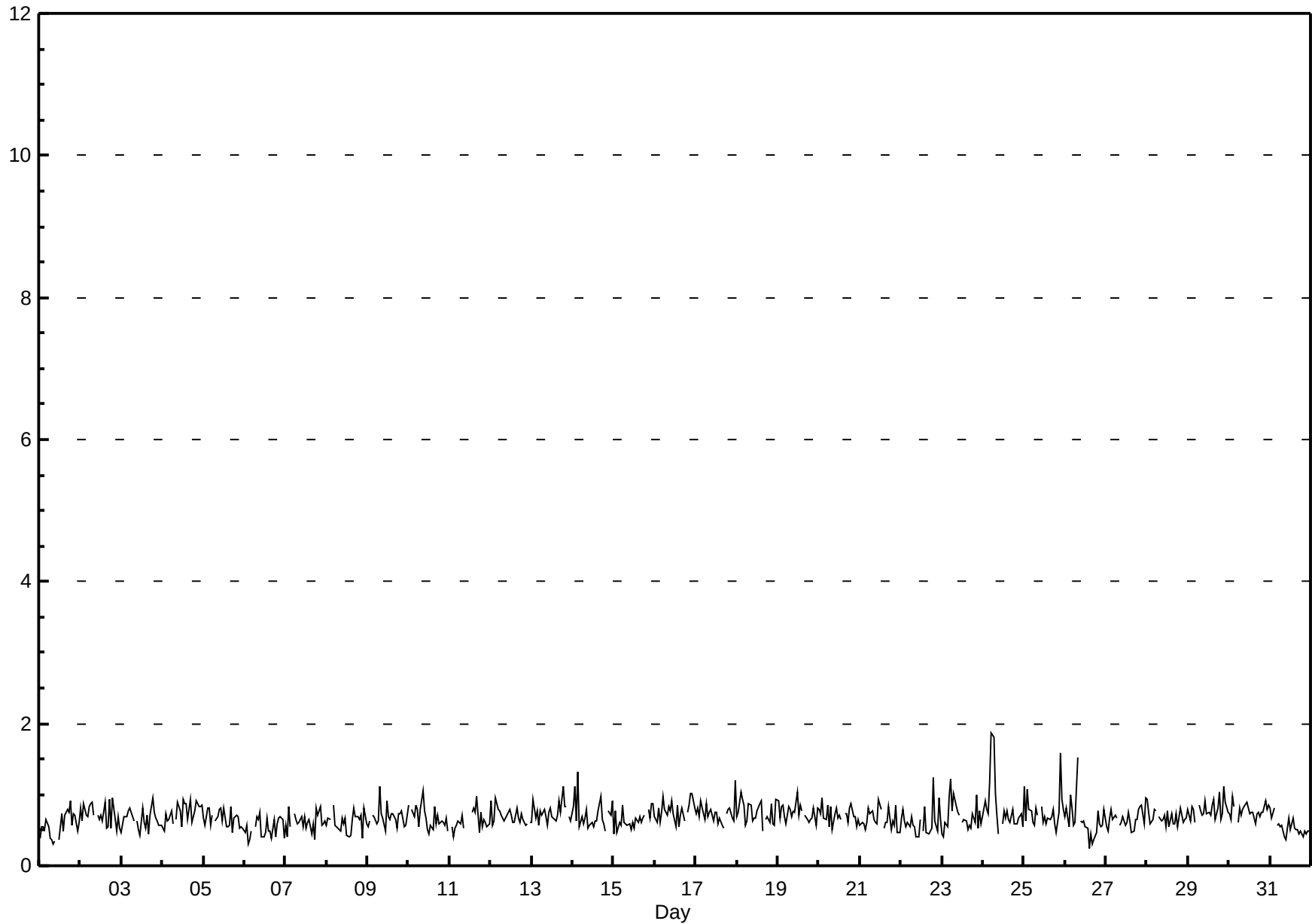
Falher - March 2015

Maximum Value: 1.9 ppb on Mar 24 06:00																				Maximum Daily Average: 0.8 ppb on Mar 24										Hours in Service: 744									
Minimum Value: 0 ppb on Mar 26 15:00																				Minimum Daily Average: 0.5 ppb on Mar 6										Hours of Data: 709									
Maximum Diurnal Average: 0.8 ppb at hour 8																				Minimum Diurnal Average: 0.6 ppb at hour 16										Hours of Missing Data: 35									
Monthly Average: 0.69 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 0.9 P ₉₉ = 1.2										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-Mar	0	1	1	0	1	1	0	0	0	A	0	1	1	1	0	1	1	1	1	1	1	1	0	1	0.6	0.9													
2-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.7	0.9													
3-Mar	0	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0.7	1.0													
4-Mar	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
5-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.7	0.8													
6-Mar	0	1	0	0	0	A	1	1	1	1	0	0	0	1	0	0	0	1	0	1	1	1	1	0	0.5	0.8													
7-Mar	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0.6	0.8													
8-Mar	1	1	1	A	1	1	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1	0	1	1	0.6	0.9													
9-Mar	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1													
10-Mar	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0.7	1.0													
11-Mar	A	1	0	1	1	1	1	1	1	C	C	C	C	1	1	1	1	0	1	1	1	1	1	1	0.6	1.0													
12-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0													
13-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.1													
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0.7	1.3													
15-Mar	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.6	0.9													
16-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0													
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	1.2													
18-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	0.7	1.0													
19-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.0													
20-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.0													
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0.6	0.9													
22-Mar	1	1	1	1	1	1	1	1	1	0	0	1	A	0	1	0	0	0	0	1	1	1	0	1	1	0.6	1.2												
23-Mar	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2													
24-Mar	1	1	1	1	1	2	2	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.9												
25-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	2	1	1	0.8	1.6													
26-Mar	1	1	1	1	1	1	1	2	A	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0.6	1.5													
27-Mar	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0.7	1.0													
28-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
29-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1													
30-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0													
31-Mar	1	1	1	A	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	0.8													
0.7 0.7 0.7 0.7 0.7 0.8 0.7 0.8 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.6 0.7 0.6 0.7 0.7 0.7 0.7 0.7 0.7																									Diurnal Average														
1.1 1.1 1.1 1.3 1.2 1.9 1.8 1.5 1.0 0.9 0.9 1.0 0.9 0.9 0.9 0.9 1.0 0.9 1.1 1.2 1.0 1.6 1.0 1.2																									Diurnal Maximum														
C - Calibration																									A - Automated Daily Zero Span														

Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

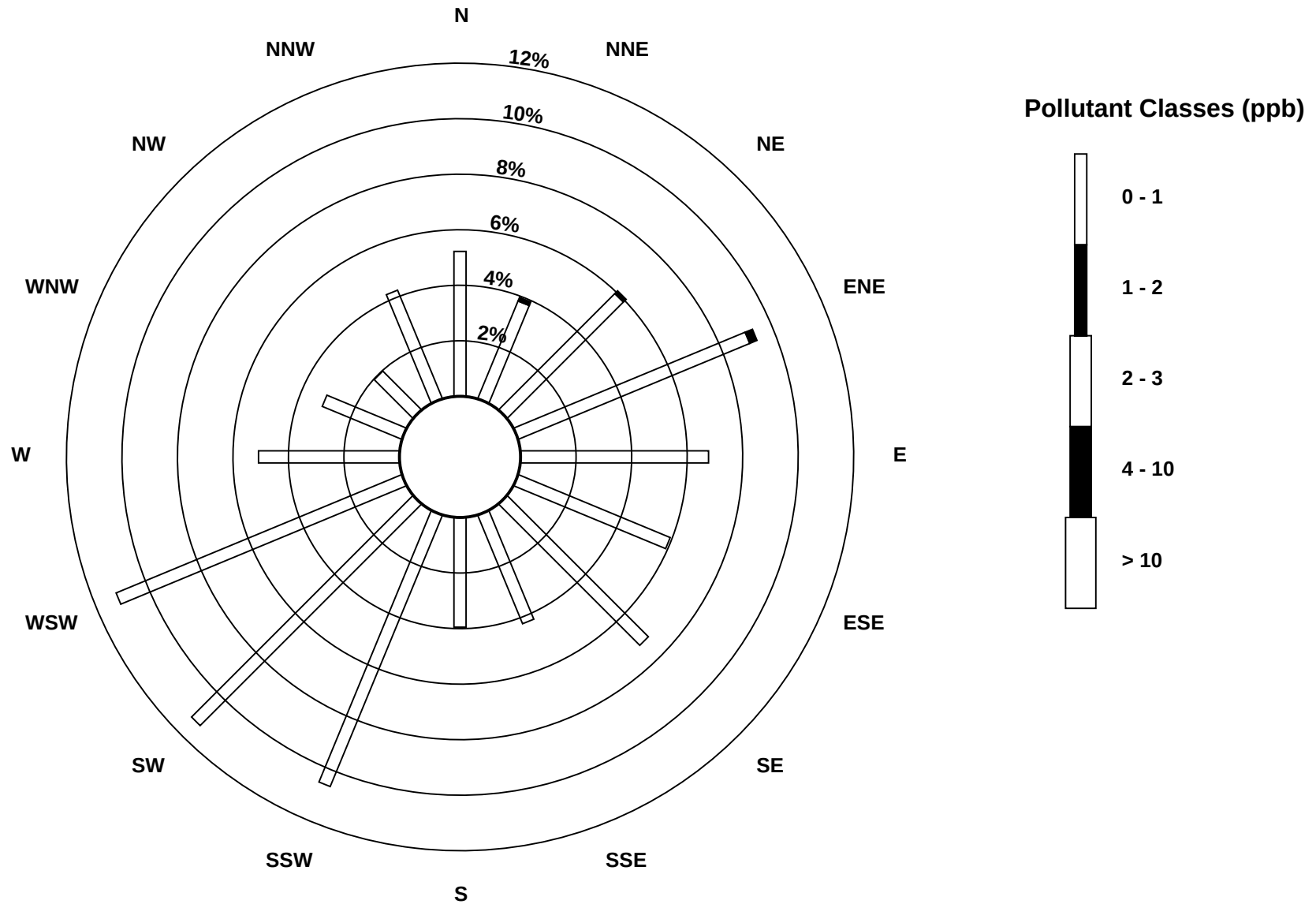
Falher - March 2015



Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb

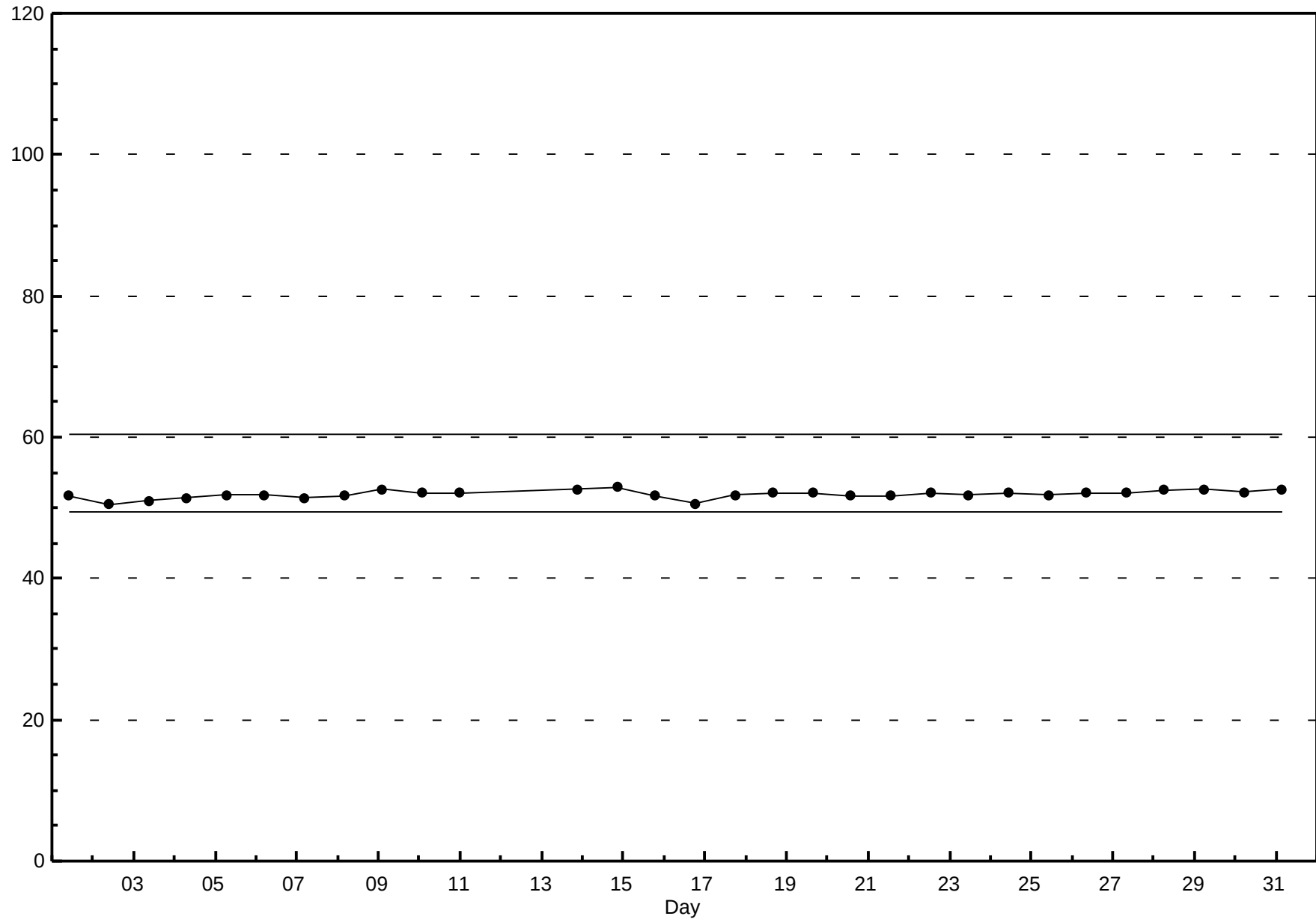
Falher - March 2015



Span Responses

Hydrogen Sulphide (H_2S)

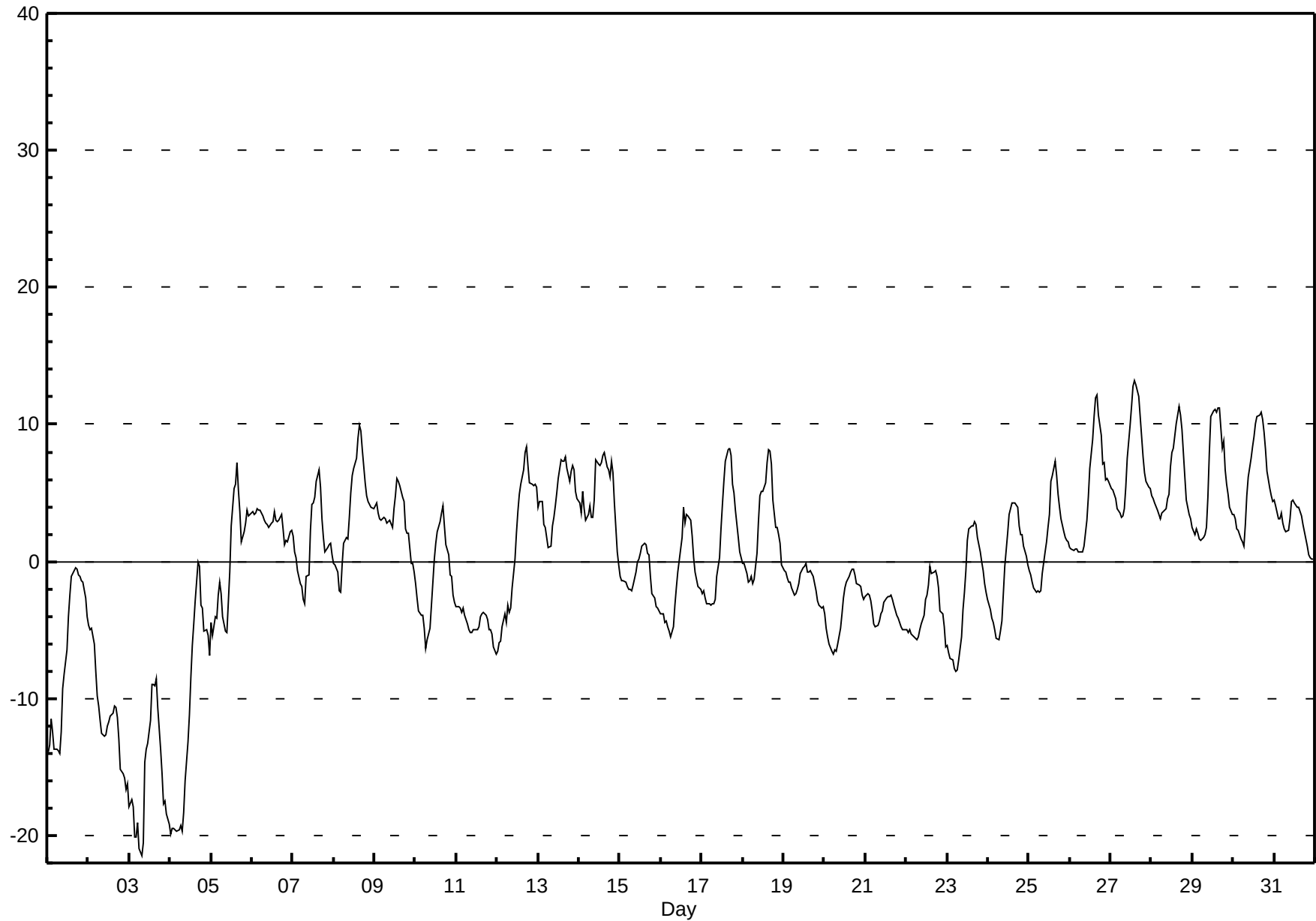
Falher - March 2015



Hourly Averages

External Temperature (ET) - °C

Falher - March 2015



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Falher - March 2015

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	12	14	17	16	17	19	20	21	19	20	19	16	13	13	9	9	8	10	12	18	26	31	31	34	2.8	33.5
Dir	34	68	85	67	58	38	29	34	64	94	111	127	138	128	137	148	155	192	236	252	267	278	295	291	54	291
2 Spd	25	18	25	29	31	32	27	30	24	27	26	26	27	28	22	20	17	13	11	9	6	10	11	11	19.3	32.0
Dir	286	265	274	283	275	263	250	247	241	248	235	237	241	241	246	253	261	252	239	205	178	210	195	183	250	263
3 Spd	12	12	7	4	7	7	6	3	2	4	1	0	6	3	5	5	3	2	4	7	10	12	15	11	1.6	15.1
Dir	165	151	134	129	145	149	94	107	229	229	300	49	233	245	217	213	211	215	34	26	35	29	4	29	103	4
4 Spd	12	14	15	20	22	20	17	14	12	11	14	10	10	8	10	12	6	10	9	12	10	3	7	7	3.3	21.5
Dir	26	4	358	356	355	358	4	14	41	75	110	108	104	109	147	168	212	235	222	220	205	155	132	172	40	355
5 Spd	17	8	5	14	19	18	15	9	7	10	11	13	11	9	13	8	6	8	12	16	10	21	19	19	11.1	20.9
Dir	201	221	199	215	228	234	239	191	139	163	178	189	208	241	251	266	249	231	183	187	200	209	204	204	210	209
6 Spd	20	19	18	21	24	31	29	20	19	20	19	21	17	14	17	18	12	11	13	10	9	13	18	17	16.9	31.2
Dir	208	210	217	237	243	255	255	251	244	246	239	237	247	245	234	239	245	252	217	208	194	178	206	222	234	255
7 Spd	17	17	16	16	12	14	12	11	7	10	10	10	12	11	7	4	9	8	5	8	13	13	14	15	11.0	16.9
Dir	227	236	245	236	262	247	219	215	223	209	227	248	243	253	256	242	231	203	229	196	217	217	220	211	230	236
8 Spd	18	12	12	14	15	14	15	19	18	19	20	22	22	18	15	13	14	15	13	13	17	18	18	17	15.0	22.0
Dir	205	213	201	175	176	194	192	194	195	205	222	229	233	241	254	257	256	252	231	208	200	207	200	195	213	229
9 Spd	15	15	11	12	9	3	2	9	9	6	9	12	15	14	21	23	20	11	12	7	5	11	17	22	7.7	22.7
Dir	215	217	208	195	185	243	293	199	213	302	335	279	276	273	269	274	280	278	185	182	191	161	333	334	254	274
10 Spd	20	12	6	5	6	3	7	9	12	13	14	18	16	11	7	5	3	5	6	4	9	11	15	13	5.6	19.9
Dir	345	12	71	104	139	53	2	28	35	59	74	91	97	130	140	125	83	22	34	34	349	339	326	324	41	345
11 Spd	18	16	14	14	16	17	17	15	17	16	13	15	18	19	17	16	15	14	12	14	11	11	11	12	13.5	19.2
Dir	326	336	325	320	356	1	355	350	356	2	357	326	319	314	328	324	316	302	281	279	310	292	285	292	326	314
12 Spd	10	7	8	9	4	3	9	10	10	14	10	9	7	10	11	10	18	28	24	21	22	23	21	25	9.5	27.8
Dir	300	270	295	4	224	318	136	158	117	126	141	168	156	144	144	193	215	218	205	195	203	211	218	207	196	218
13 Spd	17	16	22	16	17	13	16	17	21	20	22	24	24	24	18	16	16	20	19	22	24	24	21	21	17.7	24.5
Dir	191	203	200	176	180	153	123	116	121	123	132	144	148	151	126	115	114	117	114	139	154	151	138	133	143	148
14 Spd	12	12	8	13	11	11	12	12	14	10	6	9	14	9	9	16	3	6	12	35	40	53	46	40	9.3	53.1
Dir	132	114	96	122	119	127	158	144	135	113	130	100	115	105	110	210	94	39	226	221	223	235	238	261	193	235
15 Spd	34	25	19	16	16	17	16	12	10	7	5	4	7	16	20	20	18	15	13	6	5	0	5	7	11.7	33.6
Dir	262	254	250	242	229	225	231	237	249	286	216	201	254	265	255	254	267	265	265	274	243	334	76	104	250	262
16 Spd	6	6	7	9	8	5	5	8	6	7	6	9	7	0	6	6	7	7	8	9	8	10	10	12	4.5	12.0
Dir	108	111	104	120	110	87	90	127	184	203	179	179	192	165	13	22	50	28	52	45	61	60	67	75	91	75
17 Spd	12	14	15	15	15	15	19	18	16	16	14	17	19	21	19	15	15	13	16	22	20	16	15	12	15.9	21.6
Dir	65	65	69	67	67	66	63	70	72	86	82	91	100	95	87	91	85	74	70	71	76	89	84	79	78	71
18 Spd	11	14	13	11	10	12	12	10	10	13	18	20	19	22	17	17	18	14	11	5	2	7	9	6	5.4	22.4
Dir	64	81	90	92	113	143	147	156	194	227	247	246	247	246	255	255	253	265	261	285	302	310	329	326	235	246
19 Spd	7	9	10	9	10	11	13	17	13	11	12	15	18	16	17	17	16	13	12	15	18	15	13	12	12.7	18.5
Dir	346	344	2	359	18	38	35	38	35	36	26	2	359	4	359	4	24	25	22	348	342	344	338	7	9	359
20 Spd	9	8	10	12	10	10	14	13	13	16	17	17	19	22	23	26	26	26	26	26	28	31	32	30	17.7	32.0
Dir	346	327	332	347	6	27	31	28	41	50	42	48	71	72	65	57	56	54	54	55	62	67	58	58	49	58
21 Spd	28	30	30	30	29	29	27	27	22	28	27	26	27	25	25	20	15	14	14	10	7	6	6	5	20.5	29.8
Dir	57	61	63	57	51	45	50	54	57	65	64	71	72	76	79	69	47	35	40	40	35	13	10	358	57	57
22 Spd	5	4	0	4	6	8	7	7	8	8	7	6	6	5	5	6	5	6	6	11	14	11	11	13	3.2	14.0
Dir	352	1	345	208	224	220	226	225	219	212	207	219	171	144	138	122	110	135	107	93	90	87	82	77	139	90



Hourly Averages

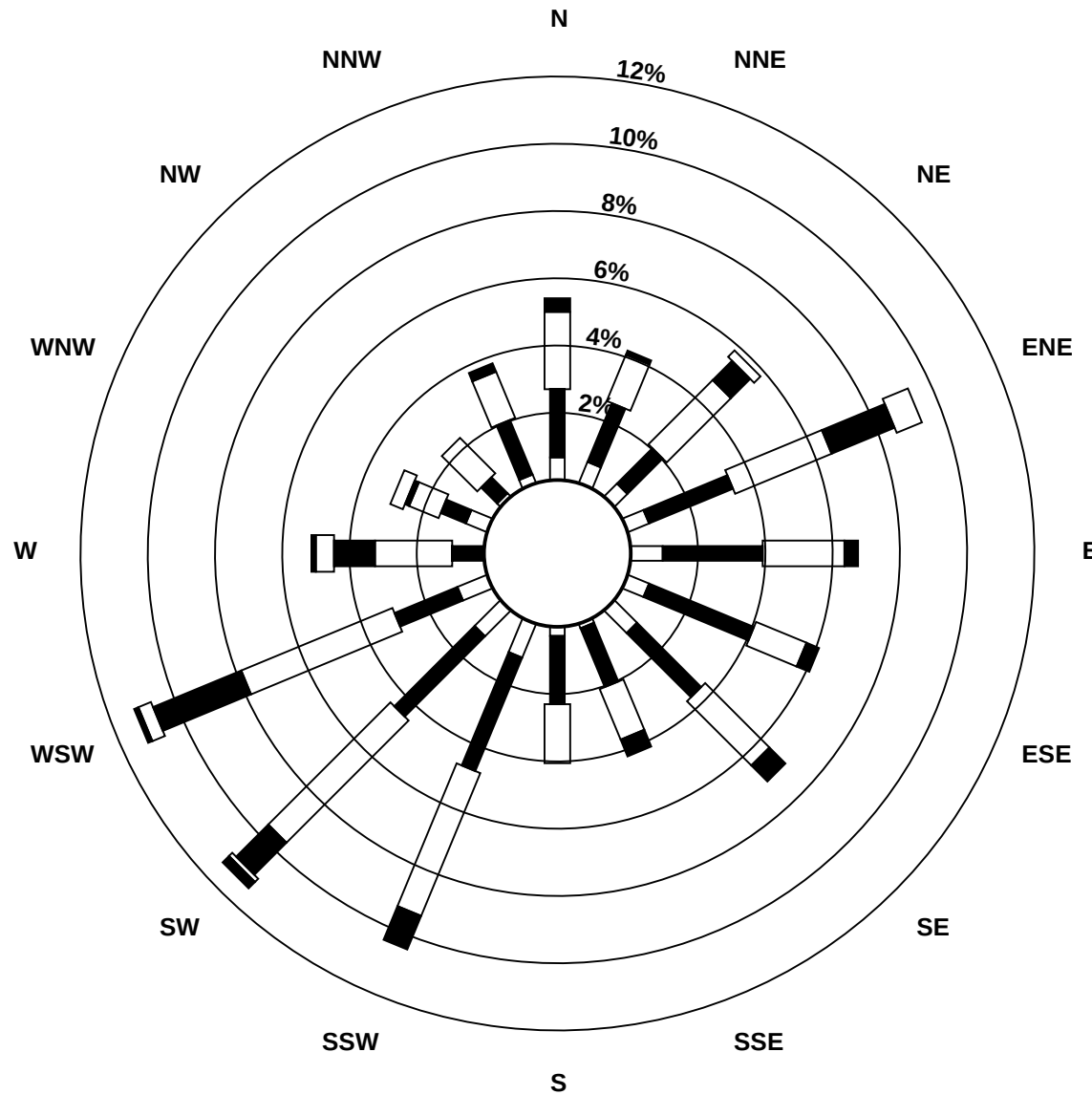
Wind Speed (km/h)
Wind Direction (deg)
Falher - March 2015

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	12	11	13	13	12	15	13	14	15	16	13	10	6	6	8	8	9	7	6	6	6	3	1	3	7.7	16.3								
Dir	59	40	44	45	36	41	41	52	63	81	89	101	98	37	1	1	348	350	327	329	353	2	76	111	44	81								
24 Spd	3	5	4	3	4	4	7	7	7	8	6	10	14	18	16	16	15	14	11	11	15	13	10	7	7.8	17.6								
Dir	182	3	15	37	19	64	62	78	101	111	90	135	152	137	138	128	122	125	129	117	155	168	134	118	124	137								
25 Spd	7	8	7	7	9	9	9	10	9	7	7	6	8	2	3	2	6	6	6	6	4	7	6	5	5.6	10.1								
Dir	87	68	70	61	58	72	64	82	89	85	88	95	111	59	29	345	355	5	28	32	37	97	120	105	70	82								
26 Spd	9	8	7	8	10	11	10	8	9	12	11	12	18	14	17	13	17	9	5	7	11	11	11	9	5.1	17.5								
Dir	87	84	78	61	85	86	89	106	112	139	142	130	155	175	219	228	232	228	232	224	241	242	238	240	167	155								
27 Spd	5	9	13	11	11	12	11	10	7	4	4	4	7	9	14	10	8	6	7	6	6	6	4	7	3.3	14.1								
Dir	253	217	209	213	185	181	165	160	150	142	131	124	159	226	278	312	328	27	33	349	340	271	238	222	214	278								
28 Spd	9	10	8	9	6	9	11	14	17	19	10	4	9	13	15	20	25	21	11	9	15	10	13	10	10.2	25.1								
Dir	180	184	195	191	217	195	223	246	272	284	322	214	217	195	235	261	263	270	258	238	207	218	215	201	236	263								
29 Spd	11	14	13	14	13	17	19	15	12	15	15	27	28	23	24	20	24	19	10	13	14	17	16	18	12.4	27.8								
Dir	179	162	138	134	116	129	134	139	147	169	193	226	222	225	226	245	263	263	235	223	219	219	211	209	201	222								
30 Spd	18	17	16	16	16	15	15	14	16	16	18	17	13	12	6	4	4	3	2	5	5	10	12	10	8.0	18.4								
Dir	216	217	210	213	208	204	200	213	223	236	245	236	235	249	267	201	213	288	85	73	86	78	77	76	215	216								
31 Spd	7	4	8	12	10	5	2	13	14	14	13	12	15	19	17	15	18	20	18	18	17	14	16	20	9.2	19.6								
Dir	71	99	74	21	8	340	246	300	317	333	330	321	295	292	300	264	258	256	256	241	249	250	249	250	284	256								
Spd	1.7	1.2	1.2	0.7	0.8	0.7	1.5	2.1	2.4	2.7	2.6	3.8	4.7	4.0	3.4	3.9	3.9	3.3	2.2	3.2	3.7	4.6	3.4	3.2	Diurnal Average									
Dir	232	187	160	133	145	158	116	126	124	134	147	179	189	204	233	245	264	262	220	204	206	213	229	229	Diurnal Maximum									
Spd	33.6	29.5	29.6	29.8	31.5	32.0	29.0	29.9	23.8	27.6	27.5	26.5	27.8	27.6	24.6	26.3	26.4	27.8	26.0	35.5	39.9	53.1	46.3	40.4	Diurnal Maximum									
Dir	262	61	63	57	275	263	255	247	241	65	64	226	222	241	79	57	56	218	54	221	223	235	238	261	Diurnal Maximum									
Maximum Speed Value: 53 km/h on Mar 14 22:00																								Minimum Speed Value: 0 km/h on Mar 15 22:00						Hours in Service:				744
Maximum Daily Speed Average: 20.5 km/h on Mar 21																								Minimum Daily Speed Average: 1.6 km/h on Mar 3						Hours of Data:				744
Maximum Diurnal Speed Average: 4.7 km/h at hour 13																								Minimum Diurnal Speed Average: 0.7 km/h at hour 6						Hours of Missing Data:				0
Monthly Average Velocity: 2.04 km/h 202.8 deg												Speed Percentiles: P ₁ = 1.6 P ₁₀ = 5.5 Q ₁ = 8.1 Median = 12.4 Q ₃ = 17.0 P ₉₀ = 21.8 P ₉₉ = 33.5												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	7		29		26		4		0		0		66																					
NorthEast	9		26		43		13		10		0		101																					
East	9		51		32		13		0		0		105																					
SouthEast	7		33		41		12		0		0		93																					
South	4		35		32		3		0		0		74																					
SouthWest	15		45		82		29		2		3		176																					
West	2		12		43		20		8		1		86																					
NorthWest	5		15		20		2		1		0		43																					
Total	58		246		319		96		21		4		744																					

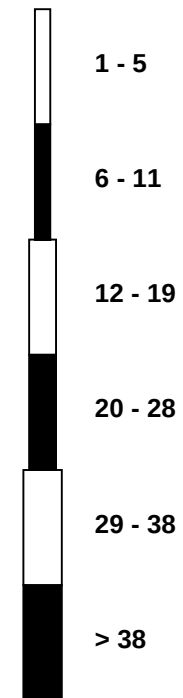
Wind Rose

Wind Speed (WS) (km/h)

Falher - March 2015



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Falher - March 2015

Maximum Speed: 53 km/h on Mar 14 22:00																					Maximum Daily Speed Average: 21.2 km/h on Mar 21										Hours in Service: 744	
Minimum Speed: 0 km/h on Mar 22 03:00																					Minimum Daily Speed Average: 6.8 km/h on Mar 3										Hours of Data: 744	
Maximum Diurnal Speed Average: 14.8 km/h at hour 24																					Minimum Diurnal Speed Average: 11.6 km/h at hour 19										Hours of Missing Data: 0	
Monthly Average Speed: 13.50 km/h																					Percentiles: P ₁ = 3.1 P ₁₀ = 5.8 Q ₁ = 8.4 Median = 12.6 Q ₃ = 17.1 P ₉₀ = 21.8 P ₉₉ = 33.6										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-Mar	12	14	18	17	17	19	20	21	20	20	19	16	13	13	9	9	8	10	12	18	26	31	31	34	17.7	33.7						
2-Mar	25	18	25	29	32	32	27	30	24	27	26	26	27	28	22	20	17	13	12	10	7	10	11	11	21.2	32.1						
3-Mar	12	12	8	4	7	7	6	3	6	4	3	2	6	4	5	6	3	2	5	8	10	12	15	13	6.8	15.2						
4-Mar	13	14	15	20	22	20	17	15	12	12	15	10	10	8	10	12	7	10	9	12	10	3	7	8	12.1	21.5						
5-Mar	17	8	6	14	19	18	15	9	8	10	11	13	11	9	13	8	6	8	12	16	11	21	19	19	12.5	20.9						
6-Mar	20	19	18	22	24	31	29	20	19	20	19	22	17	14	17	18	12	12	13	10	10	13	18	17	18.0	31.4						
7-Mar	17	17	16	16	13	14	12	11	7	10	10	10	12	12	8	5	9	9	6	9	13	13	14	15	11.6	17.0						
8-Mar	18	12	12	14	15	15	15	19	18	19	20	22	22	18	15	13	14	15	13	14	17	18	18	17	16.4	22.0						
9-Mar	15	15	11	12	9	6	4	9	9	8	10	13	15	14	21	23	20	11	12	8	6	12	17	22	12.5	22.8						
10-Mar	20	12	6	5	6	6	8	9	12	13	14	18	16	12	7	5	4	5	6	4	9	11	15	13	9.9	20.1						
11-Mar	18	16	14	14	17	17	17	15	17	16	13	15	18	19	17	16	15	15	12	14	11	12	11	12	15.1	19.3						
12-Mar	11	7	8	11	6	12	10	10	11	14	10	9	7	10	11	11	18	28	24	21	22	23	21	25	14.2	27.9						
13-Mar	17	17	22	17	17	15	16	17	21	20	22	24	25	24	19	16	16	20	19	22	25	24	21	21	19.8	24.6						
14-Mar	12	12	9	13	11	11	12	12	14	11	6	9	14	10	11	16	5	6	17	36	40	53	46	41	17.9	53.3						
15-Mar	34	25	19	17	17	17	16	12	10	8	6	5	8	17	21	21	18	15	14	7	6	5	6	7	13.6	33.9						
16-Mar	6	7	7	9	8	6	6	8	6	7	6	9	8	4	7	6	7	7	8	9	9	10	10	12	7.5	12.1						
17-Mar	12	14	15	15	15	15	19	18	17	16	14	17	19	21	19	15	15	13	16	22	20	16	15	12	16.3	21.6						
18-Mar	11	14	13	11	10	12	12	11	10	13	18	20	19	22	17	18	18	14	11	7	3	8	9	6	12.8	22.4						
19-Mar	7	10	10	9	10	12	13	17	13	11	12	15	19	16	18	17	16	13	13	15	19	15	13	12	13.5	18.6						
20-Mar	9	8	10	12	10	11	14	13	13	16	17	17	19	22	23	26	26	26	26	26	28	31	32	30	19.4	32.1						
21-Mar	28	30	30	30	29	29	28	27	22	28	28	26	27	25	25	20	16	14	14	10	7	6	6	5	21.2	29.9						
22-Mar	5	4	0	4	6	8	7	7	8	8	8	6	6	5	5	6	5	6	6	11	14	11	12	13	7.2	14.0						
23-Mar	12	11	13	13	12	15	14	14	15	16	13	10	6	7	8	8	9	7	6	7	6	3	1	3	9.6	16.4						
24-Mar	3	5	5	4	4	4	7	7	7	8	6	10	14	18	17	16	15	14	11	11	16	13	10	8	9.7	17.7						
25-Mar	7	8	7	8	9	9	9	10	9	8	7	7	8	3	4	3	6	6	7	6	5	7	6	6	6.8	10.3						
26-Mar	9	8	8	8	10	11	10	9	10	12	12	12	18	15	17	13	17	9	5	7	11	11	11	10	10.9	17.6						
27-Mar	6	9	13	11	11	12	11	10	7	4	4	5	8	10	15	11	8	7	8	7	7	6	4	7	8.3	14.6						
28-Mar	9	10	8	10	6	10	11	15	17	19	12	5	10	13	16	20	25	21	11	9	15	10	13	11	12.8	25.2						
29-Mar	11	14	13	14	13	17	19	15	12	15	15	27	28	24	25	20	25	19	10	14	14	17	16	18	17.2	27.9						
30-Mar	18	17	16	16	16	15	15	14	16	16	18	17	14	13	7	5	6	4	2	5	6	10	12	10	12.0	18.4						
31-Mar	8	5	8	12	10	6	7	14	14	14	13	13	15	19	17	16	18	20	19	18	17	14	16	20	13.8	19.7						
13.6 12.7 12.4 13.2 13.2 13.8 13.8 13.6 13.1 13.6 13.1 13.9 14.7 14.4 14.2 13.5 13.0 12.2 11.6 12.7 13.5 14.5 14.7 14.8																									Diurnal Average							
33.9 29.6 29.6 29.9 31.6 32.1 29.0 30.0 23.8 27.7 27.5 26.7 27.9 27.7 24.6 26.4 26.5 27.9 26.0 35.5 40.0 53.3 46.3 41.1																									Diurnal Maximum							
All monthly, daily, and diurnal averages have been calculated using scalar methods																																

Hourly Standard Deviations

Wind Direction (WD) - deg

Falher - March 2015

Maximum Value: 93.3 deg on Mar 14 19:00																		Hours in Service: 744							
Minimum Value: 1.7 deg on Mar 17 02:00																		Hours of Data: 744							
Percentiles: P ₁ = 2.1 P ₁₀ = 3.6 Q ₁ = 5.1 Median = 7.9 Q ₃ = 13.4 P ₉₀ = 24.8 P ₉₉ = 76.0																		Hours of Missing Data: 0							
																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Maximum
1-Mar	7	12	7	7	5	5	3	5	15	6	3	10	2	3	10	5	9	12	8	6	4	7	6	6	15.3
2-Mar	6	4	7	4	5	4	5	6	2	6	4	3	4	5	5	6	4	9	25	27	23	8	8	10	27.0
3-Mar	8	3	36	22	20	7	26	39	84	19	68	80	10	23	13	10	19	51	35	10	11	5	5	28	83.9
4-Mar	10	3	2	2	2	3	4	10	10	15	10	13	7	16	16	7	37	12	7	3	28	34	17	21	37.5
5-Mar	3	22	59	6	3	6	9	17	23	9	4	6	10	8	5	9	9	12	16	10	17	3	4	4	59.2
6-Mar	5	4	4	7	3	7	3	5	5	3	7	6	4	7	4	2	7	15	8	11	14	7	4	6	14.7
7-Mar	3	6	4	3	21	8	4	4	14	10	7	8	6	9	13	20	7	12	25	23	5	4	2	4	24.7
8-Mar	5	4	7	4	4	11	11	8	7	6	5	3	3	6	8	6	4	6	11	11	4	5	8	3	11.0
9-Mar	4	2	8	2	8	59	62	8	18	39	28	18	5	8	3	4	8	10	16	18	14	45	8	5	61.9
10-Mar	9	17	17	13	8	58	25	9	5	11	12	5	4	19	10	12	44	13	9	20	23	13	3	7	58.4
11-Mar	5	7	7	4	18	7	6	8	12	6	11	11	5	8	5	5	7	13	9	8	15	11	11	7	18.0
12-Mar	10	14	13	43	58	78	22	11	9	10	8	6	11	7	12	20	8	4	8	6	4	6	6	6	77.9
13-Mar	6	6	5	18	2	30	5	5	5	3	5	3	6	4	14	3	5	7	3	13	6	5	5	4	30.3
14-Mar	6	12	33	7	18	32	5	13	8	20	28	24	8	16	42	14	60	24	93	4	4	5	3	11	93.3
15-Mar	7	8	8	5	5	3	5	5	7	18	41	47	22	18	10	10	9	9	20	12	16	88	16	8	87.6
16-Mar	15	11	9	6	8	33	23	17	13	10	17	11	18	91	18	17	17	10	6	10	12	8	4	7	91.3
17-Mar	5	2	3	4	5	3	4	6	10	5	3	7	5	5	3	4	6	5	4	3	6	2	3	7	9.6
18-Mar	9	3	4	5	15	4	2	10	10	9	6	5	5	4	8	10	6	4	3	50	46	26	3	10	49.6
19-Mar	9	10	7	6	8	10	4	3	8	5	9	7	6	5	7	5	11	7	7	17	4	3	5	9	16.9
20-Mar	8	10	5	7	6	14	3	4	7	6	8	15	9	8	6	4	4	5	3	4	3	4	4	3	15.0
21-Mar	3	4	4	3	5	4	3	3	5	4	4	5	6	5	4	7	16	6	5	6	9	13	16	10	15.8
22-Mar	5	9	44	9	5	7	6	6	7	9	11	16	21	19	17	10	8	12	13	7	5	7	9	6	44.1
23-Mar	7	5	4	5	7	9	5	5	9	6	5	11	13	32	14	10	9	13	8	7	7	42	36	14	42.4
24-Mar	26	25	22	28	7	17	8	6	11	9	13	8	9	7	11	6	5	6	5	8	19	8	10	29	29.3
25-Mar	16	9	18	10	9	12	14	9	10	14	13	17	16	68	53	76	15	9	8	11	19	19	18	36	75.6
26-Mar	9	4	10	15	7	6	5	4	8	12	9	4	5	25	5	12	5	9	9	17	6	7	7	15	25.0
27-Mar	44	13	9	6	8	8	10	8	15	14	25	32	29	27	15	21	20	32	23	32	37	17	7	15	43.5
28-Mar	5	15	6	7	16	8	8	13	5	5	41	67	24	12	26	11	6	5	4	19	14	9	4	12	66.6
29-Mar	9	4	12	10	7	6	2	6	15	5	6	7	6	12	8	6	13	13	8	8	6	4	5	4	15.2
30-Mar	2	6	3	4	3	2	6	5	8	6	7	11	24	13	52	62	57	45	65	15	29	4	4	9	65.1
31-Mar	31	57	23	8	16	39	87	8	11	9	9	10	8	6	11	9	5	5	7	3	6	7	5	3	87.4
43.5 57.0 59.2 43.4 57.7 77.9 87.4 38.7 83.9 39.2 67.8 79.9 28.7 91.3 52.7 75.6 60.2 50.9 93.3 49.6 45.5 87.6 36.3 36.1																									

PAZA

Portable – Clairmont Station
Monthly Summary Tables, Graphs and
Roses

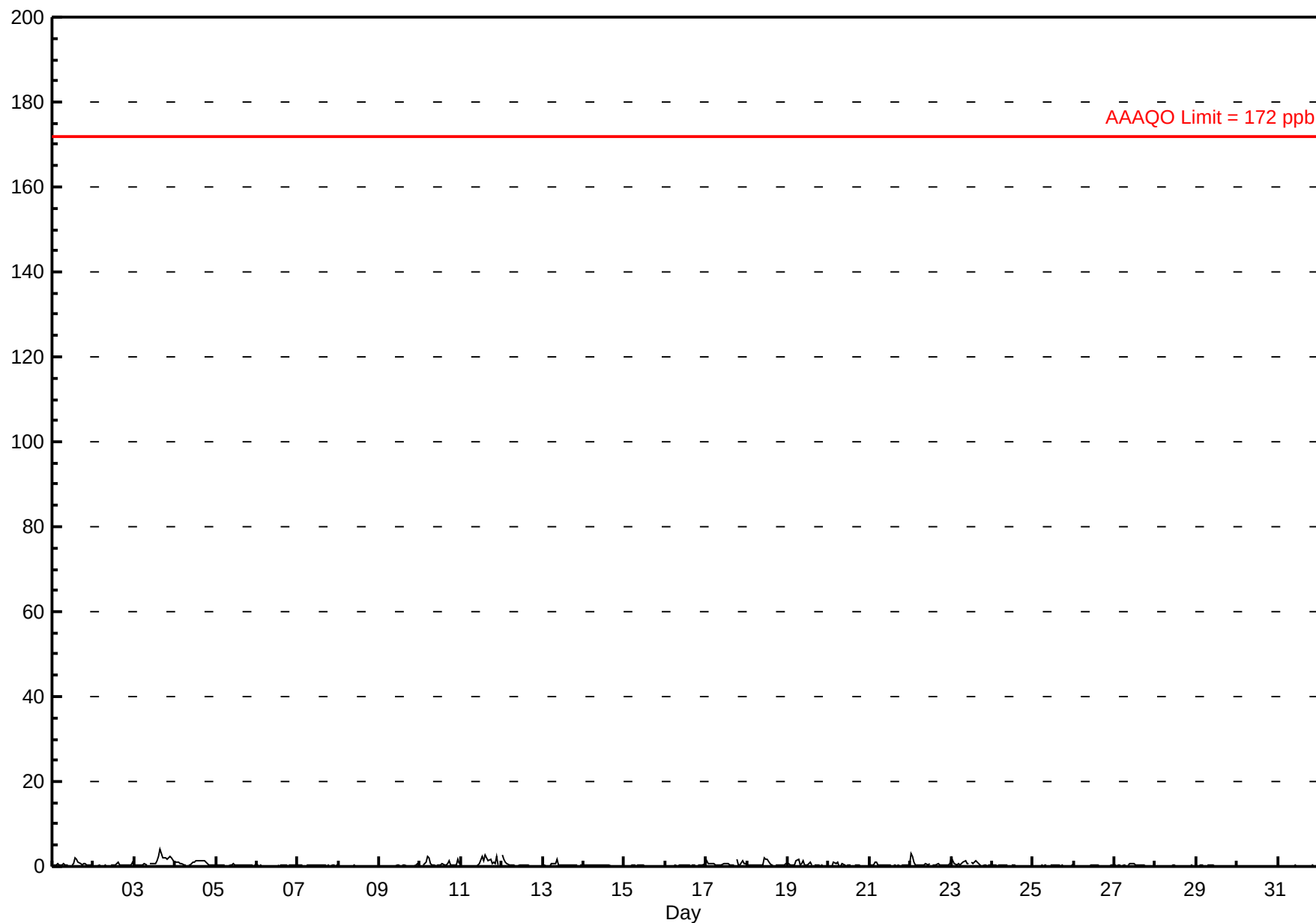
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 4.2 ppb on Mar 3 16:00 Maximum Daily Average: 1.3 ppb on Mar 3																				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 Mar 14 19:00 Maximum Diurnal Average: 0.6 ppb at hour 15 Monthly Average: 0.38 ppb																				Minimum Daily Average: 0.1 ppb on Mar 30 Minimum Diurnal Average: 0.3 ppb at hour 8 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.8 P ₉₉ = 2.5						
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-Mar	0	0	0	1	0	0	1	0	0	0	A	0	1	2	2	1	1	0	1	1	0	0	0	0	0.6	1.9
2-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.3	1.1
3-Mar	0	0	0	0	0	0	1	0	A	1	1	1	1	1	3	4	3	2	2	2	2	2	2	1	1.3	4.2
4-Mar	1	1	1	1	1	0	0	A	0	0	1	1	1	1	1	2	1	1	1	1	0	0	0	0	0.8	1.5
5-Mar	0	0	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
6-Mar	0	0	0	0	0	A	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
7-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
8-Mar	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
9-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.6
10-Mar	0	A	0	1	2	2	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	2	1	0.7	2.5
11-Mar	A	0	0	0	0	0	0	0	0	0	0	1	2	1	3	2	1	2	1	1	1	2	0	A	0.9	2.7
12-Mar	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	2.8
13-Mar	0	0	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	1.6
14-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.4
15-Mar	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	0.4
16-Mar	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	0.7
17-Mar	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0	0	A	2	0	0	1	1	1	0.6	1.6
18-Mar	0	0	0	0	0	0	0	0	0	0	2	2	2	1	0	0	A	0	0	0	0	0	0	1	0.5	1.9
19-Mar	1	0	0	0	0	1	2	0	1	1	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0.5	1.7
20-Mar	0	0	0	1	1	1	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	1.0
21-Mar	0	0	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	1.1
22-Mar	3	2	1	0	0	0	0	0	0	1	0	1	A	0	0	0	1	0	0	0	0	0	1	0.6	3.0	
23-Mar	2	1	1	0	1	0	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0.7	2.0	
24-Mar	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	0.5	
25-Mar	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	0.5
26-Mar	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
27-Mar	0	0	0	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
28-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
30-Mar	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
31-Mar	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
0.5 0.4 0.3 0.4 0.4 0.4 0.3 0.3 0.4 0.4 0.4 0.4 0.5 0.5 0.6 0.5 0.4 0.4 0.3 0.3 0.3 0.4 0.3 0.3																									Diurnal Average	
3.0 2.3 1.0 1.1 2.5 2.0 1.7 1.1 1.6 1.5 1.9 1.6 2.5 1.9 2.7 4.2 3.1 2.1 2.1 1.9 2.0 2.5 1.9 1.1																									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 Averages

Sulphur Dioxide (SO₂) - ppb
Portable Clairmont - March 2015



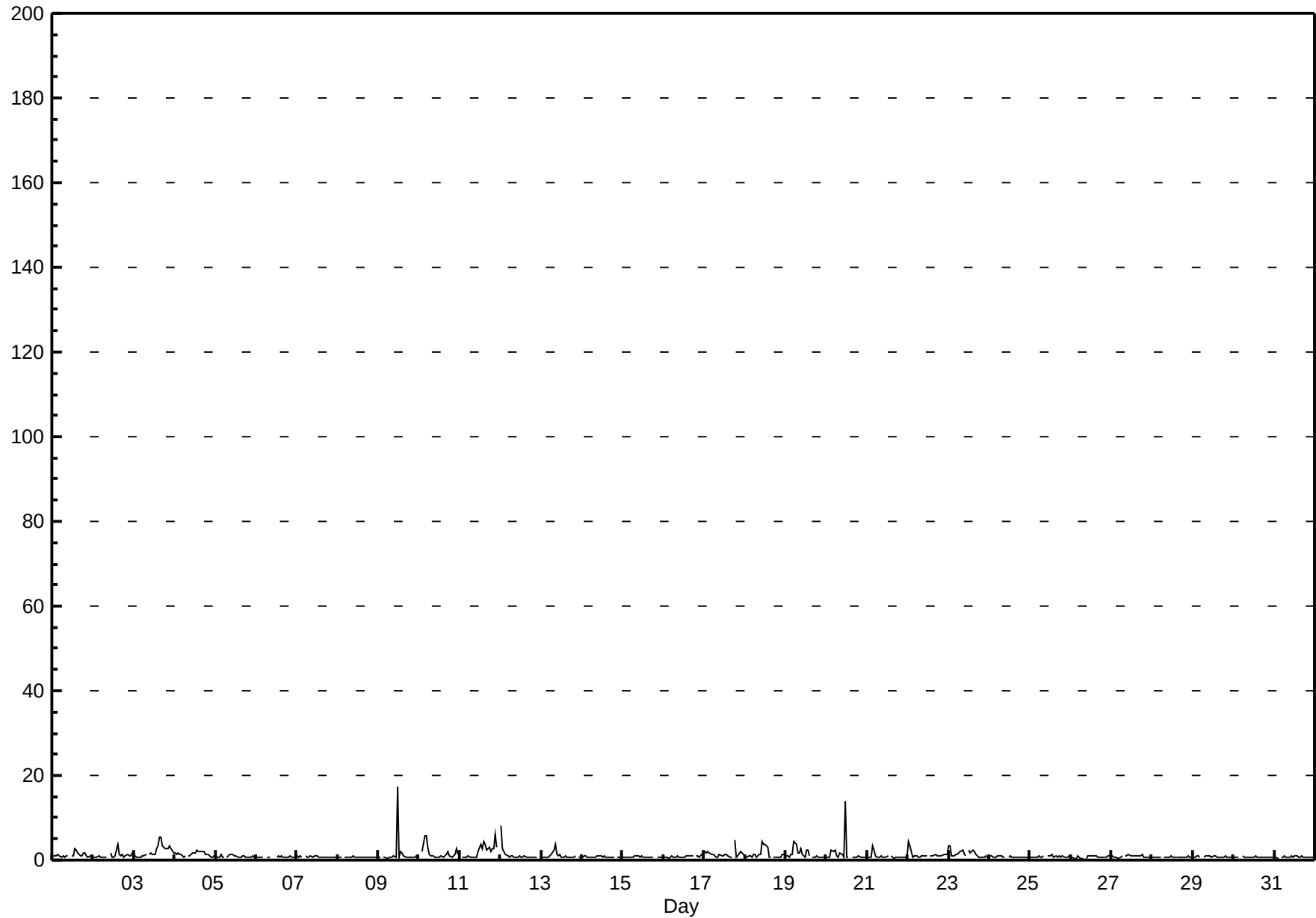
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Portable Clairmont - March 2015

Maximum Value: 17.2 ppb on Mar 9 12:00																				Maximum Daily Average: 2.2 ppb on Mar 3					Hours in Service: 744				
Minimum Value: 0 ppb on Mar 9 06:00																				Minimum Daily Average: 0.6 ppb on Mar 30					Hours of Data: 709				
Maximum Diurnal Average: 2.1 ppb at hour 12																				Minimum Diurnal Average: 0.9 ppb at hour 8					Hours of Missing Data: 35				
Monthly Average: 1.12 ppb																				Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 1.1 P ₉₀ = 1.9 P ₉₉ = 5.1					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-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	3	2	2	1	1	2	2	1	1	1	1	1.2	2.7			
2-Mar	1	1	1	1	1	1	1	1	1	A	2	1	1	1	4	1	1	1	1	1	1	1	1	2	1.1	3.7			
3-Mar	1	1	1	1	1	1	1	1	A	1	2	1	1	3	3	5	5	3	3	3	3	3	3	2	2.2	5.4			
4-Mar	2	1	2	1	1	1	1	A	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1.5	2.3			
5-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4			
6-Mar	1	1	1	1	1	A	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9			
7-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0			
8-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9			
9-Mar	1	1	A	1	1	0	1	1	1	1	1	17	1	2	2	1	1	1	1	1	1	1	1	1	1.5	17.2			
10-Mar	1	A	2	6	6	3	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	3	1	1.7	5.8			
11-Mar	A	1	1	1	1	1	1	1	1	1	1	2	4	3	5	4	2	3	2	3	3	6	3	A	2.1	6.2			
12-Mar	8	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.3	8.1			
13-Mar	1	1	1	1	1	1	1	2	4	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	3.8			
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.1			
15-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	1.1			
16-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	0.9	1.7			
17-Mar	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	5	1	1	2	2	1	1.4	4.8			
18-Mar	1	1	1	1	1	1	1	1	1	1	4	4	3	1	1	A	1	1	1	1	1	1	1	1	1.5	4.4			
19-Mar	1	1	1	1	1	4	4	2	2	3	1	1	2	2	1	A	1	1	1	1	1	1	1	1	1.4	4.3			
20-Mar	1	1	1	2	2	2	1	1	2	1	1	14	1	1	A	1	1	1	1	1	1	1	1	1	1.6	13.8			
21-Mar	1	1	1	3	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	3.5			
22-Mar	4	3	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.3	4.3			
23-Mar	3	3	1	1	1	1	2	2	2	1	1	A	2	2	2	2	1	1	1	1	1	1	1	1	1.5	3.5			
24-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1			
25-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	0.8	1.5			
26-Mar	1	1	0	0	1	1	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0			
27-Mar	1	1	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4			
28-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1			
29-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1			
30-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0			
31-Mar	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0			
1.3 1.0 1.0 1.2 1.1 1.1 1.0 0.9 1.1 1.0 1.1 2.1 1.2 1.3 1.3 1.2 1.1 1.0 1.1 0.9 0.9 1.1 1.1 0.9																									Diurnal Average				
8.1 3.4 2.1 5.8 5.8 4.3 3.7 2.2 3.8 2.7 4.4 17.2 3.8 3.0 4.5 5.4 5.4 3.3 4.8 2.6 2.8 6.2 3.0 1.8																									Diurnal Maximum				
C - Calibration A - Automated Daily Zero Span																													

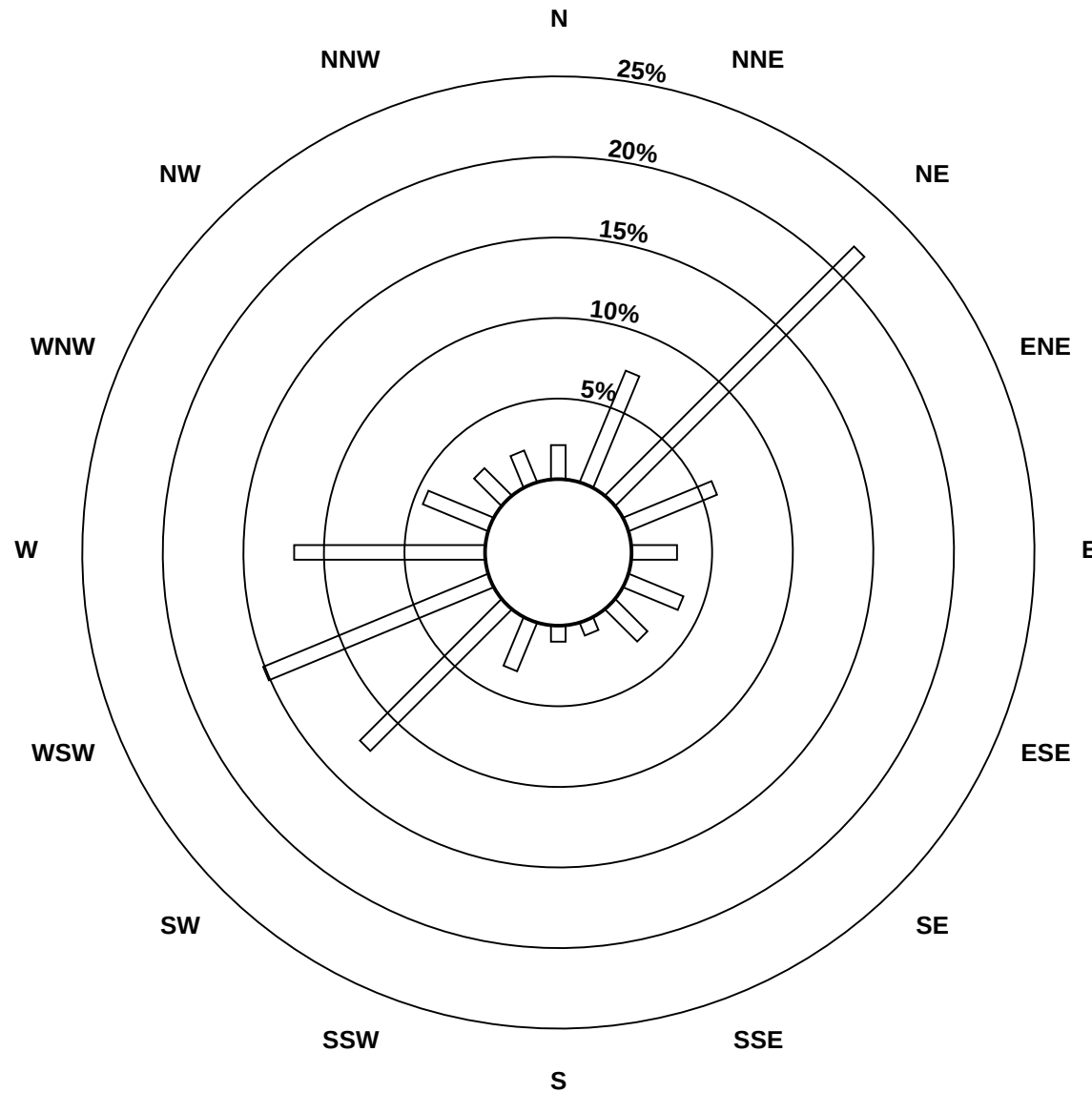
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Portable Clairmont - March 2015

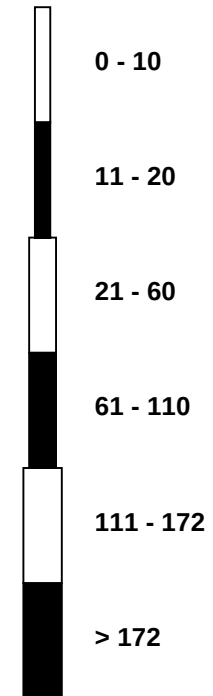


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Portable Clairmont - March 2015

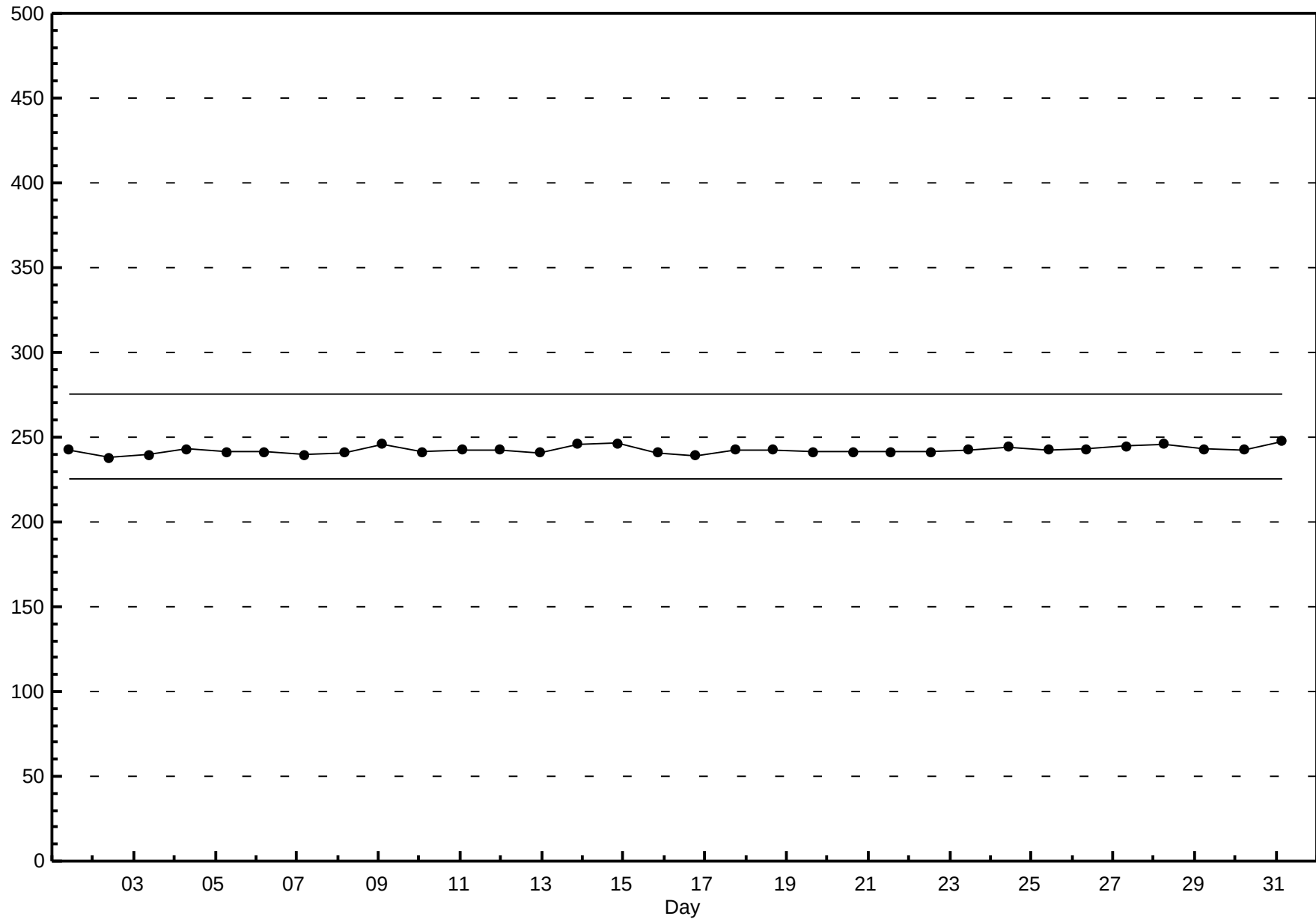


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Portable Clairmont - March 2015



Hourly Averages

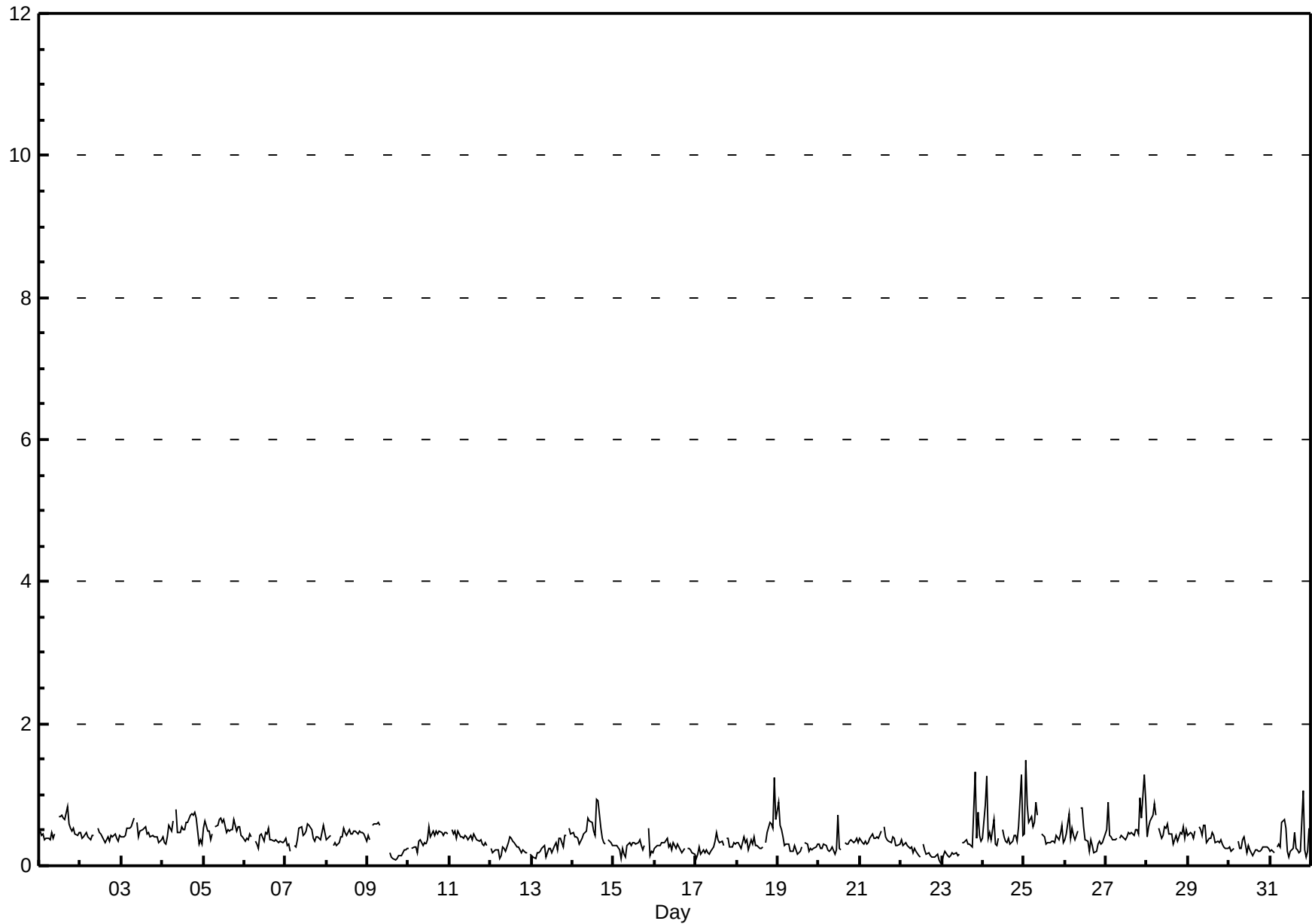
Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744							
Maximum Value: 1.5 ppb on Mar 25 02:00																				Maximum Daily Average: 0.5 ppb on Mar 27		Hours of Data: 707					
Minimum Value: 0 ppb on Mar 23 00:00																				Minimum Daily Average: 0.2 ppb on Mar 22		Hours of Missing Data: 37					
Maximum Diurnal Average: 0.4 ppb at hour 20																				Minimum Diurnal Average: 0.3 ppb at hour 18		Hours of Calibration: 37					
Monthly Average: 0.38 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 0.9		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-Mar	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0.5	0.8	
2-Mar	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
3-Mar	0	0	0	1	1	1	1	1	A	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.5	0.7	
4-Mar	0	0	0	0	1	0	1	A	1	0	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0.5	0.8	
5-Mar	1	1	0	0	0	0	A	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	1	0	0	0.5	0.7
6-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.4	0.5	
7-Mar	0	0	0	0	A	0	0	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	0	0.4	0.6	
8-Mar	0	0	0	A	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0.4	0.5	
9-Mar	0	0	A	1	1	1	1	1	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
10-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
11-Mar	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5	
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4	
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0.3	0.5	
14-Mar	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	1	0	0	0	A	0	0	0	0.5	0.9	
15-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.3	0.5	
16-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4	
17-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.5	
18-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	0.4	1.2	
19-Mar	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.9	
20-Mar	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.7	
21-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0.4	0.6	
22-Mar	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	
23-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	1	0	0	0.3	1.3	
24-Mar	0	1	1	0	0	0	1	0	0	0	A	1	0	0	0	0	0	0	0	0	0	1	1	0	0.5	1.3	
25-Mar	0	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	1.5	
26-Mar	0	0	1	0	1	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8	
27-Mar	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	0.5	1.3	
28-Mar	0	1	1	1	1	1	A	1	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	1	0.5	0.9	
29-Mar	0	0	0	0	0	A	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
30-Mar	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	
31-Mar	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.3	1.1	
																								Diurnal Average			
																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																											

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Portable Clairmont - March 2015



Hourly Maximums

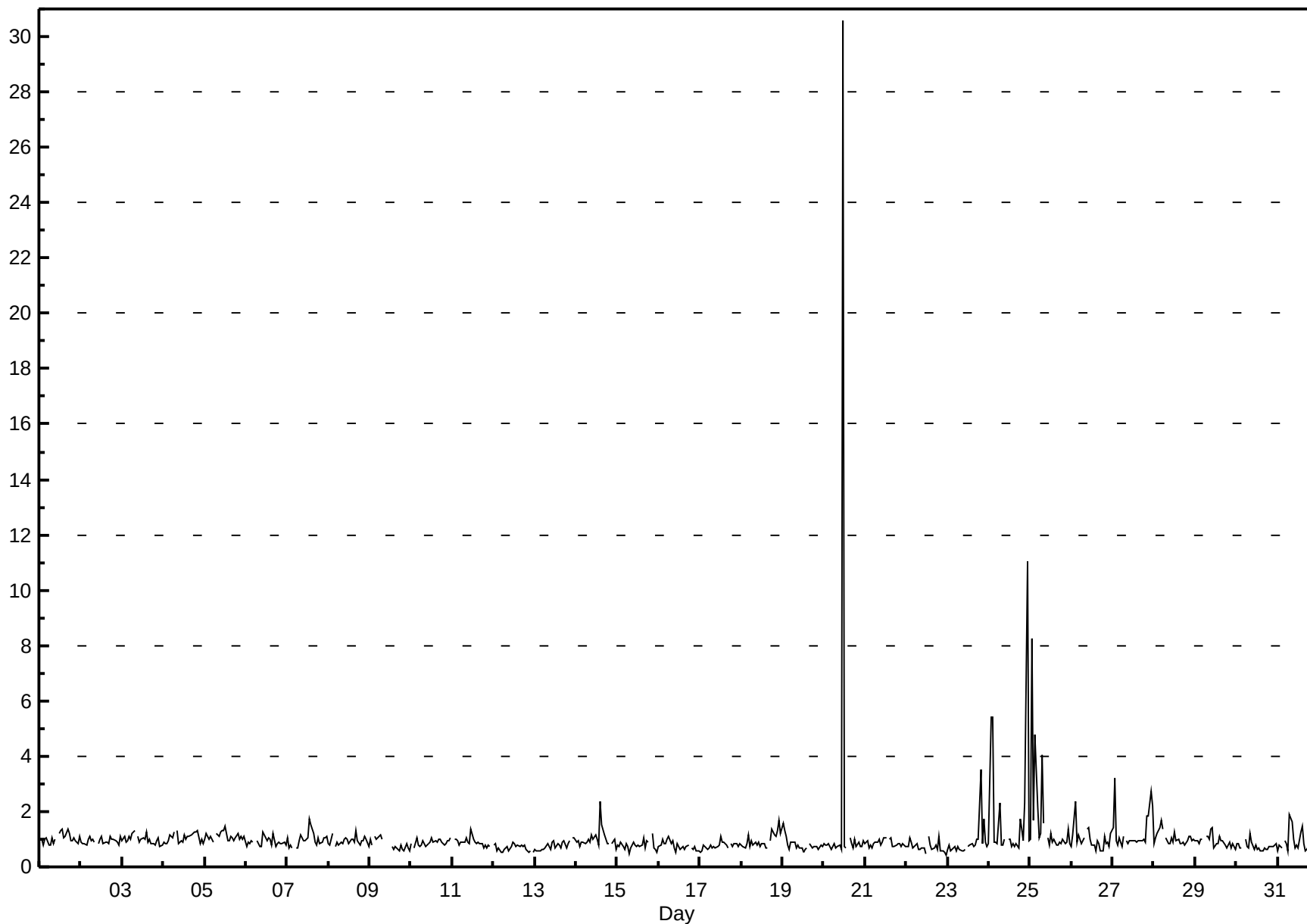
Total Reduced Sulphur (TRS) - ppb

Portable Clairmont - March 2015

Maximum Value: 30.6 ppb on Mar 20 12:00																				Maximum Daily Average: 2.1 ppb on Mar 20					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 23 00:00																				Minimum Daily Average: 0.7 ppb on Mar 12					Hours of Data: 707	
Maximum Diurnal Average: 1.9 ppb at hour 12																				Minimum Diurnal Average: 0.9 ppb at hour 18					Hours of Missing Data: 37	
Monthly Average: 1.01 ppb																				Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.8 Median = 0.9 Q ₃ = 1.0 P ₉₀ = 1.2 P ₉₉ = 3.6					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-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
2-Mar	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	1.1
3-Mar	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	1.3
4-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
5-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5
6-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
7-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1.0	1.7
8-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
9-Mar	1	1	A	1	1	1	1	1	C	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
10-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1
11-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.3
12-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.9
13-Mar	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
14-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	A	1	1	1	1.0	2.4
15-Mar	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.2
16-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.1
17-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.1
18-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	1	0.9	1.7
19-Mar	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.6
20-Mar	1	1	1	1	1	1	1	1	1	1	1	31	1	1	A	1	1	1	1	1	1	1	1	1	2.1	30.6
21-Mar	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
22-Mar	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	0	0.7	1.1
23-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	3	1	2	1	1	0.9	3.5
24-Mar	1	5	5	1	1	1	2	1	1	1	A	1	1	1	1	1	1	1	2	1	1	2	11	1	1.9	11.0
25-Mar	1	8	2	5	2	1	1	4	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.7	8.2
26-Mar	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.4
27-Mar	1	3	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	2	1.3	3.2
28-Mar	1	1	1	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.7
29-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
30-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
31-Mar	1	1	1	A	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	1.0	2.4
0.9 1.3 1.1 1.0 0.9 0.9 0.9 1.0 0.9 0.9 0.9 1.9 0.9 0.9 1.0 0.9 0.9 0.9 0.9 1.0 0.9 1.0 1.3 0.9																								Diurnal Average		
1.6 8.2 5.4 4.8 2.1 1.4 2.3 4.1 1.6 1.4 1.4 30.6 1.5 1.7 2.4 1.5 1.4 1.2 1.8 3.5 1.9 2.3 11.0 2.2																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

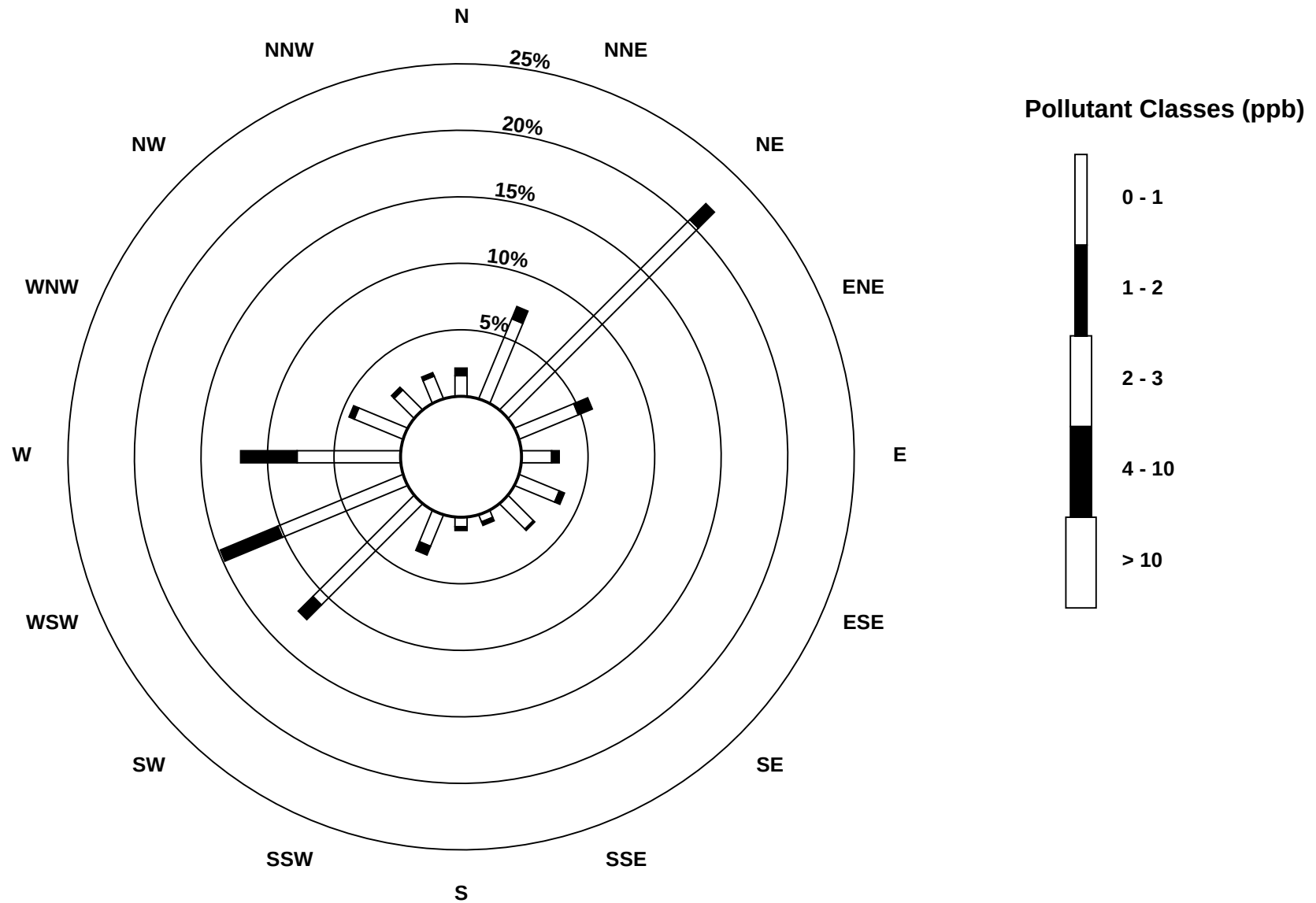
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Portable Clairmont - March 2015



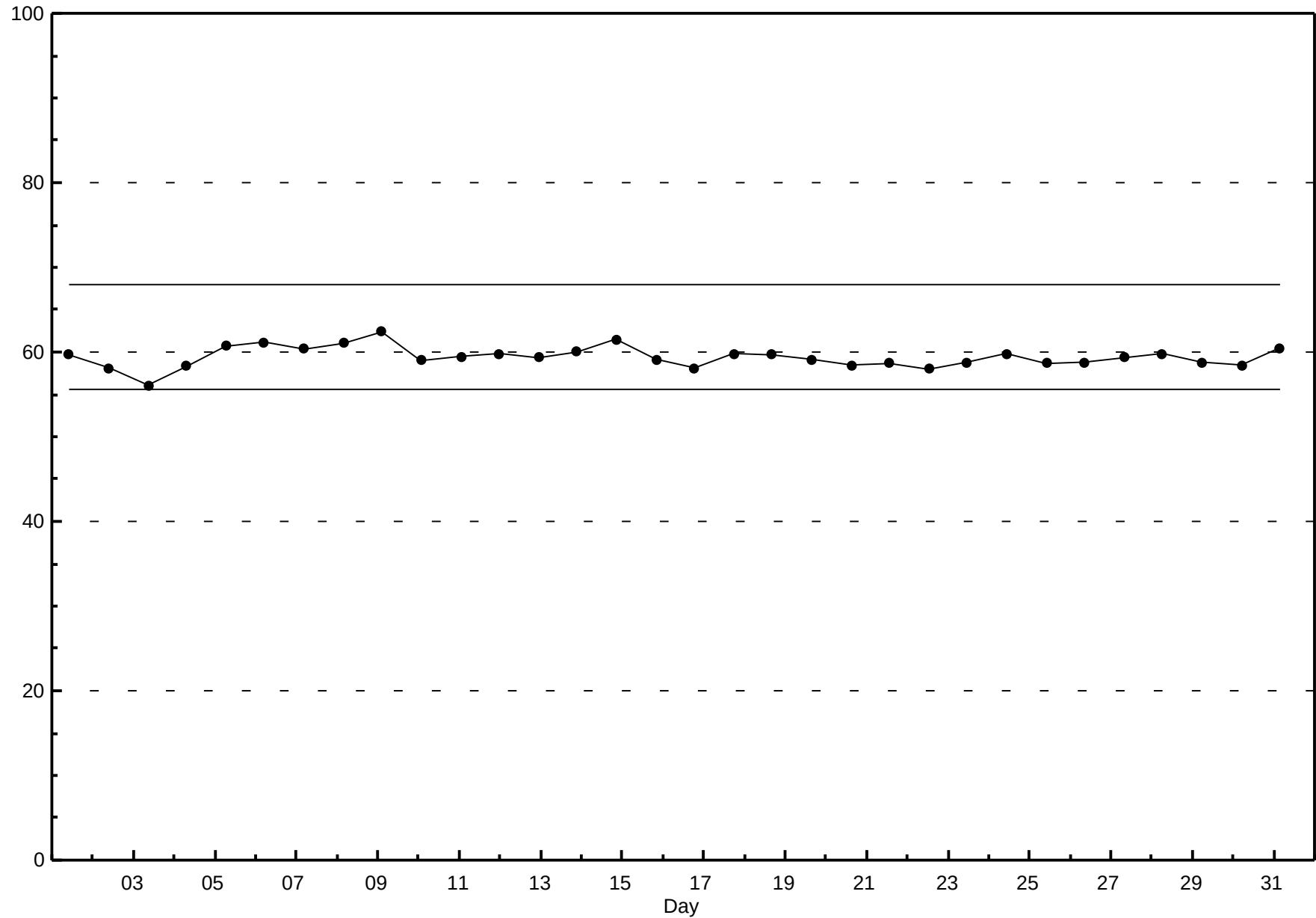
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Portable Clairmont - March 2015



Span Responses

Total Reduced Sulphur (TRS)
Portable Clairmont - March 2015



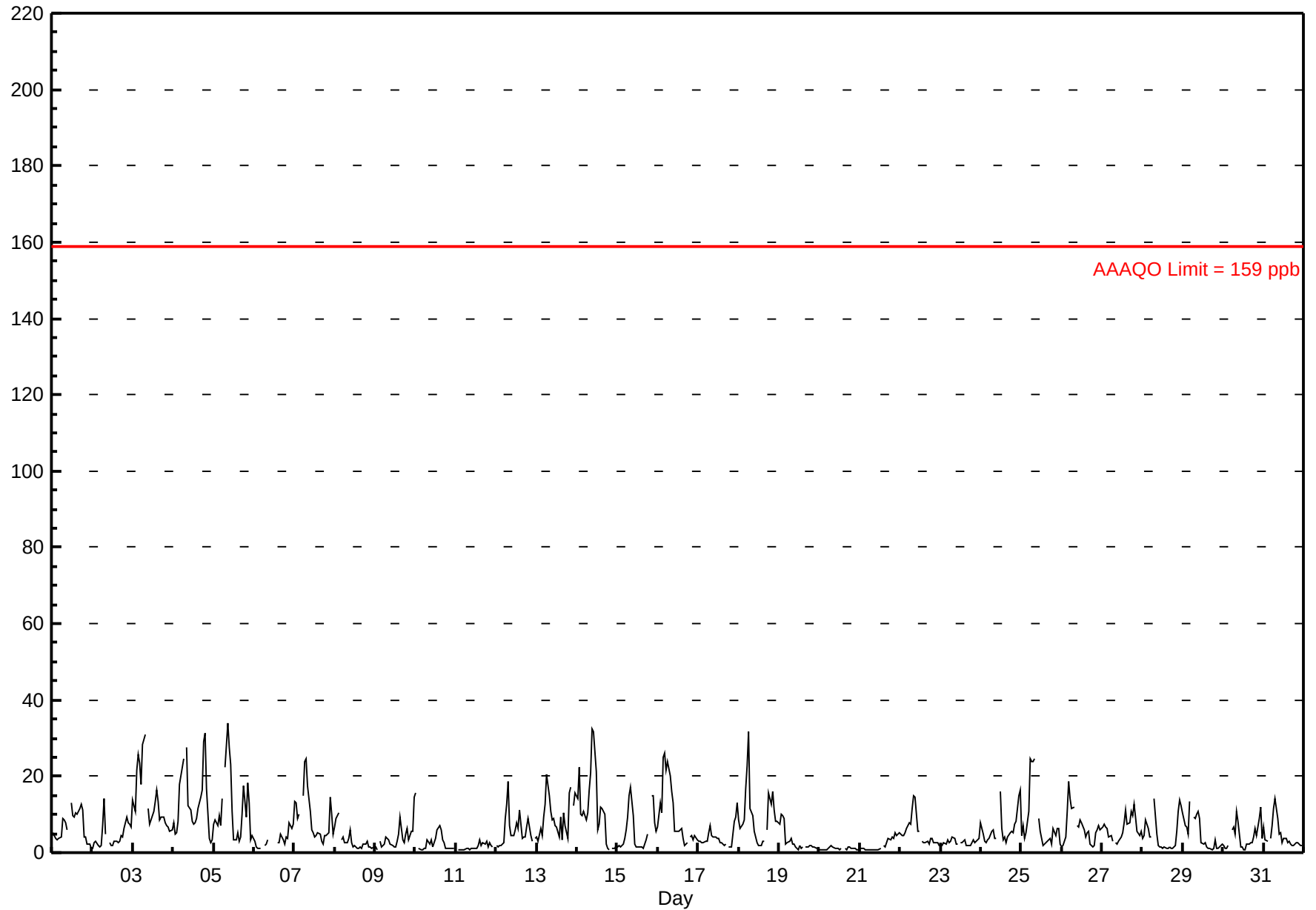
Hourly Averages

Nitrogen Dioxide (NO₂) - ppb Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 34.0 ppb on Mar 5 09:00 Maximum Daily Average: 13.7 ppb on Mar 3																					Hours in Service: 744 Hours of Data: 707					
Minimum Value: 1 ppb on Mar 21 11:00 Minimum Daily Average: 1.1 ppb on Mar 20 Maximum Diurnal Average: 11.2 ppb at hour 8 Minimum Diurnal Average: 4.0 ppb at hour 13 Monthly Average: 6.18 ppb Percentiles: P ₁ = 0.7 P ₁₀ = 1.2 Q ₁ = 2.1 Median = 4.0 Q ₃ = 8.4 P ₉₀ = 14.0 P ₉₉ = 28.2																					Hours of Missing Data: 37 Hours of Calibration: 37 Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	5	5	4	4	4	4	9	8	8	6	A	13	10	9	10	10	11	13	11	4	4	2	2	1	6.9	13.0
2-Mar	1	3	3	2	2	2	7	14	5	A	3	2	2	3	3	3	3	4	4	6	9	8	7	7	4.4	14.1
3-Mar	14	11	21	26	23	18	28	31	A	12	7	9	11	13	16	14	8	9	9	8	7	7	6	6	13.7	31.0
4-Mar	8	5	5	8	18	23	24	A	28	12	11	8	7	8	9	12	15	16	29	31	17	4	3	3	13.2	31.2
5-Mar	7	9	7	10	7	14	A	22	34	28	23	11	3	3	5	3	4	10	18	9	18	13	3	4	11.6	34.0
6-Mar	3	2	1	1	1	A	2	2	4	C	C	C	C	C	3	2	5	3	2	4	4	8	6	8	3.4	7.9
7-Mar	14	13	9	10	A	15	24	25	18	11	6	5	4	5	5	5	3	2	4	5	5	14	10	5	9.4	24.5
8-Mar	7	9	10	A	3	4	2	2	4	6	3	1	2	1	1	1	1	2	2	3	1	1	1	2	3.1	10.3
9-Mar	1	1	A	3	2	2	4	4	4	2	2	2	1	3	5	9	3	3	5	6	3	6	6	14	3.9	14.4
10-Mar	16	A	1	1	1	1	1	4	2	3	2	3	4	6	7	6	3	3	1	1	1	1	1	1	3.0	15.8
11-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	3	2	3	2	3	2	2	A	1.5	3.4
12-Mar	2	2	2	2	3	9	13	19	7	5	4	6	8	6	11	4	4	4	7	9	4	3	A	4	5.9	18.7
13-Mar	4	3	6	4	9	13	21	15	11	8	9	7	7	4	9	3	10	7	4	16	17	A	12	16	9.4	20.6
14-Mar	14	22	10	10	11	9	10	16	21	33	32	21	6	7	12	11	10	2	1	1	A	1	1	2	11.5	32.5
15-Mar	2	2	2	2	4	6	9	15	17	10	2	1	1	1	1	1	2	3	5	A	15	15	8	6	5.7	17.2
16-Mar	7	13	11	25	26	22	24	20	16	13	5	6	6	6	6	4	2	3	A	4	4	3	4	3	10.1	25.9
17-Mar	3	3	2	3	3	3	5	7	5	4	4	4	4	3	3	2	2	A	1	1	2	8	9	13	4.1	13.1
18-Mar	9	7	7	9	17	23	32	12	10	5	4	2	2	2	3	3	A	6	16	13	16	11	8	8	9.7	31.6
19-Mar	8	10	10	9	2	3	3	4	2	2	2	1	2	1	1	A	2	1	2	2	2	2	1	1	3.1	10.0
20-Mar	1	1	1	1	1	1	2	2	2	1	1	1	1	1	A	1	1	2	2	1	1	1	1	1	1.1	2.0
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	1	2	4	3	4	4	5	5	5	2.0	5.1
22-Mar	5	5	4	5	6	8	7	12	15	14	6	6	A	3	2	3	3	2	4	4	3	2	3	2	5.3	14.9
23-Mar	2	2	3	2	3	3	3	4	4	2	2	A	3	3	3	2	2	2	2	3	3	3	3	4	2.7	4.1
24-Mar	8	5	3	2	3	4	6	6	4	4	A	16	6	4	4	3	4	5	6	5	8	8	15	16	6.3	16.3
25-Mar	4	7	4	5	11	25	24	24	25	A	9	6	4	2	2	3	3	4	2	6	5	6	6	2	8.2	24.7
26-Mar	2	2	4	11	19	14	12	12	A	7	7	9	8	6	4	5	6	2	2	2	5	6	7	6	6.8	18.7
27-Mar	7	7	7	6	4	5	3	A	3	2	3	4	5	8	11	7	8	11	10	13	9	5	4	6	6.4	12.7
28-Mar	4	4	9	7	4	4	A	14	5	2	2	1	1	1	1	1	1	1	1	2	6	11	14	12	4.7	14.0
29-Mar	11	7	7	5	13	A	9	9	10	11	9	3	2	2	1	1	1	1	1	3	1	1	1	2	4.9	13.4
30-Mar	2	1	1	2	A	6	7	5	11	8	1	2	1	1	2	2	3	3	4	6	4	9	12	4	4.2	11.9
31-Mar	7	3	3	A	4	7	12	14	9	5	5	3	4	4	3	3	2	2	2	3	3	2	2	2	4.4	14.0
5.8 5.5 5.2 6.0 7.1 8.5 10.5 11.2 9.7 7.8 5.9 5.3 4.0 4.1 5.1 4.3 4.3 4.4 5.4 5.9 6.1 5.6 5.5 5.5																								Diurnal Average		
15.8 22.3 21.5 25.8 25.9 24.6 31.6 31.0 34.0 32.5 31.6 21.2 10.7 13.3 16.3 13.5 14.5 16.3 29.2 31.2 18.4 14.9 15.0 16.3																								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
Portable Clairmont - March 2015



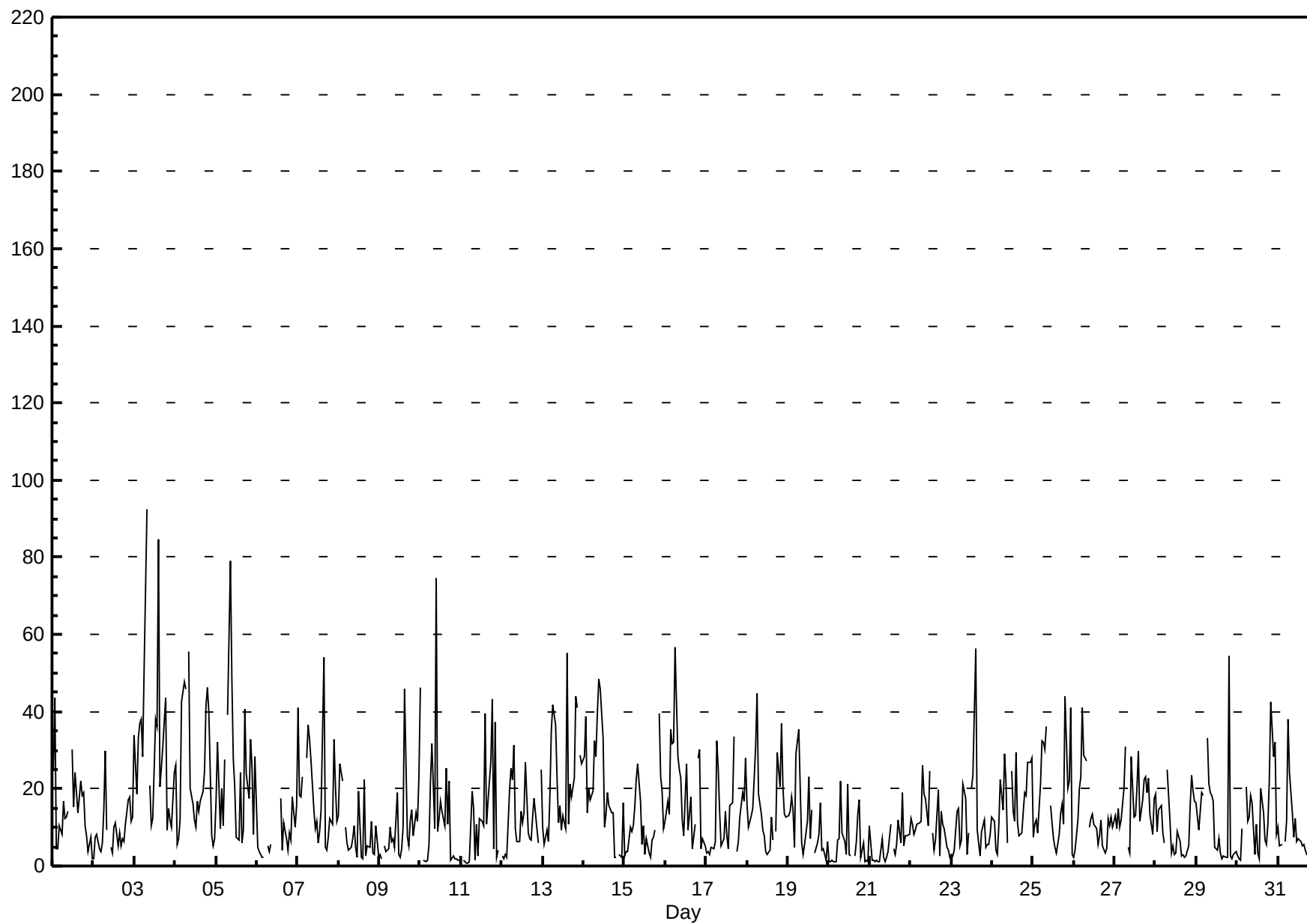
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb Portable Clairmont - March 2015

Maximum Value: 92.5 ppb on Mar 3 08:00																				Maximum Daily Average: 31.6 ppb on Mar 3										Hours in Service: 744	
Minimum Value: 1 ppb on Mar 11 05:00																				Minimum Daily Average: 5.4 ppb on Mar 21										Hours of Data: 707	
Maximum Diurnal Average: 25.0 ppb at hour 8																				Minimum Diurnal Average: 9.3 ppb at hour 3										Hours of Missing Data: 37	
Monthly Average: 14.43 ppb																				Percentiles: P ₁ = 1.1 P ₁₀ = 2.7 Q ₁ = 5.2 Median = 10.9 Q ₃ = 19.7 P ₉₀ = 31.4 P ₉₉ = 55.3										Hours of Calibration: 37	
																				Percent Operational Time: 100.0											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
1-Mar	25	43	4	5	10	8	17	12	13	14	A	30	15	24	19	14	22	18	19	10	8	4	8	2	15.0	43.5					
2-Mar	2	8	8	5	4	6	15	30	9	A	5	3	10	11	5	9	5	7	6	11	17	18	11	13	9.5	29.8					
3-Mar	34	18	33	37	38	28	51	93	A	21	10	12	38	36	84	20	25	31	44	9	15	12	10	24	31.6	92.5					
4-Mar	26	5	7	12	43	48	46	A	56	20	16	12	10	17	14	17	19	25	42	46	40	8	5	7	23.5	55.7					
5-Mar	17	32	10	20	10	28	A	39	79	49	28	21	8	7	24	6	9	41	24	17	33	26	8	28	24.5	79.0					
6-Mar	5	4	3	2	2	A	5	4	6	C	C	C	C	C	18	4	11	7	4	8	7	18	10	16	7.4	17.9					
7-Mar	41	18	18	23	A	28	37	33	27	15	10	12	6	9	14	54	5	4	8	12	11	33	21	12	19.5	54.0					
8-Mar	13	26	22	A	10	6	4	5	7	11	5	2	19	2	2	22	3	5	5	12	3	3	11	2	8.8	26.4					
9-Mar	3	2	A	5	4	4	10	6	7	5	19	3	2	5	10	46	8	5	12	15	8	14	12	23	9.9	45.8					
10-Mar	46	A	1	1	1	6	22	32	10	75	9	12	17	14	10	25	11	22	1	3	2	2	2	1	14.1	74.7					
11-Mar	A	1	1	1	1	1	20	15	1	11	3	12	12	11	39	11	17	27	43	4	37	2	4	A	12.5	43.1					
12-Mar	2	2	3	2	20	25	22	31	10	6	6	14	11	14	27	9	7	7	13	17	10	6	A	25	12.6	31.4					
13-Mar	10	5	9	7	18	35	42	37	23	11	16	9	13	10	55	11	21	18	23	44	41	A	29	26	22.3	55.2					
14-Mar	28	39	14	20	17	19	32	28	40	48	46	33	10	13	19	16	14	14	2	2	A	3	2	16	20.8	48.3					
15-Mar	3	4	4	10	9	11	15	23	26	17	5	11	3	7	3	2	7	7	9	A	40	23	19	10	11.6	39.6					
16-Mar	11	17	13	36	32	32	57	28	25	23	12	8	26	9	13	18	5	11	A	28	30	5	7	5	19.6	56.6					
17-Mar	3	4	3	5	5	6	32	26	14	5	7	14	8	4	16	16	34	A	4	6	13	19	17	28	12.5	33.6					
18-Mar	16	10	13	15	23	31	45	19	13	9	8	4	3	4	13	7	A	9	29	20	37	20	13	13	16.3	44.7					
19-Mar	13	14	18	15	5	29	35	20	6	3	5	11	23	7	15	A	3	6	8	16	4	4	2	6	11.8	35.4					
20-Mar	1	1	1	1	1	7	7	22	9	6	3	21	3	3	A	3	6	13	17	2	6	1	2	1	6.0	22.1					
21-Mar	10	1	1	1	1	1	7	2	1	2	4	11	A	4	3	5	12	6	19	5	8	8	8	8	5.4	19.2					
22-Mar	12	11	8	9	11	11	12	26	19	18	11	25	A	8	4	7	20	3	14	11	10	5	4	2	11.3	25.9					
23-Mar	3	2	4	14	15	5	7	21	18	3	9	A	20	24	56	9	6	2	9	12	5	6	6	8	11.5	56.2					
24-Mar	13	11	4	3	10	22	15	29	21	6	A	25	14	11	29	11	8	8	14	19	18	27	27	28	16.3	29.3					
25-Mar	7	11	12	9	21	32	32	30	36	A	16	11	7	5	3	8	14	16	11	44	20	22	41	3	17.9	43.8					
26-Mar	2	4	12	20	23	41	29	27	A	10	12	14	11	10	6	8	12	5	3	4	12	10	13	10	13.0	41.0					
27-Mar	13	10	15	10	12	20	31	A	5	3	28	13	13	20	30	12	17	22	23	19	23	13	8	17	16.4	31.0					
28-Mar	19	9	15	16	9	6	A	25	12	3	5	3	3	9	6	2	3	2	3	5	16	23	20	17	10.0	25.0					
29-Mar	17	9	14	19	18	A	33	21	19	18	17	5	4	7	3	2	2	2	2	54	3	2	3	4	12.2	54.3					
30-Mar	2	2	2	10	A	20	11	13	18	16	3	11	3	2	20	14	7	6	11	22	42	28	32	8	13.2	42.5					
31-Mar	10	5	5	A	6	11	38	24	14	8	12	6	7	6	5	6	4	3	3	4	21	4	3	3	9.1	38.2					
13.6 11.0 9.3 11.4 13.1 18.3 24.9 25.0 18.7 15.5 11.7 12.4 11.4 10.7 19.0 13.0 11.0 12.0 13.7 16.6 17.8 12.3 11.9 12.3																									Diurnal Average						
46.1 43.5 33.3 37.1 42.6 47.6 56.6 92.5 79.0 74.7 45.7 33.4 37.9 36.3 84.5 54.0 33.6 40.7 43.8 54.3 42.5 32.7 41.1 28.4																									Diurnal Maximum						
C - Calibration A - Automated Daily Zero Span																															

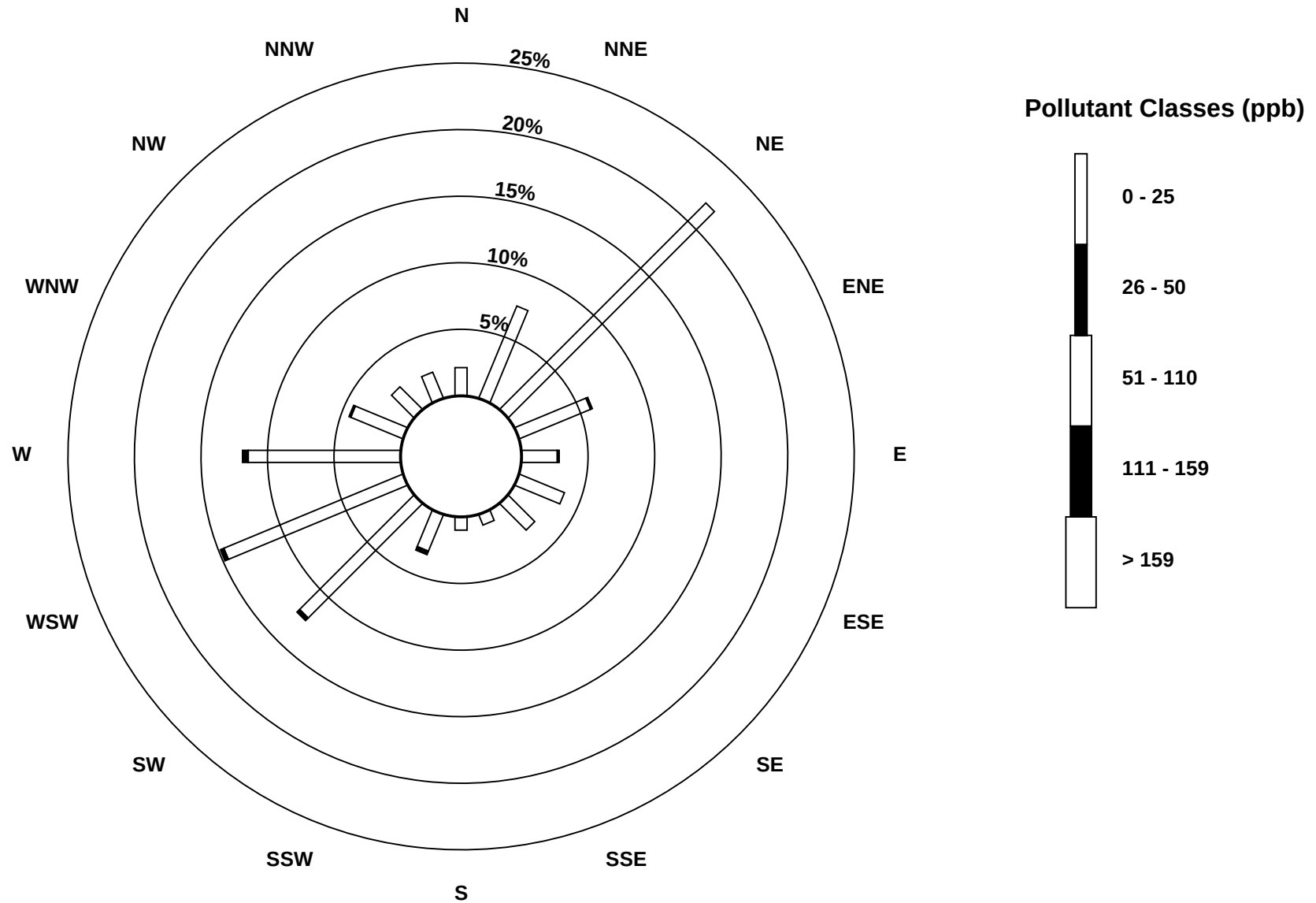
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Portable Clairmont - March 2015



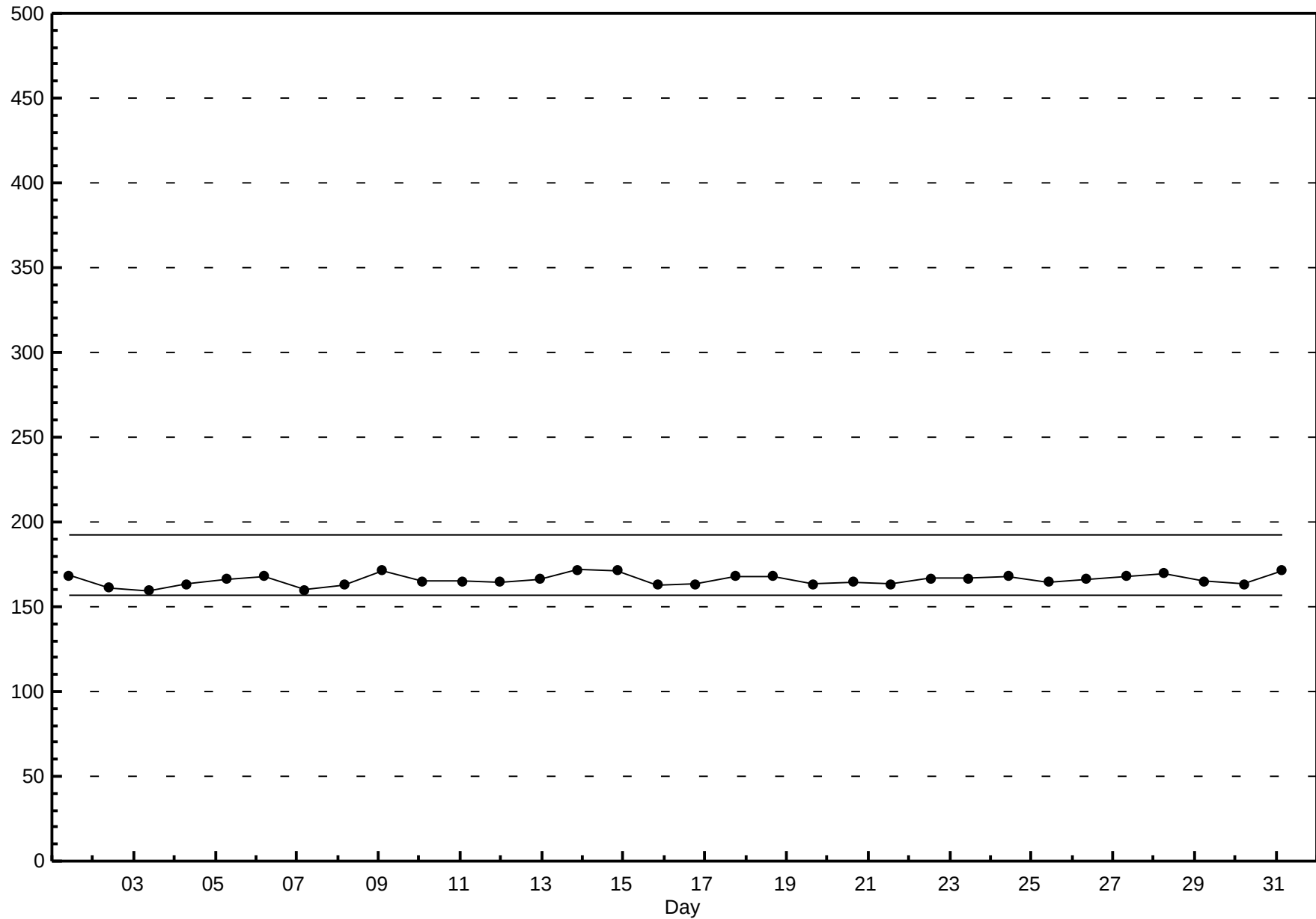
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Portable Clairmont - March 2015



Span Responses

Nitrogen Dioxide (NO₂)
Portable Clairmont - March 2015



Hourly Averages

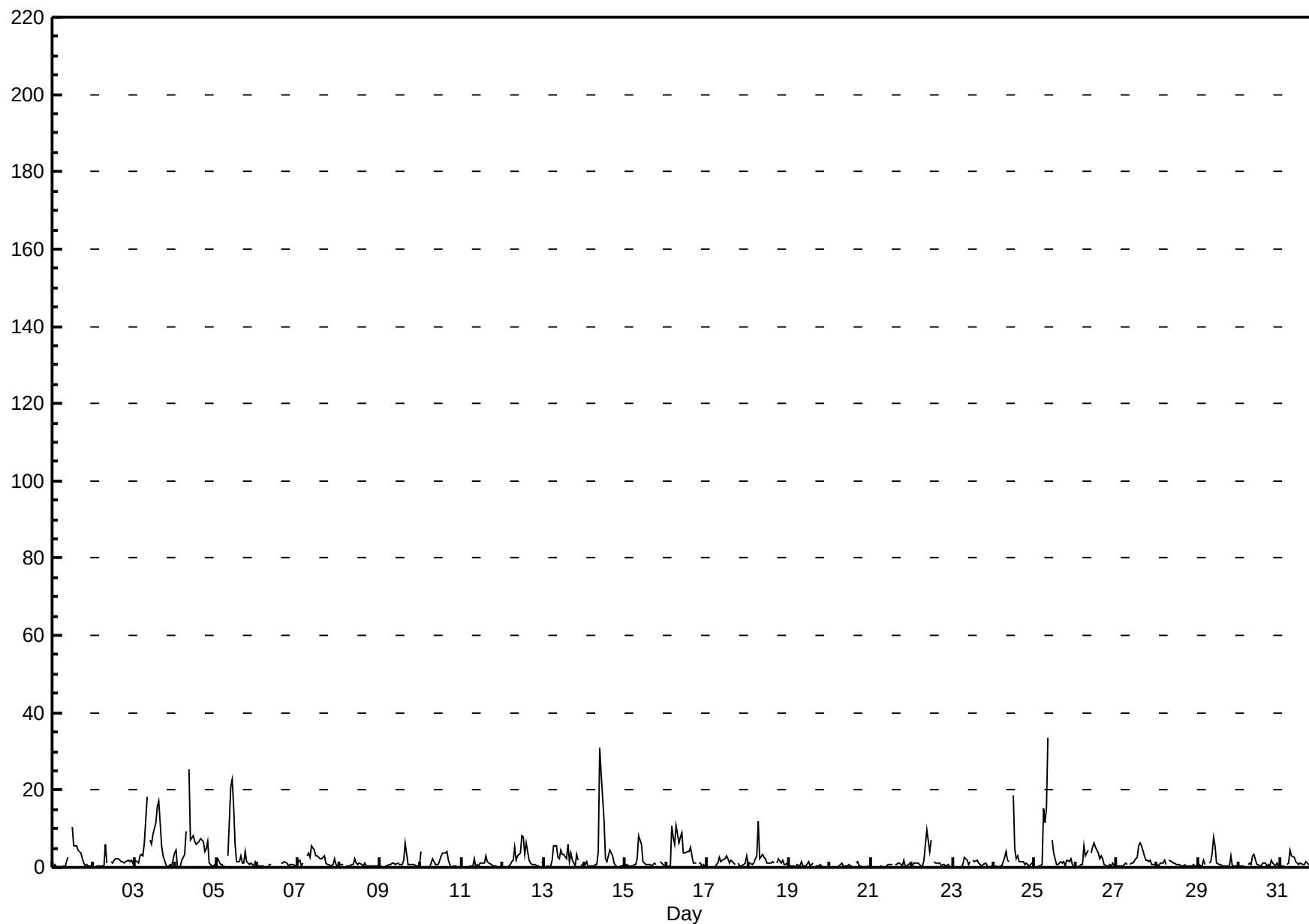
Nitrogen Oxide (NO) - ppb

Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 33.5 ppb on Mar 25 09:00 Maximum Daily Average: 5.7 ppb on Mar 3																				Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 37 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Mar 13 04:00 Maximum Diurnal Average: 4.9 ppb at hour 9 Monthly Average: 1.96 ppb										Minimum Daily Average: 0.4 ppb on Mar 20 Minimum Diurnal Average: 0.4 ppb at hour 3 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.4 Median = 0.9 Q ₃ = 2.0 P ₉₀ = 5.1 P ₉₉ = 17.6																
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-Mar	0	1	0	0	0	0	0	0	1	3	A	10	6	5	5	4	4	2	1	1	1	0	0	0	2.0	10.3
2-Mar	0	0	0	0	0	0	0	6	1	A	1	1	2	2	2	2	2	2	1	1	2	1	2	1	1.4	6.0
3-Mar	2	1	1	3	3	3	6	18	A	7	6	9	11	16	17	11	6	3	1	0	0	1	0	4	5.7	18.2
4-Mar	4	0	0	0	2	3	9	A	25	7	8	7	6	6	7	7	7	4	5	7	1	1	0	1	5.1	25.3
5-Mar	2	2	1	1	0	0	A	3	21	23	16	6	2	2	3	1	1	4	2	1	1	1	0	1	4.0	22.6
6-Mar	0	0	0	0	0	A	1	1	1	C	C	C	C	C	1	1	2	1	1	1	1	1	0	1	0.7	1.5
7-Mar	1	2	1	1	A	3	4	3	6	5	3	3	2	2	2	3	1	1	1	1	1	2	1	0	2.1	5.6
8-Mar	0	1	1	A	0	0	0	1	1	2	1	1	1	1	0	1	0	1	0	0	0	0	0	0	0.6	2.3
9-Mar	0	0	A	0	0	1	1	1	1	1	1	1	1	1	2	6	1	1	1	1	1	0	1	1	1.0	6.3
10-Mar	4	A	0	0	0	0	1	2	1	1	1	2	3	4	4	4	2	1	0	0	0	0	0	0	1.3	4.3
11-Mar	A	0	0	0	0	0	0	2	0	1	0	1	1	1	3	1	1	1	1	0	0	0	0	A	0.7	2.9
12-Mar	0	0	0	0	1	1	2	5	2	3	4	8	8	3	6	2	1	1	1	1	0	0	A	1	2.2	8.0
13-Mar	0	0	0	0	0	2	5	6	3	2	5	3	3	2	6	2	4	2	0	3	2	A	1	0	2.3	5.9
14-Mar	1	1	0	0	0	0	1	1	4	31	24	12	2	1	3	5	3	1	0	0	A	0	0	1	4.1	30.8
15-Mar	1	1	1	1	1	1	1	2	8	6	1	1	1	1	1	0	1	1	1	A	1	1	1	0	1.3	8.0
16-Mar	0	0	0	11	8	6	11	6	8	9	4	4	4	4	5	3	1	1	A	1	1	0	1	0	3.8	11.0
17-Mar	0	0	0	0	0	1	1	3	1	2	2	3	2	1	2	1	1	A	1	0	1	1	1	3	1.2	3.0
18-Mar	1	1	1	1	2	3	12	2	3	3	2	1	1	1	2	1	A	1	2	1	2	1	1	1	2.0	12.0
19-Mar	0	0	0	0	0	1	1	1	0	0	0	2	0	1	1	A	0	0	1	0	0	0	0	0	0.5	1.5
20-Mar	0	0	0	0	0	0	1	1	0	0	0	1	0	0	A	1	1	0	0	0	0	0	0	0	0.4	1.4
21-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	1	2	0	0	1	1	0.5	1.8
22-Mar	0	1	1	1	1	0	0	2	6	10	4	7	A	1	1	1	1	0	1	1	0	1	0	0	1.8	9.8
23-Mar	0	0	0	0	0	0	1	3	2	1	1	A	2	2	2	1	1	0	1	1	0	0	0	1	0.8	2.5
24-Mar	0	0	0	0	0	0	2	4	2	2	A	19	5	2	3	1	1	2	1	1	1	0	1	1	2.1	18.8
25-Mar	0	0	0	0	1	15	12	15	34	A	7	4	2	1	1	2	1	1	1	2	1	2	1	0	4.5	33.5
26-Mar	0	0	0	1	1	6	3	4	A	4	5	6	5	4	2	3	2	1	0	1	1	1	1	0	2.2	6.2
27-Mar	0	0	1	0	0	1	1	A	1	1	1	2	3	6	6	5	3	2	2	1	2	1	1	1	1.8	6.2
28-Mar	1	0	1	1	2	1	A	2	2	1	1	1	1	1	0	0	1	0	0	0	0	1	0	1	0.8	1.9
29-Mar	1	0	0	2	1	A	1	2	4	8	6	1	1	1	1	0	1	0	0	3	0	0	0	0	1.5	8.0
30-Mar	0	0	0	0	A	1	1	1	3	3	1	1	0	0	1	1	1	1	0	2	1	1	1	0	0.9	3.3
31-Mar	0	0	0	A	1	1	5	3	3	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1.2	4.5
0.7 0.5 0.4 0.9 0.9 1.8 2.9 3.5 4.9 4.9 3.9 4.0 2.7 2.5 3.0 2.5 1.7 1.2 0.9 1.2 0.8 0.6 0.6 0.7 Diurnal Average 4.3 2.1 1.2 10.7 7.7 15.3 12.0 18.2 33.5 30.8 24.2 18.8 11.5 15.7 17.2 11.4 6.9 4.1 4.9 6.7 2.1 2.3 1.7 3.7 Diurnal Maximum																										
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Portable Clairmont - March 2015



Hourly Maximums

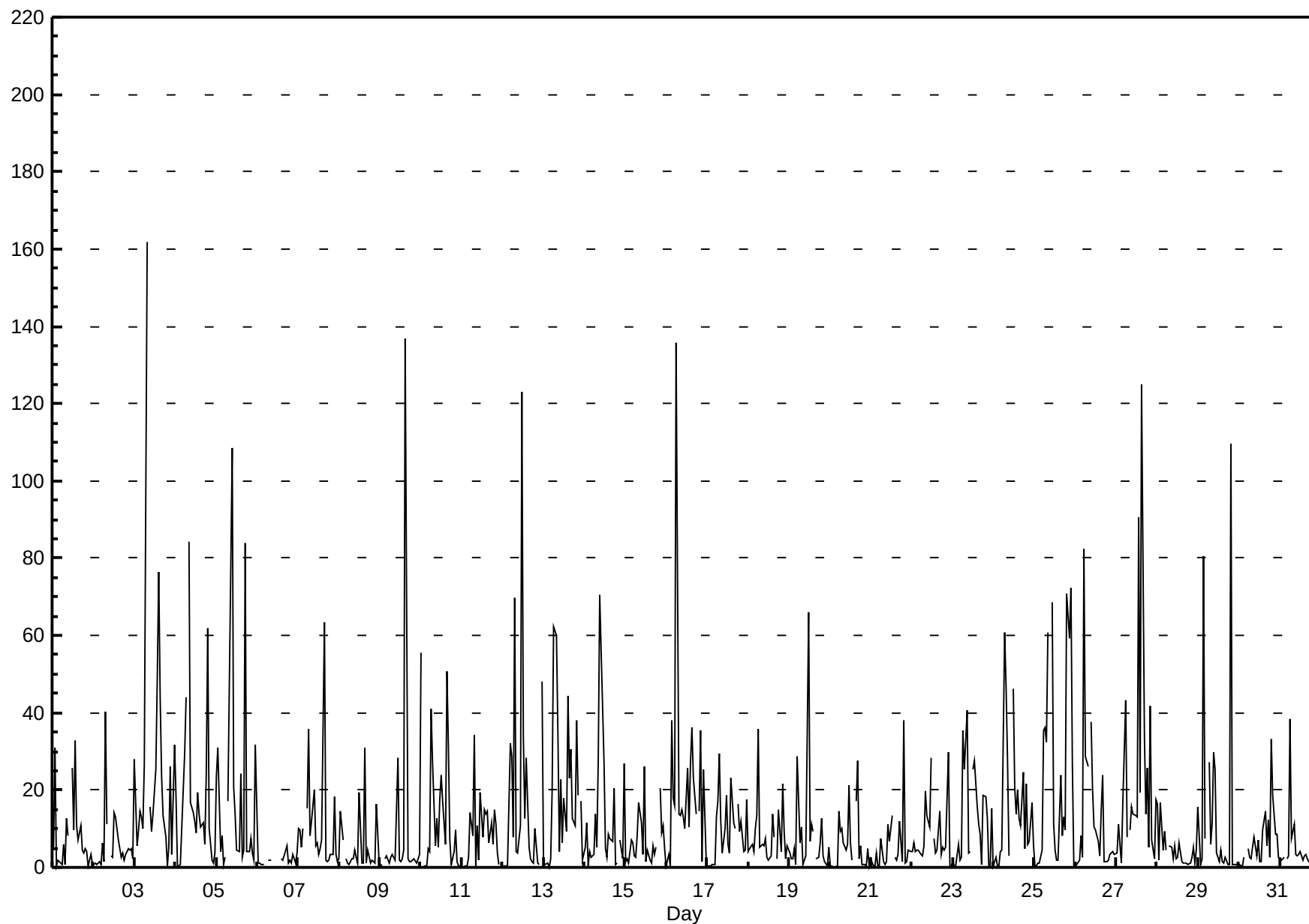
Nitrogen Oxide (NO) - ppb

Portable Clairmont - March 2015

Maximum Value: 161.7 ppb on Mar 3 08:00																				Maximum Daily Average: 26.7 ppb on Mar 3					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 13 04:00																				Minimum Daily Average: 2.0 ppb on Mar 6					Hours of Data: 707	
Maximum Diurnal Average: 24.4 ppb at hour 7																				Minimum Diurnal Average: 2.6 ppb at hour 3					Hours of Missing Data: 37	
Monthly Average: 12.19 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.7 Q ₁ = 2.0 Median = 5.2 Q ₃ = 14.1 P ₉₀ = 29.8 P ₉₉ = 107.8					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-Mar	4	31	0	2	1	1	6	1	13	8	A	26	10	33	11	7	11	4	4	5	4	1	3	1	8.1	32.7
2-Mar	1	1	1	1	1	7	1	40	11	A	3	3	14	13	7	5	3	4	2	3	5	4	5	2	5.9	40.2
3-Mar	28	6	10	14	13	10	27	162	A	15	9	14	25	49	76	44	24	13	8	0	5	26	3	32	26.7	161.7
4-Mar	18	0	0	1	10	30	44	A	84	17	14	12	9	19	14	10	12	6	25	62	10	2	1	4	17.6	84.1
5-Mar	24	31	4	8	1	3	A	17	78	108	21	14	4	4	24	3	4	84	4	4	7	4	2	32	21.1	108.5
6-Mar	1	1	1	1	1	A	2	2	2	C	C	C	C	C	2	2	3	6	1	2	1	3	1	4	2.0	5.6
7-Mar	10	10	5	10	A	15	36	8	12	20	6	6	3	5	7	64	2	1	2	3	3	18	4	1	11.0	63.6
8-Mar	2	15	7	A	2	1	1	2	2	4	3	1	20	1	1	31	1	4	1	2	1	1	16	1	5.3	31.0
9-Mar	1	1	A	2	3	1	3	3	3	2	28	2	1	2	4	137	2	2	1	2	2	1	2	3	9.1	136.9
10-Mar	56	A	0	0	5	4	41	27	6	13	5	18	24	17	6	51	31	7	1	4	10	2	0	0	14.2	55.6
11-Mar	A	0	0	0	2	14	8	34	1	11	2	20	8	15	14	15	6	11	6	15	11	4	1	A	9.0	34.3
12-Mar	0	0	0	0	32	29	8	70	4	4	11	123	34	13	28	5	2	1	1	10	1	1	A	48	18.6	123.1
13-Mar	1	1	1	0	2	20	62	60	35	4	23	6	18	9	44	23	31	13	11	38	19	A	17	2	19.1	62.4
14-Mar	5	12	0	4	3	3	14	5	28	70	56	27	5	3	9	7	7	21	1	1	A	7	2	27	13.8	70.4
15-Mar	1	2	1	7	6	3	3	8	17	12	3	26	2	4	2	1	6	3	5	A	21	9	11	5	6.9	26.0
16-Mar	0	4	0	38	18	16	136	14	14	15	13	10	26	10	27	36	23	14	A	15	35	2	25	0	21.3	135.8
17-Mar	0	0	0	1	1	13	17	30	12	4	10	18	6	4	23	11	10	A	16	9	12	4	4	18	9.7	29.5
18-Mar	4	5	6	4	10	13	36	5	6	6	7	2	2	3	14	8	A	2	15	4	22	9	2	6	8.3	35.8
19-Mar	4	2	2	5	1	29	6	10	1	2	3	66	7	11	9	A	2	3	6	13	3	1	0	5	8.4	66.0
20-Mar	0	0	0	0	0	15	9	10	6	4	6	21	6	2	A	17	27	2	6	1	1	0	5	0	6.1	27.4
21-Mar	2	0	0	4	0	0	8	1	1	1	11	7	13	A	3	2	3	12	2	38	1	2	5	4	5.2	38.2
22-Mar	4	6	4	5	4	3	3	5	20	14	11	28	A	7	4	5	14	3	5	4	5	30	0	0	8.1	29.7
23-Mar	2	0	1	6	2	3	35	25	41	4	4	A	25	28	16	11	9	1	19	18	13	0	0	15	12.0	40.6
24-Mar	0	3	0	0	4	4	61	47	27	3	A	46	20	14	20	13	11	25	5	22	6	7	17	6	15.7	60.8
25-Mar	1	0	1	1	4	35	36	32	61	A	68	11	5	2	2	24	8	13	10	71	59	72	26	0	23.7	72.3
26-Mar	0	1	2	8	3	83	29	26	A	38	20	10	10	7	3	15	24	1	1	2	4	4	4	3	12.9	82.5
27-Mar	4	11	6	1	17	43	8	A	10	15	14	13	13	90	19	125	34	14	26	5	42	7	2	18	23.4	125.1
28-Mar	16	2	17	4	9	5	A	5	5	2	5	2	3	6	2	1	1	1	1	1	3	5	1	4	4.4	16.7
29-Mar	16	1	2	80	7	A	27	6	12	30	25	4	2	4	1	1	3	1	1	110	1	1	1	1	14.6	109.7
30-Mar	1	1	0	2	A	5	3	2	5	8	3	7	2	2	10	15	6	12	3	33	19	9	9	3	6.8	33.3
31-Mar	2	2	3	A	2	3	38	7	11	3	3	3	4	2	3	3	2	1	1	2	47	2	2	2	6.6	47.1
6.9 4.9 2.6 7.3 5.7 14.2 24.4 23.0 18.1 15.6 13.8 18.9 11.0 13.1 13.5 23.0 10.7 9.5 6.3 16.7 12.4 7.9 5.8 8.3																								Diurnal Average		
55.6 31.1 16.7 80.4 32.0 82.5 135.8 161.7 84.1 108.5 68.5 123.1 34.4 90.4 76.3 136.9 33.7 83.8 25.6 109.7 59.4 72.3 26.3 48.1																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Portable Clairmont - March 2015



Hourly Averages

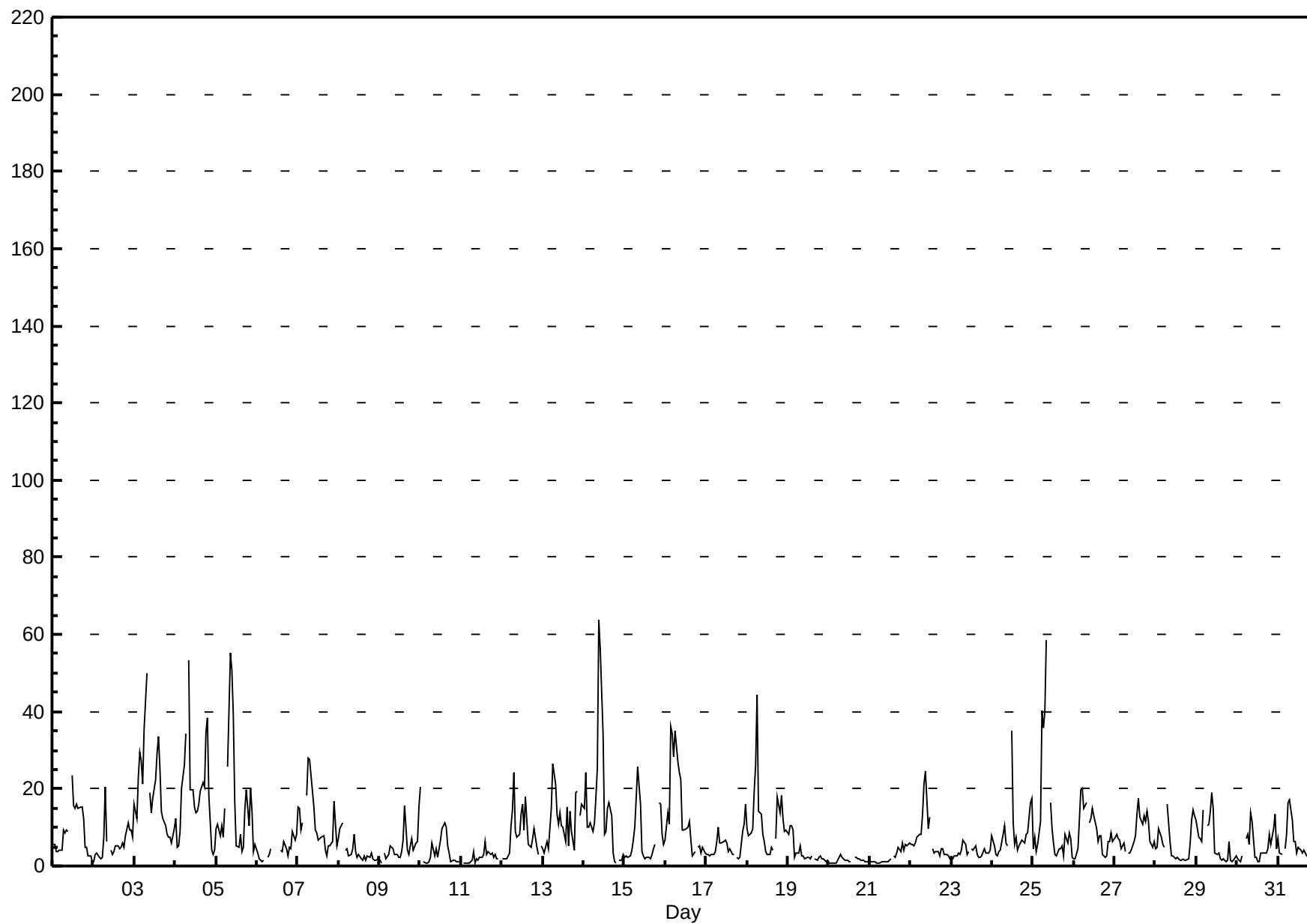
Oxides of Nitrogen (NO_x) - ppb

Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 63.9 ppb on Mar 14 10:00 Maximum Daily Average: 19.6 ppb on Mar 3																								Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 37 Percent Operational Time: 100.0			
Minimum Value: 1 ppb on Mar 11 04:00 Minimum Daily Average: 1.5 ppb on Mar 20 Maximum Diurnal Average: 14.8 ppb at hour 8 Minimum Diurnal Average: 5.6 ppb at hour 3 Monthly Average: 8.21 ppb Percentiles: P ₁ = 0.9 P ₁₀ = 1.6 Q ₁ = 2.7 Median = 5.2 Q ₃ = 10.4 P ₉₀ = 17.7 P ₉₉ = 49.2																											
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-Mar	6	6	4	4	4	4	9	9	9	9	A	24	15	15	16	15	15	15	12	5	5	3	2	1	9.0	23.6	
2-Mar	1	3	3	2	2	2	7	20	6	A	4	3	4	5	5	5	5	6	5	8	11	9	9	8	5.8	20.3	
3-Mar	16	12	23	29	27	21	35	50	A	19	14	17	22	29	34	25	14	12	10	8	8	8	6	10	19.6	49.8	
4-Mar	12	5	5	9	20	26	34	A	53	20	20	15	14	14	16	19	22	21	35	39	18	4	3	4	18.6	53.5	
5-Mar	10	11	8	11	7	15	A	26	55	51	39	17	5	5	8	4	5	14	20	10	20	14	4	6	15.8	55.3	
6-Mar	3	2	1	1	2	A	2	3	4	C	C	C	C	C	4	4	6	4	3	5	4	9	7	8	4.1	8.8	
7-Mar	15	15	9	11	A	18	28	28	24	15	9	8	7	7	7	8	4	3	5	5	6	17	11	5	11.6	28.0	
8-Mar	7	10	11	A	4	4	3	3	5	5	8	4	2	3	2	1	2	1	3	2	3	2	1	2	3.8	11.1	
9-Mar	2	1	A	3	2	3	5	5	5	3	3	2	2	4	7	16	4	3	5	7	4	6	6	15	4.9	15.8	
10-Mar	20	A	1	1	1	1	2	6	3	4	2	4	7	10	11	10	5	3	1	1	1	1	1	1	4.3	20.4	
11-Mar	A	1	1	1	1	1	1	4	1	2	1	2	2	3	6	3	4	3	3	2	3	2	2	A	2.2	6.4	
12-Mar	2	2	2	2	3	11	15	24	9	7	8	14	16	9	18	6	5	5	7	10	5	3	A	5	8.2	24.3	
13-Mar	4	3	6	4	10	15	26	21	13	11	14	10	10	6	15	5	14	9	4	19	19	A	13	16	11.8	26.4	
14-Mar	15	24	10	10	11	9	11	18	25	64	56	34	8	9	15	16	13	3	1	1	A	2	1	3	15.7	63.9	
15-Mar	2	3	2	3	4	7	10	17	26	16	4	2	2	2	2	2	3	5	6	A	17	16	8	6	7.1	25.7	
16-Mar	7	14	11	36	34	28	35	27	24	22	9	9	10	10	12	7	3	4	A	5	5	3	5	3	14.1	36.0	
17-Mar	3	3	2	3	3	4	6	10	6	6	6	7	6	4	5	3	3	A	2	2	2	9	11	16	5.3	16.1	
18-Mar	10	8	8	10	19	26	44	14	13	8	6	4	3	3	5	4	A	7	18	14	18	12	9	9	11.9	44.3	
19-Mar	8	10	10	9	2	3	3	5	3	3	2	2	2	2	2	A	2	2	2	2	2	2	1	1	3.6	10.4	
20-Mar	1	1	1	1	1	1	2	3	2	2	1	2	1	1	A	2	2	2	2	1	1	1	1	1	1.5	2.9	
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	2	A	3	2	4	5	4	6	4	6	5	6	2.5	6.1	
22-Mar	5	6	5	6	8	8	8	14	21	24	10	13	A	4	3	4	4	4	2	4	4	3	3	2	7.2	24.5	
23-Mar	2	2	3	3	3	3	4	7	6	3	4	A	4	4	5	3	2	2	3	5	3	3	3	4	3.5	6.7	
24-Mar	8	5	3	3	4	4	8	10	6	5	A	35	11	6	7	4	5	7	6	6	8	9	16	18	8.5	35.0	
25-Mar	5	7	4	6	11	40	36	40	59	A	16	10	6	3	3	4	5	5	3	8	6	9	7	2	12.8	58.6	
26-Mar	2	2	4	12	20	20	15	17	A	11	12	15	13	10	6	8	8	3	2	3	6	7	9	6	9.1	20.2	
27-Mar	7	8	7	7	5	6	4	A	3	3	4	6	8	13	17	13	11	13	12	14	12	6	5	6	8.3	17.3	
28-Mar	4	5	10	8	6	5	A	16	6	3	2	2	2	2	1	2	2	1	1	2	6	12	14	13	5.5	16.2	
29-Mar	12	7	7	6	15	A	10	11	14	19	15	4	3	3	2	1	2	1	1	6	1	1	2	2	6.4	19.2	
30-Mar	2	1	1	2	A	7	8	6	14	12	2	2	1	1	3	3	3	4	5	8	5	10	13	4	5.2	13.8	
31-Mar	7	3	3	A	4	8	16	17	12	6	7	3	5	4	4	4	3	2	3	4	5	3	3	3	5.6	17.1	
6.6 6.0 5.6 7.0 8.1 10.4 13.5 14.8 14.8 12.8 9.9 9.3 6.7 6.6 8.2 6.8 6.0 5.7 6.3 7.1 7.1 6.3 6.1 6.3 20.4 24.1 23.2 36.0 34.2 40.4 44.3 49.8 58.6 63.9 56.3 35.0 22.4 29.1 33.7 25.2 21.8 20.6 34.7 38.5 20.0 16.8 16.3 17.7																										Diurnal Average	Diurnal Maximum
C - Calibration A - Automated Daily Zero Span																											

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
Portable Clairmont - March 2015



Hourly Maximums

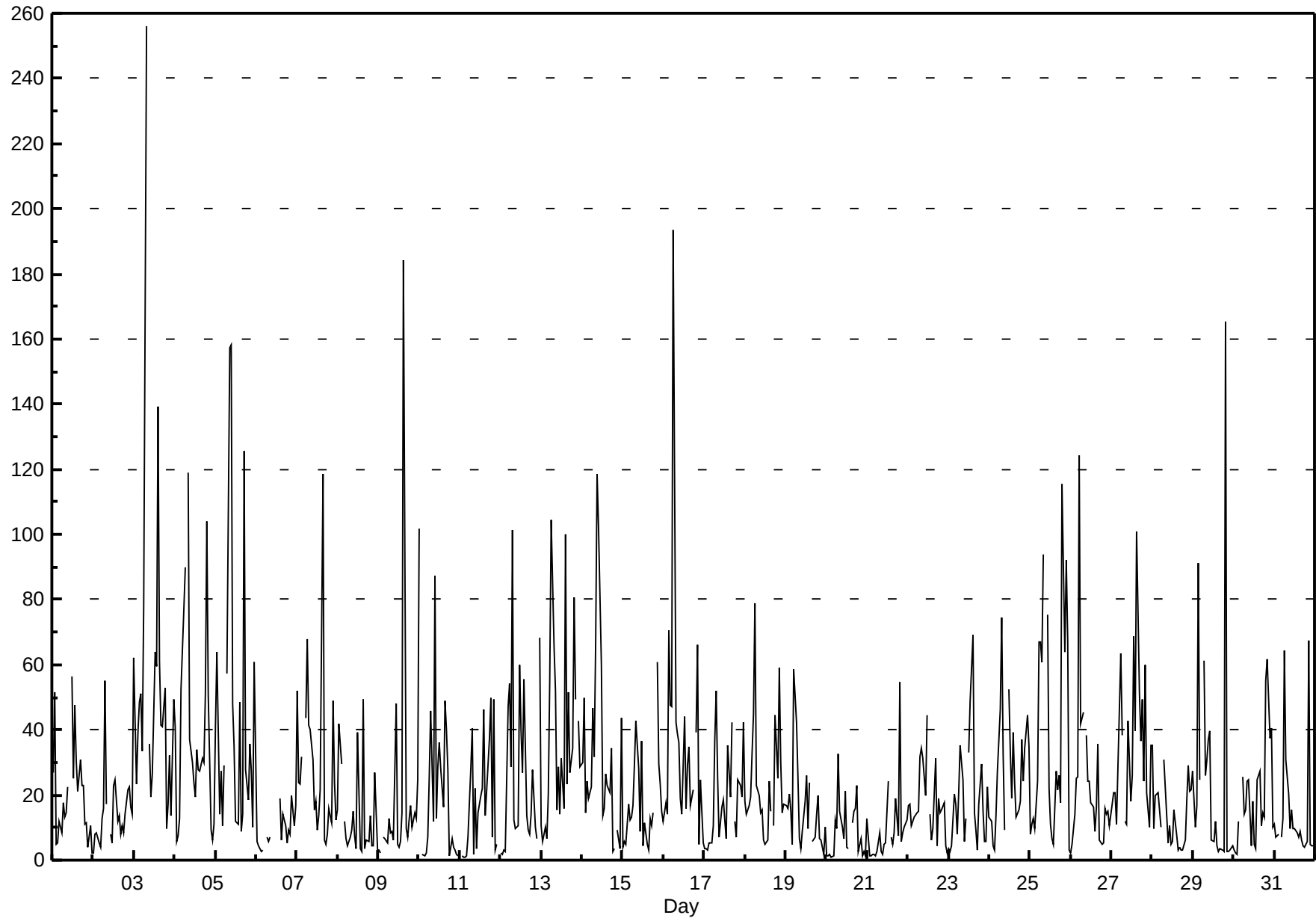
Oxides of Nitrogen (NO_x) - ppb

Portable Clairmont - March 2015

Maximum Value: 256.0 ppb on Mar 3 08:00																								Hours in Service: 744		
Maximum Daily Average: 54.5 ppb on Mar 3																								Hours of Data: 707		
Minimum Value: 1 ppb on Mar 11 04:00																								Hours of Missing Data: 37		
Maximum Diurnal Average: 44.5 ppb at hour 8																								Hours of Calibration: 37		
Monthly Average: 24.33 ppb																								Percent Operational Time: 100.0		
Minimum Daily Average: 8.8 ppb on Mar 20																										
Minimum Diurnal Average: 11.2 ppb at hour 3																										
Percentiles: P ₁ = 1.3 P ₁₀ = 3.4 Q ₁ = 7.2 Median = 15.5 Q ₃ = 31.2 P ₉₀ = 52.6 P ₉₉ = 128.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	27	52	5	5	12	8	18	13	14	23	A	56	25	48	30	21	31	23	23	11	11	4	11	2	20.6	56.4
2-Mar	2	8	8	5	4	13	16	55	17	A	8	5	23	25	12	14	8	11	8	14	21	23	16	14	14.4	55.0
3-Mar	62	23	39	48	51	33	77	256	A	36	19	26	64	59	139	61	41	41	53	10	17	32	14	49	54.5	256.0
4-Mar	41	6	8	13	53	77	90	A	119	37	30	24	19	34	28	27	31	30	51	104	51	9	6	11	39.1	119.0
5-Mar	40	64	14	27	11	29	A	57	158	158	48	35	12	11	49	9	14	126	28	18	36	27	10	61	45.2	158.0
6-Mar	6	4	4	3	3	A	7	6	7	C	C	C	C	C	19	6	14	11	5	9	8	20	10	17	8.8	20.0
7-Mar	52	24	23	32	A	44	68	41	40	31	16	18	9	13	22	118	6	5	8	16	12	49	24	13	29.7	118.4
8-Mar	15	42	30	A	12	7	5	7	9	15	7	3	39	3	3	49	4	6	6	14	5	4	27	3	13.7	49.5
9-Mar	3	2	A	7	7	5	13	8	9	6	48	5	4	6	15	184	10	7	13	17	10	15	13	25	18.7	184.0
10-Mar	102	A	2	1	2	7	25	46	12	87	13	29	36	28	16	49	40	28	1	7	4	3	2	1	23.6	101.7
11-Mar	A	1	1	1	1	7	28	41	2	22	3	14	20	22	46	14	21	37	50	7	49	3	5	A	18.0	49.9
12-Mar	2	2	3	2	47	54	29	101	12	10	10	60	40	27	56	14	9	8	14	28	10	7	A	68	26.7	101.2
13-Mar	10	6	10	7	20	55	105	66	52	15	29	14	31	16	100	24	52	27	34	81	49	A	43	29	38.0	104.6
14-Mar	30	50	14	24	19	22	47	32	66	119	102	60	14	16	26	23	21	35	3	3	A	9	4	44	34.0	118.7
15-Mar	4	6	5	17	12	13	17	29	43	28	9	37	4	11	5	3	13	10	15	A	61	30	23	15	17.8	61.0
16-Mar	12	18	14	71	47	47	194	42	39	36	19	14	44	16	29	35	17	22	A	39	66	5	25	5	37.2	193.7
17-Mar	3	4	3	5	5	11	36	52	26	7	16	18	12	7	35	19	42	A	12	7	25	23	19	42	18.7	52.1
18-Mar	18	14	17	19	32	45	79	23	20	15	15	6	5	6	24	15	A	11	45	25	59	30	14	17	24.1	79.1
19-Mar	17	16	20	16	5	58	42	25	7	4	9	18	26	10	24	A	6	7	14	20	7	6	2	10	16.0	58.4
20-Mar	1	1	2	1	1	12	10	32	15	10	7	21	4	4	A	12	15	16	23	3	7	1	3	1	8.8	32.5
21-Mar	13	1	1	2	2	1	3	8	3	2	5	5	24	A	7	5	8	19	7	54	6	8	10	12	9.0	54.4
22-Mar	17	17	11	12	13	15	15	32	34	31	20	45	A	14	6	10	31	4	19	15	15	18	4	2	17.4	44.7
23-Mar	3	3	4	20	17	8	20	35	25	6	13	A	33	49	69	15	9	3	17	30	15	6	6	23	18.6	69.3
24-Mar	13	12	4	3	14	27	46	74	33	9	A	52	33	19	39	24	13	15	18	37	24	34	44	35	27.2	74.4
25-Mar	8	11	13	9	24	67	67	61	94	A	75	22	11	6	5	28	22	26	17	116	64	92	67	3	39.5	115.6
26-Mar	2	5	14	25	26	124	42	45	A	38	24	24	17	16	9	16	35	6	5	6	16	14	15	11	23.3	124.5
27-Mar	17	21	21	11	29	64	38	A	12	11	43	18	26	69	39	101	51	37	49	24	60	21	10	35	35.1	100.8
28-Mar	35	10	20	21	15	10	A	31	14	5	11	5	6	15	8	3	4	3	3	6	19	29	21	21	13.7	35.1
29-Mar	27	10	17	91	25	A	61	26	31	37	40	6	6	12	4	3	3	3	3	165	3	3	3	4	25.4	165.2
30-Mar	3	2	2	12	A	26	14	15	24	24	4	18	5	3	25	27	11	15	13	55	62	38	41	10	19.5	61.9
31-Mar	11	7	8	A	7	13	64	31	20	10	16	10	10	8	7	9	6	4	4	6	67	5	5	5	14.5	67.2
19.9 14.7 11.2 17.7 17.8 31.2 43.9 44.5 33.0 29.7 23.5 23.1 20.8 19.8 29.9 31.2 19.6 19.8 18.7 31.5 28.6 18.9 16.6 19.6																								Diurnal Average		
101.7 63.8 39.3 91.4 52.6 124.5 193.7 256.0 157.5 158.0 102.4 60.1 64.1 68.6 139.2 184.0 51.7 125.6 52.8 165.2 67.2 92.2 67.3 68.3																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

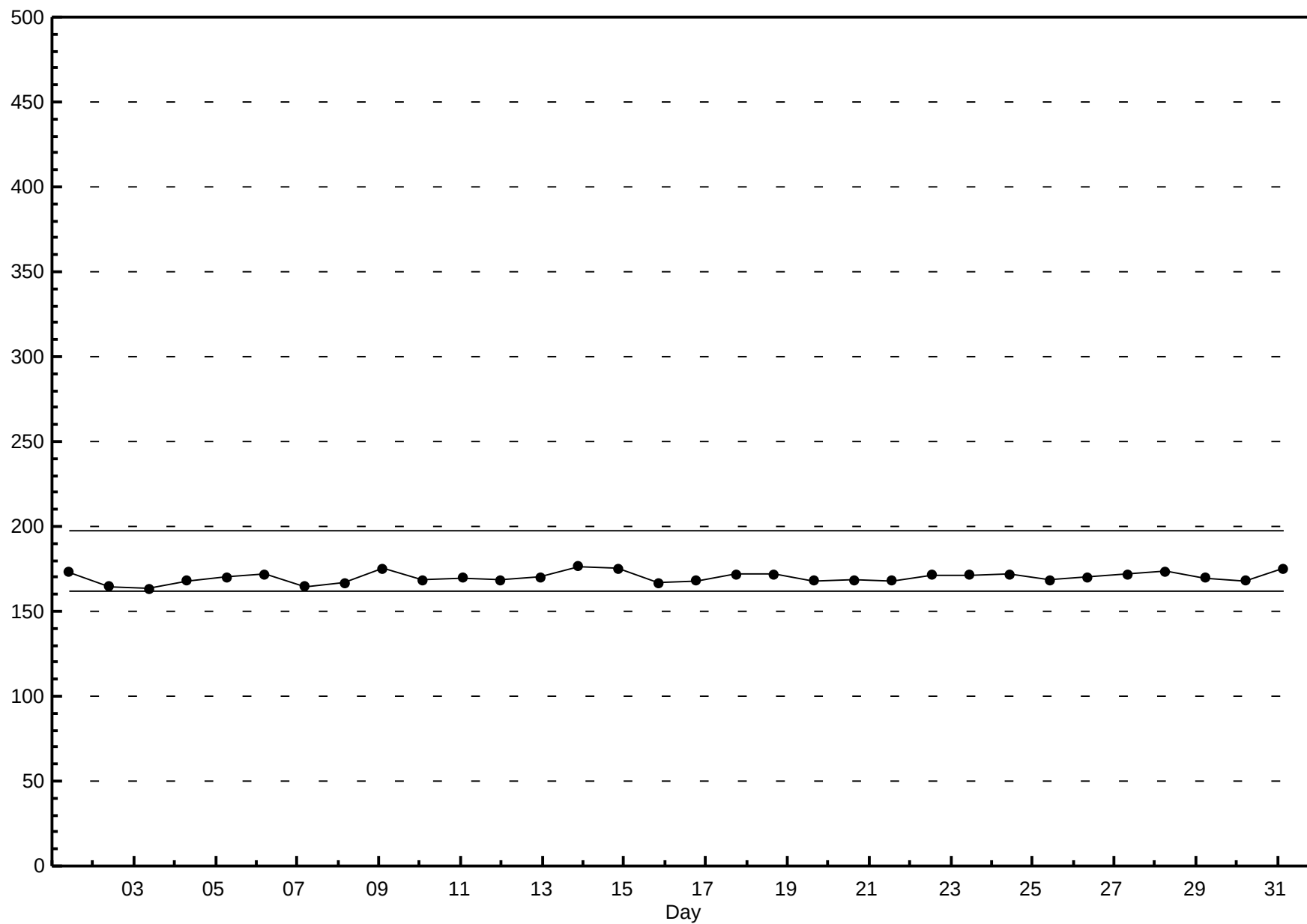
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Portable Clairmont - March 2015



Span Responses

Oxides of Nitrogen (NO_x)
Portable Clairmont - March 2015



Hourly Averages

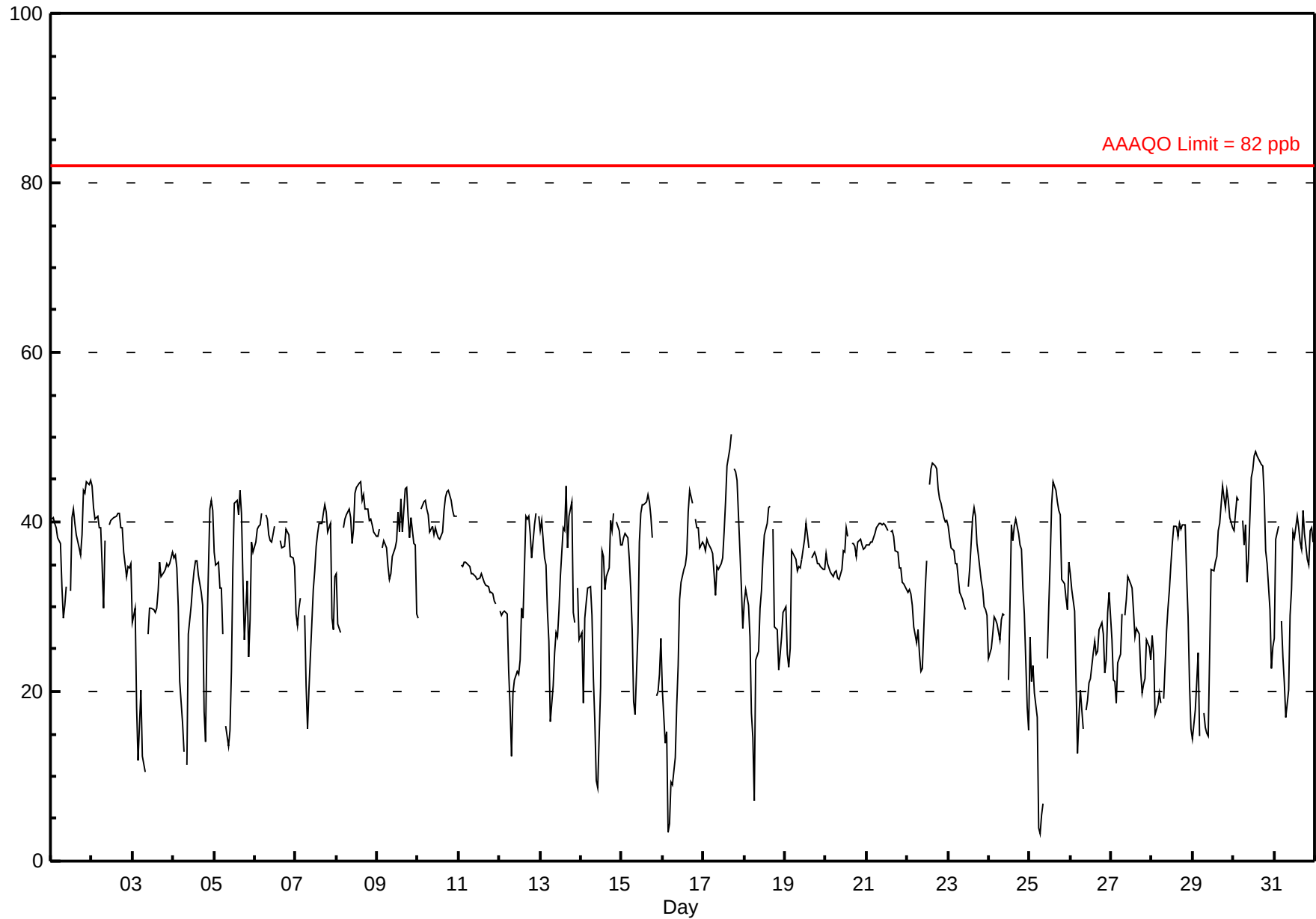
Ozone (O₃) - ppb

Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 50.4 ppb on Mar 17 17:00 Maximum Daily Average: 40.2 ppb on Mar 10																								Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0		
Minimum Value: 3 ppb on Mar 25 07:00 Minimum Daily Average: 23.9 ppb on Mar 26 Maximum Diurnal Average: 39.3 ppb at hour 16 Minimum Diurnal Average: 25.3 ppb at hour 8 Monthly Average: 33.04 ppb Percentiles: P ₁ = 8.5 P ₁₀ = 20.5 Q ₁ = 28.6 Median = 35.0 Q ₃ = 39.3 P ₉₀ = 41.7 P ₉₉ = 46.9																										
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-Mar	40	40	40	39	38	38	32	29	30	32	A	32	40	42	40	38	37	36	39	44	43	45	44	45	38.4	44.9
2-Mar	44	42	40	41	39	39	35	30	38	A	40	40	40	40	41	41	41	39	39	36	34	35	35	35	38.5	44.2
3-Mar	28	30	18	12	16	20	12	11	A	27	30	30	30	29	30	32	35	34	34	34	35	35	35	36	27.5	36.4
4-Mar	36	36	35	30	21	16	13	A	11	27	30	33	34	35	36	34	32	30	18	14	27	41	43	41	29.2	42.5
5-Mar	36	35	35	32	32	27	A	16	14	15	22	35	42	43	41	44	41	33	26	33	24	29	38	37	31.7	43.8
6-Mar	38	39	40	40	41	A	41	40	39	38	38	39	C	C	C	38	37	37	39	39	38	36	36	35	38.3	41.0
7-Mar	29	28	30	31	A	29	21	16	20	28	32	34	37	39	40	40	41	42	41	39	40	29	27	34	32.4	42.0
8-Mar	34	28	27	A	39	40	41	42	40	37	39	43	44	45	45	43	43	41	41	40	40	40	39	38	39.6	44.7
9-Mar	38	39	A	37	38	37	35	33	34	36	37	38	41	39	43	39	44	44	41	38	41	38	37	29	38.0	44.1
10-Mar	29	A	42	42	43	42	41	39	39	38	39	39	38	38	39	41	43	44	44	43	41	41	41	41	40.2	43.8
11-Mar	A	35	35	35	35	35	35	34	34	34	34	33	33	34	33	33	33	32	32	32	31	31	30	A	33.3	35.3
12-Mar	30	29	29	29	29	23	18	12	20	21	22	22	24	30	29	41	40	41	39	36	40	41	A	41	29.8	41.1
13-Mar	39	40	36	35	29	26	16	21	24	27	27	30	34	39	39	44	37	41	42	29	28	A	32	26	32.2	44.3
14-Mar	27	19	29	31	32	32	29	22	16	9	9	21	37	36	32	34	35	40	39	41	A	40	39	37	29.8	41.1
15-Mar	37	38	39	38	36	32	27	19	17	27	38	41	42	42	42	43	42	41	38	A	19	20	22	26	33.4	43.3
16-Mar	20	14	15	3	4	9	9	12	18	23	31	33	34	35	36	41	44	42	A	40	39	39	37	38	26.9	43.8
17-Mar	37	37	38	37	37	36	34	31	35	34	35	36	39	42	47	49	50	A	46	46	45	37	32	27	38.6	50.4
18-Mar	30	32	30	27	17	15	7	24	25	30	32	36	38	40	42	42	A	39	28	27	23	24	26	29	28.8	41.9
19-Mar	30	24	23	25	37	36	36	34	35	35	36	38	40	38	37	A	36	37	36	35	35	35	34	34	34.1	39.8
20-Mar	36	35	35	34	34	34	34	33	33	34	37	36	39	38	A	38	37	37	36	38	38	37	37	37	36.0	39.3
21-Mar	37	37	38	38	38	39	39	40	40	40	40	40	39	A	39	39	38	37	36	35	35	33	33	32	37.4	39.9
22-Mar	32	32	32	30	28	26	27	24	22	23	32	35	A	44	46	47	47	46	44	43	42	40	40	40	35.8	47.0
23-Mar	40	38	37	37	35	35	33	32	31	30	30	A	32	35	41	42	41	38	36	33	32	30	30	29	34.5	41.7
24-Mar	24	25	27	29	28	28	26	29	29	29	A	21	30	40	38	39	40	39	37	37	32	29	18	15	30.0	40.4
25-Mar	26	21	23	20	17	4	3	5	7	A	24	30	35	42	45	44	42	41	41	33	33	31	30	35	27.5	44.8
26-Mar	34	32	30	21	13	17	20	16	A	18	19	21	22	25	26	24	25	27	28	27	22	24	29	32	23.9	33.9
27-Mar	26	21	21	19	23	24	29	A	29	31	34	33	32	30	27	27	27	22	20	21	21	26	25	24	25.8	33.6
28-Mar	27	24	17	19	20	19	A	19	27	30	32	35	38	39	40	38	40	39	40	40	34	29	21	16	29.6	39.9
29-Mar	14	18	21	25	15	A	17	16	15	15	24	34	34	35	36	39	40	44	43	42	44	43	40	39	30.2	44.3
30-Mar	39	41	43	42	A	40	37	40	33	36	45	46	48	48	48	47	47	47	43	37	35	30	23	25	40.0	48.3
31-Mar	26	38	39	A	28	24	21	17	20	29	32	39	38	41	39	38	37	41	39	36	35	39	39	38	33.6	41.4
32.1 31.6 31.4 30.3 29.1 28.4 26.6 25.3 26.8 28.7 31.6 34.1 36.4 38.0 38.4 39.3 39.0 38.4 36.8 35.5 34.2 34.1 33.1 33.0																								Diurnal Average		
44.2 41.7 42.8 42.5 42.6 41.6 40.9 41.5 40.5 39.7 45.3 46.2 47.8 48.3 47.8 48.7 50.4 46.7 46.2 46.0 45.0 44.7 44.4 44.9																								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
Portable Clairmont - March 2015



Hourly Maximums

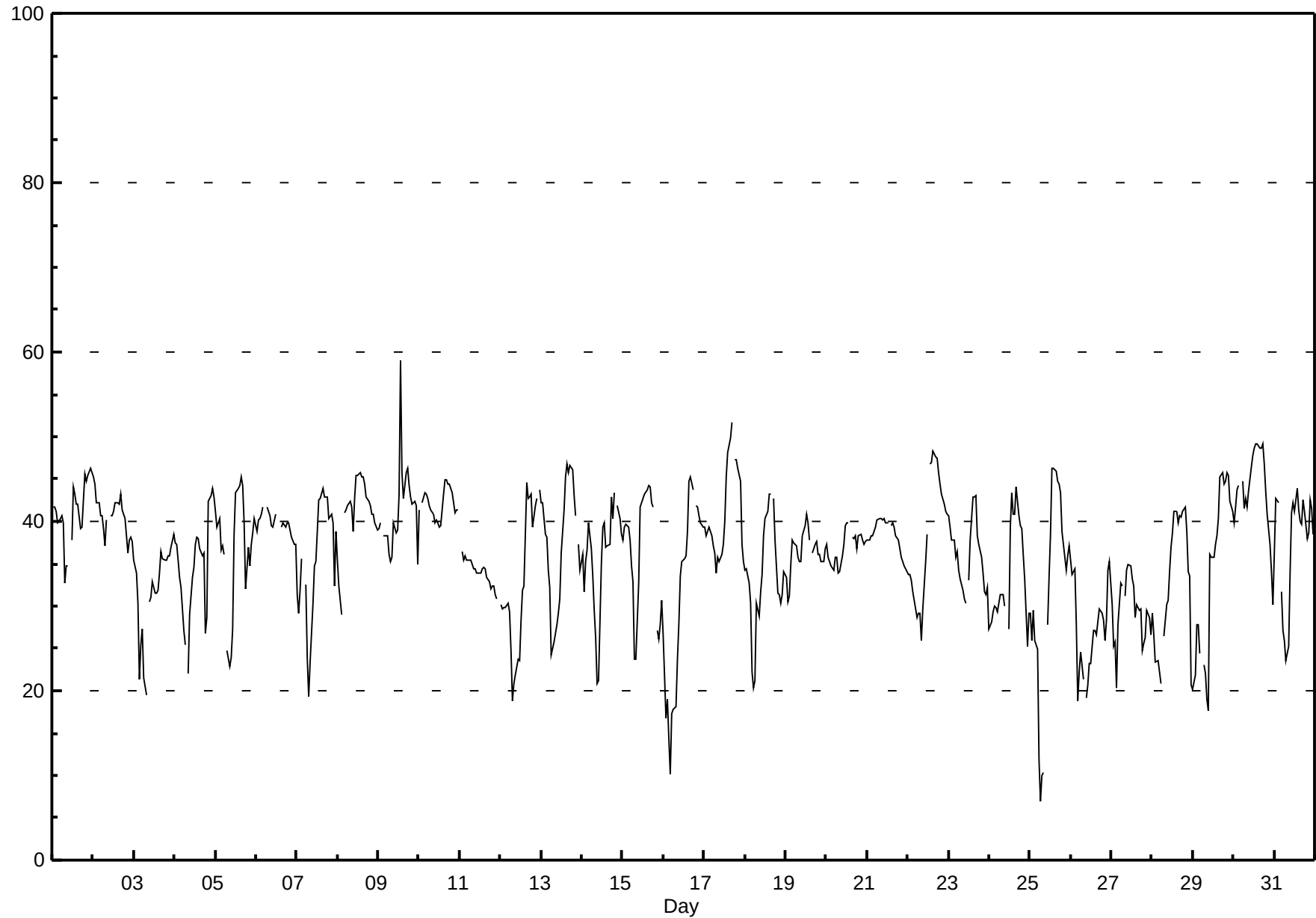
Ozone (O₃) - ppb

Portable Clairmont - March 2015

Maximum Value: 59.0 ppb on Mar 9 14:00																					Maximum Daily Average: 43.7 ppb on Mar 30										Hours in Service: 744	
Minimum Value: 7 ppb on Mar 25 07:00																					Minimum Daily Average: 27.2 ppb on Mar 26										Hours of Data: 709	
Maximum Diurnal Average: 41.4 ppb at hour 16																					Minimum Diurnal Average: 29.6 ppb at hour 8										Hours of Missing Data: 35	
Monthly Average: 36.15 ppb																					Percentiles: P ₁ = 17.1 P ₁₀ = 25.9 Q ₁ = 31.8 Median = 37.3 Q ₃ = 41.3 P ₉₀ = 44.2 P ₉₉ = 48.4										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-Mar	42	42	41	40	40	41	40	33	35	35	A	38	44	43	42	42	39	39	43	46	45	45	46	46	41.1	46.2						
2-Mar	45	44	42	42	41	41	39	37	40	A	41	41	41	42	42	42	43	41	41	40	36	38	38	38	40.7	45.2						
3-Mar	35	34	30	21	25	27	22	19	A	30	31	33	31	31	32	34	36	36	35	35	36	36	37	38	31.6	38.4						
4-Mar	37	37	35	33	32	27	25	A	22	29	33	35	37	38	38	37	36	36	27	29	42	43	44	43	34.7	43.9						
5-Mar	41	39	40	37	37	36	A	25	23	24	27	38	43	44	44	45	44	40	32	37	35	37	39	40	36.9	45.2						
6-Mar	39	40	40	41	42	A	42	41	41	40	39	41	C	C	C	39	40	39	40	40	39	38	37	37	39.7	41.8						
7-Mar	31	29	32	36	A	32	24	19	23	30	35	35	39	43	43	44	43	43	43	40	41	40	32	39	35.5	43.8						
8-Mar	35	32	29	A	41	41	42	42	42	39	43	45	45	46	45	45	44	43	42	42	41	41	40	39	41.1	45.8						
9-Mar	39	40	A	38	38	38	36	35	36	40	39	39	43	59	46	43	46	46	44	43	42	42	42	35	41.3	59.0						
10-Mar	41	A	42	43	43	43	42	41	41	40	40	40	39	40	43	45	45	44	44	43	42	41	41	41	42.0	44.9						
11-Mar	A	36	35	36	35	35	35	35	34	34	34	34	34	34	35	34	33	33	32	32	32	31	31	A	34.0	36.4						
12-Mar	30	30	30	30	30	29	25	19	21	22	24	23	28	32	32	45	43	43	43	39	42	43	A	44	32.4	44.6						
13-Mar	42	42	39	38	34	32	24	26	27	28	29	31	36	41	45	47	46	47	46	43	41	A	37	34	37.2	46.8						
14-Mar	36	32	35	37	40	37	33	29	26	21	21	35	39	40	37	37	37	43	40	43	A	42	40	38	35.7	43.3						
15-Mar	38	39	40	39	38	35	33	24	24	33	42	42	43	43	44	44	44	42	42	A	27	26	28	31	36.5	44.3						
16-Mar	27	17	19	14	10	17	18	18	24	28	34	35	36	36	39	45	45	44	A	42	42	41	40	39	30.8	45.2						
17-Mar	39	38	39	39	38	37	36	34	36	35	36	37	40	45	48	50	52	A	47	47	46	45	37	35	40.8	51.8						
18-Mar	34	34	33	30	22	20	21	30	29	32	34	38	40	41	43	43	A	43	38	32	31	30	31	34	33.3	43.3						
19-Mar	33	30	31	35	38	37	37	36	35	35	38	39	41	40	38	A	36	37	38	36	36	35	35	37	36.3	40.8						
20-Mar	37	36	35	35	34	36	36	34	34	36	37	39	40	40	A	38	38	38	37	38	38	38	37	38	37.0	39.8						
21-Mar	38	38	38	38	39	39	40	40	40	40	40	40	40	A	39	40	39	38	38	37	36	35	35	34	38.3	40.3						
22-Mar	34	34	33	32	31	29	29	29	26	30	35	38	A	47	47	48	48	47	46	44	43	42	41	41	38.0	48.2						
23-Mar	41	39	38	38	36	36	34	33	32	31	30	A	33	38	43	43	43	43	38	37	36	34	32	31	32	36.0	43.0					
24-Mar	27	28	29	30	30	29	31	31	31	30	A	27	39	43	41	41	44	41	40	39	36	33	25	29	33.8	44.0						
25-Mar	29	26	29	26	25	12	7	10	10	A	28	33	38	46	46	46	45	44	43	39	36	34	36	37	31.6	46.3						
26-Mar	35	34	34	28	19	22	25	21	A	19	21	23	23	27	27	27	28	30	29	28	26	28	34	35	27.2	35.4						
27-Mar	30	25	26	20	28	33	32	A	31	34	35	35	33	32	29	30	30	30	25	26	26	30	29	27	29.3	34.9						
28-Mar	29	27	23	24	22	21	A	26	30	31	34	37	39	41	41	40	41	41	41	42	39	34	34	21	32.9	41.7						
29-Mar	20	22	28	28	24	A	23	22	19	18	36	36	36	37	38	40	45	46	44	45	46	45	42	41	34.0	45.7						
30-Mar	40	42	44	44	A	45	42	43	42	44	47	48	49	49	49	49	49	49	47	44	41	37	34	30	43.7	49.2						
31-Mar	36	43	42	A	32	27	26	24	25	34	41	42	41	44	41	40	40	43	41	38	39	43	42	38	37.5	43.9						
35.5 34.3 34.5 33.5 32.6 32.3 31.0 29.6 30.3 31.7 34.6 36.7 38.4 40.8 40.6 41.4 41.4 40.8 39.5 38.8 37.9 37.5 36.6 36.4																									Diurnal Average							
45.2 44.4 43.7 44.2 43.2 44.7 41.8 42.7 41.7 43.5 46.5 47.9 48.7 59.0 49.2 49.8 51.8 49.2 47.4 47.3 46.3 45.5 46.2 45.7																									Diurnal Maximum							
C - Calibration																									A - Automated Daily Zero Span							

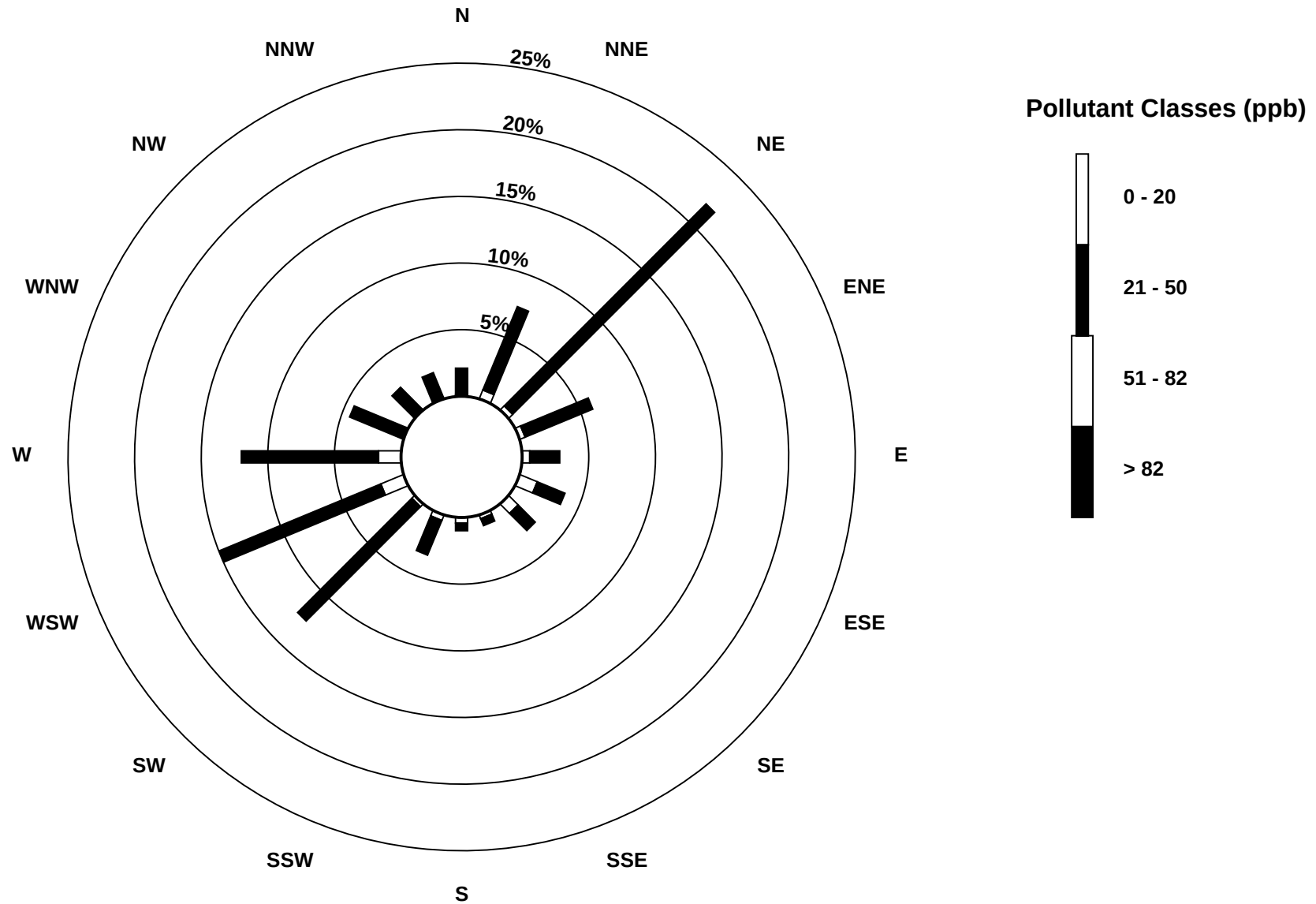
Hourly Maximums

Ozone (O₃) - ppb
Portable Clairmont - March 2015



Pollutant Rose

Ozone (O₃) - ppb
Portable Clairmont - March 2015



Eight Hour Running Averages

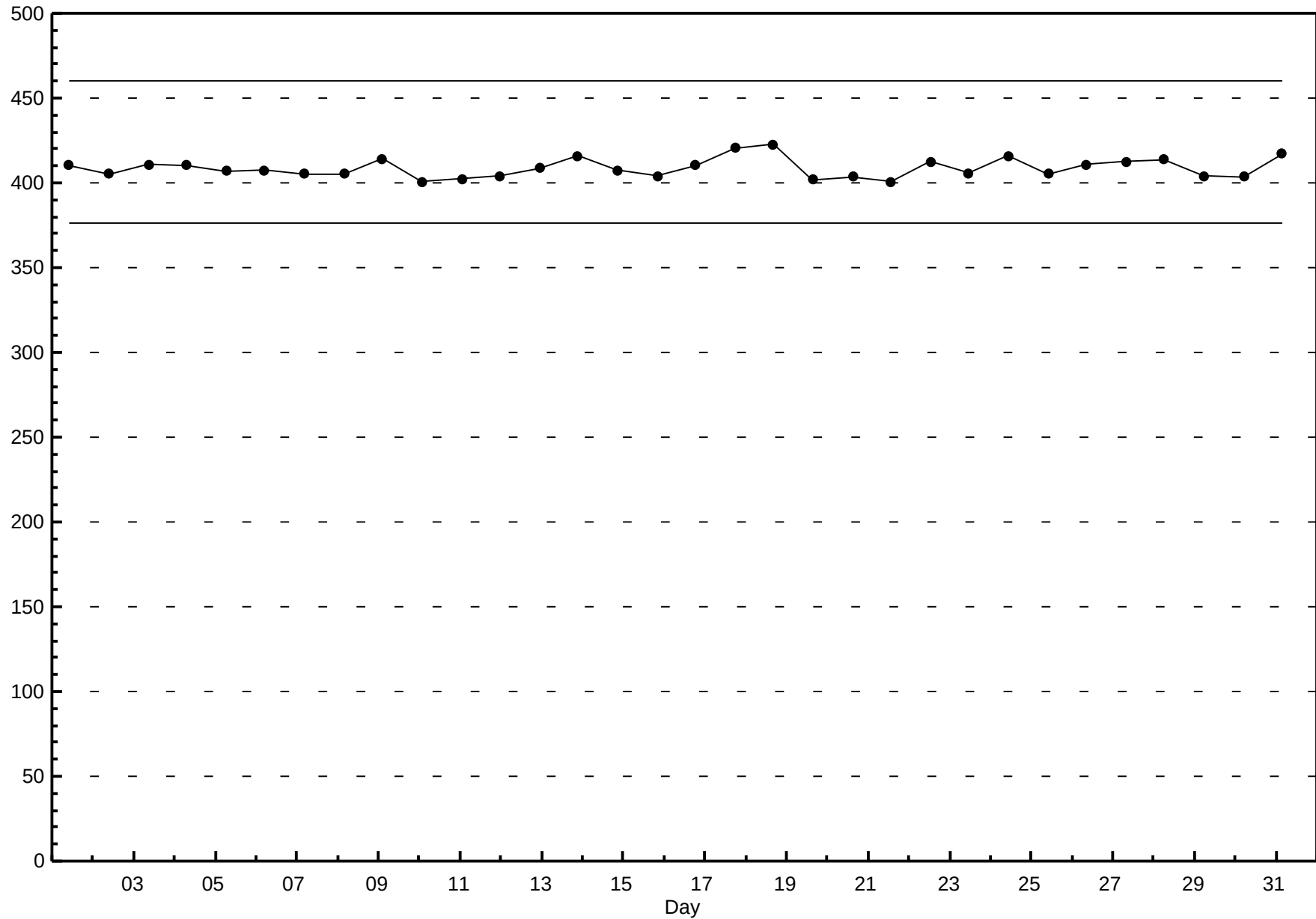
Ozone (O₃) - ppb

Portable Clairmont - March 2015

Maximum Value: 47.0 ppb on Mar 30 18:00																								Hours in Service:	744
Minimum Value: 10.7 ppb on Mar 16 09:00																								Hours of Data:	738
Percentiles: P ₁ = 12.8 P ₁₀ = 22.9 Q ₁ = 28.2 Median = 34.7 Q ₃ = 38.2 P ₉₀ = 40.5 P ₉₉ = 45.4																								Hours of Missing Data:	6
																								Hours of Calibration:	6
																								Percent Operational Time:	100.0
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	33	33	34	35	37	38	38	37	36	35	34	33	33	34	35	36	37	38	38	39	40	40	41	42	41.6
2-Mar	43	43	43	43	43	42	41	39	38	37	37	37	37	38	38	40	40	40	40	40	39	38	37	37	43.4
3-Mar	35	34	31	28	26	24	21	18	17	17	18	21	23	24	27	30	30	31	32	32	33	34	34	35	35.2
4-Mar	35	35	35	35	33	31	28	27	23	22	21	22	23	26	29	30	33	33	31	29	28	29	30	31	35.3
5-Mar	31	32	34	36	37	35	34	31	27	24	23	23	24	27	28	32	35	38	38	38	36	34	33	33	38.1
6-Mar	32	33	35	35	37	39	39	40	40	40	39	39	39	39	N	N	N	N	N	N	38	38	37	37	39.9
7-Mar	36	35	34	33	32	31	29	26	25	25	25	26	27	28	31	34	36	38	39	40	40	39	37	37	40.1
8-Mar	36	34	32	31	31	33	35	36	37	38	40	40	41	41	42	42	42	43	43	43	42	42	41	40	43.2
9-Mar	40	40	39	39	38	38	37	37	36	36	36	36	36	37	38	38	39	41	41	41	41	41	40	39	41.0
10-Mar	37	36	36	37	37	38	38	40	41	41	40	40	39	39	39	39	39	40	41	41	42	42	42	42	42.1
11-Mar	42	41	39	38	37	37	36	35	35	35	34	34	34	34	34	33	33	33	33	33	32	32	32	32	41.9
12-Mar	31	31	30	30	30	28	27	25	24	23	22	21	20	21	23	26	29	31	33	35	37	38	40	40	39.6
13-Mar	39	39	39	39	37	35	33	30	29	27	26	25	26	27	30	33	35	36	38	38	37	37	36	34	39.4
14-Mar	32	29	27	27	28	28	28	28	26	25	23	21	22	22	23	24	26	30	34	37	37	37	38	39	38.7
15-Mar	39	39	39	38	38	37	36	33	31	29	29	30	30	32	34	37	40	41	41	42	38	35	32	30	41.5
16-Mar	27	23	20	18	16	14	13	11	11	12	14	17	21	24	28	31	35	37	38	39	40	40	40	40	40.5
17-Mar	39	38	38	38	38	37	37	36	36	35	35	35	35	36	37	40	42	43	44	46	46	46	44	41	46.4
18-Mar	38	37	35	33	29	26	23	23	22	22	23	26	29	33	36	37	37	38	38	37	34	32	30	28	38.4
19-Mar	28	26	26	26	27	29	30	31	31	32	34	36	36	36	37	37	37	37	37	37	36	36	35	35	37.3
20-Mar	35	35	35	35	35	35	35	34	34	34	34	34	35	36	36	37	37	38	37	38	37	37	37	37	37.6
21-Mar	37	37	37	37	37	38	38	38	39	39	39	39	39	40	39	39	39	39	38	38	37	36	36	35	39.6
22-Mar	34	33	33	32	31	30	30	29	28	26	27	27	27	30	33	36	39	43	44	45	45	44	44	43	45.3
23-Mar	42	41	40	39	38	38	37	36	35	34	33	32	32	32	33	34	36	37	38	37	37	36	35	34	41.9
24-Mar	31	30	29	28	28	27	27	27	28	28	28	27	27	29	31	32	34	35	36	38	38	36	34	31	37.8
25-Mar	29	27	25	23	21	18	16	15	13	11	11	13	16	21	27	32	37	38	40	40	40	39	37	36	40.5
26-Mar	35	34	32	31	28	26	25	23	21	19	18	18	19	20	21	22	22	24	25	25	26	25	26	27	34.7
27-Mar	27	26	25	24	24	25	25	23	24	25	27	29	30	31	31	30	30	29	27	26	24	24	24	23	31.0
28-Mar	23	24	23	23	23	22	21	21	21	21	24	26	28	31	32	35	36	38	39	39	39	37	35	32	39.1
29-Mar	29	26	24	22	20	18	18	18	18	18	18	20	22	24	26	29	32	36	38	39	40	41	42	42	41.8
30-Mar	42	41	41	41	41	41	40	40	40	39	39	40	41	42	43	44	46	47	47	45	44	42	38	36	47.0
31-Mar	33	32	32	31	30	29	29	28	27	26	24	26	28	30	32	34	37	38	39	39	38	38	38	38	38.9
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Portable Clairmont - March 2015



Hourly Averages

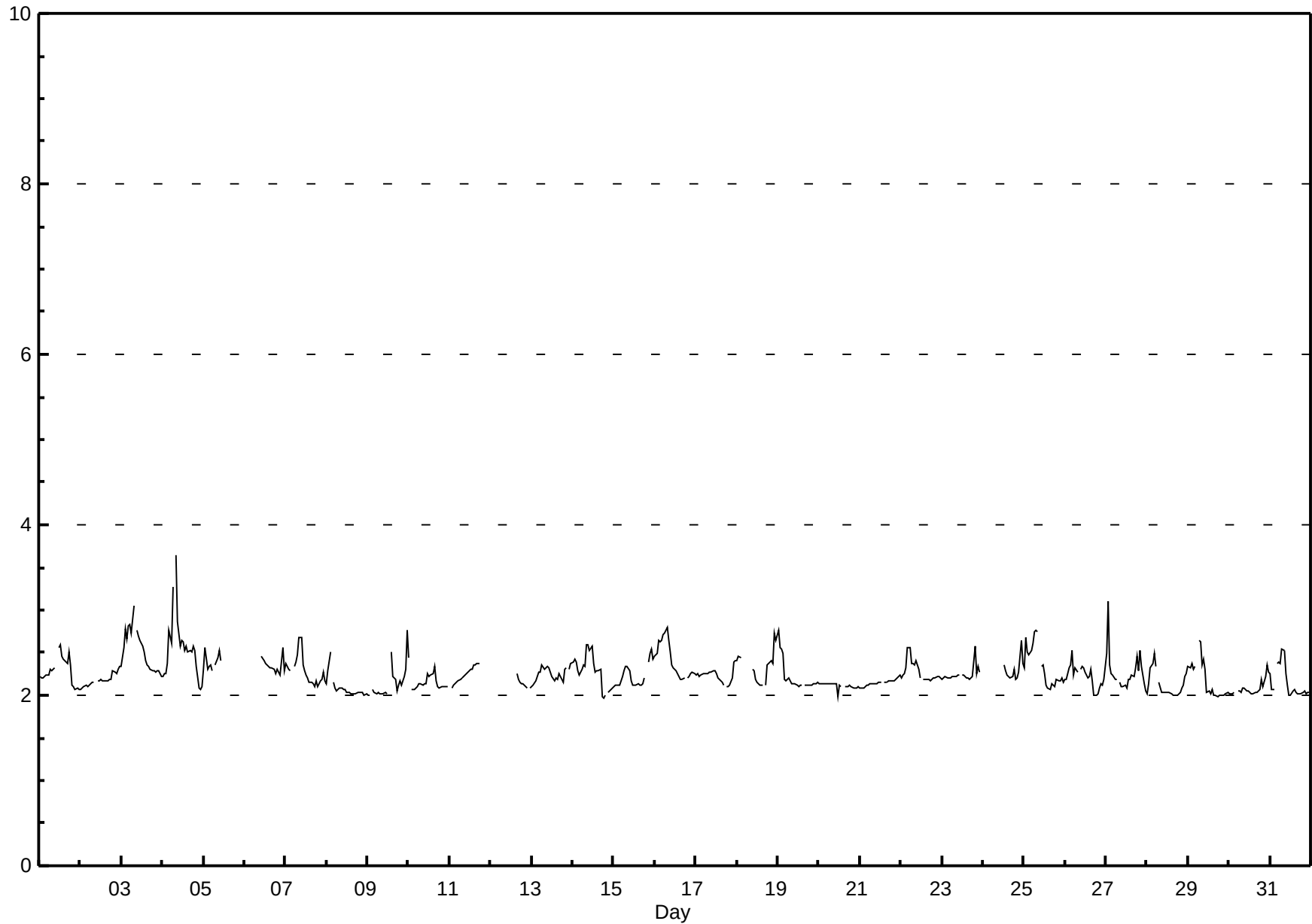
Total Hydrocarbons (THC) - ppm

Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.65 ppm on Mar 4 09:00 Maximum Daily Average: 2.54 ppm on Mar 4																				Hours in Service: 744 Hours of Data: 650 Hours of Missing Data: 94 Hours of Calibration: 34 Percent Operational Time: 91.9						
Minimum Value: 2.0 ppm on Mar 14 19:00 Minimum Daily Average: 2.08 ppm on Mar 8 Maximum Diurnal Average: 2.35 ppm at hour 9 Minimum Diurnal Average: 2.16 ppm at hour 18 Monthly Average: 2.246 ppm Percentiles: P ₁ = 1.99 P ₁₀ = 2.04 Q ₁ = 2.11 Median = 2.21 Q ₃ = 2.33 P ₉₀ = 2.53 P ₉₉ = 2.82																										
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-Mar	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	A	2.6	2.6	2.5	2.4	2.4	2.4	2.5	2.4	2.1	2.1	2.1	2.1	2.1	2.29	2.59
2-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.18	2.34
3-Mar	2.3	2.6	2.8	2.7	2.8	2.8	2.7	3.0	A	2.8	2.7	2.6	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.52	3.05
4-Mar	2.2	2.3	2.3	2.4	2.8	2.6	3.3	A	3.7	2.9	2.6	2.6	2.6	2.5	2.6	2.5	2.5	2.5	2.6	2.5	2.3	2.1	2.1	2.1	2.54	3.65
5-Mar	2.3	2.6	2.3	2.3	2.4	2.3	A	2.4	2.4	2.5	2.4	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.56
6-Mar	N	N	N	N	N	N	N	N	N	M	2.5	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.6	2.3	--	2.57
7-Mar	2.4	2.3	2.3	2.3	A	2.3	2.4	2.5	2.7	2.7	2.4	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.3	2.2	2.29	2.67
8-Mar	2.1	2.3	2.5	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.08	2.51
9-Mar	2.0	2.0	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	2.5	2.2	2.2	2.1	2.1	2.2	2.1	2.2	2.3	2.8	2.14	2.77
10-Mar	2.4	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.16	2.45
11-Mar	A	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	N	N	N	N	N	N	--	2.38
12-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	M	2.3	2.2	2.1	2.1	2.1	2.1	2.1	A	2.1	--	2.25
13-Mar	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.3	A	2.3	2.4	2.25	2.38
14-Mar	2.4	2.4	2.4	2.3	2.2	2.3	2.4	2.3	2.6	2.6	2.5	2.6	2.4	2.3	2.3	2.3	2.3	2.0	2.0	2.0	A	2.0	2.1	2.1	2.29	2.60
15-Mar	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	A	2.4	2.5	2.5	2.4	2.22	2.53
16-Mar	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.8	2.6	2.5	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.2	A	2.2	2.2	2.3	2.3	2.3	2.41	2.80
17-Mar	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	A	2.1	2.1	2.1	2.2	2.4	2.4	2.23	2.41
18-Mar	2.4	2.5	2.4	N	N	N	N	N	N	2.3	2.3	2.2	2.2	2.1	2.1	2.1	A	2.1	2.4	2.4	2.4	2.4	2.7	2.6	--	2.74
19-Mar	2.8	2.6	2.5	2.5	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.21	2.76
20-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.14
21-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	A	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.14	2.24
22-Mar	2.2	2.2	2.2	2.3	2.6	2.6	2.4	2.4	2.3	2.4	2.3	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.27	2.56
23-Mar	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.6	2.3	2.3	2.3	N	2.24	2.58
24-Mar	N	N	N	N	N	N	N	N	N	C	C	C	2.4	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.6	2.4	--	2.65
25-Mar	2.3	2.7	2.5	2.5	2.5	2.6	2.7	2.8	2.8	A	2.3	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.1	2.34	2.76
26-Mar	2.2	2.2	2.3	2.4	2.5	2.2	2.3	2.3	A	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.2	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.22	2.53
27-Mar	2.5	3.1	2.3	2.3	2.2	2.2	2.2	A	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.5	2.3	2.5	2.3	2.1	2.1	2.28	3.11
28-Mar	2.0	2.1	2.3	2.4	2.5	2.3	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.12	2.48
29-Mar	2.3	2.3	2.4	2.3	2.3	A	2.6	2.6	2.3	2.4	2.3	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.18	2.65
30-Mar	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.2	2.4	2.3	2.08	2.35
31-Mar	2.3	2.1	2.1	A	2.4	2.4	2.4	2.5	2.5	2.2	2.1	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	2.14	2.54
2.25 2.30 2.29 2.27 2.32 2.29 2.35 2.33 2.35 2.31 2.26 2.24 2.23 2.20 2.21 2.20 2.18 2.16 2.17 2.19 2.19 2.18 2.25 2.23																								Diurnal Average		
2.76 3.11 2.78 2.67 2.82 2.82 3.27 3.05 3.65 2.87 2.69 2.65 2.62 2.53 2.57 2.50 2.53 2.51 2.58 2.58 2.53 2.50 2.74 2.77																								Diurnal Maximum		
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																										

Hourly Averages

Total Hydrocarbons (THC) - ppm
Portable Clairmont - March 2015



Hourly Maximums

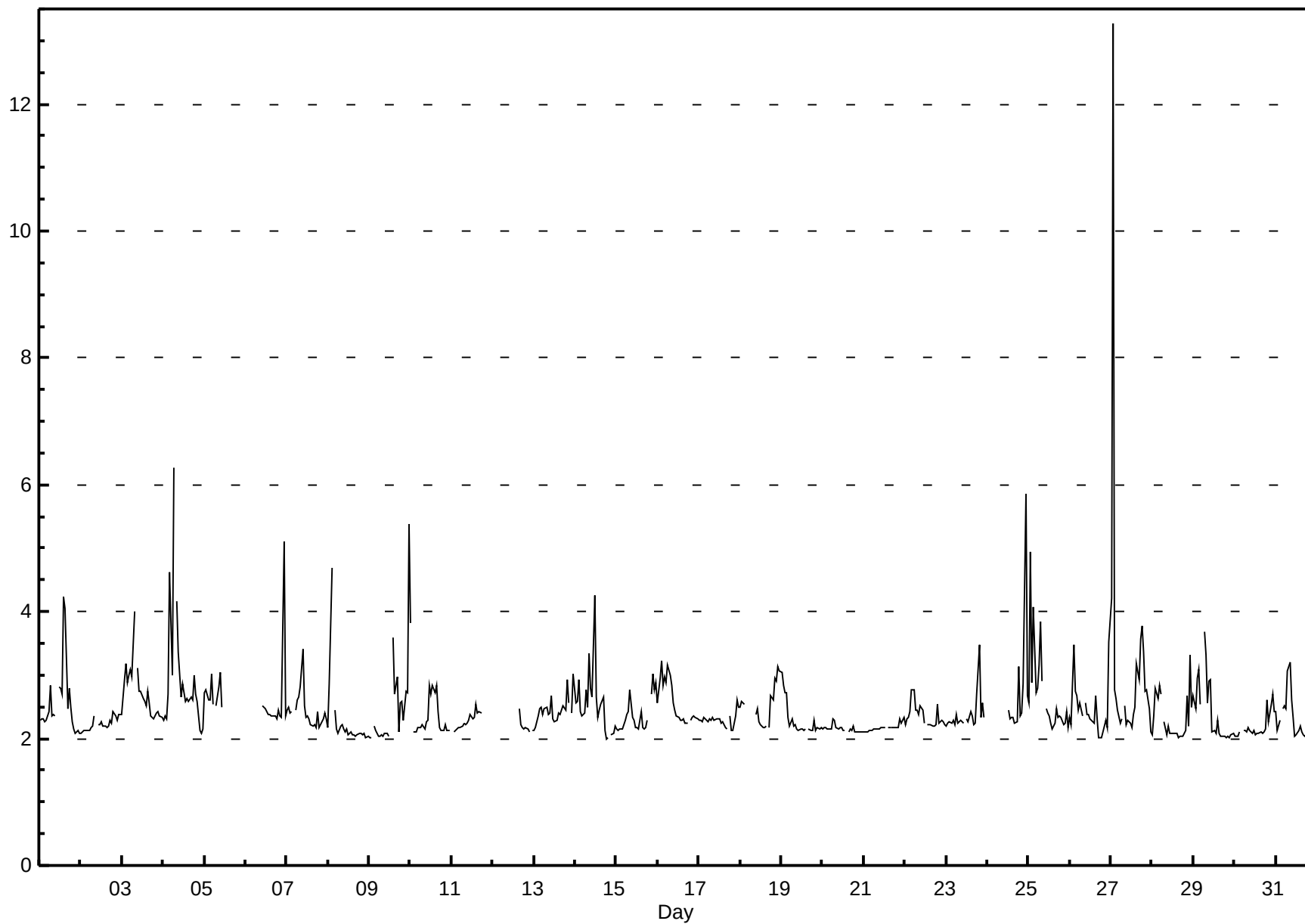
Total Hydrocarbons (THC) - ppm

Portable Clairmont - March 2015

Maximum Value: 13.27 ppm on Mar 27 02:00																					Maximum Daily Average: 3.18 ppm on Mar 27					Hours in Service: 744	
Minimum Value: 2.0 ppm on Mar 14 19:00																					Minimum Daily Average: 2.16 ppm on Mar 20					Hours of Data: 650	
Maximum Diurnal Average: 2.88 ppm at hour 2																					Minimum Diurnal Average: 2.28 ppm at hour 18					Hours of Missing Data: 94	
Monthly Average: 2.453 ppm																					Percentiles: P ₁ = 2.02 P ₁₀ = 2.09 Q ₁ = 2.16 Median = 2.31 Q ₃ = 2.55 P ₉₀ = 2.91 P ₉₉ = 4.70					Hours of Calibration: 34	
																					Percent Operational Time: 91.9						
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-Mar	2.3	2.3	2.3	2.3	2.3	2.4	2.8	2.4	2.4	2.4	A	2.8	2.8	2.7	4.2	4.0	2.5	2.8	2.5	2.3	2.1	2.1	2.1	2.1	2.56	4.23	
2-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.4	A	2.2	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.2	2.4	2.4	2.3	2.4	2.4	2.23	2.44	
3-Mar	2.4	2.9	3.2	2.9	3.0	3.1	3.0	4.0	A	3.1	2.7	2.7	2.6	2.6	2.5	2.7	2.6	2.4	2.3	2.4	2.4	2.4	2.4	2.3	2.72	4.01	
4-Mar	2.3	2.4	2.3	2.7	4.6	3.0	6.3	A	4.2	3.4	2.7	2.9	2.7	2.6	2.6	2.6	2.7	2.6	3.0	2.7	2.6	2.1	2.1	2.2	2.91	6.27	
5-Mar	2.7	2.8	2.6	2.6	3.0	2.5	A	2.5	2.8	3.0	2.5	N	N	N	N	N	N	N	N	N	N	N	N	N	--	3.04	
6-Mar	N	N	N	N	N	N	N	N	N	M	2.5	2.5	2.4	2.4	2.4	2.3	2.4	2.4	2.3	2.5	2.4	2.3	5.1	2.4	--	5.10	
7-Mar	2.5	2.5	2.4	2.4	A	2.5	2.6	2.7	2.8	3.4	2.5	2.3	2.4	2.3	2.2	2.2	2.2	2.2	2.4	2.2	2.3	2.3	2.4	2.3	2.43	3.41	
8-Mar	2.2	2.9	4.7	A	2.4	2.1	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.26	4.70	
9-Mar	2.0	2.0	A	2.2	2.1	2.0	2.0	2.1	2.0	2.1	2.1	2.0	C	C	3.6	2.7	3.0	2.1	2.6	2.6	2.3	2.8	2.7	5.4	2.50	5.38	
10-Mar	3.8	A	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.8	2.7	2.8	2.7	2.8	2.4	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.38	3.83	
11-Mar	A	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.4	2.3	2.3	2.5	2.4	2.4	2.4	N	N	N	N	N	N	--	2.54	
12-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	M	2.5	2.2	2.2	2.2	2.2	2.2	2.1	A	2.1	--	2.47	
13-Mar	2.1	2.2	2.3	2.5	2.5	2.4	2.5	2.5	2.4	2.4	2.7	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.4	2.9	2.6	A	2.4	3.0	2.45	3.02	
14-Mar	2.6	2.6	2.9	2.4	2.4	2.4	2.8	2.5	3.3	2.8	2.7	4.2	2.7	2.3	2.4	2.5	2.7	2.1	2.0	2.0	A	2.1	2.1	2.2	2.55	4.25	
15-Mar	2.2	2.1	2.1	2.1	2.2	2.3	2.4	2.4	2.8	2.3	2.3	2.2	2.2	2.2	2.4	2.2	2.2	2.2	2.3	A	2.7	3.0	2.8	2.9	2.36	3.01	
16-Mar	2.6	2.9	3.2	2.8	3.0	2.9	3.2	3.0	2.8	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.2	2.2	A	2.3	2.3	2.4	2.3	2.3	2.57	3.24	
17-Mar	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.3	2.2	2.2	A	2.4	2.1	2.1	2.3	2.6	2.5	2.30	2.60	
18-Mar	2.5	2.6	2.5	N	N	N	N	N	N	2.4	2.5	2.3	2.2	2.2	2.2	2.2	A	2.2	2.7	2.6	3.0	2.9	3.1	3.1	--	3.12	
19-Mar	3.0	2.8	2.7	2.7	2.3	2.2	2.3	2.2	2.2	2.2	2.1	2.2	2.2	2.1	2.2	A	2.1	2.1	2.1	2.3	2.1	2.2	2.1	2.2	2.30	3.04	
20-Mar	2.2	2.2	2.2	2.2	2.1	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	A	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.16	2.31	
21-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.2	2.3	2.17	2.33	
22-Mar	2.2	2.3	2.3	2.4	2.8	2.8	2.4	2.4	2.4	2.5	2.5	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.5	2.2	2.3	2.3	2.2	2.35	2.78	
23-Mar	2.2	2.3	2.3	2.3	2.3	2.2	2.4	2.2	2.3	2.3	2.2	A	2.3	2.3	2.4	2.4	2.2	2.2	2.7	3.5	2.3	2.6	2.3	N	2.37	3.48	
24-Mar	N	N	N	N	N	N	N	N	N	C	C	C	2.4	2.3	2.3	2.3	2.2	2.3	3.1	2.3	2.4	2.8	5.9	2.7	--	5.87	
25-Mar	2.6	5.0	2.9	4.1	2.7	2.8	3.2	3.8	2.9	A	2.5	2.4	2.4	2.3	2.1	2.2	2.5	2.3	2.4	2.3	2.2	2.2	2.4	2.2	2.71	4.95	
26-Mar	2.3	2.2	3.5	2.7	2.7	2.4	2.6	2.3	A	2.6	2.4	2.4	2.3	2.3	2.3	2.7	2.3	2.0	2.0	2.1	2.2	2.3	2.2	3.5	2.44	3.52	
27-Mar	4.2	13.3	2.8	2.6	2.5	2.2	2.3	A	2.5	2.2	2.3	2.2	2.2	2.4	2.5	3.2	2.9	3.6	3.8	3.4	2.7	2.8	2.5	2.1	3.18	13.27	
28-Mar	2.0	2.4	2.8	2.6	2.8	2.7	A	2.3	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.7	2.2	3.3	2.5	2.31	3.32	
29-Mar	2.7	2.5	2.9	3.1	2.5	A	3.7	3.3	2.6	2.9	2.9	2.1	2.1	2.1	2.3	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.44	3.67	
30-Mar	2.0	2.0	2.0	2.1	A	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.6	2.3	2.5	2.7	2.4	2.19	2.70	
31-Mar	2.4	2.1	2.3	A	2.5	2.5	2.5	3.1	3.2	2.6	2.3	2.0	2.1	2.1	2.2	2.1	2.1	2.0	2.1	2.1	2.2	2.0	2.1	2.1	2.29	3.20	
2.46 2.88 2.60 2.50 2.55 2.41 2.65 2.54 2.54 2.49 2.37 2.39 2.32 2.29 2.43 2.41 2.32 2.28 2.37 2.39 2.33 2.35 2.60 2.49																								Diurnal Average			
4.21 13.27 4.70 4.07 4.63 3.10 6.27 4.01 4.17 3.41 2.94 4.25 2.78 2.83 4.23 4.04 2.96 3.58 3.78 3.48 2.96 3.01 5.87 5.38																								Diurnal Maximum			
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																											

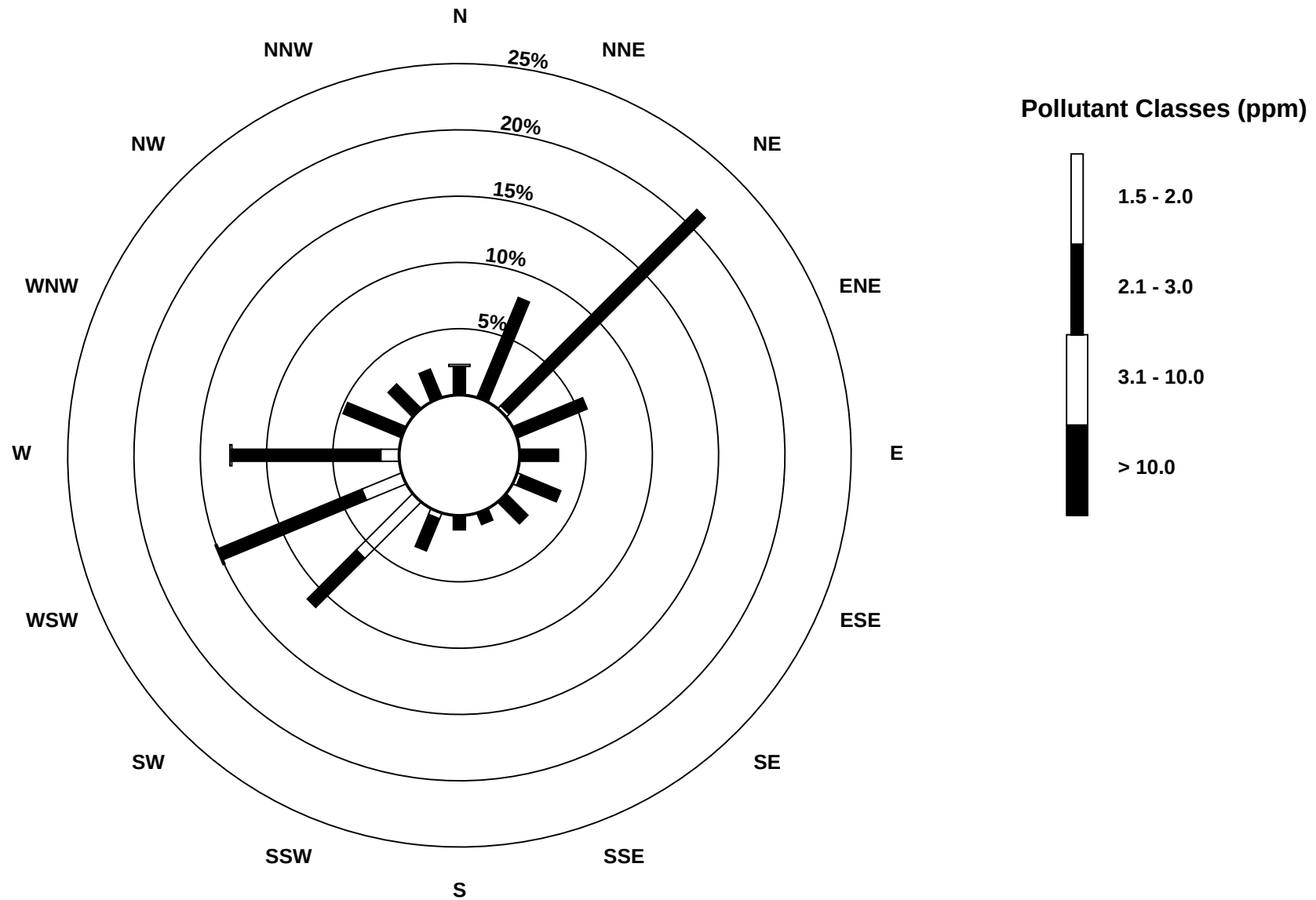
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Portable Clairmont - March 2015



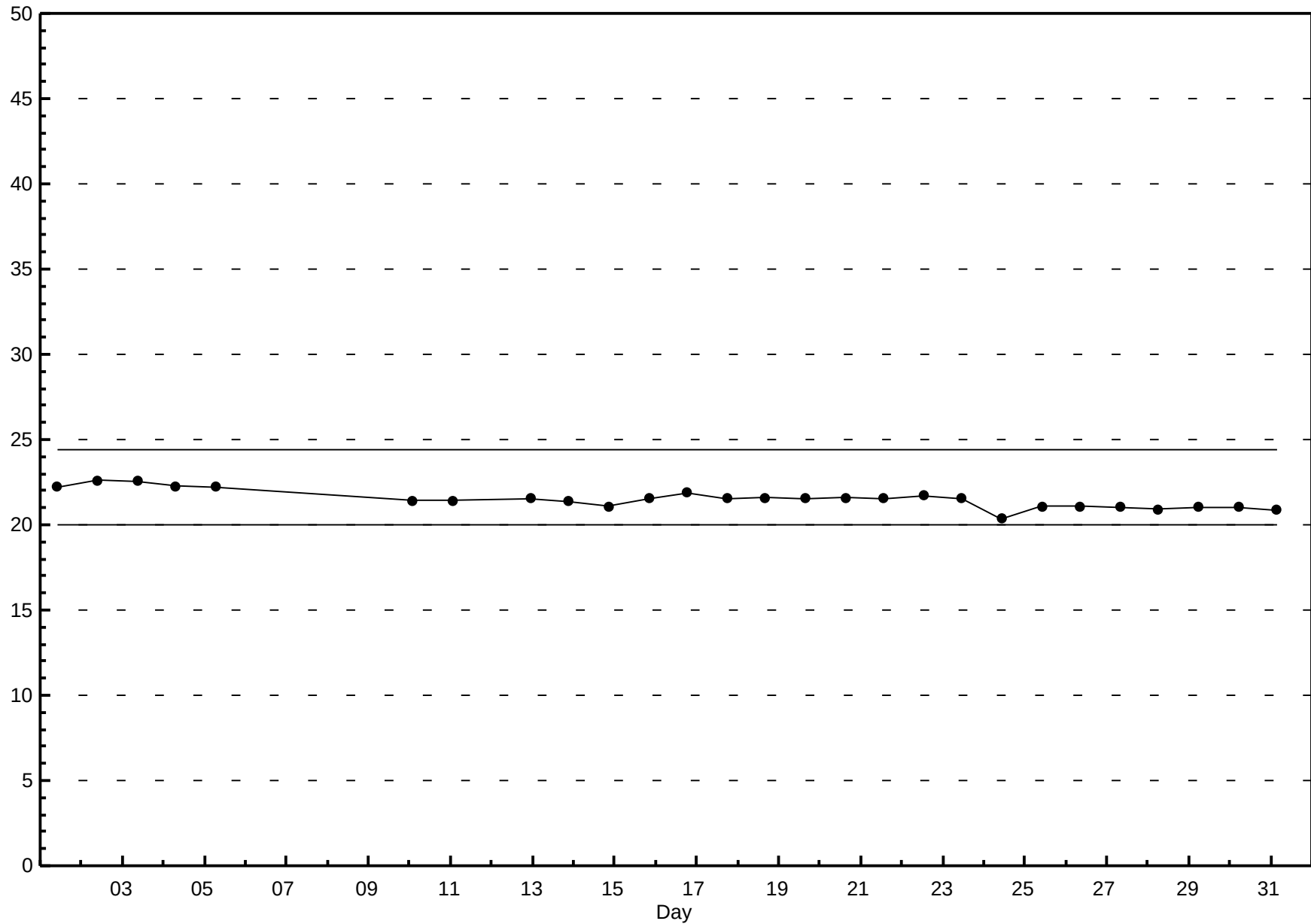
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Portable Clairmont - March 2015



Span Responses

Total Hydrocarbons (THC)
Portable Clairmont - March 2015



Hourly Averages

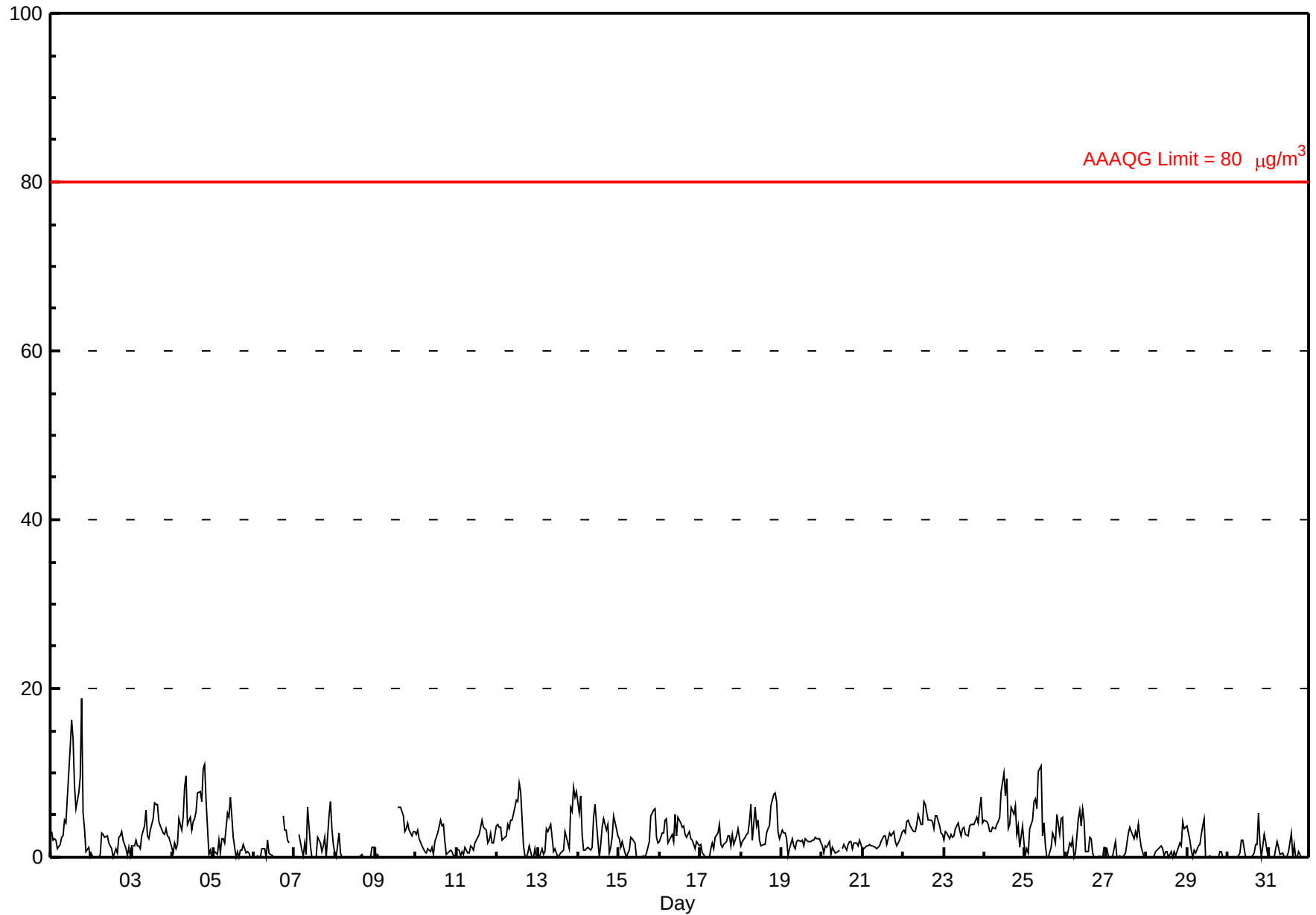
PM2.5 (PM_{2.5}) - µg/m³

Portable Clairmont - March 2015

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 18.9 µg/m³ on Mar 1 19:00 Maximum Daily Average: 5.7 µg/m³ on Mar 1																					Hours in Service: 744 Hours of Data: 728 Hours of Missing Data: 16 Hours of Calibration: 0 Percent Operational Time: 97.9					
Minimum Value: 0 µg/m³ on Mar 2 00:00 Maximum Diurnal Average: 3.1 µg/m³ at hour 9 Monthly Average: 2.28 µg/m³ Minimum Daily Average: 0.3 µg/m³ on Mar 8 Minimum Diurnal Average: 1.3 µg/m³ at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 1.8 Q ₃ = 3.3 P ₉₀ = 5.1 P ₉₉ = 10.3																										
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-Mar	3	2	2	2	1	2	2	3	4	4	7	13	16	14	8	6	8	9	19	5	3	1	1	0	5.7	18.9
2-Mar	0	0	0	0	0	0	3	3	2	2	2	1	1	0	1	1	2	3	3	2	1	0	1	0	1.2	3.0
3-Mar	1	1	2	1	1	1	3	4	6	3	2	3	5	6	6	6	4	4	3	3	3	3	2	1	3.1	6.5
4-Mar	1	2	1	2	5	3	5	8	10	4	5	3	4	5	5	8	8	7	11	11	7	0	1	0	4.7	11.0
5-Mar	0	1	0	2	1	2	2	2	5	5	7	5	2	0	1	0	1	1	1	0	1	1	0	0	1.7	7.1
6-Mar	0	0	0	0	0	1	1	0	2	1	0	0	M	M	M	M	M	5	3	3	2	2	M	M	--	5.0
7-Mar	M	M	M	3	1	0	2	0	6	1	0	0	0	0	2	2	1	1	2	0	5	7	3	2	1.8	6.5
8-Mar	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	2.9
9-Mar	0	0	0	0	0	0	0	0	M	M	M	M	M	6	6	6	5	3	3	4	3	3	3	3	2.4	6.0
10-Mar	3	3	2	1	1	1	1	1	1	1	0	2	2	3	4	4	4	2	0	1	1	1	0	0	1.6	4.5
11-Mar	1	1	0	1	0	1	1	1	1	1	1	2	2	3	4	4	4	3	2	2	3	2	2	4	1.8	4.4
12-Mar	4	4	4	2	2	3	4	3	4	4	6	7	7	9	8	1	0	0	1	1	0	0	1	0	3.1	8.9
13-Mar	0	0	1	0	1	3	3	4	2	1	1	0	0	1	1	1	3	2	1	6	5	8	7	8	2.5	8.4
14-Mar	5	7	3	1	1	1	1	1	1	5	6	2	0	2	4	5	3	4	0	1	2	5	3	2	2.8	7.3
15-Mar	2	1	2	1	0	1	1	2	2	2	0	0	0	0	0	0	0	1	2	5	6	6	2	2	1.6	5.8
16-Mar	2	3	3	4	5	2	2	3	2	5	3	5	4	4	4	3	2	3	2	2	2	1	2	1	2.8	5.1
17-Mar	2	1	0	0	0	0	1	2	1	2	3	4	2	1	2	2	3	2	1	3	1	3	3	2	1.7	3.9
18-Mar	1	2	2	3	3	4	6	2	6	4	4	2	1	2	1	3	3	4	6	7	8	7	3	2	3.6	7.6
19-Mar	3	3	3	2	0	1	2	1	1	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	1.9	3.3
20-Mar	1	0	1	1	2	0	1	1	0	1	1	N	1	2	1	1	2	2	1	2	2	1	2	2	1.2	2.0
21-Mar	1	1	1	1	2	1	1	1	1	1	1	2	3	3	2	2	3	3	3	2	1	2	2	3	1.8	3.0
22-Mar	3	3	4	4	4	3	3	3	4	5	4	4	7	6	5	4	4	4	3	5	5	4	3	3	4.1	6.6
23-Mar	2	3	3	2	3	2	3	3	4	3	3	3	4	3	3	4	4	4	4	5	4	6	7	4	3.5	7.1
24-Mar	4	4	4	3	3	4	3	4	4	5	8	10	7	9	3	4	6	5	6	3	4	1	4	2	4.6	9.9
25-Mar	0	1	0	3	4	7	7	6	10	11	2	4	1	0	0	1	3	2	2	5	3	5	5	0	3.5	10.9
26-Mar	0	0	2	1	2	0	0	5	6	4	6	4	1	1	2	2	0	0	0	0	0	0	0	1	1.6	5.8
27-Mar	1	0	0	0	0	2	0	0	0	0	0	1	2	3	4	3	2	3	2	4	2	1	0	0	1.3	3.9
28-Mar	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	0	1	0	1	2	1	4	3	4	1.0	4.3
29-Mar	4	2	1	0	1	0	1	2	3	4	5	0	0	0	0	0	0	0	0	1	1	0	0	0	1.0	4.6
30-Mar	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	2	5	2	0	3	2	1	0.9	5.3
31-Mar	0	0	0	0	1	2	1	0	0	0	0	0	1	3	0	2	0	0	1	0	0	0	0	0	0.5	3.0
1.5 1.5 1.5 1.3 1.4 1.6 2.0 2.1 3.1 2.8 2.6 2.8 2.6 2.8 2.6 2.6 2.7 2.6 2.9 2.8 2.5 2.4 2.2 1.6																								Diurnal Average		
5.3 7.3 4.2 4.4 4.6 6.6 7.0 8.2 10.1 10.9 7.8 13.1 16.3 14.1 8.4 7.7 7.7 9.5 18.9 11.0 7.6 8.4 7.1 7.8																								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 Averages

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Clairmont - March 2015



Hourly Maximums

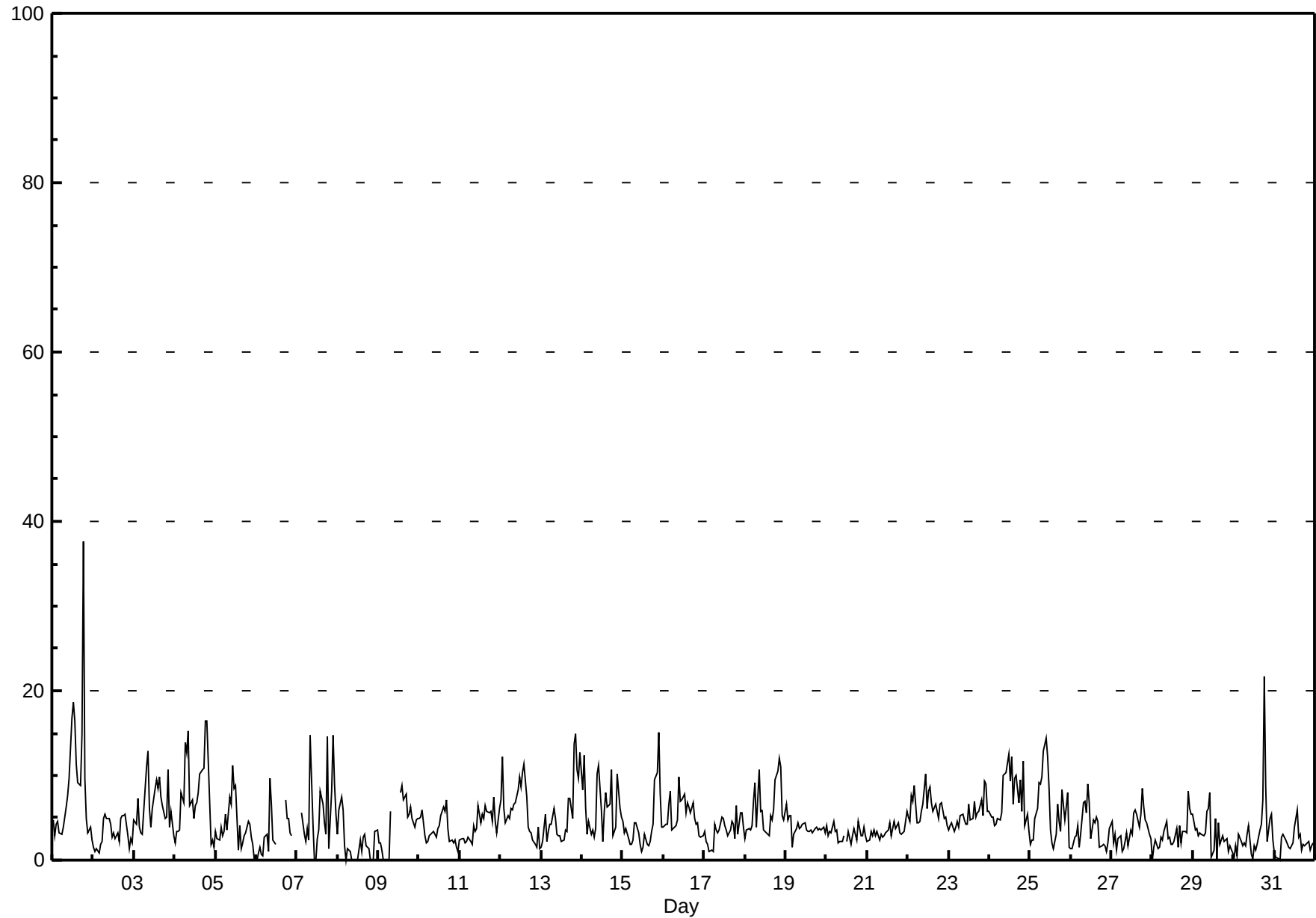
PM2.5 (PM_{2.5}) - µg/m³

Portable Clairmont - March 2015

Maximum Value: 37.7 μg/m³ on Mar 1 19:00																				Maximum Daily Average: 8.9 μg/m³ on Mar 1					Hours in Service: 744	
Minimum Value: 0 μg/m³ on Mar 6 01:00																				Minimum Daily Average: 1.9 μg/m³ on Mar 8					Hours of Data: 728	
Maximum Diurnal Average: 6.7 μg/m³ at hour 19																				Minimum Diurnal Average: 3.2 μg/m³ at hour 4					Hours of Missing Data: 16	
Monthly Average: 4.67 μg/m³																				Percentiles: P ₁ = 0.0 P ₁₀ = 1.5 Q ₁ = 2.6 Median = 3.9 Q ₃ = 5.9 P ₉₀ = 8.9 P ₉₉ = 16.3					Hours of Calibration: 0	
																				Percent Operational Time: 97.9						
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-Mar	5	3	4	5	3	3	4	5	6	8	10	17	19	16	11	9	9	15	38	10	5	3	4	2	8.9	37.7
2-Mar	1	1	1	1	2	2	5	5	5	5	4	3	3	3	3	2	5	5	5	5	3	1	3	2	3.2	5.5
3-Mar	5	4	7	4	3	3	6	11	13	6	4	6	9	10	9	10	8	6	5	5	11	4	6	3	6.5	12.9
4-Mar	2	3	3	4	8	7	14	13	15	6	7	5	7	7	8	10	11	11	17	17	12	2	2	1	8.0	16.5
5-Mar	3	2	2	4	3	3	5	4	7	7	11	9	9	1	4	1	2	3	3	5	4	3	2	0	4.1	11.2
6-Mar	0	1	2	1	1	3	3	1	10	7	2	2	M	M	M	M	M	7	5	5	3	3	M	M	--	9.7
7-Mar	M	M	M	6	3	2	4	2	15	4	0	0	3	4	8	7	4	3	15	1	8	15	9	5	5.6	14.8
8-Mar	3	6	7	6	2	0	1	1	0	0	0	0	0	2	1	3	3	2	1	0	0	0	3	4	1.9	7.5
9-Mar	2	2	1	0	0	0	0	6	M	M	M	M	M	8	9	7	8	5	5	6	5	4	5	5	4.1	8.7
10-Mar	5	5	6	3	2	2	3	3	3	3	3	4	4	5	6	6	7	4	2	2	2	2	2	1	3.6	7.1
11-Mar	2	3	3	2	2	3	2	2	4	3	4	6	4	5	5	6	6	6	6	5	8	5	3	6	4.2	7.5
12-Mar	7	12	6	4	5	5	6	6	7	7	8	10	9	10	11	7	4	3	3	2	2	2	4	1	6.0	12.2
13-Mar	1	2	5	2	3	4	4	6	5	3	3	3	2	2	4	3	7	7	5	14	15	11	10	13	5.7	15.0
14-Mar	8	12	6	3	5	3	3	3	4	10	11	6	2	6	8	6	7	11	3	3	4	10	6	5	6.1	12.4
15-Mar	5	3	4	3	2	2	2	4	4	3	2	1	2	3	2	2	2	3	4	9	10	15	8	4	4.2	15.2
16-Mar	4	4	4	7	8	4	4	4	5	10	7	7	8	6	7	6	6	7	5	4	4	3	3	3	5.3	9.8
17-Mar	3	2	2	1	1	1	4	4	3	4	5	5	4	4	3	4	5	4	3	6	3	6	6	4	3.6	6.4
18-Mar	3	4	4	3	4	7	9	4	11	6	6	4	3	3	3	5	5	6	10	10	12	11	5	5	5.9	12.0
19-Mar	7	5	5	5	1	3	4	4	4	4	4	4	4	3	3	4	3	4	4	4	4	4	4	3	3.9	6.5
20-Mar	4	3	3	3	5	3	4	2	2	2	3	N	2	3	2	3	4	3	2	4	3	3	4	3	3.1	4.6
21-Mar	2	2	3	3	4	3	3	2	3	3	3	3	4	4	3	4	5	4	4	3	3	3	3	6	3.4	5.7
22-Mar	5	5	8	7	9	4	4	5	6	7	10	6	8	9	7	6	7	6	5	7	7	5	5	4	6.2	10.1
23-Mar	4	4	4	3	4	5	4	5	5	5	4	4	7	5	5	7	5	6	6	7	5	9	9	6	5.3	9.3
24-Mar	6	5	5	4	4	5	5	6	10	10	10	13	9	12	7	10	10	7	9	6	12	4	6	3	7.4	12.5
25-Mar	2	2	2	5	6	9	9	10	13	14	12	8	4	2	1	3	7	5	3	8	5	6	8	2	6.1	14.3
26-Mar	1	1	3	3	4	2	3	7	7	6	9	7	3	5	4	5	5	1	2	2	2	1	2	4	3.6	9.0
27-Mar	5	2	3	1	3	3	1	1	2	3	2	4	3	6	6	5	4	5	9	6	5	4	3	2	3.7	8.5
28-Mar	0	1	2	1	1	3	2	3	5	3	3	2	2	2	4	2	4	2	3	3	3	8	6	5	3.0	8.1
29-Mar	5	4	4	3	3	3	3	3	6	6	8	0	1	5	0	4	2	3	2	2	3	1	2	1	3.1	7.9
30-Mar	0	2	1	3	2	2	2	2	3	4	1	0	2	1	2	4	4	7	22	9	2	5	5	2	3.6	21.7
31-Mar	1	0	0	0	3	3	3	2	1	1	2	2	4	6	3	3	1	2	2	2	2	1	2	2	2.0	6.0
3.4 3.6 3.8 3.2 3.4 3.3 4.1 4.4 6.1 5.3 5.3 4.8 4.8 5.3 4.9 5.1 5.2 5.2 6.7 5.6 5.3 5.0 4.6 3.6																									Diurnal Average	
8.4 12.4 7.7 7.0 8.8 9.1 14.0 12.7 15.3 14.3 12.2 16.8 18.7 16.4 11.4 10.2 10.7 15.0 37.7 16.5 15.0 15.2 9.7 12.6																									Diurnal Maximum	
M - Maintenance N - Not Valid																										

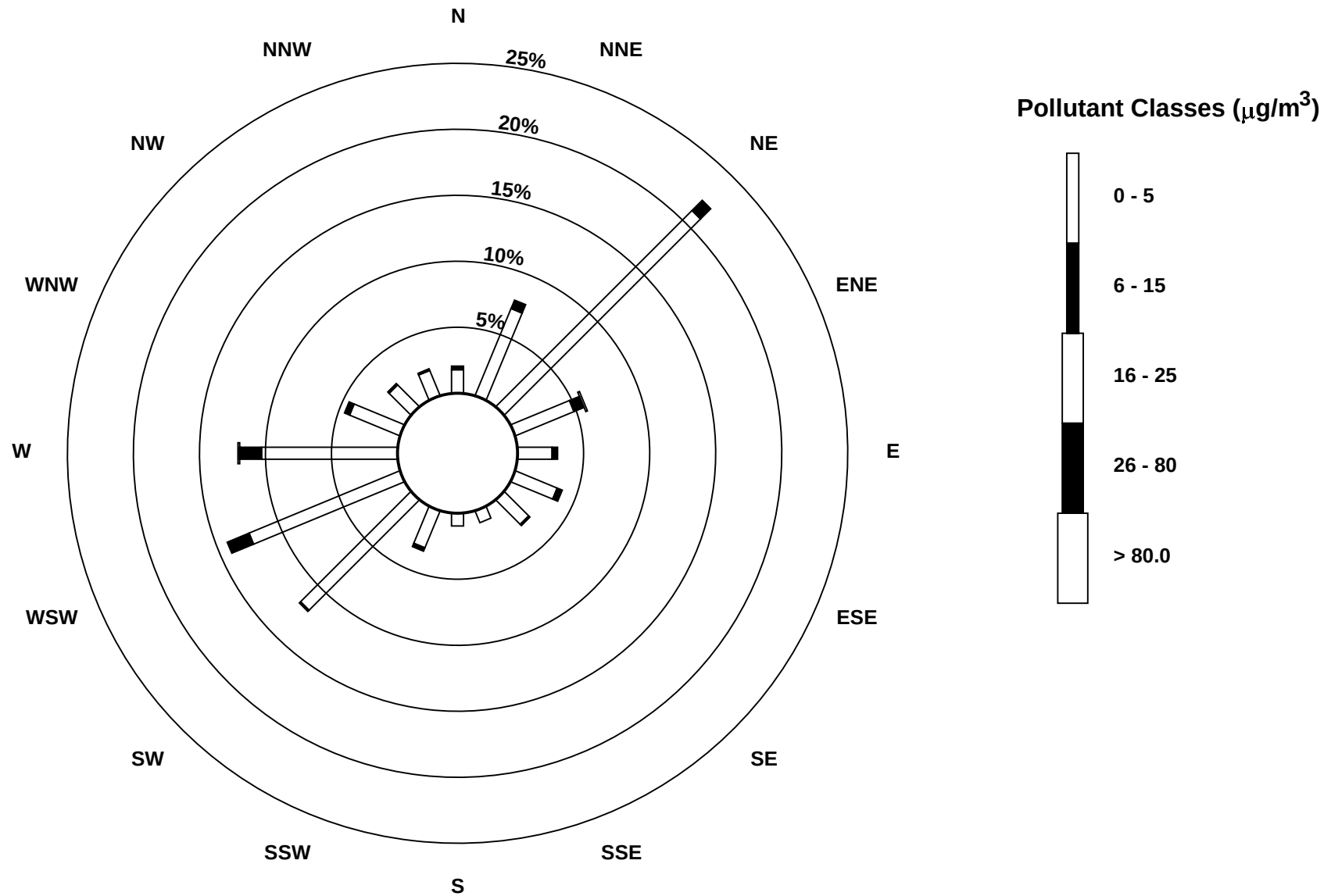
Hourly Maximums

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Clairmont - March 2015



Pollutant Rose

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Clairmont - March 2015



Hourly Averages

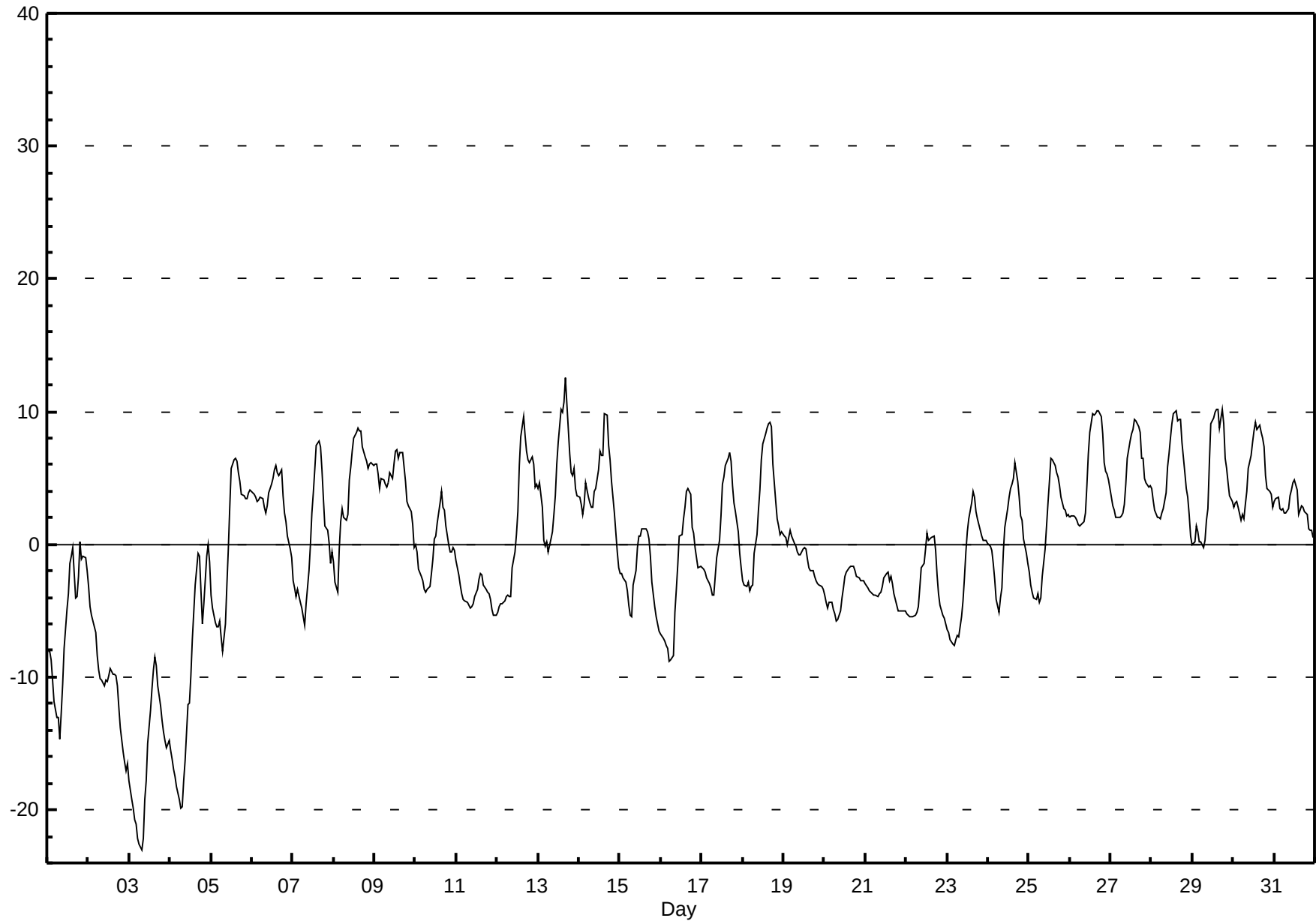
External Temperature (ET) - °C

Portable Clairmont - March 2015

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 12.5 °C on Mar 13 17:00 Maximum Daily Average: 5.3 °C on Mar 26																									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 °C on Mar 3 08:00 Maximum Diurnal Average: 4.1 °C at hour 16 Monthly Average: -0.24 °C																									Minimum Daily Average: -16.1 °C on Mar 3 Minimum Diurnal Average: -3.8 °C at hour 7 Percentiles: P ₁ = -19.9 P ₁₀ = -7.5 Q ₁ = -3.7 Median = 0.4 Q ₃ = 4.1 P ₉₀ = 6.8 P ₉₉ = 10.1	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	-8	-8	-9	-10	-12	-13	-13	-15	-13	-11	-8	-5	-4	-1	0	-4	-4	-2	0	-1	-1	-1	-2	-6.1	0.2	
2-Mar	-3	-5	-5	-6	-7	-8	-9	-10	-10	-11	-10	-10	-10	-9	-10	-10	-11	-12	-14	-16	-16	-17	-17	-10.3	-3.2	
3-Mar	-18	-19	-20	-21	-21	-22	-23	-23	-22	-19	-18	-15	-12	-11	-9	-8	-9	-11	-12	-13	-14	-15	-15	-16.1	-8.5	
4-Mar	-16	-16	-17	-17	-18	-19	-20	-20	-18	-16	-12	-12	-10	-7	-5	-3	-1	-1	-4	-6	-4	-1	0	-1	-10.2	0.0
5-Mar	-4	-5	-6	-6	-6	-6	-7	-8	-6	-3	0	3	6	6	6	6	5	5	4	4	3	3	4	4	0.1	6.4
6-Mar	4	4	4	3	3	4	3	3	2	3	4	5	5	6	6	5	5	6	4	2	2	1	0	-1	3.4	6.0
7-Mar	-3	-3	-4	-3	-4	-5	-5	-6	-4	-2	0	2	4	6	7	8	7	6	3	1	1	0	-1	-1	0.2	7.8
8-Mar	-1	-3	-4	0	2	3	2	2	2	5	6	7	8	8	9	9	9	7	7	6	6	6	6	6	4.4	8.8
9-Mar	6	6	5	4	5	5	5	4	5	5	5	6	7	7	6	7	7	6	5	3	3	2	2	0	4.8	7.1
10-Mar	0	-1	-2	-2	-3	-3	-4	-3	-3	-2	-1	0	1	2	3	4	3	3	1	0	-1	-1	0	0	-0.4	4.0
11-Mar	-1	-2	-3	-4	-4	-4	-4	-5	-5	-5	-4	-4	-3	-3	-2	-2	-3	-3	-4	-4	-4	-5	-5	-5	-3.7	-1.2
12-Mar	-5	-5	-4	-4	-4	-4	-4	-4	-4	-2	-1	1	2	6	8	10	8	7	6	6	7	6	4	5	1.5	9.6
13-Mar	4	5	3	0	0	0	-1	0	1	2	4	6	8	10	10	11	13	11	7	5	5	6	4	4	4.9	12.5
14-Mar	4	3	2	3	5	4	3	3	3	4	4	6	7	7	7	10	10	7	6	5	4	2	-1	-2	4.4	9.8
15-Mar	-2	-2	-3	-3	-4	-5	-5	-5	-3	-2	0	1	1	1	1	1	1	0	-1	-3	-5	-5	-6	-7	-2.3	1.2
16-Mar	-7	-7	-7	-8	-8	-9	-9	-8	-5	-3	-2	1	1	2	3	4	4	4	1	1	0	-1	-2	-2	-2.4	4.2
17-Mar	-2	-2	-2	-3	-3	-3	-4	-4	-2	-1	0	2	5	5	6	6	7	6	4	3	2	1	-1	-2	0.9	6.9
18-Mar	-3	-3	-3	-3	-3	-3	-3	-1	1	3	4	6	8	8	9	9	9	9	6	3	2	1	1	1	2.4	9.2
19-Mar	1	1	0	1	1	1	0	0	-1	-1	-1	0	0	0	-1	-2	-2	-2	-2	-3	-3	-3	-3	-3	-1.0	1.0
20-Mar	-4	-4	-5	-4	-4	-5	-5	-6	-6	-5	-4	-3	-2	-2	-2	-2	-2	-2	-2	-2	-3	-3	-3	-3	-3.4	-1.6
21-Mar	-3	-3	-3	-4	-4	-4	-4	-4	-4	-4	-3	-2	-2	-2	-3	-2	-3	-4	-5	-5	-5	-5	-5	-5	-3.6	-2.1
22-Mar	-5	-5	-5	-5	-5	-5	-5	-5	-3	-2	-1	0	1	0	0	1	1	0	-2	-4	-5	-5	-6	-6	-3.1	0.8
23-Mar	-6	-7	-7	-8	-8	-7	-7	-7	-5	-4	-3	-1	1	2	3	4	4	2	2	1	1	0	0	0	-2.0	4.0
24-Mar	0	0	0	-1	-3	-4	-5	-4	-3	-1	1	3	4	4	4	5	6	5	4	2	2	0	-1	-1	0.7	6.1
25-Mar	-2	-3	-4	-4	-4	-4	-4	-4	-2	0	1	3	5	6	6	6	5	5	4	4	3	3	2	2	1.0	6.4
26-Mar	2	2	2	2	2	1	1	2	2	2	4	7	8	10	10	10	10	10	10	8	6	6	5	5	5.3	10.1
27-Mar	3	3	3	2	2	2	2	2	3	4	6	8	8	9	9	9	9	8	6	6	5	5	4	4	5.2	9.4
28-Mar	4	3	3	2	2	2	2	3	4	6	7	8	9	10	10	9	9	9	8	5	4	4	2	1	5.3	10.1
29-Mar	0	0	1	1	0	0	0	0	2	3	6	9	10	10	10	10	9	10	9	6	6	5	4	3	4.7	10.2
30-Mar	3	3	3	3	2	2	2	3	4	6	7	8	8	9	9	9	8	8	7	5	4	4	4	3	5.2	9.1
31-Mar	3	3	4	3	3	3	2	2	3	4	4	5	5	4	2	3	3	3	2	2	1	1	1	1	2.7	4.8
-1.9 -2.3 -2.7 -3.0 -3.2 -3.5 -3.8 -3.8 -2.9 -1.5 -0.1 1.3 2.4 3.3 3.6 4.1 3.8 3.2 2.0 0.9 0.2 -0.2 -0.8 -1.1 Diurnal Average 6.0 6.1 5.3 4.2 5.0 4.9 4.6 4.4 4.7 5.8 6.9 9.1 9.6 10.1 10.1 10.7 12.5 10.6 9.7 8.3 6.6 6.1 6.2 5.9 Diurnal Maximum																										

Hourly Averages

External Temperature (ET) - °C
Portable Clairmont - March 2015



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Clairmont - March 2015

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	10	8	8	8	6	3	3	0	2	1	4	4	3	3	6	4	8	8	9	16	15	15	13	25	3.6	25.2
Dir	48	59	53	48	61	69	88	38	92	96	100	105	62	15	340	283	261	254	271	293	279	302	294	328	328.5	328.1
2 Spd	21	10	12	11	18	15	8	9	13	12	14	19	19	17	19	17	15	12	15	9	9	8	7	8	12.1	21.0
Dir	327	332	309	299	325	335	322	322	315	306	282	275	273	303	290	290	284	278	280	266	259	251	263	281	296.0	327.4
3 Spd	4	3	2	1	3	4	2	0	5	5	8	5	3	4	5	5	8	8	6	7	9	7	7	9	1.7	8.9
Dir	213	260	176	277	250	246	247	211	251	252	258	240	34	47	45	51	38	40	48	59	50	69	56	48	33.6	49.9
4 Spd	8	9	6	2	1	0	3	1	1	3	3	5	5	5	4	4	3	3	2	4	6	11	11	9	2.4	11.5
Dir	53	48	62	89	269	144	244	296	269	245	235	256	245	251	252	249	246	252	220	266	251	236	232	244	248.0	232.5
5 Spd	7	6	3	2	2	3	2	1	2	1	3	5	9	12	11	15	12	8	5	5	3	4	12	11	5.2	15.1
Dir	268	265	265	226	140	147	148	64	95	76	267	252	229	229	228	230	226	231	213	233	202	220	216	226	227.8	230.3
6 Spd	12	14	16	16	16	19	19	15	13	12	11	15	14	15	14	12	10	10	15	10	10	5	5	5	12.3	19.4
Dir	227	231	223	226	241	248	248	243	227	258	259	253	249	248	254	253	232	228	232	241	232	243	232	252	241.0	247.5
7 Spd	4	4	3	6	5	6	5	4	3	3	5	4	3	5	4	3	10	13	9	6	6	3	2	3	4.7	12.8
Dir	267	271	254	285	276	279	242	248	260	267	287	242	265	240	216	239	232	234	254	246	259	247	261	255	252.9	233.8
8 Spd	2	2	2	6	9	12	14	12	7	10	9	13	16	20	22	25	25	16	15	12	14	17	28	24	13.6	28.2
Dir	256	199	221	238	227	212	228	247	246	210	241	231	227	230	226	224	222	213	220	230	233	234	223	224	226.5	222.8
9 Spd	25	24	13	8	12	13	13	15	14	19	18	19	22	16	7	7	12	14	9	8	10	6	5	4	12.7	24.9
Dir	224	226	235	239	247	239	228	220	221	236	243	251	253	273	251	211	239	228	227	227	228	247	256	288	237.4	224.1
10 Spd	6	19	18	15	11	8	9	7	7	5	6	3	4	4	4	3	7	9	11	12	14	13	14	16	9.0	18.8
Dir	316	22	39	39	46	55	43	48	45	40	33	41	22	1	328	36	49	59	41	37	37	38	37	36	35.9	22.5
11 Spd	20	21	25	24	20	17	15	14	15	14	15	15	14	10	9	11	11	10	10	10	10	12	12	14	14.4	25.3
Dir	31	35	35	36	36	32	37	36	29	30	38	40	33	39	44	52	49	41	43	48	53	43	40	38	37.9	35.1
12 Spd	13	13	5	4	4	3	4	4	5	5	3	3	6	4	4	17	17	16	15	14	15	14	9	12	4.0	16.9
Dir	39	48	57	58	104	142	146	136	125	110	77	56	48	73	240	230	215	198	187	197	213	218	203	207	182.4	229.9
13 Spd	13	15	5	3	6	6	3	5	5	6	5	9	10	6	5	5	2	4	4	2	6	3	3	1	3.4	14.9
Dir	192	208	170	50	138	128	120	92	78	83	104	132	132	105	72	25	338	36	68	74	141	99	64	70	121.1	208.4
14 Spd	0	1	3	1	4	1	1	1	1	1	2	2	4	2	1	2	6	22	29	34	36	24	24	15	7.3	36.5
Dir	149	18	105	326	229	111	109	135	107	215	297	357	84	21	19	255	247	229	227	227	225	249	281	279	240.6	225.2
15 Spd	13	11	12	8	6	3	3	2	3	4	13	20	18	16	17	17	13	8	5	2	2	2	1	1	7.6	19.9
Dir	264	256	274	289	289	274	274	164	333	257	247	264	281	264	269	274	281	285	268	259	2	125	58	80	270.9	264.2
16 Spd	1	1	2	2	3	5	4	5	1	1	2	1	4	4	5	6	6	6	7	6	5	7	5	7	2.3	7.5
Dir	27	90	27	256	241	253	260	253	273	22	300	43	26	33	34	359	28	43	38	40	69	55	70	53	27.9	53.1
17 Spd	10	10	10	9	10	11	9	6	10	11	12	11	10	14	17	15	13	16	14	11	8	1	6	5	9.5	16.6
Dir	43	42	44	52	50	45	58	60	45	44	39	41	48	33	34	33	35	35	31	30	40	326	274	265	38.1	34.2
18 Spd	7	7	6	5	5	5	4	6	4	5	8	10	12	10	10	9	7	6	4	7	3	4	4	5	6.0	11.8
Dir	252	251	242	254	252	263	207	241	248	267	259	267	272	282	295	294	290	277	279	260	241	261	265	261	265.8	271.9
19 Spd	3	1	2	2	8	8	10	7	13	17	20	21	21	21	22	18	20	18	15	13	10	7	6	6	11.4	22.1
Dir	251	269	59	1	14	26	34	74	41	38	35	34	35	34	29	30	24	19	14	9	5	357	1	18	26.7	28.8
20 Spd	7	8	9	12	12	13	13	13	16	16	16	19	21	24	23	25	24	22	24	26	24	22	19	19	17.8	26.1
Dir	36	34	45	40	37	42	50	43	35	40	41	36	39	40	38	40	40	41	45	42	44	44	45	42	41.1	41.8
21 Spd	20	19	19	19	19	18	20	20	20	19	18	17	14	12	14	13	11	10	11	9	8	5	3	4	12.1	20.5
Dir	43	41	40	36	33	30	28	27	29	32	30	23	8	348	339	344	327	322	314	319	305	300	294	289	14.1	28.7
22 Spd	4	4	4	3	3	2	2	2	4	5	6	6	7	6	6	6	7	10	7	6	5	5	7	8	2.9	10.0
Dir	308	252	252	260	250	236	226	184	142	118	96	103	102	76	48	42	50	36	39	44	61	60	55	52	62.7	36.0

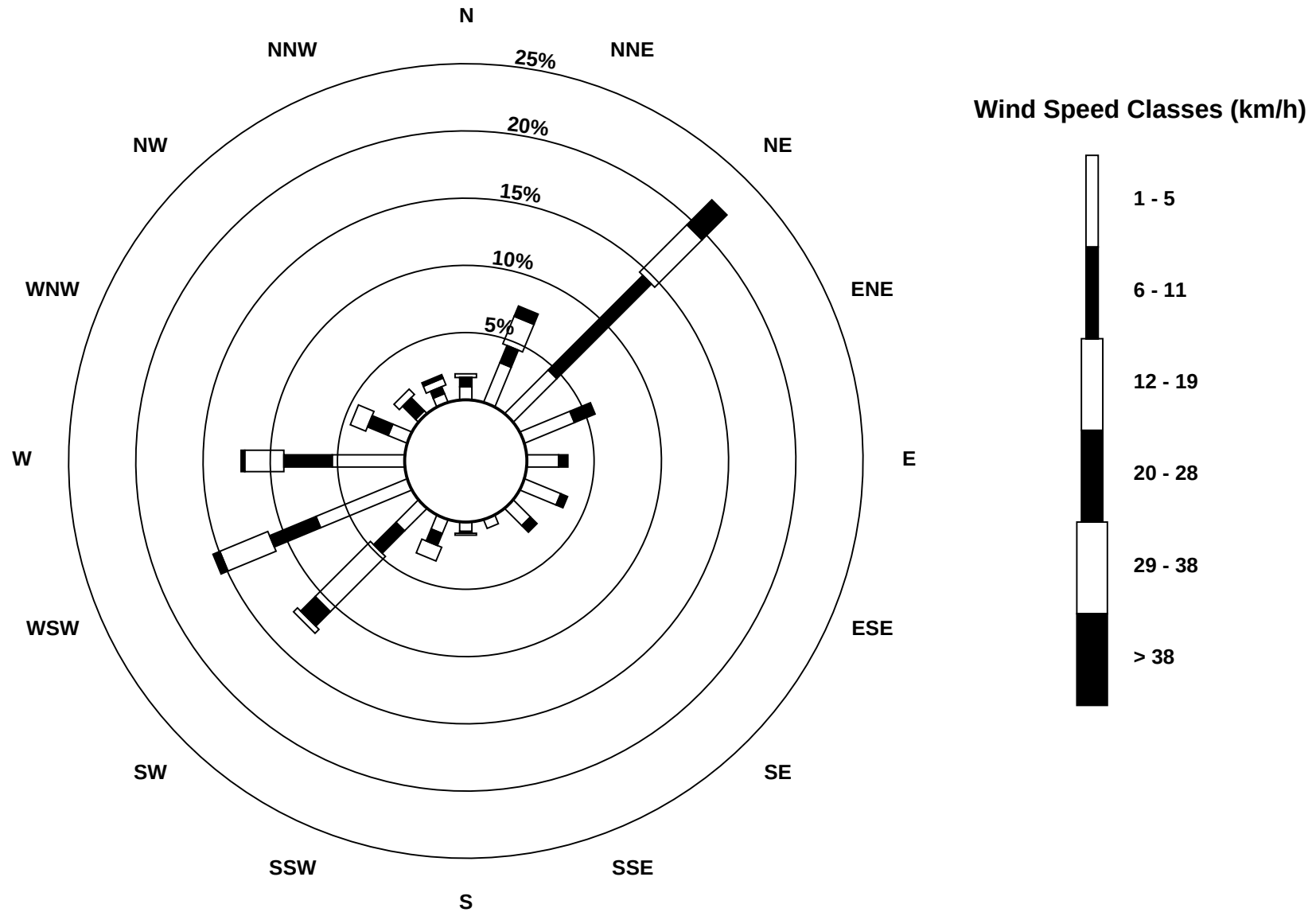
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Clairmont - March 2015

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	7	9	10	7	7	7	11	11	10	11	8	9	6	9	10	6	4	4	2	3	4	6.7	11.3
Dir	51	41	47	45	39	40	61	49	56	41	39	37	31	30	36	76	79	88	86	25	37	18	100	127	50.2	40.7
24 Spd	3	2	4	6	6	4	2	5	5	2	2	4	4	6	8	5	4	8	6	4	2	2	1	1	3.0	7.8
Dir	111	81	49	42	50	48	57	48	45	36	21	55	28	34	33	25	279	323	356	359	298	127	174	31	30.4	322.6
25 Spd	2	1	1	1	0	1	1	1	1	2	4	5	5	4	5	5	4	3	2	3	2	2	3	7	0.8	6.8
Dir	78	72	55	93	18	249	274	323	255	279	277	263	256	252	327	3	23	64	102	117	79	76	45	46	356.7	45.9
26 Spd	5	4	1	2	1	3	4	4	1	3	4	5	7	5	4	2	5	14	13	11	6	4	5	3	2.2	13.8
Dir	46	63	20	216	160	111	111	125	55	85	108	158	180	205	268	256	240	230	231	241	270	274	276	227	216.8	229.8
27 Spd	3	0	4	3	2	2	7	6	5	5	3	2	4	4	5	4	2	2	2	3	5	6	6	5	1.4	6.6
Dir	316	354	127	123	78	64	39	46	48	39	29	12	44	31	41	42	47	358	43	267	259	263	240	210	28.7	38.8
28 Spd	7	3	2	5	6	6	8	4	9	12	12	12	13	16	16	15	16	19	20	13	5	4	4	3	8.6	20.1
Dir	213	254	208	252	263	276	281	190	217	238	264	266	266	254	247	230	232	223	226	233	225	248	164	112	239.9	225.7
29 Spd	3	4	3	4	1	3	1	2	2	2	1	7	5	5	12	21	12	22	18	13	17	14	14	14	6.4	21.9
Dir	109	117	113	95	130	111	53	73	122	39	232	210	233	243	246	253	273	230	226	230	229	221	215	215	226.5	229.8
30 Spd	12	14	17	11	3	8	9	12	7	8	8	8	6	3	5	3	5	6	5	3	5	0	2	1	4.1	17.2
Dir	221	220	227	232	269	236	218	228	213	212	251	257	263	279	40	12	104	108	138	45	43	309	91	301	227.0	226.6
31 Spd	4	7	6	7	9	7	7	5	6	6	6	7	10	13	18	17	17	22	18	12	13	16	17	11	10.2	21.7
Dir	298	315	298	259	248	260	283	271	269	259	287	326	309	254	263	253	250	249	259	268	256	247	265	271	265.1	249.2
Spd	1.5	1.4	1.5	1.9	1.9	1.4	0.9	0.6	1.5	1.5	2.2	2.4	2.8	3.2	3.8	3.5	3.0	3.0	2.9	2.8	2.6	2.5	2.6	2.1	Diurnal Average	
Dir	323.7	345.7	14.2	0.2	348.7	346.4	334.8	8.2	16.3	355.9	328.5	305.4	310.5	311.0	313.3	293.3	282.5	258.7	259.7	275.4	260.2	266.9	264.8	294.8	Diurnal Maximum	
Spd	24.9	24.4	25.3	23.9	19.8	19.2	19.7	19.9	20.5	18.9	20.5	21.3	21.7	24.3	23.5	25.3	24.7	22.4	28.9	33.8	36.5	24.2	28.2	25.2	Diurnal Maximum	
Dir	224.1	226.2	35.1	35.6	36.4	247.8	27.8	27.3	28.7	32.0	34.7	34.3	253.2	39.7	38.3	223.6	221.6	41.1	227.3	226.8	225.2	248.6	222.8	328.1		
Maximum Speed Value: 36 km/h on Mar 14 21:00																								Hours in Service: 744		
Maximum Daily Speed Average: 17.8 km/h on Mar 20																								Hours of Data: 744		
Maximum Diurnal Speed Average: 3.8 km/h at hour 15																								Hours of Missing Data: 0		
Minimum Speed Value: 0 km/h on Mar 30 22:00																								Percent Operational Time: 100.0		
Minimum Daily Speed Average: 0.8 km/h on Mar 25																										
Minimum Diurnal Speed Average: 0.6 km/h at hour 8																										
Monthly Average Velocity: 1.83 km/h 303.95 deg																										
Speed Percentiles: P ₁ = 0.6 P ₁₀ = 2.0 Q ₁ = 3.8 Median = 6.6 Q ₃ = 12.5 P ₉₀ = 17.7 P ₉₉ = 25.2																										
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	20	9	8	0	0	0	37																			
NorthEast	51	91	52	29	0	0	223																			
East	47	17	0	0	0	0	64																			
SouthEast	25	5	0	0	0	0	30																			
South	11	1	4	0	0	0	16																			
SouthWest	37	39	64	10	4	0	154																			
West	71	56	38	10	0	0	175																			
NorthWest	15	18	10	2	0	0	45																			
Total	277	236	176	51	4	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Portable Clairmont - March 2015



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Clairmont - March 2015

Maximum Speed: 37 km/h on Mar 14 21:00																				Maximum Daily Speed Average: 17.9 km/h on Mar 20					Hours in Service: 744	
Minimum Speed: 1 km/h on Mar 4 06:00																				Minimum Daily Speed Average: 3.4 km/h on Mar 25					Hours of Data: 744	
Maximum Diurnal Speed Average: 11.7 km/h at hour 18																				Minimum Diurnal Speed Average: 6.7 km/h at hour 8					Hours of Missing Data: 0	
Monthly Average Speed: 8.88 km/h																				Percentiles: P ₁ = 1.4 P ₁₀ = 2.8 Q ₁ = 4.2 Median = 6.9 Q ₃ = 12.8 P ₉₀ = 17.6 P ₉₉ = 25.4					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-Mar	10	8	8	9	6	3	3	1	2	1	4	4	3	3	6	5	8	8	9	17	15	15	13	26	7.8	25.8
2-Mar	21	10	12	11	18	15	8	9	13	13	14	19	19	18	19	17	16	12	15	9	9	8	7	8	13.4	21.2
3-Mar	5	4	2	2	3	4	2	2	5	5	8	5	4	4	5	5	8	8	7	7	9	7	8	9	5.3	8.9
4-Mar	9	9	6	2	2	1	4	2	2	4	3	5	5	5	4	4	3	3	3	4	6	11	12	10	4.9	11.6
5-Mar	7	7	4	3	3	3	2	1	2	2	3	5	9	12	11	15	13	8	5	6	3	5	12	12	6.4	15.2
6-Mar	12	14	16	16	16	19	20	16	13	13	11	15	14	15	14	12	10	10	15	10	10	5	5	5	12.7	19.5
7-Mar	4	4	3	6	5	6	5	5	3	4	5	5	4	5	5	4	11	13	9	6	6	3	3	4	5.3	13.0
8-Mar	3	2	3	6	9	12	14	12	7	10	9	13	16	20	22	25	25	17	15	12	14	17	28	24	14.0	28.3
9-Mar	25	25	13	8	12	13	13	15	14	19	18	19	22	17	8	7	12	14	10	8	10	8	6	4	13.4	25.0
10-Mar	7	19	18	15	11	8	9	7	7	5	6	4	4	5	5	4	7	10	11	12	14	13	14	16	9.6	19.5
11-Mar	20	21	25	24	20	17	15	14	15	14	15	15	14	10	9	11	11	10	11	10	10	13	12	14	14.6	25.3
12-Mar	14	13	5	4	5	4	4	4	5	5	4	4	6	4	5	17	17	17	15	14	15	14	10	13	9.0	17.1
13-Mar	14	15	8	4	6	7	3	6	5	6	6	9	10	6	5	6	3	4	5	5	7	6	4	3	6.2	15.0
14-Mar	3	4	3	4	6	4	3	3	2	3	3	2	4	4	4	4	6	22	29	34	37	27	24	15	10.5	36.7
15-Mar	13	11	12	8	6	5	3	3	3	5	13	20	19	17	17	17	14	9	5	2	2	2	2	2	8.7	20.2
16-Mar	1	1	2	2	4	5	4	5	2	2	4	5	4	4	5	6	6	6	7	6	5	7	6	8	4.4	7.7
17-Mar	10	10	10	9	10	11	9	6	10	11	12	11	10	15	17	15	13	16	14	11	8	2	7	5	10.6	16.6
18-Mar	7	7	6	5	5	5	4	7	4	5	8	10	12	11	10	9	7	6	5	7	4	4	5	5	6.6	11.9
19-Mar	4	2	4	4	9	8	10	8	13	17	20	21	21	21	22	18	20	18	16	13	10	7	6	6	12.4	22.1
20-Mar	7	8	9	12	12	13	13	13	16	16	16	19	21	24	24	25	24	22	24	26	24	22	19	19	17.9	26.2
21-Mar	20	19	19	19	19	18	20	20	21	19	18	17	14	12	14	13	11	10	11	9	8	5	4	4	14.3	20.5
22-Mar	4	4	4	3	3	2	2	3	4	5	6	7	7	7	6	6	7	10	7	6	6	6	7	8	5.4	10.0
23-Mar	6	7	7	7	9	10	8	7	7	11	11	10	11	9	9	6	9	10	6	4	4	2	3	4	7.4	11.4
24-Mar	3	2	4	6	6	4	2	5	5	2	3	5	4	6	8	5	5	8	6	5	5	3	3	2	4.5	8.3
25-Mar	3	2	2	2	1	3	2	2	3	3	5	5	6	5	7	5	4	4	2	3	2	2	3	7	3.4	6.8
26-Mar	6	4	2	3	2	3	4	4	2	4	5	7	8	5	4	3	6	14	13	12	6	4	5	4	5.4	13.9
27-Mar	4	2	4	3	2	2	7	7	5	5	3	3	4	4	5	4	2	3	4	3	6	6	6	5	4.1	6.7
28-Mar	8	4	3	5	6	6	9	4	10	12	12	12	13	16	16	15	16	19	20	14	5	4	5	3	9.8	20.3
29-Mar	3	4	4	4	2	4	2	2	2	3	5	7	6	6	13	22	13	22	18	14	17	14	14	14	8.9	22.3
30-Mar	12	15	17	11	4	8	10	12	7	8	9	9	7	5	5	4	7	6	5	3	5	1	3	4	7.3	17.3
31-Mar	4	7	6	7	9	7	7	5	6	6	6	7	11	13	19	18	17	22	18	12	13	16	17	11	11.0	21.8
8.6 8.6 7.8 7.3 7.4 7.4 7.1 6.7 6.8 7.6 8.5 9.6 10.1 9.9 10.4 10.6 10.8 11.7 10.9 9.8 9.5 8.5 8.7 8.8																									Diurnal Average	
25.0 24.5 25.3 24.0 19.9 19.4 19.7 20.0 20.5 19.0 20.5 21.4 21.9 24.4 23.6 25.4 25.0 22.4 29.1 34.1 36.7 27.2 28.3 25.8																									Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg

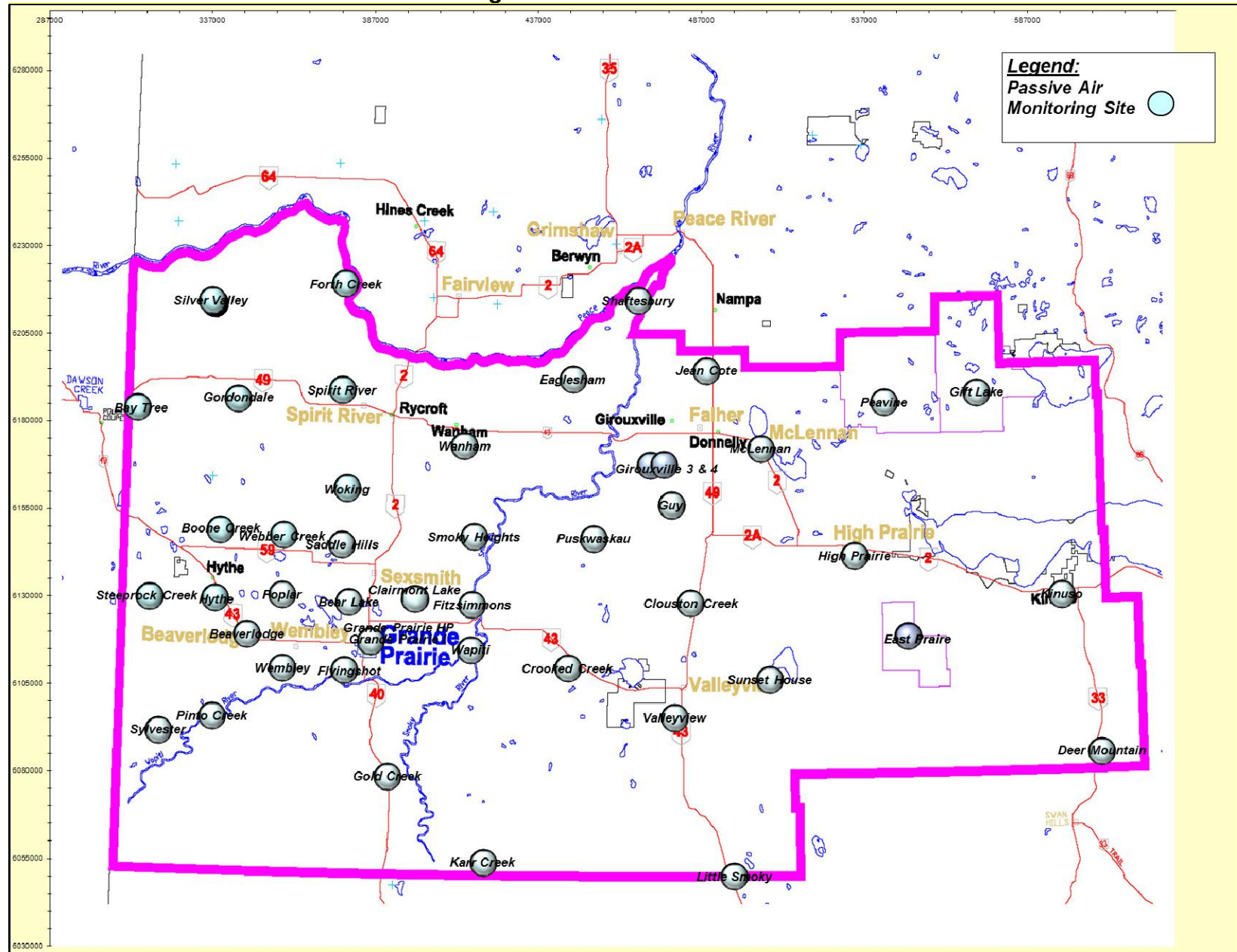
Portable Clairmont - March 2015

Maximum Value: 97.7 deg on Mar 1 08:00																		Hours in Service: 744							
Minimum Value: 2.8 deg on Mar 11 03:00																		Hours of Data: 744							
																		Hours of Missing Data: 0							
Percentiles: P ₁ = 3.3 P ₁₀ = 5.5 Q ₁ = 7.7 Median = 12.9 Q ₃ = 24.3 P ₉₀ = 52.1 P ₉₉ = 90.3																		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-Mar	6	6	6	8	9	21	19	98	17	20	20	14	36	13	11	39	12	11	18	10	7	9	10	14	97.7
2-Mar	7	17	8	12	8	8	8	10	14	20	17	7	11	14	7	7	8	10	5	8	7	10	12	24	23.7
3-Mar	40	34	25	64	22	19	28	73	10	12	10	26	64	29	15	15	4	4	7	10	6	12	8	6	72.6
4-Mar	5	5	11	26	34	70	50	87	93	19	25	18	18	19	25	20	27	31	49	17	25	8	10	11	93.3
5-Mar	8	12	77	68	56	21	39	46	19	57	47	16	9	15	13	8	7	17	13	19	31	49	8	12	77.5
6-Mar	7	10	6	7	8	7	7	8	7	21	13	6	6	7	6	8	22	9	6	8	8	17	8	17	21.7
7-Mar	14	10	15	9	16	9	17	24	24	15	19	22	39	44	19	49	12	10	13	15	14	55	61	52	60.8
8-Mar	48	28	50	24	14	8	10	9	13	7	15	8	8	9	7	6	10	8	9	7	7	14	5	7	50.2
9-Mar	5	6	14	17	9	7	7	7	7	11	8	6	7	11	22	13	10	7	13	13	7	41	34	14	40.9
10-Mar	20	17	10	6	8	9	6	7	6	9	10	46	14	17	27	41	17	14	6	5	5	4	4	6	45.7
11-Mar	4	4	3	4	5	6	7	4	8	8	7	8	9	9	8	12	9	8	11	11	10	11	7	6	12.2
12-Mar	5	15	23	23	29	24	16	18	30	17	37	37	15	28	71	9	10	10	7	8	11	9	17	13	71.2
13-Mar	11	7	55	24	25	20	28	32	19	9	17	12	8	13	30	29	58	38	41	77	34	57	44	70	77.0
14-Mar	87	90	36	86	57	92	84	83	87	62	86	45	33	58	87	64	32	7	6	7	6	29	7	12	92.4
15-Mar	9	13	8	11	19	58	24	58	46	18	12	10	7	12	12	8	14	14	10	36	72	44	50	21	72.0
16-Mar	30	43	31	58	23	14	18	9	60	61	66	93	17	15	9	13	18	6	6	11	14	11	14	14	93.1
17-Mar	5	5	5	9	6	6	15	15	6	4	4	9	14	6	3	3	4	4	3	6	14	73	14	9	72.9
18-Mar	6	9	12	14	18	13	24	20	12	17	10	11	8	10	9	8	12	18	21	17	58	24	34	20	58.3
19-Mar	34	91	81	73	8	8	8	19	6	4	3	4	4	4	4	5	5	5	5	5	10	13	8	9	90.8
20-Mar	6	11	6	5	5	4	6	6	4	4	6	6	5	5	5	4	4	4	4	5	4	4	4	4	10.8
21-Mar	4	4	3	4	3	3	3	3	4	3	4	5	7	15	5	6	8	13	7	8	7	11	27	22	27.4
22-Mar	33	11	10	12	21	19	20	31	19	9	17	18	24	20	10	8	15	4	6	9	15	16	12	9	33.4
23-Mar	11	5	9	11	6	8	29	9	13	6	5	6	6	7	10	15	6	7	19	7	16	11	20	15	28.7
24-Mar	23	29	13	5	8	10	35	6	20	20	51	28	13	11	8	20	63	21	22	56	90	33	73	77	90.0
25-Mar	38	43	45	44	74	76	47	77	76	31	26	16	16	26	40	17	11	42	31	30	22	18	25	4	77.3
26-Mar	11	10	59	58	72	12	12	17	50	59	23	53	23	32	23	80	49	7	8	24	21	18	13	38	79.8
27-Mar	53	92	23	31	22	23	7	12	14	11	18	68	33	17	28	27	37	36	56	54	12	17	13	21	92.2
28-Mar	10	24	60	25	8	21	10	31	12	9	11	16	8	7	13	7	10	7	8	6	26	15	52	21	60.3
29-Mar	22	19	39	18	65	47	34	38	38	44	86	23	25	39	14	20	23	9	6	11	7	8	7	8	86.2
30-Mar	7	7	6	19	61	14	8	9	12	11	15	13	28	61	13	39	57	28	16	25	10	91	52	81	90.6
31-Mar	10	10	18	6	9	14	14	12	12	8	28	17	15	16	10	10	8	6	10	15	16	7	10	9	28.1
86.7 92.2 81.0 86.4 74.0 92.4 83.8 97.7 93.3 61.9 86.3 93.1 63.6 60.8 87.0 79.8 63.3 41.6 56.4 77.0 90.0 90.6 73.2 80.6																									

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for March 2015

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
9a	Spirit River	0.4	32.5	0.6		
9b	Spirit River	0.3	38.9	0.9		
20a	Shaftesbury	0.2	45.3	0.6		
20b	Shaftesbury	0.3	37.5	0.4		
26a	Flyingshot	0.5	31.7	1.3		
26b	Flyingshot	0.3	35.9	1.4		
36a	Guy	0.6	42.2	0.5		
36b	Guy	0.6	39.5	8.1		
63a	Girouxville 3				0.2	
63b	Girouxville 3				0.3	
1	Silver Valley	0.3	38.0	0.4		08-27-081-11 W6M
2	Bay Tree	0.4	37.1	0.6		13-16-078-13 W6M
3	Fourth Creek	0.8	41.9	0.7		04-13-082-07 W6M
4	Gordondale	0.3	44.1	1.0		04-34-078-10 W6M
5	Boone Creek	0.2	39.0	1.1		16-36-074-11 W6M
7	Steeprock Creek	0.2	38.0	0.5		09-35-072-13 W6M
9	Spirit River	0.3	35.7	0.7		08-12-079-07 W6M
10	Woking	0.2	35.3	0.6		01-13-076-07 W6M
11	Webber Creek	0.3	25.3	0.6		09-36-074-09 W6M
12	Hythe	0.6	34.4	1.0		14-36-072-11 W6M
14	Sylvester	0.3	35.8	1.2		08-06-069-12 W6M
16	Beaverlodge	0.3	36.9	1.1		15-36-071-10 W6M
17	Poplar	0.4	35.2	1.2		13-06-073-08 W6M
18	Saddle Hills	0.3	44.2	0.6		04-25-074-07 W6M
19	Wanham	0.5	32.7	0.7		16-22-077-03 W6M
20	Shaftesbury	0.3	41.4	0.5		04-03-082-23 W5M
21	Eaglesham	0.3	39.6	2.6		16-21-079-25 W5M
23	Bear Lake	0.4	32.5	1.1		15-31-072-06 W6M
24	Wembley	0.2	36.4	0.8		12-31-070-08 W6M
25	Pinto Creek	0.2	34.5	1.1		04-24-069-11 W6M
26	Flyingshot	0.4	33.8	1.4		15-36-070-07 W6M
27	Grande Prairie I	0.3	41.3	0.4		08-15-071-06 W6M

PAZA Passive Results for March 2015 (Continued)

28	Clairmont Lake	0.2	30.7	0.5	09-06-073-04 W6M
29	Smoky Heights	0.3	39.1	0.7	04-06-075-02 W6M
30	Fitzsimmons	0.2	38.9	0.6	15-36-072-03 W6M
32	Gold Creek	0.4	42.7	0.4	06-33-067-05 W6M
33	Wapiti	0.2	32.2	0.3	02-25-071-03 W6M
34	Puskwaskau	0.3	27.4	1.3	15-35-074-25 W5M
35	Jean Cote	0.7	37.5	2.1	12-35-079-21 W5M
36	Guy	0.6	40.9	4.3	03-04-076-22 W5M
37	Crooked Creek	0.2	29.0	0.6	16-01-071-26 W5M
38	Karr Creek	0.2	40.3	1.2	10-16-065-02 W6M
38	Karr Creek	0.2	40.3	1.2	12-01-073-22 W5M
40	McLennan	0.6	39.7	N/S	03-29-077-19 W5M
41	Valleyview	0.4	39.5	1.0	09-30-069-22 W5M
42	Sunset House	0.7	40.1	1.2	05-32-070-19 W5M
43	High Prairie	0.4	36.4	0.7	16-13-074-17 W5M
44	Peavine	0.2	44.0	0.8	03-05-079-15 W5M
45	Gift Lake	0.1	15.5	0.3	0.1 10-07-079-12 W5M
46	Little Smoky	0.7	35.3	1.7	12-01-065-21 W5M
47	Kinuso	0.3	39.0	1.3	12-10-073-10 W5M
48	Deer Mountain	0.2	33.5	2.8	15-22-068-09 W5M
49	Grande Prairie HP	0.3	30.7	1.2	17-26-071-06 W6M
50	East Prairie	0.6	35.9	0.5	13-02-072-15 W5M
63	Girouxville 3			0.2	14-02-077-23 W5M
64	Girouxville 4			0.3	4-08-077-22 W5M

*BDL = Below Detection Level

*N/S - No sample

Passive Summary for March 2015

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

Passive Summary for March 2015 (PAZA Zone)				
Mean	0.3	36.4	1.0	0.2
Standard Deviation	0.2	5.4	0.7	0.1
Minimum	0.1	15.5	0.3	0.1
Minimum At	Gift Lake (#45)	Gift Lake (#45)	Gift Lake (#45)	Gift Lake (#45)
Maximum	0.8	44.2	4.3	0.3
Maximum At	Fourth Creek (#3)	Saddle Hills (#18)	Guy (#36)	Girouxville 4 (#64)

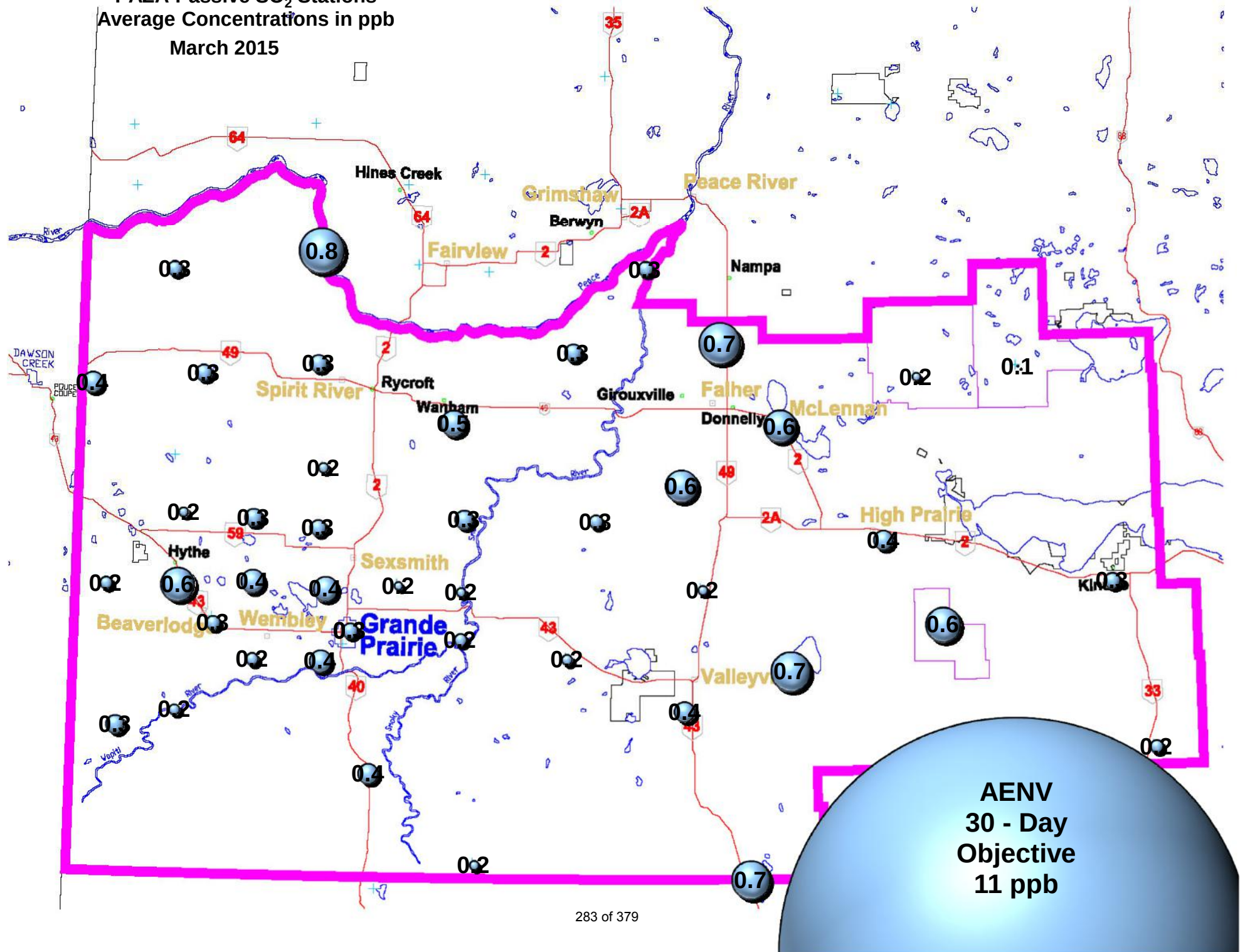
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)

	SO ₂	O ₃	NO ₂
PAZA Beaverlodge station	0.3	38.5	2.6
PAZA Beaverlodge passive	0.3	36.9	1.1

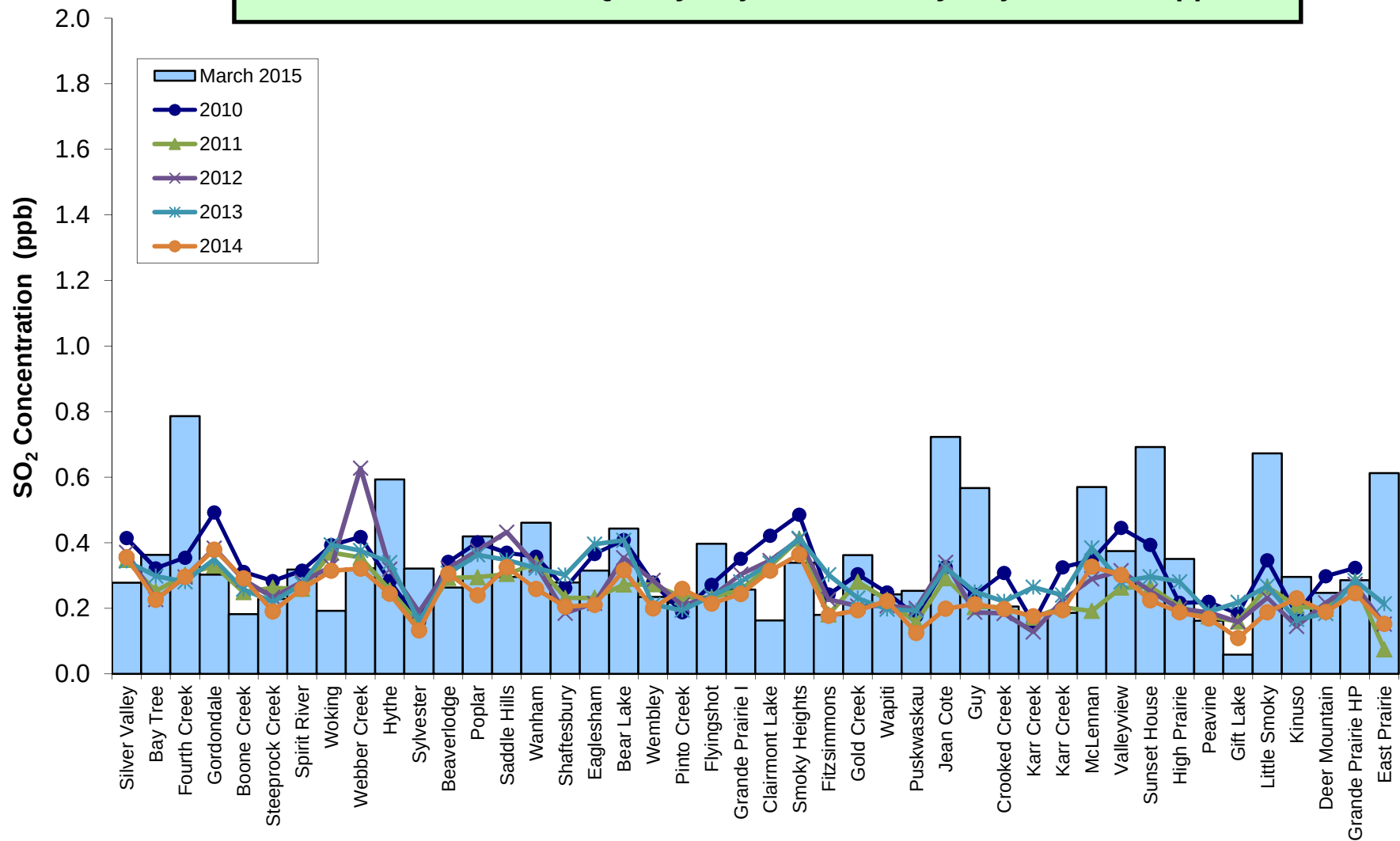
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

	SO ₂	O ₃	NO ₂
PAZA Henry Pirker station	0.2	28.9	11.2
PAZA Grande Prairie passive	0.3	30.7	1.2

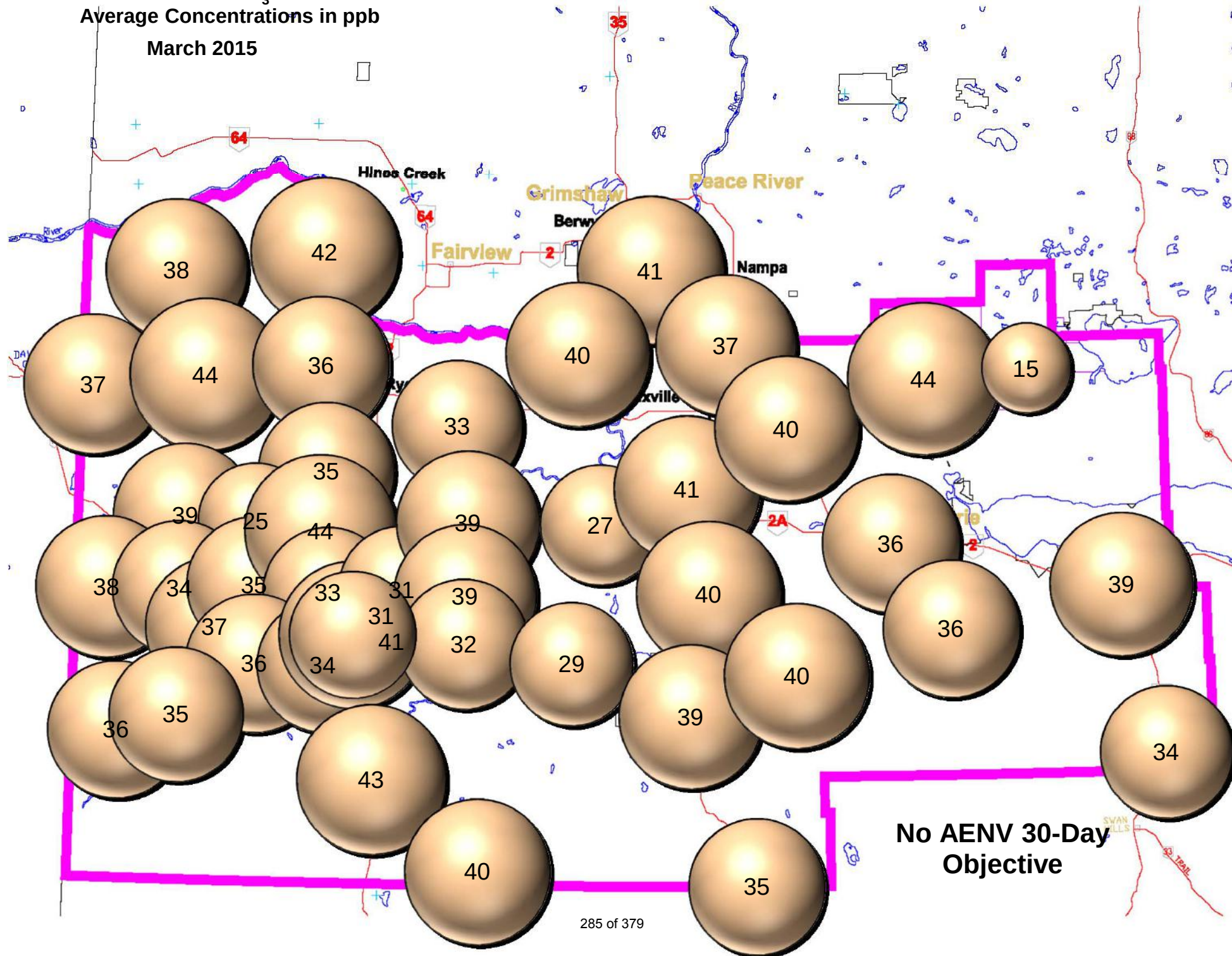
**PAZA Passive SO₂ Stations
Average Concentrations in ppb
March 2015**



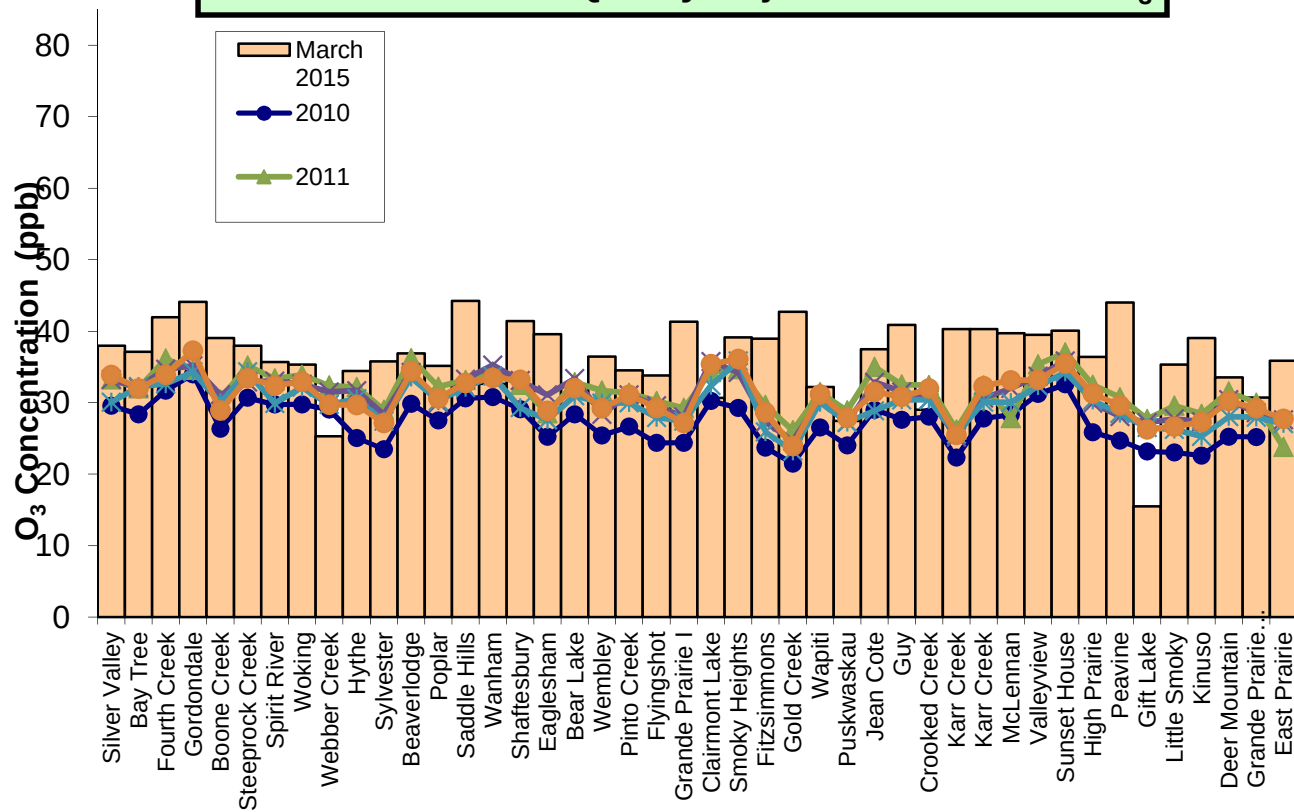
Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb



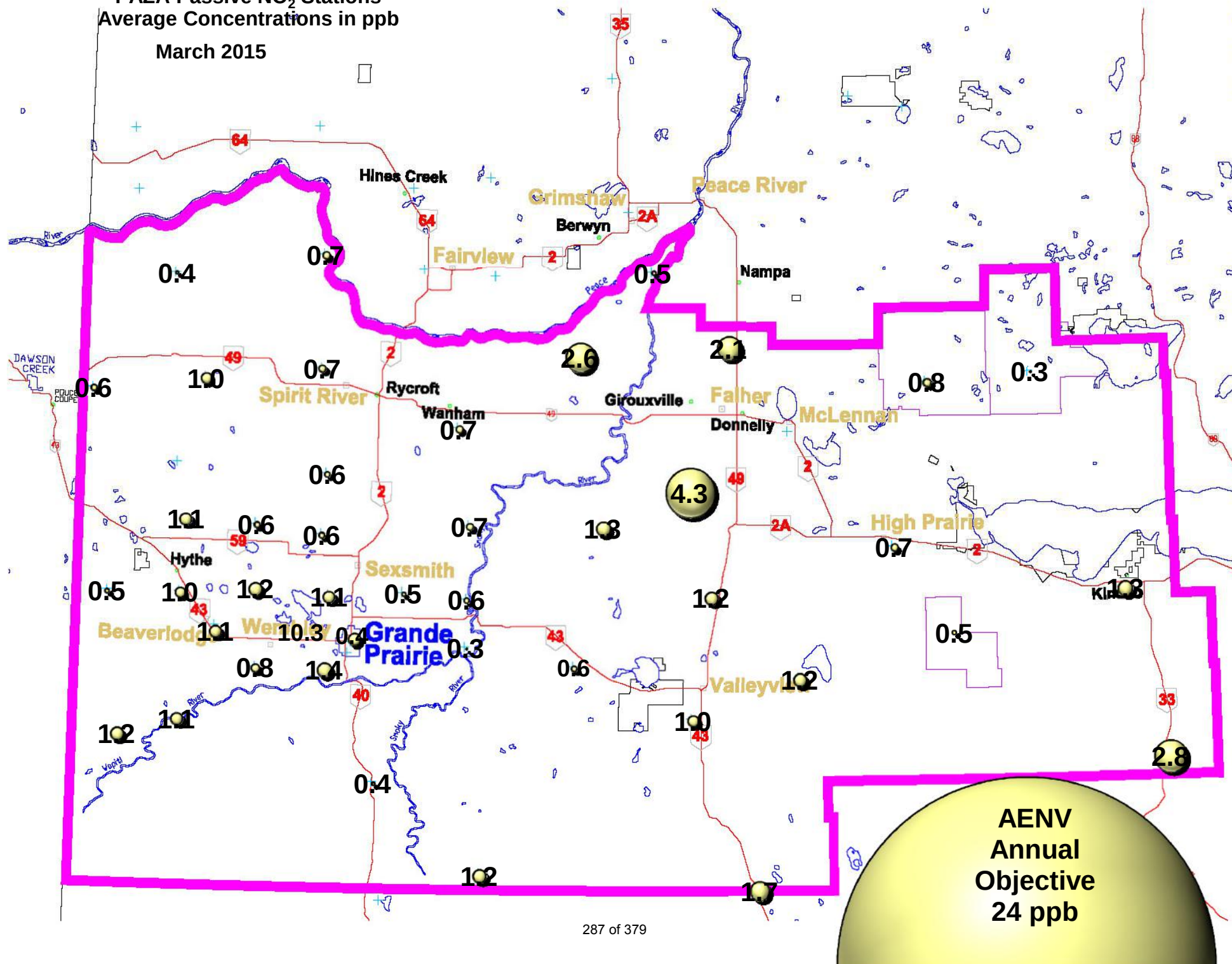
PAZA Passive O₃ Stations
Average Concentrations in ppb
March 2015



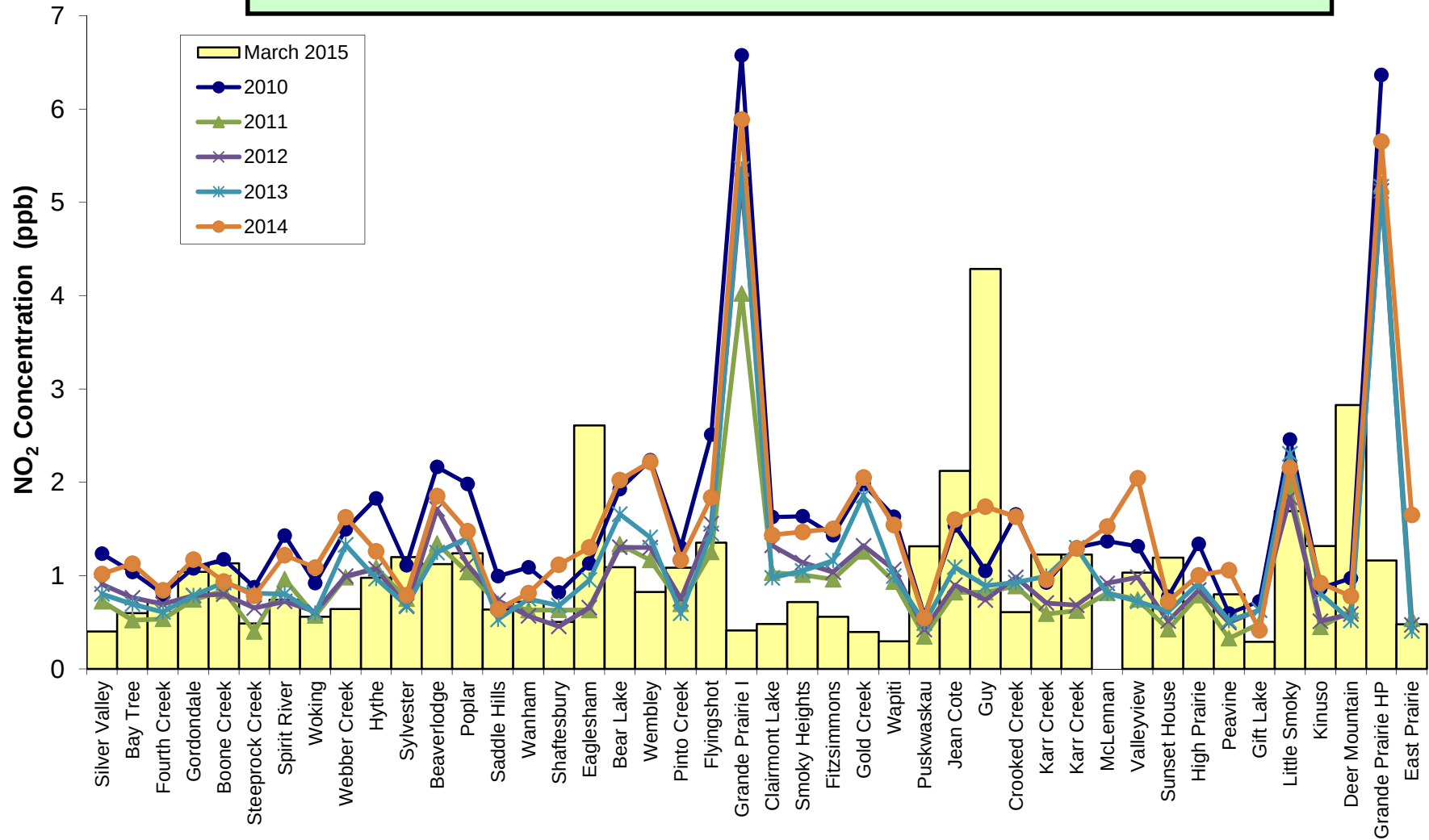
Alberta Ambient Air Quality Objective - No Annual O₃



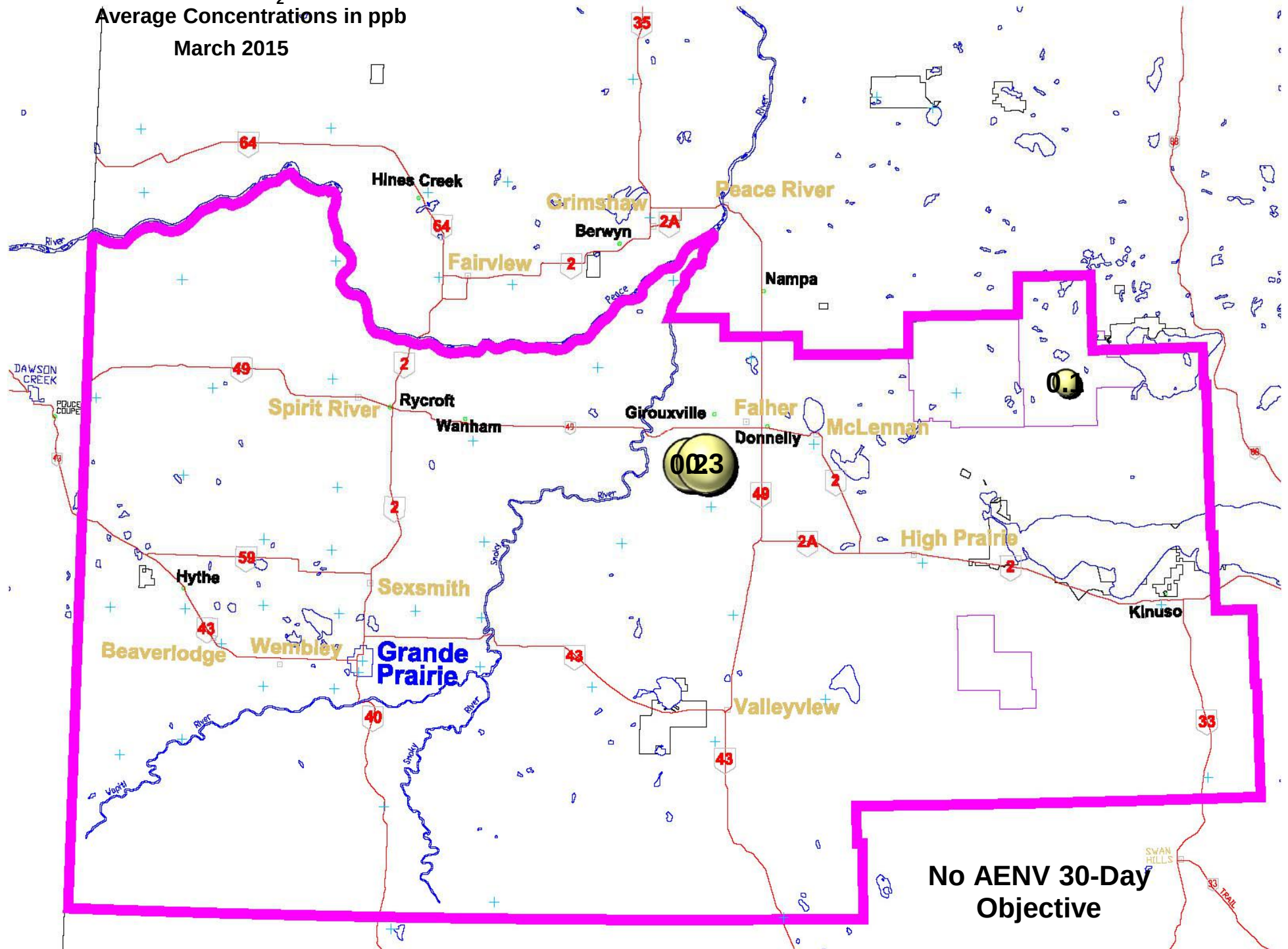
March 2015

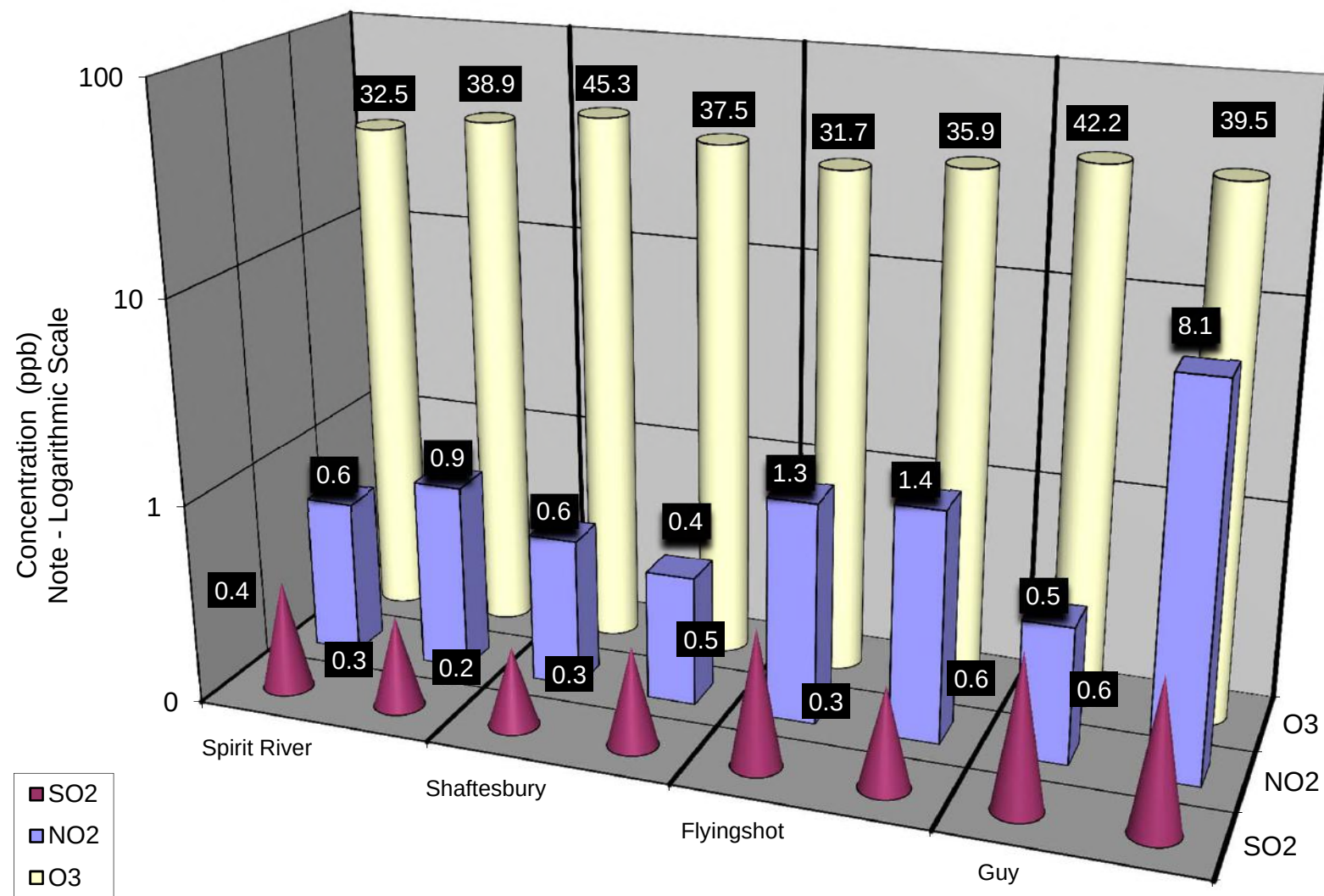


Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 24 ppb



PAZA Passive H₂S Stations
Average Concentrations in ppb
March 2015





Duplicate Summary Chart

PAZA

ALBERTA ENVIRONMENT AND SUSTAINABLE RESOURCES INCIDENT REPORT

March 2015

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:	296205	Reported To (AESRD Contact):	Natasha
Date & Time Incident Reported to AESRD:	March 21, 2015 11:20	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:	March 21, 2015 09:00 MST	End Date & Time of Incident:	March 21, 2015 10:00 MST
Reason or Nature of Incident:			
On March 21, 2015 the PM2.5 analyzer exceeded 1-hour AAAQ Objective of 80 µg/m ³ , details as follows:			
<u>10:00HRS MST</u> PM2.5 =86.2 µg/m³ WS=12.3 km/hr WD=28.5 degrees			
Immediate Actions Taken:			
Confirmed validity of data and proceeded to call in the exceedence to AEMERA			
Investigation Details:			
N/A			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	March 21 2015
7-Day Letter Due Date:	March 28 2015		

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:	296212	Reported To (AESRD Contact):	Erin
Date & Time Incident Reported to AESRD:	March 22, 2015 06:30	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:	March 22, 2015 00:00 MST	End Date & Time of Incident:	March 21, 2015 01:00 MST
Reason or Nature of Incident:			
On March 22, 2015 the PM2.5 analyzer exceeded 1-hour AAAQ Objective of 80 µg/m ³ , details as follows:			
01:00HRS MST PM2.5 =81.9 µg/m ³ WS=1.6 km/hr WD=259.4 degrees			
Immediate Actions Taken:			
Confirmed validity of data and proceeded to call in the exceedence to AEMERA			
Investigation Details:			
N/A			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	March 22 2015
7-Day Letter Due Date:	March 29 2015		

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:	296232	Reported To (AESRD Contact):	Erin
Date & Time Incident Reported to AESRD:	March 22, 2015 23:20	Reported By:	Christopher Hendrickson
Reported on Behalf of:	PAZA	Approval Number (if applicable):	N/A
Location(s) of Incident:	Valleyview Air Quality Monitoring station		
Start Date & Time of Incident:	March 22, 2015 22:00 MST	End Date & Time of Incident:	March 22, 2015 23:00 MST
Reason or Nature of Incident:			
On March 22, 2015 the H ₂ S analyzer exceeded 1-hour AAAQ Objective of 10.5 ppb, details as follows: <u>23:00 HRS MST</u> H₂S = 13.2 ppb WS=1.1 km/hr WD=339.4 degrees			
Immediate Actions Taken:			
Confirmed validity of data and proceeded to call in the exceedence to AEMERA			
Investigation Details:			
N/A			
Actions Taken to Prevent Reoccurrence (if any):			
N/A			
Additional Actions Required (if any):			
N/A			
Report Completed By:	Christopher Hendrickson	Date Report Submitted:	March 22 2015
7-Day Letter Due Date:	March 29 2015		

March 2015 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, THC, TRS

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	9:30	End Time (MST)	11:45
Barometric Pressure	711.000 mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Conc	50.2 ppm	Cal Gas Cert Date	March 10, 2017
		Cal Gas Cylinder #	LL119493
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	1.002242	Calculated slope	1.009822
Calculated intercept	2.391601	Calculated intercept	2.212899
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	9.8		9.8	
Coefficient	0.764		0.764	
Pressure	656.2	mm Hg	658.1	mm Hg
Flow	0.484	lpm	0.484	lpm
Lamp intensity	43635	Hz	44234	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	0.3	N/A
4995	39.93	398.1	393.4	1.0119
4995	19.97	199.9	194.0	1.0305
4995	9.97	100.0	94.7	1.0556
4995	0.00	0.0	0.3	As Found Zero
4995	39.93	398.1	393.4	As Found Span
Average Correction Factor				1.0327

Calculated value of As Found Response: 396.4 ppb Percent Change of As Found: 0.4%

	before calibration		after calibration	
Auto zero	0.0	ppb	-0.1	ppb
Auto span	328.2	ppb	318.5	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



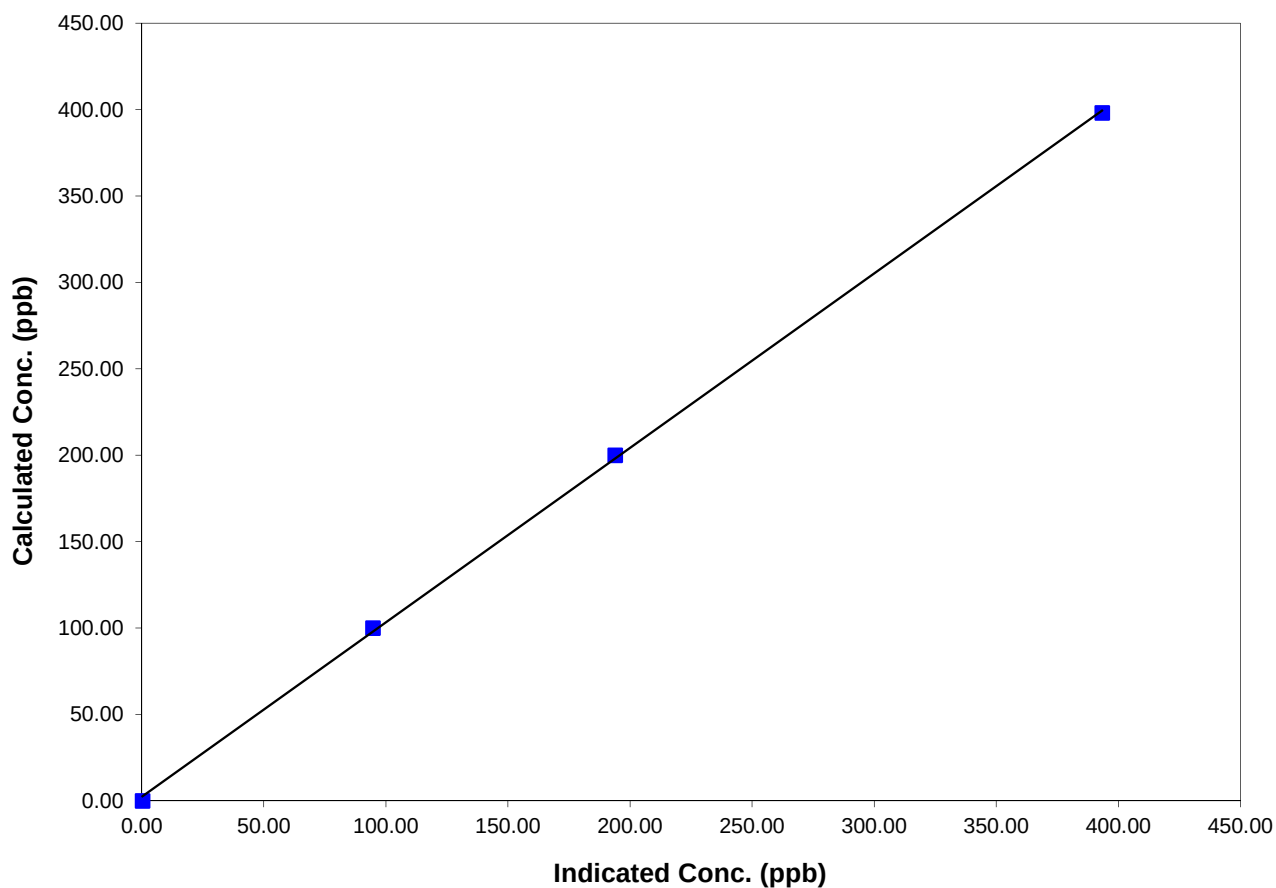
Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:30	End Time (MST)	11:45
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

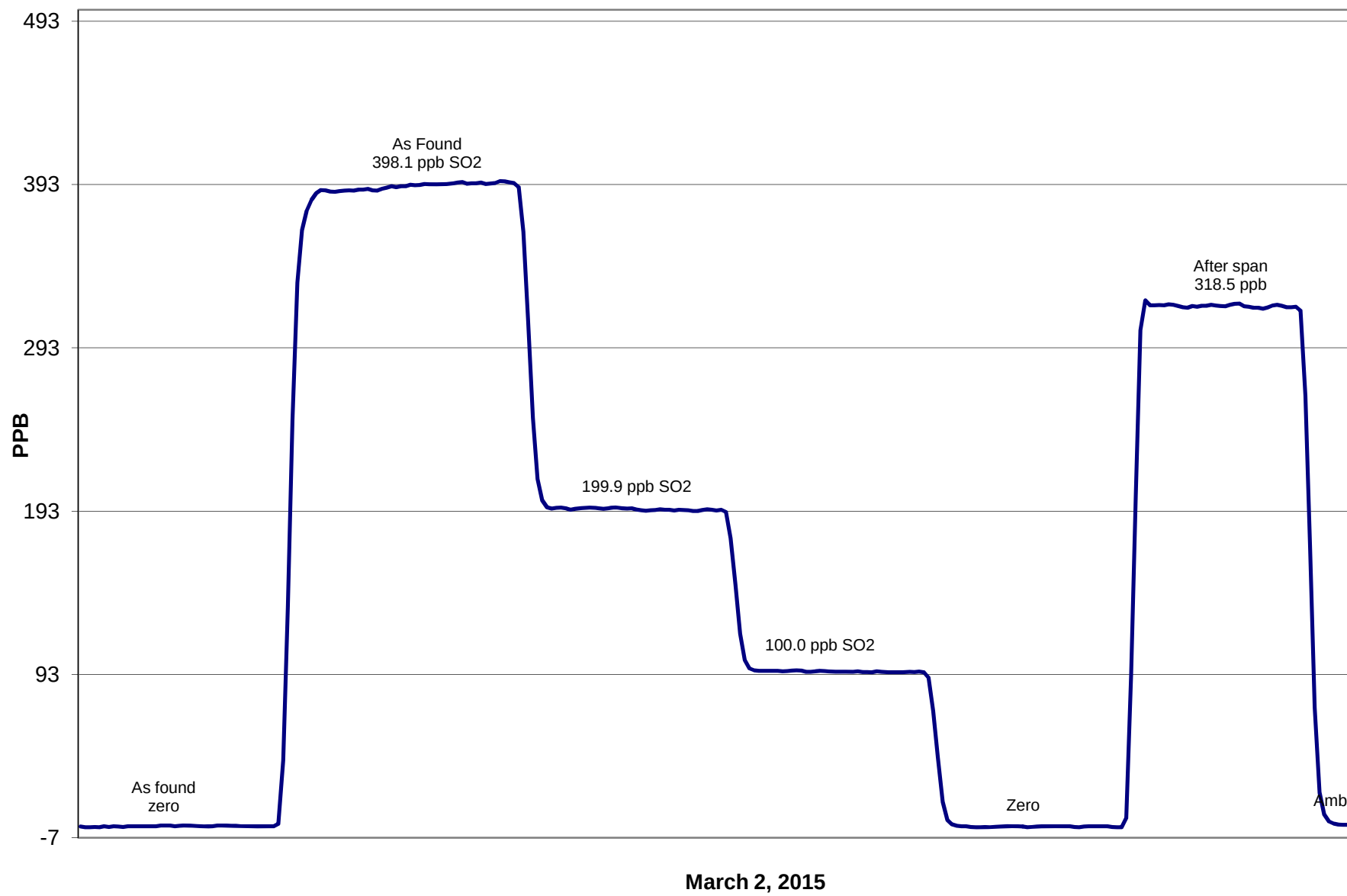
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999815
398.1	393.4	1.0119		
199.9	194.0	1.0305		
100.0	94.7	1.0556	Slope	1.009822
			Intercept	2.212899

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Installation	Removal
Other:			
Start Time (MST)	9:20	End Time (MST)	13:30:00 PM
Barometric Pressure	711.000 mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	3016
NO Cal Gas Conc	50.9 ppm	Cal Gas Expiry Date	March 10, 2017
NOx Cal Gas Conc	51.2 ppm	Cal Gas Serial #	LL119493

DACS Information

DACS make	CR3000	DACS serial No.	5408
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Parameter		NO2	NOx	NO
Before	Data Slope	1.005159	1.003448	0.998916
	Data Offset	0.046627	1.674521	1.713360
After	Data Slope	1.002026	0.990911	0.984831
	Data Offset	0.067122	2.201995	2.331765
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	42i	Analyzer serial #	906535087
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Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	5.2	mV	5.2	mV
NOx bkgnd	5.7	mV	5.7	mV
NO coefficient	0.968		0.968	
NOx coefficient	1.000		1.000	
NO2 conv temp	327.4	Deg C	327.0	Deg C
Cooler Temp	-2.8	Deg C	-2.8	Deg C
PMT Volt	-844.0	mV	-844.0	mV
R Cell Press	170.4	in Hg	171.2	in Hg
Sample Flow	0.725	LPM	0.725	LPM

Notes: No adjustments made

Calibration Report

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



Station Information

Calibration Date: March 2, 2015 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	0.0	0.1	0.0	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	408.6	408.8	0.0	0.9936	0.9871
2	4995	19.96	203.8	202.6	1.2	202.2	201.4	0.3	1.0080	1.0057
3	4995	9.93	101.6	101.0	0.6	98.3	98.2	0.2	1.0339	1.0288
AFZ	4995	0.00	0.0	0.0	0.0	0.0	0.1	0.0	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	408.6	408.8	0.0	0.9936	0.9871
Average Correction Factor									1.0118	1.0072

As Found Concentrations: NO_x= 411.7 NO= 410.0 As Found Percent Change NO_x= 1.4% NO= 1.6%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.1	0.1	0.0	0.0	0.1	0.0	N/A	N/A	N/A	N/A
NO point	408.8	408.8	0.0	409.2	408.8	0.3	0.9989	1.0000	N/A	N/A
300	408.8	98.2	310.6	408.2	98.2	310.0	1.0014	1.0000	1.0020	99.8%
200	408.8	198.7	210.0	408.9	198.7	209.5	0.9995	1.0000	1.0027	99.7%
100	408.8	299.3	109.4	409.3	299.3	109.1	0.9986	1.0000	1.0033	99.7%
Average Correction Factor							0.9998	1.0000	1.0027	99.7%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.1	0.1	ppb	0.0	0.0	0.1	ppb
Auto span	366.6	364.4	1.7	ppb	370.7	368.2	2.0	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



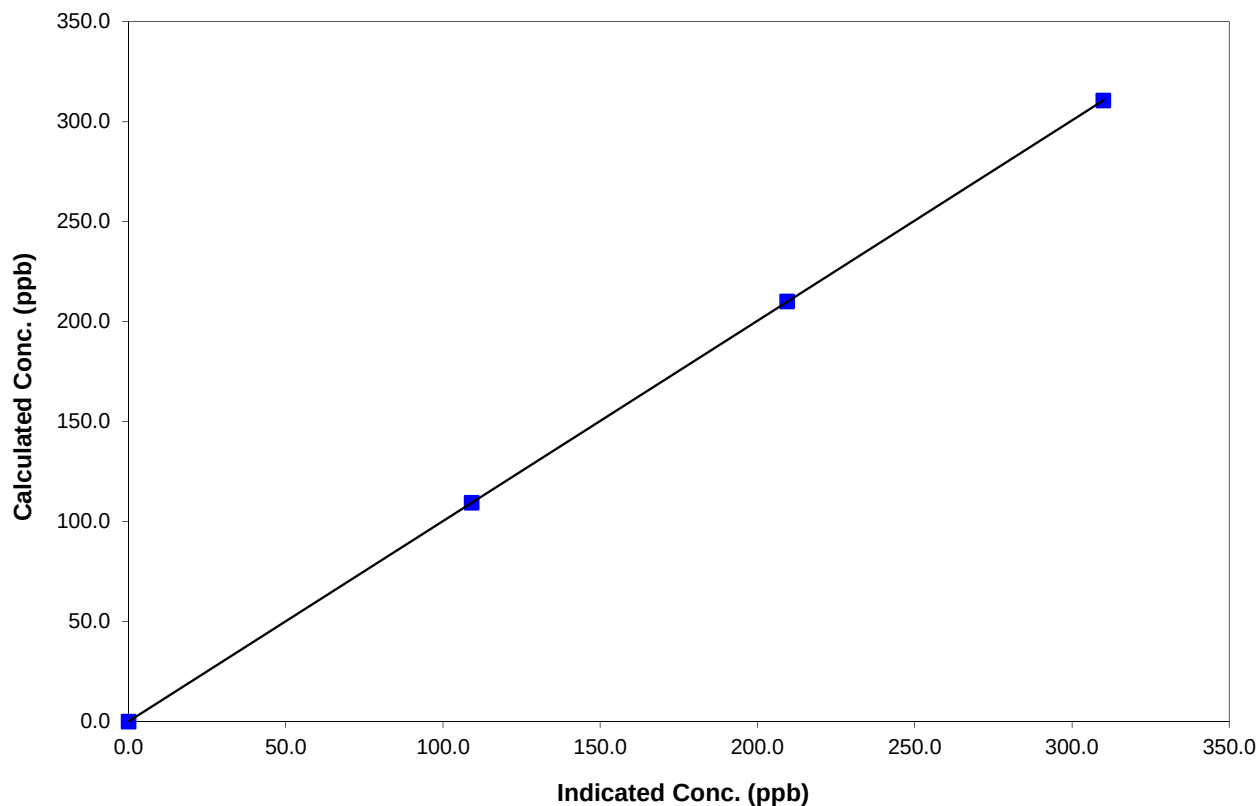
Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:20	End Time (MST)	13:30:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	1.000000
310.6	310.0	1.0020		
210.0	209.5	1.0027		
109.4	109.1	1.0033	Slope	1.002026
			Intercept	0.067122

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



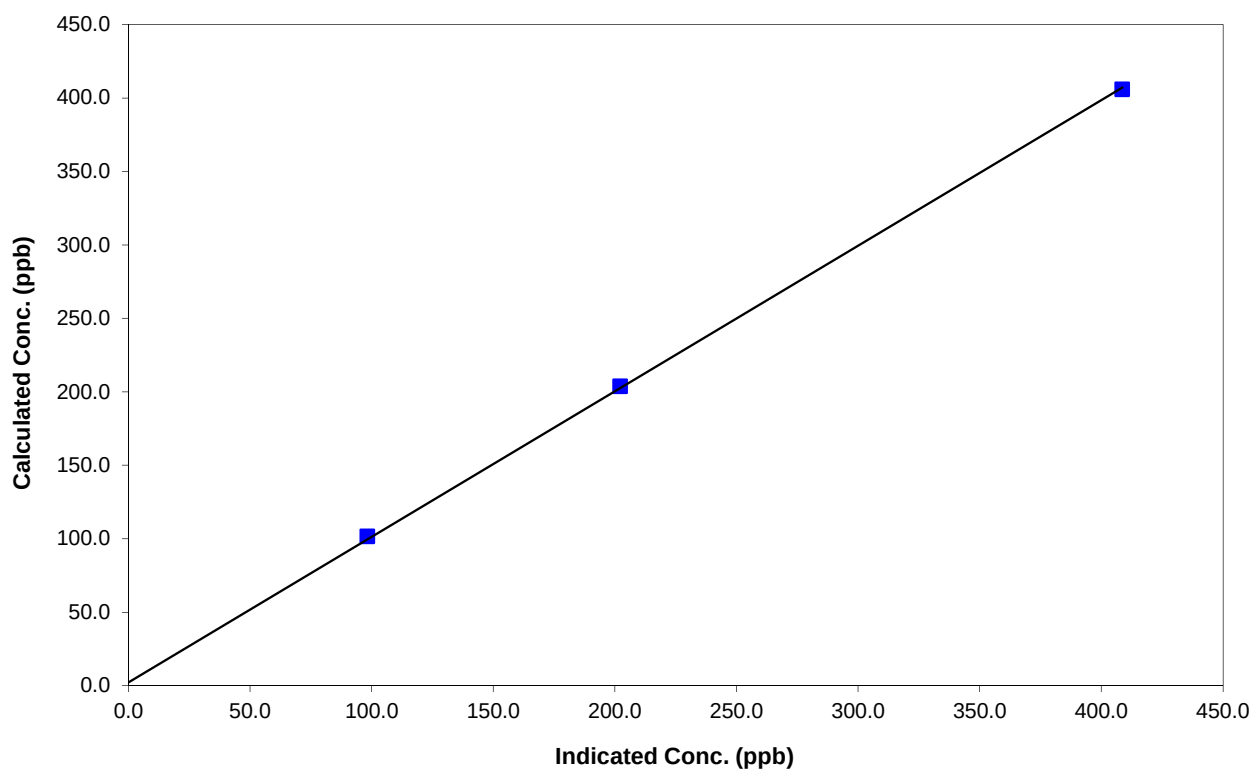
Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:20	End Time (MST)	13:30:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999871
405.9	408.6	0.9936		
203.8	202.2	1.0080		
101.6	98.3	1.0339	Slope	0.990911
			Intercept	2.201995

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



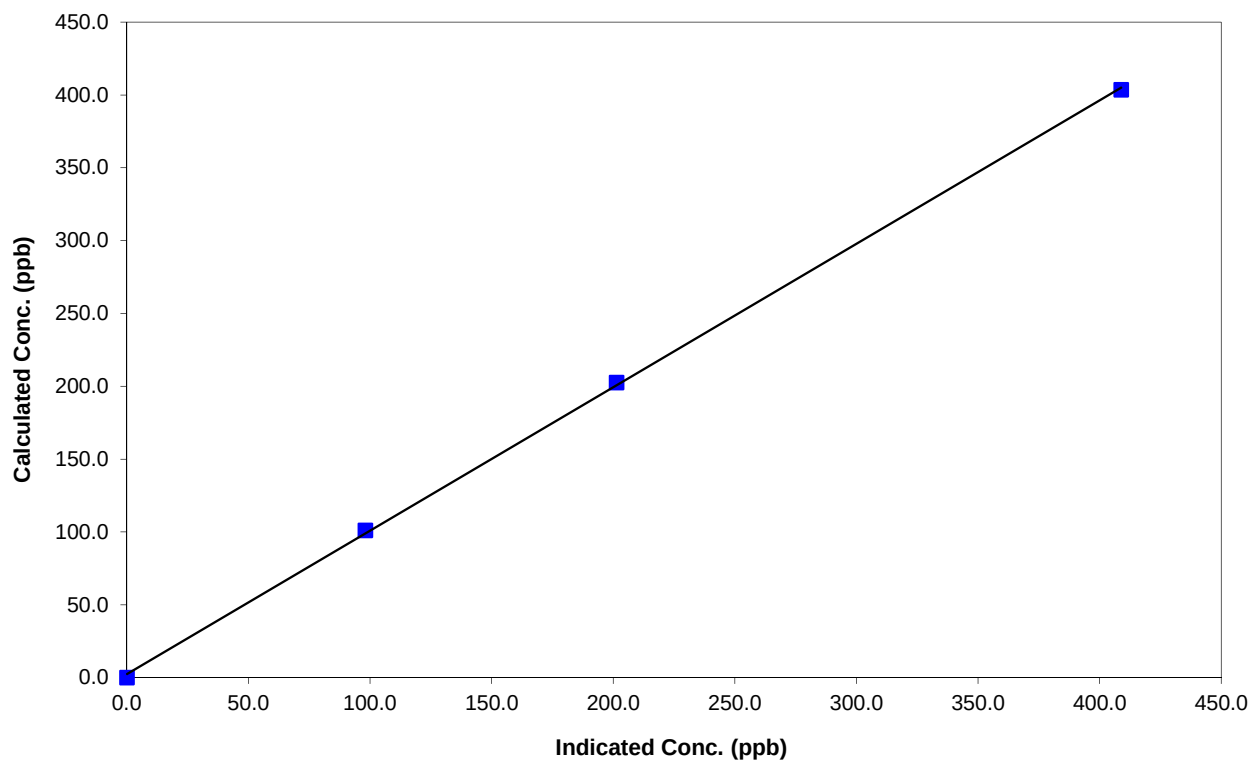
Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:20	End Time (MST)	13:30:00 PM
Analyzer make	42i	Analyzer serial #	906535087

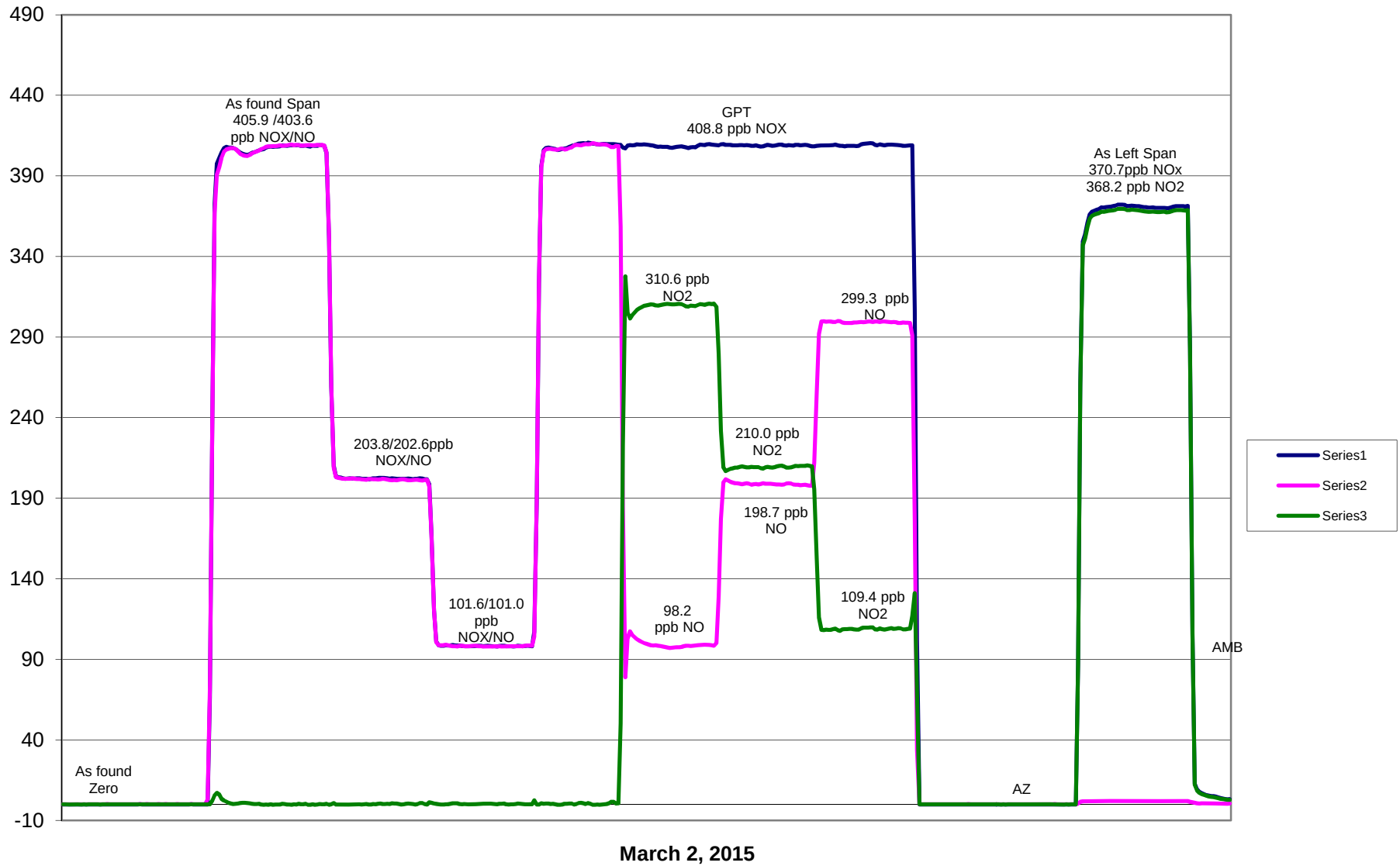
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999826
403.6	408.8	0.9871		
202.6	201.4	1.0057		
101.0	98.2	1.0288	Slope	0.984831
			Intercept	2.331765

NO Calibration Curve



NO_x Calibration



Calibration Report



AIR QUALITY MONITORING

Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	12:30	End Time (MST)	15:15:00 PM
Barometric Pressure	711.000 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	0.991950	Calculated slope	1.012258
Calculated intercept	0.908557	Calculated intercept	-0.105618

Analyzer make	Teco 49C	Analyzer serial #	607415761
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	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	1.008		1.008	
Lamp temp	57	mV	57	mV
Lamp Intensity A/B	98447/92337	mV	98663/92053	mV
Pressure	686.6	mm Hg	692.8	mm Hg
Flow A	0.731	ccm	0.736	ccm
Flow B	0.729	ccm	0.724	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	0.4	N/A
5035	0.3	310.6	307.2	1.0109
5035	0.2	210.0	207.3	1.0130
5035	0.1	109.4	107.8	1.0149
5035	0.0	0.0	0.4	As found zero
5035	0.3	310.6	307.2	As found span
Average Correction Factor				1.0129

Calculated value of As Found Response: 305.3 ppm Percent Change of As Found: -1.7%

	before calibration		after calibration	
Auto zero	0.9	ppb	0.3	ppb
Auto span	445.7	ppb	450.5	ppb

Notes: By accident put punch the wrong concentration on the last dilution point O3.
No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter 03

Air Monitoring Network PAZA



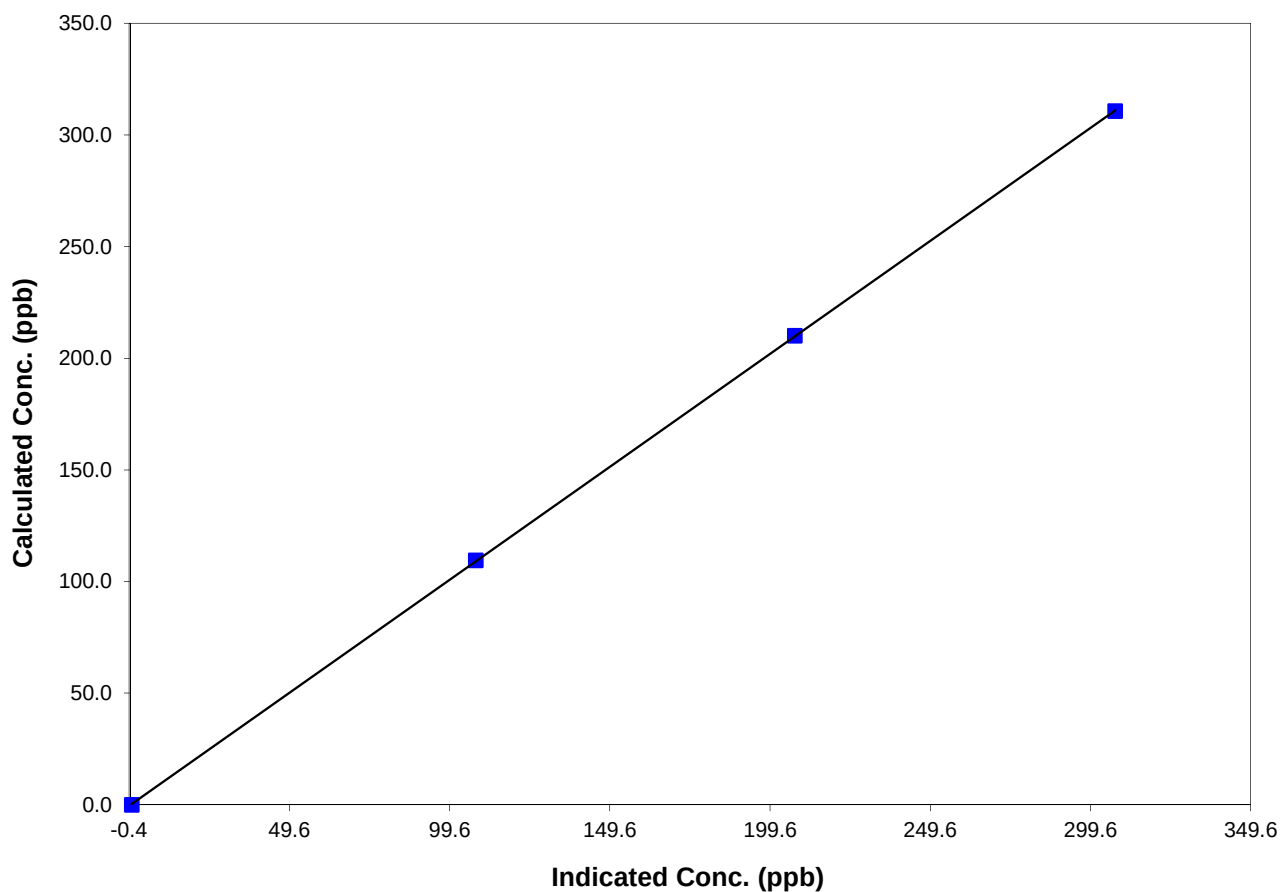
Station Information

Calibration Date	March 2, 2015	Previous Calibration	February 3, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:30	End Time (MST)	15:15:00 PM
Analyzer make/model	Teco 49C	Analyzer serial #	607415761

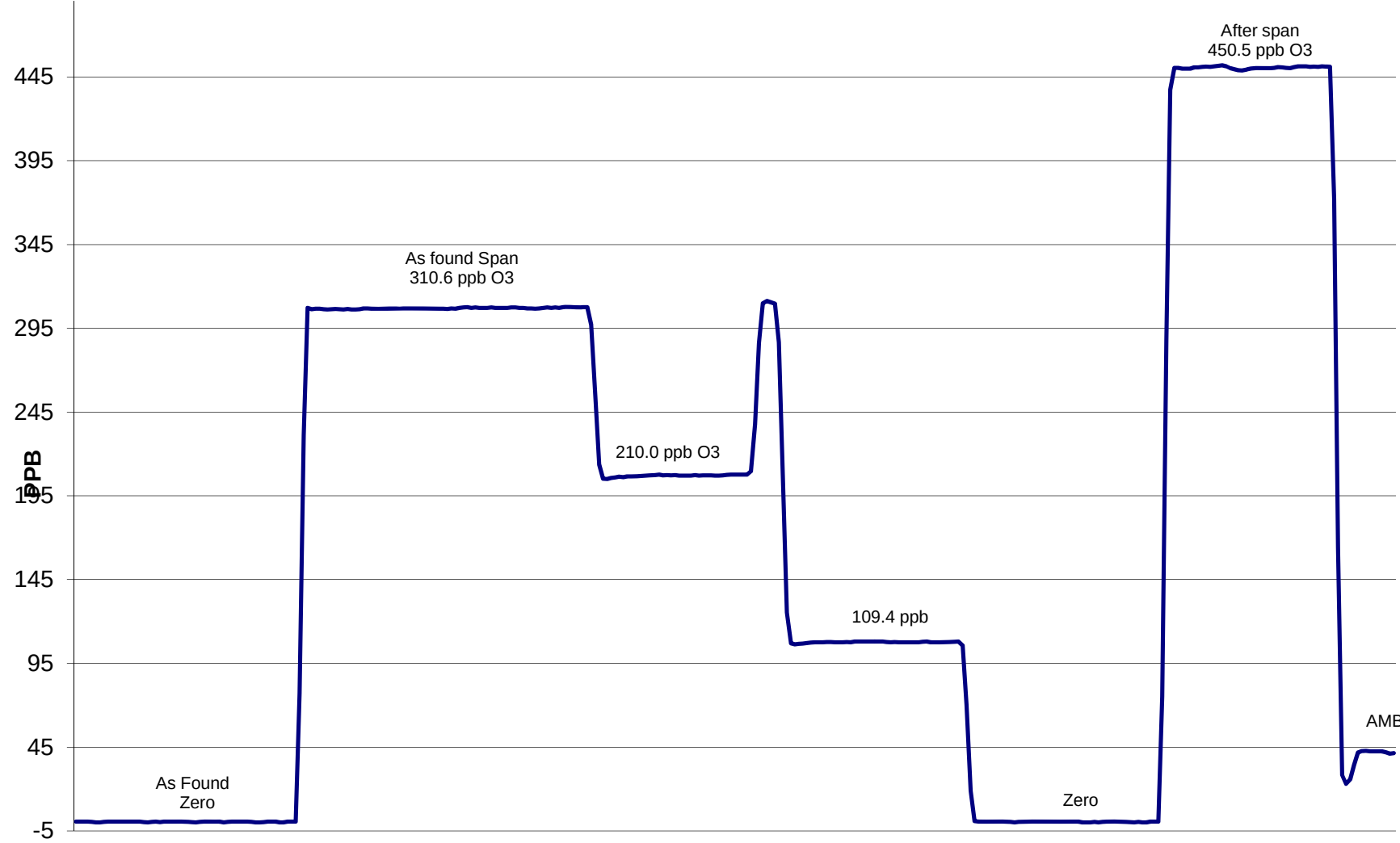
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	NA	Correlation Coefficient	0.999992
310.6	307.2	1.0109		
210.0	207.3	1.0130		
109.4	107.8	1.0149	Slope	1.012258
			Intercept	-0.105618

O3 Calibration Curve



O3 Calibration



March 2, 2015

Calibration Report

Parameter CO

Air Monitoring Network PAZA



Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 17, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	12:05	End Time (MST)	15:20:00 PM
Barometric Pressure	713.0 mm/hg	Station Temperature	22.0 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 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	0.999476	Calculated slope	1.000921
Calculated intercept	-0.003832	Calculated intercept	-0.019430
Analyzer make	Model 48I-TLE	Analyzer serial #	1408761378

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO zero setting	0.108		0.449	
CO span setting	1.001		1.001	
Sample pressure	716.9	mm Hg	702.8	mm Hg
Sample Flow	0.468	LPM	0.460	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	0.00	N/A
4995	69.94	40.02	40.00	1.0005
4995	34.96	20.14	20.13	1.0005
4995	17.96	10.38	10.42	0.9963
4995	0.00	0.00	0.34	As Found Zero
4995	69.94	40.02	40.89	As Found Span
Average Correction Factor				0.9991

Calculated value of As Found Response: 40.526 ppm Percent Change of As Found: -1.3%

	before calibration		after calibration	
Auto zero	-0.02	ppm	0.01	ppm
Auto span	19.89	ppm	19.90	ppm

Notes: Zero adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CO
Air Monitoring Network PAZA



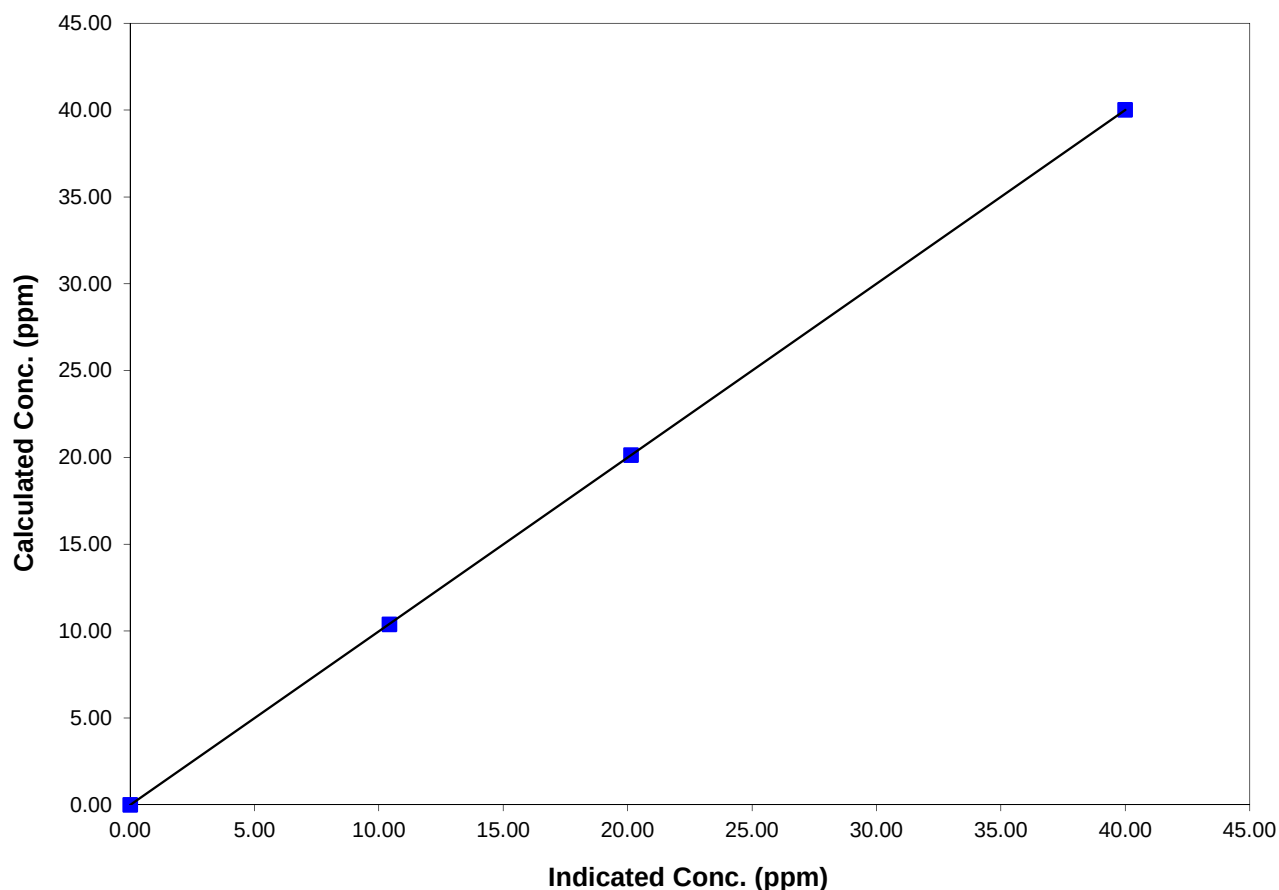
Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 17, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:05	End Time (MST)	15:20:00 PM
Analyzer make/model	Model 48I-TLE	Analyzer serial #	1408761378

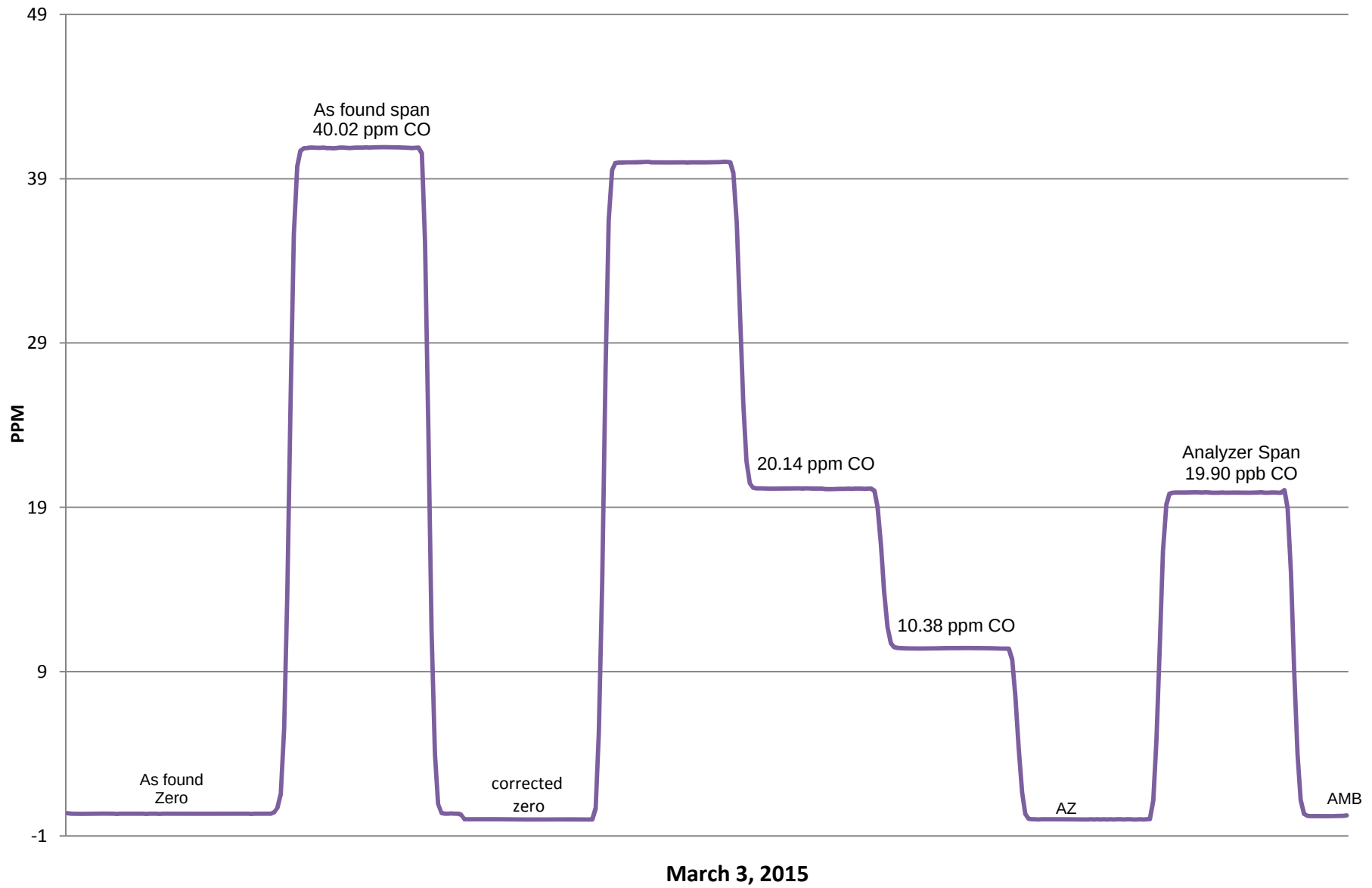
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.004	N/A	Correlation Coefficient	0.999999
40.017	39.998	1.0005		
20.142	20.132	1.0005		
10.383	10.421	0.9963	Slope	1.000921
			Intercept	-0.019430

CO Calibration Curve



CO Calibration



Calibration Report



Parameter CH4 / NMHC / THC

Air Monitoring Network PAZA

Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	10:40	End Time (MST)	13:10:00 PM
Barometric Pressure	713.00 mm/hg	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas CH4 Conc	386 ppm CH4	Cal Gas Expiry Date	28/03/2014
Cal Gas C3H8 Conc	207 569.25 ppm CH4	Cal Gas Cylinder #	LL34318
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 11,12,13

Analyzer make	TEI 55I	Analyzer serial #	1134650658
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	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	27.8	PSI	27.8	PSI
Fuel pressure	42.1	PSI	42.1	PSI
Carrier pressure	30.3	PSI	30.3	PSI
CH4 cal factor	5.78		5.78	E ⁻⁴
NMHC cal factor	1.93		1.93	E ⁻⁴
Rt	12.74	Sec	12.74	Sec
Pk Index	23.22		23.22	

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	12.95	0.9954
1996	40.96	7.76	7.76	1.0006
1996	15.99	3.07	3.03	1.0124
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	12.95	As Found Span
Average Correction Factor				1.0028

Calculated value of As Found Response: 13.105 ppm Percent Change of As Found: -1.7%

	Before		After
Calculated slope	1.011966	Calculated slope	0.995807
Calculated intercept	0.019301	Calculated intercept	0.015595

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	8.76	ppm	8.93	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	19.31	0.9844
1996	40.96	11.45	11.81	0.9693
1996	15.99	4.52	4.69	0.9649
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	19.31	As Found Span
Average Correction Factor				0.9729

Calculated value of As Found Response: 19.179 ppm Percent Change of As Found: -0.9%

	<u>Before</u>		<u>After</u>
Calculated slope	0.996244	Calculated slope	0.984712
Calculated intercept	-0.039710	Calculated intercept	-0.074858

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	12.25	ppm	12.75	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	32.24	0.9896
1996	40.96	19.21	19.55	0.9826
1996	15.99	7.59	7.71	0.9852
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	32.24	As Found Span
Average Correction Factor				0.9858

Calculated value of As Found Response: 32.294 ppm Percent Change of As Found: -1.3%

	<u>Before</u>		<u>After</u>
Calculated slope	1.003139	Calculated slope	0.989761
Calculated intercept	-0.015124	Calculated intercept	-0.053429

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	21.01	ppm	21.68	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CH4

Air Monitoring Network PAZA



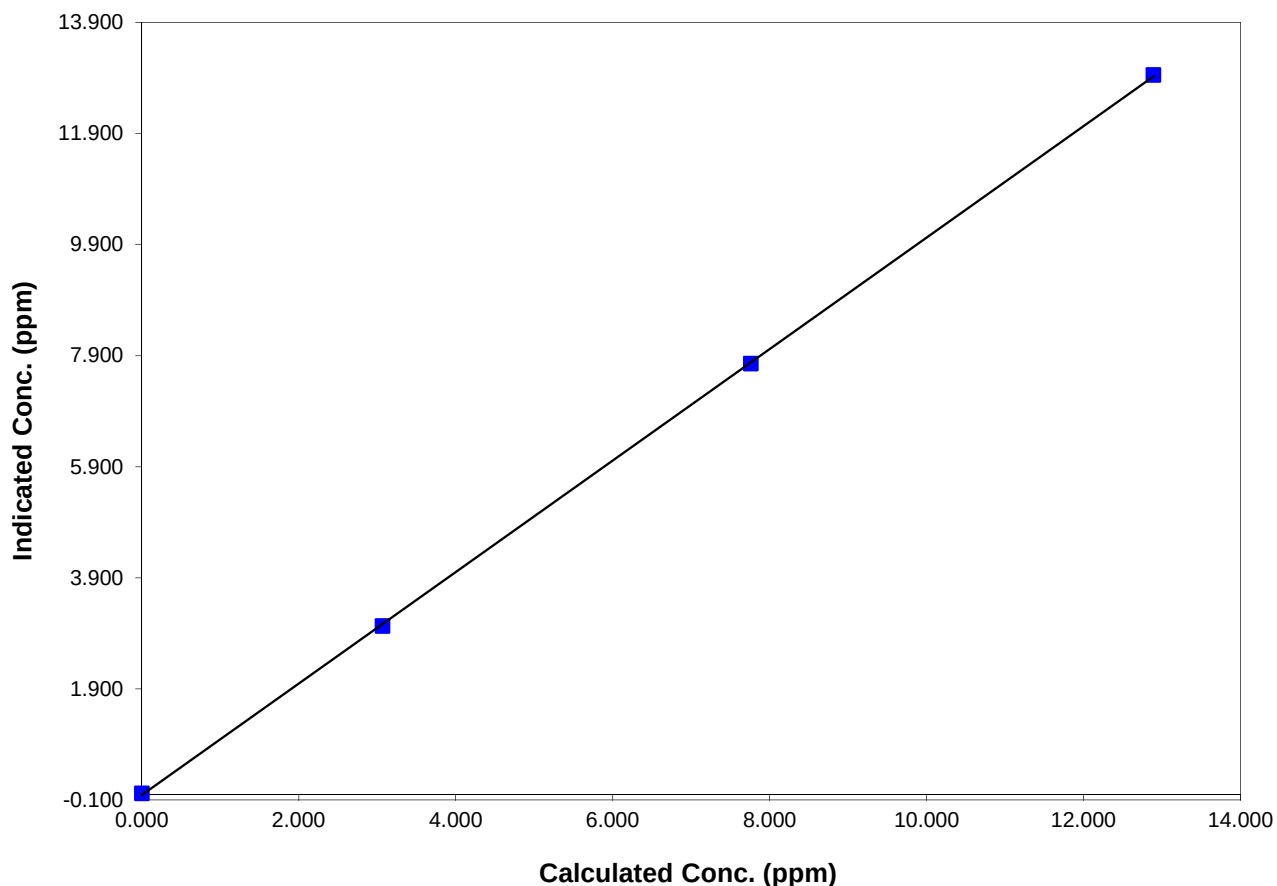
Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:40	End Time (MST)	13:10:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.020	N/A	Correlation Coefficient	0.999965
12.891	12.950	0.9954		
7.762	7.757	1.0006		
3.068	3.030	1.0124	Slope	0.995807
			Intercept	0.015595

CH4 Calibration Data



Calibration Summary

Parameter NMHC

Air Monitoring Network PAZA



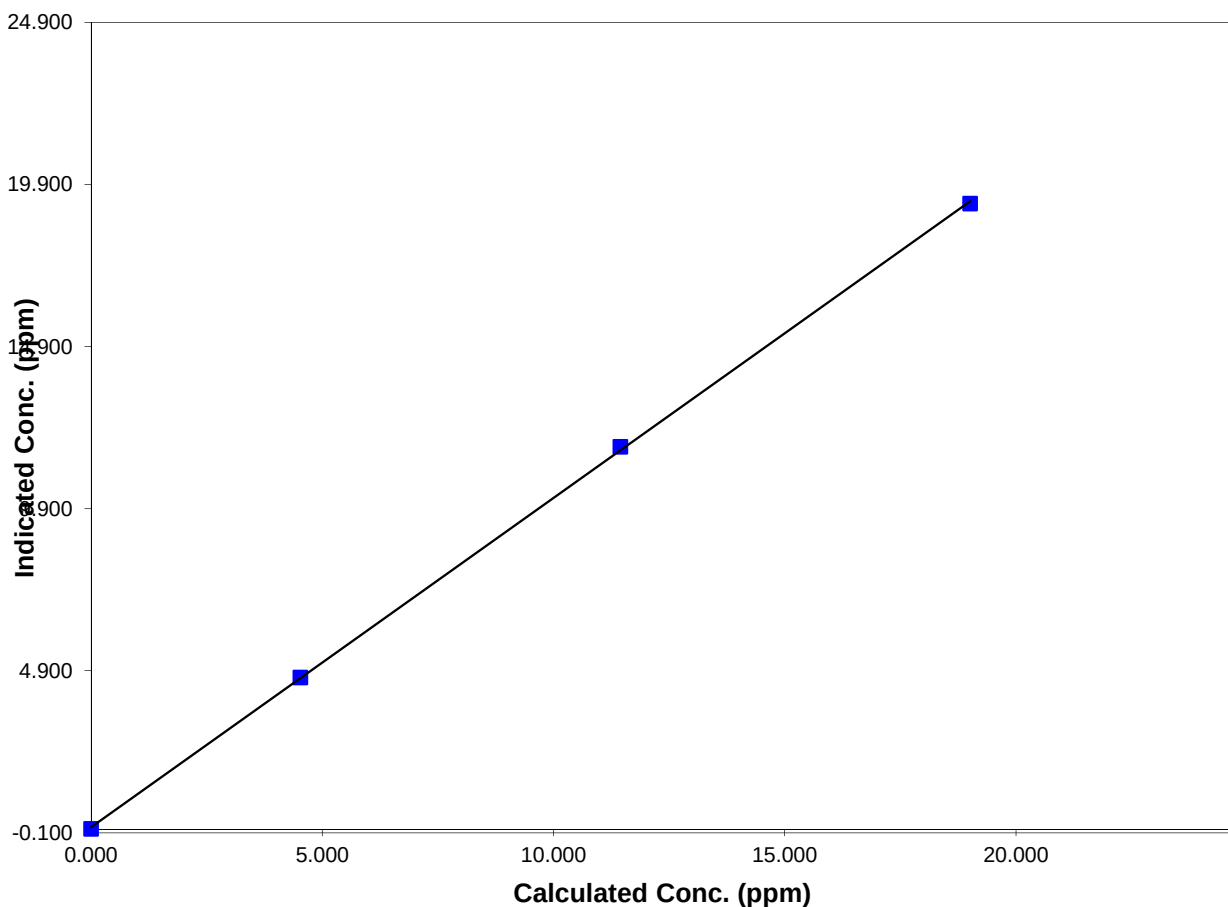
Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:40	End Time (MST)	13:10:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.020	N/A	Correlation Coefficient	0.999905
19.010	19.311	0.9844		
11.447	11.809	0.9693		
4.524	4.689	0.9649	Slope	0.984712
			Intercept	-0.074858

NMHC Calibration Data



Calibration Summary

Parameter THC

Air Monitoring Network PAZA



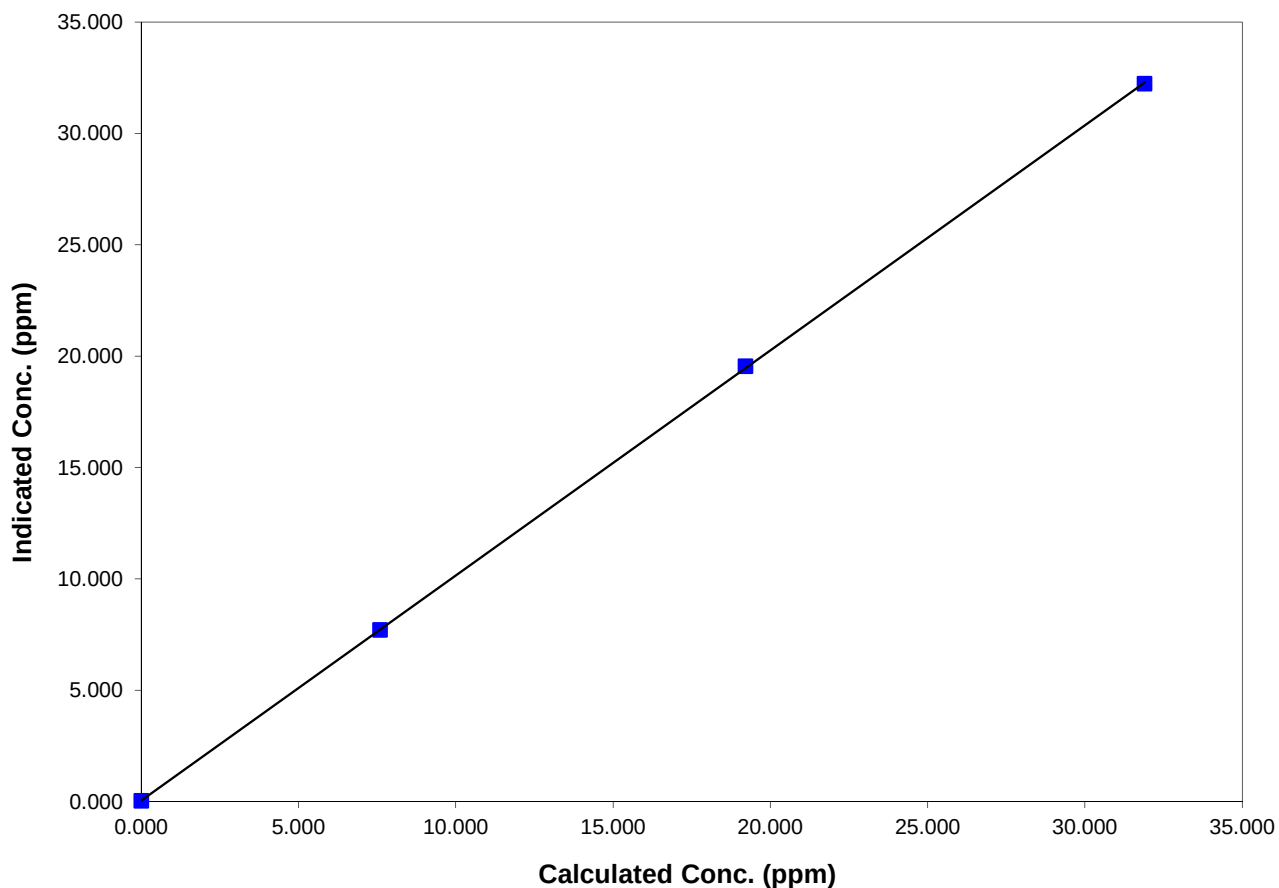
Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:40	End Time (MST)	13:10:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

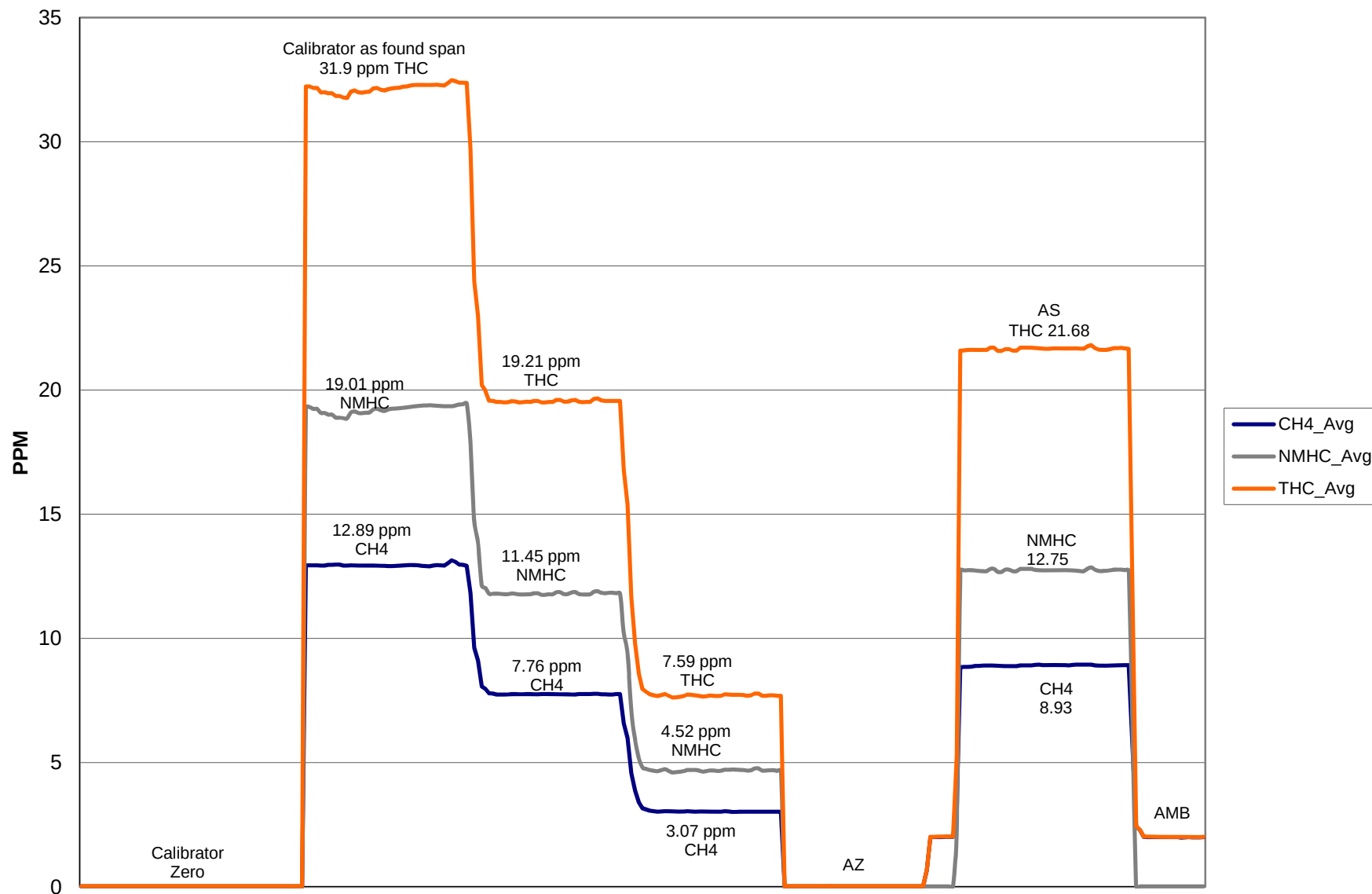
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.034	N/A	Correlation Coefficient	0.999982
31.901	32.236	0.9896		
19.209	19.549	0.9826		
7.592	7.706	0.9852	Slope	0.989761
			Intercept	-0.053429

THC Calibration Data



THC/CH₄/NMHC Calibration



Calibration Report

Parameter TRS

Air Monitoring Network PAZA



Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	8:20	End Time (MST)	11:50
Barometric Pressure	713.00 mm/Hg	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Conc	10.32 ppb	Cal Gas Expiry Date	08/07/2016
		Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.007799	Calculated slope	1.028653
Calculated intercept	0.195060	Calculated intercept	-0.142053
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.950		0.950	
Background	16.9		16.9	
Pressure	665.9	mm Hg	667	mm Hg
Flow	0.45	ccm	0.452	ccm
Lamp Voltage	886	v	886	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	0.09	N/A
4995	39.93	81.84	79.73	1.0265
4995	19.95	41.05	39.94	1.0278
6995	9.95	14.66	14.51	1.0100
4995	0.00	0.00	0.09	As Found Zero
4995	39.93	81.84	79.73	As Found Span
Average Correction Factor				1.0214

Calculated value of As Found Response: 80.5 ppb Percent Change of As Found: 1.7%

	before calibration		after calibration	
Auto zero	0.07	ppb	0.22	ppb
Auto span	34.88	ppb	33.50	ppb

Notes: Slow response on the as found span-left the point run longer
 Analyzer needs new parts or replacement
 No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



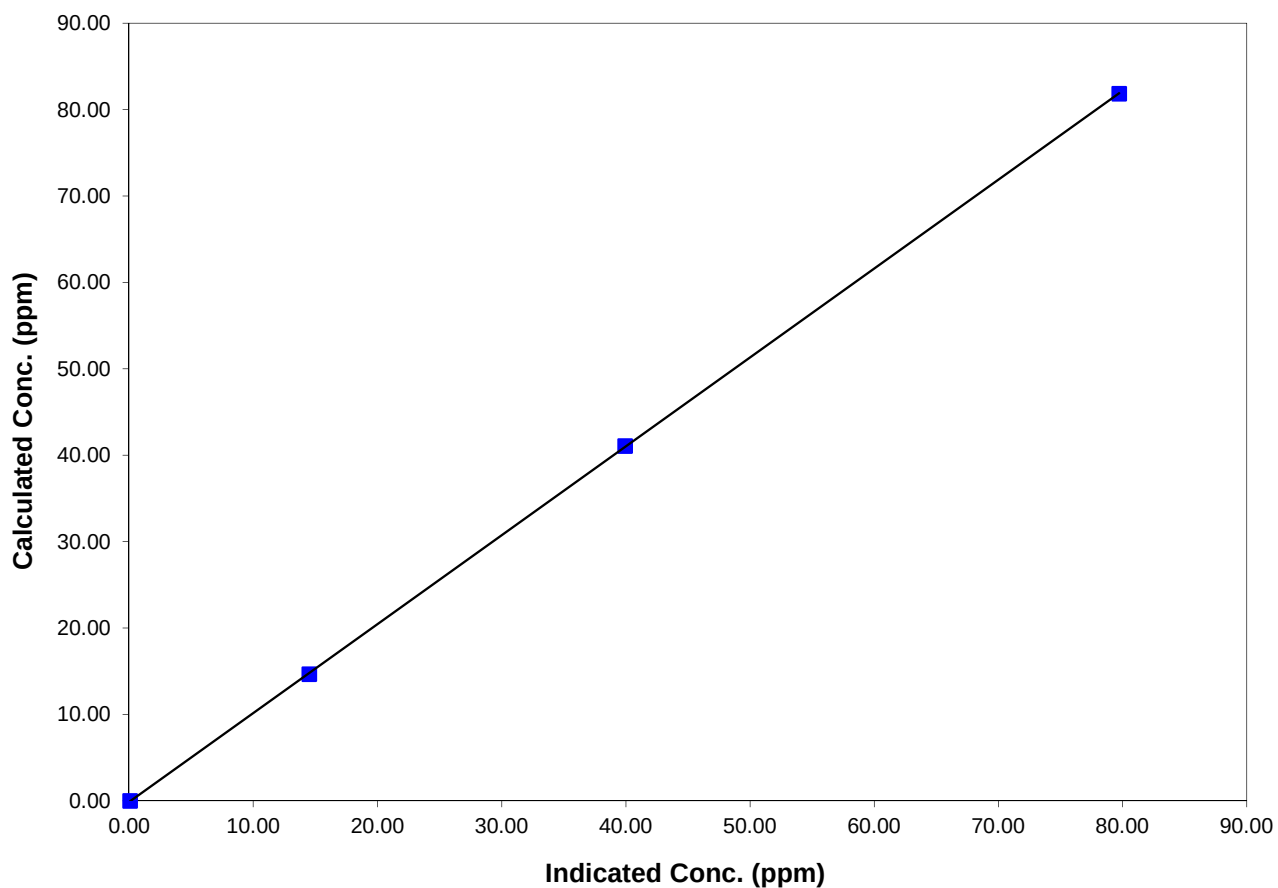
Station Information

Calibration Date	March 3, 2015	Previous Calibration	February 2, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:20	End Time (MST)	11:50
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

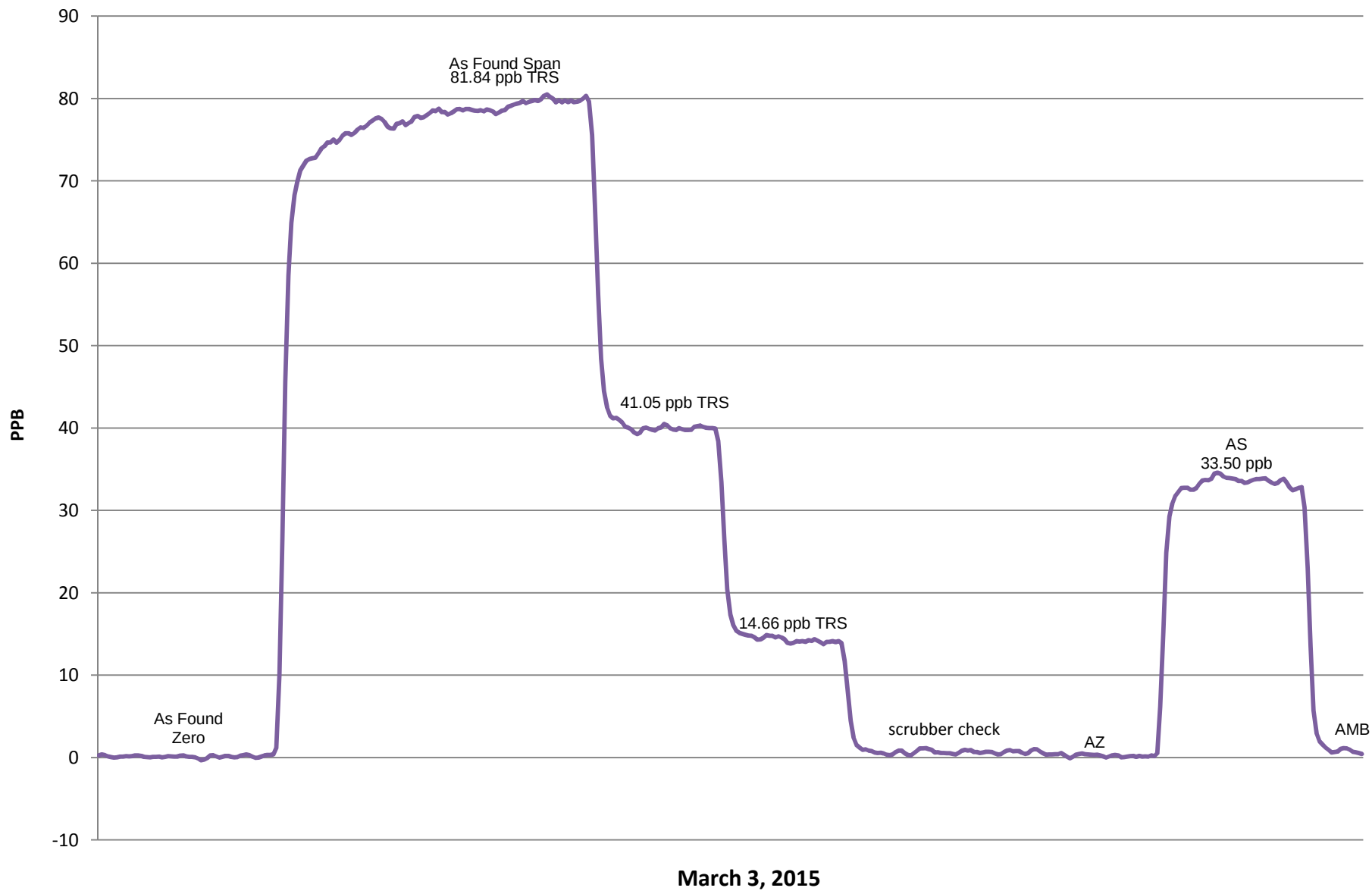
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.089	N/A	Correlation Coefficient	0.999992
81.844	79.732	1.0265		
41.054	39.943	1.0278		
14.659	14.513	1.0100	Slope	1.028653
			Intercept	-0.142053

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	March 10 2015	Previous Calibration	February 4 2015
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	10:25	End Time (MST)	12:45
Barometric Pressure	0.921 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	0.031307	Cal Gas Cylinder #	LL105159
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.990750	Calculated slope	0.986076
Calculated intercept	1.113316	Calculated intercept	2.050357
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.7		11.7	
coefficient	1.24		1.24	
Lamp Voltage	829	volts	830	volts
Chamber Temp	45.3	Deg C	45	Deg C
Perm Gas Temp	44.98	Deg C	45	Deg C
Pressure	666.8	mm Hg	667.2	mm Hg
Sample Flow	0.45	ccm	0.45	ccm
Lamp Intensity	89	%	89	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.3	N/A
4995	39.93	394.9	399.5	0.9887
4995	19.97	198.3	198.2	1.0007
4995	9.97	99.2	96.0	1.0333
4995	0.0	0.0	0.3	As Found Zero
4995	39.93	394.9	399.5	As Found Span
Average Correction Factor				1.0076

Calculated value of As Found Response: 396.623 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	0.4	ppm	0.3	ppm
Auto span	259.4	ppm	258.9	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



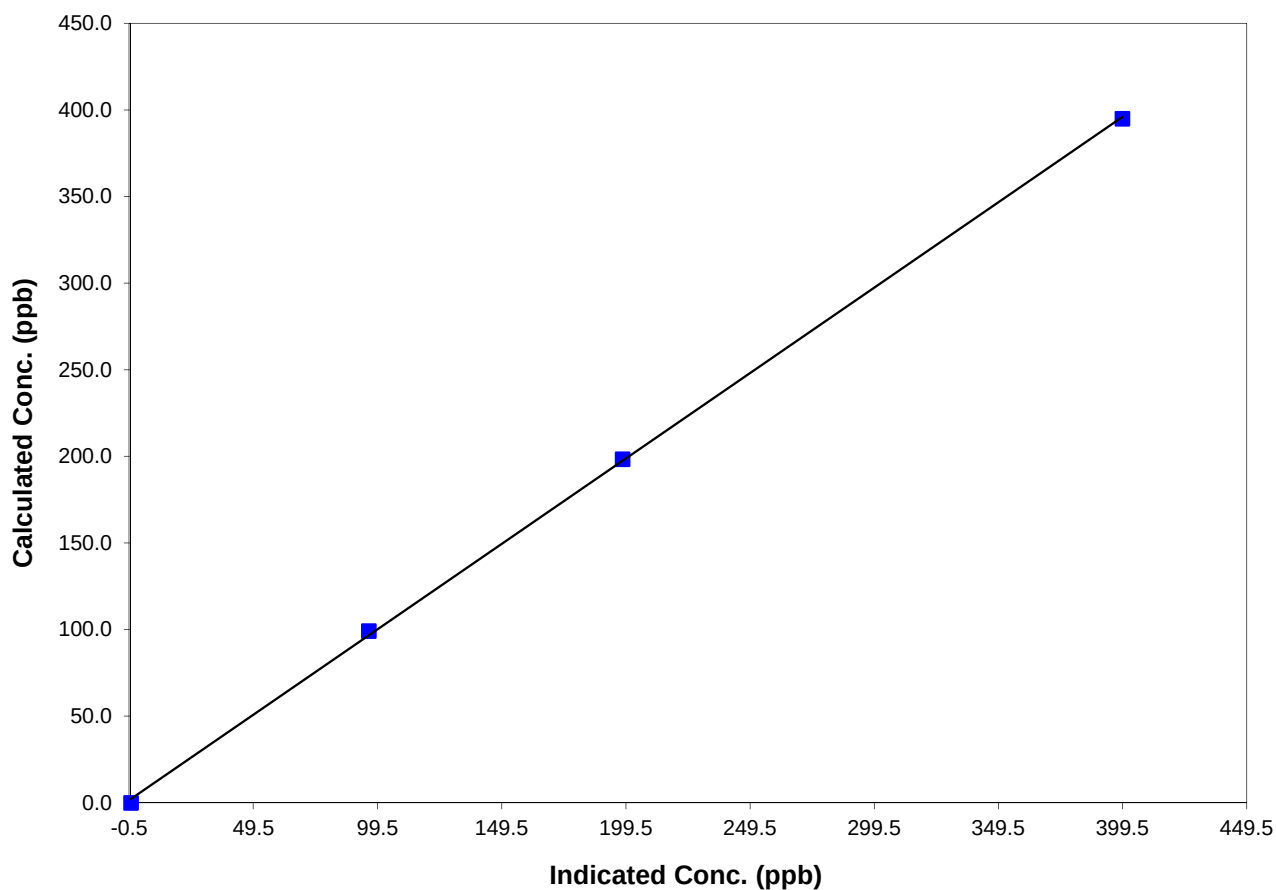
Station Information

Calibration Date	March 10 2015	Previous Calibration	February 4 2015
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:25	End Time (MST)	12:45
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

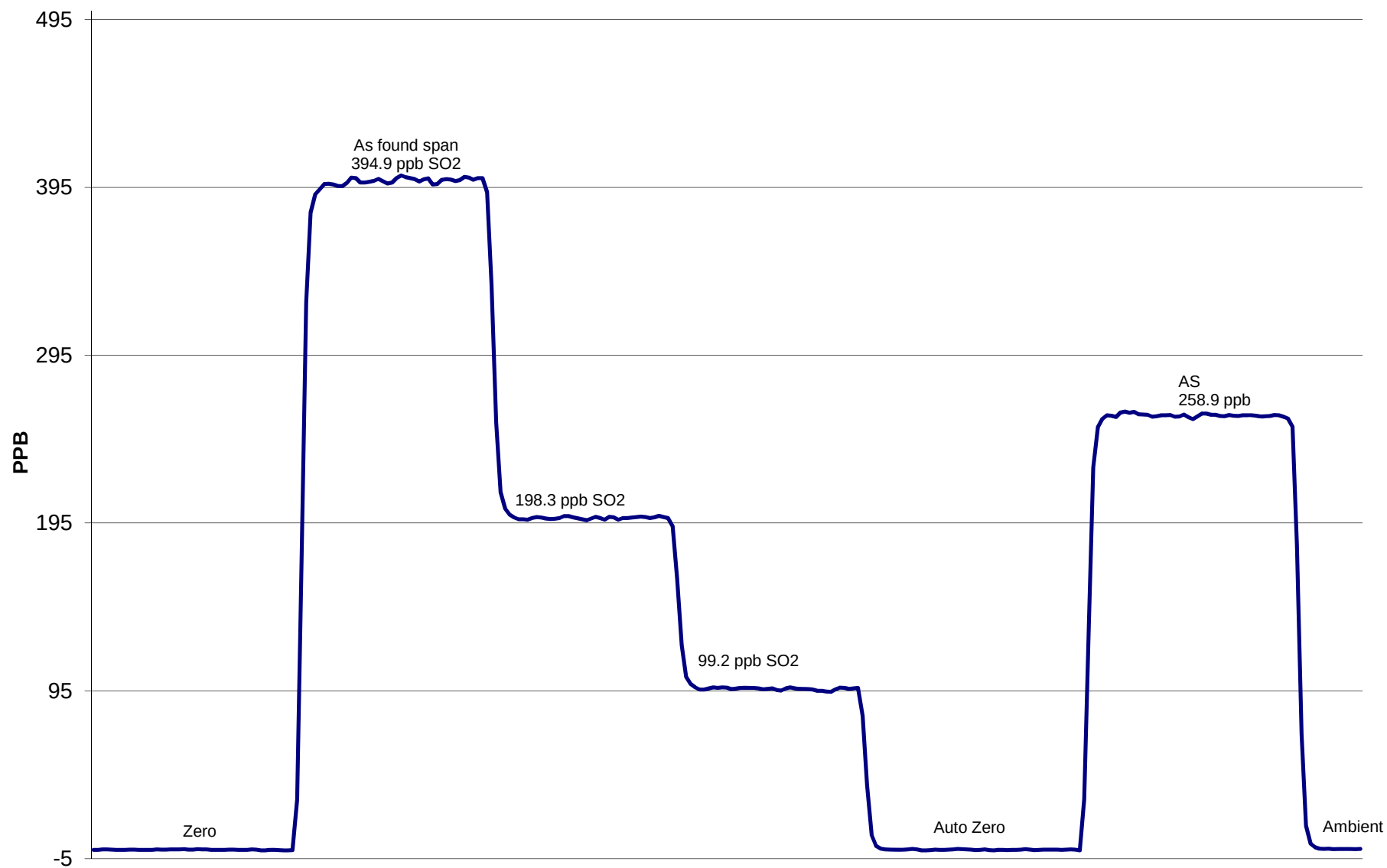
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999844
394.9	399.5	0.9887		
198.3	198.2	1.0007		
99.2	96.0	1.0333	Slope	0.986076
			Intercept	2.050357

SO2 Calibration Curve



SO2 Calibration



March 10 2015

Calibration Report



Parameter TRS

Air Monitoring Network PAZA

Station Information

Calibration Date	March 10 2015	Previous Calibration	February 4 2015
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	8:30	End Time (MST)	11:40
Barometric Pressure	0.921 ATM	Station Temperature	22.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031095	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	1.007550	Calculated slope	1.006731
Calculated intercept	0.322352	Calculated intercept	-0.141502

Analyzer make TEI Model 43C Analyzer serial # 3.199E+13

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	41	ppb	41	ppb
coefficient	0.989		0.989	
Lamp Voltage	1058	volts	1059	volts
Chamber Temp	44.3	Deg C	44.4	Deg C
Perm Gas Temp	44.99	Deg C	45	Deg C
Pressure	639.3	mm Hg	640.1	mm Hg
Sample Flow	0.611	ccm	0.611	ccm
Lamp Intensity	31,148	mv	31,422	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	81.84	81.5	1.0044
4995	19.97	41.10	40.9	1.0036
6995	9.97	14.69	14.5	1.0138
4995	9.97		1.1	Sox Test
4995	0.00	0.00	0.3	As Found Zero
4995	39.93	81.84	81.5	As Found Span
Average Correction Factor				1.0073

Calculated value of As Found Response: 82.07 ppm Percent Change of As Found: **-0.3%**

	before calibration		after calibration	
Auto zero	-0.1	ppm	0.6	ppm
Auto span	73.1	ppm	72.7	ppm

Notes: No adjustment made

Calibration Performed By: Dmyrtro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



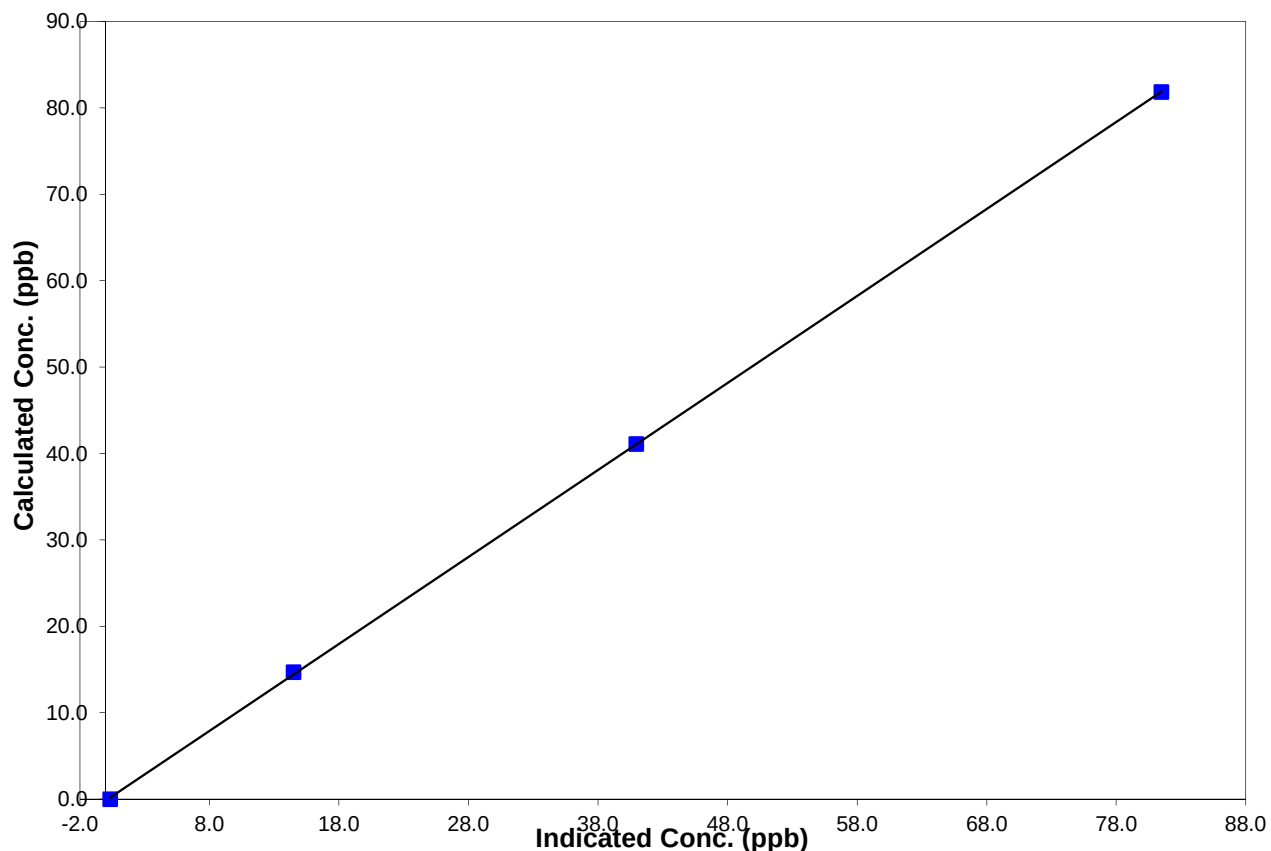
Station Information

Calibration Date	March 10 2015	Previous Calibration	February 4 2015
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:30	End Time (MST)	11:40
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

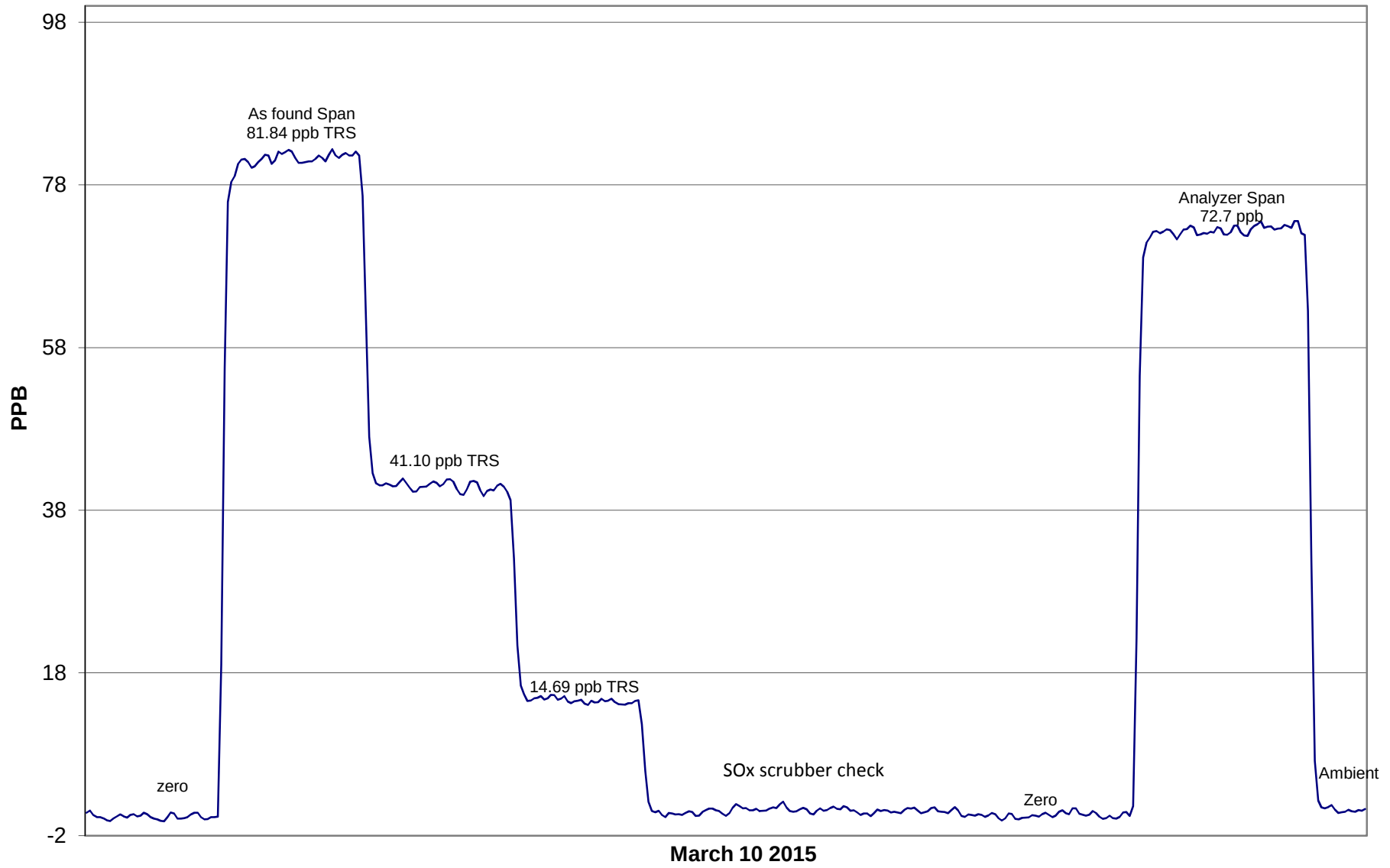
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999973
81.8	81.5	1.0044		
41.1	40.9	1.0036		
14.7	14.5	1.0138	Slope	1.006731
			Intercept	-0.141502

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	March 20, 2015	Previous Calibration	February 5, 2015
Station Number	3	Station Location	Smokey Heights
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:
Start Time (MST)	10:30	End Time (MST)	13:30:00 AM
Barometric Pressure	0.930 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	0.031613	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	1.001319	Calculated slope	0.998528
Calculated intercept	0.715738	Calculated intercept	1.271437
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	12.1		11.3	
coefficient	0.952		0.934	
Lamp Voltage	936	volts	936	volts
Chamber Temp	45.1	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	671.4	mm Hg	671.4	mm Hg
Sample Flow	0.449	lpm	0.449	lpm
Lamp Intensity	88	%	88	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.5	N/A
4995	39.93	394.94	395.1	0.9995
4995	19.97	198.31	196.4	1.0097
4995	9.97	99.20	96.4	1.0294
4995	0.0	0.00	0.5	As Found Zero
4995	39.93	394.94	402.4	As Found Span
Average Correction Factor				1.0129

Calculated value of As Found Response: 403.173 ppm Percent Change of As Found: -2.1%

	before calibration		after calibration	
Auto zero	0.5	ppb	0.5	ppb
Auto span	254.4	ppb	248.9	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



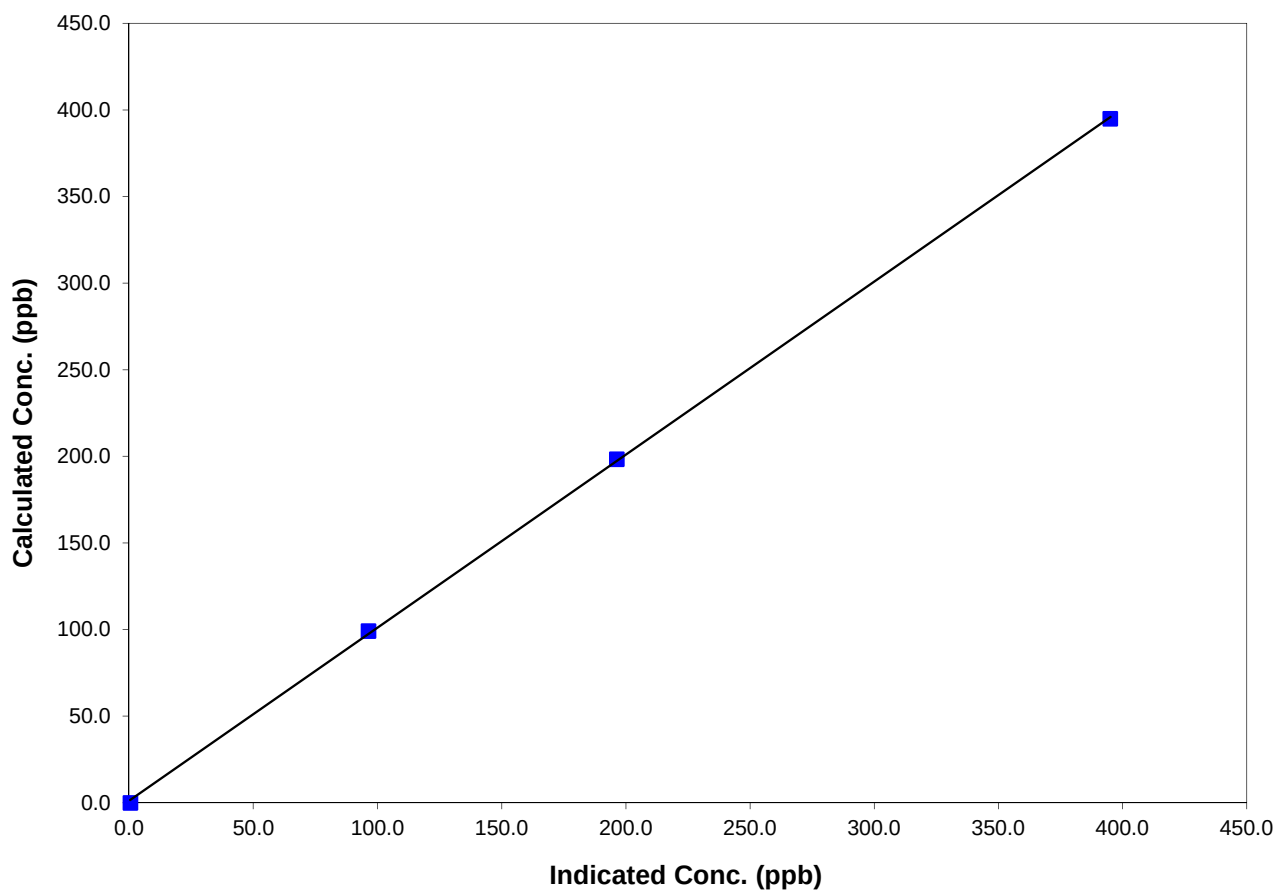
Station Information

Calibration Date	March 20, 2015	Previous Calibration	February 5, 2015
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	10:30	End Time (MST)	13:30:00 AM
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

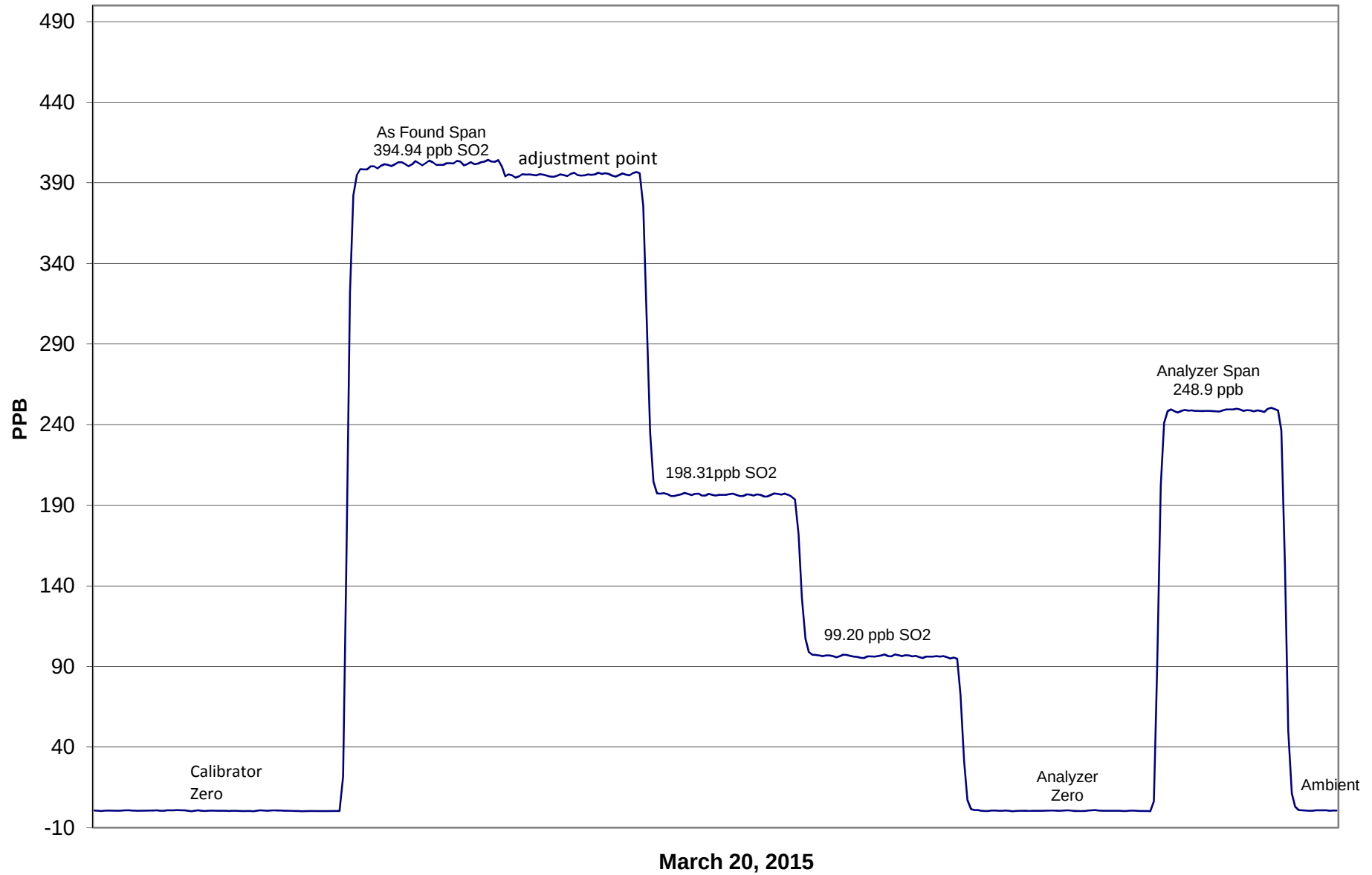
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999911
394.9	395.1	0.9995		
198.3	196.4	1.0097		
99.2	96.4	1.0294	Slope	0.998528
			Intercept	1.271437

SO2 Calibration Curve



Smokey Heights SO₂ Calibration



Calibration Report



Parameter TRS

Air Monitoring Network PAZA

Station Information

Calibration Date	March 20, 2015	Previous Calibration	March 20, 2015
Station Number	3	Station Location	Smokey Heights
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	9:00	End Time (MST)	11:50
Barometric Pressure	0.930 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	0.031613	Cal Gas Cylinder #	BLM00586
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.997872	Calculated slope	1.000823
Calculated intercept	0.485333	Calculated intercept	0.450795

Analyzer make TEI Model 43C Analyzer serial # 0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	19.8	ppb	19.8	ppb
coefficient	0.983		0.983	
Lamp Voltage	850	volts	849	volts
Chamber Temp	43.9	Deg C	43.9	Deg C
Perm Gas Temp	45	Deg C	45.01	Deg C
Pressure	610.7	mm Hg	610.7	mm Hg
Sample Flow	0.629	lpm	0.630	lpm
Lamp Intensity	34,830	mv	34,916	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	39.93	81.84	81.6	1.0028
4995	19.97	41.10	40.2	1.0226
6995	9.97	14.69	13.8	1.0679
4995	9.97		0.4	Sox test
4995	0.0	0.00	0.2	As Found Zero
4995	39.93	81.84	81.6	As Found Span
Average Correction Factor				1.0311

Calculated value of As Found Response: 81.77 ppm Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	-0.1	ppm	0.2	ppm
Auto span	32.1	ppm	31.7	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



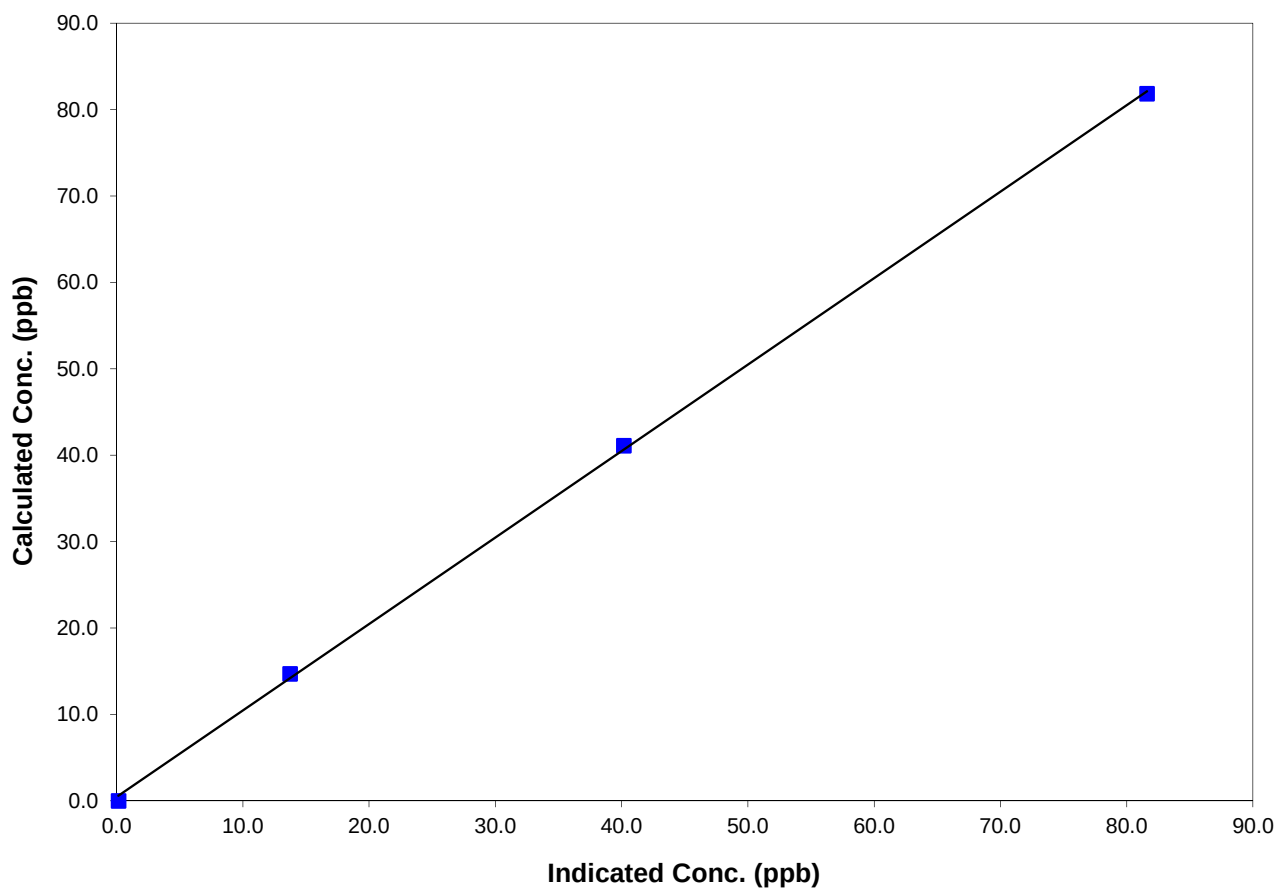
Station Information

Calibration Date	March 20, 2015	Previous Calibration	March 20, 2015
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	9:00	End Time (MST)	11:50
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

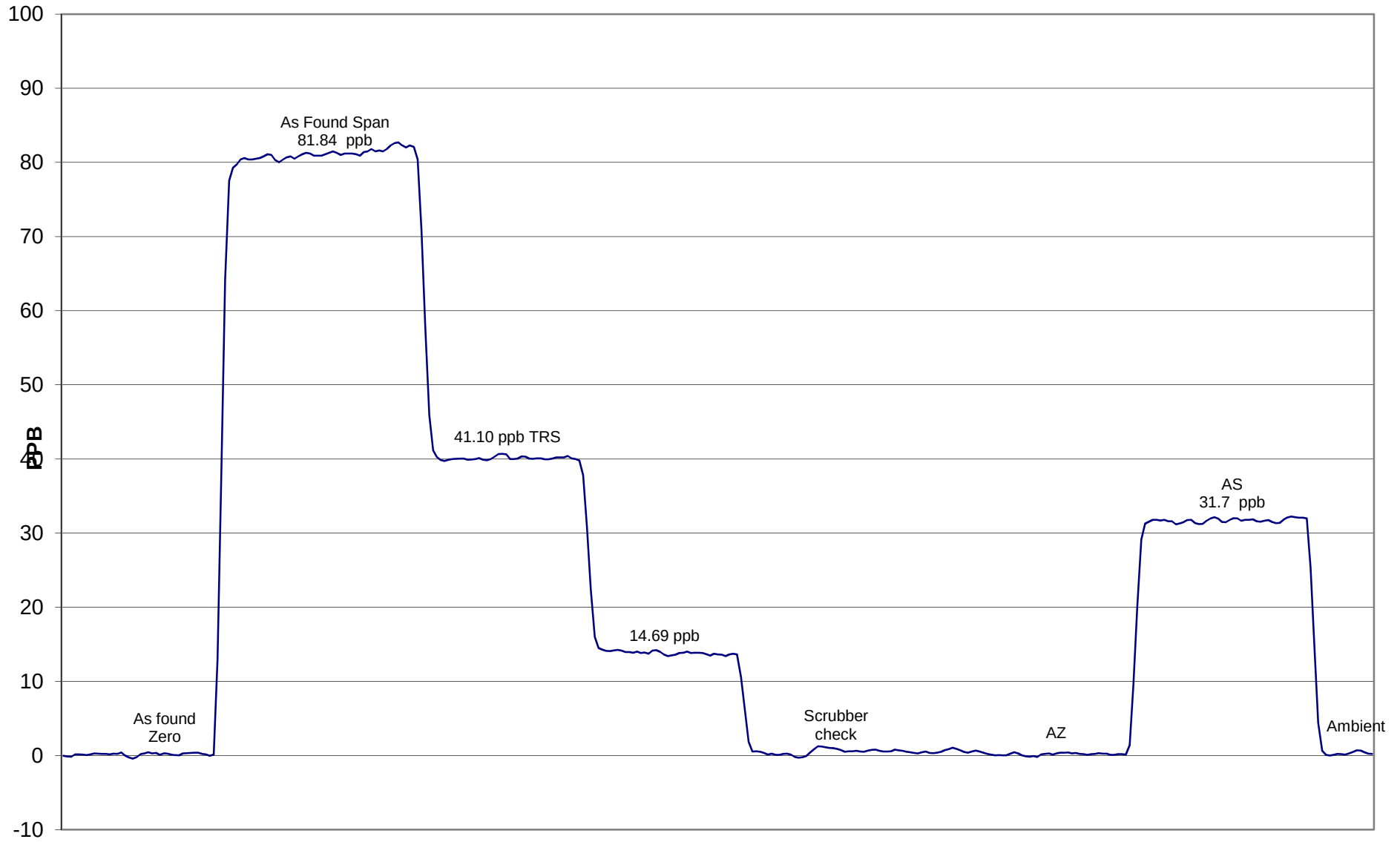
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999779
81.8	81.6	1.0028		
41.1	40.2	1.0226		
14.7	13.8	1.0679	Slope	1.000823
			Intercept	0.450795

TRS Calibration Curve



Smokey Heights TRS Calibration



March 20, 2015

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	March 5, 2015	Previous Calibration	February 12, 2015
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Start Time (MST)	8:40	End Time (MST)	23:30
Barometric Pressure	0.925 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	10.8 ppm	Cal Gas Expiry Date	28/09/2012
Gas Cert Reference	FF14871		
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.993525	Calculated slope	0.999682
Calculated intercept	-0.047928	Calculated intercept	0.047077
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.75		2.69	
Coefficient	1.053		1.038	
PMT	-767.8	V	-767.8	V
UV Lamp Voltage	1089	V	1089	V
Chamber Temp	45	Deg C	45	Deg C
Pressure	664.3	mm Hg	668.2	mm Hg
Sample Flow	0.527	LPM	0.531	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	0.2	N/A
4994	39.92	85.6	85.7	0.9993
4994	19.96	43.0	42.9	1.0016
4994	9.96	21.5	21.2	1.0141
4994	0.00	0.0	0.2	As found zero
4994	39.92	85.6	87.1	As found span
Average Correction Factor				1.0050

Calculated value of As Found Response: 86.360 ppm Percent Change of As Found: -0.8%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.2	ppb
Auto span	60.1	ppb	60.2	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



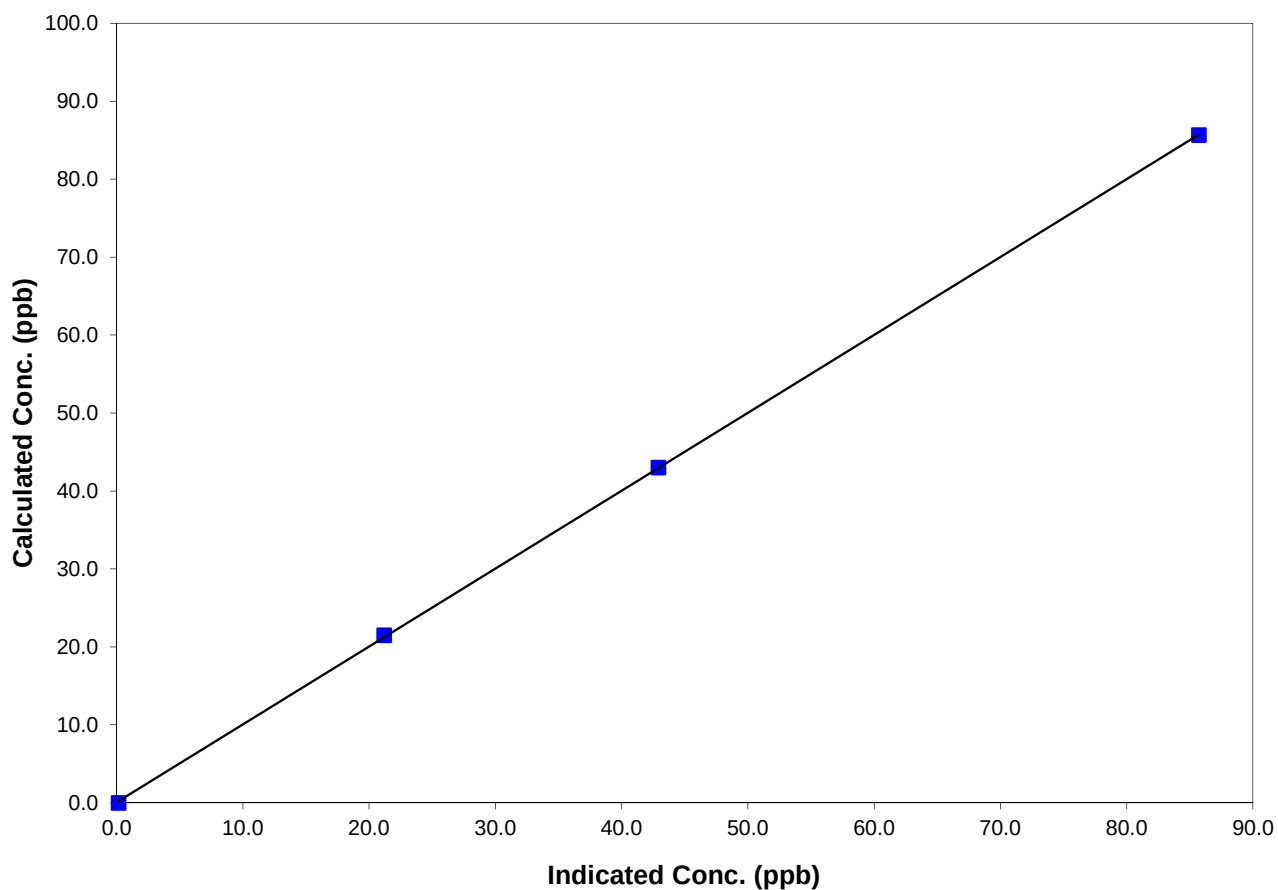
Station Information

Calibration Date	March 5, 2015	Previous Calibration	February 12, 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:40	End Time (MST)	23:30
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

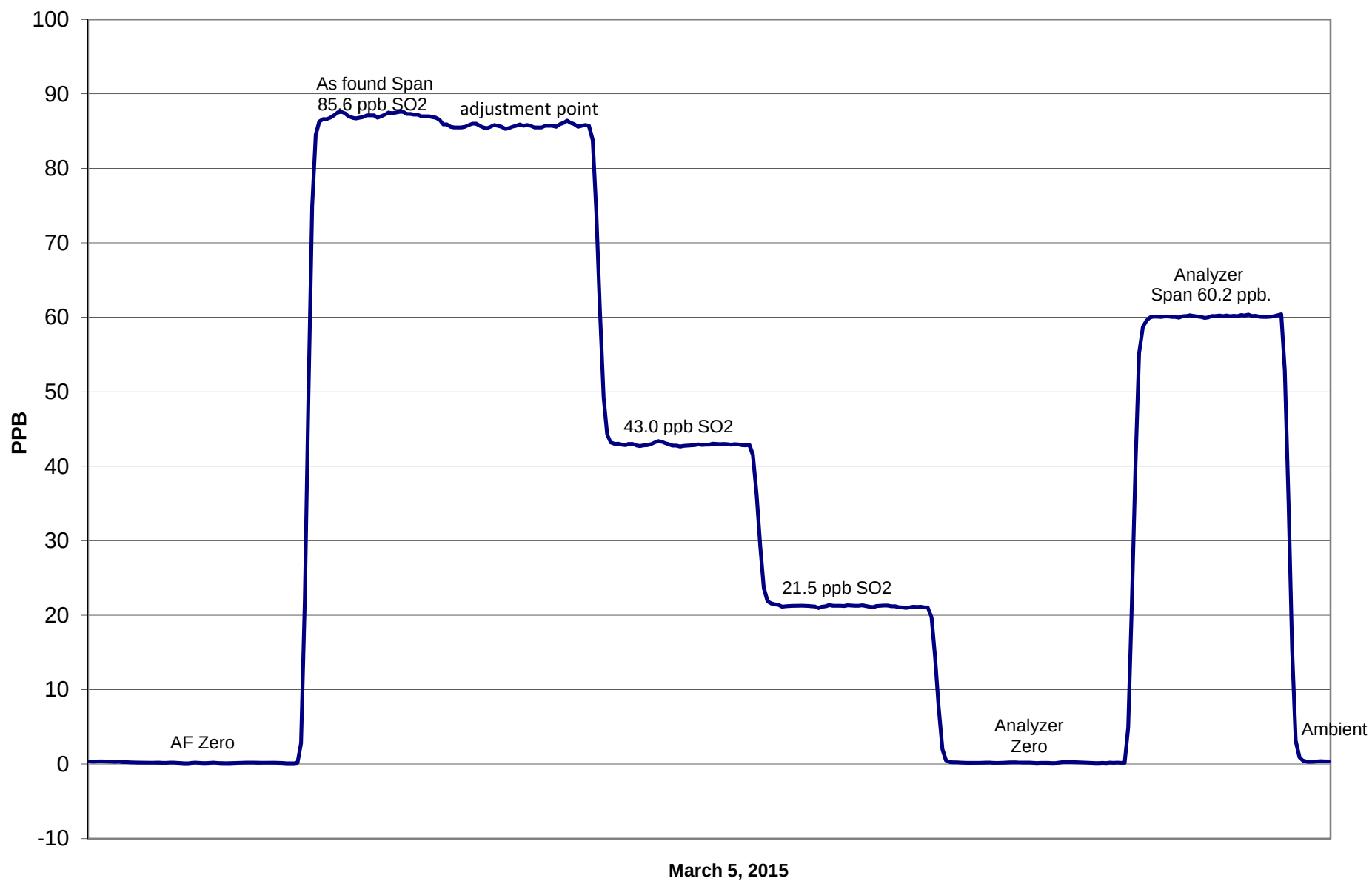
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999970
85.6	85.7	0.9993		
43.0	42.9	1.0016		
21.5	21.2	1.0141	Slope	0.999682
			Intercept	0.047077

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	March 4 2015	Previous Calibration	February12 2015
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Installation	Removal
Other:			
Start Time (MST)	9:45	End Time (MST)	15:34:00 PM
Barometric Pressure	0.917	Atm	Station Temperature
Calibrator	EnviroNics	Serial Number	3016
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #
			LL119493

DACS Information

DACS make	CR3000	DACS serial No.	5237
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Parameter		NO2	NOx	NO
Before	Data Slope	0.995533	1.013513	1.012008
	Data Offset	0.270888	1.220201	1.427505
After	Data Slope	0.994582	0.998565	0.995930
	Data Offset	-0.360988	0.772317	0.946232
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
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Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	3.2	mV	3.2	mV
NOx bkgnd	3.5	mV	3.5	mV
NO coefficient	1.082		1.072	
NOx coefficient	1.004		1.004	
NO2 conv temp	324.5	Deg C	325.7	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-747.8	mV	-747.8	mV
R Cell Press	245.1	in Hg	241.8	in Hg
Sample Flow	0.529	LPM	0.536	LPM

Notes: PMT adjustment performed

Calibration Report

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



Station Information

Calibration Date: 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	-0.2	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	406.1	404.9	0.5	0.9997	0.9968
2	4995	19.96	203.8	202.6	1.2	203.1	201.7	0.6	1.0032	1.0045
3	4995	9.93	101.6	101.0	0.6	100.0	99.6	0.2	1.0160	1.0141
AFZ	4995	0.00	0.0	0.0	0.0	-0.2	-0.1	-0.2	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	384.3	383.0	0.4	1.0565	1.0537
Average Correction Factor									1.0063	1.0051

As Found Concentrations: NO_x= 390.8 NO= 389.2 As Found Percent Change NO_x= -3.7% NO= -3.6%

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	-0.2	N/A	N/A	N/A	N/A
NO point	404.9	404.9	0.0	406.4	404.9	0.7	0.9963	1.0000	N/A	N/A
300	404.9	98.3	306.6	407.1	98.3	308.1	0.9946	1.0000	0.9949	100.5%
200	404.9	196.7	208.1	407.5	196.7	209.9	0.9935	1.0000	0.9915	100.9%
100	404.9	296.9	107.9	407.1	296.9	109.6	0.9945	1.0000	0.9848	101.5%
Average Correction Factor							0.9942	1.0000	0.9904	101.0%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.2	-0.1	ppb	-0.1	-0.2	0.1	ppb
Auto span	189.7	188.3	0.9	ppb	195.1	193.4	1.1	ppb

Calibration Performed By: Dmytro Dolotii, Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



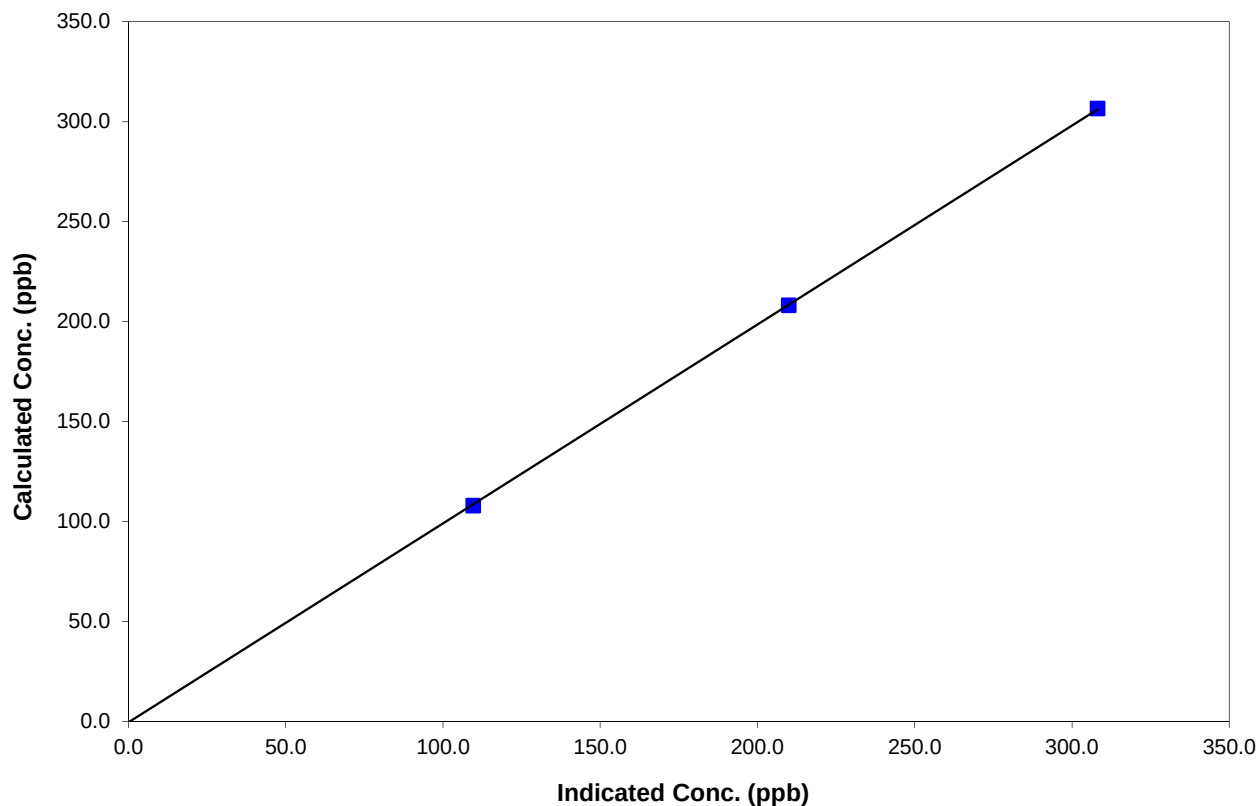
Station Information

Calibration Date	March 4 2015	Previous Calibration	February12 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:45	End Time (MST)	15:34:00 PM
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A	Correlation Coefficient	0.999979
306.6	308.1	0.9949		
208.1	209.9	0.9915		
107.9	109.6	0.9848	Slope	0.994582
			Intercept	-0.360988

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



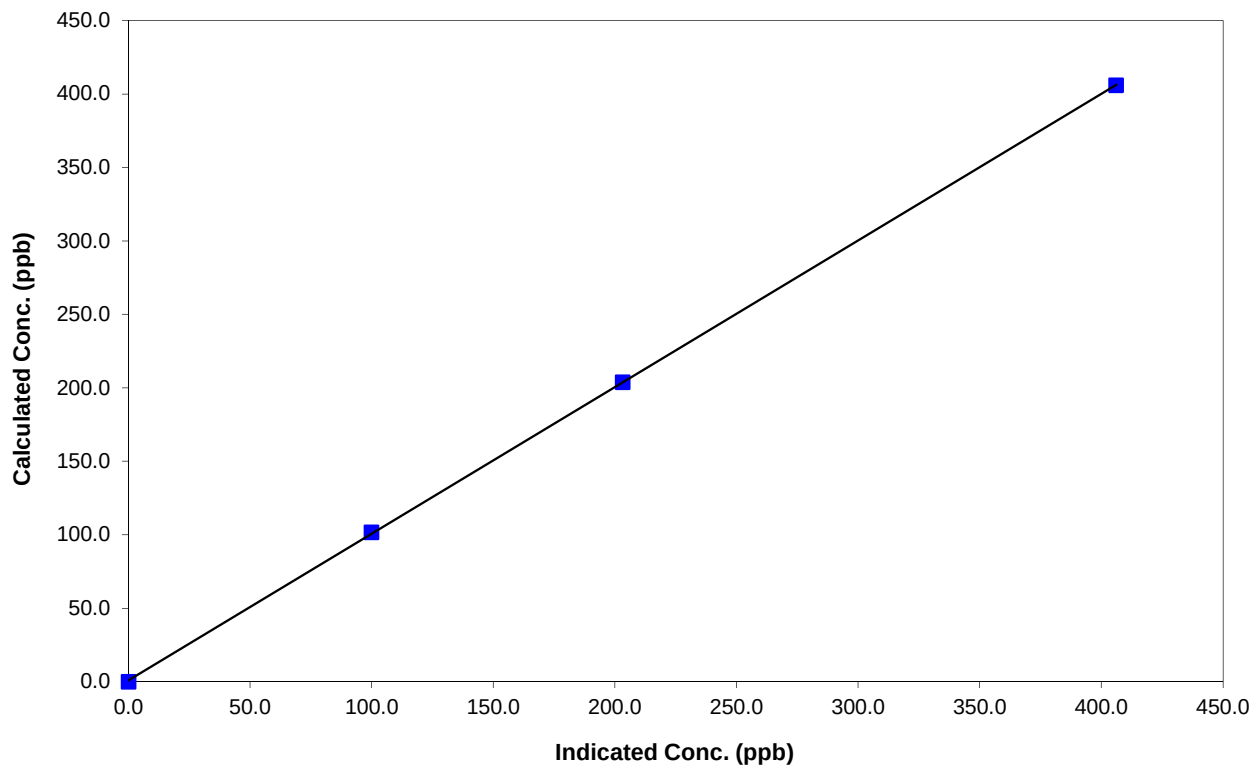
Station Information

Calibration Date	March 4 2015	Previous Calibration	February12 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:45	End Time (MST)	15:34:00 PM
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	0.999981
405.9	406.1	0.9997		
203.8	203.1	1.0032		
101.6	100.0	1.0160	Slope	0.998565
			Intercept	0.772317

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



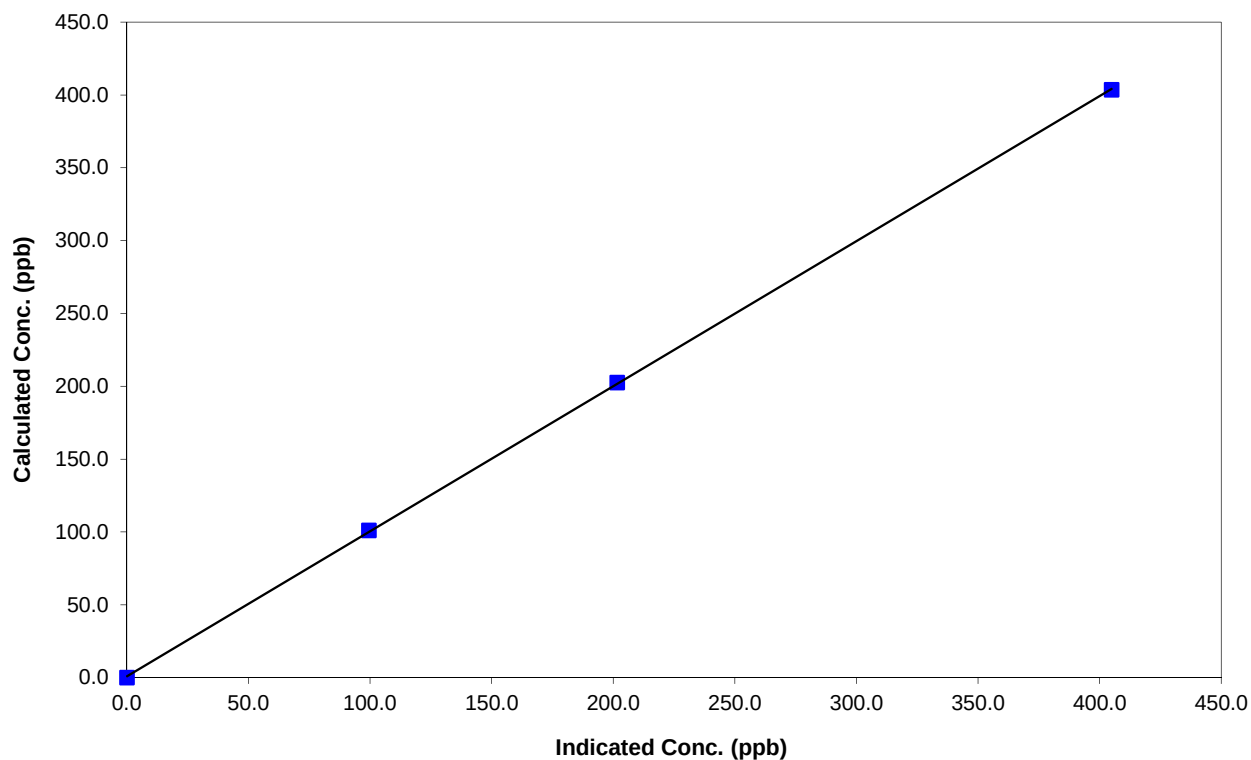
Station Information

Calibration Date	March 4 2015	Previous Calibration	February12 2015
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:45	End Time (MST)	15:34:00 PM
Analyzer make	TEI 42i	Analyzer serial #	906535068

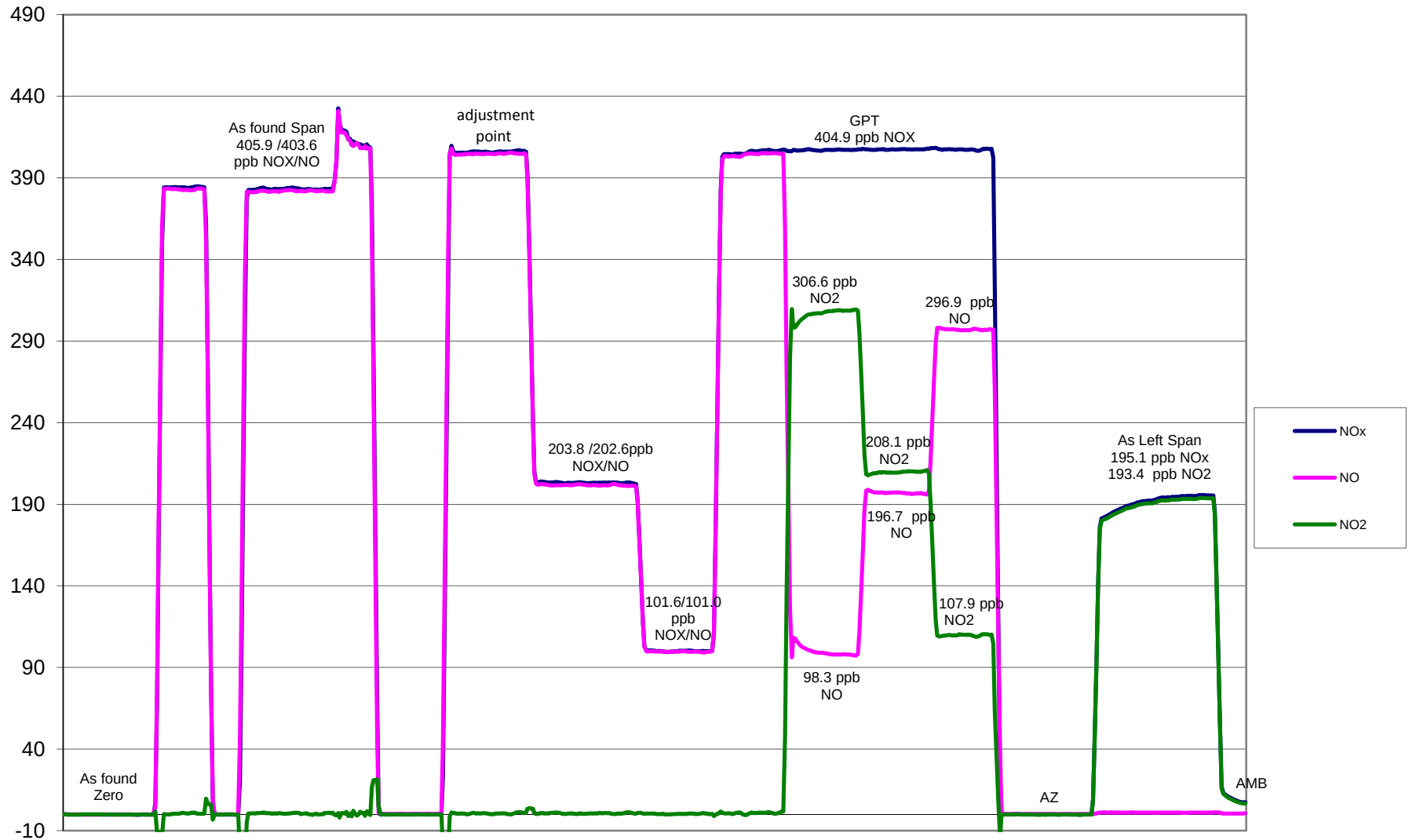
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999968
403.6	404.9	0.9968		
202.6	201.7	1.0045		
101.0	99.6	1.0141	Slope	0.995930
			Intercept	0.946232

NO Calibration Curve



NO_x Calibration



March 4 2015

Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	March 4, 2014	Previous Calibration	February 12, 2014
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	14:10:00 PM	End Time (MST)	16:40:00 PM
Barometric Pressure	0.917 atm	Station Temperature	20.0 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	1.003904	Calculated slope	0.997747
Calculated intercept	0.596706	Calculated intercept	-0.110890

Analyzer make	Teco 49i	Analyzer serial #	1136451236,AMU 1879
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	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.30	ppb	-0.30	ppb
slope	1.086		1.149	
Lamp temp	53.8	mV	53.8	mV
Lamp Intensity A/B	65410/69347	mV	65364/69295	mV
Pressure	679.1	mm Hg	683	mm Hg
Flow A	0.768	LPM	0.77	LPM
Flow B	0.740	LPM	0.744	LPM

Calibration Data

Dilution air flow rate (cc/min)	Calibrator Setting	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5035	0.00	0.0	0.3	N/A
5035	0.30	306.6	308.2	0.9948
5035	0.20	208.1	207.2	1.0042
5035	0.10	107.9	108.7	0.9923
5035	0.00	0.0	0.3	As found zero
5035	0.30	306.6	292.6	As found span
Average Correction Factor				0.9971

Calculated value of As Found Response: 294.1 ppm Percent Change of As Found: -4.1%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.5	ppb
Auto span	282.1	ppb	287.7	ppb

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii,Grover Chrisitiansen

Calibration Summary

Parameter O3

Air Monitoring Network PAZA



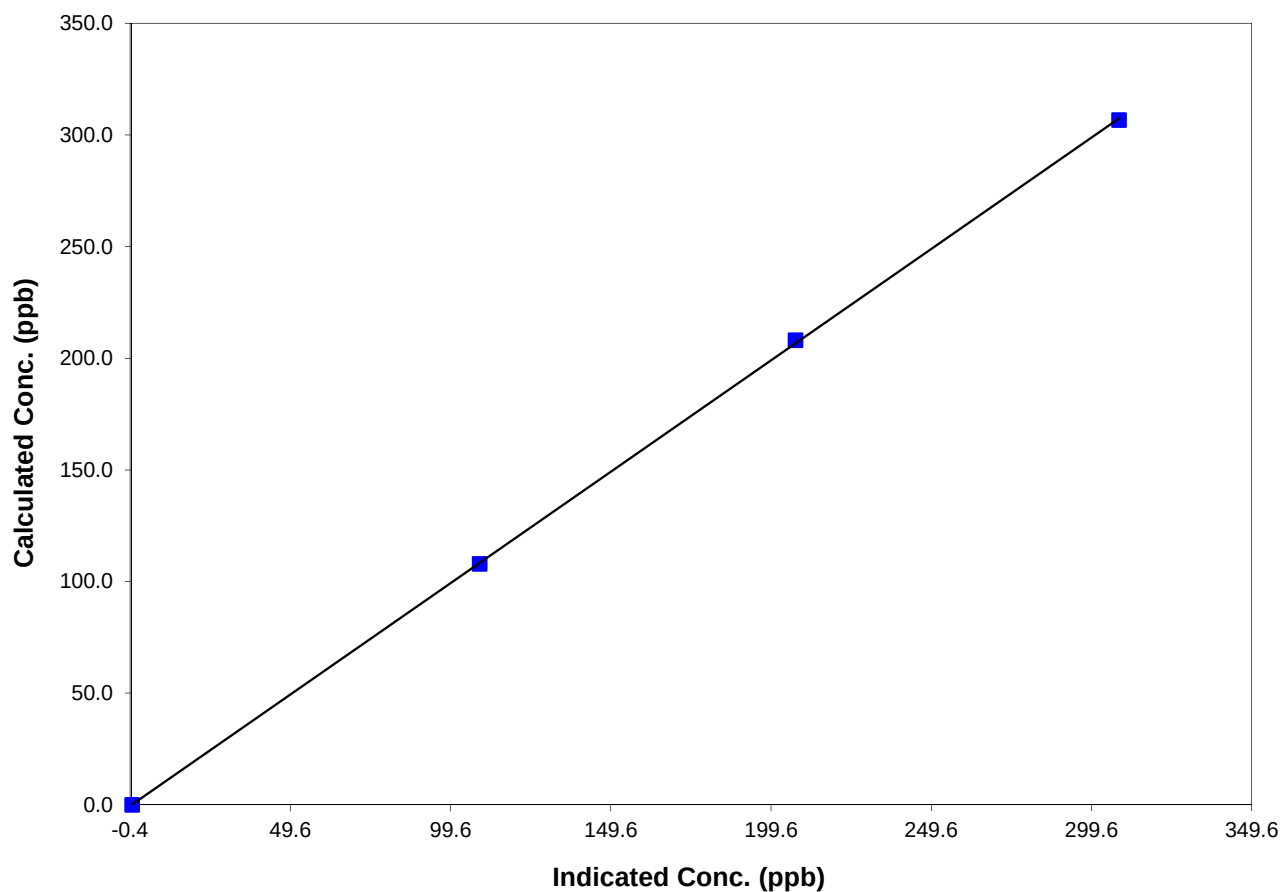
Station Information

Calibration Date	March 4, 2014	Previous Calibration	February 12, 2014
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	14:10:00 PM	End Time (MST)	16:40:00 PM
Analyzer make/model	Teco 49i	Analyzer serial #	1136451236,AMU 1879

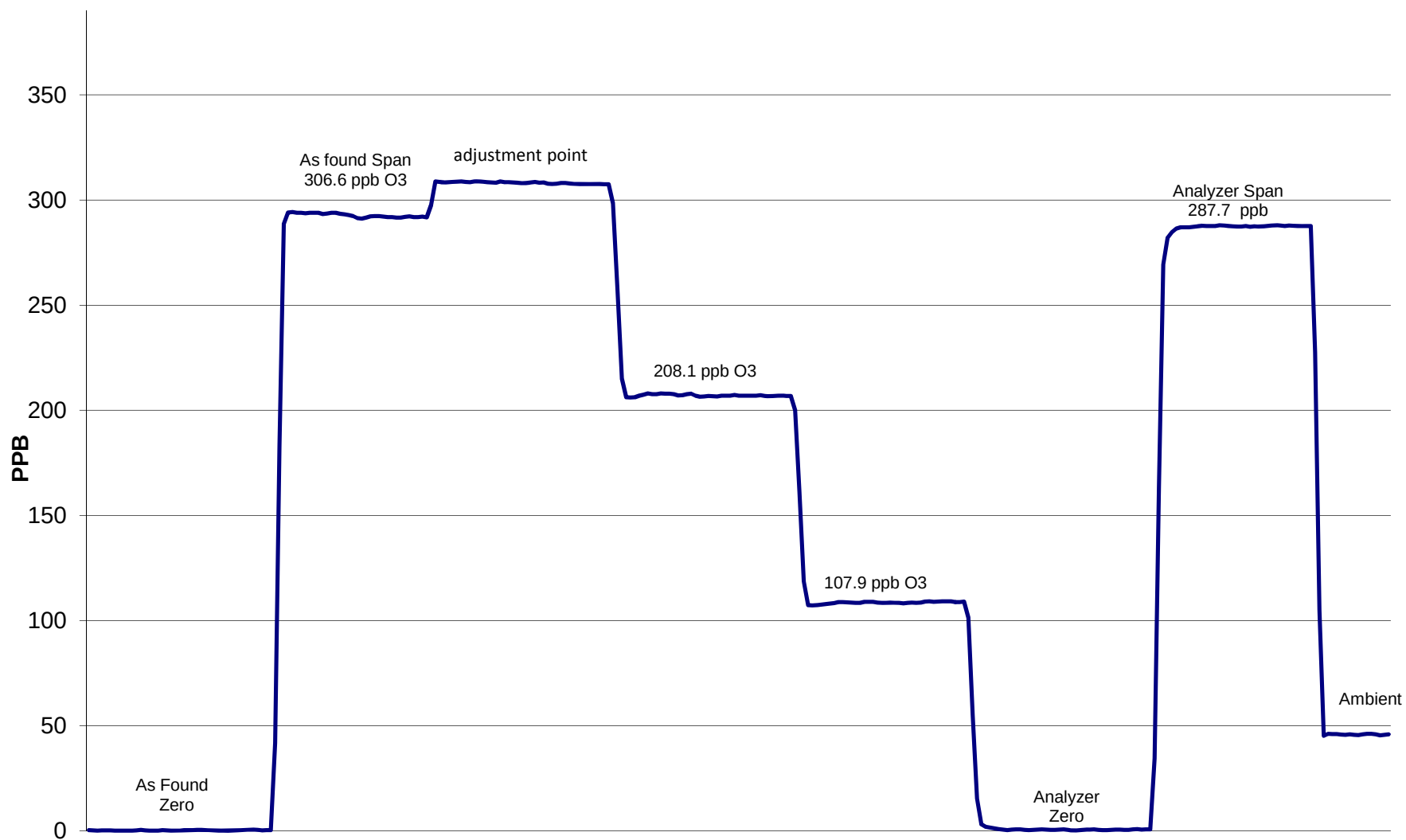
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	NA	Correlation Coefficient	0.999943
306.6	308.2	0.9948		
208.1	207.2	1.0042		
107.9	108.7	0.9923	Slope	0.997747
			Intercept	-0.110890

O3 Calibration Curve



O3 Calibration



March 4, 2014

FDMS TEOM PM2.5 AUDIT



STATION: BeaverLodge
 LOCATION: PAZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 30-Mar-15

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	AMU1649
Site Number	4
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.035
T-Case Indicated / Set Point	30/30
T-Air Indicated / Set Point	30/30
T-Cap Indicated / Set Point	30/30
Splitter Assembly Alignment (cm)	15.5
(vs. specified depth of 15.5 cm from top of flow tube to top of concentric 1/2 in. tube)	

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	
Previous Calibration	07-Jan-15

PUMP CAPACITY CHECK *	PASS
-----------------------	------

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

"FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	-0.06	0.05
PUMP OFF	0.01	0.00
NET	-0.07	0.05
LIMITS	<0.15	<0.60

	Ambient Temp. (^o C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
SET POINT (S)	na	na	15818	13.67	3.00
INDICATED (I)	9.1	0.906		13.65	3.00
MEASURED (AF)	8.9	0.909		14.00	2.90
MEASURED (M)	8.9	0.909	15942	14.00	2.90
DIFFERENCE (M-I)	-0.2	0.003	0.8%	0.35	-0.10
LIMITS	± 2^o C	± 0.005 atm	± 2.5 %	± 1.0 L/min	± 0.2 L/min

As Found Data
 Adjusted Data

Ko Audit Filter data Weight: 0.11251 Serial #: CVK 3316

COMMENTS: Shut down cal due to SHARP 5030 installation.

Sample heads were cleaned.

Base leak check: Main: -0.06 Aux: 0.05

Referense leak check: Main: -0.06 Aux: 0.05

Sample Head Inspection Or Cleaning: TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACI

SHARP 5030 PM2.5 Calibration



STATION: Beaver Lodge NAPS site
LOCATION: Beaver Lodge
START TIME (MST): 11:15

OPERATOR: Grover Christiansen
DATE: March 30 2015
END TIME (MST): 15:05:00 PM

MONITOR INFO / PARAMETER VALUES:

Make/Model SHARP 5030
Configuration PM 2.5
Serial Number AMU 1969

Audit Device Model Delta cal
Audit Device S/N AMU 1789
Certification Date 01-Oct-15

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (^o C)	Ambient Pres. (mbar)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
As Found Data	Audit values (I)	8.4	905	16.67	16.67	13:39
	MEASURED (AF)	8.5	906	17.31	17.31	13:40
	AF Difference (AF-I)	0.1	1	-0.64	0.64	0:01
Adjusted Data	MEASURED (M)	8.5	906	17.31	17.31	13:40
	Adj Difference (M-I)	0.1	1	0.64	0.64	0:01
	LIMITS	± 4.0 ^o C	6.7 mbar	1.0 L/min	± 1.0 L/min	±2 min

Sample Head Inspect/Cleaning: Cleaned sample head

Status of sampling tape: 90% full

Nozzle Inspection / cleanliness: Good

COMMENTS: Full installation cal performed.

Foil calibration Old value 7123 New value 6998

Nephelometer zero. Analog as found = 0.3 adsuted conc = 0.1

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	March 12 2015	Previous Calibration	February 24 2015
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
Start Time (MST)	9:25	End Time (MST)	11:30
Barometric Pressure	722.00 mmHg	Station Temperature	23.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	49.8 ppm	Cal Gas Exp Date	March 10, 2017
Gas Cylinder Num.	LL119493		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.987794	Calculated slope	0.990925
Calculated intercept	2.402662	Calculated intercept	1.704705
Analyzer make	TEI 43C	Analyzer serial #	609716239

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	15.6		15.6	
Coefficient	1.017		1.017	
UV Lamp Voltage	739	LPM	742	LPM
Chamber Temp	42.8	V	43	V
Perm Gas Temp	45	C	45	C
Pressure	671.4	in Hg	673.7	in Hg
Sample Flow	0.486	LPM	0.486	LPM
Lamp Intensity	47560	Hz	47509	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	-0.1	N/A
4995	39.93	394.9	397.7	0.9931
4995	19.97	198.3	197.4	1.0048
4995	9.95	99.0	96.8	1.0230
4995	0.00	0.0	-0.1	As found zero
4995	39.93	394.9	397.7	As found span
Average Correction Factor				1.0070

Calculated value of As Found Response: 395.4 ppm Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	-0.1	ppm	0.0	ppm
Auto span	284.8	ppm	282.4	ppm

Notes: No adjustments made.
Chamber temp is low, but analyzer is working good, and giving consistent daily zero/span

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



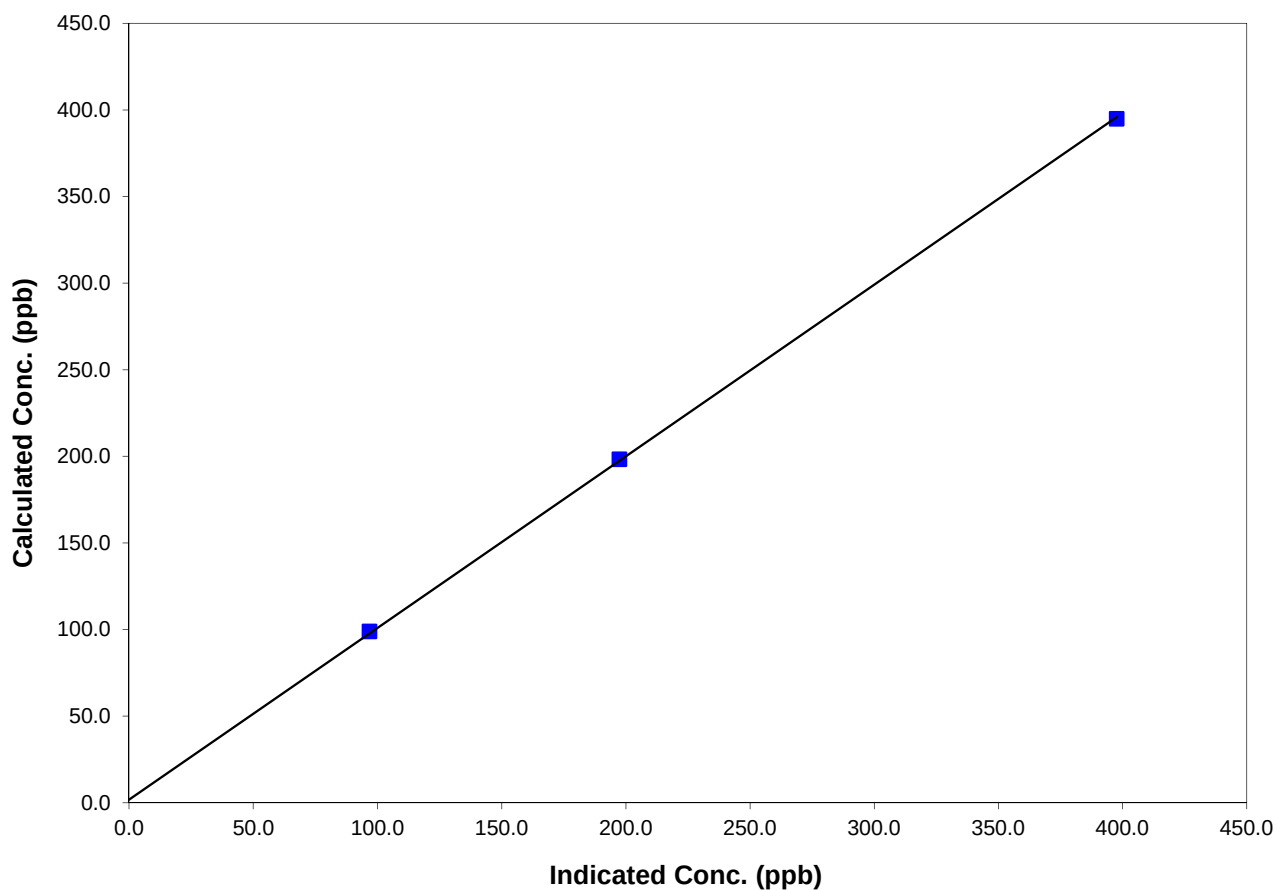
Station Information

Calibration Date	March 12 2015	Previous Calibration	February 24 2015
Station Number	6	Station Location	Valleyview
Start Time (MST)	9:25	End Time (MST)	11:30
Analyzer make/model	TEI 43C	Analyzer serial #	609716239

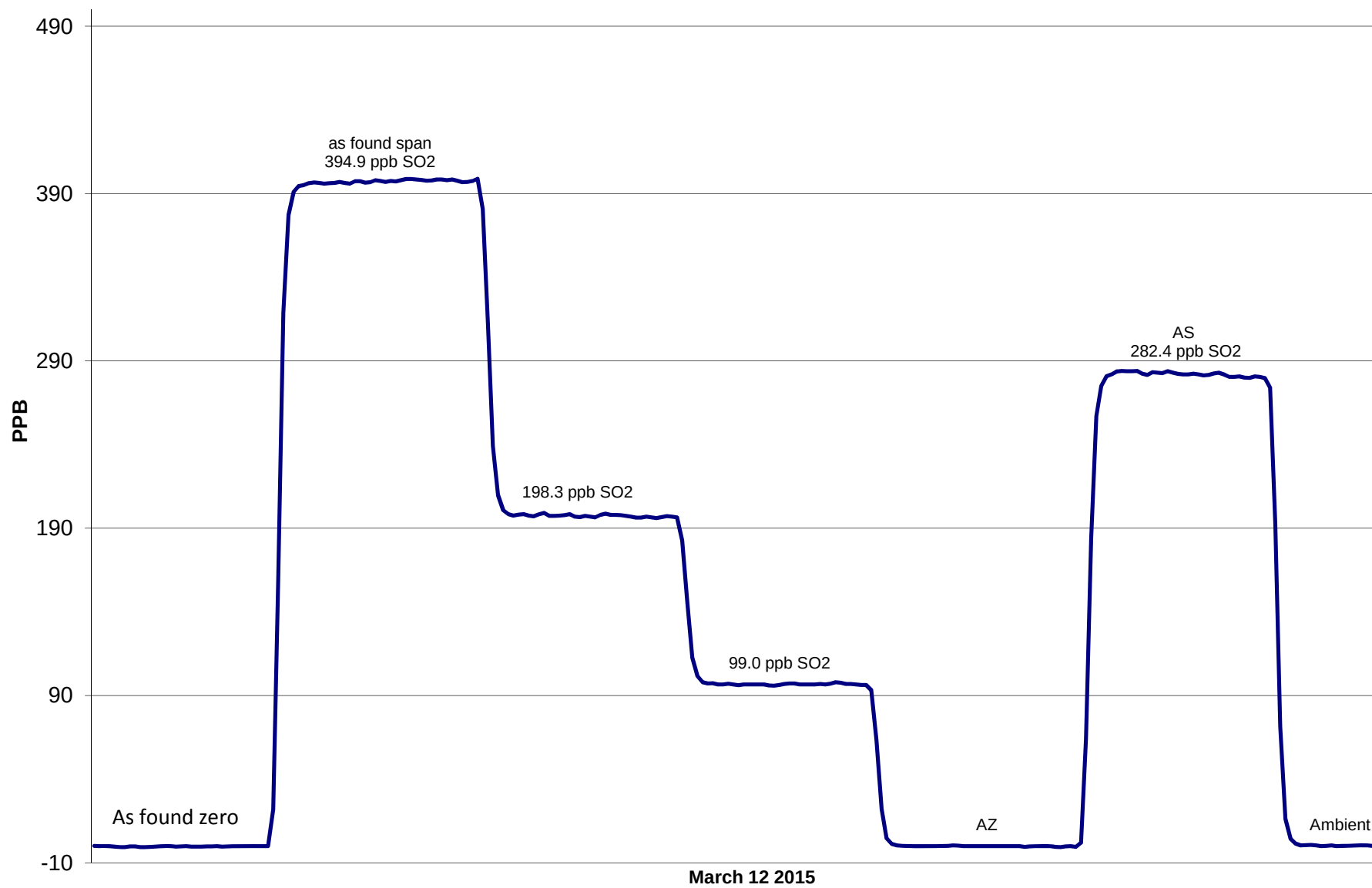
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999927
394.9	397.7	0.9931		
198.3	197.4	1.0048		
99.0	96.8	1.0230	Slope	0.990925
			Intercept	1.704705

SO2 Calibration Curve



SO2 Calibration



Calibration Report



Parameter H2S

Air Monitoring Network PAZA

Station Information

Calibration Date	March 12 2015	Previous Calibration	February 22 2015
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
Start Time (MST)	7:45	End Time (MST)	10:25
Barometric Pressure	722.00 mm	Station Temperature	23.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	10.32 ppm	Cal Gas Expiry Date	July 03 2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.006570	Calculated slope	0.998138
Calculated intercept	0.236967	Calculated intercept	0.035478

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

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	7.5	ppb	7.4	ppb
Coefficient	0.888		0.888	
Lamp Voltage	792	v	789	v
Chamber Temp	45	c	45	c
Perm Oven Temp	45	c	45	c
Pressure	566.20	mm Hg	566.80	mm Hg
Sample Flow	0.387	ccm	0.387	lpm
Lamp Intensity	91	%	91	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.2	N/A
4997	39.91	81.8	82.1	0.9961
4997	19.94	41.0	40.7	1.0081
6995	9.97	14.7	14.6	1.0081
4997	9.97		2.8	Sox Test
4997	0.00	0.0	0.2	As found zero
4997	39.93	81.8	82.1	As found span
Average Correction Factor				1.0041

Calculated value of As Found Response: 82.62 ppm Percent Change of As Found: -1.0%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.4	ppm
Auto span	65.5	ppm	66.4	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter H2S

Air Monitoring Network PAZA



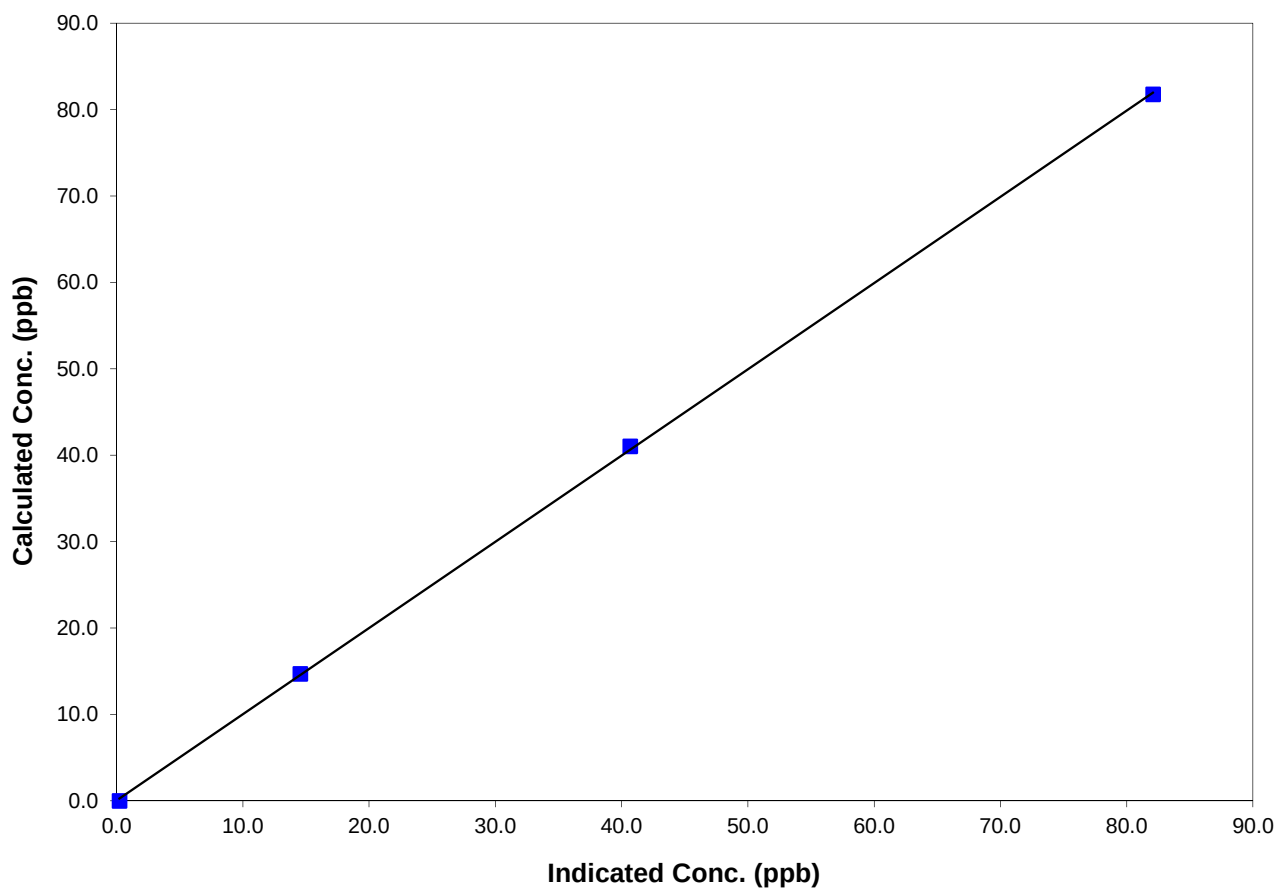
Station Information

Calibration Date	March 12 2015	Previous Calibration	February 22 2015
Station Number	6	Station Location	Valleyview
Start Time (MST)	7:45	End Time (MST)	10:25
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

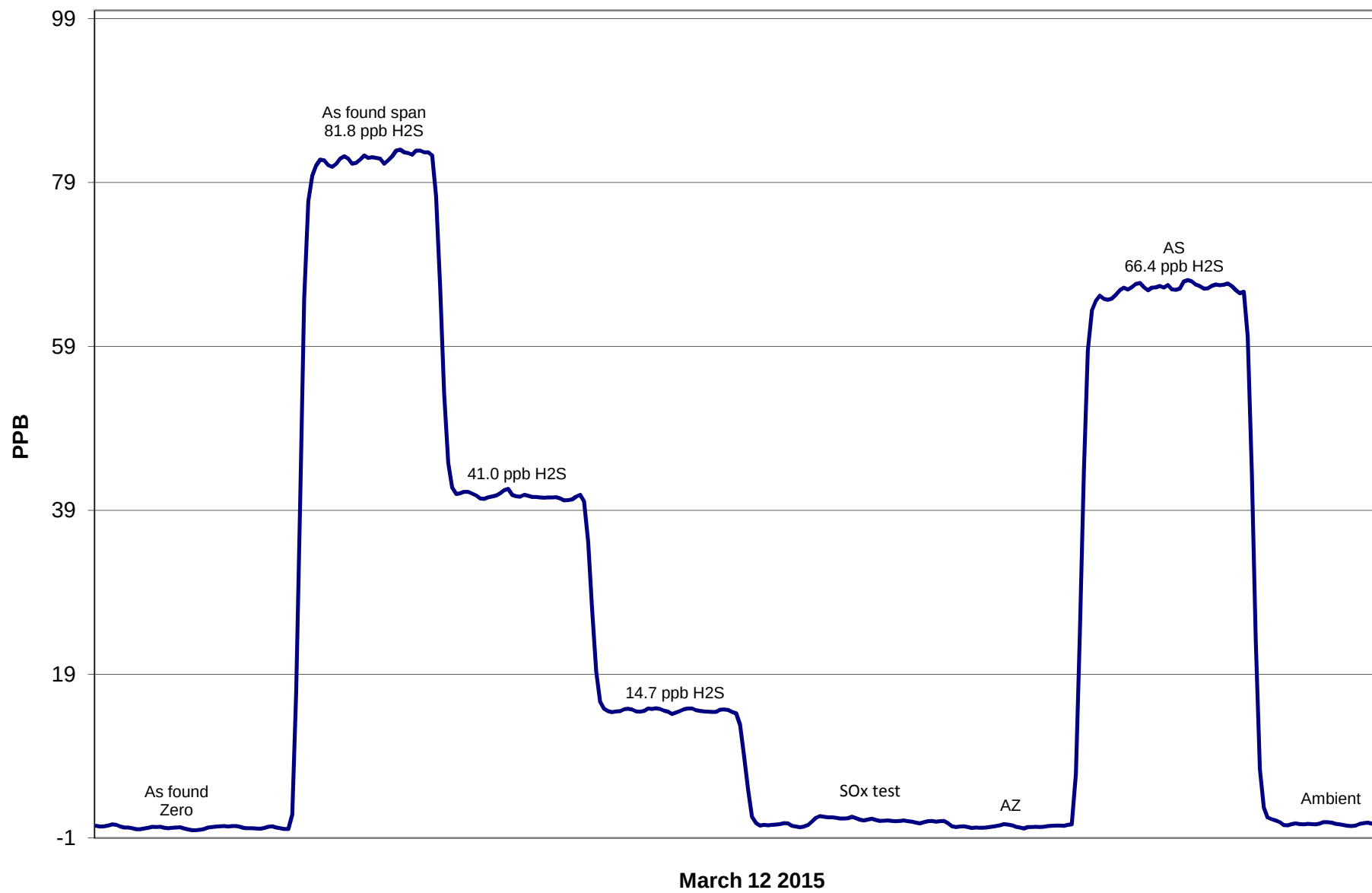
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999932
81.8	82.1	0.9961		
41.0	40.7	1.0081		
14.7	14.6	1.0081	Slope	0.998138
			Intercept	0.035478

H2S Calibration Curve



H2S Calibration



Calibration Report

Parameter SO₂

Air Monitoring Network PAZA



Station Information

Calibration Date	March 11, 2015	Previous Calibration	February 19, 2015
Station Number	1	Station Location	Falher
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	11:40	End Time (MST)	14:05:00 PM
Barometric Pressure	0.918 mm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Concentration	50.2 ppm	Cal Gas Expiry Date	10/03/2017
Correction factor	0.031205	Cal Gas Cylinder #	LL119493
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.994206	Calculated slope	0.987176
Calculated intercept	0.843732	Calculated intercept	0.012480
Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	6.5		6.5	
coefficient	0.902		0.902	
Lamp Voltage	860	volts	866	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	677	mm Hg	681.8	mm Hg
Sample Flow	0.408	ccm	0.412	ccm
Lamp Intensity	96	%	96	%

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	0.9	N/A
4995	39.93	398.1	403.8	0.9860
4995	19.96	199.8	201.8	0.9900
4995	9.97	100.0	100.5	0.9949
4995	0.0	0.0	0.9	As Found Zero
4995	39.93	398.1	403.8	As Found Span
Average Correction Factor				0.9903

Calculated value of As Found Response: 401.403 ppm Percent Change of As Found: **-0.8%**

	before calibration		after calibration	
Auto zero	0.8	ppm	0.8	ppm
Auto span	356.1	ppm	355.5	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



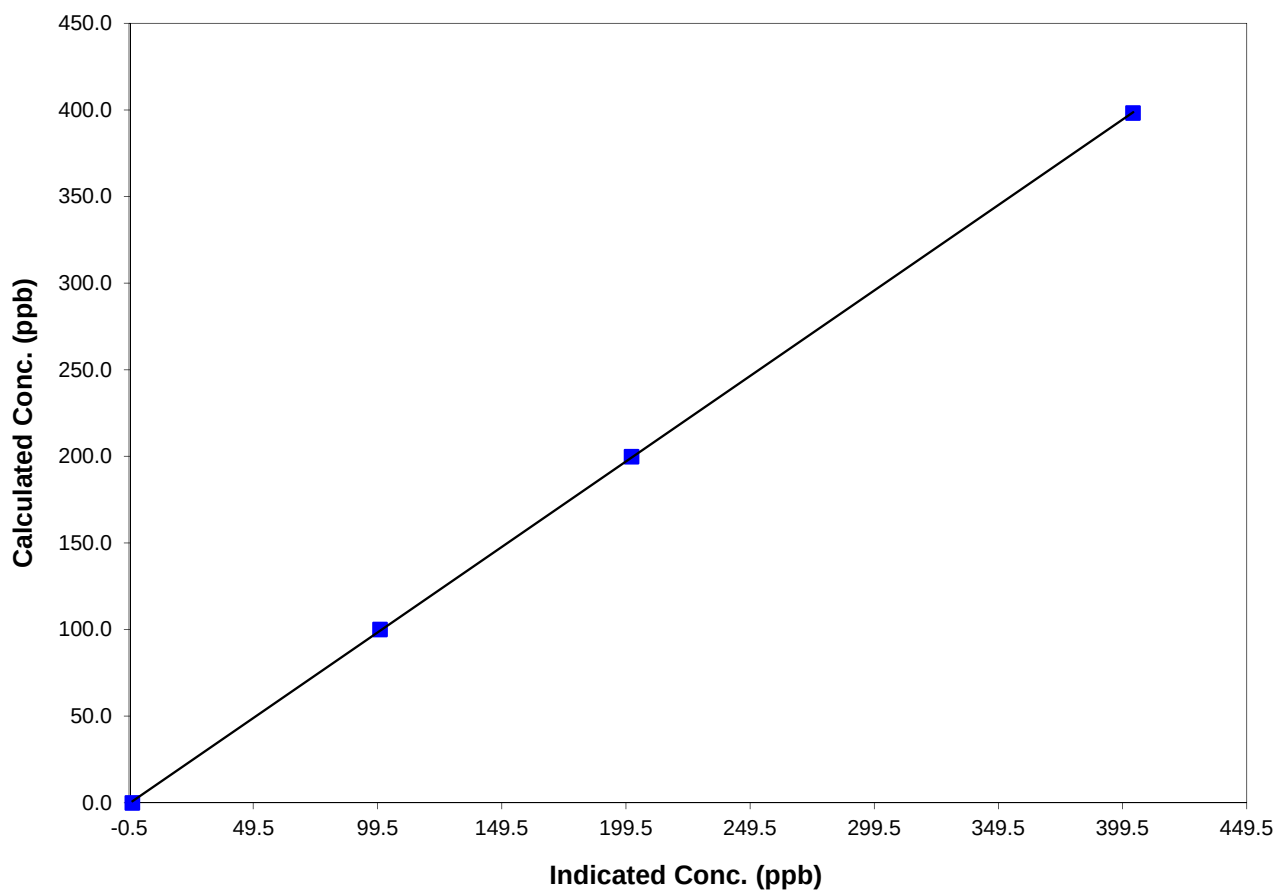
Station Information

Calibration Date	March 11, 2015	Previous Calibration	February 19, 2015
Station Number	1	Station Location	Falher
Start Time (MST)	11:40	End Time (MST)	14:05:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	1207452008

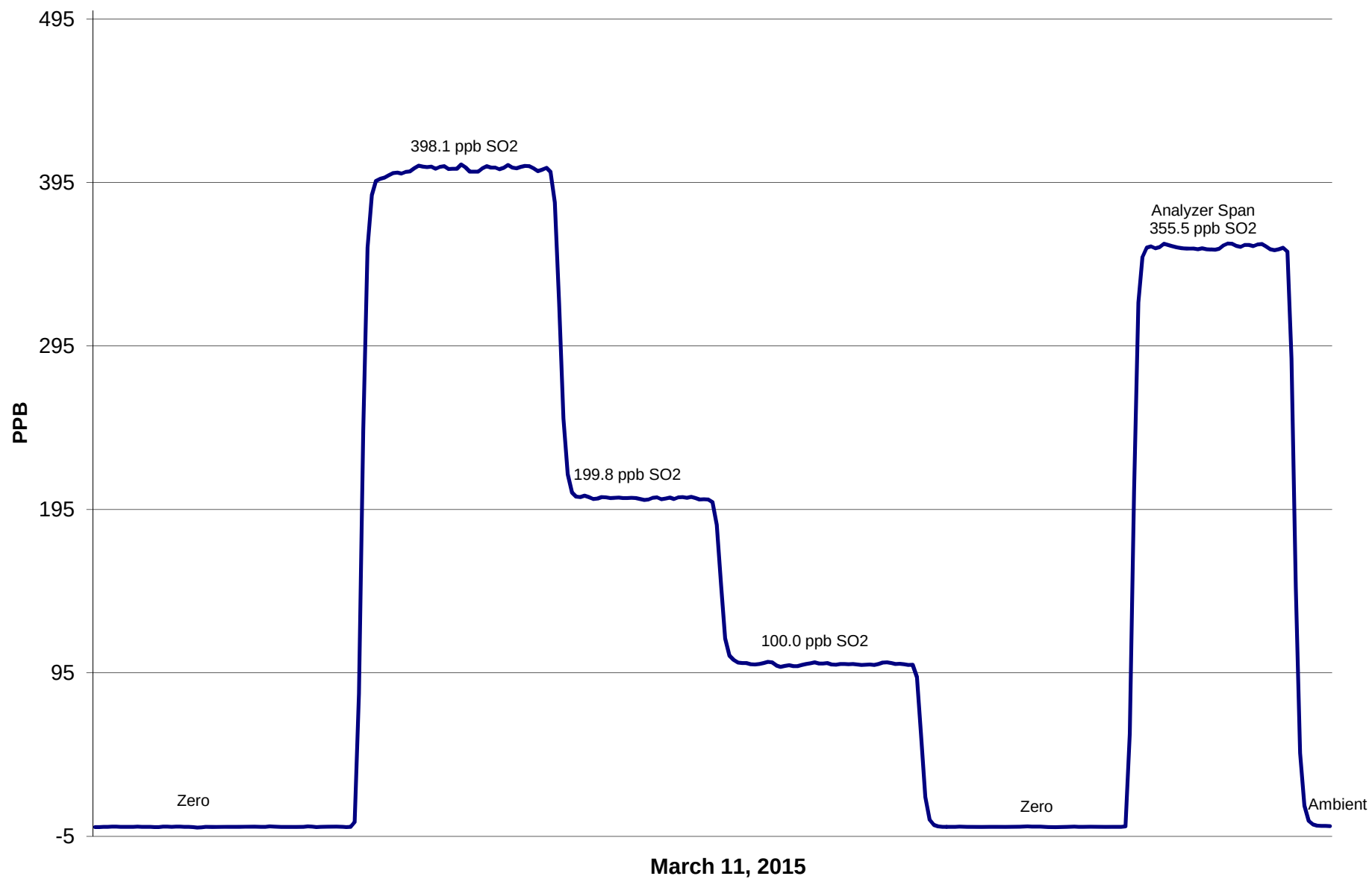
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.9	N/A	Correlation Coefficient	0.999979
398.1	403.8	0.9860		
199.8	201.8	0.9900		
100.0	100.5	0.9949	Slope	0.987176
			Intercept	0.012480

SO2 Calibration Curve



SO2 Calibration



Calibration Report



Parameter H2S

Air Monitoring Network PAZA

Station Information

Calibration Date	March 11, 2015	Previous Calibration	February 19, 2015
Station Number	1	Station Location	Falher
Reason:	Routine	Install	Removal
Start Time (MST)	9:35	End Time (MST)	13:04:00 PM
Barometric Pressure	0.918 mm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031205	Cal Gas Cylinder #	LL110781
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.993195	Calculated slope	0.983943
Calculated intercept	0.156319	Calculated intercept	-0.078625
Analyzer make	Thermo 450i	Analyzer serial #	1207452006

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	14.3	ppb	14.3	ppb
coefficient	1.117		1.117	
Lamp Voltage	807	volts	808	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	44.99	Deg C	44.99	Deg C
Pressure	537.1	mm Hg	538.1	mm Hg
Sample Flow	0.931	lpm	0.931	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	81.84	83.4	0.9814
4995	19.96	41.07	41.6	0.9881
6994	9.97	14.69	15.0	0.9823
4995	0.00	0.00	0.3	As Found Zero
4995	39.93	81.84	83.4	As Found Span
Average Correction Factor				0.9839

Calculated value of As Found Response: 82.73 ppm Percent Change of As Found: **-1.1%**

	before calibration		after calibration	
Auto zero	0.3	ppm	0.4	ppm
Auto span	52.3	ppm	52.5	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter H2S

Air Monitoring Network PAZA



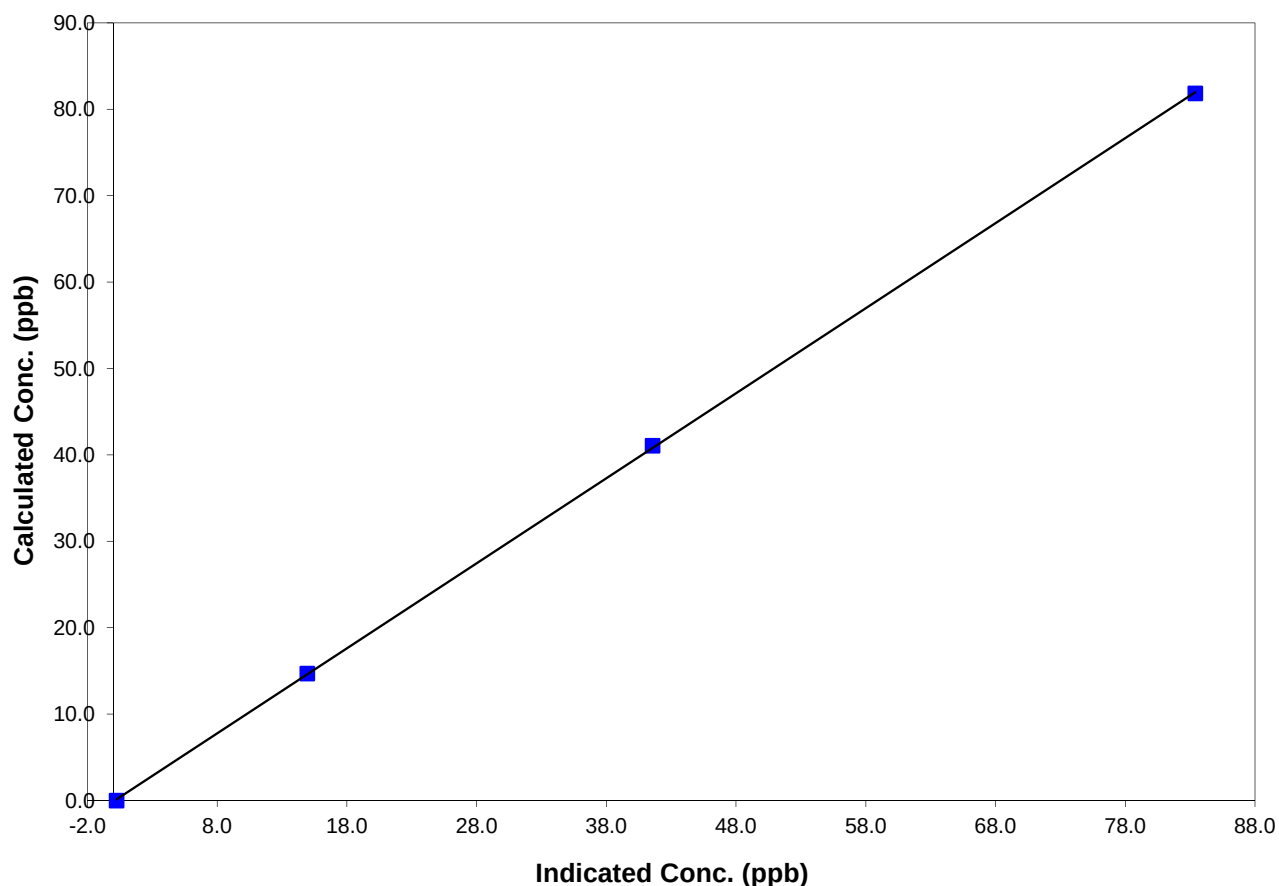
Station Information

Calibration Date	March 11, 2015	Previous Calibration	February 19, 2015
Station Number	1	Station Location	Falher
Start Time (MST)	9:35	End Time (MST)	13:04:00 PM
Analyzer make/model	Thermo 450i	Analyzer serial #	1207452006

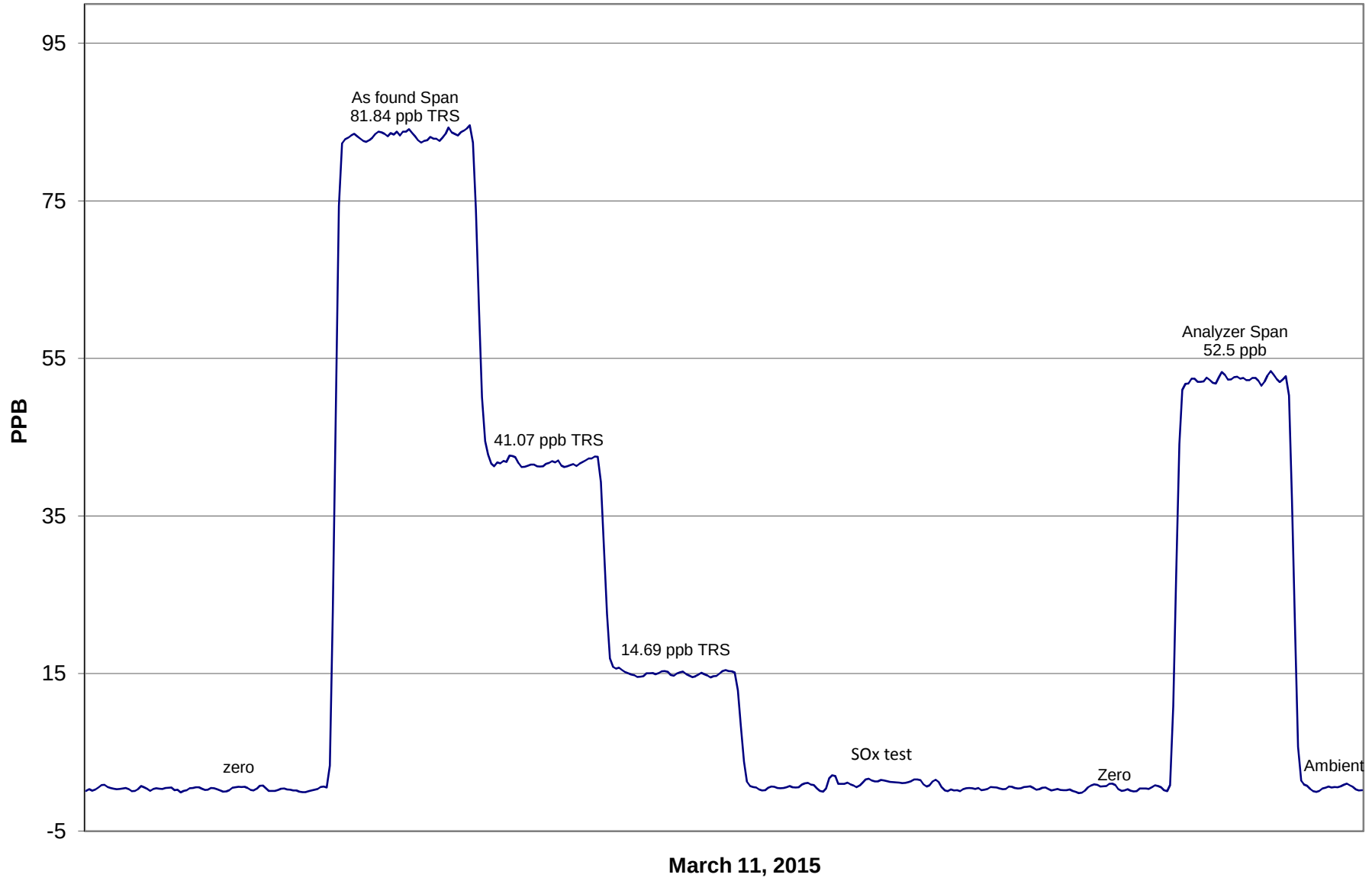
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999971
81.8	83.4	0.9814		
41.1	41.6	0.9881		
14.7	15.0	0.9823	Slope	0.983943
			Intercept	-0.078625

TRS Calibration Curve



H2S Calibration



Calibration Report



AIR QUALITY MONITORING

Parameter SO2

Air Monitoring Network PAZA

Station Information

Calibration Date	March 6, 2015	Previous Calibration	February 10, 2015
Station Number	10	Station Location	Clairmont
Reason:	Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	9:20	End Time (MST)	12:00
Barometric Pressure	0.931 Atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	50.2 ppm	Cal Gas Expiry Date	10/03/2017
Gas Cert Reference	LL119493		
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	1.007238	Calculated slope	1.002088
Calculated intercept	1.308983	Calculated intercept	1.477606
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	21.2		21	
Coefficient	1.042		1.042	
UV Lamp Voltage	884	V	886	V
Chamber Temp	44.2	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	673.4	mm Hg	674.2	mm Hg
Sample Flow	0.466	LPM	0.467	LPM
Lamp Intesity	30419	Hz	30508	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	0.2	N/A
4995	39.93	398.1	396.7	1.0036
4995	19.97	199.9	196.9	1.0151
4995	9.97	100.0	96.9	1.0322
4995	0.00	0.0	0.2	As found zero
4995	39.93	398.1	396.7	As found span
Average Correction Factor				1.0170

Calculated value of As Found Response: 400.720 ppm Percent Change of As Found: -0.7%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	234.5	ppm	238.1	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



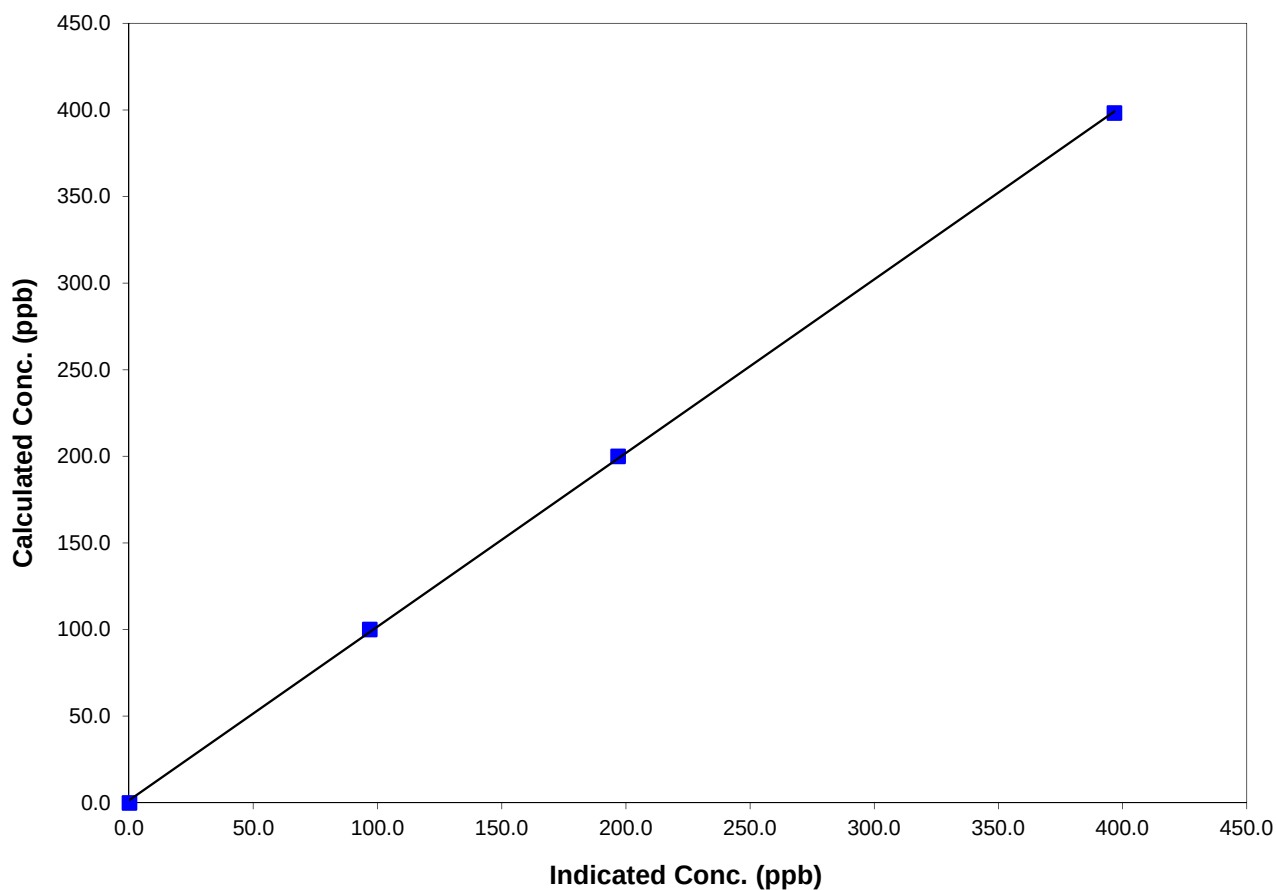
Station Information

Calibration Date	March 6, 2015	Previous Calibration	February 10, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:20	End Time (MST)	12:00
Analyzer make/model	TEI 43C	Analyzer serial #	436610005

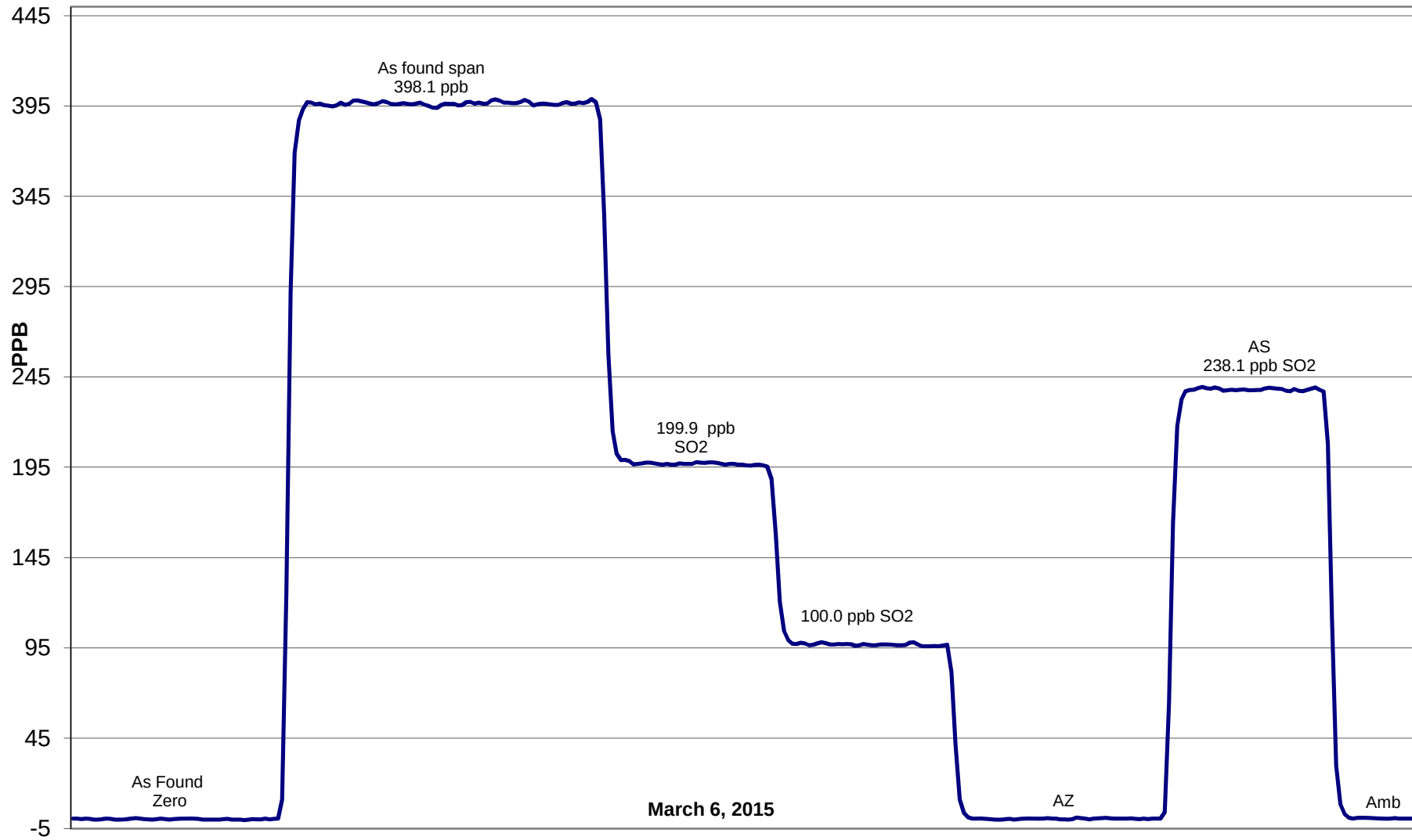
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999923
398.1	396.7	1.0036		
199.9	196.9	1.0151		
100.0	96.9	1.0322	Slope	1.002088
			Intercept	1.477606

SO2 Calibration Curve



SO2 Calibration



Parameter

Air Monitoring Network

NO_x-NO-NO₂

PAZA



Station Information

Calibration Date	March 6, 2015		Previous Calibration	February 10, 2015	
Station Number	10		Station Location	Clairmont	
Reason:	Routine Installation Removal	Other: _____			
Start Time (MST)	9:25		End Time (MST)	12:35	
Barometric Pressure	0.931	Atm	Station Temperature	20.0	Deg C
Calibrator	EnviroNics		Serial Number	3016	
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date	March 10, 2017	
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #	LL119493	

DACS Information

DACS make		CR3000		DACS serial No.		5407	
	Parameter	NO2	NOx	NO			
Before	Data Slope	0.995337	1.001231	0.998899			
	Data Offset	-0.563424	0.907039	0.608158			
After	Data Slope	1.000476	0.999202	0.996727			
	Data Offset	0.043955	0.944297	0.943856			
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	7.2	mV	7.1	mV
NOx bkgnd	7.4	mV	7.3	mV
NO coefficient	1.295		1.264	
NOx coefficient	0.999		0.999	
NO2 conv temp	324.2	Deg C	325.3	Deg C
PMT Temp	-2.8	Deg C	-2.8	Deg C
PMT Volt	-845.8	mV	-845.5	mV
R Cell Press	221.6	in Hg	218.6	in Hg
Sample Flow	0.656	LPM	0.668	LPM

Notes: Span adjustment made

Calibration Report

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



Station Information

Calibration Date: March 6, 2015 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	-0.4	-0.3	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	405.5	404.2	-0.7	1.0010	0.9984
2	4995	19.96	203.8	202.6	1.2	202.9	202.1	-0.3	1.0042	1.0026
3	4995	9.93	101.6	101.0	0.6	100.1	99.8	0.1	1.0152	1.0120
AFZ	4995	0.00	0.0	0.0	0.0	-0.4	-0.4	-0.3	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	414.6	412.5	0.0	0.9792	0.9784
Average Correction Factor									1.0068	1.0044

As Found Concentrations: NO_x= 416.4 NO= 413.0 As Found Percent Change NO_x= 2.6% NO= 2.3%

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	-0.4	-0.4	0.0	-0.4	-0.4	-0.3	N/A	N/A	N/A	N/A
NO point	408.0	408.0	0.0	409.1	408.0	-1.3	0.9973	1.0000	N/A	N/A
300	408.0	94.5	313.5	409.6	94.5	313.1	0.9960	1.0000	1.0011	99.9%
200	408.0	195.9	212.0	410.3	195.9	211.9	0.9943	1.0000	1.0006	99.9%
100	408.0	298.2	109.8	410.7	298.2	110.1	0.9934	1.0000	0.9970	100.3%
Average Correction Factor							0.9946	1.0000	0.9996	100.0%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.2	0.0	0.3	ppb	-0.2	-0.4	-0.2	ppb
Auto span	171.9	169.9	1.2	ppb	168.2	166.4	0.8	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



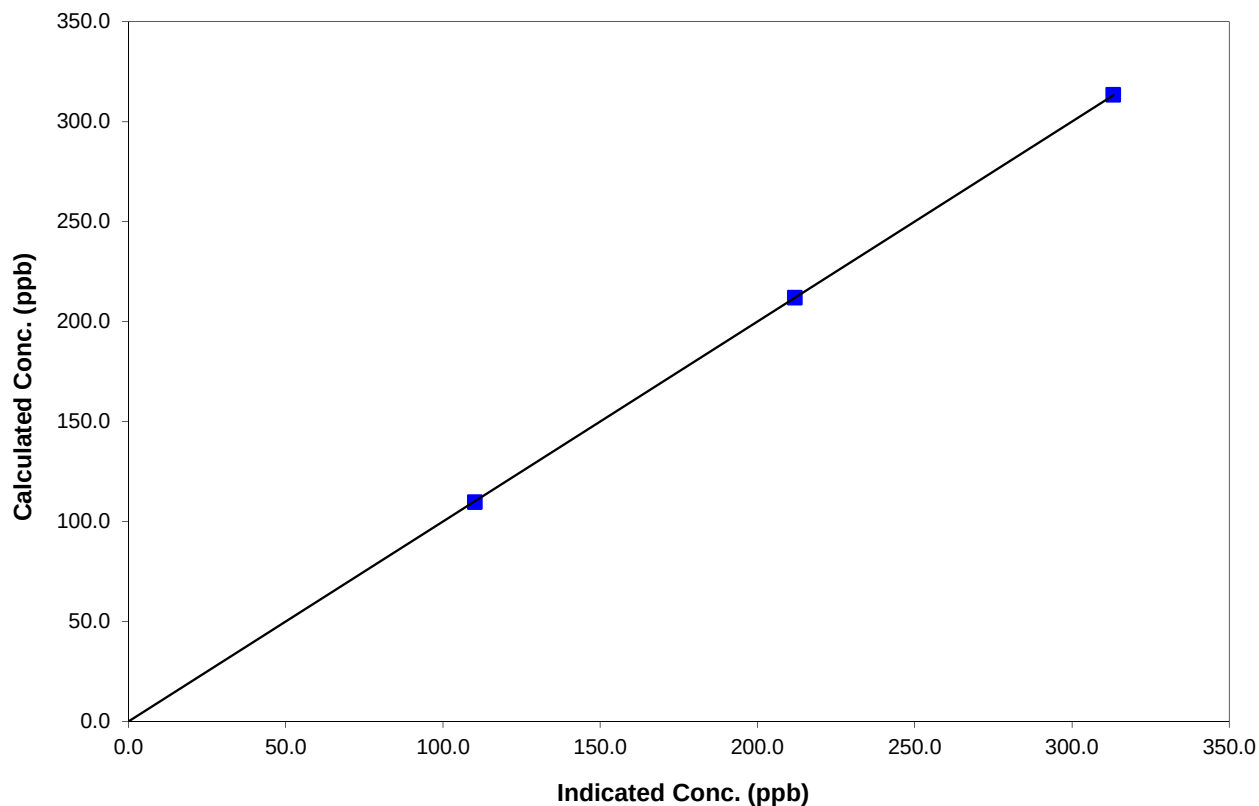
Station Information

Calibration Date	March 6, 2015	Previous Calibration	February 10, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:25	End Time (MST)	12:35
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A	Correlation Coefficient	0.999995
313.5	313.1	1.0011		
212.0	211.9	1.0006		
109.8	110.1	0.9970	Slope	1.000476
			Intercept	0.043955

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



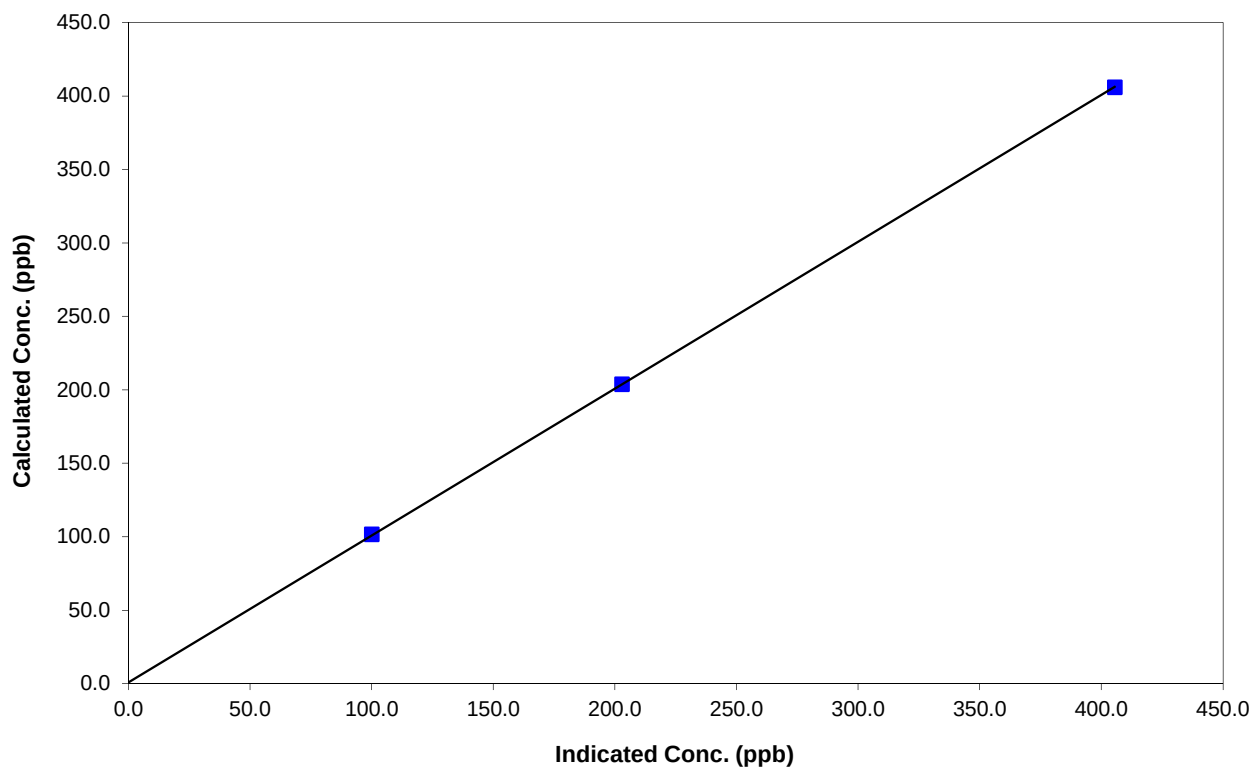
Station Information

Calibration Date	March 6, 2015	Previous Calibration	February 10, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:25	End Time (MST)	12:35
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	0.999992
405.9	405.5	1.0010		
203.8	202.9	1.0042		
101.6	100.1	1.0152	Slope	0.999202
			Intercept	0.944297

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



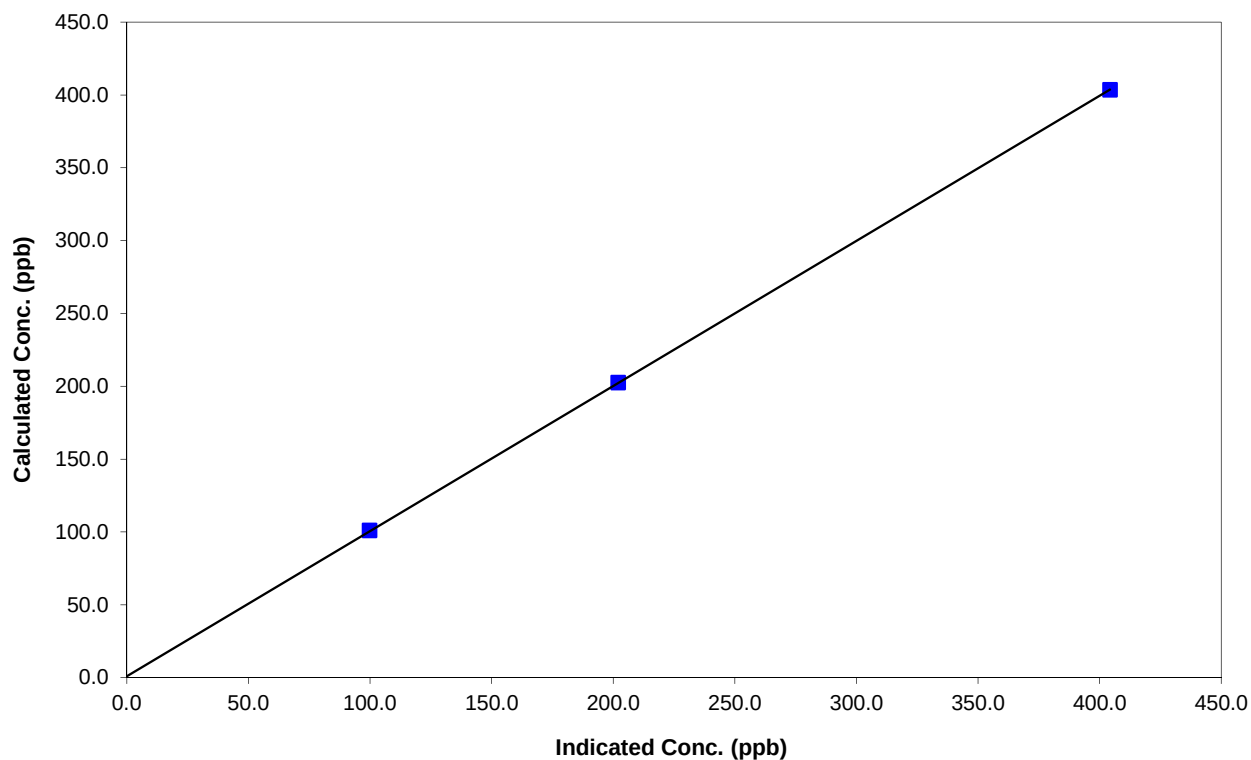
Station Information

Calibration Date	March 6, 2015	Previous Calibration	February 10, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:25	End Time (MST)	12:35
Analyzer make	TEI 42i	Analyzer serial #	0701120011

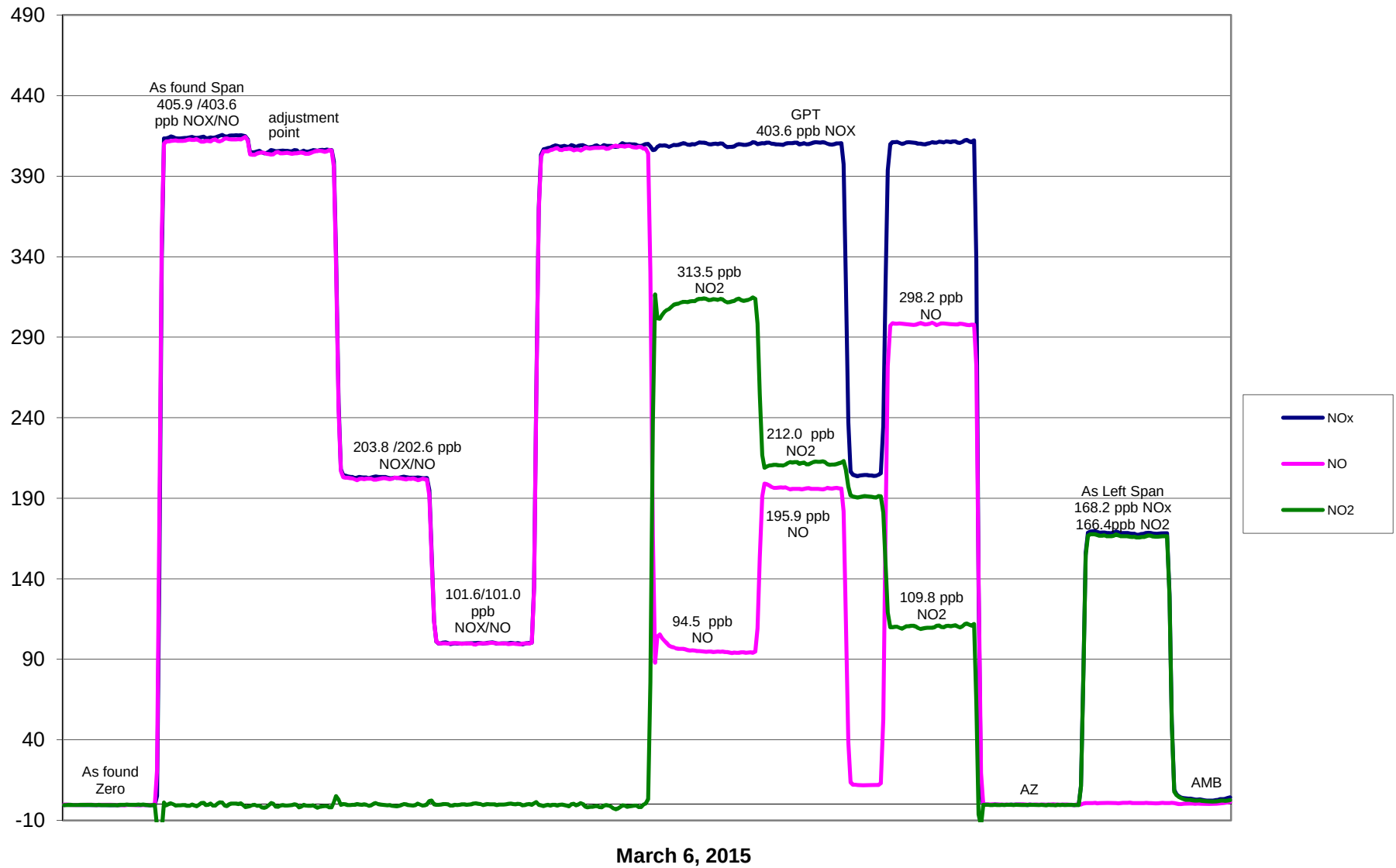
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A	Correlation Coefficient	0.999991
403.6	404.2	0.9984		
202.6	202.1	1.0026		
101.0	99.8	1.0120	Slope	0.996727
			Intercept	0.943856

NO Calibration Curve



NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	March 6 2015	Previous Calibration	February 10 2015
Station Number	10	Station Location	Clairmont
Reason:	Routine	☐ Install	☐ Removal remove ☐ Other:

Start Time (MST)	12:20	End Time (MST)	14:50:00 PM
Barometric Pressure	0.931 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016

DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	1.000953	Calculated slope	1.016547
Calculated intercept	-0.286176	Calculated intercept	0.070761

Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240
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	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	0.980		0.980	
Cell A intensity	81110	Hz	82101	Hz
Cell B intensity	78663	Hz	79321	Hz
Pressure	668.00	in Hg	670.80	in Hg
CellA Flow	0.705	ccm	0.705	ccm
Cell B Flow	0.694	cmm	0.694	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5035	0.00	0.0	0.2	N/A
5035	0.30	313.5	308.8	1.0152
5035	0.20	212.0	207.7	1.0205
5035	0.10	109.8	108.0	1.0170
5035	0.00	0.0	0.2	As found zero
5035	0.30	313.5	308.8	As found span
Average Correction Factor				1.0175

Calculated value of As Found Response: 308.7 ppm Percent Change of As Found: -1.5%

	before calibration		after calibration	
Auto zero	0.0	ppb	0.0	ppb
Auto span	398.2	ppb	426.5	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter O3

Air Monitoring Network PAZA



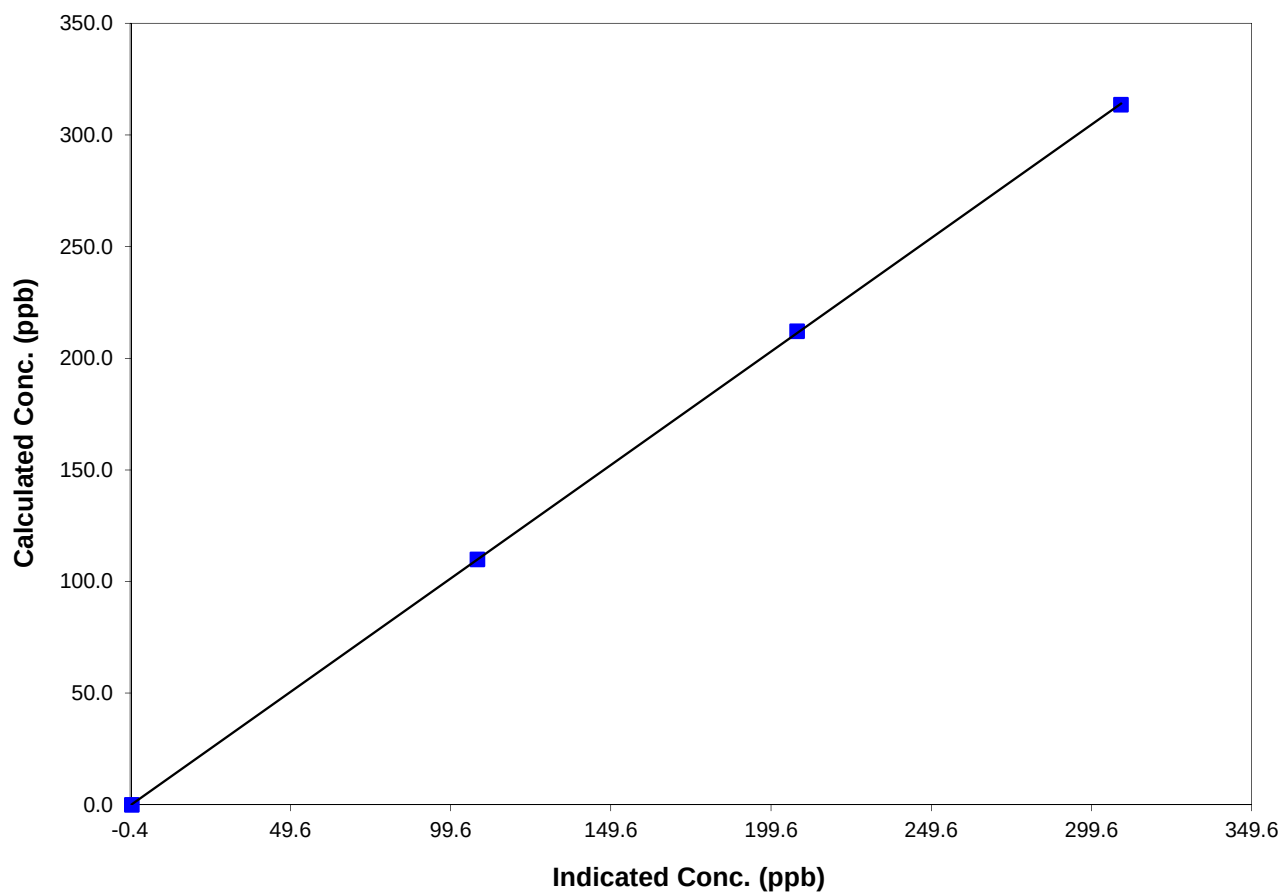
Station Information

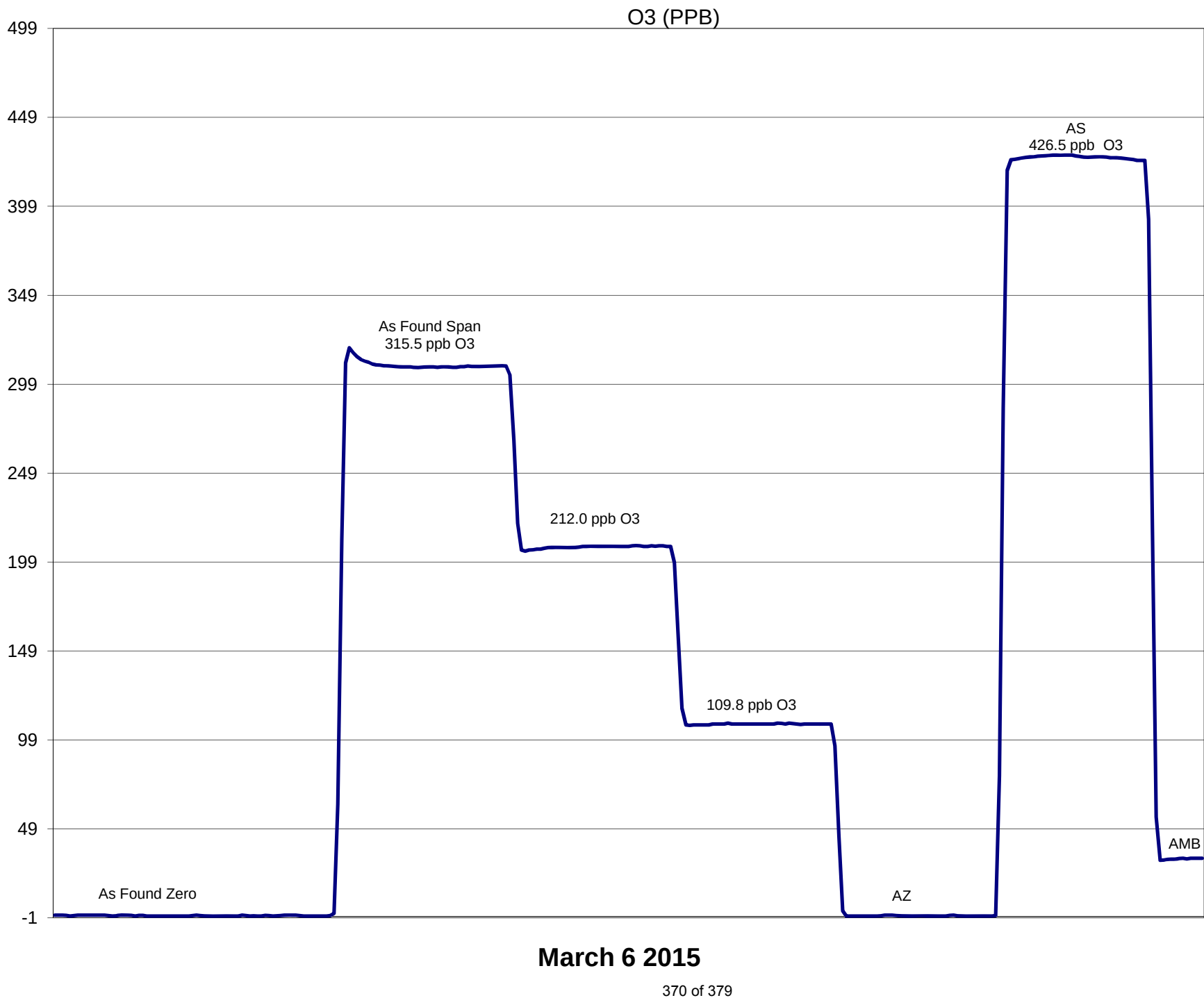
Calibration Date	March 6 2015	Previous Calibration	February 10 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	12:20	End Time (MST)	14:50:00 PM
Analyzer make/model	TEI Model 49C	Analyzer serial #	49C-0609716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	NA	Correlation Coefficient	0.999984
313.5	308.8	1.0152		
212.0	207.7	1.0205		
109.8	108.0	1.0170	Slope	1.016547
			Intercept	0.070761

O3 Calibration Curve





Calibration Report



Parameter THC
Air Monitoring Network PAZA

Station Information

Calibration Date	March 9, 2015	Previous Calibration	February 11, 2015
Station Number	10	Station Location	Clairmont
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	11:55	End Time (MST)	14:15:00 PM
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
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	0.978566	Calculated slope	0.977817
Calculated intercept	0.031370	Calculated intercept	0.113780
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	1510	capture	1510	capture
THC span counts	11040	capture	11040	capture
THC zero offset	2309	capture	2309	capture
THC span offset	2343	capture	2343	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	69.89	21.81	22.24	0.9809
2996	29.96	9.47	9.48	0.9991
2996	9.97	3.17	3.07	1.0337
2996	0.00	0.00	-0.01	As Found Zero
2996	69.93	21.82	22.24	As Found Span
Average Correction Factor				1.0046

Calculated value of As Found Response: 21.803 ppm Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	0.04	ppm	0.00	ppm
Auto span	22.74	ppm	21.83	ppm

Notes: No adjustment made
New span cylinder was installed

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter THC

Air Monitoring Network PAZA



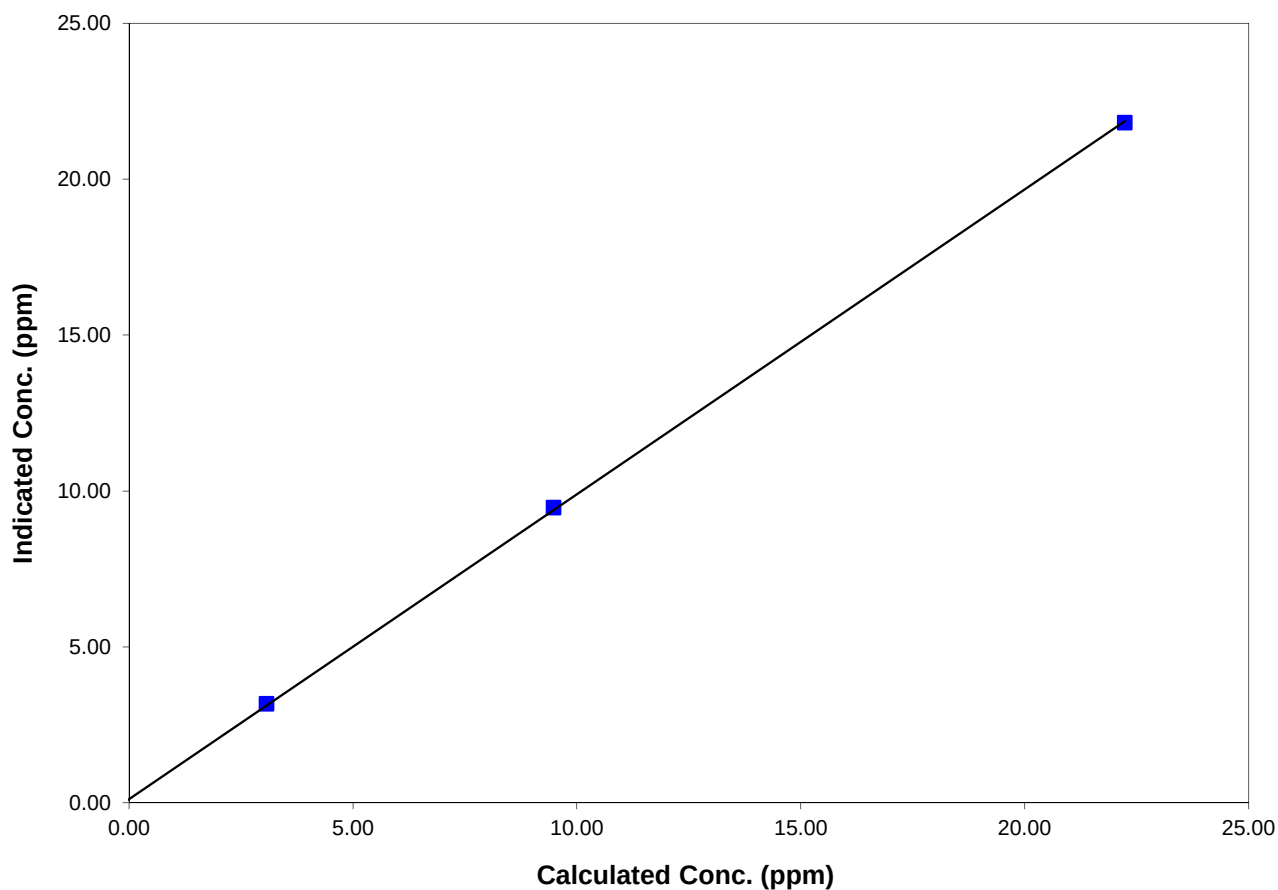
Station Information

Calibration Date	March 9, 2015	Previous Calibration	February 11, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	11:55	End Time (MST)	14:15:00 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	-0.014	N/A		
21.81	22.24	0.9809	Correlation Coefficient	0.999917
9.47	9.48	0.9991		
3.17	3.07	1.0337	Slope	0.977817
			Intercept	0.113780

THC Calibration Curve



THC Calibration



Calibration Report



Parameter THC

Air Monitoring Network PASZA

Station Information

Calibration Date	March 24, 2015	Previous Calibration	March 9, 2015
Station Number	10	Station Location	Clairmont
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	9:20	End Time (MST)	12:05
Barometric Pressure	0.935 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
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
	Before		After
Calculated slope	0.977817	Calculated slope	0.997864
Calculated intercept	0.113780	Calculated intercept	-0.006977
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	1510	capture	1510	capture
THC span counts	11040	capture	11040	capture
THC zero offset	2309	capture	2309	capture
THC span offset	2343	capture	2240	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	0.11	N/A
2996	69.89	21.81	21.90	0.9958
2996	29.96	9.47	9.43	1.0042
2996	9.97	3.17	3.11	1.0206
2996	0.00	0.00	0.11	As Found Zero
2996	69.93	21.82	22.50	As Found Span
Average Correction Factor				1.0068

Calculated value of As Found Response: 22.009 ppm Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	0.00	ppm	0.08	ppm
Auto span	21.83	ppm	21.48	ppm

Notes: Span adjustment made
New zero air supply installed

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter THC

Air Monitoring Network PASZA



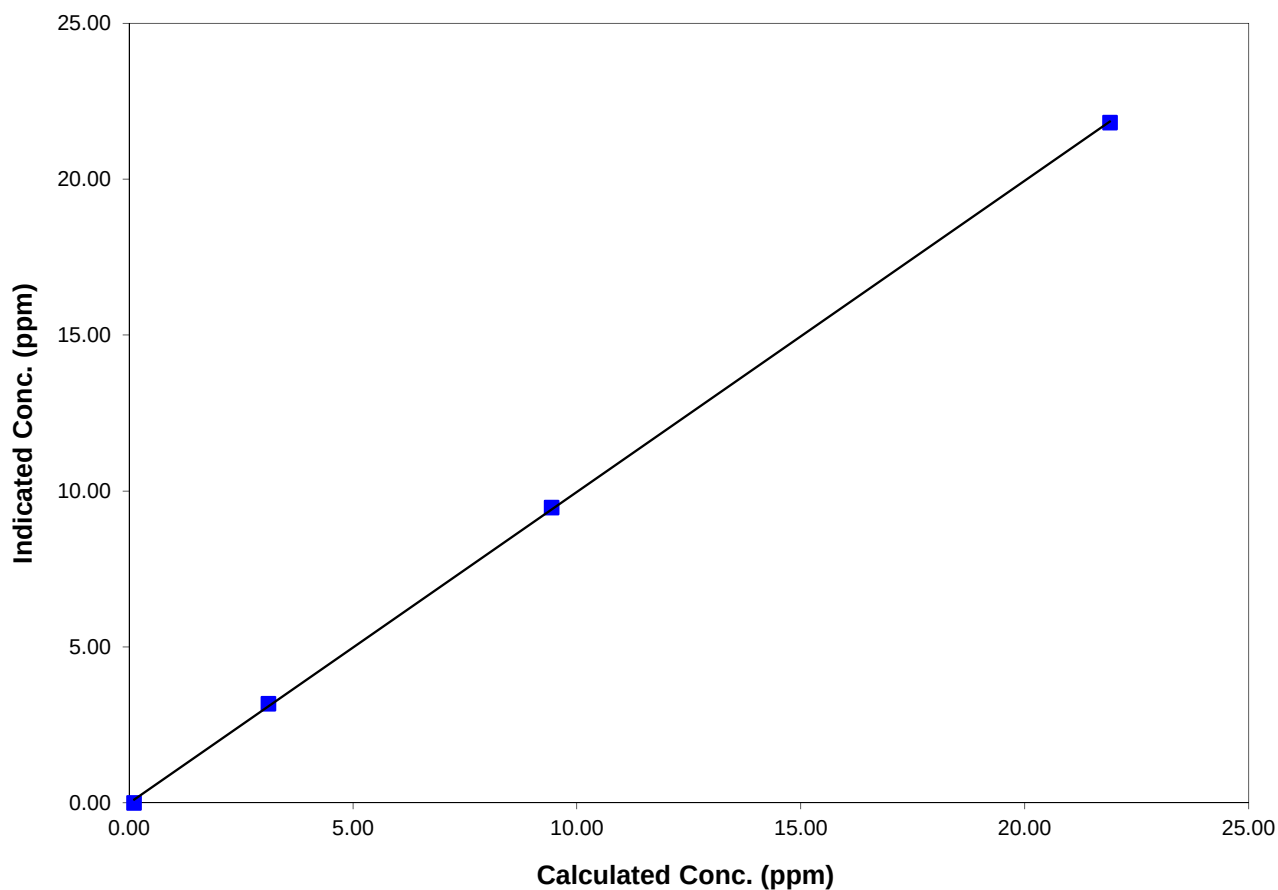
Station Information

Calibration Date	March 24, 2015	Previous Calibration	March 9, 2015
Station Number	10	Station Location	Clairmont
Start Time (MST)	9:20	End Time (MST)	12:05
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

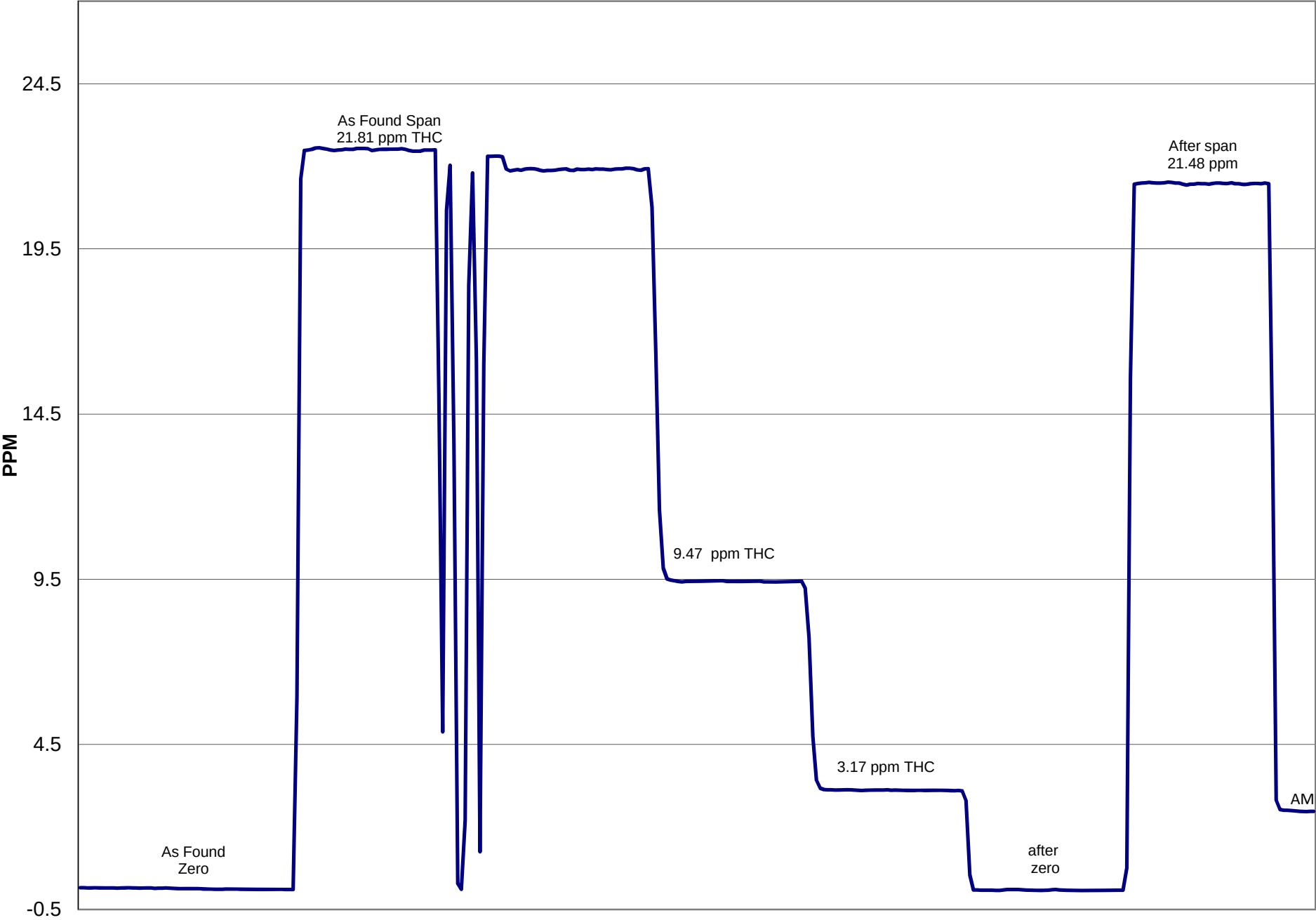
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.112	N/A	Correlation Coefficient	0.999917
21.81	21.90	0.9958		
9.47	9.43	1.0042		
3.17	3.11	1.0206	Slope	0.997864
			Intercept	-0.006977

THC Calibration Curve



THC Calibration



Calibration Report

Parameter **TRS**
Air Monitoring Network

PAZA



Station Information

Calibration Date	March 9, 2015	Previous Calibration	February 11, 2015
Station Name	PAZA Rover	Station Location	Clairmont
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	8:00 AM	End Time (MST)	13:00:00 PM
Barometric Pressure	0.935 Atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	10.32 ppm	Cal Gas Expiry Date	July/08/2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	1
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.025294	Calculated slope	1.000507
Calculated intercept	-0.497865	Calculated intercept	0.259260
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	25.5	ppb	25.7	ppb
Coefficient	0.957		0.938	
Lamp Voltage	796	V	796	V
Chamber Temp	43.8	C	43.9	C
Perm gas Temp	45	C	45	C
Pressure	652.9	mmHg	655.4	mmHg
Sample Flow	0.429	lpm	0.430	lpm
Lamp Intensity	43591	Hz	43272	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.0	0.1	N/A
4995	39.93	81.8	81.7	1.0018
4995	19.97	41.1	40.6	1.0123
6995	9.97	14.7	14.1	1.0385
4995	9.97		0.4	Sox Test
4995	0.00	0.0	0.5	As found zero
4995	39.93	81.8	82.4	As found span
Average Correction Factor				1.0175

Calculated value of As Found Response: 83.45 ppm Percent Change of As Found: -2.0%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.0	ppm
Auto span	60.2	ppm	61.7	ppm

Notes: Zero/span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



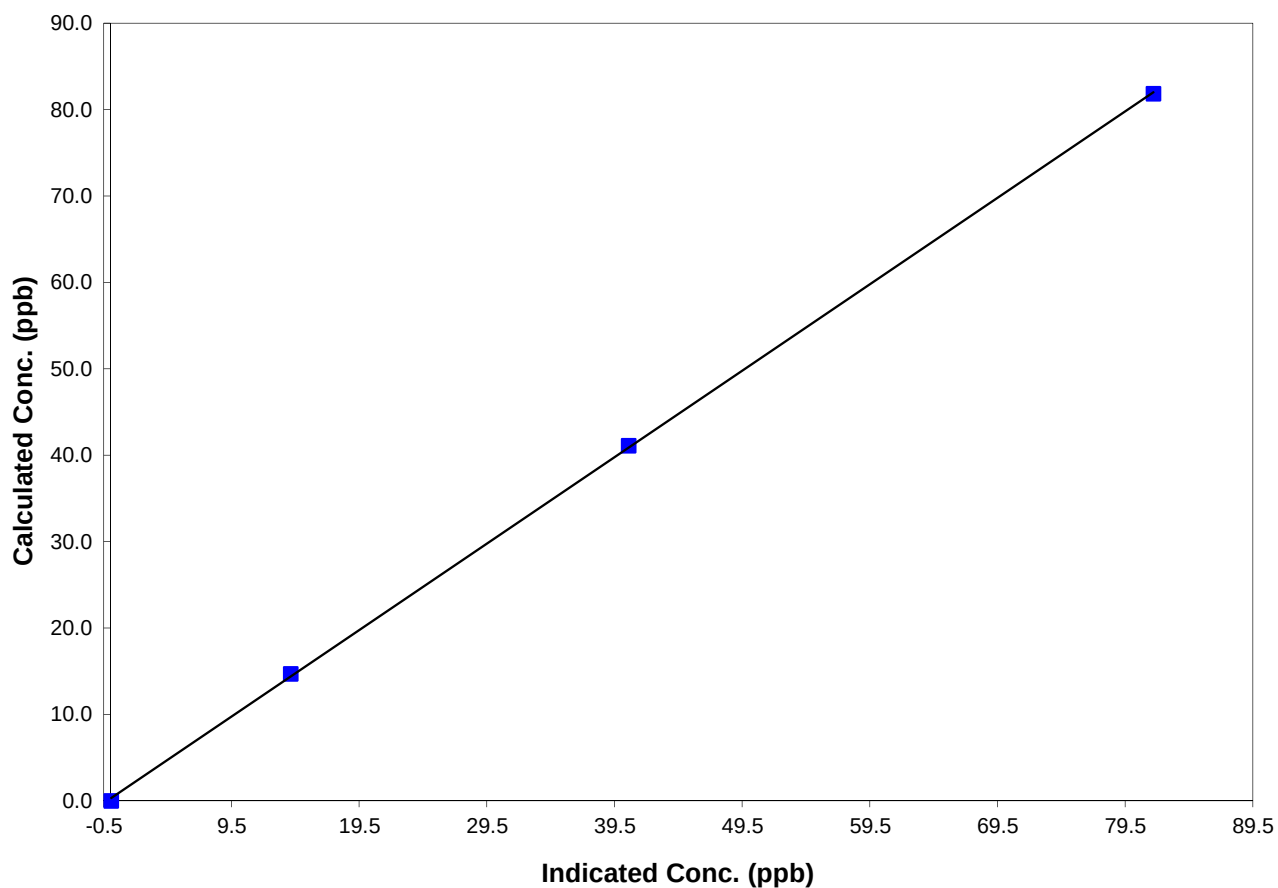
Station Information

Calibration Date	March 9, 2015	Previous Calibration	February 11, 2015
Station Number	PAZA Rover	Station Location	Clairmont
Start Time (MST)	8:00	End Time (MST)	13:00:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

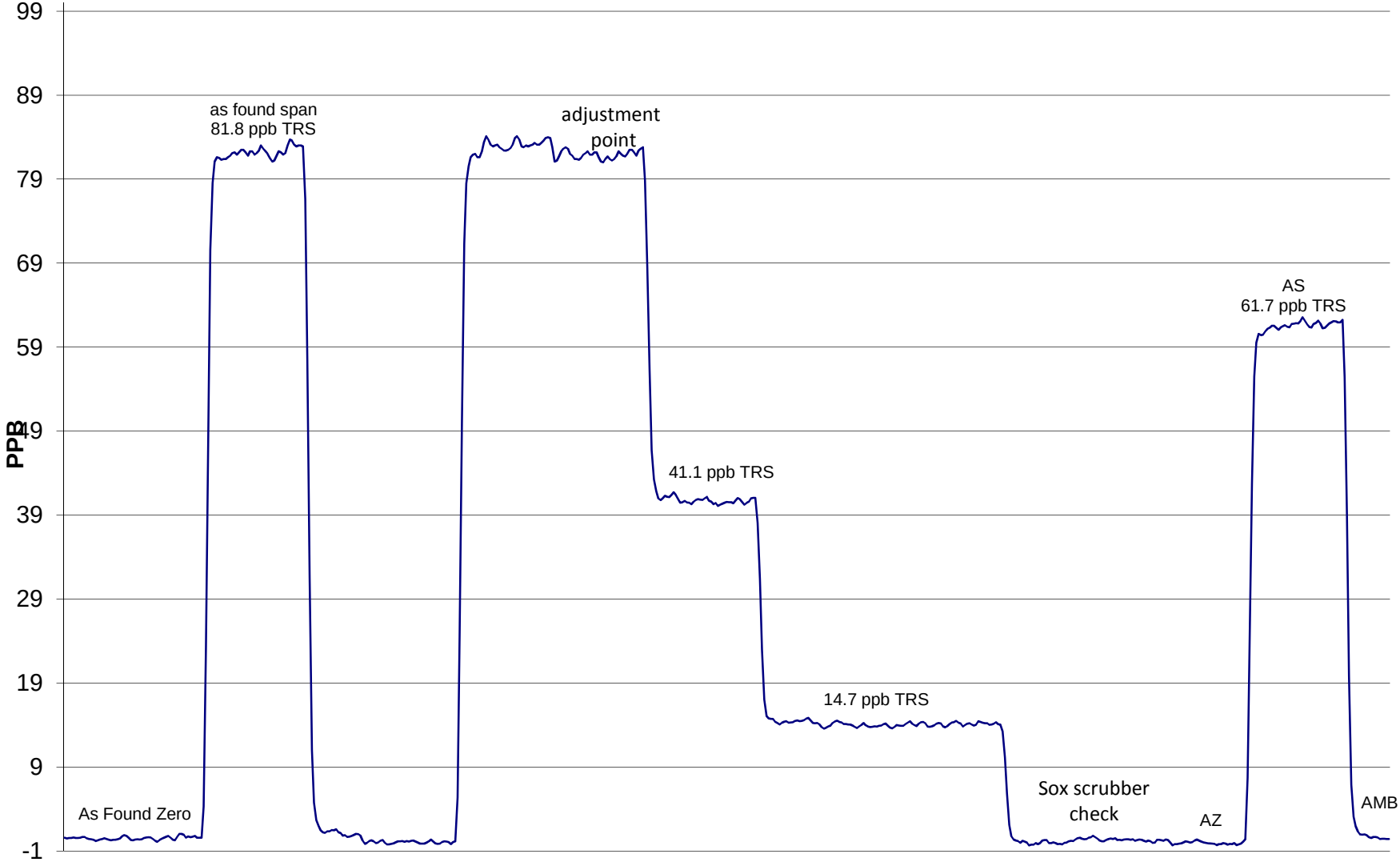
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999931
81.8	81.7	1.0018		
41.1	40.6	1.0123		
14.7	14.1	1.0385	Slope	1.000507
			Intercept	0.259260

TRS Calibration Curve



TRS Calibration



March 9, 2015