



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
March 2018**

March 31, 2018

Alberta Environment and Parks

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

RE: Peace Airshed Zone Association (PAZA) – March 2018 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of March 2018.

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
	Teepee Creek	SE-2-074-04-W6	00001635-02-00

Company	Facility	LSD	EPEA Approval Number
	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
	Pouce Coupe	16-07-078-11-W6	00000614-01-00

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

Included in this report is a summary of the monthly continuous monitoring, detailed hourly average reports and multipoint calibration reports of all instruments. Operational summaries can be found on the “Monthly Continuous Data Summary” and “Continuous Network Equipment Summary” pages of the report.

Continuous Monitoring: Six (6) Stations including Henry Pirker (Grande Prairie), Evergreen Park, Smoky Heights, Beaverlodge, Valleyview, and Rycroft-Portable.

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 meteorological 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 meteorological 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 meteorological 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.
- ◆ All analyzers and meteorological 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.
- ◆ All analyzers and meteorological sensors at the Valleyview station had an operational uptime greater than 90% for the month of March, with the exception of the relative humidity sensor which was offline due to instrument malfunctioning.

Donnelly Station:

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

Rycroft-Portable Station:

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

Passive Monitoring - 27 Stations throughout the PAZA zone:

There were six duplicate sites sampled in the month of March: Wembley and Clouston Creek (SO₂), Bay Tree (O₃), Wanham and Fitzsimmons (NO₂), and Girouxville 3 (H₂S). 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 0.2 ppb to 0.8 ppb, with a mean of 0.5 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.2 ppb to 7.0 ppb, with a mean of 1.1 ppb.
- Monthly average concentrations for O₃ passives ranged from 46.9 ppb to 51.9 ppb, with a mean of 49.8 ppb.
- Monthly average concentrations for H₂S passives were .01 ppb.

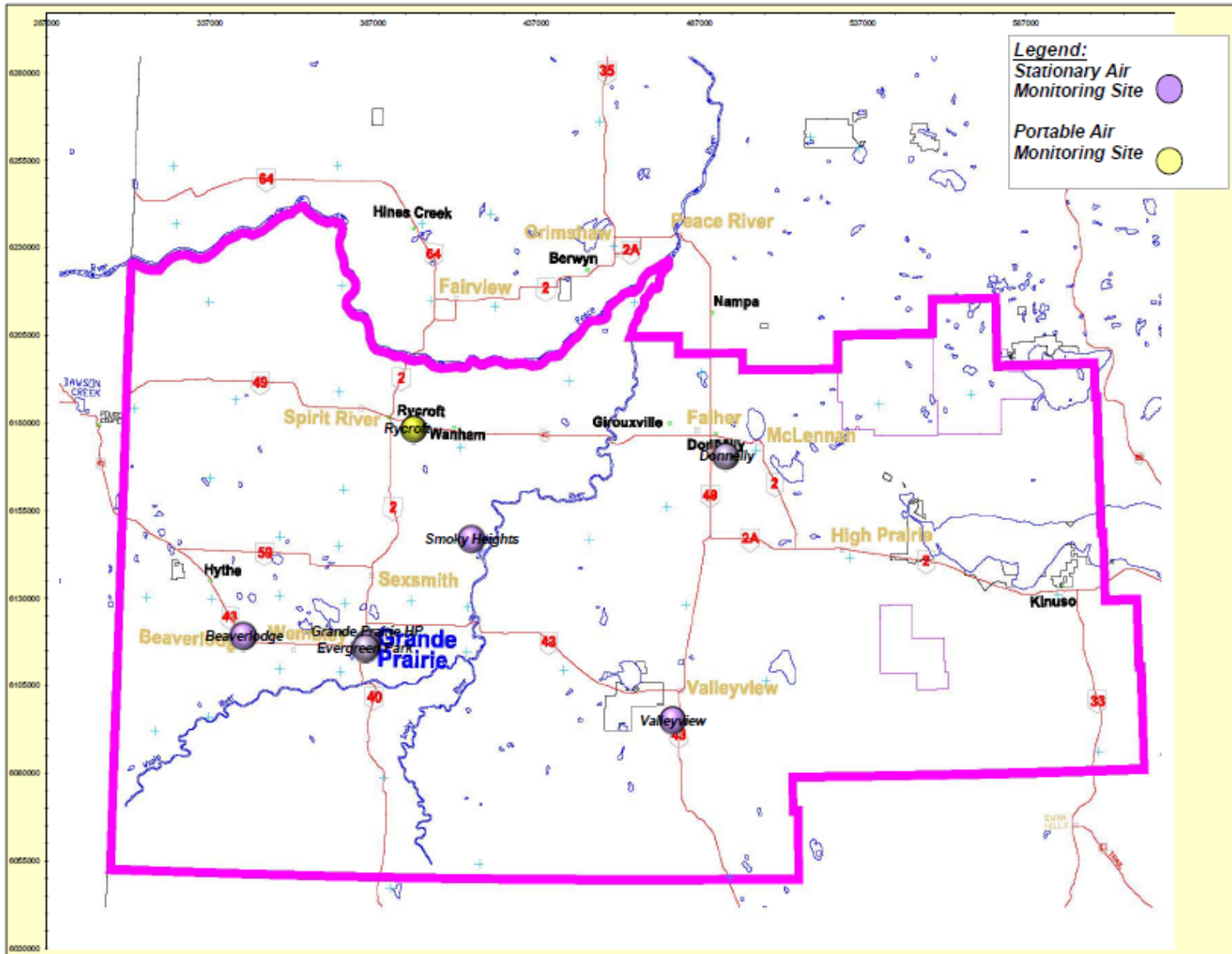
If you have any questions or concerns, please contact Patrick Andersen at 403.505.1041 or the PAZA office at 780.833.4343.

On Behalf of the
Peace Airshed Zone Association



Patrick Andersen, B.Sc.
Program Manager

Location of PAZA Continuous Monitoring Stations



PAZA Monthly Continuous Data Summary

Mar-2018 Peace Airshed Zone Association							Maximum Recorded Values				Operational Time (%)	Calibration Date
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr		24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr	Conc	Day	Conc	Day		
SO ₂ (ppb)	172	48	Henry Pirker	0.6	0	0	3.1	Mar-03 07:00	1.7	Mar-15	100.0	Mar-01
SO ₂ (ppb)	172	48	Evergreen Park	0.4	0	0	9.8	Mar-31 11:00	1.6	Mar-31	100.0	Mar-22
SO ₂ (ppb)	172	48	Smoky Heights	0.9	0	0	12.6	Mar-18 20:00	2.0	Mar-12	100.0	Mar-21
SO ₂ (ppb)	172	48	Beaverlodge	0.8	0	0	18.8	Mar-14 14:00	3.8	Mar-14	99.7	Mar-06
SO ₂ (ppb)	172	48	Valleyview	0.7	0	0	10.6	Mar-14 12:00	2.4	Mar-14	100.0	Mar-28
SO ₂ (ppb)	172	48	Donnelly	0.5	0	0	3.6	Mar-10 01:00	1.3	Mar-15	100.0	Mar-27
SO ₂ (ppb)	172	48	Rycroft-Portable	0.6	0	0	3.7	Mar-31 14:00	1.7	Mar-31	100.0	Mar-16
NO (ppb)			Henry Pirker	5.8	0	0	102.3	Mar-13 09:00	24.4	Mar-06	100.0	Mar-01
NO ₂ (ppb)	159	106	Henry Pirker	16.2	0	0	59.9	Mar-14 07:00	31.0	Mar-08	100.0	Mar-01
NO _x (ppb)			Henry Pirker	22.2	0	0	158.2	Mar-13 09:00	51.4	Mar-06	100.0	Mar-01
NO (ppb)			Beaverlodge	1.4	0	0	37.4	Mar-06 10:00	7.6	Mar-08	99.7	Mar-06
NO ₂ (ppb)	159	106	Beaverlodge	5.2	0	0	34.6	Mar-31 23:00	16.0	Mar-08	99.7	Mar-06
NO _x (ppb)			Beaverlodge	6.6	0	0	57.8	Mar-08 10:00	23.5	Mar-08	99.7	Mar-06
NO (ppb)			Rycroft-Portable	1.0	0	0	28.2	Mar-08 10:00	3.2	Mar-08	100.0	Mar-16
NO ₂ (ppb)	159	106	Rycroft-Portable	4.0	0	0	25.4	Mar-13 18:00	10.8	Mar-13	100.0	Mar-16
NO _x (ppb)			Rycroft-Portable	5.0	0	0	49.3	Mar-08 10:00	14.0	Mar-13	100.0	Mar-16
O ₃ (ppb)	82		Henry Pirker	28.2	0	0	56.9	Mar-14 17:00	40.0	Mar-29	100.0	Mar-01
O ₃ (ppb) - 8-hr			Henry Pirker		0				50.0	Mar-14		-
O ₃ (ppb)	82		Beaverlodge	38.4	0	0	61.1	Mar-14 14:00	49.6	Mar-14	99.7	Mar-06
O ₃ (ppb) - 8-hr			Beaverlodge		0				99.0	Mar-23		-
O ₃ (ppb)	82		Rycroft-Portable	40.0	0	0	62.0	Mar-17 17:00	49.2	Mar-19	100.0	Mar-16
O ₃ (ppb) - 8-hr			Rycroft-Portable		0				57.0	Mar-17		-
CO (ppm)	13		Henry Pirker	0.25	0	0	0.9	Mar-13 09:00	0.4	Mar-15	100.0	Mar-02
CO (ppm) - 8-hr		5	Henry Pirker		0				0.5	Mar-13		-

PAZA Monthly Continuous Data Summary – continued

Mar-2018			Peace Airshed Zone Association				Maximum Recorded Values						
							1-hr		24-hr / 8-hr				
THC (ppm)			Henry Pirker	2.1	-	-	4.3	Mar-13 09:00	2.4	Mar-13	100.0	Mar-02	
CH ₄ (ppm)			Henry Pirker	2.1	-	-	4.3	Mar-13 09:00	2.4	Mar-13	100.0	Mar-02	
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	Mar-31 14:00	0.0	Mar-31	100.0	Mar-02	
THC (ppm)			Rycroft-Portable	1.9	-	-	2.2	Mar-07 07:00	2.1	Mar-17	97.2	Mar-13	
CH ₄ (ppm)			Rycroft-Portable	1.9	-	-	2.2	Mar-07 07:00	2.1	Mar-17	97.2	Mar-13	
NMHC (ppm)			Rycroft-Portable	0.0	-	-	0.0	Mar-29 21:00	0.0	Mar-09	97.2	Mar-13	
TRS (ppb)			Henry Pirker	0.1	-	-	0.5	Mar-05 17:00	0.3	Mar-05	100.0	Mar-02	
TRS (ppb)			Evergreen Park	0.3	-	-	1.5	Mar-07 11:00	0.5	Mar-12	100.0	Mar-22	
TRS (ppb)			Smoky Heights	0.5	-	-	3.8	Mar-04 08:00	1.0	Mar-04	100.0	Mar-21	
TRS (ppb)			Rycroft-Portable	0.2	-	-	2.1	Mar-09 01:00	0.2	Mar-05	100.0	Mar-16	
H ₂ S (ppb)	10	3	Valleyview	0.2	0	0	2.4	Mar-04 22:00	0.5	Mar-06	100.0	Mar-28	
H ₂ S (ppb)	10	3	Donnelly	0.2	0	0	1.2	Mar-12 09:00	0.5	Mar-12	100.0	Mar-27	
PM _{2.5} (µg/m3)	80	30	Henry Pirker	5.5	0	0	23.3	Mar-15 08:00	13.2	Mar-15	100.0	Dec-20	
PM _{2.5} (µg/m3)	80	30	Evergreen Park	3.7	0	0	24.7	Mar-12 10:00	9.7	Mar-14	100.0	Mar-22	
PM _{2.5} (µg/m3)	80	30	Smoky Heights	3.8	0	0	42.9	Mar-13 22:00	11.0	Mar-15	99.9	Dec-15	
PM _{2.5} (µg/m3)	80	30	Beaverlodge	4.5	0	0	22.3	Mar-14 22:00	12.4	Mar-14	99.7	Dec-20	
PM _{2.5} (µg/m3)	80	30	Rycroft-Portable	2.1	0	0	10.8	Mar-11 21:00	5.9	Mar-14	100.0	Mar-16	
RH (%)			Henry Pirker	65.2	-	-	88.6	Mar-21 09:00	82.5	Mar-21	100.0	-	
RH (%)			Evergreen Park	71.7	-	-	98.3	Mar-21 09:00	89.3	Mar-21	100.0	-	
RH (%)			Beaverlodge	--	-	-	--	Mar-01 00:00	--	Feb-28	0.0	-	
RH (%)			Valleyview	--	-	-	--	Mar-01 00:00	--	Feb-28	0.0	-	
SR (W/m ²)			Henry Pirker	115.0	-	-	660.1	Mar-30 13:00	208.6	Mar-31	100.0	-	
Temp (°C)			Henry Pirker	-6.5	-	-	11.1	Mar-15 14:00	2.8	Mar-15	100.0	-	
Temp (°C)			Evergreen Park	-6.5	-	-	9.1	Mar-15 16:00	2.8	Mar-20	100.0	-	
Temp (°C)			Smoky Heights	-6.9	-	-	7.4	Mar-15 16:00	1.3	Mar-16	100.0	-	
Temp (°C)			Beaverlodge	-6.0	-	-	7.6	Mar-15 16:00	2.9	Mar-15	99.7	-	
Temp (°C)			Valleyview	-5.3	-	-	9.7	Mar-13 17:00	2.8	Mar-20	100.0	-	
Temp (°C)			Donnelly	-6.7	-	-	9.2	Mar-12 17:00	1.2	Mar-20	100.0	-	
Temp (°C)			Rycroft-Portable	-7.3	-	-	11.4	Mar-15 14:00	2.3	Mar-20	100.0	-	

PAZA Monthly Continuous Data Summary – continued

Mar-2018		Peace Airshed Zone Association					Maximum Recorded Values						
							1-hr		24-hr / 8-hr				
WSPD s (km/hr)			Henry Pirker	5.8	-	-	28.0	Mar-31 22:00	12.4	Mar-22	97.7%	-	
WSPD s (km/hr)			Evergreen Park	9.4	-	-	36.0	Mar-23 05:00	21.6	Mar-22	100.0%	-	
WSPD s (km/hr)			Smoky Heights	11.0	-	-	34.0	Mar-22 17:00	27.1	Mar-22	100.0%	-	
WSPD s (km/hr)			Beaverlodge	13.5	-	-	44.0	Mar-21 20:00	37.4	Mar-22	98.9%	-	
WSPD s (km/hr)			Valleyview	4.4	-	-	19.0	Mar-01 15:00	11.0	Mar-01	100.0%	-	
WSPD s (km/hr)			Donnelly	8.6	-	-	26.0	Mar-23 10:00	17.3	Mar-22	100.0%	-	
WSPD s (km/hr)			Rycroft-Portable	10.2	-	-	36.0	Mar-02 02:00	27.4	Mar-22	100.0%	-	
WSPD v (km/hr)			Henry Pirker	1.8	-	-	28.0	Mar-31 22:00	12.2	Mar-22	97.7%	-	
WSPD v (km/hr)			Evergreen Park	2.9	-	-	36.0	Mar-23 05:00	21.1	Mar-22	100.0%	-	
WSPD v (km/hr)			Smoky Heights	3.5	-	-	34.0	Mar-22 17:00	26.8	Mar-22	100.0%	-	
WSPD v (km/hr)			Beaverlodge	5.0	-	-	44.0	Mar-21 20:00	37.1	Mar-22	98.9%	-	
WSPD v (km/hr)			Valleyview	1.5	-	-	19.0	Mar-01 15:00	8.7	Mar-01	100.0%	-	
WSPD v (km/hr)			Donnelly	1.9	-	-	26.0	Mar-23 10:00	17.2	Mar-22	100.0%	-	
WSPD v (km/hr)			Rycroft-Portable	1.5	-	-	36.0	Mar-02 02:00	27.2	Mar-22	100.0%	-	
WDIR			Henry Pirker	NNW	-	-	-	-	-	-	97.7%	-	
WDIR			Evergreen Park	NNW	-	-	-	-	-	-	100.0%	-	
WDIR			Smoky Heights	NNW	-	-	-	-	-	-	100.0%	-	
WDIR			Beaverlodge	NE	-	-	-	-	-	-	98.9%	-	
WDIR			Valleyview	N	-	-	-	-	-	-	100.0%	-	
WDIR			Donnelly	ESE	-	-	-	-	-	-	100.0%	-	
WDIR			Rycroft-Portable	N	-	-	-	-	-	-	100.0%	-	

PAZA

Henry Pirker Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

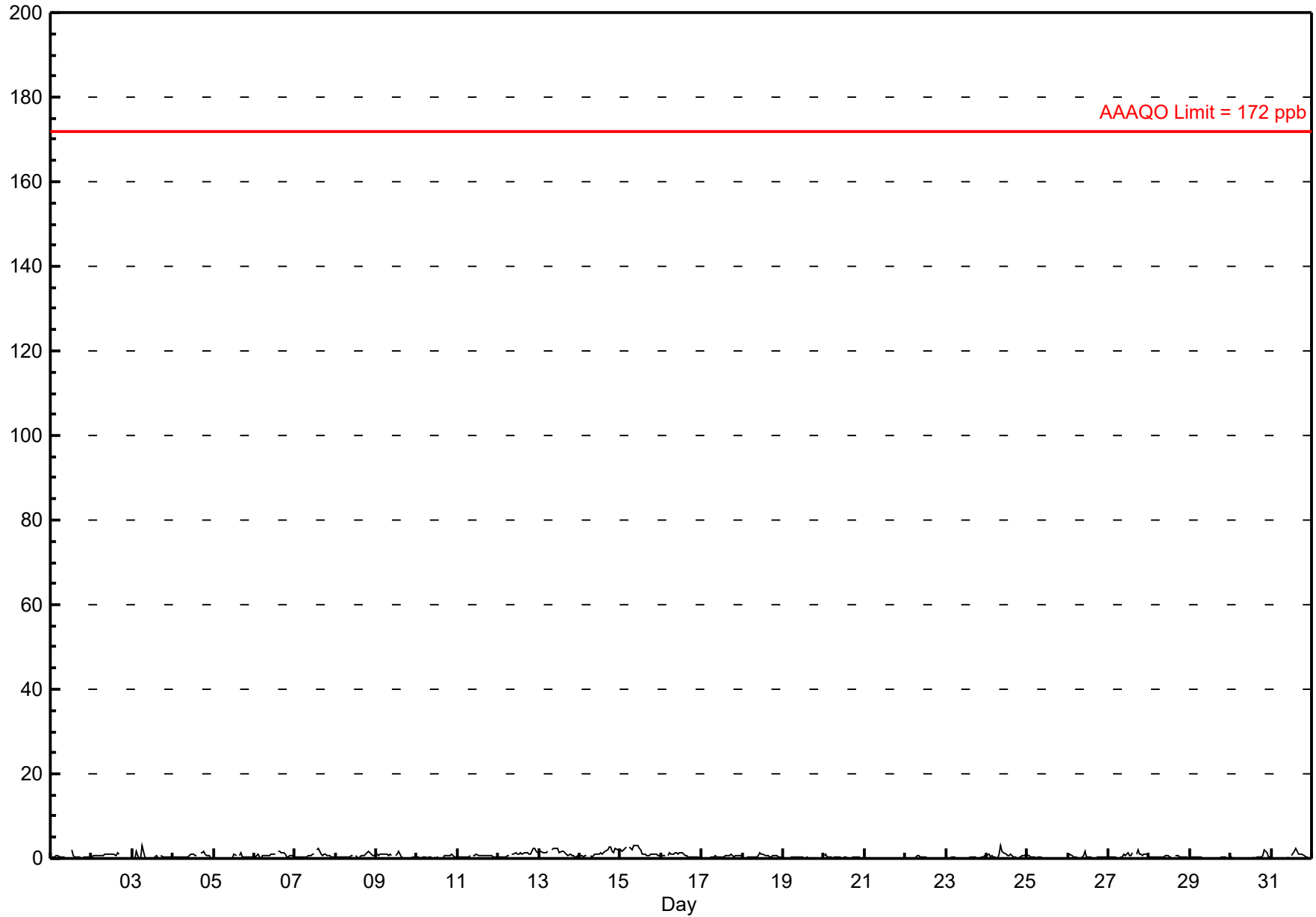
Sulphur Dioxide (SO₂) - ppb

Henry Pirker - March 2018

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 3.1 ppb on Mar 3 07:00	Maximum Daily Average: 1.7 ppb on Mar 15		Hours of Data:	709
Minimum Value: 0 ppb on Mar 2 19:00	Minimum Daily Average: 0.1 ppb on Mar 21		Hours of Missing Data:	35
Maximum Diurnal Average: 0.8 ppb at hour 15	Minimum Diurnal Average: 0.3 ppb at hour 5		Hours of Calibration:	35
Monthly Average: 0.57 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.8 P ₉₀ = 1.3 P ₉₉ = 2.6		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	0	0	0	1	1	0	0	0	0	C	C	C	2	1	0	0	0	0	A	0	0	0	0	0	0.4	2.1
2-Mar	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0.6	1.3
3-Mar	0	0	2	1	0	0	3	0	0	0	0	0	0	0	1	0	A	1	0	0	0	0	0	0	0.5	3.1
4-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	1	1	2	1	1	1	0	0	0.6	1.7
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	1	1	0	0	0	0	1	0	0	0.3	1.3
6-Mar	0	1	1	0	0	1	1	1	1	1	1	1	1	A	2	2	1	1	1	0	0	1	1	0	0.8	1.7
7-Mar	0	0	0	0	0	0	0	0	1	1	1	1	A	2	2	1	1	1	1	1	1	0	0	0	0.7	2.4
8-Mar	0	0	0	0	0	0	0	0	0	1	1	A	1	0	0	1	1	1	1	2	2	1	1	1	0.6	1.6
9-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	0	0	0	0	0	0	0	0	0	0.6	1.9
10-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0.4	0.9
11-Mar	0	0	0	0	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.5	1.0
12-Mar	0	0	0	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1.1	2.2
13-Mar	1	2	1	1	1	2	A	2	2	2	2	2	1	2	2	1	1	1	1	1	1	0	0	1	1.4	2.5
14-Mar	1	1	0	1	1	A	1	1	1	1	1	1	1	1	2	2	3	3	2	1	2	2	2	2	1.3	2.6
15-Mar	2	2	2	3	A	3	2	2	3	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	1.7	3.0
16-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.7	1.3
17-Mar	0	0	A	0	0	0	0	0	1	0	0	0	0	0	1	1	1	1	1	0	1	1	1	1	0.5	0.9
18-Mar	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0.5	1.2
19-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	0.2	0.5
20-Mar	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.9
21-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
22-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	0.2	0.6
23-Mar	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	0.6
24-Mar	1	1	0	1	0	0	0	1	3	2	1	1	1	1	1	0	0	A	0	0	1	1	1	1	0.8	3.1
25-Mar	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.5
26-Mar	0	1	1	0	0	0	0	0	0	1	2	0	0	0	0	0	A	0	0	0	0	0	0	0	0.4	1.9
27-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	1	2	1	1	1	1	1	1	0.7	2.2
28-Mar	0	0	0	0	0	0	0	0	0	1	1	1	0	0	A	1	1	1	0	0	0	0	0	0	0.4	0.8
29-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	0.5
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	2	1	0	0.4	1.9
31-Mar	0	0	0	0	0	0	0	0	0	0	0	A	1	2	3	2	1	1	1	1	0	0	0	0	0.5	2.5
	0.4	0.5	0.5	0.4	0.3	0.4	0.5	0.5	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.6	0.7	0.7	0.7	0.5	0.6	0.6	0.5	0.4	Diurnal Average	
	2.0	1.7	1.9	2.5	1.2	2.7	3.1	2.2	3.1	3.0	2.9	2.4	2.1	1.9	2.5	1.8	1.9	2.6	2.6	1.6	2.2	2.3	2.2	2.1	Diurnal Maximum	

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

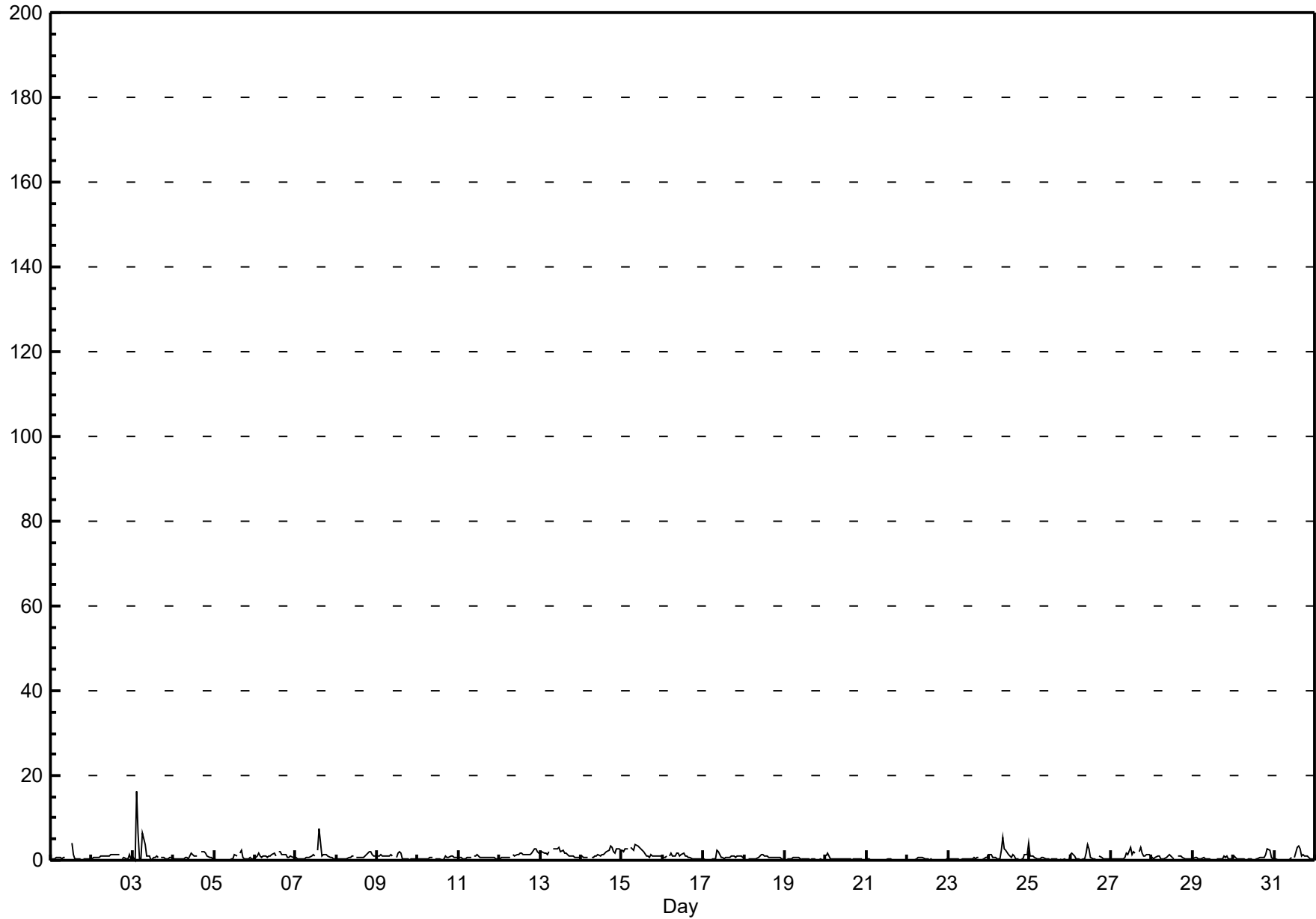


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

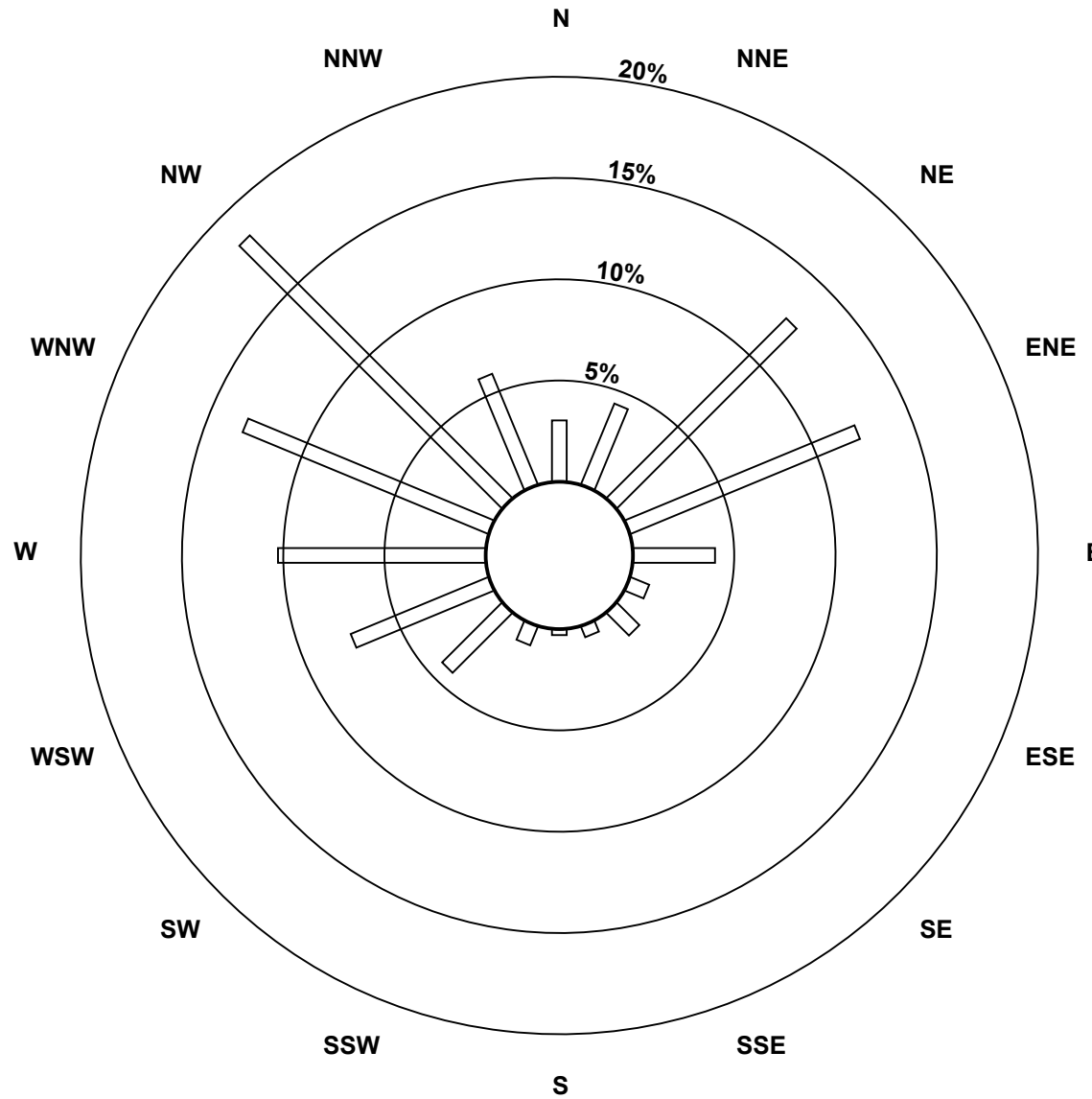
Henry Pirker - March 2018

Maximum Value: 16.1 ppb on Mar 3 03:00		Maximum Daily Average: 2.0 ppb on Mar 15		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 3 02:00		Minimum Daily Average: 0.2 ppb on Mar 21		Hours of Data: 709																							
Maximum Diurnal Average: 1.2 ppb at hour 5		Minimum Diurnal Average: 0.5 ppb at hour 5		Hours of Missing Data: 35																							
Monthly Average: 0.85 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.6 Q ₃ = 1.1 P ₉₀ = 1.8 P ₉₉ = 3.8		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	C	C	C	4	2	0	0	0	0	A	0	0	0	0	0	0.7	4.2	
2-Mar	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	0	0	1	0	0.9	1.4	
3-Mar	1	0	16	6	0	0	6	4	1	1	1	0	1	1	1	1	A	1	1	0	0	0	1	1	1.9	16.1	
4-Mar	0	0	0	0	0	0	0	1	1	0	2	1	1	1	1	A	2	2	2	2	1	1	1	0	0.9	2.0	
5-Mar	1	0	0	0	0	0	0	0	0	0	0	0	1	1	A	2	2	1	0	0	0	1	0	0	0.5	2.3	
6-Mar	1	1	2	1	1	1	1	1	1	1	1	2	1	A	2	2	1	1	1	1	1	1	1	1	1.1	2.0	
7-Mar	1	0	0	0	0	0	1	1	1	1	1	1	A	2	8	1	1	1	1	1	1	1	0	0	1.1	7.5	
8-Mar	0	0	0	0	0	0	0	1	1	1	1	1	A	1	1	1	1	1	2	2	2	1	1	1	0.8	2.2	
9-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	0	0	0	0	0	0	0	0	0	0.9	2.1	
10-Mar	0	0	0	0	0	0	0	1	1	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0.5	1.1	
11-Mar	1	1	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.7	1.3	
12-Mar	0	1	1	1	1	1	1	A	1	1	1	1	2	2	1	1	1	1	1	2	3	3	2	2	1.3	2.7	
13-Mar	2	2	2	2	1	2	A	3	3	3	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1.7	2.9	
14-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	2	3	3	2	2	3	3	2	1.6	3.3	
15-Mar	2	2	3	3	A	3	3	2	4	3	3	3	2	2	1	1	1	1	1	1	1	1	1	1	2.0	3.6	
16-Mar	1	1	1	A	1	2	1	1	2	2	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0.9	1.7	
17-Mar	0	0	A	0	0	0	0	0	3	2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	2.5	
18-Mar	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.6	1.4	
19-Mar	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
20-Mar	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0.4	1.7	
21-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	
22-Mar	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.7	
23-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	A	0	0	1	1	1	0.3	0.7	
24-Mar	1	1	1	1	1	0	0	2	5	3	2	1	1	1	1	1	0	0	A	0	0	1	1	4	1.4	5.4	
25-Mar	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	1.1	
26-Mar	1	2	1	0	0	0	0	0	0	2	4	3	1	0	0	0	A	1	1	0	0	0	0	0	0.8	3.8	
27-Mar	0	0	0	0	0	0	0	0	1	2	1	3	1	2	2	A	2	3	2	1	1	1	1	1	1.1	3.2	
28-Mar	1	0	1	1	1	0	0	0	1	1	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0.6	1.3	
29-Mar	0	1	1	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0.4	1.1	
30-Mar	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	3	3	1	0	0.6	2.7	
31-Mar	0	0	0	0	0	0	0	0	0	0	1	A	1	3	3	3	1	1	1	1	1	0	0	0	0.8	3.3	
		0.7	0.7	1.2	0.8	0.5	0.6	0.7	0.8	1.0	1.0	1.1	1.0	1.0	1.1	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	Diurnal Average		
		2.3	2.0	16.1	6.4	1.4	3.2	6.5	3.8	5.4	3.5	3.8	2.9	4.2	3.0	7.5	2.6	2.3	3.3	3.2	2.2	2.7	2.7	2.7	3.9	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

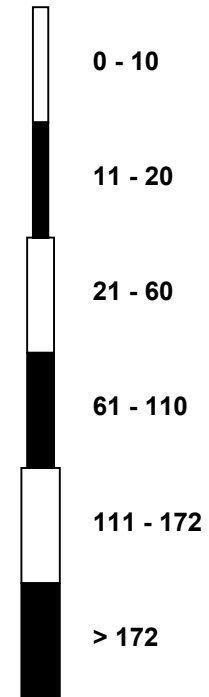


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - March 2018

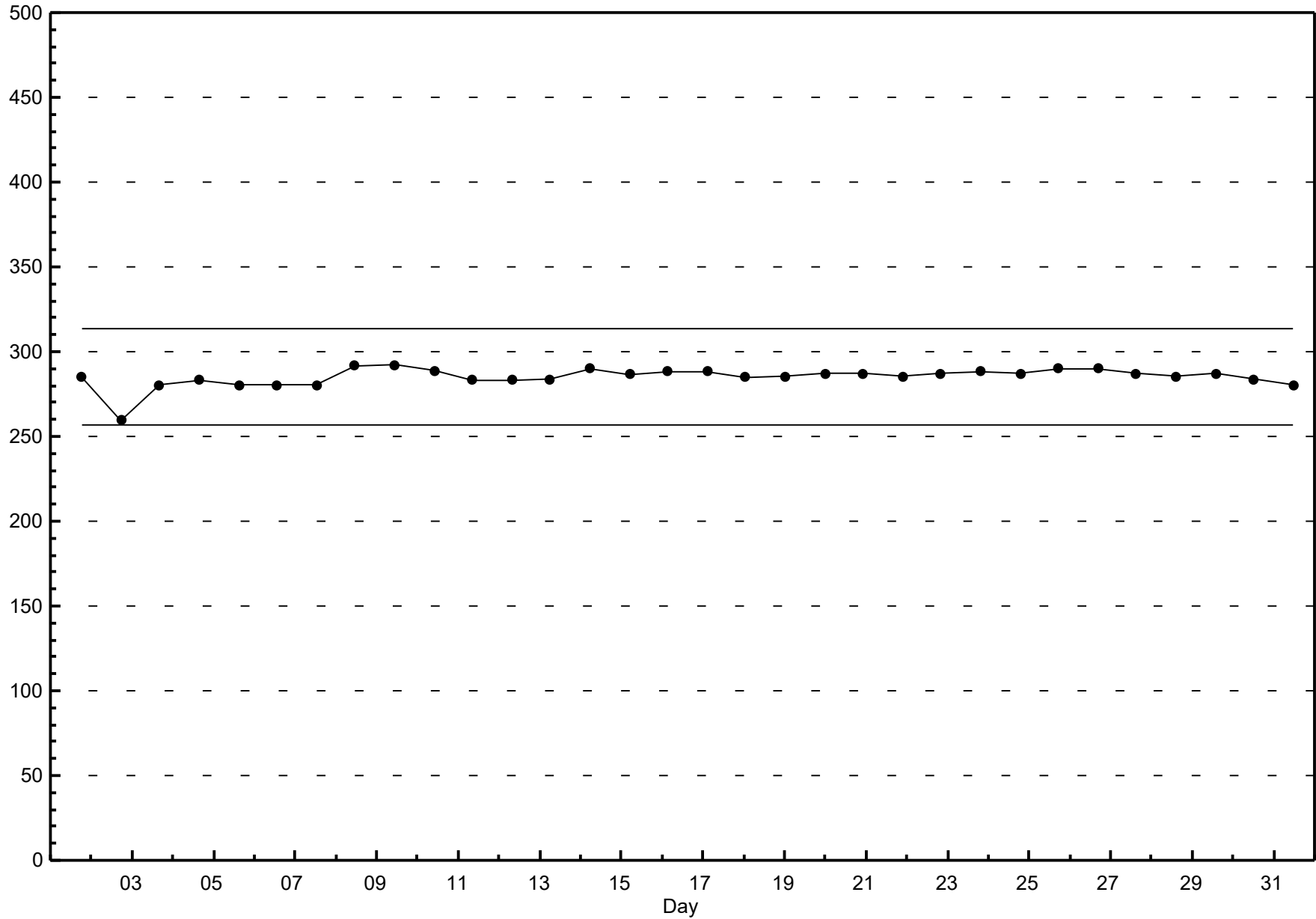


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Henry Pirker - March 2018

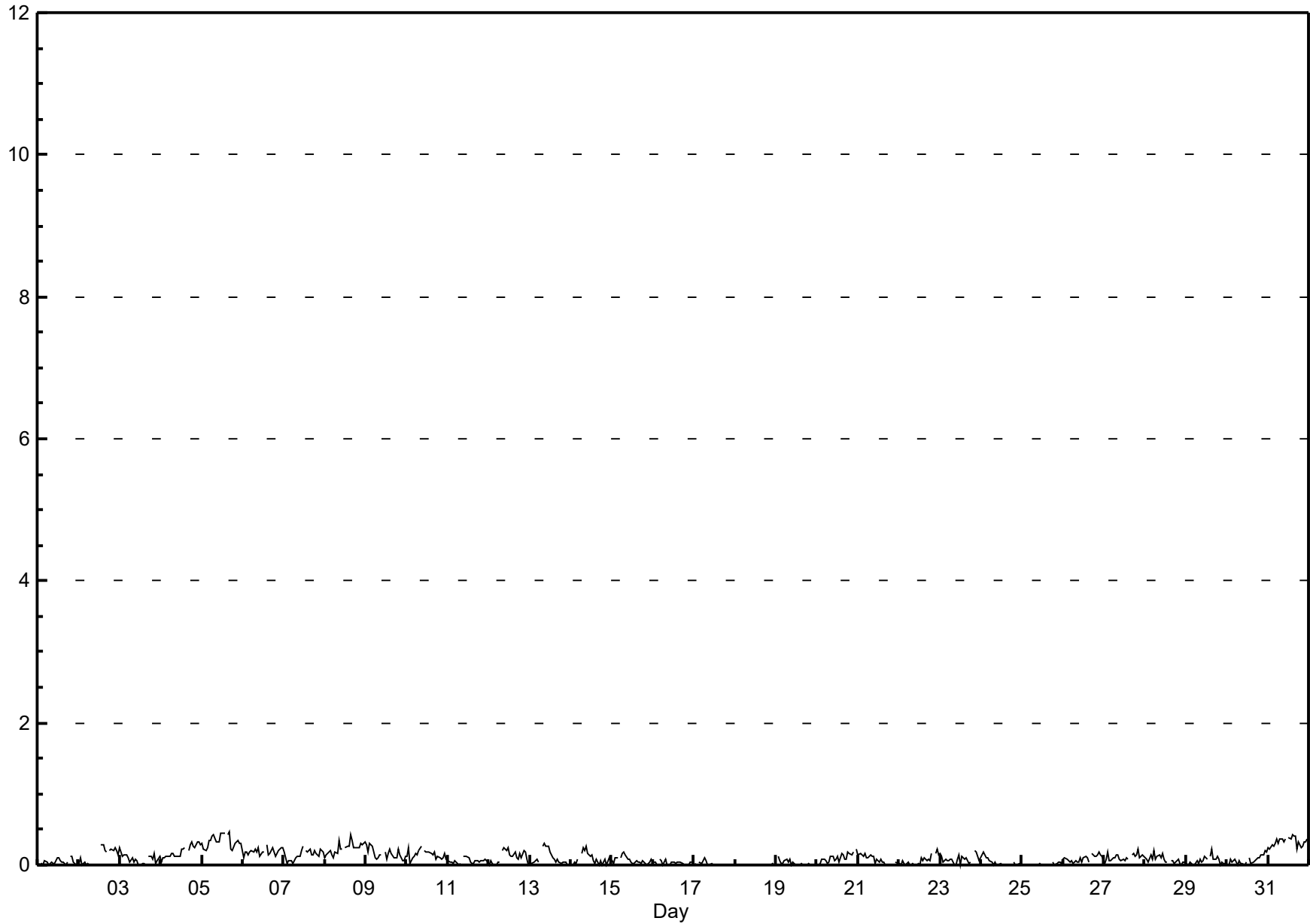


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2018

Maximum Value: 0.5 ppb on Mar 5 17:00		Maximum Daily Average: 0.3 ppb on Mar 5		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 1 04:00		Minimum Daily Average: 0.0 ppb on Mar 18		Hours of Data: 708																							
Maximum Diurnal Average: 0.1 ppb at hour 9		Minimum Diurnal Average: 0.1 ppb at hour 4		Hours of Missing Data: 36																							
Monthly Average: 0.10 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.2 P ₉₉ = 0.4		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	A	0	0	0	0	0	0.0	0.1	
2-Mar	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3	
3-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	
4-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	0.3	
5-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	0.5	
6-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	
7-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	
8-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	
9-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	
10-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	
11-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	0.1	
12-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	
13-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	
14-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	0.3	
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	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	
17-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	
18-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	0.0	
19-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	0.1	
20-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	
21-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	
22-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	
23-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	
24-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	
25-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	
26-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	
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	0.1	0.2	
28-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	0.2	
29-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	
30-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	
31-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	
		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average		
		0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									



Hourly Maximums

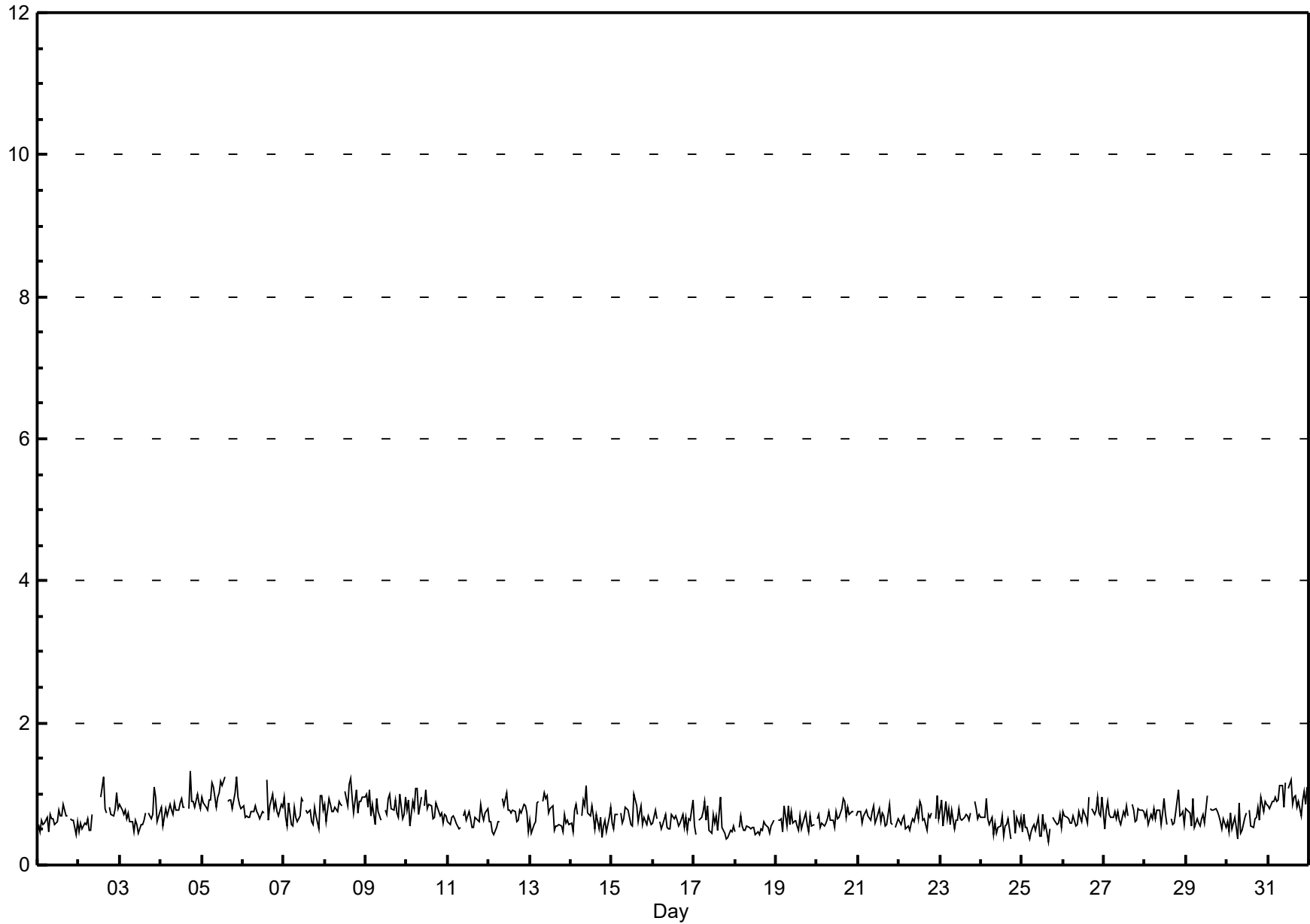
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2018

Maximum Value: 1.3 ppb on Mar 4 18:00		Maximum Daily Average: 1.0 ppb on Mar 5		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 25 16:00		Minimum Daily Average: 0.5 ppb on Mar 18		Hours of Data: 708																							
Maximum Diurnal Average: 0.8 ppb at hour 13		Minimum Diurnal Average: 0.7 ppb at hour 2		Hours of Missing Data: 36																							
Monthly Average: 0.71 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: 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	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	0.6	0.9	
2-Mar	0	1	0	1	1	1	0	0	1	C	C	C	C	1	1	1	1	A	1	1	1	1	1	1	0.7	1.2	
3-Mar	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.1	
4-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	1.3	
5-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	1.0	1.2	
6-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	1.2	
7-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	0.7	1.0	
8-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	0.9	1.2	
9-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	0.8	1.1	
10-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	0.8	1.1	
11-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	0.7	0.8	
12-Mar	1	1	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.0	
13-Mar	1	0	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	0.7	1.0	
14-Mar	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0.7	1.1	
15-Mar	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
16-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.6	0.9	
17-Mar	1	0	A	1	1	1	1	1	1	0	0	1	1	1	0	1	1	0	0	0	0	0	0	1	0.6	0.9	
18-Mar	0	A	1	1	1	0	0	1	1	1	1	0	0	0	1	0	1	1	1	1	0	1	1	1	0.5	0.7	
19-Mar	A	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	1	1	0.6	0.8	
20-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	
21-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	
22-Mar	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	0.7	1.0	
23-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	0.9	
24-Mar	1	1	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	0	A	1	0	1	1	1	0.6	0.9	
25-Mar	0	1	1	1	0	0	1	1	0	1	0	0	1	1	0	0	A	1	1	1	1	1	1	1	0.5	0.7	
26-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	1.0	
27-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	0.9	
28-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	0.7	1.1	
29-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	0.7	1.0	
30-Mar	1	0	1	1	1	1	0	1	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
31-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	0.9	1.2	
		0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Diurnal Average	
		1.0	0.9	1.1	0.9	1.0	1.1	1.2	1.1	1.1	1.1	1.2	1.2	1.1	1.2	1.2	1.2	1.0	1.3	1.1	1.1	1.2	1.0	1.0	1.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

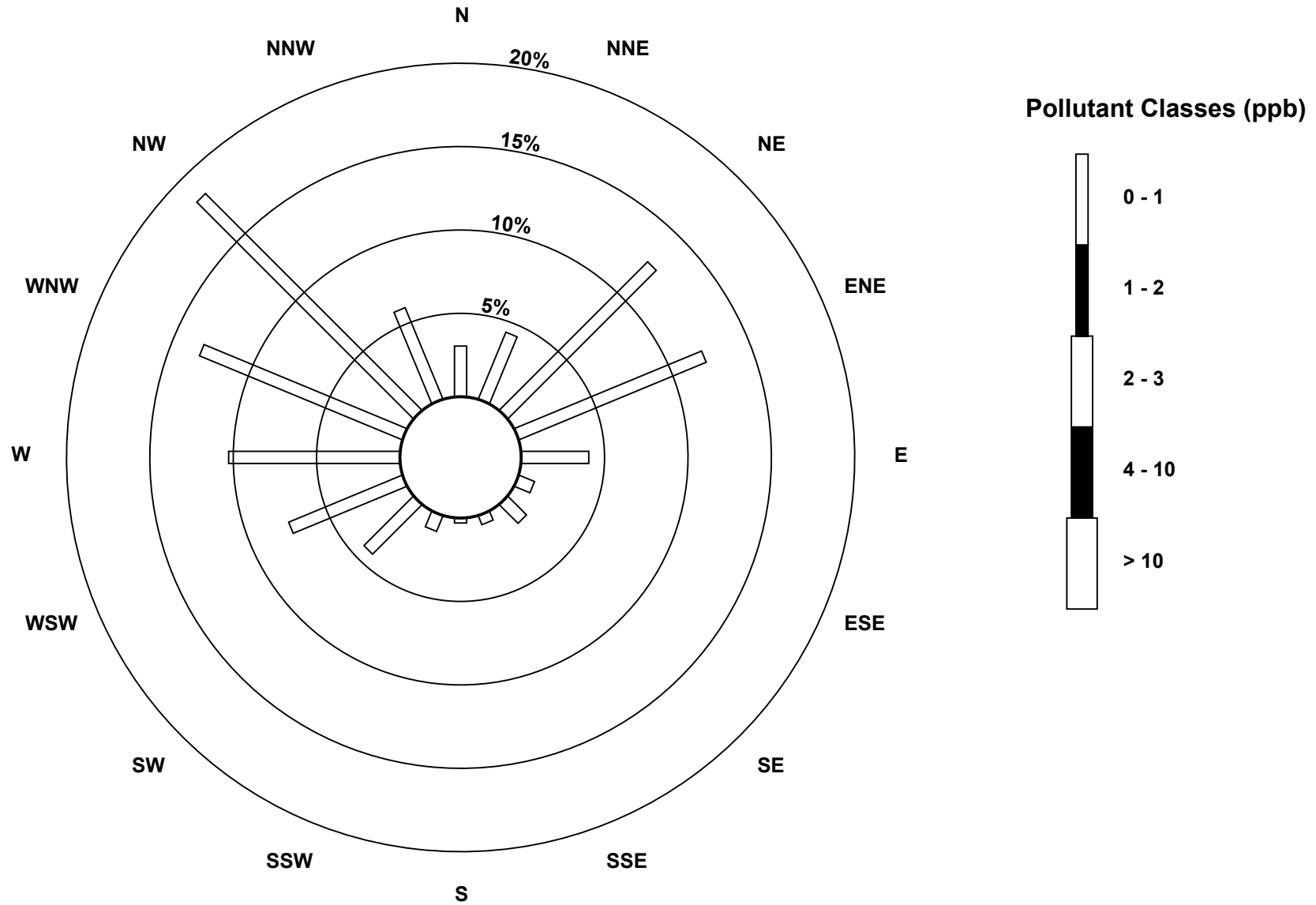
Hourly Maximums

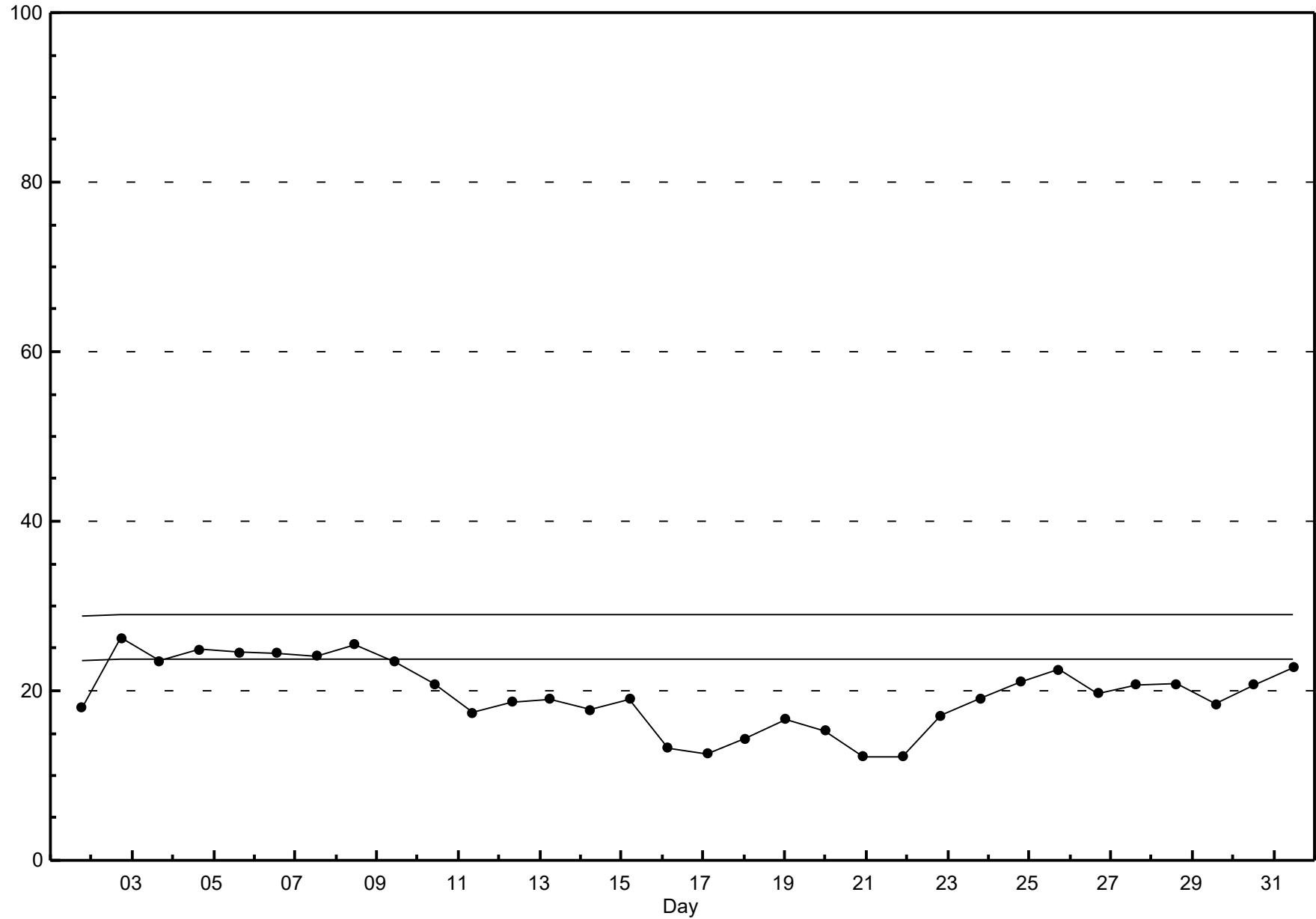
Total Reduced Sulphur (TRS) - ppb
Henry Pirker - March 2018



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Henry Pirker - March 2018





Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - March 2018

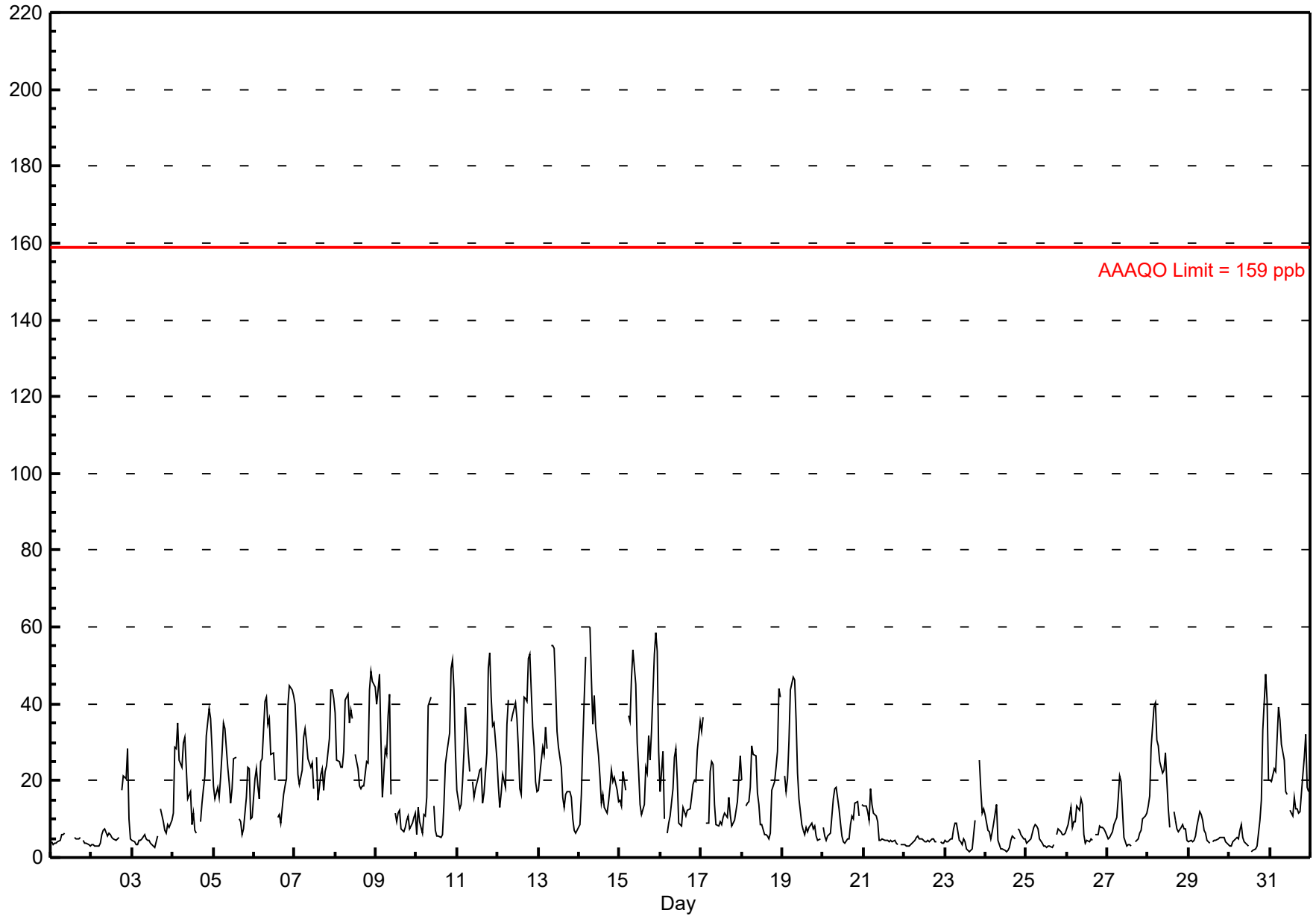
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 59.9 ppb on Mar 14 07:00	Maximum Daily Average: 31.0 ppb on Mar 8		Hours of Data:	707
Minimum Value: 2 ppb on Mar 24 13:00	Minimum Daily Average: 4.2 ppb on Mar 22		Hours of Missing Data:	37
Maximum Diurnal Average: 24.1 ppb at hour 8	Minimum Diurnal Average: 8.8 ppb at hour 15		Hours of Calibration:	37
Monthly Average: 16.18 ppb	Percentiles: P ₁ = 2.1 P ₁₀ = 4.0 Q ₁ = 5.7 Median = 11.8 Q ₃ = 23.4 P ₉₀ = 36.0 P ₉₉ = 53.5		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Mar	4	3	4	4	4	5	6	6	6	C	C	C	C	C	5	5	5	5	A	4	4	4	3	3	4.5	6.3																						
2-Mar	3	3	3	3	3	4	6	7	7	6	6	6	5	5	5	5	5	A	17	21	20	28	10	5	8.1	28.4																						
3-Mar	4	4	3	3	4	5	5	6	5	5	4	4	3	3	4	6	A	13	9	7	6	9	8	10	5.6	12.6																						
4-Mar	11	29	28	35	25	24	30	31	23	15	17	8	12	7	6	A	9	14	18	21	32	39	36	28	21.8	38.8																						
5-Mar	18	15	18	16	21	27	35	34	24	19	14	18	26	26	A	10	9	6	7	15	23	23	10	11	18.6	35.2																						
6-Mar	20	23	19	15	25	26	41	42	35	36	27	27	20	A	11	11	9	16	19	21	40	45	44	42	26.6	44.6																						
7-Mar	40	32	22	19	23	31	33	30	26	23	24	18	A	26	15	21	23	17	22	24	31	44	44	41	27.4	43.8																						
8-Mar	38	26	25	24	24	28	41	42	35	38	36	A	27	23	19	18	18	19	25	25	44	49	46	45	31.0	48.6																						
9-Mar	40	44	48	31	16	28	27	37	43	16	A	11	9	12	12	7	7	8	10	11	7	9	10	11	19.7	47.6																						
10-Mar	6	13	9	6	11	11	16	40	42	A	13	7	6	6	5	6	14	24	27	32	49	51	44	28	20.3	51.4																						
11-Mar	17	13	14	20	28	39	27	23	A	20	16	18	21	23	23	14	17	27	49	54	42	34	35	26	26.0	53.5																						
12-Mar	19	13	17	22	18	35	41	A	35	37	40	36	28	18	17	42	41	41	52	53	34	29	20	17	30.6	53.0																						
13-Mar	18	22	29	27	34	28	A	55	55	54	45	33	29	23	16	13	17	17	17	16	10	7	6	7	25.1	55.3																						
14-Mar	9	17	30	42	52	A	60	47	35	42	34	27	21	14	17	13	12	15	18	23	20	21	17	14	26.0	59.9																						
15-Mar	15	13	22	18	A	37	35	47	54	45	30	22	14	11	14	23	22	32	25	33	53	59	54	27	30.7	58.6																						
16-Mar	17	28	10	A	7	9	11	18	26	28	20	9	8	13	12	11	12	13	15	19	20	20	28	36	17.0	35.5																						
17-Mar	33	37	A	9	9	22	25	24	14	9	8	9	9	11	12	10	16	11	8	9	10	14	21	26	15.4	36.6																						
18-Mar	20	A	13	14	15	18	29	27	26	17	14	9	9	6	6	6	5	6	17	20	23	27	44	42	18.0	44.1																						
19-Mar	A	21	17	21	30	44	47	46	36	22	15	8	7	6	8	7	8	9	8	8	6	4	5	A	17.4	47.1																						
20-Mar	8	6	4	6	6	11	15	18	18	12	9	6	4	4	5	5	9	11	10	14	14	11	A	14	9.5	18.3																						
21-Mar	13	14	12	10	18	14	12	11	9	4	4	5	4	5	4	4	4	4	4	4	3	A	3	3	7.4	18.0																						
22-Mar	3	3	3	3	3	4	4	5	5	5	5	5	4	4	5	4	5	5	4	4	A	4	4	4	4.2	5.4																						
23-Mar	5	4	4	5	5	7	9	9	4	4	3	5	4	2	2	2	2	6	10	A	25	18	11	13	6.9	25.4																						
24-Mar	11	7	7	5	7	9	14	5	3	2	2	2	2	2	3	4	6	5	A	8	7	6	5	5	5.4	13.6																						
25-Mar	4	4	5	5	8	9	8	7	5	4	3	3	3	3	3	3	3	A	6	8	7	6	6	6	5.1	8.7																						
26-Mar	8	8	13	8	9	9	13	12	15	14	6	4	5	4	5	4	A	6	6	8	8	8	8	7	8.2	15.2																						
27-Mar	5	5	6	7	9	10	15	21	20	12	5	3	3	3	3	A	4	5	5	6	7	10	11	12	8.2	21.1																						
28-Mar	14	16	29	39	40	31	29	25	22	23	27	20	13	8	A	12	10	8	7	8	9	8	7	5	17.7	40.1																						
29-Mar	4	4	4	5	5	8	12	11	10	7	6	4	4	A	4	4	4	5	5	5	5	5	4	3	5.7	11.8																						
30-Mar	3	3	4	5	5	5	7	9	5	4	3	3	A	2	2	2	3	6	10	15	33	48	41	20	10.3	47.7																						
31-Mar	20	20	23	23	31	39	36	29	25	17	16	A	12	11	16	13	13	11	12	22	26	32	18	17	21.0	39.0																						
																								14.3	15.0	14.8	14.9	16.5	19.2	23.0	24.1	22.3	18.7	15.7	11.7	11.1	10.0	8.8	9.9	10.7	12.6	15.3	17.2	20.7	22.3	20.1	17.6	Diurnal Average
																								39.9	43.8	47.6	41.6	52.4	43.6	59.9	55.2	55.3	54.5	44.5	36.0	28.9	26.0	23.2	41.9	41.2	40.6	51.9	53.5	52.9	58.6	53.6	44.5	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
Henry Pirker - March 2018



Hourly Maximums

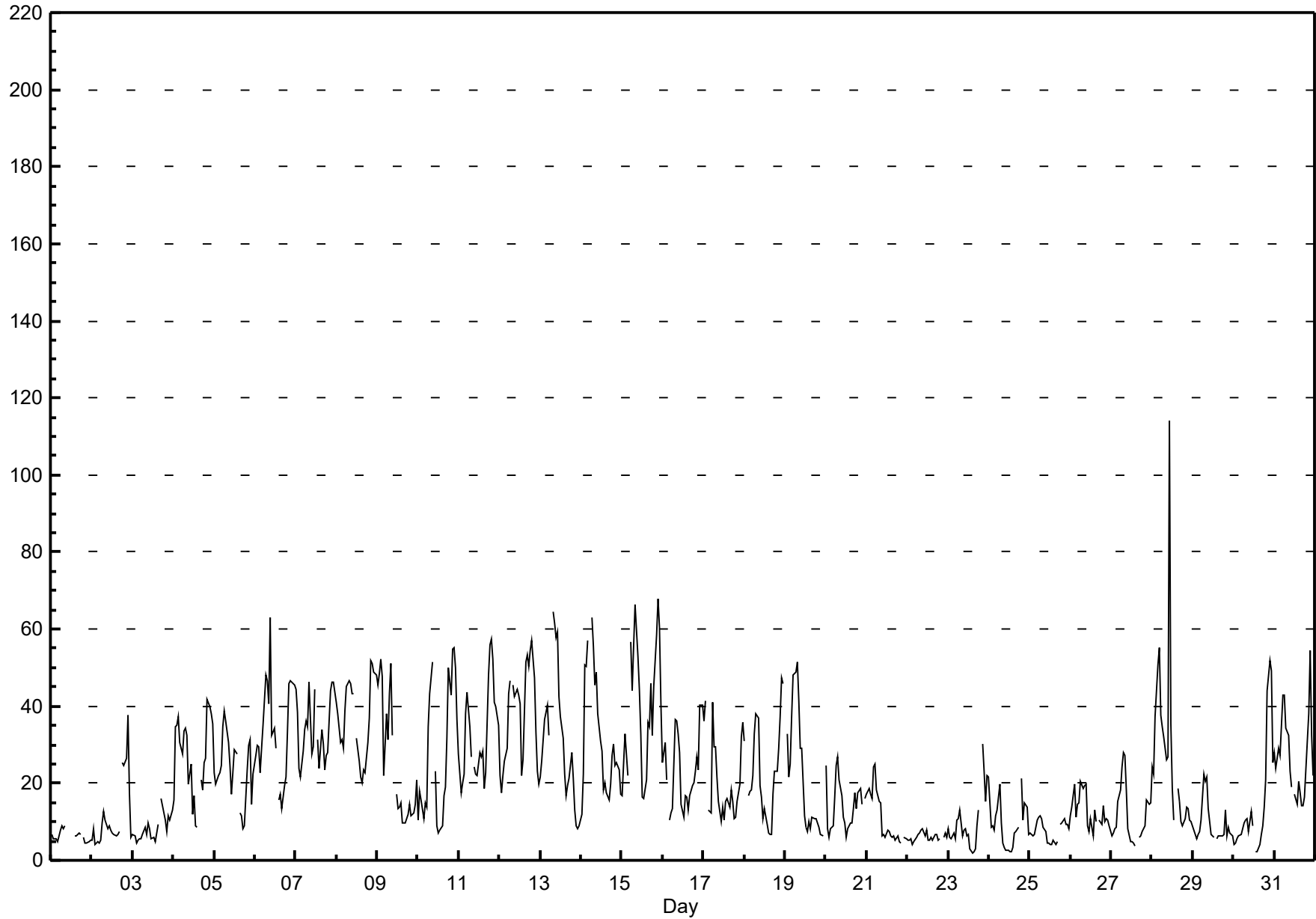
Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - March 2018

Maximum Value: 114.0 ppb on Mar 28 11:00		Maximum Daily Average: 40.2 ppb on Mar 15		Hours in Service: 744																							
Minimum Value: 2 ppb on Mar 23 15:00		Minimum Daily Average: 6.1 ppb on Mar 22		Hours of Data: 707																							
Maximum Diurnal Average: 30.0 ppb at hour 8		Minimum Diurnal Average: 12.4 ppb at hour 15		Hours of Missing Data: 37																							
Monthly Average: 21.28 ppb		Percentiles: P ₁ = 2.7 P ₁₀ = 5.9 Q ₁ = 8.5 Median = 17.1 Q ₃ = 30.9 P ₉₀ = 44.6 P ₉₉ = 60.2		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	7	6	6	5	5	8	9	8	9	C	C	C	C	C	6	6	7	7	A	6	5	4	5	5	6.3	8.9	
2-Mar	5	8	4	5	4	5	10	13	10	8	9	8	7	7	6	7	8	A	25	25	26	38	18	6	11.4	37.6	
3-Mar	7	6	4	5	6	6	7	9	7	10	8	6	6	5	7	9	A	16	12	10	8	11	10	13	8.1	16.1	
4-Mar	16	35	35	37	30	28	34	34	32	20	25	12	17	9	9	A	21	18	25	26	42	40	38	35	26.9	41.8	
5-Mar	23	20	22	23	25	35	39	36	31	25	17	23	29	28	A	12	11	8	9	24	30	31	14	22	23.3	38.9	
6-Mar	27	30	29	23	29	35	48	47	41	63	33	34	29	A	16	17	14	19	22	33	46	47	46	45	33.6	63.2	
7-Mar	45	38	24	22	28	34	36	35	46	27	30	45	A	31	24	34	30	23	27	28	44	46	46	44	34.3	46.3	
8-Mar	41	38	31	31	29	39	45	47	46	43	A	A	32	26	22	20	23	23	31	37	52	51	49	48	36.8	52.0	
9-Mar	46	48	52	48	22	38	31	43	51	32	A	17	14	14	15	10	10	11	12	14	11	12	14	21	25.5	52.1	
10-Mar	11	18	16	11	15	14	35	43	51	A	23	9	7	8	9	17	19	32	50	43	55	55	50	36	27.2	55.2	
11-Mar	28	17	20	23	38	44	35	27	A	24	22	22	28	27	28	18	23	48	56	58	52	41	40	35	32.8	57.6	
12-Mar	22	18	22	26	29	43	46	A	45	43	44	43	41	22	26	51	53	50	54	57	47	33	23	20	37.4	56.9	
13-Mar	22	26	37	39	40	32	A	65	61	58	59	43	37	32	22	17	19	21	28	21	13	9	8	9	31.2	64.6	
14-Mar	12	22	51	50	57	A	63	56	46	49	38	31	28	18	20	17	16	20	27	30	24	25	24	17	32.3	63.0	
15-Mar	17	25	33	22	A	57	44	56	66	53	45	33	17	16	21	36	35	46	32	45	59	68	60	41	40.2	67.8	
16-Mar	25	30	21	A	10	12	13	37	36	33	28	15	11	17	17	13	17	20	20	23	27	23	40	40	23.0	40.3	
17-Mar	36	41	A	13	12	41	30	29	22	15	10	14	11	15	16	14	18	15	11	11	15	20	32	36	20.8	41.2	
18-Mar	31	A	17	18	18	22	33	38	37	19	16	11	13	9	7	7	7	17	23	23	29	37	47	46	22.9	47.2	
19-Mar	A	33	22	25	37	48	49	51	42	29	29	12	9	8	10	8	11	11	11	10	8	7	6	A	21.6	51.3	
20-Mar	25	8	6	8	9	16	24	27	21	17	11	10	6	8	10	10	13	18	13	18	19	15	A	16	14.2	26.8	
21-Mar	17	18	17	16	24	25	18	15	15	6	7	6	8	7	6	6	6	5	6	5	4	A	6	6	10.9	24.8	
22-Mar	5	5	6	4	5	6	7	7	8	8	6	8	5	5	6	5	7	7	5	6	A	6	7	6	6.1	8.2	
23-Mar	8	6	6	7	6	10	11	13	6	8	8	6	7	3	2	2	3	9	13	A	30	23	15	22	9.8	30.2	
24-Mar	22	8	9	8	12	13	20	10	4	3	3	2	2	2	3	7	7	9	A	21	10	15	14	7	9.2	21.8	
25-Mar	7	7	6	7	10	11	11	11	9	7	5	5	4	4	5	4	5	A	9	10	11	9	9	8	7.6	11.5	
26-Mar	12	14	20	11	15	15	20	19	20	20	9	7	11	6	13	10	A	10	9	14	10	11	10	9	12.8	20.5	
27-Mar	6	7	8	9	15	18	24	28	27	18	8	5	5	5	4	A	6	6	7	8	9	16	14	15	11.8	27.8	
28-Mar	24	22	37	51	55	38	35	32	26	27	114	35	19	11	A	19	15	10	9	11	14	13	10	10	27.7	114.0	
29-Mar	9	7	6	7	8	10	22	20	22	13	10	7	6	A	6	6	6	6	7	13	6	8	7	6	9.5	22.3	
30-Mar	4	4	6	6	7	8	10	11	11	7	13	9	A	2	2	4	7	9	14	21	44	52	49	26	14.1	51.9	
31-Mar	28	24	29	27	35	43	43	34	32	23	19	A	17	14	20	18	14	14	16	31	38	54	33	22	27.4	54.4	
		19.5	19.7	20.0	19.5	21.2	25.1	28.4	30.0	29.3	24.5	23.9	17.0	15.2	12.8	12.4	13.9	14.9	17.6	20.2	22.7	26.3	27.4	24.9	22.4	Diurnal Average	
		45.6	48.4	52.1	50.6	56.9	56.6	63.0	64.6	66.2	63.2	114.0	44.5	40.5	31.9	28.4	51.4	53.5	50.3	55.9	57.6	58.6	67.8	60.3	48.0	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

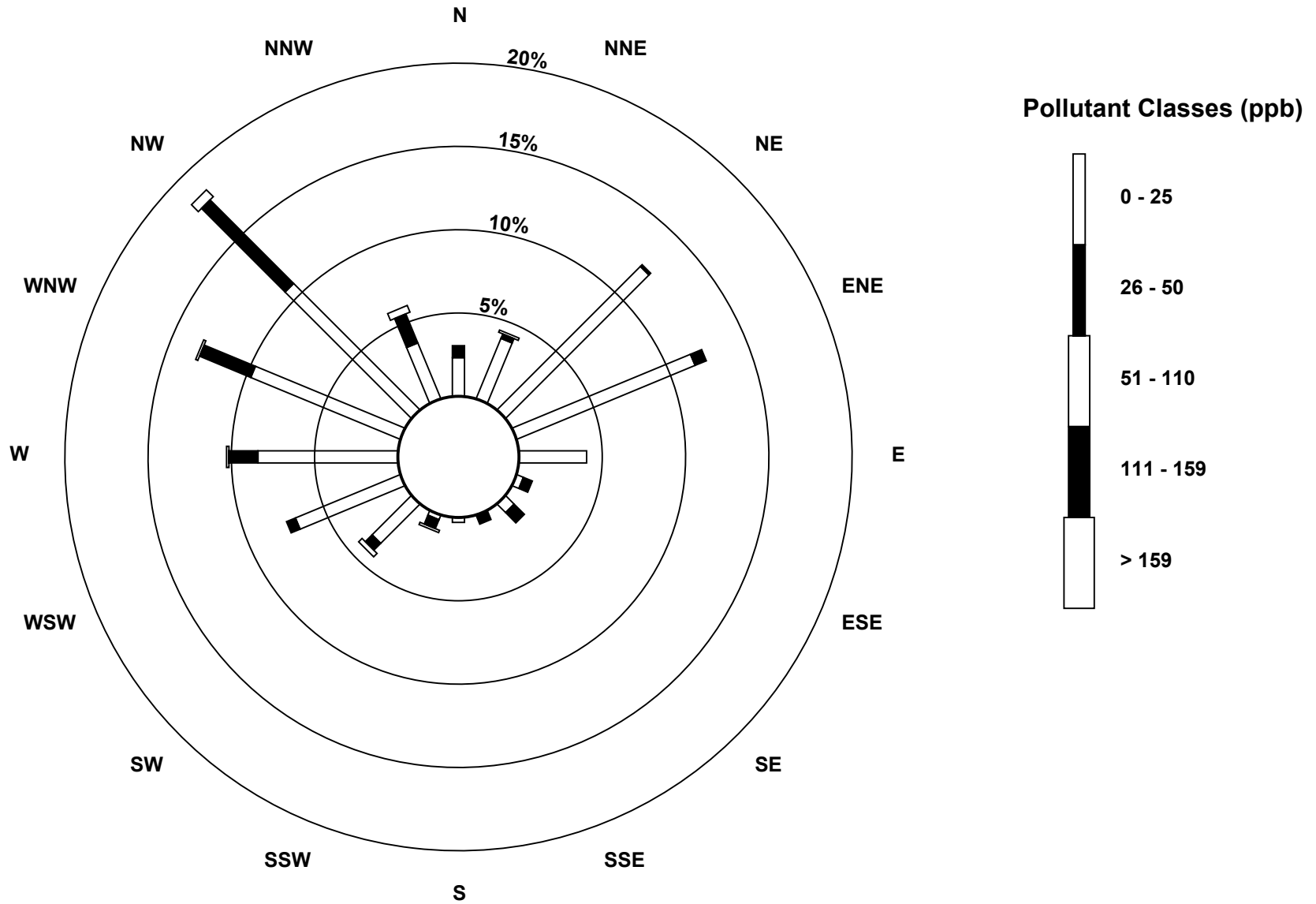
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - March 2018



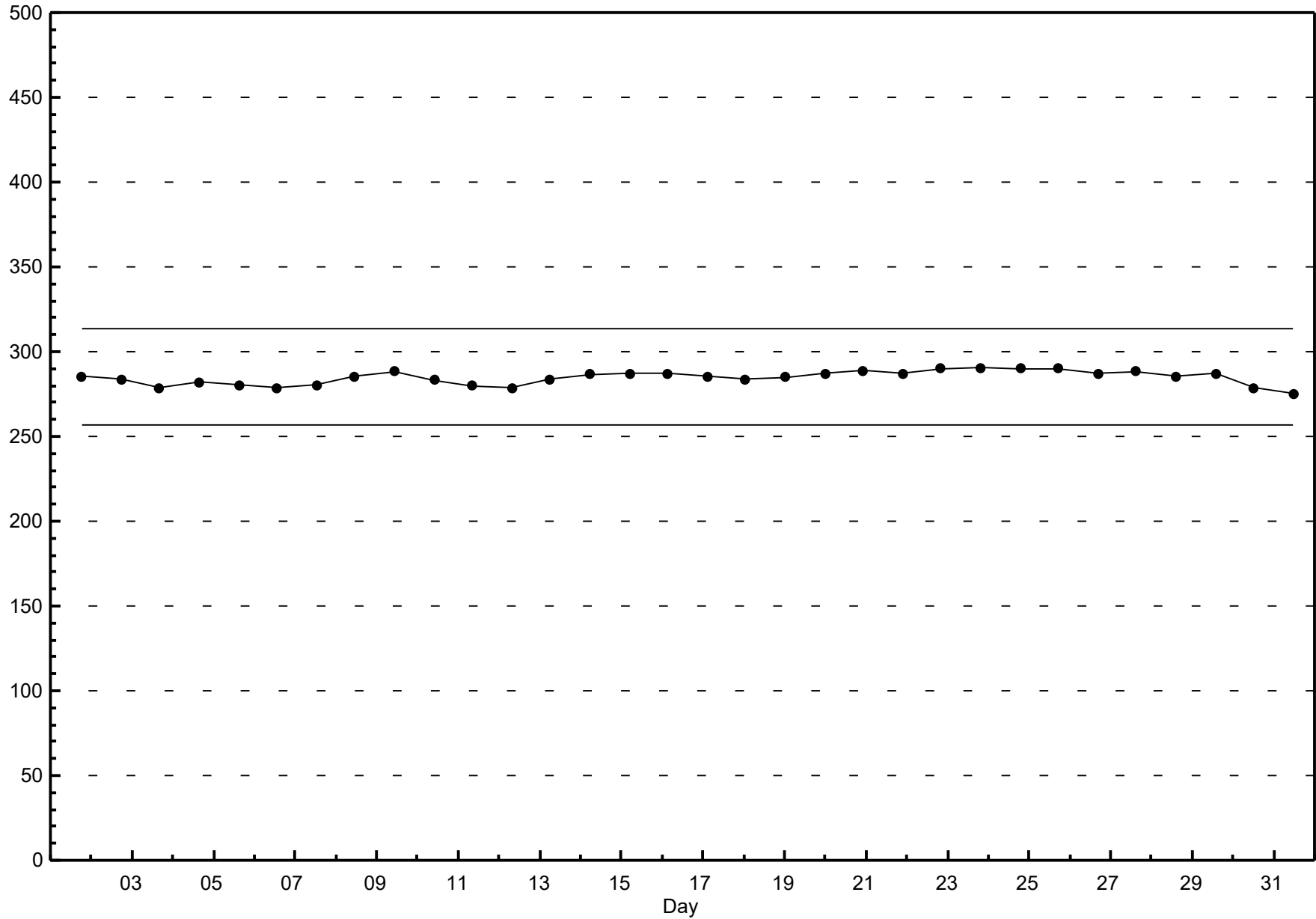
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Henry Pirker - March 2018



Span Responses

Nitrogen Dioxide (NO₂)
Henry Pirker - March 2018

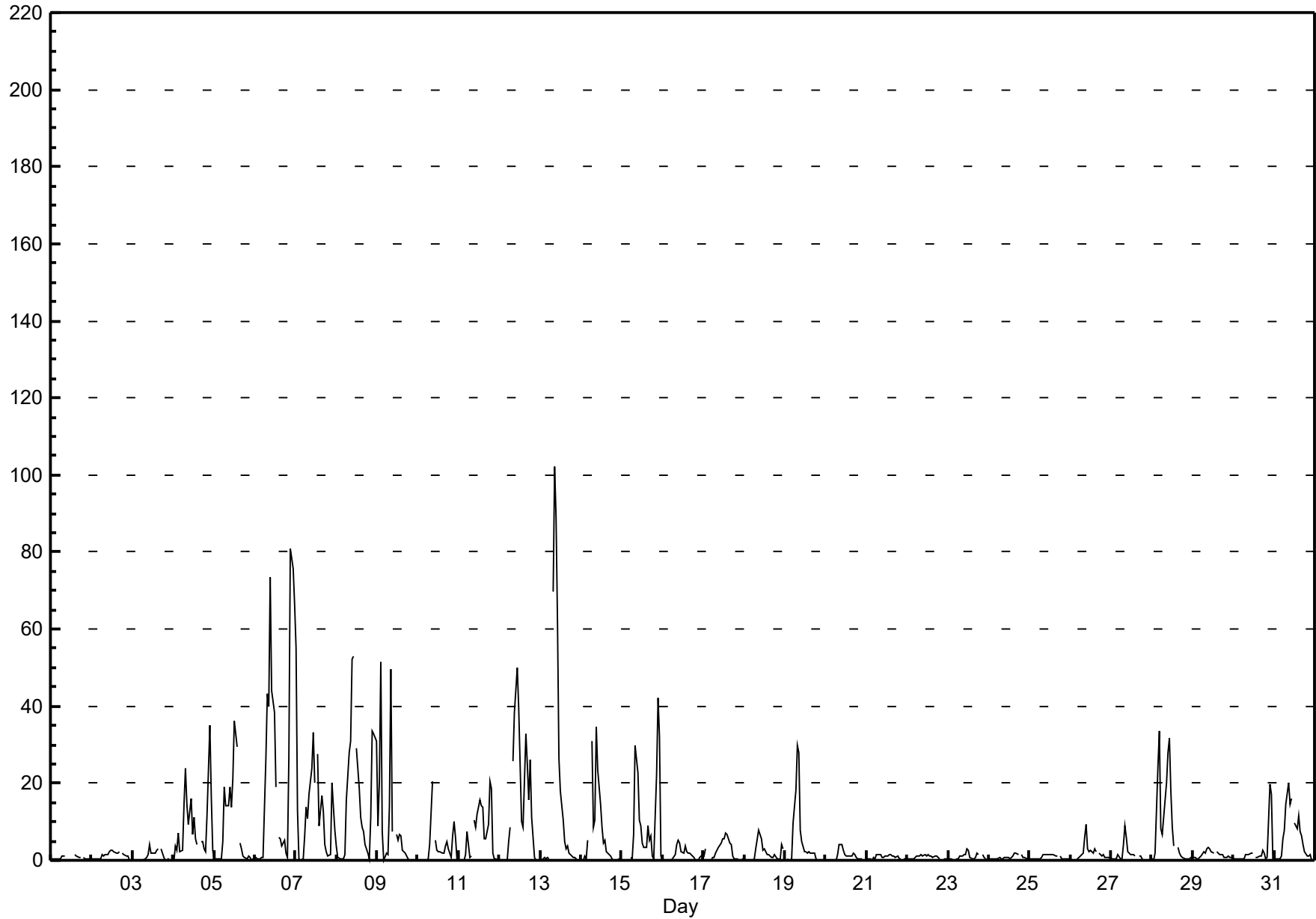


Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2018

Maximum Value: 102.3 ppb on Mar 13 09:00		Maximum Daily Average: 24.4 ppb on Mar 6		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 3 03:00		Minimum Daily Average: 0.6 ppb on Mar 1		Hours of Data: 707																							
Maximum Diurnal Average: 16.5 ppb at hour 10		Minimum Diurnal Average: 1.5 ppb at hour 4		Hours of Missing Data: 37																							
Monthly Average: 5.77 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.4 Median = 1.3 Q ₃ = 4.8 P ₉₀ = 17.9 P ₉₉ = 61.4		Hours of Calibration: 37																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	0	0	0	0	0	1	1	1	1	C	C	C	C	C	1	1	1	1	A	1	0	0	0	0	0.6	1.4	
2-Mar	0	0	0	0	0	0	2	1	1	2	2	2	2	2	2	2	2	A	2	2	1	1	0	0	1.2	2.4	
3-Mar	0	0	0	0	0	0	0	0	1	2	4	2	2	2	3	3	A	3	1	0	0	0	0	0	1.0	4.1	
4-Mar	0	4	3	7	2	3	15	24	15	9	16	7	11	6	4	A	5	5	3	2	12	35	16	3	8.9	35.1	
5-Mar	0	0	0	0	0	5	19	14	14	19	14	21	36	29	A	4	3	1	1	0	1	1	0	0	8.0	36.0	
6-Mar	1	0	0	0	1	1	26	43	40	74	44	39	19	A	6	6	4	5	2	1	27	81	76	66	24.4	81.1	
7-Mar	55	13	0	0	0	6	14	11	17	24	33	20	A	28	9	17	13	4	2	1	2	20	14	8	13.6	55.4	
8-Mar	4	1	0	0	0	2	16	28	31	52	53	A	29	18	11	9	7	4	2	0	11	33	33	31	16.3	53.0	
9-Mar	9	20	51	8	0	2	1	14	49	7	A	7	5	7	6	3	2	1	1	0	0	0	0	0	8.5	51.3	
10-Mar	0	0	0	0	0	0	0	4	20	A	5	3	2	2	2	2	4	5	3	1	6	10	6	0	3.3	20.4	
11-Mar	0	0	0	0	2	7	1	1	A	10	9	12	16	14	14	6	6	9	20	19	2	0	0	0	6.5	20.4	
12-Mar	0	0	0	0	0	5	9	A	26	38	50	39	25	10	9	33	25	16	26	11	1	0	0	0	14.0	50.0	
13-Mar	0	0	1	0	1	0	A	70	102	89	62	27	18	10	5	3	4	2	1	1	1	0	0	0	17.2	102.3	
14-Mar	0	0	1	0	5	A	31	8	11	35	24	14	8	4	5	2	2	1	0	0	0	0	0	0	6.7	34.8	
15-Mar	0	0	0	0	A	1	1	7	30	23	11	9	4	3	3	9	5	6	1	0	22	42	32	1	9.2	42.0	
16-Mar	0	0	0	A	0	0	0	2	4	5	5	2	2	4	2	2	2	1	1	0	0	0	1	2	1.5	5.1	
17-Mar	1	3	A	0	0	1	1	2	2	3	5	5	5	7	7	4	4	1	1	0	0	0	0	0	2.4	7.2	
18-Mar	0	A	0	0	0	0	0	3	8	7	6	3	3	2	1	1	1	1	2	0	0	0	4	3	2.0	7.8	
19-Mar	A	0	0	0	0	10	18	30	28	8	5	2	2	2	2	2	2	2	2	0	0	0	0	A	5.2	29.8	
20-Mar	0	0	0	0	0	0	0	1	4	4	3	1	1	1	1	1	2	2	1	0	0	0	A	0	1.0	4.3	
21-Mar	0	0	0	0	1	0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0	A	0	0	0.8	1.6	
22-Mar	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0.9	1.4	
23-Mar	0	0	0	0	0	0	1	1	1	2	2	3	3	1	1	0	1	2	1	A	1	1	0	0	0.9	2.8	
24-Mar	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	2	2	1	A	2	1	1	1	0	0.7	1.9	
25-Mar	0	0	0	0	0	0	0	1	1	1	1	2	1	2	1	1	1	A	1	1	0	0	0	0	0.8	1.6	
26-Mar	0	0	0	0	0	1	1	2	6	9	3	2	3	2	3	2	A	2	1	1	1	1	1	1	1.9	9.4	
27-Mar	1	0	0	1	2	0	0	4	9	6	2	1	2	1	1	A	1	1	1	0	0	0	0	0	1.5	8.9	
28-Mar	0	0	2	24	33	8	7	11	20	28	32	18	8	4	A	3	2	1	1	0	0	0	0	1	8.9	33.5	
29-Mar	1	1	1	1	1	1	2	2	3	3	2	2	A	2	2	2	1	1	1	1	1	1	1	1	1.5	3.4	
30-Mar	0	0	0	0	0	0	0	1	1	2	2	2	A	1	1	1	1	2	2	0	1	20	17	0	2.5	19.8	
31-Mar	0	0	1	0	1	6	8	15	20	14	16	A	10	8	12	7	6	4	2	1	1	1	0	0	5.9	20.3	
		2.5	1.5	2.1	1.5	1.8	2.1	5.9	10.1	15.7	16.5	14.2	8.9	8.0	6.2	4.1	4.5	3.8	3.0	2.8	1.6	3.1	8.4	6.8	4.0	Diurnal Average	
		55.4	20.4	51.3	24.3	33.5	9.7	31.0	69.7	102.3	89.1	61.8	39.5	36.0	29.3	13.9	32.7	24.9	15.7	26.3	18.5	26.7	81.1	75.7	66.4	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Hourly Maximums

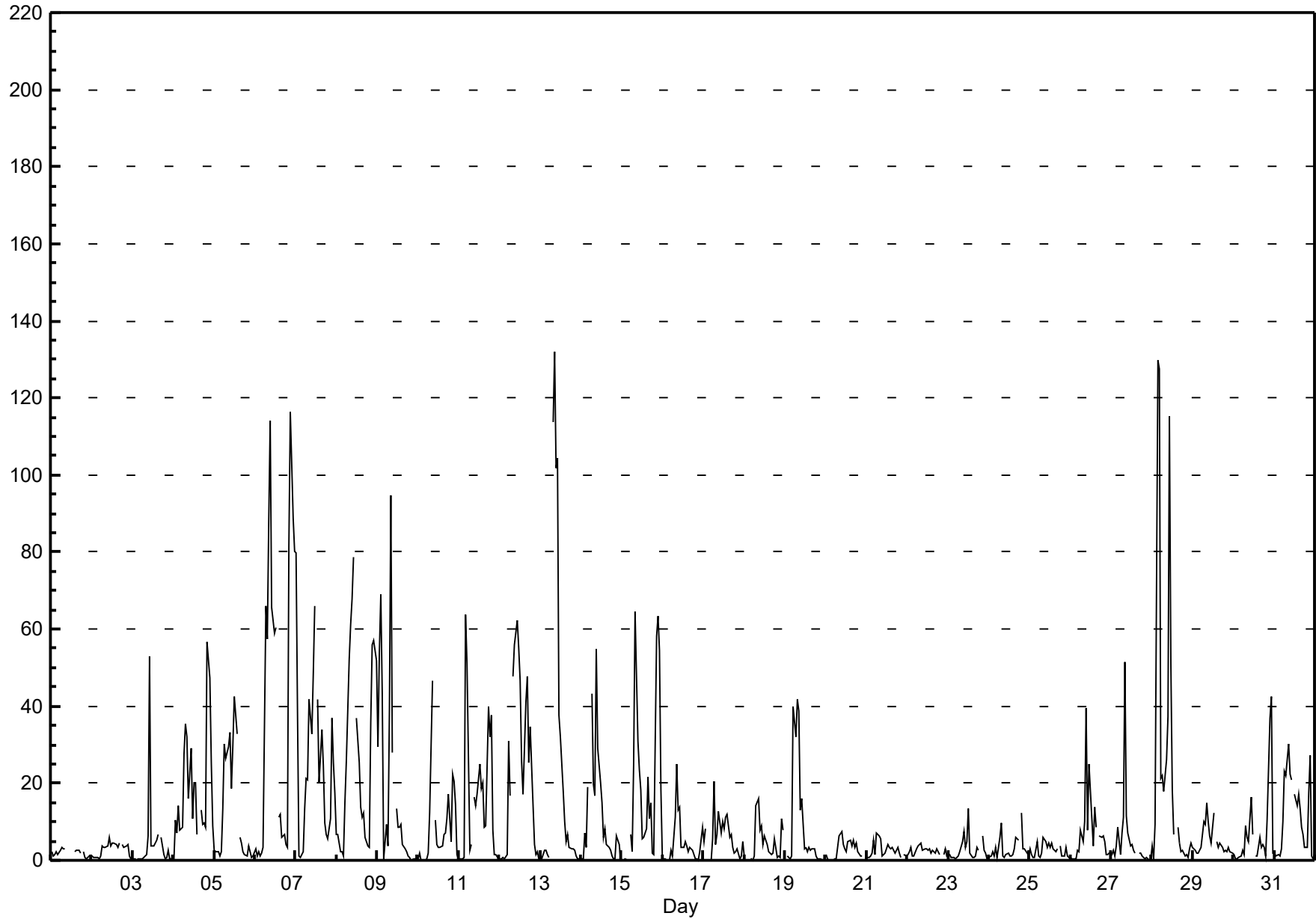
Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2018

Maximum Value: 132.0 ppb on Mar 13 09:00		Maximum Daily Average: 40.6 ppb on Mar 6		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 15 00:00		Minimum Daily Average: 2.0 ppb on Mar 1		Hours of Data: 707																							
Maximum Diurnal Average: 30.6 ppb at hour 9		Minimum Diurnal Average: 4.1 ppb at hour 3		Hours of Missing Data: 37																							
Monthly Average: 11.72 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.5 Q ₁ = 1.3 Median = 3.5 Q ₃ = 11.5 P ₉₀ = 35.6 P ₉₉ = 104.4		Hours of Calibration: 37																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	2	1	2	2	1	3	3	3	3	C	C	C	C	C	2	3	3	2	A	2	1	1	1	1	2.0	3.4	
2-Mar	1	1	1	1	1	1	4	3	3	4	6	4	5	5	4	3	4	A	4	4	4	4	1	0	2.9	5.8	
3-Mar	0	0	0	1	0	0	1	1	2	6	53	4	4	4	5	7	A	6	1	1	1	3	0	0	4.4	52.9	
4-Mar	0	11	7	14	8	9	28	36	32	16	29	11	20	20	7	A	13	9	10	9	56	47	25	9	18.5	56.5	
5-Mar	3	2	2	1	2	13	30	26	29	33	19	30	43	33	A	6	5	2	1	1	4	2	1	1	12.6	42.6	
6-Mar	3	1	2	1	2	3	66	57	88	114	66	59	61	A	11	12	6	7	4	3	82	116	89	80	40.6	116.2	
7-Mar	80	39	1	1	2	13	21	21	42	33	48	66	A	42	20	34	25	10	7	6	11	37	25	18	26.1	79.9	
8-Mar	7	7	2	2	1	15	26	52	61	68	79	A	37	26	14	11	12	6	4	3	36	56	57	52	27.5	78.7	
9-Mar	29	54	69	43	0	9	4	39	95	28	A	13	8	9	9	4	3	2	1	1	0	0	0	0	18.3	94.7	
10-Mar	0	2	0	0	0	0	2	12	47	A	10	4	3	3	4	7	7	11	17	5	22	20	14	2	8.4	46.6	
11-Mar	0	0	0	1	64	51	2	4	A	16	14	17	25	19	20	9	9	40	32	38	8	1	1	1	16.2	63.9	
12-Mar	0	0	1	1	2	31	17	A	48	56	62	55	47	26	17	41	48	25	35	24	4	1	2	0	23.6	62.5	
13-Mar	0	0	3	3	2	1	A	114	132	102	105	38	32	18	10	5	7	3	3	3	3	1	0	0	25.3	132.0	
14-Mar	0	0	7	3	19	A	43	20	17	55	29	20	15	6	8	4	3	3	1	1	0	6	4	0	11.5	54.9	
15-Mar	0	0	0	0	A	7	2	25	65	31	23	18	5	6	8	22	11	15	2	1	58	64	54	18	19.0	64.6	
16-Mar	0	0	0	A	0	2	1	11	25	13	14	3	3	5	4	2	3	3	1	0	0	0	2	8	4.5	25.0	
17-Mar	5	8	A	0	0	6	20	4	7	13	7	10	8	11	12	6	7	3	2	2	3	1	1	5	6.1	20.5	
18-Mar	1	A	0	0	0	0	1	14	16	8	9	4	6	4	2	2	2	2	6	1	1	1	11	8	4.3	16.1	
19-Mar	A	1	1	0	1	40	32	42	39	13	16	3	3	2	4	2	3	3	1	0	0	0	0	A	9.4	41.8	
20-Mar	2	0	0	0	0	0	1	3	6	8	4	3	2	5	5	4	5	4	4	2	1	1	A	1	2.7	7.6	
21-Mar	1	1	1	2	5	1	7	6	5	1	1	2	4	3	3	3	3	2	3	2	1	A	1	1	2.7	7.1	
22-Mar	1	2	3	1	1	3	4	4	4	3	3	3	3	3	2	2	2	3	2	2	A	2	3	1	2.5	4.4	
23-Mar	1	1	1	1	0	1	1	2	5	7	4	5	13	2	1	1	1	3	3	A	6	2	2	1	2.8	13.4	
24-Mar	1	1	2	1	3	1	6	10	1	1	1	2	1	1	2	3	6	5	A	12	3	3	2	1	3.0	12.3	
25-Mar	3	1	1	1	5	1	1	2	6	5	3	5	3	5	3	2	3	A	4	1	1	3	1	1	2.6	5.8	
26-Mar	1	0	0	0	3	2	8	5	10	40	8	25	18	4	14	9	A	6	6	6	5	1	1	2	7.5	39.5	
27-Mar	1	3	1	4	9	2	7	11	51	12	7	4	4	3	2	A	2	2	1	1	0	1	0	0	5.5	51.5	
28-Mar	4	0	9	130	127	21	22	18	26	37	115	51	18	7	A	9	4	2	3	1	1	1	3	4	26.7	129.8	
29-Mar	3	3	2	2	3	3	10	10	15	10	6	4	12	A	5	3	4	3	2	3	2	3	2	2	5.0	14.9	
30-Mar	1	1	0	1	1	2	1	9	6	5	17	7	A	1	1	6	4	4	3	1	10	37	43	2	7.1	42.6	
31-Mar	2	1	2	1	3	10	23	22	30	22	21	A	17	14	17	14	8	7	3	3	18	27	1	0	11.6	30.3	
		5.1	4.8	4.1	7.2	8.9	8.5	13.1	19.6	30.6	26.1	26.9	16.8	15.1	10.2	7.5	8.1	7.3	6.6	5.8	4.6	11.4	14.8	11.7	7.3	Diurnal Average	
		79.9	54.2	69.0	129.8	127.5	51.3	65.9	113.9	132.0	114.3	115.1	66.0	60.6	41.9	20.2	41.1	47.6	39.8	34.7	37.8	81.7	116.2	88.7	80.2	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - March 2018

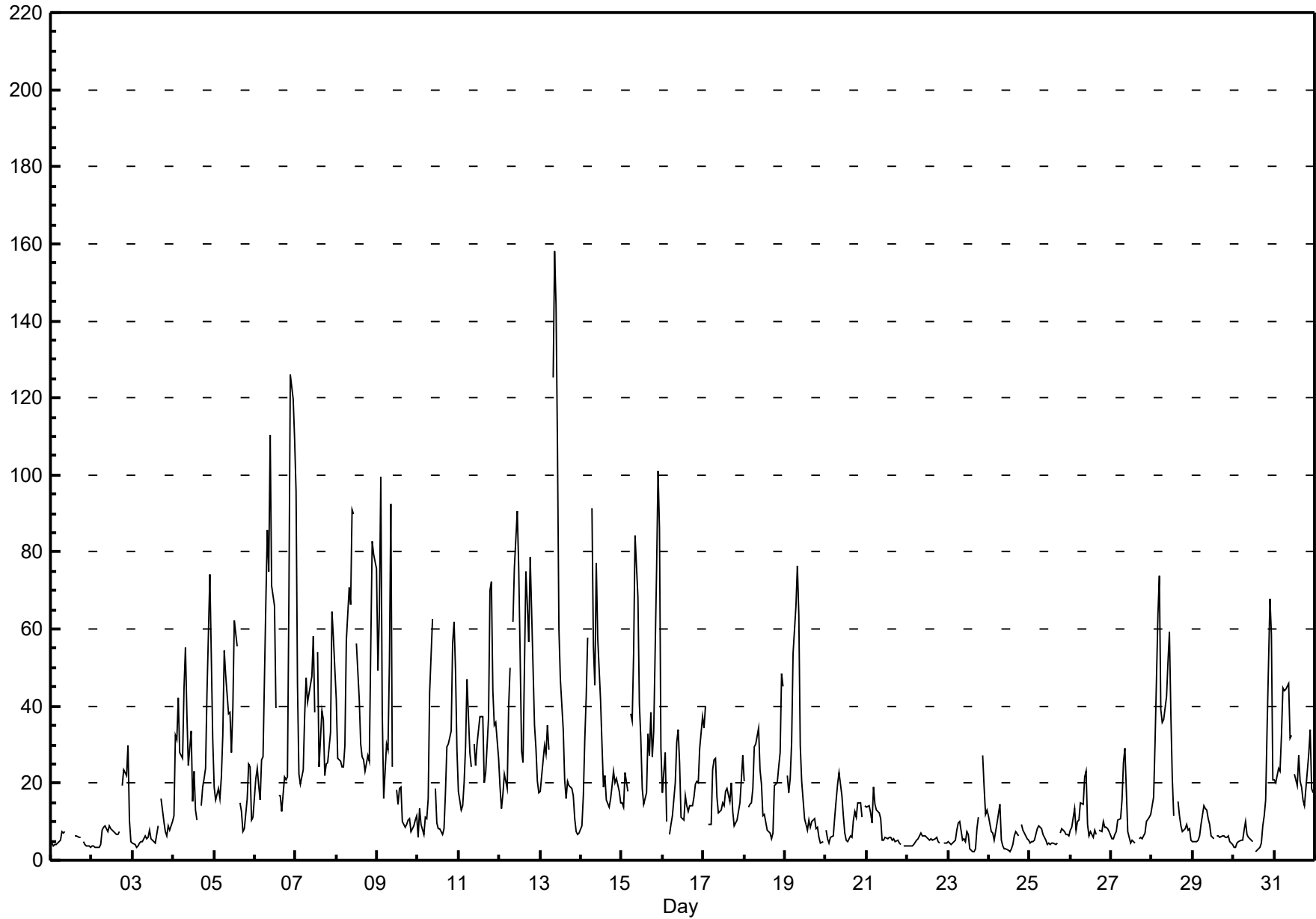


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - March 2018

Maximum Value: 158.2 ppb on Mar 13 09:00		Maximum Daily Average: 51.4 ppb on Mar 6		Hours in Service: 744																							
Minimum Value: 2 ppb on Mar 24 13:00		Minimum Daily Average: 5.1 ppb on Mar 22		Hours of Data: 707																							
Maximum Diurnal Average: 38.3 ppb at hour 9		Minimum Diurnal Average: 13.0 ppb at hour 15		Hours of Missing Data: 37																							
Monthly Average: 22.17 ppb		Percentiles: P ₁ = 2.9 P ₁₀ = 4.8 Q ₁ = 6.8 Median = 14.3 Q ₃ = 28.7 P ₉₀ = 53.6 P ₉₉ = 106.5		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	5	4	4	4	4	5	7	7	8	C	C	C	C	C	6	6	6	6	A	5	4	4	4	3	5.2	7.5	
2-Mar	4	4	3	3	4	4	8	9	9	7	9	8	8	7	7	7	8	A	19	23	22	30	10	5	9.4	29.7	
3-Mar	4	4	3	4	4	5	5	7	5	6	8	6	5	5	7	9	A	16	10	7	6	9	8	10	6.6	15.9	
4-Mar	12	32	31	42	28	27	45	55	38	25	33	15	23	13	11	A	14	19	21	24	44	74	53	31	30.9	74.3	
5-Mar	19	16	19	16	21	33	55	48	38	39	28	39	62	56	A	15	13	7	8	16	25	24	10	11	26.9	62.2	
6-Mar	21	24	20	16	26	27	67	86	75	110	71	66	39	A	17	17	13	22	21	22	67	126	120	109	51.4	126.2	
7-Mar	96	45	23	20	24	38	47	41	43	48	58	38	A	54	24	39	36	22	25	25	33	65	58	50	41.4	95.7	
8-Mar	42	27	26	24	24	30	57	71	66	91	90	A	56	42	30	27	26	23	27	26	55	83	79	76	47.7	91.0	
9-Mar	49	65	99	39	16	30	29	51	93	24	A	18	15	19	19	10	9	9	11	11	8	9	11	12	28.4	99.5	
10-Mar	6	13	9	7	11	11	16	44	63	A	19	10	8	8	7	8	18	29	30	34	56	62	50	29	23.8	62.5	
11-Mar	18	13	14	20	30	47	28	24	A	30	25	30	37	37	37	20	23	37	70	72	44	35	36	26	32.8	72.5	
12-Mar	19	14	17	22	19	40	50	A	62	76	91	76	53	28	25	75	67	57	79	64	35	29	20	18	45.0	90.7	
13-Mar	18	22	30	28	35	29	A	125	158	144	107	60	47	34	21	16	20	19	19	17	11	7	7	7	42.7	158.2	
14-Mar	9	17	31	42	58	A	91	55	45	77	58	41	30	19	22	16	14	16	19	23	20	21	18	15	33.0	91.4	
15-Mar	15	14	23	18	A	38	36	54	84	68	41	32	19	14	18	33	27	38	27	33	76	101	86	29	40.1	101.1	
16-Mar	18	28	10	A	7	9	12	20	31	34	25	11	10	17	14	13	14	14	17	20	21	20	29	37	18.7	37.5	
17-Mar	34	40	A	9	9	23	26	26	16	12	13	15	14	18	19	15	20	13	9	10	10	15	21	27	18.1	39.8	
18-Mar	21	A	14	14	15	19	30	30	34	24	20	12	12	8	8	7	6	7	19	20	24	28	49	45	20.2	48.6	
19-Mar	A	22	18	21	31	54	66	76	64	30	21	11	9	8	10	9	10	11	8	9	6	5	5	A	22.8	76.3	
20-Mar	8	6	5	6	6	11	16	20	23	17	12	7	5	5	6	6	11	13	11	15	15	11	A	14	10.8	22.8	
21-Mar	14	14	12	10	19	15	13	12	11	5	5	6	6	6	6	5	5	5	5	4	4	A	4	4	4	8.3	18.9
22-Mar	4	4	4	4	4	5	6	6	7	6	6	6	6	5	6	5	6	6	5	5	A	4	4	4	4	5.1	6.9
23-Mar	5	5	4	5	5	8	10	10	5	6	5	8	7	3	2	2	3	8	11	A	27	19	12	13	7.9	27.1	
24-Mar	12	7	7	5	7	10	14	5	4	3	3	2	2	3	4	7	8	6	A	9	8	7	6	5	6.3	14.5	
25-Mar	4	5	5	5	8	9	9	8	7	5	4	5	4	5	5	4	5	A	7	8	7	7	7	6	6.0	9.1	
26-Mar	8	9	13	8	10	11	15	15	21	23	9	6	7	6	8	7	A	8	7	10	9	9	8	7	10.2	23.2	
27-Mar	6	6	7	7	10	11	16	25	29	18	8	5	5	5	4	A	5	6	5	7	7	10	11	12	9.8	29.0	
28-Mar	14	17	31	64	74	39	36	36	42	51	59	38	21	12	A	15	12	9	8	8	9	8	8	5	26.8	73.9	
29-Mar	5	5	5	5	6	9	14	13	13	11	9	7	6	A	6	6	6	6	6	6	6	6	5	4	7.3	14.3	
30-Mar	3	3	4	5	5	5	8	10	7	6	5	5	A	2	3	3	4	9	12	16	34	68	59	21	12.9	67.8	
31-Mar	21	20	24	23	32	45	44	44	46	32	32	A	23	19	27	20	19	16	14	23	28	34	19	18	27.1	45.8	
		17.1	16.7	17.2	16.5	18.5	21.5	29.1	34.5	38.3	35.5	30.1	20.8	19.3	16.3	13.0	14.5	14.7	15.8	18.3	19.1	24.0	31.0	27.2	21.8	Diurnal Average	
		95.7	64.6	99.5	63.6	73.9	53.6	91.4	125.4	158.2	144.1	106.8	75.9	62.2	55.7	37.4	75.1	66.5	56.7	78.6	72.5	75.8	126.2	119.8	109.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

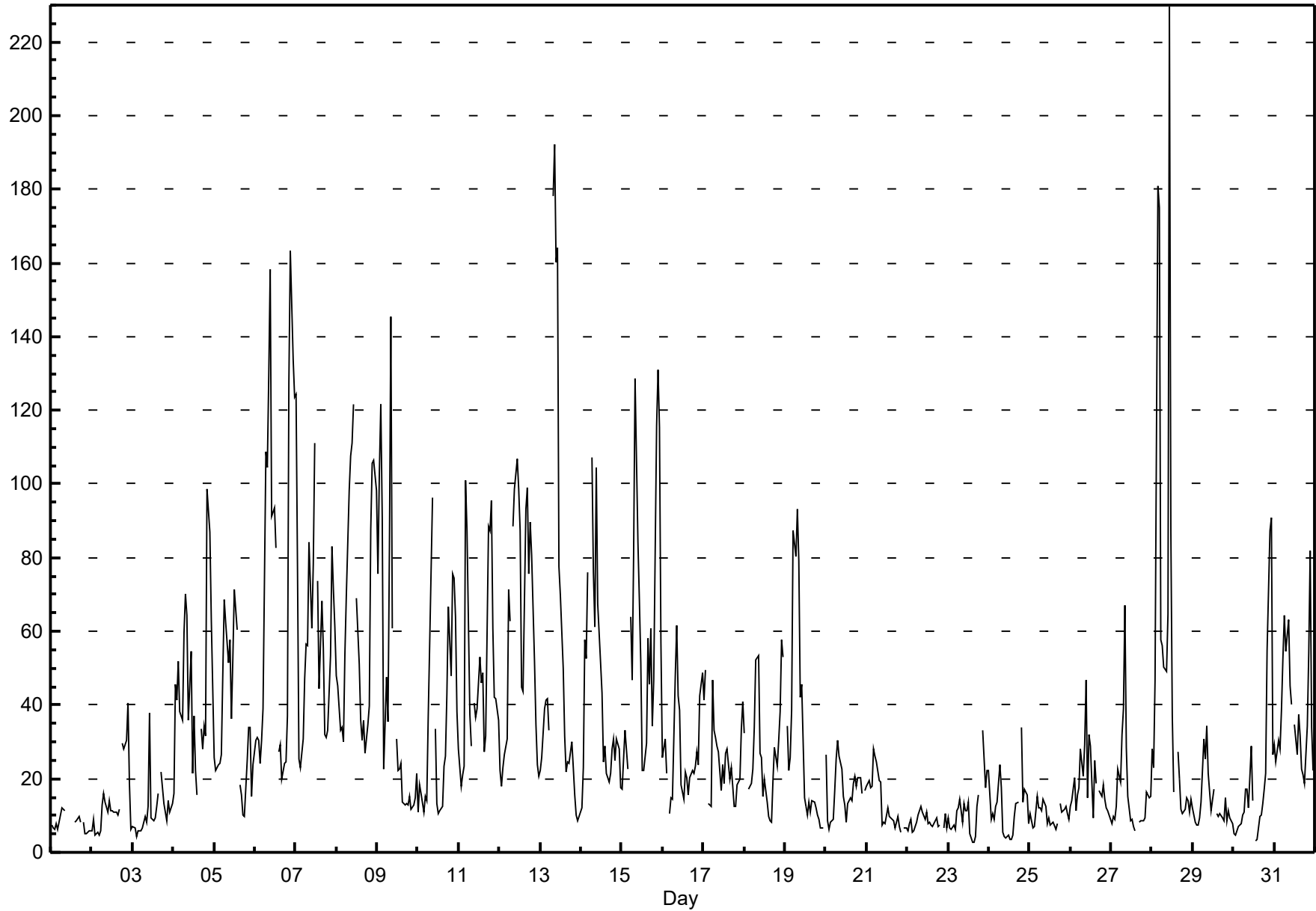
Henry Pirker - March 2018

Maximum Value: 229.7 ppb on Mar 28 11:00		Maximum Daily Average: 72.3 ppb on Mar 6		Hours in Service: 744																																													
Minimum Value: 3 ppb on Mar 23 15:00		Minimum Daily Average: 8.0 ppb on Mar 1		Hours of Data: 707																																													
Maximum Diurnal Average: 58.4 ppb at hour 9		Minimum Diurnal Average: 19.8 ppb at hour 15		Hours of Missing Data: 37																																													
Monthly Average: 32.59 ppb		Percentiles: P ₁ = 4.2 P ₁₀ = 7.7 Q ₁ = 11.2 Median = 22.0 Q ₃ = 41.1 P ₉₀ = 76.7 P ₉₉ = 159.9		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	7	7	6	8	6	10	12	12	11	C	C	C	C	C	8	8	10	8	A	8	5	5	6	6	8.0	12.0																							
2-Mar	6	9	5	6	5	6	13	16	13	11	14	11	11	11	11	10	12	A	30	28	30	40	19	6	14.0	40.4																							
3-Mar	7	7	4	6	6	6	7	10	8	12	38	9	9	9	12	16	A	22	13	11	8	14	11	13	11.3	37.9																							
4-Mar	16	45	41	52	38	36	60	70	64	36	54	22	37	22	15	A	34	28	34	31	99	87	63	45	44.8	98.7																							
5-Mar	26	22	24	24	26	49	69	62	51	58	36	53	71	61	A	18	16	10	10	25	34	34	15	24	35.5	71.5																							
6-Mar	30	31	30	24	30	39	109	104	129	158	91	93	83	A	27	29	20	24	25	37	128	163	134	124	72.3	163.4																							
7-Mar	124	77	25	23	31	47	57	56	84	61	78	111	A	74	45	68	55	32	31	33	53	83	71	61	60.1	124.4																							
8-Mar	48	45	33	34	30	54	70	98	108	111	121	A	69	51	36	31	36	27	35	40	88	106	106	98	64.1	121.4																							
9-Mar	75	103	122	91	22	47	35	83	146	61	A	31	22	23	24	14	13	13	13	15	12	13	15	21	44.1	145.5																							
10-Mar	11	18	16	11	15	14	37	56	96	A	34	13	10	11	13	23	26	43	67	48	75	75	64	38	35.4	96.3																							
11-Mar	28	18	21	23	101	87	38	29	A	41	37	39	53	46	49	27	32	88	88	96	61	42	42	36	48.7	101.0																							
12-Mar	22	18	23	26	31	71	63	A	89	99	107	99	87	45	43	93	99	76	90	81	52	35	24	21	60.5	107.0																							
13-Mar	22	26	39	41	42	33	A	178	192	160	164	78	70	50	32	22	25	24	30	23	16	10	8	10	56.3	192.4																							
14-Mar	12	23	58	53	76	A	107	76	61	104	67	52	43	24	29	22	19	22	28	31	25	31	28	17	43.8	107.1																							
15-Mar	17	25	33	22	A	64	47	81	129	84	68	51	22	22	30	58	46	61	34	47	116	131	115	57	59.2	131.0																							
16-Mar	26	31	21	A	11	15	15	48	62	43	39	18	14	22	20	16	20	22	21	24	27	24	43	49	27.4	61.5																							
17-Mar	41	50	A	13	12	47	33	31	29	27	17	24	19	27	28	20	23	18	13	13	18	20	34	41	25.9	49.5																							
18-Mar	32	A	17	18	19	22	34	52	53	27	26	15	20	14	10	9	8	19	28	23	30	38	58	53	27.2	57.5																							
19-Mar	A	34	22	26	38	87	80	93	79	42	45	15	12	10	14	11	14	14	12	10	9	7	7	A	31.0	93.1																							
20-Mar	27	9	6	8	9	17	25	30	26	22	15	13	8	13	15	14	19	21	18	20	20	16	A	17	16.9	30.5																							
21-Mar	18	19	18	18	28	26	24	20	19	7	8	8	12	10	9	9	9	6	10	7	5	A	7	7	13.2	28.3																							
22-Mar	6	8	9	6	6	8	10	11	12	11	9	11	8	8	7	7	9	9	7	7	A	7	10	7	8.4	12.3																							
23-Mar	9	7	6	7	6	11	12	14	8	13	11	11	14	5	3	3	4	12	16	A	33	25	17	22	11.8	33.1																							
24-Mar	22	9	10	9	12	14	24	17	5	4	4	4	4	4	5	10	13	14	A	34	13	17	15	8	11.9	33.8																							
25-Mar	10	8	7	7	15	12	12	11	14	12	8	9	7	8	8	6	8	A	13	11	12	12	11	9	10.1	15.3																							
26-Mar	12	14	20	11	16	17	28	21	29	47	15	32	29	9	25	19	A	17	15	18	14	12	11	10	19.3	46.6																							
27-Mar	8	10	9	13	23	19	32	39	67	28	15	9	9	7	6	A	8	8	9	8	9	16	15	15	16.6	67.1																							
28-Mar	28	23	47	181	175	58	56	50	49	65	230	87	37	16	A	27	20	12	11	12	15	14	11	15	53.8	229.7																							
29-Mar	12	8	7	7	9	14	31	26	34	21	16	11	17	A	11	10	11	9	9	15	9	11	9	8	13.7	34.1																							
30-Mar	5	5	6	7	8	10	11	17	17	12	29	14	A	3	3	10	10	13	17	22	55	87	91	27	20.8	90.7																							
31-Mar	29	25	30	28	38	53	64	54	63	45	40	A	35	26	37	31	23	21	19	34	54	82	34	22	38.7	82.0																							
																								24.6	24.5	23.9	26.8	29.6	33.1	40.5	48.9	58.4	49.1	49.6	33.7	29.8	22.5	19.8	22.1	22.0	24.0	25.6	27.1	37.6	41.9	36.4	29.5	Diurnal Average	
																								124.4	103.1	121.5	181.0	174.9	87.4	108.8	178.2	192.4	160.1	229.7	111.1	87.5	73.7	48.8	93.0	99.0	88.4	89.6	95.6	127.6	163.4	133.5	123.7	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									

Hourly Maximums

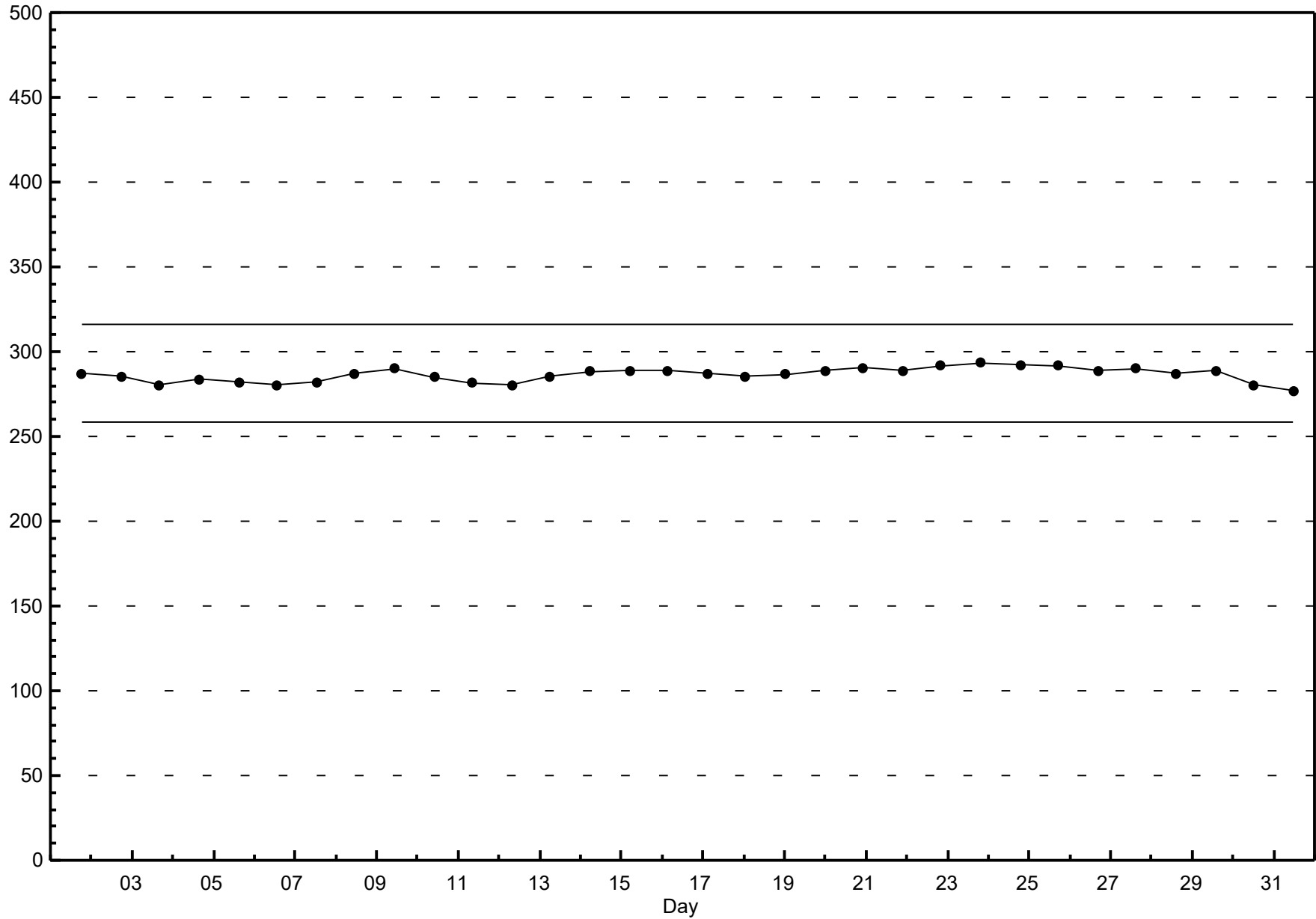
Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - March 2018



Span Responses

Oxides of Nitrogen (NO_x)
Henry Pirker - March 2018



Hourly Averages

Ozone (O₃) - ppb

Henry Pirker - March 2018

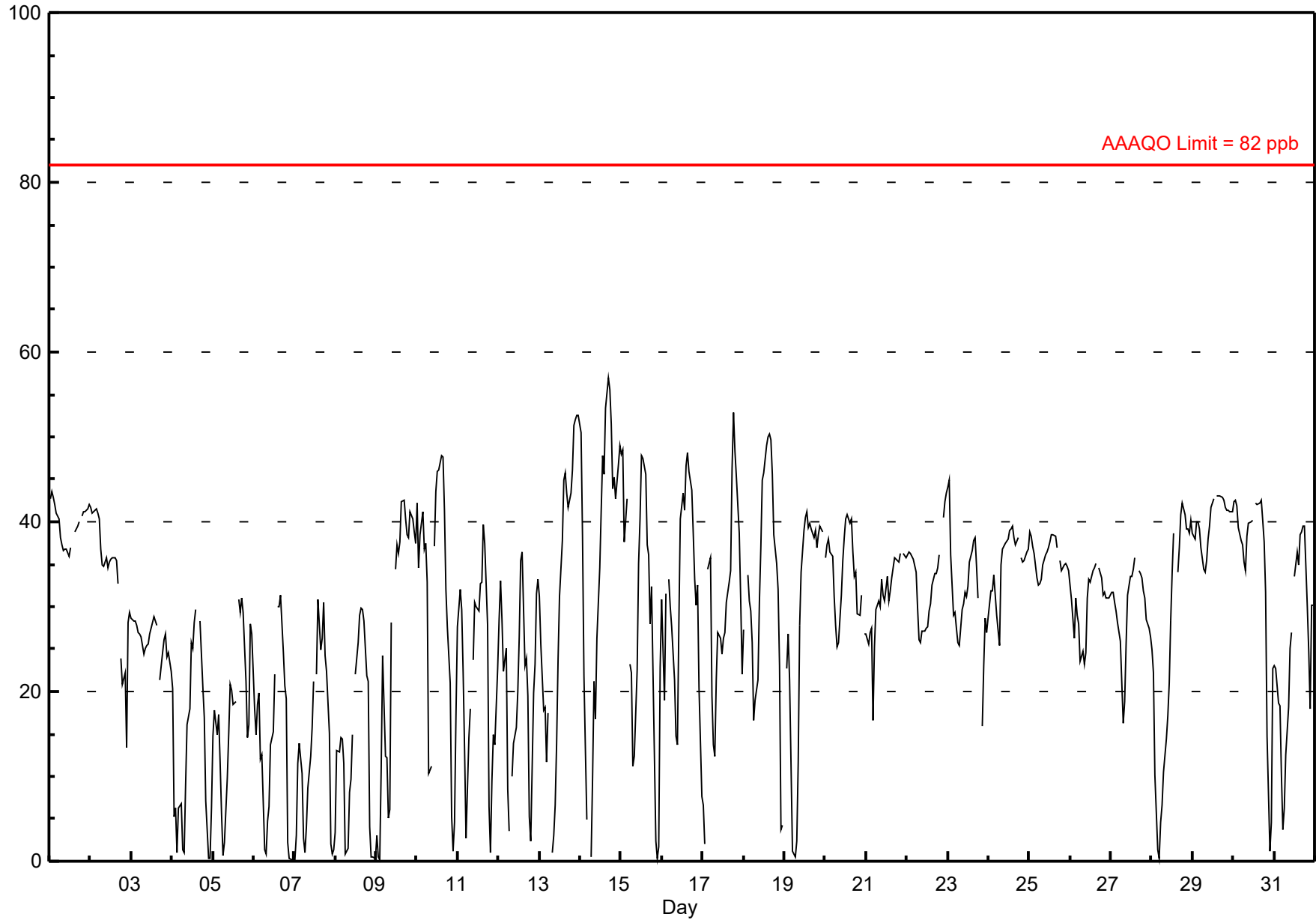
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 56.9 ppb on Mar 14 17:00	Maximum Daily Average: 40.0 ppb on Mar 29
Minimum Value: 0 ppb on Mar 7 01:00	Hours of Data: 710
Maximum Diurnal Average: 37.6 ppb at hour 16	Hours of Missing Data: 34
Monthly Average: 28.17 ppb	Hours of Calibration: 34
Minimum Daily Average: 13.2 ppb on Mar 4	Percent Operational Time: 100.0
Minimum Diurnal Average: 17.5 ppb at hour 8	
Percentiles: P ₁ = 0.4 P ₁₀ = 6.7 Q ₁ = 21.1 Median = 30.7 Q ₃ = 37.5 P ₉₀ = 42.0 P ₉₉ = 51.5	

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	43	44	43	42	41	40	38	37	37	37	37	36	37	C	C	39	40	40	A	41	41	41	42	42	39.8	43.5																						
2-Mar	42	41	41	42	41	40	37	35	35	36	35	35	36	36	36	35	33	A	24	21	22	13	28	29	33.6	41.7																						
3-Mar	29	28	28	28	27	27	26	24	25	25	26	27	28	29	28	28	A	21	25	26	27	24	25	22	26.2	28.8																						
4-Mar	20	5	6	1	6	7	1	1	9	16	18	26	25	28	30	A	28	24	20	17	7	0	0	6	13.2	29.6																						
5-Mar	15	18	15	17	12	6	1	2	10	15	21	20	18	19	A	31	29	31	29	21	15	16	28	27	18.1	31.1																						
6-Mar	18	15	18	20	12	12	1	1	5	6	14	15	22	A	30	30	31	25	21	19	2	0	0	0	13.9	31.4																						
7-Mar	0	3	11	14	10	3	1	4	9	12	16	21	A	22	31	25	26	30	24	22	15	2	1	1	13.3	30.9																						
8-Mar	3	13	13	15	14	12	1	2	8	10	15	A	22	26	29	30	30	28	22	21	4	1	1	0	13.8	29.8																						
9-Mar	3	0	0	11	24	12	12	5	6	28	A	34	37	36	38	42	43	40	39	38	41	40	39	37	26.4	42.5																						
10-Mar	42	35	39	41	37	38	33	10	11	A	37	44	46	46	48	48	41	32	28	21	5	1	5	17	30.6	47.9																						
11-Mar	28	32	30	22	13	3	15	18	A	24	31	30	29	33	33	40	37	28	7	1	10	15	14	23	22.3	39.6																						
12-Mar	29	33	29	22	25	8	3	A	10	14	16	20	27	35	36	23	24	19	5	2	20	23	32	33	21.3	36.4																						
13-Mar	31	26	18	18	12	17	A	1	3	7	14	24	31	38	45	46	43	42	43	46	51	52	53	52	31.0	52.5																						
14-Mar	51	38	22	13	5	A	1	10	21	17	26	35	41	48	46	53	57	56	52	44	45	43	47	49	35.6	56.9																						
15-Mar	48	48	38	43	A	23	22	11	12	22	35	40	48	47	46	37	36	28	32	22	2	0	2	23	29.0	48.4																						
16-Mar	31	19	32	A	33	30	28	21	15	14	28	40	43	41	47	48	46	44	39	33	30	33	20	8	31.4	48.1																						
17-Mar	7	2	A	34	36	19	14	12	21	27	26	24	26	27	31	33	34	46	53	48	45	39	31	22	28.6	52.8																						
18-Mar	27	A	34	31	30	26	17	19	21	30	37	45	46	49	50	50	50	46	39	35	32	23	4	4	32.3	50.4																						
19-Mar	A	23	27	21	11	1	1	2	12	28	34	39	40	41	39	40	39	38	39	37	39	39	39	A	28.6	41.3																						
20-Mar	36	37	38	36	36	31	28	25	26	31	35	38	40	41	40	40	37	34	34	29	29	31	A	27	33.9	40.8																						
21-Mar	27	26	27	28	17	25	30	31	30	33	31	31	34	31	32	33	35	36	35	35	36	A	36	36	31.0	36.3																						
22-Mar	36	36	36	36	36	34	30	26	26	27	27	27	28	30	30	33	34	34	35	36	A	41	42	43	33.2	43.4																						
23-Mar	44	45	36	29	29	27	26	25	30	30	32	31	32	35	37	38	38	35	31	A	16	23	29	27	31.5	44.9																						
24-Mar	29	32	32	34	31	29	25	35	37	37	37	38	39	39	40	38	37	38	A	36	35	35	36	37	35.1	39.6																						
25-Mar	39	38	37	36	33	33	33	33	35	36	36	37	38	38	38	38	37	A	35	34	35	35	35	34	35.9	38.8																						
26-Mar	32	31	26	31	29	28	24	25	23	25	31	33	33	34	35	35	A	35	33	31	32	31	31	31	30.4	35.1																						
27-Mar	32	32	31	30	28	26	21	16	19	26	31	34	34	34	36	A	34	34	33	32	31	28	28	27	29.3	35.8																						
28-Mar	25	22	10	1	0	5	7	11	14	17	21	28	34	39	A	34	37	41	42	41	39	39	39	40	25.5	42.1																						
29-Mar	39	38	40	40	39	37	34	34	35	38	40	42	43	A	43	43	43	43	43	42	41	41	41	41	40.0	43.1																						
30-Mar	42	42	42	39	38	37	35	34	38	40	40	40	A	42	42	42	42	40	38	32	15	1	5	23	34.4	42.5																						
31-Mar	23	23	19	18	10	4	6	13	18	25	27	A	34	36	35	38	39	40	39	30	25	18	30	30	25.2	39.5																						
																								29.0	27.5	27.2	26.5	23.9	21.4	18.3	17.5	20.0	24.5	28.4	32.3	34.2	35.8	37.4	37.6	37.3	35.4	32.4	29.8	26.3	24.4	25.3	26.4	Diurnal Average
																								50.6	48.4	42.8	42.7	41.1	40.3	38.2	37.4	38.2	39.8	40.0	44.9	47.8	49.0	50.0	53.4	56.9	55.7	52.8	48.4	51.4	52.1	52.5	52.5	Diurnal Maximum

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

Hourly Averages

Ozone (O₃) - ppb
Henry Pirker - March 2018



Hourly Maximums

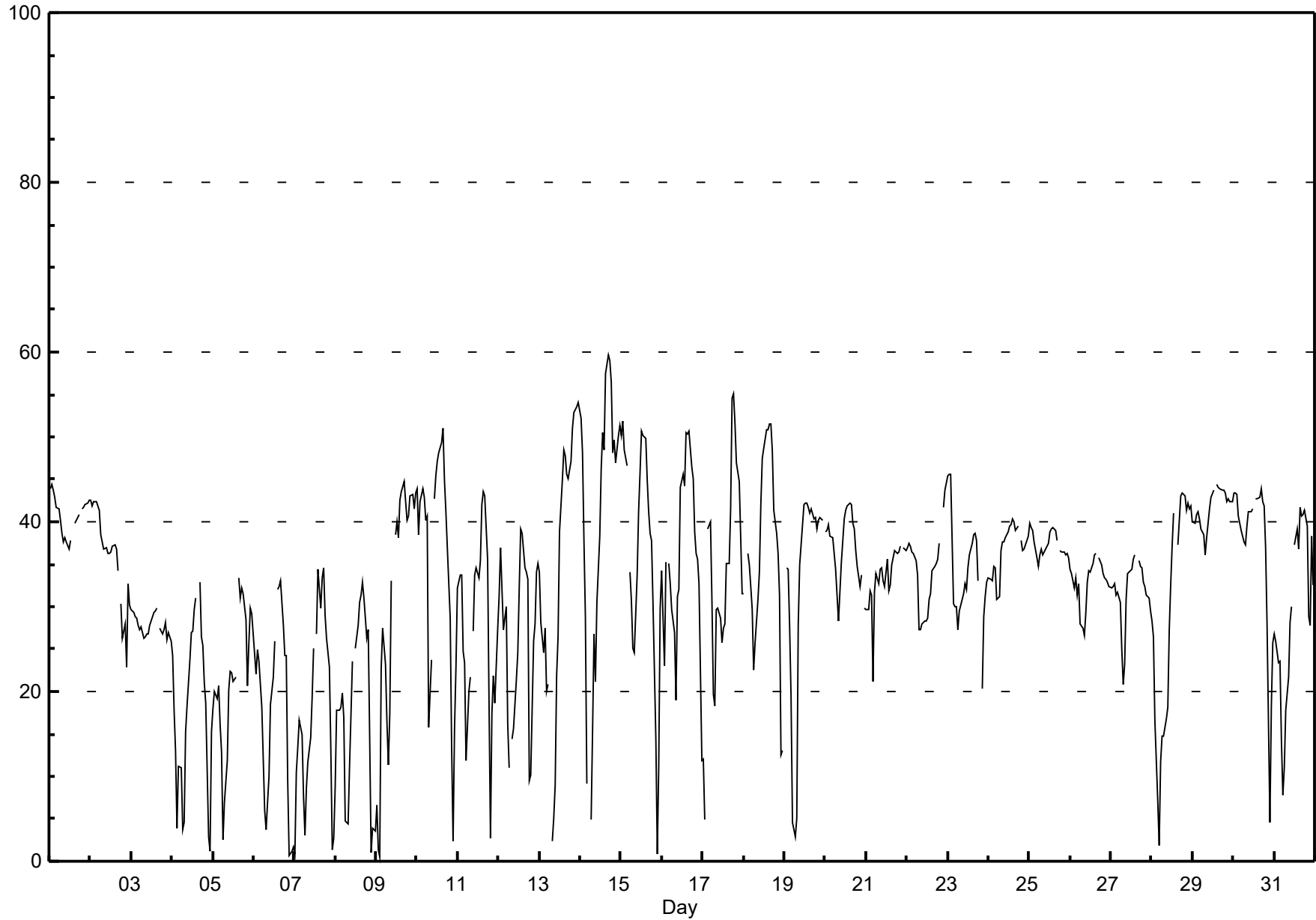
Ozone (O₃) - ppb

Henry Pirker - March 2018

Maximum Value: 59.7 ppb on Mar 14 17:00		Maximum Daily Average: 41.5 ppb on Mar 29		Hours in Service: 744																							
Minimum Value: 1 ppb on Mar 9 03:00		Minimum Daily Average: 17.4 ppb on Mar 7		Hours of Data: 710																							
Maximum Diurnal Average: 40.2 ppb at hour 17		Minimum Diurnal Average: 21.6 ppb at hour 8		Hours of Missing Data: 34																							
Monthly Average: 31.68 ppb		Percentiles: P ₁ = 1.3 P ₁₀ = 14.5 Q ₁ = 26.3 Median = 33.8 Q ₃ = 39.8 P ₉₀ = 43.9 P ₉₉ = 53.5		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	44	44	44	43	42	42	40	39	38	38	38	37	38	C	C	40	41	41	A	42	42	42	42	43	40.8	44.3	
2-Mar	42	42	42	42	42	41	39	38	37	37	36	36	37	37	37	37	34	A	30	26	28	23	33	30	36.0	42.5	
3-Mar	30	29	29	29	28	27	28	26	26	27	27	28	29	29	29	30	A	27	27	27	28	26	27	26	27.8	29.8	
4-Mar	24	18	13	4	11	11	4	5	15	18	24	27	27	30	31	A	33	26	25	21	19	3	1	15	17.6	32.8	
5-Mar	18	20	19	21	16	13	3	7	12	20	22	22	21	22	A	33	31	32	32	28	21	26	30	29	21.6	33.5	
6-Mar	24	22	25	24	21	18	6	4	7	10	19	22	26	A	32	32	33	28	24	24	9	1	1	2	18.0	33.0	
7-Mar	1	10	13	17	15	8	3	9	12	15	19	25	A	27	34	30	33	35	29	26	23	13	1	3	17.4	34.6	
8-Mar	9	18	18	18	20	17	5	4	11	17	24	A	25	28	30	31	33	31	26	27	15	1	4	3	18.1	32.9	
9-Mar	7	1	1	23	27	23	16	11	17	33	A	38	40	38	42	44	45	42	40	41	43	43	41	43	30.5	44.7	
10-Mar	44	38	42	44	43	40	41	16	24	A	43	45	47	48	49	51	45	41	37	29	13	2	16	23	35.7	51.1	
11-Mar	32	34	34	25	23	12	20	22	A	27	34	35	33	35	42	43	43	36	19	3	18	22	19	27	27.7	43.5	
12-Mar	31	37	32	27	30	16	11	A	14	16	21	25	32	39	39	35	34	33	9	10	26	28	34	35	26.7	39.1	
13-Mar	34	28	25	28	20	21	A	2	5	9	22	26	39	45	48	48	46	45	47	51	53	53	54	54	34.9	54.0	
14-Mar	52	48	38	29	9	A	5	15	27	21	31	38	46	50	48	57	60	59	56	48	50	47	50	51	40.8	59.7	
15-Mar	50	52	48	47	A	34	31	25	25	34	41	46	51	50	50	45	41	39	38	30	14	1	11	30	36.2	51.9	
16-Mar	34	23	35	A	35	33	30	27	19	31	32	44	46	44	51	50	51	46	45	39	36	36	33	12	36.1	50.6	
17-Mar	12	5	A	39	40	31	20	18	30	30	29	26	27	28	35	35	42	55	55	52	47	45	38	32	33.4	55.0	
18-Mar	32	A	36	35	32	30	23	26	31	34	42	47	49	51	51	51	51	48	41	39	36	31	13	13	36.6	51.5	
19-Mar	A	35	34	28	20	5	3	5	28	35	37	42	42	42	42	41	42	40	41	39	40	41	40	A	32.8	42.2	
20-Mar	39	39	40	38	38	36	34	31	28	35	38	40	41	42	42	42	40	39	37	35	32	34	A	30	37.0	42.1	
21-Mar	30	30	32	31	21	32	34	33	34	35	33	32	36	32	33	35	36	37	36	37	37	A	37	37	33.4	37.1	
22-Mar	37	37	37	36	36	35	34	27	27	28	28	28	29	31	31	34	35	35	36	37	A	42	44	45	34.4	44.6	
23-Mar	45	46	46	30	30	30	27	30	31	31	33	32	35	36	37	38	39	38	33	A	20	29	31	33	33.9	45.7	
24-Mar	33	33	33	35	35	31	31	37	38	38	38	39	40	40	40	40	39	39	A	38	37	37	38	38	36.7	40.3	
25-Mar	40	39	39	38	36	35	36	37	36	37	37	37	39	39	39	39	38	A	37	36	36	36	36	36	37.3	39.9	
26-Mar	34	34	32	33	31	33	28	27	27	29	33	34	34	35	36	36	A	36	35	34	33	33	33	32	32.8	36.3	
27-Mar	32	32	33	31	32	30	25	21	23	31	34	34	34	36	36	A	35	35	35	33	32	31	31	29	31.6	36.1	
28-Mar	28	26	17	7	2	12	15	15	17	18	27	33	37	41	A	37	40	43	43	43	41	42	42	42	29.1	43.3	
29-Mar	40	40	41	41	40	39	39	36	38	40	41	43	44	A	44	44	44	44	44	43	42	43	42	42	41.5	44.5	
30-Mar	43	43	43	41	39	38	38	37	39	41	41	41	A	43	43	43	44	44	42	42	37	28	5	18	26	37.2	43.9
31-Mar	27	26	23	24	14	8	11	18	22	28	30	A	37	39	37	42	41	41	41	39	29	28	38	33	29.4	41.7	
		31.6	31.0	31.5	30.2	27.6	26.0	22.5	21.6	24.6	28.1	31.8	34.6	36.6	37.7	39.7	40.2	40.2	39.1	35.9	33.8	31.0	28.1	29.2	29.8	Diurnal Average	
		52.2	51.9	48.4	46.7	42.9	41.5	40.7	38.7	39.4	41.2	42.8	47.4	50.7	50.9	50.8	57.5	59.7	59.0	56.4	51.8	52.9	53.3	53.6	54.0	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

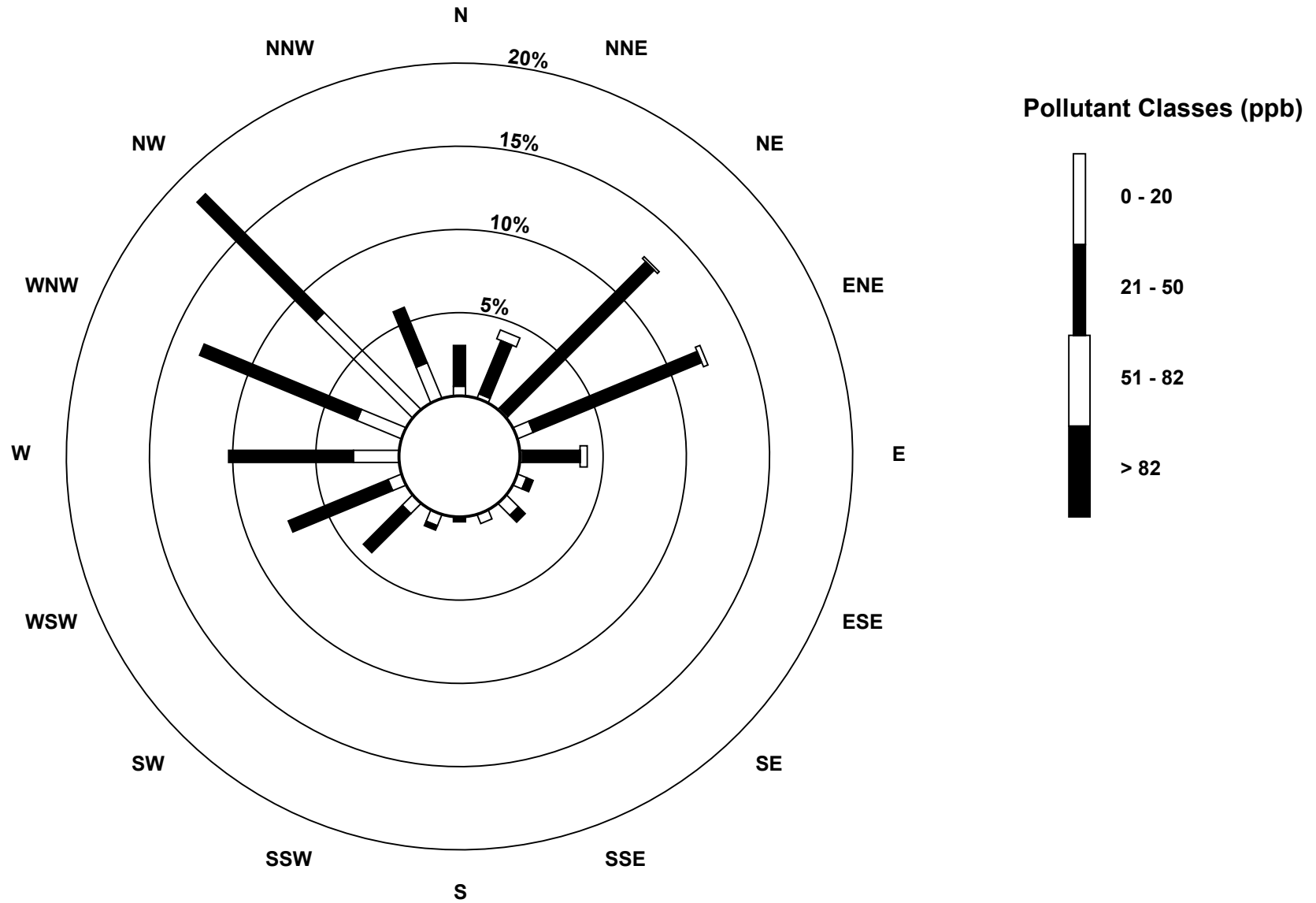
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - March 2018



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - March 2018



Eight Hour Running Averages

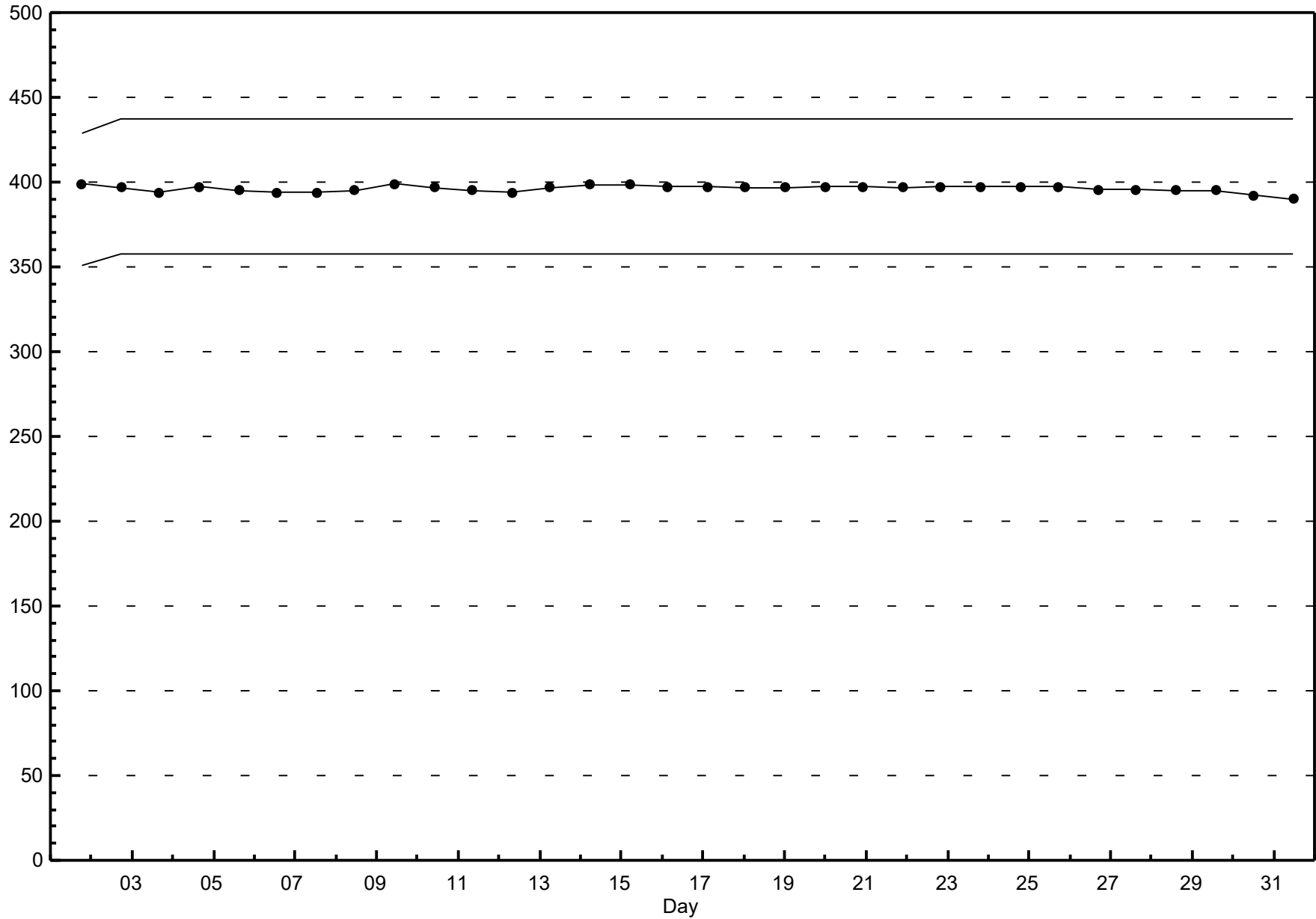
Ozone (O₃) - ppb

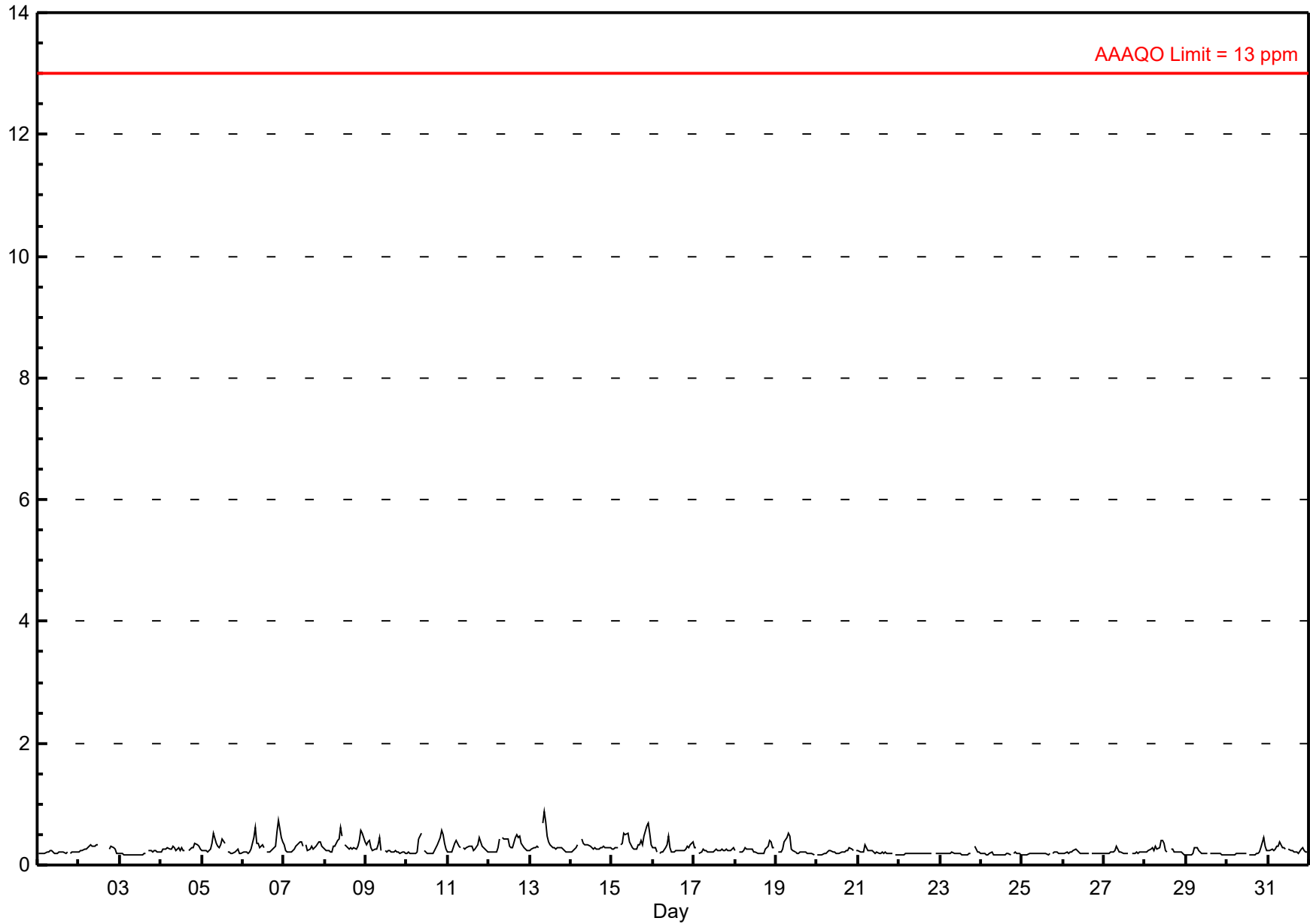
Henry Pirker - March 2018

Maximum Value: 50.0 ppb on Mar 14 21:00																	Hours in Service: 744									
Minimum Value: 2.5 ppb on Mar 9 04:00																	Hours of Data: 741									
Percentiles: P ₁ = 5.3 P ₁₀ = 12.4 Q ₁ = 20.8 Median = 29.5 Q ₃ = 36.9 P ₉₀ = 40.3 P ₉₉ = 48.2																	Hours of Missing Data: 3									
																	Hours of Calibration: 3									
																	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	39	40	41	42	42	42	42	41	40	39	39	38	37	37	37	37	38	N	N	N	40	40	41	42.0		
2-Mar	41	41	41	41	41	41	41	40	39	38	37	37	36	35	35	35	35	35	33	31	30	26	25	24	41.4	
3-Mar	24	24	25	26	26	28	28	27	27	26	26	26	26	26	27	27	27	27	27	26	26	26	25	24	28.0	
4-Mar	24	22	20	16	14	12	9	6	5	6	7	11	13	16	19	22	24	26	26	25	22	18	14	13	26.0	
5-Mar	11	10	10	10	10	11	11	11	10	10	10	11	12	13	15	19	22	24	25	26	25	25	25	25	25.6	
6-Mar	23	21	20	20	19	19	15	12	11	10	9	8	10	9	13	17	21	24	25	25	23	20	16	12	25.4	
7-Mar	8	6	5	4	5	5	5	6	7	8	9	9	9	12	16	19	22	25	26	26	25	22	18	15	25.9	
8-Mar	12	10	9	8	8	9	9	9	10	9	9	10	12	16	20	23	26	27	26	24	21	17	13	26.6		
9-Mar	10	7	4	3	5	7	8	9	9	12	14	18	19	23	26	32	37	39	39	39	40	40	40	40	40.3	
10-Mar	40	39	39	39	39	38	38	34	30	30	30	30	31	32	35	40	44	43	41	39	34	28	23	19	44.2	
11-Mar	17	17	17	17	18	19	20	20	19	18	18	19	21	26	28	31	32	33	30	26	23	21	19	17	32.6	
12-Mar	16	16	19	22	24	23	22	21	19	16	14	14	14	18	23	23	24	25	24	22	21	19	19	20	25.0	
13-Mar	21	22	23	25	24	23	22	18	14	11	10	11	14	17	20	26	31	35	39	42	44	46	47	48	47.9	
14-Mar	49	48	46	42	36	33	26	20	16	13	13	16	21	25	30	36	40	45	48	50	50	49	50	49	50.0	
15-Mar	48	47	45	45	45	42	39	33	28	25	24	24	27	30	33	36	39	40	39	37	31	26	20	18	47.8	
16-Mar	18	16	16	16	20	24	28	28	25	25	24	26	27	29	31	34	38	42	44	43	41	40	37	32	43.5	
17-Mar	27	21	19	19	20	18	17	18	20	23	24	23	21	22	24	27	29	31	34	37	40	41	41	40	41.2	
18-Mar	39	38	35	33	30	29	27	26	25	26	26	28	30	33	37	41	45	47	47	46	44	41	35	29	46.7	
19-Mar	26	23	21	19	16	13	13	12	12	13	14	16	20	25	30	34	38	39	39	39	39	39	39	39	39.5	
20-Mar	38	38	38	38	37	36	35	33	32	31	31	31	32	33	35	37	38	38	38	37	35	34	33	31	38.1	
21-Mar	30	29	28	28	26	25	26	26	27	27	28	28	31	31	32	32	32	33	33	34	34	35	35	36	35.7	
22-Mar	36	36	36	36	36	36	35	34	32	31	30	29	28	28	28	28	29	30	31	32	33	35	36	38	37.8	
23-Mar	39	41	41	40	39	37	35	33	31	29	29	29	29	30	32	33	34	35	35	35	33	31	30	28	41.1	
24-Mar	27	27	27	28	30	30	30	31	32	33	33	34	35	36	38	38	38	38	38	38	38	37	37	36	38.5	
25-Mar	37	37	37	37	37	36	36	35	35	34	34	35	35	36	37	37	37	38	37	37	37	36	36	35	37.6	
26-Mar	34	34	33	32	32	31	29	28	27	26	27	27	28	28	30	31	32	34	34	34	34	33	33	32	34.4	
27-Mar	32	32	31	31	31	30	29	27	25	25	25	25	26	27	29	30	33	34	34	34	34	33	31	31	34.1	
28-Mar	30	28	25	22	18	15	12	10	9	8	10	13	17	21	23	27	30	33	36	38	39	39	39	40	39.7	
29-Mar	40	40	39	39	39	39	38	38	37	37	37	37	38	38	39	41	42	42	43	43	43	42	42	42	42.7	
30-Mar	42	42	42	41	41	40	40	39	38	38	38	38	38	38	39	40	41	41	41	41	40	37	32	27	41.8	
31-Mar	22	20	17	16	15	15	16	14	14	14	15	15	18	23	27	31	33	36	37	36	35	33	32	31	37.3	
48.8 48.4 45.7 45.0 45.0 42.2 41.7 41.0 40.2 39.4 38.6 37.9 37.9 38.6 39.5 41.1 44.6 46.5 48.4 49.5 50.0 49.4 49.5 49.0																	Diurnal Maximums									
N - Not Valid																										

Span Responses

Ozone (O₃)
Henry Pirker - March 2018





Hourly Maximums

Carbon Monoxide (CO) - ppm

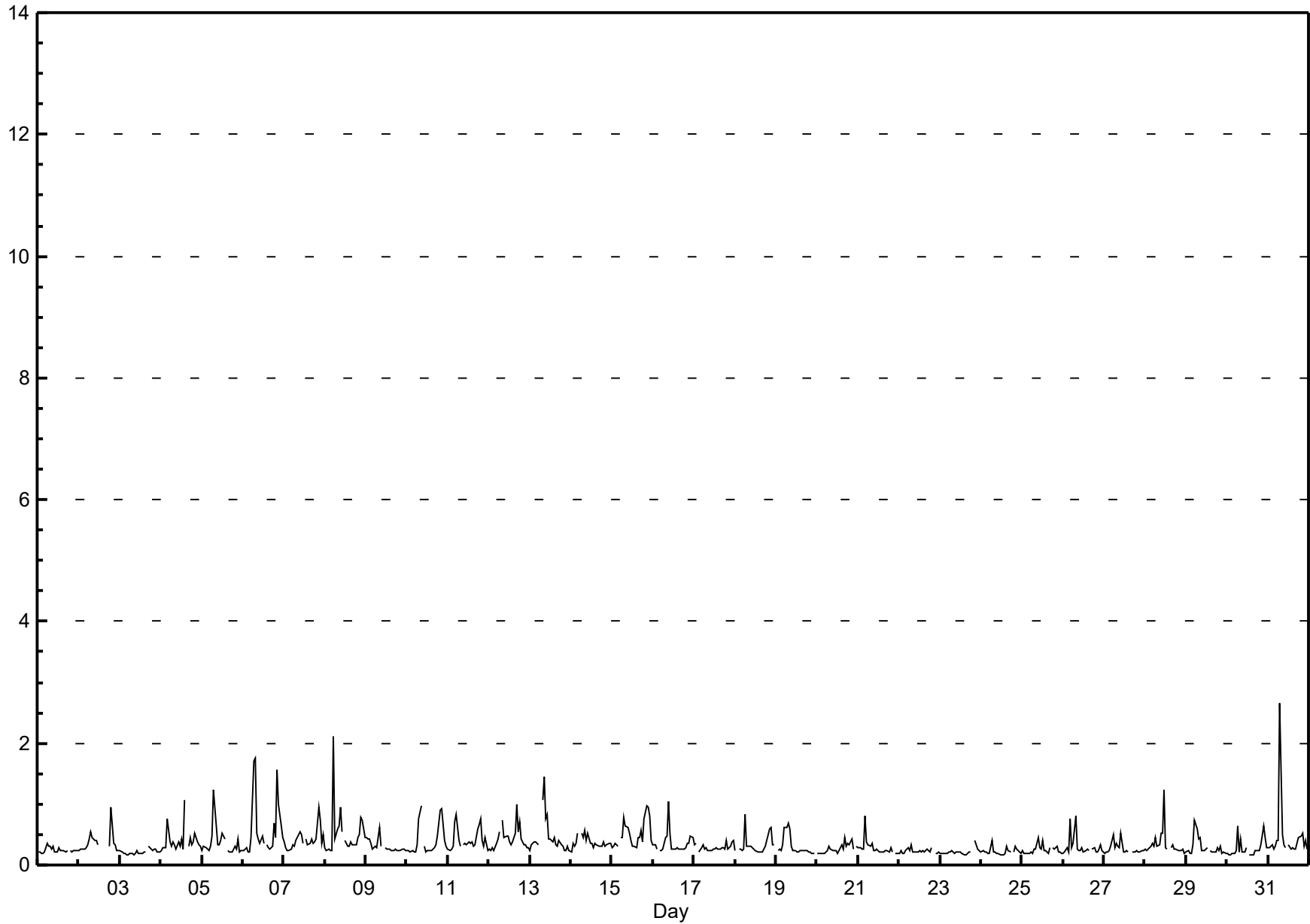
Henry Pirker - March 2018

Maximum Value: 2.65 ppm on Mar 31 08:00		Maximum Daily Average: 0.57 ppm on Mar 6		Hours in Service: 744																							
Minimum Value: 0.2 ppm on Mar 30 15:00		Minimum Daily Average: 0.21 ppm on Mar 3		Hours of Data: 707																							
Maximum Diurnal Average: 0.58 ppm at hour 8		Minimum Diurnal Average: 0.25 ppm at hour 4		Hours of Missing Data: 37																							
Monthly Average: 0.344 ppm		Percentiles: P ₁ = 0.18 P ₁₀ = 0.20 Q ₁ = 0.23 Median = 0.28 Q ₃ = 0.37 P ₉₀ = 0.53 P ₉₉ = 1.23		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	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.25	0.37	
2-Mar	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.6	0.5	0.4	0.4	0.3	C	C	C	C	C	A	0.3	1.0	0.4	0.3	0.2	0.2	0.37	0.95	
3-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	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.21	0.31	
4-Mar	0.2	0.3	0.3	0.3	0.8	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3	1.1	A	0.3	0.4	0.3	0.4	0.5	0.4	0.3	0.3	0.39	1.08	
5-Mar	0.2	0.3	0.3	0.3	0.2	0.3	0.5	1.2	0.6	0.3	0.3	0.4	0.5	0.4	A	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.2	0.36	1.24	
6-Mar	0.2	0.3	0.3	0.2	0.2	0.5	1.7	1.8	0.5	0.4	0.4	0.5	0.3	A	0.3	0.3	0.3	0.3	0.7	0.4	1.6	1.0	0.6	0.4	0.57	1.77	
7-Mar	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.4	A	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.9	0.7	0.4	0.5	0.41	0.95	
8-Mar	0.3	0.2	0.3	0.2	0.2	2.1	0.4	0.6	0.6	1.0	0.5	A	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.5	0.8	0.7	0.5	0.52	2.11	
9-Mar	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.6	0.3	A	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.31	0.62	
10-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8	1.0	A	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.5	0.9	0.9	0.7	0.4	0.3	0.40	0.98	
11-Mar	0.3	0.2	0.3	0.3	0.7	0.8	0.4	0.3	A	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.6	0.7	0.8	0.4	0.3	0.5	0.2	0.41	0.82	
12-Mar	0.3	0.2	0.3	0.2	0.4	0.4	0.6	A	0.7	0.4	0.5	0.5	0.4	0.3	0.4	0.5	1.0	0.5	0.7	0.4	0.3	0.3	0.3	0.44	0.99		
13-Mar	0.2	0.3	0.4	0.4	0.4	0.3	A	1.1	1.5	0.8	0.8	0.4	0.4	0.4	0.5	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.2	0.46	1.45	
14-Mar	0.2	0.3	0.3	0.3	0.5	A	0.5	0.4	0.6	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.37	0.57	
15-Mar	0.3	0.3	0.3	0.3	A	0.5	0.4	0.8	0.6	0.6	0.5	0.4	0.3	0.3	0.4	0.5	0.6	0.4	0.8	1.0	1.0	0.8	0.4	0.51	0.98		
16-Mar	0.3	0.3	0.3	A	0.2	0.2	0.3	0.4	0.5	1.0	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.35	1.03	
17-Mar	0.3	0.4	A	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.29	0.40	
18-Mar	0.2	A	0.3	0.3	0.2	0.3	0.8	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.6	0.6	0.3	0.3	0.33	0.83	
19-Mar	A	0.2	0.3	0.2	0.3	0.6	0.6	0.7	0.6	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	A	0.31	0.69	
20-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	A	0.3	0.27	0.44	
21-Mar	0.3	0.3	0.3	0.3	0.8	0.4	0.3	0.3	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.2	0.28	0.80	
22-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	A	0.2	0.2	0.2	0.23	0.32	
23-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	A	0.4	0.3	0.3	0.22	0.41	
24-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	A	0.2	0.3	0.3	0.2	0.2	0.22	0.41	
25-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.4	0.2	0.2	0.2	0.3	A	0.3	0.3	0.3	0.2	0.2	0.2	0.25	0.45	
26-Mar	0.2	0.2	0.3	0.2	0.8	0.3	0.4	0.8	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	A	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.30	0.80	
27-Mar	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.3	0.3	0.3	0.5	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	0.26	0.52	
28-Mar	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.5	0.5	1.2	0.3	0.3	A	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.34	1.24	
29-Mar	0.2	0.2	0.2	0.2	0.3	0.7	0.6	0.4	0.4	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.29	0.73	
30-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.6	0.2	0.4	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.6	0.5	0.3	0.28	0.65	
31-Mar	0.3	0.3	0.3	0.3	0.3	0.4	0.4	2.7	0.5	0.3	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.4	0.3	0.44	2.65	
		0.25	0.26	0.26	0.25	0.33	0.42	0.43	0.58	0.46	0.39	0.36	0.32	0.29	0.27	0.30	0.27	0.31	0.31	0.33	0.39	0.43	0.40	0.34	0.29	Diurnal Average	
		0.44	0.42	0.43	0.39	0.80	2.11	1.70	2.65	1.45	1.03	0.82	1.24	0.52	0.44	1.08	0.52	0.99	0.60	0.72	0.95	1.56	1.00	0.80	0.49	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

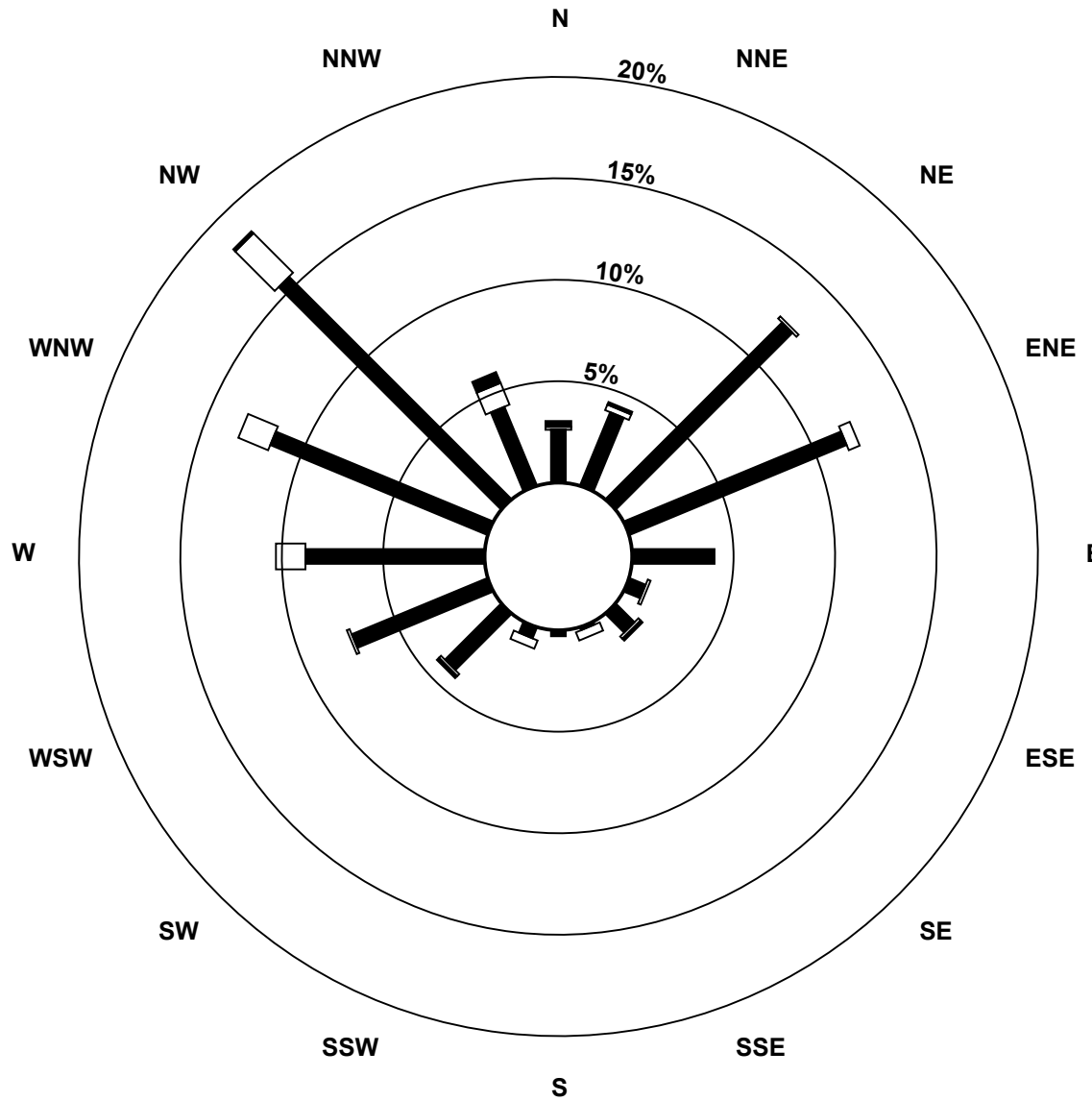
Carbon Monoxide (CO) - ppm

Henry Pirker - March 2018

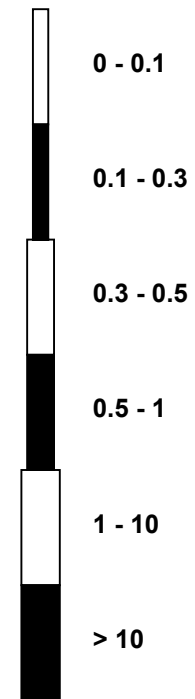


Pollutant Rose

Carbon Monoxide (CO) - ppm
Henry Pirker - March 2018



Pollutant Classes (ppm)





Peace Airshed Zone Association

Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2018

Number of Exceedences (AAAQO): 8-hr: 0	Hours in Service: 744
Maximum Value: 0.54 ppm on Mar 13 14:00	Hours of Data: 735
Minimum Value: 0.17 ppm on Mar 30 05:00	Hours of Missing Data: 9
	Hours of Calibration: 9
	Percent Operational Time: 100.0
Percentiles: P ₁ = 0.17 P ₁₀ = 0.18 Q ₁ = 0.20 Median = 0.24 Q ₃ = 0.29 P ₉₀ = 0.35 P ₉₉ = 0.47	

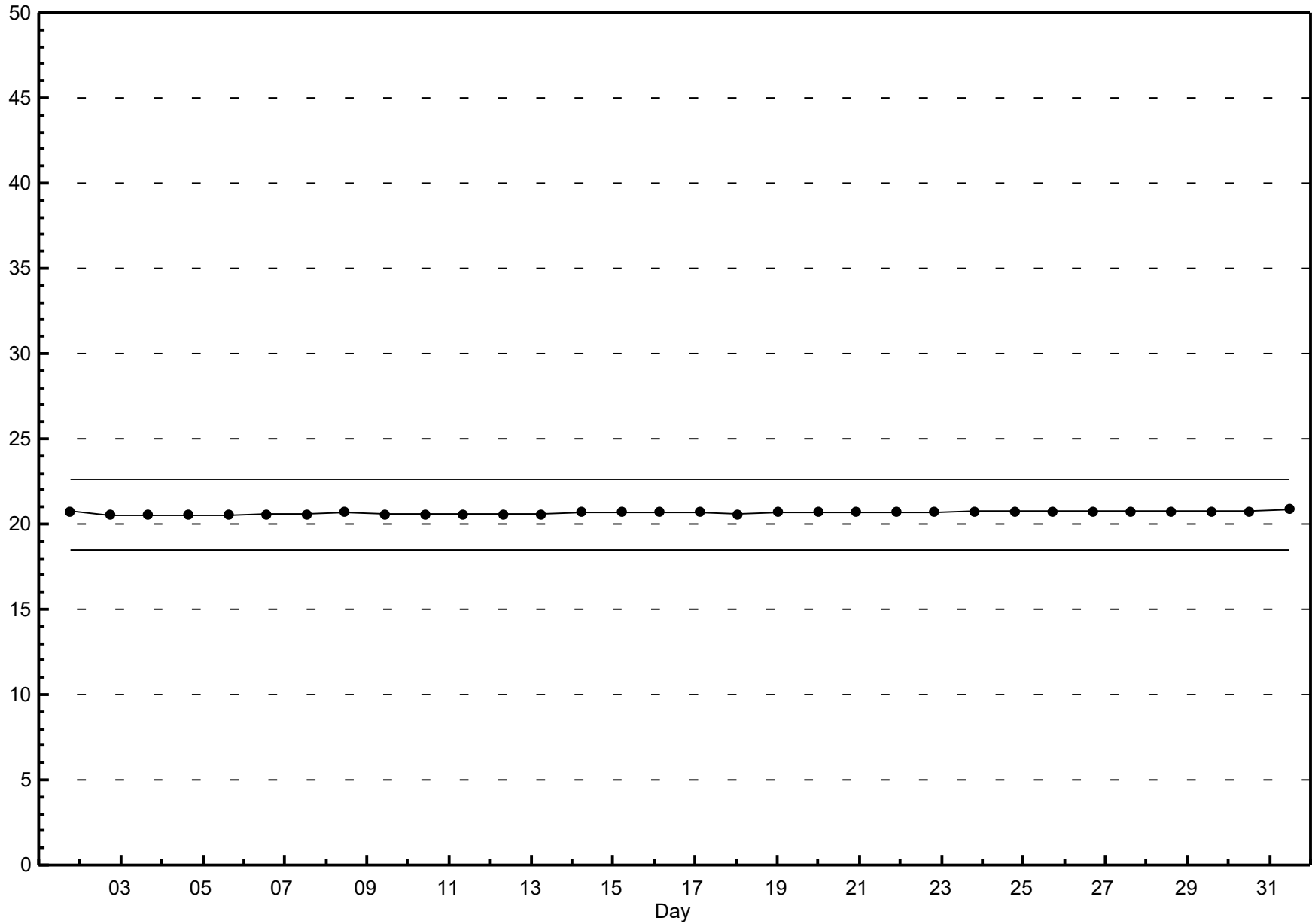
Day	Hourly Period Ending At (MST)																								Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
2-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	N	N	N	N	N	N	N	N	N	N	0.3	0.32
3-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
4-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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30
5-Mar	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.37
6-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.39
7-Mar	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.41
8-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.41
9-Mar	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.41
10-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	0.3	0.3	0.3	0.4	0.4	0.4	0.38
11-Mar	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.37
12-Mar	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	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.39
13-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.54
14-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.35
15-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.47
16-Mar	0.5	0.4	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.46
17-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.31
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	0.29
19-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.35
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	0.24
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	0.25
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	0.20
23-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
24-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
25-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
26-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
27-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
28-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	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32
29-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
30-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	0.3	0.25
31-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	0.30
	0.46	0.45	0.43	0.43	0.39	0.35	0.32	0.34	0.43	0.49	0.52	0.53	0.54	0.54	0.51	0.45	0.38	0.39	0.39	0.39	0.38	0.44	0.47	0.47		

Diurnal Maximums

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

Span Responses

Carbon Monoxide (CO)
Henry Pirker - March 2018



Hourly Averages

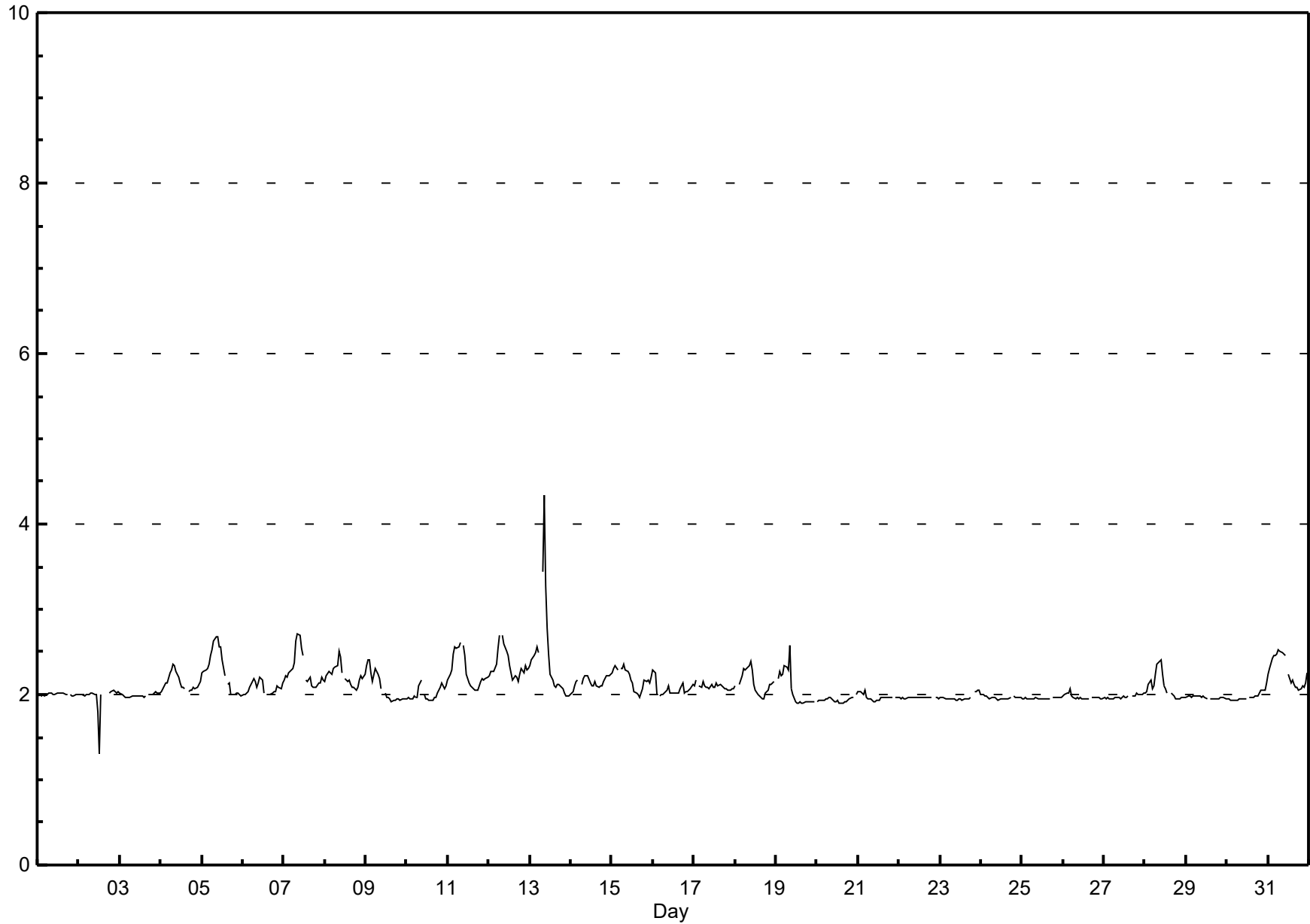
Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2018

Maximum Value: 4.34 ppm on Mar 13 09:00		Maximum Daily Average: 2.44 ppm on Mar 13		Hours in Service: 744																																													
Minimum Value: 1.3 ppm on Mar 2 13:00		Minimum Daily Average: 1.93 ppm on Mar 20		Hours of Data: 709																																													
Maximum Diurnal Average: 2.26 ppm at hour 9		Minimum Diurnal Average: 2.01 ppm at hour 18		Hours of Missing Data: 35																																													
Monthly Average: 2.090 ppm		Percentiles: P ₁ = 1.91 P ₁₀ = 1.95 Q ₁ = 1.96 Median = 2.01 Q ₃ = 2.16 P ₉₀ = 2.31 P ₉₉ = 2.69		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	2.0	2.0	2.0	2.0	2.0	2.0	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	2.00	2.02																						
2-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.3	2.0	C	C	C	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.05																						
3-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	2.0	2.0	A	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.04																							
4-Mar	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.1	A	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.35																						
5-Mar	2.2	2.3	2.3	2.3	2.4	2.5	2.5	2.6	2.7	2.7	2.6	2.6	2.4	2.2	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.28	2.67																						
6-Mar	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.07	2.20																							
7-Mar	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.6	2.7	2.7	2.5	2.5	A	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.28	2.72																							
8-Mar	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.3	2.5	2.4	2.3	A	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.22	2.51																							
9-Mar	2.3	2.4	2.4	2.3	2.2	2.3	2.3	2.2	2.2	2.1	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.08	2.41																							
10-Mar	1.9	2.0	1.9	1.9	2.0	2.0	2.0	2.1	2.2	A	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.01	2.17																							
11-Mar	2.2	2.2	2.3	2.5	2.6	2.5	2.6	2.6	A	2.6	2.5	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.27	2.61																							
12-Mar	2.2	2.3	2.3	2.3	2.3	2.5	2.7	A	2.7	2.6	2.5	2.5	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.35	2.70																							
13-Mar	2.3	2.4	2.5	2.5	2.6	2.5	A	3.4	4.3	3.3	2.8	2.5	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.44	4.34																							
14-Mar	2.0	2.0	2.1	2.1	2.2	A	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.15	2.24																							
15-Mar	2.3	2.3	2.3	2.3	A	2.3	2.3	2.4	2.3	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.1	2.2	2.18	2.36																							
16-Mar	2.3	2.3	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.06	2.28																							
17-Mar	2.1	2.2	A	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.09	2.17																							
18-Mar	2.1	A	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.14	2.39																							
19-Mar	A	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.3	2.6	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	2.06	2.58																							
20-Mar	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	1.93	2.00																							
21-Mar	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	A	2.0	2.0	1.97	2.05																							
22-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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.96	1.97																							
23-Mar	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.1	2.0	1.96	2.05																							
24-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.96	2.00																							
25-Mar	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.96	1.97																							
26-Mar	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.08																							
27-Mar	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.01																							
28-Mar	2.0	2.0	2.1	2.2	2.1	2.1	2.2	2.4	2.4	2.4	2.2	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.09	2.40																							
29-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	2.0	A	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	1.97	1.98																							
30-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	1.98	2.13																							
31-Mar	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	A	2.2	2.1	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.28	2.52																							
																								2.08	2.10	2.11	2.12	2.12	2.15	2.16	2.21	2.26	2.21	2.15	2.08	2.03	2.03	2.02	2.02	2.01	2.01	2.02	2.03	2.05	2.05	2.05	2.07	Diurnal Average	
																								2.34	2.41	2.45	2.49	2.56	2.55	2.70	3.44	4.34	3.27	2.78	2.57	2.40	2.26	2.17	2.22	2.20	2.16	2.24	2.30	2.26	2.33	2.29	2.30	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									

Hourly Averages

Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2018



Hourly Maximums

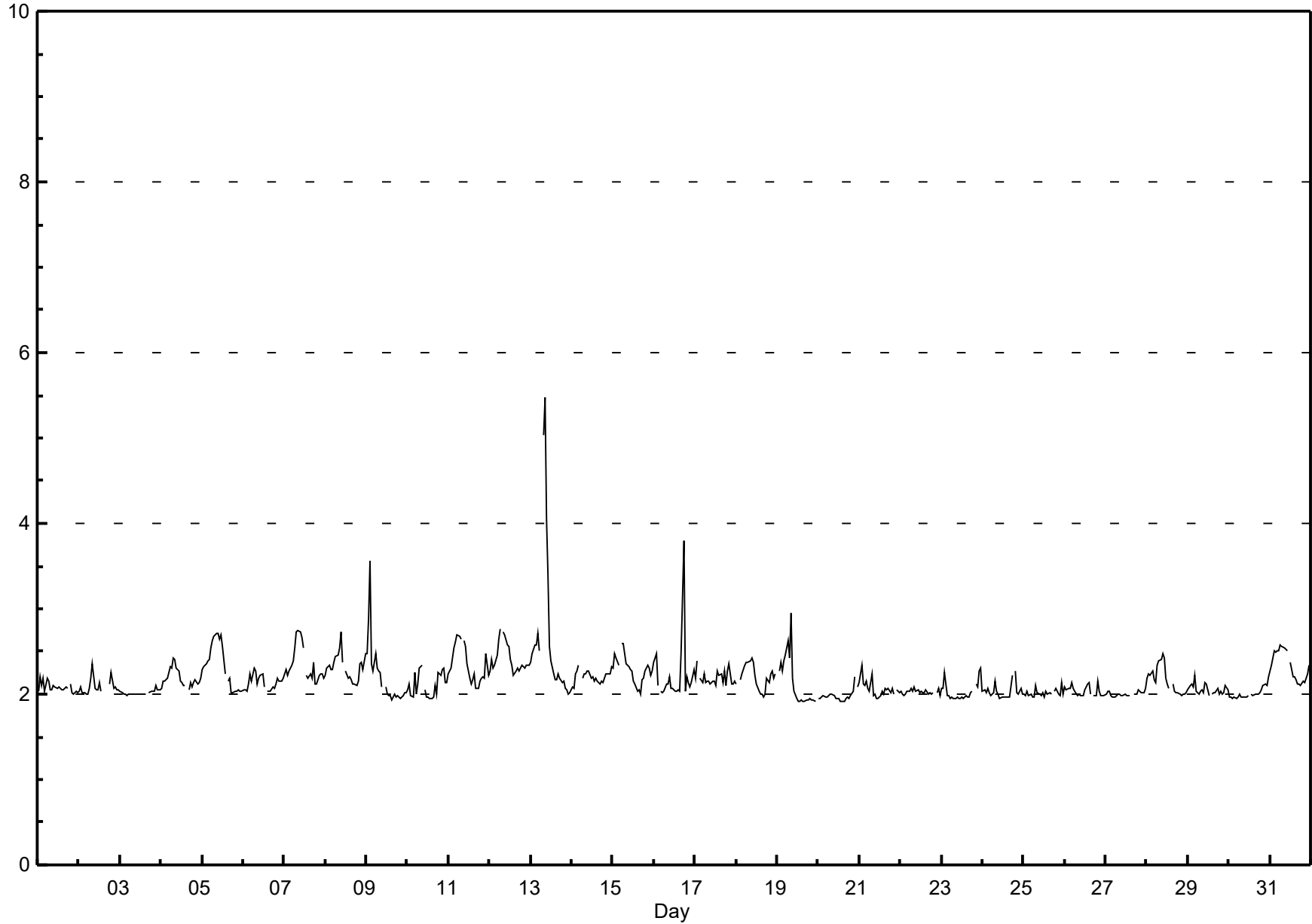
Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2018

Maximum Value: 5.48 ppm on Mar 13 09:00		Maximum Daily Average: 2.68 ppm on Mar 13		Hours in Service: 744																																												
Minimum Value: 1.9 ppm on Mar 20 16:00		Minimum Daily Average: 1.98 ppm on Mar 20		Hours of Data: 709																																												
Maximum Diurnal Average: 2.37 ppm at hour 9		Minimum Diurnal Average: 2.06 ppm at hour 15		Hours of Missing Data: 35																																												
Monthly Average: 2.169 ppm		Percentiles: P ₁ = 1.92 P ₁₀ = 1.97 Q ₁ = 2.01 Median = 2.10 Q ₃ = 2.25 P ₉₀ = 2.43 P ₉₉ = 2.87		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	2.0	2.2	2.1	2.2	2.0	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.0	2.0	2.0	2.0	2.08	2.21																						
2-Mar	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.1	2.1	2.1	2.1	2.0	C	C	C	A	2.1	2.3	2.1	2.1	2.1	2.1	2.09	2.36																						
3-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	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.01	2.10																						
4-Mar	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.3	2.2	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.19	2.43																						
5-Mar	2.3	2.3	2.3	2.4	2.4	2.5	2.6	2.7	2.7	2.7	2.6	2.7	2.6	2.2	A	2.2	2.2	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.34	2.72																						
6-Mar	2.1	2.1	2.0	2.1	2.2	2.2	2.3	2.3	2.1	2.2	2.2	2.2	2.1	A	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.13	2.30																						
7-Mar	2.2	2.3	2.2	2.3	2.3	2.4	2.5	2.7	2.7	2.7	2.7	2.5	A	2.2	2.2	2.2	2.2	2.4	2.1	2.1	2.2	2.2	2.2	2.2	2.35	2.75																						
8-Mar	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.7	2.4	A	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.4	2.4	2.3	2.5	2.31	2.74																						
9-Mar	2.5	2.9	3.6	2.4	2.3	2.5	2.3	2.3	2.3	2.1	A	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.21	3.56																						
10-Mar	2.1	2.1	2.0	2.0	2.3	2.0	2.1	2.3	2.3	A	2.1	2.0	2.0	2.0	1.9	2.0	2.1	2.0	2.3	2.2	2.3	2.3	2.1	2.1	2.11	2.35																						
11-Mar	2.2	2.3	2.4	2.6	2.6	2.7	2.7	2.6	A	2.6	2.6	2.4	2.2	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.5	2.2	2.35	2.69																						
12-Mar	2.3	2.4	2.3	2.3	2.5	2.6	2.8	A	2.7	2.7	2.6	2.6	2.4	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.41	2.77																						
13-Mar	2.4	2.5	2.6	2.6	2.7	2.5	A	5.0	5.5	4.1	3.4	2.6	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.68	5.48																						
14-Mar	2.1	2.1	2.2	2.3	2.3	A	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.20	2.35																						
15-Mar	2.3	2.5	2.4	2.3	A	2.6	2.6	2.5	2.4	2.3	2.3	2.3	2.2	2.1	2.0	2.1	2.0	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.29	2.60																						
16-Mar	2.4	2.5	2.1	A	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.1	2.0	2.5	3.8	2.0	2.2	2.1	2.1	2.1	2.3	2.22	3.79																						
17-Mar	2.2	2.4	A	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.1	2.3	2.2	2.2	2.1	2.3	2.1	2.3	2.4	2.1	2.1	2.2	2.19	2.38																						
18-Mar	2.1	A	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.2	2.3	2.2	2.2	2.20	2.43																						
19-Mar	A	2.3	2.4	2.3	2.4	2.5	2.6	2.4	3.0	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.14	2.96																						
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	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2	A	2.1	1.98	2.21																						
21-Mar	2.1	2.3	2.1	2.1	2.1	2.1	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.0	A	2.1	2.0	2.06	2.33																						
22-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.02	2.09																						
23-Mar	2.1	2.1	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.3	2.03	2.31																						
24-Mar	2.0	2.1	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	2.2	A	2.3	2.0	2.0	2.1	2.0	2.03	2.27																						
25-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	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.1	2.0	2.01	2.13																						
26-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	A	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.04	2.15																						
27-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	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.1	2.00	2.07																						
28-Mar	2.2	2.2	2.2	2.3	2.2	2.1	2.3	2.4	2.4	2.5	2.4	2.2	2.1	2.1	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.17	2.48																						
29-Mar	2.1	2.1	2.1	2.1	2.2	2.0	2.0	2.0	2.1	2.0	2.1	2.0	A	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.05	2.23																						
30-Mar	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	2.1	2.1	2.1	2.1	2.2	2.01	2.21																						
31-Mar	2.3	2.3	2.5	2.5	2.5	2.5	2.6	2.6	2.5	2.5	2.5	A	2.4	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.3	2.33	2.58																						
																								2.14	2.21	2.22	2.18	2.20	2.22	2.24	2.34	2.37	2.29	2.23	2.15	2.11	2.08	2.06	2.07	2.07	2.14	2.07	2.12	2.12	2.12	2.13	2.14	Diurnal Average
																								2.48	2.88	3.56	2.57	2.71	2.69	2.77	5.03	5.48	4.05	3.39	2.70	2.56	2.35	2.22	2.27	2.49	3.79	2.31	2.33	2.36	2.38	2.48	2.48	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

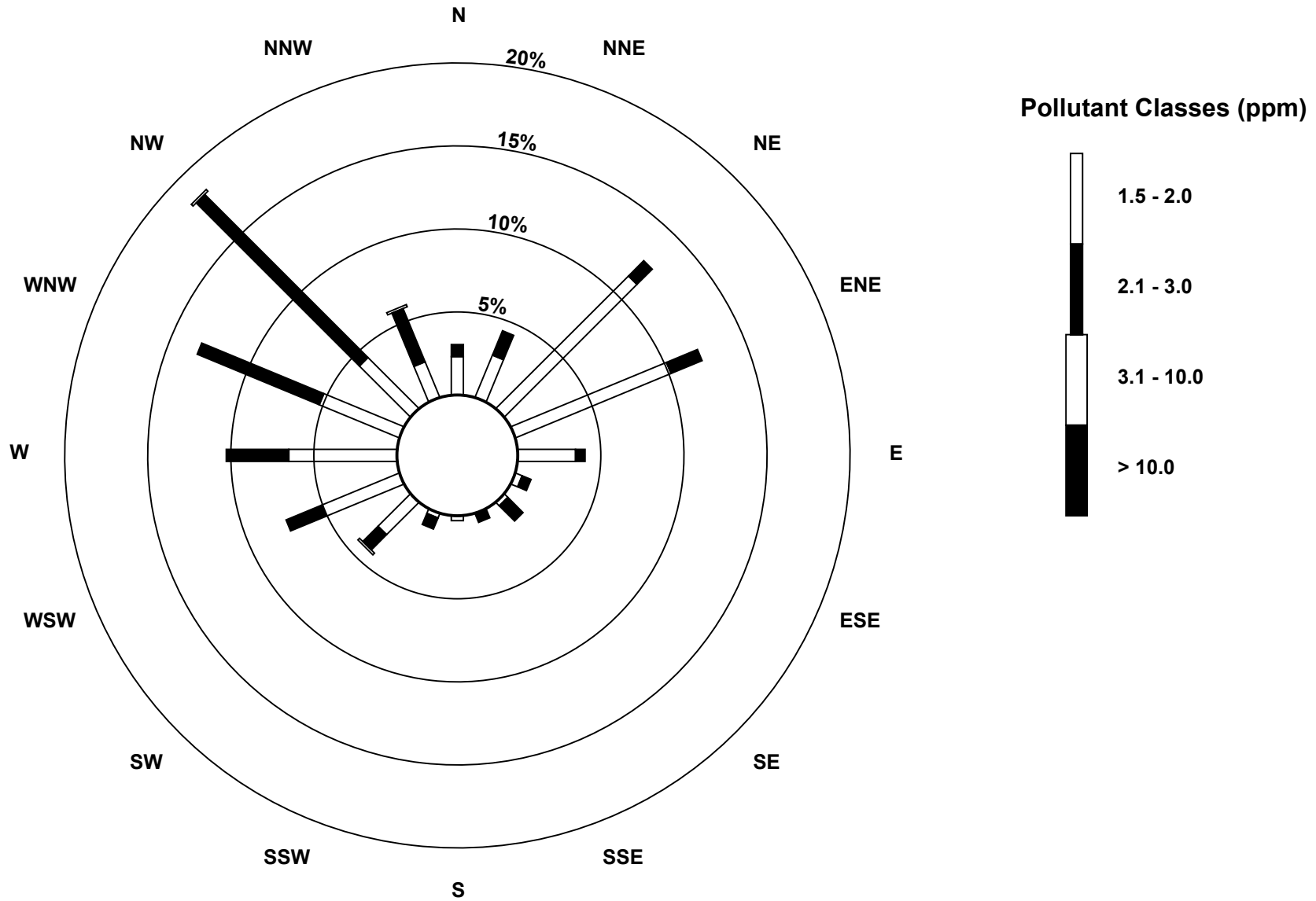
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2018



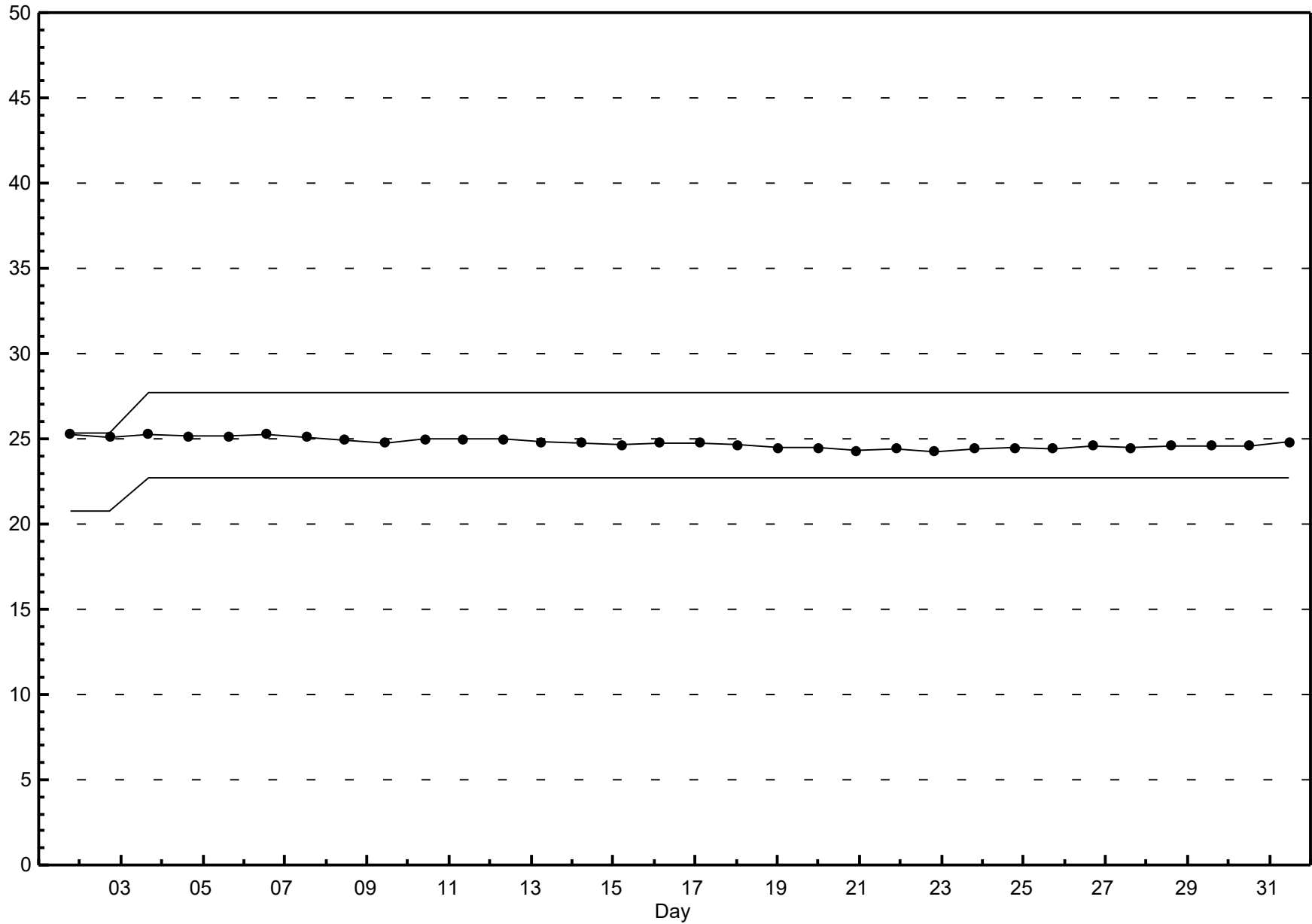
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2018



Span Responses

Total Hydrocarbons (THC)
Henry Pirker - March 2018



Hourly Averages

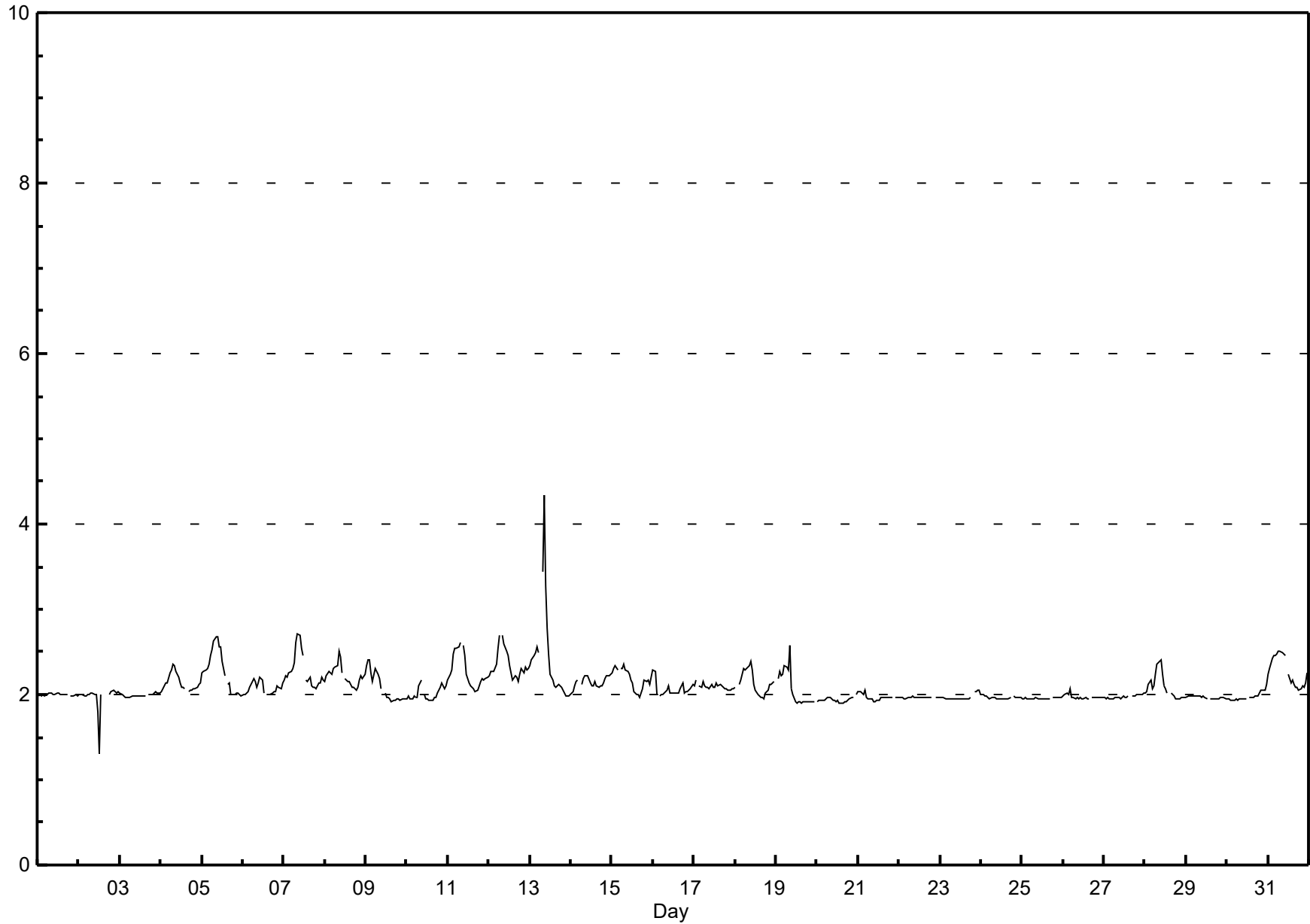
Methane (CH₄) - ppm

Henry Pirker - March 2018

Maximum Value: 4.34 ppm on Mar 13 09:00 Maximum Daily Average: 2.43 ppm on Mar 13 Minimum Value: 1.3 ppm on Mar 2 13:00 Minimum Daily Average: 1.94 ppm on Mar 20 Maximum Diurnal Average: 2.26 ppm at hour 9 Minimum Diurnal Average: 2.01 ppm at hour 18 Monthly Average: 2.090 ppm Percentiles: P ₁ = 1.91 P ₁₀ = 1.95 Q ₁ = 1.96 Median = 2.01 Q ₃ = 2.16 P ₉₀ = 2.31 P ₉₉ = 2.69		Hours in Service:	744																								
		Hours of Data:	709																								
		Hours of Missing Data:	35																								
		Hours of Calibration:	35																								
		Percent Operational Time:	100.0																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-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	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.01
2-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.3	2.0	C	C	C	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.05
3-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	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.04
4-Mar	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.3	2.2	2.1	2.1	2.1	2.1	A	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.14	2.35
5-Mar	2.2	2.3	2.3	2.3	2.4	2.5	2.5	2.6	2.7	2.7	2.6	2.6	2.4	2.2	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.28	2.67
6-Mar	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.07	2.20
7-Mar	2.2	2.2	2.2	2.2	2.3	2.3	2.4	2.6	2.7	2.7	2.5	2.5	A	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.28	2.72
8-Mar	2.2	2.2	2.3	2.3	2.2	2.3	2.3	2.3	2.5	2.4	2.3	A	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.22	2.51
9-Mar	2.3	2.4	2.4	2.3	2.1	2.3	2.3	2.2	2.2	2.1	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.08	2.41
10-Mar	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.2	A	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.01	2.17	
11-Mar	2.2	2.2	2.3	2.5	2.5	2.5	2.6	2.6	A	2.6	2.5	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.27	2.61
12-Mar	2.2	2.3	2.3	2.3	2.3	2.5	2.7	A	2.7	2.6	2.5	2.5	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.34	2.70
13-Mar	2.3	2.4	2.5	2.5	2.6	2.5	A	3.4	4.3	3.3	2.8	2.5	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.43	4.34	
14-Mar	2.0	2.0	2.1	2.1	2.2	A	2.1	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.15	2.24	
15-Mar	2.3	2.3	2.3	2.3	A	2.3	2.3	2.4	2.3	2.3	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.2	2.1	2.2	2.18	2.36	
16-Mar	2.3	2.3	2.0	A	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.06	2.28	
17-Mar	2.1	2.2	A	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.09	2.17	
18-Mar	2.1	A	2.1	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.14	2.39	
19-Mar	A	2.2	2.3	2.2	2.2	2.3	2.3	2.3	2.6	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	2.07	2.58	
20-Mar	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	1.94	2.00	
21-Mar	2.0	2.0	2.0	2.0	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	2.0	2.0	2.0	2.0	A	2.0	2.0	1.97	2.05	
22-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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.96	1.97	
23-Mar	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	A	2.0	2.0	2.0	2.0	1.97	2.05	
24-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.96	2.00	
25-Mar	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	1.96	1.97	
26-Mar	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	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.07	
27-Mar	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.01	
28-Mar	2.0	2.0	2.1	2.2	2.1	2.1	2.2	2.4	2.4	2.4	2.2	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.09	2.40	
29-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	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.97	1.98	
30-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	1.98	2.13	
31-Mar	2.2	2.3	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	A	2.2	2.1	2.2	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.27	2.52	
		2.08	2.10	2.11	2.12	2.12	2.15	2.16	2.21	2.26	2.21	2.15	2.08	2.03	2.03	2.02	2.02	2.01	2.01	2.02	2.03	2.05	2.05	2.05	2.07	Diurnal Average	
		2.34	2.41	2.45	2.49	2.56	2.55	2.70	3.44	4.34	3.27	2.78	2.57	2.40	2.26	2.17	2.22	2.20	2.16	2.24	2.30	2.26	2.33	2.29	2.30	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Averages

Methane (CH₄) - ppm
Henry Pirker - March 2018



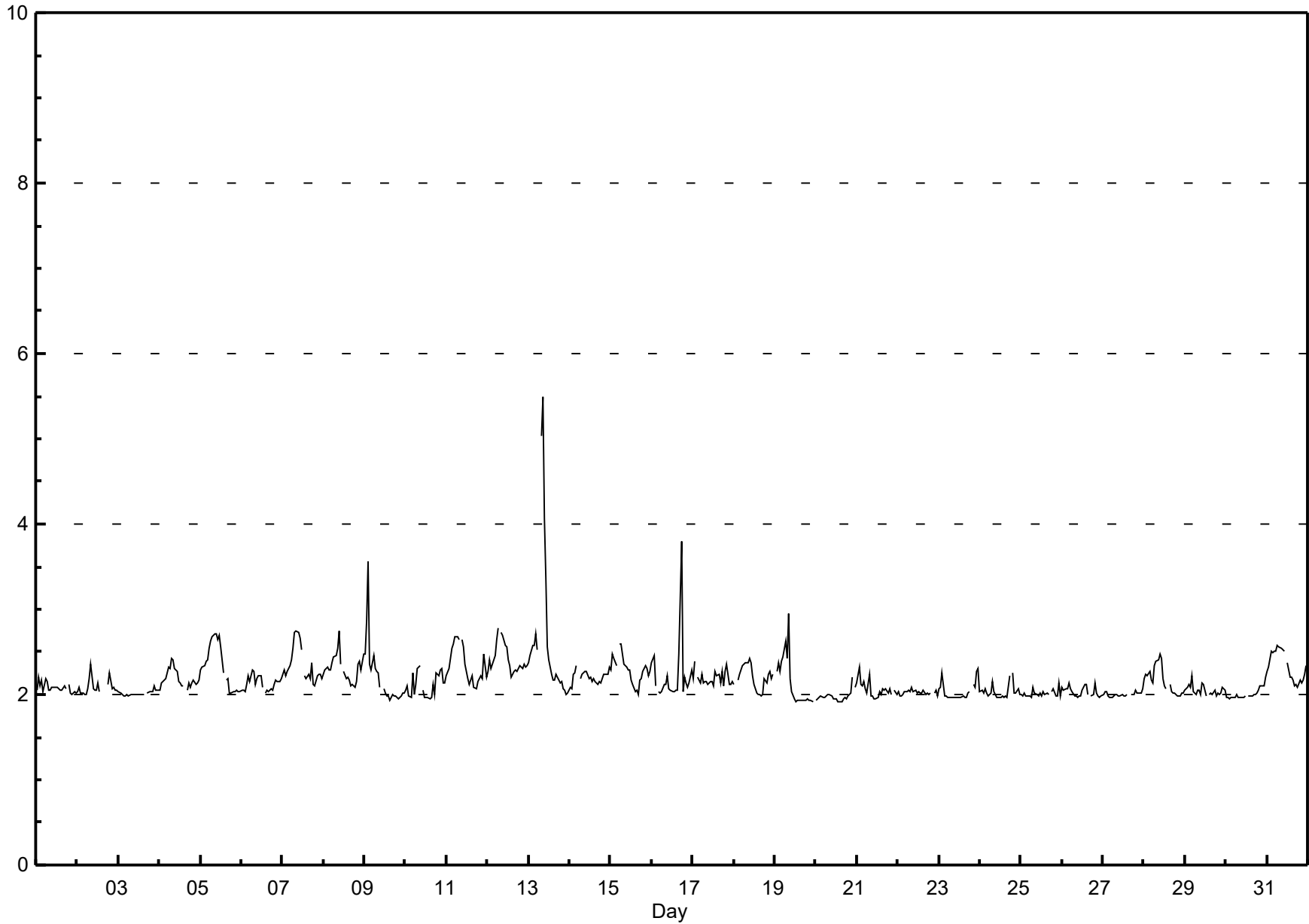
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - March 2018

Maximum Value: 5.49 ppm on Mar 13 09:00		Maximum Daily Average: 2.68 ppm on Mar 13		Hours in Service: 744																							
Minimum Value: 1.9 ppm on Mar 19 13:00		Minimum Daily Average: 1.98 ppm on Mar 20		Hours of Data: 709																							
Maximum Diurnal Average: 2.36 ppm at hour 9		Minimum Diurnal Average: 2.06 ppm at hour 15		Hours of Missing Data: 35																							
Monthly Average: 2.168 ppm		Percentiles: P ₁ = 1.92 P ₁₀ = 1.97 Q ₁ = 2.01 Median = 2.10 Q ₃ = 2.25 P ₉₀ = 2.42 P ₉₉ = 2.86		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	2.0	2.2	2.1	2.2	2.0	2.2	2.2	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.0	2.0	2.0	2.0	2.08	2.21	
2-Mar	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.1	2.1	2.1	2.1	2.0	C	C	C	A	2.1	2.2	2.1	2.1	2.1	2.0	2.09	2.35	
3-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	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.01	2.09	
4-Mar	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.4	2.4	2.3	2.3	2.2	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.18	2.42	
5-Mar	2.3	2.3	2.3	2.4	2.4	2.5	2.6	2.7	2.7	2.7	2.6	2.7	2.6	2.2	A	2.2	2.2	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.34	2.71	
6-Mar	2.1	2.1	2.0	2.1	2.2	2.2	2.3	2.3	2.1	2.2	2.2	2.2	2.1	A	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.2	2.13	2.29	
7-Mar	2.2	2.3	2.2	2.3	2.3	2.4	2.5	2.7	2.7	2.7	2.7	2.5	A	2.2	2.2	2.2	2.2	2.4	2.1	2.1	2.2	2.2	2.2	2.2	2.35	2.75	
8-Mar	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.7	2.4	A	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.4	2.4	2.3	2.5	2.31	2.74	
9-Mar	2.5	2.9	3.6	2.4	2.3	2.5	2.3	2.3	2.2	2.1	A	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.21	3.56	
10-Mar	2.1	2.1	2.0	2.0	2.3	2.0	2.1	2.3	2.3	A	2.0	2.0	2.0	2.0	1.9	2.0	2.1	2.0	2.3	2.2	2.3	2.3	2.1	2.1	2.11	2.35	
11-Mar	2.2	2.3	2.4	2.5	2.6	2.7	2.7	2.6	A	2.6	2.6	2.4	2.2	2.1	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.5	2.2	2.34	2.68	
12-Mar	2.3	2.4	2.3	2.4	2.5	2.6	2.8	A	2.7	2.7	2.6	2.6	2.4	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3	2.41	2.77	
13-Mar	2.4	2.5	2.6	2.6	2.7	2.5	A	5.0	5.5	4.1	3.4	2.6	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.68	5.49	
14-Mar	2.1	2.1	2.2	2.3	2.3	A	2.2	2.2	2.2	2.3	2.3	2.2	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.20	2.35	
15-Mar	2.3	2.5	2.4	2.3	A	2.6	2.6	2.5	2.4	2.3	2.3	2.3	2.2	2.1	2.0	2.0	2.0	2.2	2.2	2.3	2.3	2.3	2.2	2.3	2.29	2.60	
16-Mar	2.4	2.5	2.1	A	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.1	2.0	2.5	3.8	2.0	2.2	2.1	2.1	2.1	2.3	2.21	3.79	
17-Mar	2.2	2.4	A	2.2	2.1	2.2	2.1	2.2	2.1	2.1	2.2	2.2	2.1	2.3	2.2	2.2	2.1	2.3	2.1	2.3	2.4	2.1	2.1	2.2	2.19	2.39	
18-Mar	2.1	A	2.2	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.2	2.3	2.2	2.2	2.20	2.43	
19-Mar	A	2.3	2.4	2.3	2.4	2.4	2.6	2.4	3.0	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.14	2.95	
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	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.2	A	2.1	1.98	2.20	
21-Mar	2.1	2.3	2.1	2.1	2.2	2.1	2.0	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.1	2.0	A	2.0	2.0	2.06	2.33	
22-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.02	2.08
23-Mar	2.1	2.1	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.3	2.3	2.03	2.31
24-Mar	2.0	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	2.2	A	2.3	2.0	2.0	2.1	2.0	2.03	2.26
25-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	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.0	2.0	2.1	2.0	2.01	2.13	
26-Mar	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	A	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.03	2.14	
27-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	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.00	2.07	
28-Mar	2.2	2.2	2.2	2.3	2.2	2.1	2.3	2.4	2.4	2.5	2.4	2.2	2.1	2.1	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.16	2.47	
29-Mar	2.1	2.1	2.1	2.1	2.2	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	A	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.05	2.22	
30-Mar	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	2.1	2.1	2.1	2.1	2.2	2.01	2.20	
31-Mar	2.3	2.3	2.5	2.5	2.5	2.5	2.6	2.6	2.5	2.5	2.5	A	2.4	2.2	2.2	2.2	2.1	2.1	2.1	2.2	2.1	2.2	2.2	2.3	2.33	2.58	
		2.14	2.21	2.22	2.18	2.20	2.22	2.24	2.34	2.36	2.29	2.23	2.15	2.11	2.08	2.06	2.07	2.07	2.14	2.07	2.12	2.12	2.12	2.13	2.14	Diurnal Average	
		2.48	2.87	3.56	2.57	2.72	2.68	2.77	5.04	5.49	4.06	3.38	2.70	2.55	2.34	2.23	2.28	2.48	3.79	2.31	2.34	2.35	2.39	2.47	2.47	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

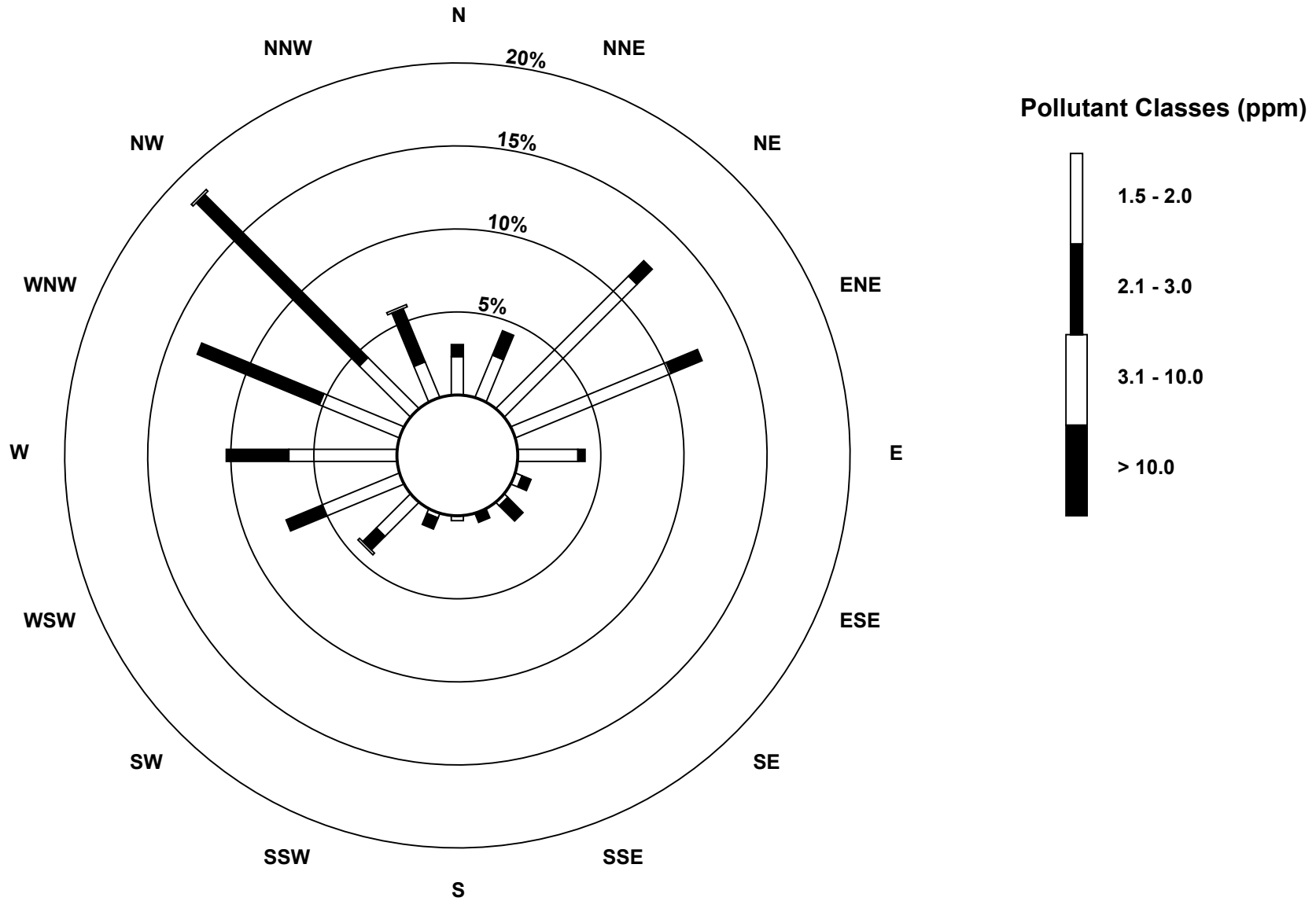
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - March 2018



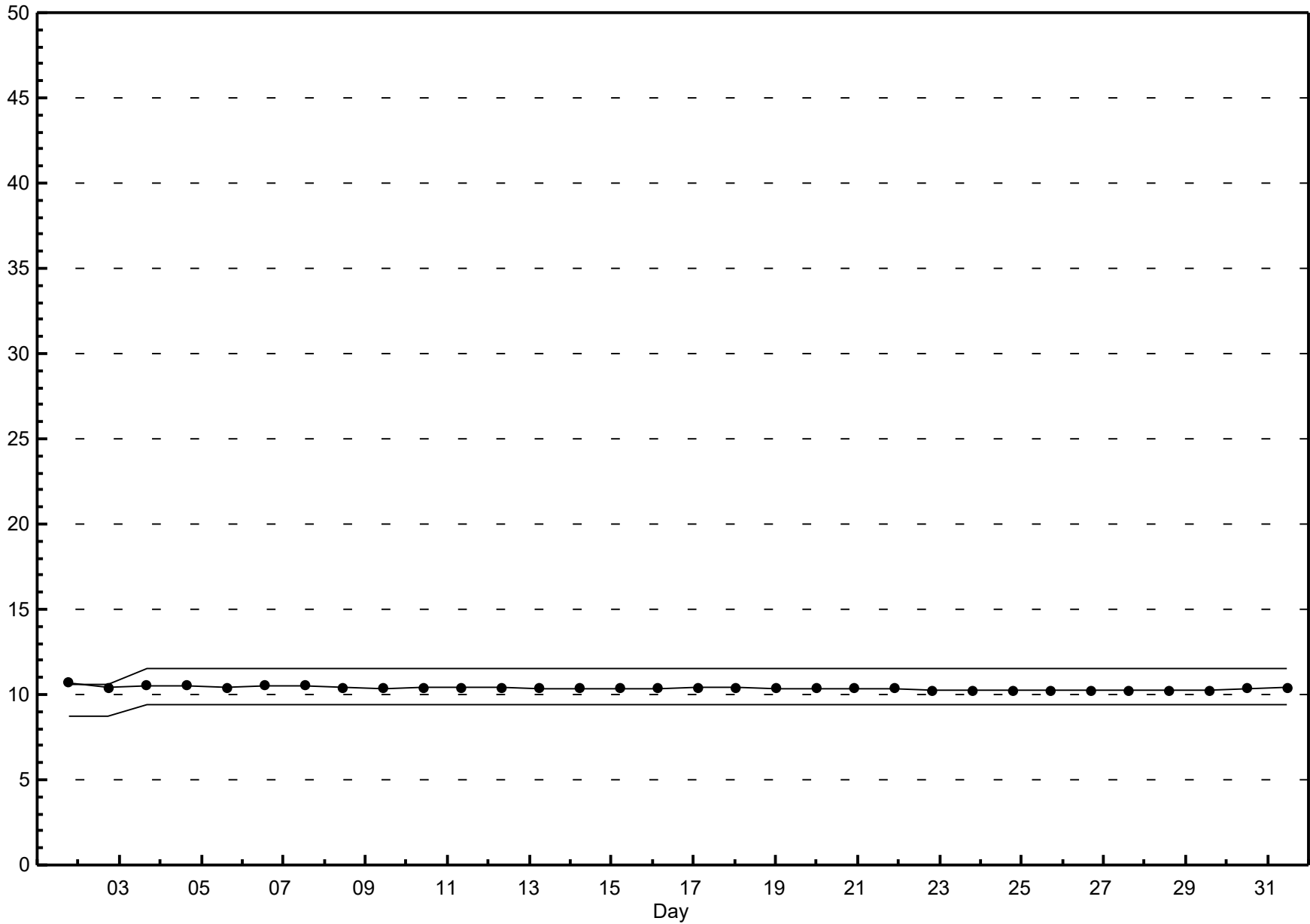
Pollutant Rose

Methane (CH₄) - ppm
Henry Pirker - March 2018



Span Responses

Methane (CH₄)
Henry Pirker - March 2018

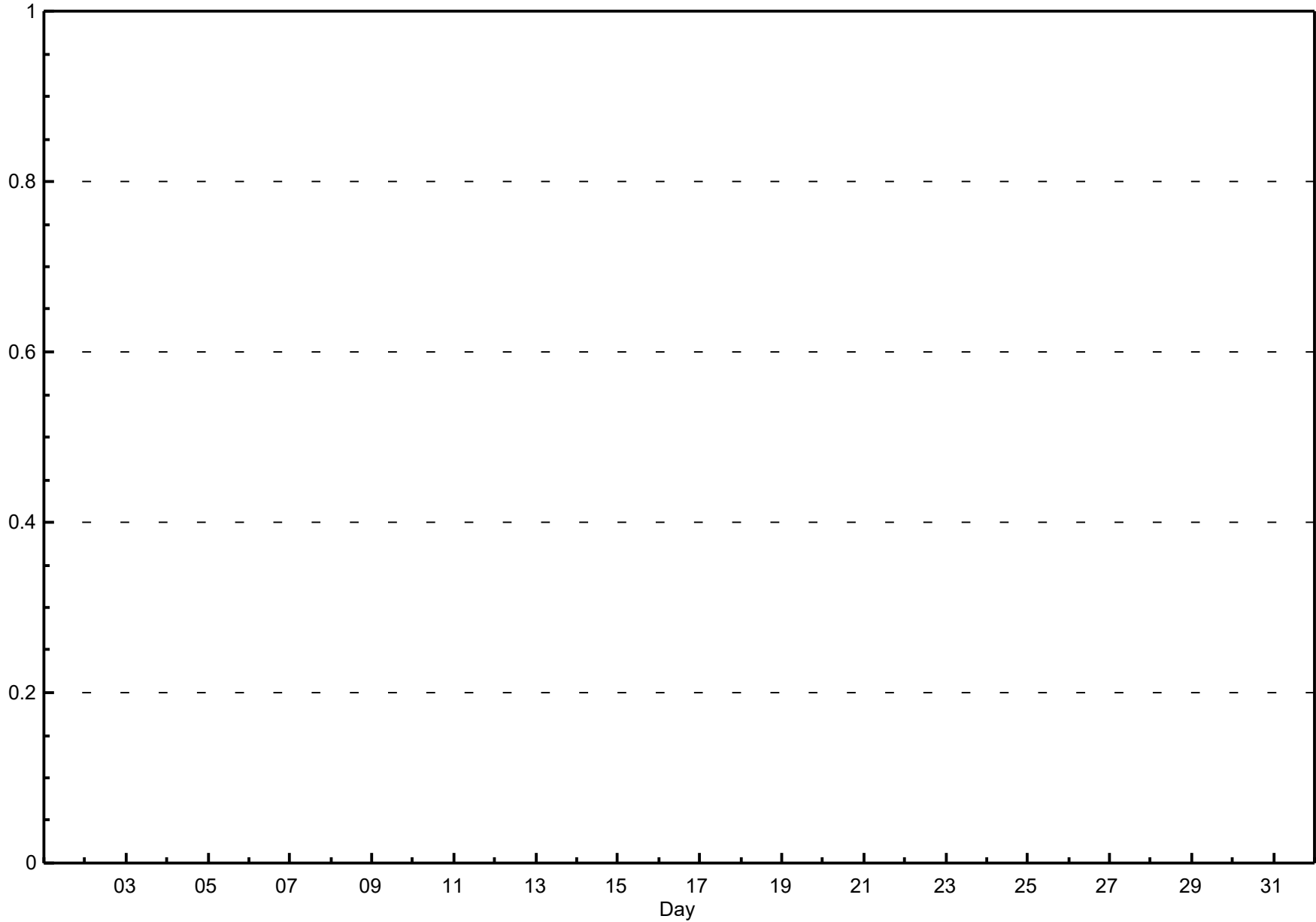


Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2018

Maximum Value: 0.00 ppm on Mar 31 14:00 Maximum Daily Average: 0.00 ppm on Mar 31 Minimum Value: 0.0 ppm on Mar 1 02:00 Minimum Daily Average: 0.00 ppm on Mar 3 Maximum Diurnal Average: 0.00 ppm at hour 21 Minimum Diurnal Average: 0.00 ppm at hour 2 Monthly Average: 0.000 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service:	744		
																								Hours of Data:	709		
																								Hours of Missing Data:	35		
																								Hours of Calibration:	35		
																								Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-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	0.0	0.00	0.00
2-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	A	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	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
4-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	0.0	0.00	0.00
5-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	0.0	0.00	0.00
6-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	0.0	0.00	0.00
7-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	0.0	0.00	0.00
8-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	0.0	0.00	0.00
9-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	0.0	0.00	0.00
10-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	0.0	0.00	0.00
11-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	0.0	0.00	0.00
12-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	0.0	0.00	0.00
13-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	0.0	0.00	0.00
14-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	0.0	0.00	0.00
15-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	0.0	0.00	0.00
16-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	0.0	0.00	0.00
17-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	0.0	0.00	0.00
18-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	0.0	0.00	0.00
19-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	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	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
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	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
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	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
23-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	0.0	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	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
25-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	0.0	0.00	0.00
26-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	0.0	0.00	0.00
27-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	0.0	0.00	0.00
28-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	0.0	0.00	0.00
29-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	0.0	0.00	0.00
30-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	0.0	0.00	0.00
31-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	0.0	0.00	0.00
																								0.00	0.00		
																								0.00	0.00		
																								Diurnal Average			
																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											

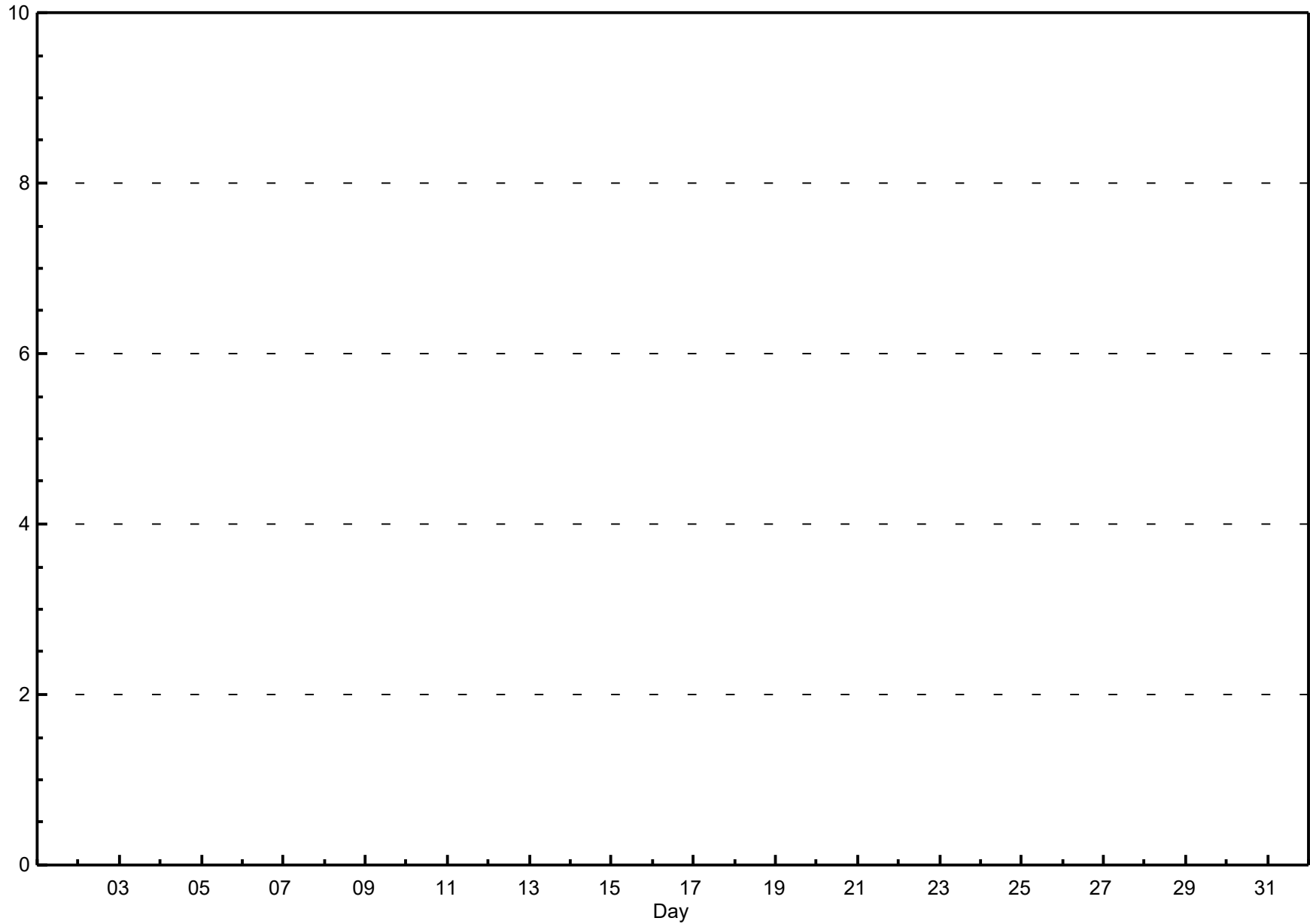


Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2018

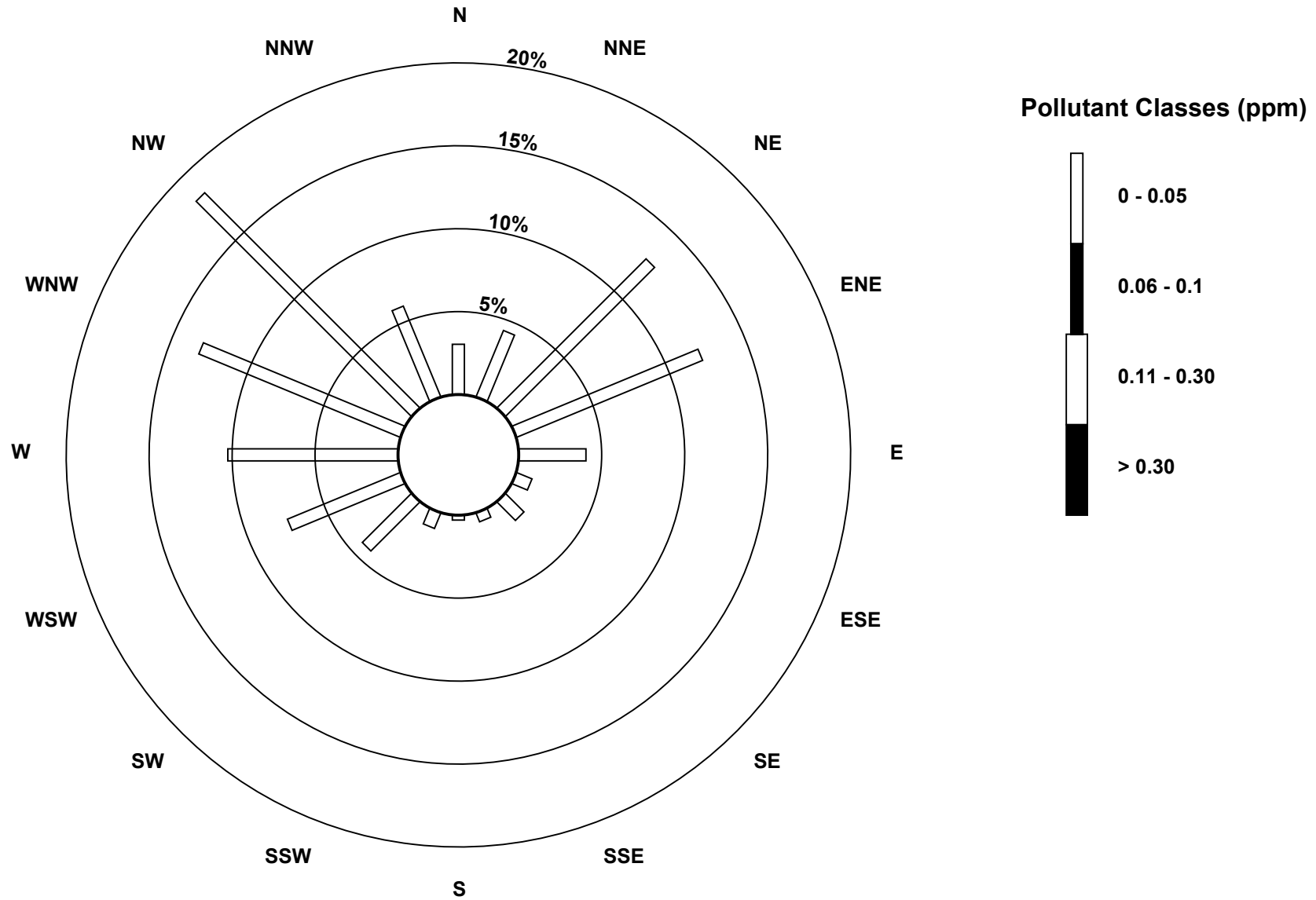
Maximum Value: 0.00 ppm on Mar 2 13:00 Maximum Daily Average: 0.00 ppm on Mar 9 Minimum Value: 0.0 ppm on Mar 3 04:00 Minimum Daily Average: 0.00 ppm on Mar 14 Maximum Diurnal Average: 0.00 ppm at hour 21 Minimum Diurnal Average: 0.00 ppm at hour 5 Monthly Average: 0.000 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-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	0.0	0.00	0.00
2-Mar	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	C	C	C	A	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	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
4-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	0.0	0.00	0.00
5-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	0.0	0.00	0.00
6-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	0.0	0.00	0.00
7-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	0.0	0.00	0.00
8-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	0.0	0.00	0.00
9-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	0.0	0.00	0.00
10-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	0.0	0.00	0.00
11-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	0.0	0.00	0.00
12-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	0.0	0.00	0.00
13-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	0.0	0.00	0.00
14-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	0.0	0.00	0.00
15-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	0.0	0.00	0.00
16-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	0.0	0.00	0.00
17-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	0.0	0.00	0.00
18-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	0.0	0.00	0.00
19-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	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	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
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	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
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	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
23-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	0.0	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	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
25-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	0.0	0.00	0.00
26-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	0.0	0.00	0.00
27-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	0.0	0.00	0.00
28-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	0.0	0.00	0.00
29-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	0.0	0.00	0.00
30-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	0.0	0.00	0.00
31-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	0.0	0.00	0.00
																								0.00	0.00		
																								0.00	0.00		
C - Calibration A - Automated Daily Zero Span																											

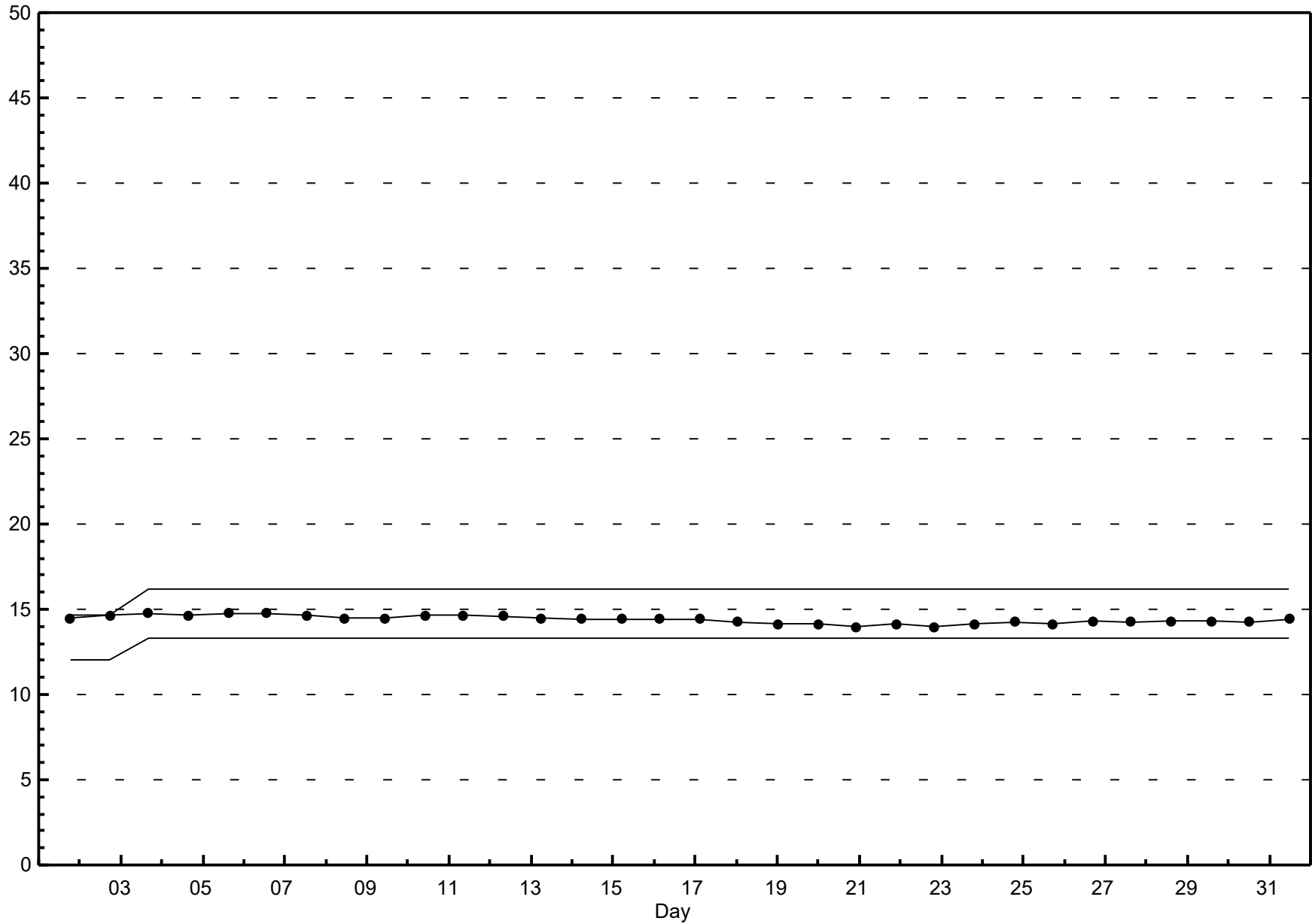


Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - March 2018





Hourly Averages

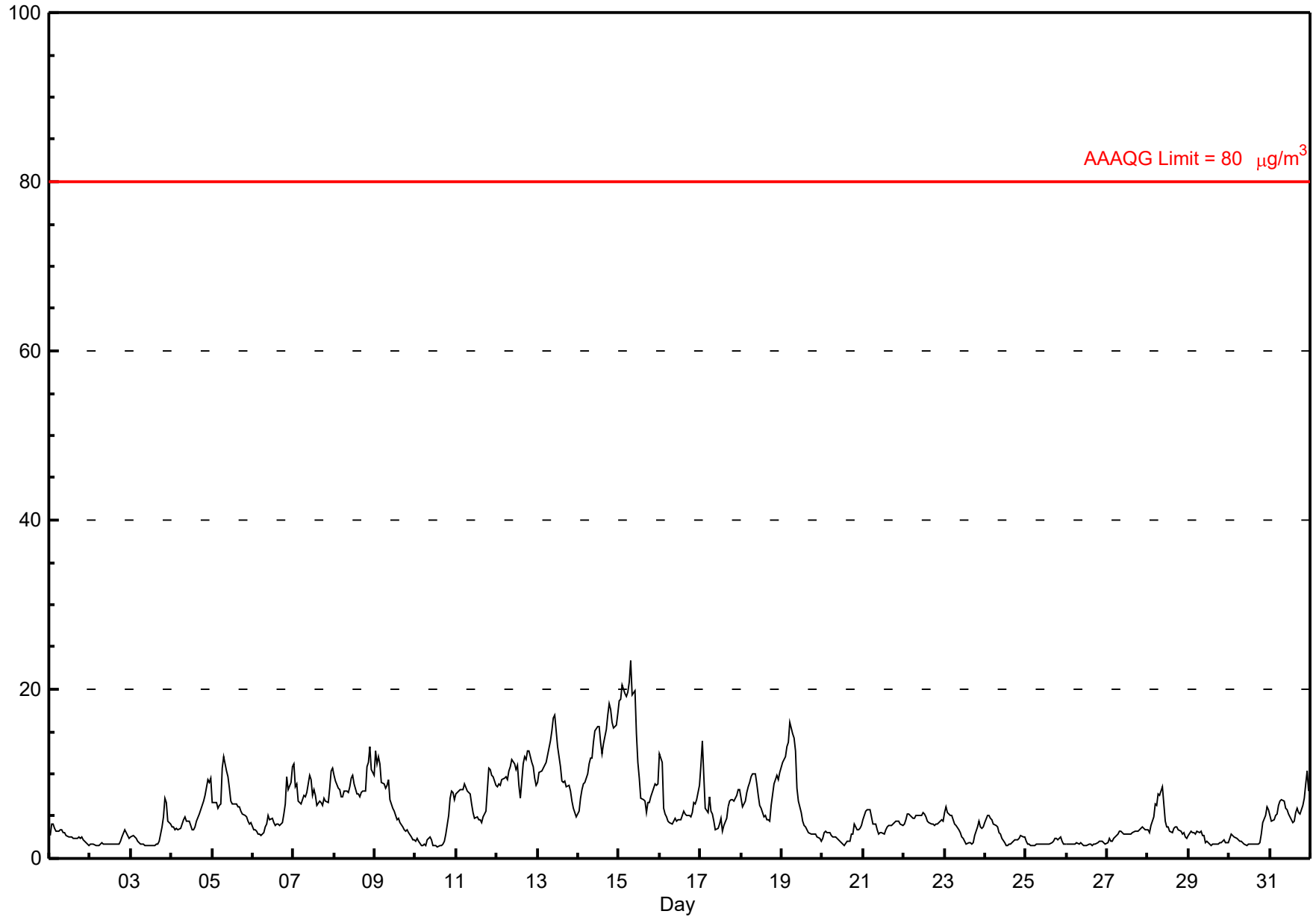
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Henry Pirker - March 2018

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 23.3 µg/m ³ on Mar 15 08:00	Maximum Daily Average: 13.2 µg/m ³ on Mar 15
Minimum Value: 1 µg/m ³ on Mar 10 14:00	Hours of Data: 744
Maximum Diurnal Average: 6.4 µg/m ³ at hour 8	Hours of Missing Data: 0
Monthly Average: 5.52 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.7 µg/m ³ on Mar 26	Percent Operational Time: 100.0
Minimum Diurnal Average: 4.2 µg/m ³ at hour 15	
Percentiles: P ₁ = 1.5 P ₁₀ = 1.7 Q ₁ = 2.6 Median = 4.4 Q ₃ = 7.5 P ₉₀ = 10.6 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	3	4	4	4	3	3	3	3	3	3	3	2	3	3	2	2	2	3	2	3	2	2	2	2	2.7	4.0	
2-Mar	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	1.9	3.3
3-Mar	3	3	3	2	2	2	2	2	2	1	2	2	1	1	2	2	2	2	4	5	7	7	4	4	2.7	7.2	
4-Mar	4	4	3	4	3	4	4	5	5	4	4	4	3	3	4	4	5	6	6	7	8	9	9	9	5.1	9.5	
5-Mar	7	7	7	6	6	6	11	12	10	10	8	7	6	6	6	6	6	6	5	5	5	4	4	4	6.7	12.0	
6-Mar	3	3	3	3	3	3	3	4	4	5	5	5	4	4	4	4	4	4	5	7	10	8	9	11	4.9	10.8	
7-Mar	11	8	9	7	6	7	8	7	8	10	9	8	8	8	6	7	7	6	7	7	7	8	10	11	7.9	11.1	
8-Mar	10	9	8	8	7	7	8	8	8	9	10	10	9	8	8	7	8	8	8	11	11	13	10	10	8.9	13.3	
9-Mar	13	11	12	11	9	9	8	9	9	7	6	6	5	5	5	4	4	3	3	3	3	3	2	2	6.3	12.6	
10-Mar	2	2	2	2	2	2	2	2	3	2	2	2	1	1	1	1	2	2	3	5	7	8	8	7	2.9	7.9	
11-Mar	8	8	8	8	8	9	8	8	8	6	5	5	5	5	5	4	5	6	8	11	10	10	10	9	7.3	10.6	
12-Mar	9	9	9	9	9	10	9	10	11	12	11	10	11	9	7	11	12	12	13	13	11	11	10	9	10.2	12.7	
13-Mar	9	10	10	11	11	11	12	14	15	17	17	15	13	11	9	9	9	8	9	8	7	6	5	5	10.5	16.9	
14-Mar	6	7	8	9	9	10	11	12	12	14	15	16	16	14	12	14	15	17	18	18	16	15	16	17	13.1	18.3	
15-Mar	19	19	20	19	19	20	21	23	19	20	15	11	9	7	7	7	5	7	7	7	8	9	9	9	13.2	23.3	
16-Mar	12	11	6	5	5	4	4	4	4	5	4	5	5	5	6	5	5	5	5	5	7	6	7	9	5.9	12.4	
17-Mar	11	14	10	6	5	7	6	5	4	3	4	4	5	3	4	5	6	7	7	7	7	7	8	8	6.4	13.9	
18-Mar	7	6	7	8	8	9	10	10	10	9	8	6	6	5	5	5	5	4	6	9	9	10	9	10	7.5	10.1	
19-Mar	11	12	12	13	14	16	15	14	13	8	7	5	4	4	4	3	3	3	3	3	3	3	2	2	7.4	16.1	
20-Mar	2	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	3	3	4	3	3	4	4	2.7	4.1	
21-Mar	5	6	6	6	6	5	4	4	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4.2	5.8	
22-Mar	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	5	4	4.7	5.5	
23-Mar	5	6	5	5	5	4	4	4	3	3	3	2	2	2	2	2	2	2	3	4	4	4	4	4	3.5	6.1	
24-Mar	4	5	5	5	5	4	4	4	3	3	2	2	2	2	2	2	2	2	2	2	2	3	3	2	2.9	5.1	
25-Mar	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2	1.8	2.6	
26-Mar	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.7	2.0	
27-Mar	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	4	4	3	3	2.9	3.7	
28-Mar	3	3	4	5	6	6	8	7	8	7	4	4	4	3	3	4	4	4	3	3	3	3	2	2	4.4	8.4	
29-Mar	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2.3	3.2	
30-Mar	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	4	5	6	6	2.6	6.1	
31-Mar	5	4	5	5	5	6	7	7	7	6	6	5	5	4	4	5	6	5	5	6	7	9	10	8	6.0	10.3	
	6.0	6.2	6.1	5.8	5.8	6.0	6.1	6.4	6.2	6.0	5.5	5.0	4.8	4.3	4.2	4.4	4.5	4.7	5.1	5.7	6.0	6.1	5.9	5.9	Diurnal Average		
	18.6	18.8	20.5	19.4	19.1	19.6	20.8	23.3	19.3	19.8	16.9	15.5	15.6	13.8	12.3	13.5	15.3	16.9	18.3	17.6	16.1	15.4	15.8	17.0	Diurnal Maximum		

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

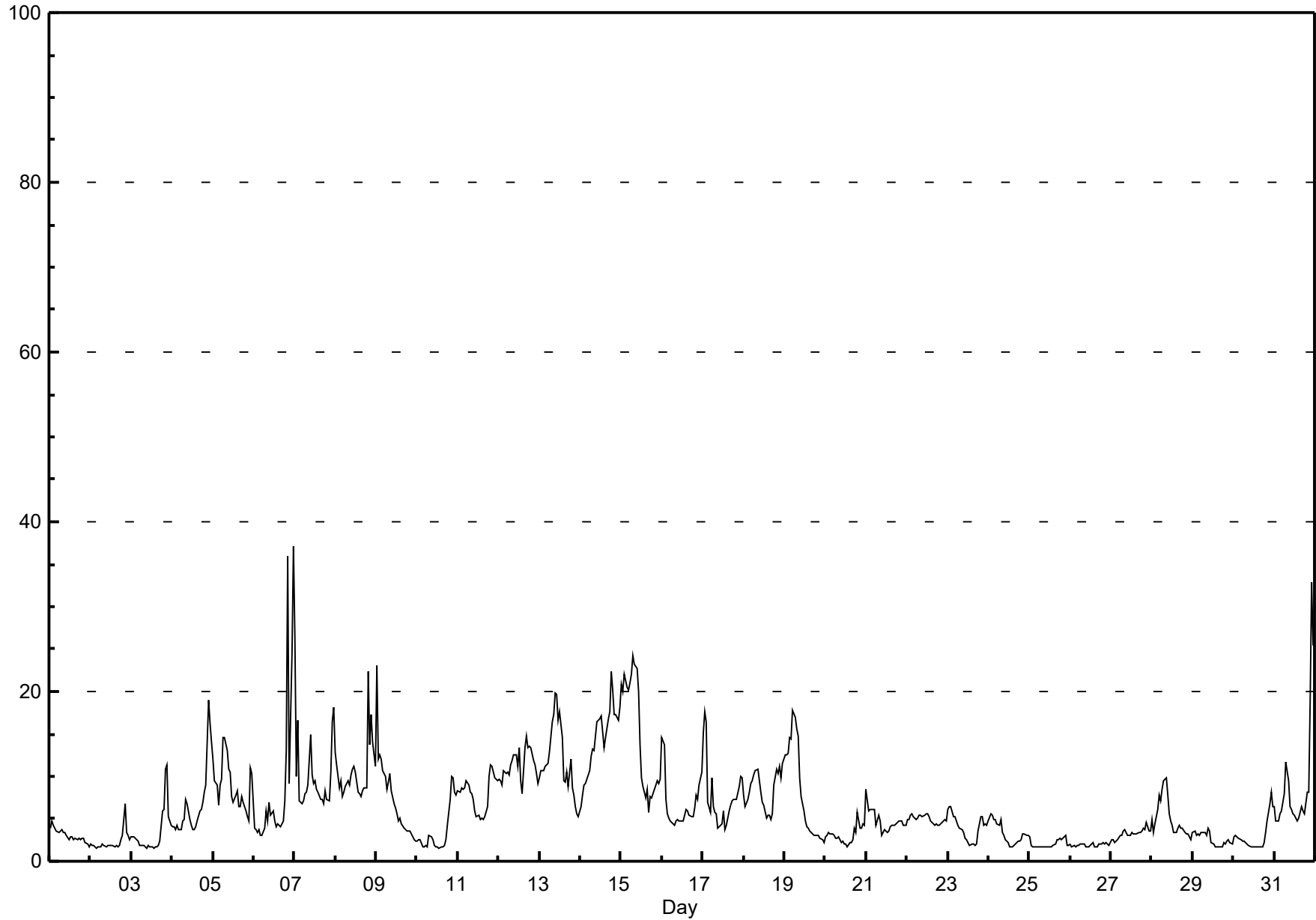


Hourly Maximums

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

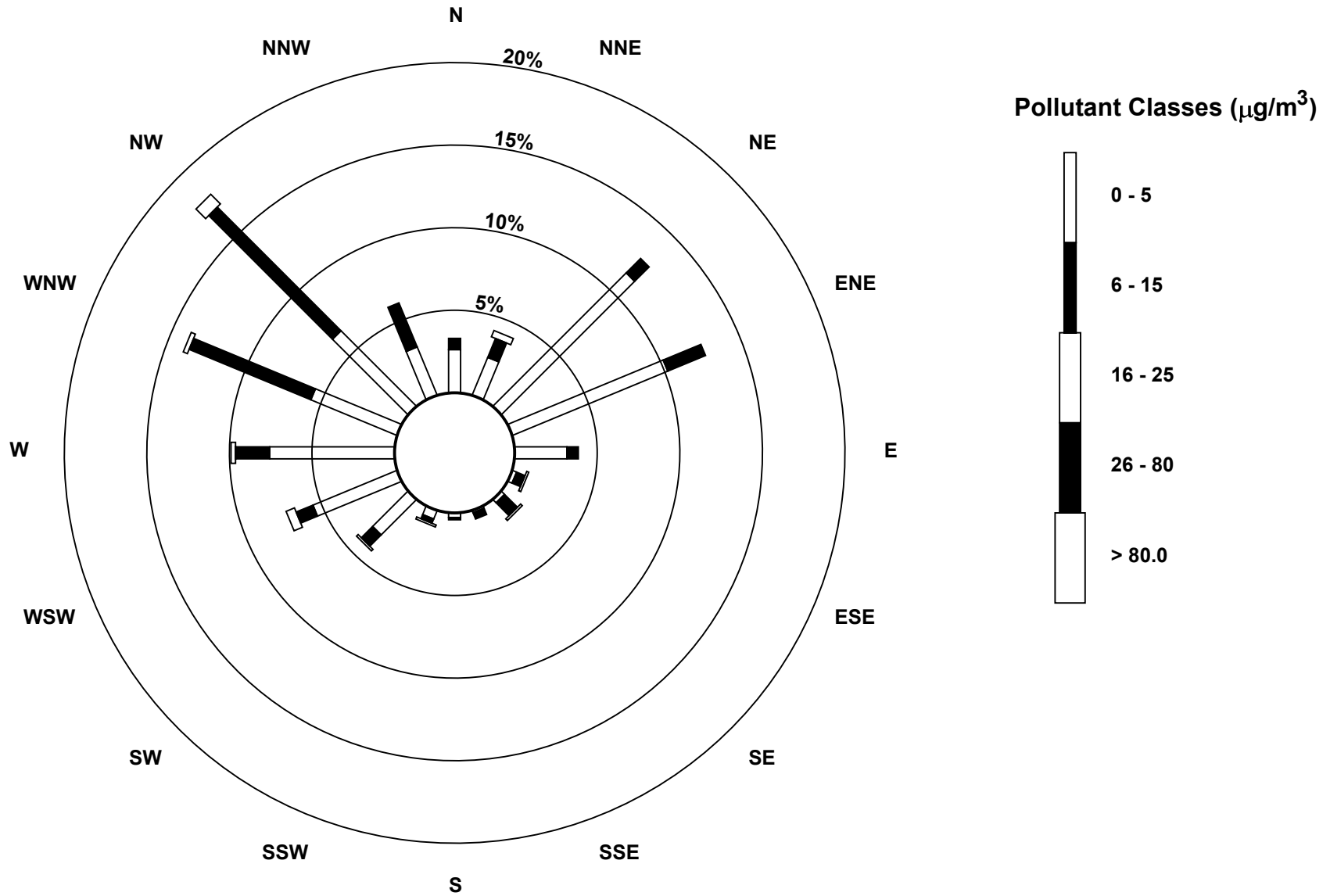
Henry Pirker - March 2018

Maximum Value: 37.2 µg/m ³ on Mar 7 00:00 Minimum Value: 2 µg/m ³ on Mar 2 04:00 Maximum Diurnal Average: 8.4 µg/m ³ at hour 23 Monthly Average: 6.53 µg/m ³		Maximum Daily Average: 14.6 µg/m ³ on Mar 15 Minimum Daily Average: 1.9 µg/m ³ on Mar 26 Minimum Diurnal Average: 4.6 µg/m ³ at hour 15 Percentiles: P ₁ = 1.6 P ₁₀ = 1.9 Q ₁ = 2.9 Median = 4.9 Q ₃ = 8.8 P ₉₀ = 13.0 P ₉₉ = 23.1		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	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	4	4	3	4	4	3	3	3	3	3	3	3	3	2	3	3	3	3	2	2	2	3.1	4.7	
2-Mar	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	7	3	3	3	2.3	6.7	
3-Mar	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	6	6	11	11	5	4	3.4	11.3	
4-Mar	4	4	4	4	4	4	5	5	7	7	5	4	4	4	4	5	6	6	7	8	9	19	16	14	6.6	18.9	
5-Mar	12	9	9	7	9	10	15	15	13	11	10	8	7	8	8	6	6	8	7	6	5	5	11	10	9.0	14.7	
6-Mar	4	4	3	4	3	3	4	6	5	7	5	6	5	4	4	4	4	5	7	13	36	9	25	37	8.6	37.2	
7-Mar	26	10	17	7	7	7	8	8	9	15	10	9	10	9	8	7	7	7	8	7	7	11	16	18	10.4	26.3	
8-Mar	13	11	9	10	8	8	9	10	9	10	11	11	10	8	8	8	8	9	9	22	14	17	14	11	10.7	22.4	
9-Mar	23	12	12	12	11	10	8	9	10	8	7	6	6	5	5	4	4	4	4	4	4	3	3	2	7.3	23.1	
10-Mar	2	2	2	2	2	2	2	3	3	3	2	2	2	2	2	2	2	2	4	7	10	10	8	8	3.5	10.0	
11-Mar	8	8	9	8	9	10	9	8	8	7	6	5	5	5	5	5	5	7	10	11	11	11	10	9	7.9	11.4	
12-Mar	10	9	9	11	10	11	10	11	12	12	12	11	13	10	8	13	15	13	14	13	12	11	10	9	11.3	14.8	
13-Mar	10	11	11	11	11	12	13	16	17	20	20	17	18	15	10	9	11	9	12	9	8	6	6	5	11.8	19.9	
14-Mar	7	8	9	9	10	11	12	13	13	15	16	17	17	15	13	15	17	18	22	20	17	17	17	18	14.4	22.3	
15-Mar	21	20	22	21	20	21	22	24	23	23	20	14	10	9	7	8	6	8	7	8	9	9	9	10	14.6	24.3	
16-Mar	15	14	7	6	5	5	5	4	5	5	5	5	5	6	6	5	5	5	6	8	7	9	11	6.6	14.6		
17-Mar	15	18	16	7	6	10	6	6	6	4	4	4	6	4	4	6	7	7	7	7	7	9	10	10	7.8	17.6	
18-Mar	8	6	7	8	9	9	10	11	11	10	8	7	7	5	5	5	6	9	11	10	11	10	12	8.4	11.6		
19-Mar	12	12	13	15	14	18	17	16	15	10	8	6	5	4	4	3	3	3	3	3	3	3	2	2	8.1	17.8	
20-Mar	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	3	4	3	6	4	4	4	4	3.1	5.8	
21-Mar	8	6	6	6	6	6	4	5	5	3	3	4	3	4	4	4	4	4	5	5	5	5	4	4	4.8	8.4	
22-Mar	5	5	5	6	5	5	5	5	5	5	5	6	6	5	5	5	4	4	4	4	4	5	5	5	5.0	5.7	
23-Mar	6	6	6	5	5	5	4	4	4	3	3	3	2	2	2	2	2	2	4	5	5	4	4	4	3.9	6.4	
24-Mar	5	6	5	5	5	4	4	5	3	3	3	2	2	2	2	2	2	2	2	2	3	3	3	3	3.3	5.5	
25-Mar	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	2	3	3	2	2	2.0	3.0	
26-Mar	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.9	2.1	
27-Mar	2	3	2	2	3	3	3	4	4	3	3	3	3	3	3	3	3	3	4	4	4	5	4	4	3.2	4.6	
28-Mar	5	3	4	6	8	7	8	9	10	8	6	5	4	3	3	4	4	4	4	3	3	3	3	3	5.1	9.8	
29-Mar	3	4	3	3	3	3	3	3	3	4	4	2	2	2	2	2	2	2	2	2	2	3	2	2	2.6	3.8	
30-Mar	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	5	7	8	6	2.9	8.2	
31-Mar	6	5	5	6	6	7	8	12	10	6	6	6	5	5	5	6	6	6	6	8	8	19	33	25	8.9	32.8	
	8.1	7.0	7.0	6.3	6.3	6.6	6.8	7.4	7.2	7.0	6.3	5.6	5.5	4.8	4.6	4.8	5.0	5.2	6.0	7.0	7.7	7.7	8.4	8.4	Diurnal Average		
	26.3	20.0	22.1	20.5	20.3	21.0	22.1	24.3	23.2	22.7	20.0	16.7	17.7	15.3	13.3	14.7	16.9	17.6	22.3	22.4	36.0	19.0	32.8	37.2	Diurnal Maximum		



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Henry Pirker - March 2018



Hourly Averages

External Temperature (ET) - °C

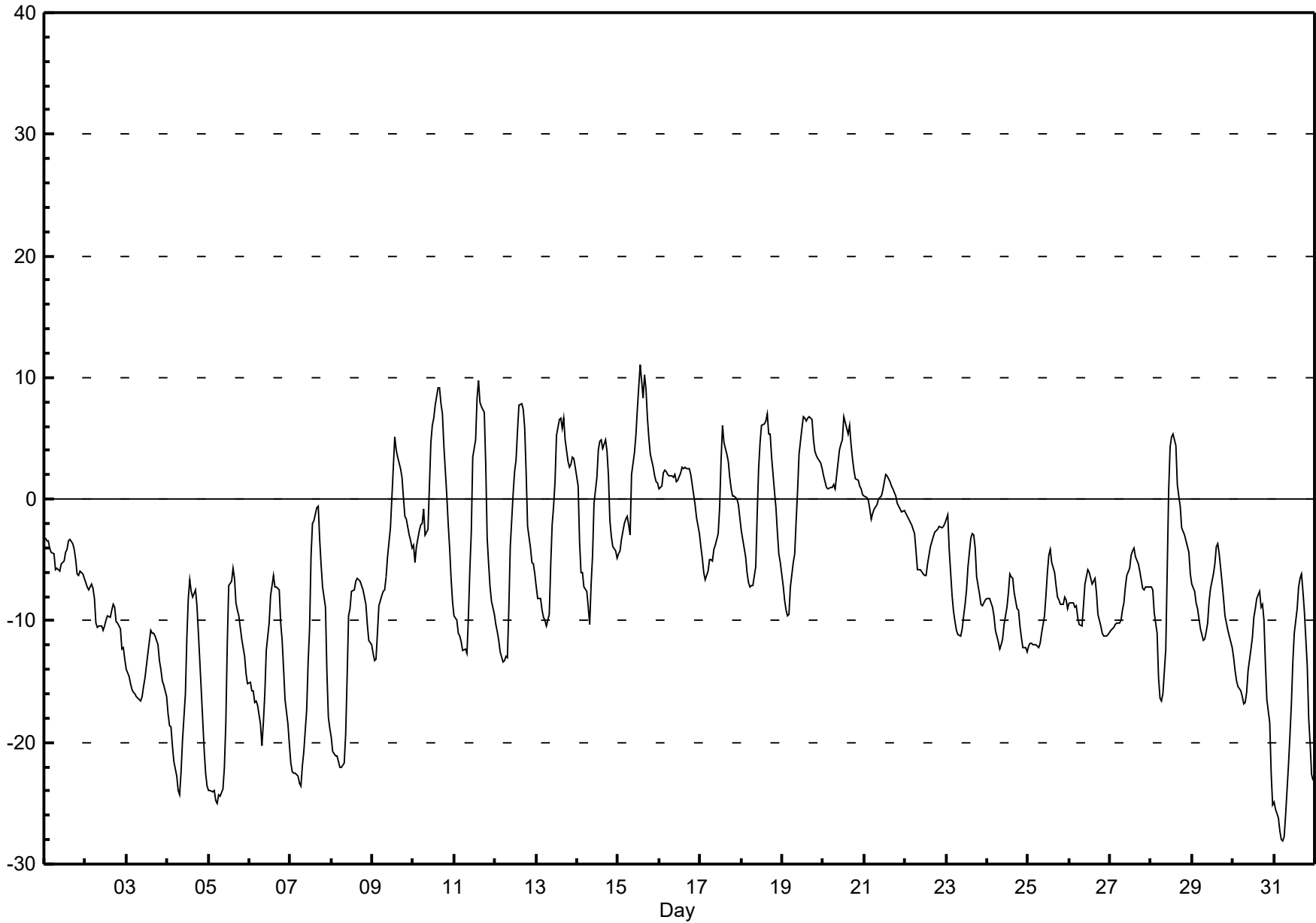
Henry Pirker - March 2018

Maximum Value: 11.1 °C on Mar 15 14:00		Maximum Daily Average: 2.8 °C on Mar 15		Hours in Service: 744																							
Minimum Value: -28 °C on Mar 31 06:00		Minimum Daily Average: -18.3 °C on Mar 31		Hours of Data: 744																							
Maximum Diurnal Average: -0.6 °C at hour 15		Minimum Diurnal Average: -11.3 °C at hour 8		Hours of Missing Data: 0																							
Monthly Average: -6.50 °C		Percentiles: P ₁ = -25.1 P ₁₀ = -16.5 Q ₁ = -11.0 Median = -6.7 Q ₃ = -0.7 P ₉₀ = 3.7 P ₉₉ = 8.3		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	-3	-3	-3	-4	-4	-4	-6	-6	-6	-6	-5	-5	-4	-4	-3	-3	-4	-4	-5	-6	-6	-6	-6	-7	-4.8	-3.2	
2-Mar	-7	-7	-7	-7	-7	-8	-10	-11	-10	-10	-11	-10	-10	-10	-10	-9	-9	-9	-10	-10	-11	-12	-12	-13	-9.6	-6.9	
3-Mar	-14	-15	-15	-16	-16	-16	-16	-16	-17	-16	-15	-15	-13	-12	-11	-11	-11	-11	-12	-13	-14	-15	-15	-16	-14.2	-10.8	
4-Mar	-18	-19	-19	-20	-22	-23	-24	-24	-22	-20	-16	-11	-8	-7	-8	-8	-7	-9	-11	-13	-16	-21	-23	-24	-16.3	-6.6	
5-Mar	-24	-24	-24	-24	-25	-25	-24	-24	-24	-22	-18	-12	-7	-7	-6	-7	-9	-9	-10	-12	-12	-13	-14	-15	-16.3	-5.7	
6-Mar	-15	-16	-16	-17	-17	-17	-19	-20	-18	-16	-12	-10	-8	-7	-6	-7	-7	-7	-10	-12	-14	-17	-19	-20	-13.6	-6.3	
7-Mar	-22	-22	-23	-22	-23	-23	-24	-22	-21	-17	-13	-11	-5	-2	-2	-1	-1	-3	-5	-7	-9	-14	-18	-19	-13.7	-0.6	
8-Mar	-20	-21	-21	-21	-22	-22	-22	-22	-19	-15	-10	-9	-8	-7	-7	-6	-7	-7	-7	-8	-9	-10	-12	-12	-13.4	-6.5	
9-Mar	-13	-13	-13	-11	-9	-8	-8	-7	-6	-5	-2	0	3	5	4	3	3	2	0	-1	-2	-3	-3	-4	-3.7	5.1	
10-Mar	-4	-5	-4	-3	-2	-2	-1	-3	-2	1	5	6	7	8	9	9	8	7	4	0	-2	-4	-7	-8	0.7	9.2	
11-Mar	-10	-10	-11	-11	-12	-12	-12	-13	-10	-6	-3	3	5	8	10	8	8	7	3	-3	-5	-7	-8	-9	-3.8	9.8	
12-Mar	-10	-11	-12	-13	-13	-13	-13	-13	-9	-4	0	2	3	6	8	8	7	6	2	-2	-4	-5	-5	-6	-3.8	7.8	
13-Mar	-7	-8	-8	-9	-10	-10	-10	-9	-5	-2	-1	1	5	7	7	6	7	5	3	3	3	3	3	3	-1.0	6.7	
14-Mar	1	-4	-6	-6	-7	-8	-9	-10	-7	-5	0	2	4	5	5	4	5	4	2	-2	-3	-4	-4	-5	-2.0	4.9	
15-Mar	-4	-4	-3	-2	-2	-1	-2	-3	2	4	5	7	9	11	8	10	9	7	5	4	3	2	1	1	2.8	11.1	
16-Mar	1	1	2	2	2	2	2	2	2	2	1	2	2	3	2	3	3	3	2	1	0	0	-2	-3	1.5	2.7	
17-Mar	-4	-5	-6	-7	-6	-5	-5	-5	-4	-4	-3	-1	3	6	5	4	3	2	1	0	0	0	0	-2	-1.3	6.1	
18-Mar	-3	-3	-5	-6	-7	-7	-7	-7	-6	-1	2	5	6	6	6	7	5	5	3	1	-1	-3	-4	-5	-0.7	7.0	
19-Mar	-7	-8	-9	-10	-9	-7	-5	-4	-2	1	4	6	7	7	7	6	7	7	5	4	4	3	3	2	0.4	6.8	
20-Mar	2	1	1	1	1	1	1	1	1	2	4	4	5	7	6	5	6	4	3	2	2	2	1	1	0	2.7	6.8
21-Mar	0	0	0	-1	-2	-1	-1	0	0	0	0	1	2	2	2	1	1	1	0	0	-1	-1	-1	-1	0.1	2.1	
22-Mar	-1	-1	-2	-2	-2	-3	-4	-6	-6	-6	-6	-6	-6	-5	-5	-4	-3	-3	-3	-2	-2	-2	-2	-2	-3.5	-1.2	
23-Mar	-2	-1	-4	-8	-9	-10	-11	-11	-11	-11	-10	-9	-7	-6	-3	-3	-3	-4	-6	-8	-9	-9	-8	-8	-7.1	-1.2	
24-Mar	-8	-8	-9	-9	-10	-11	-12	-12	-12	-11	-10	-9	-8	-6	-6	-6	-8	-9	-9	-10	-11	-12	-12	-13	-9.7	-6.1	
25-Mar	-12	-12	-12	-12	-12	-12	-12	-12	-11	-10	-8	-6	-5	-4	-5	-6	-7	-8	-8	-9	-9	-8	-8	-9	-9.0	-4.2	
26-Mar	-8	-9	-9	-9	-9	-10	-10	-10	-9	-7	-6	-6	-6	-7	-7	-6	-8	-10	-10	-11	-11	-11	-11	-11	-8.8	-5.8	
27-Mar	-11	-11	-11	-10	-10	-10	-10	-9	-8	-7	-6	-6	-5	-4	-4	-5	-5	-6	-7	-7	-7	-7	-7	-7	-7.6	-4.0	
28-Mar	-7	-8	-9	-11	-15	-16	-17	-16	-12	-6	1	4	5	5	4	1	0	-1	-2	-3	-3	-4	-4	-6	-5.0	5.4	
29-Mar	-7	-8	-8	-9	-10	-11	-12	-12	-11	-10	-8	-7	-6	-5	-4	-4	-4	-7	-8	-10	-10	-11	-11	-12	-8.5	-3.6	
30-Mar	-13	-14	-15	-15	-16	-16	-17	-17	-16	-14	-12	-11	-10	-9	-8	-8	-9	-9	-10	-14	-16	-18	-22	-25	-13.9	-7.5	
31-Mar	-25	-25	-26	-27	-28	-28	-28	-26	-22	-19	-17	-13	-11	-9	-7	-6	-6	-8	-9	-14	-18	-20	-23	-23	-18.3	-6.2	
		-8.8	-9.4	-9.9	-10.3	-10.6	-10.9	-11.2	-11.3	-9.7	-7.7	-5.5	-3.6	-1.9	-0.9	-0.6	-0.7	-1.2	-2.1	-3.6	-5.3	-6.3	-7.4	-8.3	-9.0	Diurnal Average	
		1.9	1.5	2.2	2.4	2.3	2.1	2.0	1.9	2.0	4.1	5.3	7.4	9.3	11.1	9.8	10.2	9.0	7.2	5.1	4.0	3.6	3.5	3.3	2.7	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - March 2018



Hourly Averages

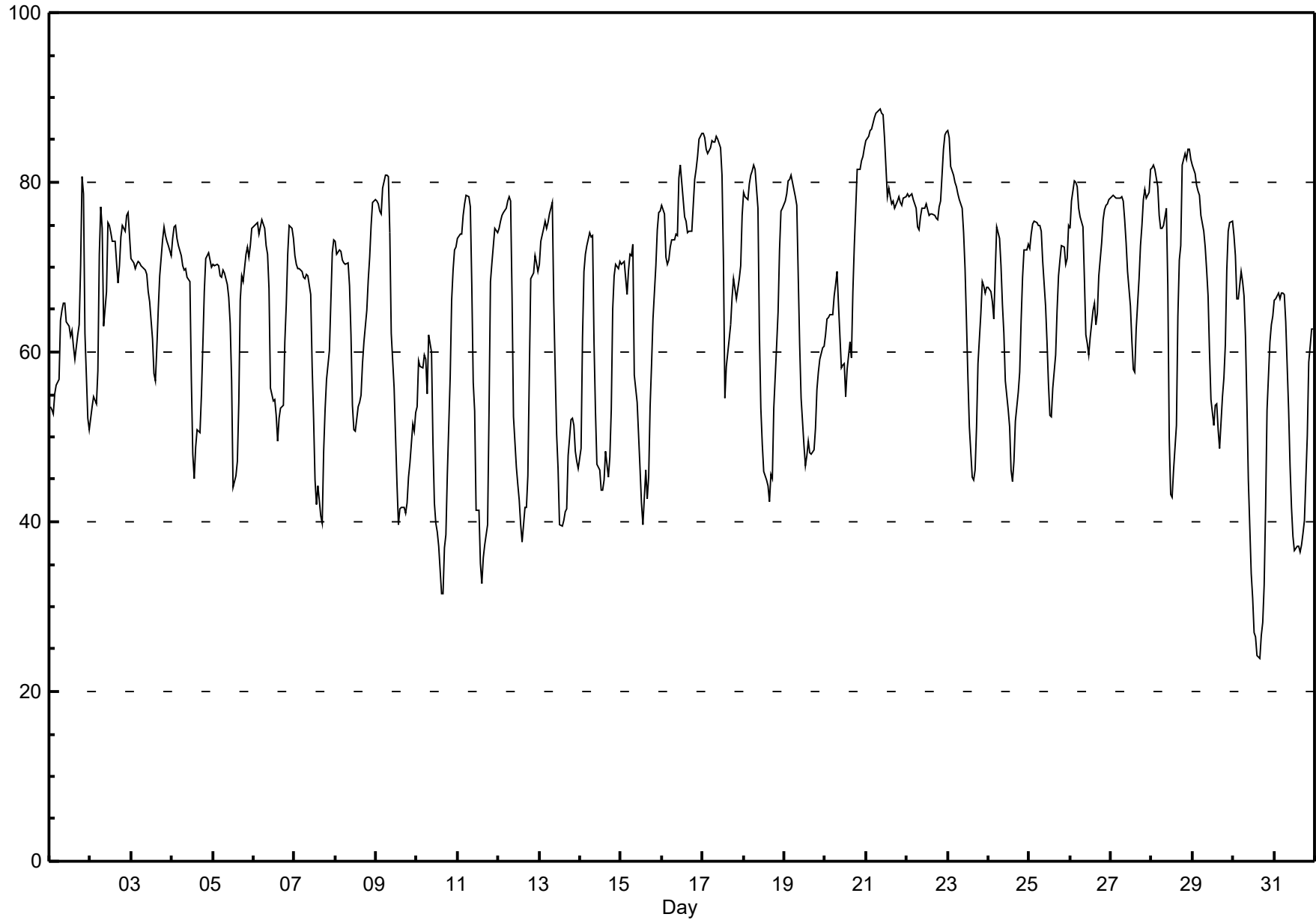
Relative Humidity (RH) - %

Henry Pirker - March 2018

Maximum Value: 88.6 % on Mar 21 09:00 Minimum Value: 24 % on Mar 30 16:00 Maximum Diurnal Average: 73.9 % at hour 7 Monthly Average: 65.21 %		Maximum Daily Average: 82.5 % on Mar 21 Minimum Daily Average: 49.2 % on Mar 30 Minimum Diurnal Average: 50.9 % at hour 14 Percentiles: P ₁ = 31.6 P ₁₀ = 45.2 Q ₁ = 55.0 Median = 69.0 Q ₃ = 75.2 P ₉₀ = 79.4 P ₉₉ = 86.2		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	54	53	53	55	56	57	64	65	66	66	64	63	62	63	61	59	62	63	70	81	79	62	52	51	61.6	80.6
2-Mar	52	53	55	54	58	71	77	75	63	67	75	75	74	73	73	71	68	70	74	75	74	76	76	74	68.9	77.2
3-Mar	71	71	70	70	71	70	70	70	70	69	67	66	61	58	57	60	65	69	73	75	74	73	73	71	68.5	74.7
4-Mar	73	75	75	73	73	71	70	70	70	69	68	57	48	45	49	51	51	55	61	67	71	72	71	70	64.8	74.9
5-Mar	70	70	70	70	69	69	70	69	68	66	63	57	44	45	47	54	66	69	68	72	72	71	73	75	65.4	74.6
6-Mar	75	75	75	74	75	76	75	72	72	67	56	54	54	53	49	52	53	54	61	66	71	75	75	73	65.9	75.6
7-Mar	71	70	70	70	70	69	69	69	69	67	58	52	45	42	44	41	40	48	53	57	60	66	72	73	60.2	73.2
8-Mar	73	72	72	72	71	70	70	71	68	62	54	51	51	54	54	55	59	61	65	68	71	75	78	78	65.5	78.0
9-Mar	78	77	77	76	79	81	81	81	74	62	56	50	44	40	42	42	42	41	42	45	47	52	51	53	58.8	80.9
10-Mar	54	59	58	58	60	59	55	62	60	49	42	40	39	37	32	32	37	38	46	57	66	70	72	72	52.2	72.4
11-Mar	73	74	74	76	77	78	78	77	68	56	53	41	41	35	33	36	37	40	53	68	71	73	75	74	60.9	78.4
12-Mar	75	75	76	76	77	78	78	78	67	52	46	44	43	40	38	42	42	45	57	69	69	71	70	69	61.6	78.3
13-Mar	70	73	75	75	75	75	76	78	66	58	50	46	40	40	40	41	42	48	52	52	51	48	47	46	56.9	77.6
14-Mar	49	62	69	71	73	74	74	74	61	53	47	46	44	44	45	48	45	48	53	65	69	70	70	71	59.3	74.0
15-Mar	70	71	71	67	70	71	71	73	57	54	50	46	42	40	46	43	45	54	59	64	70	74	77	77	60.9	76.6
16-Mar	77	76	71	70	71	72	73	73	74	74	81	82	78	76	75	74	74	74	77	80	81	83	85	86	76.7	85.7
17-Mar	86	85	84	83	84	85	85	85	85	85	84	81	71	55	58	62	63	67	69	67	66	69	70	76	75.2	85.8
18-Mar	79	78	78	80	81	81	82	82	77	62	53	49	46	45	44	42	46	45	53	61	65	72	77	77	64.8	82.0
19-Mar	78	79	80	80	81	80	78	77	69	61	55	49	47	48	49	48	48	48	51	56	58	59	61	61	62.5	80.8
20-Mar	62	64	64	64	64	67	68	70	66	58	58	59	55	58	61	59	67	73	77	81	81	83	83	84	67.8	84.0
21-Mar	85	85	86	86	87	88	88	89	89	88	88	85	78	79	78	77	78	77	78	78	78	77	78	78	82.5	88.6
22-Mar	79	78	79	79	78	77	75	74	76	77	77	77	77	76	76	76	76	76	76	77	78	84	86	86	77.9	86.0
23-Mar	86	85	82	81	80	79	79	78	77	74	70	64	57	51	45	45	46	51	59	65	68	68	67	68	67.7	86.0
24-Mar	68	67	66	64	70	75	73	70	66	62	57	53	51	46	45	47	52	55	58	64	69	72	72	73	62.2	74.8
25-Mar	72	74	75	75	75	75	75	74	71	65	61	56	53	52	56	60	65	69	71	72	72	70	71	75	68.1	75.4
26-Mar	75	78	80	80	80	77	76	75	69	62	61	60	62	65	66	63	65	69	73	76	77	77	78	78	71.6	80.2
27-Mar	78	78	78	78	78	78	78	78	76	73	69	65	61	58	58	63	69	72	75	78	79	78	79	82	73.4	81.6
28-Mar	82	82	82	80	76	75	75	75	77	68	50	43	43	46	51	64	71	73	82	83	83	84	84	83	71.2	83.9
29-Mar	82	81	80	79	78	76	74	72	70	67	60	54	51	54	54	51	49	55	57	61	70	74	75	75	66.6	82.0
30-Mar	74	71	66	66	69	68	67	62	54	45	34	31	27	27	24	24	27	28	32	42	53	61	63	64	49.2	73.7
31-Mar	66	66	67	66	67	67	67	63	53	47	42	38	37	37	37	36	37	39	40	50	59	61	63	63	52.8	67.0
	72.1	72.9	72.8	72.7	73.2	73.9	73.9	73.5	69.2	64.1	59.7	56.0	52.4	50.9	51.2	52.2	54.4	57.2	61.8	66.8	69.5	71.0	71.6	72.1	Diurnal Average	
	86.0	85.4	86.1	86.3	86.9	87.6	88.2	88.5	88.6	88.1	87.9	85.3	78.3	79.3	78.3	77.4	77.9	76.9	82.0	83.4	82.7	83.9	85.6	86.0	Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - March 2018

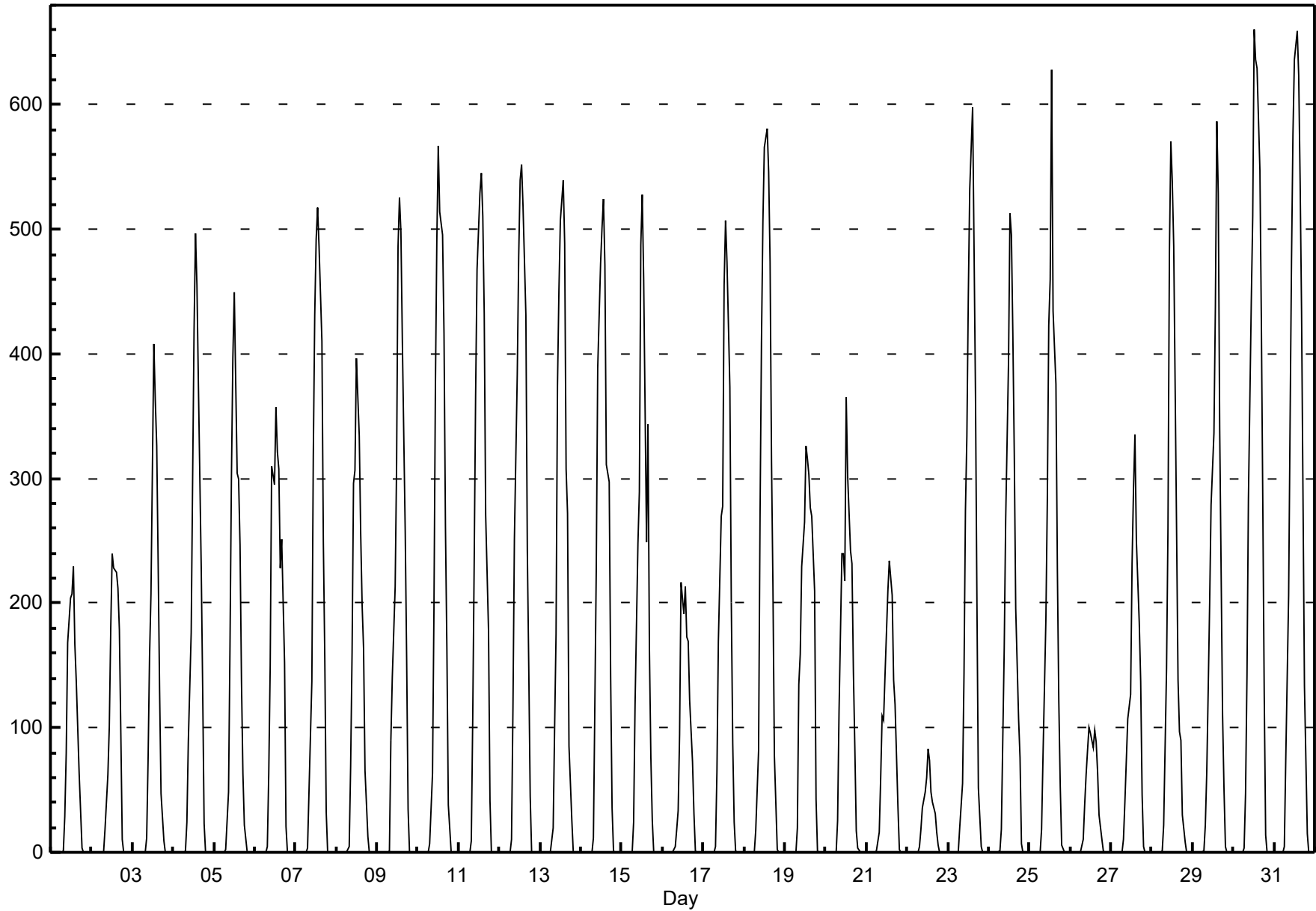


Hourly Averages

Solar Radiation (SR) - W/m²

Henry Pirker - March 2018

Maximum Value: 660.1 W/m² on Mar 30 13:00		Maximum Daily Average: 208.6 W/m² on Mar 31																				Hours in Service: 744				
Minimum Value: 0 W/m² on Mar 1 03:00		Minimum Daily Average: 19.4 W/m² on Mar 22																				Hours of Data: 744				
Maximum Diurnal Average: 417.3 W/m² at hour 14		Minimum Diurnal Average: 0.0 W/m² at hour 24																				Hours of Missing Data: 0				
Monthly Average: 115.04 W/m²		Percentiles: P₁ = 0.0 P₁₀ = 0.0 Q₁ = 0.0 Median = 4.2 Q₃ = 201.8 P₉₀ = 418.5 P₉₉ = 593.1																				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	0	0	0	0	0	0	0	1	29	80	168	204	207	230	168	137	64	33	4	0	0	0	0	0	55.2	229.8
2-Mar	0	0	0	0	0	0	0	0	19	63	101	180	240	228	225	212	178	96	10	0	0	0	0	0	64.7	239.7
3-Mar	0	0	0	0	0	0	0	1	11	75	156	207	408	363	327	232	130	47	9	0	0	0	0	0	81.9	408.5
4-Mar	0	0	0	0	0	0	0	1	24	88	176	300	419	497	455	377	227	130	23	0	0	0	0	0	113.3	496.9
5-Mar	0	0	0	0	0	0	0	2	48	165	300	396	450	304	300	246	138	64	22	0	0	0	0	0	101.5	450.0
6-Mar	0	0	0	0	0	0	0	4	64	149	310	296	357	321	308	228	251	152	21	0	0	0	0	0	102.6	357.0
7-Mar	0	0	0	0	0	0	0	3	49	137	318	431	493	518	487	410	249	157	32	0	0	0	0	0	136.8	517.8
8-Mar	0	0	0	0	0	0	0	4	69	160	296	307	397	335	256	198	164	66	13	0	0	0	0	0	94.4	396.7
9-Mar	0	0	0	0	0	0	0	2	90	140	213	312	487	525	498	410	257	154	34	0	0	0	0	0	130.1	525.5
10-Mar	0	0	0	0	0	0	0	7	63	194	373	491	567	514	496	416	261	164	39	0	0	0	0	0	149.4	567.1
11-Mar	0	0	0	0	0	0	0	9	109	231	366	467	529	546	511	432	271	177	41	0	0	0	0	0	153.7	545.6
12-Mar	0	0	0	0	0	0	0	11	116	251	383	479	539	552	519	431	242	149	45	0	0	0	0	0	154.9	552.0
13-Mar	0	0	0	0	0	0	0	20	101	175	375	451	507	539	489	308	272	85	25	0	0	0	0	0	139.5	538.9
14-Mar	0	0	0	0	0	0	0	12	117	228	389	472	502	524	471	311	298	141	36	1	0	0	0	0	145.9	524.2
15-Mar	0	0	0	0	0	0	0	24	118	248	289	488	528	460	249	343	162	77	25	0	0	0	0	0	125.5	527.5
16-Mar	0	0	0	0	0	0	0	4	18	34	94	216	192	213	173	170	122	73	31	1	0	0	0	0	55.9	216.4
17-Mar	0	0	0	0	0	0	0	5	65	169	270	278	455	507	474	373	201	88	24	1	0	0	0	0	121.3	507.5
18-Mar	0	0	0	0	0	0	0	17	82	268	409	506	566	581	546	473	314	212	77	2	0	0	0	0	168.9	580.6
19-Mar	0	0	0	0	0	0	0	20	135	159	229	265	326	316	303	277	269	209	42	2	0	0	0	0	106.4	325.9
20-Mar	0	0	0	0	0	0	0	25	113	240	240	218	365	302	242	232	146	84	17	4	0	0	0	0	92.8	365.1
21-Mar	0	0	0	0	0	0	1	16	60	109	106	142	210	234	220	207	139	119	37	2	0	0	0	0	66.7	233.7
22-Mar	0	0	0	0	0	0	0	4	18	36	48	60	83	74	49	40	31	16	6	0	0	0	0	0	19.4	82.6
23-Mar	0	0	0	0	0	0	0	20	56	142	274	335	446	533	598	484	366	200	52	4	0	0	0	0	146.3	597.9
24-Mar	0	0	0	0	0	0	1	19	92	164	266	394	513	495	416	319	196	107	76	7	0	0	0	0	127.7	513.2
25-Mar	0	0	0	0	0	0	0	18	77	187	283	423	460	628	434	376	227	121	53	6	0	0	0	0	137.2	628.5
26-Mar	0	0	0	0	0	0	0	10	38	62	82	101	96	84	98	89	65	29	11	1	0	0	0	0	31.9	100.8
27-Mar	0	0	0	0	0	0	0	10	41	74	107	127	231	292	336	250	184	137	46	5	0	0	0	0	76.7	335.8
28-Mar	0	0	0	0	0	0	1	22	147	261	482	571	539	486	257	139	97	89	30	8	0	0	0	0	130.4	570.9
29-Mar	0	0	0	0	0	0	1	22	65	130	200	279	337	438	587	529	340	110	50	4	0	0	0	0	128.8	586.7
30-Mar	0	0	0	0	0	0	3	48	142	283	442	511	660	636	630	547	427	281	127	14	0	0	0	0	197.9	660.1
31-Mar	0	0	0	0	0	0	4	75	206	345	475	576	636	660	624	538	433	284	134	15	0	0	0	0	208.6	659.6
		0.0	0.0	0.0	0.0	0.0	0.0	0.5	14.0	76.9	162.9	265.2	338.2	411.1	417.3	378.8	314.1	216.8	124.3	38.5	2.5	0.0	0.0	0.0	0.0	Diurnal Average
		0.1	0.1	0.2	0.2	0.1	0.2	4.5	74.6	206.4	345.1	481.7	576.0	660.1	659.6	629.5	547.4	432.9	284.2	133.8	15.5	0.1	0.1	0.1	0.1	Diurnal Maximum



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	10	10	10	10	9	9	9	10	11	10	11	12	13	14	14	14	16	15	15	15	12	12	11.5	16.4
Dir	56	56	54	57	60	53	43	49	47	45	45	44	48	50	55	55	59	63	72	68	71	72	67	66	57.7	71.9
2 Spd	12	13	12	14	15	13	10	8	10	10	10	9	11	10	10	9	7	5	3	3	3	4	8	11	7.5	14.5
Dir	71	74	73	88	87	79	54	48	56	59	56	53	55	56	56	67	52	52	36	57	66	310	308	305	58.4	86.8
3 Spd	10	12	14	13	14	14	15	14	14	14	14	14	14	11	9	10	8	4	5	7	8	6	6	4	10.4	14.7
Dir	276	276	280	279	280	282	285	281	280	278	280	282	278	277	272	274	273	237	281	299	299	302	303	315	281.4	285.2
4 Spd	N	2	4	2	3	2	N	N	N	2	4	4	3	3	5	5	2	2	3	3	2	2	3	3	1.9	5.1
Dir	N	192	265	292	305	306	N	N	N	245	272	278	292	331	340	335	337	48	73	66	61	311	298	304	314.5	339.7
5 Spd	3	N	3	10	N	9	3	3	3	5	6	N	2	2	3	6	10	13	10	4	6	6	8	8	3.9	13.3
Dir	318	N	310	136	N	133	320	327	306	275	273	N	275	294	288	299	301	305	315	276	274	264	290	286	289.8	305.3
6 Spd	8	4	5	3	3	2	1	2	2	1	3	3	3	2	3	3	2	1	2	2	1	1	2	2	1.4	7.8
Dir	283	257	278	306	242	230	316	350	290	281	279	323	24	9	351	359	119	140	100	92	340	30	305	323	306.2	282.8
7 Spd	2	N	N	N	N	N	17	4	4	3	3	5	2	4	6	3	0	5	5	4	3	2	2	2	0.8	16.8
Dir	318	N	N	N	N	N	132	308	310	303	280	276	288	312	319	285	287	82	76	78	71	306	322	323	340.1	132.1
8 Spd	3	3	2	2	2	10	1	2	3	1	1	4	5	6	5	4	5	4	3	3	2	2	1	3	2.0	9.6
Dir	314	308	330	315	310	137	101	196	320	143	270	288	288	288	296	303	286	327	299	285	331	344	305	299	297.4	136.9
9 Spd	2	2	2	5	3	3	4	4	4	8	8	5	4	3	7	11	15	15	12	10	12	13	9	7	6.6	15.2
Dir	337	265	296	285	282	220	237	252	279	284	284	252	268	277	273	251	242	239	235	233	244	239	234	230	251.2	242.0
10 Spd	3	2	6	7	3	6	6	1	2	3	6	9	10	7	5	4	4	3	1	1	2	2	2	3	2.7	10.0
Dir	232	290	229	253	249	258	225	64	168	182	226	255	270	280	284	310	23	24	78	48	6	305	323	316	265.3	269.6
11 Spd	3	3	4	2	2	2	4	3	2	2	3	1	2	1	1	2	2	1	1	2	3	2	3	3	2.1	4.4
Dir	322	325	285	305	347	332	309	305	310	278	270	256	251	267	290	320	311	297	322	315	312	321	325	318	306.9	309.4
12 Spd	2	3	2	2	2	3	3	2	2	1	1	3	4	3	2	4	2	2	1	3	4	3	5	4	2.5	4.6
Dir	319	305	302	314	296	296	323	317	323	299	250	267	299	323	306	325	4	342	26	312	323	322	329	329	315.6	328.7
13 Spd	2	3	2	3	3	2	2	1	1	0	3	3	2	4	6	6	4	2	3	5	7	9	10	10	2.2	10.0
Dir	309	289	324	298	333	304	288	309	345	235	273	310	359	20	74	79	55	48	51	58	60	71	80	88	45.1	87.5
14 Spd	4	2	2	1	1	3	3	3	2	3	3	4	3	2	3	4	4	3	3	4	3	4	3	4	1.9	4.4
Dir	98	296	6	65	229	2	277	306	296	275	292	308	12	32	59	28	28	32	13	307	313	316	326	326	342.6	308.4
15 Spd	4	3	3	3	2	3	3	1	1	3	3	4	3	4	1	2	2	2	0	1	1	2	3	3	1.5	3.8
Dir	321	281	238	249	258	252	290	274	207	127	216	249	284	289	286	239	235	27	97	275	338	332	294	326	273.5	289.2
16 Spd	2	1	6	7	7	7	9	3	2	1	4	10	7	7	7	8	8	5	4	4	3	2	2	1	3.8	9.9
Dir	288	266	297	300	304	313	311	333	322	308	270	279	280	265	223	226	258	226	239	188	187	231	320	289	272.4	278.8
17 Spd	1	1	3	3	0	1	3	1	4	5	5	2	0	2	4	5	2	4	4	3	3	1	1	3	1.5	5.2
Dir	302	167	291	300	230	214	271	307	296	278	277	240	241	267	295	314	338	54	53	42	53	20	14	320	313.2	314.1
18 Spd	2	2	3	2	3	2	2	2	2	2	3	3	3	4	4	3	3	3	2	3	3	0	1	1	1.8	4.0
Dir	322	329	290	303	309	323	328	287	315	306	315	300	296	298	309	306	319	338	51	68	73	292	117	310	318.7	298.4
19 Spd	2	3	1	1	0	0	2	3	2	6	10	14	15	15	14	14	14	12	11	12	15	13	10	6	7.7	15.0
Dir	294	303	311	305	117	118	147	157	202	242	218	234	240	248	244	244	246	243	247	240	242	244	233	236	240.5	242.2
20 Spd	6	4	4	4	6	6	7	5	5	6	6	5	1	4	4	3	5	3	2	3	5	3	2	1	2.2	7.0
Dir	232	286	277	257	275	260	248	277	271	253	265	290	310	334	347	338	346	29	46	65	100	88	58	47	286.9	247.9
21 Spd	2	2	2	0	1	3	3	3	4	8	8	9	8	8	9	11	11	12	12	12	13	14	13	12	7.4	13.6
Dir	59	103	77	65	67	79	62	52	56	75	82	75	69	53	51	51	48	52	57	60	67	65	63	67	62.2	65.0
22 Spd	13	12	13	14	12	12	11	12	12	12	11	12	12	12	12	13	12	12	12	13	13	12	12	12	12.2	14.4
Dir	65	57	60	61	60	57	50	50	53	53	47	47	44	43	46	52	51	52	54	58	61	65	65	65	55.0	60.6

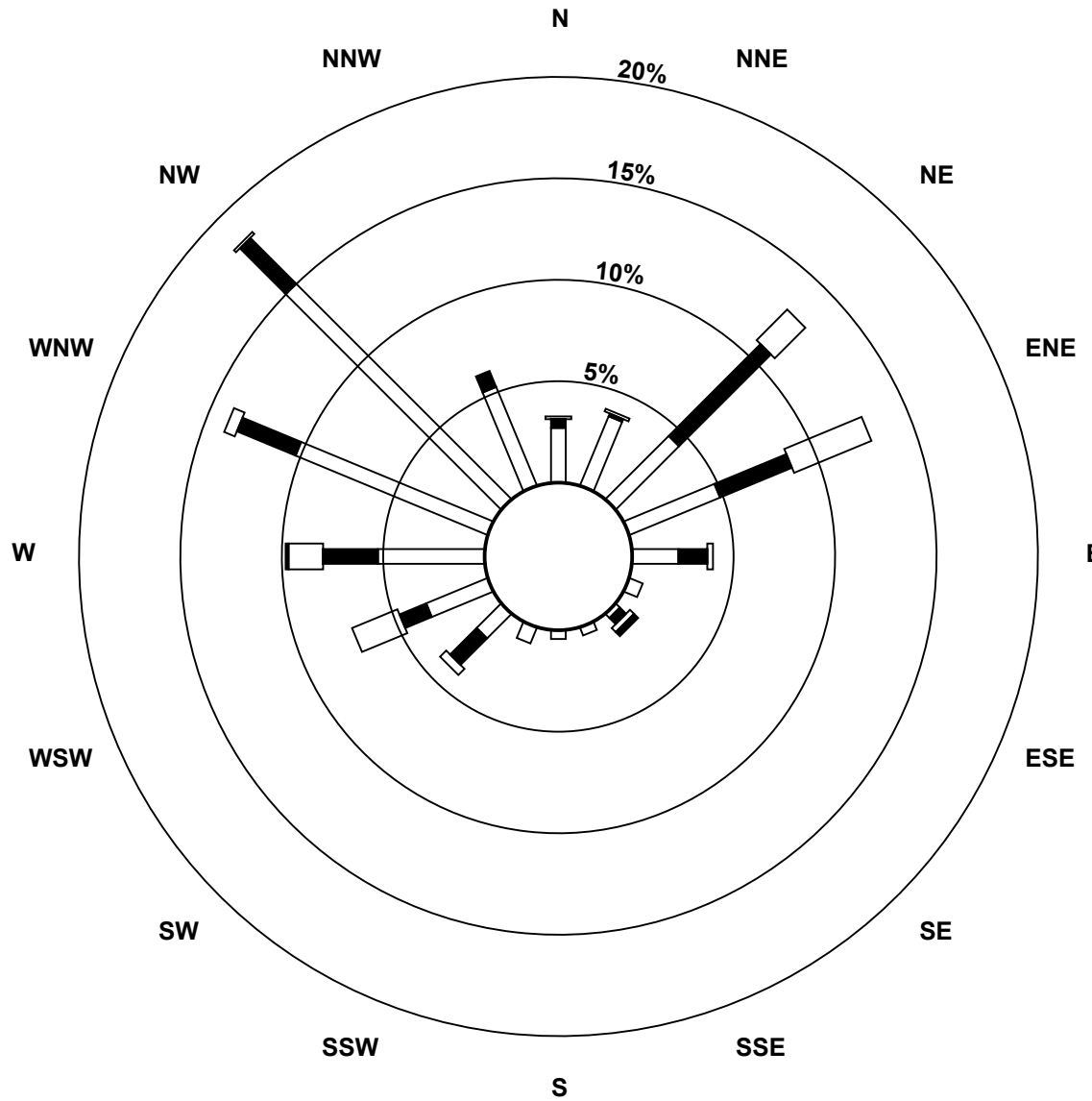
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2018

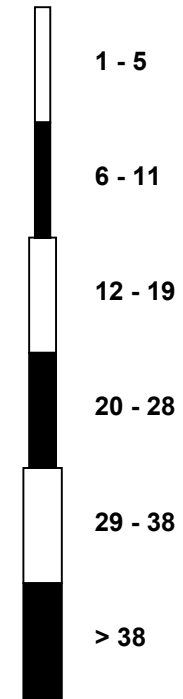
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	10	9	9	14	16	18	19	19	20	18	16	14	12	10	8	5	4	6	3	1	2	3	3	1	7.3	20.0
Dir	68	68	225	234	241	251	256	263	272	271	268	256	267	283	301	302	260	247	286	357	53	68	84	8	263.6	272.5
24 Spd	1	2	3	3	5	5	2	10	11	10	9	6	6	4	4	5	4	4	4	4	4	5	5	5	3.4	11.1
Dir	23	59	40	41	19	16	358	307	317	321	323	298	277	282	275	328	21	56	56	45	50	50	39	30	348.2	317.4
25 Spd	5	3	2	3	4	5	4	3	3	6	5	5	6	6	7	7	7	5	6	7	5	4	4	4	4.5	7.5
Dir	36	58	40	21	8	5	11	27	66	86	79	62	36	47	41	51	51	57	64	81	78	77	33	10	50.2	51.4
26 Spd	3	1	2	5	3	3	2	2	1	3	6	7	5	4	5	5	5	6	5	5	6	7	7	8	3.0	8.2
Dir	353	286	274	325	344	33	28	29	335	320	325	335	1	34	36	27	61	68	68	73	80	90	89	85	36.5	85.1
27 Spd	8	6	4	5	4	3	0	1	4	5	7	10	11	8	10	10	8	8	6	5	3	4	3	3	3.1	10.8
Dir	67	69	69	79	84	115	141	6	4	345	321	299	311	321	292	295	291	278	295	297	281	238	232	236	313.7	311.5
28 Spd	3	2	2	1	2	3	3	3	3	2	2	3	4	7	5	4	5	6	6	5	5	5	4	7	1.6	7.5
Dir	257	209	200	299	315	305	320	303	313	329	347	326	291	318	344	89	75	76	74	86	83	84	51	53	20.8	317.6
29 Spd	5	6	6	7	6	5	6	5	5	7	8	11	10	11	9	7	8	8	10	9	8	9	10	9	7.5	10.7
Dir	54	50	48	53	50	48	58	62	61	58	63	71	74	69	66	47	38	39	35	38	45	50	49	44	53.0	70.9
30 Spd	11	12	11	12	10	11	8	9	11	9	7	7	7	5	5	3	4	3	2	1	1	2	N	N	5.5	12.0
Dir	36	28	18	2	344	344	354	342	350	348	359	335	316	286	274	306	276	272	236	203	226	288	N	N	345.9	27.6
31 Spd	N	3	4	3	2	N	3	2	22	2	N	3	6	6	6	7	5	6	5	3	2	28	15	2	0.4	28.2
Dir	N	310	325	317	331	N	323	326	131	243	N	301	316	320	323	325	323	320	318	299	329	131	131	322	20.7	131.2
Spd	2.1	1.8	1.7	1.5	1.7	1.2	1.7	2.3	1.8	2.1	2.7	3.1	2.9	3.1	2.7	2.6	2.2	1.8	2.0	1.7	1.8	1.5	1.7	2.1	Diurnal Average	
Dir	18.7	15.8	334.4	342.2	336.7	341.6	323.2	326.7	336.9	320.5	306.7	304.5	316.7	328.9	335.3	341.1	345.2	12.7	30.8	39.4	43.8	69.5	35.1	10.4	Diurnal Maximum	
Spd	13.2	12.7	14.0	14.4	16.4	17.9	18.6	18.7	22.4	17.5	16.2	14.5	14.5	14.9	14.4	14.4	15.2	15.2	16.4	14.5	15.5	28.2	14.5	12.2	Diurnal Maximum	
Dir	64.8	74.4	280.0	60.6	240.7	250.8	256.0	262.8	131.1	270.7	267.7	255.7	239.7	248.0	244.1	55.3	242.0	238.9	71.9	67.9	70.7	131.2	130.6	65.3	Diurnal Maximum	
Maximum Speed Value: 28 km/h on Mar 31 22:00		Minimum Speed Value: 0 km/h on Mar 19 05:00																Hours in Service: 744								
Maximum Daily Speed Average: 12.2 km/h on Mar 22		Minimum Daily Speed Average: 0.4 km/h on Mar 11																Hours of Data: 727								
Maximum Diurnal Speed Average: 3.1 km/h at hour 12		Minimum Diurnal Speed Average: 1.2 km/h at hour 6																Hours of Missing Data: 17								
Monthly Average Velocity: 1.76 km/h 346.90 deg		Speed Percentiles: P ₁ = 0.4 P ₁₀ = 1.6 Q ₁ = 2.5 Median = 4.0 Q ₃ = 8.0 P ₉₀ = 12.0 P ₉₉ = 16.7																Percent Operational Time: 97.7								
All monthly, daily, and diurnal averages have been calculated using vector methods																										
N - Not Valid																										
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	40	12	2	0	0	0	54																			
NorthEast	64	60	43	0	0	0	167																			
East	28	29	10	0	0	0	67																			
SouthEast	11	3	2	1	1	0	18																			
South	9	0	0	0	0	0	9																			
SouthWest	29	16	16	0	0	0	61																			
West	86	41	22	1	0	0	150																			
NorthWest	159	40	2	0	0	0	201																			
Total	426	201	97	2	1	0	727																			

Wind Rose

Wind Speed (WS) (km/h)
Henry Pirker - March 2018



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - March 2018

Maximum Speed: 28 km/h on Mar 31 22:00	Maximum Daily Speed Average: 12.4 km/h on Mar 22	Hours in Service: 744
Minimum Speed: 0 km/h on Mar 17 05:00	Minimum Daily Speed Average: 2.4 km/h on Mar 11	Hours of Data: 727
Maximum Diurnal Speed Average: 6.9 km/h at hour 12	Minimum Diurnal Speed Average: 4.8 km/h at hour 2	Hours of Missing Data: 17
Monthly Average Speed: 5.79 km/h	Percentiles: P ₁ = 0.6 P ₁₀ = 1.8 Q ₁ = 2.7 Median = 4.4 Q ₃ = 8.2 P ₉₀ = 12.3 P ₉₉ = 17.4	Percent Operational Time: 97.7

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	9	9	10	10	11	10	9	9	9	10	11	11	11	12	13	15	14	14	17	15	16	15	12	12	11.9	16.6
2-Mar	12	13	12	14	15	14	10	8	10	10	10	9	11	10	10	9	7	5	3	3	3	4	8	11	9.2	14.7
3-Mar	10	13	14	13	14	14	15	14	14	14	14	14	14	11	9	10	8	4	5	7	8	6	6	4	10.7	14.7
4-Mar	N	3	4	3	3	2	N	N	N	4	5	5	4	3	5	5	2	2	4	3	2	3	3	3	3.4	5.3
5-Mar	3	N	3	14	N	12	3	3	3	5	6	N	2	2	3	6	10	13	10	4	6	6	8	8	6.2	13.5
6-Mar	8	5	5	3	3	3	2	2	2	3	4	4	3	3	3	3	3	2	2	2	1	1	2	2	2.9	7.8
7-Mar	2	N	N	N	N	N	20	4	4	3	4	5	2	4	6	3	2	5	5	4	3	3	3	2	4.4	19.7
8-Mar	3	3	2	3	2	13	4	13	3	1	2	4	5	6	5	4	5	4	3	3	2	2	1	3	4.1	13.0
9-Mar	3	3	2	5	3	3	4	4	4	9	8	6	5	3	8	11	15	15	12	10	12	13	9	7	7.3	15.3
10-Mar	4	2	6	7	3	6	7	1	2	3	6	9	10	7	5	4	4	3	2	2	2	2	2	3	4.3	10.1
11-Mar	3	3	5	2	2	2	5	3	2	2	3	1	2	1	2	3	2	1	1	2	3	2	3	3	2.4	4.6
12-Mar	2	3	3	3	2	4	3	2	2	1	1	3	4	4	3	4	3	2	1	3	4	3	5	4	2.8	4.6
13-Mar	3	4	3	3	3	2	4	1	1	0	3	3	3	4	6	6	4	2	3	5	7	9	10	10	4.0	10.0
14-Mar	4	2	2	2	2	3	3	3	2	3	3	5	3	3	3	4	4	4	4	4	3	4	3	4	3.2	4.5
15-Mar	4	3	3	3	3	3	3	1	1	3	3	4	3	4	2	2	3	3	2	0	2	1	2	3	2.5	3.8
16-Mar	3	1	6	7	7	7	9	3	2	1	5	10	7	7	7	8	8	5	4	4	3	2	2	2	4.9	10.0
17-Mar	1	1	3	4	0	1	3	1	4	5	5	2	1	2	4	5	3	4	5	3	3	1	1	3	2.7	5.3
18-Mar	2	2	3	2	3	2	2	2	2	2	3	3	3	4	4	3	3	3	2	3	3	0	1	2	2.5	4.3
19-Mar	2	3	1	1	0	0	2	3	4	7	10	14	15	15	14	14	14	12	11	12	15	13	10	6	8.3	15.0
20-Mar	6	5	5	4	6	6	7	5	5	6	6	6	2	4	4	3	5	3	2	3	5	4	2	1	4.4	7.1
21-Mar	2	2	2	1	1	3	3	4	4	8	8	9	8	8	9	11	11	12	12	13	13	14	13	12	7.6	13.7
22-Mar	13	12	13	14	12	12	11	12	12	12	12	12	12	13	13	13	12	12	12	13	14	12	12	12	12.4	14.5
23-Mar	10	9	14	14	17	18	19	19	20	18	16	15	12	10	8	5	4	6	3	2	3	3	3	1	10.4	20.1
24-Mar	2	2	3	3	5	5	3	10	11	10	9	7	6	4	4	5	4	4	4	4	4	5	5	5	5.2	11.1
25-Mar	5	4	2	3	4	5	5	3	4	6	6	5	6	6	7	7	8	7	5	6	7	5	4	4	5.1	7.6
26-Mar	3	2	3	5	3	3	2	2	2	4	6	7	5	4	5	5	5	6	5	6	6	7	8	8	4.8	8.2
27-Mar	8	6	4	5	4	3	1	1	4	5	7	10	11	9	10	10	8	8	6	5	3	4	3	4	5.8	11.1
28-Mar	3	2	3	2	2	3	3	3	3	2	2	3	4	8	6	5	5	6	7	5	5	4	7	4	4.1	8.0
29-Mar	5	7	6	7	6	5	6	5	5	7	8	11	10	11	9	7	8	8	10	9	8	9	10	9	7.8	10.9
30-Mar	11	12	11	12	10	11	9	9	11	9	8	8	8	6	5	4	4	3	3	1	1	2	N	N	7.1	12.2
31-Mar	N	3	4	3	2	N	3	3	22	7	N	3	6	7	7	7	6	6	5	4	4	28	16	2	7.0	28.2
	5.0	4.8	5.3	5.6	5.1	6.1	5.9	5.1	5.8	5.8	6.5	6.9	6.4	6.3	6.3	6.6	6.3	6.0	5.5	5.2	5.5	6.1	5.7	5.3	Diurnal Average	
	13.3	12.9	14.2	14.5	16.5	18.0	19.7	18.8	22.4	17.6	16.5	14.9	14.6	15.0	14.5	14.6	15.2	15.3	16.6	14.7	15.6	28.2	15.7	12.3	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - March 2018

Maximum Value: 93.5 deg on Mar 17 01:00																								Hours in Service:	744
Minimum Value: 0.2 deg on Mar 31 00:00																								Hours of Data:	744
Percentiles: P ₁ = 4.6 P ₁₀ = 7.2 Q ₁ = 9.9 Median = 14.7 Q ₃ = 25.1 P ₉₀ = 48.1 P ₉₉ = 87.0																								Hours of Missing Data:	0
																								Hours of Calibration:	0
																								Percent Operational Time:	100.0
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	11	11	11	9	10	12	13	14	10	11	13	13	12	11	12	10	10	9	9	8	8	10	11	9	13.6
2-Mar	8	9	10	7	8	11	10	11	11	10	11	10	10	11	11	13	12	12	19	16	11	21	8	6	20.8
3-Mar	14	6	5	6	5	5	5	5	5	5	6	6	6	6	13	12	9	17	15	4	5	6	5	15	17.0
4-Mar	78	32	32	24	8	10	37	60	59	47	24	24	26	27	15	20	34	18	14	25	40	26	15	11	77.7
5-Mar	17	88	30	86	87	90	12	13	12	9	60	77	24	25	26	17	9	6	8	15	9	9	8	6	89.8
6-Mar	6	32	19	37	19	48	68	37	59	64	50	37	35	37	26	36	50	41	16	30	29	63	21	28	67.7
7-Mar	19	81	0	14	7	8	88	13	11	43	35	17	15	27	11	18	68	16	10	7	16	50	20	13	88.2
8-Mar	10	8	11	21	12	84	67	85	10	70	80	14	17	17	12	19	13	19	20	23	20	17	20	34	84.7
9-Mar	49	69	85	15	22	22	11	9	20	18	12	21	16	12	9	8	5	7	7	6	8	8	10	16	85.0
10-Mar	69	43	7	9	29	23	54	74	54	25	14	8	6	9	13	38	13	24	46	51	51	66	14	12	73.6
11-Mar	11	24	23	12	18	18	18	13	23	29	12	35	28	32	17	27	16	21	36	14	16	13	10	15	36.1
12-Mar	15	24	19	18	40	22	9	28	18	18	28	15	25	14	25	20	28	38	54	7	10	11	7	7	53.9
13-Mar	20	14	15	37	13	15	45	37	62	38	10	28	38	23	17	14	14	21	12	11	7	8	5	5	62.5
14-Mar	34	47	28	81	42	17	35	14	20	14	17	14	27	39	22	22	21	23	30	15	13	11	22	14	81.5
15-Mar	13	28	30	22	58	26	32	66	70	16	18	21	30	17	20	29	19	57	56	69	40	24	23	12	70.0
16-Mar	29	38	10	8	14	8	4	43	52	85	33	5	8	12	10	9	11	16	13	20	17	30	20	42	85.2
17-Mar	94	64	18	15	86	56	27	34	17	15	18	44	83	34	19	13	41	15	13	16	17	25	22	12	93.5
18-Mar	12	21	8	10	9	12	13	26	13	9	15	18	21	18	23	24	22	29	17	9	7	73	58	40	72.9
19-Mar	19	11	57	14	91	58	9	10	51	22	7	8	6	6	6	6	7	6	9	5	5	5	6	10	91.3
20-Mar	10	39	35	24	10	11	9	15	7	12	18	28	62	54	22	27	12	38	29	15	12	23	15	39	62.0
21-Mar	19	26	16	55	30	23	17	15	12	11	11	10	13	8	9	9	8	6	8	8	7	7	6	8	55.1
22-Mar	6	8	6	7	7	7	10	7	7	8	8	10	8	8	9	9	8	6	8	6	6	7	7	7	9.7
23-Mar	10	9	80	8	8	7	7	7	5	6	12	13	11	13	14	18	23	27	49	44	34	16	63	49	79.9
24-Mar	48	19	17	19	17	14	32	7	7	7	10	23	11	13	13	27	30	19	17	15	15	15	13	13	47.5
25-Mar	16	15	25	19	16	14	15	24	24	20	23	19	16	17	17	12	13	9	13	10	7	13	26	19	26.5
26-Mar	44	69	57	8	34	20	24	23	44	19	11	11	25	15	15	17	20	14	13	12	15	9	9	8	68.5
27-Mar	9	12	15	14	14	25	88	85	15	21	17	9	15	17	7	8	8	9	11	9	29	16	29	34	88.1
28-Mar	35	25	13	51	12	11	15	15	15	14	15	13	18	22	25	41	32	24	14	16	24	20	19	11	50.6
29-Mar	11	9	10	9	11	12	13	10	12	11	12	10	11	11	14	10	10	9	10	9	11	10	9	9	14.4
30-Mar	9	9	9	8	8	7	9	6	8	12	18	23	17	24	13	31	13	15	28	15	10	41	88	0	88.2
31-Mar	41	12	23	9	38	86	11	77	1	59	73	13	14	16	13	13	13	13	8	19	36	1	55	13	85.6
	93.5	87.6	85.0	86.3	91.3	89.8	88.2	84.8	70.0	85.2	80.5	76.5	83.4	54.3	26.4	40.6	68.4	57.3	56.0	69.2	51.4	72.9	88.2	48.7	

PAZA

Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb Evergreen Park - March 2018

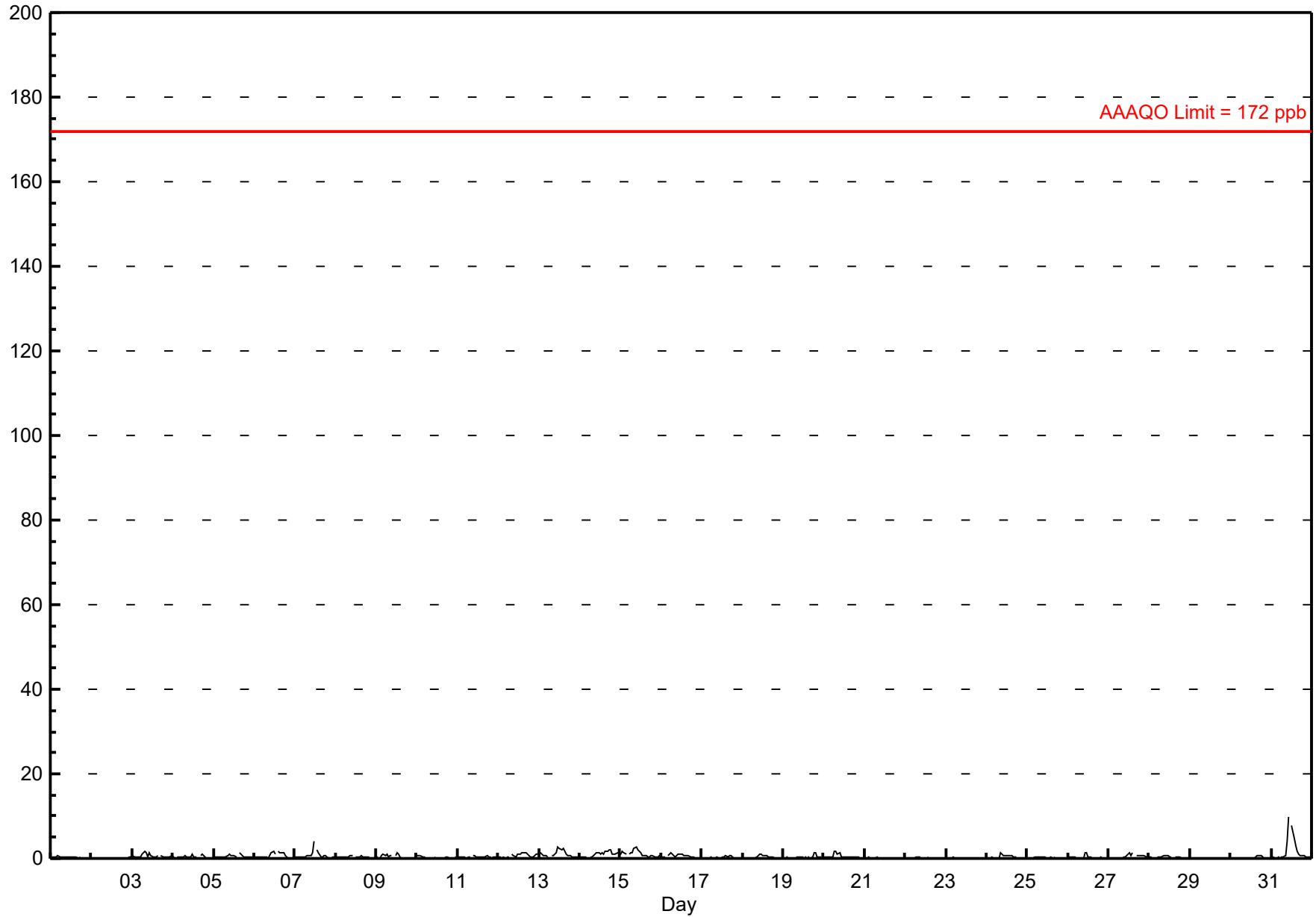
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 9.8 ppb on Mar 31 11:00	Maximum Daily Average: 1.6 ppb on Mar 31
Minimum Value: 0 ppb on Mar 4 23:00	Hours of Data: 709
Maximum Diurnal Average: 1.0 ppb at hour 11	Hours of Missing Data: 35
Monthly Average: 0.44 ppb	Hours of Calibration: 35
Minimum Daily Average: 0.0 ppb on Mar 29	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.2 ppb at hour 21	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.3 Q ₃ = 0.5 P ₉₀ = 1.1 P ₉₉ = 2.7	

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	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.5
2-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
3-Mar	1	0	0	0	0	0	1	2	1	0	1	1	0	0	0	1	A	1	0	0	0	0	0	1	0.6	1.8
4-Mar	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	A	1	1	1	0	0	0	0	0	0.4	1.0
5-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	0	A	1	1	1	0	0	0	0	0	0	0.5	1.4
6-Mar	0	0	0	0	0	0	0	0	0	1	1	2	1	A	2	1	1	1	1	0	0	0	0	0	0.6	1.7
7-Mar	0	0	0	0	0	0	0	1	1	1	2	4	A	2	1	0	0	1	1	0	0	0	0	0	0.7	4.2
8-Mar	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0	1	0	0	0	0	0	0	0	0	0.4	0.6
9-Mar	0	0	0	1	1	1	1	0	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	1	0.4	1.3
10-Mar	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
11-Mar	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	0.6
12-Mar	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0.7	1.3
13-Mar	1	1	1	1	1	0	A	1	1	1	2	3	2	2	2	2	1	1	1	0	0	0	0	0	1.0	2.7
14-Mar	0	0	0	0	0	A	0	0	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1.0	2.1
15-Mar	1	2	1	1	A	1	1	1	3	3	2	2	1	1	1	1	0	0	1	1	0	0	0	1	1.1	2.7
16-Mar	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.6	1.3
17-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0.2	0.6
18-Mar	0	A	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.9
19-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.3	1.4
20-Mar	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	1.6
21-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
22-Mar	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	A	0	0	0	0.1	0.3
23-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
24-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0.4	1.3
25-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	0.5
26-Mar	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0.2	1.5
27-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	0	0	0.4	1.3
28-Mar	0	0	0	0	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.7
29-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
30-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	1	1	0	0	0	0	0	0.2	0.8
31-Mar	0	0	0	0	0	0	0	0	1	4	10	A	8	5	3	2	1	1	1	1	0	0	0	0	1.6	9.8
	0.3	0.3	0.3	0.2	0.3	0.2	0.4	0.4	0.5	0.7	1.0	0.8	0.9	0.7	0.6	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.3	Diurnal Average	
	1.3	1.6	1.4	1.0	1.1	1.2	1.6	1.8	2.5	4.1	9.8	4.2	7.6	4.7	3.0	1.7	1.8	2.1	2.0	1.2	1.0	1.1	1.2	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
Evergreen Park - March 2018



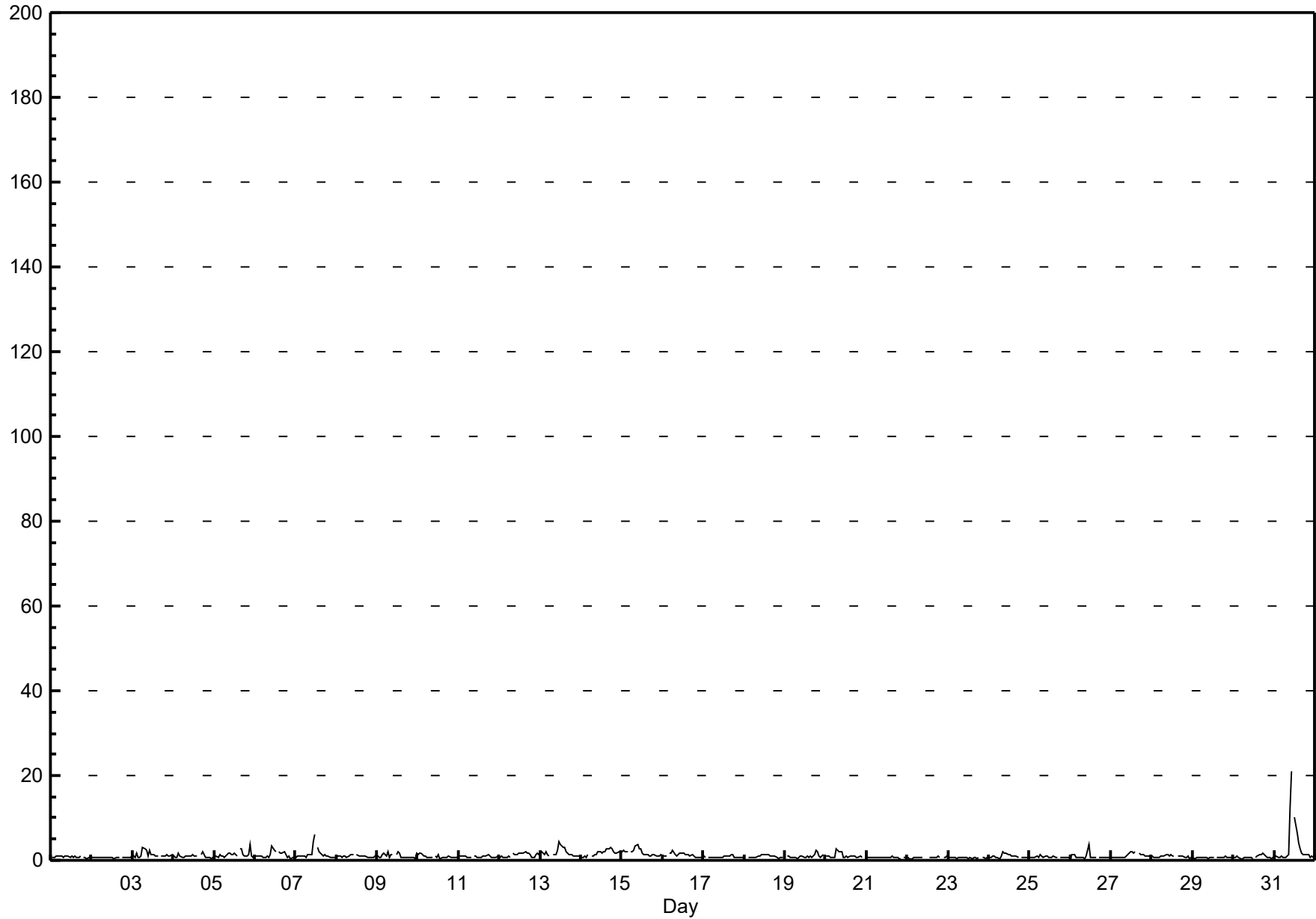
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Evergreen Park - March 2018

Maximum Value: 20.9 ppb on Mar 31 11:00		Maximum Daily Average: 3.2 ppb on Mar 31		Hours in Service: 744																						
Minimum Value: 0 ppb on Mar 30 23:00		Minimum Daily Average: 0.6 ppb on Mar 23		Hours of Data: 709																						
Maximum Diurnal Average: 2.2 ppb at hour 11		Minimum Diurnal Average: 0.8 ppb at hour 23		Hours of Missing Data: 35																						
Monthly Average: 1.11 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.9 Q ₃ = 1.2 P ₉₀ = 1.8 P ₉₉ = 3.9		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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	0.8	1.1
2-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	0.6	0.8
3-Mar	1	1	2	1	1	1	3	3	2	1	3	1	1	1	1	A	A	1	1	1	1	1	1	1	1.3	2.9
4-Mar	1	1	1	2	1	1	1	1	1	1	1	2	1	1	1	A	1	2	1	1	1	1	0	1	1.0	1.9
5-Mar	1	1	1	1	1	1	1	1	2	2	1	1	2	1	A	3	3	1	1	1	1	4	1	1	1.4	3.7
6-Mar	1	1	1	1	1	1	1	1	1	3	2	2	A	2	2	2	2	1	1	1	0	1	1	1.3	3.5	
7-Mar	1	1	1	1	1	1	1	1	1	4	6	A	3	2	1	1	1	1	1	1	1	1	1	1.5	6.2	
8-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	1.4	
9-Mar	1	1	1	1	2	1	2	1	1	1	A	1	2	2	1	1	1	1	1	1	1	0	2	1.0	2.0	
10-Mar	1	2	2	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	1	1	1	0.9	1.7	
11-Mar	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	1.3	
12-Mar	1	1	1	1	1	1	1	A	2	1	1	2	2	2	2	2	2	2	1	1	1	2	2	1.3	1.9	
13-Mar	2	2	1	2	1	1	A	1	1	1	2	4	4	3	3	2	2	1	1	1	1	1	1	1.8	4.4	
14-Mar	1	1	1	1	1	A	1	1	1	1	2	2	2	2	2	3	3	3	3	2	2	2	2	1.7	2.9	
15-Mar	2	2	2	2	A	2	2	2	3	4	3	3	2	1	1	1	1	1	1	1	1	1	1	1.8	3.8	
16-Mar	1	1	1	A	2	2	2	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1.2	2.3	
17-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
18-Mar	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
19-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1.0	2.4	
20-Mar	1	1	1	1	1	1	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1.1	2.6	
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	1	0.6	0.9	
22-Mar	1	0	0	0	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	A	1	1	0.7	1.2	
23-Mar	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	1	1	0	1	A	1	1	0	0.6	0.8	
24-Mar	1	1	1	1	1	1	0	1	2	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1.0	2.0	
25-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.2	
26-Mar	1	1	1	1	1	1	1	1	1	1	2	4	1	1	1	1	A	1	1	1	1	1	1	0.9	3.7	
27-Mar	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	A	2	1	1	1	1	1	1	1.1	2.1	
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0.9	1.4	
29-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.6	1.0	
30-Mar	1	1	1	1	0	0	1	1	1	1	1	0	A	1	1	1	1	2	1	1	1	0	1	0.8	1.6	
31-Mar	1	1	1	1	1	1	1	1	1	13	21	A	10	6	4	3	2	1	1	1	1	1	1	3.2	20.9	
		0.9	0.9	0.9	0.9	0.9	0.8	1.0	1.0	1.2	1.6	2.2	1.6	1.6	1.3	1.2	1.2	1.1	1.2	1.1	0.9	0.8	0.8	0.8	0.9	Diurnal Average
		1.9	2.4	2.0	2.2	1.7	1.9	2.9	2.6	3.3	12.5	20.9	6.2	10.2	6.5	3.9	2.9	2.8	2.9	2.8	2.2	1.8	3.7	2.0	1.8	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

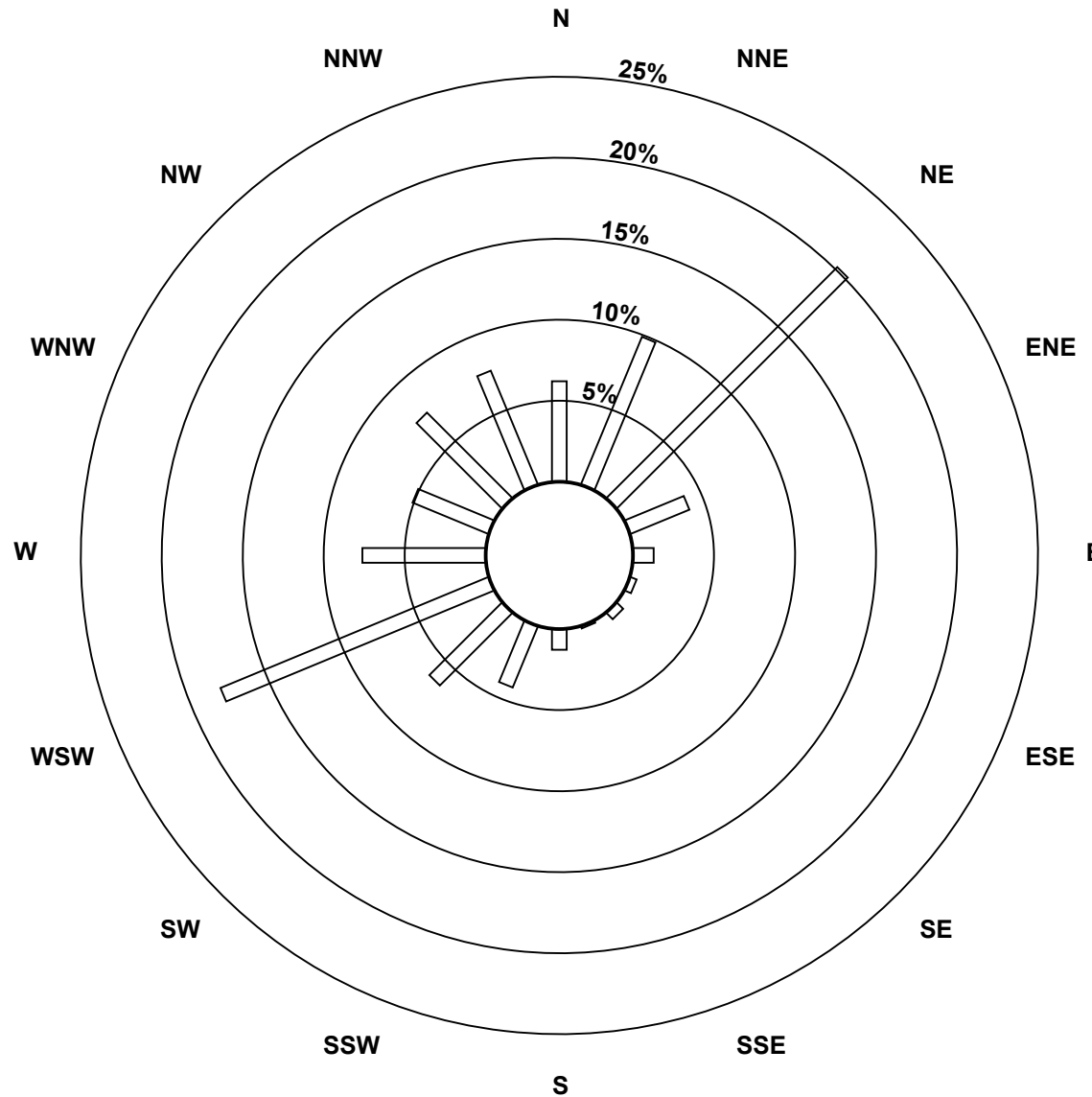
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2018

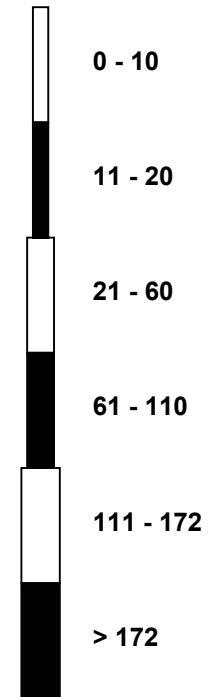


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2018

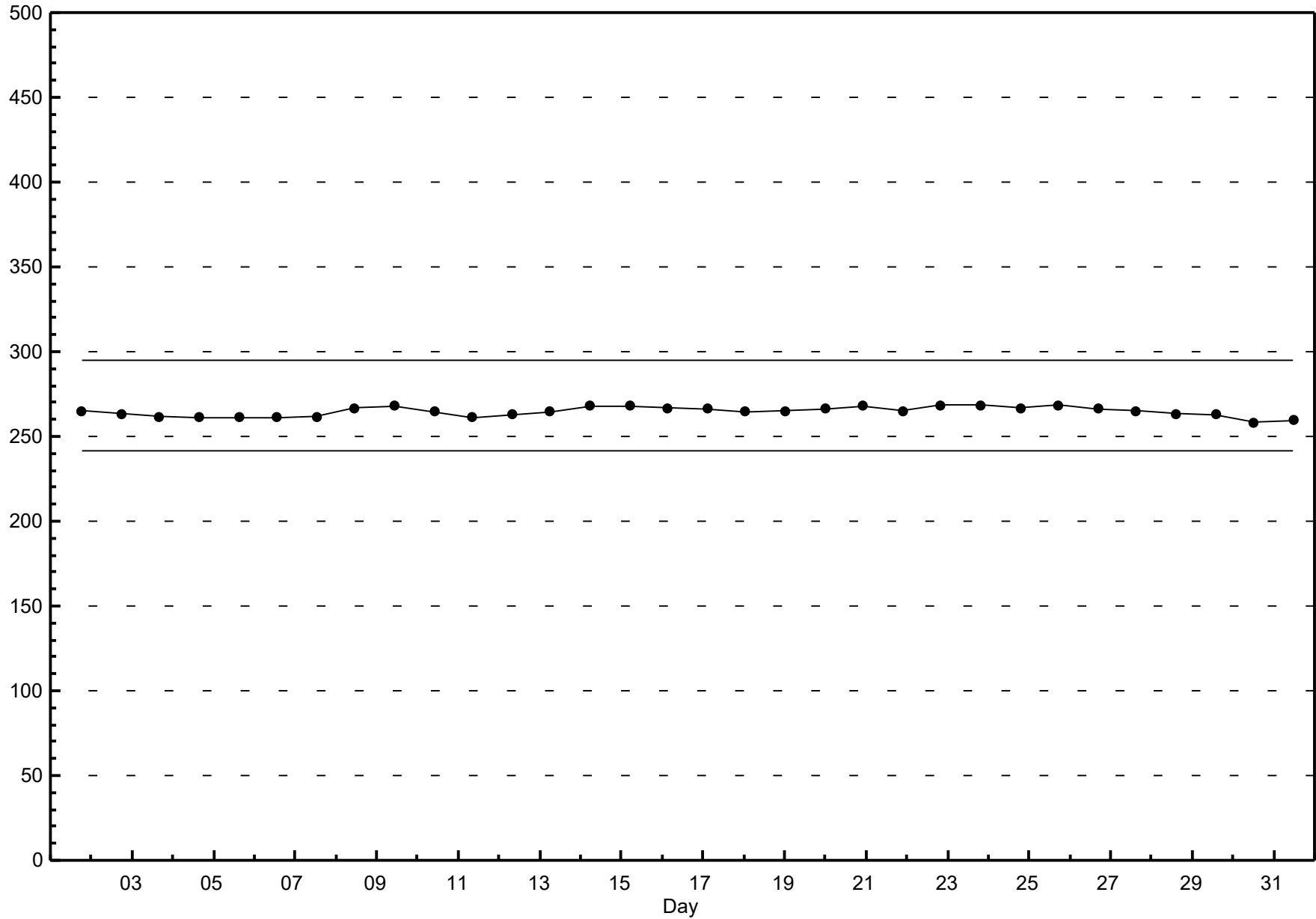


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Evergreen Park - March 2018

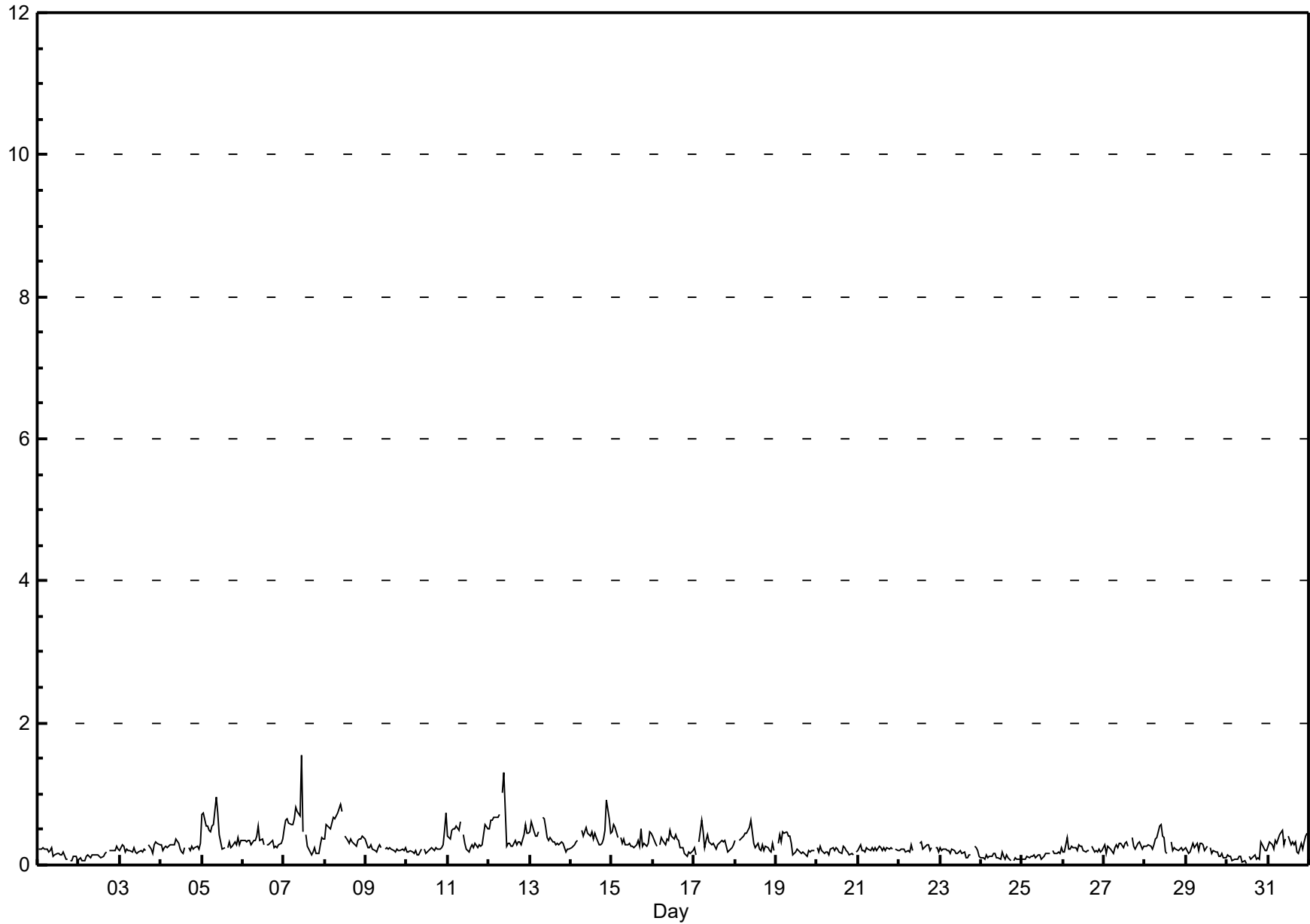


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2018

Maximum Value: 1.5 ppb on Mar 7 11:00		Maximum Daily Average: 0.5 ppb on Mar 12		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 30 12:00		Minimum Daily Average: 0.1 ppb on Mar 24		Hours of Data: 709																							
Maximum Diurnal Average: 0.4 ppb at hour 10		Minimum Diurnal Average: 0.2 ppb at hour 20		Hours of Missing Data: 35																							
Monthly Average: 0.28 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 0.8		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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.2	
2-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	0.3	
3-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	0.3	
4-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	0.4	
5-Mar	1	1	1	1	0	0	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	1.0	
6-Mar	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
7-Mar	1	1	1	1	1	1	1	1	1	1	2	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	1.5	
8-Mar	0	1	1	1	1	1	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9	
9-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	0.2	0.3	
10-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	0.2	0.7	
11-Mar	0	0	0	0	1	1	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
12-Mar	1	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.3	
13-Mar	0	1	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
14-Mar	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.9	
15-Mar	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
16-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	0.3	0.5	
17-Mar	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
18-Mar	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
19-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	0.3	0.5	
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	A	0	0.2	0.3
21-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	
22-Mar	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3	
23-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	
24-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	0.2	
25-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	
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	0.2	0.4	
27-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	0.4	
28-Mar	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.6	
29-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	0.3	
30-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	
31-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	
		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Diurnal Average	
		0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.8	1.0	1.3	1.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.3	0.4	0.5	0.9	0.6	0.7	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																									

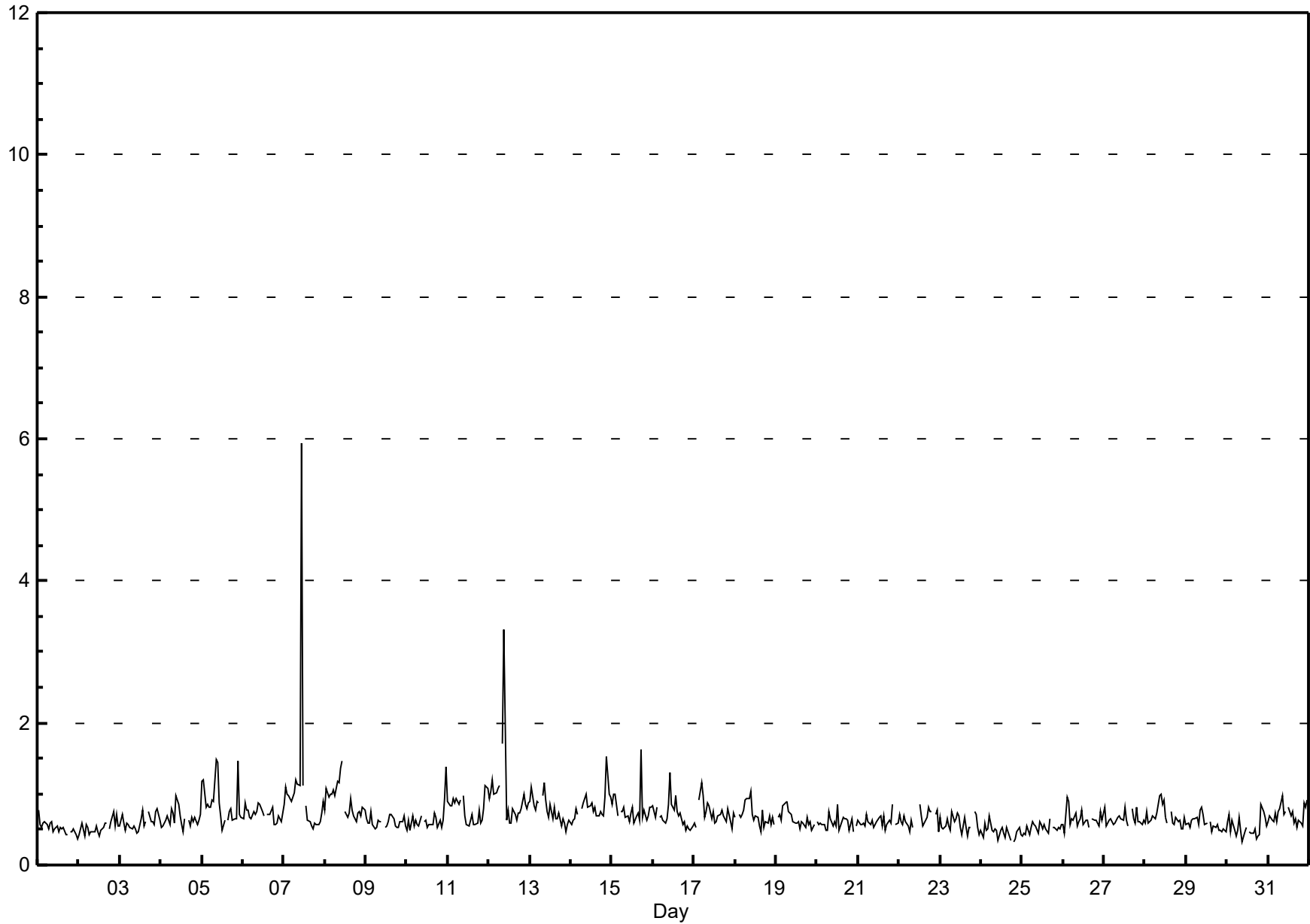


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

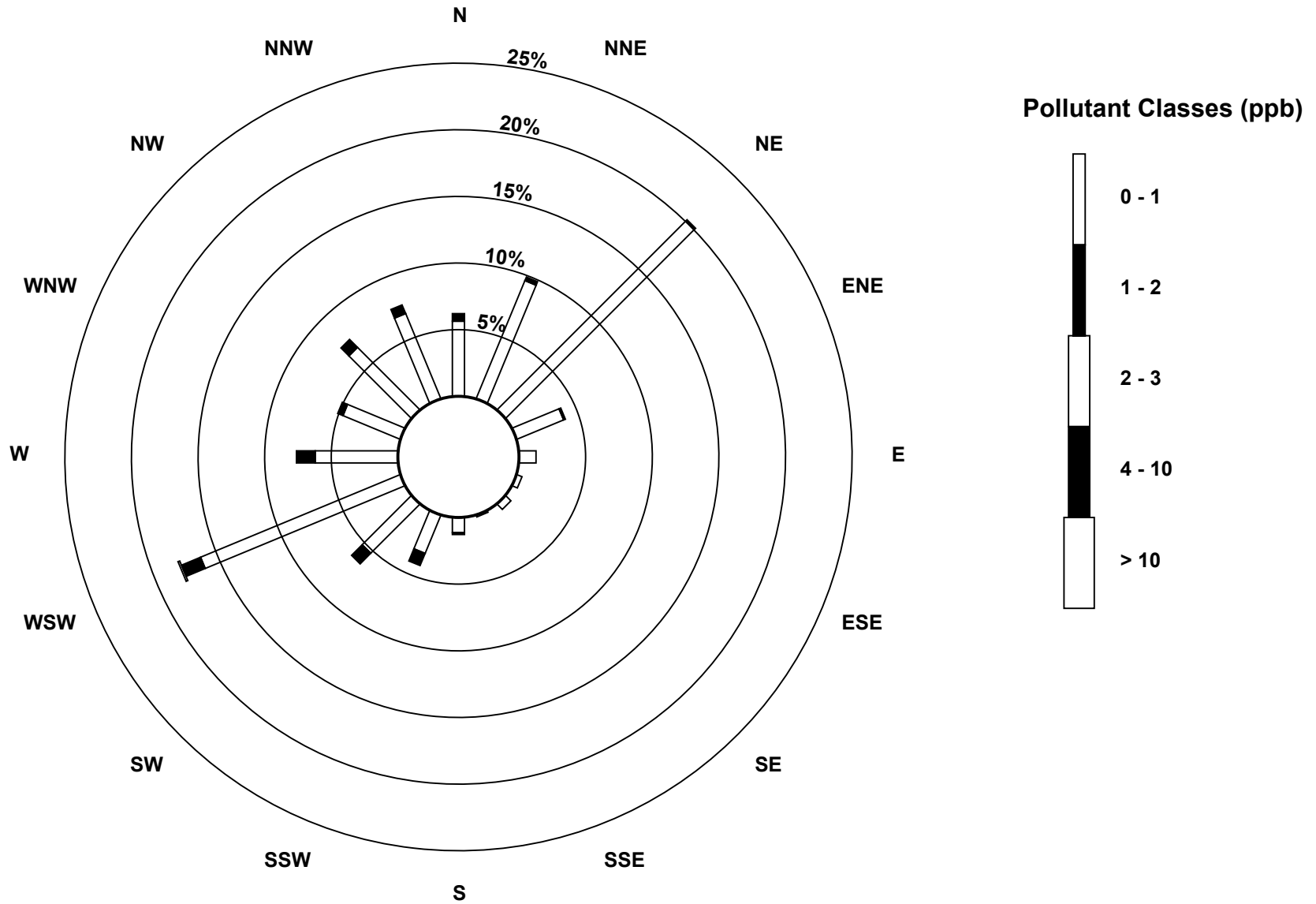
Evergreen Park - March 2018

Maximum Value: 5.9 ppb on Mar 7 11:00		Maximum Daily Average: 1.1 ppb on Mar 7		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 30 10:00		Minimum Daily Average: 0.5 ppb on Mar 24		Hours of Data: 709																							
Maximum Diurnal Average: 0.9 ppb at hour 11		Minimum Diurnal Average: 0.6 ppb at hour 20		Hours of Missing Data: 35																							
Monthly Average: 0.69 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.6 Q ₃ = 0.8 P ₉₀ = 0.9 P ₉₉ = 1.5		Hours of Calibration: 35																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	0	0	A	0	0	1	0	0	0.5	0.8	
2-Mar	0	1	1	0	1	1	0	0	0	0	1	0	0	0	1	1	1	A	1	1	1	1	1	1	0.5	0.7	
3-Mar	1	1	1	0	1	1	1	1	1	1	0	0	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8	
4-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	0.6	1.0	
5-Mar	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	0.9	1.5	
6-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	0.7	0.9	
7-Mar	1	1	1	1	1	1	1	1	1	1	6	1	A	1	1	1	1	1	1	1	1	1	1	1	1.1	5.9	
8-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	0.9	1.5	
9-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	0.6	0.8	
10-Mar	0	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.4	
11-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	0.8	1.1	
12-Mar	1	1	1	1	1	1	1	A	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	3.3	
13-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.8	1.2	
14-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	0.8	1.5	
15-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0.8	1.6	
16-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0.7	1.3	
17-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2	
18-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.7	1.0	
19-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0.7	0.9	
20-Mar	1	1	1	1	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	A	1	0.6	0.9	
21-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	0.6	0.9	
22-Mar	1	1	1	1	1	1	0	1	1	C	C	C	1	1	1	1	1	1	1	1	A	1	1	0	0.6	0.8	
23-Mar	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	0	1	A	1	1	1	0	0.6	0.8	
24-Mar	0	0	1	0	1	1	0	0	1	0	0	0	1	0	0	1	0	0	A	0	0	0	0	0	0.5	0.7	
25-Mar	0	0	0	1	0	1	1	1	1	0	1	1	1	1	0	1	A	1	1	1	0	1	1	1	0.5	0.6	
26-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	1.0	
27-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	0.6	0.8	
28-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	0.7	1.0	
29-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	1	1	1	0	0	0	0	0.6	0.8	
30-Mar	1	1	0	1	0	0	0	1	0	0	0	1	A	0	0	0	0	1	0	0	0	0	0	0	0.5	0.9	
31-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	1.0	
	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.9	0.9	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	Diurnal Average		
	1.2	1.2	1.2	1.0	1.2	1.1	1.1	1.2	1.7	3.3	5.9	1.1	0.9	1.0	0.8	0.9	0.8	1.6	0.8	0.8	1.0	1.5	1.1	1.4	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									



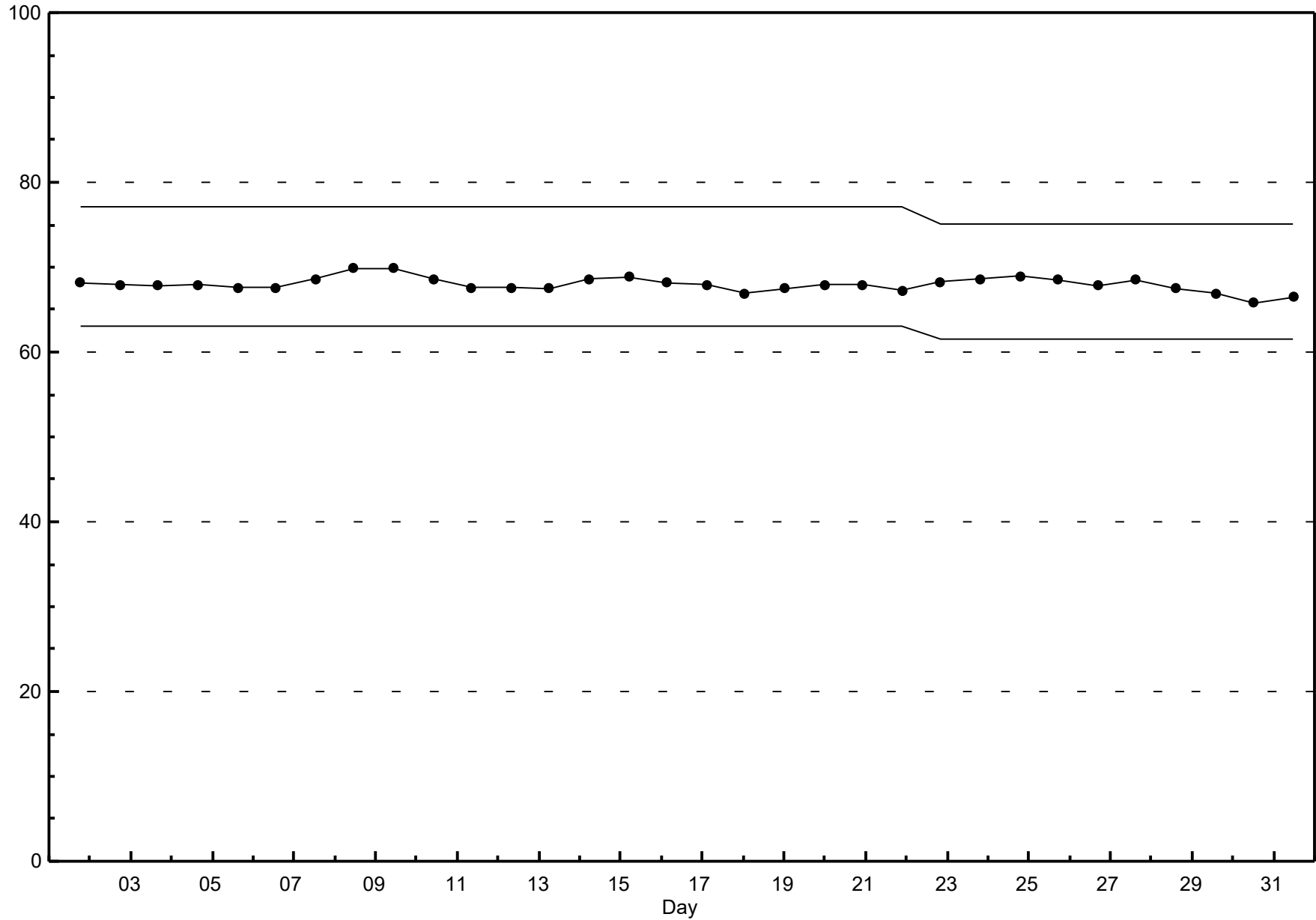
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2018



Span Responses

Total Reduced Sulphur (TRS)
Evergreen Park - March 2018



Hourly Averages

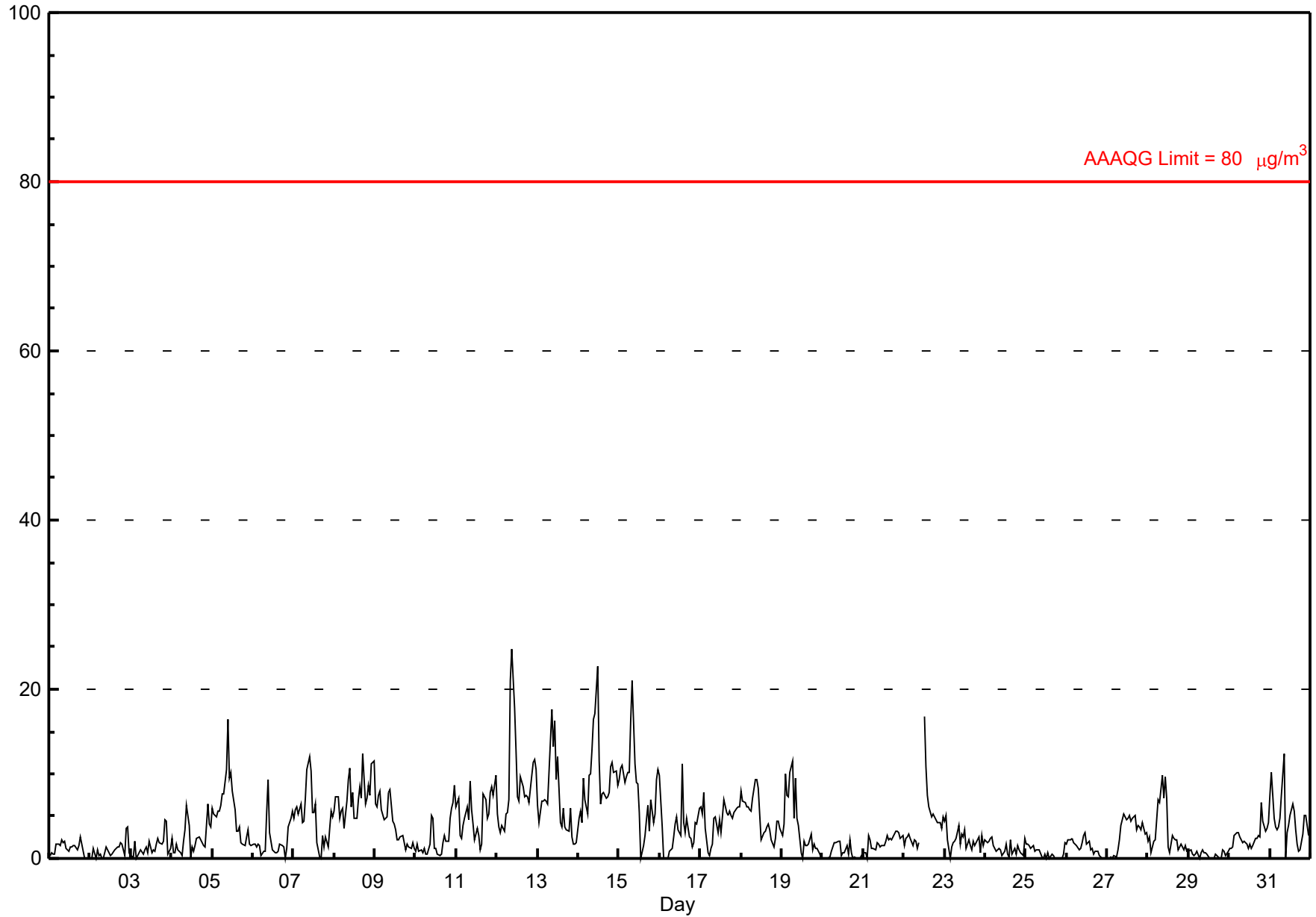
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - March 2018

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 24.7 µg/m ³ on Mar 12 10:00	Maximum Daily Average: 9.7 µg/m ³ on Mar 14
Minimum Value: 0 µg/m ³ on Mar 1 22:00	Hours of Data: 742
Maximum Diurnal Average: 6.5 µg/m ³ at hour 9	Hours of Missing Data: 2
Monthly Average: 3.69 µg/m ³	Hours of Calibration: 2
Minimum Daily Average: 0.5 µg/m ³ on Mar 29	Percent Operational Time: 100.0
Minimum Diurnal Average: 2.5 µg/m ³ at hour 19	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.4 Q ₁ = 1.1 Median = 2.4 Q ₃ = 5.3 P ₉₀ = 8.4 P ₉₉ = 16.7	

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	0	1	0	1	2	2	1	2	2	2	1	1	1	1	1	1	1	2	2	2	1	0	0	0	1.2	2.5
2-Mar	0	0	1	0	1	0	1	0	0	1	1	1	0	1	1	1	1	1	2	2	0	4	4	1	1.0	3.7
3-Mar	0	0	2	0	0	1	1	0	1	1	1	2	1	1	1	2	2	2	2	2	5	4	0	1	1.4	4.6
4-Mar	2	1	1	2	1	1	0	2	3	6	4	0	1	1	2	2	3	2	2	1	1	6	4	4	2.2	6.5
5-Mar	6	5	5	6	6	6	8	8	11	17	9	10	8	6	3	3	4	2	2	2	3	3	2	2	5.6	16.5
6-Mar	2	2	1	2	2	0	1	1	5	9	3	1	1	1	1	1	2	2	1	0	1	4	5	6	2.2	9.2
7-Mar	5	6	6	5	6	4	4	7	10	12	10	5	5	7	2	0	0	3	1	3	1	3	6	5	4.9	12.1
8-Mar	6	7	7	5	6	6	4	7	9	11	6	8	5	5	7	8	7	12	6	7	9	7	11	12	7.4	12.3
9-Mar	6	6	7	8	6	5	5	5	8	8	4	4	3	2	2	3	3	2	1	2	1	1	2	1	4.0	8.1
10-Mar	1	2	1	1	1	1	1	0	2	5	5	1	1	1	0	0	2	3	2	2	5	6	7	9	2.4	8.7
11-Mar	6	7	3	2	4	5	6	5	9	6	4	2	4	3	1	2	8	7	5	5	8	8	7	10	5.2	9.8
12-Mar	5	4	3	4	3	5	5	7	21	25	18	13	7	7	10	8	7	8	7	7	10	11	12	10	9.0	24.7
13-Mar	6	4	7	7	7	7	6	14	18	13	16	9	12	4	4	6	4	3	3	6	2	2	2	2	6.9	17.7
14-Mar	5	6	4	10	7	5	10	10	13	16	17	23	12	6	8	8	7	7	8	11	11	10	10	9	9.7	22.7
15-Mar	9	11	11	9	10	10	10	16	21	11	9	9	6	0	2	3	5	6	3	7	4	5	9	11	8.2	21.0
16-Mar	10	4	0	0	0	0	1	1	3	4	5	3	3	11	4	3	5	3	2	1	2	4	4	6	3.3	11.2
17-Mar	6	5	8	4	1	0	1	2	5	5	3	5	3	5	7	5	5	6	5	5	5	6	6	6	4.5	7.9
18-Mar	8	7	7	6	6	6	6	7	9	9	8	5	2	3	3	4	4	3	2	1	2	4	4	4	5.1	9.4
19-Mar	3	4	10	7	7	10	12	5	9	5	4	1	0	2	2	2	2	3	1	2	1	1	1	0	3.8	11.6
20-Mar	0	0	0	0	0	1	1	2	2	2	2	0	1	1	1	1	2	1	0	0	0	0	0	0	0.7	2.2
21-Mar	1	1	0	3	2	1	1	1	2	2	1	1	2	2	3	2	2	2	3	3	3	3	2	3	1.9	3.2
22-Mar	2	2	3	3	2	1	2	2	1	2	C	C	17	11	7	6	5	5	5	5	4	4	3	5	4.5	16.9
23-Mar	4	5	2	0	1	2	2	2	4	2	3	3	3	1	2	2	1	2	2	2	3	1	3	2	2.2	5.0
24-Mar	2	2	2	2	2	2	1	1	1	1	0	1	2	1	0	2	1	1	0	1	1	1	0	2	1.3	2.5
25-Mar	2	2	1	1	1	1	1	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	2	0.7	1.9
26-Mar	2	2	2	2	2	2	1	1	1	2	3	3	2	2	1	1	0	1	1	0	0	0	0	0	1.3	3.0
27-Mar	0	0	0	0	0	0	1	2	4	5	5	4	5	5	4	5	5	3	4	4	3	4	3	3	3.0	5.3
28-Mar	2	3	1	2	2	5	7	7	10	7	10	7	1	1	3	2	2	2	1	2	1	1	2	1	3.4	9.9
29-Mar	1	1	1	0	1	1	0	1	1	1	1	0	0	0	0	0	1	0	0	0	1	1	0	1	0.5	1.0
30-Mar	1	1	1	3	3	3	2	2	2	2	2	1	2	1	2	2	2	3	3	7	4	3	4	4	2.5	6.7
31-Mar	7	10	5	4	3	4	5	8	12	0	3	4	5	6	6	3	2	1	1	3	5	5	4	3	4.5	12.3
	3.6	3.5	3.3	3.2	3.1	3.1	3.5	4.1	6.5	6.2	5.3	4.3	3.7	3.1	2.9	2.9	3.0	3.1	2.5	3.0	3.2	3.7	3.8	3.9	Diurnal Average	
	9.8	10.6	11.0	9.6	9.6	10.3	11.6	16.2	21.0	24.7	17.7	22.7	16.9	11.2	9.6	8.5	7.6	12.3	7.9	10.9	11.4	11.3	11.6	11.6	Diurnal Maximum	

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

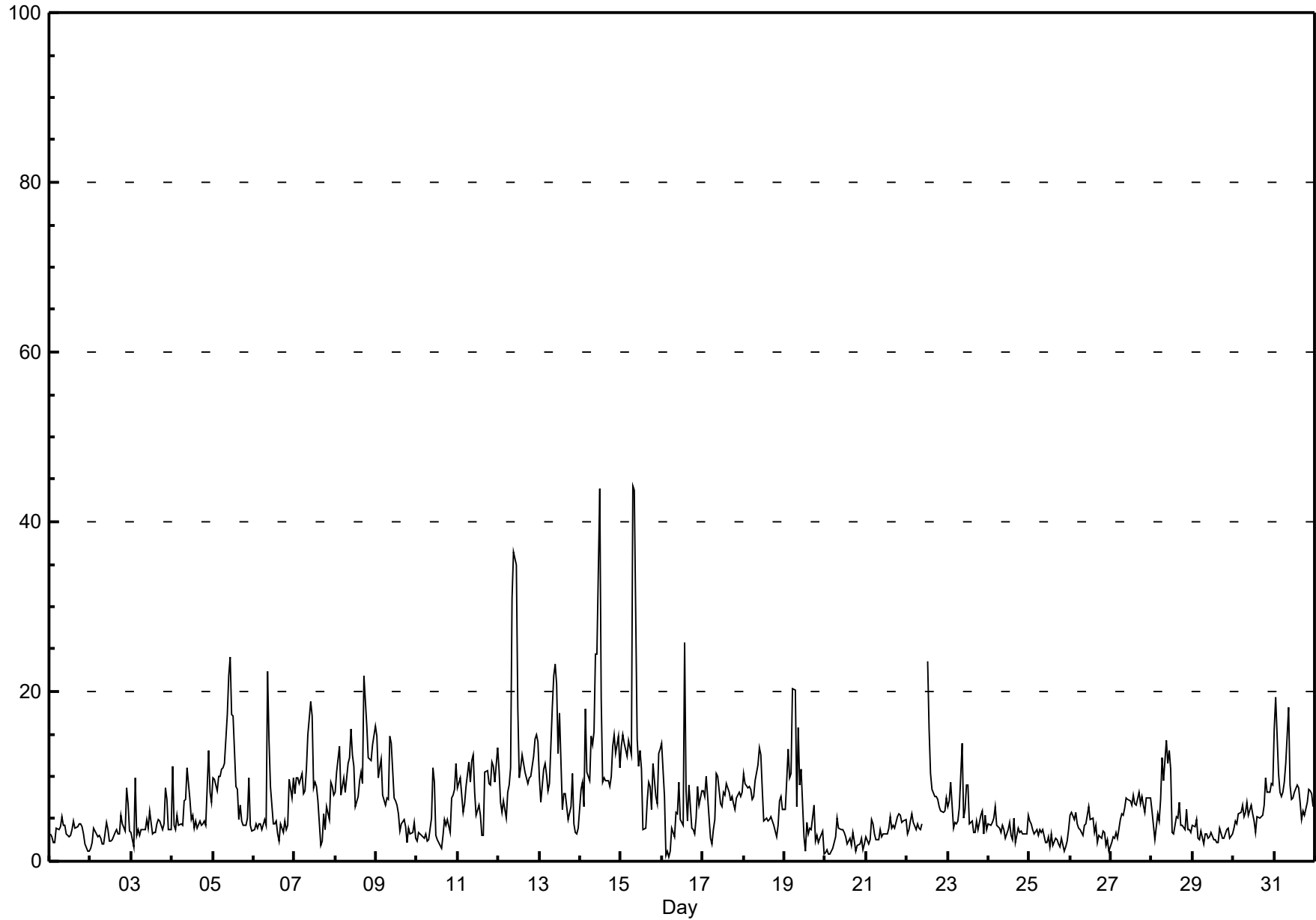


Hourly Maximums

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

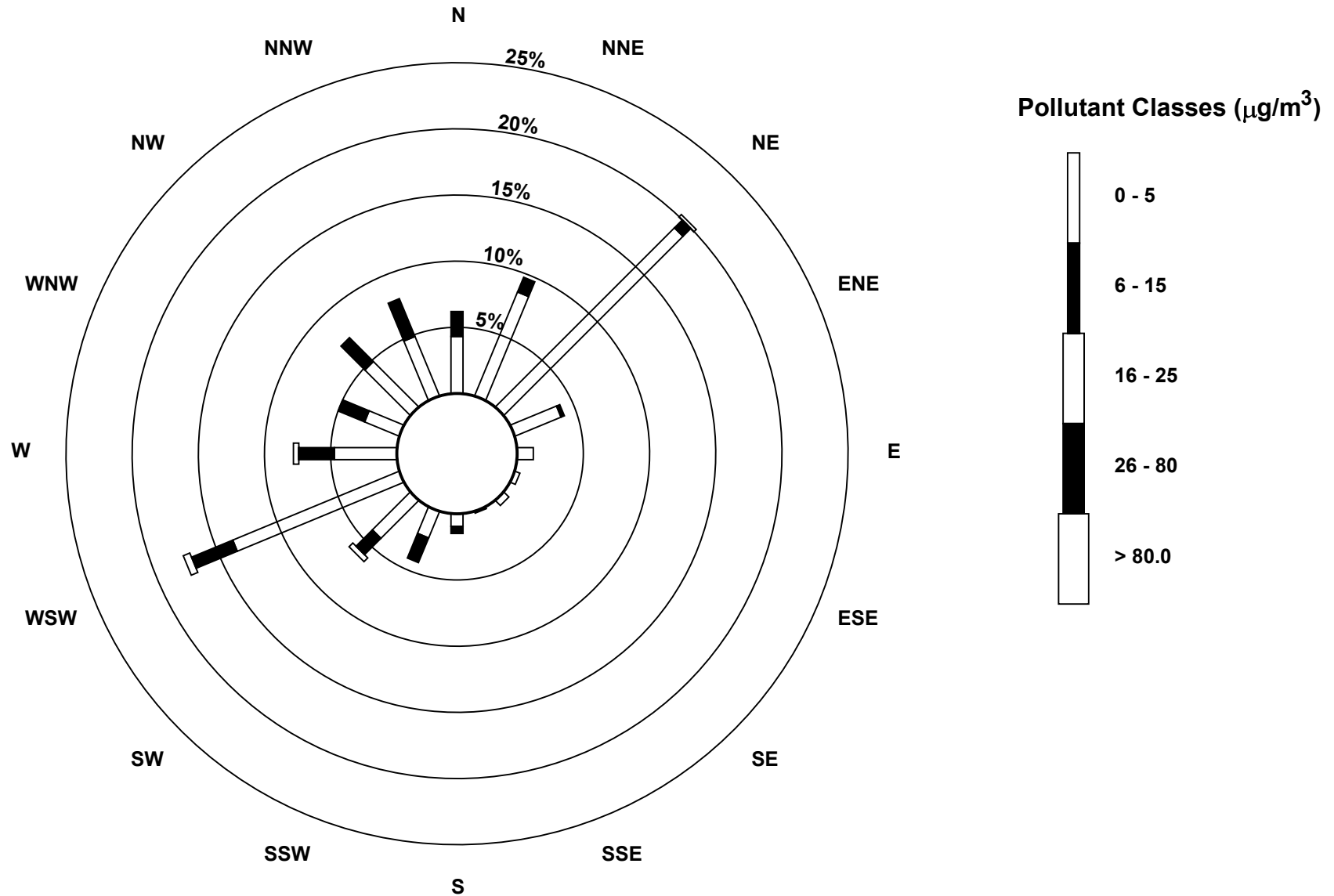
Evergreen Park - March 2018

Maximum Value: 44.3 µg/m ³ on Mar 15 08:00		Maximum Daily Average: 14.2 µg/m ³ on Mar 14		Hours in Service: 744																							
Minimum Value: 1 µg/m ³ on Mar 16 05:00		Minimum Daily Average: 2.4 µg/m ³ on Mar 20		Hours of Data: 742																							
Maximum Diurnal Average: 11.5 µg/m ³ at hour 9		Minimum Diurnal Average: 5.1 µg/m ³ at hour 16		Hours of Missing Data: 2																							
Monthly Average: 6.91 µg/m ³		Percentiles: P ₁ = 1.2 P ₁₀ = 2.7 Q ₁ = 3.7 Median = 5.4 Q ₃ = 9.0 P ₉₀ = 12.5 P ₉₉ = 24.4		Hours of Calibration: 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	3	3	2	2	4	4	4	5	4	4	3	3	3	4	5	4	4	4	4	4	3	2	1	1	3.4	5.3	
2-Mar	2	2	4	3	3	3	3	2	2	5	4	2	2	3	3	4	3	3	5	4	3	9	7	3	3.5	8.7	
3-Mar	3	2	10	3	4	3	4	4	4	5	4	6	3	3	3	4	5	5	4	4	9	7	4	4	4.4	9.8	
4-Mar	11	4	4	5	4	4	4	7	7	11	7	5	5	4	5	4	5	4	4	5	4	13	8	7	6.0	13.0	
5-Mar	10	10	8	10	10	11	11	12	17	22	24	17	17	9	8	5	7	5	4	4	5	10	4	4	10.1	24.0	
6-Mar	4	4	4	4	4	4	5	4	22	14	9	4	4	5	3	2	4	3	5	4	4	10	7	10	6.1	22.3	
7-Mar	8	10	10	9	10	8	8	11	15	19	17	9	9	9	7	2	2	6	4	6	5	9	9	8	8.7	18.8	
8-Mar	8	11	14	8	9	10	8	12	12	16	13	11	6	8	9	11	9	22	16	12	12	12	14	16	11.5	21.8	
9-Mar	15	10	11	12	8	7	7	7	15	14	7	7	7	6	4	4	5	4	2	4	3	3	5	3	7.0	14.7	
10-Mar	2	3	3	3	3	3	2	2	5	11	9	3	3	2	1	3	5	4	5	3	7	8	8	12	4.7	11.5	
11-Mar	9	10	8	6	7	9	12	9	12	13	8	5	7	5	3	3	11	11	9	9	12	11	9	13	8.7	13.5	
12-Mar	11	7	6	7	5	8	9	11	31	36	35	18	10	11	13	11	10	9	10	10	12	14	15	14	13.5	36.4	
13-Mar	10	7	11	12	10	8	9	18	22	23	21	13	17	6	8	8	6	5	6	10	4	3	3	4	10.2	23.2	
14-Mar	8	9	6	18	11	9	15	14	15	24	24	44	19	9	10	10	9	9	10	14	15	13	15	11	14.2	43.9	
15-Mar	14	15	14	12	14	13	12	44	44	14	11	13	11	4	4	7	9	9	6	12	8	7	13	13	13.5	44.3	
16-Mar	14	8	1	1	1	1	4	3	6	6	9	5	4	26	8	5	9	4	4	3	5	9	7	8	6.2	25.7	
17-Mar	8	8	10	8	3	2	4	5	10	10	7	6	8	8	9	8	7	8	7	6	7	8	8	8	7.2	10.3	
18-Mar	10	9	9	9	8	7	8	10	11	13	13	8	5	5	5	5	5	4	3	4	7	8	6	6	7.4	13.3	
19-Mar	6	9	13	10	10	20	20	6	16	9	11	3	1	5	3	4	4	7	2	3	2	3	3	1	7.2	20.3	
20-Mar	1	1	1	1	2	2	3	5	4	4	4	3	3	2	3	2	3	2	1	2	2	3	1	2	2.4	5.2	
21-Mar	3	2	2	5	4	3	2	2	4	3	3	3	3	4	5	4	4	4	5	6	5	5	5	5	3.9	5.7	
22-Mar	3	4	5	6	5	4	4	4	4	4	C	C	24	16	10	8	8	8	7	6	6	6	6	7	7.0	23.5	
23-Mar	6	7	9	4	5	4	5	6	14	5	6	9	9	4	5	3	3	5	4	5	6	3	5	4	5.8	14.0	
24-Mar	4	4	5	5	6	4	4	3	4	4	3	4	5	3	2	5	2	4	3	4	3	3	3	5	3.9	6.4	
25-Mar	5	4	4	3	4	3	4	3	4	2	2	3	2	3	2	3	2	2	2	3	1	2	2	4	2.9	4.7	
26-Mar	5	6	5	6	4	4	4	3	4	4	5	6	5	5	3	4	2	3	3	4	3	2	2	1	4.0	6.4	
27-Mar	2	3	3	3	3	5	6	5	6	7	7	7	7	8	7	7	8	7	8	7	6	7	8	7	6.0	8.2	
28-Mar	6	4	2	6	5	7	12	10	14	12	13	11	3	3	5	5	7	4	4	4	6	4	4	3	6.4	14.2	
29-Mar	4	4	5	3	3	3	2	3	3	3	3	3	3	3	2	2	4	3	3	3	4	4	3	3	3.1	4.9	
30-Mar	4	5	4	6	6	7	5	6	7	5	7	6	5	3	5	5	5	5	7	10	8	8	9	9	6.1	9.8	
31-Mar	16	19	10	8	8	8	9	11	18	9	7	7	8	9	9	7	5	6	5	7	8	8	8	6	9.1	19.3	
		7.0	6.6	6.5	6.4	5.8	6.1	6.8	8.0	11.5	10.7	9.9	8.2	7.0	6.2	5.5	5.1	5.6	5.8	5.3	5.8	6.0	6.9	6.6	6.6	Diurnal Average	
		15.7	19.3	14.0	17.9	14.2	20.3	20.2	44.3	43.8	36.4	34.9	43.9	23.5	25.7	12.6	10.6	10.6	21.8	16.0	13.6	14.9	14.4	14.9	15.9	Diurnal Maximum	
C - Calibration																											



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Evergreen Park - March 2018



Hourly Averages

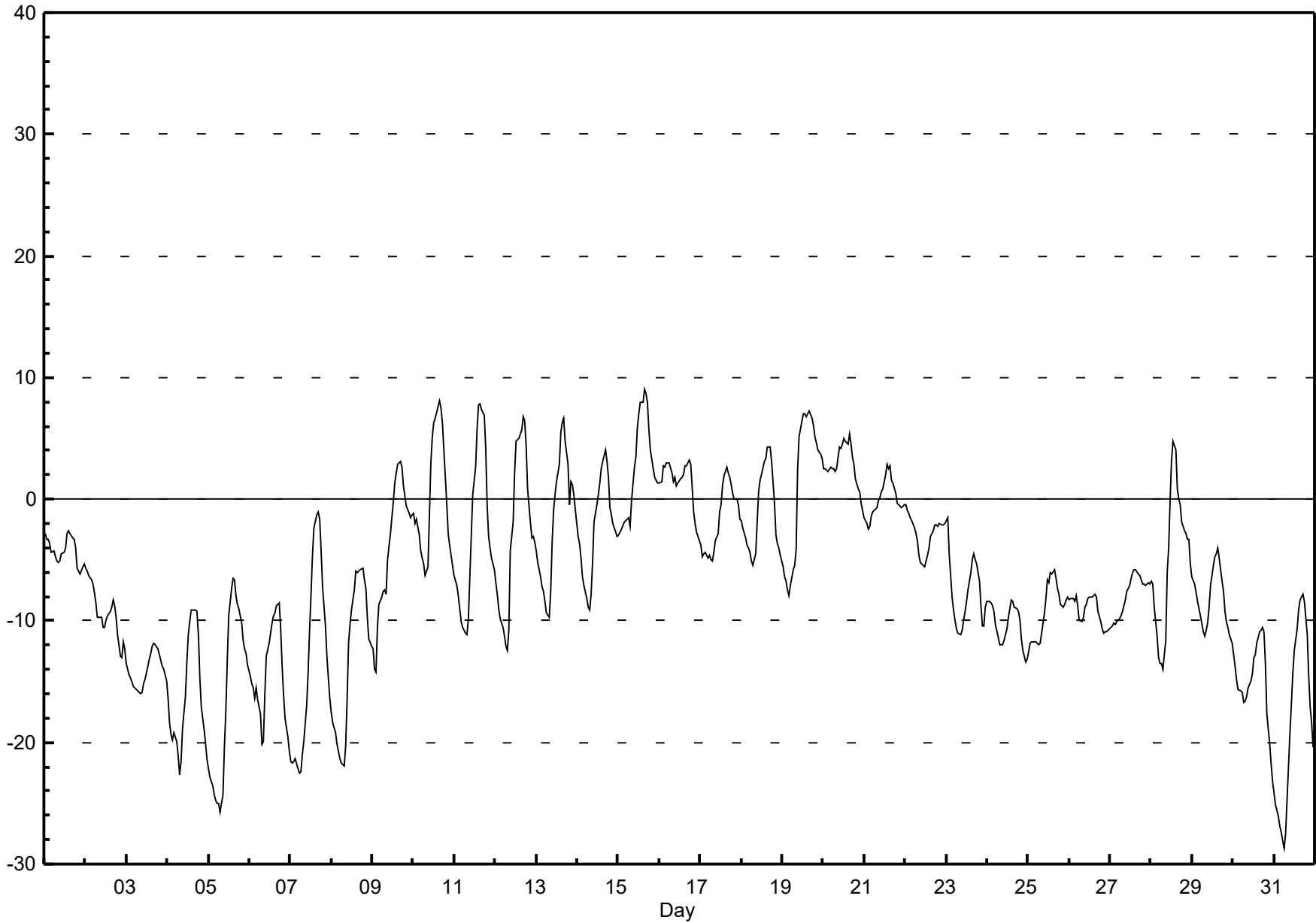
External Temperature (ET) - °C

Evergreen Park - March 2018

Maximum Value: 9.1 °C on Mar 15 16:00		Maximum Daily Average: 2.8 °C on Mar 20		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Minimum Value: -29 °C on Mar 31 07:00 Maximum Diurnal Average: -1.5 °C at hour 16 Monthly Average: -6.52 °C		Minimum Daily Average: -18.0 °C on Mar 31 Minimum Diurnal Average: -11.0 °C at hour 8 Percentiles: P ₁ = -25.1 P ₁₀ = -16.2 Q ₁ = -10.9 Median = -6.6 Q ₃ = -1.0 P ₉₀ = 3.0 P ₉₉ = 7.7																								
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	-3	-3	-3	-4	-4	-4	-5	-5	-5	-5	-5	-4	-4	-3	-3	-3	-3	-3	-4	-6	-6	-6	-6	-5	-4.3	-2.6
2-Mar	-6	-6	-6	-7	-7	-8	-8	-10	-10	-10	-11	-11	-10	-10	-9	-9	-8	-9	-10	-11	-13	-13	-12	-12	-9.3	-5.6
3-Mar	-13	-14	-15	-15	-15	-16	-16	-16	-16	-16	-15	-15	-14	-13	-13	-12	-12	-12	-12	-13	-13	-14	-14	-15	-14.1	-11.9
4-Mar	-16	-18	-19	-20	-19	-20	-21	-23	-22	-19	-16	-13	-11	-10	-9	-9	-9	-9	-11	-15	-17	-19	-20	-21	-16.2	-9.1
5-Mar	-22	-23	-24	-24	-25	-25	-25	-26	-24	-20	-17	-13	-10	-7	-7	-7	-8	-9	-9	-10	-12	-12	-13	-14	-16.1	-6.6
6-Mar	-15	-15	-16	-16	-16	-17	-18	-20	-20	-16	-13	-12	-11	-10	-10	-9	-9	-9	-11	-14	-16	-18	-20	-21	-14.5	-8.5
7-Mar	-22	-22	-22	-21	-22	-23	-22	-21	-20	-17	-14	-11	-8	-5	-2	-1	-1	-2	-4	-7	-10	-13	-15	-16	-13.4	-1.0
8-Mar	-17	-18	-19	-20	-21	-21	-22	-22	-20	-16	-12	-10	-9	-7	-6	-6	-6	-6	-6	-7	-7	-10	-11	-12	-13.0	-5.6
9-Mar	-12	-14	-14	-11	-9	-8	-8	-7	-8	-5	-3	-1	0	1	2	3	3	3	1	0	-1	-1	-2	-1	-3.8	3.1
10-Mar	-1	-2	-2	-3	-4	-5	-5	-6	-6	-1	3	5	6	7	8	8	8	6	4	0	-3	-4	-5	-5	0.1	8.1
11-Mar	-6	-7	-8	-9	-10	-11	-11	-11	-10	-6	-3	0	3	6	8	8	7	7	4	-1	-3	-4	-5	-6	-2.8	7.8
12-Mar	-7	-8	-9	-10	-11	-11	-12	-12	-11	-4	-2	2	5	5	5	6	7	6	4	1	-2	-3	-3	-4	-2.8	6.8
13-Mar	-4	-5	-6	-7	-8	-8	-9	-10	-8	-3	-1	0	1	3	5	6	7	5	3	0	1	1	0	-1	-1.6	6.6
14-Mar	-3	-4	-5	-6	-7	-8	-9	-9	-8	-5	-2	0	0	1	3	3	4	3	2	-1	-1	-2	-3	-3	-2.5	4.0
15-Mar	-3	-3	-2	-2	-2	-2	-2	-2	0	3	4	6	7	8	8	9	9	8	6	4	3	2	2	1	2.5	9.1
16-Mar	1	1	3	3	3	3	3	2	1	2	1	1	2	2	2	3	3	3	3	1	-1	-2	-3	-3	1.4	3.2
17-Mar	-4	-5	-5	-4	-5	-5	-5	-5	-4	-3	-3	-1	0	1	2	3	2	2	1	0	0	0	-1	-2	-1.7	2.6
18-Mar	-2	-2	-3	-4	-4	-4	-5	-5	-4	-2	1	2	2	3	3	4	4	4	3	0	-3	-4	-4	-5	-1.0	4.3
19-Mar	-6	-6	-7	-8	-8	-7	-6	-5	-4	2	5	6	7	7	7	7	7	7	6	5	5	4	4	3	1.1	7.2
20-Mar	3	2	2	2	3	2	3	2	3	4	4	5	5	5	5	5	5	3	3	2	1	1	0	-1	2.8	5.4
21-Mar	-2	-2	-2	-2	-1	-1	-1	-1	0	0	1	1	2	3	2	3	2	1	0	0	0	-1	-1	0	0.0	2.8
22-Mar	-1	-1	-1	-2	-2	-2	-3	-3	-5	-5	-5	-6	-5	-5	-4	-3	-3	-2	-2	-2	-2	-2	-2	-2	-2.9	-0.5
23-Mar	-2	-2	-4	-8	-9	-10	-11	-11	-11	-11	-10	-9	-8	-8	-6	-5	-4	-5	-5	-7	-9	-10	-10	-9	-7.7	-1.5
24-Mar	-8	-8	-9	-9	-9	-10	-11	-12	-12	-12	-12	-11	-10	-9	-8	-8	-9	-9	-9	-10	-11	-12	-13	-13	-10.3	-8.3
25-Mar	-13	-12	-12	-12	-12	-12	-12	-12	-11	-9	-8	-7	-7	-6	-6	-6	-6	-7	-8	-9	-9	-9	-8	-8	-9.1	-5.8
26-Mar	-8	-8	-8	-8	-8	-9	-10	-10	-10	-9	-9	-8	-8	-8	-8	-8	-8	-9	-10	-11	-11	-11	-11	-11	-9.1	-7.8
27-Mar	-11	-10	-10	-10	-10	-10	-10	-9	-9	-8	-8	-7	-7	-6	-6	-6	-6	-6	-7	-7	-7	-7	-7	-7	-7.9	-5.8
28-Mar	-7	-7	-9	-11	-13	-13	-14	-14	-12	-6	-4	0	3	5	4	1	0	0	-2	-3	-3	-3	-3	-5	-4.9	4.7
29-Mar	-6	-7	-8	-8	-9	-10	-11	-11	-11	-10	-9	-7	-5	-5	-5	-4	-5	-7	-8	-9	-10	-11	-11	-12	-8.2	-4.0
30-Mar	-13	-14	-15	-16	-16	-16	-17	-17	-16	-16	-15	-14	-13	-13	-12	-11	-11	-11	-11	-13	-18	-20	-22	-23	-15.0	-10.6
31-Mar	-24	-25	-26	-27	-27	-28	-29	-28	-22	-19	-17	-14	-12	-11	-9	-8	-8	-8	-8	-11	-15	-17	-18	-20	-18.0	-7.8
																								Diurnal Average		
																								Diurnal Maximum		
-8.1 -8.6 -9.2 -9.6 -9.9 -10.2 -10.6 -11.0 -10.1 -7.9 -6.3 -4.7 -3.5 -2.5 -1.9 -1.5 -1.6 -2.0 -3.1 -4.9 -6.3 -7.1 -7.6 -8.2																										
2.6 2.5 2.7 2.6 3.0 3.0 3.0 2.3 2.5 4.3 5.1 6.4 7.0 7.9 8.0 9.1 8.7 8.0 6.1 5.2 4.6 4.1 3.7 3.4																										

Hourly Averages

External Temperature (ET) - °C
Evergreen Park - March 2018



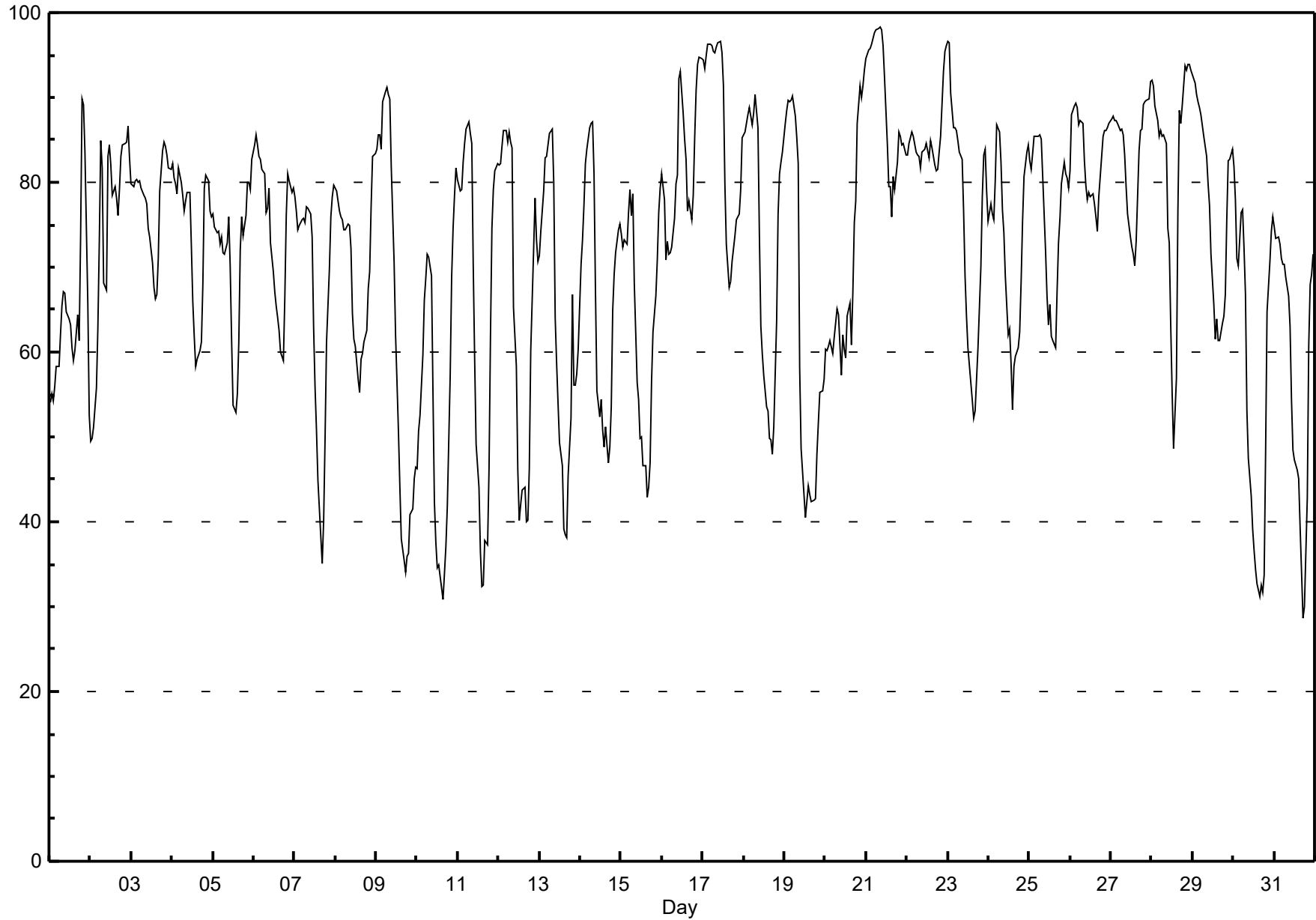
Hourly Averages

Relative Humidity (RH) - % Evergreen Park - March 2018

Maximum Value: 98.3 % on Mar 21 09:00		Maximum Daily Average: 89.3 % on Mar 21		Hours in Service: 744																						
Minimum Value: 29 % on Mar 31 18:00		Minimum Daily Average: 54.1 % on Mar 10		Hours of Data: 744																						
Maximum Diurnal Average: 81.4 % at hour 7		Minimum Diurnal Average: 56.4 % at hour 16		Hours of Missing Data: 0																						
Monthly Average: 71.71 %		Percentiles: P ₁ = 32.5 P ₁₀ = 47.3 Q ₁ = 61.3 Median = 75.8 Q ₃ = 83.7 P ₉₀ = 88.8 P ₉₉ = 96.5		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	54	55	54	56	58	58	62	65	67	67	65	64	63	60	59	60	64	61	74	90	89	84	66	52	64.6	89.9
2-Mar	49	50	51	56	63	73	85	82	68	67	83	84	82	79	80	78	76	79	83	84	85	85	87	83	74.6	86.6
3-Mar	80	80	80	80	80	80	79	79	78	77	75	73	70	68	66	67	71	79	84	85	84	83	82	82	77.6	84.7
4-Mar	82	80	80	79	82	80	78	77	78	79	79	73	66	62	58	59	60	61	68	79	81	80	77	76	73.9	82.1
5-Mar	76	75	74	74	73	74	72	71	73	76	70	61	54	53	55	61	72	76	74	76	80	80	79	83	71.3	82.7
6-Mar	84	86	84	83	83	82	81	76	77	79	73	70	67	65	64	63	60	59	66	76	81	80	79	79	74.9	85.6
7-Mar	78	77	74	75	76	76	75	77	77	76	73	63	56	51	45	38	35	40	50	61	70	76	78	80	65.8	79.7
8-Mar	79	79	77	76	76	74	74	75	75	72	65	62	61	57	55	59	60	61	62	67	70	77	83	83	70.0	83.4
9-Mar	84	86	86	84	89	91	91	90	90	82	71	62	56	51	44	38	35	34	36	36	41	42	45	46	62.9	91.1
10-Mar	46	51	53	60	66	69	72	71	69	55	42	38	35	35	32	31	34	37	42	57	69	75	78	82	54.1	81.6
11-Mar	80	79	79	82	85	86	87	86	85	70	59	49	44	36	32	33	38	37	46	62	75	79	81	82	65.6	87.1
12-Mar	82	82	84	86	86	85	86	85	84	65	58	46	40	42	44	44	40	40	46	60	72	78	73	71	65.8	86.2
13-Mar	71	74	79	83	83	84	86	86	80	64	59	54	49	47	39	38	38	45	52	67	56	56	57	60	62.9	86.3
14-Mar	70	73	77	82	84	86	87	87	81	67	55	52	54	51	49	51	47	49	54	65	69	72	74	75	67.2	87.1
15-Mar	74	72	73	73	76	79	76	79	68	56	54	50	50	47	47	43	44	47	56	62	67	71	76	79	63.4	79.4
16-Mar	81	78	71	73	71	72	72	76	80	81	92	93	88	85	83	77	78	76	78	85	91	94	95	95	81.8	94.7
17-Mar	94	93	95	96	96	96	95	95	96	97	97	95	91	80	73	68	68	71	72	74	76	76	79	85	85.8	96.6
18-Mar	86	86	88	89	88	87	88	90	86	74	63	60	57	54	53	50	50	48	51	64	76	81	82	84	72.2	90.4
19-Mar	87	88	90	90	90	90	88	85	82	58	49	43	41	42	44	43	42	43	48	52	55	55	57	62.7	90.1	
20-Mar	60	60	61	61	60	62	63	65	64	57	62	60	59	64	66	61	67	75	78	87	91	90	91	93	69.1	93.3
21-Mar	95	96	96	96	97	98	98	98	98	98	96	92	84	80	80	76	81	79	82	86	85	84	85	83	89.3	98.3
22-Mar	83	85	85	86	85	84	83	83	82	84	84	85	84	83	85	84	82	81	82	84	85	93	95	96	85.1	96.1
23-Mar	97	96	91	86	86	86	85	84	83	77	69	64	61	58	54	52	53	57	60	70	78	83	84	79	74.8	96.7
24-Mar	75	78	76	76	80	87	86	82	77	74	69	62	63	59	53	58	59	60	62	68	75	81	84	84	72.1	86.8
25-Mar	83	81	83	85	85	85	86	85	81	72	67	63	66	62	61	61	67	73	76	80	82	81	81	79	76.0	85.5
26-Mar	81	88	89	89	89	87	87	87	83	80	78	79	78	79	77	76	74	78	83	85	86	86	86	87	83.1	89.2
27-Mar	88	88	87	87	87	86	86	86	83	80	76	73	72	71	70	73	84	86	86	89	89	90	90	92	83.4	91.9
28-Mar	92	91	89	87	85	86	85	86	85	75	73	63	55	49	57	76	89	87	89	94	93	94	94	93	82.0	93.9
29-Mar	93	92	90	90	89	88	85	84	83	80	77	72	66	62	64	61	61	63	64	67	76	83	83	84	77.3	92.8
30-Mar	82	78	71	70	76	77	72	67	53	47	43	39	37	34	33	31	32	32	34	48	65	71	74	76	55.9	81.9
31-Mar	75	73	74	73	71	70	70	69	67	63	54	48	47	46	45	39	34	29	30	43	61	68	69	72	57.9	74.8
		78.8	79.0	78.8	79.5	80.5	81.2	81.4	80.9	78.5	72.6	68.7	64.3	61.2	58.4	57.0	56.4	58.0	59.5	63.4	71.0	75.8	78.3	78.8	79.1	Diurnal Average
		96.7	96.5	95.7	96.3	97.0	97.7	98.0	98.2	98.3	98.0	96.6	95.2	91.4	85.0	85.0	84.1	88.5	86.9	89.0	93.8	93.2	93.8	95.4	96.1	Diurnal Maximum

Hourly Averages

**Relative Humidity (RH) - %
Evergreen Park - March 2018**



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	18	14	14	13	15	15	15	13	17	18	21	23	23	22	24	22	21	17	14	17	16	11	22	21	17.6	24.4
Dir	53	51	52	54	54	54	52	50	50	46	51	45	46	45	49	48	50	53	63	58	61	63	78	84	54.3	49.4
2 Spd	24	23	20	15	19	16	11	16	15	17	15	18	18	17	15	15	11	5	3	1	2	9	12	11.6	24.1	
Dir	82	84	84	86	93	71	60	44	49	48	45	45	51	47	53	45	41	39	12	19	26	248	307	293	56.2	82.4
3 Spd	16	16	15	13	14	12	13	13	13	15	14	19	19	20	19	15	11	11	7	8	10	8	6	13.3	20.4	
Dir	253	255	258	258	258	267	281	279	284	268	282	256	252	253	252	256	263	251	244	248	272	301	287	239	262.2	253.3
4 Spd	4	2	3	3	5	2	4	3	2	1	8	11	11	10	7	9	7	6	3	2	1	1	1	1	2.9	11.3
Dir	230	220	241	248	242	289	286	254	271	332	240	251	277	279	312	337	13	42	35	27	339	356	18	334	286.9	277.5
5 Spd	1	1	1	1	3	3	1	1	1	9	10	12	11	9	13	12	20	18	15	7	5	9	9	9	6.4	20.3
Dir	268	222	248	206	198	210	355	349	300	260	255	272	269	264	272	313	315	320	310	282	233	247	241	243	278.8	315.0
6 Spd	6	8	7	7	4	3	4	0	0	3	4	11	11	10	10	9	4	2	1	0	0	1	1	1	3.2	10.6
Dir	239	246	250	237	253	266	268	31	57	186	320	340	340	340	346	341	330	2	29	14	19	328	249	292	309.7	340.2
7 Spd	0	0	0	0	0	0	2	2	2	4	7	9	8	6	16	11	10	6	4	2	2	1	1	1	2.5	15.8
Dir	352	237	203	199	303	312	310	279	237	246	240	259	252	223	319	336	318	22	41	30	31	8	8	349	301.4	318.5
8 Spd	0	1	1	1	0	0	0	1	1	1	4	6	9	8	9	10	10	6	1	4	2	1	3	2	2.7	9.8
Dir	285	210	17	211	215	359	60	237	6	222	312	331	337	329	324	327	317	333	316	258	317	272	235	240	316.0	326.7
9 Spd	2	3	3	9	7	8	10	10	8	10	10	13	13	12	23	30	27	27	23	22	18	22	19	24	14.5	29.9
Dir	289	234	254	260	244	231	245	242	245	249	260	246	261	265	254	251	246	245	242	238	241	237	241	229	245.4	251.1
10 Spd	18	8	13	2	2	2	1	2	2	3	11	18	16	16	8	7	9	6	3	1	0	0	0	1	2.9	18.4
Dir	221	209	212	227	78	52	127	82	107	180	223	249	271	321	310	345	12	5	39	47	289	46	62	276	264.4	221.2
11 Spd	3	3	4	2	1	1	3	2	1	6	8	9	11	7	5	6	4	4	4	2	0	1	1	1	2.7	10.6
Dir	315	316	254	229	234	243	326	270	259	245	255	254	250	254	254	332	357	343	38	359	313	334	343	291	278.5	249.8
12 Spd	1	1	1	2	0	0	0	0	2	2	8	3	4	7	9	8	8	6	3	2	1	3	4	4	2.5	8.9
Dir	263	258	238	233	222	322	337	197	218	261	259	257	294	334	335	345	12	352	34	332	279	313	326	322	317.7	334.9
13 Spd	3	1	1	2	1	1	1	1	2	1	5	5	10	10	9	10	11	10	4	6	11	10	9	4	3.5	11.2
Dir	275	275	286	249	218	16	185	209	38	29	243	270	334	343	27	35	39	39	27	25	47	50	55	50	21.1	39.4
14 Spd	1	4	0	3	2	0	3	1	2	5	6	8	9	9	10	8	7	9	6	3	4	3	2	3	2.8	10.2
Dir	237	238	359	217	232	239	201	265	285	234	247	255	334	332	344	358	8	18	9	317	302	291	269	288	313.1	343.7
15 Spd	2	5	5	1	1	3	1	4	4	4	7	8	10	13	6	8	6	1	3	0	1	1	2	1	3.0	12.7
Dir	277	245	209	242	208	236	264	244	227	200	197	245	237	318	270	234	237	340	39	226	33	14	239	252	247.9	317.8
16 Spd	6	5	7	6	6	6	8	1	1	4	10	13	16	15	12	12	11	7	6	4	3	3	2	0	6.0	16.4
Dir	217	239	265	251	305	285	299	137	253	192	266	262	256	250	243	256	252	248	242	189	189	192	46	194	252.9	256.5
17 Spd	2	0	1	3	3	5	6	3	2	4	4	1	4	7	9	8	8	8	9	3	1	1	1	2	2.3	9.2
Dir	180	351	284	272	258	244	301	290	278	232	254	267	331	3	335	356	19	29	37	38	25	277	20	1	337.2	334.6
18 Spd	1	1	2	2	2	2	1	1	2	3	3	9	9	9	11	9	5	5	2	1	0	0	1	1	3.1	11.3
Dir	315	332	308	295	279	279	307	293	323	237	296	341	352	348	342	9	15	5	38	43	24	204	88	30	346.6	342.4
19 Spd	0	1	0	1	0	1	0	1	3	14	23	27	33	30	27	25	24	24	23	19	23	21	14	17	14.3	32.6
Dir	0	280	229	199	153	27	76	59	188	238	235	235	241	248	248	250	248	245	242	242	246	244	223	227	241.4	240.9
20 Spd	16	16	12	13	16	13	14	6	1	8	18	17	13	11	6	4	8	9	7	5	5	3	2	0	5.1	18.1
Dir	216	223	228	234	231	234	238	257	355	257	262	256	259	341	356	337	7	30	30	40	79	72	25	284	257.0	261.8
21 Spd	0	1	1	1	4	3	3	5	11	9	8	12	14	18	21	23	23	21	21	19	19	18	17	17	11.9	23.0
Dir	21	133	63	221	63	55	58	42	52	59	51	51	53	43	37	39	46	46	48	51	51	53	55	59	49.1	38.8
22 Spd	16	18	18	23	21	21	21	22	23	23	27	27	26	25	23	22	22	20	21	20	19	16	17	17	21.1	27.5
Dir	51	52	52	50	49	49	51	47	48	46	44	45	46	47	45	48	46	48	52	50	56	55	53	56	48.9	44.6

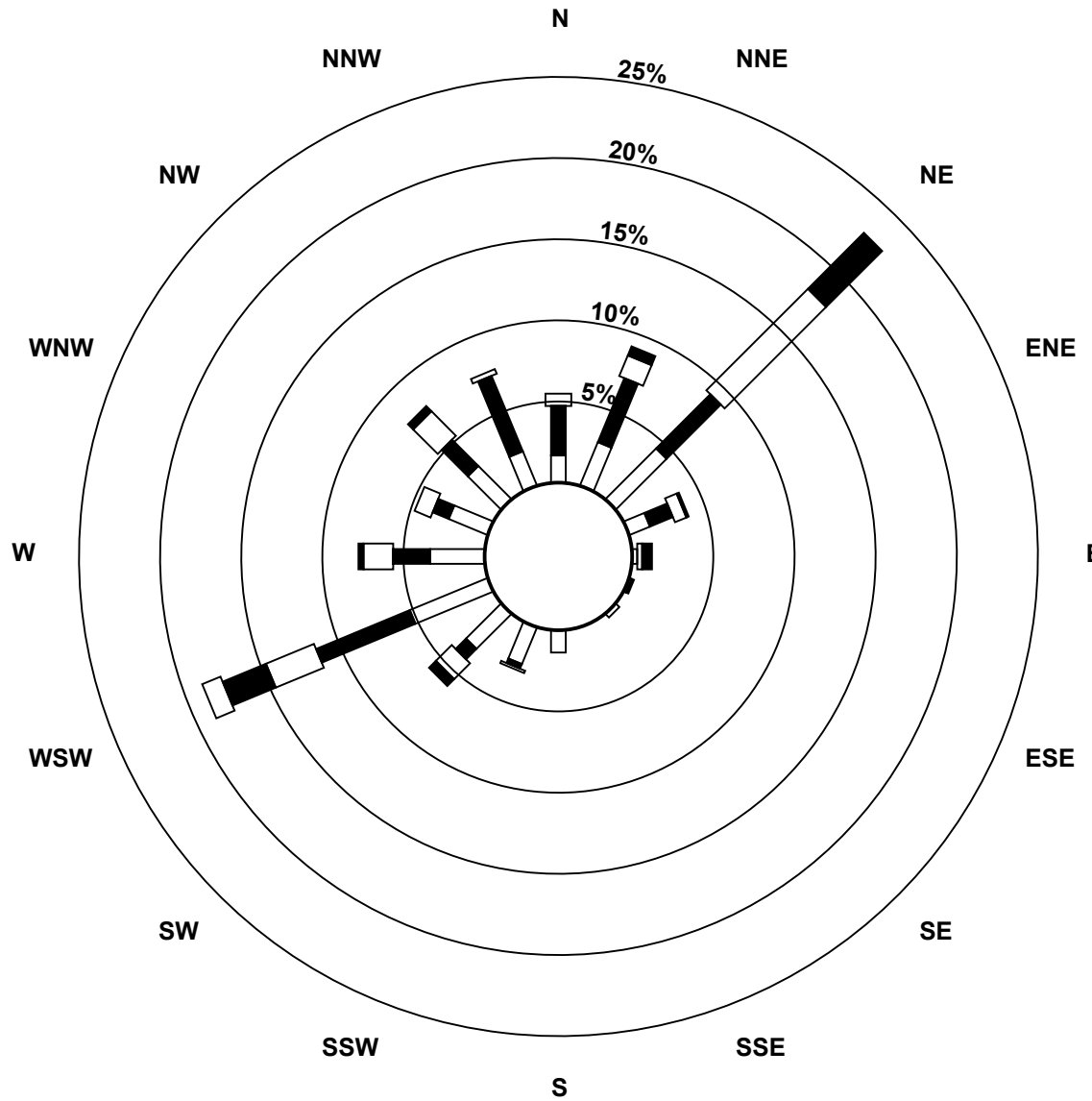
Hourly Averages

**Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2018**

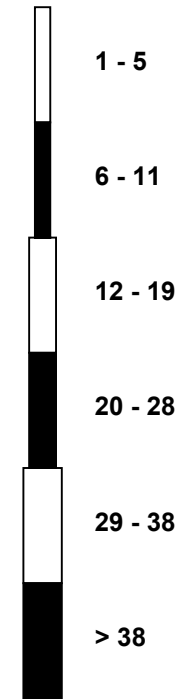
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	13	10	27	31	36	35	35	34	28	28	28	23	25	22	15	10	10	13	10	4	3	3	2	2	15.1	35.7
Dir	54	51	236	246	247	246	251	256	258	255	252	260	264	256	247	242	318	314	308	345	47	50	36	47	258.4	247.0
24 Spd	0	3	3	4	7	10	8	9	19	20	17	10	8	10	7	10	9	6	10	9	8	9	7	8	6.5	19.5
Dir	51	59	61	46	35	29	25	332	325	324	323	330	271	252	307	8	10	31	35	40	43	36	32	25	356.6	324.0
25 Spd	6	4	4	5	6	5	5	5	6	5	6	7	12	17	20	19	17	15	9	6	4	4	5	5	7.8	20.0
Dir	33	44	24	17	15	16	22	33	37	71	122	352	27	36	30	38	42	43	51	56	43	43	23	4	35.5	30.1
26 Spd	4	3	5	5	4	9	7	5	4	5	16	12	12	10	11	10	10	10	7	9	8	8	7	7	5.9	16.0
Dir	340	342	213	321	347	29	21	10	345	358	322	355	32	33	16	34	66	60	51	54	68	77	78	70	27.7	322.4
27 Spd	12	8	4	5	3	2	1	2	7	9	14	19	24	17	15	14	12	8	8	5	4	5	2	7	5.8	24.4
Dir	46	56	49	42	44	146	108	26	18	5	334	317	315	311	303	315	308	270	290	289	258	230	221	222	321.6	314.9
28 Spd	2	1	2	0	0	1	4	3	3	1	6	8	15	16	9	8	11	9	11	5	7	6	5	14	3.8	16.4
Dir	209	180	191	188	7	264	324	328	336	281	356	322	293	301	352	41	32	54	51	76	50	66	48	38	7.8	300.8
29 Spd	13	12	12	12	13	10	10	9	10	13	13	15	16	16	17	18	19	18	20	19	18	19	20	21	15.1	20.6
Dir	41	43	36	39	41	42	35	50	45	47	52	47	48	45	50	42	39	26	37	38	39	41	41	38	41.2	38.4
30 Spd	24	22	20	17	12	13	17	10	12	13	15	14	12	12	10	7	8	6	5	2	2	0	1	1	9.2	23.8
Dir	33	32	28	23	16	13	17	7	11	2	6	355	22	340	314	331	322	314	287	248	195	195	252	202	7.3	33.5
31 Spd	1	0	1	3	1	1	1	1	2	8	9	7	10	10	11	12	11	11	7	4	4	2	2	2	3.0	12.2
Dir	205	2	186	205	199	204	202	340	235	259	242	304	333	343	3	11	10	23	23	347	325	309	262	247	334.8	11.3
Spd	1.6	1.3	0.5	1.1	1.0	1.4	2.4	2.2	2.8	2.5	4.7	6.0	6.6	7.1	6.9	6.7	6.8	5.5	4.0	2.5	2.2	1.5	1.8	1.3	Diurnal Average	
Dir	40.7	38.7	290.6	300.3	322.6	339.0	330.3	336.9	352.9	310.0	293.7	301.8	311.1	325.6	333.7	348.1	356.9	4.8	12.3	20.2	28.8	19.3	28.0	19.0	Diurnal Maximum	
Spd	24.1	23.3	27.1	31.4	35.7	34.8	35.4	34.3	28.0	28.2	28.3	27.5	32.6	30.4	27.2	29.9	26.6	26.8	23.2	22.0	23.4	21.5	22.2	24.0	Diurnal Maximum	
Dir	82.4	84.0	236.2	245.7	247.0	246.3	250.9	255.7	257.6	255.4	251.9	44.6	240.9	247.8	248.0	251.1	245.6	244.7	241.7	237.6	246.2	237.0	77.8	228.9		
Maximum Speed Value: 36 km/h on Mar 23 05:00																		Minimum Speed Value: 0 km/h on Mar 18 23:00						Hours in Service: 744		
Maximum Daily Speed Average: 21.1 km/h on Mar 22																		Minimum Daily Speed Average: 2.3 km/h on Mar 8						Hours of Data: 744		
Maximum Diurnal Speed Average: 7.1 km/h at hour 14																		Minimum Diurnal Speed Average: 0.5 km/h at hour 3						Hours of Missing Data: 0		
Monthly Average Velocity: 2.93 km/h 340.68 deg																		Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.8 Q ₁ = 2.5 Median = 7.3 Q ₃ = 12.9 P ₉₀ = 19.8 P ₉₉ = 29.2						Percent Operational Time: 100.0		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	42	48	13	0	0	0	103																			
NorthEast	55	52	66	41	0	0	214																			
East	8	6	2	6	0	0	22																			
SouthEast	5	1	0	0	0	0	6																			
South	25	1	0	0	0	0	26																			
SouthWest	57	34	17	14	4	0	126																			
West	62	38	30	11	6	0	147																			
NorthWest	41	36	20	3	0	0	100																			
Total	295	216	148	75	10	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - March 2018



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - March 2018

Maximum Speed: 36 km/h on Mar 23 05:00	Maximum Daily Speed Average: 21.6 km/h on Mar 22	Hours in Service: 744
Minimum Speed: 0 km/h on Mar 18 23:00	Minimum Daily Speed Average: 3.8 km/h on Mar 8	Hours of Data: 744
Maximum Diurnal Speed Average: 14.7 km/h at hour 13	Minimum Diurnal Speed Average: 6.5 km/h at hour 22	Hours of Missing Data: 0
Monthly Average Speed: 9.36 km/h	Percentiles: P ₁ = 0.4 P ₁₀ = 1.4 Q ₁ = 2.9 Median = 8.0 Q ₃ = 13.7 P ₉₀ = 20.2 P ₉₉ = 29.9	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	18	15	14	13	16	16	15	14	17	19	21	24	24	23	25	23	22	17	15	17	16	12	23	22	18.4	24.9
2-Mar	25	24	21	16	20	16	11	16	15	18	16	18	18	18	16	15	15	12	5	3	1	2	9	13	14.4	24.9
3-Mar	16	16	15	14	14	12	13	13	13	16	15	19	20	21	20	19	15	12	11	8	8	10	9	6	14.0	20.7
4-Mar	4	3	3	3	5	3	4	3	3	3	9	11	13	12	9	10	7	7	3	2	1	1	1	1	5.0	12.5
5-Mar	1	1	2	1	3	3	2	1	2	9	10	13	11	9	15	14	21	19	16	8	5	10	9	9	8.1	20.7
6-Mar	6	8	7	7	4	3	5	1	2	3	7	11	11	11	10	10	10	5	2	1	1	0	2	2	5.4	11.1
7-Mar	1	1	0	1	1	1	2	2	2	4	7	10	8	7	16	13	10	7	4	2	2	1	1	1	4.5	16.1
8-Mar	0	1	1	1	1	1	1	2	2	1	4	6	9	8	9	10	10	7	3	4	2	1	3	3	3.8	10.4
9-Mar	4	5	4	9	7	8	10	10	8	11	11	13	13	13	23	30	27	27	23	22	18	22	19	24	15.1	30.3
10-Mar	19	9	13	3	2	3	2	5	2	4	12	18	18	16	10	8	10	6	4	2	1	1	0	1	7.0	18.7
11-Mar	3	4	4	2	1	1	4	4	2	7	8	9	11	8	5	7	5	4	4	2	1	1	1	2	4.1	10.9
12-Mar	2	3	2	2	1	0	1	1	2	2	8	4	6	8	9	9	8	6	3	2	2	3	4	4	3.9	9.1
13-Mar	3	2	1	3	1	1	3	1	2	1	5	8	11	11	10	11	12	10	4	7	11	10	9	5	5.9	11.5
14-Mar	2	4	1	4	2	2	3	2	3	5	6	10	10	9	11	9	8	10	6	3	4	3	3	3	5.2	10.9
15-Mar	3	5	5	2	3	3	2	4	4	5	7	9	11	13	8	8	7	6	4	1	2	1	3	2	4.9	13.1
16-Mar	6	6	7	6	7	8	8	1	2	6	11	13	17	16	12	13	11	8	6	4	3	3	3	1	7.4	16.7
17-Mar	3	1	2	4	4	5	7	4	3	5	4	2	4	7	10	9	9	8	9	3	1	1	1	2	4.4	9.7
18-Mar	1	2	2	2	3	2	1	2	3	3	4	9	10	10	12	10	9	6	5	2	1	0	0	1	4.2	12.0
19-Mar	0	1	0	1	0	1	1	2	3	15	23	28	33	31	27	25	25	24	23	19	24	21	14	17	14.9	33.0
20-Mar	16	16	12	13	16	13	14	6	2	9	19	18	15	12	7	5	9	9	7	5	5	3	2	1	9.8	18.7
21-Mar	2	2	2	2	4	3	4	5	11	10	8	13	15	18	22	23	23	22	22	20	20	18	18	18	12.6	23.4
22-Mar	17	18	19	24	22	22	21	23	23	24	28	28	26	26	23	23	22	20	21	21	19	16	17	17	21.6	28.0
23-Mar	14	11	29	32	36	35	36	35	28	29	29	24	25	22	16	11	12	14	11	5	3	3	2	2	19.3	36.0
24-Mar	1	3	3	4	7	11	8	11	19	20	18	12	10	11	9	12	10	8	10	9	8	9	7	8	9.5	20.0
25-Mar	6	5	4	5	6	5	5	6	7	6	8	10	13	18	21	19	17	15	10	6	4	5	5	6	8.9	20.5
26-Mar	5	5	6	5	4	9	8	5	5	6	16	13	13	10	12	11	11	10	7	9	8	8	7	8	8.5	16.3
27-Mar	12	9	5	5	3	3	3	3	7	10	15	20	25	18	16	15	13	9	9	6	4	6	3	9	9.4	25.1
28-Mar	3	2	2	1	1	2	5	4	3	2	6	9	16	17	12	9	12	10	11	6	8	7	6	15	7.0	17.4
29-Mar	14	13	13	12	13	11	11	9	10	14	13	16	17	17	18	19	20	18	21	20	19	20	21	21	15.8	21.0
30-Mar	24	22	21	17	13	14	17	11	13	14	16	15	13	13	12	9	10	7	7	2	2	0	1	1	11.4	24.2
31-Mar	2	1	1	4	1	1	1	1	2	9	10	9	11	11	12	13	12	11	7	4	4	2	2	3	5.5	13.1
	7.6	7.0	7.2	7.1	7.2	7.0	7.3	6.7	7.1	9.3	12.1	13.6	14.7	14.3	14.1	13.6	13.2	11.4	9.5	7.3	6.7	6.5	6.7	7.5	Diurnal Average	
	24.9	24.1	29.3	31.7	36.0	35.2	35.8	35.0	28.4	28.6	28.7	28.0	33.0	30.6	27.4	30.3	26.8	27.0	23.3	22.2	23.5	21.7	22.8	24.1	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - March 2018

Maximum Value: 97.5 deg on Mar 6 22:00																						Hours in Service:	744		
Minimum Value: 5.3 deg on Mar 20 01:00																						Hours of Data:	744		
Percentiles: P ₁ = 6.4 P ₁₀ = 11.3 Q ₁ = 15.3 Median = 22.7 Q ₃ = 44.9 P ₉₀ = 71.7 P ₉₉ = 93.7																						Hours of Missing Data:	0		
																						Hours of Calibration:	0		
																						Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	11	12	14	17	15	14	16	16	19	17	16	12	11	14	12	12	11	14	20	11	14	17	14	15	20.3
2-Mar	14	15	17	20	17	16	16	11	15	13	20	16	18	16	17	19	18	18	16	23	30	56	19	26	55.5
3-Mar	12	10	10	10	11	14	17	17	16	16	24	13	9	10	10	11	12	16	9	8	18	14	21	18	23.6
4-Mar	21	44	14	14	12	42	23	21	50	89	27	17	26	32	46	24	20	21	20	28	74	37	58	71	88.6
5-Mar	75	35	95	55	30	43	65	61	54	20	16	13	15	20	30	26	13	15	17	30	11	11	9	15	94.5
6-Mar	20	11	12	13	15	37	30	90	84	46	82	18	17	22	21	20	20	25	26	71	61	98	81	94	97.5
7-Mar	88	94	92	87	85	91	43	53	45	34	23	23	18	31	13	32	24	36	14	42	54	46	56	83	94.0
8-Mar	83	67	39	66	90	80	87	79	75	76	28	20	16	26	25	26	18	42	67	33	20	70	29	81	89.9
9-Mar	94	61	48	18	18	10	10	7	13	16	18	12	17	34	11	9	7	7	6	8	7	8	6	6	93.8
10-Mar	9	47	10	86	62	43	66	66	60	67	28	10	24	17	41	32	24	24	35	57	72	94	94	35	94.4
11-Mar	37	34	46	59	76	54	44	55	63	21	15	19	12	20	20	26	23	26	13	22	57	68	45	53	76.2
12-Mar	46	65	69	33	79	63	82	71	21	47	20	42	46	18	14	24	22	21	22	33	68	31	17	36	82.4
13-Mar	32	52	55	66	56	51	76	66	42	38	30	51	16	25	24	20	14	11	18	34	8	10	9	29	75.8
14-Mar	70	46	85	76	71	80	54	63	43	12	17	38	19	19	21	24	30	24	23	34	21	23	44	39	85.0
15-Mar	42	32	27	73	85	37	60	51	71	69	12	18	22	17	38	14	10	76	64	78	80	53	27	85	85.4
16-Mar	16	23	14	15	24	48	16	79	80	55	16	17	12	12	13	12	21	19	16	17	28	35	67	94	94.2
17-Mar	74	73	83	36	32	17	30	50	53	19	40	78	40	35	19	27	29	21	17	16	40	52	41	33	82.6
18-Mar	48	29	19	26	38	32	51	70	55	41	44	27	32	25	20	26	29	31	17	16	59	75	78	62	77.7
19-Mar	81	77	76	73	95	51	63	77	24	26	9	7	9	7	8	8	7	9	7	6	7	6	9	7	95.0
20-Mar	5	7	7	15	6	6	7	33	61	37	16	22	33	25	28	53	24	21	14	15	15	34	48	89	88.6
21-Mar	88	85	60	93	28	50	38	21	20	28	22	21	20	15	13	12	13	13	13	13	13	12	14	15	93.0
22-Mar	14	12	14	11	11	14	13	13	13	12	12	12	11	13	12	14	12	13	13	14	11	14	12	11	14.2
23-Mar	17	17	45	8	7	8	8	11	10	10	10	14	13	14	16	23	39	21	22	41	20	19	46	71	70.5
24-Mar	72	28	29	43	30	13	13	32	10	13	17	36	51	25	50	31	27	37	17	13	9	11	11	10	71.7
25-Mar	18	23	17	26	16	17	16	22	39	54	59	54	26	20	15	15	15	24	20	19	24	19	16	27	59.4
26-Mar	78	71	52	45	38	18	21	25	29	30	17	27	20	26	28	37	23	25	20	21	21	18	18	22	78.0
27-Mar	15	25	30	46	37	63	87	60	19	25	27	19	15	20	21	21	22	26	32	29	27	48	65	46	86.6
28-Mar	47	74	64	89	81	82	34	23	21	73	19	39	19	20	39	35	17	21	20	37	50	33	34	14	89.4
29-Mar	17	19	22	19	18	23	21	24	23	22	22	23	17	28	19	18	15	11	12	11	13	12	14	12	27.8
30-Mar	10	11	13	12	15	13	9	19	15	21	16	23	29	37	35	45	40	47	39	87	45	67	70	31	86.6
31-Mar	78	79	58	15	49	91	73	67	52	19	13	40	21	22	22	21	21	15	11	20	15	41	25	26	91.2
	93.8	94.0	94.5	93.0	95.0	91.2	86.6	90.1	84.2	88.6	82.4	78.0	50.9	36.8	49.7	53.2	40.2	76.3	66.8	86.6	79.8	97.5	93.8	94.2	

PAZA

Smoky Heights Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Smoky Heights - March 2018

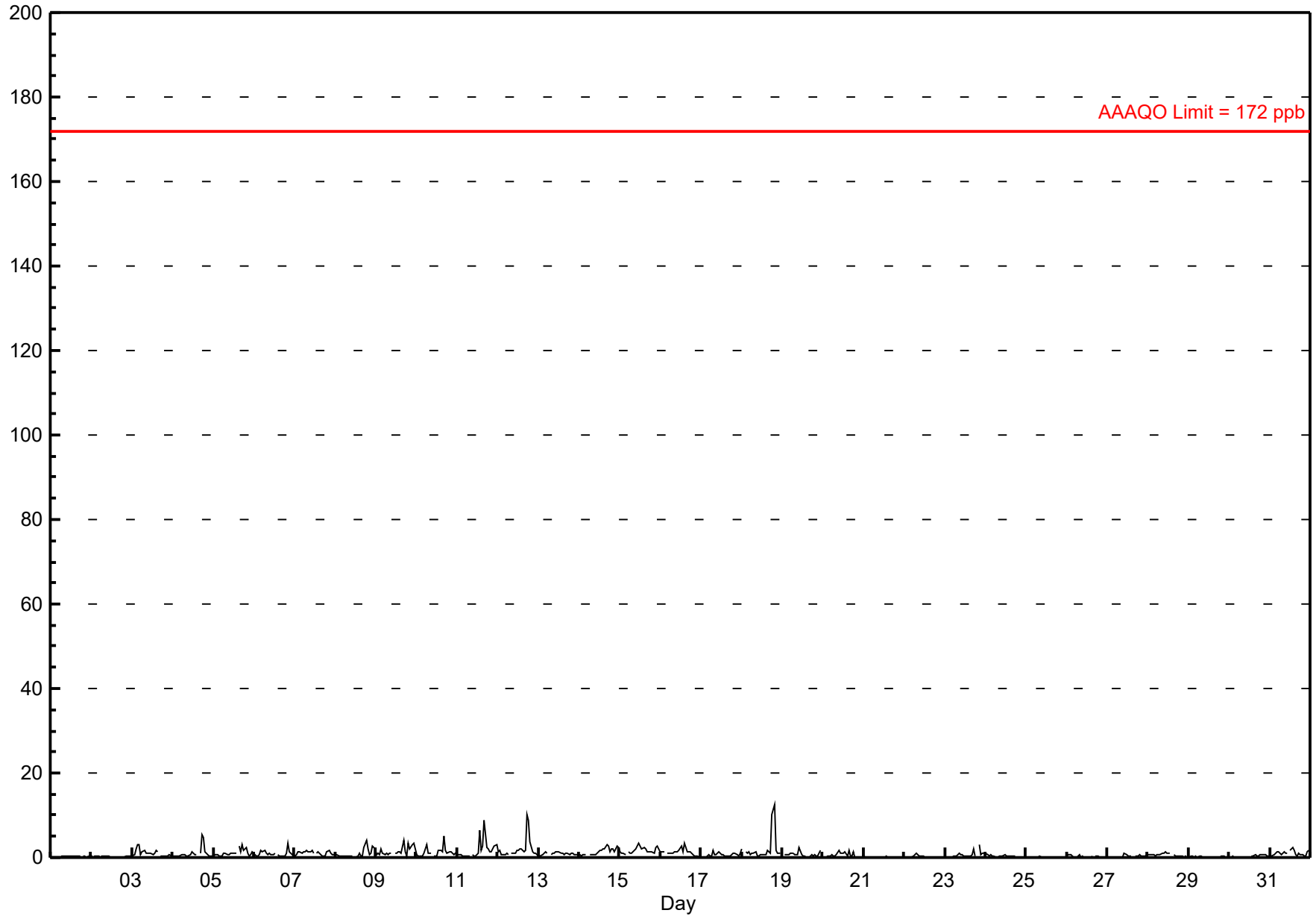
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 12.6 ppb on Mar 18 20:00	Maximum Daily Average: 2.0 ppb on Mar 12
Minimum Value: 0 ppb on Mar 21 23:00	Hours of Data: 709
Maximum Diurnal Average: 1.5 ppb at hour 19	Hours of Missing Data: 35
Monthly Average: 0.85 ppb	Hours of Calibration: 35
Minimum Daily Average: 0.1 ppb on Mar 21	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.5 ppb at hour 2	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.6 Q ₃ = 1.1 P ₉₀ = 1.7 P ₉₉ = 5.1	

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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.5	
2-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0.2	0.5	
3-Mar	0	1	2	3	3	1	1	2	1	1	1	1	1	2	2	A	0	0	0	0	0	0	1	0	1.1	3.0	
4-Mar	0	0	0	0	0	1	1	1	0	0	1	1	1	1	1	A	1	5	5	1	1	0	0	0	1.1	5.4	
5-Mar	0	1	1	0	0	0	1	1	1	1	1	1	1	1	A	3	1	3	2	2	1	0	1	1	1.0	2.9	
6-Mar	1	0	0	1	2	1	2	1	1	1	1	1	1	A	1	0	0	0	0	1	3	1	1	1	0.9	3.3	
7-Mar	0	1	1	1	1	1	1	2	1	1	2	1	A	1	1	1	0	0	0	1	2	1	1	1	1.1	1.9	
8-Mar	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	2	4	2	1	1	3	2	0.9	3.9
9-Mar	1	1	1	2	1	1	1	1	1	1	1	A	1	1	2	1	1	4	1	0	3	2	3	3	2	1.6	4.0
10-Mar	1	0	0	0	1	2	3	1	1	A	0	0	0	2	2	1	5	2	1	1	1	1	1	1	1.2	5.2	
11-Mar	1	1	1	0	0	0	0	0	A	1	0	0	1	6	2	3	9	2	2	1	1	2	3	3	1.8	8.7	
12-Mar	2	2	1	1	1	1	1	A	1	1	1	2	2	2	2	1	2	10	9	4	1	1	1	1	2.0	10.2	
13-Mar	0	0	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	
14-Mar	1	0	1	1	1	A	1	1	1	1	1	1	2	2	2	3	3	1	2	2	1	3	2	2	1.4	3.1	
15-Mar	1	1	1	1	A	1	1	1	1	1	2	3	3	3	2	2	2	1	1	1	1	2	3	2	1.7	3.3	
16-Mar	1	1	1	A	1	1	1	1	1	1	1	2	3	1	3	2	1	1	1	1	0	0	0	0	1.3	3.4	
17-Mar	0	0	A	0	1	0	0	2	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	0.7	1.8	
18-Mar	2	A	1	1	1	1	1	1	1	1	0	1	1	1	1	2	1	1	10	13	2	1	1	1	1.9	12.6	
19-Mar	A	1	1	1	1	1	1	1	1	1	2	1	0	0	0	0	0	1	0	1	0	0	2	A	0.7	2.3	
20-Mar	0	0	0	0	0	1	0	0	1	2	1	1	1	0	2	0	0	1	0	0	0	A	0	0	0.6	1.7	
21-Mar	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.3	
22-Mar	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.9	
23-Mar	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	2	0	A	3	1	1	1	0.6	3.0	
24-Mar	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0.3	1.0	
25-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	
26-Mar	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.7	
27-Mar	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	A	0	0	0	1	0	0	0	1	0.3	0.9	
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0.6	1.4	
29-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	0.2	0.2	
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	1	1	1	1	0	0	0.3	0.8	
31-Mar	0	0	1	1	1	1	1	1	1	1	1	A	2	2	2	1	0	1	1	1	0	0	1	2	1.0	2.3	
	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	1.0	0.9	0.9	1.2	1.4	1.5	1.4	0.9	0.7	0.9	0.8	Diurnal Average		
	2.0	1.6	2.1	3.0	3.0	2.0	2.9	1.8	1.5	1.9	2.6	3.3	2.9	6.4	3.4	2.9	8.7	10.2	10.1	12.6	3.3	3.1	3.5	3.2	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 2018



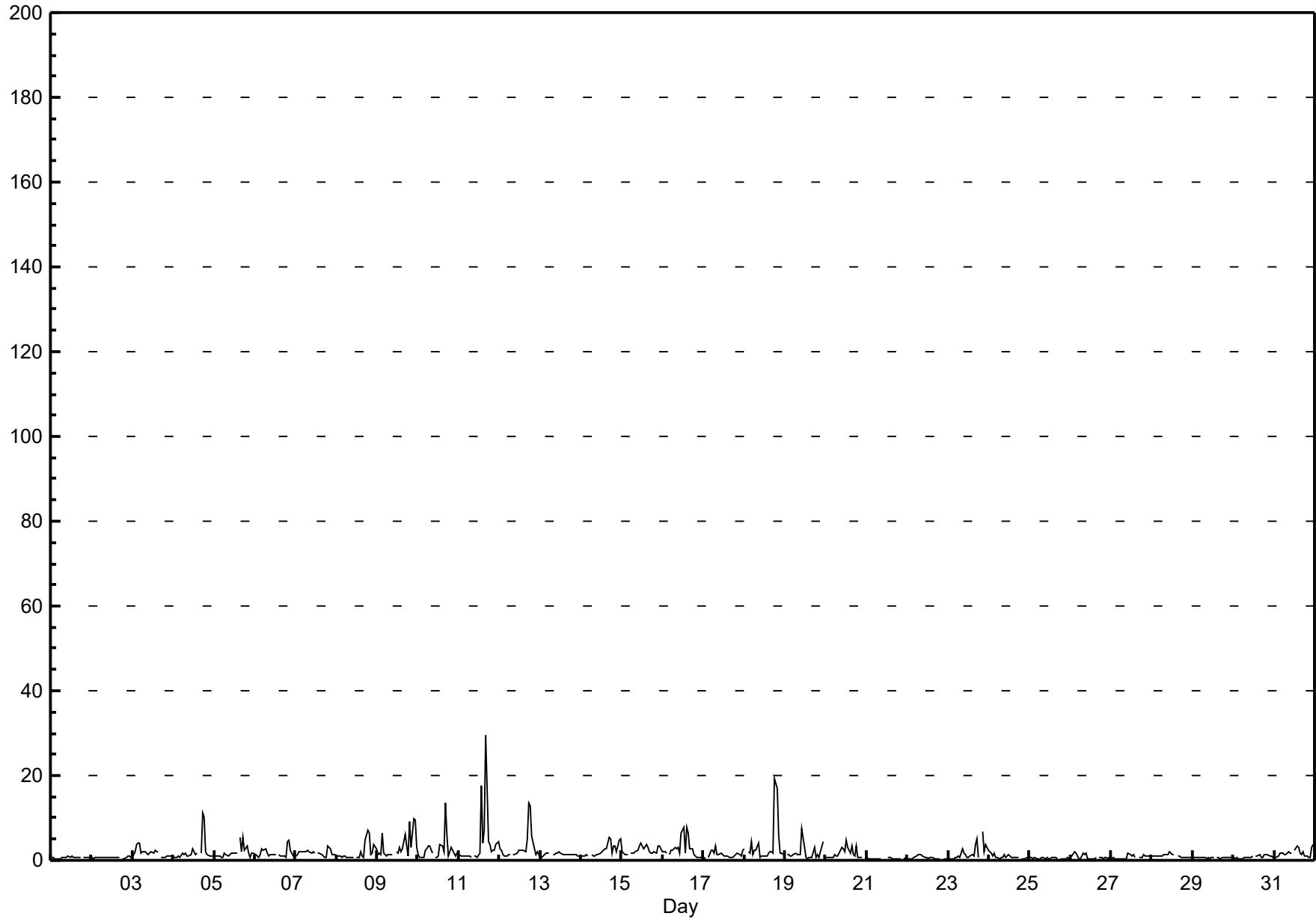
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Smoky Heights - March 2018

Maximum Value: 29.4 ppb on Mar 11 17:00		Maximum Daily Average: 4.1 ppb on Mar 11		Hours in Service:	744																					
Minimum Value: 0 ppb on Mar 27 07:00		Minimum Daily Average: 0.5 ppb on Mar 21		Hours of Data:	709																					
Maximum Diurnal Average: 3.0 ppb at hour 17		Minimum Diurnal Average: 1.0 ppb at hour 2		Hours of Missing Data:	35																					
Monthly Average: 1.69 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 1.1 Q ₃ = 1.8 P ₉₀ = 3.2 P ₉₉ = 11.0		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	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.0	
2-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	1	1	1	0.6	1.1	
3-Mar	1	2	4	4	4	2	2	2	2	1	2	2	2	3	2	2	A	1	1	1	1	1	1	1.8	4.1	
4-Mar	1	1	1	1	1	2	1	2	1	1	1	3	2	1	2	A	2	11	10	2	1	1	1	2.1	11.1	
5-Mar	1	1	1	1	1	1	2	1	1	1	2	2	2	2	A	5	2	6	2	3	2	1	2	1.8	5.6	
6-Mar	1	1	1	1	3	2	3	2	1	1	1	1	A	1	1	1	1	1	5	5	2	1	1	1.7	4.7	
7-Mar	1	1	2	2	2	2	2	2	2	2	2	A	2	2	1	1	1	1	3	3	1	1	1	1.7	3.4	
8-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	5	7	6	1	2	4	1.8	7.1	
9-Mar	1	2	1	6	2	1	1	1	1	1	A	2	2	3	2	3	6	3	1	9	3	10	9	3.3	9.7	
10-Mar	1	1	1	1	2	3	4	3	2	A	1	1	1	4	3	2	14	6	1	3	2	2	1	2.6	13.5	
11-Mar	1	1	1	1	1	1	1	1	A	1	1	1	2	18	4	7	29	4	4	2	2	3	4	4.1	29.4	
12-Mar	3	2	1	1	1	1	1	A	1	1	2	2	2	2	2	2	5	14	13	6	3	1	2	3.1	13.6	
13-Mar	1	1	1	2	2	2	A	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.4	2.0	
14-Mar	1	1	1	1	1	A	1	1	1	1	1	2	2	2	3	3	5	5	2	3	3	2	5	2.4	5.5	
15-Mar	2	2	1	1	A	2	2	2	2	2	3	4	3	3	4	3	2	2	2	2	2	4	3	2.4	4.0	
16-Mar	2	2	2	A	1	2	3	3	3	3	2	6	8	2	8	6	3	3	1	1	1	1	1	2.8	7.9	
17-Mar	1	0	A	1	2	3	2	3	1	1	2	1	1	1	1	1	1	1	1	1	2	1	2	1.4	3.3	
18-Mar	3	A	2	2	5	1	2	2	4	1	1	1	1	1	2	2	2	2	19	17	6	2	2	3.5	19.4	
19-Mar	A	1	1	1	1	1	2	1	1	1	7	3	1	0	1	1	1	3	1	1	1	2	4	1.7	7.4	
20-Mar	1	1	1	1	1	1	1	1	2	3	3	2	5	3	2	3	1	1	3	1	1	1	A	1	1.6	4.7
21-Mar	1	0	1	0	0	0	0	0	1	C	C	C	1	1	1	0	0	0	1	0	0	A	0	0.5	0.8	
22-Mar	0	1	0	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	A	0	0	0.6	1.3	
23-Mar	0	0	0	1	1	1	1	1	3	2	1	1	1	1	1	1	4	5	1	A	7	2	4	1.7	6.9	
24-Mar	2	2	1	2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	0	0	1	1	0.9	2.3	
25-Mar	1	1	0	1	0	1	0	1	1	0	1	0	0	1	1	1	1	A	0	0	0	0	1	0.5	0.6	
26-Mar	1	1	2	2	1	0	0	2	1	2	0	0	0	0	1	A	1	1	1	0	1	1	0	0.8	2.0	
27-Mar	0	1	0	0	0	0	0	0	0	0	2	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.8	
28-Mar	1	1	1	1	1	1	1	1	1	1	2	2	2	2	A	1	1	1	1	1	1	1	1	1.1	2.0	
29-Mar	1	1	1	1	1	1	1	1	0	1	0	1	1	A	1	1	0	1	1	1	1	1	1	0.6	0.7	
30-Mar	1	0	1	0	0	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
31-Mar	1	1	1	2	2	2	2	1	2	2	2	A	2	3	3	2	1	2	1	1	1	1	3	1.7	3.9	
		1.1	1.0	1.1	1.3	1.3	1.2	1.3	1.4	1.4	1.3	1.6	1.7	1.6	2.1	1.8	1.9	3.0	2.8	2.7	2.6	1.8	1.5	1.9	1.6	Diurnal Average
		2.8	2.4	3.6	6.5	4.6	2.8	3.5	3.3	3.9	3.0	7.4	6.3	7.9	17.5	7.8	7.2	29.4	13.6	19.4	16.9	6.9	9.7	9.4	5.2	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

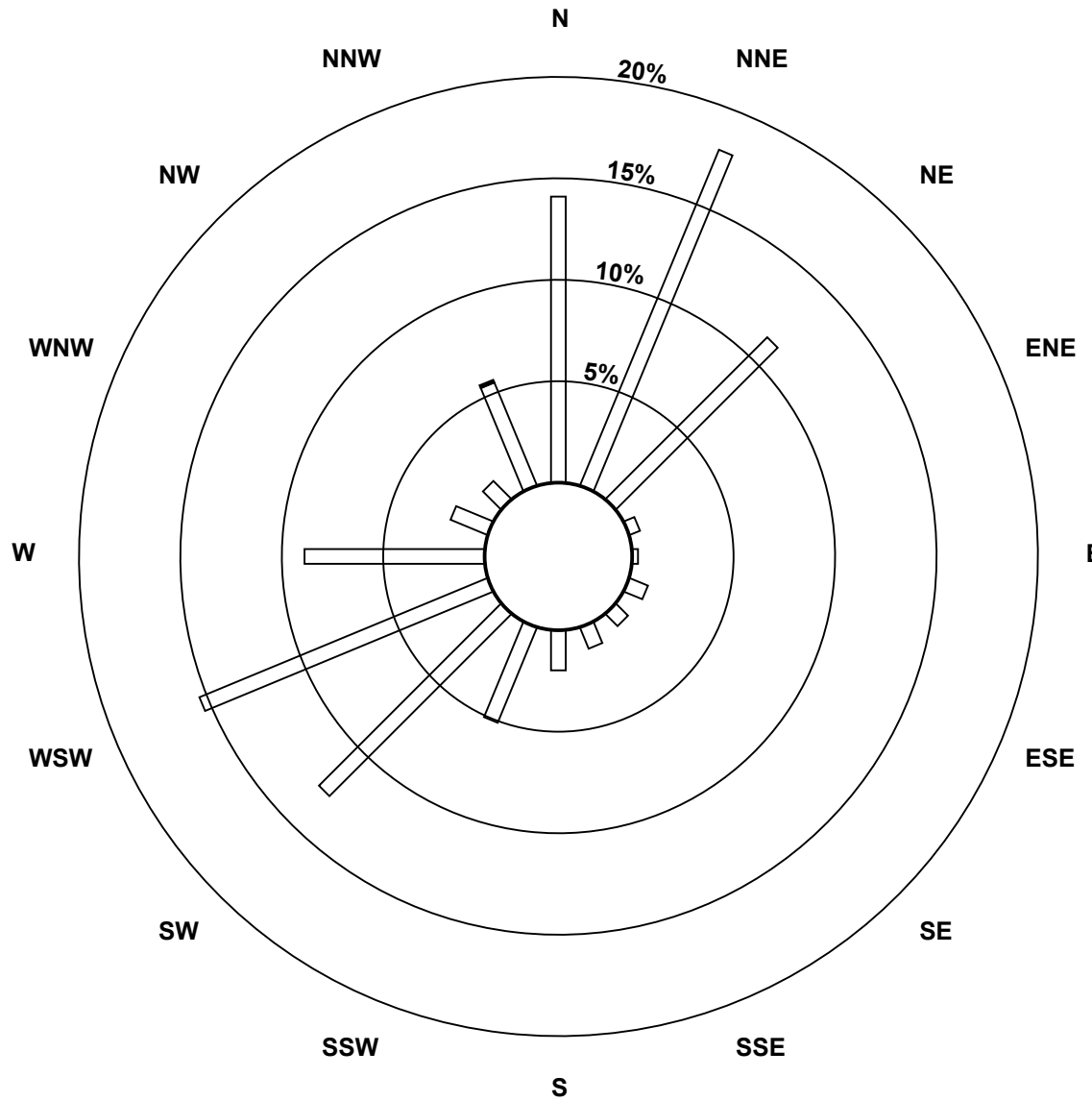
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2018

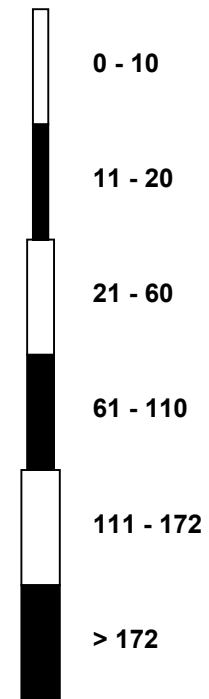


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2018

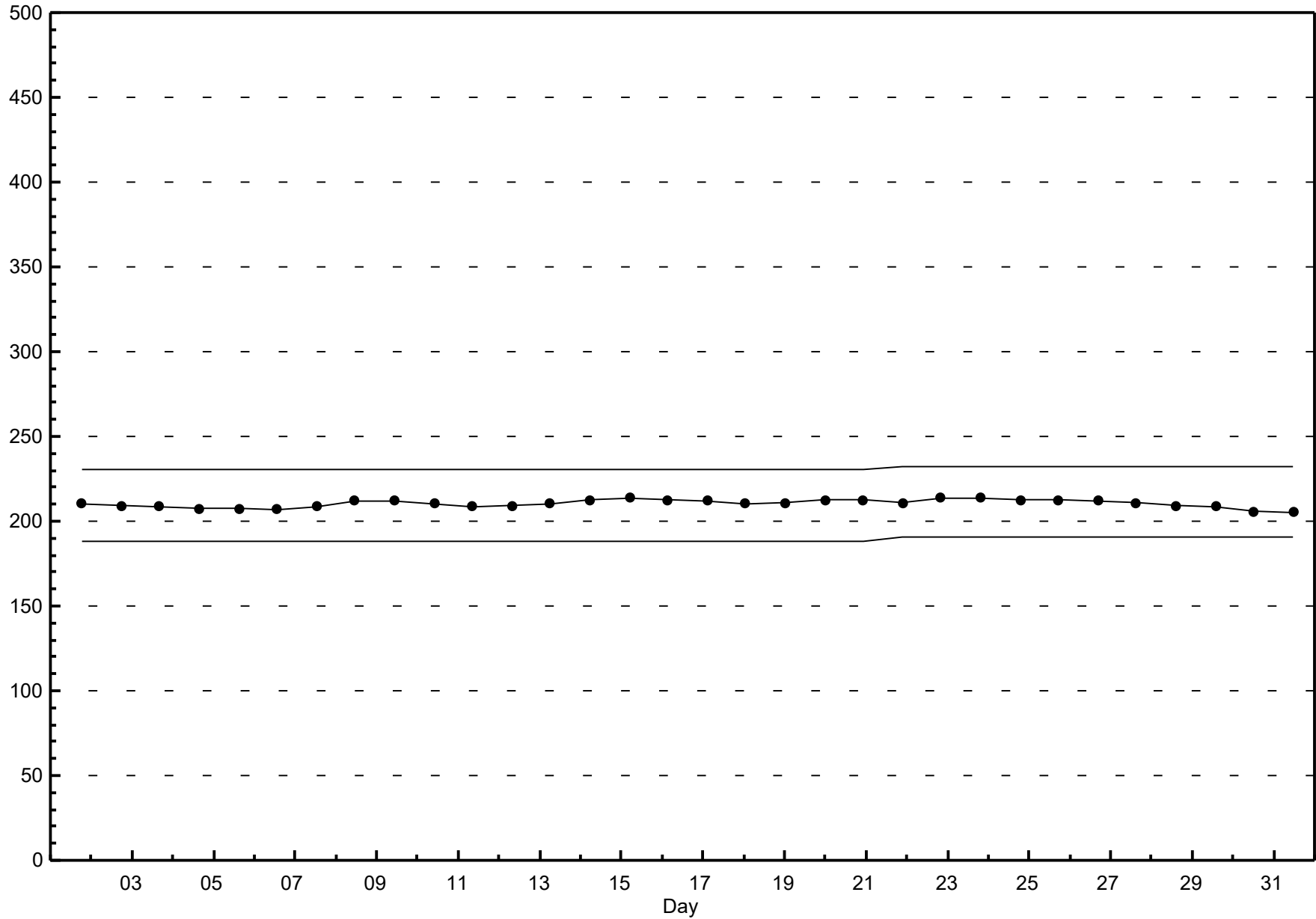


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Smoky Heights - March 2018

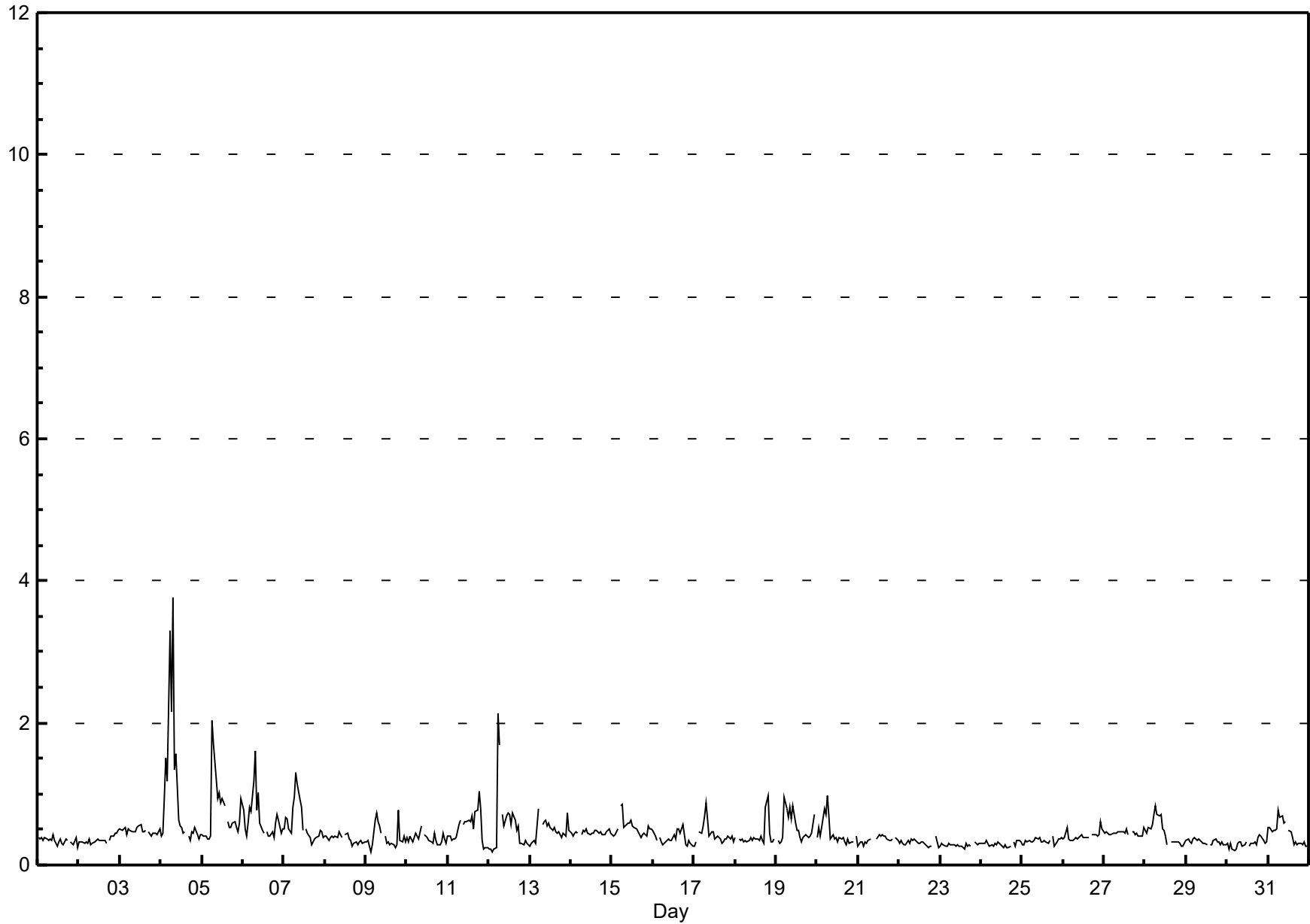


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2018

Maximum Value: 3.8 ppb on Mar 4 08:00		Maximum Daily Average: 1.0 ppb on Mar 4		Hours in Service: 744																																												
Minimum Value: 0 ppb on Mar 9 04:00		Minimum Daily Average: 0.3 ppb on Mar 23		Hours of Data: 709																																												
Maximum Diurnal Average: 0.7 ppb at hour 8		Minimum Diurnal Average: 0.4 ppb at hour 17		Hours of Missing Data: 35																																												
Monthly Average: 0.45 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.7 P ₉₉ = 1.6		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	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																						
2-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	0.4	0.5																						
3-Mar	1	0	1	1	0	1	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	1	0.5	0.6																						
4-Mar	0	0	1	2	1	3	2	4	1	2	1	1	1	0	0	A	0	0	0	0	0	1	0	0	1.0	3.8																						
5-Mar	0	0	0	0	0	0	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0.8	2.0																						
6-Mar	1	1	0	1	1	1	1	2	1	1	1	0	0	A	0	0	0	0	0	0	1	1	1	0	1	0.7	1.6																					
7-Mar	1	1	1	1	0	1	1	1	1	1	1	0	A	1	0	0	0	0	0	0	0	0	0	0	0.6	1.3																						
8-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																						
9-Mar	0	0	0	0	0	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0.4	0.8																						
10-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																						
11-Mar	0	0	0	0	0	0	1	1	A	1	1	1	1	1	1	0	1	1	1	1	0	0	0	0	0.5	1.0																						
12-Mar	0	0	0	0	0	2	2	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0.6	2.1																						
13-Mar	0	0	0	0	1	1	A	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	0.5	0.8																						
14-Mar	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	0.5																						
15-Mar	0	0	0	1	A	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	0.5	0.8																						
16-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0.4	0.6																						
17-Mar	0	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9																						
18-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.4	1.0																						
19-Mar	A	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	A	0.5	1.0																						
20-Mar	0	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	1.0																						
21-Mar	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.4																						
22-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	0.3	0.4																						
23-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	0.3	0.3																						
24-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																						
25-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	0.4																						
26-Mar	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	0.4	0.6																						
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	1	0.5	0.5																						
28-Mar	0	0	1	1	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.5	0.8																						
29-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	0.3	0.4																						
30-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	0.4																						
31-Mar	1	1	0	0	0	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8																						
																								0.4	0.4	0.4	0.4	0.4	0.6	0.7	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average
																								0.8	0.7	0.9	1.5	1.2	3.3	2.2	3.8	1.3	1.6	1.0	0.9	0.9	0.8	0.7	0.6	0.7	0.8	1.0	1.0	0.7	0.6	0.7	0.9	Diurnal Maximum
C - Calibration																								A - Automated Daily Zero Span																								

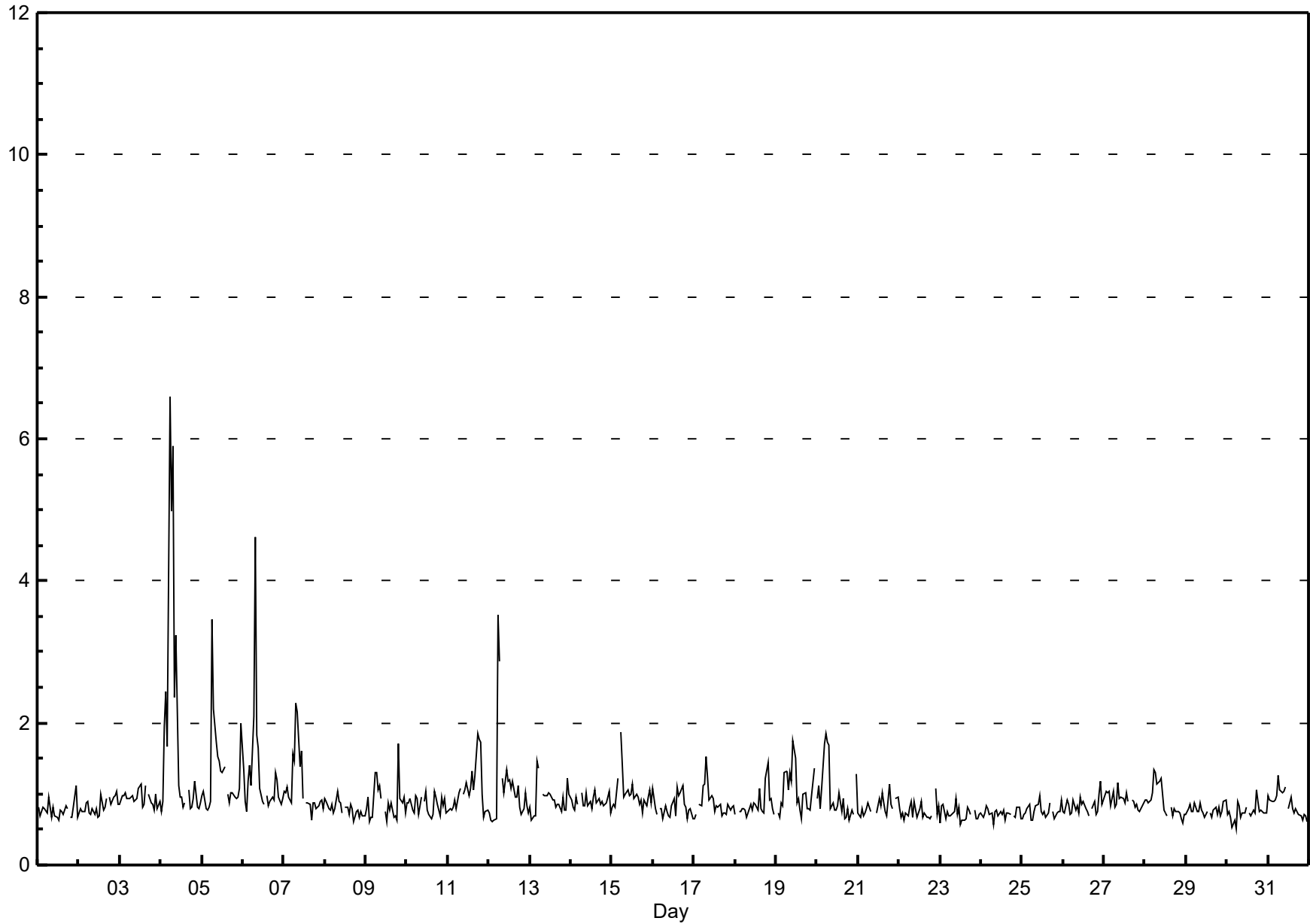


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

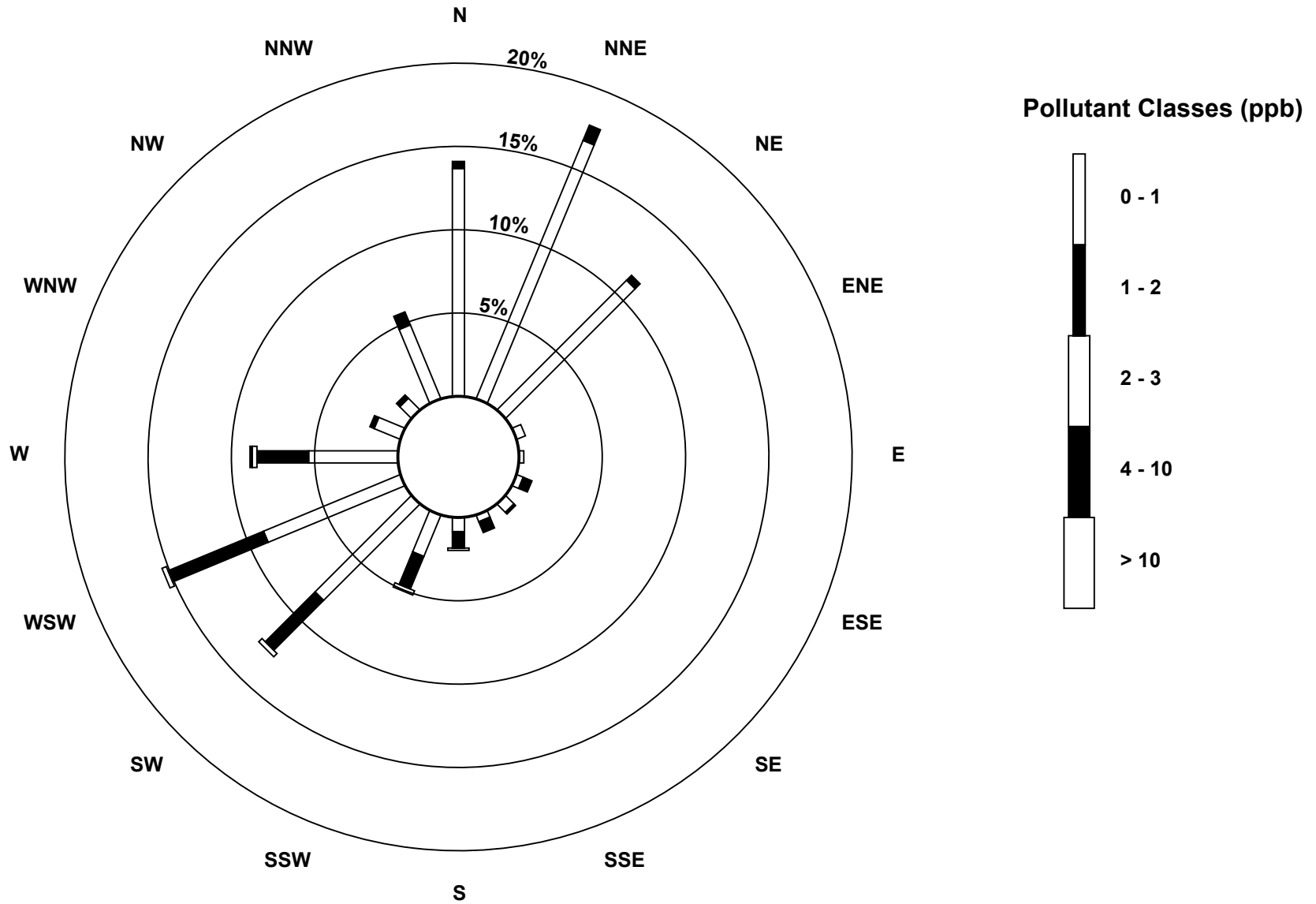
Smoky Heights - March 2018

Maximum Value: 6.6 ppb on Mar 4 06:00		Maximum Daily Average: 1.9 ppb on Mar 4		Hours in Service: 744																							
Minimum Value: 1 ppb on Mar 30 06:00		Minimum Daily Average: 0.7 ppb on Mar 23		Hours of Data: 709																							
Maximum Diurnal Average: 1.3 ppb at hour 7		Minimum Diurnal Average: 0.8 ppb at hour 21		Hours of Missing Data: 35																							
Monthly Average: 0.94 ppb		Percentiles: P ₁ = 0.6 P ₁₀ = 0.7 Q ₁ = 0.7 Median = 0.8 Q ₃ = 1.0 P ₉₀ = 1.2 P ₉₉ = 2.8		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	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.1	
2-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	1.0	
3-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	0.9	1.1	
4-Mar	1	1	2	2	2	7	5	6	2	3	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.9	6.6	
5-Mar	1	1	1	1	1	1	3	2	2	2	1	1	1	1	A	1	1	1	1	1	1	1	2	1.3	3.5		
6-Mar	1	1	1	1	1	1	2	5	2	2	1	1	1	A	1	1	1	1	1	1	1	1	1	1.3	4.6		
7-Mar	1	1	1	1	1	2	1	2	2	1	2	1	A	1	1	1	1	1	1	1	1	1	1	1.1	2.3		
8-Mar	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		
9-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	0.9	1.7		
10-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0		
11-Mar	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1.1	1.9		
12-Mar	1	1	1	1	1	4	3	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	3.5		
13-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5		
14-Mar	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	1.1		
15-Mar	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.9		
16-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1		
17-Mar	1	1	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5		
18-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4		
19-Mar	A	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8		
20-Mar	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.8		
21-Mar	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.1		
22-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.1		
23-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	0.9		
24-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	0.8		
25-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.0		
26-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.2		
27-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.2		
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3		
29-Mar	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	0.9		
30-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1		
31-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3		
		0.8	0.8	0.8	0.9	0.9	1.3	1.3	1.3	1.1	1.1	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.9	0.9	Diurnal Average	
		1.3	1.1	2.0	2.4	1.7	6.6	5.0	5.9	2.4	3.2	1.8	1.5	1.3	1.4	1.3	1.1	1.3	1.9	1.8	1.7	1.2	1.1	1.4	2.0	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



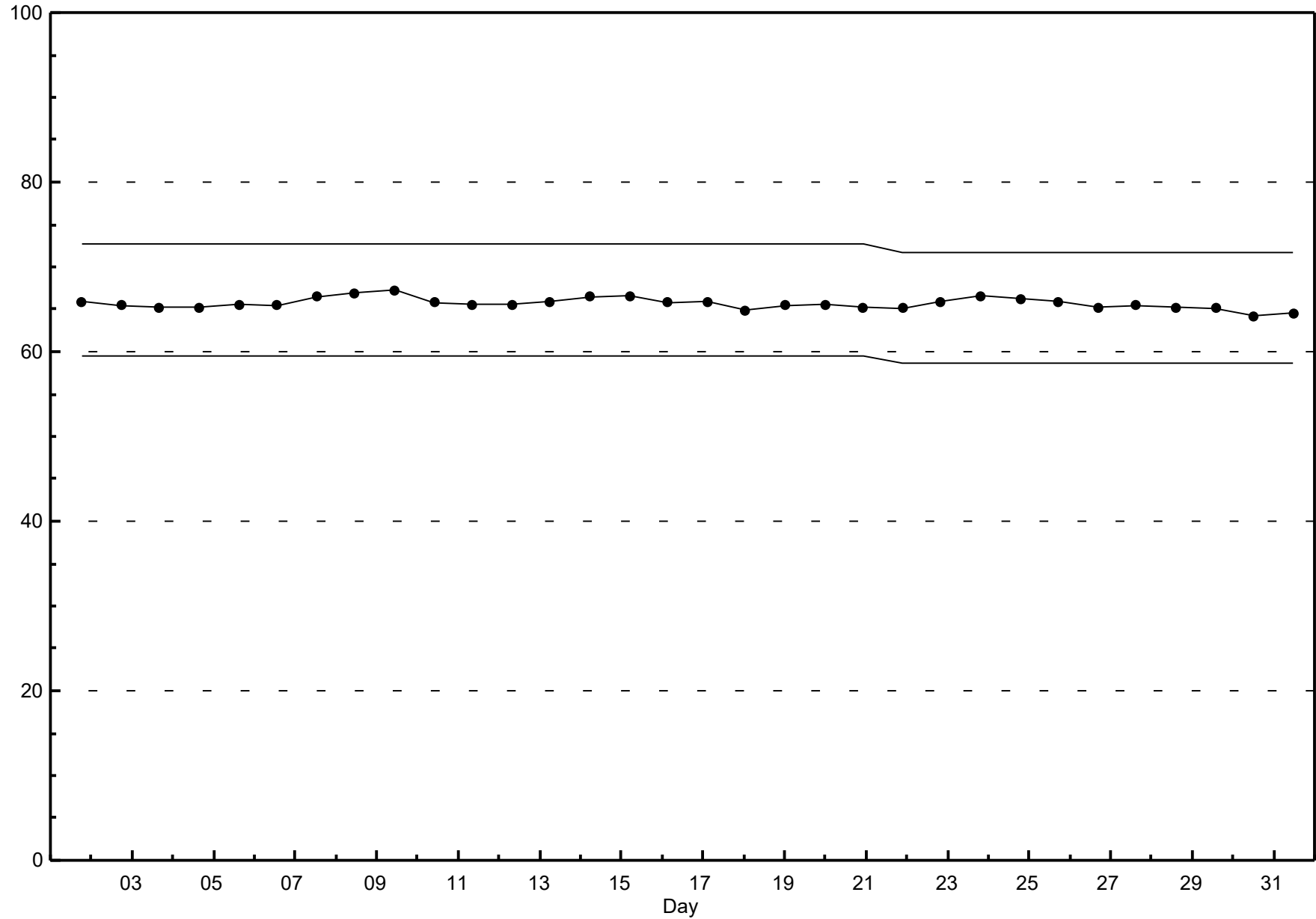
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - March 2018



Span Responses

Total Reduced Sulphur (TRS)
Smoky Heights - March 2018



Hourly Averages

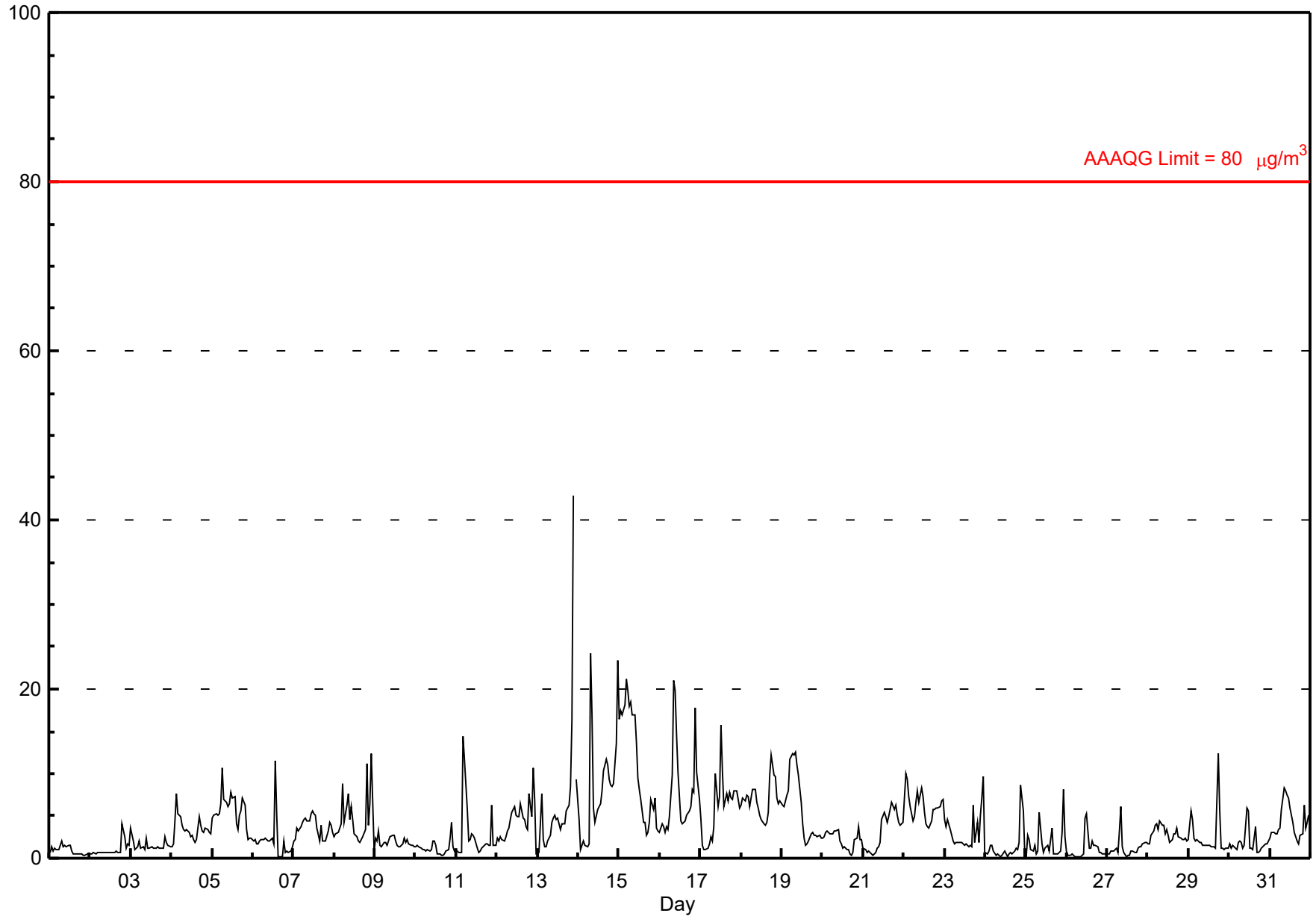
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Smoky Heights - March 2018

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 42.9 µg/m ³ on Mar 13 22:00	Maximum Daily Average: 11.0 µg/m ³ on Mar 15
Minimum Value: 0 µg/m ³ on Mar 24 14:00	Hours of Data: 743
Maximum Diurnal Average: 5.8 µg/m ³ at hour 22	Hours of Missing Data: 1
Monthly Average: 3.76 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 0.9 µg/m ³ on Mar 1	Percent Operational Time: 99.9
Minimum Diurnal Average: 2.7 µg/m ³ at hour 15	
Percentiles: P ₁ = 0.3 P ₁₀ = 0.7 Q ₁ = 1.3 Median = 2.5 Q ₃ = 5.1 P ₉₀ = 7.8 P ₉₉ = 18.3	

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	1	1	1	1	1	1	2	2	1	2	1	2	2	1	1	0	1	0	0	0	0	0	0	0	0.9	2.1
2-Mar	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	3	1	2	2	1.0	4.1
3-Mar	3	2	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1.5	3.5
4-Mar	1	2	4	8	5	5	4	3	3	3	3	3	3	2	2	2	5	4	3	3	4	3	3	3	3.4	7.6
5-Mar	5	5	5	5	5	6	11	7	7	6	6	8	7	7	4	3	5	6	7	6	3	2	2	2	5.5	10.7
6-Mar	2	2	2	2	2	2	2	2	2	2	2	2	2	12	5	0	0	0	2	1	1	1	1	1	2.1	11.5
7-Mar	2	2	4	3	4	4	5	5	4	4	5	6	5	5	4	2	4	2	2	2	3	4	4	3	3.7	5.6
8-Mar	3	3	3	4	4	9	4	6	8	5	6	5	3	3	2	2	2	3	3	11	4	6	12	1	4.6	12.3
9-Mar	2	2	3	2	1	2	2	2	2	3	3	3	2	2	1	1	2	2	2	2	2	1	1	1	1.9	3.2
10-Mar	1	1	1	1	1	1	1	1	1	1	2	2	2	1	0	0	0	0	1	1	2	4	1	1	1.2	4.3
11-Mar	1	1	1	1	14	12	6	2	2	3	3	2	1	1	1	1	1	2	2	2	2	6	1	2	2.8	14.4
12-Mar	2	2	3	2	2	2	3	4	5	5	6	5	5	5	6	5	5	4	3	8	5	11	7	0	4.4	10.7
13-Mar	0	1	8	2	1	1	2	3	4	5	5	5	5	3	4	4	4	6	6	9	16	43	N	9	6.4	42.9
14-Mar	5	1	1	2	1	1	2	24	17	6	4	6	6	6	8	10	12	11	9	9	8	9	14	23	8.2	24.2
15-Mar	16	17	17	18	21	20	18	18	17	17	14	10	8	7	4	4	3	3	4	7	6	7	4	3	11.0	21.3
16-Mar	3	4	4	3	4	3	5	10	21	20	15	10	4	4	4	4	5	6	6	8	8	18	10	7	7.7	21.0
17-Mar	5	2	1	1	1	2	3	2	4	10	6	7	16	10	6	8	7	8	7	7	8	8	7	6	5.8	15.7
18-Mar	6	7	7	8	7	6	7	8	8	7	6	5	5	4	4	4	5	10	12	10	10	7	7	7	6.9	12.2
19-Mar	6	6	7	7	8	12	12	12	13	11	10	7	4	2	2	2	2	3	3	3	3	3	3	2	5.9	12.6
20-Mar	2	3	3	3	3	3	3	3	3	3	2	2	1	1	1	1	0	0	1	2	2	4	2	2	2.2	3.7
21-Mar	1	1	1	1	1	1	0	1	1	1	2	5	5	5	4	5	6	7	6	6	5	4	4	4	3.2	6.7
22-Mar	7	10	9	7	6	4	5	7	8	7	8	7	6	4	4	4	4	6	6	6	6	6	7	7	6.3	10.0
23-Mar	5	4	4	3	3	2	2	2	2	2	2	2	2	2	1	1	1	6	2	4	2	5	7	10	3.1	9.7
24-Mar	1	0	1	2	2	1	0	1	0	0	0	1	1	0	0	1	1	1	1	1	2	9	6	0	1.3	8.6
25-Mar	0	3	2	1	1	1	0	1	5	2	1	1	1	2	1	4	0	0	0	1	1	3	8	3	1.8	8.2
26-Mar	1	0	0	0	0	0	0	0	0	0	1	5	5	1	1	2	2	2	1	1	1	1	0	0	1.1	5.2
27-Mar	1	1	1	1	1	1	1	3	6	1	1	0	0	0	1	1	1	1	1	1	1	2	2	2	1.2	6.0
28-Mar	2	2	3	3	4	4	3	4	4	4	3	3	3	2	2	3	3	2	2	2	2	2	2	2	2.9	4.4
29-Mar	2	6	5	2	2	2	2	2	2	1	1	2	1	1	1	1	1	12	6	1	1	1	1	1	2.5	12.3
30-Mar	2	1	2	1	1	2	2	2	1	2	6	6	1	1	1	4	1	1	1	1	1	2	2	2	1.8	6.0
31-Mar	2	3	3	3	3	3	4	6	8	8	7	7	6	4	3	2	2	2	3	3	6	3	4	5	4.2	8.2
	3.0	3.1	3.4	3.2	3.6	3.8	3.6	4.7	5.2	4.6	4.3	4.1	3.6	3.3	2.7	2.7	2.8	3.6	3.4	4.0	3.9	5.8	4.2	3.7	Diurnal Average	
	16.4	17.4	16.9	18.2	21.3	19.8	17.9	24.2	21.0	19.8	14.5	10.2	15.7	11.5	8.0	10.4	11.7	12.3	12.2	11.2	16.2	42.9	13.6	23.4	Diurnal Maximum	

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

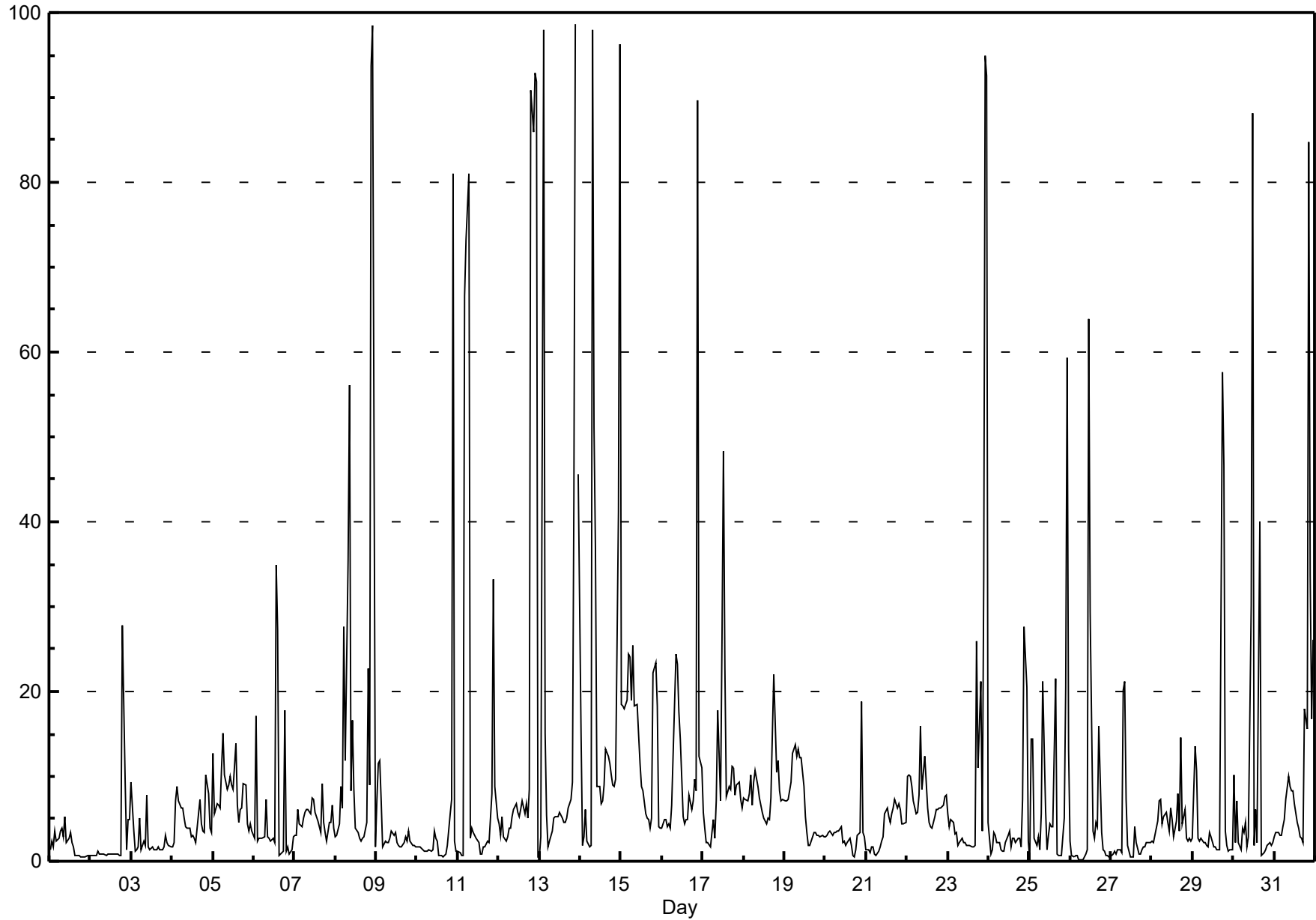
Smoky Heights - March 2018

Maximum Value: 98.6 µg/m ³ on Mar 13 22:00		Maximum Daily Average: 19.6 µg/m ³ on Mar 14		Hours in Service: 744																							
Minimum Value: 0 µg/m ³ on Mar 25 01:00		Minimum Daily Average: 2.0 µg/m ³ on Mar 1		Hours of Data: 743																							
Maximum Diurnal Average: 23.0 µg/m ³ at hour 22		Minimum Diurnal Average: 3.9 µg/m ³ at hour 17		Hours of Missing Data: 1																							
Monthly Average: 8.46 µg/m ³		Percentiles: P ₁ = 0.5 P ₁₀ = 1.0 Q ₁ = 2.0 Median = 3.9 Q ₃ = 7.5 P ₉₀ = 17.7 P ₉₉ = 92.7		Hours of Calibration: 0																							
				Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	1	2	2	4	2	3	4	4	3	5	2	3	3	2	2	1	1	1	0	0	0	0	1	1	2.0	5.3	
2-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	28	9	1	5	5	2.7	27.8	
3-Mar	9	4	1	1	2	5	1	2	2	8	2	1	2	1	1	1	2	1	1	2	3	2	2	2	2.5	9.3	
4-Mar	2	2	7	9	7	6	6	5	4	4	4	3	3	3	2	4	7	4	4	3	10	8	4	3	4.8	10.2	
5-Mar	13	6	7	7	6	11	15	10	9	9	10	9	8	14	7	5	6	6	9	9	4	4	4	4	7.9	15.1	
6-Mar	3	17	2	3	3	3	3	7	3	3	2	3	2	35	27	1	1	1	18	1	2	1	1	3	6.0	34.9	
7-Mar	3	3	6	4	4	5	6	6	6	6	8	7	6	5	5	3	9	5	3	2	5	5	7	4	5.1	9.2	
8-Mar	3	3	4	9	6	28	12	35	56	8	17	9	4	3	3	2	3	3	5	23	9	94	98	2	18.2	98.4	
9-Mar	7	11	12	7	2	2	2	2	3	4	3	3	2	2	2	2	2	3	2	4	2	2	2	2	3.5	11.9	
10-Mar	2	2	2	1	1	1	1	1	1	1	4	3	2	1	1	0	1	1	2	6	7	81	2	1	5.2	81.1	
11-Mar	1	1	1	1	67	73	81	3	4	3	3	3	2	1	1	2	2	2	2	5	8	33	9	5	13.0	81.1	
12-Mar	4	3	5	3	2	3	4	4	5	6	7	6	5	6	7	6	7	5	9	91	86	93	92	0	19.1	92.8	
13-Mar	0	3	98	15	5	2	2	4	5	5	5	5	6	5	5	5	6	7	9	43	99	N	46	16.8	98.6		
14-Mar	15	2	3	6	2	2	2	98	51	37	9	9	7	7	9	13	12	11	10	9	9	10	41	96	19.6	97.9	
15-Mar	19	18	18	19	24	24	19	25	18	19	15	11	9	8	6	5	5	4	5	22	23	18	4	4	14.3	25.4	
16-Mar	4	5	5	4	4	4	7	19	24	23	18	14	5	4	5	5	8	6	7	10	8	90	12	11	12.6	89.6	
17-Mar	6	4	2	2	2	3	5	3	7	18	7	26	48	23	8	9	9	11	11	8	9	9	7	6	10.1	48.3	
18-Mar	8	7	7	8	10	7	9	11	9	8	7	6	5	4	5	5	8	15	22	10	12	8	7	7	8.5	22.0	
19-Mar	7	7	7	8	9	13	14	12	13	12	12	9	5	3	2	2	2	3	3	3	3	3	3	3	6.7	13.7	
20-Mar	3	3	3	4	3	3	3	4	4	4	2	2	2	2	3	2	1	0	1	3	3	19	3	3	3.4	18.8	
21-Mar	1	1	1	2	2	1	1	1	2	2	3	6	6	5	5	6	6	7	6	7	6	4	4	5	3.8	7.3	
22-Mar	10	10	10	9	7	6	6	8	16	9	12	9	6	5	4	4	5	6	6	6	6	7	8	8	7.6	15.9	
23-Mar	6	4	5	5	3	3	2	2	3	2	2	2	2	2	2	2	2	26	11	21	4	33	95	93	13.8	95.0	
24-Mar	5	1	1	3	3	2	2	1	1	1	2	3	4	2	3	3	2	3	3	2	7	28	20	2	4.3	27.6	
25-Mar	0	14	14	3	2	3	1	6	21	6	1	3	4	4	4	21	1	1	1	1	5	20	59	13	8.8	59.3	
26-Mar	2	1	0	1	1	0	0	0	0	1	1	64	29	4	3	5	4	16	3	1	1	1	1	0	5.8	64.0	
27-Mar	1	1	1	1	1	1	1	20	21	7	2	0	0	0	4	2	1	1	1	2	2	2	2	2	3.3	21.2	
28-Mar	2	2	3	5	7	7	4	5	6	5	4	6	5	3	5	8	4	15	4	6	3	2	3	2	4.8	14.6	
29-Mar	3	14	11	3	2	3	2	2	2	2	3	3	2	2	1	1	1	58	47	4	2	1	1	1	7.1	57.6	
30-Mar	10	2	7	2	1	4	3	5	2	3	30	88	2	6	2	40	1	1	1	1	2	2	2	2	9.2	88.1	
31-Mar	3	3	3	3	3	4	5	7	10	9	8	8	7	5	4	3	3	2	18	16	85	34	17	26	11.9	84.7	
		4.9	5.1	8.1	4.9	6.4	7.5	7.3	10.1	10.1	7.4	6.6	10.5	6.3	5.4	4.4	5.4	3.9	7.3	7.3	10.2	12.2	23.0	17.3	11.7	Diurnal Average	
		18.5	18.3	97.9	19.0	66.6	73.2	81.1	97.9	56.1	36.6	30.3	88.1	48.3	34.9	27.3	40.0	12.4	57.6	46.6	90.8	85.9	98.6	98.4	96.2	Diurnal Maximum	
N - Not Valid																											

Hourly Maximums

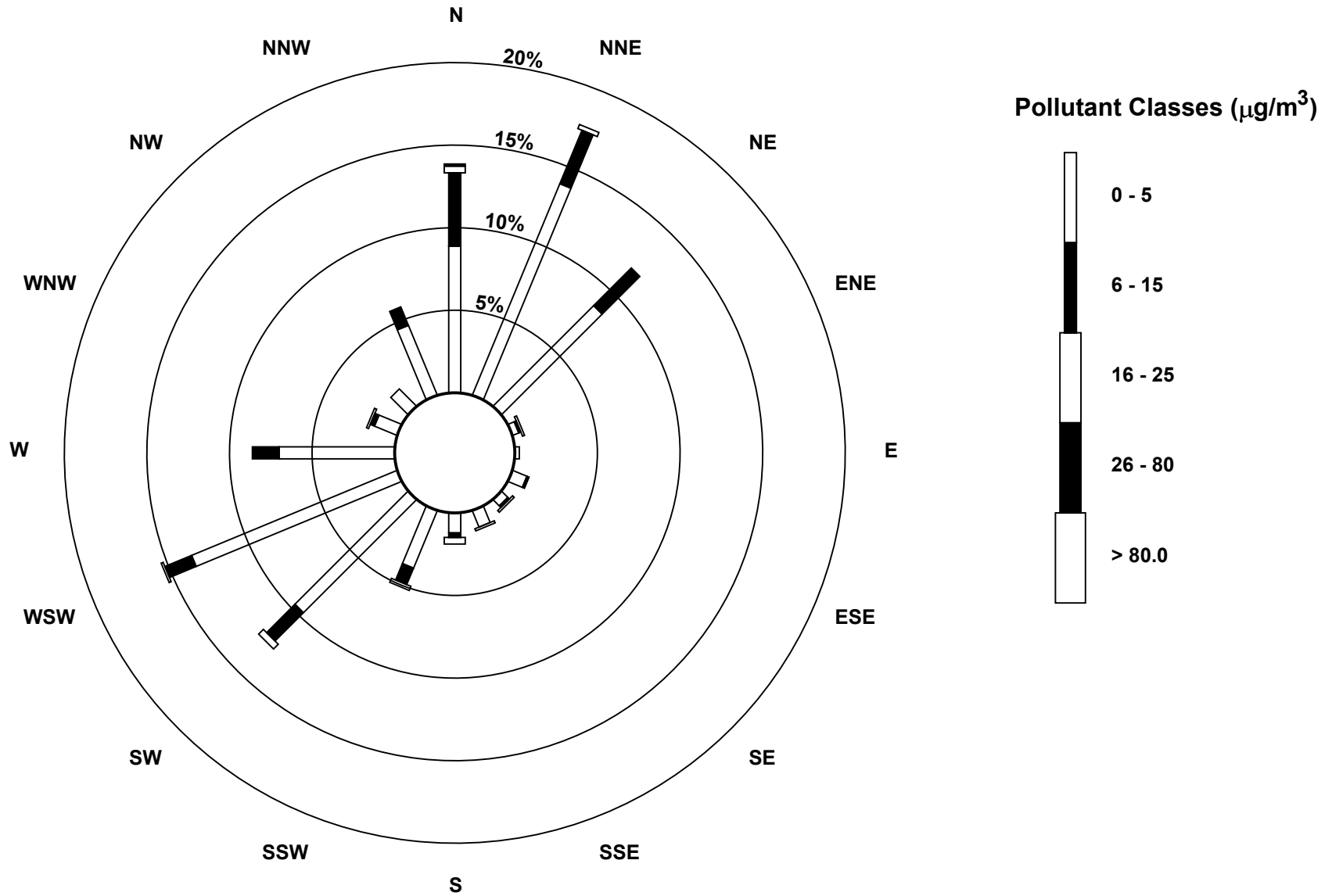
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Smoky Heights - March 2018



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Smoky Heights - March 2018



Hourly Averages

External Temperature (ET) - °C

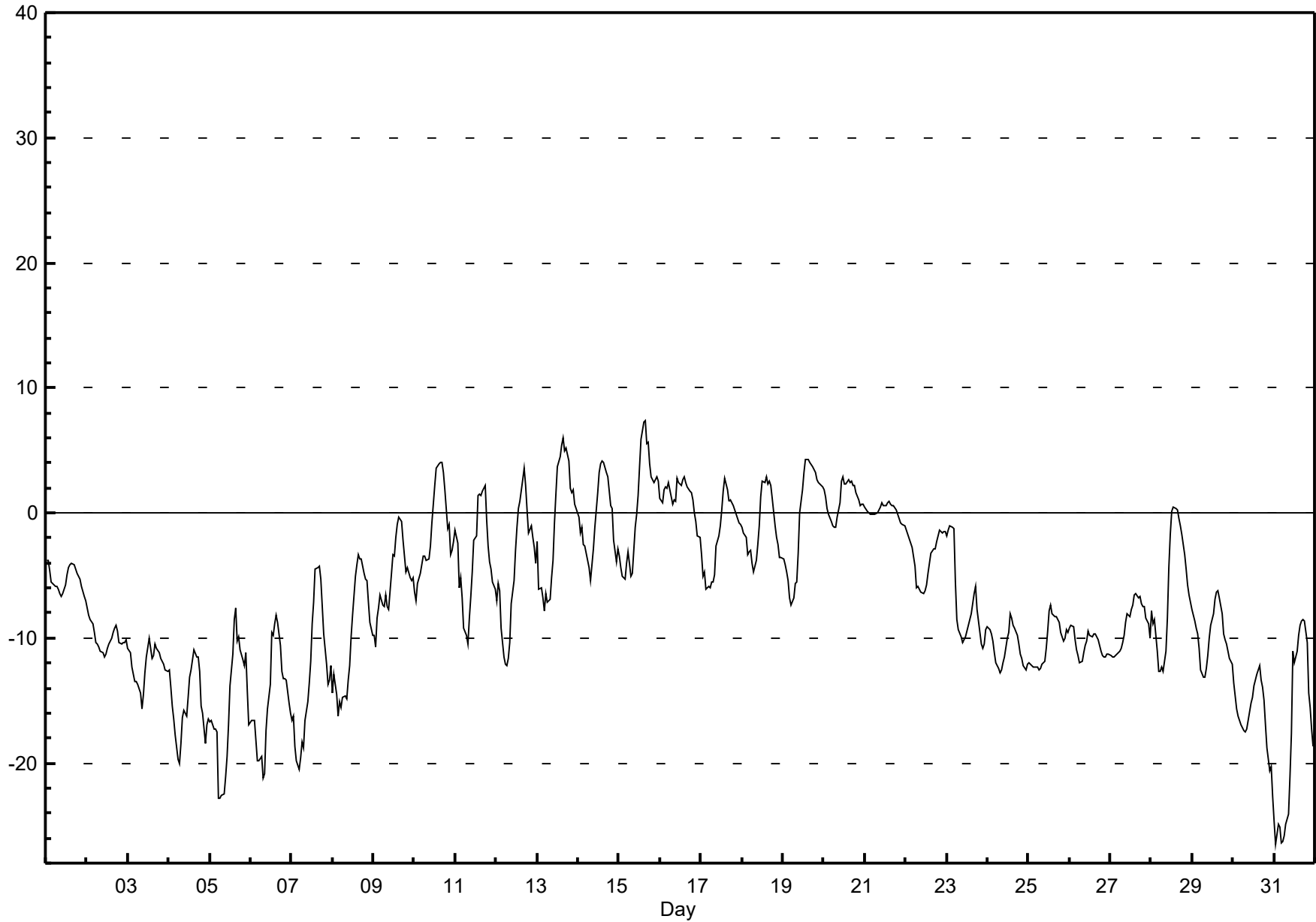
Smoky Heights - March 2018

Maximum Value: 7.4 °C on Mar 15 16:00 Minimum Value: -27 °C on Mar 31 02:00 Maximum Diurnal Average: -2.9 °C at hour 16 Monthly Average: -6.87 °C		Maximum Daily Average: 1.3 °C on Mar 16 Minimum Daily Average: -17.6 °C on Mar 31 Minimum Diurnal Average: -10.5 °C at hour 8 Percentiles: P ₁ = -24.4 P ₁₀ = -15.5 Q ₁ = -11.4 Median = -6.8 Q ₃ = -1.3 P ₉₀ = 1.9 P ₉₉ = 5.1		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	-5	-6	-6	-6	-6	-6	-6	-7	-6	-6	-5	-4	-4	-4	-4	-5	-5	-5	-5	-6	-7	-7	-5.3	-3.8
2-Mar	-8	-8	-9	-9	-10	-10	-11	-11	-11	-11	-12	-11	-11	-10	-10	-10	-9	-9	-9	-10	-11	-10	-10	-10	-10.0	-7.6
3-Mar	-11	-11	-12	-13	-13	-14	-14	-14	-16	-15	-13	-11	-10	-11	-12	-11	-10	-11	-11	-12	-12	-12	-13	-13	-12.2	-10.0
4-Mar	-13	-14	-15	-16	-18	-20	-20	-18	-16	-16	-16	-15	-13	-13	-12	-11	-12	-11	-13	-15	-16	-18	-17	-17	-15.2	-10.9
5-Mar	-17	-17	-17	-17	-17	-23	-23	-23	-23	-21	-19	-17	-14	-11	-9	-8	-10	-10	-11	-12	-12	-11	-14	-17	-15.5	-7.6
6-Mar	-17	-17	-17	-18	-20	-20	-19	-21	-21	-17	-16	-14	-10	-10	-9	-8	-9	-11	-13	-13	-13	-13	-15	-16	-14.8	-8.2
7-Mar	-17	-16	-19	-20	-21	-20	-18	-19	-17	-15	-14	-12	-9	-7	-4	-4	-4	-5	-8	-10	-12	-14	-13	-12	-12.9	-4.2
8-Mar	-14	-13	-15	-16	-15	-16	-15	-15	-15	-13	-12	-10	-8	-5	-4	-3	-4	-4	-5	-5	-5	-7	-9	-10	-9.9	-3.3
9-Mar	-10	-11	-8	-8	-7	-7	-7	-7	-7	-8	-5	-3	-3	-2	-1	0	-1	-2	-3	-5	-4	-5	-5	-5	-5.2	-0.4
10-Mar	-6	-7	-6	-5	-4	-3	-3	-4	-4	-3	-1	1	2	4	4	4	4	3	2	-1	-1	-3	-3	-2	-1.4	4.1
11-Mar	-1	-2	-6	-5	-7	-9	-10	-10	-8	-7	-5	-2	-2	1	2	1	2	2	-1	-3	-4	-4	-6	-6	-3.8	2.2
12-Mar	-7	-6	-6	-9	-12	-12	-12	-12	-10	-7	-5	-3	-1	0	1	3	4	2	0	-2	-1	-2	-3	-4	-4.3	3.6
13-Mar	-2	-6	-6	-7	-8	-7	-7	-7	-5	-4	-1	1	4	4	5	6	5	5	4	2	2	2	1	0	-0.7	6.0
14-Mar	0	-2	-1	-2	-3	-4	-4	-5	-4	-3	-1	2	3	4	4	4	3	3	2	1	0	-2	-4	-3	-0.6	4.2
15-Mar	-3	-4	-5	-5	-4	-3	-4	-5	-5	-1	0	1	4	6	7	7	6	6	4	3	2	3	3	3	0.6	7.4
16-Mar	1	1	2	2	2	2	2	1	1	1	3	2	2	3	3	2	2	2	2	1	0	-1	-2	-2	1.3	2.9
17-Mar	-3	-5	-5	-6	-6	-6	-5	-5	-5	-3	-2	-1	0	2	3	2	1	1	1	1	0	0	-1	-1	-1.8	2.8
18-Mar	-1	-2	-2	-3	-3	-3	-4	-5	-4	-3	-1	1	2	2	3	2	3	2	1	-1	-2	-3	-4	-4	-1.1	2.9
19-Mar	-4	-4	-5	-5	-7	-7	-7	-7	-6	-6	-3	0	2	3	4	4	4	4	3	3	3	2	2	2	-0.5	4.3
20-Mar	2	1	0	0	-1	-1	-1	-1	0	1	3	3	2	2	3	2	3	2	2	2	1	1	1	1	1.1	2.9
21-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	-1	-1	-1	0.1	0.9
22-Mar	-1	-2	-2	-2	-3	-4	-6	-6	-6	-6	-6	-6	-6	-5	-4	-3	-3	-3	-2	-2	-1	-2	-2	-2	-3.6	-1.4
23-Mar	-2	-1	-1	-1	-1	-6	-8	-9	-10	-10	-10	-10	-9	-9	-8	-7	-6	-6	-8	-10	-10	-11	-10	-9	-7.3	-1.0
24-Mar	-9	-9	-10	-10	-11	-12	-12	-13	-13	-12	-11	-10	-10	-8	-8	-9	-9	-10	-10	-11	-12	-12	-13	-12	-10.7	-8.1
25-Mar	-12	-12	-12	-12	-12	-12	-13	-12	-12	-12	-11	-9	-8	-7	-8	-8	-8	-8	-9	-10	-10	-10	-9	-10	-10.3	-7.4
26-Mar	-9	-9	-9	-10	-11	-11	-12	-12	-11	-11	-10	-9	-10	-10	-10	-10	-10	-10	-11	-11	-11	-11	-11	-11	-10.5	-9.0
27-Mar	-11	-12	-12	-11	-11	-11	-11	-10	-10	-9	-8	-8	-8	-7	-7	-6	-7	-7	-7	-7	-7	-8	-9	-10	-9.0	-6.4
28-Mar	-8	-9	-9	-11	-13	-13	-12	-13	-11	-8	-4	-2	0	0	0	0	0	-1	-2	-3	-4	-6	-7	-7	-5.9	0.4
29-Mar	-8	-9	-9	-10	-11	-13	-13	-13	-13	-12	-11	-10	-9	-8	-7	-6	-6	-7	-8	-10	-10	-11	-12	-12	-9.8	-6.2
30-Mar	-14	-15	-16	-16	-17	-17	-17	-18	-17	-17	-15	-15	-14	-13	-13	-12	-13	-14	-15	-17	-19	-21	-20	-23	-16.1	-12.2
31-Mar	-25	-27	-25	-25	-26	-26	-26	-25	-24	-21	-18	-11	-12	-11	-10	-9	-9	-9	-9	-10	-14	-16	-17	-19	-17.6	-8.6
	-7.5	-8.1	-8.4	-9.0	-9.5	-10.1	-10.3	-10.5	-9.9	-8.7	-7.3	-5.8	-4.7	-3.8	-3.2	-2.9	-3.2	-3.5	-4.5	-5.6	-6.2	-6.9	-7.4	-7.7	Diurnal Average	
	1.8	1.2	1.8	2.1	1.9	2.4	1.8	0.7	1.0	1.0	2.8	2.9	3.7	5.8	7.3	7.4	5.5	5.6	4.2	3.3	2.7	2.7	2.9	2.5	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C

Smoky Heights - March 2018





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	19	19	18	18	18	21	21	21	20	24	25	27	26	27	26	30	31	30	25	22	20	23	21	19	22.5	31.0
Dir	24	27	23	15	16	22	25	30	28	28	31	28	36	40	47	49	48	50	52	54	57	54	43	44	37.5	47.7
2 Spd	23	25	21	20	21	24	24	25	28	25	24	21	21	19	17	15	13	11	10	4	4	8	4	4	16.5	27.5
Dir	45	45	41	41	41	43	43	43	47	49	44	43	41	41	41	47	57	70	83	47	55	124	108	132	48.0	47.2
3 Spd	3	10	14	12	8	3	2	1	3	3	2	3	3	5	7	8	6	9	7	7	7	9	9	10	4.2	13.7
Dir	20	341	338	340	335	321	228	167	205	129	137	168	167	215	239	253	322	321	323	322	326	327	331	333	318.0	338.2
4 Spd	8	4	6	6	9	9	10	7	3	4	8	9	9	8	9	9	8	5	3	4	2	2	2	4	5.7	10.2
Dir	325	228	245	248	253	263	261	269	245	191	224	250	254	249	256	242	242	250	280	284	307	273	257	247	254.4	260.9
5 Spd	5	7	7	8	6	4	7	7	10	8	11	10	8	6	4	5	10	4	0	5	6	12	14	4	5.0	14.3
Dir	271	266	266	239	228	192	229	204	177	198	231	247	261	259	243	2	18	34	20	223	244	274	269	225	246.5	268.7
6 Spd	8	4	7	11	9	14	11	12	10	6	4	5	3	6	4	3	2	2	8	9	9	7	7	9	5.2	14.0
Dir	193	278	265	253	264	264	269	258	253	194	124	103	37	12	359	282	222	254	256	260	263	219	224	257	253.7	264.4
7 Spd	10	10	7	9	12	11	10	11	11	10	11	9	4	5	3	10	7	6	6	6	5	6	5	6	4.1	11.9
Dir	261	253	214	192	214	221	207	212	215	235	219	226	120	109	92	15	9	30	31	323	295	289	268	259	236.2	214.0
8 Spd	5	4	2	4	8	6	8	7	8	8	8	9	11	9	8	8	9	8	8	7	5	5	5	4	6.2	10.7
Dir	252	265	354	12	19	18	8	2	22	24	22	23	20	12	5	356	351	351	360	7	12	356	355	37	6.8	19.9
9 Spd	4	3	6	7	8	7	6	6	5	9	4	6	13	13	11	8	14	10	16	18	21	21	18	23	9.0	23.3
Dir	349	19	354	343	267	216	224	255	243	254	166	178	233	248	286	264	224	224	235	249	242	247	229	233	244.0	232.6
10 Spd	15	15	17	20	15	15	14	13	16	15	14	13	18	21	16	14	10	9	5	6	7	6	8	7	12.2	20.6
Dir	231	222	237	233	211	206	190	206	246	238	251	249	226	232	224	232	235	229	240	222	256	277	248	248	230.7	232.1
11 Spd	7	7	4	2	1	2	1	3	4	4	2	3	8	4	6	10	8	8	5	2	3	5	4	1	3.7	10.0
Dir	242	246	225	231	64	201	3	173	235	211	149	162	240	229	244	257	247	260	247	260	239	265	284	276	241.3	256.6
12 Spd	7	9	11	7	8	8	8	9	10	9	7	8	11	11	10	10	10	9	6	3	3	4	4	2	6.5	11.3
Dir	235	243	254	203	215	219	201	204	205	216	223	245	258	254	253	266	268	261	271	281	297	13	357	266	242.0	253.9
13 Spd	4	1	1	3	2	3	3	3	3	4	1	2	2	5	10	12	13	14	17	16	11	10	9	8	4.6	16.7
Dir	257	187	302	264	177	213	213	247	247	258	113	112	9	9	14	9	4	6	26	23	11	6	13	2	5.0	25.6
14 Spd	8	8	9	7	9	8	8	6	6	8	8	3	2	6	8	10	11	16	14	12	9	6	5	4	7.7	15.6
Dir	18	12	17	7	12	360	7	7	13	25	22	11	358	1	351	350	347	353	356	358	3	14	30	77	5.9	353.2
15 Spd	3	4	6	8	12	9	4	4	5	7	10	9	6	4	2	3	5	1	3	7	6	7	6	7	4.6	11.7
Dir	129	180	216	213	226	216	162	190	195	184	250	227	258	269	232	155	196	151	200	260	267	265	289	270	227.2	226.5
16 Spd	3	3	4	4	6	7	13	10	8	8	6	13	16	12	10	10	9	10	9	5	8	10	12	12	5.6	15.5
Dir	225	225	301	23	353	10	351	10	359	292	285	241	261	254	252	268	260	227	205	185	208	258	262	261	270.1	261.4
17 Spd	4	8	9	8	10	7	4	5	3	1	2	5	6	7	10	13	14	10	9	8	7	4	7	8	3.3	14.0
Dir	235	237	272	251	214	257	180	226	260	127	114	52	34	26	4	355	15	16	19	3	7	352	355	340	340.9	14.6
18 Spd	8	9	7	8	8	8	7	6	9	11	9	6	5	5	5	8	7	7	5	4	5	2	2	7	4.3	11.1
Dir	344	337	344	11	345	338	11	8	17	19	17	22	329	264	261	260	257	265	272	348	25	43	239	219	336.1	19.3
19 Spd	9	7	8	10	13	13	10	11	10	12	16	20	18	18	22	22	22	17	14	12	15	17	16	18	14.2	21.8
Dir	217	220	215	213	211	221	224	223	219	219	245	241	239	237	246	248	241	255	247	259	225	238	251	243	236.3	246.5
20 Spd	20	17	17	16	15	14	12	5	4	10	17	21	20	13	14	16	11	9	8	7	2	3	5	4	10.8	21.4
Dir	243	246	253	249	253	255	250	227	228	239	232	234	240	240	230	235	252	215	186	203	227	267	305	1	240.9	233.7
21 Spd	6	6	6	7	8	8	9	10	10	14	17	19	20	22	28	29	25	26	25	24	27	22	24	25	17.1	29.0
Dir	7	36	34	34	31	21	36	29	32	37	41	42	44	46	49	51	54	46	43	44	43	44	46	45	42.8	50.7
22 Spd	27	27	27	28	30	24	24	28	32	30	30	27	28	26	25	30	34	30	27	25	26	23	22	19	26.8	33.6
Dir	47	44	44	46	50	31	26	41	43	40	37	34	35	34	31	43	47	48	50	50	54	51	49	42	42.5	46.6

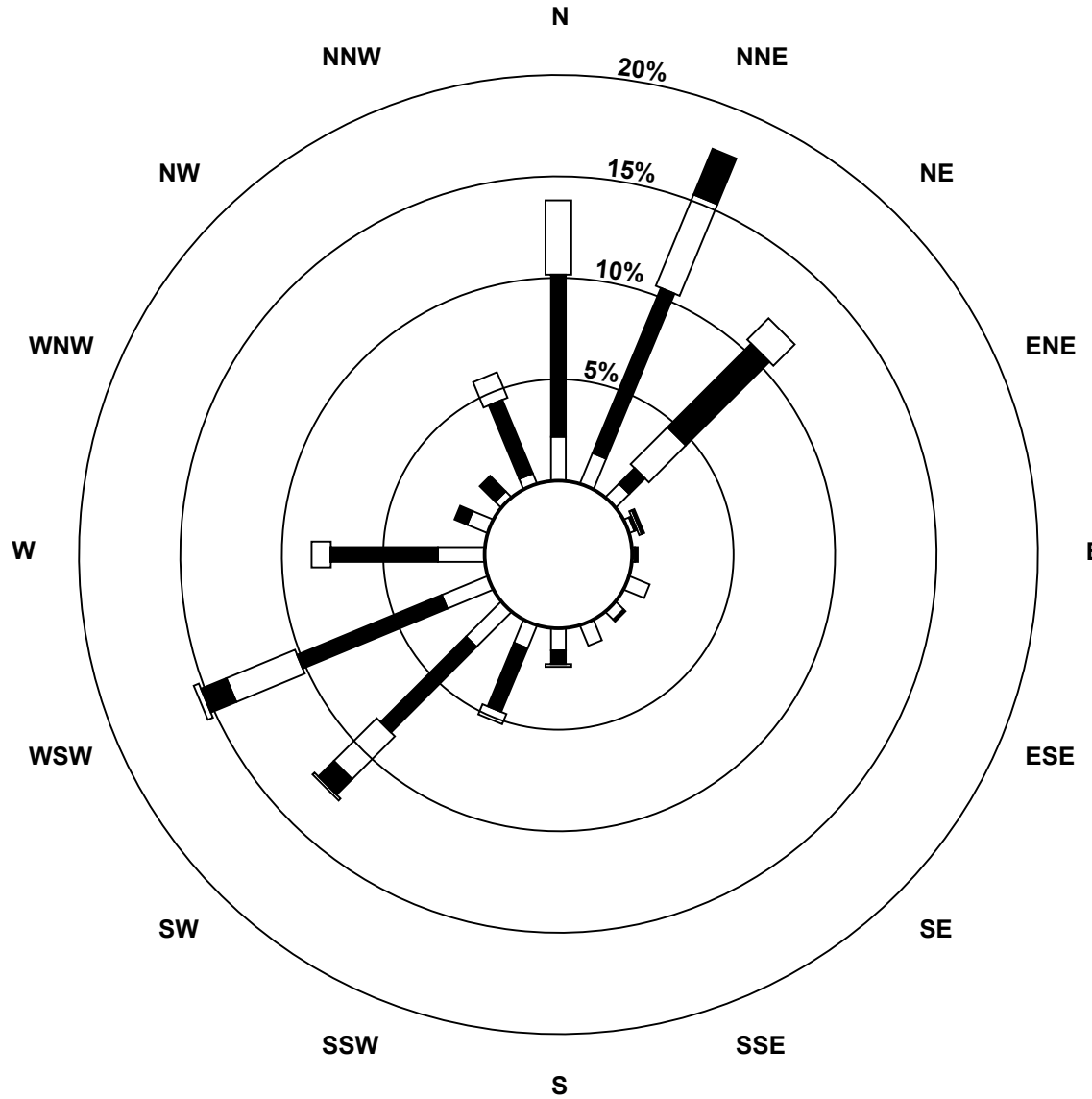
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2018

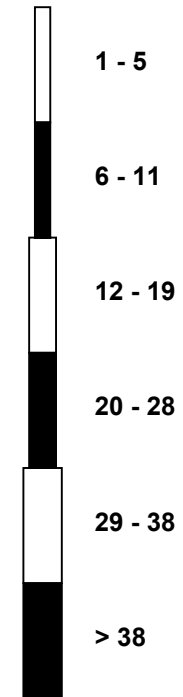
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	15	14	14	12	12	22	25	29	31	30	28	28	26	23	19	13	7	5	7	6	6	6	9	9	8.3	31.4
Dir	30	37	45	46	41	232	225	227	242	237	236	237	235	232	247	334	337	344	335	17	24	6	6	251.1	242.5	
24 Spd	10	11	12	13	14	11	8	9	10	9	9	10	5	7	8	7	6	8	9	11	10	11	13	9.3	14.0	
Dir	7	10	8	3	7	355	345	354	344	341	332	12	23	23	16	0	3	359	9	7	14	15	18	18	4.7	7.3
25 Spd	11	10	10	10	9	9	9	10	11	10	10	9	9	10	12	14	15	13	13	10	11	11	13	11	10.8	14.5
Dir	22	14	9	10	8	10	16	21	16	7	19	13	9	11	9	15	32	39	35	30	24	17	11	11	17.8	32.5
26 Spd	9	8	13	13	13	12	10	8	7	10	11	12	14	14	13	10	8	8	8	6	6	7	7	11	9.3	14.1
Dir	353	341	338	346	344	347	342	327	331	349	357	359	6	360	4	6	25	18	12	21	35	40	46	43	0.6	6.2
27 Spd	13	13	12	14	10	9	8	8	8	10	10	15	15	16	10	9	11	4	8	9	9	8	8	8	5.8	16.1
Dir	34	27	23	26	22	16	17	13	357	349	343	337	336	334	338	348	315	253	224	219	214	230	213	215	343.7	334.3
28 Spd	11	11	8	9	9	11	13	10	9	6	3	5	5	11	16	13	11	6	7	8	13	14	15	15	3.1	15.6
Dir	217	197	204	238	246	237	225	259	265	254	286	22	29	22	14	13	11	352	21	19	33	43	30	29	343.1	13.6
29 Spd	14	14	13	14	12	11	12	12	16	13	14	15	16	16	18	19	16	18	19	20	22	23	24	24	15.9	24.5
Dir	27	14	13	26	14	1	12	15	27	28	29	23	32	35	43	32	36	19	8	22	22	23	25	24	23.6	24.3
30 Spd	26	24	21	19	17	16	15	14	13	14	12	13	11	13	13	10	15	13	13	10	10	12	11	10	9.2	26.3
Dir	22	22	15	6	356	1	358	350	344	351	356	353	357	13	8	344	239	236	236	239	258	262	262	253	341.9	22.0
31 Spd	6	10	11	8	8	7	7	8	8	7	6	3	6	8	8	8	7	7	4	5	5	5	3	4	4.7	11.3
Dir	180	196	211	223	207	201	214	219	226	243	247	242	257	266	268	272	263	273	296	340	350	351	13	6	243.4	210.6
Spd	3.6	3.4	4.3	3.8	3.3	3.3	2.5	2.4	2.7	2.7	2.9	3.1	3.7	4.1	4.6	5.1	4.4	4.1	3.8	4.0	3.7	3.7	4.1	3.4	Diurnal Average	
Dir	356.9	353.4	343.3	345.0	338.8	314.1	324.0	325.5	331.3	334.5	337.5	331.8	329.3	337.8	344.3	347.3	351.0	356.4	2.4	356.7	358.4	349.5	350.4	345.4	Diurnal Maximum	
Spd	27.4	27.2	26.8	28.3	29.5	24.2	24.9	28.7	32.1	29.9	30.3	27.6	27.5	27.5	27.8	30.1	33.6	30.4	26.8	24.9	26.7	23.0	23.9	24.6	Diurnal Maximum	
Dir	47.0	43.8	44.4	46.2	50.1	31.0	225.2	226.8	42.9	40.3	36.9	236.9	35.5	40.1	48.8	42.9	46.6	49.8	49.6	50.2	42.5	53.8	46.3	44.8	Diurnal Maximum	
Maximum Speed Value: 34 km/h on Mar 22 17:00																		Minimum Speed Value: 0 km/h on Mar 5 19:00						Hours in Service: 744		
Maximum Daily Speed Average: 26.8 km/h on Mar 22																		Minimum Daily Speed Average: 3.1 km/h on Mar 11						Hours of Data: 744		
Maximum Diurnal Speed Average: 5.1 km/h at hour 16																		Minimum Diurnal Speed Average: 2.4 km/h at hour 8						Hours of Missing Data: 0		
Monthly Average Velocity: 3.54 km/h 344.02 deg																		Speed Percentiles: P ₁ = 1.2 P ₁₀ = 3.7 Q ₁ = 6.2 Median = 9.1 Q ₃ = 13.6 P ₉₀ = 21.4 P ₉₉ = 29.8						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	22	124	58	5	0	0	209																			
NorthEast	9	26	40	57	13	0	145																			
East	6	2	0	0	0	0	8																			
SouthEast	12	1	0	0	0	0	13																			
South	19	12	2	0	0	0	33																			
SouthWest	30	84	41	17	4	0	176																			
West	23	81	24	1	0	0	129																			
NorthWest	7	21	3	0	0	0	31																			
Total	128	351	168	80	17	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - March 2018



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - March 2018

Maximum Speed: 34 km/h on Mar 22 17:00	Maximum Daily Speed Average: 27.1 km/h on Mar 22	Hours in Service: 744
Minimum Speed: 1 km/h on Mar 12 00:00	Minimum Daily Speed Average: 4.8 km/h on Mar 11	Hours of Data: 744
Maximum Diurnal Speed Average: 12.6 km/h at hour 16	Minimum Diurnal Speed Average: 9.7 km/h at hour 20	Hours of Missing Data: 0
Monthly Average Speed: 11.02 km/h	Percentiles: P ₁ = 2.2 P ₁₀ = 4.3 Q ₁ = 6.5 Median = 9.3 Q ₃ = 13.8 P ₉₀ = 21.5 P ₉₉ = 30.0	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	19	19	18	18	18	21	22	21	20	24	26	27	27	28	27	30	31	31	25	22	20	23	21	19	23.2	31.2
2-Mar	23	25	21	20	21	24	24	25	28	25	25	22	21	19	17	15	13	11	10	5	5	8	5	4	17.3	27.6
3-Mar	3	10	14	12	8	5	3	2	3	3	2	3	3	5	8	8	7	9	8	7	7	9	9	10	6.6	13.8
4-Mar	8	4	6	6	9	9	10	7	4	5	8	9	9	8	9	9	9	5	3	4	3	3	3	4	6.5	10.4
5-Mar	5	7	7	8	6	5	7	7	10	9	11	10	8	6	4	6	10	4	1	6	7	12	15	6	7.4	14.7
6-Mar	9	6	8	11	9	14	11	12	10	6	5	5	3	6	5	3	3	3	8	9	9	7	7	9	7.4	14.1
7-Mar	10	10	8	10	12	11	10	11	11	11	11	10	5	5	3	10	8	6	6	6	6	6	5	6	8.2	11.9
8-Mar	5	4	3	4	8	6	8	7	8	8	8	9	11	9	8	8	9	8	8	7	5	5	5	4	6.9	10.7
9-Mar	5	5	6	9	8	7	7	6	6	10	5	8	13	13	13	9	14	10	16	18	21	21	19	23	11.3	23.4
10-Mar	15	15	17	20	15	15	14	14	16	15	14	13	18	21	16	14	10	9	5	6	7	6	8	7	12.9	20.7
11-Mar	7	7	4	2	1	3	4	4	4	4	3	4	8	4	6	10	8	8	6	3	3	6	4	1	4.8	10.0
12-Mar	8	9	11	8	8	8	8	9	10	9	7	8	11	11	10	10	10	9	6	3	3	5	4	3	7.9	11.3
13-Mar	4	4	2	3	3	3	3	3	3	4	2	3	3	6	10	12	13	14	17	16	11	10	9	8	7.0	16.7
14-Mar	9	8	9	7	9	8	8	6	6	8	8	4	3	6	8	10	11	16	15	12	9	6	6	5	8.2	15.8
15-Mar	4	4	6	8	12	9	5	5	5	7	11	10	7	5	2	3	5	2	5	7	6	7	6	7	6.2	12.1
16-Mar	4	3	5	5	6	8	13	11	9	9	8	13	16	12	10	10	9	10	9	5	9	10	12	13	9.1	15.7
17-Mar	5	8	9	8	10	9	5	5	3	2	3	5	6	7	10	13	14	10	9	8	7	4	7	8	7.3	14.1
18-Mar	8	9	8	8	8	8	7	6	9	11	9	6	6	6	5	8	7	7	5	5	5	2	3	7	6.8	11.2
19-Mar	9	7	8	10	13	13	10	11	10	12	17	20	18	18	22	22	22	17	15	13	15	17	16	18	14.7	22.0
20-Mar	20	17	17	16	15	14	12	5	4	10	17	21	20	14	14	16	11	9	8	7	2	3	6	4	11.7	21.5
21-Mar	7	6	6	7	8	8	9	10	11	14	17	19	20	22	28	29	25	26	25	24	27	22	24	25	17.4	29.1
22-Mar	27	27	27	28	30	25	24	28	32	30	30	27	28	26	25	30	34	30	27	25	26	23	22	19	27.1	33.7
23-Mar	15	15	14	12	12	25	25	29	31	30	28	28	26	23	19	13	7	6	7	7	6	6	9	10	16.8	31.4
24-Mar	10	11	12	13	14	11	8	9	10	9	10	9	10	6	7	8	7	6	9	9	11	10	12	13	9.7	14.2
25-Mar	11	10	10	10	10	9	9	10	11	10	10	9	9	11	12	14	15	13	13	10	11	11	13	11	11.0	14.6
26-Mar	9	8	13	13	13	12	10	8	7	10	11	13	14	14	13	10	8	8	8	6	7	7	7	11	10.0	14.3
27-Mar	13	13	12	14	10	9	9	8	9	10	11	15	15	16	10	9	11	6	8	9	9	8	8	8	10.4	16.2
28-Mar	11	11	8	9	9	12	13	10	9	6	3	5	5	11	16	13	11	6	7	8	13	14	15	16	10.1	15.6
29-Mar	14	14	13	14	12	11	12	12	16	16	13	14	15	16	16	18	19	17	18	19	20	22	23	25	16.2	24.5
30-Mar	26	24	21	19	17	16	15	14	13	14	12	13	12	13	14	13	15	13	13	10	10	12	11	10	14.6	26.4
31-Mar	6	10	11	9	8	7	7	8	8	7	6	3	6	8	8	8	7	7	5	5	5	5	4	4	6.9	11.3
	10.6	10.7	10.8	11.1	11.0	11.1	10.7	10.5	10.8	11.2	11.3	11.8	12.1	12.1	12.1	12.6	12.4	10.9	10.5	9.7	9.9	10.1	10.2	10.2	Diurnal Average	
	27.5	27.3	26.9	28.4	29.7	24.6	25.0	28.9	32.2	30.0	30.4	27.7	27.6	27.6	28.0	30.2	33.7	30.5	26.9	25.0	26.9	23.3	24.0	24.6	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg
Smoky Heights - March 2018

Maximum Value: 89.8 deg on Mar 5 19:00																								Hours in Service:	744
Minimum Value: 2.2 deg on Mar 7 05:00																								Hours of Data:	744
Percentiles: P ₁ = 2.8 P ₁₀ = 4.2 Q ₁ = 5.7 Median = 8.5 Q ₃ = 15.6 P ₉₀ = 32.3 P ₉₉ = 66.3																								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	4	4	5	5	4	4	5	5	6	4	4	4	6	5	7	5	5	6	5	6	7	8	5	5	8.0
2-Mar	4	5	4	3	4	4	5	4	4	5	5	5	5	5	5	7	8	8	7	23	34	11	24	21	33.6
3-Mar	63	7	4	6	20	47	46	76	13	42	20	37	17	19	12	13	45	8	8	7	9	6	6	5	76.1
4-Mar	16	34	13	11	4	11	15	12	50	28	16	5	6	6	5	7	5	12	15	14	49	64	34	28	64.3
5-Mar	12	8	6	19	12	39	25	17	6	18	6	5	7	32	23	61	8	6	90	9	31	11	14	41	89.8
6-Mar	18	47	16	13	5	7	7	10	15	16	26	22	43	8	35	34	21	27	5	7	9	17	8	7	47.1
7-Mar	6	6	21	15	2	5	7	8	9	8	19	20	33	16	35	9	7	19	22	22	16	10	17	7	35.1
8-Mar	13	19	33	21	5	7	5	9	8	8	7	5	4	7	8	10	8	9	8	13	17	22	10	26	32.9
9-Mar	43	66	19	31	12	21	20	7	13	13	59	39	6	10	34	31	3	5	6	2	3	6	13	5	65.8
10-Mar	5	7	3	5	6	6	9	14	4	6	8	11	5	3	5	13	18	7	14	10	12	16	10	12	17.6
11-Mar	9	10	17	19	40	69	79	40	13	22	46	50	11	33	9	4	4	10	29	33	25	21	59	49	79.2
12-Mar	25	8	5	20	9	13	9	9	6	8	6	8	3	3	3	4	4	7	8	31	40	51	31	54	54.4
13-Mar	11	77	70	43	60	28	14	19	15	12	60	49	63	51	4	6	5	9	4	6	15	7	4	10	77.1
14-Mar	6	9	6	16	6	7	9	8	9	5	5	46	64	17	13	9	7	7	9	9	7	9	23	36	63.7
15-Mar	67	27	23	14	15	24	22	25	24	21	29	18	45	28	60	27	31	57	42	7	8	12	15	9	67.0
16-Mar	42	38	37	27	20	31	15	21	31	30	53	7	8	4	4	6	27	18	11	31	25	9	4	10	52.9
17-Mar	38	12	15	18	11	66	41	20	41	66	29	14	9	9	12	11	6	9	7	9	9	11	9	5	66.5
18-Mar	6	4	9	6	13	8	20	11	8	3	5	7	28	15	14	4	3	7	6	36	7	18	57	17	57.0
19-Mar	10	13	11	6	4	3	4	4	4	9	9	4	6	3	8	2	4	4	11	22	6	4	4	4	22.4
20-Mar	5	5	3	4	3	7	4	28	9	12	3	4	6	16	9	7	3	19	11	9	60	29	30	16	60.2
21-Mar	26	16	12	8	7	8	6	8	7	6	5	5	5	5	7	5	7	6	7	7	6	6	5	4	25.8
22-Mar	5	4	5	5	6	10	9	5	4	4	5	5	4	5	5	6	5	5	5	5	5	6	4	7	9.5
23-Mar	4	11	5	10	7	56	3	6	3	4	5	5	4	6	8	5	8	36	9	17	17	15	7	14	55.7
24-Mar	12	8	9	10	8	14	17	17	12	12	14	14	10	24	13	18	15	14	14	7	4	7	7	5	23.6
25-Mar	3	7	6	9	7	6	4	6	7	8	6	9	9	8	7	8	8	6	5	6	6	7	7	14	13.9
26-Mar	9	11	7	8	9	8	10	9	8	11	11	16	9	11	11	12	7	6	6	4	9	12	4	7	16.2
27-Mar	7	7	9	4	5	10	6	8	14	10	13	6	6	6	13	12	7	50	12	11	6	11	7	8	50.2
28-Mar	7	4	11	7	8	6	14	10	8	14	24	13	13	6	6	4	9	14	10	5	9	9	6	5	23.9
29-Mar	5	6	7	4	7	7	5	4	4	4	9	6	6	8	7	5	6	17	7	5	4	4	4	4	17.1
30-Mar	5	7	4	10	8	8	9	10	8	10	13	13	18	10	10	41	5	2	5	7	3	4	7	8	40.8
31-Mar	10	6	4	17	9	11	4	7	4	13	13	17	6	4	3	12	5	8	43	7	10	9	11	24	43.4
67.0	77.1	69.6	43.4	60.2	69.2	79.2	76.1	50.2	66.5	60.5	50.2	63.7	51.3	60.5	61.2	44.7	56.8	89.8	36.3	60.2	64.3	58.5	54.4		

PAZA

Beaverlodge Station

Monthly Summary Tables, Graphs and
Roses



Peace Airshed Zone Association

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Beaverlodge - March 2018

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 18.8 ppb on Mar 14 14:00	Maximum Daily Average: 3.8 ppb on Mar 14		Hours of Data:	708
Minimum Value: 0 ppb on Mar 31 07:00	Minimum Daily Average: 0.1 ppb on Mar 23		Hours of Missing Data:	36
Maximum Diurnal Average: 1.2 ppb at hour 15	Minimum Diurnal Average: 0.6 ppb at hour 8		Hours of Calibration:	34
Monthly Average: 0.80 ppb	Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.8 P ₉₀ = 1.7 P ₉₉ = 6.0		Percent Operational Time:	99.7

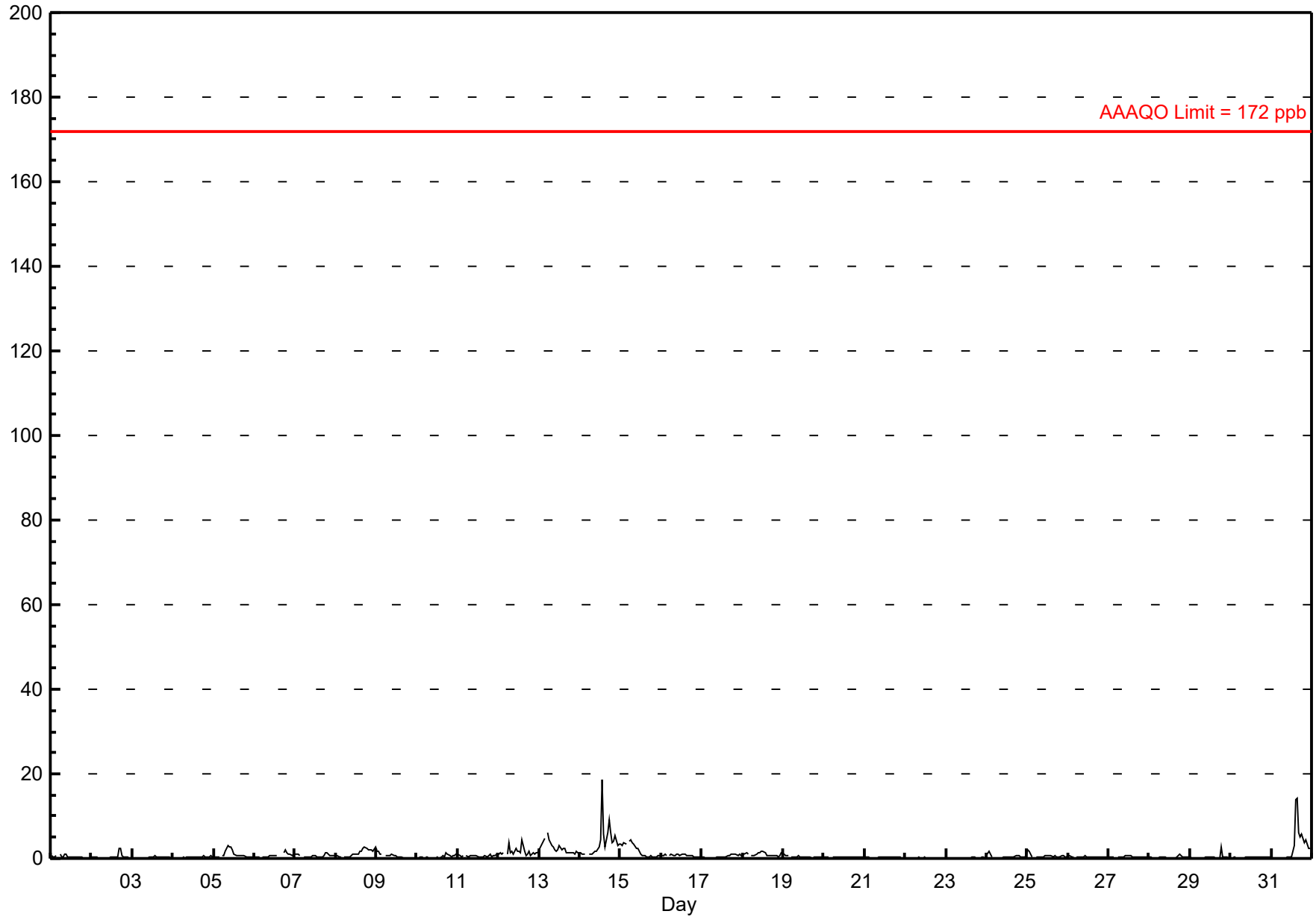
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	1	0	0	1	A	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
2-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0.4	2.4
3-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	0.7
4-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0.3	0.5
5-Mar	0	0	0	0	A	1	1	2	3	3	3	2	1	1	1	1	1	1	1	0	0	0	0	0	0.9	3.1
6-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	C	C	C	1	2	1	1	1	1	1	0.7	2.1
7-Mar	1	1	1	1	A	0	0	0	0	0	1	1	1	0	0	0	0	1	1	1	1	1	1	1	0.6	1.4
8-Mar	1	1	0	0	A	0	0	0	0	1	1	1	1	1	2	2	2	3	3	2	2	2	2	3	1.3	2.7
9-Mar	2	2	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.8
10-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	1	1	1	0.4	1.2
11-Mar	1	1	0	1	A	1	0	1	1	1	1	1	0	0	0	0	1	0	1	1	0	1	1	1	0.6	0.9
12-Mar	1	1	1	1	A	1	4	1	2	1	2	2	2	1	4	2	1	1	2	1	1	1	1	1	1.5	4.5
13-Mar	2	3	4	5	A	6	4	3	3	2	2	2	3	2	2	3	1	1	1	1	1	1	2	1	2.5	6.0
14-Mar	1	1	1	1	A	1	1	1	2	2	2	3	4	19	6	3	6	9	6	4	4	5	3	3	3.8	18.8
15-Mar	3	3	4	4	A	4	4	4	3	2	2	2	1	1	1	0	0	0	1	0	0	0	1	1	1.8	4.5
16-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.7	1.1
17-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.5	1.1
18-Mar	1	1	1	1	A	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6
19-Mar	1	1	1	1	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2
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	0.3	0.4
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	0.2	0.4
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	0.1	0.2
23-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
24-Mar	1	2	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	0.4	1.6
25-Mar	2	2	1	0	A	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	1	1	0	1	0.6	2.0
26-Mar	1	1	0	1	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
27-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7
28-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.2	0.9
29-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0.3	2.7
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	0.3	0.5
31-Mar	0	P	P	0	A	0	0	0	0	0	0	0	0	3	14	14	6	5	6	4	5	3	2	2	3.2	14.3

0.7	0.7	0.7	0.7	--	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	1.2	1.2	1.1	0.9	1.1	1.1	0.8	0.8	0.7	0.6	0.7	Diurnal Average	
3.4	3.2	4.2	4.9	--	6.0	4.5	3.6	3.4	2.8	2.8	2.8	4.3	18.8	13.8	14.3	6.1	9.1	6.0	3.8	4.5	5.5	3.0	3.5	Diurnal Maximum	

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

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2018



Hourly Maximums

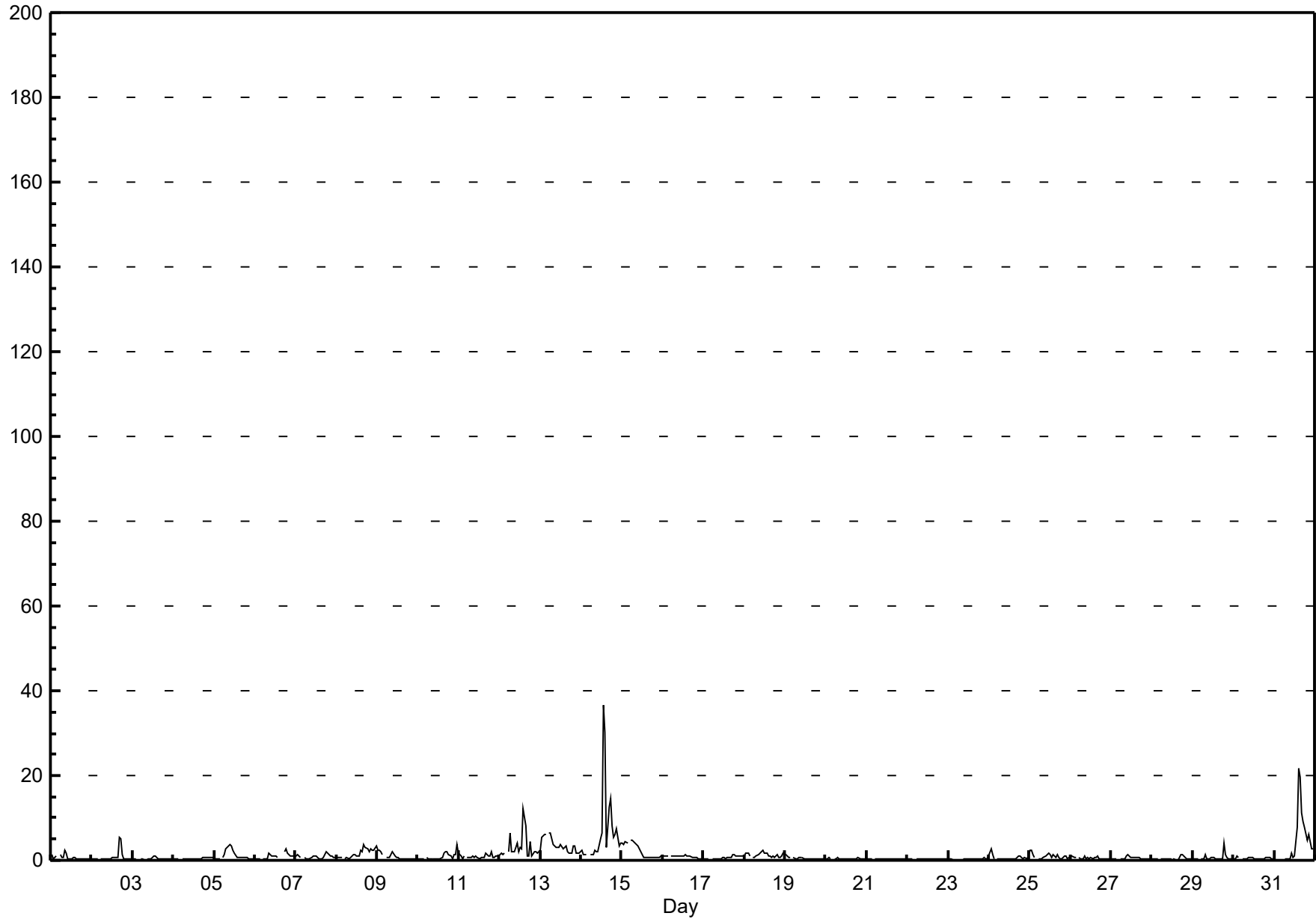
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - March 2018

Maximum Value: 36.6 ppb on Mar 14 14:00		Maximum Daily Average: 7.0 ppb on Mar 14		Hours in Service: 744																						
Minimum Value: 0 ppb on Mar 31 06:00		Minimum Daily Average: 0.2 ppb on Mar 23		Hours of Data: 708																						
Maximum Diurnal Average: 2.8 ppb at hour 15		Minimum Diurnal Average: 0.8 ppb at hour 8		Hours of Missing Data: 36																						
Monthly Average: 1.24 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.5 Q ₃ = 1.2 P ₉₀ = 2.6 P ₉₉ = 11.0		Hours of Calibration: 34																						
				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	1	0	1	1	A	1	1	1	2	2	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.7	2.5
2-Mar	0	0	0	1	A	0	0	0	0	0	0	0	1	1	1	1	5	5	1	0	0	0	0	0	0.8	5.3
3-Mar	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.3	0.9
4-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.4	0.8
5-Mar	0	0	0	0	A	1	2	3	3	4	3	2	2	1	1	1	1	1	1	1	0	0	0	0	1.2	3.7
6-Mar	0	0	0	0	A	0	0	0	2	1	1	1	1	1	C	C	C	2	3	2	1	1	1	1	1.1	2.7
7-Mar	1	1	1	1	A	1	0	0	0	1	1	1	1	1	0	0	1	2	2	2	1	1	1	1	0.9	2.0
8-Mar	1	1	1	1	A	0	1	0	1	1	1	1	1	1	2	2	4	3	3	2	3	2	2	3	1.6	3.6
9-Mar	2	2	2	1	A	1	1	1	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.8	2.5
10-Mar	0	0	0	0	A	1	0	0	0	0	0	0	0	0	1	2	2	2	1	1	0	1	1	4	0.8	3.6
11-Mar	2	1	0	1	A	1	1	1	1	1	1	1	0	1	1	1	2	1	1	2	1	1	1	1	0.9	1.9
12-Mar	1	2	1	2	A	2	6	2	2	2	4	2	3	3	12	8	1	1	4	1	2	2	2	2	2.9	12.1
13-Mar	2	5	6	6	A	7	6	4	3	3	3	3	4	3	3	3	2	2	2	3	3	2	2	2	3.5	6.6
14-Mar	3	1	1	1	A	1	1	1	2	2	2	5	6	37	30	3	13	15	8	6	6	7	3	4	7.0	36.6
15-Mar	4	4	4	4	A	5	5	4	4	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2.2	4.9
16-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.9	1.3
17-Mar	0	0	0	0	A	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	0.6	1.4
18-Mar	1	2	2	1	A	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1	2	1.2	2.3
19-Mar	1	1	1	1	A	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.4
20-Mar	0	0	1	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.7
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	0.3	0.5
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	0.2	0.3
23-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.8
24-Mar	1	3	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	2	0.7	2.9
25-Mar	3	2	1	1	A	0	0	0	1	1	1	2	1	1	1	1	1	1	0	0	1	1	0	1	1.0	2.5
26-Mar	1	1	1	1	A	1	0	0	1	0	1	0	1	0	1	1	1	0	0	0	0	0	0	0	0.5	1.1
27-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	0.5	1.5
28-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0.4	1.4
29-Mar	0	0	0	0	A	0	0	1	0	0	0	1	1	0	0	0	0	0	4	1	1	0	0	0	0.6	4.2
30-Mar	0	0	1	1	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0.5	1.0
31-Mar	0	P	P	1	A	0	0	0	0	0	2	1	1	8	22	20	11	9	8	5	6	4	3	3	4.9	21.6
		1.0	1.0	1.0	0.9	--	0.9	1.0	0.8	1.0	1.0	1.1	1.0	1.1	2.1	2.8	1.7	1.7	1.7	1.6	1.1	1.1	1.0	0.8	1.0	Diurnal Average
		4.2	5.3	6.1	6.0	--	6.6	6.4	4.3	4.1	3.7	3.9	5.1	6.5	36.6	30.2	19.8	12.5	14.5	8.3	5.5	6.2	7.5	3.4	4.2	Diurnal Maximum
C - Calibration					P - Power Failure					A - Automated Daily Zero Span																

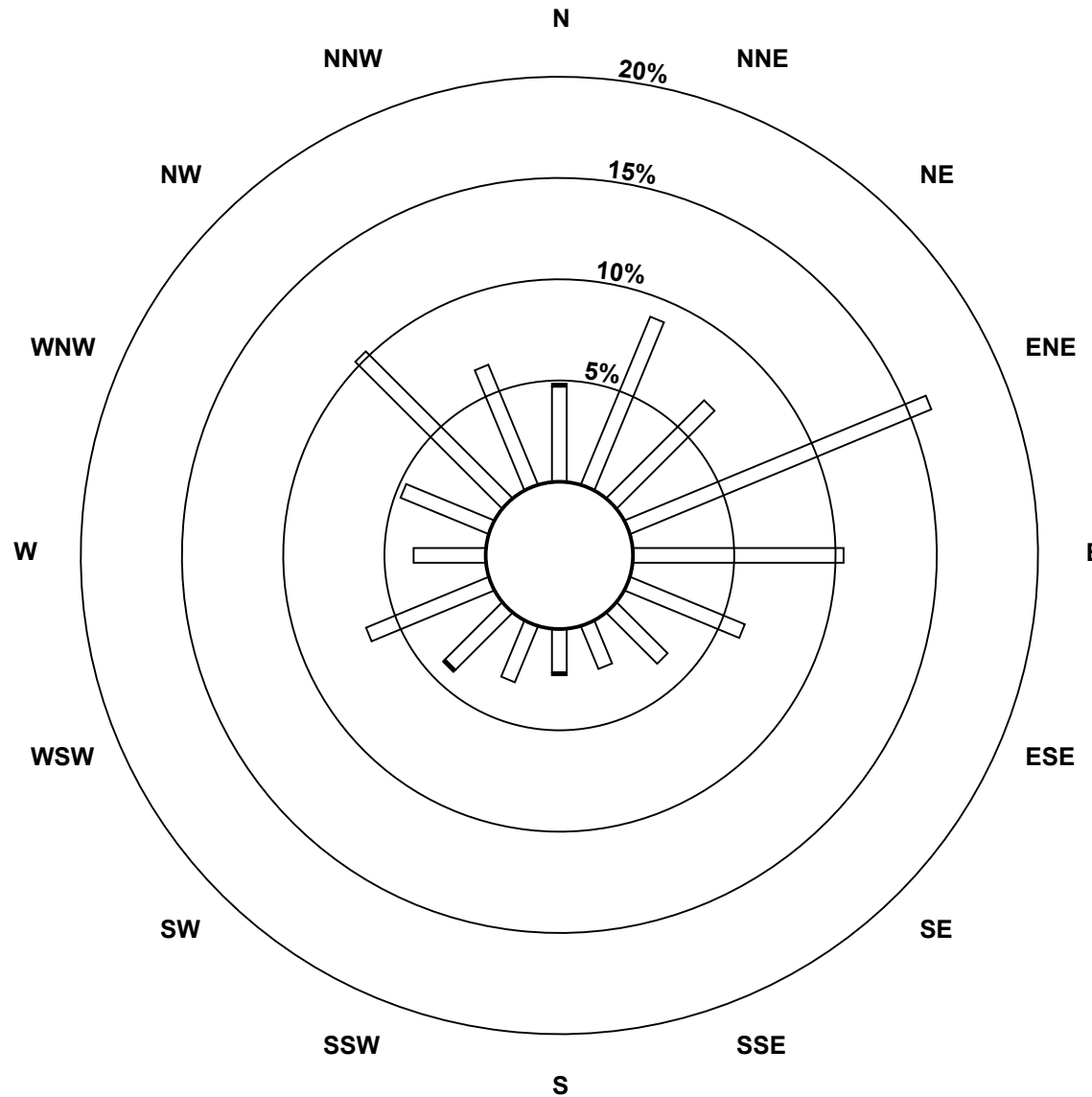
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2018

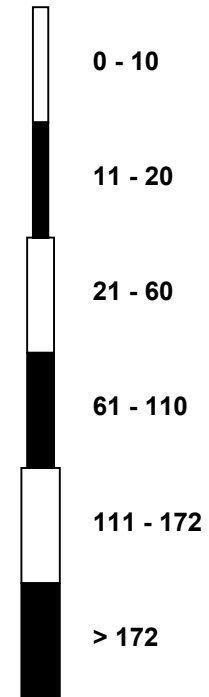


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2018

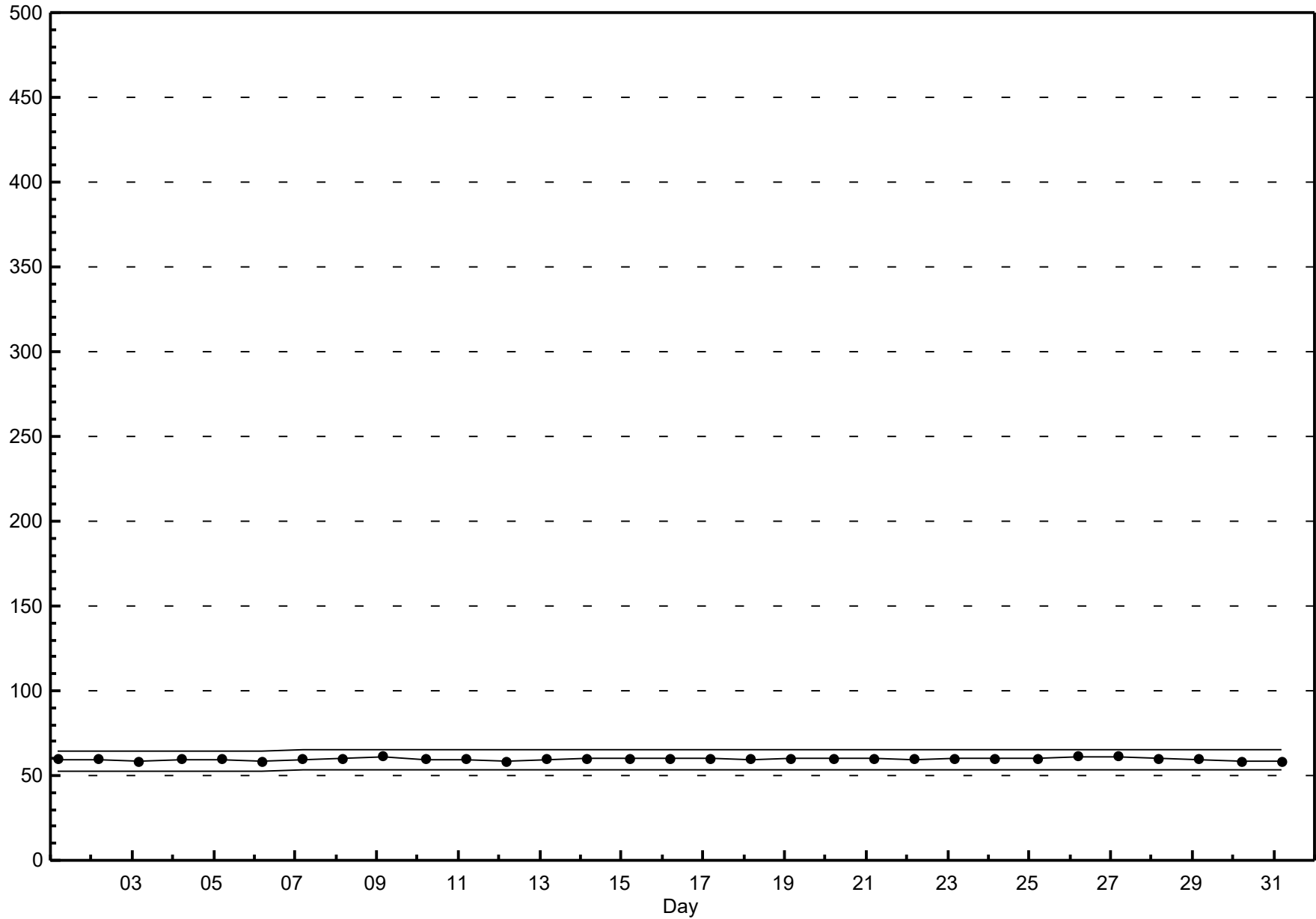


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Beaverlodge - March 2018



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2018

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 34.6 ppb on Mar 31 23:00	Maximum Daily Average: 16.0 ppb on Mar 8		Hours of Data:	705
Minimum Value: 1 ppb on Mar 30 02:00	Minimum Daily Average: 1.3 ppb on Mar 1		Hours of Missing Data:	39
Maximum Diurnal Average: 7.3 ppb at hour 6	Minimum Diurnal Average: 3.1 ppb at hour 15		Hours of Calibration:	37
Monthly Average: 5.19 ppb	Percentiles: P ₁ = 0.7 P ₁₀ = 1.0 Q ₁ = 1.6 Median = 3.6 Q ₃ = 7.4 P ₉₀ = 11.6 P ₉₉ = 21.2		Percent Operational Time:	99.7

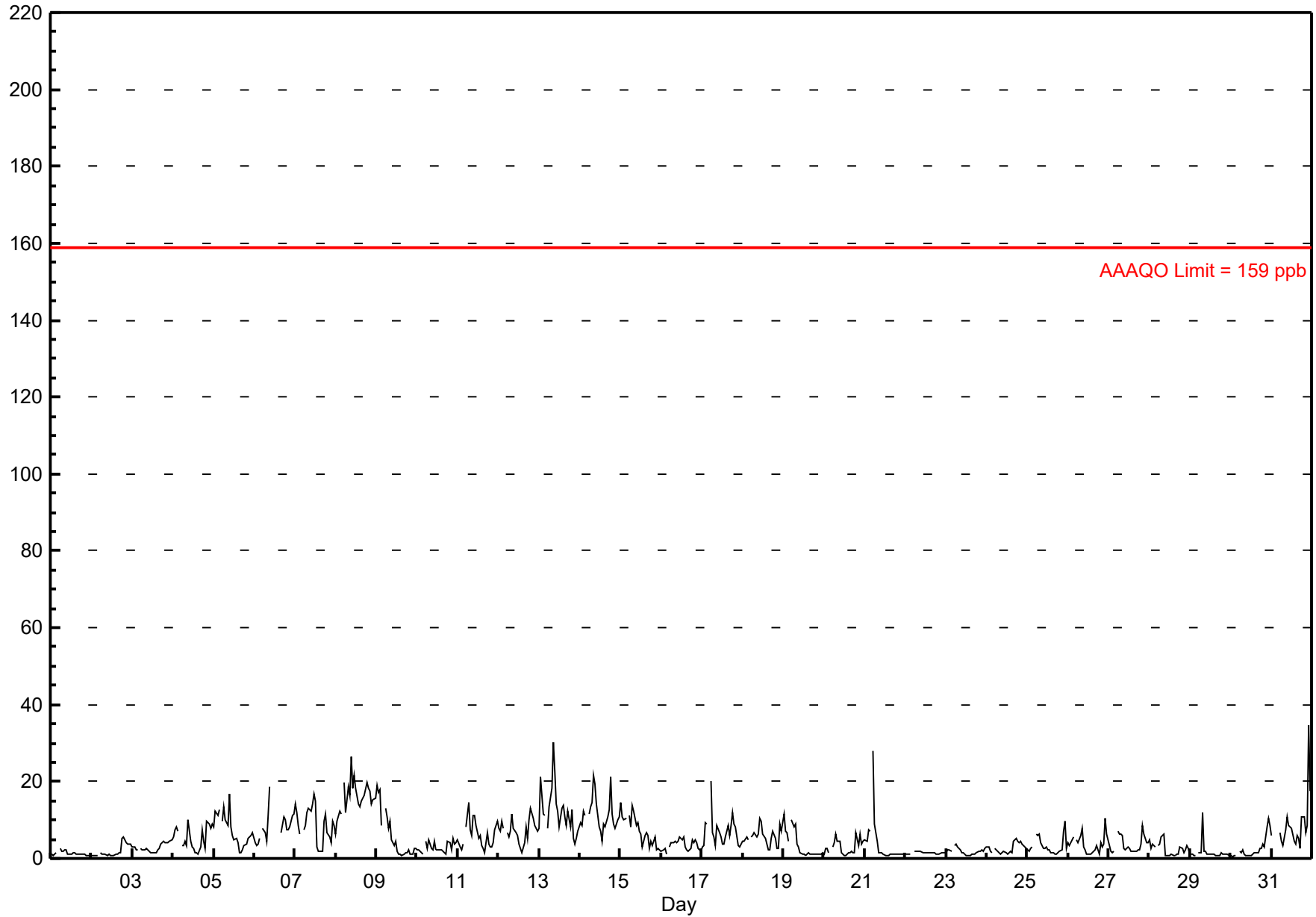
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	1	1	1	1	A	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.5	
2-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	5	5	4	4	4	4	1.9	5.5	
3-Mar	3	3	2	2	A	3	2	2	2	2	2	1	1	2	2	2	3	4	4	4	4	4	4	5	2.8	4.9	
4-Mar	6	7	8	7	A	3	3	4	3	10	4	3	3	2	2	1	3	7	5	3	10	9	8	9	5.2	10.1	
5-Mar	8	12	11	13	A	10	13	10	9	17	8	6	5	5	4	2	2	2	3	4	5	5	6	7	7.2	16.6	
6-Mar	4	3	4	5	A	8	7	4	11	19	C	C	C	C	C	C	7	11	10	8	7	8	11	12	--	18.5	
7-Mar	14	12	8	6	A	7	9	12	13	12	14	17	15	3	2	2	2	10	12	7	6	4	10	9	8.9	16.7	
8-Mar	6	10	12	11	A	20	12	19	17	27	18	22	18	14	13	15	16	17	20	18	18	14	15	16	16.0	26.6	
9-Mar	19	17	18	9	A	13	11	8	10	5	3	5	2	1	1	1	1	2	2	2	1	1	3	2	5.9	19.2	
10-Mar	2	2	2	1	A	4	3	5	2	2	4	2	2	2	2	2	1	1	4	4	2	5	4	4	2.9	5.2	
11-Mar	5	3	2	4	A	8	15	7	6	11	11	9	5	6	3	3	2	7	4	3	3	4	8	10	6.0	14.7	
12-Mar	8	7	10	8	A	7	5	7	12	8	7	6	4	3	1	4	8	5	10	13	10	8	8	7	7.2	13.1	
13-Mar	8	21	11	11	A	8	14	18	30	23	14	12	8	13	14	11	9	12	8	13	5	4	5	7	12.2	30.1	
14-Mar	9	9	12	11	A	12	14	15	21	19	14	8	7	5	9	8	11	13	21	12	9	8	10	11	11.6	21.5	
15-Mar	14	11	10	10	A	11	8	14	12	9	9	7	6	3	6	7	6	2	5	3	6	2	3	2	7.3	14.4	
16-Mar	2	2	3	1	A	3	4	4	4	4	5	6	5	5	3	2	2	3	5	4	5	4	2	2	3.5	5.6	
17-Mar	3	3	9	9	A	20	7	5	3	9	7	6	4	4	5	8	6	9	12	9	8	3	3	4	6.8	20.0	
18-Mar	4	5	6	5	A	6	6	7	6	7	10	10	6	5	4	2	2	5	7	5	3	3	9	7	5.6	10.5	
19-Mar	12	7	7	4	A	10	8	9	4	3	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3.4	11.6	
20-Mar	1	3	2	1	A	3	4	6	5	5	1	1	1	1	1	2	2	2	2	2	7	3	6	4	4	2.9	6.8
21-Mar	5	5	8	7	A	28	9	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3.6	28.0	
22-Mar	1	1	1	1	A	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	2.0	
23-Mar	1	2	2	2	A	3	4	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3	1.8	3.7	
24-Mar	3	3	2	1	A	2	2	2	1	2	2	1	1	1	2	2	4	5	5	4	5	4	3	3	2.6	5.3	
25-Mar	2	2	3	3	A	6	6	6	4	3	3	3	2	2	2	1	1	1	2	2	2	7	10	3	3.3	9.9	
26-Mar	4	3	5	6	A	5	4	6	8	3	2	1	1	2	2	2	3	1	4	3	4	11	6	3.8	10.6		
27-Mar	3	2	2	2	A	7	6	6	6	3	2	3	2	2	2	2	2	2	4	9	6	4	4	3.7	8.6		
28-Mar	5	3	4	3	A	3	4	5	6	1	1	1	1	1	1	1	1	3	2	2	2	3	3	2.4	6.3		
29-Mar	1	1	1	1	A	1	2	12	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1.6	12.0	
30-Mar	1	1	1	1	A	2	2	2	1	1	1	1	1	1	2	2	2	2	3	4	3	8	11	8	2.5	10.6	
31-Mar	6	P	P	3	A	7	4	4	8	11	8	8	8	5	4	6	5	3	11	11	7	9	35	18	8.5	34.6	

5.3	5.4	5.6	4.9	--	7.3	6.2	6.9	6.9	7.1	5.4	4.8	3.9	3.1	3.1	3.2	3.5	4.4	5.6	5.2	4.7	4.7	6.4	5.6	Diurnal Average	
19.2	21.1	17.9	12.6	--	28.0	14.7	18.6	30.1	26.6	18.2	21.6	18.4	14.2	13.8	15.0	15.6	16.5	21.2	18.1	17.7	14.3	34.6	17.7	Diurnal Maximum	

C - Calibration P - Power Failure 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 2018



Hourly Maximums

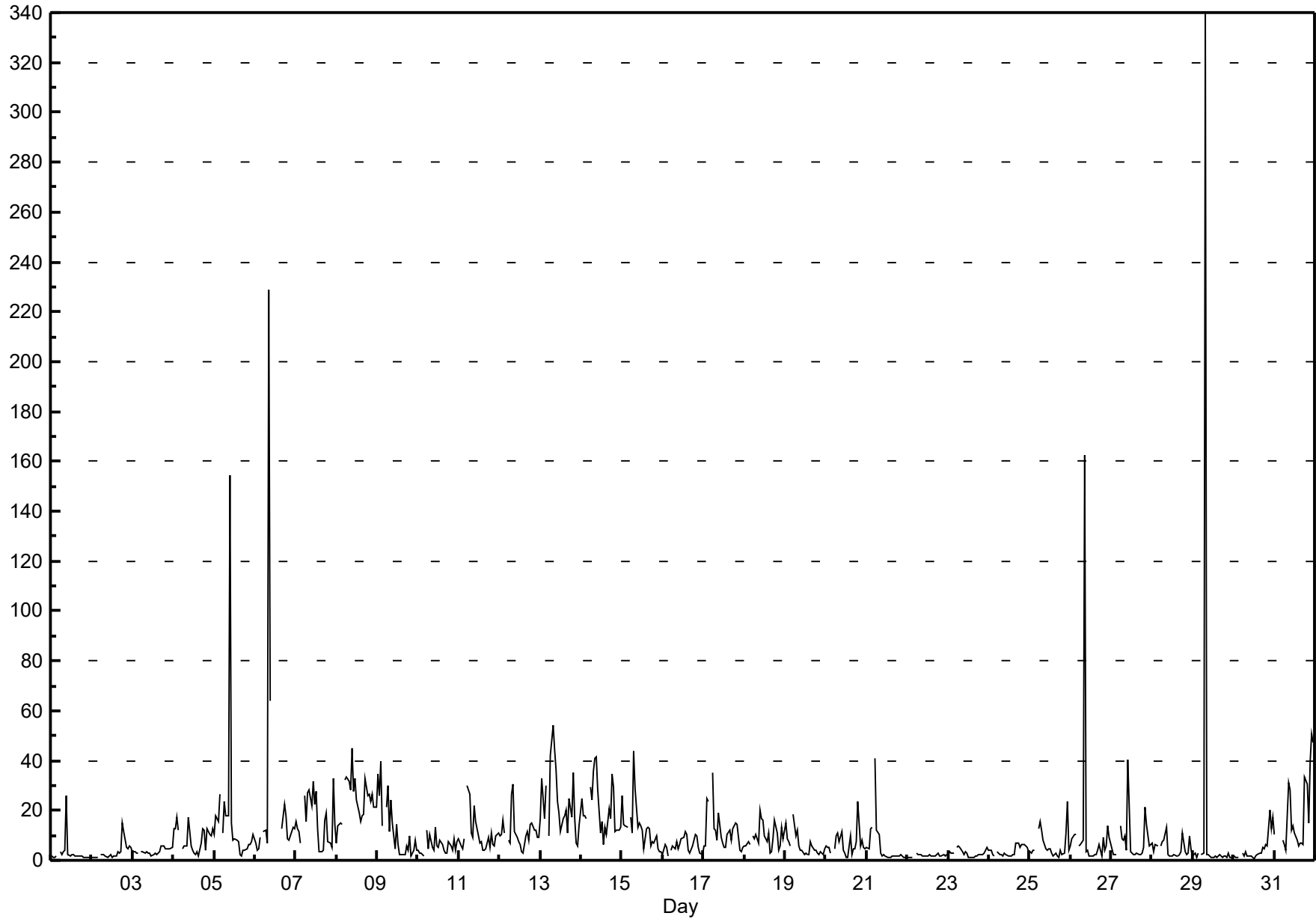
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2018

Maximum Value: 339.2 ppb on Mar 29 08:00		Maximum Daily Average: 24.1 ppb on Mar 8		Hours in Service: 744																									
Minimum Value: 1 ppb on Mar 30 13:00		Minimum Daily Average: 1.9 ppb on Mar 22		Hours of Data: 705																									
Maximum Diurnal Average: 25.1 ppb at hour 9		Minimum Diurnal Average: 5.0 ppb at hour 14		Hours of Missing Data: 39																									
Monthly Average: 10.27 ppb		Percentiles: P ₁ = 0.9 P ₁₀ = 1.7 Q ₁ = 2.7 Median = 5.7 Q ₃ = 12.2 P ₉₀ = 23.1 P ₉₉ = 47.1		Hours of Calibration: 37																									
				Percent Operational Time: 99.7																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Mar	2	1	1	2	A	3	3	4	4	26	2	2	2	3	2	2	1	2	2	1	1	1	1	1	3.0	26.1			
2-Mar	1	1	1	1	A	2	2	2	2	1	2	2	1	1	2	3	3	4	15	11	5	5	6	5	3.4	15.2			
3-Mar	4	3	3	3	A	3	3	3	4	3	3	2	2	3	2	3	3	6	6	5	4	5	5	5	3.6	5.8			
4-Mar	13	13	17	12	A	5	6	6	6	18	6	4	3	2	3	2	7	13	12	4	13	10	10	13	8.6	17.5			
5-Mar	10	18	15	26	A	11	24	18	18	155	15	8	8	8	8	2	2	4	4	4	6	6	7	11	16.9	154.5			
6-Mar	7	4	4	9	A	12	12	7	229	64	C	C	C	C	C	C	13	23	18	8	8	10	13	13	--	229.1			
7-Mar	16	13	12	7	A	26	16	27	28	22	32	23	28	13	4	3	4	16	19	8	7	5	33	15	16.3	33.1			
8-Mar	7	14	15	15	A	33	33	32	28	45	28	33	24	19	16	18	18	33	26	27	23	27	21	21	24.1	44.7			
9-Mar	35	26	40	14	A	21	30	11	24	15	5	14	7	2	2	2	2	5	4	10	2	4	8	4	12.5	39.8			
10-Mar	4	3	3	2	A	12	5	11	5	4	14	6	5	8	6	4	3	3	7	6	4	9	4	8	5.9	13.5			
11-Mar	8	6	5	8	A	30	27	11	9	22	16	13	7	7	4	4	5	9	5	11	6	6	10	11	10.4	30.2			
12-Mar	10	11	16	11	A	8	7	26	31	11	9	8	7	4	3	10	12	8	14	15	12	12	9	9	11.4	30.6			
13-Mar	17	33	17	30	A	10	42	54	44	36	24	19	11	17	18	20	11	25	17	35	16	7	6	14	22.8	54.0			
14-Mar	25	18	18	17	A	29	24	36	41	41	28	11	16	6	13	11	21	17	35	29	12	12	12	13	21.0	41.3			
15-Mar	26	14	14	13	A	17	11	44	29	13	15	14	12	5	13	13	12	5	8	7	10	4	3	3	13.3	44.0			
16-Mar	2	7	5	1	A	4	6	5	8	5	6	8	9	11	10	4	3	6	8	10	10	5	3	2	6.0	11.3			
17-Mar	6	6	25	24	A	35	13	12	8	19	9	7	5	5	10	12	8	12	14	15	14	4	4	5	11.8	35.1			
18-Mar	6	6	7	6	A	10	8	11	7	20	17	16	10	8	11	3	3	9	16	11	4	6	13	8	9.4	20.1			
19-Mar	15	9	7	6	A	18	10	12	6	4	4	2	3	2	2	8	6	4	4	3	2	3	2	5	6.0	18.5			
20-Mar	6	5	5	3	A	5	10	11	7	12	4	3	1	1	10	2	4	5	7	24	6	8	5	5	6.5	23.6			
21-Mar	5	5	13	13	A	41	12	10	3	2	2	1	1	1	2	2	2	2	2	2	3	2	1	1	5.5	41.0			
22-Mar	1	1	1	1	A	3	2	2	3	2	2	2	2	2	2	2	2	2	3	1	1	3	2	2	1.9	3.0			
23-Mar	2	4	3	3	A	5	6	5	4	2	4	3	1	1	1	1	1	1	2	2	2	3	4	5	2.9	6.0			
24-Mar	4	4	3	2	A	4	2	2	2	3	2	2	1	2	2	2	7	7	5	6	6	7	5	4	3.6	6.9			
25-Mar	3	3	4	4	A	12	16	12	8	5	4	5	5	3	2	3	2	1	4	2	3	11	24	4	6.0	23.6			
26-Mar	6	9	10	10	A	6	6	8	162	3	4	2	2	2	3	2	4	6	2	9	4	6	14	9	12.5	162.2			
27-Mar	5	3	2	2	A	14	9	8	10	4	40	3	3	2	3	3	2	3	3	5	21	15	6	6	7.5	40.2			
28-Mar	7	3	6	6	A	6	7	8	13	2	2	2	2	2	2	2	2	4	11	4	3	3	10	4	4.8	13.3			
29-Mar	2	3	1	3	A	2	3	339	2	2	2	1	1	2	1	2	2	1	2	2	1	3	1	1	16.5	339.2			
30-Mar	2	1	1	1	A	3	2	3	2	2	2	1	1	2	2	3	3	5	5	6	6	20	13	17	4.4	20.4			
31-Mar	11	P	P	6	A	8	6	4	31	28	12	14	11	8	6	7	7	6	33	31	15	40	50	47	18.1	50.5			
		8.6	8.1	9.2	8.5	--	12.9	11.7	24.0	25.1	19.1	10.4	7.7	6.4	5.0	5.4	5.1	5.6	7.9	10.1	10.1	7.5	8.4	9.8	8.8	Diurnal Average			
		34.7	33.1	39.8	29.9	--	41.0	42.3	339.2	229.1	154.5	40.2	32.9	27.7	19.0	17.6	19.9	20.6	32.6	34.7	35.0	23.4	39.5	50.5	47.2	Diurnal Maximum			
C - Calibration		P - Power Failure				A - Automated Daily Zero Span																							

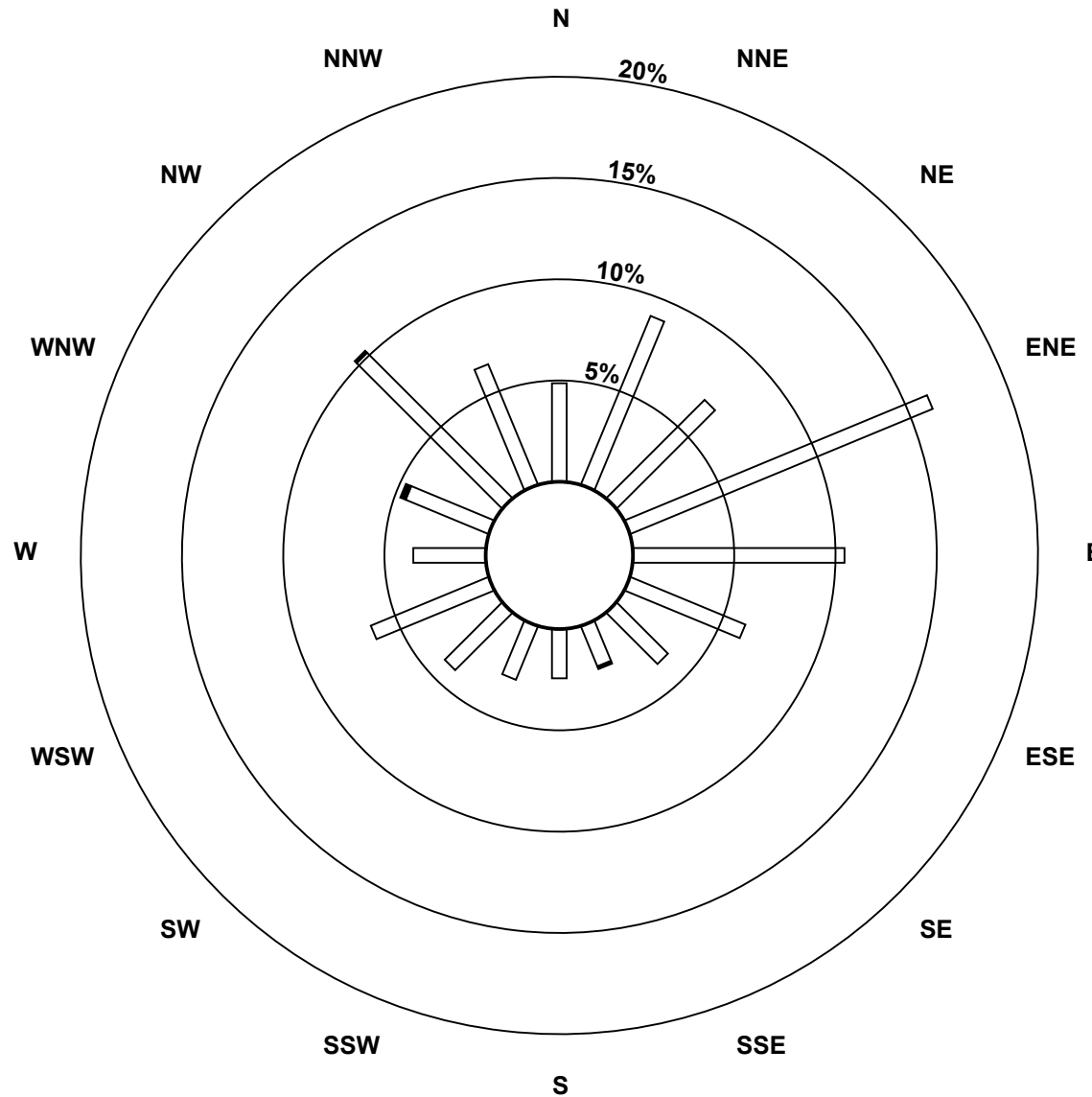
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2018

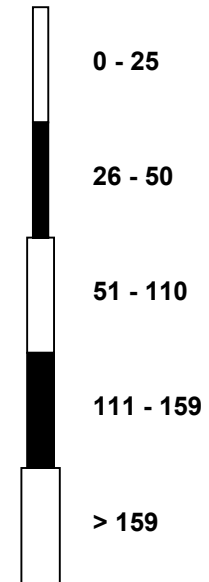


Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2018

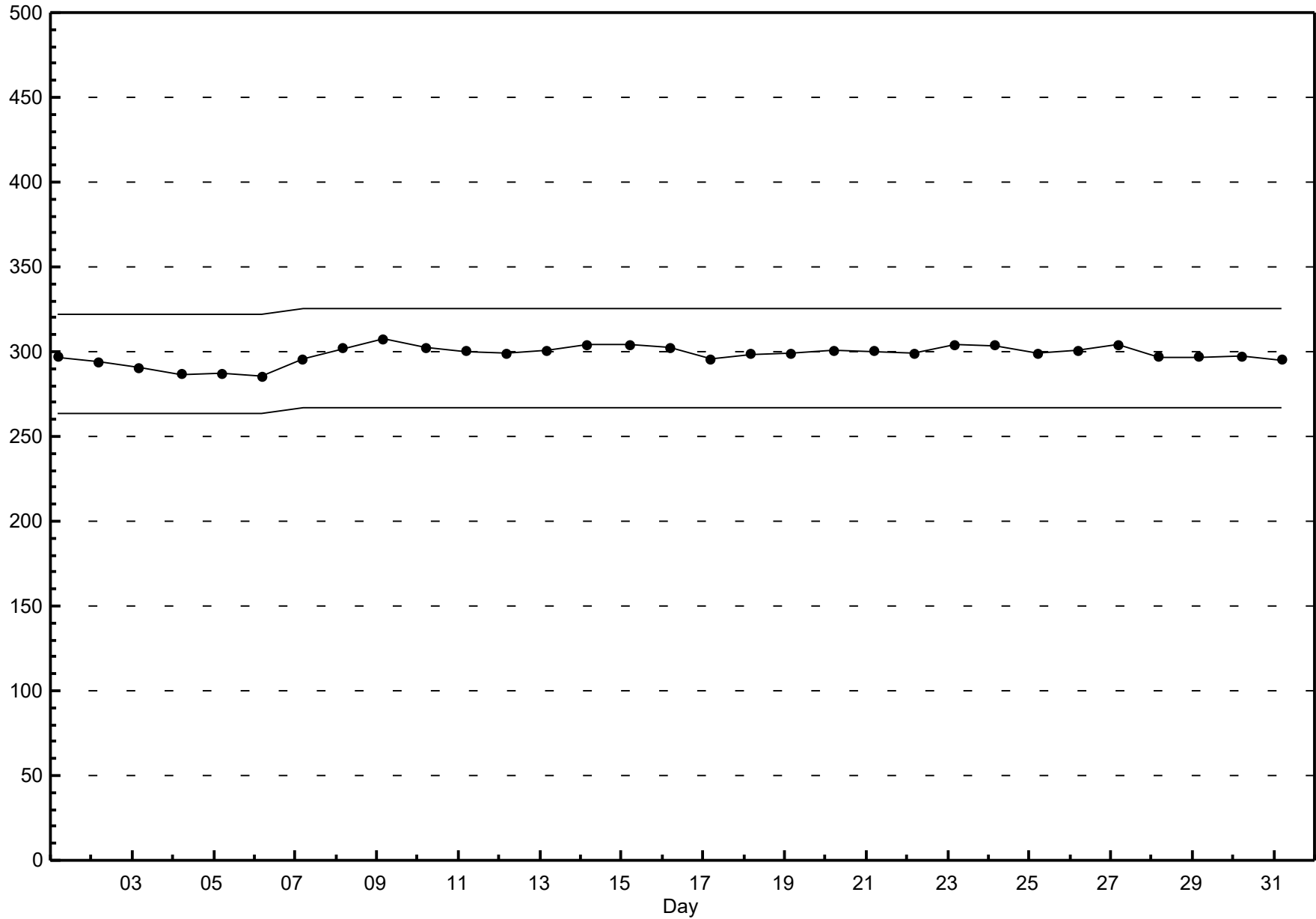


Pollutant Classes (ppb)



Span Responses

Nitrogen Dioxide (NO₂)
Beaverlodge - March 2018



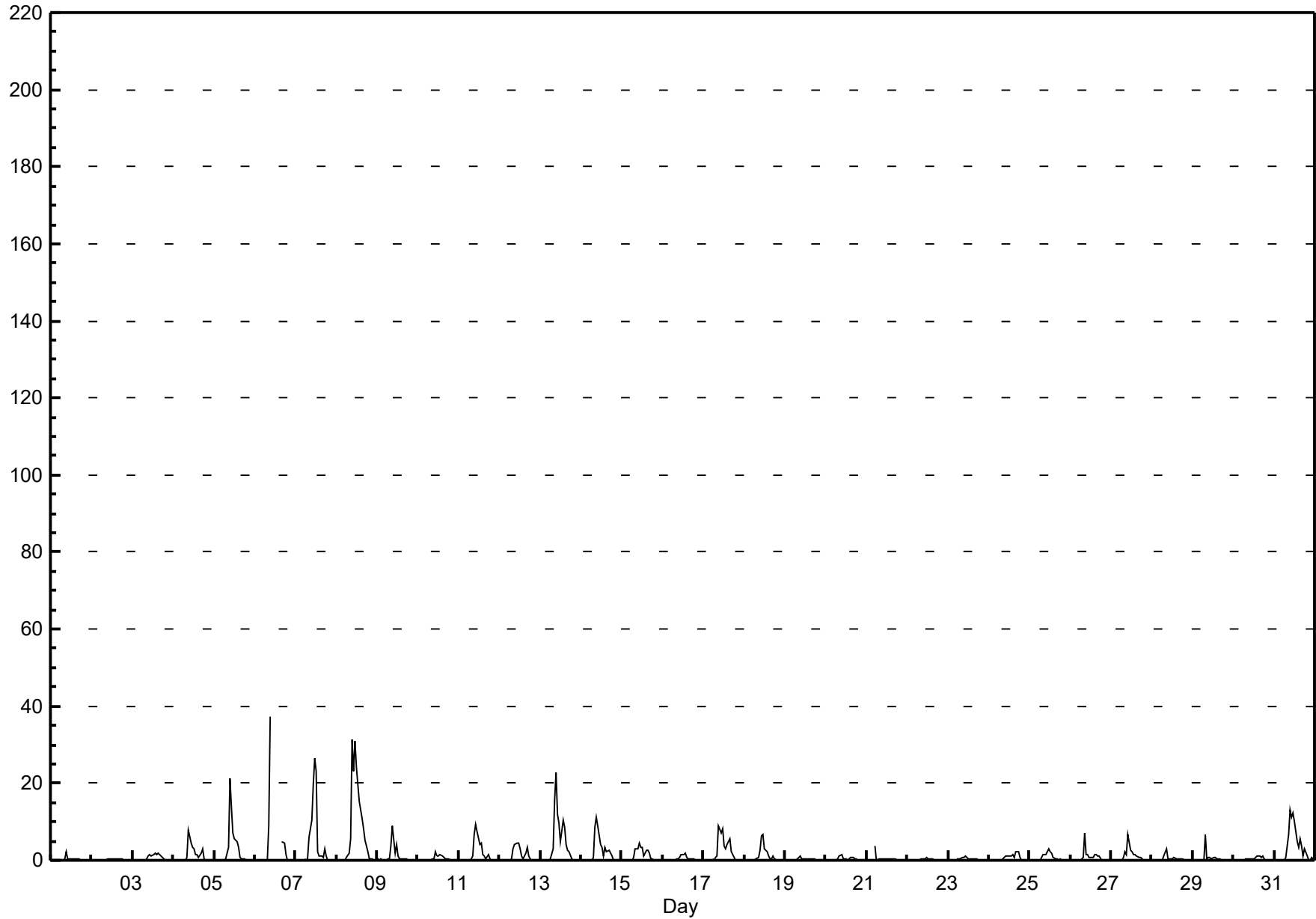
Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2018

Maximum Value: 37.4 ppb on Mar 6 10:00		Maximum Daily Average: 7.6 ppb on Mar 8		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 16 00:00		Minimum Daily Average: 0.2 ppb on Mar 22		Hours of Data: 705																							
Maximum Diurnal Average: 6.6 ppb at hour 10		Minimum Diurnal Average: 0.0 ppb at hour 2		Hours of Missing Data: 39																							
Monthly Average: 1.44 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 1.0 P ₉₀ = 3.5 P ₉₉ = 22.8		Hours of Calibration: 37																							
				Percent Operational Time: 99.7																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	0	0	0	0	A	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	2.4	
2-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	0.5	
3-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	2	2	2	1	1	0	0	0	0	0	0	0.6	1.8	
4-Mar	0	0	0	0	A	0	0	0	1	8	4	3	3	2	1	1	2	3	1	0	0	0	0	0	1.3	7.7	
5-Mar	0	0	0	0	A	0	0	0	3	21	14	7	6	5	3	1	1	0	0	0	0	0	0	0	2.7	21.3	
6-Mar	0	0	0	0	A	0	0	0	9	37	C	C	C	C	C	C	5	4	1	0	0	0	0	0	--	37.4	
7-Mar	0	0	0	0	A	0	0	1	6	11	20	27	23	2	1	1	1	3	1	0	0	0	0	0	4.2	26.6	
8-Mar	0	0	0	0	A	0	1	2	5	31	23	31	24	15	13	11	8	5	2	0	0	0	0	0	7.6	31.2	
9-Mar	0	0	1	0	A	0	0	0	4	9	2	4	1	0	0	0	0	0	0	0	0	0	0	0	1.0	8.9	
10-Mar	0	0	0	0	A	0	0	0	0	1	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0.4	2.2	
11-Mar	0	0	0	0	A	0	0	0	1	7	9	7	4	5	2	1	0	2	0	0	0	0	0	0	1.7	9.3	
12-Mar	0	0	0	0	A	0	0	0	3	4	5	5	3	1	0	2	3	1	0	0	0	0	0	0	1.3	4.6	
13-Mar	0	0	0	0	A	0	0	3	16	23	12	10	5	11	9	4	2	2	0	0	0	0	0	0	4.3	22.9	
14-Mar	0	0	0	0	A	0	0	1	9	11	9	4	3	1	3	2	2	2	1	0	0	0	0	0	2.2	11.0	
15-Mar	0	0	0	0	A	0	0	1	3	3	4	3	3	1	3	3	2	0	0	0	0	0	0	0	1.2	4.4	
16-Mar	0	0	0	0	A	0	0	0	0	0	1	2	1	2	1	0	0	0	0	0	0	0	0	0	0.4	2.0	
17-Mar	0	0	0	0	A	1	0	1	1	9	7	8	4	3	4	6	2	2	1	0	0	0	0	0	2.1	8.8	
18-Mar	0	0	0	0	A	0	0	0	1	3	6	7	3	2	1	0	0	1	1	0	0	0	0	0	1.1	6.5	
19-Mar	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
20-Mar	0	0	0	0	A	0	0	1	1	2	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0.3	1.6	
21-Mar	0	0	0	0	A	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.7	
22-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	0.6	
23-Mar	0	0	0	0	A	0	0	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.3	1.1	
24-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	2	2	1	0	0	0	0	0	0.6	2.3	
25-Mar	0	0	0	0	A	0	0	1	2	1	2	3	2	2	1	1	0	0	0	0	0	0	0	0	0.7	3.0	
26-Mar	0	0	0	0	A	0	0	1	7	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0.8	7.2	
27-Mar	0	0	0	0	A	0	0	1	2	1	7	3	2	2	1	1	1	1	0	0	0	0	0	0	1.0	6.7	
28-Mar	0	0	0	0	A	0	0	1	3	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.4	3.0	
29-Mar	0	0	0	0	A	0	0	7	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.5	6.7	
30-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0.4	1.2	
31-Mar	0	P	P	1	A	0	0	1	7	13	11	12	10	5	4	5	4	1	3	1	0	0	1	0	3.7	12.9	
		0.0	0.0	0.1	0.1	--	0.2	0.1	0.8	2.8	6.6	4.9	4.8	3.6	2.3	2.0	1.6	1.4	1.2	0.6	0.1	0.0	0.0	0.1	0.1	Diurnal Average	
		0.3	0.1	0.6	0.9	--	3.7	0.7	6.7	15.8	37.4	23.1	30.8	24.4	15.4	13.0	10.9	8.1	5.3	2.9	1.0	0.2	0.2	0.6	0.3	Diurnal Maximum	
C - Calibration					P - Power Failure					A - Automated Daily Zero Span																	

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2018



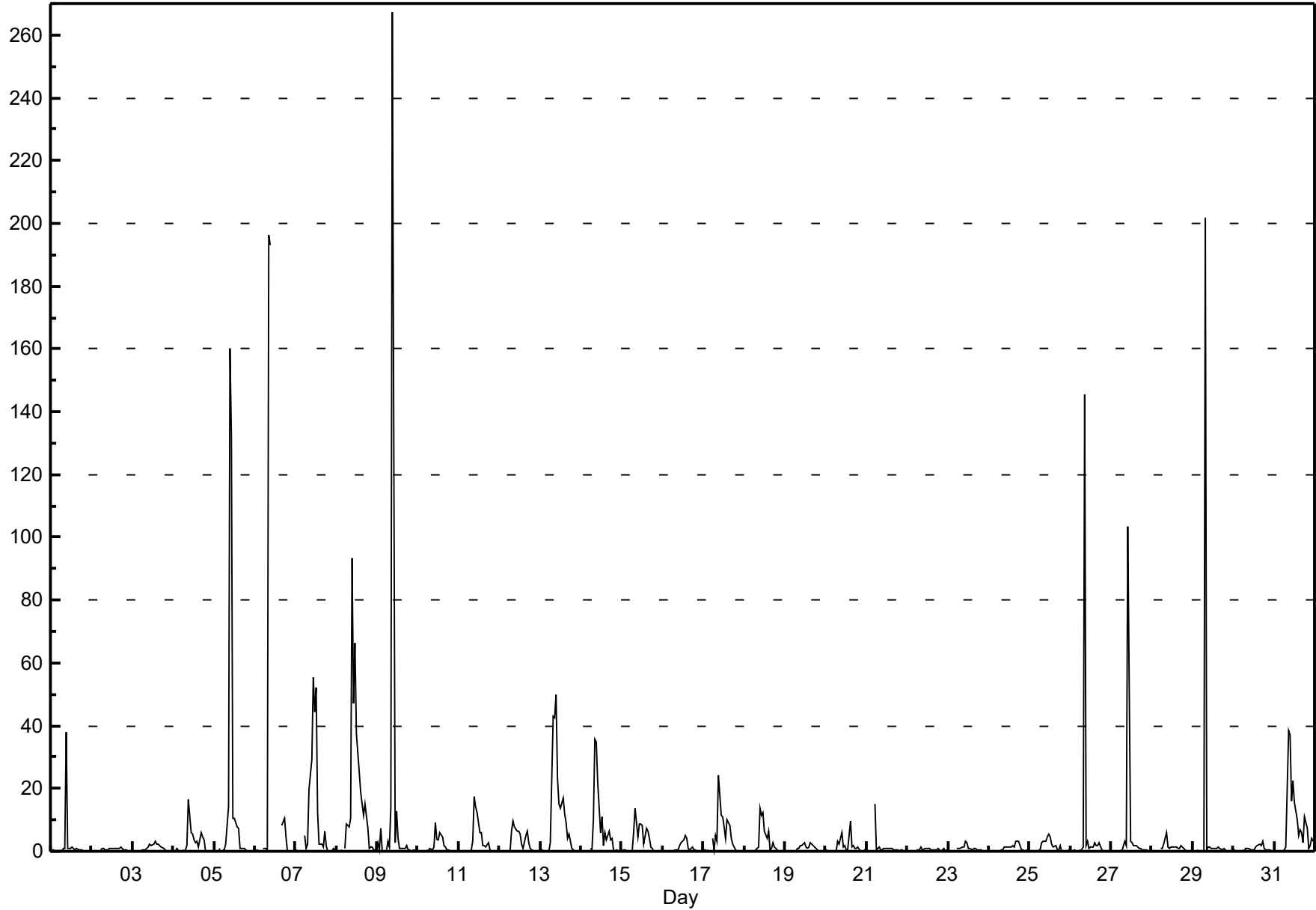
Hourly Maximums

Nitrogen Oxide (NO) - ppb Beaverlodge - March 2018

Maximum Value: 267.1 ppb on Mar 9 10:00		Maximum Daily Average: 16.1 ppb on Mar 8		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 25 02:00		Minimum Daily Average: 0.5 ppb on Mar 22		Hours of Data: 705																							
Maximum Diurnal Average: 32.7 ppb at hour 10		Minimum Diurnal Average: 0.2 ppb at hour 2		Hours of Missing Data: 39																							
Monthly Average: 5.08 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.7 Q ₃ = 2.3 P ₉₀ = 8.6 P ₉₉ = 102.8		Hours of Calibration: 37																							
				Percent Operational Time: 99.7																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	0	0	0	0	A	0	0	1	1	38	1	1	1	1	1	1	0	0	0	0	0	0	0	0	2.1	38.0	
2-Mar	0	0	0	0	A	0	1	1	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.6	1.3	
3-Mar	0	0	0	0	A	0	1	0	1	1	2	2	2	3	2	2	2	1	1	0	0	0	0	0	1.0	3.3	
4-Mar	0	0	1	0	A	0	0	0	2	17	6	5	4	3	3	1	6	5	4	0	0	0	0	0	2.6	16.7	
5-Mar	0	0	0	1	A	0	1	2	14	160	132	10	11	8	7	1	1	1	1	0	0	0	0	0	15.2	160.0	
6-Mar	0	0	0	0	A	1	1	1	196	193	C	C	C	C	C	C	8	11	5	0	0	0	0	0	--	196.4	
7-Mar	0	0	0	0	A	5	1	2	20	29	55	44	52	12	2	2	1	6	2	0	0	0	1	0	10.3	55.2	
8-Mar	0	0	0	0	A	1	9	8	11	94	47	67	38	25	19	15	12	15	7	1	1	1	0	0	16.1	93.5	
9-Mar	3	0	8	0	A	0	3	1	14	267	3	13	4	1	1	1	1	2	0	1	0	0	0	0	14.1	267.1	
10-Mar	0	0	0	0	A	1	0	1	1	1	9	4	3	6	5	2	1	1	1	0	0	0	0	0	1.6	9.0	
11-Mar	0	0	0	0	A	0	0	1	3	18	14	12	6	6	2	2	1	3	0	0	0	0	0	0	3.0	17.5	
12-Mar	0	0	0	0	A	0	0	6	10	8	6	6	6	2	1	5	6	3	1	0	0	0	0	0	2.7	9.5	
13-Mar	0	0	0	0	A	0	3	43	42	50	23	15	14	17	12	9	4	5	1	0	0	0	0	0	10.5	49.8	
14-Mar	0	0	0	0	A	1	0	10	36	35	22	6	11	2	6	4	7	4	4	1	0	0	0	0	6.5	35.7	
15-Mar	0	0	0	0	A	0	0	6	14	5	9	9	8	2	7	6	4	1	1	0	0	0	0	0	3.2	13.9	
16-Mar	0	0	0	0	A	0	0	0	1	1	2	3	4	5	4	1	1	1	1	0	0	0	0	0	1.0	5.2	
17-Mar	0	0	0	0	A	4	0	5	3	24	11	11	8	4	10	8	4	2	2	0	0	0	0	0	4.3	24.3	
18-Mar	0	0	0	0	A	0	0	1	1	14	11	13	6	4	6	1	1	3	2	0	0	0	0	0	2.8	13.8	
19-Mar	0	0	0	0	A	0	0	1	1	2	2	3	1	1	1	3	2	1	1	0	0	0	0	0	0.9	2.9	
20-Mar	0	0	0	0	A	0	0	3	2	6	2	2	1	1	10	2	2	1	1	2	0	0	0	0	1.5	9.8	
21-Mar	0	0	0	0	A	15	0	2	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1.1	15.0	
22-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	0	1	0	1	0	0	1	0	0	0.5	1.4	
23-Mar	0	0	0	0	A	1	1	1	1	1	3	3	1	1	1	1	1	0	0	1	0	0	0	0	0.8	3.2	
24-Mar	0	0	0	0	A	0	0	0	1	2	1	2	1	2	2	1	3	3	2	0	0	0	0	0	0.9	3.3	
25-Mar	0	0	0	0	A	0	0	3	3	3	5	6	5	2	2	2	1	0	2	0	0	0	0	0	1.5	5.6	
26-Mar	0	0	0	0	A	0	0	2	145	2	3	1	2	1	3	2	2	3	0	0	0	0	0	0	7.3	145.3	
27-Mar	0	0	0	0	A	0	0	2	3	2	103	3	3	2	2	2	1	1	1	0	0	1	0	0	5.5	103.2	
28-Mar	0	0	0	0	A	1	1	2	6	1	1	1	1	1	1	1	1	2	1	0	0	0	0	0	1.1	6.1	
29-Mar	0	0	0	0	A	0	0	202	1	2	1	1	1	1	1	1	1	0	1	0	0	0	0	0	9.3	201.6	
30-Mar	0	0	0	0	A	0	0	1	1	1	1	1	0	1	2	2	2	3	1	1	0	0	0	0	0.8	3.3	
31-Mar	0	P	P	10	A	0	0	1	39	37	16	22	16	10	5	7	6	3	11	7	1	2	4	3	9.6	38.6	
		0.3	0.2	0.4	0.5	--	1.1	0.8	9.9	18.5	32.7	16.5	8.9	7.0	4.3	4.0	2.9	2.7	2.7	1.7	0.6	0.2	0.3	0.3	0.3	Diurnal Average	
		2.9	0.3	7.5	10.4	--	15.0	8.6	201.6	196.4	267.1	131.6	66.5	52.1	25.0	18.6	15.1	11.6	15.2	10.9	7.1	1.2	1.8	4.1	3.2	Diurnal Maximum	
C - Calibration					P - Power Failure					A - Automated Daily Zero Span																	

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2018

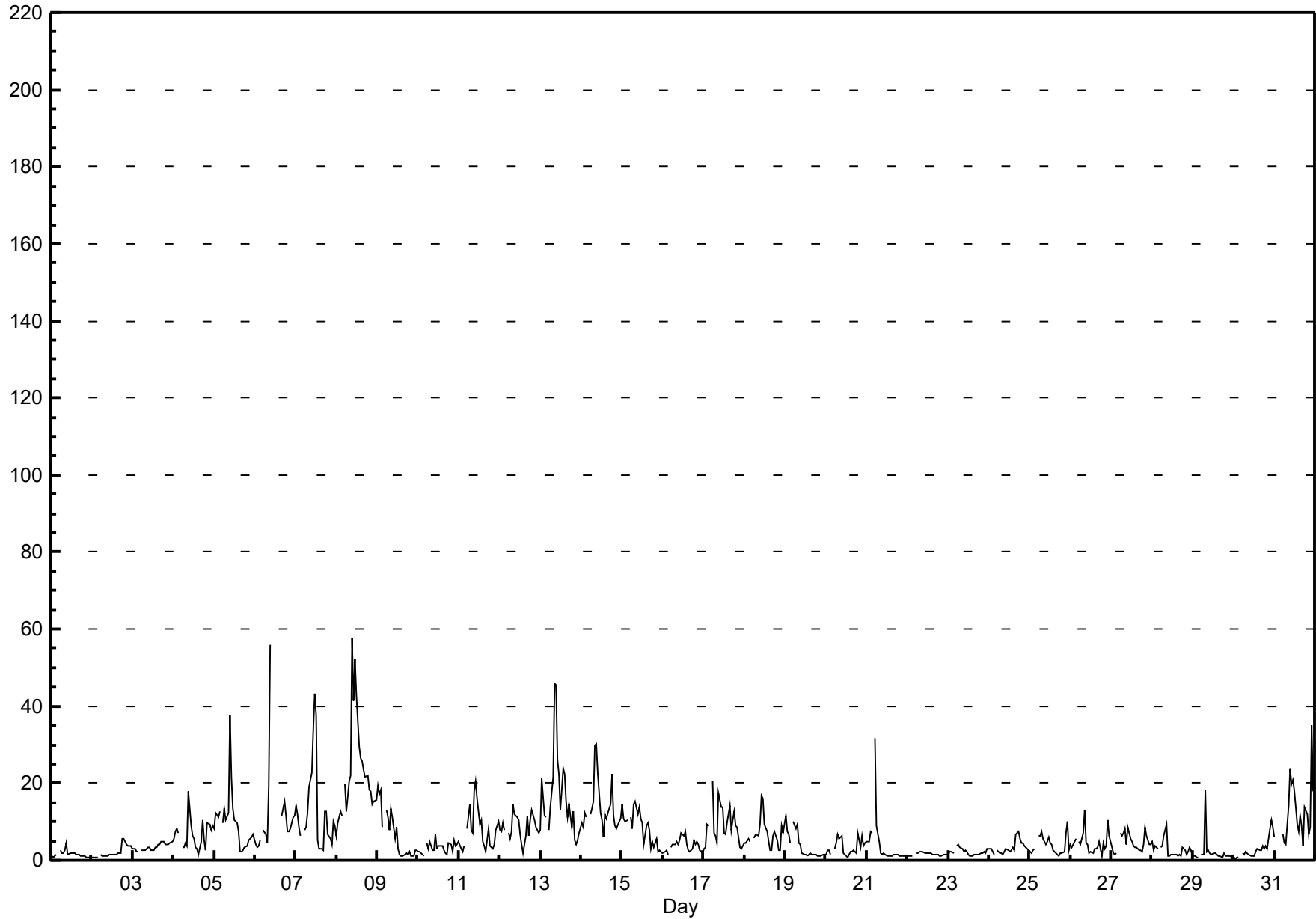


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - March 2018

Maximum Value: 57.8 ppb on Mar 8 10:00		Maximum Daily Average: 23.5 ppb on Mar 8		Hours in Service: 744																							
Minimum Value: 1 ppb on Mar 30 02:00		Minimum Daily Average: 1.6 ppb on Mar 22		Hours of Data: 705																							
Maximum Diurnal Average: 13.7 ppb at hour 10		Minimum Diurnal Average: 4.7 ppb at hour 21		Hours of Missing Data: 39																							
Monthly Average: 6.62 ppb		Percentiles: P ₁ = 0.8 P ₁₀ = 1.3 Q ₁ = 2.0 Median = 4.0 Q ₃ = 8.6 P ₉₀ = 14.0 P ₉₉ = 41.2		Hours of Calibration: 37																							
				Percent Operational Time: 99.7																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	1	1	1	1	A	3	2	2	2	5	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1.6	4.6	
2-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	2	2	6	6	4	4	4	4	4	2.1	5.6	
3-Mar	3	3	2	2	A	3	2	2	3	3	3	3	3	3	4	4	5	5	4	4	4	4	5	3.4	5.0		
4-Mar	6	7	8	7	A	3	3	4	4	18	9	6	6	3	3	2	5	10	5	3	10	9	8	9	6.5	17.8	
5-Mar	8	12	11	13	A	10	13	11	12	38	22	13	11	10	7	2	2	3	3	4	5	5	6	7	9.9	37.7	
6-Mar	4	3	4	5	A	8	7	5	19	56	C	C	C	C	C	C	12	15	12	8	7	8	11	12	--	55.9	
7-Mar	14	12	9	6	A	8	9	12	19	23	34	43	38	5	3	3	2	13	13	7	6	4	10	9	13.1	43.3	
8-Mar	6	10	12	12	A	20	13	21	22	58	41	52	43	30	26	26	24	22	22	18	18	14	15	16	23.5	57.8	
9-Mar	19	17	18	9	A	13	11	8	14	11	5	9	3	1	1	1	1	2	2	2	1	1	3	3	6.8	19.4	
10-Mar	2	2	2	1	A	4	3	5	3	3	7	3	4	4	4	2	2	1	5	4	2	5	4	4	3.3	6.6	
11-Mar	5	3	2	4	A	8	15	8	7	18	20	16	9	11	5	4	2	8	4	3	3	4	8	10	7.7	20.4	
12-Mar	8	7	10	8	A	7	5	7	15	12	11	10	7	4	2	6	11	6	11	13	10	9	8	7	8.5	14.7	
13-Mar	8	21	11	11	A	8	14	21	46	46	26	22	13	24	23	15	11	14	9	13	5	4	5	7	16.4	45.7	
14-Mar	10	9	12	11	A	12	14	15	30	30	23	12	11	6	12	11	13	14	22	12	9	8	10	11	13.8	30.4	
15-Mar	14	11	10	10	A	11	8	15	15	12	14	11	10	4	9	10	8	3	5	3	6	2	3	2	8.5	15.2	
16-Mar	2	2	3	1	A	3	4	4	5	4	5	7	6	7	4	3	2	3	5	4	5	4	2	2	3.9	7.5	
17-Mar	3	3	9	9	A	20	7	6	4	17	14	14	7	7	10	14	8	10	13	9	8	3	3	4	8.9	20.5	
18-Mar	4	5	6	5	A	6	6	7	7	9	17	16	9	7	5	3	3	6	7	5	3	3	9	7	6.7	16.9	
19-Mar	12	7	7	4	A	10	8	9	4	4	2	1	1	1	1	2	1	1	1	1	1	1	1	2	3.7	11.6	
20-Mar	1	3	2	2	A	3	4	7	6	6	2	2	1	1	2	2	3	2	2	7	3	6	4	4	3.3	7.0	
21-Mar	5	5	8	7	A	32	9	5	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	4.0	31.6	
22-Mar	1	1	1	1	A	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	2	1.6	2.2	
23-Mar	2	2	2	2	A	4	4	3	3	2	3	2	1	1	1	1	2	1	2	2	2	2	2	3	2.1	4.1	
24-Mar	3	3	2	2	A	3	2	2	2	2	3	3	2	2	3	3	7	8	6	4	5	4	3	3	3.2	7.6	
25-Mar	2	2	3	3	A	6	6	7	6	4	5	6	5	4	3	2	2	1	2	2	2	7	10	3	4.0	9.9	
26-Mar	4	3	5	6	A	5	4	7	13	4	4	2	2	3	3	3	3	5	1	4	3	4	11	6	4.6	13.2	
27-Mar	3	2	2	2	A	7	6	7	8	4	9	6	5	4	3	3	3	3	2	4	9	6	4	4	4.6	8.7	
28-Mar	5	3	4	3	A	3	4	6	9	1	1	1	1	2	1	1	1	1	4	3	2	2	3	3	2.8	9.3	
29-Mar	1	1	1	1	A	1	2	18	2	3	2	1	2	2	1	1	1	1	2	1	1	1	1	1	2.1	18.4	
30-Mar	1	1	1	1	A	2	2	2	2	1	1	1	1	2	3	3	2	4	3	4	3	8	11	9	2.9	10.6	
31-Mar	6	P	P	4	A	7	4	4	14	24	20	21	18	9	7	11	9	4	14	12	7	9	35	18	12.2	35.0	
		5.3	5.4	5.6	5.0	--	7.5	6.3	7.6	9.7	13.7	10.3	9.7	7.5	5.4	5.1	4.8	4.9	5.6	6.1	5.3	4.7	4.7	6.5	5.7	Diurnal Average	
		19.4	21.1	18.4	12.7	--	31.6	14.7	21.4	45.7	57.8	41.3	52.4	42.8	29.5	26.4	25.8	23.6	21.7	22.4	18.2	17.8	14.4	35.0	18.0	Diurnal Maximum	
C - Calibration		P - Power Failure				A - Automated Daily Zero Span																					



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

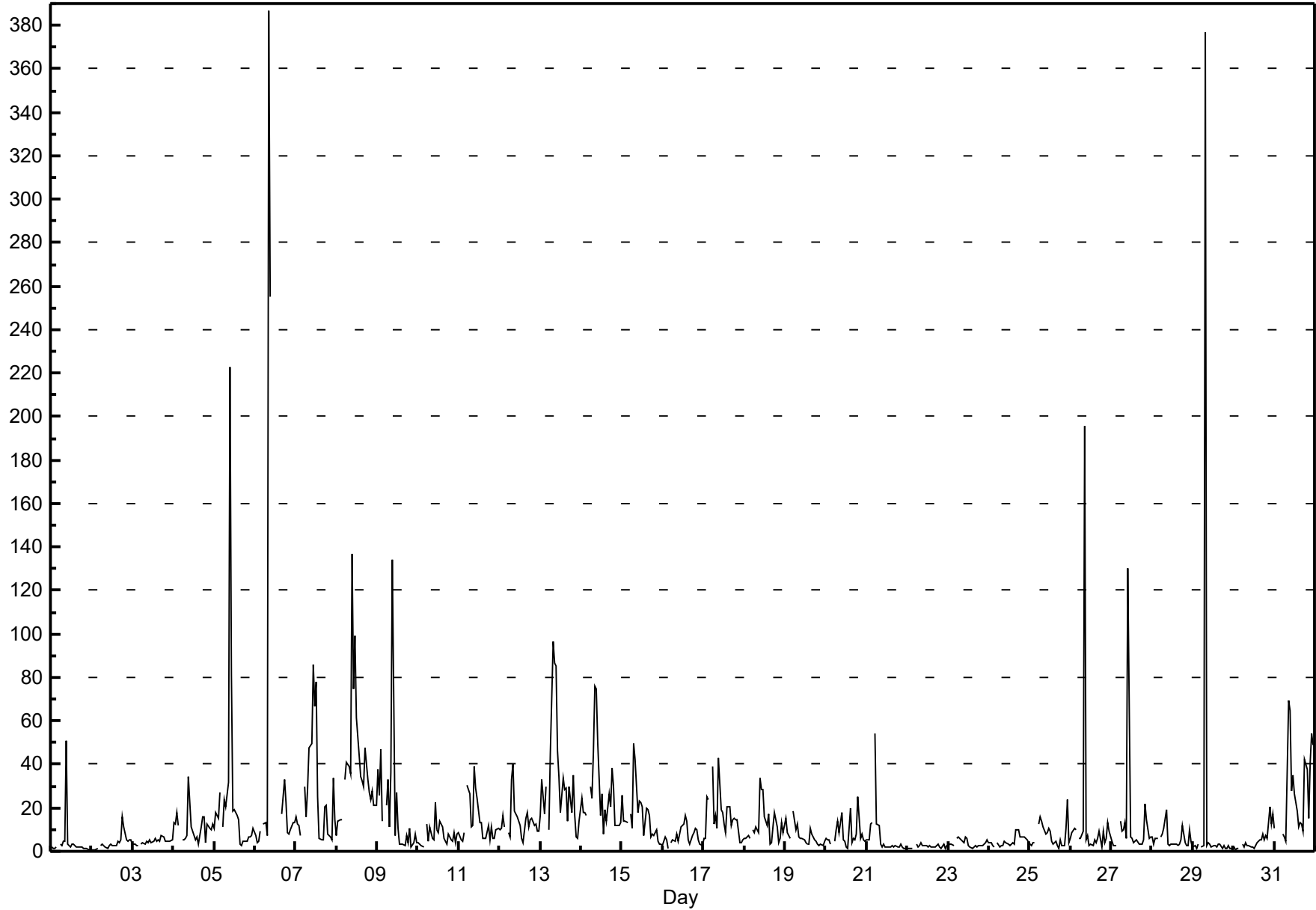
Beaverlodge - March 2018

Maximum Value: 386.8 ppb on Mar 6 09:00		Maximum Daily Average: 39.7 ppb on Mar 8		Hours in Service: 744																									
Minimum Value: 1 ppb on Mar 1 23:00		Minimum Daily Average: 2.3 ppb on Mar 22		Hours of Data: 705																									
Maximum Diurnal Average: 43.3 ppb at hour 10		Minimum Diurnal Average: 7.6 ppb at hour 21		Hours of Missing Data: 39																									
Monthly Average: 14.25 ppb		Percentiles: P ₁ = 1.1 P ₁₀ = 2.3 Q ₁ = 3.4 Median = 6.6 Q ₃ = 14.2 P ₉₀ = 29.7 P ₉₉ = 129.0		Hours of Calibration: 37																									
				Percent Operational Time: 99.7																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Mar	2	2	1	2	A	3	3	4	5	51	3	2	3	4	2	2	2	2	2	1	1	1	1	1	4.4	50.8			
2-Mar	1	1	1	1	A	2	3	3	2	1	3	3	2	3	3	5	4	5	16	12	5	5	6	5	4.0	16.2			
3-Mar	4	4	3	3	A	3	4	3	5	4	5	4	4	6	4	6	5	7	7	5	5	5	5	5	4.5	7.2			
4-Mar	13	13	18	12	A	5	6	6	7	34	11	9	7	5	7	3	11	16	16	4	13	10	10	13	10.9	34.1			
5-Mar	10	18	15	27	A	11	24	20	32	223	81	18	19	16	15	3	3	5	5	4	6	6	8	11	25.2	222.7			
6-Mar	7	4	4	9	A	13	13	7	387	255	C	C	C	C	C	C	17	33	22	9	8	10	13	13	--	386.8			
7-Mar	16	13	12	7	A	30	16	28	48	50	86	67	78	25	6	5	5	21	21	8	7	5	34	15	26.1	86.1			
8-Mar	7	14	15	15	A	33	41	39	36	137	75	99	62	44	34	33	30	48	33	27	24	28	21	21	39.7	137.0			
9-Mar	37	26	47	14	A	21	33	12	37	134	7	27	10	3	3	3	3	7	4	11	2	4	8	4	20.0	134.1			
10-Mar	4	3	3	2	A	13	5	11	6	6	23	10	8	14	11	6	4	3	8	6	4	9	4	8	7.3	22.5			
11-Mar	8	6	5	9	A	30	27	11	12	39	29	24	13	13	6	6	6	12	5	11	6	6	10	11	13.3	39.2			
12-Mar	10	11	17	11	A	8	7	33	40	18	16	14	12	6	4	15	18	11	14	15	12	12	9	9	14.0	40.1			
13-Mar	17	33	17	30	A	10	45	96	87	85	46	34	18	33	29	29	14	30	18	35	17	7	6	14	32.6	96.5			
14-Mar	25	18	18	17	A	30	24	46	76	75	50	17	27	8	19	14	26	20	38	29	12	12	12	13	27.2	76.3			
15-Mar	26	14	14	14	A	17	11	50	42	18	23	23	20	7	20	19	17	7	8	7	10	5	3	3	16.4	49.7			
16-Mar	2	7	5	2	A	4	6	5	8	5	8	11	13	16	14	5	3	7	8	11	10	5	3	2	7.0	16.4			
17-Mar	6	6	25	24	A	39	13	17	10	43	19	18	13	9	20	20	12	14	15	15	14	4	4	5	15.9	42.9			
18-Mar	6	6	7	6	A	10	8	11	8	34	28	28	16	12	17	4	4	12	18	11	4	6	13	8	12.1	33.9			
19-Mar	15	9	7	6	A	18	10	13	6	6	6	5	4	3	3	11	8	5	5	3	3	4	2	5	6.8	18.5			
20-Mar	6	5	5	3	A	5	10	14	8	18	5	5	2	2	20	4	6	5	8	25	6	8	5	5	7.8	25.0			
21-Mar	5	5	13	13	A	54	12	12	3	2	3	2	2	2	2	2	2	2	2	2	3	2	1	1	6.5	53.9			
22-Mar	1	1	2	1	A	3	2	3	4	2	2	3	2	3	2	2	2	2	3	2	2	3	2	3	2.3	3.8			
23-Mar	3	4	3	3	A	6	7	6	5	4	7	6	2	2	1	2	2	2	3	3	3	3	4	5	3.6	6.9			
24-Mar	4	4	3	2	A	4	2	2	2	4	4	3	3	3	4	3	10	10	7	6	6	7	5	4	4.5	10.2			
25-Mar	3	3	4	4	A	12	16	14	11	8	9	10	9	5	4	5	2	2	6	3	3	11	24	4	7.4	23.7			
26-Mar	6	9	10	10	A	6	6	9	196	5	7	3	3	3	5	4	6	9	2	9	4	6	14	9	14.8	195.5			
27-Mar	5	3	3	2	A	14	9	10	13	6	130	6	6	4	5	5	3	3	3	5	22	15	6	6	12.3	130.2			
28-Mar	7	3	6	6	A	7	8	11	19	3	3	3	3	4	3	3	3	6	12	4	3	3	10	4	5.8	19.2			
29-Mar	2	3	1	4	A	2	3	377	3	4	3	2	2	3	2	3	3	2	3	2	1	3	1	1	18.6	376.8			
30-Mar	2	1	1	1	A	3	2	4	3	3	2	2	1	3	4	5	5	8	5	7	6	20	13	17	5.1	20.5			
31-Mar	11	P	P	10	A	8	7	5	69	65	28	35	26	18	11	13	13	9	43	38	15	41	54	49	27.0	69.4			
		8.7	8.2	9.5	8.7	--	13.7	12.3	28.4	38.4	43.3	24.1	16.5	13.1	9.3	9.4	8.1	8.1	10.5	11.7	10.6	7.6	8.6	10.0	8.9	Diurnal Average			
		37.4	33.0	47.2	29.8	--	53.9	45.0	376.8	386.8	255.2	130.2	99.2	78.2	43.7	34.1	32.7	29.9	47.6	42.5	37.6	24.0	41.3	54.2	48.9	Diurnal Maximum			
C - Calibration		P - Power Failure				A - Automated Daily Zero Span																							

Hourly Maximums

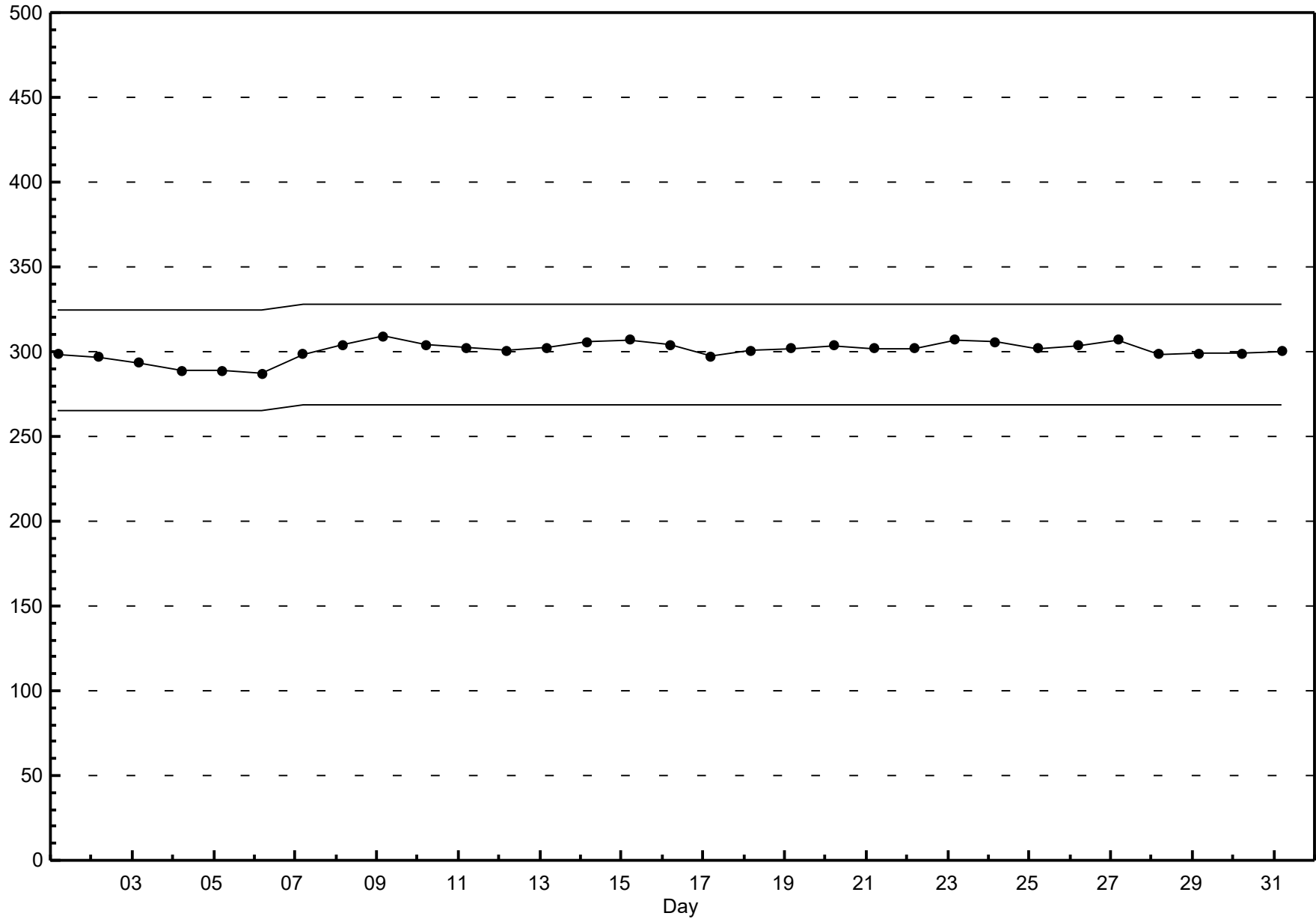
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - March 2018



Span Responses

Oxides of Nitrogen (NO_x)
Beaverlodge - March 2018



Hourly Averages

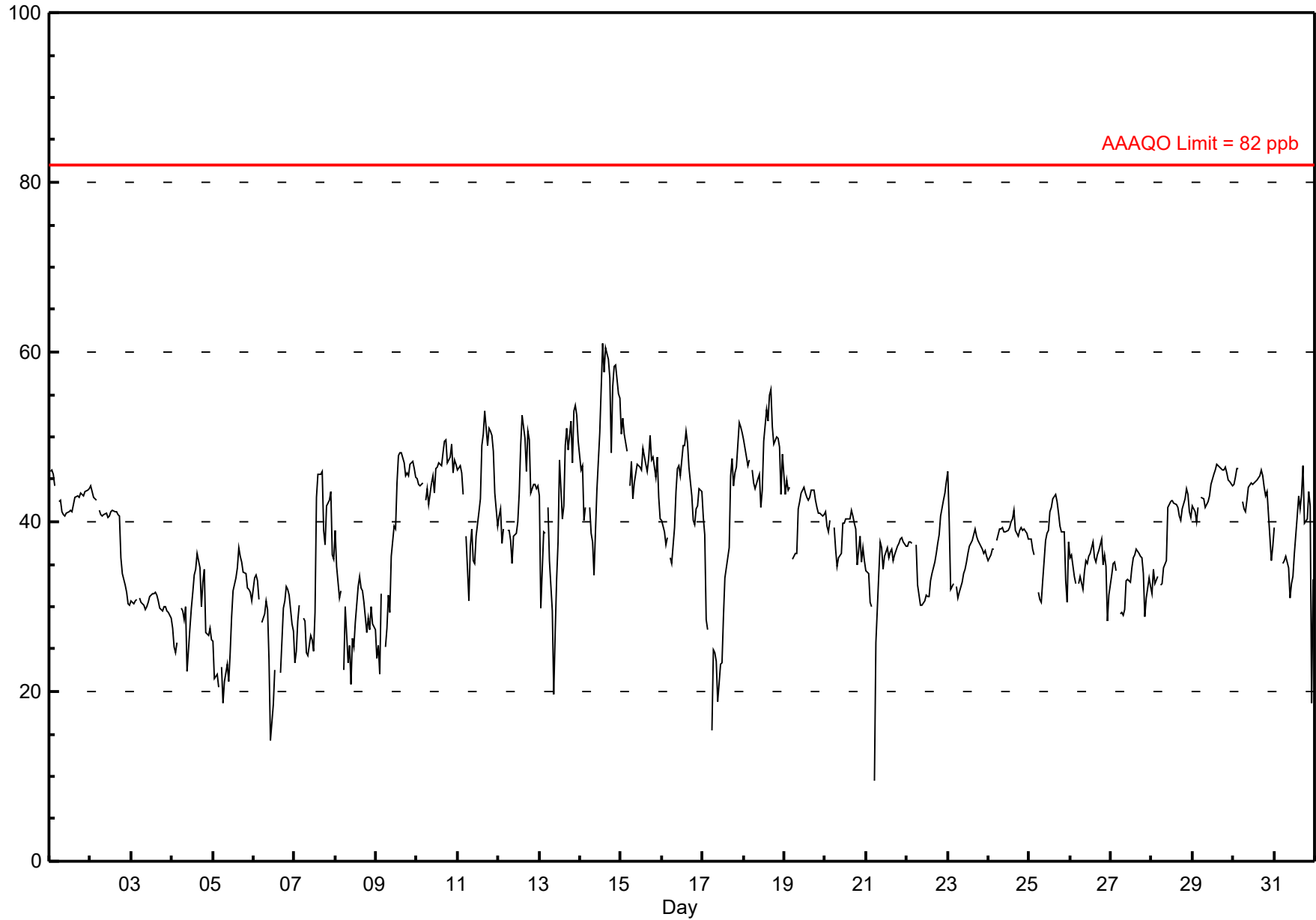
Ozone (O₃) - ppb

Beaverlodge - March 2018

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 61.1 ppb on Mar 14 14:00 Maximum Daily Average: 49.6 ppb on Mar 14		Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 34 Percent Operational Time: 99.7																								
Minimum Value: 10 ppb on Mar 21 06:00 Maximum Diurnal Average: 42.8 ppb at hour 16 Monthly Average: 38.44 ppb		Minimum Daily Average: 28.1 ppb on Mar 6 Minimum Diurnal Average: 34.0 ppb at hour 6 Percentiles: P ₁ = 19.8 P ₁₀ = 28.7 Q ₁ = 33.0 Median = 39.0 Q ₃ = 43.8 P ₉₀ = 47.4 P ₉₉ = 56.0																								
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	46	46	46	44	A	42	43	41	41	41	41	41	41	41	42	43	43	43	43	43	43	44	44	42.8	46.1	
2-Mar	44	44	43	43	A	41	41	41	41	41	41	41	41	41	41	41	41	41	36	34	33	32	30	30	39.1	44.2
3-Mar	31	30	31	31	A	31	30	30	30	30	30	31	31	31	32	31	31	30	30	30	30	30	29	29	30.4	31.8
4-Mar	27	25	25	26	A	30	29	28	30	22	28	30	32	34	34	36	35	30	33	34	27	27	27	26	29.4	36.3
5-Mar	26	22	22	20	A	23	19	21	23	21	25	29	32	33	35	37	36	35	34	34	32	32	32	31	28.4	36.9
6-Mar	33	34	33	31	A	28	29	31	30	24	14	18	22	C	C	C	22	30	31	32	32	31	28	27	28.1	33.8
7-Mar	23	25	28	30	A	29	28	24	24	27	26	25	29	43	46	46	46	39	37	42	43	43	36	36	33.7	46.0
8-Mar	39	35	31	32	A	22	30	23	25	21	26	25	28	32	34	32	32	30	27	29	27	30	28	27	29.0	39.0
9-Mar	24	25	22	31	A	25	27	31	29	36	39	39	45	48	48	48	47	45	46	45	47	47	46	45	38.6	48.2
10-Mar	45	44	44	45	A	43	44	42	45	45	43	46	46	47	47	48	50	50	47	48	49	46	47	47	46.0	49.6
11-Mar	46	47	46	43	A	38	31	37	39	36	35	38	41	43	49	50	53	49	51	51	50	48	43	40	43.7	53.1
12-Mar	41	41	37	39	A	39	39	38	35	38	39	40	43	49	53	50	46	51	50	43	44	44	44	44	42.9	52.5
13-Mar	43	30	39	39	A	42	35	30	20	27	33	38	47	40	42	49	51	49	52	47	53	54	52	50	41.8	53.8
14-Mar	46	47	40	42	A	42	39	38	34	39	44	51	56	61	58	61	59	57	48	56	58	58	55	55	49.6	61.1
15-Mar	50	52	50	48	A	44	47	43	45	47	47	46	46	49	47	46	47	50	47	48	45	48	43	40	46.8	52.2
16-Mar	40	39	37	38	A	36	35	39	43	46	47	45	49	49	51	49	46	43	40	40	42	42	44	44	42.8	50.7
17-Mar	40	39	28	27	A	15	25	25	24	19	23	23	29	33	35	37	45	48	44	46	47	52	51	51	35.0	51.7
18-Mar	50	49	47	47	A	46	45	44	45	46	42	44	49	53	52	55	56	51	49	50	50	49	43	48	48.2	55.7
19-Mar	43	45	44	44	A	36	36	36	41	42	43	44	43	43	43	43	44	44	43	42	41	41	41	41	41.8	44.9
20-Mar	41	39	39	40	A	39	37	35	36	36	40	40	40	40	40	41	41	40	39	35	38	35	37	35	38.5	41.4
21-Mar	34	34	31	30	A	10	26	34	38	37	34	36	37	36	36	37	35	36	37	37	38	38	38	37	34.2	38.2
22-Mar	37	38	38	37	A	37	33	31	30	30	31	31	31	31	33	34	35	36	37	38	41	42	43	45	35.7	44.7
23-Mar	46	40	32	33	A	32	31	32	33	34	34	35	36	37	38	38	39	38	38	37	37	36	37	36	36.1	45.9
24-Mar	35	36	37	37	A	38	39	39	39	39	39	39	39	39	40	40	41	39	38	39	39	39	39	38	38.6	41.3
25-Mar	38	38	37	36	A	32	31	31	33	38	39	39	41	42	43	43	42	41	39	39	39	33	31	38	37.4	43.2
26-Mar	36	36	34	33	A	33	33	32	34	35	35	36	36	38	36	35	36	37	38	35	36	35	28	31	34.7	37.9
27-Mar	34	35	35	34	A	29	29	29	30	33	33	33	35	36	36	37	36	36	36	34	29	31	33	32	33.3	36.7
28-Mar	32	34	33	34	A	33	33	35	35	42	42	42	43	42	42	42	41	40	42	43	44	43	41	40	39.0	43.8
29-Mar	42	41	40	42	A	43	43	42	42	42	43	44	46	46	47	47	46	46	46	46	46	45	45	44	44.1	46.8
30-Mar	44	45	46	46	A	42	41	41	43	44	45	44	45	45	45	45	46	45	44	43	44	38	35	37	43.3	46.3
31-Mar	39	P	P	36	A	35	35	36	35	31	33	34	36	41	43	42	43	47	40	40	44	42	19	33	37.3	46.7
		38.6	37.8	36.5	36.7	--	34.0	34.3	34.1	34.5	35.1	35.9	37.1	39.3	41.5	42.2	42.8	42.3	41.8	40.7	40.7	40.8	40.5	38.4	38.7	Diurnal Average
		50.3	52.2	50.4	48.4	--	46.0	47.1	43.9	45.1	46.8	46.6	50.5	55.8	61.1	57.6	60.5	59.2	56.9	51.9	56.0	58.3	58.4	55.1	54.6	Diurnal Maximum
C - Calibration		P - Power Failure				A - Automated Daily Zero Span																				
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 82 ppb										24-hr na														

Hourly Averages

Ozone (O₃) - ppb
Beaverlodge - March 2018



Hourly Maximums

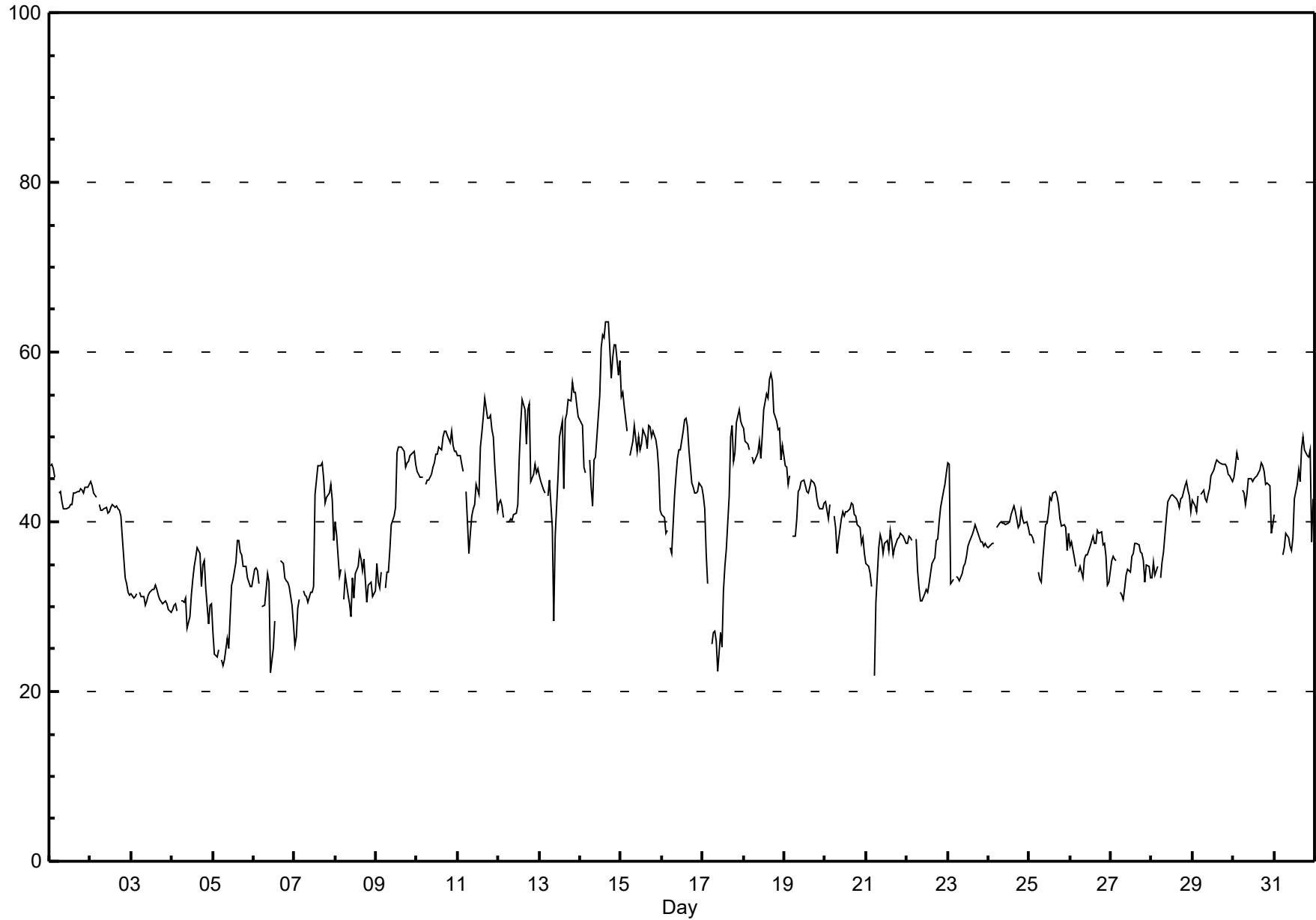
Ozone (O₃) - ppb

Beaverlodge - March 2018

Maximum Value: 63.6 ppb on Mar 14 16:00		Maximum Daily Average: 54.5 ppb on Mar 14		Hours in Service: 744																						
Minimum Value: 22 ppb on Mar 21 06:00		Minimum Daily Average: 30.5 ppb on Mar 5		Hours of Data: 708																						
Maximum Diurnal Average: 44.4 ppb at hour 16		Minimum Diurnal Average: 36.8 ppb at hour 6		Hours of Missing Data: 36																						
Monthly Average: 40.74 ppb		Percentiles: P ₁ = 24.4 P ₁₀ = 31.4 Q ₁ = 35.1 Median = 41.1 Q ₃ = 45.8 P ₉₀ = 50.1 P ₉₉ = 60.3		Hours of Calibration: 34																						
				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	47	47	46	45	A	43	43	42	41	42	41	42	42	43	43	44	44	44	44	43	44	44	44	43	43.5	46.8
2-Mar	45	44	43	43	A	42	41	41	41	42	41	41	42	42	42	42	42	41	41	38	33	33	32	31	40.1	44.8
3-Mar	32	31	31	32	A	32	31	31	30	31	31	32	32	32	32	32	31	31	30	31	31	30	30	29	31.1	32.5
4-Mar	30	30	30	29	A	31	31	30	31	27	29	31	33	35	36	37	36	32	35	35	32	28	30	30	31.8	37.0
5-Mar	27	24	24	25	A	24	23	24	26	25	29	32	33	35	38	38	36	36	35	35	33	33	32	32	30.5	37.9
6-Mar	34	35	34	33	A	30	30	32	34	33	22	25	28	C	C	C	35	35	33	33	33	32	30	28	31.5	35.4
7-Mar	25	26	30	31	A	32	31	31	31	32	32	32	43	45	47	47	47	45	42	43	43	44	43	38	37.4	47.0
8-Mar	40	38	34	34	A	31	34	31	30	29	33	31	34	35	36	36	34	36	30	33	33	33	31	32	33.4	39.9
9-Mar	35	33	32	34	A	32	34	34	37	40	41	42	48	49	49	49	48	46	47	47	48	48	48	47	42.1	48.9
10-Mar	46	46	45	45	A	44	45	45	46	46	47	48	48	49	48	50	51	51	50	49	51	49	48	48	47.6	50.7
11-Mar	48	48	47	46	A	43	36	39	41	42	42	44	43	49	50	52	55	52	52	53	51	50	47	41	46.5	54.6
12-Mar	42	42	42	40	A	40	40	40	40	41	41	42	47	52	54	53	49	53	54	45	46	47	46	46	45.4	54.3
13-Mar	45	45	44	43	A	43	45	39	28	38	42	45	50	52	44	52	53	54	54	56	55	55	54	52	47.4	56.5
14-Mar	52	51	46	46	A	47	44	42	47	48	50	55	60	62	62	64	64	60	57	59	61	61	57	59	54.5	63.6
15-Mar	55	55	53	51	A	48	49	49	51	48	50	49	49	51	50	49	51	51	50	51	50	48	46	41	49.8	55.2
16-Mar	41	40	39	39	A	37	36	43	45	47	49	48	51	52	52	51	49	45	44	43	43	44	45	44	44.7	52.2
17-Mar	43	42	36	33	A	26	27	27	26	22	27	25	32	35	37	43	50	51	47	48	52	53	52	51	38.5	53.2
18-Mar	51	49	49	48	A	48	47	47	48	49	47	50	53	55	55	57	58	57	53	52	51	51	47	49	51.0	57.5
19-Mar	47	47	44	45	A	38	38	40	44	44	45	45	44	44	43	44	45	45	44	43	42	42	41	42	43.3	46.6
20-Mar	42	41	40	42	A	41	39	36	38	40	41	41	41	41	42	42	42	41	41	40	39	37	38	36	40.1	42.3
21-Mar	35	35	34	32	A	22	31	37	38	38	36	37	38	37	39	38	36	37	38	38	39	39	38	37	36.0	39.0
22-Mar	37	38	38	38	A	38	34	32	31	31	31	32	32	33	34	35	36	38	38	40	42	44	44	46	36.6	45.8
23-Mar	47	47	33	33	A	34	33	33	34	35	35	36	37	38	39	39	40	39	39	38	38	37	37	37	37.2	47.0
24-Mar	37	37	37	38	A	39	40	40	40	40	40	40	40	41	41	42	41	39	40	41	40	40	40	39	39.7	41.8
25-Mar	39	39	38	37	A	34	33	33	35	40	40	41	43	43	43	44	43	42	40	40	40	39	37	39	39.2	43.6
26-Mar	37	38	36	35	A	34	35	33	36	36	36	37	37	38	37	37	39	39	39	37	37	36	33	33	36.3	39.0
27-Mar	35	36	36	35	A	32	31	31	32	34	34	34	36	36	37	37	37	37	36	35	33	35	35	33	34.7	37.4
28-Mar	33	35	34	35	A	33	35	36	40	42	43	43	43	43	43	42	42	43	44	45	44	43	41	40.3	44.8	
29-Mar	43	42	41	43	A	43	44	43	42	43	44	45	46	47	47	47	47	47	47	47	46	46	45	45	44.8	47.3
30-Mar	45	47	48	47	A	44	43	42	43	45	45	45	45	45	45	46	47	47	46	44	45	44	39	40	44.7	48.2
31-Mar	41	P	P	38	A	36	37	39	38	37	37	38	43	44	46	45	49	50	48	48	48	48	38	43	42.4	50.0
		40.5	40.3	38.9	38.6	--	36.8	36.8	36.9	37.6	38.3	38.8	39.7	41.8	43.3	43.8	44.4	44.4	44.0	43.1	42.9	42.6	42.4	41.0	40.5	Diurnal Average
		54.7	55.2	53.5	50.7	--	47.7	48.6	49.5	51.3	49.4	50.0	55.0	60.4	62.1	61.6	63.6	63.5	60.3	56.9	59.3	60.8	60.9	57.3	59.0	Diurnal Maximum
C - Calibration		P - Power Failure				A - Automated Daily Zero Span																				

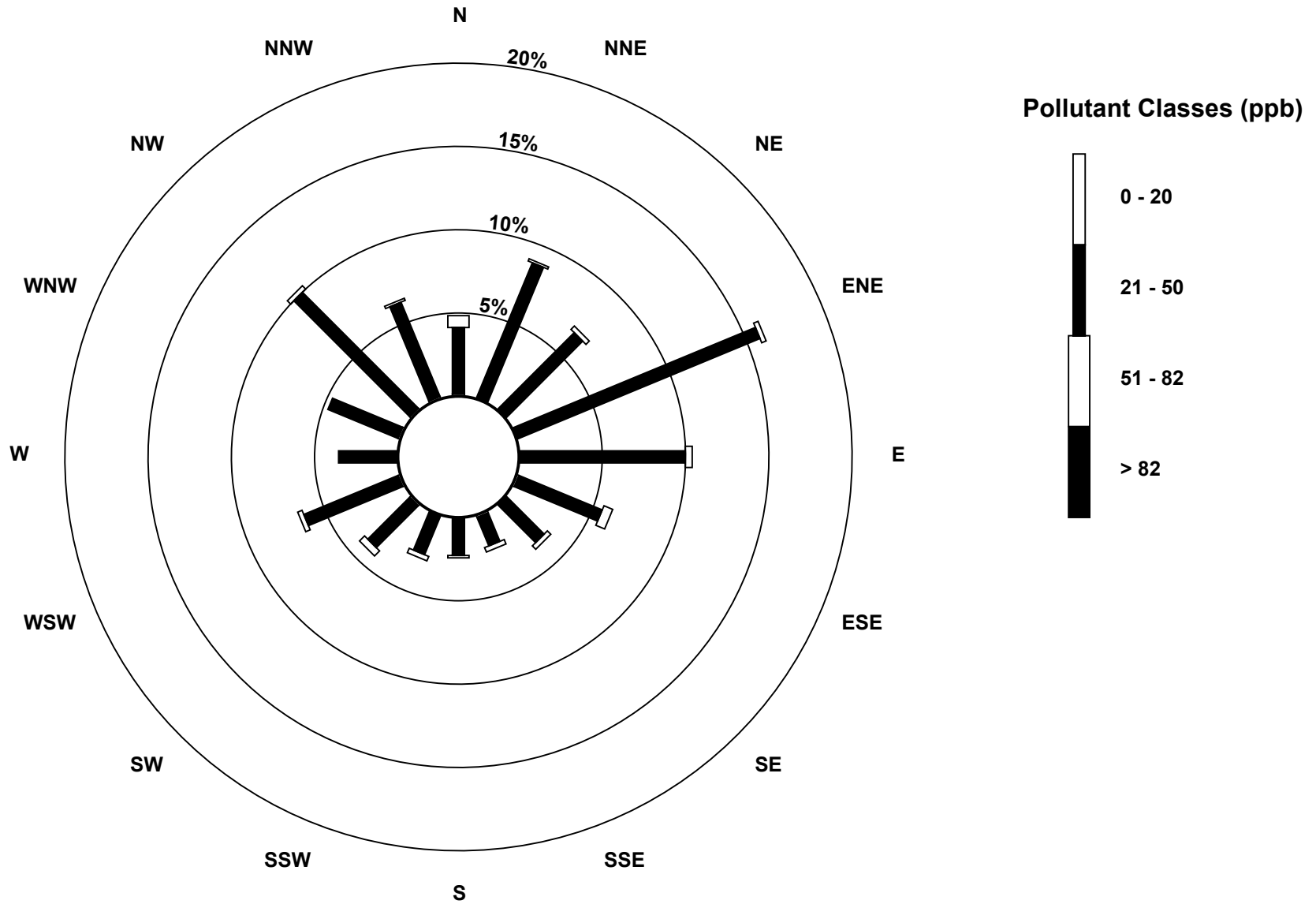
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - March 2018



Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - March 2018



Eight Hour Running Averages

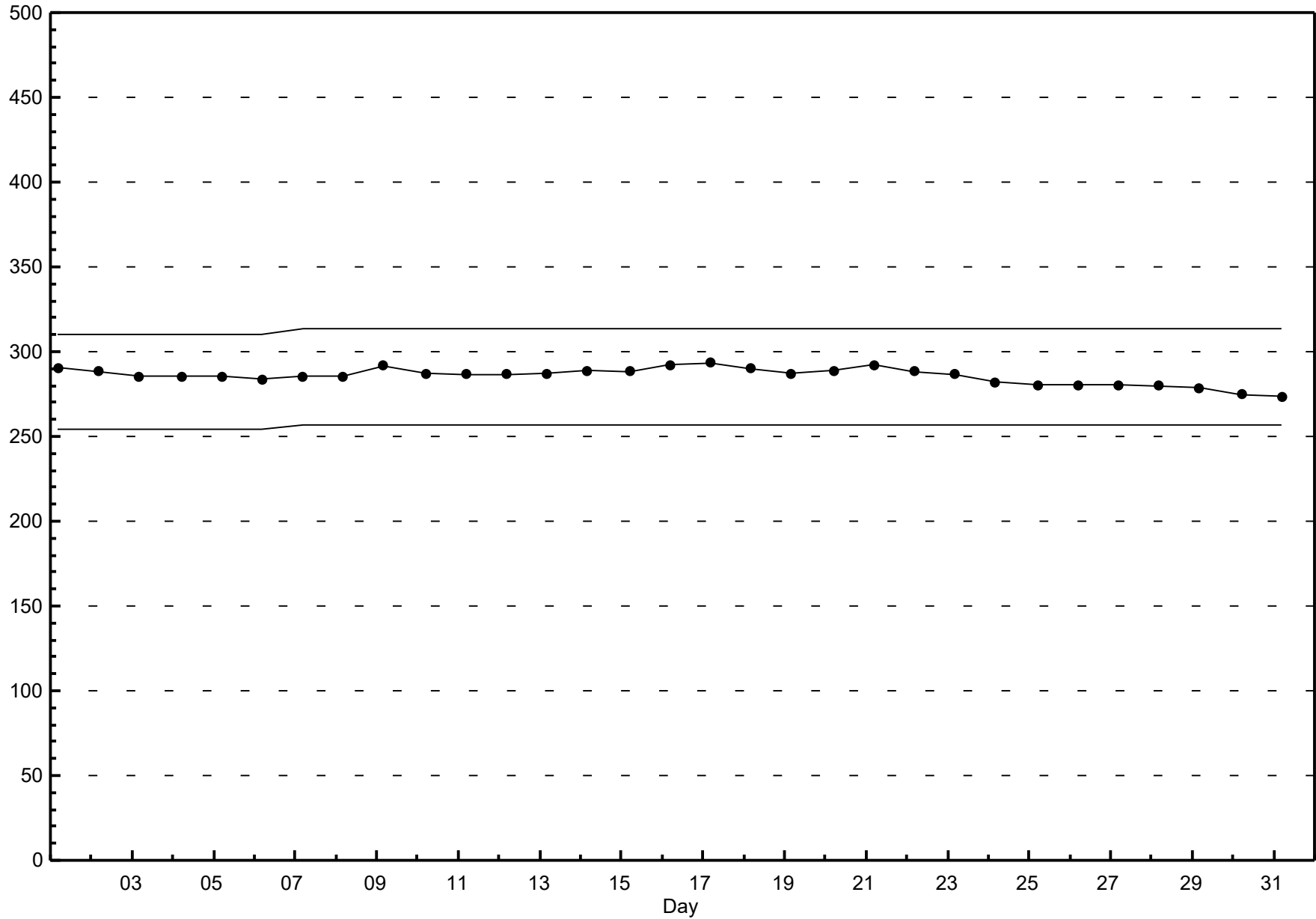
Ozone (O₃) - ppb

Beaverlodge - March 2018

Maximum Value: 57.2 ppb on Mar 14 21:00																					Hours in Service:	744			
Minimum Value: 21.4 ppb on Mar 5 10:00																					Hours of Data:	733			
Percentiles: P ₁ = 22.8 P ₁₀ = 28.8 Q ₁ = 33.2 Median = 38.9 Q ₃ = 43.5 P ₉₀ = 47.0 P ₉₉ = 54.6																					Hours of Missing Data:	11			
																					Hours of Calibration:	6			
																					Percent Operational Time:	99.3			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	46	46	46	46	46	45	45	44	43	42	42	41	41	41	41	41	42	42	42	42	43	43	43	43	46.0
2-Mar	43	44	43	43	43	43	43	42	42	41	41	41	41	41	41	41	41	41	40	39	38	37	36	34	43.5
3-Mar	33	32	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	31	31	30	30	30	33.2
4-Mar	29	29	28	28	27	27	27	27	28	27	28	28	29	29	30	31	31	32	33	33	33	32	31	30	33.5
5-Mar	29	28	26	25	24	24	22	22	21	21	22	23	24	25	27	29	31	33	34	34	35	34	34	33	34.5
6-Mar	33	33	33	32	32	32	31	31	31	29	27	25	25	24	23	N	N	N	N	N	N	30	30	29	32.9
7-Mar	29	29	28	28	28	27	27	27	27	27	27	26	27	28	30	33	36	37	39	41	43	43	41	40	42.7
8-Mar	39	39	38	37	36	33	32	30	28	26	25	25	26	27	28	29	30	30	31	30	30	29	29	29	39.3
9-Mar	28	27	27	27	27	26	26	27	27	29	31	33	34	37	39	42	44	45	46	47	47	47	47	46	46.8
10-Mar	46	46	46	45	45	45	44	44	44	44	44	44	44	45	45	46	47	47	48	48	48	48	48	48	48.1
11-Mar	47	47	47	46	46	45	42	41	40	39	37	36	37	37	40	41	43	45	47	48	50	50	49	48	50.2
12-Mar	47	46	44	43	41	40	39	39	38	38	38	38	39	40	42	43	45	46	48	48	48	48	47	46	48.2
13-Mar	45	43	41	41	40	40	39	37	33	33	32	32	34	34	35	37	41	44	46	47	48	50	51	51	50.9
14-Mar	50	50	49	48	47	45	43	42	40	39	39	41	43	45	47	50	53	56	56	57	57	57	57	56	57.2
15-Mar	55	54	54	53	53	51	50	48	47	46	46	45	46	46	46	46	47	47	47	47	47	47	47	46	54.7
16-Mar	45	44	43	41	41	39	38	38	38	39	41	42	43	44	46	47	48	47	47	46	45	44	43	43	47.8
17-Mar	42	41	40	38	38	34	31	29	26	23	23	22	23	25	26	28	31	34	37	40	42	44	46	48	47.9
18-Mar	48	49	49	49	49	49	48	47	46	46	45	44	45	46	47	48	49	50	51	52	52	51	50	50	52.0
19-Mar	48	47	46	46	45	43	42	41	40	40	40	40	40	41	42	43	43	43	43	43	43	42	42	42	48.0
20-Mar	42	41	41	40	40	40	40	39	38	37	38	38	38	38	38	39	40	40	40	40	39	39	38	38	41.6
21-Mar	37	36	35	34	34	30	29	28	29	29	30	31	31	35	36	36	36	36	36	37	37	37	37	37	37.1
22-Mar	37	38	38	38	38	37	37	36	35	34	33	32	32	31	31	31	32	33	34	35	36	37	39	40	39.8
23-Mar	41	42	41	40	40	39	37	35	33	32	33	33	33	34	35	36	37	37	38	38	38	38	38	37	41.6
24-Mar	37	37	36	36	36	36	37	37	38	38	39	39	39	39	39	40	40	40	40	40	40	39	39	39	39.6
25-Mar	39	39	38	38	38	37	36	35	34	34	34	35	35	37	38	40	41	41	41	41	41	40	38	38	41.3
26-Mar	37	36	36	35	34	34	35	34	34	33	34	34	34	35	35	36	36	36	36	36	36	36	35	34	36.9
27-Mar	34	34	34	34	33	32	33	32	32	31	31	31	31	32	33	34	35	35	36	36	35	34	34	33	35.6
28-Mar	33	33	32	32	33	33	33	33	34	35	36	37	38	39	40	41	42	42	42	42	42	42	42	42	42.0
29-Mar	42	42	42	42	41	41	42	42	42	42	42	43	43	43	44	45	45	46	46	46	46	46	46	46	46.3
30-Mar	45	45	45	45	45	45	44	44	44	44	43	43	43	43	44	44	45	45	45	45	45	44	43	42	45.4
31-Mar	41	40	39	38	N	N	N	N	N	35	34	34	34	35	36	37	38	40	41	41	42	43	39	38	42.5
54.7 54.1 54.4 53.4 52.8 50.7 49.6 47.9 47.1 46.3 45.7 45.5 46.1 47.4 50.2 53.4 55.7 56.2 56.9 57.2 56.9 56.6 55.8																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Beaverlodge - March 2018



Hourly Averages

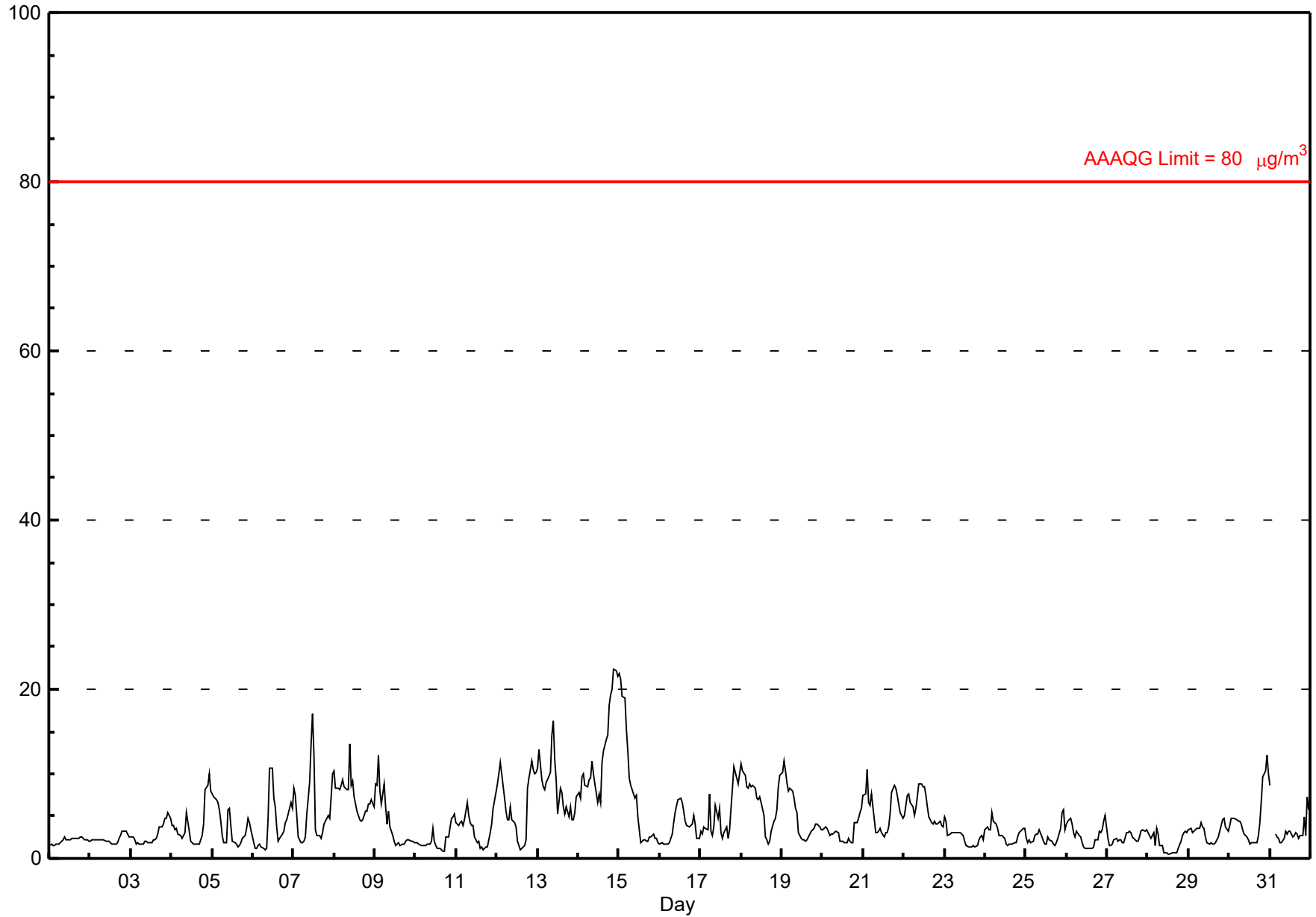
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Beaverlodge - March 2018

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 22.3 µg/m ³ on Mar 14 22:00	Maximum Daily Average: 12.4 µg/m ³ on Mar 14
Minimum Value: 1 µg/m ³ on Mar 28 14:00	Hours of Data: 742
Maximum Diurnal Average: 5.9 µg/m ³ at hour 23	Hours of Missing Data: 2
Monthly Average: 4.46 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 1.8 µg/m ³ on Mar 28	Percent Operational Time: 99.7
Minimum Diurnal Average: 2.7 µg/m ³ at hour 17	
Percentiles: P ₁ = 0.7 P ₁₀ = 1.7 Q ₁ = 2.1 Median = 3.2 Q ₃ = 5.8 P ₉₀ = 8.8 P ₉₉ = 19.1	

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	2	2	1	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2.1	2.5																						
2-Mar	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	2.3	3.3																						
3-Mar	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	4	4	4	4	5	5	5	5	2.8	5.5																						
4-Mar	4	4	3	4	3	3	2	3	3	5	3	2	2	2	2	2	2	2	3	4	8	9	10	8	3.8	10.1																						
5-Mar	8	7	7	7	6	4	3	2	2	6	6	4	2	2	2	1	2	2	2	3	4	5	4	3	3.8	7.5																						
6-Mar	2	1	1	1	2	1	1	1	1	5	11	11	7	6	4	2	2	3	3	4	5	5	7	6	3.8	10.6																						
7-Mar	8	8	5	3	2	2	2	2	5	9	14	17	12	3	3	3	2	3	4	4	5	5	7	10	5.8	17.2																						
8-Mar	10	8	8	8	9	9	8	8	8	14	9	9	7	6	5	5	4	5	6	6	6	6	7	6	7.4	13.5																						
9-Mar	9	9	12	8	6	9	6	4	6	4	3	2	1	2	2	2	2	2	2	2	2	2	2	2	4.1	12.1																						
10-Mar	2	2	2	2	2	2	2	2	2	2	3	2	1	1	1	1	1	1	3	3	4	5	5	5	2.2	5.2																						
11-Mar	4	4	4	4	4	5	7	5	4	4	4	3	2	2	1	1	1	1	1	2	3	4	6	8	3.5	7.8																						
12-Mar	9	10	11	10	7	6	5	5	6	5	4	4	2	2	1	1	2	2	8	9	11	11	10	10	6.3	11.5																						
13-Mar	11	13	9	8	8	9	9	10	15	16	12	9	5	8	8	6	5	6	5	6	5	5	5	7	8.4	16.2																						
14-Mar	8	7	10	10	9	9	9	10	12	10	9	7	8	7	11	13	14	15	18	19	20	22	22	22	12.4	22.3																						
15-Mar	22	21	19	19	15	13	9	9	8	7	7	5	3	2	2	2	2	2	3	3	3	2	2	2	7.6	21.9																						
16-Mar	2	2	2	2	2	2	2	3	4	5	6	7	7	7	6	4	4	4	4	4	5	4	2	2	3.8	7.1																						
17-Mar	3	3	4	3	3	8	3	3	4	6	5	6	3	2	3	4	2	3	6	8	11	9	9	10	5.1	10.8																						
18-Mar	11	10	10	8	8	9	8	9	8	7	7	7	5	3	2	2	2	2	3	4	5	6	8	10	6.7	11.2																						
19-Mar	10	12	10	9	8	8	8	7	6	5	3	2	2	2	2	2	3	3	3	4	4	4	4	3	5.2	11.5																						
20-Mar	3	4	4	4	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	4	4	5	5	6	3.1	5.8																						
21-Mar	7	8	11	7	6	8	6	3	3	3	4	3	3	3	3	4	5	8	9	8	7	6	5	5	5.6	10.5																						
22-Mar	5	6	7	8	7	6	5	6	7	9	9	8	8	7	6	5	4	4	4	4	4	4	4	4	6.0	8.9																						
23-Mar	5	4	3	3	3	3	3	3	3	3	3	3	2	2	1	1	1	1	1	2	2	3	3	2	2.5	4.9																						
24-Mar	3	4	3	3	5	4	4	4	3	3	3	2	2	2	2	2	2	2	2	2	3	3	3	4	2.9	5.4																						
25-Mar	2	2	2	2	2	3	3	3	3	3	2	2	2	3	2	2	2	2	2	2	4	5	6	3	2.6	5.8																						
26-Mar	4	4	5	4	3	3	3	3	2	2	1	1	1	1	1	1	1	2	2	3	3	3	4	5	2.7	5.1																						
27-Mar	2	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	2	2	2	2	3	3	3	3	2.4	3.4																						
28-Mar	3	3	2	3	1	4	3	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	3	3	1.8	3.6																						
29-Mar	3	4	3	3	3	4	4	4	4	4	2	2	2	2	2	2	2	2	3	4	4	5	4	3	3.1	4.7																						
30-Mar	4	5	5	5	5	4	4	4	3	3	3	2	2	2	2	2	2	3	4	7	10	10	12	10	4.7	12.1																						
31-Mar	9	P	P	3	3	2	2	2	2	3	3	3	3	3	3	3	3	2	3	3	5	3	7	6	3.4	8.7																						
																								5.8	5.7	5.7	5.1	4.6	4.8	4.3	4.0	4.5	5.0	4.7	4.3	3.5	3.0	2.9	2.7	2.7	3.1	3.9	4.5	5.3	5.4	5.9	5.8	Diurnal Average
																								21.9	21.2	19.1	19.0	15.2	12.6	9.5	10.2	14.6	16.2	13.6	17.2	12.2	8.3	11.4	12.7	14.1	14.7	18.1	19.3	20.0	22.3	22.2	21.5	Diurnal Maximum

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

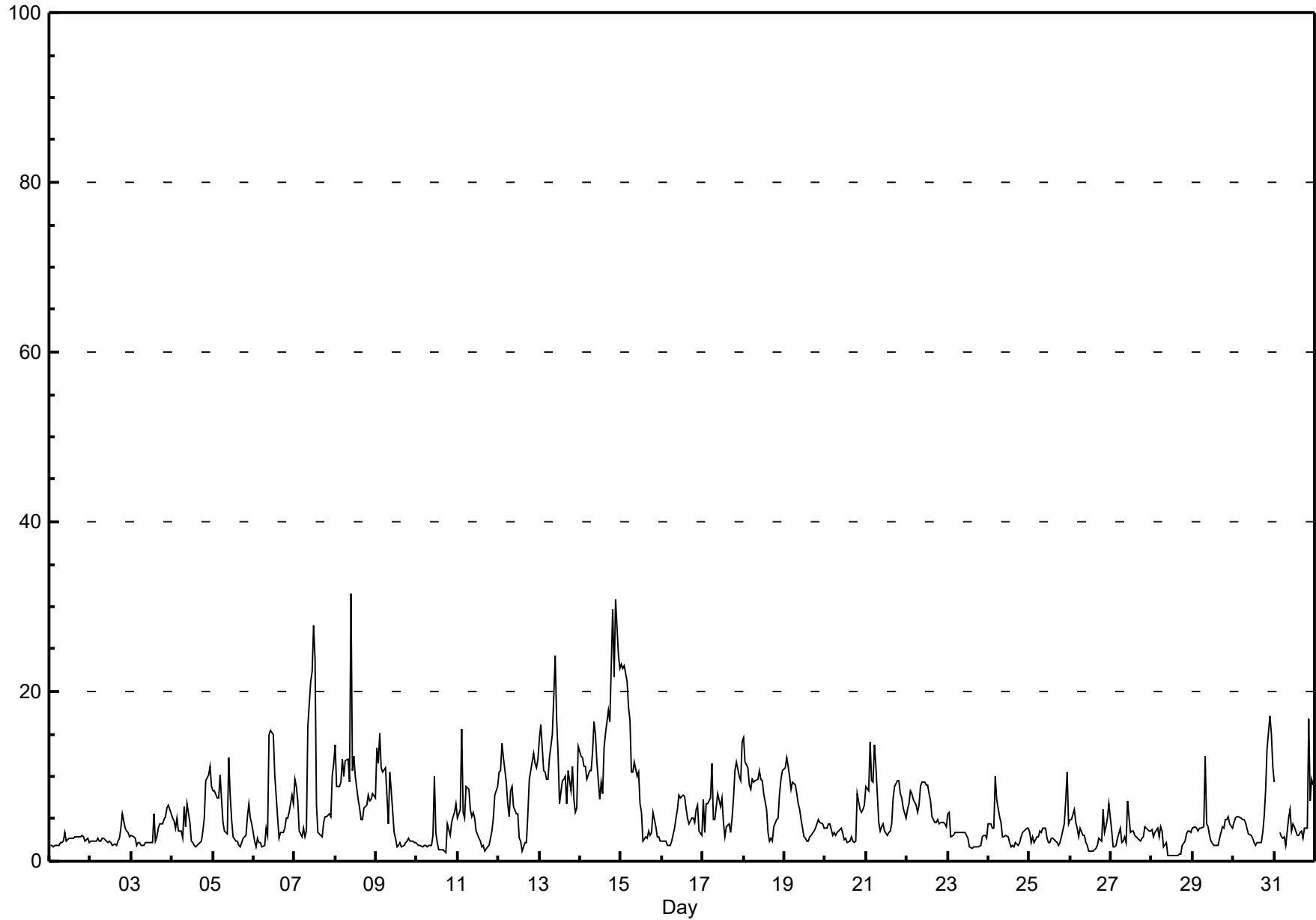


Hourly Maximums

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

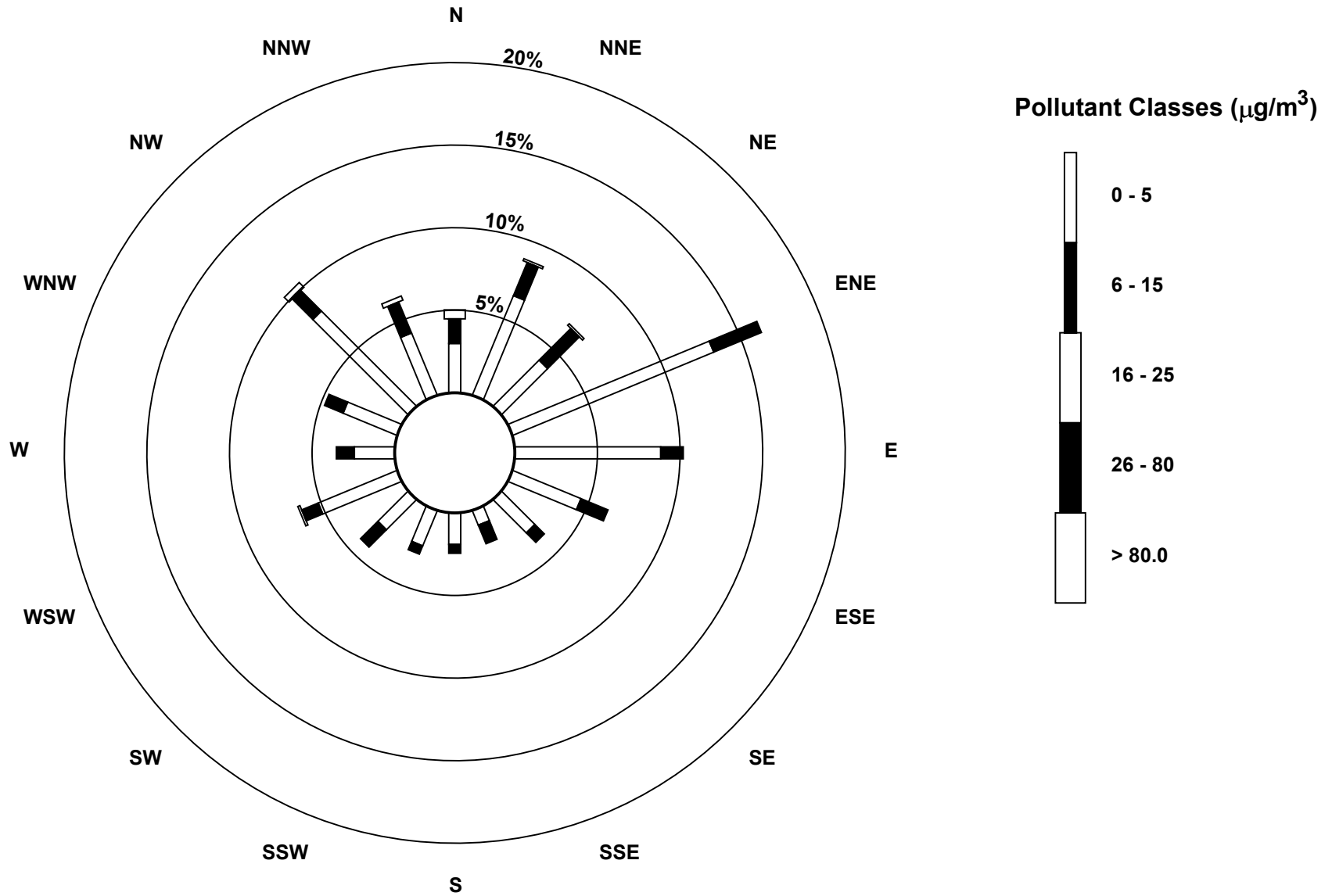
Beaverlodge - March 2018

Maximum Value: 31.5 µg/m ³ on Mar 8 10:00 Minimum Value: 1 µg/m ³ on Mar 28 11:00 Maximum Diurnal Average: 7.9 µg/m ³ at hour 10 Monthly Average: 5.73 µg/m ³		Maximum Daily Average: 15.6 µg/m ³ on Mar 14 Minimum Daily Average: 2.2 µg/m ³ on Mar 28 Minimum Diurnal Average: 3.3 µg/m ³ at hour 16 Percentiles: P ₁ = 0.9 P ₁₀ = 1.9 Q ₁ = 2.6 Median = 4.1 Q ₃ = 7.6 P ₉₀ = 11.2 P ₉₉ = 23.1		Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
1-Mar	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3	3	3	3	3	3	2	3	2	2.5	3.4																						
2-Mar	2	2	2	2	3	2	2	3	3	2	2	2	2	2	2	2	2	3	4	6	4	4	3	3	2.7	5.6																						
3-Mar	3	3	3	2	2	2	2	2	2	2	2	2	2	6	2	3	4	4	4	5	5	6	7	6	3.4	6.6																						
4-Mar	5	5	4	5	4	4	3	7	4	7	5	2	2	2	2	2	2	4	5	9	10	11	9	4.7	11.2																							
5-Mar	8	8	8	8	10	7	5	4	3	12	8	5	3	2	2	2	2	2	3	3	5	7	5	4	5.2	12.2																						
6-Mar	2	2	3	2	2	2	2	4	3	15	15	15	10	8	5	3	3	3	4	5	5	6	8	7	5.6	15.3																						
7-Mar	10	9	7	4	3	4	3	4	16	21	22	28	24	7	3	3	3	5	5	5	6	5	10	11	9.1	27.8																						
8-Mar	14	9	9	9	12	10	12	12	9	32	11	12	10	7	6	5	5	6	7	8	7	7	8	8	9.8	31.5																						
9-Mar	13	11	15	11	11	11	8	4	10	8	3	3	2	2	2	2	2	2	3	2	2	2	2	2	5.6	15.1																						
10-Mar	2	2	2	2	2	2	2	2	2	3	10	3	2	1	1	1	1	1	4	3	5	5	6	7	3.0	10.0																						
11-Mar	5	6	16	6	5	9	8	6	5	6	5	4	3	2	2	2	1	2	2	3	4	5	8	9	5.1	15.6																						
12-Mar	10	11	14	12	9	7	5	8	9	7	6	6	3	2	1	2	2	6	10	11	13	11	11	12	7.8	13.9																						
13-Mar	14	16	11	10	10	10	12	15	19	24	17	13	7	10	10	10	7	11	8	11	7	6	6	14	11.6	24.2																						
14-Mar	12	12	11	11	10	11	11	13	16	15	12	7	9	8	13	15	18	16	23	30	22	31	24	23	15.6	30.8																						
15-Mar	23	23	23	21	18	17	10	10	12	10	11	7	6	2	3	3	4	3	3	6	4	3	3	2	9.4	23.2																						
16-Mar	2	2	2	2	2	2	2	4	5	6	8	8	8	8	6	5	4	5	5	5	6	7	4	3	4.6	7.8																						
17-Mar	7	3	7	7	8	11	5	5	7	8	7	8	5	3	4	4	3	5	8	11	12	10	9	14	7.1	14.2																						
18-Mar	15	12	11	9	9	10	9	9	10	11	10	10	8	6	3	2	3	2	4	5	5	8	10	11	7.9	14.6																						
19-Mar	11	12	11	10	9	9	9	8	7	6	5	3	3	2	2	3	3	4	4	4	5	5	4	4	6.0	12.2																						
20-Mar	4	4	4	4	3	3	3	3	4	4	3	3	3	2	2	3	2	2	2	8	6	6	6	7	3.9	8.0																						
21-Mar	9	8	14	9	9	14	11	5	4	4	4	4	3	3	4	4	8	9	9	9	8	8	6	5	7.2	14.2																						
22-Mar	6	7	8	8	7	7	6	7	9	9	9	9	9	8	7	5	5	5	5	4	5	5	4	4	6.5	9.3																						
23-Mar	6	6	3	3	3	3	3	3	3	3	3	3	3	2	1	2	2	2	2	2	3	3	3	3	2.9	5.8																						
24-Mar	4	4	4	4	10	7	5	5	3	3	3	3	2	2	2	2	2	2	2	3	3	4	4	4	3.6	10.0																						
25-Mar	3	2	3	2	3	3	4	3	4	4	3	2	2	3	3	2	2	2	2	3	4	7	10	4	3.4	10.5																						
26-Mar	5	5	6	5	4	3	4	3	3	2	2	1	1	1	1	1	2	3	2	6	3	4	5	7	3.3	6.8																						
27-Mar	4	2	2	2	3	4	2	2	3	2	7	3	4	4	3	3	3	2	3	3	4	4	4	4	3.1	7.0																						
28-Mar	4	3	3	4	3	4	4	2	2	1	1	1	1	1	1	1	1	2	2	3	4	4	3	2.2	4.1																							
29-Mar	4	4	4	4	4	4	4	12	4	4	3	2	2	2	2	2	3	4	4	5	5	5	4	4	4.0	12.4																						
30-Mar	5	5	5	5	5	5	5	5	4	3	3	3	2	2	2	2	2	3	5	8	13	17	15	11	5.7	17.1																						
31-Mar	9	P	P	3	3	3	3	2	5	6	4	4	4	3	3	3	4	3	4	4	17	7	10	9	5.1	16.9																						
																								7.3	6.7	7.2	6.1	6.0	6.1	5.4	5.6	6.2	7.9	6.6	5.7	4.7	3.7	3.4	3.3	3.4	4.0	4.8	6.1	6.6	6.9	7.0	6.9	Diurnal Average
																								23.2	22.7	23.0	21.3	18.1	16.6	12.2	14.9	19.3	31.5	22.4	27.8	24.0	9.5	13.4	15.1	17.8	16.4	23.0	29.6	21.8	30.8	24.2	22.7	Diurnal Maximum
P - Power Failure																																																



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Beaverlodge - March 2018



Hourly Averages

External Temperature (ET) - °C

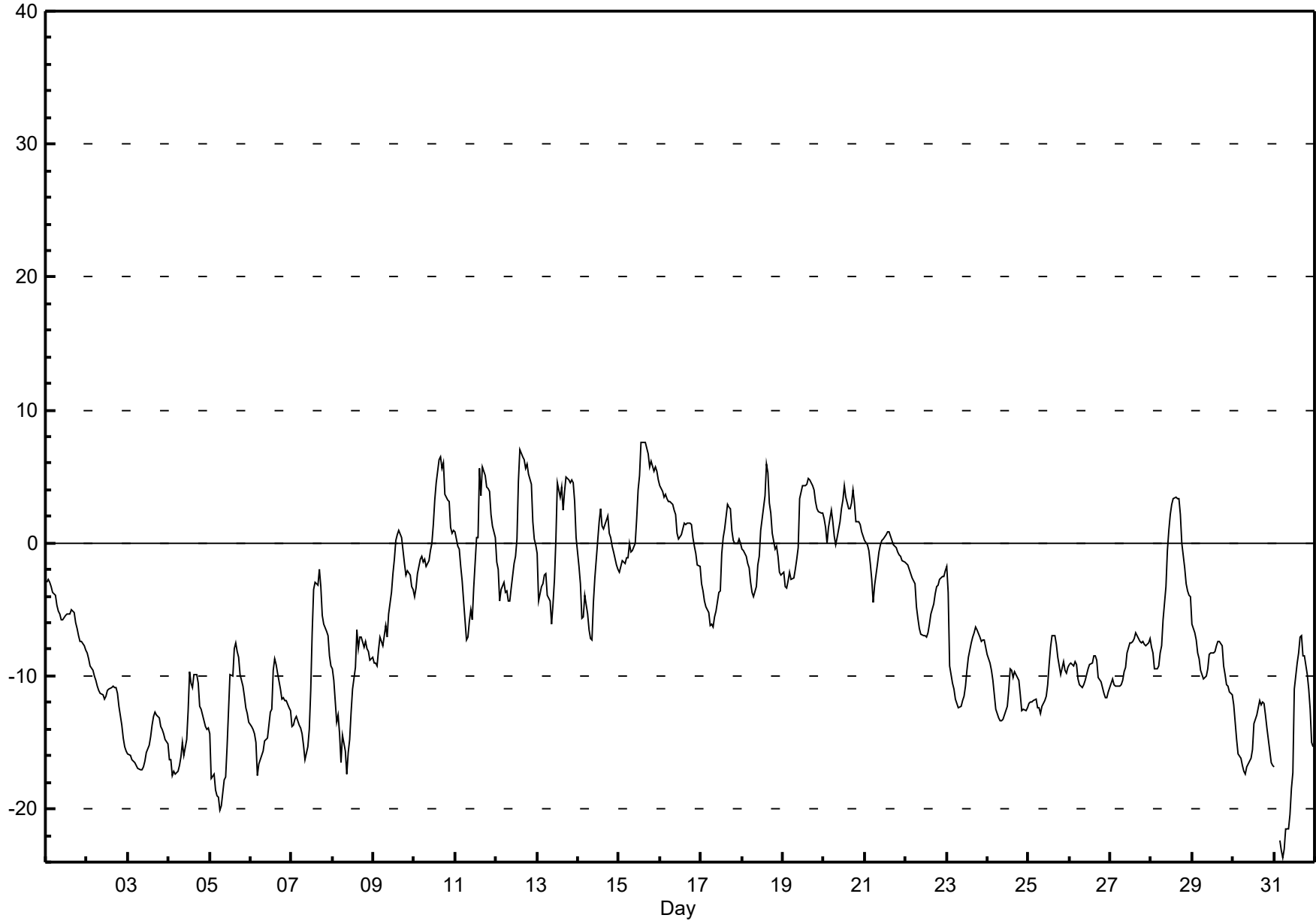
Beaverlodge - March 2018

Maximum Value: 7.6 °C on Mar 15 16:00		Maximum Daily Average: 2.9 °C on Mar 15		Hours in Service: 744																							
Minimum Value: -24 °C on Mar 31 06:00		Minimum Daily Average: -15.2 °C on Mar 3		Hours of Data: 742																							
Maximum Diurnal Average: -2.8 °C at hour 17		Minimum Diurnal Average: -9.0 °C at hour 8		Hours of Missing Data: 2																							
Monthly Average: -6.02 °C		Percentiles: P ₁ = -20.0 P ₁₀ = -14.8 Q ₁ = -11.0 Median = -6.7 Q ₃ = -0.4 P ₉₀ = 3.1 P ₉₉ = 6.3		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	-3	-3	-3	-3	-4	-4	-5	-5	-5	-6	-6	-5	-5	-5	-5	-5	-6	-6	-7	-7	-7	-8	-8	-5.3	-2.8		
2-Mar	-8	-9	-9	-10	-10	-10	-11	-11	-11	-11	-12	-12	-11	-11	-11	-11	-11	-11	-11	-12	-14	-15	-15	-16	-11.3	-8.2	
3-Mar	-16	-16	-16	-16	-17	-17	-17	-17	-17	-17	-16	-16	-15	-15	-14	-13	-13	-13	-13	-14	-14	-14	-15	-15	-15.2	-12.8	
4-Mar	-16	-16	-17	-17	-17	-17	-17	-16	-15	-16	-15	-13	-10	-11	-11	-10	-10	-11	-12	-12	-13	-14	-14	-14	-13.9	-9.7	
5-Mar	-14	-18	-17	-19	-19	-19	-20	-20	-18	-18	-15	-13	-10	-10	-8	-7	-8	-9	-10	-11	-11	-12	-13	-13	-13.8	-7.5	
6-Mar	-14	-14	-14	-15	-18	-17	-16	-16	-15	-15	-15	-13	-13	-10	-9	-9	-10	-11	-12	-12	-12	-12	-13	-13.0	-8.8		
7-Mar	-14	-14	-13	-13	-14	-14	-14	-15	-16	-15	-14	-11	-7	-3	-3	-3	-2	-3	-5	-6	-7	-7	-8	-9	-9.7	-2.0	
8-Mar	-10	-10	-13	-13	-14	-17	-14	-16	-17	-16	-15	-13	-11	-9	-7	-8	-7	-7	-8	-7	-8	-8	-9	-9	-11.1	-6.6	
9-Mar	-9	-9	-9	-8	-7	-8	-7	-6	-7	-5	-4	-2	-1	0	1	1	0	-1	-2	-2	-2	-3	-4	-4.0	0.9		
10-Mar	-4	-3	-2	-1	-1	-1	-1	-2	-1	-1	0	1	3	4	6	6	6	6	4	3	3	1	1	1	1.2	6.4	
11-Mar	1	0	0	-2	-3	-4	-7	-7	-6	-5	-6	-3	0	0	6	4	6	5	4	4	4	2	1	0	-0.3	5.7	
12-Mar	-1	-2	-4	-4	-3	-4	-4	-4	-4	-3	-2	-1	0	5	7	7	6	6	6	5	4	2	0	0	0.5	7.1	
13-Mar	-1	-4	-3	-3	-2	-2	-4	-4	-6	-5	-3	0	4	3	4	2	4	5	5	5	5	5	3	0	0.3	4.9	
14-Mar	-2	-3	-6	-6	-4	-5	-7	-7	-7	-4	-3	0	2	3	1	1	2	2	1	0	0	-1	-2	-2	-1.9	2.6	
15-Mar	-2	-2	-1	-2	-1	-1	0	-1	-1	0	2	4	5	8	8	8	7	7	6	6	5	6	5	5	2.9	7.6	
16-Mar	4	4	3	4	3	3	3	3	2	2	1	0	1	1	1	1	1	1	1	0	0	-1	-2	-2	1.6	4.3	
17-Mar	-3	-4	-4	-5	-5	-6	-6	-6	-6	-5	-4	-4	-1	0	1	3	3	3	1	0	0	0	0	0	-2.0	2.9	
18-Mar	0	-1	-1	-2	-2	-3	-4	-4	-3	-2	-1	1	2	4	6	5	3	2	1	0	0	-1	-2	-2	-0.2	6.0	
19-Mar	-2	-3	-3	-3	-2	-3	-3	-2	-1	0	3	4	4	4	4	5	5	4	4	3	3	2	2	2	1.2	4.9	
20-Mar	2	1	0	1	2	2	1	0	0	2	3	3	4	3	3	3	3	4	3	2	2	1	1	1	1.9	4.3	
21-Mar	0	0	-1	-1	-3	-4	-3	-2	-1	0	0	0	1	1	1	0	0	0	0	-1	-1	-1	-1	-1	-0.7	0.9	
22-Mar	-2	-2	-2	-2	-3	-3	-5	-6	-6	-7	-7	-7	-7	-7	-6	-5	-5	-4	-3	-3	-3	-3	-2	-2	-4.2	-1.6	
23-Mar	-2	-4	-9	-11	-11	-12	-12	-12	-12	-12	-12	-11	-10	-9	-8	-7	-7	-6	-7	-7	-7	-7	-8	-8	-8.7	-1.8	
24-Mar	-8	-9	-10	-10	-11	-13	-13	-13	-13	-13	-13	-12	-11	-9	-10	-10	-10	-10	-10	-11	-13	-12	-13	-12	-11.3	-8.4	
25-Mar	-12	-12	-12	-12	-12	-12	-12	-13	-12	-12	-11	-11	-9	-8	-7	-7	-8	-9	-9	-10	-9	-10	-10	-9	-10.3	-7.0	
26-Mar	-9	-9	-9	-9	-9	-10	-11	-11	-11	-10	-10	-9	-9	-9	-8	-8	-9	-10	-10	-11	-11	-12	-12	-11	-9.9	-8.4	
27-Mar	-11	-10	-11	-11	-11	-11	-11	-10	-10	-9	-8	-8	-8	-7	-7	-7	-7	-7	-8	-7	-8	-8	-7	-7	-8.7	-6.8	
28-Mar	-8	-8	-10	-9	-9	-8	-8	-6	-3	-1	1	2	3	3	3	3	3	0	-2	-3	-4	-4	-4	-4	-2.7	3.4	
29-Mar	-6	-7	-7	-8	-9	-10	-10	-10	-10	-9	-8	-8	-8	-8	-8	-7	-7	-8	-9	-10	-11	-11	-11	-11	-8.9	-6.1	
30-Mar	-12	-13	-15	-16	-16	-17	-17	-17	-17	-17	-16	-16	-14	-13	-13	-12	-12	-12	-12	-13	-14	-16	-17	-17	-14.7	-11.8	
31-Mar	-17	P	P	-22	-23	-24	-23	-21	-21	-20	-18	-17	-11	-9	-8	-7	-7	-9	-8	-10	-11	-13	-15	-15	-15.1	-7.0	
		-6.4	-6.7	-7.4	-8.0	-8.2	-8.7	-9.0	-9.0	-8.8	-8.1	-7.2	-6.0	-4.5	-3.7	-2.9	-2.8	-2.8	-3.2	-3.9	-4.5	-4.9	-5.5	-6.1	-6.3	Diurnal Average	
		4.3	3.9	3.5	3.7	3.4	3.2	3.1	2.9	2.5	2.1	3.3	4.3	5.0	7.5	7.5	7.6	7.2	6.7	6.0	6.1	5.4	5.7	5.3	4.8	Diurnal Maximum	
P - Power Failure																											

Hourly Averages

External Temperature (ET) - °C

Beaverlodge - March 2018



Hourly Averages

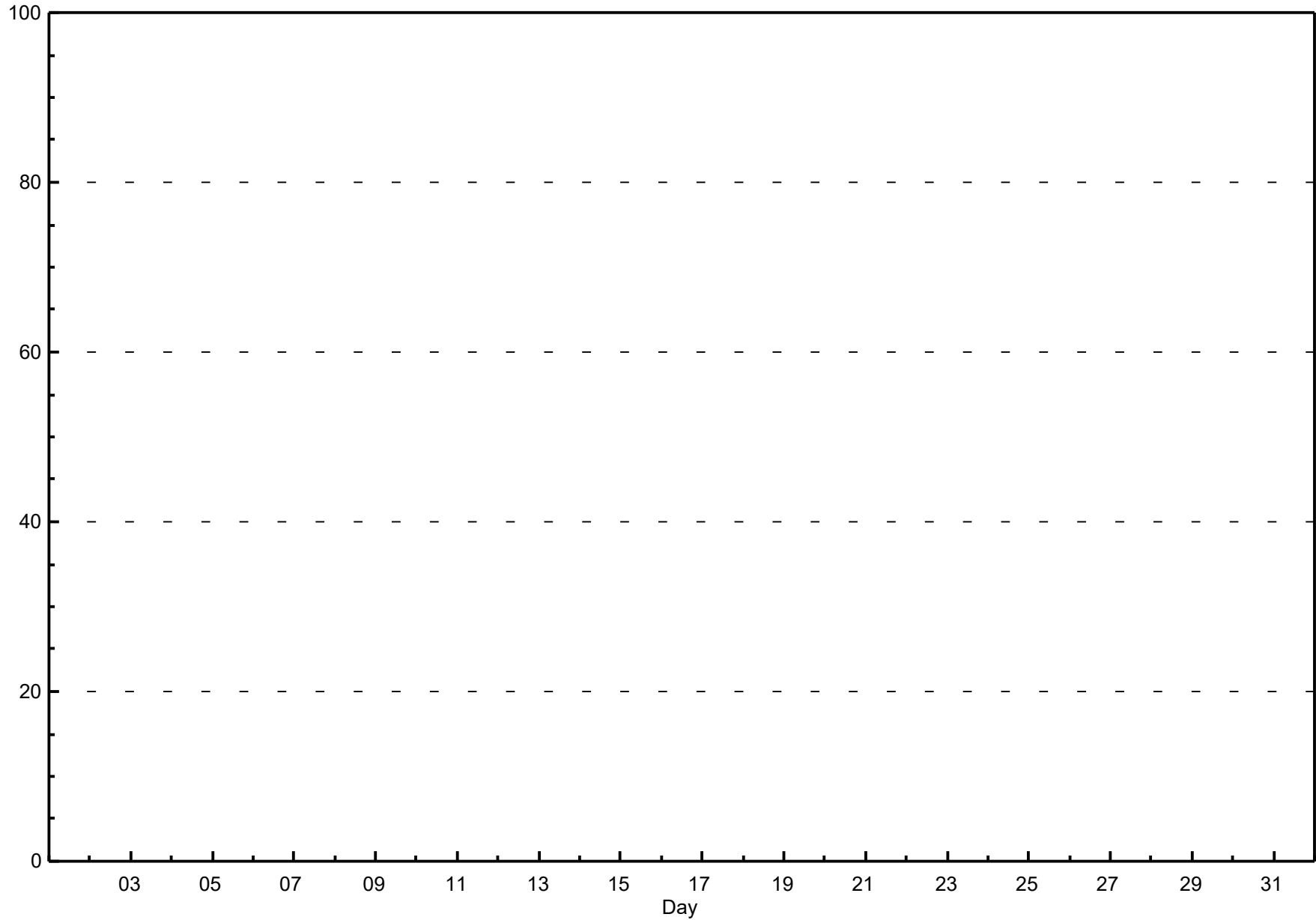
Relative Humidity (RH) - %
Beaverlodge - March 2018

Maximum Value: -- % on Mar 1 00:00 Minimum Value: -- % on Mar 1 00:00 Maximum Diurnal Average: -- % at hour 0 Monthly Average: -- %		Maximum Daily Average: -- % on Feb 28 Minimum Daily Average: -- % on Feb 28 Minimum Diurnal Average: -- % at hour 0 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.0 P ₉₉ = 0.0		Hours in Service: 744 Hours of Data: 0 Hours of Missing Data: 744 Hours of Calibration: 0 Percent Operational Time: 0.0																								
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	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--	
2-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
3-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
4-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
5-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
6-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
7-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
8-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
9-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
10-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
11-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
12-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
13-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
14-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
15-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
16-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
17-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
18-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
19-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
20-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
21-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
22-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
23-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
24-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
25-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
26-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
27-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
28-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
29-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
30-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
31-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Diurnal Average	Diurnal Maximum

N - Not Valid

Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - March 2018



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	34	34	33	31	32	34	34	33	31	32	37	35	35	34	37	41	42	42	40	39	38	37	36	31	35.5	42.3
Dir	66	68	70	69	69	68	64	65	59	58	65	69	69	61	62	67	70	71	71	71	71	74	77	76	68	71
2 Spd	30	29	27	27	29	30	33	33	33	32	30	29	21	18	18	15	13	12	8	15	20	20	20	17	18.2	33.0
Dir	76	67	65	71	69	67	68	66	68	72	71	69	65	62	60	52	37	33	326	315	317	319	326	324	53	68
3 Spd	17	13	12	13	14	13	16	15	14	13	14	15	13	14	13	15	15	14	13	13	15	11	10	11	13.5	16.6
Dir	316	321	322	318	316	324	321	320	317	318	310	314	311	301	302	303	310	312	315	333	336	342	322	324	317	316
4 Spd	9	10	6	9	8	15	10	8	8	8	3	5	3	4	4	5	5	7	9	11	11	14	12	8	1.9	14.8
Dir	20	239	306	341	326	324	332	354	331	256	149	243	192	85	84	91	112	146	80	79	95	102	98	156	46	324
5 Spd	9	6	6	3	7	15	8	9	12	7	6	6	2	5	9	16	13	14	13	11	13	12	12	13	4.7	15.8
Dir	161	71	46	327	16	73	120	63	71	196	65	57	199	250	293	327	354	344	338	332	332	321	315	308	357	327
6 Spd	17	13	13	13	14	16	14	13	15	12	4	0	3	3	5	8	6	5	4	6	5	6	6	7	3.7	16.5
Dir	321	334	321	291	64	57	37	34	44	38	218	245	237	211	191	117	171	134	91	78	80	93	117	113	40	321
7 Spd	10	10	9	7	9	10	5	4	4	4	2	2	5	11	13	9	5	4	6	8	9	9	9	9	5.0	12.8
Dir	190	72	63	102	83	65	60	318	231	8	45	13	18	5	3	32	87	122	81	74	69	66	77	87	61	3
8 Spd	7	7	5	9	4	4	9	4	13	7	7	6	1	4	3	4	2	2	7	10	8	6	4	7	2.4	13.0
Dir	118	228	332	4	278	158	29	320	39	289	39	296	329	86	171	232	208	321	230	320	27	10	24	356	352	39
9 Spd	8	9	8	10	7	5	2	9	6	9	6	1	11	25	28	29	25	23	16	18	18	20	12	9	11.2	29.3
Dir	326	17	281	319	300	262	329	333	314	325	330	178	278	273	274	263	251	243	249	246	258	259	247	230	271	263
10 Spd	7	7	7	6	11	13	11	12	15	8	8	12	10	10	6	4	6	5	5	7	2	3	4	5	4.8	15.3
Dir	243	241	213	230	228	214	244	244	248	251	234	235	239	231	199	69	63	46	94	75	42	207	209	32	231	248
11 Spd	6	4	3	7	7	3	6	4	5	4	3	2	0	5	1	6	4	7	7	7	5	3	5	5	1.5	7.5
Dir	35	2	344	309	322	232	146	77	27	283	11	245	154	58	258	60	105	122	66	59	69	134	179	220	54	59
12 Spd	2	5	1	7	5	9	5	3	3	4	3	3	5	2	1	4	9	12	9	3	1	3	4	2	3.7	11.5
Dir	341	67	113	48	78	53	83	95	94	95	137	101	49	89	205	96	120	98	81	108	265	359	38	65	80	98
13 Spd	4	1	5	2	4	5	6	2	2	4	3	5	9	4	5	5	4	3	3	2	8	8	5	8	0.4	9.3
Dir	187	267	346	25	34	246	356	280	309	306	301	13	14	206	222	235	110	52	111	219	147	137	188	275	271	14
14 Spd	4	4	6	8	4	4	4	6	6	2	3	3	7	9	8	5	4	2	7	10	10	5	10	9	3.3	10.0
Dir	345	27	256	30	344	359	55	205	4	327	15	50	311	10	161	226	249	221	309	7	355	357	330	357	345	355
15 Spd	6	6	4	4	3	2	9	5	5	4	3	3	3	2	2	5	4	3	3	4	5	6	7	9	2.0	9.0
Dir	343	317	245	50	59	299	306	345	302	345	128	104	88	123	136	172	209	267	53	292	272	295	316	325	315	306
16 Spd	10	7	8	12	11	12	15	12	11	10	8	N	N	N	9	11	12	10	6	9	5	5	6	4	5.4	14.9
Dir	318	303	311	322	320	323	321	324	315	330	319	N	N	N	238	254	257	244	192	185	146	74	79	93	300	321
17 Spd	4	8	2	3	2	3	6	N	N	N	23	6	3	2	1	1	2	5	5	7	9	7	6	7	2.6	23.4
Dir	78	34	264	310	141	354	27	N	N	N	359	250	206	102	253	167	86	95	98	106	117	88	46	24	49	359
18 Spd	7	10	8	8	6	5	5	7	1	2	5	4	4	3	1	1	4	6	10	9	8	7	9	9	2.8	10.1
Dir	23	20	24	22	10	326	337	39	162	329	287	240	222	218	195	119	85	132	119	92	73	96	107	104	62	20
19 Spd	7	9	10	7	6	6	5	6	10	13	26	30	27	26	20	14	19	21	18	21	14	12	6	9	11.3	29.7
Dir	133	137	127	107	137	155	131	174	224	222	237	245	244	244	249	263	251	252	246	247	243	243	218	216	232	245
20 Spd	11	6	8	5	6	5	3	6	5	1	15	8	4	5	9	9	4	1	4	12	9	5	7	5	2.0	14.9
Dir	220	204	69	211	245	212	187	62	121	130	246	287	62	92	154	22	80	8	67	117	77	120	94	104	132	246
21 Spd	6	4	4	5	5	8	6	6	6	8	15	15	19	26	27	31	31	33	37	44	42	42	38	36	19.6	44.1
Dir	93	66	165	107	55	291	38	107	91	91	84	69	70	69	63	65	60	61	63	67	69	70	73	73	69	67
22 Spd	35	37	42	40	42	41	38	38	37	36	35	35	35	34	35	36	38	37	42	40	39	37	35	32	37.1	42.2
Dir	75	72	70	70	69	66	57	57	58	58	57	54	55	54	54	55	56	58	66	67	67	68	65	71	63	69

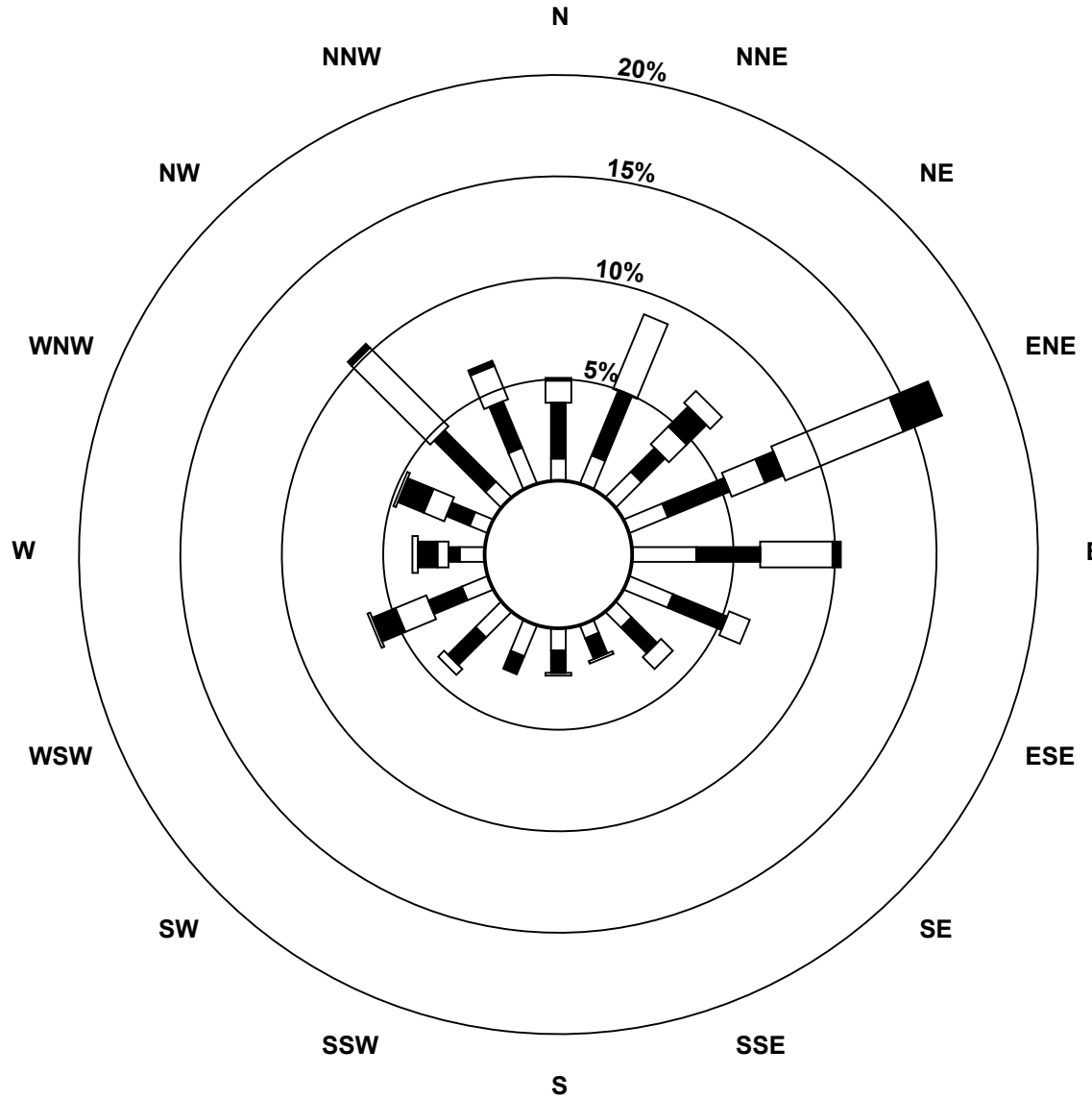
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2018

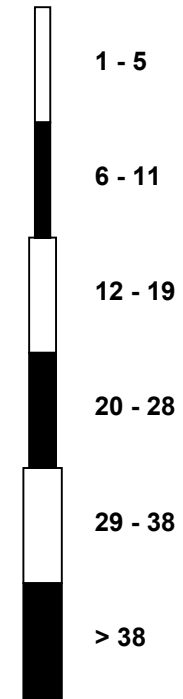
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	27	8	28	29	27	27	25	23	24	24	22	17	17	13	11	11	10	8	11	12	11	14	12	12	12.1	28.6
Dir	77	11	295	298	282	283	286	288	294	295	290	295	299	315	335	16	38	10	16	16	27	32	28	12	319	298
24 Spd	12	14	15	18	15	16	15	16	16	14	13	11	8	8	5	7	8	10	10	16	14	14	14	15	9.1	17.9
Dir	12	16	14	14	2	1	6	350	348	337	326	322	312	144	176	141	103	118	101	33	28	29	25	30	15	14
25 Spd	15	11	10	10	3	13	12	12	11	13	13	12	11	9	9	11	12	12	16	13	11	14	13	10	5.2	15.8
Dir	29	357	333	340	318	174	155	141	169	143	130	135	113	88	98	97	99	107	95	91	102	299	310	19	98	95
26 Spd	9	6	10	14	11	13	13	12	16	13	12	12	13	14	11	9	4	14	14	16	17	16	17	18	6.4	18.3
Dir	334	13	319	337	353	338	309	294	315	326	341	14	18	20	359	352	51	119	98	94	102	102	99	100	22	100
27 Spd	19	15	13	12	12	14	14	7	10	12	12	17	16	14	13	11	11	11	11	4	3	10	8	5	3.5	18.8
Dir	90	92	97	114	123	144	130	89	327	354	350	333	325	322	321	324	19	31	28	14	239	215	218	202	33	90
28 Spd	10	8	10	12	10	14	7	13	17	25	28	27	26	26	30	28	25	13	11	15	16	13	8	8	5.3	29.6
Dir	101	119	132	92	103	58	38	278	273	267	272	278	286	283	279	275	276	268	94	100	70	83	128	98	281	279
29 Spd	13	9	11	16	14	13	14	13	15	13	9	16	17	20	22	19	16	18	21	20	21	20	19	19	15.1	22.4
Dir	74	65	88	86	86	71	87	92	87	88	72	94	84	88	94	88	63	54	35	44	47	47	44	41	70	94
30 Spd	22	21	18	19	17	19	17	15	15	16	15	12	8	6	7	9	8	9	12	15	20	12	7	11	9.1	22.3
Dir	42	38	23	25	24	29	27	23	24	27	23	25	51	189	140	185	204	221	317	324	335	310	345	300	13	42
31 Spd	20	P	P	22	24	23	23	24	14	3	7	6	3	4	6	5	2	6	5	9	10	8	6	10	7.5	24.2
Dir	38	P	P	54	61	55	55	87	84	141	64	336	28	116	182	217	276	2	299	29	2	49	151	279	54	61
Spd	7.1	6.5	5.1	6.8	6.0	5.8	6.5	5.5	5.3	4.0	4.2	3.4	3.6	3.2	2.0	3.3	3.6	4.2	6.3	7.1	7.3	6.0	5.5	5.1	Diurnal Average	
Dir	53	46	31	31	41	42	38	35	22	8	10	7	15	28	25	30	52	64	58	52	50	51	54	45	Diurnal Maximum	
Spd	34.7	36.7	42.0	39.8	42.2	40.8	38.0	37.6	36.9	35.7	36.8	35.1	35.1	34.4	37.1	41.2	41.7	42.3	42.1	44.1	41.7	42.4	37.6	35.9	Diurnal Maximum	
Dir	75	72	70	70	69	66	57	57	58	58	65	69	69	61	62	67	70	71	66	67	69	70	73	73	Diurnal Maximum	
Maximum Speed Value: 44 km/h on Mar 21 20:00		Minimum Speed Value: 0 km/h on Mar 6 12:00																		Hours in Service: 744						
Maximum Daily Speed Average: 37.1 km/h on Mar 22		Minimum Daily Speed Average: 0.4 km/h on Mar 12																		Hours of Data: 736						
Maximum Diurnal Speed Average: 7.3 km/h at hour 21		Minimum Diurnal Speed Average: 2.0 km/h at hour 15																		Hours of Missing Data: 8						
Monthly Average Velocity: 4.97 km/h 39.8 deg		Speed Percentiles: P ₁ = 1.1 P ₁₀ = 3.4 Q ₁ = 5.4 Median = 9.5 Q ₃ = 15.0 P ₉₀ = 27.6 P ₉₉ = 41.5																		Percent Operational Time: 98.9						
All monthly, daily, and diurnal averages have been calculated using vector methods																										
P - Power Failure N - Not Valid																										
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	19	34	26	1	0	0	80																			
NorthEast	23	40	33	18	27	7	148																			
East	31	48	40	7	23	10	159																			
SouthEast	16	32	12	0	0	0	60																			
South	15	14	2	0	0	0	31																			
SouthWest	28	27	12	5	1	0	73																			
West	15	11	11	18	3	0	58																			
NorthWest	16	44	59	7	1	0	127																			
Total	163	250	195	56	55	17	736																			

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - March 2018



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - March 2018

Maximum Speed: 44 km/h on Mar 21 20:00	Maximum Daily Speed Average: 37.4 km/h on Mar 22	Hours in Service: 744
Minimum Speed: 1 km/h on Mar 18 15:00	Minimum Daily Speed Average: 5.4 km/h on Mar 15	Hours of Data: 736
Maximum Diurnal Speed Average: 14.5 km/h at hour 20	Minimum Diurnal Speed Average: 12.5 km/h at hour 15	Hours of Missing Data: 8
Monthly Average Speed: 13.50 km/h	Percentiles: P ₁ = 2.6 P ₁₀ = 5.4 Q ₁ = 7.1 Median = 11.2 Q ₃ = 15.9 P ₉₀ = 27.8 P ₉₉ = 41.6	Percent Operational Time: 98.9

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	34	34	33	31	32	34	34	34	31	32	37	35	35	35	37	41	42	42	40	39	38	37	36	31	35.7	42.4
2-Mar	30	29	27	27	29	30	33	33	33	32	30	29	21	19	18	15	13	12	9	15	20	20	21	17	23.4	33.1
3-Mar	17	13	12	13	14	13	17	15	14	13	14	15	14	14	13	15	16	14	13	13	15	11	10	11	13.7	16.7
4-Mar	10	13	10	11	11	15	10	8	8	12	7	6	4	4	4	5	6	7	9	11	14	14	12	12	9.3	15.0
5-Mar	12	17	14	14	16	17	16	16	18	13	10	7	5	6	14	17	14	14	14	12	13	12	12	13	13.1	18.1
6-Mar	17	13	13	13	16	16	15	14	15	15	10	8	7	7	8	7	8	7	5	4	6	5	6	7	10.1	16.7
7-Mar	12	10	9	10	10	13	10	11	11	14	8	6	6	12	13	9	6	5	6	8	9	9	11	10	9.5	13.9
8-Mar	9	9	10	13	11	11	11	12	14	10	8	7	6	8	3	4	4	6	8	11	8	8	8	10	8.8	13.8
9-Mar	10	12	9	10	8	6	7	10	8	9	6	5	14	25	28	29	25	24	16	18	18	20	12	10	14.2	29.5
10-Mar	7	7	7	7	12	13	11	12	15	8	8	12	10	10	7	5	6	5	5	7	5	4	6	6	8.1	15.4
11-Mar	6	5	5	7	7	7	8	7	7	6	6	4	2	5	2	6	4	7	7	8	5	4	6	7	5.7	8.5
12-Mar	6	6	6	7	6	9	7	6	6	5	4	3	5	3	2	5	9	12	9	4	4	5	5	9	5.9	11.9
13-Mar	5	6	6	5	6	6	10	7	8	7	6	6	9	4	5	6	6	5	5	7	9	9	6	9	6.6	10.1
14-Mar	9	8	8	8	7	8	12	8	9	6	5	4	7	10	9	5	5	3	7	10	10	7	11	10	7.7	11.8
15-Mar	8	7	6	6	5	6	9	5	7	7	5	3	3	3	3	5	5	4	4	4	5	6	7	9	5.4	9.3
16-Mar	10	9	9	12	11	12	15	12	11	10	11	N	N	N	9	12	12	11	6	9	6	5	6	6	9.8	15.0
17-Mar	6	8	10	6	8	7	7	N	N	N	26	7	3	3	3	2	3	5	6	8	9	7	6	7	7.0	26.1
18-Mar	7	10	8	8	7	6	6	7	11	6	5	5	4	3	1	2	4	6	10	9	8	7	9	9	6.6	10.6
19-Mar	8	10	11	7	7	7	6	7	10	13	26	30	27	26	20	14	19	21	18	21	14	12	7	9	14.6	29.8
20-Mar	11	7	8	10	7	6	5	6	5	5	16	9	5	5	10	9	5	3	5	12	10	8	7	6	7.5	15.9
21-Mar	7	6	6	7	11	9	8	8	8	9	15	15	19	26	27	31	31	33	37	44	42	43	38	36	21.5	44.2
22-Mar	35	37	42	40	42	41	38	38	37	36	35	35	35	34	35	37	38	37	42	40	39	37	35	33	37.4	42.3
23-Mar	27	22	28	29	27	27	25	23	24	24	22	17	18	14	12	13	10	9	11	12	11	15	12	12	18.4	29.0
24-Mar	12	14	15	18	16	16	15	16	17	14	13	11	10	11	6	7	8	10	10	16	14	14	15	15	13.1	18.1
25-Mar	16	11	11	11	13	13	12	12	11	14	13	12	11	9	10	11	12	13	16	13	12	15	13	11	12.3	16.0
26-Mar	11	10	12	14	11	13	13	12	16	13	13	13	13	14	12	10	11	14	14	16	17	16	17	18	13.4	18.4
27-Mar	19	15	14	12	12	14	14	11	11	12	13	17	16	15	13	11	11	11	12	9	10	10	10	13	12.7	18.9
28-Mar	12	11	13	13	13	15	12	13	17	25	28	27	26	26	30	29	27	19	12	15	17	14	9	9	17.9	29.8
29-Mar	13	10	12	16	14	13	14	13	15	13	11	16	17	20	22	19	16	18	21	20	21	20	19	19	16.5	22.4
30-Mar	22	21	19	19	17	19	17	16	15	16	15	12	9	7	7	10	8	10	13	15	21	18	19	20	15.2	22.5
31-Mar	24	F	F	23	25	23	23	25	21	19	16	15	15	6	6	5	6	9	11	18	16	17	19	21	16.5	25.4
	13.9	13.1	13.1	13.8	13.9	14.4	14.2	13.9	14.5	13.9	14.2	13.0	12.6	12.8	12.5	12.8	12.5	12.7	12.9	14.5	14.3	13.8	13.2	13.3	Diurnal Average	
	34.8	36.8	42.1	39.9	42.3	40.9	38.1	37.7	36.9	35.7	36.9	35.2	35.2	34.6	37.3	41.3	41.7	42.4	42.1	44.2	41.8	42.5	37.7	36.0	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg
Beaverlodge - March 2018

Maximum Value: 96.6 deg on Mar 6 12:00																		Hours in Service: 744								
Minimum Value: 1.0 deg on Mar 16 13:00																		Hours of Data: 742								
Percentiles: P ₁ = 2.3 P ₁₀ = 3.9 Q ₁ = 6.7 Median = 14.9 Q ₃ = 39.0 P ₉₀ = 66.0 P ₉₉ = 87.9																		Hours of Missing Data: 2								
																		Hours of Calibration: 0								
																		Percent Operational Time: 99.7								
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	3	2	2	2	2	3	3	3	4	4	3	4	3	5	5	4	3	3	3	3	3	4	4	4	5.1	
2-Mar	5	4	4	5	3	3	3	2	3	3	3	3	6	7	4	8	8	5	23	5	4	5	4	5	23.4	
3-Mar	5	7	6	5	6	5	5	6	6	6	6	8	8	6	7	5	6	6	6	8	4	12	8	6	11.7	
4-Mar	29	51	58	38	56	11	7	12	20	44	67	31	36	38	16	17	33	16	10	9	36	9	5	51	66.5	
5-Mar	42	78	72	81	67	27	62	65	54	67	65	46	65	41	68	20	8	8	7	14	14	10	10	5	81.4	
6-Mar	9	8	8	17	30	12	15	21	11	38	80	97	69	73	69	36	13	15	13	11	11	9	19	19	96.6	
7-Mar	37	10	16	41	33	49	71	75	80	79	92	74	41	12	10	15	36	35	15	6	10	7	49	34	92.0	
8-Mar	45	41	58	47	70	80	43	76	24	52	25	36	95	64	19	11	73	72	38	12	22	43	62	45	95.4	
9-Mar	38	58	31	12	21	38	73	23	50	10	11	95	70	6	7	5	7	2	4	5	14	9	8	12	95.1	
10-Mar	18	29	26	35	13	4	9	7	9	10	15	6	5	11	18	43	19	12	20	9	91	38	54	40	90.7	
11-Mar	13	52	61	11	15	72	51	52	45	53	59	76	84	15	76	11	25	20	14	6	22	44	33	40	84.3	
12-Mar	75	32	82	8	17	18	40	58	59	39	34	18	10	67	66	34	15	16	5	62	83	59	64	86	85.8	
13-Mar	36	84	33	83	55	30	59	70	82	58	61	29	7	41	18	31	69	51	63	83	26	31	32	32	84.0	
14-Mar	67	71	52	28	65	65	81	40	50	81	51	33	19	9	32	30	20	46	17	14	11	66	23	32	81.2	
15-Mar	41	46	48	56	61	77	14	23	44	60	51	36	35	36	44	17	36	22	32	13	22	15	7	5	76.6	
16-Mar	6	52	27	4	5	5	6	7	20	9	45	28	1	56	11	11	3	18	26	19	30	26	19	43	55.6	
17-Mar	55	6	80	59	87	79	26	33	4	3	53	24	15	42	88	71	48	28	24	25	14	18	15	6	88.4	
18-Mar	4	5	2	7	32	40	43	17	91	77	7	25	15	17	42	48	12	8	10	11	5	10	8	6	90.6	
19-Mar	22	24	18	22	20	10	35	26	20	14	5	3	4	3	11	13	5	5	5	3	4	3	24	7	34.5	
20-Mar	4	38	23	69	31	47	63	18	26	78	50	35	50	13	21	10	39	78	31	17	21	54	15	33	78.2	
21-Mar	18	53	45	41	81	19	38	33	36	24	13	9	6	5	6	5	5	5	4	3	3	3	4	3	80.9	
22-Mar	4	4	3	2	2	5	4	3	4	3	5	4	4	4	4	4	4	5	3	3	3	2	3	3	5.4	
23-Mar	4	69	7	9	8	6	5	7	5	6	10	9	9	16	23	33	14	34	15	3	6	6	5	8	68.5	
24-Mar	6	4	7	8	10	11	9	10	12	13	14	14	45	54	35	21	17	6	17	6	2	7	7	4	53.9	
25-Mar	7	17	21	25	77	10	18	16	7	7	7	11	6	12	10	7	10	9	8	7	15	28	13	25	76.6	
26-Mar	37	64	31	13	13	9	7	5	7	9	11	10	5	4	25	16	64	10	6	6	7	3	6	8	64.0	
27-Mar	5	10	7	7	8	11	11	55	29	11	10	8	8	10	11	10	15	5	16	68	82	10	38	85	84.6	
28-Mar	29	47	38	22	42	22	59	8	4	3	5	6	6	8	6	7	17	57	32	13	18	17	28	35	58.9	
29-Mar	14	39	24	6	10	12	9	8	6	9	33	15	7	7	3	6	11	5	7	4	5	7	7	7	39.0	
30-Mar	8	5	10	2	3	7	4	9	7	5	6	9	45	22	14	35	8	18	10	7	6	54	76	59	76.5	
31-Mar	35	P	P	13	18	8	5	21	52	83	75	67	91	53	26	31	71	49	63	72	52	73	80	69	90.9	
	74.6	84.0	82.1	83.2	87.2	80.1	81.2	76.5	90.6	82.9	92.0	96.6	95.4	73.1	88.4	70.7	73.3	78.2	62.8	83.3	90.7	73.4	79.9	85.8		
P - Power Failure																										

PAZA

Valleyview Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

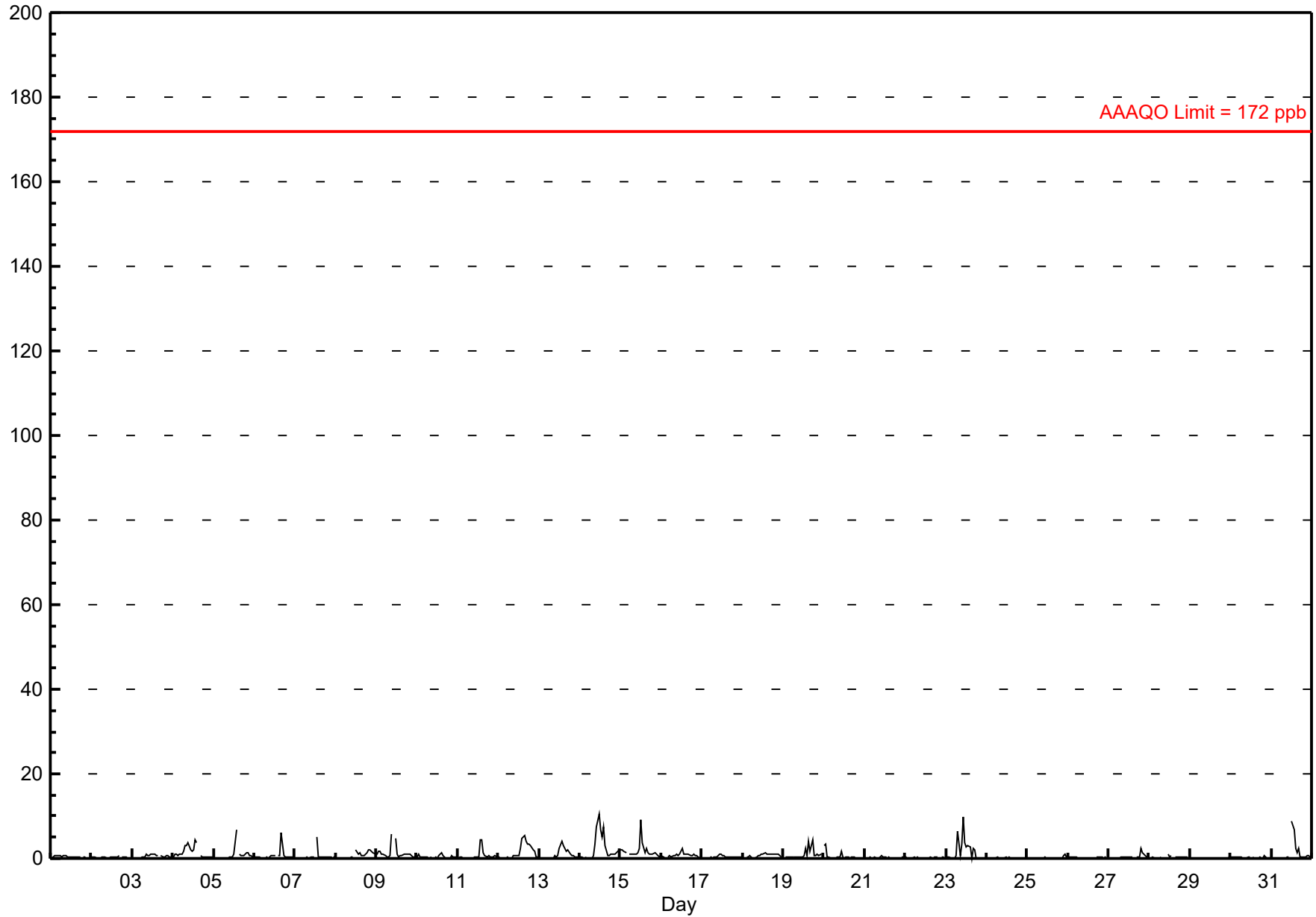
Sulphur Dioxide (SO₂) - ppb

Valleyview - March 2018

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 10.6 ppb on Mar 14 12:00	Maximum Daily Average: 2.4 ppb on Mar 14		Hours of Data:	709
Minimum Value: 0 ppb on Mar 23 22:00	Minimum Daily Average: 0.1 ppb on Mar 24		Hours of Missing Data:	35
Maximum Diurnal Average: 2.0 ppb at hour 14	Minimum Diurnal Average: 0.2 ppb at hour 5		Hours of Calibration:	35
Monthly Average: 0.70 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.3 Q ₃ = 0.7 P ₉₀ = 1.6 P ₉₉ = 6.8		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	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.8
2-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0.2	0.5
3-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	1	0	0	1	1	0	0	0.5	1.0	
4-Mar	0	1	1	1	1	1	2	3	3	4	2	2	2	4	4	A	1	0	0	0	0	0	0	1.4	4.3	
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	7	A	1	1	1	1	1	1	1	0	0.7	6.8	
6-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	6	1	0	0	0	0	0	0.6	6.1	
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	5	0	0	0	0	0	0	0	0	0	0.5	5.1	
8-Mar	0	0	0	0	0	0	0	0	0	0	0	A	2	1	1	1	1	1	1	2	2	2	1	0.8	2.2	
9-Mar	1	2	2	1	1	1	0	0	1	6	A	5	1	0	1	1	1	1	1	1	1	0	0	1.2	5.7	
10-Mar	0	1	0	0	0	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	1	0	0	0.4	1.4	
11-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	4	4	1	1	0	1	0	0	0	1	0.7	4.5	
12-Mar	0	0	0	0	0	0	0	A	0	1	1	1	1	2	5	6	4	3	3	3	2	2	0	1.5	5.5	
13-Mar	0	0	0	0	0	0	A	0	0	1	1	1	3	4	3	2	2	2	1	1	1	0	0	0.9	4.2	
14-Mar	0	0	0	0	0	A	0	0	1	4	7	11	7	5	7	3	1	1	1	1	1	1	2	2.4	10.6	
15-Mar	2	2	2	1	A	1	1	1	1	1	1	2	9	4	1	2	1	1	1	1	1	1	0	1.7	9.1	
16-Mar	1	0	0	A	0	1	0	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	0	0.7	2.4	
17-Mar	0	0	A	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.0	
18-Mar	0	A	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.2	
19-Mar	A	0	0	0	0	0	0	0	0	0	0	1	2	1	4	2	4	4	1	1	1	1	1	1.0	4.5	
20-Mar	3	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	3.4
21-Mar	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.7
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0.2	0.5	
23-Mar	0	0	0	0	0	0	1	6	1	3	10	4	3	3	3	0	3	2	0	A	0	0	0	1.7	9.9	
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.2	
25-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	0.1	1.1	
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	0.1	0.4	
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	2	1	1	0	0.4	2.4	
28-Mar	0	0	0	0	0	0	0	0	C	C	C	1	0	1	A	0	0	0	0	0	0	0	0	0.3	0.9	
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.2	
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0.2	0.6	
31-Mar	0	0	0	0	0	0	0	0	0	0	0	A	9	7	2	1	2	0	0	0	0	1	1	1.1	8.8	
	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.5	0.4	0.9	1.1	1.2	1.6	2.0	1.4	1.0	1.0	0.8	0.6	0.6	0.6	0.5	0.4	0.3	Diurnal Average	
	3.0	3.4	1.7	1.5	1.1	1.2	1.6	6.5	3.1	5.7	9.9	10.6	9.1	6.9	7.3	5.5	6.1	4.5	3.2	2.9	2.2	1.7	1.6	1.9	Diurnal Maximum	

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



Hourly Maximums

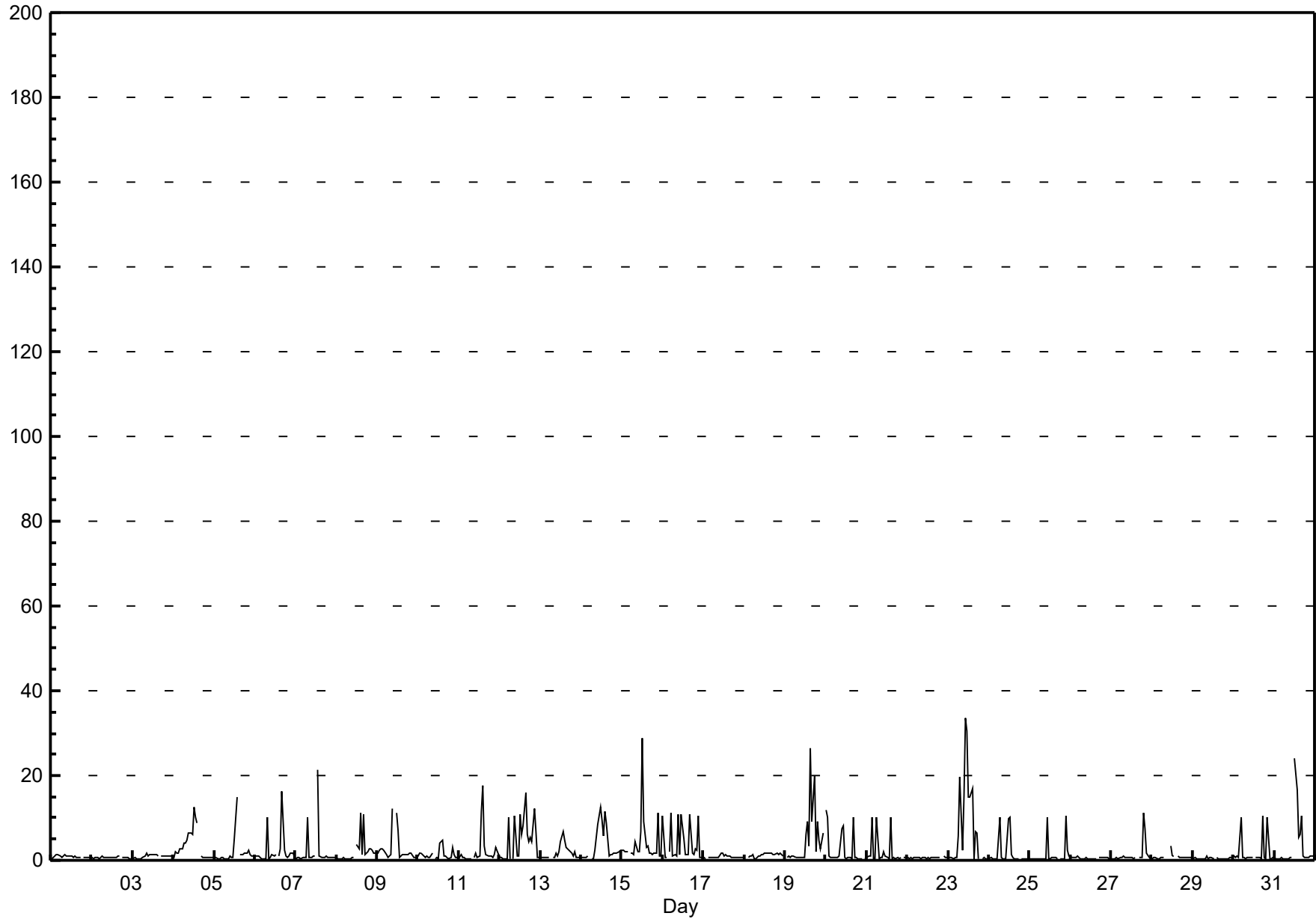
Sulphur Dioxide (SO₂) - ppb

Valleyview - March 2018

Maximum Value: 33.7 ppb on Mar 23 11:00		Maximum Daily Average: 7.5 ppb on Mar 23		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 26 16:00		Minimum Daily Average: 0.5 ppb on Mar 29		Hours of Data: 709																							
Maximum Diurnal Average: 5.4 ppb at hour 13		Minimum Diurnal Average: 0.8 ppb at hour 24		Hours of Missing Data: 35																							
Monthly Average: 2.24 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.8 Q ₃ = 1.6 P ₉₀ = 6.7 P ₉₉ = 19.5		Hours of Calibration: 35																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-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	0.9	1.3	
2-Mar	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	0.6	0.9	
3-Mar	0	1	0	0	0	0	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.7	
4-Mar	1	2	2	2	3	3	4	4	5	6	6	6	12	10	9	A	1	1	1	1	1	1	1	1	3.5	12.4	
5-Mar	1	1	0	0	1	1	0	0	0	1	1	1	5	15	A	1	1	1	2	2	2	1	1	1	1.7	15.0	
6-Mar	1	1	1	1	0	0	0	10	0	1	1	1	1	A	1	3	16	2	1	1	1	2	2	1	2.2	16.3	
7-Mar	0	1	1	0	1	1	1	10	1	1	1	1	A	21	1	1	1	1	1	1	1	1	1	1	2.0	21.5	
8-Mar	1	0	1	0	1	0	0	0	0	1	1	A	4	3	11	1	11	1	2	3	3	2	2	2	2.1	11.1	
9-Mar	2	2	3	3	2	1	1	1	1	1	12	A	11	7	1	1	2	1	1	2	2	1	1	1	2.6	12.0	
10-Mar	1	2	2	1	1	1	1	1	2	A	0	1	0	4	5	1	1	1	0	1	3	1	1	1	1.3	4.7	
11-Mar	0	1	1	1	0	0	0	0	A	1	2	1	1	11	18	3	1	1	1	1	1	1	3	1	2.3	17.7	
12-Mar	1	1	0	0	0	10	0	A	0	11	1	1	11	6	8	16	6	4	5	4	12	7	1	1	4.7	15.9	
13-Mar	1	1	1	1	1	1	A	1	1	2	1	2	4	7	5	3	3	3	2	1	2	1	1	1	1.7	6.7	
14-Mar	1	1	1	1	1	A	0	0	2	5	8	13	9	6	11	9	1	1	1	2	2	2	2	2	3.5	12.6	
15-Mar	2	2	2	2	A	2	2	1	4	2	2	7	29	9	3	3	2	2	1	2	2	11	1	1	4.1	28.7	
16-Mar	11	1	1	A	2	11	1	1	1	11	1	11	5	1	1	1	11	2	1	3	3	10	1	1	3.9	11.0	
17-Mar	1	0	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.8	
18-Mar	1	A	1	1	1	1	0	1	1	1	1	1	2	2	2	2	2	2	2	2	1	2	1	1	1.2	1.7	
19-Mar	A	1	1	1	1	1	1	1	1	1	1	1	6	9	3	26	9	20	2	9	5	3	6	A	4.9	26.4	
20-Mar	12	10	1	1	1	1	1	1	1	7	8	1	1	1	1	0	10	1	1	0	0	1	A	0	2.6	11.7	
21-Mar	1	1	1	10	0	0	10	0	1	1	2	1	1	1	10	0	1	0	1	0	1	A	1	1	1.9	10.3	
22-Mar	1	0	1	0	1	1	1	1	0	1	1	0	1	0	1	1	1	1	1	1	A	1	1	1	0.6	1.1	
23-Mar	1	1	1	0	1	1	6	20	2	15	34	31	15	15	17	0	7	7	0	A	0	1	0	1	7.5	33.7	
24-Mar	0	1	0	0	0	0	10	1	0	0	1	10	10	1	1	0	0	0	A	0	0	0	0	0	1.8	10.3	
25-Mar	0	0	0	0	0	0	0	0	0	0	10	0	0	1	1	1	0	A	0	0	0	10	2	1	1.4	10.4	
26-Mar	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	A	1	1	1	1	1	1	0	0.6	1.0	
27-Mar	1	0	0	1	0	1	1	1	1	1	1	1	1	0	1	A	1	1	1	11	7	2	1	1	1.4	11.3	
28-Mar	0	1	1	0	0	1	1	1	C	C	C	4	1	1	A	1	1	1	1	1	1	1	1	1	0.8	3.5	
29-Mar	0	1	0	0	0	0	0	0	1	0	1	1	0	A	1	0	0	0	1	1	0	0	0	1	0.5	0.9	
30-Mar	1	1	1	1	10	1	1	0	1	1	1	1	A	1	1	1	0	10	1	0	10	0	0	1	1.9	10.4	
31-Mar	1	0	0	0	1	0	0	0	0	1	1	A	24	17	6	6	10	1	1	1	1	1	1	1	3.2	24.0	
		1.4	1.2	0.8	1.1	1.1	1.4	1.5	2.1	1.1	3.0	3.1	3.8	5.4	5.1	4.1	3.0	3.5	2.3	1.1	1.7	2.1	2.2	1.1	0.8	Diurnal Average	
		11.7	10.2	2.8	10.3	10.1	11.0	10.3	19.7	4.6	15.2	33.7	30.6	28.7	21.5	17.7	26.4	16.3	20.1	5.3	11.3	12.1	11.2	6.5	2.4	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

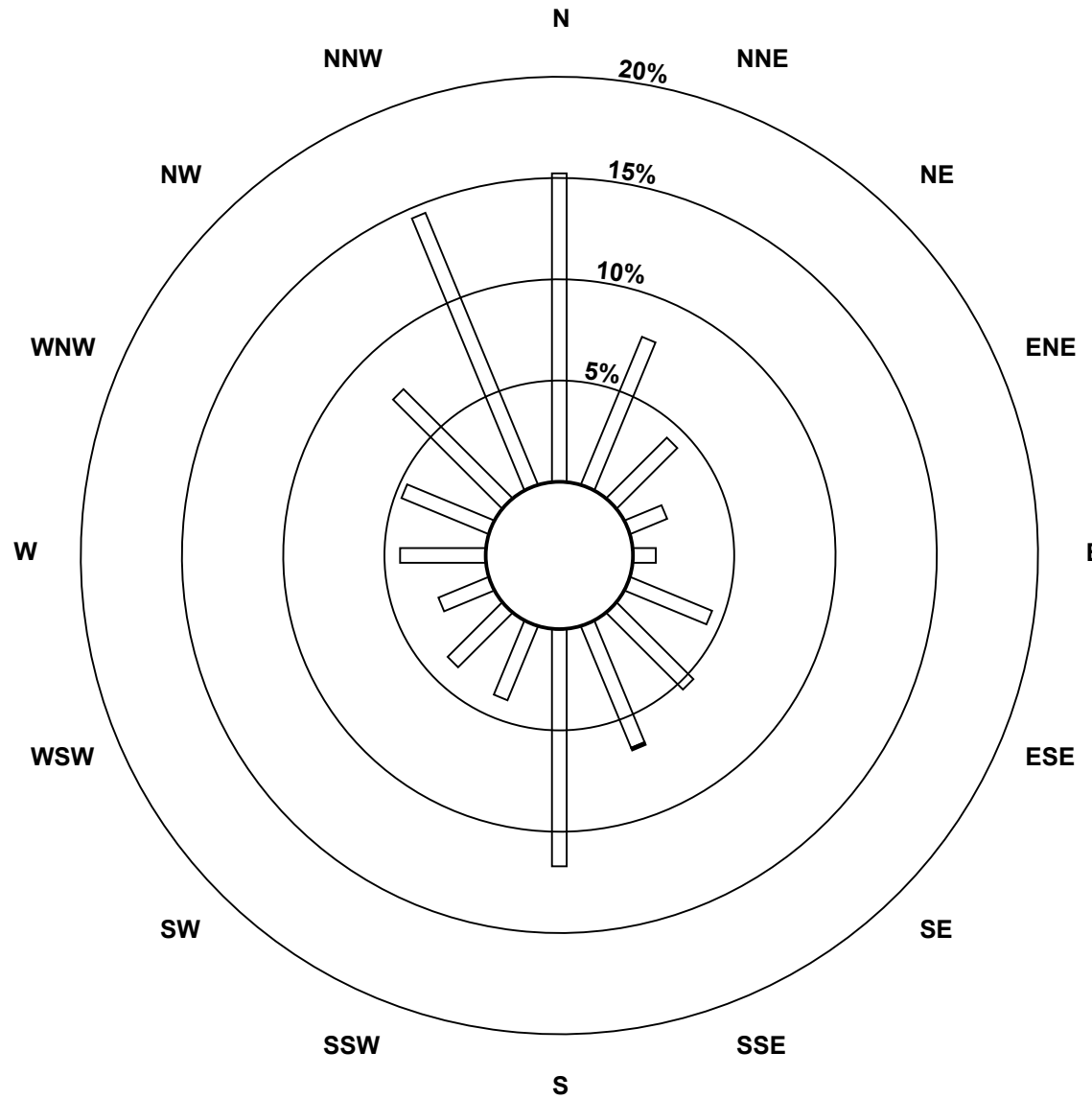
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Valleyview - March 2018

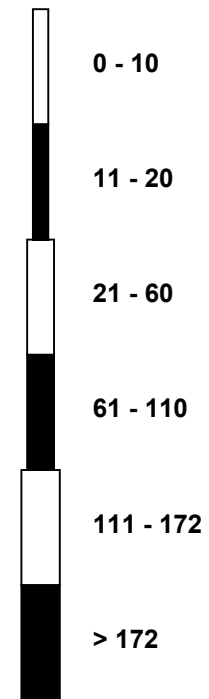


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - March 2018

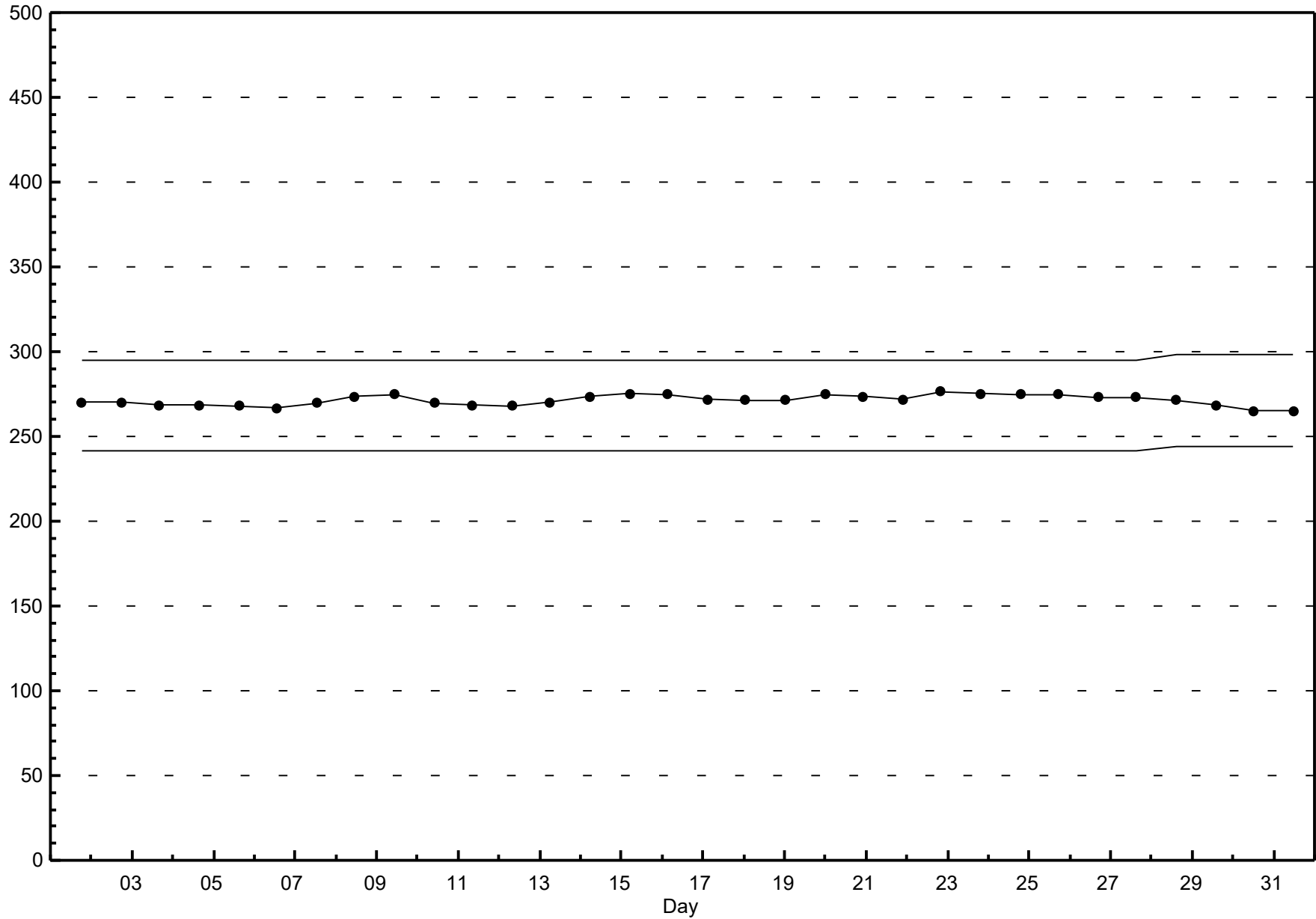


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - March 2018



Hourly Averages

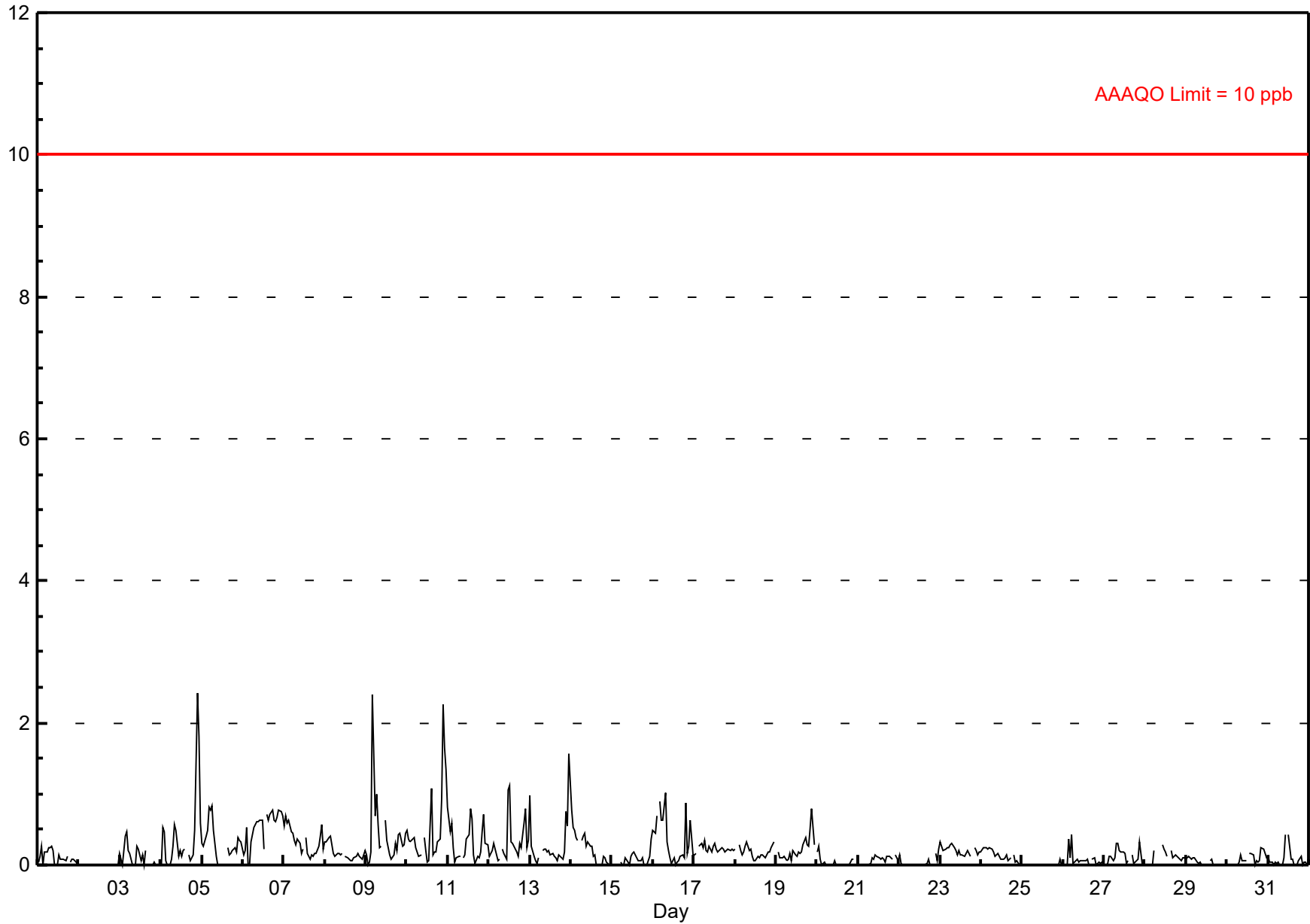
Hydrogen Sulphide (H₂S) - ppb

Valleyview - March 2018

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.4 ppb on Mar 4 22:00 Maximum Daily Average: 0.5 ppb on Mar 6		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 1 04:00 Maximum Diurnal Average: 0.4 ppb at hour 22 Monthly Average: 0.19 ppb		Minimum Daily Average: 0.0 ppb on Mar 2 Minimum Diurnal Average: 0.1 ppb at hour 17 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 = 1.1																									
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	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	
2-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	0.0	
3-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	0.5	
4-Mar	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	2	2	1	0.4	2.4	
5-Mar	0	0	0	0	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.8	
6-Mar	0	0	1	0	0	0	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	0.5	0.8	
7-Mar	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0.3	0.7	
8-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	
9-Mar	0	0	0	0	2	1	1	1	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0.4	2.4	
10-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	1	2	2	1	0.5	2.3
11-Mar	1	0	1	0	0	0	0	0	A	A	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0.3	0.8	
12-Mar	0	0	0	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0.3	1.1	
13-Mar	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0.3	1.6	
14-Mar	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8	
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	0.4	
16-Mar	0	0	1	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.3	1.0	
17-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	0.2	0.3	
18-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	
19-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0.2	0.8	
20-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	0.3	
21-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	
22-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	0.2	
23-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	0.3	
24-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	0.2	
25-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	0.1	
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	0.1	0.4	
27-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	
28-Mar	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3	
29-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	0.1	
30-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	
31-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	0.4	
		0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.4	0.3	0.3	Diurnal Average	
		1.0	0.7	0.7	0.6	2.4	0.8	1.0	1.0	0.6	0.6	0.6	1.1	1.1	0.8	1.1	0.6	0.7	0.8	0.6	0.9	0.9	2.4	1.8	1.6	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 2018



Hourly Maximums

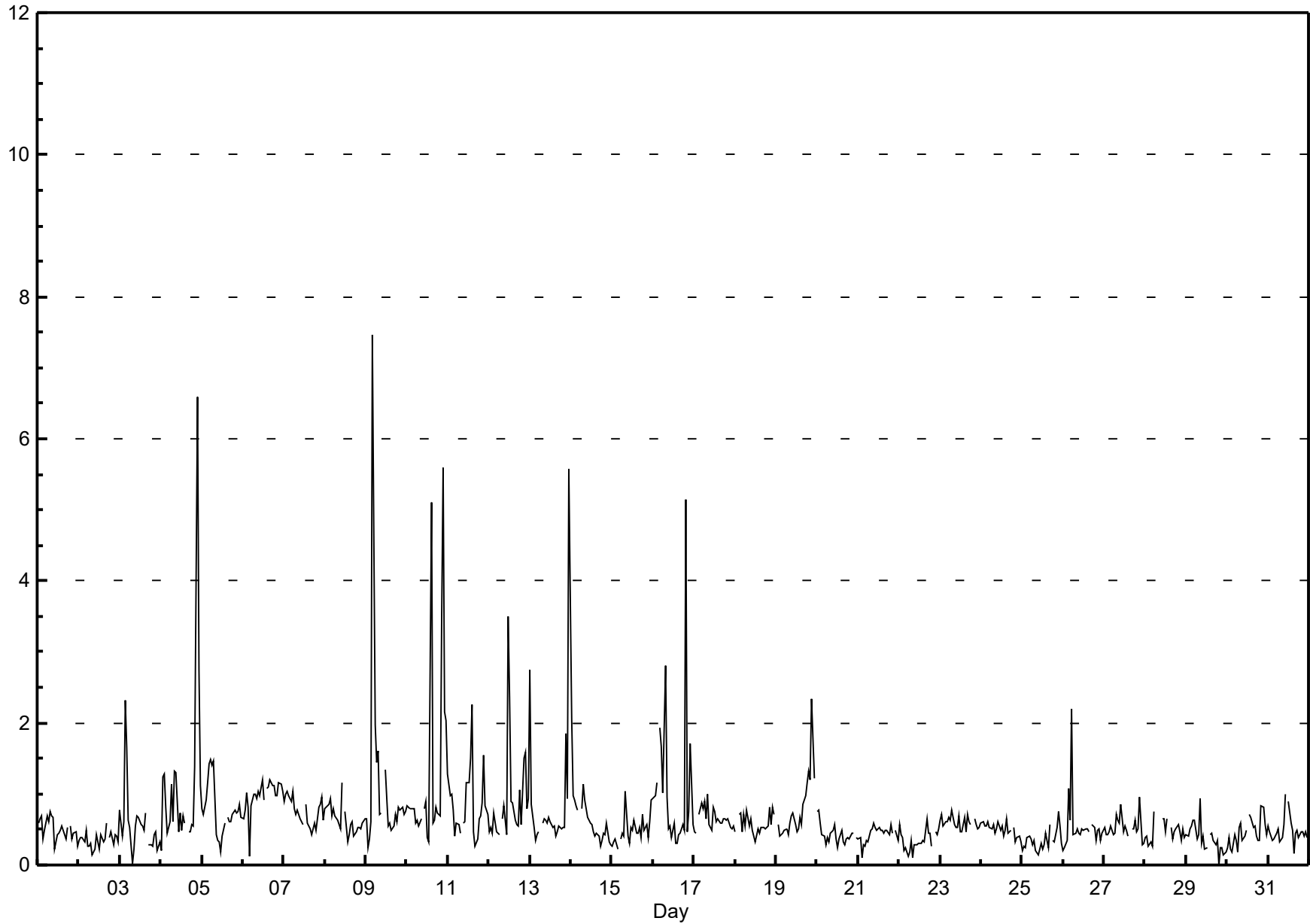
Hydrogen Sulphide (H₂S) - ppb

Valleyview - March 2018

Maximum Value: 7.5 ppb on Mar 9 05:00		Maximum Daily Average: 1.3 ppb on Mar 10		Hours in Service: 744																						
Minimum Value: 0 ppb on Mar 29 20:00		Minimum Daily Average: 0.3 ppb on Mar 22		Hours of Data: 708																						
Maximum Diurnal Average: 1.1 ppb at hour 22		Minimum Diurnal Average: 0.5 ppb at hour 16		Hours of Missing Data: 36																						
Monthly Average: 0.67 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 1.0 P ₉₉ = 3.4		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	0	0	1	1	1	1	1	0	0	0	0	1	0	0	1	A	1	0	0	0	0	0.5	0.7
2-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0.4	0.6
3-Mar	1	0	1	2	2	1	1	0	0	1	1	1	1	0	1	A	0	0	0	0	0	0	0	0	0.6	2.3
4-Mar	0	1	1	1	0	1	1	1	1	1	0	1	0	1	1	A	0	0	1	1	1	7	3	1	1.1	6.6
5-Mar	1	1	1	1	1	1	1	1	0	0	0	0	0	1	A	1	1	1	1	1	1	1	1	0.8	1.5	
6-Mar	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.0	1.2	
7-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	0	1	1	1	0.7	1.0	
8-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	1	1	0	0	1	1	0	1	0.6	1.2	
9-Mar	1	0	0	1	7	2	1	2	1	1	A	1	1	1	1	0	1	1	1	1	1	1	1	1.1	7.5	
10-Mar	1	1	1	1	1	1	1	1	1	A	1	1	0	0	5	1	1	1	1	1	1	3	6	2	1.3	5.6
11-Mar	1	1	1	1	0	1	1	0	A	1	1	1	1	2	2	0	0	0	1	1	1	2	1	0.9	2.3	
12-Mar	0	1	0	1	0	0	0	A	1	1	0	4	2	1	1	1	1	1	1	1	2	2	1	0.9	3.5	
13-Mar	3	1	1	0	0	0	A	1	1	1	1	1	1	1	0	0	1	1	1	1	2	1	6	0.9	5.6	
14-Mar	2	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0.7	2.1	
15-Mar	0	0	0	0	A	0	0	0	1	0	0	1	0	1	0	0	1	0	1	0	1	0	1	0.5	1.0	
16-Mar	1	1	1	A	2	2	1	3	1	1	1	0	1	0	0	0	0	1	0	5	0	1	2	1.1	5.1	
17-Mar	0	0	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
18-Mar	0	A	1	1	0	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	0.6	0.8	
19-Mar	A	1	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	1	1	1	2	1	0.8	2.3	
20-Mar	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.8
21-Mar	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	1	0	A	0	0	0.4	0.6
22-Mar	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0.3	0.7
23-Mar	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	A	1	1	1	0.6	0.8	
24-Mar	1	1	1	1	1	1	1	1	0	1	1	0	1	0	0	1	0	0	A	1	0	0	0	0	0.5	0.7
25-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	1	1	1	0	0.3	0.8
26-Mar	0	0	0	1	1	2	0	0	1	0	0	1	0	0	1	0	A	1	1	0	0	0	0	0	0.5	2.2
27-Mar	1	0	0	0	1	0	0	1	1	1	1	0	1	0	0	A	1	1	1	0	1	1	0	0	0.5	0.9
28-Mar	0	0	0	0	0	1	C	C	C	C	1	1	0	1	A	1	0	0	1	1	0	0	1	0	0.5	0.8
29-Mar	0	0	1	1	1	1	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.9
30-Mar	0	0	0	0	0	0	0	1	1	0	0	0	A	1	1	1	1	0	0	0	1	1	1	0	0.5	0.8
31-Mar	1	0	0	0	0	0	1	0	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.0
		0.7	0.6	0.6	0.6	0.9	0.7	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.8	0.5	0.5	0.5	0.6	0.7	0.7	1.1	0.8	0.8	Diurnal Average
		2.8	1.2	1.3	2.3	7.5	2.2	1.4	2.8	1.3	1.3	1.2	3.5	2.4	1.5	5.1	1.1	1.2	1.1	1.2	5.1	3.5	6.6	2.7	5.6	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

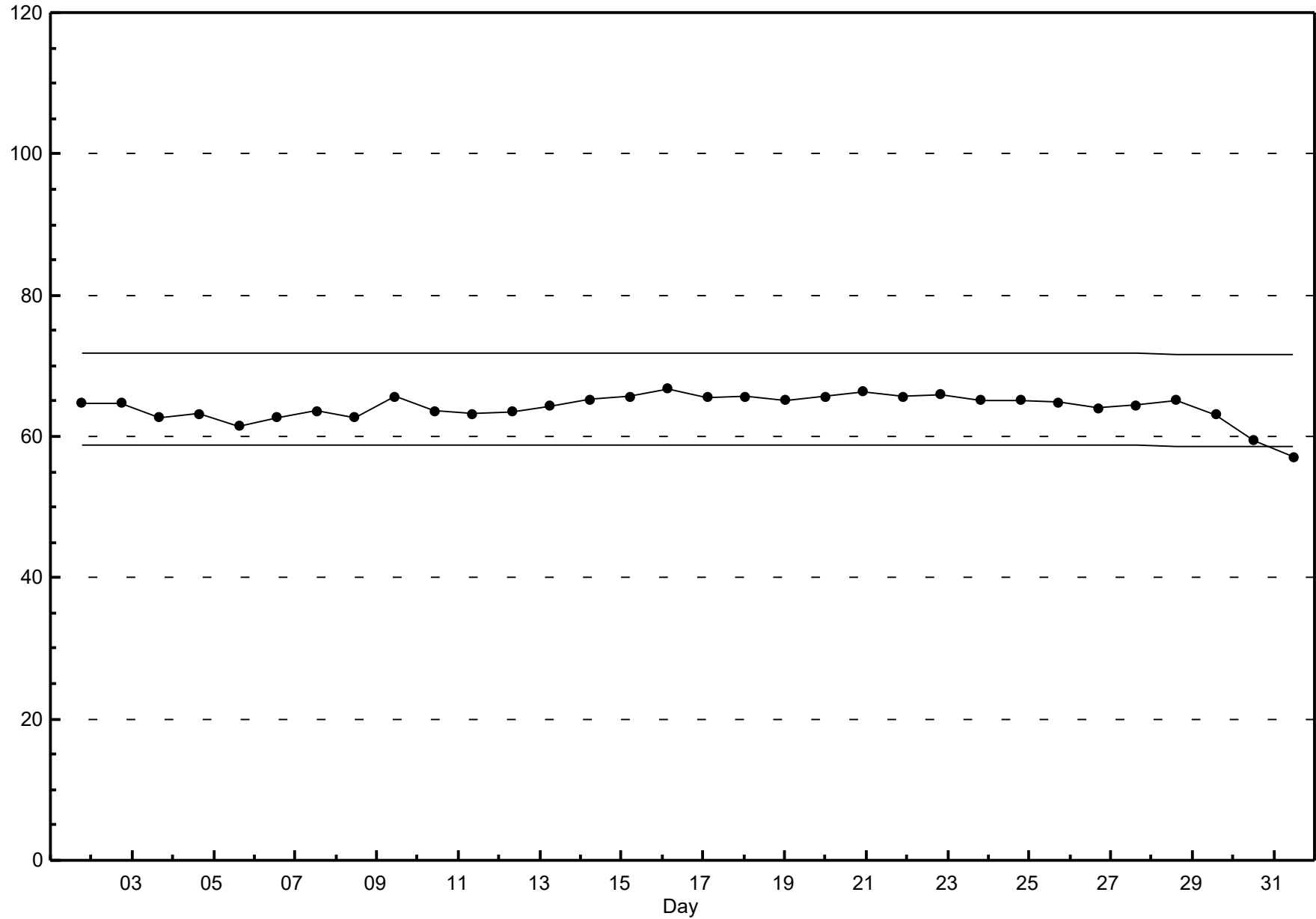
Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2018



Span Responses

Hydrogen Sulphide (H₂S)
Valleyview - March 2018



Hourly Averages

External Temperature (ET) - °C

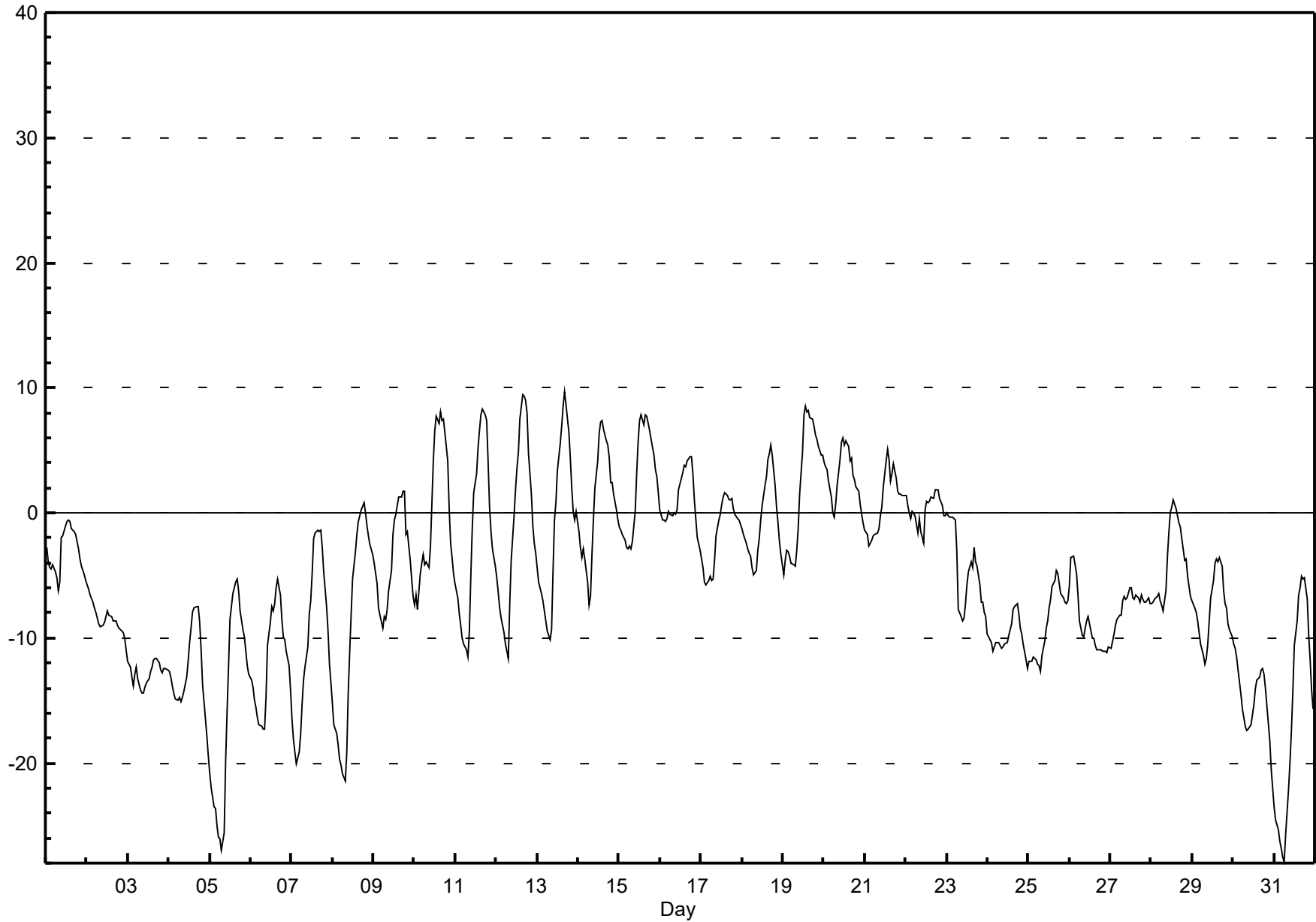
Valleyview - March 2018

Maximum Value: 9.7 °C on Mar 13 17:00 Minimum Value: -28 °C on Mar 31 07:00 Maximum Diurnal Average: -0.7 °C at hour 17 Monthly Average: -5.34 °C		Maximum Daily Average: 2.8 °C on Mar 20 Minimum Daily Average: -16.1 °C on Mar 31 Minimum Diurnal Average: -9.9 °C at hour 8 Percentiles: P ₁ = -25.6 P ₁₀ = -14.2 Q ₁ = -10.0 Median = -5.3 Q ₃ = -0.2 P ₉₀ = 4.2 P ₉₉ = 8.2		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	-4	-5	-4	-5	-5	-6	-6	-2	-2	-1	-1	-1	-1	-1	-2	-2	-2	-3	-4	-4	-5	-5	-3.2	-0.6
2-Mar	-6	-6	-7	-7	-8	-8	-8	-9	-9	-9	-9	-8	-8	-8	-8	-9	-9	-9	-9	-9	-9	-10	-10	-11	-8.4	-5.7
3-Mar	-12	-12	-13	-14	-13	-12	-13	-14	-14	-14	-14	-14	-13	-13	-12	-12	-12	-12	-12	-13	-13	-12	-12	-13	-12.8	-11.6
4-Mar	-13	-13	-14	-14	-15	-15	-15	-15	-15	-14	-13	-12	-10	-9	-8	-8	-7	-7	-9	-11	-14	-16	-18	-19	-12.7	-7.4
5-Mar	-21	-22	-23	-24	-25	-26	-26	-27	-26	-20	-16	-12	-9	-6	-6	-6	-5	-6	-8	-9	-10	-11	-12	-13	-15.4	-5.3
6-Mar	-13	-14	-15	-16	-16	-17	-17	-17	-17	-15	-11	-9	-7	-8	-7	-6	-5	-7	-9	-10	-10	-11	-12	-14	-11.8	-5.3
7-Mar	-16	-18	-19	-20	-19	-18	-15	-13	-12	-11	-8	-7	-5	-2	-2	-1	-2	-1	-3	-5	-7	-9	-12	-14	-10.0	-1.3
8-Mar	-15	-17	-18	-19	-20	-20	-21	-21	-19	-14	-11	-8	-5	-3	-2	-1	0	0	1	0	-1	-2	-3	-3	-9.3	0.8
9-Mar	-4	-5	-6	-8	-8	-9	-8	-9	-8	-6	-5	-2	-1	0	1	1	1	2	2	-2	-2	-4	-5	-7	-3.7	1.8
10-Mar	-7	-7	-8	-5	-4	-3	-4	-4	-4	-3	1	4	7	8	7	8	7	8	6	4	0	-2	-4	-5	0.0	8.0
11-Mar	-6	-7	-8	-9	-10	-11	-11	-12	-9	-5	-1	2	3	5	7	8	8	8	7	4	0	-1	-3	-4	-1.9	8.3
12-Mar	-5	-6	-8	-8	-10	-11	-11	-12	-7	-4	0	2	4	5	7	9	9	9	8	5	1	-1	-2	-3	-1.2	9.5
13-Mar	-4	-5	-6	-7	-8	-9	-9	-10	-9	-5	-1	1	3	6	7	9	10	9	6	4	2	0	-1	0	-0.7	9.7
14-Mar	-2	-3	-4	-3	-4	-6	-7	-7	-3	-1	2	4	6	7	7	7	6	5	4	2	2	2	0	-1	0.7	7.4
15-Mar	-1	-1	-2	-2	-3	-3	-3	-3	-2	0	3	6	7	8	7	8	8	7	7	6	5	3	3	2	2.5	7.8
16-Mar	0	-1	-1	-1	0	0	0	0	0	0	0	2	3	3	4	4	4	5	4	3	1	0	-2	-3	1.0	4.5
17-Mar	-4	-4	-5	-6	-5	-5	-5	-5	-4	-2	-1	0	1	1	2	1	1	1	1	0	0	0	-1	-1	-1.7	1.6
18-Mar	-1	-2	-2	-3	-3	-3	-4	-5	-5	-3	-2	-1	1	2	3	4	5	5	5	2	1	-1	-2	-3	-0.6	5.4
19-Mar	-5	-4	-3	-3	-3	-4	-4	-4	-3	-1	2	5	8	9	8	8	8	8	7	6	6	5	5	5	2.2	8.5
20-Mar	4	4	3	3	1	0	0	1	2	4	6	6	5	6	5	4	4	3	3	2	2	1	0	-1	2.8	6.0
21-Mar	-1	-2	-3	-2	-2	-2	-2	-2	-1	0	1	2	4	5	4	3	3	4	3	2	2	2	1	1	0.8	5.1
22-Mar	1	1	0	0	0	0	-1	-2	0	-2	-2	0	1	1	1	1	1	2	2	2	1	1	0	0	0.3	1.9
23-Mar	0	0	0	0	0	-1	-3	-8	-8	-9	-8	-7	-6	-5	-4	-4	-3	-4	-4	-6	-7	-7	-8	-8	-4.6	0.1
24-Mar	-10	-10	-10	-11	-11	-10	-10	-11	-11	-11	-10	-10	-10	-9	-9	-8	-7	-7	-8	-9	-10	-10	-12	-12	-9.9	-7.3
25-Mar	-12	-12	-12	-12	-12	-12	-12	-13	-11	-10	-9	-9	-8	-7	-6	-5	-5	-5	-6	-7	-7	-7	-7	-7	-8.8	-4.6
26-Mar	-6	-4	-3	-4	-5	-7	-9	-10	-10	-9	-9	-8	-9	-10	-10	-11	-11	-11	-11	-11	-11	-11	-11	-11	-8.7	-3.4
27-Mar	-11	-10	-10	-9	-8	-8	-8	-7	-7	-7	-7	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7.5	-5.9
28-Mar	-7	-7	-7	-7	-6	-7	-7	-8	-6	-4	-2	0	1	0	0	-1	-1	-2	-4	-4	-4	-5	-6	-7	-4.0	1.0
29-Mar	-7	-8	-8	-9	-10	-10	-11	-12	-12	-11	-9	-7	-5	-4	-4	-4	-4	-4	-6	-7	-8	-9	-9	-10	-7.8	-3.6
30-Mar	-11	-11	-12	-13	-14	-16	-16	-17	-17	-17	-17	-16	-15	-14	-13	-13	-13	-12	-13	-14	-15	-18	-20	-22	-15.0	-10.5
31-Mar	-24	-24	-25	-26	-27	-27	-28	-26	-22	-20	-17	-14	-11	-9	-7	-6	-5	-5	-5	-7	-10	-12	-14	-16	-16.1	-5.0
	-7.1	-7.6	-8.1	-8.5	-8.8	-9.2	-9.6	-9.9	-8.9	-7.2	-5.5	-3.8	-2.4	-1.6	-1.1	-0.8	-0.7	-0.8	-1.5	-2.9	-4.0	-5.2	-6.1	-6.8	Diurnal Average	
	4.0	3.7	3.4	2.6	1.3	0.1	-0.1	0.6	2.2	4.3	5.6	6.0	7.8	8.5	8.1	9.5	9.7	9.0	8.0	6.2	5.9	5.3	4.6	4.7	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C

Valleyview - March 2018



Hourly Averages

Relative Humidity (RH) - %

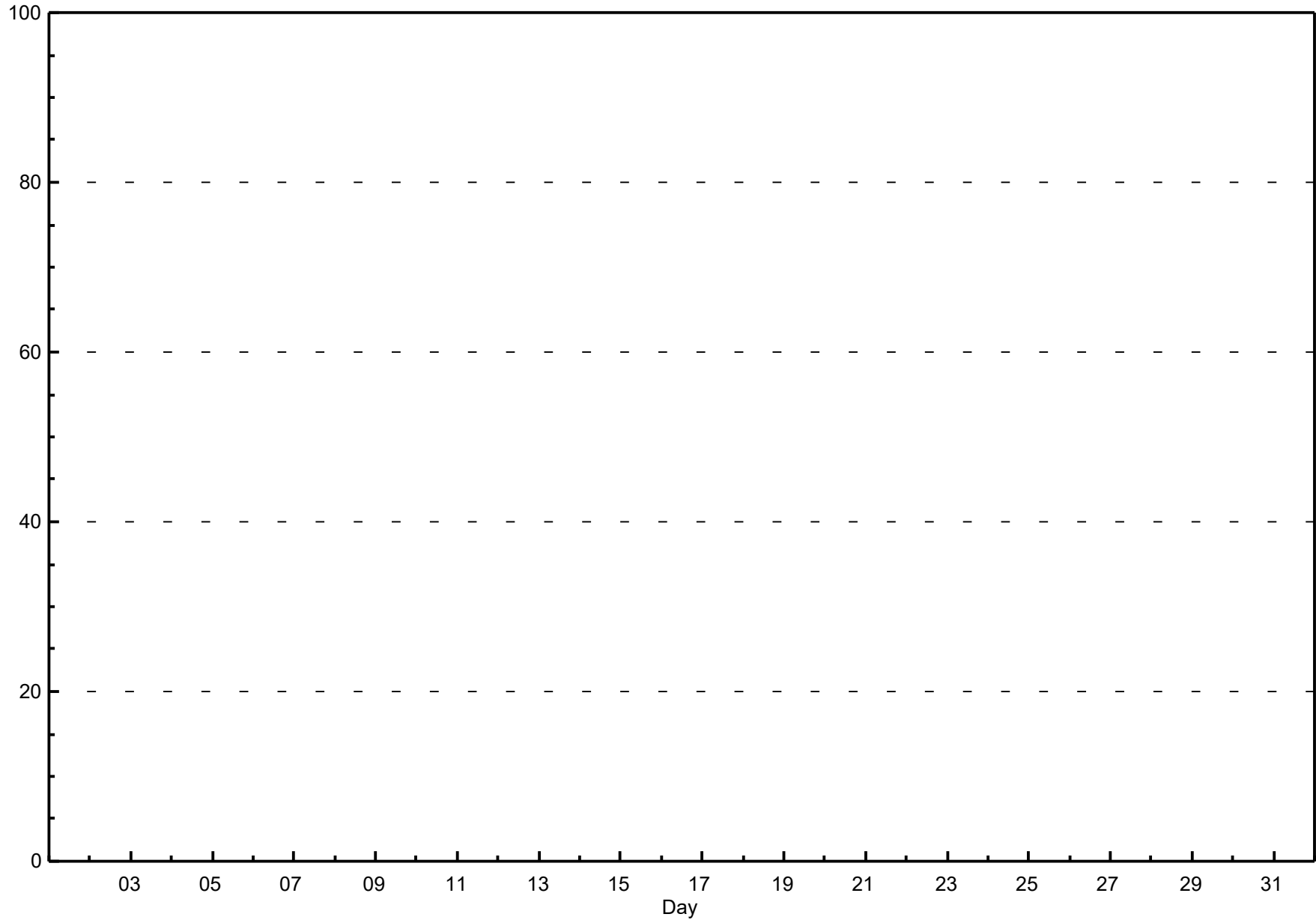
Valleyview - March 2018

Maximum Value: -- % on Mar 1 00:00 Minimum Value: -- % on Mar 1 00:00 Maximum Diurnal Average: -- % at hour 0 Monthly Average: -- %		Maximum Daily Average: -- % on Feb 28 Minimum Daily Average: -- % on Feb 28 Minimum Diurnal Average: -- % at hour 0 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.0 P ₉₉ = 0.0		Hours in Service: 744 Hours of Data: 0 Hours of Missing Data: 744 Hours of Calibration: 0 Percent Operational Time: 0.0																								
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	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--	
2-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
3-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
4-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
5-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
6-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
7-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
8-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
9-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
10-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
11-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
12-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
13-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
14-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
15-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
16-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
17-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
18-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
19-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
20-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
21-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
22-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
23-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
24-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
25-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
26-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
27-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
28-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
29-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
30-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
31-Mar	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Diurnal Average	
	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Diurnal Maximum	

N - Not Valid

Hourly Averages

Relative Humidity (RH) - %
Valleyview - March 2018





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	3	5	6	3	4	6	6	7	5	9	14	16	18	14	19	17	16	12	12	12	16	13	12	14	7.9	19.0
Dir	18	356	339	346	15	345	10	339	344	125	125	127	127	124	126	124	123	120	120	122	124	123	125	127	115	126
2 Spd	15	14	15	14	12	11	10	11	10	11	11	10	11	9	8	8	8	5	4	4	4	4	1	2	8.2	14.7
Dir	124	124	128	127	126	127	127	124	123	124	127	127	138	143	148	146	144	150	145	142	148	148	1	358	130	124
3 Spd	3	1	2	1	1	6	6	6	6	6	7	8	8	7	7	7	6	6	4	4	6	5	5	4	4.9	7.9
Dir	325	332	329	297	307	310	283	283	285	295	302	308	307	297	300	308	307	299	296	303	310	303	295	289	301	307
4 Spd	3	4	4	5	4	4	2	3	2	4	4	4	3	2	1	1	2	1	0	0	0	2	1	0	1.8	4.7
Dir	278	265	270	283	281	282	261	251	282	261	235	239	236	232	32	9	41	17	46	54	319	330	197	138	271	283
5 Spd	0	0	0	0	0	1	0	1	2	2	1	2	1	2	4	7	7	4	6	9	5	0	2	1	1.5	8.7
Dir	306	173	121	165	216	140	299	181	131	191	196	236	135	347	345	329	318	312	327	336	332	251	239	216	317	336
6 Spd	2	1	1	1	1	2	1	0	1	2	3	2	1	7	9	4	2	5	6	3	0	1	1	0	0.9	8.9
Dir	229	222	187	206	192	157	153	230	190	179	157	168	15	342	342	349	344	342	353	335	272	239	175	180	329	342
7 Spd	0	0	0	0	0	0	1	0	1	0	2	3	2	4	8	8	5	3	2	2	1	0	0	0	1.2	8.1
Dir	197	198	191	127	172	61	184	181	4	64	172	243	247	306	313	306	339	360	2	359	321	279	180	205	308	306
8 Spd	0	0	0	0	0	0	0	1	0	0	2	3	4	5	4	5	4	1	5	5	7	6	3	2	0.1	7.3
Dir	37	310	188	346	185	195	179	153	155	84	4	7	4	358	335	338	343	347	164	167	169	169	169	170	129	169
9 Spd	2	2	0	0	1	0	0	1	2	4	4	2	7	11	10	8	6	3	0	1	2	1	1	1	1.8	10.7
Dir	170	164	291	161	323	332	85	183	176	246	253	281	308	316	313	322	345	346	172	200	232	180	181	196	297	316
10 Spd	1	2	2	3	2	2	2	2	2	2	2	2	3	1	3	2	5	3	1	1	0	2	1	1	0.6	5.2
Dir	210	211	201	184	173	171	191	173	217	190	187	166	167	263	1	25	354	33	64	130	219	340	174	206	186	354
11 Spd	0	0	0	0	0	0	0	1	1	2	2	0	3	3	5	5	5	5	3	2	1	1	1	0	1.1	5.4
Dir	217	255	209	181	168	264	171	169	212	179	222	308	340	315	324	324	331	335	343	339	322	168	215	169	317	331
12 Spd	0	0	0	0	0	0	0	0	0	0	0	2	3	5	4	3	6	6	3	0	1	1	0	0	1.2	6.1
Dir	209	77	262	290	187	153	176	167	257	177	230	308	341	338	336	345	336	338	357	339	311	329	159	300	335	338
13 Spd	0	1	0	1	0	1	0	1	0	1	1	4	3	5	6	5	6	7	4	1	0	1	1	1	1.7	6.8
Dir	177	179	174	166	11	161	230	156	258	164	27	349	332	334	357	354	6	342	335	347	313	330	324	314	346	342
14 Spd	0	0	1	1	1	1	1	2	2	3	5	6	4	3	6	11	9	8	3	1	4	7	7	6	0.3	10.5
Dir	36	140	125	119	37	98	28	148	172	160	164	168	165	332	338	352	353	358	335	214	158	167	171	170	137	352
15 Spd	4	6	5	5	4	4	3	2	1	2	3	1	1	6	7	3	2	1	1	1	1	0	0	0	1.0	6.9
Dir	172	171	173	171	173	168	171	192	264	169	152	231	306	298	316	325	41	93	106	341	336	319	19	216	195	316
16 Spd	0	0	0	0	2	1	1	1	4	7	4	1	2	4	7	10	5	4	2	2	0	0	1	1	2.0	9.6
Dir	47	192	10	177	282	336	260	9	354	340	360	65	296	308	304	327	314	299	312	273	175	57	160	173	321	327
17 Spd	0	0	0	1	0	1	4	2	1	1	1	3	6	6	6	8	7	5	7	7	7	5	4	3	3.2	8.3
Dir	237	187	173	190	229	49	344	342	190	166	19	350	349	1	0	354	2	359	8	356	10	359	359	358	358	354
18 Spd	3	2	3	1	1	0	0	1	3	3	3	4	6	5	5	3	3	2	2	4	2	1	0	0	2.2	6.2
Dir	12	5	5	320	311	220	229	321	343	345	347	348	343	347	335	345	340	330	321	355	2	343	186	176	345	343
19 Spd	1	3	4	3	4	3	5	5	6	5	4	3	3	11	11	11	10	8	8	7	6	7	7	8	3.9	11.1
Dir	185	171	174	173	176	181	170	173	169	172	167	173	220	280	283	277	279	274	284	286	281	271	285	266	250	280
20 Spd	8	5	2	2	1	1	1	1	2	2	4	6	9	7	8	9	3	2	1	1	1	1	0	0	1.8	9.1
Dir	258	250	169	167	152	170	167	205	205	151	306	332	345	343	340	347	343	4	132	56	26	356	168	313	322	347
21 Spd	0	0	1	0	0	0	1	1	1	0	3	4	7	7	7	9	9	9	9	6	6	6	5	6	3.0	9.1
Dir	165	221	261	162	116	110	128	132	153	88	331	316	349	55	50	59	56	57	44	54	115	118	102	114	63	57
22 Spd	6	3	4	4	8	5	3	3	7	7	6	7	11	12	10	11	11	12	10	9	5	7	3	3	6.4	12.2
Dir	113	77	73	84	119	107	68	93	117	46	47	115	120	123	118	117	115	121	123	122	88	122	99	109	109	123

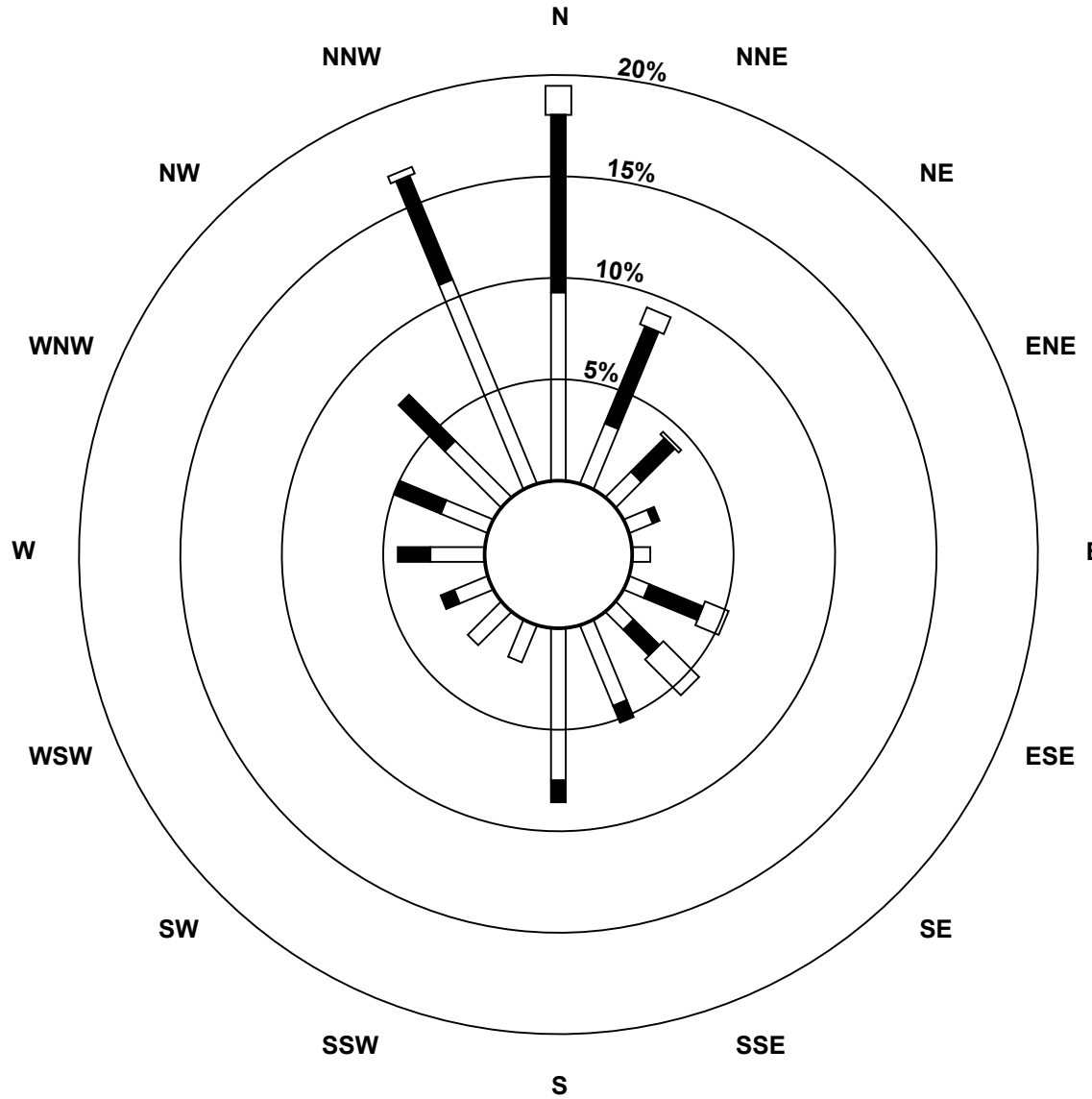
Hourly Averages

**Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2018**

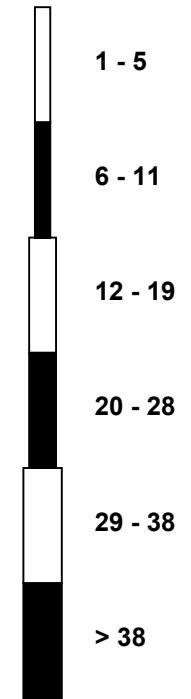
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	6	4	2	1	1	0	5	7	8	8	8	6	2	2	3	4	0	3	1	4	4	3	5	6	1.6	8.2
Dir	125	116	109	75	89	28	271	254	251	261	262	246	251	259	262	338	339	23	18	326	353	18	343	8	289	262
24 Spd	5	5	4	4	3	3	7	9	8	8	8	7	4	5	5	4	4	3	3	5	6	6	6	9	5.3	9.1
Dir	348	358	358	353	1	4	353	15	19	15	14	3	17	345	350	352	9	338	317	9	14	19	24	16	5	15
25 Spd	8	9	8	7	9	9	9	7	6	6	5	6	7	7	9	11	9	9	7	5	2	1	0	1	6.1	10.6
Dir	13	6	7	6	356	348	350	347	357	355	326	310	321	335	340	342	1	23	17	351	320	265	225	203	352	342
26 Spd	2	6	3	2	1	6	5	8	5	6	7	10	11	11	12	11	9	7	6	4	2	2	2	0	4.6	12.0
Dir	210	175	186	260	289	334	17	345	0	8	21	16	17	21	3	6	4	3	3	4	22	53	71	66	8	3
27 Spd	4	3	2	3	3	2	1	1	1	3	8	9	13	12	8	6	6	4	1	2	2	2	1	1	3.5	12.8
Dir	31	33	34	358	7	348	323	251	8	1	342	331	342	4	356	358	9	13	3	283	278	255	180	169	353	342
28 Spd	1	1	2	1	0	0	0	0	1	1	1	6	11	15	9	8	6	5	6	4	3	5	6	8	3.1	14.7
Dir	183	176	173	170	312	353	227	328	182	179	231	312	312	331	9	5	357	3	22	34	45	35	10	9	355	331
29 Spd	7	8	8	6	7	7	6	5	5	6	7	6	5	5	7	10	9	11	12	12	11	10	10	11	7.7	12.2
Dir	1	6	26	29	14	19	15	13	11	11	33	46	39	56	50	36	32	13	13	19	32	42	39	37	26	19
30 Spd	12	13	16	14	14	14	14	11	13	14	14	11	10	8	9	9	7	6	6	4	1	1	1	1	8.7	15.8
Dir	36	33	23	17	353	355	355	356	351	356	355	14	21	21	11	0	354	355	350	335	289	187	171	187	6	23
31 Spd	1	0	0	0	0	0	0	0	1	2	3	4	6	5	3	4	3	5	3	5	6	5	3	0	2.2	5.8
Dir	198	194	197	170	179	143	210	224	175	325	341	341	337	335	332	348	357	339	342	355	357	345	339	204	342	337
Spd	0.7	0.7	0.9	0.6	0.7	1.0	1.0	0.8	0.6	0.8	1.2	1.3	2.3	3.5	4.1	4.3	3.7	3.1	2.3	1.8	1.0	0.7	0.6	0.7	Diurnal Average	
Dir	60	66	50	61	31	6	358	348	354	4	3	351	355	348	350	355	4	6	11	8	35	63	51	62	Diurnal Maximum	
Spd	14.7	13.6	15.8	14.3	14.2	14.3	13.8	11.4	12.9	14.0	14.4	16.3	18.1	14.7	19.0	17.4	15.8	12.2	12.2	12.2	15.9	13.2	12.4	14.3	Diurnal Maximum	
Dir	124	124	23	127	353	355	355	356	351	356	355	127	127	331	126	124	123	121	120	19	124	123	125	127	Diurnal Maximum	
Maximum Speed Value: 19 km/h on Mar 1 15:00		Minimum Speed Value: 0 km/h on Mar 21 00:00		Hours in Service: 744																						
Maximum Daily Speed Average: 8.7 km/h on Mar 1		Minimum Daily Speed Average: 0.1 km/h on Mar 12		Hours of Data: 744																						
Maximum Diurnal Speed Average: 4.3 km/h at hour 16		Minimum Diurnal Speed Average: 0.6 km/h at hour 23		Hours of Missing Data: 0																						
Monthly Average Velocity: 1.49 km/h 6.5 deg				Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 1.0 Median = 3.4 Q ₃ = 6.4 P ₉₀ = 9.4 P ₉₉ = 14.7				Percent Operational Time: 100.0																		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
Direction	Speed Range (km/h)						Total																			
	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38																				
North	103	102	17	0	0	0	222																			
NorthEast	32	22	4	0	0	0	58																			
East	22	0	0	0	0	0	22																			
SouthEast	33	26	23	0	0	0	82																			
South	128	10	0	0	0	0	138																			
SouthWest	50	1	0	0	0	0	51																			
West	42	18	1	0	0	0	61																			
NorthWest	70	38	2	0	0	0	110																			
Total	480	217	47	0	0	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Valleyview - March 2018



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - March 2018

Maximum Speed: 19 km/h on Mar 1 15:00		Maximum Daily Speed Average: 11.0 km/h on Mar 1		Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0																						
Minimum Speed: 0 km/h on Mar 31 06:00		Minimum Daily Speed Average: 1.7 km/h on Mar 12		Percent Operational Time: 100.0																						
Maximum Diurnal Speed Average: 7.4 km/h at hour 15		Minimum Diurnal Speed Average: 2.9 km/h at hour 4																								
Monthly Average Speed: 4.44 km/h		Percentiles: P ₁ = 0.1 P ₁₀ = 0.6 Q ₁ = 1.4 Median = 3.6 Q ₃ = 6.6 P ₉₀ = 9.5 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	3	5	6	3	4	6	6	7	5	9	14	16	18	15	19	18	16	12	12	12	16	13	12	14	11.0	19.1
2-Mar	15	14	15	14	12	11	10	11	11	11	11	10	11	9	8	8	8	5	4	4	4	1	1	2	8.7	14.9
3-Mar	3	1	2	1	1	6	6	6	6	6	7	8	8	7	7	7	6	6	4	4	6	5	5	4	5.1	8.0
4-Mar	3	4	4	5	4	4	2	3	3	4	4	4	4	3	2	2	2	1	1	1	1	2	1	0	2.6	4.9
5-Mar	0	0	1	0	1	1	0	1	2	2	2	2	2	2	4	7	7	4	7	9	5	1	2	1	2.7	8.9
6-Mar	2	1	1	1	2	2	1	1	1	2	3	4	3	7	9	4	2	5	6	3	1	1	1	1	2.6	8.9
7-Mar	0	0	0	1	0	1	1	1	1	1	2	4	3	5	8	8	6	3	2	2	2	1	0	0	2.1	8.3
8-Mar	0	1	0	0	0	0	0	1	0	0	2	3	5	6	4	5	4	2	5	5	7	6	3	2	2.5	7.4
9-Mar	2	2	1	1	1	1	0	1	2	4	4	2	8	11	10	9	6	3	0	1	2	1	1	1	3.1	10.8
10-Mar	1	2	2	4	3	3	2	2	2	2	2	2	3	2	3	2	5	4	2	1	1	3	1	1	2.3	5.2
11-Mar	0	1	1	1	0	1	0	1	1	2	3	2	3	3	5	5	5	5	3	2	1	1	1	0	2.0	5.4
12-Mar	0	0	0	0	0	1	0	0	0	1	1	2	3	5	4	3	6	6	3	2	1	1	1	0	1.7	6.1
13-Mar	0	1	0	1	1	1	1	1	1	1	2	5	4	5	6	6	6	7	4	1	1	2	1	1	2.3	6.9
14-Mar	0	1	1	1	1	1	1	2	2	3	5	6	4	4	7	11	9	8	4	1	5	7	7	6	4.0	10.6
15-Mar	4	7	5	5	4	4	3	2	1	3	3	2	2	7	8	4	3	1	1	1	1	1	0	1	3.0	7.5
16-Mar	1	0	0	1	2	2	1	2	4	7	5	1	3	5	7	10	5	4	2	2	0	1	1	1	2.7	9.7
17-Mar	0	1	1	2	2	2	4	3	1	1	1	3	6	6	6	8	8	6	7	7	7	5	4	3	4.0	8.4
18-Mar	3	2	3	1	1	0	1	1	3	3	3	4	6	5	5	3	3	2	2	4	2	1	0	0	2.5	6.2
19-Mar	1	3	4	3	4	3	5	5	6	5	4	4	3	11	11	11	10	8	8	8	7	7	8	8	6.1	11.4
20-Mar	8	5	2	2	1	1	1	1	2	2	5	7	9	7	8	9	3	3	2	1	1	1	0	0	3.4	9.2
21-Mar	1	1	1	0	0	1	2	2	1	1	3	4	7	7	9	9	9	9	9	7	6	6	5	7	4.4	9.3
22-Mar	6	4	4	4	9	5	3	4	7	8	7	7	11	12	10	11	11	12	10	9	5	7	3	3	7.3	12.4
23-Mar	6	4	2	1	1	0	5	7	8	8	8	6	3	3	4	4	1	3	2	4	4	4	5	6	4.2	8.5
24-Mar	5	5	4	4	3	3	7	9	8	9	8	7	4	6	6	4	4	3	3	6	6	6	6	9	5.7	9.3
25-Mar	8	10	8	7	9	10	9	7	6	6	5	6	7	7	9	11	9	9	7	5	4	2	2	2	6.9	10.6
26-Mar	2	6	4	2	1	7	5	9	5	6	7	10	12	12	12	11	9	7	6	4	3	2	2	1	6.0	12.1
27-Mar	4	3	2	3	3	2	1	1	1	3	9	9	13	13	8	6	6	5	1	2	2	2	1	1	4.2	12.8
28-Mar	1	1	2	1	1	1	0	0	1	1	1	6	12	15	9	8	7	5	6	4	4	5	6	8	4.5	14.9
29-Mar	7	8	8	6	7	7	6	6	5	6	8	6	6	5	8	10	9	11	12	12	11	10	10	11	8.1	12.3
30-Mar	12	13	16	14	14	14	14	12	13	14	15	11	10	8	9	9	7	6	6	4	1	1	1	1	9.4	16.0
31-Mar	1	0	0	0	0	0	0	0	1	2	3	5	6	5	4	4	4	5	3	5	6	5	3	0	2.6	5.9
		3.3	3.5	3.3	2.9	3.0	3.2	3.2	3.4	3.6	4.3	5.0	5.4	6.4	7.0	7.4	7.3	6.4	5.5	4.7	4.3	3.9	3.5	3.1	3.1	Diurnal Average
		14.9	13.7	16.0	14.5	14.2	14.4	14.0	11.6	13.0	14.2	14.5	16.4	18.3	14.9	19.1	17.6	16.0	12.4	12.4	12.3	16.1	13.4	12.4	14.4	Diurnal Maximum

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

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - March 2018

Maximum Value: 96.8 deg on Mar 11 06:00																						Hours in Service:	744		
Minimum Value: 2.9 deg on Mar 6 15:00																						Hours of Data:	744		
Percentiles: P ₁ = 5.1 P ₁₀ = 8.3 Q ₁ = 11.3 Median = 17.7 Q ₃ = 40.3 P ₉₀ = 68.4 P ₉₉ = 91.1																						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	25	11	14	28	43	14	30	13	31	34	8	8	7	9	7	9	9	10	10	9	8	9	7	8	43.3
2-Mar	8	8	7	8	9	8	9	8	9	9	9	11	12	14	13	12	12	16	13	11	12	27	29	30	30.2
3-Mar	10	21	19	22	32	13	27	16	15	16	12	11	9	15	14	12	13	13	16	14	10	14	13	14	32.0
4-Mar	13	21	18	23	22	20	31	22	28	21	19	29	30	65	67	30	29	30	32	88	77	72	39	64	87.9
5-Mar	79	52	91	79	57	68	62	26	15	32	73	35	65	48	12	12	15	11	15	12	17	68	17	12	90.9
6-Mar	12	38	45	27	48	14	9	36	19	11	17	52	80	5	3	20	14	10	11	20	60	32	16	49	79.9
7-Mar	57	40	62	70	86	89	53	86	82	92	26	32	53	48	10	11	26	18	44	23	21	96	32	45	95.6
8-Mar	88	75	57	90	30	52	78	19	55	53	16	14	17	17	11	8	15	78	12	10	7	7	9	12	90.2
9-Mar	9	12	74	73	46	83	46	15	10	23	39	52	17	8	10	9	8	14	65	12	22	10	25	10	82.8
10-Mar	7	7	17	11	28	21	38	21	26	20	50	58	23	63	18	36	8	13	44	43	87	55	38	39	86.5
11-Mar	40	75	42	31	19	97	92	31	42	13	41	88	12	20	9	6	5	12	14	18	70	45	42	64	96.8
12-Mar	43	81	85	60	9	31	74	44	90	68	68	32	17	5	5	12	4	4	36	80	80	88	80	77	90.1
13-Mar	91	17	68	45	93	58	57	53	62	50	68	14	14	8	15	7	8	10	8	96	80	38	55	80	96.2
14-Mar	79	62	47	37	81	68	62	31	10	11	13	9	16	75	11	6	8	16	37	35	18	10	7	7	80.6
15-Mar	7	8	9	7	12	12	15	12	67	26	21	58	79	39	24	17	36	37	51	50	30	78	74	62	79.1
16-Mar	85	87	73	46	20	79	65	63	32	10	30	62	62	15	13	8	18	18	12	23	75	60	37	29	86.9
17-Mar	24	53	88	66	86	79	26	85	13	66	65	22	10	16	14	9	16	11	11	10	8	8	14	6	88.1
18-Mar	11	10	15	36	50	61	74	55	9	11	9	8	4	5	12	20	12	8	11	13	16	50	26	50	74.1
19-Mar	21	5	6	6	7	13	6	6	7	16	12	20	34	16	11	10	11	14	11	12	11	9	36	12	36.3
20-Mar	11	34	14	31	20	23	19	15	20	33	34	14	8	14	13	6	26	50	53	30	85	44	66	90	89.6
21-Mar	25	34	56	63	53	67	37	21	18	88	17	23	26	20	31	17	13	15	8	17	23	14	18	15	88.3
22-Mar	18	27	25	27	13	29	42	36	15	26	28	23	11	10	12	12	12	11	10	10	27	15	26	33	41.8
23-Mar	10	18	52	25	28	42	85	19	15	15	13	17	41	47	42	17	93	31	69	40	20	21	12	14	92.7
24-Mar	13	17	11	17	24	19	10	12	11	15	17	15	30	12	19	30	32	26	21	25	16	10	10	9	31.8
25-Mar	11	8	9	10	8	6	9	5	10	16	23	15	13	9	7	6	21	11	12	13	69	77	78	45	78.1
26-Mar	36	8	45	47	70	26	19	9	14	14	12	11	13	11	8	11	11	11	8	11	30	27	47	62	69.5
27-Mar	9	13	19	15	27	19	73	71	28	18	11	12	6	17	11	15	15	16	38	49	53	41	20	8	72.5
28-Mar	12	10	10	17	86	77	85	67	29	56	61	28	10	11	17	13	23	18	15	19	29	17	13	13	85.6
29-Mar	10	11	11	15	12	11	12	15	12	11	10	20	20	28	22	12	13	13	8	8	10	9	8	7	27.9
30-Mar	7	9	8	9	6	7	9	9	7	9	9	13	11	14	16	13	21	15	12	21	51	30	16	21	50.8
31-Mar	10	26	16	32	21	55	23	51	23	42	8	10	10	34	46	13	22	8	9	12	5	13	15	68	67.8
91.3	86.9	90.9	90.2	93.1	96.8	92.1	86.4	90.1	92.3	72.7	88.2	79.9	75.3	67.0	36.2	92.7	77.5	68.5	96.2	86.5	95.6	80.2	89.6		

PAZA

Donnelly Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

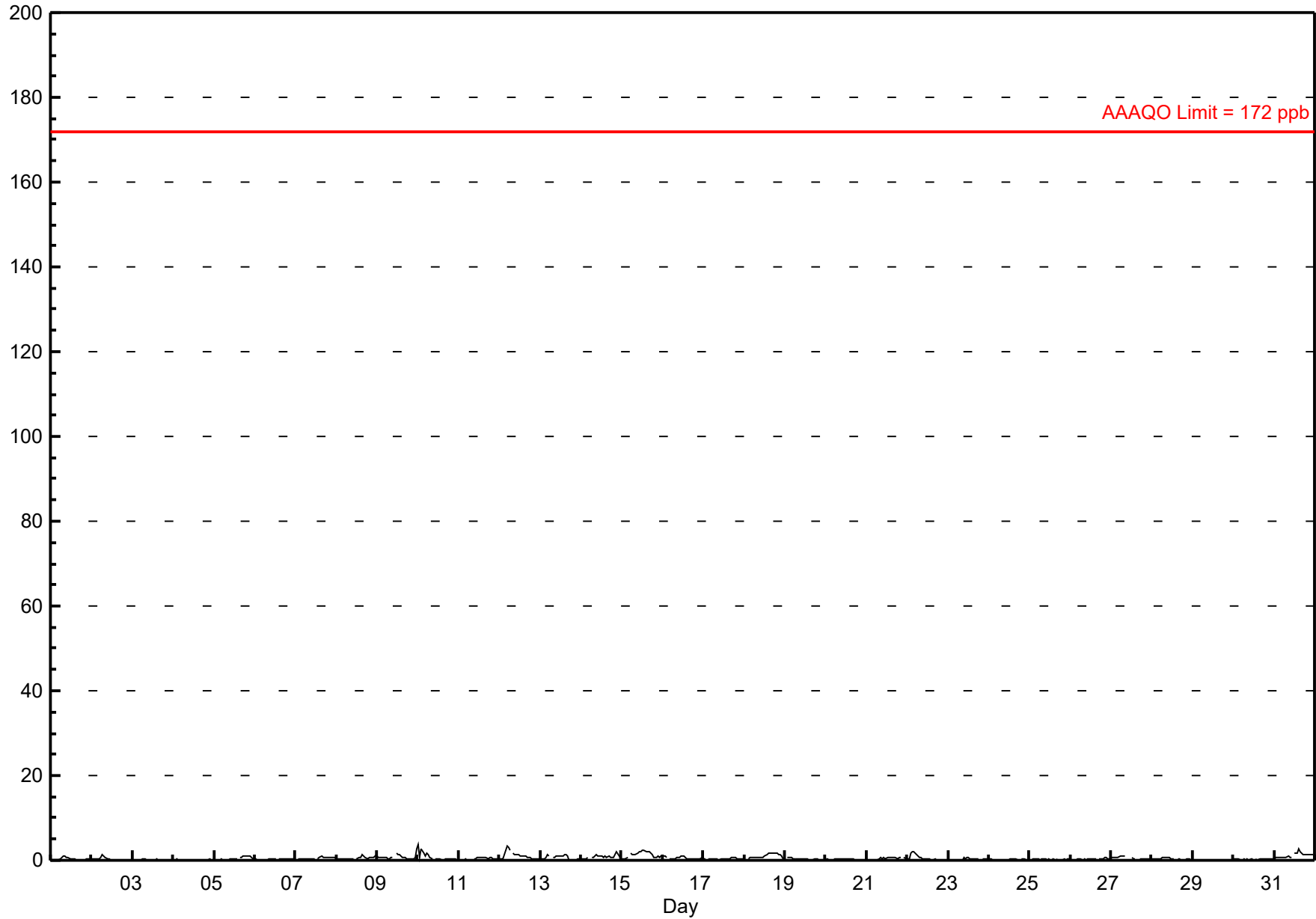
Sulphur Dioxide (SO₂) - ppb

Donnelly - March 2018

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 3.6 ppb on Mar 10 01:00	Maximum Daily Average: 1.3 ppb on Mar 15		Hours of Data:	709
Minimum Value: 0 ppb on Mar 23 06:00	Minimum Daily Average: 0.1 ppb on Mar 29		Hours of Missing Data:	35
Maximum Diurnal Average: 0.6 ppb at hour 15	Minimum Diurnal Average: 0.3 ppb at hour 2		Hours of Calibration:	35
Monthly Average: 0.48 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 1.1 P ₉₉ = 2.3		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	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	1.0
2-Mar	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	1.2
3-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
4-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
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	1	0	0.5	1.2
6-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	0.5
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	0.5	0.9
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	0	1	1	1	1	0.5	1.3
9-Mar	1	1	1	1	1	1	0	0	1	1	A	2	1	1	1	1	1	1	0	0	0	0	1	3	0.8	2.8
10-Mar	4	1	3	2	1	2	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	3.6
11-Mar	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	1	0	1	1	0	0	0	0	0.4	0.8
12-Mar	0	0	0	1	3	3	2	A	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1.1	3.4	
13-Mar	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.7	1.4	
14-Mar	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0	0.8	2.2
15-Mar	0	0	0	1	A	2	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1.3	2.3
16-Mar	1	1	1	A	0	0	1	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	0.6	1.1
17-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0.3	0.6
18-Mar	0	A	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	1	1	1	0	1.0	1.8
19-Mar	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
20-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
21-Mar	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	0	1	1	A	1	0	0.4	0.8
22-Mar	0	0	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.5	2.2
23-Mar	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0.2	0.8
24-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	0.2	0.3
25-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	0.2
26-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0	0.3	0.5
27-Mar	1	1	1	1	1	1	1	1	1	C	C	C	1	0	0	A	0	0	0	0	0	0	0	0	0.5	1.0
28-Mar	0	0	0	0	0	0	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.6
29-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
30-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
31-Mar	0	1	1	1	1	1	1	1	1	1	A	2	2	3	2	2	1	1	1	1	1	1	1	1	1.2	2.5
	0.4	0.3	0.4	0.5	0.5	0.6	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4	Diurnal Average	
	3.6	1.0	2.6	2.2	3.4	3.2	2.5	1.4	1.7	1.7	2.1	1.9	2.3	2.2	2.5	2.1	2.0	1.8	1.7	1.5	1.4	2.2	1.2	2.8	Diurnal Maximum	

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

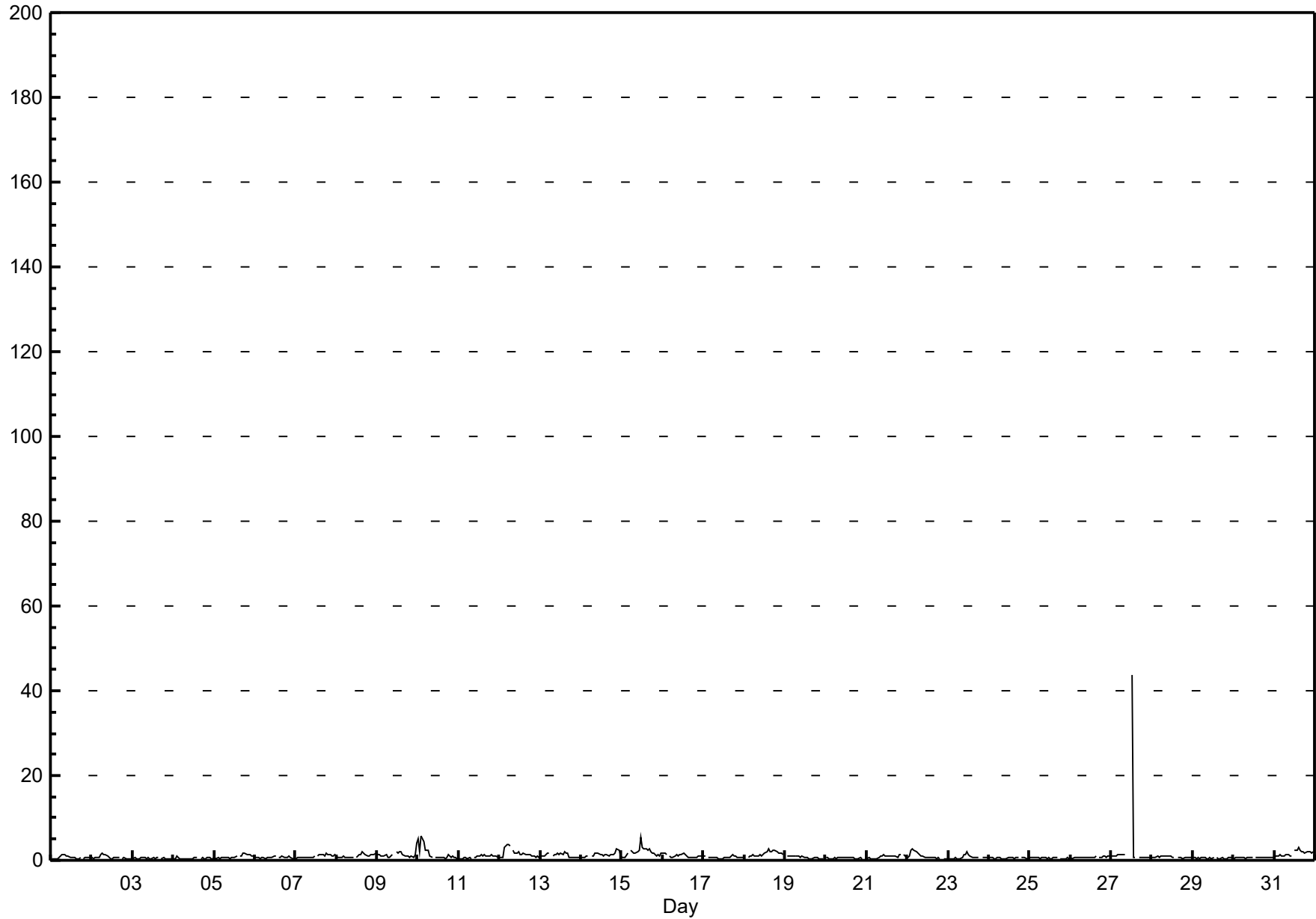


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

Donnelly - March 2018

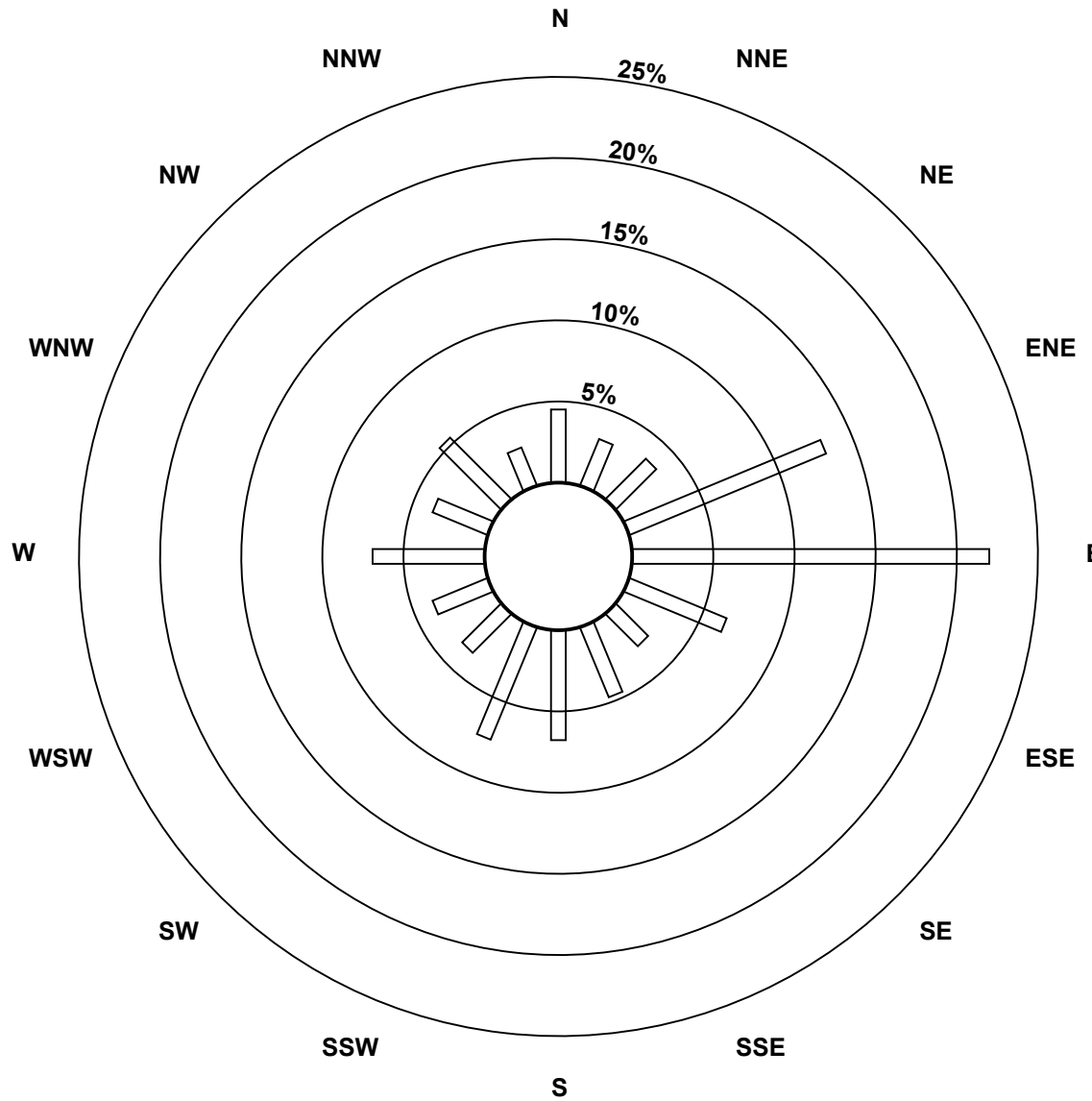
Maximum Value: 43.7 ppb on Mar 27 13:00 Minimum Value: 0 ppb on Mar 21 04:00 Maximum Diurnal Average: 2.5 ppb at hour 13 Monthly Average: 1.01 ppb		Maximum Daily Average: 3.0 ppb on Mar 27 Minimum Daily Average: 0.5 ppb on Mar 3 Minimum Diurnal Average: 0.8 ppb at hour 2 Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 0.7 Q ₃ = 1.2 P ₉₀ = 1.7 P ₉₉ = 3.5		Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	1	A	0	1	1	1	1	0.7	1.5	
2-Mar	1	1	1	1	1	1	2	1	1	1	1	0	0	1	1	1	1	A	0	1	0	0	0	0.7	1.7	
3-Mar	1	1	0	0	0	1	1	1	1	1	0	0	1	0	1	1	A	0	1	0	0	0	0	0.5	0.6	
4-Mar	0	0	1	1	0	0	0	0	0	0	0	0	1	1	1	A	0	1	0	0	1	1	0	0.5	0.9	
5-Mar	1	0	1	0	1	1	1	1	1	0	1	1	1	1	A	1	1	2	2	2	2	1	1	0.9	1.6	
6-Mar	1	1	1	0	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0.7	1.0	
7-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	1	1	1	0.9	1.7	
8-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	2	1	1	1	1	2	1.0	1.9	
9-Mar	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	2	1	1	1	1	1	1	4	1.3	4.2	
10-Mar	5	2	6	4	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1.6	5.8	
11-Mar	0	1	0	1	1	0	1	0	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	0.8	1.5	
12-Mar	1	1	1	3	4	4	3	A	2	2	2	2	1	1	2	1	1	1	1	1	1	1	1	1.6	3.9	
13-Mar	1	1	1	1	2	2	A	1	1	2	2	1	2	1	2	2	2	1	1	1	1	1	1	1.2	1.9	
14-Mar	1	1	1	1	1	A	1	1	2	2	2	2	1	1	1	1	1	1	1	1	2	3	2	1.3	2.7	
15-Mar	1	1	1	2	A	2	2	2	2	2	2	3	6	3	3	3	2	3	2	2	2	1	1	2.0	5.6	
16-Mar	2	2	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1.0	1.8	
17-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
18-Mar	1	A	1	1	1	1	1	1	1	1	1	1	2	2	3	2	2	2	3	2	2	2	1	1.6	2.7	
19-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	0	1	0	0.8	1.2	
20-Mar	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	A	0	0.6	0.8
21-Mar	0	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
22-Mar	1	1	2	3	2	2	2	1	1	1	1	1	1	1	1	1	1	0	1	0	A	0	0	1.0	2.7	
23-Mar	0	1	0	0	1	0	0	0	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	0.7	2.0	
24-Mar	1	1	1	0	0	1	1	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	0	0.6	0.8	
25-Mar	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	A	1	0	0	1	1	0.6	0.7	
26-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9	
27-Mar	1	1	1	1	1	1	1	1	1	1	C	C	C	44	1	1	A	1	1	1	1	1	1	3.0	43.7	
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	0.8	1.0	
29-Mar	1	1	0	1	0	1	1	1	0	1	0	1	0	1	A	1	0	0	1	0	0	1	1	0.5	0.7	
30-Mar	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
31-Mar	1	1	1	1	1	1	1	1	1	1	1	A	2	2	3	2	2	2	2	2	2	2	2	1.6	3.0	
	0.8	0.8	0.9	1.0	1.0	1.0	1.0	0.8	1.0	0.9	0.9	1.1	2.5	1.0	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9	Diurnal Average		
	4.9	2.0	5.8	4.3	3.9	3.6	3.3	1.8	2.3	2.1	2.5	5.6	43.7	2.6	3.0	2.5	2.6	2.3	2.5	2.0	1.9	2.7	2.2	4.2	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span		



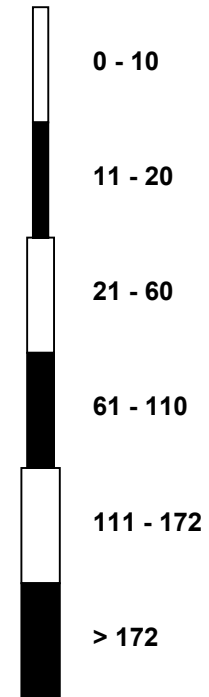
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Donnelly - March 2018

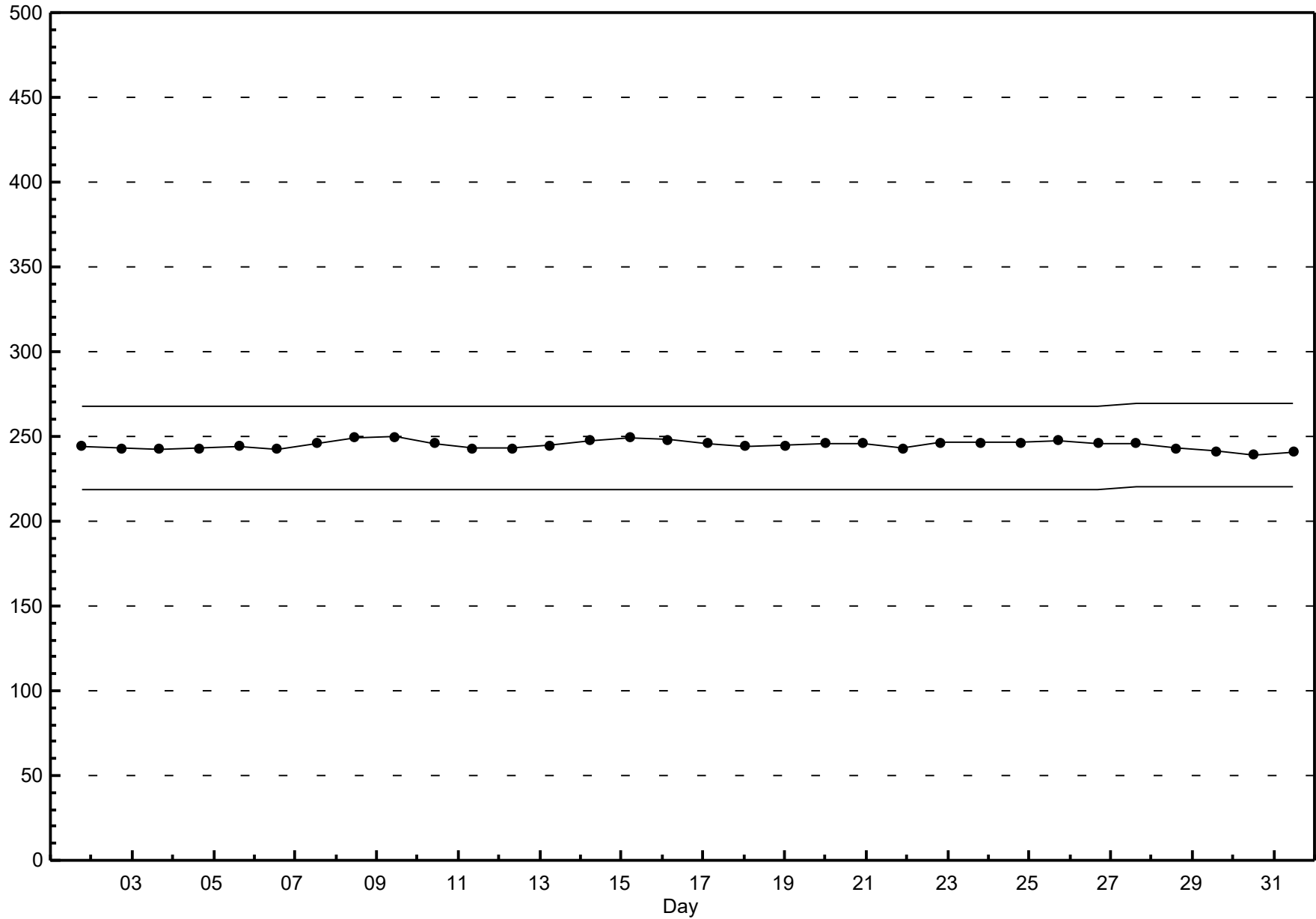


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Donnelly - March 2018



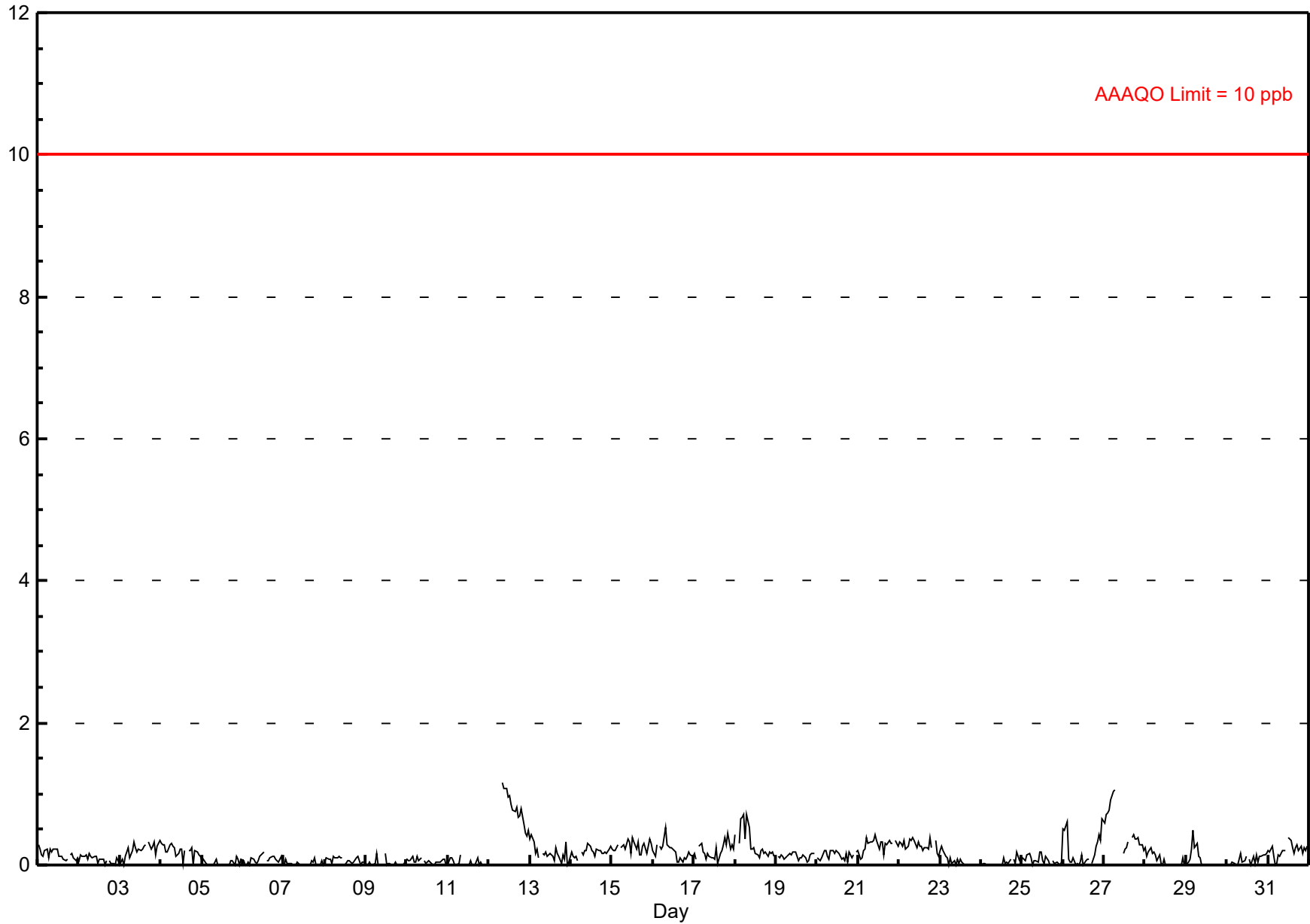
Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

Donnelly - March 2018

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.2 ppb on Mar 12 09:00 Maximum Daily Average: 0.5 ppb on Mar 12		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 2 16:00 Maximum Diurnal Average: 0.2 ppb at hour 9 Monthly Average: 0.16 ppb		Minimum Daily Average: 0.0 ppb on Mar 7 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 = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.9																								
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.3
2-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
3-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	0.3
4-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	0.3
5-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	0.1
6-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
7-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	0.1
8-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	0.1
9-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
10-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	0.1
11-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
12-Mar	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.5	1.2
13-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	0.4
14-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	0.3
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	0.3	0.4
16-Mar	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
17-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	0.2	0.4
18-Mar	0	A	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
19-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	0.1	0.2
20-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
21-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	0.3	0.4
22-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	0.3	0.4
23-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
24-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	0.2
25-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
26-Mar	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0.2	0.7
27-Mar	1	1	1	1	1	1	1	C	C	C	C	0	0	0	0	A	0	0	0	0	0	0	0	0	0.5	1.1
28-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
29-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	0.5
30-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
31-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
																								Diurnal Average	Diurnal Maximum	
																								0.2	0.6	
																								0.2	0.7	
																								0.2	0.7	
																								0.2	0.8	
																								0.2	0.9	
																								0.2	1.0	
																								0.2	1.1	
																								0.2	0.7	
																								0.2	1.2	
																								0.2	1.1	
																								0.2	1.1	
																								0.2	1.0	
																								0.2	1.0	
																								0.1	0.8	
																								0.1	0.8	
																								0.1	0.8	
																								0.2	0.7	
																								0.2	0.7	
																								0.2	0.8	
																								0.1	0.6	
																								0.1	0.5	
																								0.1	0.4	
																								0.1	0.7	

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



Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

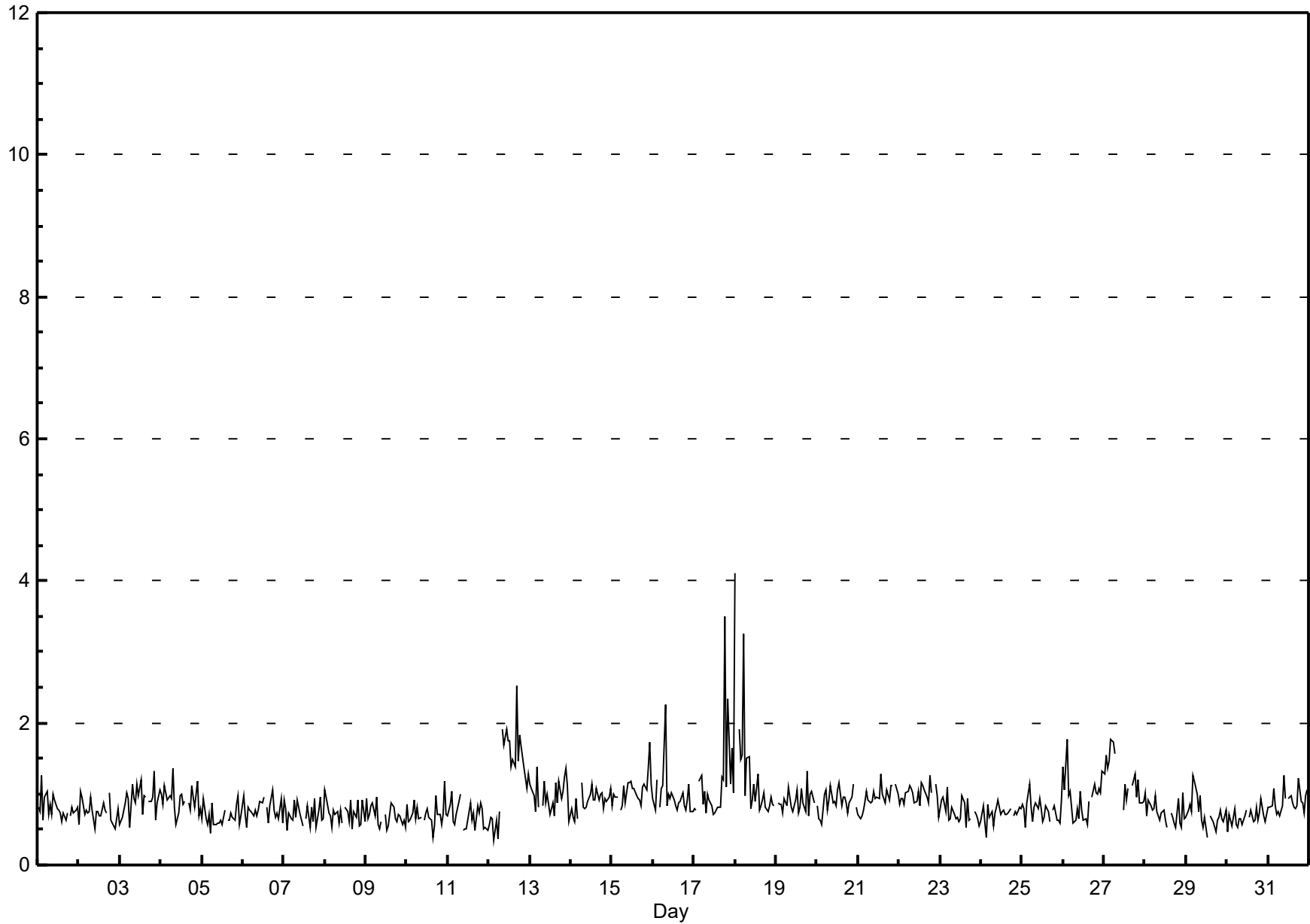
Donnelly - March 2018

Maximum Value: 4.1 ppb on Mar 18 01:00		Maximum Daily Average: 1.3 ppb on Mar 18		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 12 04:00		Minimum Daily Average: 0.7 ppb on Mar 30		Hours of Data: 708																							
Maximum Diurnal Average: 1.0 ppb at hour 19		Minimum Diurnal Average: 0.8 ppb at hour 4		Hours of Missing Data: 36																							
Monthly Average: 0.88 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 1.0 P ₉₀ = 1.2 P ₉₉ = 1.9		Hours of Calibration: 36																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-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	1.3	
2-Mar	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	1.0	
3-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.3	
4-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	0.9	1.4	
5-Mar	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.0	
6-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	1.1	
7-Mar	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
8-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	0.7	1.1	
9-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
10-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	1.2	
11-Mar	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	0.7	1.0	
12-Mar	1	1	1	0	1	0	1	A	2	2	2	2	2	1	1	1	3	1	2	2	1	1	1	1	1.3	2.5	
13-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	1.4	
14-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	
15-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1.1	1.7	
16-Mar	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.3	
17-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	2	1	2	1	1.1	3.5	
18-Mar	4	A	2	1	2	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	4.1	
19-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
20-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	0.9	1.2	
21-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	0.9	1.3	
22-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	1.0	1.3	
23-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	0.7	1.1	
24-Mar	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	0.9	
25-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	
26-Mar	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.8	
27-Mar	1	2	1	1	2	2	2	C	C	C	C	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	1.8	
28-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	
29-Mar	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	0	1	1	1	1	1	0.7	1.3	
30-Mar	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
31-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	0.9	1.3	
		1.0	0.8	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	1.0	0.9	0.9	0.9	0.9	0.8	Diurnal Average	
		4.1	1.5	1.9	1.5	1.8	3.2	1.6	2.3	1.9	1.7	1.9	1.8	1.7	1.4	1.5	1.4	2.5	1.5	3.5	1.7	2.3	1.4	1.7	1.3	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

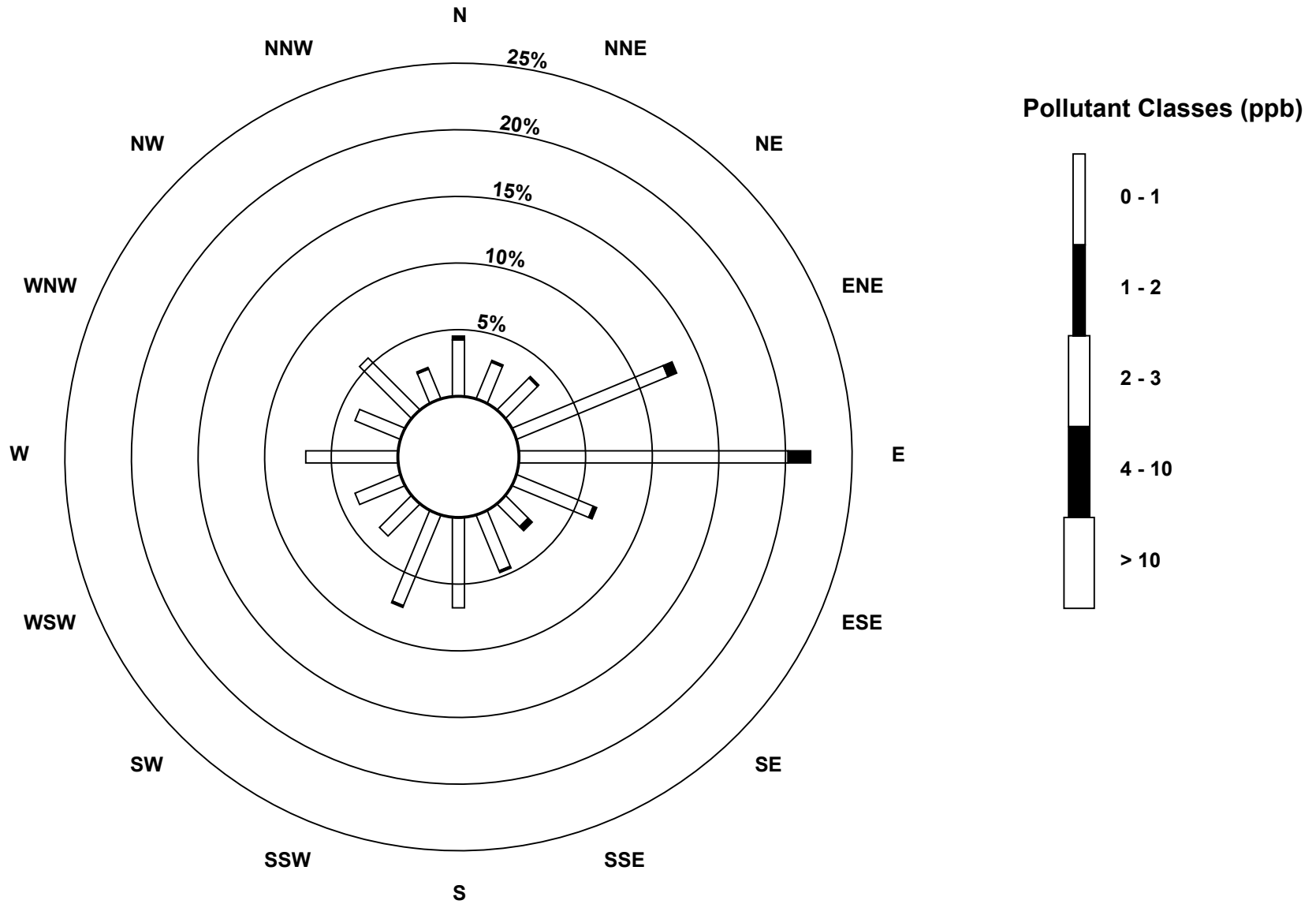
Hydrogen Sulphide (H₂S) - ppb

Donnelly - March 2018



Pollutant Rose

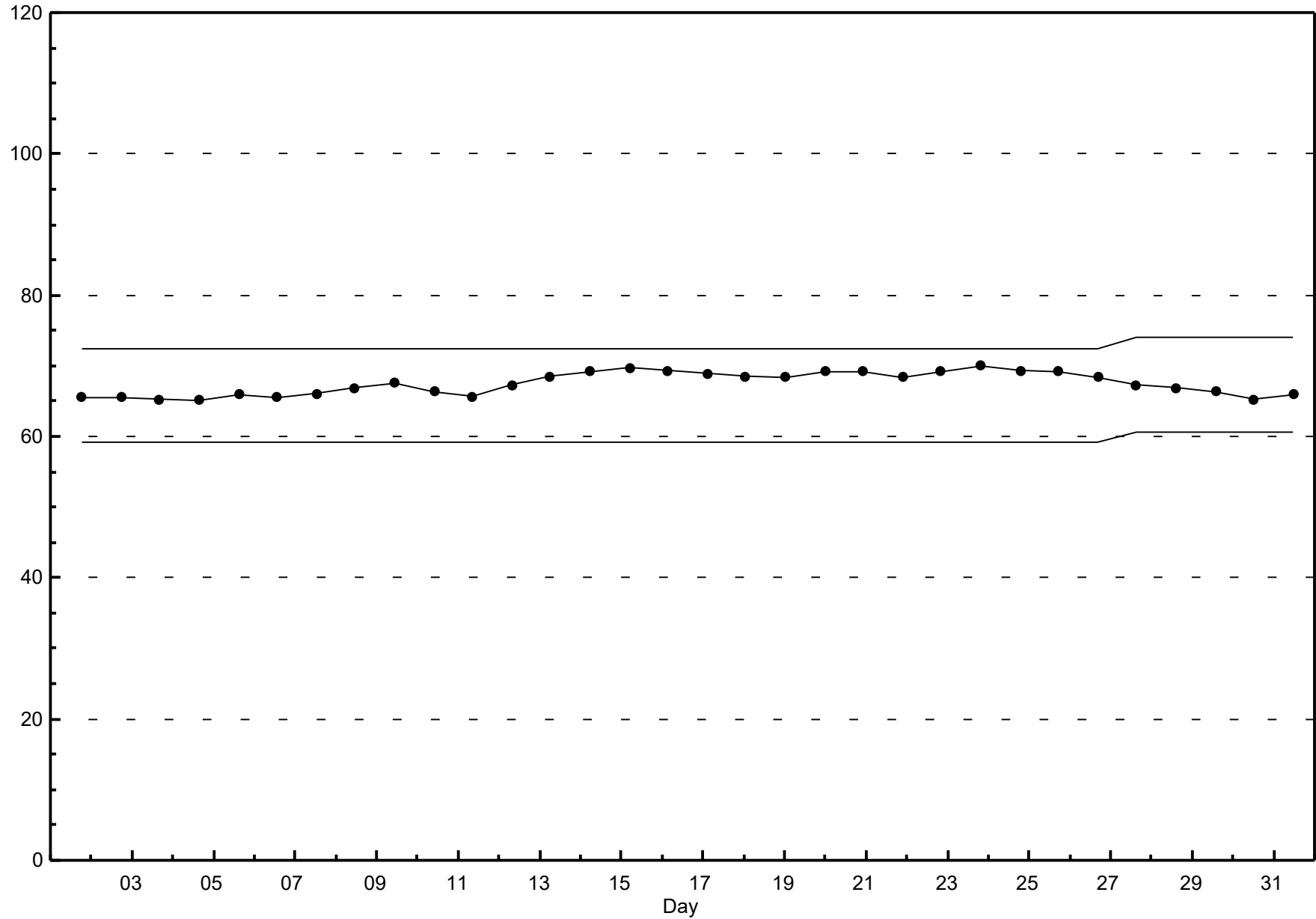
Hydrogen Sulphide (H₂S) - ppb
Donnelly - March 2018



Span Responses

Hydrogen Sulphide (H₂S)

Donnelly - March 2018

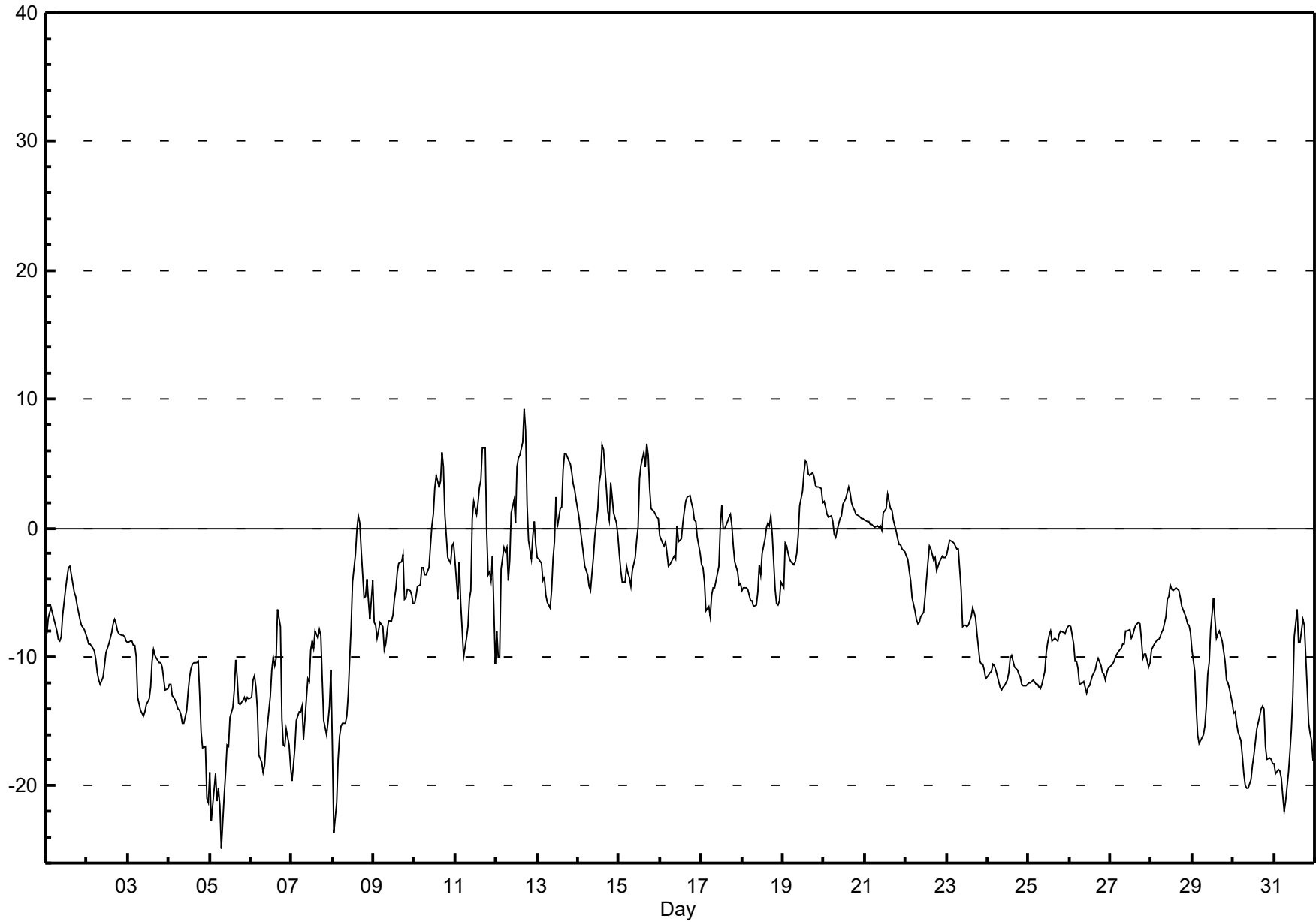


Hourly Averages

External Temperature (ET) - °C

Donnelly - March 2018

Maximum Value: 9.2 °C on Mar 12 17:00		Maximum Daily Average: 1.2 °C on Mar 20		Hours in Service: 744																							
Minimum Value: -25 °C on Mar 5 08:00		Minimum Daily Average: -16.9 °C on Mar 30		Hours of Data: 744																							
Maximum Diurnal Average: -3.0 °C at hour 17		Minimum Diurnal Average: -9.7 °C at hour 8		Hours of Missing Data: 0																							
Monthly Average: -6.71 °C		Percentiles: P ₁ = -21.2 P ₁₀ = -15.2 Q ₁ = -11.3 Median = -7.1 Q ₃ = -1.6 P ₉₀ = 1.6 P ₉₉ = 6.0		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	-8	-7	-7	-6	-7	-8	-8	-9	-9	-8	-7	-5	-4	-3	-3	-4	-5	-5	-6	-6	-7	-8	-8	-8	-6.4	-3.0	
2-Mar	-9	-9	-9	-9	-10	-10	-11	-12	-12	-12	-11	-10	-9	-9	-8	-7	-7	-7	-8	-8	-8	-8	-8	-9	-9.2	-7.1	
3-Mar	-9	-9	-9	-9	-9	-10	-13	-14	-14	-15	-14	-14	-13	-12	-10	-9	-10	-10	-10	-10	-11	-12	-13	-12	-11.4	-8.8	
4-Mar	-12	-12	-13	-13	-13	-14	-14	-15	-15	-15	-14	-13	-12	-11	-11	-10	-10	-10	-13	-16	-17	-17	-21	-21	-13.9	-10.3	
5-Mar	-19	-23	-20	-19	-21	-20	-22	-25	-21	-19	-17	-17	-15	-14	-13	-10	-12	-14	-14	-13	-13	-13	-13	-13	-16.6	-10.2	
6-Mar	-13	-12	-11	-12	-14	-18	-18	-19	-18	-17	-15	-13	-11	-10	-11	-10	-6	-8	-15	-17	-17	-16	-17	-19	-14.0	-6.3	
7-Mar	-20	-18	-17	-15	-14	-14	-14	-16	-15	-12	-12	-9	-9	-9	-8	-9	-8	-8	-12	-15	-16	-15	-14	-11	-12.9	-7.8	
8-Mar	-17	-24	-21	-18	-16	-15	-15	-15	-15	-13	-10	-8	-4	-2	0	1	0	-2	-5	-5	-4	-6	-7	-4	-9.4	0.9	
9-Mar	-7	-8	-9	-8	-7	-8	-9	-9	-8	-7	-7	-7	-5	-5	-3	-3	-3	-2	-6	-5	-5	-5	-5	-6	-6.1	-2.1	
10-Mar	-6	-5	-5	-4	-3	-3	-4	-4	-3	-1	0	1	3	4	3	4	6	5	1	-2	-3	-3	-1	-1	-0.9	5.9	
11-Mar	-2	-6	-3	-6	-8	-10	-8	-8	-6	-5	1	2	1	2	3	4	6	6	0	-4	-3	-4	-2	-11	-2.5	6.3	
12-Mar	-8	-10	-10	-3	-1	-2	-2	-4	-2	1	2	0	5	5	6	7	9	8	2	-1	-2	-1	0	-1	-0.1	9.2	
13-Mar	-2	-2	-3	-4	-4	-5	-6	-6	-5	-2	-1	2	0	1	2	4	6	6	5	5	4	3	3	2	0.2	5.8	
14-Mar	1	0	-1	-2	-3	-4	-5	-5	-3	-2	-1	1	4	4	6	6	3	1	1	4	2	1	0	-1	0.4	6.4	
15-Mar	-2	-3	-4	-4	-3	-4	-4	-5	-3	-2	-1	0	4	5	6	5	7	6	3	2	1	1	1	1	0.2	6.5	
16-Mar	-1	-1	-1	-1	-2	-3	-3	-2	-2	-2	0	-1	-1	0	1	2	2	3	2	2	1	0	-1	-2	-0.4	2.6	
17-Mar	-3	-3	-4	-6	-6	-7	-5	-5	-5	-4	-3	0	2	0	0	1	1	1	0	-1	-3	-3	-4	-4	-2.6	1.8	
18-Mar	-5	-5	-5	-5	-5	-6	-6	-6	-6	-5	-3	-4	-2	-1	0	0	0	1	0	-5	-6	-6	-6	-4	-3.6	0.9	
19-Mar	-5	-1	-1	-2	-2	-3	-3	-3	-2	-1	2	3	4	5	5	4	4	4	4	3	3	3	3	2	1.2	5.2	
20-Mar	2	2	1	1	1	1	-1	-1	0	1	1	2	2	2	3	3	2	2	1	1	1	1	1	1	1.2	3.2	
21-Mar	1	1	0	0	0	0	0	0	0	0	0	1	2	3	2	2	1	1	0	-1	-1	-1	-2	-2	0.3	2.6	
22-Mar	-2	-2	-3	-4	-5	-6	-7	-7	-7	-7	-7	-5	-4	-3	-1	-2	-2	-2	-3	-3	-3	-2	-2	-2	-3.9	-1.4	
23-Mar	-2	-2	-1	-1	-1	-1	-2	-2	-5	-8	-7	-7	-8	-8	-7	-6	-7	-7	-8	-10	-11	-11	-11	-12	-6.0	-1.0	
24-Mar	-12	-11	-11	-11	-11	-11	-12	-12	-13	-12	-12	-12	-11	-10	-10	-10	-11	-11	-11	-12	-12	-12	-12	-12	-11.4	-9.9	
25-Mar	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-10	-9	-8	-8	-9	-9	-9	-9	-8	-8	-8	-8	-8	-8	-9.9	-7.7	
26-Mar	-8	-8	-9	-10	-10	-11	-12	-12	-12	-12	-13	-12	-12	-11	-11	-11	-10	-10	-11	-11	-11	-12	-11	-11	-11.0	-7.6	
27-Mar	-11	-11	-10	-10	-10	-9	-9	-9	-9	-8	-8	-8	-9	-8	-8	-8	-7	-7	-9	-10	-10	-10	-11	-10	-9.1	-7.3	
28-Mar	-9	-9	-9	-9	-9	-8	-8	-8	-7	-6	-5	-4	-5	-5	-5	-5	-5	-6	-7	-7	-7	-8	-8	-8	-6.8	-4.4	
29-Mar	-9	-11	-14	-16	-17	-16	-16	-15	-14	-11	-10	-8	-5	-7	-9	-8	-8	-9	-10	-10	-12	-12	-12	-14	-11.4	-5.5	
30-Mar	-14	-14	-15	-16	-17	-18	-19	-20	-20	-20	-19	-18	-18	-17	-16	-15	-14	-14	-14	-17	-18	-18	-18	-18	-16.9	-13.8	
31-Mar	-18	-19	-19	-19	-19	-21	-22	-21	-19	-17	-16	-13	-8	-6	-9	-9	-8	-7	-7	-12	-15	-16	-17	-18	-14.8	-6.3	
		-7.8	-8.2	-8.2	-8.2	-8.4	-8.9	-9.3	-9.7	-9.1	-8.2	-7.0	-5.9	-4.7	-4.1	-3.6	-3.3	-3.0	-3.4	-5.1	-6.3	-6.8	-6.9	-7.2	-7.6	Diurnal Average	
		2.1	1.6	1.1	0.8	0.9	0.5	0.1	0.2	0.1	1.2	2.2	2.8	4.7	5.5	6.4	6.7	9.2	7.5	5.2	5.0	4.3	3.4	3.1	2.2	Diurnal Maximum	





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Donnelly - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	7	9	10	12	12	13	15	14	18	19	17	16	18	18	17	17	17	18	18	17	16	16	17	18	15.4	18.8
Dir	86	92	87	84	83	80	73	79	80	80	81	86	87	89	88	83	77	70	69	73	74	74	78	81	80	80
2 Spd	16	16	15	15	16	14	14	15	14	13	15	16	15	14	13	12	10	10	10	12	9	8	8	8	12.8	16.4
Dir	87	87	90	91	90	81	79	80	82	83	82	84	89	89	93	89	88	97	100	101	104	105	104	100	89	87
3 Spd	6	6	5	4	3	3	9	8	9	11	10	12	13	13	11	10	10	7	6	6	5	7	3	3	4.2	12.9
Dir	99	95	94	92	90	279	281	279	279	280	283	273	271	261	283	318	1	354	354	6	9	18	349	301	307	271
4 Spd	5	8	7	9	9	7	8	7	8	9	10	10	11	9	8	6	3	1	2	3	4	4	1	2	4.7	10.5
Dir	271	292	292	290	292	287	273	270	257	260	270	272	271	263	266	307	282	113	118	146	113	131	52	98	273	271
5 Spd	4	5	5	2	5	4	4	6	4	3	1	2	2	4	2	2	5	2	6	6	9	12	13	12	0.7	12.5
Dir	99	71	85	75	71	82	76	69	79	76	272	297	0	268	252	37	46	317	272	249	229	190	211	246	189	211
6 Spd	11	10	12	12	10	8	7	11	8	6	7	4	3	2	3	3	1	1	4	6	5	4	3	5	3.2	12.2
Dir	252	279	284	274	263	236	205	190	198	189	197	204	218	248	16	50	84	166	97	121	161	152	116	72	224	284
7 Spd	6	4	5	4	7	4	7	5	4	3	4	6	6	6	3	4	1	3	2	3	3	5	6	10	2.6	9.7
Dir	89	108	114	110	112	111	131	91	98	71	78	191	258	288	270	265	36	92	80	83	156	155	161	174	130	174
8 Spd	6	4	5	6	6	5	6	9	13	14	14	14	13	15	12	11	10	2	4	1	2	3	6	7	7.0	15.2
Dir	159	81	85	91	78	98	101	103	99	99	99	99	97	96	94	97	90	170	261	97	123	179	137	154	103	96
9 Spd	4	3	3	4	4	11	8	6	9	9	16	16	12	10	14	10	8	4	5	12	17	18	16	20	7.3	19.8
Dir	99	108	103	85	108	207	230	240	251	252	253	262	272	268	274	266	263	222	192	183	184	198	200	208	226	208
10 Spd	19	19	16	18	18	17	17	18	17	16	16	15	14	14	14	8	4	2	3	3	5	5	9	8	10.6	19.4
Dir	208	205	197	194	194	182	182	184	187	182	190	192	229	267	279	258	227	167	176	137	139	161	152	159	197	208
11 Spd	7	3	7	3	5	5	4	6	5	4	2	7	9	10	7	4	2	3	4	4	6	2	7	4	3.3	9.6
Dir	131	134	146	89	88	84	103	99	88	79	103	134	189	201	192	333	355	56	88	110	120	154	155	59	124	201
12 Spd	1	4	5	10	17	11	10	6	4	8	5	7	0	2	3	3	0	3	3	4	6	9	9	3	3.9	17.3
Dir	93	71	94	170	178	172	150	128	117	138	149	16	106	88	336	349	204	142	97	65	91	119	120	85	131	178
13 Spd	4	3	6	7	6	4	5	4	5	6	6	3	4	3	6	2	2	5	7	8	9	9	9	10	4.5	9.9
Dir	98	95	82	82	90	109	93	96	100	98	115	202	240	343	354	358	55	76	88	91	93	95	97	96	90	96
14 Spd	9	9	10	10	7	9	10	8	7	7	8	7	7	8	8	7	6	3	2	13	11	9	9	9	7.5	13.1
Dir	95	98	99	99	99	99	98	97	102	100	100	95	97	103	97	83	347	286	88	97	100	102	110	115	97	97
15 Spd	5	9	6	6	11	11	11	13	14	12	10	9	1	4	2	1	3	3	1	3	2	3	4	4	5.0	13.6
Dir	108	117	114	138	161	155	166	176	175	192	204	185	158	57	71	59	125	157	145	83	151	140	92	96	154	175
16 Spd	4	5	4	6	6	5	2	2	4	7	1	8	11	9	10	6	6	4	5	7	10	11	10	6	2.8	10.8
Dir	99	109	97	98	78	61	23	141	247	289	135	252	269	269	265	255	249	236	190	184	182	174	197	198	213	269
17 Spd	5	5	6	6	4	5	3	5	2	4	6	5	3	6	7	7	5	2	1	1	2	1	1	2	0.8	7.5
Dir	193	175	187	95	108	86	151	186	70	66	62	71	136	307	285	273	265	202	75	84	51	72	54	73	130	285
18 Spd	4	7	8	6	5	5	6	4	0	0	0	6	6	6	5	5	5	4	0	3	4	2	4	7	1.9	8.1
Dir	62	71	73	78	74	71	70	67	47	154	351	258	266	273	300	326	359	47	59	99	96	106	108	121	62	73
19 Spd	7	12	16	18	18	19	21	21	22	15	11	17	15	17	17	12	14	13	15	20	15	14	16	11	12.8	22.2
Dir	137	161	160	165	164	164	169	168	174	169	166	184	193	231	235	216	212	241	246	256	252	246	232	215	198	174
20 Spd	10	11	14	15	15	16	13	7	5	5	4	3	5	7	4	3	7	6	4	2	3	2	3	2	5.3	15.8
Dir	202	189	191	192	193	199	203	217	255	261	247	279	247	319	14	213	190	200	187	188	110	106	124	106	203	199
21 Spd	2	3	4	6	6	8	9	14	13	11	11	12	13	14	16	15	16	17	17	15	17	16	15	12	11.8	17.1
Dir	100	92	85	81	83	78	77	69	78	81	75	75	78	78	70	73	73	72	71	73	75	77	78	73	76	71
22 Spd	11	13	14	16	17	15	15	16	15	15	19	19	18	17	17	17	19	22	23	21	18	20	18	17	17.2	23.3
Dir	73	69	69	67	64	69	67	68	73	73	66	65	70	73	88	86	70	68	69	71	74	68	69	72	71	69

Hourly Averages

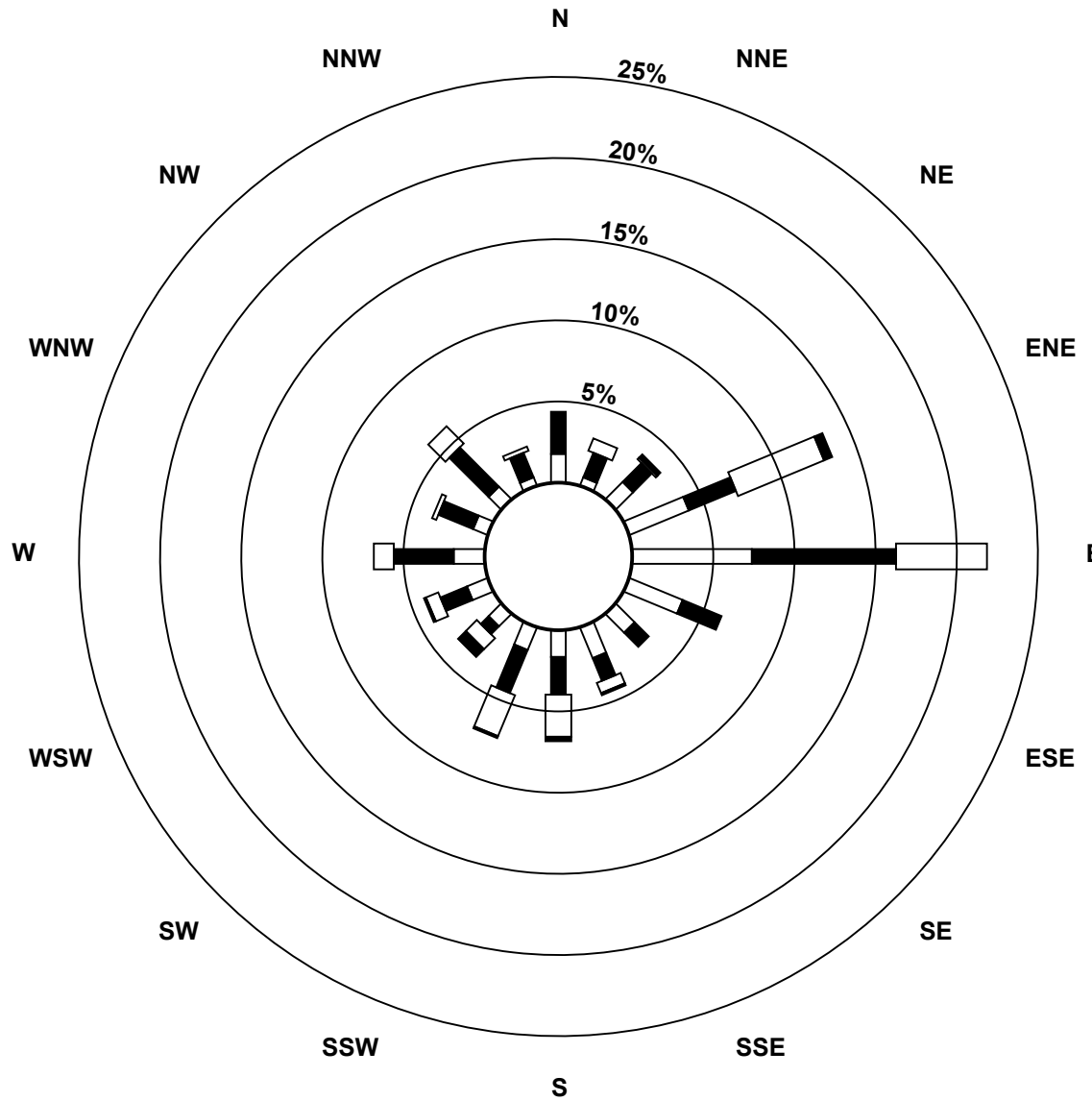
Wind Speed (km/h)
Wind Direction (deg)
Donnelly - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	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	14	11	11	11	12	11	10	10	18	26	23	24	25	24	17	10	9	7	4	3	5	5	6	6	5.3	26.2
Dir	70	75	85	88	90	94	97	103	216	219	230	221	216	216	220	249	311	298	263	263	236	249	275	288	208	219
24 Spd	2	3	4	4	6	9	11	10	11	13	10	8	11	6	7	7	7	5	4	2	2	7	10	9	5.6	12.8
Dir	315	303	296	320	322	323	328	330	326	313	313	314	277	294	312	340	2	34	40	10	0	25	35	46	334	313
25 Spd	8	8	7	11	7	7	7	8	10	8	6	7	8	7	9	8	7	7	5	6	8	12	9	8	6.9	11.7
Dir	31	33	27	36	34	22	21	29	37	45	58	61	55	36	351	352	16	40	90	91	89	95	72	81	45	95
26 Spd	5	5	4	5	7	8	6	7	9	10	13	12	12	10	12	11	10	8	6	2	5	1	3	6	6.0	12.7
Dir	80	62	3	326	323	320	323	333	315	325	325	336	336	328	311	312	309	310	300	326	356	59	106	94	330	325
27 Spd	7	10	9	10	8	10	9	8	10	7	8	13	16	15	15	13	11	7	4	4	5	10	14	13	1.2	15.8
Dir	96	87	89	86	88	93	94	84	66	61	339	319	318	311	311	306	303	296	267	195	176	180	184	183	23	318
28 Spd	13	13	13	12	10	9	5	4	3	3	4	4	6	8	8	7	6	6	7	6	9	9	7	10	2.3	13.4
Dir	190	192	190	198	196	201	214	215	243	248	322	313	319	314	323	335	336	313	305	339	358	0	10	46	273	192
29 Spd	9	7	8	8	7	7	5	7	7	4	6	5	4	7	7	8	9	8	9	12	12	15	18	12	7.1	17.6
Dir	52	36	71	71	73	74	95	93	94	92	88	97	88	60	13	354	358	356	8	24	23	28	37	31	44	37
30 Spd	12	15	21	20	11	9	11	10	11	10	11	13	15	13	14	10	8	6	5	4	3	6	10	11	6.3	21.3
Dir	25	30	35	37	19	7	356	353	352	346	335	324	310	301	304	319	304	274	271	234	200	205	196	196	341	35
31 Spd	12	12	10	8	8	5	4	5	10	11	9	5	2	1	4	4	2	2	1	3	4	3	6	2	4.3	11.8
Dir	197	197	200	204	202	193	187	177	180	189	194	207	213	348	348	354	355	84	143	148	140	175	203	155	192	197
Spd	3.5	3.6	4.0	4.1	4.0	3.6	3.2	3.5	2.5	1.9	1.0	0.7	1.5	1.8	2.5	2.3	2.3	1.7	1.7	2.8	3.2	3.5	3.8	3.7	Diurnal Average	
Dir	114	108	108	106	116	120	119	113	128	137	134	201	255	292	314	345	10	45	70	94	107	116	123	117	Diurnal Maximum	
Spd	19.4	19.1	21.3	19.9	18.1	19.1	20.8	21.1	22.2	26.2	22.9	23.5	24.6	23.8	17.4	17.2	19.0	21.6	23.3	21.1	17.8	20.4	18.4	19.8	Diurnal Maximum	
Dir	208	205	35	37	194	164	169	168	174	219	230	221	216	216	88	83	70	68	69	71	74	68	69	208	Diurnal Maximum	
Maximum Speed Value: 26 km/h on Mar 23 10:00		Minimum Speed Value: 0 km/h on Mar 12 17:00																Hours in Service: 744								
Maximum Daily Speed Average: 17.2 km/h on Mar 22		Minimum Daily Speed Average: 0.7 km/h on Mar 17																Hours of Data: 744								
Maximum Diurnal Speed Average: 4.1 km/h at hour 4		Minimum Diurnal Speed Average: 0.7 km/h at hour 12																Hours of Missing Data: 0								
Monthly Average Velocity: 1.92 km/h 107.2 deg		Speed Percentiles: P ₁ = 0.7 P ₁₀ = 2.6 Q ₁ = 4.4 Median = 7.4 Q ₃ = 11.5 P ₉₀ = 16.0 P ₉₉ = 21.5																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	17	32	1	0	0	0	50																			
NorthEast	23	24	12	3	0	0	62																			
East	84	97	83	5	0	0	269																			
SouthEast	32	24	0	0	0	0	56																			
South	16	43	41	4	0	0	104																			
SouthWest	16	12	16	8	0	0	52																			
West	19	50	14	1	0	0	84																			
NorthWest	13	37	17	0	0	0	67																			
Total	220	319	184	21	0	0	744																			

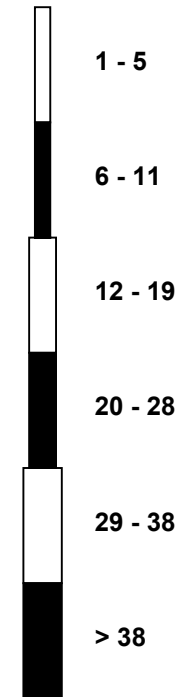
Wind Rose

Wind Speed (WS) (km/h)

Donnelly - March 2018



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Donnelly - March 2018

Maximum Speed: 26 km/h on Mar 23 10:00	Maximum Daily Speed Average: 17.3 km/h on Mar 22	Hours in Service: 744
Minimum Speed: 1 km/h on Mar 18 19:00	Minimum Daily Speed Average: 4.4 km/h on Mar 17	Hours of Data: 744
Maximum Diurnal Speed Average: 10.0 km/h at hour 12	Minimum Diurnal Speed Average: 6.3 km/h at hour 19	Hours of Missing Data: 0
Monthly Average Speed: 8.64 km/h	Percentiles: P ₁ = 1.3 P ₁₀ = 3.2 Q ₁ = 4.7 Median = 7.5 Q ₃ = 11.7 P ₉₀ = 16.1 P ₉₉ = 22.0	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	7	9	10	12	12	13	15	14	18	19	17	16	18	18	17	17	17	18	18	17	16	16	17	18	15.5	18.8
2-Mar	16	16	15	15	16	14	14	15	14	13	15	16	15	15	13	12	10	10	10	12	9	8	8	8	12.9	16.4
3-Mar	6	6	5	4	3	5	9	8	9	11	10	12	13	13	12	10	10	8	6	6	6	7	4	3	7.6	13.0
4-Mar	5	8	7	9	9	7	8	7	8	9	10	10	11	9	8	6	3	1	2	4	4	4	2	3	6.4	10.6
5-Mar	4	5	5	3	5	4	4	6	4	3	3	4	4	4	3	3	5	3	6	6	9	12	13	12	5.3	12.7
6-Mar	11	10	12	12	11	9	8	11	8	6	7	4	3	2	3	3	1	1	4	6	6	4	3	5	6.3	12.2
7-Mar	6	4	5	4	7	5	7	5	4	4	4	7	6	6	3	4	2	4	3	3	4	5	6	10	5.0	9.8
8-Mar	6	5	5	6	6	5	7	9	13	14	14	14	13	15	12	11	10	10	4	2	3	4	6	7	8.4	15.3
9-Mar	4	3	3	4	4	12	9	6	9	9	16	16	12	10	14	11	8	5	5	12	17	18	17	20	10.2	19.8
10-Mar	19	19	16	18	18	17	17	18	17	16	16	15	15	14	15	9	4	3	3	3	5	5	9	8	12.5	19.4
11-Mar	7	3	7	4	5	6	5	6	5	4	3	7	9	10	7	6	2	4	4	4	6	2	8	5	5.4	9.9
12-Mar	2	4	5	11	17	12	11	6	4	8	8	7	2	4	3	3	1	4	4	5	6	9	9	3	6.2	17.4
13-Mar	4	3	6	7	6	4	5	4	5	6	7	4	5	4	6	3	3	6	7	8	9	9	9	10	5.8	10.0
14-Mar	9	9	10	10	7	9	10	8	7	7	8	7	7	8	8	7	6	4	4	13	12	9	9	9	8.3	13.1
15-Mar	5	9	6	6	11	11	11	13	14	12	10	9	3	4	3	2	3	4	2	3	3	3	4	4	6.5	13.7
16-Mar	4	5	4	6	6	5	4	3	5	7	2	9	11	9	10	6	6	5	5	7	10	11	10	6	6.4	11.0
17-Mar	5	5	8	7	6	5	3	6	2	4	6	5	4	6	8	7	5	2	1	2	2	1	2	2	4.4	8.0
18-Mar	4	7	8	6	5	5	6	4	1	2	1	6	6	6	5	5	4	1	3	4	2	4	7	7	4.5	8.1
19-Mar	7	12	16	18	18	19	21	21	22	15	11	17	15	17	17	12	14	13	16	20	15	14	17	11	15.8	22.2
20-Mar	10	12	14	15	15	16	13	7	5	5	4	3	6	7	4	3	7	6	4	3	3	2	3	2	7.0	15.8
21-Mar	2	3	4	6	6	8	9	14	13	11	11	12	13	14	16	15	16	17	17	16	17	16	15	12	11.8	17.2
22-Mar	11	13	14	16	17	15	15	16	15	15	19	19	18	17	17	17	19	22	23	21	18	20	18	17	17.3	23.3
23-Mar	14	11	11	11	12	12	10	10	23	26	23	24	25	24	17	11	9	7	4	4	6	5	6	6	13.0	26.2
24-Mar	2	3	4	4	6	9	11	10	11	13	10	8	11	6	7	7	7	5	5	3	2	7	10	9	7.1	12.9
25-Mar	8	8	7	11	7	7	7	8	10	8	6	7	8	7	9	8	8	7	6	6	8	12	9	8	7.9	11.8
26-Mar	5	5	4	5	7	8	7	7	9	11	13	12	12	10	12	11	10	8	6	3	5	1	3	6	7.5	12.8
27-Mar	7	10	10	10	8	10	10	8	11	7	9	13	16	15	15	13	11	7	4	4	5	10	14	13	10.0	15.8
28-Mar	13	13	13	12	10	9	5	4	3	3	4	4	6	8	8	7	6	6	7	6	9	9	7	11	7.7	13.4
29-Mar	9	7	8	8	7	7	5	7	7	5	6	5	5	8	7	8	10	8	10	12	12	15	18	12	8.5	17.6
30-Mar	12	15	21	20	11	10	11	10	11	10	11	13	16	14	14	10	8	7	5	5	4	6	10	11	10.9	21.3
31-Mar	12	12	10	8	8	5	4	5	10	11	9	5	2	1	4	4	3	3	1	3	4	4	6	5	5.7	11.9
	7.7	8.2	8.9	9.2	9.3	9.2	9.0	9.0	9.6	9.5	9.5	10.0	10.0	9.9	9.6	8.2	7.4	6.7	6.3	7.1	7.6	8.2	9.0	8.5	Diurnal Average	
	19.4	19.2	21.3	19.9	18.1	19.2	20.8	21.1	23.0	26.2	23.3	23.8	24.6	23.9	17.5	17.3	19.1	21.7	23.3	21.1	17.8	20.5	18.4	19.8	Diurnal Maximum	

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

Hourly Standard Deviations

Wind Direction (WD) - deg

Donnelly - March 2018

Maximum Value: 96.0 deg on Mar 18 10:00																		Hours in Service: 744							
Minimum Value: 1.5 deg on Mar 20 07:00																		Hours of Data: 744							
Percentiles: P ₁ = 2.3 P ₁₀ = 3.7 Q ₁ = 5.4 Median = 8.8 Q ₃ = 18.0 P ₉₀ = 38.0 P ₉₉ = 82.7																		Hours of Missing Data: 0							
																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	6	5	6	5	4	5	3	5	3	3	3	5	4	4	5	5	3	4	3	5	4	3	3	3	6.1
2-Mar	5	4	5	5	6	6	4	4	4	4	5	5	5	5	6	6	6	8	6	5	6	7	6	6	7.9
3-Mar	8	9	9	7	9	87	7	5	6	6	6	7	4	4	26	11	7	7	8	7	10	5	52	21	87.0
4-Mar	15	8	6	6	4	8	6	4	5	4	6	7	8	5	12	9	18	52	28	16	8	11	57	32	56.7
5-Mar	18	10	9	21	10	14	7	5	14	10	86	52	56	26	41	55	11	40	9	11	21	4	11	3	86.3
6-Mar	4	9	6	5	15	18	13	6	3	8	6	12	21	41	58	9	51	85	20	8	23	25	31	11	85.1
7-Mar	15	6	16	9	5	13	10	19	11	40	34	24	30	24	40	40	80	29	42	11	32	13	12	7	79.7
8-Mar	16	38	10	12	14	10	8	6	4	4	4	4	5	5	6	7	6	77	54	91	66	47	21	13	91.3
9-Mar	9	8	6	16	18	26	26	7	9	5	5	8	6	6	5	19	12	27	24	8	7	3	2	4	26.5
10-Mar	2	3	3	2	3	2	2	2	2	2	7	5	15	16	16	27	11	57	31	22	26	20	9	8	56.9
11-Mar	18	22	22	37	17	29	24	8	12	41	37	28	9	14	19	76	26	8	13	18	26	61	41	49	76.1
12-Mar	50	10	19	15	2	28	15	27	22	18	62	13	87	81	46	29	83	38	20	31	19	10	9	49	87.1
13-Mar	18	36	11	7	10	20	11	12	10	9	25	55	19	45	7	35	69	15	9	4	5	4	4	5	68.5
14-Mar	5	4	4	4	6	6	4	6	24	16	6	10	9	7	9	26	11	32	90	5	4	5	6	6	89.8
15-Mar	7	7	10	25	9	9	5	5	7	6	7	8	81	8	42	67	23	32	71	12	50	21	11	12	80.5
16-Mar	10	9	19	7	14	9	69	61	41	30	79	20	12	9	6	12	8	26	7	5	6	3	7	5	79.0
17-Mar	15	7	50	28	42	27	48	56	36	21	5	15	56	7	11	8	22	49	38	37	19	44	52	16	56.0
18-Mar	6	3	4	5	8	6	6	14	82	96	64	13	7	13	17	20	8	12	45	12	11	42	10	4	96.0
19-Mar	12	6	3	4	4	5	3	3	4	10	10	5	9	8	3	6	10	12	13	9	12	8	12	10	13.0
20-Mar	7	5	3	4	2	2	1	14	18	24	10	30	35	13	30	58	4	5	10	64	18	13	12	21	63.7
21-Mar	14	15	12	10	6	4	4	3	4	4	5	4	4	6	4	4	4	3	3	3	3	3	3	4	15.4
22-Mar	4	8	5	6	4	5	5	4	4	6	4	3	4	6	5	6	4	4	3	3	3	3	3	4	7.7
23-Mar	3	8	5	5	5	7	7	6	48	4	10	10	3	3	7	30	7	14	29	36	39	17	16	13	48.0
24-Mar	59	32	14	19	7	9	7	8	9	5	12	15	13	21	9	17	8	15	13	22	21	11	4	7	58.6
25-Mar	9	5	8	4	10	6	4	4	4	7	9	12	9	18	8	9	14	8	23	12	7	6	17	7	23.4
26-Mar	13	8	29	11	10	8	12	10	9	9	9	6	7	10	9	7	5	9	6	26	9	43	11	8	43.5
27-Mar	8	6	6	5	7	6	7	10	5	11	27	6	5	7	4	4	4	6	28	24	9	8	6	4	28.2
28-Mar	7	4	3	3	4	7	10	14	28	33	22	23	14	10	13	12	12	7	6	18	5	7	10	9	32.9
29-Mar	13	10	10	5	5	4	8	7	8	10	12	13	13	15	24	6	6	11	11	6	9	3	3	3	24.1
30-Mar	4	4	4	5	9	8	5	7	7	6	7	11	5	7	6	9	11	6	22	14	11	9	7	4	21.9
31-Mar	2	3	3	7	4	10	11	12	7	3	7	8	58	59	17	13	28	30	62	24	21	34	29	68	68.0
	58.6	38.0	50.0	37.2	41.7	87.0	68.8	60.9	81.9	96.0	86.3	54.8	87.1	81.3	57.8	76.1	83.3	85.1	89.8	91.3	65.8	60.6	56.7	68.0	

PAZA

Portable – Rycroft Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb Portable Rycroft - March 2018

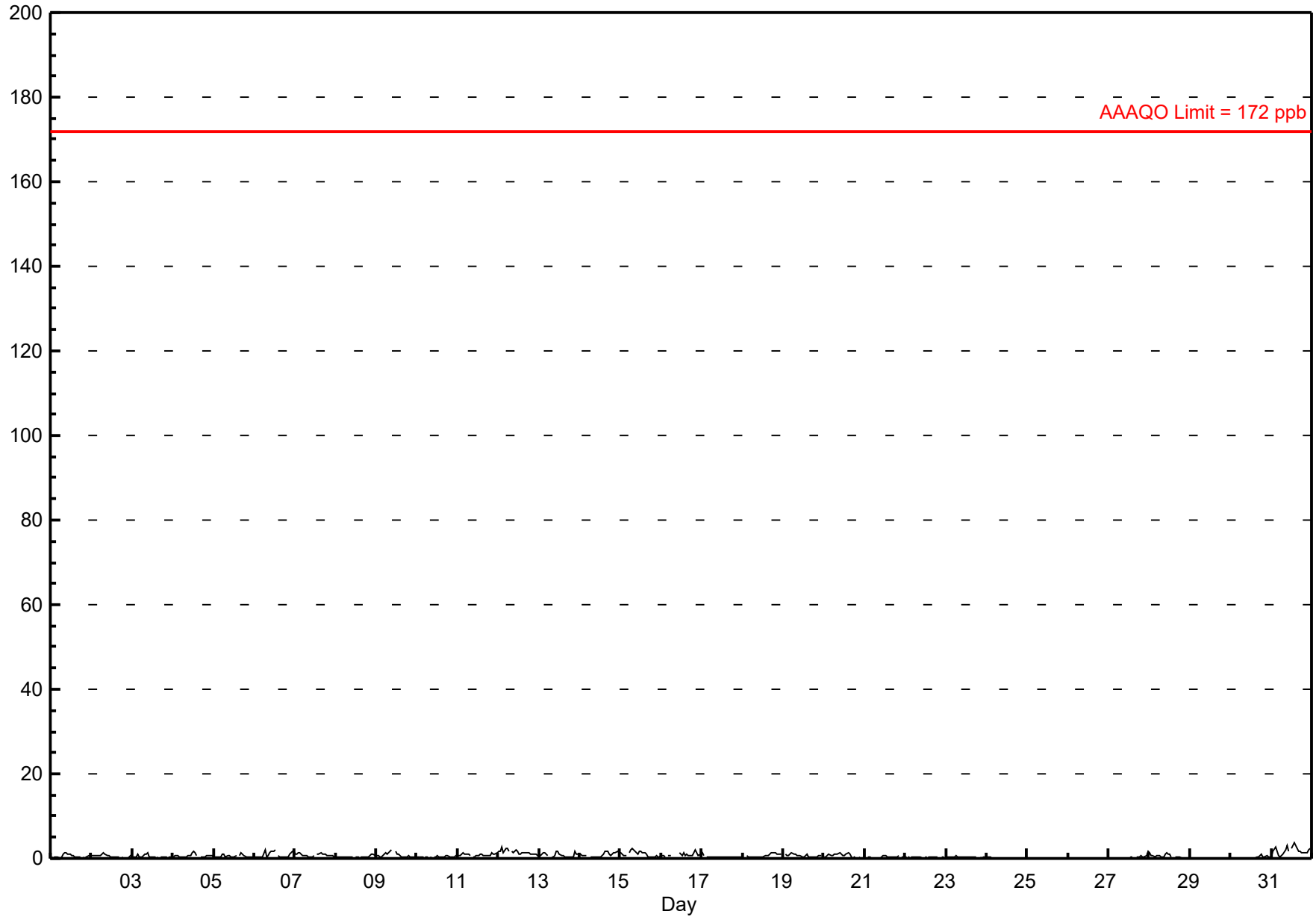
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 3.7 ppb on Mar 31 14:00	Maximum Daily Average: 1.7 ppb on Mar 31		Hours of Data:	708
Minimum Value: 0 ppb on Mar 24 04:00	Minimum Daily Average: 0.0 ppb on Mar 25		Hours of Missing Data:	36
Maximum Diurnal Average: 0.7 ppb at hour 10	Minimum Diurnal Average: 0.5 ppb at hour 20		Hours of Calibration:	36
Monthly Average: 0.58 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.8 P ₉₀ = 1.4 P ₉₉ = 2.3		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	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	A	A	0	0	0	1	1	0.5	1.5
2-Mar	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	A	0	0	0	0	0	1	0.5	1.2
3-Mar	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0.5	1.5
4-Mar	0	1	1	1	1	0	0	0	0	1	1	1	2	1	1	A	A	0	0	0	0	1	1	1	1	0.6	1.7
5-Mar	0	0	0	0	0	1	1	0	1	1	0	0	0	1	A	A	1	1	1	1	0	0	0	0	0	0.5	1.4
6-Mar	0	0	0	0	0	0	2	0	1	1	2	2	2	A	A	1	0	0	0	0	0	0	1	2	2	0.8	2.2
7-Mar	1	1	1	1	1	1	1	1	0	0	0	1	A	A	1	1	1	1	1	1	1	1	1	1	0	0.8	1.4
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	1	1	1	1	0.4	1.1
9-Mar	1	1	0	0	1	1	1	1	1	2	2	A	A	2	1	1	1	0	0	0	1	0	0	0	0	0.8	2.0
10-Mar	0	0	0	0	0	0	0	0	0	0	A	A	0	0	1	0	0	0	0	1	1	0	0	0	1	0.4	0.8
11-Mar	1	1	1	1	1	1	1	1	A	A	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
12-Mar	2	2	3	1	2	2	2	A	A	2	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1.5	2.8
13-Mar	1	1	1	1	1	1	A	A	0	0	1	2	2	1	1	1	0	0	1	0	0	0	2	1	1	0.8	1.6
14-Mar	1	1	1	1	1	A	A	0	0	0	0	0	0	0	1	1	2	2	1	1	1	1	1	2	1	0.9	1.7
15-Mar	1	1	1	1	A	A	1	2	2	2	1	1	2	2	1	1	1	1	0	0	0	0	1	0	0	1.0	2.3
16-Mar	1	1	0	A	1	1	1	C	C	C	C	2	1	1	1	1	1	1	1	1	1	2	1	1	1	0.9	2.1
17-Mar	2	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.5
18-Mar	0	A	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3
19-Mar	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0	1	1	1	A	0.7	1.2
20-Mar	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0.7	1.4
21-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	A	0	0	0.3	0.7
22-Mar	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5
23-Mar	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.5
24-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	0.3
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
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	0.1
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	1	0.3	1.8
28-Mar	1	1	1	0	1	1	1	0	0	1	1	1	1	0	A	A	0	0	0	0	0	0	0	0	0	0.5	1.5
29-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	0.1	0.1
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	1	1	1	0	1	0	0.2	1.0
31-Mar	0	2	3	2	1	0	1	1	2	3	2	A	2	4	3	2	2	2	2	1	1	1	1	2	2	1.7	3.7
	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6		Diurnal Average
	1.7	1.8	2.8	1.6	2.5	2.3	2.2	2.3	2.0	3.0	2.0	1.9	2.2	3.7	3.0	2.2	1.7	1.5	1.4	1.4	2.1	1.6	2.2	2.2		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
Portable Rycroft - March 2018



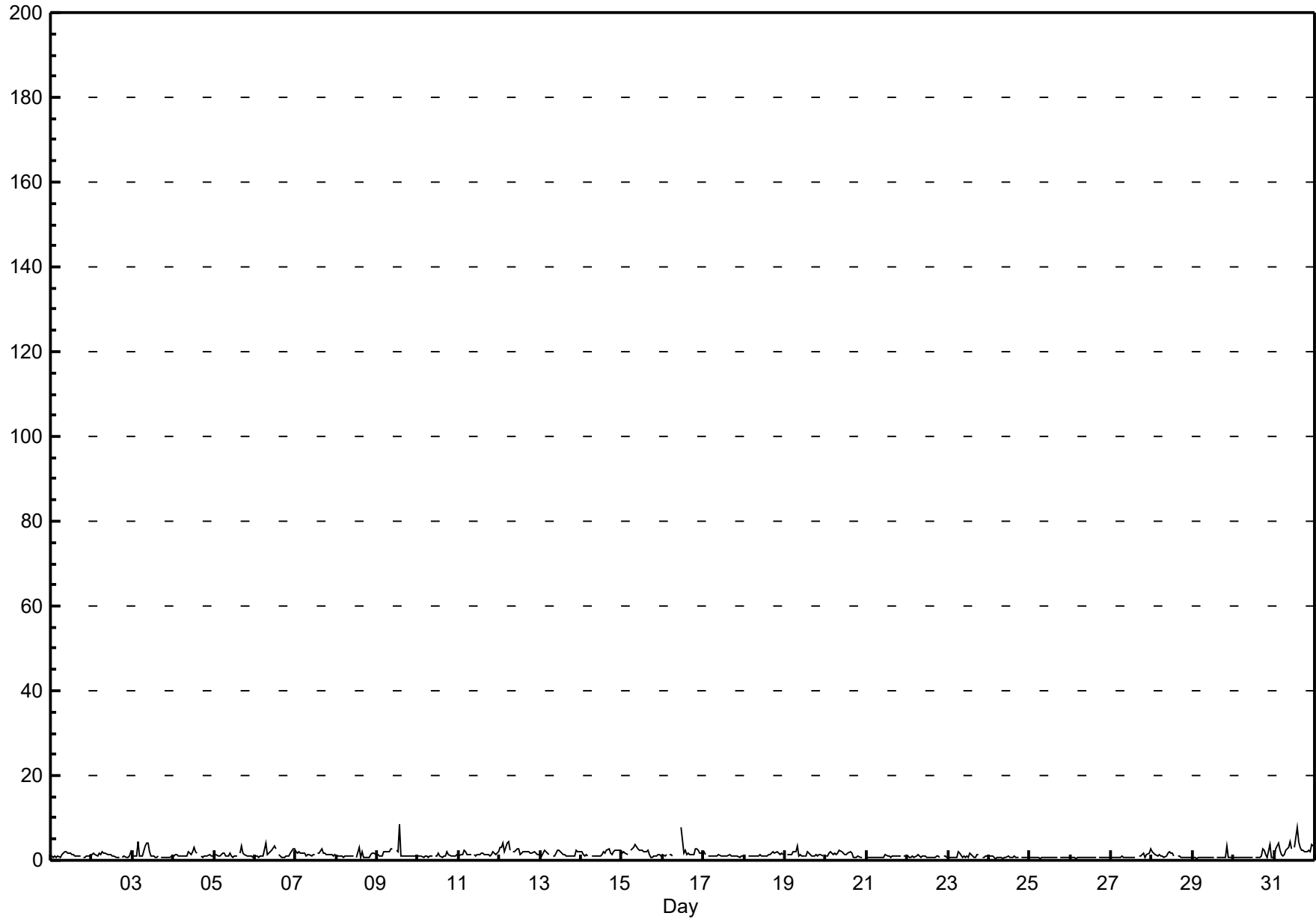
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Portable Rycroft - March 2018

Maximum Value: 8.4 ppb on Mar 9 14:00		Maximum Daily Average: 2.8 ppb on Mar 31		Hours in Service: 744																						
Minimum Value: 0 ppb on Mar 24 09:00		Minimum Daily Average: 0.6 ppb on Mar 25		Hours of Data: 708																						
Maximum Diurnal Average: 1.8 ppb at hour 14		Minimum Diurnal Average: 1.1 ppb at hour 19		Hours of Missing Data: 36																						
Monthly Average: 1.33 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.7 Q ₁ = 0.8 Median = 1.1 Q ₃ = 1.6 P ₉₀ = 2.2 P ₉₉ = 4.1		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	2	2	2	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1.1	2.0
2-Mar	1	2	1	1	2	1	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	1.2	2.0
3-Mar	1	1	1	4	1	1	1	3	4	4	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1.5	4.5
4-Mar	1	1	1	1	1	1	1	1	1	2	1	2	3	2	2	A	1	1	1	1	1	1	1	1	1.3	3.1
5-Mar	1	1	1	1	1	2	2	1	1	2	1	1	1	1	A	2	3	2	1	1	1	1	1	1	1.3	3.3
6-Mar	1	1	1	1	1	1	4	1	2	2	2	3	3	A	1	1	1	1	1	1	1	1	2	3	1.6	3.9
7-Mar	2	2	2	2	2	2	1	1	1	1	1	1	A	2	2	3	2	2	1	1	1	1	1	1	1.5	2.6
8-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	3	1	2	1	1	1	1	2	2	2	1.2	3.1
9-Mar	1	1	1	1	2	2	2	2	3	3	A	3	2	8	1	1	1	1	1	1	1	1	1	1	1.8	8.4
10-Mar	1	1	1	1	1	1	1	1	1	A	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1.1	1.9
11-Mar	1	1	1	2	2	1	1	1	A	1	1	1	1	2	2	1	1	1	1	1	2	2	2	2	1.5	2.4
12-Mar	3	3	4	2	4	5	2	A	2	2	3	3	2	2	2	2	2	2	2	2	2	2	1	1	2.3	4.5
13-Mar	1	1	2	2	2	1	A	1	1	2	2	2	2	1	1	1	1	1	1	1	1	2	2	2	1.5	2.5
14-Mar	2	2	1	1	1	A	1	1	1	1	1	1	1	2	2	2	3	2	1	2	3	2	2	2	1.6	2.7
15-Mar	2	2	2	1	A	2	3	3	4	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1.9	3.8
16-Mar	1	1	1	A	1	1	1	C	C	C	C	8	2	2	1	2	1	1	1	3	3	2	2	2	2.0	7.9
17-Mar	2	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	2.2
18-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	2	2	2	2	2	1	2	1	1.3	2.0
19-Mar	A	1	1	1	1	2	2	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	A	1.4	3.3
20-Mar	1	1	2	2	1	2	1	2	2	2	2	1	1	2	2	2	1	1	1	1	1	1	A	1	1.4	2.3
21-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	0.9	1.2
22-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	0.9	1.2
23-Mar	1	1	1	1	1	1	2	2	1	1	1	1	1	2	1	1	1	1	1	1	A	1	1	1	1.0	2.0
24-Mar	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	1.2
25-Mar	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.6	0.7
26-Mar	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.7
27-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	2	3	1.0	2.6
28-Mar	2	2	1	1	1	1	1	1	1	2	2	2	2	1	A	1	1	1	1	1	1	1	1	1	1.2	2.2
29-Mar	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	4	1	1	1	0.8	3.5
30-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	3	2	1	1	4	1	1	1.0	3.7
31-Mar	1	3	4	2	2	1	1	2	3	4	3	A	3	8	4	3	2	2	2	2	2	2	4	4	2.8	7.9
		1.2	1.2	1.3	1.3	1.2	1.3	1.3	1.4	1.4	1.6	1.4	1.6	1.3	1.8	1.3	1.4	1.2	1.2	1.1	1.2	1.3	1.3	1.3	1.4	Diurnal Average
		2.9	3.0	4.0	4.5	4.1	4.5	3.9	3.5	4.1	4.4	2.9	7.9	3.1	8.4	4.4	3.2	3.3	2.8	2.3	2.9	3.5	3.7	3.9	3.6	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

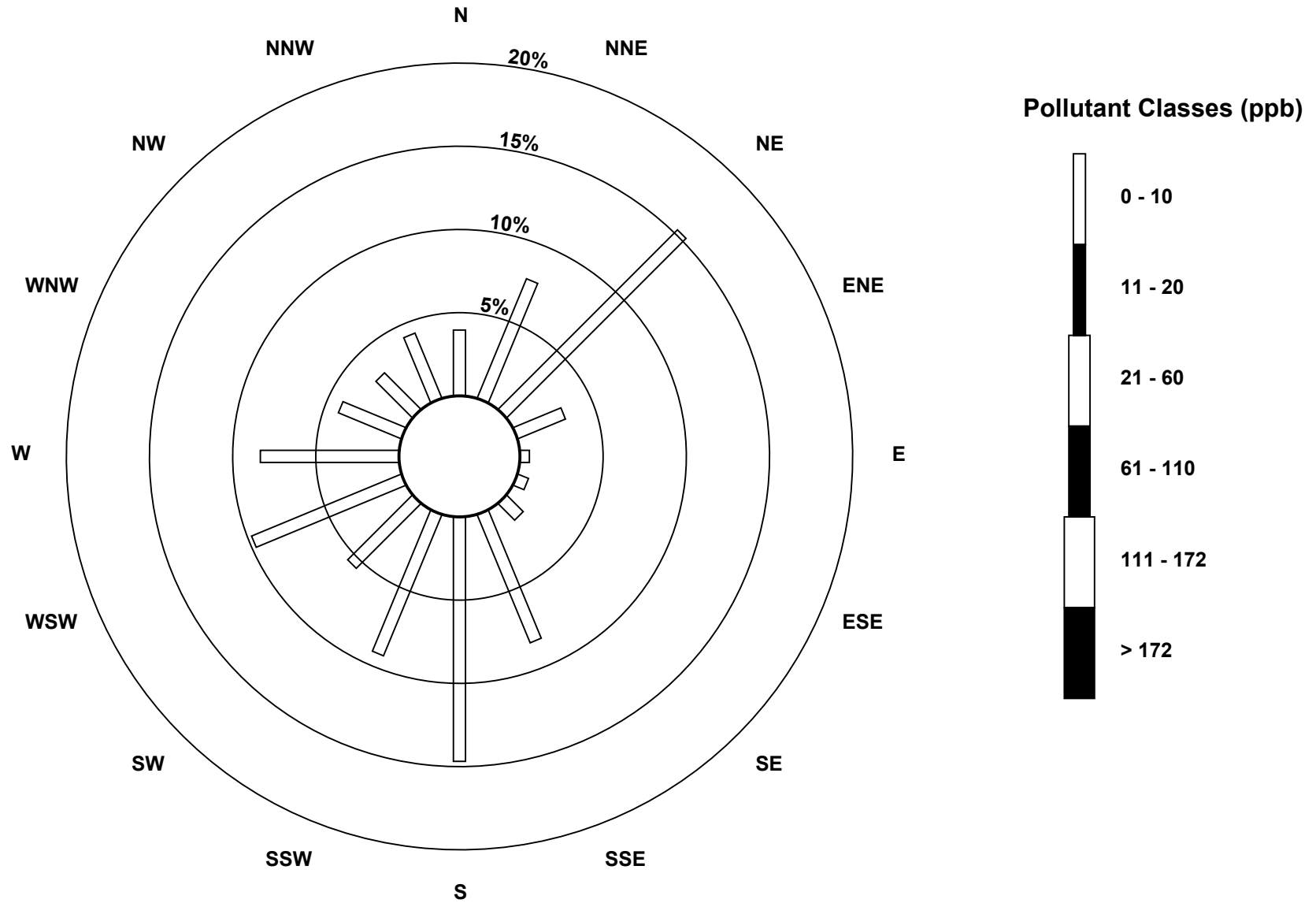
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Portable Rycroft - March 2018



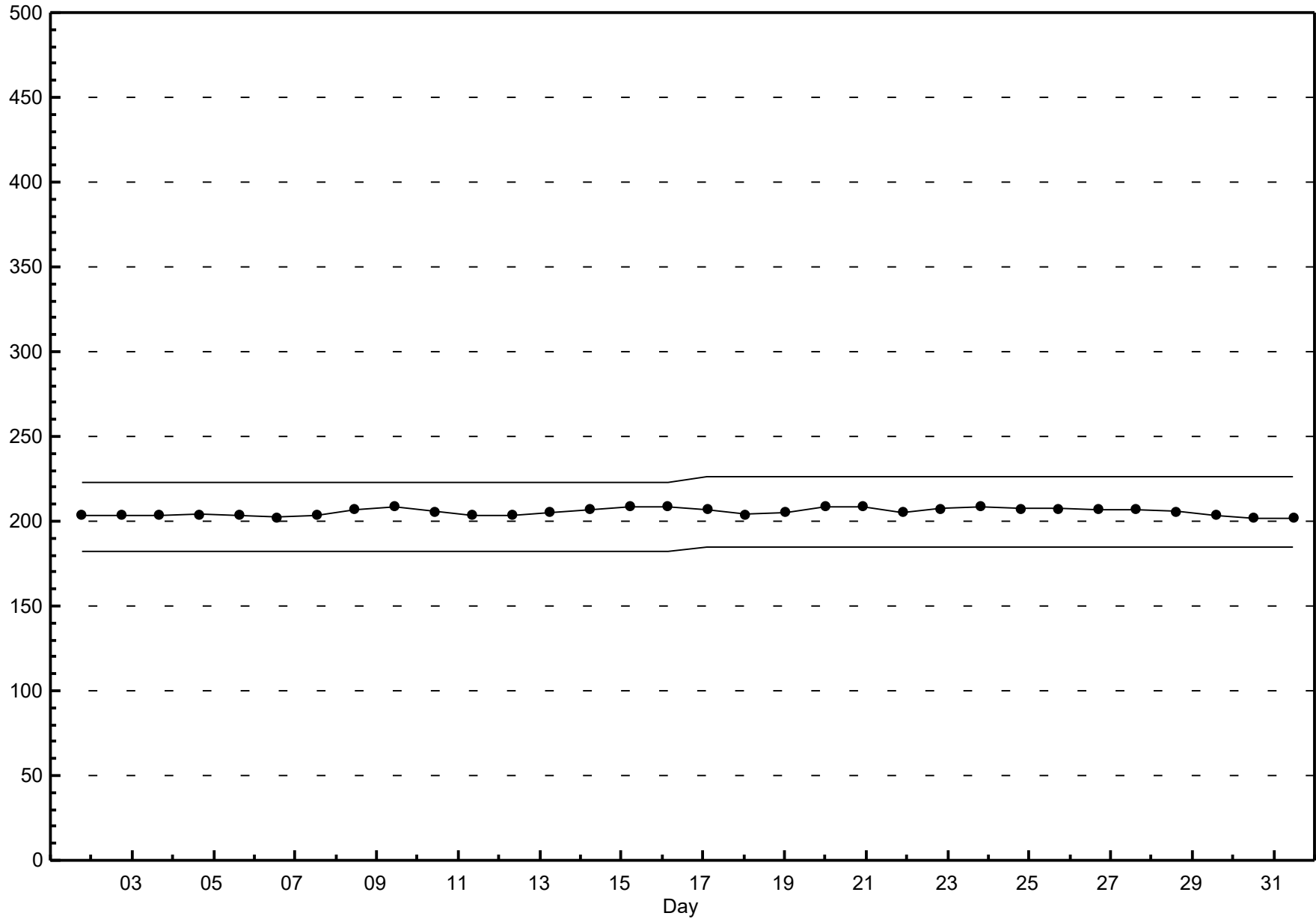
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Portable Rycroft - March 2018



Span Responses

Sulphur Dioxide (SO₂)
Portable Rycroft - March 2018

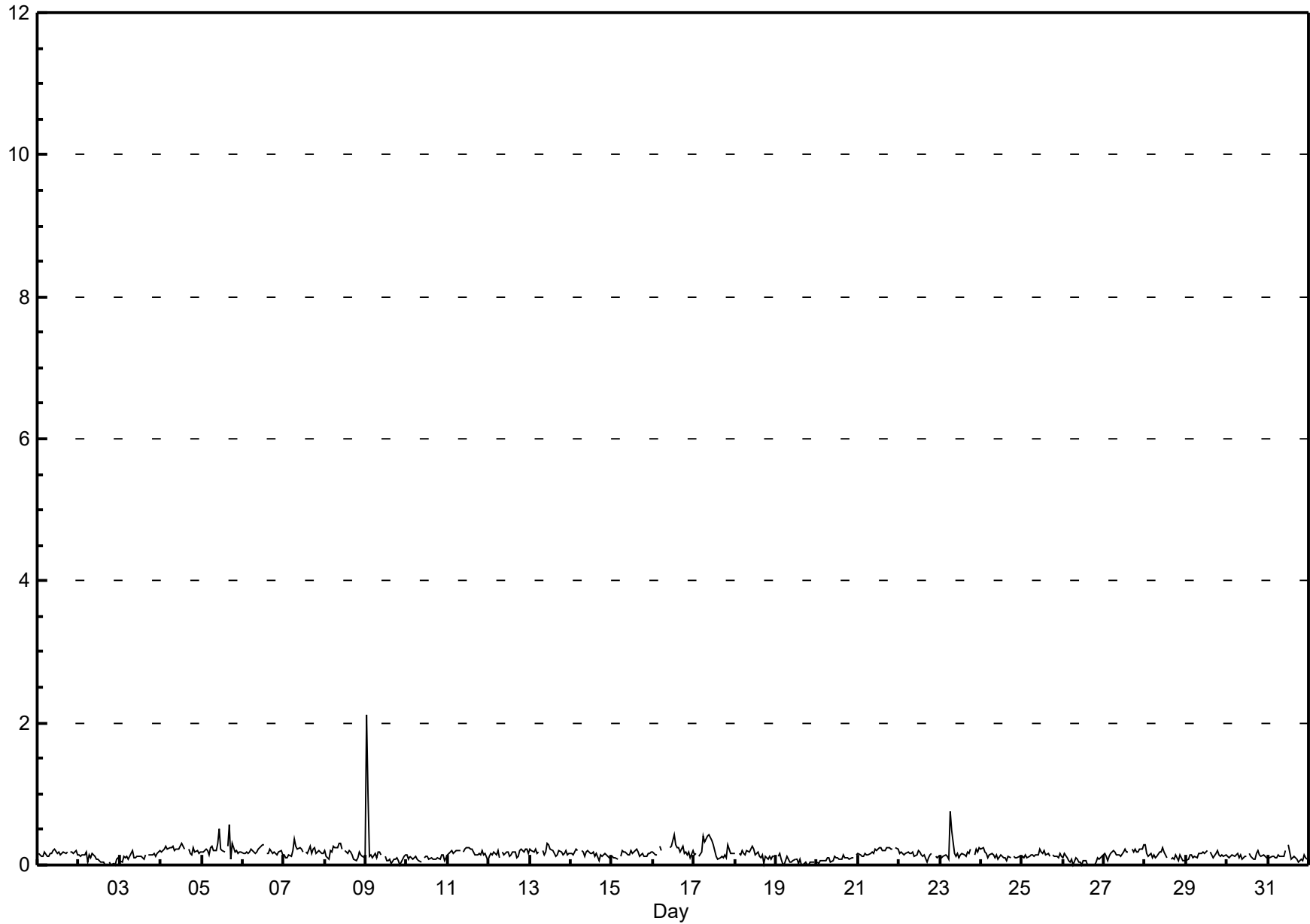


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable Rycroft - March 2018

Maximum Value: 2.1 ppb on Mar 9 01:00		Maximum Daily Average: 0.2 ppb on Mar 5		Hours in Service: 744																						
Minimum Value: 0 ppb on Mar 2 17:00		Minimum Daily Average: 0.1 ppb on Mar 19		Hours of Data: 708																						
Maximum Diurnal Average: 0.2 ppb at hour 1		Minimum Diurnal Average: 0.1 ppb at hour 20		Hours of Missing Data: 36																						
Monthly Average: 0.16 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.2 P ₉₉ = 0.4		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	A	0	0	0	0	0	0.2	0.2
2-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
3-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	0.2
4-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	0.3
5-Mar	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	1	0	0	0	0	0	0	0	0.2	0.6
6-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
7-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
8-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	0.3
9-Mar	2	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.1
10-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	0.1
11-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	0.2
12-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	0.2
13-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
14-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	0.2
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	0.2	0.2
16-Mar	0	0	0	A	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
17-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	0.2	0.4
18-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
19-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	0.1	0.2
20-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
21-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	0.2
22-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
23-Mar	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.7
24-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	0.3
25-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	0.2
26-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
27-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	0.3
28-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
29-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	0.2
30-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
31-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	0.3
		0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average
		2.1	1.0	0.2	0.3	0.3	0.4	0.7	0.5	0.4	0.4	0.5	0.3	0.4	0.3	0.3	0.3	0.6	0.3	0.3	0.2	0.3	0.2	0.2	0.3	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

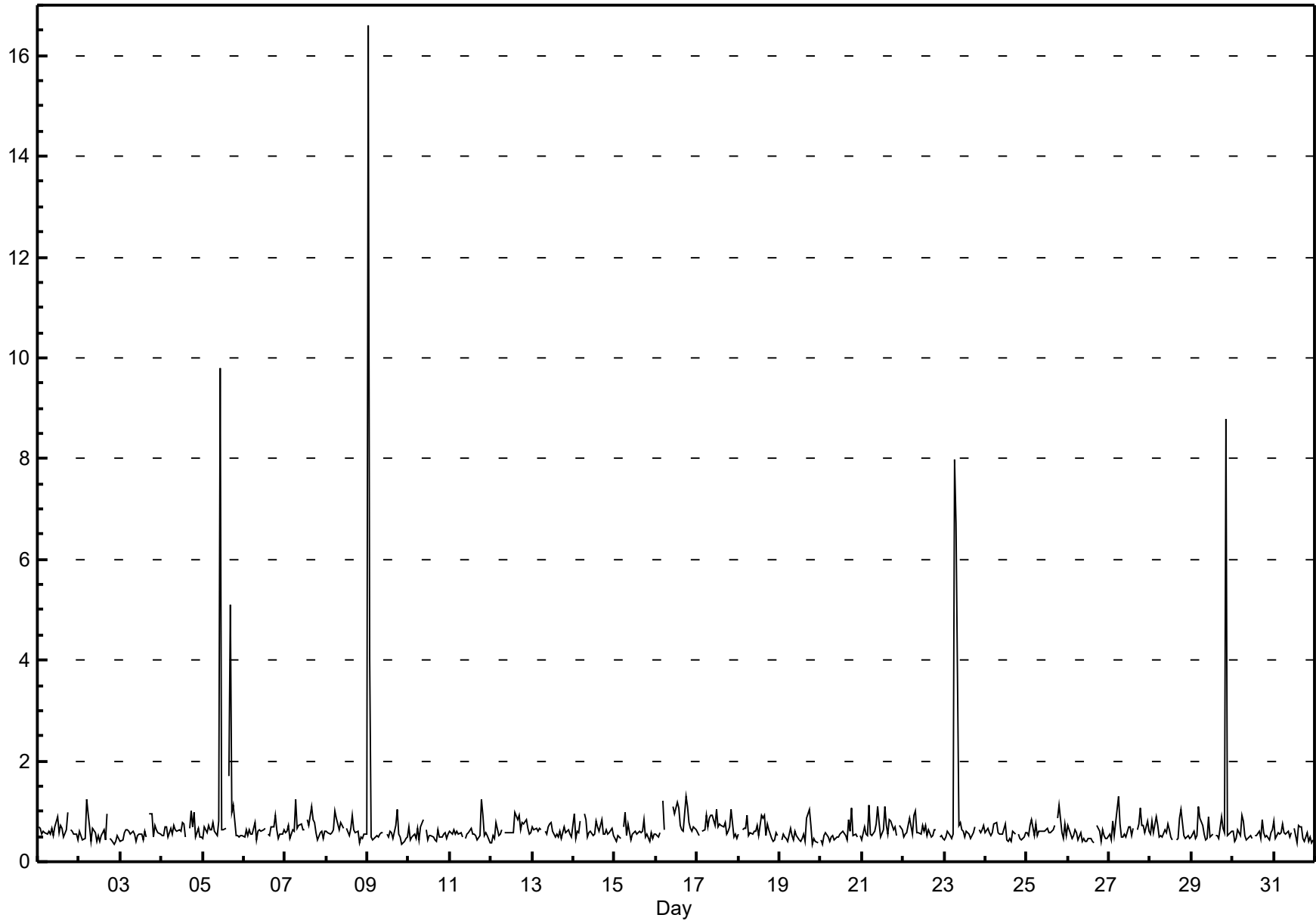


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

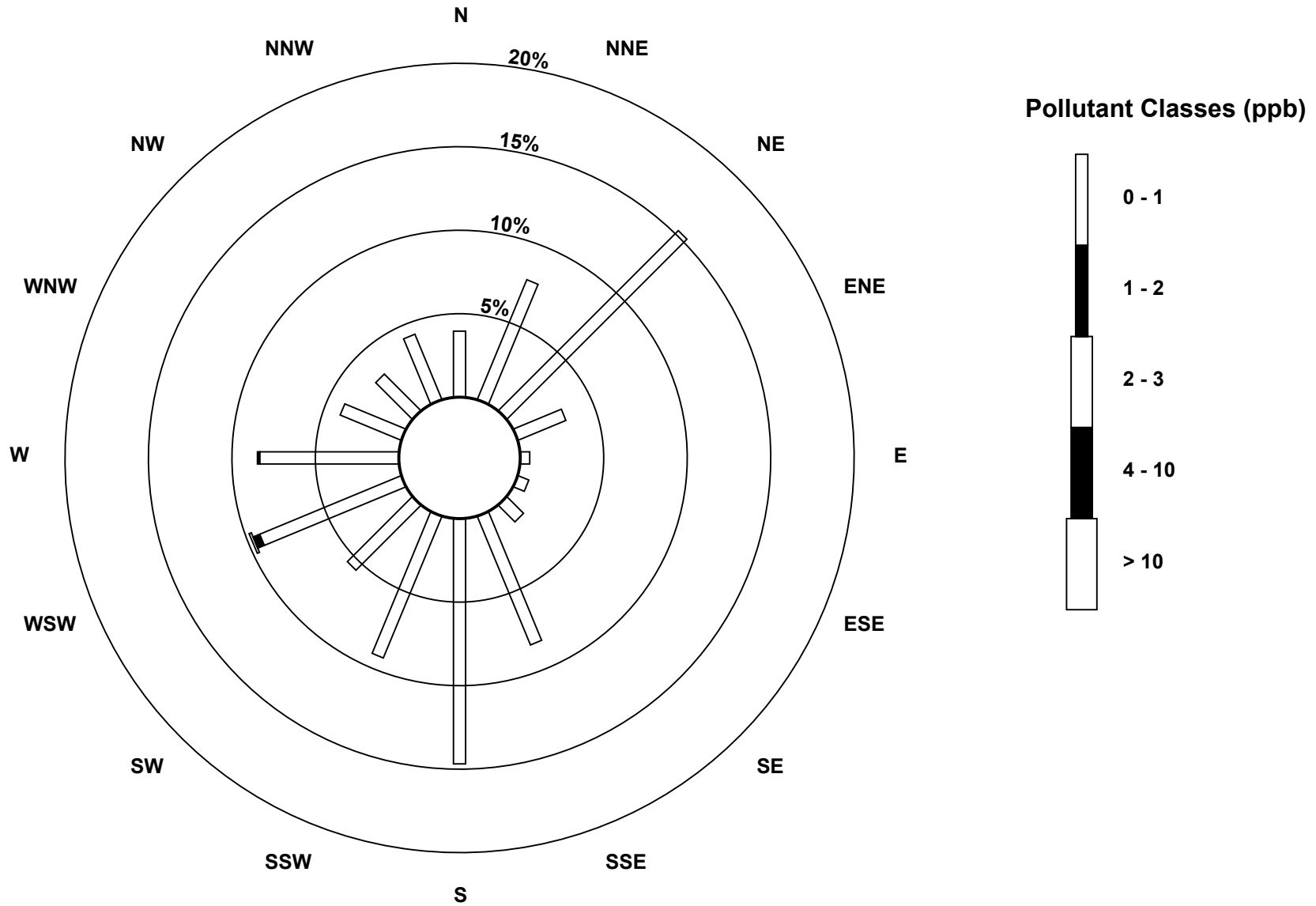
Portable Rycroft - March 2018

Maximum Value: 16.6 ppb on Mar 9 01:00		Maximum Daily Average: 1.4 ppb on Mar 9		Hours in Service: 744																						
Minimum Value: 0 ppb on Mar 2 21:00		Minimum Daily Average: 0.5 ppb on Mar 26		Hours of Data: 708																						
Maximum Diurnal Average: 1.1 ppb at hour 1		Minimum Diurnal Average: 0.5 ppb at hour 22		Hours of Missing Data: 36																						
Monthly Average: 0.69 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.9 P ₉₉ = 1.7		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	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0.6	1.0
2-Mar	1	1	0	0	1	1	1	0	1	1	0	1	0	1	1	0	1	A	0	0	0	0	1	0	0.6	1.2
3-Mar	0	0	1	1	1	1	1	1	1	0	1	1	1	0	1	0	A	1	1	0	1	1	1	1	0.6	1.0
4-Mar	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	0	0.6	1.0
5-Mar	0	1	1	1	1	1	1	1	1	1	10	1	1	1	A	2	5	1	1	1	1	0	1	1	1.3	9.8
6-Mar	0	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	0.6	0.9
7-Mar	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	0	1	0.7	1.2
8-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0	1	1	0.6	1.0
9-Mar	17	4	0	0	0	1	1	1	1	1	A	1	0	1	1	0	1	1	1	0	0	0	0	1	1.4	16.6
10-Mar	1	0	0	1	0	1	0	1	1	A	1	0	1	1	0	0	0	1	1	0	1	1	0	1	0.5	0.8
11-Mar	1	1	1	1	1	1	1	0	A	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0.6	1.2
12-Mar	0	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
13-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	0.6	0.8
14-Mar	1	0	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
15-Mar	0	0	1	0	A	1	1	1	1	0	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0.6	1.0
16-Mar	1	1	1	A	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
17-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0.7	1.0
18-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0.6	0.9
19-Mar	A	0	1	0	0	0	0	1	1	0	1	0	0	0	1	0	1	1	1	0	0	0	0	1	0.5	1.0
20-Mar	0	0	1	1	0	0	0	1	0	0	0	1	1	1	1	0	1	1	1	1	1	1	A	1	0.5	1.1
21-Mar	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.1
22-Mar	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	1	0	0.6	1.0
23-Mar	0	0	1	1	0	1	8	7	1	1	1	1	0	1	1	0	1	1	1	A	1	1	1	1	1.2	8.0
24-Mar	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	1	A	1	0	0	1	1	0.6	0.8
25-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	1	0.6	1.1
26-Mar	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0	A	1	1	1	0	1	1	0	0	0.5	0.7
27-Mar	1	0	1	1	1	1	1	0	0	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	1.3
28-Mar	1	1	1	1	1	0	1	0	1	1	1	0	0	1	A	0	0	1	1	1	0	1	1	0	0.6	1.0
29-Mar	0	1	0	1	1	1	1	1	0	0	1	0	0	1	A	1	0	0	1	1	1	9	1	1	1.0	8.8
30-Mar	1	0	0	1	1	1	1	1	0	0	1	0	A	1	1	1	0	1	1	1	1	0	1	1	0.6	0.9
31-Mar	1	0	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	0	0	1	0	0	0	0	0.6	0.8
		1.1	0.7	0.6	0.6	0.7	0.7	0.9	0.8	0.6	0.6	0.9	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.7	0.6	0.8	0.5	0.5	0.5	Diurnal Average
		16.6	4.0	0.8	0.9	1.2	1.3	8.0	6.7	0.9	1.1	9.8	1.0	1.2	1.1	1.0	1.7	5.1	1.3	1.2	1.1	8.8	0.7	0.8	0.7	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								



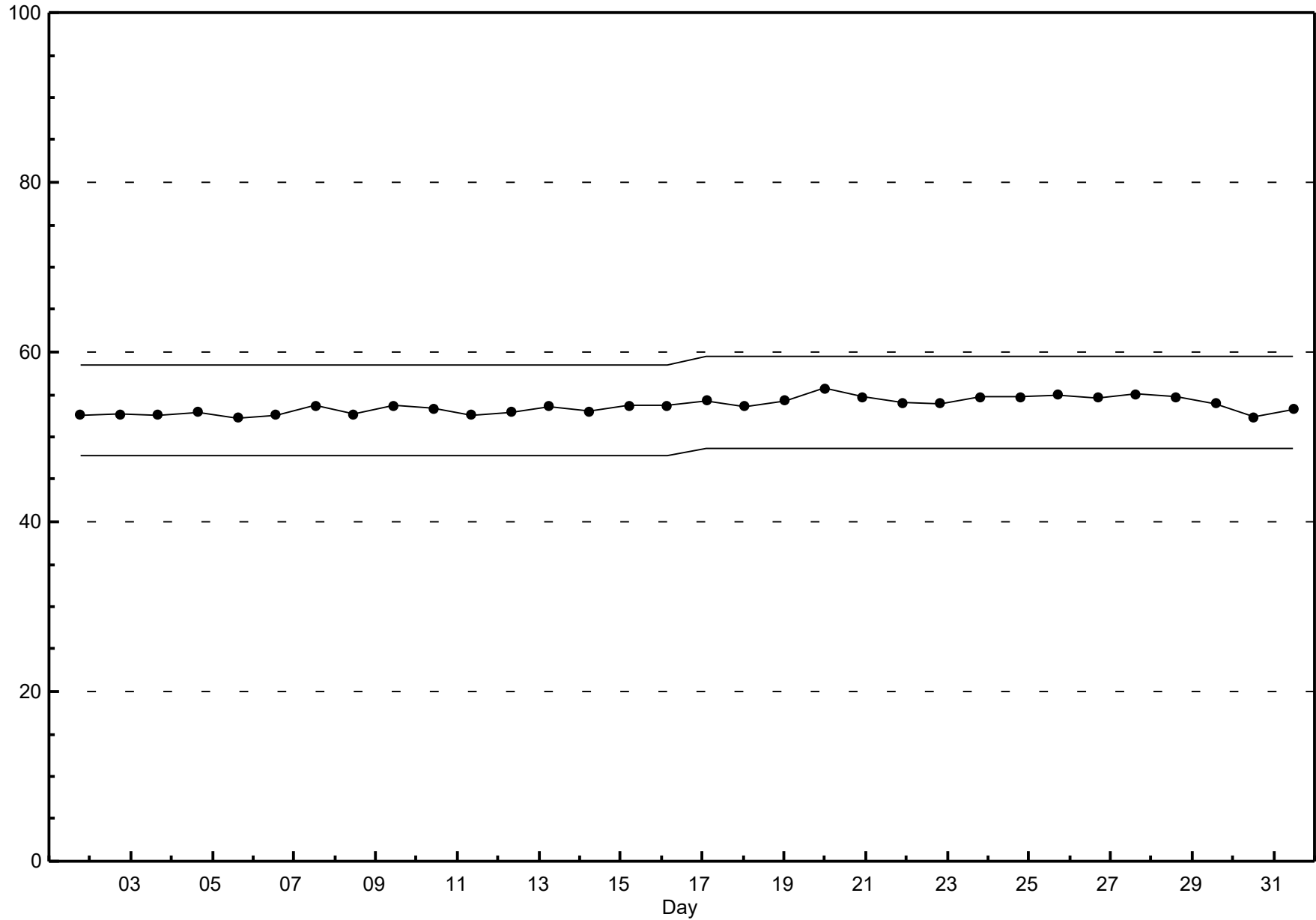
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Portable Rycroft - March 2018



Span Responses

Total Reduced Sulphur (TRS)
Portable Rycroft - March 2018



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Portable Rycroft - March 2018

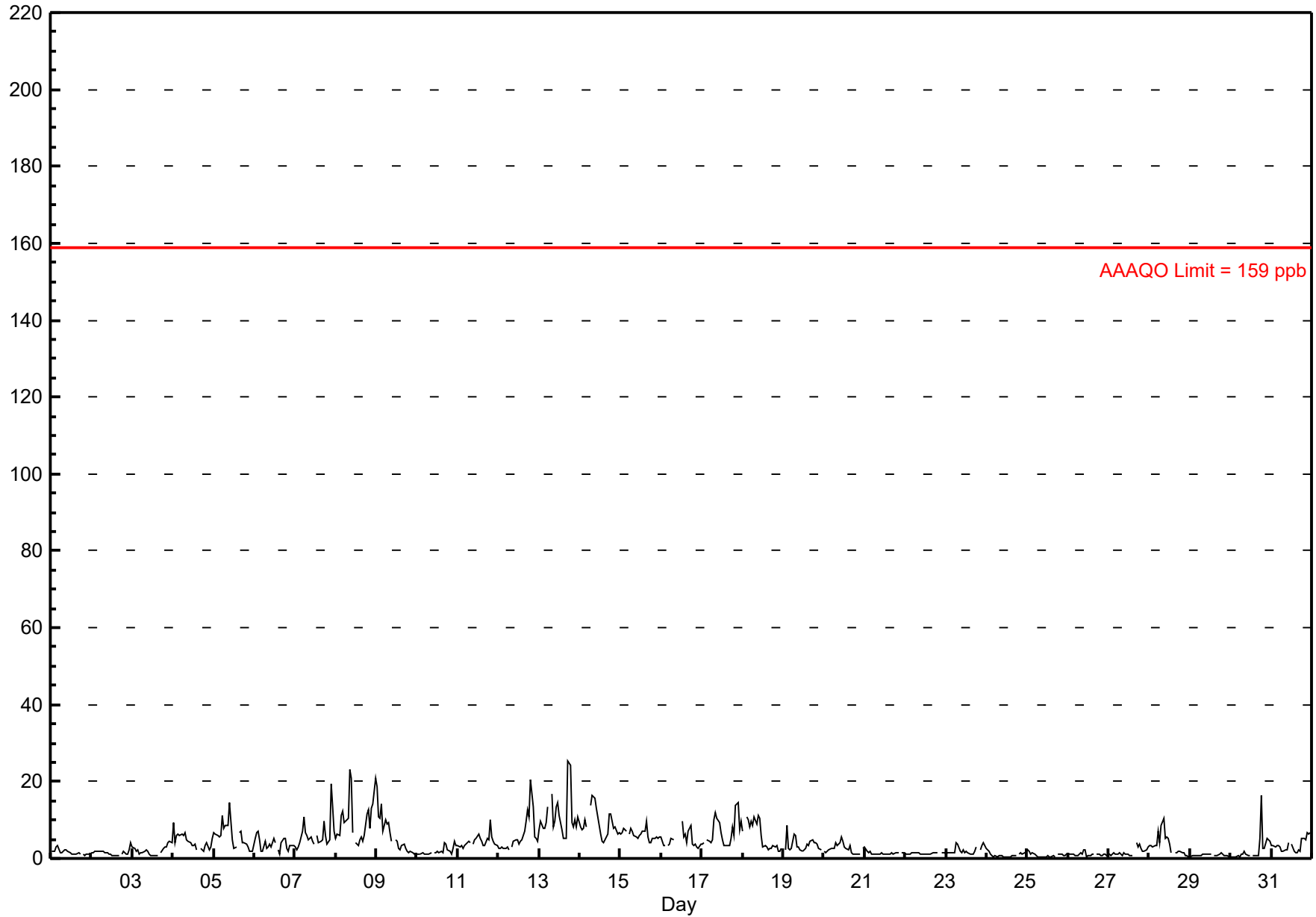
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 25.4 ppb on Mar 13 18:00	Maximum Daily Average: 10.8 ppb on Mar 13		Hours of Data:	708
Minimum Value: 0 ppb on Mar 30 02:00	Minimum Daily Average: 0.9 ppb on Mar 25		Hours of Missing Data:	36
Maximum Diurnal Average: 5.2 ppb at hour 19	Minimum Diurnal Average: 2.6 ppb at hour 15		Hours of Calibration:	36
Monthly Average: 3.96 ppb	Percentiles: P ₁ = 0.4 P ₁₀ = 0.9 Q ₁ = 1.3 Median = 2.8 Q ₃ = 5.3 P ₉₀ = 9.0 P ₉₉ = 18.5		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	2	2	2	3	3	1	1	2	2	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1.6	3.2	
2-Mar	1	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	A	1	2	1	1	2	4	1.5	4.2	
3-Mar	3	2	2	2	1	1	2	2	2	2	1	1	1	1	1	1	A	1	3	3	3	4	5	4	2.1	4.6	
4-Mar	9	4	6	6	6	6	6	7	5	5	4	3	3	4	2	A	3	2	2	3	4	2	3	5	4.4	9.4	
5-Mar	7	6	6	6	6	11	8	9	8	14	10	5	2	3	A	7	7	4	4	4	3	2	2	2	5.9	14.4	
6-Mar	5	7	7	5	2	2	5	3	3	4	3	5	4	A	2	1	4	5	5	3	2	3	3	3	3.8	7.1	
7-Mar	3	2	3	4	7	11	7	6	5	6	5	4	A	6	4	5	5	10	6	4	5	19	14	7	6.3	19.4	
8-Mar	5	6	6	11	12	9	10	10	23	21	7	A	4	3	5	6	5	6	12	13	8	13	14	21	10.0	23.1	
9-Mar	19	11	11	14	7	10	9	9	7	5	A	5	5	3	2	3	4	2	2	2	2	1	1	1	5.8	18.6	
10-Mar	1	1	1	1	1	1	1	1	2	A	2	1	2	2	2	2	4	4	2	2	1	3	4	4	1.9	4.3	
11-Mar	3	3	4	3	3	4	4	4	A	4	5	5	6	5	4	3	3	5	5	10	5	4	4	3	4.4	10.2	
12-Mar	3	3	3	3	3	3	2	A	3	5	5	5	4	4	5	7	10	13	11	21	14	6	5	4	6.0	20.6	
13-Mar	7	10	8	8	9	13	A	17	8	10	13	14	11	8	5	5	5	25	24	9	8	10	8	11	10.8	25.4	
14-Mar	8	7	8	10	8	A	14	16	16	16	13	9	6	4	4	5	6	11	12	10	8	8	6	7	9.3	16.3	
15-Mar	6	7	8	7	A	6	8	7	6	6	5	6	6	7	7	10	6	4	4	5	5	5	5	5	6.2	9.8	
16-Mar	6	4	3	A	3	4	5	5	C	C	C	C	10	5	6	4	7	8	4	3	4	3	3	4	4.8	9.6	
17-Mar	4	4	A	5	4	4	5	10	12	10	9	7	5	3	3	3	3	5	8	6	14	15	8	10	6.8	14.7	
18-Mar	7	A	11	10	8	10	9	11	9	11	10	6	3	3	3	2	3	2	3	3	3	2	2	3	5.8	11.2	
19-Mar	A	2	9	3	2	3	6	6	3	3	2	2	2	2	4	3	4	5	4	4	4	2	2	A	3.6	8.6	
20-Mar	2	2	2	2	2	3	3	4	3	4	6	4	3	2	2	3	1	1	1	1	1	1	A	3	2.5	5.7	
21-Mar	3	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	2	2	1.4	2.9	
22-Mar	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	1	A	2	2	1	1.3	1.6	
23-Mar	1	1	1	1	1	2	4	4	2	2	2	1	2	1	1	1	1	2	3	A	2	3	4	3	2.1	4.2	
24-Mar	3	2	1	1	0	1	0	1	1	1	0	1	0	0	1	1	1	1	A	1	2	1	1	2	0.9	2.6	
25-Mar	2	2	1	1	1	1	1	0	1	0	0	0	1	1	1	1	0	A	1	1	1	1	1	1	0.9	2.2	
26-Mar	1	1	1	1	1	1	1	2	1	2	2	0	1	1	1	1	A	1	1	1	1	1	1	1	1.0	2.3	
27-Mar	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	A	4	3	4	2	2	2	2	3	1.7	4.1	
28-Mar	3	3	3	3	4	7	4	8	11	5	6	5	4	1	A	2	2	2	2	1	1	1	1	0	3.5	10.6	
29-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0.9	1.4	
30-Mar	0	0	0	0	1	0	1	1	2	1	1	1	A	1	1	1	1	1	5	16	3	3	5	5	4	2.3	16.3
31-Mar	3	3	3	3	3	3	2	2	2	2	4	A	4	2	1	1	2	2	5	5	5	7	6	7	3.4	6.7	
	4.1	3.4	3.8	4.0	3.6	4.1	4.1	5.1	4.9	5.0	4.3	3.5	3.2	2.7	2.6	2.9	3.3	4.7	5.2	4.2	3.8	4.3	3.9	4.2	Diurnal Average		
	18.6	11.0	10.7	14.1	12.1	13.4	13.7	16.7	23.1	20.9	13.4	14.5	11.0	7.5	7.2	9.8	9.6	25.4	24.2	20.6	13.6	19.4	14.1	21.0	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 Rycroft - March 2018



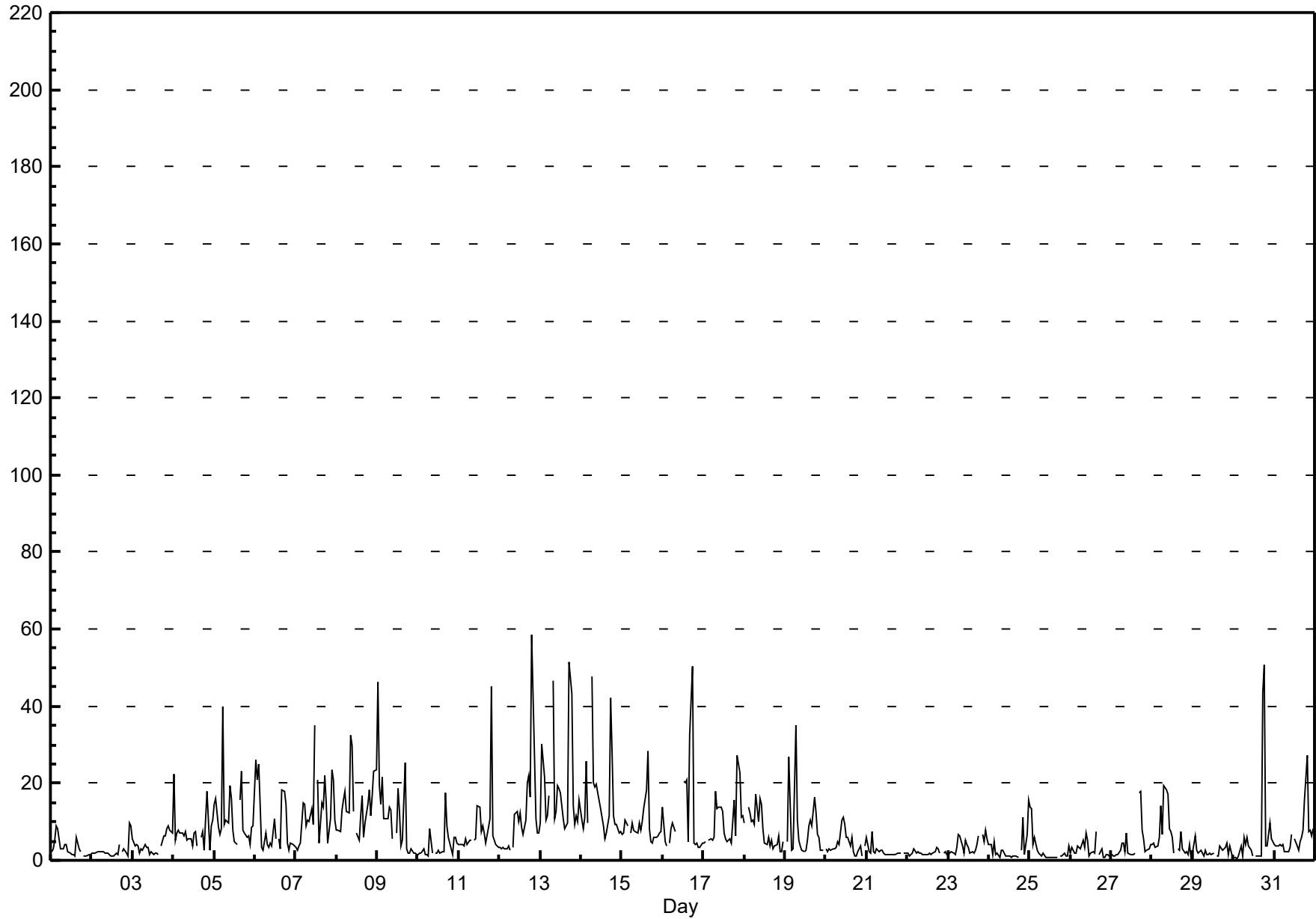
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb Portable Rycroft - March 2018

Maximum Value: 58.6 ppb on Mar 12 20:00		Maximum Daily Average: 18.2 ppb on Mar 13		Hours in Service: 744																							
Minimum Value: 1 ppb on Mar 30 03:00		Minimum Daily Average: 2.0 ppb on Mar 22		Hours of Data: 708																							
Maximum Diurnal Average: 13.2 ppb at hour 18		Minimum Diurnal Average: 5.0 ppb at hour 15		Hours of Missing Data: 36																							
Monthly Average: 7.35 ppb		Percentiles: P ₁ = 0.8 P ₁₀ = 1.5 Q ₁ = 2.2 Median = 4.5 Q ₃ = 9.4 P ₉₀ = 16.7 P ₉₉ = 45.0		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	3	5	9	8	3	3	3	4	4	2	2	1	1	1	6	3	2	A	1	1	1	1	2	3.1	9.1	
2-Mar	2	2	2	2	2	2	2	2	2	2	2	1	1	1	2	1	4	A	2	3	2	1	10	9	2.6	9.7	
3-Mar	6	4	4	4	2	3	3	4	3	3	2	2	1	2	2	1	A	4	6	6	8	9	8	7	4.1	9.0	
4-Mar	22	5	7	8	7	7	6	7	5	6	6	4	7	7	4	A	6	7	3	10	18	2	9	11	7.6	22.3	
5-Mar	14	16	9	7	8	40	9	10	10	19	16	8	5	4	A	16	23	8	7	6	6	4	9	9	11.4	39.8	
6-Mar	26	21	25	15	4	2	7	4	4	4	4	11	5	A	5	3	18	18	15	4	3	5	4	4	9.2	26.1	
7-Mar	3	2	4	4	15	14	9	11	10	13	9	35	A	21	5	15	14	22	15	5	11	23	21	10	12.7	35.0	
8-Mar	8	8	7	13	16	18	13	12	32	30	13	A	7	5	12	17	6	10	15	18	11	17	23	24	14.5	32.4	
9-Mar	46	19	14	22	11	11	11	14	13	6	A	7	19	13	4	5	25	3	2	2	3	2	2	2	11.0	46.3	
10-Mar	2	2	2	3	1	1	1	8	2	A	2	2	2	2	2	2	17	9	6	3	1	6	6	4	3.8	17.4	
11-Mar	4	4	4	4	5	4	5	5	A	5	6	14	14	8	9	7	4	9	11	45	6	5	4	4	8.1	45.1	
12-Mar	3	3	4	3	3	4	3	A	3	12	13	10	12	9	7	10	20	22	16	59	27	11	7	7	11.6	58.6	
13-Mar	10	30	22	10	11	17	A	47	11	13	19	19	17	11	8	9	10	52	43	14	9	12	10	16	18.2	51.6	
14-Mar	10	8	11	26	10	A	48	20	19	20	18	13	11	9	6	7	12	42	28	11	9	9	7	8	15.8	47.9	
15-Mar	7	7	10	9	A	7	10	8	7	7	10	8	10	13	18	28	8	5	5	6	6	6	7	7	9.1	28.3	
16-Mar	14	5	4	A	4	8	10	7	C	C	C	C	20	20	21	5	32	50	4	4	4	3	3	4	11.9	50.3	
17-Mar	4	5	A	5	6	5	6	18	13	14	14	13	7	5	5	6	5	10	16	6	27	23	11	12	10.2	27.1	
18-Mar	10	A	14	12	10	10	9	17	10	16	15	8	5	4	6	4	5	3	4	4	6	2	2	5	7.9	17.0	
19-Mar	A	5	27	15	3	3	35	10	5	4	3	2	3	5	9	11	9	17	12	7	6	3	3	A	8.8	35.2	
20-Mar	3	2	3	3	3	3	3	5	4	10	11	9	6	6	4	6	2	1	1	2	4	1	A	4	4.2	11.3	
21-Mar	6	2	2	7	2	2	3	2	3	2	2	2	1	2	2	2	2	2	2	2	2	2	A	2	2	2.3	7.3
22-Mar	2	1	2	2	3	2	2	2	2	1	2	2	2	1	2	2	2	3	3	2	A	2	2	2	2	2.0	3.5
23-Mar	2	2	2	2	2	3	7	6	4	2	5	4	3	2	2	2	3	4	6	A	7	5	8	6	3.8	8.0	
24-Mar	4	4	2	5	2	2	1	2	2	2	1	1	1	1	1	1	1	1	A	2	11	2	7	16	3.1	15.7	
25-Mar	14	14	4	6	3	2	1	1	2	1	1	1	1	1	1	1	1	A	1	1	2	1	1	4	2.7	13.8	
26-Mar	2	3	2	2	4	3	3	5	3	7	5	1	2	2	2	7	A	2	3	1	1	1	1	1	2.8	7.4	
27-Mar	2	1	1	2	2	3	4	4	2	7	2	1	2	1	2	A	18	18	8	6	2	3	3	4	4.2	18.0	
28-Mar	4	4	3	4	6	14	7	20	18	17	8	8	6	2	A	3	3	7	3	2	2	2	4	1	6.4	19.5	
29-Mar	2	6	3	2	2	3	1	3	2	2	2	2	2	A	1	1	4	3	3	3	5	1	4	1	2.4	6.4	
30-Mar	1	1	1	1	4	1	6	4	6	4	3	1	A	1	1	1	1	43	51	4	4	10	6	5	6.9	50.7	
31-Mar	4	4	4	4	4	4	2	2	2	3	7	A	6	4	3	5	6	8	16	27	8	8	7	8	6.3	27.1	
7.9		6.5	6.8	6.9	5.4	6.8	7.7	8.8	7.1	8.2	6.9	6.8	6.2	5.7	5.0	6.3	9.1	13.2	10.5	8.9	7.1	6.0	6.4	6.5	Diurnal Average		
46.3		30.1	26.9	25.6	15.7	39.8	47.9	46.8	32.4	29.8	19.3	35.0	20.5	20.8	21.0	28.3	32.5	51.6	50.7	58.6	27.1	23.4	23.1	23.5	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									

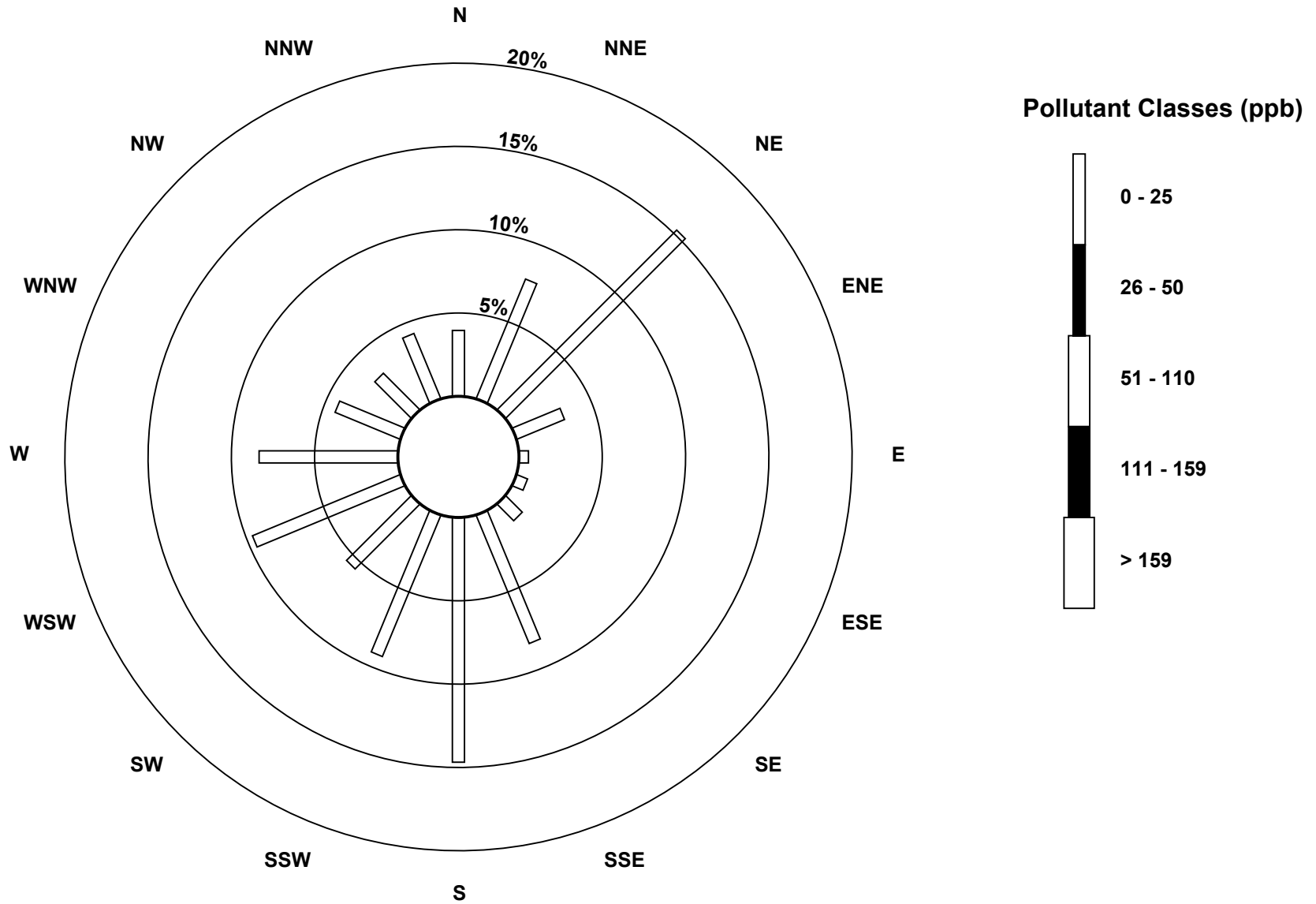
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Portable Rycroft - March 2018



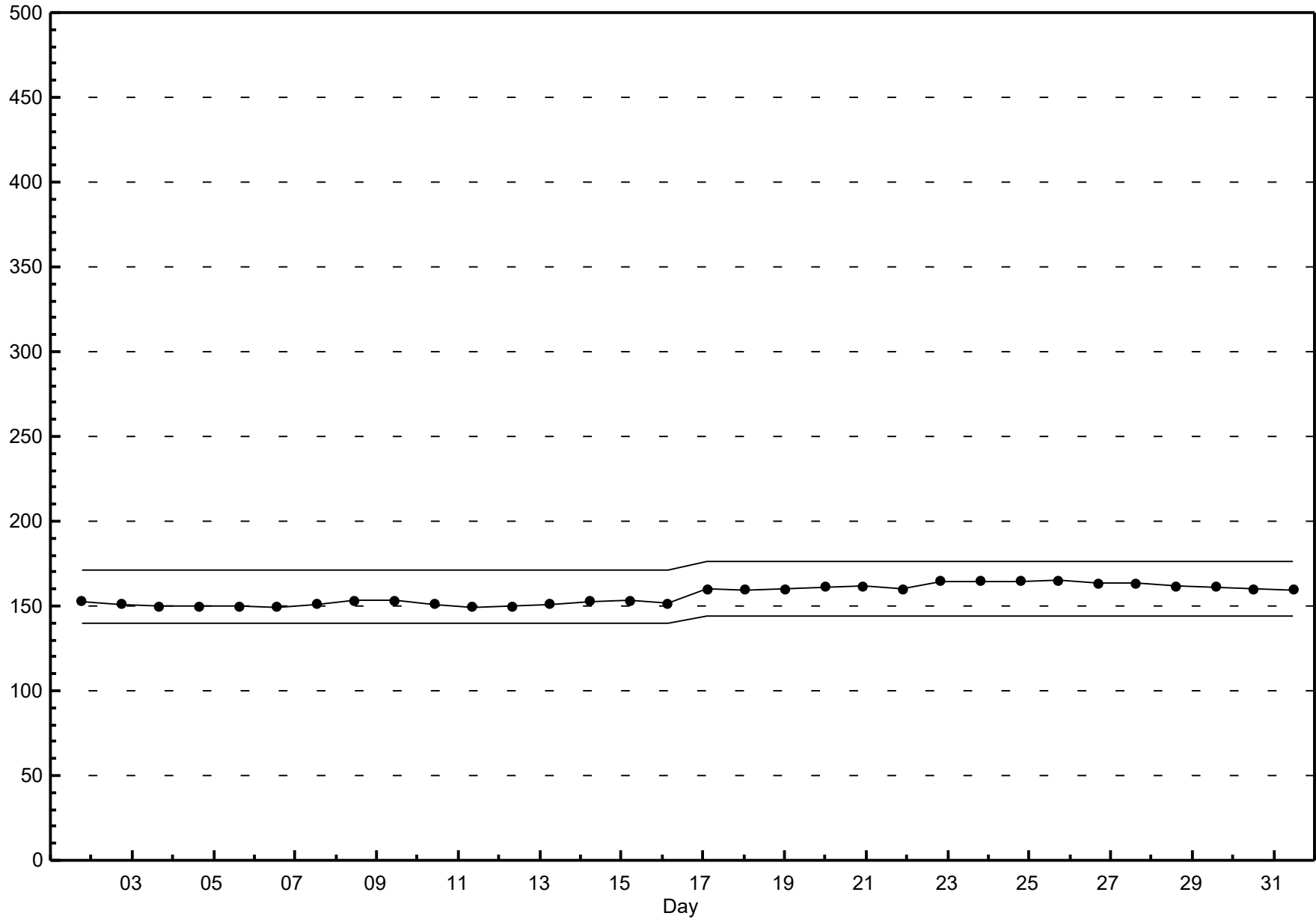
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Portable Rycroft - March 2018



Span Responses

Nitrogen Dioxide (NO₂)
Portable Rycroft - March 2018



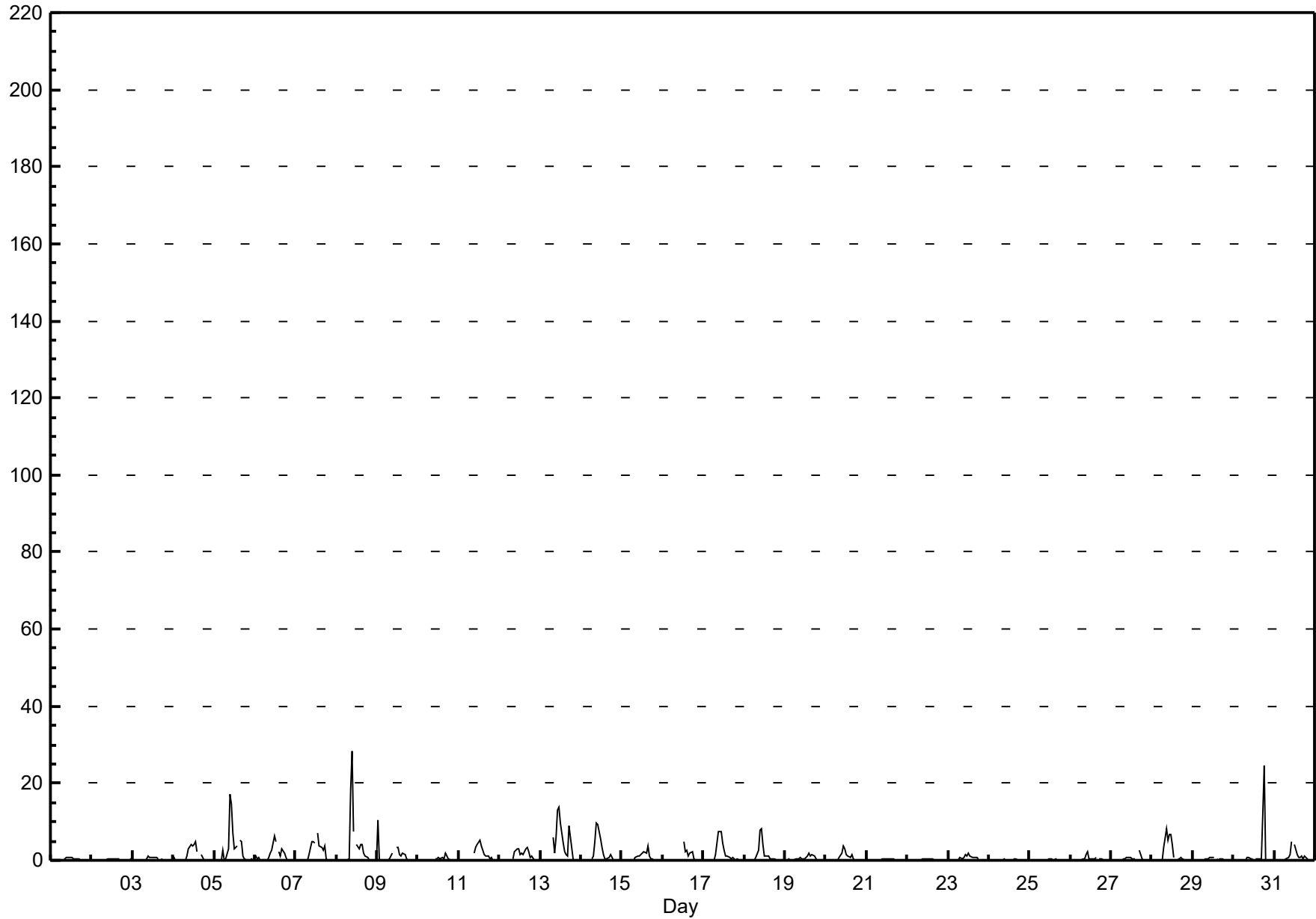
Hourly Averages

Nitrogen Oxide (NO) - ppb Portable Rycroft - March 2018

Maximum Value: 28.2 ppb on Mar 8 10:00		Maximum Daily Average: 3.2 ppb on Mar 8		Hours in Service: 744																						
Minimum Value: 0 ppb on Mar 1 01:00		Minimum Daily Average: 0.1 ppb on Mar 24		Hours of Data: 708																						
Maximum Diurnal Average: 3.7 ppb at hour 10		Minimum Diurnal Average: 0.0 ppb at hour 5		Hours of Missing Data: 36																						
Monthly Average: 0.98 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.7 P ₉₀ = 2.9 P ₉₉ = 11.9		Hours of Calibration: 36																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0.2	0.8
2-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	0.5
3-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0.3	1.0
4-Mar	1	0	0	0	0	0	0	0	1	3	4	4	4	5	2	A	1	1	0	0	0	0	0	0	1.1	4.9
5-Mar	0	0	0	0	0	3	0	0	3	17	14	7	3	4	A	5	5	1	0	0	0	0	0	2.7	17.3	
6-Mar	1	0	1	0	0	0	0	0	1	2	3	6	5	A	2	1	3	2	1	0	0	0	0	1.2	6.3	
7-Mar	0	0	0	0	0	0	0	0	1	5	5	5	A	7	4	3	2	4	0	0	0	0	0	1.6	7.1	
8-Mar	0	0	0	0	0	0	0	0	18	28	7	A	4	3	4	4	2	1	1	0	0	0	0	3.2	28.2	
9-Mar	11	0	0	0	0	0	0	0	1	2	A	3	3	1	1	2	1	0	0	0	0	0	0	1.2	10.6	
10-Mar	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	0	2	1	0	0	0	0	0	0.3	1.7	
11-Mar	0	0	0	0	0	0	0	0	A	2	3	4	5	4	3	1	1	1	0	1	0	0	0	1.1	5.3	
12-Mar	0	0	0	0	0	0	0	A	0	2	3	3	2	2	2	3	3	2	1	1	0	0	0	1.1	3.3	
13-Mar	0	0	0	0	0	0	A	6	2	6	13	14	10	4	2	2	1	9	3	0	0	0	0	3.1	13.7	
14-Mar	0	0	0	0	0	A	0	1	5	10	9	6	3	1	0	0	1	2	1	0	0	0	0	1.7	9.5	
15-Mar	0	0	0	0	A	0	0	0	1	1	1	2	2	2	4	1	0	0	0	0	0	0	0	0.7	3.7	
16-Mar	0	0	0	A	0	0	0	0	C	C	C	C	5	2	3	1	2	2	0	0	0	0	0	0.8	5.0	
17-Mar	0	0	A	0	0	0	0	2	5	7	7	4	3	1	1	1	0	1	1	0	0	0	0	1.5	7.4	
18-Mar	0	A	0	0	0	0	0	1	3	8	8	4	1	1	1	1	0	0	0	0	0	0	0	1.3	8.4	
19-Mar	A	0	0	0	0	0	0	0	0	1	1	0	1	1	2	1	1	1	0	0	0	0	0	0.5	1.7	
20-Mar	0	0	0	0	0	0	0	0	1	2	4	3	2	1	1	1	0	0	0	0	0	0	A	0	0.7	3.8
21-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.4	
22-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0.1	0.5	
23-Mar	0	0	0	0	0	0	0	1	0	1	1	1	2	1	1	1	1	1	1	A	0	0	0	0.5	1.8	
24-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.3	
25-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3	
26-Mar	0	0	0	0	0	0	0	0	0	1	2	0	0	0	1	1	A	0	0	0	0	0	0	0.3	2.1	
27-Mar	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	A	2	1	1	0	0	0	0	0.4	2.5	
28-Mar	0	0	0	0	0	0	0	3	8	5	7	7	4	1	A	0	0	1	0	0	0	0	0	1.6	8.4	
29-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	0	0	0	0	0	0	0	0	0.2	0.8	
30-Mar	0	0	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	12	25	0	0	0	1.8	24.8	
31-Mar	0	0	0	0	0	0	0	0	1	2	5	A	4	1	1	1	1	1	1	0	0	0	0	0.8	4.8	
		0.4	0.0	0.1	0.0	0.0	0.1	0.0	0.6	1.9	3.7	3.6	2.8	2.3	1.6	1.2	1.2	1.2	1.6	1.3	0.2	0.1	0.0	0.0	Diurnal Average	
		10.6	0.4	0.7	0.1	0.1	2.5	0.5	5.9	18.4	28.2	14.4	13.7	9.9	7.1	4.1	5.1	4.8	12.0	24.8	1.2	0.3	0.1	0.3	0.2	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

Hourly Averages

Nitrogen Oxide (NO) - ppb
Portable Rycroft - March 2018



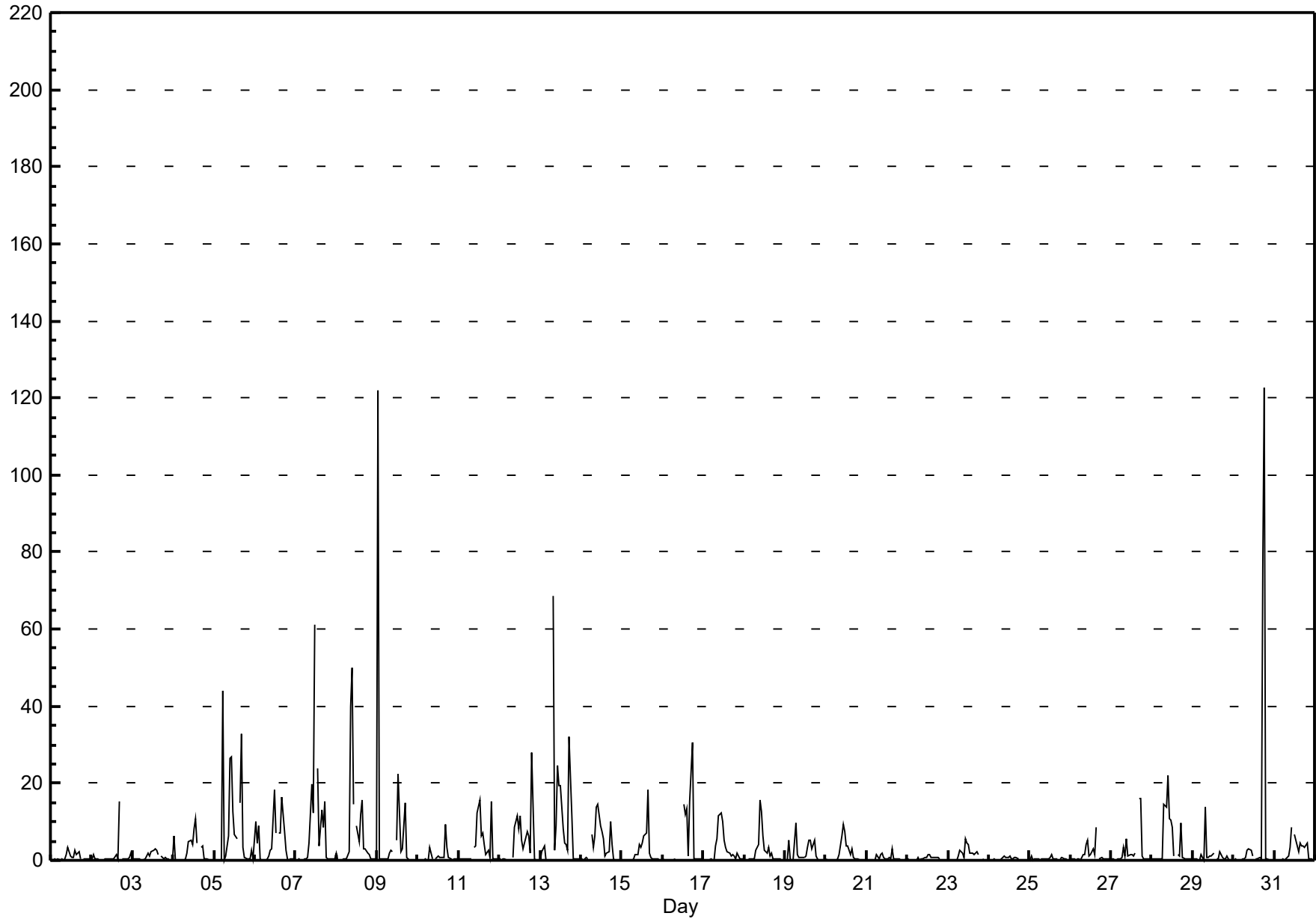
Hourly Maximums

Nitrogen Oxide (NO) - ppb Portable Rycroft - March 2018

Maximum Value: 122.8 ppb on Mar 30 19:00		Maximum Daily Average: 9.4 ppb on Mar 13		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 24 07:00		Minimum Daily Average: 0.4 ppb on Mar 25		Hours of Data: 708																							
Maximum Diurnal Average: 8.2 ppb at hour 18		Minimum Diurnal Average: 0.2 ppb at hour 5		Hours of Missing Data: 36																							
Monthly Average: 3.28 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 2.6 P ₉₀ = 8.7 P ₉₉ = 39.5		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	2	3	1	1	1	3	2	2	0	A	0	0	0	0	0	0.7	3.3	
2-Mar	0	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	15	A	0	0	0	0	1	2	1.1	15.2	
3-Mar	0	0	0	0	0	0	0	0	1	2	1	2	3	3	3	2	A	1	0	1	0	0	0	0	0.9	3.0	
4-Mar	7	0	0	0	0	0	0	1	2	5	5	4	8	11	4	A	3	4	0	0	1	0	0	0	2.4	10.9	
5-Mar	0	0	0	0	0	44	0	1	6	26	27	13	7	6	A	15	33	3	1	0	0	0	2	0	8.1	44.2	
6-Mar	10	4	9	0	0	0	0	0	1	3	3	18	7	A	7	7	16	7	3	0	0	0	0	0	4.3	18.3	
7-Mar	0	0	0	0	0	0	0	1	4	20	12	61	A	24	4	13	9	15	1	0	0	0	0	0	7.2	61.3	
8-Mar	2	0	0	0	0	0	0	2	40	50	14	A	9	5	12	16	3	3	2	2	0	0	0	0	7.0	49.9	
9-Mar	122	0	0	0	0	0	0	2	3	2	A	5	22	12	2	3	15	1	0	0	0	0	0	0	8.4	121.9	
10-Mar	0	0	0	0	0	0	0	4	0	A	1	1	1	1	1	1	9	3	1	0	0	0	0	0	1.1	9.2	
11-Mar	0	0	0	0	0	0	0	0	A	3	4	12	16	6	7	4	2	3	1	15	0	0	0	0	3.3	15.6	
12-Mar	0	0	0	0	0	0	0	A	1	9	12	8	12	5	3	6	7	6	2	28	0	0	0	0	4.4	27.9	
13-Mar	0	2	4	0	0	0	A	69	3	9	25	19	20	8	5	4	3	32	11	0	0	0	0	0	9.4	68.6	
14-Mar	0	0	0	1	0	A	7	3	6	14	15	9	7	6	1	2	2	10	4	0	0	0	0	0	3.9	14.7	
15-Mar	0	0	0	0	A	0	0	0	0	1	2	4	3	5	6	7	18	2	1	0	0	0	0	0	2.3	18.4	
16-Mar	0	0	0	A	0	0	0	0	C	C	C	C	15	12	13	1	15	31	0	0	0	0	0	0	4.7	30.5	
17-Mar	0	0	A	0	0	0	0	4	6	12	12	10	5	3	2	2	1	2	1	0	2	0	0	0	2.8	12.3	
18-Mar	0	A	0	0	0	0	0	3	4	16	13	6	3	2	4	1	2	0	0	0	0	0	0	0	2.4	15.5	
19-Mar	A	0	5	0	0	0	10	2	1	1	1	1	1	3	5	5	3	5	1	0	0	0	0	0	2.1	9.6	
20-Mar	0	0	0	0	0	0	0	1	1	6	9	7	4	4	2	3	1	0	0	0	0	0	A	0	1.7	9.1	
21-Mar	0	0	0	0	0	0	2	0	1	2	1	1	0	1	0	3	0	0	0	0	0	0	A	0	0.6	2.9	
22-Mar	0	0	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	1	1	0	A	0	0	0	0.5	1.4	
23-Mar	0	0	0	0	0	0	1	3	2	1	5	4	4	2	2	2	2	2	1	A	0	0	0	0	1.4	5.4	
24-Mar	0	0	0	1	0	0	0	0	1	1	1	1	1	0	0	1	1	0	A	0	0	0	0	0	0.4	1.2	
25-Mar	0	1	0	0	0	0	0	0	0	0	0	0	1	2	0	1	0	A	0	1	0	0	0	0	0.4	1.6	
26-Mar	0	0	0	0	0	0	0	1	1	4	5	1	1	3	1	9	A	1	1	0	0	0	0	0	1.4	8.6	
27-Mar	0	0	0	0	0	0	1	3	1	5	1	1	2	1	2	A	16	16	1	0	0	0	0	0	2.3	16.1	
28-Mar	0	0	0	0	0	0	0	15	14	22	11	10	9	1	A	1	1	10	1	0	0	0	0	0	4.2	21.9	
29-Mar	0	0	0	0	0	1	0	14	1	1	1	1	2	A	0	0	2	1	0	0	1	1	0	0	1.2	13.9	
30-Mar	0	0	0	0	0	0	0	1	3	3	3	1	A	1	1	1	0	76	123	0	0	0	0	0	9.3	122.8	
31-Mar	0	0	0	0	0	0	0	0	1	3	9	A	7	4	2	4	4	4	3	4	0	0	0	0	2.1	8.5	
4.8		0.5	0.7	0.2	0.2	1.7	0.8	4.4	3.7	7.7	6.8	7.3	6.0	4.6	3.3	4.4	5.9	8.2	5.6	1.9	0.3	0.2	0.3	0.2	Diurnal Average		
121.9		4.4	8.8	0.8	0.3	44.2	9.6	68.6	40.0	49.9	27.0	61.3	22.4	23.9	13.4	18.4	32.9	75.6	122.8	27.9	1.8	0.5	2.4	1.7	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Portable Rycroft - March 2018

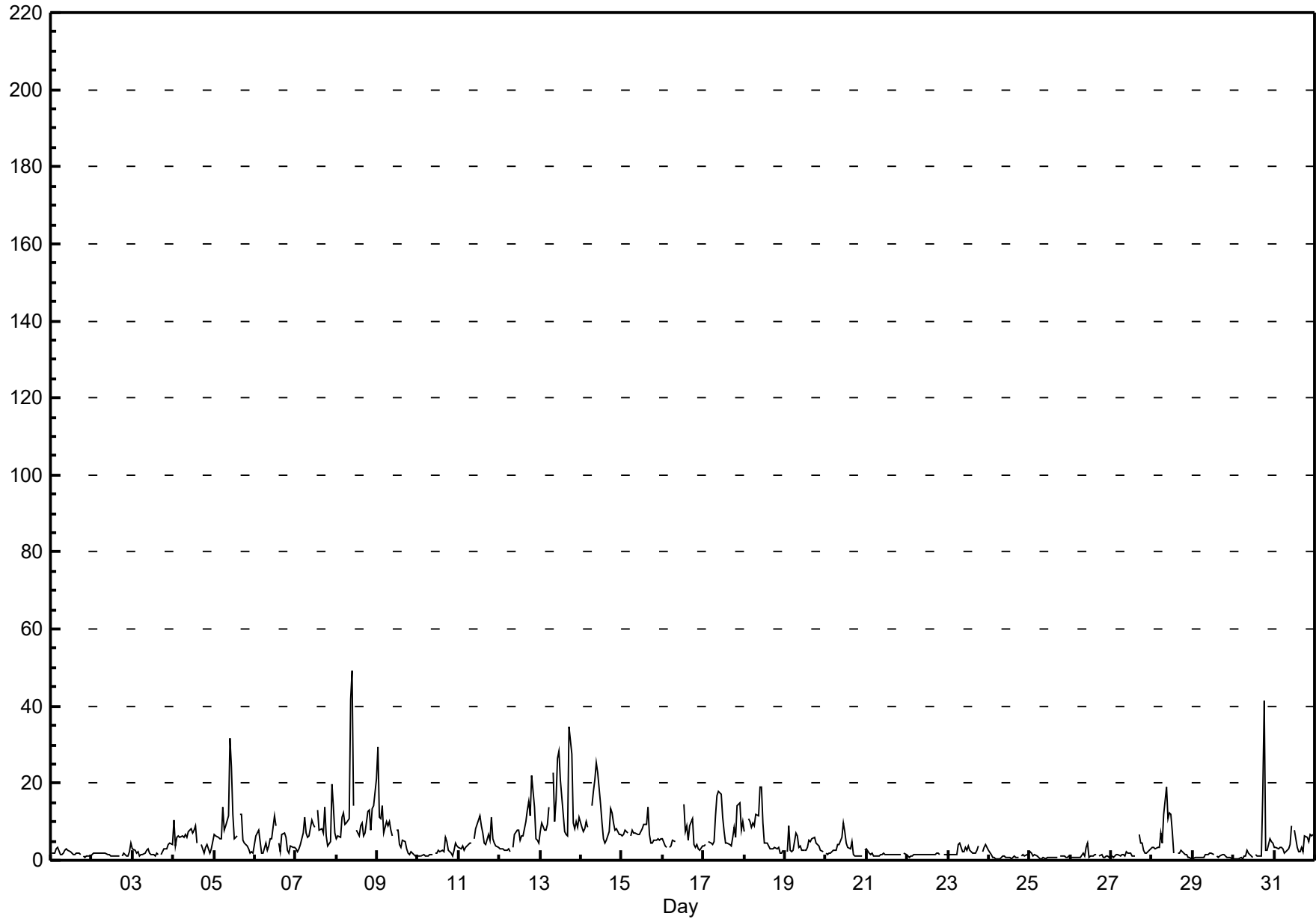


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Portable Rycroft - March 2018

Maximum Value: 49.3 ppb on Mar 8 10:00		Maximum Daily Average: 14.0 ppb on Mar 13		Hours in Service: 744																							
Minimum Value: 0 ppb on Mar 30 02:00		Minimum Daily Average: 0.9 ppb on Mar 25		Hours of Data: 708																							
Maximum Diurnal Average: 8.8 ppb at hour 10		Minimum Diurnal Average: 3.5 ppb at hour 2		Hours of Missing Data: 36																							
Monthly Average: 4.96 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 1.0 Q ₁ = 1.5 Median = 3.1 Q ₃ = 6.7 P ₉₀ = 10.9 P ₉₉ = 27.6		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	2	2	3	3	2	1	2	3	3	3	2	2	2	2	2	2	1	A	1	1	1	1	1	1.8	3.2	
2-Mar	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	A	1	2	1	1	2	4	1.6	4.4	
3-Mar	3	3	2	2	1	1	2	2	2	3	2	2	1	1	2	1	A	2	3	3	3	4	5	4	2.3	4.5	
4-Mar	10	4	6	6	6	6	6	7	6	7	8	7	8	9	5	A	4	3	2	3	4	2	3	5	5.5	10.4	
5-Mar	7	6	6	6	6	14	8	9	12	32	24	12	6	6	A	12	12	5	5	4	3	2	2	2	8.6	31.9	
6-Mar	6	7	8	5	2	2	5	3	4	6	6	12	9	A	4	2	7	7	6	3	2	4	3	3	4.9	11.6	
7-Mar	3	2	3	4	7	11	7	6	7	10	9	8	A	13	8	8	7	14	6	4	5	20	14	7	8.0	19.8	
8-Mar	5	6	6	11	12	9	10	11	42	49	14	A	8	6	9	10	6	7	13	13	8	13	14	21	13.3	49.3	
9-Mar	29	11	11	14	7	10	9	10	8	6	A	8	8	4	3	5	5	3	2	2	2	1	1	1	7.0	29.5	
10-Mar	1	1	1	1	1	1	1	1	2	A	2	2	2	2	3	2	6	5	3	2	1	3	4	4	2.2	5.8	
11-Mar	3	3	4	3	3	4	4	4	A	6	8	9	12	9	7	5	4	7	5	11	6	5	4	3	5.6	11.6	
12-Mar	3	3	3	3	3	3	2	A	3	7	8	8	5	6	6	10	13	15	12	22	14	6	5	4	7.2	22.2	
13-Mar	8	10	8	8	9	14	A	23	10	16	27	28	21	12	8	7	6	35	28	10	8	10	8	11	14.0	34.6	
14-Mar	8	8	8	10	8	A	14	18	21	25	23	15	10	6	5	5	7	13	12	10	8	8	7	7	11.1	25.4	
15-Mar	6	7	8	7	A	6	8	7	7	7	7	7	7	8	9	9	14	7	5	4	5	5	6	5	7.0	13.6	
16-Mar	6	4	3	A	3	4	5	5	C	C	C	C	15	8	9	5	9	11	4	3	4	3	3	4	5.6	14.7	
17-Mar	4	4	A	5	4	4	5	12	17	18	17	11	7	4	5	4	4	6	9	6	14	15	8	10	8.4	18.0	
18-Mar	7	A	11	10	8	10	9	12	12	19	19	10	4	4	4	3	3	3	3	3	3	2	2	3	7.2	19.1	
19-Mar	A	2	9	3	2	3	7	6	3	4	3	2	3	3	5	5	6	6	5	4	4	3	2	A	4.0	8.9	
20-Mar	2	2	2	2	2	3	3	4	4	6	10	8	5	3	3	5	2	1	1	1	1	1	A	3	3.1	9.6	
21-Mar	3	2	1	2	1	1	1	1	1	2	2	2	2	1	1	2	2	1	2	2	1	A	2	2	1.6	2.9	
22-Mar	1	1	1	1	1	2	2	1	2	1	1	1	1	2	1	2	2	2	2	1	A	2	2	1	1.4	1.8	
23-Mar	1	1	1	1	1	2	4	4	2	2	4	2	4	3	2	2	2	2	4	A	2	3	4	3	2.5	4.4	
24-Mar	3	2	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	1	1	2	1.0	2.6
25-Mar	2	2	1	1	1	1	1	0	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	2.2	
26-Mar	1	1	1	1	1	1	1	2	1	3	4	1	1	1	1	2	A	1	1	1	1	1	1	1	1.3	4.3	
27-Mar	1	1	1	1	1	1	2	1	1	2	2	2	1	1	1	A	7	4	4	3	2	2	2	3	2.1	6.6	
28-Mar	3	3	3	3	4	7	4	12	19	11	12	12	8	2	A	2	2	3	2	2	1	1	1	0	5.1	19.1	
29-Mar	1	1	1	1	1	1	1	1	1	1	2	2	2	A	1	1	1	1	1	1	1	1	1	0	1.0	1.8	
30-Mar	0	0	0	0	1	0	1	1	3	2	1	1	A	1	1	1	1	1	17	41	3	3	5	5	4	4.1	41.2
31-Mar	3	3	3	3	3	3	2	2	3	4	9	A	8	3	2	2	3	2	6	6	5	7	6	7	4.2	9.1	
		4.5	3.5	3.9	4.0	3.6	4.2	4.2	5.7	6.8	8.8	7.9	6.3	5.6	4.3	3.8	4.1	4.5	6.3	6.5	4.4	3.9	4.4	4.0	4.3	Diurnal Average	
		29.5	11.1	10.9	14.3	12.3	13.9	14.2	22.8	41.7	49.3	26.6	28.4	21.0	13.2	9.1	13.6	13.1	34.6	41.2	22.2	14.1	19.8	14.3	21.4	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Hourly Maximums

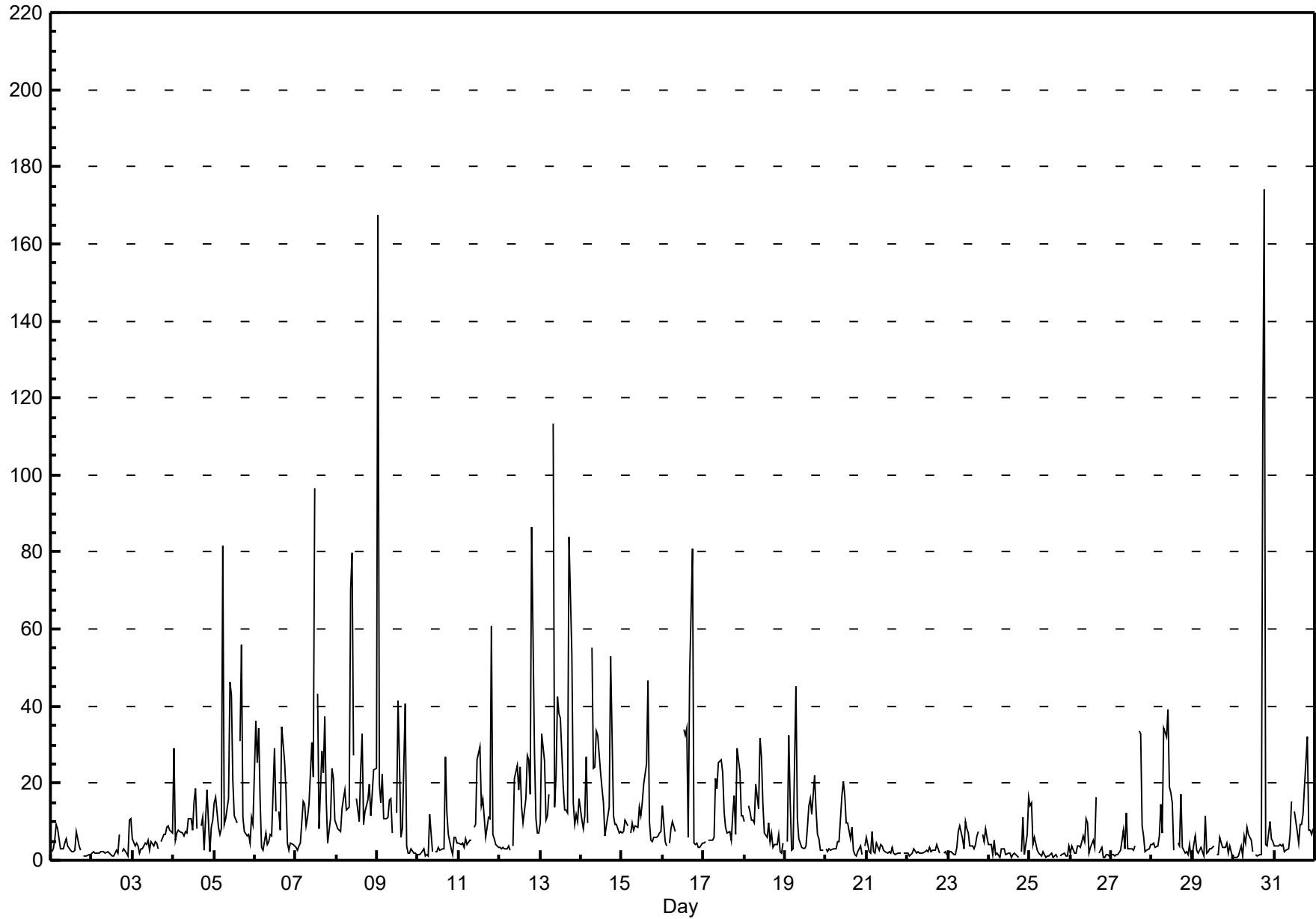
Oxides of Nitrogen (NO_x) - ppb

Portable Rycroft - March 2018

Maximum Value: 174.2 ppb on Mar 30 19:00		Maximum Daily Average: 27.4 ppb on Mar 13		Hours in Service: 744																						
Minimum Value: 1 ppb on Mar 24 07:00		Minimum Daily Average: 2.3 ppb on Mar 22		Hours of Data: 708																						
Maximum Diurnal Average: 21.1 ppb at hour 18		Minimum Diurnal Average: 5.4 ppb at hour 5		Hours of Missing Data: 36																						
Monthly Average: 10.47 ppb		Percentiles: P ₁ = 0.9 P ₁₀ = 1.7 Q ₁ = 2.7 Median = 5.4 Q ₃ = 11.5 P ₉₀ = 24.1 P ₉₉ = 81.5		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	3	5	9	8	3	3	3	5	6	4	3	2	2	3	7	4	3	A	1	1	1	1	2	3.5	9.2
2-Mar	2	2	2	2	2	2	2	2	2	2	2	2	1	1	3	2	7	A	2	3	2	1	10	11	2.9	10.9
3-Mar	6	4	4	4	2	3	3	4	4	5	3	5	4	5	5	3	A	5	7	7	9	9	8	7	4.9	9.1
4-Mar	29	5	7	8	7	7	6	7	7	11	11	8	15	19	8	A	9	11	3	10	18	2	9	10	10.0	29.2
5-Mar	15	16	9	7	8	82	9	11	16	46	43	20	11	10	A	31	56	11	8	6	7	4	11	9	19.4	81.5
6-Mar	36	25	34	15	4	2	7	4	5	7	6	29	13	A	13	8	35	26	18	5	3	4	4	4	13.3	36.3
7-Mar	3	3	4	4	15	15	9	11	14	30	22	97	A	43	8	28	23	37	16	4	11	24	21	10	19.7	96.5
8-Mar	9	8	8	13	16	18	13	14	70	80	27	A	16	10	24	33	9	13	16	20	12	17	24	24	21.4	79.7
9-Mar	168	20	15	22	11	11	11	16	16	7	A	12	41	25	6	8	41	4	2	2	3	2	2	2	19.4	167.6
10-Mar	1	2	2	3	1	1	1	12	2	A	2	2	3	3	3	3	27	12	7	3	1	6	6	4	4.7	26.7
11-Mar	4	4	4	4	6	4	5	5	A	8	9	26	29	14	16	11	6	11	11	61	7	6	4	4	11.3	60.9
12-Mar	3	3	3	3	3	4	3	A	4	21	25	18	24	14	10	16	27	26	17	87	27	11	7	7	15.8	86.6
13-Mar	10	33	26	10	12	17	A	113	14	22	43	38	37	19	13	13	12	84	54	15	9	12	10	16	27.4	113.4
14-Mar	11	8	11	27	10	A	55	24	24	33	32	23	19	15	7	9	14	53	33	12	9	9	7	8	19.7	55.4
15-Mar	7	7	10	9	A	7	10	8	9	9	14	11	15	20	25	47	10	5	5	6	6	6	7	8	11.3	46.5
16-Mar	14	5	4	A	4	8	10	8	C	C	C	C	34	32	34	6	48	81	5	4	4	3	3	4	16.5	81.0
17-Mar	4	5	A	5	5	5	6	21	19	25	26	23	13	9	7	7	5	12	17	7	29	23	12	12	12.9	29.2
18-Mar	10	A	14	13	10	11	10	20	14	32	27	14	7	6	10	5	7	3	4	4	7	2	2	5	10.2	31.6
19-Mar	A	5	33	15	3	3	45	11	6	4	3	3	4	9	14	16	12	22	13	7	6	3	3	A	10.8	45.3
20-Mar	3	2	3	2	3	3	3	5	5	17	21	17	10	10	5	9	3	1	1	2	4	1	A	4	5.8	20.5
21-Mar	6	2	2	7	2	2	4	3	4	4	2	2	2	2	2	3	2	2	2	2	2	A	2	2	2.7	7.4
22-Mar	2	1	2	2	3	2	2	2	2	2	2	3	2	3	2	3	3	4	3	2	A	2	2	2	2.3	3.9
23-Mar	2	2	2	2	2	3	8	9	6	3	10	8	7	4	4	3	4	6	7	A	7	5	8	6	5.1	10.2
24-Mar	4	4	2	5	2	2	1	3	3	3	2	2	2	1	2	2	1	1	A	2	11	2	7	16	3.4	16.2
25-Mar	14	15	4	6	3	2	1	1	2	1	1	1	2	2	1	1	1	A	1	2	2	1	1	4	3.0	14.8
26-Mar	2	4	2	2	4	4	3	6	5	11	10	2	3	5	3	16	A	2	3	1	1	1	1	1	4.0	16.2
27-Mar	1	1	1	2	2	3	5	8	3	12	3	3	3	2	4	A	33	33	9	6	2	3	3	4	6.4	33.5
28-Mar	4	5	3	4	6	15	7	34	32	39	19	18	15	3	A	4	4	17	3	2	2	1	4	1	10.6	39.3
29-Mar	2	7	3	2	2	3	1	12	2	2	3	3	4	A	1	1	6	3	4	4	5	2	4	1	3.2	11.5
30-Mar	1	1	1	1	4	1	6	5	8	7	5	2	A	2	1	1	1	113	174	4	4	10	6	5	15.8	174.2
31-Mar	4	4	4	4	4	4	2	3	3	7	15	A	13	7	5	9	9	12	19	32	8	8	7	8	8.2	32.0
		12.6	6.8	7.4	7.1	5.4	8.2	8.5	12.8	10.5	15.7	13.5	14.1	12.1	10.2	8.2	10.6	14.4	21.1	15.9	10.7	7.2	6.1	6.6	6.6	Diurnal Average
		167.6	32.8	34.3	26.9	16.1	81.5	55.4	113.4	70.4	79.7	42.9	96.5	41.3	43.3	34.3	46.5	56.1	112.8	174.2	86.6	29.2	24.0	23.6	24.0	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

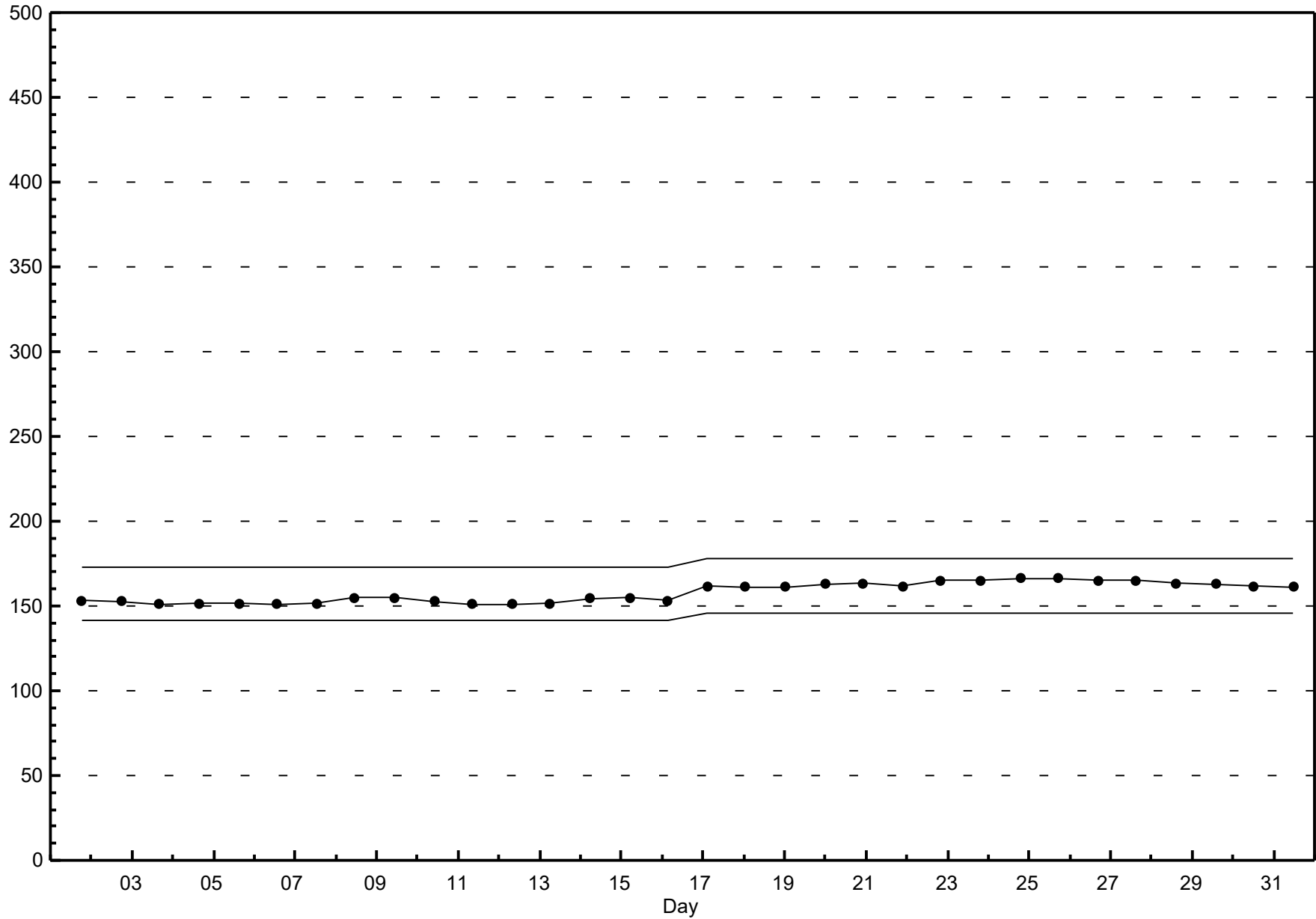
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Portable Rycroft - March 2018



Span Responses

Oxides of Nitrogen (NO_x)
Portable Rycroft - March 2018



Hourly Averages

Ozone (O₃) - ppb

Portable Rycroft - March 2018

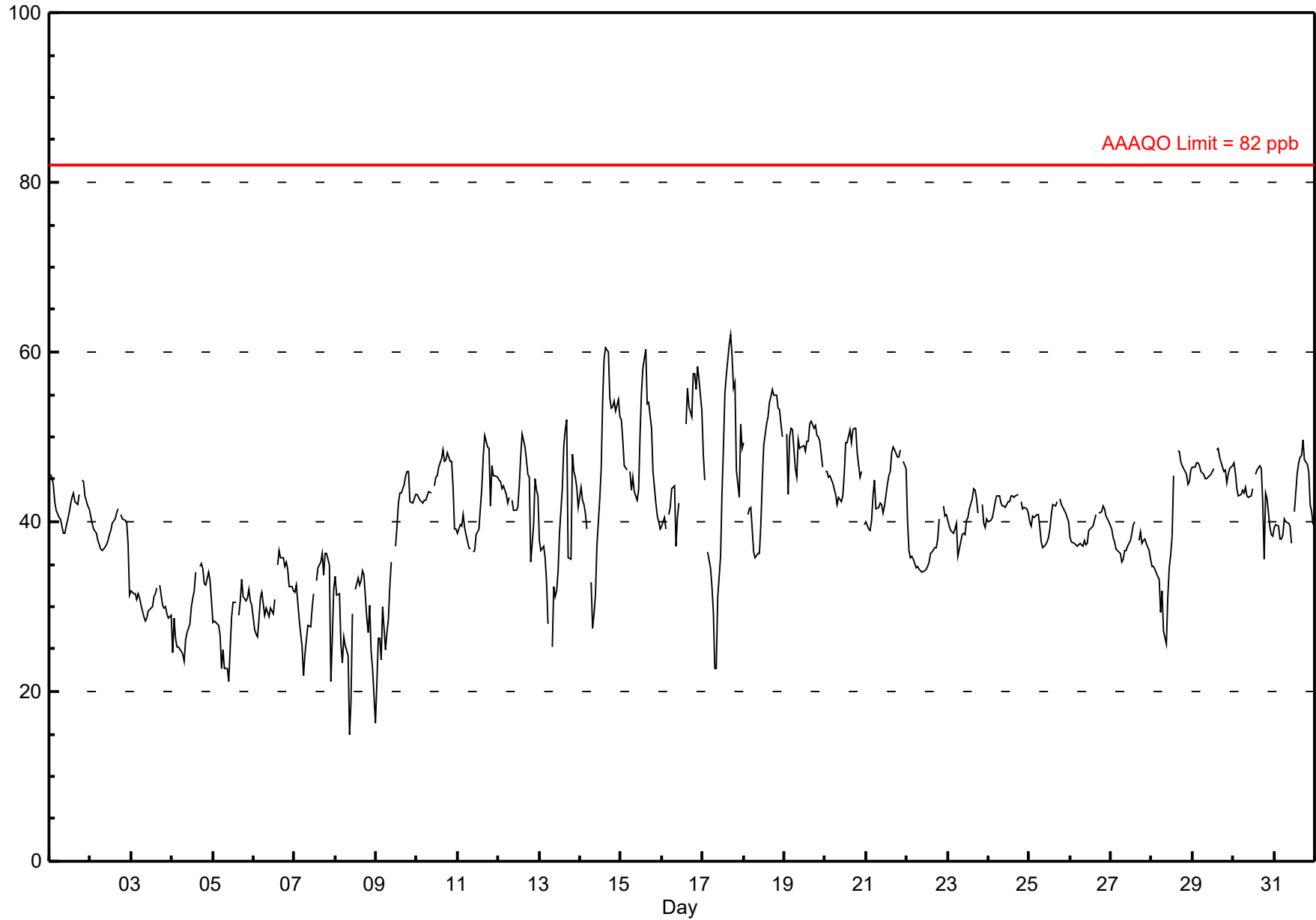
Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 62.0 ppb on Mar 17 17:00	Maximum Daily Average: 49.2 ppb on Mar 19		Hours of Data:	709
Minimum Value: 15 ppb on Mar 8 09:00	Minimum Daily Average: 27.5 ppb on Mar 8		Hours of Missing Data:	35
Maximum Diurnal Average: 45.7 ppb at hour 17	Minimum Diurnal Average: 35.0 ppb at hour 8		Hours of Calibration:	35
Monthly Average: 40.02 ppb	Percentiles: P ₁ = 22.7 P ₁₀ = 29.1 Q ₁ = 35.2 Median = 40.6 Q ₃ = 45.3 P ₉₀ = 49.5 P ₉₉ = 58.2		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	46	45	44	42	41	41	40	39	39	39	40	41	42	43	43	42	42	43	A	45	45	43	42	41	42.1	45.6																						
2-Mar	41	40	39	39	38	37	37	37	37	37	38	38	39	40	40	41	41	A	41	40	40	40	37	31	38.6	41.5																						
3-Mar	32	31	32	31	32	31	30	29	28	29	29	30	30	31	32	32	A	33	30	30	30	29	29	29	30.3	32.6																						
4-Mar	25	29	26	25	25	25	24	24	26	27	28	30	31	32	34	A	35	35	34	33	33	34	33	31	29.5	35.1																						
5-Mar	28	28	28	28	27	23	25	23	23	21	25	29	31	31	A	29	31	33	31	31	31	32	31	30	28.1	33.2																						
6-Mar	27	27	26	28	31	32	29	30	29	29	30	29	31	A	35	37	36	36	35	35	34	32	32	32	31.4	36.5																						
7-Mar	32	33	31	28	25	22	24	26	28	28	30	31	A	33	35	35	36	34	36	36	35	21	26	32	30.3	36.3																						
8-Mar	33	31	32	26	23	26	25	24	15	19	29	A	32	33	33	33	34	34	29	27	30	25	23	16	27.5	34.2																						
9-Mar	21	26	26	24	30	25	27	28	32	35	A	37	39	42	43	43	44	45	46	46	42	42	43	43	36.2	45.9																						
10-Mar	43	43	43	42	42	42	43	44	43	A	44	45	45	46	47	48	47	47	48	47	47	44	39	39	44.4	48.5																						
11-Mar	39	40	39	41	39	38	37	37	A	36	37	38	39	42	44	48	50	49	49	42	47	46	45	45	42.0	50.1																						
12-Mar	45	45	44	44	43	42	43	A	43	41	41	42	44	48	50	49	47	46	45	35	40	45	44	43	43.9	50.4																						
13-Mar	38	37	37	36	33	28	A	25	32	31	32	34	39	44	49	51	52	36	36	48	46	45	44	42	38.9	52.0																						
14-Mar	44	43	42	41	39	A	33	27	29	31	37	43	46	54	59	61	60	55	53	54	54	53	54	52	46.3	60.5																						
15-Mar	52	50	47	46	A	46	44	45	43	42	44	50	55	58	60	54	54	53	51	46	42	41	40	39	47.9	60.3																						
16-Mar	39	41	39	A	41	42	44	44	37	41	42	C	C	C	52	56	54	52	58	57	56	58	57	53	48.1	58.3																						
17-Mar	48	45	A	36	35	32	29	23	23	31	36	43	49	55	57	61	62	59	56	57	46	43	52	49	44.6	62.0																						
18-Mar	49	A	41	41	42	39	36	36	36	36	40	45	49	51	52	54	55	56	55	55	53	53	52	50	46.8	55.5																						
19-Mar	A	50	43	50	51	51	46	45	50	49	49	49	48	50	49	52	52	51	51	50	50	50	46	A	49.2	51.9																						
20-Mar	46	46	45	45	44	44	43	42	43	42	43	46	49	49	51	49	51	51	51	48	45	46	A	40	46.1	51.1																						
21-Mar	40	39	39	40	43	45	42	42	42	42	41	42	44	45	46	48	49	48	48	48	48	A	47	46	44.1	48.8																						
22-Mar	40	37	36	36	36	35	35	34	34	34	34	34	35	35	36	36	37	37	38	40	A	42	41	41	36.7	41.9																						
23-Mar	40	39	39	39	39	40	36	37	38	39	39	40	41	41	43	44	44	43	41	A	42	40	39	40	40.1	43.9																						
24-Mar	40	40	40	41	42	43	43	42	42	42	42	42	42	43	43	43	43	43	A	42	41	42	42	41	42.0	43.2																						
25-Mar	40	39	41	40	41	41	39	38	37	37	38	38	39	41	42	42	42	A	43	42	41	41	40	40	40.1	42.7																						
26-Mar	38	38	37	37	37	37	38	37	38	37	38	39	39	39	40	41	A	41	41	42	41	41	40	40	39.0	41.8																						
27-Mar	39	38	38	37	37	36	35	36	37	37	37	38	39	40	40	A	38	39	38	38	38	37	37	36	37.5	40.0																						
28-Mar	35	35	34	34	33	29	32	27	26	31	35	36	38	45	A	48	48	47	47	46	46	44	45	46	38.6	48.3																						
29-Mar	47	46	47	47	47	46	46	45	45	45	45	46	46	A	48	49	48	46	46	46	45	46	46	47	46.3	48.7																						
30-Mar	47	46	44	43	43	44	43	44	43	43	43	44	A	46	46	47	46	46	42	36	43	43	39	38	43.1	46.9																						
31-Mar	39	40	39	38	38	38	40	40	40	40	38	A	41	46	47	48	48	50	47	47	46	42	41	40	42.3	49.6																						
																								39.1	38.8	37.9	37.6	37.3	36.7	36.3	35.0	35.3	35.7	37.4	39.3	40.9	43.0	44.8	45.5	45.7	44.2	43.4	43.2	42.6	41.2	40.9	39.7	Diurnal Average
																								52.0	50.3	46.9	50.0	51.1	50.9	46.3	45.2	49.7	48.7	48.7	50.2	55.2	58.1	60.3	60.8	62.0	59.4	57.5	57.4	55.6	58.3	56.8	53.1	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 Rycroft - March 2018



Hourly Maximums

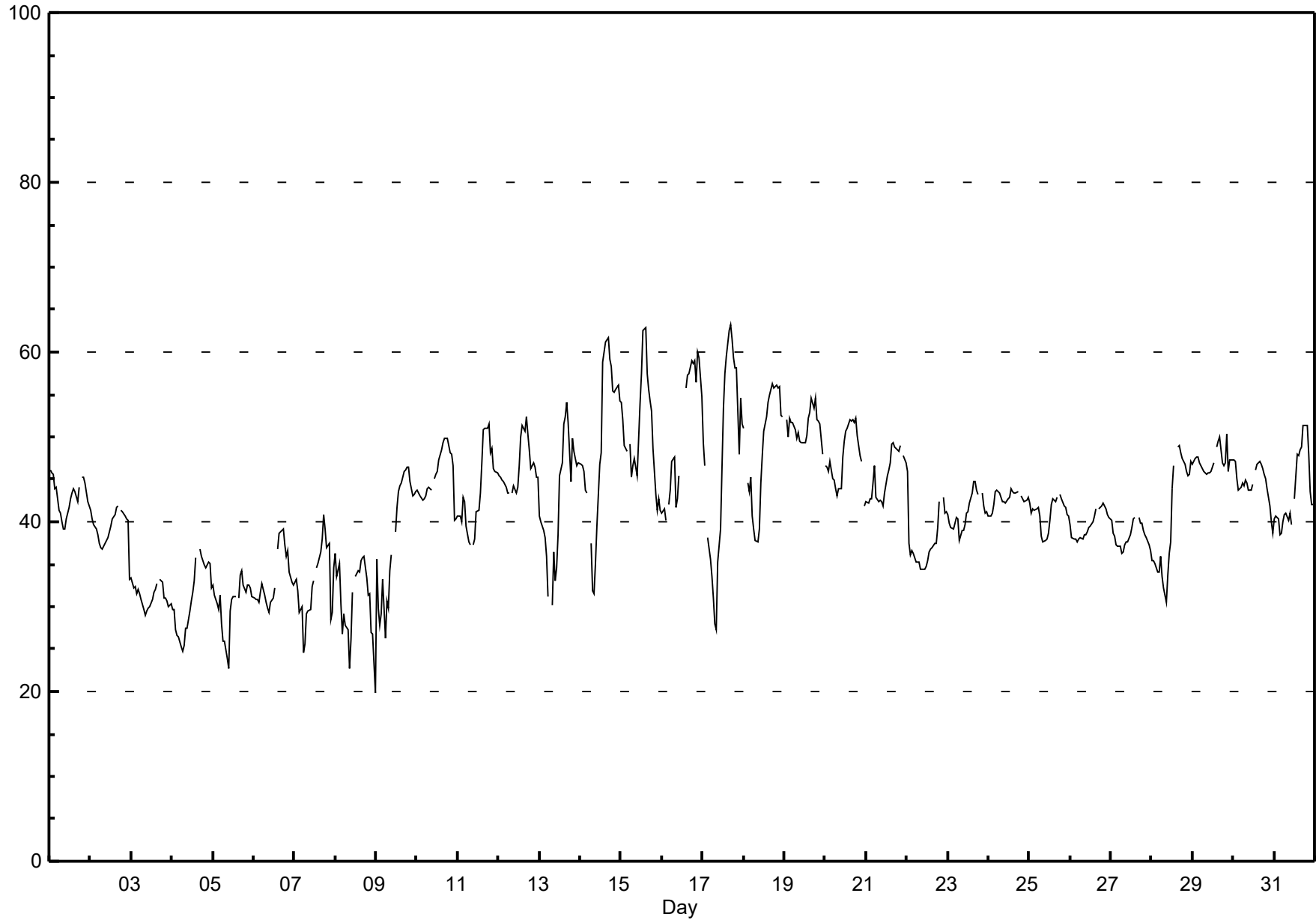
Ozone (O₃) - ppb

Portable Rycroft - March 2018

Maximum Value: 63.2 ppb on Mar 17 17:00		Maximum Daily Average: 51.2 ppb on Mar 19		Hours in Service: 744																						
Minimum Value: 20 ppb on Mar 9 00:00		Minimum Daily Average: 30.3 ppb on Mar 5		Hours of Data: 709																						
Maximum Diurnal Average: 47.4 ppb at hour 17		Minimum Diurnal Average: 36.9 ppb at hour 8		Hours of Missing Data: 35																						
Monthly Average: 41.74 ppb		Percentiles: P ₁ = 25.5 P ₁₀ = 31.0 Q ₁ = 36.6 Median = 41.9 Q ₃ = 46.7 P ₉₀ = 51.6 P ₉₉ = 60.0		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	46	46	46	44	44	41	41	40	39	39	40	42	43	43	44	44	42	44	A	45	45	45	42	42	42.9	46.1
2-Mar	41	40	40	39	39	38	37	37	37	38	38	39	39	40	41	42	42	A	41	41	41	40	40	33	39.3	41.8
3-Mar	33	32	32	32	32	32	31	30	29	29	30	30	31	32	32	33	A	33	33	31	31	31	30	30	31.2	33.3
4-Mar	30	30	27	27	26	25	25	25	27	27	30	31	32	33	36	A	37	36	35	35	35	35	35	32	30.9	36.8
5-Mar	33	31	30	30	31	28	26	26	24	23	30	31	31	31	A	31	34	34	32	32	33	33	32	31	30.3	34.2
6-Mar	31	31	31	31	32	33	31	31	30	29	31	31	32	A	37	39	39	39	37	36	37	34	33	33	33.3	39.1
7-Mar	33	33	32	29	30	25	26	29	29	30	32	33	A	35	35	37	38	41	39	37	37	28	29	35	32.7	40.8
8-Mar	36	34	35	30	27	29	28	27	23	26	32	A	34	34	34	35	36	36	33	31	32	27	27	20	30.7	36.2
9-Mar	36	30	28	29	33	26	31	30	34	36	A	39	42	44	44	45	46	46	46	46	45	43	43	44	38.5	46.5
10-Mar	44	43	43	43	43	43	44	44	44	A	45	46	46	47	48	49	50	50	50	48	48	47	40	40	45.4	49.9
11-Mar	41	41	40	43	42	39	38	37	A	37	38	41	41	43	47	51	51	51	51	48	49	46	46	46	43.8	51.5
12-Mar	45	45	45	45	44	43	43	A	43	44	43	44	47	50	51	51	52	50	48	46	47	46	45	45	46.4	52.4
13-Mar	41	40	39	38	36	31	A	30	36	33	35	38	45	47	52	52	54	52	45	50	48	47	47	47	42.7	54.1
14-Mar	47	47	46	44	43	A	38	32	31	35	40	47	48	59	60	61	62	59	58	55	55	56	56	54	49.2	61.7
15-Mar	54	52	49	48	A	49	45	47	47	45	50	54	57	63	63	57	56	54	53	49	43	41	43	41	50.5	62.9
16-Mar	41	42	40	A	42	44	47	48	42	43	45	C	C	C	56	57	57	59	59	59	56	60	59	55	50.5	60.0
17-Mar	49	47	A	38	36	34	31	28	27	35	39	46	53	58	60	63	63	62	59	58	58	48	55	52	47.7	63.2
18-Mar	51	A	45	44	45	41	39	38	38	39	45	48	51	52	54	55	56	56	56	56	56	56	52	52	48.9	56.2
19-Mar	A	52	50	52	52	52	51	50	51	49	49	49	49	50	52	53	55	53	55	52	52	52	48	A	51.2	54.6
20-Mar	47	46	46	47	45	45	44	43	44	44	48	49	51	51	52	52	52	52	52	50	48	47	A	42	47.7	52.2
21-Mar	42	42	43	43	44	47	43	42	43	42	42	43	45	46	47	49	49	49	49	48	49	A	48	47	45.3	49.3
22-Mar	46	37	36	37	36	35	35	35	34	34	34	35	35	36	37	37	37	38	39	42	A	43	41	41	37.5	45.9
23-Mar	41	40	39	39	40	41	40	38	39	39	40	41	41	42	43	45	45	44	43	A	43	42	41	41	41.2	44.7
24-Mar	41	41	41	42	44	44	43	43	42	42	42	43	43	44	44	43	43	43	A	43	43	42	43	43	42.7	43.8
25-Mar	42	41	42	41	42	42	41	38	38	38	38	39	40	42	43	42	43	A	43	43	42	42	41	41	41.0	43.2
26-Mar	40	38	38	38	38	38	38	38	38	39	39	39	40	40	41	42	A	42	42	42	42	42	41	41	39.7	42.2
27-Mar	40	39	38	37	37	37	36	36	37	38	38	38	39	40	40	A	41	40	40	39	38	38	37	37	38.3	40.5
28-Mar	35	35	35	34	34	36	34	32	30	34	36	38	44	47	A	49	49	48	47	47	46	45	46	47	40.4	49.0
29-Mar	47	47	48	48	47	47	46	46	46	46	46	46	47	A	49	49	50	47	47	47	50	46	47	47	47.2	50.4
30-Mar	47	47	45	44	44	45	44	45	45	44	44	44	A	46	47	47	47	46	46	45	44	42	40	39	44.6	47.3
31-Mar	40	41	40	38	39	40	41	41	40	41	40	A	43	48	48	49	49	51	51	51	48	44	42	42	43.8	51.4
		41.3	40.3	39.6	39.1	38.9	38.2	37.9	36.9	37.0	37.3	39.2	40.9	42.5	44.4	46.0	46.8	47.4	46.7	45.9	45.1	44.7	42.9	42.3	41.3	Diurnal Average
		54.0	52.1	49.9	52.2	51.6	51.6	50.8	49.9	50.5	49.4	49.6	53.9	57.4	62.5	62.9	62.6	63.2	61.6	59.4	59.0	58.2	60.0	59.3	54.8	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

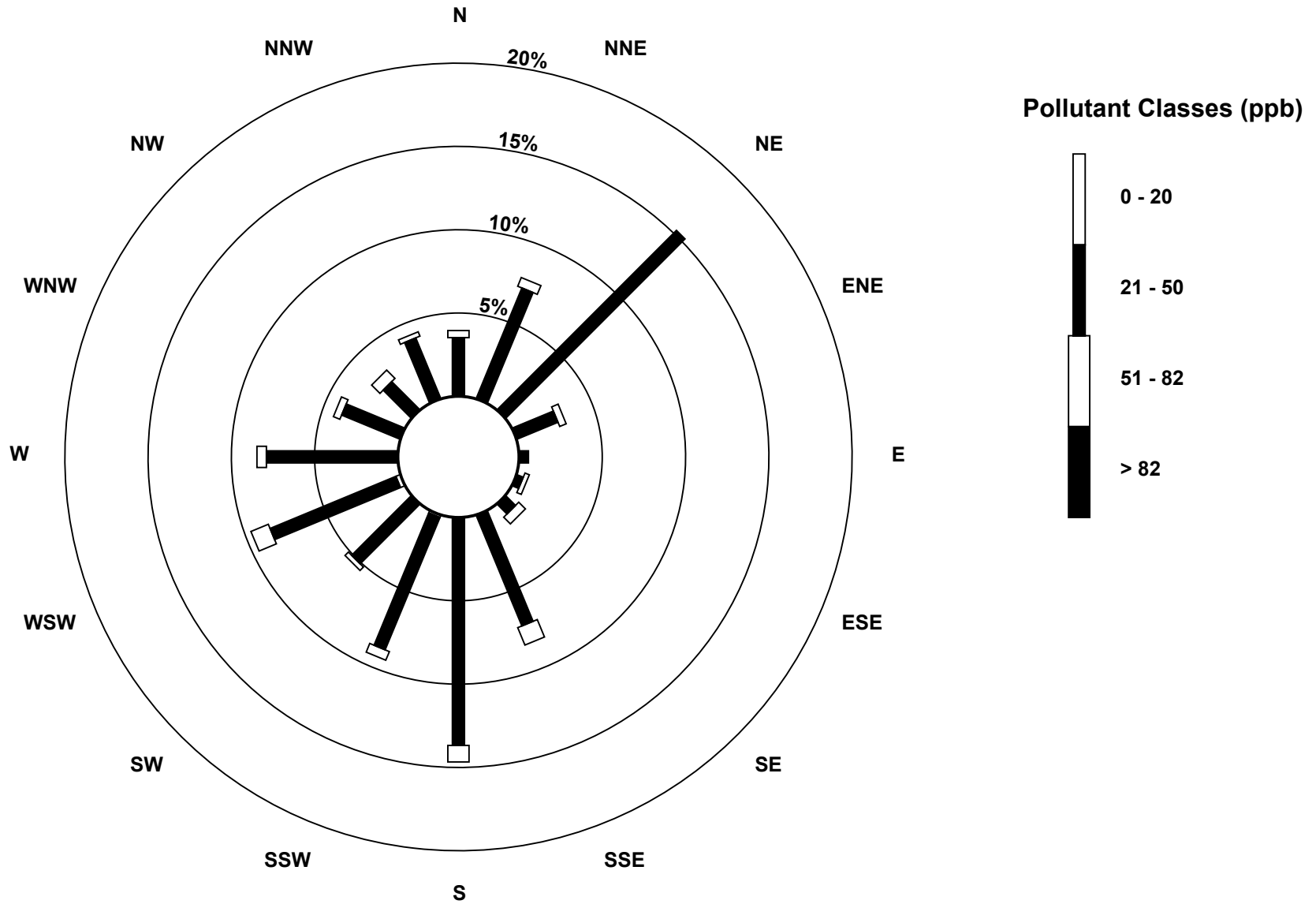
Hourly Maximums

Ozone (O₃) - ppb
Portable Rycroft - March 2018



Pollutant Rose

Ozone (O₃) - ppb
Portable Rycroft - March 2018



Eight Hour Running Averages

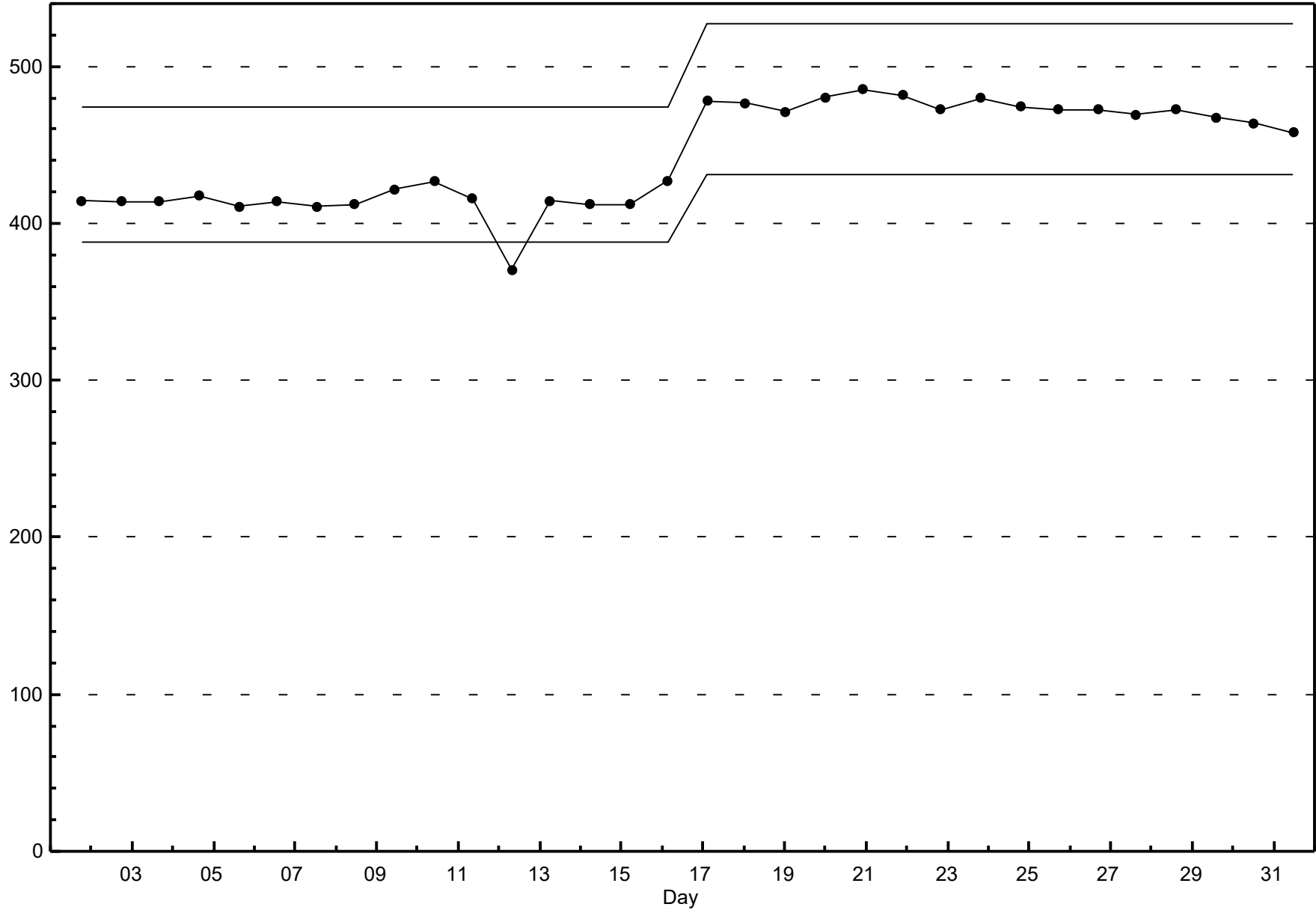
Ozone (O₃) - ppb

Portable Rycroft - March 2018

Maximum Value: 57.0 ppb on Mar 17 20:00																					Hours in Service:	744			
Minimum Value: 23.2 ppb on Mar 8 12:00																					Hours of Data:	738			
Percentiles: P ₁ = 24.3 P ₁₀ = 29.7 Q ₁ = 35.0 Median = 40.8 Q ₃ = 44.8 P ₉₀ = 48.5 P ₉₉ = 55.3																					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	46	45	45	45	44	44	43	42	42	41	40	40	40	40	41	41	41	42	42	43	43	43	43	43	45.8
2-Mar	43	42	42	41	40	40	39	38	38	38	37	37	37	38	38	39	39	40	40	40	41	41	40	39	42.8
3-Mar	37	37	36	34	33	32	31	31	30	30	30	30	30	30	30	30	30	31	31	31	31	31	30	30	37.5
4-Mar	29	29	28	28	27	27	26	25	26	25	26	26	27	28	29	30	31	32	33	33	34	34	34	33	34.0
5-Mar	33	32	31	30	30	28	27	26	25	25	24	24	25	26	26	27	28	30	31	31	31	31	31	31	32.6
6-Mar	31	30	29	29	29	29	29	29	29	29	30	30	30	30	30	31	32	33	34	35	35	35	35	34	35.3
7-Mar	34	33	33	32	31	29	28	28	27	27	26	27	27	29	30	31	33	33	34	35	35	34	33	32	35.1
8-Mar	32	31	31	30	28	29	29	28	25	24	23	23	24	25	26	28	30	33	33	32	32	30	29	27	32.6
9-Mar	26	25	24	24	24	24	24	26	27	28	29	31	32	35	37	39	41	42	43	44	44	44	44	44	44.1
10-Mar	44	44	43	43	43	43	43	43	43	43	43	43	44	44	45	46	46	46	47	47	47	47	46	45	47.4
11-Mar	44	43	42	41	40	39	39	39	39	38	38	38	38	38	39	41	42	43	45	45	46	47	47	46	46.8
12-Mar	46	45	45	45	45	44	44	44	43	43	43	42	42	43	44	45	45	46	46	46	45	45	44	43	46.3
13-Mar	42	41	40	40	39	37	36	33	33	32	31	31	32	34	36	39	41	42	43	44	45	45	45	44	45.3
14-Mar	43	43	44	43	43	42	40	38	36	35	34	34	35	38	41	45	49	52	54	55	56	56	55	54	56.2
15-Mar	53	53	52	51	51	50	48	47	46	45	44	45	46	48	50	51	52	54	54	54	52	50	48	46	54.4
16-Mar	44	42	41	40	40	40	41	41	41	41	42	42	42	N	N	N	N	N	N	55	55	55	56	56	55.9
17-Mar	55	54	53	50	47	44	40	35	32	30	31	32	33	36	40	44	49	53	55	57	57	55	54	53	57.0
18-Mar	51	50	48	46	45	45	43	41	39	39	38	39	40	41	43	46	48	50	52	53	54	54	54	54	54.2
19-Mar	53	53	51	50	50	50	49	48	48	48	49	49	48	48	49	49	50	50	50	50	51	51	50	50	53.4
20-Mar	49	48	48	47	46	45	45	45	44	44	43	43	44	45	46	47	48	49	50	50	50	49	49	47	50.0
21-Mar	46	44	42	41	41	41	41	41	41	42	42	42	42	43	43	44	45	46	46	47	48	48	48	48	48.0
22-Mar	47	45	43	41	40	39	37	36	35	35	35	35	34	35	35	35	35	36	36	37	37	38	39	39	46.5
23-Mar	40	40	40	40	40	40	39	39	38	38	38	38	39	39	40	41	41	42	42	42	43	42	42	41	42.5
24-Mar	41	40	40	40	40	41	41	42	42	42	42	42	42	42	42	43	43	43	43	43	43	43	42	42	42.9
25-Mar	42	41	41	41	41	41	40	40	40	39	39	39	38	38	39	39	40	40	41	42	42	42	42	41	41.9
26-Mar	41	40	40	39	39	38	38	37	37	37	37	38	38	38	38	39	39	40	40	41	41	41	41	41	41.1
27-Mar	41	40	40	39	39	38	38	37	37	36	36	37	37	37	38	38	38	39	39	39	39	38	38	37	40.7
28-Mar	37	37	36	36	35	34	33	32	31	31	31	32	34	34	37	40	43	44	46	47	47	47	46	46	46.8
29-Mar	46	46	46	46	46	46	46	46	46	46	46	46	46	46	45	46	46	47	47	47	47	47	46	46	47.1
30-Mar	46	46	46	45	45	45	45	44	44	43	43	43	43	44	44	44	45	45	44	44	44	43	42	41	46.1
31-Mar	40	40	40	39	39	39	39	39	39	39	39	39	40	41	42	43	44	45	47	47	47	47	46	45	47.2
54.9 53.9 53.4 51.1 50.6 49.6 48.8 48.1 48.3 48.1 48.8 48.7 48.4 48.2 49.9 50.9 52.3 53.5 55.3 57.0 56.6 56.0 55.9 55.6																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Portable Rycroft - March 2018



Hourly Averages

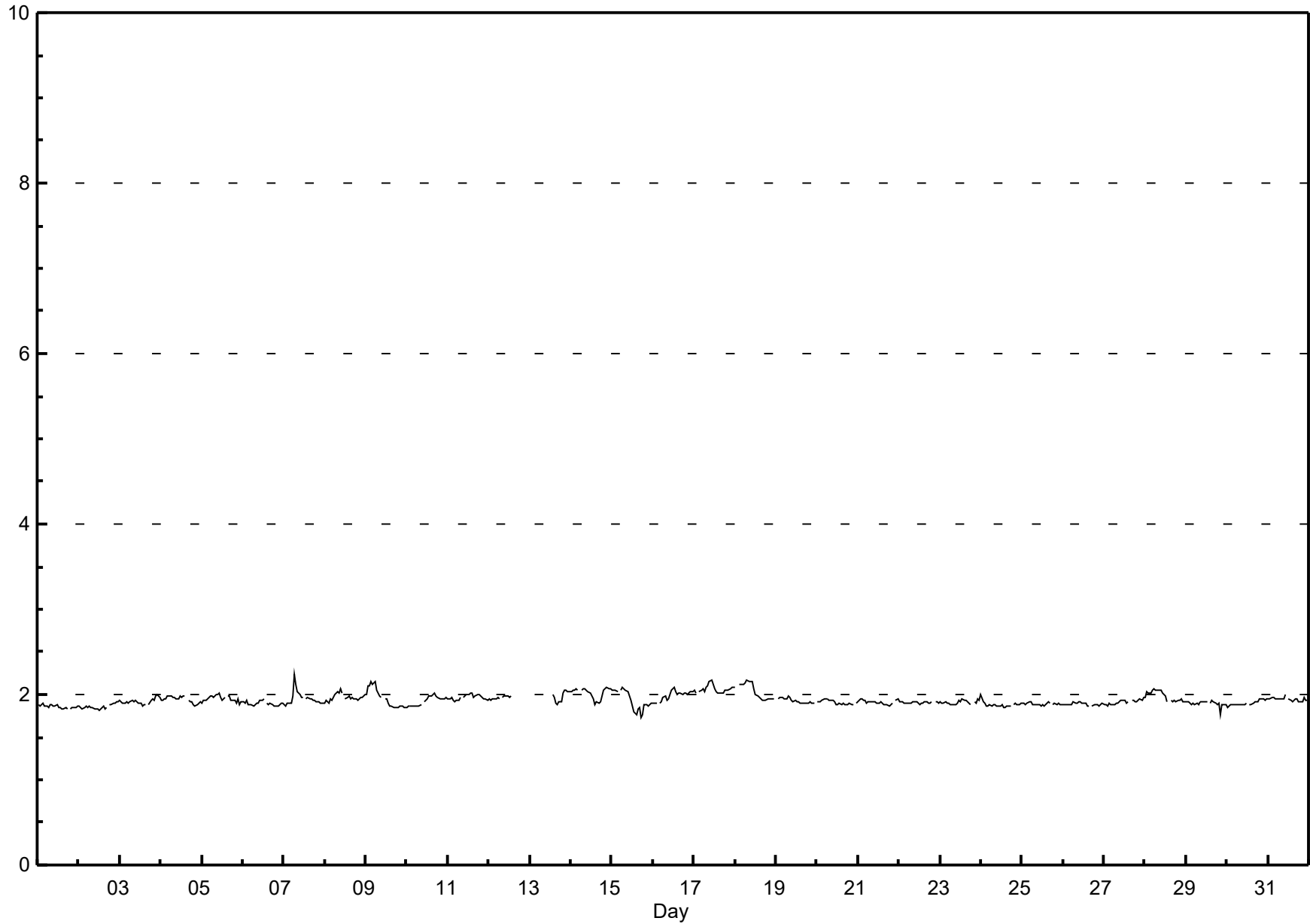
Total Hydrocarbons (THC) - ppm

Portable Rycroft - March 2018

Maximum Value: 2.24 ppm on Mar 7 07:00		Maximum Daily Average: 2.06 ppm on Mar 17		Hours in Service: 744																																													
Minimum Value: 1.7 ppm on Mar 15 18:00		Minimum Daily Average: 1.86 ppm on Mar 2		Hours of Data: 690																																													
Maximum Diurnal Average: 1.96 ppm at hour 10		Minimum Diurnal Average: 1.91 ppm at hour 18		Hours of Missing Data: 54																																													
Monthly Average: 1.935 ppm		Percentiles: P ₁ = 1.83 P ₁₀ = 1.87 Q ₁ = 1.89 Median = 1.92 Q ₃ = 1.97 P ₉₀ = 2.04 P ₉₉ = 2.15		Hours of Calibration: 33																																													
Percent Operational Time: 97.2																										Daily Average	Daily Maximum																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.86	1.89																						
2-Mar	1.9	1.9	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.86	1.91																						
3-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	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.92	2.01																							
4-Mar	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	1.98																							
5-Mar	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.01																							
6-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	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.95																							
7-Mar	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.1	2.0	2.0	2.0	A	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.96	2.24																							
8-Mar	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	1.97	2.08																							
9-Mar	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.95	2.15																							
10-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	1.92	2.01																							
11-Mar	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.97	2.02																							
12-Mar	1.9	1.9	2.0	1.9	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	N	N	N	N	N	N	N	N	N	N	--	1.99																							
13-Mar	N	N	N	N	N	N	N	N	N	N	N	C	C	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	--	2.04																							
14-Mar	2.0	2.1	2.0	2.1	2.0	A	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.1	2.1	2.1	2.1	2.1	2.02	2.08																							
15-Mar	2.1	2.1	2.0	2.0	A	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.93	2.08																							
16-Mar	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	1.9	2.0	2.0	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	1.99	2.08																							
17-Mar	2.0	2.0	A	2.0	2.1	2.1	2.0	2.1	2.1	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.06	2.17																							
18-Mar	2.1	A	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.04	2.16																							
19-Mar	A	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.99																							
20-Mar	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	1.9	A	1.9	1.91	1.96																							
21-Mar	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.91	1.95																							
22-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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.91	1.92																							
23-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	2.0	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.91	1.95																							
24-Mar	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.88	2.00																							
25-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	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.92																							
26-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	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.91																							
27-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	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.91	1.96																							
28-Mar	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.98	2.06																							
29-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	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.90	1.92																							
30-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.90	1.95																							
31-Mar	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.95	2.00																							
																								1.93	1.93	1.94	1.94	1.94	1.95	1.96	1.96	1.95	1.96	1.95	1.94	1.93	1.93	1.91	1.91	1.92	1.91	1.92	1.92	1.92	1.92	1.93	1.93	1.94	Diurnal Average
																								2.08	2.10	2.12	2.15	2.12	2.15	2.24	2.16	2.16	2.16	2.17	2.12	2.08	2.04	2.02	2.02	2.02	2.02	2.05	2.05	2.07	2.08	2.08	2.08	2.08	Diurnal Maximum
C - Calibration																								N - Not Valid				A - Automated Daily Zero Span																					

Hourly Averages

Total Hydrocarbons (THC) - ppm
Portable Rycroft - March 2018



Hourly Maximums

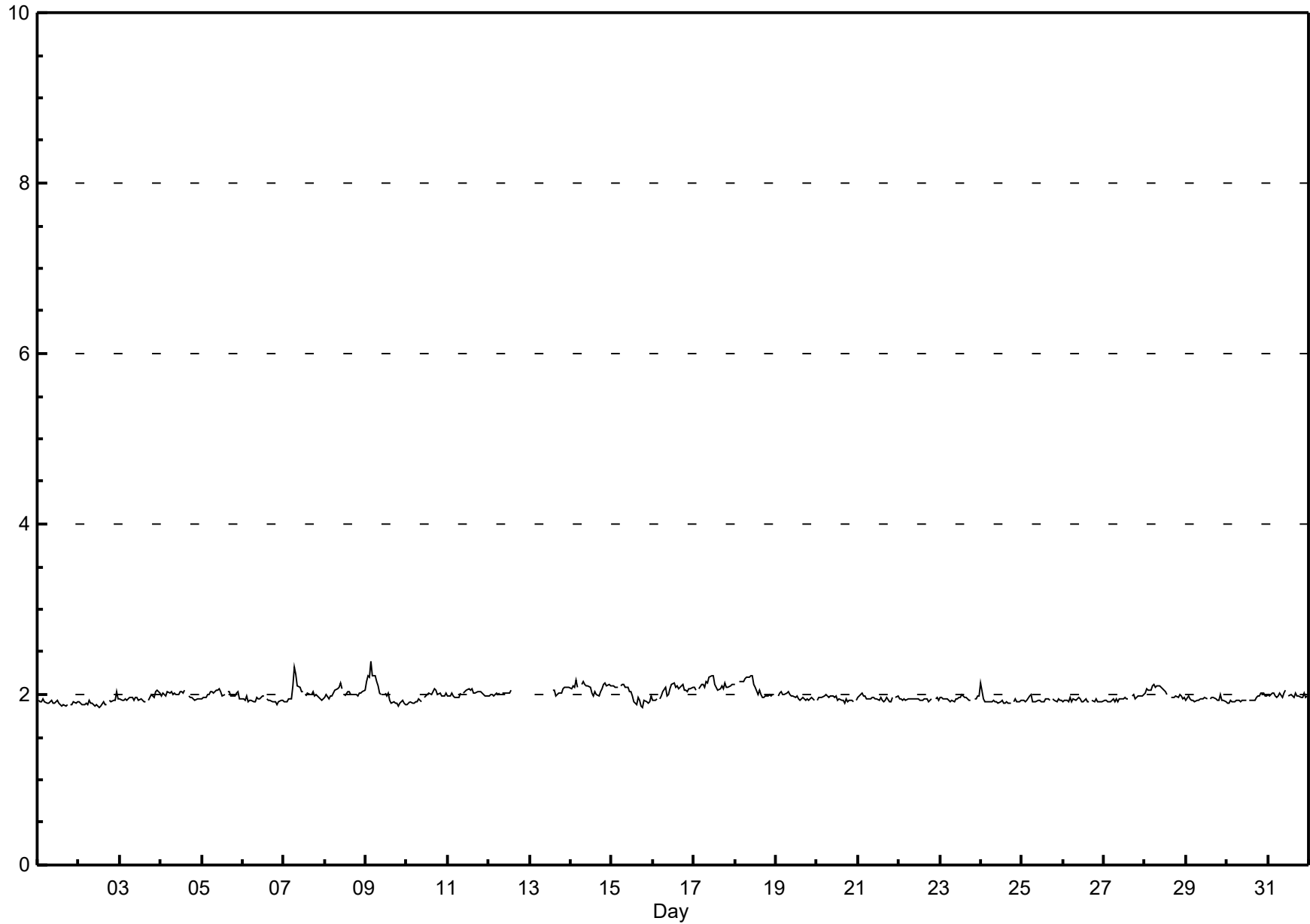
Total Hydrocarbons (THC) - ppm

Portable Rycroft - March 2018

Maximum Value: 2.39 ppm on Mar 9 04:00		Maximum Daily Average: 2.11 ppm on Mar 17		Hours in Service: 744																																												
Minimum Value: 1.8 ppm on Mar 2 13:00		Minimum Daily Average: 1.90 ppm on Mar 1		Hours of Data: 690																																												
Maximum Diurnal Average: 2.01 ppm at hour 8		Minimum Diurnal Average: 1.96 ppm at hour 16		Hours of Missing Data: 54																																												
Monthly Average: 1.985 ppm		Percentiles: P ₁ = 1.87 P ₁₀ = 1.91 Q ₁ = 1.93 Median = 1.97 Q ₃ = 2.02 P ₉₀ = 2.09 P ₉₉ = 2.22		Hours of Calibration: 33																																												
Percent Operational Time: 97.2																										Daily Average	Daily Maximum																					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	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	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.90	1.95																					
2-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	1.8	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.90	2.03																					
3-Mar	2.0	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	A	1.9	2.0	2.0	2.0	2.0	2.1	2.0	2.0	1.96	2.05																						
4-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	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	2.0	2.0	2.0	1.99	2.05																						
5-Mar	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	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.00	2.06																						
6-Mar	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	1.99																						
7-Mar	1.9	1.9	1.9	1.9	2.0	2.1	2.3	2.2	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	1.9	1.9	2.0	2.02	2.32																						
8-Mar	2.0	2.0	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.13																						
9-Mar	2.2	2.2	2.2	2.4	2.2	2.2	2.2	2.1	2.0	2.0	A	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	2.03	2.39																						
10-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.06																						
11-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.07																						
12-Mar	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	N	N	N	N	N	N	N	N	N	N	--	2.05																						
13-Mar	N	N	N	N	N	N	N	N	N	N	N	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	--	2.09																						
14-Mar	2.1	2.1	2.1	2.2	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.08	2.17																						
15-Mar	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.00	2.12																						
16-Mar	1.9	1.9	2.0	A	1.9	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.04	2.13																						
17-Mar	2.1	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.22																						
18-Mar	2.1	A	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	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	2.22																						
19-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	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	A	1.97	2.03																						
20-Mar	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.95	2.01																						
21-Mar	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.0	1.9	1.9	2.0	A	2.0	2.0	1.96	2.02																						
22-Mar	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	2.0	2.0	1.9	1.95	1.96																						
23-Mar	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	1.95	1.99																						
24-Mar	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.92	2.13																						
25-Mar	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	A	2.0	1.9	1.9	1.9	1.9	1.9	1.94	2.00																						
26-Mar	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.96																						
27-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.95	2.00																						
28-Mar	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	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	2.03	2.12																						
29-Mar	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	1.9	A	1.9	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.94	2.00																						
30-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.94	2.01																						
31-Mar	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	2.0	2.0	1.99	2.05																						
																								1.98	1.98	1.98	1.99	1.99	2.01	2.01	2.00	2.01	2.00	2.00	1.98	1.98	1.97	1.96	1.97	1.97	1.97	1.97	1.97	1.98	1.98	1.98	Diurnal Average	
																								2.16	2.22	2.21	2.39	2.22	2.32	2.24	2.21	2.22	2.22	2.22	2.13	2.09	2.10	2.07	2.10	2.11	2.14	2.12	2.13	2.11	2.12	2.12	Diurnal Maximum	
C - Calibration																								N - Not Valid				A - Automated Daily Zero Span																				

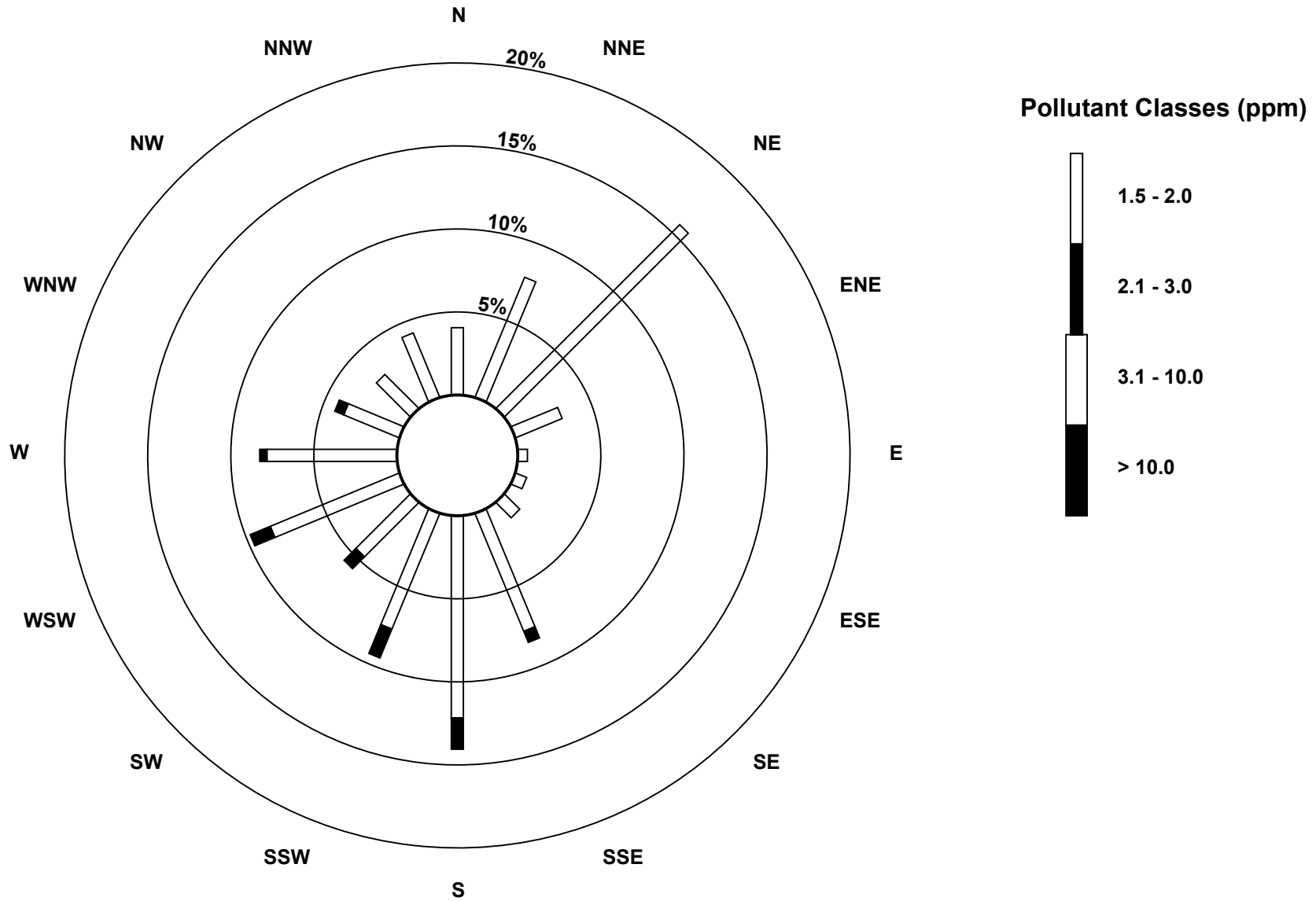
Hourly Maximums

Total Hydrocarbons (THC) - ppm
Portable Rycroft - March 2018



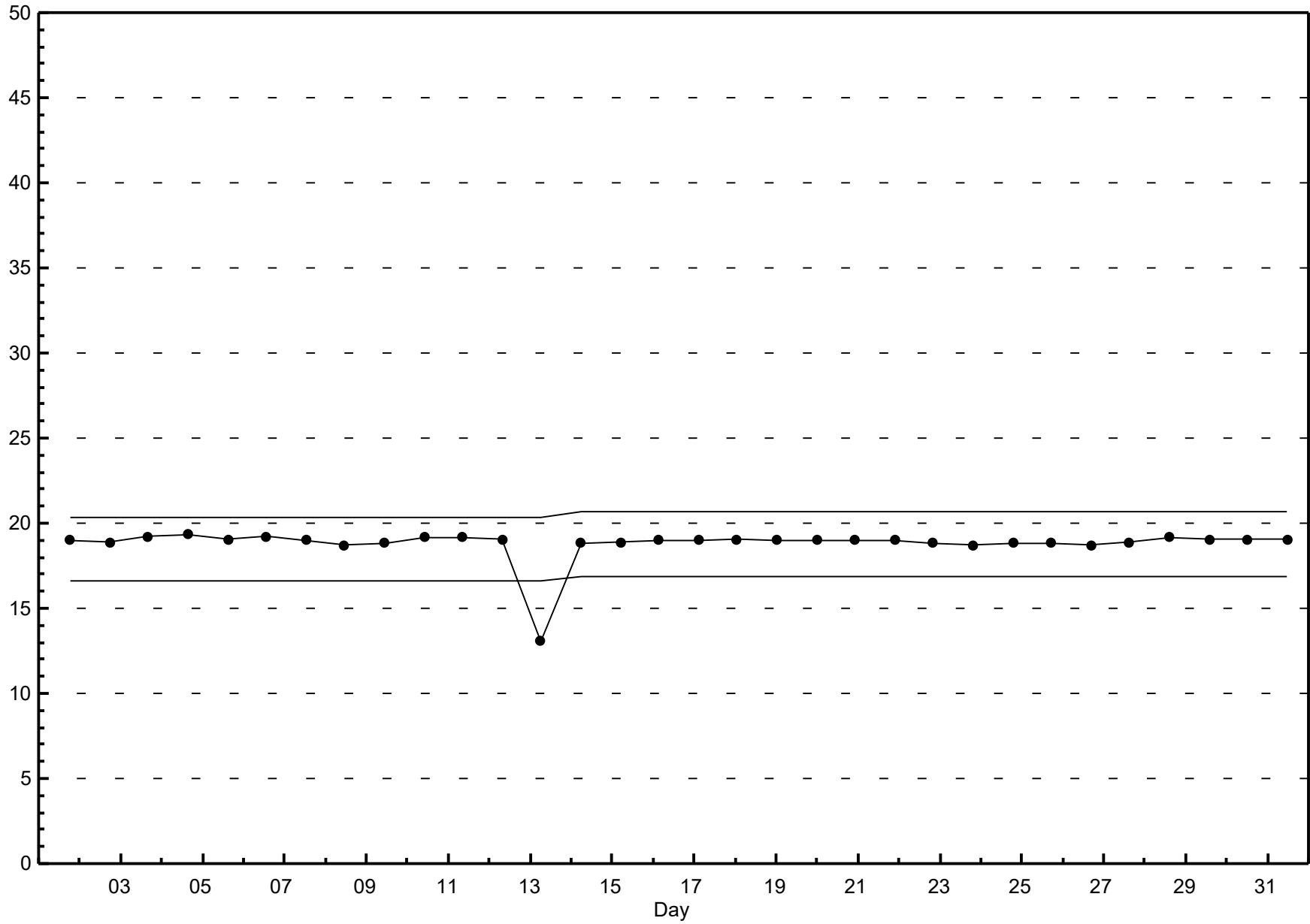
Pollutant Rose

Total Hydrocarbons (THC) - ppm
Portable Rycroft - March 2018



Span Responses

Total Hydrocarbons (THC)
Portable Rycroft - March 2018



Hourly Averages

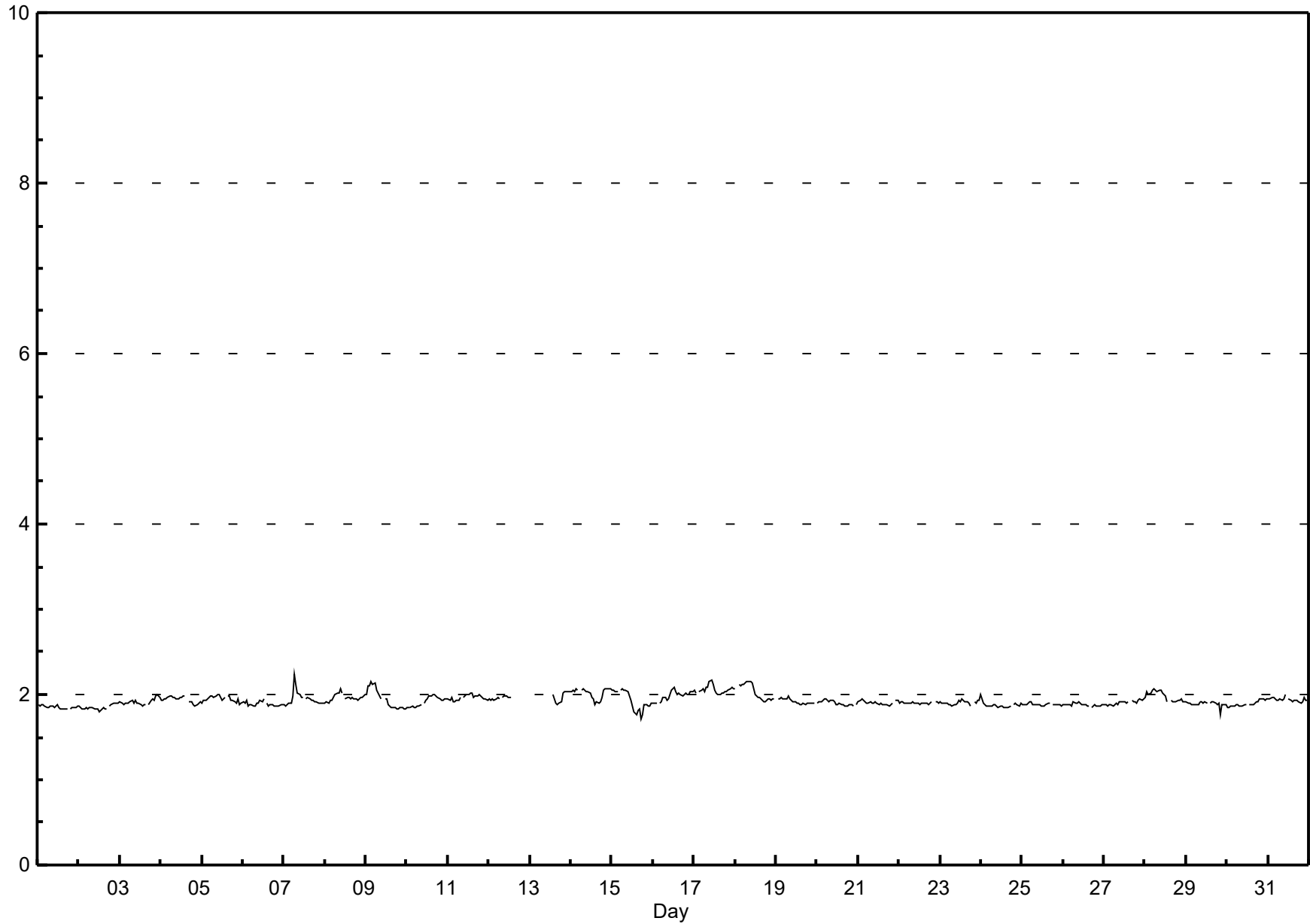
Methane (CH₄) - ppm

Portable Rycroft - March 2018

Maximum Value: 2.24 ppm on Mar 7 07:00 Minimum Value: 1.7 ppm on Mar 15 18:00 Maximum Diurnal Average: 1.95 ppm at hour 10 Monthly Average: 1.930 ppm		Maximum Daily Average: 2.06 ppm on Mar 17 Minimum Daily Average: 1.85 ppm on Mar 2 Minimum Diurnal Average: 1.90 ppm at hour 18 Percentiles: P ₁ = 1.82 P ₁₀ = 1.86 Q ₁ = 1.88 Median = 1.91 Q ₃ = 1.96 P ₉₀ = 2.03 P ₉₉ = 2.14		Hours in Service: 744 Hours of Data: 690 Hours of Missing Data: 54 Hours of Calibration: 33 Percent Operational Time: 97.2																																													
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	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.8	1.9	1.9	1.85	1.89																							
2-Mar	1.9	1.8	1.8	1.8	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	A	1.9	1.9	1.9	1.9	1.9	1.9	1.85	1.91																							
3-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	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.91	2.00																							
4-Mar	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	1.98																							
5-Mar	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.01																							
6-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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.94																							
7-Mar	1.9	1.9	1.9	1.9	1.9	2.0	2.2	2.1	2.0	2.0	2.0	2.0	A	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.95	2.24																							
8-Mar	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.1	2.0	A	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.96	2.07																							
9-Mar	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.95	2.15																							
10-Mar	1.8	1.9	1.9	1.9	1.8	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	1.9	1.9	1.9	1.9	2.0	1.92	2.00																							
11-Mar	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.96	2.02																							
12-Mar	1.9	1.9	2.0	1.9	2.0	2.0	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	N	N	N	N	N	N	N	N	N	N	--	1.98																							
13-Mar	N	N	N	N	N	N	N	N	N	N	N	C	C	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	--	2.04																							
14-Mar	2.0	2.0	2.0	2.1	2.0	A	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.01	2.07																							
15-Mar	2.1	2.0	2.0	2.0	A	2.0	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.8	1.9	1.9	1.9	1.9	1.9	1.92	2.08																							
16-Mar	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	1.9	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	1.98	2.08																							
17-Mar	2.0	2.0	A	2.0	2.1	2.1	2.0	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.06	2.17																							
18-Mar	2.1	A	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.03	2.16																							
19-Mar	A	1.9	2.0	2.0	2.0	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	1.92	1.98																							
20-Mar	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.90	1.95																							
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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.90	1.95																							
22-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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.90	1.91																							
23-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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.90	1.95																							
24-Mar	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	1.8	1.8	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.87	1.99																							
25-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	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.91																							
26-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	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.91																							
27-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	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.91	1.96																							
28-Mar	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.1	2.1	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.98	2.06																							
29-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	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.89	1.92																							
30-Mar	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.89	1.95																							
31-Mar	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.94	1.99																							
																								1.93	1.93	1.93	1.94	1.93	1.94	1.95	1.95	1.95	1.95	1.95	1.94	1.93	1.92	1.91	1.91	1.91	1.90	1.91	1.92	1.92	1.93	1.93	1.93	Diurnal Average	
																								2.07	2.10	2.11	2.15	2.11	2.14	2.24	2.16	2.15	2.15	2.17	2.11	2.08	2.03	2.02	2.01	2.01	2.01	2.04	2.04	2.07	2.07	2.08	2.07	Diurnal Maximum	
C - Calibration																								N - Not Valid				A - Automated Daily Zero Span																					

Hourly Averages

Methane (CH₄) - ppm
Portable Rycroft - March 2018



Hourly Maximums

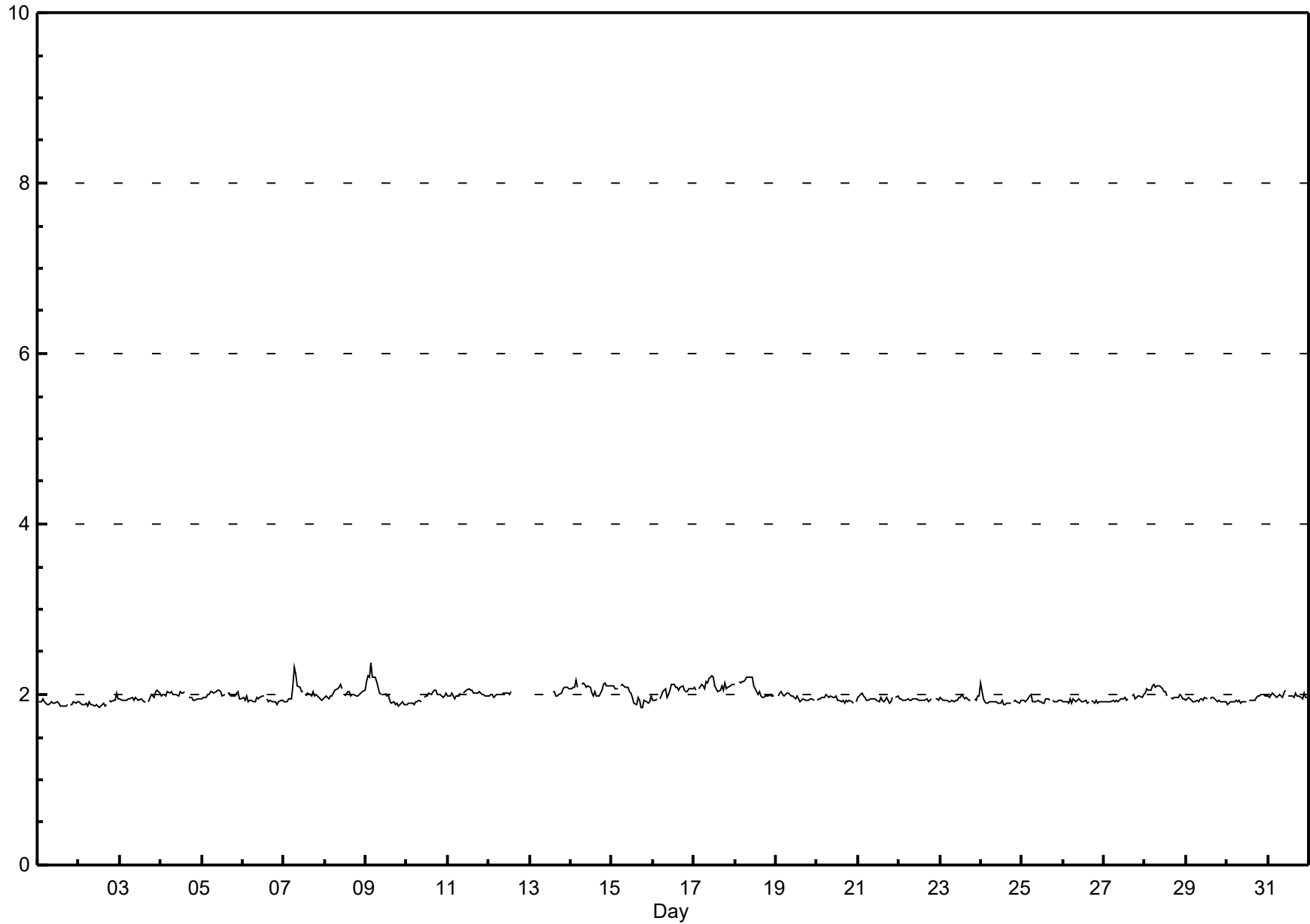
Methane (CH₄) - ppm

Portable Rycroft - March 2018

Maximum Value: 2.38 ppm on Mar 9 04:00		Maximum Daily Average: 2.11 ppm on Mar 17		Hours in Service: 744																							
Minimum Value: 1.8 ppm on Mar 2 13:00		Minimum Daily Average: 1.90 ppm on Mar 1		Hours of Data: 690																							
Maximum Diurnal Average: 2.01 ppm at hour 8		Minimum Diurnal Average: 1.96 ppm at hour 16		Hours of Missing Data: 54																							
Monthly Average: 1.979 ppm		Percentiles: P ₁ = 1.87 P ₁₀ = 1.91 Q ₁ = 1.93 Median = 1.96 Q ₃ = 2.02 P ₉₀ = 2.08 P ₉₉ = 2.21		Hours of Calibration: 33																							
				Percent Operational Time: 97.2																							
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	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.90	1.94
2-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	1.8	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.90	2.01
3-Mar	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	A	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.04
4-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	2.0	2.0	A	2.0	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	1.99	2.04
5-Mar	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.00	2.06	
6-Mar	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	1.99	
7-Mar	1.9	1.9	1.9	1.9	1.9	2.1	2.3	2.2	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	1.9	1.9	1.9	2.01	2.32	
8-Mar	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.12	
9-Mar	2.2	2.2	2.2	2.4	2.2	2.2	2.2	2.1	2.0	2.0	A	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	2.03	2.38	
10-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.05	
11-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.07	
12-Mar	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	N	N	N	N	N	N	N	N	N	N	--	2.04	
13-Mar	N	N	N	N	N	N	N	N	N	N	N	C	C	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	--	2.09	
14-Mar	2.1	2.1	2.1	2.2	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.08	2.16	
15-Mar	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	2.0	1.9	1.8	1.8	1.9	1.9	1.9	1.9	2.0	1.99	2.11	
16-Mar	1.9	1.9	1.9	A	1.9	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.04	2.13	
17-Mar	2.1	2.0	A	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.11	2.21	
18-Mar	2.1	A	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.2	2.2	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	2.08	2.21	
19-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	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.97	2.03	
20-Mar	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.95	2.01	
21-Mar	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	2.0	1.9	1.9	2.0	A	2.0	2.0	1.95	2.02	
22-Mar	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	A	2.0	2.0	1.9	1.94	1.96	
23-Mar	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	A	1.9	1.9	2.0	2.0	1.95	1.99	
24-Mar	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.92	2.13	
25-Mar	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	A	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.99	
26-Mar	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.92	1.95	
27-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.95	2.00	
28-Mar	2.0	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.02	2.11	
29-Mar	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.0	1.9	A	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	1.97	
30-Mar	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.94	2.00	
31-Mar	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	2.0	2.0	1.99	2.04	
		1.98	1.97	1.98	1.99	1.98	1.99	2.00	2.01	1.99	2.00	2.00	1.99	1.98	1.97	1.97	1.96	1.97	1.96	1.96	1.96	1.97	1.97	1.97	1.98	Diurnal Average	
		2.15	2.22	2.20	2.38	2.21	2.21	2.32	2.24	2.20	2.21	2.21	2.21	2.13	2.08	2.09	2.06	2.10	2.11	2.13	2.12	2.13	2.11	2.11	2.11	Diurnal Maximum	
C - Calibration		N - Not Valid						A - Automated Daily Zero Span																			

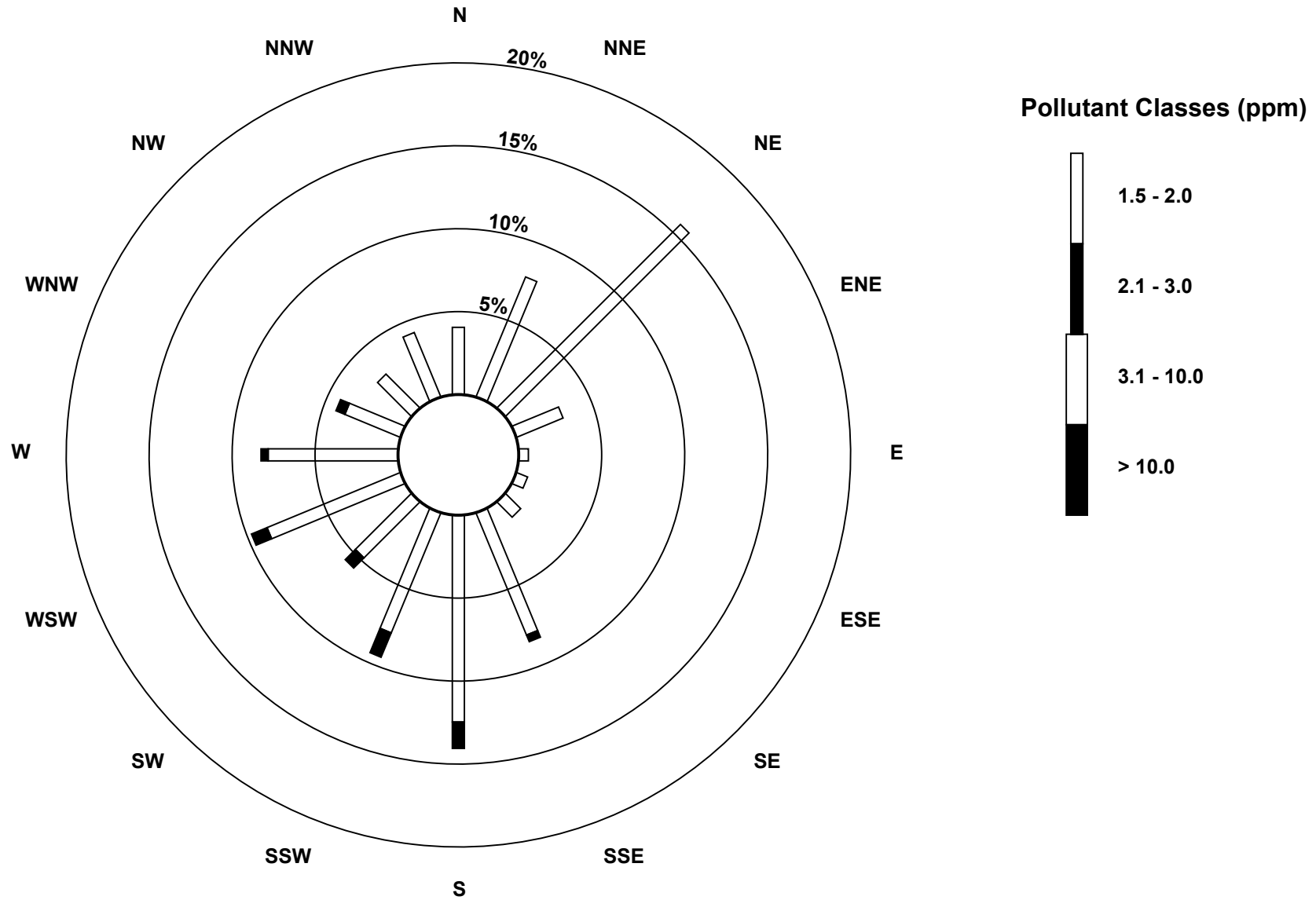
Hourly Maximums

Methane (CH₄) - ppm
Portable Rycroft - March 2018



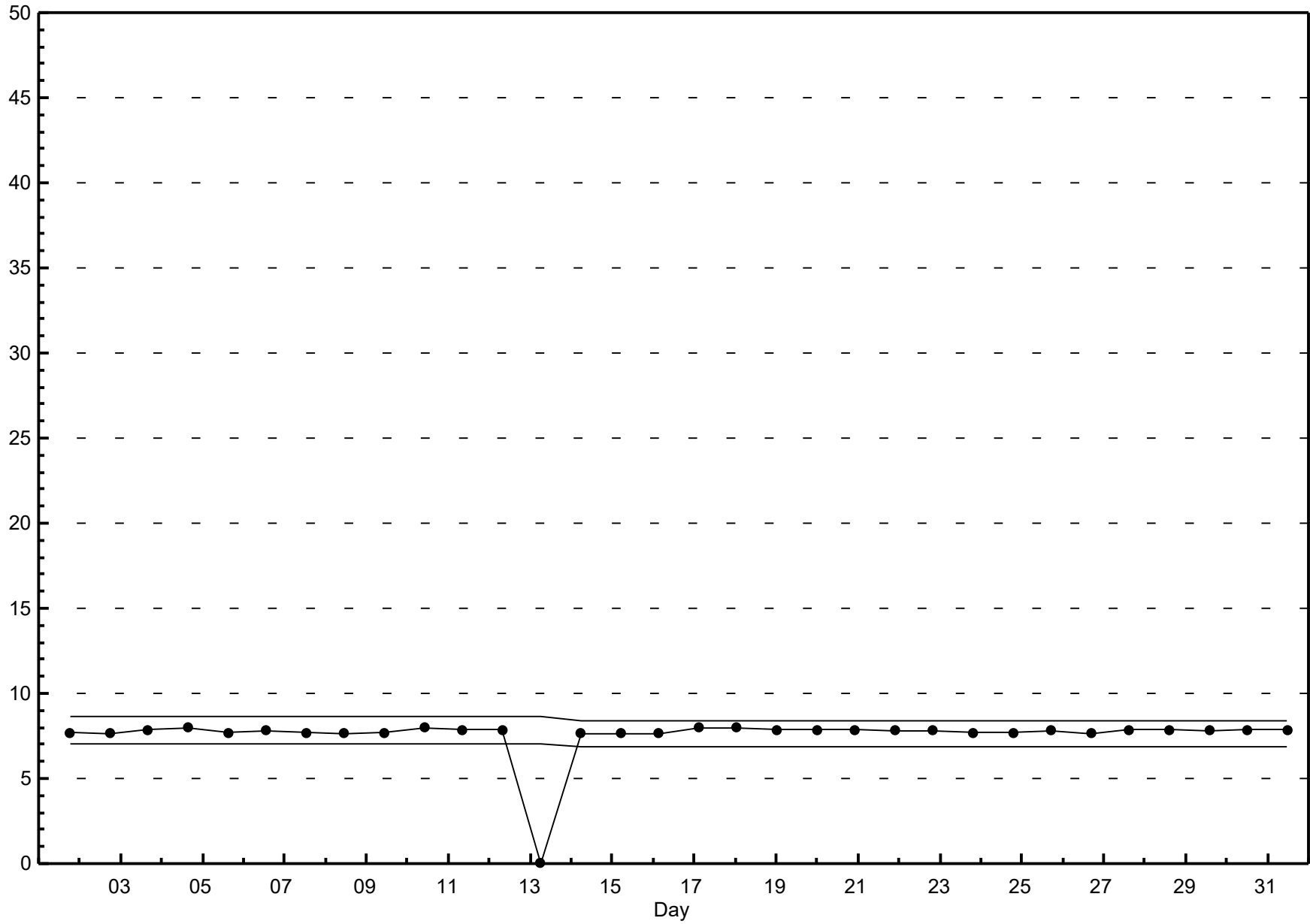
Pollutant Rose

Methane (CH₄) - ppm
Portable Rycroft - March 2018



Span Responses

Methane (CH₄)
Portable Rycroft - March 2018

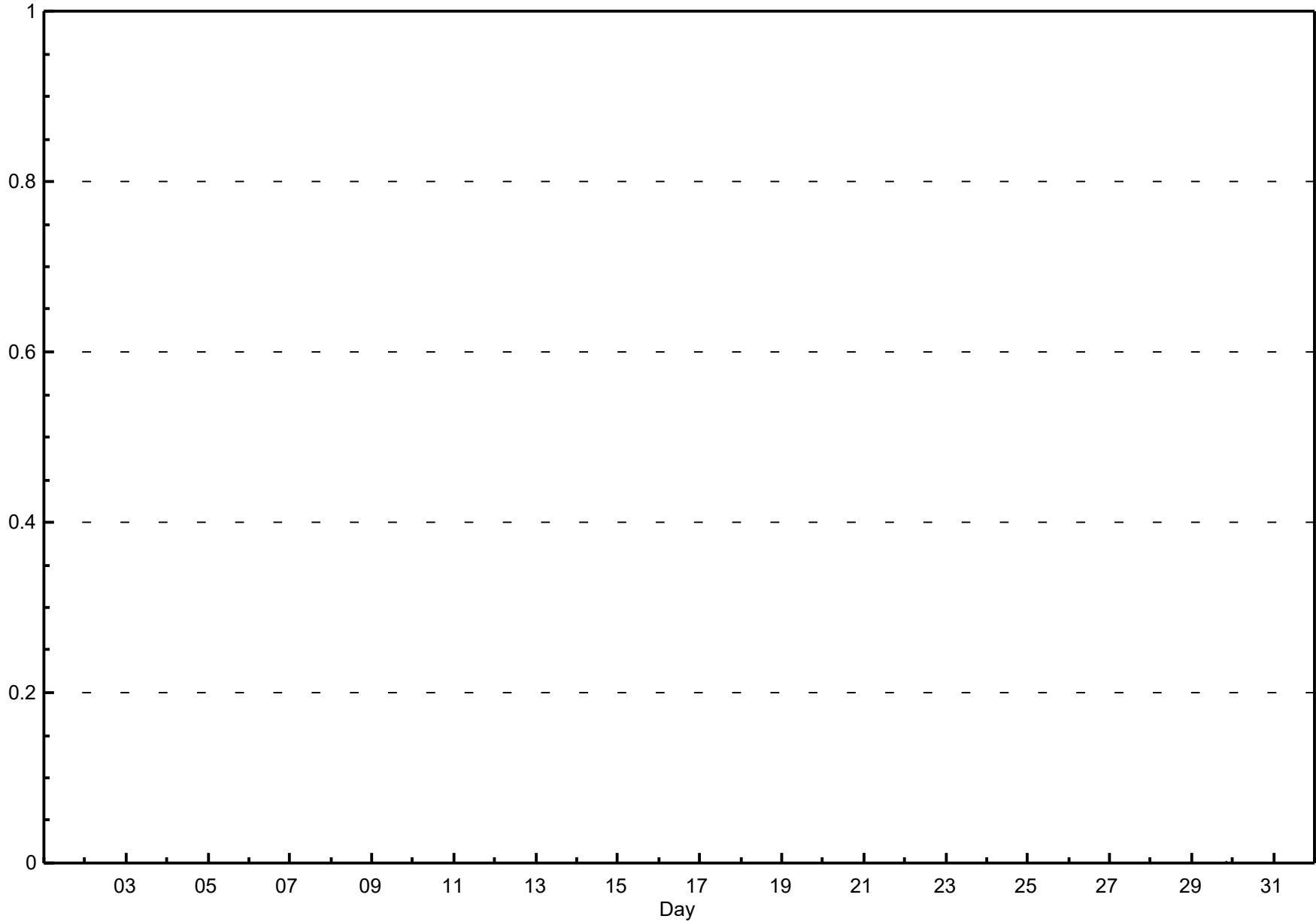


Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Portable Rycroft - March 2018

Maximum Value: 0.00 ppm on Mar 29 21:00 Maximum Daily Average: 0.00 ppm on Mar 9 Minimum Value: 0.0 ppm on Mar 1 01:00 Minimum Daily Average: 0.00 ppm on Mar 2 Maximum Diurnal Average: 0.00 ppm at hour 17 Minimum Diurnal Average: 0.00 ppm at hour 7 Monthly Average: 0.000 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service:	744	
																								Hours of Data:	690	
																								Hours of Missing Data:	54	
																								Hours of Calibration:	33	
																								Percent Operational Time:	97.2	
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	0.0	0.0	0.0	0.0	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
2-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
3-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
4-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
5-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
6-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
7-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
8-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
9-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
10-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
11-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
12-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	N	N	N	N	N	N	N	N	N	N	--	0.00
13-Mar	N	N	N	N	N	N	N	N	N	N	N	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.00
14-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
15-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
16-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
17-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
18-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
19-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	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	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	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
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	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
23-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
24-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
25-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
26-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
27-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
28-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
29-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
30-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
31-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
0.00 0.00																								Diurnal Average		
0.00 0.00																								Diurnal Maximum		
C - Calibration				N - Not Valid				A - Automated Daily Zero Span																		



Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

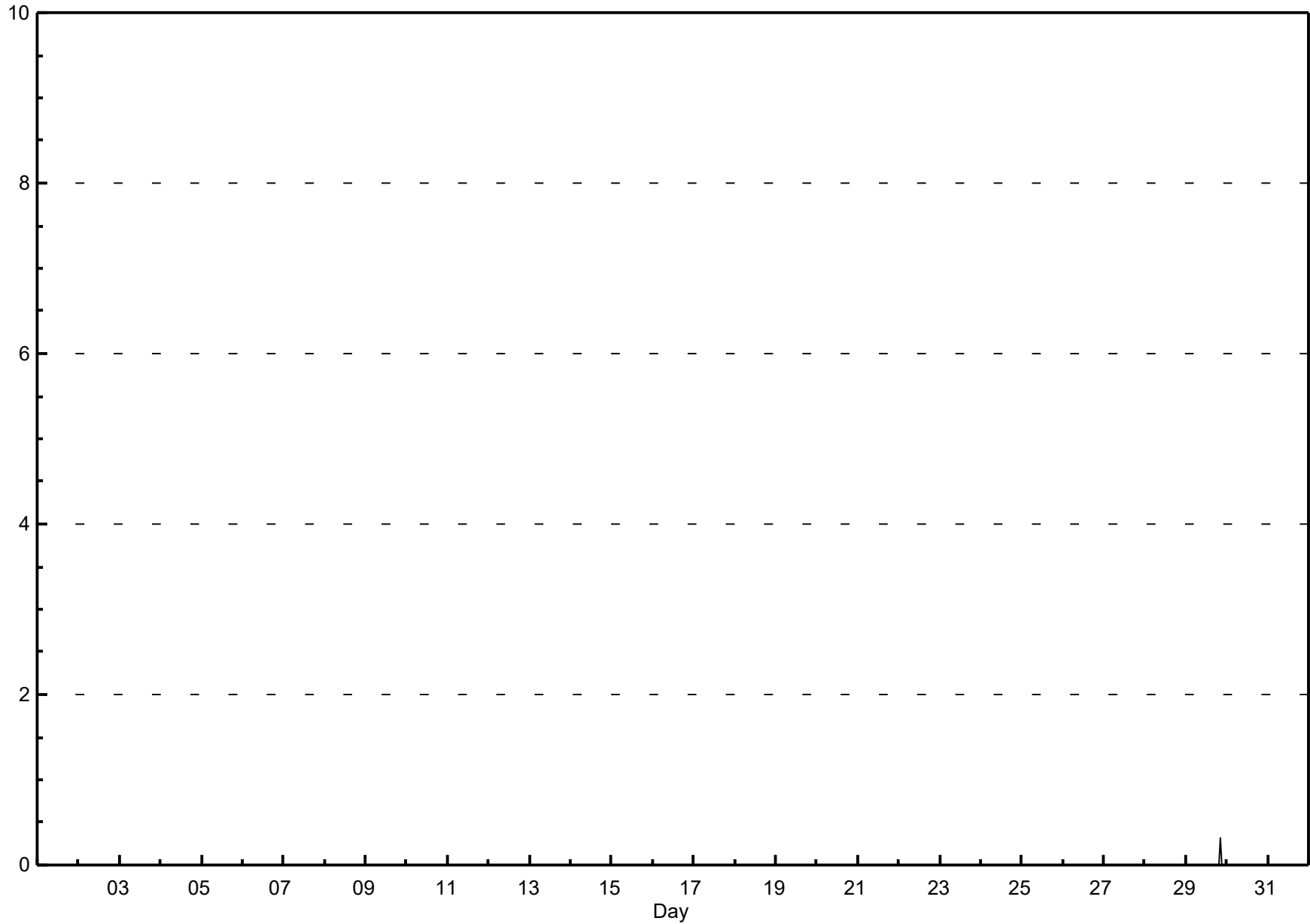
Portable Rycroft - March 2018

Maximum Value: 0.32 ppm on Mar 29 21:00 Maximum Daily Average: 0.01 ppm on Mar 29 Minimum Value: 0.0 ppm on Mar 1 02:00 Minimum Daily Average: 0.00 ppm on Mar 24 Maximum Diurnal Average: 0.01 ppm at hour 21 Minimum Diurnal Average: 0.00 ppm at hour 7 Monthly Average: 0.001 ppm Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00																								Hours in Service:	744																							
																								Hours of Data:	690																							
																								Hours of Missing Data:	54																							
																								Hours of Calibration:	33																							
																								Percent Operational Time:	97.2																							
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	0.0	0.0	0.0	0.0	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																					
2-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	0.0	0.00	0.00																					
3-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	0.0	0.00	0.00																					
4-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	0.0	0.00	0.00																					
5-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	0.0	0.00	0.00																					
6-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	0.0	0.00	0.00																					
7-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	0.0	0.00	0.00																					
8-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	0.0	0.00	0.00																					
9-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	0.0	0.00	0.00																					
10-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	0.0	0.00	0.00																					
11-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	0.0	0.00	0.00																					
12-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	N	N	N	N	N	N	N	N	N	N	N	--	0.00																					
13-Mar	N	N	N	N	N	N	N	N	N	N	N	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	0.00																					
14-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	0.0	0.00	0.00																					
15-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	0.0	0.00	0.00																					
16-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	0.0	0.00	0.00																					
17-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	0.0	0.00	0.00																					
18-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	0.0	0.00	0.00																					
19-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	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	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																					
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	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																					
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	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																					
23-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	0.0	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	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																					
25-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	0.0	0.00	0.00																					
26-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	0.0	0.00	0.00																					
27-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	0.0	0.00	0.00																					
28-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	0.0	0.00	0.00																					
29-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	0.3	0.01	0.32																					
30-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	0.0	0.00	0.00																					
31-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	0.0	0.00	0.00																					
																								0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	Diurnal Average	
																								0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	Diurnal Maximum	
C - Calibration																								N - Not Valid						A - Automated Daily Zero Span																		

Hourly Maximums

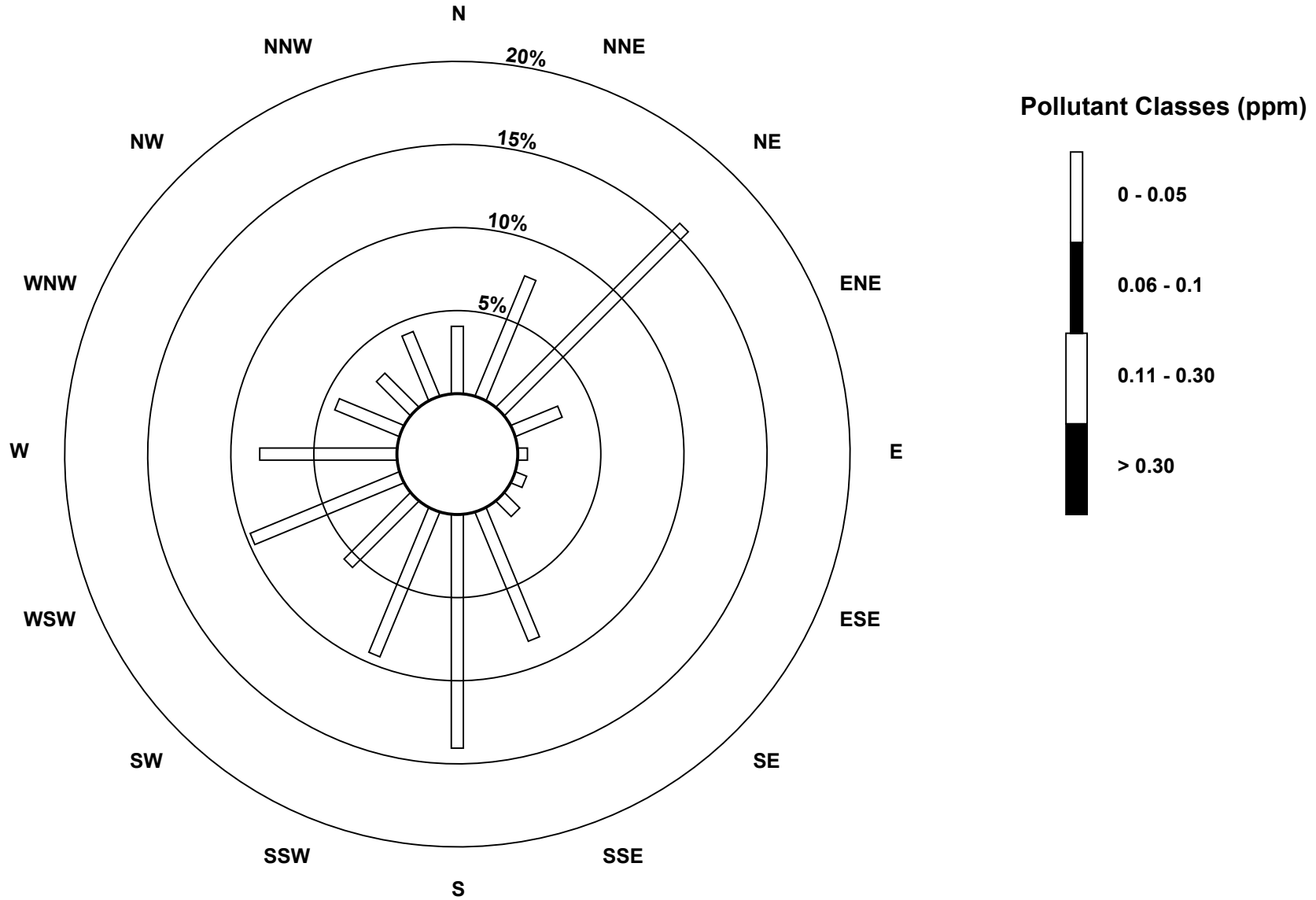
Non Methane Hydrocarbon (NMHC) - ppm

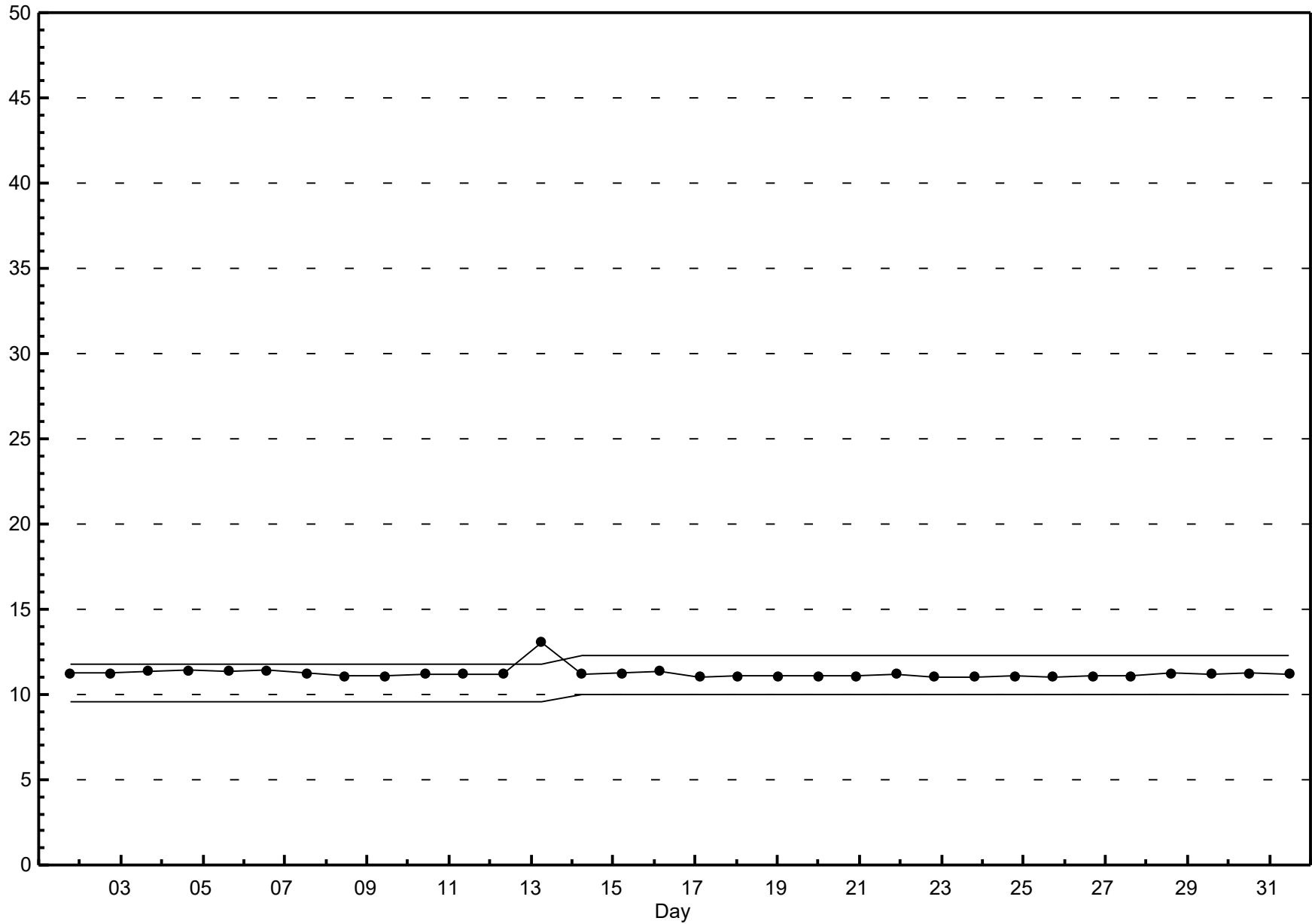
Portable Rycroft - March 2018



Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm
Portable Rycroft - March 2018





Hourly Averages

PM2.5 (PM_{2.5}) - µg/m³

Portable Rycroft - March 2018

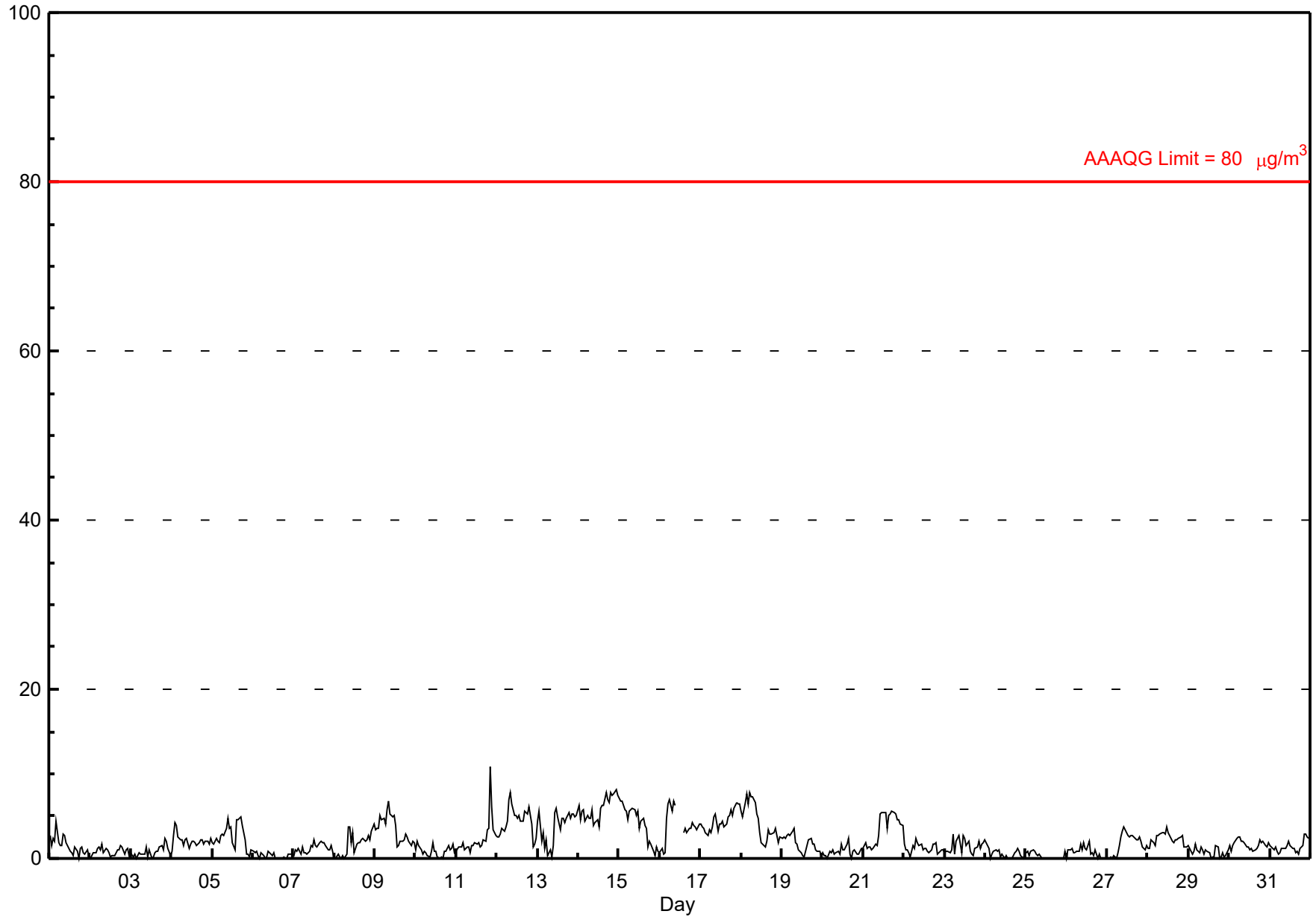
Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 10.8 µg/m ³ on Mar 11 21:00	Maximum Daily Average: 5.9 µg/m ³ on Mar 14
Minimum Value: 0 µg/m ³ on Mar 1 18:00	Hours of Data: 740
Maximum Diurnal Average: 2.6 µg/m ³ at hour 9	Hours of Missing Data: 4
Monthly Average: 2.14 µg/m ³	Hours of Calibration: 4
Minimum Daily Average: 0.3 µg/m ³ on Mar 25	Percent Operational Time: 100.0
Minimum Diurnal Average: 1.8 µg/m ³ at hour 14	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.3 Q ₁ = 0.8 Median = 1.6 Q ₃ = 3.0 P ₉₀ = 5.1 P ₉₉ = 7.5	

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	3	1	2	2	4	2	1	1	3	3	2	1	1	1	0	1	1	0	1	1	1	1	1	0	1.5	4.3																							
2-Mar	0	0	1	1	1	1	1	2	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	0	0.8	1.8																							
3-Mar	1	0	1	0	0	1	1	1	0	1	0	1	0	0	1	1	1	1	2	1	2	2	1	0	0.8	2.3																							
4-Mar	1	3	4	4	3	2	2	2	2	2	1	2	2	2	2	1	2	2	2	2	2	2	2	2	2.1	4.2																							
5-Mar	2	2	2	2	2	3	3	3	4	5	4	4	2	1	5	5	5	5	4	2	0	1	0	1	2.7	4.9																							
6-Mar	1	1	1	0	0	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	1	1	0.3	0.9																							
7-Mar	0	1	1	1	0	1	1	1	1	1	2	1	2	2	1	2	2	2	2	2	1	1	1	1	1.2	2.2																							
8-Mar	0	0	0	0	0	0	0	0	4	4	2	3	1	2	2	2	2	2	2	2	3	2	3	4	1.7	4.1																							
9-Mar	3	4	4	5	4	5	4	6	7	5	5	5	4	1	1	2	2	2	3	3	2	2	2	2	3.4	6.7																							
10-Mar	1	2	2	1	1	1	1	0	0	1	2	1	1	0	0	0	0	1	1	2	1	1	2	1	0.9	2.1																							
11-Mar	1	1	1	1	2	1	1	1	1	2	2	2	2	2	1	2	2	2	3	3	11	6	3	3	2.4	10.8																							
12-Mar	3	3	3	4	3	4	4	7	8	6	5	5	5	5	4	4	6	5	5	6	4	1	2	2	4.4	7.8																							
13-Mar	4	6	2	3	1	2	0	1	0	2	5	6	5	3	5	5	4	5	5	5	5	5	5	5	3.8	6.0																							
14-Mar	6	5	6	6	4	5	5	5	6	4	4	5	4	6	6	6	8	7	7	8	8	8	8	8	5.9	8.1																							
15-Mar	7	7	7	6	6	5	6	6	6	6	5	6	4	4	5	4	4	1	2	2	1	0	1	1	4.1	7.1																							
16-Mar	1	1	1	1	5	6	7	6	7	6	C	C	C	C	3	4	3	4	4	4	4	4	3	4	3.8	7.0																							
17-Mar	4	4	4	3	3	3	3	4	5	5	3	4	4	4	4	4	5	5	6	5	6	7	6	6	4.5	6.7																							
18-Mar	6	5	7	8	7	8	7	7	7	5	5	3	2	2	1	2	3	3	3	3	4	3	2	3	4.3	7.8																							
19-Mar	2	3	2	3	3	3	3	4	2	2	1	1	0	0	1	1	2	2	2	2	1	1	1	0	1.7	3.5																							
20-Mar	1	0	0	0	1	1	1	1	1	1	1	2	1	1	2	2	0	0	1	1	0	0	1	1	0.8	2.3																							
21-Mar	1	2	1	1	1	1	1	2	2	3	5	5	5	5	4	5	5	6	5	5	5	5	4	4	3.5	5.6																							
22-Mar	2	1	1	1	0	1	1	2	2	2	2	1	1	1	1	1	1	2	2	2	0	1	1	1	1.2	2.4																							
23-Mar	1	1	1	1	1	3	1	2	3	2	1	3	2	2	2	1	1	0	1	1	2	1	2	2	1.4	2.8																							
24-Mar	2	2	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0.6	2.2																							
25-Mar	1	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	1.0																							
26-Mar	0	1	1	1	1	1	1	1	2	1	2	1	1	2	0	1	0	1	0	1	0	0	0	0	0.8	2.0																							
27-Mar	0	0	0	0	0	0	1	2	3	3	4	3	3	3	3	3	2	2	2	3	2	1	1	1	1.7	3.7																							
28-Mar	1	1	2	2	2	3	3	3	3	3	3	4	3	3	2	2	2	2	2	3	3	1	1	1	2.3	3.7																							
29-Mar	1	1	1	1	2	1	1	1	1	0	1	1	1	0	0	0	2	1	0	0	1	0	0	1	0.8	1.7																							
30-Mar	2	1	2	2	2	3	2	2	2	2	1	1	1	1	1	1	1	1	2	2	2	2	1	2	1.6	2.5																							
31-Mar	1	1	1	1	1	0	1	1	1	1	1	2	2	1	1	1	1	0	1	2	3	3	3	2	1.4	2.9																							
																								1.9	1.9	2.0	1.9	2.0	2.2	2.1	2.4	2.6	2.5	2.3	2.4	2.0	1.8	1.9	2.0	2.2	2.2	2.3	2.4	2.4	2.0	2.0	2.0	Diurnal Average	
																								7.1	6.9	6.7	7.7	6.5	7.8	7.3	7.3	7.8	6.4	5.5	6.0	5.5	6.0	6.3	6.3	7.8	7.0	6.5	7.7	10.8	7.6	8.1	7.5	Diurnal Maximum	

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

Hourly Averages

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Rycroft - March 2018



Hourly Maximums

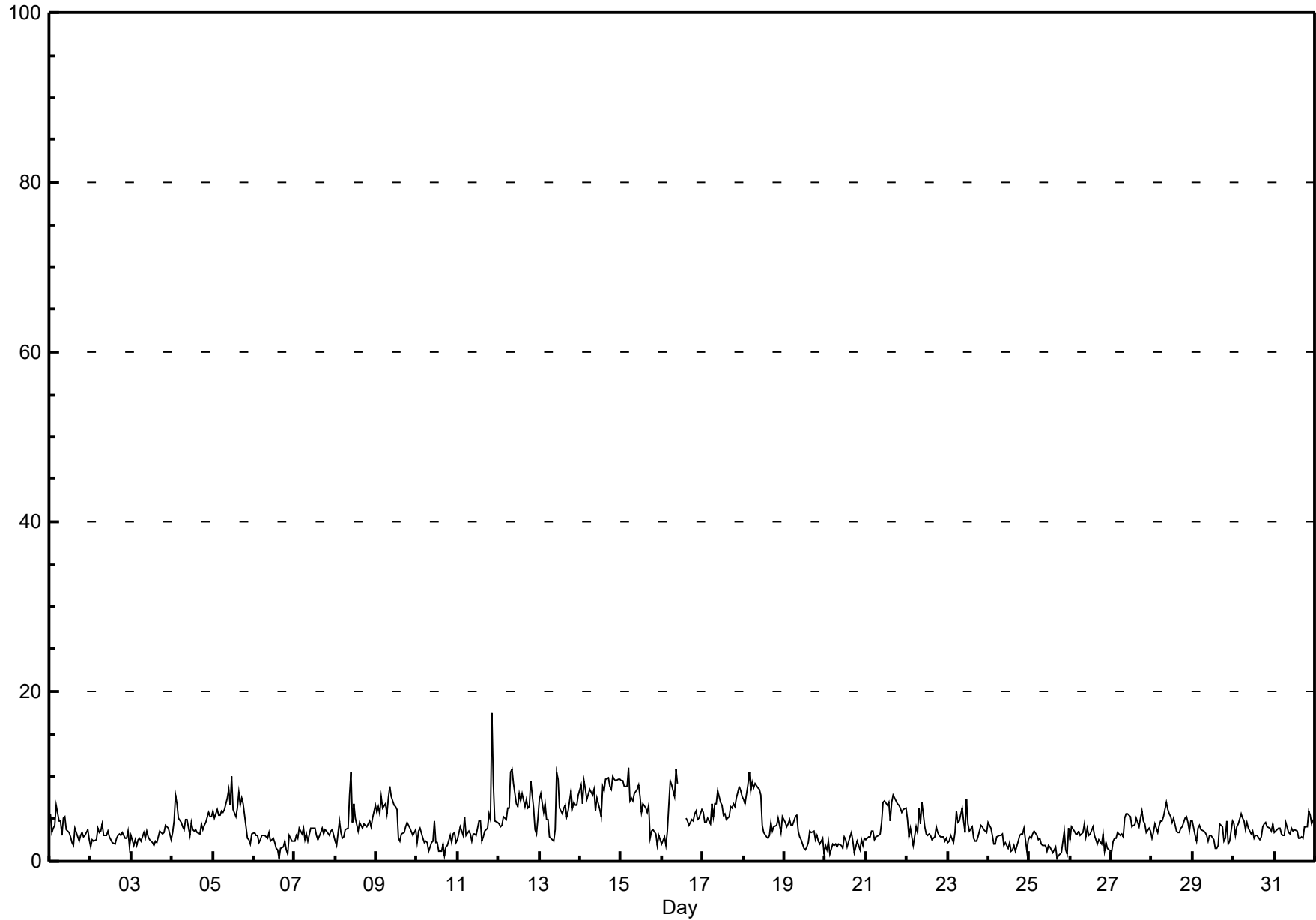
PM2.5 (PM_{2.5}) - µg/m³

Portable Rycroft - March 2018

Maximum Value: 17.4 µg/m ³ on Mar 11 21:00		Maximum Daily Average: 8.4 µg/m ³ on Mar 14		Hours in Service: 744																							
Minimum Value: 0 µg/m ³ on Mar 25 17:00		Minimum Daily Average: 2.0 µg/m ³ on Mar 25		Hours of Data: 740																							
Maximum Diurnal Average: 5.1 µg/m ³ at hour 10		Minimum Diurnal Average: 3.5 µg/m ³ at hour 15		Hours of Missing Data: 4																							
Monthly Average: 4.25 µg/m ³		Percentiles: P ₁ = 0.9 P ₁₀ = 2.1 Q ₁ = 2.8 Median = 3.7 Q ₃ = 5.3 P ₉₀ = 7.4 P ₉₉ = 10.3		Hours of Calibration: 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	6	3	4	4	7	5	5	3	5	5	4	3	3	2	2	4	3	2	3	3	3	3	4	2	3.7	6.5	
2-Mar	2	3	2	3	4	3	4	4	3	3	4	3	2	2	2	3	3	3	3	3	3	3	3	2	2.9	4.3	
3-Mar	3	2	3	2	3	3	2	3	3	3	3	3	2	2	2	2	3	3	3	3	4	4	4	3	2.8	4.2	
4-Mar	3	5	8	7	5	5	4	4	5	5	3	5	4	4	4	3	3	4	4	4	5	6	5	5	4.5	7.9	
5-Mar	6	5	6	5	5	6	6	6	7	8	7	10	6	5	6	8	7	8	7	4	3	2	2	3	5.8	10.0	
6-Mar	3	3	3	2	3	3	3	3	3	3	2	3	2	1	1	0	2	2	2	1	1	3	2	2	2.3	3.3	
7-Mar	2	3	3	4	3	4	3	3	2	4	4	4	4	3	3	3	4	3	4	4	3	4	4	3	3.3	3.9	
8-Mar	2	2	5	3	3	3	4	4	8	11	5	7	5	4	5	4	4	4	4	4	5	4	5	7	4.6	10.6	
9-Mar	6	6	6	8	6	7	6	8	9	8	7	7	6	3	2	3	3	4	4	4	4	3	3	4	5.2	8.8	
10-Mar	2	4	4	3	2	2	2	1	2	2	5	2	2	1	1	2	1	2	2	3	2	3	3	2	2.3	4.7	
11-Mar	3	4	4	3	5	3	4	3	2	3	3	3	5	5	2	3	4	4	6	5	17	9	5	5	4.5	17.4	
12-Mar	4	4	4	5	5	6	6	10	11	9	7	6	8	7	8	6	7	6	6	9	6	4	3	5	6.5	10.8	
13-Mar	7	8	6	7	5	5	3	3	2	4	10	10	6	6	6	7	5	6	8	6	7	7	7	8	6.2	10.5	
14-Mar	9	7	10	8	7	8	8	8	8	6	8	6	5	9	8	10	10	9	8	10	10	9	10	10	8.4	9.9	
15-Mar	10	9	9	9	11	7	8	7	8	8	9	8	6	7	6	6	7	3	4	4	3	2	3	3	6.4	11.0	
16-Mar	2	3	2	4	7	9	9	8	11	9	C	C	C	C	5	5	4	5	5	6	6	5	5	6	5.7	10.9	
17-Mar	6	5	5	5	4	7	5	7	7	8	7	7	5	6	5	5	6	6	7	6	8	9	8	8	6.3	8.7	
18-Mar	7	7	9	11	8	9	9	9	8	8	4	3	3	3	3	3	5	4	4	4	5	4	3	5	6.0	10.6	
19-Mar	5	4	4	5	4	4	5	5	4	3	3	2	1	2	2	4	3	4	3	3	2	2	3	1	3.2	5.4	
20-Mar	2	1	2	1	2	2	2	2	2	2	2	3	3	2	3	3	2	1	2	2	1	3	2	3	2.0	3.4	
21-Mar	3	3	3	3	4	3	3	3	3	5	7	7	7	7	5	7	8	7	7	7	6	6	6	6	5.2	7.8	
22-Mar	5	3	4	3	2	4	3	6	4	7	4	3	3	3	3	3	3	4	3	3	3	3	2	3	3.5	7.0	
23-Mar	2	2	3	2	3	6	5	5	6	5	3	7	4	4	4	3	2	2	3	4	4	4	3	3	3.8	7.2	
24-Mar	5	4	3	2	2	3	3	3	3	2	2	2	2	1	1	2	1	2	3	3	3	4	1	3	2.5	4.6	
25-Mar	3	3	3	4	3	3	3	2	2	2	1	2	2	1	1	2	0	1	1	1	3	1	1	4	2.0	3.9	
26-Mar	2	4	4	3	3	4	3	3	4	3	4	3	3	4	3	3	2	3	2	3	1	2	2	1	2.9	4.3	
27-Mar	1	2	3	3	3	3	3	3	5	6	6	5	4	4	4	5	4	5	6	5	4	3	4	4	4.0	6.0	
28-Mar	3	3	4	3	4	5	5	5	7	6	6	5	5	5	4	3	3	4	4	5	5	5	4	5	4.5	7.0	
29-Mar	5	3	2	4	4	4	4	3	3	2	3	3	3	2	1	2	4	4	2	3	5	2	2	5	3.1	4.8	
30-Mar	4	3	4	4	6	5	5	4	5	4	3	4	3	3	3	3	3	3	4	4	5	4	4	4	3.9	5.6	
31-Mar	3	4	4	4	3	3	3	5	3	3	4	4	4	4	3	3	3	3	4	4	6	5	4	5	3.7	6.0	
		4.1	3.9	4.3	4.3	4.4	4.6	4.4	4.6	5.1	5.1	4.7	4.6	3.9	3.7	3.5	3.8	3.9	3.9	4.1	4.3	4.6	4.1	3.8	4.1	Diurnal Average	
		9.5	9.4	9.6	10.6	11.0	9.5	8.9	10.5	10.9	10.6	10.5	10.0	7.9	8.9	8.3	9.7	9.8	8.7	8.4	9.9	17.4	9.5	9.7	9.7	Diurnal Maximum	
C - Calibration																											

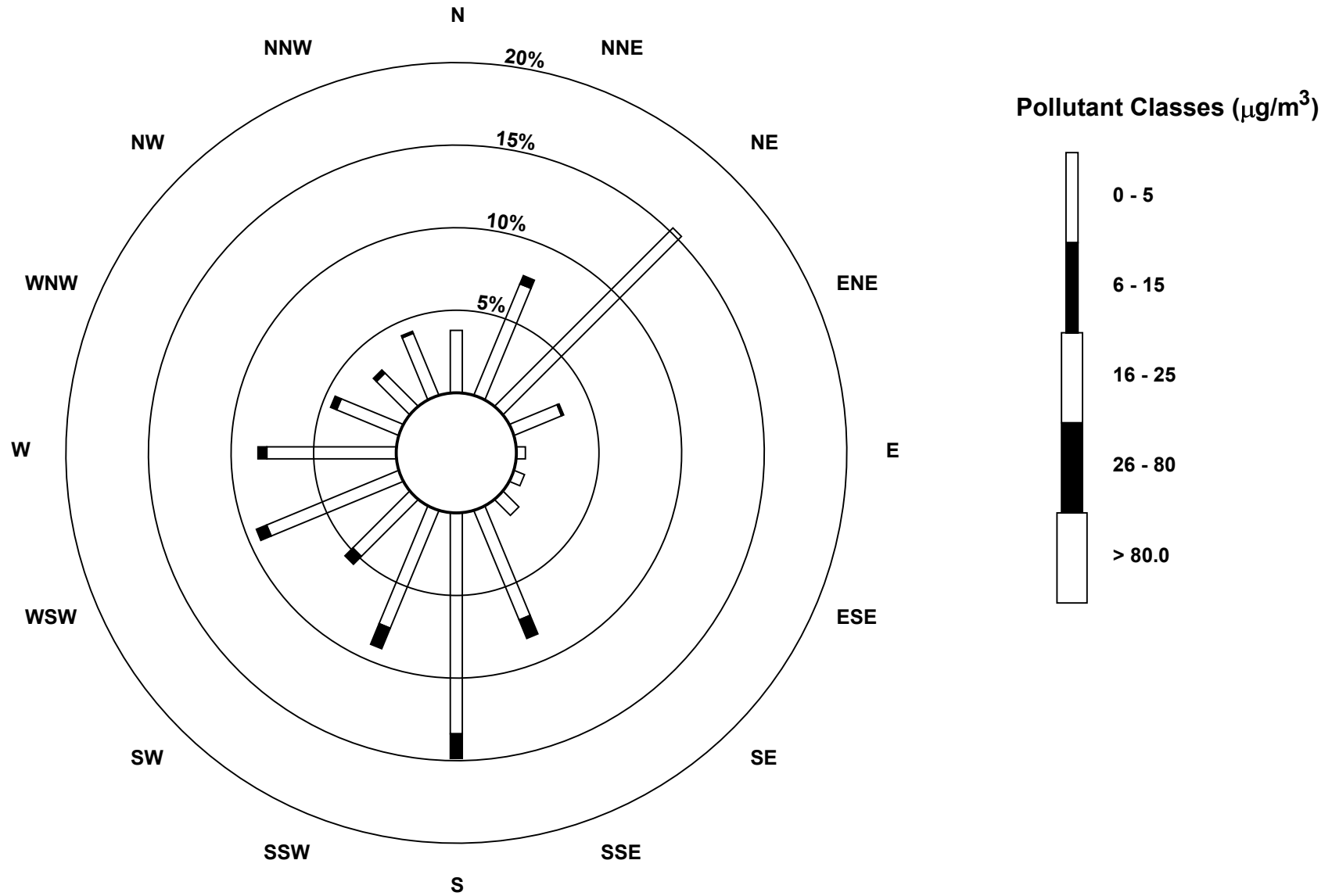
Hourly Maximums

PM2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Rycroft - March 2018



Pollutant Rose

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Portable Rycroft - March 2018



Hourly Averages

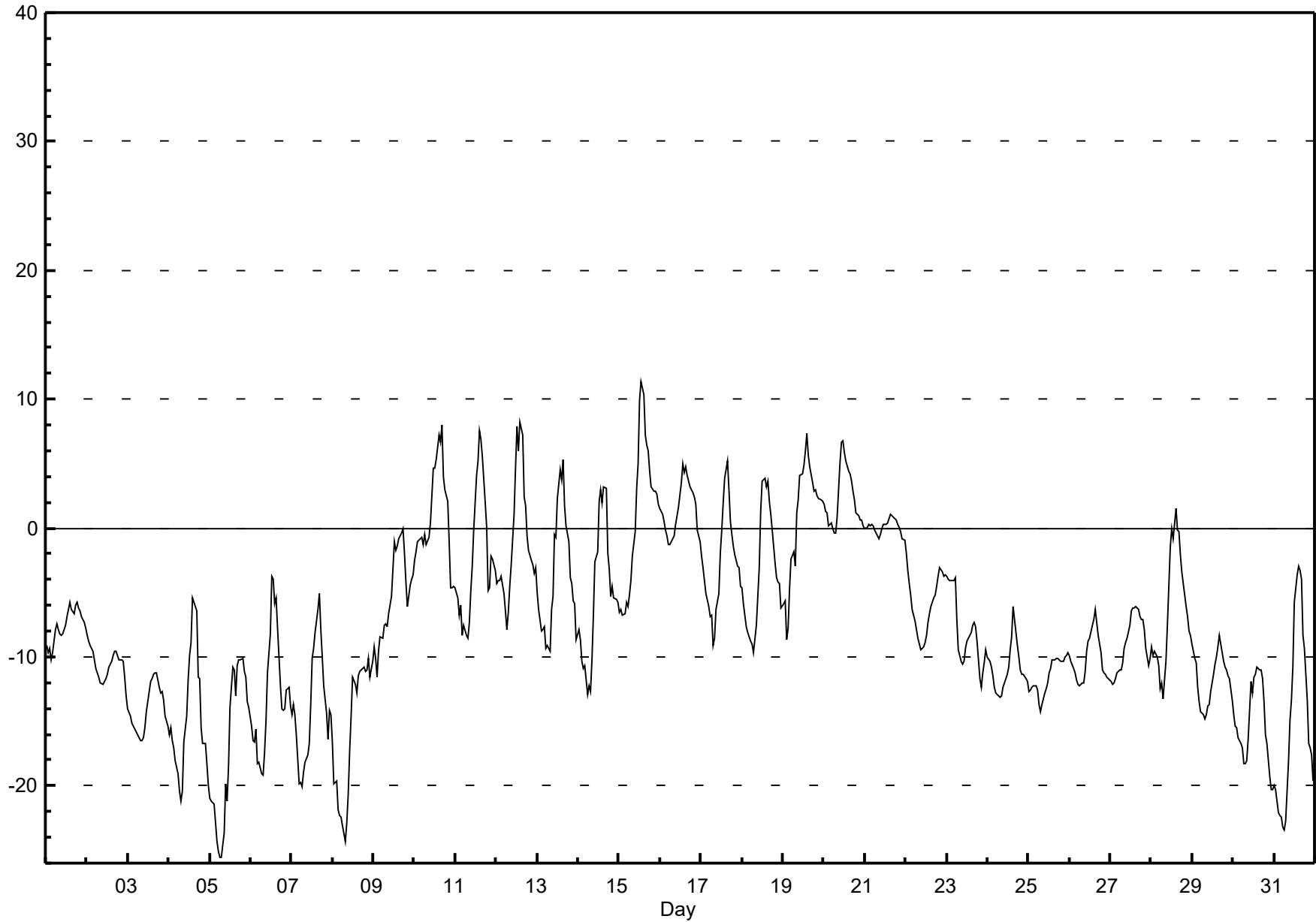
External Temperature (ET) - °C

Portable Rycroft - March 2018

Maximum Value: 11.4 °C on Mar 15 14:00		Maximum Daily Average: 2.3 °C on Mar 20		Hours in Service: 744																							
Minimum Value: -26 °C on Mar 5 08:00		Minimum Daily Average: -17.1 °C on Mar 5		Hours of Data: 744																							
Maximum Diurnal Average: -2.4 °C at hour 16		Minimum Diurnal Average: -11.5 °C at hour 8		Hours of Missing Data: 0																							
Monthly Average: -7.32 °C		Percentiles: P ₁ = -23.2 P ₁₀ = -16.3 Q ₁ = -11.7 Median = -8.0 Q ₃ = -1.9 P ₉₀ = 2.4 P ₉₉ = 7.3		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	-9	-10	-9	-10	-10	-8	-7	-8	-8	-8	-8	-7	-6	-6	-6	-7	-6	-6	-6	-6	-6	-7	-7	-8	-7.6	-5.7	
2-Mar	-8	-9	-9	-10	-10	-11	-11	-12	-12	-12	-12	-12	-11	-11	-10	-10	-10	-10	-10	-10	-10	-10	-12	-13	-10.6	-8.3	
3-Mar	-14	-15	-15	-15	-16	-16	-16	-16	-17	-16	-16	-14	-13	-12	-12	-11	-11	-11	-12	-13	-13	-13	-15	-15	-14.0	-11.2	
4-Mar	-16	-15	-17	-17	-18	-19	-20	-21	-20	-17	-15	-12	-10	-9	-5	-6	-6	-12	-12	-16	-17	-17	-18	-20	-14.8	-5.4	
5-Mar	-21	-21	-21	-23	-24	-25	-26	-26	-24	-20	-21	-18	-14	-11	-11	-13	-11	-10	-10	-10	-11	-12	-13	-14	-17.1	-10.1	
6-Mar	-15	-17	-17	-16	-18	-18	-19	-19	-17	-15	-11	-8	-4	-4	-6	-5	-8	-12	-14	-14	-14	-13	-12	-14	-12.9	-3.7	
7-Mar	-14	-14	-14	-16	-20	-20	-20	-19	-18	-18	-17	-14	-10	-9	-8	-6	-5	-8	-10	-12	-14	-16	-14	-14	-13.8	-5.1	
8-Mar	-17	-20	-20	-22	-22	-22	-23	-24	-23	-21	-17	-15	-12	-12	-13	-11	-11	-11	-11	-11	-11	-10	-12	-10	-15.9	-10.1	
9-Mar	-9	-10	-12	-10	-8	-9	-8	-7	-8	-7	-5	-3	-1	-2	-1	-1	0	0	-2	-4	-6	-4	-4	-4	-5.2	-0.1	
10-Mar	-2	-2	-1	-1	-1	-1	0	-1	-1	0	3	5	5	5	7	7	8	4	3	2	-1	-5	-5	-4	1.0	8.1	
11-Mar	-5	-5	-7	-6	-8	-8	-8	-9	-7	-5	-3	0	4	5	8	7	6	2	0	-5	-5	-2	-2	-3	-2.4	7.5	
12-Mar	-4	-4	-4	-4	-5	-6	-8	-6	-5	-3	1	5	8	6	8	7	2	2	-1	-2	-3	-3	-4	-3	-1.0	8.3	
13-Mar	-5	-6	-8	-8	-8	-9	-9	-10	-6	-5	0	-1	2	5	4	5	2	0	-1	-4	-4	-6	-6	-9	-3.6	5.3	
14-Mar	-8	-9	-10	-11	-11	-13	-12	-13	-10	-7	-3	-2	2	3	2	3	3	-2	-3	-5	-5	-5	-5	-6	-5.2	3.2	
15-Mar	-7	-6	-7	-7	-6	-6	-5	-4	-2	0	3	5	10	11	10	7	6	6	4	3	3	3	3	2	1.2	11.4	
16-Mar	2	1	0	0	-1	-1	-1	-1	-1	0	1	2	3	5	4	5	4	3	3	3	2	2	0	-1	1.5	5.0	
17-Mar	-2	-3	-4	-5	-6	-7	-7	-9	-9	-6	-5	-2	0	2	4	5	3	1	-1	-1	-2	-3	-3	-4	-2.7	5.3	
18-Mar	-5	-6	-8	-8	-8	-9	-9	-10	-8	-5	-3	1	4	4	3	4	2	1	0	-3	-4	-4	-4	-6	-3.4	3.8	
19-Mar	-6	-6	-9	-8	-5	-2	-2	-3	1	2	4	4	5	6	7	6	5	4	3	3	3	2	2	2	0.8	7.3	
20-Mar	2	1	1	0	0	0	0	0	1	5	7	7	6	5	4	4	4	3	2	1	1	1	1	0	2.3	6.8	
21-Mar	0	0	0	0	0	0	0	-1	-1	-1	0	0	0	0	1	1	1	1	1	0	0	0	-1	-1	0.1	1.0	
22-Mar	-2	-3	-4	-5	-6	-7	-8	-9	-9	-9	-9	-9	-8	-7	-7	-6	-5	-5	-5	-4	-3	-3	-4	-4	-5.9	-2.0	
23-Mar	-4	-4	-4	-4	-4	-4	-7	-9	-10	-11	-10	-9	-9	-9	-8	-8	-7	-8	-9	-12	-12	-11	-10	-9	-8.0	-3.8	
24-Mar	-10	-10	-11	-11	-12	-13	-13	-13	-13	-12	-12	-11	-11	-9	-8	-6	-7	-9	-10	-11	-11	-11	-12	-12	-10.9	-6.1	
25-Mar	-13	-13	-12	-12	-12	-13	-14	-14	-14	-13	-12	-12	-11	-11	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-11.5	-9.7	
26-Mar	-10	-10	-11	-11	-12	-12	-12	-12	-12	-11	-10	-9	-9	-8	-7	-6	-7	-8	-10	-11	-11	-11	-12	-12	-10.2	-6.4	
27-Mar	-12	-12	-12	-12	-11	-11	-11	-10	-9	-9	-9	-7	-6	-6	-6	-6	-6	-7	-7	-7	-8	-9	-11	-10	-9.0	-6.1	
28-Mar	-9	-10	-10	-10	-11	-12	-12	-13	-10	-8	-4	-1	0	-1	1	0	0	-2	-3	-5	-6	-7	-8	-8	-6.3	1.5	
29-Mar	-9	-10	-10	-12	-13	-14	-14	-15	-14	-14	-14	-13	-11	-11	-10	-9	-8	-10	-10	-11	-11	-11	-12	-13	-11.7	-8.3	
30-Mar	-14	-15	-16	-16	-17	-17	-18	-18	-18	-16	-12	-13	-12	-11	-11	-11	-11	-12	-13	-16	-17	-19	-20	-20	-15.2	-10.8	
31-Mar	-20	-20	-22	-22	-22	-23	-23	-23	-18	-15	-13	-11	-6	-4	-3	-3	-4	-8	-9	-13	-17	-17	-18	-20	-14.8	-2.9	
		-8.6	-9.1	-9.7	-10.1	-10.5	-10.9	-11.2	-11.5	-10.4	-8.9	-7.2	-5.7	-3.7	-3.0	-2.5	-2.4	-2.9	-4.3	-5.3	-6.6	-7.2	-7.6	-8.0	-8.5	Diurnal Average	
		1.8	1.3	1.2	0.2	0.4	0.2	-0.1	-0.4	1.2	5.1	6.6	6.8	9.9	11.4	10.4	7.2	8.1	6.0	4.5	3.2	2.9	2.9	2.6	2.1	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Portable Rycroft - March 2018





Peace Airshed Zone Association

Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Rycroft - March 2018

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	1	5	18	26	21	20	21	26	28	32	33	33	30	32	34	33	33	32	33	33	32	23.9	33.5
Dir	52	18	40	343	33	31	28	30	39	43	46	46	46	49	47	37	31	42	48	49	52	50	49	51	43.2	41.8
2 Spd	34	36	31	30	29	28	30	29	32	31	27	24	23	23	21	21	19	16	12	6	5	5	4	15	20.6	35.7
Dir	49	49	49	48	47	49	47	49	48	47	48	50	52	51	49	49	52	51	42	35	55	53	251	258	47.7	48.7
3 Spd	13	16	17	15	18	19	20	20	18	19	21	23	25	26	23	19	16	14	13	12	13	10	9	9	16.9	25.5
Dir	259	263	259	258	260	258	258	258	256	258	261	267	271	273	266	267	271	276	266	260	266	267	263	261	263.8	272.6
4 Spd	6	4	5	6	6	8	8	9	8	6	5	4	3	5	3	4	4	6	5	1	2	3	5	5	3.2	8.6
Dir	235	193	197	194	193	183	185	182	174	184	203	188	225	253	276	327	8	41	86	79	132	150	172	185	188.9	181.6
5 Spd	3	2	3	2	1	5	3	2	3	1	6	5	4	4	3	7	16	18	16	18	19	18	19	18	7.7	19.2
Dir	163	195	182	156	182	246	218	205	225	284	251	252	289	284	254	248	253	243	241	247	255	255	256	253	247.5	255.8
6 Spd	15	12	14	10	6	7	7	8	7	4	3	3	4	4	5	4	5	4	1	2	4	8	6	4	3.3	15.1
Dir	242	247	254	237	219	221	186	167	169	180	183	329	358	319	319	345	351	317	64	148	159	158	154	148	221.1	242.0
7 Spd	4	4	6	7	3	4	4	4	4	6	8	4	3	4	4	3	2	1	3	4	5	8	9	8	2.8	9.1
Dir	113	124	143	141	289	292	288	253	254	262	257	253	231	196	189	183	240	347	163	157	178	185	164	149	196.9	164.5
8 Spd	4	4	2	2	3	3	2	2	2	4	5	4	5	7	7	6	4	5	3	3	3	4	4	3	2.7	7.0
Dir	172	164	190	198	200	205	202	220	254	252	280	283	309	276	263	269	249	231	238	155	202	169	202	203	233.2	263.1
9 Spd	3	1	4	5	5	4	7	17	14	15	17	12	8	21	17	14	5	7	9	10	10	13	13	13	8.1	21.0
Dir	248	261	238	225	199	196	227	251	234	232	234	255	241	265	266	270	226	153	142	152	179	180	197	193	225.6	265.2
10 Spd	19	14	9	9	12	8	13	9	11	12	9	5	4	3	5	6	2	4	5	4	5	7	7	8	6.9	19.1
Dir	186	190	202	197	185	194	187	194	186	188	192	207	202	208	197	193	273	13	56	98	168	185	184	174	188.0	186.2
11 Spd	9	9	8	10	6	8	8	8	7	4	4	4	2	6	8	8	2	4	2	4	9	11	11	9	4.0	10.8
Dir	162	168	177	166	196	179	181	172	184	178	215	234	264	351	13	24	32	23	69	178	181	150	160	162	167.9	149.7
12 Spd	11	9	13	11	10	7	6	8	7	2	5	5	5	6	5	3	6	4	3	6	3	6	7	3	2.7	12.7
Dir	153	151	151	158	157	178	166	164	158	24	13	11	12	341	21	323	292	274	249	265	209	183	173	145	166.5	151.0
13 Spd	2	0	4	6	6	6	4	3	4	3	2	6	5	5	7	8	5	4	3	4	5	4	5	6	2.0	8.1
Dir	63	325	234	180	178	188	188	183	160	187	242	273	330	318	333	1	323	256	246	190	186	207	189	222	228.3	1.4
14 Spd	4	2	3	1	2	4	4	5	4	3	3	5	4	8	10	10	5	7	7	6	6	7	7	7	1.5	10.3
Dir	191	156	175	269	154	227	183	189	190	198	302	291	292	15	25	26	342	280	246	201	191	185	173	167	216.7	25.4
15 Spd	8	7	6	5	7	5	5	5	3	3	3	3	3	4	5	6	5	3	5	5	6	6	3	3	3.7	8.1
Dir	171	173	167	185	168	195	187	152	154	147	166	207	310	1	273	237	184	201	189	204	187	190	205	256	189.6	171.3
16 Spd	4	1	6	10	9	8	8	4	4	4	8	10	6	4	6	4	4	3	3	4	4	7	5	7	3.4	10.5
Dir	244	212	232	278	292	318	303	284	223	213	260	255	231	226	242	228	247	195	149	119	130	148	173	152	240.0	278.2
17 Spd	5	7	7	7	6	4	4	5	3	2	5	4	6	7	5	4	5	5	3	3	4	4	4	4	3.1	7.4
Dir	161	174	176	184	186	180	183	184	210	256	287	284	274	292	282	313	304	285	258	220	256	245	199	219	229.1	183.8
18 Spd	4	4	4	4	5	3	5	4	4	4	4	4	4	5	7	8	8	7	8	5	2	6	3	5	0.7	8.5
Dir	191	192	202	214	195	196	191	216	194	244	257	294	294	316	328	3	33	72	70	57	117	155	167	174	196.5	33.4
19 Spd	4	3	2	7	10	12	9	4	12	12	12	11	6	9	6	12	17	14	11	6	4	7	9	11	7.0	17.3
Dir	166	120	219	167	148	146	175	214	192	195	195	194	202	226	223	238	248	263	271	236	169	167	180	186	202.4	247.9
20 Spd	10	8	6	5	5	6	5	2	2	2	3	5	3	4	3	2	2	4	5	6	4	4	4	3	2.4	9.7
Dir	191	190	196	193	189	193	194	200	190	246	277	352	303	217	238	278	167	132	139	152	131	67	73	56	183.1	191.3
21 Spd	6	3	5	9	11	12	14	14	18	13	17	24	25	24	25	25	25	22	22	24	26	32	32	30	18.9	32.4
Dir	55	40	77	43	38	49	47	52	40	14	53	47	45	47	50	51	49	60	58	53	56	50	49	50	49.2	49.3
22 Spd	29	32	31	33	30	26	30	26	20	24	26	26	25	21	28	26	29	26	23	28	30	31	28	28	27.2	33.2
Dir	37	39	38	39	41	45	43	44	50	43	36	29	26	26	33	31	35	35	37	47	50	44	39	42	38.8	38.8

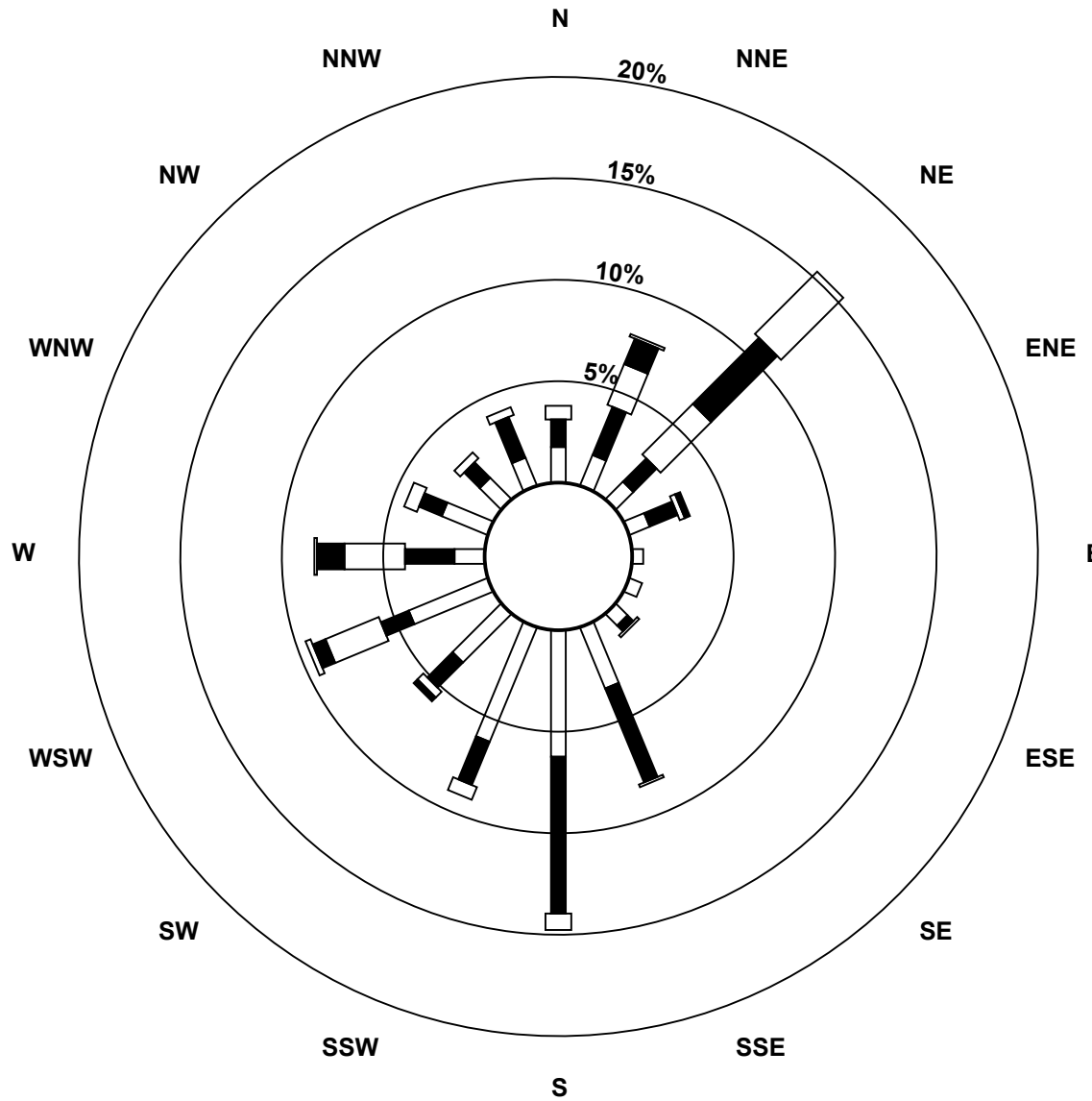
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable Rycroft - March 2018

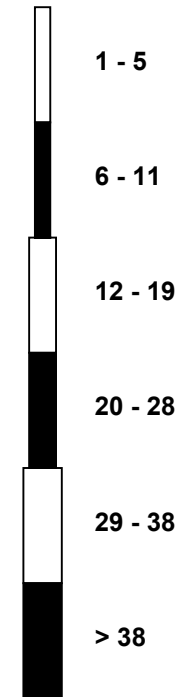
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	26	25	27	24	21	8	29	35	24	27	28	23	26	29	28	25	18	10	8	12	8	4	5	11	10.2	35.0
Dir	36	30	37	46	47	24	259	254	231	232	245	238	252	263	264	271	279	292	276	287	280	180	266	282	276.6	254.5
24 Spd	10	12	12	16	15	17	20	19	19	15	18	16	15	9	6	2	2	3	3	3	3	2	4	4	8.8	19.6
Dir	292	284	304	297	282	281	280	277	273	264	266	263	262	271	297	329	24	23	15	356	34	20	45	356	284.8	280.0
25 Spd	4	2	3	3	4	9	17	14	12	13	14	16	15	17	15	16	13	12	12	11	10	10	8	4	10.2	16.9
Dir	343	341	354	357	2	15	28	36	34	31	33	33	37	36	38	38	54	64	61	58	45	43	71	5	37.3	35.6
26 Spd	7	10	12	12	12	9	10	7	11	10	10	12	11	9	7	5	6	2	2	3	6	10	10	12	6.8	12.5
Dir	347	342	340	329	325	327	327	328	318	338	340	343	336	326	328	340	13	358	61	97	73	68	59	55	349.6	54.7
27 Spd	16	14	9	8	8	8	6	8	9	11	14	11	14	19	22	18	11	11	10	6	6	6	5	5	3.6	22.2
Dir	50	50	59	66	60	27	16	10	2	340	319	314	285	270	270	262	258	232	227	201	190	186	170	192	303.8	269.7
28 Spd	6	8	7	7	5	3	4	4	3	4	5	6	8	10	7	6	4	5	4	11	15	17	16	14	3.3	16.8
Dir	191	163	163	150	174	223	169	195	157	208	268	340	3	25	22	34	40	50	87	43	46	37	28	30	49.7	36.6
29 Spd	10	8	12	14	13	10	10	11	12	11	16	16	18	18	19	20	20	17	11	12	13	12	14	22	13.7	21.8
Dir	33	17	20	27	25	29	53	45	45	57	35	36	48	53	43	39	22	8	13	19	15	30	20	31	32.2	30.6
30 Spd	16	13	13	14	15	11	10	10	11	11	7	4	5	5	5	6	6	7	6	8	11	8	10	9	2.5	15.6
Dir	12	7	359	358	358	343	315	325	320	312	280	221	186	179	176	185	186	187	192	221	230	190	174	165	301.7	12.0
31 Spd	7	6	9	8	8	6	7	6	9	4	5	6	5	8	8	9	7	7	4	2	5	7	8	8	2.3	9.2
Dir	154	182	183	177	174	182	180	187	152	181	249	283	333	4	8	8	7	332	300	224	190	177	160	174	186.8	152.2
Spd	1.9	1.8	1.2	1.1	1.1	0.9	0.9	1.1	0.3	1.3	2.8	3.6	4.0	4.5	4.5	4.5	4.0	2.9	1.9	1.8	1.9	3.0	2.5	1.7	Diurnal Average	
Dir	75.7	53.9	48.6	58.2	52.2	5.0	313.3	284.9	228.4	302.5	308.1	328.7	340.6	336.5	344.5	351.6	355.6	7.9	42.3	64.4	88.9	100.7	106.2	101.4	Diurnal Maximum	
Spd	33.9	35.7	31.3	33.2	30.0	27.7	29.7	35.0	32.3	31.2	27.6	28.5	32.0	33.2	32.6	29.9	32.1	33.5	33.1	32.6	31.9	33.1	32.9	31.8	Diurnal Maximum	
Dir	49.2	48.7	37.8	38.8	40.5	48.7	42.5	254.5	48.0	46.9	244.8	45.9	45.8	48.9	47.4	36.6	30.9	41.8	47.9	48.9	52.5	50.2	49.3	51.4	Diurnal Maximum	
Maximum Speed Value: 36 km/h on Mar 2 02:00		Minimum Speed Value: 0 km/h on Mar 13 02:00																Hours in Service: 744								
Maximum Daily Speed Average: 27.2 km/h on Mar 22		Minimum Daily Speed Average: 0.7 km/h on Mar 8																Hours of Data: 744								
Maximum Diurnal Speed Average: 4.5 km/h at hour 14		Minimum Diurnal Speed Average: 0.3 km/h at hour 9																Hours of Missing Data: 0								
Monthly Average Velocity: 1.46 km/h 9.57 deg		Speed Percentiles: P ₁ = 1.3 P ₁₀ = 3.0 Q ₁ = 4.3 Median = 7.2 Q ₃ = 12.8 P ₉₀ = 23.2 P ₉₉ = 33.0																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	22	28	16	1	0	0	67																			
NorthEast	15	30	40	42	37	0	164																			
East	8	5	0	0	0	0	13																			
SouthEast	24	19	2	0	0	0	45																			
South	76	104	13	1	0	0	194																			
SouthWest	49	22	9	4	0	0	84																			
West	41	31	40	16	4	0	132																			
NorthWest	19	18	8	0	0	0	45																			
Total	254	257	128	64	41	0	744																			

Wind Rose

Wind Speed (WS) (km/h)
Portable Rycroft - March 2018



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable Rycroft - March 2018

Maximum Speed: 36 km/h on Mar 2 02:00	Maximum Daily Speed Average: 27.4 km/h on Mar 22	Hours in Service: 744
Minimum Speed: 2 km/h on Mar 7 18:00	Minimum Daily Speed Average: 3.9 km/h on Mar 8	Hours of Data: 744
Maximum Diurnal Speed Average: 11.6 km/h at hour 14	Minimum Diurnal Speed Average: 8.5 km/h at hour 19	Hours of Missing Data: 0
Monthly Average Speed: 10.19 km/h	Percentiles: P ₁ = 2.0 P ₁₀ = 3.4 Q ₁ = 4.5 Median = 7.3 Q ₃ = 13.0 P ₉₀ = 23.4 P ₉₉ = 33.1	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	9	10	8	3	6	18	26	21	20	21	26	29	32	33	33	30	32	34	33	33	32	33	33	32	24.4	33.6
2-Mar	34	36	31	30	29	28	30	29	32	31	27	24	23	23	21	21	19	16	12	6	5	5	8	15	22.4	35.8
3-Mar	13	16	17	15	18	19	20	20	18	19	21	23	25	26	23	19	16	14	14	12	13	10	10	9	17.0	25.6
4-Mar	6	5	5	6	6	8	8	9	8	6	5	4	3	5	4	4	4	7	5	2	3	3	5	5	5.2	8.6
5-Mar	4	3	3	4	3	5	3	2	3	2	6	5	4	4	3	7	16	18	16	18	19	18	19	18	8.5	19.3
6-Mar	15	12	14	10	6	7	7	8	7	4	4	4	4	4	5	4	5	4	2	2	4	9	7	4	6.3	15.1
7-Mar	5	4	7	7	4	4	5	4	4	7	8	5	4	4	4	3	2	2	3	5	5	8	9	8	5.0	9.2
8-Mar	4	4	3	3	3	3	2	2	2	4	5	4	5	7	7	6	4	5	3	3	3	4	4	3	3.9	7.3
9-Mar	3	2	4	5	5	4	8	17	14	15	17	12	8	21	17	14	7	9	10	10	13	13	14	14	10.4	21.1
10-Mar	19	14	9	9	12	8	13	9	11	12	9	5	4	3	5	7	3	4	5	4	5	7	7	8	8.1	19.1
11-Mar	9	9	8	10	6	8	8	8	8	5	4	4	3	6	8	8	3	5	4	5	9	14	11	9	7.1	14.3
12-Mar	11	9	13	11	10	8	6	8	7	3	5	5	5	6	6	4	6	4	4	6	4	7	7	5	6.7	12.8
13-Mar	3	3	5	6	6	6	5	4	4	3	3	6	5	5	8	8	5	4	4	4	5	4	5	6	4.9	8.2
14-Mar	4	2	5	5	3	5	5	5	4	3	3	5	4	9	10	10	6	7	7	6	6	8	7	8	5.7	10.4
15-Mar	8	7	6	5	7	5	5	5	3	4	4	4	3	4	5	6	5	3	5	5	7	6	3	3	5.0	8.2
16-Mar	5	2	6	11	9	8	8	4	4	4	8	10	7	4	6	5	4	3	4	4	4	7	5	7	5.8	10.8
17-Mar	5	7	7	7	6	5	4	6	4	3	5	4	6	7	5	4	5	5	3	3	4	4	4	4	4.9	7.4
18-Mar	4	4	4	4	5	3	5	4	4	4	4	4	4	5	7	9	9	7	8	6	3	6	4	5	5.1	8.6
19-Mar	4	4	2	7	11	12	11	6	12	12	12	11	6	9	6	12	17	14	11	7	5	7	9	12	9.2	17.4
20-Mar	10	8	6	5	5	6	5	3	2	2	3	5	4	4	3	3	3	4	5	6	4	4	4	4	4.4	9.7
21-Mar	6	4	5	9	11	12	14	15	18	16	20	24	25	25	25	25	25	22	22	24	26	32	33	30	19.6	32.5
22-Mar	29	32	31	33	30	26	30	26	20	24	26	26	25	21	28	26	29	26	23	28	30	31	28	28	27.4	33.2
23-Mar	26	25	27	24	21	14	29	35	24	27	28	23	26	29	28	25	18	10	8	13	10	4	6	11	20.5	35.1
24-Mar	10	12	12	16	16	17	20	19	19	15	18	16	15	9	6	3	2	3	3	3	4	2	5	4	10.4	19.7
25-Mar	4	3	4	3	4	10	17	14	12	13	14	16	16	17	15	16	14	12	13	12	10	10	8	6	10.9	17.0
26-Mar	7	10	12	12	12	9	10	7	11	10	10	12	11	9	7	5	6	2	2	3	6	10	10	13	8.6	12.5
27-Mar	16	14	9	8	8	9	6	8	10	12	14	11	14	19	22	18	11	11	10	6	6	6	5	5	10.8	22.3
28-Mar	6	8	7	7	5	3	4	4	4	4	5	6	8	10	7	7	5	5	4	12	15	17	16	14	7.6	17.1
29-Mar	10	8	12	15	13	10	10	11	13	12	16	16	18	18	19	20	20	17	12	12	13	12	14	22	14.3	21.9
30-Mar	16	13	13	14	15	11	10	10	11	11	7	4	5	5	5	6	6	7	6	8	11	8	10	9	9.2	15.8
31-Mar	7	6	9	8	8	6	7	6	9	4	5	7	5	8	8	9	7	7	4	3	5	7	8	8	6.8	9.3
	10.1	9.5	9.8	10.0	9.8	9.6	11.0	10.6	10.4	10.0	11.0	10.9	10.6	11.6	11.5	11.0	10.2	9.4	8.5	8.7	9.2	10.2	10.2	10.7	Diurnal Average	
	34.0	35.8	31.4	33.2	30.2	27.8	29.8	35.1	32.3	31.3	27.8	28.6	32.1	33.3	32.7	30.0	32.1	33.6	33.1	32.6	31.9	33.2	33.0	31.9	Diurnal Maximum	

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

Hourly Standard Deviations

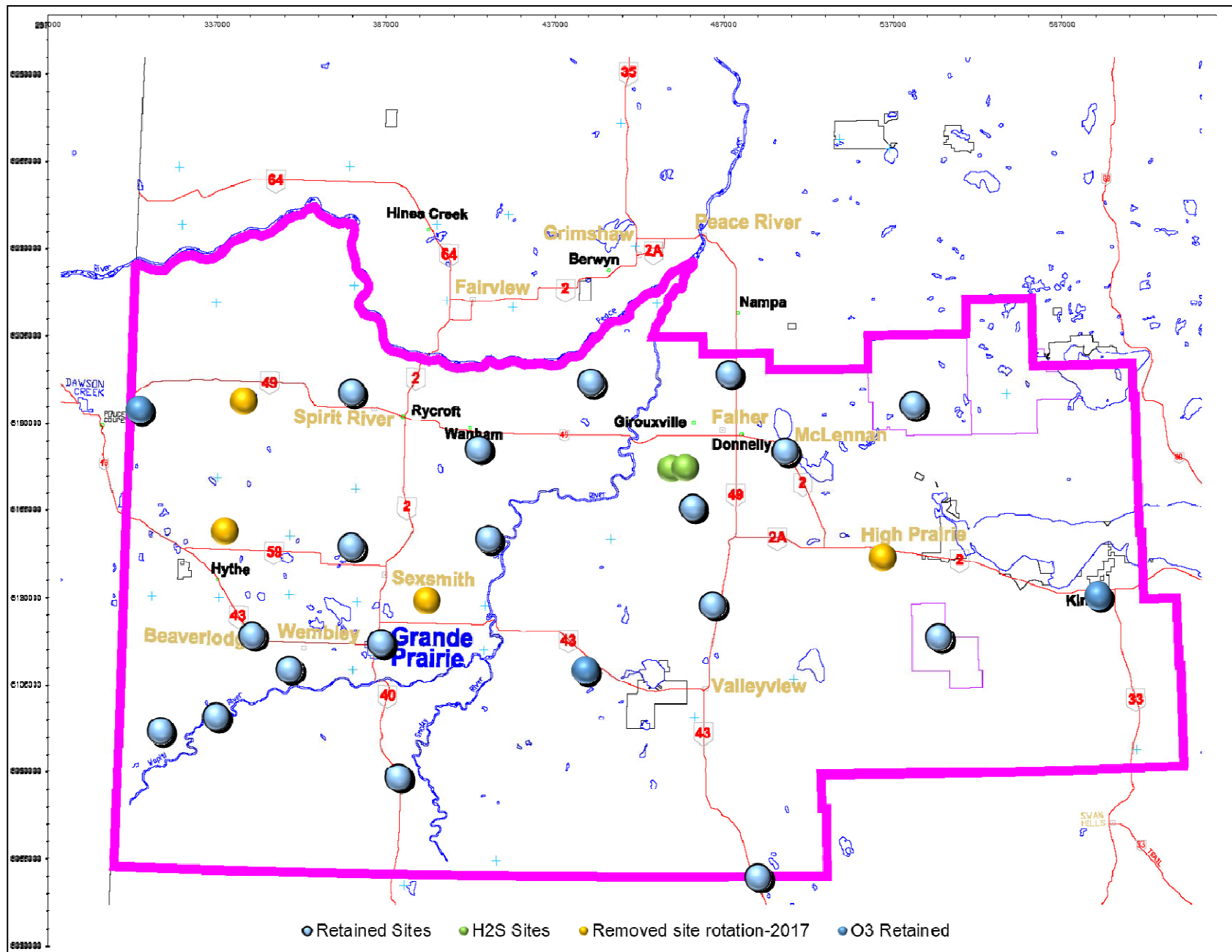
Wind Direction (WD) - deg
 Portable Rycroft - March 2018

Maximum Value: 92.4 deg on Mar 13 02:00																		Hours in Service: 744							
Minimum Value: 1.5 deg on Mar 1 07:00																		Hours of Data: 744							
Percentiles: P ₁ = 2.1 P ₁₀ = 3.9 Q ₁ = 5.4 Median = 9.5 Q ₃ = 17.2 P ₉₀ = 33.5 P ₉₉ = 71.0																		Hours of Missing Data: 0							
																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	13	19	26	82	48	4	1	3	4	5	5	5	5	5	5	5	2	5	4	4	4	4	4	4	81.9
2-Mar	4	4	4	4	4	4	4	4	4	4	5	6	5	6	6	6	6	7	4	6	10	9	87	6	86.6
3-Mar	7	2	3	3	2	2	2	2	2	3	3	3	3	3	3	2	4	4	6	4	5	7	3	3	7.0
4-Mar	24	11	12	7	6	6	5	5	9	12	8	13	18	15	30	11	20	27	11	74	46	41	16	15	74.2
5-Mar	66	72	15	63	85	20	30	34	25	69	6	10	17	18	33	16	7	4	4	3	4	2	4	3	85.4
6-Mar	3	8	5	4	13	9	9	6	6	11	17	57	16	6	10	11	13	12	49	24	10	7	12	13	57.1
7-Mar	13	15	10	5	55	12	14	17	20	13	11	27	29	9	15	22	28	65	53	18	10	5	7	5	64.9
8-Mar	19	20	43	17	13	9	27	34	20	13	15	11	9	17	13	9	20	13	27	28	10	10	11	27	42.9
9-Mar	29	65	16	15	16	10	23	5	5	5	4	13	11	4	2	2	46	8	8	13	4	9	72	6	71.7
10-Mar	3	7	4	5	6	7	4	9	4	3	6	5	12	11	13	13	44	14	20	13	11	3	6	7	44.5
11-Mar	10	10	8	10	30	5	7	13	17	22	17	29	53	13	6	7	70	21	48	57	6	66	57	5	69.6
12-Mar	6	6	3	3	9	21	26	9	9	70	16	13	13	13	22	23	13	21	50	33	26	10	18	64	70.0
13-Mar	36	92	20	10	13	8	14	15	17	28	51	21	9	17	12	8	18	12	18	13	11	17	7	22	92.4
14-Mar	15	40	65	82	51	30	22	7	8	14	37	15	25	18	5	6	36	20	12	11	5	7	8	12	82.3
15-Mar	10	6	28	14	11	23	25	13	14	37	39	25	53	17	27	8	12	6	17	16	32	9	61	63	62.7
16-Mar	34	68	7	18	7	8	8	31	14	13	19	6	44	22	8	6	13	20	42	22	8	12	20	7	68.1
17-Mar	13	7	4	5	12	27	18	15	23	40	18	10	11	7	14	18	14	12	14	13	15	31	17	12	39.7
18-Mar	10	5	8	10	7	10	6	23	6	21	12	8	8	6	8	17	11	9	4	7	41	20	36	16	40.6
19-Mar	14	49	40	24	6	3	38	51	15	4	5	4	4	9	12	12	5	8	11	30	27	10	5	4	50.9
20-Mar	5	7	5	17	9	5	9	10	37	28	23	14	50	9	23	44	39	22	10	6	16	21	11	24	50.4
21-Mar	15	34	25	19	4	7	17	28	9	32	35	5	4	6	6	6	6	6	7	5	6	4	4	5	34.6
22-Mar	8	4	4	3	7	6	4	6	7	5	5	3	3	7	5	3	4	3	5	5	5	4	3	3	7.8
23-Mar	4	3	8	3	4	62	7	5	4	4	7	7	7	2	3	5	9	4	8	10	45	22	35	5	61.5
24-Mar	7	5	12	9	5	3	3	3	3	8	4	5	4	9	17	33	33	11	20	18	26	43	16	17	43.2
25-Mar	11	26	31	18	14	9	5	2	6	3	4	3	10	3	12	5	12	7	5	8	22	9	10	44	43.9
26-Mar	17	10	9	14	6	7	6	5	4	8	5	4	7	12	10	14	10	39	43	16	7	8	7	6	43.2
27-Mar	6	7	8	7	10	14	9	6	7	13	5	14	10	5	4	4	6	7	9	11	7	6	10	11	14.3
28-Mar	6	8	7	6	26	32	22	13	45	21	28	12	16	4	9	16	19	34	22	7	7	12	4	8	45.1
29-Mar	14	21	5	3	9	8	11	7	14	16	5	7	12	9	10	5	13	5	8	5	8	4	3	6	20.6
30-Mar	9	5	9	6	7	12	6	6	4	10	11	23	23	16	11	10	5	4	5	11	4	8	5	6	23.3
31-Mar	8	6	7	3	3	10	11	21	6	39	22	17	13	7	5	6	10	6	17	35	7	8	5	4	39.0
	66.4	92.4	64.7	82.3	85.4	61.5	37.7	50.9	45.1	70.0	51.4	57.1	53.0	21.6	33.5	43.8	69.6	64.9	53.0	74.2	45.7	65.7	86.6	63.6	

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for March 2018

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
2a	Bay Tree		44.1			
2b	Bay Tree		49.7			
19a	Wanham			0.3		
19b	Wanham			0.3		
24a	Wembley	0.6				
24b	Wembley	0.6				
30a	Fitzsimmons			0.6		
30b	Fitzsimmons			0.4		
39a	Clouston Creek	0.4				
39b	Clouston Creek	0.4				
63a	Girouxville 3				N/S	
63b	Girouxville 3				N/S	
2	Bay Tree	0.5	46.9	0.8		13-16-078-13 W6M
3	Fourth Creek	N/S		N/S		04-13-082-07 W6M
9	Spirit River	0.5		0.4		08-12-079-07 W6M
12	Hythe	0.7		0.6		14-36-072-11 W6M
14	Sylvester	0.4		0.5		08-06-069-12 W6M
16	Beaverlodge	0.7		1.4		15-36-071-10 W6M
18	Saddle Hills	0.6		0.3		04-25-074-07 W6M
19	Wanham	0.5		0.3		16-22-077-03 W6M
21	Eaglesham	0.3		0.2		16-21-079-25 W5M
29	Smoky Heights	0.8		0.9		04-06-075-02 W6M
25	Pinto Creek	0.4		0.5		04-24-069-11 W6M
27	Grande Prairie I	0.7		7.0		08-15-071-06 W6M
29	Smoky Heights	0.8		0.9		04-06-075-02 W6M
30	Fitzsimmons	0.4		0.6		15-36-072-03 W6M
32	Gold Creek	0.4		2.4		06-33-067-05 W6M
35	Jean Cote	0.5		0.4		12-35-079-21 W5M
36	Guy	0.4		0.2	0.1	03-04-076-22 W5M
37	Crooked Creek	0.5	50.5	0.8		16-01-071-26 W5M
39	Clouston Creek	0.4		0.4		12-01-073-22 W5M
40	McLennan	0.6		0.4		03-29-077-19 W5M
42	Sunset House	0.4		0.2		05-32-070-19 W5M
44	Peavine	0.3		0.2		03-05-079-15 W5M
46	Little Smoky	0.4		1.7		12-01-065-21 W5M
47	Kinuso	0.3	51.9	0.4		12-10-073-10 W5M
49	Grande Prairie HP	0.5		6.0		17-26-071-06 W6M
50	East Prairie	0.2		0.2		13-02-072-15 W5M
63	Girouxville 3				N/s	14-02-077-23 W5M
64	Girouxville 4				0.1	4-08-077-22 W5M

*BDL = Below Detection Level

*N/S - No sample

Passive Summary for March 2018

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 2018 (PAZA Zone)				
Mean	0.5	49.8	1.1	0.1
Standard Deviation	0.2	2.6	1.7	0.0
Minimum	0.2	46.9	0.2	0.1
Minimum At	East Prairie (#50)	Bay Tree (#2)	Guy (#36)	Guy (#36)
Maximum	0.8	51.9	7.0	0.1
Maximum At	Smoky Heights (#29)	Kinuso (#47)	Grande Prairie I (#27)	Girouxville 4 (#64)

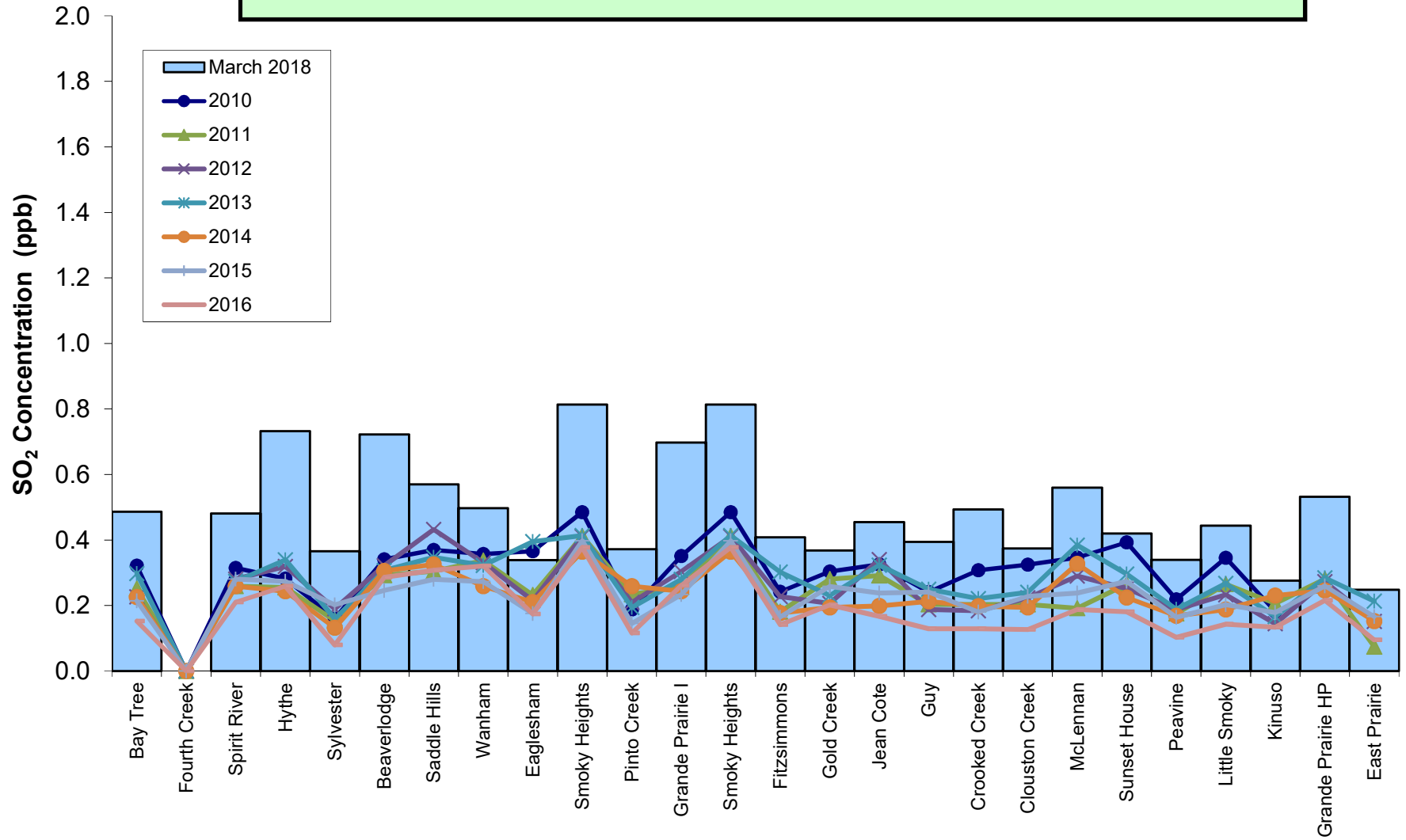
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)

	SO ₂	NO ₂
PAZA Beaverlodge station	0.8	5.2
PAZA Beaverlodge passive	0.7	1.4

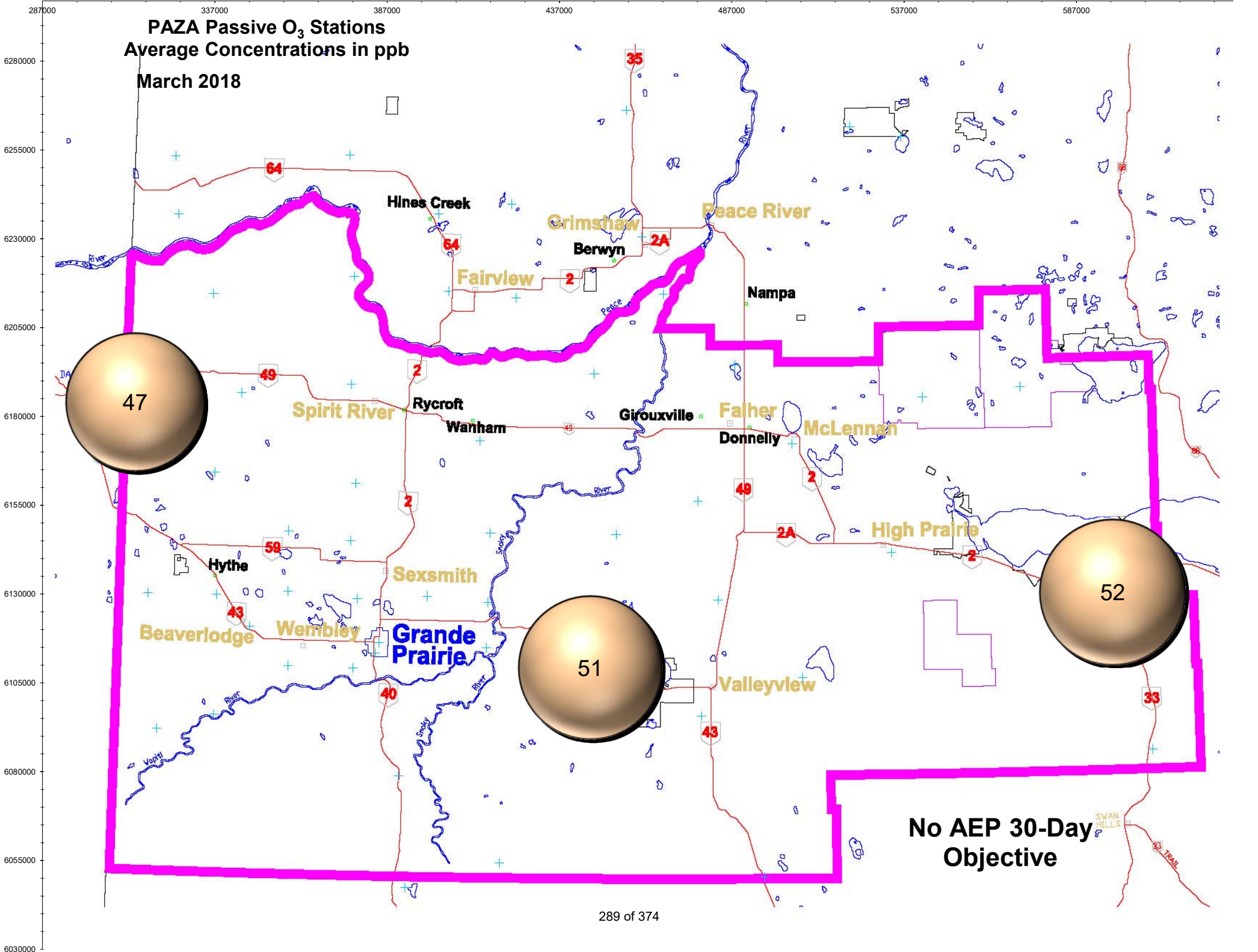
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

	SO ₂	NO ₂
PAZA Henry Pirker station	0.6	16.2
PAZA Grande Prairie passive	0.7	7.0

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

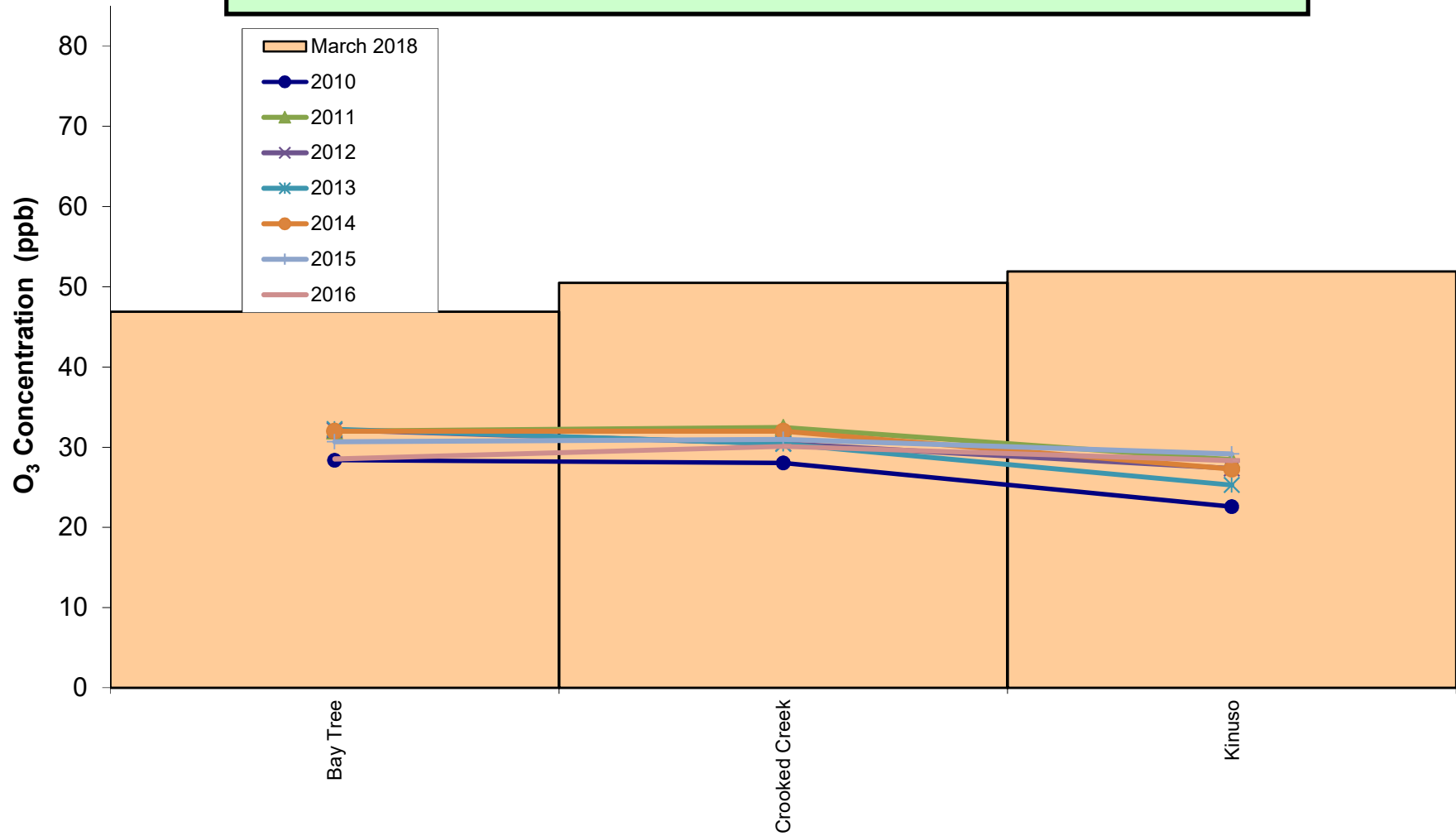


PAZA Passive O₃ Stations
Average Concentrations in ppb
March 2018

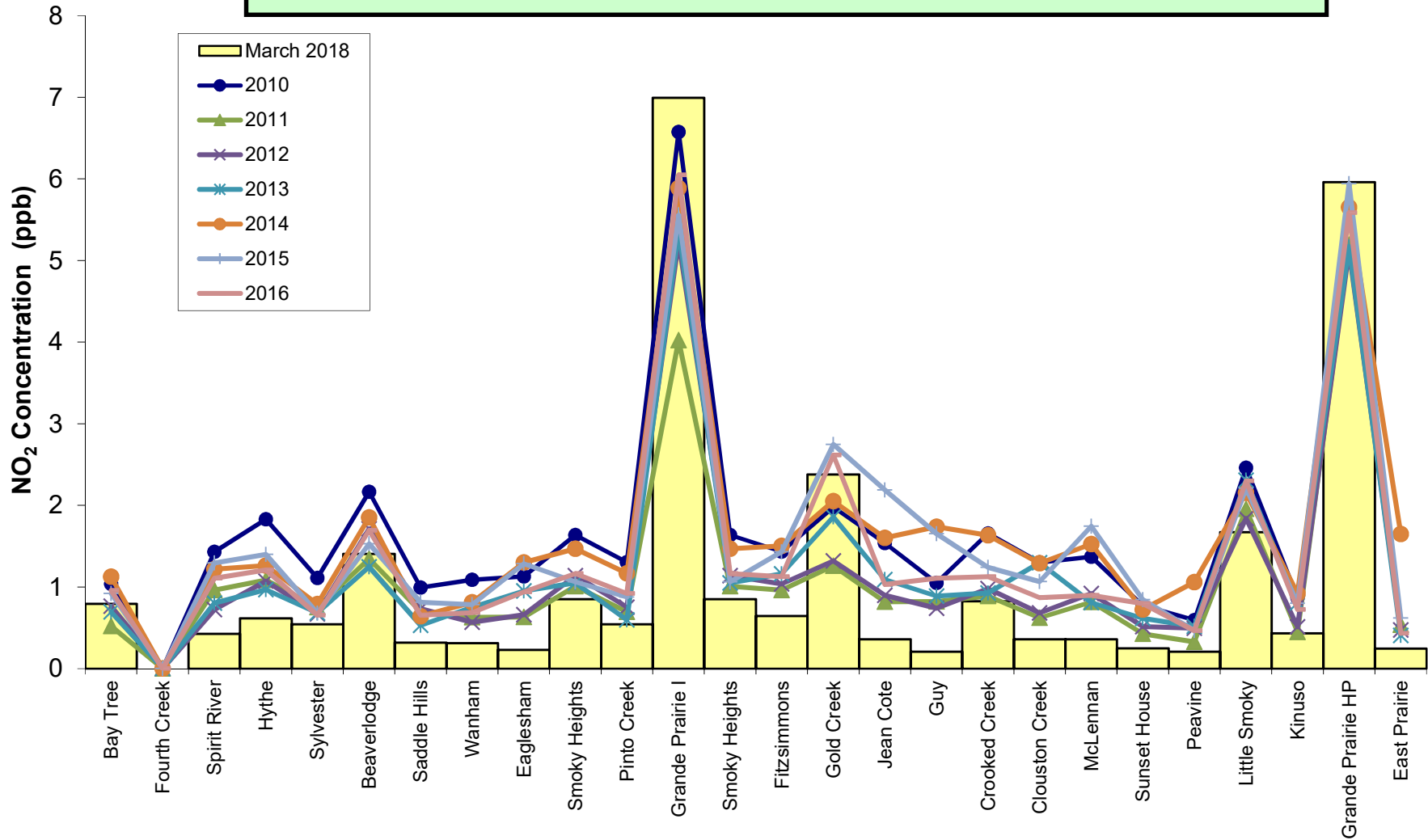


No AEP 30-Day Objective

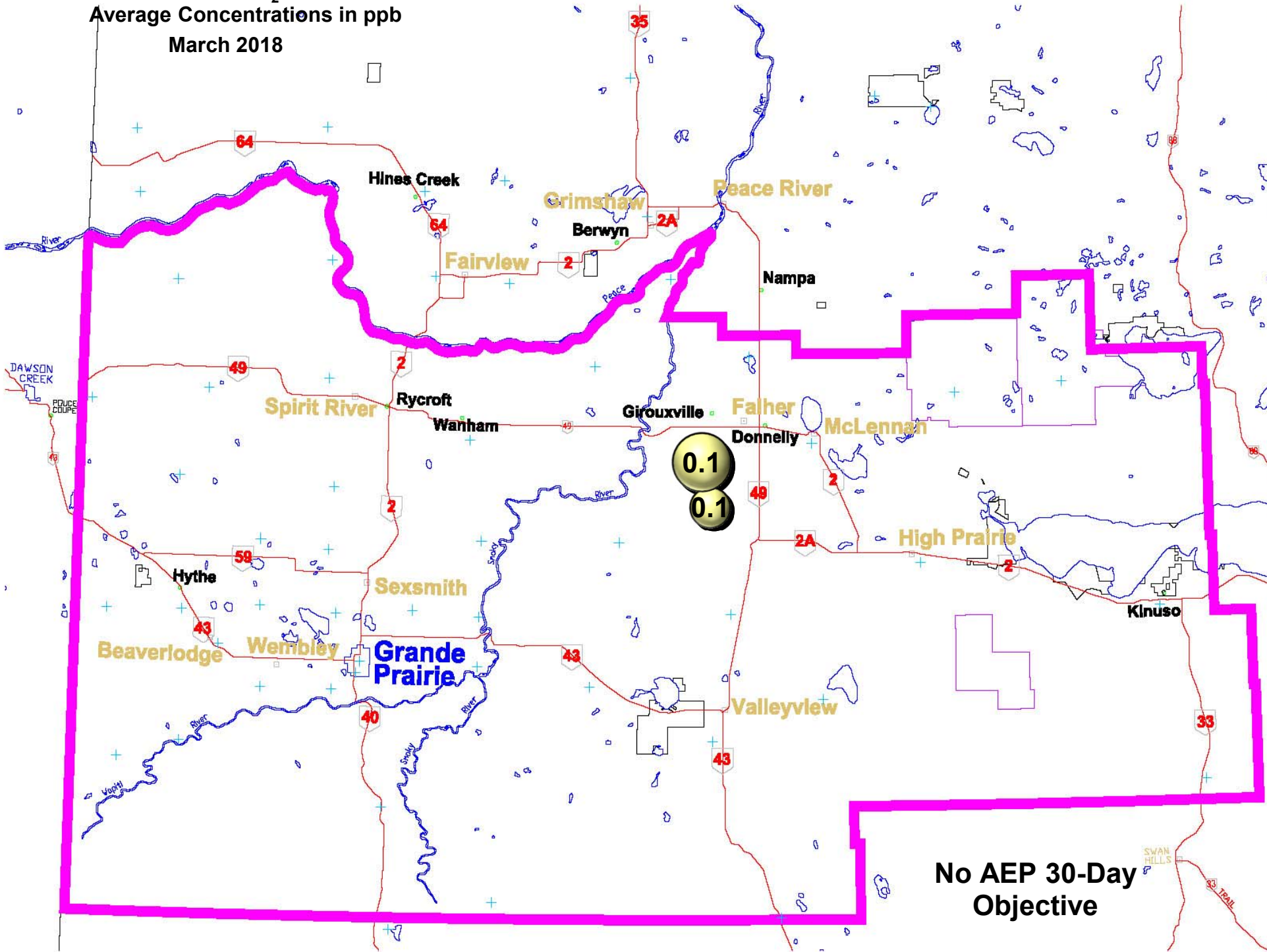
Alberta Ambient Air Quality Objective - No Annual O₃ Objective



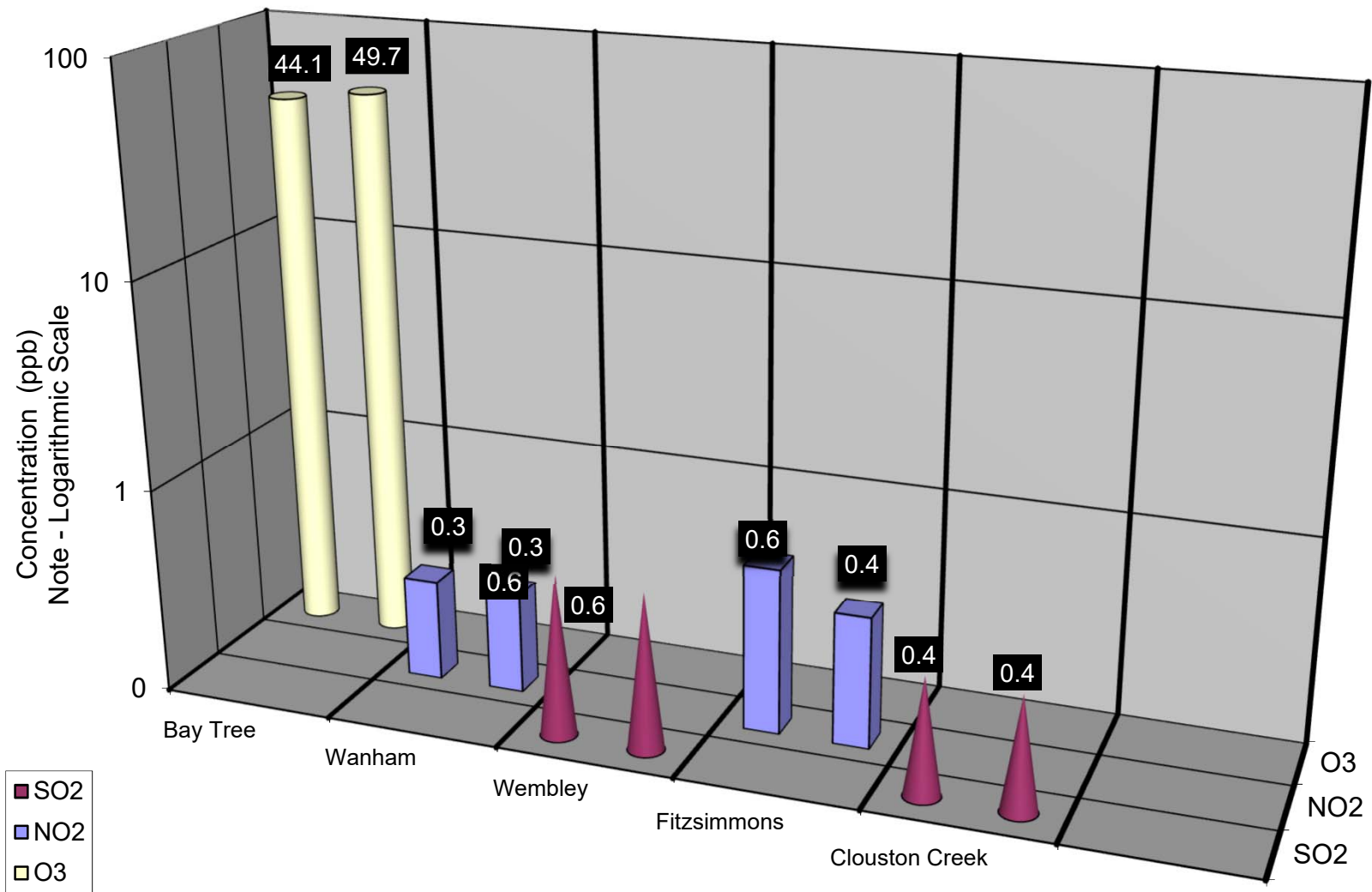
Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 24 ppb



**PAZA Passive H₂S Stations
Average Concentrations in ppb
March 2018**



**No AEP 30-Day
Objective**



Duplicate Summary Chart

March 2018 Calibration Reports

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

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

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

**PAZA – Beaverlodge Station with the following calibrations:
SO₂, NO, NO₂, NO_x, O₃, and PM_{2.5}**

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

**PAZA – Donnelly Station with the following calibrations:
SO₂ and H₂S**

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

Calibration Report



Parameter SO2
 Air Monitoring Network PAZA

Station Information

Calibration Date	March 1, 2018	Previous Calibration	February 5, 2018
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:40	End Time (MST)	12:00
Barometric Pressure	923.0 mbar	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Conc	49.6 ppm	Cal Gas Cert Date	10/24/2020
		Cal Gas Cylinder #	LL107945
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.990983	Calculated slope	1.009705
Calculated intercept	-0.019810	Calculated intercept	1.791259
Analyzer make	TEI 43I-TLE	Analyzer serial #	1507864682 (AMU 2006)

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	1.45		1.44	
Coefficient	0.935		0.935	
Pressure	669.4	mm Hg	669.8	mm Hg
Flow	0.442	lpm	0.444	lpm
Lamp intensity	83	Hz	82	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)
4996	0.00	0.0	0.1	N/A
4996	39.97	393.7	389.3	1.0113
4996	19.97	197.5	192.1	1.0278
4996	9.98	98.9	94.7	1.0438
4996	0.00	0.0	0.1	As Found Zero
4996	39.97	393.7	389.3	As Found Span
Average Correction Factor				1.0276

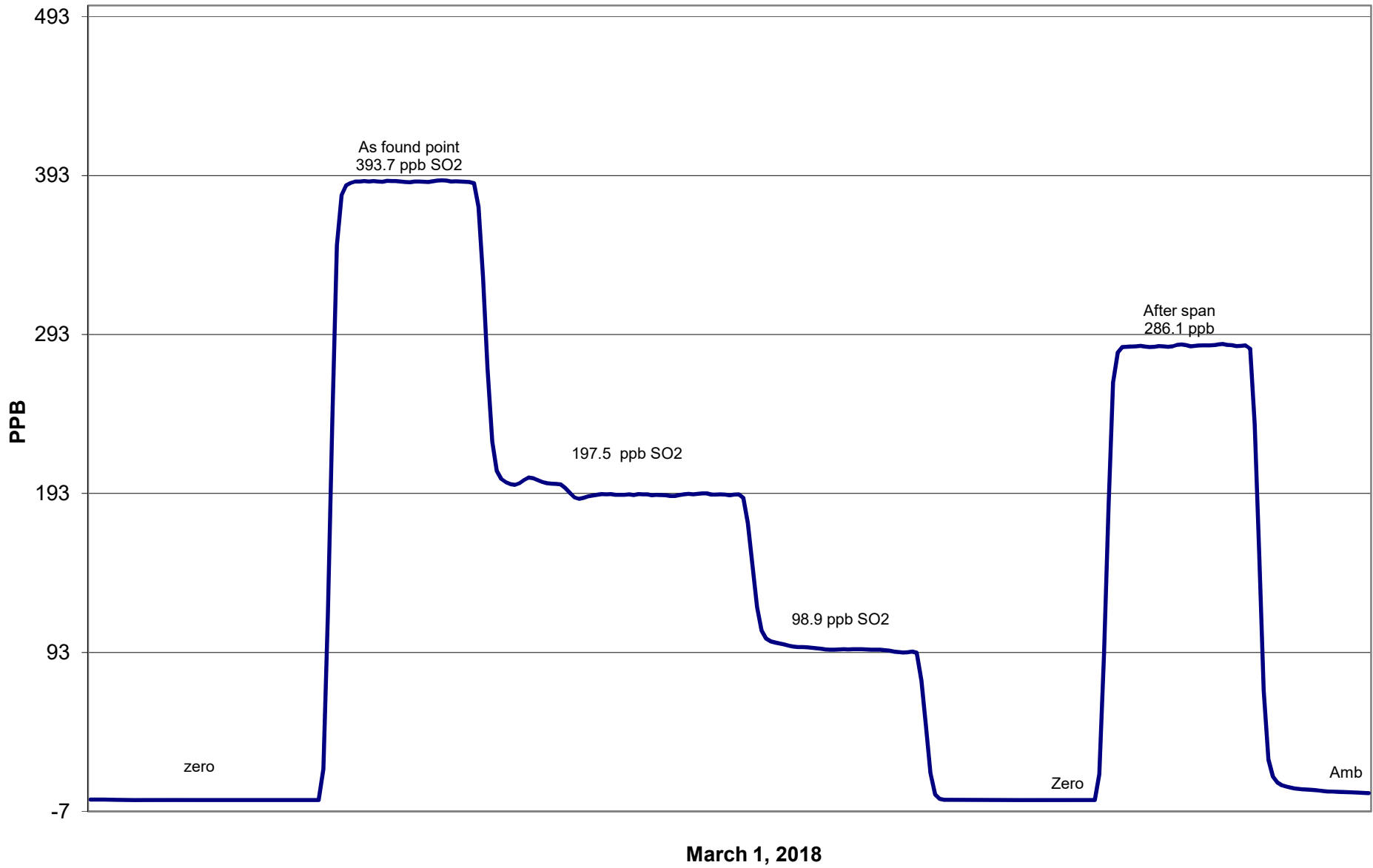
Calculated value of As Found Response: 385.6 ppb Percent Change of As Found: 2.0%

	before calibration		after calibration	
Auto zero	0.2	ppb	0.1	ppb
Auto span	285.9	ppb	286.1	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

SO2 Calibration



Calibration Report

Parameter
 Air Monitoring Network

PAZA



Station Information

Calibration Date	March 2, 2018	Previous Calibration	February 6, 2018
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:30	End Time (MST)	13:05:00 PM
Barometric Pressure	0.919 mBar	Station Temperature	23.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas Conc	10.2 ppb	Cal Gas Expiry Date	02/23/2019
		Cal Gas Cylinder #	EY0000380
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.978931	Calculated slope	0.966949
Calculated intercept	0.531638	Calculated intercept	0.691255
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.994		1.022	
Background	18.1		18.7	
Pressure	669.1	mm Hg	664.5	mm Hg
Flow	0.430	ccm	0.428	ccm
Lamp Voltage	822	V	822	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)
4997	0.00	0.00	-0.11	N/A
4997	39.98	80.96	83.29	0.9721
4998	19.97	40.59	40.87	0.9932
6997	9.98	14.53	13.83	1.0504
4997	0.00	0.00	-0.11	As Found Zero
4997	41.20	83.41	74.46	As Found Span
Average Correction Factor				1.0052

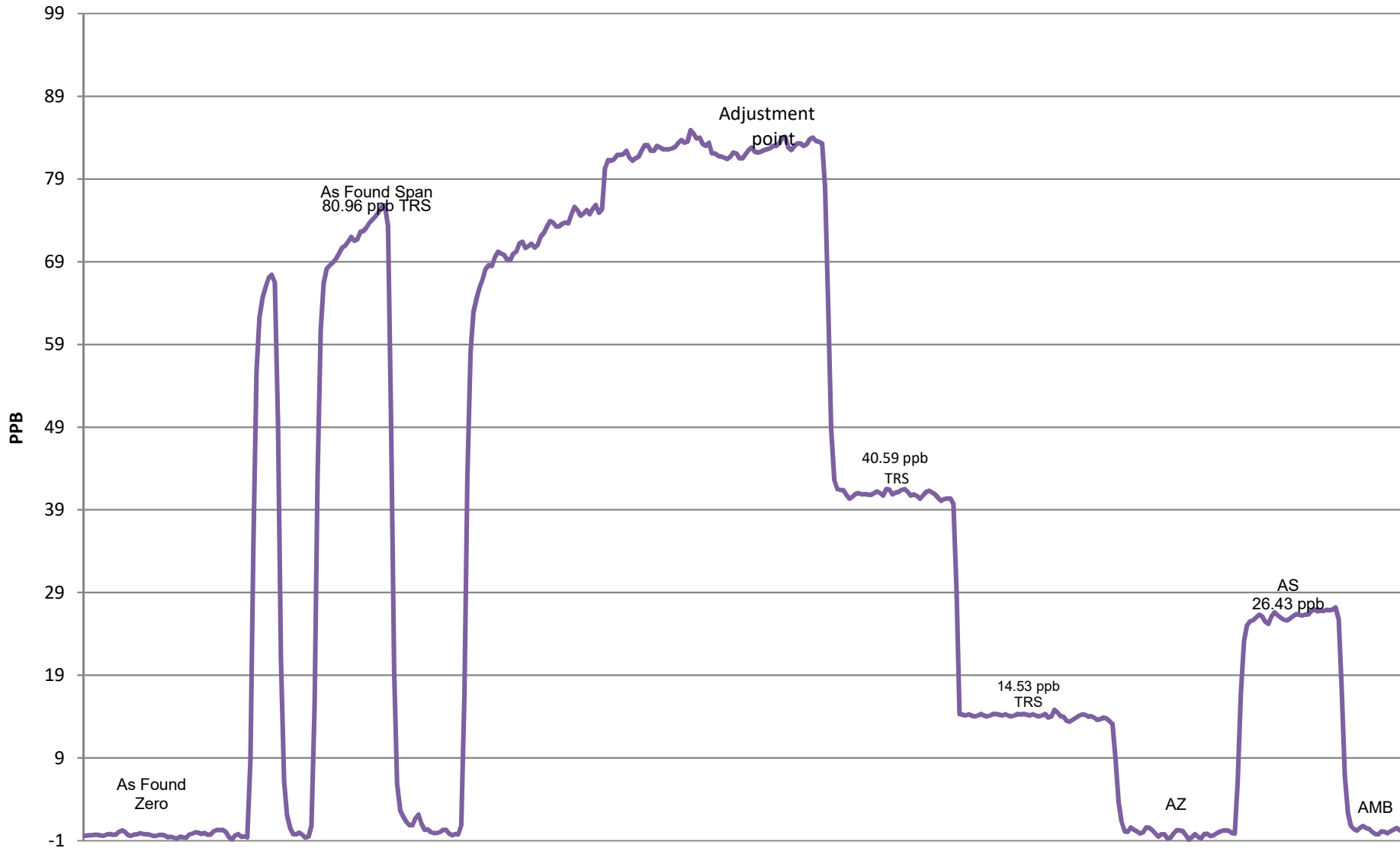
Calculated value of As Found Response: **73.5 ppb** Percent Change of As Found: **11.8%**

	before calibration		after calibration	
Auto zero	-0.30	ppb	-0.24	ppb
Auto span	26.28	ppb	26.43	ppb

Notes: Sox scrubber replaced
Span adjustment made

Calibration Performed By: Dmytro Dolotii

TRS Calibration



March 2, 2018

Calibration Report



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

Station Information

Calibration Date: **March 1, 2018** 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	4996	0.00	0.0	0.0	0.0	0.0	0.1	0.0	N/A	N/A
1	4996	39.97	412.7	411.9	0.8	415.9	416.0	0.2	0.9923	0.9902
2	4996	19.98	207.1	206.7	0.4	205.4	204.4	0.6	1.0085	1.0113
3	4996	10.01	104.0	103.8	0.2	99.2	98.9	0.4	1.0480	1.0497
AFZ	4996	0.00	0.0	0.0	0.0	0.0	0.1	0.0	0.0000	0.0000
AFS	4996	39.97	412.7	411.9	0.8	415.9	416.0	0.2	0.9923	0.9902
								Average Correction Factor	1.0163	1.0171

As Found Concentrations: **NO_x= 418.0** **NO= 416.5** As Found Percent Change **NO_x= 1.3%** **NO= 1.1%**

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	415.2	415.2	0.0	415.3	415.2	0.0	0.9999	1.0000	N/A	N/A	
300	415.2	99.0	316.2	414.4	99.0	315.3	1.0019	1.0000	1.0028	99.7%	
200	415.2	198.6	216.7	413.8	198.6	214.5	1.0033	1.0000	1.0102	99.0%	
100	415.2	298.7	116.5	415.2	298.7	115.6	1.0000	1.0000	1.0083	99.2%	
							Average Correction Factor	1.0017	1.0000	1.0071	99.3%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.0	0.0	0.1	ppb	0.0	0.0	0.1	ppb
Auto span	283.1	281.4	1.4	ppb	286.6	284.7	1.6	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



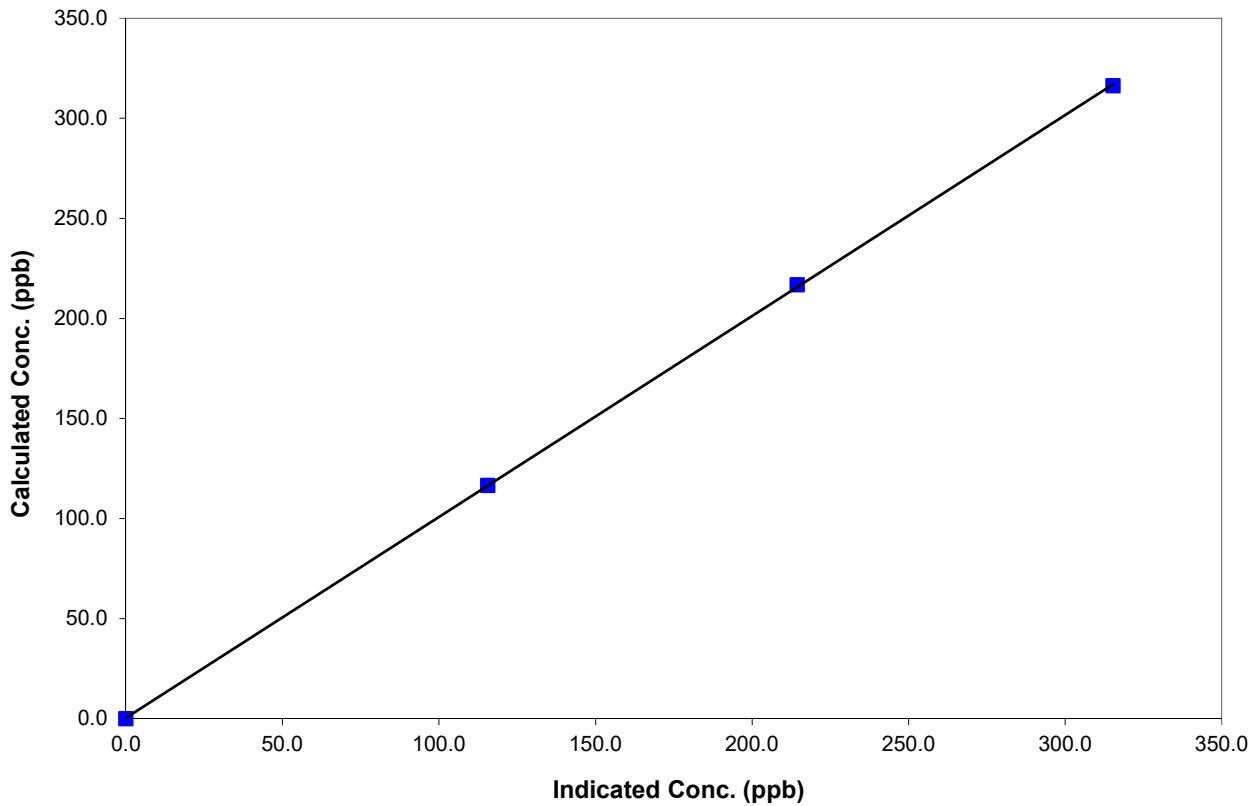
Station Information

Calibration Date	March 1, 2018	Previous Calibration	February 5, 2018
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:45	End Time (MST)	14:00:00 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		
316.2	315.3	1.0028	Correlation Coefficient	0.999970
216.7	214.5	1.0102		
116.5	115.6	1.0083		
			Slope	1.003874
			Intercept	0.377319

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



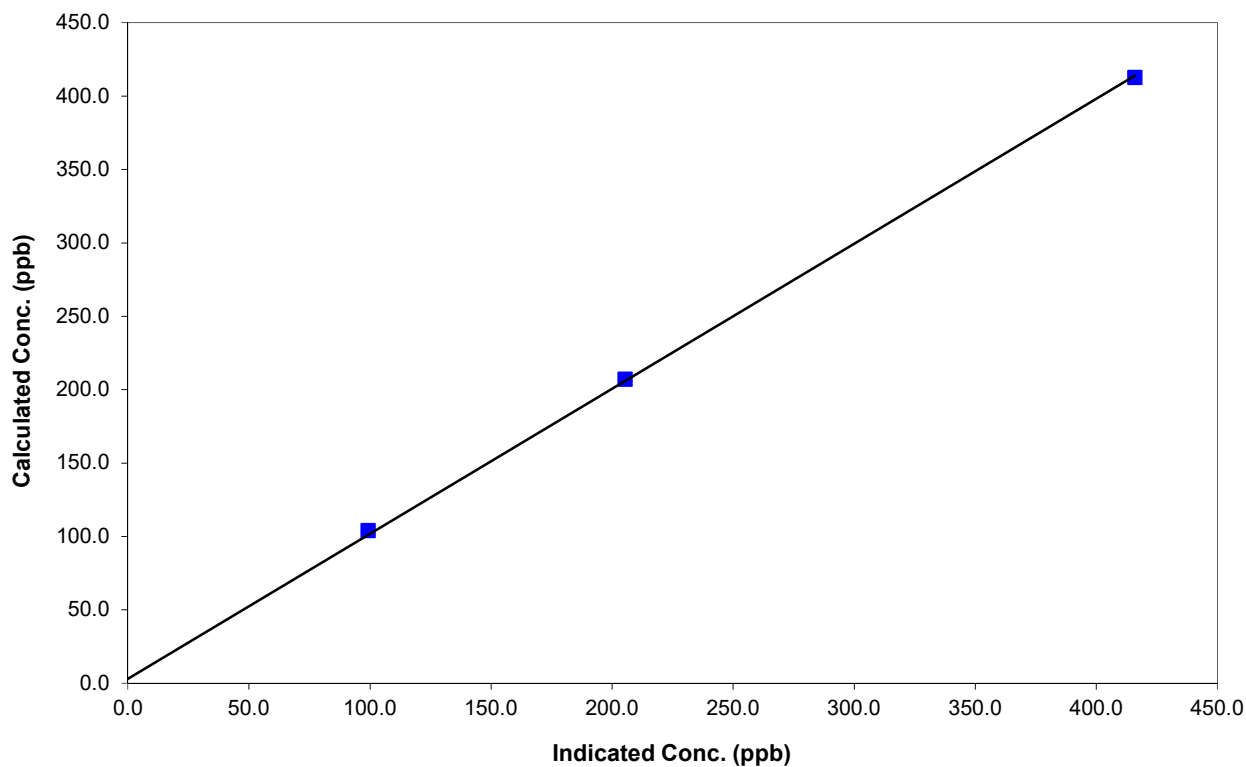
Station Information

Calibration Date	March 1, 2018	Previous Calibration	February 5, 2018
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:45	End Time (MST)	14:00:00 PM
Analyzer make	42i	Analyzer serial #	906535087

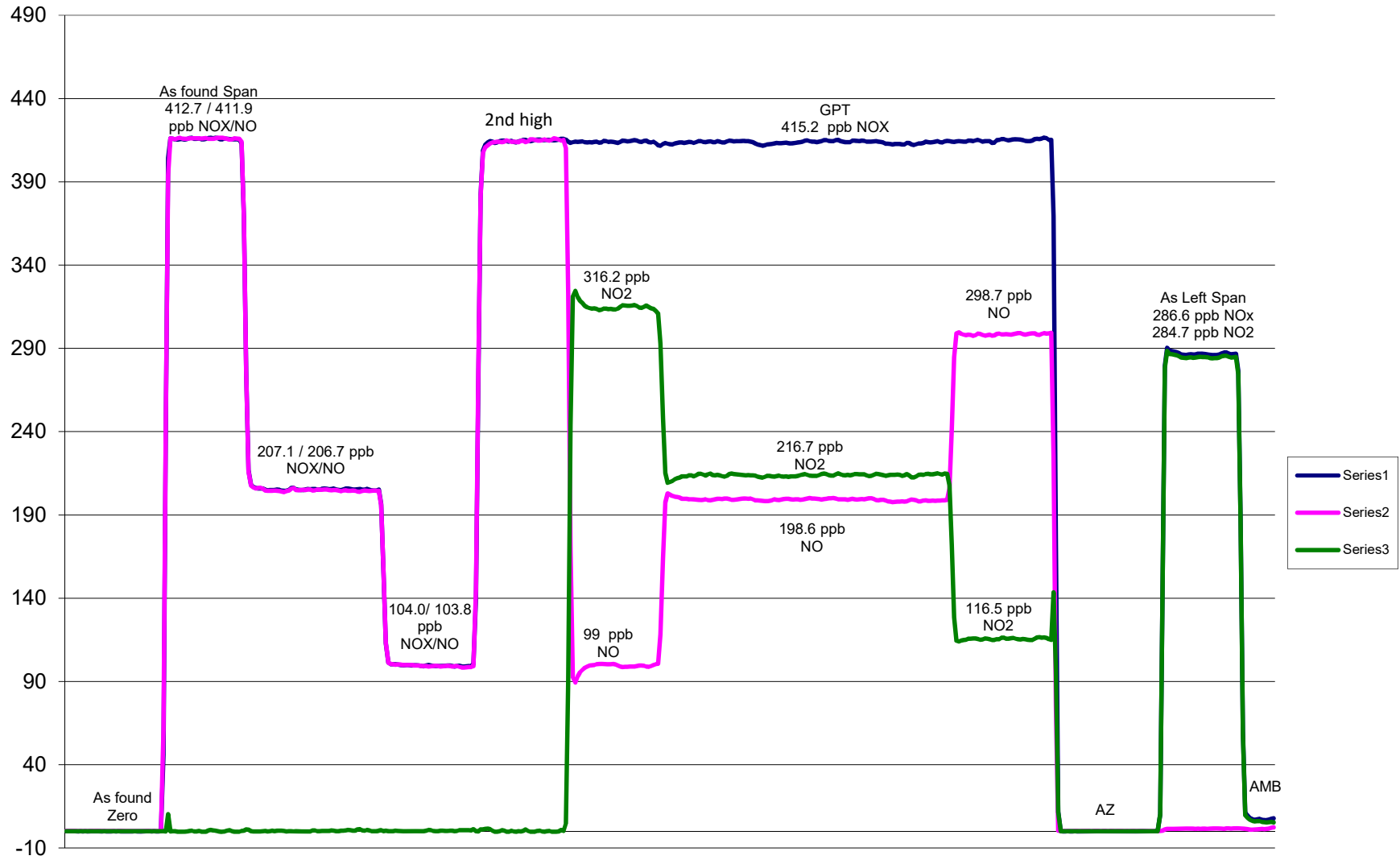
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
412.7	415.9	0.9923	Correlation Coefficient	0.999780
207.1	205.4	1.0085		
104.0	99.2	1.0480		
			Slope	0.988434
			Intercept	2.913837

NO_x Calibration Curve

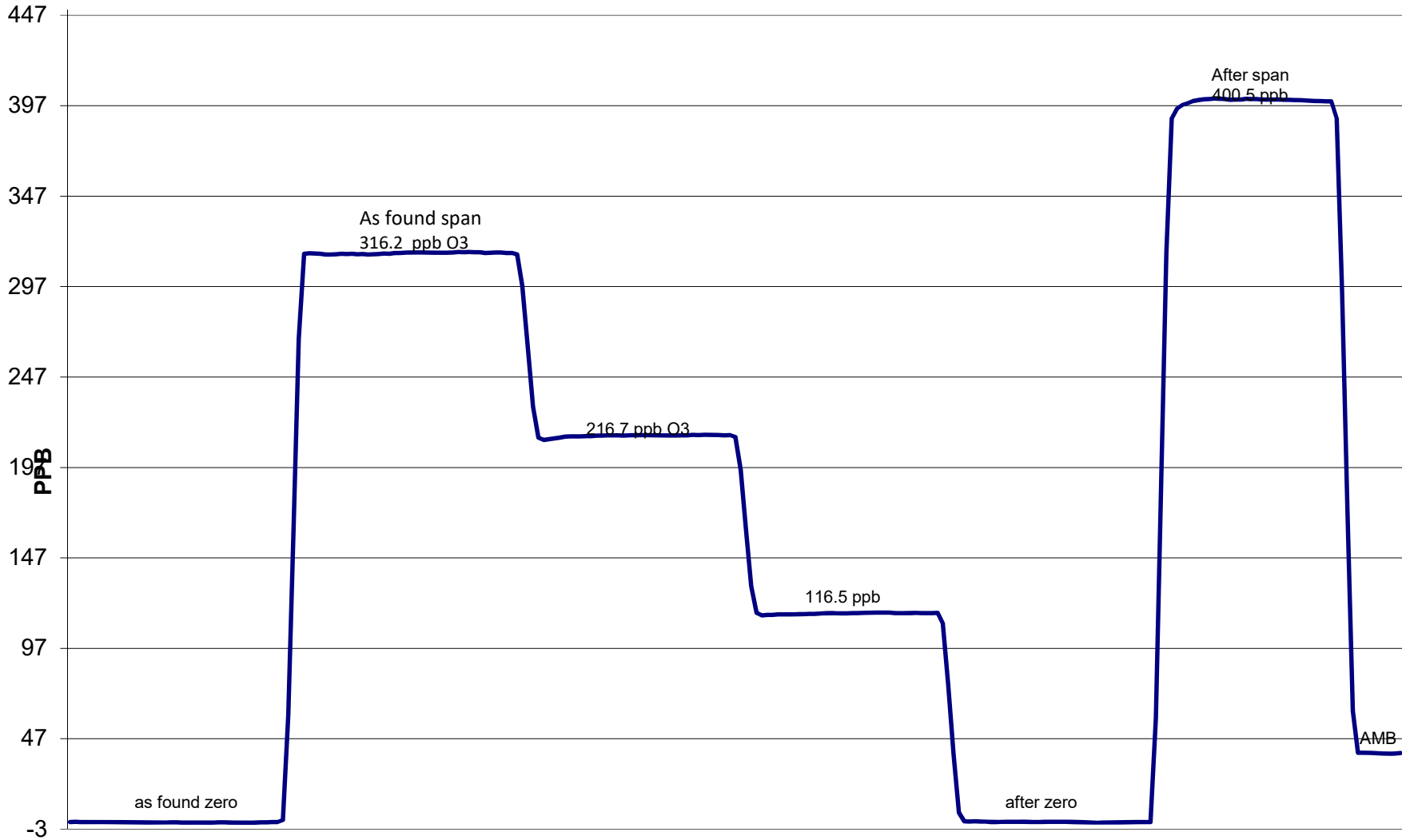


NO_x Calibration



March 1, 2018

O3 Calibration



March 1, 2018

Calibration Report



Parameter CO
 Air Monitoring Network PAZA

Station Information

Calibration Date	March 2, 2018	Previous Calibration	February 6, 2018
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	12:05	End Time (MST)	14:55:00 PM
Barometric Pressure	0.919 mBar	Station Temperature	23.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	6586
Cal Gas Conc	2906 ppm	Cal Gas Expiry Date	07/07/2023
		Cal Gas Cylinder #	LL109096
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.002795	Calculated slope	0.999626
Calculated intercept	-0.229131	Calculated intercept	-0.178254
Analyzer make	Model 48I-TLE	Analyzer serial #	1408761378

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO zero setting	10.161		10.343	
CO span setting	1.080		1.080	
Sample pressure	698.3	mm Hg	698.9	mm Hg
Sample Flow	0.455	LPM	0.455	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)
4997	0.00	0.00	0.01	N/A
4998	69.96	40.12	40.18	0.9983
4998	34.98	20.20	20.57	0.9819
4998	17.99	10.42	10.72	0.9726
4998	0.00	0.00	0.23	As Found Zero
4998	69.96	40.12	40.67	As Found Span
Average Correction Factor				0.9843

Calculated value of As Found Response: 40.326 ppm Percent Change of As Found: -0.5%

	before calibration		after calibration	
Auto zero	0.00	ppm	0.01	ppm
Auto span	20.53	ppm	20.48	ppm

Notes: Zero adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Report



Parameter CH4 / NMHC / THC
 Air Monitoring Network PAZA

Station Information

Calibration Date	March 2, 2018	Previous Calibration	February 2, 2018
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:Mair

Start Time (MST)	14:10:00 PM	End Time (MST)	16:55:00 PM
Barometric Pressure	0.919 mBar	Station Temperature	23.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas CH4 Conc	386 ppm CH4	Cal Gas Expiry Date	05/07/2015
Cal Gas C3H8 Conc	207 569.25 ppm CH4	Cal Gas Cylinder #	LL34318
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 11,12,13

Analyzer make TEI 55I Analyzer serial # 1134650658

	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	27.8	PSI	27.8	PSI
Fuel pressure	42.1	PSI	42.1	PSI
Carrier pressure	30.3	PSI	30.3	PSI
CH4 cal factor	5.22		5.22	E ⁻⁴
NMHC cal factor	1.51		1.51	E ⁻⁴
Rt	12.31	Sec	12.31	Sec
Pk Index	23.43		23.43	

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)
1998	0.00	0.00	0.02	N/A
1998	64.99	12.16	12.15	1.0009
1998	40.97	7.76	7.72	1.0045
1998	15.99	3.06	3.01	1.0172
1998	0.00	0.00	0.02	As Found Zero
1998	70.65	13.18	12.33	As Found Span
Average Correction Factor				1.0076

Calculated value of As Found Response: 12.320 ppm Percent Change of As Found: 6.5%

	Before	After
Calculated slope	1.001872	1.001182
Calculated intercept	-0.016790	0.013170

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	9.58	ppm	10.53	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)
1998	0.00	0.00	0.02	N/A
1998	64.99	17.93	17.95	0.9989
1998	40.97	11.44	11.44	0.9999
1998	15.99	4.52	4.46	1.0133
1998	0.00	0.00	0.02	As Found Zero
1998	70.65	19.44	17.68	As Found Span
Average Correction Factor				1.0040

Calculated value of As Found Response: 17.649 ppm Percent Change of As Found: 9.2%

	Before		After
Calculated slope	1.001607	Calculated slope	0.998526
Calculated intercept	-0.038281	Calculated intercept	0.017320

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	13.29	ppm	14.79	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)
1998	0.00	0.00	0.03	N/A
1998	64.99	30.09	30.08	1.0003
1998	40.97	19.19	19.14	1.0028
1998	15.99	7.58	7.46	1.0164
1998	0.00	0.00	0.03	As Found Zero
1998	70.65	32.62	29.99	As Found Span
Average Correction Factor				1.0065

Calculated value of As Found Response: 29.970 ppm Percent Change of As Found: 8.1%

	Before		After
Calculated slope	1.002016	Calculated slope	1.000005
Calculated intercept	-0.046087	Calculated intercept	0.038453

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	22.86	ppm	25.30	ppm

Notes: Hydrogen cylinder replaced
Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter CH4
 Air Monitoring Network PAZA

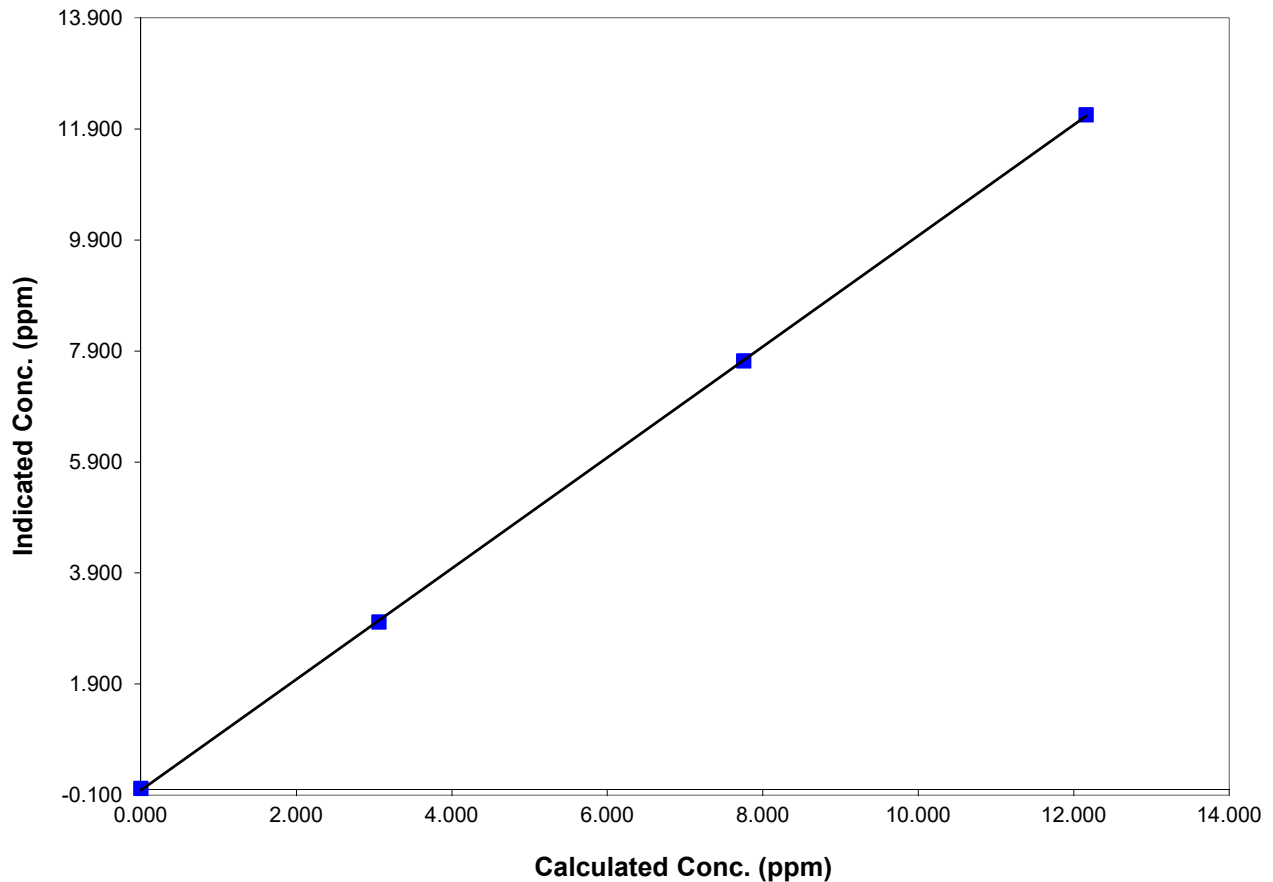
Station Information

Calibration Date	March 2, 2018	Previous Calibration	February 2, 2018
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:10:00 PM	End Time (MST)	16:55:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.018	N/A		
12.160	12.149	1.0009	Correlation Coefficient	0.999969
7.756	7.721	1.0045		
3.065	3.013	1.0172	Slope	1.001182
			Intercept	0.013170

CH4 Calibration Data



Calibration Summary



Parameter THC
 Air Monitoring Network PAZA

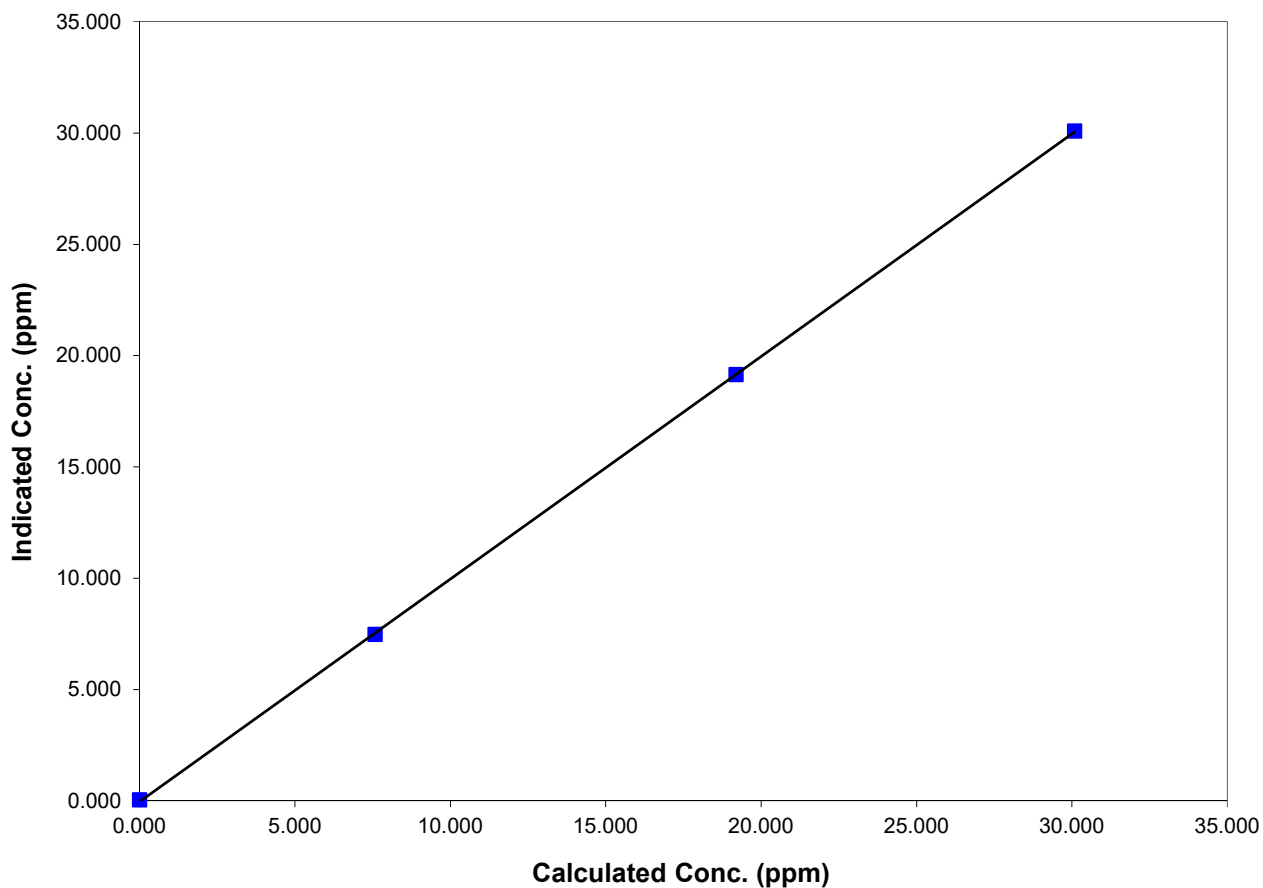
Station Information

Calibration Date	March 2, 2018	Previous Calibration	February 2, 2018
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:10:00 PM	End Time (MST)	16:55:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

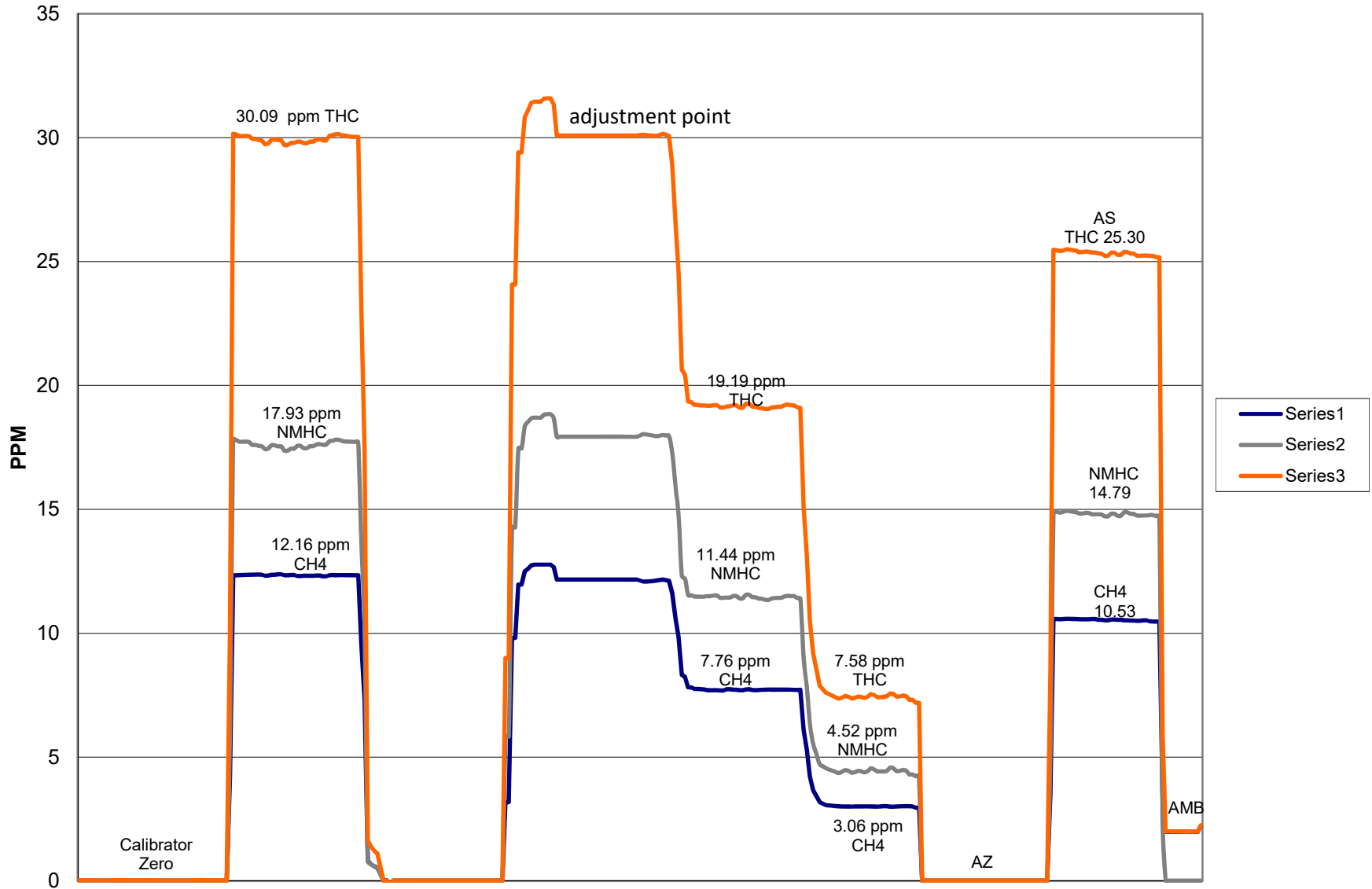
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.030	N/A		
30.093	30.084	1.0003	Correlation Coefficient	0.999976
19.194	19.141	1.0028		
7.584	7.462	1.0164	Slope	1.000005
			Intercept	0.038453

THC Calibration Data



THC/CH₄/NMHC Calibration



Calibration Report



AIR QUALITY MONITORING

Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	<u>March 22, 2018</u>	Previous Calibration	<u>February 27, 2018</u>
Station Number	<u>2</u>	Station Location	<u>Evergreen Park</u>
Reason:	<u>Routine</u>	<u>Install</u>	<u>Removal</u>
			<u>Other:</u>
Start Time (MST)	<u>10:45</u>	End Time (MST)	<u>12:50</u>
Barometric Pressure	<u>0.936</u> ATM	Station Temperature	<u>22.0</u> Deg C
Calibrator	<u>EnviroNics 6103</u>	Serial Number	<u>6586</u>
Cal Gas Concentratio	<u>49.6</u> ppm	Cal Gas Expiry Date	<u>04/05/2019</u>
Correction factor	<u>0.031602</u>	Cal Gas Cylinder #	<u>LL107945</u>
DACS make	<u>CR3000</u>	DACS serial No.	<u>5236</u>
DACS voltage range	<u>0 - 5 volt</u>	DACS channel #	<u>6</u>
	<u>Before</u>		<u>After</u>
Calculated slope	<u>0.988588</u>	Calculated slope	<u>0.989142</u>
Calculated intercept	<u>1.288108</u>	Calculated intercept	<u>0.527796</u>
Analyzer make	<u>Teco 43i</u>	Analyzer serial #	<u>701120008</u>

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	12.6		12.6	
coefficient	1.246		1.246	
Lamp Voltage	836	volts	835	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	669.2	mm Hg	672.3	mm Hg
Sample Flow	0.440	ccm	0.440	ccm
Lamp Intensity	90	%	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)
4997	0.0	0.00	0.5	N/A
4997	39.97	393.6	398.0	0.9890
4997	19.99	197.6	198.5	0.9957
4997	9.98	98.9	98.5	1.0034
4997	0.0	0.0	0.5	As Found Zero
4997	39.98	393.7	398.0	As Found Span
Average Correction Factor				0.9960

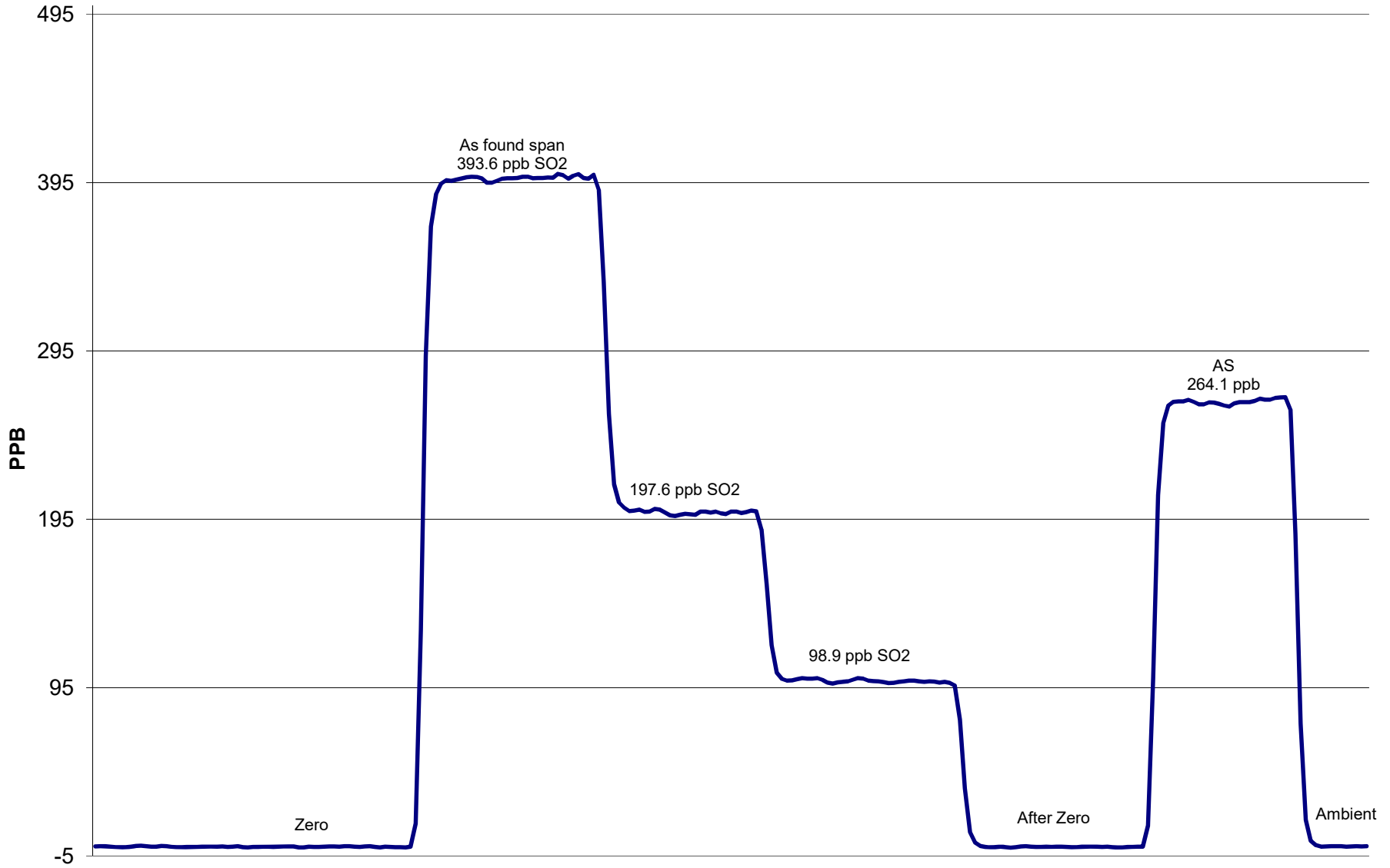
Calculated value of As Found Response: 394.213 ppm Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	0.6	ppm	0.4	ppm
Auto span	269.4	ppm	264.1	ppm

Notes: No adjustment made

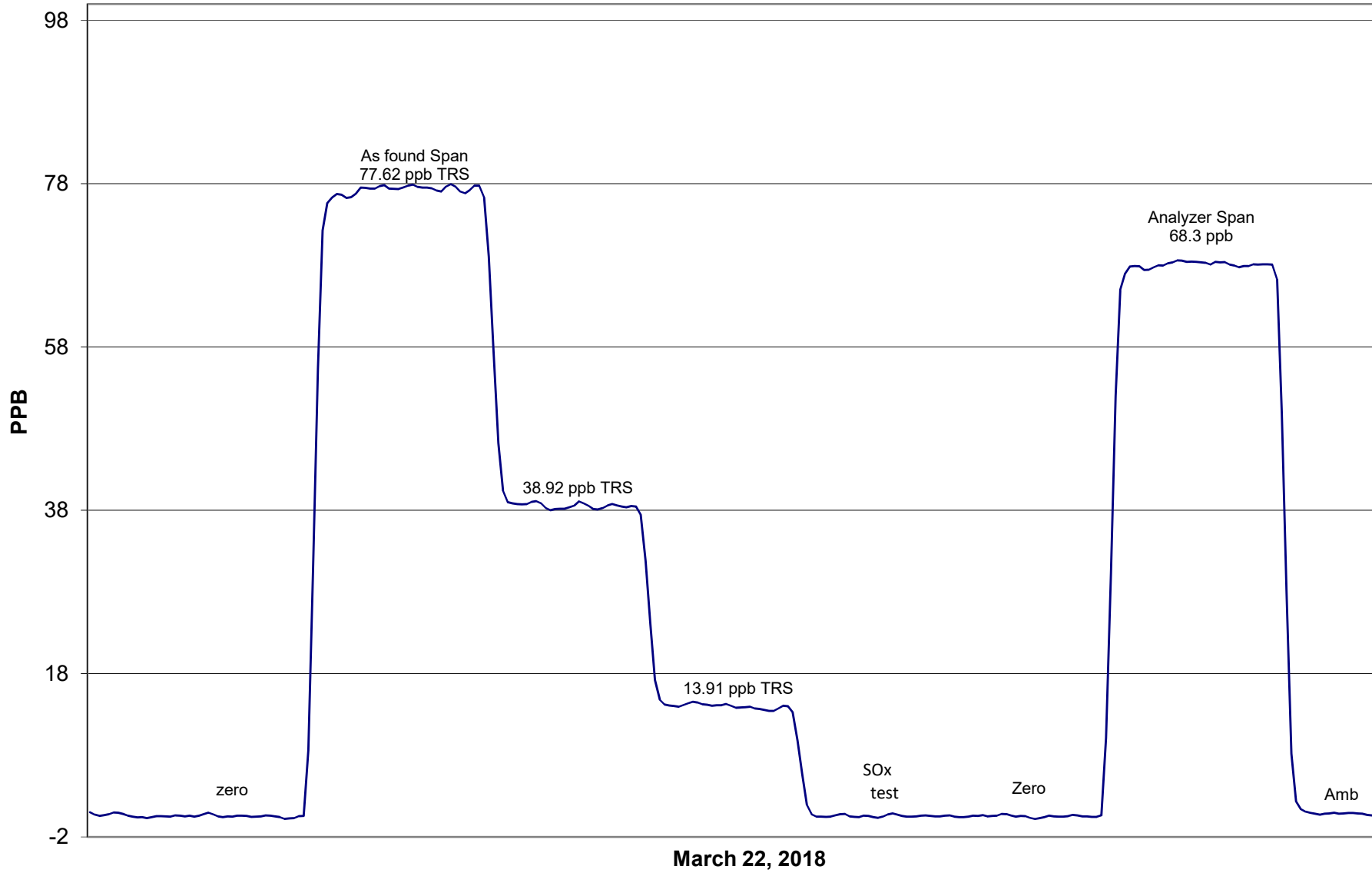
Calibration Performed By: Dmytro Dolotii

SO2 Calibration



March 22, 2018

TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	March 21, 2018	Previous Calibration	February 16, 2018
Station Number	3	Station Location	Smokey Heights
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	9:35	End Time (MST)	11:50
Barometric Pressure	0.924 ATM	Station Temperature	19.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas Concentratio	49.6 ppm	Cal Gas Cert Date	10/24/2020
Correction factor	0.031517	Cal Gas Cylinder #	LL107945
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	1.005761	Calculated slope	1.005575
Calculated intercept	0.037595	Calculated intercept	-0.201842
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	14		14	
coefficient	0.966		0.966	
Lamp Voltage	942	volts	943	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	665.4	mm Hg	666.1	mm Hg
Sample Flow	0.443	lpm	0.444	lpm
Lamp Intensity	87	%	87	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4996	0.0	0.00	0.8	N/A
4996	39.96	393.57	391.7	1.0047
4996	19.97	197.47	196.8	1.0035
4996	9.99	98.98	97.7	1.0131
4996	0.0	0.00	0.8	As Found Zero
4996	39.96	393.57	391.7	As Found Span
Average Correction Factor				1.0071

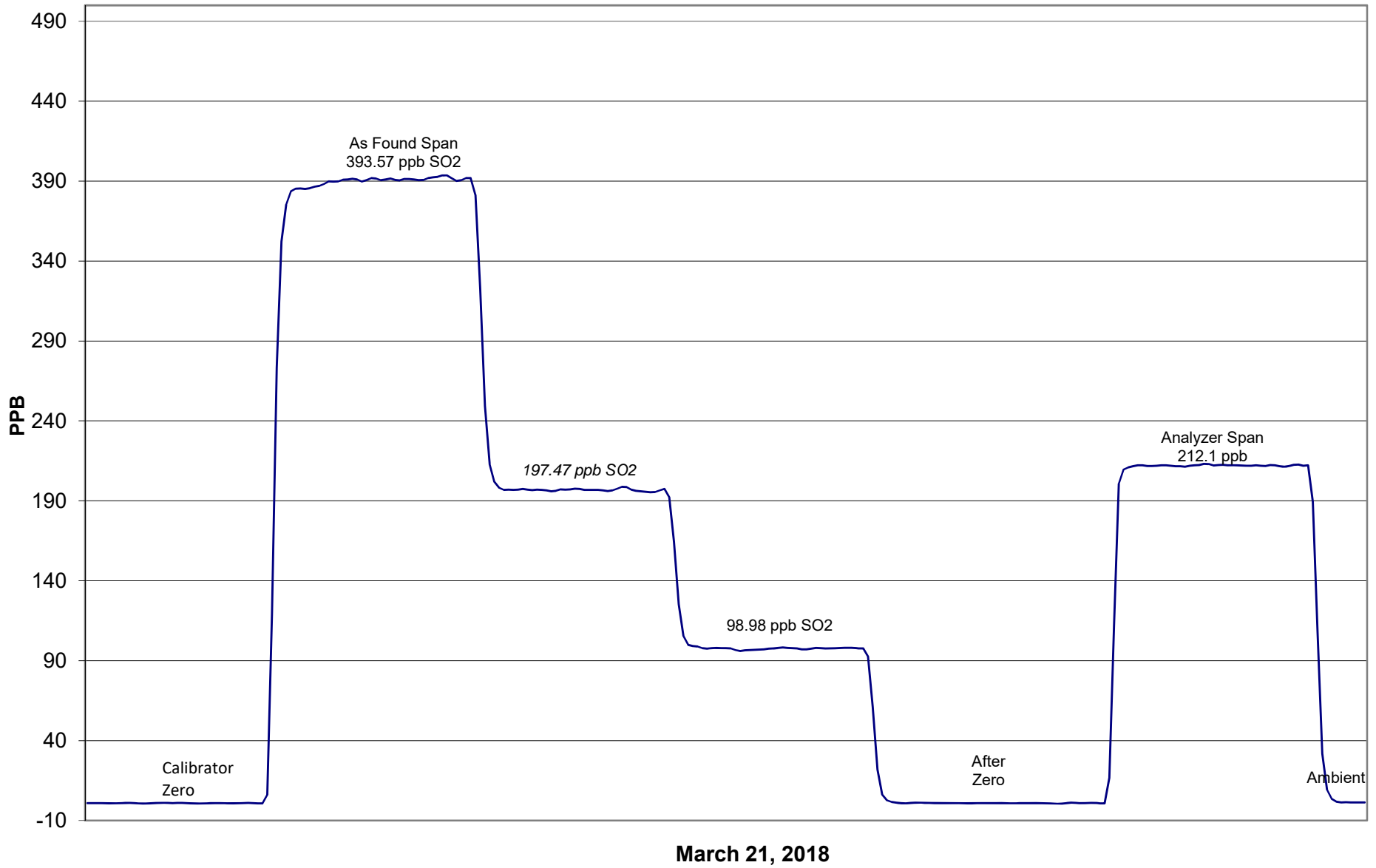
Calculated value of As Found Response: 393.209 ppb Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	0.9	ppb	0.8	ppb
Auto span	209.2	ppb	212.1	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Smokey Heights SO₂ Calibration



Calibration Report



Parameter TRS

AIR QUALITY MONITORING

Air Monitoring Network PAZA

Station Information

Calibration Date	March 21, 2018	Previous Calibration	February 16, 2018
Station Number	3	Station Location	Smokey Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	8:10	End Time (MST)	10:45
Barometric Pressure	0.923 ATM	Station Temperature	19.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas Conc	9.78 ppm	Cal Gas Expiry Date	02/28/2020
Correction factor	0.031483	Cal Gas Cylinder #	LL119574
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	1.019658	Calculated slope	1.017060
Calculated intercept	-0.839714	Calculated intercept	-0.316419

Analyzer make TEI Model 43I APSAA Analyzer serial # 1153630151

	before		after	
Concentration range	100	ppb	100	ppb
Background	14.2	ppb	14.2	ppb
coefficient	1.027		1.027	
Lamp Voltage	812	volts	813	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	669.1	mm Hg	669.5	mm Hg
Sample Flow	0.419	lpm	0.420	lpm
Lamp Intensity	93	mv	93	mv

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4996	0.0	0.00	0.4	N/A
4996	39.96	77.60	76.7	1.0121
4996	19.97	38.94	38.5	1.0116
6998	9.99	13.94	14.0	0.9991
4996	9.99		0.5	Sox test
4996	0.0	0.00	0.4	As Found Zero
4996	39.96	77.60	76.7	As Found Span
Average Correction Factor				1.0076

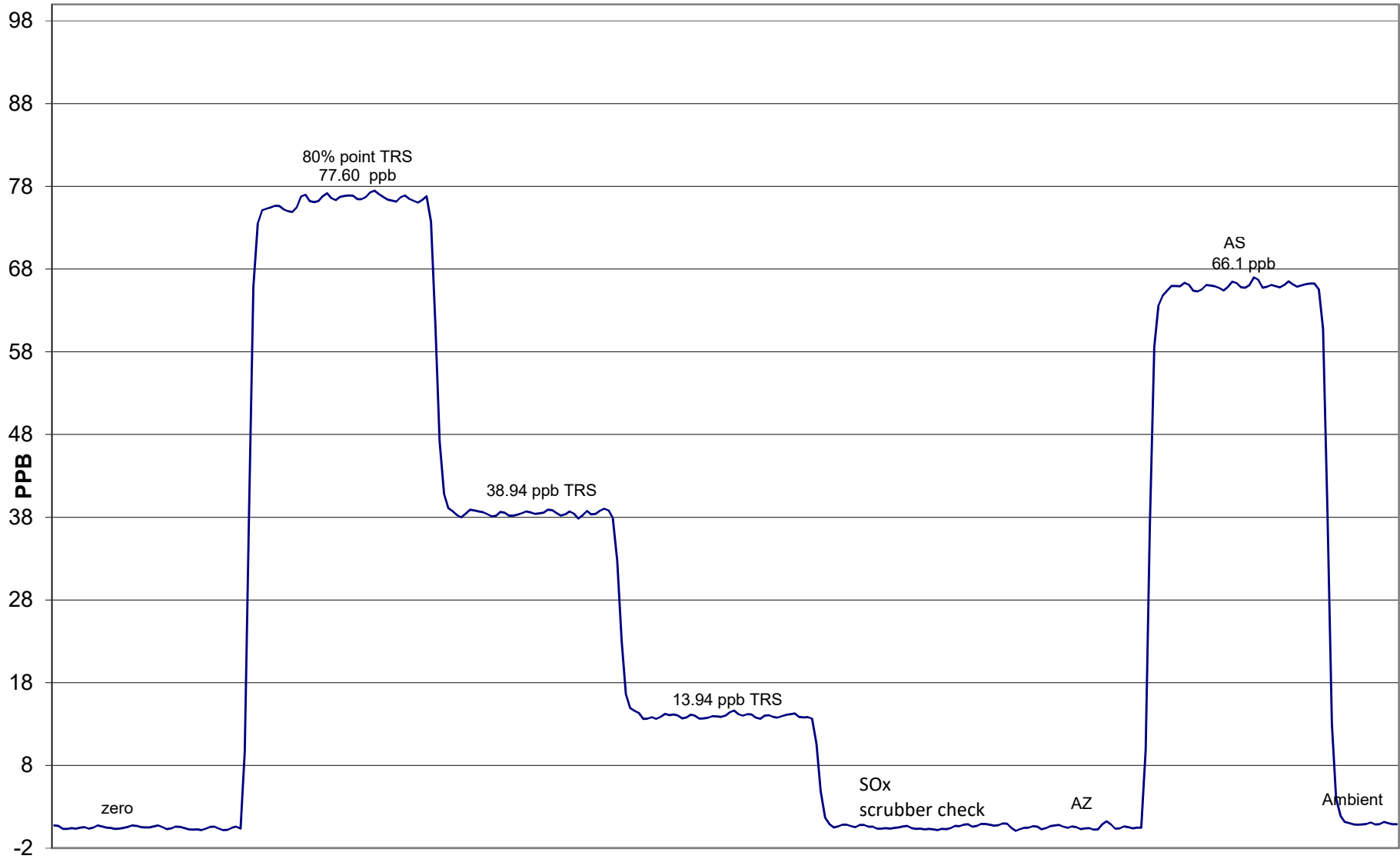
Calculated value of As Found Response: 76.92 ppb Percent Change of As Found: 0.9%

	before calibration		after calibration	
Auto zero	0.8	ppb	0.5	ppb
Auto span	63.9	ppb	66.1	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Smokey Heights TRS Calibration



March 21, 2018

Calibration Report



Parameter SO2
 Air Monitoring Network PAZA

Station Information

Calibration Date	March 6, 2018	Previous Calibration	February 7, 2018
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	12:30	End Time (MST)	16:44:00 PM
Barometric Pressure	0.921 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentratio	10.5 ppm	Cal Gas Expiry Date	12/01/2019
Gas Cert Reference	FF16108		
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.005594	Calculated slope	1.002009
Calculated intercept	0.134465	Calculated intercept	0.102788
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.87		2.84	
Coefficient	0.975		0.975	
PMT	-767.8	V	-768.2	V
UV Lamp Voltage	1134	V	1135	V
Chamber Temp	44.9	Deg C	45	Deg C
Pressure	667.9	mm Hg	669.3	mm Hg
Sample Flow	0.488	LPM	0.486	LPM
Lamp Intensity	94	%	94	%

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)
4995	0.00	0.0	0.1	N/A
4995	39.94	83.3	83.1	1.0022
4995	19.97	41.8	41.6	1.0059
4995	9.97	20.9	20.6	1.0176
4995	0.00	0.0	0.1	As found zero
4995	39.94	83.3	83.1	As found span
Average Correction Factor				1.0086

Calculated value of As Found Response: 83.613 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	0.2	ppb	0.2	ppb
Auto span	58.9	ppb	59.2	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary



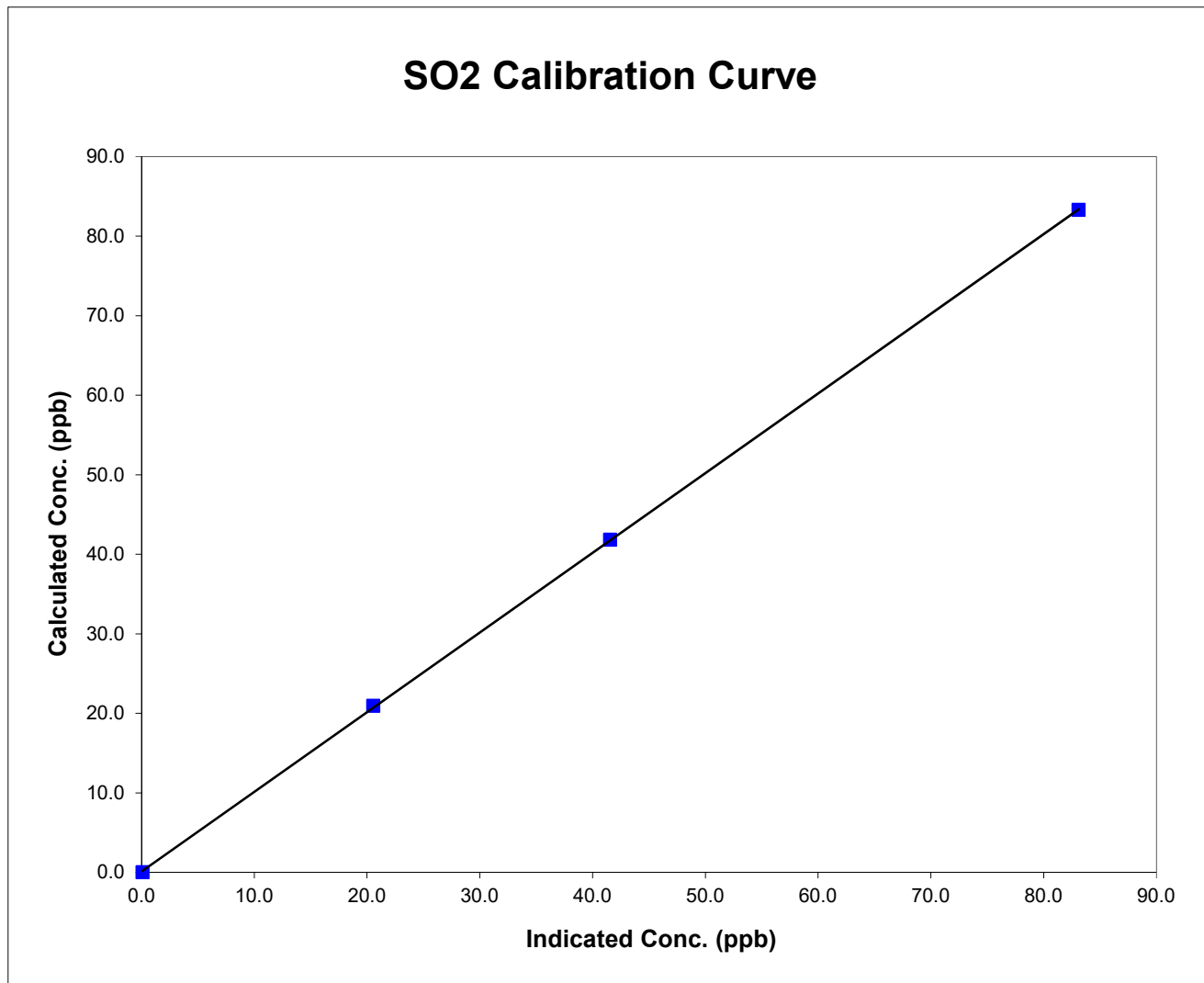
Parameter SO2
 Air Monitoring Network PAZA

Station Information

Calibration Date	March 6, 2018	Previous Calibration	February 7, 2018
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:30	End Time (MST)	16:44:00 PM
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999975
83.3	83.1	1.0022		
41.8	41.6	1.0059		
20.9	20.6	1.0176		
			Slope	1.002009
			Intercept	0.102788



SO2 Calibration



March 6, 2018

Calibration Report



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

Station Information

Calibration Date: **March 6, 2018** Station Location: **Beaverlodge**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4995	0.00	0.0	0.0	0.0	0.1	0.1	-0.2	N/A	N/A
1	4995	39.94	412.5	411.7	0.8	409.2	408.9	-0.6	1.0082	1.0068
2	4995	19.97	207.1	206.7	0.4	204.5	203.7	-0.1	1.0124	1.0144
3	4995	9.97	103.6	103.4	0.2	100.3	100.3	-0.1	1.0326	1.0307
AFZ	4995	0.00	0.0	0.0	0.0	0.1	0.1	-0.2	0.0000	0.0000
AFS	4995	39.94	412.5	411.7	0.8	399.8	399.7	-0.5	1.0317	1.0301
								Average Correction Factor	1.0177	1.0173

As Found Concentrations: **NO_x= 402.4** **NO= 401.0** As Found Percent Change **NO_x= -2.4%** **NO= -2.6%**

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.94 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	0.1	0.1	-0.2	N/A	N/A	N/A	N/A	
NO point	400.6	409.9	-9.3	410.3	409.9	-0.4	0.9763	1.0000	N/A	N/A	
300	400.6	107.9	292.7	410.1	107.9	301.5	0.9769	1.0000	0.9707	103.0%	
200	400.6	205.2	195.4	411.3	205.2	205.2	0.9739	1.0000	0.9520	105.0%	
100	400.6	300.3	100.3	412.8	300.3	111.9	0.9705	1.0000	0.8966	111.5%	
							Average Correction Factor	0.9738	1.0000	0.9398	106.5%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.3	-0.2	-0.2	ppb	-0.3	-0.3	-0.1	ppb
Auto span	296.1	294.1	1.3	ppb	299.8	297.6	1.4	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



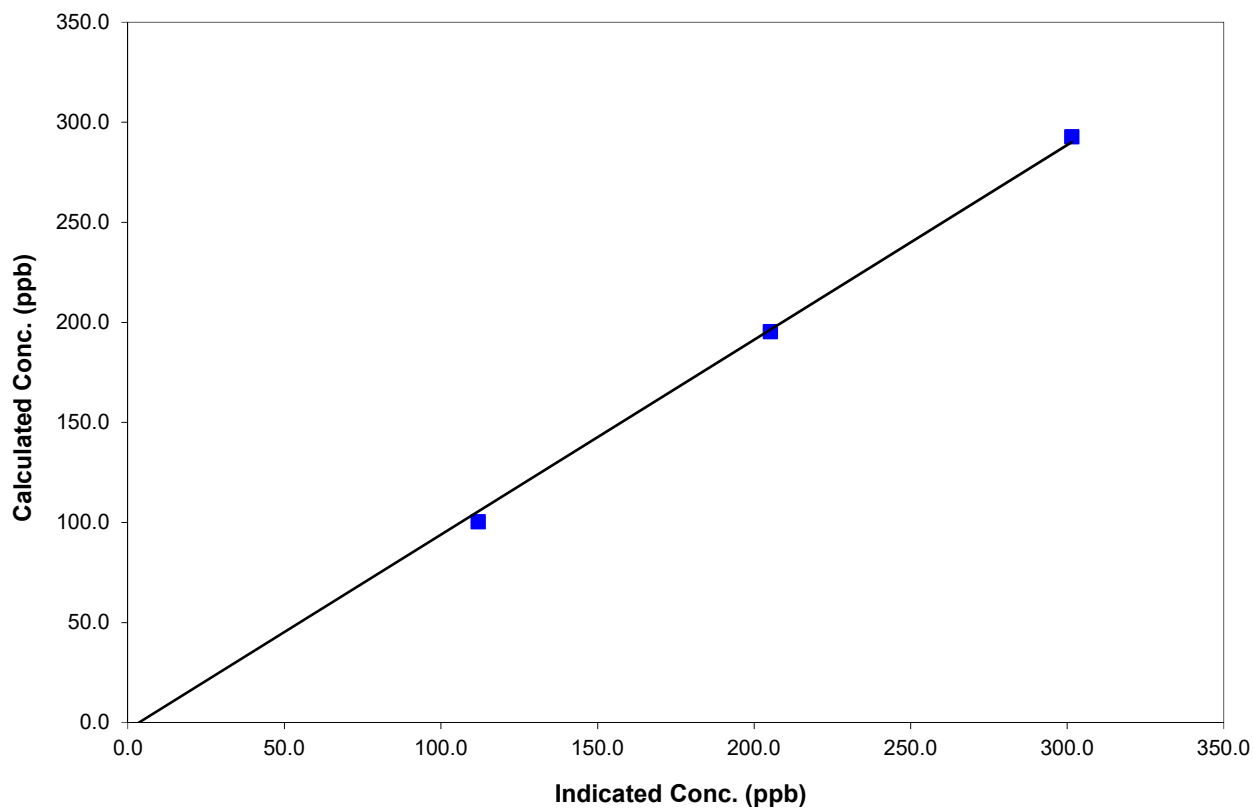
Station Information

Calibration Date	March 6, 2018	Previous Calibration	February 7, 2018
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:05	End Time (MST)	14:25:00 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		
292.7	301.5	0.9707	Correlation Coefficient	0.998988
195.4	205.2	0.9520		
100.3	111.9	0.8966		
			Slope	0.973184
			Intercept	-3.356142

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



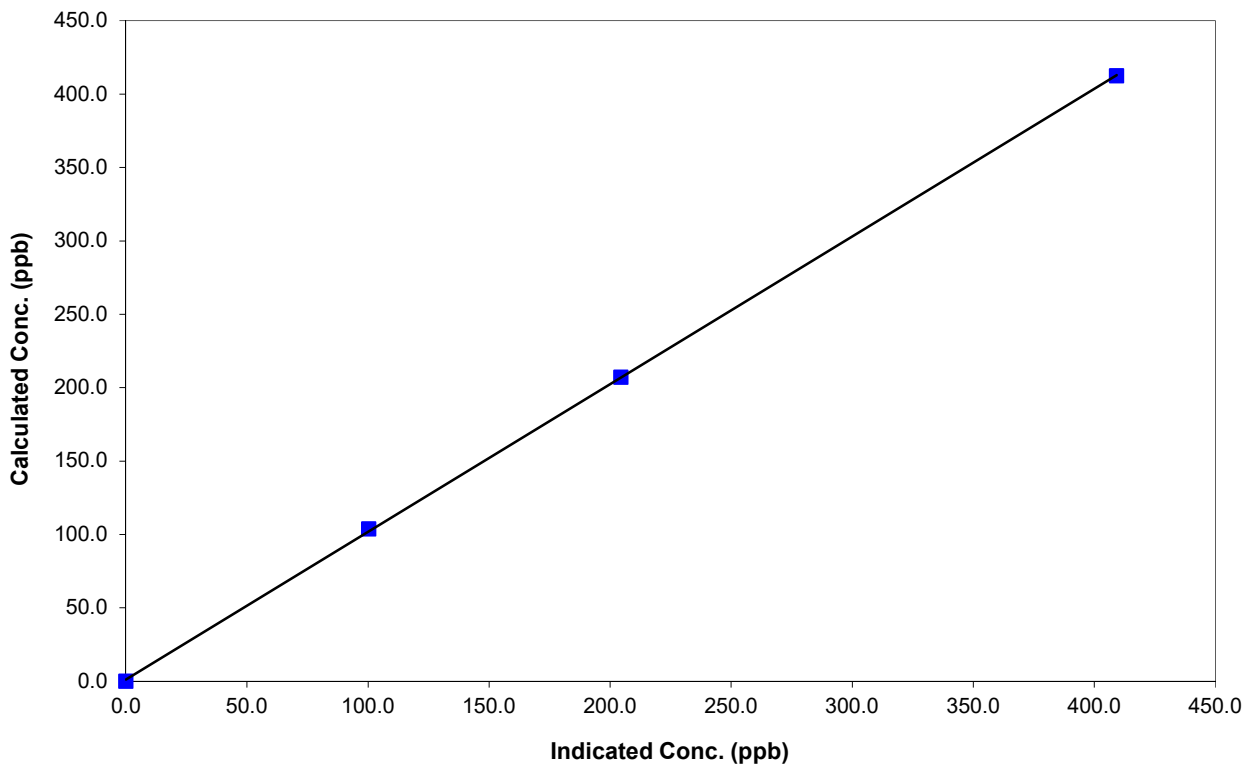
Station Information

Calibration Date	March 6, 2018	Previous Calibration	February 7, 2018
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:05	End Time (MST)	14:25:00 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		
412.5	409.2	1.0082	Correlation Coefficient	0.999959
207.1	204.5	1.0124		
103.6	100.3	1.0326		
			Slope	1.006470
			Intercept	1.116415

NO_x Calibration Curve



Calibration Summary



AIR QUALITY MONITORING

Parameter NO

Air Monitoring Network PAZA

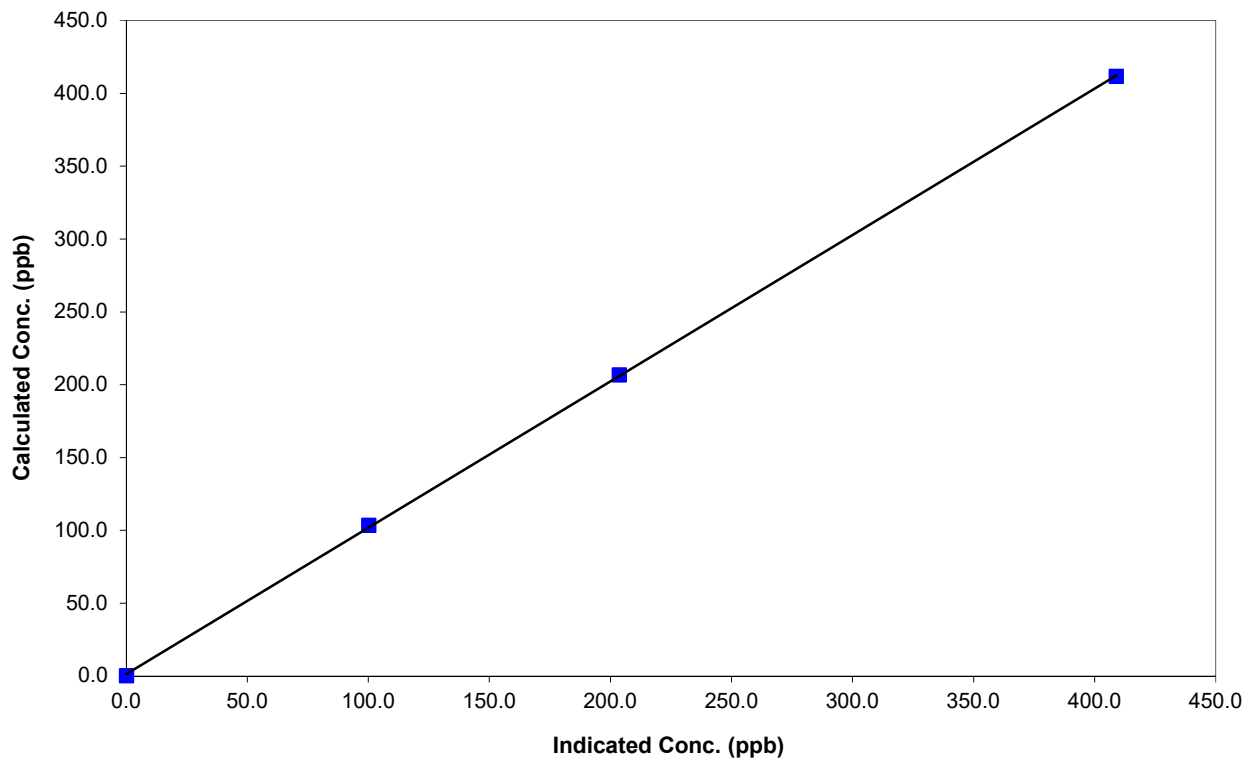
Station Information

Calibration Date	March 6, 2018	Previous Calibration	February 7, 2018
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	10:05	End Time (MST)	14:25:00 PM
Analyzer make	TEI 42i	Analyzer serial #	906535068

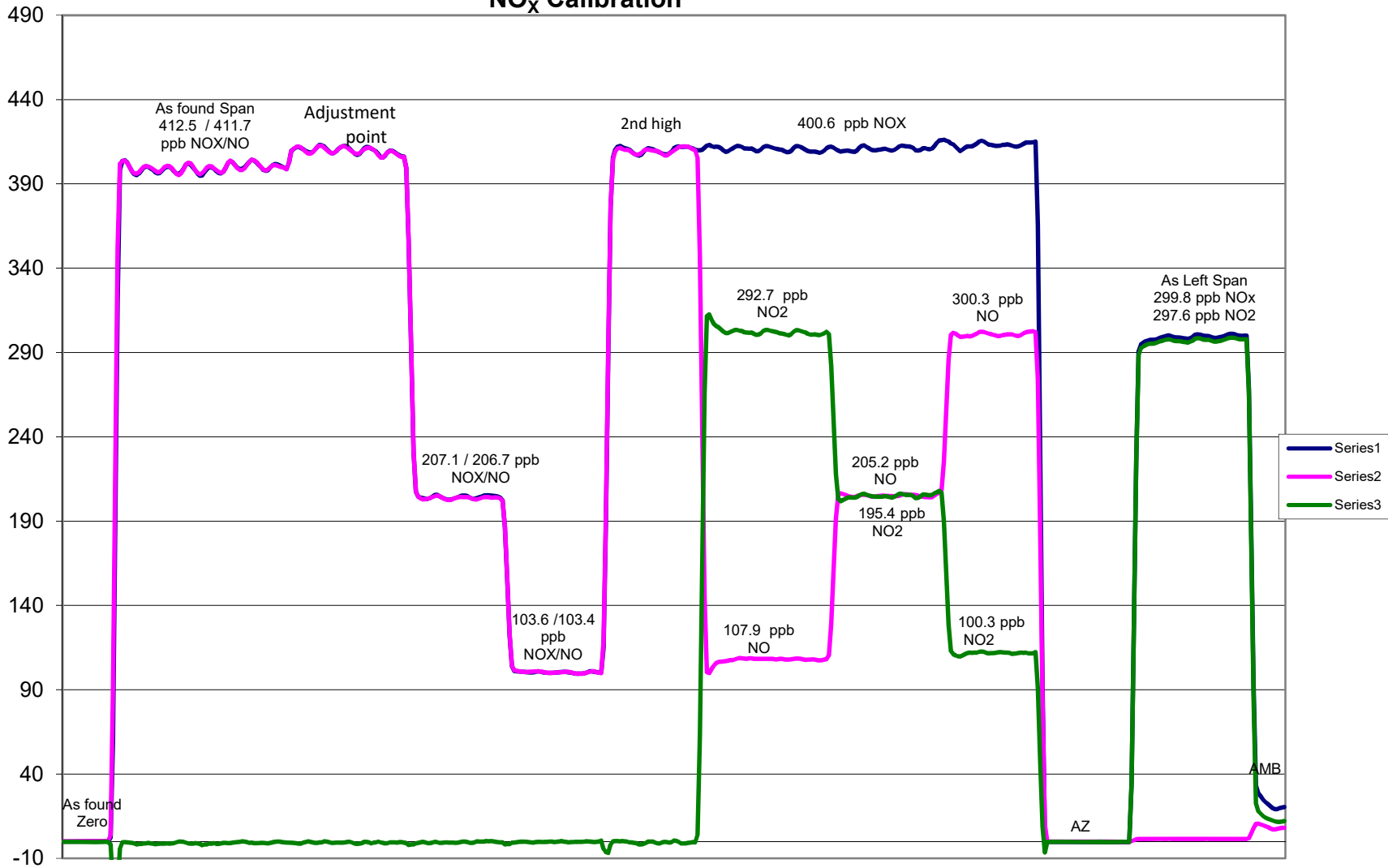
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
411.7	408.9	1.0068	Correlation Coefficient	0.999952
206.7	203.7	1.0144		
103.4	100.3	1.0307		
			Slope	1.005445
			Intercept	1.185484

NO Calibration Curve

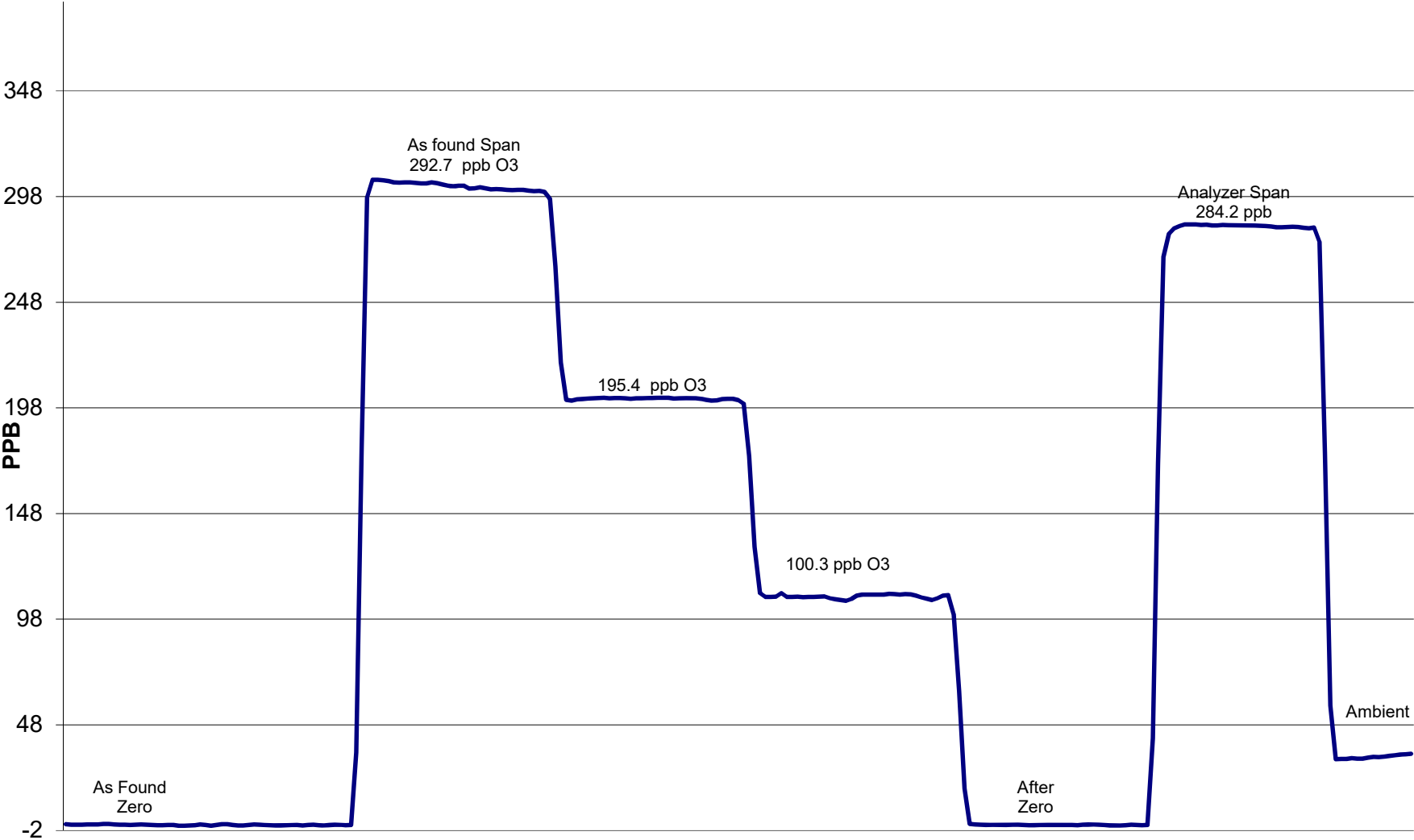


NO_x Calibration



March 6, 2018

O3 Calibration



March 6, 2018

Calibration Report



Parameter SO2
 Air Monitoring Network PAZA

Station Information

Calibration Date	March 28, 2018	Previous Calibration	February 14, 2018
Station Number	6	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
Other:			
Start Time (MST)	08:10:00:AM	End Time (MST)	10:30
Barometric Pressure	0.929 atm	Station Temperature	22.0 Deg C
Calibrator	EnviroNics	Serial Number	3016
Cal Gas Concentration	49.6 ppm	Cal Gas Exp Date	February 21, 2020
Gas Cylinder Num.	EY0000751		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	4
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.994262	Calculated slope	1.018450
Calculated intercept	0.443319	Calculated intercept	0.189147
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	7.3		7.3	
Coefficient	0.861		0.861	
UV Lamp Voltage	797	LPM	797	LPM
Chamber Temp	45	V	45	V
Perm Gas Temp	45	C	45	C
Pressure	677.6	in Hg	678.4	in Hg
Sample Flow	0.456	LPM	0.457	LPM
Lamp Intensity	91	Hz	91	%

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	0.8	N/A
4995	39.96	393.7	386.7	1.0181
4995	19.97	197.5	193.7	1.0196
4995	9.97	98.8	95.6	1.0337
4995	0.00	0.0	0.8	As found zero
4995	39.96	393.7	386.7	As found span
Average Correction Factor				1.0238

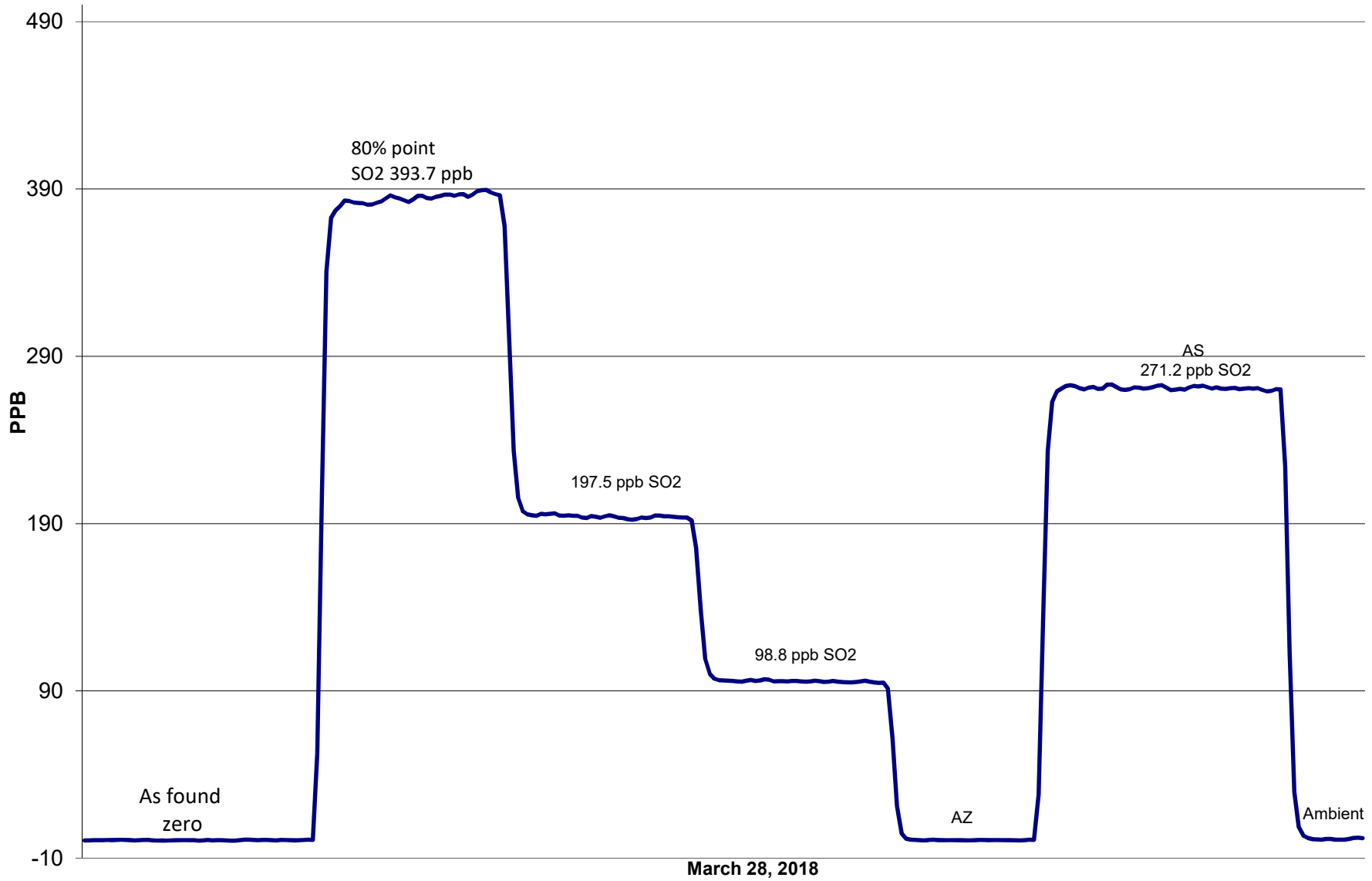
Calculated value of As Found Response: 384.1 ppb Percent Change of As Found: 2.4%

	before calibration		after calibration	
Auto zero	0.7	ppb	0.7	ppb
Auto span	267.7	ppb	271.2	ppb

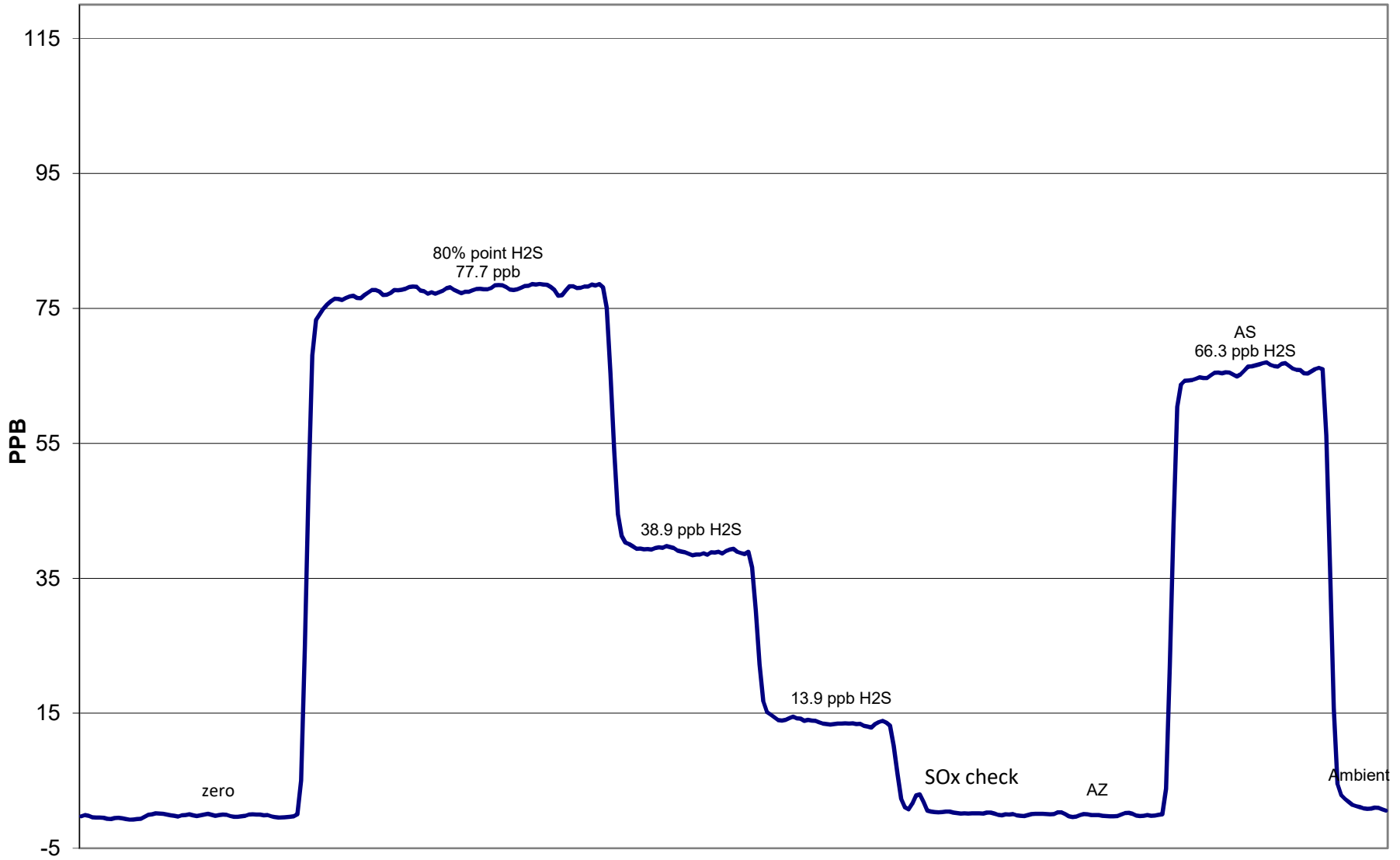
Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

SO2 Calibration



H2S Calibration



March 28, 2018

Calibration Report



Parameter SO₂

AIR QUALITY MONITORING

Air Monitoring Network PAZA

Station Information

Calibration Date	March 27, 2018	Previous Calibration	February 21, 2018
Station Number	1	Station Location	Donnelly
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	9:30	End Time (MST)	12:10
Barometric Pressure	0.926 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas Concentration	49.6 ppm	Cal Gas Expiry Date	10/24/2020
Correction factor	0.031477	Cal Gas Cylinder #	LL107945
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.990487	Calculated slope	1.005314
Calculated intercept	-0.837822	Calculated intercept	0.987794
Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	6.7		8	
coefficient	1.020		1.020	
Lamp Voltage	867	volts	862	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	677	mm Hg	673.1	mm Hg
Sample Flow	0.432	ccm	0.431	ccm
Lamp Intensity	97	%	97	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)
4997	0.0	0.00	0.0	N/A
4997	39.96	393.5	390.6	1.0073
4997	19.98	197.5	195.8	1.0087
4997	10.01	99.2	96.1	1.0315
4997	0.0	0.0	1.0	As Found Zero
4997	39.99	393.8	388.2	As Found Span
Average Correction Factor				1.0158

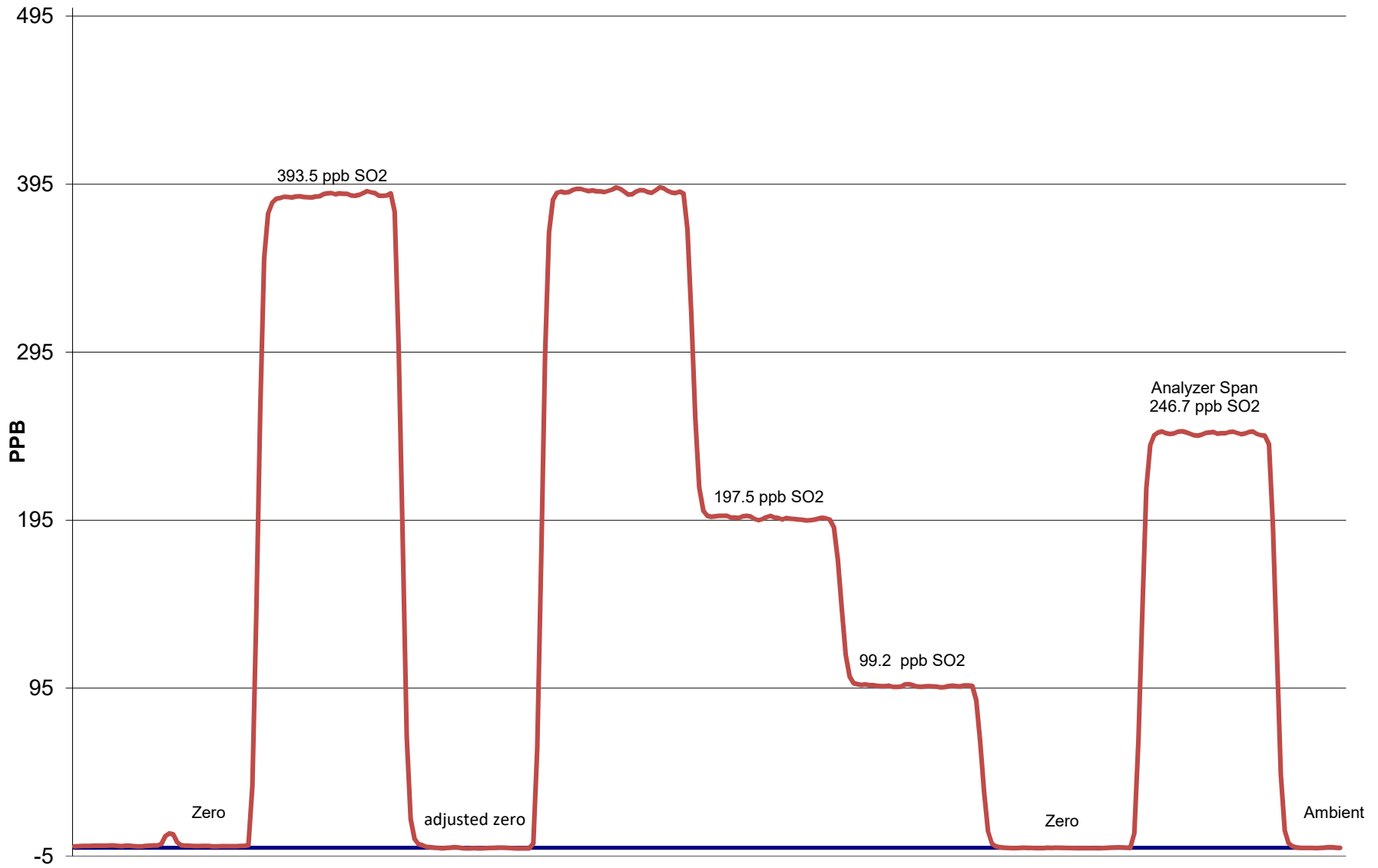
Calculated value of As Found Response: 382.695 ppb Percent Change of As Found: **2.8%**

	before calibration		after calibration	
Auto zero	1.2	ppb	-0.1	ppb
Auto span	247.2	ppb	246.7	ppb

Notes: Slight zero adjustment made

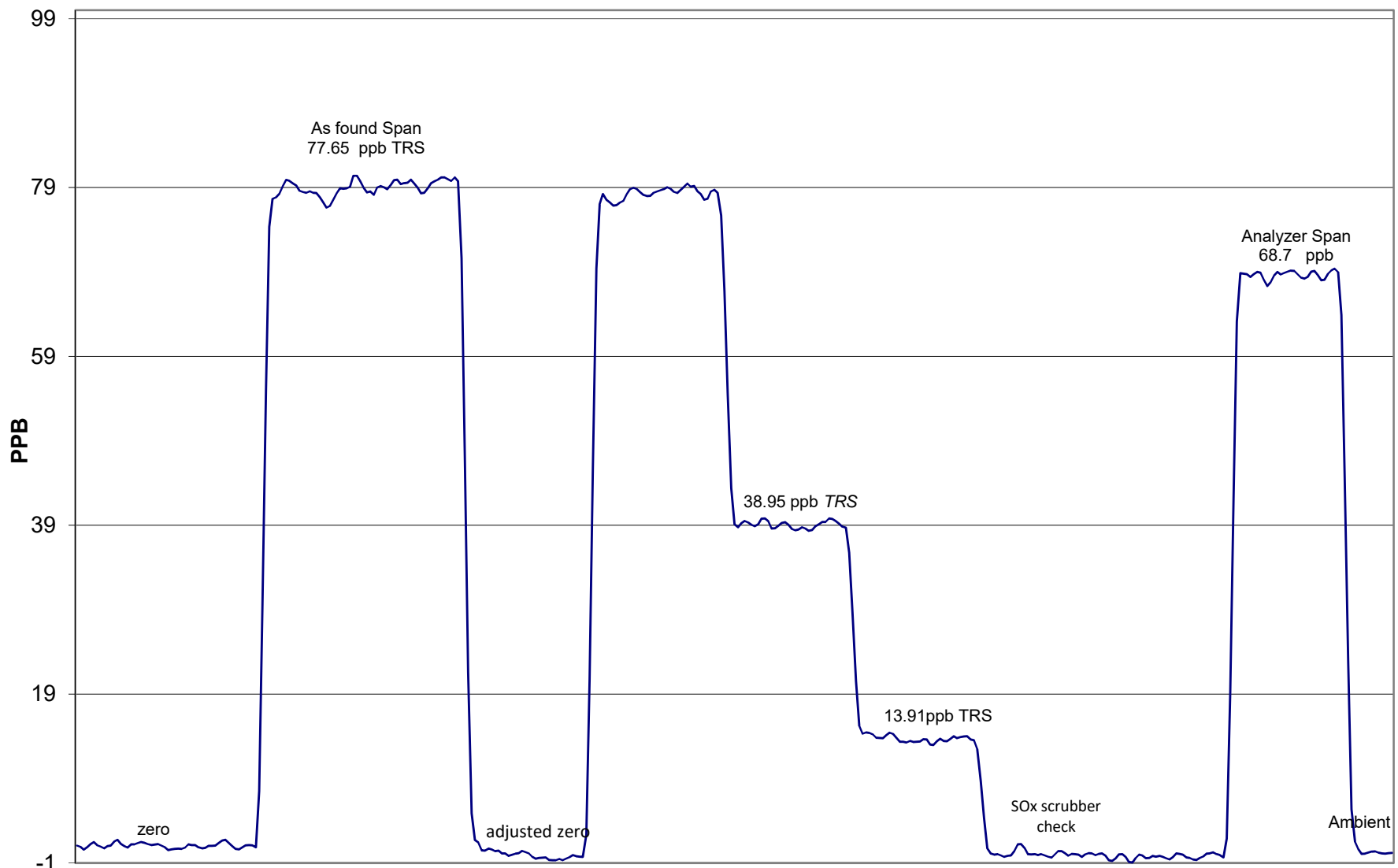
Calibration Performed By: Dmytro Dolotii

SO2 Calibration



March 27, 2018

H2S Calibration



March 27, 2018

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	March 16, 2018	Previous Calibration	February 8, 2018
Station Number	10	Station Location	Rycroft
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	8:15	End Time (MST)	10:45
Barometric Pressure	0.919 Atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas Concentratio	50.1 ppm	Cal Gas Expiry Date	10/10/2020
Gas Cert Reference	LL104185		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	2
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.994743	Calculated slope	0.987900
Calculated intercept	-0.117529	Calculated intercept	1.847987
Analyzer make	TEI 43C	Analyzer serial #	436610005

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	24.5		24	
Coefficient	1.076		1.076	
UV Lamp Voltage	901	V	902	V
Chamber Temp	44.5	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	671.5	mm Hg	692.2	mm Hg
Sample Flow	0.465	LPM	0.470	LPM
Lamp Intesity	30289	Hz	30627	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)
4996	0.00	0.0	0.6	N/A
4996	39.96	397.5	402.2	0.9883
4996	19.99	199.7	197.5	1.0112
4996	9.98	99.9	97.9	1.0207
4996	0.00	0.0	0.6	As found zero
4996	39.96	397.5	396.2	As found span
Average Correction Factor				1.0067

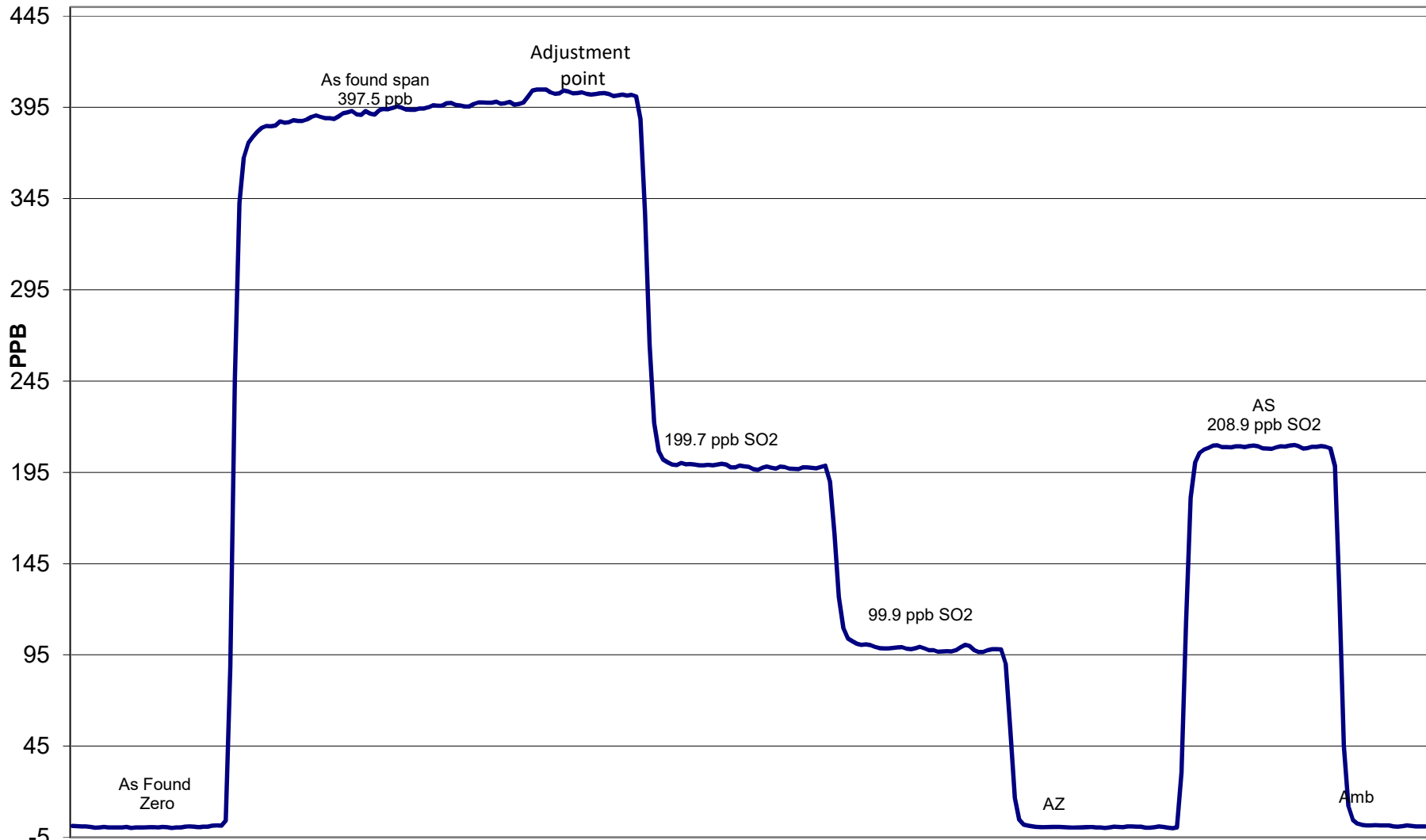
Calculated value of As Found Response: 393.416 ppb Percent Change of As Found: 1.0%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	200.2	ppb	208.9	ppb

Notes: Slight adjustment made

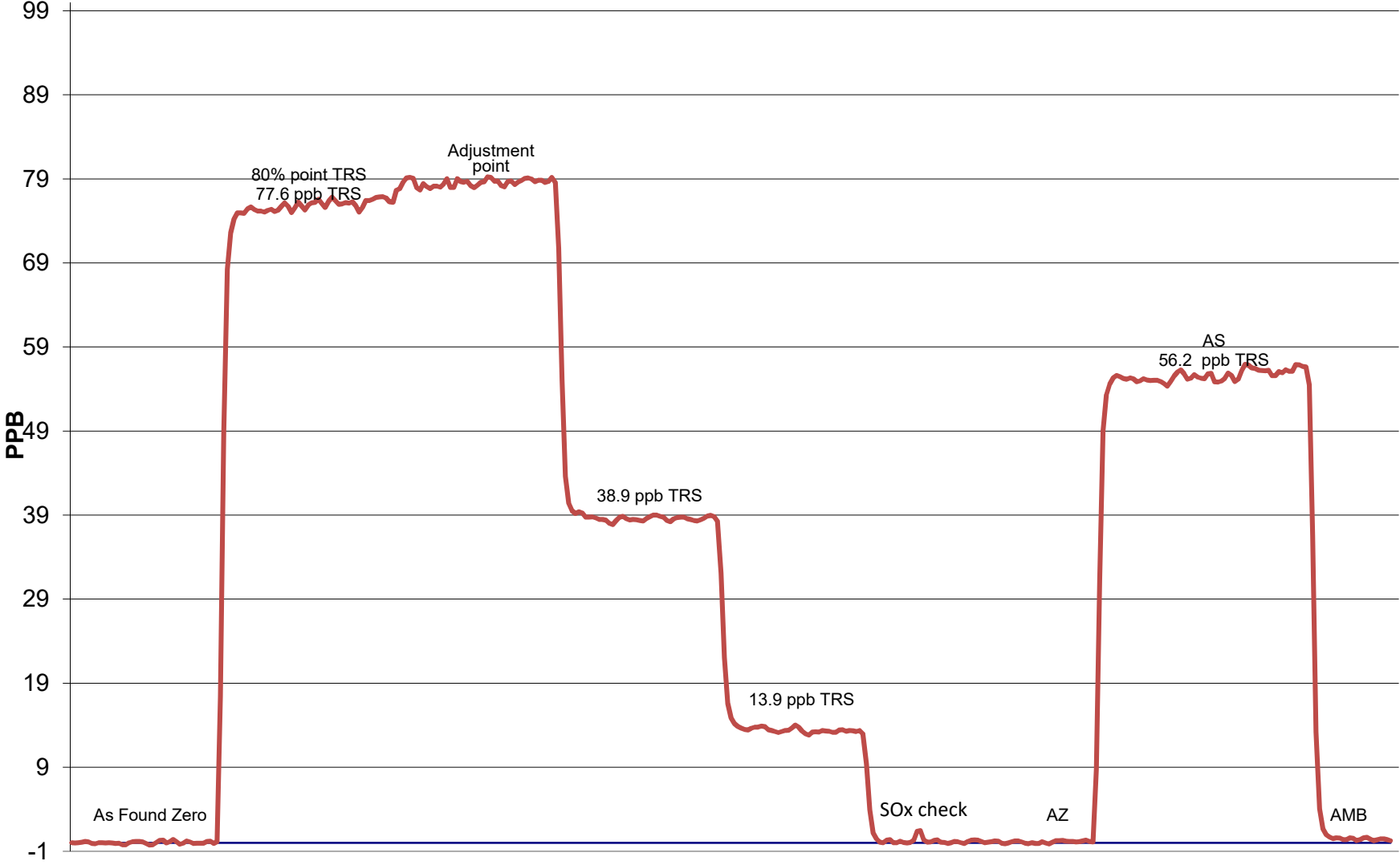
Calibration Performed By: Dmytro Dolotii

SO2 Calibration



March 16, 2018

TRS Calibration



March 16, 2018

Calibration Report



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

Station Information

Calibration Date: **March 16, 2018** Station Location: **Rycroft**

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	4996	0.00	0.0	0.0	0.0	0.3	0.1	0.3	N/A	N/A
1	4996	39.96	403.1	402.3	0.8	403.1	401.3	0.1	1.0000	1.0024
2	4996	19.99	202.5	202.1	0.4	201.6	200.4	0.4	1.0043	1.0084
3	4996	9.98	101.3	101.1	0.2	98.7	98.7	0.1	1.0261	1.0246
AFZ	4996	0.00	0.0	0.0	0.0	0.3	0.1	0.3	0.0000	0.0000
AFS	4996	39.96	403.1	402.3	0.8	382.8	380.3	0.9	1.0530	1.0579
								Average Correction Factor	1.0101	1.0118

As Found Concentrations: **NO_x= 383.0** **NO= 381.3** As Found Percent Change **NO_x= -5.0%** **NO= -5.2%**

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.94 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	0.3	0.1	0.3	N/A	N/A	N/A	N/A	
NO point	401.4	401.4	0.0	403.4	401.4	0.0	0.9952	1.0000	N/A	N/A	
300	401.4	95.5	306.0	403.6	95.5	306.6	0.9946	1.0000	0.9979	100.2%	
200	401.4	193.6	207.8	404.4	193.6	208.7	0.9926	1.0000	0.9956	100.4%	
100	401.4	288.7	112.7	403.8	288.7	113.1	0.9941	1.0000	0.9967	100.3%	
							Average Correction Factor	0.9938	1.0000	0.9968	100.3%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.0	0.1	0.1	ppb	0.3	0.1	0.2	ppb
Auto span	155.4	153.9	0.8	ppb	161.8	160.2	1.0	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



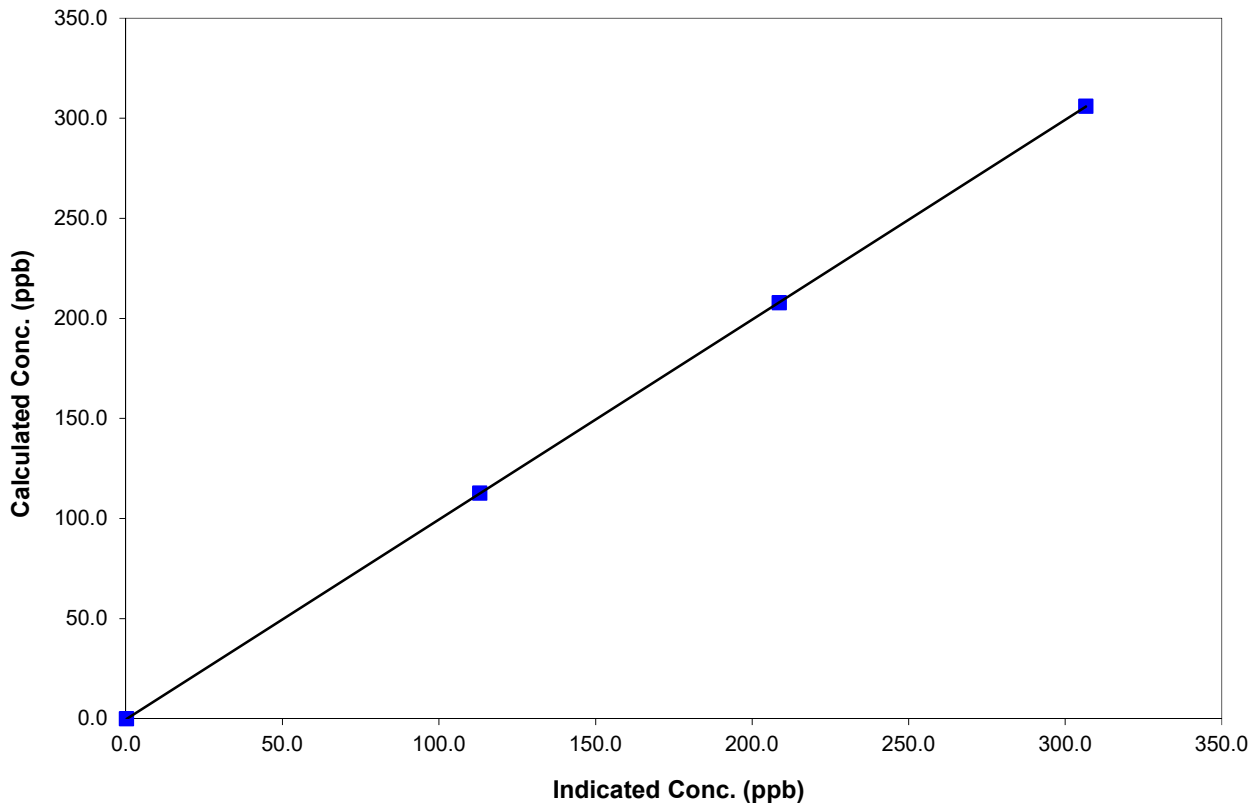
Station Information

Calibration Date	March 16, 2018	Previous Calibration	February 8, 2018
Station Number	10	Station Location	Rycroft
Start Time (MST)	8:20	End Time (MST)	11:55
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		
306.0	306.6	0.9979	Correlation Coefficient	0.999998
207.8	208.7	0.9956		
112.7	113.1	0.9967		
			Slope	0.998363
			Intercept	-0.286506

NO₂ Calibration Curve



Calibration Summary



Parameter NO_x
 Air Monitoring Network PAZA

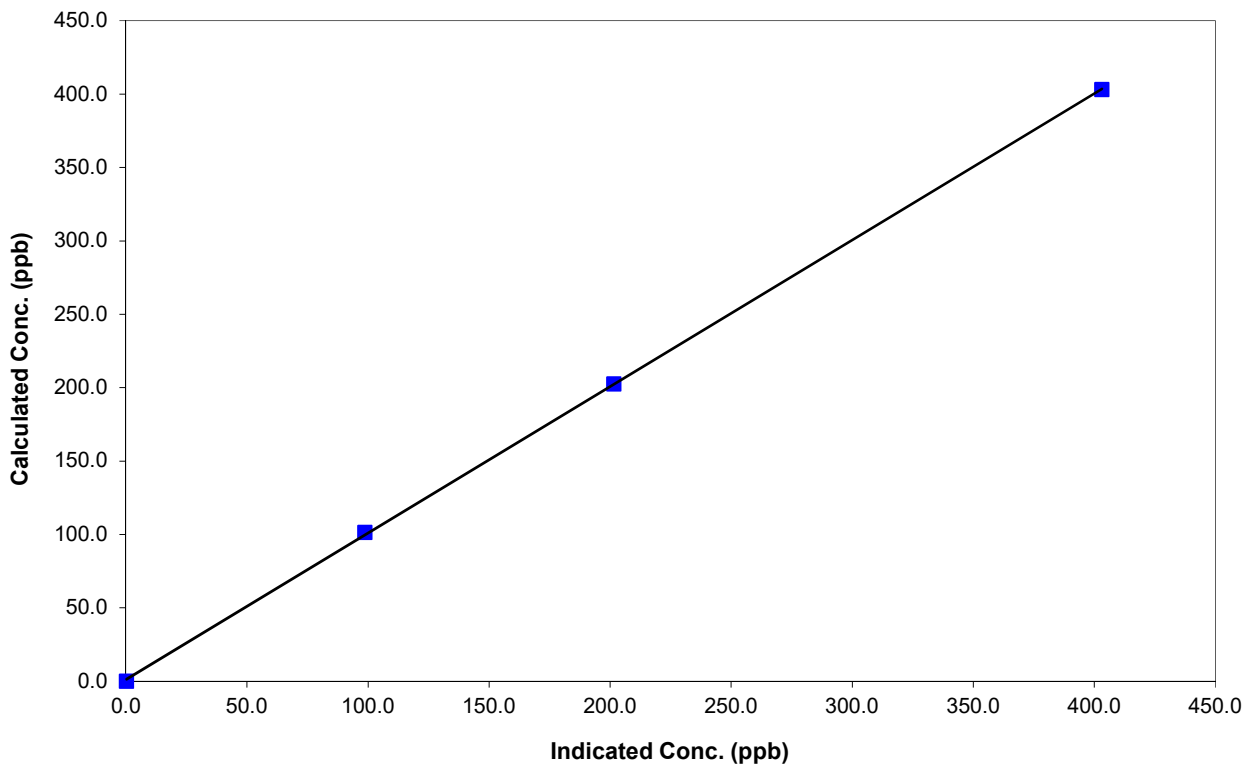
Station Information

Calibration Date	March 16, 2018	Previous Calibration	February 8, 2018
Station Number	10	Station Location	Rycroft
Start Time (MST)	8:20	End Time (MST)	11:55
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		
403.1	403.1	1.0000	Correlation Coefficient	0.999947
202.5	201.6	1.0043		
101.3	98.7	1.0261		
			Slope	0.998560
			Intercept	1.051864

NOx Calibration Curve



Calibration Summary



AIR QUALITY MONITORING

Parameter NO

Air Monitoring Network PAZA

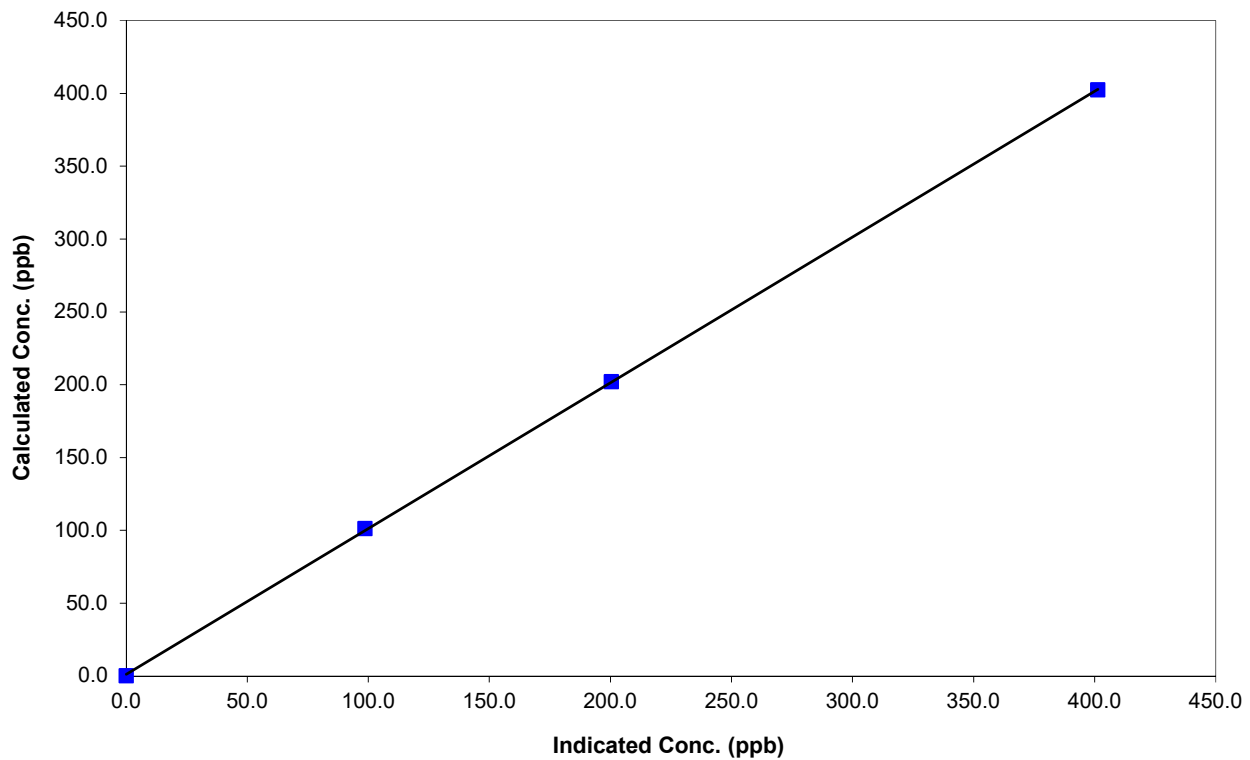
Station Information

Calibration Date	March 16, 2018	Previous Calibration	February 8, 2018
Station Number	10	Station Location	Rycroft
Start Time (MST)	8:20	End Time (MST)	11:55
Analyzer make	TEI 42i	Analyzer serial #	0701120011

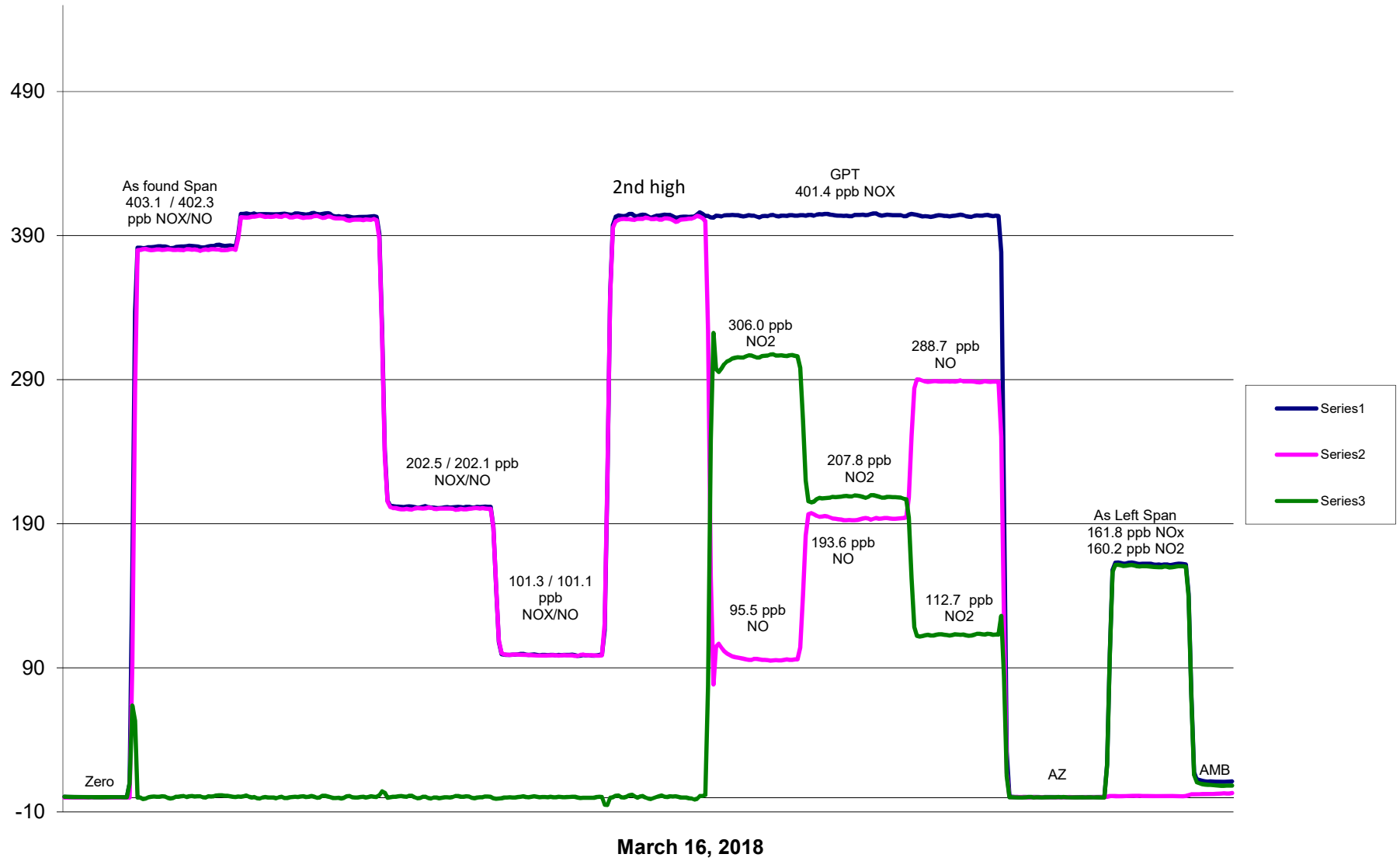
Calibration Data

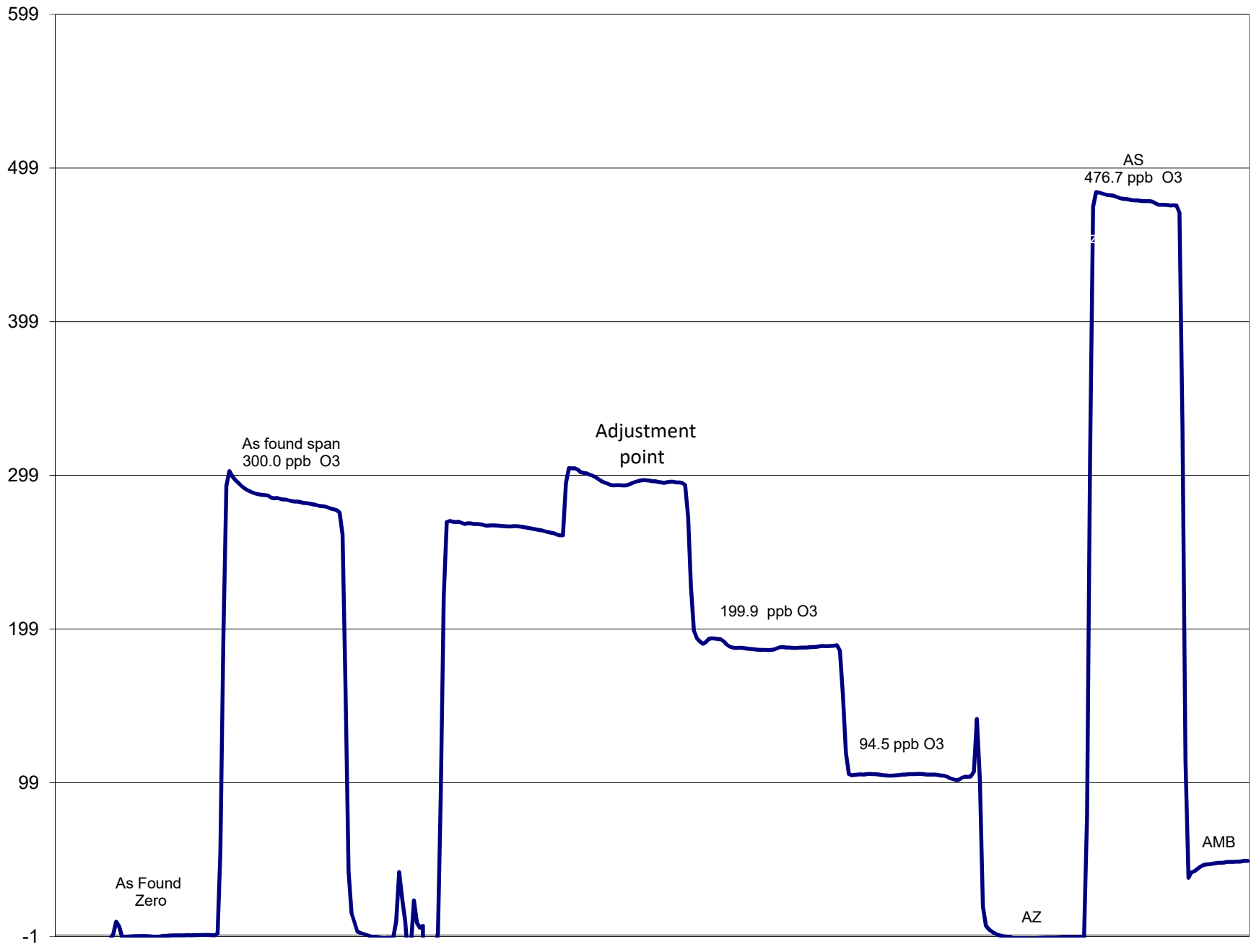
Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
402.3	401.3	1.0024	Correlation Coefficient	0.999963
202.1	200.4	1.0084		
101.1	98.7	1.0246		
			Slope	1.001008
			Intercept	1.074920

NO Calibration Curve



NO_x Calibration





March 16 2017

Calibration Report



Parameter CH4 / NMHC / THC
 Air Monitoring Network PAZA

Station Information

Calibration Date	March 13, 2018	Previous Calibration	February 9, 2018
Station Number	1	Station Location	Rycroft
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:

Start Time (MST)	10:55	End Time (MST)	13:05:00 PM
Barometric Pressure	0.930 atm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas CH4 Conc	404 ppm CH4	Cal Gas Expiry Date	28/03/2014
Cal Gas C3H8 Conc	201 552.75 ppm CH4	Cal Gas Cylinder #	LL34988
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 12,13,14

Analyzer make TEI 55I-A3PHAA Analyzer serial # 1151980005

	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	34.7	PSI	34.7	PSI
Fuel pressure	49.4	PSI	49.4	PSI
Carrier pressure	40.1	PSI	40.1	PSI
CH4 cal factor				E ⁻⁴
NMHC cal factor				E ⁻⁴
Rt		Sec		Sec
Pk Index				

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)
2000	0.00	0.00	0.01	N/A
2000	64.93	12.70	12.02	1.0565
2000	40.97	8.11	7.80	1.0393
2000	15.96	3.20	3.03	1.0552
2000	0.00	0.00	0.01	As Found Zero
2000	64.93	12.70	12.03	As Found Span
Average Correction Factor				1.0503

Calculated value of As Found Response: 11.905 ppm Percent Change of As Found: 6.3%

	Before	After
Calculated slope	0.991061	1.053972
Calculated intercept	-0.004071	-0.022531

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.01	ppm
Auto span	8.12	ppm	7.83	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)
2000	0.00	0.00	0.00	N/A
2002	64.93	17.36	17.90	0.9700
2000	40.97	11.10	11.46	0.9685
2000	15.96	4.38	4.40	0.9938
2000	0.00	0.00	0.00	As Found Zero
2000	64.93	17.38	17.90	As Found Span
Average Correction Factor				0.9775

Calculated value of As Found Response: 18.099 ppm Percent Change of As Found: -4.1%

	<u>Before</u>		<u>After</u>
Calculated slope	1.007224	Calculated slope	0.967472
Calculated intercept	0.068891	Calculated intercept	0.043438

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.00	ppm	0.00	ppm
Auto span	10.76	ppm	11.51	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)
2000	0.00	0.00	0.01	N/A
2000	64.93	30.08	29.96	1.0043
2000	40.97	19.21	19.27	0.9968
2000	15.96	7.57	7.45	1.0161
2000	0.00	0.00	0.01	As Found Zero
2000	64.93	30.08	29.96	As Found Span
Average Correction Factor				1.0057

Calculated value of As Found Response: 30.011 ppm Percent Change of As Found: 0.2%

	<u>Before</u>		<u>After</u>
Calculated slope	1.000017	Calculated slope	1.001928
Calculated intercept	0.057448	Calculated intercept	0.017965

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.01	ppm
Auto span	18.88	ppm	19.34	ppm

Notes: Nitrogen & hydrogen cylinders replaced

Calibration Performed By: Dmytro Dolotii

Calibration Summary



Parameter CH4
 Air Monitoring Network PAZA

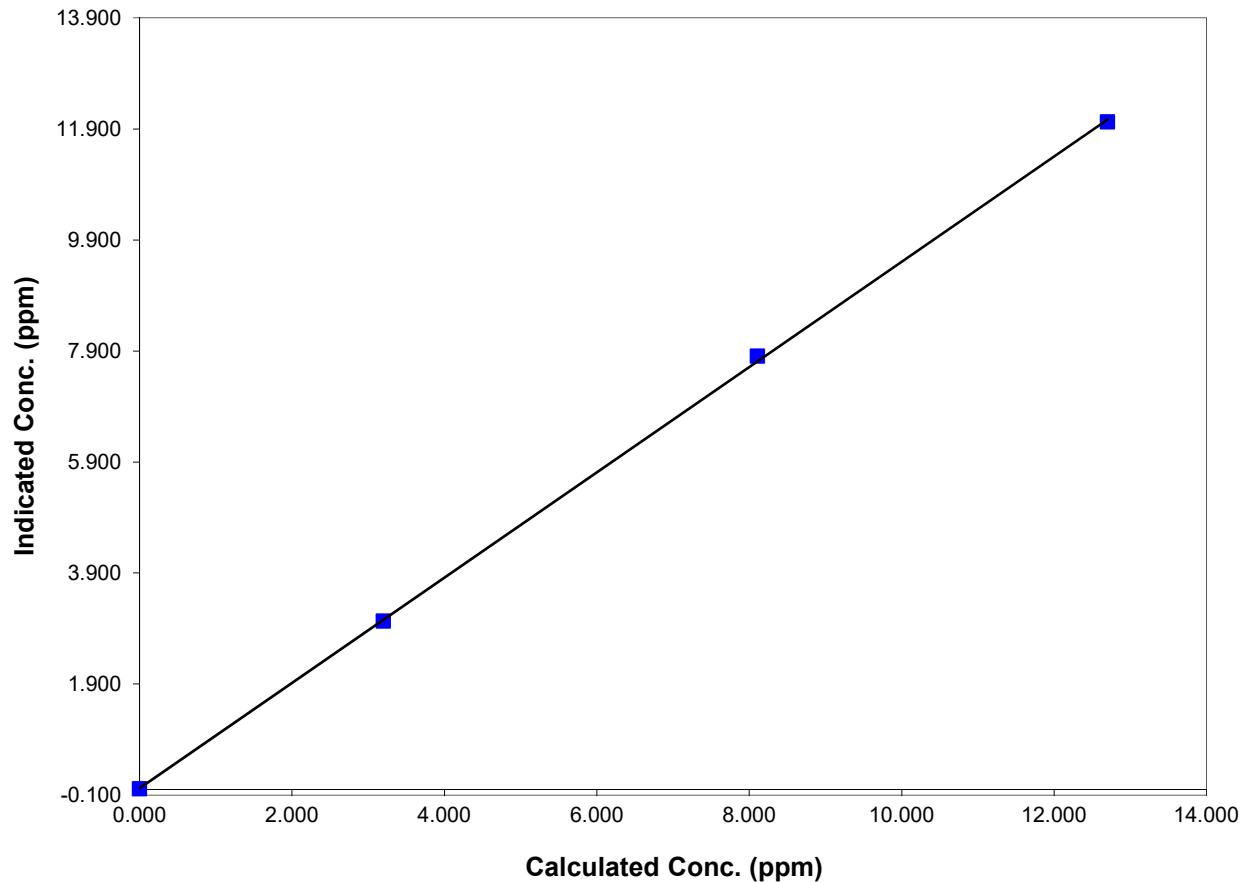
Station Information

Calibration Date	March 13, 2018	Previous Calibration	February 9, 2018
Station Number	1	Station Location	Rycroft
Start Time (MST)	10:55	End Time (MST)	13:05:00 PM
Analyzer make/model	TEI 55I-A3PHAA	Analyzer serial #	1151980005

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.009	N/A	Correlation Coefficient	0.999870
12.703	12.024	1.0565		
8.110	7.803	1.0393		
3.198	3.031	1.0552		
			Slope	1.053972
			Intercept	-0.022531

CH4 Calibration Data



Calibration Summary



Parameter THC
 Air Monitoring Network PAZA

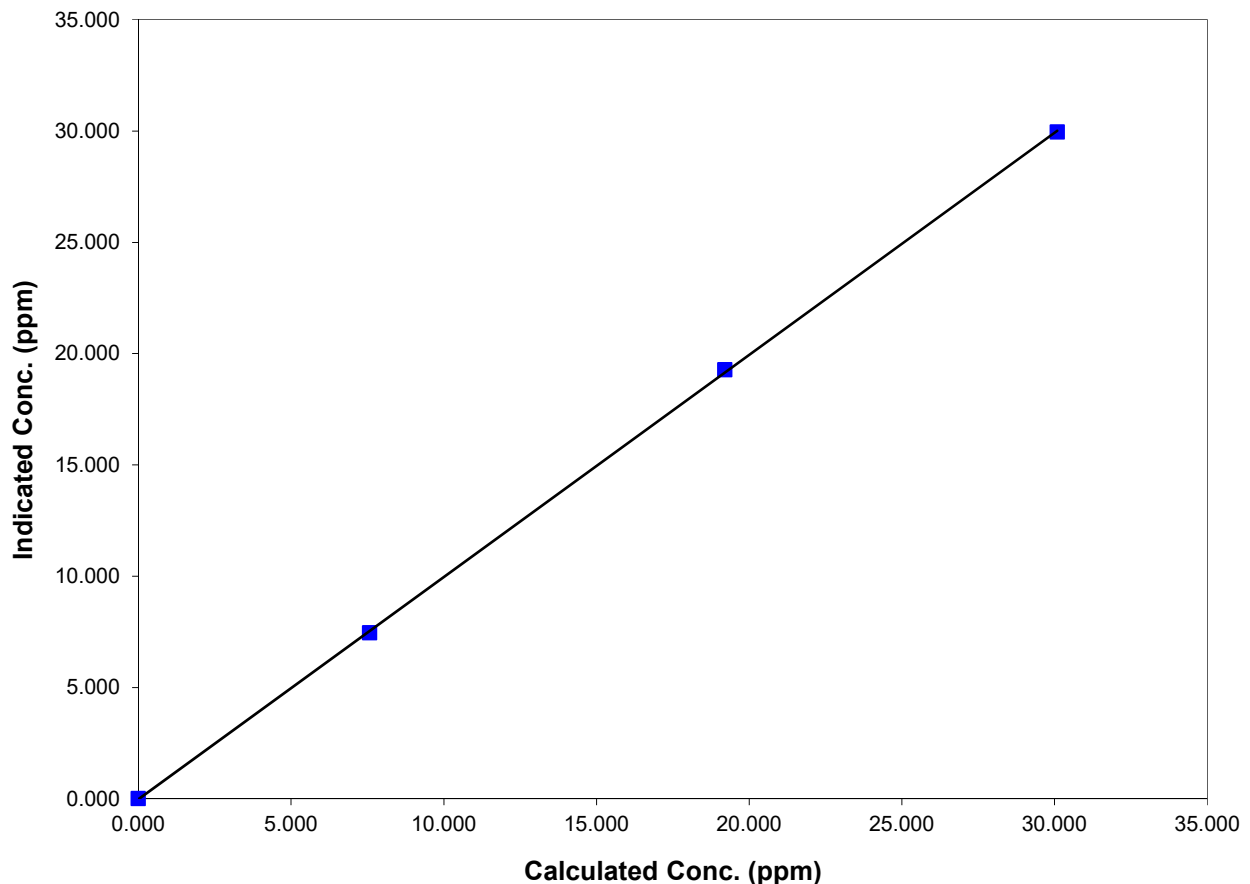
Station Information

Calibration Date	March 13, 2018	Previous Calibration	February 9, 2018
Station Number	1	Station Location	Rycroft
Start Time (MST)	10:55	End Time (MST)	13:05:00 PM
Analyzer make/model	TEI 55I-A3PHAA	Analyzer serial #	1151980005

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.006	N/A	Correlation Coefficient	0.999953
30.084	29.956	1.0043		
19.206	19.266	0.9968		
7.574	7.455	1.0161		
			Slope	1.001928
			Intercept	0.017965

THC Calibration Data



THC/CH₄/NMHC Calibration

