



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
February 2016**

March 30th, 2016

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

RE: Peace Airshed Zone Association (PAZA) – February 2016 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **February 2016**.

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

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

Company	Facility	LSD	EPEA Approval Number
	Teepee Creek	SE-2-074-04-W6	00001635-02-00
	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00
Canfor Forest Products	Grande Prairie	SW-23-071-06-W6	152645-01-00
Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	00000212-01-00
Devon Canada	NW Belloy (Dunvegan)	16-36-079-03-W6	00009810-02-00
	Eaglesham (South)	02-14-077-25-W5	00047669-01-00
	North Normanville	03-36-079-23-W5	00047455-01-00
	West Culp	05-34-078-25-W6	00136284-00-00
	Cecil	08-15-084-08-W6	00010032-02-00
Encana Corporation	Sexsmith	04-08-075-07-W6	00010002-01-00
Enerplus Resources	Pouce Coupe	SW-06-069-21-W5	1464-02-03
Exshaw Oil Corporation	Spirit River	03-10-077-07-W6	344521-00-00
Grande Prairie Generation Inc.	Northern Prairie Power Project	04-19-073-08-W6	00238762-00-00
Long Run Exploration	Eaglesham	01-25-076-01-W6	00241532-00-00
	Kakut	14-12-075-03-W6	00248469-00-00
	Donnelly	06-01-077-21-W5	00000087-02-00
	Puskwaskau	03-26-074-01-W6	00017524-01-00
Longview Oil Corp.	Sunset House	06-22-070-20-W5	138884-01-00
Penn West Petroleum Ltd.	Tangent	13-29-080-23-W5	00001746-02-00

Company	Facility	LSD	EPEA Approval Number
	Pouce Coupe	16-07-078-11-W6	00000614-01-00
Petrus Resources	Rycroft	08-25-077-06-W6	11351-02-00
	Spirit River	08-34-077-06-W6	11096-02-00
Spectra Energy Midstream Corporation	Fourth Creek	16-11-082-09-W6	00000263-01-00
	Gordondale	11-26-079-09-W6	00011495-01-01
	Pouce Coupe/Bonanza	3-23-080-13-W6	00070203-01-01
Suncor Energy Inc.	Progress	07-22-078-09-W6	00011428-02-00
TAQA North Ltd.	Valhalla	13-21-076-09-W6	00017620-01-00
Veresen Energy	Hythe Brainard	11-18-074-12-W6	00010910-02-00
Weyerhaeuser Canada	Grande Prairie Pulp and Wood Plant	01-14-070-05-W6	00000113-02-00

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

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

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

Henry Pirker Station:

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

Evergreen Park Station:

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

Smoky Heights Station:

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

Beaverlodge Station:

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

Valleyview Station:

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

Falher Station:

- ◆ The measured ambient air quality was within the AAAQO for the Falher station.
- ◆ All analyzers and sensors at the Falher station had an operational uptime greater than 90% for the month of February.
- ◆ The station was shut down February 24th, pending relocation in the spring.

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of February: Boone Creek, Spirit River, Eaglesham, Valleyview and Girouxville 3. The passive sample analyses were performed by MAXXAM Analytics Inc.

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

- Monthly average concentrations for SO₂ passives ranged from 0.1 ppb to 0.5 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.3 ppb to 10.4 ppb, with a mean of 1.5 ppb.
- Monthly average concentrations for O₃ passives ranged from 25.5 ppb to 56.0 ppb, with a mean of 41.3 ppb.
- Monthly average concentrations for H₂S passives were 0.3 ppb at all locations.

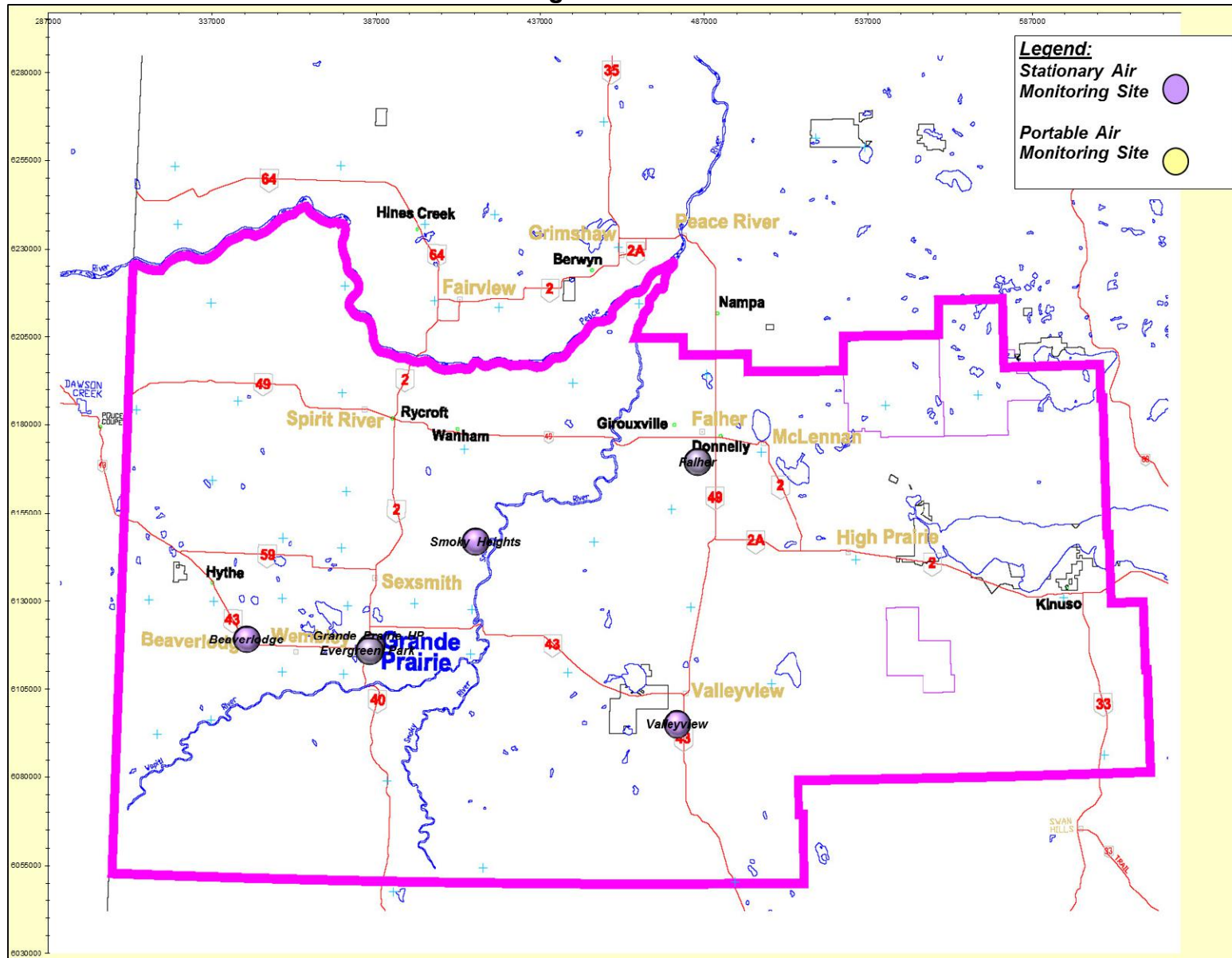
If you have any questions or concerns, please contact Patrick Andersen at 403.505.1041 or the PAZA office at 780.833.4343.

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

Feb-2016 Peace Airshed Zone Association							Maximum Recorded Values					
							1-hr		24-hr / 8-hr			
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	Conc	Day	Operational Time (%)	Calibration Date
	1-hr	24-hr			1-hr	24-hr						
SO ₂ (ppb)	172	48	Henry Pirker	0.1	0	0	3.2	Feb-23 10:00	0.2	Feb-23	100%	Feb-02
SO ₂ (ppb)	172	48	Evergreen Park	0.2	0	0	3.6	Feb-18 17:00	0.5	Feb-18	100%	Feb-04
SO ₂ (ppb)	172	48	Smoky Heights	0.5	0	0	5.9	Feb-25 05:00	1.4	Feb-25	100%	Feb-09
SO ₂ (ppb)	172	48	Beaverlodge	0.3	0	0	7.5	Feb-23 08:00	1.3	Feb-23	100%	Feb-10
SO ₂ (ppb)	172	48	Valleyview	0.8	0	0	23.6	Feb-27 06:00	4.0	Feb-27	100%	Feb-18
SO ₂ (ppb)	172	48	Falher	0.2	0	0	0.9	Feb-12 16:00	0.3	Feb-12	100%	Feb-24
SO ₂ (ppb)	172	48	Portable	-	0	0	-	-	-	-	-	-
NO (ppb)			Henry Pirker	7.3	0	0	116.8	Feb-22 09:00	16.7	Feb-05	100%	Feb-02
NO ₂ (ppb)	159	106	Henry Pirker	16.1	0	0	62.9	Mar-01 00:00	31.7	Feb-05	100%	Feb-02
NO _x (ppb)			Henry Pirker	23.5	0	0	164.4	Feb-22 09:00	48.5	Feb-05	100%	Feb-02
NO (ppb)			Beaverlodge	0.7	0	0	27.6	Feb-03 15:00	4.3	Feb-03	100%	Feb-10
NO ₂ (ppb)	159	106	Beaverlodge	3.6	0	0	28.0	Feb-04 06:00	10.1	Feb-03	100%	Feb-10
NO _x (ppb)			Beaverlodge	4.4	0	0	52.3	Feb-03 15:00	14.4	Feb-03	100%	Feb-10
NO (ppb)			Portable	-	0	0	-	-	-	-	-	-
NO ₂ (ppb)	159	106	Portable	-	0	0	-	-	-	-	-	-
NO _x (ppb)			Portable	-	0	0	-	-	-	-	-	-
O ₃ (ppb)	82		Henry Pirker	19.0	0	-	39.9	Feb-25 15:00	34.6	Feb-06	100%	Feb-02
O ₃ (ppb) - 8-hr			Henry Pirker		0				38.4	Feb-06		-
O ₃ (ppb)	82		Beaverlodge	32.6	0	-	45.9	Feb-25 17:00	40.9	Feb-25	100%	Feb-10
O ₃ (ppb) - 8-hr			Beaverlodge		0				43.4	Feb-25		-
O ₃ (ppb)	82		Portable	-	0	-	-	-	-	-	-	-
O ₃ (ppb) - 8-hr			Portable		-				-			-
CO (ppm)	13		Henry Pirker	0.29	0	-	1.5	Feb-09 10:00	0.5	Feb-05	100%	Feb-03
CO (ppm) - 8-hr	5		Henry Pirker		0				0.9	Feb-06		-

PAZA Monthly Continuous Data Summary – continued

Feb-2016Peace Airshed Zone Association							Maximum Recorded Values					
							1-hr		24-hr / 8-hr			
THC (ppm)			Henry Pirker	2.1	-	-	2.8	Feb-01 01:00	2.3	Feb-21	94%	Feb-03
CH ₄ (ppm)			Henry Pirker	2.1	-	-	2.8	Feb-01 01:00	2.3	Feb-21	94%	Feb-03
NMHC (ppm)			Henry Pirker	0.0	-	-	0.0	Feb-23 22:00	0.0	Feb-18	94%	Feb-03
THC (ppm)			Portable	-	-	-	-	-	-	-	-	-
TRS (ppb)			Henry Pirker	0.3	-	-	1.1	Feb-13 11:00	0.7	Feb-05	100%	Feb-03
TRS (ppb)			Evergreen Park	0.4	-	-	1.3	Feb-08 17:00	0.8	Feb-03	100%	Feb-04
TRS (ppb)			Smoky Heights	0.1	-	-	2.3	Feb-22 02:00	0.2	Feb-22	100%	Feb-09
TRS (ppb)			Portable	-	-	-	-	-	-	-	-	-
H ₂ S (ppb)	10	3	Valleyview	0.3	0	0	4.0	Feb-01 18:00	0.5	Feb-01	100%	Feb-18
H ₂ S (ppb)	10	3	Falher	0.1	0	0	1.1	Feb-09 15:00	0.4	Feb-09	100%	Feb-24
PM _{2.5} (µg/m3)	80	30	Henry Pirker	5.7	0	0	47.2	Feb-02 20:00	11.8	Feb-12	100%	Feb-03
PM _{2.5} (µg/m3)	80	30	Evergreen Park	2.8	0	0	24.8	Feb-02 17:00	6.8	Feb-24	100%	Feb-04
PM _{2.5} (µg/m3)	80	30	Smoky Heights	4.4	0	0	61.5	Feb-03 17:00	12.4	Feb-12	99%	Feb-09
PM _{2.5} (µg/m3)	80	30	Beaverlodge	3.1	0	0	14.7	Feb-12 20:00	9.3	Feb-12	100%	Feb-10
PM _{2.5} (µg/m3)	80	30	Portable	-	-	-	-	-	-	-	-	-
RH (%)			Henry Pirker	67.4	-	-	87.4	Feb-10 07:00	82.0	Feb-10	100%	-
RH (%)			Evergreen Park	72.5	-	-	99.5	Feb-10 08:00	92.4	Feb-10	100%	-
RH (%)			Beaverlodge	72.1	-	-	99.9	Feb-14 10:00	98.6	Feb-12	100%	-
RH (%)			Valleyview	64.3	-	-	94.0	Feb-10 07:00	87.4	Feb-18	100%	-
SR (W/m ²)			Henry Pirker	55.4	-	-	426.1	Feb-27 13:00	96.8	Feb-23	100%	-
Temp (°C)			Henry Pirker	-2.9	-	-	11.0	Feb-25 15:00	5.1	Feb-09	100%	-
Temp (°C)			Evergreen Park	-2.8	-	-	10.5	Feb-09 15:00	4.9	Feb-09	100%	-
Temp (°C)			Smoky Heights	-3.8	-	-	7.5	Feb-26 14:00	4.6	Feb-09	100%	-
Temp (°C)			Beaverlodge	-2.0	-	-	10.3	Feb-09 17:00	7.6	Feb-09	100%	-
Temp (°C)			Valleyview	-1.5	-	-	12.1	Feb-26 15:00	7.0	Feb-09	100%	-
Temp (°C)			Falher	-5.3	-	-	5.2	Feb-13 17:00	2.8	Feb-09	100%	-
Temp (°C)			Portable	-	-	-	-	-	-	-	-	-

PAZA Monthly Continuous Data Summary – continued

Feb-2016 Peace Airshed Zone Association							Maximum Recorded Values					
							1-hr		24-hr / 8-hr			
WSPD s (km/hr)			Henry Pirker	5.2	-	-	35.0	Feb-06 07:00	20.8	Feb-06	100%	-
WSPD s (km/hr)			Evergreen Park	8.9	-	-	59.0	Feb-06 06:00	35.0	Feb-06	100%	-
WSPD s (km/hr)			Smoky Heights	12.3	-	-	43.0	Feb-06 09:00	27.6	Feb-06	100%	-
WSPD s (km/hr)			Beaverlodge	9.0	-	-	46.0	Feb-06 11:00	32.6	Feb-06	100%	-
WSPD s (km/hr)			Valleyview	4.4	-	-	28.0	Feb-06 12:00	16.7	Feb-06	100%	-
WSPD s (km/hr)			Falher	12.9	-	-	57.0	Feb-06 11:00	28.7	Feb-06	100%	-
WSPD s (km/hr)			Portable	-	-	-	-	-	-	-	-	-
WSPD v (km/hr)			Henry Pirker	2.0	-	-	35.0	Feb-06 07:00	20.1	Feb-06	100%	-
WSPD v (km/hr)			Evergreen Park	3.5	-	-	59.0	Feb-06 06:00	34.2	Feb-06	100%	-
WSPD v (km/hr)			Smoky Heights	5.7	-	-	43.0	Feb-06 08:00	25.8	Feb-06	100%	-
WSPD v (km/hr)			Beaverlodge	2.5	-	-	46.0	Feb-06 11:00	31.5	Feb-06	100%	-
WSPD v (km/hr)			Valleyview	1.4	-	-	28.0	Feb-06 12:00	15.7	Feb-06	100%	-
WSPD v (km/hr)			Falher	1.7	-	-	57.0	Feb-06 11:00	26.7	Feb-06	100%	-
WSPD v (km/hr)			Portable	-	-	-	-	-	-	-	-	-
WDIR			Henry Pirker	WSW	-	-	-	-	-	-	100%	-
WDIR			Evergreen Park	W	-	-	-	-	-	-	100%	-
WDIR			Smoky Heights	SW	-	-	-	-	-	-	100%	-
WDIR			Beaverlodge	WNW	-	-	-	-	-	-	100%	-
WDIR			Valleyview	W	-	-	-	-	-	-	100%	-
WDIR			Falher	S	-	-	-	-	-	-	100%	-
WDIR			Portable	-	-	-	-	-	-	-	-	-

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
NOx/NO/NO ₂	TEI	42i	No operational issues observed.
O ₃	TEI	49i	No operational issues observed.
CO	TEI	48C	No operational issues observed.
THC/CH ₄ /NMHC	TEI	55I	Hydrogen cylinder expired on February 25 th , replaced February 27 th .
TRS	TEI	45C/43C	No operational issues observed.
PM _{2.5}	Sharp	5030	No operational issues observed.
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Evergreen Park Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	Sharp	5030	No operational issues observed.
ET	Met One/Gill	083D	No operational issues observed.
RH	Met One/Gill		No operational issues observed.
WS / WD	Met One/ Gill		No operational issues observed.

PAZA – Smoky Heights Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	Sharp	5030	Analyzer failed to capture valid data on February 4 th .
ET	Met One	083D	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Beaverlodge Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No operational issues observed.
NO _x /NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
PM _{2.5}	Sharp	5030	No operational issues observed.
ET	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS / WD	Blue Sky	857	No operational issues observed.

PAZA – Valleyview Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	TEI	43A	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Falher Station

General Station Issues

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
H ₂ S	Thermo	450i	No operational issues observed.
ET	Gill	RM Young 5103	No operational issues observed.
WS / WD	Gill	RM Young 5103	No operational issues observed.

PAZA – Portable-Clairmont

General Station Issues

Routine monthly calibrations were performed on February 24th (SO₂, NO_x, O₃) and 25th (THC, TRS). Station was relocated on February 5th.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	Manifold cleaning during February 25 th calibration period.
NO _x	TEI	42i	Manifold cleaning during February 25 th calibration period.
O ₃	TEI	49C	Manifold cleaning during February 25 th calibration period.
TRS	TEI	39C	No operational issues observed.
THC	TEI	51C	No operational issues observed.
PM _{2.5}	Sharp	5030	Manifold cleaning during February 25 th calibration period.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA
Henry Pirker Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

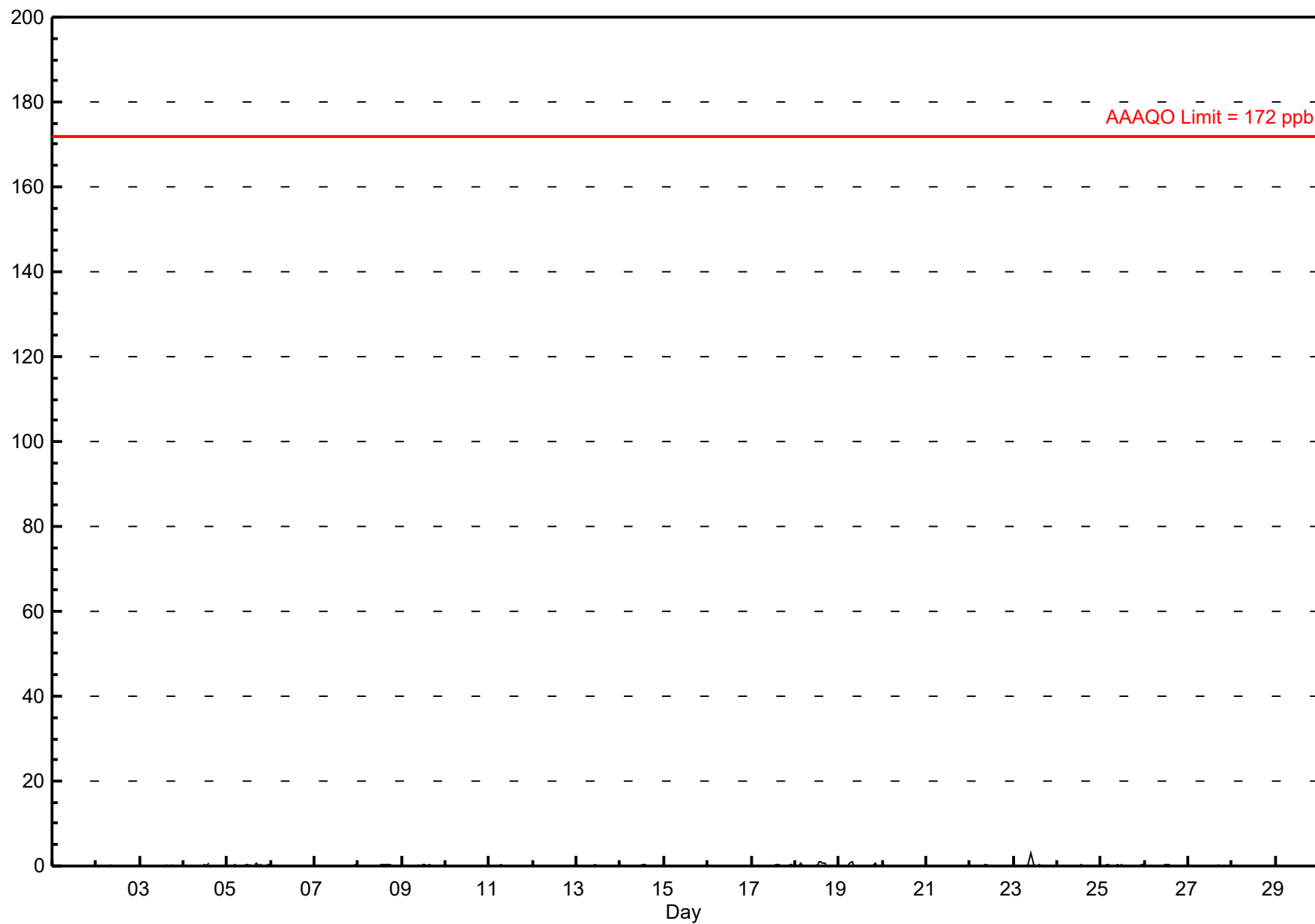
Sulphur Dioxide (SO₂) - ppb

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																								Hours in Service: 696			
Maximum Value: 3.2 ppb on Feb 23 10:00																								Maximum Daily Average: 0.2 ppb on Feb 23		Hours of Data: 662	
Minimum Value: 0 ppb on Feb 1 01:00																								Minimum Daily Average: 0.0 ppb on Feb 28		Hours of Missing Data: 34	
Maximum Diurnal Average: 0.2 ppb at hour 10																								Minimum Diurnal Average: 0.0 ppb at hour 2		Hours of Calibration: 34	
Monthly Average: 0.06 ppb																								Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.2 P ₉₉ = 0.8		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-Feb	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-Feb	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	A	0	0	0	0	0	0	0.0	0.2	
3-Feb	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	
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0.1	0.8	
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0.2	0.6	
6-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.3	
7-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
8-Feb	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	
9-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
11-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	
12-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
13-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
14-Feb	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	0.5	
15-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
16-Feb	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-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
18-Feb	0	A	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0.2	1.1	
19-Feb	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0.1	1.2	
20-Feb	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	
21-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.2	
22-Feb	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	0.4	
23-Feb	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	3.2	
24-Feb	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-Feb	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	
26-Feb	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	
27-Feb	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	0.4	
28-Feb	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	
29-Feb	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	0.2	
																								Diurnal Average			
																								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
Henry Pirker - February 2016



Hourly Maximums

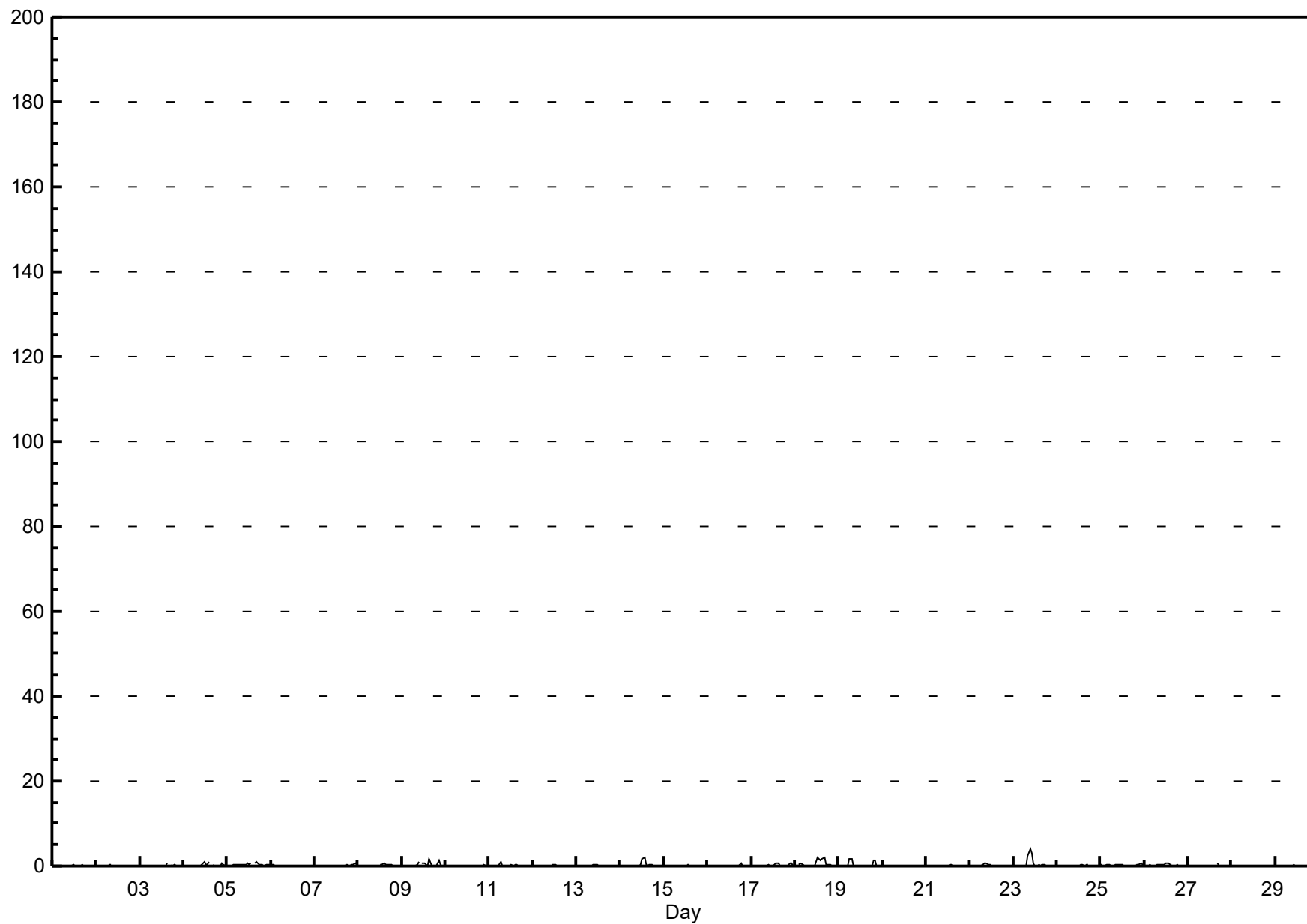
Sulphur Dioxide (SO₂) - ppb

Henry Pirker - February 2016

Maximum Value: 3.9 ppb on Feb 23 10:00										Maximum Daily Average: 0.5 ppb on Feb 23										Hours in Service: 696						
Minimum Value: 0 ppb on Feb 3 06:00										Minimum Daily Average: 0.0 ppb on Feb 28										Hours of Data: 662						
Maximum Diurnal Average: 0.3 ppb at hour 10										Minimum Diurnal Average: 0.0 ppb at hour 2										Hours of Missing Data: 34						
Monthly Average: 0.15 ppb										Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 1.8										Hours 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-Feb	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-Feb	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	0.4
3-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0.1	0.5
4-Feb	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	A	0	0	0	0	0	1	0	0	0.3	1.0
5-Feb	0	0	0	0	0	0	0	0	0	0	0	1	0	1	A	1	1	0	0	0	0	0	0	0	0.4	1.0
6-Feb	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	0.4
7-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0	0.1	0.6
8-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0.2	0.5
9-Feb	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	2	0	0	0	0	1	0	0	0	0.3	1.5
10-Feb	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	0.4
11-Feb	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
12-Feb	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-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
14-Feb	0	0	0	0	0	A	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0.2	2.0
15-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
16-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.0	0.5
17-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	1	1	0	0.2	0.7
18-Feb	0	A	0	1	0	0	0	0	0	0	0	0	2	2	1	2	2	0	0	0	0	0	0	0	0.5	2.1
19-Feb	A	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0.3	1.8
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.2
21-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.3
22-Feb	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.8
23-Feb	0	0	0	0	0	0	0	0	2	4	3	1	0	0	0	0	0	0	0	A	0	0	0	0	0.5	3.9
24-Feb	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
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0.2	0.5
26-Feb	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0.2	0.7
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0.1	0.7
28-Feb	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
29-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	0.1	0.8
0.0 0.0 0.0 0.1 0.1 0.1 0.1 0.1 0.2 0.3 0.2 0.2 0.3 0.3 0.2 0.3 0.2 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.1																								Diurnal Average		
0.4 0.2 0.3 0.8 0.5 0.3 1.8 1.7 2.4 3.9 3.0 1.0 2.1 2.0 1.4 1.7 2.1 0.4 0.5 1.5 1.3 0.7 0.7 0.8																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

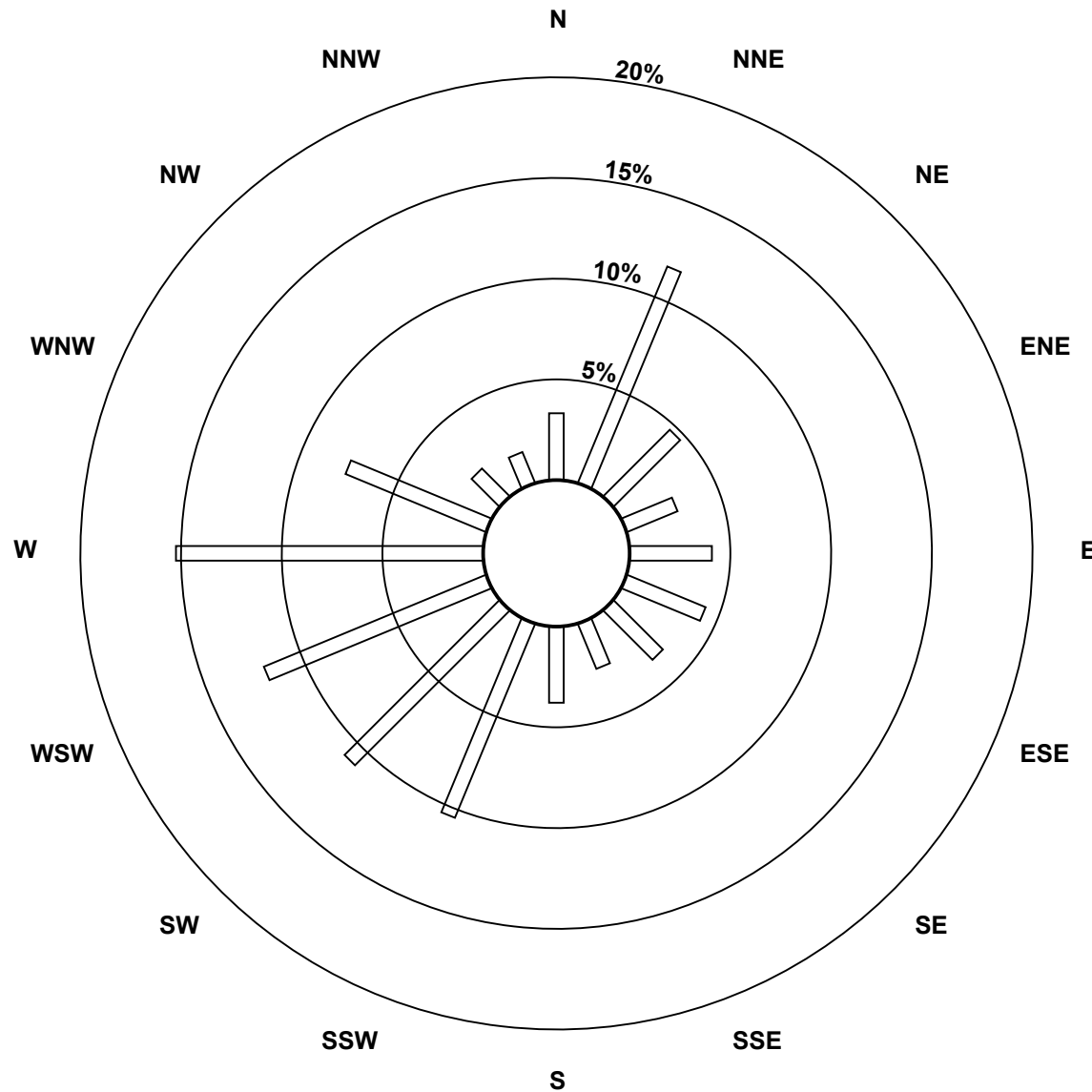
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - February 2016

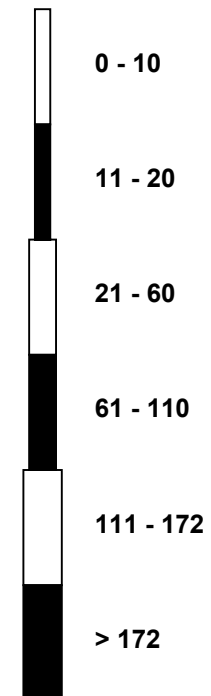


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - February 2016

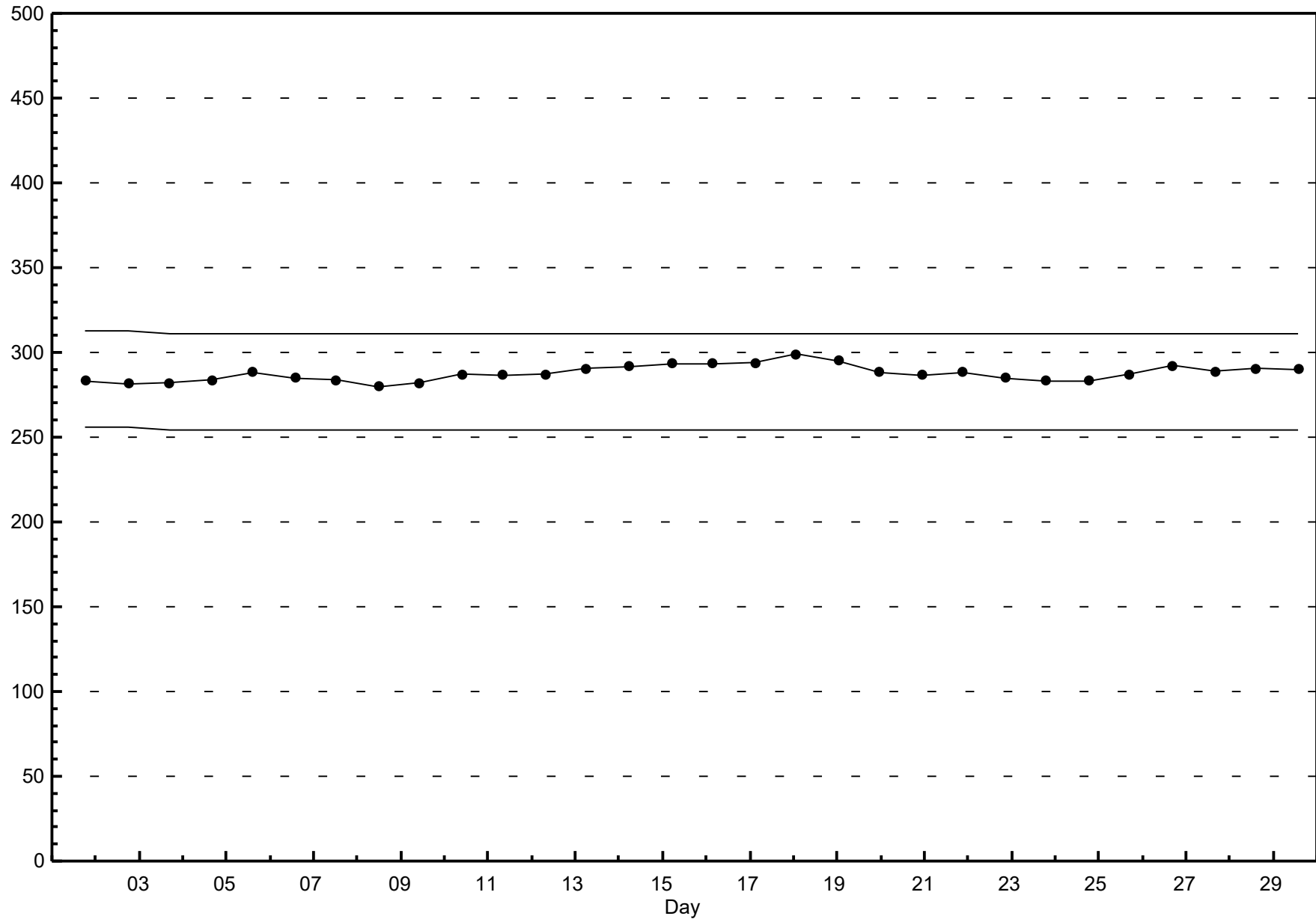


Pollutant Classes (ppb)



Span Responses

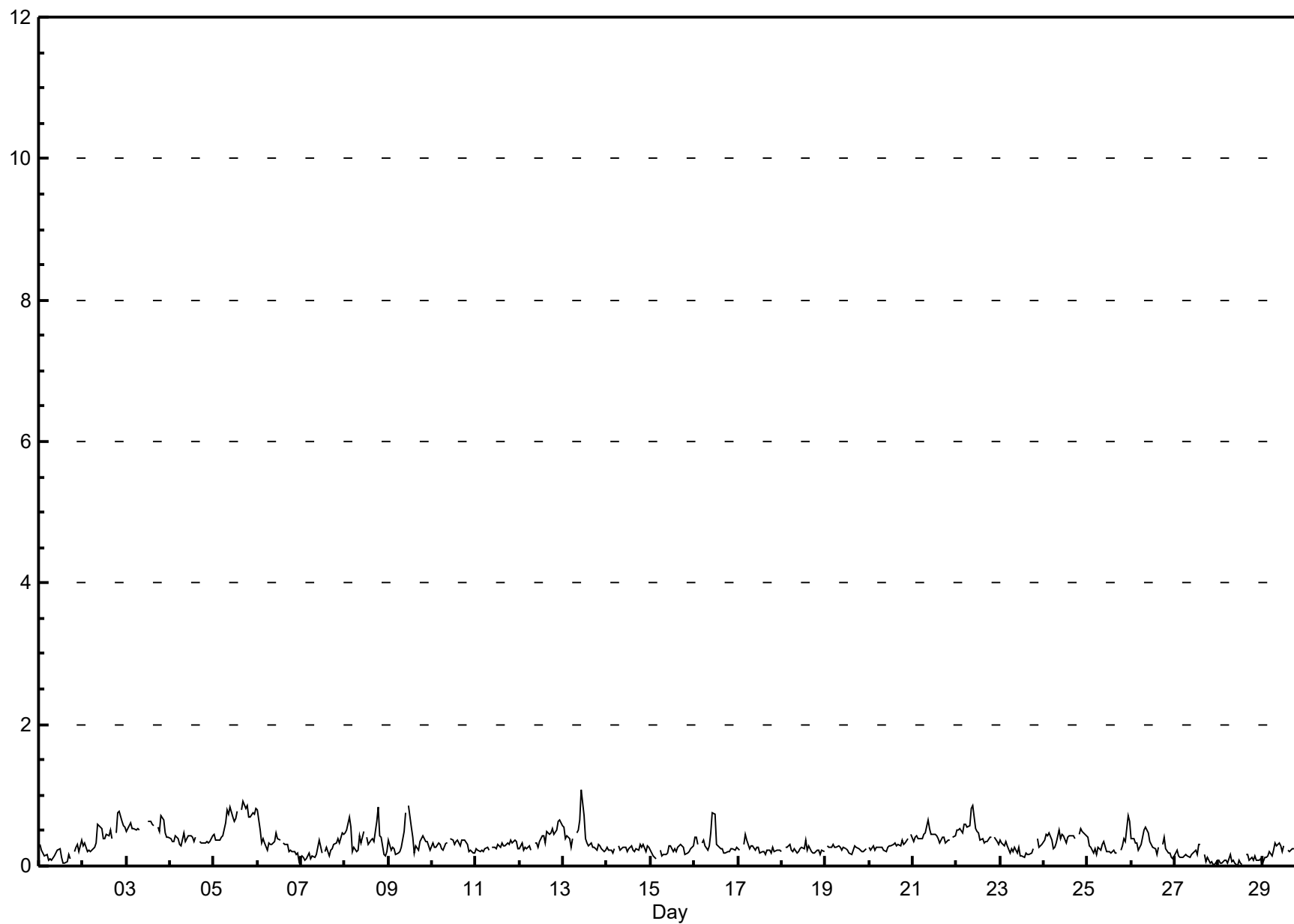
Sulphur Dioxide (SO₂)
Henry Pirker - February 2016



Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.1 ppb on Feb 13 11:00 Maximum Daily Average: 0.7 ppb on Feb 5																								Hours in Service: 696 Hours of Data: 662 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on Feb 28 11:00 Minimum Daily Average: 0.1 ppb on Feb 28 Maximum Diurnal Average: 0.4 ppb at hour 11 Minimum Diurnal Average: 0.3 ppb at hour 6 Monthly Average: 0.32 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.5 P ₉₉ = 0.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	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	0.4
2-Feb	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	A	0	1	1	1	1	1	0.4	0.8
3-Feb	0	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	A	1	0	1	1	0	0	0	0.5	0.7
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.5
5-Feb	0	0	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.9
6-Feb	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.8
7-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
8-Feb	0	1	1	1	0	0	0	0	0	0	0	A	1	0	0	0	0	1	1	0	0	0	0	0	0.4	0.8
9-Feb	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
11-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
12-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0.4	0.6
13-Feb	1	0	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1
14-Feb	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-Feb	0	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
16-Feb	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
17-Feb	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-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.3
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4
21-Feb	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.6
22-Feb	0	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0.5	0.9
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.4
24-Feb	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0.4	0.5
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	0.3	0.7
26-Feb	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.6
27-Feb	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-Feb	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
29-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0.3	0.8
0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.4 0.4 0.4 0.4 0.3 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																								Diurnal Average		
0.8 0.6 0.7 0.6 0.6 0.6 0.6 0.6 0.8 0.8 0.9 1.1 0.9 0.7 0.8 0.6 0.8 0.9 0.8 0.9 0.7 0.8 0.7 0.8 0.8																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Henry Pirker - February 2016



Hourly Maximums

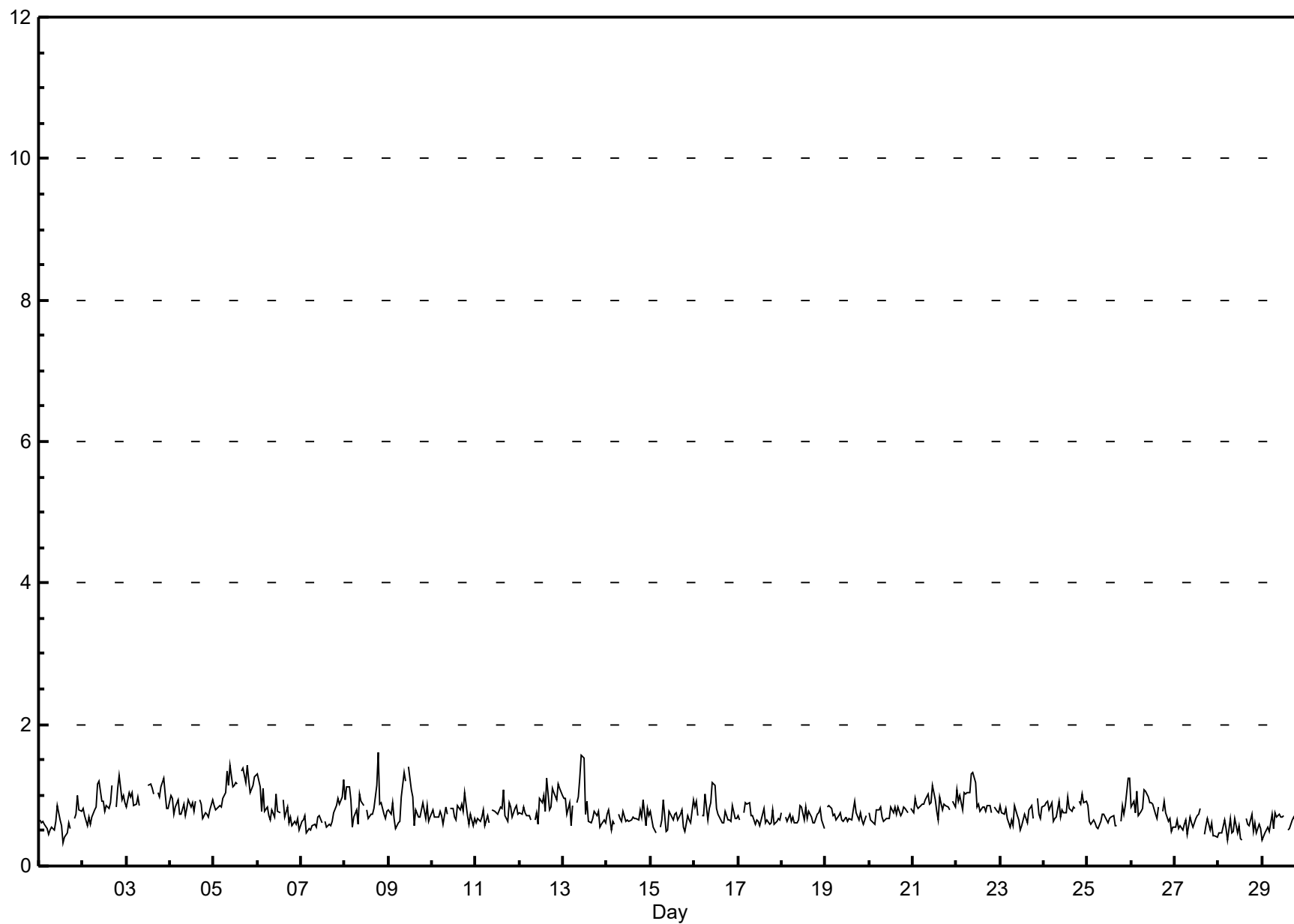
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2016

Maximum Value: 1.7 ppb on Mar 1 00:00																		Maximum Daily Average: 1.1 ppb on Feb 5																		Hours in Service: 696	
Minimum Value: 0 ppb on Feb 1 14:00																		Minimum Daily Average: 0.5 ppb on Feb 28																		Hours of Data: 662	
Maximum Diurnal Average: 0.8 ppb at hour 10																		Minimum Diurnal Average: 0.7 ppb at hour 6																		Hours of Missing Data: 34	
Monthly Average: 0.77 ppb																		Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.9 P ₉₀ = 1.0 P ₉₉ = 1.4																		Hours of Calibration: 34	
																																				Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24													
1-Feb	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	A	1	1	1	1	1	0.6	1.0											
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.3											
3-Feb	1	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.2											
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.0											
5-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1.1	1.4											
6-Feb	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	1.3											
7-Feb	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2											
8-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	0.9	1.6											
9-Feb	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	1.4											
10-Feb	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0											
11-Feb	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-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2											
13-Feb	1	1	1	1	1	1	A	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.6											
14-Feb	1	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9											
15-Feb	1	1	1	0	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	0.9											
16-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2											
17-Feb	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	0.9											
18-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9											
19-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.9											
20-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.8											
21-Feb	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	1.1											
22-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.3											
23-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	1.0											
24-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.0											
25-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.2											
26-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	0.8	1.1											
27-Feb	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	A	0	1	1	1	1	0	0	0	0.6	0.8											
28-Feb	0	0	0	1	1	0	1	0	0	1	0	1	0	0	A	1	1	1	1	0	1	0	1	1	0.5	0.7											
29-Feb	0	0	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	0.7	1.7											
																								Diurnal Average													
																								Diurnal Maximum													
C - Calibration A - Automated Daily Zero Span																																					

Hourly Maximums

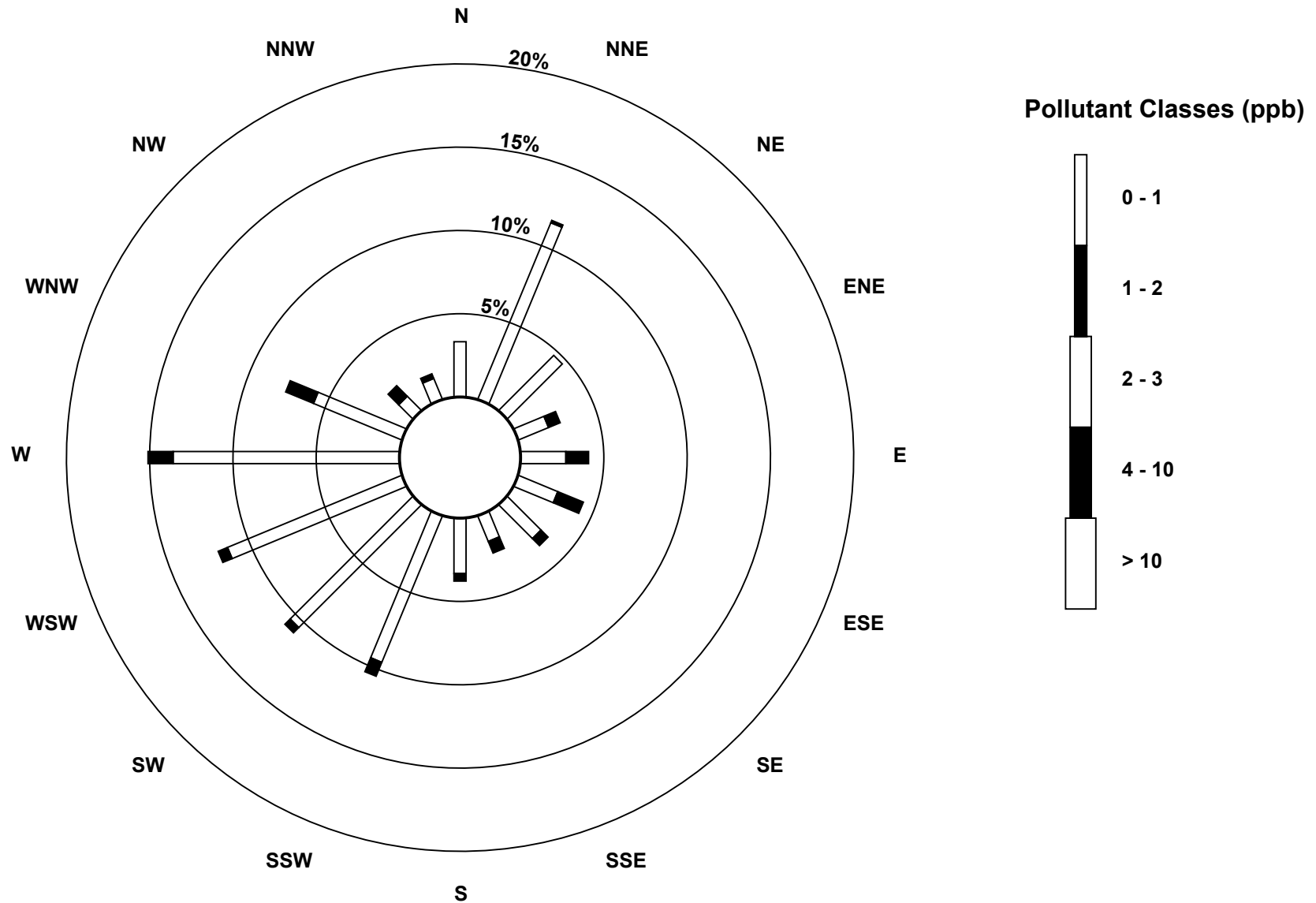
Total Reduced Sulphur (TRS) - ppb
Henry Pirker - February 2016



Pollutant Rose

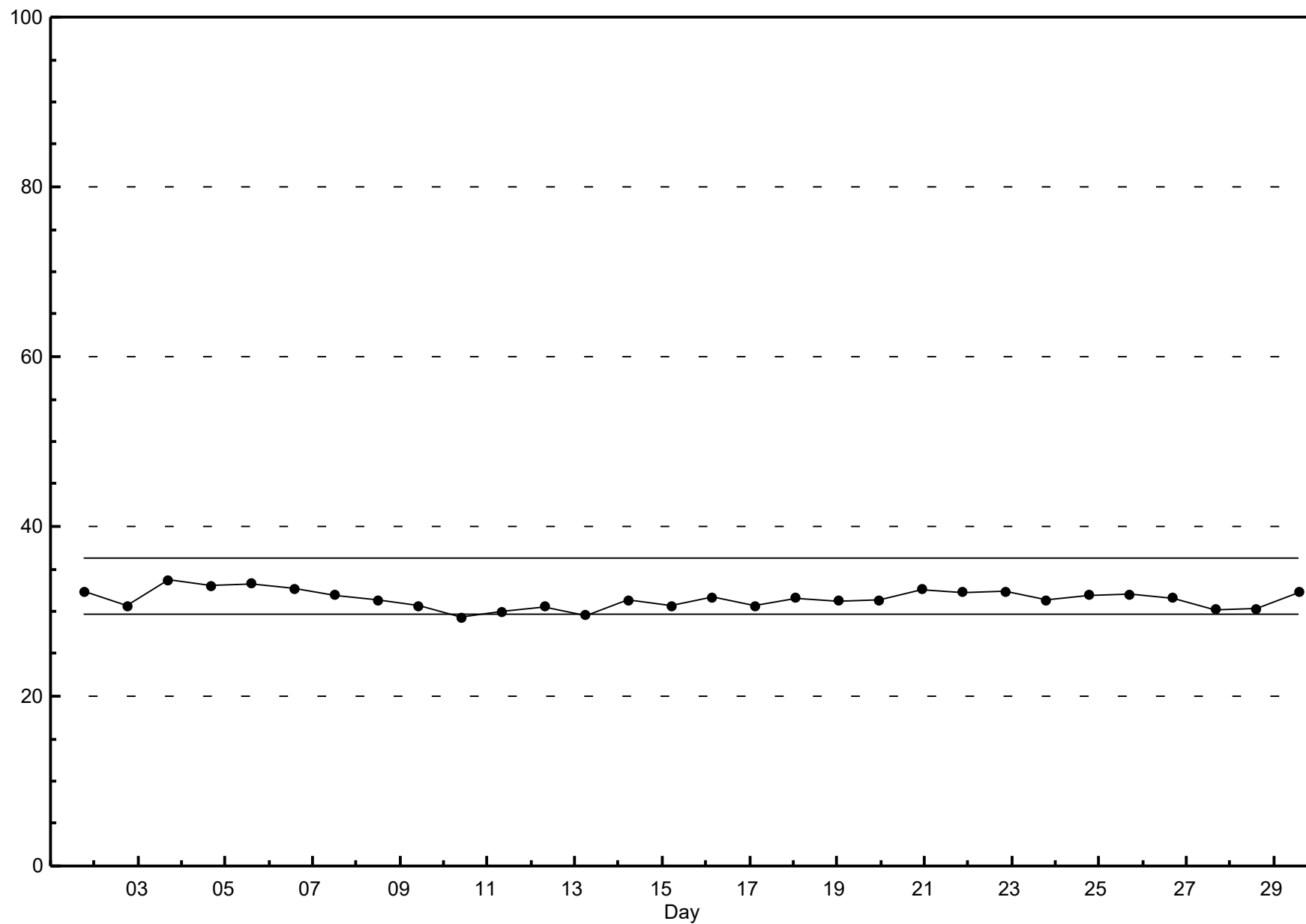
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2016



Span Responses

Total Reduced Sulphur (TRS)
Henry Pirker - February 2016



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

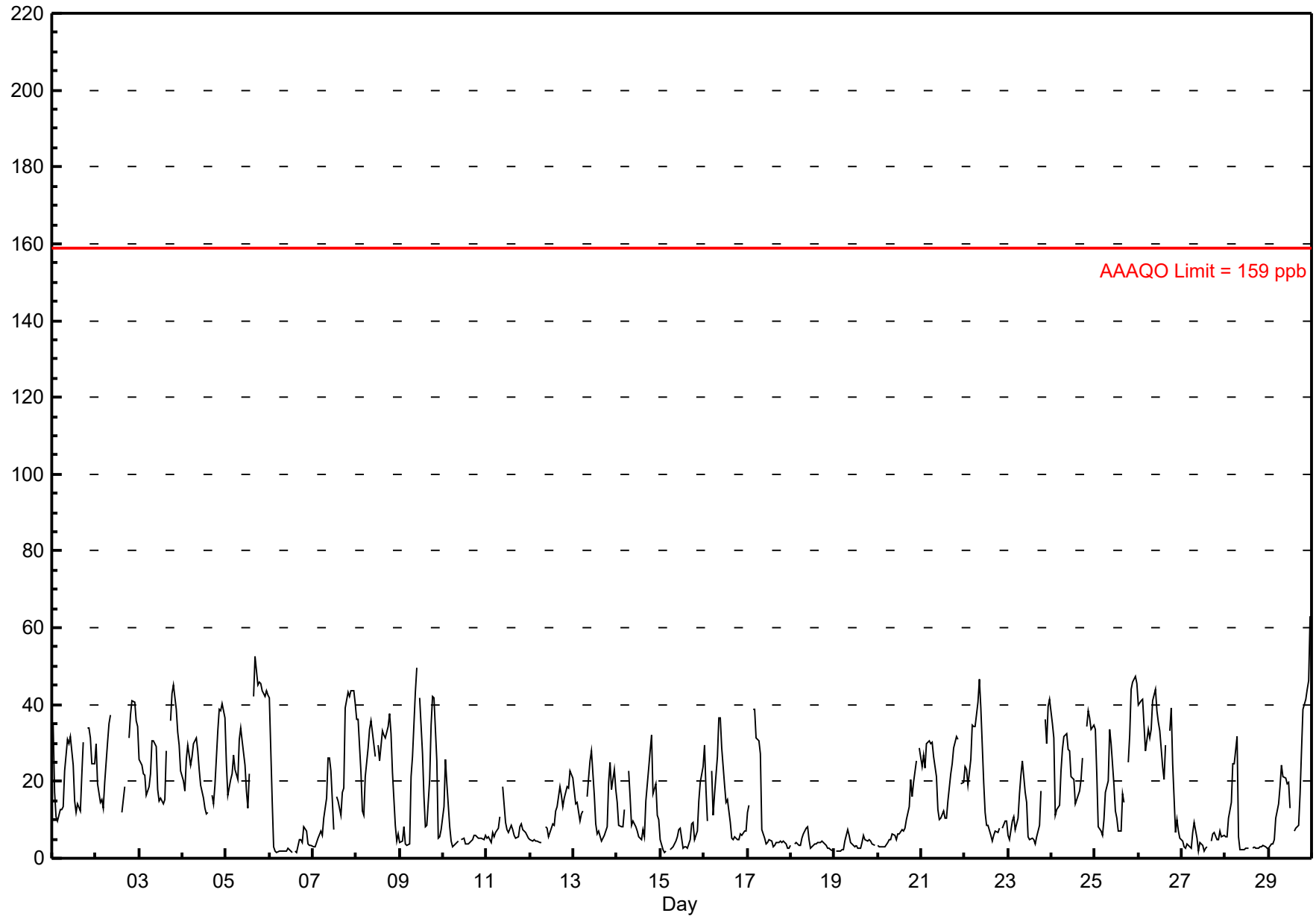
Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 62.9 ppb on Mar 1 00:00 Maximum Daily Average: 31.7 ppb on Feb 5																								Hours in Service: 696 Hours of Data: 661 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0		
Minimum Value: 1 ppb on Feb 6 13:00 Minimum Daily Average: 3.8 ppb on Feb 19 Maximum Diurnal Average: 22.0 ppb at hour 20 Minimum Diurnal Average: 9.4 ppb at hour 15 Monthly Average: 16.13 ppb Percentiles: P ₁ = 1.7 P ₁₀ = 3.2 Q ₁ = 5.0 Median = 12.1 Q ₃ = 25.3 P ₉₀ = 35.7 P ₉₉ = 45.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Feb	35	17	11	10	13	13	13	23	31	30	32	24	15	12	14	12	22	30	A	34	34	31	25	24	21.9	34.7
2-Feb	30	19	14	15	13	20	30	35	37	C	C	C	C	C	12	15	19	A	31	37	41	41	36	34	26.7	40.9
3-Feb	26	24	22	22	16	19	22	31	31	29	18	15	16	14	15	28	A	36	43	45	39	33	30	23	25.8	45.2
4-Feb	20	17	26	30	24	27	30	31	28	23	19	16	13	12	12	A	16	14	19	33	39	38	40	36	24.5	40.1
5-Feb	25	16	21	22	27	23	20	31	34	30	24	17	13	22	A	42	53	45	46	45	43	42	44	43	31.7	52.6
6-Feb	42	15	3	2	2	2	2	2	2	2	3	2	1	A	2	2	5	5	4	8	7	4	3	3	5.3	41.7
7-Feb	3	3	4	5	7	6	11	15	26	26	23	8	A	16	15	11	17	18	39	43	42	44	44	40	20.3	43.8
8-Feb	36	36	22	12	11	21	29	34	36	33	26	A	30	25	33	32	31	34	38	32	22	8	5	7	25.8	37.7
9-Feb	4	4	8	4	4	4	21	26	43	49	A	42	27	16	8	9	21	35	42	42	25	5	5	8	19.7	49.4
10-Feb	13	26	19	8	5	3	3	4	4	A	5	5	4	4	4	4	5	6	6	5	5	5	5	6	6.7	25.8
11-Feb	5	6	4	7	6	7	8	11	A	19	9	8	7	9	8	6	5	6	8	9	7	7	6	5	7.4	18.6
12-Feb	5	4	5	4	5	4	4	A	8	8	6	7	9	9	12	13	19	17	13	16	19	18	23	21	10.7	22.7
13-Feb	18	14	14	10	11	12	A	16	21	25	28	16	9	6	7	4	5	6	8	20	25	18	23	18	14.6	27.8
14-Feb	15	9	8	8	12	A	23	16	9	10	8	7	6	5	7	6	15	24	28	32	17	19	11	10	13.2	32.2
15-Feb	5	2	2	2	A	2	3	3	4	6	7	8	3	3	3	3	5	9	9	5	7	15	20	24	6.5	23.8
16-Feb	30	18	10	A	23	11	17	26	36	37	29	19	15	15	9	5	5	6	5	5	6	6	7	7	15.0	36.6
17-Feb	12	14	A	39	39	31	30	27	7	5	4	4	5	4	3	3	4	4	5	4	4	4	3	3	11.2	38.9
18-Feb	3	A	4	4	3	3	5	7	8	8	5	2	3	4	4	4	4	4	4	3	3	2	2	2	4.0	8.1
19-Feb	A	2	2	2	2	2	4	8	6	4	4	3	3	3	3	4	6	5	5	5	5	4	3	A	3.8	7.6
20-Feb	3	3	3	3	3	4	5	5	6	6	5	6	6	8	7	8	10	13	20	16	20	25	A	29	9.4	28.8
21-Feb	24	27	24	30	30	30	30	26	21	13	10	11	12	11	10	15	22	25	29	32	31	A	19	20	21.8	31.6
22-Feb	24	23	19	26	35	34	34	40	47	39	20	12	9	9	6	5	6	7	7	8	A	8	10	10	18.9	46.8
23-Feb	6	5	10	11	8	10	17	22	25	17	15	6	5	5	5	4	6	9	18	A	36	30	39	41	15.1	41.2
24-Feb	35	31	11	13	14	23	28	32	32	28	28	21	20	14	15	18	21	26	A	34	38	37	34	35	25.6	38.3
25-Feb	33	22	8	7	6	10	17	20	34	30	19	12	10	7	7	17	14	A	25	32	44	46	47	45	22.3	47.4
26-Feb	40	41	41	35	28	34	31	33	41	44	39	35	33	24	21	29	A	33	39	24	7	10	7	5	29.3	44.0
27-Feb	4	3	2	4	3	3	7	9	5	2	4	3	2	3	3	A	4	6	7	5	5	7	6	6	4.5	9.3
28-Feb	5	6	10	14	25	25	32	5	2	2	2	3	2	2	A	2	3	2	3	3	3	3	3	3	7.0	31.6
29-Feb	3	4	4	5	10	14	18	24	21	21	19	20	13	A	7	8	9	17	28	39	41	44	46	63	20.8	62.9
18.0 14.7 11.8 12.6 13.7 14.1 17.7 20.1 21.7 20.2 15.1 12.3 10.8 10.0 9.4 11.5 13.0 16.3 19.6 22.0 22.0 19.8 19.5 20.3 41.7 40.9 41.5 38.7 38.9 34.2 34.5 40.5 46.8 49.4 38.6 41.8 33.0 25.2 33.2 42.1 52.6 45.2 45.8 45.3 43.8 45.8 47.4 62.9																								Diurnal Average	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 - February 2016



Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

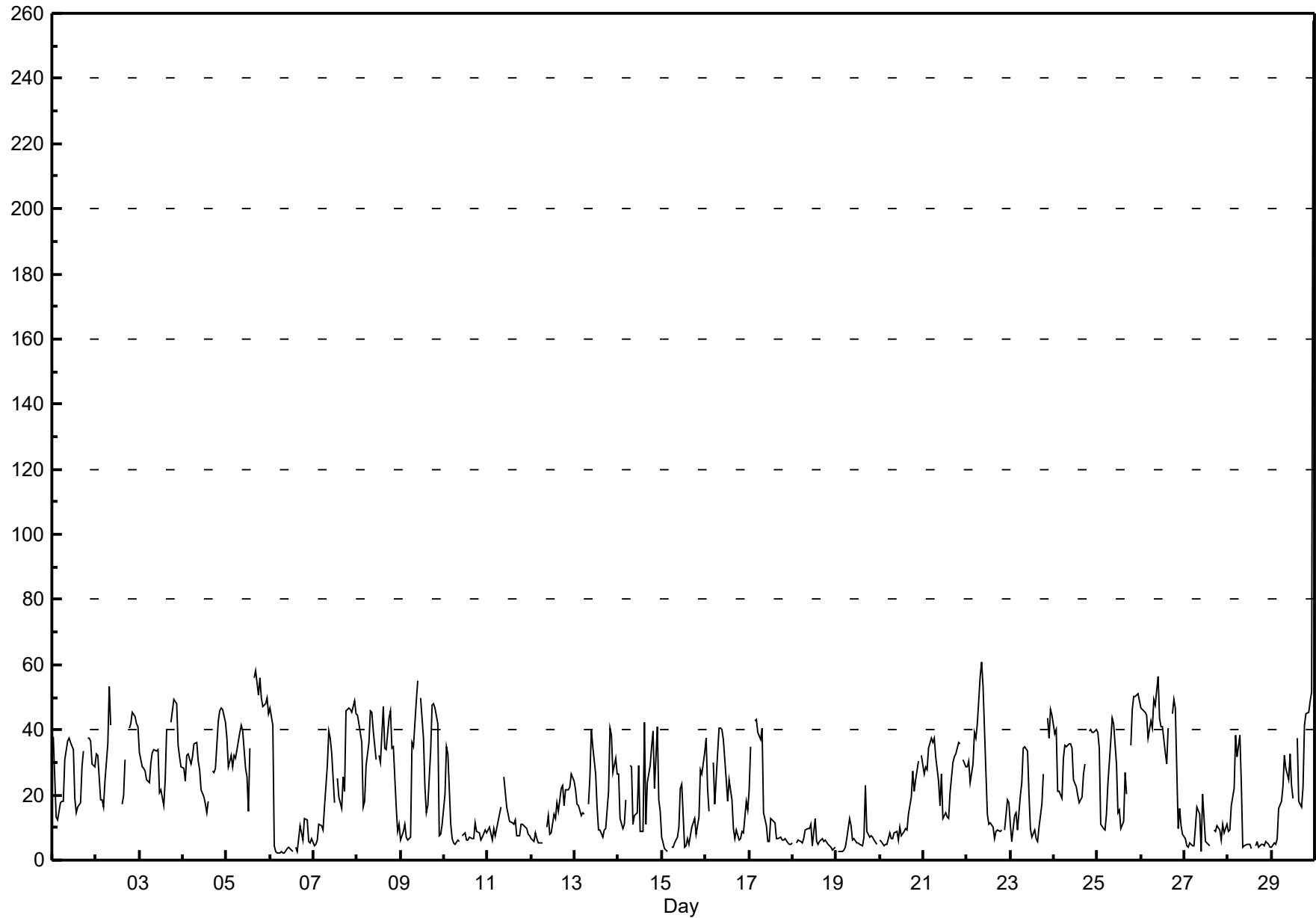
Henry Pirker - February 2016

Maximum Value: 257.9 ppb on Mar 1 00:00																				Maximum Daily Average: 39.6 ppb on Feb 5										Hours in Service: 696	
Minimum Value: 2 ppb on Feb 6 06:00																				Minimum Daily Average: 6.4 ppb on Feb 18										Hours of Data: 661	
Maximum Diurnal Average: 31.8 ppb at hour 24																				Minimum Diurnal Average: 14.3 ppb at hour 14										Hours of Missing Data: 35	
Monthly Average: 21.82 ppb																				Percentiles: P ₁ = 2.7 P ₁₀ = 5.1 Q ₁ = 8.3 Median = 18.0 Q ₃ = 34.0 P ₉₀ = 42.9 P ₉₉ = 55.9										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-Feb	38	25	13	12	17	18	18	31	37	37	C	C	C	C	16	18	29	34	A	37	38	37	30	29	26.8	38.0					
2-Feb	33	32	19	18	16	24	36	53	42	C	C	C	C	17	20	31	A	41	42	45	44	42	41	33.1	53.5						
3-Feb	33	28	28	27	25	24	30	33	34	34	21	22	17	25	40	A	42	46	50	48	35	32	29	32.0	49.6						
4-Feb	28	24	32	33	30	32	36	36	31	28	22	19	17	14	18	A	27	27	28	43	46	47	46	42	30.7	46.9					
5-Feb	37	28	32	29	32	31	37	39	41	40	28	26	15	35	A	56	58	51	56	50	47	48	50	45	39.6	58.0					
6-Feb	47	42	5	3	2	2	3	2	2	4	4	4	3	A	4	3	11	8	6	13	12	6	5	7	8.5	46.7					
7-Feb	5	5	6	11	11	9	17	29	39	37	33	18	A	25	20	16	26	21	46	47	46	45	49	45	26.3	48.8					
8-Feb	44	42	36	16	18	29	36	46	45	40	31	A	32	30	47	34	34	43	46	34	35	16	9	11	32.8	47.0					
9-Feb	6	9	11	7	6	7	36	35	49	55	A	50	37	22	14	17	33	47	48	47	42	8	8	11	26.3	55.0					
10-Feb	20	35	33	11	7	5	5	6	6	A	8	8	6	6	7	7	7	11	9	8	6	7	9	8	10.2	34.9					
11-Feb	9	10	6	9	8	10	14	16	A	26	16	14	12	11	11	12	7	8	11	11	10	9	8	7	11.2	25.7					
12-Feb	7	6	8	7	5	5	5	A	10	14	8	8	14	13	17	15	22	23	17	21	22	23	27	24	14.0	26.5					
13-Feb	22	17	17	14	15	14	A	17	26	40	35	26	16	9	9	7	9	10	21	40	38	27	31	26	21.2	40.4					
14-Feb	26	13	10	11	19	A	29	29	11	14	14	29	9	9	42	11	24	29	35	40	22	41	19	15	21.7	42.3					
15-Feb	7	3	3	3	A	4	4	5	7	10	22	23	4	5	7	5	10	12	13	8	13	28	26	33	11.1	33.0					
16-Feb	38	22	15	A	30	17	25	41	40	40	37	25	18	25	19	10	7	9	6	7	9	8	18	15	20.9	40.7					
17-Feb	22	35	A	43	43	39	37	40	14	11	6	6	13	12	12	7	7	7	6	6	7	5	5	5	16.8	43.1					
18-Feb	5	A	5	6	6	5	7	9	10	10	11	5	13	6	5	6	7	6	6	5	4	4	3	4	6.4	12.6					
19-Feb	A	3	3	3	3	4	6	13	11	6	7	5	5	5	4	7	23	9	7	8	7	6	5	A	6.8	22.7					
20-Feb	6	6	5	5	5	8	7	7	9	9	6	10	8	9	10	9	14	19	27	21	25	31	A	32	12.5	32.3					
21-Feb	27	29	28	35	38	36	38	32	24	17	26	13	15	13	13	21	30	32	32	36	36	A	31	28	27.3	37.5					
22-Feb	29	30	24	30	39	37	42	56	61	53	27	14	11	11	10	7	9	9	9	9	A	9	19	18	24.5	60.6					
23-Feb	11	6	14	15	9	20	24	34	35	33	20	10	7	9	6	6	10	17	26	A	44	37	46	45	21.1	46.5					
24-Feb	39	40	21	21	19	31	35	35	36	36	34	25	22	20	18	20	26	30	A	40	40	39	39	40	30.6	40.1					
25-Feb	39	35	11	10	9	14	23	37	44	42	29	14	16	10	12	27	20	A	35	46	50	50	51	49	29.3	51.1					
26-Feb	47	46	45	44	37	43	41	49	48	56	44	41	41	33	30	40	A	45	49	47	10	16	11	8	37.9	56.4					
27-Feb	7	5	4	5	4	4	10	16	14	3	20	6	5	5	4	A	9	9	10	9	6	11	9	11	8.2	20.2					
28-Feb	9	9	17	22	38	32	38	23	4	4	5	5	5	4	A	5	6	4	5	5	4	6	5	4	11.2	38.5					
29-Feb	4	5	5	7	16	18	22	32	28	25	32	23	19	A	38	18	17	22	41	45	46	49	52	258	35.7	257.9					
																								Diurnal Average							
																								Diurnal Maximum							
C - Calibration																								A - Automated Daily Zero Span							

Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

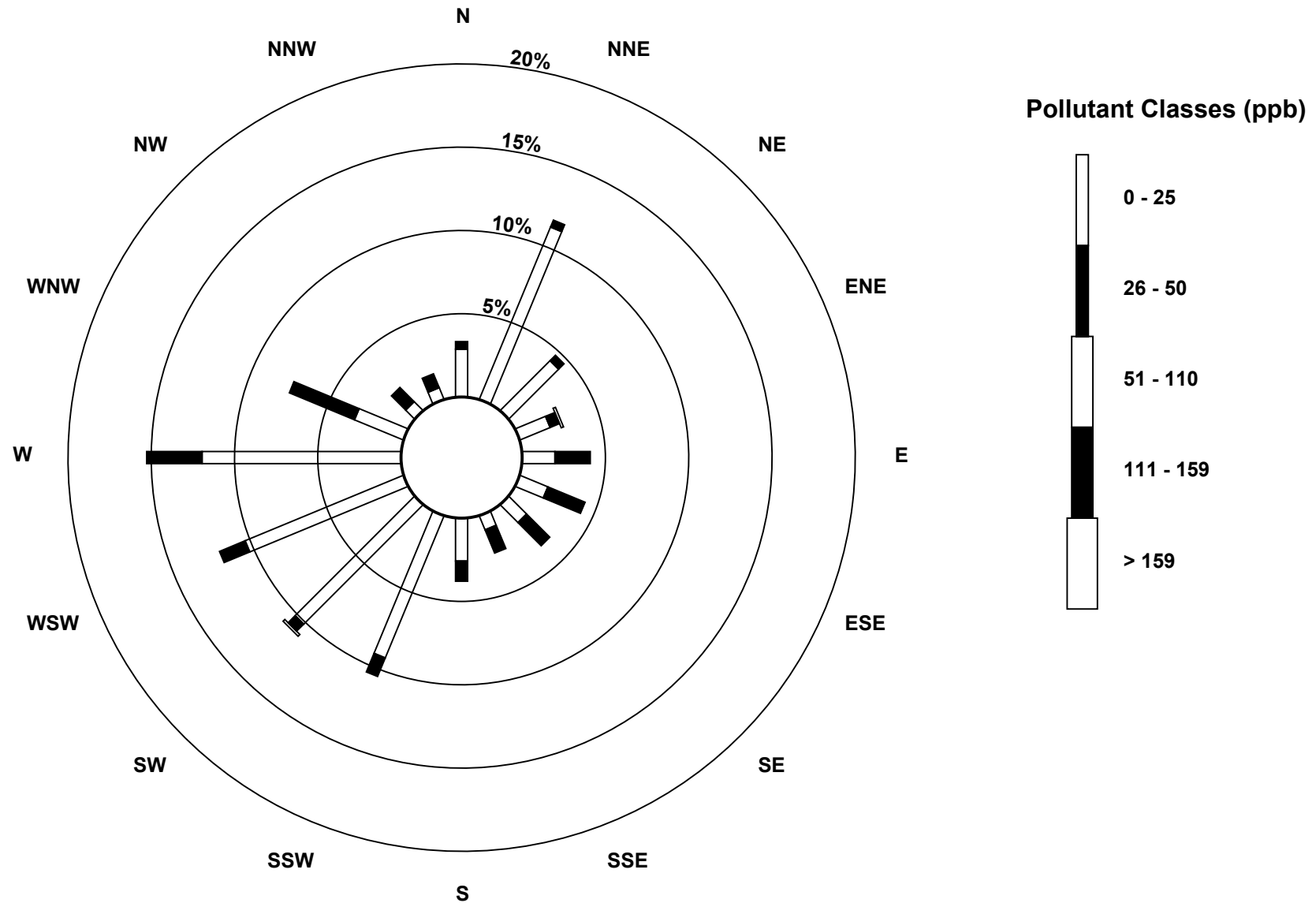
Henry Pirker - February 2016



Pollutant Rose

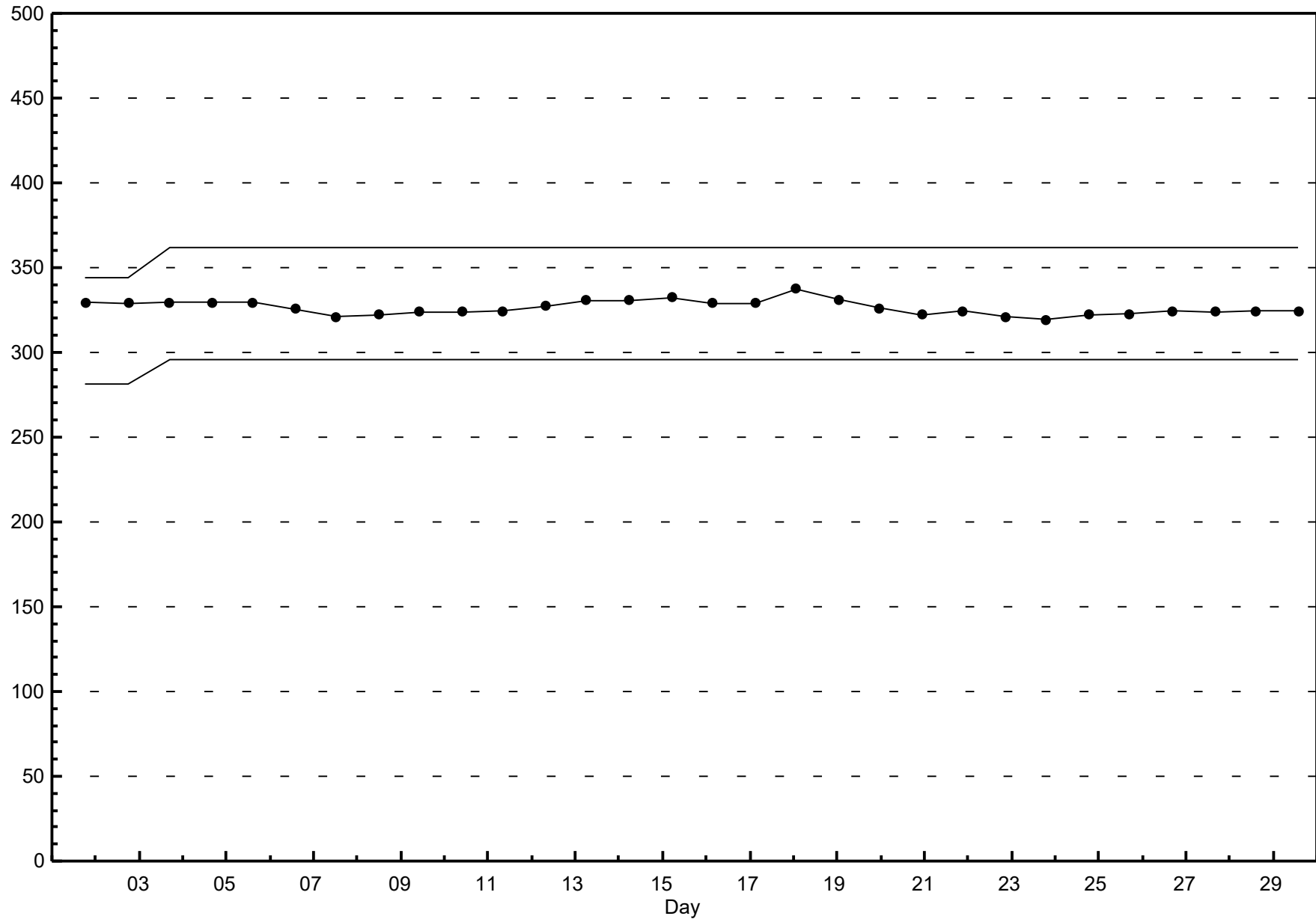
Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - February 2016



Span Responses

Nitrogen Dioxide (NO₂)
Henry Pirker - February 2016



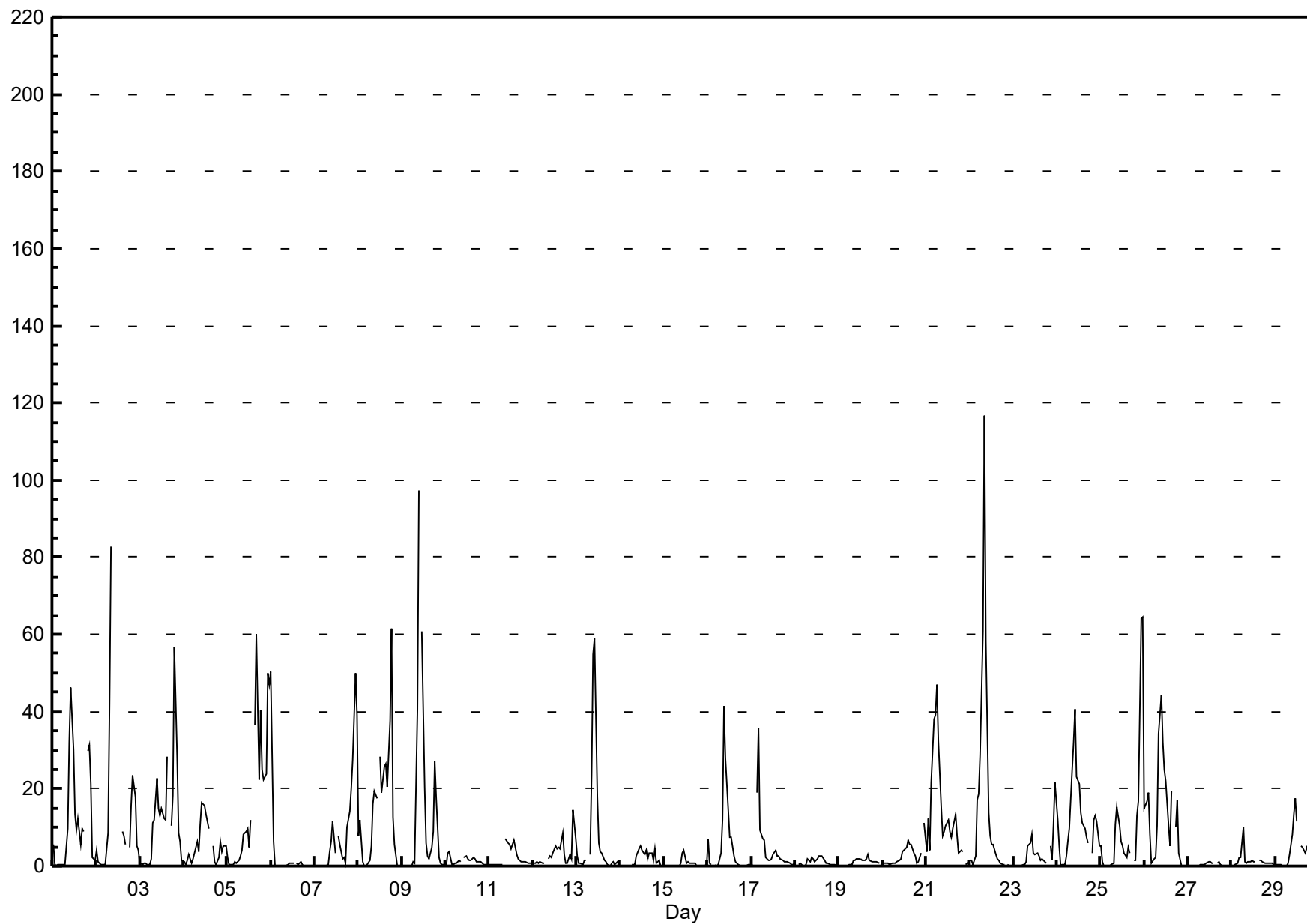
Hourly Averages

Nitrogen Oxide (NO) - ppb
Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 116.8 ppb on Feb 22 09:00 Maximum Daily Average: 16.7 ppb on Feb 5																				Hours in Service: 696 Hours of Data: 661 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Feb 27 03:00 Maximum Diurnal Average: 18.0 ppb at hour 10 Monthly Average: 7.29 ppb																				Minimum Daily Average: 0.4 ppb on Feb 27 Minimum Diurnal Average: 1.3 ppb at hour 3 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.5 Median = 1.7 Q ₃ = 7.7 P ₉₀ = 21.2 P ₉₉ = 64.0						
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-Feb	5	0	0	0	0	0	0	0	10	32	46	30	14	9	12	6	10	9	A	30	31	21	2	1	11.8	46.1
2-Feb	4	1	0	0	0	1	8	42	83	C	C	C	C	C	9	8	6	A	5	16	24	18	5	4	13.0	83.0
3-Feb	1	0	1	1	0	1	2	11	12	23	15	13	15	12	12	28	A	11	18	57	28	9	6	1	12.0	56.8
4-Feb	1	0	1	3	1	2	3	6	4	11	16	16	13	11	10	A	5	1	0	2	6	4	5	5	5.6	16.5
5-Feb	2	0	0	1	1	1	2	3	4	8	9	10	5	12	A	37	60	22	40	25	22	24	50	47	16.7	60.0
6-Feb	50	6	0	0	0	0	0	0	0	0	1	1	1	A	1	0	1	0	0	0	0	0	0	0	2.7	50.5
7-Feb	0	0	0	0	0	0	0	0	4	6	11	3	A	8	6	2	2	1	10	14	20	28	50	39	8.9	49.9
8-Feb	8	12	1	0	0	0	1	5	16	20	17	A	28	19	26	26	20	38	61	13	6	0	0	0	13.8	61.5
9-Feb	0	0	0	0	0	0	1	1	40	97	A	61	20	6	2	2	5	9	27	18	2	1	0	1	12.8	97.3
10-Feb	0	3	4	1	0	1	1	1	1	A	2	3	2	2	2	2	2	1	1	1	1	0	0	0	1.3	3.7
11-Feb	0	1	0	0	0	0	0	1	A	7	6	6	4	7	5	3	2	1	1	1	1	1	1	1	2.2	6.9
12-Feb	1	1	1	1	1	1	1	A	2	2	2	3	5	4	5	4	8	3	1	1	3	2	14	7	3.2	14.4
13-Feb	3	1	1	0	1	1	A	3	24	55	59	18	6	4	3	1	1	0	0	1	1	0	1	0	8.1	59.1
14-Feb	0	0	0	0	0	A	1	0	0	3	5	5	4	3	4	2	3	3	2	4	1	2	0	0	1.8	5.1
15-Feb	0	0	0	0	A	0	0	0	0	1	3	4	1	1	1	1	1	1	0	0	0	0	0	0	0.6	4.1
16-Feb	7	1	0	A	1	0	0	3	12	41	28	14	7	8	3	1	1	0	0	0	0	0	0	0	5.6	41.3
17-Feb	0	0	A	19	36	9	7	7	2	1	1	2	3	4	3	2	2	1	1	1	1	1	1	1	4.6	35.9
18-Feb	1	A	0	1	0	0	1	2	1	2	2	1	2	3	3	3	1	1	1	0	0	0	0	0	1.1	2.8
19-Feb	A	0	0	0	0	0	0	1	2	2	2	2	2	1	1	2	3	2	1	1	1	1	1	A	1.1	2.9
20-Feb	1	1	1	1	0	1	1	1	1	2	2	4	4	5	7	6	6	3	3	1	1	3	A	11	2.7	11.3
21-Feb	4	12	4	22	38	39	47	32	15	8	9	10	12	9	7	10	13	8	3	4	4	A	1	1	13.6	47.1
22-Feb	2	1	1	3	17	19	29	61	117	58	14	8	6	5	3	2	2	1	0	0	A	0	0	0	15.1	116.8
23-Feb	0	0	0	0	0	0	0	1	5	6	8	4	3	3	3	2	2	1	1	A	5	2	10	22	3.4	21.8
24-Feb	12	5	0	0	0	3	7	10	25	32	40	23	21	14	11	10	7	6	A	3	12	13	11	5	11.8	40.5
25-Feb	5	1	0	0	0	0	0	1	11	15	10	6	5	3	2	5	3	A	2	2	13	17	64	65	10.1	64.6
26-Feb	15	17	19	8	1	2	2	10	34	44	32	25	22	11	5	19	A	10	17	3	0	0	0	0	12.9	44.2
27-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0.4	1.0
28-Feb	0	0	0	1	2	2	10	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1.3	10.2
29-Feb	0	1	0	0	0	0	0	1	3	8	13	18	12	A	5	5	3	5	4	12	15	39	82	93	13.9	93.0
4.4 2.3 1.3 2.2 3.7 3.0 4.5 7.3 15.3 18.0 13.3 10.8 8.1 6.4 5.6 7.0 6.4 5.2 7.5 7.6 7.2 6.7 11.0 10.9																								Diurnal Average		
50.5 16.6 19.0 21.7 38.1 39.0 47.1 60.9 116.8 97.3 59.1 60.6 28.2 19.0 25.6 36.5 60.0 37.8 61.5 56.8 31.4 39.2 81.9 93.0																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Henry Pirker - February 2016



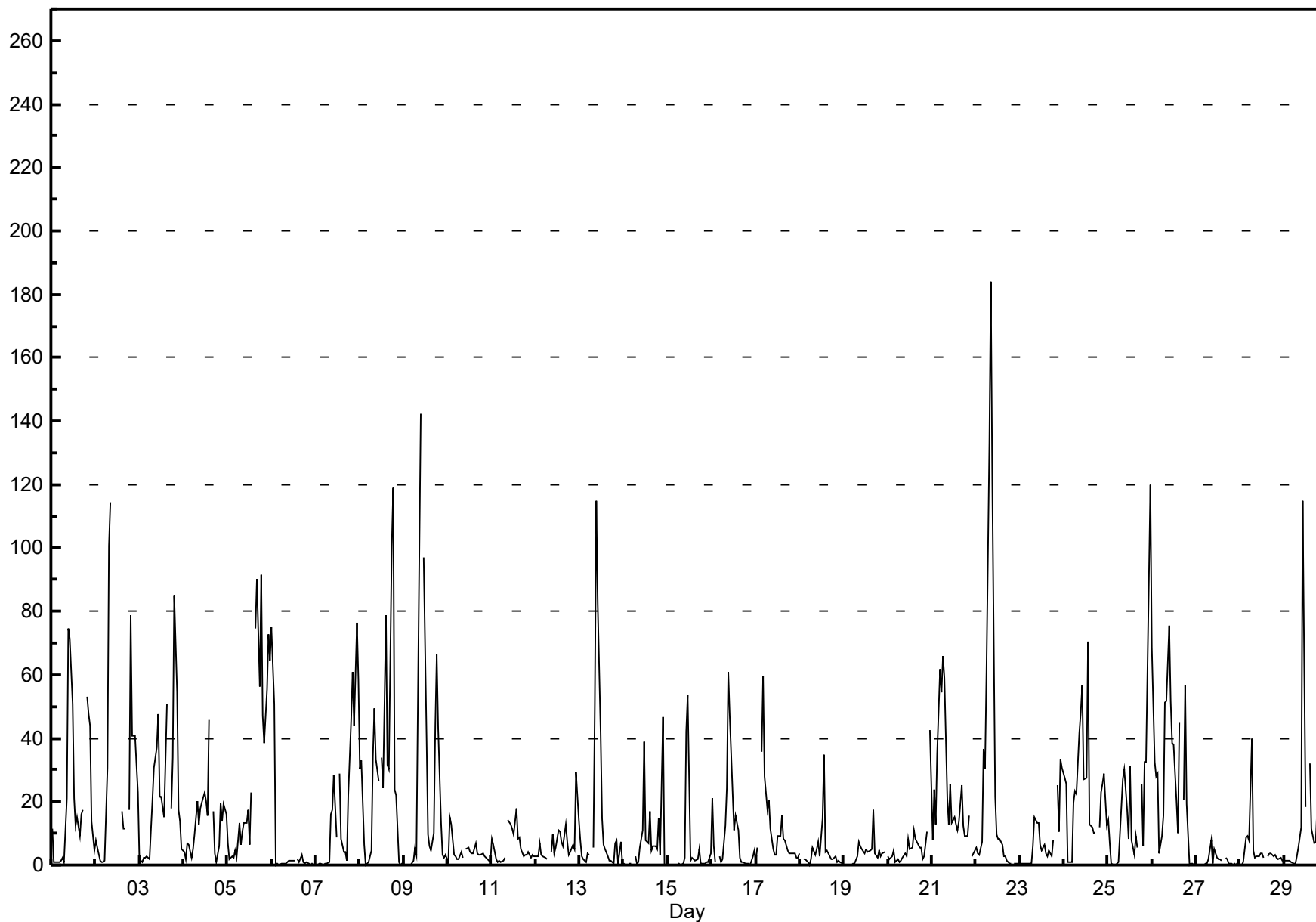
Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - February 2016

Maximum Value: 261.4 ppb on Mar 1 00:00																				Maximum Daily Average: 35.2 ppb on Feb 29					Hours in Service: 696	
Minimum Value: 0 ppb on Feb 15 02:00																				Minimum Daily Average: 1.3 ppb on Feb 27					Hours of Data: 661	
Maximum Diurnal Average: 32.6 ppb at hour 10																				Minimum Diurnal Average: 3.5 ppb at hour 3					Hours of Missing Data: 35	
Monthly Average: 15.63 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 1.7 Median = 5.2 Q ₃ = 17.7 P ₉₀ = 45.5 P ₉₉ = 119.1					Hours of Calibration: 35	
																									Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	12	1	1	1	1	2	2	1	21	74	71	51	21	12	15	9	16	17	A	53	47	44	14	4	21.4	74.5
2-Feb	8	6	1	1	1	1	31	101	114	C	C	C	C	C	17	11	11	A	17	79	41	41	32	23	29.8	114.3
3-Feb	2	1	2	2	3	2	12	20	31	37	47	21	22	15	33	51	A	18	34	85	54	18	14	5	23.0	85.3
4-Feb	4	2	7	7	2	5	10	20	13	18	20	23	20	16	46	A	17	4	1	6	20	14	19	16	13.4	45.9
5-Feb	7	2	3	2	4	2	13	6	10	13	13	17	6	23	A	75	90	56	91	47	38	56	73	65	31.1	91.3
6-Feb	75	51	0	0	0	0	0	0	0	1	1	1	1	A	2	1	3	1	0	1	0	0	0	0	6.2	75.1
7-Feb	0	0	0	0	0	0	1	1	16	17	28	9	A	29	8	4	4	1	22	46	61	44	76	59	18.6	76.2
8-Feb	30	33	6	0	0	1	5	35	49	33	26	A	34	24	79	31	30	101	119	24	22	1	0	0	29.7	119.1
9-Feb	0	0	0	0	0	1	5	3	98	142	A	97	40	10	6	4	10	44	66	43	13	3	2	3	25.8	142.1
10-Feb	1	15	13	3	3	2	2	4	2	A	5	6	4	4	3	7	4	3	3	4	3	2	2	1	4.1	14.9
11-Feb	8	7	2	1	1	1	1	2	A	14	13	11	9	18	8	9	5	3	3	3	4	2	3	3	5.7	17.7
12-Feb	3	3	7	3	3	2	2	A	4	10	4	5	11	10	7	6	13	7	3	4	6	5	29	14	7.0	29.3
13-Feb	8	3	2	1	4	3	A	5	51	115	82	41	15	6	5	3	2	1	1	7	8	0	7	1	16.1	115.0
14-Feb	0	0	0	1	0	A	3	1	1	5	11	39	8	7	17	4	6	6	5	15	3	47	0	0	7.8	46.6
15-Feb	0	0	0	0	A	0	0	0	0	2	42	54	2	2	2	2	2	5	0	0	0	1	1	4	5.3	53.5
16-Feb	21	6	1	A	3	1	2	12	24	61	47	23	11	16	11	2	1	1	0	0	0	0	3	5	10.9	61.0
17-Feb	1	6	A	36	59	28	17	21	11	5	3	3	9	9	16	8	8	5	3	3	4	3	2	2	11.5	59.4
18-Feb	4	A	2	2	1	0	2	6	3	5	7	3	15	35	4	5	3	2	2	3	1	1	1	1	4.5	34.6
19-Feb	A	0	0	0	0	0	1	3	7	6	5	4	5	4	5	5	17	3	2	5	3	4	4	A	3.8	17.3
20-Feb	3	2	3	5	1	2	1	1	2	3	3	8	5	6	11	8	7	5	5	2	3	10	A	43	6.1	42.6
21-Feb	8	24	13	35	62	54	66	59	21	13	25	13	15	13	11	14	25	12	9	9	16	A	3	5	22.8	66.0
22-Feb	6	3	3	7	36	30	61	133	184	121	21	10	8	8	6	3	3	1	1	0	A	0	0	0	28.2	184.1
23-Feb	0	0	0	0	0	1	1	6	15	13	13	7	5	6	4	3	5	3	8	A	25	10	33	31	8.2	33.5
24-Feb	27	26	1	1	1	20	23	22	42	48	57	27	28	71	13	12	10	10	A	12	23	26	29	13	23.4	70.5
25-Feb	14	7	0	0	0	0	1	18	27	30	17	8	31	8	3	9	5	A	26	6	33	33	91	120	21.2	119.9
26-Feb	69	33	28	29	3	9	15	51	52	75	52	38	38	20	10	45	A	21	57	19	0	0	0	0	28.9	75.5
27-Feb	0	0	0	0	0	0	0	2	8	1	5	2	2	2	1	A	2	2	1	0	0	0	0	1	1.3	7.9
28-Feb	0	0	1	9	9	8	40	5	2	3	3	4	4	2	A	3	4	4	3	3	2	2	2	1	4.9	39.6
29-Feb	1	2	1	1	1	1	0	3	5	12	115	67	18	A	32	12	7	7	18	33	33	69	110	261	35.2	261.4
11.1 8.2 3.5 5.3 7.1 6.4 11.3 19.3 29.2 32.6 27.3 21.9 14.3 14.4 13.9 12.8 11.5 12.7 18.6 18.3 16.6 15.6 19.7 24.3																									Diurnal Average	
75.1 50.6 27.8 35.9 61.7 54.4 66.0 133.0 184.1 142.1 114.7 97.1 39.9 70.5 78.7 74.8 90.1 100.6 119.1 85.3 60.9 69.4 110.4 261.4																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - February 2016



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

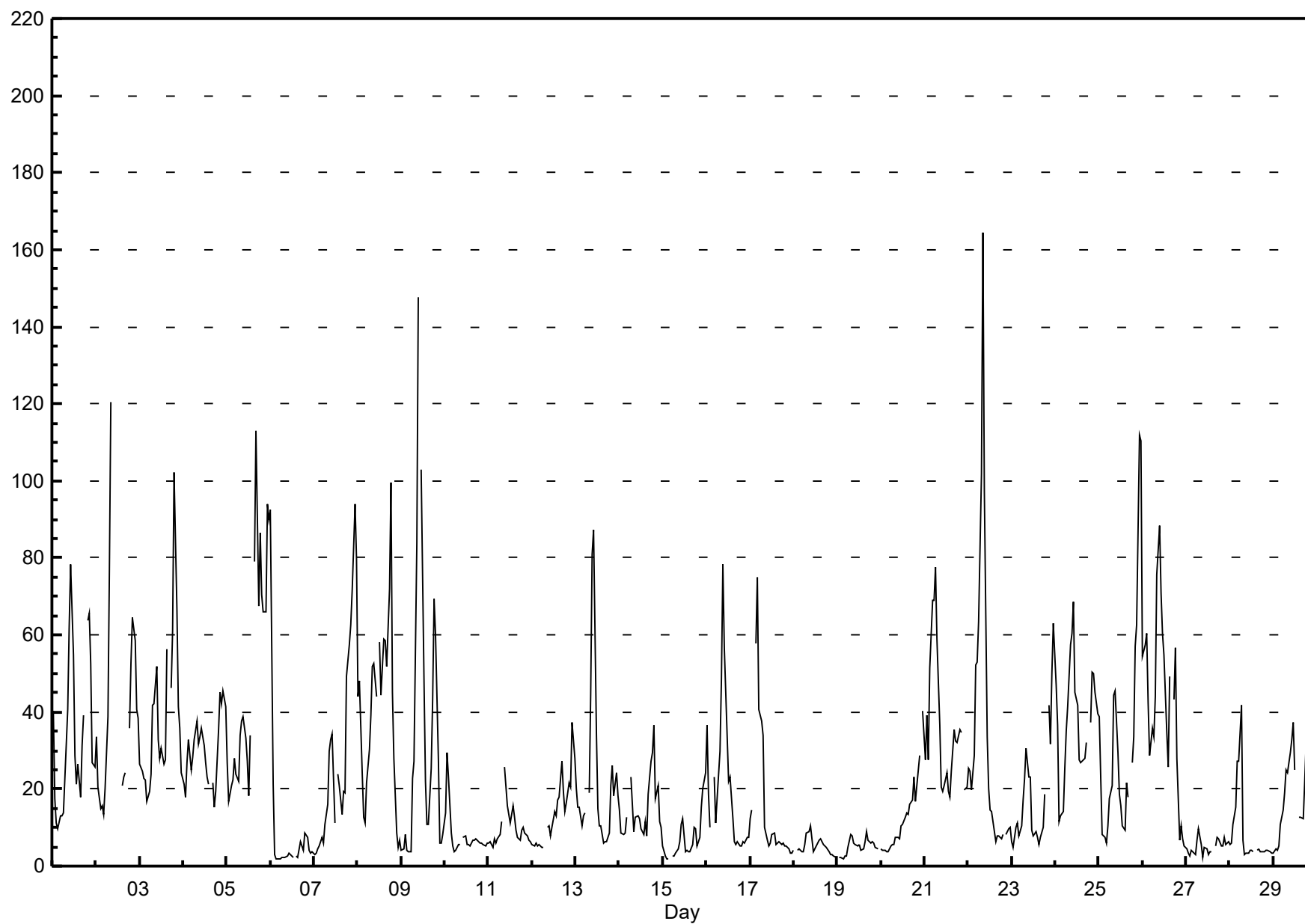
Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 164.4 ppb on Feb 22 09:00 Maximum Daily Average: 48.5 ppb on Feb 5																								Hours in Service: 696 Hours of Data: 661 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0		
Minimum Value: 2 ppb on Feb 15 03:00 Minimum Daily Average: 5.0 ppb on Feb 27 Maximum Diurnal Average: 38.4 ppb at hour 10 Minimum Diurnal Average: 13.2 ppb at hour 3 Monthly Average: 23.54 ppb Percentiles: P ₁ = 2.1 P ₁₀ = 4.0 Q ₁ = 6.1 Median = 14.8 Q ₃ = 32.8 P ₉₀ = 56.9 P ₉₉ = 111.7																										
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-Feb	40	18	11	10	13	13	14	23	41	62	78	55	29	21	27	18	31	39	A	64	66	53	27	26	33.8	78.2
2-Feb	34	21	15	16	14	20	39	77	121	C	C	C	C	C	21	23	24	A	36	53	65	59	41	38	39.6	120.6
3-Feb	27	25	23	22	17	19	24	42	42	52	33	28	31	27	27	56	A	46	61	102	67	41	36	24	37.9	102.3
4-Feb	21	18	27	33	25	28	33	37	32	34	36	31	27	23	21	A	22	15	19	35	45	42	45	41	30.1	45.4
5-Feb	27	17	21	23	28	24	22	34	38	39	33	27	18	34	A	79	113	68	86	71	66	66	94	90	48.5	113.0
6-Feb	92	21	3	2	2	2	2	2	2	2	3	3	2	A	3	2	6	5	4	8	7	4	3	4	8.2	92.5
7-Feb	3	3	4	5	7	6	11	16	30	33	34	11	A	24	21	13	19	19	49	57	63	71	94	80	29.3	94.0
8-Feb	44	48	24	13	11	22	30	39	52	52	44	A	58	44	59	59	52	72	100	45	28	9	5	7	39.8	99.6
9-Feb	4	5	8	4	4	4	23	27	84	147	A	103	48	22	11	11	26	43	69	60	28	6	6	8	32.6	147.5
10-Feb	14	29	23	9	5	4	4	6	6	A	7	8	6	6	5	7	7	7	7	6	6	6	5	6	8.1	29.4
11-Feb	6	6	5	7	6	7	8	11	A	26	15	13	11	16	13	9	7	7	9	10	9	8	7	6	9.7	25.7
12-Feb	6	5	6	5	5	5	5	A	10	11	8	10	14	13	17	18	27	19	14	16	22	20	37	28	14.0	37.3
13-Feb	20	15	15	10	13	14	A	19	45	81	87	34	15	10	10	6	6	7	9	21	26	18	24	18	22.8	87.3
14-Feb	15	9	8	8	13	A	23	16	9	13	13	12	10	8	12	8	19	27	29	36	18	21	11	10	15.1	36.5
15-Feb	5	2	2	2	A	3	3	3	5	6	11	12	4	4	4	4	6	10	10	5	7	15	20	24	7.2	24.3
16-Feb	37	19	10	A	23	11	17	30	48	78	57	34	22	23	12	6	6	6	5	5	6	6	7	8	20.8	78.3
17-Feb	12	14	A	58	75	41	37	34	10	7	5	6	8	9	6	6	6	6	6	5	5	5	3	3	16.0	75.1
18-Feb	4	A	4	5	4	4	6	8	9	11	7	4	5	6	7	7	6	5	5	4	3	3	3	2	5.2	10.5
19-Feb	A	2	2	2	2	3	5	8	8	6	5	5	5	4	4	6	9	7	6	6	6	5	4	A	5.1	8.9
20-Feb	5	4	4	4	4	5	6	6	8	8	7	10	11	13	14	14	16	17	23	17	21	29	A	40	12.3	40.1
21-Feb	28	39	28	52	69	69	78	59	37	21	19	21	24	19	18	25	36	33	32	36	35	A	20	21	35.5	77.7
22-Feb	25	25	20	29	52	53	63	102	164	97	33	20	15	14	9	6	8	8	7	8	A	8	10	10	34.2	164.4
23-Feb	6	5	10	11	8	11	17	23	31	23	23	9	8	9	8	6	8	10	19	A	42	32	50	63	18.7	63.1
24-Feb	47	36	12	13	14	26	35	41	57	60	69	45	42	28	27	27	28	32	A	37	50	50	45	40	37.5	68.7
25-Feb	39	23	8	7	6	11	17	21	44	45	30	19	16	10	9	22	18	A	27	34	57	63	112	110	32.5	111.9
26-Feb	55	58	61	43	29	36	34	44	76	88	71	60	55	35	26	49	A	43	57	28	7	10	7	5	42.4	88.5
27-Feb	4	3	3	4	3	3	7	10	6	2	5	4	3	4	4	A	5	7	7	5	5	7	6	6	5.0	9.6
28-Feb	6	6	11	15	27	27	42	7	3	3	3	4	4	4	A	4	4	4	4	4	4	4	4	3	8.6	41.9
29-Feb	3	4	4	5	11	15	19	25	24	29	33	37	25	A	13	13	12	22	32	51	57	84	128	156	34.9	156.3
22.4 17.2 13.2 14.8 17.5 17.2 22.3 27.5 37.1 38.4 28.6 23.2 19.0 16.5 15.1 18.6 19.5 21.6 27.1 29.7 29.2 26.5 30.6 31.4																								Diurnal Average		
92.5 57.6 60.6 57.7 75.1 69.0 77.7 101.7 164.4 147.5 87.3 102.9 58.0 44.4 59.0 78.9 113.0 72.1 99.6 102.3 66.7 83.6 128.5 156.3																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - February 2016



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

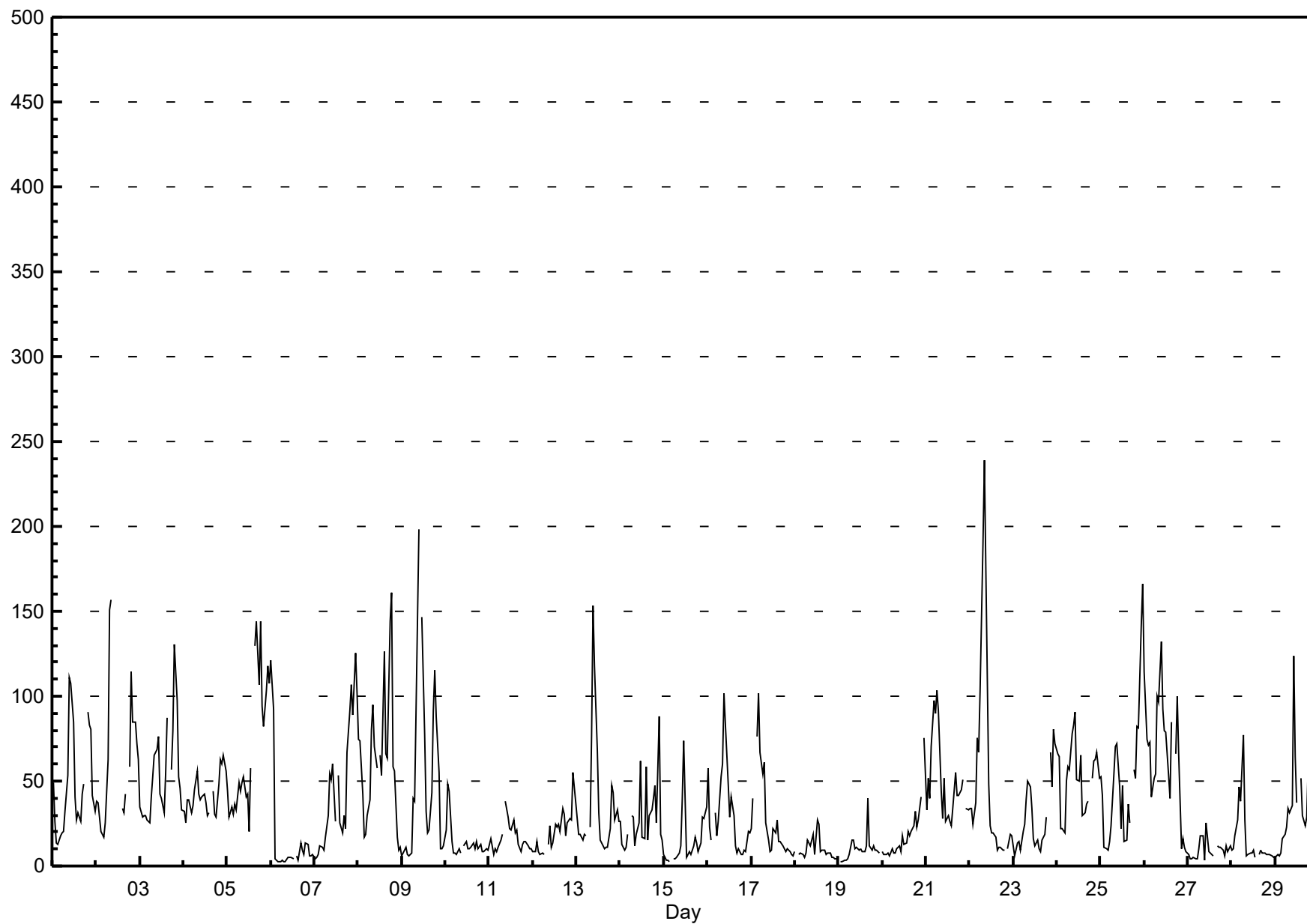
Henry Pirker - February 2016

Maximum Value: 490.8 ppb on Mar 1 00:00																				Maximum Daily Average: 69.2 ppb on Feb 5					Hours in Service: 696	
Minimum Value: 3 ppb on Feb 6 06:00																				Minimum Daily Average: 9.3 ppb on Feb 27					Hours of Data: 661	
Maximum Diurnal Average: 58.5 ppb at hour 10																				Minimum Diurnal Average: 19.4 ppb at hour 3					Hours of Missing Data: 35	
Monthly Average: 36.58 ppb																				Percentiles: P ₁ = 3.0 P ₁₀ = 6.8 Q ₁ = 10.3 Median = 24.9 Q ₃ = 51.1 P ₉₀ = 83.1 P ₉₉ = 160.8					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-Feb	49	26	14	13	18	20	21	32	54	111	107	85	40	27	32	26	42	48	A	91	83	81	41	32	47.5	111.0
2-Feb	38	38	20	19	17	25	63	151	157	C	C	C	C	C	34	31	42	A	58	115	85	85	72	62	61.7	156.8
3-Feb	35	29	30	30	27	25	41	52	65	68	76	42	40	31	55	87	A	57	79	130	97	53	46	33	53.5	130.1
4-Feb	32	25	39	39	32	36	45	56	42	39	41	42	37	30	31	A	44	31	29	49	63	60	65	56	41.9	65.4
5-Feb	44	29	35	31	36	33	49	44	49	53	40	42	20	57	A	130	144	107	144	94	82	103	117	107	69.2	144.0
6-Feb	121	93	5	3	3	3	3	3	3	5	5	5	4	A	6	3	14	9	7	14	13	6	6	7	14.8	121.3
7-Feb	5	5	6	12	11	10	17	30	54	51	60	27	A	53	25	20	30	22	67	91	107	89	125	101	44.3	125.4
8-Feb	75	74	42	17	18	30	39	80	95	70	57	A	65	54	126	66	64	144	161	58	56	17	9	11	62.1	161.4
9-Feb	6	9	11	7	6	8	39	38	145	198	A	147	77	32	19	21	44	91	115	88	55	10	10	12	51.8	198.1
10-Feb	21	48	44	14	7	7	7	10	7	A	12	14	10	10	11	14	10	14	10	13	9	9	10	9	14.0	48.3
11-Feb	13	16	7	10	8	11	16	18	A	38	29	22	21	27	19	21	12	9	13	14	14	12	10	10	16.1	37.8
12-Feb	9	8	14	9	7	8	7	A	13	23	11	14	25	23	25	21	34	31	18	25	28	27	55	38	20.5	55.0
13-Feb	28	19	19	15	18	17	A	23	77	154	118	67	31	16	14	10	11	11	22	47	43	28	33	27	36.8	153.8
14-Feb	26	13	10	11	19	A	30	29	11	19	25	62	17	16	59	15	30	33	40	48	26	88	19	15	28.7	88.0
15-Feb	7	4	3	3	A	4	4	5	8	12	39	74	5	7	9	6	12	17	14	8	14	29	28	35	15.1	73.9
16-Feb	58	23	15	A	32	18	26	53	60	102	83	48	29	41	30	12	8	11	6	7	9	9	21	19	31.3	101.9
17-Feb	22	40	A	76	102	67	54	61	26	15	9	9	22	20	28	15	14	12	10	8	10	8	7	6	27.8	101.7
18-Feb	8	A	7	7	7	5	8	15	12	15	19	7	27	24	9	9	9	7	8	8	5	5	4	4	9.9	27.2
19-Feb	A	3	3	3	3	5	7	15	15	11	11	9	10	9	9	12	40	12	9	12	10	10	8	A	10.2	40.1
20-Feb	8	7	7	7	6	10	8	8	11	12	9	18	12	14	21	18	20	23	32	23	27	40	A	75	18.0	75.2
21-Feb	33	52	40	70	97	90	103	91	44	28	52	26	29	26	24	34	55	42	42	45	51	A	34	33	49.7	103.3
22-Feb	34	34	25	37	76	67	103	190	239	175	48	24	19	20	17	9	11	11	9	10	A	10	19	18	52.3	239.3
23-Feb	12	6	14	15	10	20	24	39	50	47	34	16	12	16	10	9	15	19	29	A	67	47	80	72	28.7	80.2
24-Feb	66	65	22	22	20	50	59	56	78	83	91	51	50	65	29	31	37	38	A	51	62	62	67	52	52.5	90.7
25-Feb	52	41	11	10	10	15	24	54	70	72	47	22	47	15	15	36	26	A	57	51	82	82	142	166	49.9	166.4
26-Feb	114	74	71	73	41	52	54	100	97	132	92	79	79	53	40	85	A	66	100	66	10	16	11	8	65.8	132.2
27-Feb	7	5	4	5	5	5	10	18	18	3	25	8	7	6	6	A	12	11	11	10	6	12	9	12	9.3	25.3
28-Feb	9	10	18	27	47	38	77	27	6	7	8	8	9	5	A	7	9	7	8	7	7	7	6	5	15.6	77.4
29-Feb	5	7	6	8	16	19	23	34	32	36	123	64	37	A	52	30	24	29	59	76	73	117	159	491	66.0	490.8
33.5 28.6 19.4 21.1 24.9 24.8 34.3 47.6 54.9 58.5 47.1 38.3 29.1 26.8 27.9 28.9 30.1 33.7 42.8 45.0 42.6 40.0 43.3 54.2																									Diurnal Average	
121.3 92.5 71.3 76.2 101.7 90.2 103.3 190.2 239.3 198.1 123.3 147.0 78.8 65.5 125.9 129.7 144.0 143.8 161.4 130.1 107.1 116.9 158.8 490.8																									Diurnal Maximum	
C - Calibration																										
A - Automated Daily Zero Span																										

Hourly Maximums

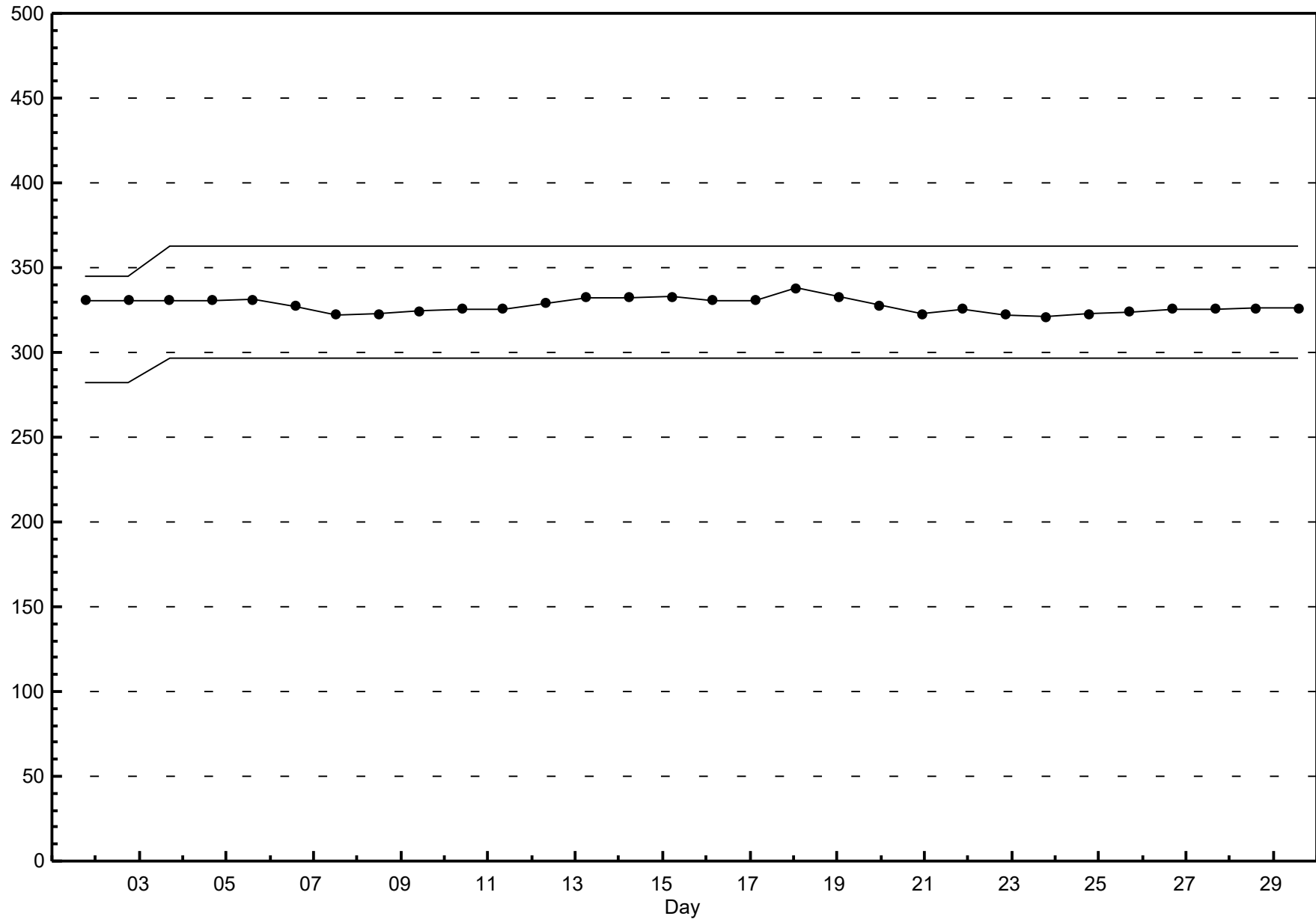
Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - February 2016



Span Responses

Oxides of Nitrogen (NO_x)
Henry Pirker - February 2016



Hourly Averages

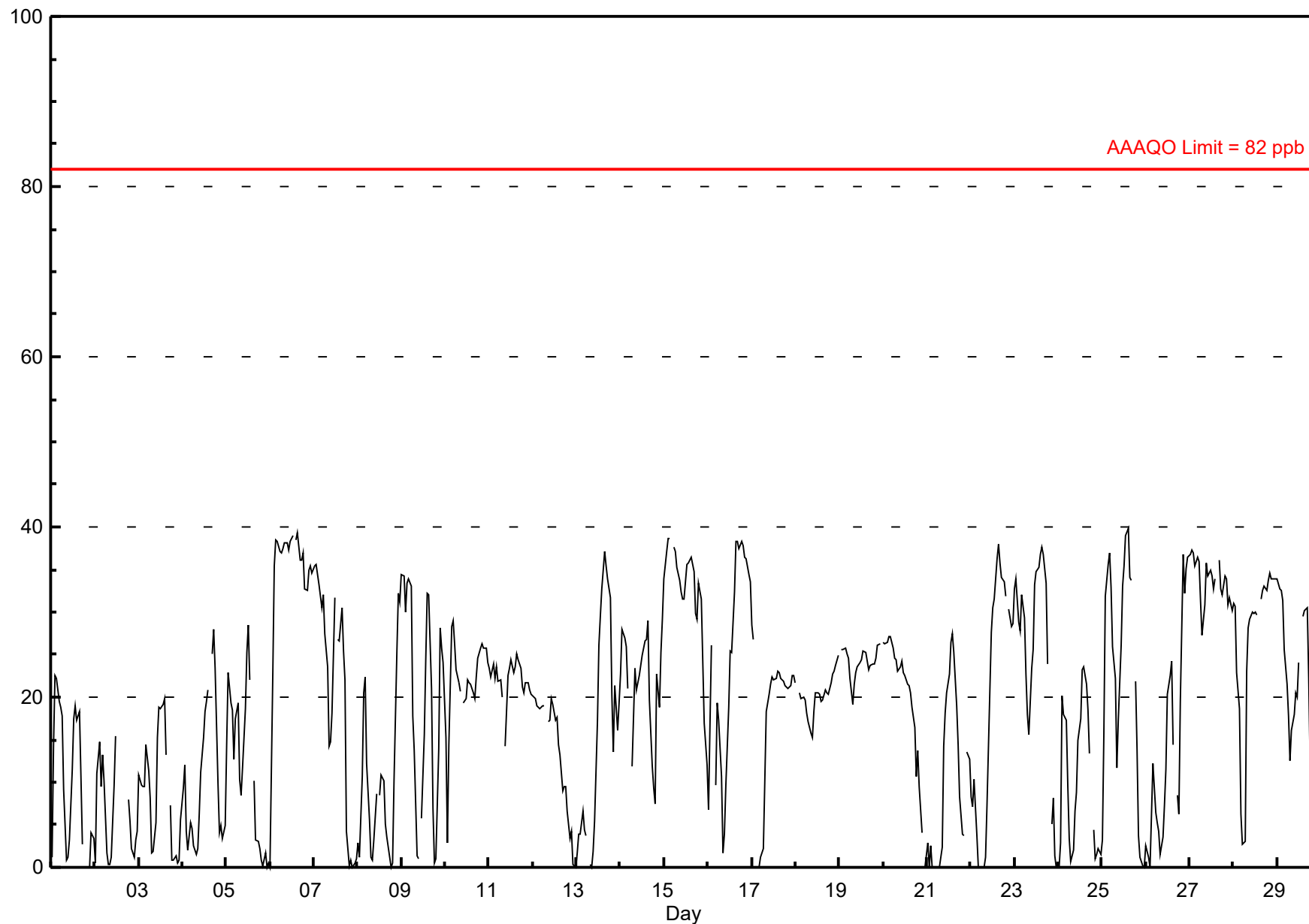
Ozone (O₃) - ppb

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 39.9 ppb on Feb 25 15:00 Maximum Daily Average: 34.6 ppb on Feb 6																				Hours in Service: 696 Hours of Data: 662 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Feb 1 20:00 Maximum Diurnal Average: 26.7 ppb at hour 15 Monthly Average: 18.95 ppb										Minimum Daily Average: 7.0 ppb on Feb 2 Minimum Diurnal Average: 12.6 ppb at hour 9 Percentiles: P ₁ = 0.0 P ₁₀ = 1.2 Q ₁ = 8.6 Median = 20.5 Q ₃ = 28.0 P ₉₀ = 34.6 P ₉₉ = 38.6																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	1	14	22	22	19	19	18	9	1	1	3	11	17	19	17	18	11	3	A	0	0	0	4	3	10.2	22.5
2-Feb	1	11	15	9	13	10	2	0	0	1	10	15	C	C	C	C	20	A	8	5	2	1	3	4	7.0	20.4
3-Feb	11	10	10	9	14	11	8	2	2	5	15	19	19	19	20	13	A	7	1	1	1	0	1	6	8.9	19.9
4-Feb	9	12	4	2	5	5	3	2	2	6	11	15	18	19	21	A	25	28	23	10	4	5	3	5	10.4	27.9
5-Feb	14	23	19	18	13	17	19	10	9	12	19	25	28	22	A	10	3	3	2	1	0	2	0	0	11.8	28.5
6-Feb	0	23	35	38	38	37	37	37	38	38	37	38	39	A	39	39	36	36	37	33	33	35	35	35	34.6	39.3
7-Feb	35	36	34	33	30	32	28	24	14	15	18	32	A	27	27	31	25	22	4	0	1	0	0	1	20.4	35.6
8-Feb	3	1	11	21	22	12	6	1	1	3	9	A	9	11	10	5	4	1	0	1	10	25	32	31	9.9	32.2
9-Feb	34	34	30	33	34	33	18	14	1	1	A	6	16	24	32	32	21	7	1	1	14	28	26	24	20.2	34.4
10-Feb	15	3	14	28	29	26	23	22	21	A	19	20	22	22	22	20	20	22	25	26	26	26	26	24	21.8	29.1
11-Feb	23	22	24	22	24	22	22	20	A	14	22	23	24	23	24	25	24	23	21	20	22	22	21	20	22.1	25.0
12-Feb	20	20	19	19	19	19	19	A	17	17	20	19	17	18	14	13	9	9	10	7	3	4	0	0	13.6	20.1
13-Feb	2	4	4	7	4	4	A	0	0	2	5	17	26	29	33	37	35	34	32	20	14	21	16	19	15.9	37.2
14-Feb	23	28	27	26	21	A	12	18	23	21	23	24	25	27	27	29	20	12	9	7	23	19	25	29	21.6	29.2
15-Feb	34	37	39	39	A	38	37	35	34	32	32	32	36	36	36	36	35	30	29	33	31	24	17	12	32.3	38.7
16-Feb	7	17	26	A	10	19	17	11	2	4	10	19	25	25	32	38	38	38	38	38	36	36	34	34	24.1	38.4
17-Feb	28	27	A	0	0	1	2	10	18	20	22	22	22	22	23	23	22	22	21	21	21	21	23	23	18.1	28.5
18-Feb	22	A	20	20	20	20	18	17	16	15	18	21	21	20	19	20	21	21	20	22	23	23	24	25	20.2	24.9
19-Feb	A	26	26	26	25	25	22	19	21	23	23	24	24	25	25	24	23	24	24	24	25	26	26	A	24.1	26.3
20-Feb	26	26	26	27	27	26	25	24	23	24	24	23	23	22	21	21	19	16	11	14	9	4	A	0	20.1	27.2
21-Feb	3	0	3	0	0	0	0	0	2	14	18	21	23	26	27	25	19	14	8	4	4	A	14	13	10.3	27.4
22-Feb	8	7	10	4	0	0	0	0	1	7	21	28	30	32	36	38	36	34	34	32	A	30	28	29	19.4	38.0
23-Feb	33	34	29	28	32	29	23	18	16	23	26	33	35	35	37	38	37	33	24	A	5	8	1	0	25.0	37.6
24-Feb	0	3	20	18	17	10	3	1	2	7	9	15	17	23	23	22	19	13	A	4	1	2	2	2	10.1	23.5
25-Feb	3	16	32	36	37	33	26	22	12	17	26	33	35	39	40	34	34	A	22	14	4	1	0	0	22.4	39.9
26-Feb	2	1	0	6	12	6	5	4	2	4	7	11	20	22	24	14	A	9	6	20	37	32	35	36	13.8	36.8
27-Feb	37	37	37	35	36	36	31	27	31	36	34	35	34	33	34	A	36	33	32	34	34	31	32	30	33.7	37.3
28-Feb	31	31	23	19	6	3	3	23	28	29	30	30	30	30	A	32	33	33	33	34	35	34	34	34	26.7	34.6
29-Feb	34	33	33	31	26	21	18	13	16	18	20	20	24	A	29	30	30	22	11	1	0	1	1	0	18.8	33.9
16.5 19.1 21.2 20.6 19.1 18.4 15.9 13.7 12.6 14.6 19.0 22.5 24.5 25.0 26.7 25.7 24.3 20.4 18.0 15.2 14.9 16.5 16.6 15.7																								Diurnal Average		
36.8 37.3 38.6 38.7 38.2 37.6 37.1 37.4 38.2 38.1 37.4 38.4 38.9 39.0 39.9 39.3 38.3 37.5 38.4 37.9 36.8 36.2 35.4 36.5																								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 - February 2016



Hourly Maximums

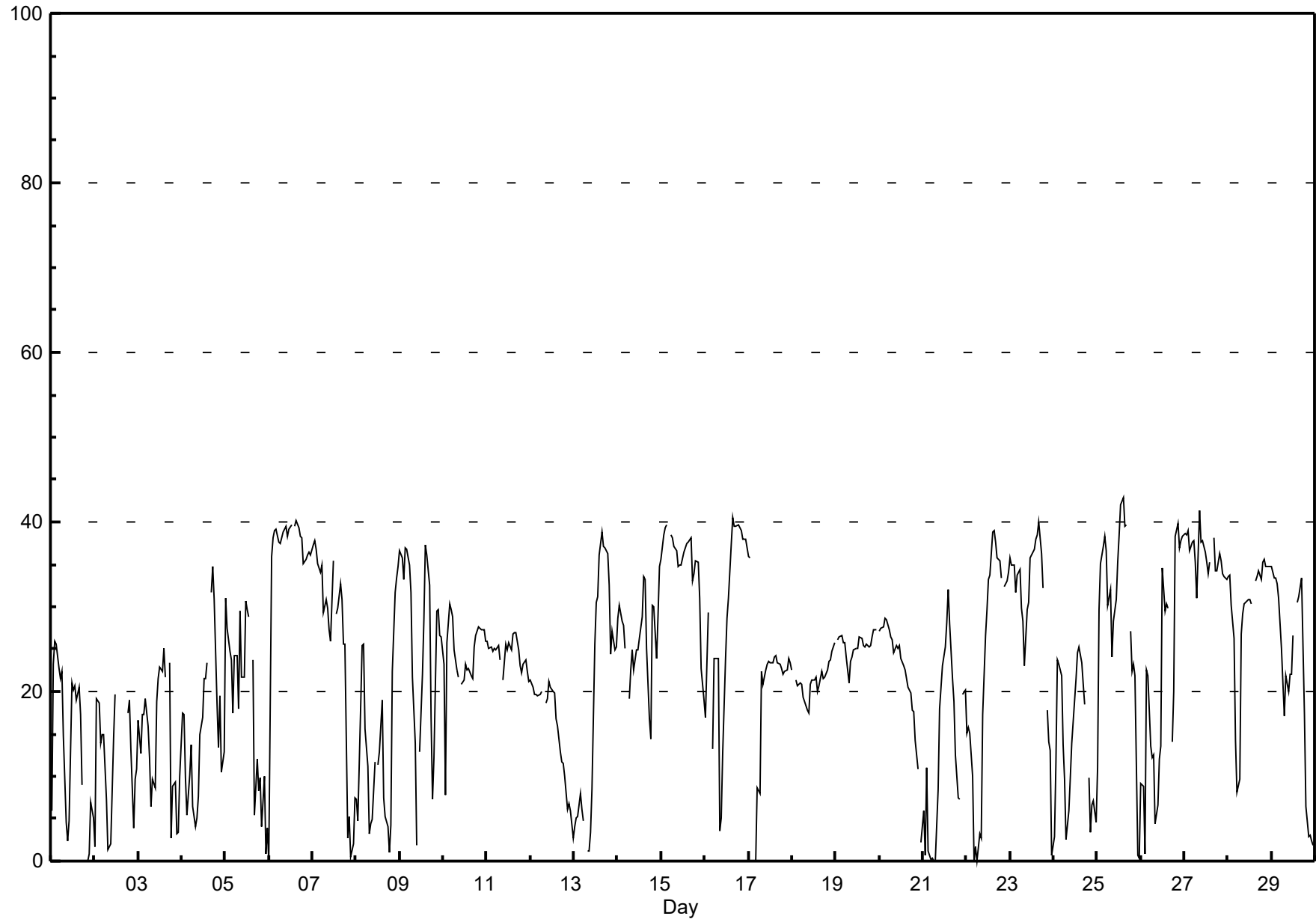
Ozone (O₃) - ppb

Henry Pirker - February 2016

Maximum Value: 42.9 ppb on Feb 25 15:00																								Hours in Service: 696		
Maximum Daily Average: 36.3 ppb on Feb 6																								Hours of Data: 662		
Minimum Value: 0 ppb on Feb 1 20:00																								Hours of Missing Data: 34		
Maximum Diurnal Average: 29.6 ppb at hour 15																								Hours of Calibration: 34		
Monthly Average: 22.73 ppb																								Percent Operational Time: 100.0		
Minimum Daily Average: 12.2 ppb on Feb 2																										
Minimum Diurnal Average: 17.6 ppb at hour 9																										
Percentiles: P ₁ = 0.0 P ₁₀ = 5.1 Q ₁ = 14.9 Median = 23.7 Q ₃ = 31.7 P ₉₀ = 37.0 P ₉₉ = 39.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	6	23	26	26	23	21	22	15	5	2	5	21	20	21	19	20	17	9	A	0	0	1	7	5	13.7	25.9
2-Feb	2	19	19	14	15	15	7	1	2	2	15	20	C	C	C	C	28	A	17	19	13	4	10	11	12.2	27.9
3-Feb	17	13	17	17	19	16	12	6	10	9	19	22	23	22	25	22	A	23	3	9	9	3	3	10	14.3	25.2
4-Feb	17	17	10	5	10	14	6	4	5	8	15	17	22	21	23	A	32	35	31	18	13	20	11	13	16.0	34.7
5-Feb	31	28	25	24	17	24	24	18	30	22	22	31	30	29	A	24	5	12	8	10	4	10	1	4	18.8	31.0
6-Feb	0	36	38	39	39	38	37	38	39	40	38	39	40	A	40	40	39	38	38	35	36	36	36	36	36.3	40.2
7-Feb	37	38	37	35	34	35	29	31	30	27	26	35	A	29	30	33	31	26	26	3	5	1	2	8	25.5	37.8
8-Feb	7	5	18	25	26	16	11	3	4	5	12	A	11	13	19	7	5	4	1	4	22	32	33	35	13.9	34.7
9-Feb	37	36	33	37	37	35	32	22	14	2	A	13	22	28	37	36	33	17	7	12	29	30	27	26	26.2	37.3
10-Feb	23	8	26	30	30	29	25	23	22	A	21	21	23	22	23	22	21	25	27	28	27	27	27	26	24.2	30.4
11-Feb	26	25	25	25	25	25	25	24	A	21	26	25	26	25	27	27	27	25	23	22	23	24	22	21	24.5	27.0
12-Feb	21	20	20	20	19	20	20	A	19	19	21	21	20	20	17	16	13	12	11	10	6	7	6	3	15.6	21.3
13-Feb	4	5	5	8	6	5	A	1	1	3	9	26	30	31	36	39	37	37	36	33	24	27	25	25	19.8	38.8
14-Feb	29	30	28	28	25	A	19	23	25	23	25	25	26	29	33	33	25	17	14	30	30	24	29	35	26.3	34.7
15-Feb	36	39	39	40	A	38	38	37	37	35	35	35	36	37	37	38	38	33	34	35	35	31	23	19	35.0	39.6
16-Feb	17	23	29	A	13	24	24	24	4	5	13	24	29	31	37	41	40	39	40	39	39	38	38	37	28.2	40.5
17-Feb	36	36	A	0	0	9	8	22	21	23	23	24	23	23	24	24	23	23	23	22	22	23	24	23	20.9	35.9
18-Feb	23	A	21	21	21	21	19	19	18	17	21	21	21	22	20	21	22	22	22	23	24	24	25	26	21.4	25.8
19-Feb	A	26	26	27	26	26	24	21	24	24	25	25	25	27	26	25	25	26	25	25	26	27	27	A	25.4	27.3
20-Feb	27	27	28	29	28	27	26	26	25	26	25	25	24	23	23	21	21	20	18	18	14	11	A	2	22.3	28.6
21-Feb	6	1	11	1	0	0	0	0	8	18	20	23	25	28	32	28	21	19	12	8	7	A	20	20	13.5	32.1
22-Feb	15	16	15	10	0	2	0	3	3	17	27	30	33	34	39	39	38	36	35	33	A	32	33	34	22.8	39.0
23-Feb	36	35	35	32	34	34	30	28	23	30	31	36	36	37	38	39	40	36	32	A	18	14	13	1	29.8	40.0
24-Feb	3	12	24	23	22	14	10	3	6	10	14	16	22	25	25	23	21	19	A	10	3	7	7	5	14.0	25.2
25-Feb	11	30	35	37	38	37	30	32	24	28	31	35	39	42	43	39	40	A	27	22	23	22	1	0	29.0	42.9
26-Feb	9	9	1	23	22	14	12	12	4	7	12	14	35	30	30	30	A	14	20	38	40	37	38	38	21.2	39.8
27-Feb	39	38	39	37	38	38	35	31	41	38	38	36	35	34	35	A	38	34	34	36	35	34	34	33	36.1	41.4
28-Feb	34	34	30	26	14	8	10	27	29	30	31	31	31	30	A	33	34	34	33	35	36	35	35	35	29.3	35.5
29-Feb	35	33	33	33	31	25	21	17	22	20	22	22	27	A	31	31	33	25	17	6	3	3	2	2	21.5	34.8
20.8 23.6 24.8 23.9 21.9 21.7 20.0 18.3 17.6 18.2 22.1 25.4 27.2 27.4 29.6 28.9 27.7 24.4 22.8 20.9 20.4 20.8 19.9 19.0																								Diurnal Average		
38.6 38.5 39.4 39.6 39.2 38.4 38.1 38.2 41.4 39.5 38.3 39.2 39.7 42.0 42.9 40.5 40.0 39.5 39.6 39.4 39.8 38.0 38.0 38.3																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

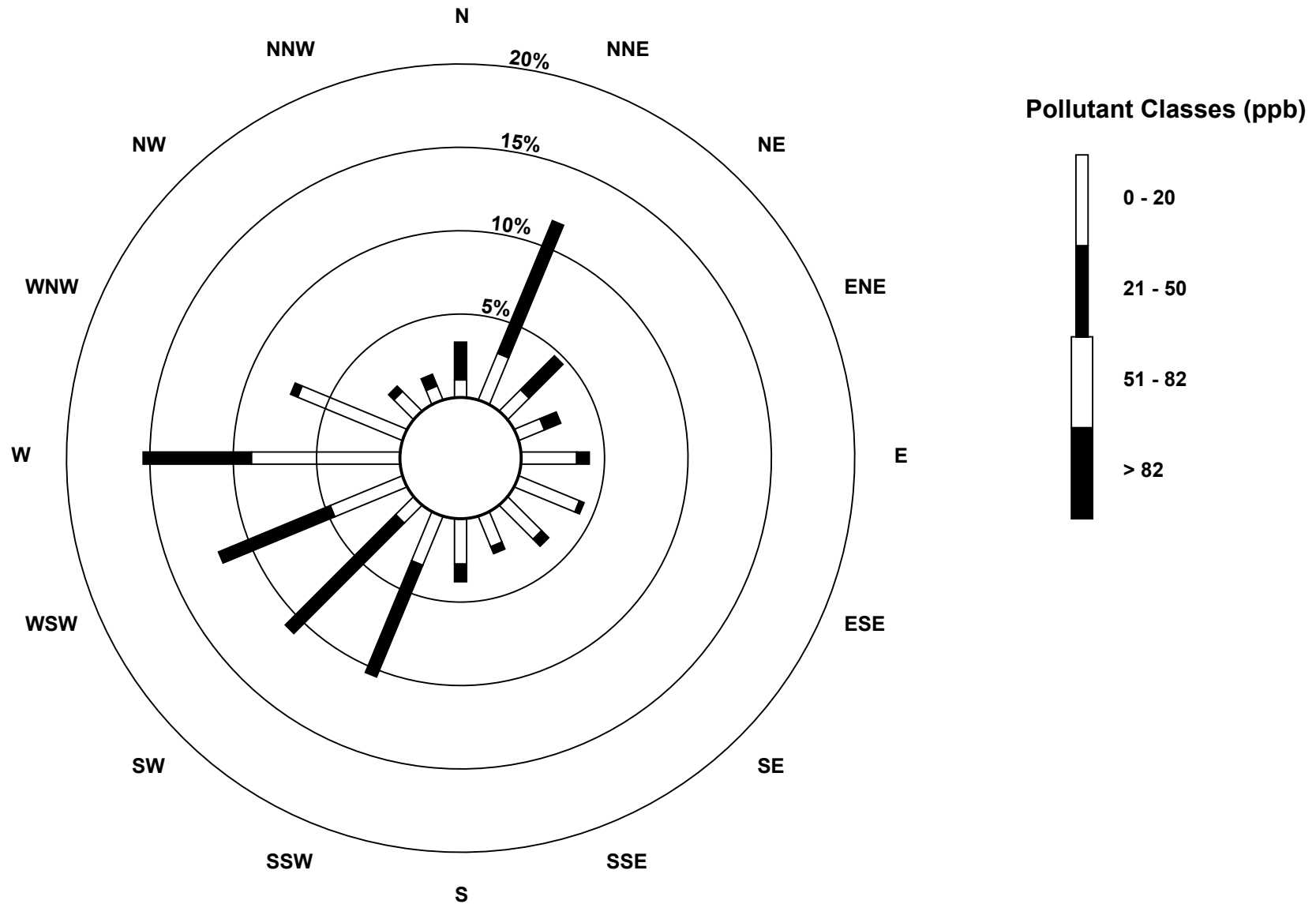
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - February 2016



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - February 2016



Eight Hour Running Averages

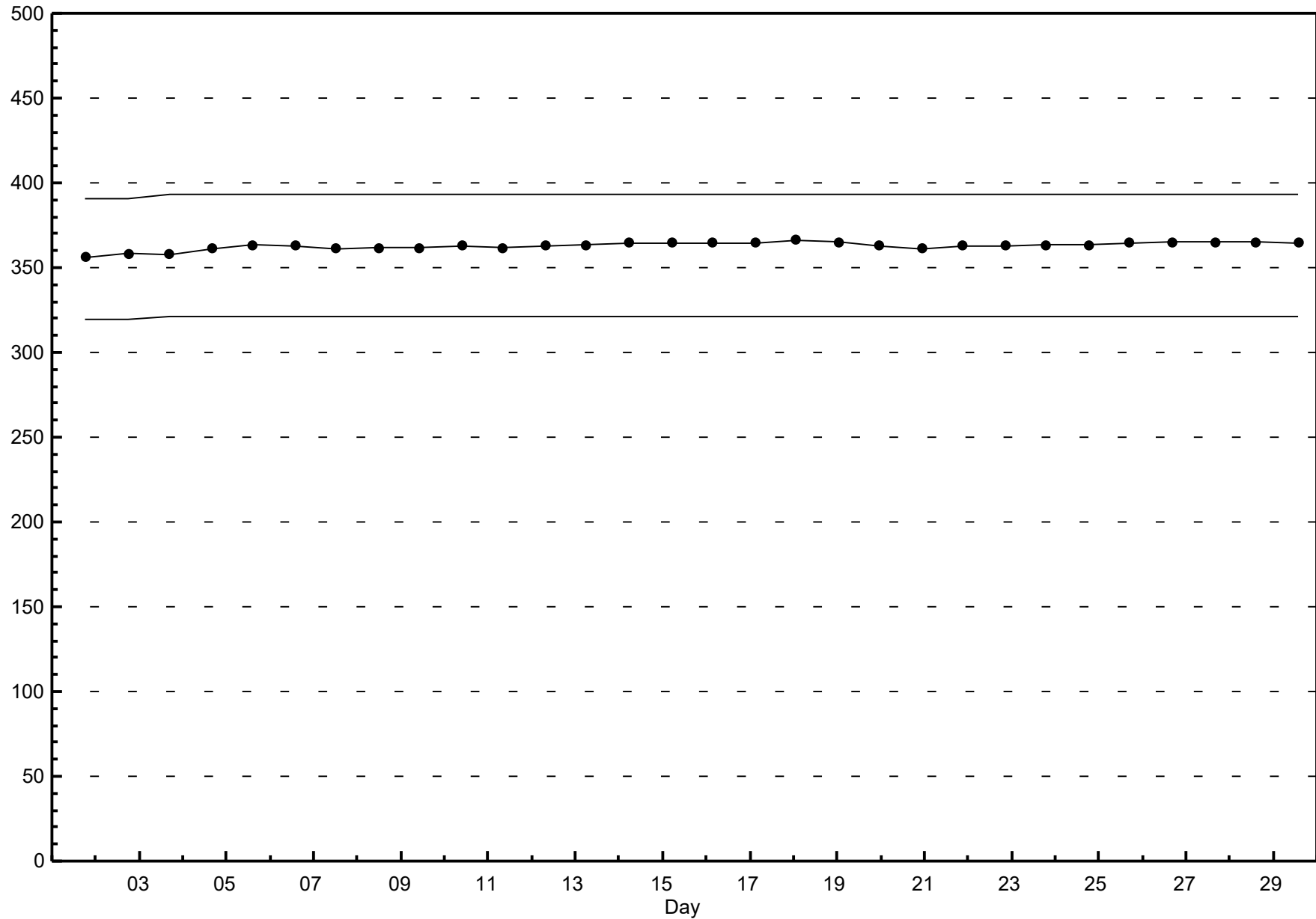
Ozone (O₃) - ppb

Henry Pirker - February 2016

Maximum Value: 38.4 ppb on Feb 6 16:00																								Hours in Service: 696	
Minimum Value: 0.3 ppb on Feb 21 09:00																								Hours of Data: 688	
Percentiles: P ₁ = 1.2 P ₁₀ = 5.5 Q ₁ = 10.8 Median = 19.8 Q ₃ = 25.2 P ₉₀ = 33.6 P ₉₉ = 37.8																								Hours of Missing Data: 8	
																								Hours of Calibration: 8	
																								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-Feb	16	14	14	15	15	15	16	16	16	14	12	10	10	10	10	11	12	13	14	12	9	7	5	3	15.9
2-Feb	1	2	4	5	7	8	8	8	8	6	6	7	6	5	N	N	N	N	N	N	N	N	7	6	8.3
3-Feb	5	6	6	6	8	9	10	9	8	8	8	10	10	11	13	14	16	16	14	11	9	6	4	2	16.0
4-Feb	3	4	4	4	5	5	6	5	4	4	4	6	8	10	12	13	17	20	21	21	19	17	14	13	21.5
5-Feb	12	11	10	12	13	14	16	17	16	15	15	15	17	18	18	18	17	16	13	10	6	3	3	1	18.0
6-Feb	1	3	8	12	17	22	26	31	36	37	38	38	38	38	38	38	38	38	38	37	36	36	36	35	38.4
7-Feb	35	35	34	35	34	34	33	32	29	26	24	24	23	22	22	23	25	26	24	19	17	14	10	7	34.8
8-Feb	4	1	2	5	7	9	10	10	9	10	9	8	6	6	6	7	7	7	6	5	5	7	10	13	13.0
9-Feb	17	21	25	29	32	33	31	29	25	21	19	15	13	11	13	16	19	20	17	17	17	17	16	15	32.8
10-Feb	14	14	16	19	21	21	20	20	21	23	24	23	22	21	21	21	21	21	22	22	23	23	24	24	24.3
11-Feb	25	25	25	24	24	23	23	22	22	21	21	21	21	21	22	22	23	24	24	23	23	23	22	22	24.8
12-Feb	21	21	20	20	20	20	19	19	19	18	19	19	18	18	18	17	16	15	14	12	10	9	7	5	21.2
13-Feb	4	4	3	3	3	3	3	4	3	3	3	5	8	11	14	19	23	27	30	31	29	28	26	24	30.8
14-Feb	22	22	21	22	23	23	22	22	22	21	20	20	21	21	23	25	24	23	21	19	19	18	18	18	24.7
15-Feb	20	23	27	31	32	34	36	37	37	36	35	34	34	34	34	34	34	34	34	34	33	32	30	26	36.9
16-Feb	23	21	21	19	16	15	15	15	15	13	10	11	13	14	16	19	24	28	32	34	36	37	37	37	37.2
17-Feb	35	34	33	28	23	18	13	10	8	7	9	12	15	17	20	22	22	22	22	22	22	22	22	22	35.4
18-Feb	22	22	22	21	21	21	20	20	19	18	18	18	18	18	18	19	19	20	20	20	21	21	22	22	22.2
19-Feb	22	23	24	25	25	25	25	24	24	23	23	23	23	23	23	24	24	24	24	24	24	24	25	25	25.1
20-Feb	25	25	26	26	27	26	26	26	26	25	25	24	24	23	23	22	22	21	19	18	17	14	13	10	26.6
21-Feb	8	6	5	3	1	1	0	0	0	2	4	7	10	13	16	20	22	22	20	18	16	15	13	11	21.7
22-Feb	9	8	8	8	8	7	5	3	3	3	4	7	11	15	19	24	28	32	33	34	34	34	33	32	34.4
23-Feb	31	31	31	30	30	30	29	28	26	25	24	25	25	26	28	30	33	34	34	34	30	26	21	15	34.2
24-Feb	10	6	5	7	8	9	9	9	9	10	8	8	8	10	12	15	17	18	19	17	15	12	9	6	19.0
25-Feb	4	4	8	12	16	20	23	26	27	27	26	26	26	26	28	30	32	34	34	31	27	21	16	11	34.5
26-Feb	6	6	3	2	3	4	4	5	5	5	6	6	7	10	12	13	15	16	15	17	19	20	22	25	25.0
27-Feb	26	30	34	36	36	36	36	35	34	34	33	33	33	33	33	34	35	34	34	34	34	33	33	33	36.3
28-Feb	32	32	31	29	25	22	18	17	17	17	18	19	22	25	29	30	30	31	31	32	33	33	33	34	33.5
29-Feb	34	34	34	33	32	31	29	26	24	22	20	19	19	18	20	23	25	25	24	21	18	16	12	8	33.7
35.4 34.8 34.4 35.9 35.8 36.3 36.0 36.9 36.9 37.5 37.7 37.7 37.8 37.9 38.1 38.4 38.1 37.8 37.8 37.0 36.1 36.9 37.2 36.6																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Henry Pirker - February 2016



Hourly Averages

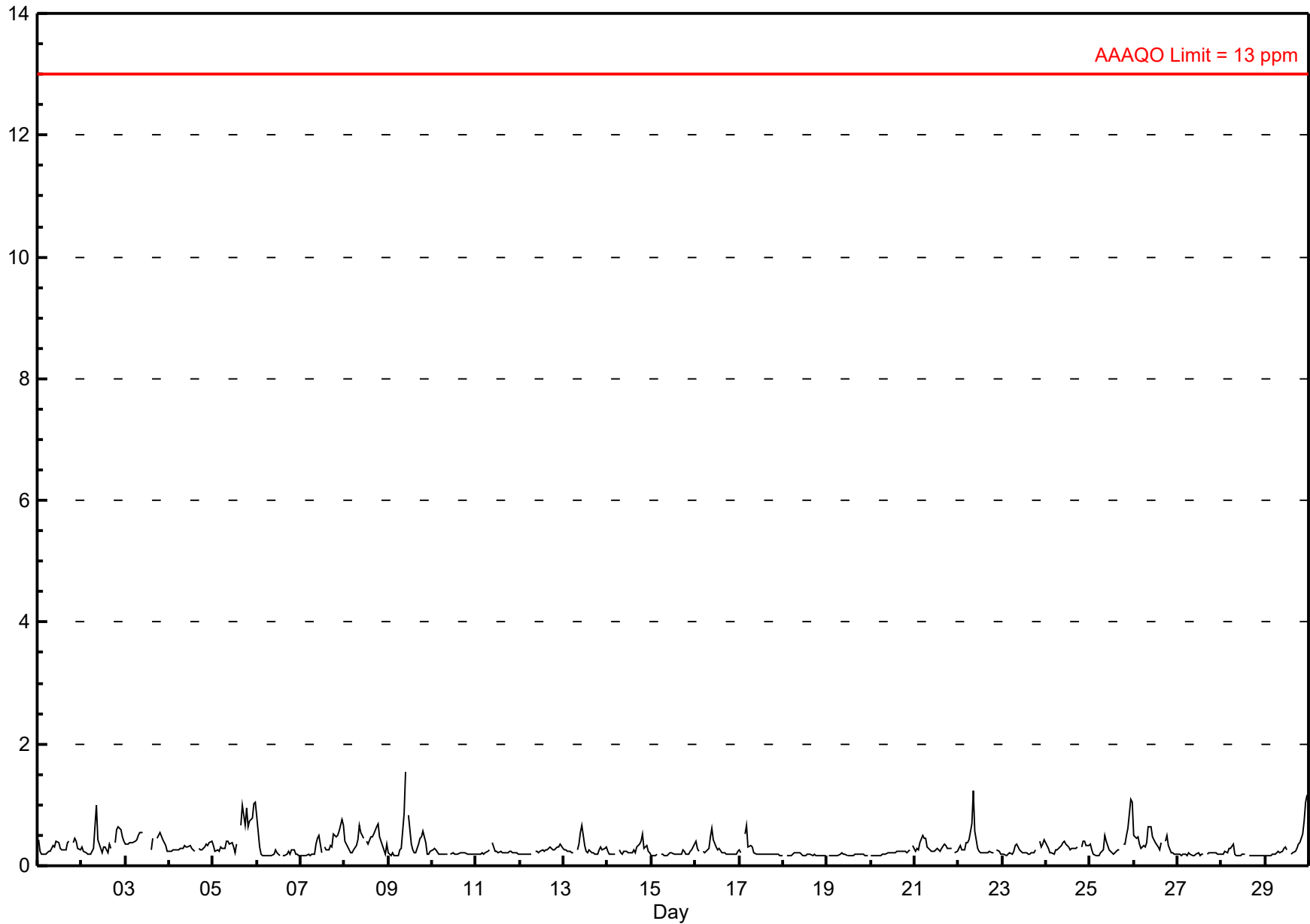
Carbon Monoxide (CO) - ppm

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.54 ppm on Feb 9 10:00 Maximum Daily Average: 0.51 ppm on Feb 5																				Hours in Service: 696 Hours of Data: 662 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0							
Minimum Value: 0.2 ppm on Feb 7 02:00 Minimum Daily Average: 0.18 ppm on Feb 19 Maximum Diurnal Average: 0.39 ppm at hour 9 Minimum Diurnal Average: 0.22 ppm at hour 3 Monthly Average: 0.290 ppm Percentiles: P ₁ = 0.16 P ₁₀ = 0.17 Q ₁ = 0.19 Median = 0.23 Q ₃ = 0.33 P ₉₀ = 0.47 P ₉₉ = 1.03																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	A	0.4	0.4	0.4	0.3	0.3	0.30	0.45	
2-Feb	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.6	1.0	0.4	0.3	0.2	0.3	0.3	0.2	0.3	0.3	A	0.4	0.6	0.6	0.6	0.5	0.4	0.38	1.00	
3-Feb	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	C	C	C	C	0.3	0.4	A	0.4	0.5	0.6	0.4	0.4	0.3	0.2	0.41	0.56	
4-Feb	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	A	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.4	0.29	0.40	
5-Feb	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.2	0.4	A	0.7	1.0	0.7	1.0	0.6	0.7	0.8	1.0	1.0	0.51	1.03	
6-Feb	0.8	0.3	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	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.22	0.81	
7-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.2	A	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.6	0.7	0.7	0.34	0.75	
8-Feb	0.4	0.4	0.3	0.2	0.2	0.3	0.3	0.4	0.7	0.6	0.5	A	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.5	0.4	0.3	0.2	0.4	0.41	0.70	
9-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.9	1.5	A	0.8	0.4	0.3	0.2	0.2	0.3	0.4	0.5	0.6	0.4	0.2	0.2	0.2	0.38	1.54	
10-Feb	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.29	
11-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.38	
12-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.25	0.35	
13-Feb	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.4	0.5	0.7	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.29	0.67	
14-Feb	0.2	0.2	0.2	0.2	0.2	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.4	0.5	0.3	0.3	0.2	0.2	0.26	0.52	
15-Feb	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.21	0.35	
16-Feb	0.4	0.3	0.2	A	0.2	0.2	0.2	0.3	0.5	0.6	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	0.27	0.62	
17-Feb	0.3	0.2	A	0.5	0.7	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.66	
18-Feb	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.22	
19-Feb	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.18	0.21	
20-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.21	0.34	
21-Feb	0.2	0.3	0.2	0.4	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	A	0.2	0.2	0.30	0.50	
22-Feb	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.7	1.2	0.6	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.2	0.2	0.34	1.24	
23-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.4	0.3	0.4	0.4	0.25	0.43	
24-Feb	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	A	0.3	0.4	0.4	0.3	0.3	0.30	0.41	
25-Feb	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	A	0.4	0.4	0.5	0.6	1.1	1.0	0.36	1.08	
26-Feb	0.5	0.5	0.5	0.4	0.3	0.3	0.3	0.4	0.6	0.6	0.5	0.4	0.4	0.3	0.3	0.4	A	A	0.4	0.5	0.3	0.2	0.2	0.2	0.38	0.64	
27-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.21	
28-Feb	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.37	
29-Feb	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	A	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.7	1.0	1.2	0.34	1.17	
0.29 0.24 0.22 0.23 0.24 0.24 0.26 0.30 0.39 0.38 0.30 0.27 0.24 0.24 0.23 0.26 0.28 0.30 0.33 0.33 0.33 0.33 0.32 0.35 0.36																										Diurnal Average	
0.81 0.46 0.48 0.53 0.66 0.45 0.44 0.69 1.24 1.54 0.67 0.84 0.41 0.36 0.47 0.65 0.99 0.65 0.96 0.63 0.73 0.78 1.08 1.17																										Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na																											

Hourly Averages

Carbon Monoxide (CO) - ppm
Henry Pirker - February 2016



Hourly Maximums

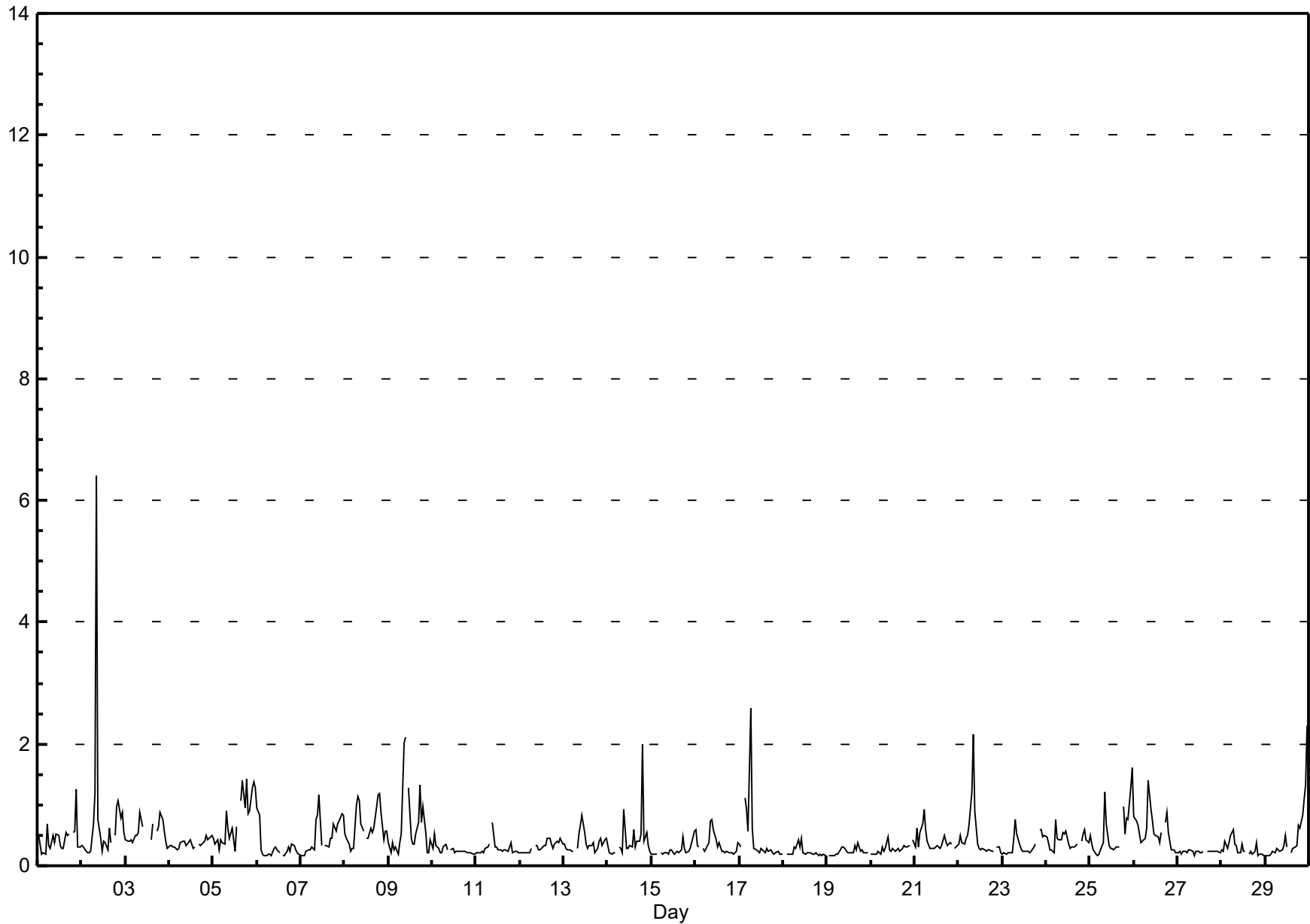
Carbon Monoxide (CO) - ppm

Henry Pirker - February 2016

Maximum Value: 6.40 ppm on Feb 2 09:00																				Maximum Daily Average: 0.78 ppm on Feb 2					Hours in Service: 696		
Minimum Value: 0.2 ppm on Feb 6 05:00																				Minimum Daily Average: 0.23 ppm on Feb 18					Hours of Data: 662		
Maximum Diurnal Average: 0.83 ppm at hour 9																				Minimum Diurnal Average: 0.28 ppm at hour 3					Hours of Missing Data: 34		
Monthly Average: 0.419 ppm																				Percentiles: P ₁ = 0.17 P ₁₀ = 0.20 Q ₁ = 0.23 Median = 0.31 Q ₃ = 0.46 P ₉₀ = 0.75 P ₉₉ = 1.98					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-Feb	0.5	0.4	0.2	0.2	0.2	0.7	0.3	0.3	0.5	0.4	0.5	0.5	0.3	0.3	0.3	0.5	0.5	0.5	A	0.5	0.5	0.6	1.3	0.3	0.3	0.44	1.26
2-Feb	0.3	0.3	0.2	0.2	0.2	0.2	0.7	1.2	6.4	0.8	0.4	0.2	0.4	0.4	0.3	0.6	0.4	A	0.5	1.0	1.1	0.8	0.9	0.6	0.6	0.78	6.40
3-Feb	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.9	0.6	C	C	C	C	0.4	0.7	A	0.6	0.6	0.9	0.8	0.6	0.4	0.3	0.55	0.89	
4-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	A	0.4	0.3	0.3	0.4	0.5	0.4	0.5	0.5	0.37	0.50	
5-Feb	0.5	0.3	0.4	0.3	0.4	0.4	0.4	0.9	0.6	0.5	0.6	0.4	0.2	0.6	A	1.1	1.4	1.0	1.4	0.9	0.9	1.3	1.4	1.3	0.74	1.43	
6-Feb	1.0	0.8	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	A	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.29	0.96	
7-Feb	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.8	0.8	1.2	0.3	A	0.3	0.3	0.3	0.5	0.4	0.7	0.6	0.7	0.7	0.9	0.8	0.49	1.16	
8-Feb	0.5	0.5	0.3	0.2	0.3	0.3	1.0	1.1	1.1	0.7	0.6	A	0.5	0.4	0.6	0.5	0.6	1.0	1.2	1.2	0.9	0.4	0.6	0.6	0.65	1.18	
9-Feb	0.4	0.2	0.4	0.3	0.3	0.2	0.4	0.5	2.0	2.1	A	1.3	0.5	0.3	0.3	0.5	0.7	1.3	0.7	1.0	0.5	0.2	0.2	0.4	0.64	2.11	
10-Feb	0.3	0.5	0.3	0.3	0.2	0.2	0.3	0.4	0.3	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26	0.52	
11-Feb	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	A	0.7	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.28	0.72	
12-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.31	0.45	
13-Feb	0.3	0.3	0.3	0.3	0.2	0.2	A	0.3	0.5	0.7	0.8	0.5	0.4	0.3	0.3	0.3	0.4	0.2	0.3	0.4	0.4	0.3	0.4	0.4	0.38	0.84	
14-Feb	0.3	0.2	0.2	0.2	0.2	A	0.3	0.3	0.2	0.9	0.3	0.3	0.3	0.3	0.6	0.3	0.4	0.4	0.5	2.0	0.4	0.5	0.3	0.2	0.43	1.99	
15-Feb	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.5	0.3	0.2	0.2	0.3	0.4	0.6	0.25	0.56	
16-Feb	0.6	0.3	0.3	A	0.3	0.2	0.3	0.4	0.7	0.8	0.6	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.35	0.76	
17-Feb	0.4	0.3	A	1.1	0.9	0.6	2.6	0.6	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.45	2.59	
18-Feb	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.45	
19-Feb	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.2	0.3	0.2	0.2	0.2	A	0.23	0.38	
20-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.5	0.3	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	A	0.4	0.27	0.47	
21-Feb	0.3	0.6	0.3	0.5	0.7	0.9	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.4	0.3	A	0.3	0.3	0.41	0.92	
22-Feb	0.4	0.5	0.4	0.4	0.5	0.5	0.7	1.2	2.2	0.9	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	A	0.3	0.3	0.2	0.48	2.17	
23-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.7	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.6	0.6	0.5	0.5	0.34	0.75	
24-Feb	0.5	0.4	0.3	0.3	0.2	0.8	0.4	0.4	0.4	0.5	0.5	0.6	0.4	0.3	0.3	0.3	0.3	0.4	A	0.4	0.5	0.6	0.4	0.4	0.42	0.76	
25-Feb	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.4	1.2	0.7	0.3	0.3	0.3	0.3	0.3	0.3	0.3	A	1.0	0.5	0.8	0.8	1.3	1.6	0.53	1.62	
26-Feb	0.8	0.7	0.7	0.5	0.4	0.4	0.4	0.6	1.4	0.9	0.7	0.5	0.5	0.5	0.4	0.5	A	0.7	0.9	0.5	0.3	0.3	0.3	0.2	0.57	1.41	
27-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23	0.26	
28-Feb	0.3	0.2	0.4	0.3	0.4	0.5	0.6	0.4	0.3	0.2	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.28	0.59	
29-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.5	0.3	A	0.2	0.3	0.3	0.3	0.7	0.6	0.8	1.1	1.3	2.3	0.49	2.31	
0.37 0.34 0.28 0.29 0.30 0.34 0.47 0.48 0.83 0.57 0.42 0.37 0.30 0.31 0.30 0.37 0.38 0.43 0.47 0.53 0.47 0.47 0.46 0.50																								Diurnal Average			
0.96 0.83 0.68 1.12 0.92 0.92 2.59 1.20 6.40 2.11 1.16 1.29 0.49 0.63 0.62 1.08 1.40 1.32 1.43 1.99 1.06 1.29 1.38 2.31																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											

Hourly Maximums

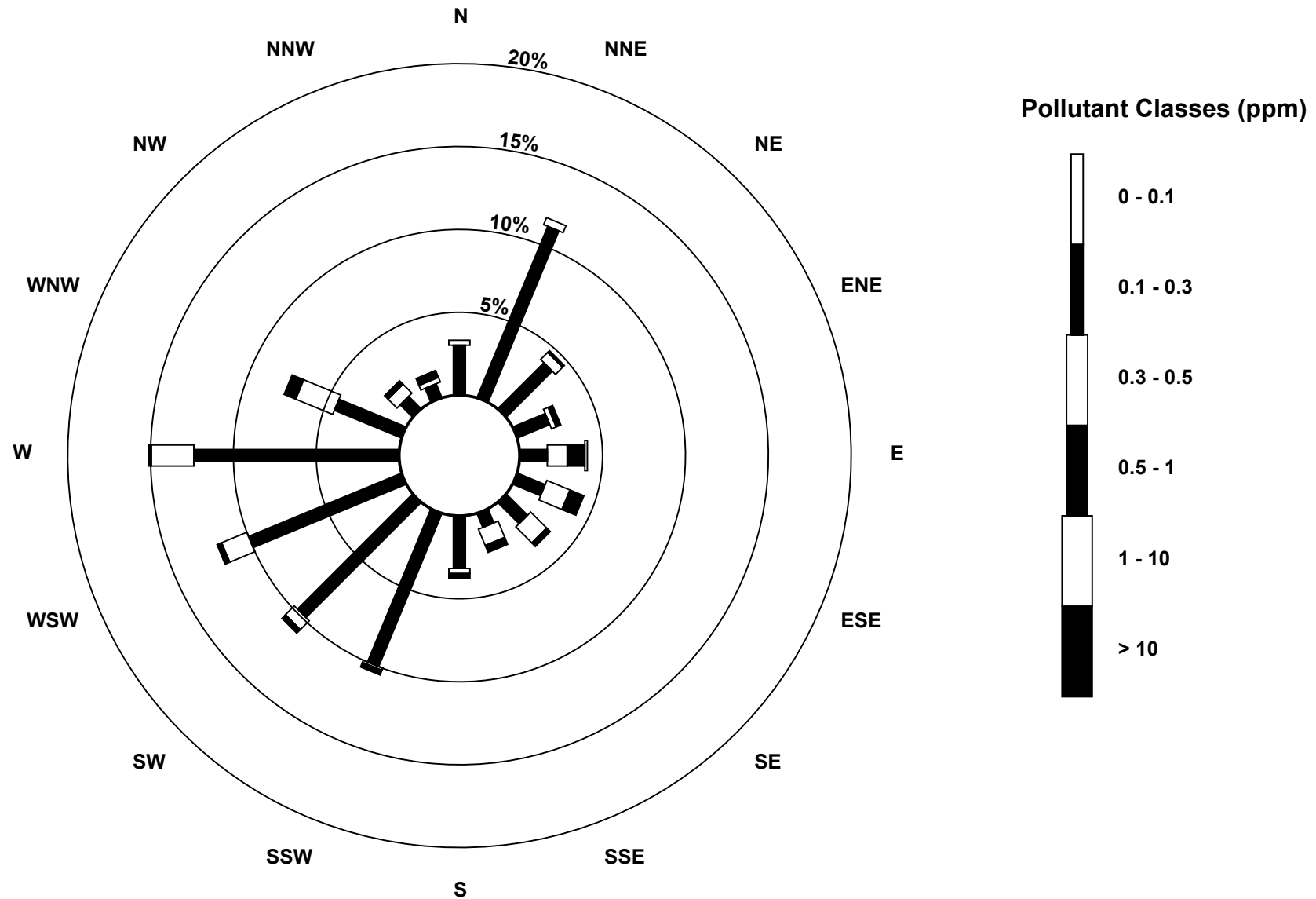
Carbon Monoxide (CO) - ppm
Henry Pirker - February 2016



Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2016



Eight Hour Running Averages

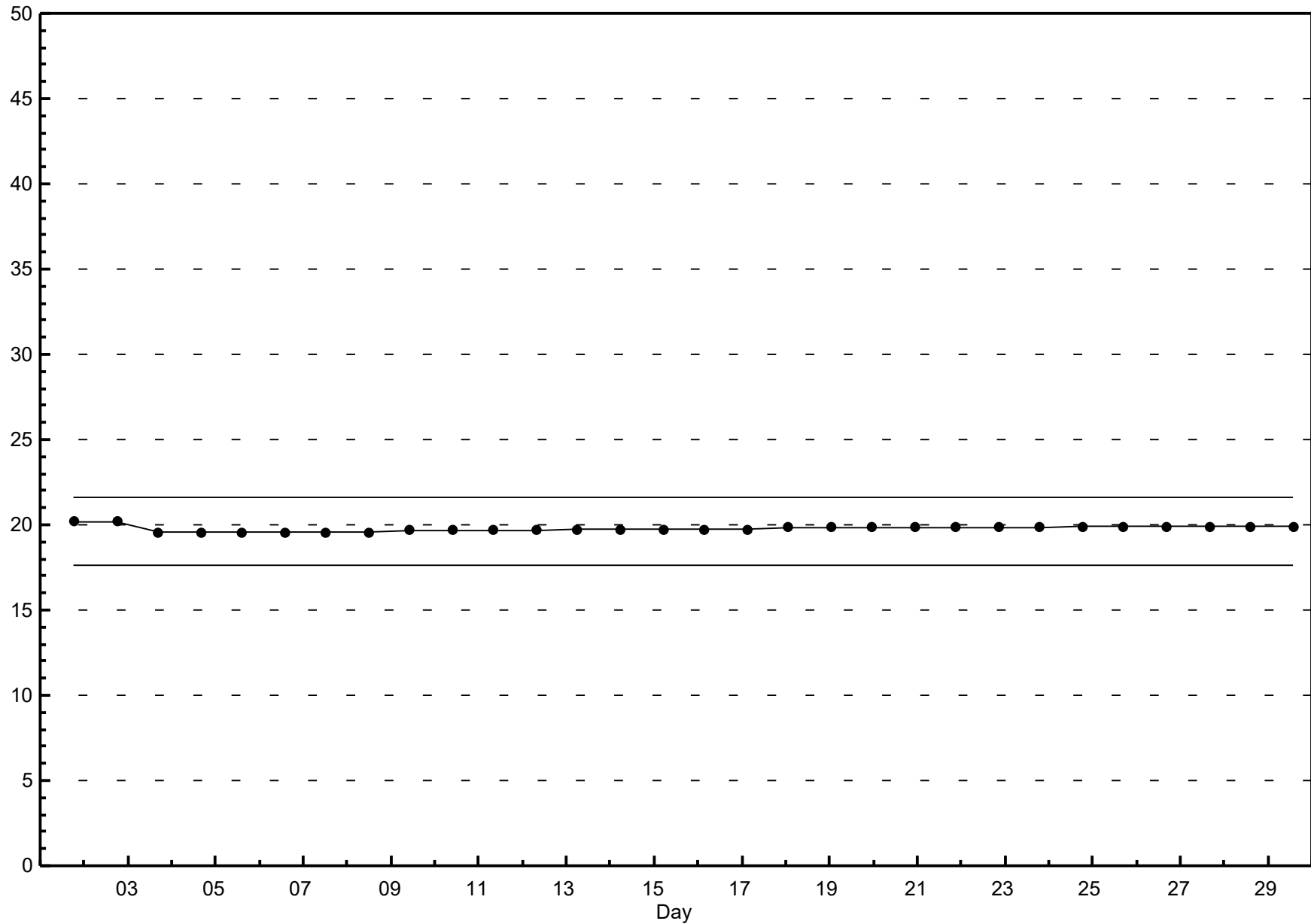
Carbon Monoxide (CO) - ppm

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 0.85 ppm on Feb 6 00:00																								Hours in Service: 696 Hours of Data: 688		
Minimum Value: 0.16 ppm on Feb 19 05:00																								Hours of Missing Data: 8 Hours of Calibration: 8		
Percentiles: P ₁ = 0.16 P ₁₀ = 0.18 Q ₁ = 0.20 Median = 0.26 Q ₃ = 0.33 P ₉₀ = 0.44 P ₉₉ = 0.68																								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-Feb	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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.36
2-Feb	0.3	0.3	0.3	0.3	0.3	0.2	0.2	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	0.48
3-Feb	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	N	N	N	N	N	N	N	N	0.4	0.4	0.4	0.4	0.4	0.49
4-Feb	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	0.39
5-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.85
6-Feb	0.8	0.8	0.7	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.83
7-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.52
8-Feb	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.53
9-Feb	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.63
10-Feb	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.34
11-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.26
12-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29
13-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.37
14-Feb	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	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.33
15-Feb	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32
16-Feb	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	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.36
17-Feb	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.38
18-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
19-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
20-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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
21-Feb	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.36
22-Feb	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.53
23-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.31
24-Feb	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	0.3	0.3	0.34
25-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.60
26-Feb	0.6	0.6	0.6	0.6	0.6	0.6	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	0.4	0.3	0.3	0.3	0.3	0.3	0.64
27-Feb	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
28-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
29-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	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	0.4	0.5	0.6	0.6	0.59
0.83 0.78 0.69 0.63 0.60 0.57 0.47 0.40 0.50 0.53 0.53 0.59 0.61 0.63 0.62 0.61 0.54 0.51 0.59 0.64 0.71 0.77 0.80 0.85																										
Diurnal Maximums																										
N - Not Valid																										
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																										

Span Responses

Carbon Monoxide (CO)
Henry Pirker - February 2016



Hourly Averages

Total Hydrocarbons (THC) - ppm

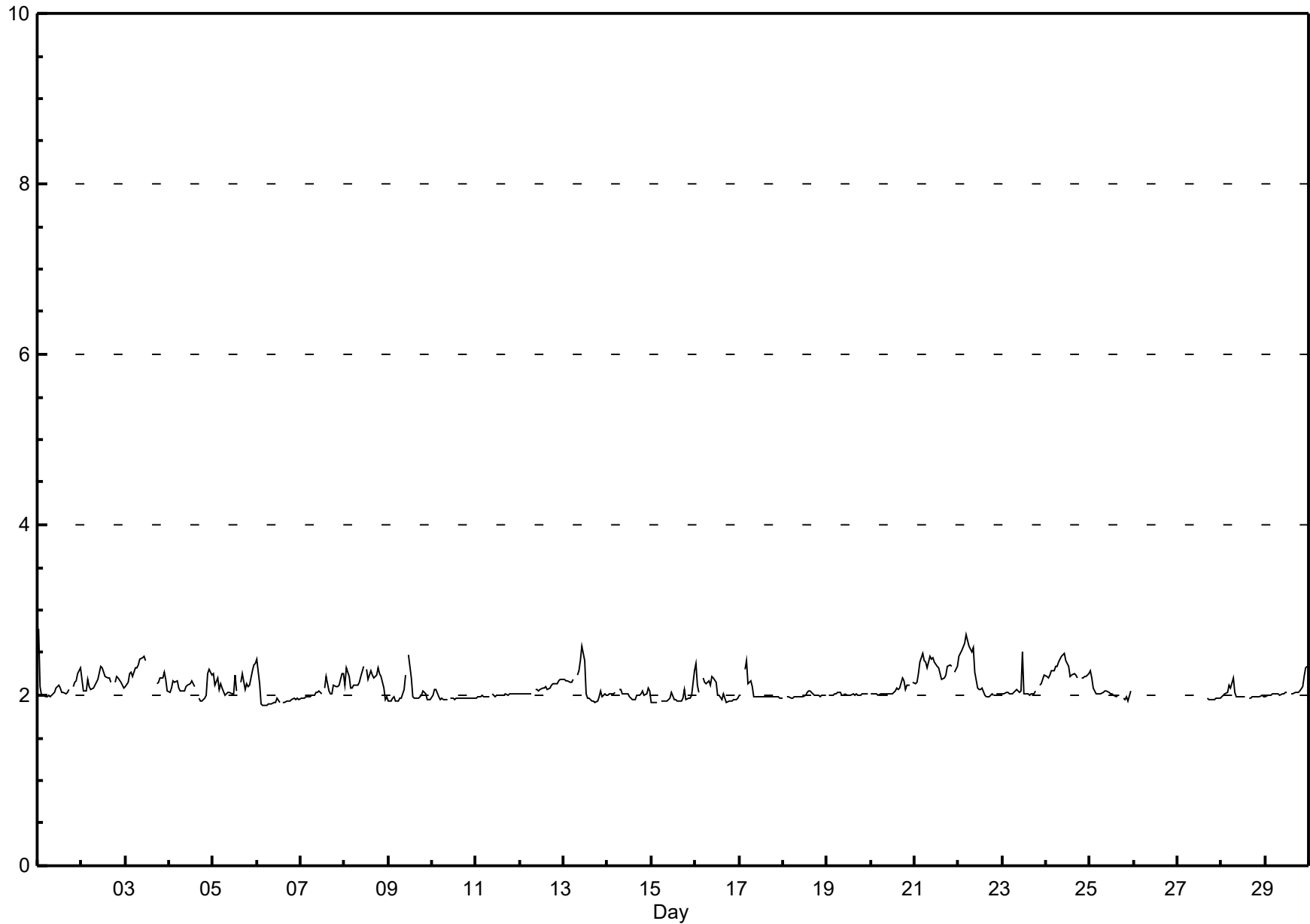
Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.78 ppm on Feb 1 01:00 Maximum Daily Average: 2.32 ppm on Feb 21																				Hours in Service: 696 Hours of Data: 624 Hours of Missing Data: 72 Hours of Calibration: 33 Percent Operational Time: 94.4						
Minimum Value: 1.9 ppm on Feb 6 05:00 Minimum Daily Average: 1.95 ppm on Feb 6 Maximum Diurnal Average: 2.13 ppm at hour 12 Minimum Diurnal Average: 2.03 ppm at hour 18 Monthly Average: 2.082 ppm Percentiles: P ₁ = 1.90 P ₁₀ = 1.96 Q ₁ = 1.98 Median = 2.02 Q ₃ = 2.15 P ₉₀ = 2.29 P ₉₉ = 2.57																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	2.8	2.1	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	2.0	2.1	A	2.1	2.1	2.2	2.3	2.3	2.10	2.78
2-Feb	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.1	2.1	2.1	2.17	2.34
3-Feb	2.1	2.2	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.4	C	C	C	C	A	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.26	2.45
4-Feb	2.0	2.1	2.2	2.1	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	A	2.0	1.9	1.9	2.0	2.0	2.3	2.3	2.2	2.10	2.31
5-Feb	2.3	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	A	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.4	2.4	2.13	2.36
6-Feb	2.4	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.95	2.42
7-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	A	2.1	2.2	2.1	2.0	2.0	2.1	2.1	2.1	2.2	2.3	2.06	2.25	
8-Feb	2.1	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	A	2.3	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.1	1.9	2.0	2.18	2.35
9-Feb	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.1	2.2	A	2.5	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.9	1.9	2.0	2.02	2.48
10-Feb	2.0	2.1	2.1	2.0	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	2.0	2.0	2.0	2.0	2.0	2.0	1.97	2.07
11-Feb	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	2.0	2.0	2.0	2.00	2.02
12-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	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	2.2	2.2	2.2	2.08	2.19
13-Feb	2.2	2.2	2.2	2.1	2.2	2.2	A	2.2	2.3	2.4	2.6	2.4	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.11	2.57
14-Feb	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.01	2.08	
15-Feb	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	1.9	1.9	1.9	2.0	2.1	1.9	2.0	2.0	2.3	1.97	2.29	
16-Feb	2.4	2.1	2.0	A	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.06	2.37	
17-Feb	2.0	2.0	A	2.3	2.4	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.40	
18-Feb	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	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.05	
19-Feb	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.03	
20-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	A	2.1	2.06	2.20
21-Feb	2.1	2.2	2.3	2.4	2.5	2.4	2.4	2.3	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.4	2.3	A	2.3	2.3	2.32	2.49
22-Feb	2.5	2.5	2.5	2.6	2.7	2.7	2.6	2.5	2.6	2.3	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.25	2.71
23-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.2	2.2	2.07	2.51
24-Feb	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.5	2.5	2.5	2.4	2.3	2.2	2.2	2.3	2.2	2.2	A	2.2	2.2	2.2	2.2	2.3	2.29	2.49
25-Feb	2.3	2.2	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	2.0	2.0	A	2.0	1.9	2.0	1.9	2.1	N	2.03	2.29
26-Feb	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-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	1.97
28-Feb	2.0	2.0	2.0	2.0	2.1	2.1	2.2	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	2.01	2.20
29-Feb	2.0	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	2.1	2.2	2.3	2.3	2.06	2.34
																									Diurnal Average	
																									Diurnal Maximum	
C - Calibration N - Not Valid A - Automated Daily Zero Span																										

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2016



Hourly Maximums

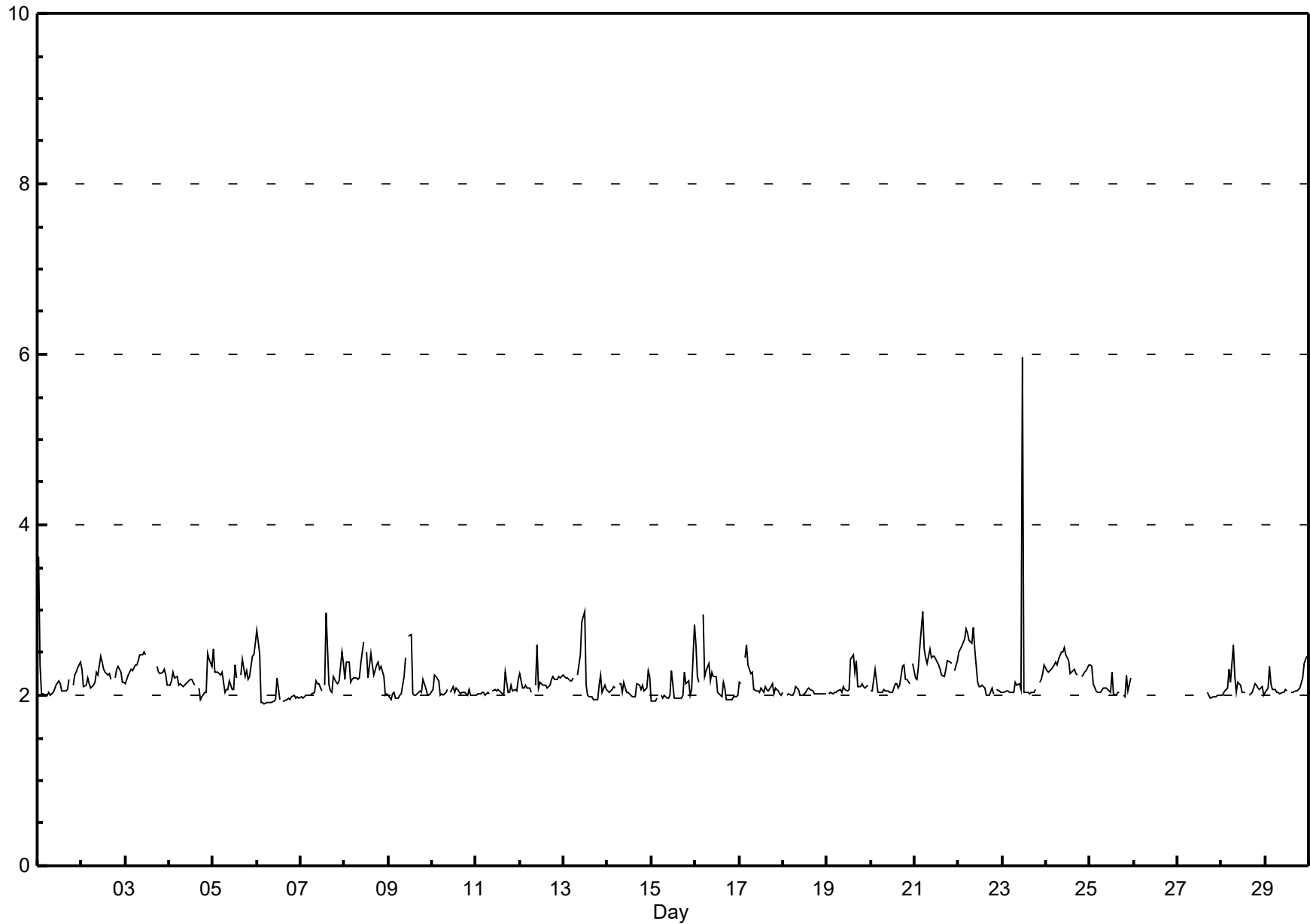
Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2016

Maximum Value: 5.96 ppm on Feb 23 12:00																				Maximum Daily Average: 2.40 ppm on Feb 21					Hours in Service: 696	
Minimum Value: 1.9 ppm on Feb 6 05:00																				Minimum Daily Average: 2.01 ppm on Feb 6					Hours of Data: 624	
Maximum Diurnal Average: 2.36 ppm at hour 12																				Minimum Diurnal Average: 2.09 ppm at hour 16					Hours of Missing Data: 72	
Monthly Average: 2.165 ppm																				Percentiles: P ₁ = 1.92 P ₁₀ = 1.99 Q ₁ = 2.03 Median = 2.10 Q ₃ = 2.24 P ₉₀ = 2.40 P ₉₉ = 2.94					Hours of Calibration: 33	
																									Percent Operational Time: 94.4	
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-Feb	3.6	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	A	2.1	2.2	2.3	2.3	2.4	2.19	3.63
2-Feb	2.3	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.3	2.2	2.5	2.4	2.3	2.3	2.2	2.3	2.2	A	2.2	2.3	2.3	2.3	2.1	2.1	2.23	2.45
3-Feb	2.1	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.5	C	C	C	C	A	2.3	2.3	2.3	2.3	2.3	2.2	2.1	2.32	2.51
4-Feb	2.1	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	A	2.1	2.0	2.0	2.0	2.0	2.5	2.4	2.3	2.16	2.49
5-Feb	2.5	2.3	2.3	2.3	2.2	2.3	2.0	2.1	2.1	2.2	2.1	2.1	2.4	2.2	A	2.2	2.4	2.2	2.3	2.2	2.2	2.5	2.5	2.6	2.26	2.61
6-Feb	2.8	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.76
7-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.1	A	2.1	3.0	2.1	2.1	2.0	2.2	2.2	2.1	2.2	2.5	2.4	2.15	2.97
8-Feb	2.2	2.4	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.6	A	2.5	2.2	2.5	2.4	2.2	2.3	2.4	2.3	2.3	2.2	2.0	2.0	2.28	2.62
9-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	A	2.7	2.7	2.0	2.0	2.0	2.0	2.1	2.0	2.2	2.1	2.0	2.0	2.0	2.11	2.72
10-Feb	2.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.1	A	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.06	2.24
11-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.3	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.05	2.27
12-Feb	2.3	2.1	2.1	2.1	2.1	2.1	2.0	A	2.1	2.6	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.16	2.59
13-Feb	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.3	2.5	2.9	3.0	2.1	2.0	2.0	2.0	2.0	1.9	2.0	2.1	2.2	2.0	2.1	2.1	2.20	2.98
14-Feb	2.0	2.0	2.1	2.1	2.1	A	2.1	2.1	2.0	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	2.3	2.2	2.08	2.28
15-Feb	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.1	2.2	2.0	2.1	2.8	2.06	2.83
16-Feb	2.6	2.2	2.2	A	3.0	2.2	2.3	2.4	2.2	2.3	2.2	2.2	2.0	2.0	2.0	2.1	2.1	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.16	2.95
17-Feb	2.2	2.1	A	2.4	2.6	2.4	2.3	2.3	2.1	2.1	2.1	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.14	2.60
18-Feb	2.0	A	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	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.10
19-Feb	A	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.4	2.5	2.3	2.4	2.1	2.1	2.1	2.1	2.1	2.1	A	2.13	2.48
20-Feb	2.1	2.0	2.3	2.2	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.3	2.4	2.2	2.2	2.1	A	2.4	2.13	2.37
21-Feb	2.2	2.2	2.3	2.6	3.0	2.5	2.4	2.4	2.5	2.4	2.5	2.4	2.4	2.4	2.3	2.2	2.2	2.3	2.4	2.4	2.4	A	2.3	2.4	2.40	2.99
22-Feb	2.5	2.5	2.6	2.7	2.8	2.7	2.6	2.6	2.8	2.5	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	A	2.1	2.1	2.0	2.31	2.79
23-Feb	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.2	2.1	2.1	2.1	6.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.2	2.2	2.3	2.3	2.26	5.96
24-Feb	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.2	A	2.2	2.2	2.3	2.3	2.3	2.34	2.56
25-Feb	2.3	2.3	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.0	2.3	2.0	2.0	2.0	2.0	A	2.0	2.0	2.2	2.1	2.2	N	2.10	2.35
26-Feb	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-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	2.03
28-Feb	2.0	2.0	2.1	2.1	2.3	2.1	2.6	2.2	2.0	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.10	2.60
29-Feb	2.0	2.1	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.4	2.4	2.5	2.12	2.45
2.25 2.17 2.16 2.16 2.21 2.15 2.15 2.16 2.17 2.21 2.19 2.36 2.16 2.11 2.14 2.09 2.10 2.10 2.12 2.12 2.15 2.14 2.17 2.21																								Diurnal Average		
3.63 2.54 2.58 2.67 2.99 2.74 2.64 2.61 2.79 2.59 2.87 5.96 2.72 2.43 2.97 2.36 2.42 2.35 2.40 2.39 2.37 2.49 2.50 2.83																								Diurnal Maximum		
C - Calibration N - Not Valid A - Automated Daily Zero Span																										

Hourly Maximums

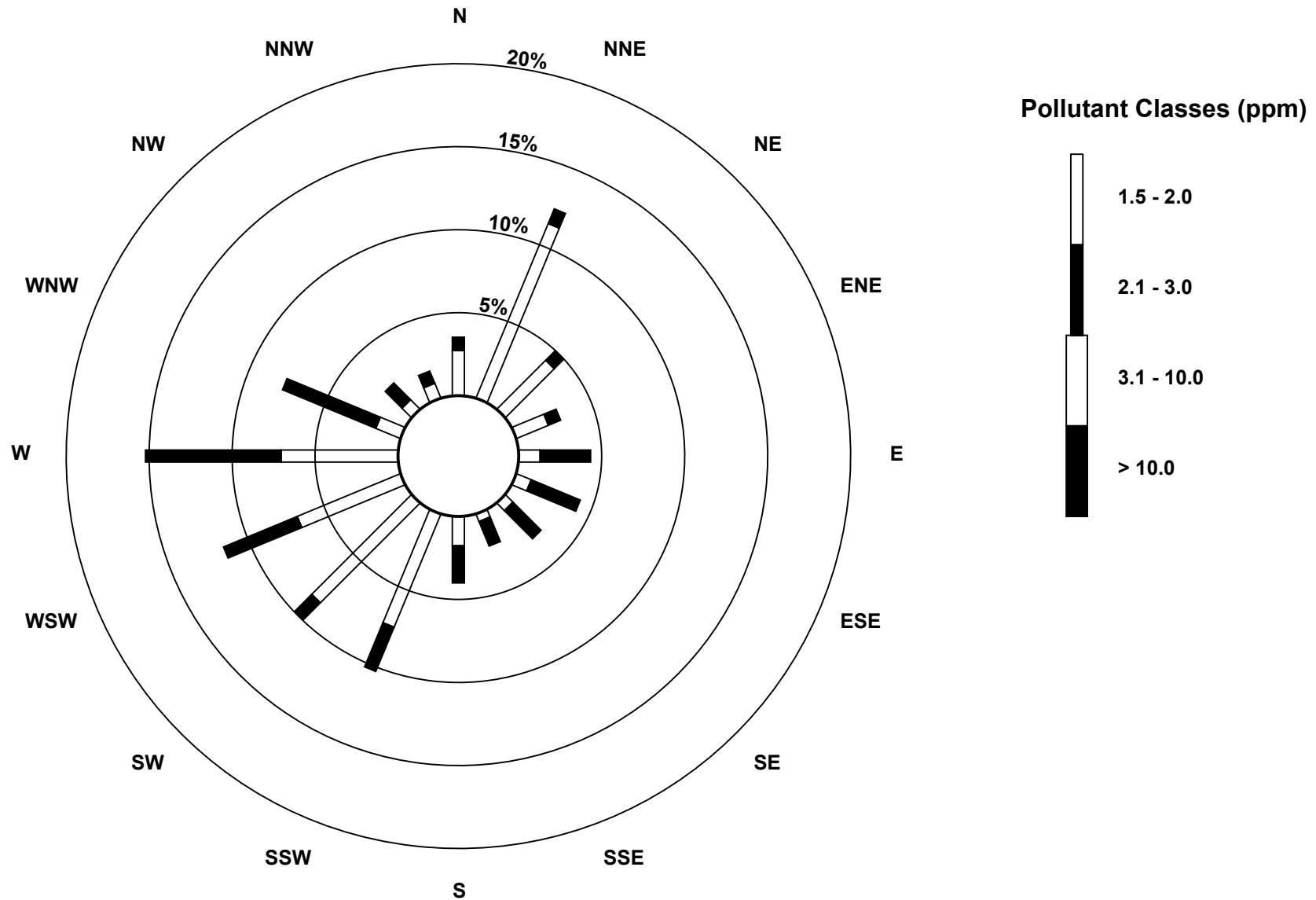
Total Hydrocarbons (THC) - ppm
Henry Pirker - February 2016



Pollutant Rose

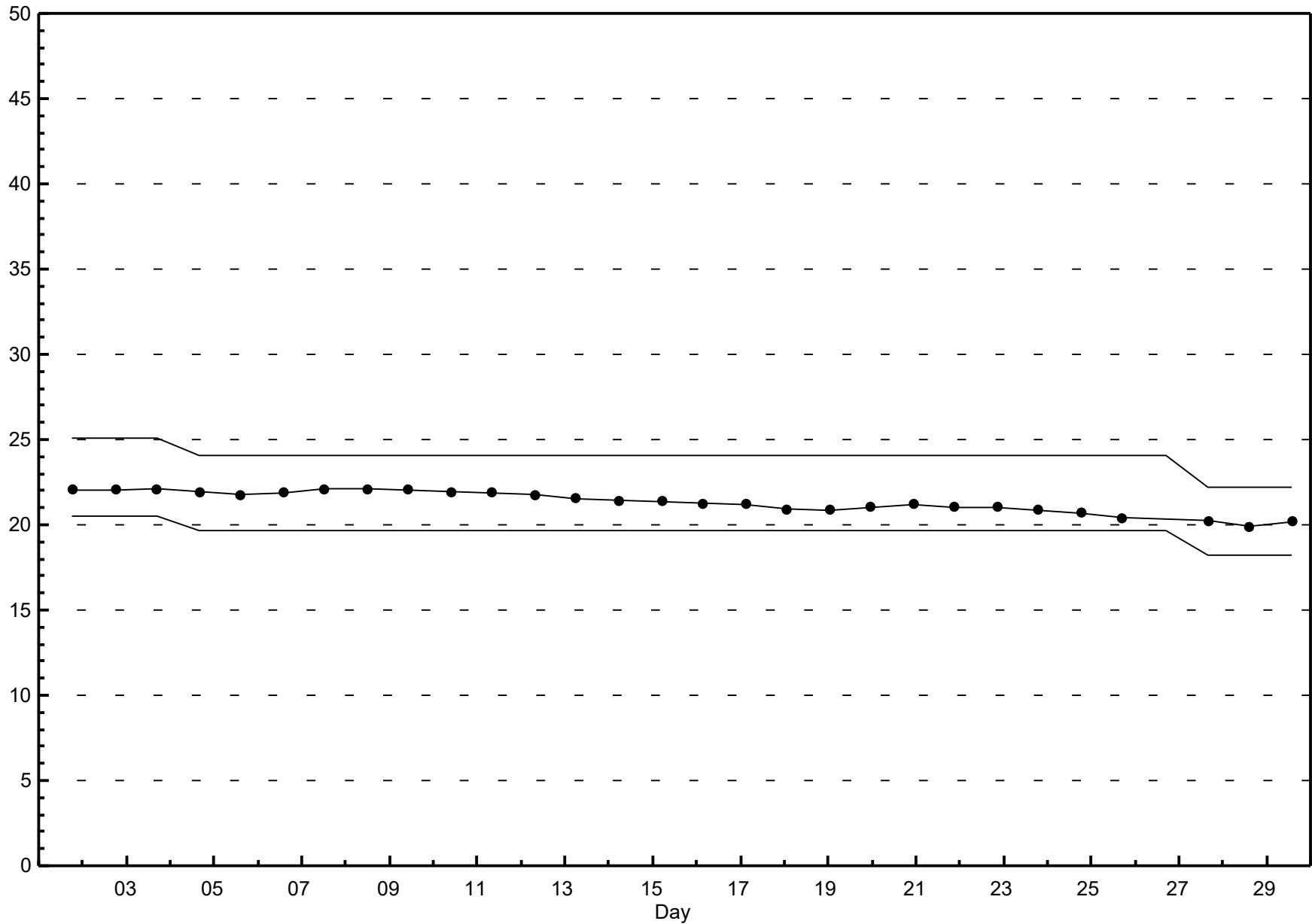
Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2016



Span Responses

Total Hydrocarbons (THC)
Henry Pirker - February 2016



Hourly Averages

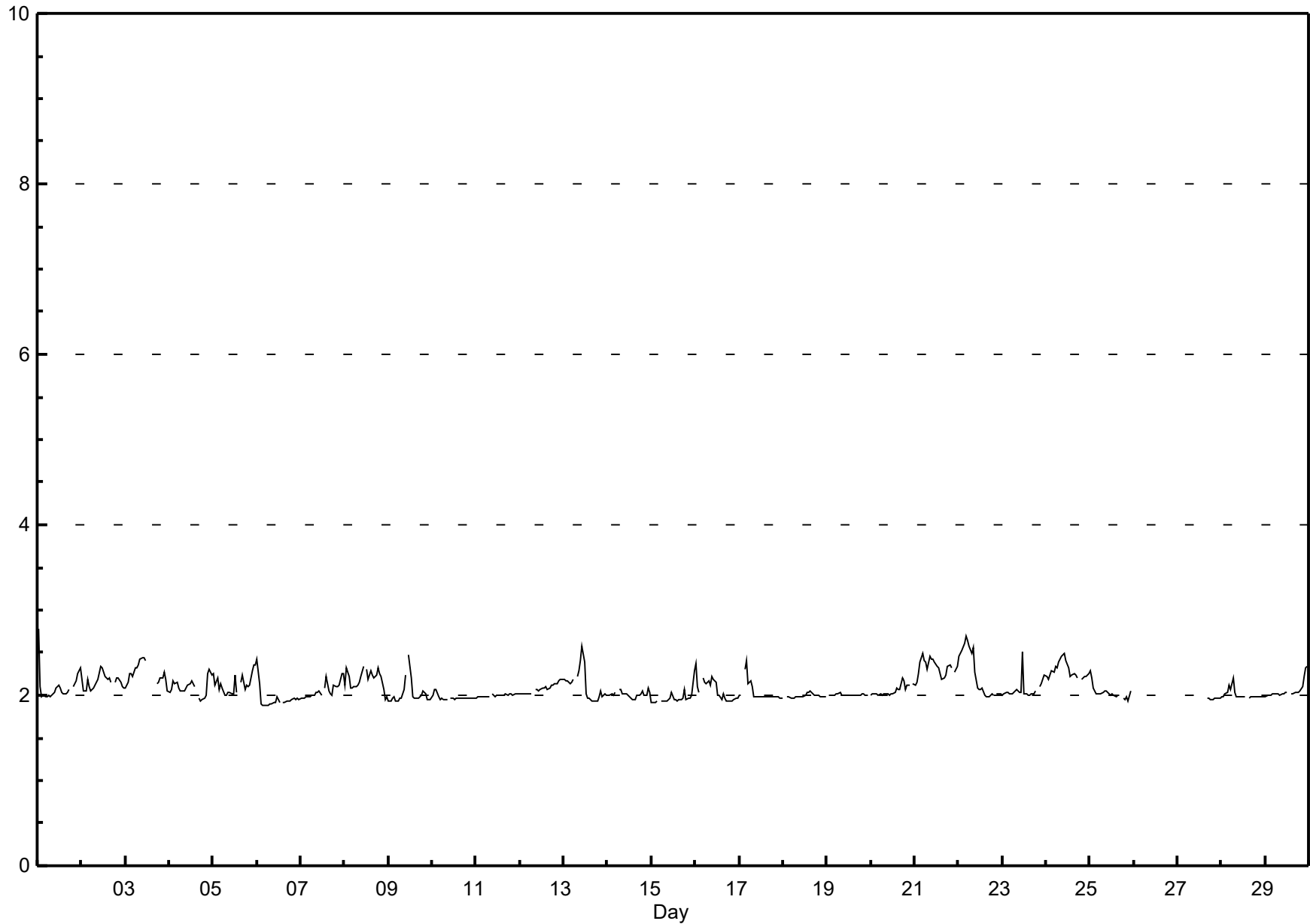
Methane (CH₄) - ppm

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.78 ppm on Feb 1 01:00 Maximum Daily Average: 2.32 ppm on Feb 21																				Hours in Service: 696 Hours of Data: 624 Hours of Missing Data: 72 Hours of Calibration: 33 Percent Operational Time: 94.4						
Minimum Value: 1.9 ppm on Feb 6 05:00 Minimum Daily Average: 1.95 ppm on Feb 6 Maximum Diurnal Average: 2.13 ppm at hour 12 Minimum Diurnal Average: 2.03 ppm at hour 18 Monthly Average: 2.081 ppm Percentiles: P ₁ = 1.90 P ₁₀ = 1.96 Q ₁ = 1.98 Median = 2.02 Q ₃ = 2.15 P ₉₀ = 2.29 P ₉₉ = 2.57																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	2.8	2.1	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	2.0	2.1	A	2.1	2.1	2.2	2.3	2.3	2.10	2.78
2-Feb	2.2	2.0	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.1	2.1	2.1	2.16	2.34
3-Feb	2.1	2.2	2.3	2.3	2.2	2.3	2.3	2.4	2.4	2.4	2.4	2.4	C	C	C	C	A	2.1	2.2	2.2	2.2	2.3	2.2	2.1	2.26	2.45
4-Feb	2.0	2.1	2.2	2.1	2.2	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.2	2.1	2.1	A	2.0	1.9	1.9	2.0	2.0	2.3	2.3	2.2	2.09	2.31
5-Feb	2.2	2.1	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.0	A	2.2	2.2	2.1	2.1	2.1	2.1	2.3	2.4	2.4	2.13	2.36
6-Feb	2.4	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.95	2.42
7-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	A	2.1	2.2	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.2	2.05	2.25
8-Feb	2.1	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	A	2.3	2.2	2.3	2.2	2.2	2.2	2.3	2.3	2.2	2.1	1.9	2.0	2.18	2.34
9-Feb	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.1	2.2	A	2.5	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.9	1.9	2.0	2.02	2.48
10-Feb	2.0	2.1	2.1	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	2.0	2.0	1.97	2.07
11-Feb	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	2.0	2.0	2.0	2.00	2.02
12-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	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	2.2	2.2	2.2	2.08	2.19
13-Feb	2.2	2.2	2.2	2.1	2.1	2.2	A	2.2	2.3	2.4	2.6	2.4	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.11	2.57
14-Feb	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.01	2.08
15-Feb	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	1.9	1.9	1.9	2.0	2.1	1.9	2.0	2.0	2.0	2.3	1.97	2.29
16-Feb	2.4	2.1	2.0	A	2.2	2.2	2.1	2.2	2.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.06	2.37
17-Feb	2.0	2.0	A	2.3	2.4	2.1	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.03	2.40
18-Feb	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.05
19-Feb	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.01	2.03
20-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.1	2.1	2.1	A	2.1	2.05	2.20
21-Feb	2.1	2.1	2.3	2.4	2.5	2.4	2.4	2.3	2.5	2.4	2.4	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.3	2.4	2.3	A	2.3	2.3	2.32	2.49
22-Feb	2.5	2.5	2.5	2.6	2.7	2.6	2.6	2.5	2.6	2.3	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.25	2.70
23-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.2	2.2	2.07	2.50
24-Feb	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.5	2.5	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	A	2.2	2.2	2.2	2.2	2.3	2.29	2.49
25-Feb	2.3	2.2	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	2.0	2.0	A	2.0	1.9	2.0	1.9	2.1	N	2.03	2.29
26-Feb	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-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	1.97
28-Feb	2.0	2.0	2.0	2.0	2.1	2.1	2.2	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	2.01	2.19
29-Feb	2.0	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	2.1	2.2	2.3	2.3	2.06	2.34
Diurnal Average																										
Diurnal Maximum																										
C - Calibration N - Not Valid A - Automated Daily Zero Span																										

Hourly Averages

Methane (CH₄) - ppm
Henry Pirker - February 2016



Hourly Maximums

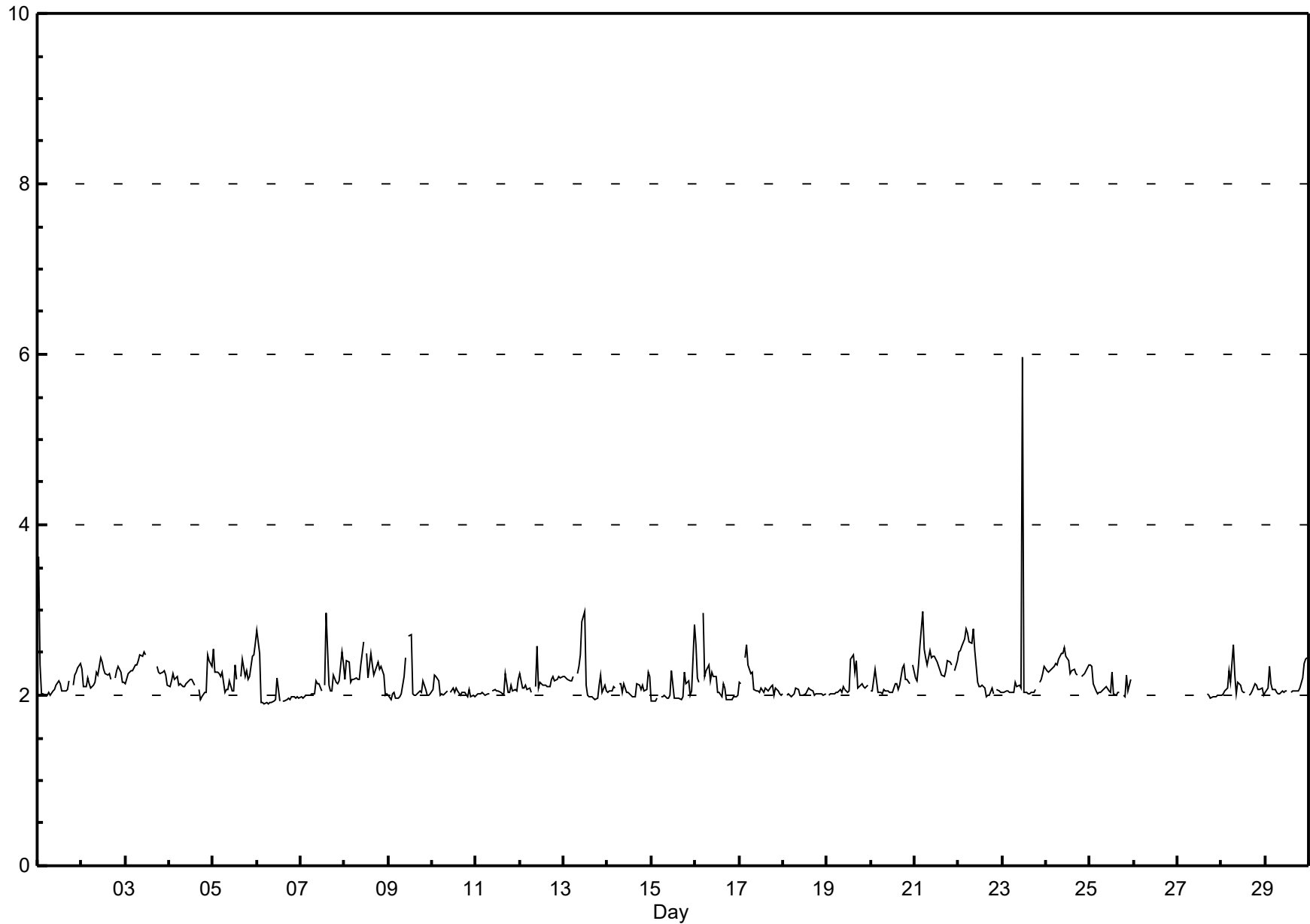
Methane (CH₄) - ppm

Henry Pirker - February 2016

Maximum Value: 5.97 ppm on Feb 23 12:00																								Maximum Daily Average: 2.40 ppm on Feb 21																								Hours in Service: 696	
Minimum Value: 1.9 ppm on Feb 6 05:00																								Minimum Daily Average: 2.01 ppm on Feb 6																								Hours of Data: 624	
Maximum Diurnal Average: 2.36 ppm at hour 12																								Minimum Diurnal Average: 2.09 ppm at hour 16																								Hours of Missing Data: 72	
Monthly Average: 2.162 ppm																								Percentiles: P ₁ = 1.91 P ₁₀ = 1.99 Q ₁ = 2.03 Median = 2.09 Q ₃ = 2.25 P ₉₀ = 2.40 P ₉₉ = 2.95																								Hours of Calibration: 33	
																								Percent Operational Time: 94.4																									
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-Feb	3.6	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.0	2.1	2.2	A	2.1	2.2	2.3	2.3	2.4	2.19	3.63																							
2-Feb	2.3	2.1	2.1	2.2	2.1	2.1	2.1	2.2	2.3	2.2	2.4	2.4	2.3	2.3	2.2	2.2	2.2	A	2.2	2.3	2.3	2.3	2.1	2.1	2.23	2.45																							
3-Feb	2.1	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.5	C	C	C	C	A	2.3	2.3	2.2	2.3	2.3	2.2	2.1	2.32	2.51																							
4-Feb	2.1	2.2	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	A	2.1	2.0	2.0	2.0	2.0	2.5	2.4	2.3	2.16	2.48																							
5-Feb	2.5	2.3	2.3	2.3	2.2	2.3	2.0	2.1	2.1	2.2	2.1	2.1	2.4	2.2	A	2.2	2.4	2.2	2.3	2.2	2.2	2.5	2.5	2.6	2.26	2.60																							
6-Feb	2.8	2.5	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	1.9	A	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.76																							
7-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.1	2.0	A	2.1	3.0	2.1	2.0	2.0	2.2	2.2	2.1	2.2	2.5	2.4	2.14	2.97																							
8-Feb	2.2	2.4	2.4	2.2	2.2	2.2	2.2	2.2	2.2	2.4	2.6	A	2.5	2.2	2.5	2.4	2.2	2.3	2.4	2.3	2.3	2.2	2.0	2.0	2.28	2.62																							
9-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.4	A	2.7	2.7	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.1	2.0	2.0	2.0	2.10	2.71																							
10-Feb	2.1	2.2	2.2	2.2	2.0	2.0	2.0	2.0	2.1	A	2.0	2.1	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.05	2.23																							
11-Feb	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.3	2.0	2.0	2.1	2.1	2.1	2.1	2.2	2.05	2.26																							
12-Feb	2.2	2.1	2.1	2.1	2.1	2.1	2.0	A	2.1	2.6	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.16	2.58																							
13-Feb	2.2	2.2	2.2	2.2	2.2	2.2	A	2.2	2.3	2.5	2.9	3.0	2.1	2.0	2.0	2.0	2.0	1.9	2.0	2.1	2.2	2.0	2.1	2.1	2.20	2.98																							
14-Feb	2.0	2.0	2.1	2.1	2.1	A	2.1	2.1	2.0	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	2.3	2.2	2.08	2.28																							
15-Feb	1.9	1.9	1.9	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.1	2.2	2.0	2.1	2.8	2.05	2.83																							
16-Feb	2.6	2.2	2.1	A	3.0	2.2	2.3	2.4	2.2	2.3	2.2	2.2	2.0	2.0	2.0	2.1	2.1	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.16	2.96																							
17-Feb	2.2	2.1	A	2.4	2.6	2.4	2.3	2.3	2.1	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.13	2.60																							
18-Feb	2.0	A	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	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.09																							
19-Feb	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.1	2.4	2.5	2.3	2.4	2.1	2.1	2.1	2.1	2.1	2.1	A	2.12	2.47																							
20-Feb	2.0	2.0	2.3	2.2	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.3	2.4	2.2	2.2	2.1	A	2.4	2.13	2.36																							
21-Feb	2.2	2.2	2.3	2.6	3.0	2.5	2.4	2.4	2.5	2.4	2.5	2.5	2.4	2.3	2.3	2.2	2.2	2.3	2.4	2.4	2.4	A	2.3	2.4	2.40	2.99																							
22-Feb	2.5	2.5	2.6	2.7	2.8	2.7	2.6	2.6	2.8	2.5	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.1	2.0	A	2.1	2.0	2.0	2.31	2.79																							
23-Feb	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.2	2.1	2.1	2.1	6.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.2	2.2	2.2	2.3	2.25	5.97																							
24-Feb	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.5	2.4	2.2	2.3	2.3	2.3	2.2	A	2.2	2.2	2.3	2.3	2.4	2.34	2.56																							
25-Feb	2.4	2.3	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.3	2.0	2.0	2.0	2.0	A	2.0	2.0	2.2	2.0	2.2	C	2.10	2.35																							
26-Feb	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	--	--																							
27-Feb	C	C	C	C	C	C	C	C	C	C	C	C	C	C	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	--	2.02																							
28-Feb	2.0	2.0	2.1	2.1	2.3	2.1	2.6	2.2	2.0	2.1	2.1	2.0	2.0	2.0	A	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.10	2.59																							
29-Feb	2.0	2.1	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	A	2.0	2.0	2.1	2.0	2.1	2.1	2.2	2.4	2.4	2.4	2.12	2.45																							
2.24 2.17 2.15 2.16 2.21 2.15 2.14 2.15 2.17 2.21 2.19 2.36 2.16 2.11 2.14 2.09 2.10 2.10 2.12 2.12 2.15 2.14 2.17 2.21																								Diurnal Average																									
3.63 2.53 2.57 2.66 2.99 2.73 2.63 2.60 2.79 2.58 2.86 5.97 2.71 2.42 2.97 2.35 2.42 2.35 2.40 2.39 2.36 2.48 2.50 2.83																								Diurnal Maximum																									
C - Calibration N - Not Valid A - Automated Daily Zero Span																																																	

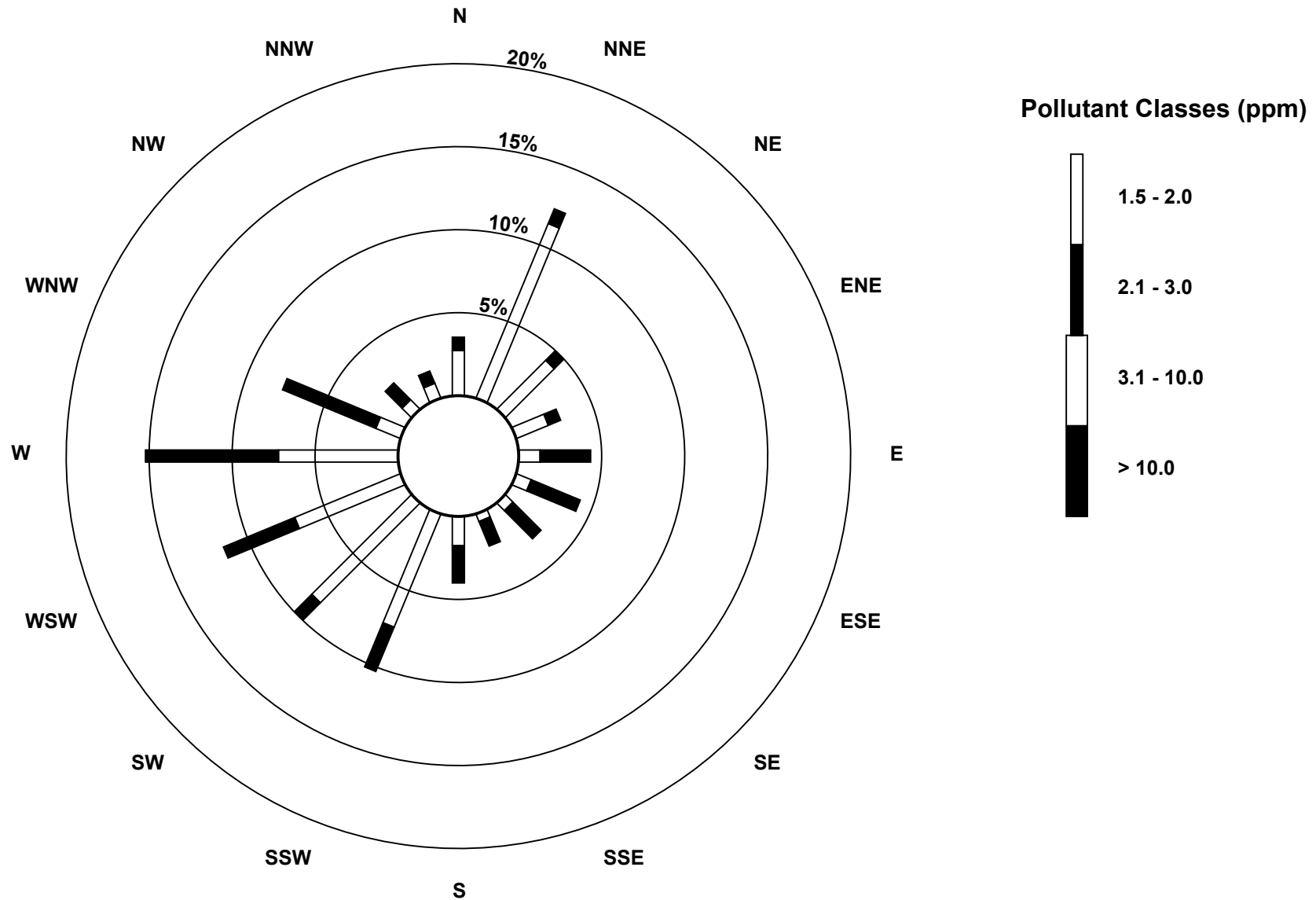
Hourly Maximums

Methane (CH₄) - ppm
Henry Pirker - February 2016



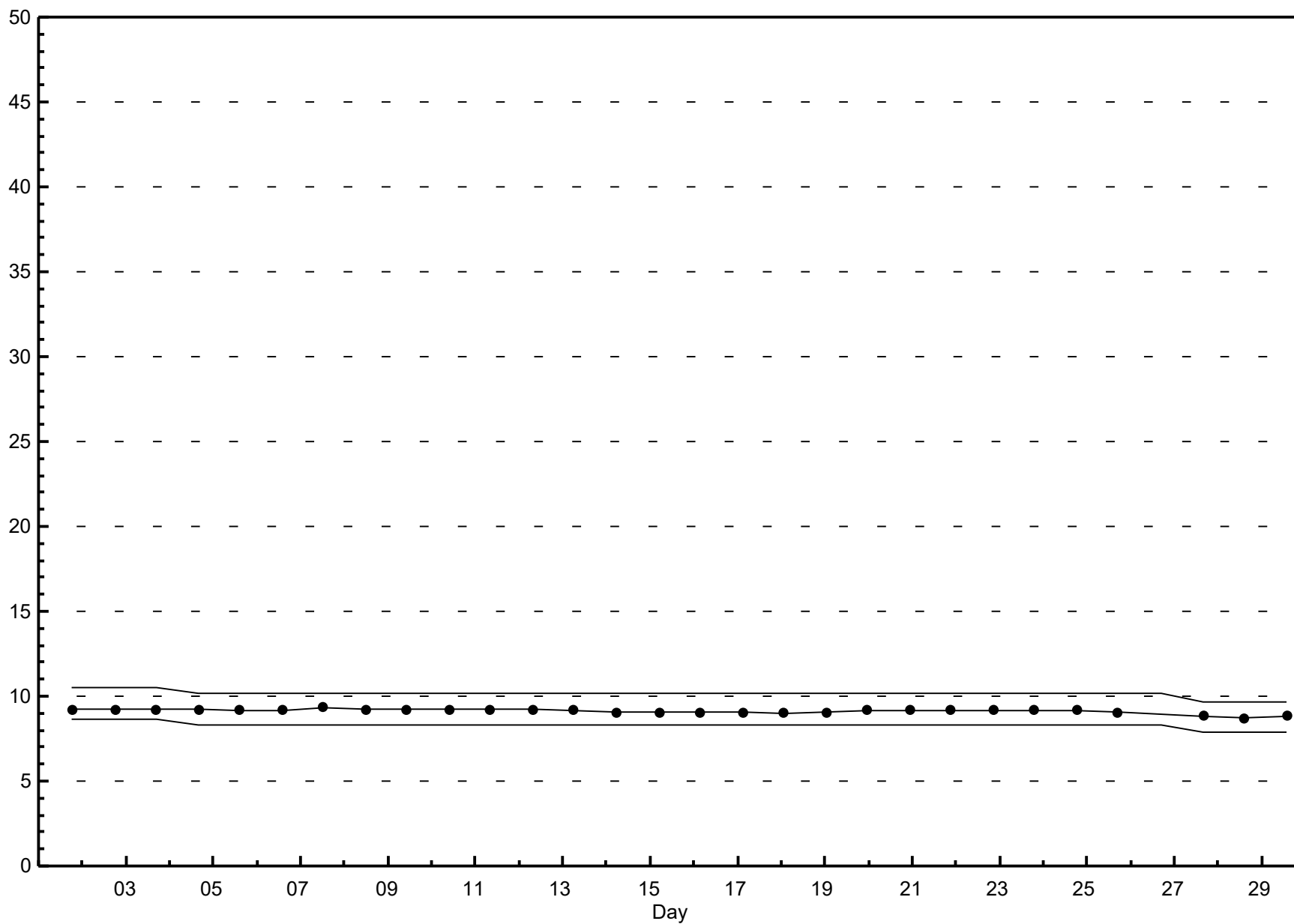
Pollutant Rose

Methane (CH₄) - ppm
Henry Pirker - February 2016



Span Responses

Methane (CH₄)
Henry Pirker - February 2016

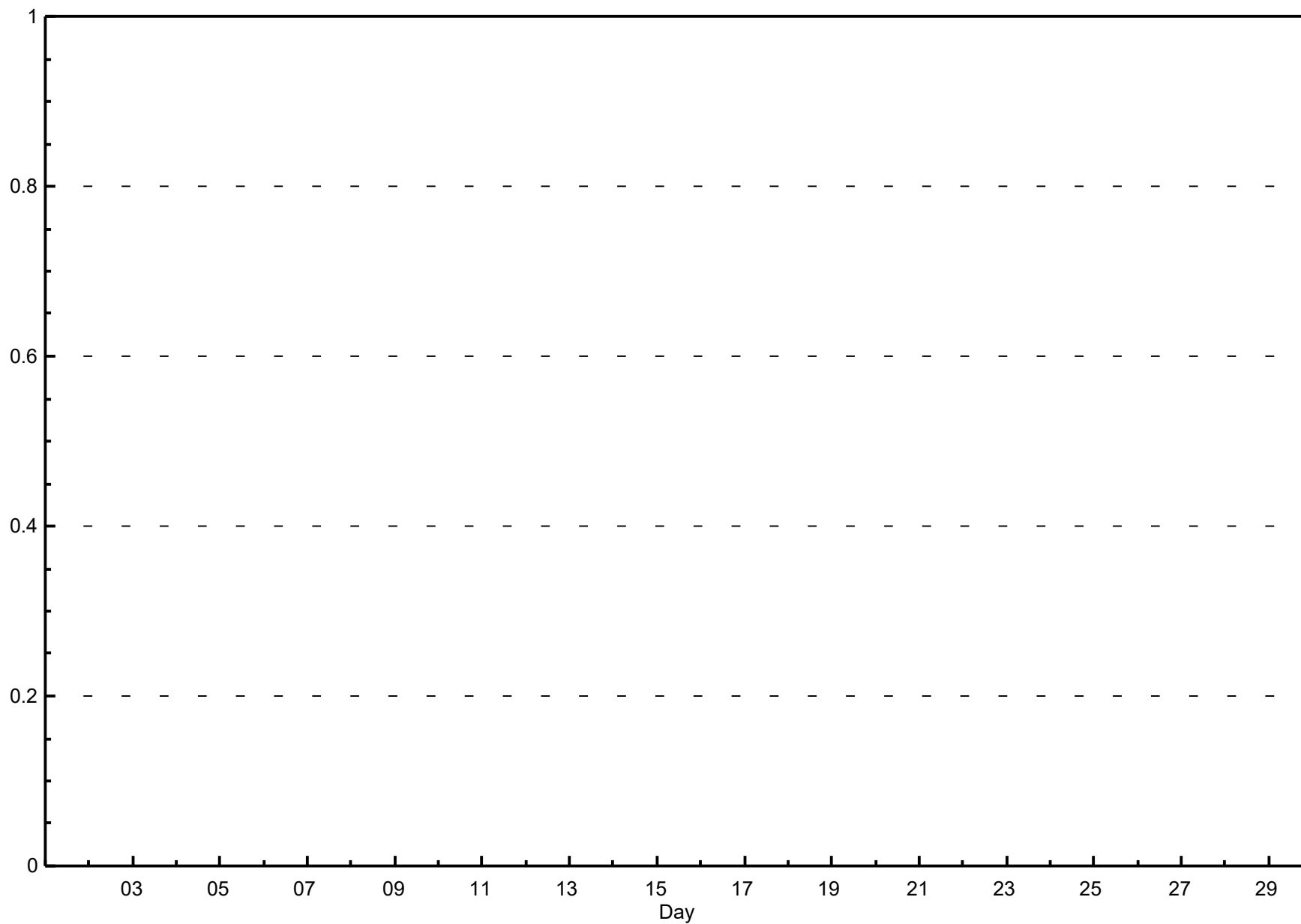


Hourly Averages

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.00 ppm on Feb 23 22:00 Maximum Daily Average: 0.00 ppm on Feb 18																								Hours in Service: 696 Hours of Data: 624 Hours of Missing Data: 72 Hours of Calibration: 33 Percent Operational Time: 94.4		
Minimum Value: 0.0 ppm on Feb 1 01:00 Minimum Daily Average: 0.00 ppm on Feb 4 Maximum Diurnal Average: 0.00 ppm at hour 21 Minimum Diurnal Average: 0.00 ppm at hour 15 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																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	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-Feb	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	C	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Feb	0.0	0.0	0.0	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-Feb	0.0	0.0	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-Feb	0.0	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
7-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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
13-Feb	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
14-Feb	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-Feb	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-Feb	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-Feb	0.0	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-Feb	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-Feb	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
20-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
24-Feb	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	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	N	0.00	0.00
26-Feb	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-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Feb	0.0	0.0	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-Feb	0.0	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
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

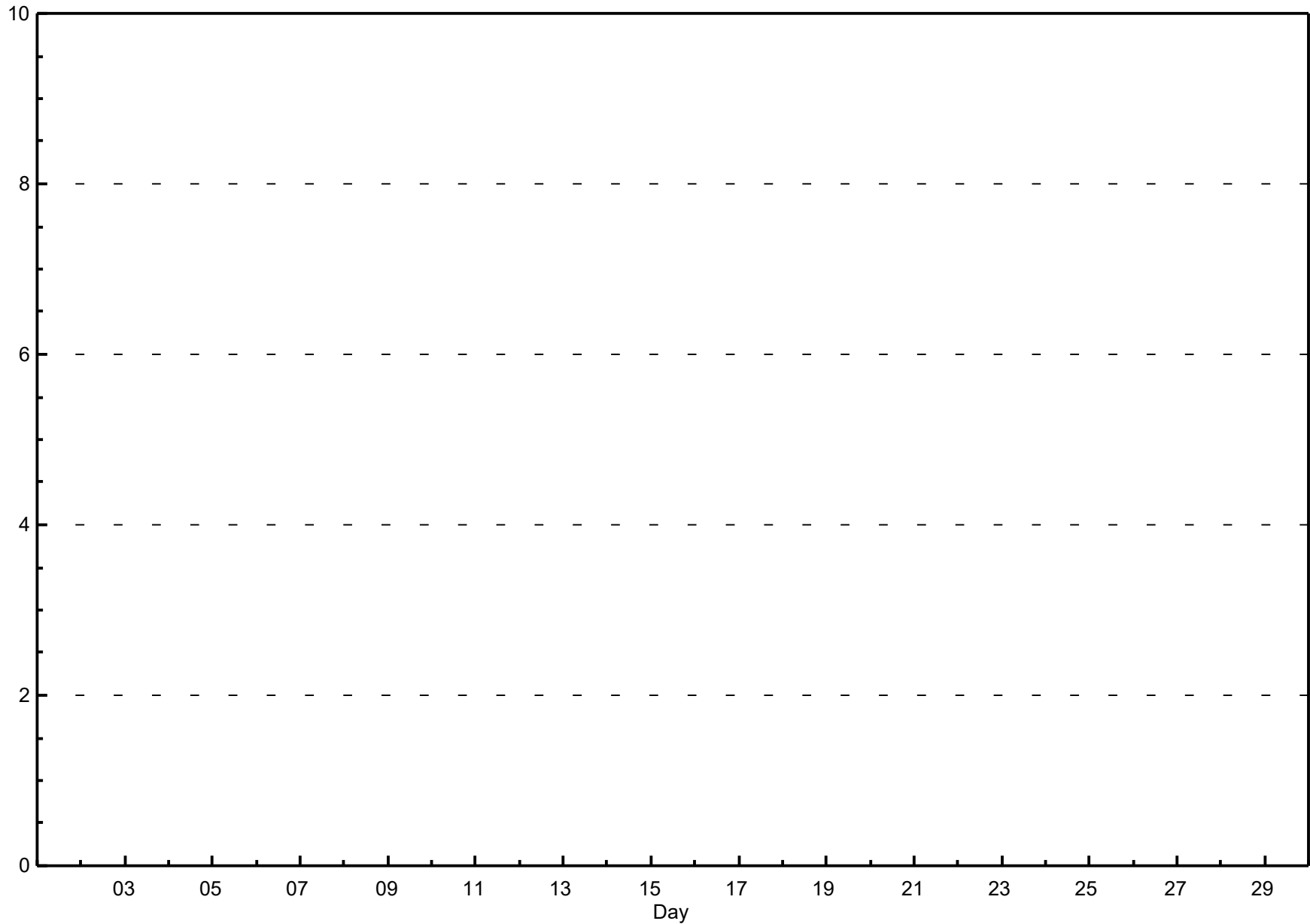
Henry Pirker - February 2016

Maximum Value: 0.00 ppm on Feb 27 18:00																				Maximum Daily Average: 0.00 ppm on Feb 5					Hours in Service: 696	
Minimum Value: 0.0 ppm on Feb 9 20:00																				Minimum Daily Average: 0.00 ppm on Feb 28					Hours of Data: 624	
Maximum Diurnal Average: 0.00 ppm at hour 13																				Minimum Diurnal Average: 0.00 ppm at hour 6					Hours of Missing Data: 72	
Monthly Average: 0.001 ppm																				Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.00 Median = 0.00 Q ₃ = 0.00 P ₉₀ = 0.00 P ₉₉ = 0.00					Hours of Calibration: 33	
																				Percent Operational Time: 94.4						
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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	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-Feb	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	C	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
4-Feb	0.0	0.0	0.0	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-Feb	0.0	0.0	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-Feb	0.0	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
7-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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-Feb	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
13-Feb	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
14-Feb	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-Feb	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-Feb	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-Feb	0.0	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-Feb	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-Feb	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.00	0.00
20-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.00	0.00
24-Feb	0.0	0.0	0.0	0.0	0.0	0.0	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-Feb	0.0	0.0	0.0	0.0	0.0	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	N	0.00	0.00
26-Feb	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-Feb	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
28-Feb	0.0	0.0	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-Feb	0.0	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
																								Diurnal Average		
																								Diurnal Maximum		
C - Calibration N - Not Valid A - Automated Daily Zero Span																										

Hourly Maximums

Non Methane Hydrocarbon (NMHC) - ppm

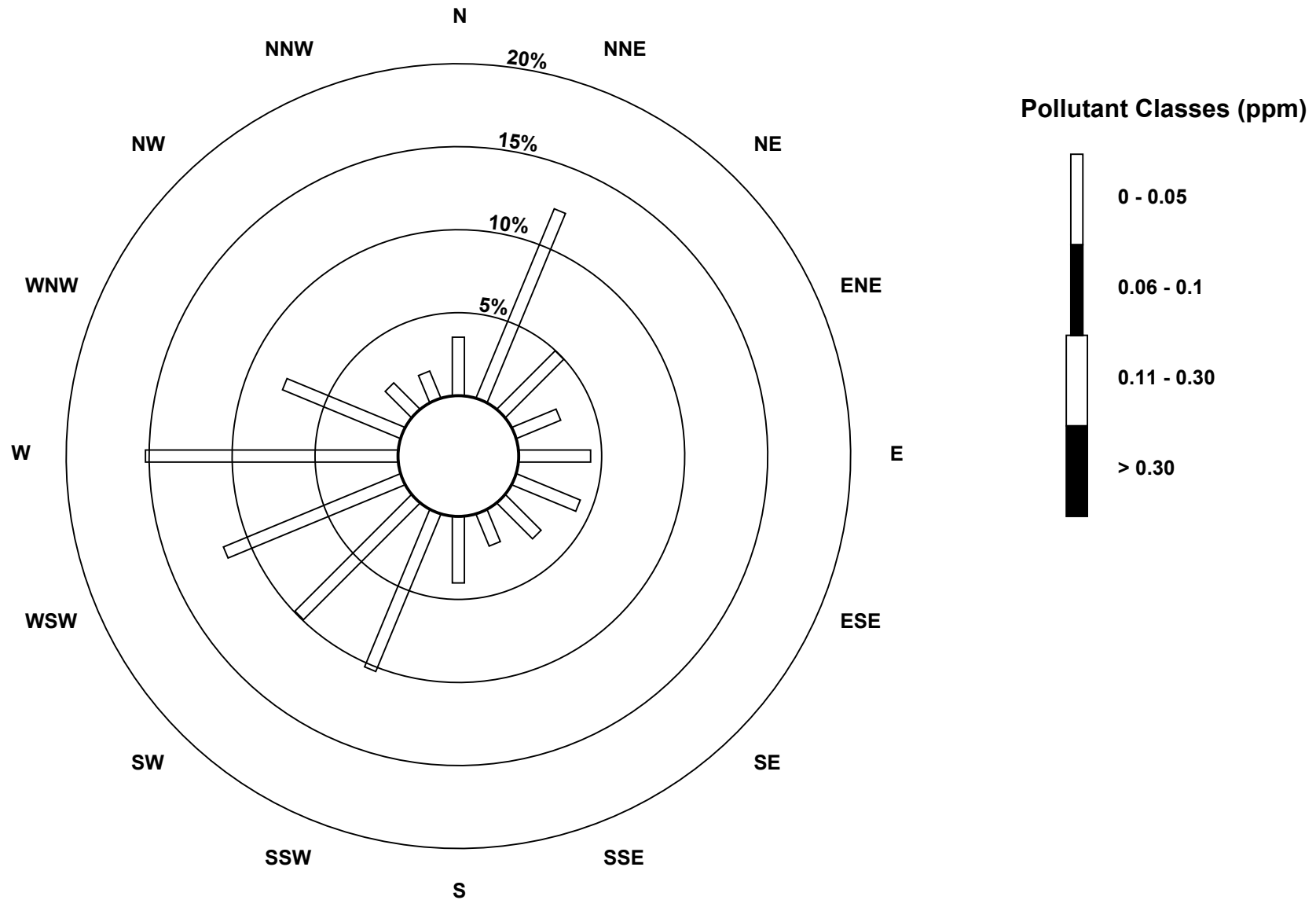
Henry Pirker - February 2016

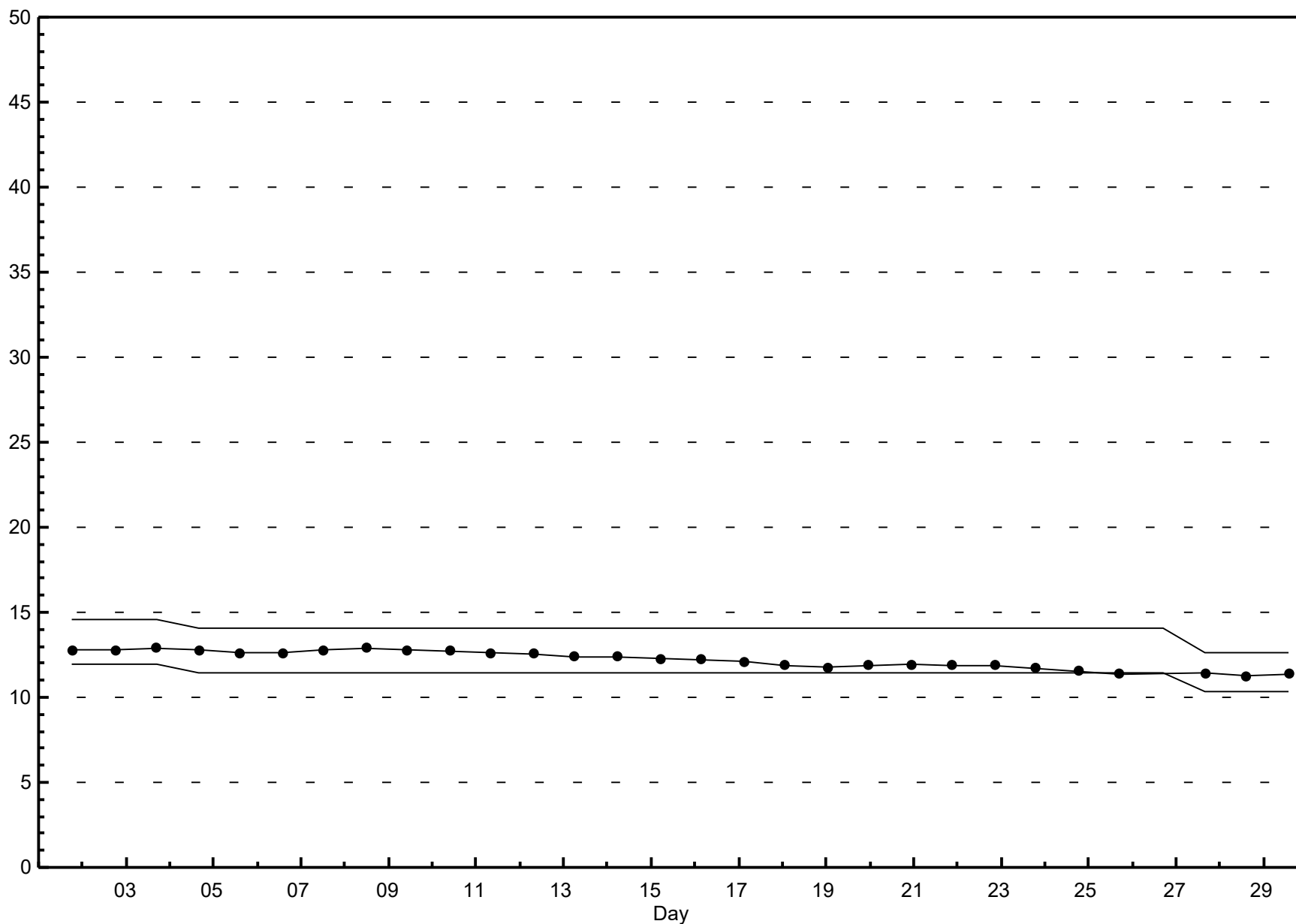


Pollutant Rose

Non Methane Hydrocarbon (NMHC) - ppm

Henry Pirker - February 2016



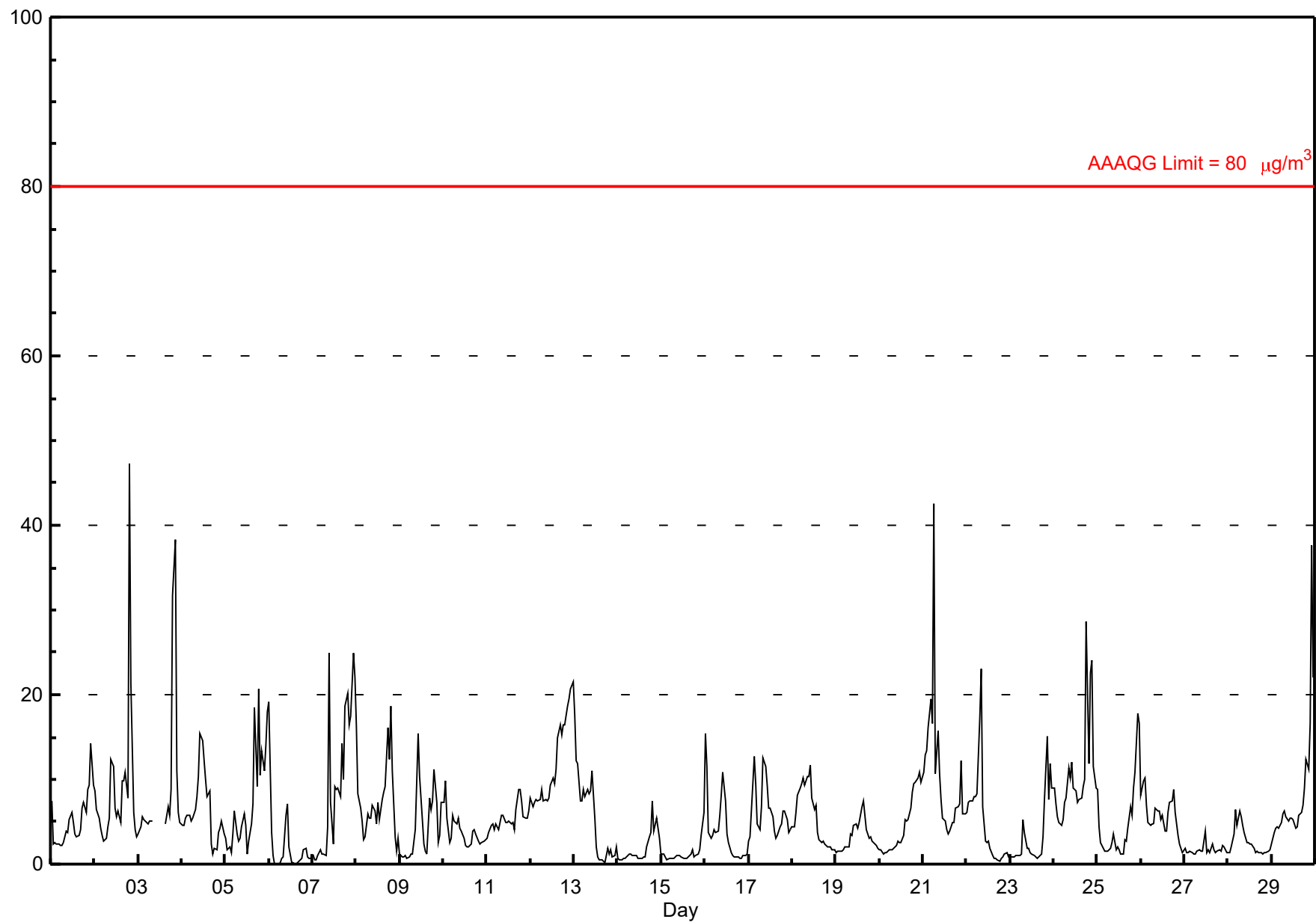


Hourly Averages

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

Henry Pirker - February 2016

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 47.2 µg/m³ on Feb 2 20:00 Maximum Daily Average: 11.8 µg/m³ on Feb 12																				Hours in Service: 696 Hours of Data: 690 Hours of Missing Data: 6 Hours of Calibration: 6 Percent Operational Time: 100.0						
Minimum Value: 0 µg/m³ on Feb 6 15:00 Maximum Diurnal Average: 9.0 µg/m³ at hour 20 Monthly Average: 5.70 µg/m³ Minimum Daily Average: 1.3 µg/m³ on Feb 15 Minimum Diurnal Average: 3.8 µg/m³ at hour 15 Percentiles: P ₁ = 0.1 P ₁₀ = 0.9 Q ₁ = 1.8 Median = 4.5 Q ₃ = 7.5 P ₉₀ = 11.5 P ₉₉ = 23.4																										
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-Feb	7	2	3	2	2	2	2	3	4	4	5	6	5	3	3	3	4	7	7	6	9	9	14	9	5.2	14.3
2-Feb	9	6	6	4	3	3	3	4	5	12	12	7	6	6	5	10	10	11	8	47	21	6	4	3	8.8	47.2
3-Feb	3	4	6	5	5	5	5	5	5	C	C	C	C	C	C	5	7	6	9	32	38	11	6	5	9.0	38.3
4-Feb	5	5	5	6	6	5	5	6	8	10	15	15	12	10	8	9	2	1	2	2	4	4	5	4	6.4	15.4
5-Feb	3	2	2	1	4	6	4	3	3	4	6	5	1	3	5	7	19	9	21	10	13	11	14	18	7.2	20.6
6-Feb	19	4	1	0	0	0	0	1	1	6	7	2	0	0	0	0	0	1	1	2	2	1	1	1	2.0	19.1
7-Feb	1	1	1	1	2	1	1	1	4	25	7	2	9	9	9	8	14	10	19	20	16	17	25	22	9.4	24.9
8-Feb	16	8	7	5	3	3	6	5	5	7	6	5	7	5	8	8	9	16	12	19	11	3	1	3	7.5	18.6
9-Feb	1	1	1	1	1	1	1	1	4	10	15	10	5	2	2	1	8	7	7	11	7	3	3	7	4.6	15.4
10-Feb	7	10	5	2	3	6	5	5	5	4	4	3	2	2	2	2	4	4	3	3	2	2	3	3	3.9	9.8
11-Feb	3	4	5	5	4	5	4	5	6	6	5	5	5	5	5	4	6	9	9	7	6	5	5	6	5.4	8.9
12-Feb	8	7	7	8	7	8	9	7	8	7	8	9	10	9	11	15	16	15	17	16	19	19	21	21	11.8	21.5
13-Feb	18	12	12	7	7	9	8	9	8	9	11	5	2	1	1	0	0	0	2	1	2	1	1	2	5.4	17.6
14-Feb	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	7	4	5	4	3	1.9	7.4
15-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	3	6	1.3	6.1
16-Feb	16	11	4	3	3	4	4	4	6	8	11	7	4	3	1	1	1	1	1	1	1	1	1	1	4.0	15.5
17-Feb	3	3	9	13	9	5	4	7	12	12	9	7	7	6	4	3	3	4	5	6	6	5	4	4	6.3	12.7
18-Feb	4	4	6	8	9	9	10	9	10	10	12	8	7	7	4	3	3	3	2	2	2	2	2	2	5.8	11.7
19-Feb	1	2	1	1	2	2	2	2	4	3	5	5	4	5	7	7	6	4	3	3	3	2	2	2	3.3	7.4
20-Feb	2	2	1	1	1	2	2	2	2	2	3	2	3	3	5	5	5	7	8	9	10	10	11	10	4.5	10.9
21-Feb	11	13	13	16	19	17	43	11	16	11	8	5	5	4	4	4	5	5	7	7	7	12	6	6	10.5	42.6
22-Feb	6	7	8	8	8	8	8	17	23	7	3	3	3	2	1	1	1	1	0	1	1	1	1	1	4.9	23.0
23-Feb	1	1	1	1	1	1	1	5	4	2	2	1	1	1	1	1	1	1	3	8	15	8	12	9	3.4	15.2
24-Feb	9	7	6	5	5	5	7	8	11	10	12	9	9	7	8	8	9	10	29	12	23	24	11	9	10.5	28.6
25-Feb	9	4	3	2	2	2	2	2	3	4	2	2	2	1	1	3	3	4	7	6	9	11	18	17	4.8	17.8
26-Feb	8	10	10	7	5	5	5	5	7	6	6	5	6	4	4	6	7	8	9	6	3	2	2	1	5.7	10.2
27-Feb	2	1	1	2	1	1	1	2	2	2	2	4	1	2	1	2	2	1	1	2	2	2	2	1	1.7	3.9
28-Feb	1	1	2	4	6	5	6	6	5	4	3	3	2	2	2	1	1	1	1	1	1	1	2	2	2.7	6.4
29-Feb	2	4	4	4	4	5	6	6	6	5	5	5	5	4	4	6	6	7	9	12	11	17	38	22	8.3	37.6
6.1 4.8 4.5 4.3 4.3 4.3 5.4 4.9 6.1 6.8 6.6 5.1 4.4 3.9 3.8 4.3 5.4 5.4 7.1 9.0 8.6 6.9 7.7 6.9																								Diurnal Average		
19.1 12.9 13.4 16.0 19.4 16.7 42.6 17.4 23.0 24.8 15.4 14.6 12.1 10.0 11.2 15.0 18.5 16.1 28.6 47.2 38.3 24.1 37.6 22.0																								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

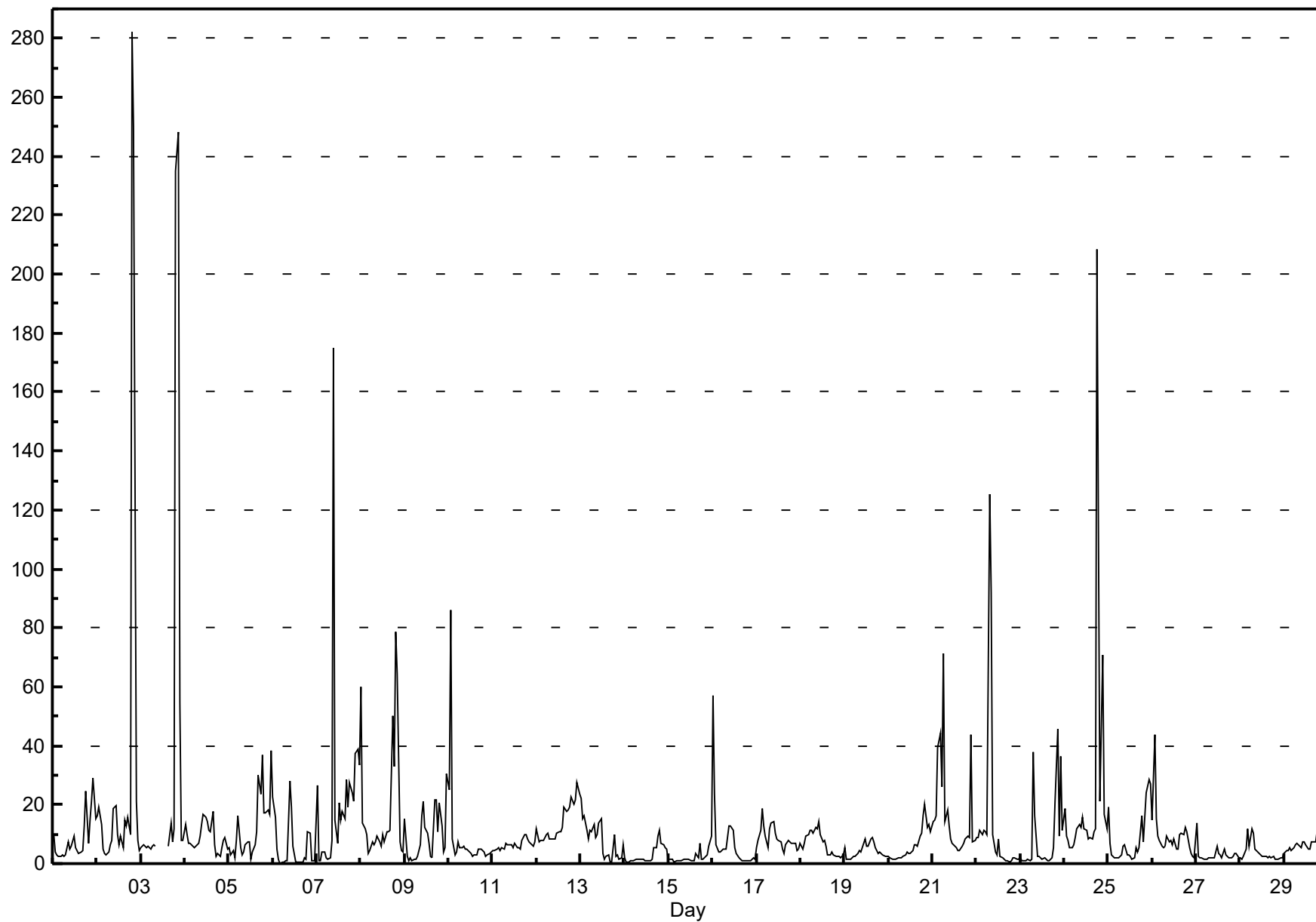
Henry Pirker - February 2016

Maximum Value: 282.3 μg/m ³ on Feb 2 20:00																				Maximum Daily Average: 35.8 μg/m ³ on Feb 3										Hours in Service:		696				
Minimum Value: 0 μg/m ³ on Feb 6 05:00																				Minimum Daily Average: 2.2 μg/m ³ on Feb 15										Hours of Data:		690				
Maximum Diurnal Average: 30.6 μg/m ³ at hour 20																				Minimum Diurnal Average: 5.1 μg/m ³ at hour 15										Hours of Missing Data:		6				
Monthly Average: 11.20 μg/m ³																				Percentiles: P ₁ = 0.6 P ₁₀ = 1.4 Q ₁ = 2.6 Median = 6.0 Q ₃ = 11.0 P ₉₀ = 20.1 P ₉₉ = 124.0										Hours of Calibration:		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-Feb	10	4	3	3	3	3	2	3	7	5	6	9	6	5	3	4	4	13	24	7	15	21	29	15	8.5	28.9										
2-Feb	16	19	13	5	4	3	4	6	8	19	19	10	6	9	6	15	13	16	10	282	250	21	8	4	31.9	282.3										
3-Feb	6	6	6	6	6	5	6	6	6	C	C	C	C	C	C	6	14	7	12	235	248	55	8	8	35.8	248.4										
4-Feb	13	10	7	7	6	6	6	7	9	13	16	16	14	11	11	18	6	3	4	3	5	8	9	5	8.9	17.7										
5-Feb	6	3	5	2	8	16	5	3	4	7	8	7	2	4	6	11	30	24	37	17	17	18	17	38	12.2	38.2										
6-Feb	23	16	5	1	0	0	0	1	1	28	19	6	1	0	0	0	1	2	1	11	11	1	1	1	5.4	28.0										
7-Feb	27	1	1	4	4	2	1	2	8	175	15	7	21	15	17	15	28	19	27	24	21	37	39	34	22.6	175.2										
8-Feb	60	14	12	10	4	4	8	6	7	10	7	6	10	7	11	11	11	50	33	78	64	8	4	4	18.3	78.4										
9-Feb	15	2	1	2	1	1	2	2	6	16	21	12	11	7	2	2	22	22	11	21	13	4	6	30	9.6	30.4										
10-Feb	25	86	8	3	4	8	6	6	6	5	5	4	3	2	3	3	5	5	5	4	3	3	3	4	8.6	86.1										
11-Feb	5	4	5	5	4	5	5	7	7	6	6	6	7	6	6	5	8	10	10	8	7	6	6	7	6.3	9.8										
12-Feb	12	8	8	8	8	10	10	8	8	8	8	10	11	11	12	19	17	18	19	22	20	21	27	23	13.7	27.4										
13-Feb	22	15	16	11	9	11	11	13	9	10	14	15	3	1	3	3	1	0	10	2	3	1	2	6	8.0	22.2										
14-Feb	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	6	5	9	11	7	6	5	5	3.0	11.3										
15-Feb	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	3	2	7	1	1	2	3	6	9	2.2	9.4										
16-Feb	57	24	6	4	4	5	5	5	9	13	13	11	5	4	2	1	1	1	1	1	1	1	2	2	7.4	57.2										
17-Feb	5	8	11	19	13	9	6	12	14	14	11	8	8	7	5	3	6	8	7	7	7	7	5	5	8.5	18.9										
18-Feb	7	5	7	9	10	11	11	11	12	12	14	10	7	8	6	3	3	4	3	3	2	2	2	3	6.9	14.3										
19-Feb	5	2	2	2	2	2	2	3	5	4	5	8	6	6	8	9	7	5	3	4	3	3	2	2	4.2	8.8										
20-Feb	2	2	1	2	2	2	2	2	2	3	4	3	3	4	7	6	6	9	11	16	20	12	13	11	6.1	20.1										
21-Feb	14	15	16	39	44	26	71	14	18	13	9	7	6	5	4	4	6	7	8	9	9	44	7	8	16.8	71.3										
22-Feb	9	9	11	10	11	11	10	125	92	10	4	3	8	2	2	1	1	1	1	1	2	2	2	1	13.7	125.2										
23-Feb	3	1	1	1	1	1	1	38	16	3	2	2	2	2	2	1	1	2	5	20	46	10	36	11	8.6	45.7										
24-Feb	19	9	8	6	5	6	9	12	13	12	16	12	11	8	9	8	11	12	208	21	46	71	17	12	23.4	208.2										
25-Feb	19	7	3	2	2	2	2	3	6	6	3	3	2	2	2	6	4	5	16	7	16	24	29	27	8.2	28.5										
26-Feb	15	44	15	9	8	6	6	6	9	7	8	6	8	5	5	10	10	10	12	11	5	3	2	2	9.3	43.5										
27-Feb	14	2	2	2	2	1	1	2	2	2	2	6	3	3	2	5	3	2	2	2	2	4	4	2	3.0	13.8										
28-Feb	2	2	3	5	12	6	12	10	5	5	3	3	3	3	2	2	2	2	2	2	1	2	2	2	3.8	11.7										
29-Feb	4	4	5	5	5	6	6	7	6	5	8	7	6	5	5	7	7	7	11	55	15	25	139	29	15.8	138.6										
14.3 11.1 6.3 6.3 6.2 5.8 7.4 11.1 10.3 14.7 8.9 7.1 6.2 5.2 5.1 6.3 8.2 9.6 17.4 30.6 29.8 14.6 14.9 10.7																									Diurnal Average											
59.8 86.1 16.4 39.5 44.5 25.8 71.3 125.2 92.1 175.2 21.0 15.7 20.7 14.9 17.5 18.9 29.9 50.3 208.2 282.3 250.2 70.9 138.6 38.2																									Diurnal Maximum											
C - Calibration																																				

Hourly Maximums

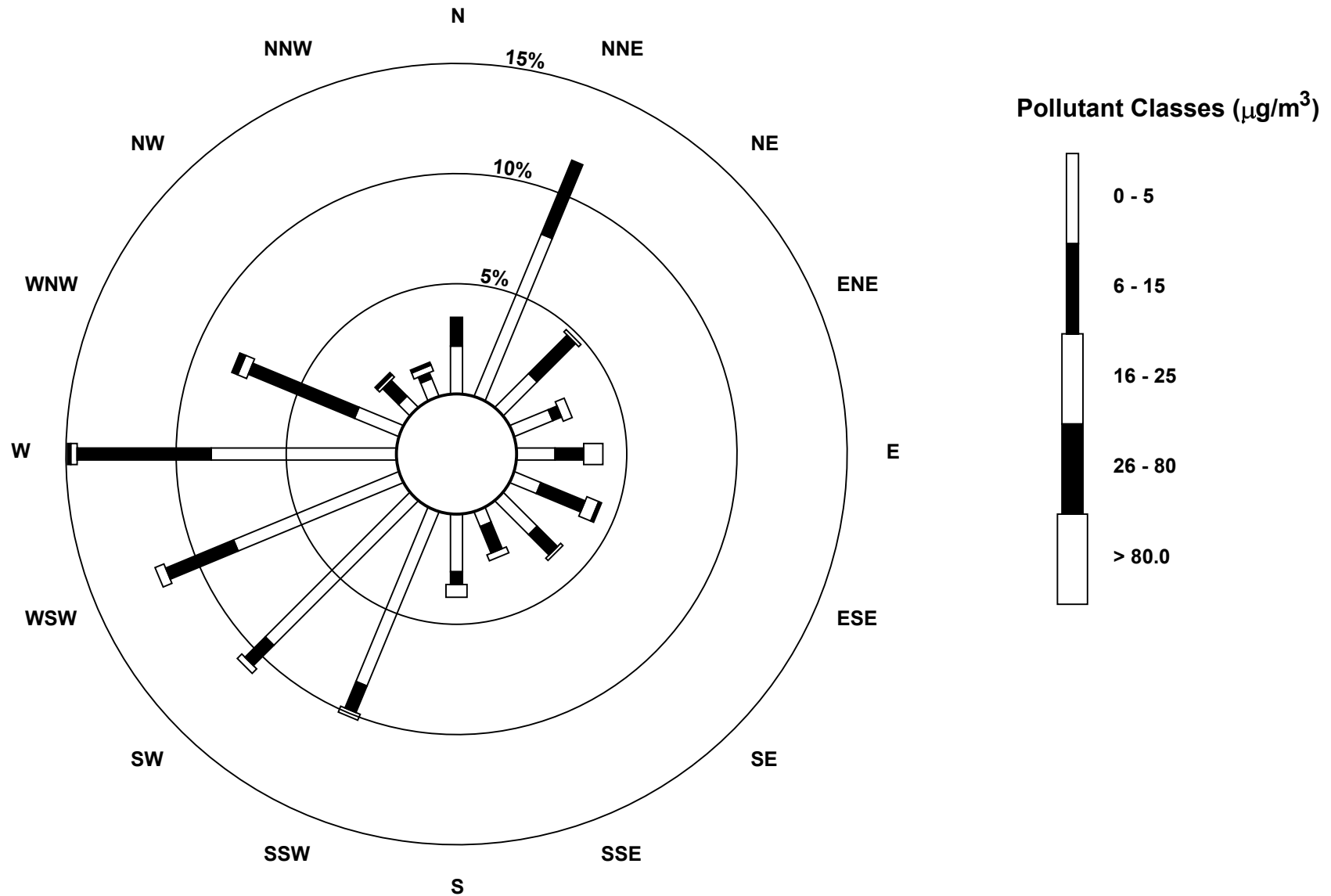
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Henry Pirker - February 2016



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Henry Pirker - February 2016



Hourly Averages

External Temperature (ET) - °C

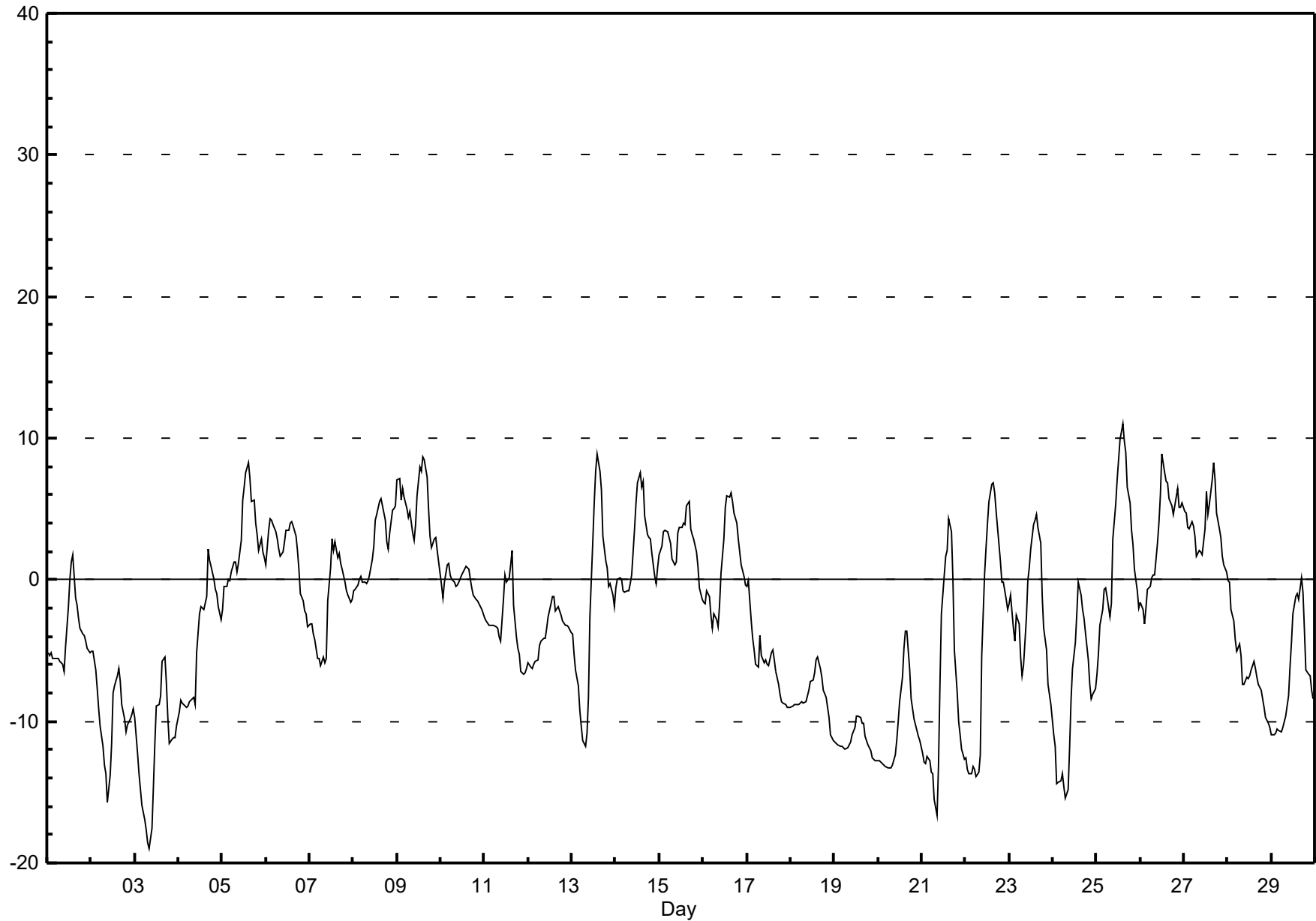
Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 11.0 °C on Feb 25 15:00 Maximum Daily Average: 5.1 °C on Feb 9																			Hours in Service: 696 Hours of Data: 696							
Minimum Value: -19 °C on Feb 3 09:00 Minimum Daily Average: -12.2 °C on Feb 3 Maximum Diurnal Average: 1.5 °C at hour 16 Minimum Diurnal Average: -6.0 °C at hour 9 Monthly Average: -2.90 °C Percentiles: P ₁ = -15.9 P ₁₀ = -11.6 Q ₁ = -7.8 Median = -2.2 Q ₃ = 1.9 P ₉₀ = 5.0 P ₉₉ = 8.6																			Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	-5	-5	-5	-6	-6	-6	-6	-6	-6	-7	-5	-2	0	1	2	-1	-2	-3	-3	-4	-4	-4	-5	-5	-3.8	1.8
2-Feb	-5	-5	-6	-8	-9	-10	-12	-13	-14	-16	-14	-12	-8	-8	-7	-6	-7	-9	-10	-11	-10	-10	-10	-9	-9.5	-5.0
3-Feb	-10	-12	-14	-15	-16	-17	-18	-19	-19	-18	-15	-12	-9	-9	-8	-6	-5	-7	-10	-12	-11	-11	-11	-10	-12.2	-5.4
4-Feb	-9	-8	-9	-9	-9	-9	-9	-8	-8	-9	-5	-2	-2	-2	-2	-1	2	1	1	0	-1	-1	-2	-3	-4.3	2.2
5-Feb	-2	-1	0	0	0	1	1	1	0	1	3	6	7	8	8	7	6	6	4	3	2	3	2	2	2.8	8.3
6-Feb	1	4	4	4	4	3	3	2	2	2	3	4	3	4	4	4	3	2	1	-1	-2	-2	-2	-3	1.9	4.3
7-Feb	-3	-3	-4	-4	-6	-6	-6	-6	-6	-6	-2	1	3	2	3	2	2	1	1	0	-1	-1	-2	-1	-1.7	2.9
8-Feb	-1	-1	0	0	0	0	0	0	0	0	1	2	4	5	6	6	5	4	3	2	3	5	5	5	2.3	5.7
9-Feb	7	7	6	6	6	5	4	5	3	3	4	6	8	8	9	9	7	5	3	2	3	3	2	1	5.1	8.7
10-Feb	0	-1	0	1	1	0	0	0	0	0	0	0	1	1	1	1	0	-1	-1	-1	-1	-2	-2	-2	-0.3	1.2
11-Feb	-3	-3	-3	-3	-3	-3	-3	-3	-4	-4	-1	0	0	0	1	2	-2	-4	-5	-5	-7	-7	-7	-6	-3.1	2.0
12-Feb	-6	-6	-6	-6	-6	-6	-5	-4	-4	-4	-3	-3	-2	-1	-1	-2	-2	-2	-3	-3	-3	-3	-3	-4	-3.7	-1.1
13-Feb	-4	-5	-6	-7	-9	-10	-11	-12	-11	-8	-3	3	5	8	9	8	6	3	1	1	0	0	-1	-2	-2.0	8.9
14-Feb	-1	0	0	0	-1	-1	-1	-1	0	0	4	5	7	8	7	7	4	3	3	3	2	0	0	1	2.1	7.6
15-Feb	2	2	3	3	3	3	3	1	1	1	3	4	4	4	4	5	6	4	3	3	2	1	-1	-1	2.6	5.6
16-Feb	-2	-2	-1	-1	-3	-3	-2	-3	-3	-2	0	3	5	6	6	6	6	5	4	3	2	1	0	0	1.0	6.1
17-Feb	0	0	-3	-4	-5	-6	-6	-4	-5	-6	-6	-6	-6	-5	-5	-6	-6	-7	-8	-9	-9	-9	-9	-9	-5.8	-0.1
18-Feb	-9	-9	-9	-9	-9	-9	-9	-9	-9	-8	-8	-7	-7	-7	-6	-5	-6	-7	-8	-8	-9	-10	-11	-11	-8.2	-5.5
19-Feb	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-11	-10	-10	-10	-10	-10	-10	-11	-12	-12	-12	-13	-13	-13	-11.4	-9.6
20-Feb	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-11	-10	-9	-7	-5	-4	-4	-6	-8	-9	-10	-11	-11	-11	-10.3	-3.6
21-Feb	-12	-13	-13	-12	-13	-14	-14	-15	-17	-13	-7	-2	0	2	2	4	3	0	-5	-8	-10	-11	-12	-13	-8.0	4.3
22-Feb	-13	-13	-14	-14	-13	-13	-14	-14	-12	-5	0	2	4	6	7	7	6	5	3	1	0	0	-1	-2	-3.7	6.8
23-Feb	-2	-1	-3	-4	-3	-3	-5	-7	-6	-3	0	1	2	4	4	5	4	3	-1	-3	-5	-7	-8	-9	-2.0	4.7
24-Feb	-11	-12	-14	-14	-14	-14	-15	-15	-15	-12	-8	-6	-4	-2	0	-1	-2	-3	-4	-6	-7	-8	-8	-8	-8.5	-0.2
25-Feb	-7	-5	-3	-2	-1	-1	-1	-3	-2	3	5	7	8	10	11	10	9	7	5	3	2	1	-1	-2	2.3	11.0
26-Feb	-2	-2	-3	-2	-1	0	0	0	0	3	4	6	9	8	7	7	6	5	5	5	6	5	5	5	3.2	8.9
27-Feb	5	5	4	4	4	4	3	2	2	2	4	6	5	5	7	8	7	5	4	3	2	1	0	0	3.8	8.3
28-Feb	0	0	-2	-3	-4	-5	-5	-5	-7	-7	-7	-7	-7	-6	-6	-6	-7	-7	-8	-8	-9	-10	-10	-10	-6.2	-0.1
29-Feb	-11	-11	-11	-11	-11	-11	-10	-10	-10	-8	-6	-4	-2	-1	-1	-1	0	-1	-3	-6	-7	-7	-8	-8	-6.7	0.1
																									Diurnal Average	
																									Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - February 2016



Hourly Averages

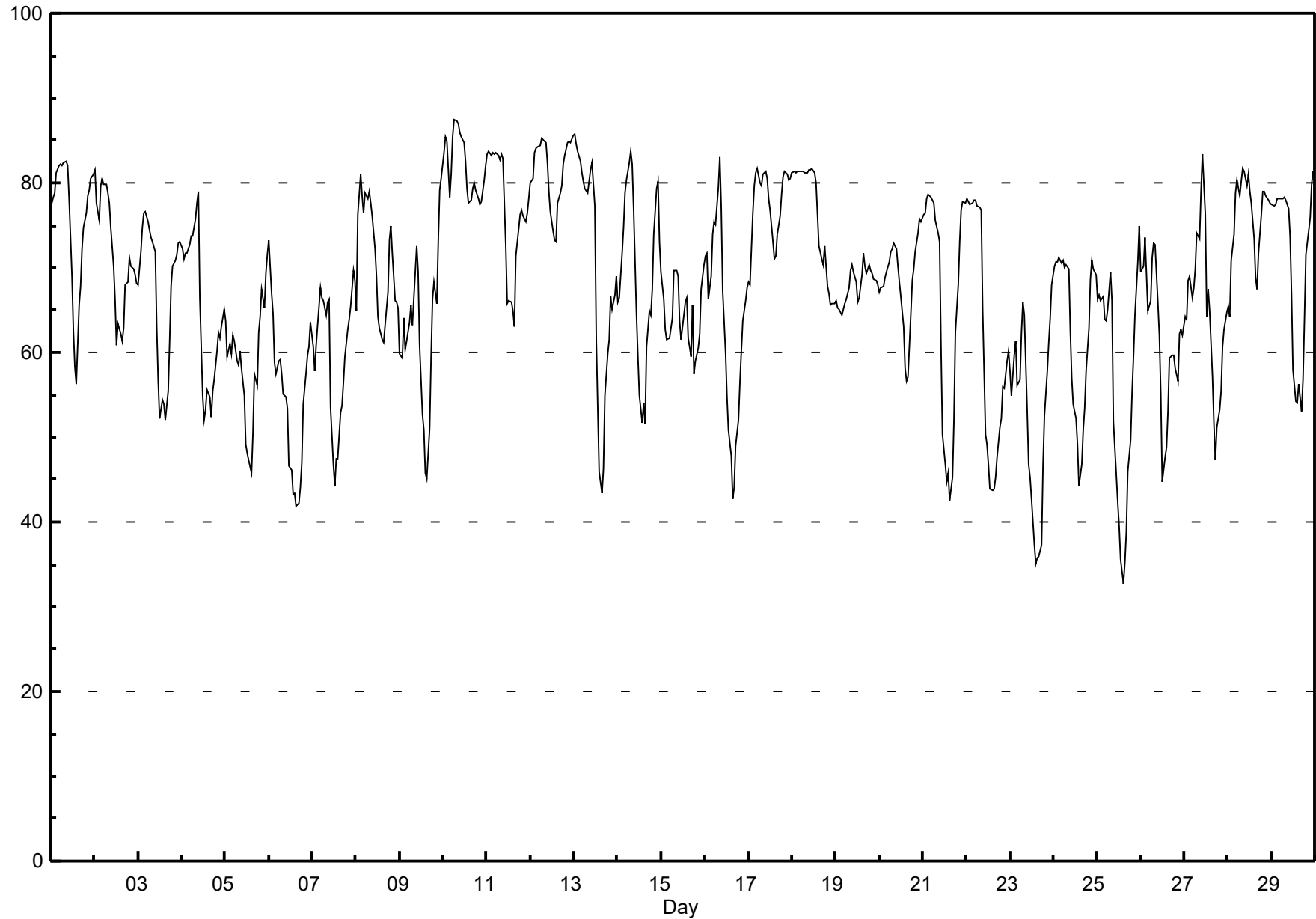
Relative Humidity (RH) - %

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 87.4 % on Feb 10 07:00 Maximum Daily Average: 82.0 % on Feb 10																								Hours in Service: 696 Hours of Data: 696 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 33 % on Feb 25 15:00 Minimum Daily Average: 52.4 % on Feb 23 Maximum Diurnal Average: 74.9 % at hour 9 Minimum Diurnal Average: 55.7 % at hour 16 Monthly Average: 67.38 % Percentiles: P ₁ = 36.5 P ₁₀ = 50.9 Q ₁ = 60.2 Median = 68.4 Q ₃ = 77.5 P ₉₀ = 81.3 P ₉₉ = 85.4																										
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-Feb	78	78	79	81	82	82	82	82	83	82	78	69	63	58	56	66	68	72	75	76	78	79	80	81	75.4	82.6
2-Feb	82	78	76	80	81	80	80	79	78	75	70	66	61	63	62	61	63	68	68	71	70	70	69	68	71.6	81.5
3-Feb	68	72	75	76	77	75	74	74	73	72	63	57	52	54	54	52	55	61	68	70	71	71	73	73	67.1	76.6
4-Feb	72	71	72	72	73	74	74	76	78	79	66	55	52	53	56	55	52	55	57	60	62	62	63	65	64.7	79.0
5-Feb	64	59	61	60	62	61	59	59	60	58	55	49	48	47	46	51	57	56	62	64	67	65	69	71	58.9	71.5
6-Feb	73	67	65	59	57	59	59	57	55	55	53	47	46	43	43	42	42	44	47	54	58	60	61	63	54.5	73.2
7-Feb	61	58	61	63	68	66	66	64	66	66	54	47	44	48	47	53	54	56	60	63	64	65	70	68	59.6	69.6
8-Feb	65	76	81	78	76	79	78	79	78	76	72	69	64	63	62	61	63	67	73	75	72	66	66	65	71.0	81.1
9-Feb	60	59	64	60	61	64	66	63	70	73	70	61	53	51	46	45	51	59	66	68	66	73	79	81	62.8	80.6
10-Feb	84	85	85	78	81	85	87	87	87	86	85	85	83	79	78	78	79	80	79	78	77	78	80	82	82.0	87.4
11-Feb	83	84	83	84	83	84	83	83	83	83	73	66	66	66	65	63	71	75	76	77	76	75	76	78	76.5	83.6
12-Feb	80	80	83	84	84	84	85	85	85	82	79	77	74	73	73	78	79	80	82	83	85	85	85	86	81.3	85.5
13-Feb	86	85	84	82	81	80	79	79	80	82	82	77	62	54	46	43	46	55	60	62	67	65	67	69	69.7	85.8
14-Feb	66	66	72	75	79	80	82	84	82	77	64	59	55	52	54	52	61	65	64	67	74	79	80	73	69.3	83.8
15-Feb	69	66	63	62	62	63	64	70	70	69	64	61	64	66	66	62	59	66	58	59	61	62	68	70	64.3	70.3
16-Feb	71	72	66	69	74	75	75	80	83	77	67	60	55	51	48	43	44	49	52	56	60	64	66	68	63.5	83.1
17-Feb	68	68	76	80	81	82	80	80	81	81	80	78	77	73	71	71	74	76	79	81	81	81	80	81	77.5	81.6
18-Feb	81	81	81	81	81	81	81	81	81	81	82	82	81	80	76	73	71	70	73	68	67	66	66	66	76.3	81.7
19-Feb	66	65	65	64	65	66	66	68	70	70	70	68	66	67	69	72	70	69	70	70	69	69	68	68	67.9	71.7
20-Feb	67	68	68	69	69	71	72	72	73	72	70	68	67	63	58	57	57	64	68	70	72	74	76	75	68.4	75.8
21-Feb	76	76	78	79	78	78	78	76	74	73	61	50	47	45	46	43	45	52	62	68	73	77	78	78	66.3	78.6
22-Feb	78	78	78	78	78	78	77	77	77	65	50	49	47	44	44	44	45	48	51	52	56	56	59	60	61.2	78.1
23-Feb	58	55	60	61	56	57	62	66	64	53	47	45	43	37	35	36	36	37	47	52	58	61	64	68	52.4	68.0
24-Feb	70	71	71	71	71	71	70	70	70	63	57	54	52	49	44	47	51	53	58	63	69	71	70	69	62.6	71.2
25-Feb	66	67	66	67	64	64	65	69	66	52	46	42	40	36	33	35	39	46	50	55	60	64	71	75	55.7	74.9
26-Feb	70	70	74	69	65	66	71	73	73	66	62	55	45	48	49	53	59	60	60	58	57	62	63	62	62.0	73.6
27-Feb	64	64	68	69	66	68	70	74	73	79	83	76	64	67	65	57	52	47	51	53	55	61	63	65	64.8	83.4
28-Feb	65	64	71	74	79	80	79	80	82	81	80	81	79	78	73	69	67	72	76	79	79	78	78	78	75.9	81.7
29-Feb	77	77	77	78	78	78	78	78	78	77	74	67	58	54	54	56	53	57	64	71	74	76	80	81	70.7	81.4
																									Diurnal Average	
																									Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - February 2016



Hourly Averages

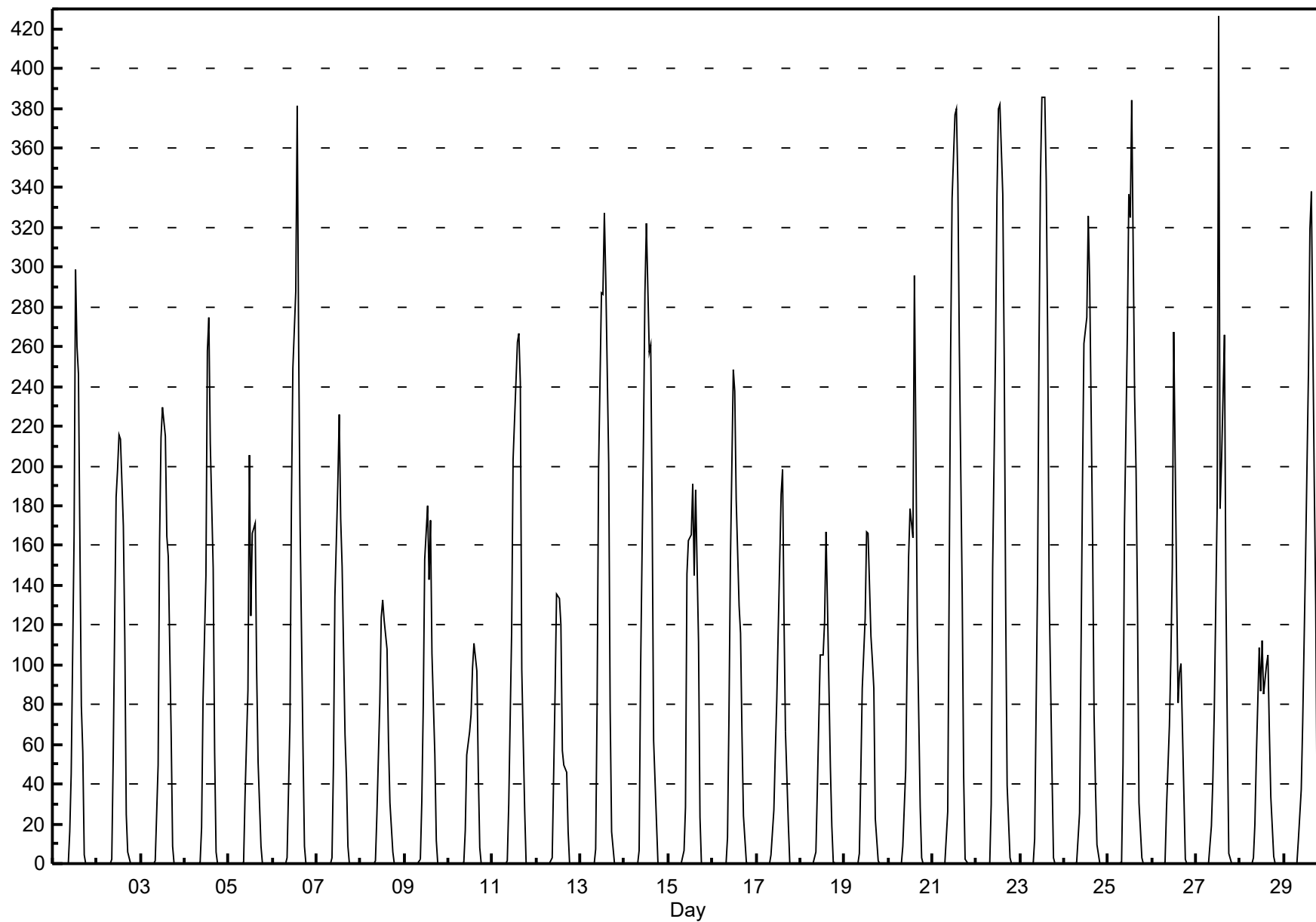
Solar Radiation (SR) - W/m²

Henry Pirker - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 426.1 W/m ² on Feb 27 13:00 Maximum Daily Average: 96.8 W/m ² on Feb 23																								Hours in Service: 696 Hours of Data: 696			
Minimum Value: 0 W/m ² on Feb 1 01:00 Minimum Daily Average: 23.9 W/m ² on Feb 10 Maximum Diurnal Average: 229.9 W/m ² at hour 13 Minimum Diurnal Average: 0.0 W/m ² at hour 1 Monthly Average: 55.39 W/m ² Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 84.9 P ₉₀ = 200.8 P ₉₉ = 379.2																								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-Feb	0	0	0	0	0	0	0	0	0	16	45	165	299	260	247	80	56	5	0	0	0	0	0	0	0	48.8	298.6
2-Feb	0	0	0	0	0	0	0	0	2	54	184	198	216	214	170	113	25	6	0	0	0	0	0	0	0	49.2	215.9
3-Feb	0	0	0	0	0	0	0	0	2	50	162	214	229	215	164	155	65	9	0	0	0	0	0	0	0	52.7	229.4
4-Feb	0	0	0	0	0	0	0	0	1	18	83	145	258	275	211	149	56	6	0	0	0	0	0	0	0	50.1	275.0
5-Feb	0	0	0	0	0	0	0	0	1	34	87	206	125	166	171	97	51	9	0	0	0	0	0	0	0	39.5	205.8
6-Feb	0	0	0	0	0	0	0	0	3	72	181	250	288	381	261	170	58	9	0	0	0	0	0	0	0	69.7	381.4
7-Feb	0	0	0	0	0	0	0	0	3	49	134	190	226	174	149	65	43	9	0	0	0	0	0	0	0	43.4	226.3
8-Feb	0	0	0	0	0	0	0	0	2	25	81	124	133	122	108	61	30	6	0	0	0	0	0	0	0	28.8	132.5
9-Feb	0	0	0	0	0	0	0	0	2	31	80	153	180	143	173	106	55	12	0	0	0	0	0	0	0	38.9	179.9
10-Feb	0	0	0	0	0	0	0	0	1	17	55	66	75	98	111	97	46	8	0	0	0	0	0	0	0	23.9	110.5
11-Feb	0	0	0	0	0	0	0	0	1	30	116	203	223	263	267	242	97	27	0	0	0	0	0	0	0	61.3	266.9
12-Feb	0	0	0	0	0	0	0	0	3	45	87	135	133	120	57	50	46	16	0	0	0	0	0	0	0	28.8	135.2
13-Feb	0	0	0	0	0	0	0	0	7	81	199	287	287	327	293	201	78	16	0	0	0	0	0	0	0	74.0	327.2
14-Feb	0	0	0	0	0	0	0	0	6	96	214	287	322	258	261	177	62	20	0	0	0	0	0	0	0	71.0	322.3
15-Feb	0	0	0	0	0	0	0	0	6	29	145	163	165	191	145	188	112	23	0	0	0	0	0	0	0	48.6	190.6
16-Feb	0	0	0	0	0	0	0	0	13	73	152	249	238	183	129	116	65	24	1	0	0	0	0	0	0	51.8	248.7
17-Feb	0	0	0	0	0	0	0	0	4	27	56	82	117	186	198	123	67	19	0	0	0	0	0	0	0	36.7	198.2
18-Feb	0	0	0	0	0	0	0	0	6	37	71	105	105	122	167	130	49	19	1	0	0	0	0	0	0	33.8	166.7
19-Feb	0	0	0	0	0	0	0	0	5	45	88	123	167	166	114	102	88	23	1	0	0	0	0	0	0	38.5	167.3
20-Feb	0	0	0	0	0	0	0	0	9	47	104	155	179	164	296	213	119	28	3	0	0	0	0	0	0	54.9	295.9
21-Feb	0	0	0	0	0	0	0	0	26	141	256	334	377	380	342	261	135	44	2	0	0	0	0	0	0	95.8	379.6
22-Feb	0	0	0	0	0	0	0	0	30	148	259	337	380	382	337	253	130	39	3	0	0	0	0	0	0	95.7	381.8
23-Feb	0	0	0	0	0	0	0	0	12	142	259	345	385	385	343	264	138	45	3	0	0	0	0	0	0	96.8	385.4
24-Feb	0	0	0	0	0	0	0	1	26	107	190	262	274	326	291	162	75	38	10	0	0	0	0	0	0	73.4	325.8
25-Feb	0	0	0	0	0	0	0	0	50	170	268	337	325	384	235	198	128	31	3	0	0	0	0	0	0	88.7	384.0
26-Feb	0	0	0	0	0	0	0	1	28	69	103	149	268	139	81	96	101	35	2	0	0	0	0	0	0	44.6	267.5
27-Feb	0	0	0	0	0	0	0	0	19	43	78	182	426	178	202	266	138	67	5	0	0	0	0	0	0	66.8	426.1
28-Feb	0	0	0	0	0	0	0	3	20	53	109	87	113	86	100	105	66	33	4	0	0	0	0	0	0	32.3	112.5
29-Feb	0	0	0	0	0	0	0	0	12	37	71	112	154	248	319	339	191	129	21	0	0	0	0	0	0	68.1	338.5
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2 10.3 61.6 135.0 194.7 229.9 225.3 204.9 157.8 81.7 26.0 2.0 0.0 0.0 0.0 0.0 0.0																								Diurnal Average			
0.0 0.0 0.0 0.0 0.3 0.0 0.0 2.8 50.1 170.2 267.6 345.4 426.1 385.4 343.5 338.5 191.0 129.5 21.3 0.0 0.0 0.1 0.0 0.0																								Diurnal Maximum			

Hourly Averages

Solar Radiation (SR) - W/m²
Henry Pirker - February 2016



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	1	2	4	4	4	2	2	1	1	2	0	2	3	2	3	1	1	1	1	1	0	2	2	1	0.2	4.0
Dir	44	85	90	87	91	77	71	114	270	260	86	205	198	201	243	255	295	300	262	298	350	267	266	279	165.2	90.2
2 Spd	2	4	3	1	3	2	1	1	2	1	5	2	2	4	5	6	4	4	2	2	2	2	1	1	2.1	6.2
Dir	195	244	248	180	189	206	193	182	290	310	270	275	270	293	274	291	254	277	286	299	316	304	270	294	267.3	291.1
3 Spd	2	1	3	2	3	2	4	5	3	3	4	3	3	3	3	0	1	2	2	1	2	2	3	1	2.1	4.6
Dir	288	251	280	294	274	292	286	275	269	267	270	276	265	280	254	284	358	31	359	342	315	288	297	294	285.1	274.9
4 Spd	1	1	1	1	1	0	1	2	1	3	2	3	3	4	3	4	10	11	8	4	3	4	2	3	2.4	10.6
Dir	1	84	169	205	207	183	239	215	199	157	184	205	254	256	267	241	221	220	206	181	129	142	141	133	204.7	220.2
5 Spd	4	3	3	4	2	4	6	5	6	5	4	5	5	3	2	1	1	1	2	2	1	2	2	1	2.7	5.8
Dir	131	90	101	89	61	79	73	83	114	78	97	121	127	80	129	194	76	177	84	95	113	123	75	83	98.7	73.5
6 Spd	2	10	15	28	32	31	35	33	33	31	23	25	29	28	18	16	14	18	19	9	11	14	11	11	20.1	35.3
Dir	160	195	208	208	206	211	214	214	212	221	223	229	239	240	250	251	234	221	214	226	219	215	215	211	220.3	214.2
7 Spd	10	11	10	5	3	5	5	4	2	1	1	2	2	3	2	2	1	2	2	2	1	1	1	2	2.5	11.0
Dir	219	206	207	220	262	249	251	226	275	255	246	244	222	248	248	258	147	131	65	114	97	277	330	80	223.1	205.9
8 Spd	1	1	1	3	1	1	0	1	2	2	2	3	1	1	0	2	3	1	2	2	5	10	10	9	1.6	10.3
Dir	185	169	113	162	235	156	137	135	95	113	114	138	156	139	99	104	128	224	286	247	231	240	241	225	204.7	240.1
9 Spd	15	13	8	9	5	6	6	4	1	1	2	2	3	4	6	7	4	2	3	1	2	4	4	2	2.8	15.1
Dir	213	208	214	239	264	267	211	186	299	93	67	131	169	190	262	253	299	276	286	39	36	15	17	11	234.0	213.0
10 Spd	1	2	2	3	6	9	10	10	10	9	10	9	8	6	6	7	8	7	6	5	3	4	4	2	6.0	10.2
Dir	306	335	21	21	16	24	37	32	37	28	30	28	22	14	12	12	13	17	30	24	29	0	357	344	21.6	31.7
11 Spd	2	3	1	1	3	3	4	3	3	3	4	2	2	3	2	3	8	9	6	4	5	6	5	5	3.4	9.2
Dir	344	343	19	49	61	73	75	63	52	56	42	20	7	323	327	29	41	47	43	11	34	40	32	33	34.9	46.6
12 Spd	7	6	5	6	6	7	10	9	6	6	10	7	4	2	4	2	1	4	3	0	2	2	1	2	3.5	10.4
Dir	37	28	21	30	22	32	46	46	30	30	46	36	11	0	210	181	170	101	128	179	62	86	255	284	39.4	46.3
13 Spd	2	4	3	5	4	3	2	1	2	3	1	2	5	5	7	12	10	7	5	4	5	4	2	1	3.4	11.8
Dir	196	251	251	249	270	278	269	264	115	115	118	204	217	204	227	237	235	251	248	223	186	192	247	265	230.8	236.7
14 Spd	4	3	3	1	1	1	3	6	8	3	2	3	4	2	2	1	2	1	0	1	2	3	6	4	1.9	8.0
Dir	208	198	194	272	190	211	202	183	197	222	215	202	202	221	309	56	108	149	336	17	48	125	117	163	185.7	197.2
15 Spd	9	12	20	20	19	17	15	7	5	3	3	5	7	7	4	2	1	1	8	10	6	3	2	2	7.2	20.5
Dir	201	210	214	219	223	229	232	250	248	252	226	240	254	277	264	270	280	267	221	238	196	204	116	125	226.7	218.8
16 Spd	2	2	3	1	2	3	2	1	3	2	2	3	1	4	9	16	16	16	18	14	10	6	1	2	4.5	18.4
Dir	42	23	40	188	294	266	205	163	113	97	88	118	173	194	207	221	218	209	212	211	206	182	259	245	207.5	211.6
17 Spd	1	1	1	1	0	2	2	5	6	5	7	6	7	7	8	8	8	7	6	6	5	5	5	5	4.2	8.2
Dir	193	186	107	341	93	268	304	349	29	21	28	23	25	4	6	7	38	32	16	13	15	11	4	8	15.2	38.4
18 Spd	5	2	3	3	4	2	3	3	2	2	5	4	6	7	8	10	13	14	13	13	13	13	14	14	5.4	14.1
Dir	23	18	32	42	96	109	45	35	59	300	268	261	269	266	262	267	271	272	277	275	274	277	272	271	278.9	271.3
19 Spd	12	10	10	9	7	7	7	4	5	5	4	4	4	4	4	6	5	6	6	6	5	6	6	5	3.4	11.9
Dir	275	269	266	268	270	272	277	288	38	31	31	33	22	11	9	32	28	13	23	10	20	31	32	29	336.8	275.0
20 Spd	4	5	5	4	5	6	6	5	5	5	5	4	3	1	2	2	3	4	5	4	3	2	3	3	1.9	6.4
Dir	18	26	26	34	46	63	64	50	45	54	67	78	83	146	145	246	267	285	283	274	287	294	289	292	27.0	63.4
21 Spd	3	1	0	1	1	0	0	3	2	3	1	1	2	2	3	2	2	3	3	3	3	2	4	4	1.7	3.7
Dir	282	299	247	108	94	106	268	295	183	272	262	245	251	244	274	229	262	276	283	286	282	295	262	252	267.4	252.5
22 Spd	3	2	2	2	2	1	1	1	0	1	3	7	7	6	14	17	15	14	16	15	13	12	8	8	6.7	17.4
Dir	297	274	271	299	318	315	254	286	159	155	234	208	224	244	229	230	226	217	217	224	233	224	217	205	227.6	230.3

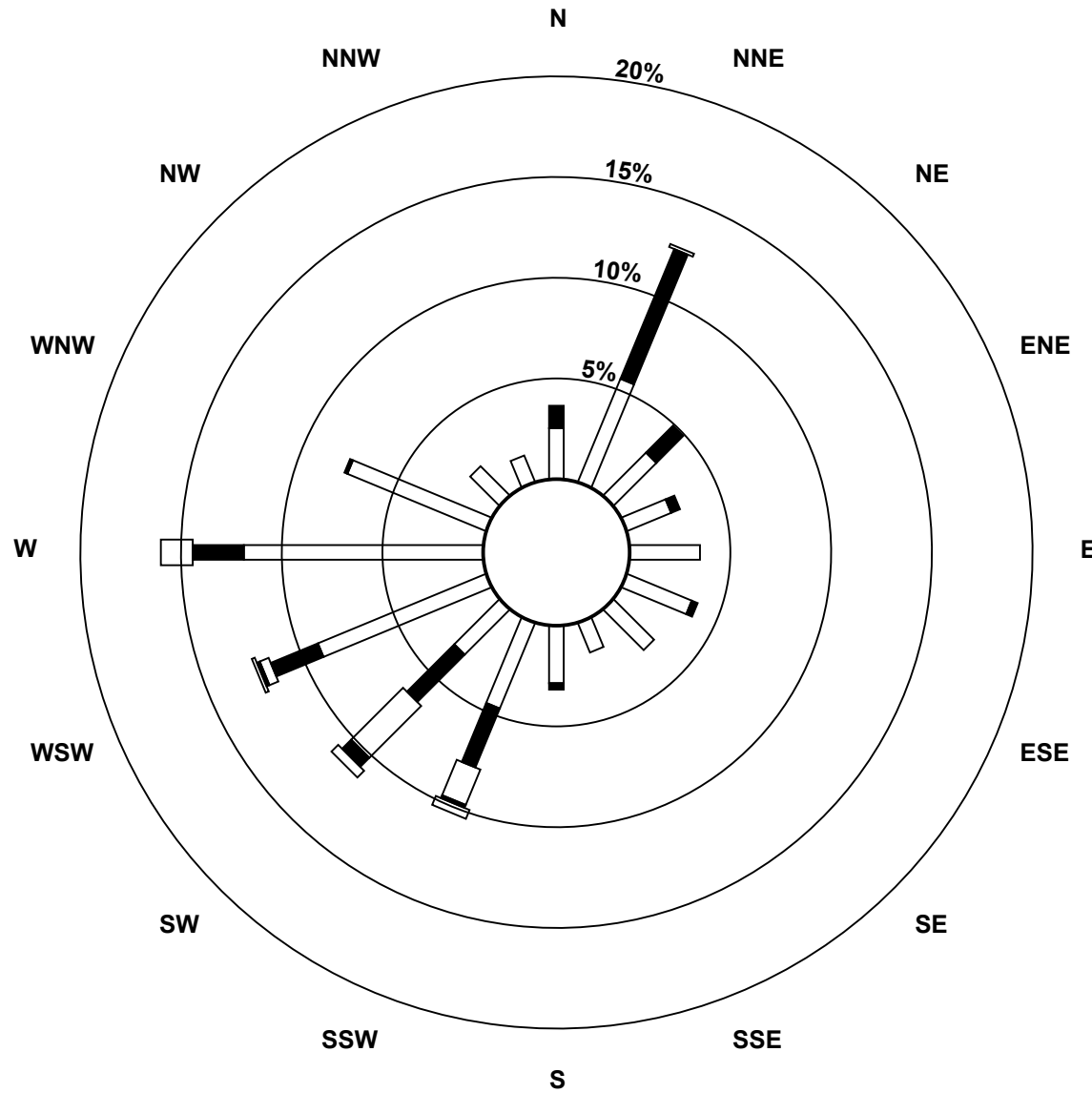
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - February 2016

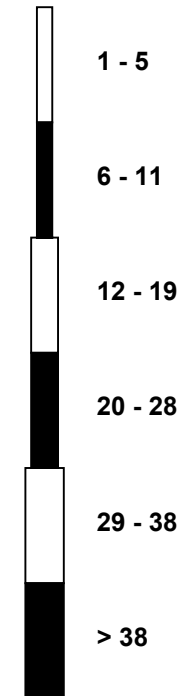
Day		Hourly Period Ending At (MST)																								Daily Average	Daily Maximum						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24								
23 Spd		13	15	8	7	12	11	2	2	2	5	5	9	9	10	11	9	8	4	4	1	3	2	1	1	6.1	14.6						
	Dir	210	219	198	201	218	213	250	269	227	227	231	245	238	236	235	245	242	245	273	291	284	270	275	300	231.0	218.8						
24 Spd		2	3	3	2	3	2	2	1	1	3	3	3	5	4	3	3	2	3	2	3	1	2	2	1	2.3	5.0						
	Dir	301	278	278	281	274	310	268	318	209	268	257	280	252	271	263	260	275	278	295	271	290	261	286	112	272.9	252.4						
25 Spd		2	4	5	4	12	10	5	3	3	1	4	5	4	3	1	2	4	3	4	1	2	0	0	1	3.0	11.5						
	Dir	166	241	256	243	197	202	225	240	255	257	209	225	190	238	250	171	237	240	269	214	320	253	104	192	224.2	197.3						
26 Spd		2	1	1	2	0	2	2	0	2	2	1	0	1	3	1	2	1	1	3	7	12	8	12	8	2.4	11.6						
	Dir	221	303	139	147	206	138	113	122	136	248	153	146	155	271	280	249	292	254	280	220	215	199	211	230	215.7	214.5						
27 Spd		10	8	4	7	13	13	11	4	7	16	9	6	7	7	5	3	2	10	12	14	12	8	6	4	7.4	16.1						
	Dir	222	228	248	233	228	225	216	198	278	267	251	249	274	277	277	283	192	202	208	212	217	211	219	293	234.1	266.9						
28 Spd		4	5	3	2	1	1	2	8	10	11	11	10	10	8	10	12	11	10	9	8	9	8	5	7	6.2	11.9						
	Dir	251	254	278	287	139	269	28	22	31	27	24	22	22	15	10	24	24	26	21	23	21	19	9	359	16.1	23.8						
29 Spd		6	4	3	2	2	1	2	1	1	1	1	1	3	2	3	3	1	2	1	2	0	2	1	0	1.0	6.1						
	Dir	359	28	32	8	332	308	282	228	188	211	238	267	248	256	274	298	256	265	283	269	134	343	115	220	309.6	359.4						
Spd		2.0	2.5	2.1	2.5	2.8	2.6	1.9	0.9	0.4	0.9	0.5	1.3	2.2	2.9	3.2	3.1	2.3	2.3	2.7	2.4	1.9	1.6	1.6	1.4	Diurnal Average							
Dir		235.2	230.7	225.6	224.9	225.4	227.3	227.7	241.5	205.4	266.5	276.3	241.3	251.2	262.5	260.2	260.6	253.2	245.8	244.8	247.3	242.4	241.4	256.0	258.0	Diurnal Maximum							
Spd		15.1	14.6	19.7	28.0	31.6	30.9	35.3	32.7	32.5	30.7	23.1	24.6	29.0	28.4	18.4	17.4	15.6	17.6	19.2	14.7	12.9	13.6	14.0	14.1	Diurnal Maximum							
Dir		213.0	218.8	214.0	208.4	206.1	210.5	214.2	214.0	212.4	221.3	222.8	228.6	239.0	240.4	249.6	230.3	218.2	220.8	214.3	223.6	232.6	215.2	272.5	271.3								
Maximum Speed Value: 35 km/h on Feb 6 07:00																								Minimum Speed Value: 0 km/h on Feb 1 11:00				Hours in Service:				696	
Maximum Daily Speed Average: 20.1 km/h on Feb 6																								Minimum Daily Speed Average: 0.2 km/h on Feb 1				Hours of Data:				696	
Maximum Diurnal Speed Average: 3.2 km/h at hour 15																								Minimum Diurnal Speed Average: 0.4 km/h at hour 9				Hours of Missing Data:				0	
Monthly Average Velocity: 1.95 km/h 243.81 deg												Speed Percentiles: P ₁ = 0.3 P ₁₀ = 1.0 Q ₁ = 1.8 Median = 3.2 Q ₃ = 6.2 P ₉₀ = 10.7 P ₉₉ = 28.3												Percent Operational Time:				100.0					
All monthly, daily, and diurnal averages have been calculated using vector methods																																	
Frequency Distribution																																	
		Speed Range (km/h)																															
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total																				
North	35		29		0		0		0		0		64																				
NorthEast	40		46		3		0		0		0		89																				
East	45		1		0		0		0		0		46																				
SouthEast	51		2		0		0		0		0		53																				
South	49		11		1		0		0		0		61																				
SouthWest	56		45		36		6		9		0		152																				
West	146		29		12		0		0		0		187																				
NorthWest	44		0		0		0		0		0		44																				
Total	466		163		52		6		9		0		696																				

Wind Rose

Wind Speed (WS) (km/h)
Henry Pirker - February 2016



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - February 2016

Maximum Speed: 35 km/h on Feb 6 07:00																			Maximum Daily Speed Average: 20.8 km/h on Feb 6										Hours in Service: 696																					
Minimum Speed: 0 km/h on Feb 21 06:00																			Minimum Daily Speed Average: 1.8 km/h on Feb 1										Hours of Data: 696																					
Maximum Diurnal Speed Average: 6.3 km/h at hour 19																			Minimum Diurnal Speed Average: 4.1 km/h at hour 24										Hours of Missing Data: 0																					
Monthly Average Speed: 5.24 km/h																			Percentiles: P ₁ = 0.4 P ₁₀ = 1.4 Q ₁ = 2.2 Median = 3.7 Q ₃ = 6.6 P ₉₀ = 10.8 P ₉₉ = 28.4										Percent Operational Time: 100.0																					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																										
1-Feb	1	2	4	4	4	2	2	1	1	2	0	2	3	2	3	2	1	1	1	1	0	2	2	1	1.8	4.1																								
2-Feb	2	4	3	1	3	2	1	1	3	4	5	3	2	4	5	6	4	4	3	2	2	2	2	2	2.9	6.3																								
3-Feb	2	6	4	2	4	3	6	6	5	3	4	4	3	3	3	0	2	2	2	2	4	3	3	1	3.3	6.3																								
4-Feb	1	1	1	1	1	0	2	2	1	3	2	3	4	4	3	4	10	11	8	4	4	4	2	3	3.4	10.8																								
5-Feb	5	3	3	4	2	4	6	5	6	5	4	5	5	3	2	3	1	2	3	2	2	2	2	1	3.3	6.0																								
6-Feb	3	10	16	28	32	31	35	33	33	31	23	25	29	29	18	16	14	18	19	10	11	14	12	11	20.8	35.5																								
7-Feb	10	11	10	6	3	5	5	4	2	1	1	3	2	3	2	2	1	2	2	2	2	1	1	2	3.6	11.2																								
8-Feb	2	2	2	3	2	1	0	1	2	3	2	3	1	1	1	2	3	1	3	2	5	10	10	9	3.0	10.4																								
9-Feb	15	13	8	9	6	7	6	4	1	1	2	2	3	5	7	8	4	2	3	2	2	4	4	2	5.0	15.2																								
10-Feb	1	2	2	3	6	9	10	10	10	9	10	9	8	6	7	7	8	7	6	5	3	4	4	3	6.3	10.3																								
11-Feb	2	3	1	2	3	3	4	3	3	3	4	3	3	3	3	3	8	9	6	4	5	6	5	6	4.0	9.3																								
12-Feb	7	6	5	6	6	7	10	9	6	6	10	7	5	2	4	2	2	4	4	1	2	2	2	2	4.9	10.5																								
13-Feb	2	4	3	5	4	3	3	1	2	3	1	4	5	5	7	12	10	7	5	4	5	4	4	1	4.3	11.9																								
14-Feb	4	4	3	2	2	2	3	6	8	4	2	3	4	2	2	2	2	2	2	2	2	3	6	5	3.3	8.0																								
15-Feb	9	13	20	21	20	17	15	7	5	3	3	5	7	7	4	3	2	2	9	10	7	4	2	2	8.1	20.7																								
16-Feb	2	2	3	2	3	4	2	1	3	2	2	3	1	5	9	16	16	16	18	14	11	6	2	2	6.1	18.5																								
17-Feb	3	2	1	1	1	2	3	5	7	5	7	6	7	8	8	8	8	7	6	6	5	5	5	5	5.1	8.4																								
18-Feb	5	3	3	3	4	3	3	3	3	2	5	4	6	7	8	11	13	14	13	13	13	13	14	14	7.5	14.2																								
19-Feb	12	10	10	9	7	7	7	5	5	5	4	4	4	5	4	6	5	6	6	6	5	6	6	5	6.3	12.0																								
20-Feb	5	5	5	4	5	7	6	5	5	5	5	4	3	1	2	3	3	4	5	4	3	2	4	3	4.0	6.7																								
21-Feb	4	1	0	2	1	0	0	4	8	3	1	1	2	2	3	2	2	3	3	3	3	2	4	4	2.4	8.0																								
22-Feb	3	3	2	3	4	1	3	2	0	2	3	7	8	6	14	18	15	14	16	15	13	12	8	9	7.5	17.5																								
23-Feb	13	15	8	8	12	11	3	3	3	5	5	9	10	10	11	9	9	4	4	2	3	2	2	1	6.7	14.7																								
24-Feb	2	4	3	3	4	4	4	5	7	3	3	4	5	5	3	3	2	3	2	3	2	2	3	1	3.3	6.5																								
25-Feb	2	5	5	4	12	10	6	3	3	1	4	5	4	4	1	2	4	4	5	2	2	1	0	1	3.8	11.6																								
26-Feb	2	1	1	3	1	2	2	0	2	2	1	1	1	3	1	2	2	1	5	8	12	8	12	8	3.4	11.7																								
27-Feb	10	9	5	7	13	14	11	5	8	16	9	6	7	7	5	3	2	10	12	14	12	8	7	4	8.5	16.3																								
28-Feb	4	5	3	2	1	1	2	8	11	11	11	10	10	8	10	12	11	10	9	8	9	8	5	7	7.4	12.2																								
29-Feb	6	5	4	2	2	1	3	1	1	1	1	1	3	2	3	3	2	2	1	3	2	2	2	1	2.2	6.3																								
																									4.8	5.3	4.7	5.1	5.7	5.6	5.6	5.0	5.2	5.0	4.7	5.0	5.3	5.2	5.4	5.9	5.7	6.0	6.3	5.3	5.2	5.0	4.6	4.1	Diurnal Average	
																									15.2	14.7	19.8	28.2	31.8	31.0	35.5	32.8	32.6	31.1	23.3	24.7	29.2	28.6	18.5	17.5	15.7	17.8	19.3	14.7	13.0	13.6	14.1	14.2	Diurnal Maximum	
All monthly, daily, and diurnal averages have been calculated using scalar methods																																																		

Hourly Standard Deviations

Wind Direction (WD) - deg
Henry Pirker - February 2016

Maximum Value: 90.7 deg on Feb 29 21:00																			Hours in Service: 696						
Minimum Value: 4.8 deg on Feb 6 17:00																			Hours of Data: 696						
																			Hours of Missing Data: 0						
Percentiles: P ₁ = 5.4 P ₁₀ = 7.8 Q ₁ = 12.5 Median = 20.6 Q ₃ = 35.0 P ₉₀ = 54.2 P ₉₉ = 85.9																			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-Feb	22	13	10	11	13	20	23	48	16	21	72	30	15	23	17	34	18	36	33	54	65	34	15	50	72.4
2-Feb	34	16	35	27	14	17	37	50	61	46	9	19	18	19	10	12	15	20	37	29	71	53	78	32	77.8
3-Feb	24	59	31	28	32	33	43	29	42	28	24	25	22	15	22	47	50	21	23	52	41	43	24	46	59.4
4-Feb	50	68	25	44	39	67	45	26	79	22	20	20	19	17	49	26	8	12	10	14	19	13	36	32	78.5
5-Feb	42	25	43	21	21	14	11	11	26	13	11	9	9	25	26	67	47	89	49	43	53	35	30	17	89.3
6-Feb	40	13	9	7	6	5	6	5	5	9	7	7	7	6	6	5	5	8	6	8	7	6	6	8	40.1
7-Feb	12	10	6	38	31	14	23	24	21	31	31	27	27	7	22	25	58	19	17	25	41	59	40	36	59.1
8-Feb	55	50	47	42	57	74	81	38	34	21	24	16	43	73	82	15	6	67	53	19	43	10	13	6	82.4
9-Feb	7	6	8	17	23	20	15	31	81	32	25	58	34	32	33	19	26	26	33	71	30	16	18	41	81.4
10-Feb	73	25	12	12	13	12	10	9	10	10	11	10	13	15	15	16	21	13	13	20	22	20	20	21	73.1
11-Feb	20	19	26	24	16	16	16	19	13	13	15	37	29	14	47	33	15	10	18	19	17	14	15	11	47.0
12-Feb	13	12	13	11	12	12	9	11	15	14	8	13	26	37	41	31	54	25	36	78	31	45	62	18	77.9
13-Feb	40	38	19	11	16	12	24	42	24	10	27	59	21	23	17	8	10	11	15	26	17	13	55	47	58.6
14-Feb	31	23	21	61	51	45	41	10	6	44	40	19	18	26	30	87	33	37	88	53	43	44	10	39	88.4
15-Feb	8	9	6	8	8	6	9	6	7	21	14	18	13	13	22	29	80	86	8	11	26	32	28	21	86.1
16-Feb	25	20	16	84	29	69	52	40	10	34	17	18	80	33	13	8	7	6	6	8	12	10	58	53	83.8
17-Feb	84	65	29	48	71	43	22	17	24	22	17	15	19	19	16	15	13	14	18	16	20	24	20	20	84.3
18-Feb	20	29	24	24	23	39	58	20	33	27	17	29	14	11	13	8	8	6	6	5	6	7	7	6	58.0
19-Feb	6	9	8	8	8	9	8	35	13	13	20	20	26	25	20	14	18	14	16	19	18	12	13	13	35.3
20-Feb	15	14	15	20	12	16	14	10	9	15	14	19	33	59	29	46	23	19	11	15	18	38	31	7	59.0
21-Feb	29	28	79	46	26	58	63	31	51	21	23	19	18	16	33	21	21	6	12	8	15	8	24	33	79.0
22-Feb	15	35	40	21	36	23	41	64	86	35	26	10	21	10	8	5	8	7	6	6	8	5	11	8	86.4
23-Feb	7	6	8	12	5	13	67	35	31	12	16	7	7	8	5	5	9	8	11	48	22	29	69	34	69.3
24-Feb	26	54	28	38	30	45	44	46	54	27	22	13	20	13	16	19	19	9	25	17	17	35	77	75	76.5
25-Feb	85	30	28	23	6	7	27	20	16	53	23	23	20	31	20	35	21	46	21	50	73	88	60	53	88.1
26-Feb	38	68	63	77	63	24	31	44	50	41	50	76	46	17	42	46	71	62	58	37	9	8	8	10	76.8
27-Feb	11	26	15	10	7	13	10	52	19	9	9	8	22	12	15	22	36	11	7	7	7	8	23	18	51.5
28-Feb	22	22	17	40	74	50	24	11	11	12	12	13	12	16	16	12	12	15	13	13	12	15	18	14	74.3
29-Feb	16	19	19	24	18	19	21	42	18	36	39	23	12	21	26	24	48	31	52	56	91	31	75	64	90.7
85.1 68.1 79.0 83.8 74.3 74.1 80.6 64.0 86.4 52.7 72.4 75.9 80.3 73.1 82.4 86.6 79.9 89.3 88.4 77.9 90.7 88.1 77.8 75.2																									

PAZA
Evergreen Park Station
Monthly Summary Tables, Graphs and
Roses

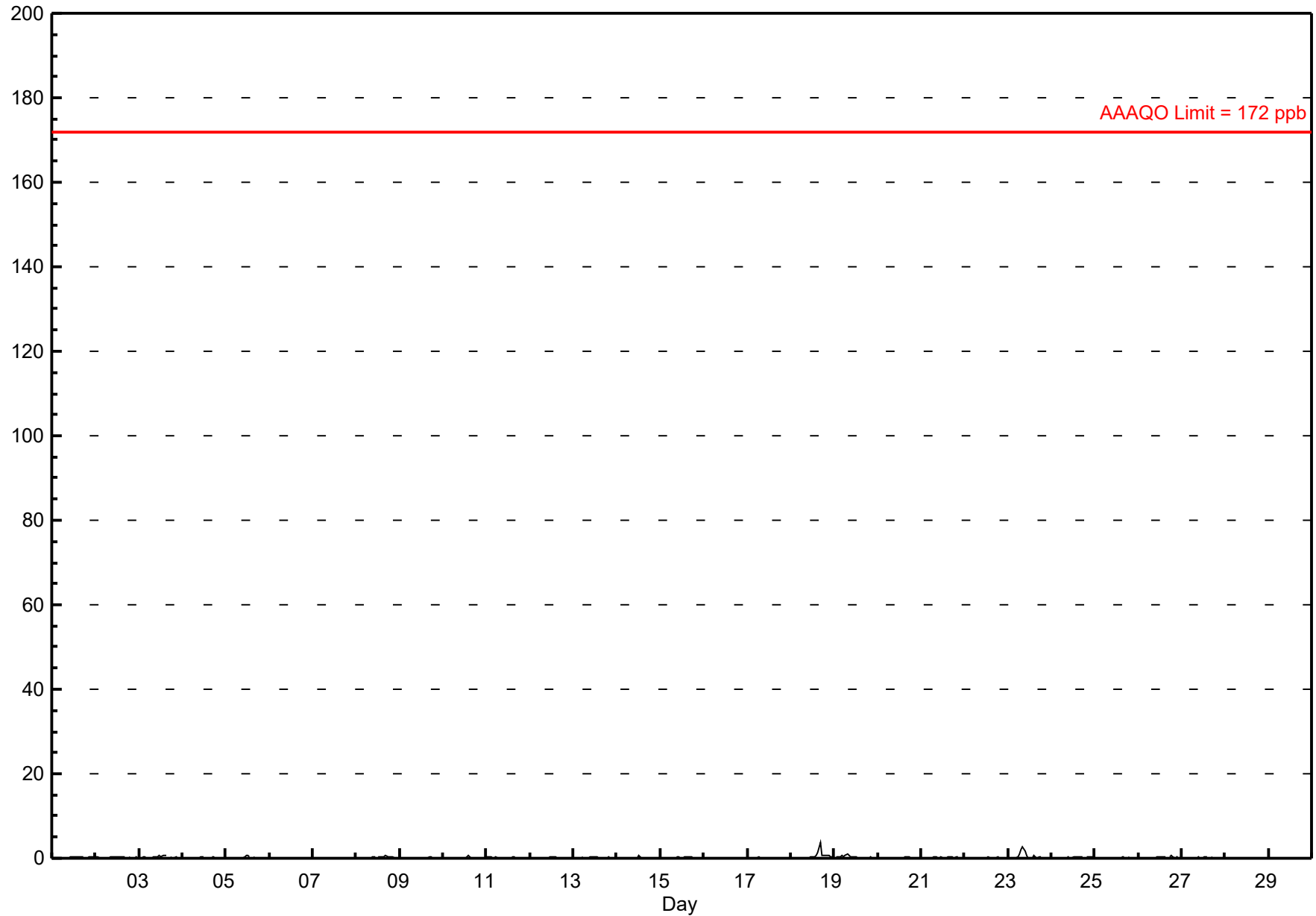
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Evergreen Park - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.6 ppb on Feb 18 17:00 Maximum Daily Average: 0.5 ppb on Feb 18																			Hours in Service: 696 Hours of Data: 663							
Minimum Value: 0 ppb on Feb 1 02:00 Maximum Diurnal Average: 0.3 ppb at hour 17 Monthly Average: 0.15 ppb																			Minimum Daily Average: 0.0 ppb on Feb 7 Minimum Diurnal Average: 0.1 ppb at hour 5 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.8		Hours of Missing Data: 33 Hours of Calibration: 33 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-Feb	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	0.4
2-Feb	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
3-Feb	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	A	0	0	0	0	0	0	0	0.3	0.7
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0.1	0.3
5-Feb	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0	0	0	0	0	0	0.2	0.8
6-Feb	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
7-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.8
9-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.5
11-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
12-Feb	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-Feb	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-Feb	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
15-Feb	0	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-Feb	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-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
18-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	1	1	1	1	1	1	0	0.5	3.6
19-Feb	A	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.9
20-Feb	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	0.3
21-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.5
22-Feb	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-Feb	0	0	0	0	0	0	1	2	3	2	1	0	0	0	1	0	0	0	0	A	0	0	0	0	0.5	2.8
24-Feb	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	0.4
25-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0.2	0.6
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.4
28-Feb	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
29-Feb	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	0.2
0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.3 0.2 0.2 0.1 0.1 0.1 0.1 0.1 Diurnal Average																										
0.4 0.4 0.4 0.5 0.7 0.5 1.0 1.9 2.8 1.6 0.6 0.8 0.8 0.7 0.8 1.3 3.6 0.7 0.8 0.7 0.7 0.8 0.5 0.4 Diurnal Maximum																										
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - February 2016



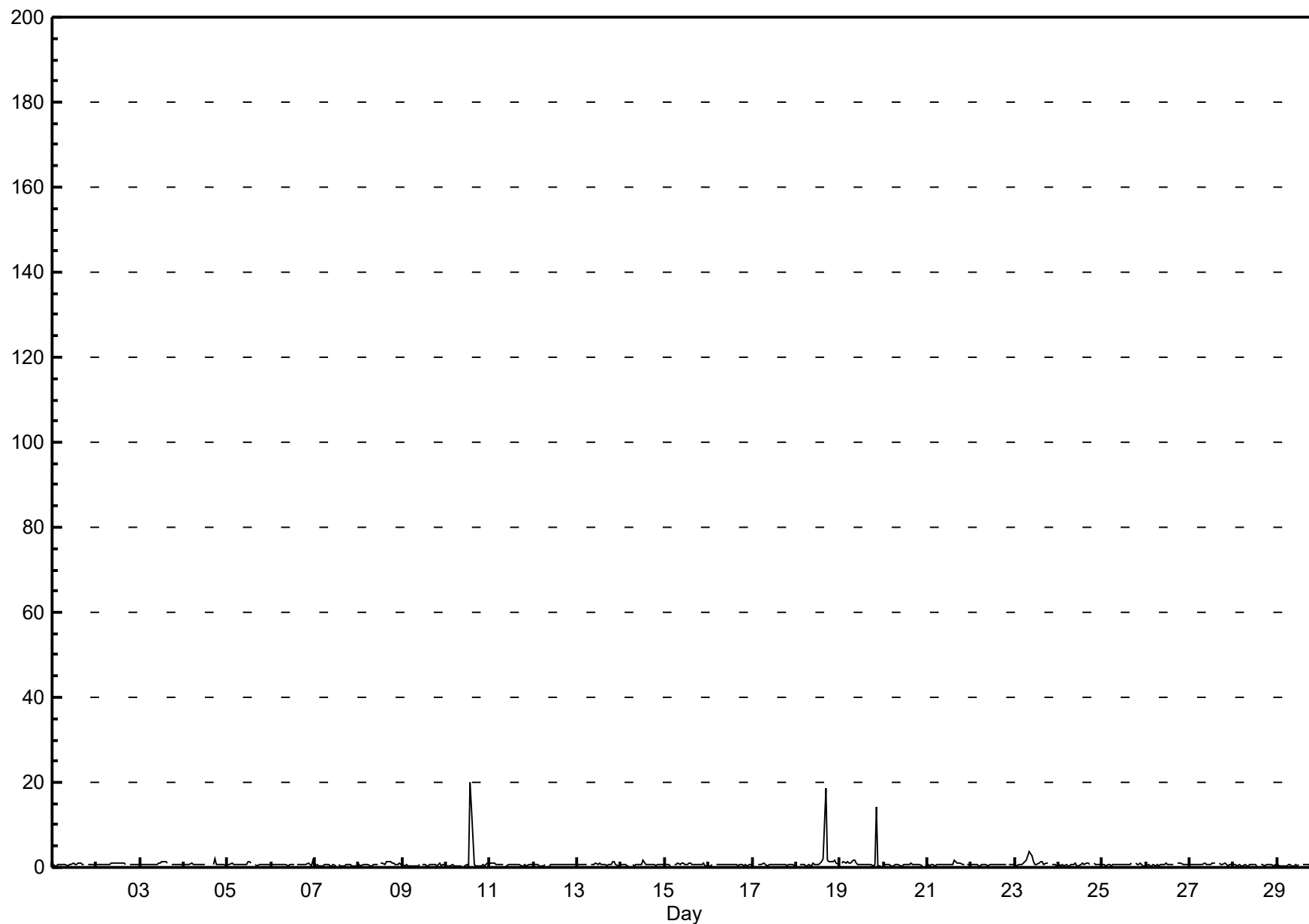
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Evergreen Park - February 2016

Maximum Value: 19.9 ppb on Feb 10 14:00																				Maximum Daily Average: 1.9 ppb on Feb 10					Hours in Service: 696	
Minimum Value: 0 ppb on Feb 10 05:00																				Minimum Daily Average: 0.5 ppb on Feb 7					Hours of Data: 663	
Maximum Diurnal Average: 1.5 ppb at hour 14																				Minimum Diurnal Average: 0.6 ppb at hour 6					Hours of Missing Data: 33	
Monthly Average: 0.78 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.8 P ₉₀ = 1.0 P ₉₉ = 2.8					Hours of Calibration: 33	
																				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-Feb	1	0	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.0
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.0
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.4
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	A	1	2	1	1	1	1	1	0	0.7	1.9
5-Feb	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	1.2
6-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	2	0.7	1.6
7-Feb	0	1	0	0	0	1	1	1	0	0	1	0	A	1	0	0	0	1	1	1	0	0	0	0	0.5	0.7
8-Feb	1	0	1	1	1	1	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4
9-Feb	1	0	1	0	0	0	0	0	0	1	A	1	1	0	0	1	1	1	1	0	1	0	1	1	0.6	1.1
10-Feb	0	0	0	1	0	0	0	0	0	A	0	1	0	20	14	1	0	0	0	0	1	0	1	1	1.9	19.9
11-Feb	1	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	1	0	0	1	0	1	1	1	0.6	1.0
12-Feb	1	1	1	0	0	0	1	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
13-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.7	1.3
14-Feb	1	1	1	0	0	A	1	0	1	1	1	1	2	1	1	1	1	1	1	0	1	1	1	1	0.6	1.6
15-Feb	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.7	1.2
16-Feb	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0	1	1	0.6	0.7
17-Feb	0	0	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0.6	1.0
18-Feb	1	A	1	1	1	0	1	1	0	1	1	1	1	1	1	2	19	2	1	1	1	2	1	1	1.7	18.7
19-Feb	A	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0	1	14	0	0	A	1.5	14.1
20-Feb	0	1	1	1	0	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.9
21-Feb	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	A	1	1	0.7	1.6
22-Feb	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.6	0.8
23-Feb	1	0	1	1	1	1	2	3	4	3	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1.1	3.7
24-Feb	1	0	1	0	1	1	0	1	1	1	0	0	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.0
25-Feb	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	0.6	0.9
26-Feb	0	1	0	0	1	0	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	1.2
27-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	0.7	1.0
28-Feb	1	1	0	1	0	0	1	0	0	1	1	1	1	0	A	1	1	0	1	1	1	1	0	1	0.5	0.7
29-Feb	1	0	0	0	0	0	1	1	0	0	1	0	1	A	1	1	1	1	0	1	1	0	1	1	0.5	1.0
0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.8 0.7 0.7 0.7 0.8 1.5 1.3 0.9 1.4 0.8 0.7 0.7 1.2 0.6 0.6 0.6																									Diurnal Average	
1.0 1.0 1.3 1.0 1.5 1.2 1.6 2.8 3.7 2.8 1.3 1.2 1.6 19.9 13.9 2.0 18.7 1.9 1.5 1.3 14.1 1.6 1.1 1.6																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

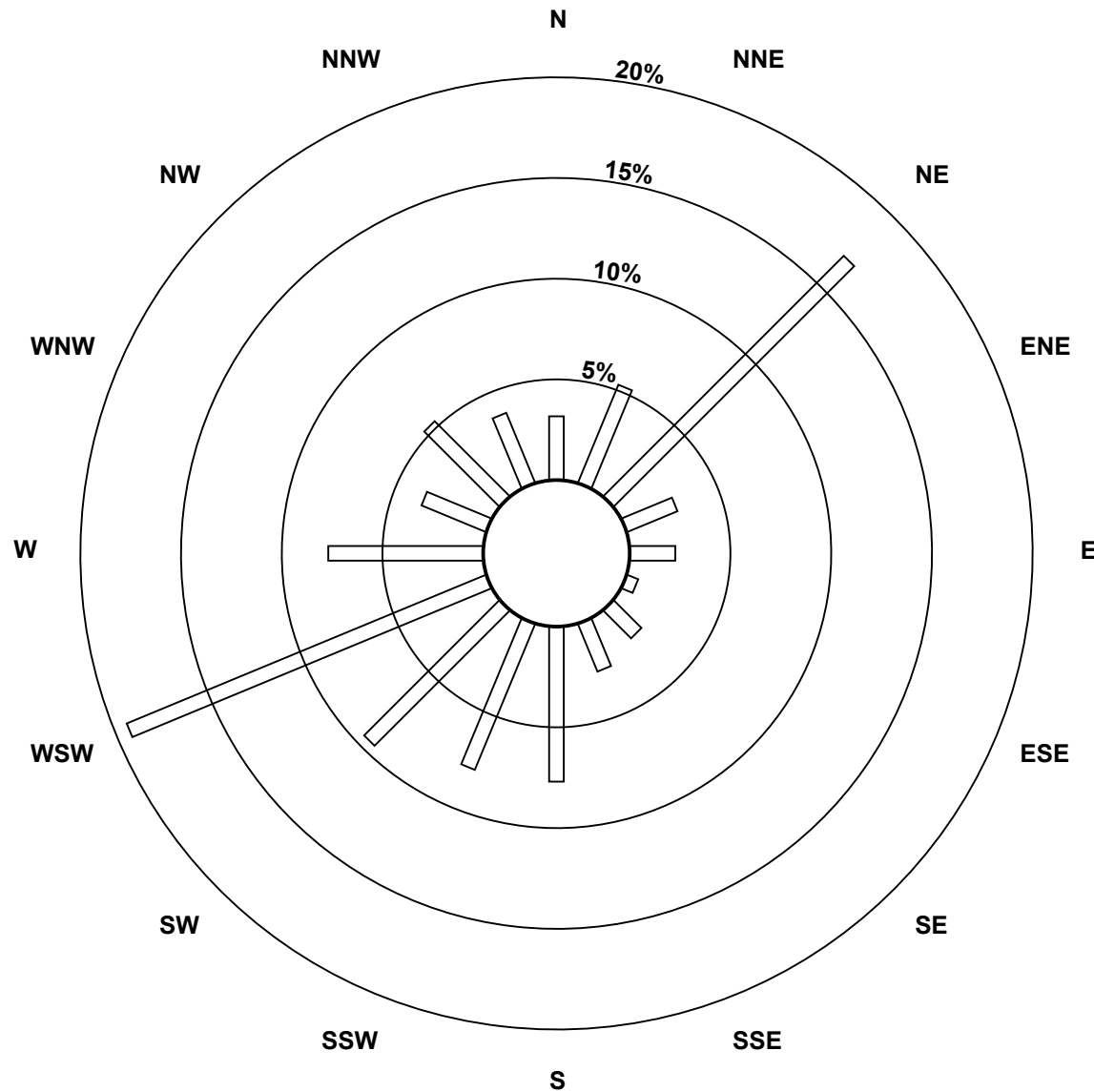
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - February 2016

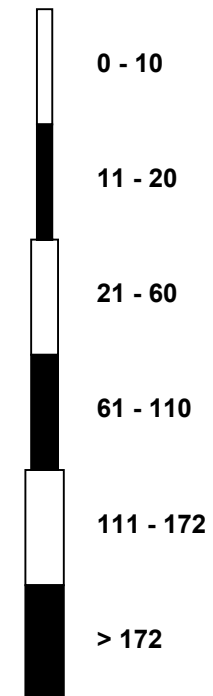


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - February 2016

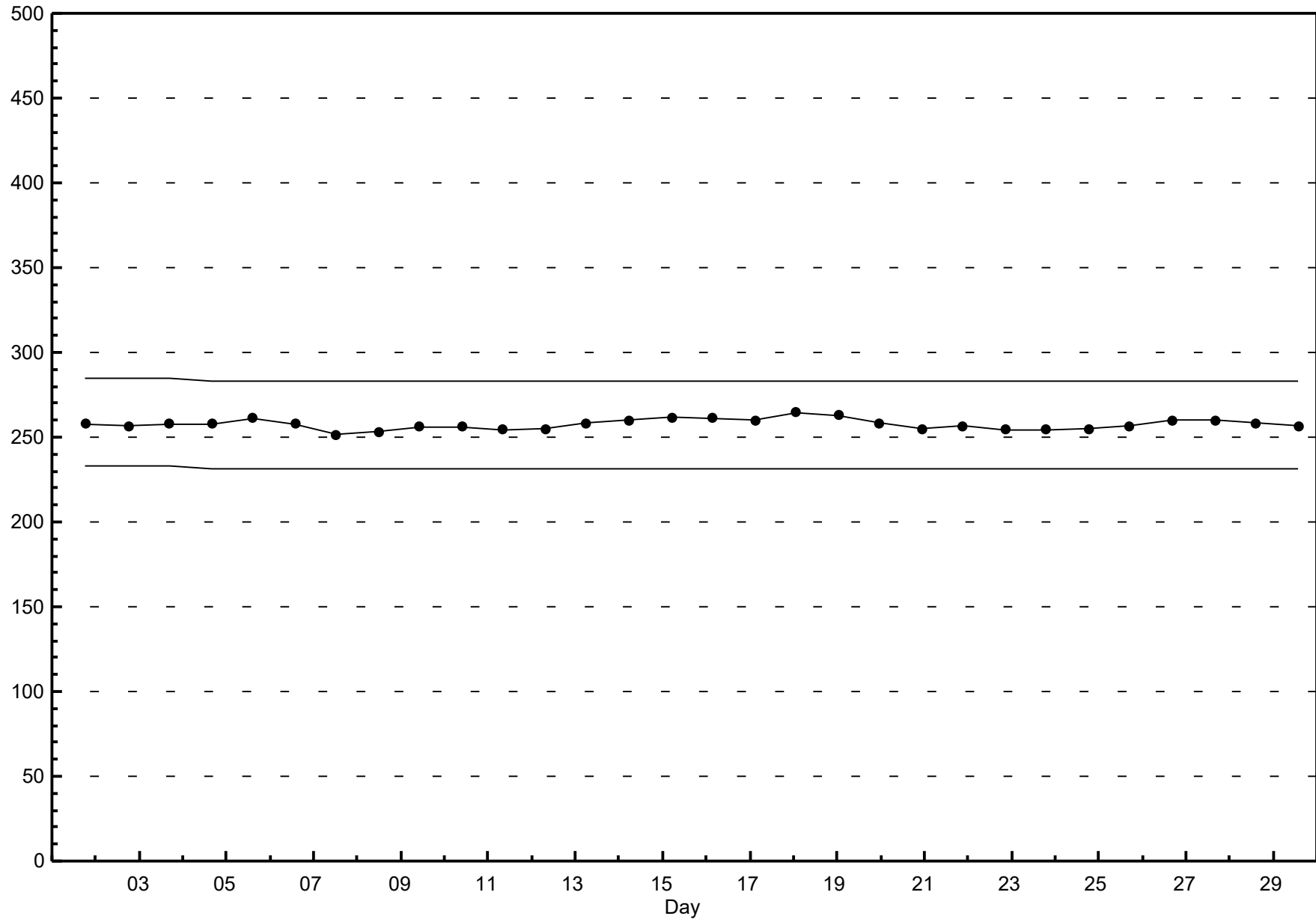


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Evergreen Park - February 2016



Hourly Averages

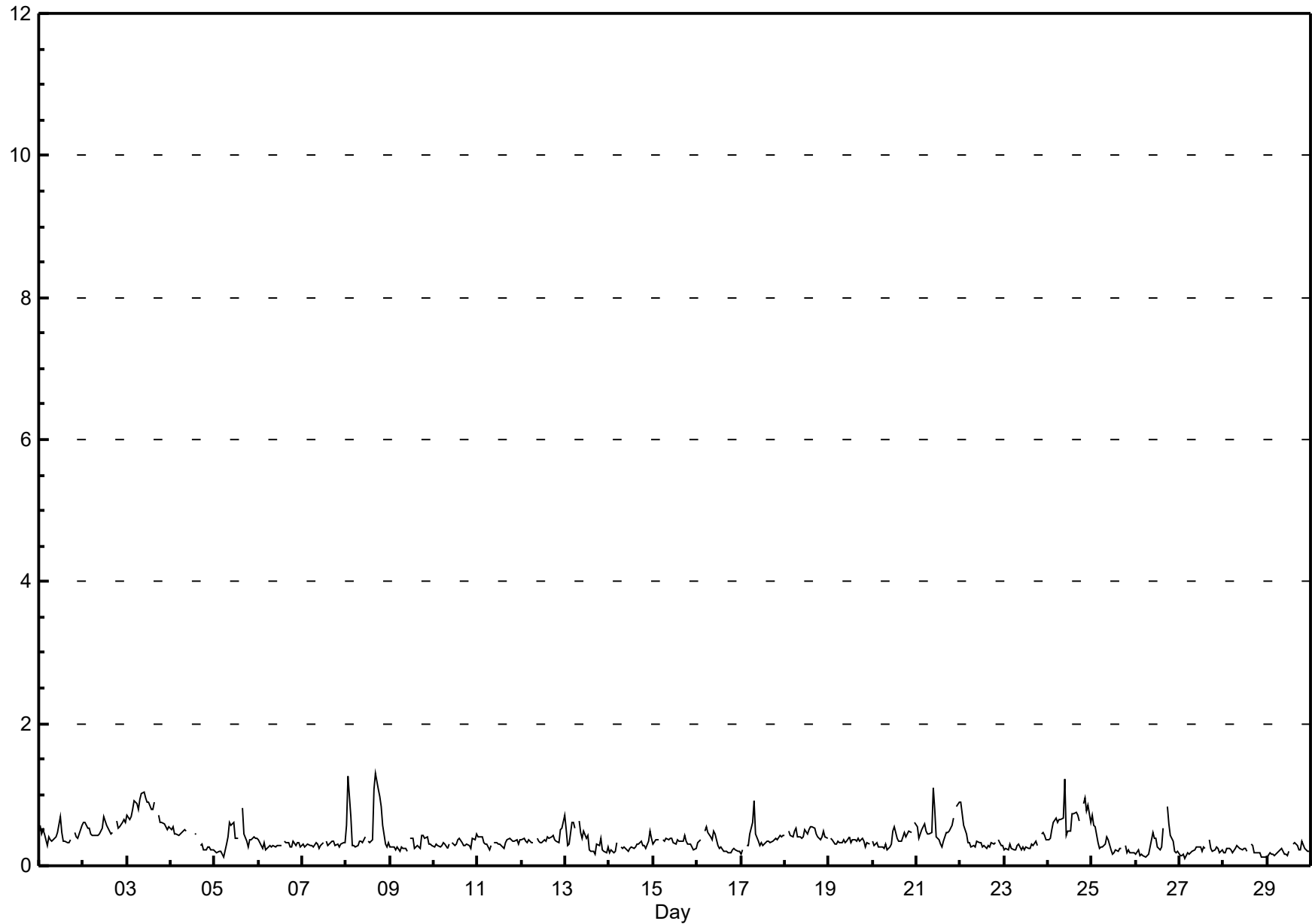
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0										Hours in Service: 696																			
Maximum Value: 1.3 ppb on Feb 8 17:00										Maximum Daily Average: 0.8 ppb on Feb 3										Hours of Data: 662									
Minimum Value: 0 ppb on Feb 27 04:00										Minimum Daily Average: 0.2 ppb on Feb 29										Hours of Missing Data: 34									
Maximum Diurnal Average: 0.4 ppb at hour 10										Minimum Diurnal Average: 0.3 ppb at hour 7										Hours of Calibration: 34									
Monthly Average: 0.37 ppb										Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.6 P ₉₉ = 1.0										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-Feb	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0	0	0	1	0.4	0.7			
2-Feb	1	1	1	1	0	0	0	0	0	0	1	1	1	1	0	0	0	A	1	1	1	1	1	1	0.5	0.7			
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.8	1.0			
4-Feb	1	1	0	0	0	0	0	1	0	C	C	C	C	0	0	A	0	0	0	0	0	0	0	0	0.4	0.6			
5-Feb	0	0	0	0	0	0	0	0	1	1	1	0	0	0	A	1	0	0	0	0	0	0	0	0	0.4	0.8			
6-Feb	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			
7-Feb	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			
8-Feb	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	0	0	0	0.6	1.3			
9-Feb	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			
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4			
11-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4			
12-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.4	0.7			
13-Feb	1	0	0	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6			
14-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5			
15-Feb	0	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-Feb	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6			
17-Feb	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9			
18-Feb	0	A	0	0	0	0	1	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0.4	0.6			
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.4			
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	1	0.4	0.6			
21-Feb	1	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	A	1	1	0.5	1.1			
22-Feb	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.9			
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.5			
24-Feb	0	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	A	1	1	1	1	1	1	0.7	1.2			
25-Feb	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.7			
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0.3	0.8			
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.4			
28-Feb	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			
29-Feb	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			
Diurnal Average																													
Diurnal Maximum																													
C - Calibration A - Automated Daily Zero Span																													
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																													

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - February 2016



Hourly Maximums

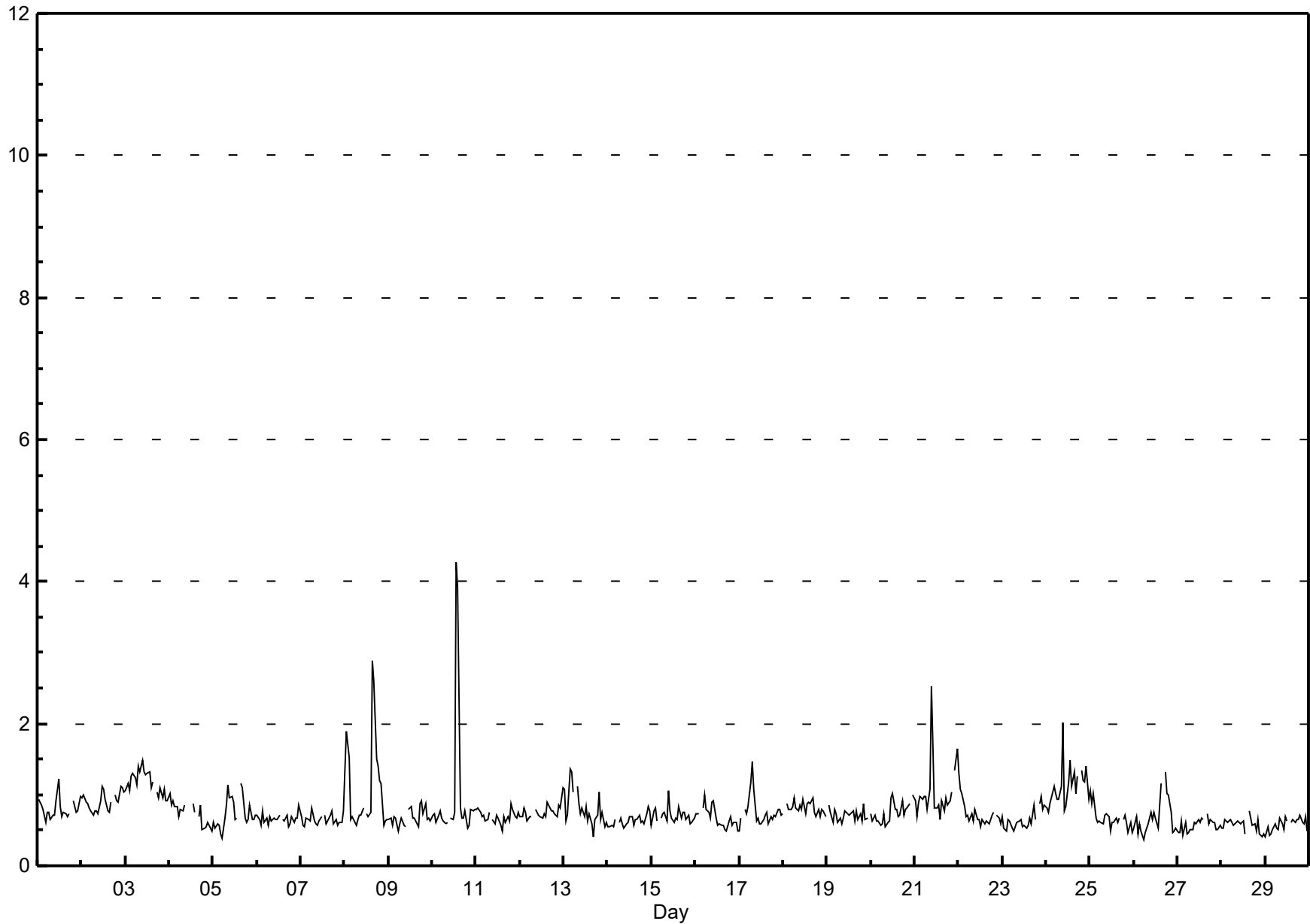
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2016

Maximum Value: 4.3 ppb on Feb 10 14:00										Maximum Daily Average: 1.2 ppb on Feb 3										Hours in Service: 696							
Minimum Value: 0 ppb on Feb 26 06:00										Minimum Daily Average: 0.6 ppb on Feb 27										Hours of Data: 662							
Maximum Diurnal Average: 0.9 ppb at hour 14										Minimum Diurnal Average: 0.7 ppb at hour 7										Hours of Missing Data: 34							
Monthly Average: 0.77 ppb										Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 1.1 P ₉₉ = 1.9										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-Feb	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	1.2	
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.1	
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	1.5	
4-Feb	1	1	1	1	1	1	1	1	1	C	C	C	C	1	1	A	1	1	1	1	1	1	1	0	0.7	1.0	
5-Feb	1	1	1	1	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	1.2	
6-Feb	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	0.8	
7-Feb	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	0.8	
8-Feb	1	2	2	1	1	1	1	1	1	1	1	A	1	1	1	3	3	2	1	1	1	1	1	1	1.1	2.9	
9-Feb	1	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	0.9	
10-Feb	1	1	1	1	1	1	1	1	1	A	1	1	1	4	4	1	1	1	1	1	1	1	1	1	1.0	4.3	
11-Feb	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.7	0.9	
12-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
13-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.8	1.4	
14-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
15-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1	
16-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0.7	1.0	
17-Feb	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
18-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
19-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
20-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0	
21-Feb	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1	A	1	2	1.0	2.5	
22-Feb	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	1.3	
23-Feb	1	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.6	1.0	
24-Feb	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.1	2.0	
25-Feb	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	0	1	0	0.7	1.1	
26-Feb	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	1	0.7	1.3	
27-Feb	0	0	1	0	1	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	0.6	0.7		
28-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	0	1	0	0	0.6	0.8		
29-Feb	0	1	0	0	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0.6	0.7		
0.8		0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.9	0.8	0.8	0.8	0.9	0.8	0.9	0.8	0.8	0.7	0.8	0.8	0.7	0.7	0.8	Diurnal Average		
1.3		1.9	1.5	1.4	1.3	1.2	1.2	1.5	1.3	2.5	1.7	1.3	1.3	4.3	3.9	2.9	2.6	1.5	1.4	1.3	1.2	1.2	1.4	1.6	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									

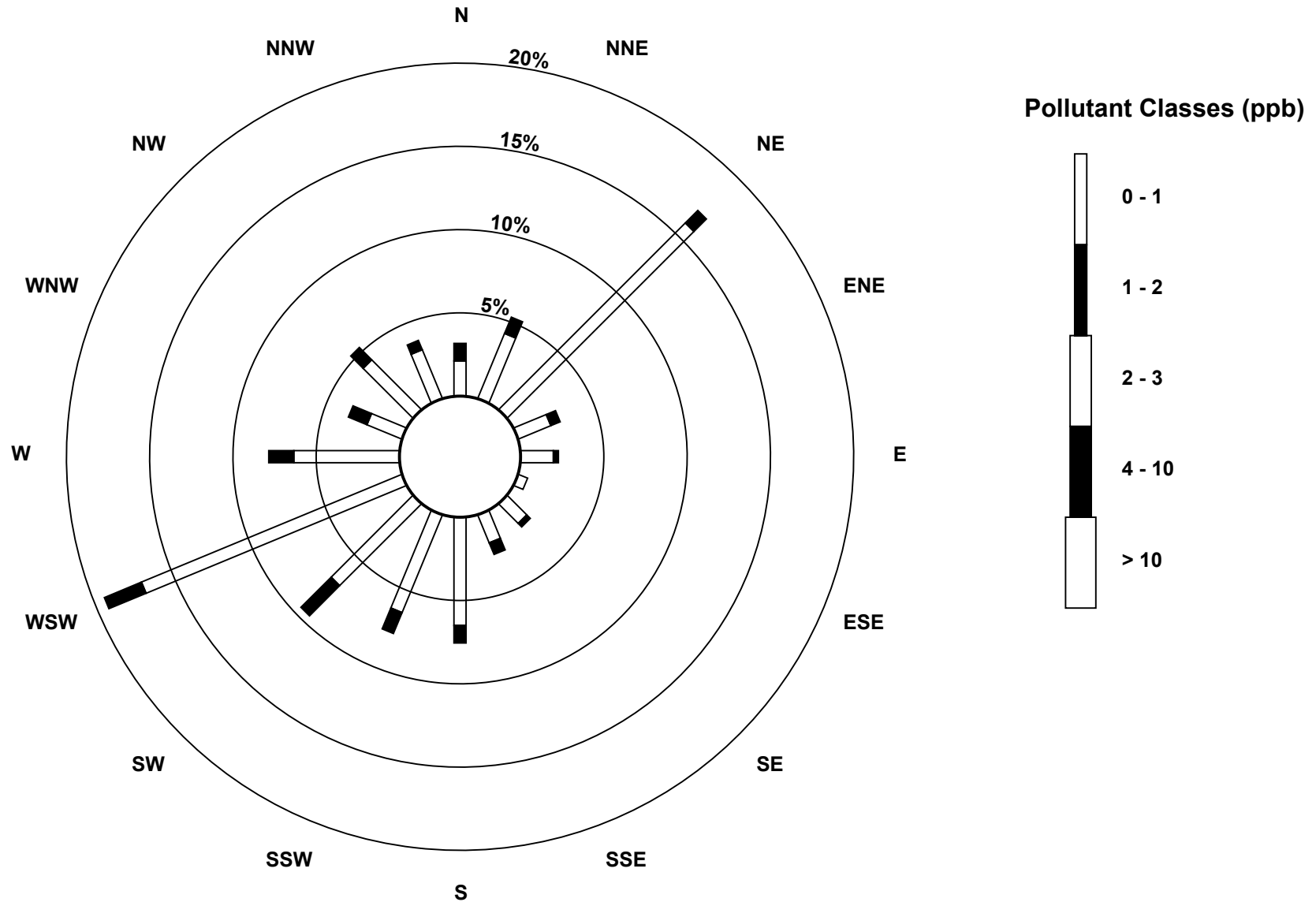
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - February 2016



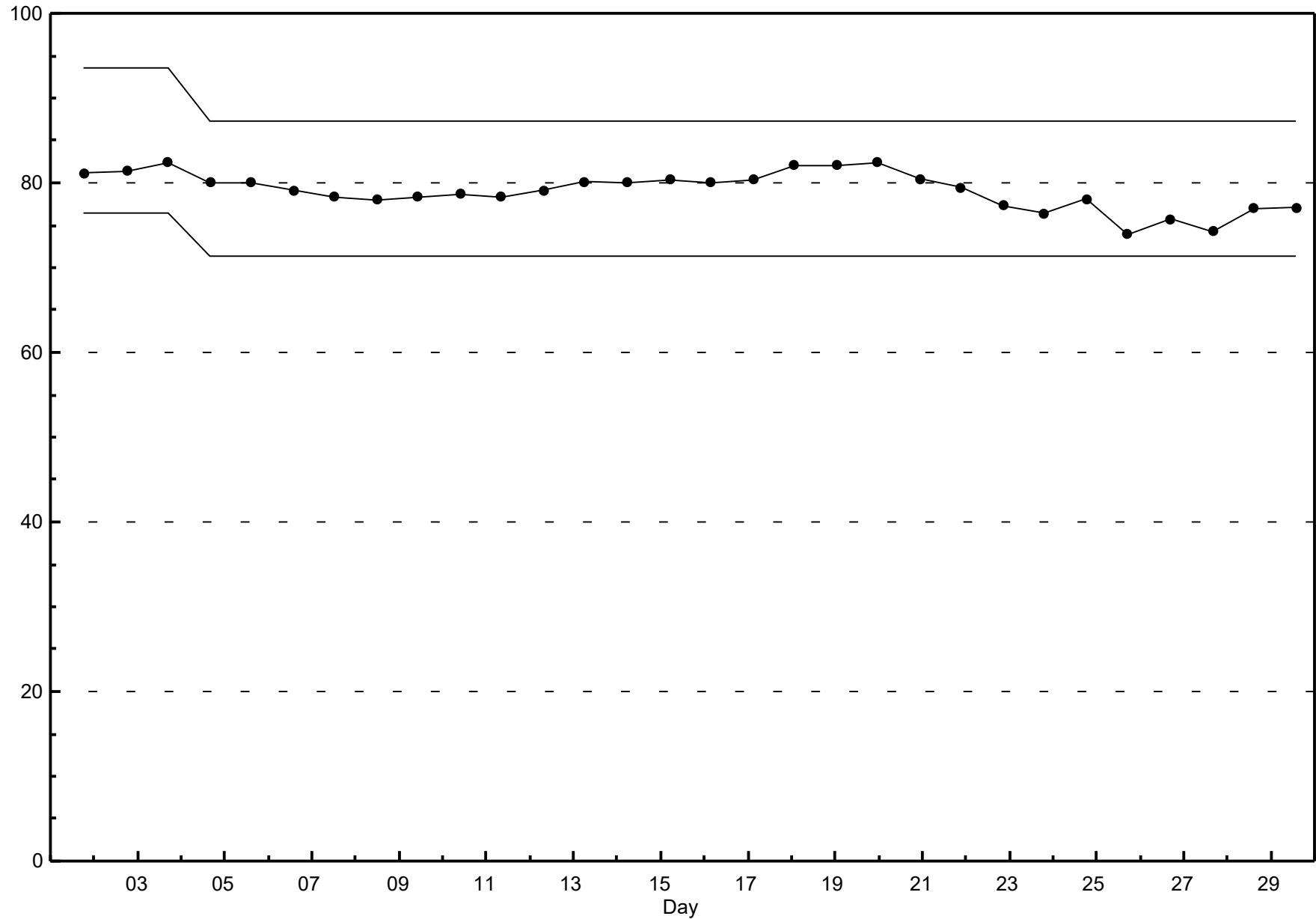
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - February 2016



Span Responses

Total Reduced Sulphur (TRS)
Evergreen Park - February 2016



Hourly Averages

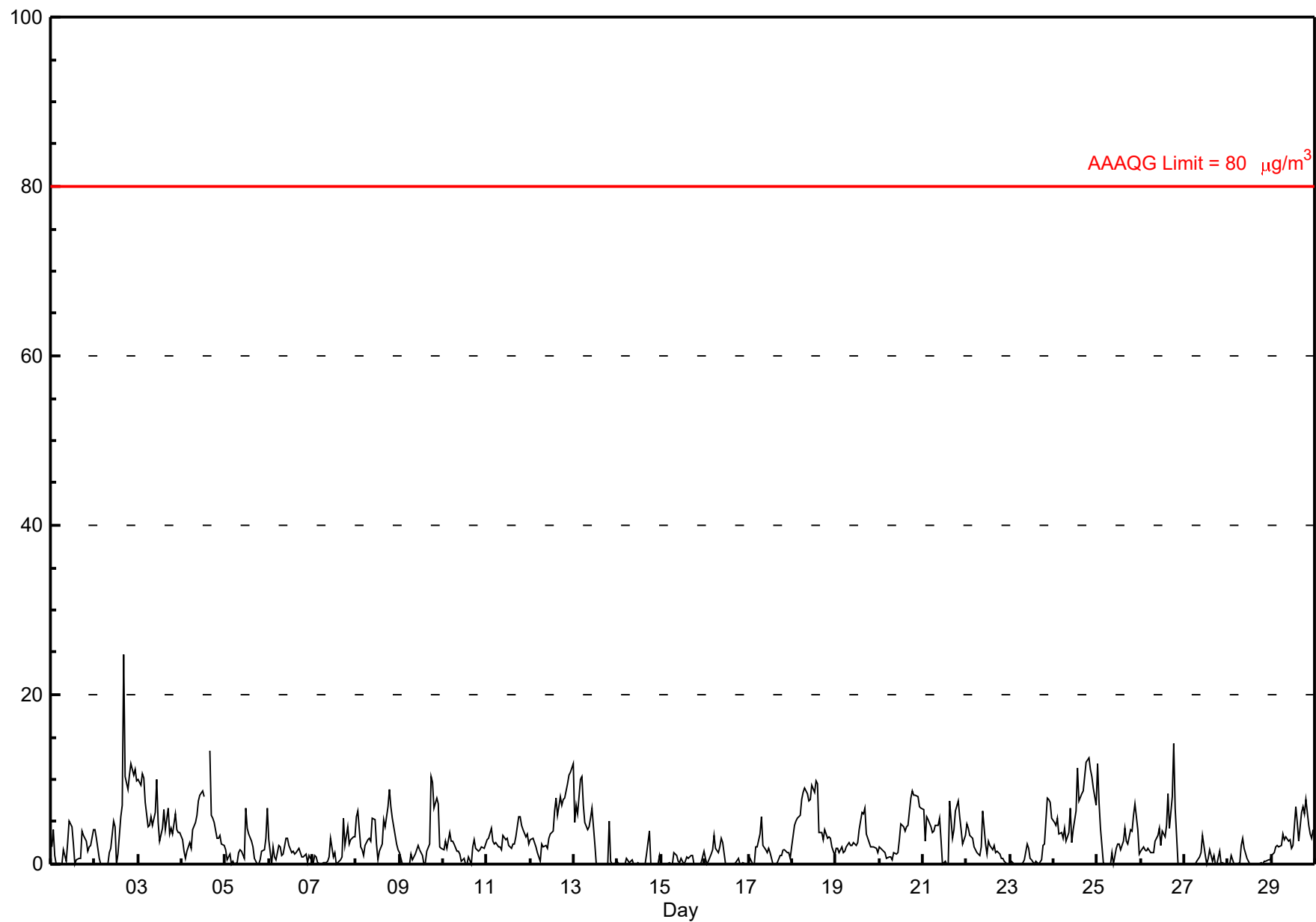
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - February 2016

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 24.8 µg/m³ on Feb 2 17:00 Maximum Daily Average: 6.8 µg/m³ on Feb 24																								Hours in Service: 696 Hours of Data: 694 Hours of Missing Data: 2 Hours of Calibration: 2 Percent Operational Time: 100.0		
Minimum Value: 0 µg/m³ on Feb 1 04:00 Maximum Diurnal Average: 4.2 µg/m³ at hour 19 Monthly Average: 2.83 µg/m³																								Minimum Daily Average: 0.3 µg/m³ on Feb 14 Minimum Diurnal Average: 1.8 µg/m³ at hour 6 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 2.0 Q ₃ = 4.1 P ₉₀ = 7.2 P ₉₉ = 11.8		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	2	4	1	0	0	0	0	2	0	3	5	4	2	0	1	1	1	4	3	3	1	2	2	4	1.9	5.1
2-Feb	4	3	1	0	0	0	0	0	1	2	5	4	0	1	6	7	25	10	9	10	12	10	11	10	5.5	24.8
3-Feb	10	9	11	10	7	4	5	6	5	6	10	5	3	4	7	4	7	4	4	4	6	4	4	4	5.9	10.7
4-Feb	3	2	1	2	3	2	4	5	6	7	8	9	8	C	C	13	6	5	5	3	3	3	2	2	4.6	13.3
5-Feb	2	1	1	0	0	0	0	1	2	2	1	7	4	4	3	2	1	0	0	1	1	2	3	7	1.8	6.7
6-Feb	3	0	2	1	1	2	2	1	1	3	3	2	1	1	1	1	2	1	1	1	1	0	1	1	1.4	3.1
7-Feb	0	1	1	0	0	0	0	0	0	1	3	1	1	0	0	0	1	5	2	4	2	3	3	3	1.4	5.5
8-Feb	6	6	2	2	1	2	3	3	3	5	5	2	1	1	2	5	4	7	9	7	6	3	2	2	3.8	8.7
9-Feb	1	0	0	0	0	0	1	1	1	2	2	2	1	0	0	2	2	10	10	7	8	7	2	2	2.5	10.4
10-Feb	2	3	2	4	3	3	2	1	2	1	0	1	0	0	1	0	2	3	2	2	2	2	2	2	1.7	3.8
11-Feb	3	3	4	3	2	2	2	2	2	3	3	3	2	2	2	2	3	6	6	5	4	3	4	2	3.1	5.7
12-Feb	3	3	3	2	1	0	2	2	2	2	3	4	4	6	8	6	8	7	8	8	9	11	11	12	5.2	11.8
13-Feb	5	7	6	10	10	7	5	4	4	5	7	2	0	0	0	0	0	0	0	5	0	0	0	1	3.3	10.3
14-Feb	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	4	0	0	0	0	0	1	0.3	3.8
15-Feb	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	1	1	0	0	0	0	0	2	0.4	1.5
16-Feb	1	0	0	1	2	3	2	1	2	3	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0.8	3.4
17-Feb	0	1	0	0	2	2	4	6	2	2	1	2	1	0	0	0	0	1	1	2	2	1	1	1	1.3	5.6
18-Feb	2	5	5	5	6	8	9	9	8	8	8	9	9	10	10	4	4	3	4	3	3	3	2	1	5.6	9.9
19-Feb	2	2	1	2	1	1	2	3	2	2	3	2	3	4	6	6	7	4	3	2	2	2	2	1	2.7	6.6
20-Feb	2	2	1	1	1	1	1	1	1	1	1	3	5	4	4	4	5	8	9	8	8	8	7	7	3.9	8.6
21-Feb	7	3	6	5	4	4	4	5	4	6	3	0	0	0	0	7	3	4	6	8	6	4	2	3	3.9	7.5
22-Feb	5	4	3	3	2	2	1	1	2	6	2	1	3	2	2	2	1	1	1	1	1	0	0	0	2.0	6.3
23-Feb	0	0	0	0	0	0	0	0	0	2	2	1	1	0	0	0	0	1	2	2	8	8	7	5	1.7	7.8
24-Feb	5	5	5	3	4	3	4	3	4	7	3	4	6	11	7	8	9	10	12	13	11	10	9	7	6.8	12.6
25-Feb	12	7	4	0	0	0	0	0	1	0	2	2	2	2	3	4	3	2	4	4	6	7	4	1	3.0	11.9
26-Feb	2	2	2	2	2	1	1	1	3	3	4	2	4	3	5	8	4	8	14	7	0	0	0	0	3.3	14.2
27-Feb	0	0	0	0	0	0	0	0	1	1	3	1	0	1	2	0	1	0	0	2	0	0	0	0	0.5	3.3
28-Feb	0	0	1	0	0	0	0	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	3.0
29-Feb	1	1	2	2	2	2	3	3	3	3	3	2	2	7	5	3	6	7	6	8	5	4	3	4	3.6	7.6
2.8 2.5 2.3 2.0 1.9 1.8 2.0 2.2 2.4 3.0 3.2 2.7 2.2 2.3 2.6 3.2 3.6 4.0 4.2 4.0 3.7 3.4 3.0 2.9																								Diurnal Average		
11.9 9.3 10.7 10.2 10.3 7.6 8.6 9.0 8.4 7.5 9.9 9.3 8.5 11.3 9.6 13.3 24.8 10.4 14.2 12.6 11.8 10.5 11.1 11.8																								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

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Evergreen Park - February 2016



Hourly Maximums

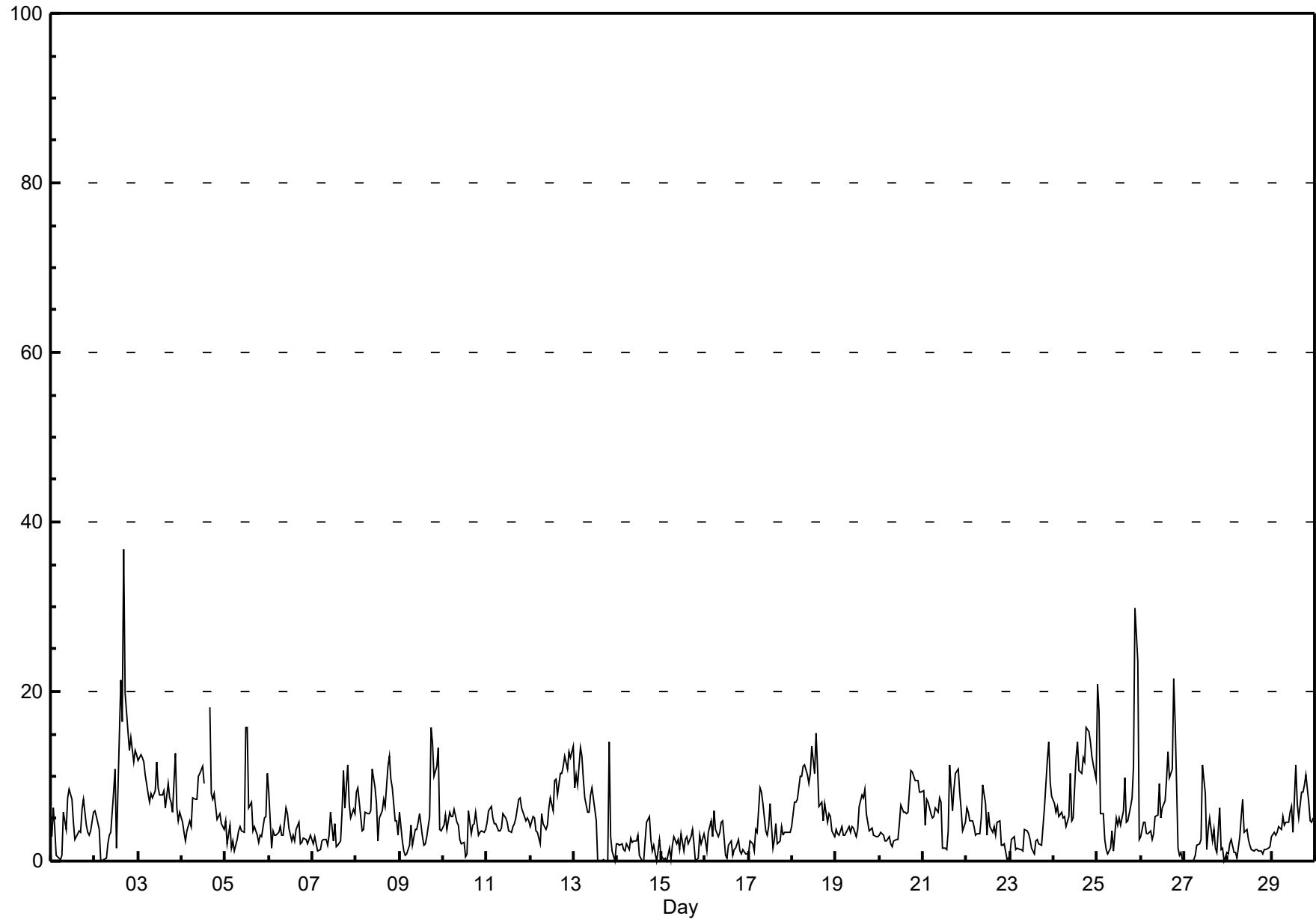
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - February 2016

Maximum Value: 36.7 μg/m³ on Feb 2 17:00																				Maximum Daily Average: 9.5 μg/m³ on Feb 2					Hours in Service: 696	
Minimum Value: 0 μg/m³ on Feb 2 05:00																				Minimum Daily Average: 1.8 μg/m³ on Feb 15					Hours of Data: 694	
Maximum Diurnal Average: 7.1 μg/m³ at hour 19																				Minimum Diurnal Average: 3.4 μg/m³ at hour 6					Hours of Missing Data: 2	
Monthly Average: 5.14 μg/m³																				Percentiles: P ₁ = 0.0 P ₁₀ = 1.1 Q ₁ = 2.4 Median = 4.1 Q ₃ = 6.7 P ₉₀ = 10.6 P ₉₉ = 19.5					Hours of Calibration: 2	
																									Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Feb	3	6	4	1	0	0	1	6	4	7	8	7	5	3	3	4	3	6	7	4	3	3	4	6	4.1	8.5
2-Feb	6	5	4	0	0	0	0	2	3	3	8	11	2	8	21	16	37	20	15	13	15	12	13	13	9.5	36.7
3-Feb	12	13	12	12	10	8	7	8	7	8	12	9	8	8	8	6	9	7	7	6	13	6	5	6	8.6	12.6
4-Feb	5	3	2	4	5	4	7	7	7	10	10	11	9	C	C	18	8	7	8	5	5	6	4	4	6.8	18.2
5-Feb	5	2	4	2	2	1	3	4	4	4	3	16	16	6	7	4	4	3	2	3	3	5	5	10	4.9	15.8
6-Feb	8	2	4	3	3	3	4	3	3	6	6	4	2	3	2	4	5	2	2	3	3	2	3	3	3.4	8.2
7-Feb	2	3	2	1	1	2	3	3	2	3	6	2	4	2	2	2	6	11	6	11	7	5	6	6	4.1	11.4
8-Feb	8	9	5	4	4	6	6	6	6	11	9	7	2	5	6	7	6	11	12	10	9	5	5	3	6.7	12.4
9-Feb	6	2	1	1	1	2	4	2	4	4	5	6	3	2	2	3	5	16	14	10	11	13	4	4	5.1	15.8
10-Feb	4	5	4	6	5	5	6	5	4	3	2	2	1	1	6	3	4	4	6	3	3	4	3	4	3.9	6.0
11-Feb	5	6	6	5	4	4	4	4	4	6	5	5	4	3	4	4	5	7	7	6	6	5	5	5	4.9	7.5
12-Feb	4	5	5	4	3	2	6	4	4	4	6	7	6	9	10	8	10	10	11	12	11	13	12	14	7.6	13.6
13-Feb	9	10	9	13	12	10	7	6	6	8	9	6	5	0	0	0	0	0	0	14	3	1	0	2	5.4	14.1
14-Feb	2	2	2	1	1	2	1	3	2	2	2	3	1	0	0	2	5	5	3	1	2	0	1	3	1.9	5.3
15-Feb	1	0	0	0	2	0	2	3	2	3	1	3	1	3	3	2	3	4	2	0	0	3	2	3	1.8	3.8
16-Feb	2	1	3	5	3	6	4	3	3	5	5	1	0	2	2	1	1	2	3	1	1	1	1	1	2.3	6.0
17-Feb	1	2	2	1	4	3	9	8	7	4	3	4	7	2	3	4	2	2	4	3	3	3	3	3	3.7	8.7
18-Feb	4	7	7	7	10	10	11	11	10	9	10	14	10	15	11	6	7	5	7	5	6	5	4	3	8.1	15.0
19-Feb	4	3	3	4	3	3	3	4	3	4	4	3	4	6	8	7	8	6	4	4	4	3	3	3	4.2	8.5
20-Feb	3	3	3	2	2	3	2	2	2	3	3	4	7	6	6	6	6	11	11	10	9	9	8	8	5.4	10.6
21-Feb	8	4	7	7	6	5	5	6	6	7	7	2	2	1	4	11	6	8	10	11	8	6	4	5	6.1	11.4
22-Feb	6	6	5	5	4	3	3	3	5	9	7	3	6	4	3	4	3	5	5	2	2	2	0	0	4.0	8.9
23-Feb	1	3	3	1	2	1	1	1	4	4	3	3	2	1	2	3	2	2	4	6	12	14	9	8	3.8	14.0
24-Feb	7	6	6	5	6	5	5	4	5	10	5	5	12	14	11	10	12	12	16	15	14	12	11	10	9.1	15.8
25-Feb	21	18	6	6	3	1	1	2	4	1	5	4	5	4	6	10	5	5	6	7	11	30	24	3	7.7	29.9
26-Feb	3	5	5	3	3	4	3	3	5	5	9	5	6	7	10	13	10	11	22	16	2	1	1	0	6.3	21.6
27-Feb	0	0	0	0	0	0	1	2	2	3	11	8	1	4	5	2	4	2	1	6	1	2	0	1	2.3	11.4
28-Feb	1	2	3	1	1	0	3	5	7	3	4	3	2	1	1	1	1	1	1	1	1	1	2	2	2.1	7.2
29-Feb	3	3	3	3	4	4	5	4	5	5	6	6	3	11	7	5	8	8	9	10	7	5	5	5	5.6	11.4
4.9 4.7 4.2 3.7 3.6 3.4 4.0 4.2 4.5 5.3 6.0 5.6 4.6 4.7 5.4 5.8 6.4 6.6 7.1 6.9 6.0 6.1 5.0 4.6																									Diurnal Average	
20.9 17.7 12.1 13.3 12.4 9.9 11.1 11.4 10.2 10.9 11.7 15.8 15.8 15.0 21.4 18.2 36.7 19.9 21.6 16.2 14.6 29.9 23.5 13.6																									Diurnal Maximum	
C - Calibration																										

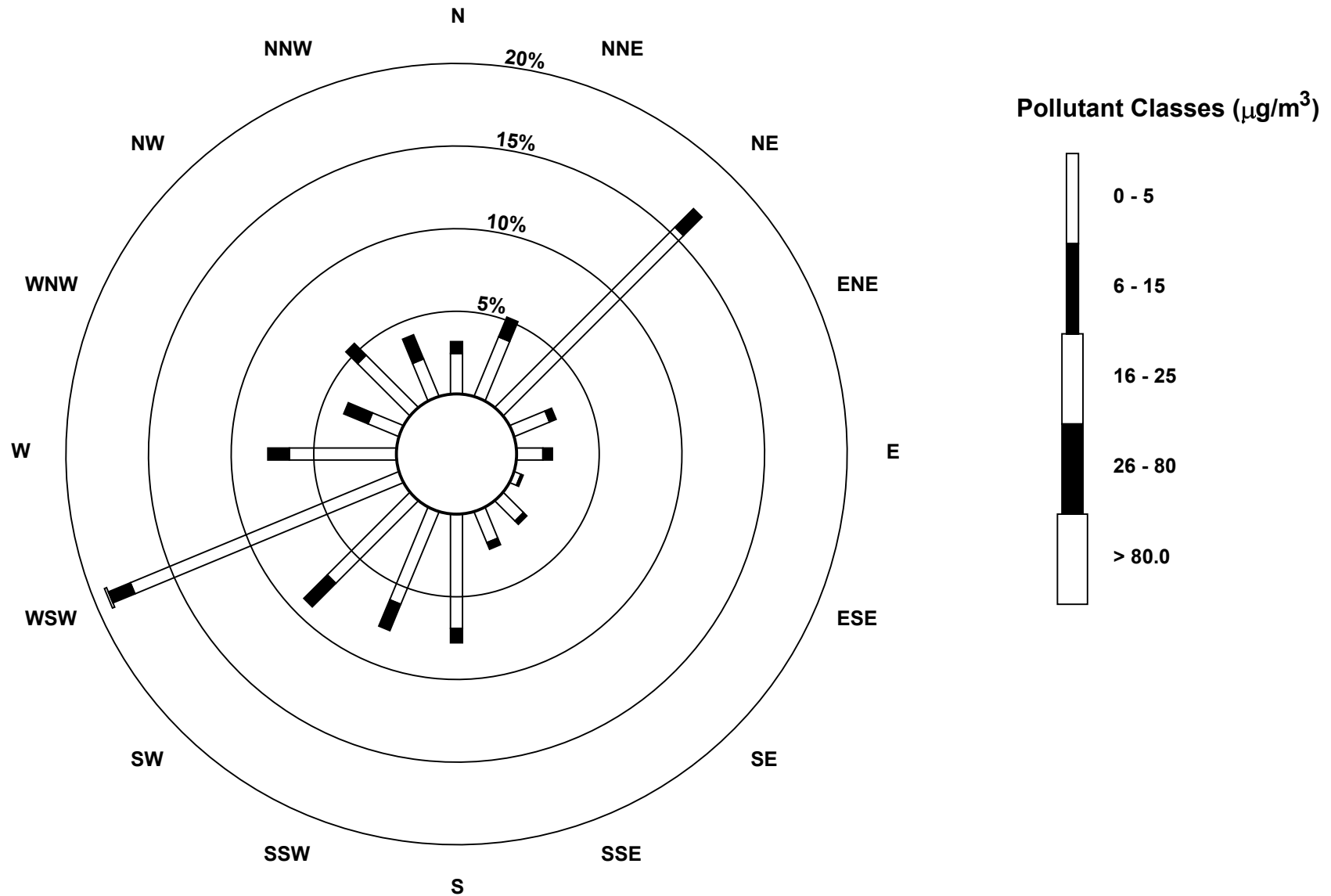
Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Evergreen Park - February 2016



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - µg/m³
Evergreen Park - February 2016



Hourly Averages

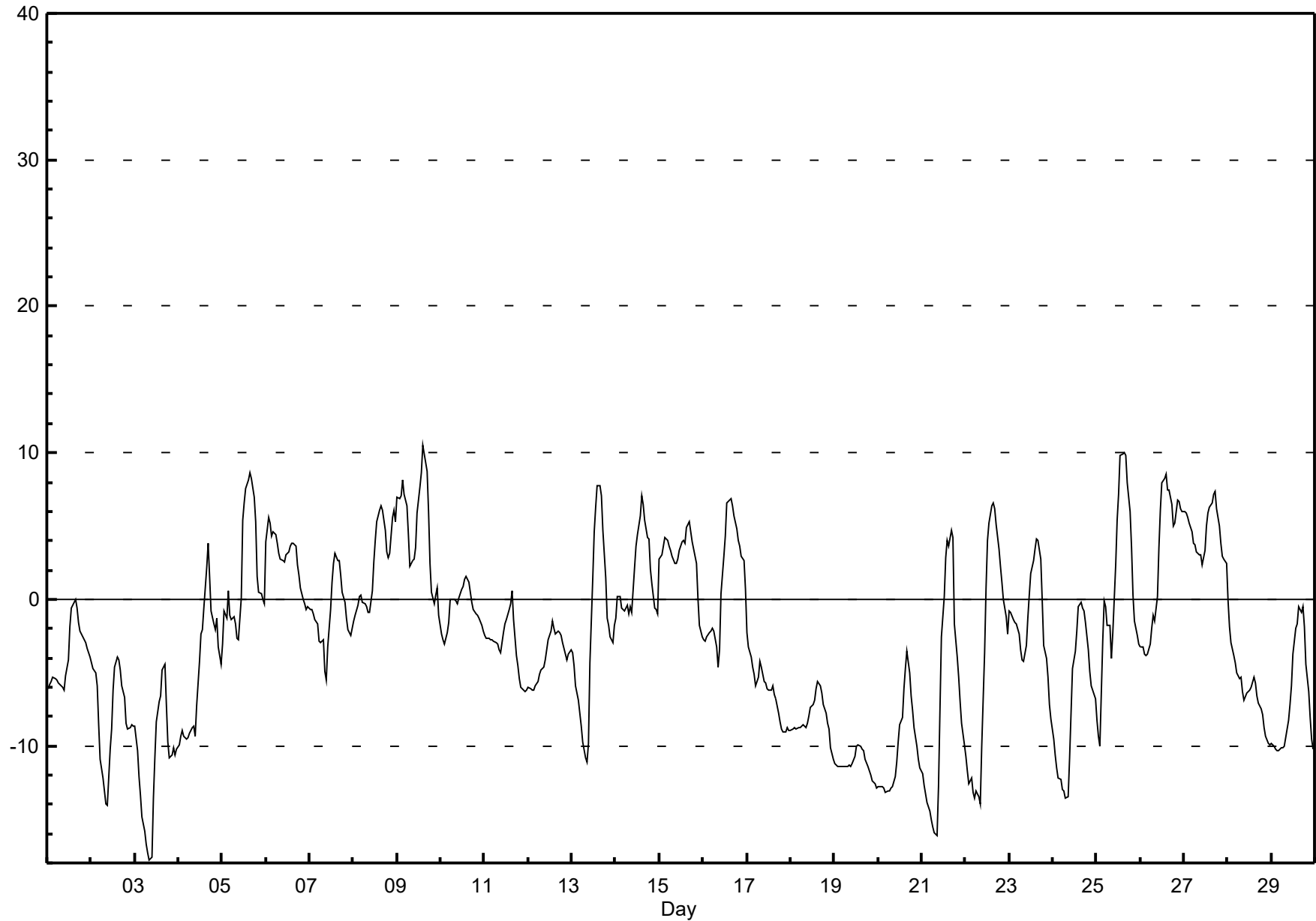
External Temperature (ET) - °C

Evergreen Park - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 10.5 °C on Feb 9 15:00 Maximum Daily Average: 4.9 °C on Feb 9																				Hours in Service: 696 Hours of Data: 696 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0						
Minimum Value: -18 °C on Feb 3 09:00 Maximum Diurnal Average: 1.9 °C at hour 16 Monthly Average: -2.76 °C										Minimum Daily Average: -11.3 °C on Feb 19 Minimum Diurnal Average: -6.0 °C at hour 9 Percentiles: P ₁ = -15.8 P ₁₀ = -11.0 Q ₁ = -7.2 Median = -2.5 Q ₃ = 2.3 P ₉₀ = 5.4 P ₉₉ = 8.3																
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-Feb	-6	-6	-6	-5	-5	-6	-6	-6	-6	-6	-5	-4	-2	-1	0	0	-1	-2	-2	-3	-3	-3	-3	-4	-3.7	0.0
2-Feb	-4	-5	-5	-6	-9	-11	-12	-13	-14	-14	-10	-9	-6	-5	-4	-4	-5	-6	-7	-8	-9	-9	-9	-9	-8.0	-3.9
3-Feb	-9	-10	-12	-13	-15	-16	-17	-17	-18	-18	-14	-11	-8	-7	-7	-5	-4	-7	-10	-11	-11	-10	-11	-10	-11.2	-4.4
4-Feb	-10	-9	-9	-9	-10	-9	-9	-9	-9	-9	-7	-4	-2	-2	-1	2	4	2	-1	-2	-2	-1	-3	-4	-4.8	3.9
5-Feb	-3	-1	-1	1	-1	-1	-1	-2	-3	-3	0	5	7	8	8	9	8	7	5	2	0	0	0	0	1.8	8.6
6-Feb	4	6	5	4	5	4	4	3	3	3	3	3	3	4	4	4	4	2	2	1	0	0	-1	0	2.8	5.6
7-Feb	-1	-1	-1	-1	-2	-3	-3	-3	-5	-6	-3	-1	1	2	3	3	3	2	0	0	-1	-2	-2	-2	-0.9	3.1
8-Feb	-2	-1	0	0	0	0	0	0	-1	-1	1	3	4	5	6	6	6	5	3	3	3	6	6	5	2.4	6.4
9-Feb	7	7	7	8	7	6	4	2	3	3	4	6	8	9	10	10	9	6	2	0	0	0	1	-1	4.9	10.5
10-Feb	-2	-3	-3	-2	-2	0	0	0	0	0	0	1	1	1	2	1	1	0	-1	-1	-1	-1	-2	-2	-0.6	1.5
11-Feb	-2	-3	-3	-3	-3	-3	-3	-3	-3	-4	-2	-2	-1	-1	0	1	-1	-4	-5	-5	-6	-6	-6	-6	-3.1	0.6
12-Feb	-6	-6	-6	-6	-6	-6	-5	-5	-5	-4	-3	-3	-2	-2	-2	-2	-2	-2	-2	-3	-4	-4	-4	-3	-3.9	-1.5
13-Feb	-4	-5	-6	-7	-8	-9	-10	-11	-11	-10	-4	1	5	6	8	8	7	5	1	-1	-2	-3	-3	-2	-2.2	7.8
14-Feb	-1	0	0	-1	-1	-1	0	-1	0	-1	2	4	4	6	7	6	5	4	4	2	1	-1	-1	-1	1.6	7.1
15-Feb	3	3	4	4	4	4	3	3	2	2	3	3	4	4	4	5	5	5	4	3	2	0	-2	-3	3.0	5.3
16-Feb	-3	-3	-3	-2	-2	-2	-2	-3	-5	-3	0	3	4	7	7	7	6	6	5	4	4	3	3	1	1.3	6.9
17-Feb	-2	-3	-4	-5	-5	-6	-5	-4	-5	-6	-6	-6	-6	-6	-6	-6	-7	-8	-8	-9	-9	-9	-9	-9	-6.2	-2.3
18-Feb	-9	-9	-9	-9	-9	-9	-9	-9	-9	-8	-8	-7	-7	-7	-6	-6	-6	-6	-7	-8	-8	-9	-10	-11	-8.1	-5.6
19-Feb	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-11	-10	-10	-10	-10	-11	-11	-12	-12	-12	-13	-13	-11.3	-9.9
20-Feb	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-11	-10	-9	-8	-6	-5	-4	-5	-7	-8	-9	-10	-11	-12	-10.0	-3.6
21-Feb	-12	-13	-13	-14	-14	-15	-16	-16	-16	-13	-8	-3	0	3	4	4	5	4	-2	-4	-5	-7	-8	-10	-7.0	4.8
22-Feb	-11	-12	-13	-12	-13	-14	-13	-13	-14	-10	-4	1	4	5	6	7	6	5	3	2	1	0	-1	-2	-3.8	6.5
23-Feb	-1	-1	-1	-2	-2	-2	-3	-4	-4	-3	-1	0	2	3	3	4	4	3	0	-3	-4	-5	-7	-8	-1.4	4.1
24-Feb	-10	-11	-12	-12	-12	-13	-13	-14	-13	-11	-8	-5	-4	-2	-1	0	-1	-1	-2	-3	-5	-6	-6	-7	-7.1	-0.2
25-Feb	-8	-9	-10	-3	0	-1	-2	-2	-4	-2	2	5	7	10	10	10	10	8	6	4	0	-2	-2	-3	1.0	10.0
26-Feb	-3	-3	-4	-4	-4	-3	-2	-1	-2	0	4	6	8	8	9	7	7	6	5	5	7	7	6	6	2.8	8.5
27-Feb	6	6	6	5	5	4	4	3	3	3	2	3	5	6	6	7	7	7	6	5	4	3	3	2	4.6	7.4
28-Feb	0	-2	-3	-4	-4	-5	-5	-5	-6	-7	-6	-6	-6	-6	-5	-6	-7	-7	-7	-8	-9	-9	-10	-10	-6.0	-0.1
29-Feb	-10	-10	-10	-10	-10	-10	-10	-10	-9	-8	-7	-6	-4	-2	-2	0	-1	0	-2	-4	-6	-8	-10	-10	-6.7	-0.5
																								Diurnal Average		
																								Diurnal Maximum		

Hourly Averages

External Temperature (ET) - °C
Evergreen Park - February 2016



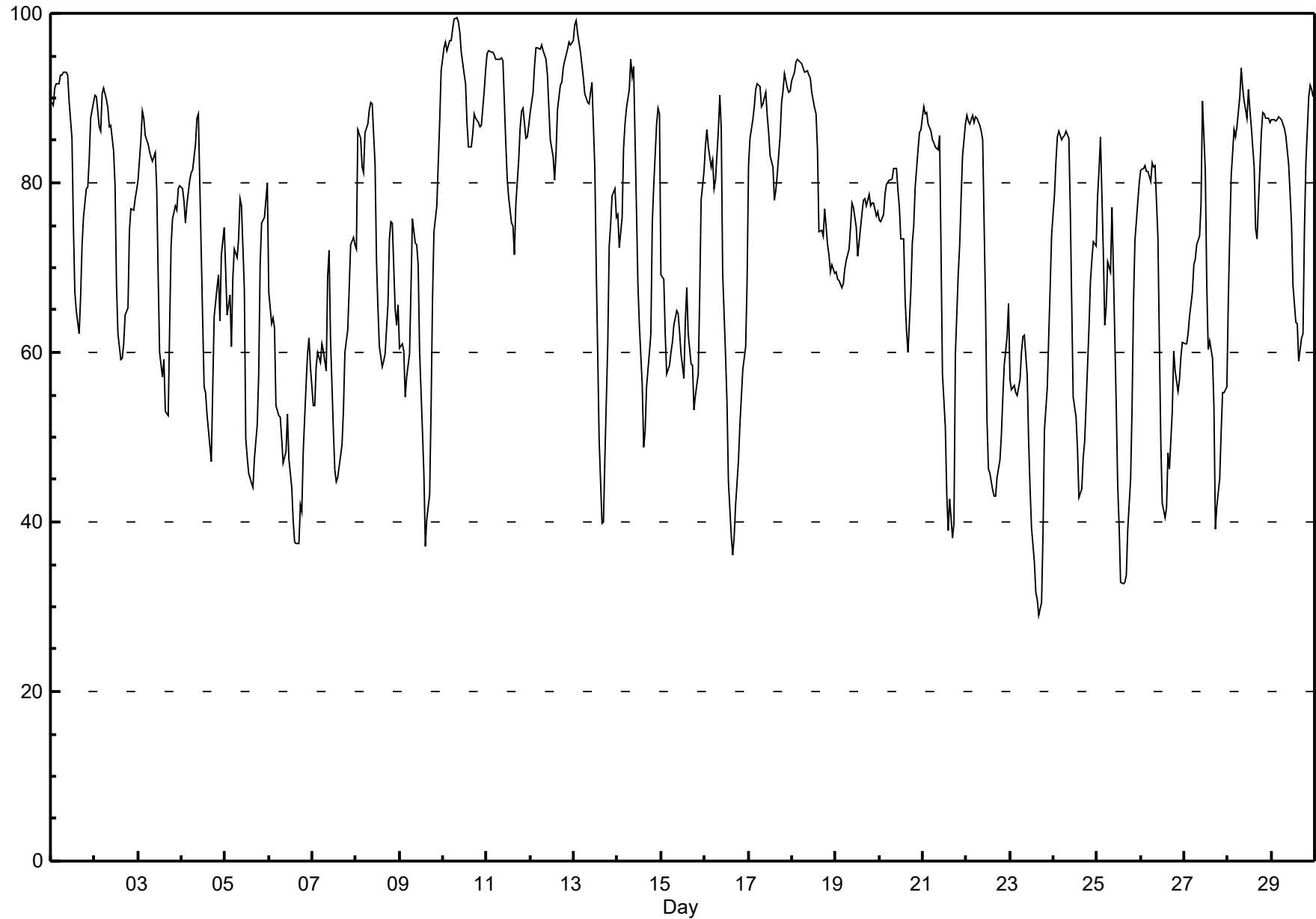
Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 99.5 % on Feb 10 08:00 Maximum Daily Average: 92.4 % on Feb 10																								Hours in Service: 696 Hours of Data: 696 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 29 % on Feb 23 17:00 Minimum Daily Average: 50.6 % on Feb 23 Maximum Diurnal Average: 82.7 % at hour 9 Minimum Diurnal Average: 55.7 % at hour 16 Monthly Average: 72.45 % Percentiles: P ₁ = 32.8 P ₁₀ = 48.1 Q ₁ = 60.1 Median = 75.3 Q ₃ = 86.6 P ₉₀ = 91.7 P ₉₉ = 97.8																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	89	89	91	92	92	93	93	93	93	93	90	85	75	67	65	62	66	73	76	79	80	83	88	89	83.1	93.0
2-Feb	90	90	87	86	91	91	90	89	87	87	84	80	68	62	59	59	61	64	65	74	77	77	78	79	78.1	91.2
3-Feb	80	85	89	88	86	85	84	83	83	84	79	69	60	57	59	53	53	63	73	76	77	77	79	80	75.0	88.5
4-Feb	79	78	75	77	80	81	82	85	88	88	80	64	56	55	53	49	47	56	64	68	69	64	72	75	70.2	88.1
5-Feb	70	64	67	61	69	72	71	73	78	77	67	50	48	46	45	44	47	52	58	70	75	76	78	80	64.1	80.0
6-Feb	67	63	64	63	54	53	52	50	47	48	53	47	44	40	38	37	38	42	41	48	56	60	62	58	51.1	67.0
7-Feb	54	54	58	60	59	61	60	58	69	72	61	51	46	45	45	48	49	53	60	63	68	73	74	73	58.8	73.5
8-Feb	72	86	85	82	81	86	87	89	89	89	82	71	65	61	58	59	60	66	73	75	75	65	63	66	74.5	89.4
9-Feb	61	61	60	55	57	60	68	76	73	73	70	60	51	46	37	40	43	54	66	74	77	82	87	93	63.5	93.2
10-Feb	96	97	96	97	97	98	99	99	99	98	95	93	92	87	84	84	86	88	88	87	87	87	91	93	92.4	99.5
11-Feb	95	96	95	95	95	95	95	95	95	94	85	81	78	75	75	72	77	83	86	88	89	85	86	87	87.3	95.6
12-Feb	88	91	94	96	96	96	96	96	95	93	89	85	83	80	84	89	92	92	94	94	96	97	96	97	91.9	96.8
13-Feb	99	99	98	95	94	92	91	89	89	91	92	82	70	60	50	40	40	48	61	73	75	79	79	76	77.5	99.1
14-Feb	76	72	76	84	87	89	91	94	92	94	77	68	63	56	49	51	56	60	62	75	80	87	89	88	75.7	94.5
15-Feb	69	69	62	58	59	60	61	63	65	65	62	60	57	64	68	62	59	58	53	55	57	67	78	81	63.0	81.3
16-Feb	84	86	84	82	83	79	80	86	90	86	69	60	54	45	38	36	38	42	47	52	55	58	61	69	65.2	90.4
17-Feb	82	85	87	89	91	92	91	89	89	91	88	86	83	82	78	79	81	86	90	91	93	91	91	91	87.3	93.0
18-Feb	92	93	94	95	94	94	94	93	93	93	92	91	89	88	84	74	74	74	77	73	71	70	70	69	84.6	94.6
19-Feb	70	69	69	68	68	70	71	72	75	78	77	75	71	73	76	78	78	77	79	77	78	78	76	77	74.1	78.7
20-Feb	76	75	76	79	80	80	80	80	82	82	79	77	73	73	66	63	60	67	73	75	79	84	86	86	76.4	86.3
21-Feb	89	88	88	87	86	85	85	84	84	86	72	57	51	43	39	43	38	40	60	69	73	78	83	87	70.7	88.9
22-Feb	88	87	87	88	87	88	88	87	86	85	65	52	46	46	44	43	43	45	47	50	55	58	62	66	66.4	88.0
23-Feb	57	56	56	55	55	57	60	62	62	57	49	44	39	35	32	31	29	30	39	51	56	62	68	74	50.6	73.8
24-Feb	79	82	85	86	85	85	86	86	85	77	66	55	52	49	43	44	48	50	54	63	68	71	73	73	68.5	86.1
25-Feb	78	81	85	72	63	65	71	69	77	70	54	44	40	33	33	33	34	39	45	54	66	73	78	80	59.9	85.4
26-Feb	82	82	82	81	81	80	82	82	82	73	61	50	42	41	42	48	46	53	60	58	55	57	60	61	64.2	82.4
27-Feb	61	61	62	64	67	70	71	73	74	77	90	81	68	60	61	59	53	39	42	45	50	55	55	56	62.4	89.7
28-Feb	66	74	81	86	85	87	90	94	91	90	88	91	89	87	82	75	73	78	86	88	88	88	88	87	84.6	93.6
29-Feb	87	87	87	87	88	88	87	86	86	82	79	75	68	64	63	59	62	62	74	82	90	92	91	90	79.9	91.5
78.5 79.4 80.1 79.5 79.6 80.4 81.2 81.9 82.7 81.8 75.7 68.4 62.8 59.3 56.8 55.7 56.3 59.8 65.3 70.0 73.0 74.9 77.2 78.6																								Diurnal Average		
98.6 99.1 97.7 96.9 96.7 98.1 99.3 99.5 99.0 97.9 95.5 92.9 91.7 88.2 84.2 88.6 91.5 91.9 93.5 94.4 95.8 96.6 96.3 96.8																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - February 2016



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	1	0	2	2	1	1	1	1	2	0	1	4	4	6	4	4	3	2	1	1	1	0	1	2	0.8	6.4
Dir	34	27	100	98	103	58	43	357	348	198	193	247	277	272	289	295	354	17	46	26	52	128	242	232	305.9	272.0
2 Spd	3	6	5	5	1	2	3	3	1	1	2	7	6	8	9	7	4	2	5	1	3	2	1	1	2.5	8.8
Dir	213	211	249	255	223	226	224	254	256	340	318	229	284	279	333	317	248	336	274	344	20	35	173	56	270.5	332.9
3 Spd	1	1	0	0	1	1	0	1	1	1	3	3	5	5	3	3	4	5	3	2	3	4	3	1	0.9	5.3
Dir	91	17	343	354	209	230	357	266	225	356	228	257	266	354	235	232	20	37	25	30	37	42	358	342	342.1	36.7
4 Spd	1	1	1	0	1	1	3	4	2	4	4	2	6	10	4	18	24	11	5	3	5	7	2	5	4.2	24.4
Dir	62	136	138	208	250	130	207	239	213	188	195	293	244	264	286	253	258	246	201	177	189	176	180	175	232.9	257.7
5 Spd	14	9	6	5	2	2	3	3	3	2	5	8	5	1	6	7	13	10	6	4	0	1	1	1	4.5	14.1
Dir	193	190	182	171	147	155	145	146	169	141	160	185	190	146	189	167	204	187	188	185	168	33	39	133	180.9	192.7
6 Spd	18	13	23	30	56	59	56	53	56	52	43	39	45	39	33	18	23	24	32	22	24	24	23	26	34.2	59.0
Dir	219	229	236	244	237	240	241	245	242	245	253	254	256	266	264	270	260	250	243	252	247	241	245	245	246.8	240.3
7 Spd	22	29	24	17	17	3	10	4	1	0	2	8	7	10	12	6	1	0	2	1	0	1	1	1	6.7	29.0
Dir	241	239	241	236	237	259	249	244	25	169	352	249	260	255	254	296	258	134	49	165	286	34	24	150	245.4	238.8
8 Spd	3	3	9	6	6	0	1	0	0	0	2	5	5	3	2	4	5	1	4	2	8	10	8	5	3.3	9.9
Dir	201	193	185	195	191	64	181	295	83	159	171	191	195	185	216	159	171	46	217	229	224	253	261	250	208.0	252.8
9 Spd	20	16	15	20	19	8	5	3	3	5	4	5	4	8	7	5	3	3	0	2	4	7	2	1	4.8	19.7
Dir	237	237	235	231	228	256	232	191	245	172	178	193	176	180	258	2	293	211	101	39	42	27	27	33	230.3	231.3
10 Spd	0	2	5	6	9	14	14	14	15	15	13	12	12	14	15	13	11	9	7	3	5	6	6	6	9.7	15.5
Dir	260	32	39	49	47	50	52	55	58	49	52	52	48	46	39	38	38	41	41	40	27	16	23	21	44.8	52.3
11 Spd	5	5	3	2	2	3	1	2	3	3	4	10	8	6	7	8	14	11	6	7	7	9	10	10	5.6	14.2
Dir	14	22	50	56	84	77	96	89	59	50	53	43	31	25	342	349	46	56	50	40	59	56	51	54	42.0	46.4
12 Spd	11	11	11	11	10	11	9	9	9	10	9	6	5	2	13	1	4	4	2	1	2	1	1	1	4.2	12.8
Dir	51	56	50	49	43	56	52	40	42	44	52	20	0	17	240	275	206	159	180	331	80	164	307	305	45.5	240.1
13 Spd	4	5	4	4	5	4	2	2	1	1	2	1	6	15	15	19	18	6	1	5	7	4	3	3	4.9	19.5
Dir	206	233	254	256	302	288	284	176	146	187	202	286	302	243	248	258	262	271	236	187	202	194	205	203	245.4	258.5
14 Spd	4	7	3	1	4	4	4	5	8	4	6	9	9	6	5	4	1	3	6	3	1	5	6	10	3.7	10.4
Dir	202	244	240	326	192	239	219	215	223	229	261	259	240	268	291	310	350	216	233	83	92	160	186	194	230.8	194.1
15 Spd	22	23	31	37	35	32	28	22	17	14	12	18	15	12	9	6	3	4	15	15	7	3	0	2	14.6	37.2
Dir	225	235	245	249	252	252	255	266	268	259	262	255	252	325	328	335	306	230	248	243	222	185	172	179	253.5	249.2
16 Spd	1	4	2	2	1	5	1	2	0	1	4	8	7	14	24	22	33	46	40	28	25	12	21	3	11.6	45.8
Dir	57	36	44	213	211	262	316	160	132	150	175	189	185	250	241	246	235	235	237	237	234	224	217	190	232.2	234.7
17 Spd	2	1	0	1	1	4	1	6	12	12	12	12	15	17	17	16	12	12	14	11	11	11	8	9	8.5	17.4
Dir	70	58	134	120	334	188	240	37	46	44	56	51	38	38	43	39	53	50	42	38	35	41	35	32	43.4	42.9
18 Spd	6	3	4	5	3	1	2	4	1	3	2	5	8	8	7	16	17	18	23	18	15	18	21	23	7.9	23.4
Dir	35	43	42	61	113	125	31	49	55	348	26	289	269	250	274	312	315	313	316	316	302	314	315	318	317.2	317.7
19 Spd	17	16	16	15	12	9	7	4	5	10	10	9	8	10	11	13	12	12	10	12	10	10	10	10	8.0	17.1
Dir	313	311	314	314	318	321	315	331	47	42	39	42	39	45	35	33	45	47	40	44	36	46	45	50	12.5	312.8
20 Spd	7	7	7	5	6	5	4	4	4	3	4	6	4	7	5	4	2	4	4	3	2	2	5	2	1.4	7.3
Dir	46	53	53	60	47	69	84	61	48	68	95	108	170	206	214	209	245	346	330	290	319	235	210	226	72.2	46.4
21 Spd	4	2	1	1	0	0	1	2	1	2	1	1	2	3	5	6	3	1	1	2	2	2	2	3	1.2	5.8
Dir	218	226	340	197	163	202	211	199	310	224	256	254	236	267	334	352	3	272	291	289	298	309	253	237	277.1	352.2
22 Spd	3	2	1	5	1	4	6	1	0	2	3	6	15	23	26	28	30	25	23	23	19	15	8	6	10.8	29.8
Dir	240	235	219	226	197	193	197	194	147	216	359	307	258	259	260	251	251	248	247	249	248	248	240	225	249.5	250.9

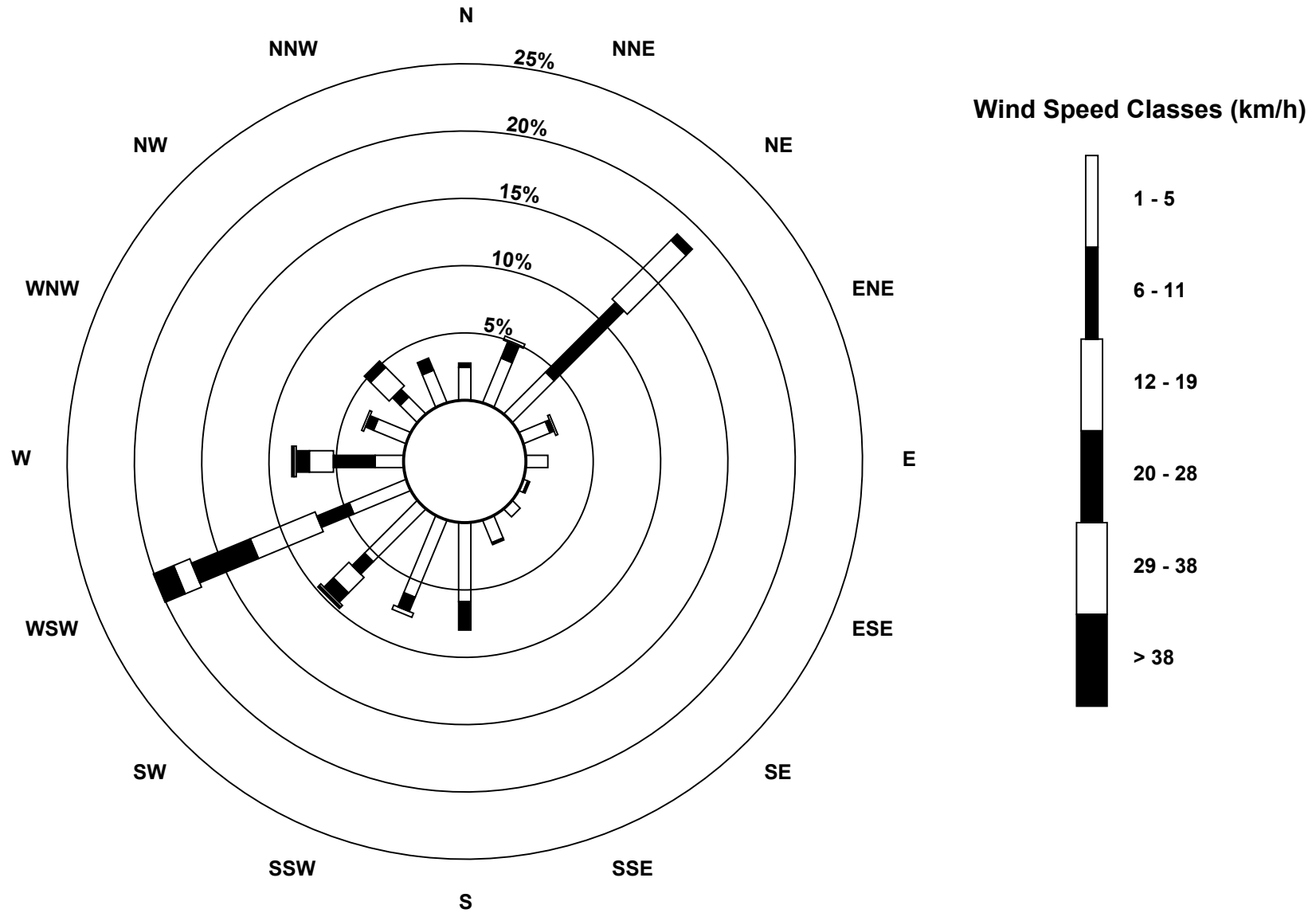
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum							
	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	18	20	17	17	21	16	15	9	10	14	17	22	20	23	19	14	14	12	4	4	1	3	1	2	12.2	23.3							
Dir	235	241	237	240	242	250	253	275	259	252	262	253	256	259	270	259	272	311	332	9	321	210	239	217	255.7	259.2							
24 Spd	1	0	1	1	1	1	0	1	2	2	1	4	6	7	4	5	4	3	2	2	1	2	3	4	1.7	7.3							
Dir	34	352	248	352	243	20	318	346	350	25	3	323	313	263	260	263	291	317	336	258	252	284	229	201	289.6	262.7							
25 Spd	1	1	1	16	23	12	4	8	1	0	7	9	9	4	6	5	7	6	6	3	1	1	2	5	5.2	22.8							
Dir	66	176	59	236	236	241	269	261	283	174	232	254	260	244	210	243	253	277	216	225	151	182	174	189	238.2	235.7							
26 Spd	3	0	2	2	3	3	4	3	2	4	2	1	3	5	1	2	2	2	3	12	19	16	15	15	4.6	19.3							
Dir	208	204	179	169	200	172	185	200	207	198	265	237	235	200	333	274	310	234	199	233	248	247	245	244	232.9	248.3							
27 Spd	19	16	9	12	19	15	20	19	11	22	15	19	20	11	7	6	4	26	23	25	24	20	14	11	14.8	25.9							
Dir	249	249	269	259	249	250	246	248	282	312	275	267	260	274	358	333	247	242	245	249	246	237	227	236	256.2	241.9							
28 Spd	4	2	3	1	2	3	3	15	19	20	20	17	19	19	19	21	21	18	16	18	15	15	13	12	12.3	21.3							
Dir	251	309	20	49	189	198	43	49	46	53	54	52	52	44	46	46	46	49	45	43	47	39	35	34	46.1	45.9							
29 Spd	9	7	6	4	1	0	6	4	0	1	2	5	3	2	4	4	5	3	3	0	1	0	2	5	1.3	9.4							
Dir	29	41	46	27	333	252	253	243	274	272	309	215	231	300	347	340	330	0	6	96	44	85	48	190	345.4	28.9							
Spd	3.9	3.9	3.7	4.8	6.2	4.6	4.5	2.9	1.6	1.5	1.6	3.6	4.8	5.4	5.3	4.8	4.5	3.7	4.1	3.2	3.1	2.2	2.3	2.0	Diurnal Average								
Dir	239.4	245.5	248.4	246.3	242.3	247.1	246.2	258.8	277.1	291.1	283.8	262.0	266.8	274.6	282.4	294.4	276.9	269.0	263.1	267.9	257.8	262.0	261.3	250.4	Diurnal Maximum								
Spd	22.4	29.0	30.6	37.2	55.9	59.0	56.3	52.8	56.3	51.6	43.4	38.9	45.5	38.6	33.5	28.4	33.4	45.8	39.5	27.7	24.7	24.3	23.1	26.1	Diurnal Maximum								
Dir	225.5	238.8	245.2	249.2	236.9	240.3	241.1	244.9	241.6	244.9	253.0	253.6	256.5	265.9	263.6	251.4	235.1	234.7	237.3	236.9	233.5	241.4	244.8	244.5									
Maximum Speed Value: 59 km/h on Feb 6 06:00																								Minimum Speed Value: 0 km/h on Feb 1 10:00						Hours in Service: 696			
Maximum Daily Speed Average: 34.2 km/h on Feb 6																								Minimum Daily Speed Average: 0.8 km/h on Feb 21						Hours of Data: 696			
Maximum Diurnal Speed Average: 6.2 km/h at hour 5																								Minimum Diurnal Speed Average: 1.5 km/h at hour 10						Hours of Missing Data: 0			
Monthly Average Velocity: 3.54 km/h 261.78 deg												Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.9 Q ₁ = 2.0 Median = 4.9 Q ₃ = 11.8 P ₉₀ = 19.5 P ₉₉ = 43.2												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	40		7		0		0		0		0		47																				
NorthEast	55		52		44		6		0		0		157																				
East	20		1		0		0		0		0		21																				
SouthEast	22		0		0		0		0		0		22																				
South	66		29		1		0		0		0		96																				
SouthWest	71		20		23		25		5		8		152																				
West	48		33		29		17		7		4		138																				
NorthWest	35		11		13		4		0		0		63																				
Total	357		153		110		52		12		12		696																				

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - February 2016



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - February 2016

Maximum Speed: 59 km/h on Feb 6 06:00																				Maximum Daily Speed Average: 35.0 km/h on Feb 6										Hours in Service: 696	
Minimum Speed: 0 km/h on Feb 29 06:00																				Minimum Daily Speed Average: 2.3 km/h on Feb 1										Hours of Data: 696	
Maximum Diurnal Speed Average: 11.2 km/h at hour 15																				Minimum Diurnal Speed Average: 7.0 km/h at hour 24										Hours of Missing Data: 0	
Monthly Average Speed: 8.85 km/h																				Percentiles: P ₁ = 0.6 P ₁₀ = 1.7 Q ₁ = 2.9 Median = 5.4 Q ₃ = 12.2 P ₉₀ = 20.0 P ₉₉ = 43.3										Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Feb	1	0	2	2	1	1	1	1	2	1	1	4	5	7	5	5	3	3	2	2	2	1	1	2	2.3	7.2					
2-Feb	3	7	6	5	2	3	4	3	2	1	2	7	6	9	9	8	5	3	5	1	3	3	3	2	4.2	9.4					
3-Feb	2	2	1	0	2	1	1	1	2	2	3	5	5	5	4	3	4	5	3	2	3	4	3	1	2.7	5.5					
4-Feb	2	2	1	1	2	2	4	4	3	5	4	4	6	11	6	19	25	11	5	3	5	7	2	5	5.9	24.9					
5-Feb	14	9	6	6	3	3	4	3	3	2	5	8	5	2	6	7	13	10	7	4	1	2	1	3	5.4	14.1					
6-Feb	19	13	23	30	56	59	57	53	57	52	44	39	46	39	34	19	24	24	33	22	25	24	23	26	35.0	59.4					
7-Feb	23	29	25	17	17	5	10	4	1	2	4	9	7	10	12	6	1	2	2	2	1	1	1	2	8.0	29.1					
8-Feb	4	4	9	7	6	2	2	1	2	3	3	5	6	3	3	5	6	2	5	4	9	10	8	5	4.8	10.0					
9-Feb	20	16	15	20	19	8	7	3	5	6	5	6	5	8	11	6	5	4	2	3	4	7	2	1	7.8	19.9					
10-Feb	0	2	5	6	9	15	14	14	14	15	16	14	12	13	15	15	13	12	10	8	3	5	6	6	10.1	16.0					
11-Feb	5	5	3	3	2	4	2	2	3	3	5	10	9	7	8	11	15	11	6	7	8	10	10	11	6.6	14.8					
12-Feb	11	11	11	12	11	11	9	9	10	10	10	7	5	5	13	4	4	6	3	3	3	3	2	2	7.2	12.9					
13-Feb	5	6	5	5	5	4	2	2	3	2	2	1	6	15	15	20	18	7	3	5	7	5	3	4	6.3	19.8					
14-Feb	4	8	4	3	4	5	4	5	8	4	7	10	9	7	5	6	2	3	8	3	4	6	7	11	5.7	10.6					
15-Feb	23	23	31	38	36	32	29	22	17	14	13	18	15	12	10	6	5	4	16	15	8	4	1	3	16.4	37.6					
16-Feb	2	4	3	4	3	6	1	3	1	3	5	8	7	14	25	23	34	46	40	28	25	13	21	8	13.6	46.1					
17-Feb	3	3	1	2	3	5	2	6	12	12	13	13	15	17	18	16	13	13	14	12	12	11	9	10	9.8	17.8					
18-Feb	6	4	5	6	5	3	3	4	3	4	3	7	9	8	9	17	18	19	23	19	15	18	22	24	10.5	23.8					
19-Feb	18	16	16	15	12	9	7	5	5	11	11	9	9	11	11	13	12	13	11	12	11	10	10	10	11.2	17.8					
20-Feb	8	8	7	6	6	5	4	4	4	4	5	7	6	7	6	5	3	5	4	5	3	3	5	2	5.0	7.8					
21-Feb	4	3	1	2	1	1	1	2	2	2	2	1	2	4	6	6	3	2	1	2	3	2	3	4	2.5	6.3					
22-Feb	3	4	1	5	1	4	6	2	1	2	4	6	16	24	27	29	30	25	23	23	19	16	8	6	11.8	30.0					
23-Feb	18	20	17	18	21	16	15	10	10	14	17	22	20	24	20	15	16	12	5	5	2	4	2	2	13.6	23.6					
24-Feb	1	1	1	1	2	2	1	2	2	2	4	5	7	8	5	5	5	3	3	2	2	3	4	4	3.1	8.2					
25-Feb	3	3	5	16	23	12	5	9	1	2	8	9	9	4	7	5	7	7	6	4	5	2	4	5	6.8	22.9					
26-Feb	3	1	3	4	3	4	5	3	3	4	3	2	3	6	2	4	3	3	4	13	20	16	15	15	5.9	19.9					
27-Feb	19	17	10	12	19	16	20	19	12	22	17	20	21	12	7	6	5	26	23	26	24	20	14	11	16.6	26.1					
28-Feb	5	4	4	2	3	3	4	15	20	20	21	17	19	19	20	22	21	19	17	18	15	16	14	12	13.7	21.9					
29-Feb	10	8	6	5	2	0	6	4	1	1	2	5	4	4	5	5	5	3	3	2	2	1	2	5	3.8	9.7					
8.2 8.0 7.8 8.6 9.6 8.3 7.9 7.5 7.2 7.7 8.2 9.6 10.2 11.0 11.2 10.8 11.0 10.5 9.9 8.8 8.3 7.7 7.2 7.0																									Diurnal Average						
22.8 29.1 30.8 37.6 56.2 59.4 56.7 53.1 56.5 52.3 43.8 39.2 45.9 39.2 34.0 28.7 33.7 46.1 39.8 27.9 24.9 24.5 23.2 26.3																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - February 2016

Maximum Value: 99.5 deg on Feb 16 05:00																			Hours in Service: 696						
Minimum Value: 4.2 deg on Feb 25 05:00																			Hours of Data: 696						
																			Hours of Missing Data: 0						
																			Hours of Calibration: 0						
Percentiles: P ₁ = 4.9 P ₁₀ = 8.3 Q ₁ = 15.3 Median = 28.2 Q ₃ = 54.5 P ₉₀ = 75.4 P ₉₉ = 93.6																			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-Feb	31	44	53	32	51	35	57	46	62	88	55	22	35	27	31	48	36	26	47	39	58	92	70	23	92.2
2-Feb	22	17	8	30	60	80	19	30	75	60	21	12	31	27	19	36	27	48	31	46	32	80	78	77	79.9
3-Feb	83	54	75	62	73	86	49	63	80	74	45	48	37	24	46	31	34	10	24	31	21	21	30	65	85.9
4-Feb	55	55	50	85	57	58	74	69	58	25	15	51	25	26	47	31	13	9	14	27	18	18	44	55	84.8
5-Feb	5	15	36	29	56	42	54	54	54	49	19	23	59	93	22	26	15	13	46	42	92	71	74	97	97.2
6-Feb	36	9	8	8	6	7	6	7	5	9	8	8	8	10	10	17	8	8	7	8	7	6	6	6	35.9
7-Feb	6	5	4	6	5	55	9	21	45	82	47	13	18	15	14	28	84	86	47	79	84	73	78	75	86.1
8-Feb	65	46	14	19	59	96	82	87	99	94	85	30	29	43	71	34	19	87	61	89	18	10	21	21	99.0
9-Feb	5	4	5	7	8	32	49	51	67	28	40	66	47	17	58	44	59	58	91	65	24	11	36	57	90.9
10-Feb	82	18	6	9	6	11	12	16	16	15	19	19	17	18	16	17	19	14	15	15	27	17	19	22	81.7
11-Feb	22	22	25	28	62	27	53	46	29	50	26	16	23	38	26	36	17	21	31	11	26	20	25	15	62.1
12-Feb	13	16	19	15	15	16	21	15	21	17	29	31	31	81	7	89	29	39	77	77	44	83	71	62	89.1
13-Feb	28	33	28	32	26	30	43	38	64	79	62	86	29	11	11	9	11	57	63	12	16	10	19	26	86.0
14-Feb	32	18	37	88	48	55	67	61	21	26	17	21	18	30	40	45	66	64	89	51	79	73	32	14	89.0
15-Feb	10	4	7	9	7	6	8	12	12	10	13	11	20	18	28	33	59	30	13	17	16	58	97	61	97.4
16-Feb	58	19	70	77	99	68	66	75	83	83	36	19	16	16	14	11	8	6	6	6	7	23	6	80	99.5
17-Feb	51	83	74	71	86	63	71	31	18	16	20	22	21	14	13	16	19	19	16	16	16	16	20	15	86.4
18-Feb	33	39	33	26	51	75	45	30	75	30	83	61	30	16	35	17	16	17	10	12	18	13	15	10	82.9
19-Feb	16	14	14	13	13	24	14	31	39	14	15	25	31	27	20	17	17	17	16	14	18	17	26	19	38.7
20-Feb	25	24	24	24	17	25	28	26	23	42	36	28	64	19	29	62	52	37	35	43	46	53	12	13	63.9
21-Feb	9	62	84	82	88	95	71	13	69	64	51	49	43	45	31	23	39	43	65	44	30	39	55	35	94.9
22-Feb	32	86	82	14	86	28	8	62	85	52	29	24	20	11	11	9	7	7	7	6	7	9	9	9	86.3
23-Feb	6	6	5	5	6	8	7	26	17	9	13	10	12	10	23	18	24	13	22	45	64	27	85	69	84.8
24-Feb	46	69	62	53	80	59	72	58	34	46	75	40	26	32	53	37	40	28	39	40	69	55	20	19	80.3
25-Feb	71	81	83	5	4	8	52	30	74	86	19	15	13	31	32	34	17	38	13	49	79	84	74	40	85.7
26-Feb	71	93	77	73	27	65	36	74	42	21	53	58	20	38	52	63	44	61	49	36	17	8	7	14	93.3
27-Feb	7	10	21	15	9	12	5	6	31	13	27	13	10	28	26	29	62	7	6	7	7	6	8	10	62.1
28-Feb	32	57	43	63	59	45	43	11	14	15	15	16	15	15	15	16	13	15	13	12	18	13	14	14	63.1
29-Feb	16	23	35	22	45	81	10	20	59	62	42	38	40	67	41	40	23	31	40	80	72	85	63	17	84.6
83.1 93.3 83.6 87.9 99.5 96.3 81.7 86.5 99.0 94.0 85.3 86.0 63.9 93.2 71.1 89.1 83.8 87.0 90.9 89.0 92.4 92.2 97.4 97.2																									

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

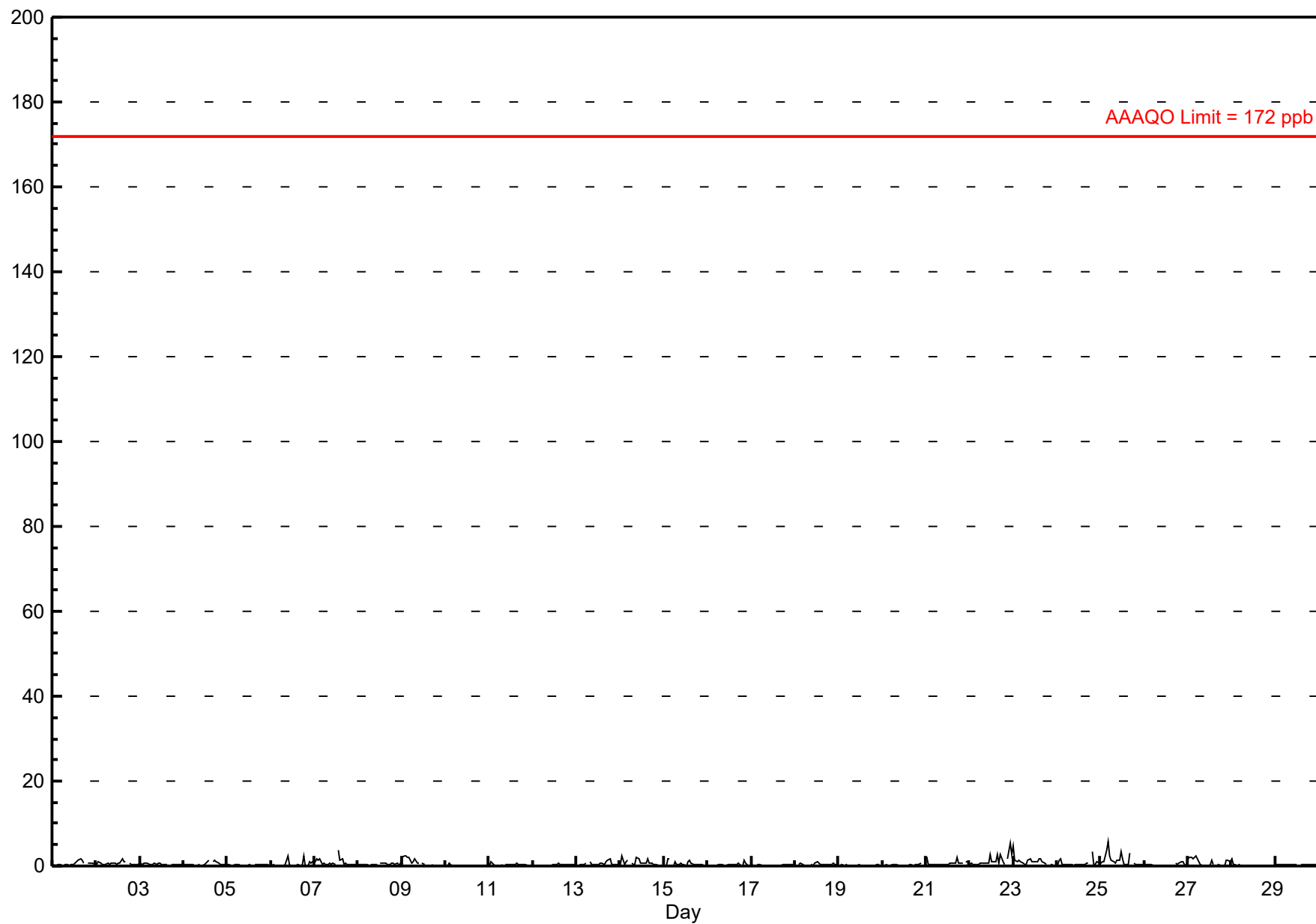
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Smoky Heights - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 696						
Maximum Value: 5.9 ppb on Feb 25 05:00																				Maximum Daily Average: 1.4 ppb on Feb 25		Hours of Data: 663				
Minimum Value: 0 ppb on Feb 9 18:00																				Minimum Daily Average: 0.1 ppb on Feb 10		Hours of Missing Data: 33				
Maximum Diurnal Average: 0.7 ppb at hour 2																				Minimum Diurnal Average: 0.3 ppb at hour 21		Hours of Calibration: 33				
Monthly Average: 0.51 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 1.2 P ₉₉ = 3.4		Percent Operational Time: 100.0				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	1	1	A	1	1	1	1	0	0.5	1.6
2-Feb	0	1	1	0	0	0	1	0	1	1	1	0	1	1	2	1	1	A	1	0	0	0	0	0	0.6	1.5
3-Feb	1	0	1	1	1	0	0	0	1	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0.4	0.7
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	0	0	0	0	0.5	1.4
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3
6-Feb	0	0	0	0	0	0	0	0	0	2	0	0	0	A	0	0	0	0	2	0	0	1	1	1	0.4	2.4
7-Feb	1	2	1	2	0	1	0	0	1	0	1	0	A	4	2	2	1	1	0	0	0	0	0	0	0.9	3.7
8-Feb	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0	1	1	0	1	0	0	0.4	0.7
9-Feb	2	2	3	2	2	1	1	2	1	1	A	1	0	C	C	C	0	0	0	0	0	0	0	0	0.9	2.5
10-Feb	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
11-Feb	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	1.2
12-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	0.6
13-Feb	0	0	0	0	0	1	A	1	0	0	0	0	0	1	1	0	1	1	2	0	0	0	0	0	0.5	1.6
14-Feb	0	2	0	1	1	A	1	0	0	2	2	1	1	1	1	2	1	1	1	0	0	0	0	0	0.7	2.3
15-Feb	0	0	2	2	A	0	1	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.5	1.7
16-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0.3	1.2
17-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
18-Feb	0	A	0	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0.4	1.0
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.4
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	2	0.3	1.9
21-Feb	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1	1	1	A	1	1	0.6	2.0
22-Feb	0	1	0	0	0	0	1	1	1	1	1	3	1	1	1	3	1	3	1	0	A	2	5	3	1.3	5.3
23-Feb	5	1	1	2	1	1	0	0	1	2	1	1	1	1	2	2	1	1	0	A	0	0	0	0	1.1	4.6
24-Feb	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	3	0	0	1	1	0.6	3.5
25-Feb	1	1	1	4	6	2	1	1	1	2	1	3	2	0	0	0	3	A	1	0	0	0	0	0	1.4	5.9
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	1	1	1	0	0	0.3	1.1
27-Feb	2	2	2	2	2	2	1	0	0	0	0	0	0	1	0	A	0	0	0	0	0	1	1	1	0.9	2.3
28-Feb	2	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	1.8
29-Feb	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
																									Diurnal Average	Diurnal Maximum
																									0.7	4.6
																									0.7	2.3
																									0.6	2.5
																									0.7	3.7
																									0.7	5.9
																									0.4	2.2
																									0.4	1.2
																									0.4	1.6
																									0.4	1.5
																									0.5	2.4
																									0.4	1.6
																									0.5	3.4
																									0.4	1.6
																									0.6	3.7
																									0.6	1.7
																									0.6	2.8
																									0.6	3.0
																									0.6	2.8
																									0.5	2.4
																									0.4	3.5
																									0.3	1.2
																									0.5	1.7
																									0.5	5.3
																									0.4	2.7
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - February 2016



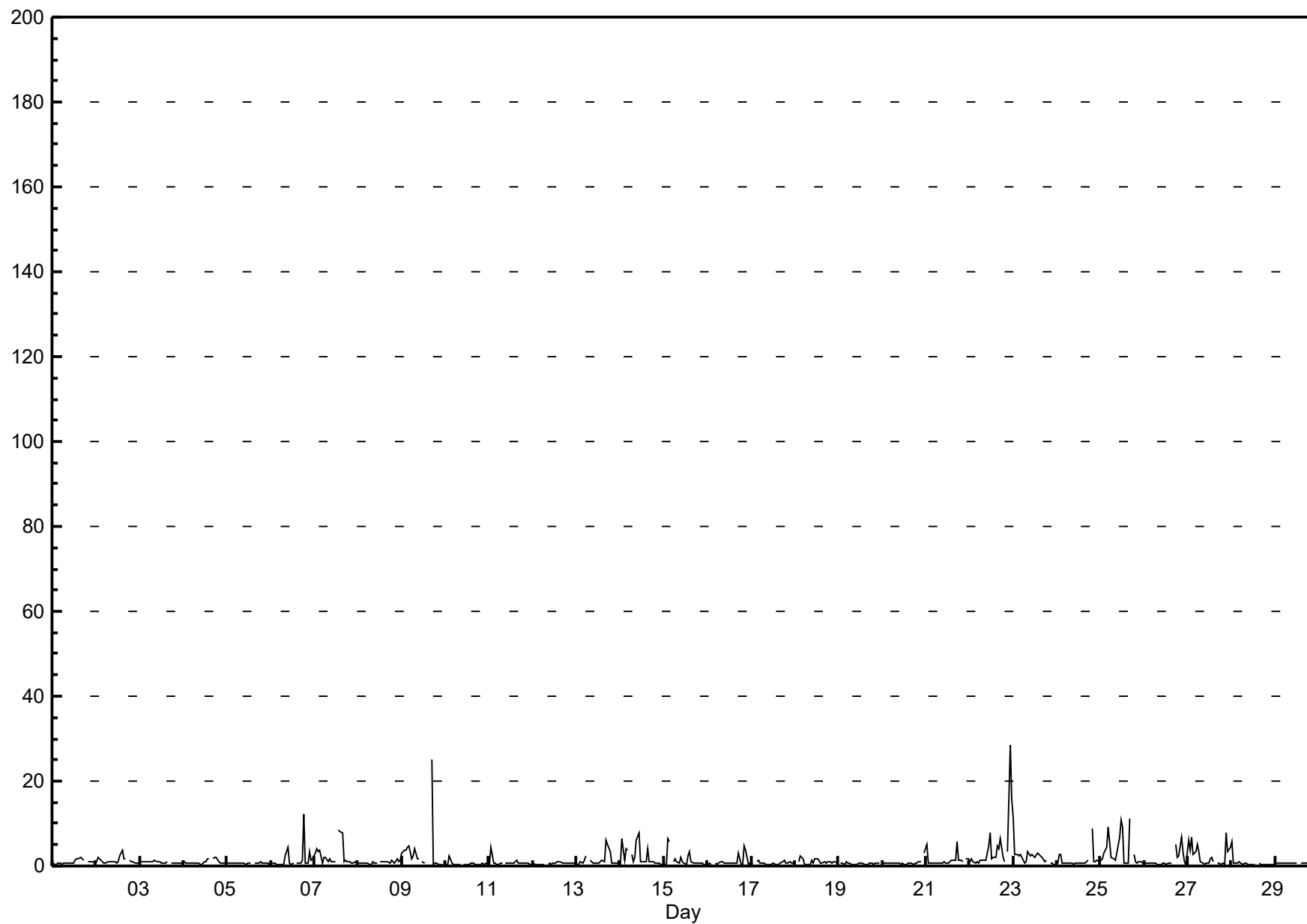
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Smoky Heights - February 2016

Maximum Value: 28.5 ppb on Feb 22 23:00																				Maximum Daily Average: 4.1 ppb on Feb 22					Hours in Service: 696	
Minimum Value: 0 ppb on Feb 10 00:00																				Minimum Daily Average: 0.5 ppb on Feb 10					Hours of Data: 663	
Maximum Diurnal Average: 2.5 ppb at hour 17																				Minimum Diurnal Average: 0.9 ppb at hour 8					Hours of Missing Data: 33	
Monthly Average: 1.42 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.8 Q ₃ = 1.2 P ₉₀ = 3.1 P ₉₉ = 10.9					Hours of Calibration: 33	
																				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-Feb	1	1	0	1	1	0	1	1	1	1	1	1	1	2	2	2	2	1	A	1	1	1	1	1	1.0	2.1
2-Feb	1	2	1	1	1	1	1	1	1	1	1	1	1	2	4	2	2	A	1	1	1	1	1	1	1.2	3.6
3-Feb	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-Feb	1	1	1	1	1	1	1	1	1	0	0	1	1	2	2	A	2	2	2	1	1	1	1	1	1.0	2.0
5-Feb	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	0	0.6	0.9
6-Feb	1	1	1	0	0	0	0	0	2	4	1	0	1	A	1	1	1	1	12	1	1	3	1	2	1.5	12.4
7-Feb	3	4	4	4	1	2	2	1	2	1	1	1	A	9	8	8	1	1	1	1	1	1	1	1	2.4	8.6
8-Feb	1	1	1	1	1	1	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	1	0.9	1.7
9-Feb	3	4	4	4	5	2	2	4	2	2	A	1	1	C	C	C	25	1	1	1	0	0	0	0	3.1	25.2
10-Feb	0	0	2	1	0	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	1	0	1	1	0.5	2.3
11-Feb	0	4	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.8	4.3
12-Feb	1	0	0	0	0	0	0	A	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0
13-Feb	0	0	1	1	1	2	A	1	1	1	1	1	1	1	1	1	6	5	4	1	1	1	1	1	1.4	6.2
14-Feb	1	6	1	4	4	A	3	1	2	6	8	1	1	1	1	4	1	1	1	1	1	1	0	0	2.2	7.9
15-Feb	0	0	7	6	A	1	2	1	1	2	1	1	0	2	3	1	1	1	1	1	1	1	0	0	1.5	6.6
16-Feb	0	1	0	A	1	0	1	1	1	1	1	1	1	1	1	1	1	3	0	0	5	4	0	1	1.0	4.9
17-Feb	1	1	A	1	1	1	1	1	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	1	0.7	1.2
18-Feb	1	A	1	2	2	0	0	0	0	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1.0	2.3
19-Feb	A	1	1	0	1	1	1	0	0	0	1	1	1	1	0	0	0	1	1	0	1	1	1	A	0.6	1.1
20-Feb	0	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	A	3	0.7	3.1
21-Feb	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	1	1	1	A	2	2	1.4	5.7
22-Feb	1	2	1	1	1	1	1	2	1	1	5	8	2	2	2	5	4	6	2	1	A	3	28	16	4.1	28.5
23-Feb	12	3	3	2	3	1	1	1	3	2	3	2	2	3	3	2	2	1	1	A	1	1	0	1	2.3	11.6
24-Feb	1	3	3	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	9	1	1	2	1	1.4	8.9
25-Feb	1	2	3	5	9	6	2	2	1	3	7	11	9	1	1	1	11	A	3	1	1	1	1	1	3.5	11.0
26-Feb	1	1	1	1	1	1	1	0	0	0	1	1	0	1	1	1	A	5	2	2	7	3	1	0	1.3	6.7
27-Feb	6	4	7	3	3	5	4	1	1	0	1	1	2	2	1	A	1	1	0	1	0	8	3	4	2.5	7.8
28-Feb	6	1	1	1	1	1	0	1	1	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0.7	5.6
29-Feb	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
1.8 1.6 1.7 1.6 1.5 1.1 1.0 0.9 1.0 1.2 1.3 1.4 1.2 1.4 1.5 1.5 2.5 1.7 1.6 1.1 1.0 1.4 1.8 1.4																									Diurnal Average	
11.6 6.4 6.8 5.8 9.3 5.7 3.5 4.1 3.3 6.1 7.9 10.9 9.3 8.6 8.1 7.7 25.2 6.5 12.4 8.9 6.7 7.8 28.5 15.6																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

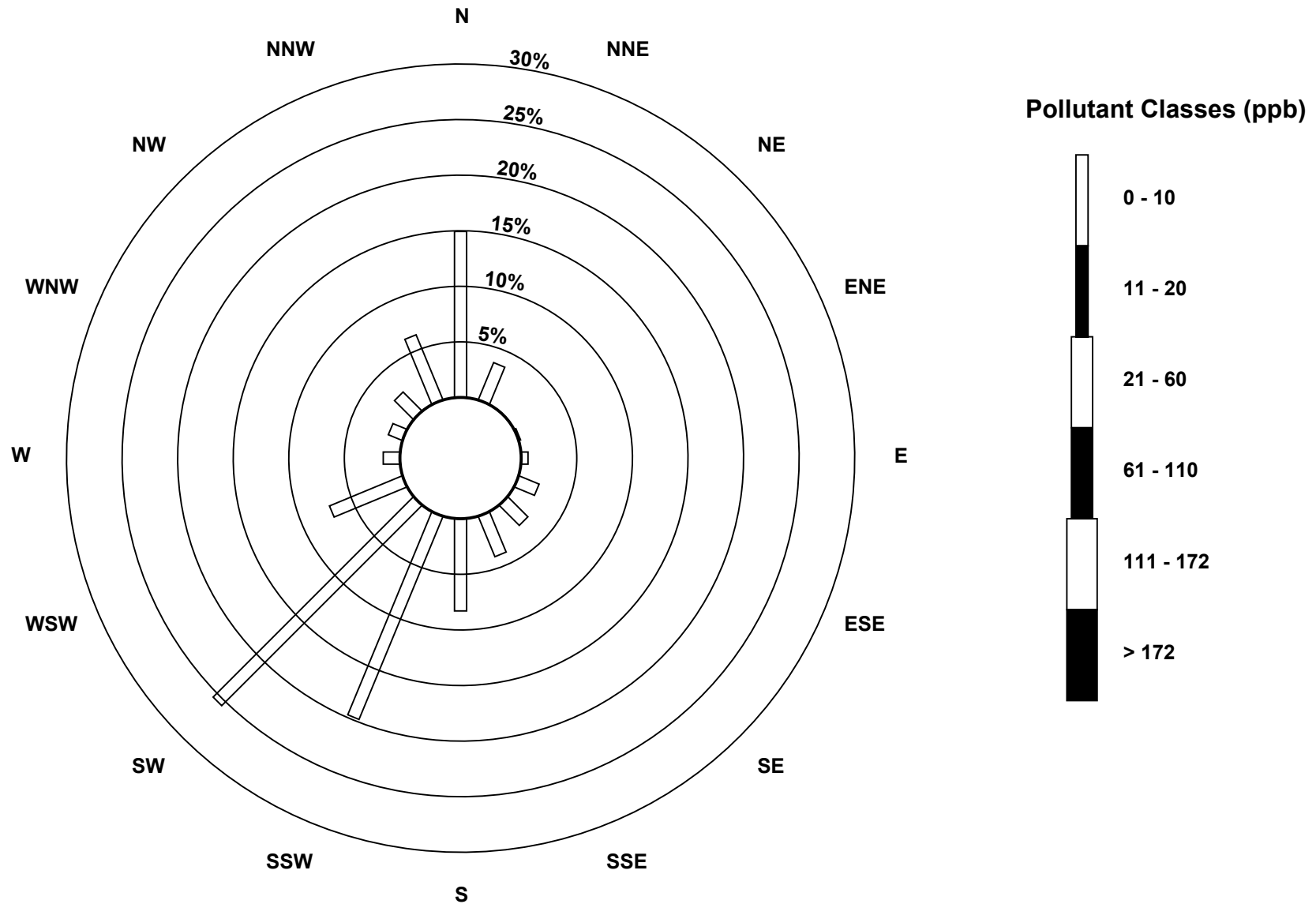
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - February 2016



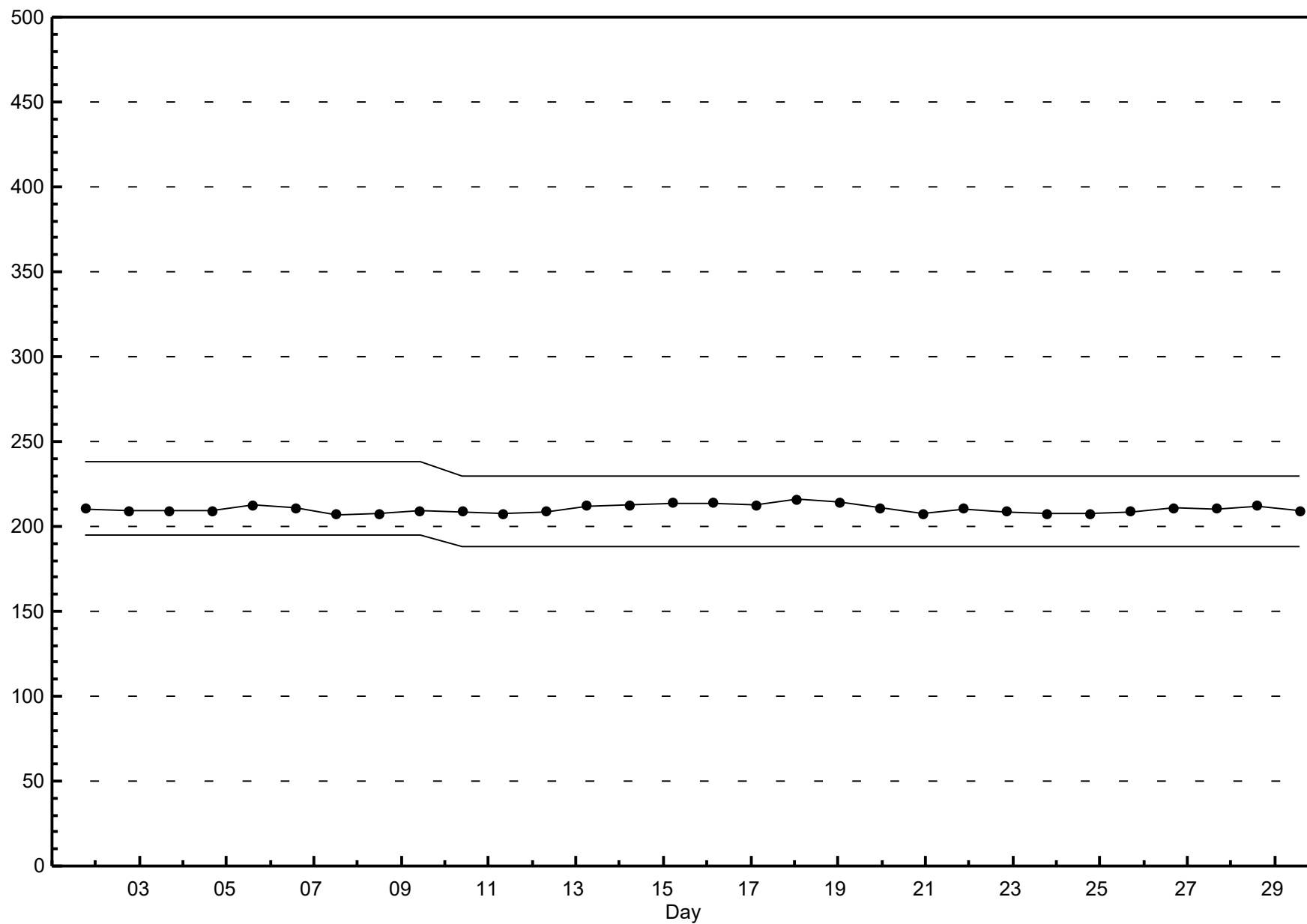
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - February 2016



Span Responses

Sulphur Dioxide (SO₂)
Smoky Heights - February 2016



Hourly Averages

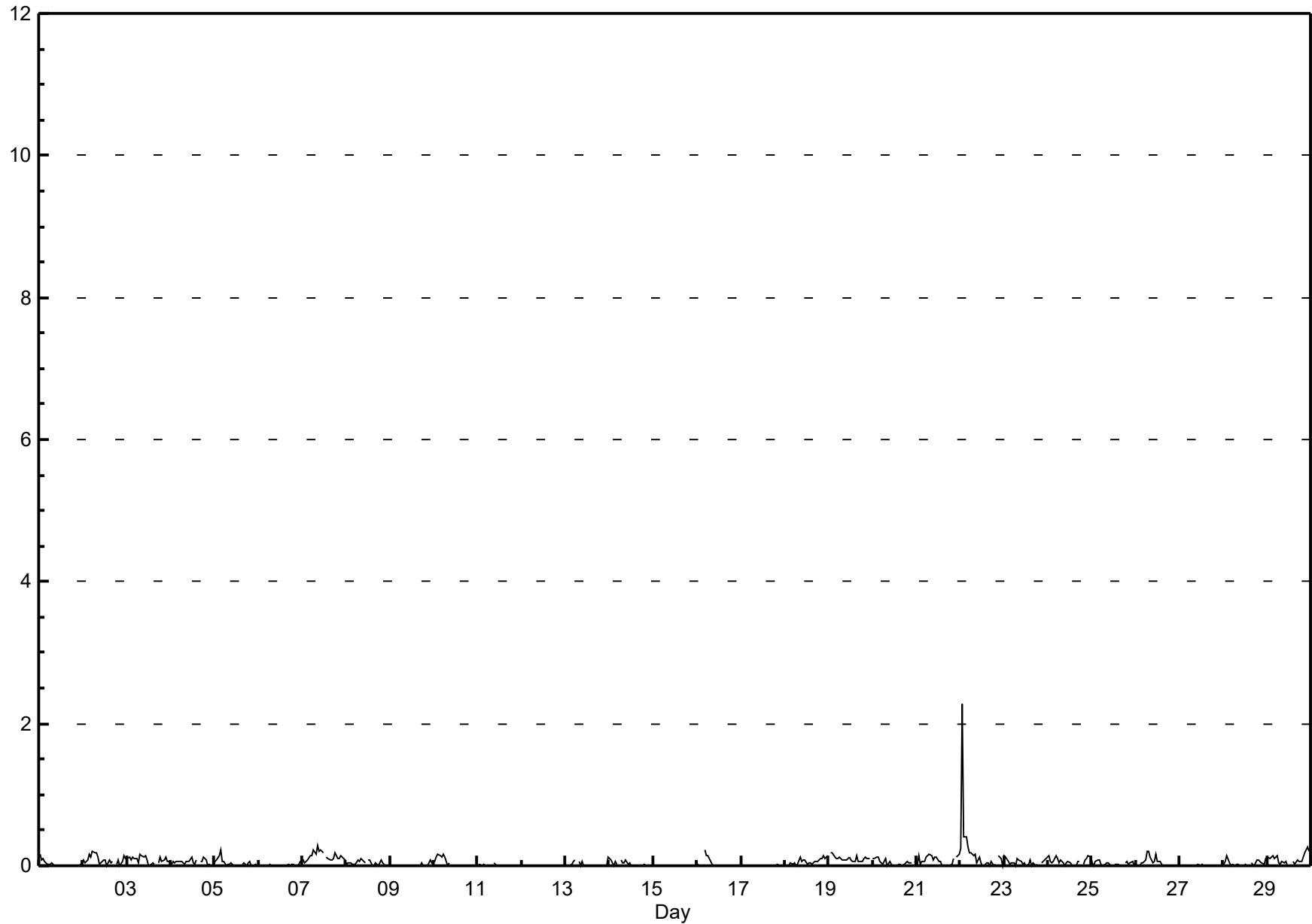
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																			Hours in Service: 696								
Maximum Value: 2.3 ppb on Feb 22 02:00																			Maximum Daily Average: 0.2 ppb on Feb 22		Hours of Data: 661						
Minimum Value: 0 ppb on Feb 1 09:00																			Minimum Daily Average: 0.0 ppb on Feb 12		Hours of Missing Data: 35						
Maximum Diurnal Average: 0.1 ppb at hour 2																			Minimum Diurnal Average: 0.0 ppb at hour 16		Hours of Calibration: 35						
Monthly Average: 0.05 ppb																			Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.1 P ₉₀ = 0.1 P ₉₉ = 0.2		Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	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	
2-Feb	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-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.1	
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.2	
6-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
7-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
9-Feb	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0.0	0.1	
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
11-Feb	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	
12-Feb	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	
13-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
14-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
15-Feb	0	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	
16-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
17-Feb	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	
18-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.2	
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.1	
21-Feb	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-Feb	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	2.3	
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.1	
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.1	
25-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.2	
27-Feb	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	
28-Feb	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	
29-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
																								Diurnal Average			
																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																											

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - February 2016



Hourly Maximums

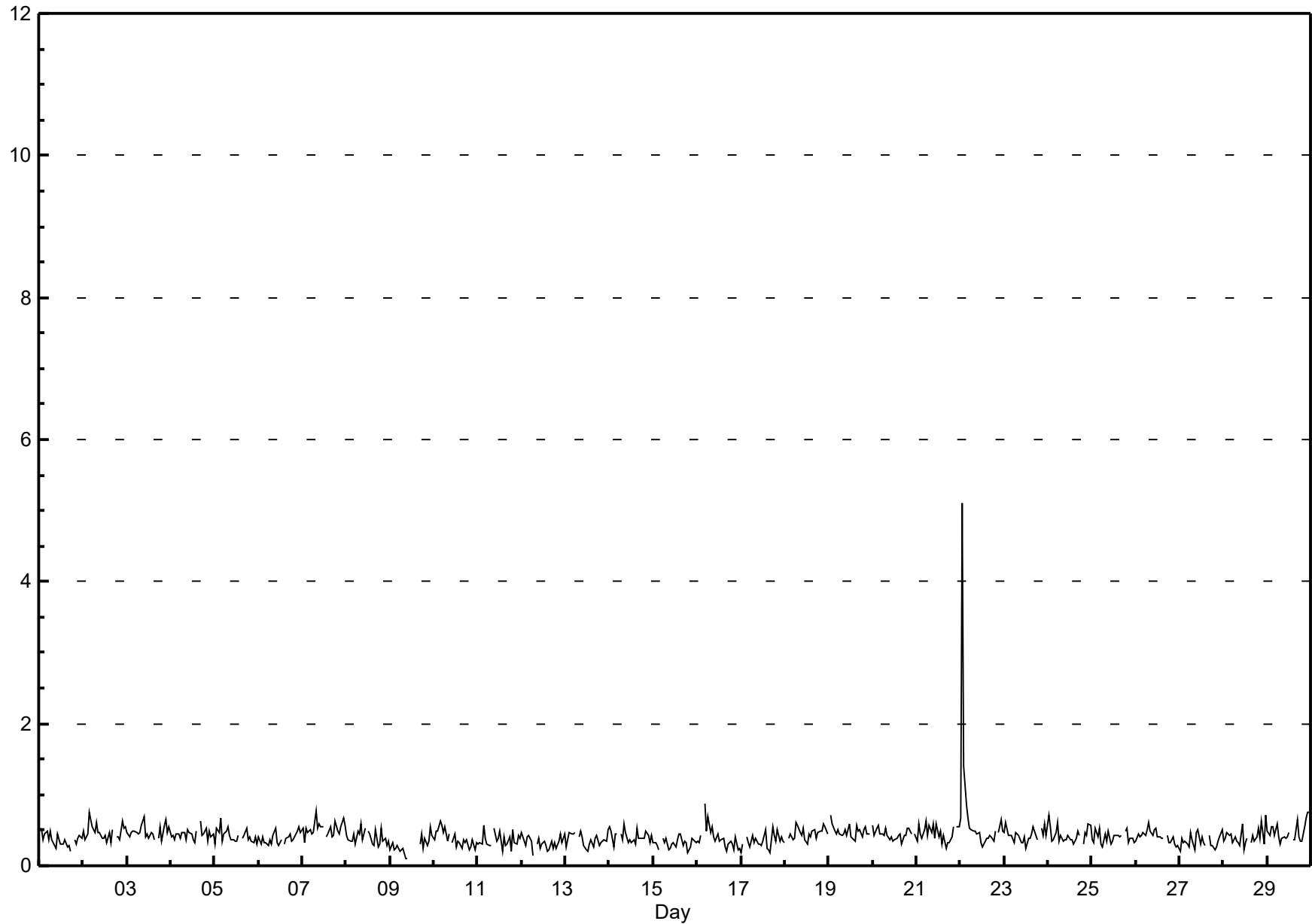
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2016

Maximum Value: 5.1 ppb on Feb 22 02:00																				Maximum Daily Average: 0.7 ppb on Feb 22										Hours in Service: 696	
Minimum Value: 0 ppb on Feb 9 10:00																				Minimum Daily Average: 0.3 ppb on Feb 9										Hours of Data: 661	
Maximum Diurnal Average: 0.6 ppb at hour 2																				Minimum Diurnal Average: 0.4 ppb at hour 13										Hours of Missing Data: 35	
Monthly Average: 0.42 ppb																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 0.7										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-Feb	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5					
2-Feb	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	1	A	0	0	0	1	1	1	0.5	0.7					
3-Feb	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	1	0	1	1	0	1	0.5	0.7					
4-Feb	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	1	0	0	1	0	0	0	0	0.4	0.6					
5-Feb	0	1	0	1	0	0	0	1	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0.4	0.7					
6-Feb	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0.4	0.6					
7-Feb	1	0	1	0	1	0	0	1	1	1	1	1	A	0	0	1	0	0	1	0	0	1	1	1	0.5	0.8					
8-Feb	0	0	0	0	0	0	0	0	1	0	0	1	A	0	0	0	1	0	0	1	0	0	0	0	0.4	0.6					
9-Feb	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	1	0	0	0.3	0.6					
10-Feb	0	0	0	1	1	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6					
11-Feb	0	0	0	1	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.6					
12-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5					
13-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.5					
14-Feb	1	0	0	0	0	A	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	0.6					
15-Feb	0	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-Feb	0	0	0	A	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9					
17-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0.3	0.6					
18-Feb	0	A	0	0	0	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	1	1	0	0.5	0.6					
19-Feb	A	1	1	0	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	1	1	0	0	A	0.5	0.7					
20-Feb	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0.4	0.6					
21-Feb	0	1	0	0	1	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	1	A	1	1	0.5	0.6					
22-Feb	1	5	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0.7	5.1					
23-Feb	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	1	0	1	0	0.4	0.6					
24-Feb	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	0	0.4	0.7					
25-Feb	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0.4	0.5					
26-Feb	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0.4	0.6					
27-Feb	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	1	0	0.3	0.5					
28-Feb	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	1	0	1	0	1	0.4	0.7					
29-Feb	0	0	1	1	0	1	0	0	0	0	0	0	0	A	0	0	1	0	0	0	1	1	1	1	0.5	0.8					
0.4 0.6 0.4 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 0.4 0.4 0.4 0.4 0.4 0.4 0.4																								Diurnal Average							
0.7 5.1 1.4 0.8 0.9 0.6 0.7 0.8 0.6 0.7 0.6 0.6 0.5 0.5 0.5 0.6 0.7 0.6 0.6 0.5 0.6 0.7 0.8 0.7																								Diurnal Maximum							
C - Calibration A - Automated Daily Zero Span																															

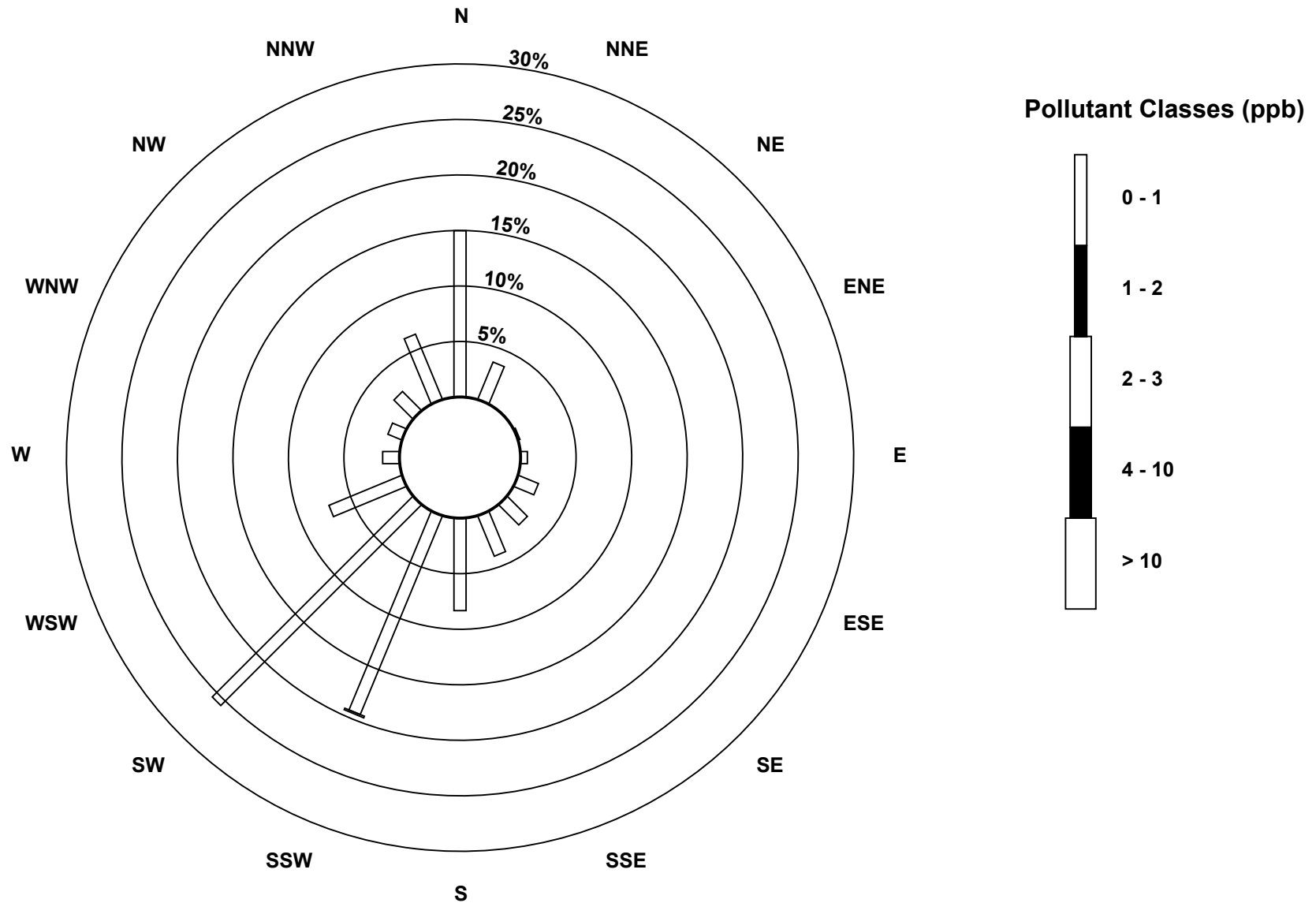
Hourly Maximums

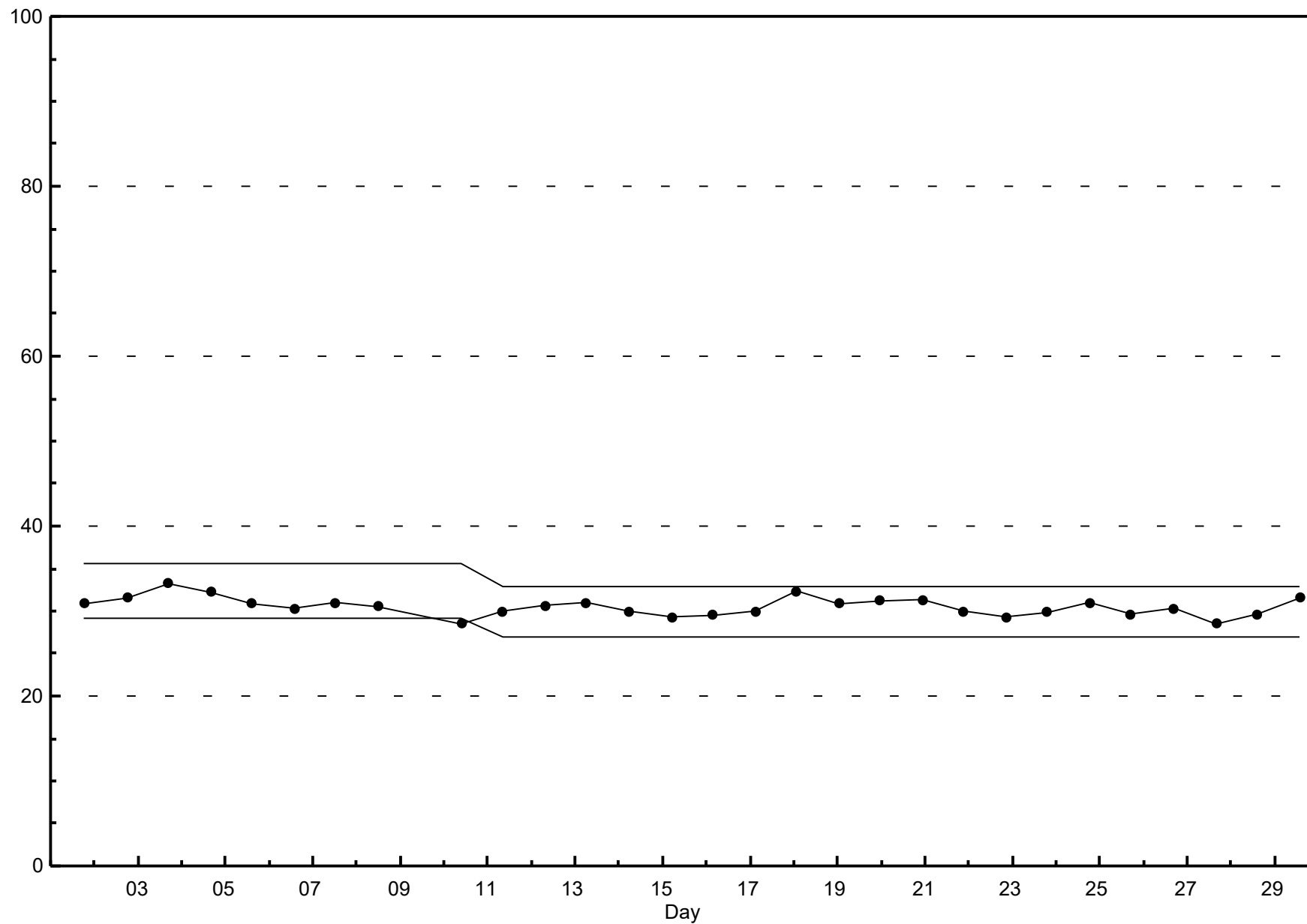
Total Reduced Sulphur (TRS) - ppb
Smoky Heights - February 2016



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - February 2016





Hourly Averages

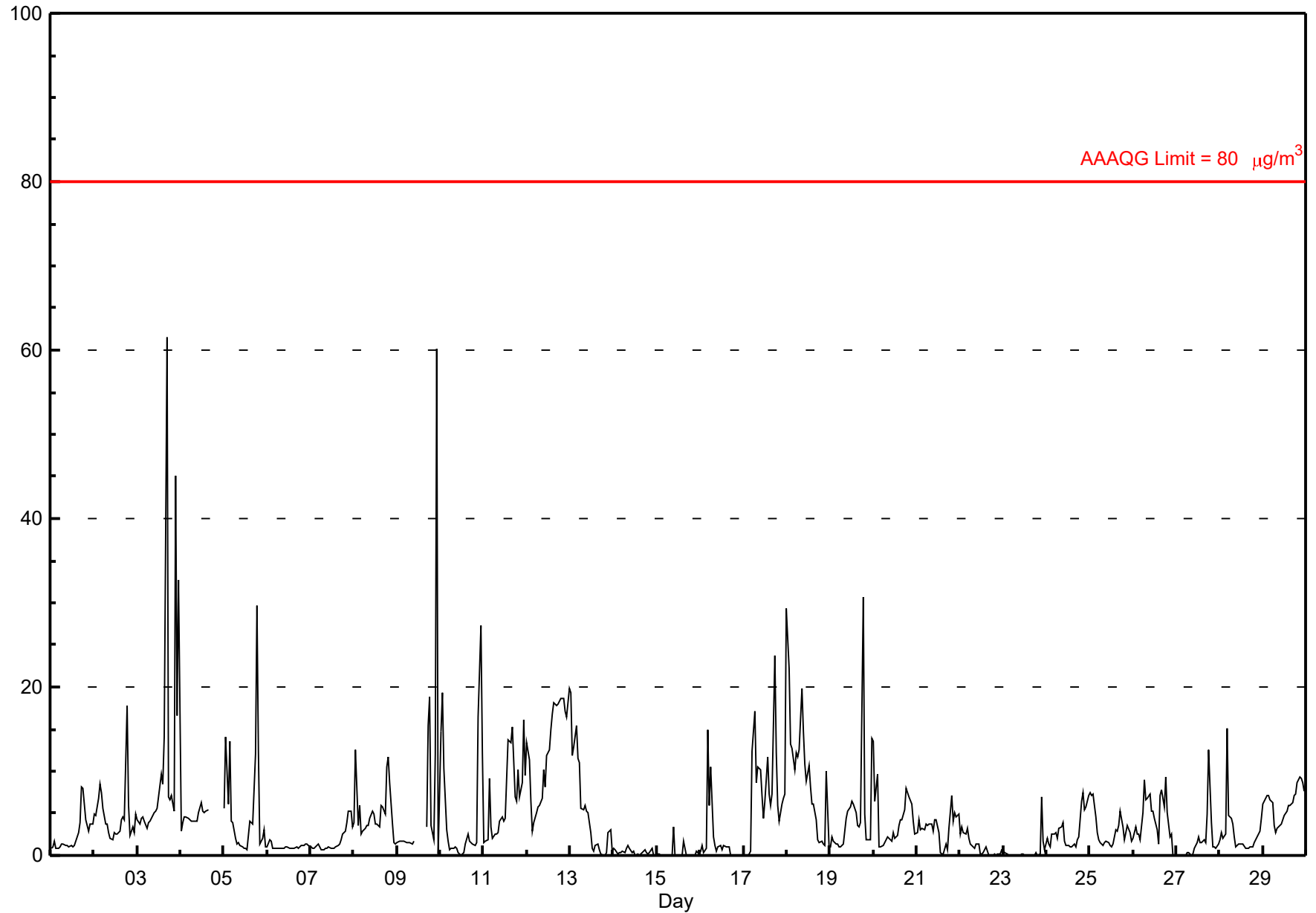
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Smoky Heights - February 2016

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 61.5 µg/m³ on Feb 3 17:00 Maximum Daily Average: 12.4 µg/m³ on Feb 12																								Hours in Service: 696 Hours of Data: 682 Hours of Missing Data: 14 Hours of Calibration: 6 Percent Operational Time: 98.9		
Minimum Value: 0 µg/m³ on Feb 13 20:00 Maximum Diurnal Average: 7.6 µg/m³ at hour 19 Monthly Average: 4.35 µg/m³ Minimum Daily Average: 0.3 µg/m³ on Feb 15 Minimum Diurnal Average: 3.0 µg/m³ at hour 8 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 1.0 Median = 2.6 Q ₃ = 5.5 P ₉₀ = 10.6 P ₉₉ = 29.3																										
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-Feb	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	3	4	8	8	4	4	3	4	4	2.4	8.2
2-Feb	5	5	7	9	7	6	4	4	3	2	2	3	3	3	3	4	5	4	18	6	2	3	3	5	4.7	17.8
3-Feb	4	4	4	5	4	3	4	4	4	5	5	6	7	10	8	14	62	7	7	7	5	45	17	33	11.4	61.5
4-Feb	3	4	5	5	4	4	4	4	4	4	5	6	5	5	5	5	N	N	N	N	N	N	N	N	--	6.2
5-Feb	6	14	6	14	4	4	2	1	1	1	1	1	1	1	4	4	4	12	30	12	1	2	3	1	5.4	29.6
6-Feb	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	4	5	5	3	1.7	5.3
8-Feb	4	13	4	6	2	3	3	4	4	4	5	5	4	4	3	6	6	5	11	12	9	4	1	1	5.1	12.5
9-Feb	2	2	2	2	2	1	1	2	1	2	C	C	C	C	C	C	3	15	19	3	2	12	60	0	7.3	60.1
10-Feb	15	19	10	3	2	1	1	1	1	1	0	0	0	0	1	3	2	2	1	1	1	16	27	12	5.1	27.3
11-Feb	2	2	2	9	3	2	3	3	3	4	4	4	4	14	14	13	15	7	6	10	7	9	16	9	6.9	16.0
12-Feb	13	11	6	3	4	5	6	6	7	10	8	12	12	15	17	18	18	18	18	19	19	17	16	20	12.4	19.8
13-Feb	19	12	13	15	11	11	6	5	6	5	5	3	1	0	1	1	1	0	0	0	0	3	3	1	5.1	19.3
14-Feb	1	1	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0.4	1.1
15-Feb	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0.3	3.4
16-Feb	0	1	0	1	15	6	11	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1.9	14.9
17-Feb	0	0	0	0	0	12	17	9	11	10	7	4	6	12	7	6	7	24	12	6	4	6	7	7	7.3	23.7
18-Feb	29	22	13	13	10	12	12	13	20	15	11	9	11	8	6	6	4	2	1	2	1	1	10	1	9.7	29.4
19-Feb	1	2	2	1	1	1	1	1	3	4	5	6	6	6	5	4	3	4	31	5	2	2	2	14	4.7	30.6
20-Feb	14	6	10	1	1	1	2	2	2	2	2	3	2	2	4	4	4	6	8	7	7	6	4	2	4.2	13.5
21-Feb	3	4	3	3	3	4	3	4	4	3	4	4	3	0	0	0	1	1	3	7	4	5	5	5	3.2	7.2
22-Feb	3	3	3	3	3	2	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1.1	3.3
23-Feb	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2	1	0.5	7.0	
24-Feb	2	1	1	3	3	3	2	3	3	4	2	1	1	1	1	1	1	2	2	6	7	5	6	7	2.9	7.5
25-Feb	8	7	7	5	3	2	1	1	1	2	1	1	1	1	3	3	4	5	3	2	3	4	3	2	3.0	7.5
26-Feb	2	3	3	3	2	5	9	7	7	7	5	5	4	3	1	7	8	6	9	5	2	3	0	0	4.4	9.3
27-Feb	0	0	0	0	0	0	0	0	0	0	1	2	2	1	2	2	2	5	13	4	1	1	1	1	1.6	12.6
28-Feb	2	3	2	2	15	5	4	4	2	1	1	1	1	1	1	1	1	1	1	2	2	2	3	4	2.6	15.1
29-Feb	6	7	7	7	7	6	4	3	3	4	4	4	5	5	6	6	6	7	7	9	9	9	9	8	6.1	9.3
5.0 5.2 3.9 3.9 3.8 3.5 3.6 3.0 3.3 3.4 3.1 3.0 3.0 3.5 3.5 4.2 5.8 5.1 7.6 4.8 3.5 6.2 7.4 5.1																								Diurnal Average		
29.4 22.3 13.2 15.4 15.1 12.3 17.2 12.6 19.8 14.8 10.8 11.8 12.5 14.8 16.8 18.1 61.5 23.7 30.6 18.6 18.7 45.0 60.1 32.7																								Diurnal Maximum		
C - Calibration N - Not Valid																										
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³																										

Hourly Averages

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Smoky Heights - February 2016



Hourly Maximums

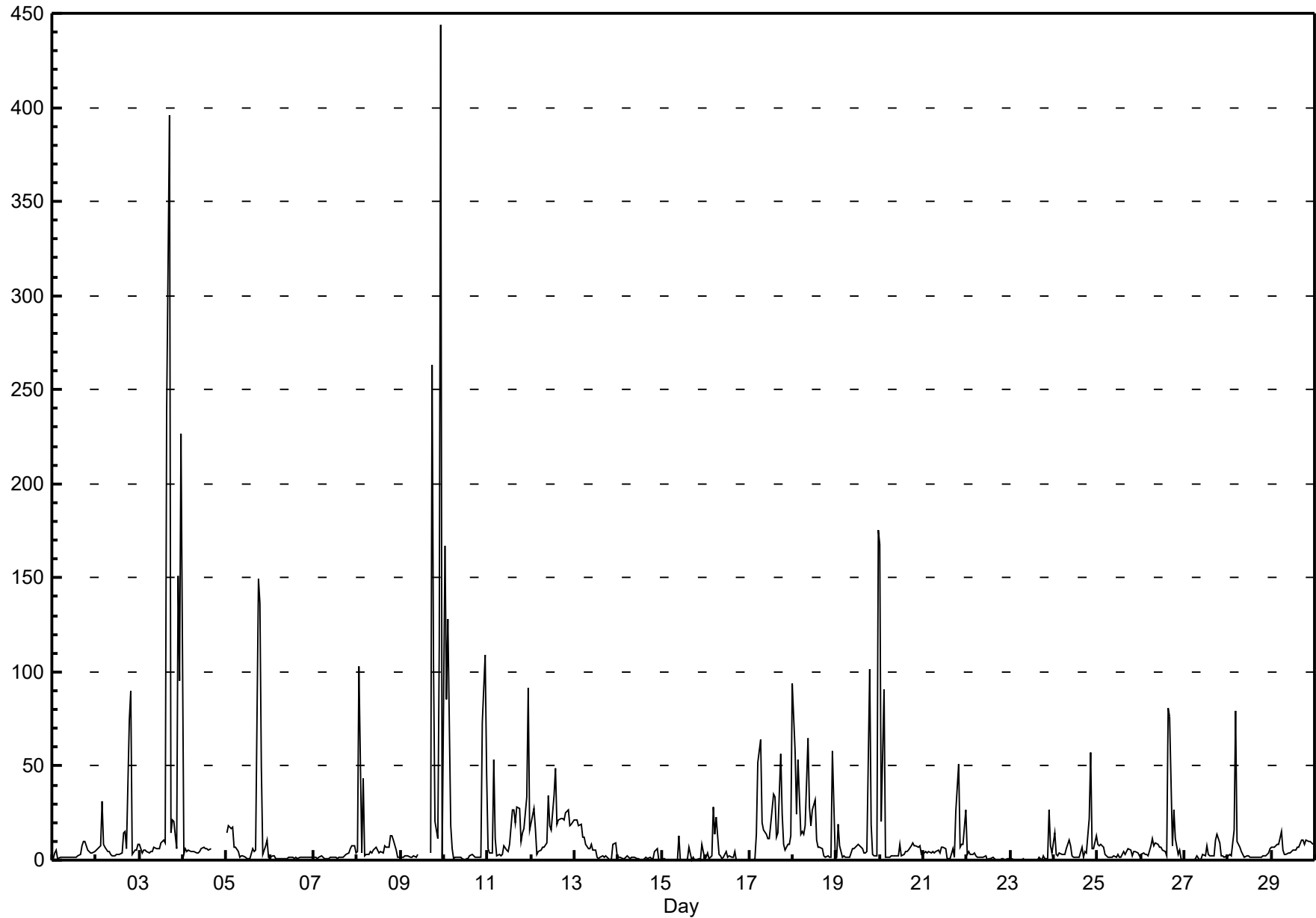
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Smoky Heights - February 2016

Maximum Value: 444.1 μg/m ³ on Feb 9 23:00																					Maximum Daily Average: 54.5 μg/m ³ on Feb 9					Hours in Service: 696	
Minimum Value: 0 μg/m ³ on Feb 15 00:00																					Minimum Daily Average: 1.2 μg/m ³ on Feb 14					Hours of Data: 682	
Maximum Diurnal Average: 33.0 μg/m ³ at hour 23																					Minimum Diurnal Average: 4.1 μg/m ³ at hour 8					Hours of Missing Data: 14	
Monthly Average: 12.42 μg/m ³																					Percentiles: P ₁ = 0.0 P ₁₀ = 0.5 Q ₁ = 1.4 Median = 3.9 Q ₃ = 8.0 P ₉₀ = 22.2 P ₉₉ = 165.3					Hours of Calibration: 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-Feb	1	4	5	1	1	1	1	2	1	2	1	1	1	1	2	3	8	10	10	5	4	4	4	5	3.3	9.7	
2-Feb	6	6	8	31	8	7	5	5	3	2	2	3	3	3	4	15	15	6	75	90	3	5	5	8	13.3	90.1	
3-Feb	8	4	5	5	5	4	5	4	7	6	6	6	9	11	9	238	396	14	21	21	6	151	96	227	52.7	395.7	
4-Feb	3	6	5	5	5	5	4	4	4	4	6	7	6	6	6	6	N	N	N	N	N	N	N	N	--	7.1	
5-Feb	14	18	17	18	7	7	5	2	2	2	1	1	1	1	6	5	5	150	137	49	3	8	10	1	19.5	149.5	
6-Feb	2	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.7	
7-Feb	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	3	4	6	8	8	4	2.3	7.8	
8-Feb	5	103	4	43	3	3	3	4	4	5	7	6	4	4	4	7	7	7	13	13	11	6	2	1	11.2	103.3	
9-Feb	2	2	2	2	2	2	2	3	2	3	C	C	C	C	C	C	4	263	104	21	12	114	444	0	54.5	444.1	
10-Feb	167	86	128	18	6	1	1	1	1	1	1	0	0	1	2	3	2	2	1	1	2	73	109	47	27.3	167.1	
11-Feb	6	4	4	53	12	3	3	3	3	8	6	5	8	27	26	20	29	27	10	15	17	33	92	16	17.8	91.8	
12-Feb	20	28	17	3	5	6	7	7	9	34	18	16	34	49	19	21	22	22	21	25	27	18	19	21	19.5	49.1	
13-Feb	22	22	19	19	12	12	9	6	6	8	6	5	2	1	2	2	1	2	0	0	1	8	9	2	7.3	21.7	
14-Feb	1	1	0	1	2	2	1	1	1	1	1	1	0	0	0	2	1	1	1	0	4	6	0	0	1.2	6.3	
15-Feb	0	0	0	0	0	0	0	0	0	13	0	0	0	0	0	7	0	1	0	0	1	0	8	0	1.3	12.7	
16-Feb	1	4	0	3	29	14	23	3	2	1	1	5	1	2	1	1	4	0	0	0	0	0	0	0	4.0	28.5	
17-Feb	0	0	0	0	14	52	64	20	16	14	11	11	19	35	34	12	15	56	25	9	5	9	9	13	18.4	64.2	
18-Feb	94	58	24	53	13	16	13	18	65	28	19	27	32	11	7	7	6	2	2	2	2	1	58	1	23.3	94.0	
19-Feb	1	19	7	2	2	1	1	2	4	6	6	8	9	7	6	4	4	4	101	19	3	2	2	176	16.5	175.6	
20-Feb	168	20	91	1	1	1	2	2	2	2	2	8	2	3	5	5	5	8	9	8	8	7	8	3	15.5	167.8	
21-Feb	4	5	4	4	4	4	4	5	5	4	7	7	6	1	1	0	6	1	26	51	7	8	8	27	8.3	51.3	
22-Feb	3	4	3	3	4	3	2	1	1	2	2	0	0	1	1	1	0	0	0	1	0	0	0	1	1.5	4.4	
23-Feb	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	0	0	27	8	4	2.0	27.1	
24-Feb	14	3	2	4	3	3	3	6	11	8	3	2	1	1	1	7	1	4	4	22	57	6	6	13	7.8	57.4	
25-Feb	8	8	9	7	3	3	2	1	2	2	2	3	1	2	5	3	4	6	5	2	5	5	4	2	3.9	8.5	
26-Feb	3	4	3	3	2	8	11	8	9	9	7	7	5	4	2	81	76	8	26	11	3	6	1	0	12.4	80.8	
27-Feb	0	0	0	0	0	0	1	2	0	1	3	2	8	3	2	3	2	10	14	9	2	2	1	2	2.8	13.9	
28-Feb	3	3	2	16	80	10	7	4	3	1	2	2	2	2	1	1	1	1	1	2	2	3	4	6	6.6	79.6	
29-Feb	7	7	8	9	8	16	5	3	3	4	4	5	5	6	7	7	10	11	9	11	10	10	9	9	7.6	15.6	
19.4 14.6 12.8 10.6 8.0 6.4 6.4 4.1 5.9 6.0 4.5 5.0 5.9 6.6 5.5 16.5 22.5 22.2 22.1 14.0 7.2 18.6 33.0 21.1																									Diurnal Average		
167.8 103.3 128.4 53.5 79.6 52.2 64.2 19.8 64.7 34.4 18.5 27.1 34.2 49.1 33.7 237.9 395.7 262.8 136.5 90.1 57.4 150.7 444.1 226.9																									Diurnal Maximum		
C - Calibration N - Not Valid																											

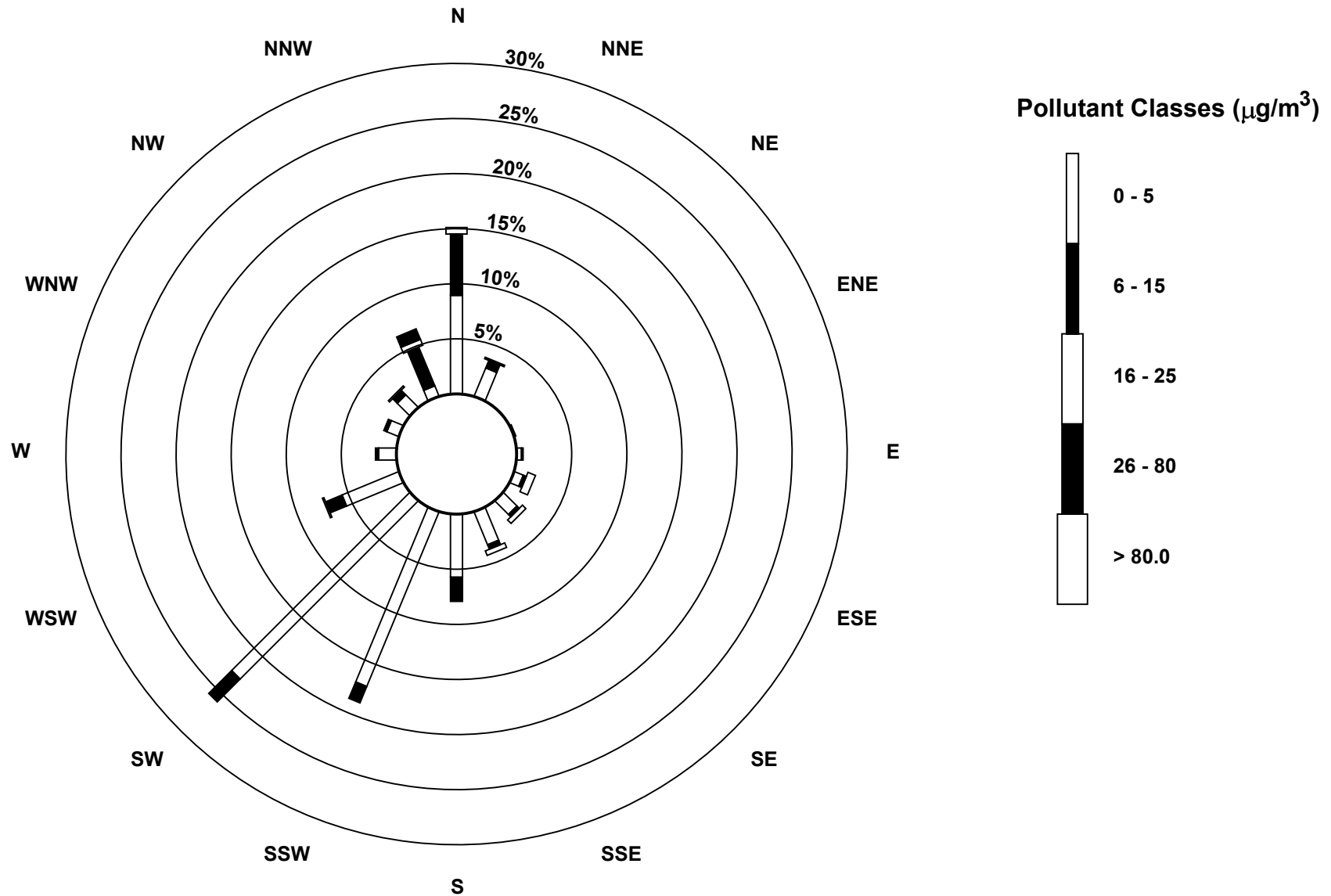
Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Smoky Heights - February 2016



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Smoky Heights - February 2016



Hourly Averages

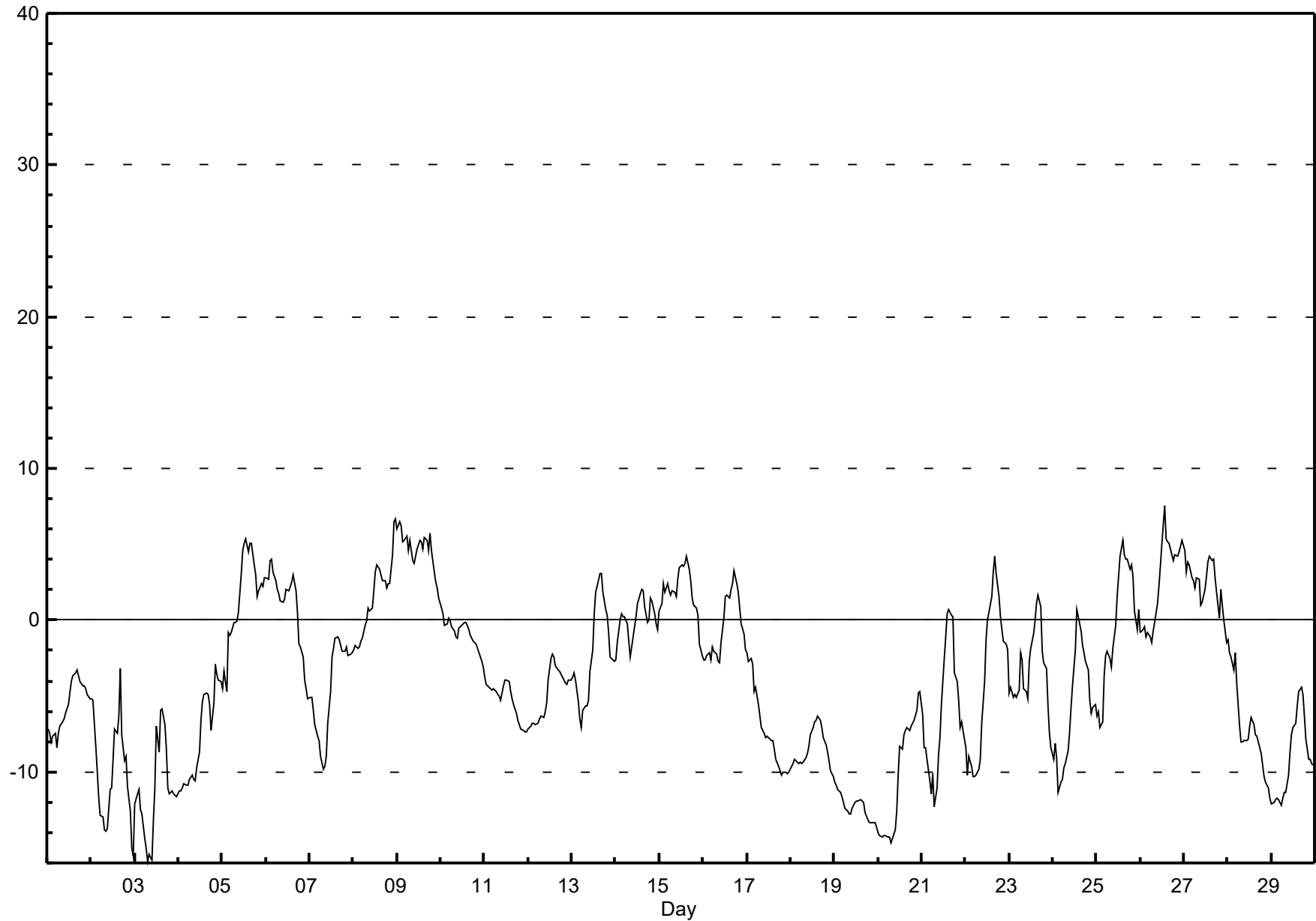
External Temperature (ET) - °C

Smoky Heights - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 7.5 °C on Feb 26 14:00 Maximum Daily Average: 4.6 °C on Feb 9																			Hours in Service: 696 Hours of Data: 696 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0							
Minimum Value: -16 °C on Feb 3 08:00 Maximum Diurnal Average: -1.1 °C at hour 16 Monthly Average: -3.83 °C										Minimum Daily Average: -12.3 °C on Feb 19 Minimum Diurnal Average: -5.8 °C at hour 9 Percentiles: P ₁ = -14.4 P ₁₀ = -11.3 Q ₁ = -7.9 Median = -3.8 Q ₃ = 0.5 P ₉₀ = 3.2 P ₉₉ = 5.6																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	-7	-7	-8	-8	-7	-8	-7	-7	-7	-6	-6	-6	-5	-4	-4	-3	-3	-4	-4	-4	-4	-5	-5	-5	-5.7	-3.3
2-Feb	-5	-5	-8	-10	-12	-13	-13	-14	-14	-14	-11	-11	-9	-7	-8	-6	-3	-8	-9	-9	-11	-13	-15	-15	-10.1	-3.2
3-Feb	-12	-11	-11	-13	-13	-14	-15	-16	-15	-16	-13	-11	-7	-9	-6	-6	-7	-8	-11	-11	-11	-11	-12	-12	-11.3	-5.8
4-Feb	-11	-11	-11	-11	-11	-11	-11	-10	-10	-11	-10	-9	-7	-5	-5	-5	-5	-6	-7	-5	-3	-4	-4	-4	-7.7	-2.9
5-Feb	-5	-3	-5	-1	-1	-1	0	0	0	1	3	5	5	5	4	5	5	4	3	2	2	2	2	3	1.5	5.3
6-Feb	3	3	4	4	3	3	2	2	1	1	1	2	2	2	3	3	2	1	-2	-2	-2	-4	-5	-5	0.9	4.0
7-Feb	-5	-5	-6	-7	-8	-8	-9	-10	-10	-9	-7	-5	-2	-2	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-4.6	-1.1
8-Feb	-2	-2	-2	-2	-1	-1	0	0	1	1	1	2	3	4	3	3	3	2	2	2	2	4	6	7	1.5	6.7
9-Feb	6	7	6	5	5	6	5	5	4	4	4	5	5	5	5	5	5	6	5	3	2	2	1	1	4.6	6.5
10-Feb	1	0	0	0	0	0	0	-1	-1	-1	-1	0	0	0	0	-1	-1	-1	-1	-2	-2	-2	-3	-3	-0.8	0.8
11-Feb	-4	-4	-4	-5	-5	-5	-5	-5	-5	-5	-4	-4	-4	-4	-5	-5	-6	-6	-7	-7	-7	-7	-7	-7	-5.3	-3.7
12-Feb	-7	-7	-7	-7	-7	-7	-7	-6	-6	-6	-5	-4	-3	-2	-2	-3	-3	-3	-4	-4	-4	-4	-4	-4	-4.9	-2.2
13-Feb	-4	-3	-4	-5	-7	-7	-6	-6	-6	-5	-3	-2	0	2	2	3	3	2	1	0	-1	-2	-3	-3	-2.2	3.1
14-Feb	-3	-1	0	0	0	0	0	-1	-2	-2	0	0	1	2	2	2	1	0	0	1	1	0	0	-1	0.0	2.0
15-Feb	1	1	2	2	2	2	2	2	2	2	3	3	4	4	4	4	3	3	1	1	1	0	-2	-2	1.8	4.2
16-Feb	-3	-3	-2	-2	-3	-2	-2	-2	-3	-3	-1	0	2	2	1	2	2	3	2	2	1	0	-1	-2	-0.5	3.3
17-Feb	-2	-3	-3	-3	-5	-4	-6	-6	-7	-7	-8	-8	-8	-8	-8	-8	-9	-10	-10	-10	-10	-10	-10	-10	-7.2	-2.1
18-Feb	-10	-9	-9	-9	-9	-9	-9	-9	-9	-9	-8	-8	-7	-7	-7	-6	-7	-7	-8	-8	-9	-9	-10	-10	-8.5	-6.3
19-Feb	-11	-11	-11	-11	-12	-12	-12	-13	-13	-13	-12	-12	-12	-12	-12	-12	-12	-13	-13	-13	-13	-13	-13	-14	-12.3	-10.7
20-Feb	-14	-14	-14	-14	-14	-14	-14	-15	-14	-14	-13	-10	-8	-8	-8	-7	-7	-7	-7	-7	-7	-6	-5	-5	-10.3	-4.7
21-Feb	-6	-8	-8	-9	-11	-11	-10	-12	-11	-9	-8	-6	-3	-1	0	1	0	0	-3	-4	-5	-7	-7	-8	-6.1	0.7
22-Feb	-8	-10	-9	-10	-10	-10	-10	-10	-9	-7	-4	-1	0	1	2	3	4	3	2	0	-1	-1	-2	-2	-3.8	4.2
23-Feb	-5	-4	-5	-5	-5	-5	-2	-3	-5	-5	-5	-3	-2	-1	0	1	2	1	-2	-3	-3	-6	-7	-8	-3.3	1.7
24-Feb	-9	-8	-9	-11	-11	-11	-10	-9	-9	-7	-6	-4	-2	1	0	-1	-2	-2	-3	-3	-5	-6	-6	-6	-5.8	0.7
25-Feb	-6	-6	-7	-7	-4	-2	-2	-2	-3	-2	0	2	3	4	5	4	4	4	3	4	3	1	-1	1	-0.2	5.3
26-Feb	-1	-1	0	-1	-1	-1	-1	-1	0	1	2	4	5	8	5	5	5	4	4	4	4	5	5	5	2.5	7.5
27-Feb	5	3	4	4	3	3	2	3	3	1	1	2	3	4	4	4	4	3	2	0	2	1	0	-1	2.4	4.6
28-Feb	-1	-2	-2	-3	-2	-4	-7	-8	-8	-8	-8	-8	-7	-6	-7	-8	-8	-8	-9	-10	-10	-11	-11	-12	-7.0	-1.3
29-Feb	-12	-12	-12	-12	-12	-12	-12	-11	-11	-10	-9	-8	-7	-7	-6	-5	-4	-5	-6	-8	-9	-9	-9	-10	-9.1	-4.4
-4.8 -4.8 -4.9 -5.2 -5.3 -5.5 -5.6 -5.7 -5.8 -5.5 -4.4 -3.2 -2.0 -1.4 -1.2 -1.1 -1.2 -1.9 -2.8 -3.1 -3.5 -4.0 -4.4 -4.6																								Diurnal Average		
6.0 6.5 6.2 5.1 5.2 5.6 4.6 5.3 3.9 3.7 4.3 4.7 5.2 7.5 5.4 5.4 5.2 4.6 5.8 4.6 4.2 4.5 6.5 6.7																								Diurnal Maximum		

Hourly Averages

External Temperature (ET) - °C
Smoky Heights - February 2016



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	2	2	4	5	5	5	4	3	5	5	6	7	9	10	10	8	8	8	8	8	8	8	8	5.9	10.2
Dir	258	285	209	229	249	213	203	205	210	153	164	185	204	212	209	216	218	238	226	242	243	238	230	226	220.4	216.2
2 Spd	10	15	14	8	10	14	14	14	12	12	14	11	7	10	13	7	2	4	6	6	3	4	6	7	8.5	14.5
Dir	222	229	237	238	229	239	232	236	235	228	223	219	214	220	209	213	23	195	257	294	76	197	232	231	228.5	229.3
3 Spd	6	5	6	8	7	8	7	9	13	9	11	7	1	2	1	8	6	7	7	8	12	12	10	13	2.2	13.4
Dir	229	203	206	192	210	206	206	194	222	182	176	184	27	107	19	359	342	344	347	337	336	342	348	347	262.1	221.8
4 Spd	14	13	14	14	14	8	5	3	3	8	10	12	9	8	13	7	10	10	8	14	14	8	10	13	3.5	14.4
Dir	351	348	352	357	355	3	343	31	142	165	164	191	205	230	213	226	204	195	191	223	206	217	195	199	227.7	206.1
5 Spd	10	11	8	18	14	6	7	5	4	9	18	22	18	17	14	12	6	2	3	2	12	7	5	5	9.0	21.7
Dir	193	187	208	181	183	147	135	164	185	196	177	167	165	185	213	205	188	169	27	156	163	195	196	183	180.9	166.6
6 Spd	4	9	24	35	32	32	35	43	43	41	42	33	20	36	30	25	23	19	19	22	20	22	23	23	25.8	42.9
Dir	196	203	205	206	208	211	212	213	215	223	229	249	274	262	257	253	236	236	225	227	223	210	213	215	225.6	213.4
7 Spd	25	25	22	24	23	19	16	11	6	11	9	14	16	18	16	13	11	9	7	5	6	10	10	3	13.5	25.2
Dir	215	217	224	230	227	222	219	226	218	221	225	193	198	207	208	214	208	230	211	213	209	219	204	174	216.0	217.0
8 Spd	4	1	4	2	3	4	9	8	9	7	7	5	4	2	3	3	6	8	8	14	15	19	26	26	7.5	26.2
Dir	202	181	129	170	154	197	176	190	203	182	150	148	158	189	205	256	233	233	221	202	194	211	225	226	203.6	225.5
9 Spd	24	27	25	22	20	18	17	13	13	8	15	15	22	22	18	16	8	8	8	12	15	10	7	5	10.9	26.9
Dir	226	222	229	231	226	218	202	228	187	161	179	198	200	204	197	200	219	268	334	345	352	355	332	312	221.4	221.9
10 Spd	5	6	5	10	14	18	19	19	17	20	14	16	20	18	18	20	17	16	14	14	13	12	13	12	14.3	19.7
Dir	334	325	341	354	357	360	7	2	353	359	22	3	358	1	10	7	3	10	9	5	359	341	335	334	359.1	359.3
11 Spd	10	9	8	7	7	5	7	7	6	7	7	10	10	9	13	11	9	9	9	12	13	11	12	11	8.9	12.9
Dir	323	319	321	336	347	0	5	3	4	354	345	357	351	342	344	344	343	0	352	354	357	354	352	353	348.2	357.1
12 Spd	11	12	14	14	15	15	17	16	14	11	12	9	5	13	17	15	13	13	14	8	8	12	11	12	5.4	17.1
Dir	348	354	359	6	356	2	2	1	358	353	358	347	345	102	116	113	114	126	122	120	127	139	160	166	47.1	115.7
13 Spd	12	16	17	16	17	19	13	10	11	8	8	11	20	21	15	16	17	16	18	13	11	10	11	12	13.3	21.2
Dir	164	188	198	190	220	229	218	209	223	176	160	198	205	210	217	209	210	215	229	240	226	212	246	243	211.1	209.9
14 Spd	10	16	16	15	14	15	14	16	15	15	16	17	16	14	11	8	7	6	11	10	5	9	9	13	11.9	16.6
Dir	229	233	226	214	218	217	227	213	219	215	211	212	214	217	231	235	226	223	201	204	140	163	176	192	213.8	211.8
15 Spd	17	20	23	18	23	19	16	19	18	15	24	24	18	7	7	7	2	5	7	3	6	9	3	4	10.5	24.4
Dir	204	210	226	233	242	247	248	255	249	243	260	259	257	223	227	270	194	14	83	99	138	137	131	210	236.5	259.5
16 Spd	4	4	3	4	8	4	7	9	13	10	11	8	8	5	7	6	14	18	21	19	17	11	13	14	9.4	20.7
Dir	225	222	251	261	221	230	180	196	195	174	173	181	216	256	218	214	223	216	198	211	207	187	196	230	207.0	198.5
17 Spd	17	16	13	9	5	9	15	17	17	17	19	16	18	17	19	22	24	20	16	17	21	19	19	16	12.9	24.1
Dir	227	229	237	221	226	359	354	355	350	348	354	2	352	344	350	352	352	351	350	349	356	349	344	342	341.8	352.1
18 Spd	14	11	10	9	7	4	5	5	6	6	5	4	6	3	7	5	9	10	9	9	7	7	7	6	6.6	14.2
Dir	340	341	337	336	338	6	12	1	353	317	334	340	356	321	292	310	307	295	299	289	298	306	318	295	323.7	340.4
19 Spd	9	7	8	8	8	8	8	8	9	9	9	10	8	10	11	14	14	13	11	13	12	11	11	11	9.2	13.9
Dir	290	308	313	315	326	10	18	23	17	28	18	17	14	6	2	357	1	359	342	347	359	2	4	356	356.3	357.2
20 Spd	9	9	10	9	8	8	9	8	9	9	7	1	2	5	7	6	9	11	13	9	8	7	8	14	1.4	14.5
Dir	345	341	353	5	5	5	2	355	350	354	349	27	123	129	160	181	207	206	190	191	201	187	217	229	281.0	228.6
21 Spd	16	10	5	6	9	8	7	7	7	13	11	9	12	13	16	13	10	6	2	2	13	15	13	13	9.0	16.4
Dir	230	227	196	208	222	226	188	170	173	176	184	184	197	202	201	222	239	272	321	229	238	238	230	226	213.6	201.1
22 Spd	14	10	19	18	12	16	14	7	9	6	7	13	17	20	21	20	21	19	22	19	22	21	22	19	15.9	22.4
Dir	233	212	234	231	221	231	223	219	190	185	168	204	204	205	206	212	226	223	228	228	224	224	223	218	218.8	223.1

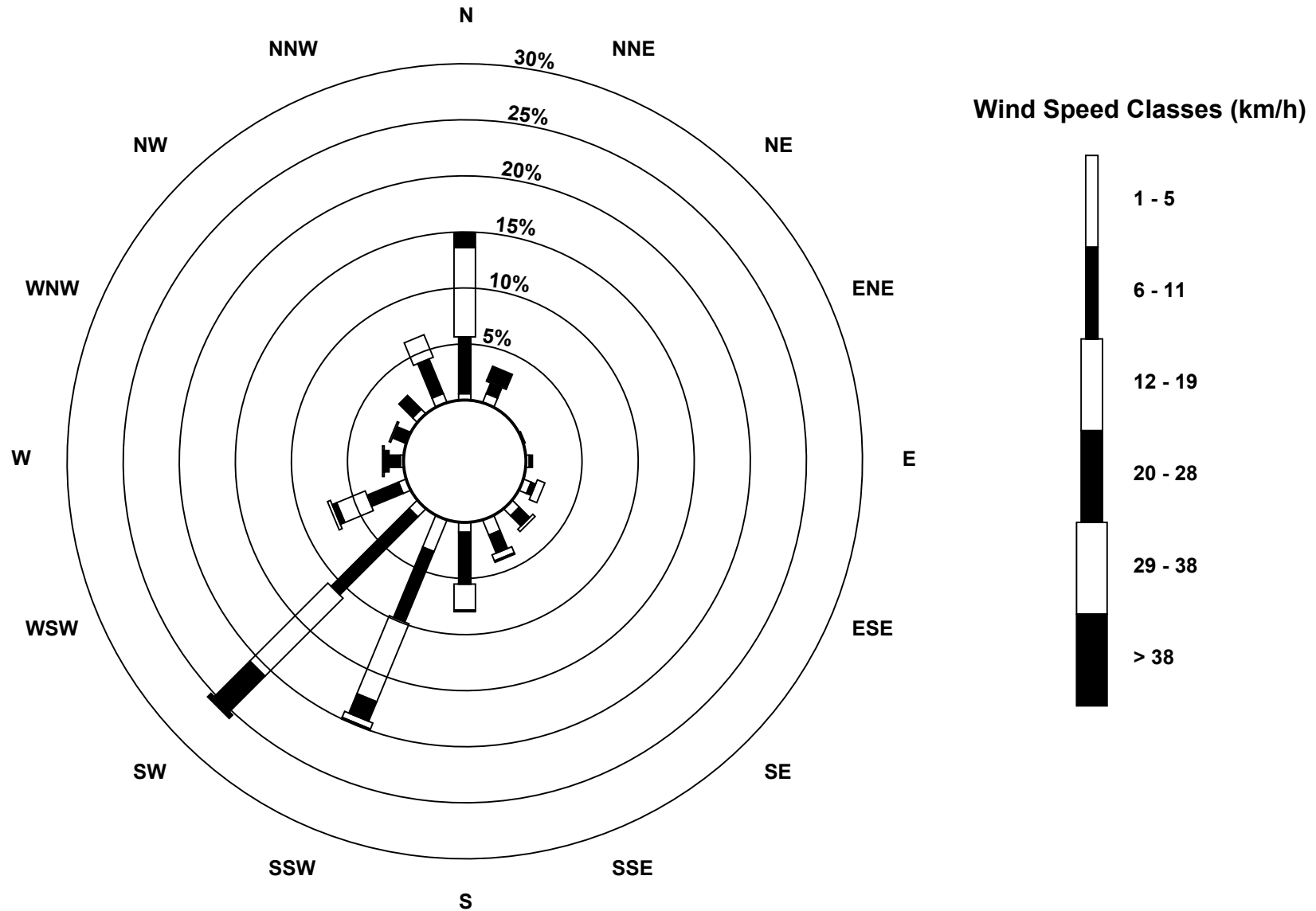
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	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	11	17	16	18	18	16	27	17	18	18	11	13	16	19	22	10	10	8	8	11	8	7	2	9	12.8	26.9
Dir	182	207	219	222	225	238	265	231	230	224	218	210	209	208	213	234	235	192	249	279	253	237	157	223	225.6	265.3
24 Spd	11	10	7	7	6	8	6	5	5	4	3	3	1	1	6	11	9	6	8	12	13	12	13	11	7.0	12.8
Dir	236	248	243	169	198	231	224	214	206	211	203	192	157	217	222	238	227	216	219	241	230	214	210	204	221.2	230.4
25 Spd	12	12	9	8	13	14	15	14	14	15	14	14	15	14	9	8	8	9	15	13	10	10	10	11	11.7	15.1
Dir	190	180	210	202	197	201	191	202	218	213	205	193	187	195	204	221	219	200	203	221	217	218	207	197	203.0	202.8
26 Spd	13	17	18	18	20	13	6	6	6	8	6	6	7	6	9	3	8	11	10	17	16	22	25	25	10.1	25.4
Dir	199	211	210	195	190	172	128	98	129	152	173	139	143	135	177	266	233	172	238	236	216	224	233	230	201.9	229.6
27 Spd	25	21	24	18	17	20	17	11	16	9	5	9	7	3	6	3	6	7	4	9	22	23	19	16	11.3	24.9
Dir	221	229	216	219	212	230	231	248	288	267	249	268	269	123	186	154	102	117	154	209	220	229	227	219	225.5	220.8
28 Spd	18	18	14	13	6	17	19	18	20	17	18	18	19	21	22	24	24	22	23	23	24	21	16	18	14.1	23.9
Dir	225	237	234	240	347	359	360	6	4	3	357	357	7	20	18	19	18	23	21	19	20	16	11	6	3.9	18.9
29 Spd	20	16	12	10	7	5	4	5	5	5	6	6	9	10	10	8	6	6	6	11	10	11	14	10	2.8	19.7
Dir	2	357	1	352	360	2	84	114	104	132	154	199	214	214	219	223	239	245	227	226	219	214	231	241	248.3	2.0
Spd	7.5	8.1	8.3	7.7	7.4	6.2	4.9	4.5	4.9	4.5	4.8	5.2	5.0	5.7	6.1	4.6	4.3	3.7	4.0	5.3	4.8	5.8	6.6	7.3	Diurnal Average	
Dir	234.9	233.3	235.2	229.0	232.0	239.8	238.9	238.3	239.3	223.0	216.2	221.5	225.5	221.3	223.2	246.6	247.2	242.6	239.7	253.3	238.7	232.4	235.9	236.1	Diurnal Maximum	
Spd	24.9	26.9	24.6	34.7	31.6	32.5	34.8	42.9	42.9	41.3	42.0	33.4	22.4	36.2	30.0	24.7	24.1	22.2	22.5	22.8	23.7	23.2	25.6	26.2	Diurnal Maximum	
Dir	220.8	221.9	228.9	206.3	207.8	210.8	211.6	213.4	214.7	222.9	229.4	249.1	199.7	262.0	257.2	253.4	352.1	22.9	21.5	18.6	19.6	229.1	225.4	225.5		
Maximum Speed Value: 43 km/h on Feb 6 08:00																				Minimum Speed Value: 1 km/h on Feb 24 14:00					Hours in Service: 696	
Maximum Daily Speed Average: 25.8 km/h on Feb 6																				Minimum Daily Speed Average: 1.4 km/h on Feb 1					Hours of Data: 696	
Maximum Diurnal Speed Average: 8.3 km/h at hour 3																				Minimum Diurnal Speed Average: 3.7 km/h at hour 18					Hours of Missing Data: 0	
Monthly Average Velocity: 5.66 km/h 233.96 deg																				Speed Percentiles: P ₁ = 1.5 P ₁₀ = 5.1 Q ₁ = 7.4 Median = 10.9 Q ₃ = 16.1 P ₉₀ = 20.3 P ₉₉ = 34.7					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	3		61		69		20		0		0		153													
NorthEast	5		2		0		1		0		0		8													
East	5		3		1		0		0		0		9													
SouthEast	14		18		6		0		0		0		38													
South	17		54		49		4		0		0		124													
SouthWest	15		110		110		52		4		4		295													
West	5		17		6		6		3		0		37													
NorthWest	2		27		3		0		0		0		32													
Total	66		292		244		83		7		4		696													

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - February 2016



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - February 2016

Maximum Speed: 43 km/h on Feb 6 09:00																				Maximum Daily Speed Average: 27.6 km/h on Feb 6										Hours in Service: 696	
Minimum Speed: 1 km/h on Feb 3 15:00																				Minimum Daily Speed Average: 6.6 km/h on Feb 1										Hours of Data: 696	
Maximum Diurnal Speed Average: 13.1 km/h at hour 15																				Minimum Diurnal Speed Average: 11.0 km/h at hour 18										Hours of Missing Data: 0	
Monthly Average Speed: 12.25 km/h																				Percentiles: P ₁ = 2.5 P ₁₀ = 5.3 Q ₁ = 7.7 Median = 11.0 Q ₃ = 16.2 P ₉₀ = 20.3 P ₉₉ = 34.6										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-Feb	7	2	2	4	5	5	5	4	3	5	5	6	7	9	10	10	9	9	8	8	8	4	5	8	8	6.6	10.2				
2-Feb	11	15	14	8	11	14	14	14	12	12	14	11	7	10	13	8	3	4	6	8	4	5	6	7	7	9.6	14.9				
3-Feb	7	6	6	8	7	8	7	9	13	10	11	7	3	3	1	8	7	7	7	8	12	12	11	13	7.9	13.5					
4-Feb	14	13	14	14	14	8	5	4	4	9	10	12	9	9	13	8	10	10	8	14	15	9	10	13	10.4	14.5					
5-Feb	10	11	8	18	15	7	7	5	5	10	18	22	18	17	14	12	7	3	4	3	12	8	5	5	10.2	21.7					
6-Feb	5	10	24	35	32	33	35	43	43	41	42	35	20	36	30	25	23	19	19	22	20	22	23	23	27.6	43.1					
7-Feb	25	25	22	24	23	19	17	11	6	11	9	14	16	18	16	13	11	9	8	5	6	10	10	4	13.8	25.2					
8-Feb	5	3	5	4	4	5	9	8	10	8	7	6	4	3	3	3	6	9	9	14	15	19	26	26	8.8	26.2					
9-Feb	24	27	25	22	20	18	17	13	13	9	16	15	22	22	18	16	9	11	9	12	16	10	7	5	15.7	26.9					
10-Feb	5	6	5	10	14	18	19	19	17	20	15	16	20	18	18	20	17	16	14	14	13	13	14	12	14.7	19.9					
11-Feb	10	9	8	7	7	6	7	7	7	7	7	10	10	9	13	11	9	9	9	12	13	11	12	11	9.2	13.0					
12-Feb	11	12	14	14	15	15	17	16	14	11	12	9	5	13	17	15	14	13	14	9	8	12	11	12	12.7	17.2					
13-Feb	12	16	17	16	17	19	13	10	11	9	9	12	20	21	15	16	17	16	18	13	11	11	11	12	14.3	21.2					
14-Feb	10	16	16	15	14	15	14	16	15	15	16	17	16	14	12	9	8	6	12	11	5	9	10	13	12.7	16.6					
15-Feb	17	20	23	18	23	19	16	19	18	16	24	24	18	7	8	8	5	5	8	4	6	9	4	4	13.5	24.5					
16-Feb	5	4	3	4	8	5	8	9	14	10	11	8	8	5	7	7	14	18	21	19	17	11	13	14	10.2	20.7					
17-Feb	17	16	13	9	7	9	15	17	17	17	19	16	18	17	19	22	24	21	16	18	21	19	19	16	16.8	24.3					
18-Feb	14	11	10	9	7	4	5	6	6	6	5	5	6	4	7	6	9	10	9	9	8	8	8	7	7.5	14.4					
19-Feb	9	7	9	8	8	9	8	8	9	9	9	10	9	10	11	14	14	13	11	13	13	11	11	11	10.1	14.0					
20-Feb	10	9	10	9	8	8	9	8	9	9	7	2	2	5	7	7	9	11	13	9	8	7	9	14	8.3	14.5					
21-Feb	16	10	6	6	9	9	7	8	8	13	11	9	12	13	17	13	11	7	3	6	13	15	13	13	10.2	16.6					
22-Feb	14	11	19	18	13	16	14	7	9	7	7	13	17	20	21	20	22	19	22	19	22	21	22	19	16.4	22.4					
23-Feb	11	17	16	18	18	16	27	18	18	18	11	13	16	19	22	10	11	8	9	12	9	8	3	9	14.2	27.1					
24-Feb	11	10	8	7	7	9	6	5	5	4	3	3	2	2	6	11	9	7	8	12	13	13	13	11	7.6	12.9					
25-Feb	12	12	10	8	14	14	15	15	14	15	14	14	15	14	9	8	8	9	15	13	10	11	10	11	12.1	15.2					
26-Feb	13	17	18	18	20	13	6	6	7	8	6	6	7	7	11	4	9	11	11	17	16	22	25	26	12.7	25.6					
27-Feb	25	21	24	18	17	20	17	12	16	9	6	9	9	5	6	4	6	7	4	9	23	23	19	16	13.6	25.0					
28-Feb	19	18	14	14	7	17	19	18	20	17	18	18	19	21	23	24	24	22	23	23	24	21	16	18	19.0	24.0					
29-Feb	20	17	12	10	8	6	5	5	5	6	6	7	9	11	10	8	6	7	6	11	10	12	14	10	9.0	19.8					
12.7 12.8 13.0 13.0 12.8 12.5 12.5 11.8 12.0 11.7 12.0 12.0 12.0 12.5 13.1 11.7 11.4 11.0 11.2 12.0 12.8 12.7 12.4 12.7																									Diurnal Average						
25.0 26.9 24.7 34.8 31.6 32.5 34.9 43.0 43.1 41.4 42.1 35.5 22.5 36.4 30.1 25.3 24.3 22.3 22.6 22.9 23.8 23.3 25.7 26.2																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - February 2016

Maximum Value: 93.7 deg on Feb 3 13:00																		Hours in Service: 696							
Minimum Value: 1.4 deg on Feb 7 01:00																		Hours of Data: 696							
Percentiles: P ₁ = 2.3 P ₁₀ = 4.0 Q ₁ = 5.8 Median = 8.4 Q ₃ = 14.3 P ₉₀ = 27.1 P ₉₉ = 64.9																		Hours of Missing Data: 0							
																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Maximum
1-Feb	17	71	60	8	14	13	9	11	16	11	6	14	9	9	7	7	18	10	7	6	6	8	8	5	70.6
2-Feb	17	13	5	24	11	5	6	5	7	6	7	7	13	10	14	52	57	31	24	67	68	36	10	11	67.7
3-Feb	8	21	12	4	7	7	8	13	6	21	7	14	94	43	62	9	4	4	7	7	5	3	7	5	93.7
4-Feb	6	8	6	6	6	13	11	26	29	10	4	12	14	10	7	12	13	16	19	5	8	20	19	8	29.5
5-Feb	25	9	18	2	19	30	14	31	40	25	16	4	4	8	10	6	27	62	55	89	5	27	24	24	88.7
6-Feb	34	22	5	3	3	3	3	3	6	3	4	22	11	6	5	14	6	5	9	3	5	4	2	2	34.0
7-Feb	1	3	5	3	2	7	5	5	15	5	16	5	3	3	4	7	9	10	19	16	11	7	13	64	64.3
8-Feb	43	93	25	91	41	29	7	10	6	24	12	12	22	33	37	31	18	23	13	7	4	7	4	3	93.1
9-Feb	3	4	3	3	2	8	9	10	14	32	9	3	4	4	6	5	26	52	9	5	19	12	14	11	52.2
10-Feb	7	8	21	12	8	6	5	7	6	7	6	7	5	8	6	5	8	7	8	7	8	12	6	8	21.3
11-Feb	6	8	8	10	8	15	10	9	10	8	8	9	8	8	5	6	7	9	9	7	6	17	6	6	17.3
12-Feb	6	6	7	6	6	6	6	5	18	8	8	7	18	21	7	8	16	9	16	28	15	7	8	4	27.8
13-Feb	9	8	4	8	7	6	9	5	8	28	11	13	3	4	11	4	2	5	3	8	11	19	8	11	27.7
14-Feb	9	6	7	4	10	4	7	5	12	5	3	2	3	7	15	14	17	16	12	31	13	11	15	10	30.7
15-Feb	5	3	5	3	5	5	7	7	4	7	5	5	7	18	34	29	88	21	22	47	44	6	41	23	88.1
16-Feb	12	17	27	16	7	27	31	11	10	6	4	15	14	10	18	13	12	10	2	6	7	14	7	7	31.2
17-Feb	4	3	5	14	59	17	8	9	8	7	8	8	9	6	7	7	6	18	7	7	6	7	6	10	58.7
18-Feb	7	10	10	7	9	16	14	14	12	29	14	22	16	48	15	17	9	11	11	13	18	12	15	16	47.8
19-Feb	11	13	8	9	10	10	5	8	9	7	7	11	9	11	11	9	9	7	7	6	9	9	8	9	12.7
20-Feb	9	7	11	8	8	9	7	8	9	8	9	70	57	24	10	22	11	8	3	8	9	16	31	4	70.1
21-Feb	4	26	28	9	5	8	17	8	10	5	5	11	15	8	8	9	12	22	53	67	10	2	8	7	67.0
22-Feb	5	15	4	5	8	6	10	11	12	21	22	6	4	3	2	5	3	3	3	5	3	4	3	4	22.2
23-Feb	7	4	8	5	8	17	8	19	7	8	11	10	3	4	3	18	23	15	21	26	32	41	59	18	59.4
24-Feb	16	5	36	9	13	8	5	21	8	16	21	17	72	90	19	4	15	10	7	12	5	9	4	7	90.1
25-Feb	5	6	9	14	10	4	4	8	3	6	4	6	7	7	9	11	11	12	7	7	19	13	14	11	18.9
26-Feb	11	10	14	6	7	12	17	30	40	12	7	24	19	54	53	44	26	8	12	8	6	3	3	6	53.8
27-Feb	5	3	6	3	5	4	8	19	9	17	35	16	53	49	31	40	6	4	35	6	6	2	4	9	53.3
28-Feb	7	4	5	30	29	9	8	7	7	12	8	7	9	8	8	5	7	6	5	5	5	5	5	6	30.0
29-Feb	5	7	9	7	9	14	30	4	10	22	6	25	6	4	4	12	8	6	12	11	11	6	4	5	30.4
	43.1	93.1	60.0	91.1	58.7	30.3	31.2	31.0	39.7	32.1	35.1	70.1	93.7	90.1	62.0	51.7	88.1	61.9	55.5	88.7	67.7	41.4	59.4	64.3	

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

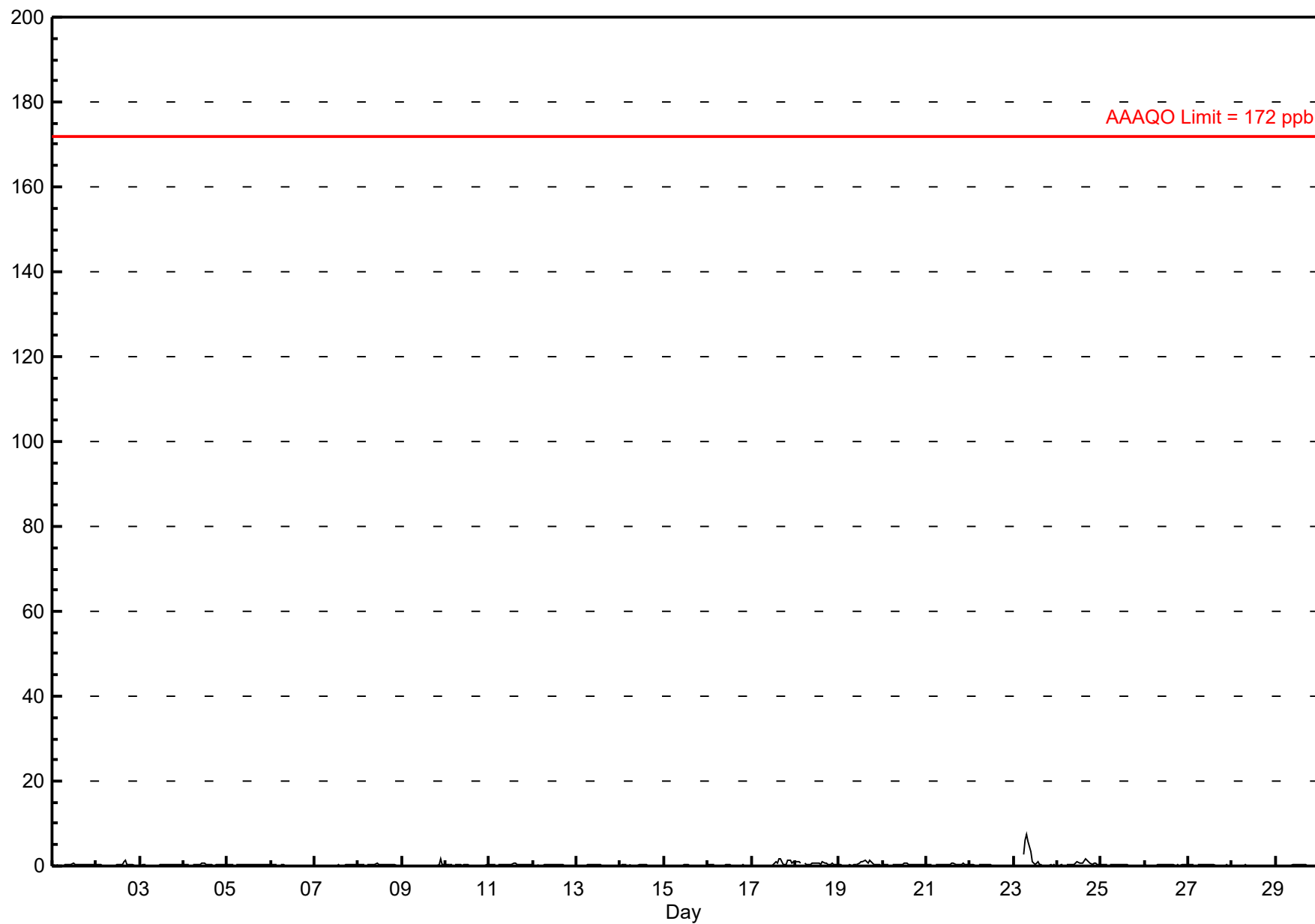
Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																			Hours in Service: 696							
Maximum Value: 7.5 ppb on Feb 23 08:00																			Maximum Daily Average: 1.3 ppb on Feb 23		Hours of Data: 664					
Minimum Value: 0 ppb on Feb 9 16:00																			Minimum Daily Average: 0.1 ppb on Feb 28		Hours of Missing Data: 32					
Maximum Diurnal Average: 0.4 ppb at hour 8																			Minimum Diurnal Average: 0.2 ppb at hour 24		Hours of Calibration: 32					
Monthly Average: 0.30 ppb																			Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 1.7		Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
2-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.3	1.5
3-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
4-Feb	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
5-Feb	0	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
6-Feb	0	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
7-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
8-Feb	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
9-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0.2	1.7
10-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0.2	0.3
11-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0.3	0.7
12-Feb	0	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
13-Feb	0	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
14-Feb	0	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
15-Feb	0	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-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
17-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	1	1	1	1	0.5	1.7
18-Feb	1	1	1	1	A	1	1	0	0	1	1	1	1	1	0	1	1	1	1	0	1	1	0	0	0.6	1.1
19-Feb	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0.5	1.4
20-Feb	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7
21-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0.4	0.7
22-Feb	0	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
23-Feb	0	0	0	0	A	3	6	7	6	3	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1.3	7.5
24-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	2	1	1	1	0	1	1	0	0	0.6	1.6
25-Feb	0	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
26-Feb	0	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
27-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
28-Feb	0	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
29-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
0.2		0.2	0.2	0.2	--	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.2	Diurnal Average	
1.1		1.1	1.1	0.8	--	2.7	6.2	7.5	5.7	3.4	1.0	1.0	1.0	1.1	1.4	1.6	1.7	1.2	0.7	0.5	1.4	1.7	0.8	1.0	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - February 2016



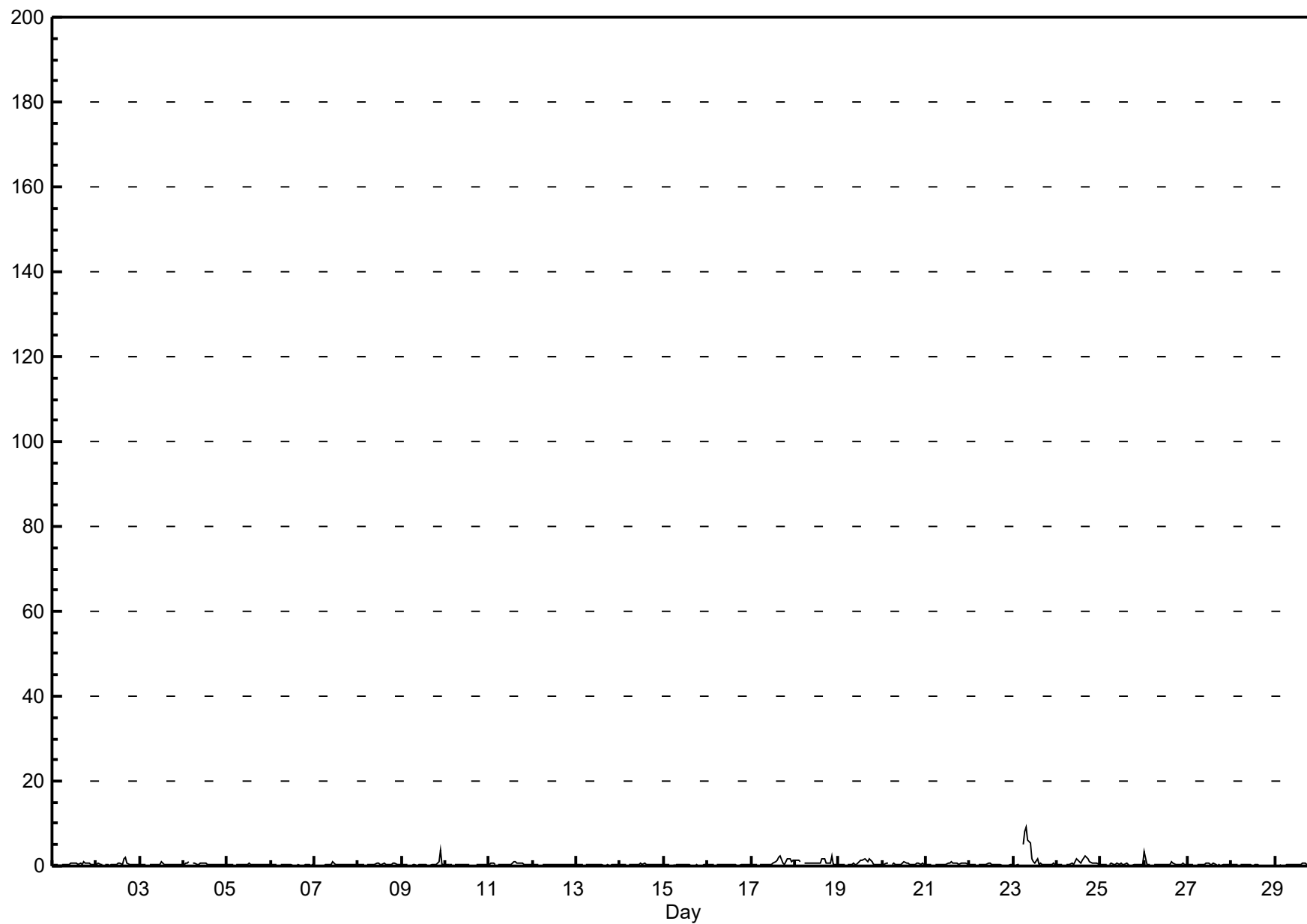
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Beaverlodge - February 2016

Maximum Value: 9.2 ppb on Feb 23 08:00																				Maximum Daily Average: 1.9 ppb on Feb 23										Hours in Service: 696	
Minimum Value: 0 ppb on Feb 9 06:00																				Minimum Daily Average: 0.2 ppb on Feb 28										Hours of Data: 664	
Maximum Diurnal Average: 0.6 ppb at hour 16																				Minimum Diurnal Average: 0.3 ppb at hour 24										Hours of Missing Data: 32	
Monthly Average: 0.47 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.5 P ₉₀ = 0.8 P ₉₉ = 3.6										Hours of Calibration: 32	
																				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-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	0	1	0	1	1	1	1	0	0	0	0.5	0.9					
2-Feb	1	1	0	0	A	0	0	0	0	0	0	0	1	1	0	2	2	1	0	0	0	0	0	0	0.5	2.1					
3-Feb	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.1					
4-Feb	0	1	1	1	A	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8					
5-Feb	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5					
6-Feb	0	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					
7-Feb	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9					
8-Feb	0	0	0	0	A	0	0	0	0	0	1	1	0	1	1	0	0	0	0	1	1	0	0	0	0.4	0.8					
9-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	0	0.4	3.6					
10-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0.3	0.5					
11-Feb	0	1	1	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0.5	1.1					
12-Feb	0	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					
13-Feb	0	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					
14-Feb	0	0	0	0	A	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0.3	0.7					
15-Feb	0	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					
16-Feb	0	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					
17-Feb	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	2	2	1	0	1	2	2	1	1	0.8	2.3					
18-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	2	0	0	0	0.9	2.3					
19-Feb	0	0	0	0	A	0	0	0	1	0	0	1	1	1	2	1	1	2	1	0	0	0	0	0	0.7	1.9					
20-Feb	0	0	1	1	A	0	1	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0.5	0.9					
21-Feb	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	1	1	1	0	0.5	1.0					
22-Feb	0	0	0	0	A	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7					
23-Feb	0	0	0	0	A	5	8	9	6	5	2	1	1	2	0	1	0	0	0	0	0	0	1	0	1.9	9.2					
24-Feb	0	0	0	0	A	0	0	0	1	0	1	2	1	1	1	2	2	2	1	1	1	1	1	0	0.8	2.2					
25-Feb	0	0	0	0	A	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.8					
26-Feb	4	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0.5	3.6					
27-Feb	0	0	0	0	A	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.7					
28-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5					
29-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.3	0.8					
0.4 0.4 0.4 0.3 -- 0.5 0.6 0.6 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.6 0.6 0.4 0.4 0.4 0.5 0.5 0.4 0.3																									Diurnal Average						
3.6 1.2 1.2 1.0 -- 5.2 8.2 9.2 6.2 5.5 1.8 1.7 1.3 1.7 1.6 2.2 2.3 1.9 1.0 1.2 2.3 3.6 1.0 1.2																									Diurnal Maximum						
C - Calibration																									A - Automated Daily Zero Span						

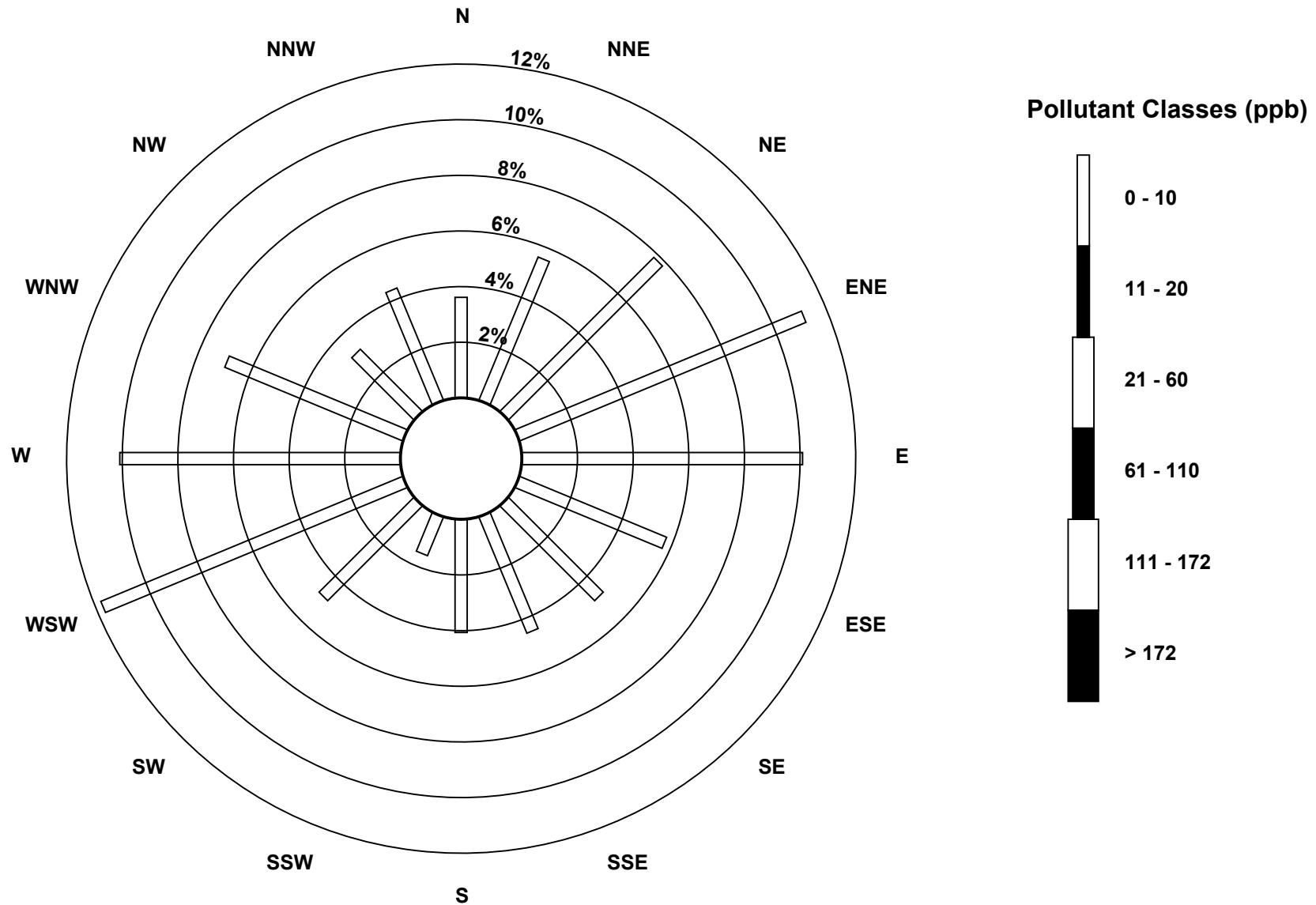
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - February 2016



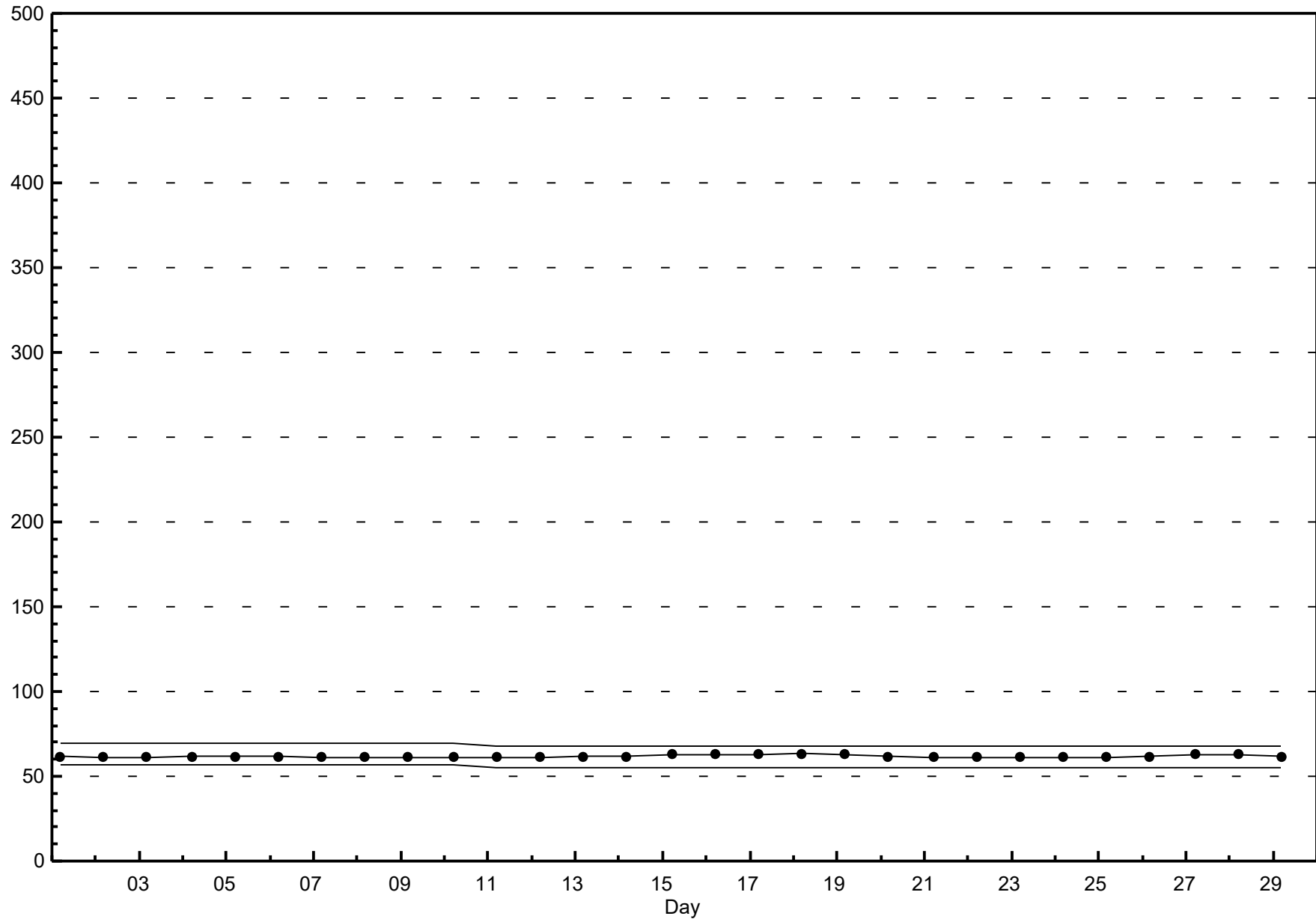
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - February 2016



Span Responses

Sulphur Dioxide (SO₂)
Beaverlodge - February 2016



Hourly Averages

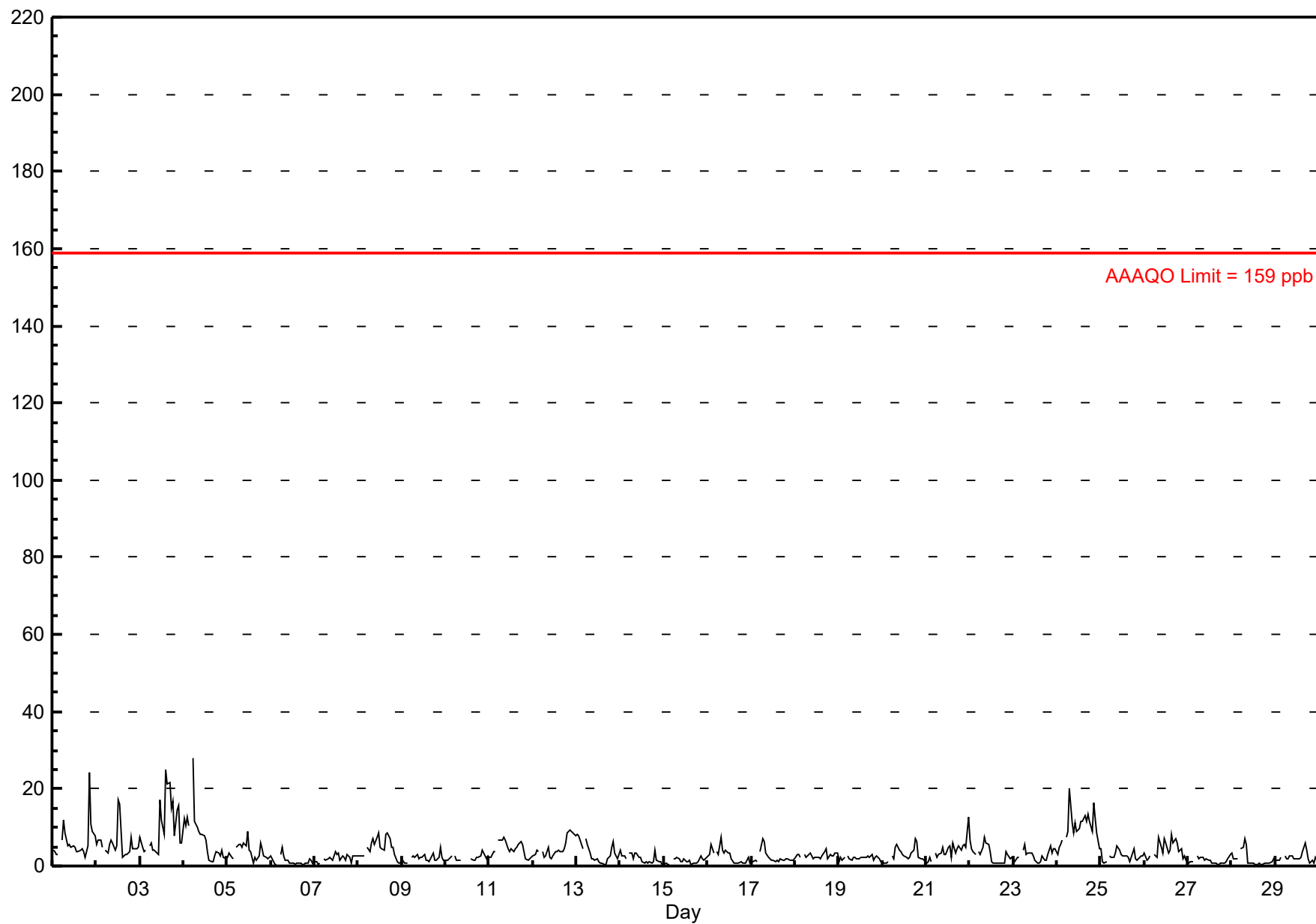
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 28.0 ppb on Feb 4 06:00 Maximum Daily Average: 10.1 ppb on Feb 3																				Hours in Service: 696 Hours of Data: 662						
Minimum Value: 0 ppb on Feb 27 17:00 Maximum Diurnal Average: 4.7 ppb at hour 6 Monthly Average: 3.62 ppb																				Minimum Daily Average: 1.2 ppb on Feb 6 Minimum Diurnal Average: 2.7 ppb at hour 4 Percentiles: P ₁ = 0.4 P ₁₀ = 0.8 Q ₁ = 1.6 Median = 2.6 Q ₃ = 4.5 P ₉₀ = 7.5 P ₉₉ = 16.9		Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	4	4	3	3	A	7	12	9	5	6	5	5	5	4	4	4	4	4	2	5	24	11	9	8	6.3	24.4
2-Feb	6	7	7	5	A	4	3	6	7	6	4	5	17	16	2	3	3	3	4	8	4	4	4	5	5.8	17.3
3-Feb	8	5	4	4	A	5	6	4	4	3	3	17	12	8	25	21	22	15	17	8	14	16	6	6	10.1	24.8
4-Feb	12	11	13	10	A	28	12	10	9	8	8	8	7	4	1	1	1	2	4	3	3	4	2	2	7.1	28.0
5-Feb	2	3	2	2	A	5	5	5	5	6	5	9	4	4	1	2	1	3	6	5	3	2	2	2	3.7	8.8
6-Feb	2	1	0	0	A	3	5	3	1	1	1	1	1	1	1	1	1	0	0	1	1	2	1	1	1.2	4.9
7-Feb	1	1	0	1	A	2	1	2	2	2	2	4	3	3	1	2	2	2	3	2	1	3	3	3	2.0	3.6
8-Feb	3	3	3	3	A	5	4	6	7	6	7	8	5	4	4	8	8	7	5	5	3	1	1	1	4.6	8.5
9-Feb	2	1	1	1	A	2	3	2	3	2	2	2	3	1	1	1	2	3	1	2	2	5	2	1	2.0	5.0
10-Feb	1	1	2	3	A	3	1	1	1	C	C	C	C	C	2	1	2	2	2	3	4	3	2	2	2.1	4.0
11-Feb	2	2	4	4	A	7	7	7	8	7	5	4	5	4	4	5	5	6	6	4	2	2	2	2	4.4	7.5
12-Feb	3	3	4	4	A	4	2	3	5	2	2	3	4	4	4	4	4	4	6	9	9	9	9	8	4.6	9.3
13-Feb	8	8	7	5	A	7	6	3	2	2	2	2	1	1	1	0	1	2	3	5	6	3	2	3	3.4	8.3
14-Feb	4	3	3	2	A	3	3	2	3	4	2	2	1	1	1	1	1	1	1	4	1	1	1	1	2.0	4.1
15-Feb	0	1	0	1	A	2	2	2	2	1	1	2	1	1	1	1	1	1	1	1	3	2	2	2	1.3	2.5
16-Feb	3	3	5	3	A	4	3	7	4	3	4	4	3	2	1	1	1	1	1	1	1	1	2	1	2.5	7.3
17-Feb	1	1	2	1	A	4	7	7	3	2	2	2	1	1	2	1	2	1	2	2	2	2	2	2	2.1	7.2
18-Feb	2	3	3	2	A	3	2	3	3	3	2	2	2	2	2	3	4	4	2	3	2	3	3	3	2.7	4.4
19-Feb	1	2	2	2	A	3	2	2	2	2	2	2	2	2	2	2	2	2	3	1	2	3	2	1	2.1	3.2
20-Feb	1	1	1	1	A	3	2	5	5	4	4	3	3	2	2	2	3	4	7	6	2	2	2	1	2.9	7.2
21-Feb	1	1	2	1	A	3	2	3	3	5	3	3	5	5	2	6	4	5	5	4	5	5	5	13	4.0	12.8
22-Feb	7	5	4	3	A	4	3	5	7	6	6	4	1	1	1	1	1	1	1	1	4	3	2	2	3.0	7.4
23-Feb	2	1	2	2	A	4	6	3	3	3	3	2	2	1	1	1	3	2	1	3	5	3	4	5	2.7	5.7
24-Feb	3	5	6	7	A	8	9	20	11	9	11	9	10	11	12	13	12	13	12	9	16	12	8	4	10.0	20.2
25-Feb	4	1	1	1	A	3	2	2	4	5	4	3	3	3	3	2	1	2	4	2	2	2	3	3	2.5	5.4
26-Feb	3	2	2	2	A	3	3	2	7	5	3	7	6	3	4	8	6	7	6	4	4	2	3	1	4.1	8.3
27-Feb	1	1	1	1	A	3	2	2	2	1	2	2	1	1	1	1	0	1	1	1	1	1	2	3	1.3	2.9
28-Feb	3	2	2	2	A	5	5	7	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.8	6.9
29-Feb	1	2	2	2	A	3	2	2	3	2	2	2	2	2	2	4	6	4	2	1	2	1	2	1	2.2	5.9
																									Diurnal Average	
																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb																										

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - February 2016



Hourly Maximums

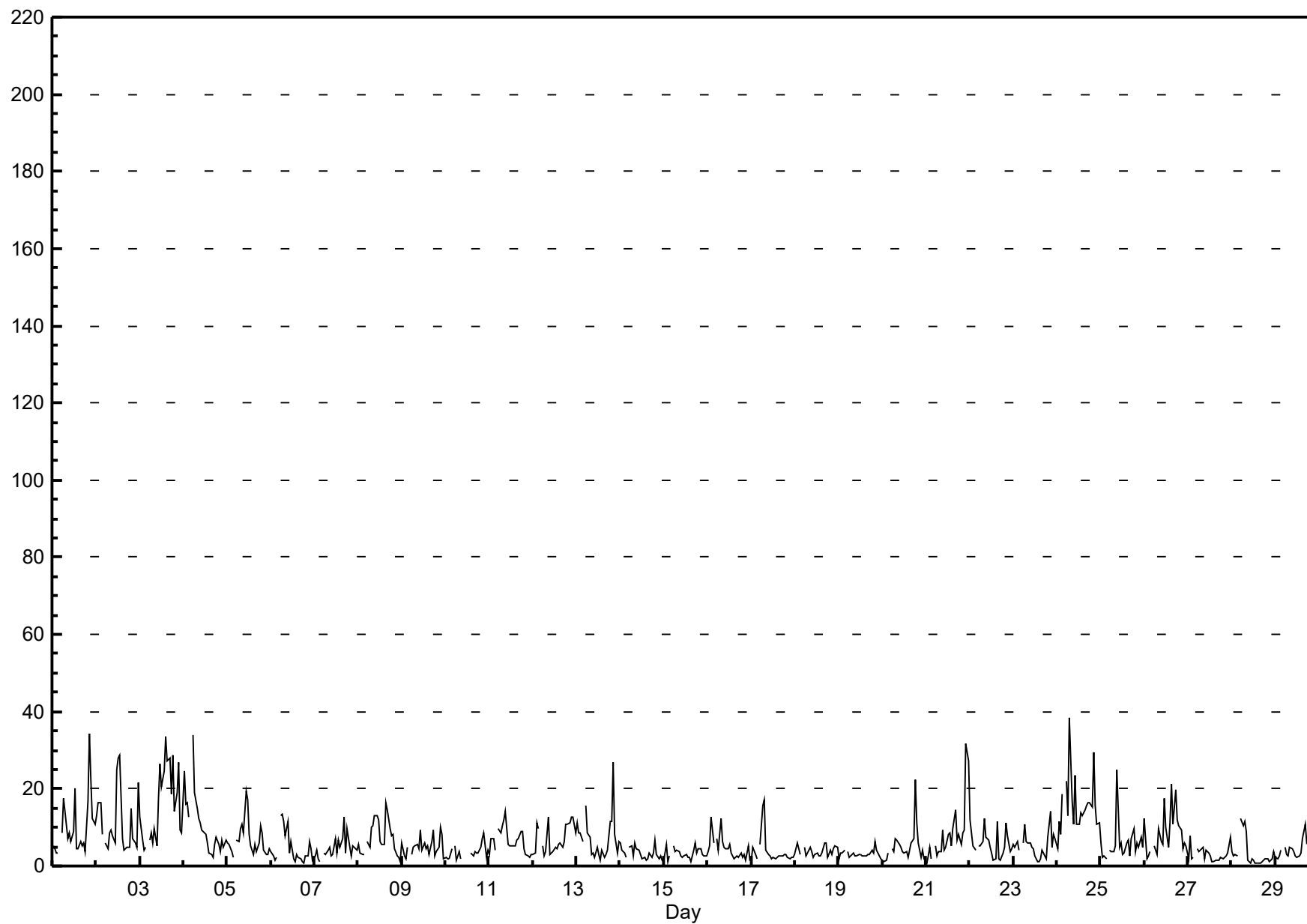
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - February 2016

Maximum Value: 38.5 ppb on Feb 24 08:00																				Maximum Daily Average: 15.9 ppb on Feb 3										Hours in Service: 696	
Minimum Value: 1 ppb on Feb 28 11:00																				Minimum Daily Average: 3.0 ppb on Feb 27										Hours of Data: 662	
Maximum Diurnal Average: 8.7 ppb at hour 21																				Minimum Diurnal Average: 4.6 ppb at hour 4										Hours of Missing Data: 34	
Monthly Average: 6.51 ppb																				Percentiles: P ₁ = 0.9 P ₁₀ = 2.0 Q ₁ = 2.9 Median = 4.7 Q ₃ = 8.2 P ₉₀ = 13.0 P ₉₉ = 28.8										Hours of Calibration: 34	
																														Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
1-Feb	5	4	3	3	A	9	17	14	7	9	6	9	20	5	5	6	5	6	4	17	34	22	12	11	10.2	34.3					
2-Feb	13	16	16	8	A	6	5	8	9	8	6	25	28	29	7	4	5	5	5	15	7	6	5	22	11.2	28.8					
3-Feb	13	7	4	5	A	7	8	6	10	5	18	26	21	25	34	27	28	19	29	14	19	27	9	9	15.9	33.5					
4-Feb	24	16	16	13	A	34	19	15	12	11	9	9	8	6	3	3	2	6	7	5	4	7	5	7	10.6	33.9					
5-Feb	6	6	4	2	A	7	6	10	11	8	19	17	8	5	3	6	4	6	10	9	4	3	3	5	7.0	19.4					
6-Feb	4	3	2	2	A	13	14	11	8	12	4	6	2	1	3	2	2	1	1	2	2	6	4	1	4.6	13.5					
7-Feb	2	4	2	1	A	3	3	4	5	3	3	7	3	7	5	7	13	3	10	5	3	5	5	4	4.6	12.6					
8-Feb	6	3	3	3	A	6	5	10	11	13	13	12	7	6	6	16	15	10	8	8	5	3	2	1	7.4	16.4					
9-Feb	6	2	2	5	A	3	5	5	6	4	9	4	6	4	5	3	6	9	3	4	5	10	8	2	5.1	10.0					
10-Feb	2	2	2	4	A	5	2	4	2	C	C	C	C	C	3	2	4	3	3	5	7	9	2	4	3.7	8.6					
11-Feb	3	7	7	4	A	10	9	10	12	14	5	5	5	5	5	7	7	9	9	5	3	2	2	3	6.5	14.0					
12-Feb	3	3	11	10	A	5	3	4	13	3	3	4	5	5	6	6	5	6	11	11	11	13	13	9	7.0	12.8					
13-Feb	11	9	9	6	A	16	9	8	3	3	2	5	3	2	4	2	3	4	12	12	27	8	3	6	7.2	27.0					
14-Feb	6	4	3	2	A	5	5	3	6	4	4	3	2	2	1	2	3	2	3	7	3	2	3	2	3.4	6.8					
15-Feb	1	6	1	3	A	5	4	4	4	2	2	3	3	2	2	1	4	6	3	5	5	3	3	3	3.2	5.9					
16-Feb	4	5	13	6	A	7	4	12	7	5	5	4	6	3	2	2	3	2	3	2	3	1	5	1	4.6	12.9					
17-Feb	2	5	3	2	A	6	16	17	4	3	3	2	2	2	2	3	3	3	3	3	2	2	2	2	3.9	17.3					
18-Feb	3	6	4	3	A	5	3	3	5	4	2	3	3	3	3	3	6	6	2	4	3	4	5	5	3.8	6.1					
19-Feb	2	3	3	4	A	4	2	3	4	2	2	3	3	3	3	3	3	3	4	3	6	4	3	2	3.1	6.4					
20-Feb	1	1	1	3	A	5	4	7	7	6	5	4	3	4	2	4	6	7	22	11	6	2	4	2	5.1	22.3					
21-Feb	1	3	5	2	A	5	3	4	4	9	4	5	8	8	5	10	15	7	8	5	9	9	32	27	8.1	31.6					
22-Feb	12	9	5	4	A	5	5	6	12	7	7	5	4	2	2	12	2	2	3	5	11	8	4	5	5.9	12.3					
23-Feb	6	5	6	4	A	6	11	6	6	6	5	4	2	1	1	2	4	2	2	7	14	5	8	7	5.3	14.0					
24-Feb	4	12	8	19	A	22	13	38	17	11	23	11	11	14	13	15	16	17	16	15	29	16	11	11	15.7	38.5					
25-Feb	6	2	2	2	A	4	4	4	5	25	5	6	3	4	6	7	3	7	10	4	6	5	7	5	5.7	24.9					
26-Feb	12	2	3	4	A	5	4	3	10	7	5	17	10	5	12	21	11	20	12	10	9	5	6	5	8.6	21.1					
27-Feb	2	8	2	2	A	4	4	4	5	2	4	4	3	1	1	1	1	2	2	2	2	3	3	7	3.0	7.9					
28-Feb	4	3	3	3	A	12	11	12	9	1	1	2	2	1	1	1	1	1	2	2	2	1	2	4	3.4	12.4					
29-Feb	2	2	3	4	A	5	3	3	5	4	4	3	2	2	4	7	11	6	6	3	9	5	4	2	4.3	10.6					
																								Diurnal Average							
																								Diurnal Maximum							
C - Calibration																								A - Automated Daily Zero Span							

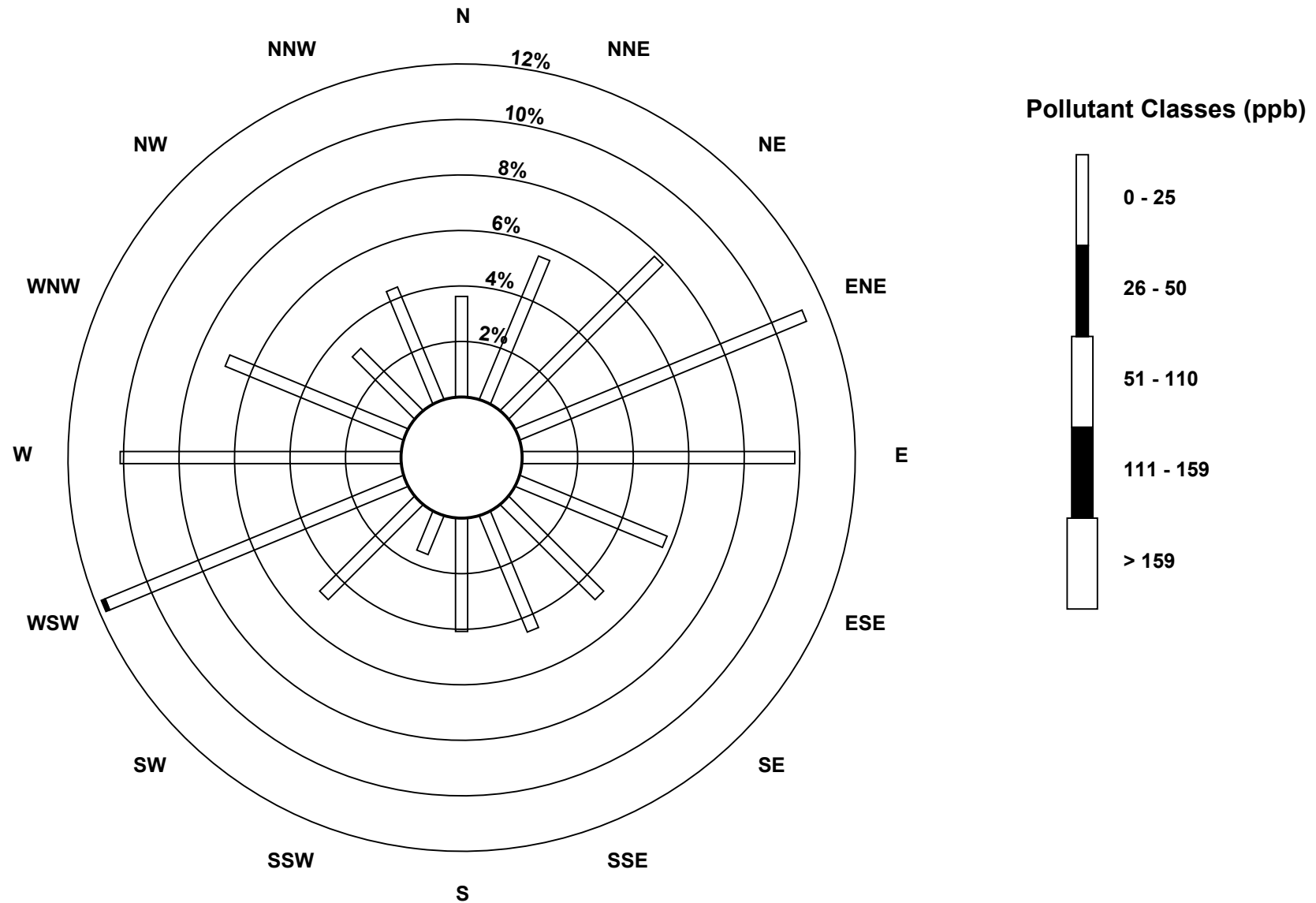
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - February 2016



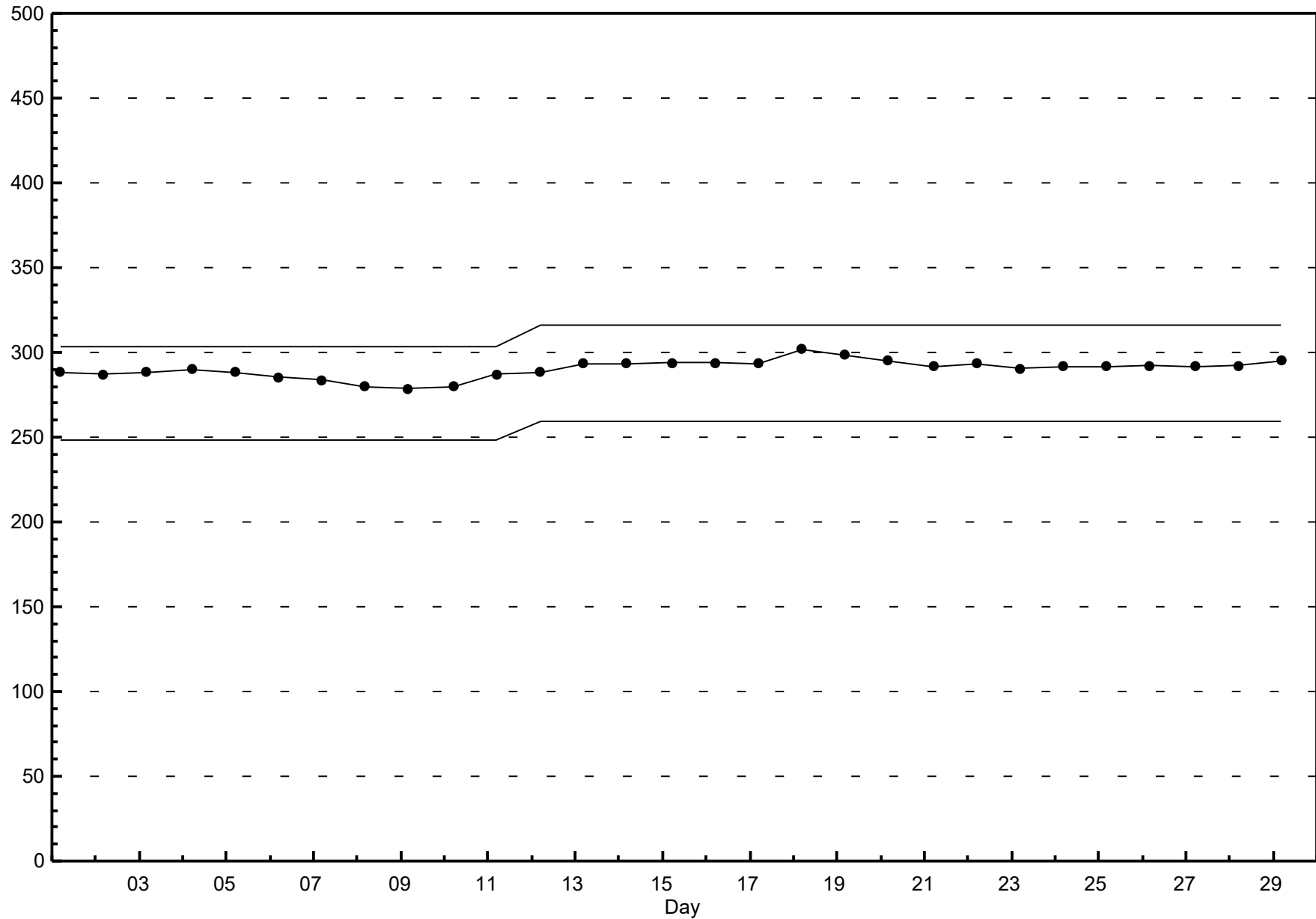
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - February 2016



Span Responses

Nitrogen Dioxide (NO₂)
Beaverlodge - February 2016



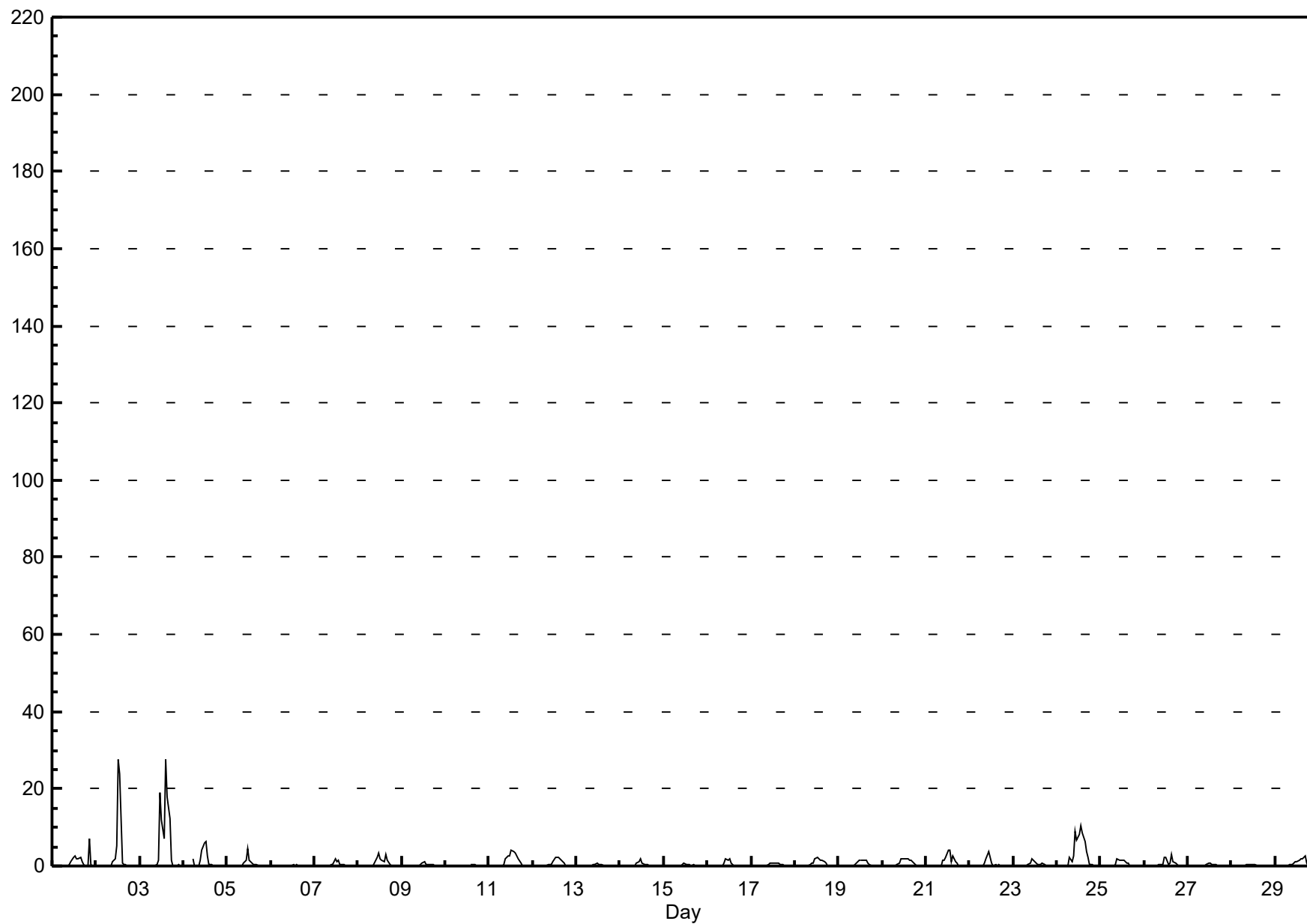
Hourly Averages

Nitrogen Oxide (NO) - ppb Beaverlodge - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 27.6 ppb on Feb 3 15:00 Maximum Daily Average: 4.3 ppb on Feb 3																								Hours in Service: 696 Hours of Data: 662 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on Feb 1 04:00 Minimum Daily Average: 0.1 ppb on Feb 10 Maximum Diurnal Average: 3.2 ppb at hour 13 Minimum Diurnal Average: 0.0 ppb at hour 2 Monthly Average: 0.74 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.5 P ₉₀ = 1.8 P ₉₉ = 12.0																										
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-Feb	0	0	0	0	A	0	0	0	0	1	1	2	2	2	2	2	1	0	0	0	7	0	0	0	0.9	7.1
2-Feb	0	0	0	0	A	0	0	0	0	1	2	5	27	24	1	0	0	0	0	0	0	0	0	0	2.7	27.4
3-Feb	0	0	0	0	A	0	0	0	0	0	1	19	12	7	28	18	12	1	0	0	0	0	0	0	4.3	27.6
4-Feb	0	0	0	0	A	2	0	0	0	1	4	6	6	2	1	0	0	0	0	0	0	0	0	0	1.1	6.4
5-Feb	0	0	0	0	A	0	0	0	0	1	2	5	2	1	0	0	0	0	0	0	0	0	0	0	0.5	4.5
6-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
7-Feb	0	0	0	0	A	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.8
8-Feb	0	0	0	0	A	0	0	0	0	1	2	3	2	1	1	3	1	0	0	0	0	0	0	0	0.7	3.5
9-Feb	0	0	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
10-Feb	0	0	0	0	A	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.1	0.2
11-Feb	0	0	0	0	A	0	0	0	0	2	3	2	4	4	3	3	2	1	0	0	0	0	0	0	1.0	4.1
12-Feb	0	0	0	0	A	0	0	0	0	0	1	1	2	2	2	2	1	1	0	0	0	0	0	0	0.6	2.3
13-Feb	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
14-Feb	0	0	0	0	A	0	0	0	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7
15-Feb	0	0	0	0	A	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.6
16-Feb	0	0	0	0	A	0	0	0	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0.3	2.0
17-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.2	0.9
18-Feb	0	0	0	0	A	0	0	0	0	1	1	2	2	2	2	1	1	1	0	0	0	0	0	0	0.5	2.2
19-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.5
20-Feb	0	0	0	0	A	0	0	0	0	1	2	2	2	2	2	2	1	1	0	0	0	0	0	0	0.7	2.0
21-Feb	0	0	0	0	A	0	0	0	0	2	2	2	4	4	1	3	1	1	0	0	0	0	0	0	0.9	4.3
22-Feb	0	0	0	0	A	0	0	0	1	2	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0.5	3.6
23-Feb	0	0	0	0	A	0	0	0	0	1	2	2	1	0	0	0	1	0	0	0	0	0	0	0	0.4	1.7
24-Feb	0	0	0	0	A	0	0	2	1	3	9	7	8	10	8	7	4	2	0	0	0	0	0	0	2.7	10.5
25-Feb	0	0	0	0	A	0	0	0	0	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0.4	2.0
26-Feb	0	0	0	0	A	0	0	0	0	0	0	2	2	1	1	3	1	1	0	0	0	0	0	0	0.5	3.0
27-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
28-Feb	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
29-Feb	0	0	0	0	A	0	0	0	0	1	1	1	1	1	2	2	3	1	0	0	0	0	0	0	0.5	2.6
0.0 0.0 0.0 0.0 -- 0.1 0.0 0.1 0.2 0.8 1.6 2.7 3.2 2.6 2.1 1.8 1.2 0.4 0.1 0.0 0.3 0.0 0.0 0.0																								Diurnal Average		
0.1 0.1 0.1 0.1 -- 1.8 0.1 2.3 1.1 2.5 8.8 19.0 27.4 23.8 27.6 17.8 12.2 2.3 0.5 0.3 7.1 0.2 0.1 0.1																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - February 2016



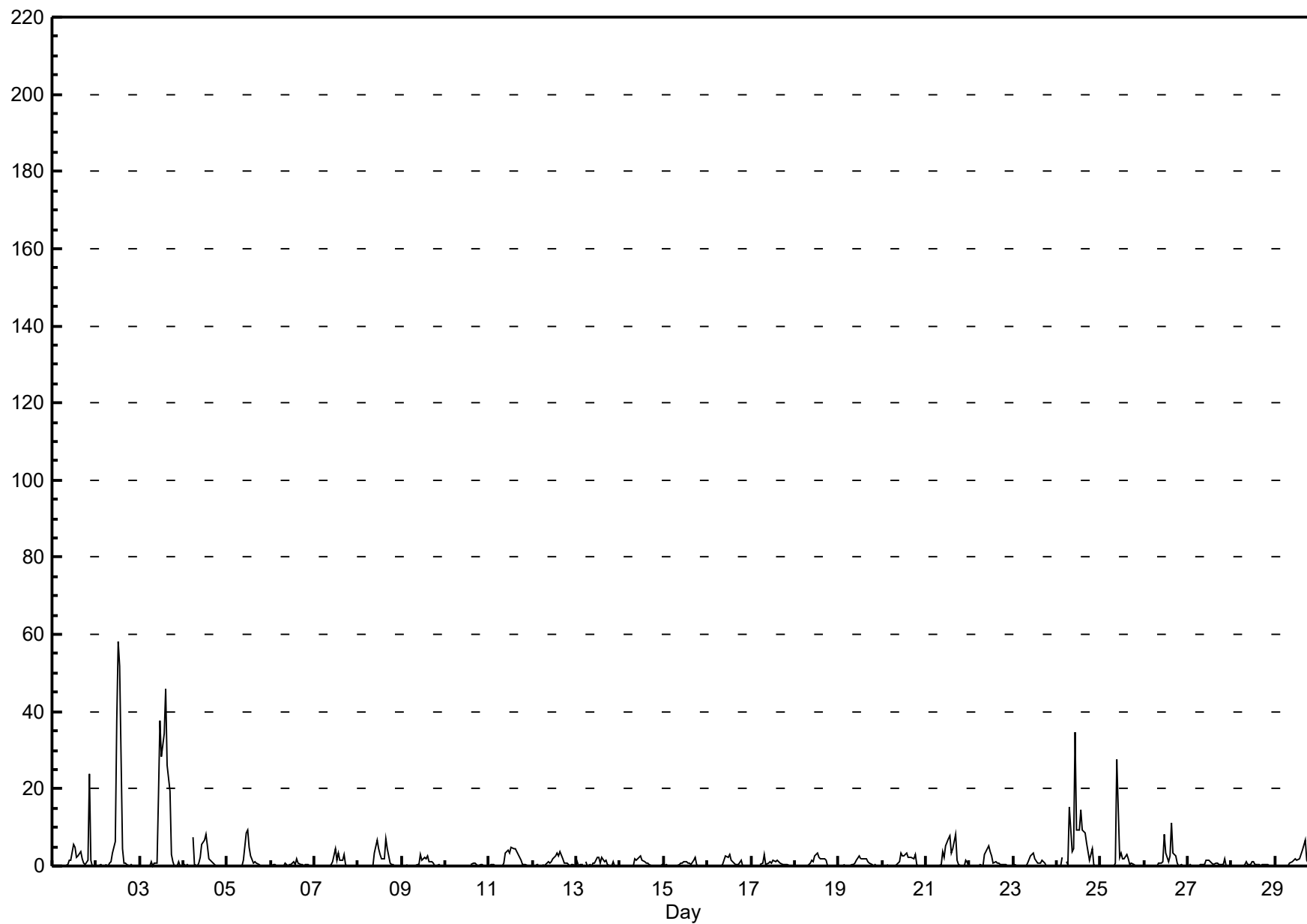
Hourly Maximums

Nitrogen Oxide (NO) - ppb Beaverlodge - February 2016

Maximum Value: 58.0 ppb on Feb 2 13:00																				Maximum Daily Average: 9.5 ppb on Feb 3										Hours in Service: 696	
Minimum Value: 0 ppb on Feb 7 04:00																				Minimum Daily Average: 0.2 ppb on Feb 10										Hours of Data: 662	
Maximum Diurnal Average: 6.0 ppb at hour 12																				Minimum Diurnal Average: 0.1 ppb at hour 24										Hours of Missing Data: 34	
Monthly Average: 1.73 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.3 Q ₃ = 1.4 P ₉₀ = 3.3 P ₉₉ = 34.4										Hours of Calibration: 34	
																				Percent Operational Time: 100.0											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Feb	0	0	0	0	A	0	0	0	0	2	2	5	5	2	3	4	2	1	0	2	24	2	0	0	2.3	24.0					
2-Feb	0	0	0	0	A	0	0	1	1	3	6	38	58	52	4	1	1	0	0	0	0	0	0	0	7.3	58.0					
3-Feb	0	0	0	0	A	0	1	0	1	1	18	38	28	34	46	26	19	3	1	0	0	1	0	0	9.5	45.9					
4-Feb	0	0	0	0	A	8	1	0	1	2	6	7	8	5	2	1	1	0	0	0	0	0	0	0	1.9	8.3					
5-Feb	0	0	0	0	A	0	0	0	0	1	9	9	5	2	1	1	1	0	0	0	0	0	0	0	1.4	9.2					
6-Feb	0	0	0	0	A	0	0	0	1	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0.4	2.0					
7-Feb	0	0	0	0	A	0	0	0	0	0	1	5	1	3	1	1	3	0	0	0	0	0	0	0	0.8	4.7					
8-Feb	0	0	0	0	A	0	0	0	0	3	7	5	3	2	2	7	5	1	1	0	0	0	0	0	1.6	6.9					
9-Feb	0	0	0	0	A	0	0	0	0	0	3	1	2	2	3	1	1	1	0	0	0	0	0	0	0.7	3.1					
10-Feb	0	0	0	0	A	0	0	0	0	C	C	C	C	C	0	1	1	0	0	0	0	0	0	0	0.2	0.8					
11-Feb	0	1	0	0	A	0	0	0	1	3	4	4	5	5	4	4	3	2	0	0	0	0	0	0	1.6	4.8					
12-Feb	0	0	1	0	A	0	0	0	1	1	1	2	3	3	3	4	2	1	1	1	0	0	0	0	1.0	3.6					
13-Feb	1	0	0	0	A	1	0	0	0	1	1	2	2	1	2	1	1	0	0	0	1	0	0	0	0.8	2.4					
14-Feb	0	0	0	0	A	0	0	0	2	2	2	3	1	1	1	1	1	0	0	0	0	0	0	0	0.7	2.7					
15-Feb	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	0	1	2	0	0	0	0	0	0	0.5	2.2					
16-Feb	0	0	0	0	A	0	0	0	0	2	3	2	3	1	1	0	0	0	2	0	0	0	0	0	0.7	3.1					
17-Feb	0	0	0	0	A	0	1	3	0	1	1	1	1	1	2	1	1	1	1	0	0	0	0	0	0.7	2.9					
18-Feb	0	0	0	0	A	0	0	0	1	1	1	3	3	2	2	2	2	2	0	0	0	0	0	0	0.9	3.2					
19-Feb	0	0	0	0	A	0	0	0	1	1	2	2	2	2	2	2	1	1	0	0	0	0	0	0	0.7	2.4					
20-Feb	0	0	0	0	A	0	0	0	1	1	3	3	2	3	2	2	2	2	3	0	0	0	0	0	1.2	3.3					
21-Feb	0	0	0	0	A	0	0	0	0	4	2	5	7	8	3	4	8	2	0	0	0	0	2	0	2.1	8.1					
22-Feb	0	0	0	0	A	0	0	0	3	4	5	4	3	1	1	1	1	0	0	0	0	0	0	0	1.1	5.4					
23-Feb	0	0	0	0	A	0	0	0	1	2	3	4	2	1	1	1	2	1	0	0	0	0	0	0	0.8	3.5					
24-Feb	0	0	0	2	A	1	0	15	4	4	35	9	9	15	9	9	6	4	2	4	0	0	0	0	5.7	34.9					
25-Feb	0	0	0	0	A	0	0	0	1	28	2	3	2	2	3	2	1	1	0	0	0	0	0	0	2.0	27.6					
26-Feb	0	0	0	0	A	0	0	0	1	1	1	8	4	1	3	11	3	3	1	0	0	0	0	0	1.6	11.0					
27-Feb	0	1	0	0	A	0	0	0	0	0	2	2	1	1	1	1	1	0	0	0	2	0	0	0	0.5	1.7					
28-Feb	0	0	0	0	A	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.1					
29-Feb	0	0	0	0	A	0	0	0	1	1	1	2	2	2	3	4	7	1	1	0	1	0	0	0	1.2	6.8					
0.2					0.2					0.2					0.2					0.2					Diurnal Average						
1.0					0.6					0.5					2.3					--					Diurnal Maximum						
C - Calibration					A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - February 2016



Hourly Averages

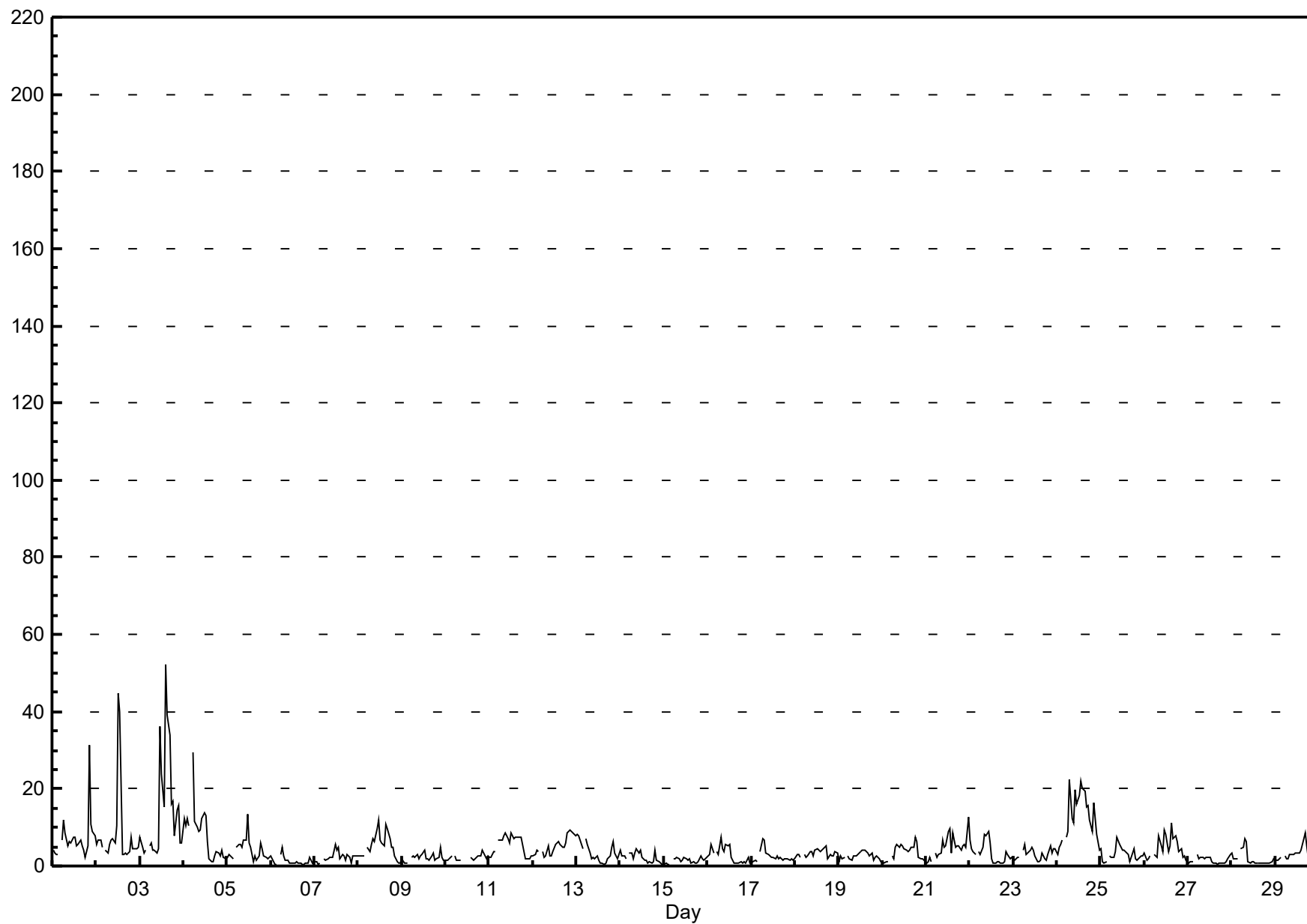
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 52.3 ppb on Feb 3 15:00 Maximum Daily Average: 14.4 ppb on Feb 3																					Hours in Service: 696 Hours of Data: 662 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0					
Minimum Value: 0 ppb on Feb 15 01:00 Minimum Daily Average: 1.3 ppb on Feb 6 Maximum Diurnal Average: 7.2 ppb at hour 13 Minimum Diurnal Average: 2.7 ppb at hour 4 Monthly Average: 4.36 ppb Percentiles: P ₁ = 0.5 P ₁₀ = 0.9 Q ₁ = 1.8 Median = 2.9 Q ₃ = 5.2 P ₉₀ = 8.3 P ₉₉ = 30.9																										
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-Feb	4	4	3	3	A	7	12	9	5	6	6	8	7	5	6	7	5	4	2	5	31	11	9	8	7.2	31.3
2-Feb	6	7	7	5	A	4	3	6	7	7	6	10	45	40	3	3	3	3	4	8	4	4	4	5	8.4	44.7
3-Feb	8	5	4	4	A	5	6	4	4	4	5	36	24	15	52	39	34	16	17	8	14	16	6	6	14.4	52.3
4-Feb	12	11	12	10	A	29	12	10	9	9	12	14	13	6	2	1	1	3	4	3	3	4	2	2	8.1	29.5
5-Feb	2	3	2	2	A	5	5	5	5	7	7	13	6	5	1	3	2	3	6	5	3	2	2	2	4.1	13.3
6-Feb	2	1	1	0	A	3	5	3	2	1	1	1	1	1	1	1	1	0	0	1	1	2	1	1	1.3	4.9
7-Feb	1	1	0	1	A	2	1	2	2	2	2	5	4	5	2	3	3	2	3	2	1	3	3	2	2.2	5.5
8-Feb	3	3	3	3	A	5	4	6	7	6	10	12	7	6	5	11	10	7	5	5	3	1	1	1	5.3	11.9
9-Feb	2	1	1	1	A	2	3	2	3	2	2	3	4	2	2	2	3	3	1	2	2	5	2	1	2.2	5.0
10-Feb	1	1	2	3	A	3	1	2	1	C	C	C	C	C	2	2	2	2	2	3	4	3	2	2	2.2	4.1
11-Feb	2	2	4	4	A	7	7	7	8	9	7	6	9	7	8	7	7	7	6	4	2	2	2	2	5.4	8.8
12-Feb	3	3	4	4	A	4	2	3	5	3	3	4	6	6	6	6	5	5	6	9	9	9	9	8	5.2	9.3
13-Feb	8	8	7	5	A	7	6	3	2	2	2	3	1	1	1	0	1	2	3	5	6	3	2	3	3.5	8.4
14-Feb	4	3	3	2	A	3	3	2	3	4	3	4	2	1	1	1	1	1	1	4	1	1	1	1	2.3	4.4
15-Feb	0	1	0	1	A	2	2	2	2	1	2	2	2	2	2	1	1	1	1	1	3	2	2	2	1.5	2.5
16-Feb	3	3	5	3	A	4	3	7	4	4	6	5	5	2	1	1	1	1	1	1	1	1	2	1	2.8	7.3
17-Feb	1	1	2	1	A	4	7	7	3	3	3	2	2	2	3	2	2	2	2	2	2	2	2	2	2.4	7.2
18-Feb	2	3	3	2	A	3	2	3	4	4	2	4	5	4	4	4	5	5	2	3	3	3	4	3	3.3	5.1
19-Feb	1	2	2	2	A	3	2	2	3	3	2	3	4	4	4	4	3	3	3	2	2	3	2	1	2.6	4.0
20-Feb	1	1	1	1	A	3	2	5	6	5	6	5	4	4	4	4	5	5	8	6	2	2	2	1	3.6	7.5
21-Feb	1	1	2	1	A	3	2	3	4	7	5	5	9	10	3	8	5	5	5	4	5	5	5	13	4.9	12.8
22-Feb	7	5	4	3	A	4	3	5	8	8	9	6	2	1	1	1	1	1	1	1	4	3	2	2	3.5	9.1
23-Feb	2	1	2	2	A	4	6	3	3	4	5	4	3	1	1	2	3	2	1	3	5	3	4	5	3.1	5.8
24-Feb	3	5	6	7	A	8	9	22	12	11	20	16	18	22	20	19	15	16	12	9	16	12	8	4	12.6	22.3
25-Feb	4	1	1	1	A	3	2	2	4	7	6	5	4	4	3	3	1	2	4	2	2	2	3	3	3.0	7.4
26-Feb	3	2	2	2	A	3	3	2	8	5	4	9	8	4	5	11	7	8	6	4	5	2	3	1	4.7	11.3
27-Feb	1	1	1	1	A	3	2	2	2	2	2	2	2	1	1	1	0	1	1	1	1	1	2	3	1.5	2.9
28-Feb	3	2	2	2	A	5	5	7	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2.0	7.0
29-Feb	1	2	2	2	A	3	2	2	3	3	3	3	3	3	4	5	8	5	2	1	2	1	2	1	2.8	8.4
3.2 2.8 3.0 2.7 -- 4.8 4.2 4.7 4.6 4.6 5.0 6.9 7.2 5.9 5.1 5.2 4.7 3.9 3.8 3.5 4.7 3.8 3.0 3.1																									Diurnal Average	
12.5 10.6 12.5 10.4 -- 29.5 11.8 22.3 12.3 11.0 19.9 36.1 44.7 40.0 52.3 39.1 34.0 16.2 16.8 9.0 31.3 15.5 8.9 12.8																									Diurnal Maximum	
C - Calibration																									A - Automated Daily Zero Span	

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - February 2016



Hourly Maximums

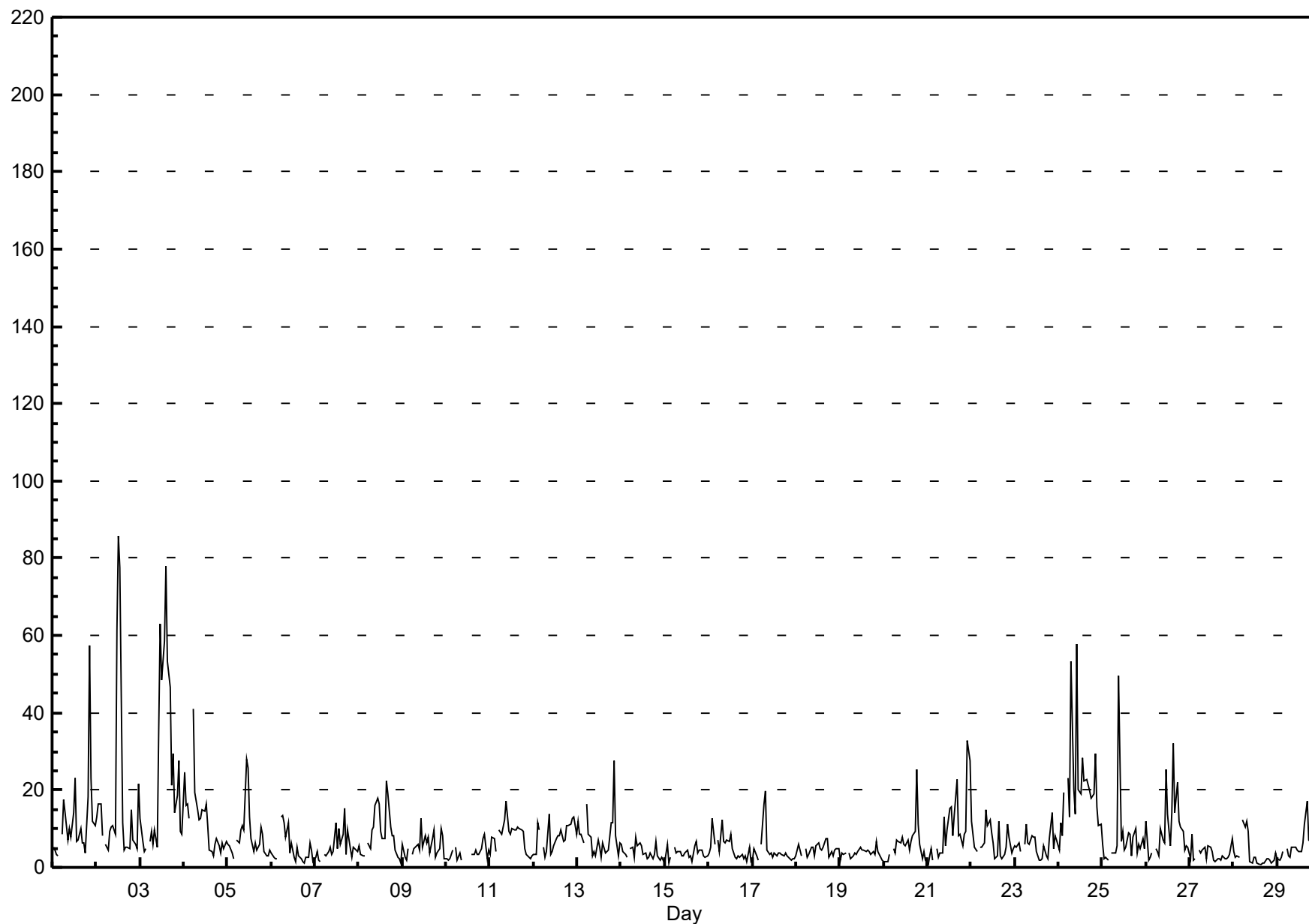
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - February 2016

Maximum Value: 85.8 ppb on Feb 2 13:00																				Maximum Daily Average: 25.1 ppb on Feb 3										Hours in Service: 696	
Minimum Value: 1 ppb on Feb 21 01:00																				Minimum Daily Average: 3.5 ppb on Feb 27										Hours of Data: 662	
Maximum Diurnal Average: 13.2 ppb at hour 12																				Minimum Diurnal Average: 4.6 ppb at hour 4										Hours of Missing Data: 34	
Monthly Average: 8.09 ppb																				Percentiles: P ₁ = 1.1 P ₁₀ = 2.2 Q ₁ = 3.3 Median = 5.2 Q ₃ = 9.3 P ₉₀ = 15.3 P ₉₉ = 57.8										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-Feb	5	4	3	3	A	9	17	14	7	10	8	14	23	7	7	10	6	6	4	18	57	23	12	11	12.2	57.4					
2-Feb	13	16	17	8	A	6	4	9	10	11	9	62	86	77	12	4	5	5	5	15	7	6	5	22	18.0	85.8					
3-Feb	12	7	4	5	A	7	9	6	10	5	36	63	49	58	78	53	47	21	29	14	19	28	9	8	25.1	77.9					
4-Feb	25	16	16	13	A	41	19	15	12	13	15	15	17	11	5	4	3	6	8	6	4	6	5	7	12.2	41.0					
5-Feb	6	6	4	2	A	7	6	10	11	10	28	26	13	7	4	6	4	6	10	9	4	3	3	5	8.2	28.1					
6-Feb	4	3	2	2	A	13	14	12	8	12	4	6	3	2	5	3	2	1	1	3	3	6	5	2	4.9	13.5					
7-Feb	3	4	2	1	A	3	3	4	5	3	4	11	5	10	6	8	15	3	10	5	3	5	4	4	5.4	15.5					
8-Feb	6	3	3	3	A	6	5	10	10	16	18	16	9	7	7	22	19	10	8	8	4	3	2	1	8.7	22.3					
9-Feb	6	2	2	5	A	3	5	5	6	5	13	5	8	6	8	4	7	10	3	4	5	10	8	2	5.7	12.5					
10-Feb	2	2	2	5	A	5	2	4	2	C	C	C	C	C	4	3	4	4	3	5	7	9	2	4	3.8	8.6					
11-Feb	3	8	7	4	A	10	9	11	12	17	10	9	10	10	10	10	10	10	9	5	3	3	2	3	8.0	17.2					
12-Feb	3	3	12	10	A	5	3	4	14	3	4	6	7	8	8	10	7	7	11	11	11	13	13	8	7.9	13.9					
13-Feb	12	9	9	6	A	16	9	8	3	4	3	7	5	3	6	4	4	4	12	12	28	8	3	6	7.8	27.7					
14-Feb	6	4	3	2	A	5	5	3	8	6	6	6	3	4	2	3	4	2	4	7	3	2	3	2	4.0	7.8					
15-Feb	1	6	1	3	A	5	4	4	4	3	3	4	4	3	3	1	5	7	4	5	5	3	3	3	3.6	6.8					
16-Feb	4	5	13	6	A	7	4	12	7	6	7	7	9	5	3	2	3	2	3	2	3	1	5	2	5.2	12.8					
17-Feb	2	5	3	2	A	6	16	20	4	3	4	3	4	3	4	4	4	3	4	3	3	2	2	2	4.5	19.7					
18-Feb	3	6	4	3	A	5	3	3	5	5	3	6	6	5	4	5	8	7	3	4	3	4	5	5	4.6	7.5					
19-Feb	2	4	3	4	A	4	2	3	4	3	4	5	5	4	4	4	4	4	4	3	7	4	3	2	3.8	6.9					
20-Feb	1	1	2	4	A	5	4	7	7	6	8	6	6	7	5	7	8	9	25	11	6	2	4	2	6.2	25.3					
21-Feb	1	3	5	2	A	5	3	4	4	13	6	10	15	16	8	14	23	8	9	5	9	9	33	27	10.0	32.9					
22-Feb	12	9	5	4	A	5	5	6	15	11	12	9	6	2	3	12	3	2	4	5	11	8	4	5	6.9	15.1					
23-Feb	6	5	6	4	A	6	11	6	6	8	8	8	4	2	2	2	6	3	2	7	14	5	8	7	6.0	14.0					
24-Feb	4	12	8	19	A	23	13	53	20	14	58	20	19	28	22	23	21	20	18	19	29	15	11	11	21.0	57.9					
25-Feb	6	2	3	2	A	4	4	4	5	50	7	9	4	5	9	9	3	8	10	4	6	5	7	5	7.4	49.5					
26-Feb	12	2	3	4	A	5	4	3	10	7	6	26	14	6	14	32	14	22	12	10	9	5	6	5	10.0	32.0					
27-Feb	2	8	2	2	A	5	4	4	5	2	6	5	4	2	2	2	2	2	3	2	2	3	3	7	3.5	8.5					
28-Feb	4	3	3	3	A	12	11	12	9	2	1	3	3	1	1	1	1	1	2	2	2	1	2	4	3.6	12.4					
29-Feb	2	2	3	4	A	5	3	3	5	5	5	5	4	4	6	11	17	7	7	3	10	5	4	2	5.3	17.0					
5.8 5.5 5.2 4.6 -- 8.2 6.9 8.9 7.9 9.1 10.5 13.2 12.3 10.8 8.7 9.5 9.0 7.0 7.8 7.1 9.6 6.8 6.1 6.0																									Diurnal Average						
24.6 16.3 16.6 19.5 -- 41.0 19.4 53.3 20.2 49.5 57.9 62.9 85.8 77.5 77.9 53.4 46.6 22.1 29.5 19.0 57.4 27.6 32.9 27.5																									Diurnal Maximum						
C - Calibration A - Automated Daily Zero Span																															

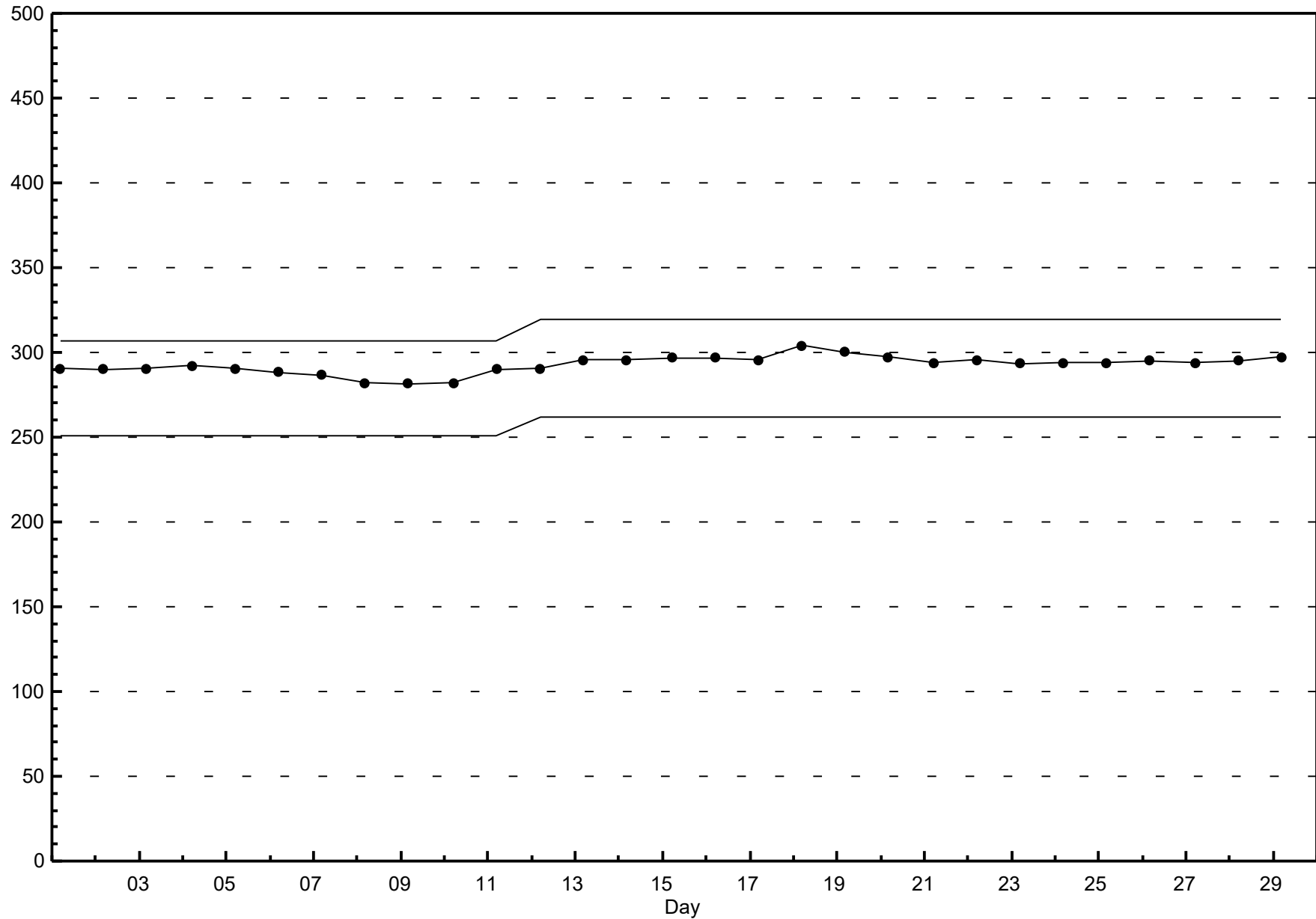
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - February 2016



Span Responses

Oxides of Nitrogen (NO_x)
Beaverlodge - February 2016

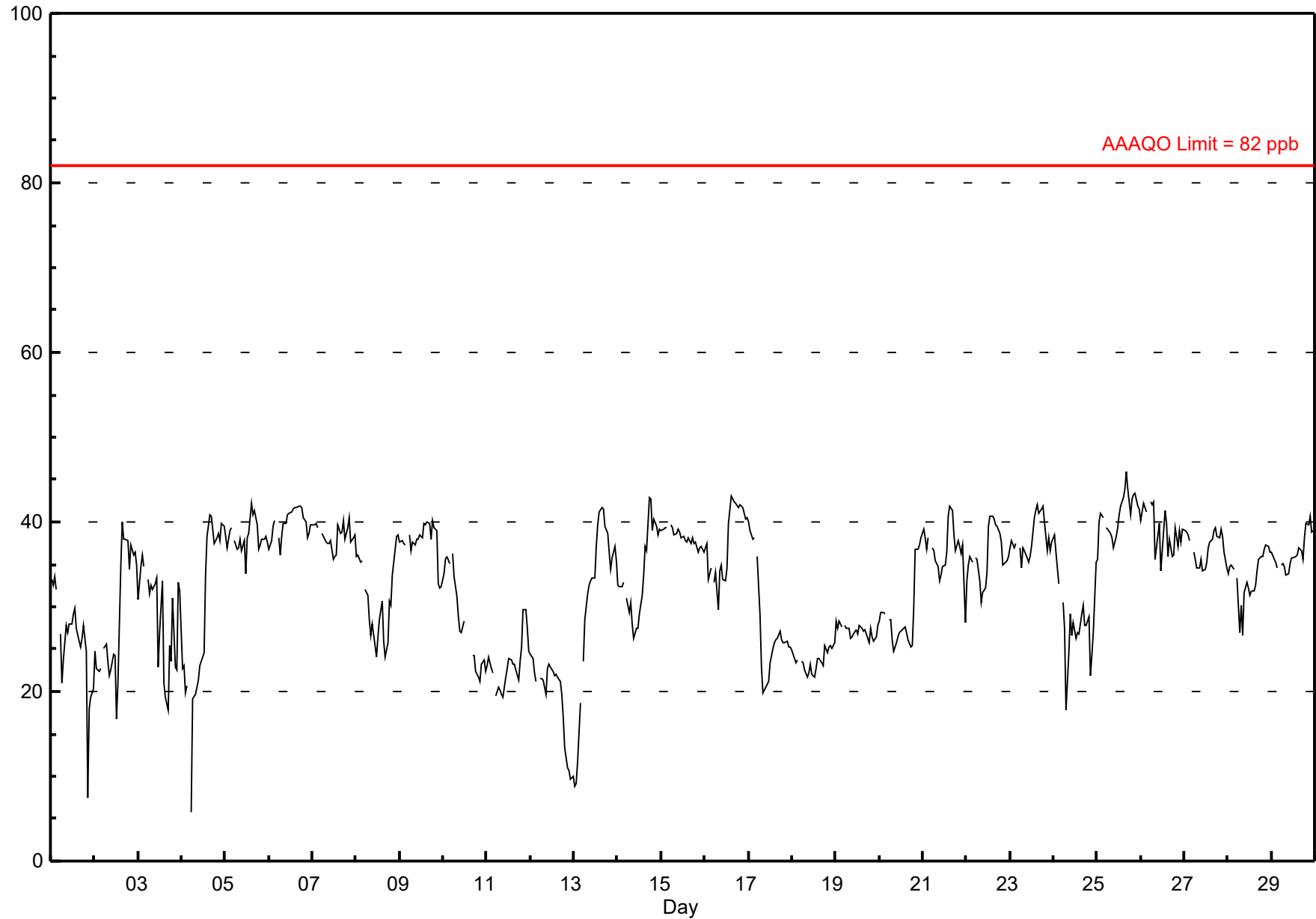


Beaverlodge - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 45.9 ppb on Feb 25 17:00 Maximum Daily Average: 40.9 ppb on Feb 25																								Hours in Service: 696 Hours of Data: 663 Hours of Missing Data: 33 Hours of Calibration: 33 Percent Operational Time: 100.0		
Minimum Value: 6 ppb on Feb 4 06:00 Maximum Diurnal Average: 34.4 ppb at hour 16 Monthly Average: 32.55 ppb												Minimum Daily Average: 19.4 ppb on Feb 12 Minimum Diurnal Average: 30.0 ppb at hour 9 Percentiles: P ₁ = 10.5 P ₁₀ = 22.6 Q ₁ = 26.8 Median = 34.9 Q ₃ = 38.2 P ₉₀ = 40.2 P ₉₉ = 42.9														
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-Feb	33	33	34	32	A	27	21	24	28	27	28	28	29	30	27	26	25	26	28	25	7	18	19	20	25.9	33.6
2-Feb	25	23	22	23	A	25	26	24	22	23	24	24	17	21	35	40	38	38	38	34	37	36	37	35	28.9	40.1
3-Feb	31	35	36	35	A	33	31	33	32	33	34	23	27	33	21	19	18	25	24	31	23	23	33	32	28.8	36.1
4-Feb	23	23	20	21	A	6	19	20	21	21	23	24	25	34	38	41	41	39	37	38	39	38	40	39	29.1	40.9
5-Feb	38	37	39	39	A	38	37	37	38	37	38	34	38	39	42	41	41	40	37	37	38	38	38	38	38.2	42.3
6-Feb	37	38	39	40	A	38	36	38	40	40	41	41	41	42	42	42	42	42	42	41	40	38	39	40	39.9	41.9
7-Feb	40	40	40	39	A	39	38	38	37	38	38	36	36	36	40	39	39	40	38	39	41	38	38	38	38.4	40.6
8-Feb	36	36	35	36	A	32	31	29	27	28	25	24	26	29	31	26	24	26	31	30	34	37	38	38	30.8	38.4
9-Feb	38	38	38	37	A	39	37	38	37	38	38	39	38	40	40	40	40	38	40	39	39	33	32	32	37.7	40.2
10-Feb	34	36	36	35	A	36	33	31	29	27	27	28	C	C	C	C	24	24	22	22	21	23	24	22	28.2	36.2
11-Feb	23	24	23	22	A	20	20	20	20	19	22	23	24	24	23	23	22	21	24	25	30	30	28	25	23.2	29.7
12-Feb	24	24	22	21	A	21	22	21	20	23	23	23	22	22	22	22	21	20	17	13	11	11	10	10	19.4	24.5
13-Feb	9	9	12	19	A	23	28	31	33	33	33	33	37	40	41	42	41	39	39	36	34	36	37	35	31.4	41.7
14-Feb	33	32	32	33	A	31	29	30	28	26	27	27	29	31	34	37	37	43	43	39	40	39	38	39	33.9	42.8
15-Feb	39	39	39	39	A	40	39	38	39	39	39	38	38	38	38	38	37	38	37	38	36	37	37	36	38.2	39.7
16-Feb	37	37	33	35	A	33	34	30	34	35	33	33	35	40	43	43	42	42	42	42	42	40	41	37.7	43.1	
17-Feb	40	39	38	38	A	36	29	23	20	20	21	21	23	25	26	26	26	27	26	26	26	25	25	27.5	40.1	
18-Feb	25	24	23	24	A	24	23	23	22	22	23	22	22	23	24	24	23	23	25	25	25	25	25	26	23.7	25.8
19-Feb	28	27	28	28	A	28	27	27	26	26	27	27	27	28	27	27	27	27	26	28	26	26	27	28	27.2	28.4
20-Feb	28	29	29	29	A	28	28	26	25	26	26	27	27	27	28	27	26	25	25	30	37	37	37	38	29.1	38.1
21-Feb	39	38	37	38	A	37	37	35	35	33	34	35	35	37	41	42	41	38	37	38	37	36	37	28	36.7	41.9
22-Feb	33	35	36	35	A	36	36	33	30	32	32	34	39	41	41	40	40	39	39	38	35	35	35	36	36.1	40.6
23-Feb	37	38	37	37	A	37	35	37	37	36	35	36	37	40	41	42	41	42	42	40	37	38	37	38	38.1	42.1
24-Feb	39	36	35	33	A	30	28	18	25	29	27	28	26	27	27	29	30	28	28	29	22	24	27	35	28.6	38.5
25-Feb	36	40	41	41	A	39	39	39	38	37	38	39	41	42	43	44	46	44	41	43	43	43	42	42	40.9	45.9
26-Feb	40	42	42	41	A	42	42	42	36	38	40	34	37	41	40	36	38	36	36	39	37	39	38	39	39.0	42.3
27-Feb	39	39	39	38	A	36	36	35	35	36	34	34	35	37	38	38	39	39	38	38	39	38	36	35	37.0	39.3
28-Feb	34	35	35	34	A	33	27	30	27	32	33	32	31	32	32	33	34	36	36	36	37	37	37	36	33.4	37.3
29-Feb	36	36	35	35	A	35	35	35	34	34	35	36	36	36	36	37	37	36	38	40	40	41	39	39	36.5	40.6
																								Diurnal Average		
																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																										

Hourly Averages

Ozone (O₃) - ppb
Beaverlodge - February 2016



Hourly Maximums

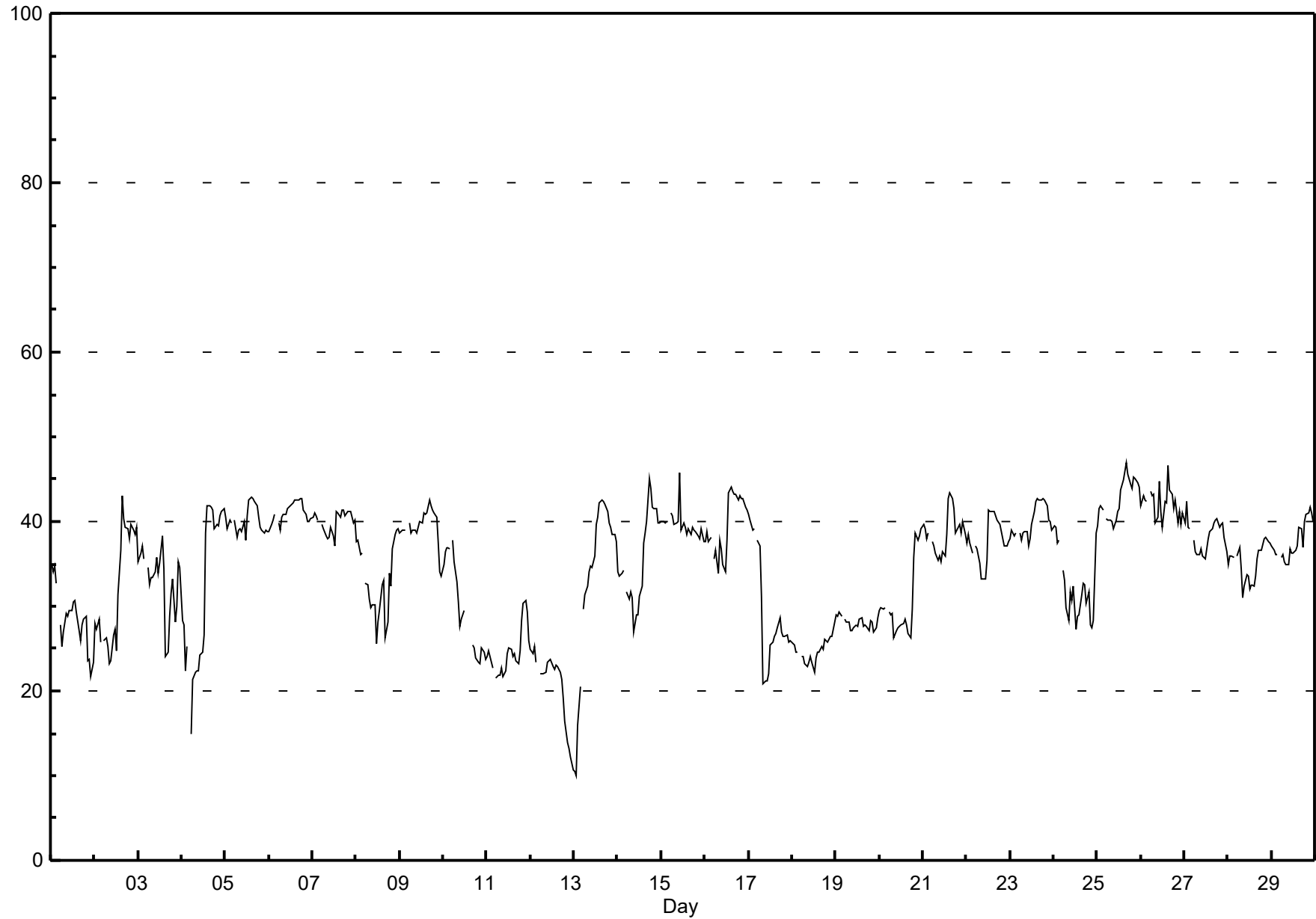
Ozone (O₃) - ppb

Beaverlodge - February 2016

Maximum Value: 47.0 ppb on Feb 25 17:00																				Maximum Daily Average: 42.7 ppb on Feb 25					Hours in Service: 696	
Minimum Value: 10 ppb on Feb 13 02:00																				Minimum Daily Average: 20.7 ppb on Feb 12					Hours of Data: 663	
Maximum Diurnal Average: 36.3 ppb at hour 16																				Minimum Diurnal Average: 32.0 ppb at hour 9					Hours of Missing Data: 33	
Monthly Average: 34.47 ppb																				Percentiles: P ₁ = 15.5 P ₁₀ = 24.2 Q ₁ = 28.4 Median = 36.8 Q ₃ = 39.9 P ₉₀ = 41.9 P ₉₉ = 45.1					Hours of Calibration: 33	
																				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-Feb	35	34	35	33	A	28	25	27	29	29	30	29	30	31	29	27	26	28	29	29	24	24	22	23	28.4	34.8
2-Feb	28	27	28	26	A	26	26	25	23	24	27	27	25	31	37	43	40	39	39	38	40	39	38	39	32.0	43.1
3-Feb	35	36	37	36	A	35	33	33	33	34	36	34	35	38	34	24	25	29	31	33	28	30	35	35	33.0	38.3
4-Feb	28	28	22	25	A	15	21	22	22	22	24	25	27	39	42	42	42	41	39	40	39	41	41	41	31.7	41.9
5-Feb	40	39	40	40	A	40	38	39	39	39	40	38	41	43	43	43	42	42	40	39	39	39	39	39	40.0	43.0
6-Feb	39	40	40	41	A	40	39	40	41	41	42	42	42	42	43	43	43	43	43	41	41	40	40	40	41.0	42.7
7-Feb	40	41	41	40	A	40	39	38	38	38	39	38	37	41	41	41	41	41	41	41	41	41	40	40	40.0	41.3
8-Feb	38	38	36	36	A	33	33	31	30	30	30	26	28	29	32	33	26	28	34	32	37	39	39	39	32.9	39.2
9-Feb	39	39	39	39	A	40	39	39	39	39	39	40	40	41	41	41	43	42	41	41	41	37	34	34	39.4	42.6
10-Feb	35	36	37	37	A	38	35	33	31	28	29	29	C	C	C	C	25	25	24	23	23	25	24	24	29.6	37.8
11-Feb	24	25	23	23	A	22	22	22	23	22	22	24	25	25	24	24	23	23	25	28	30	31	29	26	24.6	30.6
12-Feb	25	24	25	23	A	22	22	22	22	23	24	24	23	22	23	23	22	21	19	16	14	13	12	11	20.7	25.2
13-Feb	11	10	16	20	A	30	31	32	34	35	35	36	40	40	42	42	42	42	41	40	39	39	39	38	33.7	42.5
14-Feb	34	34	34	34	A	32	31	32	31	27	29	29	31	32	37	39	40	45	44	42	41	42	40	40	35.6	45.0
15-Feb	40	40	40	40	A	41	41	40	40	40	46	39	40	39	38	39	38	39	39	39	38	38	39	38	39.6	45.8
16-Feb	38	39	38	38	A	36	37	34	38	37	35	34	38	43	44	44	43	43	43	43	43	43	42	41	39.6	44.0
17-Feb	41	40	39	39	A	38	37	31	21	21	21	22	25	26	26	27	28	29	27	26	26	27	26	26	29.1	40.9
18-Feb	26	26	25	25	A	24	24	23	23	23	24	23	22	24	25	25	25	25	26	26	26	26	26	28	24.8	28.2
19-Feb	29	29	29	29	A	28	28	28	27	27	28	28	28	28	29	28	28	28	27	28	28	27	28	29	28.0	29.3
20-Feb	29	30	30	30	A	29	29	29	26	27	27	28	28	28	28	28	27	26	30	36	39	38	38	39	30.4	39.2
21-Feb	40	39	38	39	A	38	37	36	36	36	35	36	36	39	43	43	43	42	39	39	40	39	40	39	38.7	43.4
22-Feb	37	39	37	36	A	37	37	35	33	33	33	35	41	41	41	41	41	40	40	39	38	37	37	38	37.7	41.4
23-Feb	38	39	38	39	A	39	38	39	39	39	37	38	40	41	42	43	43	43	43	43	42	40	40	39	40.0	42.8
24-Feb	39	39	37	38	A	34	33	30	28	32	31	32	27	29	29	31	33	33	30	32	28	27	28	39	32.2	39.4
25-Feb	40	42	42	41	A	40	40	40	40	39	40	41	41	44	45	46	47	46	44	44	45	45	45	44	42.7	47.0
26-Feb	42	43	42	42	A	43	43	43	40	41	45	41	39	42	42	47	44	43	42	42	40	41	40	41	42.1	46.7
27-Feb	40	42	39	39	A	38	36	36	36	37	36	36	37	38	39	39	40	40	40	39	40	40	38	36	38.4	42.4
28-Feb	35	36	36	36	A	36	37	34	31	32	34	34	32	33	32	34	36	37	37	37	38	38	38	38	35.1	38.2
29-Feb	37	37	36	36	A	36	36	35	35	35	37	36	36	37	37	39	39	37	40	41	41	42	41	40	37.7	41.7
34.5 34.8 34.5 34.5 -- 33.6 33.3 32.8 32.0 32.0 32.9 32.6 33.4 35.3 36.1 36.3 35.7 35.8 35.7 35.8 35.5 35.4 35.1 35.2																									Diurnal Average	
41.9 43.1 42.5 42.3 -- 43.5 43.1 43.1 40.8 40.9 45.8 41.7 42.0 43.7 44.9 46.7 47.0 45.6 44.4 44.0 45.3 45.1 44.6 44.1																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

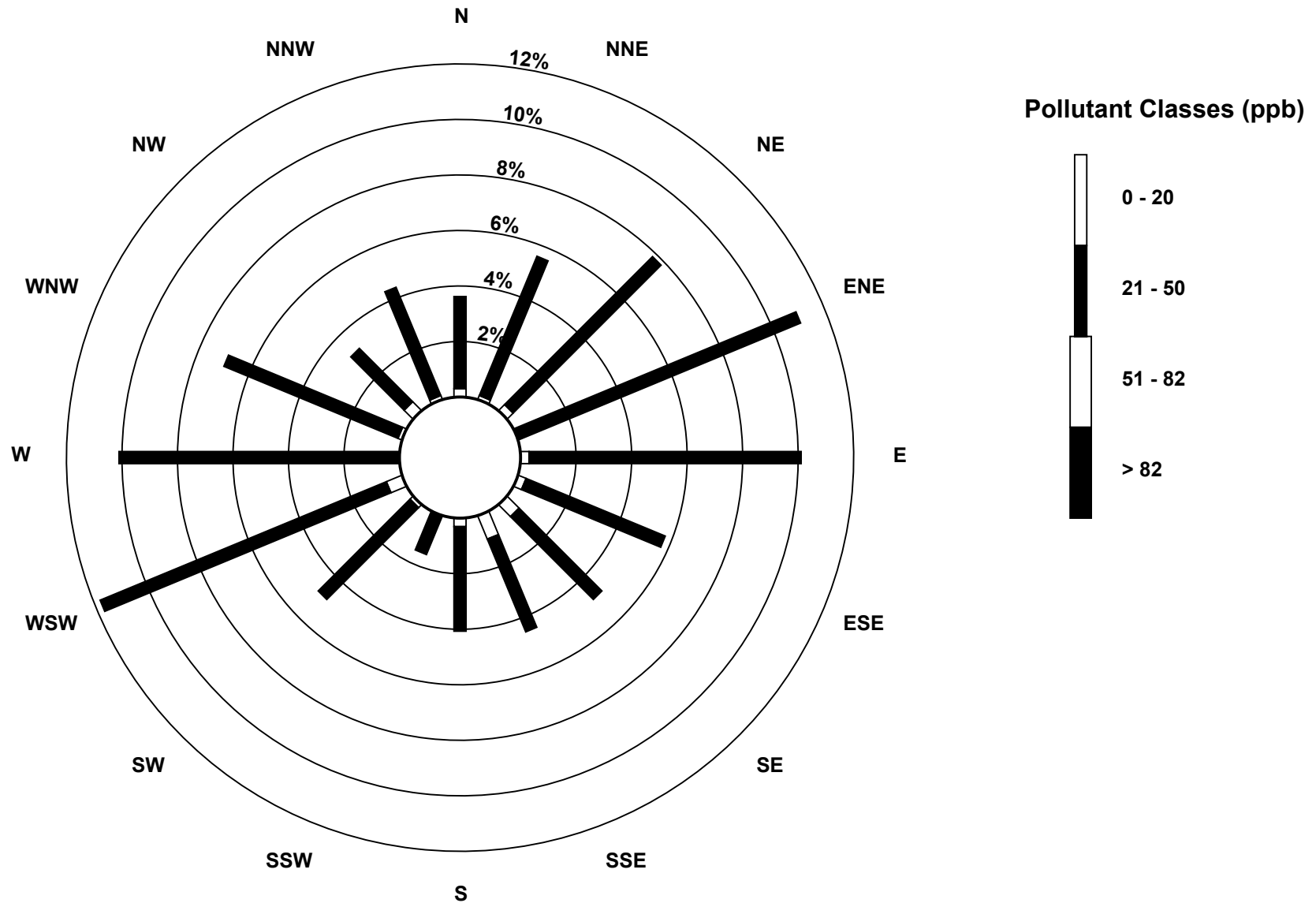
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - February 2016



Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - February 2016



Eight Hour Running Averages

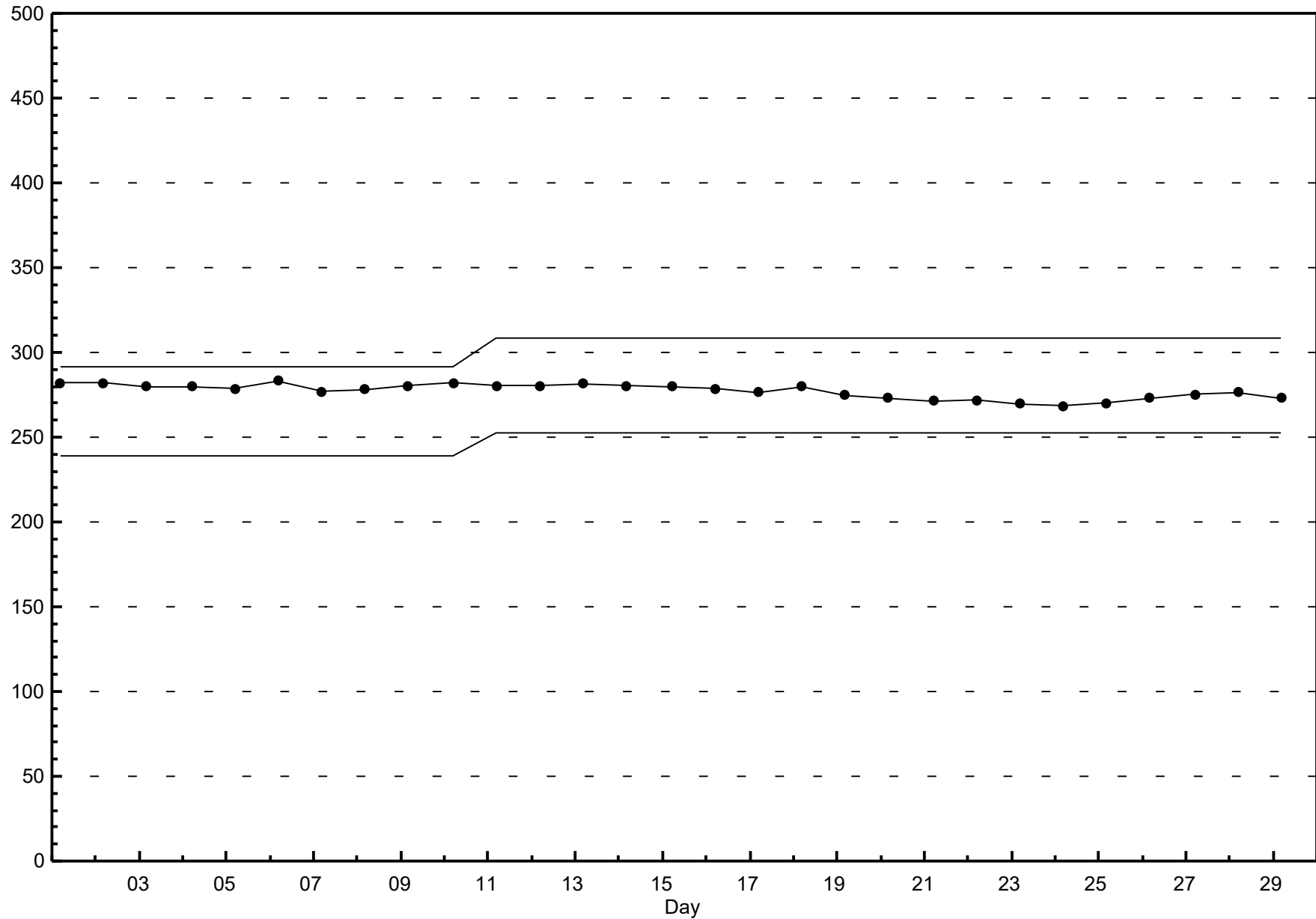
Ozone (O₃) - ppb

Beaverlodge - February 2016

Maximum Value: 43.4 ppb on Feb 25 22:00																								Hours in Service: 696	
Minimum Value: 10.6 ppb on Feb 13 03:00																								Hours of Data: 689	
																								Hours of Missing Data: 7	
Percentiles: P ₁ = 15.4 P ₁₀ = 22.8 Q ₁ = 27.0 Median = 34.9 Q ₃ = 38.0 P ₉₀ = 39.3 P ₉₉ = 42.1																								Hours of Calibration: 7	
																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																							Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	33	33	33	33	33	32	30	29	28	27	27	26	26	27	28	28	28	27	27	27	24	23	22	21	33.3
2-Feb	21	21	20	20	21	22	23	24	23	23	24	24	23	22	24	26	28	30	31	33	35	37	37	37	37.3
3-Feb	36	35	35	35	35	34	34	33	34	33	33	31	31	31	29	28	26	25	24	25	24	23	24	26	35.7
4-Feb	27	26	26	25	25	22	20	19	18	18	19	19	20	23	26	28	31	33	35	37	38	39	39	39	39.1
5-Feb	39	38	39	39	39	39	38	38	38	38	38	37	37	37	38	38	39	39	39	39	39	39	39	38	39.4
6-Feb	38	38	38	38	38	38	38	38	39	39	39	39	39	40	41	41	41	41	42	42	41	41	41	40	41.6
7-Feb	40	40	40	39	39	39	39	39	39	38	38	38	37	37	37	37	38	38	38	38	39	39	39	39	40.0
8-Feb	39	38	38	37	37	36	35	34	32	31	30	28	28	27	27	27	26	27	28	29	30	31	32	37	38.5
9-Feb	34	35	36	37	38	38	38	38	38	38	38	38	38	38	38	39	39	39	39	39	39	39	38	37	39.5
10-Feb	36	36	35	35	34	35	35	34	34	33	31	30	30	29	N	N	N	N	N	N	N	23	23	23	36.0
11-Feb	23	23	23	23	23	22	22	22	21	21	20	20	21	21	22	22	23	23	23	23	24	25	25	26	25.5
12-Feb	26	26	26	25	25	24	23	22	22	21	22	22	22	22	22	22	22	22	21	20	18	17	16	14	26.1
13-Feb	13	11	11	11	11	13	16	19	22	26	29	31	32	34	35	37	38	38	39	39	39	39	38	37	39.5
14-Feb	36	35	35	34	34	33	32	32	31	30	29	29	29	29	29	30	31	33	35	37	38	39	40	40	39.8
15-Feb	40	40	39	39	39	39	39	39	39	39	39	39	39	39	38	38	38	38	38	38	38	37	37	37	40.1
16-Feb	37	37	36	36	36	36	35	34	34	33	33	33	33	34	35	37	38	39	40	41	42	42	42	42	42.2
17-Feb	41	41	40	40	40	39	37	35	32	29	27	24	24	23	22	23	24	24	25	26	26	26	26	26	41.3
18-Feb	26	25	25	25	25	24	24	24	23	23	23	23	22	23	23	23	23	23	23	24	24	24	25	25	25.8
19-Feb	25	26	26	27	27	27	28	28	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27.8
20-Feb	27	27	28	28	28	28	29	28	28	27	27	27	27	27	27	27	27	27	27	27	28	29	31	32	32.0
21-Feb	34	35	37	38	38	38	38	37	37	36	36	35	35	35	35	36	37	38	38	39	39	39	38	37	38.8
22-Feb	36	35	35	35	34	34	34	35	34	34	33	33	34	35	35	36	37	38	39	40	39	38	38	37	39.6
23-Feb	37	37	36	36	36	37	37	37	37	36	36	36	36	37	37	38	39	39	40	41	41	40	40	39	40.7
24-Feb	39	38	37	36	36	35	34	31	29	28	27	26	26	26	26	27	28	28	28	28	27	27	27	28	38.9
25-Feb	29	30	32	33	35	37	39	39	40	39	39	39	39	39	40	40	41	42	42	43	43	43	43	43	43.4
26-Feb	42	42	42	42	42	42	42	42	41	41	40	39	39	39	39	38	38	38	37	38	38	38	37	38	42.2
27-Feb	38	38	39	38	39	38	38	37	37	36	36	35	35	35	35	36	36	37	37	38	38	38	38	38	38.6
28-Feb	37	37	36	36	35	35	33	33	32	31	31	31	31	30	31	31	32	33	33	34	34	35	36	36	37.2
29-Feb	36	36	36	36	36	36	35	35	35	35	35	35	35	35	35	35	36	36	36	37	37	38	38	39	38.5
42.2 42.0 42.1 41.9 41.7 41.5 41.6 41.7 41.1 40.5 40.3 39.3 39.4 39.8 40.5 41.0 41.3 42.1 42.4 42.9 43.2 43.4 43.2 42.9																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Beaverlodge - February 2016

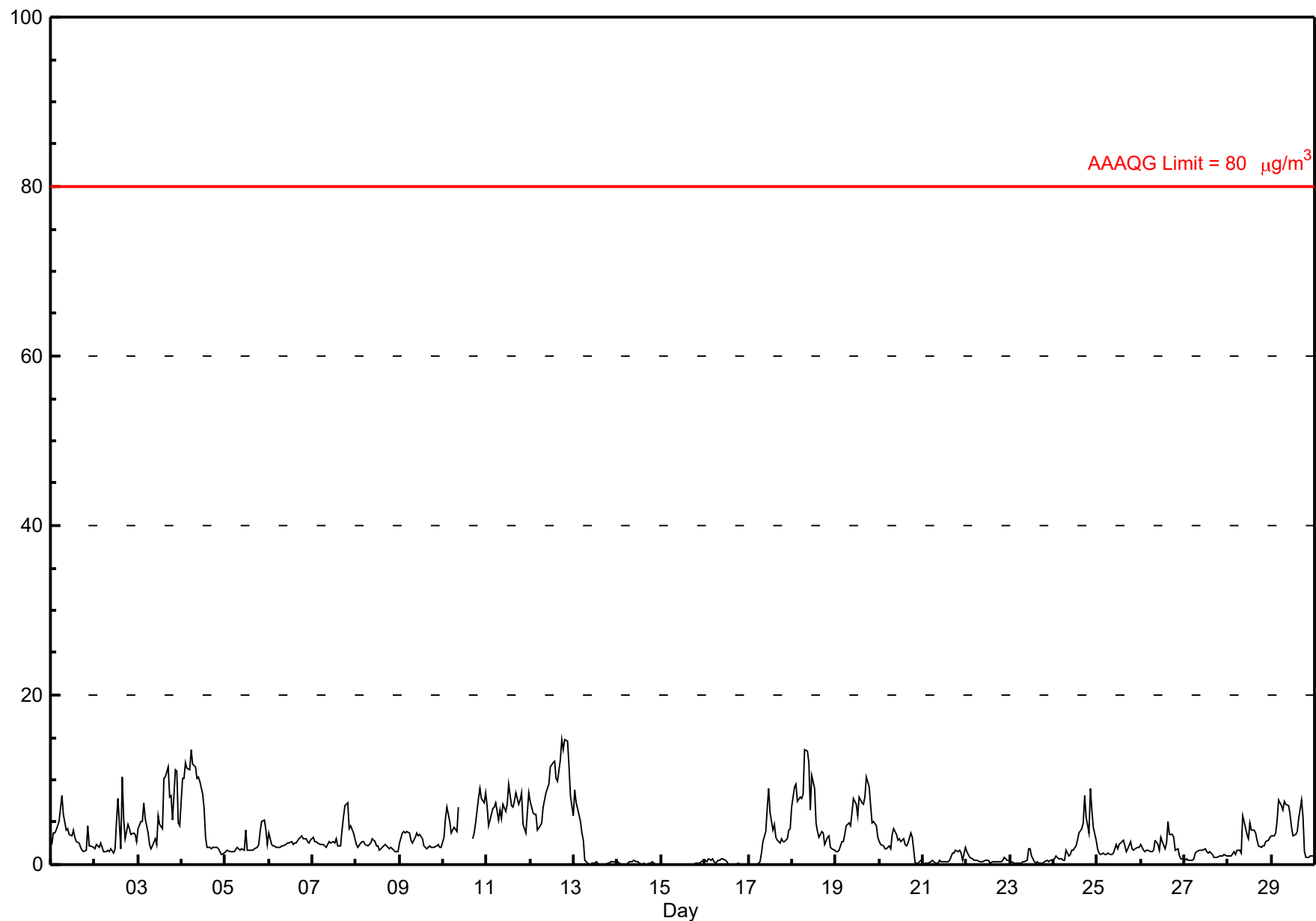


Hourly Averages

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

Beaverlodge - February 2016

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 14.7 µg/m³ on Feb 12 20:00 Maximum Daily Average: 9.3 µg/m³ on Feb 12																								Hours in Service: 696 Hours of Data: 689		
Minimum Value: 0 µg/m³ on Feb 13 16:00 Maximum Diurnal Average: 3.7 µg/m³ at hour 12 Monthly Average: 3.08 µg/m³ Minimum Daily Average: 0.1 µg/m³ on Feb 15 Minimum Diurnal Average: 2.4 µg/m³ at hour 24 Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.8 Median = 2.2 Q ₃ = 4.1 P ₉₀ = 7.4 P ₉₉ = 13.3																								Hours of Missing Data: 7 Hours of Calibration: 7 Percent Operational Time: 100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	2	4	4	4	5	7	8	6	4	4	4	3	4	3	3	2	2	2	2	2	5	2	2	2	3.6	8.1
2-Feb	2	2	2	2	2	1	2	2	2	2	1	2	5	8	2	10	5	3	5	4	4	4	4	3	3.3	10.4
3-Feb	4	5	5	7	5	4	2	2	2	3	2	6	5	4	10	10	12	8	8	5	11	11	5	5	6.0	11.6
4-Feb	10	10	12	11	11	14	12	12	10	10	10	8	7	3	2	2	2	2	2	2	2	2	1	1	6.6	13.6
5-Feb	1	2	1	2	1	2	2	2	2	2	2	4	2	2	2	2	2	2	2	4	5	5	4	2	2.3	5.3
6-Feb	4	2	2	2	2	2	2	2	2	2	2	3	3	2	2	3	3	3	3	3	3	3	3	3	2.6	3.7
7-Feb	3	3	3	3	2	2	2	2	2	3	2	3	3	3	2	2	4	6	7	7	4	5	4	3	3.3	7.3
8-Feb	2	2	2	3	3	2	2	2	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	1	2.2	3.0
9-Feb	3	4	4	4	4	4	3	2	3	4	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2.8	3.8
10-Feb	3	5	7	5	4	4	4	4	7	C	C	C	C	C	C	C	3	4	5	8	9	8	7	8	--	9.0
11-Feb	7	5	6	7	7	7	5	7	5	7	6	7	9	7	7	7	9	7	8	8	5	4	6	9	6.7	9.5
12-Feb	8	6	6	6	4	5	5	7	8	9	9	11	12	12	10	10	12	15	14	15	15	12	8	6	9.3	14.7
13-Feb	9	7	7	5	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.6	8.8
14-Feb	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
15-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
16-Feb	1	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
17-Feb	0	0	0	0	0	0	0	1	3	4	7	9	6	4	5	3	3	3	3	3	3	3	4	4	2.8	9.1
18-Feb	7	9	9	7	8	8	8	13	13	12	6	10	9	5	4	3	4	4	2	3	3	2	2	2	6.5	13.5
19-Feb	2	1	2	3	3	4	5	5	4	6	8	7	6	8	7	7	8	10	9	7	5	5	5	3	5.4	10.4
20-Feb	3	2	2	2	2	2	2	4	4	3	3	3	3	3	2	2	2	4	3	2	0	0	0	0	2.3	4.2
21-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	1	2	1	1	2	0.7	2.1
22-Feb	2	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	0.5	1.6
23-Feb	0	0	0	0	0	0	0	0	0	1	2	2	1	0	0	0	0	0	0	0	1	0	1	1	0.5	1.8
24-Feb	1	1	1	1	1	0	1	2	1	1	2	2	2	3	4	4	5	8	6	4	9	6	4	3	2.9	9.0
25-Feb	2	1	1	1	1	1	1	1	1	1	2	2	2	3	3	2	1	2	3	2	2	2	2	2	1.8	2.8
26-Feb	2	2	2	2	2	1	2	2	3	2	2	3	3	2	3	5	4	4	3	2	2	1	1	1	2.2	5.0
27-Feb	0	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.1	1.8
28-Feb	1	1	1	2	1	2	2	1	6	5	4	3	5	4	4	4	3	2	2	2	2	3	3	3	2.7	5.7
29-Feb	3	3	4	5	8	7	6	7	7	7	6	4	3	4	4	5	8	6	2	1	1	1	1	1	4.4	7.7
2.8 2.8 2.9 2.9 2.8 2.9 2.8 3.1 3.4 3.4 3.2 3.7 3.5 3.1 2.9 3.3 3.4 3.4 3.3 3.2 3.3 3.0 2.5 2.4																								Diurnal Average		
10.2 10.2 12.0 11.3 11.2 13.6 11.8 13.5 13.4 12.0 9.9 11.5 12.1 12.3 10.2 10.4 12.3 14.7 13.6 14.7 14.6 11.7 8.1 8.5																								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 Maximums

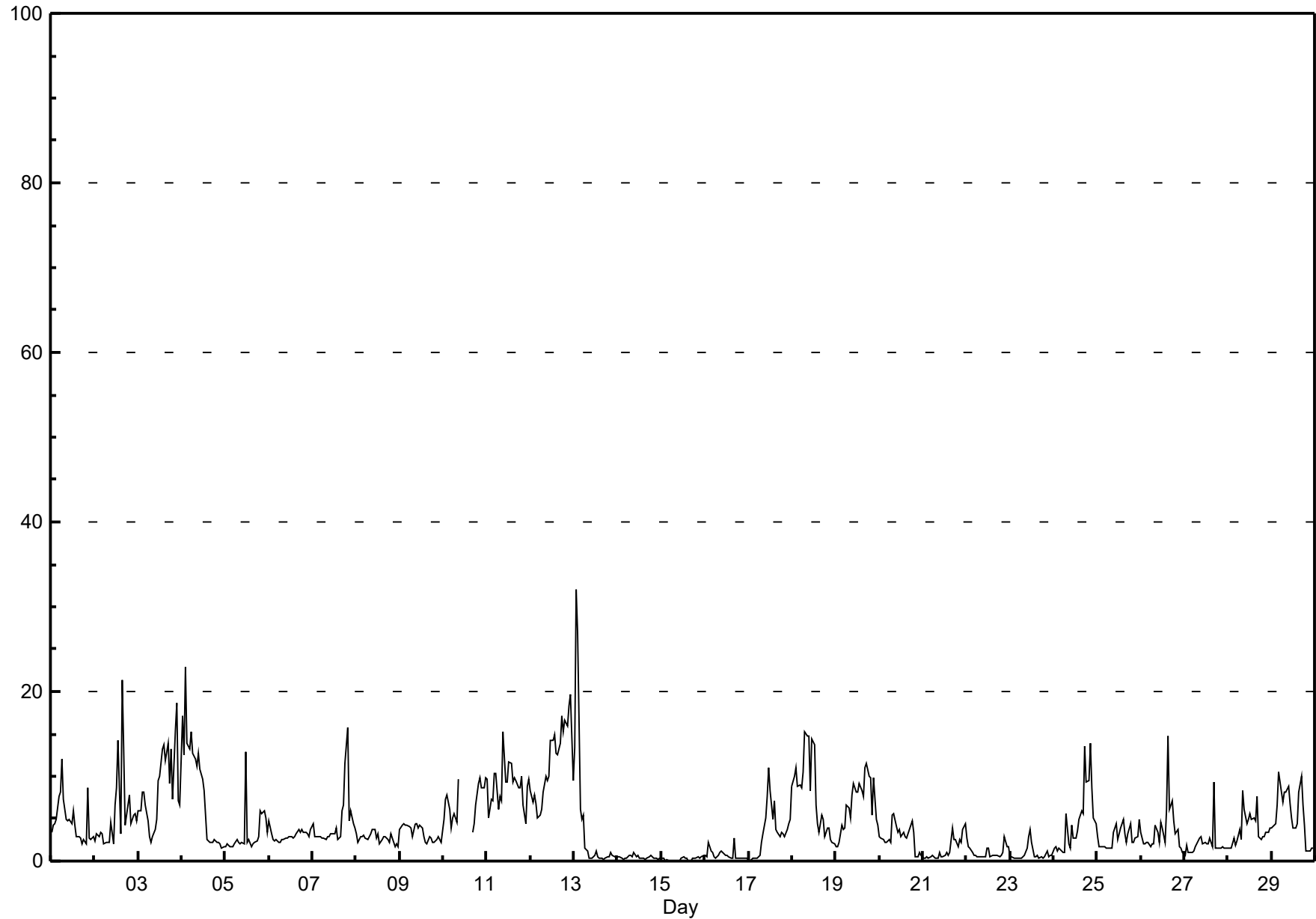
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Beaverlodge - February 2016

Maximum Value: 32.1 μg/m³ on Feb 13 02:00																				Maximum Daily Average: 11.6 μg/m³ on Feb 12					Hours in Service: 696				
Minimum Value: 0 μg/m³ on Feb 15 03:00																				Minimum Daily Average: 0.2 μg/m³ on Feb 15					Hours of Data: 689				
Maximum Diurnal Average: 5.3 μg/m³ at hour 12																				Minimum Diurnal Average: 3.4 μg/m³ at hour 24					Hours of Missing Data: 7				
Monthly Average: 4.23 μg/m³																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.5 Q ₁ = 1.5 Median = 3.0 Q ₃ = 5.7 P ₉₀ = 9.8 P ₉₉ = 18.3					Hours of Calibration: 7				
																									Percent Operational Time: 100.0				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Feb	3	4	4	5	8	8	12	7	5	5	5	4	6	4	3	3	3	2	2	2	9	3	3	3	4.7	12.0			
2-Feb	2	3	3	3	3	2	2	2	2	5	2	7	9	14	3	21	13	4	7	8	4	5	6	5	5.7	21.3			
3-Feb	6	6	8	8	7	5	3	2	3	4	5	10	10	13	14	12	14	9	13	7	15	19	7	7	8.6	18.6			
4-Feb	17	13	23	14	13	15	13	12	11	13	11	10	8	5	2	2	2	2	2	2	2	2	1	2	8.3	22.8			
5-Feb	2	2	2	2	2	2	3	2	2	2	2	13	2	3	2	2	2	2	3	6	6	6	5	3	3.2	13.0			
6-Feb	5	3	2	2	2	2	2	2	3	3	3	3	3	3	3	3	4	3	4	3	3	3	3	4	3.0	4.7			
7-Feb	4	3	3	3	3	3	3	2	3	3	3	3	3	4	3	3	6	7	12	16	5	6	4	4	4.5	15.7			
8-Feb	3	2	3	3	3	3	3	3	3	4	4	3	3	2	3	3	3	3	2	3	3	2	2	2	2.7	3.7			
9-Feb	4	4	4	4	4	4	4	3	4	4	4	4	4	3	2	2	3	3	2	2	3	3	3	2	3.3	4.5			
10-Feb	5	7	8	6	4	5	6	5	10	C	C	C	C	C	C	C	3	4	7	9	10	9	9	10	--	9.8			
11-Feb	10	5	7	7	10	10	6	8	7	15	9	9	12	12	9	10	10	9	9	10	7	4	9	10	8.9	15.2			
12-Feb	8	7	8	7	5	5	6	8	10	10	10	14	14	15	13	13	14	17	15	17	16	18	20	10	11.6	19.6			
13-Feb	13	32	27	6	5	5	1	1	0	0	0	1	1	1	0	0	0	0	0	0	1	1	1	0	4.1	32.1			
14-Feb	0	1	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0.4	1.0			
15-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	0.8			
16-Feb	1	0	2	1	1	1	0	1	1	1	1	1	1	0	0	0	3	0	0	0	0	0	0	0	0.7	2.7			
17-Feb	0	0	0	0	0	0	1	2	3	5	8	11	8	5	7	4	3	3	3	3	3	4	4	5	3.5	11.0			
18-Feb	9	10	11	9	9	9	11	15	15	15	8	14	14	7	4	3	5	5	3	4	4	2	2	2	7.9	15.2			
19-Feb	2	2	2	4	4	4	7	6	5	8	9	8	8	9	8	8	11	12	10	10	5	10	5	4	6.7	11.5			
20-Feb	3	3	2	2	2	3	2	5	6	4	3	4	3	3	3	3	3	4	5	3	0	0	1	1	2.9	5.6			
21-Feb	0	0	0	0	1	1	0	0	0	1	0	0	1	1	1	1	4	2	2	2	3	2	4	4	1.3	4.4			
22-Feb	3	2	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	0	1	1	3	2	2	1.1	3.0			
23-Feb	1	1	0	0	0	0	0	0	1	1	3	4	2	0	0	1	0	0	0	0	1	1	1	1	0.9	3.7			
24-Feb	1	2	1	1	1	1	1	6	2	1	4	3	3	3	5	6	6	13	9	10	14	9	5	4	4.7	14.0			
25-Feb	3	2	2	2	2	1	2	1	1	3	4	2	3	4	5	3	2	3	4	2	2	3	3	5	2.8	4.9			
26-Feb	3	2	2	2	2	2	2	2	4	3	2	5	4	2	6	15	6	7	5	3	4	2	1	1	3.7	14.7			
27-Feb	1	2	1	1	1	1	2	2	3	3	2	2	2	2	3	2	9	1	1	1	1	2	1	1	2.0	9.3			
28-Feb	1	1	1	3	2	2	4	2	8	6	4	5	6	5	5	5	8	3	2	3	3	3	3	4	3.8	8.3			
29-Feb	4	4	4	7	11	8	7	8	8	9	7	5	4	4	4	8	10	7	4	1	1	1	1	1	5.4	10.6			
4.0 4.2 4.7 3.6 3.7 3.6 3.5 3.9 4.2 4.6 4.1 5.3 4.9 4.5 3.9 4.7 5.1 4.4 4.5 4.5 4.4 4.2 3.7 3.4																									Diurnal Average				
17.1 32.1 27.0 14.0 13.2 15.2 12.7 15.2 14.7 15.2 10.8 14.4 14.3 14.9 13.7 21.3 14.0 17.1 15.2 16.7 15.9 18.6 19.6 9.8																									Diurnal Maximum				
C - Calibration																													

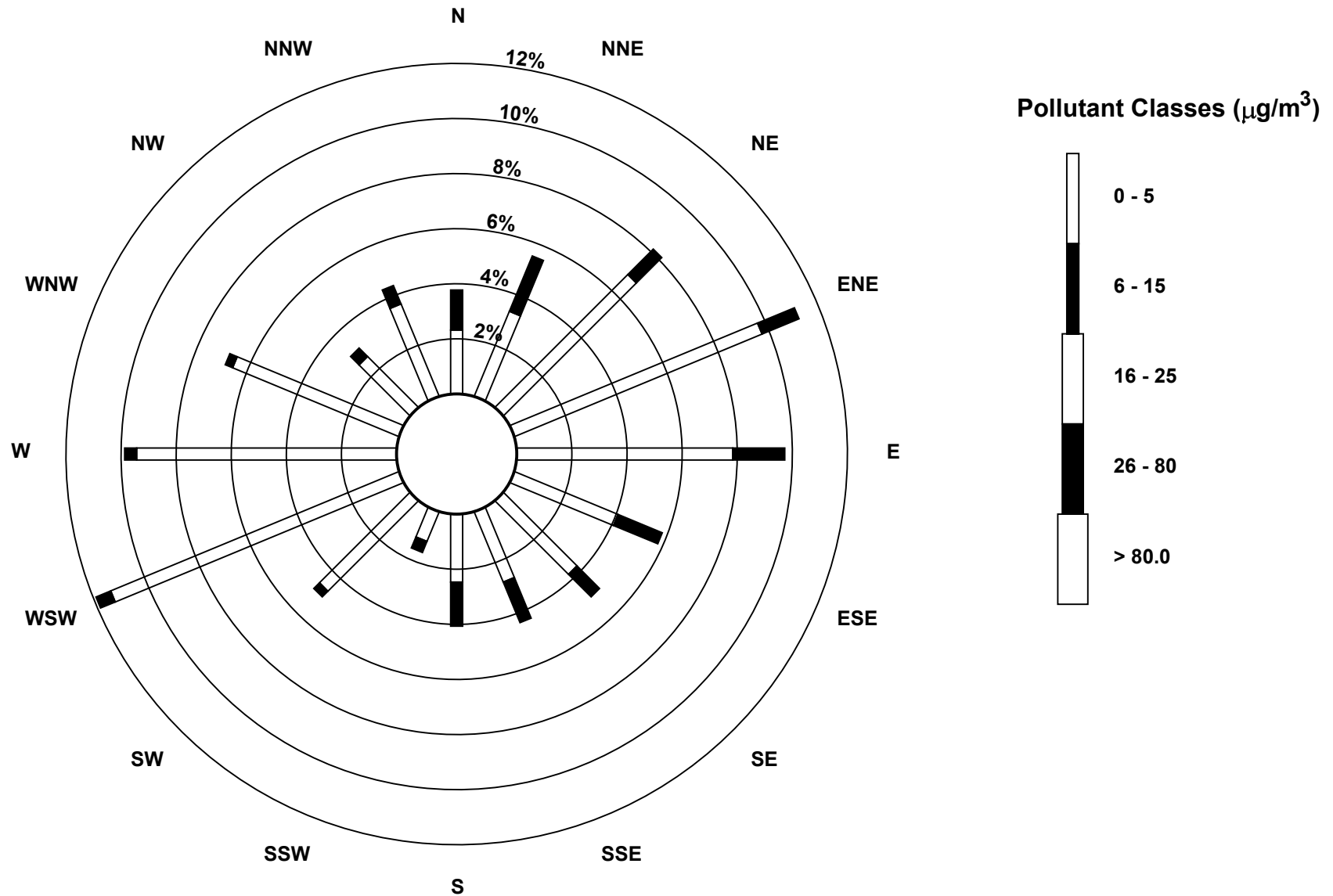
Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Beaverlodge - February 2016



Pollutant Rose

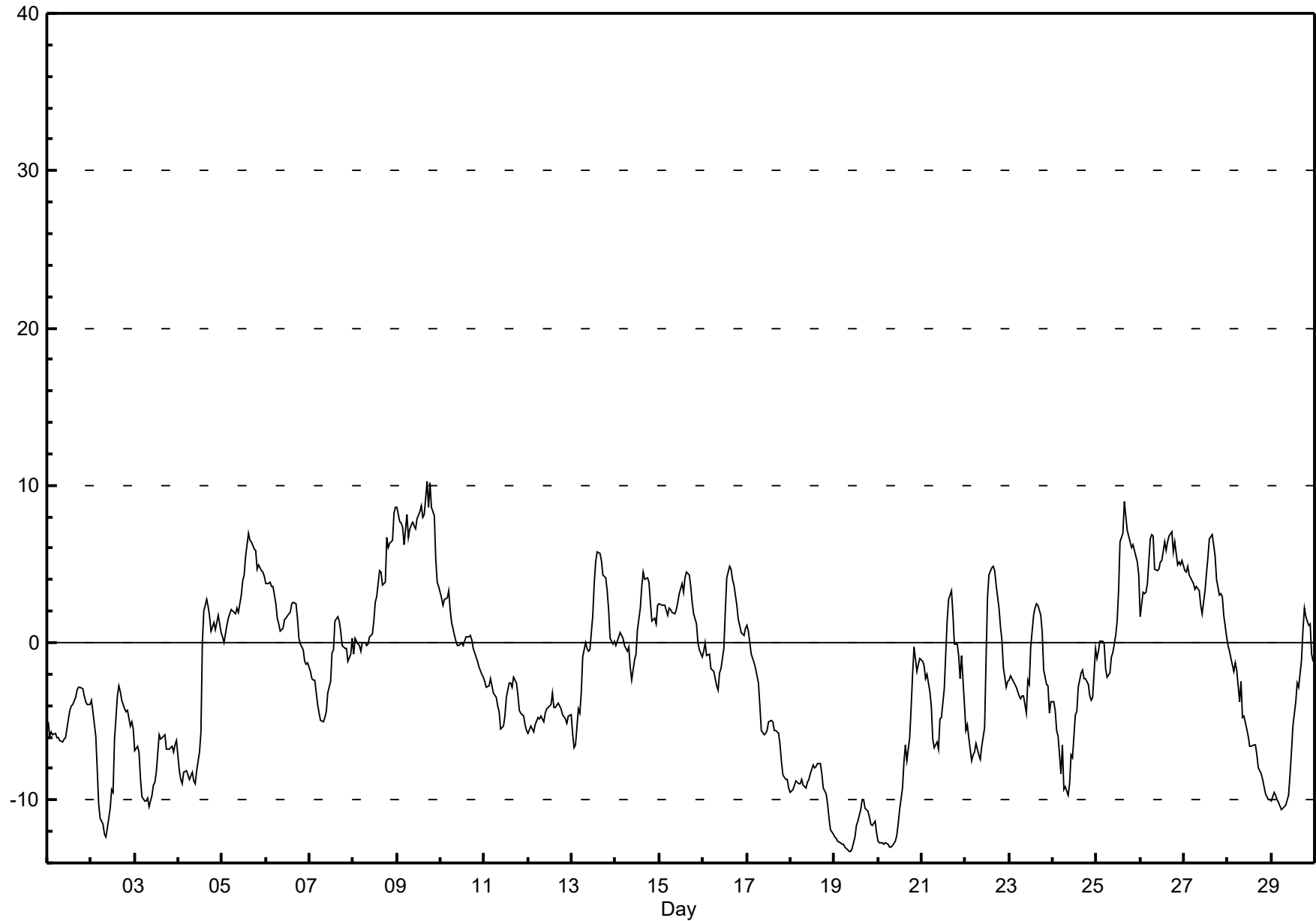
Particulate Matter 2.5 (PM_{2.5}) - µg/m³
Beaverlodge - February 2016



Hourly Averages

External Temperature (ET) - °C

Beaverlodge - February 2016



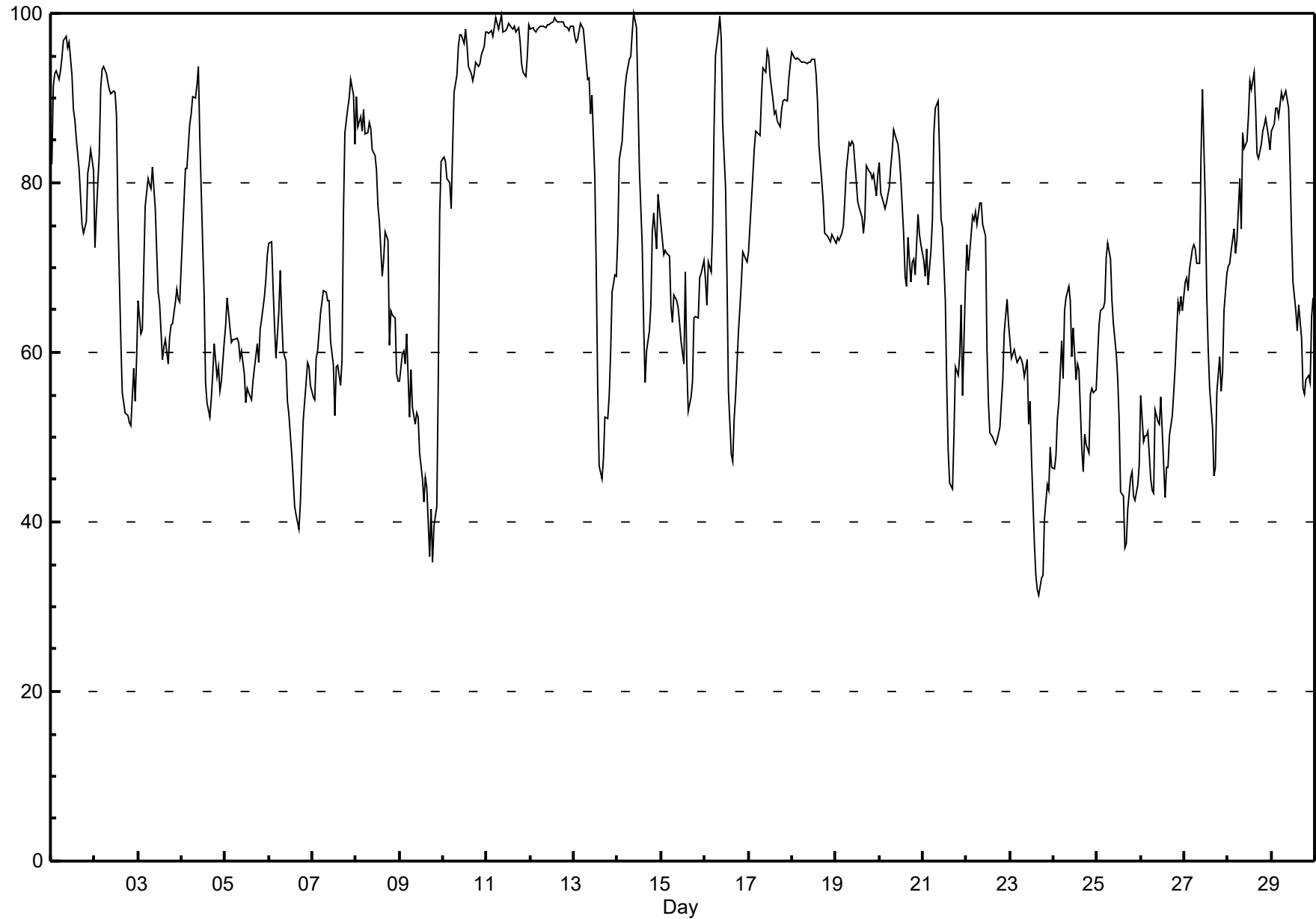
Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 99.9 % on Feb 14 10:00 Maximum Daily Average: 98.6 % on Feb 12																								Hours in Service: 696 Hours of Data: 696 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 31 % on Feb 23 17:00 Minimum Daily Average: 48.8 % on Feb 23 Maximum Diurnal Average: 81.1 % at hour 9 Minimum Diurnal Average: 61.4 % at hour 17 Monthly Average: 72.10 % Percentiles: P ₁ = 36.6 P ₁₀ = 50.2 Q ₁ = 58.6 Median = 71.8 Q ₃ = 87.0 P ₉₀ = 95.6 P ₉₉ = 99.0																										
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-Feb	82	91	93	93	92	93	95	97	97	96	97	93	89	87	85	82	78	75	74	75	81	82	84	81	87.2	97.3
2-Feb	72	76	83	91	93	94	93	92	91	90	91	91	88	76	62	55	54	53	53	52	51	58	54	59	73.9	93.8
3-Feb	66	62	63	70	77	80	80	79	82	77	72	67	66	59	61	62	59	62	63	63	66	67	66	66	68.2	81.8
4-Feb	74	78	82	82	87	88	90	90	92	94	85	73	67	56	54	52	55	57	61	57	58	55	57	61	71.0	93.8
5-Feb	63	66	63	61	62	61	62	61	59	60	57	54	56	55	54	57	58	61	59	63	64	67	69	72	61.0	71.5
6-Feb	73	73	68	63	59	65	70	64	60	59	54	53	48	45	42	41	39	42	48	52	56	59	58	56	56.1	73.1
7-Feb	55	54	59	60	65	66	67	67	66	66	61	58	53	58	58	56	59	76	86	89	90	92	90	85	68.3	92.3
8-Feb	90	87	88	86	89	86	86	87	86	84	83	82	77	75	69	71	74	73	61	65	64	64	57	57	76.7	90.1
9-Feb	57	60	60	59	62	52	58	54	52	53	52	48	45	42	45	44	36	42	35	40	42	57	76	83	52.2	82.6
10-Feb	83	83	81	80	77	84	91	93	96	98	97	96	98	96	94	93	92	93	94	94	94	95	96	98	91.5	98.2
11-Feb	98	98	98	97	98	100	98	99	100	98	98	98	99	98	98	98	98	98	97	94	93	93	95	99	97.5	99.9
12-Feb	98	98	98	98	98	99	98	99	98	99	99	99	99	99	99	99	99	99	99	99	98	98	98	98	98.6	99.4
13-Feb	97	97	97	99	98	98	96	92	92	88	90	81	70	56	47	45	47	52	52	55	60	67	69	69	75.6	98.8
14-Feb	74	83	85	88	91	93	95	95	98	100	98	90	82	73	63	57	60	63	66	74	76	72	79	77	80.4	99.9
15-Feb	75	72	72	72	71	65	64	67	66	65	63	61	59	70	59	53	55	57	64	64	64	69	69	71	65.3	75.0
16-Feb	69	66	71	69	75	86	95	98	100	97	87	79	69	55	48	47	52	55	63	65	68	72	71	71	72.0	99.7
17-Feb	72	75	81	84	86	86	86	90	94	93	96	95	92	90	88	89	87	87	89	90	90	90	92	94	88.1	95.6
18-Feb	95	95	95	95	94	94	94	94	94	94	94	95	95	93	90	84	80	78	74	74	73	73	74	73	87.3	95.4
19-Feb	73	74	73	74	75	78	81	85	84	85	85	80	78	77	76	74	76	82	81	81	81	81	79	81	78.9	84.9
20-Feb	82	79	78	77	78	79	82	84	86	85	85	83	80	74	69	68	74	68	71	71	69	76	74	73	76.8	86.3
21-Feb	71	69	72	68	72	76	86	89	90	83	76	75	66	56	48	45	44	50	58	57	60	66	55	68	66.6	89.7
22-Feb	73	70	72	76	76	77	75	78	78	75	74	60	54	51	50	49	49	50	51	54	57	62	66	63	64.1	77.7
23-Feb	61	59	60	59	59	59	59	58	57	59	52	54	47	38	34	32	31	33	34	40	44	44	49	46	48.8	61.3
24-Feb	46	48	52	54	61	57	65	66	68	66	60	63	57	59	58	49	46	50	49	48	55	56	55	56	56.0	67.7
25-Feb	60	63	65	65	66	71	73	71	66	63	60	57	52	44	43	37	37	42	45	46	43	43	44	47	54.3	72.9
26-Feb	55	50	50	50	51	45	44	43	53	52	52	55	51	43	46	46	50	53	55	58	66	65	67	65	52.7	66.6
27-Feb	68	69	67	70	72	73	72	70	70	83	91	77	67	60	56	51	46	46	55	60	56	58	65	69	65.5	91.0
28-Feb	70	70	72	75	72	73	81	75	86	84	85	88	92	91	93	89	83	83	85	86	87	88	85	84	82.3	93.1
29-Feb	86	87	89	89	88	91	90	90	91	89	82	74	68	65	63	66	62	56	55	57	57	56	64	66	74.2	90.8
73.7 74.1 75.4 76.0 77.4 78.3 80.1 80.2 81.1 80.5 78.4 75.1 71.1 67.0 63.9 61.7 61.4 63.3 64.7 66.3 67.7 69.8 71.0 72.0																								Diurnal Average		
98.1 98.2 98.0 98.8 98.4 99.5 98.4 99.0 99.9 99.9 98.7 98.8 99.0 99.4 99.2 98.9 99.0 99.1 99.0 98.5 98.2 97.9 98.4 98.6																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - February 2016



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	1	3	4	4	3	3	4	4	3	2	3	3	3	3	4	4	4	3	4	2	3	6	4	3	1.6	5.9
Dir	8	59	77	84	138	158	141	99	85	131	66	152	95	63	70	53	53	86	64	63	291	249	233	304	87	249
2 Spd	6	3	6	2	2	5	5	5	6	5	4	1	2	7	7	9	6	7	5	7	6	5	5	2	3.4	8.6
Dir	321	300	275	58	110	58	52	59	57	65	41	58	325	304	337	328	332	329	335	330	334	24	35	65	356	328
3 Spd	4	4	3	2	4	4	4	2	3	4	3	0	3	3	2	1	2	5	4	5	4	1	4	2	2.4	5.3
Dir	76	79	114	125	92	71	71	150	93	68	65	276	43	35	243	237	147	72	80	88	110	205	93	180	88	88
4 Spd	7	6	3	2	0	2	5	2	2	3	5	5	5	11	15	25	21	10	5	4	3	6	11	11	4.7	24.9
Dir	265	265	343	25	333	251	246	173	125	73	75	69	46	260	259	273	263	266	183	221	188	226	259	220	256	273
5 Spd	10	6	5	3	5	6	5	5	6	3	3	4	3	9	25	16	21	10	4	4	4	2	2	1	3.9	25.2
Dir	219	186	165	112	86	132	118	108	75	108	116	149	186	213	238	225	235	236	118	108	153	120	106	86	192	238
6 Spd	9	24	34	34	46	42	44	44	41	39	46	42	43	36	30	32	31	34	28	27	24	12	16	22	31.5	46.3
Dir	244	253	251	258	253	250	249	254	251	267	273	273	282	285	287	281	282	270	269	274	273	287	286	282	267	273
7 Spd	12	10	7	3	1	2	2	3	4	1	1	3	3	3	9	7	9	10	5	4	3	3	4	3	2.4	12.2
Dir	276	257	251	288	6	107	92	86	50	38	222	121	204	214	229	203	217	281	172	210	236	147	90	175	229	276
8 Spd	2	1	2	3	4	3	1	3	5	4	5	4	3	2	3	2	2	3	7	2	3	4	13	7	0.6	12.6
Dir	94	138	146	156	75	84	165	104	70	101	128	137	149	77	53	150	179	44	267	254	182	266	281	304	144	281
9 Spd	10	10	7	14	2	10	8	10	8	9	7	10	11	13	14	13	9	6	7	10	12	5	10	10	5.2	14.1
Dir	278	258	276	256	208	274	256	278	317	326	328	321	291	253	248	260	304	32	346	27	24	47	76	85	298	248
10 Spd	9	8	9	12	12	13	17	14	16	16	18	17	14	14	11	11	6	5	10	6	4	7	8	5	10.2	17.7
Dir	89	91	72	61	69	54	54	55	84	84	85	91	76	78	83	73	75	114	98	55	16	21	19	11	71	85
11 Spd	6	6	5	2	3	4	5	4	6	5	2	4	5	5	4	5	2	4	12	14	14	14	15	16	4.7	15.6
Dir	7	21	282	87	117	153	173	133	138	105	11	341	34	51	145	179	162	158	116	98	97	99	90	94	99	94
12 Spd	13	13	12	8	8	12	12	7	9	9	7	6	7	2	7	5	1	6	5	4	3	3	5	5	5.5	13.3
Dir	89	86	56	56	59	103	99	76	37	96	103	115	119	158	189	163	236	165	150	110	147	143	132	86	99	89
13 Spd	2	1	3	4	3	9	10	9	8	4	3	11	18	24	26	31	31	11	9	7	7	4	1	4	8.4	30.8
Dir	79	41	20	311	45	310	292	301	257	272	72	248	253	250	259	257	266	288	294	289	289	261	129	205	269	266
14 Spd	5	2	4	2	4	1	5	2	2	4	2	5	6	5	3	17	12	16	5	4	7	8	12	21	3.2	21.0
Dir	215	234	217	255	220	97	47	216	194	55	83	76	80	63	248	254	258	272	13	163	176	235	232	241	238	241
15 Spd	21	16	18	19	14	19	21	19	17	20	16	10	13	7	11	19	17	22	18	13	4	2	3	3	12.7	22.2
Dir	246	249	243	247	246	266	276	278	284	286	289	301	288	13	285	262	261	251	255	260	239	82	86	109	266	251
16 Spd	6	6	2	3	6	9	2	3	2	2	2	4	3	18	28	36	29	24	18	13	11	5	4	6	7.8	36.1
Dir	56	62	72	235	250	246	186	165	144	182	65	88	80	237	242	249	249	241	248	239	240	237	186	243	240	249
17 Spd	10	9	3	4	4	4	2	16	15	15	13	11	8	11	13	10	8	10	9	10	9	10	7	9	7.0	16.2
Dir	254	239	49	63	61	42	22	3	355	349	357	6	16	20	36	23	29	92	83	31	8	13	6	10	15	3
18 Spd	8	5	1	3	3	0	1	6	5	4	5	7	10	13	12	11	15	14	11	12	13	11	11	11	7.4	14.9
Dir	17	21	2	186	236	320	33	3	358	8	355	327	318	321	329	330	336	345	349	332	324	328	329	332	337	336
19 Spd	13	9	8	8	7	6	8	9	10	10	9	7	3	5	4	1	3	10	10	7	8	6	4	9	6.0	12.9
Dir	333	337	347	350	354	359	14	13	13	12	15	17	8	23	25	114	102	42	39	73	42	38	99	112	20	333
20 Spd	11	11	10	9	9	9	11	9	9	10	10	8	7	3	5	3	4	4	2	7	5	1	3	2	5.2	11.2
Dir	118	107	100	106	98	136	110	122	130	137	134	128	153	159	146	88	47	37	253	233	244	119	39	134	123	118
21 Spd	3	7	2	5	0	4	2	3	2	2	1	5	5	4	5	6	2	3	2	4	1	1	6	4	0.7	6.6
Dir	235	264	283	270	47	75	127	154	108	145	101	56	68	57	39	33	97	75	190	69	294	46	302	264	45	264
22 Spd	1	2	2	4	4	7	4	3	6	5	5	1	28	35	34	32	29	29	28	22	11	7	6	11	9.7	34.7
Dir	241	42	116	60	49	60	64	53	45	64	67	154	271	273	267	263	268	268	266	266	265	227	234	241	269	273

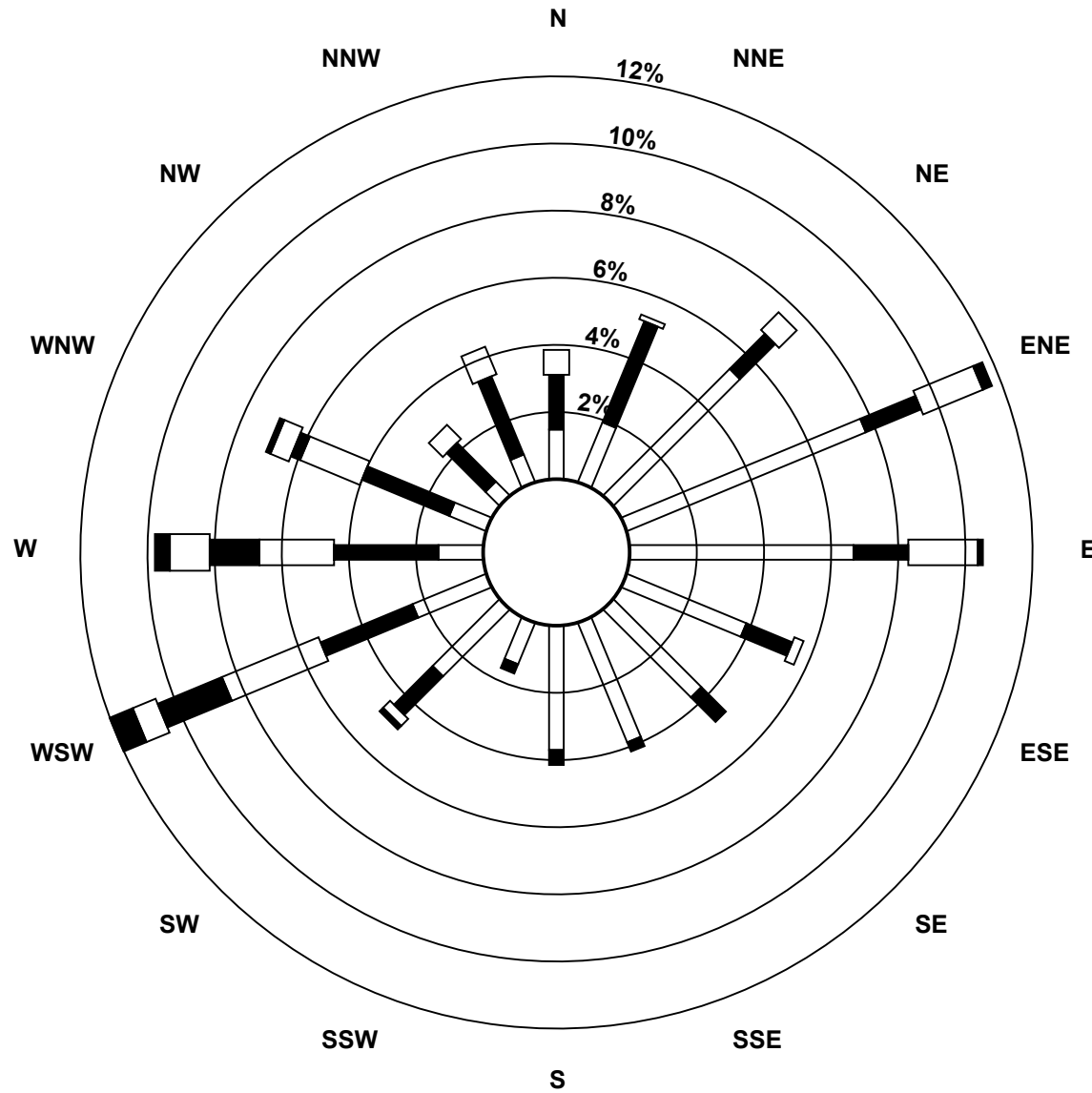
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - February 2016

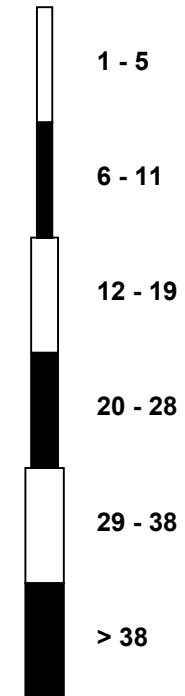
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																	
23 Spd	10	16	14	10	10	11	13	15	5	0	3	3	2	11	16	14	11	9	10	7	2	5	2	5	6.5	16.5															
Dir	266	267	277	292	295	283	284	284	288	268	166	74	16	302	307	319	345	355	357	20	350	232	54	49	303	307															
24 Spd	5	3	1	4	7	3	3	1	0	3	2	1	1	5	3	1	1	3	2	1	3	2	5	8	0.5	7.8															
Dir	60	49	16	260	47	39	52	163	311	62	176	252	55	261	74	99	111	72	84	218	204	123	209	242	81	242															
25 Spd	4	15	14	11	14	2	3	3	4	1	1	4	4	2	2	11	30	10	10	13	6	9	7	6	5.8	30.1															
Dir	218	252	247	260	253	276	75	98	190	132	166	69	70	85	52	295	271	270	243	253	263	282	258	223	258	271															
26 Spd	3	2	2	4	0	11	9	7	1	3	1	2	4	1	1	1	4	5	8	8	5	4	10	12	2.4	12.4															
Dir	103	90	86	46	14	293	312	332	204	227	31	182	131	66	135	340	346	262	249	260	217	248	253	255	271	255															
27 Spd	17	10	6	11	11	16	18	19	15	16	16	14	13	8	2	5	27	25	22	20	22	15	3	3	12.7	26.8															
Dir	254	267	304	278	272	276	285	282	296	327	286	289	294	322	48	257	254	258	250	258	273	276	221	133	275	254															
28 Spd	4	3	2	6	2	6	2	4	11	13	15	16	20	21	16	15	19	22	19	18	17	17	14	4	11.3	22.0															
Dir	58	80	97	52	130	32	306	52	106	83	73	89	84	75	75	71	77	71	68	67	67	59	61	359	72	71															
29 Spd	3	1	3	3	4	5	5	5	5	5	3	3	3	4	3	5	5	1	17	22	16	5	4	5	2.4	22.3															
Dir	335	90	100	141	179	186	176	171	170	172	158	137	101	81	83	68	57	146	248	257	275	287	216	237	220	257															
Spd	2.0	2.3	2.1	2.0	1.4	2.0	1.8	2.0	1.0	1.5	1.5	1.0	2.2	3.8	5.0	7.0	7.6	4.9	3.4	3.1	2.6	1.5	0.9	1.9	Diurnal Average																
Dir	272	263	266	276	259	273	279	299	334	6	2	351	307	292	272	271	273	277	271	278	285	305	302	254																	
Spd	21.2	24.3	33.8	33.5	46.1	41.9	44.1	43.5	41.2	38.7	46.3	42.1	42.8	36.1	33.5	36.1	31.0	33.5	28.2	27.0	23.6	16.5	16.3	21.9	Diurnal Maximum																
Dir	246	253	251	258	253	250	249	254	251	267	273	273	282	285	267	249	282	270	269	274	273	59	286	282																	
Maximum Speed Value: 46 km/h on Feb 6 11:00																								Minimum Speed Value: 0 km/h on Feb 24 09:00										Hours in Service:		696					
Maximum Daily Speed Average: 31.5 km/h on Feb 6																								Minimum Daily Speed Average: 0.5 km/h on Feb 24															Hours of Data:		696
Maximum Diurnal Speed Average: 7.6 km/h at hour 17																								Minimum Diurnal Speed Average: 0.9 km/h at hour 23															Hours of Missing Data:		0
Monthly Average Velocity: 2.47 km/h 281.4 deg																								Speed Percentiles: P ₁ = 0.5 P ₁₀ = 1.8 Q ₁ = 3.2 Median = 5.4 Q ₃ = 11.0 P ₉₀ = 17.6 P ₉₉ = 41.7															Percent Operational Time:		100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																																									
Frequency Distribution																																									
		Speed Range (km/h)																																							
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total																												
North	21		29		8		0		0		0		58																												
NorthEast	62		33		11		0		0		0		106																												
East	83		27		23		5		0		0		138																												
SouthEast	52		12		2		0		0		0		66																												
South	34		10		0		0		0		0		44																												
SouthWest	31		25		9		7		0		0		72																												
West	21		42		45		22		18		9		157																												
NorthWest	11		28		16		0		0		0		55																												
Total	315		206		114		34		18		9		696																												

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - February 2016



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - February 2016

Maximum Speed: 46 km/h on Feb 6 11:00																				Maximum Daily Speed Average: 32.6 km/h on Feb 6										Hours in Service: 696																				
Minimum Speed: 1 km/h on Feb 26 14:00																				Minimum Daily Speed Average: 3.6 km/h on Feb 24										Hours of Data: 696																				
Maximum Diurnal Speed Average: 13.0 km/h at hour 17																				Minimum Diurnal Speed Average: 7.2 km/h at hour 3										Hours of Missing Data: 0																				
Monthly Average Speed: 8.97 km/h																				Percentiles: P ₁ = 1.8 P ₁₀ = 2.9 Q ₁ = 3.9 Median = 6.3 Q ₃ = 11.3 P ₉₀ = 17.7 P ₉₉ = 41.7										Percent Operational Time: 100.0																				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																										
1-Feb	2	3	4	4	5	3	4	4	4	3	3	4	3	4	4	4	3	4	3	4	3	4	6	4	3	3.7	6.3																							
2-Feb	6	4	6	3	3	5	5	5	6	5	4	2	4	7	7	9	6	7	5	7	6	6	5	4	5.3	8.7																								
3-Feb	5	4	4	3	4	4	4	2	4	4	4	2	3	4	3	3	3	6	5	5	4	4	4	4	3.8	5.5																								
4-Feb	7	7	4	3	2	4	6	3	3	3	5	5	5	11	15	26	22	11	5	5	3	6	11	11	7.5	25.6																								
5-Feb	11	6	6	4	5	6	5	5	6	4	4	4	4	10	25	16	21	11	5	5	4	3	3	3	7.3	25.3																								
6-Feb	9	25	34	34	46	42	44	44	41	39	46	42	43	36	30	33	31	34	28	27	24	12	16	22	32.6	46.5																								
7-Feb	12	10	7	4	4	3	3	4	4	3	3	4	4	5	9	7	9	11	6	4	4	4	5	3	5.4	12.4																								
8-Feb	4	2	2	3	4	3	3	4	6	5	5	5	3	3	3	3	3	4	8	6	5	5	13	7	4.6	12.8																								
9-Feb	10	10	9	14	6	10	8	10	9	9	7	10	11	13	14	16	10	7	8	10	12	8	10	11	10.1	15.9																								
10-Feb	9	8	10	13	13	14	17	14	16	16	18	17	14	14	11	11	7	6	10	7	4	7	8	5	11.3	17.9																								
11-Feb	6	7	5	3	3	4	5	4	6	5	4	4	6	5	5	5	3	5	12	14	14	14	15	16	7.1	15.7																								
12-Feb	13	13	12	8	9	12	12	8	9	9	7	6	7	4	7	6	7	7	5	5	4	4	5	6	7.7	13.4																								
13-Feb	3	2	4	4	5	9	13	9	8	5	4	11	18	24	27	31	31	12	9	7	8	8	3	4	10.8	30.8																								
14-Feb	5	3	4	3	5	3	5	3	3	4	3	5	6	5	9	17	12	18	5	5	7	8	12	21	7.1	21.1																								
15-Feb	21	16	19	20	15	20	21	19	18	20	16	10	13	8	11	19	17	22	18	13	6	3	4	4	14.7	22.2																								
16-Feb	6	6	5	4	7	9	3	4	3	3	3	4	4	18	28	36	29	24	18	13	11	8	6	7	10.8	36.2																								
17-Feb	11	9	4	4	5	5	5	17	15	15	13	11	8	11	14	10	9	10	9	10	9	10	7	9	9.6	16.5																								
18-Feb	8	5	3	4	3	2	2	6	5	5	6	8	10	13	12	11	15	15	14	11	12	13	12	11	8.6	15.0																								
19-Feb	13	9	8	8	7	6	8	9	10	10	10	7	4	5	4	3	4	10	10	7	9	7	4	9	7.6	13.1																								
20-Feb	11	11	10	9	10	10	11	9	9	10	10	8	7	4	5	3	4	4	7	7	5	3	4	2	7.2	11.2																								
21-Feb	3	7	3	5	3	4	2	4	3	2	2	5	5	4	5	6	4	3	2	4	3	2	6	5	3.9	6.7																								
22-Feb	3	2	3	4	4	7	4	3	6	5	5	3	28	35	34	32	29	29	28	22	11	7	7	11	13.4	34.9																								
23-Feb	10	16	14	10	10	11	13	15	7	7	4	3	4	12	17	15	11	9	10	8	8	5	5	5	9.6	16.6																								
24-Feb	6	4	2	4	7	4	4	3	3	4	2	2	2	5	4	2	1	3	2	2	3	3	6	8	3.6	8.1																								
25-Feb	5	15	14	11	14	5	4	6	4	4	2	5	4	3	2	12	30	11	10	13	7	10	8	6	8.6	30.3																								
26-Feb	4	3	3	5	4	11	9	7	2	3	3	3	4	1	2	3	5	7	9	9	6	5	10	12	5.4	12.5																								
27-Feb	17	11	7	12	11	16	18	19	15	16	17	14	13	9	4	9	27	25	22	20	22	15	4	4	14.4	26.9																								
28-Feb	4	4	3	6	2	8	6	6	12	13	15	16	20	21	16	15	19	22	19	18	18	17	14	6	12.5	22.3																								
29-Feb	3	2	3	3	4	5	5	5	5	5	3	3	3	4	4	5	5	3	17	22	16	7	4	6	6.0	22.4																								
																									7.8	7.7	7.2	7.3	7.6	8.5	8.6	8.5	8.4	8.1	7.9	7.7	9.0	10.3	11.4	12.7	13.0	11.7	10.8	10.0	8.6	7.3	7.4	7.8	Diurnal Average	
																									21.3	24.7	33.9	33.6	46.2	41.9	44.1	43.7	41.3	39.4	46.5	42.4	43.0	36.2	33.6	36.2	31.1	33.6	28.3	27.1	23.7	16.9	16.3	21.9	Diurnal Maximum	
All monthly, daily, and diurnal averages have been calculated using scalar methods																																																		

Hourly Standard Deviations

Wind Direction (WD) - deg
Beaverlodge - February 2016

Maximum Value: 96.0 deg on Feb 13 02:00																			Hours in Service: 696						
Minimum Value: 2.7 deg on Feb 7 00:00																			Hours of Data: 696						
																			Hours of Missing Data: 0						
Percentiles: P ₁ = 3.0 P ₁₀ = 5.1 Q ₁ = 8.7 Median = 18.0 Q ₃ = 40.1 P ₉₀ = 64.8 P ₉₉ = 88.3																			Hours of Calibration: 0						
																			Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	52	12	17	13	41	33	9	17	43	43	27	40	44	9	9	7	15	18	15	49	30	20	28	60	59.8
2-Feb	9	34	25	52	64	11	9	14	14	13	11	70	66	8	16	10	8	10	6	7	11	23	9	63	70.2
3-Feb	16	12	25	30	18	14	25	41	34	16	56	87	49	66	85	72	49	22	46	15	36	74	12	53	86.5
4-Feb	16	25	42	46	86	57	20	27	45	18	13	11	22	10	8	15	9	22	23	29	29	20	14	6	85.6
5-Feb	16	8	29	24	16	30	23	18	16	29	26	21	33	37	4	13	11	52	56	23	23	20	33	80	80.0
6-Feb	21	11	3	4	3	3	3	4	4	12	5	7	5	5	5	5	5	3	3	4	5	6	3	3	21.0
7-Feb	9	15	23	24	69	51	32	22	27	73	72	47	15	61	15	10	22	21	26	13	33	41	28	31	73.0
8-Feb	65	68	30	28	17	24	64	36	35	40	21	20	42	49	12	51	29	78	35	91	64	60	11	18	91.2
9-Feb	13	13	37	13	85	20	31	8	14	8	16	11	6	16	10	46	35	35	23	5	7	85	23	17	85.2
10-Feb	10	14	6	7	19	7	5	7	12	7	10	9	8	10	7	9	30	66	13	29	25	8	3	9	66.1
11-Feb	8	35	20	55	16	21	7	13	13	19	55	36	39	33	42	29	36	23	25	11	5	7	5	4	55.3
12-Feb	6	5	15	10	11	11	10	32	16	9	11	29	20	64	29	29	67	24	34	23	33	43	24	51	67.5
13-Feb	40	96	50	23	63	74	75	6	21	80	56	37	5	4	8	4	4	23	18	15	19	62	80	34	96.0
14-Feb	20	65	33	77	18	58	23	41	43	18	53	11	9	13	85	12	8	25	33	35	22	40	8	5	84.5
15-Feb	3	6	6	5	3	8	4	4	3	4	4	12	7	36	22	10	5	4	5	4	42	62	52	45	61.9
16-Feb	9	6	85	54	30	11	52	24	56	52	65	24	54	18	4	4	5	4	3	5	7	75	54	18	84.6
17-Feb	14	8	65	32	42	45	74	13	8	7	8	5	8	6	10	8	33	11	19	14	3	5	10	6	73.6
18-Feb	8	14	72	43	36	84	63	19	21	28	29	15	11	10	12	11	7	9	11	8	7	10	12	10	83.7
19-Feb	8	18	13	12	10	12	8	8	6	6	5	9	40	12	18	69	32	5	6	16	6	9	34	8	69.1
20-Feb	5	8	6	5	16	11	6	8	6	6	5	8	20	16	13	28	20	72	77	9	12	59	42	48	77.3
21-Feb	20	11	52	24	88	38	27	18	40	44	56	7	14	17	12	5	55	39	32	12	86	87	21	24	87.7
22-Feb	89	33	48	13	14	8	14	56	44	19	11	56	11	5	4	4	4	4	3	3	19	14	23	13	88.6
23-Feb	8	3	7	8	7	5	4	4	75	88	37	30	87	10	7	8	11	6	5	23	82	23	90	10	89.8
24-Feb	16	68	85	61	16	70	47	80	80	48	51	76	90	44	21	50	70	41	26	75	16	49	37	19	90.3
25-Feb	20	5	6	9	4	77	51	55	34	71	79	62	25	68	62	18	5	11	8	5	40	31	60	22	79.3
26-Feb	50	48	55	38	79	12	9	18	57	26	93	58	25	82	83	75	36	48	45	27	34	64	18	7	92.7
27-Feb	6	24	24	13	5	7	3	11	11	12	11	9	5	14	68	85	4	5	5	8	4	4	68	42	85.0
28-Feb	46	30	34	13	47	38	82	51	36	13	11	11	9	8	9	11	10	8	9	9	10	12	9	47	81.9
29-Feb	21	75	18	36	15	8	7	13	14	15	19	16	19	10	23	14	12	76	6	5	11	36	29	52	76.3
88.6 96.0 84.7 77.3 87.7 83.7 81.9 79.9 79.8 88.4 92.7 86.5 90.3 81.6 84.6 85.0 70.1 77.5 77.3 91.2 85.5 86.7 89.8 80.0																									

PAZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

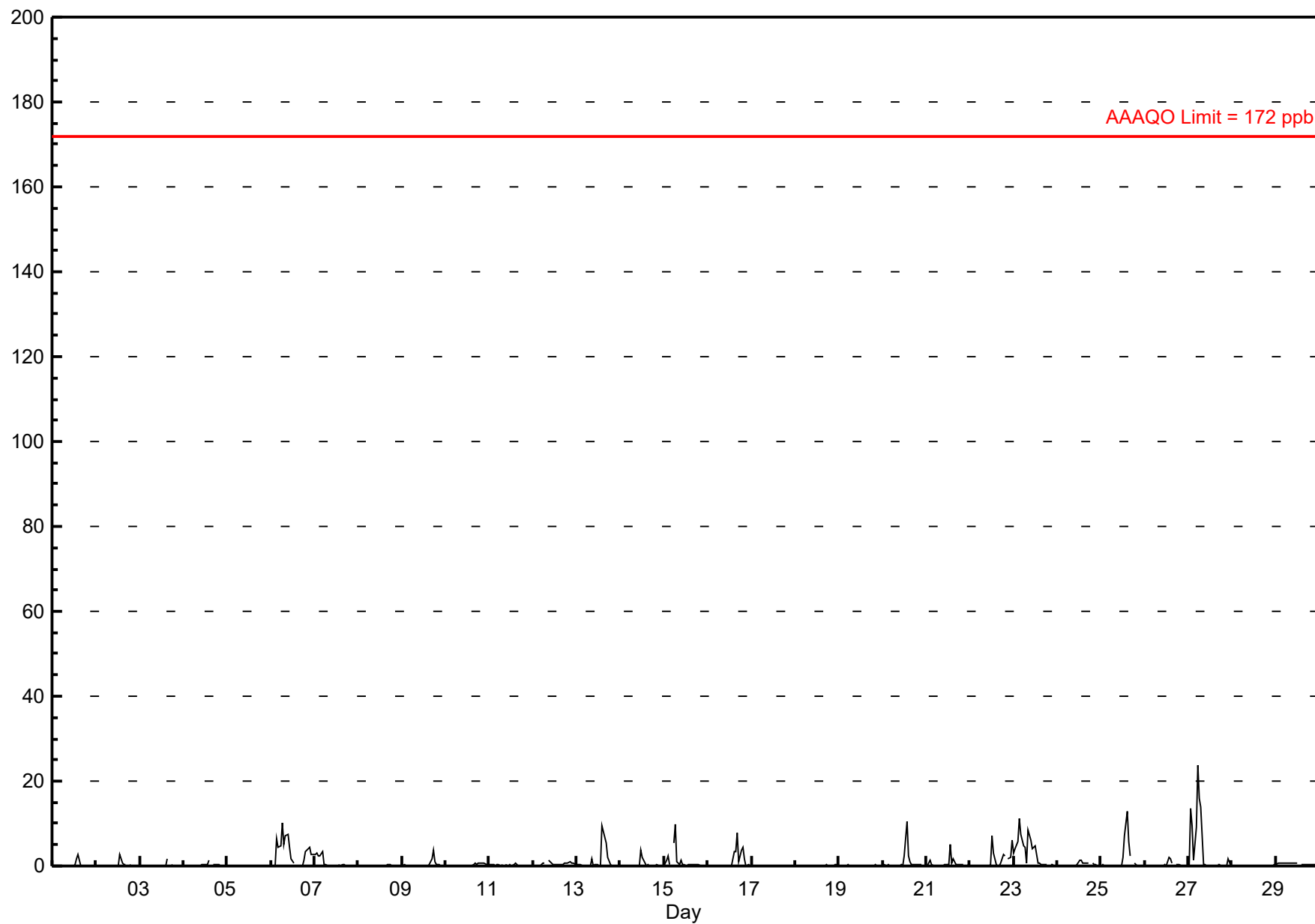
Sulphur Dioxide (SO₂) - ppb

Valleyview - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 23.6 ppb on Feb 27 06:00 Maximum Daily Average: 4.0 ppb on Feb 27																				Hours in Service: 696 Hours of Data: 663						
Minimum Value: 0 ppb on Feb 1 02:00 Minimum Daily Average: 0.0 ppb on Feb 17 Maximum Diurnal Average: 1.5 ppb at hour 15 Minimum Diurnal Average: 0.3 ppb at hour 1 Monthly Average: 0.77 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.4 P ₉₀ = 2.2 P ₉₉ = 10.3																				Hours of Missing Data: 33 Hours of Calibration: 33 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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	A	0	0	0	0	0	0.2	2.8
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	A	0	0	0	0	0	0	0.2	2.6
3-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	A	0	0	0	0	0	0	0	0.1	1.9
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0.2	1.3
5-Feb	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-Feb	0	0	0	6	4	5	10	5	7	7	4	2	1	A	0	0	0	0	1	3	4	4	3	3	3.1	10.1
7-Feb	3	3	2	2	4	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.7	3.5
8-Feb	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
9-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	2	4	1	0	0	0	0	0	0.4	3.9
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	1	1	1	1	0	0	0.3	0.8
11-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.2	0.6
12-Feb	0	0	0	0	0	1	1	A	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	0	0.5	1.3
13-Feb	0	0	0	0	0	0	A	0	2	0	0	0	0	0	10	7	5	2	0	0	0	0	0	0	1.2	9.6
14-Feb	0	0	0	0	0	A	0	0	0	0	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0.3	3.8
15-Feb	0	1	2	0	A	5	10	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	9.9
16-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	4	3	8	1	4	4	2	0	0	0	1.1	7.8
17-Feb	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-Feb	0	A	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0.1	0.4
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.2
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	2	10	3	1	0	0	0	0	0	0	A	0	0.9	10.4
21-Feb	0	1	1	0	0	0	0	0	0	0	0	0	0	5	1	2	0	0	0	0	0	A	0	0	0.5	5.0
22-Feb	0	0	0	0	0	0	0	0	0	0	0	0	7	3	0	0	0	1	3	2	A	2	2	6	1.2	7.1
23-Feb	3	4	6	11	8	5	4	1	8	6	4	5	5	1	1	0	0	1	0	A	0	0	0	0	3.2	11.3
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	1	1	1	A	1	0	0	0	0	0.4	1.5
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	2	7	13	6	2	A	1	0	0	0	0	0	1.4	12.7
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	A	0	0	0	0	0	0	0	0.3	2.2
27-Feb	0	14	10	1	9	24	16	14	0	0	0	0	0	0	0	A	0	0	0	0	0	0	2	0	4.0	23.6
28-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.2
29-Feb	0	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0.5	0.7
0.3 0.9 0.8 0.8 0.9 1.4 1.5 0.8 0.7 0.6 0.4 0.5 0.9 1.4 1.5 0.9 0.9 0.5 0.5 0.6 0.4 0.3 0.3 0.4																								Diurnal Average		
3.2 13.7 9.6 11.3 9.3 23.6 16.0 13.8 8.3 7.4 4.2 4.6 7.1 10.4 12.7 6.7 7.8 3.9 3.8 4.3 4.0 4.3 2.8 6.2																								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
Valleyview - February 2016



Hourly Maximums

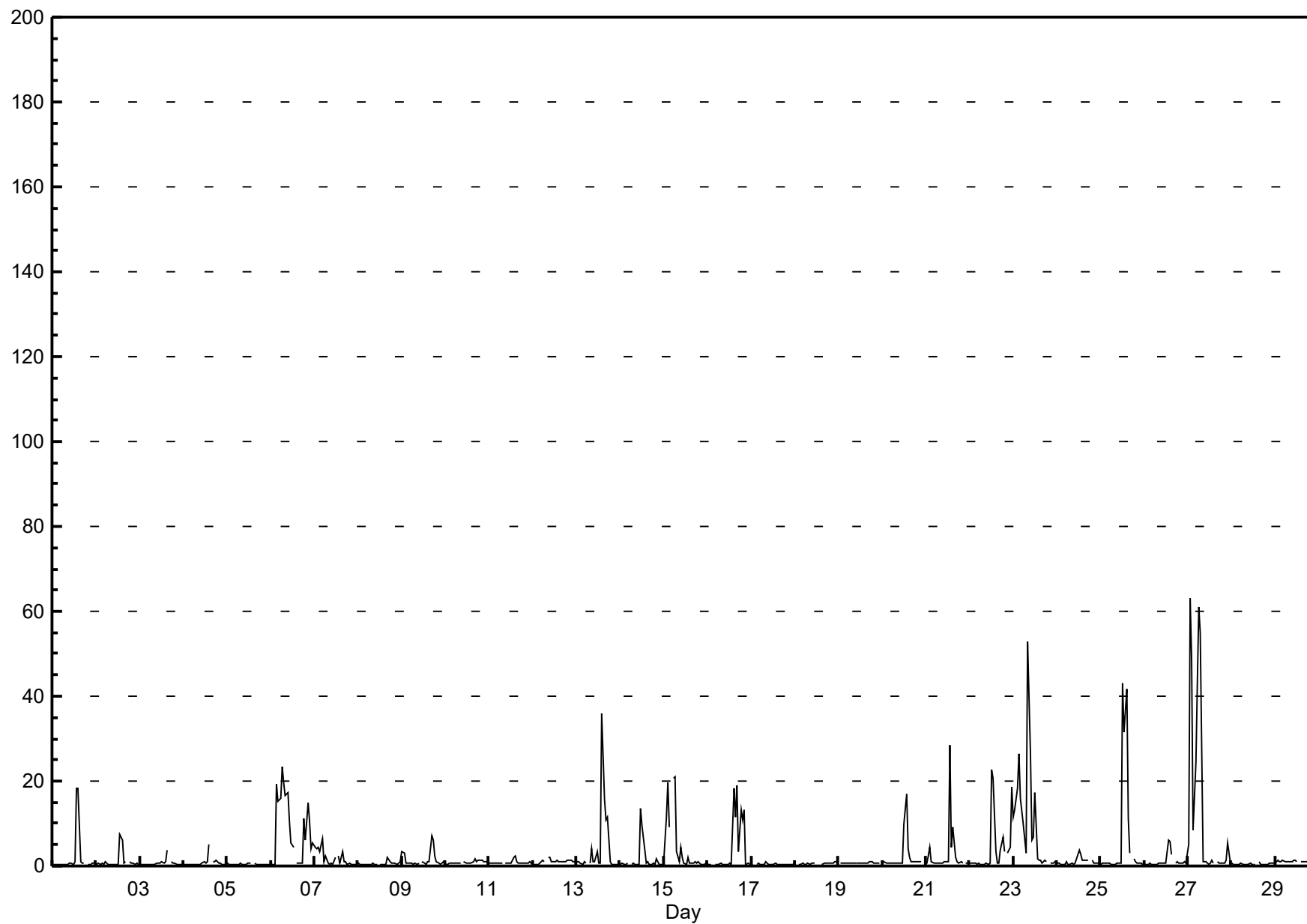
Sulphur Dioxide (SO₂) - ppb

Valleyview - February 2016

Maximum Value: 63.1 ppb on Feb 27 02:00																				Maximum Daily Average: 14.2 ppb on Feb 27					Hours in Service: 696	
Minimum Value: 0 ppb on Feb 25 08:00																				Minimum Daily Average: 0.5 ppb on Feb 17					Hours of Data: 663	
Maximum Diurnal Average: 6.1 ppb at hour 15																				Minimum Diurnal Average: 1.0 ppb at hour 22					Hours of Missing Data: 33	
Monthly Average: 2.76 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.7 Q ₃ = 1.0 P ₉₀ = 6.0 P ₉₉ = 43.0					Hours of Calibration: 33	
																									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-Feb	0	0	0	0	0	0	0	0	0	1	1	0	1	18	18	1	1	1	A	0	0	0	1	1	2.1	18.4
2-Feb	0	1	0	1	0	1	0	0	0	0	0	0	0	8	6	1	1	A	1	1	1	0	1	0	1.1	7.6
3-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	4	A	1	1	1	0	0	0	0	0.7	3.6
4-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	5	A	1	1	1	1	1	0	0	0	0.8	5.1
5-Feb	1	0	0	0	0	0	0	1	0	0	0	1	1	1	A	1	0	0	0	0	0	0	0	0	0.5	0.7
6-Feb	0	0	0	19	15	16	23	20	17	17	10	5	4	A	1	1	1	1	11	6	15	10	4	6	8.8	23.4
7-Feb	4	4	4	3	6	1	2	1	0	1	0	2	A	2	1	3	1	1	0	1	0	0	0	0	1.8	6.4
8-Feb	1	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	2	1	1	1	1	0	1	1	0.6	2.0
9-Feb	3	3	1	1	1	1	0	1	0	1	A	1	1	0	0	1	7	6	3	1	1	0	1	1	1.5	7.1
10-Feb	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0.8	1.6
11-Feb	1	1	1	1	1	1	1	1	A	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0.8	2.5
12-Feb	0	0	0	0	1	1	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.1
13-Feb	1	1	1	0	1	1	A	1	4	1	1	3	1	1	36	16	11	11	1	0	0	0	0	0	4.0	36.1
14-Feb	0	1	0	0	1	A	0	1	0	0	0	13	9	4	1	1	0	0	1	0	2	0	0	0	1.7	13.4
15-Feb	0	11	20	9	A	21	21	3	1	4	2	1	0	2	1	1	1	1	1	1	0	0	0	1	4.5	20.9
16-Feb	0	0	0	A	0	0	0	1	0	0	0	0	1	0	18	11	19	3	13	11	13	0	1	0	4.3	19.1
17-Feb	0	0	A	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.5	0.9
18-Feb	1	A	0	0	1	0	0	1	0	1	1	1	C	C	C	0	1	1	1	1	1	1	1	1	0.6	1.0
19-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.6	0.9
20-Feb	1	1	1	1	1	1	1	1	1	1	1	1	10	17	4	2	1	1	1	1	1	1	A	1	2.0	16.9
21-Feb	1	2	4	1	1	1	1	1	1	1	1	1	1	28	4	9	2	1	1	1	1	A	1	1	2.7	28.3
22-Feb	1	1	1	1	0	1	0	0	0	1	0	1	23	21	3	1	1	4	7	3	A	3	4	18	4.1	22.8
23-Feb	12	13	18	26	16	10	6	3	53	26	6	7	17	2	1	1	1	1	1	A	1	1	1	1	9.8	52.8
24-Feb	1	1	0	0	0	1	0	0	1	0	1	2	4	3	1	1	1	1	A	1	1	1	1	1	1.1	3.8
25-Feb	0	1	1	1	1	1	0	0	0	1	1	1	43	31	42	11	3	A	2	1	1	1	1	0	6.2	43.1
26-Feb	0	0	0	1	0	0	0	0	1	1	1	1	1	6	6	3	A	1	1	1	1	1	1	1	1.1	6.0
27-Feb	5	63	49	9	25	44	61	55	1	1	1	0	1	1	1	A	1	1	1	1	1	1	5	1	14.2	63.1
28-Feb	1	0	0	0	0	1	0	0	0	0	1	0	0	0	A	1	0	0	0	0	0	1	1	1	0.5	0.9
29-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.0	1.4
1.3 3.9 3.9 2.9 2.7 3.8 4.5 3.4 3.2 2.3 1.3 1.7 4.6 5.9 6.1 2.8 2.2 1.6 2.0 1.4 1.7 1.0 1.1 1.5																									Diurnal Average	
11.5 63.1 48.7 26.4 24.5 43.5 60.9 55.0 52.8 26.3 10.5 13.4 43.1 31.4 41.6 15.6 19.1 11.4 13.2 10.8 15.0 10.4 5.4 18.5																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

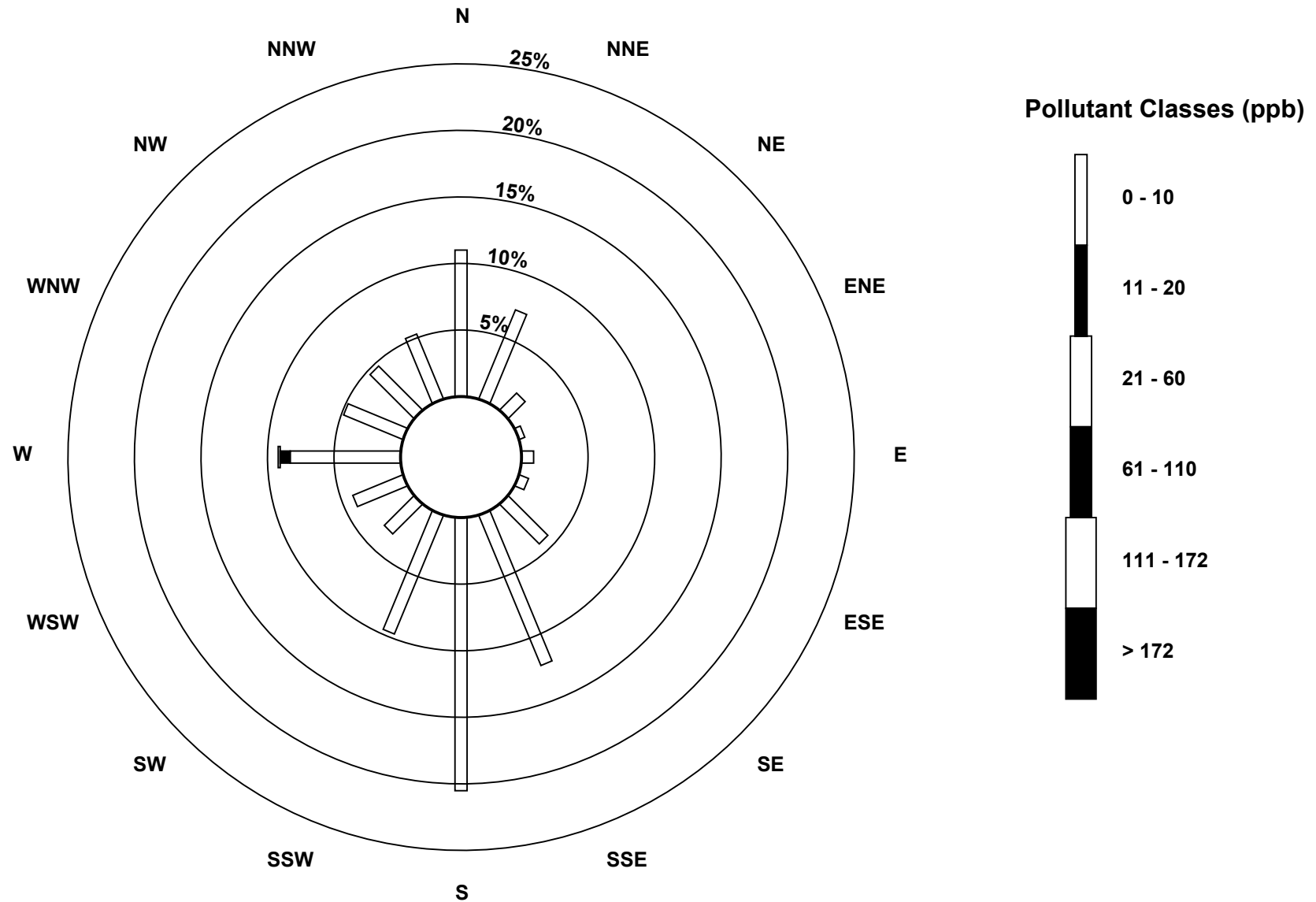
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Valleyview - February 2016



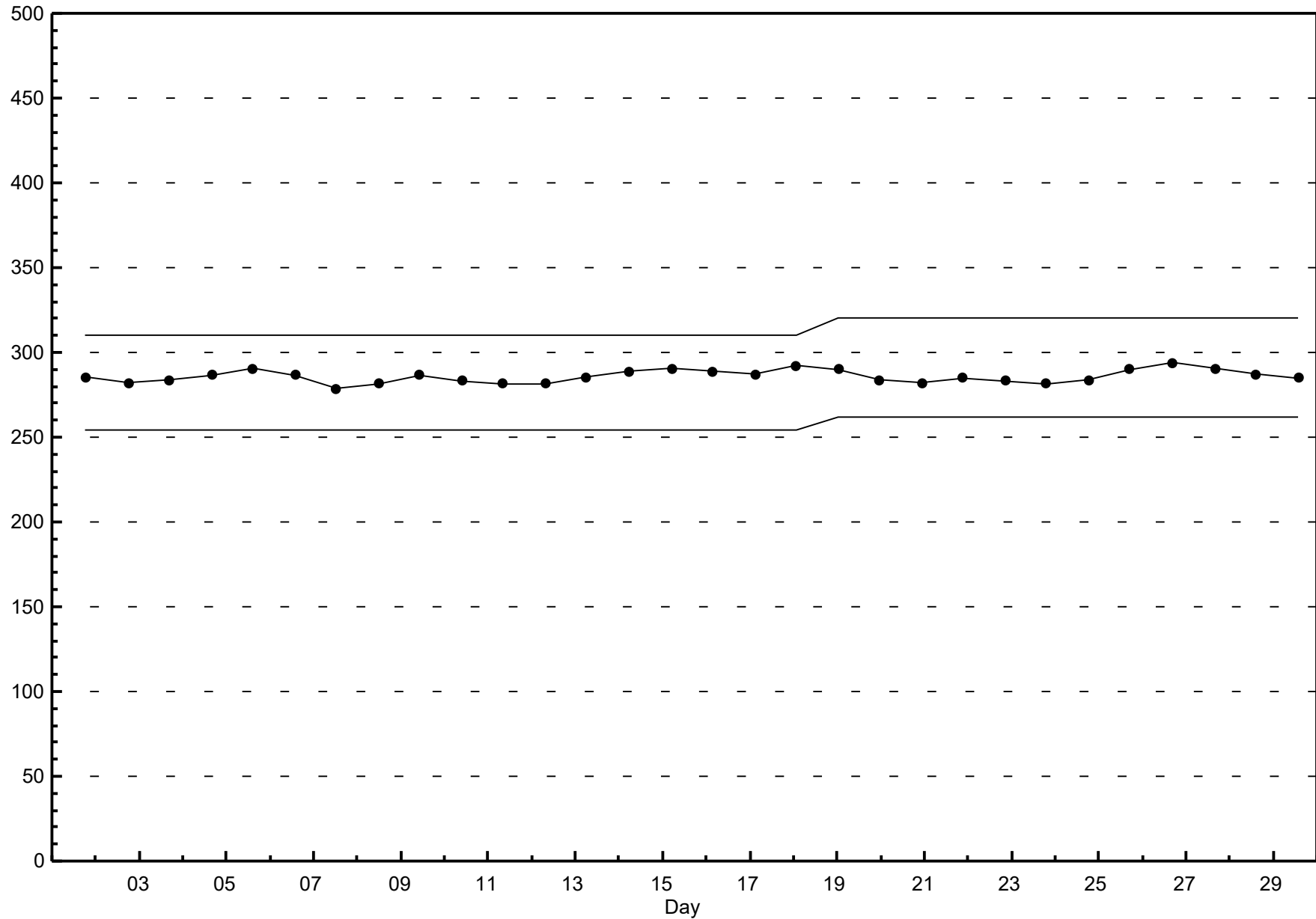
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - February 2016



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - February 2016



Hourly Averages

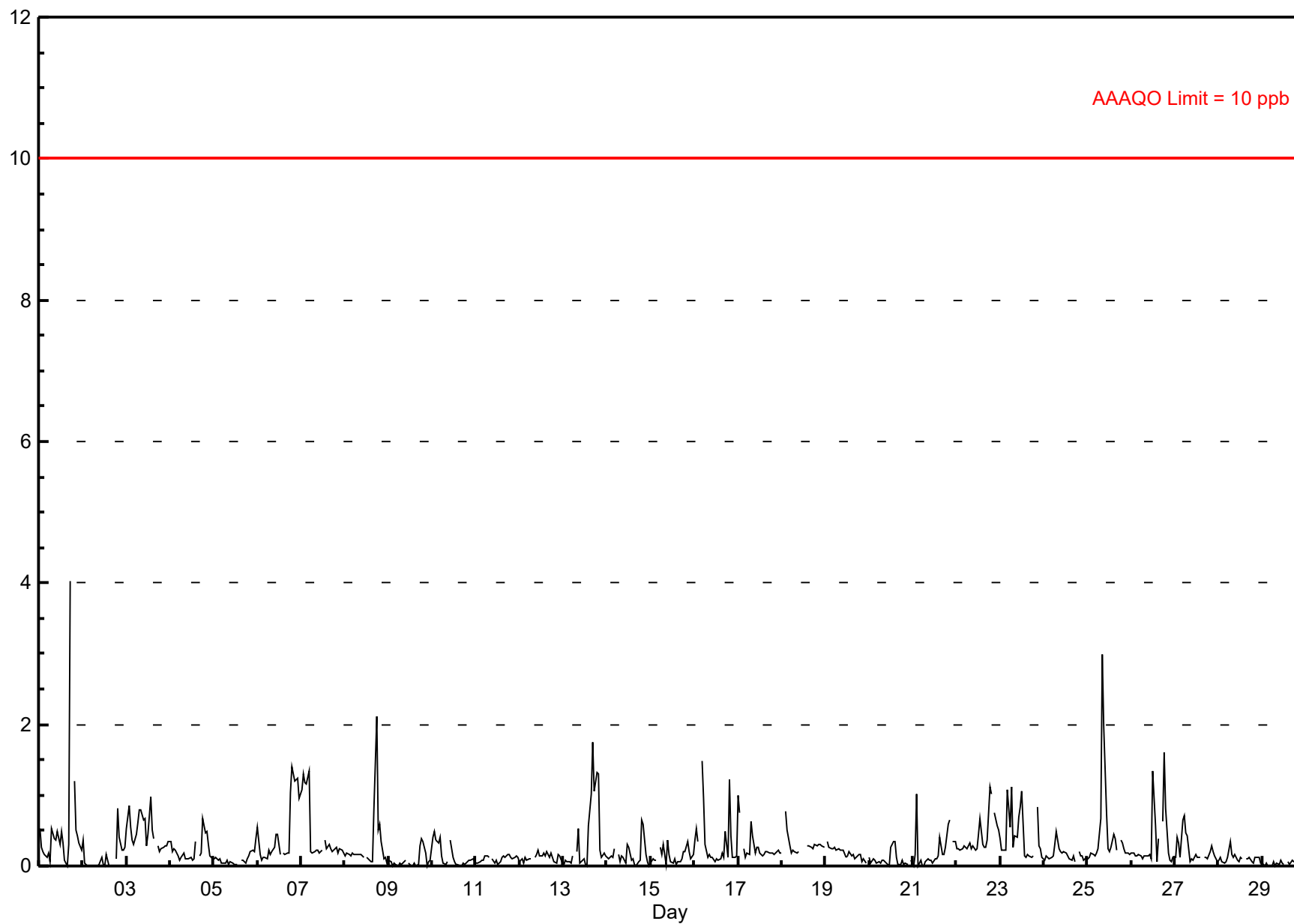
Hydrogen Sulphide (H₂S) - ppb

Valleyview - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																		Hours in Service: 696								
Maximum Value: 4.0 ppb on Feb 1 18:00																		Maximum Daily Average: 0.5 ppb on Feb 1		Hours of Data: 662						
Minimum Value: 0 ppb on Feb 1 16:00																		Minimum Daily Average: 0.0 ppb on Feb 29		Hours of Missing Data: 34						
Maximum Diurnal Average: 0.5 ppb at hour 20																		Minimum Diurnal Average: 0.2 ppb at hour 12		Hours of Calibration: 34						
Monthly Average: 0.25 ppb																		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 1.5		Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	4	A	1	1	0	0	0	0.5	4.0
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	0.1	0.8
3-Feb	1	1	1	0	0	0	1	1	1	1	1	0	0	1	1	0	A	0	0	0	0	0	0	0	0.5	1.0
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0.2	0.7
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.4
6-Feb	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	0.5	1.4
7-Feb	1	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
8-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	2	1	1	0	0	0	0.3	2.1
9-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
10-Feb	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	0.5
11-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
12-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
13-Feb	0	0	0	0	0	0	A	0	1	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0.4	1.8
14-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.2	0.6
15-Feb	0	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-Feb	0	1	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	1.5
17-Feb	1	1	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
18-Feb	0	A	1	1	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.3	0.8
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.3
20-Feb	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	0.4
21-Feb	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0	0	0.2	1.0
22-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	A	1	1	1	0.4	1.1
23-Feb	0	0	0	0	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	A	1	0	0	0	0.4	1.1
24-Feb	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
25-Feb	0	0	0	0	0	0	0	1	3	2	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0.5	3.0
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	1	2	1	0	0	0	0	0.3	1.6
27-Feb	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.7
28-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.4
29-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.0	0.1
																								Diurnal Average	Diurnal Maximum	
																								0.3	1.1	
																								0.3	1.3	
																								0.3	1.2	
																								0.2	1.2	
																								0.3	1.5	
																								0.2	1.0	
																								0.2	1.1	
																								0.2	0.8	
																								0.3	3.0	
																								0.2	2.0	
																								0.2	0.7	
																								0.2	0.8	
																								0.2	1.3	
																								0.2	1.0	
																								0.2	0.6	
																								0.2	1.0	
																								0.2	1.8	
																								0.4	4.0	
																								0.4	1.6	
																								0.5	1.4	
																								0.3	1.2	
																								0.2	1.2	
																								0.2	1.2	
																								0.2	0.9	
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 - February 2016



Hourly Maximums

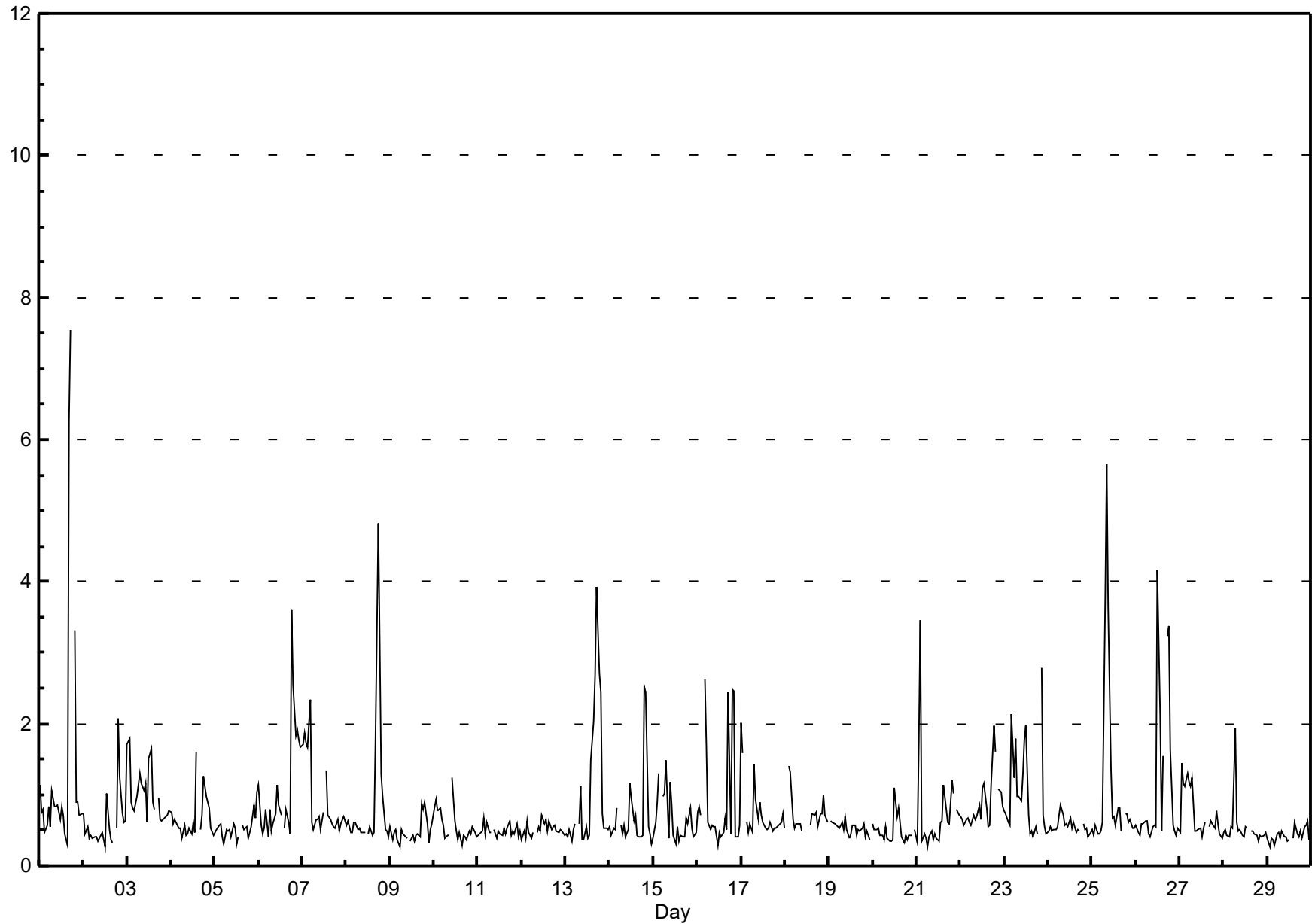
Hydrogen Sulphide (H₂S) - ppb

Valleyview - February 2016

Maximum Value: 7.5 ppb on Feb 1 18:00																		Maximum Daily Average: 1.4 ppb on Feb 1										Hours in Service: 696	
Minimum Value: 0 ppb on Feb 9 06:00																		Minimum Daily Average: 0.4 ppb on Feb 29										Hours of Data: 662	
Maximum Diurnal Average: 1.3 ppb at hour 18																		Minimum Diurnal Average: 0.6 ppb at hour 24										Hours of Missing Data: 34	
Monthly Average: 0.76 ppb																		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 1.3 P ₉₉ = 3.8										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-Feb	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	6	8	A	3	1	1	1	1	1.4	7.5			
2-Feb	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	1	2	1	1	1	1	0.6	2.1			
3-Feb	2	2	1	1	1	1	1	1	1	1	1	1	2	2	1	1	A	1	1	1	1	1	1	1	1.0	1.8			
4-Feb	1	1	1	1	1	1	0	1	0	0	1	0	1	0	2	A	1	1	1	1	1	1	1	0	0.7	1.6			
5-Feb	0	1	1	1	0	0	1	0	1	0	1	1	0	0	A	1	1	1	0	0	1	1	1	1	0.5	1.0			
6-Feb	1	1	0	1	1	0	1	0	1	1	1	1	1	A	1	1	1	0	4	3	2	2	2	2	1.1	3.6			
7-Feb	2	2	2	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	0.9	2.3			
8-Feb	1	1	0	0	1	1	1	1	0	0	0	0	A	0	1	0	0	2	5	3	1	1	0	0	0.9	4.8			
9-Feb	1	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	0	1	1	0.5	0.9			
10-Feb	1	1	1	1	1	1	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0.6	1.2			
11-Feb	0	0	0	1	0	1	0	0	A	1	0	0	0	0	1	0	1	1	0	0	0	1	0	0	0.5	0.7			
12-Feb	0	0	0	1	0	0	0	A	0	1	0	1	1	1	0	1	1	1	1	0	0	1	0	0	0.5	0.7			
13-Feb	0	0	1	0	1	1	A	1	1	0	0	1	0	0	1	2	3	4	3	2	1	1	1	1	1.1	3.9			
14-Feb	1	0	1	1	1	A	1	0	1	0	0	1	1	1	1	0	0	0	0	3	2	1	0	0	0.7	2.5			
15-Feb	0	1	1	1	A	1	1	1	0	1	1	0	0	1	0	0	0	0	1	1	1	1	0	0	0.7	1.5			
16-Feb	1	1	1	A	3	2	1	1	1	1	1	0	0	0	0	1	1	2	0	2	2	0	0	1	0.9	2.6			
17-Feb	2	2	A	1	0	1	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.7	2.0			
18-Feb	1	A	1	1	1	1	1	1	1	0	C	C	C	C	1	1	1	1	1	1	1	1	1	1	0.7	1.4			
19-Feb	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	1	0	1	1	0	0	0	A	0.5	0.7			
20-Feb	1	1	1	1	0	0	0	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	A	1	0.5	1.1			
21-Feb	0	2	3	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	0.8	3.5			
22-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	A	1	1	1	0.9	2.0			
23-Feb	1	1	1	1	2	1	2	1	1	1	1	2	2	1	0	0	0	1	0	A	3	1	1	0	1.0	2.8			
24-Feb	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	A	1	1	1	0	0	0.6	0.9			
25-Feb	1	0	1	0	0	0	1	4	6	4	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1.1	5.7			
26-Feb	1	0	0	1	1	1	1	0	0	1	1	1	4	2	0	2	A	3	3	2	1	0	0	1	1.1	4.2			
27-Feb	0	1	1	1	1	1	1	1	0	0	1	1	0	1	1	A	1	1	1	1	1	0	0	0	0.7	1.4			
28-Feb	0	1	0	0	1	1	2	1	0	1	0	0	1	1	A	0	0	0	0	0	0	0	0	0	0.5	1.9			
29-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	0	0	0	1	1	1	0	0.4	0.6			
																									Diurnal Average				
																									Diurnal Maximum				
C - Calibration																									A - Automated Daily Zero Span				

Hourly Maximums

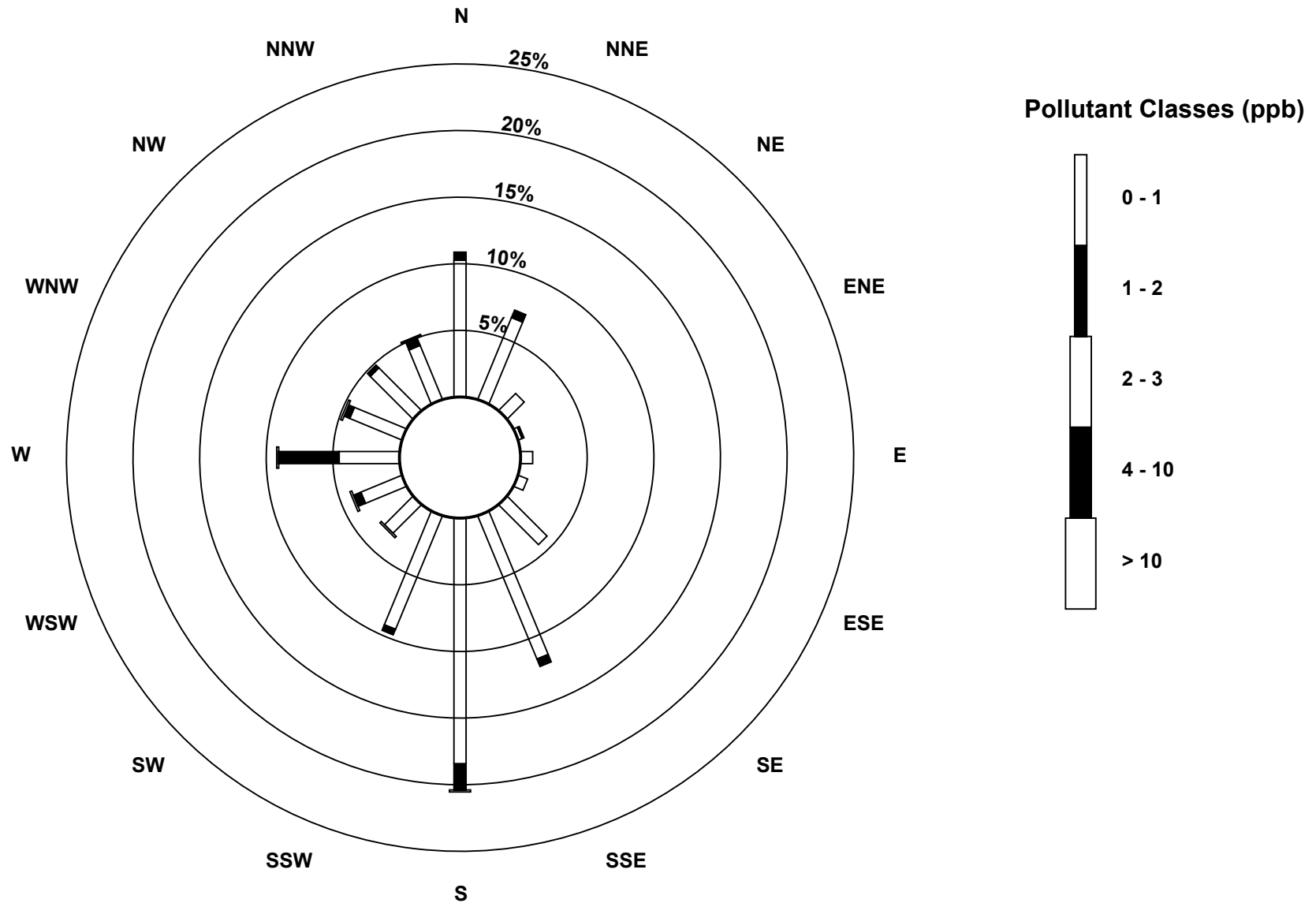
Hydrogen Sulphide (H₂S) - ppb
Valleyview - February 2016



Pollutant Rose

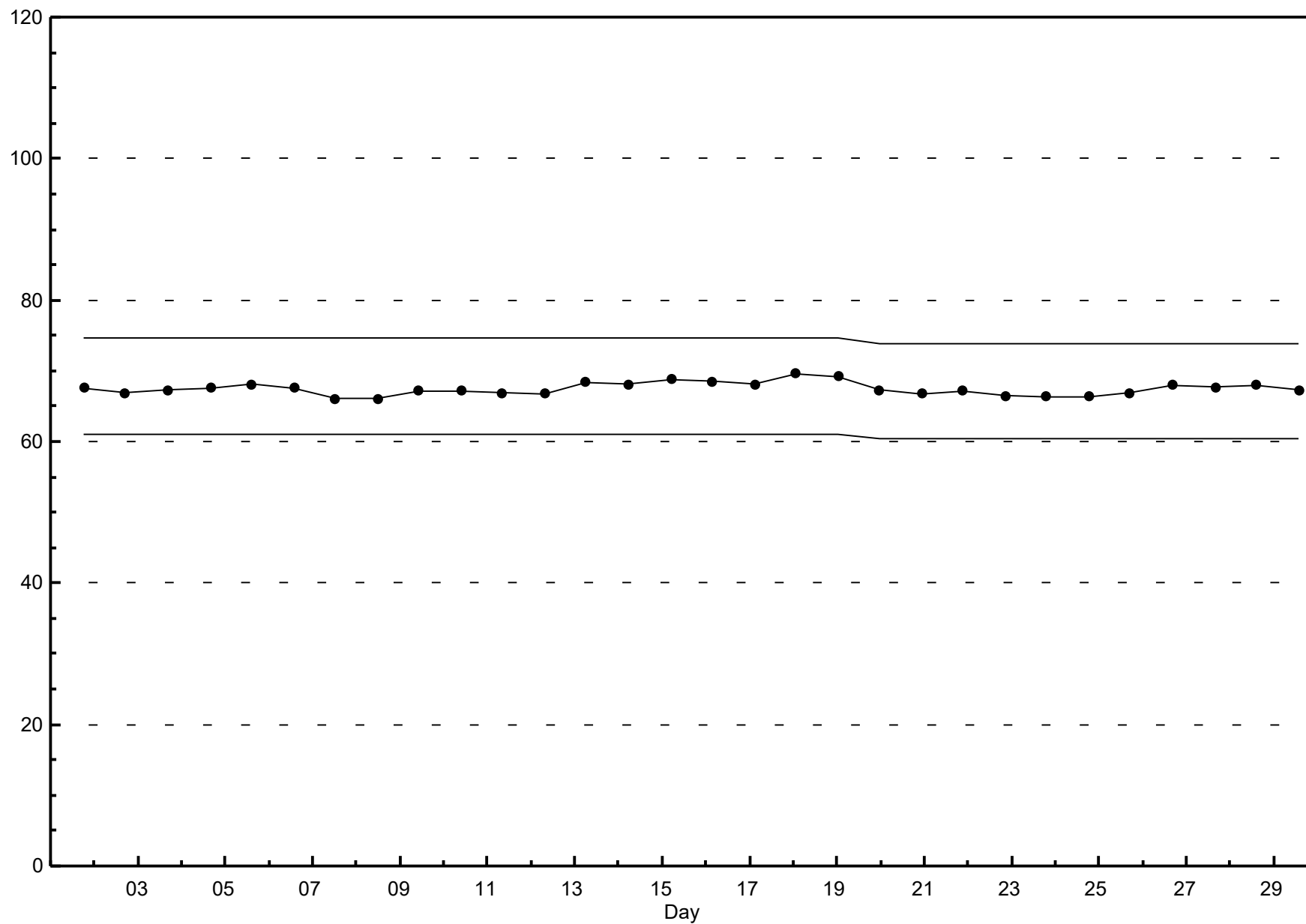
Hydrogen Sulphide (H₂S) - ppb

Valleyview - February 2016



Span Responses

Hydrogen Sulphide (H₂S)
Valleyview - February 2016



Hourly Averages

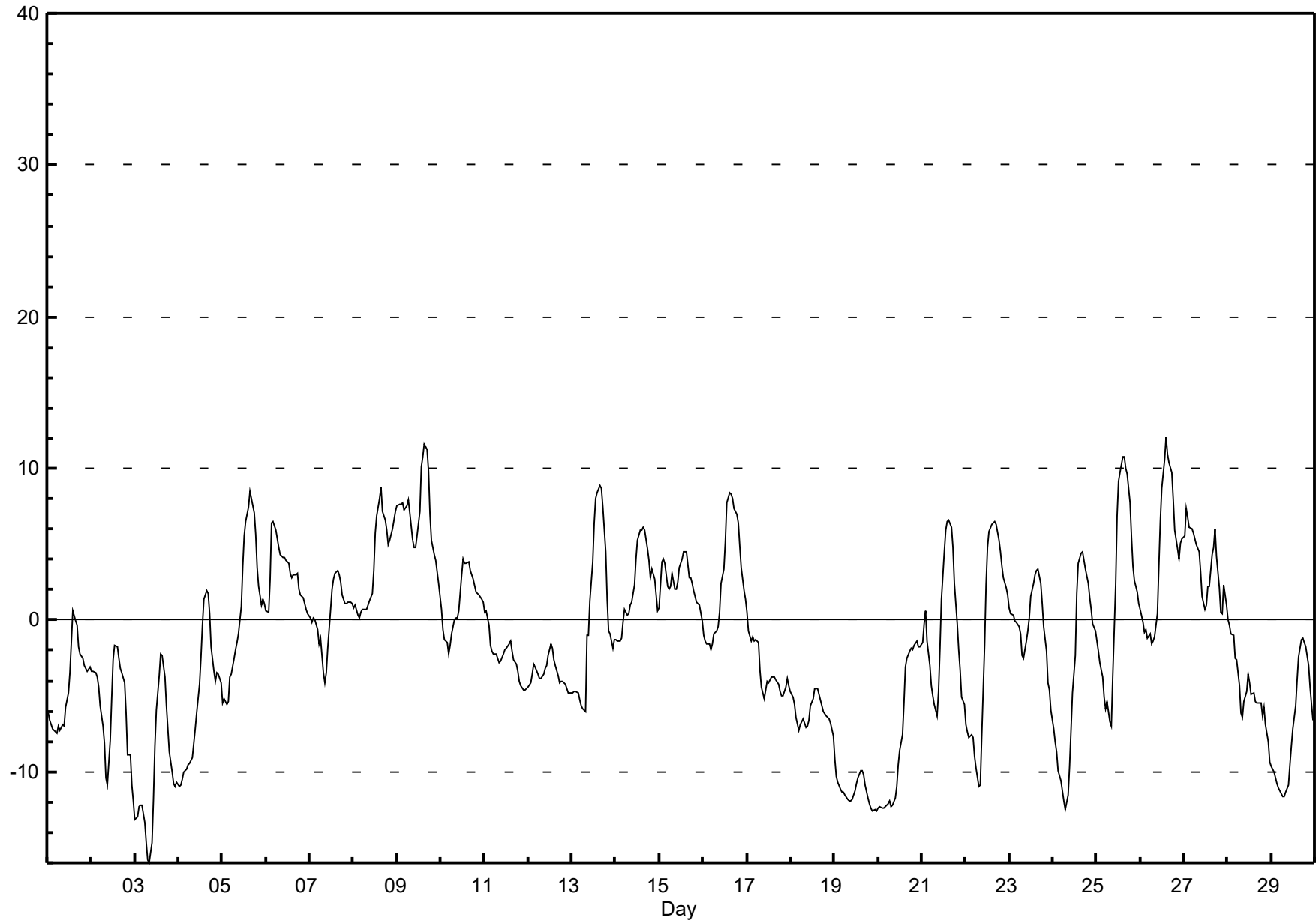
External Temperature (ET) - °C

Valleyview - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 12.1 °C on Feb 26 15:00 Maximum Daily Average: 7.0 °C on Feb 9																								Hours in Service: 696 Hours of Data: 696		
Minimum Value: -16 °C on Feb 3 09:00 Minimum Daily Average: -11.3 °C on Feb 19 Maximum Diurnal Average: 2.6 °C at hour 16 Minimum Diurnal Average: -4.5 °C at hour 9 Monthly Average: -1.46 °C Percentiles: P ₁ = -12.6 P ₁₀ = -10.0 Q ₁ = -5.2 Median = -1.4 Q ₃ = 2.7 P ₉₀ = 6.0 P ₉₉ = 10.7																								Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Feb	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	-4.3	0.6
2-Feb	-6	-7	-7	-7	-7	-7	-7	-7	-7	-6	-5	-3	-1	1	0	0	-2	-2	-3	-3	-3	-3	-3	-3	-5.8	-1.6
3-Feb	-3	-3	-3	-4	-4	-6	-7	-8	-10	-11	-8	-5	-3	-2	-2	-3	-3	-3	-4	-6	-9	-9	-11	-12	-10.0	-2.3
4-Feb	-13	-13	-12	-12	-12	-13	-15	-16	-16	-15	-12	-8	-6	-4	-2	-2	-4	-6	-7	-9	-10	-11	-11	-11	-5.2	1.9
5-Feb	-11	-11	-10	-10	-10	-10	-9	-9	-8	-7	-6	-4	-2	0	1	2	2	0	-2	-3	-4	-3	-4	-4	-5.2	1.9
6-Feb	-6	-5	-6	-5	-4	-4	-3	-2	-1	-1	1	4	6	7	7	9	8	7	6	3	2	1	1	1	1.1	8.5
7-Feb	1	0	3	6	7	6	5	5	4	4	4	4	4	3	3	3	3	3	2	2	1	1	1	0	3.1	6.5
8-Feb	0	0	0	0	-1	-2	-1	-3	-4	-3	-2	1	2	3	3	3	3	3	2	1	1	1	1	1	0.4	3.3
9-Feb	1	1	0	0	1	1	1	1	1	1	2	3	6	7	8	9	7	7	6	5	5	6	7	7	3.8	8.7
10-Feb	7	8	8	8	7	8	8	7	5	5	5	6	7	10	11	12	11	10	7	5	4	4	3	2	7.0	11.6
11-Feb	1	-1	-1	-2	-2	-2	-1	0	0	0	1	3	4	4	4	4	3	3	3	2	2	2	1	1	1.2	4.0
12-Feb	1	1	0	-2	-2	-2	-2	-3	-3	-3	-2	-2	-2	-2	-1	-2	-3	-3	-3	-4	-4	-5	-5	-5	-2.4	0.6
13-Feb	-4	-4	-4	-3	-3	-4	-4	-4	-4	-3	-3	-2	-2	-2	-3	-3	-4	-4	-4	-4	-4	-5	-5	-5	-3.5	-1.6
14-Feb	-5	-5	-5	-5	-5	-6	-6	-6	-1	-1	1	4	6	8	8	9	9	7	4	1	-1	-1	-2	-1	0.4	8.9
15-Feb	-1	-1	-1	-1	0	1	0	0	1	1	2	4	5	6	6	6	6	5	4	3	3	3	2	1	2.2	6.1
16-Feb	1	4	4	4	2	2	2	3	2	2	2	3	4	4	4	5	3	3	2	2	1	1	1	0	2.6	4.5
17-Feb	-1	-1	-2	-2	-2	-2	-1	-1	0	1	2	3	5	8	8	8	8	7	7	6	5	3	2	1	2.7	8.4
18-Feb	1	-1	-1	-1	-1	-1	-1	-3	-4	-5	-5	-4	-4	-4	-4	-4	-4	-4	-5	-5	-5	-4	-4	-4	-3.3	0.5
19-Feb	-5	-5	-6	-6	-7	-7	-7	-7	-7	-7	-6	-5	-4	-5	-5	-5	-5	-6	-6	-6	-6	-6	-7	-8	-6.0	-4.5
20-Feb	-9	-10	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-11	-11	-10	-10	-10	-10	-11	-12	-12	-13	-12	-13	-11.3	-9.2
21-Feb	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-11	-10	-9	-8	-5	-3	-2	-2	-2	-2	-2	-1	-2	-2	-7.6	-1.4
22-Feb	-1	0	1	-1	-3	-4	-5	-6	-6	-5	-2	1	5	6	6	7	6	5	2	0	-2	-3	-5	-6	-0.5	6.6
23-Feb	-7	-7	-8	-8	-8	-9	-10	-11	-11	-8	-2	2	5	6	6	6	6	6	5	4	4	3	2	2	-1.2	6.5
24-Feb	1	0	0	0	0	0	-1	-2	-3	-1	-1	0	2	2	3	3	3	2	1	0	-2	-4	-5	-6	-0.3	3.3
25-Feb	-7	-8	-9	-10	-11	-11	-12	-13	-12	-10	-7	-5	-2	2	4	4	5	4	3	2	1	1	0	-1	-3.8	4.5
26-Feb	-1	-2	-3	-4	-5	-6	-5	-7	-7	-4	2	7	9	10	11	11	10	10	8	5	4	3	2	1	2.0	10.8
27-Feb	1	0	-1	-1	-1	-1	-2	-1	-1	0	4	6	9	11	12	11	10	10	8	6	5	4	5	5	4.1	12.1
28-Feb	6	7	7	6	6	6	5	5	4	3	2	1	1	2	2	4	5	6	4	2	1	0	2	1	3.7	7.3
29-Feb	0	0	-1	-1	-3	-3	-4	-6	-6	-5	-5	-4	-4	-5	-5	-5	-6	-5	-5	-6	-6	-7	-8	-9	-4.6	0.0
30-Feb	-10	-10	-10	-11	-11	-11	-12	-12	-11	-11	-10	-8	-7	-6	-4	-2	-1	-1	-1	-2	-3	-4	-6	-7	-7.1	-1.2
-2.9 -3.0 -3.1 -3.3 -3.6 -3.8 -4.0 -4.4 -4.5 -3.9 -2.4 -0.7 0.6 1.7 2.4 2.6 2.3 1.7 0.7 -0.4 -1.2 -1.6 -2.0 -2.4																								Diurnal Average		
7.5 7.7 7.6 7.7 7.3 7.5 8.0 7.1 5.3 4.8 4.8 6.8 9.2 10.6 12.1 11.6 11.2 9.8 7.9 6.4 5.2 6.0 6.6 7.2																								Diurnal Maximum		

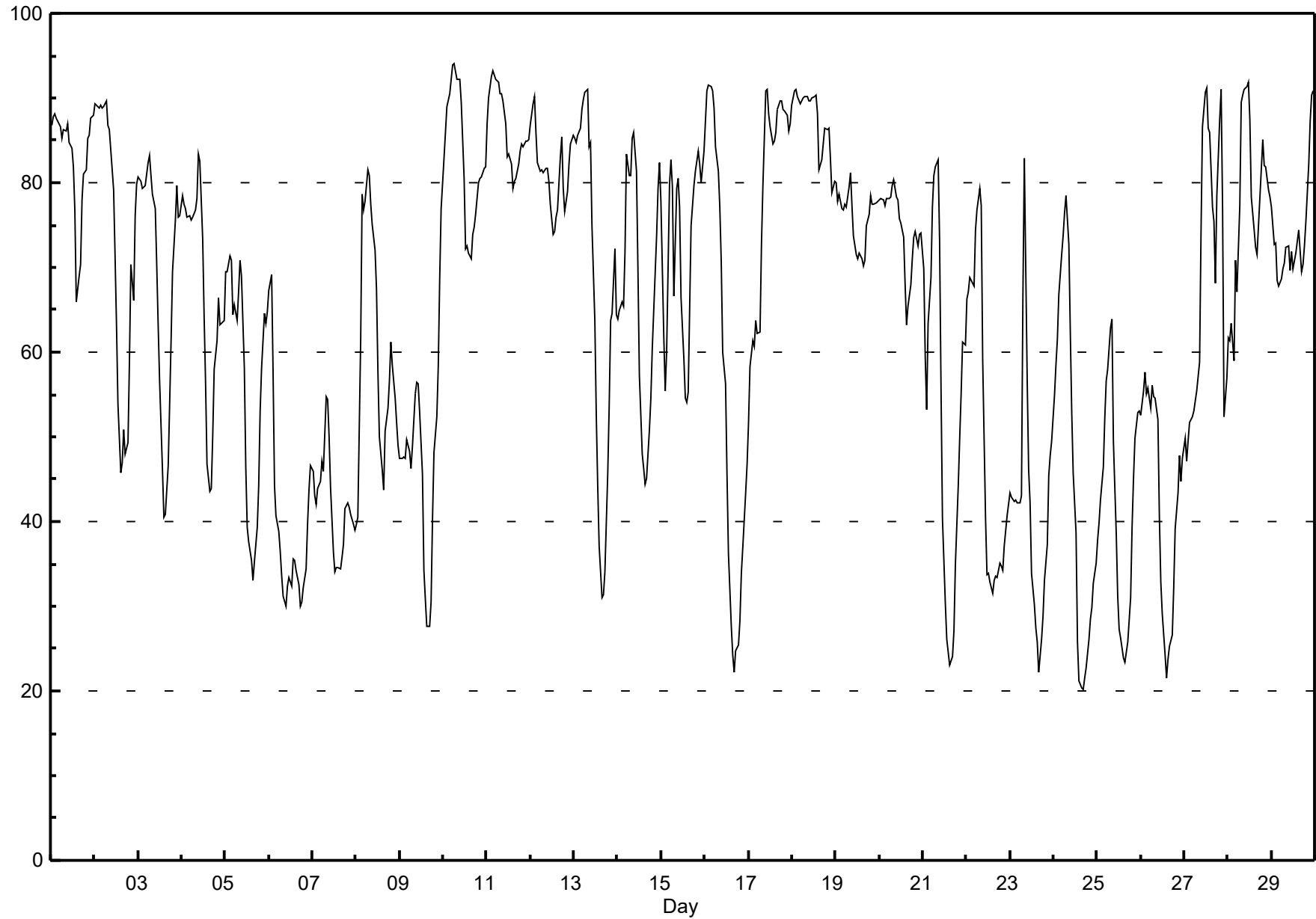
Hourly Averages

External Temperature (ET) - °C
Valleyview - February 2016



Hourly Averages

Relative Humidity (RH) - %
Valleyview - February 2016



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1 Spd	0	0	0	0	0	0	0	1	0	2	0	1	1	0	1	0	0	1	1	1	1	1	1	0	0.3	2.4	
Dir	191	170	200	117	40	192	355	349	353	346	13	317	309	226	205	155	177	328	319	331	334	28	344	261	332	346	
2 Spd	1	2	1	2	2	2	1	1	1	1	1	2	2	6	9	8	4	4	3	0	0	2	0	0	1.4	9.3	
Dir	228	202	200	191	202	234	205	207	163	181	188	170	179	265	296	311	315	290	292	177	347	318	193	136	269	296	
3 Spd	0	0	0	1	0	0	0	0	0	0	0	1	2	1	1	3	6	4	4	3	1	0	0	0	1.0	6.2	
Dir	21	20	322	7	284	2	178	186	157	301	249	221	281	348	354	7	349	336	339	334	324	183	135	307	339	349	
4 Spd	1	3	1	1	1	0	0	1	0	2	4	3	4	2	2	2	1	1	1	1	1	2	1	1	0.5	4.4	
Dir	347	337	350	339	342	298	99	320	193	180	168	170	178	189	266	19	47	160	190	199	174	185	198	203	192	168	
5 Spd	1	2	0	1	1	1	1	1	1	1	3	6	7	6	5	4	2	2	1	0	0	0	0	0	1.6	6.6	
Dir	203	180	309	272	231	235	159	273	205	200	180	170	171	170	176	182	177	180	178	232	209	176	341	25	182	171	
6 Spd	0	2	2	12	18	23	22	22	23	24	25	28	24	24	22	18	16	12	7	11	15	15	16	15	15.7	27.9	
Dir	154	178	207	262	260	262	265	263	266	267	275	280	291	310	300	304	307	298	280	272	277	276	274	273	278	280	
7 Spd	15	16	18	16	5	2	2	1	2	2	2	1	6	7	5	3	0	1	0	2	2	2	3	2	3.4	17.7	
Dir	276	276	276	276	274	158	243	166	145	151	147	130	276	299	302	298	333	118	75	144	178	177	178	182	266	276	
8 Spd	3	1	3	3	1	0	1	1	2	2	2	2	1	2	2	1	2	1	0	1	2	3	1	2	1.4	3.0	
Dir	178	185	179	180	187	171	196	190	186	181	175	167	153	153	167	161	315	245	213	190	199	186	167	228	183	179	
9 Spd	2	1	1	2	2	3	3	2	2	3	4	3	4	3	2	1	1	1	2	1	3	6	5	2	0.8	5.9	
Dir	209	196	167	163	167	185	173	198	194	188	183	186	183	180	174	201	39	347	350	343	356	356	347	341	196	356	
10 Spd	1	0	0	2	4	4	4	5	1	0	1	1	8	8	7	7	7	5	4	6	2	2	2	2	2.2	8.0	
Dir	174	182	161	41	341	13	19	14	354	145	358	91	128	124	125	126	126	128	128	139	160	159	152	157	113	128	
11 Spd	4	0	2	5	3	3	2	2	2	2	2	3	4	5	6	6	5	3	4	3	3	3	2	2	2.7	5.6	
Dir	163	164	7	351	17	37	31	7	26	4	16	20	9	357	6	6	14	23	3	6	13	359	354	353	11	6	
12 Spd	3	3	1	3	5	7	7	5	5	6	8	8	9	11	13	11	10	10	9	8	8	6	4	4	6.0	13.0	
Dir	23	21	14	119	125	124	128	124	144	153	159	152	139	168	168	171	167	170	170	169	169	172	172	172	155	168	
13 Spd	5	5	5	2	1	1	1	2	4	2	3	4	2	3	8	9	8	3	0	1	2	1	0	2	2.2	9.3	
Dir	173	173	179	191	204	208	205	183	266	158	239	251	192	221	270	274	277	298	176	180	155	156	185	196	230	274	
14 Spd	2	1	0	1	3	2	1	3	6	5	5	5	4	7	5	3	1	1	1	1	2	1	2	3	1.8	6.8	
Dir	188	198	214	204	242	209	174	222	232	232	266	306	302	308	331	51	117	147	277	252	188	186	185	249	249	302	
15 Spd	3	10	7	10	17	13	13	10	10	9	9	10	13	14	10	7	8	3	1	0	1	2	1	0	6.8	16.7	
Dir	193	248	255	301	270	261	262	304	300	281	288	295	293	291	296	304	310	322	164	156	186	180	168	260	282	270	
16 Spd	0	1	1	1	1	1	2	1	1	2	2	3	3	1	7	11	11	5	12	12	2	0	2	2	2.5	12.2	
Dir	190	9	24	309	199	185	180	162	176	171	168	169	160	162	253	258	261	256	262	276	237	133	141	178	244	276	
17 Spd	1	0	1	1	0	1	1	2	5	6	7	8	10	9	11	11	9	10	10	9	9	8	6	8	5.5	10.6	
Dir	18	190	197	189	177	184	183	12	358	9	17	6	8	3	6	16	14	14	9	6	7	11	10	1	9	6	
18 Spd	4	3	1	1	1	1	1	1	3	2	2	1	3	5	7	7	7	6	9	6	4	5	8	10	3.4	9.6	
Dir	2	305	212	189	164	190	146	52	353	18	345	4	346	334	314	290	319	318	344	360	347	350	325	353	335	353	
19 Spd	9	7	5	6	6	4	5	4	4	5	6	5	6	8	8	9	10	10	10	9	9	8	9	9	7.1	10.2	
Dir	9	17	15	3	11	24	20	34	13	17	17	10	353	351	354	354	3	4	2	5	12	6	5	6	7	2	
20 Spd	6	6	6	5	4	2	1	1	0	1	2	1	3	3	1	1	2	2	1	2	2	1	2	2	1.1	6.3	
Dir	5	359	359	14	7	22	16	358	353	26	341	340	336	347	16	192	189	186	178	182	187	183	144	163	2	359	
21 Spd	2	3	4	2	2	2	3	3	2	3	4	3	3	6	5	7	6	5	3	0	1	0	1	1	1.6	7.0	
Dir	204	247	257	183	167	170	175	193	200	192	168	161	177	248	288	285	305	342	344	185	180	207	182	206	236	285	
22 Spd	1	1	2	1	1	0	0	1	0	2	3	3	5	9	14	11	9	8	11	11	14	16	16	12	5.4	16.2	
Dir	194	188	164	195	212	193	359	192	179	168	167	152	261	285	293	307	304	290	278	278	277	273	271	271	277	273	273

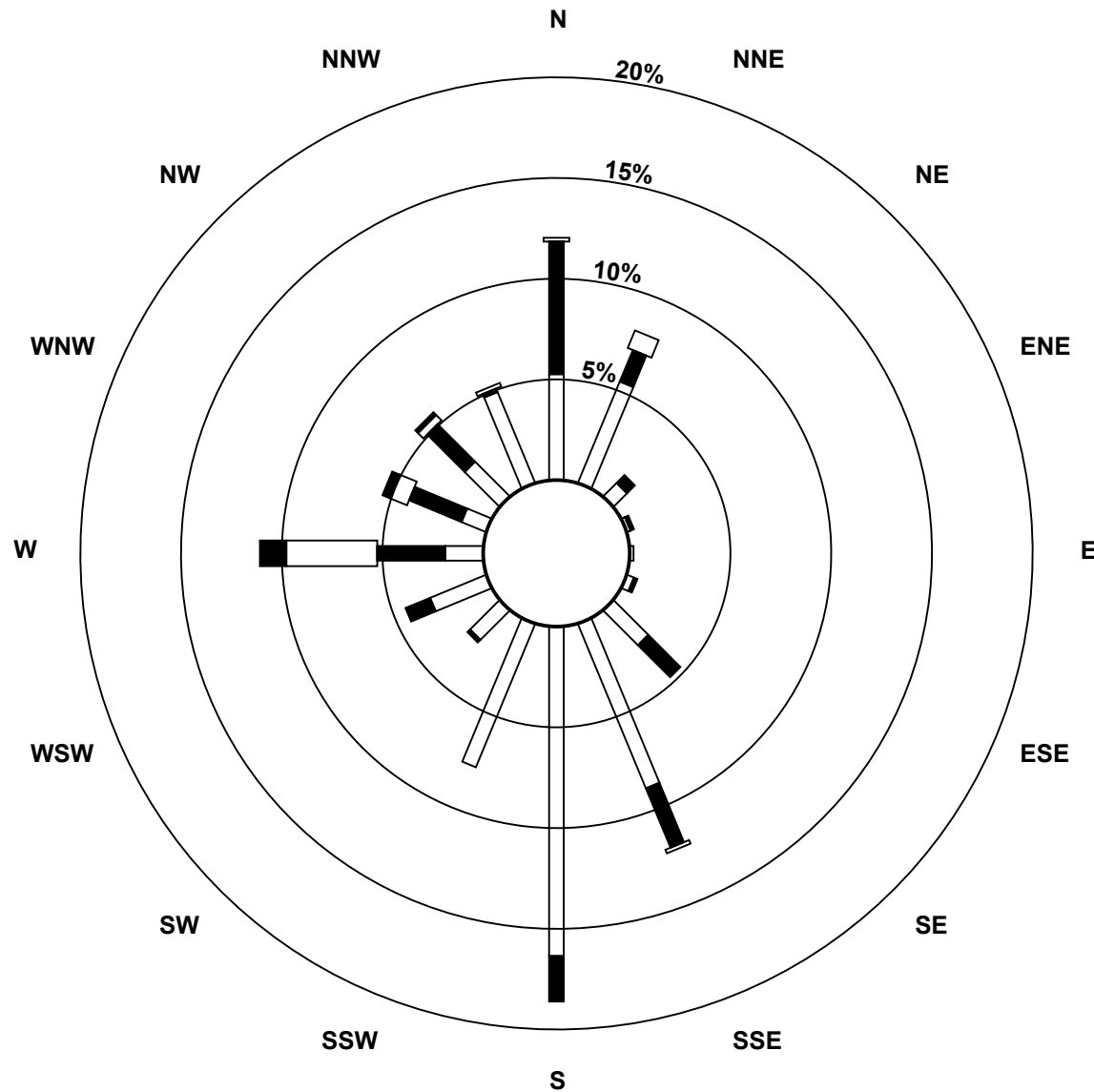
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - February 2016

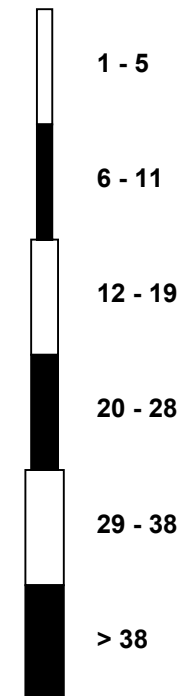
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
23 Spd	5	3	6	11	10	10	12	12	16	14	12	9	10	7	8	8	8	5	4	2	2	1	1	1	6.8	15.7			
Dir	256	243	248	259	273	268	275	296	270	269	281	279	280	312	314	303	304	329	313	312	243	142	160	201	280	270			
24 Spd	1	1	0	0	0	0	0	0	0	1	0	2	2	5	9	6	5	4	2	1	3	4	4	3	1.8	8.8			
Dir	191	166	243	210	165	320	82	262	178	248	50	352	343	162	164	163	163	151	175	183	172	176	175	179	168	164			
25 Spd	3	3	2	1	1	0	1	1	0	0	2	3	3	4	1	1	1	1	1	1	2	2	2	2	1.2	3.5			
Dir	177	185	181	207	220	169	184	2	284	174	162	169	187	240	261	2	133	171	223	207	211	184	180	188	191	240			
26 Spd	3	2	2	2	2	1	2	2	1	1	1	1	1	1	2	2	1	1	0	1	1	1	1	1	1.0	2.8			
Dir	195	192	181	176	198	201	203	199	214	170	204	217	328	71	215	289	325	281	229	150	189	185	181	146	202	195			
27 Spd	3	13	6	5	3	9	9	10	9	12	8	4	2	3	3	1	1	0	1	0	1	3	3	2	3.1	12.6			
Dir	241	278	252	251	260	276	272	280	306	339	8	33	351	323	43	348	30	101	126	171	217	232	246	171	293	278			
28 Spd	1	2	1	1	1	1	5	13	8	8	7	8	12	13	12	13	12	10	9	6	9	9	8	10	5.2	13.1			
Dir	143	161	147	182	88	81	4	5	13	12	359	38	32	32	30	24	32	41	48	65	118	130	138	145	46	5			
29 Spd	7	8	9	10	10	9	7	7	7	8	7	6	6	5	2	2	1	1	2	1	1	1	1	2	5.0	10.1			
Dir	152	163	163	166	166	169	170	169	168	168	164	161	166	160	150	160	142	168	162	174	192	199	199	190	166	166			
Spd	0.8	1.5	1.4	1.6	1.8	1.7	1.7	1.6	2.0	1.6	1.3	1.2	1.5	2.3	2.7	2.8	2.5	1.5	1.4	1.1	0.8	0.9	1.0	0.9	Diurnal Average				
Dir	231	251	244	261	256	244	253	287	275	273	261	266	286	300	299	309	322	329	320	302	268	265	260	253					
Spd	15.3	15.5	17.7	15.5	18.1	22.6	22.3	22.5	23.0	23.7	24.9	27.9	24.0	23.6	22.3	18.2	15.7	11.9	11.7	12.2	14.8	16.2	15.7	15.2	Diurnal Maximum				
Dir	276	276	276	276	260	262	265	263	266	267	275	280	291	310	300	304	307	298	262	276	277	273	274	273					
Maximum Speed Value: 28 km/h on Feb 6 12:00																								Minimum Speed Value: 0 km/h on Feb 3 10:00				Hours in Service: 696	
Maximum Daily Speed Average: 15.7 km/h on Feb 6																								Minimum Daily Speed Average: 0.3 km/h on Feb 1				Hours of Data: 696	
Maximum Diurnal Speed Average: 2.8 km/h at hour 16																								Minimum Diurnal Speed Average: 0.8 km/h at hour 1				Hours of Missing Data: 0	
Monthly Average Velocity: 1.39 km/h 280.3 deg												Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.4 Q ₁ = 1.0 Median = 2.4 Q ₃ = 6.2 P ₉₀ = 10.1 P ₉₉ = 22.4												Percent Operational Time: 100.0					
All monthly, daily, and diurnal averages have been calculated using vector methods																													
Frequency Distribution																													

Wind Rose

Wind Speed (WS) (km/h)
Valleyview - February 2016



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - February 2016

Maximum Speed: 28 km/h on Feb 6 12:00																				Maximum Daily Speed Average: 16.7 km/h on Feb 6										Hours in Service: 696	
Minimum Speed: 0 km/h on Feb 1 07:00																				Minimum Daily Speed Average: 0.8 km/h on Feb 1										Hours of Data: 696	
Maximum Diurnal Speed Average: 6.7 km/h at hour 15																				Minimum Diurnal Speed Average: 3.1 km/h at hour 1										Hours of Missing Data: 0	
Monthly Average Speed: 4.37 km/h																				Percentiles: P ₁ = 0.2 P ₁₀ = 0.6 Q ₁ = 1.3 Median = 2.5 Q ₃ = 6.3 P ₉₀ = 10.3 P ₉₉ = 22.6										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-Feb	0	0	0	0	0	0	0	1	0	2	0	1	1	1	1	0	1	1	1	1	2	2	1	0	0.8	2.4					
2-Feb	1	2	1	2	2	2	1	1	1	1	1	2	3	6	9	8	4	4	3	1	1	3	1	0	2.4	9.5					
3-Feb	0	0	0	1	0	0	0	0	0	0	1	1	2	1	1	3	6	4	4	3	1	0	0	0	1.4	6.3					
4-Feb	1	3	2	1	1	1	1	1	0	2	4	3	4	2	3	3	1	1	1	1	1	2	1	1	1.7	4.5					
5-Feb	1	2	1	2	1	1	1	1	1	1	3	6	7	6	5	4	2	2	1	0	1	1	1	1	2.0	6.6					
6-Feb	1	2	2	12	18	23	23	23	23	24	25	28	24	24	23	18	16	12	7	11	15	15	16	15	16.7	28.3					
7-Feb	15	16	18	16	6	3	3	1	2	2	2	1	6	7	5	3	1	1	0	2	2	2	3	2	4.9	17.8					
8-Feb	3	2	3	3	1	1	1	1	2	2	2	2	1	2	2	2	2	1	0	1	3	3	2	2	1.7	3.1					
9-Feb	2	2	2	2	2	3	3	2	2	3	4	3	4	3	2	1	1	2	3	1	3	6	5	2	2.6	5.9					
10-Feb	1	1	1	2	4	5	4	5	2	0	1	2	8	8	7	7	7	5	4	6	3	3	2	2	3.7	8.2					
11-Feb	4	1	2	6	4	3	3	3	3	2	2	2	3	4	5	6	5	3	4	3	3	3	2	2	3.2	5.6					
12-Feb	3	3	1	3	5	7	7	5	5	6	8	8	9	11	13	12	11	10	9	8	8	6	4	4	7.0	13.1					
13-Feb	5	5	5	3	1	2	1	2	4	2	3	4	3	3	8	10	9	3	0	1	2	1	1	2	3.3	9.6					
14-Feb	2	1	0	1	4	2	1	3	6	6	5	5	5	7	5	4	2	1	1	2	2	1	2	3	3.0	7.2					
15-Feb	3	11	7	10	17	13	13	11	10	9	9	10	13	14	10	7	8	3	1	0	1	2	1	0	7.7	17.0					
16-Feb	0	1	1	1	1	2	2	2	2	2	2	3	3	2	8	11	11	5	12	12	2	2	2	2	3.8	12.4					
17-Feb	1	0	1	1	0	1	1	2	5	7	7	8	10	9	11	11	10	10	10	9	9	8	6	8	6.1	10.7					
18-Feb	4	3	1	1	1	1	1	1	4	2	3	1	3	5	7	7	7	6	9	6	4	6	9	10	4.3	10.2					
19-Feb	9	7	6	6	6	4	5	4	4	5	6	5	6	8	8	10	10	10	10	10	9	9	8	9	7.3	10.2					
20-Feb	6	6	6	5	4	2	1	1	0	1	2	2	3	3	1	1	2	2	1	2	2	1	2	2	2.4	6.4					
21-Feb	2	3	5	2	2	2	3	3	2	3	4	3	3	6	6	7	6	5	3	1	1	0	1	1	3.1	7.2					
22-Feb	1	1	2	1	1	0	0	1	0	2	3	3	6	9	14	12	10	9	11	12	14	16	16	12	6.4	16.3					
23-Feb	5	4	6	11	10	10	12	13	16	14	12	9	10	7	8	9	8	6	4	3	2	1	2	1	7.7	15.9					
24-Feb	1	1	0	0	0	0	0	1	0	1	1	2	2	5	9	6	5	4	2	1	3	4	4	3	2.4	9.0					
25-Feb	3	3	2	1	1	1	1	1	1	1	2	3	3	4	2	2	1	1	1	1	2	2	2	2	1.7	3.7					
26-Feb	3	2	2	2	2	1	2	2	1	1	1	2	2	2	2	2	1	1	0	1	1	1	1	2	1.7	2.8					
27-Feb	3	13	6	5	3	9	9	11	9	12	9	4	2	3	3	1	1	0	1	0	1	4	3	2	4.8	12.8					
28-Feb	1	2	1	1	1	1	5	13	8	8	7	9	12	13	12	13	12	10	9	6	9	9	8	10	7.6	13.2					
29-Feb	7	8	9	10	10	9	7	7	7	8	7	6	6	5	2	2	1	1	2	1	1	1	1	2	5.1	10.2					
3.1 3.6 3.3 3.8 3.8 3.7 3.8 4.2 4.2 4.4 4.7 4.9 5.7 6.2 6.7 6.2 5.6 4.2 4.0 3.7 3.7 3.9 3.7 3.7																									Diurnal Average						
15.4 15.6 17.8 15.6 18.4 22.8 22.6 22.7 23.2 24.0 25.1 28.3 24.4 24.0 22.7 18.5 15.8 12.1 11.8 12.4 14.9 16.3 15.8 15.2																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - February 2016

Maximum Value: 98.7 deg on Feb 3 03:00																		Hours in Service: 696							
Minimum Value: 3.5 deg on Feb 21 07:00																		Hours of Data: 696							
																		Hours of Missing Data: 0							
Percentiles: P ₁ = 5.5 P ₁₀ = 8.3 Q ₁ = 10.3 Median = 17.4 Q ₃ = 35.3 P ₉₀ = 63.4 P ₉₉ = 90.5																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	68	76	63	53	98	35	83	51	64	17	39	87	75	68	39	34	69	88	54	56	80	58	76	84	98.3
2-Feb	27	24	24	15	12	19	29	21	10	14	25	12	17	21	12	17	21	11	9	82	96	52	85	77	95.5
3-Feb	83	69	99	28	69	70	28	43	53	90	77	54	44	48	43	7	12	14	5	9	40	57	91	54	98.7
4-Feb	20	19	24	41	32	94	76	83	83	8	9	12	12	32	51	26	57	43	54	25	24	11	18	13	94.2
5-Feb	14	42	89	60	26	26	87	67	29	49	20	7	6	7	7	6	15	13	25	55	58	52	71	65	88.7
6-Feb	88	25	26	14	10	8	9	9	8	8	8	10	11	9	10	10	9	9	13	9	7	7	6	6	87.5
7-Feb	7	6	6	7	61	36	28	16	9	11	12	62	41	14	16	21	83	20	35	19	26	12	11	18	83.4
8-Feb	9	16	11	7	40	61	25	17	5	11	7	12	56	17	9	51	72	35	63	27	15	22	63	28	72.2
9-Feb	22	29	39	36	35	22	19	33	15	17	12	34	7	9	18	64	80	59	49	69	46	4	12	56	80.0
10-Feb	19	29	62	30	25	11	12	9	82	70	31	78	12	9	9	9	9	13	13	12	68	38	19	20	81.6
11-Feb	10	87	12	13	21	11	16	16	19	25	16	16	17	13	13	10	8	16	13	16	13	10	14	17	86.8
12-Feb	10	11	52	29	10	6	7	6	14	16	10	15	13	8	7	7	7	8	9	8	7	7	9	9	52.1
13-Feb	7	8	7	22	20	19	24	40	47	25	15	25	40	37	15	12	8	31	62	24	35	44	27	6	62.4
14-Feb	11	35	19	24	28	25	15	22	12	20	15	26	21	17	16	30	49	15	26	53	65	37	27	8	65.4
15-Feb	15	25	19	13	11	12	9	22	12	11	9	10	8	10	12	11	15	19	49	32	9	7	53	77	76.8
16-Feb	70	37	44	61	61	46	33	32	20	10	18	13	13	75	30	11	8	16	19	10	31	72	43	46	74.8
17-Feb	82	23	11	27	56	13	29	40	8	13	10	14	9	10	10	10	11	11	9	8	8	9	9	6	82.4
18-Feb	29	18	53	31	16	16	42	63	22	31	22	33	16	18	12	14	10	12	12	12	11	18	9	20	63.2
19-Feb	9	14	15	10	10	16	13	20	16	15	13	15	20	10	11	10	10	7	7	7	9	10	9	9	19.9
20-Feb	11	11	10	12	15	24	41	28	45	16	18	19	10	10	62	69	29	28	21	27	15	21	17	21	69.4
21-Feb	9	31	54	32	16	5	3	7	8	7	10	9	24	21	25	15	12	21	15	62	16	24	22	12	62.0
22-Feb	18	34	14	15	10	28	78	24	32	20	10	11	50	15	13	14	14	14	8	9	7	8	7	7	77.6
23-Feb	32	33	21	8	9	8	7	20	10	10	7	9	12	10	11	14	12	19	12	54	37	57	44	26	56.7
24-Feb	34	25	48	72	79	84	93	83	24	54	97	15	62	13	10	11	11	11	10	17	14	5	7	8	97.4
25-Feb	6	8	12	63	25	55	28	44	87	62	22	14	32	19	55	77	15	34	16	21	27	11	10	8	86.5
26-Feb	8	9	24	10	12	22	12	40	66	55	48	52	64	64	44	47	88	49	41	55	30	26	15	60	87.7
27-Feb	25	10	20	21	32	7	9	10	13	10	27	15	24	58	19	38	40	57	18	64	49	29	28	16	63.8
28-Feb	34	12	26	15	44	73	70	7	10	12	9	19	9	10	10	11	7	8	10	26	8	11	10	10	73.5
29-Feb	14	7	10	7	8	8	8	8	10	9	9	10	10	13	16	30	67	22	11	13	31	21	16	14	67.3
87.5 86.8 98.7 72.5 98.3 94.2 93.0 83.5 86.5 89.8 97.4 87.4 74.9 74.8 62.2 77.4 87.7 88.4 63.1 82.3 95.5 72.3 91.3 84.1																									

PAZA

Falher Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

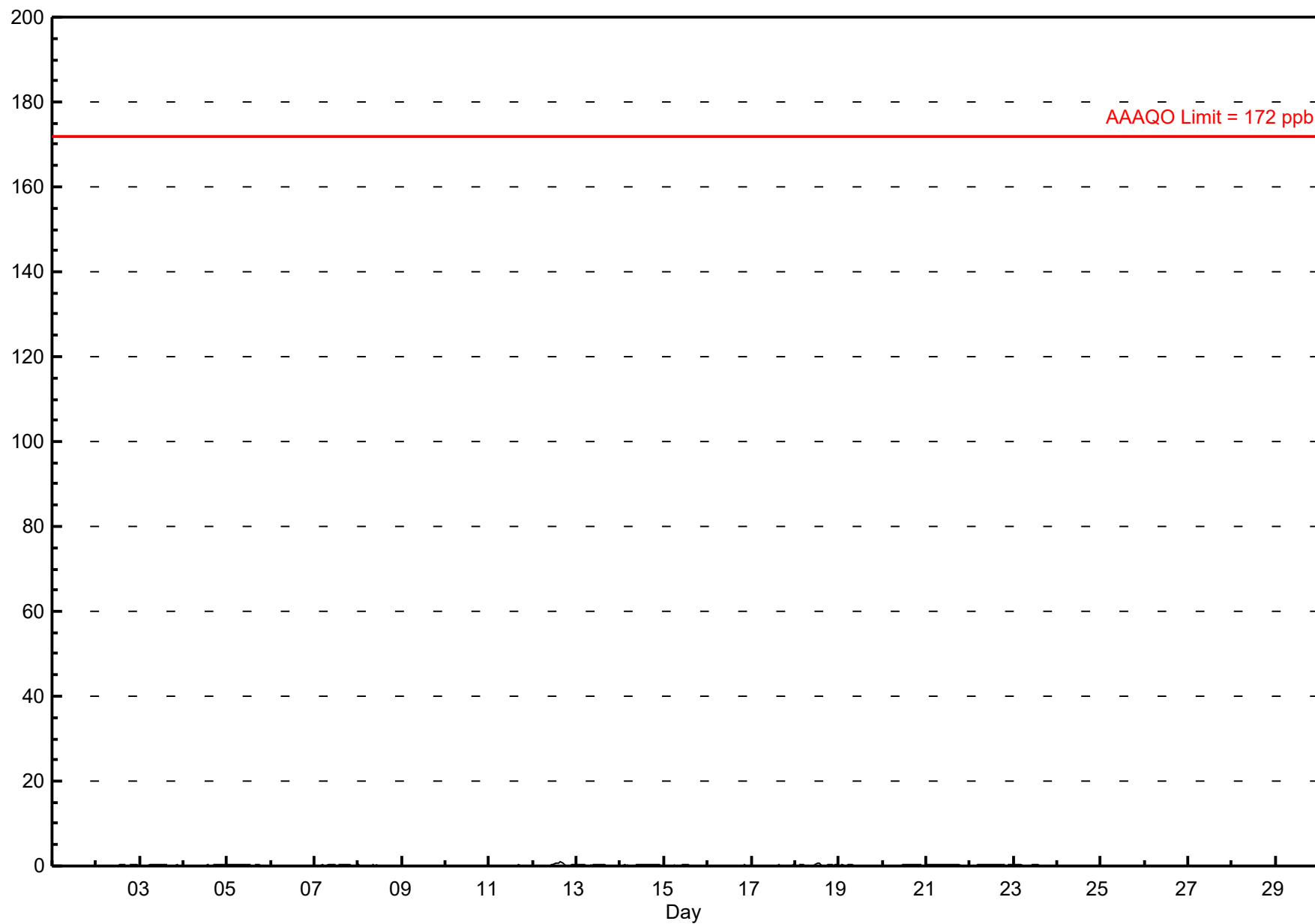
Falher - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																			Hours in Service: 568							
Maximum Value: 0.9 ppb on Feb 12 16:00																			Maximum Daily Average: 0.3 ppb on Feb 12				Hours of Data: 540			
Minimum Value: 0 ppb on Feb 1 01:00																			Minimum Daily Average: 0.0 ppb on Feb 1				Hours of Missing Data: 28			
Maximum Diurnal Average: 0.2 ppb at hour 14																			Minimum Diurnal Average: 0.1 ppb at hour 7				Hours of Calibration: 28			
Monthly Average: 0.15 ppb																			Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.6				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-Feb	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-Feb	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-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.4
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.4
6-Feb	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	0.1
7-Feb	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
8-Feb	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
9-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
10-Feb	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-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
12-Feb	0	0	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0.3	0.9
13-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
14-Feb	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-Feb	0	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-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
17-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
18-Feb	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.8
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.3
20-Feb	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-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.4
23-Feb	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
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	--	0.1
25-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
Diurnal Average																										
Diurnal Maximum																										
C - Calibration NS - Not in service A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Falher - February 2016



Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

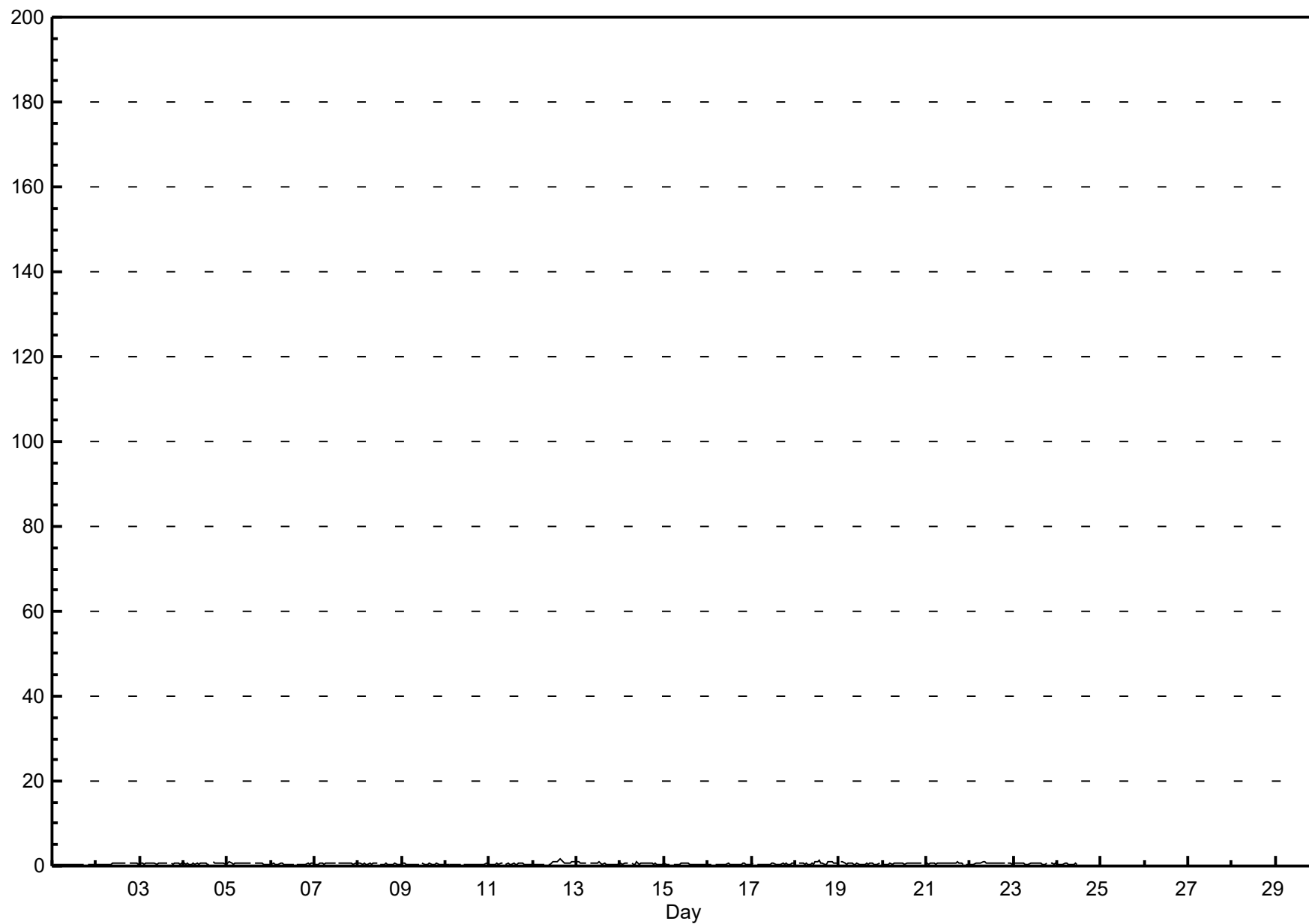
Falher - February 2016

Maximum Value: 1.6 ppb on Feb 12 16:00										Maximum Daily Average: 0.7 ppb on Feb 12										Hours in Service: 568								
Minimum Value: 0 ppb on Feb 1 03:00										Minimum Daily Average: 0.3 ppb on Feb 1										Hours of Data: 540								
Maximum Diurnal Average: 0.6 ppb at hour 14										Minimum Diurnal Average: 0.5 ppb at hour 6										Hours of Missing Data: 28								
Monthly Average: 0.53 ppb										Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.6 P ₉₀ = 0.8 P ₉₉ = 1.1										Hours of Calibration: 28								
																				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-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0.3	0.5		
2-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0.5	0.8		
3-Feb	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	A	1	0	1	1	1	0	1	0.6	0.8		
4-Feb	1	0	1	1	0	1	0	1	0	1	1	1	1	0	0	A	1	1	1	1	1	1	1	0	0.6	0.9		
5-Feb	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0.6	0.9		
6-Feb	0	1	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	1	1	0.4	0.7		
7-Feb	0	0	0	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	0.6	0.8		
8-Feb	1	1	0	1	0	0	1	0	1	1	1	A	0	0	0	1	0	0	0	0	1	0	0	0	0.5	0.6		
9-Feb	1	1	0	0	0	0	0	0	0	0	A	1	0	0	0	1	0	0	0	1	0	0	0	0	0.4	0.6		
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.5		
11-Feb	0	0	0	1	1	0	1	1	A	0	1	0	0	1	0	0	1	1	1	1	0	0	0	0	0.5	0.7		
12-Feb	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0.7	1.6		
13-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	1	1	0.6	1.0		
14-Feb	1	0	1	1	1	A	1	0	0	1	0	1	1	1	1	1	1	1	0	1	0	0	0	0	0.6	0.9		
15-Feb	1	0	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.7		
16-Feb	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	0.4	0.6		
17-Feb	0	1	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	1	1	0.5	0.6		
18-Feb	1	A	1	1	1	0	1	0	0	1	0	1	1	1	1	1	0	0	1	1	1	1	1	1	0.7	1.2		
19-Feb	A	1	1	1	0	1	1	1	1	0	1	0	0	0	0	1	0	1	1	0	0	1	1	A	0.6	0.9		
20-Feb	0	0	0	0	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	0.6	0.8		
21-Feb	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	0	0.6	0.9		
22-Feb	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0.7	1.1		
23-Feb	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	1	A	1	1	0	1	0.5	0.7		
24-Feb	0	0	0	0	1	1	0	0	0	0	1	0	C	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	--	0.5		
25-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
26-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
27-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
28-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
29-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
																									Diurnal Average			
																									Diurnal Maximum			
C - Calibration																									NS - Not in service		A - Automated Daily Zero Span	

Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

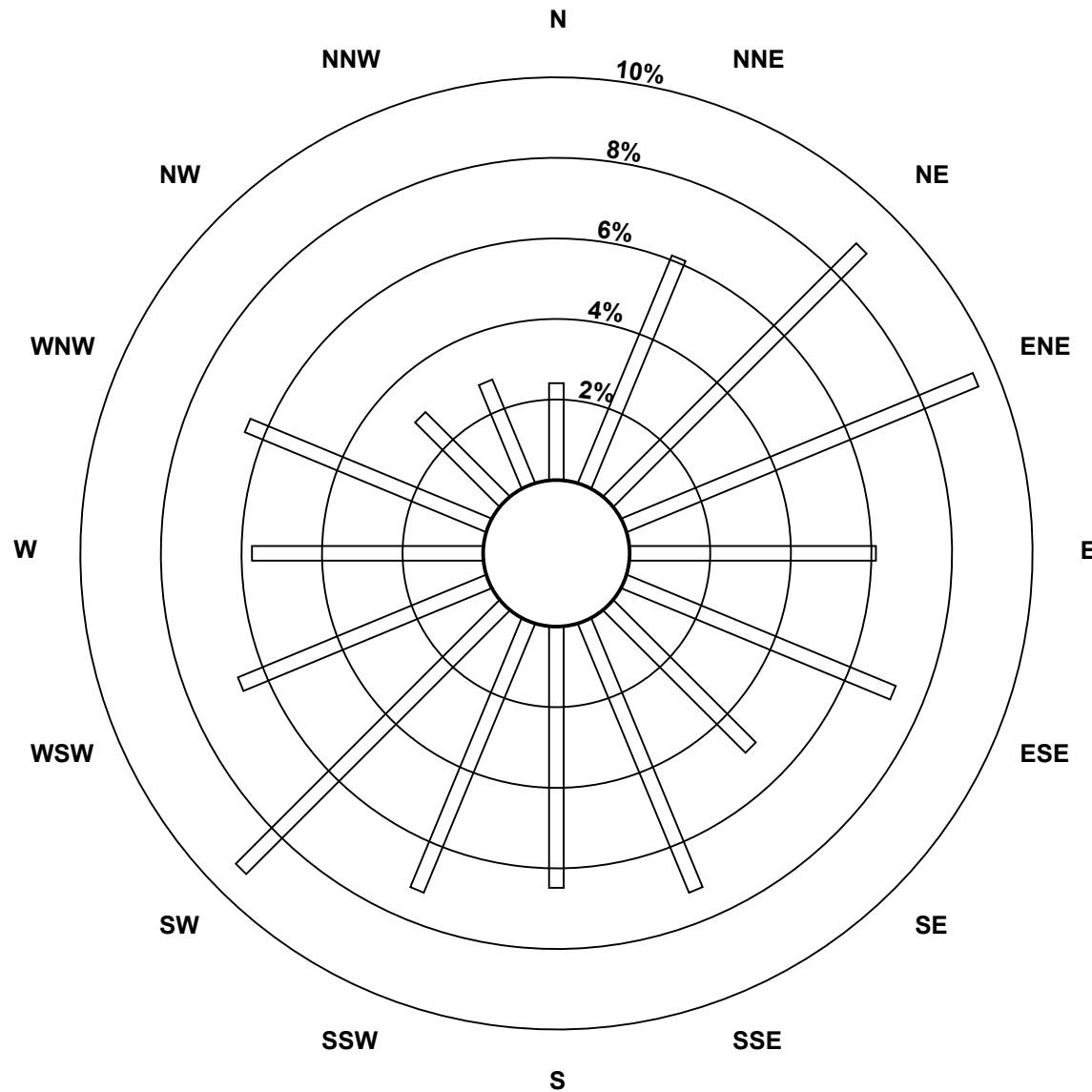
Falher - February 2016



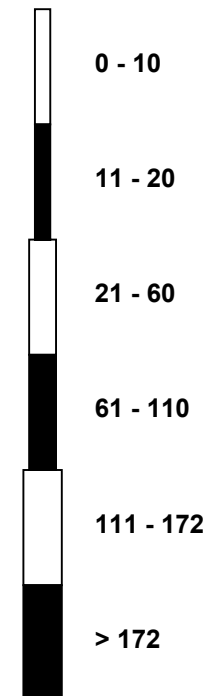
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Falher - February 2016



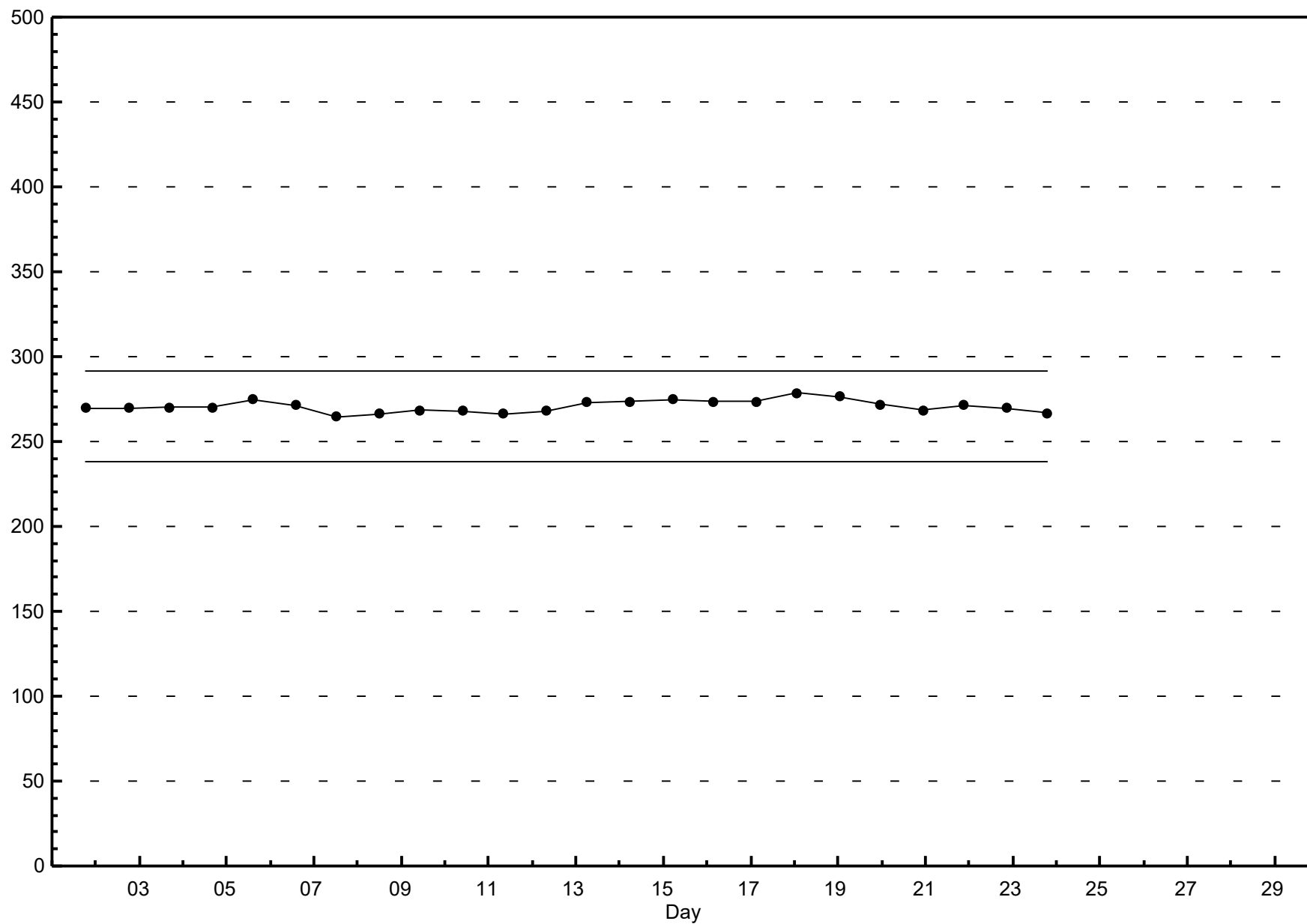
Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)

Falher - February 2016



Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

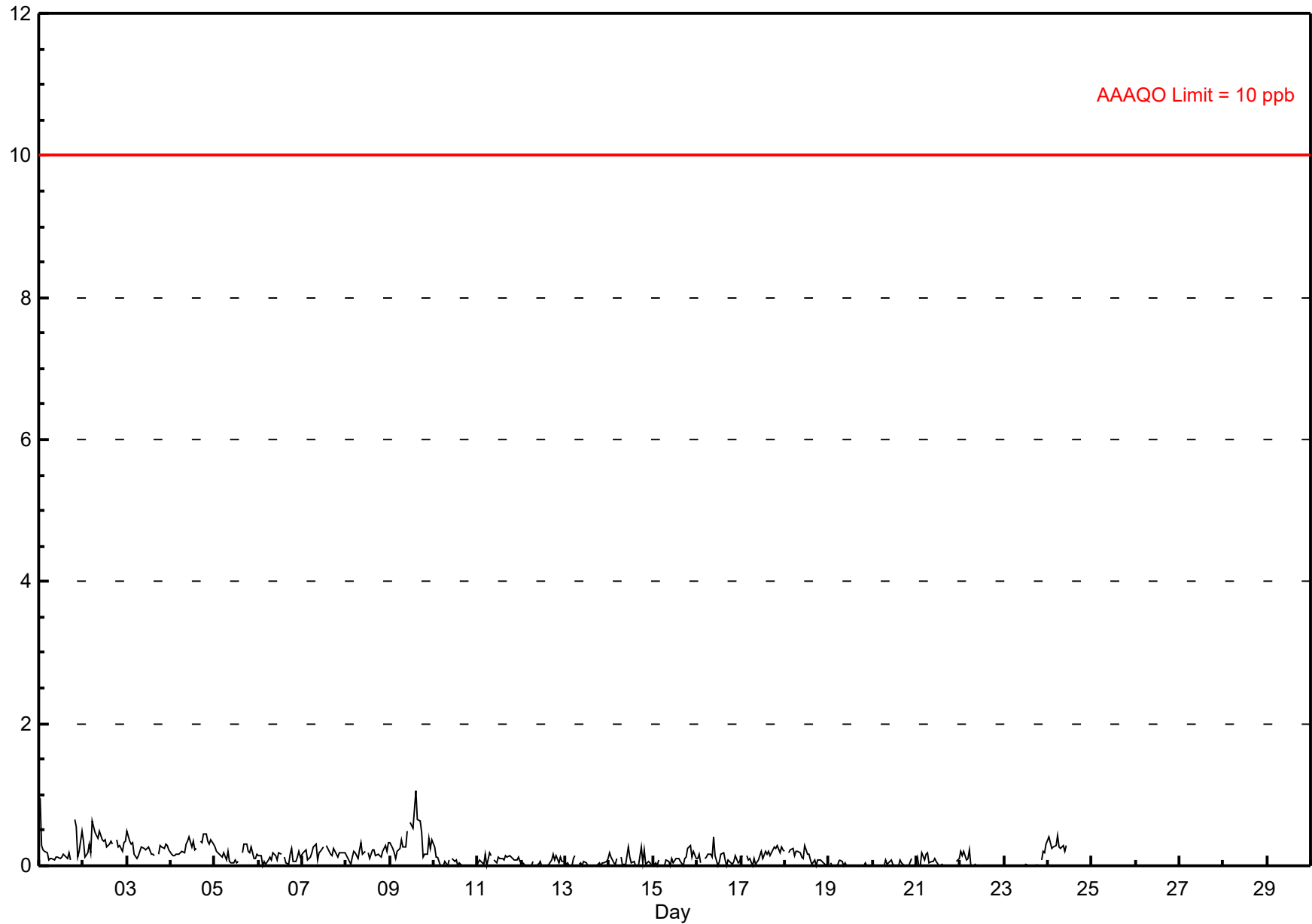
Falher - February 2016

Number of Exceedences (AAAQO): Maximum Value: 1.1 ppb on Feb 9 15:00																			1-hr: 0 24-hr: 0 Maximum Daily Average: 0.4 ppb on Feb 9					Hours in Service: 566 Hours of Data: 539 Hours of Missing Data: 27 Hours of Calibration: 27 Percent Operational Time: 100.0				
Minimum Value: 0 ppb on Feb 6 03:00 Maximum Diurnal Average: 0.2 ppb at hour 1 Monthly Average: 0.14 ppb																			Minimum Daily Average: 0.0 ppb on Feb 19 Minimum Diurnal Average: 0.1 ppb at hour 3 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 = 0.6									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1-Feb	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0.2	0.9		
2-Feb	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.6		
3-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.5		
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.5		
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3		
6-Feb	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		
7-Feb	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		
8-Feb	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-Feb	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.1		
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3		
11-Feb	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2		
12-Feb	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	0.2		
13-Feb	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1		
14-Feb	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-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3		
16-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4		
17-Feb	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-Feb	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-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.0	0.1		
20-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.1		
21-Feb	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-Feb	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-Feb	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		
24-Feb	0	0	0	0	0	0	0	0	0	0	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	0.4		
25-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
26-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
27-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
28-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
29-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--		
																									Diurnal Average			
																									Diurnal Maximum			
C - Calibration NS - Not in service A - Automated Daily Zero Span																												
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																												

Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

Falher - February 2016



Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

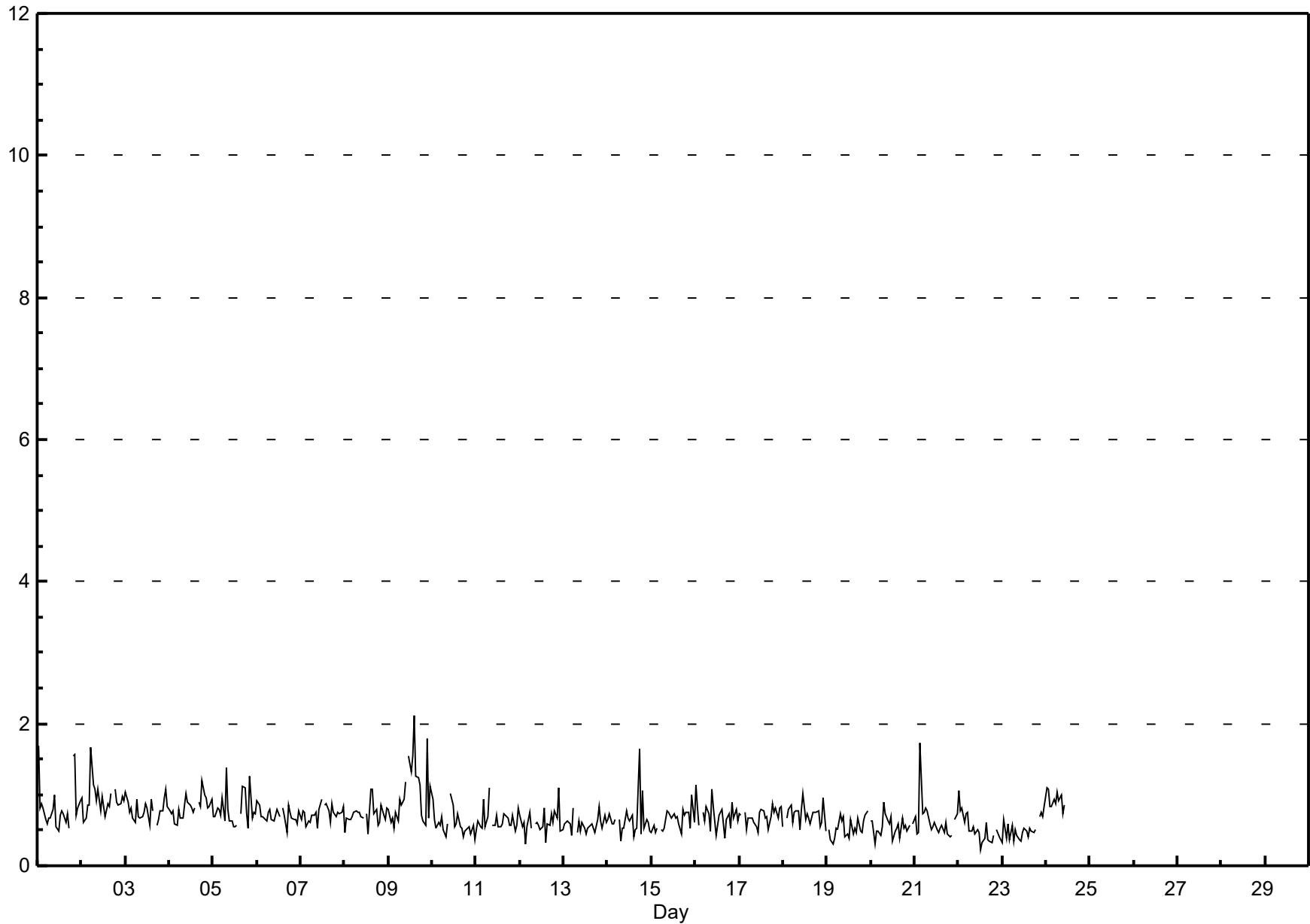
Falher - February 2016

Maximum Value: 2.1 ppb on Feb 9 15:00																			Maximum Daily Average: 1.0 ppb on Feb 9										Hours in Service: 566	
Minimum Value: 0 ppb on Feb 22 13:00																			Minimum Daily Average: 0.5 ppb on Feb 23										Hours of Data: 539	
Maximum Diurnal Average: 0.8 ppb at hour 1																			Minimum Diurnal Average: 0.6 ppb at hour 3										Hours of Missing Data: 27	
Monthly Average: 0.70 ppb																			Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 0.9 P ₉₉ = 1.6										Hours of Calibration: 27	
																													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-Feb	2	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	A	2	2	1	1	1	0.8	1.7				
2-Feb	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.7				
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1	1	1	1	1	0.8	1.1				
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.2				
5-Feb	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	1.4				
6-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	0.7	0.9				
7-Feb	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	0.9				
8-Feb	0	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.1				
9-Feb	1	1	1	1	1	1	1	1	1	1	A	2	1	2	2	1	1	1	1	1	1	2	1	1	1.0	2.1				
10-Feb	1	1	1	1	1	1	0	0	1	A	1	1	1	1	1	1	1	0	0	1	1	0	1	0	0.6	1.0				
11-Feb	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.6	1.1				
12-Feb	1	1	1	0	1	1	1	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0.6	1.1				
13-Feb	1	1	1	1	0	1	A	0	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	0.6	0.8				
14-Feb	1	1	1	1	1	A	1	0	1	1	1	1	1	1	0	1	1	2	0	1	1	1	1	0	0.7	1.7				
15-Feb	0	1	0	1	A	0	0	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	1.0				
16-Feb	1	1	1	A	1	1	1	1	0	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	0.7	1.1				
17-Feb	1	1	A	1	0	1	1	1	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	0.7	0.9				
18-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.0				
19-Feb	A	1	0	0	0	1	1	1	1	1	0	0	0	1	0	1	0	1	0	0	1	1	1	A	0.5	0.8				
20-Feb	1	1	0	0	0	0	1	1	1	1	1	1	0	0	1	1	0	1	1	1	0	1	A	1	0.6	0.9				
21-Feb	1	0	0	2	1	1	1	1	1	1	1	1	0	0	1	1	0	1	0	0	0	A	1	1	0.6	1.7				
22-Feb	1	1	1	1	1	1	0	0	1	0	1	0	0	0	0	1	0	0	0	0	A	1	0	0	0.5	1.1				
23-Feb	0	1	0	1	0	1	0	1	0	0	0	0	1	0	0	1	0	0	1	A	1	1	1	1	0.5	0.8				
24-Feb	1	1	1	1	1	1	1	1	1	1	1	C	C	C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	1.1				
25-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--				
26-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--				
27-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--				
28-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--				
29-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--				
0.8		0.7		0.6		0.7		0.7		0.7		0.7		0.7		0.7		0.6		0.7		0.7		0.7		Diurnal Average				
1.7		1.1		0.9		1.7		1.1		1.4		1.0		1.2		1.0		1.5		1.3		1.5		2.1		Diurnal Maximum				
C - Calibration				NS - Not in service								A - Automated Daily Zero Span																		

Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

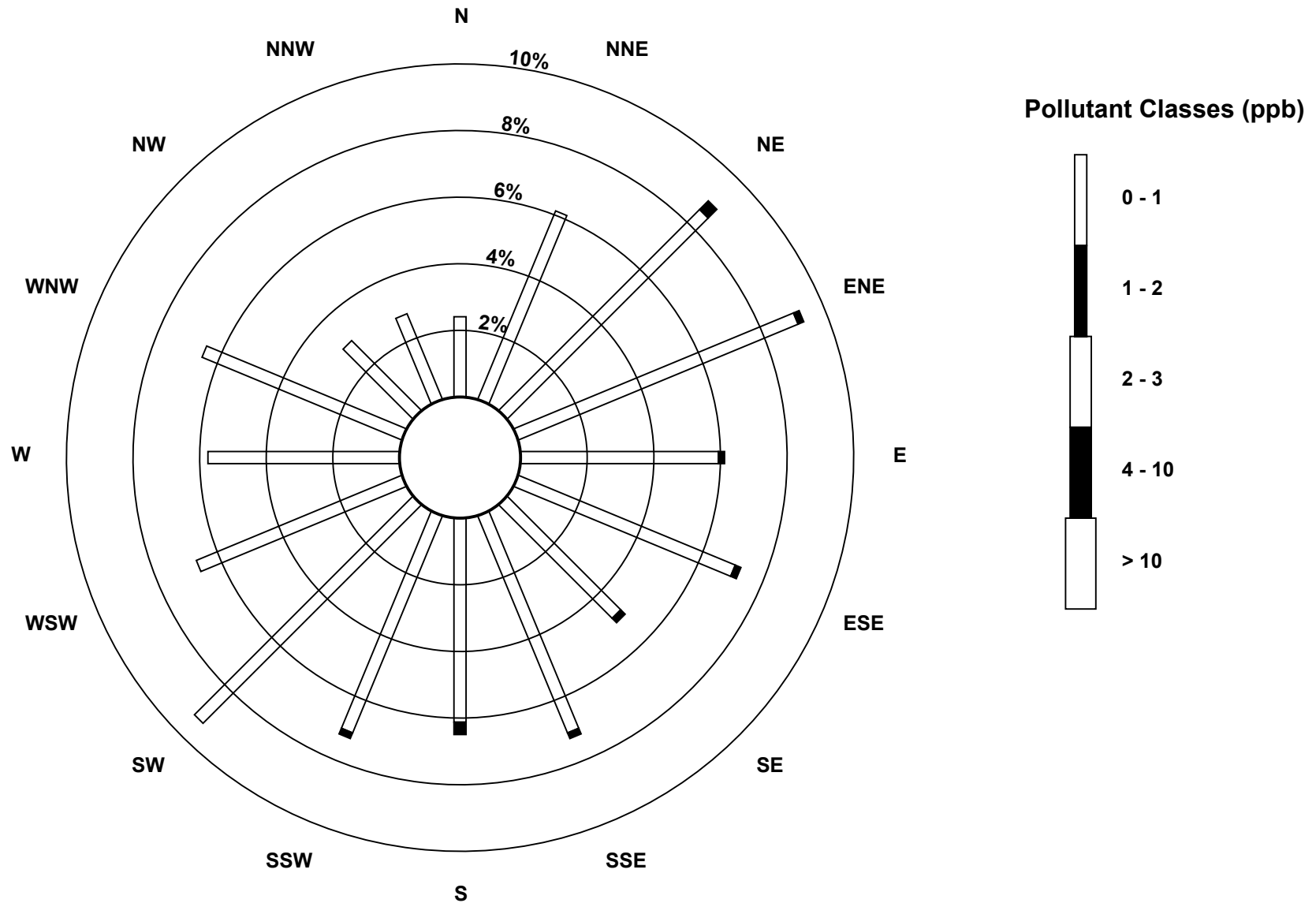
Falher - February 2016



Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb

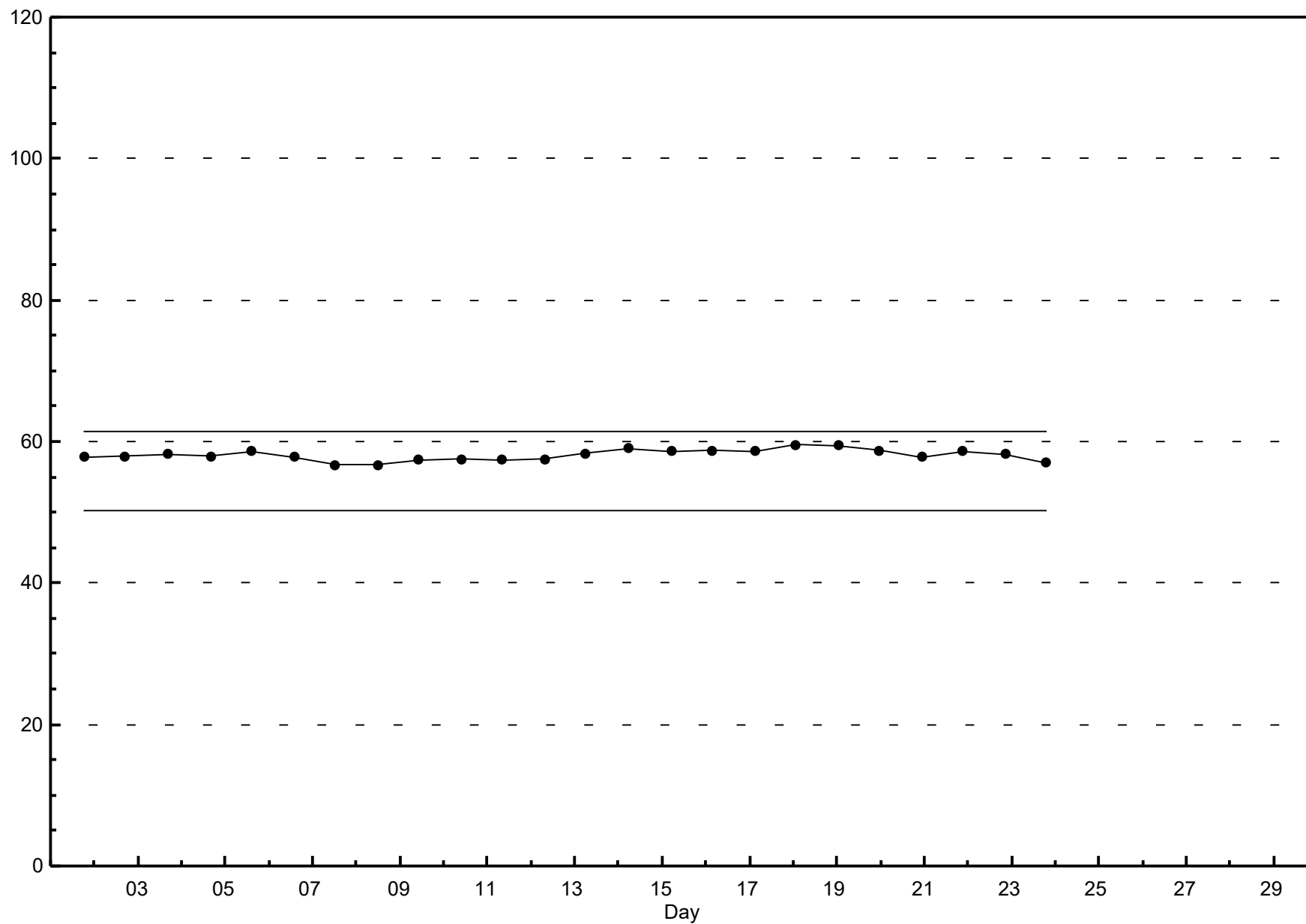
Falher - February 2016



Span Responses

Hydrogen Sulphide (H_2S)

Falher - February 2016



Hourly Averages

External Temperature (ET) - °C

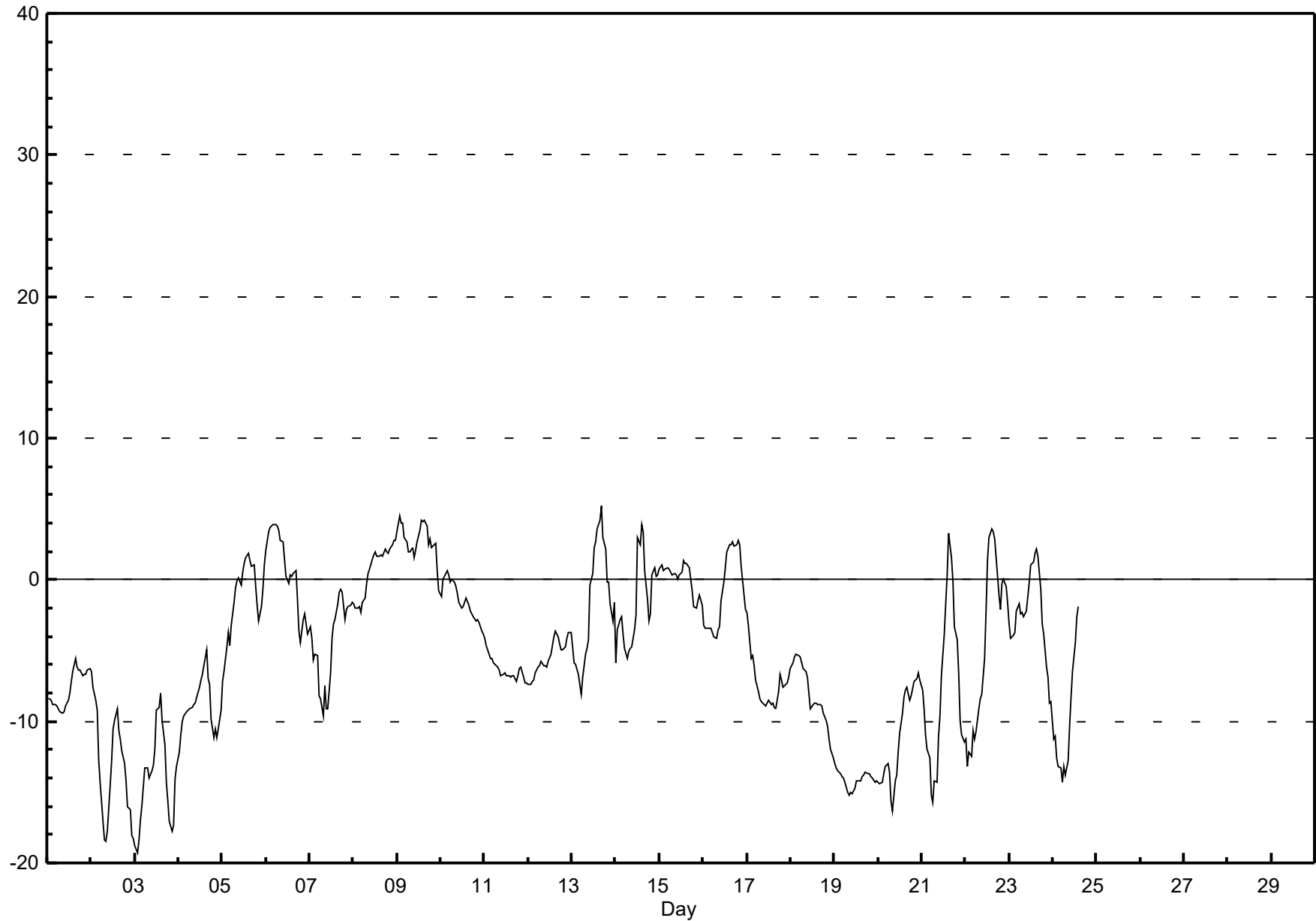
Falher - February 2016

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 5.2 °C on Feb 13 17:00 Maximum Daily Average: 2.8 °C on Feb 9																				Hours in Service: 567 Hours of Data: 567 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0						
Minimum Value: -19 °C on Feb 3 02:00 Maximum Diurnal Average: -2.5 °C at hour 16 Monthly Average: -5.27 °C										Minimum Daily Average: -14.1 °C on Feb 3 Minimum Diurnal Average: -6.9 °C at hour 7 Percentiles: P ₁ = -18.3 P ₁₀ = -13.7 Q ₁ = -9.0 Median = -5.3 Q ₃ = -0.4 P ₉₀ = 2.1 P ₉₉ = 4.1																
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-Feb	-8	-8	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-8	-7	-6	-6	-6	-6	-6	-7	-7	-7	-6	-6	-7.7	-5.6
2-Feb	-6	-8	-9	-9	-13	-14	-17	-18	-18	-18	-14	-13	-11	-10	-9	-11	-11	-12	-13	-14	-16	-16	-18	-18	-13.2	-6.5
3-Feb	-19	-19	-18	-17	-16	-13	-13	-13	-14	-14	-13	-12	-9	-9	-8	-10	-12	-14	-16	-17	-18	-17	-14	-13	-14.1	-8.0
4-Feb	-12	-11	-10	-10	-9	-9	-9	-9	-9	-9	-8	-8	-7	-7	-6	-5	-7	-7	-10	-11	-11	-11	-11	-9	-8.9	-5.0
5-Feb	-7	-6	-5	-4	-5	-3	-2	-1	0	0	0	1	1	2	2	1	1	1	0	-2	-3	-2	-1	1	-1.3	1.8
6-Feb	2	3	4	4	4	4	4	4	3	3	1	0	0	0	0	0	1	-1	-4	-4	-3	-2	-3	-4	0.6	3.9
7-Feb	-3	-4	-6	-5	-5	-8	-8	-10	-8	-9	-9	-7	-4	-3	-3	-2	-1	-1	-1	-3	-2	-2	-2	-2	-4.4	-0.7
8-Feb	-2	-2	-2	-2	-2	-2	-1	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3	0.7	2.8
9-Feb	3	5	4	4	3	3	2	2	2	2	3	4	4	4	4	4	4	3	3	2	2	3	1	-1	2.8	4.5
10-Feb	-1	0	0	1	0	0	0	0	0	-1	-2	-2	-2	-2	-1	-2	-2	-2	-3	-3	-3	-3	-4	-4	-1.5	0.6
11-Feb	-4	-5	-5	-6	-6	-6	-6	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-7	-7	-7	-6.3	-4.1
12-Feb	-7	-7	-7	-7	-7	-6	-6	-6	-6	-6	-6	-6	-5	-5	-4	-4	-4	-5	-5	-5	-5	-4	-4	-4	-5.4	-3.7
13-Feb	-5	-6	-6	-7	-7	-8	-7	-5	-5	-4	0	0	2	3	4	4	5	3	2	0	0	-2	-3	-2	-1.8	5.2
14-Feb	-6	-4	-3	-3	-4	-5	-6	-5	-5	-5	-4	-3	3	2	4	3	1	-1	-3	-2	0	1	0	0	-1.7	3.9
15-Feb	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0	-1	-2	-2	-1	-1	-2	0.1	1.3
16-Feb	-3	-3	-3	-3	-3	-4	-4	-4	-4	-3	-2	0	1	2	2	2	3	2	3	3	2	1	-1	-2	-0.8	2.8
17-Feb	-2	-3	-6	-5	-6	-7	-8	-8	-9	-9	-9	-9	-8	-9	-9	-9	-9	-8	-7	-7	-8	-7	-7	-7	-7.3	-2.3
18-Feb	-6	-6	-5	-5	-5	-5	-6	-6	-7	-7	-8	-9	-9	-9	-9	-9	-9	-9	-9	-10	-10	-11	-12	-13	-8.1	-5.3
19-Feb	-13	-13	-14	-14	-14	-14	-14	-15	-15	-15	-15	-15	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14	-14.1	-13.0
20-Feb	-14	-14	-14	-14	-13	-13	-14	-16	-16	-14	-14	-12	-11	-9	-8	-8	-8	-8	-8	-8	-7	-7	-7	-7	-11.0	-6.5
21-Feb	-8	-9	-11	-12	-13	-15	-16	-14	-14	-11	-10	-7	-4	-2	0	3	2	0	-3	-4	-7	-10	-11	-11	-7.8	3.3
22-Feb	-11	-13	-12	-12	-11	-11	-11	-9	-8	-8	-6	-2	1	3	4	3	3	2	-1	-2	0	0	0	-2	-4.4	3.5
23-Feb	-3	-4	-4	-4	-2	-2	-2	-2	-3	-2	-1	0	1	1	2	2	2	-1	-3	-4	-6	-7	-9	-9	-2.5	2.1
24-Feb	-11	-11	-13	-13	-13	-14	-13	-14	-13	-10	-8	-6	-4	-3	-2	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	-1.9
25-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
26-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
27-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
28-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
29-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--
																									Diurnal Average	
																									Diurnal Maximum	
NS - Not in service																										

Hourly Averages

External Temperature (ET) - °C

Falher - February 2016



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Falher - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	11	13	12	11	12	13	12	12	13	13	15	16	14	9	5	5	5	6	5	8	7	7	7	8.1	15.8
Dir	43	49	47	53	52	54	55	48	42	58	51	57	65	75	83	122	109	117	92	97	125	144	199	215	68	65
2 Spd	6	2	3	5	3	3	5	4	2	2	1	0	2	6	4	7	7	5	3	3	2	1	3	4	1.0	7.2
Dir	243	210	265	227	158	78	57	37	11	29	50	96	99	312	262	195	263	291	287	297	334	342	51	22	288	263
3 Spd	6	4	3	2	2	3	2	2	4	3	7	4	3	5	2	1	1	2	3	4	5	5	4	1	2.3	6.9
Dir	32	24	22	57	77	106	85	32	298	11	61	27	336	302	312	233	313	354	18	2	337	322	351	333	8	61
4 Spd	2	4	6	9	12	11	13	11	11	5	5	11	8	7	6	7	7	4	4	12	14	15	12	14	5.2	14.6
Dir	29	30	18	31	38	48	46	49	62	122	139	153	171	158	186	220	229	186	83	65	59	59	95	101	79	59
5 Spd	17	17	20	17	19	18	17	13	17	25	25	25	20	16	11	10	14	14	13	15	17	19	14	13	15.9	25.2
Dir	108	113	137	139	119	128	130	93	101	123	138	147	150	144	129	102	107	112	110	97	96	98	88	76	119	147
6 Spd	15	9	20	32	32	31	35	42	38	47	57	48	43	37	32	22	18	14	13	17	24	25	21	18	26.7	57.2
Dir	95	128	192	209	215	218	220	224	227	232	235	237	236	237	237	243	241	226	208	213	222	229	228	222	225	235
7 Spd	20	19	13	13	14	9	8	13	15	5	6	7	4	5	6	4	9	10	10	10	14	13	11	10	7.9	19.6
Dir	230	221	213	214	209	164	155	181	195	80	118	182	168	151	124	164	181	183	148	127	123	129	122	120	172	230
8 Spd	7	10	10	9	6	8	10	16	14	12	7	12	9	9	10	9	13	15	14	16	14	14	11	5	9.8	16.0
Dir	125	140	141	144	137	174	188	187	189	188	193	186	171	109	111	115	119	131	148	158	155	162	160	179	156	187
9 Spd	1	15	16	14	5	6	10	8	11	12	8	11	12	13	9	4	4	4	14	13	9	9	7	4	1.2	15.9
Dir	201	258	250	241	95	76	88	78	89	107	96	118	159	189	193	49	178	285	340	5	11	21	8	18	95	250
10 Spd	2	8	9	17	17	19	16	15	17	18	19	23	21	23	25	23	26	13	14	15	15	11	13	12	14.0	25.9
Dir	282	308	309	325	329	338	17	29	24	26	37	50	53	56	60	44	44	51	41	34	56	20	17	21	28	44
11 Spd	9	12	12	10	5	8	7	9	11	11	12	13	15	11	15	12	11	12	8	6	16	16	15	14	8.5	16.2
Dir	24	359	347	331	343	320	309	307	307	301	312	298	301	296	299	304	298	303	326	10	44	36	37	48	334	36
12 Spd	16	14	15	17	21	22	30	26	29	35	35	38	33	33	29	26	26	25	21	21	18	18	21	19	23.1	38.2
Dir	40	30	32	36	48	54	55	50	55	60	66	71	75	73	77	83	87	77	78	77	78	100	115	119	69	71
13 Spd	18	18	16	13	9	8	7	14	12	8	8	5	16	11	12	15	14	9	11	8	13	12	10	10	8.8	18.4
Dir	122	121	123	127	149	177	213	216	215	204	217	197	214	190	221	244	249	224	214	183	184	205	195	212	191	121
14 Spd	3	13	12	15	9	1	6	12	14	8	7	9	6	10	8	1	6	12	13	13	13	13	9	13	6.8	15.0
Dir	141	161	172	181	200	251	191	202	200	196	179	202	253	236	238	128	103	88	81	102	174	195	144	149	173	181
15 Spd	15	22	20	22	20	18	17	16	19	20	18	11	9	3	4	6	2	4	10	14	11	13	19	21	6.1	21.9
Dir	158	205	223	236	242	248	242	245	250	253	265	273	286	270	187	213	216	58	114	114	78	79	82	83	221	236
16 Spd	17	18	20	20	15	13	13	8	10	12	12	10	9	11	11	11	6	3	10	16	17	17	14	11	6.8	20.5
Dir	78	71	73	76	77	72	81	68	77	90	152	151	153	191	181	156	183	261	206	226	213	199	199	167	131	76
17 Spd	12	4	9	15	18	20	18	17	18	20	24	22	19	20	17	20	23	16	19	17	14	17	17	15	14.4	23.6
Dir	167	208	312	313	306	294	292	282	279	287	291	302	296	293	283	288	295	304	342	334	328	342	7	10	304	291
18 Spd	16	13	14	2	6	8	5	7	3	6	13	16	15	16	17	13	12	12	13	13	17	23	23	19	7.1	23.1
Dir	23	31	51	31	27	34	52	48	68	226	247	234	243	245	244	251	256	272	297	297	284	276	266	263	279	276
19 Spd	16	13	13	10	9	10	14	15	16	14	14	13	11	14	13	12	11	13	18	17	19	17	14	12	13.6	18.5
Dir	273	267	277	285	275	277	281	273	275	286	280	279	289	279	279	273	285	270	261	265	265	269	269	270	274	265
20 Spd	11	11	11	9	10	10	13	10	10	11	14	13	13	12	12	13	12	7	5	7	4	8	7	4	3.1	13.6
Dir	274	283	291	318	0	30	21	18	1	29	58	73	73	74	107	121	134	155	162	158	176	167	179	198	65	58
21 Spd	6	8	4	3	1	2	7	7	7	9	8	12	13	12	8	2	9	9	7	6	4	3	4	3	3.7	12.7
Dir	149	131	98	64	152	103	66	41	52	91	116	145	149	154	149	210	244	245	211	186	185	88	81	51	136	149
22 Spd	2	8	5	6	8	7	13	18	14	8	11	15	16	20	20	20	20	20	15	15	23	28	28	20	11.9	27.6
Dir	117	59	100	108	175	156	157	165	164	171	180	204	225	242	245	241	235	232	227	233	235	234	228	218	214	228

Hourly Averages

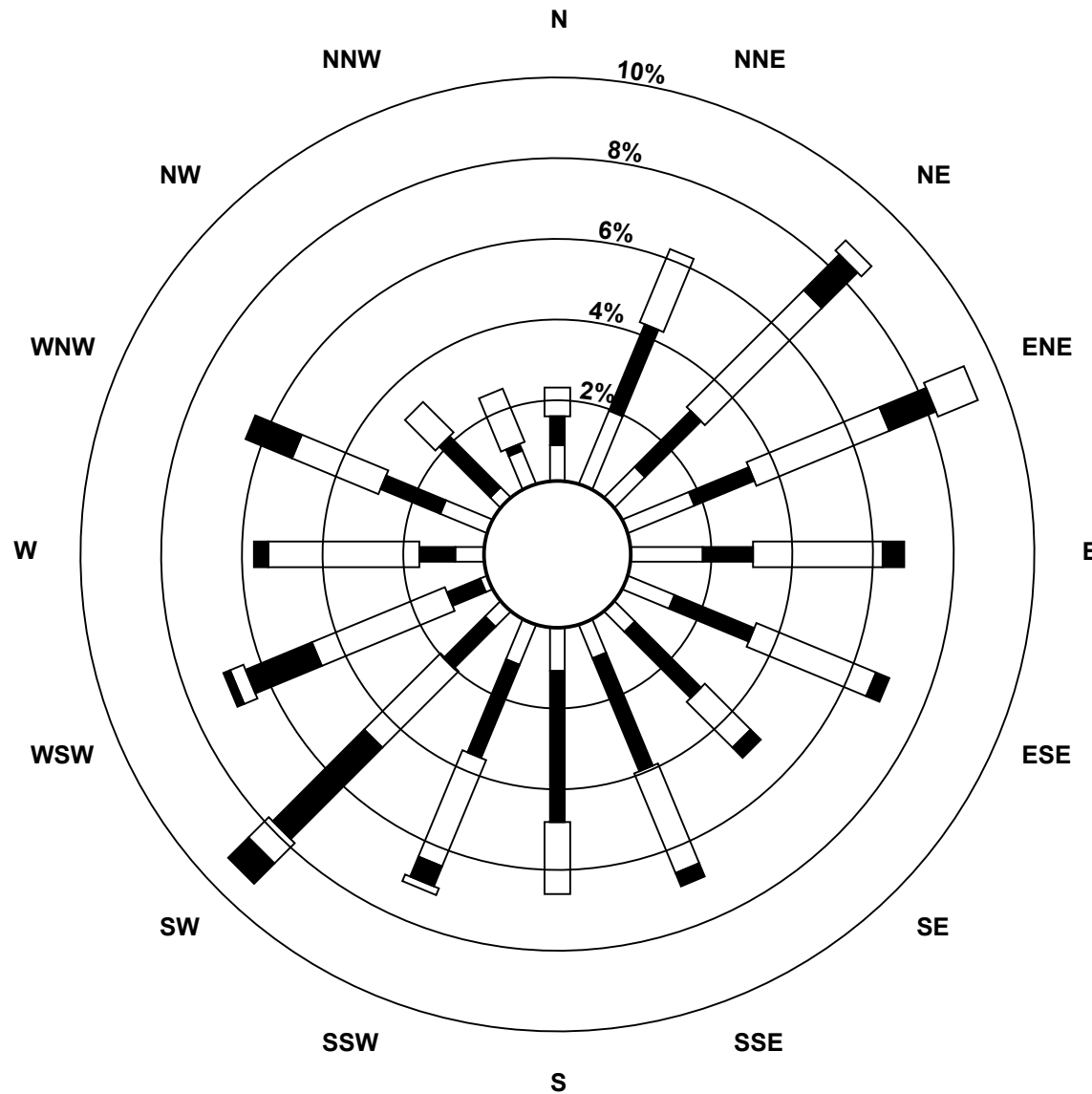
Wind Speed (km/h)
Wind Direction (deg)
Falher - February 2016

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum									
	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	17	20	14	20	24	22	24	21	20	22	18	18	21	22	20	16	13	13	14	5	1	3	5	15.0	24.5									
Dir	205	193	199	207	227	234	225	226	223	228	237	238	240	239	246	244	252	238	221	233	224	265	136	61	228	234									
24 Spd	6	5	4	7	9	10	11	14	15	17	18	19	16	18	17	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	18.5									
Dir	82	77	58	47	47	27	20	36	48	62	69	74	86	87	88	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	74									
25 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
26 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
27 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
28 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
29 Spd	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
Dir	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--									
Spd	3.0	2.3	1.7	1.6	0.7	0.1	1.1	1.2	1.3	1.2	2.1	3.2	3.3	3.2	3.4	3.1	2.9	2.3	1.2	1.5	2.1	2.1	2.4	2.6	Diurnal Average										
Dir	114	135	166	209	192	351	101	205	205	160	194	176	194	201	202	221	225	217	179	143	162	183	155	135											
Spd	19.6	21.7	20.3	32.1	31.8	30.7	35.0	41.6	37.6	46.5	57.2	48.1	42.7	36.6	32.1	26.1	25.9	24.8	21.4	21.3	23.8	27.6	27.6	21.0	Diurnal Maximum										
Dir	230	205	223	209	215	218	220	224	227	232	235	237	236	237	237	83	44	77	78	77	222	234	228	83											
Maximum Speed Value: 57 km/h on Feb 6 11:00																				Minimum Speed Value: 0 km/h on Feb 2 12:00										Hours in Service:				567	
Maximum Daily Speed Average: 26.7 km/h on Feb 6																				Minimum Daily Speed Average: 1.0 km/h on Feb 3										Hours of Data:				567	
Maximum Diurnal Speed Average: 3.4 km/h at hour 15																				Minimum Diurnal Speed Average: 0.1 km/h at hour 6										Hours of Missing Data:				0	
Monthly Average Velocity: 1.71 km/h 180.5 deg										Speed Percentiles: P ₁ = 1.1 P ₁₀ = 4.0 Q ₁ = 7.4 Median = 12.3 Q ₃ = 16.6 P ₉₀ = 21.0 P ₉₉ = 37.6											Percent Operational Time:				100.0										
All monthly, daily, and diurnal averages have been calculated using vector methods																																			
NS - Not in service																																			
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	11		9		13		1		0		0		34																						
NorthEast	16		19		43		10		4		0		92																						
East	13		21		39		8		3		1		85																						
SouthEast	7		32		27		7		0		0		73																						
South	10		34		29		2		0		0		75																						
SouthWest	5		19		36		29		7		5		101																						
West	10		8		39		6		0		0		63																						
NorthWest	10		13		17		4		0		0		44																						
Total	82		155		243		67		14		6		567																						

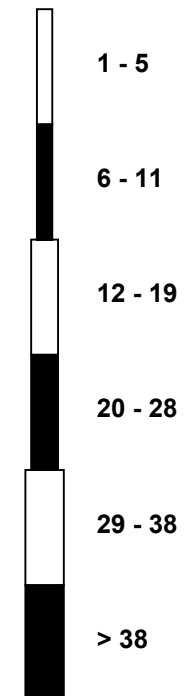
Wind Rose

Wind Speed (WS) (km/h)

Falher - February 2016



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Falher - February 2016

Maximum Speed: 57 km/h on Feb 6 11:00																				Maximum Daily Speed Average: 28.7 km/h on Feb 6										Hours in Service: 567	
Minimum Speed: 0 km/h on Feb 2 12:00																				Minimum Daily Speed Average: 3.5 km/h on Feb 3										Hours of Data: 567	
Maximum Diurnal Speed Average: 15.6 km/h at hour 12																				Minimum Diurnal Speed Average: 10.8 km/h at hour 1										Hours of Missing Data: 0	
Monthly Average Speed: 12.91 km/h																				Percentiles: P ₁ = 1.3 P ₁₀ = 4.4 Q ₁ = 7.7 Median = 12.4 Q ₃ = 16.6 P ₉₀ = 21.0 P ₉₉ = 37.6										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-Feb	10	11	13	12	11	12	13	12	12	13	13	15	16	14	10	6	7	5	6	6	8	7	8	8	10.3	15.8					
2-Feb	6	3	3	5	4	3	5	4	2	2	1	0	3	6	5	7	8	5	3	4	2	1	3	4	3.7	8.3					
3-Feb	6	4	3	2	2	3	3	2	4	3	7	5	4	5	2	1	1	3	3	5	5	5	4	1	3.5	7.1					
4-Feb	4	4	6	10	12	11	14	11	12	6	5	11	8	7	6	8	7	5	4	12	14	15	12	14	9.1	14.7					
5-Feb	17	17	20	17	19	19	18	13	17	25	25	25	20	16	11	11	14	14	13	15	17	19	14	13	17.0	25.2					
6-Feb	15	10	20	32	32	31	35	42	38	47	57	48	43	37	32	22	18	14	13	17	24	25	21	18	28.7	57.3					
7-Feb	20	19	13	13	14	9	9	13	15	5	7	7	4	5	6	5	9	11	10	10	14	13	11	10	10.5	19.7					
8-Feb	7	10	10	9	7	8	10	16	14	12	7	12	9	9	10	9	13	15	14	16	14	14	12	7	11.1	16.1					
9-Feb	5	15	16	15	7	6	10	8	11	13	8	12	13	13	9	5	6	7	14	13	9	9	7	4	9.8	16.0					
10-Feb	3	8	9	17	17	19	18	16	17	18	19	23	21	23	25	23	26	13	15	16	16	12	14	12	16.6	25.9					
11-Feb	9	12	12	10	5	8	7	9	11	11	12	13	15	11	15	12	11	13	8	7	16	16	15	14	11.3	16.2					
12-Feb	16	14	15	17	21	22	30	26	29	35	35	38	33	33	29	26	26	25	21	21	19	19	21	19	24.7	38.2					
13-Feb	18	18	16	13	9	8	8	14	12	8	8	7	16	11	13	15	14	9	11	9	14	12	10	10	11.8	18.4					
14-Feb	5	13	13	15	10	2	6	12	14	8	7	9	6	10	8	3	6	12	13	13	14	14	9	13	9.8	15.0					
15-Feb	16	22	21	22	20	18	17	16	19	20	18	11	10	4	4	7	3	4	10	14	11	14	19	21	14.1	22.0					
16-Feb	18	18	20	20	15	13	13	8	10	12	12	10	9	11	11	11	9	3	10	16	17	17	14	12	13.0	20.5					
17-Feb	12	5	11	15	18	20	18	17	18	20	24	22	19	20	17	20	23	16	19	18	14	17	17	15	17.3	23.7					
18-Feb	16	13	14	4	6	8	6	8	3	7	13	16	15	16	17	14	12	12	13	13	18	23	23	19	12.8	23.3					
19-Feb	16	13	13	11	9	10	14	15	16	14	14	13	11	14	13	12	11	13	18	17	19	17	14	12	13.8	18.5					
20-Feb	11	11	11	9	10	10	13	10	10	12	14	13	13	12	13	13	12	7	5	7	5	8	8	4	10.0	13.7					
21-Feb	7	8	4	4	1	2	8	8	7	9	8	12	13	12	8	2	9	9	8	7	4	4	5	3	6.7	12.7					
22-Feb	3	8	6	7	8	7	13	18	14	8	11	16	16	20	20	20	20	20	15	15	23	28	28	20	15.2	27.7					
23-Feb	14	17	20	14	20	24	22	24	21	20	22	19	18	21	22	20	16	14	13	14	5	3	5	6	16.3	24.5					
24-Feb	7	6	5	8	9	10	11	14	15	17	18	19	16	18	17	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	18.6					
25-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--					
26-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--					
27-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--					
28-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--					
29-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--	--					
10.8 11.7 12.2 12.5 11.9 11.8 13.3 14.0 14.2 14.3 15.3 15.6 14.6 14.5 13.5 11.9 12.2 10.9 11.4 12.4 13.0 13.4 12.7 11.4																									Diurnal Average						
19.7 21.7 20.5 32.1 31.8 30.7 35.1 41.7 37.6 46.6 57.3 48.2 42.7 36.7 32.1 26.2 25.9 24.8 21.5 21.4 23.9 27.7 27.7 21.0																									Diurnal Maximum						
NS - Not in service																															
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

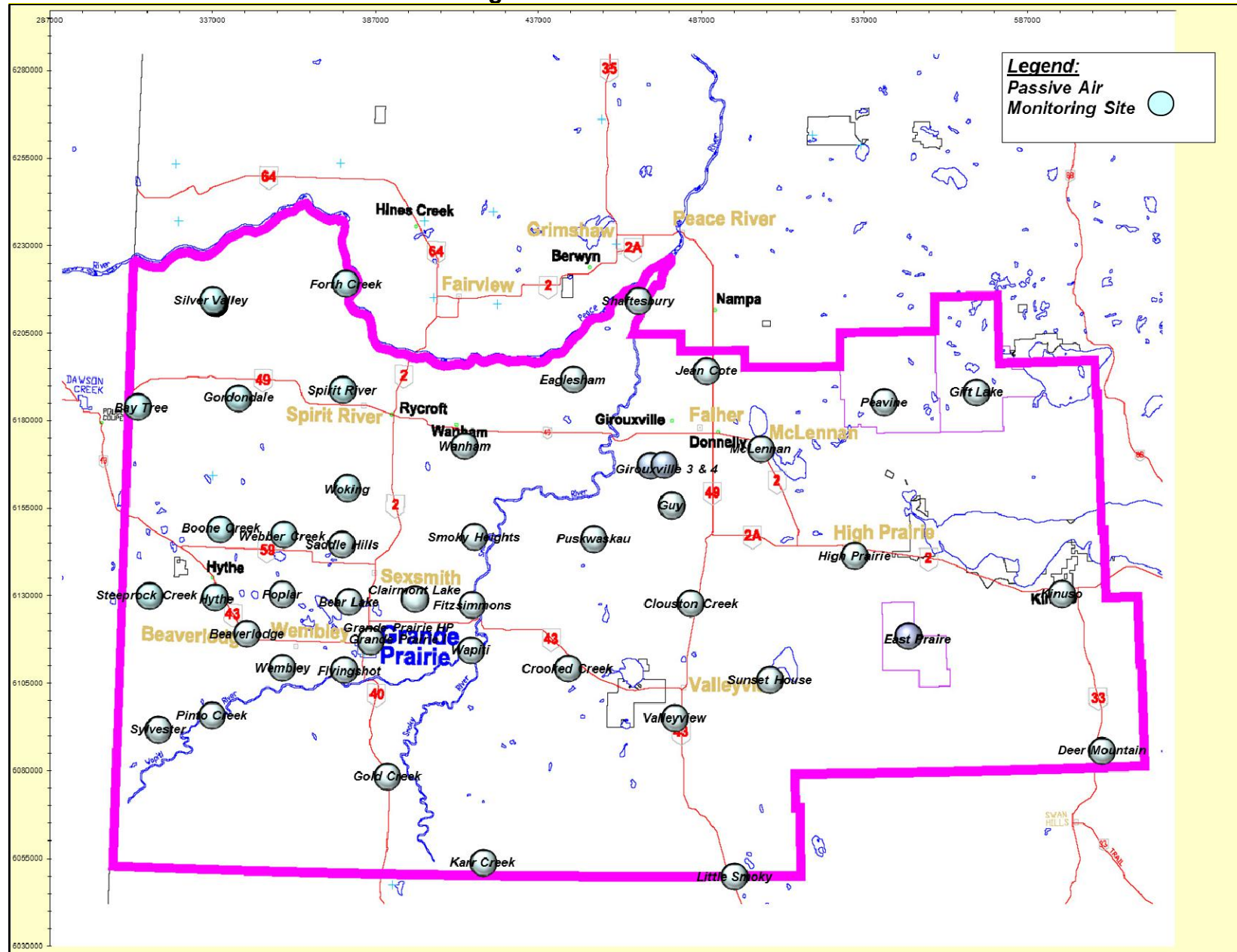
Falher - February 2016

Maximum Value: 87.3 deg on Feb 14 16:00																		Hours in Service: 567							
Minimum Value: 1.4 deg on Feb 22 08:00																		Hours of Data: 567							
																		Hours of Missing Data: 0							
Percentiles: P ₁ = 1.8 P ₁₀ = 2.9 Q ₁ = 4.5 Median = 7.3 Q ₃ = 13.8 P ₉₀ = 26.8 P ₉₉ = 72.2																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Maximum
1-Feb	11	4	4	5	6	6	5	6	7	4	3	3	5	2	19	20	35	10	13	18	17	10	26	9	35.0
2-Feb	27	72	36	11	30	26	10	9	6	3	13	11	33	33	32	12	30	14	22	16	13	15	23	11	72.2
3-Feb	7	20	7	18	11	10	11	17	15	28	16	33	49	27	21	44	72	38	34	9	5	11	5	24	71.7
4-Feb	63	32	14	17	7	7	5	7	9	37	18	6	6	4	17	14	15	29	35	5	7	7	13	5	63.4
5-Feb	3	7	5	5	4	7	15	15	9	4	7	2	2	6	6	17	5	7	13	11	8	4	4	9	17.3
6-Feb	11	31	12	3	2	2	3	2	2	3	3	3	2	3	3	5	9	5	2	3	5	2	2	3	31.2
7-Feb	3	9	4	6	19	19	14	4	4	27	21	16	18	17	8	24	10	11	14	12	4	6	5	7	26.8
8-Feb	7	10	7	8	18	8	5	4	7	6	9	8	11	16	6	7	7	4	8	3	6	7	19	49	49.2
9-Feb	73	4	5	15	51	10	15	17	6	13	12	9	21	2	51	70	57	55	4	10	4	8	7	7	72.5
10-Feb	43	13	12	4	3	4	21	6	5	6	6	5	5	5	5	6	5	14	11	7	9	16	12	6	43.4
11-Feb	13	9	8	5	8	6	5	4	5	10	5	6	5	15	5	6	8	9	8	26	3	6	6	4	25.8
12-Feb	5	5	5	6	3	3	4	3	4	2	3	2	2	2	2	3	5	2	3	6	11	10	3	4	10.8
13-Feb	2	2	4	9	9	26	10	7	9	17	23	44	4	15	14	8	3	17	10	26	8	6	9	8	44.2
14-Feb	58	5	5	6	45	55	9	3	5	5	17	25	35	9	16	87	7	10	3	13	22	8	10	4	87.3
15-Feb	18	4	9	3	2	3	3	4	3	6	4	7	12	51	31	16	31	44	15	10	8	13	2	2	51.3
16-Feb	4	3	2	3	3	4	6	11	9	9	14	7	10	5	10	7	46	17	7	5	7	3	3	24	45.5
17-Feb	13	56	85	5	5	4	5	8	4	3	4	5	7	5	6	6	3	16	7	11	6	9	8	8	84.9
18-Feb	5	7	7	78	13	5	28	9	43	49	11	4	5	4	5	10	6	7	10	6	6	8	4	4	78.4
19-Feb	4	9	6	8	7	6	5	6	4	6	5	7	8	6	6	5	10	7	3	4	3	3	3	4	9.5
20-Feb	4	5	10	14	6	10	5	6	10	14	6	5	5	9	19	6	9	7	5	9	29	14	15	14	28.8
21-Feb	7	8	18	47	62	23	14	13	15	10	7	8	2	5	8	45	8	4	25	13	25	42	34	23	62.4
22-Feb	16	17	24	24	10	7	11	1	2	3	7	9	5	5	2	4	2	2	1	3	2	3	4	8	24.2
23-Feb	3	7	3	3	9	2	4	3	2	3	4	4	3	5	5	4	3	15	7	4	16	83	44	21	83.1
24-Feb	37	17	30	14	8	10	10	11	6	5	4	3	4	3	2	NS	NS	NS	NS	NS	NS	NS	NS	NS	36.6
25-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
26-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
27-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
28-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
29-Feb	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	--
72.5 72.2 84.9 78.4 62.4 55.0 27.8 17.5 42.6 49.4 23.1 44.2 49.1 51.3 50.6 87.3 71.7 55.0 34.7 25.8 28.8 83.1 43.8 49.2																									
NS - Not in service																									

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for February 2015

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
5a	Boone Creek	0.2	46.5	0.9		
5b	Boone Creek	0.2	46.0	1.0		
9a	Spirit River	0.3	36.2	0.9		
9b	Spirit River	0.3	38.9	1.0		
21a	Eaglesham	0.2	44.7	0.2		
21b	Eaglesham	0.2	44.9	0.4		
41a	Valleyview	0.2	38.7	1.0		
41b	Valleyview	0.3	39.8	1.0		
63a	Girouxville 3				0.3	
63b	Girouxville 3				Missing	
1	Silver Valley	0.2	44.7	0.8		08-27-081-11 W6M
2	Bay Tree	0.3	41.6	1.2		13-16-078-13 W6M
3	Fourth Creek	0.3	40.1	0.6		04-13-082-07 W6M
4	Gordondale	0.4	40.3	1.5		04-34-078-10 W6M
5	Boone Creek	0.2	46.3	1.0		16-36-074-11 W6M
7	Steeprock Creek	0.3	42.5	0.3		09-35-072-13 W6M
9	Spirit River	0.3	37.6	1.0		08-12-079-07 W6M
10	Woking	0.5	40.5	0.5		01-13-076-07 W6M
11	Webber Creek	0.4	37.9	2.1		09-36-074-09 W6M
12	Hythe	0.3	45.3	1.0		14-36-072-11 W6M
14	Sylvester	0.1	34.7	0.5		08-06-069-12 W6M
16	Beaverlodge	0.3	40.9	2.0		15-36-071-10 W6M
17	Poplar	0.4	43.8	1.6		13-06-073-08 W6M
18	Saddle Hills	0.4	46.8	0.6		04-25-074-07 W6M
19	Wanham	0.4	47.5	0.5		16-22-077-03 W6M
20	Shaftesbury	0.3	41.0	1.0		04-03-082-23 W5M
21	Eaglesham	0.2	44.8	0.3		16-21-079-25 W5M
23	Bear Lake	0.4	56.0	1.2		15-31-072-06 W6M
24	Wembley	0.3	42.8	1.6		12-31-070-08 W6M
25	Pinto Creek	0.1	43.1	0.5		04-24-069-11 W6M
26	Flyingshot	0.2	40.1	1.8		15-36-070-07 W6M
27	Grande Prairie I	0.3	30.6	8.4		08-15-071-06 W6M

PAZA Passive Results for February 2015 (Continued)

28	Clairmont Lake	0.4	46.7	1.4		09-06-073-04 W6M
29	Smoky Heights	0.5	44.0	1.4		04-06-075-02 W6M
30	Fitzsimmons	0.1	45.0	1.2		15-36-072-03 W6M
32	Gold Creek	0.3	25.5	4.6		06-33-067-05 W6M
33	Wapiti	0.2	44.3	1.7		02-25-071-03 W6M
34	Puskwaskau	0.1	34.1	0.6		15-35-074-25 W5M
35	Jean Cote	0.3	50.2	0.7		12-35-079-21 W5M
36	Guy	0.2	41.8	1.2		03-04-076-22 W5M
37	Crooked Creek	0.1	47.2	1.4		16-01-071-26 W5M
38	Karr Creek	0.1	31.6	1.9		10-16-065-02 W6M
39	Clouston Creek	0.1	35.0	1.3		12-01-073-22 W5M
40	McLennan	0.2	49.5	0.5		03-29-077-19 W5M
41	Valleyview	0.3	39.3	1.0		09-30-069-22 W5M
42	Sunset House	0.2	45.3	0.6		05-32-070-19 W5M
43	High Prairie	0.2	44.5	1.0		16-13-074-17 W5M
44	Peavine	0.1	43.6	0.4		03-05-079-15 W5M
45	Gift Lake	0.1	39.4	0.6	0.3	10-07-079-12 W5M
46	Little Smoky	0.1	36.6	3.3		12-01-065-21 W5M
47	Kinuso	0.4	37.5	0.8		12-10-073-10 W5M
65	Deer Mountain 2	0.1	40.3	0.7		15-22-068-09 W5M
49	Grande Prairie HP	0.3	26.6	10.4		17-26-071-06 W6M
50	East Prairie	0.2	38.1	0.3		13-02-072-15 W5M
63	Girouxville 3				0.3	14-02-077-23 W5M
64	Girouxville 4				0.3	4-08-077-22 W5M

*BDL = Below Detection Level

*NS - No sample

Passive Summary for February 2015

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

Passive Summary for February 2016 (PAZA Zone)				
Mean	0.3	41.3	1.5	0.3
Standard Deviation	0.1	6.0	1.9	0.0
Minimum	0.1	25.5	0.3	0.3
Minimum At	Sylvester (#14)	Gold Creek (#32)	Eaglesham (#21)	Girouxville 3 (#63a)
Maximum	0.5	56.0	10.4	0.3
Maximum At	Woking (#10)	Bear Lake (#23)	Grande Prairie HP	Girouxville 3 (#63a)

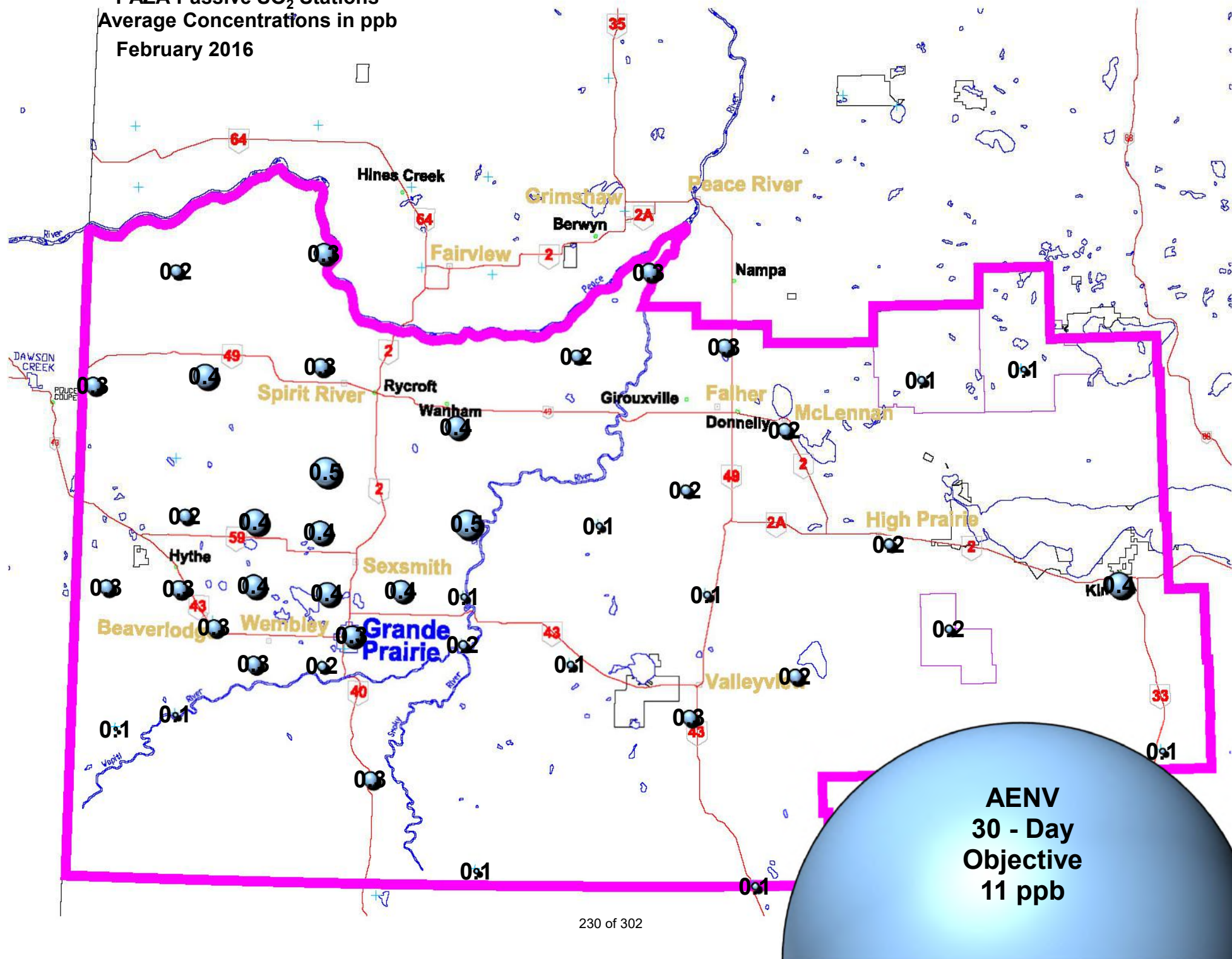
Comparison between Continuous and Passive monitoring at Beaverlodge (passive #16 Beaverlodge)

	SO ₂	O ₃	NO ₂
PAZA Beaverlodge station	0.3	32.6	3.6
PAZA Beaverlodge passive	0.3	40.9	2.0

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

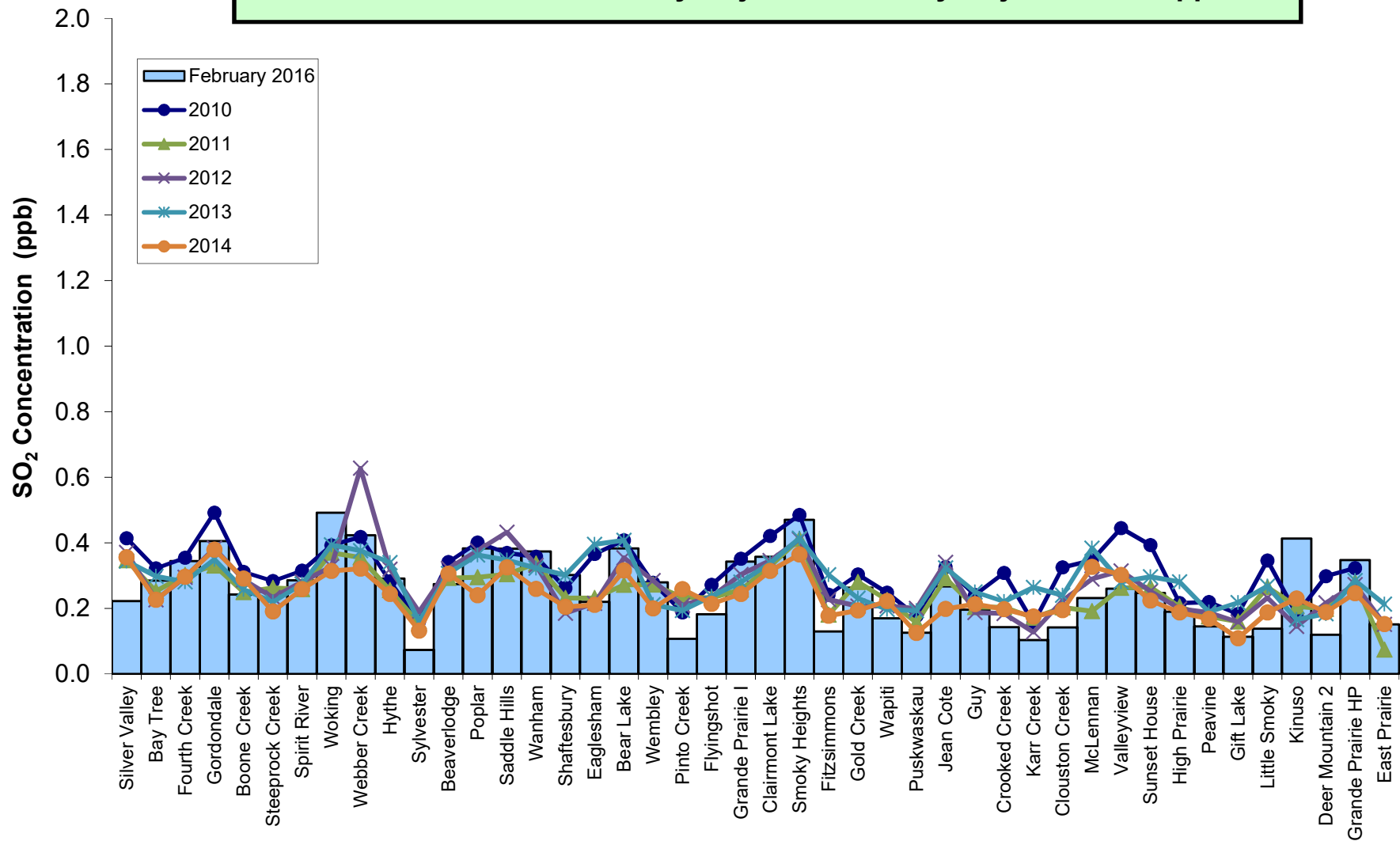
	SO ₂	O ₃	NO ₂
PAZA Henry Pirker station	0.1	19.0	16.1
PAZA Grande Prairie passive	0.3	26.6	10.4

PAZA Passive SO₂ Stations
Average Concentrations in ppb
February 2016



AENV
30 - Day
Objective
11 ppb

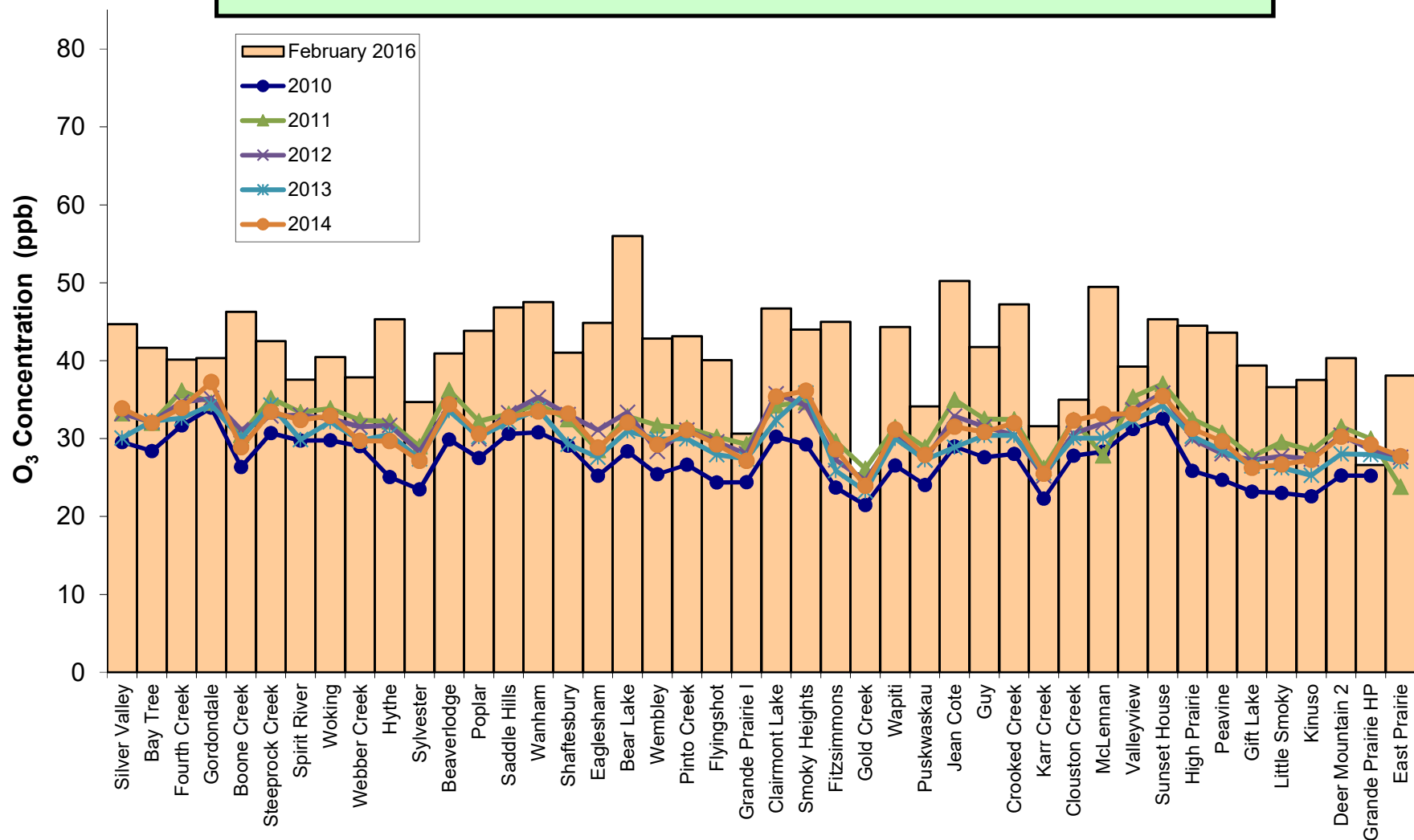
Alberta Ambient Air Quality Objective - 30-day Objective is 11 ppb



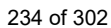
February 2016



Alberta Ambient Air Quality Objective - No Annual O₃ Objective

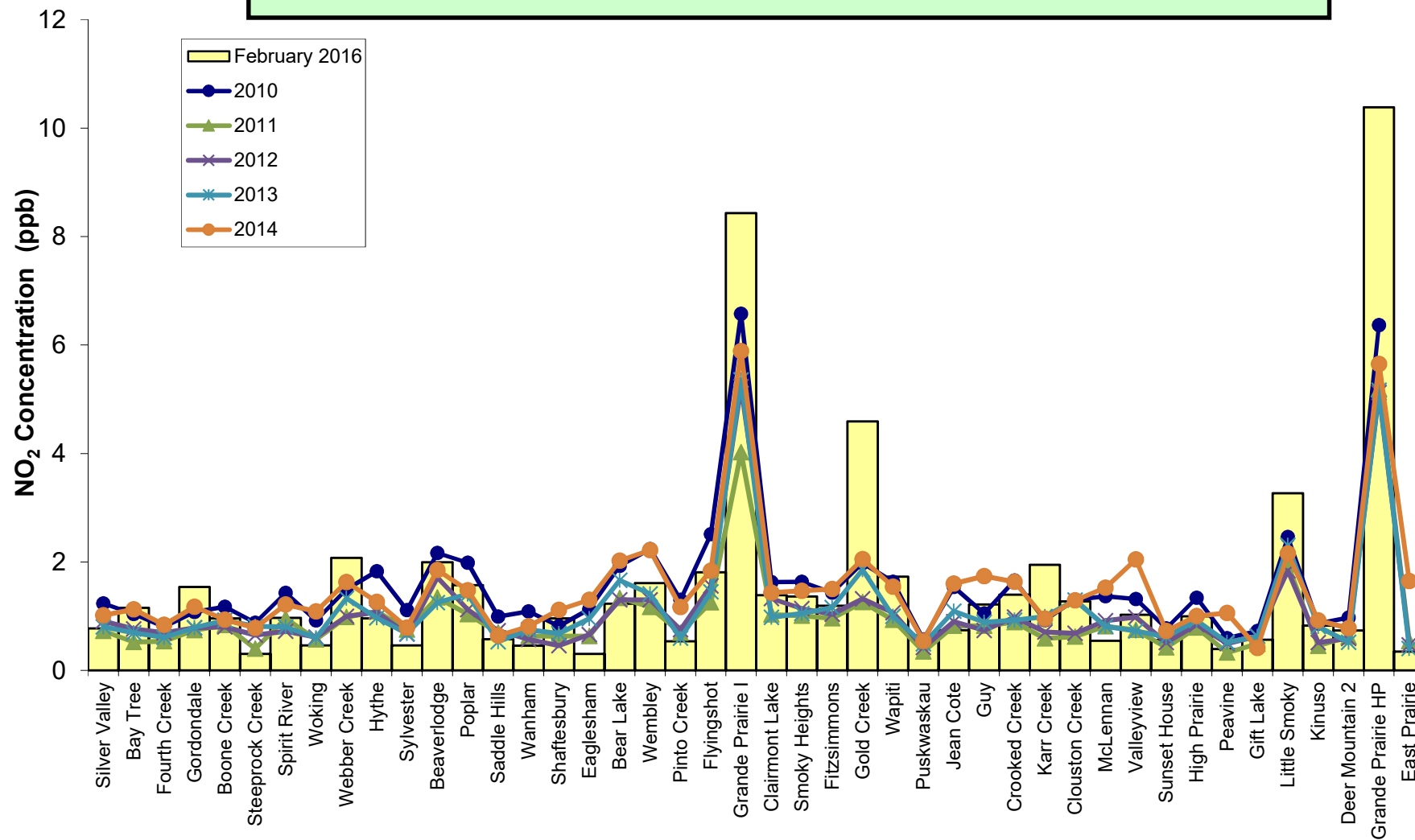


February 2016

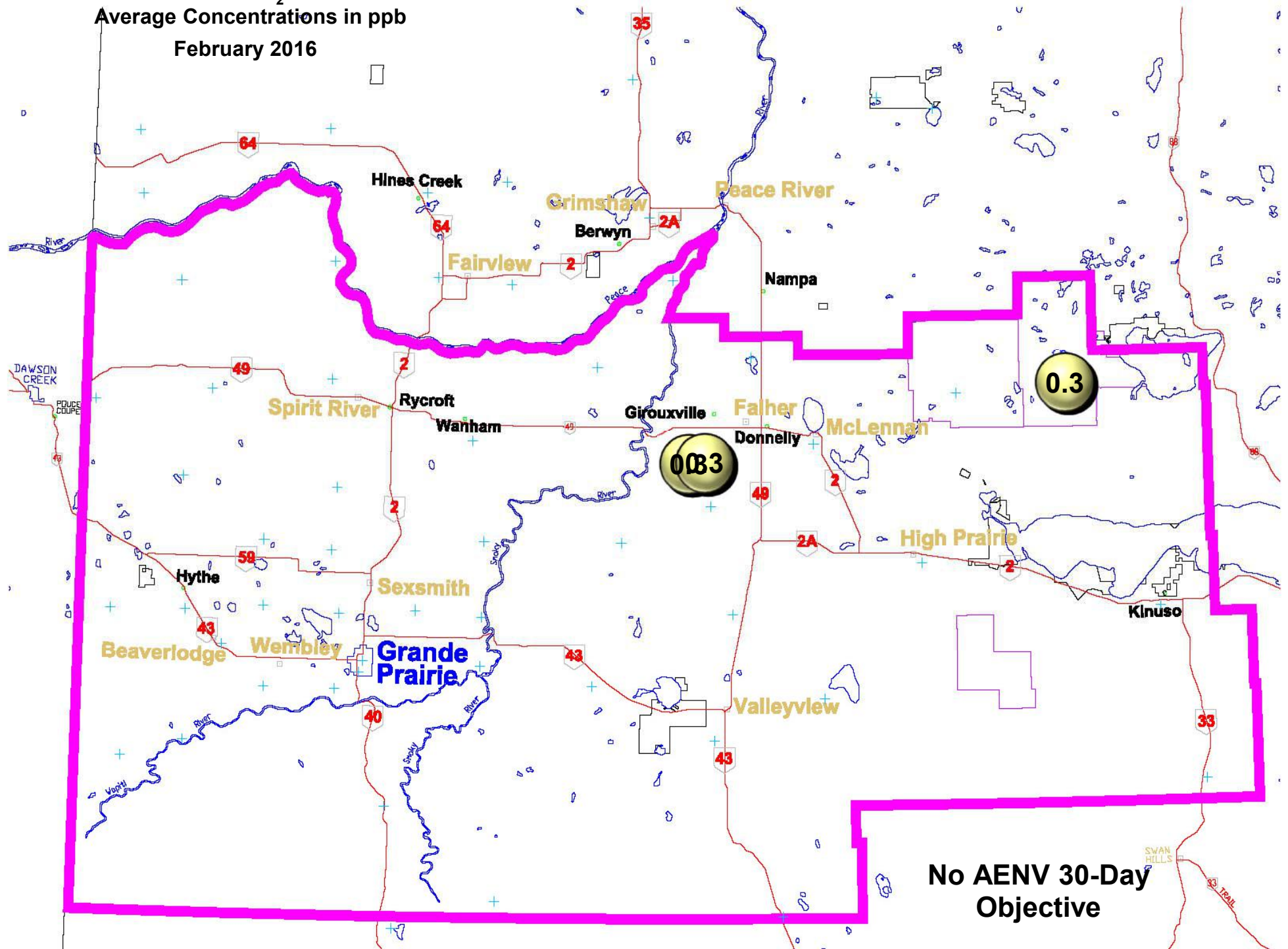


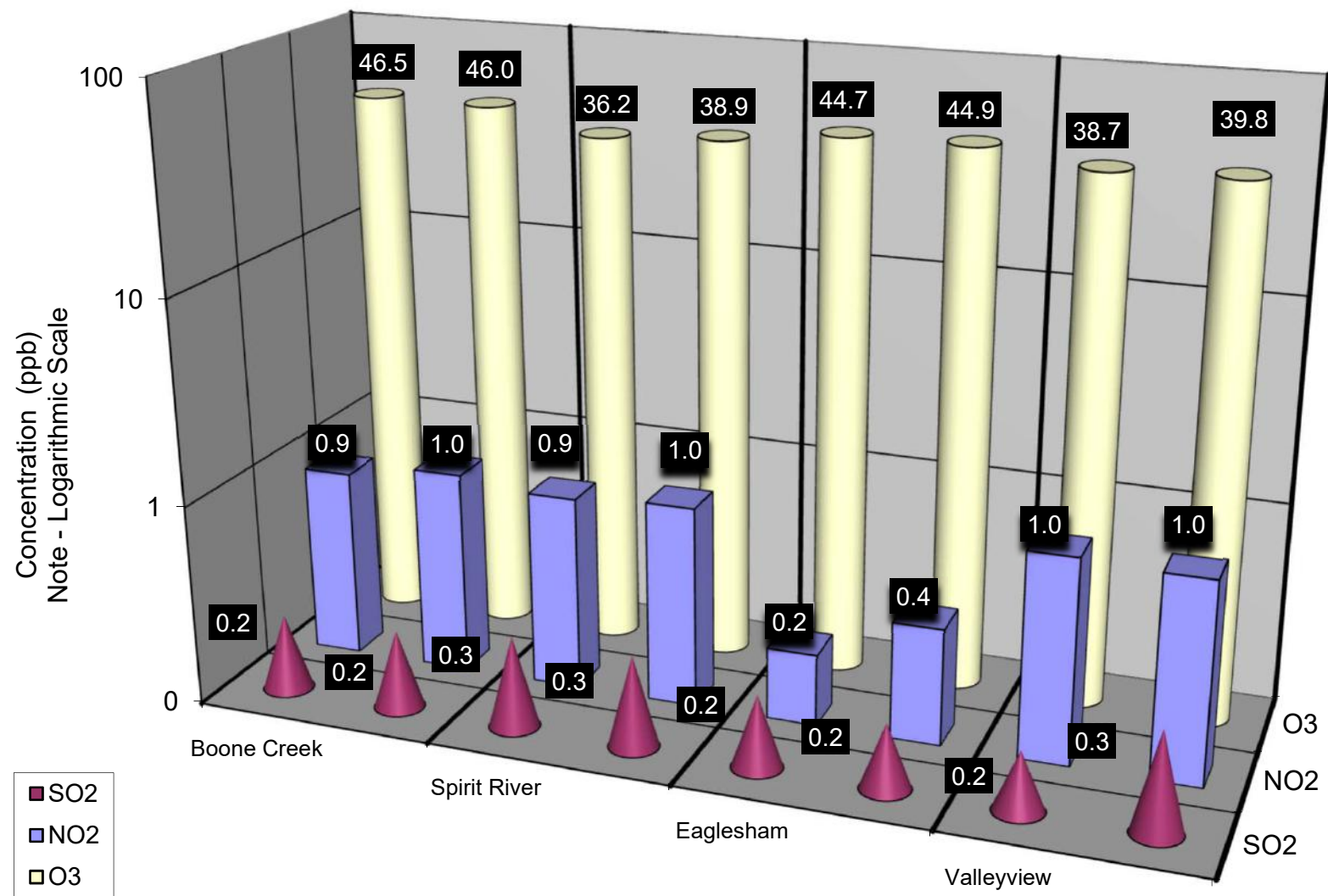
**AENV
Annual
Objective
24 ppb**

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



**PAZA Passive H₂S Stations
Average Concentrations in ppb
February 2016**





Duplicate Summary Chart

February 2016 Calibration Reports

PAZA - Henry Pirker Station with the following calibrations:

SO₂, NO, NO₂, NO_x, O₃, CO, THC, TRS, PM_{2.5}

PAZA – Evergreen Park Station with the following calibrations:

SO₂, TRS, PM_{2.5}

PAZA – Smoky Heights Station with the following calibrations:

SO₂, TRS, PM_{2.5}

PAZA – Beaverlodge Station with the following calibrations:

SO₂, NO, NO₂, NO_x, O₃, PM_{2.5}

PAZA – Valleyview Station with the following calibrations:

SO₂ & H₂S

PAZA – Falher Station with the following calibrations:

SO₂ & H₂S

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	10:05	End Time (MST)	12:25
Barometric Pressure	728.000 mm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Conc	49.7 ppm	Cal Gas Cert Date	October 5, 2018
		Cal Gas Cylinder #	LL103793
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.990725	Calculated slope	0.996968
Calculated intercept	1.733865	Calculated intercept	0.593426
Analyzer make	TEI 43I-TLE	Analyzer serial #	1507864682 (AMU 2006)

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	1.79		1.79	
Coefficient	1.012		1.012	
Pressure	671.9	mm Hg	674.6	mm Hg
Flow	0.441	lpm	0.445	lpm
Lamp intensity	82	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)
4995	0.00	0.0	0.1	N/A
4995	39.93	394.2	394.9	0.9982
4995	19.97	197.9	198.3	0.9980
4995	9.97	99.0	97.5	1.0155
4995	0.00	0.0	0.1	As Found Zero
4995	39.93	394.2	394.9	As Found Span
Average Correction Factor				1.0039

Calculated value of As Found Response: 392.8 ppb Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	286.6	ppb	283.9	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



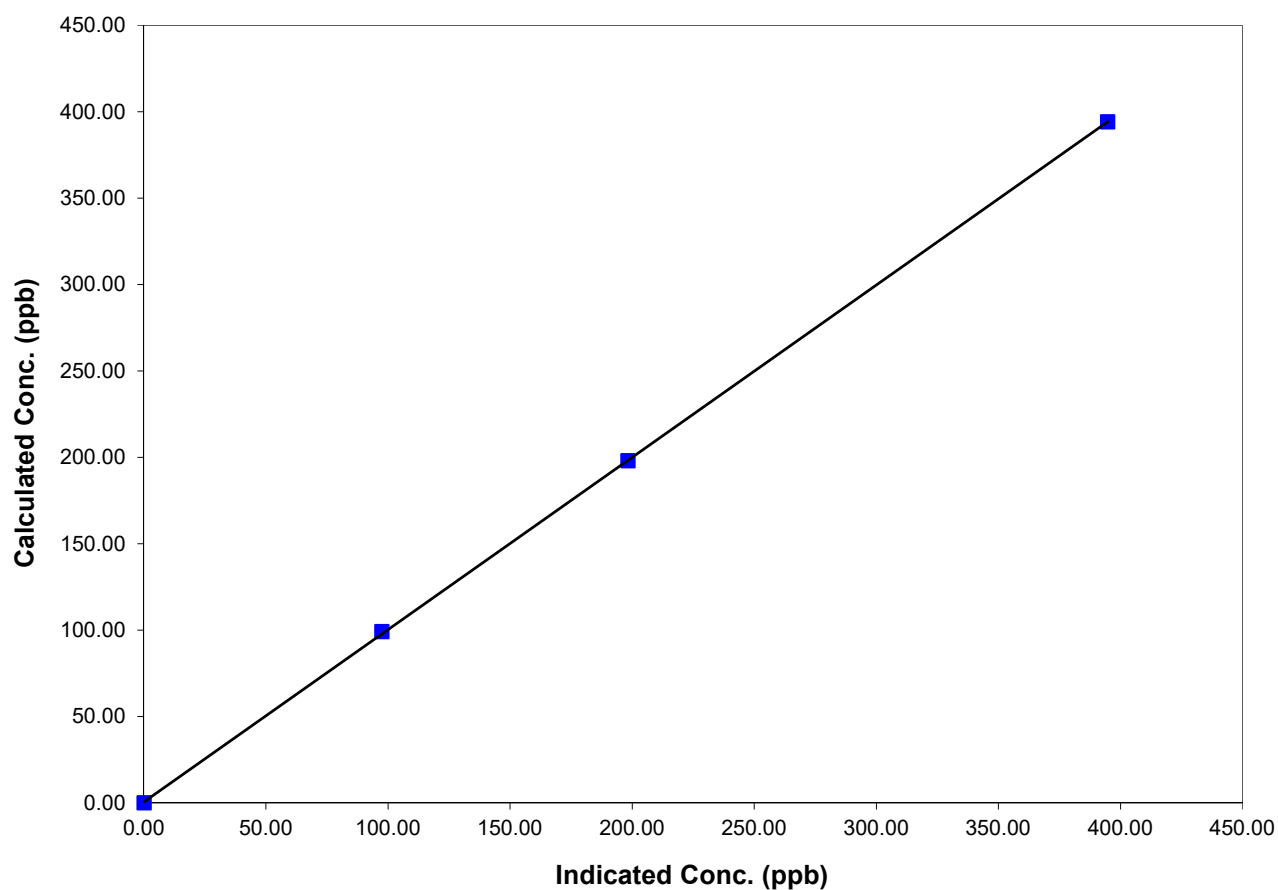
Station Information

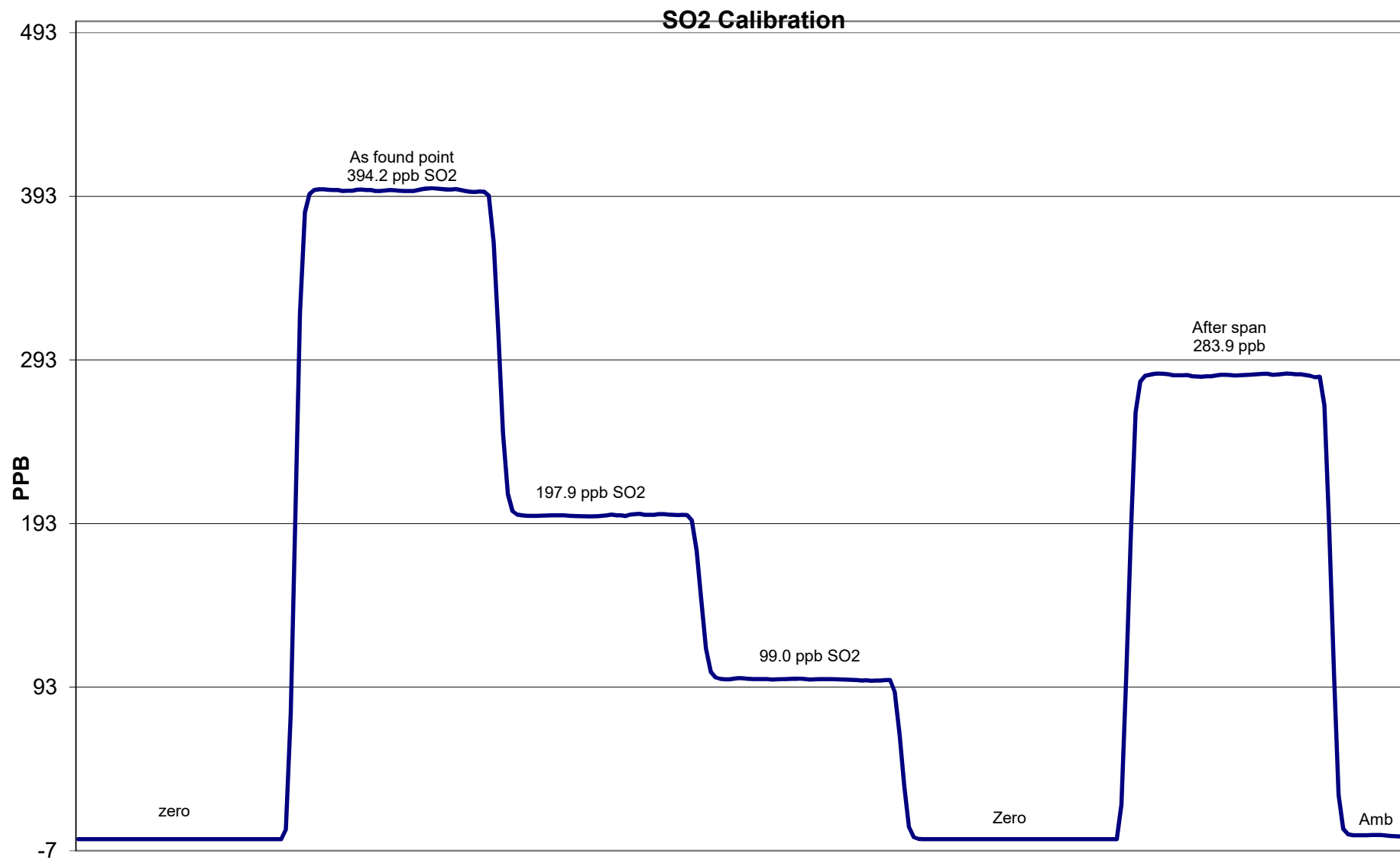
Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:05	End Time (MST)	12:25
Analyzer make/model	TEI 43I-TLE	Analyzer serial #	1507864682 (AMU 2006)

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
394.2	394.9	0.9982		
197.9	198.3	0.9980		
99.0	97.5	1.0155	Slope	0.996968
			Intercept	0.593426

SO2 Calibration Curve





February 2, 2016

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Installation	Removal
Other:			
Start Time (MST)	10:00	End Time (MST)	13:55:00 PM
Barometric Pressure	721.000 mm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
NO Cal Gas Conc	50.9 ppm	Cal Gas Expiry Date	October 5, 2018
NOx Cal Gas Conc	51.2 ppm	Cal Gas Serial #	LL103793

DACS Information

DACS make	CR3000	DACS serial No.	5408																																
<table><thead><tr><th>Parameter</th><th>NO2</th><th>NOx</th><th>NO</th></tr></thead><tbody><tr><td rowspan="2">Before</td><td>Data Slope</td><td>0.996289</td><td>0.994398</td><td>0.988624</td></tr><tr><td>Data Offset</td><td>-1.157780</td><td>0.819384</td><td>0.837314</td></tr><tr><td rowspan="2">After</td><td>Data Slope</td><td>1.001421</td><td>0.991096</td><td>0.984928</td></tr><tr><td>Data Offset</td><td>-0.493833</td><td>0.801366</td><td>0.883017</td></tr><tr><td colspan="2">Channel #</td><td>8</td><td>6</td><td>7</td></tr><tr><td colspan="2">Voltage Range</td><td>0 - 5 VDC</td><td>0 - 5 VDC</td><td>0 - 5 VDC</td></tr></tbody></table>		Parameter	NO2	NOx	NO	Before	Data Slope	0.996289	0.994398	0.988624	Data Offset	-1.157780	0.819384	0.837314	After	Data Slope	1.001421	0.991096	0.984928	Data Offset	-0.493833	0.801366	0.883017	Channel #		8	6	7	Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC		
Parameter	NO2	NOx	NO																																
Before	Data Slope	0.996289	0.994398	0.988624																															
	Data Offset	-1.157780	0.819384	0.837314																															
After	Data Slope	1.001421	0.991096	0.984928																															
	Data Offset	-0.493833	0.801366	0.883017																															
Channel #		8	6	7																															
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC																															

Analyzer Information

Analyzer make/model	42i	Analyzer serial #	906535087	
Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	6.1	mV	6.1	mV
NOx bkgnd	6.5	mV	6.5	mV
NO coefficient	0.956		0.956	
NOx coefficient	1.000		1.000	
NO2 conv temp	322.4	Deg C	323.1	Deg C
Cooler Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-844.3	mV	-844.3	mV
R Cell Press	167.1	in Hg	168.0	in Hg
Sample Flow	0.627	LPM	0.629	LPM

Notes: NO adjustment made

Calibration Report

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



Station Information

Calibration Date: February 2, 2016 Station Location: Henry Pirker

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4995	0.00	0.0	0.0	0.0	0.0	0.2	0.0	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	409.2	409.7	0.0	0.9920	0.9851
2	4995	19.96	203.8	202.6	1.2	204.3	203.4	0.4	0.9976	0.9959
3	4995	9.93	101.6	101.0	0.6	101.0	101.1	0.1	1.0054	0.9990
AFZ	4995	0.00	0.0	0.0	0.0	0.0	0.2	0.0	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	409.2	409.7	0.0	0.9920	0.9851
Average Correction Factor									0.9984	0.9933

As Found Concentrations: NO_x= 407.8 NO= 405.6 As Found Percent Change NO_x= 0.5% NO= 0.5%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.2	0.2	0.0	0.0	0.2	0.0	N/A	N/A	N/A	N/A
NO point	408.0	408.0	0.0	408.2	408.0	0.1	0.9994	1.0000	N/A	N/A
300	408.0	71.8	336.2	407.5	71.8	335.4	1.0013	1.0000	1.0023	99.8%
200	408.0	181.7	226.3	410.0	181.7	227.5	0.9951	1.0000	0.9947	100.5%
100	408.0	298.4	109.6	409.5	298.4	110.2	0.9963	1.0000	0.9948	100.5%
Average Correction Factor							0.9976	1.0000	0.9973	100.3%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.2	ppb	-0.1	0.0	0.2	ppb
Auto span	304.1	301.6	2.2	ppb	330.2	327.1	2.5	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



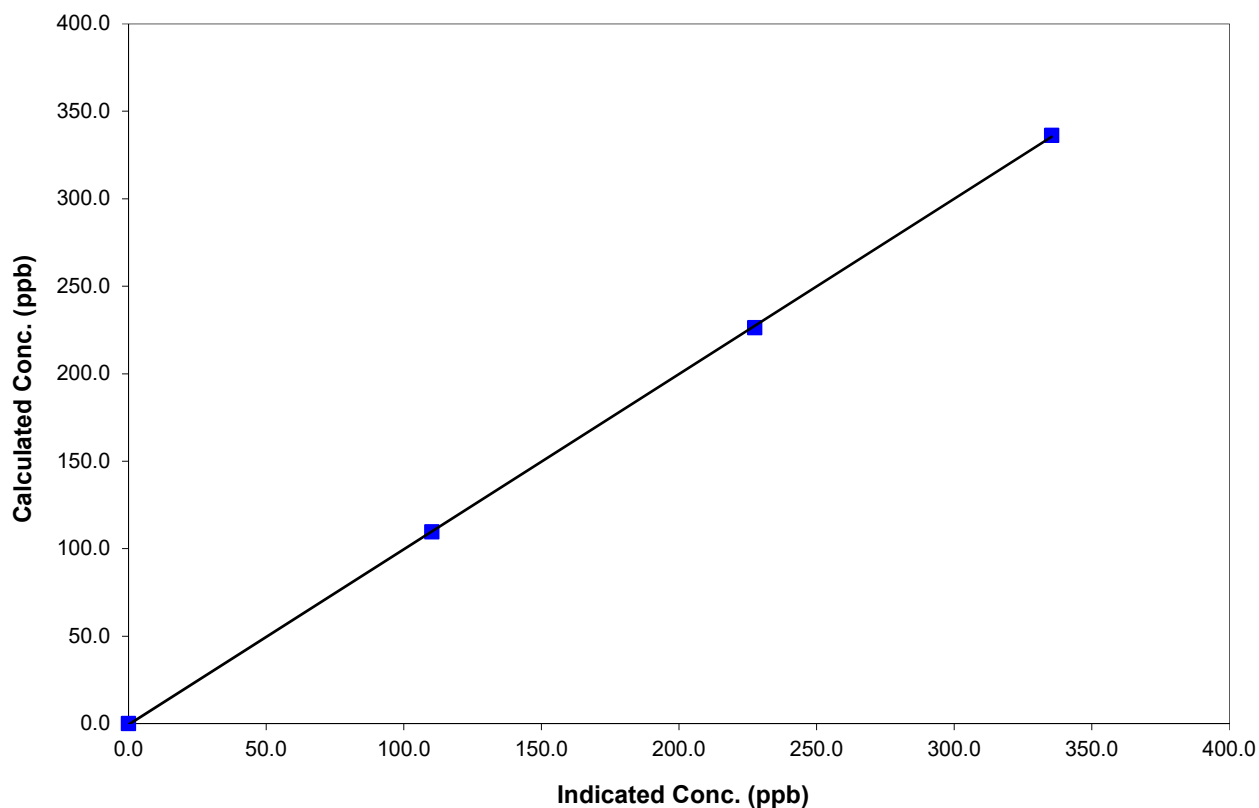
Station Information

Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:00	End Time (MST)	13:55:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999969
336.2	335.4	1.0023		
226.3	227.5	0.9947		
109.6	110.2	0.9948	Slope	1.001421
			Intercept	-0.493833

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



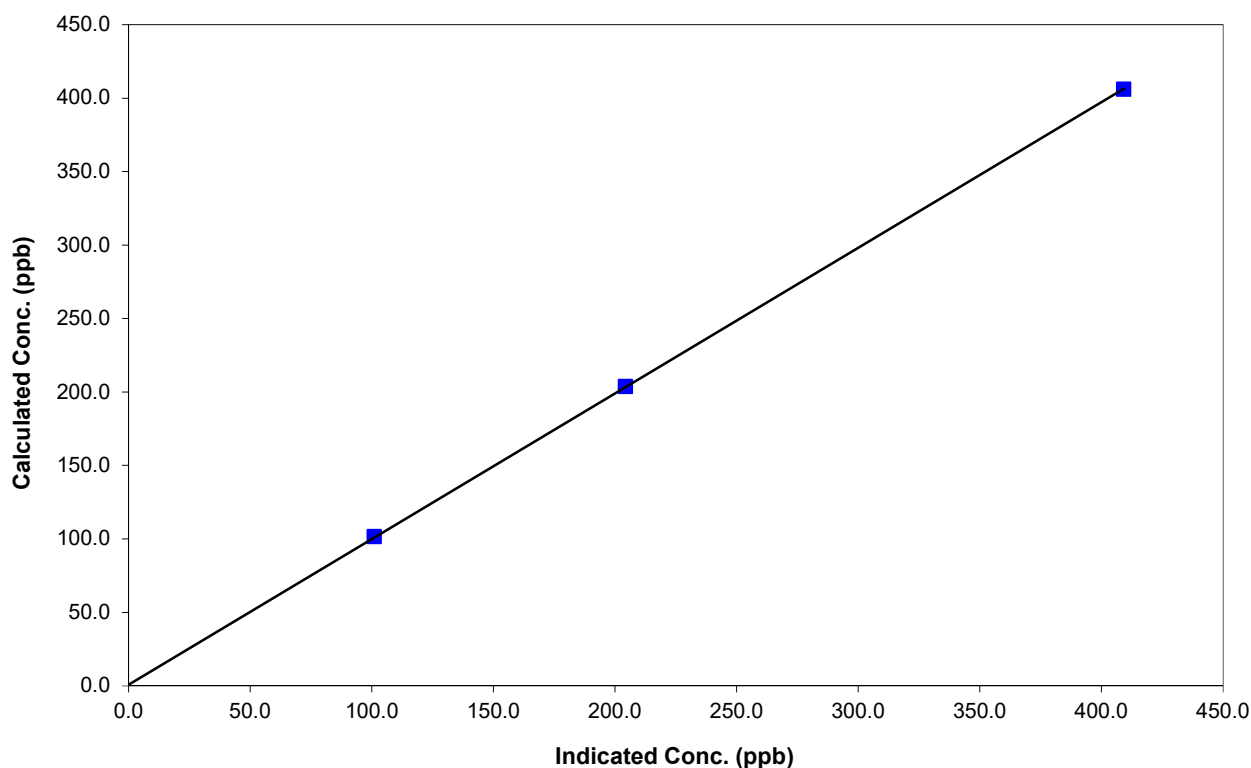
Station Information

Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:00	End Time (MST)	13:55:00 PM
Analyzer make	42i	Analyzer serial #	906535087

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999984
405.9	409.2	0.9920		
203.8	204.3	0.9976		
101.6	101.0	1.0054	Slope	0.991096
			Intercept	0.801366

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



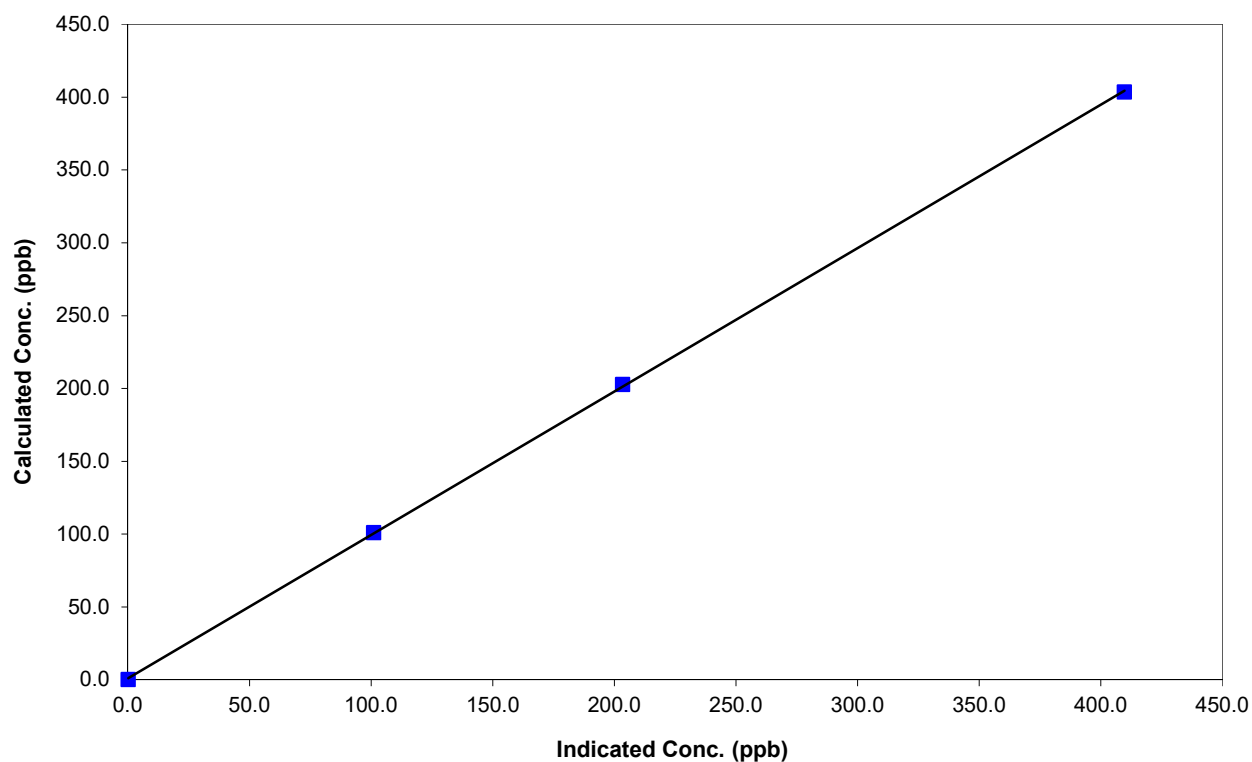
Station Information

Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:00	End Time (MST)	13:55:00 PM
Analyzer make	42i	Analyzer serial #	906535087

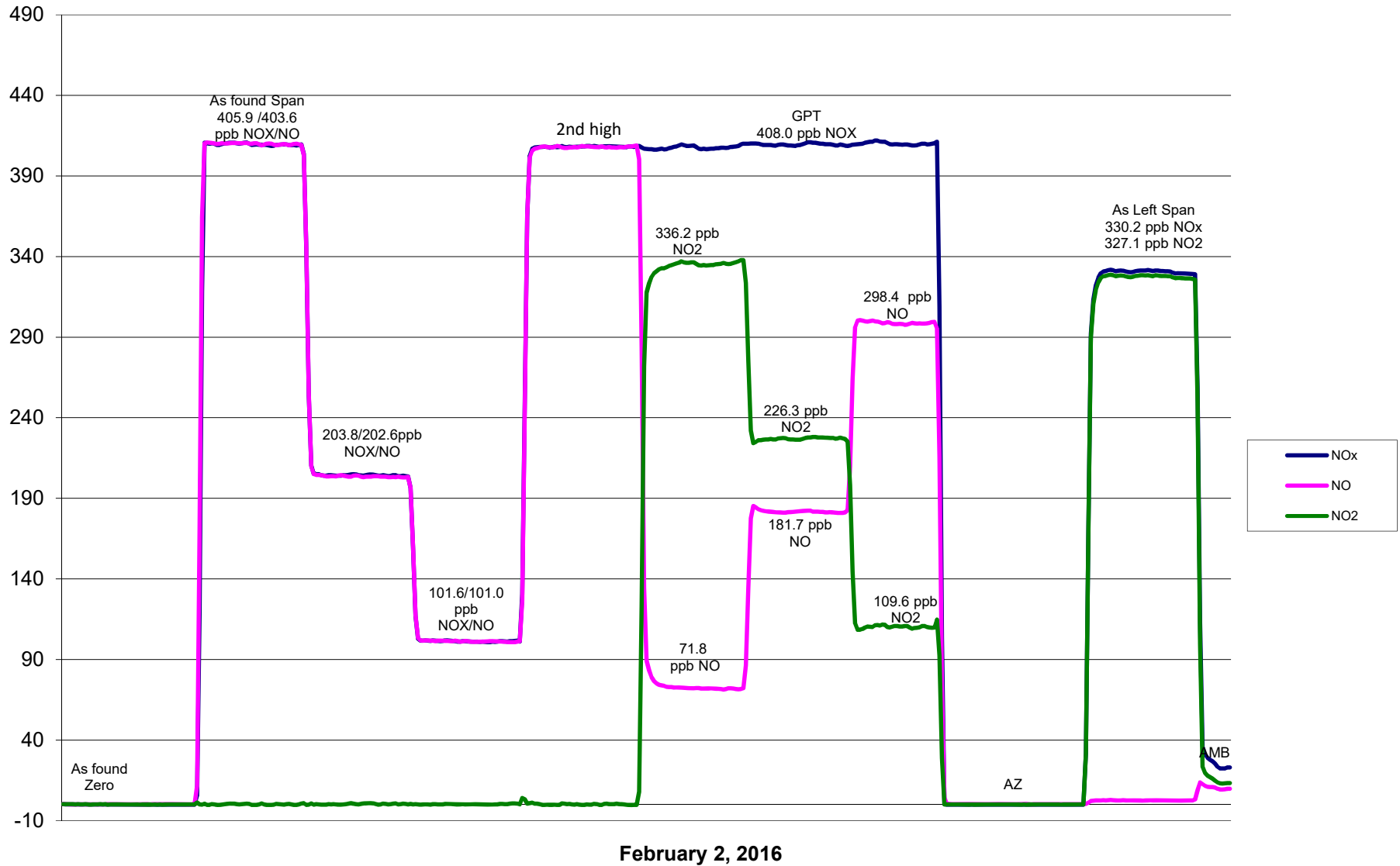
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999956
403.6	409.7	0.9851		
202.6	203.4	0.9959		
101.0	101.1	0.9990	Slope	0.984928
			Intercept	0.883017

NO Calibration Curve



NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	12:49	End Time (MST)	15:27:00 PM
Barometric Pressure	728.000 mm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.006255	Calculated slope	1.015310
Calculated intercept	-0.202382	Calculated intercept	0.819243

Analyzer make	Teco 49I	Analyzer serial #	1507964699 (AMU:2015)
---------------	----------	-------------------	-----------------------

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	0.70	ppb	0.70	ppb
slope	1.004		1.004	
Lamp temp	53.6	mV	53.7	mV
Lamp Intensity A/B	81880/91895	mV	82113/91997	mV
Pressure	0.693.1	mm Hg	0.692	mm Hg
Flow A	0.73	ccm	0.731	ccm
Flow B	0.732	ccm	0.735	ccm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5035	0.0	0.0	-0.2	N/A
5035	0.3	336.2	331.2	1.0150
5035	0.2	226.3	220.9	1.0247
5035	0.1	109.6	106.9	1.0255
5035	0.0	0.0	-0.2	As found zero
5035	0.3	336.2	331.2	As found span
Average Correction Factor				1.0217

Calculated value of As Found Response: 333.3 ppm Percent Change of As Found: -0.9%

	before calibration		after calibration	
Auto zero	-0.3	ppb	-0.6	ppb
Auto span	362.7	ppb	356.8	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter 03

Air Monitoring Network PAZA



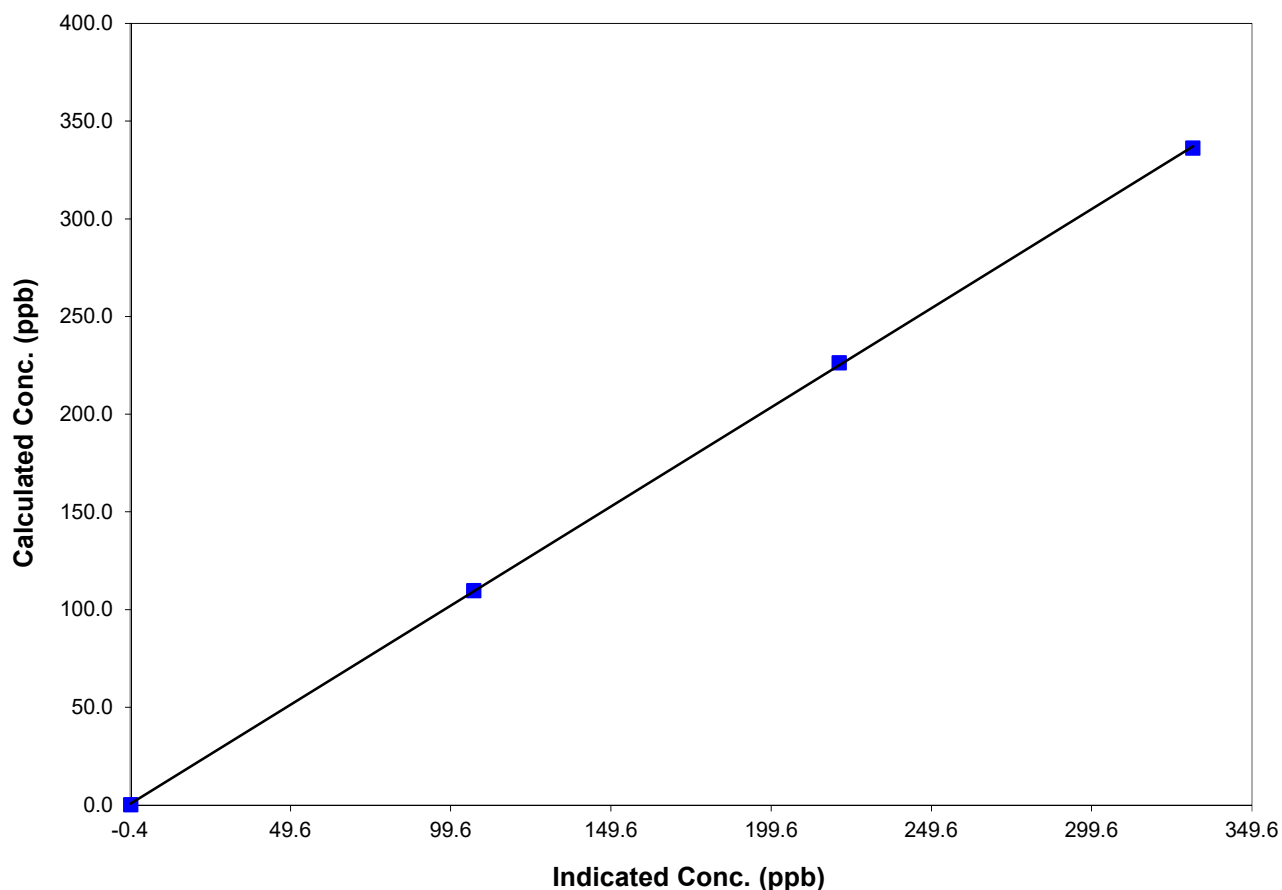
Station Information

Calibration Date	February 2, 2016	Previous Calibration	January 5, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:49	End Time (MST)	15:27:00 PM
Analyzer make/model	Teco 49I	Analyzer serial #	1507964699 (AMU:2015)

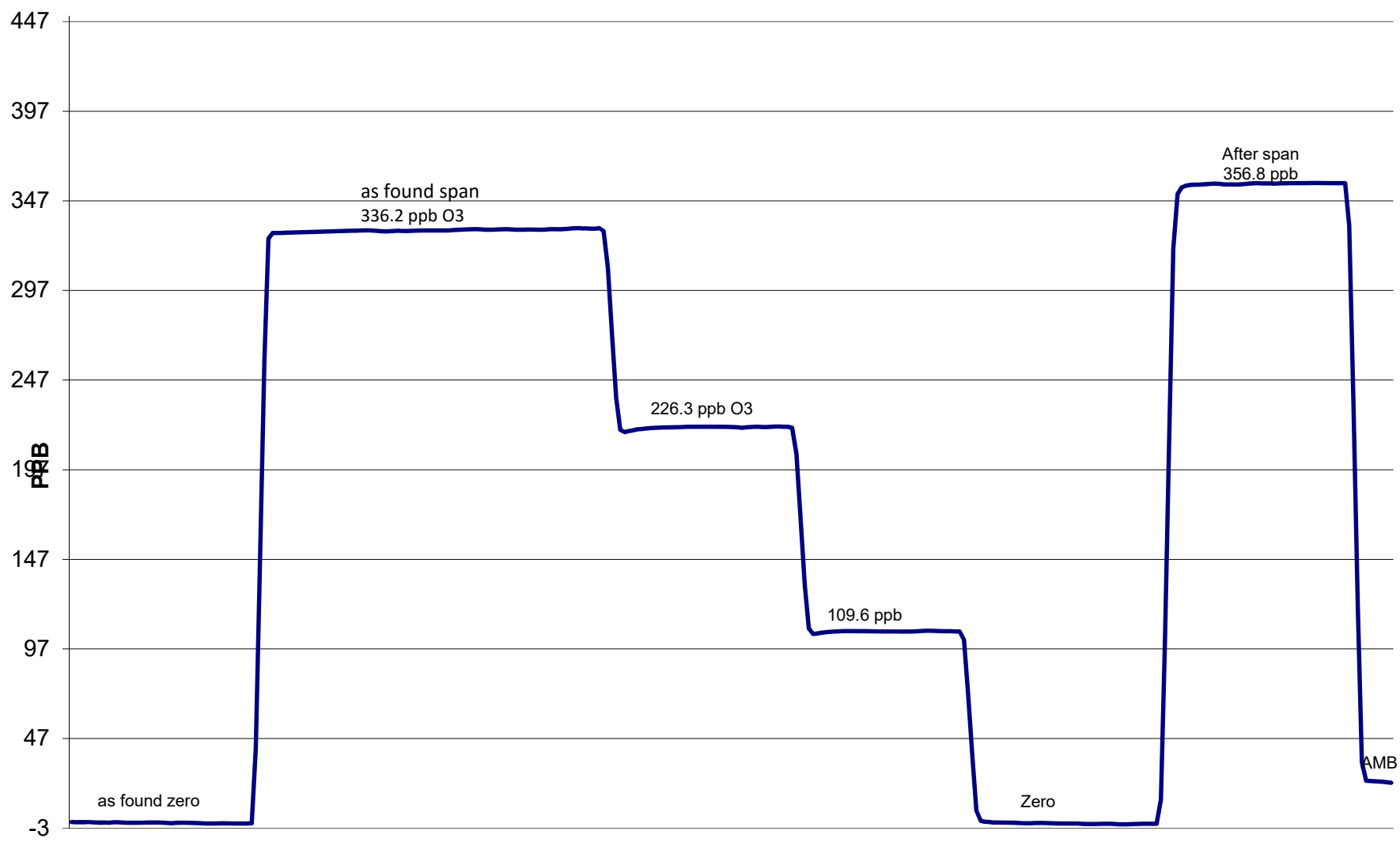
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	NA	Correlation Coefficient	0.999955
336.2	331.2	1.0150		
226.3	220.9	1.0247		
109.6	106.9	1.0255	Slope	1.015310
			Intercept	0.819243

O3 Calibration Curve



O3 Calibration



February 2, 2016

Calibration Report

Parameter CO

Air Monitoring Network PAZA



Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 4, 2015
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	10:35	End Time (MST)	13:30:00 PM
Barometric Pressure	726.0 mm/hg	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	6586
Cal Gas Conc	2898 ppm	Cal Gas Expiry Date	04/02/2013
		Cal Gas Cylinder #	LL83909
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.012281	Calculated slope	1.011758
Calculated intercept	-0.250062	Calculated intercept	-0.016951
Analyzer make	Model 48I-TLE	Analyzer serial #	1408761378

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO zero setting	4.217		4.584	
CO span setting	1.001		1.001	
Sample pressure	698.3	mm Hg	698	mm Hg
Sample Flow	0.452	LPM	0.452	LPM

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	0.00	N/A
4995	69.94	40.02	39.47	1.0139
4995	34.96	20.14	20.20	0.9972
4995	17.96	10.38	10.12	1.0257
4995	0.00	0.00	0.36	As Found Zero
4995	69.94	40.02	40.44	As Found Span
Average Correction Factor				1.0123

Calculated value of As Found Response: 40.324 ppm Percent Change of As Found: -0.8%

	before calibration		after calibration	
Auto zero	0.01	ppm	0.00	ppm
Auto span	19.59	ppm	19.52	ppm

Notes: Zero adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CO

Air Monitoring Network PAZA



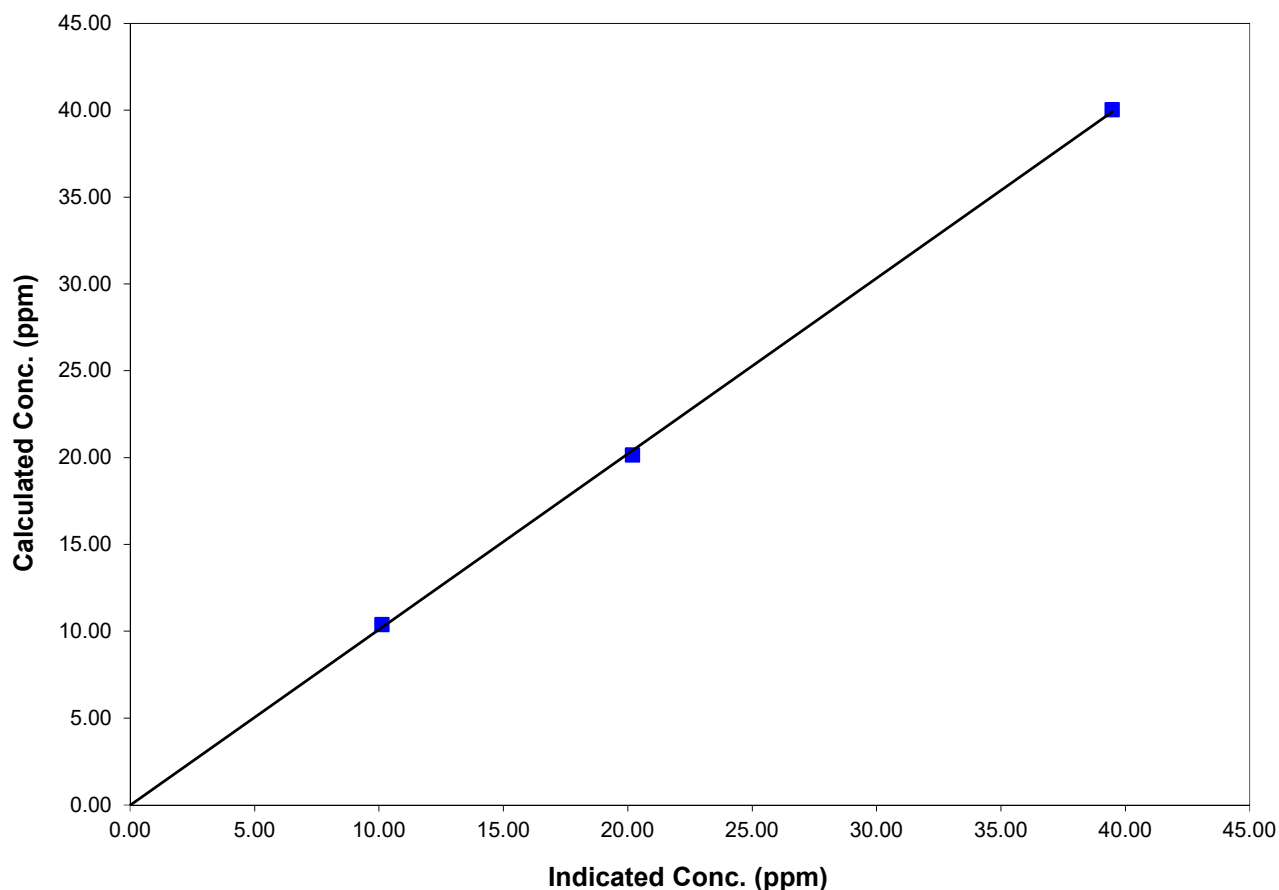
Station Information

Calibration Date	February 3, 2015	Previous Calibration	January 4, 2015
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:35	End Time (MST)	13:30:00 PM
Analyzer make/model	Model 48I-TLE	Analyzer serial #	1408761378

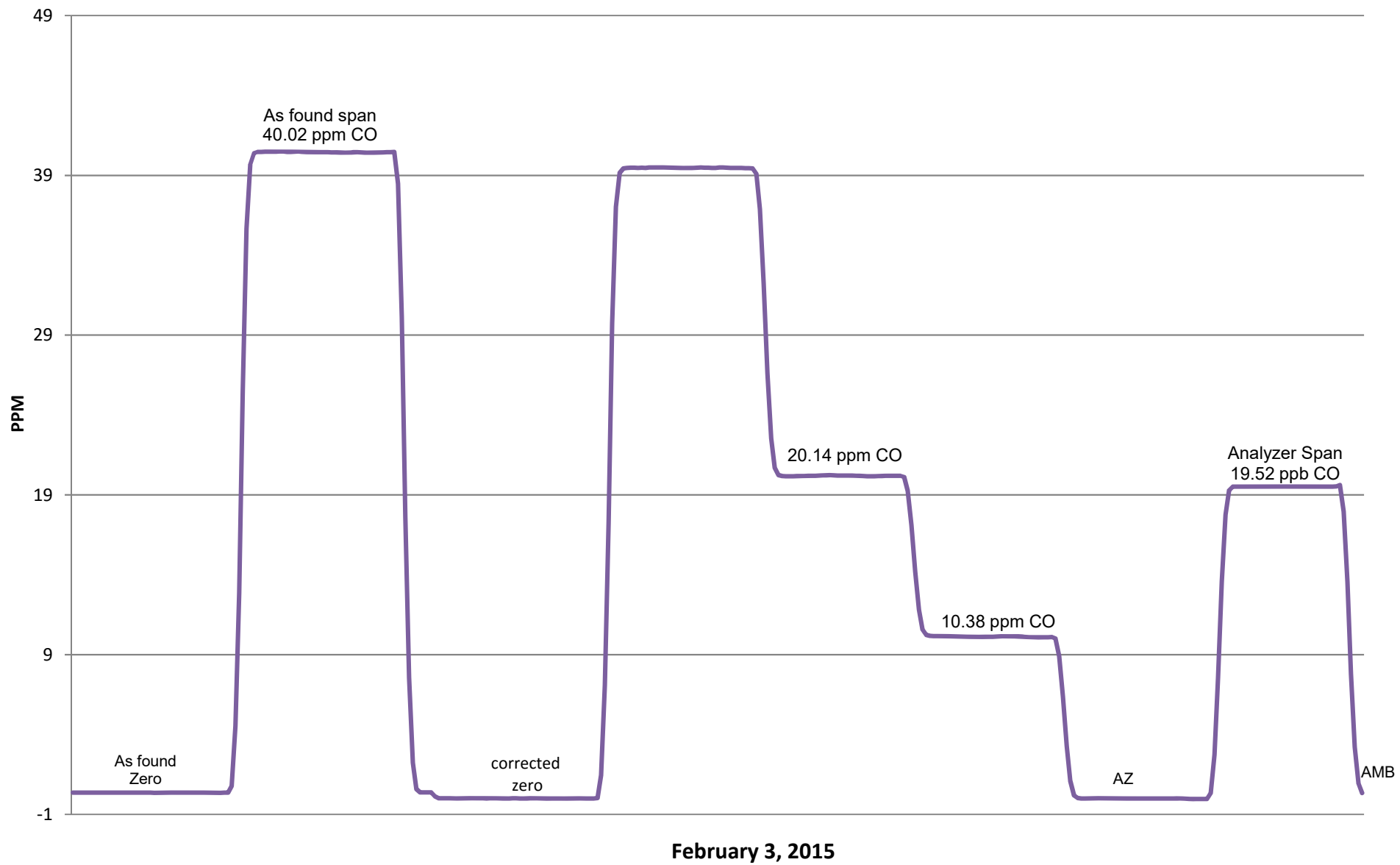
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.000	N/A	Correlation Coefficient	0.999872
40.017	39.469	1.0139		
20.142	20.198	0.9972		
10.383	10.123	1.0257	Slope	1.011758
			Intercept	-0.016951

CO Calibration Curve



CO Calibration



Calibration Report



Parameter CH4 / NMHC / THC

Air Monitoring Network PAZA

Station Information

Calibration Date	February 3, 2016	Previous Calibration	January 4, 2016
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
			Other:

Start Time (MST)	12:50	End Time (MST)	15:20:00 PM
Barometric Pressure	726.00 mm/hg	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas CH4 Conc	386 ppm CH4	Cal Gas Expiry Date	28/03/2014
Cal Gas C3H8 Conc	207 569.25 ppm CH4	Cal Gas Cylinder #	LL34318
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 5 volt	DACS channel #	SE 11,12,13

Analyzer make TEI 55I Analyzer serial # 1134650658

	before		after	
Concentration range	0-20 (CH4, NMHC); 0-40 (THC)	ppm	0-20 (CH4, NMHC); 0-40 (THC)	ppm
Air pressure	27.8	PSI	27.8	PSI
Fuel pressure	42.1	PSI	42.1	PSI
Carrier pressure	30.3	PSI	30.3	PSI
CH4 cal factor	6.01		6.01	E ⁻⁴
NMHC cal factor	2.23		2.23	E ⁻⁴
Rt	12.74	Sec	12.74	Sec
Pk Index	23.22		23.22	

CH4 Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
1996	0.00	0.00	0.02	N/A
1996	68.96	12.89	12.94	0.9964
1996	40.96	7.76	7.73	1.0046
1996	15.99	3.07	3.05	1.0074
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	12.89	12.94	As Found Span
Average Correction Factor				1.0028

Calculated value of As Found Response: 12.927 ppm Percent Change of As Found: -0.3%

	Before		After
Calculated slope	0.999818	Calculated slope	0.997760
Calculated intercept	0.011147	Calculated intercept	0.011258

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.04	ppm	0.03	ppm
Auto span	9.38	ppm	9.23	ppm

NMHC Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
1996	0.00	0.00	0.02	N/A
1996	68.96	19.01	18.90	1.0059
1996	40.96	11.45	11.51	0.9941
1996	15.99	4.52	4.64	0.9749
1996	0.00	0.00	0.02	As Found Zero
1996	68.93	19.00	18.90	As Found Span
Average Correction Factor				0.9916

Calculated value of As Found Response: 18.726 ppm Percent Change of As Found: 1.5%

	Before		After
Calculated slope	0.994734	Calculated slope	1.007849
Calculated intercept	-0.053430	Calculated intercept	-0.092056

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	13.18	ppm	12.78	ppm

THC Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
1996	0.00	0.00	0.03	N/A
1996	68.96	31.90	31.81	1.0029
1996	40.96	19.21	19.22	0.9993
1996	15.99	7.59	7.67	0.9896
1996	0.00	0.00	0.03	As Found Zero
1996	68.93	31.89	31.81	As Found Span
Average Correction Factor				0.9973

Calculated value of As Found Response: 31.650 ppm Percent Change of As Found: 0.7%

	Before		After
Calculated slope	0.997175	Calculated slope	1.004453
Calculated intercept	-0.035247	Calculated intercept	-0.074015

Final Zero/Span Data

	before calibration		after calibration	
Auto zero	0.02	ppm	0.02	ppm
Auto span	22.55	ppm	22.00	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter CH4

Air Monitoring Network PAZA



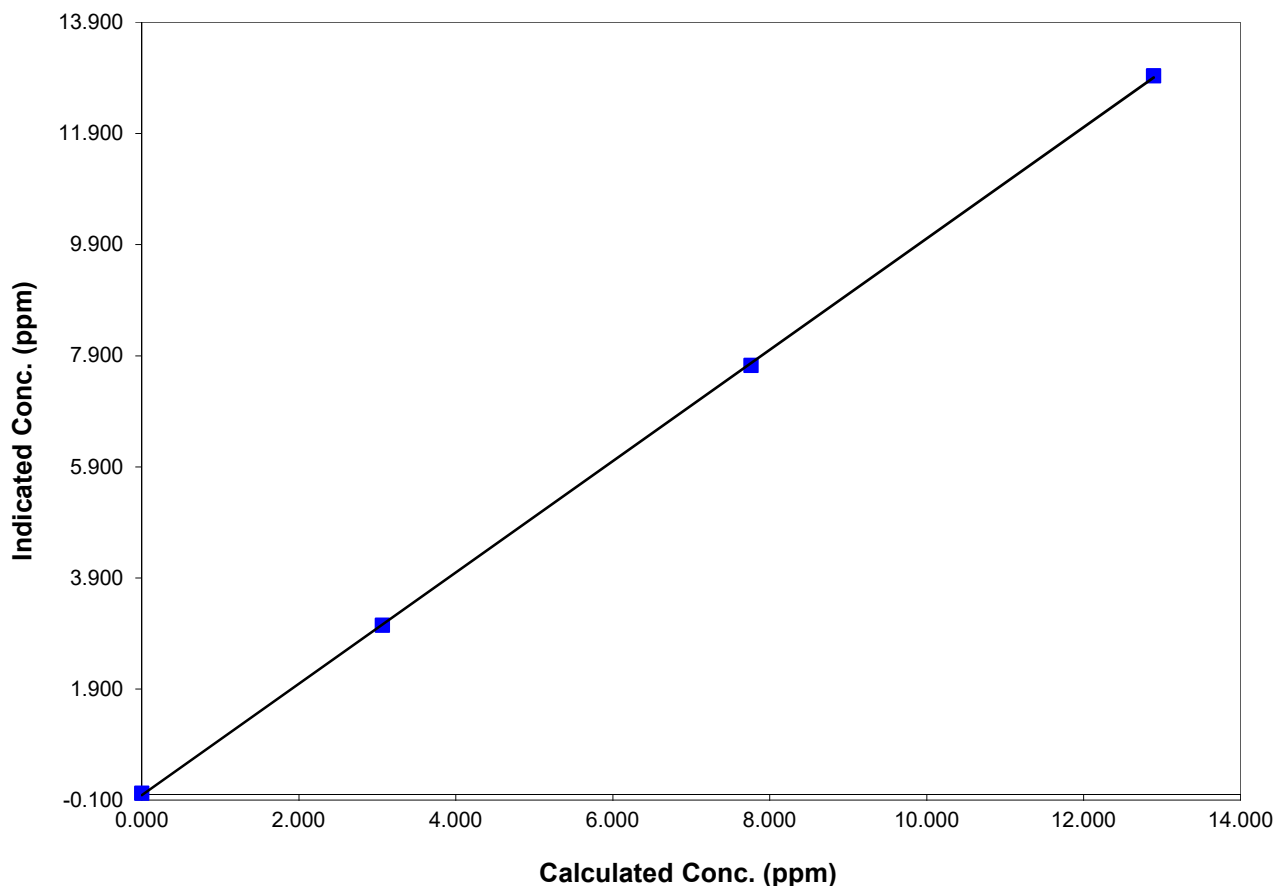
Station Information

Calibration Date	February 3, 2016	Previous Calibration	January 4, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:50	End Time (MST)	15:20:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.019	N/A	Correlation Coefficient	0.999960
12.891	12.937	0.9964		
7.762	7.727	1.0046		
3.068	3.045	1.0074	Slope	0.997760
			Intercept	0.011258

CH4 Calibration Data



Calibration Summary

Parameter NMHC

Air Monitoring Network PAZA



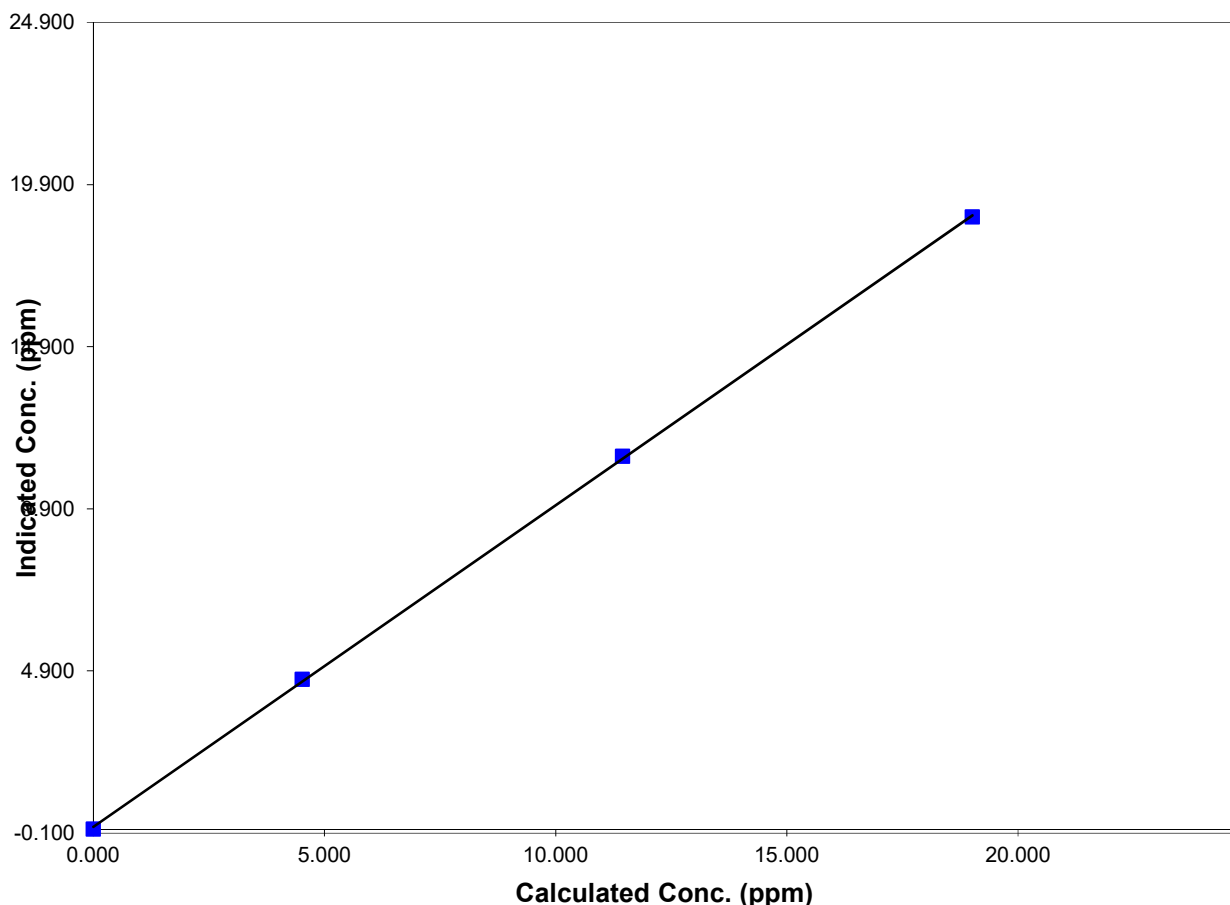
Station Information

Calibration Date	February 3, 2016	Previous Calibration	January 4, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:50	End Time (MST)	15:20:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.020	N/A	Correlation Coefficient	0.999921
19.010	18.899	1.0059		
11.447	11.514	0.9941		
4.524	4.641	0.9749	Slope	1.007849
			Intercept	-0.092056

NMHC Calibration Data



Calibration Summary

Parameter THC

Air Monitoring Network PAZA



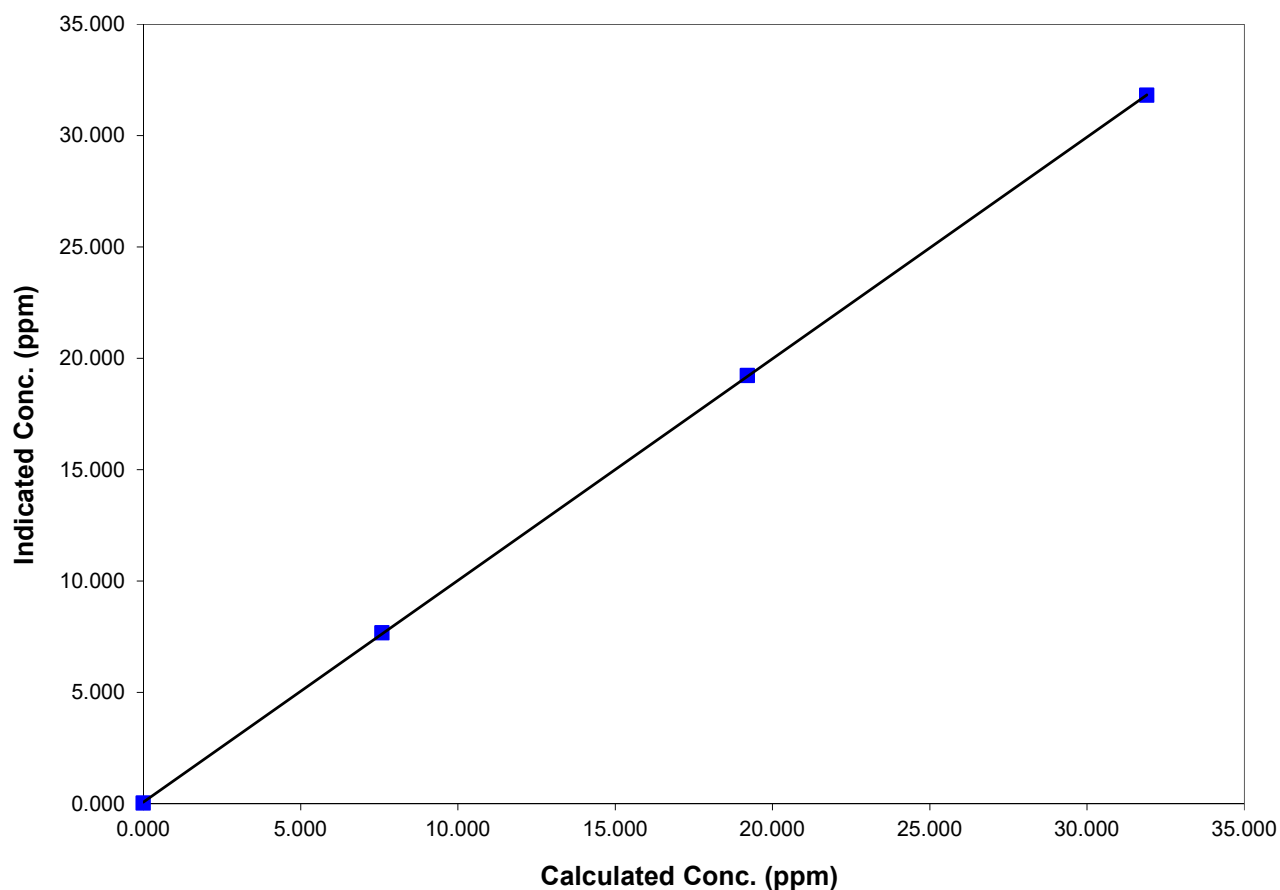
Station Information

Calibration Date	February 3, 2016	Previous Calibration	January 4, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:50	End Time (MST)	15:20:00 PM
Analyzer make/model	TEI 55I	Analyzer serial #	1134650658

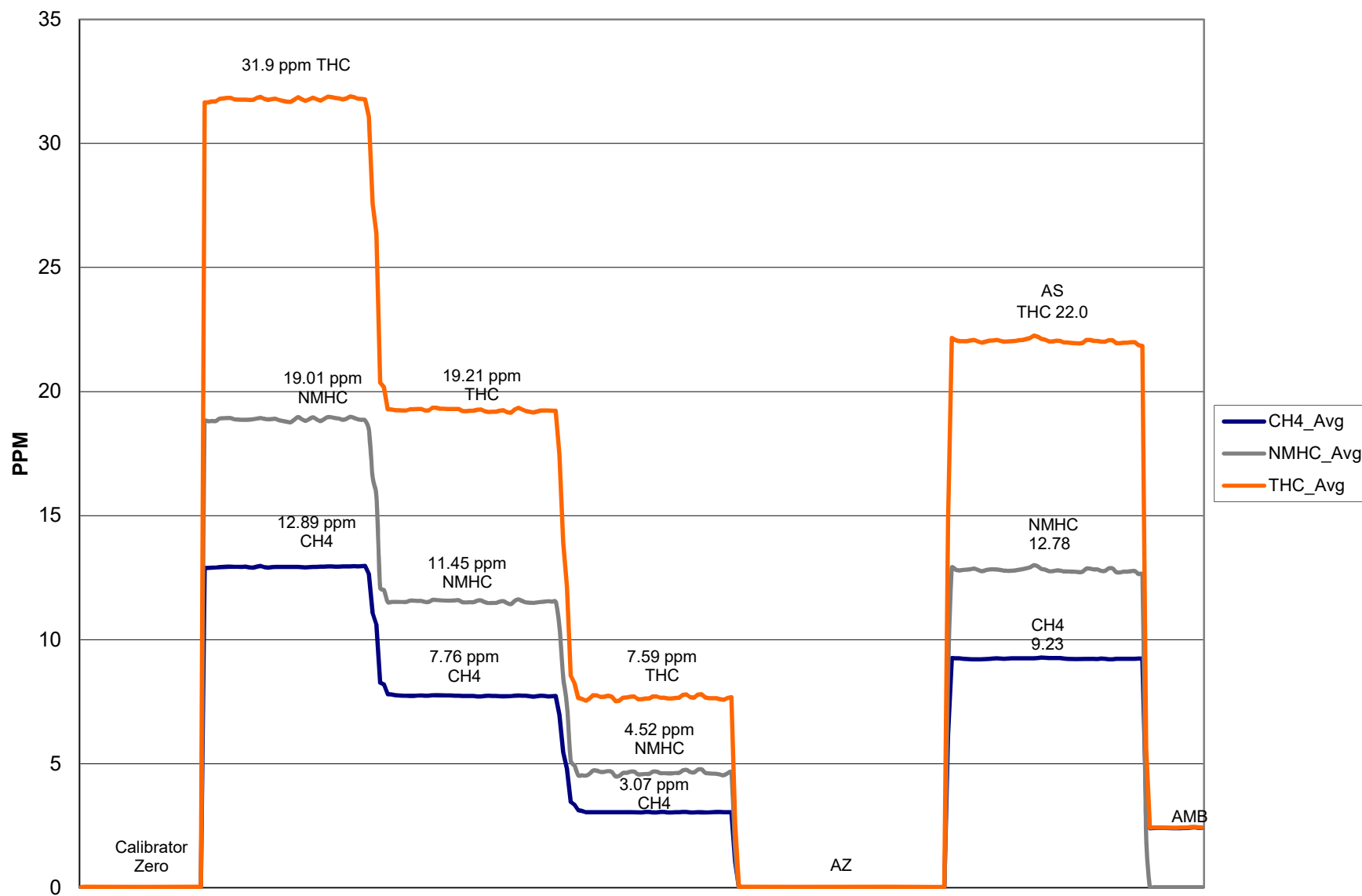
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.033	N/A	Correlation Coefficient	0.999992
31.901	31.808	1.0029		
19.209	19.222	0.9993		
7.592	7.672	0.9896	Slope	1.004453
			Intercept	-0.074015

THC Calibration Data



THC/CH₄/NMHC Calibration



Calibration Report

Parameter TR5

Air Monitoring Network PAZA



Station Information

Calibration Date	February 3, 2016	Previous Calibration	January 7, 2016
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	8:45	End Time (MST)	11:35
Barometric Pressure	726.00 mm/Hg	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6103	Serial Number	6586
Cal Gas Conc	10.32 ppb	Cal Gas Expiry Date	08/07/2016
		Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.981756	Calculated slope	1.013424
Calculated intercept	-0.044693	Calculated intercept	-0.130922
Analyzer make	TEI 45C	Analyzer serial #	630718528

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.935		0.935	
Background	18.3		18.2	
Pressure	669	mm Hg	666.6	mm Hg
Flow	0.444	ccm	0.448	ccm
Lamp Voltage	904	V	904	V

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	0.41	N/A
4995	39.93	81.84	81.08	1.0095
4995	19.95	41.05	40.31	1.0185
6995	9.95	14.66	14.45	1.0144
4995	0.00	0.00	0.41	As Found Zero
4995	39.93	81.84	81.08	As Found Span
Average Correction Factor				1.0141

Calculated value of As Found Response: 79.1 ppb Percent Change of As Found: 3.3%

	before calibration		after calibration	
Auto zero	0.51	ppb	0.59	ppb
Auto span	32.36	ppb	32.76	ppb

Notes: No adjustment made
Scrubber material checked-still good.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



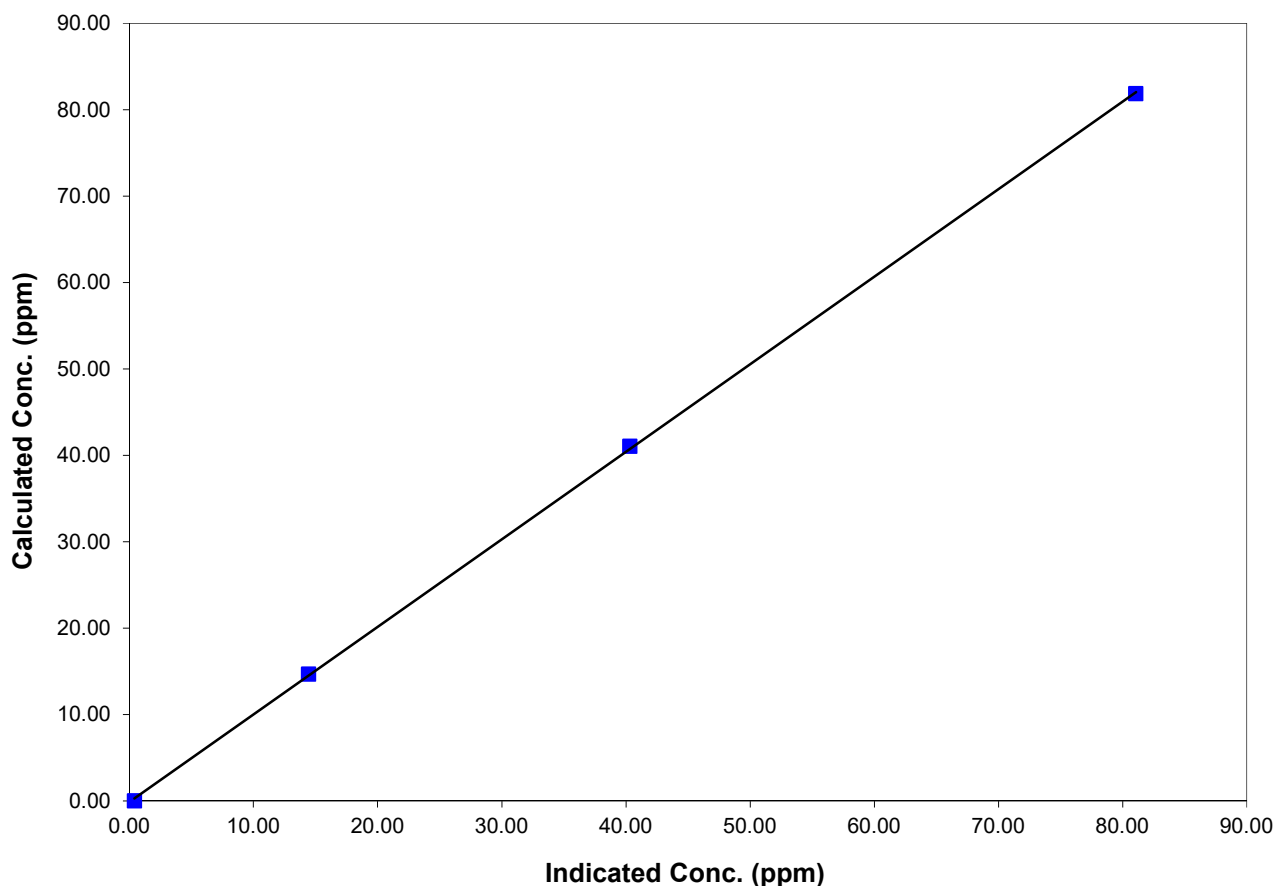
Station Information

Calibration Date	February 3, 2016	Previous Calibration	January 7, 2016
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	8:45	End Time (MST)	11:35
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

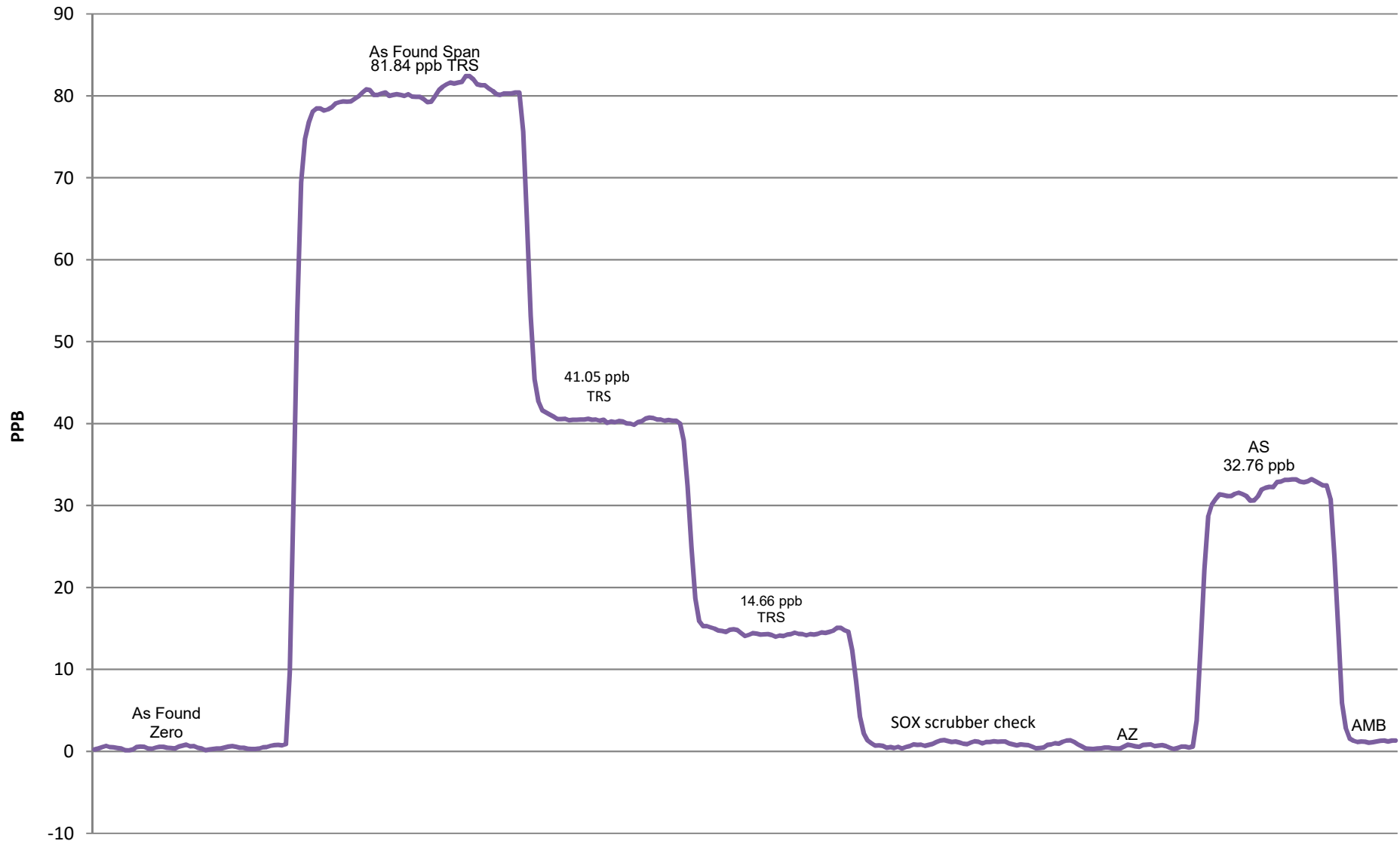
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.415	N/A	Correlation Coefficient	0.999935
81.844	81.077	1.0095		
41.054	40.309	1.0185		
14.659	14.451	1.0144	Slope	1.013424
			Intercept	-0.130922

TRS Calibration Curve



TRS Calibration



February 3, 2016

SHARP 5030 PM2.5 Calibration



STATION: Henry Pirker
 LOCATION: Muskoseepi park
 START TIME (MST): 10:00

OPERATOR: Dmytro Dolotii
 DATE: February 3 2016
 END TIME (MST): 15:05:00 PM

MONITOR INFO / PARAMETER VALUES:

Make/Model SHARP 5030
 Configuration PM 2.5
 Serial Number AMU 1860

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

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (^o C)	Ambient Pres. (mbar)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
As Found Data	Audit values (I)	-10.2	937	16.70	16.67	14:02
	MEASURED (AF)	-10.2	937	16.70	16.73	14:09
	AF Difference (AF-I)	0.0	0	0.00	0.06	0:01
Adjusted Data	MEASURED (M)	-10.2	937	16.70	16.72	14:09 PM
	Adj Difference (M-I)	0.0	0	0.00	0.05	0:01
	LIMITS	± 4.0 ^o C	6.7 mbar	1.0 L/min	± 1.0 L/min	±2 min

Sample Head Inspect/Cleaning: Cleaned sample head

Status of sampling tape: 90% full

Nozzle Inspection / cleanliness: _____

COMMENTS: _____

Foil calibration Old value 6948 New value 6939

Nephelometer zero. Analog as found = 1.6 adsuted conc = -0.0

Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	February 4 2016	Previous Calibration	January 11 2016
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	12:10	End Time (MST)	14:20:00 PM
Barometric Pressure	0.920 ATM	Station Temperature	21.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	49.7 ppm	Cal Gas Expiry Date	05/10/2018
Correction factor	0.031167	Cal Gas Cylinder #	LL103793
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	1.006994	Calculated slope	1.000603
Calculated intercept	0.456955	Calculated intercept	0.540671
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.9		11.9	
coefficient	1.257		1.257	
Lamp Voltage	831	volts	831	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	666.5	mm Hg	666.6	mm Hg
Sample Flow	0.447	ccm	0.446	ccm
Lamp Intensity	89	%	89	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.5	N/A
4995	39.93	394.2	393.9	1.0006
4995	19.97	197.9	196.7	1.0060
4995	9.95	98.8	97.1	1.0174
4995	0.0	0.0	0.6	As Found Zero
4995	39.93	394.9	393.9	As Found Span
Average Correction Factor				1.0080

Calculated value of As Found Response: 396.557 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	0.5	ppm	0.4	ppm
Auto span	259.4	ppm	261.3	ppm

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



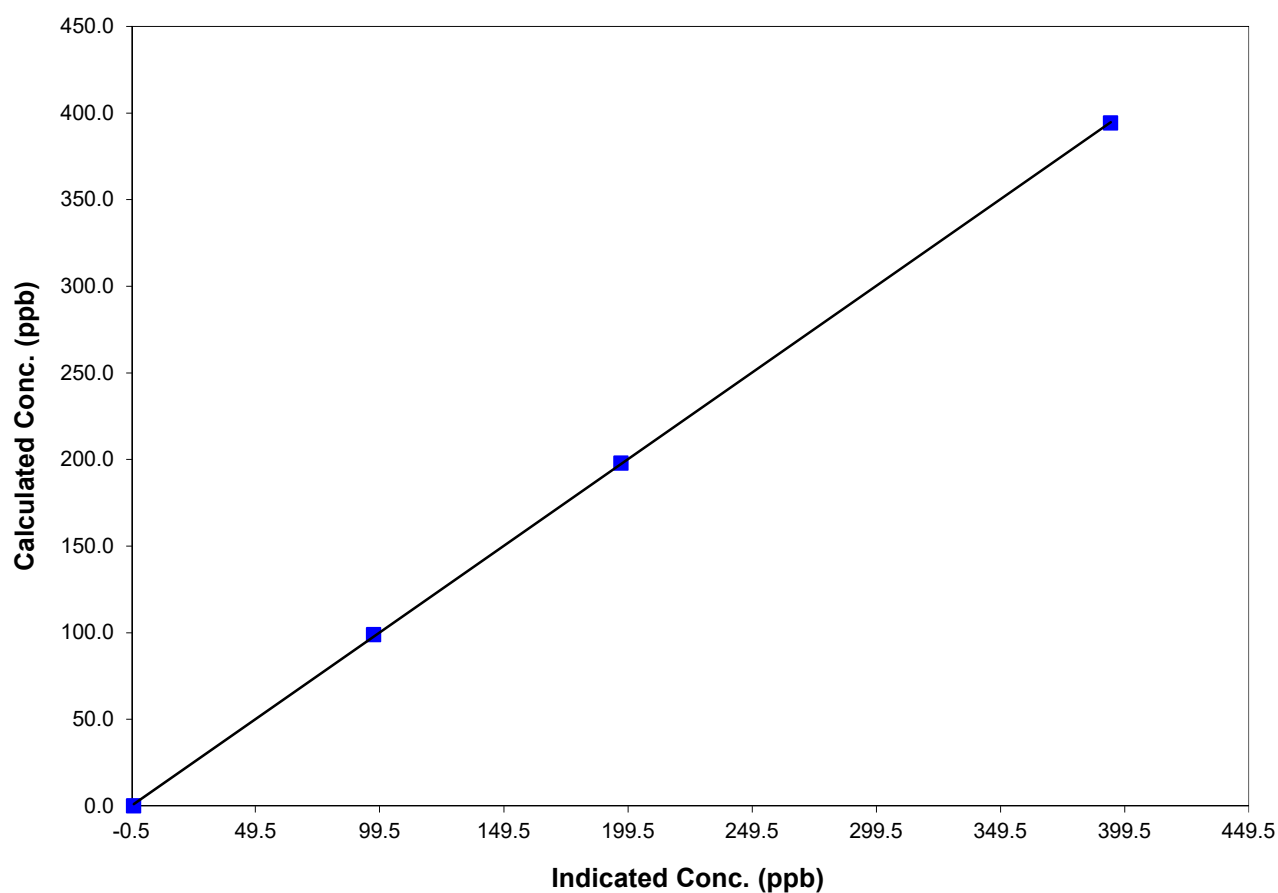
Station Information

Calibration Date	February 4 2016	Previous Calibration	January 11 2016
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:10	End Time (MST)	14:20:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

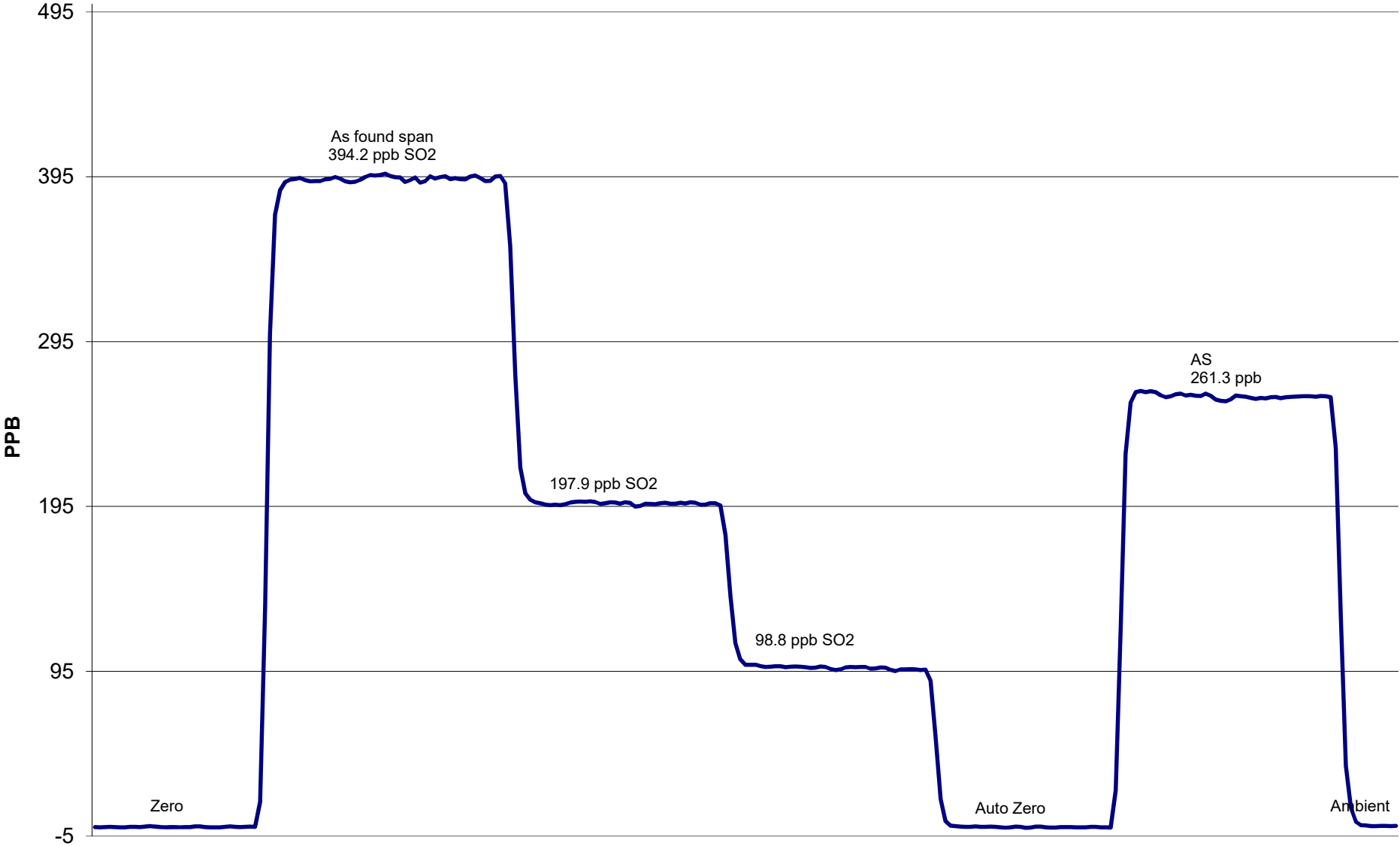
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999966
394.2	393.9	1.0006		
197.9	196.7	1.0060		
98.8	97.1	1.0174	Slope	1.000603
			Intercept	0.540671

SO2 Calibration Curve



SO2 Calibration



February 4 2016

Calibration Report



Parameter TRS

Air Monitoring Network PAZA

Station Information

Calibration Date	February 4 2016	Previous Calibration	January 13 2016
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:00	End Time (MST)	12:55
Barometric Pressure	0.920 ATM	Station Temperature	21.0 Deg C
Calibrator	Envionics	Serial Number	6586
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031167	Cal Gas Cylinder #	LL110781
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.992564	Calculated slope	0.999967
Calculated intercept	0.140819	Calculated intercept	0.073161

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

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.4	ppb	15	ppb
coefficient	1.017		0.990	
Lamp Voltage	1006	volts	1005	volts
Chamber Temp	44.3	Deg C	44.4	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	648.9	mm Hg	649.8	mm Hg
Sample Flow	0.530	ccm	0.529	ccm
Lamp Intensity	37,587	mv	37,494	mv

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	0.0	N/A
4995	39.93	81.84	81.8	1.0011
4995	19.97	41.10	41.1	0.9990
6995	9.97	14.69	14.4	1.0195
4995	9.97		0.7	Sox Test
4995	0.00	0.00	0.0	As Found Zero
4995	39.93	81.84	83.9	As Found Span
Average Correction Factor				1.0066

Calculated value of As Found Response: 83.35 ppm Percent Change of As Found: **-1.8%**

	before calibration		after calibration	
Auto zero	0.0	ppm	0.1	ppm
Auto span	79.7	ppm	79.9	ppm

Notes: Span adjustment made
Sox scrubber check performed

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



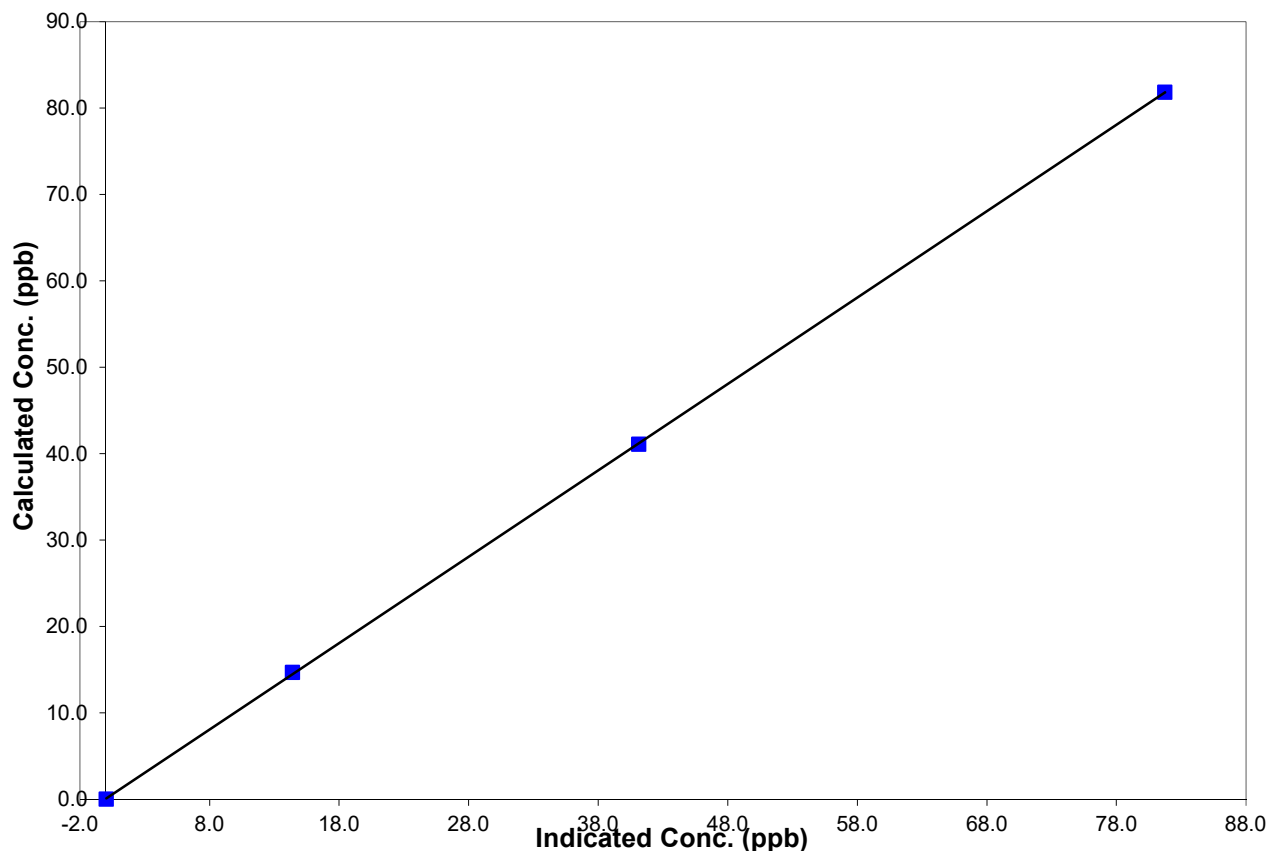
Station Information

Calibration Date	February 4 2016	Previous Calibration	January 13 2016
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:00	End Time (MST)	12:55
Analyzer make/model	TEI Model 43C	Analyzer serial #	31990000000491

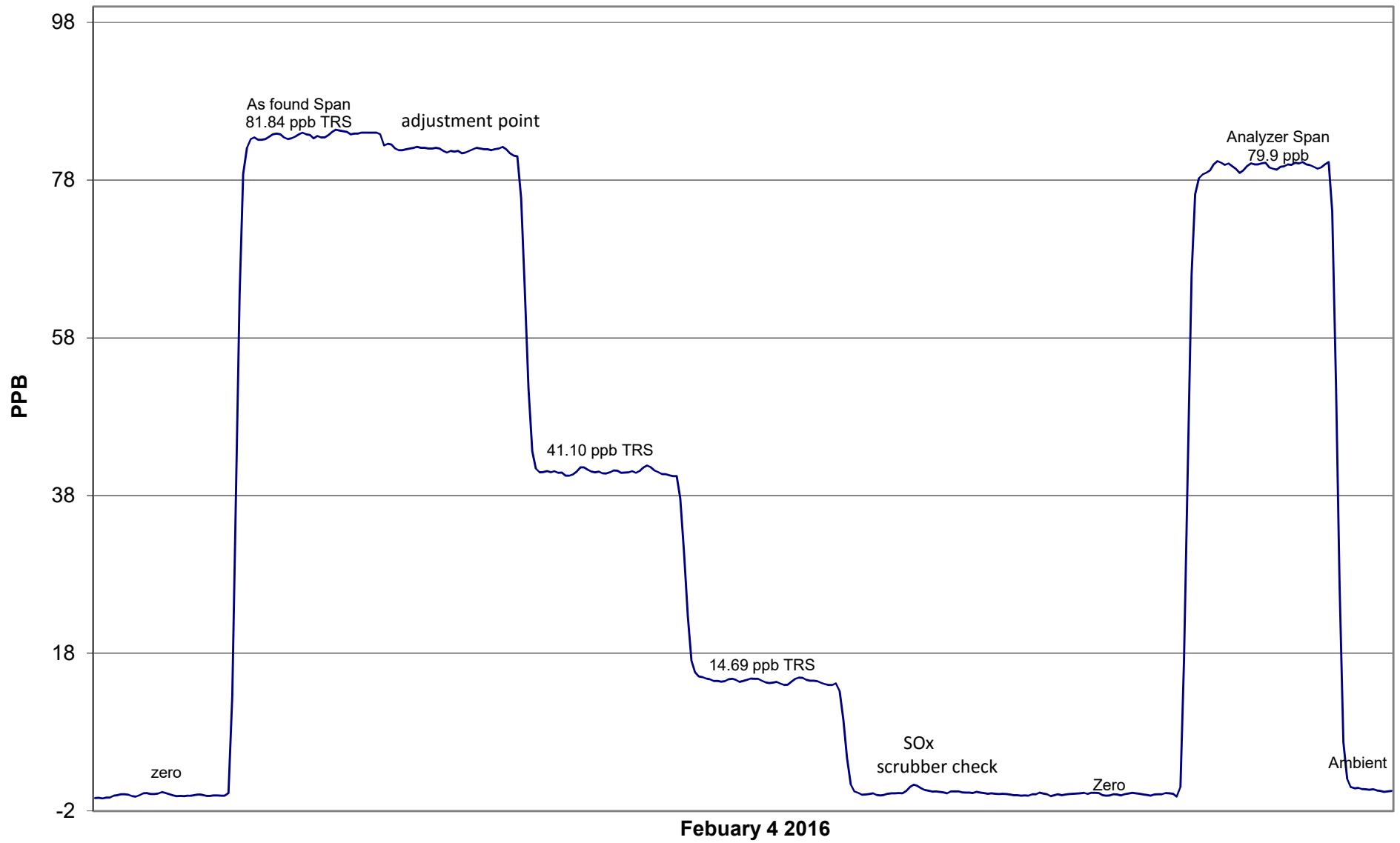
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999982
81.8	81.8	1.0011		
41.1	41.1	0.9990		
14.7	14.4	1.0195	Slope	0.999967
			Intercept	0.073161

TRS Calibration Curve



TRS Calibration



AB TEOM PM2.5 Calibration



STATION: Evergreen Park
 LOCATION: PAZA - Grande Prairie

OPERATOR: Dmytro Dolotii
 DATE: 03-Feb-16

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	21554
Site Number	2
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.000
T-Case Indicated / Set Point	40/40
T-Air Indicated / Set Point	40/40
T-Cap Indicated / Set Point	40/40
Splitter Assembly Alignment (cm)	15.5

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

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	
Previous Calibration	21-Oct-15

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

* capacity test or pump on timed test utilized to verify pump integrity
 "FAIL" indicates that pump requires service.

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.006	0.130
PUMP OFF	0.003	0.010
NET	0.003	0.120
LIMITS	<0.15	<0.60

	Ambient Temp. (^o C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
SET POINT (S)	na	na	16198	13.67	3.000
INDICATED (I)	0.7	0.922		13.65	2.999
MEASURED (AF)	0.4	0.923		13.69	3.000
MEASURED (M)	0.4	0.923	16250	13.69	3.000
DIFFERENCE (M-I)	-0.3	0.001	0.3%	0.02	0.00
LIMITS	± 2^o C	± 0.005 atm	± 2.5 %	± 1.0 L/min	± 0.2 L/min

As Found Data
 Adjusted Data

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

COMMENTS: Pass.

Sample Head Inspection/Cleaning: Large In Line Filter Inspection & Or Cleaning:

Calibration Report



Parameter SO₂

Air Monitoring Network PAZA

Station Information

Calibration Date	February 9, 2016	Previous Calibration	January 26, 2016
Station Number	3	Station Location	Smokey Heights
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:
Start Time (MST)	14:00:00 PM	End Time (MST)	16:15:00 PM
Barometric Pressure	0.927 ATM	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	49.7 ppm	Cal Gas Cert Date	05/11/2018
Correction factor	0.031458	Cal Gas Cylinder #	LL103793
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	1.000461	Calculated slope	0.991934
Calculated intercept	-0.170065	Calculated intercept	0.767158
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	12.2		12.2	
coefficient	0.952		0.952	
Lamp Voltage	938	volts	937	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	670.2	mm Hg	670.4	mm Hg
Sample Flow	0.447	lpm	0.449	lpm
Lamp Intensity	88	%	88	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.3	N/A
4995	39.93	394.15	397.3	0.9922
4995	19.97	197.91	197.8	1.0006
4995	9.97	99.00	98.2	1.0081
4995	0.0	0.00	0.3	As Found Zero
4995	39.93	394.15	397.3	As Found Span
Average Correction Factor				1.0003

Calculated value of As Found Response: 396.944 ppm Percent Change of As Found: -0.7%

	before calibration		after calibration	
Auto zero	1.1	ppb	0.5	ppb
Auto span	211.6	ppb	208.4	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



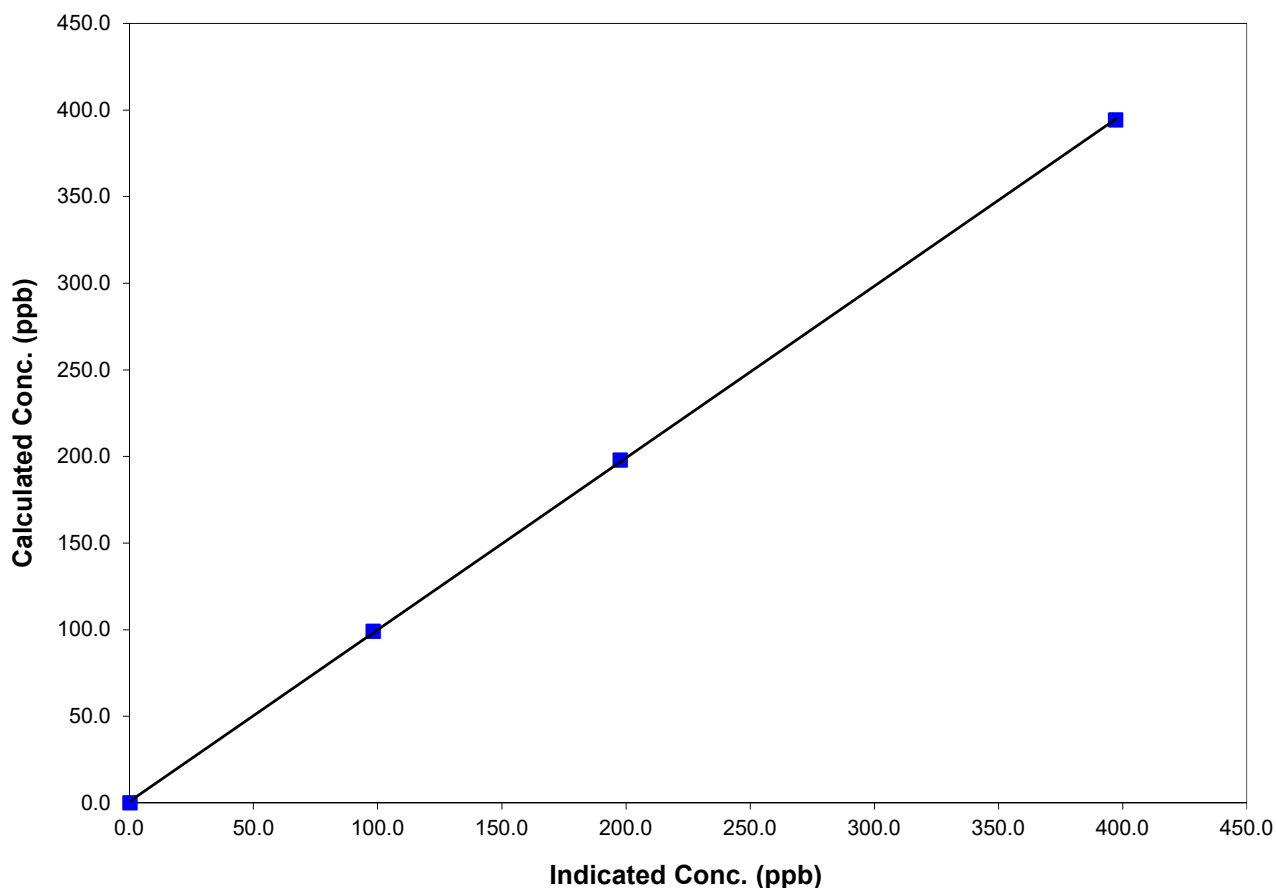
Station Information

Calibration Date	February 9, 2016	Previous Calibration	January 26, 2016
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	14:00:00 PM	End Time (MST)	16:15:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

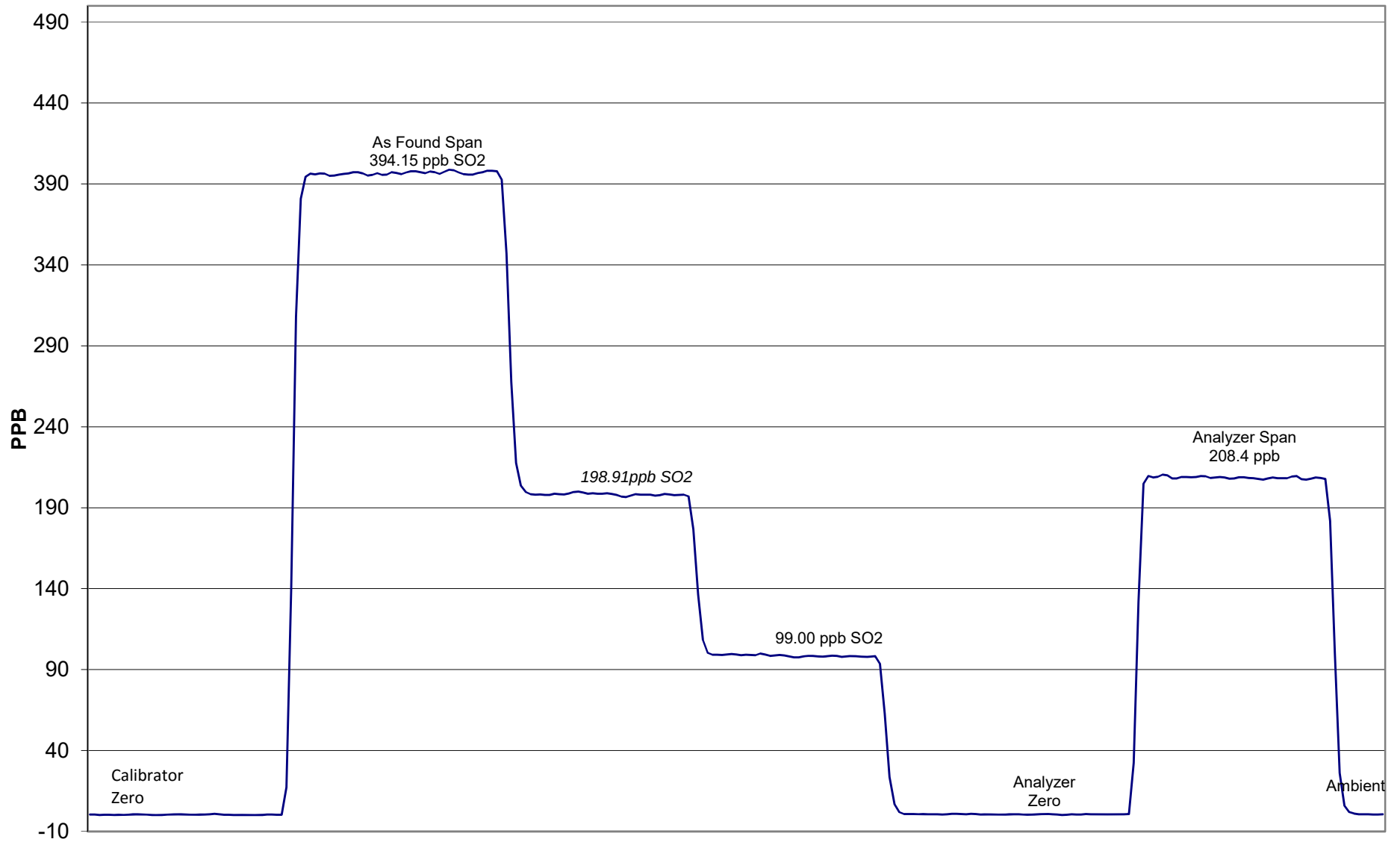
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999962
394.2	397.3	0.9922		
197.9	197.8	1.0006		
99.0	98.2	1.0081	Slope	0.991934
			Intercept	0.767158

SO2 Calibration Curve



Smokey Heights SO₂ Calibration



February 9, 2016

Calibration Report



Parameter TRS

Air Monitoring Network PAZA

Station Information

Calibration Date	February 9, 2016	Previous Calibration	January 26, 2016
Station Number	3	Station Location	Smokey Heights
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:00	End Time (MST)	14:35:00 PM
Barometric Pressure	0.927 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics	Serial Number	6586
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031511	Cal Gas Cylinder #	BLM00586
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
Calculated slope	0.976652	Calculated slope	0.989763
Calculated intercept	1.254945	Calculated intercept	0.821848

Analyzer make TEI Model 43C Analyzer serial # 0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	15	ppb	14.4	ppb
coefficient	1.065		1.044	
Lamp Voltage	855	volts	854	volts
Chamber Temp	43.8	Deg C	43.8	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	603.4	mm Hg	625	mm Hg
Sample Flow	0.563	lpm	0.583	lpm
Lamp Intensity	34,658	mv	34,500	mv

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4998	0.0	0.00	0.0	N/A
4998	39.96	81.86	82.3	0.9945
4998	19.97	41.07	40.0	1.0273
6998	9.97	14.68	13.4	1.0978
4998	9.97		0.2	Sox test
4998	0.0	0.00	0.0	As Found Zero
4998	39.96	81.86	83.9	As Found Span
Average Correction Factor				1.0399

Calculated value of As Found Response: 83.17 ppm Percent Change of As Found: -1.6%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.1	ppm
Auto span	34.2	ppm	35.3	ppm

Notes: Span adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter TRS

Air Monitoring Network PAZA



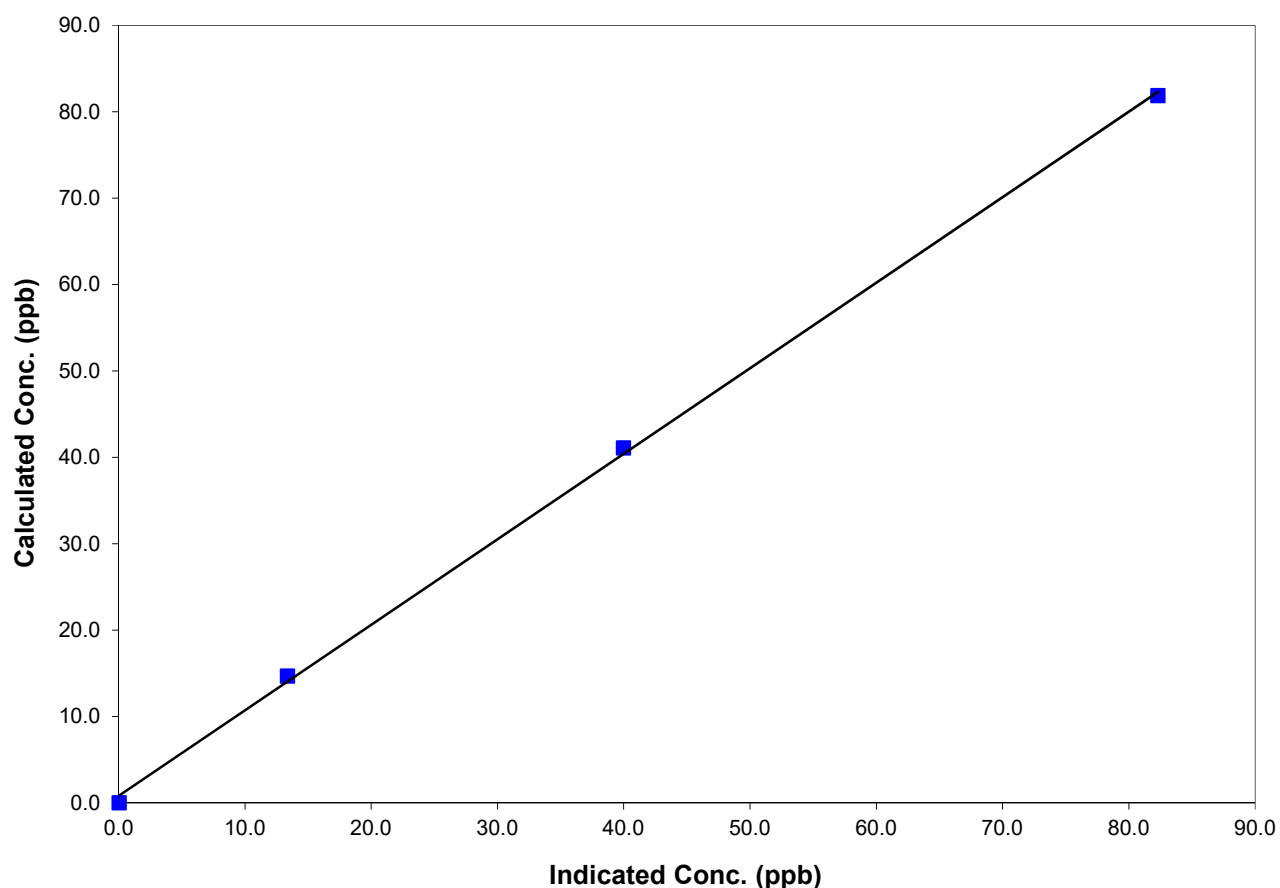
Station Information

Calibration Date	February 9, 2016	Previous Calibration	January 26, 2016
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	10:00	End Time (MST)	14:35:00 PM
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

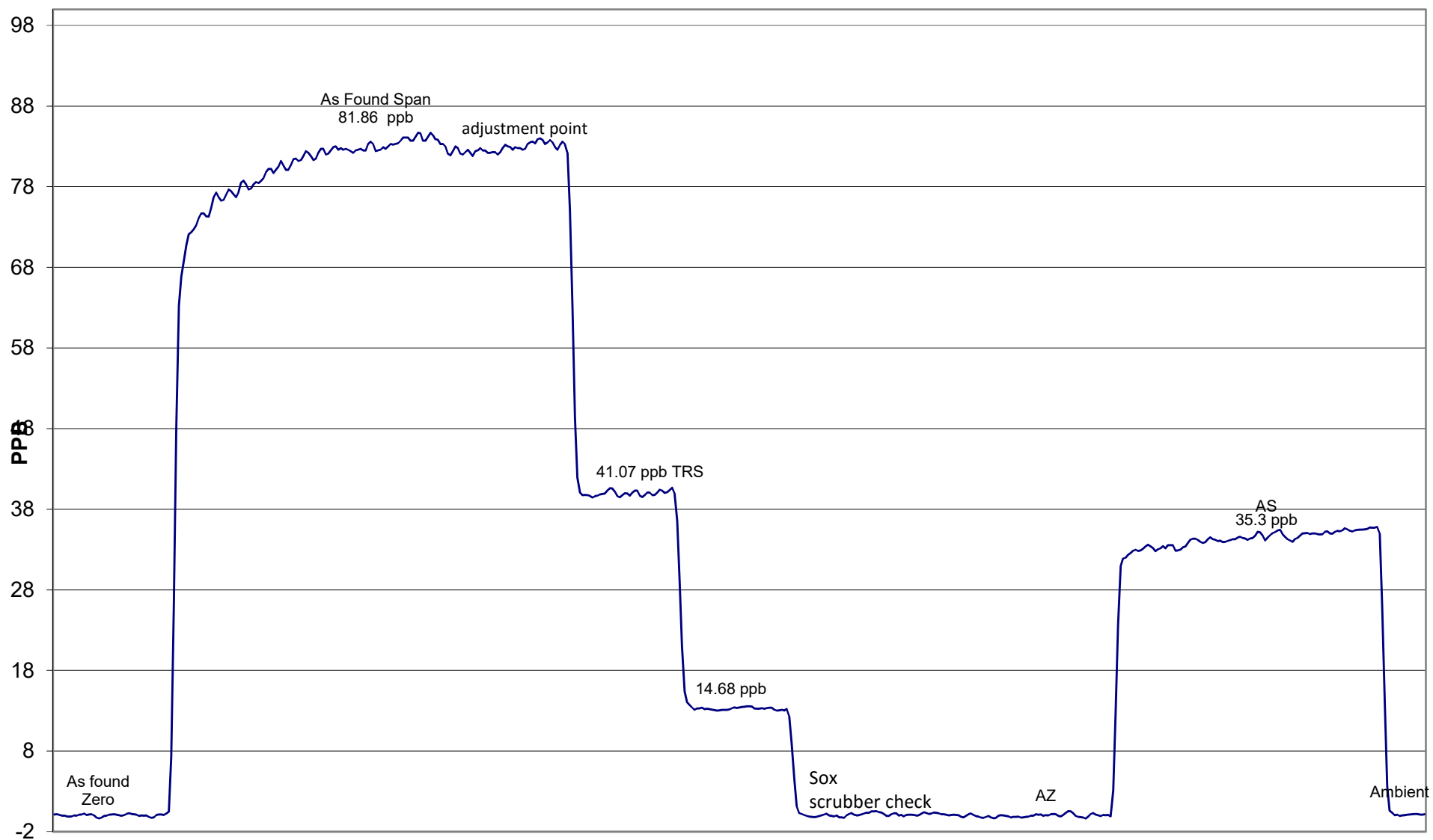
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999537
81.9	82.3	0.9945		
41.1	40.0	1.0273		
14.7	13.4	1.0978	Slope	0.989763
			Intercept	0.821848

TRS Calibration Curve



Smokey Heights TRS Calibration



February 9, 2016

SHARP 5030 PM2.5 Calibration



STATION: Smokey Heights
LOCATION: Smokey Heights
START TIME (MST): 9:00

OPERATOR: Grover Christiansen/Dmytro Dc
DATE: February 9 2016
END TIME (MST): 13:10:PM

MONITOR INFO / PARAMETER VALUES:

Make/Model SHARP 5030
Configuration PM 2.5
Serial Number CM-0271

Audit Device Model Delta cal
Audit Device S/N AMU 2024
Certification Date 16-May-15

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (^o C)	Ambient Pres. (mbar)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
As Found Data	Audit values (I)	5.1	926	16.67	16.66	14:14
	MEASURED (AF)	4.9	927	16.10	16.10	14:04
	AF Difference (AF-I)	-0.2	1	0.57	-0.56	2:24
Adjusted Data	MEASURED (M)	4.9	927	16.65	16.65	14:13:00 PM
	Adj Difference (M-I)	-0.2	1	-0.02	-0.01	0:01
	LIMITS	± 4.0 ^o C	6.7 mbar	1.0 L/min	± 1.0 L/min	±2 min

Sample Head Inspect/Cleaning: Cleaned sample head

Status of sampling tape: 40% full

Nozzle Inspection / cleanliness: Good

COMMENTS: Full cal performed.

Foil calibration Old value 7014 New value 7080

Nephelometer zero. Analog as found = 1.3. After adjustment=0.0

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 19, 2016
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
Start Time (MST)	14:00:00 PM	End Time (MST)	16:30:00 PM
Barometric Pressure	0.928 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	10.8 ppm	Cal Gas Expiry Date	28/09/2012
Gas Cert Reference	FF14871		
DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	5
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.994747	Calculated slope	0.978831
Calculated intercept	-0.104192	Calculated intercept	-0.178732
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.69		2.69	
Coefficient	1.018		1.018	
PMT	-767.8	V	-768.5	V
UV Lamp Voltage	1106	V	1088	V
Chamber Temp	45	Deg C	45	Deg C
Pressure	665.2	mm Hg	659.8	mm Hg
Sample Flow	0.458	LPM	0.451	LPM
Lamp Intensity	96	%	96	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4994	0.00	0.0	0.2	N/A
4994	39.92	85.6	87.7	0.9766
4994	19.96	43.0	44.1	0.9755
4994	9.96	21.5	22.1	0.9711
4994	0.00	0.0	0.2	As found zero
4994	39.92	85.6	87.7	As found span
Average Correction Factor				0.9744

Calculated value of As Found Response: 86.910 ppm Percent Change of As Found: -1.5%

	before calibration		after calibration	
Auto zero	0.2	ppb	0.0	ppb
Auto span	61.1	ppb	59.9	ppb

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



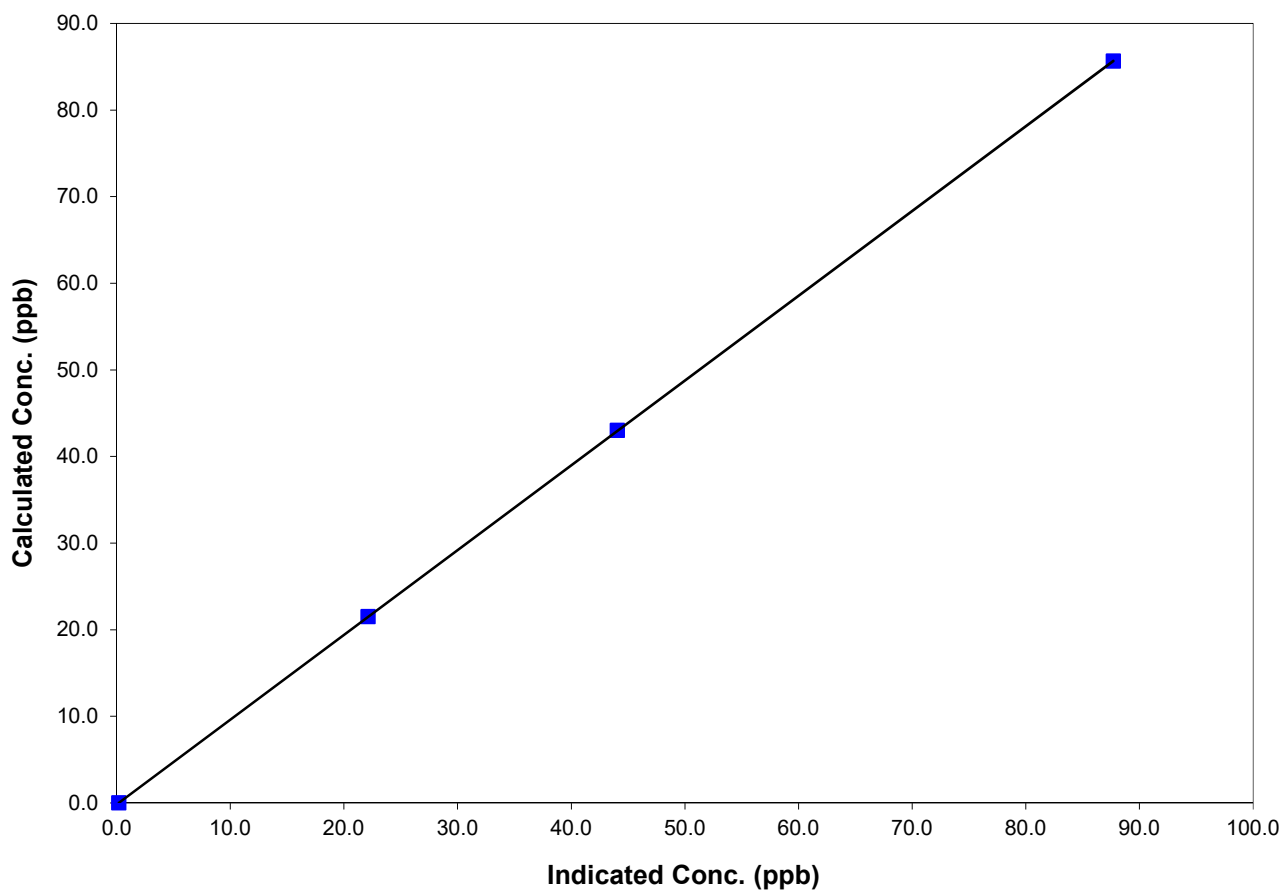
Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 19, 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	14:00:00 PM	End Time (MST)	16:30:00 PM
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

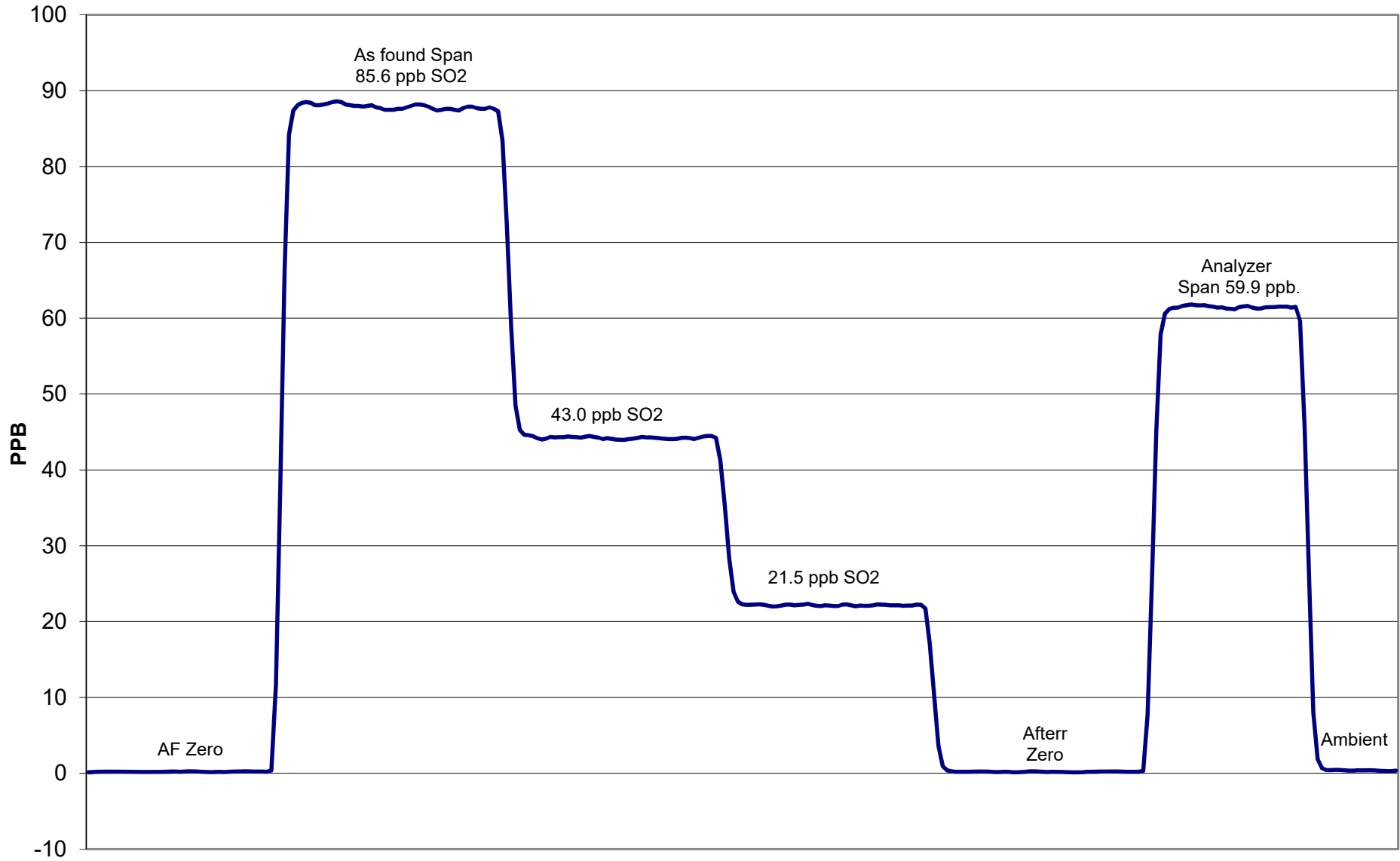
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	1.000000
85.6	87.7	0.9766		
43.0	44.1	0.9755		
21.5	22.1	0.9711	Slope	0.978831
			Intercept	-0.178732

SO2 Calibration Curve



SO2 Calibration



February 10, 2016

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PAZA



Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 15 2016		
Station Number	4	Station Location	Beaverlodge		
Reason:	Routine	Installation	Removal		
Other:					
Start Time (MST)	9:35	End Time (MST)	10:55		
Barometric Pressure	0.928	Atm	Station Temperature	20.0	Deg C
Calibrator	Envionics		Serial Number	6586	
NO Cal Gas Conc	50.9	ppm	Cal Gas Expiry Date	November 5, 2018	
NOx Cal Gas Conc	51.2	ppm	Cal Gas Serial #	LL103793	

DACS Information

DACS make	CR3000	DACS serial No.	5237	
Parameter		NO2	NOx	NO
Before	Data Slope	0.993936	0.991429	0.991952
	Data Offset	-0.678471	-0.289745	-0.315188
After	Data Slope	0.994579	0.997087	0.997935
	Data Offset	-0.489770	0.299440	0.236911
Channel #		8	6	7
Voltage Range		0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	906535068	
Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO offset	2.6	mV	2.6	mV
NOx bkgnd	3.0	mV	3.1	mV
NO coefficient	1.080		1.103	
NOx coefficient	1.005		1.005	
NO2 conv temp	323.4	Deg C	323.6	Deg C
PMT Temp	-2.9	Deg C	-2.9	Deg C
PMT Volt	-729.3	mV	-730.0	mV
R Cell Press	187.0	in Hg	185.7	in Hg
Sample Flow	0.724	LPM	0.723	LPM

Notes: Span adjustments made

Calibration Report

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



Station Information

Calibration Date: February 10, 2016 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	0.0	-0.2	N/A	N/A
1	4995	39.92	405.9	403.6	2.4	406.9	404.4	1.8	0.9976	0.9980
2	4995	19.96	203.8	202.6	1.2	204.0	202.3	0.8	0.9989	1.0013
3	4995	9.93	101.6	101.0	0.6	101.4	101.0	0.2	1.0021	1.0000
AFZ	4995	0.00	0.0	0.0	0.0	-0.1	0.0	-0.2	0.0000	0.0000
AFS	4995	39.92	405.9	403.6	0.8	398.4	396.4	1.4	1.0189	1.0182
Average Correction Factor									0.9995	0.9998

As Found Concentrations: NO_x= 394.8 NO= 392.9 As Found Percent Change NO_x= -2.7% NO= -2.6%

GPT Calibration Data

Dilution Flow 4995 ccm Source Gas Flow 39.93 ccm

O3 Setpoint (ppb)	Indicated NOx high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	-0.1	0.0	-0.2	N/A	N/A	N/A	N/A
NO point	405.1	405.1	0.0	407.3	405.1	1.4	0.9947	1.0000	N/A	N/A
300	405.1	69.9	335.2	407.9	69.9	337.1	0.9931	1.0000	0.9945	100.6%
200	405.1	179.0	226.1	408.0	179.0	228.0	0.9929	1.0000	0.9914	100.9%
100	405.1	295.3	109.9	407.8	295.3	111.9	0.9933	1.0000	0.9820	101.8%
Average Correction Factor							0.9931	1.0000	0.9893	101.1%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	-0.2	-0.1	ppb	-0.3	-0.3	0.0	ppb
Auto span	289.3	286.7	1.7	ppb	287.8	285.2	1.8	ppb

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



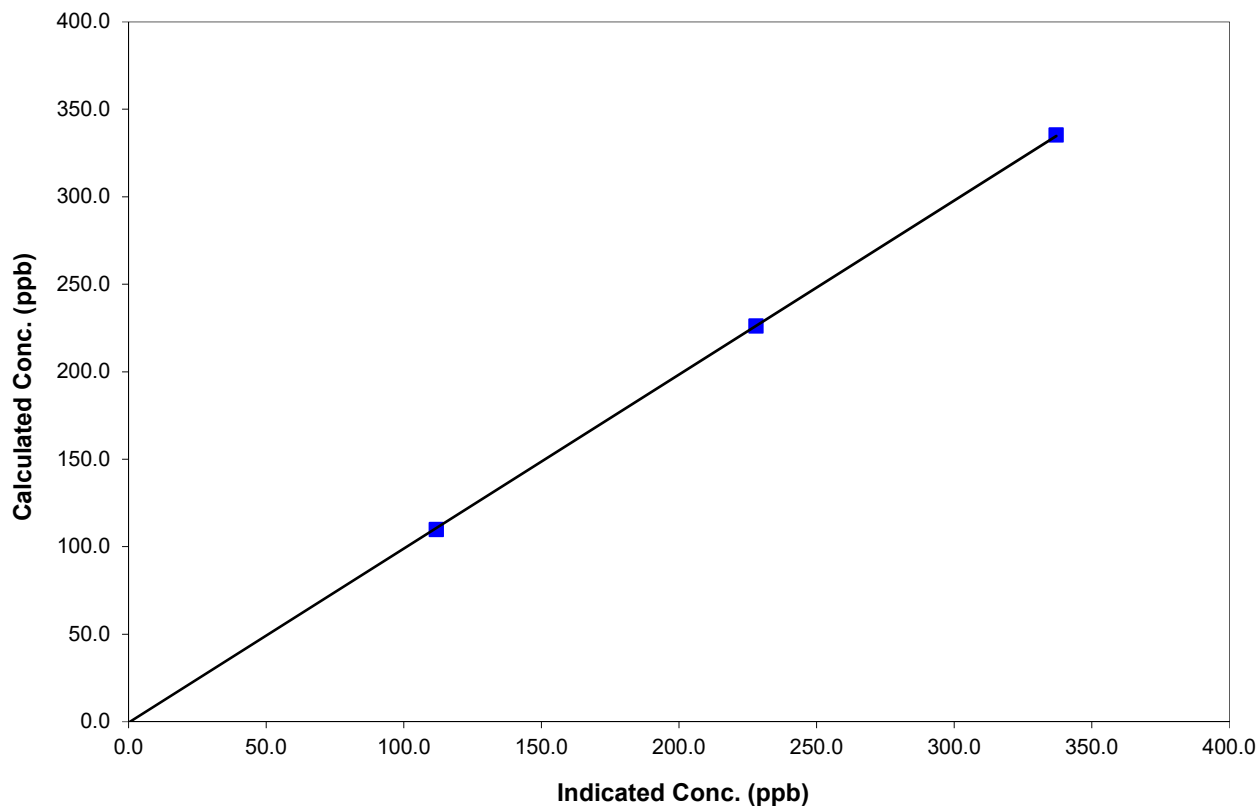
Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 15 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:35	End Time (MST)	10:55
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A	Correlation Coefficient	0.999975
335.2	337.1	0.9945		
226.1	228.0	0.9914		
109.9	111.9	0.9820	Slope	0.994579
			Intercept	-0.489770

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



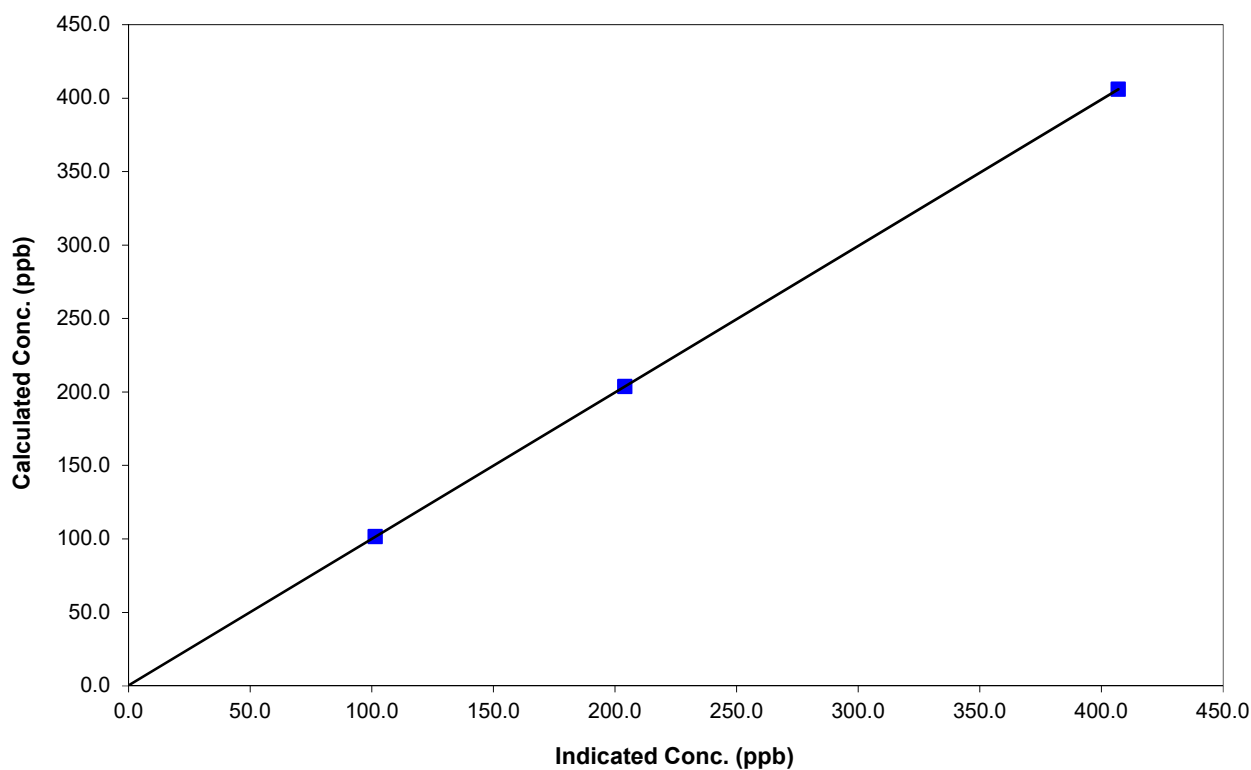
Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 15 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:35	End Time (MST)	10:55
Analyzer make	TEI 42i	Analyzer serial #	906535068

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999999
405.9	406.9	0.9976		
203.8	204.0	0.9989		
101.6	101.4	1.0021	Slope	0.997087
			Intercept	0.299440

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



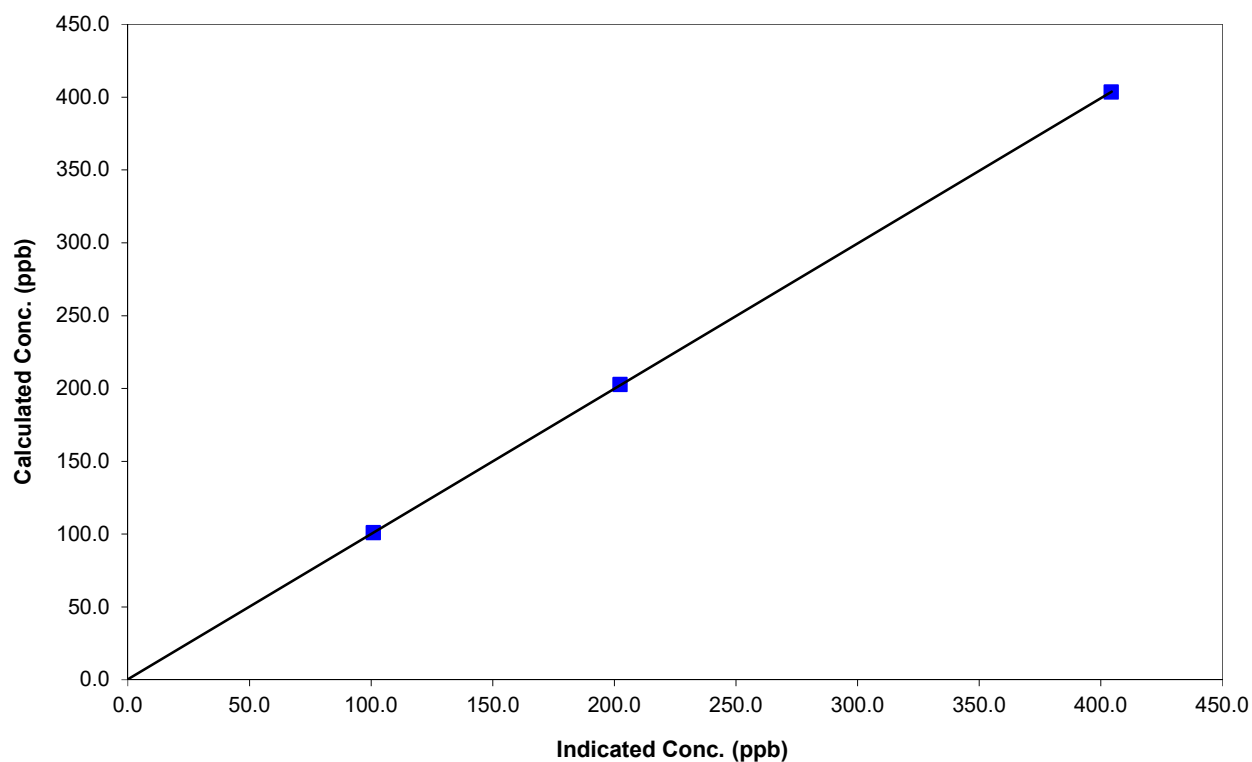
Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 15 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	9:35	End Time (MST)	10:55
Analyzer make	TEI 42i	Analyzer serial #	906535068

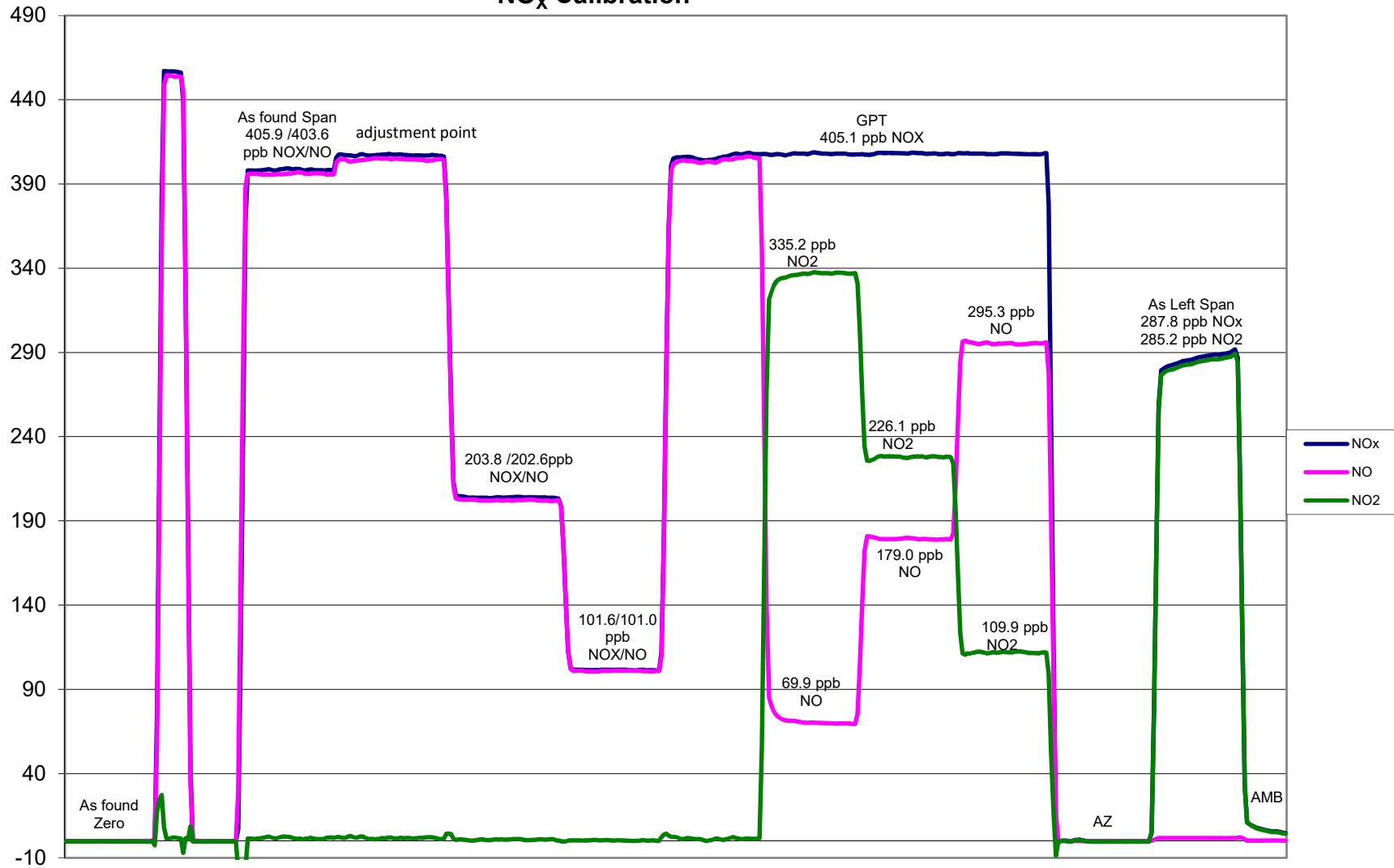
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999997
403.6	404.4	0.9980		
202.6	202.3	1.0013		
101.0	101.0	1.0000	Slope	0.997935
			Intercept	0.236911

NO Calibration Curve



NO_x Calibration



February 10, 2016

Calibration Report



Parameter 03

Air Monitoring Network PAZA

Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 15, 2016
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
			Other:

Start Time (MST)	12:50	End Time (MST)	14:55:00 PM
Barometric Pressure	0.928 atm	Station Temperature	20.0 Deg C
Calibrator	Envionics	Serial Number	6586
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	1.003857	Calculated slope	1.000964
Calculated intercept	-0.149514	Calculated intercept	0.192885

Analyzer make	Teco 49i	Analyzer serial #	1136451236,AMU 1879
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	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.30	ppb	-0.30	ppb
slope	1.090		1.090	
Lamp temp	53.8	mV	53.8	mV
Lamp Intensity A/B	51635/56831	mV	52375/57526	mV
Pressure	681.4	mm Hg	681.4	mm Hg
Flow A	0.784	LPM	0.785	LPM
Flow B	0.743	LPM	0.744	LPM

Calibration Data

Dilution air flow rate (cc/min)	Calibrator Setting	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
5035	0.00	0.0	0.5	N/A
5035	0.30	335.2	336.1	0.9974
5035	0.20	226.1	223.6	1.0112
5035	0.10	109.9	109.6	1.0026
5035	0.00	0.0	0.5	As found zero
5035	0.30	335.2	336.1	As found span
Average Correction Factor				1.0037

Calculated value of As Found Response: 336.7 ppm Percent Change of As Found: 0.5%

	before calibration		after calibration	
Auto zero	0.7	ppb	0.6	ppb
Auto span	284.0	ppb	276.3	ppb

Notes: No adjustment made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter 03

Air Monitoring Network PAZA



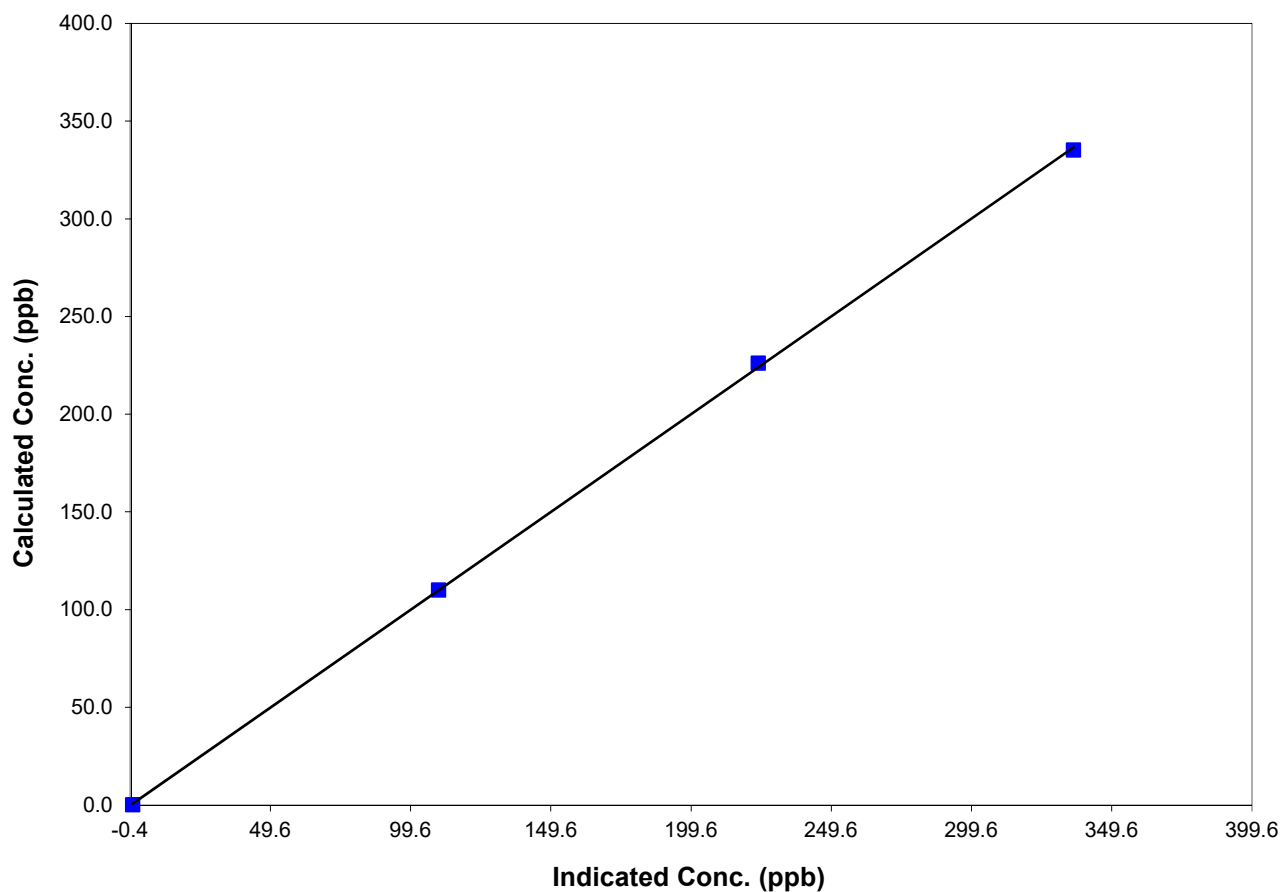
Station Information

Calibration Date	February 10, 2016	Previous Calibration	January 15, 2016
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:50	End Time (MST)	14:55:00 PM
Analyzer make/model	Teco 49i	Analyzer serial #	1136451236,AMU 1879

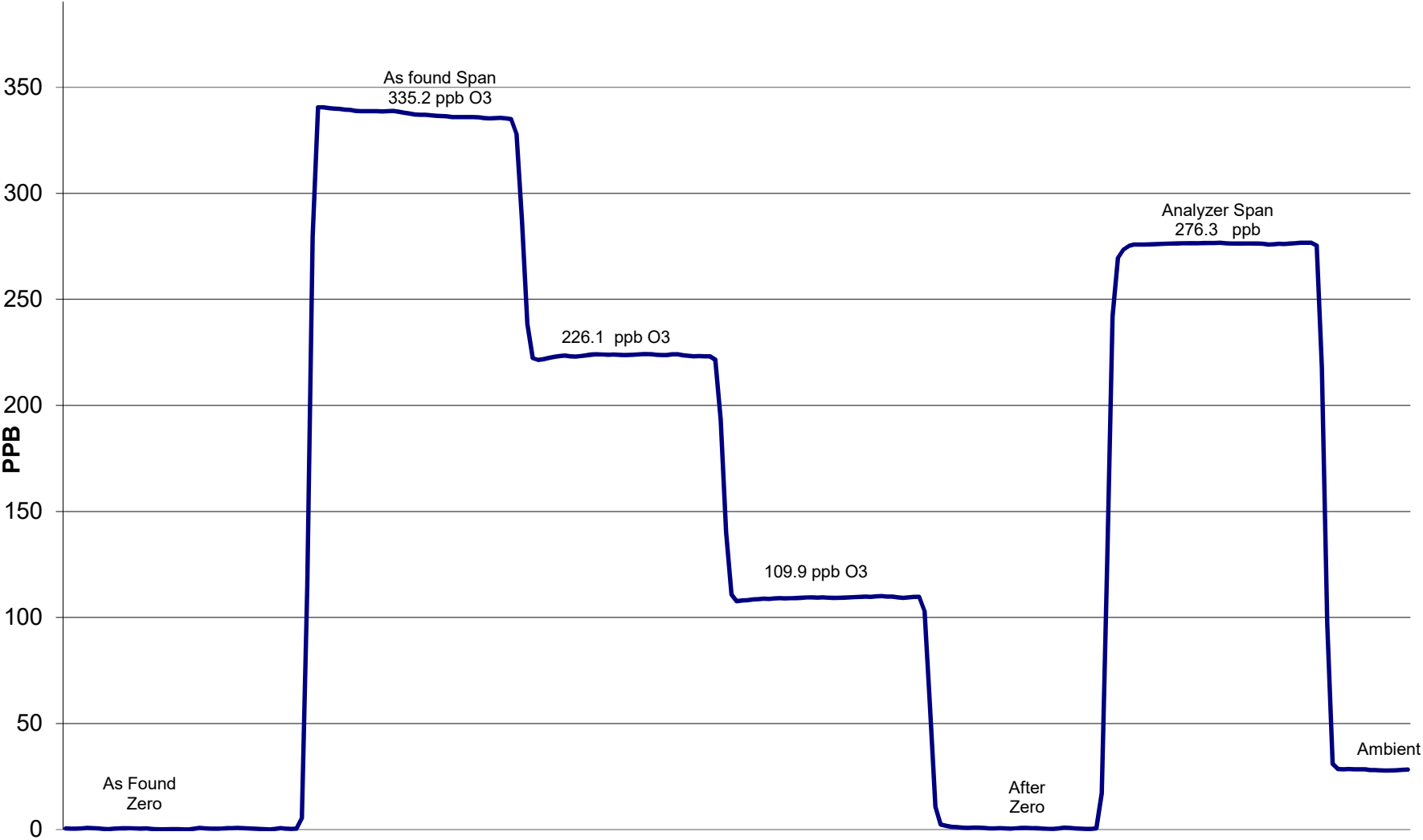
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	NA	Correlation Coefficient	0.999893
335.2	336.1	0.9974		
226.1	223.6	1.0112		
109.9	109.6	1.0026	Slope	1.000964
			Intercept	0.192885

O3 Calibration Curve



O3 Calibration



February 10, 2016

SHARP 5030 PM2.5 Calibration



STATION: Beaverlodge
 LOCATION: Beaverlodge agriculture centre
 START TIME (MST): 9:45

OPERATOR: Dmytro Dolotii
 DATE: February 10 2016
 END TIME (MST): 15:31:00 PM

MONITOR INFO / PARAMETER VALUES:

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

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

AUDIT / CALIBRATION RESULTS:

		Ambient Temp. (°C)	Ambient Pres. (mbar)	Leak Check (L/min)	Flow Rate (lpm)	Time settings (hh:mm)
As Found Data	Audit values (I)	0.3	927	16.67	16.67	15:05:00 PM
	MEASURED (AF)	0.5	926	17.10	16.73	15:03:00 PM
	AF Difference (AF-I)	0.2	-1	-0.43	0.06	0:01
Adjusted Data	MEASURED (M)	0.5	926	16.71	16.72	15:05:00 PM
	Adj Difference (M-I)	0.2	-1	0.04	0.05	0:01
	LIMITS	± 4.0 °C	6.7 mbar	1.0 L/min	± 1.0 L/min	±2 min

Sample Head Inspect/Cleaning: Cleaned sample head

Status of sampling tape: 90% full

Nozzle Inspection / cleanliness: _____

COMMENTS: _____

Foil calibration Old value 6995 New value 7008

Nephelometer zero. Analog as found = 3.0 adsuted conc = -0.0

Calibration Report

Parameter SO2

Air Monitoring Network PAZA



Station Information

Calibration Date	February 18 2016	Previous Calibration	January 20 2016
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
Start Time (MST)	12:35	End Time (MST)	14:35:00 PM
Barometric Pressure	0.927 atm	Station Temperature	20.5 Deg C
Calibrator	Envionics	Serial Number	3016
Cal Gas Concentration	49.7 ppm	Cal Gas Exp Date	November 5, 2018
Gas Cylinder Num.	LL103793		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	4
	Before		After
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.001125	Calculated slope	1.004923
Calculated intercept	0.790292	Calculated intercept	0.525134
Analyzer make	TEI 43C	Analyzer serial #	609716239

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	16.1		16.1	
Coefficient	1.031		1.031	
UV Lamp Voltage	736	LPM	736	LPM
Chamber Temp	43	V	43	V
Perm Gas Temp	45	C	45	C
Pressure	653.6	in Hg	655.6	in Hg
Sample Flow	0.477	LPM	-0.478	LPM
Lamp Intensity	47523	Hz	47463	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.7	N/A
4995	39.93	394.2	392.4	1.0045
4995	19.97	197.9	195.6	1.0120
4995	9.95	98.8	96.8	1.0208
4995	0.00	0.0	0.7	As found zero
4995	39.93	394.2	392.4	As found span
Average Correction Factor				1.0124

Calculated value of As Found Response: 392.9 ppm Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	0.4	ppm	0.4	ppm
Auto span	281.2	ppm	294.6	ppm

Notes: No adjustments made

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



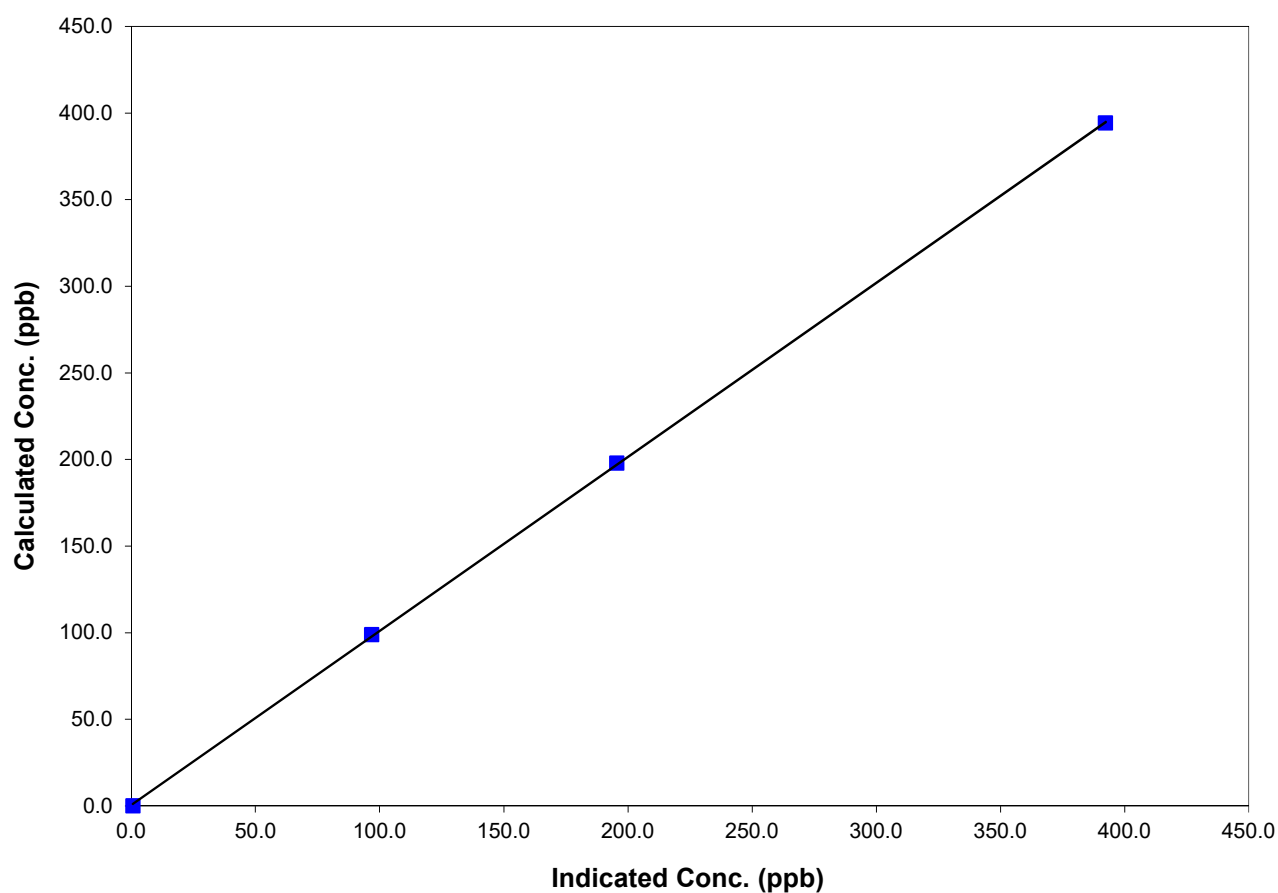
Station Information

Calibration Date	February 18 2016	Previous Calibration	January 20 2016
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:35	End Time (MST)	14:35:00 PM
Analyzer make/model	TEI 43C	Analyzer serial #	609716239

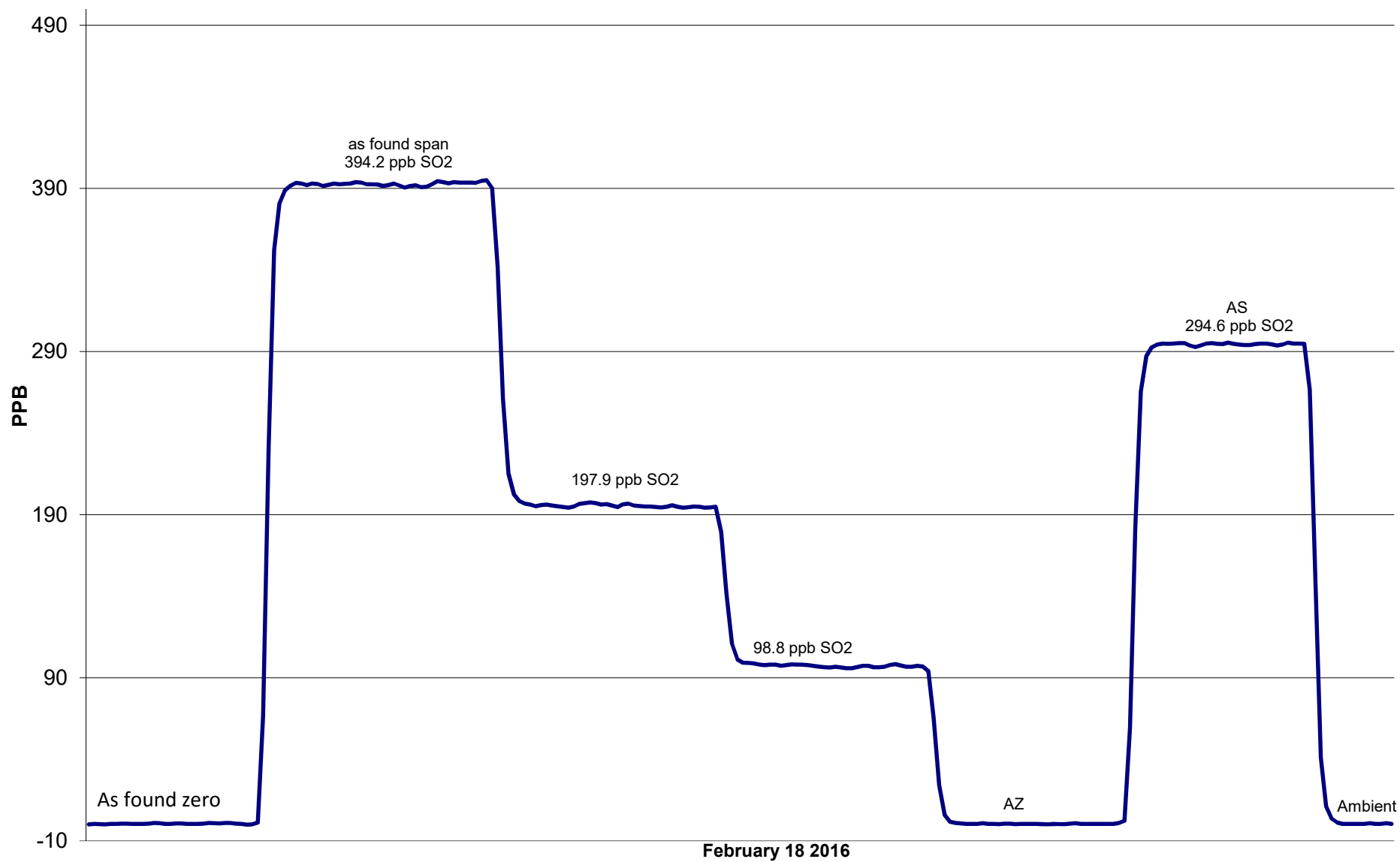
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	N/A	Correlation Coefficient	0.999957
394.2	392.4	1.0045		
197.9	195.6	1.0120		
98.8	96.8	1.0208	Slope	1.004923
			Intercept	0.525134

SO2 Calibration Curve



SO2 Calibration



Calibration Report



Parameter H2S

Air Monitoring Network PAZA

Station Information

Calibration Date	February 18 2016	Previous Calibration	January 20 2016
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	10:50	End Time (MST)	13:20:00 PM
Barometric Pressure	0.927 atm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	10.32 ppm	Cal Gas Expiry Date	July 03 2016
Gas Cert Reference	LL110781		
DACS make	CR3000	DACS serial No.	5409
DACS voltage range	0 - 5 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.012348	Calculated slope	1.012962
Calculated intercept	0.217706	Calculated intercept	-0.012774

Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010
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	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	8.2	ppb	8.2	ppb
Coefficient	0.871		0.871	
Lamp Voltage	793	V	793	V
Chamber Temp	45	c	45	c
Perm Oven Temp	45	c	45	c
Pressure	532.70	mm Hg	533.60	mm Hg
Sample Flow	0.365	ccm	0.366	lpm
Lamp Intensity	91	%	91	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.0	0.2	N/A
4997	39.91	81.8	80.8	1.0115
4997	19.94	41.0	40.4	1.0164
6995	9.97	14.7	14.3	1.0245
4997	9.97		2.8	Sox Test
4997	0.00	0.0	0.2	As found zero
4997	39.93	81.8	80.8	As found span
Average Correction Factor				1.0175

Calculated value of As Found Response: 81.82 ppm Percent Change of As Found: 0.0%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.2	ppm
Auto span	66.3	ppm	69.5	ppm

Notes: No adjustment made
Sox scrubber test performed

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter H2S

Air Monitoring Network PAZA



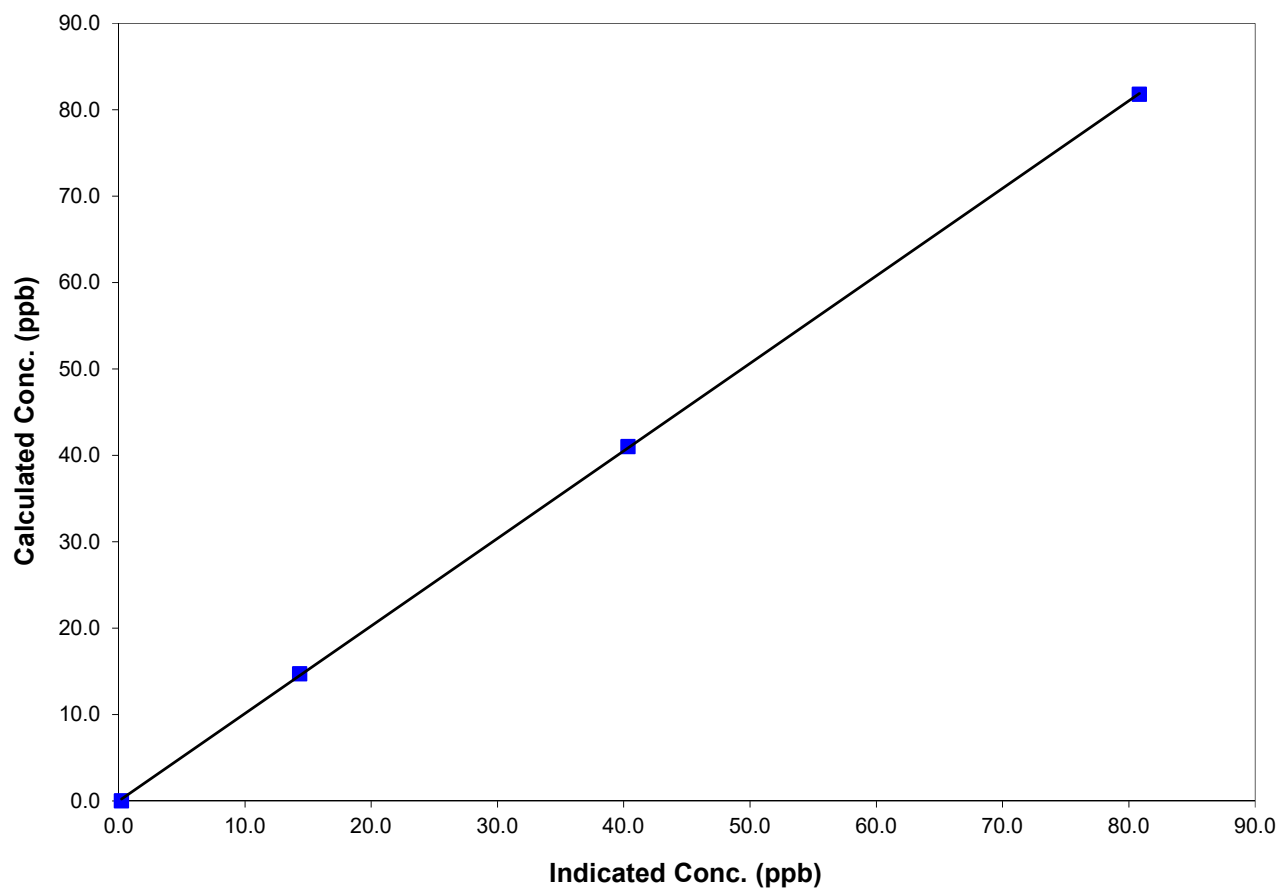
Station Information

Calibration Date	February 18 2016	Previous Calibration	January 20 2016
Station Number	6	Station Location	Valleyview
Start Time (MST)	10:50	End Time (MST)	13:20:00 PM
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

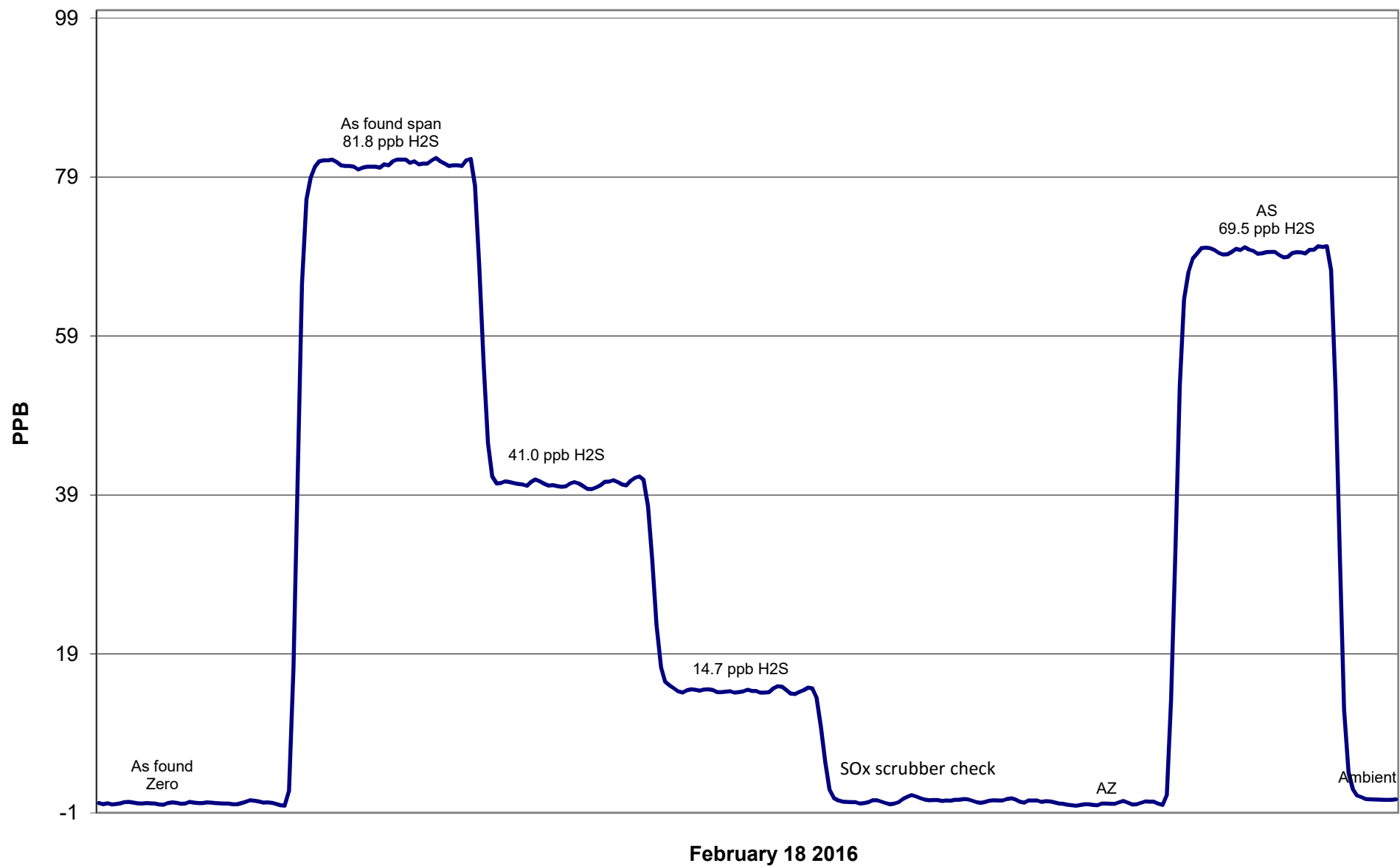
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999970
81.8	80.8	1.0115		
41.0	40.4	1.0164		
14.7	14.3	1.0245	Slope	1.012962
			Intercept	-0.012774

H2S Calibration Curve



H2S Calibration



Calibration Report

Parameter SO₂

Air Monitoring Network PAZA



Station Information

Calibration Date	February 24, 2016	Previous Calibration	January 27, 2016
Station Number	1	Station Location	Falher
Reason:	☐ Routine ☐ Install ☒ Removal ☐ Other:		
Start Time (MST)	12:40	End Time (MST)	15:00:00 PM
Barometric Pressure	0.921 mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Concentration	49.7 ppm	Cal Gas Expiry Date	05/10/2018
Correction factor	0.031254	Cal Gas Cylinder #	LL103793
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.991286	Calculated slope	0.985045
Calculated intercept	0.175766	Calculated intercept	0.479657
Analyzer make	Teco 43i	Analyzer serial #	1207452008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7		7	
coefficient	0.905		0.905	
Lamp Voltage	865	volts	864	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	685.9	mm Hg	686.2	mm Hg
Sample Flow	0.403	ccm	0.403	ccm
Lamp Intensity	97	%	97	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.0	0.00	0.8	N/A
4995	39.93	394.2	400.1	0.9851
4995	19.96	197.8	200.1	0.9883
4995	9.97	99.0	98.5	1.0052
4995	0.0	0.0	0.8	As Found Zero
4995	39.93	394.2	399.9	As Found Span
Average Correction Factor				0.9929

Calculated value of As Found Response: 395.880 ppm Percent Change of As Found: **-0.4%**

	before calibration		after calibration	
Auto zero	0.7	ppm	0.7	ppm
Auto span	268.9	ppm	265.4	ppm

Notes: No adjustment made. Analyzer shut down following calibration until relocation of trailer.

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter SO2

Air Monitoring Network PAZA



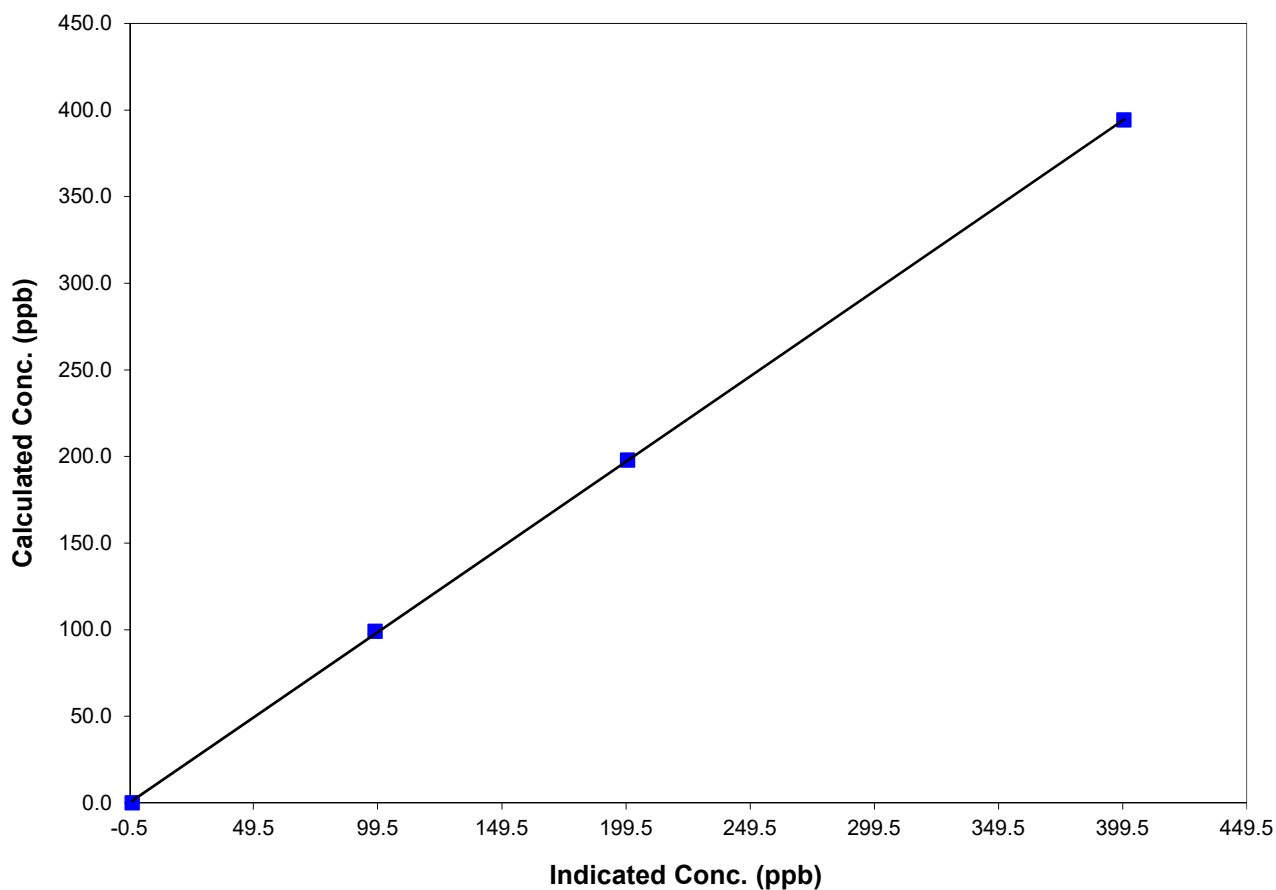
Station Information

Calibration Date	February 24, 2016	Previous Calibration	January 27, 2016
Station Number	1	Station Location	Falher
Start Time (MST)	12:40	End Time (MST)	15:00:00 PM
Analyzer make/model	Teco 43i	Analyzer serial #	1207452008

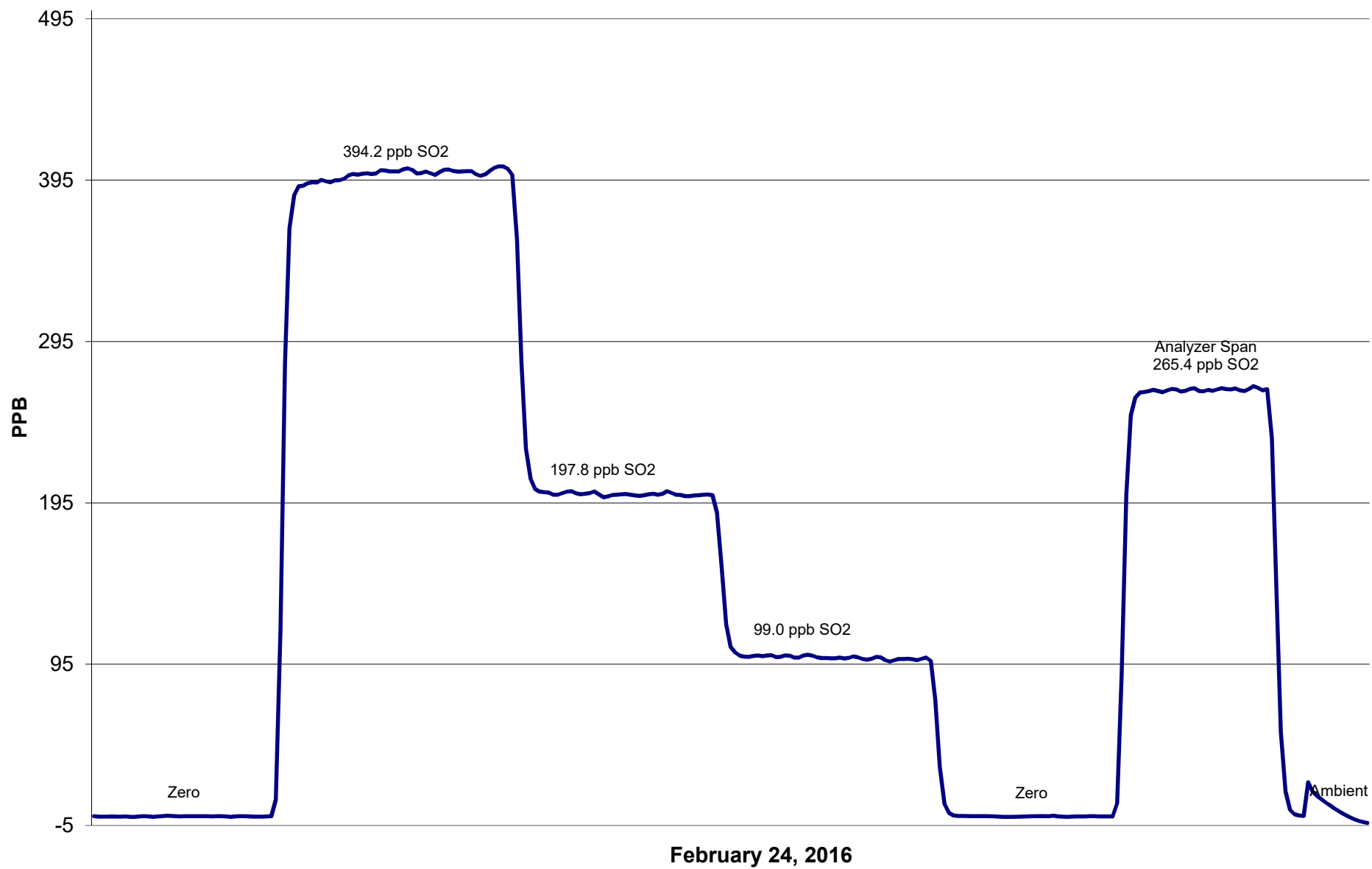
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.8	N/A	Correlation Coefficient	0.999953
394.2	400.1	0.9851		
197.8	200.1	0.9883		
99.0	98.5	1.0052	Slope	0.985045
			Intercept	0.479657

SO2 Calibration Curve



SO2 Calibration



Calibration Report



Parameter H2S

Air Monitoring Network PAZA

Station Information

Calibration Date	February 24, 2016	Previous Calibration	January 27, 2016
Station Number	1	Station Location	Falher
Reason:	Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	11:20	End Time (MST)	14:00:00 PM
Barometric Pressure	0.926 mm	Station Temperature	20.5 Deg C
Calibrator	EnviroNics	Serial Number	6586
Cal Gas Conc	10.32 ppm	Cal Gas Expiry Date	08/07/2016
Correction factor	0.031424	Cal Gas Cylinder #	LL110781
DACS make	CR1000	DACS serial No.	3980
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.991857	Calculated slope	0.990164
Calculated intercept	-0.277695	Calculated intercept	-0.219665
Analyzer make	Thermo 450i	Analyzer serial #	1207452006

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.4	ppb	15.4	ppb
coefficient	1.109		1.109	
Lamp Voltage	808	volts	805	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	518.6	mm Hg	520.4	mm Hg
Sample Flow	0.85	lpm	0.851	lpm
Lamp Intensity	90	mv	90	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4995	0.00	0.00	0.4	N/A
4995	39.93	81.84	83.0	0.9857
4995	19.96	41.07	41.4	0.9916
6994	9.97	14.69	15.0	0.9811
4995	0.00	0.00	0.4	As Found Zero
4995	39.93	81.84	83.0	As Found Span
Average Correction Factor				0.9861

Calculated value of As Found Response: 81.65 ppm Percent Change of As Found: **0.2%**

	before calibration		after calibration	
Auto zero	0.4	ppm	0.3	ppm
Auto span	58.3	ppm	57.3	ppm

Notes: No adjustment made. Analyzer left running even though site is considered down until relocation.
Sox crubber check performed

Calibration Performed By: Dmytro Dolotii

Calibration Summary

Parameter H2S

Air Monitoring Network PAZA



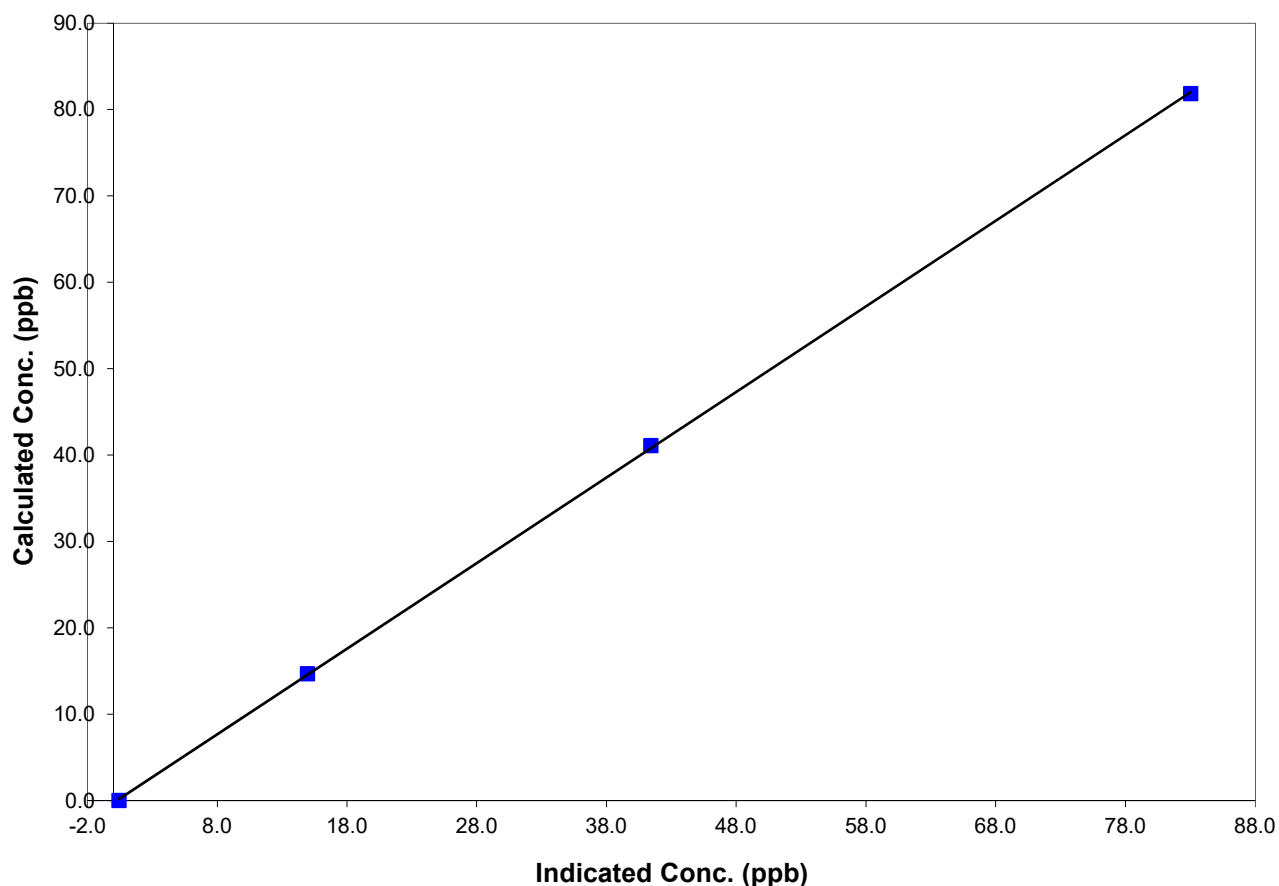
Station Information

Calibration Date	February 24, 2016	Previous Calibration	January 27, 2016
Station Number	1	Station Location	Falher
Start Time (MST)	11:20	End Time (MST)	14:00:00 PM
Analyzer make/model	Thermo 450i	Analyzer serial #	1207452006

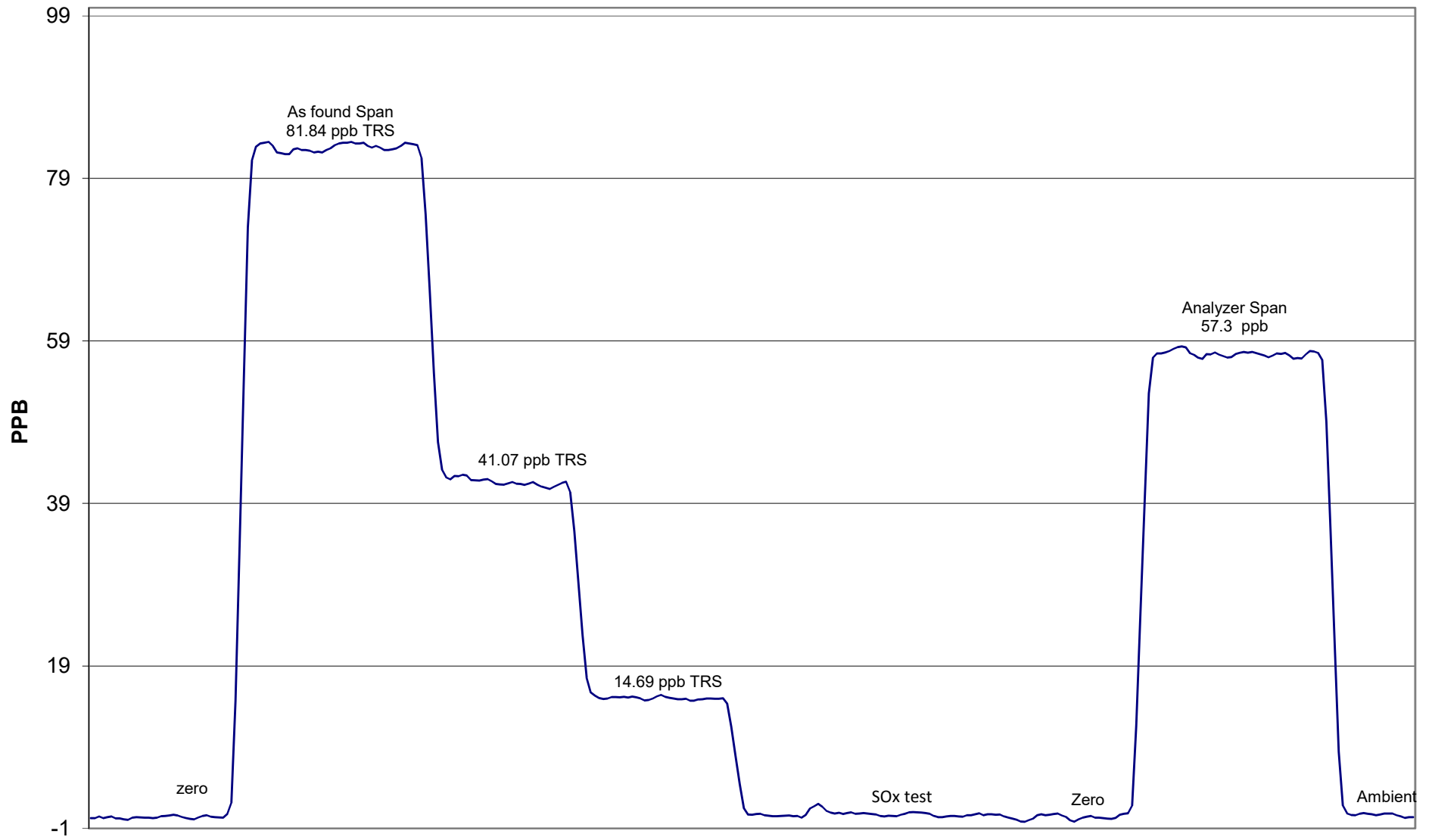
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A	Correlation Coefficient	0.999961
81.8	83.0	0.9857		
41.1	41.4	0.9916		
14.7	15.0	0.9811	Slope	0.990164
			Intercept	-0.219665

TRS Calibration Curve



H2S Calibration



February 24, 2016