



Peace Airshed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
March 2012**

Operations and Reporting



April 30th, 2012

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

RE: Peace Airshed Zone Association (PAZA) – March 2012 Ambient Air Report

Enclosed is the PAZA Ambient Monitoring Network Report for the month of **March 2012**.

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	AENV Approval Number
Advantage Oil & Gas Ltd.	Glacier	05-02-076-13-W6	262479-00-00
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
Barrick Energy Inc.	Sturgeon/Valleyview	02-02-069-22-W5	1633-02-00
Birchcliff Energy Ltd.	Pouce Coupe	03-22-078-12-W6	252529-00-00
Bonavista Energy Corporation	Rycroft	08-25-077-06-W6	11351-02-00
	Spirit River	08-34-077-06-W6	11096-02-00
Canadian Natural Resources Limited	Bonanza	11-25-081-11-W6	29-01-01
	Progress/Gordondale	01-01-077-10-W6	10036-02-00
	Gold Creek	13-26-067-05-W6	10446-02-00
	Teepee Creek	SE-2-074-04-W6	1635-02-02

Conocophillips Canada Energy Partnership	Wembley	06-19-073-08-W6	212-01-00
Devon Canada	Tangent	16-20-080-24-W5	11346-02-00
	NW Belloy (Dunvegan)	16-36-079-03-W6	9810-02-00
	Eaglesham (South)	02-14-077-25-W5	47669-01-00
	Puskwaskau	03-26-074-01-W6	17524-01-00
	North Normanville	03-36-079-23-W5	47455-01-00
	West Culp	05-34-078-25-W6	136284-00-00
	Cecil	08-15-084-08-W6	10032-02-00
EnCana Corporation	Hythe Brainard	11-18-074-12-W6	10910-02-02
	Sexsmith	04-08-075-07-W6	10002-01-00
Galleon Energy Inc.	Eaglesham	01-25-076-01-W6	241532-00-00
	Kakut	14-12-075-03-W6	248469-00-01
	Donnelly	06-01-077-21-W5	87-02-00
Grande Prairie Generation Inc.	Northern Prairie Power Project	04-19-073-08-W6	238762-00-02
Longview Oil Corp.	Sunset House	06-22-70-20-W5	138884-01-00
Penn West Petroleum Ltd.	Tangent	13-29-080-23-W5	1746-02-01
	Pouce Coupe	16-07-078-11-W6	614-01-00
Spectra Energy Midstream Corporation	Fourth Creek	16-11-082-09-W6	263-01-00
Suncor Energy Inc.	Progress	07-22-078-09-W6	11428-02-00
Taq North Ltd.	Valhalla	13-21-076-09-W6	17620-01-01
Weyerhaeuser Canada	Grande Prairie Pulp and Wood Plant	01-14-070-05-W6	113-02-00

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 Portable-Sunset House.

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

Henry Pirker Station:

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

Evergreen Park Station:

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

Smoky Heights Station:

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

Beaverlodge Station:

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

Valleyview Station:

- ◆ The measured ambient air quality was within the AAAQO for the Valleyview station.
- ◆ All analyzers and sensors at the Valleyview station had an operational uptime greater than 90% for the month of March
- ◆ An exceedence of the H₂S 1-hour guideline was reported on March 21st and rescinded on final review of the data for reporting.

Sunset House Station:

- ◆ The measured ambient air quality was within the AAAQO for the Sunset House station.
- ◆ All analyzers and sensors at the Sunset House station had an operational uptime greater than 90% for the month of March
- ◆ Calibration of the Ozone analyzer returned a 24.9% change in response from the previous calibration. This is determined to be due to operator error in the previous calibration and accepted as a valid change. No further action will be taken.

Passive Monitoring - 46 Stations throughout the PAZA zone:

There were five duplicate sites sampled in the month of March: Wanham, Eaglesham, Grande Prairie I, Peavine, 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 1.5 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.1 ppb to 5.0 ppb, with a mean of 0.8 ppb.
- Monthly average concentrations for O₃ passives ranged from 34.4 ppb to 57.9 ppb, with a mean of 46.6 ppb.
- Monthly average concentrations for H₂S passives ranged from 0.1 to 0.3 ppb, with a mean of 0.2 ppb.

If you have any questions or concerns, please contact Shelly Pruden, PAZA Program Manager at 780.833.4343 or 780.882.4071.

On Behalf of the,
Peace Airshed Zone Association



Shelly Pruden
Program Manager

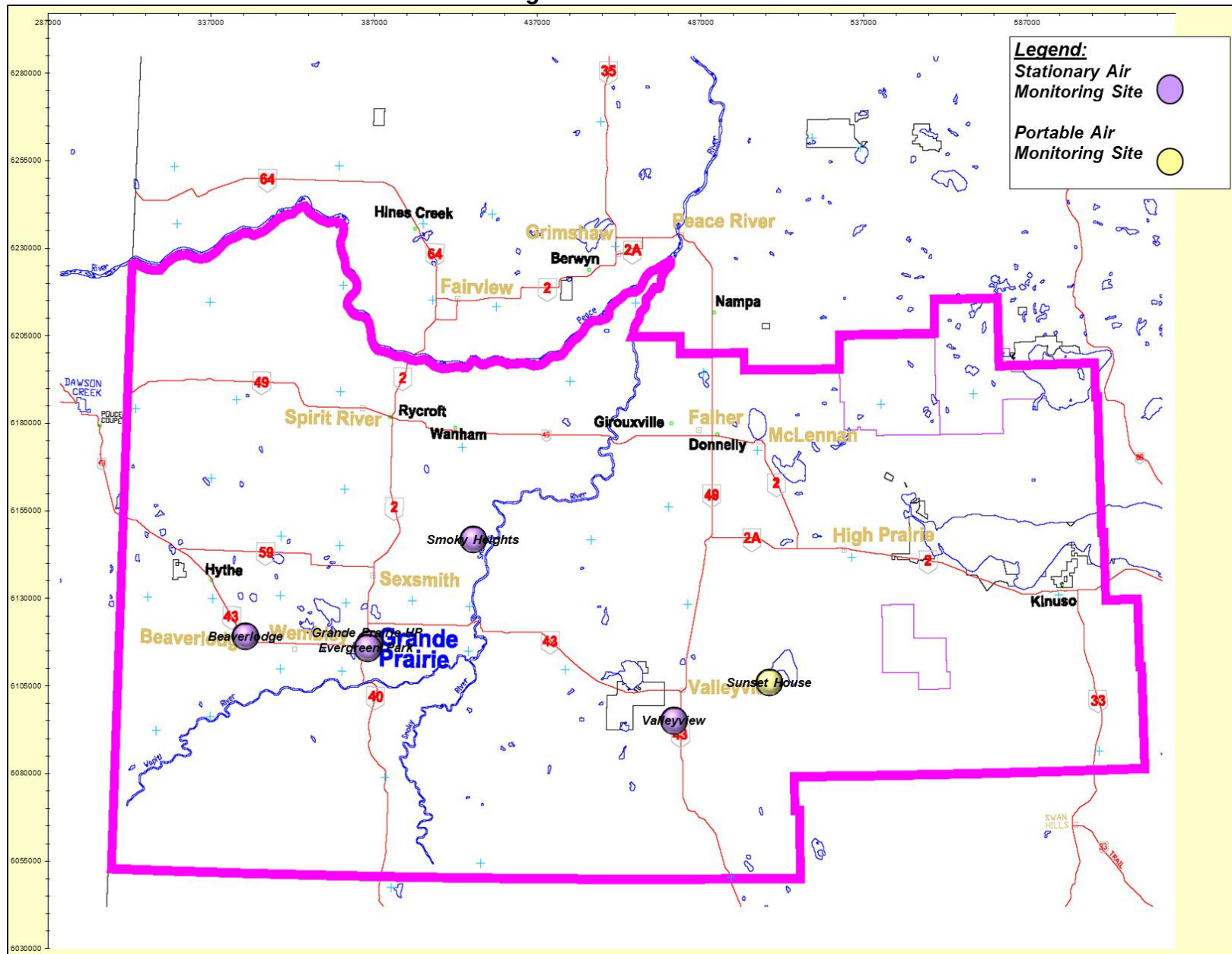


Patrick Andersen, B.Sc.
FOCUS AQM Data Specialist



Jeff Cooper, C.Tech.
AQM Operations Manager

Location of PAZA Continuous Monitoring Stations



PAZA Monthly Continuous Data Summary

Mar-2012 Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	Conc	Day	Operational Time (%)
	1-hr	24-hr			1-hr	24-hr					
SO ₂ (ppb)	172	48	Henry Pirker	0.4	0	0	9.3	Mar-13 11:00	1.6	Mar-13	100%
SO ₂ (ppb)	172	48	Evergreen Park	0.2	0	0	4.3	Mar-12 11:00	0.8	Mar-01	100%
SO ₂ (ppb)	172	48	Smoky Heights	0.6	0	0	10.6	Mar-04 10:00	1.8	Mar-04	100%
SO ₂ (ppb)	172	48	Beaverlodge	0.4	0	0	3.9	Mar-23 03:00	1.0	Mar-01	100%
SO ₂ (ppb)	172	48	Valleyview	0.5	0	0	18.6	Mar-04 03:00	2.4	Mar-04	100%
SO ₂ (ppb)	172	48	Sunset House	0.2	0	0	2.4	Mar-26 04:00	0.8	Mar-26	100%
NO (ppb)			Henry Pirker	4.1	0	0	86.4	Mar-15 22:00	15.0	Mar-15	100%
NO ₂ (ppb)	159	106	Henry Pirker	11.9	0	0	44.7	Mar-12 08:00	21.8	Mar-15	100%
NO _x (ppb)			Henry Pirker	16.0	0	0	130.7	Mar-15 22:00	36.8	Mar-15	100%
NO (ppb)			Beaverlodge	0.5	0	0	9.4	Mar-24 09:00	2.0	Mar-24	100%
NO ₂ (ppb)	159	106	Beaverlodge	3.5	0	0	19.7	Mar-22 07:00	7.1	Mar-24	100%
NO _x (ppb)			Beaverlodge	4.0	0	0	22.7	Mar-22 08:00	9.2	Mar-24	100%
NO (ppb)			Sunset House	0.1	0	0	2.1	Mar-03 22:00	0.3	Mar-24	100%
NO ₂ (ppb)	159	106	Sunset House	1.4	0	0	4.4	Mar-15 21:00	2.4	Mar-28	100%
NO _x (ppb)			Sunset House	1.5	0	0	6.4	Mar-03 22:00	2.6	Mar-28	100%
O ₃ (ppb)	82		Henry Pirker	26.3	0	-	48.6	Mar-30 15:00	35.1	Mar-30	100%
O ₃ (ppb) - 8-hr			Henry Pirker		0				46.4	Mar-30	
O ₃ (ppb)	82		Beaverlodge	34.7	0	-	52.2	Mar-26 18:00	43.7	Mar-31	100%
O ₃ (ppb) - 8-hr			Beaverlodge		0				49.8	Mar-30	
O ₃ (ppb)	82		Sunset House	36.4	0	-	57.9	Mar-27 19:00	52.6	Mar-27	100%
O ₃ (ppb) - 8-hr			Sunset House		0				55.9	Mar-27	
CO (ppm)	13		Henry Pirker	0.25	0	-	1.2	Mar-15 22:00	0.4	Mar-15	100%
CO (ppm) - 8-hr	5		Henry Pirker		0				0.5	Mar-16	
THC (ppm)			Henry Pirker	2.17	-	-	3.0	Mar-26 07:00	2.4	Mar-25	100%
TRS (ppb)			Henry Pirker	0.3	-	-	1.2	Mar-29 16:00	0.5	Mar-14	100%
TRS (ppb)			Evergreen Park	0.6	-	-	1.5	Mar-02 09:00	0.9	Mar-14	100%
TRS (ppb)			Smoky Heights	0.3	-	-	0.5	Mar-28 08:00	0.4	Mar-17	100%
TRS (ppb)			Sunset House	0.3	-	-	0.6	Mar-02 03:00	0.4	Mar-02	100%
H ₂ S (ppb)	10	3	Valleyview	0.1	0	0	8.4	Mar-21 13:00	0.8	Mar-21	100%
PM2.5 (µg/m3)	80	30	Henry Pirker	6.7	0	0	35.6	Mar-15 22:00	14.8	Mar-25	95%
PM2.5 (µg/m3)	80	30	Evergreen Park	3.8	0	0	20.8	Mar-26 09:00	11.3	Mar-25	99%
PM2.5 (µg/m3)	80	30	Smoky Heights	4.1	0	0	63.9	Mar-17 12:00	12.9	Mar-17	99%
PM2.5 (µg/m3)	80	30	Beaverlodge	7.6	0	0	28.5	Mar-28 05:00	17.5	Mar-28	100%
PM2.5 (µg/m3)	80	30	Sunset House	2.1	0	0	12.0	Mar-25 19:00	7.0	Mar-28	99%

PAZA Monthly Continuous Data Summary – continued

Mar-2012Peace Airshed Zone Association							Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
RH (%)			Henry Pirker	63.9	-	-	89.4	Mar-29 06:00	77.3	Mar-29	100%
RH (%)			Evergreen Park	67.1	-	-	97.8	Mar-29 08:00	83.8	Mar-11	100%
RH (%)			Beaverlodge	71.8	-	-	100.0	Mar-10 21:00	96.5	Mar-11	97%
RH (%)			Valleyview	65.7	-	-	95.7	Mar-29 07:00	84.9	Mar-22	100%
SR (W/m ²)			Henry Pirker	115.8	-	-	635.4	Mar-31 14:00	197.4	Mar-31	100%
Temp (°C)			Henry Pirker	-3.0	-	-	9.9	Mar-29 17:00	4.9	Mar-09	100%
Temp (°C)			Evergreen Park	-3.0	-	-	10.0	Mar-29 16:00	5.7	Mar-09	100%
Temp (°C)			Smoky Heights	-3.7	-	-	11.9	Mar-29 16:00	3.9	Mar-09	100%
Temp (°C)			Beaverlodge	-2.4	-	-	9.8	Mar-29 15:00	5.3	Mar-09	97%
Temp (°C)			Valleyview	-1.3	-	-	13.0	Mar-29 16:00	6.4	Mar-09	100%
Temp (°C)			Sunset House	-1.6	-	-	11.5	Mar-29 17:00	6.1	Mar-09	100%
WSPD s (km/hr)			Henry Pirker	8.7	-	-	31.0	Mar-03 15:00	16.5	Mar-09	100%
WSPD s (km/hr)			Evergreen Park	12.0	-	-	48.0	Mar-07 15:00	28.3	Mar-07	100%
WSPD s (km/hr)			Smoky Heights	12.6	-	-	38.0	Mar-09 13:00	20.0	Mar-09	100%
WSPD s (km/hr)			Beaverlodge	10.8	-	-	48.0	Mar-09 16:00	27.1	Mar-09	100%
WSPD s (km/hr)			Valleyview	5.6	-	-	20.0	Mar-02 18:00	9.0	Mar-18	100%
WSPD s (km/hr)			Sunset House	12.2	-	-	30.0	Mar-15 13:00	20.5	Mar-27	100%
WSPD v (km/hr)			Henry Pirker	2.5	-	-	31.0	Mar-03 15:00	14.0	Mar-09	100%
WSPD v (km/hr)			Evergreen Park	4.1	-	-	47.0	Mar-07 15:00	26.5	Mar-07	100%
WSPD v (km/hr)			Smoky Heights	3.8	-	-	37.0	Mar-09 13:00	18.6	Mar-09	100%
WSPD v (km/hr)			Beaverlodge	3.4	-	-	47.0	Mar-09 16:00	25.3	Mar-09	100%
WSPD v (km/hr)			Valleyview	1.1	-	-	20.0	Mar-02 18:00	7.8	Mar-18	100%
WSPD v (km/hr)			Sunset House	4.1	-	-	30.0	Mar-15 16:00	19.1	Mar-27	100%
WDIR			Henry Pirker	WNW	-	-	-	-	-	-	100%
WDIR			Evergreen Park	WNW	-	-	-	-	-	-	100%
WDIR			Smoky Heights	WNW	-	-	-	-	-	-	100%
WDIR			Beaverlodge	W	-	-	-	-	-	-	100%
WDIR			Valleyview	WNW	-	-	-	-	-	-	100%
WDIR			Sunset House	S	-	-	-	-	-	-	100%

Continuous Network Equipment Summary

PAZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on March 6th (CO & THC), March 7th (SO₂, NO_x & O₃), and March 8th (TRS). A site tour was conducted on March 30th with an analyzer response demonstration, invalidating a portion of the 11th hour for PM_{2.5} and O₃ due to the nature of the analyzer responses.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
NOx/NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	One (1) hour flagged as maintenance during site visit.
CO	TEI	48C	No operational issues observed.
THC	TEI	51-CLT	No operational issues observed.
TRS	TEI	45C/43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Thirty-Four (34) hours were flagged invalid due to negative readings and one (1) hour flagged as maintenance during site visit. Filter cleaned on March 8 th .
RH	Met One	083D	No operational issues observed.
ET	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS / WD	Met One	010C/020C	No operational issues observed.

PAZA – Evergreen Park Station

General Station Issues

Routine monthly calibration performed on March 21st (SO₂, and TRS). SO₂ analyzer maintenance performed on March 24th and re-calibrated.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Five (5) hours were flagged invalid due to negative readings. Fliter cleaned on March 21 st .
ET	Met One/Gill	083D	No operational issues observed.
RH	Met One/Gill		No operational issues observed.
WS / WD	Met One/ Gill		No operational issues observed.

PAZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on March 28th (SO₂ and TRS).

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Six (6) hours were flagged invalid due to negative readings. Filter was cleaned on March 28 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

Routine monthly calibrations performed on March 14th (SO₂, NO_x, O₃).

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No operational issues observed.
NO _x /NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Filter was cleaned March 14 th . One hour of data was flagged invalid due to analyzer instability.
ET	n/a	n/a	Electrical continuity between sensor and data acquisition system caused loss of data on March 17, 18, 19 and 20 th .
RH	n/a	n/a	Electrical continuity between sensor and data acquisition system caused loss of data on March 17, 18, 19 and 20 th .
WS / WD	Blue Sky	857	No operational issues observed.

PAZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on March 12th (SO₂ & H₂S).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	Two hours flagged invalid due to signal instability.
H ₂ S	TEI	43A	Two hours flagged invalid due to signal instability.
ET	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA – Portable-Sunset House Station

General Station Issues

Routine monthly calibrations were performed on March 12th (SO₂, O₃, NO_x) and March 13th (TRS). The station experienced failure of the data acquisition system to capture analyzer data on March 29th that self-rectified.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
TRS	TEI	39C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Filter was cleaned March 12 th . 2 hours flagged invalid due to analyzer instability.
ET	Gill	Met Pak 3	No operational issues observed.
WS / WD	Gill	Met Pak 3	No operational issues observed.

PAZA

Henry Pirker Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

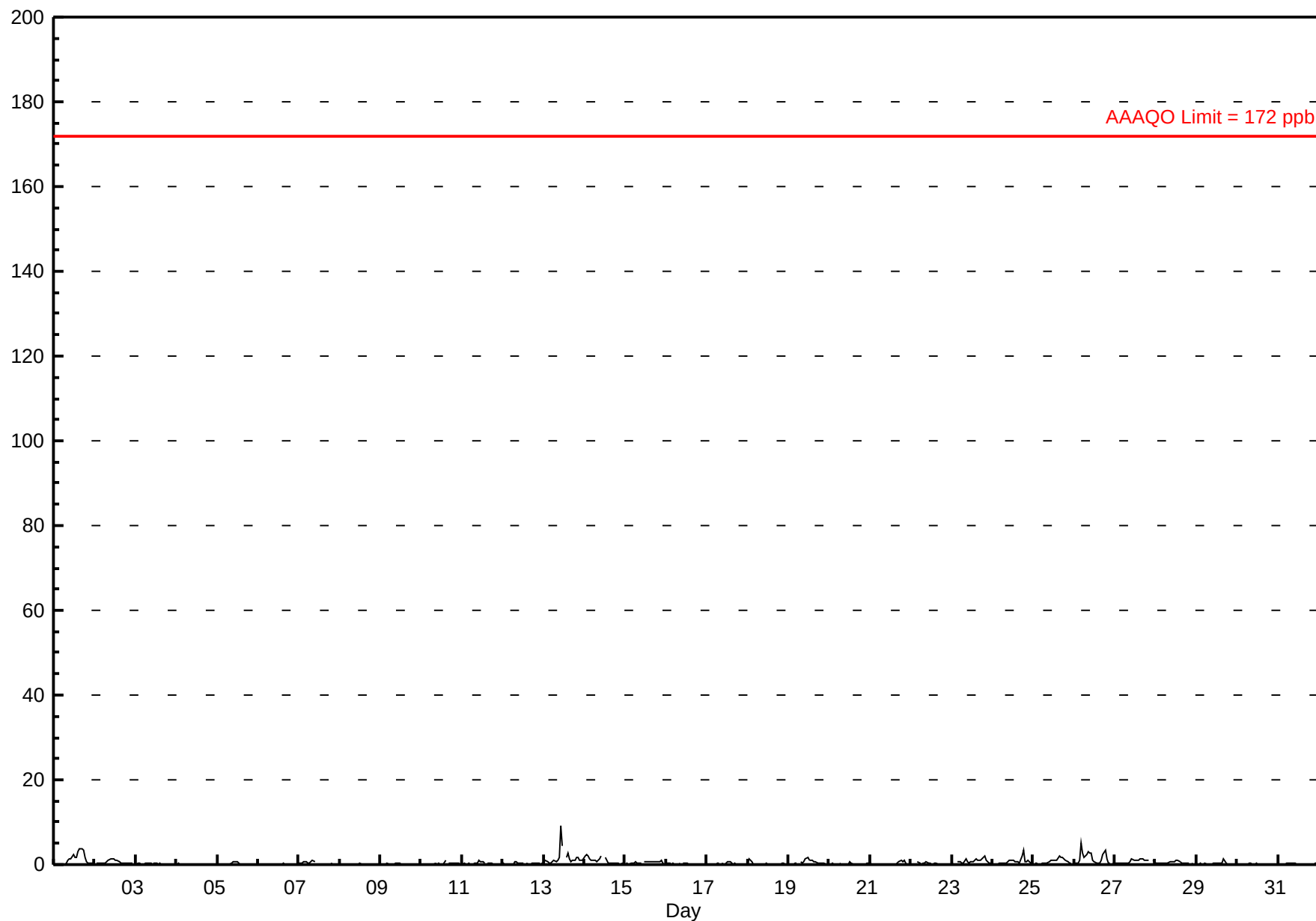
Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.3 ppb on Mar 13 11:00 Maximum Daily Average: 1.6 ppb on Mar 13																								Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on Mar 1 01:00 Maximum Diurnal Average: 0.9 ppb at hour 11 Monthly Average: 0.43 ppb												Minimum Daily Average: 0.0 ppb on Mar 6 Minimum Diurnal Average: 0.2 ppb at hour 24 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.5 P ₉₀ = 1.0 P ₉₉ = 3.2														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	A	0	0	0	0	0	0	1	1	2	2	2	3	4	4	3	2	1	0	0	0	0	1.2	3.7	
2-Mar	A	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0.6	1.3	
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4	
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.2	
5-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0.1	0.7	
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.4	
7-Mar	0	0	0	1	1	1	0	1	1	1	C	C	C	0	0	0	0	A	0	0	0	0	0	0.3	1.0	
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.3	
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.2	
10-Mar	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	1.1	
11-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0.3	1.2	
12-Mar	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.8	
13-Mar	0	1	1	0	0	1	1	1	1	2	9	4	A	2	3	1	1	1	1	2	2	1	1	1	1.6	9.3
14-Mar	2	2	2	1	1	1	1	1	1	1	2	A	2	1	0	0	0	0	0	0	0	0	0	1.0	2.3	
15-Mar	0	0	0	0	0	0	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	0	0	0.5	1.0	
16-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
17-Mar	0	0	0	0	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0.2	0.6	
18-Mar	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2	
19-Mar	0	0	0	0	0	0	A	1	0	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0.5	1.7	
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.1	0.7	
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0.2	1.1	
22-Mar	0	0	0	A	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
23-Mar	0	0	A	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	2	1	1	0	0	0.7	2.0	
24-Mar	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	2	3	1	1	1	0	0.8	3.3	
25-Mar	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	1	1	1	0	A	0.8	1.9	
26-Mar	0	0	0	1	5	3	2	2	3	3	3	1	1	0	0	1	2	3	1	0	0	A	0	1.5	5.0	
27-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3	
28-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	A	0	0	0	0.5	0.9	
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0.2	1.2	
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4	
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.3	
0.2 0.3 0.2 0.2 0.4 0.3 0.3 0.4 0.5 0.6 0.9 0.7 0.5 0.5 0.6 0.5 0.5 0.6 0.6 0.4 0.4 0.3 0.2 0.2																								Diurnal Average		
2.1 2.3 2.0 1.5 5.0 2.6 1.7 2.3 3.2 2.9 9.3 4.4 1.7 1.8 3.2 3.7 3.7 3.4 3.3 2.0 1.6 1.1 0.9 0.9																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - March 2012



Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

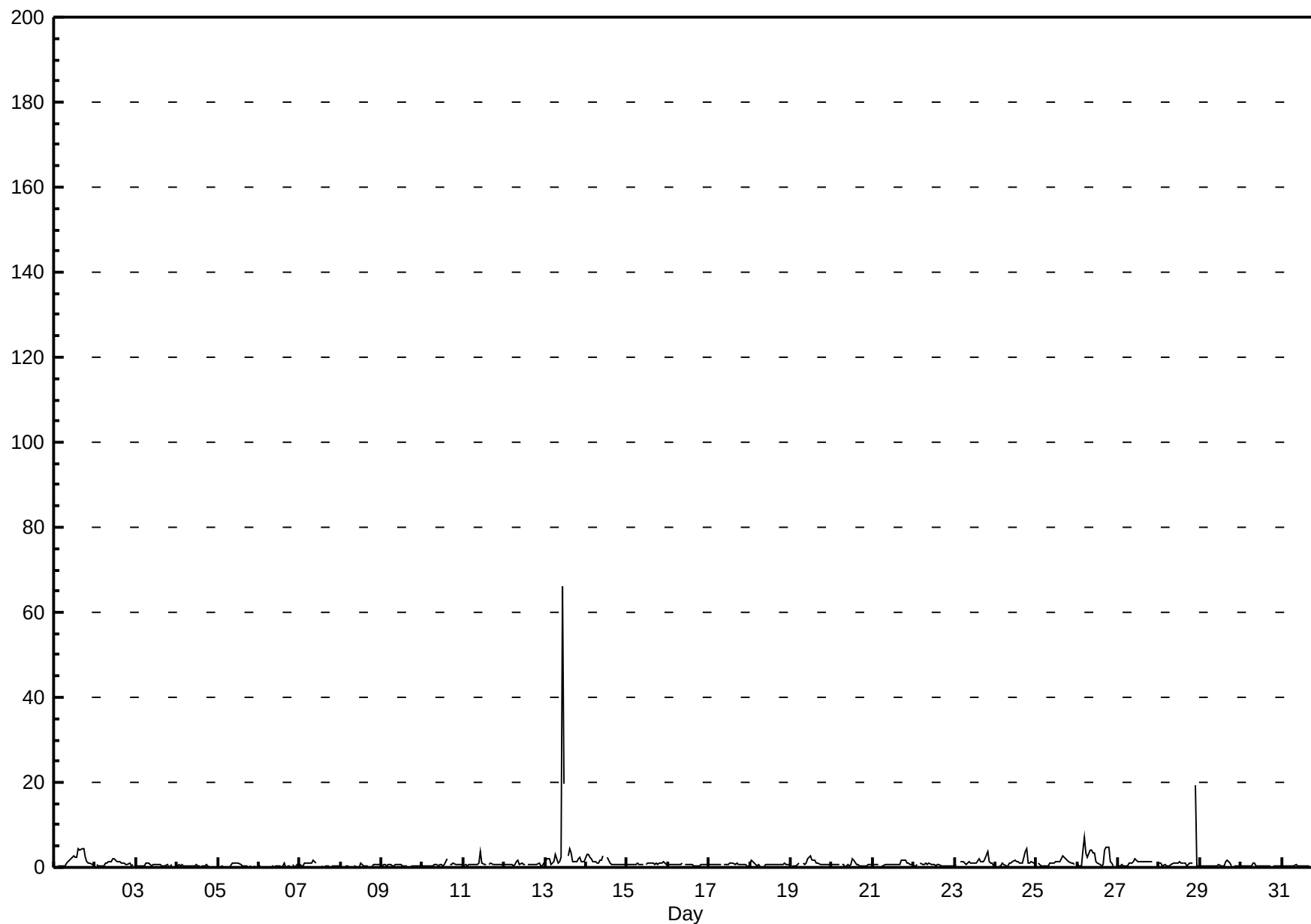
Henry Pirker - March 2012

Maximum Value: 66.1 ppb on Mar 13 11:00																				Maximum Daily Average: 5.4 ppb on Mar 13					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 5 23:00																				Minimum Daily Average: 0.3 ppb on Mar 6					Hours of Data: 708	
Maximum Diurnal Average: 3.3 ppb at hour 11																				Minimum Diurnal Average: 0.5 ppb at hour 24					Hours of Missing Data: 36	
Monthly Average: 0.96 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 1.0 P ₉₀ = 1.5 P ₉₉ = 4.2					Hours of Calibration: 36	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	A	0	0	0	0	0	1	1	2	2	3	2	2	4	4	4	4	2	1	1	1	1	0	1.7	4.4
2-Mar	A	1	0	0	0	0	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	0	1	A	0.9	1.9
3-Mar	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	1	A	0	0.5	1.0
4-Mar	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	A	0	0	0.3	0.7
5-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	A	0	0	0	0.4	1.0
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	1	0	1	0	0.3	1.0
7-Mar	1	0	0	1	1	1	1	1	2	1	C	C	C	0	0	0	0	0	A	0	0	0	0	0	0.6	1.5
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	1	1	1	1	1	0.4	1.1
9-Mar	0	1	1	0	1	1	0	0	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	1	0.4	0.7
10-Mar	0	0	0	0	0	0	0	1	1	0	1	1	0	1	2	A	1	1	1	1	1	1	1	1	0.5	2.1
11-Mar	1	1	0	1	1	1	1	1	1	1	4	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	3.6
12-Mar	1	1	1	1	1	0	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	0.7	1.6
13-Mar	1	2	2	1	1	1	3	1	1	2	66	20	A	3	4	3	1	1	1	2	2	1	1	1	5.4	66.1
14-Mar	3	3	2	2	2	2	1	1	2	2	3	A	2	2	1	1	1	1	1	1	1	1	1	1	1.4	3.0
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4
16-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	1	1	1	1	1	0.5	0.9
17-Mar	1	1	1	1	1	1	1	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.6	1.0
18-Mar	1	2	1	1	0	1	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.5
19-Mar	0	0	0	0	1	1	A	1	1	1	2	3	2	2	2	1	1	1	1	1	1	1	1	1	0.9	2.6
20-Mar	1	1	1	1	1	A	1	1	0	1	0	1	2	2	1	1	0	0	0	0	0	1	1	1	0.5	2.0
21-Mar	1	1	1	1	A	0	0	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	0.7	1.5
22-Mar	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.6	1.0
23-Mar	0	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	4	1	1	1	0	1.3	3.7
24-Mar	0	A	0	0	1	1	0	0	1	1	1	2	1	1	1	1	1	4	4	1	1	1	1	1	1.2	4.4
25-Mar	A	1	1	0	0	0	0	0	1	1	1	1	1	1	1	3	2	2	2	1	1	1	1	A	1.1	2.6
26-Mar	1	0	0	4	7	3	2	4	4	3	3	1	1	1	0	1	4	5	5	1	1	0	A	0	2.4	7.0
27-Mar	0	0	1	0	0	0	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.9
28-Mar	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	0	1	1	1	1	A	19	0	0	1.6	19.3
29-Mar	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2	1	0	A	0	0	0	0	0.6	1.8
30-Mar	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.9
31-Mar	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	1	0	0	0.4	0.7
0.6 0.6 0.6 0.7 0.8 0.7 0.7 0.8 0.9 0.9 3.3 1.6 1.0 0.9 1.0 1.0 1.0 1.1 1.0 0.8 0.7 1.3 0.6 0.5																									Diurnal Average	
3.0 3.0 2.5 4.2 7.0 3.4 2.9 3.9 3.9 3.4 66.1 19.6 2.4 2.9 4.4 3.9 4.4 4.9 4.9 3.7 2.3 19.3 1.4 1.5																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

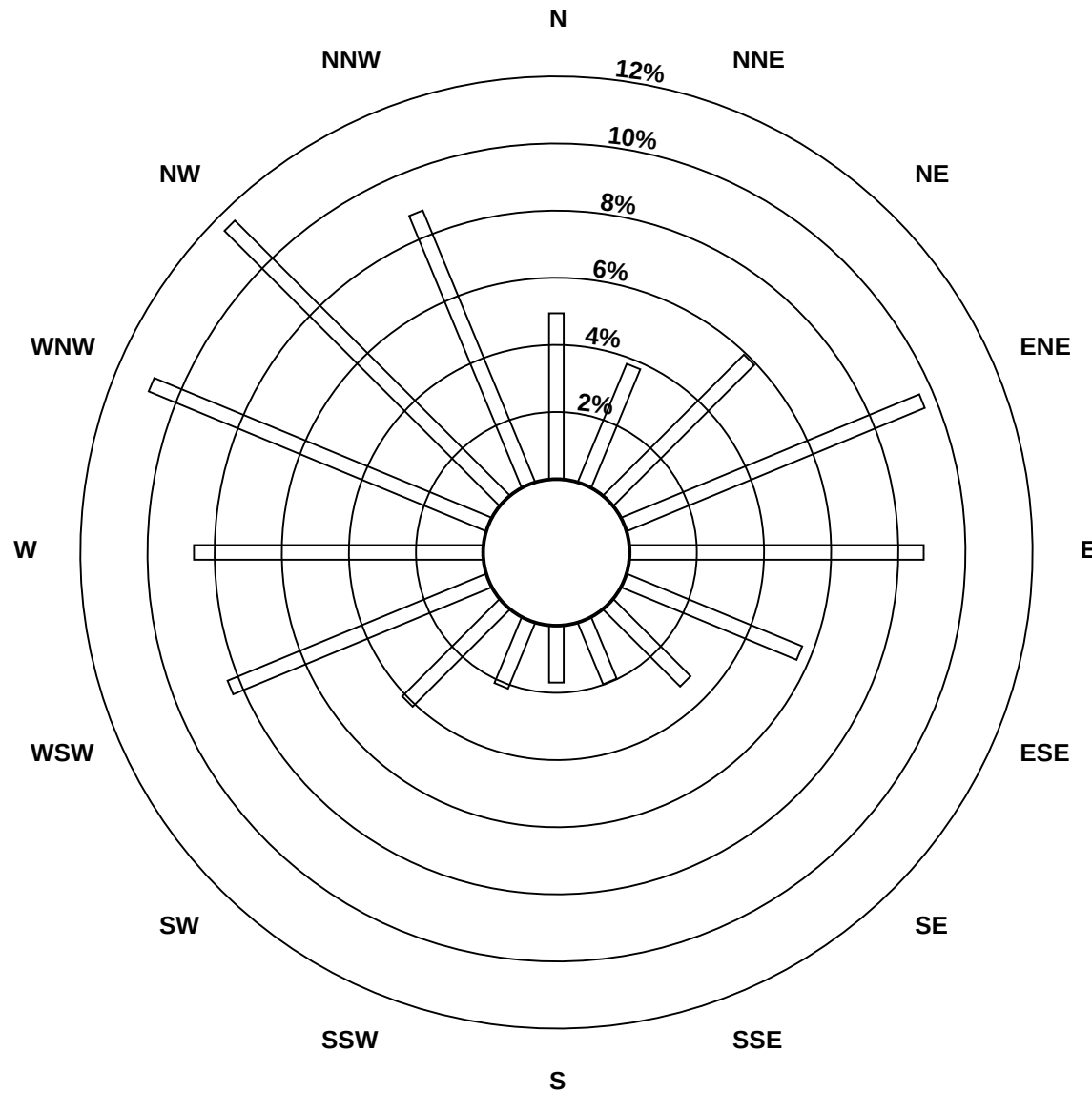
Henry Pirker - March 2012



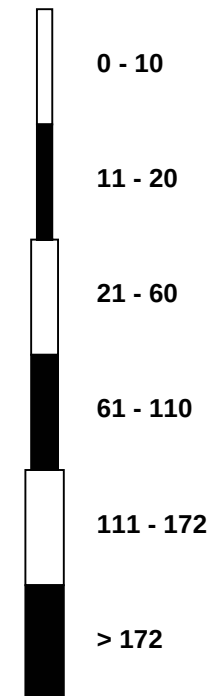
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - March 2012

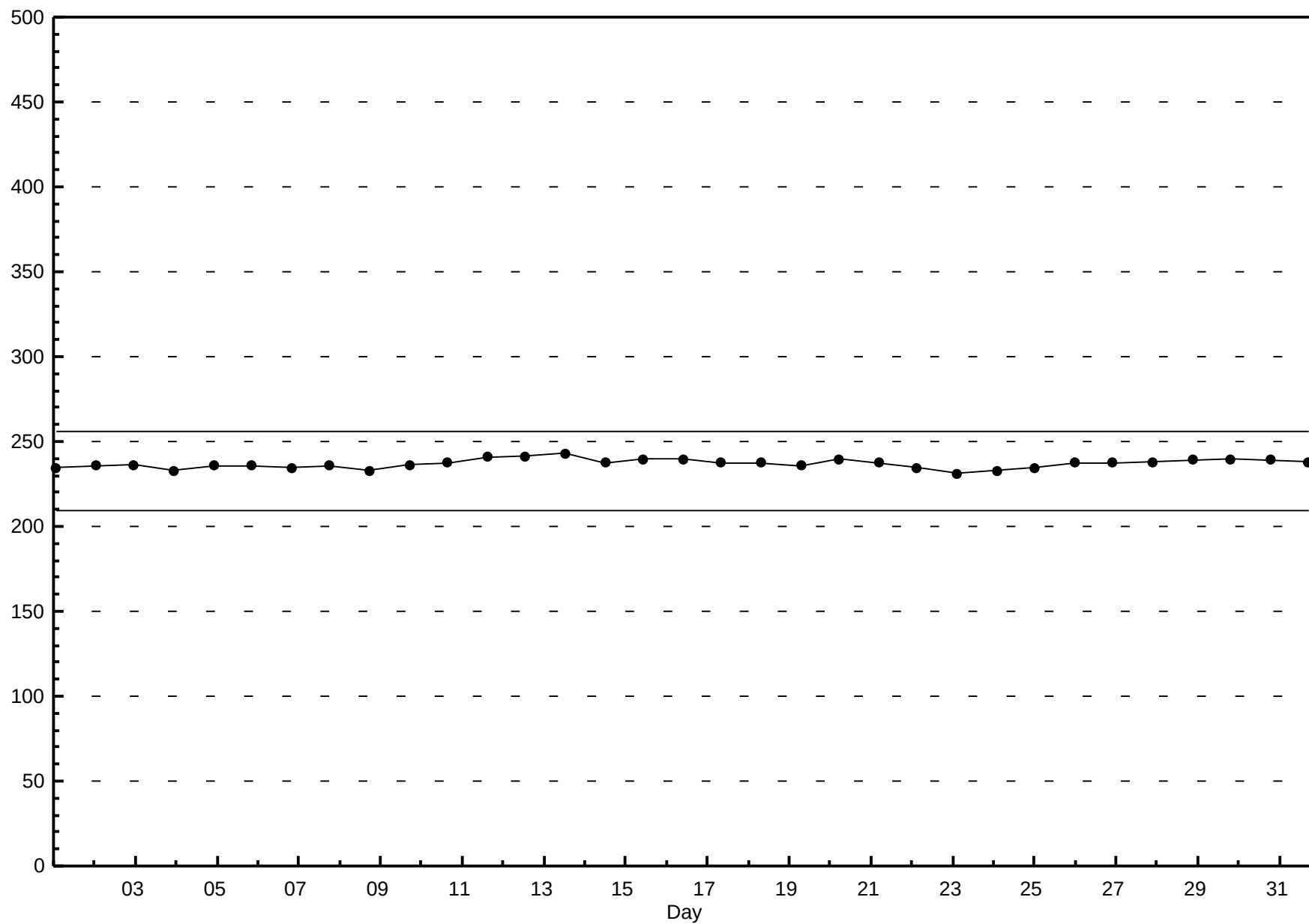


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Henry Pirker - March 2012



Hourly Averages

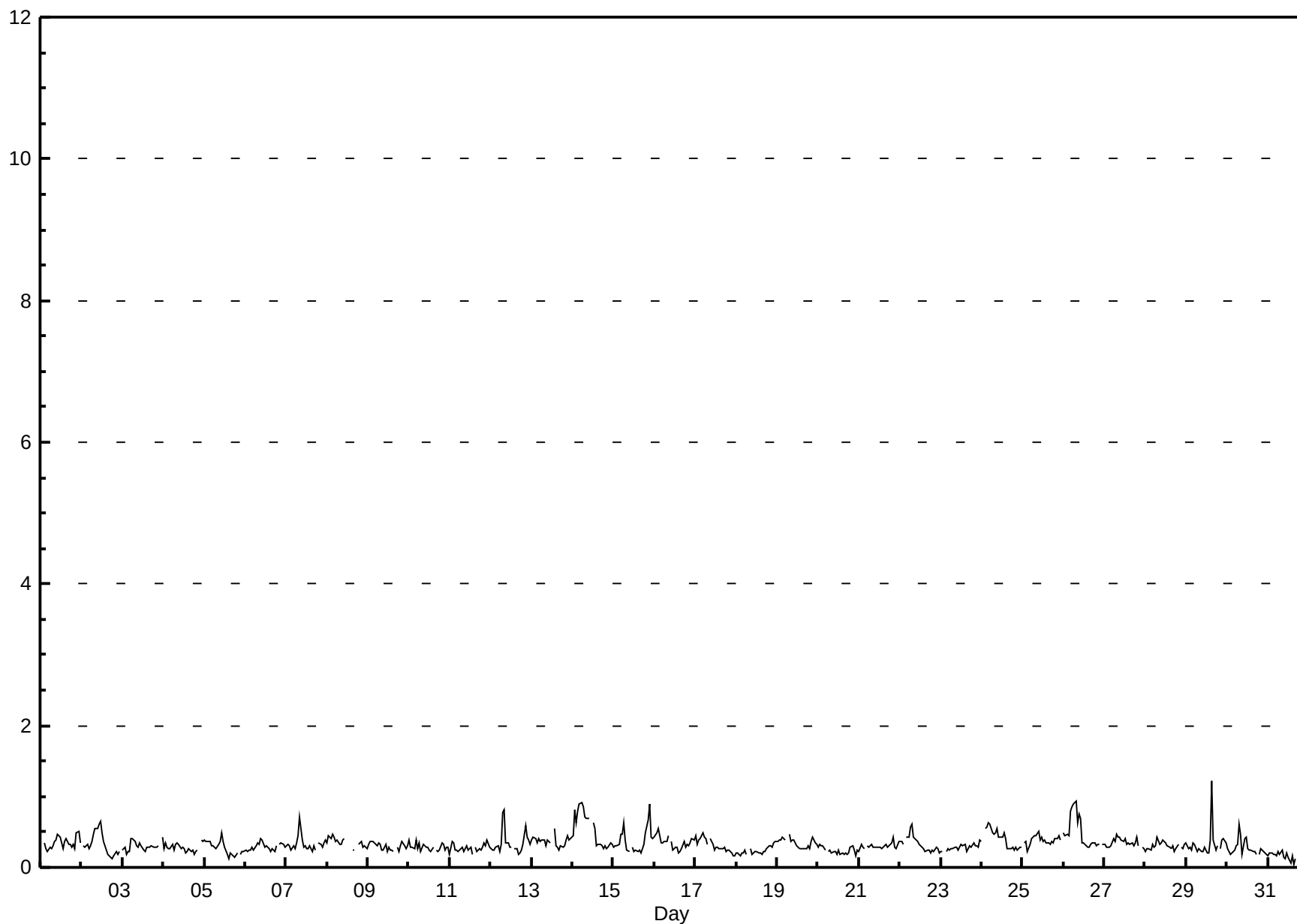
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744							
Maximum Value: 1.2 ppb on Mar 29 16:00																				Maximum Daily Average: 0.5 ppb on Mar 14		Hours of Data: 707					
Minimum Value: 0 ppb on Mar 31 16:00																				Minimum Daily Average: 0.2 ppb on Mar 31		Hours of Missing Data: 37					
Maximum Diurnal Average: 0.4 ppb at hour 8																				Minimum Diurnal Average: 0.3 ppb at hour 17		Hours of Calibration: 37					
Monthly Average: 0.32 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.4 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-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
2-Mar	A	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.6
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4	
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4	
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.5	
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.4	
7-Mar	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.7	
8-Mar	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	A	0	0	0	0	0	0	0.4	0.5	
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4	
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.4	
11-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4	
12-Mar	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0.3	0.8	
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
14-Mar	0	1	1	1	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9	
15-Mar	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4	0.9	
16-Mar	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
17-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
18-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
22-Mar	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
23-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
24-Mar	0	A	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
25-Mar	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.5	
26-Mar	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	0.9	
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5	
28-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.4	
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0.3	1.2	
30-Mar	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.6	
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.5	
0.3 0.3 0.3 0.3 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3																									Diurnal Average		
0.5 0.8 0.6 0.8 0.9 0.9 0.9 0.9 0.9 0.8 0.7 0.7 0.6 0.6 0.6 0.4 1.2 0.4 0.4 0.3 0.5 0.7 0.9 0.5 0.4																									Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																											

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Henry Pirker - March 2012



Hourly Maximums

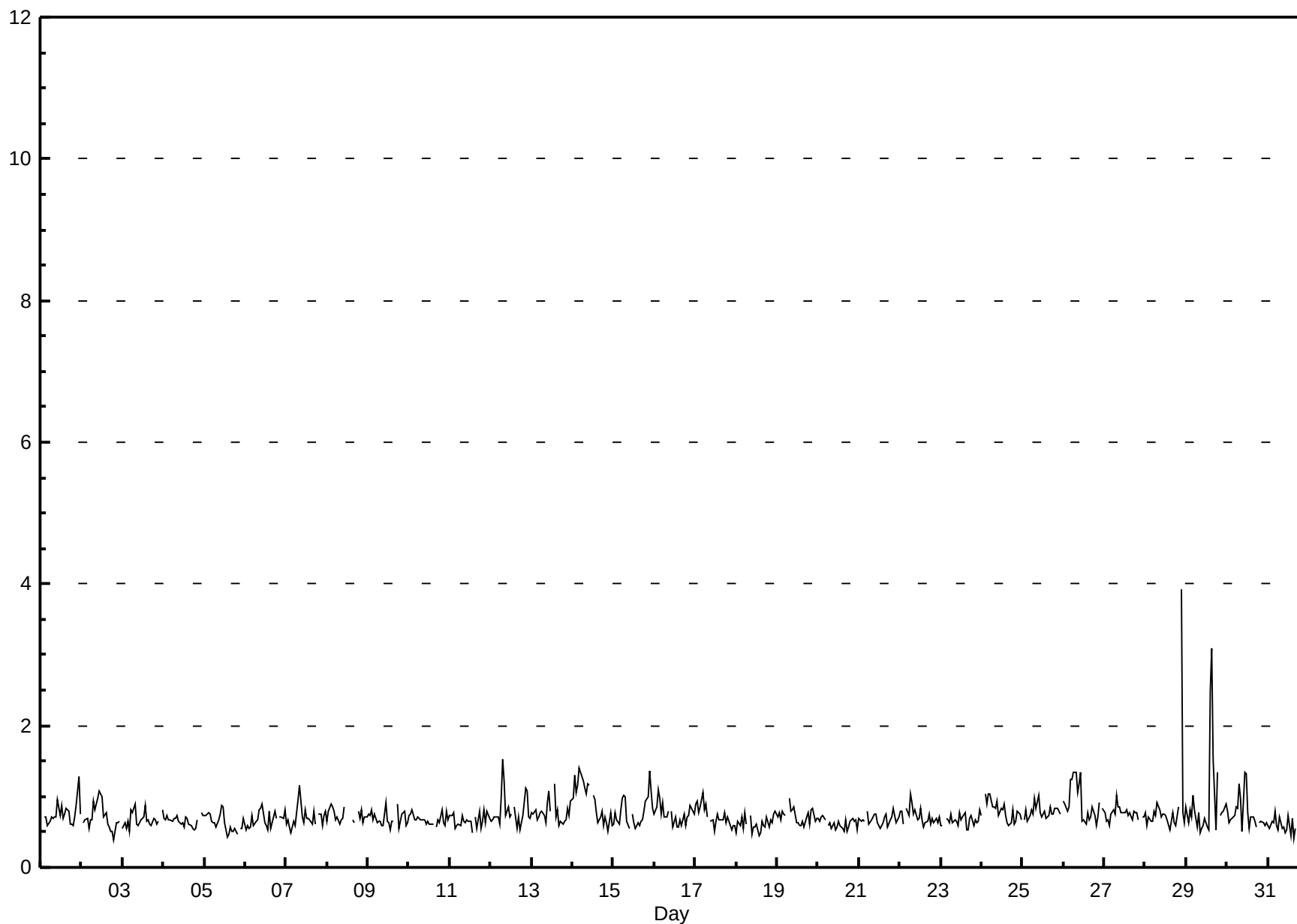
Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2012

Maximum Value: 3.9 ppb on Mar 28 22:00																				Maximum Daily Average: 0.9 ppb on Mar 29										Hours in Service: 744											
Minimum Value: 0 ppb on Mar 2 20:00																				Minimum Daily Average: 0.6 ppb on Mar 20										Hours of Data: 707											
Maximum Diurnal Average: 0.8 ppb at hour 8																				Minimum Diurnal Average: 0.7 ppb at hour 14										Hours of Missing Data: 37											
Monthly Average: 0.74 ppb																				Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 0.9 P ₉₉ = 1.3										Hours of Calibration: 37											
																																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum															
1-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3															
2-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	0.7	1.1															
3-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.9															
4-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	0.8															
5-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	A	1	1	1	0.6	0.9															
6-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	0.9															
7-Mar	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	1.2															
8-Mar	1	1	1	1	1	1	1	1	1	1	1	C	C	C	C	1	1	A	1	1	1	1	1	1	0.7	0.9															
9-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	0.9															
10-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	0.8															
11-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	1	1	0.7	0.8															
12-Mar	1	1	1	1	1	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.5															
13-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2															
14-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4															
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4															
16-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1															
17-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1															
18-Mar	0	1	1	1	1	1	1	A	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0.6	0.8															
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0															
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7															
21-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8															
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0															
23-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8															
24-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0															
25-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.0															
26-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.9	1.3															
27-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0															
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	3.9															
29-Mar	1	1	1	1	1	1	1	1	0	1	1	1	1	1	2	3	2	1	1	A	1	1	1	1	0.9	3.1															
30-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.3															
31-Mar	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0	1	A	1	1	1	1	1	1	0.6	0.8															
0.7 0.7 0.7 0.7 0.8 0.8 0.8 0.8 0.8 0.7 0.8 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.8 0.7 0.7																								Diurnal Average																	
1.0 1.3 1.1 1.2 1.4 1.3 1.3 1.5 1.2 1.2 1.3 1.3 1.0 1.2 2.5 3.1 1.5 0.9 1.3 0.9 1.1 3.9 1.3 0.9																								Diurnal Maximum																	
C - Calibration																								A - Automated Daily Zero Span																	

Hourly Maximums

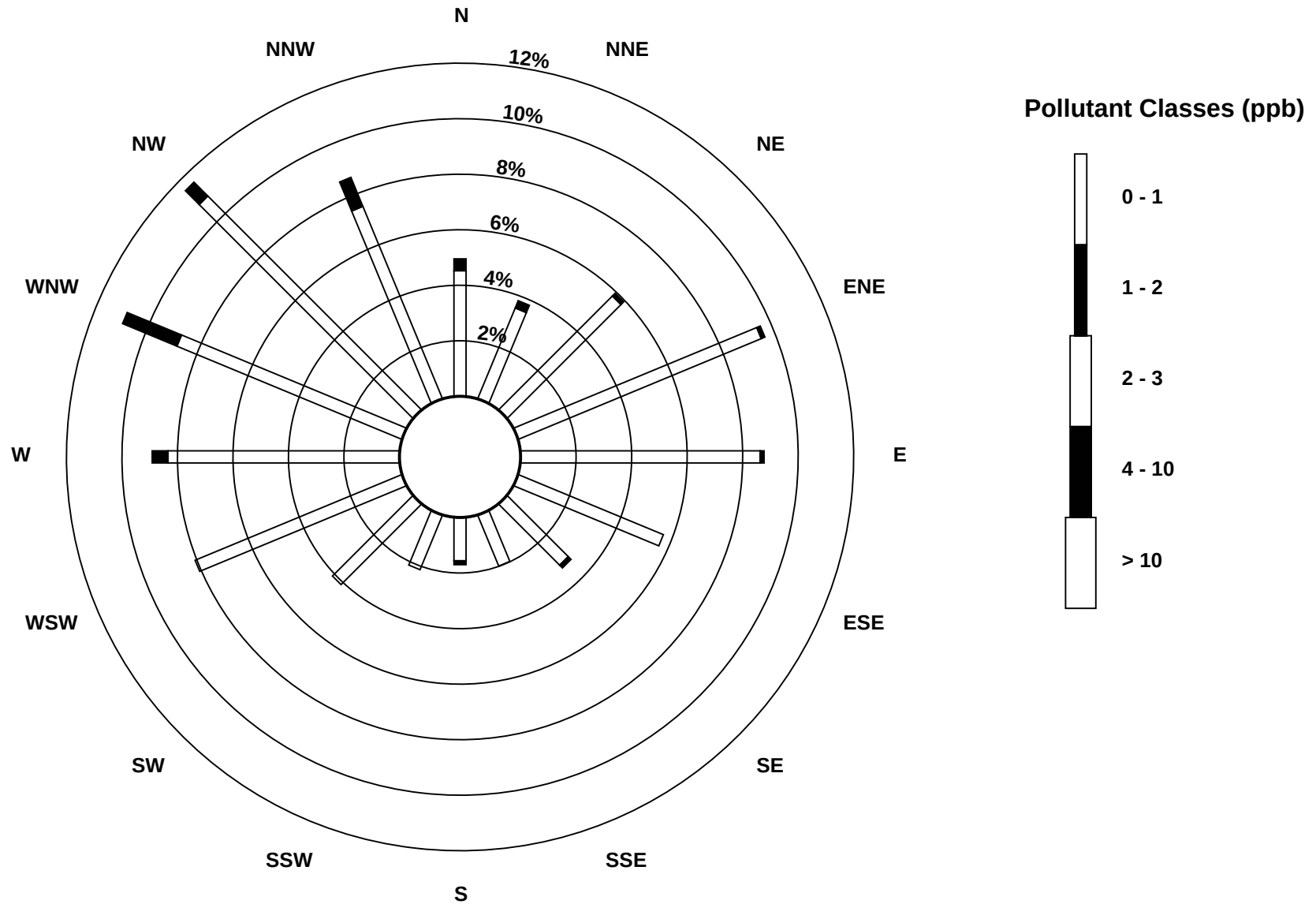
Total Reduced Sulphur (TRS) - ppb
Henry Pirker - March 2012

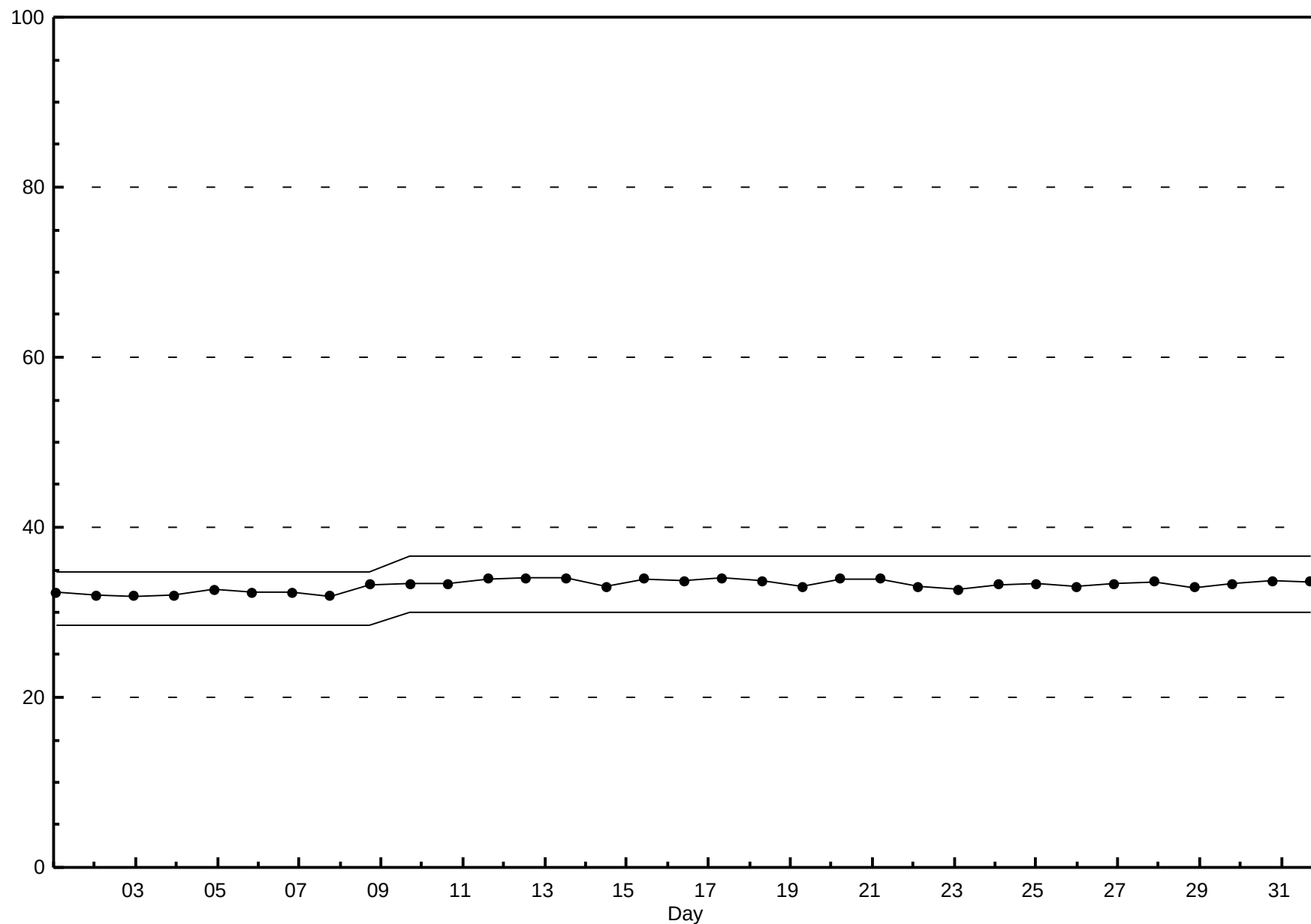


Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - March 2012





Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

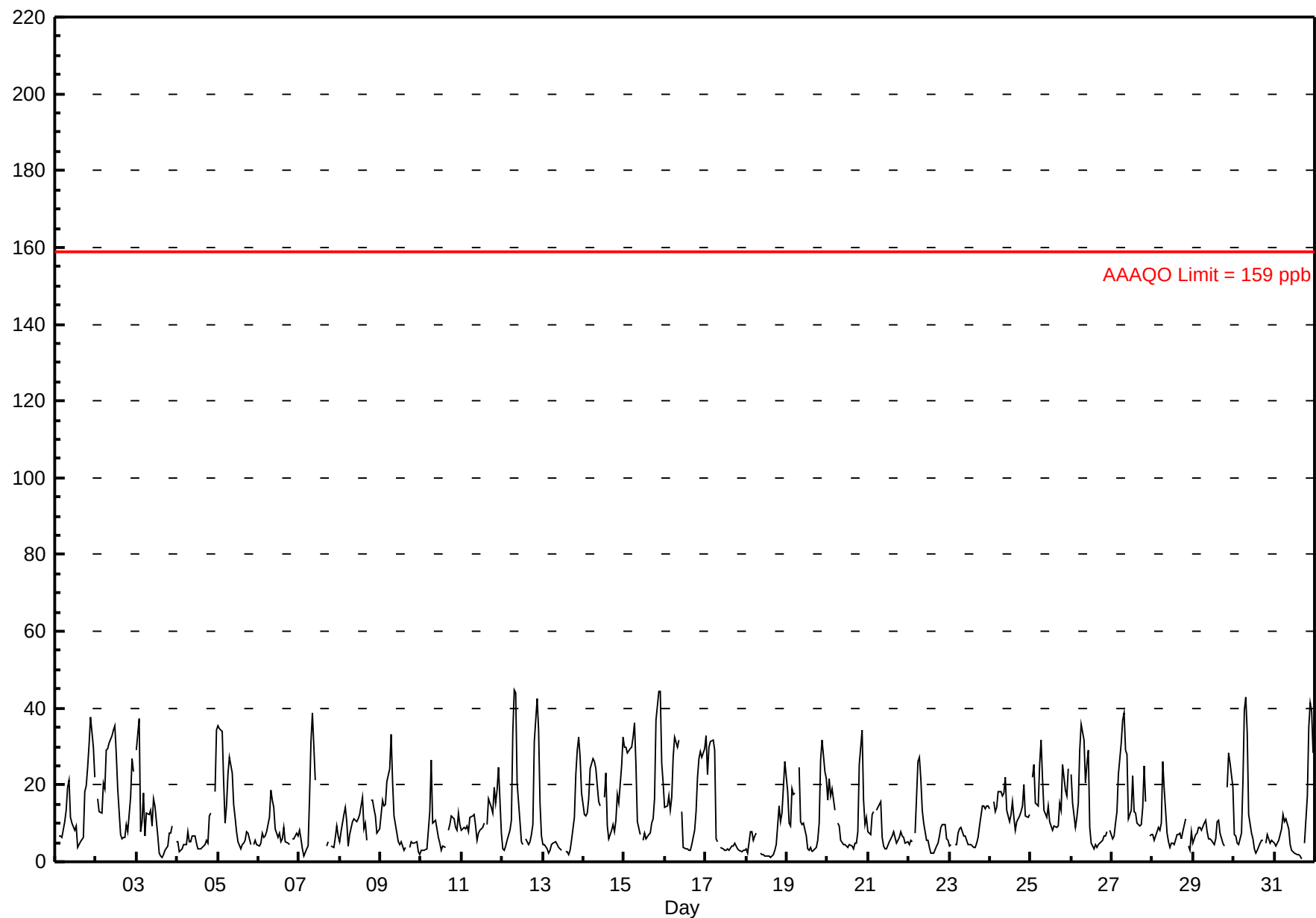
Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 44.7 ppb on Mar 12 08:00 Maximum Daily Average: 21.8 ppb on Mar 15																				Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 39 Percent Operational Time: 100.0							
Minimum Value: 1 ppb on Mar 31 17:00 Minimum Daily Average: 6.4 ppb on Mar 18 Maximum Diurnal Average: 20.3 ppb at hour 7 Minimum Diurnal Average: 5.3 ppb at hour 15 Monthly Average: 11.93 ppb Percentiles: P ₁ = 1.5 P ₁₀ = 3.4 Q ₁ = 5.0 Median = 8.6 Q ₃ = 15.7 P ₉₀ = 27.2 P ₉₉ = 40.6																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Mar	4	A	7	7	7	10	14	19	21	11	10	8	9	4	4	5	6	18	20	25	31	38	30	22	14.3	37.8	
2-Mar	A	16	13	13	20	19	29	29	31	33	34	36	28	19	7	6	6	6	10	8	17	27	24	A	19.6	35.6	
3-Mar	29	37	8	10	18	7	13	12	13	9	16	15	7	2	1	1	2	3	4	7	7	9	A	5	10.3	37.3	
4-Mar	5	3	3	3	5	5	8	5	5	7	7	5	3	3	3	4	5	6	5	12	13	A	18	34	7.2	34.5	
5-Mar	36	35	34	21	10	15	23	27	23	15	12	8	5	3	4	5	6	8	7	4	A	5	6	4	13.7	35.6	
6-Mar	4	5	8	6	7	8	12	19	16	14	9	6	7	5	6	9	5	5	5	A	6	6	7	7	7.9	18.6	
7-Mar	8	6	3	2	3	4	17	31	39	21	C	C	C	C	C	C	4	5	A	4	4	6	9	7	--	38.9	
8-Mar	5	8	12	14	10	4	7	10	11	11	10	11	12	17	9	10	6	A	16	16	14	12	8	8	10.5	16.8	
9-Mar	12	16	14	15	21	24	33	21	12	10	5	5	5	4	3	4	A	4	5	5	5	5	3	2	10.1	33.3	
10-Mar	3	3	3	3	8	13	27	10	11	8	6	5	3	4	4	A	8	10	12	11	9	8	13	10	8.4	26.7	
11-Mar	8	9	9	9	8	12	12	12	9	6	7	8	9	10	A	10	16	14	13	19	15	19	25	7	11.6	24.7	
12-Mar	4	3	4	5	8	11	34	45	44	21	10	5	4	A	6	4	5	7	10	31	43	34	15	7	15.7	44.7	
13-Mar	4	4	3	2	3	4	5	5	4	4	3	3	A	3	3	2	3	5	11	23	29	33	27	18	8.8	32.6	
14-Mar	12	12	13	16	24	27	26	24	20	16	15	A	17	23	9	6	8	10	8	11	18	15	25	32	16.8	32.5	
15-Mar	30	30	28	30	30	33	36	25	10	7	A	6	8	6	7	8	10	11	16	37	44	44	26	21	21.8	44.3	
16-Mar	14	14	17	13	17	27	32	30	32	A	13	4	3	3	3	3	4	8	13	22	27	29	27	30	16.8	32.3	
17-Mar	33	23	30	31	32	29	6	5	A	4	3	3	3	3	3	4	4	5	4	3	3	3	3	3	10.4	32.7	
18-Mar	3	2	8	8	6	7	7	A	2	2	2	2	2	1	1	1	2	3	4	15	11	13	19	26	6.4	26.2	
19-Mar	18	10	9	19	17	18	A	25	10	10	10	7	3	3	4	3	3	4	5	10	27	32	23	22	12.7	31.5	
20-Mar	16	22	17	19	13	A	10	9	5	4	5	4	4	4	4	3	5	5	8	25	34	16	10	12	11.1	34.3	
21-Mar	8	7	12	13	A	13	14	16	6	4	3	3	5	6	7	8	6	5	6	8	7	6	5	5	7.6	15.6	
22-Mar	4	5	5	A	7	26	27	21	13	10	6	6	4	2	2	2	4	5	7	9	10	10	6	6	8.6	27.2	
23-Mar	4	4	A	5	5	8	9	9	7	7	6	5	4	5	4	4	5	6	9	15	14	14	15	15	7.6	14.6	
24-Mar	14	A	16	13	14	18	18	17	18	22	14	10	12	16	12	8	10	12	13	15	20	12	11	12	14.2	22.1	
25-Mar	A	22	25	15	15	26	32	22	13	12	14	11	9	8	9	9	9	15	13	25	18	17	24	A	16.6	31.7	
26-Mar	23	15	9	12	15	29	36	32	20	25	29	9	5	3	5	4	4	5	5	7	7	8	A	8	13.7	35.7	
27-Mar	6	7	10	13	23	31	37	39	29	28	11	13	22	13	13	10	9	10	14	25	16	A	7	7	17.1	38.7	
28-Mar	7	6	7	9	8	10	26	19	8	5	4	5	5	5	7	7	7	6	8	11	A	4	3	8	8.0	26.1	
29-Mar	5	7	8	9	9	8	10	11	8	6	6	6	4	6	10	11	8	5	4	A	20	28	26	19	10.2	28.5	
30-Mar	7	7	5	5	8	21	39	43	34	12	8	6	3	2	3	5	6	6	A	5	7	5	6	5	10.7	42.7	
31-Mar	5	4	5	7	9	12	10	11	9	4	3	2	2	2	2	1	1	A	5	17	35	41	39	29	11.1	41.3	
11.5 11.8 11.5 11.6 12.6 15.9 20.3 20.2 16.2 11.6 9.7 7.4 7.2 6.5 5.3 5.4 6.0 7.3 9.1 14.7 17.5 17.2 15.8 13.5 35.6 37.3 34.0 31.4 31.9 32.5 39.4 44.7 44.0 32.7 34.3 35.6 27.8 23.1 12.6 10.9 16.4 18.1 19.9 37.0 44.2 44.3 39.1 34.5																										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 - March 2012



Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

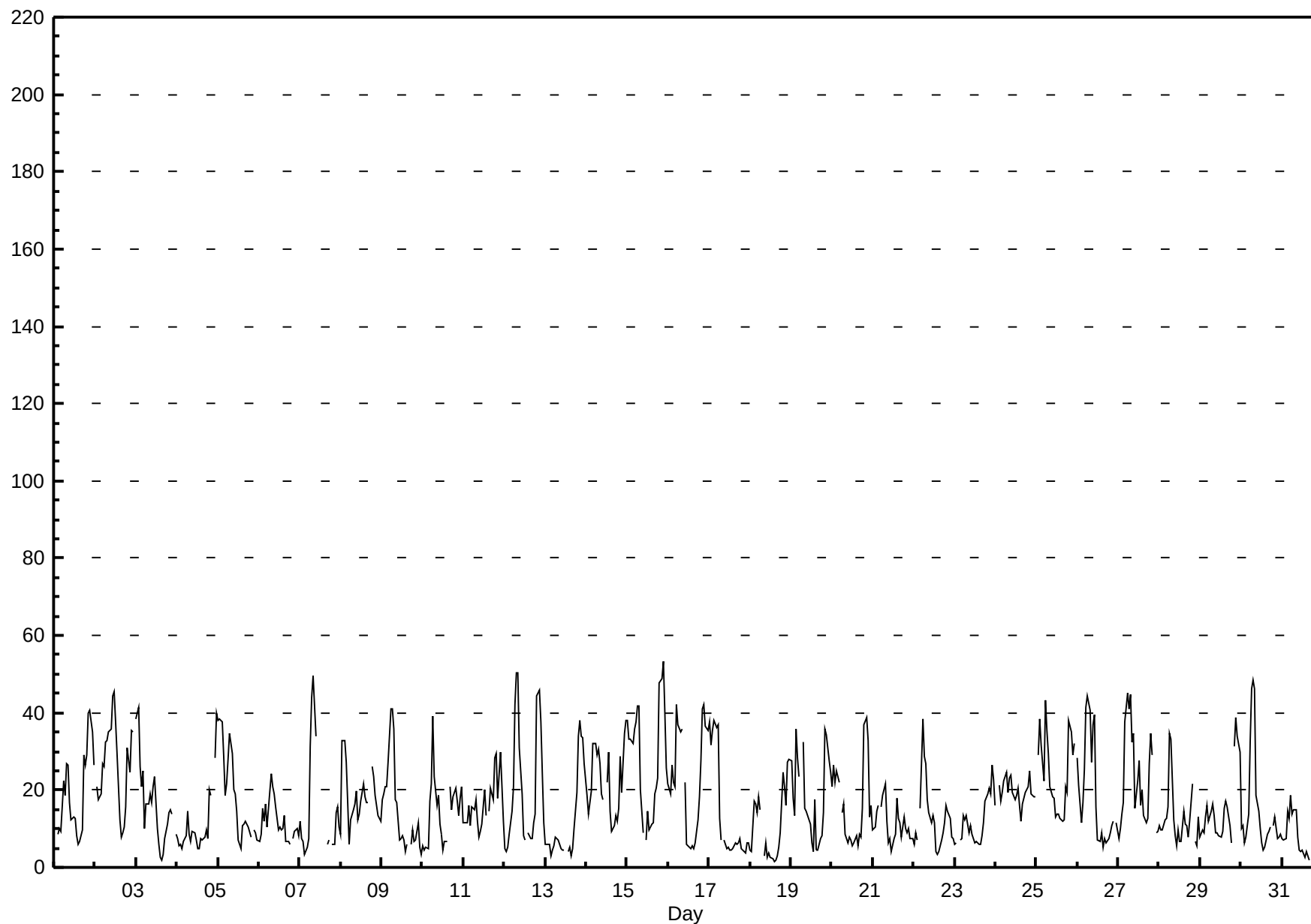
Henry Pirker - March 2012

Maximum Value: 53.3 ppb on Mar 15 22:00																				Maximum Daily Average: 28.4 ppb on Mar 15					Hours in Service: 744	
Minimum Value: 2 ppb on Mar 18 15:00																				Minimum Daily Average: 10.7 ppb on Mar 18					Hours of Data: 705	
Maximum Diurnal Average: 27.0 ppb at hour 8																				Minimum Diurnal Average: 8.5 ppb at hour 16					Hours of Missing Data: 39	
Monthly Average: 17.09 ppb																				Percentiles: P ₁ = 2.4 P ₁₀ = 5.5 Q ₁ = 7.8 Median = 13.9 Q ₃ = 22.6 P ₉₀ = 35.5 P ₉₉ = 47.4					Hours of Calibration: 39	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	5	A	8	10	9	22	18	27	27	17	12	13	13	8	6	7	10	29	26	29	40	40	35	27	19.1	40.5
2-Mar	A	21	17	19	27	26	33	33	35	36	44	45	37	29	12	8	9	10	16	31	25	35	35	A	26.6	45.5
3-Mar	38	41	26	21	25	10	16	17	19	17	21	23	10	6	3	2	4	7	11	14	15	14	A	9	16.0	41.2
4-Mar	8	6	6	5	7	8	15	9	7	9	9	7	5	5	7	7	8	10	8	20	19	A	28	40	10.8	39.9
5-Mar	38	38	38	29	19	22	28	35	30	20	19	14	7	5	11	11	12	11	11	8	A	10	9	7	18.6	38.4
6-Mar	7	9	15	12	17	10	20	24	21	19	16	10	11	10	10	14	7	7	6	A	7	9	10	8	12.0	24.2
7-Mar	12	7	7	3	5	8	31	44	49	34	C	C	C	C	C	C	6	7	A	6	6	14	16	10	--	49.5
8-Mar	8	33	33	27	17	6	12	15	16	20	12	14	17	22	18	17	17	A	26	24	19	16	14	12	18.0	33.0
9-Mar	18	19	21	21	27	41	41	36	18	17	7	8	8	7	4	6	A	6	10	7	7	11	5	3	15.1	41.2
10-Mar	6	5	5	5	17	22	39	24	16	19	11	9	5	7	7	A	21	15	18	21	17	13	18	21	14.7	39.2
11-Mar	11	12	12	16	11	16	15	18	12	8	9	11	20	13	A	15	20	18	28	29	18	24	30	12	16.5	29.8
12-Mar	5	4	5	9	15	21	42	50	50	31	19	8	7	A	9	8	8	11	14	45	46	38	24	12	20.8	50.4
13-Mar	6	6	6	3	5	6	8	7	6	5	5	5	A	4	5	3	5	10	20	34	38	34	33	27	12.1	38.1
14-Mar	19	14	17	20	32	32	29	31	27	19	18	A	22	30	15	9	11	13	12	15	29	19	35	38	21.9	37.9
15-Mar	38	33	33	32	36	38	42	42	20	9	A	7	15	10	11	11	19	21	23	48	49	53	40	26	28.4	53.3
16-Mar	21	19	26	22	21	42	37	35	36	A	22	6	5	5	5	5	6	12	18	28	41	42	36	35	23.0	42.3
17-Mar	38	32	35	38	36	37	13	7	A	7	5	5	4	4	5	6	6	7	7	5	5	4	7	6	13.9	37.9
18-Mar	5	4	17	16	14	18	15	A	3	6	3	4	2	2	2	3	5	9	25	21	16	27	28	10.7	28.0	
19-Mar	28	18	14	36	28	24	A	33	15	14	14	11	7	4	18	5	5	8	8	14	36	34	27	25	18.4	35.8
20-Mar	21	27	22	25	22	A	14	16	8	6	8	7	6	6	8	6	8	8	15	37	39	33	13	16	16.2	38.7
21-Mar	10	10	15	16	A	16	19	22	12	6	7	4	8	9	18	13	11	8	13	10	9	10	8	7	11.3	21.7
22-Mar	6	9	7	A	15	39	29	27	18	14	12	14	12	4	4	4	7	9	12	16	15	12	8	7	12.9	38.5
23-Mar	6	6	A	7	7	13	12	13	9	11	8	7	6	7	6	6	8	11	17	19	20	19	26	23	11.8	26.5
24-Mar	16	A	21	17	19	22	25	19	23	24	19	18	19	20	16	12	16	19	20	21	25	19	18	18	19.5	25.0
25-Mar	A	29	38	32	22	43	35	29	21	18	18	13	14	14	13	12	12	21	19	38	35	29	32	A	24.4	43.3
26-Mar	28	21	12	17	25	41	45	41	27	37	39	16	7	7	9	5	7	6	8	9	11	12	A	12	19.2	44.5
27-Mar	7	10	14	17	38	45	41	45	32	35	15	22	28	16	20	13	12	13	27	35	29	A	9	9	23.1	45.2
28-Mar	11	10	10	12	13	16	35	33	12	8	6	10	7	7	15	11	11	8	12	22	A	7	6	13	12.7	34.6
29-Mar	8	10	9	13	16	12	15	16	13	9	9	8	8	9	15	17	16	11	6	A	31	39	34	30	15.4	38.9
30-Mar	10	11	6	8	14	32	46	48	46	18	15	10	6	4	5	8	9	10	A	11	13	7	8	8	15.6	48.5
31-Mar	8	7	8	15	13	19	14	15	15	8	5	4	4	3	4	3	2	A	12	34	43	45	46	35	15.6	46.0
15.2 16.2 16.8 17.4 19.0 23.5 26.1 27.0 21.5 16.7 14.0 11.5 11.0 9.6 9.7 8.5 9.8 11.4 14.9 22.5 24.4 22.8 22.0 18.1																									Diurnal Average	
38.2 41.2 38.3 37.9 37.6 45.2 46.3 50.4 50.3 36.8 44.5 45.5 37.5 29.7 20.3 17.3 20.9 29.0 28.5 47.8 48.7 53.3 46.0 39.9																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

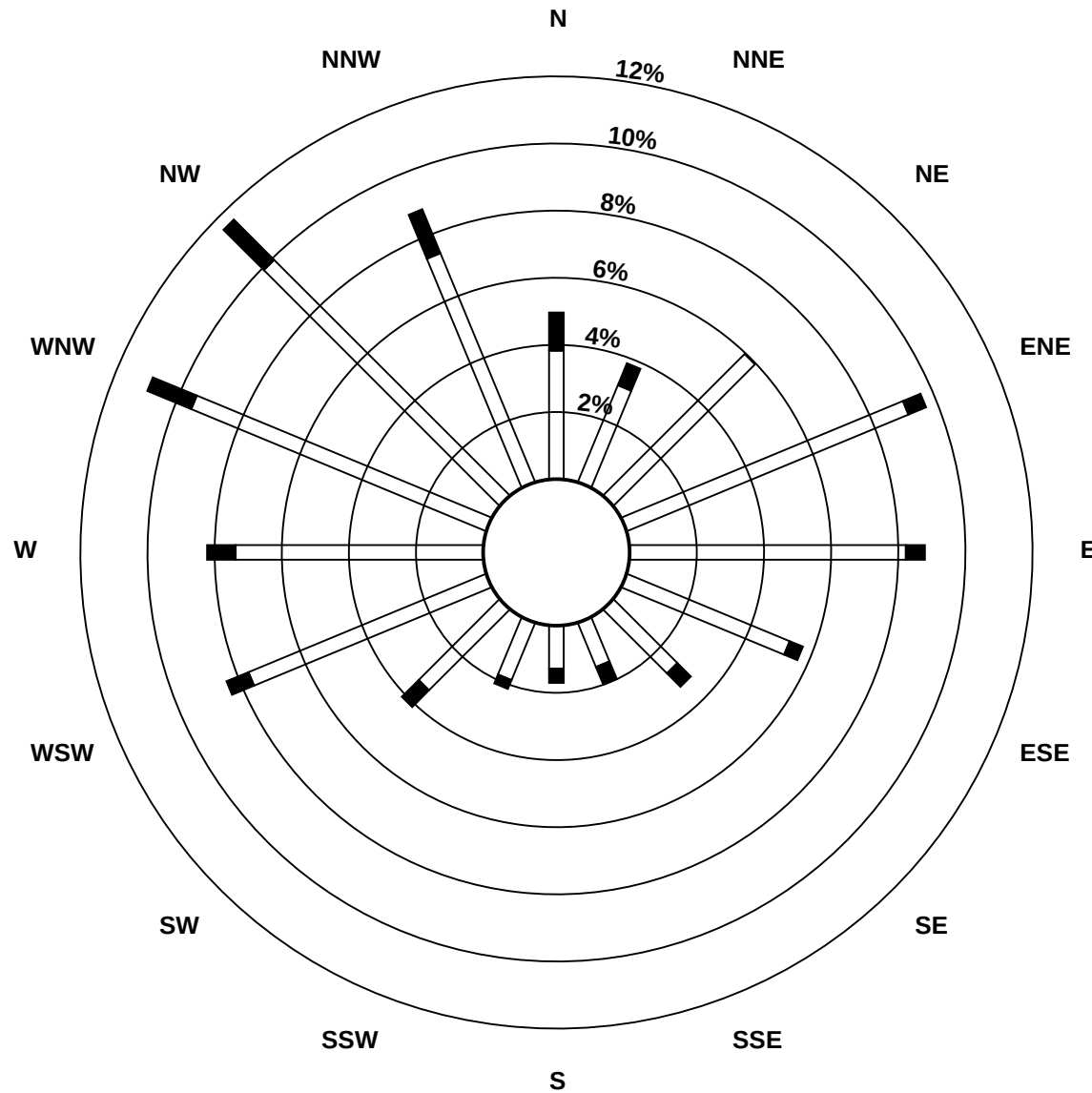
Henry Pirker - March 2012



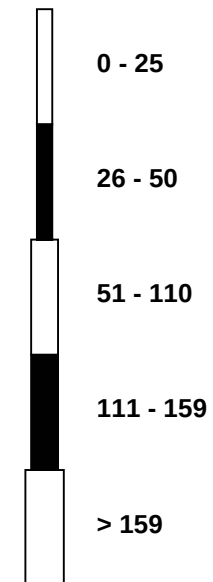
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - March 2012

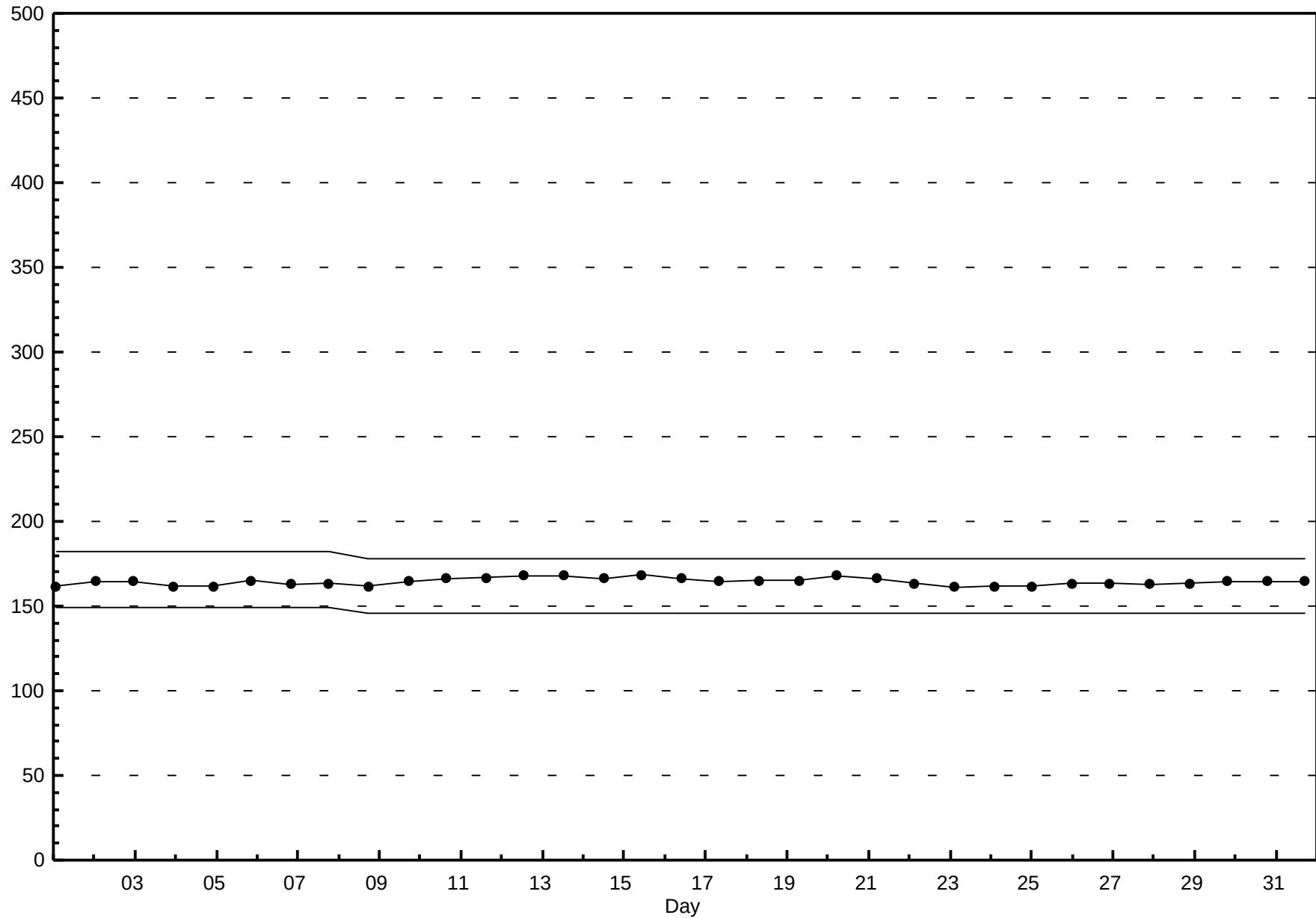


Pollutant Classes (ppb)



Span Responses

Nitrogen Dioxide (NO₂)
Henry Pirker - March 2012



Hourly Averages

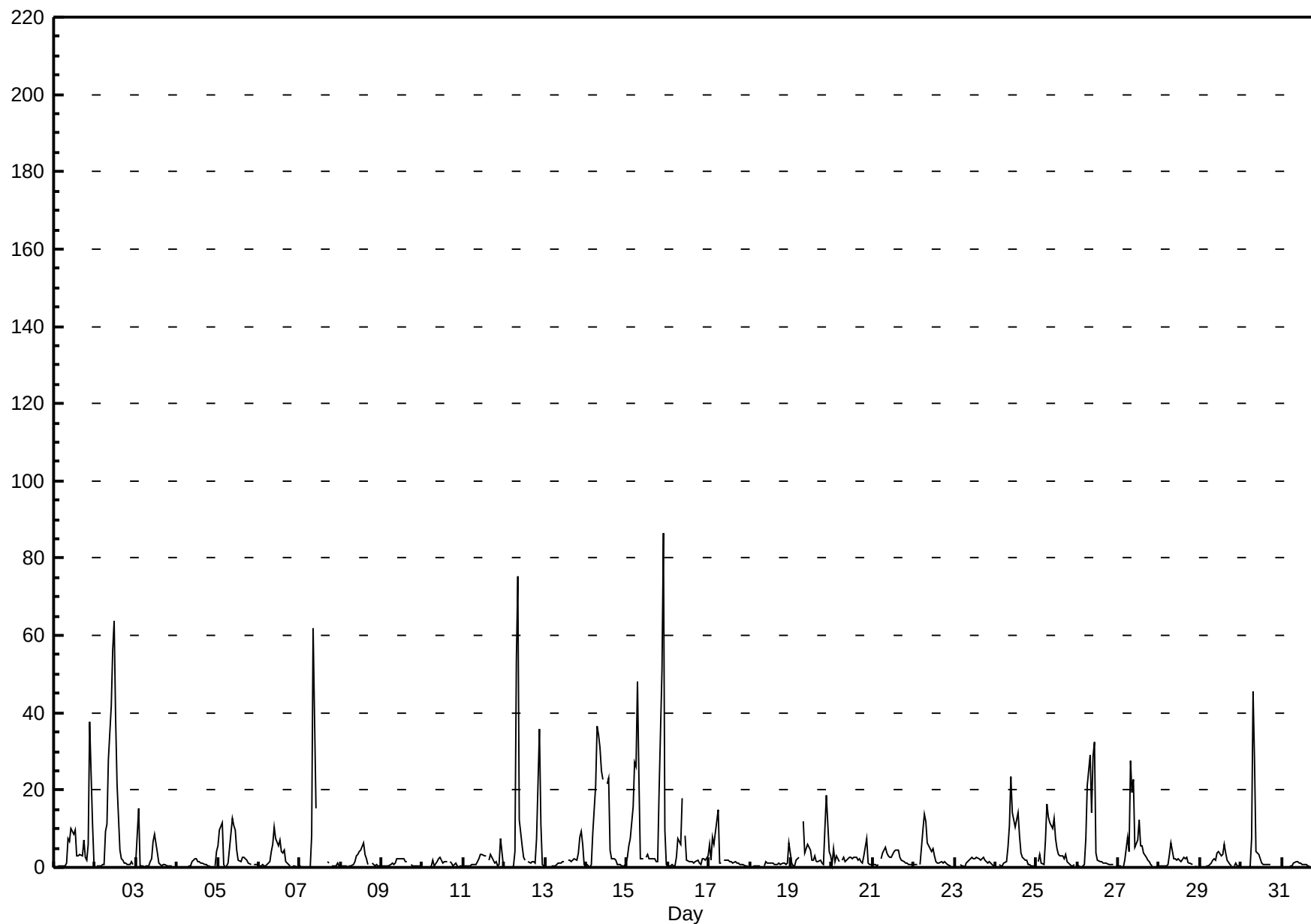
Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 86.4 ppb on Mar 15 22:00 Maximum Daily Average: 15.0 ppb on Mar 15																								Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 39 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on Mar 4 04:00 Minimum Daily Average: 0.9 ppb on Mar 4 Maximum Diurnal Average: 12.0 ppb at hour 9 Minimum Diurnal Average: 0.8 ppb at hour 1 Monthly Average: 4.10 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.5 Median = 1.3 Q ₃ = 3.1 P ₉₀ = 9.8 P ₉₉ = 49.5																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	A	0	0	0	0	0	1	7	7	10	9	10	3	3	4	3	7	3	2	6	38	11	1	5.5	37.8
2-Mar	A	0	0	0	1	1	9	11	28	42	56	64	39	22	4	2	2	1	1	1	1	1	1	A	13.1	63.7
3-Mar	2	15	0	0	0	0	0	0	1	2	7	8	4	1	1	0	1	1	0	0	0	0	A	0	2.0	15.2
4-Mar	0	0	0	0	0	0	0	0	1	2	2	2	2	1	1	1	1	1	0	0	0	A	0	4	0.9	4.1
5-Mar	5	10	11	1	0	1	1	5	13	11	10	4	2	1	3	3	2	2	1	1	A	1	1	1	3.8	12.7
6-Mar	0	0	1	0	1	1	1	4	6	10	8	6	7	4	4	5	1	1	1	A	0	0	0	0	2.7	10.5
7-Mar	0	0	0	0	0	0	0	8	62	15	C	C	C	C	C	C	1	1	A	0	0	0	1	0	--	62.0
8-Mar	0	0	0	0	0	0	0	1	2	3	3	4	4	6	3	2	1	A	1	1	0	1	0	0	1.6	6.4
9-Mar	0	0	0	0	0	1	1	1	1	2	2	2	2	2	1	2	A	1	0	0	0	0	0	0	0.9	2.3
10-Mar	0	0	0	0	0	0	2	1	2	2	3	2	1	2	1	A	2	1	0	1	0	0	0	1	0.9	2.6
11-Mar	0	0	0	1	1	1	1	1	1	2	3	3	3	3	A	2	3	2	1	1	0	1	7	0	1.7	7.4
12-Mar	0	0	0	0	0	0	4	54	75	12	5	3	2	A	2	1	1	2	1	7	36	11	1	0	9.5	75.3
13-Mar	0	0	0	0	0	1	1	1	1	1	1	1	A	2	2	1	2	2	2	4	8	9	6	1	2.0	9.2
14-Mar	1	1	0	1	9	21	37	34	31	25	23	A	22	23	5	2	2	2	1	1	1	0	0	1	10.5	36.6
15-Mar	3	6	7	15	27	26	48	23	2	2	A	3	3	2	2	2	2	1	2	20	51	86	10	1	15.0	86.4
16-Mar	0	0	1	0	0	2	7	6	18	A	8	2	2	2	1	1	1	2	1	1	2	2	2	3	2.9	17.8
17-Mar	6	2	8	6	12	15	1	1	A	2	2	2	1	2	1	2	1	1	1	1	1	0	0	0	2.9	14.9
18-Mar	0	0	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	1.0	6.2	
19-Mar	1	1	0	2	2	3	A	12	4	5	6	4	2	2	3	2	1	2	1	1	10	19	4	3	3.9	18.8
20-Mar	1	5	2	3	2	A	2	2	2	2	3	2	2	3	3	2	2	2	1	3	8	1	1	1	2.3	7.6
21-Mar	1	1	0	1	A	2	4	5	4	3	3	3	4	4	4	4	3	2	2	1	1	1	1	1	2.3	5.1
22-Mar	1	1	1	A	1	10	14	12	6	6	4	5	3	1	1	1	1	1	1	1	1	0	0	0	3.1	13.8
23-Mar	0	0	A	1	0	1	0	1	2	2	2	2	2	3	2	2	2	3	2	1	1	1	1	1	1.4	2.6
24-Mar	0	A	1	0	0	1	2	5	11	24	14	10	12	14	8	4	3	2	2	1	1	1	0	0	5.0	23.6
25-Mar	A	1	3	1	1	7	16	13	12	10	13	7	5	3	3	3	2	3	1	1	0	0	1	A	4.9	16.4
26-Mar	1	0	0	0	1	7	21	29	14	29	32	4	2	1	2	1	1	1	1	1	1	1	A	0	6.5	32.3
27-Mar	0	0	0	0	2	8	4	28	20	23	5	7	12	6	6	4	3	2	1	1	0	A	0	0	5.7	27.6
28-Mar	1	0	0	1	0	1	4	6	2	2	2	2	2	2	3	2	3	1	1	1	A	0	0	0	1.6	6.4
29-Mar	0	0	0	0	0	0	1	2	2	2	4	4	3	3	6	4	2	1	0	A	0	1	0	0	1.6	5.8
30-Mar	0	0	0	0	0	0	8	45	28	4	3	2	1	1	1	1	1	1	A	0	0	0	0	0	4.2	45.3
31-Mar	0	0	0	0	0	0	0	1	2	1	1	1	1	1	1	1	0	A	1	1	4	15	27	9	2.8	26.7
0.8 1.6 1.3 1.2 2.1 3.7 6.4 10.5 12.0 8.5 8.2 5.9 5.4 4.2 2.7 2.1 1.7 1.7 1.1 1.9 4.7 6.7 2.7 1.2 5.8 15.2 11.4 15.5 27.1 26.0 48.1 53.5 75.3 41.9 56.2 63.7 38.7 23.3 8.3 4.6 3.3 7.2 2.7 19.9 50.9 86.4 26.7 8.8																								Diurnal Average	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Henry Pirker - March 2012



Hourly Maximums

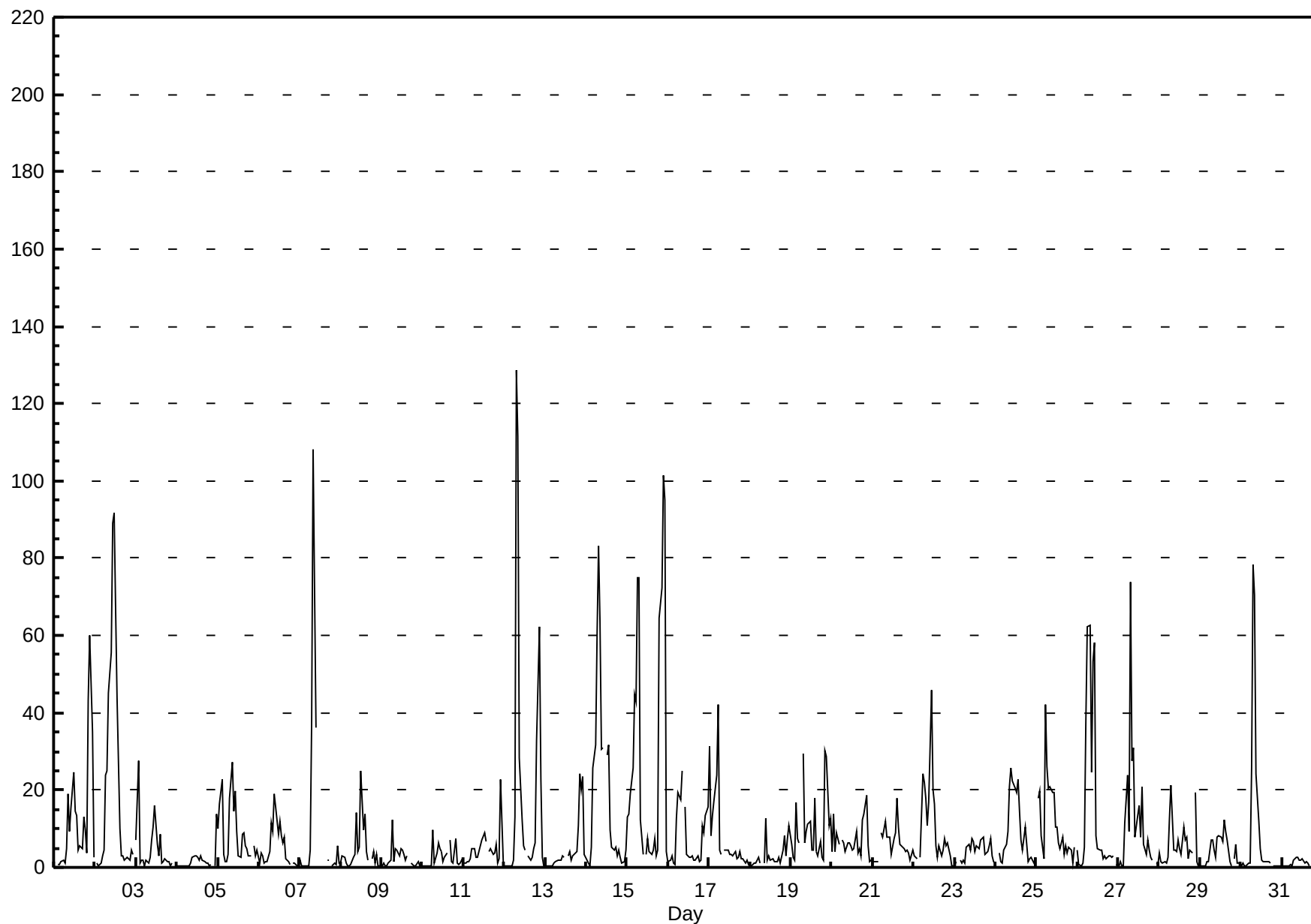
Nitrogen Oxide (NO) - ppb

Henry Pirker - March 2012

Maximum Value: 128.5 ppb on Mar 12 08:00																				Maximum Daily Average: 30.5 ppb on Mar 15					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 7 06:00																				Minimum Daily Average: 1.8 ppb on Mar 4					Hours of Data: 705	
Maximum Diurnal Average: 25.4 ppb at hour 8																				Minimum Diurnal Average: 3.4 ppb at hour 1					Hours of Missing Data: 39	
Monthly Average: 9.22 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 1.5 Median = 3.7 Q ₃ = 8.9 P ₉₀ = 24.0 P ₉₉ = 87.6					Hours of Calibration: 39	
																									Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	A	1	1	1	2	1	5	19	9	15	25	15	14	4	6	5	13	10	4	43	60	35	3	12.6	60.2
2-Mar	A	1	0	1	3	4	24	25	45	56	89	92	67	44	10	3	3	2	2	2	4	4	4	A	22.0	91.9
3-Mar	7	28	1	2	2	0	2	1	2	7	11	16	6	3	8	1	1	2	1	1	0	1	A	0	4.6	27.6
4-Mar	0	0	0	0	0	0	0	0	1	3	3	3	2	2	3	2	2	1	1	0	1	A	0	14	1.8	13.9
5-Mar	10	17	23	3	1	1	3	18	27	15	20	9	3	3	9	9	6	5	3	3	A	6	3	4	8.7	27.4
6-Mar	1	4	3	1	1	1	4	11	9	19	16	9	12	8	7	8	2	1	1	A	1	1	0	0	5.3	18.9
7-Mar	2	0	0	0	0	0	4	38	108	36	C	C	C	C	C	C	2	2	A	0	1	1	5	1	--	108.3
8-Mar	1	3	3	1	0	0	1	3	3	14	4	5	25	10	14	4	2	A	2	4	1	3	0	0	4.5	24.9
9-Mar	0	1	0	0	1	2	12	1	5	4	3	5	4	3	2	3	A	1	1	0	0	1	0	0	2.4	12.2
10-Mar	0	0	0	0	0	0	10	1	4	6	5	4	1	2	4	A	7	2	1	7	1	1	1	2	2.7	9.8
11-Mar	1	1	1	1	2	5	5	2	2	4	5	7	9	7	A	4	5	3	4	6	1	2	23	0	4.5	22.9
12-Mar	0	0	0	0	0	2	13	129	111	28	12	6	4	A	3	2	2	5	6	33	62	23	3	0	19.4	128.5
13-Mar	0	0	0	0	0	1	1	2	2	2	3	2	A	3	4	2	3	3	4	11	24	20	23	3	5.1	24.3
14-Mar	2	1	0	5	26	32	61	83	63	30	31	A	29	32	10	5	4	5	3	5	2	1	1	5	19.0	83.0
15-Mar	13	14	19	26	45	43	75	75	12	3	A	3	7	4	3	4	7	3	4	65	72	102	95	4	30.5	101.5
16-Mar	1	2	3	1	1	13	19	17	25	A	16	3	3	3	3	2	2	3	1	2	11	9	13	16	7.4	25.0
17-Mar	31	8	13	17	24	42	4	3	A	4	4	4	3	3	3	4	2	3	4	2	2	1	2	1	8.2	42.3
18-Mar	0	0	1	1	2	2	1	A	1	13	2	3	2	2	1	1	1	2	1	4	8	3	7	11	3.2	12.7
19-Mar	6	2	2	17	7	6	A	29	6	9	11	12	4	4	18	4	3	7	2	2	30	29	11	12	10.3	30.2
20-Mar	4	14	4	9	6	A	7	6	4	6	6	5	4	5	9	4	5	3	12	14	18	5	1	2	6.8	18.5
21-Mar	1	1	1	1	A	9	8	12	8	8	8	3	8	9	18	10	6	6	5	4	4	4	2	4	6.2	18.1
22-Mar	3	3	2	A	2	24	22	18	11	17	46	20	16	6	2	6	3	4	7	6	6	3	0	0	9.9	45.9
23-Mar	0	1	A	2	1	2	1	5	6	5	7	7	4	6	5	7	7	8	3	4	5	7	3	1	4.3	7.9
24-Mar	1	A	4	1	1	4	6	9	21	26	22	20	19	23	14	7	4	10	6	1	2	2	1	2	9.2	25.8
25-Mar	A	18	20	8	2	42	26	20	21	19	20	10	10	6	5	8	3	5	4	5	5	1	5	A	12.1	42.2
26-Mar	4	1	0	1	5	37	62	63	25	53	58	8	5	4	4	2	3	2	3	3	3	3	A	1	15.3	62.7
27-Mar	0	1	0	0	11	24	9	74	28	31	8	13	16	8	21	6	3	7	5	3	2	A	1	1	11.9	73.8
28-Mar	4	1	1	1	1	2	13	21	4	4	4	7	5	3	11	7	8	2	5	4	A	19	1	0	5.7	21.4
29-Mar	0	0	0	0	1	1	7	7	4	3	8	8	8	7	12	9	7	1	0	A	2	6	1	1	4.2	12.3
30-Mar	0	1	0	0	1	1	26	78	70	24	12	5	2	1	1	1	1	1	A	0	0	0	0	0	10.0	78.3
31-Mar	0	0	0	0	0	1	0	2	2	2	2	2	2	1	2	1	0	A	4	1	30	39	47	33	7.6	47.2
3.4 4.4 3.6 3.6 5.1 10.3 14.3 25.4 21.8 15.4 15.6 11.0 10.3 7.8 7.3 4.6 3.8 4.0 3.7 6.8 11.8 12.4 10.1 4.4																									Diurnal Average	
31.5 27.6 22.7 25.8 44.8 43.1 74.9 128.5 111.4 55.6 89.1 91.9 67.2 44.0 20.7 10.3 7.8 13.0 12.2 64.6 72.4 101.5 95.2 33.0																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - March 2012



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

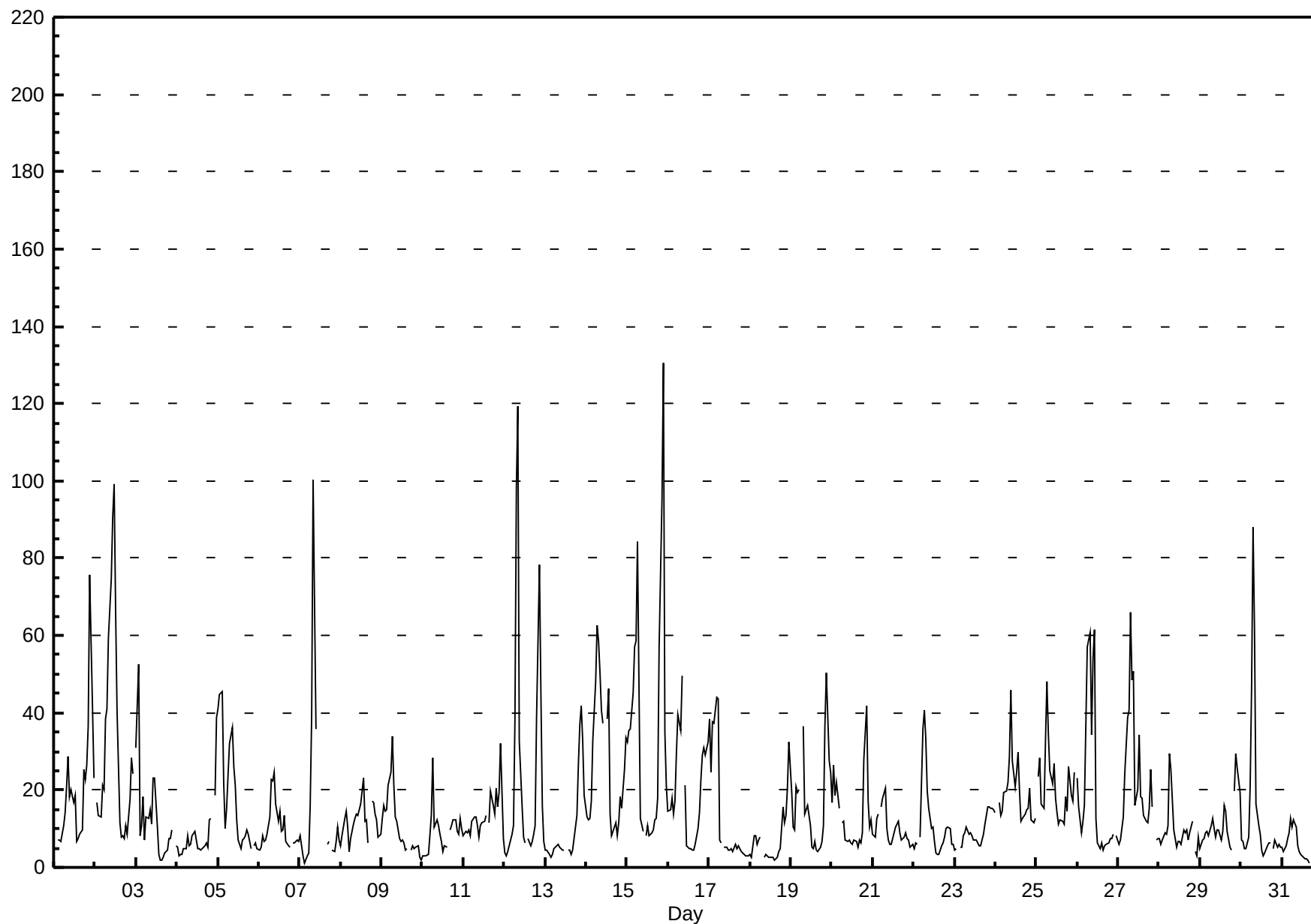
Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 130.7 ppb on Mar 15 22:00 Maximum Daily Average: 36.8 ppb on Mar 15																								Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 39 Percent Operational Time: 100.0		
Minimum Value: 1 ppb on Mar 31 17:00 Minimum Daily Average: 7.4 ppb on Mar 18 Maximum Diurnal Average: 30.6 ppb at hour 8 Minimum Diurnal Average: 7.4 ppb at hour 16 Monthly Average: 15.98 ppb Percentiles: P ₁ = 2.0 P ₁₀ = 4.4 Q ₁ = 6.2 Median = 10.3 Q ₃ = 18.8 P ₉₀ = 36.6 P ₉₉ = 88.2																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	4	A	7	7	7	11	14	21	29	18	20	17	19	7	9	10	25	23	27	37	76	41	23	19.9	75.7	
2-Mar	A	17	13	13	21	20	39	41	59	75	91	99	67	41	11	8	8	7	11	8	17	28	24	A	32.7	99.3
3-Mar	31	53	8	11	18	7	13	13	15	11	23	23	10	3	2	2	2	4	4	8	8	10	A	6	12.4	52.6
4-Mar	5	3	3	3	5	5	8	5	6	8	9	7	5	5	4	5	5	6	5	12	13	A	19	39	8.1	38.6
5-Mar	41	45	45	22	10	15	24	32	36	26	21	12	7	5	7	8	8	10	9	5	A	5	6	5	17.6	45.4
6-Mar	4	5	8	7	7	8	13	23	22	25	16	12	14	9	10	13	7	6	5	A	6	6	7	7	10.5	24.6
7-Mar	8	6	3	1	3	4	17	39	100	36	C	C	C	C	C	C	6	7	A	5	4	7	11	7	--	100.4
8-Mar	5	8	13	15	10	4	8	11	13	14	14	15	17	23	12	12	6	A	17	17	14	12	8	9	12.0	23.2
9-Mar	13	16	15	15	21	25	34	21	13	12	7	7	7	6	4	5	A	4	5	5	5	5	3	2	10.9	34.1
10-Mar	3	3	3	3	8	13	29	11	12	11	9	7	4	6	5	A	10	11	12	12	9	8	13	10	9.2	28.5
11-Mar	8	9	9	10	8	12	13	13	11	8	11	12	12	13	A	11	20	16	14	21	16	19	32	8	13.3	31.9
12-Mar	4	3	4	6	8	11	38	98	119	33	16	8	6	A	8	6	7	8	11	39	78	45	16	7	25.2	119.3
13-Mar	5	5	4	3	3	5	5	6	5	5	5	4	A	4	5	3	5	8	13	26	37	42	33	19	10.8	41.7
14-Mar	13	12	13	17	33	48	63	59	51	40	37	A	38	46	14	8	10	11	8	11	18	15	25	34	27.2	62.8
15-Mar	32	36	36	45	57	59	84	49	13	9	A	8	11	8	9	10	12	13	18	57	95	131	35	21	36.8	130.7
16-Mar	15	15	18	14	17	29	39	36	49	A	21	6	5	5	4	4	6	10	14	23	29	31	29	32	19.7	49.5
17-Mar	38	25	38	37	44	44	7	6	A	5	5	5	4	5	4	6	5	6	5	4	4	3	3	3	13.3	43.8
18-Mar	3	2	8	8	6	7	8	A	3	4	3	3	3	2	2	2	3	4	5	16	12	13	21	32	7.4	32.3
19-Mar	19	10	10	21	20	20	A	36	14	15	16	11	5	5	7	4	4	5	7	11	37	50	27	25	16.5	50.2
20-Mar	17	26	19	22	15	A	12	12	7	7	6	6	7	7	5	7	6	9	28	42	17	10	12	13.3	41.8	
21-Mar	9	8	13	14	A	16	18	21	10	7	6	6	9	10	11	12	9	7	8	9	8	7	5	6	9.8	20.7
22-Mar	5	6	6	A	8	36	41	33	20	15	10	10	7	4	3	3	6	6	8	10	11	10	6	6	11.7	40.8
23-Mar	4	5	A	5	5	8	9	10	9	9	8	7	7	7	6	5	7	9	11	16	16	15	15	15	9.1	15.7
24-Mar	14	A	17	14	15	19	20	22	29	46	28	21	25	30	20	12	13	14	15	15	21	12	12	13	19.2	45.7
25-Mar	A	23	29	16	15	33	48	35	25	22	27	18	14	11	12	12	11	18	15	26	19	17	25	A	21.4	48.0
26-Mar	23	16	9	12	16	36	57	61	34	54	62	13	6	5	6	5	6	6	6	7	7	8	A	8	20.2	61.5
27-Mar	6	7	10	13	24	39	41	66	48	51	16	20	34	18	18	14	12	11	15	25	16	A	7	7	22.6	66.1
28-Mar	7	6	7	9	9	11	29	25	10	7	5	7	7	6	10	9	10	7	9	12	A	4	3	8	9.4	29.4
29-Mar	5	7	8	9	9	8	11	13	10	8	10	10	7	9	16	15	9	5	4	A	20	29	26	20	11.7	29.3
30-Mar	7	7	5	5	8	21	47	88	61	17	11	9	5	3	4	6	6	6	A	5	7	5	6	5	14.9	87.9
31-Mar	5	4	6	7	9	13	11	12	10	6	4	3	3	2	2	2	1	A	6	17	39	56	66	37	14.0	65.7
12.3 13.4 12.8 12.8 14.7 19.5 26.6 30.6 28.1 20.1 17.8 13.3 12.6 10.6 7.9 7.4 7.6 8.9 10.1 16.5 22.2 23.8 18.4 14.6 41.1 52.6 45.4 45.0 56.9 58.5 84.2 98.1 119.3 74.7 90.7 99.3 66.6 46.3 19.7 14.7 19.6 25.4 22.7 56.8 95.1 130.7 65.7 38.6																								Diurnal Average	Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - March 2012



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

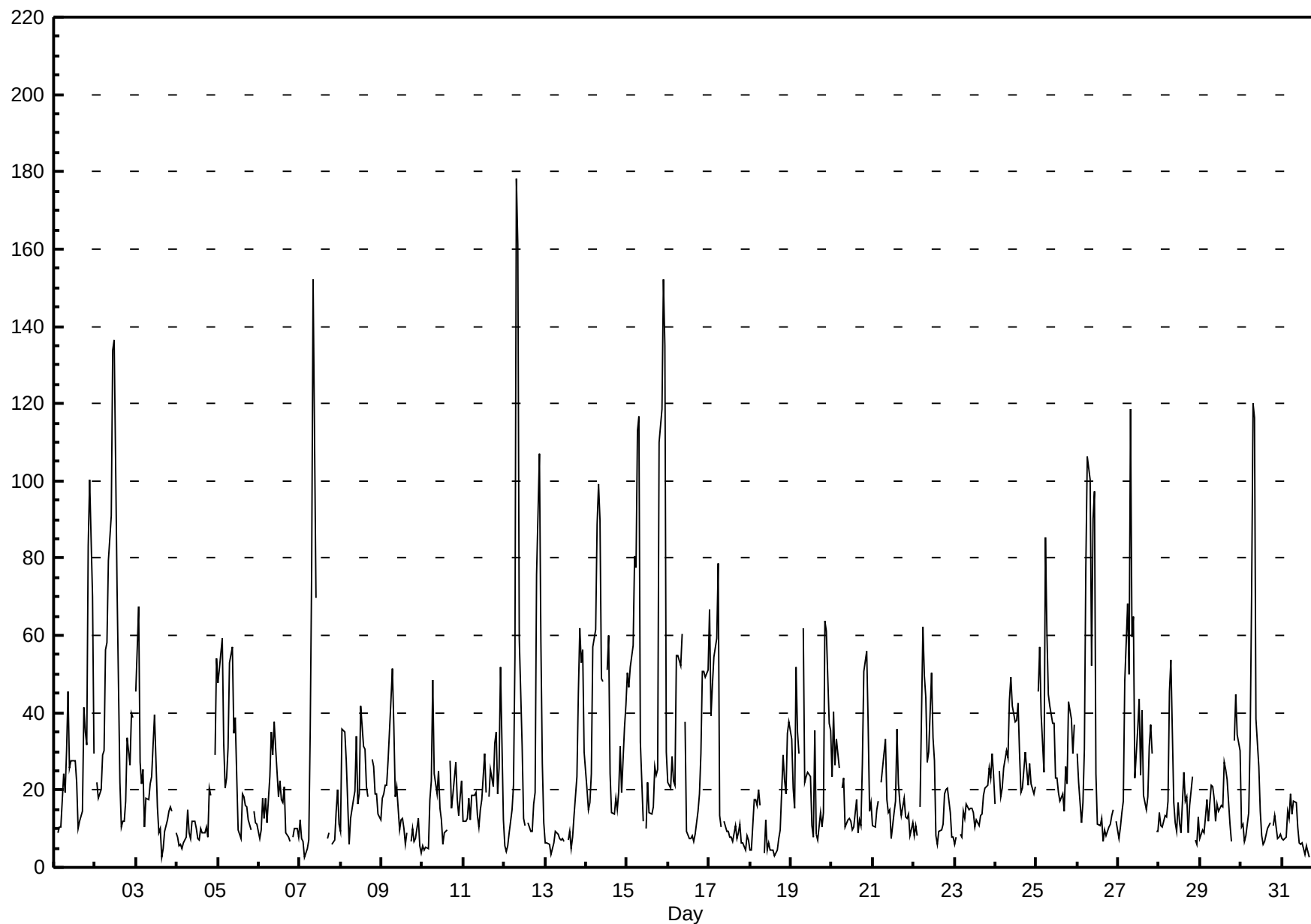
Henry Pirker - March 2012

Maximum Value: 178.2 ppb on Mar 12 08:00																					Maximum Daily Average: 58.0 ppb on Mar 15										Hours in Service: 744	
Minimum Value: 2 ppb on Mar 3 16:00																					Minimum Daily Average: 12.5 ppb on Mar 4										Hours of Data: 705	
Maximum Diurnal Average: 50.8 ppb at hour 8																					Minimum Diurnal Average: 12.7 ppb at hour 16										Hours of Missing Data: 39	
Monthly Average: 25.70 ppb																					Percentiles: P ₁ = 3.8 P ₁₀ = 7.1 Q ₁ = 10.4 Median = 17.7 Q ₃ = 30.8 P ₉₀ = 54.6 P ₉₉ = 133.2										Hours of Calibration: 39	
																					Percent Operational Time: 100.0											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum						
1-Mar	6	A	9	10	11	24	19	30	45	26	28	28	28	22	10	12	14	41	35	32	83	100	70	29	31.0	100.3						
2-Mar	A	22	18	20	29	30	56	58	79	91	134	137	105	73	22	10	12	12	17	33	26	40	39	A	48.4	136.5						
3-Mar	45	68	27	21	25	10	18	17	21	23	32	39	16	9	10	2	5	9	12	15	16	15	A	9	20.3	67.6						
4-Mar	8	6	6	5	7	8	15	9	8	12	12	10	7	7	10	9	9	11	8	21	19	A	29	54	12.5	53.9						
5-Mar	48	51	59	32	20	23	31	53	57	35	39	24	10	8	19	18	16	16	12	10	A	15	12	11	26.9	59.2						
6-Mar	8	10	18	13	18	12	24	35	29	38	31	18	22	18	17	21	9	8	7	A	8	10	10	8	16.9	37.8						
7-Mar	12	7	7	3	5	7	35	77	152	70	C	C	C	C	C	C	8	9	A	6	7	14	20	11	--	152.3						
8-Mar	9	36	35	28	17	6	13	18	20	34	16	19	42	31	31	21	18	A	28	26	19	19	14	12	22.2	41.8						
9-Mar	18	19	21	21	27	43	52	37	18	21	10	12	13	10	6	9	A	7	10	7	7	13	5	4	17.0	51.6						
10-Mar	5	5	5	5	17	22	49	24	19	25	15	12	6	9	10	A	28	15	19	27	17	14	18	22	17.0	48.6						
11-Mar	12	12	13	18	12	19	19	19	13	10	15	18	29	19	A	18	25	21	32	35	19	26	52	12	20.4	51.8						
12-Mar	5	4	5	9	15	21	55	178	161	59	31	13	11	A	12	9	9	17	19	76	107	59	27	12	39.8	178.2						
13-Mar	6	6	6	3	5	6	9	8	7	7	7	7	A	7	9	5	8	13	24	45	62	53	56	30	17.0	61.8						
14-Mar	20	15	17	24	57	62	89	99	90	49	48	A	51	60	24	14	14	18	15	20	31	20	36	42	39.7	99.1						
15-Mar	51	47	52	58	80	78	113	117	32	12	A	10	22	14	14	16	26	24	25	110	119	152	135	30	58.0	152.1						
16-Mar	22	20	29	23	21	55	55	52	60	A	38	9	8	8	8	7	9	15	19	30	51	51	49	51	29.9	60.5						
17-Mar	67	39	47	54	59	79	13	10	A	12	9	9	8	8	7	11	8	9	11	6	6	4	8	7	21.5	78.6						
18-Mar	5	4	17	17	16	20	16	A	4	12	4	6	4	4	3	4	4	7	10	29	23	19	35	38	13.2	37.8						
19-Mar	33	20	15	52	35	29	A	62	22	24	25	23	11	8	36	8	7	14	10	14	64	61	37	35	28.1	63.9						
20-Mar	23	40	26	33	26	A	21	23	11	12	13	12	10	11	18	9	12	11	27	51	56	37	14	17	22.3	56.0						
21-Mar	11	10	15	17	A	22	26	33	18	14	15	7	14	17	36	22	17	14	18	13	13	14	8	12	16.8	35.9						
22-Mar	8	11	8	A	16	62	50	44	27	30	50	34	28	8	6	9	10	11	19	20	20	14	8	8	21.8	62.2						
23-Mar	6	8	A	8	8	14	13	17	15	15	15	14	10	12	11	13	14	19	20	21	26	23	29	24	15.5	29.4						
24-Mar	16	A	25	18	20	26	30	28	43	49	42	38	38	43	30	19	20	30	25	21	27	22	19	21	28.3	49.3						
25-Mar	A	45	57	40	25	85	61	45	42	37	37	23	23	19	17	19	15	26	22	43	38	29	37	A	35.7	85.4						
26-Mar	29	22	12	17	31	78	106	100	52	90	97	24	11	11	13	7	10	8	10	11	13	15	A	12	33.9	106.3						
27-Mar	7	10	14	17	48	68	50	119	60	65	23	36	44	24	41	19	15	18	31	37	30	A	9	9	34.5	118.5						
28-Mar	14	11	10	13	13	17	45	54	17	11	9	17	11	9	25	17	18	9	16	24	A	7	6	13	16.8	53.6						
29-Mar	8	10	9	13	17	12	21	21	18	12	16	14	16	16	27	25	23	11	7	A	33	45	34	30	19.0	44.8						
30-Mar	10	11	7	8	14	33	71	120	116	39	26	15	8	6	7	10	11	11	A	11	13	7	8	8	24.9	120.2						
31-Mar	7	7	8	15	13	19	14	17	17	10	6	6	6	3	6	4	2	A	15	35	72	79	86	67	22.5	86.1						
18.0 19.9 20.0 20.5 23.6 33.1 39.6 50.8 42.5 31.5 29.1 21.9 21.1 17.0 16.6 12.7 13.2 15.0 18.1 28.5 35.3 33.7 31.5 22.1																									Diurnal Average							
66.7 67.6 59.2 57.5 80.4 85.4 113.0 178.2 161.2 91.1 133.8 136.5 105.0 72.9 40.8 25.2 27.7 41.4 34.9 110.1 118.5 152.1 135.1 67.4																									Diurnal Maximum							
C - Calibration A - Automated Daily Zero Span																																

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

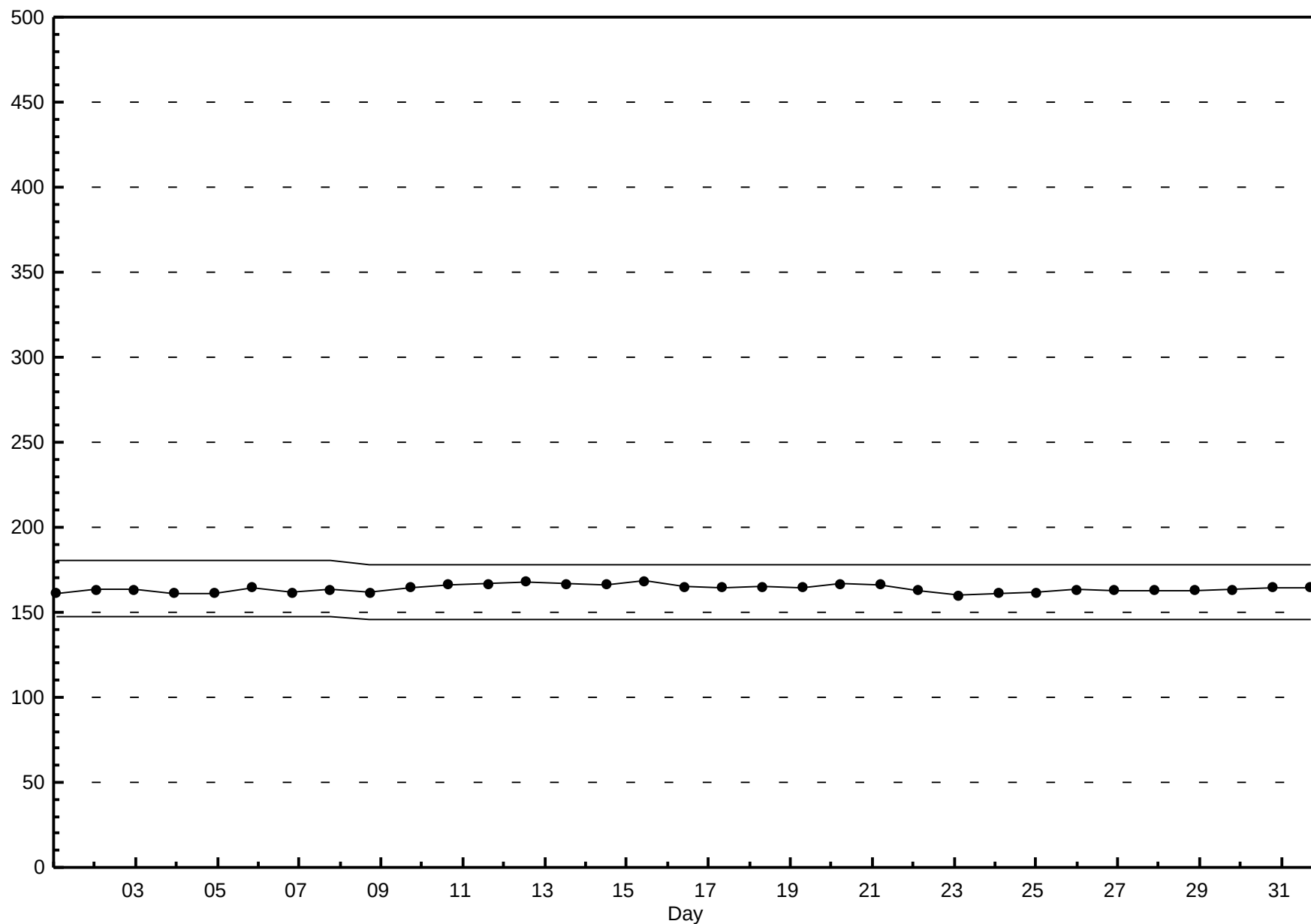
Henry Pirker - March 2012



Span Responses

Oxides of Nitrogen (NO_x)

Henry Pirker - March 2012



Hourly Averages

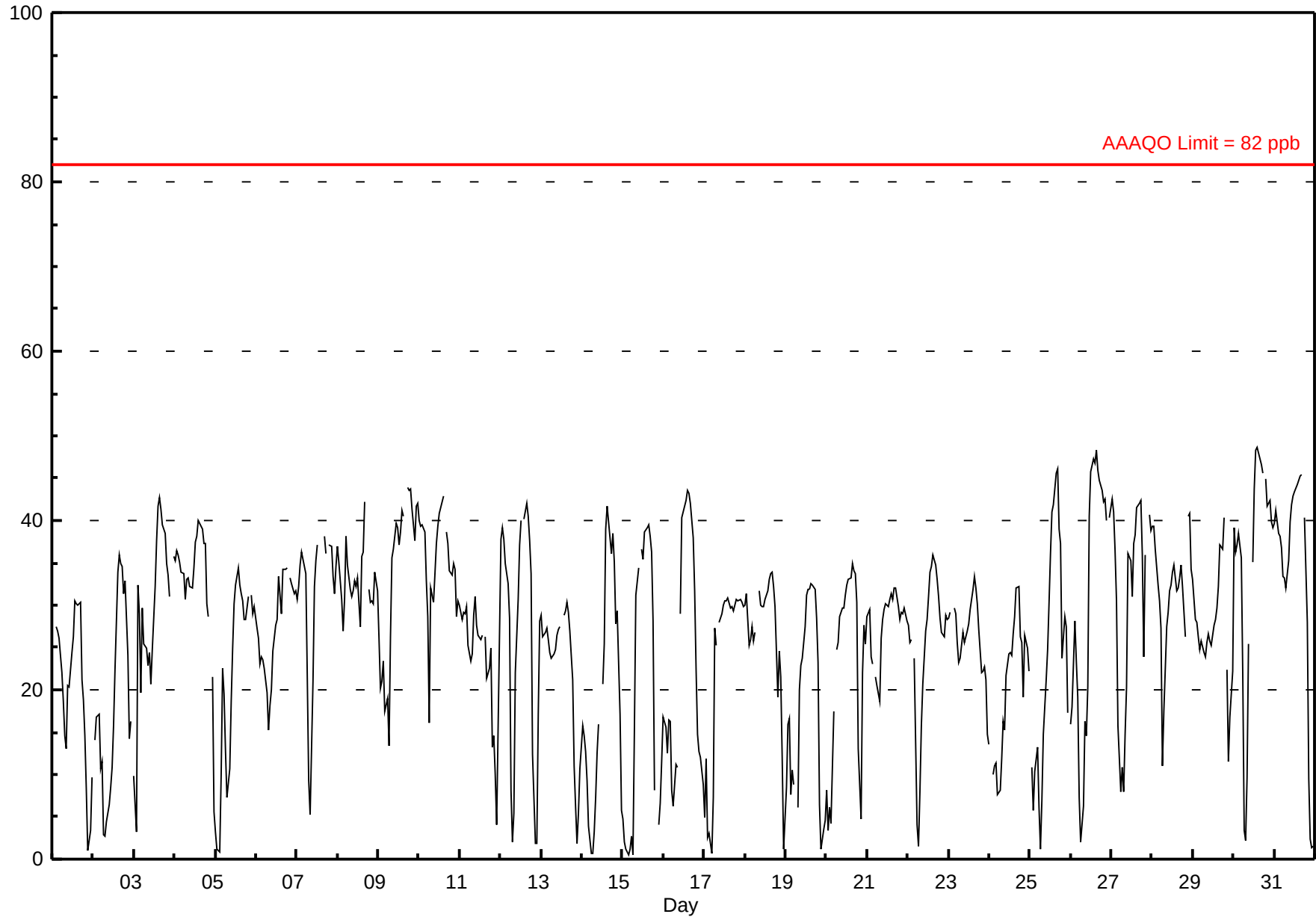
Ozone (O₃) - ppb

Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 48.6 ppb on Mar 30 15:00 Maximum Daily Average: 35.1 ppb on Mar 30																								Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 36 Percent Operational Time: 99.7		
Minimum Value: 0 ppb on Mar 15 04:00 Minimum Daily Average: 18.3 ppb on Mar 2 Maximum Diurnal Average: 36.6 ppb at hour 16 Minimum Diurnal Average: 15.9 ppb at hour 7 Monthly Average: 26.46 ppb Percentiles: P ₁ = 1.1 P ₁₀ = 8.1 Q ₁ = 20.0 Median = 28.8 Q ₃ = 34.4 P ₉₀ = 40.0 P ₉₉ = 46.5																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	30	A	27	27	26	22	19	15	13	20	20	24	26	31	30	30	30	21	19	15	8	1	3	10	20.4	30.6
2-Mar	A	14	17	17	11	12	3	3	4	6	8	11	16	22	34	36	35	35	31	33	24	14	16	A	18.3	35.9
3-Mar	10	3	32	29	20	30	25	25	23	24	21	25	32	38	42	43	41	40	39	35	33	31	A	36	29.4	42.7
4-Mar	35	36	36	35	34	34	31	33	33	32	32	34	37	38	40	40	39	37	37	30	29	A	22	6	33.1	40.0
5-Mar	3	1	1	10	22	20	13	7	11	19	25	30	32	34	32	31	31	28	28	31	A	31	29	30	21.7	34.3
6-Mar	27	26	23	24	24	23	20	15	18	20	25	28	28	33	31	29	34	34	34	A	33	32	31	32	27.2	34.4
7-Mar	31	32	35	36	35	34	22	9	5	21	32	35	37	C	C	C	38	36	A	37	37	33	31	35	30.6	38.1
8-Mar	37	35	31	27	31	38	35	32	31	32	33	32	33	27	36	36	42	A	32	30	31	30	34	32	32.9	42.1
9-Mar	26	20	21	23	17	19	13	26	36	37	40	39	37	39	41	40	A	44	44	44	41	38	42	42	33.4	44.0
10-Mar	40	39	40	39	33	29	16	32	30	34	37	39	41	42	43	A	39	37	34	34	35	34	29	30	35.0	43.0
11-Mar	30	28	29	29	30	25	23	24	29	31	28	26	26	26	A	26	21	23	25	13	15	10	4	27	23.9	30.9
12-Mar	38	39	38	35	33	28	8	2	5	22	31	37	40	A	40	42	41	38	34	12	2	2	17	28	26.6	42.1
13-Mar	29	26	27	27	26	24	24	24	25	26	27	27	A	29	29	30	29	27	21	11	6	2	5	11	22.3	30.3
14-Mar	16	15	13	9	4	1	1	3	7	12	16	A	21	25	39	42	38	36	39	35	28	29	17	6	19.6	41.8
15-Mar	5	2	1	0	1	3	1	15	31	34	A	37	35	39	39	40	38	36	28	8	N	4	7	12	18.9	39.5
16-Mar	17	16	13	16	16	8	6	11	11	A	29	40	42	42	44	43	42	38	32	22	15	13	12	9	23.3	43.6
17-Mar	5	12	3	3	1	7	27	25	A	28	29	30	31	30	31	30	30	29	30	31	30	31	30	30	23.2	30.8
18-Mar	30	31	25	26	27	26	27	A	32	30	30	30	31	32	33	34	34	32	30	19	25	22	12	1	26.8	33.8
19-Mar	8	16	17	8	10	9	A	6	20	23	24	27	31	32	32	33	32	32	29	23	6	1	3	5	18.6	32.6
20-Mar	8	3	6	4	18	A	25	26	29	30	30	31	32	33	33	35	34	34	30	13	5	22	28	25	23.2	34.9
21-Mar	29	29	24	23	A	21	20	19	26	28	30	30	30	31	31	31	32	32	30	28	29	29	30	28	27.8	32.0
22-Mar	28	26	26	A	24	4	2	8	16	21	27	28	31	34	35	36	35	33	31	28	27	26	29	28	25.3	36.0
23-Mar	28	29	A	30	29	26	23	24	27	26	26	27	28	30	32	33	32	30	27	22	22	23	21	15	26.5	33.4
24-Mar	14	A	10	11	11	8	8	12	16	15	22	24	24	24	27	29	32	32	26	26	19	26	25	22	20.1	32.3
25-Mar	A	11	6	10	13	6	1	7	15	21	25	30	36	41	42	46	46	39	37	24	29	27	17	A	24.1	46.2
26-Mar	16	18	28	23	19	7	2	6	16	15	20	41	46	47	47	48	46	45	44	42	42	40	A	40	30.4	48.3
27-Mar	42	41	36	31	16	8	11	8	15	20	36	35	31	37	38	42	42	42	36	24	36	A	41	39	30.7	42.5
28-Mar	39	39	37	32	31	27	11	17	28	29	32	32	34	35	32	32	33	35	32	26	A	40	41	34	31.7	40.8
29-Mar	33	28	28	26	25	26	24	24	26	27	26	25	28	28	30	32	37	37	40	A	22	12	17	22	27.1	40.3
30-Mar	39	36	37	38	36	22	3	2	10	25	M	35	44	48	49	47	47	46	A	45	42	42	40	39	35.1	48.6
31-Mar	40	41	38	38	37	33	33	32	35	40	42	43	43	44	45	45	46	A	40	28	10	2	1	1	33.0	45.5
25.3 24.0 23.4 23.0 21.9 19.3 15.9 16.4 20.7 25.0 27.6 31.2 32.8 34.2 36.4 36.6 36.5 34.8 32.4 26.5 24.3 22.4 21.9 23.2																								Diurnal Average		
42.5 41.2 39.5 38.6 36.8 38.2 34.8 33.1 35.6 39.9 41.8 42.9 45.8 48.2 48.6 48.3 46.6 45.6 43.6 45.0 42.5 42.4 41.8 42.1																								Diurnal Maximum		
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																										

Hourly Averages

Ozone (O₃) - ppb
Henry Pirker - March 2012



Hourly Maximums

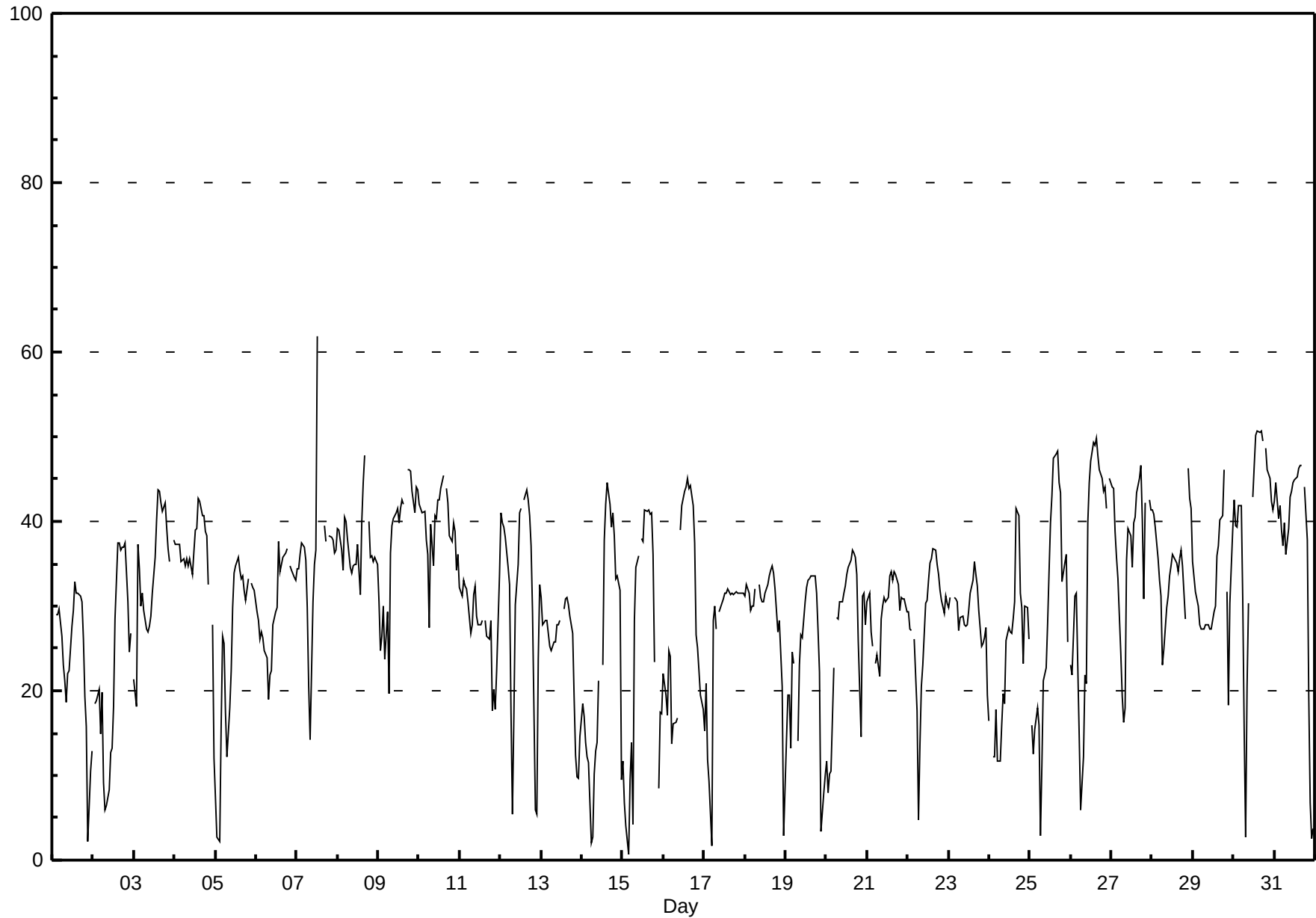
Ozone (O₃) - ppb

Henry Pirker - March 2012

Maximum Value: 61.8 ppb on Mar 7 13:00																								Maximum Daily Average: 39.5 ppb on Mar 30						Hours in Service: 744	
Minimum Value: 1 ppb on Mar 15 04:00																								Minimum Daily Average: 22.7 ppb on Mar 2						Hours of Data: 706	
Maximum Diurnal Average: 39.1 ppb at hour 17																								Minimum Diurnal Average: 21.2 ppb at hour 7						Hours of Missing Data: 38	
Monthly Average: 30.40 ppb																								Percentiles: P ₁ = 2.7 P ₁₀ = 14.7 Q ₁ = 25.6 Median = 31.5 Q ₃ = 37.6 P ₉₀ = 42.5 P ₉₉ = 49.4						Hours of Calibration: 36	
																								Percent Operational Time: 99.7							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	31	A	29	29	30	27	23	21	19	22	22	28	30	33	32	32	31	31	26	19	16	2	11	13	24.1	32.9					
2-Mar	A	19	19	20	15	20	9	6	6	8	13	13	18	29	37	37	37	37	37	37	30	25	27	A	22.7	37.4					
3-Mar	21	18	37	34	30	32	29	27	27	28	29	32	36	40	44	44	42	41	42	39	37	35	A	38	34.0	43.7					
4-Mar	37	37	37	37	35	36	35	36	35	36	34	36	39	39	43	42	41	41	39	38	32	A	28	12	35.9	42.7					
5-Mar	7	3	2	16	26	26	18	12	18	22	30	34	35	36	34	33	34	32	31	33	A	33	32	32	25.1	35.8					
6-Mar	29	28	26	27	26	25	24	19	22	22	28	29	30	38	34	35	36	36	37	A	35	34	33	33	29.9	37.7					
7-Mar	34	34	36	37	37	35	30	21	14	30	35	37	62	C	C	C	40	38	A	38	38	38	36	37	35.4	61.8					
8-Mar	39	39	37	34	41	40	38	35	34	35	35	35	37	31	40	45	48	A	40	36	36	35	36	35	37.4	47.8					
9-Mar	31	25	26	30	24	29	20	36	40	40	41	41	40	41	43	42	A	46	46	46	44	41	44	44	37.4	46.2					
10-Mar	42	41	41	41	38	36	28	40	35	41	40	42	42	44	45	A	44	44	42	38	38	40	39	34	36	39.5	45.4				
11-Mar	32	31	33	32	32	30	27	28	31	32	29	28	28	28	A	28	27	26	28	18	20	18	22	34	28.0	33.7					
12-Mar	41	40	39	38	35	33	17	5	17	30	35	41	41	A	43	44	42	41	37	29	6	5	24	33	31.1	43.7					
13-Mar	31	28	28	28	27	25	25	26	26	28	28	28	A	30	31	31	30	29	27	19	12	10	10	15	24.8	31.0					
14-Mar	19	17	14	12	12	2	3	10	13	14	21	A	23	38	42	45	42	39	41	38	33	33	32	10	24.0	44.5					
15-Mar	12	7	4	1	10	14	4	28	35	36	A	38	38	41	41	41	41	41	36	23	N	8	18	17	24.3	41.4					
16-Mar	22	19	17	25	24	14	16	16	17	A	39	42	44	44	45	44	44	42	37	27	25	22	19	18	28.8	45.0					
17-Mar	15	21	12	9	2	28	30	27	A	29	30	31	31	31	32	31	31	31	31	32	31	32	32	32	26.7	32.0					
18-Mar	31	33	32	29	30	30	32	A	33	31	31	31	32	33	34	34	35	34	32	27	28	24	21	3	29.4	34.7					
19-Mar	14	19	20	13	25	23	A	14	23	27	26	31	32	33	33	34	34	34	32	27	22	3	8	10	23.3	33.6					
20-Mar	12	8	10	10	23	A	29	28	31	31	32	32	34	35	35	37	36	36	34	26	15	31	32	28	27.1	36.6					
21-Mar	31	32	27	25	A	23	24	22	28	30	31	31	31	34	34	33	34	34	33	30	31	31	31	29	29.9	34.1					
22-Mar	29	27	27	A	26	18	5	14	20	23	30	31	33	35	36	37	37	35	34	32	31	29	31	30	28.2	36.8					
23-Mar	30	31	A	31	31	30	27	29	29	28	28	28	29	32	33	35	34	32	29	25	26	26	27	20	29.1	35.2					
24-Mar	16	A	12	12	18	12	12	16	20	19	26	27	27	27	28	31	41	41	31	30	23	30	30	26	24.1	41.5					
25-Mar	A	16	13	15	18	16	3	11	21	23	28	34	40	43	47	48	48	45	43	33	35	36	26	A	29.2	48.2					
26-Mar	23	22	31	31	23	15	6	12	22	21	40	45	47	49	49	50	48	46	45	44	44	41	A	45	34.7	49.8					
27-Mar	44	44	39	36	33	24	19	16	18	35	39	38	35	40	40	43	45	47	40	31	42	A	43	41	36.2	46.6					
28-Mar	41	41	39	36	33	31	23	25	30	31	33	35	36	36	35	34	36	37	35	28	A	46	43	42	35.0	46.2					
29-Mar	35	32	31	30	28	27	27	28	28	28	27	27	29	30	36	37	40	41	46	A	32	18	30	39	31.6	46.0					
30-Mar	43	40	39	42	42	31	15	3	20	30	M	43	47	50	51	50	51	50	A	49	46	45	42	41	39.5	50.7					
31-Mar	42	44	40	42	39	37	40	36	39	43	43	45	45	45	46	47	47	A	44	38	19	7	3	4	36.3	46.6					
28.9 27.4 26.6 26.9 27.0 25.6 21.2 21.6 25.0 28.4 31.1 33.7 35.7 36.7 38.8 38.7 39.1 38.0 36.3 32.1 29.7 26.9 27.7 27.4																									Diurnal Average						
44.0 44.5 41.1 41.9 41.9 39.9 39.9 39.6 39.6 42.9 43.5 44.6 61.8 50.2 50.7 50.5 50.7 49.5 46.1 48.7 46.0 46.2 44.1 45.1																									Diurnal Maximum						
C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span																															

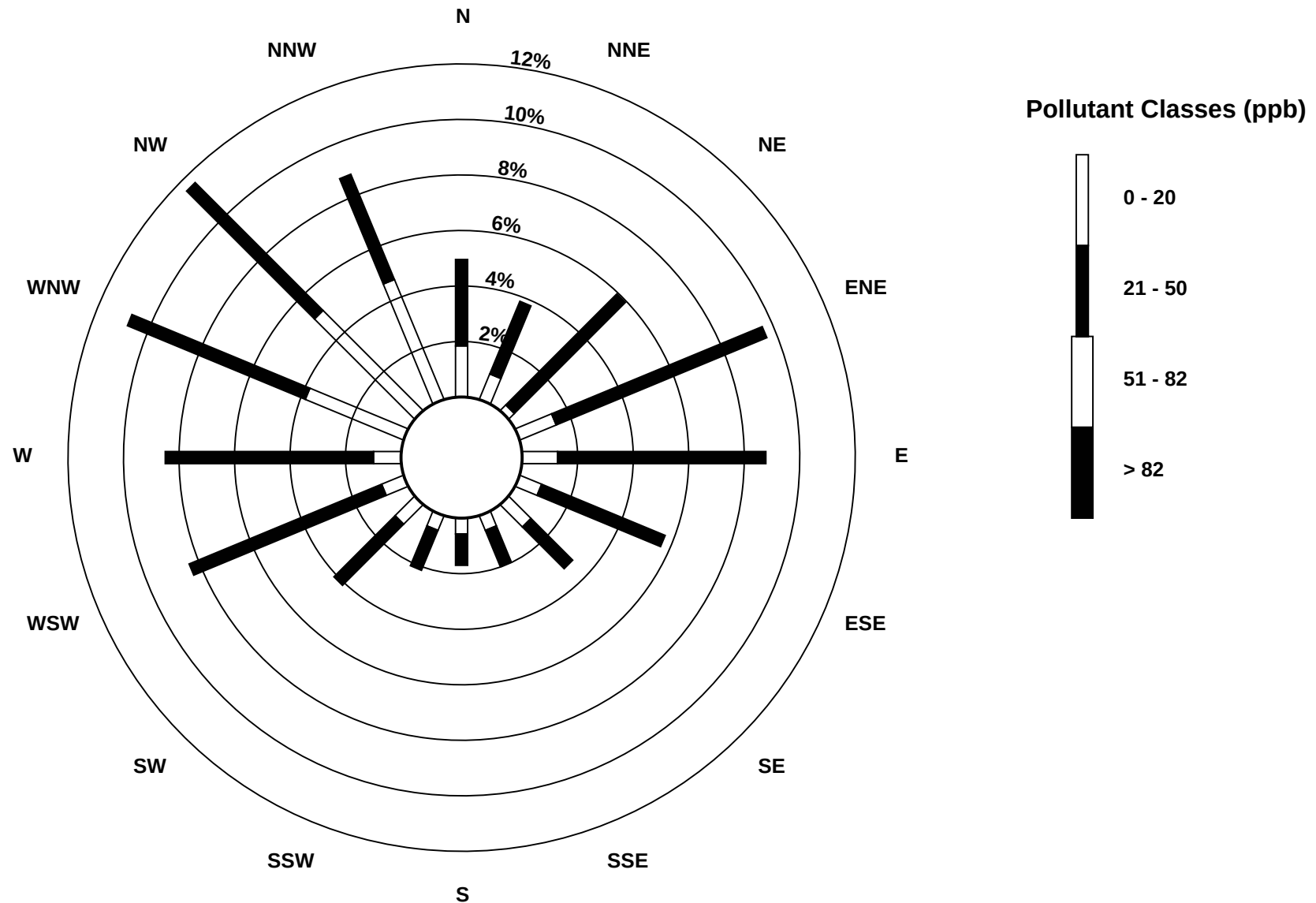
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - March 2012



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - March 2012



Eight Hour Running Averages

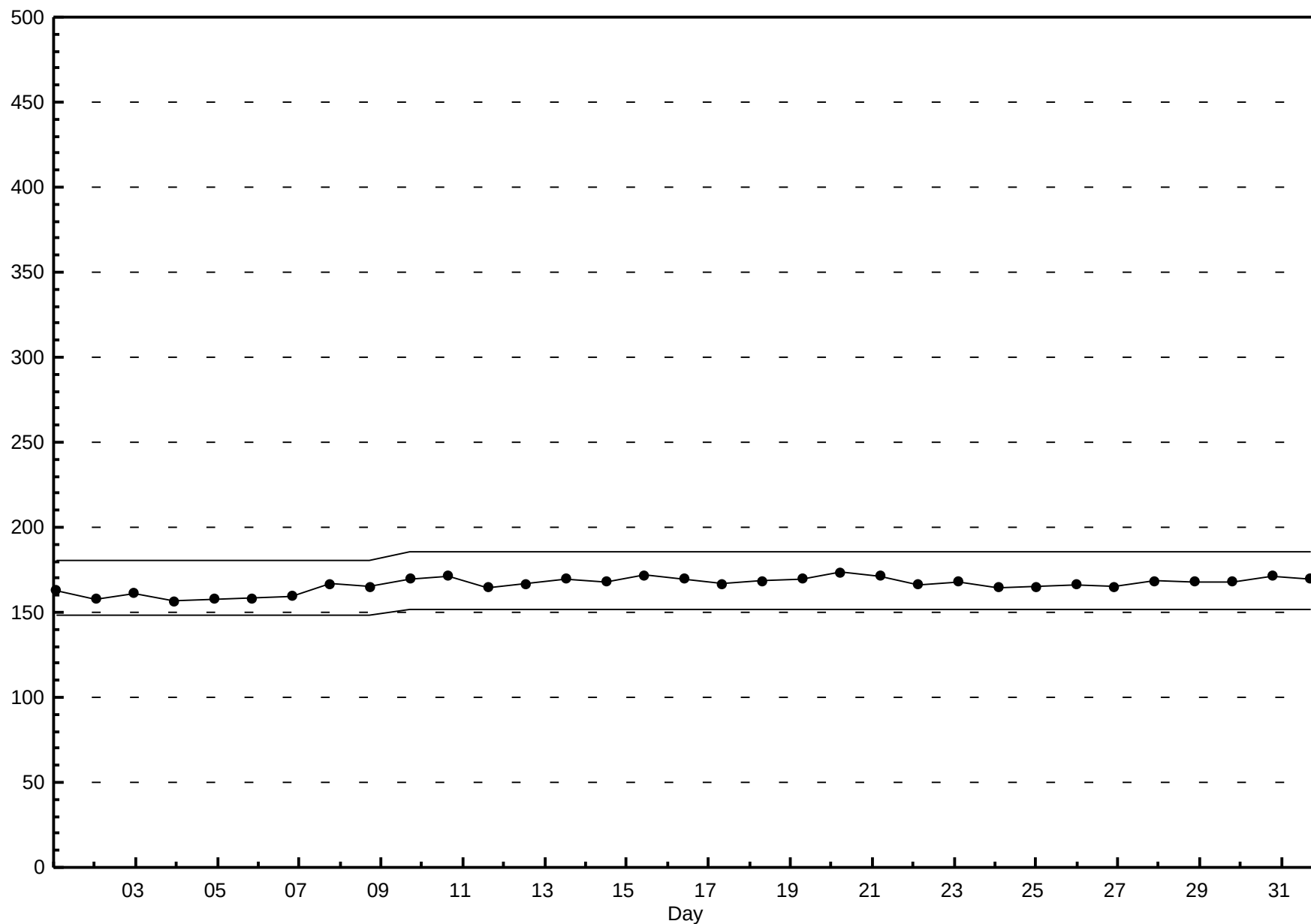
Ozone (O₃) - ppb

Henry Pirker - March 2012

Maximum Value: 46.4 ppb on Mar 30 20:00																								Hours in Service: 744		
Minimum Value: 2.3 ppb on Mar 15 07:00																								Hours of Data: 737		
																								Hours of Missing Data: 7		
Percentiles: P ₁ = 6.4 P ₁₀ = 12.7 Q ₁ = 21.1 Median = 27.6 Q ₃ = 32.8 P ₉₀ = 37.5 P ₉₉ = 44.9																								Hours of Calibration: 7		
																								Percent Operational Time: 100.0		
Day	Hourly Period Ending At (MST)																							Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	28	28	29	29	29	27	26	24	21	21	20	20	21	22	24	27	27	26	25	23	19	16	13		28.6	
2-Mar	11	10	10	10	10	12	12	11	10	9	8	7	8	9	13	17	21	25	27	30	31	30	28	27		31.3
3-Mar	23	19	19	18	18	20	21	22	23	26	25	24	26	27	29	31	33	35	37	39	39	38	37	36		38.7
4-Mar	36	35	35	35	35	35	35	34	34	33	33	33	33	34	35	36	37	37	38	37	36	36	33	29		37.9
5-Mar	23	18	13	10	9	11	9	10	11	13	16	18	20	21	24	27	29	31	31	31	31	30	30	30		31.1
6-Mar	29	29	28	27	27	26	25	23	22	21	21	21	22	23	25	27	29	30	32	32	33	33	33	33		33.1
7-Mar	33	32	32	33	33	33	32	29	26	25	24	24	23	23	N	N	N	N	N	N	N	N	36	35		35.5
8-Mar	35	35	35	33	32	33	34	33	32	32	32	33	33	32	32	33	34	34	34	34	33	34	34	33		35.2
9-Mar	31	29	28	27	25	24	22	21	22	24	26	28	31	33	37	39	39	40	41	41	42	42	42	42		42.0
10-Mar	42	41	41	40	39	38	35	33	32	31	31	31	32	34	37	38	39	40	39	38	38	37	35	34		41.8
11-Mar	33	32	31	31	30	29	28	27	27	28	27	27	27	27	27	27	26	25	25	23	21	19	17	17		32.9
12-Mar	19	21	23	26	28	30	31	28	24	21	21	21	22	21	25	31	36	38	39	35	30	26	23	22		38.7
13-Mar	20	19	18	20	23	26	26	26	25	25	25	26	25	26	27	28	28	28	28	25	23	20	17	14		28.4
14-Mar	12	11	10	10	9	9	9	8	7	6	7	6	9	12	18	23	28	31	34	34	35	36	33	28		35.7
15-Mar	24	20	15	11	8	4	2	4	7	11	12	17	22	27	33	36	37	38	36	33	33	28	23	19		37.7
16-Mar	16	13	11	12	12	13	13	13	12	12	14	17	21	26	31	36	40	40	40	38	35	31	27	23		40.4
17-Mar	18	15	11	9	7	6	8	10	11	13	17	21	25	29	29	30	30	30	30	30	30	30	30	30		30.2
18-Mar	30	30	30	29	29	28	28	27	28	28	28	29	29	30	31	31	32	32	32	31	30	28	26	22		31.8
19-Mar	19	17	15	13	12	10	10	11	12	13	14	17	20	23	24	28	29	30	31	30	27	24	20	16		31.0
20-Mar	13	10	7	5	6	7	10	13	16	20	23	27	29	29	30	32	32	33	33	31	27	26	25	24		32.9
21-Mar	23	23	22	23	26	26	25	24	23	23	24	25	26	27	28	30	30	31	31	31	30	30	30	30		30.8
22-Mar	29	28	28	28	27	24	20	17	15	14	14	16	17	21	25	28	31	32	33	33	32	31	31	30		32.9
23-Mar	29	28	28	28	29	28	28	27	27	26	26	26	26	26	27	29	29	30	30	29	29	28	26	24		29.9
24-Mar	22	21	18	16	15	13	11	10	11	11	13	15	16	18	21	23	25	27	27	27	27	27	27	26		27.5
25-Mar	25	22	19	17	16	13	10	8	9	10	12	15	18	22	27	32	36	38	40	39	38	36	33	31		39.7
26-Mar	27	24	23	23	21	18	16	15	15	15	14	16	19	24	30	35	39	42	45	46	45	44	44	43		45.6
27-Mar	42	42	41	39	35	31	28	24	21	18	18	19	21	24	28	32	35	38	38	37	37	37	37	37		42.2
28-Mar	37	36	36	38	37	36	32	29	28	26	26	26	26	27	30	32	32	33	33	32	32	33	34	35		37.6
29-Mar	35	34	33	33	32	30	28	27	26	26	25	25	26	26	27	28	29	30	32	33	32	30	28	27		34.5
30-Mar	27	27	27	28	30	31	29	27	23	22	20	19	20	24	30	37	42	45	45	46	46	45	44	43		46.4
31-Mar	42	41	41	40	39	38	37	37	36	36	36	37	38	39	41	42	43	44	44	42	37	31	25	18		44.0
42.2 41.7 40.9 40.1 39.5 38.3 37.5 36.6 36.1 35.9 36.3 36.9 37.7 39.1 40.5 42.2 43.5 45.0 45.4 46.4 46.2 45.3 44.1 42.9																									Diurnal Maximums	
N - Not Valid																										

Span Responses

Ozone (O₃)
Henry Pirker - March 2012



Hourly Averages

Carbon Monoxide (CO) - ppm

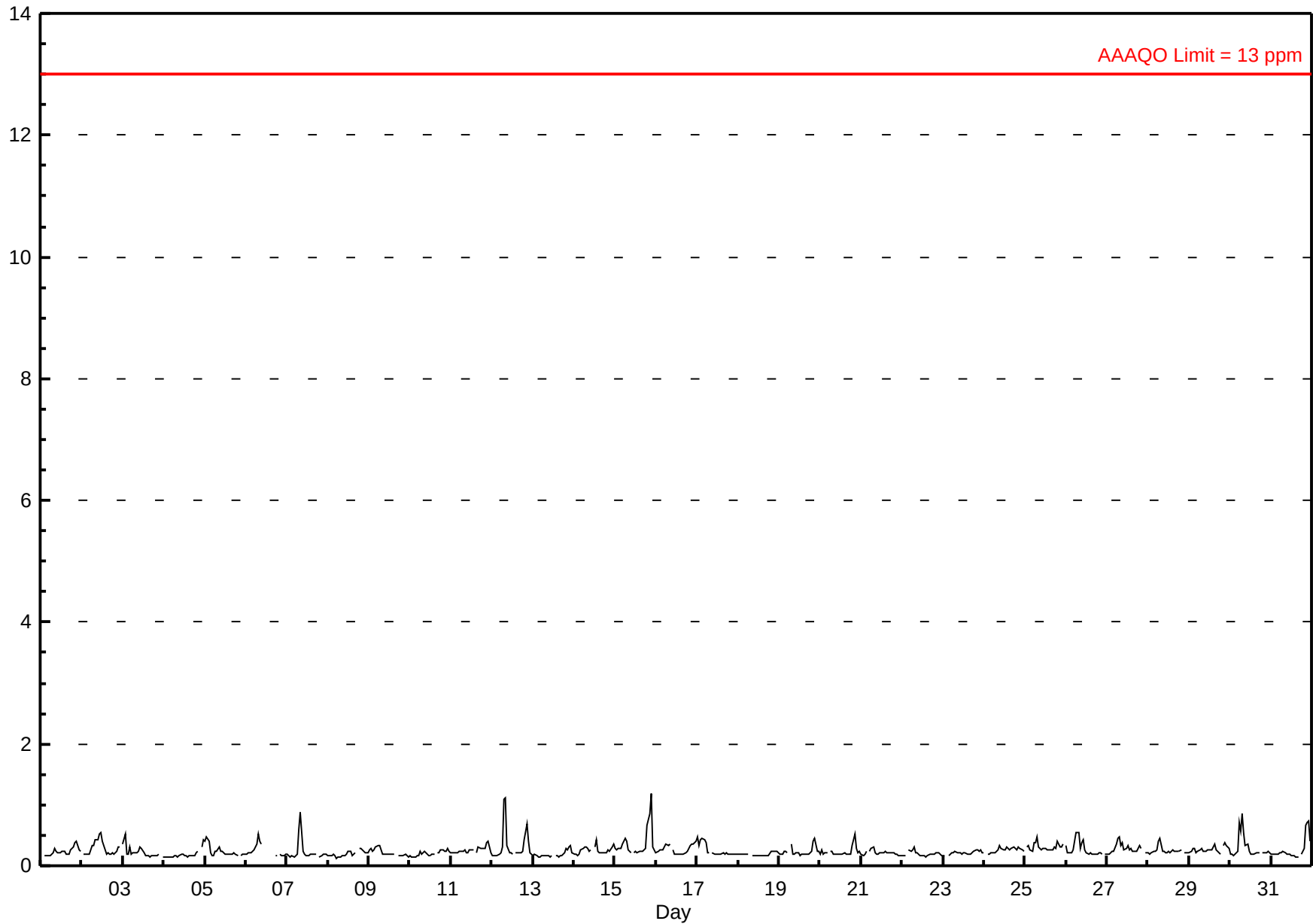
Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.19 ppm on Mar 15 22:00 Maximum Daily Average: 0.36 ppm on Mar 15																					Hours in Service: 744 Hours of Data: 704 Hours of Missing Data: 40 Hours of Calibration: 40 Percent Operational Time: 100.0					
Minimum Value: 0.1 ppm on Mar 8 06:00 Maximum Diurnal Average: 0.36 ppm at hour 8 Monthly Average: 0.247 ppm										Minimum Daily Average: 0.18 ppm on Mar 4 Minimum Diurnal Average: 0.20 ppm at hour 16 Percentiles: P ₁ = 0.15 P ₁₀ = 0.17 Q ₁ = 0.19 Median = 0.21 Q ₃ = 0.26 P ₉₀ = 0.35 P ₉₉ = 0.67																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.3	0.2	0.24	0.39	
2-Mar	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	A	0.29	0.55	
3-Mar	0.3	0.5	0.2	0.2	0.3	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	0.2	0.2	A	0.2	0.22	0.52	
4-Mar	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.4	0.18	0.42	
5-Mar	0.4	0.5	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.23	0.48	
6-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.4	0.4	C	C	C	C	C	C	C	0.2	0.2	A	0.2	0.2	0.2	--	0.52	
7-Mar	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.6	0.9	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	0.23	0.88	
8-Mar	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.3	0.3	0.3	0.2	0.2	0.2	0.19	0.28	
9-Mar	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.33	
10-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.20	0.27	
11-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.26	0.40	
12-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.1	1.1	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.4	0.7	0.4	0.2	0.33	1.11	
13-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.19	0.33	
14-Mar	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	A	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.26	0.42	
15-Mar	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.7	0.9	1.2	0.3	0.36	1.19	
16-Mar	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.3	0.4	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.27	0.41	
17-Mar	0.5	0.3	0.4	0.4	0.4	0.4	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	0.26	0.46	
18-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.25	
19-Mar	0.2	0.2	0.2	0.2	0.2	0.2	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	0.4	0.4	0.2	0.23	0.44	
20-Mar	0.2	0.3	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	0.3	0.5	0.3	0.2	0.23	0.52	
21-Mar	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.30	
22-Mar	0.2	0.2	0.2	A	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.31	
23-Mar	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.21	0.25	
24-Mar	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.26	0.34	
25-Mar	A	0.3	0.3	0.3	0.2	0.4	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.31	0.47	
26-Mar	0.3	0.2	0.2	0.2	0.3	0.4	0.5	0.6	0.3	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.27	0.55	
27-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	A	0.2	0.28	0.48	
28-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.25	0.45	
29-Mar	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	A	0.3	0.4	0.3	0.27	0.39	
30-Mar	0.2	0.2	0.2	0.2	0.2	0.7	0.6	0.9	0.5	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	0.30	0.87	
31-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	A	0.2	0.3	0.7	0.7	0.7	0.4	0.27	0.74	
0.22 0.23 0.21 0.21 0.23 0.26 0.29 0.36 0.31 0.25 0.24 0.22 0.22 0.22 0.21 0.20 0.21 0.21 0.22 0.26 0.31 0.31 0.27 0.24																								Diurnal Average		
0.46 0.52 0.42 0.44 0.42 0.71 0.56 1.10 1.11 0.42 0.52 0.55 0.39 0.42 0.31 0.34 0.31 0.32 0.29 0.65 0.86 1.19 0.74 0.42																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na																										

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2012



Hourly Maximums

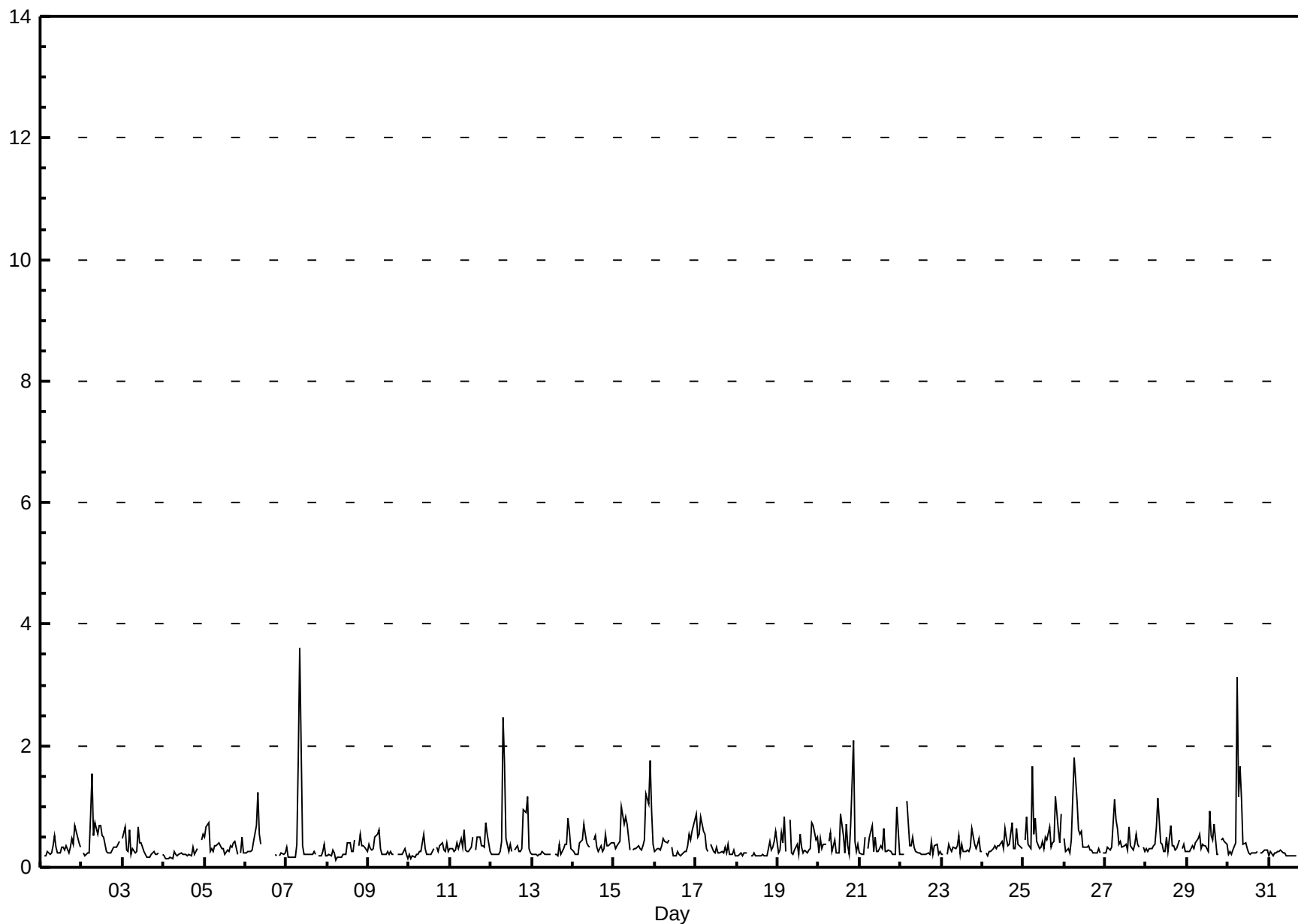
Carbon Monoxide (CO) - ppm

Henry Pirker - March 2012

Maximum Value: 3.60 ppm on Mar 7 09:00																				Maximum Daily Average: 0.60 ppm on Mar 15					Hours in Service: 744	
Minimum Value: 0.1 ppm on Mar 8 06:00																				Minimum Daily Average: 0.23 ppm on Mar 4					Hours of Data: 704	
Maximum Diurnal Average: 0.66 ppm at hour 8																				Minimum Diurnal Average: 0.28 ppm at hour 16					Hours of Missing Data: 40	
Monthly Average: 0.387 ppm																				Percentiles: P ₁ = 0.16 P ₁₀ = 0.20 Q ₁ = 0.23 Median = 0.30 Q ₃ = 0.41 P ₉₀ = 0.65 P ₉₉ = 1.77					Hours of Calibration: 40	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0.2	A	0.2	0.2	0.3	0.2	0.2	0.4	0.5	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.3	0.5	0.4	0.7	0.6	0.4	0.3	0.34	0.69
2-Mar	A	0.2	0.2	0.2	0.2	0.9	1.5	0.5	0.7	0.6	0.7	0.7	0.5	0.5	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	A	0.46	1.54
3-Mar	0.5	0.7	0.3	0.3	0.6	0.2	0.3	0.2	0.3	0.7	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	A	0.2	0.31	0.67
4-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	A	0.5	0.6	0.23	0.55
5-Mar	0.5	0.7	0.7	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.4	0.2	A	0.2	0.5	0.2	0.36	0.73
6-Mar	0.2	0.3	0.3	0.3	0.3	0.4	0.7	1.2	0.6	0.4	C	C	C	C	C	C	C	0.2	0.2	A	0.2	0.2	0.2	0.2	--	1.22
7-Mar	0.3	0.2	0.2	0.2	0.2	0.2	0.4	1.8	3.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	A	0.2	0.2	0.3	0.4	0.2	0.45	3.60
8-Mar	0.2	0.2	0.2	0.3	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.3	0.3	0.5	A	0.4	0.5	0.4	0.4	0.3	0.3	0.28	0.54
9-Mar	0.4	0.3	0.3	0.3	0.5	0.6	0.6	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.28	0.62
10-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.27	0.54
11-Mar	0.3	0.3	0.3	0.3	0.4	0.3	0.5	0.3	0.6	0.3	0.3	0.3	0.3	0.5	A	0.3	0.5	0.5	0.4	0.4	0.3	0.7	0.6	0.3	0.38	0.73
12-Mar	0.2	0.2	0.2	0.2	0.2	0.3	0.4	2.5	1.7	0.5	0.3	0.4	0.3	A	0.3	0.3	0.3	0.3	0.3	1.0	0.9	1.2	0.3	0.2	0.53	2.47
13-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.4	0.2	0.3	0.4	0.4	0.8	0.6	0.3	0.28	0.82
14-Mar	0.3	0.2	0.2	0.2	0.4	0.4	0.7	0.6	0.4	0.4	0.3	A	0.5	0.5	0.3	0.3	0.4	0.3	0.3	0.5	0.4	0.4	0.4	0.4	0.37	0.71
15-Mar	0.4	0.3	0.4	0.4	1.0	0.8	0.7	0.8	0.7	0.3	A	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.5	1.2	1.0	1.7	0.9	0.4	0.60	1.75
16-Mar	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.4	0.5	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.5	0.5	0.6	0.8	0.35	0.79
17-Mar	0.9	0.5	0.6	0.8	0.6	0.6	0.3	0.3	A	0.4	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.4	0.2	0.2	0.3	0.2	0.37	0.89
18-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.4	0.6	0.25	0.60
19-Mar	0.2	0.3	0.6	0.4	0.8	0.3	A	0.8	0.2	0.2	0.3	0.4	0.2	0.5	0.3	0.2	0.3	0.2	0.3	0.3	0.7	0.7	0.4	0.5	0.40	0.83
20-Mar	0.2	0.5	0.3	0.4	0.4	A	0.4	0.6	0.3	0.4	0.2	0.2	0.2	0.9	0.5	0.2	0.7	0.4	0.2	0.7	2.1	0.4	0.3	0.4	0.47	2.09
21-Mar	0.2	0.2	0.2	0.5	A	0.3	0.5	0.7	0.3	0.5	0.3	0.3	0.3	0.3	0.6	0.3	0.3	0.3	0.3	0.2	0.2	0.2	1.0	0.2	0.35	1.00
22-Mar	0.2	0.2	0.2	A	1.1	0.4	0.4	0.5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.4	0.4	0.2	0.3	0.31	1.08
23-Mar	0.2	0.2	A	0.2	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.2	0.4	0.3	0.3	0.3	0.3	0.3	0.6	0.4	0.3	0.4	0.5	0.3	0.32	0.64
24-Mar	0.3	A	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.6	0.5	0.4	0.4	0.7	0.3	0.3	0.6	0.4	0.3	0.3	0.37	0.74
25-Mar	A	0.5	0.8	0.4	0.3	1.7	0.5	0.8	0.4	0.3	0.3	0.4	0.3	0.5	0.4	0.7	0.3	0.4	0.4	1.2	0.6	0.4	0.9	A	0.57	1.66
26-Mar	0.5	0.2	0.3	0.2	0.4	1.1	1.8	1.1	0.6	0.5	0.6	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.2	0.2	0.3	0.2	A	0.2	0.47	1.81
27-Mar	0.2	0.3	0.3	0.3	0.3	1.1	0.8	0.6	0.4	0.4	0.3	0.4	0.4	0.3	0.7	0.4	0.3	0.4	0.5	0.4	0.3	A	0.3	0.3	0.42	1.12
28-Mar	0.3	0.3	0.3	0.3	0.4	0.4	0.7	1.1	0.4	0.4	0.3	0.3	0.5	0.3	0.7	0.3	0.3	0.3	0.3	0.4	A	0.3	0.4	0.3	0.40	1.14
29-Mar	0.3	0.3	0.3	0.4	0.3	0.4	0.5	0.6	0.3	0.4	0.3	0.3	0.3	0.9	0.5	0.5	0.7	0.2	0.2	A	0.5	0.5	0.4	0.4	0.40	0.92
30-Mar	0.2	0.3	0.2	0.3	0.4	3.1	1.2	1.7	1.1	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.3	0.3	0.3	0.54	3.12
31-Mar	0.2	0.3	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	A	0.3	0.5	3.5	1.0	1.2	0.7	0.48	3.51
0.29 0.29 0.30 0.29 0.39 0.54 0.53 0.66 0.56 0.35 0.31 0.29 0.29 0.36 0.33 0.28 0.31 0.30 0.32 0.43 0.57 0.48 0.47 0.33																								Diurnal Average		
0.89 0.67 0.82 0.82 1.08 3.12 1.81 2.47 3.60 0.67 0.68 0.68 0.53 0.92 0.69 0.65 0.71 0.74 0.64 1.20 3.51 1.75 1.18 0.79																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

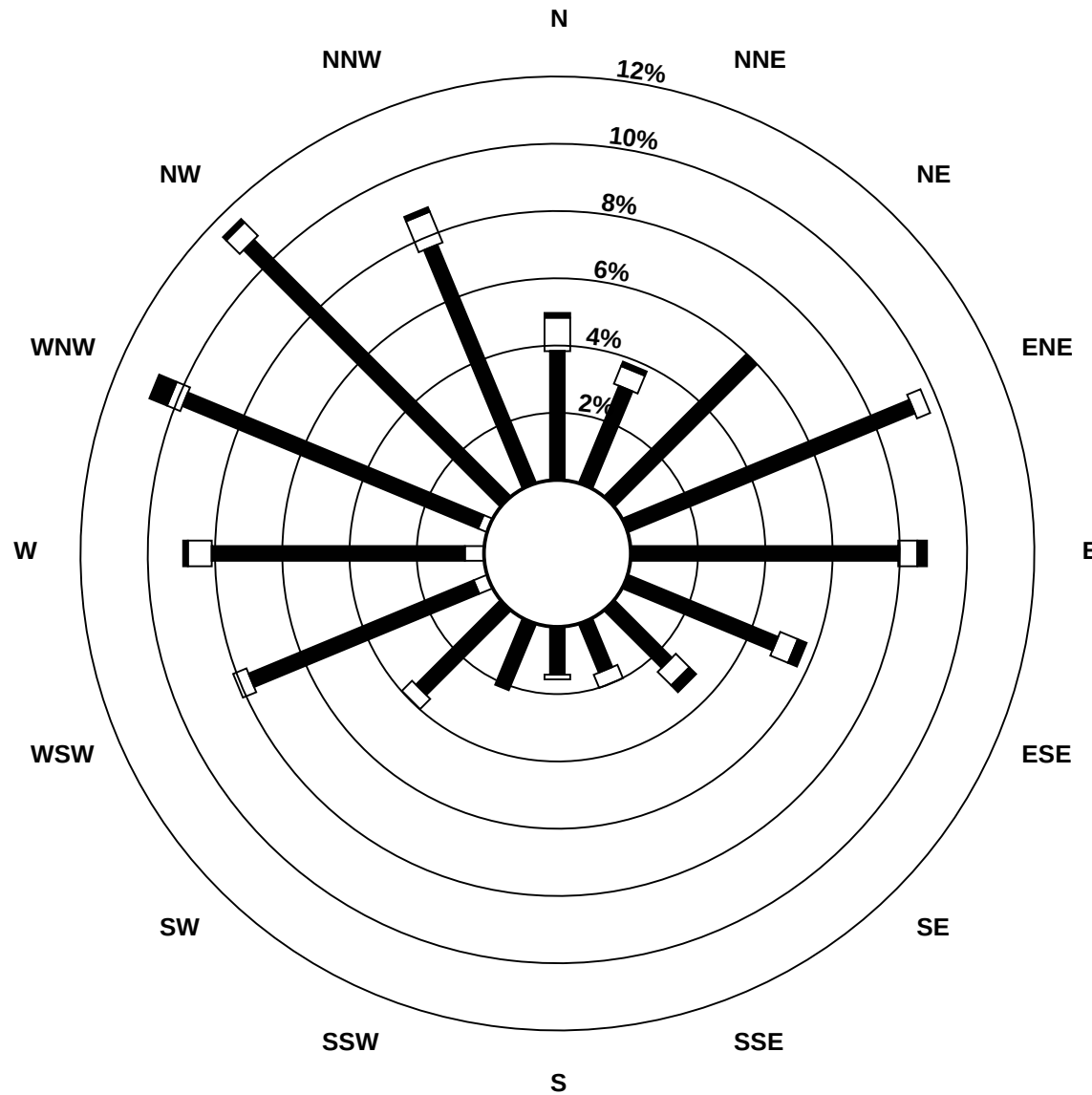
Carbon Monoxide (CO) - ppm
Henry Pirker - March 2012



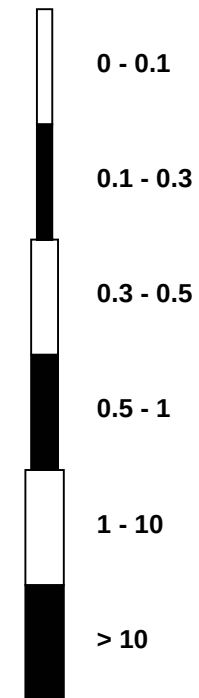
Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - March 2012



Pollutant Classes (ppm)



Eight Hour Running Averages

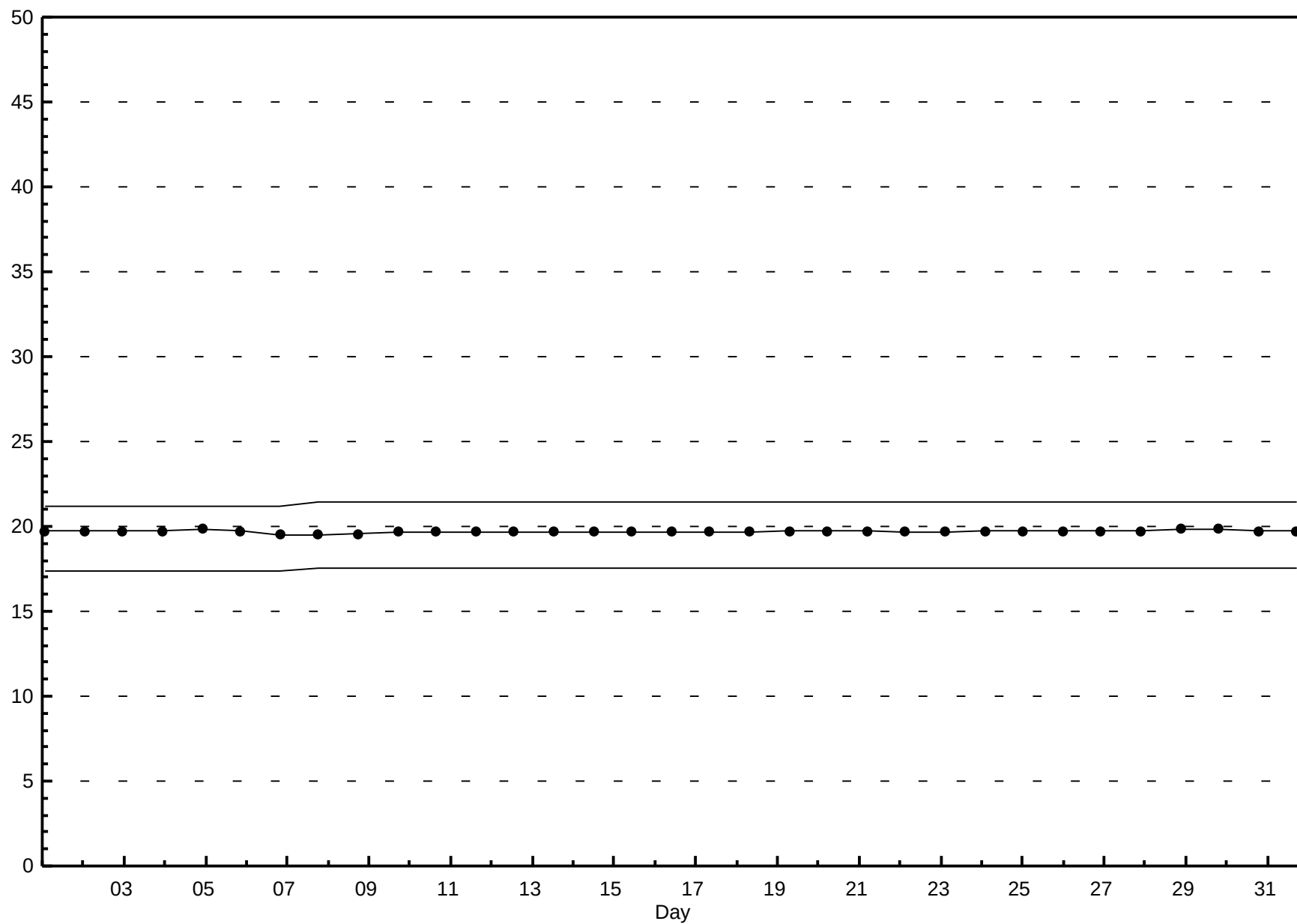
Carbon Monoxide (CO) - ppm

Henry Pirker - March 2012

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 0.51 ppm on Mar 16 00:00																								Hours in Service: 744	
Minimum Value: 0.15 ppm on Mar 4 06:00																								Hours of Data: 733	
Percentiles: P ₁ = 0.16 P ₁₀ = 0.17 Q ₁ = 0.20 Median = 0.23 Q ₃ = 0.28 P ₉₀ = 0.33 P ₉₉ = 0.49																								Hours of Missing Data: 11	
																								Hours of Calibration: 11	
																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.29
2-Mar	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.41
3-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.31
4-Mar	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
5-Mar	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.35
6-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	N	N	N	N	N	N	N	N	N	N	N	0.2	0.36
7-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.33
8-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
9-Mar	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
10-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
11-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.31
12-Mar	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.50
13-Mar	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.32
14-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.31
15-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.5	0.51
16-Mar	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.50
17-Mar	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.40
18-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
19-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.27
20-Mar	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.28
21-Mar	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
22-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
23-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
24-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.29
25-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.34
26-Mar	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	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.39
27-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.36
28-Mar	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.28
29-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.30
30-Mar	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.48
31-Mar	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.45
0.50 0.50 0.50 0.45 0.40 0.40 0.39 0.39 0.44 0.45 0.48 0.48 0.48 0.50 0.48 0.38 0.35 0.32 0.28 0.30 0.37 0.49 0.50 0.51																									
Diurnal Maximums																									
N - Not Valid																									
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																									

Span Responses

Carbon Monoxide (CO)
Henry Pirker - March 2012



Hourly Averages

Total Hydrocarbons (THC) - ppm

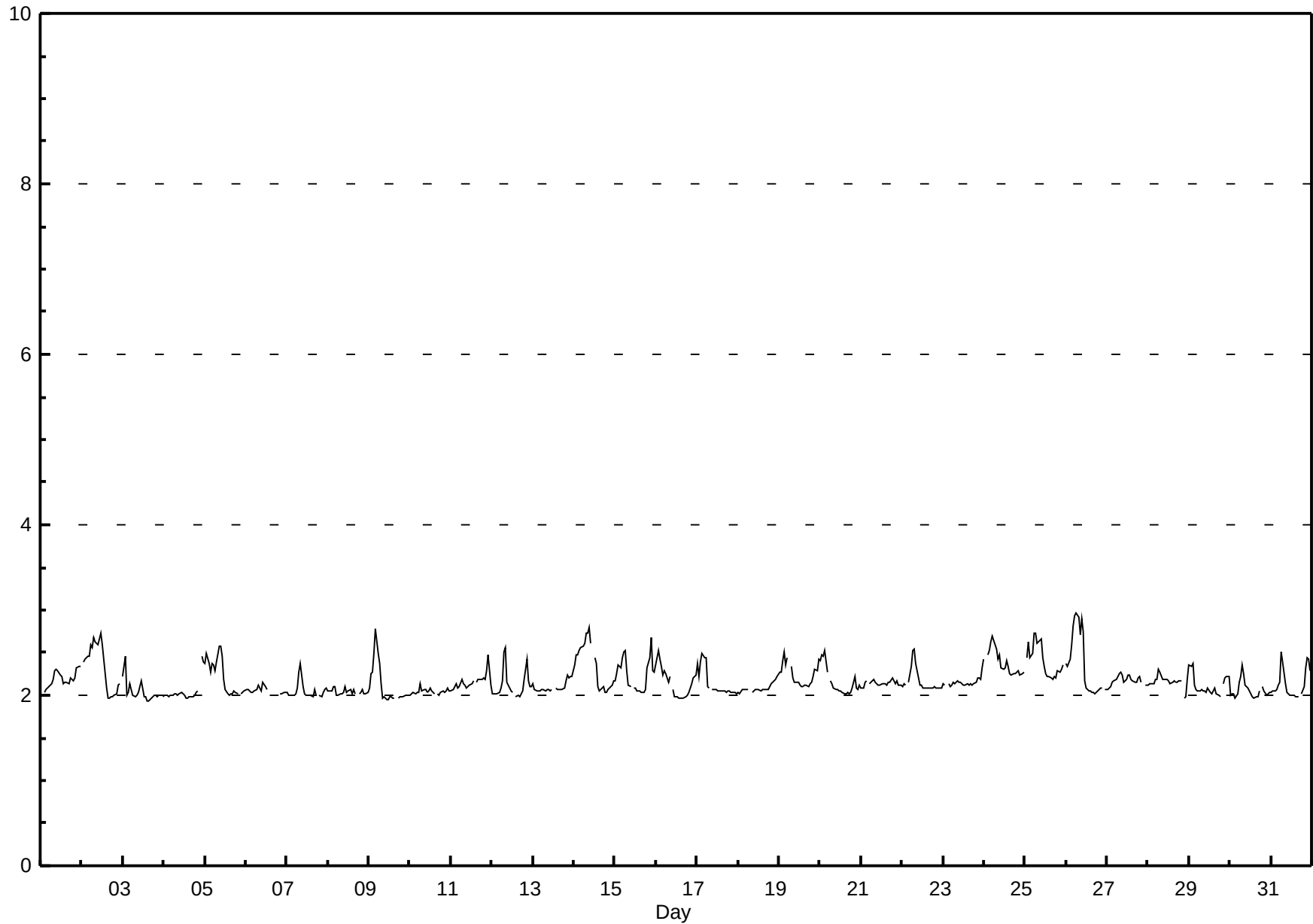
Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.96 ppm on Mar 26 07:00 Maximum Daily Average: 2.40 ppm on Mar 25																								Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0			
Minimum Value: 1.9 ppm on Mar 3 16:00 Maximum Diurnal Average: 2.28 ppm at hour 8 Monthly Average: 2.165 ppm												Minimum Daily Average: 2.04 ppm on Mar 4 Minimum Diurnal Average: 2.06 ppm at hour 15 Percentiles: P ₁ = 1.97 P ₁₀ = 2.00 Q ₁ = 2.04 Median = 2.11 Q ₃ = 2.23 P ₉₀ = 2.44 P ₉₉ = 2.78															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Mar	2.0	A	2.0	2.1	2.1	2.1	2.1	2.2	2.3	2.3	2.3	2.2	2.2	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.19	2.33
2-Mar	A	2.4	2.4	2.5	2.5	2.6	2.6	2.7	2.6	2.6	2.7	2.7	2.6	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	2.34	2.73
3-Mar	2.2	2.5	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.0	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	A	2.0	2.04	2.46	
4-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.5	2.4	2.04	2.46	
5-Mar	2.4	2.5	2.4	2.3	2.4	2.3	2.3	2.4	2.6	2.6	2.5	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.22	2.58	
6-Mar	2.1	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	C	C	C	C	C	2.0	A	2.0	2.0	2.0	2.0	2.06	2.15	
7-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	A	2.0	2.0	2.0	2.1	2.1	2.05	2.37	
8-Mar	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.0	2.1	2.0	2.0	A	2.0	2.0	2.1	2.0	2.0	2.0	2.04	2.11	
9-Mar	2.1	2.2	2.3	2.5	2.8	2.5	2.4	2.1	2.0	2.0	2.0	1.9	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.11	2.78	
10-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.1	2.1	2.0	2.1	2.1	2.0	2.0	A	2.0	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.04	2.13	
11-Mar	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	A	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.5	2.1	2.15	2.47	
12-Mar	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.5	2.6	2.1	2.1	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.2	2.4	2.2	2.1	2.1	2.12	2.56	
13-Mar	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.10	2.23	
14-Mar	2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.8	2.6	A	2.4	2.4	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.1	2.1	2.2	2.35	2.80
15-Mar	2.2	2.2	2.4	2.3	2.4	2.5	2.5	2.3	2.1	2.1	A	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.1	2.3	2.4	2.7	2.3	2.3	2.24	2.67	
16-Mar	2.4	2.5	2.4	2.3	2.2	2.3	2.2	2.2	2.2	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.2	2.15	2.53	
17-Mar	2.4	2.2	2.4	2.5	2.4	2.4	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.14	2.50	
18-Mar	2.0	2.0	2.1	2.1	2.1	2.1	2.1	A	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.09	2.23	
19-Mar	2.3	2.3	2.4	2.5	2.4	2.4	A	2.3	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.24	2.51	
20-Mar	2.4	2.5	2.5	2.5	2.3	A	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.1	2.15	2.52	
21-Mar	2.1	2.1	2.1	2.2	A	2.1	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.1	2.2	2.1	2.1	2.14	2.20	
22-Mar	2.1	2.1	2.1	A	2.2	2.3	2.5	2.5	2.4	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.17	2.54	
23-Mar	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.15	2.32	
24-Mar	2.4	A	2.5	2.5	2.6	2.7	2.6	2.5	2.4	2.5	2.3	2.3	2.3	2.4	2.3	2.3	2.2	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.38	2.69	
25-Mar	A	2.4	2.6	2.4	2.5	2.7	2.7	2.6	2.6	2.7	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	A	2.40	2.73	
26-Mar	2.4	2.3	2.4	2.6	2.8	2.9	3.0	2.9	2.7	2.9	2.7	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	A	2.1	2.37	2.96	
27-Mar	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.2	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	A	2.1	2.1	2.17	2.26	
28-Mar	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.1	2.1	2.2	2.2	A	2.0	2.0	2.2	2.16	2.31	
29-Mar	2.4	2.3	2.4	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.0	2.0	2.0	A	2.1	2.2	2.2	2.2	2.12	2.37	
30-Mar	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.4	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.1	2.1	2.0	2.0	2.06	2.36	
31-Mar	2.0	2.0	2.1	2.1	2.1	2.2	2.5	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.3	2.4	2.4	2.3	2.14	2.51	
2.16 2.20 2.22 2.22 2.24 2.27 2.27 2.28 2.25 2.22 2.18 2.13 2.12 2.10 2.06 2.06 2.06 2.07 2.08 2.11 2.14 2.15 2.17 2.16																								Diurnal Average			
2.42 2.53 2.62 2.59 2.81 2.93 2.96 2.91 2.73 2.90 2.74 2.73 2.59 2.42 2.34 2.26 2.23 2.26 2.26 2.32 2.45 2.67 2.47 2.42																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2012



Hourly Maximums

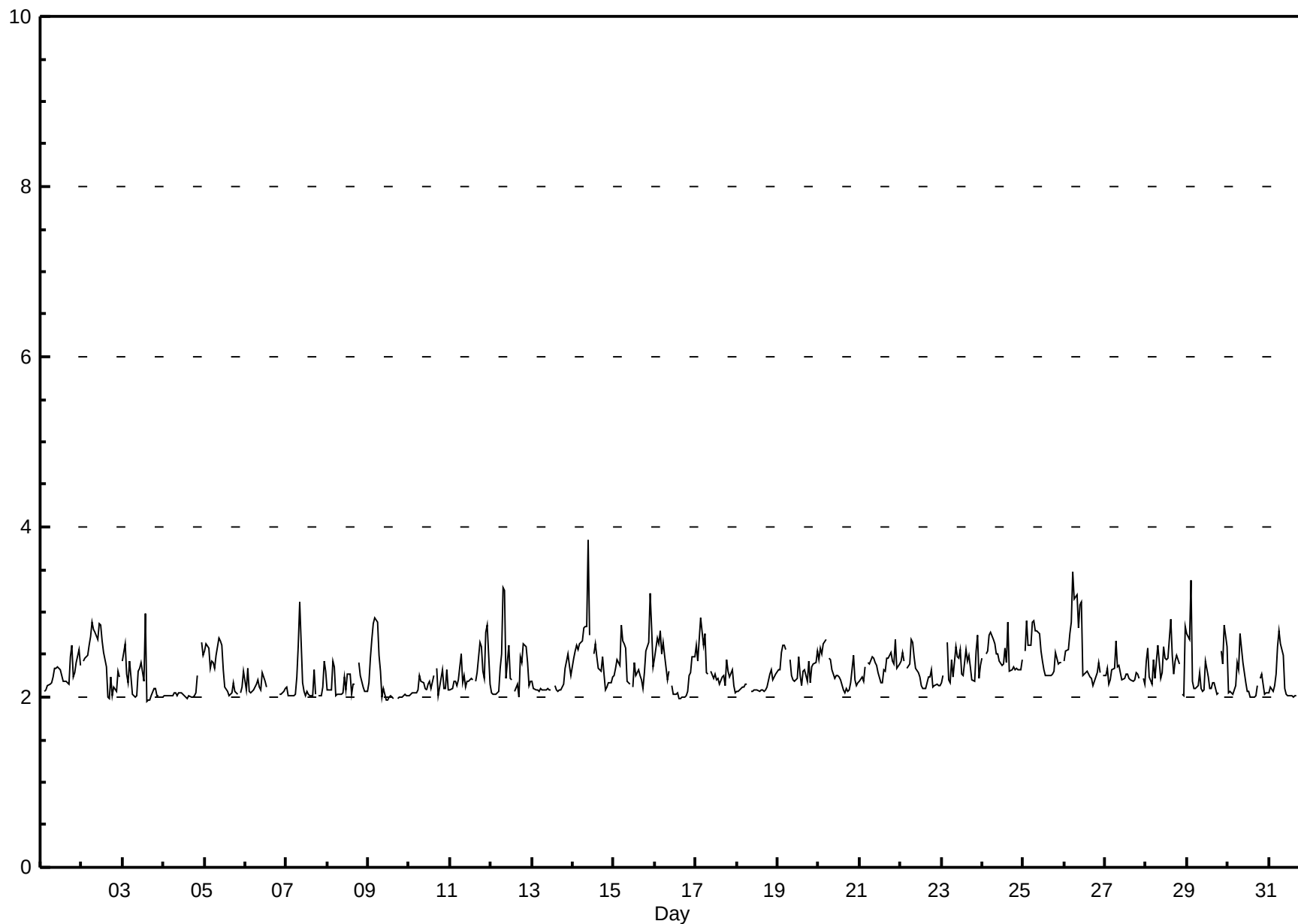
Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2012

Maximum Value: 3.85 ppm on Mar 14 10:00																								Hours in Service:		744
Maximum Daily Average: 2.57 ppm on Mar 26																								Hours of Data:		706
Minimum Value: 2.0 ppm on Mar 3 15:00																								Hours of Missing Data:		38
Maximum Diurnal Average: 2.46 ppm at hour 8																								Hours of Calibration:		38
Monthly Average: 2.302 ppm																								Percent Operational Time:		100.0
Minimum Daily Average: 2.08 ppm on Mar 4																										
Minimum Diurnal Average: 2.18 ppm at hour 16																										
Percentiles: P ₁ = 1.99 P ₁₀ = 2.02 Q ₁ = 2.09 Median = 2.25 Q ₃ = 2.44 P ₉₀ = 2.64 P ₉₉ = 3.20																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	2.1	A	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.3	2.4	2.3	2.3	2.2	2.2	2.2	2.2	2.5	2.6	2.2	2.3	2.4	2.6	2.4	2.27	2.60
2-Mar	A	2.4	2.5	2.5	2.6	2.7	2.9	2.8	2.8	2.7	2.9	2.9	2.7	2.5	2.4	2.0	2.0	2.2	2.0	2.1	2.1	2.3	2.2	A	2.46	2.88
3-Mar	2.4	2.6	2.3	2.2	2.4	2.2	2.0	2.0	2.0	2.3	2.3	2.4	2.2	3.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	A	2.0	2.20	2.98
4-Mar	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	A	2.6	2.5	2.08	2.64
5-Mar	2.5	2.6	2.6	2.3	2.4	2.4	2.3	2.5	2.7	2.7	2.6	2.3	2.1	2.1	2.0	2.0	2.0	2.2	2.1	2.0	A	2.0	2.1	2.3	2.31	2.70
6-Mar	2.1	2.3	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.3	2.2	2.1	C	C	C	C	C	2.0	A	2.0	2.0	2.1	2.1	2.12	2.34
7-Mar	2.1	2.0	2.0	2.0	2.0	2.0	2.2	2.6	3.1	2.2	2.1	2.0	2.1	2.0	2.0	2.0	2.3	2.0	A	2.0	2.0	2.1	2.4	2.3	2.17	3.13
8-Mar	2.1	2.1	2.1	2.4	2.4	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.3	2.3	2.0	2.1	2.2	A	2.4	2.3	2.2	2.1	2.1	2.1	2.15	2.43
9-Mar	2.2	2.5	2.7	2.9	2.9	2.9	2.5	2.3	2.0	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	2.21	2.94
10-Mar	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.2	2.2	2.1	2.1	2.2	2.2	2.1	2.3	A	2.3	2.0	2.1	2.3	2.1	2.1	2.3	2.1	2.14	2.35
11-Mar	2.1	2.1	2.2	2.2	2.1	2.2	2.5	2.2	2.2	2.1	2.2	2.2	2.2	2.2	A	2.2	2.3	2.6	2.6	2.3	2.2	2.8	2.8	2.2	2.29	2.84
12-Mar	2.0	2.0	2.0	2.0	2.1	2.3	2.5	3.3	3.2	2.2	2.6	2.2	2.2	A	2.1	2.1	2.0	2.5	2.4	2.6	2.6	2.4	2.1	2.2	2.34	3.29
13-Mar	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.4	2.5	2.4	2.3	2.16	2.51
14-Mar	2.5	2.5	2.6	2.6	2.6	2.7	2.8	2.8	2.8	3.9	2.7	A	2.5	2.6	2.5	2.3	2.3	2.5	2.3	2.1	2.1	2.2	2.2	2.2	2.53	3.85
15-Mar	2.2	2.3	2.4	2.4	2.8	2.7	2.6	2.6	2.2	2.1	A	2.1	2.4	2.3	2.3	2.3	2.2	2.1	2.3	2.5	2.6	3.2	2.8	2.4	2.43	3.22
16-Mar	2.5	2.7	2.6	2.8	2.5	2.6	2.5	2.2	2.3	A	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.5	2.5	2.28	2.77
17-Mar	2.6	2.4	2.7	2.9	2.6	2.8	2.3	2.3	A	2.3	2.2	2.3	2.2	2.2	2.2	2.2	2.3	2.1	2.4	2.3	2.2	2.3	2.1	2.0	2.35	2.92
18-Mar	2.1	2.1	2.1	2.1	2.1	2.2	2.1	A	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.2	2.2	2.3	2.13	2.33
19-Mar	2.3	2.3	2.5	2.6	2.6	2.6	A	2.4	2.3	2.2	2.2	2.2	2.5	2.3	2.1	2.3	2.3	2.2	2.4	2.2	2.4	2.4	2.4	2.5	2.36	2.61
20-Mar	2.4	2.6	2.5	2.6	2.7	A	2.5	2.4	2.3	2.2	2.3	2.2	2.2	2.2	2.1	2.0	2.1	2.1	2.1	2.2	2.5	2.2	2.1	2.2	2.29	2.68
21-Mar	2.2	2.2	2.2	2.4	A	2.4	2.4	2.5	2.5	2.4	2.4	2.3	2.2	2.2	2.3	2.3	2.5	2.5	2.5	2.4	2.4	2.7	2.3	2.4	2.36	2.68
22-Mar	2.4	2.5	2.4	A	2.3	2.4	2.7	2.6	2.5	2.3	2.3	2.2	2.1	2.1	2.1	2.1	2.2	2.2	2.3	2.1	2.1	2.2	2.1	2.1	2.29	2.67
23-Mar	2.2	2.3	A	2.7	2.2	2.2	2.4	2.2	2.6	2.5	2.5	2.6	2.3	2.3	2.6	2.4	2.5	2.4	2.2	2.2	2.5	2.7	2.2	2.4	2.38	2.72
24-Mar	2.5	A	2.5	2.5	2.7	2.8	2.7	2.6	2.5	2.5	2.4	2.4	2.4	2.6	2.4	2.9	2.3	2.3	2.4	2.3	2.3	2.3	2.3	2.4	2.48	2.88
25-Mar	A	2.5	2.9	2.6	2.6	2.9	2.9	2.8	2.8	2.7	2.6	2.4	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.5	2.4	2.4	2.4	A	2.52	2.91
26-Mar	2.4	2.5	2.6	2.7	2.9	3.5	3.2	3.2	2.8	3.1	3.1	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.2	2.3	2.4	2.3	A	2.3	2.57	3.47
27-Mar	2.3	2.3	2.2	2.2	2.3	2.3	2.7	2.4	2.4	2.3	2.2	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.3	2.3	2.2	A	2.2	2.1	2.27	2.65
28-Mar	2.4	2.6	2.2	2.2	2.4	2.2	2.4	2.6	2.2	2.3	2.6	2.5	2.4	2.5	2.9	2.5	2.3	2.4	2.5	2.4	A	2.0	2.0	2.8	2.41	2.91
29-Mar	2.8	2.7	3.4	2.2	2.1	2.1	2.1	2.3	2.1	2.1	2.1	2.4	2.2	2.1	2.1	2.2	2.2	2.0	2.0	A	2.5	2.4	2.8	2.6	2.33	3.38
30-Mar	2.1	2.1	2.0	2.0	2.1	2.4	2.3	2.8	2.6	2.4	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.1	A	2.2	2.3	2.0	2.0	2.1	2.17	2.75
31-Mar	2.1	2.1	2.1	2.1	2.3	2.6	2.8	2.6	2.5	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.2	2.3	2.8	2.6	2.6	2.7	2.29	2.82
2.27 2.34 2.35 2.35 2.38 2.41 2.44 2.46 2.41 2.35 2.32 2.24 2.23 2.23 2.18 2.18 2.18 2.21 2.24 2.24 2.30 2.32 2.32 2.29																								Diurnal Average		
2.75 2.70 3.38 2.92 2.94 3.47 3.15 3.29 3.25 3.85 3.11 2.85 2.67 2.98 2.91 2.88 2.50 2.64 2.60 2.64 2.82 3.22 2.85 2.83																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

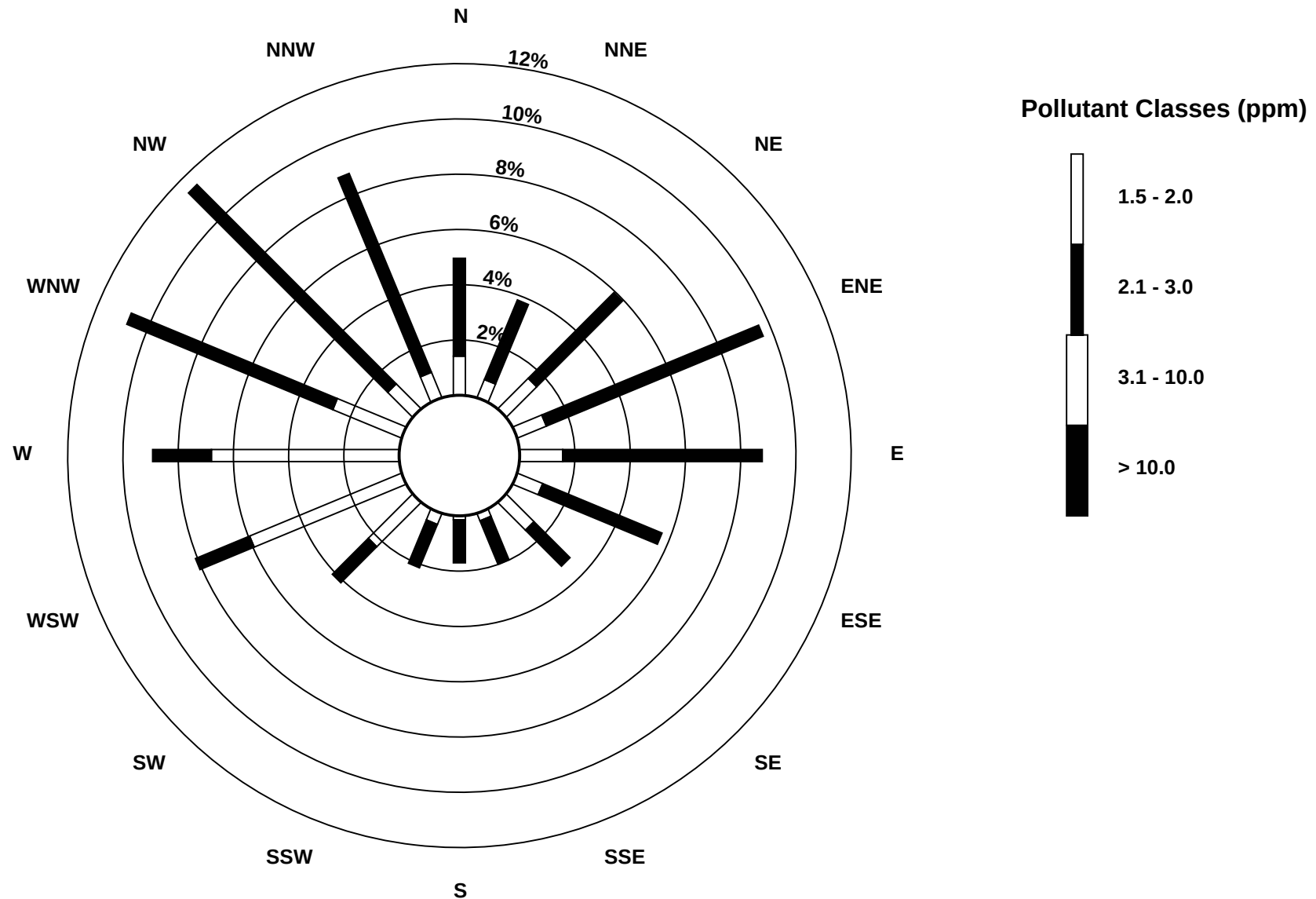
Total Hydrocarbons (THC) - ppm
Henry Pirker - March 2012



Pollutant Rose

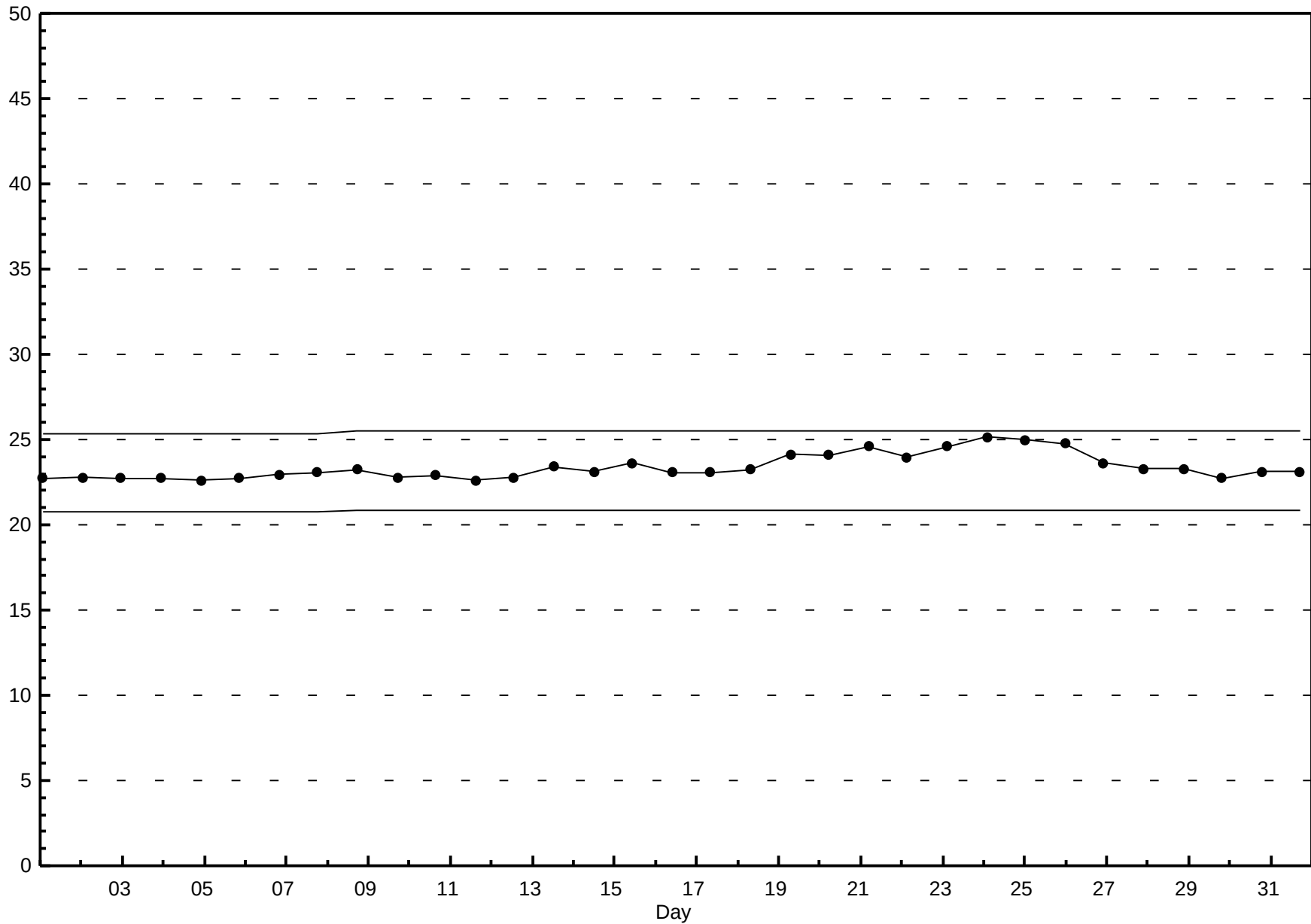
Total Hydrocarbons (THC) - ppm

Henry Pirker - March 2012



Span Responses

Total Hydrocarbons (THC)
Henry Pirker - March 2012

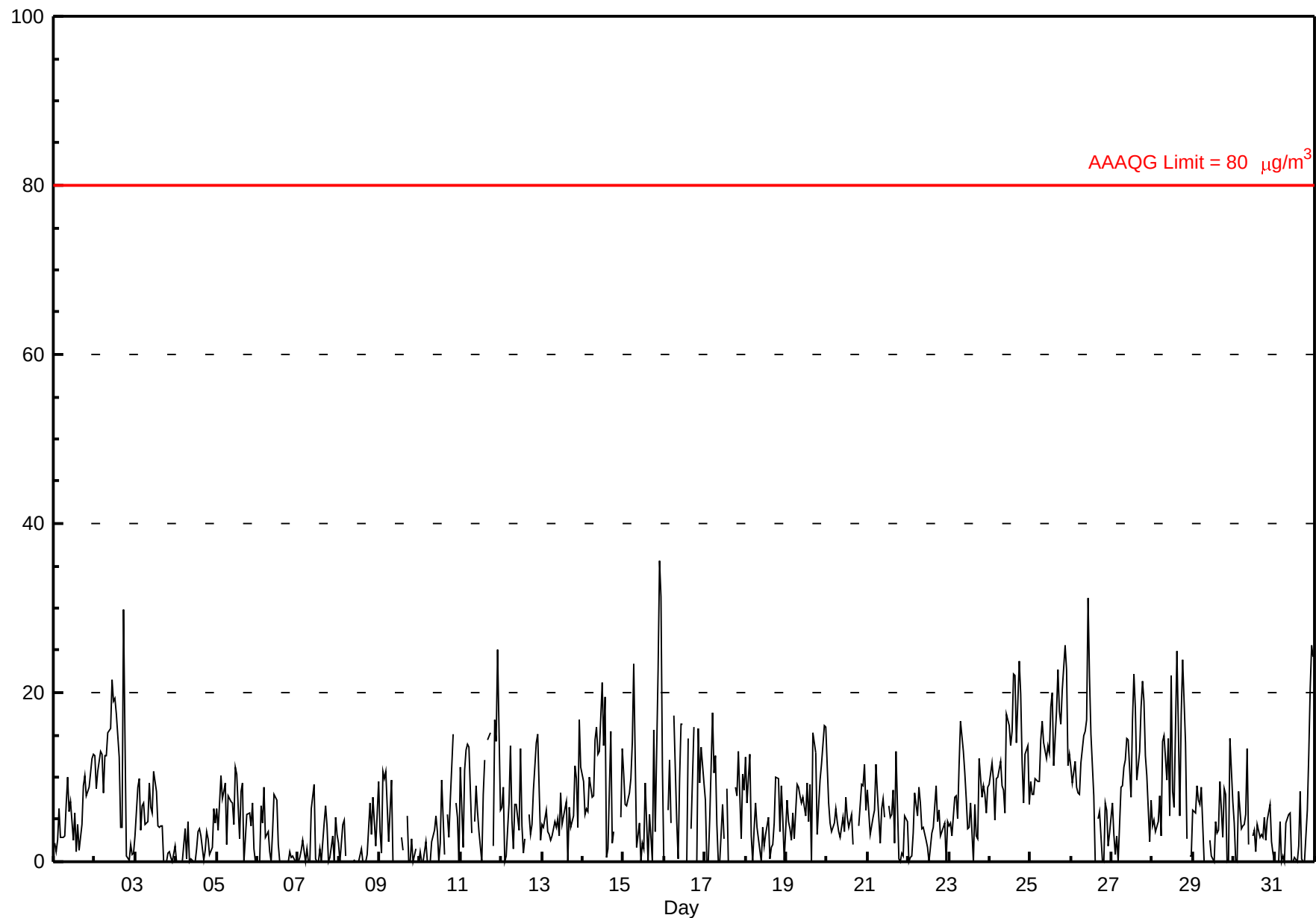


Hourly Averages

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

Henry Pirker - March 2012

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 35.6 µg/m³ on Mar 15 22:00 Minimum Value: 0 µg/m³ on Mar 3 18:00 Maximum Diurnal Average: 8.7 µg/m³ at hour 23 Monthly Average: 6.68 µg/m³																					Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 0 Percent Operational Time: 95.2					
Maximum Daily Average: 14.8 µg/m³ on Mar 25 Minimum Daily Average: 1.8 µg/m³ on Mar 4 Minimum Diurnal Average: 4.0 µg/m³ at hour 2 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 2.2 Median = 5.3 Q ₃ = 9.6 P ₉₀ = 14.9 P ₉₉ = 24.7																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	2	1	3	6	3	3	3	7	10	6	7	3	6	1	4	1	4	9	10	8	8	9	12	13	5.8	12.7
2-Mar	13	9	11	13	13	8	13	12	15	16	22	19	19	18	12	4	4	30	15	1	0	2	1	1	11.2	29.9
3-Mar	3	9	10	4	7	7	4	5	9	6	6	11	8	4	4	4	4	0	0	1	1	1	0	2	4.6	10.7
4-Mar	0	0	0	0	0	4	0	5	0	0	0	0	2	4	4	3	0	1	4	3	1	2	6	5	1.8	6.2
5-Mar	6	4	10	7	8	9	2	8	7	7	4	11	10	3	8	9	0	3	6	6	4	7	2	0	5.9	11.1
6-Mar	0	0	7	5	9	3	4	1	0	4	8	7	2	0	N	0	0	0	0	1	1	1	0	N	2.3	8.8
7-Mar	0	1	1	3	0	1	0	0	6	9	0	0	0	2	0	5	7	4	0	0	3	0	5	3	2.1	9.1
8-Mar	2	0	4	5	1	N	N	0	0	0	0	0	2	0	M	0	1	7	3	8	5	2	10	2.3	9.6	
9-Mar	4	1	11	10	11	2	6	10	0	N	N	3	N	3	1	N	5	0	0	3	0	2	N	0	3.7	10.7
10-Mar	1	0	0	2	0	0	0	2	4	5	4	0	2	10	1	N	6	3	7	15	N	7	5	0	3.4	15.1
11-Mar	11	2	11	13	14	13	3	N	5	9	6	4	0	8	12	N	14	15	N	2	17	14	25	6	9.7	25.0
12-Mar	6	9	0	1	7	14	5	2	7	7	4	13	4	1	3	N	6	3	4	9	14	15	9	3	6.2	15.0
13-Mar	4	4	6	4	3	2	3	5	4	5	3	8	4	6	7	0	6	4	5	11	10	4	17	11	5.8	16.7
14-Mar	9	6	6	6	10	8	8	14	16	13	13	21	14	20	1	2	15	2	4	N	N	N	5	13	9.8	21.1
15-Mar	10	7	7	8	10	14	23	12	2	4	0	2	2	9	0	6	3	0	16	4	23	36	31	11	10.0	35.6
16-Mar	0	N	6	12	5	N	17	5	0	10	16	16	N	0	14	N	4	16	N	0	16	9	14	9	8.9	17.3
17-Mar	7	0	0	5	18	11	13	4	0	0	7	3	N	9	0	0	N	N	9	8	13	3	10	8	6.0	17.7
18-Mar	12	7	13	3	0	4	7	4	1	0	4	2	3	5	0	2	2	5	10	10	4	9	5	0	4.7	12.6
19-Mar	7	5	4	3	6	3	9	9	8	7	8	5	9	5	9	0	15	13	3	7	10	12	16	16	7.8	16.1
20-Mar	11	7	5	4	5	6	5	3	3	5	4	8	5	4	6	2	N	N	N	4	9	9	11	6	5.8	11.5
21-Mar	8	3	4	5	6	12	8	2	6	7	5	N	7	5	6	8	2	13	0	0	1	1	5	5	5.3	13.0
22-Mar	0	0	1	3	8	5	9	7	4	4	2	2	0	2	3	4	9	5	6	3	4	5	0	5	3.8	9.0
23-Mar	4	5	3	8	8	5	11	17	13	11	8	4	4	7	0	7	3	3	12	8	9	8	6	9	7.1	16.6
24-Mar	9	12	10	5	10	10	12	9	9	6	18	16	14	15	22	22	14	24	20	12	7	13	14	7	12.8	23.8
25-Mar	9	8	8	10	9	9	14	17	14	12	14	13	18	20	11	18	23	18	16	20	26	23	11	13	14.8	25.6
26-Mar	11	9	12	9	8	8	12	15	15	17	31	22	15	8	0	N	5	6	0	0	7	6	2	3	9.6	31.2
27-Mar	7	3	1	3	0	9	9	11	12	15	14	8	17	22	18	10	13	18	21	19	13	10	2	7	10.9	22.1
28-Mar	4	5	4	5	8	3	14	15	10	15	5	22	8	7	25	16	5	18	24	14	3	N	1	1	10.0	25.0
29-Mar	6	6	9	7	7	9	0	N	0	N	3	1	0	5	3	4	10	3	9	8	0	0	15	7	5.0	14.6
30-Mar	5	0	0	8	4	4	4	6	13	2	M	3	4	1	4	3	3	3	5	3	5	7	2	1	4.0	13.4
31-Mar	0	0	0	5	0	1	0	5	6	6	0	0	1	0	2	8	0	0	0	6	13	20	26	24	5.1	25.7
5.7 4.0 5.3 5.8 6.3 6.5 7.3 7.3 6.4 7.2 7.4 7.5 6.4 6.6 6.1 5.7 6.4 7.5 7.6 6.2 7.8 8.2 8.7 6.6																								Diurnal Average		
12.6 11.6 12.6 13.2 17.7 14.0 23.4 16.6 15.9 16.8 31.2 22.1 19.3 22.1 25.0 22.0 22.7 29.9 23.9 20.4 25.6 35.6 31.3 24.2																								Diurnal Maximum		
M - Maintenance N - Not Valid																										
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³																										



Hourly Maximums

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

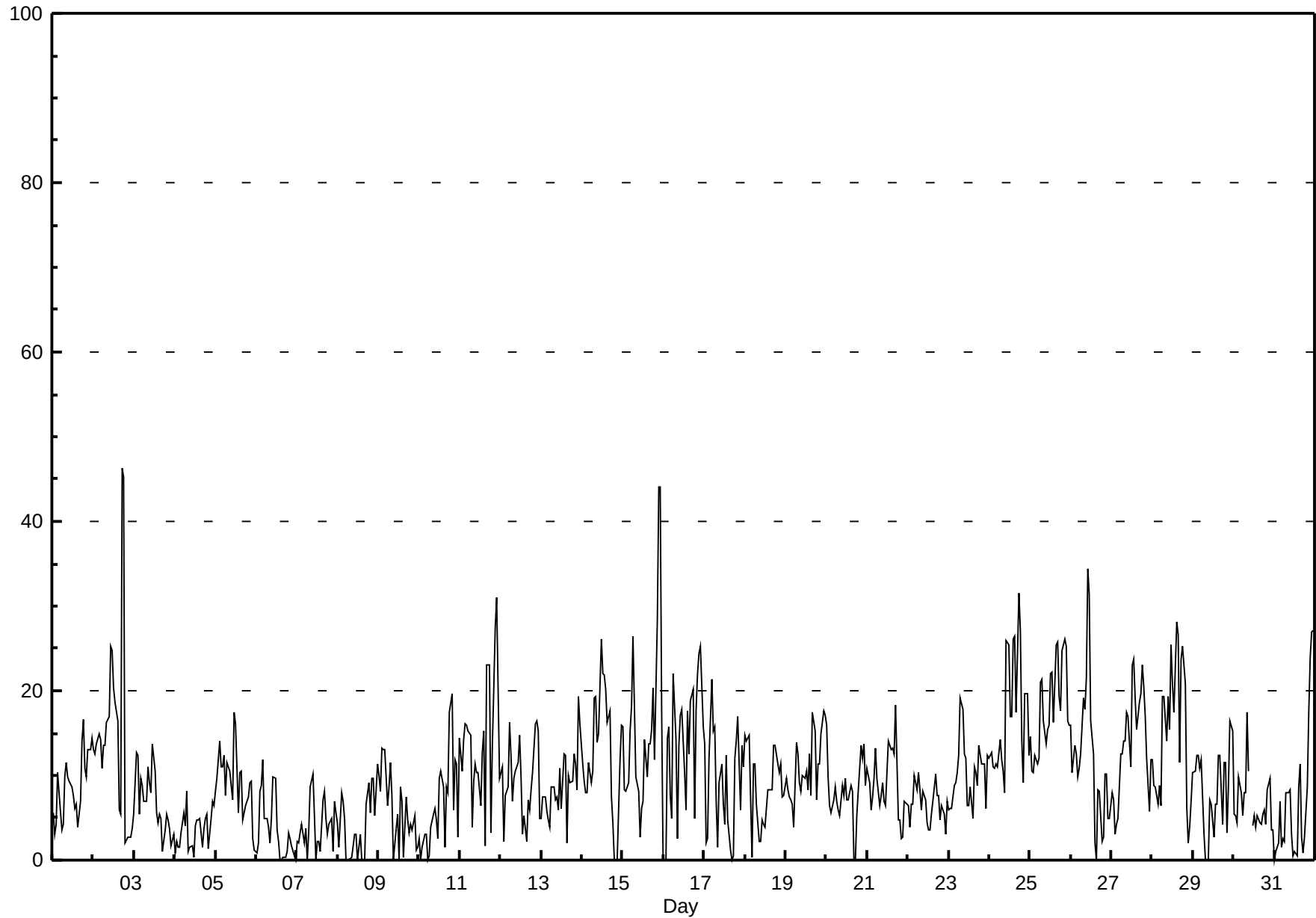
Henry Pirker - March 2012

Maximum Value: 46.2 μg/m³ on Mar 2 18:00																								Maximum Daily Average: 18.0 μg/m³ on Mar 25						Hours in Service: 744	
Minimum Value: 0 μg/m³ on Mar 6 15:00																								Minimum Daily Average: 3.6 μg/m³ on Mar 4						Hours of Data: 742	
Maximum Diurnal Average: 11.8 μg/m³ at hour 23																								Minimum Diurnal Average: 7.1 μg/m³ at hour 2						Hours of Missing Data: 2	
Monthly Average: 9.74 μg/m³																								Percentiles: P ₁ = 0.0 P ₁₀ = 2.0 Q ₁ = 5.0 Median = 8.6 Q ₃ = 13.3 P ₉₀ = 18.6 P ₉₉ = 31.1						Hours of Calibration: 0	
Percent Operational Time: 99.7																															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
1-Mar	6	3	4	10	8	3	4	10	12	10	9	9	8	6	7	4	7	14	17	11	10	13	13	14	8.8	16.7					
2-Mar	13	13	14	15	14	11	14	14	16	17	25	25	20	19	16	6	5	46	45	2	3	3	3	4	15.1	46.2					
3-Mar	5	13	12	5	10	9	7	7	11	9	8	14	11	6	4	5	5	1	3	5	5	4	2	3	6.8	13.8					
4-Mar	1	2	2	2	3	6	4	8	1	2	2	0	4	5	5	5	2	4	5	5	1	5	7	6	3.6	8.1					
5-Mar	8	10	14	11	11	12	8	12	11	9	7	17	16	6	10	11	5	6	6	7	9	9	3	1	9.1	17.4					
6-Mar	1	2	8	9	12	5	5	4	2	5	10	10	3	2	0	0	0	0	1	3	3	2	1	0	3.6	11.8					
7-Mar	2	2	3	4	2	4	0	3	9	10	5	0	2	2	1	7	8	5	3	4	5	1	7	6	4.0	10.1					
8-Mar	4	2	8	7	5	0	0	0	0	2	3	3	0	3	0	M	0	7	9	6	10	10	5	11	4.1	11.3					
9-Mar	10	8	13	13	13	6	9	12	8	0	4	5	0	9	7	0	7	5	3	4	3	5	1	2	6.2	13.3					
10-Mar	3	0	2	3	3	0	1	4	5	6	5	3	10	11	9	2	9	8	17	20	6	12	11	3	6.2	19.6					
11-Mar	14	11	14	16	16	15	15	4	9	11	10	10	6	13	15	2	23	23	3	14	20	27	31	10	13.9	31.1					
12-Mar	10	11	2	8	9	16	12	7	10	11	12	15	10	3	5	2	7	6	8	10	16	16	15	5	9.4	16.4					
13-Mar	5	7	7	6	5	4	9	9	7	7	6	11	6	13	12	2	10	9	9	13	11	8	19	16	8.8	19.3					
14-Mar	11	9	8	8	12	9	11	19	19	14	15	26	22	22	20	16	18	7	4	0	0	0	12	16	12.4	26.2					
15-Mar	16	8	8	9	15	18	26	18	10	8	3	6	7	14	10	14	14	15	20	12	28	44	44	18	16.1	44.0					
16-Mar	0	0	14	16	8	5	22	14	3	14	17	18	10	6	18	13	19	20	5	18	22	24	25	16	13.6	25.2					
17-Mar	14	2	3	12	21	15	16	7	2	9	11	7	4	12	5	1	0	1	12	14	17	6	14	11	8.9	21.3					
18-Mar	15	14	15	7	0	11	11	7	2	2	5	4	4	8	8	8	8	14	14	11	10	11	7	8	8.6	14.7					
19-Mar	10	8	7	7	7	4	14	13	9	8	10	10	11	8	13	8	17	15	7	11	11	15	18	17	10.7	17.6					
20-Mar	16	10	6	6	7	9	7	6	5	9	8	10	7	7	9	8	0	0	5	8	14	12	14	9	7.9	16.0					
21-Mar	11	9	6	7	10	13	10	6	8	9	7	6	14	14	13	13	13	18	5	5	3	3	7	7	9.0	18.4					
22-Mar	6	4	7	7	10	8	10	8	6	8	7	4	3	3	5	7	10	8	8	5	6	5	3	7	6.6	10.3					
23-Mar	6	6	6	9	9	10	12	19	18	13	12	6	6	9	5	11	10	9	14	11	11	11	6	12	10.1	19.1					
24-Mar	12	13	11	11	11	11	14	12	11	8	26	25	17	17	26	26	17	32	27	14	9	20	20	12	16.8	31.6					
25-Mar	15	11	10	12	11	12	21	21	16	14	15	16	22	22	16	25	26	19	18	25	26	25	16	16	18.0	26.2					
26-Mar	16	10	14	13	10	11	13	19	18	22	34	31	16	13	2	0	8	8	2	3	10	10	5	5	12.2	34.5					
27-Mar	8	7	3	4	5	13	13	14	14	17	17	11	23	24	19	15	19	20	23	21	17	12	6	12	14.0	23.8					
28-Mar	12	9	9	7	9	6	19	19	14	19	15	25	21	17	28	27	12	24	25	21	6	2	4	7	14.9	28.2					
29-Mar	10	11	12	12	11	12	3	0	0	0	7	7	3	7	7	12	12	4	12	12	3	9	16	15	8.2	16.4					
30-Mar	5	5	4	10	8	5	8	8	17	11	M	4	5	4	5	4	4	5	6	4	8	10	3	3	6.5	17.4					
31-Mar	0	1	2	7	2	3	2	8	8	8	3	1	1	1	9	11	3	1	3	9	17	24	27	27	7.3	27.2					
8.6 7.1 8.0 8.8 8.9 8.6 10.3 10.0 9.0 9.4 10.6 10.9 9.5 9.8 10.0 8.9 9.6 11.4 11.0 9.9 10.4 11.6 11.8 9.6																								Diurnal Average							
16.0 14.0 14.7 16.2 21.3 18.1 26.4 21.3 19.3 21.6 34.5 31.3 23.0 23.8 28.2 26.7 25.7 46.2 45.2 24.7 28.4 44.0 44.0 27.2																								Diurnal Maximum							
M - Maintenance																															

Hourly Maximums

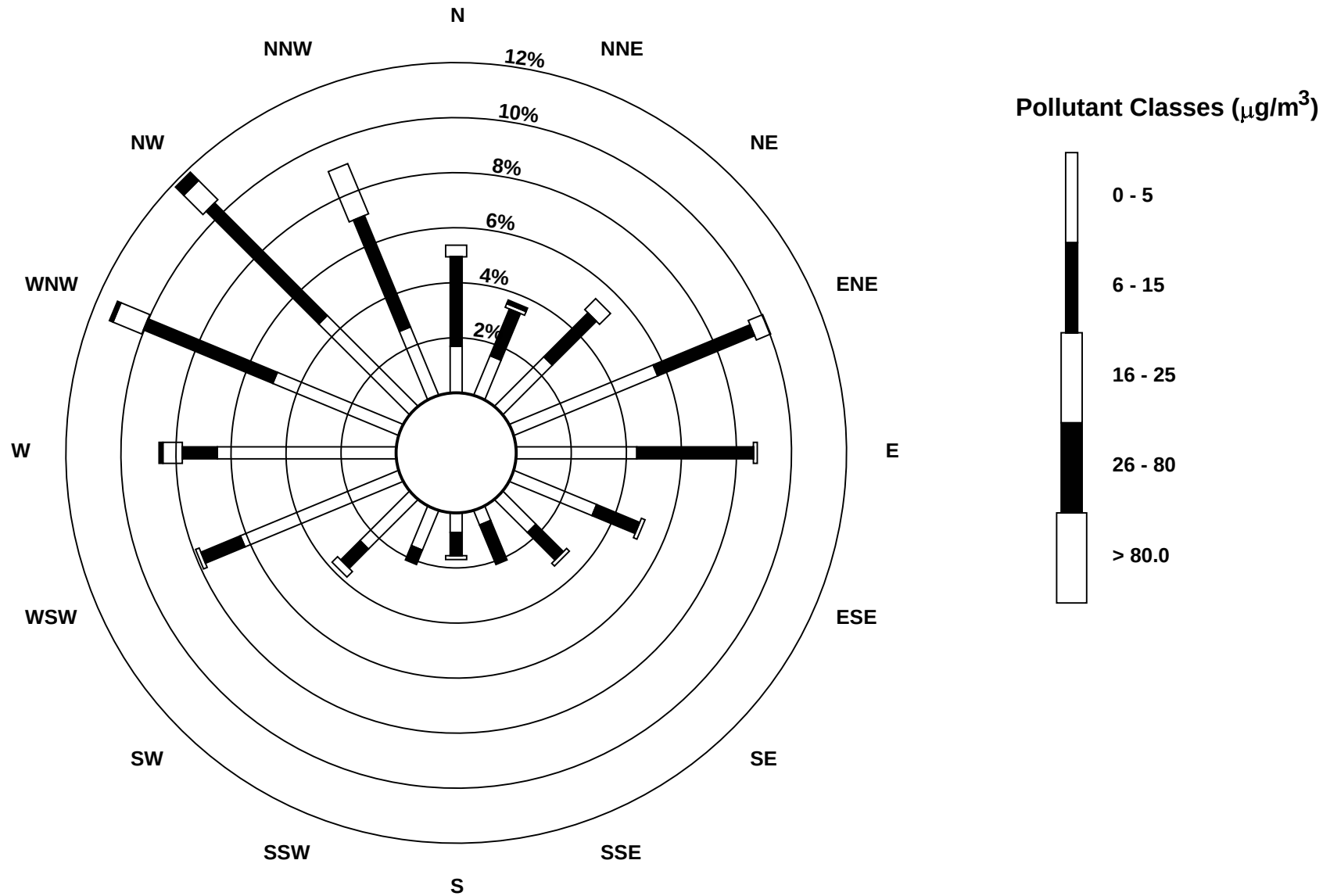
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Henry Pirker - March 2012



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Henry Pirker - March 2012



Hourly Averages

External Temperature (ET) - °C

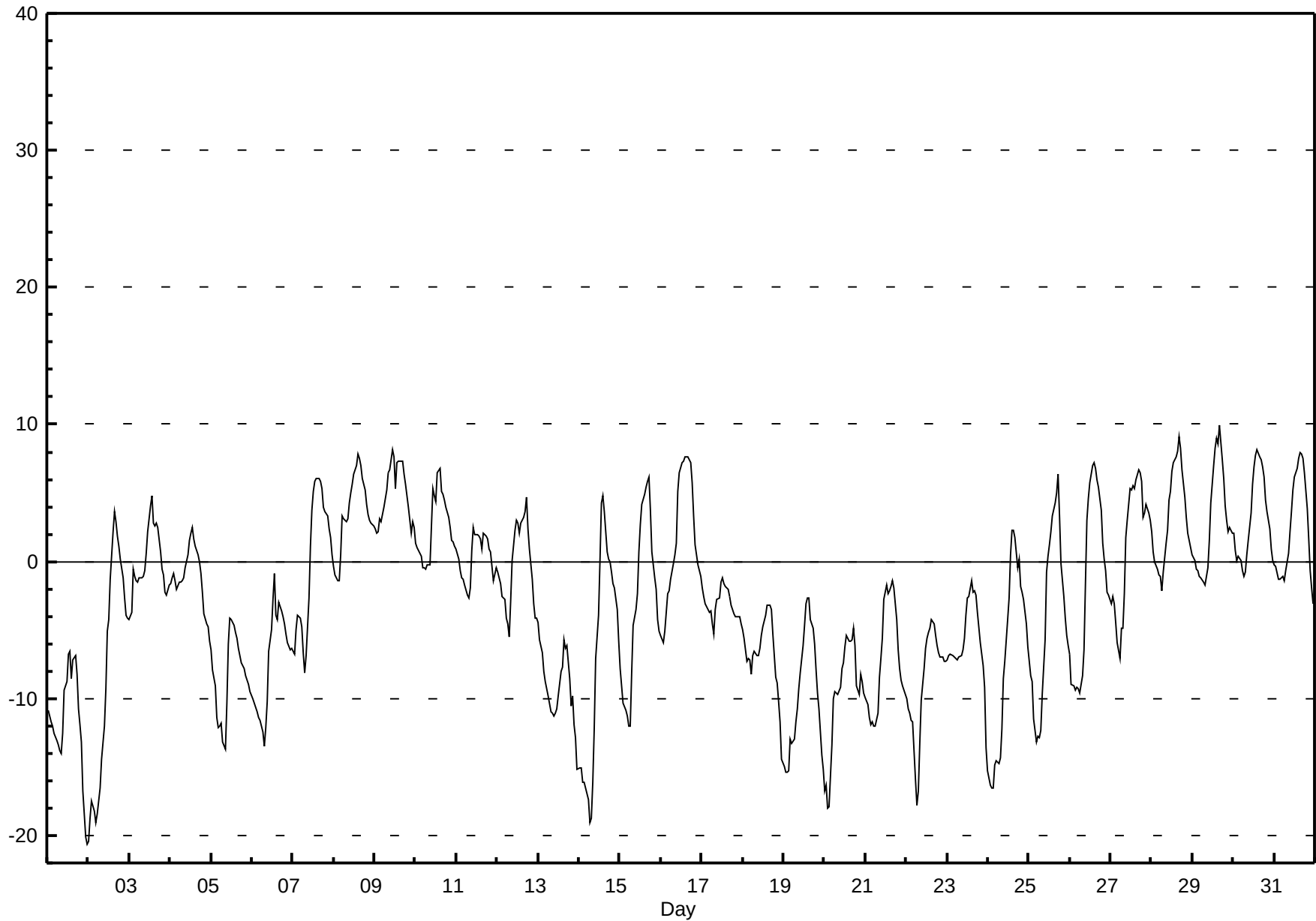
Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.9 °C on Mar 29 17:00 Maximum Daily Average: 4.9 °C on Mar 9																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: -21 °C on Mar 2 00:00 Minimum Daily Average: -11.7 °C on Mar 1 Maximum Diurnal Average: 2.0 °C at hour 16 Minimum Diurnal Average: -7.3 °C at hour 7 Monthly Average: -3.03 °C Percentiles: P ₁ = -18.4 P ₁₀ = -12.0 Q ₁ = -7.3 Median = -2.4 Q ₃ = 2.1 P ₉₀ = 5.4 P ₉₉ = 8.1																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	-11	-11	-12	-12	-13	-13	-13	-14	-14	-13	-9	-9	-7	-7	-9	-7	-7	-8	-11	-12	-13	-17	-20	-21	-11.7	-6.5
2-Mar	-20	-19	-17	-18	-19	-18	-18	-17	-14	-12	-9	-5	-4	-1	2	4	3	2	1	0	-1	-3	-4	-4	-8.0	3.6
3-Mar	-4	-4	-1	-1	-1	-1	-1	-1	-1	-1	1	2	4	5	3	3	3	2	1	-1	-1	-2	-2	-2	-0.1	4.8
4-Mar	-2	-1	-1	-1	-2	-2	-2	-1	-1	-1	0	2	2	2	2	1	0	0	-1	-2	-4	-5	-5	-6	-1.1	2.5
5-Mar	-6	-8	-9	-11	-12	-12	-12	-13	-14	-10	-6	-4	-4	-5	-5	-6	-6	-7	-7	-8	-8	-9	-9	-9	-8.4	-4.1
6-Mar	-10	-10	-11	-11	-11	-12	-12	-13	-12	-10	-7	-5	-3	-1	-4	-4	-3	-4	-4	-5	-5	-6	-6	-6	-7.3	-0.8
7-Mar	-7	-7	-5	-4	-4	-5	-7	-8	-7	-3	1	4	5	6	6	6	6	5	4	4	3	2	2	0	0.0	6.1
8-Mar	0	-1	-1	-1	1	3	3	3	3	4	5	6	6	7	8	8	7	6	5	4	3	3	3	3	3.6	7.9
9-Mar	2	2	2	3	3	4	5	5	7	7	8	8	5	7	7	7	6	6	5	4	2	3	2	2	4.9	8.2
10-Mar	1	1	1	0	0	0	-1	0	0	3	5	5	4	6	7	5	5	5	4	3	2	2	1	1	2.5	6.8
11-Mar	1	0	-1	-1	-1	-2	-2	-3	-2	1	2	2	2	2	2	1	2	2	2	1	1	0	-1	0	0.2	2.5
12-Mar	-1	-1	-2	-3	-3	-4	-5	-6	-3	0	2	3	3	2	3	3	4	5	2	1	-1	-3	-4	-4	-0.4	4.7
13-Mar	-4	-6	-7	-8	-9	-9	-10	-11	-11	-11	-11	-11	-10	-8	-8	-6	-6	-6	-9	-11	-10	-12	-13	-15	-9.2	-4.4
14-Mar	-15	-15	-16	-16	-16	-17	-19	-19	-16	-12	-7	-4	0	4	5	4	1	0	0	-1	-2	-2	-3	-6	-7.2	4.8
15-Mar	-8	-9	-10	-11	-11	-12	-12	-8	-5	-4	-2	1	3	4	5	5	6	6	4	1	-1	-2	-4	-5	-2.9	6.1
16-Mar	-5	-6	-5	-4	-2	-2	-1	0	1	1	5	6	7	7	8	8	8	7	6	3	1	0	0	-1	1.7	7.6
17-Mar	-2	-3	-3	-3	-4	-4	-5	-5	-3	-3	-3	-1	-1	-2	-2	-2	-3	-3	-4	-4	-4	-4	-4	-5	-3.1	-1.2
18-Mar	-5	-6	-7	-7	-7	-8	-7	-7	-7	-7	-6	-5	-5	-4	-3	-3	-3	-3	-5	-8	-9	-10	-12	-14	-6.7	-3.2
19-Mar	-15	-15	-15	-15	-13	-13	-13	-12	-11	-9	-8	-6	-5	-3	-3	-3	-4	-5	-6	-8	-10	-11	-14	-15	-9.7	-2.6
20-Mar	-17	-16	-18	-18	-13	-10	-9	-10	-10	-9	-8	-7	-6	-5	-6	-6	-6	-5	-6	-9	-10	-8	-9	-10	-9.6	-4.9
21-Mar	-10	-10	-11	-12	-12	-12	-12	-11	-8	-7	-6	-3	-2	-2	-2	-2	-1	-2	-4	-6	-8	-9	-9	-10	-7.2	-1.4
22-Mar	-10	-11	-11	-12	-12	-16	-18	-17	-13	-10	-8	-6	-6	-5	-5	-4	-5	-5	-6	-7	-7	-7	-7	-7	-8.9	-4.2
23-Mar	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-4	-3	-3	-1	-2	-2	-2	-4	-6	-7	-8	-9	-14	-5.8	-1.4
24-Mar	-15	-16	-17	-17	-15	-15	-15	-14	-12	-9	-7	-4	-3	0	2	2	2	0	0	-2	-2	-3	-5	-6	-7.1	2.2
25-Mar	-7	-8	-9	-12	-13	-13	-13	-12	-10	-6	-1	0	1	2	3	4	5	6	3	0	-3	-4	-5	-6	-4.0	6.3
26-Mar	-7	-9	-9	-9	-9	-9	-10	-8	-6	-2	3	5	6	7	7	7	6	5	4	1	0	-1	-2	-2	-1.4	7.2
27-Mar	-3	-3	-3	-4	-6	-7	-5	-5	-2	2	3	5	5	6	5	6	7	6	6	3	3	4	4	3	1.3	6.7
28-Mar	2	1	0	-1	-1	-1	-2	-1	1	2	4	5	7	7	8	8	9	8	7	5	3	2	2	1	3.2	9.1
29-Mar	0	0	-1	-1	-1	-1	-2	-2	-1	-1	2	4	7	8	9	9	10	7	6	4	3	2	2	2	2.8	9.9
30-Mar	2	1	0	0	0	-1	-1	-1	0	1	4	6	7	8	8	8	7	7	6	4	4	2	1	0	3.1	8.2
31-Mar	0	0	-1	-1	-1	-1	-1	-1	1	2	4	5	6	7	8	8	8	8	6	4	2	-1	-2	-3	2.3	8.0
-5.9 -6.4 -6.7 -7.0 -7.0 -7.1 -7.3 -7.0 -5.8 -3.9 -1.7 -0.2 0.8 1.7 1.9 2.0 1.9 1.4 0.2 -1.5 -2.4 -3.4 -4.3 -5.1 2.3 2.1 2.2 3.1 2.9 4.0 4.5 5.2 6.5 6.7 8.2 7.6 7.2 8.3 9.0 8.6 9.9 8.3 6.7 4.8 4.0 4.2 3.6 3.0																								Diurnal Average	Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C

Henry Pirker - March 2012



Hourly Averages

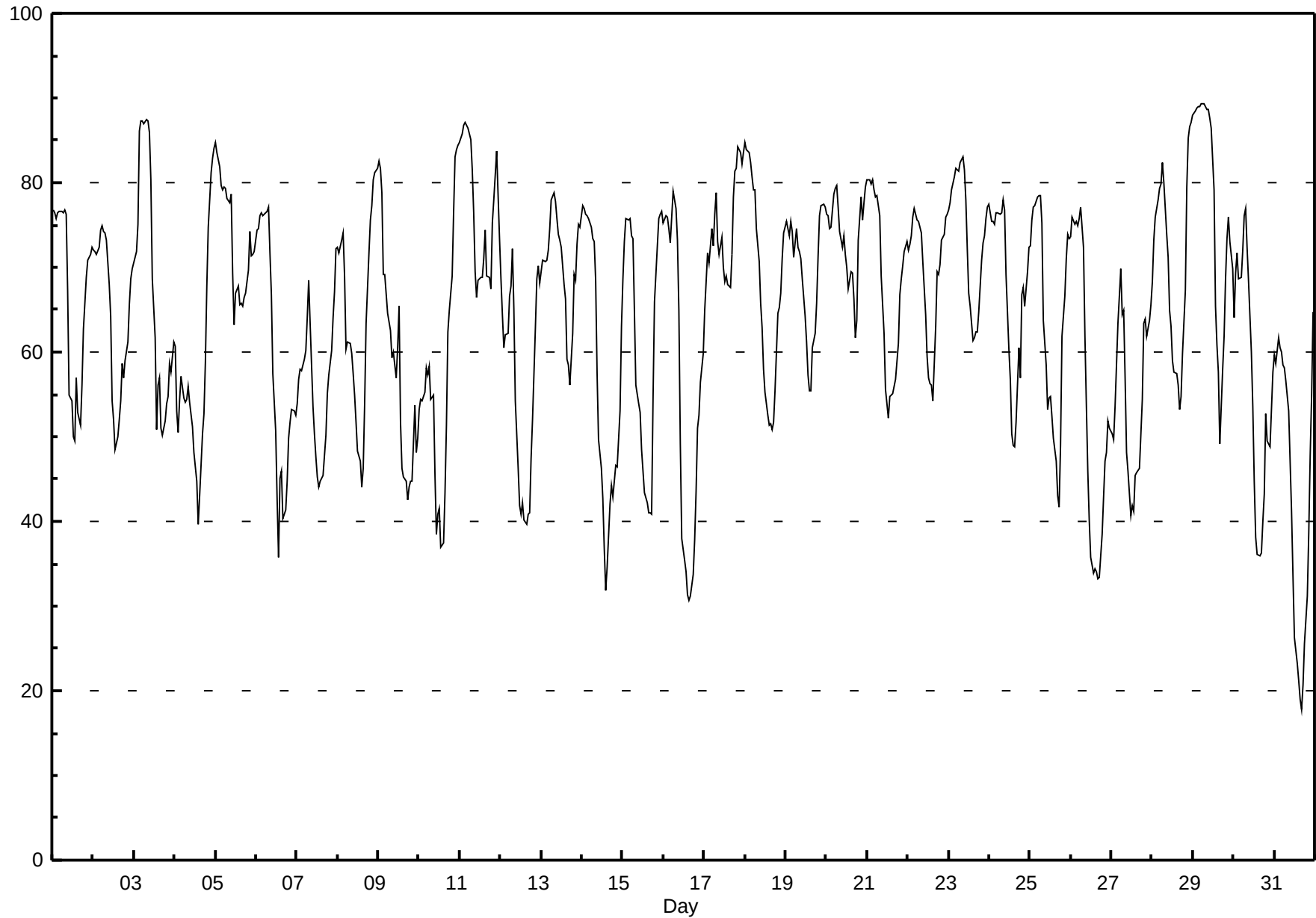
Relative Humidity (RH) - %

Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 89.4 % on Mar 29 06:00 Maximum Daily Average: 77.3 % on Mar 29																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 18 % on Mar 31 17:00 Maximum Diurnal Average: 74.1 % at hour 7 Monthly Average: 63.91 %												Minimum Daily Average: 43.3 % on Mar 31 Minimum Diurnal Average: 49.5 % at hour 16 Percentiles: P ₁ = 30.7 P ₁₀ = 44.2 Q ₁ = 53.9 Median = 66.7 Q ₃ = 75.2 P ₉₀ = 79.5 P ₉₉ = 88.4														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	77	76	76	76	77	77	76	77	76	67	55	54	50	49	57	53	51	56	63	66	69	71	72	72	66.4	76.8
2-Mar	72	72	72	72	74	75	74	74	73	68	64	54	52	48	50	52	54	59	57	59	61	66	69	70	64.2	74.8
3-Mar	70	72	75	86	87	87	87	87	87	86	80	69	62	51	56	57	51	50	52	54	55	59	58	61	68.3	87.4
4-Mar	61	53	51	54	57	55	54	54	56	54	51	48	47	45	40	43	50	53	59	68	75	81	83	84	57.3	84.0
5-Mar	85	83	82	80	79	79	79	78	78	79	69	63	67	68	66	66	65	66	67	70	74	71	72	72	73.2	84.7
6-Mar	74	75	76	77	76	76	77	77	72	67	57	51	43	36	45	46	40	41	45	50	52	53	53	53	58.8	77.2
7-Mar	54	57	58	58	59	60	64	69	63	53	50	48	45	44	45	45	48	50	55	57	60	64	67	72	56.1	72.3
8-Mar	72	72	73	74	69	60	61	61	60	57	55	52	48	47	44	46	54	63	72	76	77	80	81	82	64.1	81.7
9-Mar	83	82	79	69	69	65	64	62	59	60	57	60	65	52	46	45	45	43	44	45	45	54	48	50	57.9	82.6
10-Mar	53	54	54	55	58	57	58	54	55	46	38	41	42	37	37	43	51	62	65	69	76	83	84	84	56.7	84.4
11-Mar	85	86	87	87	87	86	85	82	76	70	67	69	69	69	71	74	69	69	67	75	78	81	84	73	76.9	87.1
12-Mar	69	64	61	62	62	67	68	72	65	54	46	42	41	42	40	40	41	41	48	52	63	69	70	68	56.1	72.2
13-Mar	69	71	71	71	72	75	78	79	78	76	74	73	72	68	66	59	58	56	62	69	69	73	75	75	70.4	78.7
14-Mar	77	77	76	76	76	75	73	73	68	58	50	46	43	37	32	35	42	44	43	45	47	47	53	63	56.4	77.3
15-Mar	69	73	76	76	76	74	73	65	56	54	53	48	46	43	42	41	41	41	55	66	72	76	76	77	61.2	76.7
16-Mar	75	76	76	75	73	76	79	77	73	65	49	38	35	34	31	31	31	34	38	44	51	52	56	60	55.4	79.0
17-Mar	65	68	72	71	75	73	76	79	73	72	74	70	68	69	68	68	71	78	81	82	84	84	82	84	74.4	84.2
18-Mar	85	84	83	82	81	79	79	75	71	66	63	58	55	52	51	52	51	52	55	65	65	67	71	74	67.3	84.7
19-Mar	75	75	74	75	74	71	75	72	72	71	69	64	61	57	55	55	61	62	66	71	76	77	77	77	69.3	77.4
20-Mar	76	76	74	75	79	79	80	77	74	72	74	71	70	67	70	69	66	62	64	73	78	76	78	80	73.3	79.6
21-Mar	80	80	80	80	79	78	78	76	69	66	62	56	52	55	55	55	56	57	61	67	69	70	72	73	67.8	80.4
22-Mar	72	73	74	76	77	76	75	75	74	71	64	59	57	56	56	54	63	70	69	70	73	74	76	76	69.2	77.0
23-Mar	77	78	79	81	82	82	81	82	83	82	78	72	67	65	61	62	62	62	65	71	73	74	76	77	73.8	83.1
24-Mar	77	75	75	75	76	76	76	77	78	77	69	60	57	50	49	49	52	61	57	67	68	65	70	72	67.0	77.9
25-Mar	73	76	77	77	78	78	78	75	64	59	53	55	55	52	50	47	43	42	49	62	67	71	74	73	63.7	78.4
26-Mar	74	76	75	75	75	76	77	72	62	54	46	40	36	34	34	34	33	33	38	43	47	48	52	51	53.6	77.1
27-Mar	50	50	54	58	63	70	64	65	57	48	46	41	42	41	45	46	46	50	54	63	64	62	64	66	54.6	69.8
28-Mar	68	73	76	78	79	80	82	80	74	71	65	63	59	58	57	56	53	55	60	67	79	85	87	87	70.6	87.1
29-Mar	88	89	89	89	89	89	89	89	89	89	88	86	79	65	61	58	49	58	62	69	73	76	73	70	77.3	89.4
30-Mar	64	69	72	69	69	72	76	77	72	68	60	54	45	38	36	36	36	40	43	53	49	49	53	58	56.6	76.9
31-Mar	60	59	62	61	60	58	58	57	53	47	41	34	26	23	21	19	18	21	26	31	39	48	55	65	43.3	64.8
71.9 72.4 72.8 73.2 73.8 73.6 74.1 73.2 69.7 65.3 60.2 56.1 53.4 50.2 49.7 49.5 50.1 52.6 56.2 61.8 65.4 67.9 69.7 70.9																								Diurnal Average		
87.9 88.5 88.8 88.9 89.1 89.4 89.3 89.0 88.6 88.6 87.6 86.5 79.1 69.0 71.0 74.5 71.5 78.3 81.4 81.7 84.2 85.2 86.6 87.1																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Henry Pirker - March 2012

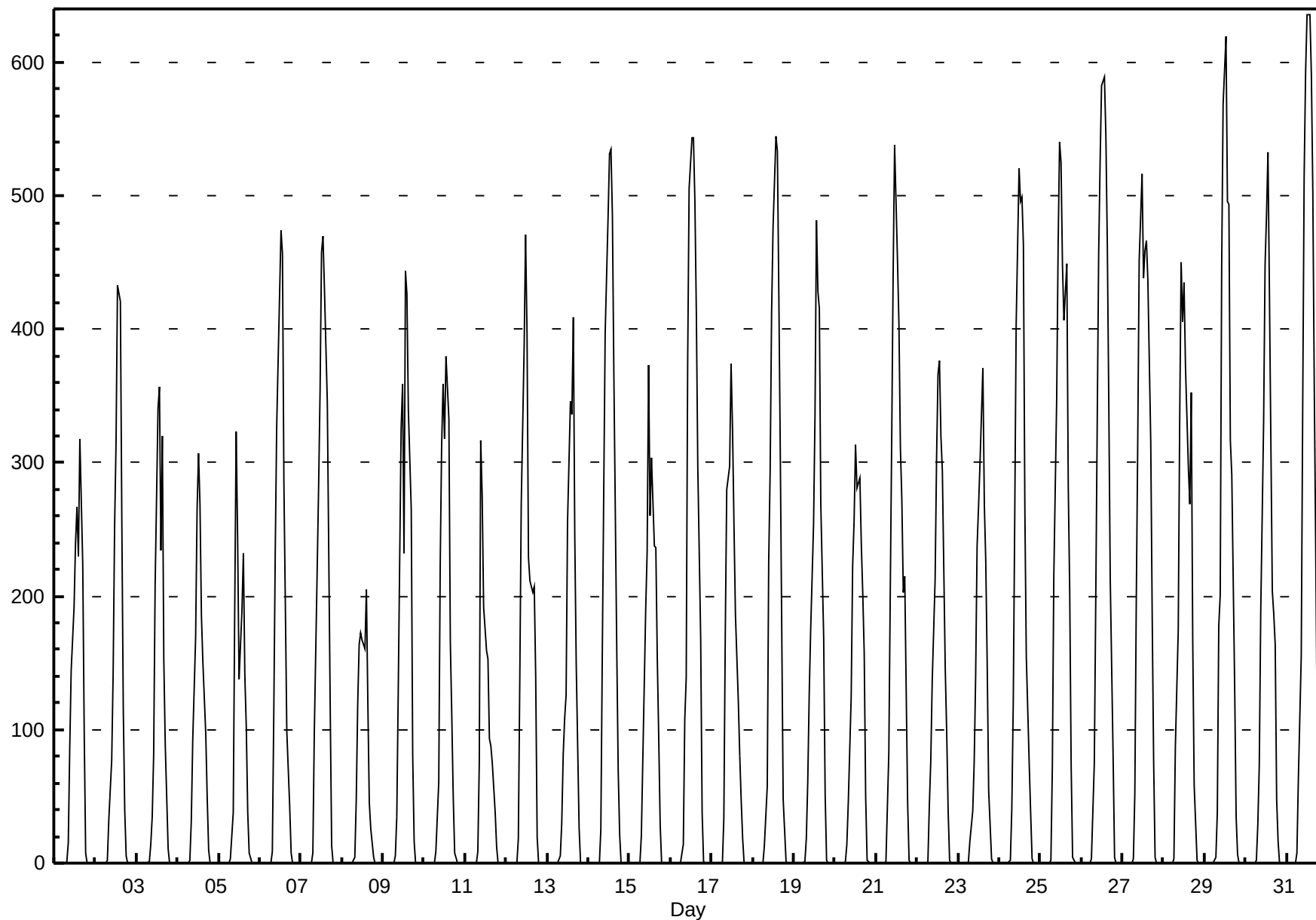


Hourly Averages

Solar Radiation (SR) - W/m²

Henry Pirker - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 635.4 W/m ² on Mar 31 14:00 Maximum Daily Average: 197.4 W/m ² on Mar 31																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 0 W/m ² on Mar 1 01:00 Minimum Daily Average: 51.6 W/m ² on Mar 8 Maximum Diurnal Average: 393.7 W/m ² at hour 14 Minimum Diurnal Average: 0.0 W/m ² at hour 1 Monthly Average: 115.76 W/m ² Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 4.4 Q ₃ = 212.0 P ₉₀ = 402.6 P ₉₉ = 577.1																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	0	0	0	0	0	0	1	15	86	145	192	240	267	230	318	224	99	7	0	0	0	0	0	76.0	318.2
2-Mar	0	0	0	0	0	0	0	2	33	77	142	251	314	433	421	256	116	41	5	0	0	0	0	0	87.2	433.1
3-Mar	0	0	0	0	0	0	0	1	14	35	82	207	340	357	234	320	153	89	11	0	0	0	0	0	76.8	356.8
4-Mar	0	0	0	0	0	0	0	2	32	92	169	265	307	270	185	151	96	49	10	0	0	0	0	0	67.8	306.9
5-Mar	0	0	0	0	0	0	0	3	38	189	324	245	138	189	232	141	102	38	7	0	0	0	0	0	68.6	323.7
6-Mar	0	0	0	0	0	0	0	9	112	231	327	426	474	456	284	193	99	43	7	0	0	0	0	0	110.9	474.4
7-Mar	0	0	0	0	0	0	0	8	98	220	283	355	458	470	431	345	231	116	13	0	0	0	0	0	126.1	469.7
8-Mar	0	0	0	0	0	0	0	5	48	120	164	173	167	160	205	120	45	26	5	0	0	0	0	0	51.6	205.1
9-Mar	0	0	0	0	0	0	0	5	35	128	326	359	232	443	426	339	265	80	16	0	0	0	0	0	110.6	443.2
10-Mar	0	0	0	0	0	0	0	8	61	222	313	359	318	379	333	166	110	50	8	0	0	0	0	0	97.0	379.3
11-Mar	0	0	0	0	0	0	0	9	75	316	275	192	160	153	93	88	75	38	11	0	0	0	0	0	61.9	316.3
12-Mar	0	0	0	0	0	0	0	18	138	269	386	470	397	229	212	202	207	139	20	0	0	0	0	0	111.9	470.3
13-Mar	0	0	0	0	0	0	0	5	31	82	108	126	256	346	336	409	244	149	26	0	0	0	0	0	88.3	408.8
14-Mar	0	0	0	0	0	0	0	25	155	278	397	484	531	535	484	367	160	69	22	0	0	0	0	0	146.2	535.3
15-Mar	0	0	0	0	0	0	0	21	77	189	233	374	260	304	237	236	154	94	29	0	0	0	0	0	92.1	373.7
16-Mar	0	0	0	0	0	0	0	14	107	139	374	506	544	544	496	412	298	169	38	1	0	0	0	0	151.7	543.8
17-Mar	0	0	0	0	0	0	0	33	173	280	297	374	325	254	187	121	80	46	18	0	0	0	0	0	91.2	374.0
18-Mar	0	0	0	0	0	0	0	13	57	226	294	412	477	544	534	426	308	177	47	1	0	0	0	0	146.5	544.2
19-Mar	0	0	0	0	0	0	1	19	62	127	174	254	336	482	428	415	269	168	52	2	0	0	0	0	116.2	482.1
20-Mar	0	0	0	0	0	0	1	14	46	124	222	256	314	281	288	239	202	157	50	2	0	0	0	0	91.5	313.9
21-Mar	0	0	0	0	0	0	1	82	203	318	443	538	452	403	311	273	203	214	46	2	0	0	0	0	145.3	537.9
22-Mar	0	0	0	0	0	0	1	43	77	137	212	304	366	376	320	294	145	98	39	2	0	0	0	0	100.6	376.1
23-Mar	0	0	0	0	0	0	1	16	39	76	139	237	267	299	371	269	226	147	54	3	0	0	0	0	89.4	370.8
24-Mar	0	0	0	0	0	0	2	41	120	257	404	521	496	499	463	266	155	75	38	3	0	0	0	0	139.1	521.0
25-Mar	0	0	0	0	0	0	3	71	213	348	464	540	525	448	407	450	282	204	73	4	0	0	0	0	168.0	539.9
26-Mar	0	0	0	0	0	0	3	75	197	329	456	525	583	589	545	462	347	213	79	5	0	0	0	0	183.7	588.8
27-Mar	0	0	0	0	0	0	3	52	197	314	452	516	438	458	466	437	316	186	76	4	0	0	0	0	163.1	516.1
28-Mar	0	0	0	0	0	0	4	87	175	332	451	406	435	372	296	269	353	168	58	3	0	0	0	0	142.0	450.7
29-Mar	0	0	0	0	0	0	4	38	178	201	445	569	619	496	494	317	291	131	34	7	0	0	0	0	159.4	619.2
30-Mar	0	0	0	0	0	0	2	29	74	188	331	448	486	533	428	204	186	164	48	16	0	0	0	0	130.8	533.1
31-Mar	0	0	0	0	0	0	7	63	155	341	514	593	635	635	591	502	356	235	100	9	0	0	0	0	197.4	635.4
0.0 0.0 0.0 0.0 0.0 0.0 1.1 26.2 97.9 202.3 301.5 370.2 383.6 393.7 353.8 290.5 203.2 118.5 33.8 2.1 0.0 0.0 0.0 0.0																								Diurnal Average		
0.0 0.0 0.0 0.0 0.0 0.0 7.3 87.3 213.2 347.7 514.2 592.7 635.3 635.4 590.6 502.3 356.3 235.3 100.1 16.3 0.0 0.0 0.0 0.0																								Diurnal Maximum		



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2012

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	8	6	5	5	4	5	3	5	5	4	5	6	6	8	6	4	5	5	5	3	3	4	4	4.0	8.2
Dir	340	354	357	343	328	333	315	318	327	331	287	289	293	298	331	323	339	17	76	84	102	314	315	327	333.3	331.4
2 Spd	4	4	4	4	2	2	3	4	2	2	3	3	5	8	15	22	24	20	18	15	10	6	3	2	7.1	24.2
Dir	319	296	305	333	316	299	326	315	291	280	189	276	298	319	281	260	275	284	280	283	272	236	212	331	281.4	274.5
3 Spd	2	4	11	2	2	6	6	6	7	6	3	7	14	25	31	26	29	21	19	11	16	14	17	17	8.5	31.0
Dir	166	160	239	192	137	161	131	134	150	160	150	213	246	289	318	308	292	289	292	268	254	247	248	250	268.6	318.5
4 Spd	14	16	20	15	11	14	12	16	15	12	8	10	14	13	17	14	13	13	14	8	3	6	4	4	10.9	19.7
Dir	251	262	264	254	248	252	247	252	253	249	240	249	260	271	275	254	229	229	231	236	185	166	147	143	248.2	263.8
5 Spd	3	1	3	4	3	4	4	5	5	3	5	9	15	18	19	17	15	11	13	14	11	11	8	6	7.6	18.7
Dir	105	76	331	316	289	334	338	316	319	310	291	316	329	356	357	2	5	21	7	349	347	3	26	56	351.9	357.4
6 Spd	4	3	6	7	7	7	8	8	9	8	6	9	8	11	12	10	26	28	25	24	17	15	8	8	6.2	27.6
Dir	97	102	122	139	127	119	120	114	126	124	180	234	254	273	314	284	258	258	265	265	263	245	234	235	242.1	258.1
7 Spd	4	6	15	17	13	11	6	3	5	11	14	20	24	26	24	23	25	23	23	25	21	10	5	5	13.8	26.0
Dir	310	287	283	284	278	289	268	301	293	292	279	274	266	271	262	262	258	258	260	269	281	316	39	97	273.7	270.9
8 Spd	8	5	6	3	7	17	15	16	14	13	13	10	7	4	2	8	8	5	8	5	4	6	8	5	4.0	16.8
Dir	110	120	132	106	250	248	246	239	247	244	249	237	240	266	326	198	213	115	83	84	99	103	113	120	214.2	248.2
9 Spd	3	4	6	5	2	4	6	9	15	17	21	23	20	25	29	23	21	31	24	22	21	15	23	20	14.0	30.6
Dir	94	126	163	169	96	190	193	198	216	236	255	279	261	257	263	273	266	273	267	271	272	286	277	278	260.2	273.4
10 Spd	11	11	14	11	8	9	10	6	6	3	4	7	8	5	7	8	8	9	6	7	9	3	4	8	2.1	13.7
Dir	275	247	261	269	256	250	210	254	354	338	268	189	179	134	93	69	104	126	126	87	121	131	96	117	196.5	261.2
11 Spd	8	7	6	6	5	4	5	6	7	7	3	3	3	5	5	6	5	5	4	10	5	1	5	11	1.4	11.2
Dir	124	115	95	102	94	72	78	96	106	120	158	324	33	351	300	302	115	91	105	268	285	323	235	255	102.9	255.2
12 Spd	13	14	12	11	9	3	5	2	4	5	6	10	11	15	14	17	14	11	6	4	1	3	5	9	2.0	16.5
Dir	263	228	228	234	238	294	226	79	128	136	107	88	77	83	87	89	88	81	62	27	261	320	322	327	105.7	89.4
13 Spd	12	13	12	13	17	16	18	18	15	17	16	15	14	13	12	8	7	4	5	5	5	3	5	5	10.8	17.6
Dir	315	319	299	307	314	316	303	318	307	305	302	302	301	300	309	309	311	321	328	5	358	295	348	322	311.2	302.6
14 Spd	6	4	1	2	4	4	4	4	5	5	3	4	3	3	7	10	12	10	11	10	7	3	1	1	2.3	12.4
Dir	354	327	284	305	340	332	305	312	315	295	289	290	296	29	48	62	75	75	88	99	115	113	193	296	36.8	74.8
15 Spd	1	1	0	0	0	1	1	7	12	14	14	13	10	12	12	11	10	7	5	2	2	0	5	1	4.7	14.5
Dir	294	33	184	320	18	314	67	100	98	107	100	108	90	88	88	78	77	142	331	89	302	20	322	303	90.9	100.4
16 Spd	5	3	6	5	4	4	8	9	8	9	10	16	17	17	19	19	17	13	8	8	7	5	3	1	8.6	19.2
Dir	325	324	301	255	231	237	222	236	237	233	244	266	267	262	258	266	270	277	274	237	262	242	285	254	260.0	258.1
17 Spd	3	4	5	0	3	5	11	12	16	15	15	14	15	13	15	12	12	10	9	9	9	4	2	8	8.1	16.4
Dir	349	357	138	152	5	32	65	57	68	71	68	55	51	56	46	50	48	43	45	56	60	95	349	307	53.0	67.9
18 Spd	9	10	7	11	13	11	13	17	16	15	14	15	15	15	14	13	9	10	7	4	7	3	3	4	9.3	16.7
Dir	310	317	264	269	288	291	277	289	302	308	305	306	302	301	300	309	303	296	308	358	79	83	85	335	301.4	288.7
19 Spd	4	4	4	1	2	4	4	6	8	10	9	7	8	6	7	8	9	10	9	4	2	2	3	3	3.9	9.7
Dir	339	308	311	75	45	316	3	331	348	355	354	10	42	43	37	50	86	94	88	81	354	5	311	329	21.4	94.1
20 Spd	2	2	4	2	5	8	8	8	12	11	10	12	9	7	10	9	8	4	0	3	4	5	6	7	5.1	11.7
Dir	344	330	339	48	65	74	71	63	54	79	59	48	46	29	346	345	359	19	227	109	99	112	98	90	50.0	54.3
21 Spd	7	6	4	4	5	7	8	6	8	9	8	4	5	7	5	6	7	10	10	9	8	6	8	6	6.4	10.5
Dir	86	86	55	84	79	67	68	64	68	84	95	102	15	28	33	26	63	71	66	61	78	77	77	78	68.3	70.7
22 Spd	6	5	6	5	5	4	4	6	6	6	7	8	9	10	10	6	6	7	7	8	5	4	5	5	4.7	10.2
Dir	75	67	68	58	58	323	329	329	330	324	24	31	359	325	293	324	37	30	24	21	355	329	312	319	0.8	293.0

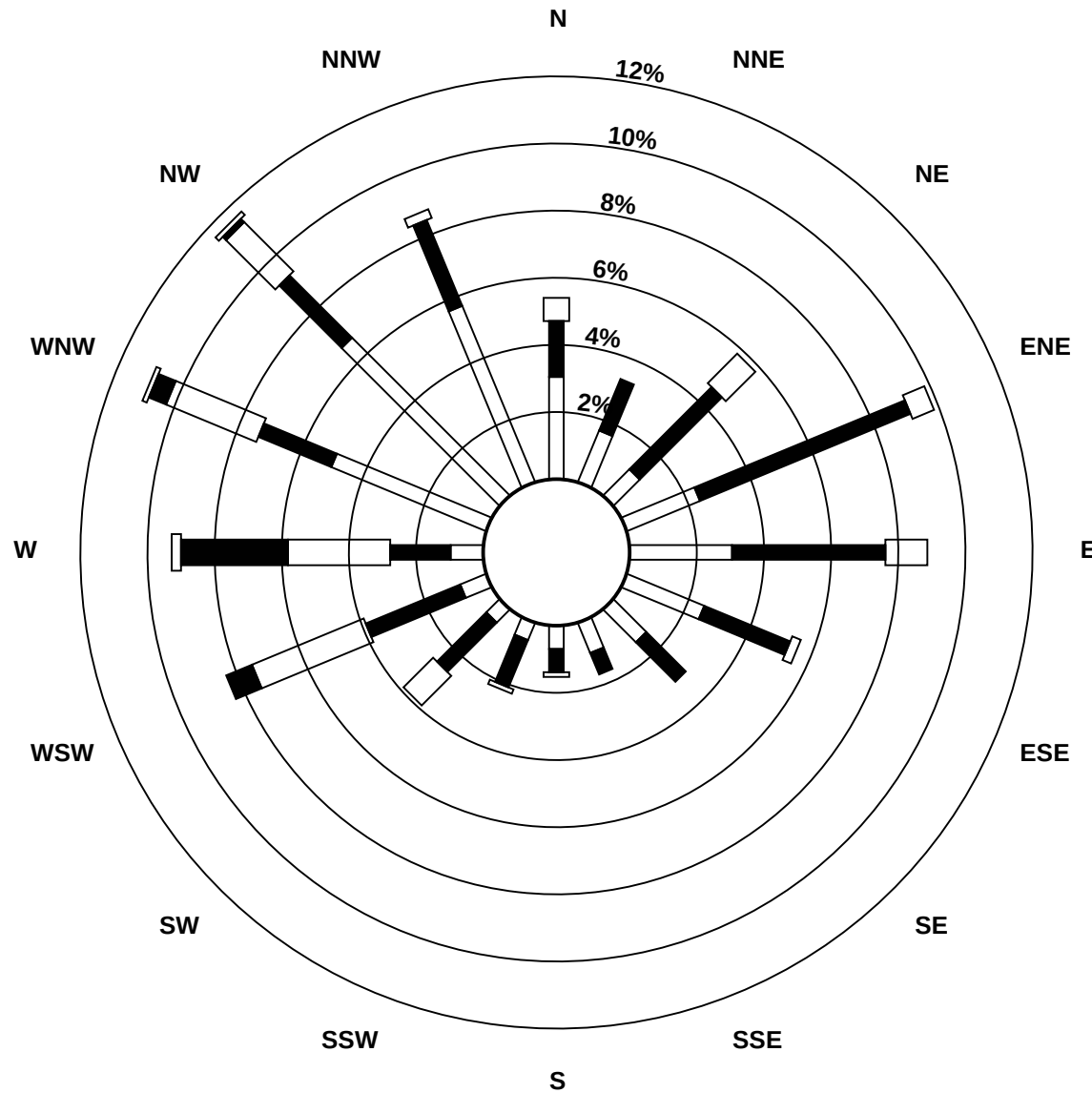
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - March 2012

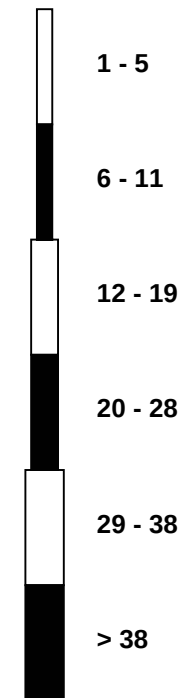
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	4	3	7	6	6	6	1	6	8	9	8	6	5	8	8	8	8	7	7	7	5	5	3	5	5.1	8.9
Dir	315	55	69	77	86	124	231	45	74	88	78	57	62	39	58	71	62	49	43	48	64	76	3	323	61.1	88.4
24 Spd	5	4	4	3	6	3	2	1	2	2	5	5	6	5	6	7	5	10	4	5	5	5	3	3	3.4	9.7
Dir	335	326	313	350	298	303	314	289	301	291	285	312	332	22	48	82	42	346	347	325	338	355	313	301	338.5	345.6
25 Spd	5	4	5	4	3	3	4	4	5	4	4	8	8	8	6	8	4	5	6	3	3	3	3	2	4.2	8.5
Dir	325	22	20	338	282	347	3	329	296	286	288	319	348	345	357	345	347	291	312	354	316	317	338	354	332.5	344.8
26 Spd	4	3	7	7	7	1	3	4	5	3	2	7	10	10	10	11	12	11	10	10	10	7	3	4	4.5	12.4
Dir	325	308	302	316	341	332	351	337	289	285	270	104	77	62	61	56	52	50	55	59	69	71	5	55	39.7	52.3
27 Spd	4	5	4	2	1	3	4	2	3	1	5	3	6	7	10	9	7	8	5	2	7	10	12	10	2.0	11.8
Dir	64	84	119	121	62	59	65	275	305	245	141	248	284	311	345	345	312	347	333	5	91	92	100	106	37.0	99.8
28 Spd	9	8	8	9	10	10	4	8	9	9	9	8	8	8	8	6	8	8	7	3	22	10	9	6	4.7	21.6
Dir	92	77	97	97	89	110	84	95	108	93	80	78	63	52	54	54	48	60	66	32	266	286	338	208	73.5	265.6
29 Spd	7	6	5	1	1	1	1	1	1	1	5	5	6	7	8	10	8	14	14	6	3	5	4	5	0.9	13.9
Dir	175	180	163	167	164	125	114	101	101	72	115	60	56	33	22	38	39	310	283	319	93	151	172	265	34.4	283.3
30 Spd	9	4	6	7	4	1	1	1	3	8	10	12	15	15	14	11	14	10	11	12	12	11	10	12	7.8	15.1
Dir	247	282	260	299	327	123	291	353	232	242	259	250	257	265	271	258	232	212	205	184	208	234	238	246	243.9	264.7
31 Spd	10	8	9	8	8	7	5	6	7	13	17	18	20	18	16	15	13	13	8	4	4	3	2	2	7.3	19.7
Dir	247	234	217	224	226	220	209	203	201	219	240	253	271	265	281	275	288	303	9	53	114	128	316	341	254.2	271.4
Spd	1.8	1.4	2.2	2.0	1.8	1.7	1.4	1.5	1.1	1.2	1.9	3.4	4.4	5.4	6.3	5.0	3.7	3.7	3.2	2.5	2.0	0.9	1.4	1.9	Diurnal Average	
Dir	305.9	299.3	265.1	278.7	293.7	285.4	279.1	301.7	310.9	269.4	270.3	289.7	301.3	313.7	321.2	320.4	308.3	307.7	311.5	311.1	286.1	281.3	302.2	282.6	Diurnal Maximum	
Spd	13.8	15.6	19.7	17.3	16.7	16.8	17.6	17.5	16.4	17.5	20.6	22.9	23.5	26.0	31.0	25.7	28.7	30.6	24.8	24.7	21.6	14.6	22.7	20.5	Diurnal Maximum	
Dir	250.6	262.1	263.8	283.7	314.1	248.2	302.6	317.8	67.9	304.7	255.4	278.6	265.9	270.9	318.5	307.7	291.9	273.4	265.1	268.6	265.6	244.6	277.2	277.9		
Maximum Speed Value: 31 km/h on Mar 3 15:00																								Hours in Service: 744		
Maximum Daily Speed Average: 14.0 km/h on Mar 9																								Hours of Data: 744		
Maximum Diurnal Speed Average: 6.3 km/h at hour 15																								Hours of Missing Data: 0		
Minimum Speed Value: 0 km/h on Mar 15 05:00																										
Minimum Daily Speed Average: 0.9 km/h on Mar 24																										
Minimum Diurnal Speed Average: 0.9 km/h at hour 22																										
Monthly Average Velocity: 2.47 km/h 301.34 deg																								Percent Operational Time: 100.0		
Speed Percentiles: P ₁ = 0.6 P ₁₀ = 2.7 Q ₁ = 4.2 Median = 6.8 Q ₃ = 10.9 P ₉₀ = 15.6 P ₉₉ = 25.5																										
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	39		35		7		0		0		0		81													
NorthEast	20		61		12		0		0		0		93													
East	33		73		18		0		0		0		124													
SouthEast	21		28		0		0		0		0		49													
South	13		14		1		0		0		0		28													
SouthWest	7		36		23		0		0		0		66													
West	29		24		53		36		3		0		145													
NorthWest	82		47		27		1		1		0		158													
Total	244		318		141		37		4		0		744													

Wind Rose

Wind Speed (WS) (km/h)
Henry Pirker - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - March 2012

Maximum Speed: 31 km/h on Mar 3 15:00																				Maximum Daily Speed Average: 16.5 km/h on Mar 9										Hours in Service: 744	
Minimum Speed: 1 km/h on Mar 29 05:00																				Minimum Daily Speed Average: 5.2 km/h on Mar 24										Hours of Data: 744	
Maximum Diurnal Speed Average: 12.7 km/h at hour 15																				Minimum Diurnal Speed Average: 6.3 km/h at hour 5										Hours of Missing Data: 0	
Monthly Average Speed: 8.69 km/h																				Percentiles: P ₁ = 1.0 P ₁₀ = 3.6 Q ₁ = 4.9 Median = 7.3 Q ₃ = 11.1 P ₉₀ = 15.8 P ₉₉ = 25.7										Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	7	8	7	5	5	4	5	3	5	5	4	5	6	6	8	7	5	6	5	5	4	4	4	4	5.3	8.5					
2-Mar	4	4	4	4	3	3	4	4	3	3	4	4	5	8	16	22	24	21	18	15	11	6	4	3	8.2	24.4					
3-Mar	3	5	11	3	4	7	6	6	7	6	5	7	14	26	31	26	29	22	19	11	16	14	17	18	13.0	31.4					
4-Mar	14	16	20	15	11	14	12	16	15	12	8	10	14	14	17	15	14	14	14	8	4	6	4	4	12.2	19.8					
5-Mar	3	2	3	5	4	4	4	5	5	4	6	9	15	18	19	17	15	12	13	15	11	11	8	7	9.0	19.0					
6-Mar	5	4	6	7	7	7	8	8	9	8	7	10	9	12	12	11	26	28	25	24	18	15	8	9	11.6	27.7					
7-Mar	7	7	15	18	13	11	6	4	5	11	14	20	24	26	24	23	25	23	23	25	21	10	6	5	15.3	26.2					
8-Mar	8	5	6	5	8	17	16	16	14	13	13	10	7	5	3	8	9	7	8	7	5	6	8	5	8.8	16.9					
9-Mar	3	5	6	5	3	5	6	10	15	17	21	23	21	25	30	24	21	31	24	22	21	15	23	21	16.5	30.8					
10-Mar	12	12	14	11	9	9	10	9	7	5	5	8	8	6	8	8	9	9	7	7	9	4	4	8	8.1	13.9					
11-Mar	8	7	7	7	6	4	6	6	7	8	4	5	4	6	6	7	5	6	7	11	6	3	6	12	6.3	11.6					
12-Mar	14	14	13	11	9	5	6	3	4	6	6	10	12	15	14	17	14	11	7	5	3	4	6	10	9.1	16.7					
13-Mar	12	14	12	13	17	17	18	18	15	18	16	15	15	13	12	9	7	5	6	5	5	3	5	5	11.4	17.8					
14-Mar	6	4	2	3	4	4	4	5	5	5	4	4	4	5	7	11	13	10	11	10	7	3	2	1	5.6	12.5					
15-Mar	1	1	1	1	1	1	2	7	12	15	15	13	10	12	13	11	10	9	6	3	2	1	5	2	6.4	14.6					
16-Mar	5	4	6	6	4	4	9	9	8	9	10	17	17	17	19	19	17	13	8	9	7	5	5	3	9.6	19.4					
17-Mar	3	4	5	3	4	6	11	12	17	15	15	15	15	13	15	13	12	10	9	9	9	6	5	8	9.8	16.6					
18-Mar	10	10	8	11	13	11	13	17	16	15	14	16	15	15	14	14	10	10	7	5	8	4	3	4	11.0	16.8					
19-Mar	4	5	4	2	4	5	5	7	9	10	9	8	8	7	8	9	9	10	9	5	3	4	4	3	6.3	10.1					
20-Mar	3	3	4	3	5	8	8	9	12	12	10	12	10	7	10	9	8	5	4	3	4	5	6	7	7.0	12.1					
21-Mar	7	6	4	5	5	7	8	6	9	9	9	6	6	7	6	7	7	11	10	9	8	6	8	6	7.1	10.8					
22-Mar	7	5	6	5	5	4	5	6	6	7	8	8	9	10	10	8	7	8	8	8	6	5	5	5	6.7	10.4					
23-Mar	4	4	7	6	6	7	3	6	9	9	8	6	6	9	9	8	8	7	7	7	6	6	4	5	6.5	9.0					
24-Mar	5	4	4	3	6	3	3	2	2	3	5	7	7	6	7	7	8	10	7	6	6	8	3	5	5.2	10.4					
25-Mar	5	4	5	4	4	3	5	4	6	4	4	8	8	8	7	9	6	5	6	5	5	4	5	4	5.4	9.1					
26-Mar	4	5	8	7	7	4	4	5	5	3	4	8	11	10	10	12	13	12	10	11	10	7	4	5	7.4	12.8					
27-Mar	4	6	4	3	3	4	4	4	4	3	6	5	6	8	10	10	8	8	5	3	7	10	12	10	6.1	11.9					
28-Mar	9	8	9	9	10	10	4	8	9	9	10	9	8	9	8	7	9	8	8	7	22	11	11	7	9.0	21.9					
29-Mar	7	6	6	1	1	1	1	1	1	1	6	6	7	7	8	10	9	14	14	6	4	5	4	6	5.5	14.3					
30-Mar	9	6	6	9	6	3	2	3	4	9	10	12	15	16	15	12	14	11	11	13	13	12	11	12	9.6	15.5					
31-Mar	11	9	9	8	8	7	6	6	7	14	18	18	21	18	16	16	14	14	9	4	4	3	3	4	10.3	20.6					
6.6 6.3 7.2 6.4 6.3 6.4 6.5 7.2 8.1 8.6 8.9 10.1 10.9 11.8 12.7 12.4 12.4 11.8 10.5 9.1 8.5 6.6 6.6 6.6																									Diurnal Average						
13.9 15.7 19.8 17.5 16.9 16.9 17.8 17.6 16.6 17.7 20.8 23.1 23.7 26.2 31.4 25.9 28.8 30.8 25.1 24.8 21.9 14.8 22.9 21.0																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - March 2012

Maximum Value: 92.2 deg on Mar 11 22:00																								Hours in Service: 744	
Minimum Value: 0.3 deg on Mar 29 04:00																								Hours of Data: 744	
Percentiles: P ₁ = 5.5 P ₁₀ = 7.5 Q ₁ = 10.6 Median = 15.9 Q ₃ = 29.0 P ₉₀ = 54.7 P ₉₉ = 84.9																								Hours of Missing Data: 0	
																								Hours of Calibration: 0	
																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	14	9	11	15	13	22	13	14	9	11	11	6	6	15	14	14	34	36	15	10	29	49	13	20	48.6
2-Mar	14	6	24	20	56	48	24	10	64	55	40	59	32	17	23	7	6	13	6	19	13	13	62	61	64.0
3-Mar	39	47	11	56	60	17	11	10	13	35	48	12	14	13	9	8	5	7	5	16	7	6	6	5	59.7
4-Mar	6	8	7	6	8	8	9	8	6	12	12	10	11	11	11	22	10	8	10	11	58	6	11	16	58.5
5-Mar	31	79	39	65	34	11	10	16	7	34	14	11	12	11	10	11	14	17	13	11	13	10	23	33	78.8
6-Mar	18	28	12	14	12	10	10	6	10	8	28	23	20	22	14	16	6	5	8	8	9	8	16	14	28.4
7-Mar	56	27	4	10	7	7	21	18	15	6	9	8	7	7	8	6	5	6	7	7	10	11	33	25	56.2
8-Mar	11	34	16	46	50	7	8	8	8	7	10	16	34	63	25	29	47	35	44	50	23	7	10	63.5	
9-Mar	37	33	12	16	71	30	13	16	6	11	7	8	13	6	8	7	11	7	8	6	7	7	6	13	70.8
10-Mar	11	9	10	17	26	8	12	49	22	47	24	31	15	37	29	12	24	10	26	15	14	36	31	7	49.1
11-Mar	9	14	14	11	20	16	13	10	14	30	54	66	42	38	70	30	34	43	68	14	33	92	30	14	92.2
12-Mar	13	7	11	8	15	59	15	42	28	21	26	12	13	9	11	8	8	12	43	39	80	48	54	27	80.3
13-Mar	8	10	10	11	8	10	9	6	6	9	9	6	12	9	9	14	15	31	25	21	28	47	28	18	46.9
14-Mar	13	18	63	58	23	24	27	11	21	13	23	11	32	57	19	13	8	8	9	8	14	45	60	56	62.6
15-Mar	39	44	75	66	91	59	36	13	8	6	7	9	18	8	9	11	10	41	57	57	63	81	25	38	91.3
16-Mar	41	68	22	30	32	47	29	8	15	8	11	10	13	11	9	8	8	5	12	9	17	21	55	64	68.2
17-Mar	46	14	37	88	62	31	13	13	10	11	13	14	14	15	11	16	15	26	18	18	20	57	72	16	88.5
18-Mar	10	8	28	8	7	8	8	6	6	7	6	7	9	8	9	12	21	9	12	35	20	21	30	23	34.6
19-Mar	19	33	33	58	85	45	21	20	20	14	13	21	20	33	27	24	18	16	12	59	50	56	34	73	84.6
20-Mar	57	73	26	50	16	11	13	11	16	16	18	23	15	28	17	16	21	34	85	17	15	12	14	8	85.1
21-Mar	7	10	22	31	16	10	9	28	13	16	17	64	41	21	35	19	18	15	11	13	14	15	12	19	64.2
22-Mar	15	14	13	20	30	28	13	9	8	30	26	21	26	18	11	37	30	21	16	11	18	33	9	21	37.0
23-Mar	13	67	16	15	14	23	79	24	15	11	15	22	24	23	22	22	17	24	21	11	13	14	45	10	78.5
24-Mar	10	9	25	38	14	12	14	20	19	66	7	56	23	28	26	16	51	22	85	35	28	57	40	76	85.0
25-Mar	25	16	11	26	42	16	20	33	23	12	14	22	25	22	22	24	59	21	19	70	76	57	65	79	78.5
26-Mar	43	50	23	18	21	83	52	24	14	37	73	24	15	16	17	14	14	16	13	10	10	11	33	46	82.6
27-Mar	27	14	22	48	73	40	23	78	34	62	28	59	12	22	19	19	18	17	18	51	18	6	6	7	77.9
28-Mar	13	12	9	6	6	8	22	10	11	14	20	20	18	17	24	22	22	16	12	60	10	30	40	21	60.0
29-Mar	9	15	13	0	1	10	12	10	18	39	34	36	26	27	19	12	27	14	14	17	41	12	15	41	41.3
30-Mar	13	50	27	37	53	77	89	85	41	15	17	14	13	14	19	17	12	12	13	11	18	9	7	7	89.2
31-Mar	11	22	11	6	6	19	26	40	18	12	11	12	16	16	13	17	14	26	16	29	10	16	56	75	75.2
57.3 78.8 74.7 88.5 91.3 82.6 89.2 85.4 64.0 65.7 73.3 66.1 42.2 57.0 70.4 37.0 59.1 47.2 85.1 70.2 80.3 92.2 71.9 78.5																									

PAZA

Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

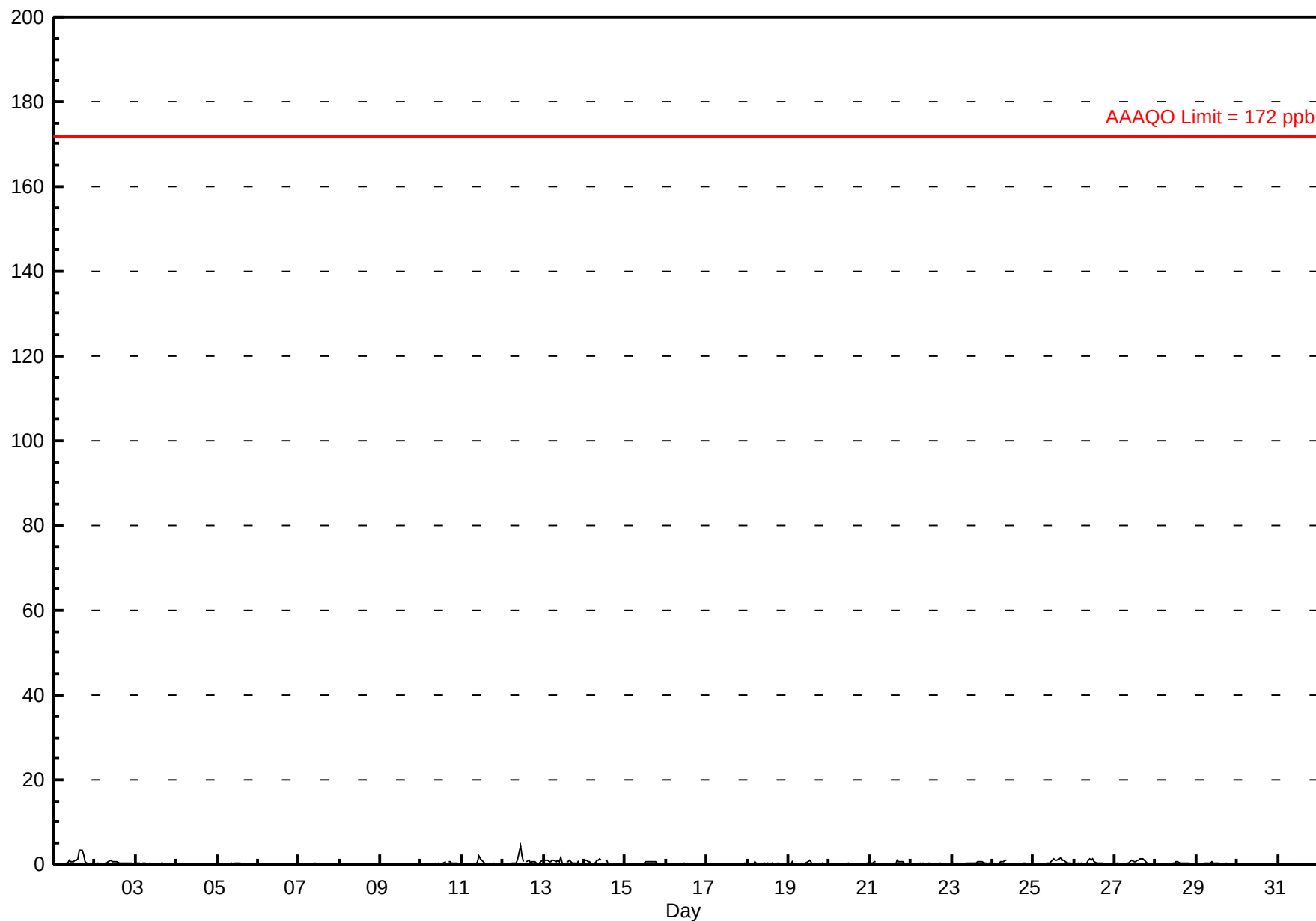
Sulphur Dioxide (SO₂) - ppb

Evergreen Park - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 4.3 ppb on Mar 12 11:00 Maximum Daily Average: 0.8 ppb on Mar 1																					Hours in Service: 744 Hours of Data: 702 Hours of Missing Data: 42 Hours of Calibration: 42 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Mar 4 09:00 Maximum Diurnal Average: 0.6 ppb at hour 11 Monthly Average: 0.24 ppb										Minimum Daily Average: 0.0 ppb on Mar 17 Minimum Diurnal Average: 0.1 ppb at hour 22 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.7 P ₉₉ = 1.6																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	4	3	2	1	0	0	0	0	0	0	0.8	3.6
2-Mar	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0.4	0.9
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3	
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.1	
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4	
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.1	
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.2	
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0.0	0.2	
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.1	
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	1	0	0	0	0	0	0	0.2	0.8	
11-Mar	0	0	0	0	0	0	0	0	0	1	2	1	1	0	A	0	0	0	0	0	0	0	0	0	0.3	2.0	
12-Mar	0	0	0	0	0	0	0	0	0	1	4	2	1	A	1	1	0	1	1	1	0	0	1	1	0.7	4.3	
13-Mar	1	1	1	1	1	1	1	1	1	1	2	0	A	1	1	1	1	0	0	0	1	0	0	1	0.7	1.6	
14-Mar	1	1	1	1	0	0	0	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.2	
15-Mar	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	1	1	0	0	0	0	0	0.2	0.7	
16-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	
17-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
18-Mar	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
19-Mar	0	0	1	0	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.9	
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3	
21-Mar	0	0	1	1	A	0	0	0	0	0	0	C	C	C	C	0	1	1	1	1	0	0	0	0	0.3	0.9	
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
23-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0.3	0.7	
24-Mar	0	A	0	0	0	1	1	1	1	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
25-Mar	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	1	1	1	0	0	0	A	0.6	1.7	
26-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0.4	1.5	
27-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0.5	1.4	
28-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	A	0	0	0	0.2	0.6	
29-Mar	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.6	
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.1	
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.2	
0.2 0.2 0.2 0.1 0.1 0.1 0.2 0.2 0.3 0.3 0.6 0.4 0.4 0.3 0.3 0.4 0.4 0.4 0.3 0.2 0.1 0.1 0.1 0.1																								Diurnal Average			
1.2 1.2 1.1 0.8 0.8 1.1 1.1 1.0 1.1 1.5 4.3 1.9 1.2 1.0 1.4 3.6 3.5 2.4 1.1 0.6 0.8 0.3 0.7 0.9																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																											

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2012



Hourly Maximums

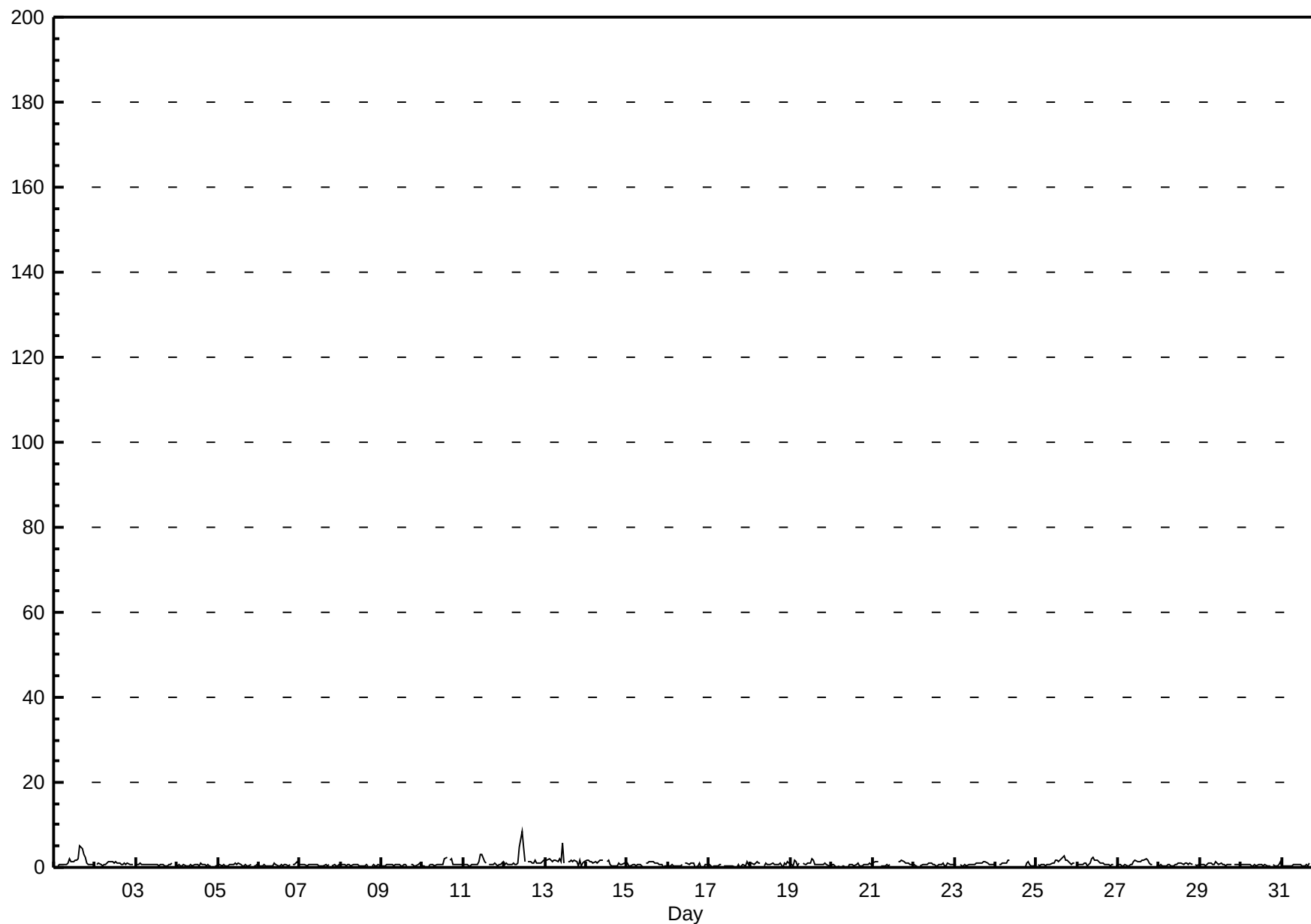
Sulphur Dioxide (SO₂) - ppb

Evergreen Park - March 2012

Maximum Value: 8.5 ppb on Mar 12 11:00																				Maximum Daily Average: 1.7 ppb on Mar 12										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 10 03:00																				Minimum Daily Average: 0.4 ppb on Mar 17										Hours of Data: 702	
Maximum Diurnal Average: 1.4 ppb at hour 11																				Minimum Diurnal Average: 0.6 ppb at hour 22										Hours of Missing Data: 42	
Monthly Average: 0.80 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.9 P ₉₀ = 1.4 P ₉₉ = 2.5										Hours of Calibration: 42	
																														Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	1	A	0	1	1	1	1	1	1	2	1	1	2	2	2	5	4	3	2	1	1	1	1	1	1.5	4.9					
2-Mar	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.4					
3-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.1					
4-Mar	0	1	0	0	1	0	0	0	1	0	1	1	1	0	1	1	1	0	1	0	1	A	0	0	0.5	1.1					
5-Mar	1	1	0	1	0	0	0	1	1	1	1	1	1	1	0	0	1	0	0	1	A	0	0	1	0.6	1.1					
6-Mar	1	0	0	1	0	0	0	0	0	1	1	0	0	1	0	1	1	0	1	A	1	1	1	1	0.6	1.3					
7-Mar	1	1	1	1	0	1	1	1	1	1	1	0	0	0	0	1	0	1	A	0	1	0	0	1	0.5	0.8					
8-Mar	1	1	1	0	1	1	0	1	1	1	1	0	0	0	0	1	0	A	0	1	0	0	1	0	0.5	0.8					
9-Mar	0	0	0	1	1	1	1	0	1	1	1	0	0	1	1	0	A	1	1	0	0	1	1	1	0.5	1.0					
10-Mar	0	0	0	0	1	1	1	0	1	1	1	1	1	2	3	A	2	2	1	1	1	1	1	1	0.8	2.5					
11-Mar	1	1	1	0	1	1	1	1	1	1	3	3	1	1	A	1	1	1	1	1	0	1	1	1	0.9	3.0					
12-Mar	1	1	1	1	1	1	1	1	1	5	8	5	1	A	1	1	1	1	2	1	1	1	1	2	1.7	8.5					
13-Mar	2	2	2	2	1	2	2	1	2	1	6	1	A	1	1	2	1	2	1	0	2	0	1	1	1.6	5.6					
14-Mar	2	2	1	1	1	1	1	1	2	2	2	A	1	2	1	0	0	0	0	1	1	1	1	1	1.1	1.8					
15-Mar	1	0	0	1	1	0	1	1	1	0	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	1.5					
16-Mar	0	0	1	0	0	0	0	0	1	A	1	1	1	1	1	1	0	0	1	0	0	0	1	1	0.5	1.1					
17-Mar	1	0	0	0	0	0	1	1	A	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0.4	1.2					
18-Mar	1	1	1	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.8	1.3					
19-Mar	1	0	2	2	0	1	A	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	0	0	0.9	1.9					
20-Mar	1	1	0	0	0	A	0	0	0	0	1	1	1	0	1	1	1	0	0	1	1	1	1	1	0.5	1.0					
21-Mar	1	1	1	1	A	0	0	0	1	0	1	C	C	C	C	1	1	2	1	1	1	1	1	1	0.9	1.6					
22-Mar	1	0	0	A	0	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1	1	0.6	1.0					
23-Mar	1	1	A	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4					
24-Mar	1	A	1	1	1	1	1	2	2	C	C	C	C	C	0	0	0	0	1	1	1	0	0	1	0.7	1.6					
25-Mar	A	1	0	1	1	0	1	1	1	1	1	2	2	1	2	2	3	2	2	1	1	1	1	A	1.2	2.9					
26-Mar	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	0	1	1	A	0	1.0	2.3					
27-Mar	1	1	0	0	1	0	0	1	1	1	2	1	1	1	2	2	2	2	1	1	1	A	0	0	1.0	2.0					
28-Mar	0	1	0	0	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	0.7	1.0					
29-Mar	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	0.7	1.2					
30-Mar	1	1	1	1	1	1	0	0	1	1	1	1	1	0	1	0	0	0	A	1	0	0	1	1	0.6	1.4					
31-Mar	0	0	0	0	0	0	0	1	1	1	1	1	0	0	1	0	1	A	1	0	1	0	1	0	0.5	1.0					
0.7 0.7 0.6 0.7 0.6 0.7 0.6 0.7 0.8 1.0 1.4 1.0 0.9 0.9 0.9 1.0 0.9 0.9 0.8 0.7 0.7 0.6 0.7 0.7																								Diurnal Average							
1.7 1.8 1.9 1.6 1.5 1.6 1.7 1.6 2.0 4.8 8.5 4.7 1.9 1.9 2.5 4.9 4.4 3.1 2.4 1.3 1.7 1.2 1.3 1.6																								Diurnal Maximum							
C - Calibration A - Automated Daily Zero Span																															

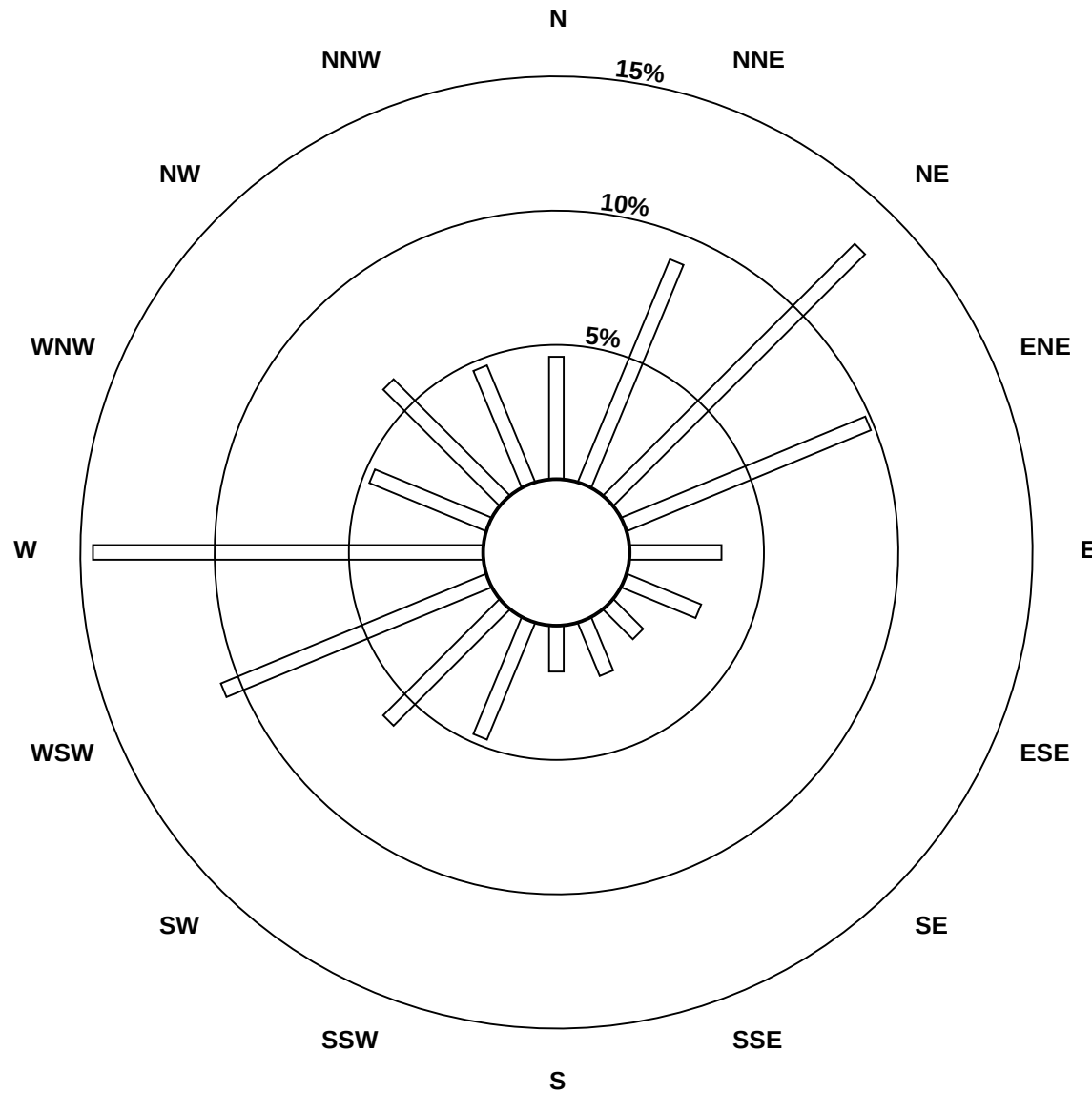
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2012

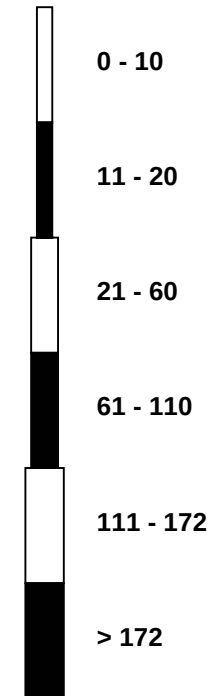


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Evergreen Park - March 2012

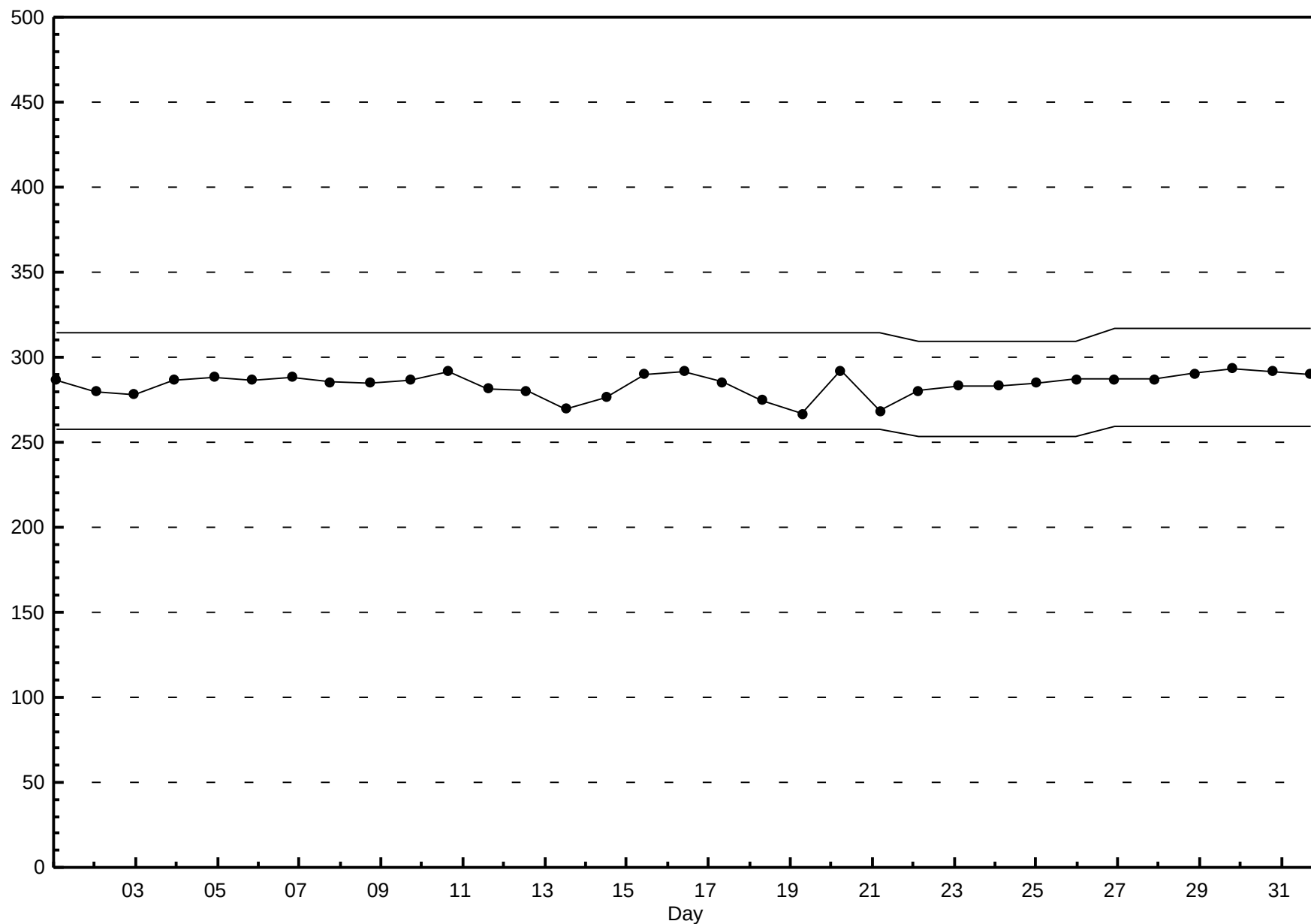


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Evergreen Park - March 2012



Hourly Averages

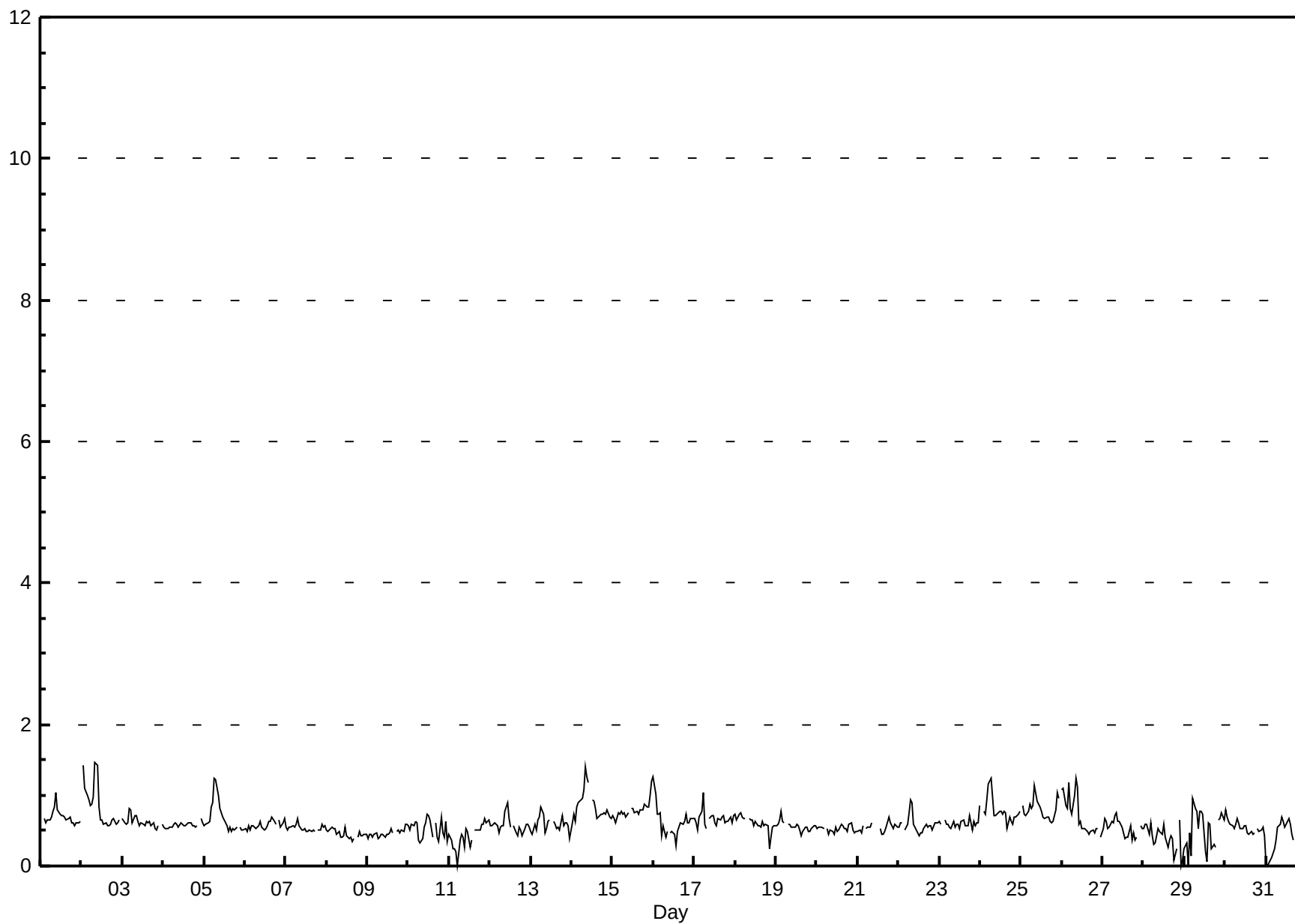
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.5 ppb on Mar 2 09:00 Maximum Daily Average: 0.9 ppb on Mar 14																			Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 37 Percent Operational Time: 100.0								
Minimum Value: 0 ppb on Mar 28 23:00 Maximum Diurnal Average: 0.7 ppb at hour 9 Monthly Average: 0.60 ppb																			Minimum Daily Average: 0.4 ppb on Mar 28 Minimum Diurnal Average: 0.5 ppb at hour 14 Percentiles: P ₁ = 0.1 P ₁₀ = 0.4 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.2								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
2-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.5	
3-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.8	
4-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.7	
5-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	A	1	1	0	0.7	1.2	
6-Mar	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.6	0.7	
7-Mar	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	A	1	1	1	1	1	0.5	0.7	
8-Mar	1	0	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0.5	0.6	
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	1	0	1	0	1	0.5	0.6	
10-Mar	1	1	1	1	1	1	0	0	0	1	1	1	1	1	0	A	1	0	1	0	0	1	0	0	0.5	0.7	
11-Mar	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	1	1	1	1	1	1	1	1	1	0.4	0.7	
12-Mar	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	0	0	1	1	0	1	1	1	1	0.6	0.9	
13-Mar	0	0	1	1	1	1	1	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0.6	0.8	
14-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
16-Mar	1	1	1	1	1	0	1	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0.6	1.3	
17-Mar	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
18-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0.6	0.8	
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	1	0	0	1	1	1	0.6	0.8	
20-Mar	1	1	1	1	1	A	1	0	1	0	0	1	0	1	1	1	1	1	1	0	1	1	1	0	0.5	0.6	
21-Mar	0	1	0	1	A	1	1	1	1	C	C	C	C	1	0	0	0	1	1	1	1	1	1	1	0.5	0.7	
22-Mar	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	0.6	0.9	
23-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7	
24-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
25-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A		0.8	1.1	
26-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	1	1	A	0	0.7	1.2	
27-Mar	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	A	1	1	0.5	0.8	
28-Mar	1	1	1	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	A	1	0	0	0.4	0.6	
29-Mar	0	0	0	0	0	1	1	1	1	1	1	1	0	0	1	1	0	0	0	A	1	1	1	1	0.5	0.9	
30-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	1	0	1	1	0	0.6	0.8	
31-Mar	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	A	1	1	1	1	1	1	0.5	0.7	
		0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	Diurnal Average		
		1.3	1.4	1.1	1.0	1.2	1.2	1.2	1.2	1.5	1.4	1.2	0.8	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.8	1.0	1.0	1.2	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 10 ppb		24-hr 3 ppb																							

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2012



Hourly Maximums

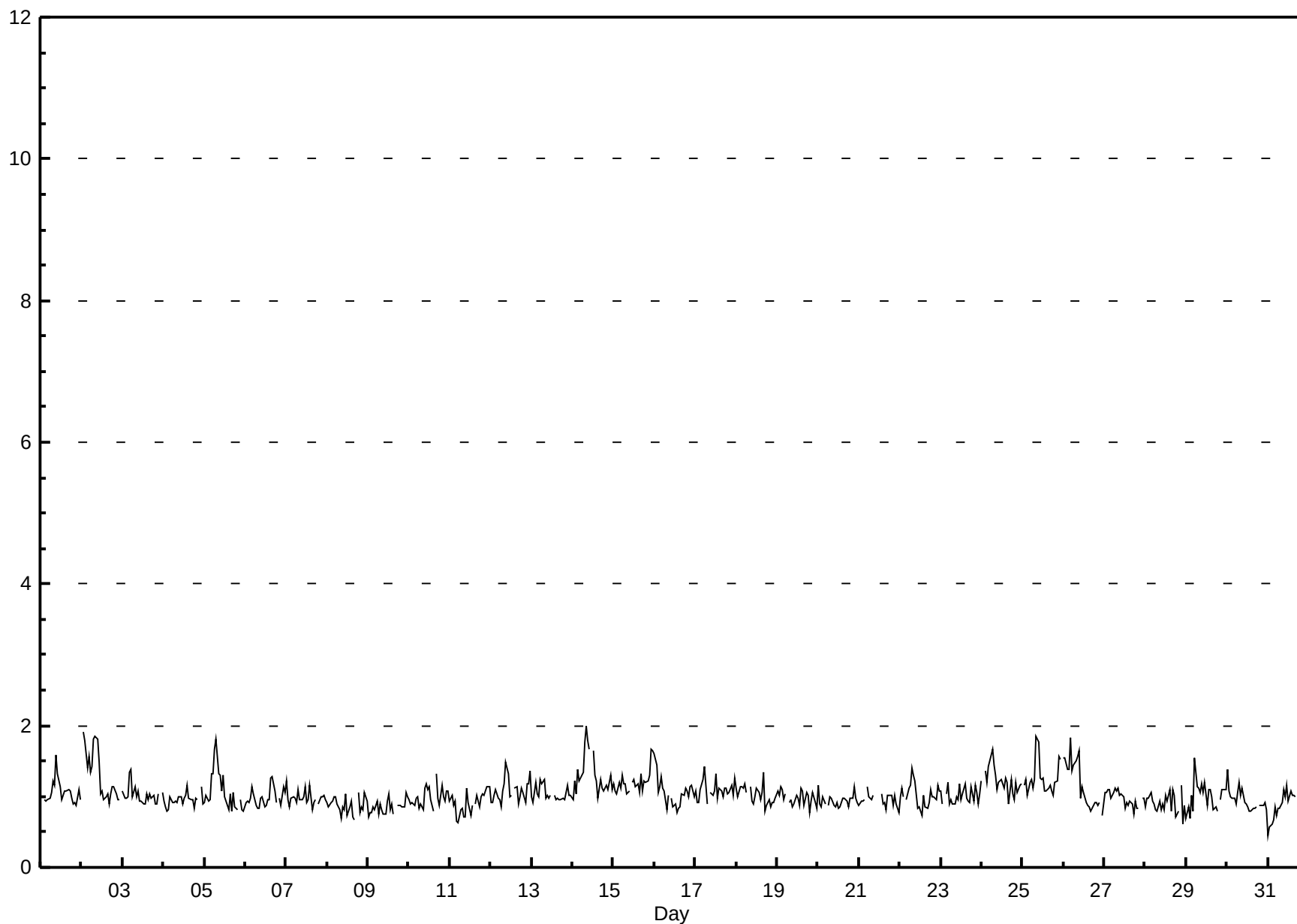
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - March 2012

Maximum Value: 2.0 ppb on Mar 14 09:00										Maximum Daily Average: 1.3 ppb on Mar 14										Hours in Service: 744						
Minimum Value: 0 ppb on Mar 31 01:00										Minimum Daily Average: 0.9 ppb on Mar 9										Hours of Data: 707						
Maximum Diurnal Average: 1.1 ppb at hour 10										Minimum Diurnal Average: 1.0 ppb at hour 14										Hours of Missing Data: 37						
Monthly Average: 1.04 ppb										Percentiles: P ₁ = 0.7 P ₁₀ = 0.8 Q ₁ = 0.9 Median = 1.0 Q ₃ = 1.1 P ₉₀ = 1.3 P ₉₉ = 1.8											Hours of Calibration: 37					
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6
2-Mar	A	2	2	1	2	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.3	1.9
3-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.4
4-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.2
5-Mar	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1.1	1.8
6-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.3
7-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	1.2
8-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.1
9-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.1
10-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	1.3
11-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.1
12-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1.1	1.5
13-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
14-Mar	1	1	1	1	1	1	1	2	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1.3	2.0
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	1.2	1.7
16-Mar	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6
17-Mar	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4
18-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.1
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
21-Mar	1	1	1	1	A	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	1	1.0	1.1
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4
23-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
24-Mar	1	A	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.7
25-Mar	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	A	1.3	1.8
26-Mar	2	2	1	1	2	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.2	1.8
27-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	1.1
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.2
29-Mar	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.5
30-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1.0	1.4
31-Mar	0	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	1.2
		1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Diurnal Average	
		1.6	1.9	1.8	1.4	1.8	1.5	1.7	1.8	2.0	1.8	1.7	1.3	1.7	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.6	1.7	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																								

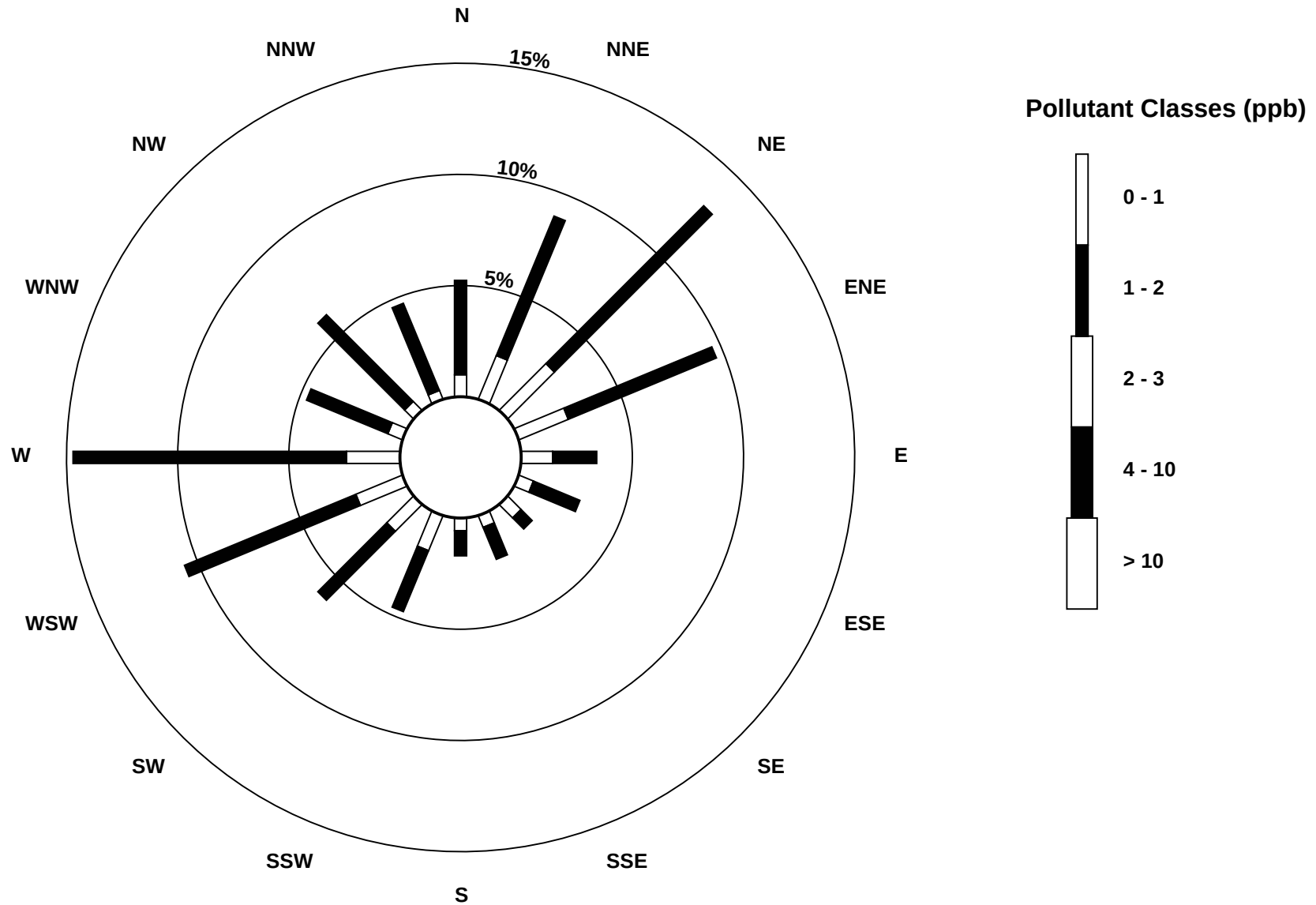
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2012



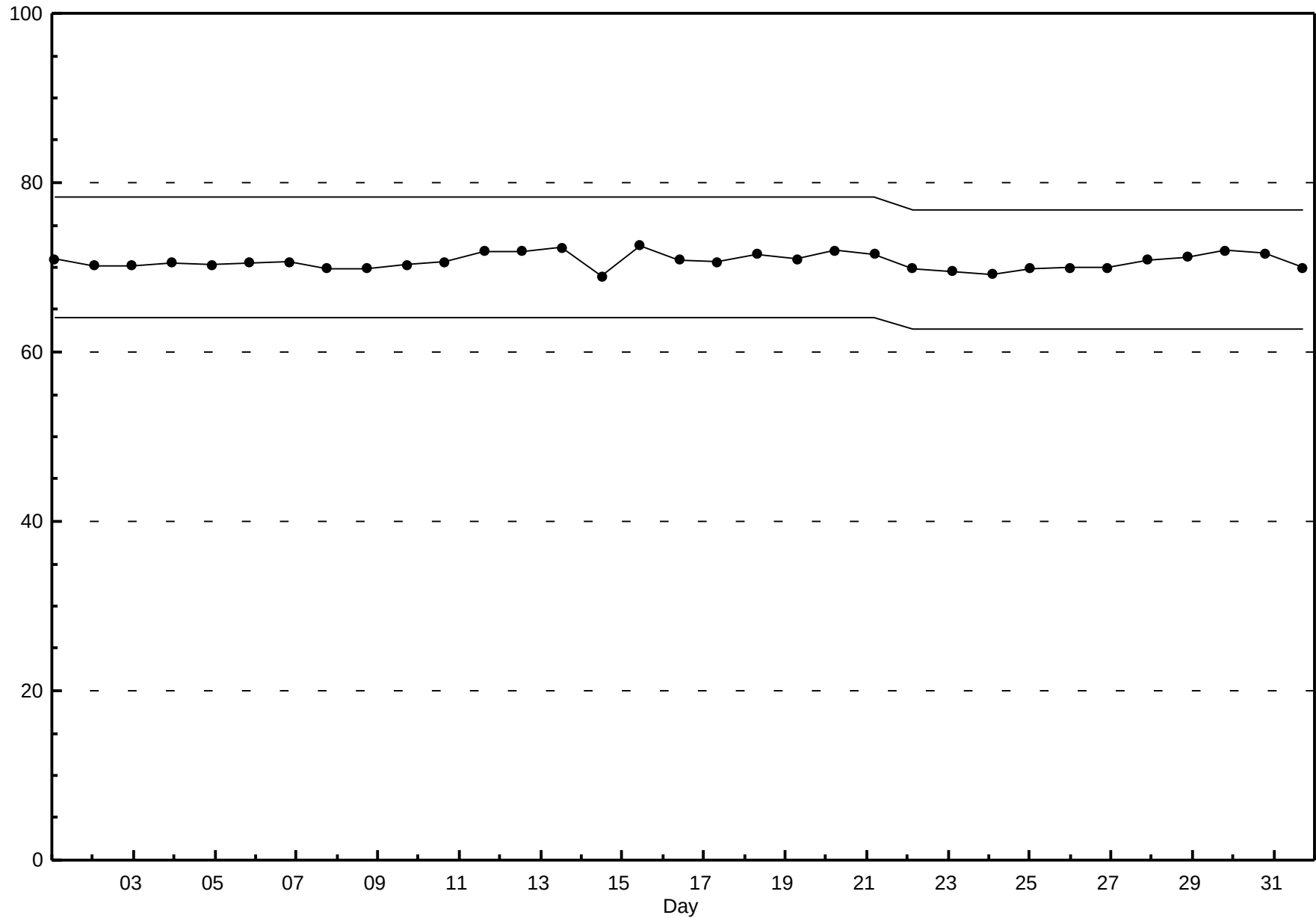
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - March 2012



Span Responses

Total Reduced Sulphur (TRS)
Evergreen Park - March 2012

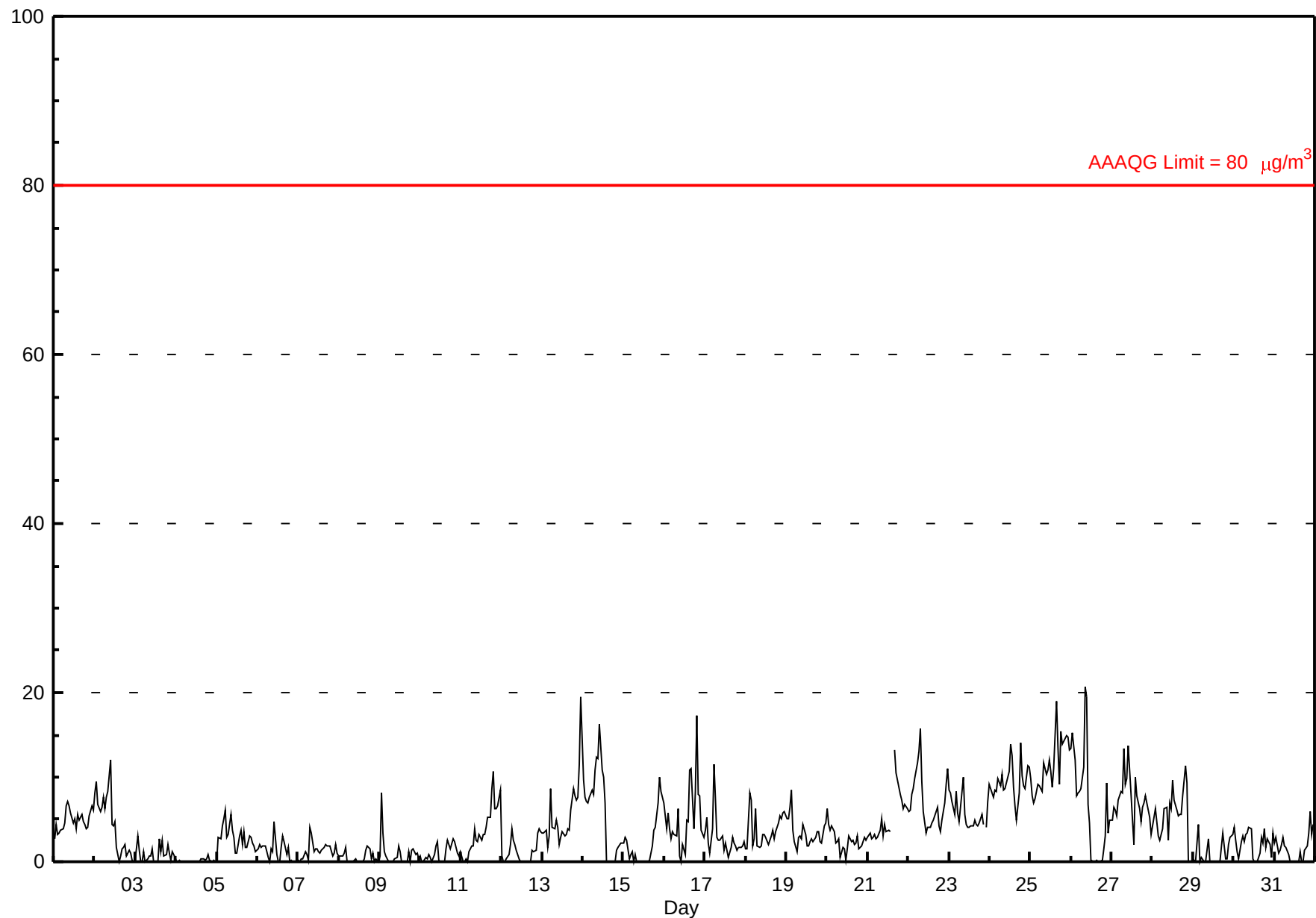


Hourly Averages

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

Evergreen Park - March 2012

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 20.8 µg/m ³ on Mar 26 09:00																								
Maximum Daily Average: 11.3 µg/m ³ on Mar 25																								
Minimum Value: 0 µg/m ³ on Mar 2 15:00 Maximum Diurnal Average: 4.9 µg/m ³ at hour 9 Monthly Average: 3.80 µg/m ³																								
Minimum Daily Average: 0.1 µg/m ³ on Mar 4 Minimum Diurnal Average: 2.6 µg/m ³ at hour 14 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.9 Median = 2.8 Q ₃ = 5.9 P ₉₀ = 8.9 P ₉₉ = 15.3																								
Day	Hourly Period Ending At (MST)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1-Mar	3	4	3	3	4	4	5	7	7	7	6	5	5	4	6	5	6	5	4	4	4	5	7	6
2-Mar	8	10	7	6	7	8	6	8	8	12	4	4	5	2	0	1	2	2	2	1	1	1	0	0
3-Mar	0	3	1	0	0	1	0	0	1	1	1	0	0	0	3	1	2	1	1	2	1	0	1	1
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
5-Mar	0	3	3	4	5	6	3	3	6	4	3	1	1	3	4	2	4	2	2	3	3	2	2	1
6-Mar	2	2	2	2	2	2	1	0	2	1	5	1	0	0	2	3	2	1	2	0	0	0	0	0
7-Mar	0	0	0	0	1	1	0	4	3	1	2	2	1	1	1	2	2	2	2	2	1	1	2	1
8-Mar	1	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	1	0	0	0
9-Mar	1	8	3	1	1	0	0	0	0	0	1	2	1	0	0	0	0	1	0	1	2	1	1	0
10-Mar	1	0	0	1	0	1	1	0	1	2	2	0	0	0	0	1	3	2	2	3	2	2	1	1
11-Mar	1	0	0	0	0	1	2	2	4	3	2	3	3	3	3	4	5	5	9	11	6	6	7	8
12-Mar	1	0	0	0	1	2	4	3	2	1	0	0	0	0	0	0	0	0	1	1	1	3	4	4
13-Mar	3	3	4	2	3	9	4	4	5	4	2	3	4	3	3	4	4	6	9	8	7	8	12	20
14-Mar	10	8	7	7	8	9	8	11	12	12	16	11	10	7	0	N	0	0	0	0	1	2	2	2
15-Mar	2	3	3	0	1	1	0	1	0	0	N	0	0	0	0	0	1	2	4	4	7	10	8	8
16-Mar	7	4	6	4	3	4	3	3	6	1	0	2	1	5	5	11	11	4	8	17	8	8	4	3
17-Mar	4	5	2	1	4	11	8	3	3	3	3	1	2	1	1	2	3	2	2	1	2	2	2	2
18-Mar	1	2	8	7	2	3	6	2	2	2	3	3	3	2	3	3	4	3	4	4	5	5	6	6
19-Mar	5	5	6	8	4	2	1	3	3	3	4	3	2	2	2	3	2	3	4	4	2	2	4	5
20-Mar	6	4	4	4	4	2	2	3	1	2	1	0	2	3	2	2	2	2	3	2	2	2	3	3
21-Mar	3	3	3	3	3	3	3	4	5	3	4	4	4	4	M	M	13	10	9	8	7	6	7	6
22-Mar	6	6	8	9	10	12	13	16	9	6	3	4	4	4	5	5	6	6	4	4	5	7	9	11
23-Mar	8	8	7	6	8	6	5	6	10	6	4	4	4	4	4	5	4	4	5	6	4	N	4	7
24-Mar	9	8	8	8	8	10	9	10	8	9	9	11	14	13	9	7	5	8	14	10	9	9	11	11
25-Mar	10	8	7	7	9	9	9	8	12	10	11	12	11	9	11	19	13	9	15	14	15	15	15	13
26-Mar	13	15	12	8	8	8	9	11	21	19	7	5	0	0	0	0	0	0	0	1	3	9	3	5
27-Mar	5	6	6	5	7	8	8	13	9	10	14	8	5	2	10	8	6	5	6	7	8	7	5	3
28-Mar	4	5	6	3	2	3	4	6	6	3	7	6	10	7	6	5	6	6	8	11	9	0	0	0
29-Mar	0	0	2	4	0	0	0	0	1	3	0	0	N	0	0	0	N	0	3	2	0	2	3	3
30-Mar	4	3	1	0	2	3	2	3	3	4	4	0	0	0	0	1	3	2	4	2	3	2	1	3
31-Mar	2	3	1	1	2	3	2	2	1	0	0	0	0	0	0	1	0	0	1	2	3	6	3	4
3.9 4.2 3.9 3.5 3.6 4.2 3.8 4.4 4.9 4.2 4.0 3.1 3.0 2.6 2.6 3.4 3.6 3.2 4.1 4.3 4.0 4.1 4.1 4.4 13.4 15.3 12.1 8.6 9.9 11.8 13.1 15.7 20.8 19.5 16.2 12.1 13.9 12.5 11.1 19.0 13.5 10.5 15.4 17.3 14.5 15.0 14.7 19.6																								
Diurnal Average																								
Diurnal Maximum																								
M - Maintenance N - Not Valid Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m ³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m ³																								



Hourly Maximums

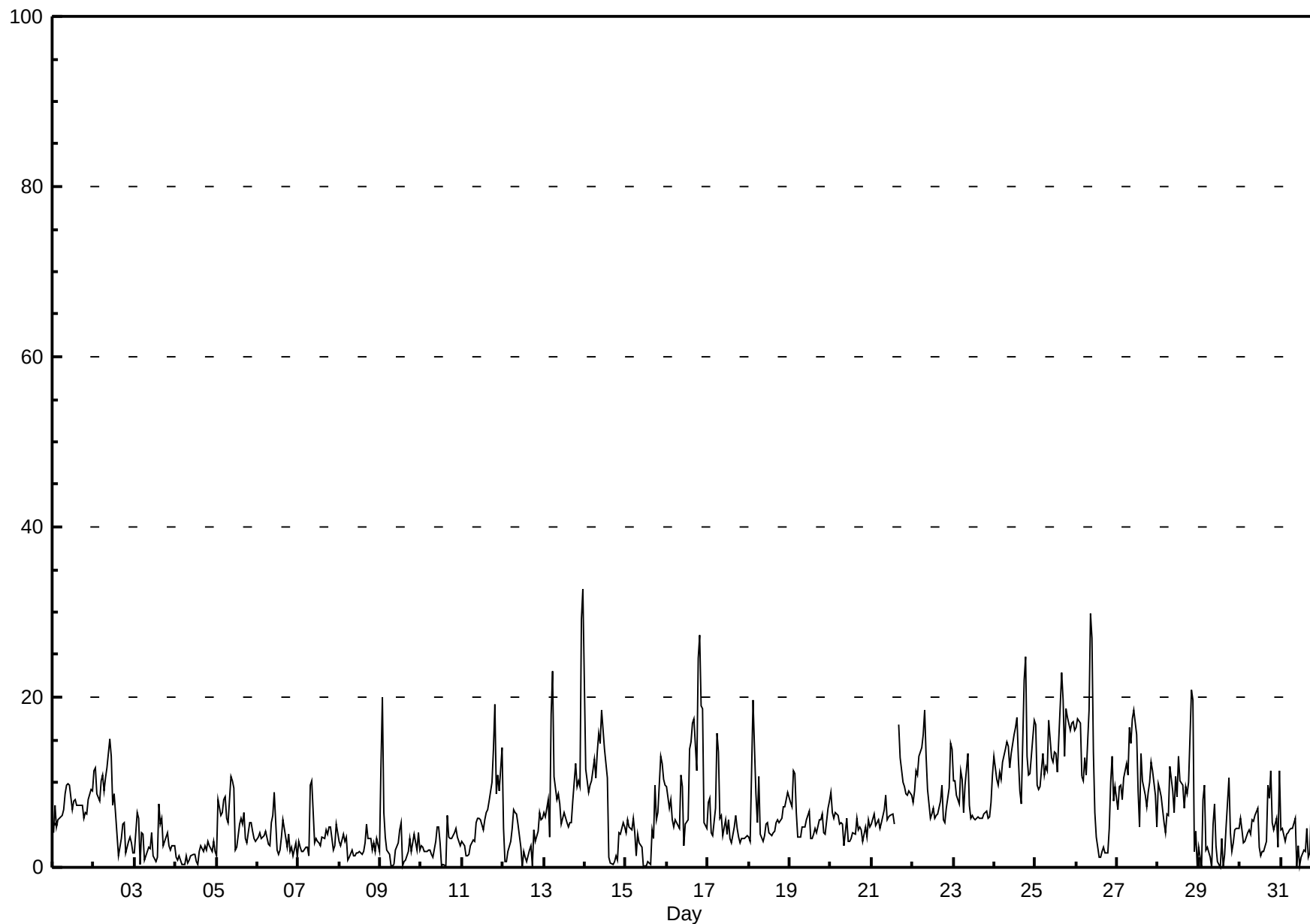
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - March 2012

Maximum Value: 32.8 µg/m ³ on Mar 14 00:00																								Hours in Service: 744		
Maximum Daily Average: 14.4 µg/m ³ on Mar 25																								Hours of Data: 742		
Minimum Value: 0 µg/m ³ on Mar 12 12:00																								Hours of Missing Data: 2		
Maximum Diurnal Average: 8.3 µg/m ³ at hour 9																								Hours of Calibration: 0		
Monthly Average: 6.52 µg/m ³																								Percent Operational Time: 99.7		
Minimum Daily Average: 1.5 µg/m ³ on Mar 4																										
Minimum Diurnal Average: 4.8 µg/m ³ at hour 14																										
Percentiles: P ₁ = 0.0 P ₁₀ = 1.6 Q ₁ = 3.1 Median = 5.3 Q ₃ = 9.0 P ₉₀ = 13.0 P ₉₉ = 24.3																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	4	7	5	6	6	6	7	9	10	10	10	7	8	8	7	7	7	6	7	6	8	9	9	7.3	9.9	
2-Mar	11	12	9	8	10	11	9	10	12	15	13	7	9	6	1	2	3	5	5	2	3	4	3	2	7.2	15.0
3-Mar	2	7	6	0	4	4	1	2	2	2	4	1	1	1	7	5	6	3	4	4	2	2	3	3	3.1	7.5
4-Mar	1	1	1	1	0	0	1	1	1	1	2	2	1	0	2	3	2	3	2	3	3	2	3	2	1.5	3.1
5-Mar	1	8	6	7	8	8	6	5	11	10	9	2	2	5	6	5	7	3	3	5	5	4	3	3	5.6	10.6
6-Mar	4	4	3	4	4	4	3	3	5	6	9	2	2	2	4	6	5	2	4	2	2	1	3	1	3.5	8.9
7-Mar	3	2	2	2	2	2	1	10	10	3	3	3	3	3	4	3	4	4	5	5	2	3	5	4	3.7	10.2
8-Mar	3	3	4	3	4	1	1	2	1	1	2	2	2	2	3	5	3	3	2	3	2	3	2	2	2.4	5.1
9-Mar	12	20	6	4	2	2	0	0	0	2	3	4	5	0	1	1	2	3	2	3	4	2	4	2	3.5	19.9
10-Mar	3	2	2	2	2	2	2	1	3	5	5	3	0	0	0	6	4	3	3	4	5	4	3	3	2.7	6.0
11-Mar	3	3	1	1	2	3	3	3	5	6	6	6	4	6	7	7	8	10	14	19	9	11	9	14	6.6	19.2
12-Mar	5	1	1	2	3	5	7	6	6	5	2	0	2	1	1	2	3	0	4	3	4	6	6	6	3.3	6.7
13-Mar	6	6	8	4	18	23	11	8	9	7	5	6	7	5	5	5	5	8	12	9	10	9	29	33	10.4	32.8
14-Mar	12	10	9	10	10	13	11	14	16	15	18	14	12	10	1	0	0	1	1	1	4	4	5	5	8.1	18.4
15-Mar	4	6	5	4	6	4	1	4	3	2	0	0	0	1	0	4	3	10	6	7	13	12	10	10	4.8	13.1
16-Mar	9	7	8	6	5	6	5	5	11	9	3	5	6	14	15	17	17	11	25	27	19	19	5	5	10.7	27.2
17-Mar	8	8	4	4	7	16	14	6	6	4	6	4	6	3	3	5	6	5	4	3	3	3	3	4	5.5	15.8
18-Mar	3	3	20	14	9	5	11	4	3	4	5	5	4	4	4	4	5	6	5	6	7	7	8	9	6.5	19.7
19-Mar	8	7	11	11	6	4	4	5	5	5	6	7	3	3	4	5	4	6	6	6	4	4	7	8	5.7	11.3
20-Mar	9	6	6	6	6	5	5	5	3	6	3	3	3	4	4	6	4	5	4	3	5	4	6	5	4.8	8.9
21-Mar	5	6	5	5	6	5	5	7	8	6	6	6	6	5	M	M	17	13	10	9	9	8	9	8	7.5	16.7
22-Mar	8	9	11	11	13	14	16	18	13	9	6	6	7	6	6	6	8	10	6	5	7	9	15	14	9.7	18.4
23-Mar	10	10	9	7	11	10	7	10	13	7	6	6	6	6	6	6	6	6	6	7	6	6	8	11	7.7	13.3
24-Mar	13	10	10	11	10	12	14	15	14	12	13	16	16	18	13	9	7	22	25	13	11	11	15	17	13.7	24.8
25-Mar	17	10	9	9	13	11	12	11	17	13	12	14	13	11	15	23	20	13	19	18	16	17	17	16	14.4	22.8
26-Mar	17	17	17	11	10	13	11	18	30	27	14	6	4	1	1	2	2	2	2	5	10	13	8	9	10.4	29.9
27-Mar	7	9	10	8	10	12	11	17	15	17	18	16	9	5	13	10	8	7	9	10	12	11	8	5	10.8	18.4
28-Mar	10	9	8	5	4	6	6	12	9	6	11	8	13	10	10	7	9	9	10	21	20	2	4	0	8.7	20.9
29-Mar	2	0	8	10	2	2	1	0	5	7	3	1	0	3	0	2	5	10	4	2	3	4	5	5	3.5	10.4
30-Mar	6	4	3	3	4	4	4	6	5	6	7	2	1	2	2	3	10	8	11	5	4	6	2	11	5.1	11.4
31-Mar	4	5	3	4	4	4	5	5	6	0	3	0	1	2	2	5	1	2	7	4	6	9	6	9	4.0	9.2
6.7 6.9 6.7 5.8 6.5 7.0 6.2 7.1 8.3 7.4 6.8 5.3 5.0 4.8 4.8 5.6 6.3 6.4 7.3 7.1 7.0 6.7 7.2 7.5																									Diurnal Average	
16.7 19.9 19.7 14.1 18.0 23.1 15.5 18.4 29.9 27.0 18.4 15.6 16.5 17.7 15.1 22.8 19.7 22.1 24.8 27.2 19.7 18.7 29.2 32.8																									Diurnal Maximum	
M - Maintenance																										

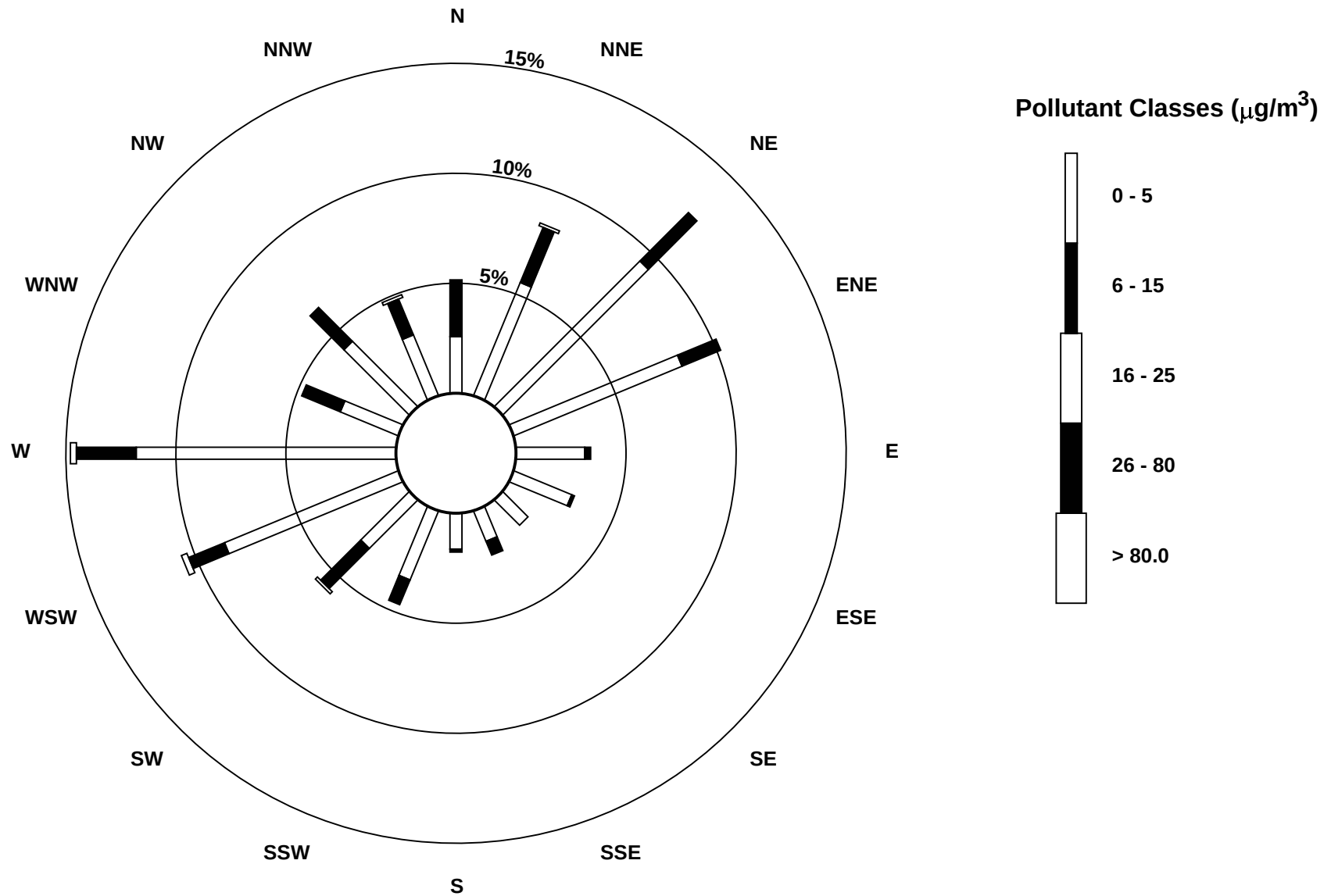
Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Evergreen Park - March 2012



Pollutant Rose

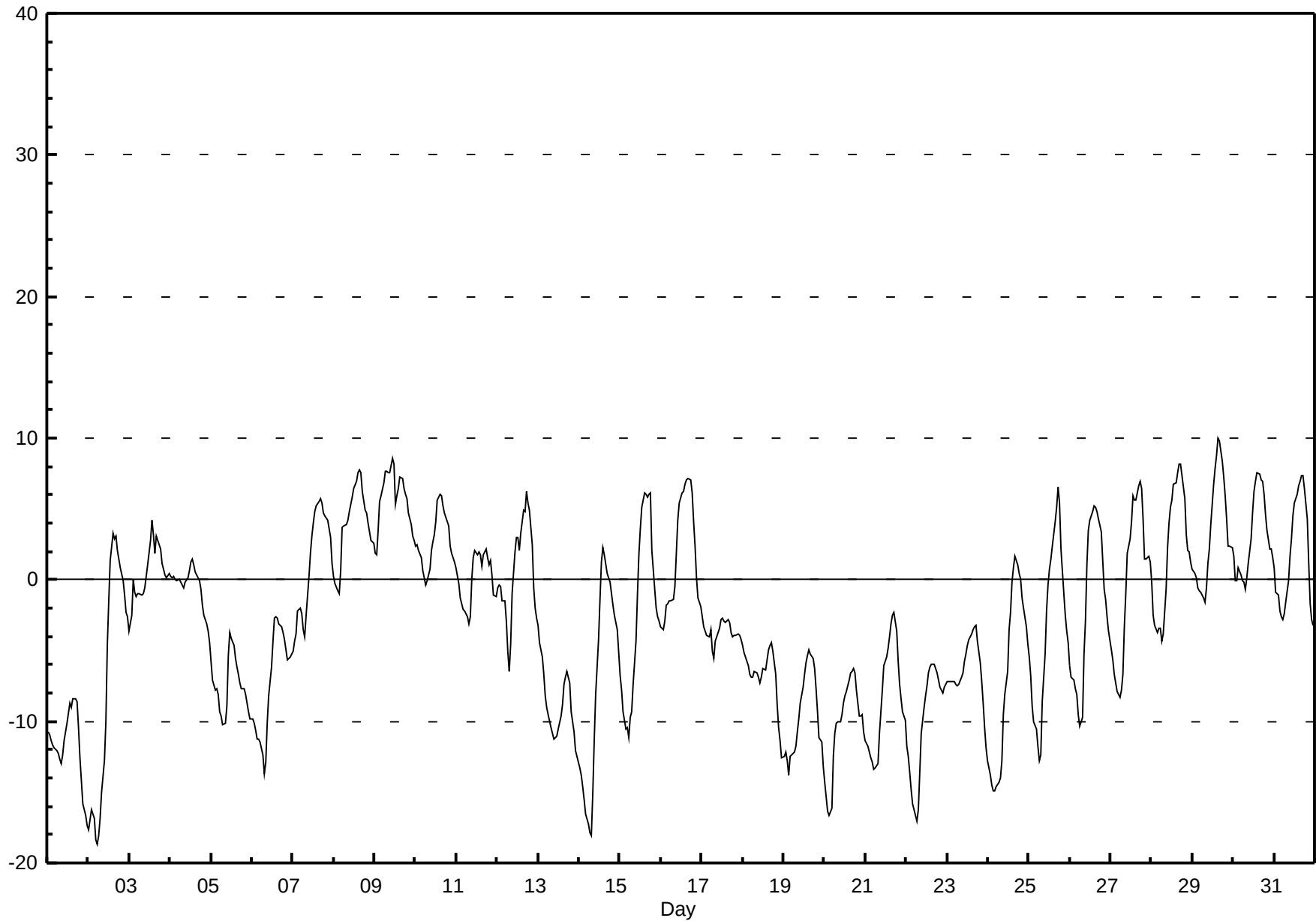
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Evergreen Park - March 2012



Hourly Averages

External Temperature (ET) - °C

Evergreen Park - March 2012



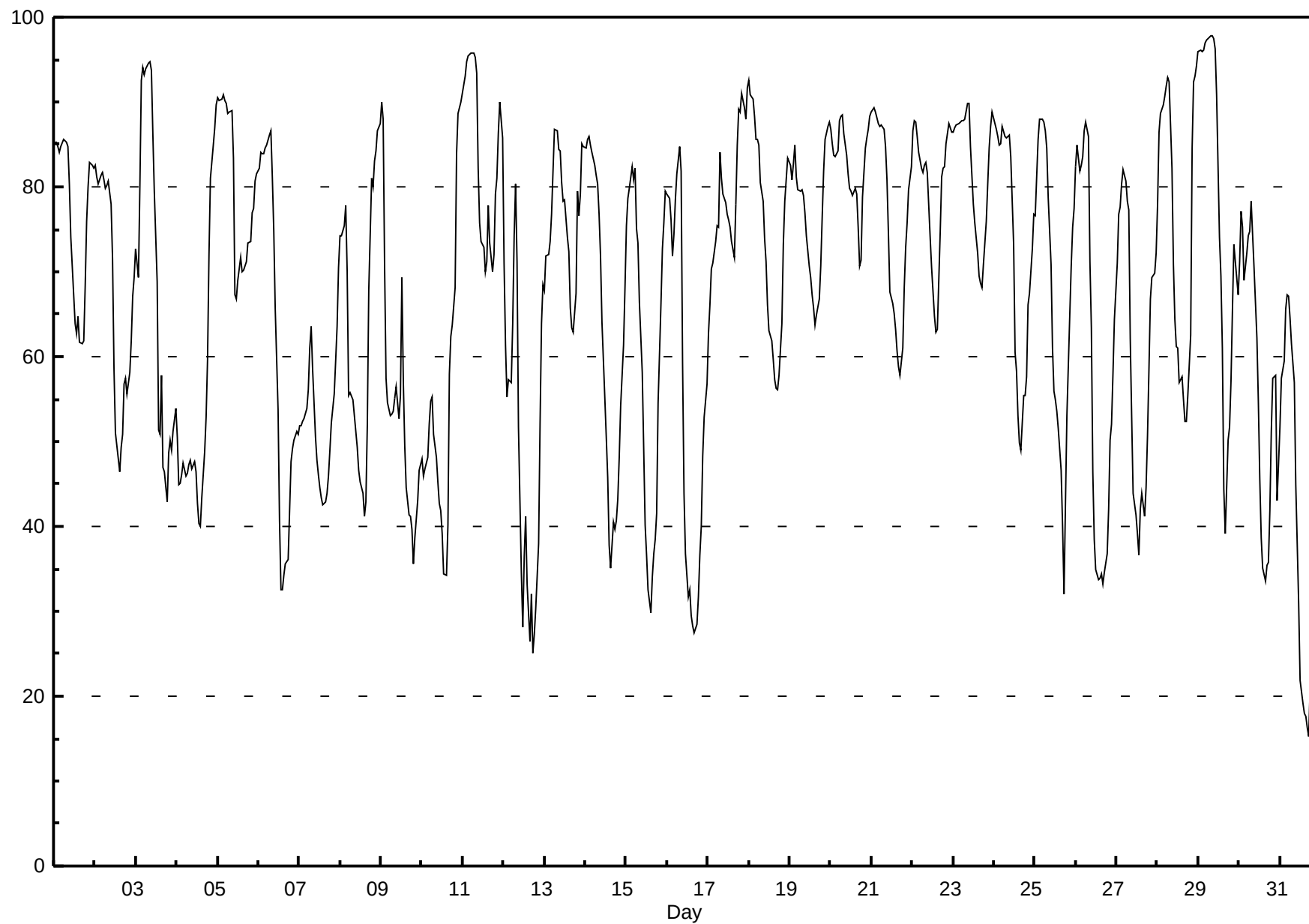
Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 97.8 % on Mar 29 08:00 Maximum Daily Average: 83.8 % on Mar 11																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 15 % on Mar 31 18:00 Maximum Diurnal Average: 79.3 % at hour 8 Monthly Average: 67.14 %												Minimum Daily Average: 43.1 % on Mar 31 Minimum Diurnal Average: 49.8 % at hour 16 Percentiles: P ₁ = 24.9 P ₁₀ = 40.6 Q ₁ = 52.1 Median = 70.9 Q ₃ = 82.5 P ₉₀ = 88.0 P ₉₉ = 95.6														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	85	85	85	84	85	86	85	85	85	80	74	67	64	63	65	62	61	62	68	76	80	83	82	82	76.4	85.5
2-Mar	82	81	80	81	82	81	80	80	81	78	72	59	51	49	47	49	51	57	57	56	58	62	67	69	67.1	82.5
3-Mar	73	69	80	93	94	93	94	95	95	94	86	80	69	51	51	58	47	46	43	49	50	49	51	54	69.3	94.7
4-Mar	50	45	45	46	47	46	46	47	48	47	48	47	43	40	40	43	49	53	60	72	81	85	87	90	54.4	89.6
5-Mar	91	90	90	91	90	90	89	89	89	83	67	67	69	72	70	70	71	71	73	74	77	77	81	82	79.7	90.8
6-Mar	82	84	84	84	85	85	86	87	81	75	66	54	41	33	33	34	36	36	42	48	49	50	51	51	60.6	86.6
7-Mar	52	52	52	53	54	56	61	64	58	51	48	46	45	43	43	44	46	49	52	56	59	64	70	70	52.5	70.4
8-Mar	74	74	75	78	70	55	56	55	53	51	49	47	45	44	41	43	52	68	81	80	83	84	87	87	63.9	87.5
9-Mar	90	88	71	57	55	53	53	53	55	56	53	55	69	57	50	45	41	41	40	36	39	43	47	47	53.9	90.0
10-Mar	48	46	47	48	52	55	55	51	48	45	43	42	39	34	34	40	58	62	64	68	84	89	89	90	55.5	89.9
11-Mar	91	93	95	95	96	96	96	95	93	82	76	74	73	70	71	78	73	70	72	79	81	86	90	86	83.8	95.8
12-Mar	71	61	55	57	57	64	74	80	71	52	35	28	36	41	33	26	32	25	27	30	38	52	64	68	49.2	80.4
13-Mar	68	72	72	74	77	82	87	87	84	84	80	78	79	74	72	66	63	63	67	79	77	79	85	85	76.4	86.7
14-Mar	85	86	86	85	84	82	81	80	77	72	64	55	51	46	38	35	41	40	41	43	48	54	61	68	62.6	86.0
15-Mar	75	79	80	82	81	82	75	73	66	58	49	40	37	32	30	34	37	38	42	55	66	73	76	79	60.0	82.4
16-Mar	79	79	76	72	74	79	81	85	82	59	44	37	32	33	29	28	27	29	32	37	40	48	53	57	53.8	84.7
17-Mar	63	66	70	71	74	75	75	84	81	79	78	77	76	75	74	72	78	85	89	89	91	89	88	92	78.8	91.7
18-Mar	93	91	90	88	86	86	85	81	78	74	71	66	63	62	60	57	56	56	58	64	73	78	81	83	74.2	92.5
19-Mar	83	81	83	85	81	80	79	80	79	77	74	71	69	67	66	64	65	67	71	76	82	86	87	88	76.6	87.6
20-Mar	87	85	84	84	84	88	88	88	86	84	82	80	79	79	80	79	75	71	71	79	85	86	87	88	82.4	88.4
21-Mar	89	89	89	88	87	87	87	87	85	81	75	68	66	65	63	61	59	58	61	68	73	76	80	82	76.0	89.3
22-Mar	87	88	88	86	84	82	82	83	83	82	74	71	68	65	63	63	75	81	82	82	85	87	87	86	79.7	87.8
23-Mar	86	87	87	87	88	88	88	88	90	90	85	81	78	76	72	69	69	68	71	76	80	85	87	89	81.9	89.9
24-Mar	88	87	86	85	85	87	86	86	86	86	83	73	61	58	53	50	49	55	55	58	66	67	73	77	72.5	88.1
25-Mar	77	81	86	88	88	88	87	85	79	71	61	56	55	54	51	47	40	32	43	53	65	71	75	77	67.0	88.0
26-Mar	82	85	82	83	83	87	88	86	71	63	46	38	35	34	34	34	33	35	37	42	50	52	58	64	58.5	87.7
27-Mar	71	77	78	80	82	81	78	77	62	53	44	41	39	37	42	44	41	45	51	59	67	69	70	72	60.8	82.1
28-Mar	78	86	89	90	91	92	93	92	82	71	64	61	61	57	58	55	52	52	55	63	85	92	93	94	75.3	94.3
29-Mar	96	96	96	96	97	97	98	98	98	98	96	91	74	69	61	44	39	50	52	57	65	73	71	67	78.3	97.8
30-Mar	71	77	75	69	72	74	75	78	74	70	62	55	46	39	35	34	35	36	42	51	57	58	43	47	57.4	78.3
31-Mar	52	58	59	66	67	67	65	62	57	45	38	31	22	19	18	18	16	15	21	29	37	49	61	64	43.1	67.2
77.3 78.0 77.9 78.3 78.4 78.8 79.1 79.3 76.1 70.7 64.1 59.2 55.9 52.8 50.8 49.8 50.5 52.0 55.4 60.6 66.7 70.7 73.4 75.4																								Diurnal Average		
95.9 96.1 95.9 96.2 96.9 97.4 97.7 97.8 97.7 97.5 96.2 90.9 79.4 79.1 79.8 79.2 77.9 84.9 89.1 88.9 90.9 92.4 93.0 94.3																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Evergreen Park - March 2012



Hourly Averages

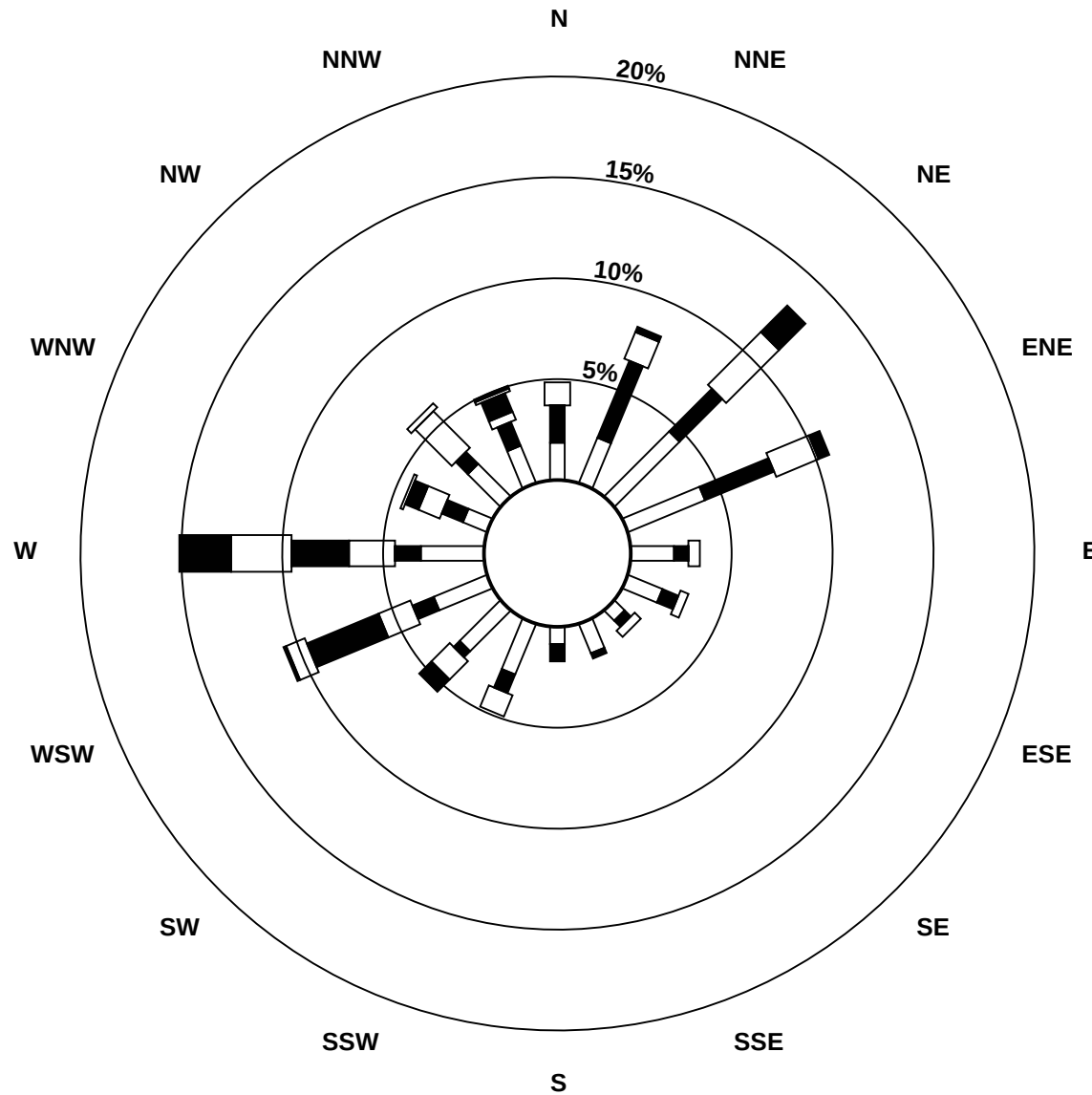
Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - March 2012

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	7	8	6	5	3	3	1	2	4	4	4	7	7	10	10	8	7	5	3	0	1	1	1	3.4	10.2
Dir	28	37	29	27	33	49	8	251	274	279	308	264	257	339	2	22	17	37	53	47	24	14	354	5	8.9	1.7
2 Spd	1	3	2	2	2	1	1	1	1	2	7	5	8	30	46	44	41	28	18	16	9	5	4	1	10.7	45.5
Dir	319	320	309	241	210	223	89	14	40	246	205	215	262	270	266	264	274	280	276	268	268	271	213	64	267.4	265.8
3 Spd	5	1	18	3	5	7	5	4	5	6	4	13	23	31	42	31	33	25	19	18	23	23	28	29	11.8	42.2
Dir	61	274	261	68	177	177	145	134	160	169	210	227	255	323	336	325	291	278	284	265	254	251	258	261	277.7	335.9
4 Spd	29	29	33	27	28	32	21	24	18	11	13	21	26	26	26	22	25	23	25	15	14	5	5	2	20.1	32.8
Dir	256	257	264	253	252	252	251	252	240	261	263	264	265	268	274	260	246	236	229	237	226	181	190	204	252.2	264.0
5 Spd	4	3	2	2	3	3	3	4	4	7	12	19	29	18	20	22	21	18	17	16	13	13	10	6	8.9	29.4
Dir	54	47	27	270	264	296	325	316	250	299	305	320	342	12	16	34	34	34	33	28	29	41	66	68	11.5	341.9
6 Spd	2	4	5	7	4	3	5	3	1	8	12	17	26	31	36	36	43	45	39	36	21	20	22	25	15.5	45.3
Dir	75	120	150	132	111	104	105	112	107	175	210	241	254	269	273	268	266	264	267	264	244	231	236	244	253.2	264.2
7 Spd	22	26	28	32	21	12	8	9	10	25	37	40	45	43	47	42	44	44	43	40	30	11	4	6	26.5	47.4
Dir	243	247	253	260	267	308	325	268	287	274	269	268	266	267	265	265	266	263	263	273	274	306	24	76	267.3	265.2
8 Spd	5	4	3	3	11	28	31	33	33	27	25	18	13	12	12	17	6	3	10	6	4	4	4	2	9.0	33.1
Dir	76	75	110	198	248	249	253	252	252	257	258	254	249	239	210	209	211	95	72	101	75	79	55	69	243.9	252.4
9 Spd	1	2	3	9	10	12	23	27	22	31	41	33	38	35	32	28	43	33	41	43	33	28	22	22	23.9	43.2
Dir	27	213	193	192	205	215	224	230	241	252	251	277	273	270	263	275	273	269	274	275	274	279	277	265	262.1	275.0
10 Spd	21	26	25	18	7	2	12	17	11	4	7	13	12	10	12	12	10	5	11	10	3	3	5	5	6.4	26.4
Dir	255	256	259	265	272	239	206	222	223	252	251	207	222	178	145	131	139	135	84	112	120	148	82	116	211.9	255.5
11 Spd	4	5	5	2	3	3	5	1	3	4	4	6	7	8	8	9	5	5	2	14	4	2	2	9	1.2	14.5
Dir	124	94	98	109	45	48	79	359	92	160	276	13	19	358	318	304	92	79	261	273	291	227	335	247	347.6	272.9
12 Spd	14	28	24	14	16	1	2	2	2	6	6	11	16	19	16	17	14	17	11	20	1	1	2	8	3.0	28.0
Dir	249	244	238	227	223	151	47	80	68	148	121	123	61	63	76	98	88	124	195	223	309	278	342	332	169.8	243.6
13 Spd	14	20	12	18	27	21	18	19	17	18	18	16	17	16	14	10	12	7	5	3	5	2	4	3	12.2	26.5
Dir	325	330	311	326	337	329	311	323	308	320	309	317	306	297	330	285	284	296	309	43	35	171	355	335	318.4	337.4
14 Spd	3	2	3	1	1	0	3	1	3	2	4	5	8	8	13	19	18	14	12	7	2	1	1	0	3.7	19.0
Dir	341	211	211	320	23	255	211	254	11	312	267	343	358	28	50	59	65	77	75	88	62	41	15	132	50.3	58.8
15 Spd	1	1	1	3	1	4	5	5	10	8	10	14	14	16	14	13	13	0	5	1	1	1	2	1	5.0	16.0
Dir	278	77	30	39	54	50	61	68	79	93	82	115	99	94	103	61	53	332	252	53	37	58	317	323	80.2	94.1
16 Spd	5	3	11	13	3	2	2	2	5	12	20	20	31	26	29	30	27	17	11	6	5	1	0	0	11.2	31.0
Dir	299	239	285	257	83	234	218	222	226	246	258	267	262	279	275	269	272	278	274	252	229	223	169	317	266.5	261.6
17 Spd	1	1	2	3	3	4	9	14	16	24	23	21	22	23	24	24	21	18	17	15	5	6	7	9	11.7	24.3
Dir	53	169	147	193	13	20	53	56	67	66	67	60	50	52	56	55	46	46	46	52	26	21	340	314	51.4	54.8
18 Spd	11	12	11	15	13	13	14	18	14	19	20	20	21	25	22	20	15	11	11	6	2	3	2	2	11.8	25.4
Dir	319	324	264	270	281	276	274	303	314	318	291	285	337	339	336	342	338	325	330	338	29	52	49	349	313.7	338.5
19 Spd	4	1	2	1	4	8	8	6	12	8	10	11	10	12	15	12	13	13	10	5	1	3	0	2	6.5	14.7
Dir	18	245	338	56	48	53	60	30	40	12	339	30	32	9	1	19	48	57	57	30	62	30	293	36	29.5	1.0
20 Spd	0	1	3	3	4	9	8	10	17	14	21	17	15	13	10	10	10	7	5	4	1	2	4	5	7.5	21.0
Dir	55	5	36	357	46	74	75	64	63	72	54	53	39	34	28	26	38	5	10	62	68	81	75	61	49.0	54.0
21 Spd	5	8	6	5	6	9	10	9	11	12	8	10	13	12	12	10	9	14	15	10	9	8	4	4	8.2	14.6
Dir	74	73	64	80	68	65	70	66	71	73	39	358	7	5	358	17	45	57	61	63	63	58	53	37	48.3	60.6
22 Spd	1	2	2	1	5	3	3	4	4	9	12	12	11	11	14	12	8	9	6	6	1	5	3	3	4.0	13.5
Dir	338	308	244	261	219	240	234	276	299	328	21	23	8	5	343	351	37	37	34	25	295	225	310	221	353.5	343.2

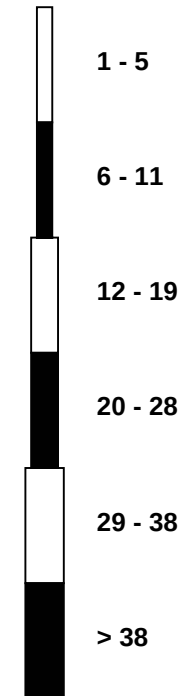
FOCUS
AIR QUALITY MONITORING

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - March 2012

Maximum Speed: 48 km/h on Mar 7 15:00																				Maximum Daily Speed Average: 28.3 km/h on Mar 7										Hours in Service: 744	
Minimum Speed: 1 km/h on Mar 22 04:00																				Minimum Daily Speed Average: 5.5 km/h on Mar 1										Hours of Data: 744	
Maximum Diurnal Speed Average: 20.5 km/h at hour 15																				Minimum Diurnal Speed Average: 6.8 km/h at hour 23										Hours of Missing Data: 0	
Monthly Average Speed: 11.95 km/h																				Percentiles: P ₁ = 1.7 P ₁₀ = 2.9 Q ₁ = 4.4 Median = 9.2 Q ₃ = 16.3 P ₉₀ = 26.0 P ₉₉ = 44.1										Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	7	7	8	6	5	3	4	2	3	5	6	5	7	9	11	11	9	8	5	3	2	2	1	1	5.5	11.5					
2-Mar	2	3	3	2	4	3	3	2	3	4	8	6	9	31	46	44	41	28	18	16	9	5	5	3	12.5	45.8					
3-Mar	5	6	18	5	6	7	5	4	6	7	6	14	24	33	43	32	34	25	21	18	23	24	28	29	17.5	43.0					
4-Mar	29	29	33	27	28	32	21	24	19	11	13	21	26	26	27	22	25	23	25	16	14	6	5	4	21.2	33.1					
5-Mar	4	4	4	5	5	4	3	6	6	8	13	20	30	20	21	23	22	18	17	17	14	13	10	6	12.2	29.8					
6-Mar	2	4	7	7	5	4	6	3	2	9	13	18	27	32	36	37	44	46	39	36	21	20	22	25	19.3	45.7					
7-Mar	23	26	29	32	21	14	8	9	11	25	37	40	46	43	48	42	44	44	44	40	31	13	5	6	28.3	47.7					
8-Mar	5	5	4	6	14	28	31	33	33	28	25	18	13	12	12	17	10	9	11	7	4	4	5	3	14.1	33.3					
9-Mar	2	5	5	9	11	12	23	27	22	31	42	34	38	35	33	28	43	33	41	43	34	28	23	24	26.1	43.4					
10-Mar	22	27	25	18	10	5	12	17	15	6	9	14	12	12	13	14	13	10	5	12	10	4	3	5	12.1	26.6					
11-Mar	5	5	5	3	3	3	6	3	4	6	5	7	8	9	9	11	6	5	8	16	6	5	4	9	6.3	16.3					
12-Mar	14	28	24	14	16	6	3	4	4	7	7	13	17	19	17	18	16	17	14	20	3	3	4	9	12.5	28.3					
13-Mar	14	21	13	18	27	22	20	20	18	18	19	17	18	18	16	12	12	8	6	4	7	4	4	3	14.2	26.9					
14-Mar	4	3	4	2	2	2	4	3	4	4	5	6	9	9	13	20	18	14	12	8	4	2	2	2	6.5	19.5					
15-Mar	2	4	2	3	4	4	6	6	10	9	10	15	15	17	15	14	13	8	8	3	4	2	4	3	7.6	16.8					
16-Mar	6	5	12	13	4	3	5	3	6	12	21	20	32	27	30	30	28	18	11	6	5	3	1	2	12.7	32.1					
17-Mar	3	3	3	4	4	5	9	14	16	24	24	22	23	24	24	25	21	19	17	15	7	8	8	9	13.8	25.0					
18-Mar	12	13	12	15	13	13	15	19	15	20	23	23	21	26	23	21	16	14	12	7	5	4	3	3	14.5	25.8					
19-Mar	4	4	4	3	5	9	9	6	13	10	11	12	12	14	16	13	13	14	10	6	3	4	2	3	8.3	15.5					
20-Mar	4	3	4	3	5	9	8	10	18	15	21	18	16	14	11	11	11	8	6	4	3	3	5	5	8.8	21.3					
21-Mar	5	8	6	5	6	9	11	10	11	13	10	11	14	12	12	11	10	15	15	11	9	8	5	6	9.7	15.0					
22-Mar	2	2	2	1	5	3	3	4	5	10	13	13	12	13	15	13	9	10	7	7	2	5	3	3	6.8	15.0					
23-Mar	2	2	3	3	3	4	3	6	8	9	8	10	11	13	15	15	14	15	12	7	6	3	3	2	7.4	15.3					
24-Mar	2	2	2	2	3	2	3	3	4	4	7	11	11	15	12	11	10	12	10	8	7	4	5	5	6.4	15.1					
25-Mar	4	2	3	2	5	2	3	3	4	6	7	10	13	12	12	12	10	6	6	5	4	4	4	3	5.9	13.3					
26-Mar	4	4	5	3	4	3	4	3	2	6	11	15	20	22	22	24	25	25	18	10	4	4	4	4	10.2	24.9					
27-Mar	1	2	4	4	2	4	4	5	2	4	5	12	12	7	15	14	9	11	6	3	2	6	6	5	6.0	14.8					
28-Mar	4	2	2	3	4	3	2	4	5	10	11	9	14	14	17	16	21	16	11	11	31	14	13	10	10.2	31.2					
29-Mar	10	8	7	10	7	7	7	6	5	6	8	10	11	10	13	16	13	19	23	6	4	3	4	6	9.1	23.5					
30-Mar	4	5	7	12	7	4	5	5	9	11	14	14	20	20	16	14	24	18	19	13	14	14	19	16	12.6	23.7					
31-Mar	8	3	5	5	3	3	7	5	11	23	29	22	31	28	24	22	17	17	12	5	3	3	2	3	12.2	31.0					
7.0 7.9 8.5 8.0 7.8 7.6 8.1 8.6 9.5 11.7 14.2 15.5 18.5 19.2 20.5 19.7 19.5 17.3 15.2 12.3 9.4 7.3 6.8 7.0																									Diurnal Average						
29.3 28.7 33.1 32.4 27.8 32.3 31.4 32.7 33.3 31.1 41.7 40.4 45.6 43.1 47.7 44.2 44.5 45.7 43.5 43.4 33.7 27.9 27.7 29.1																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - March 2012

Maximum Value: 98.4 deg on Mar 27 21:00																			Hours in Service: 744						
Minimum Value: 4.9 deg on Mar 6 22:00																			Hours of Data: 744						
																			Hours of Missing Data: 0						
Percentiles: P ₁ = 5.3 P ₁₀ = 8.2 Q ₁ = 14.4 Median = 25.1 Q ₃ = 50.6 P ₉₀ = 76.5 P ₉₉ = 93.0																			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-Mar	17	15	10	19	16	19	56	57	77	41	46	56	28	46	29	28	24	15	21	32	91	59	58	74	90.9
2-Mar	62	37	40	50	73	96	82	91	87	78	42	66	37	11	6	6	9	13	17	8	31	22	82	85	96.1
3-Mar	16	88	11	69	44	21	36	31	35	33	71	17	14	23	11	19	15	12	24	7	5	6	6	6	88.2
4-Mar	6	7	7	5	6	5	7	5	6	23	9	8	8	12	17	11	8	7	7	7	12	30	32	73	72.7
5-Mar	47	43	69	77	53	53	32	54	55	33	23	19	10	22	19	12	12	12	12	14	16	11	22	28	77.0
6-Mar	47	34	24	15	27	41	15	21	90	25	16	19	14	13	9	9	6	7	7	8	8	5	5	5	89.5
7-Mar	6	6	8	8	9	34	14	9	16	8	8	7	7	7	6	6	7	7	7	6	8	35	24	24	35.4
8-Mar	27	48	56	71	88	6	5	6	6	7	7	9	14	15	12	14	77	74	23	48	38	35	34	50	87.7
9-Mar	76	90	76	16	14	11	5	6	7	6	7	16	11	9	7	10	10	9	6	7	8	10	11	18	90.2
10-Mar	12	7	5	12	40	85	9	7	76	68	45	15	31	40	28	29	16	22	19	25	17	49	36	19	85.2
11-Mar	47	27	20	50	25	29	24	69	45	61	44	36	37	31	38	37	40	34	90	29	50	71	71	19	90.0
12-Mar	12	8	7	10	10	85	59	77	68	47	47	30	17	11	21	21	31	16	39	7	71	78	72	48	85.1
13-Mar	14	23	23	15	10	24	26	18	23	15	18	23	22	25	24	33	21	30	37	30	38	75	47	49	74.8
14-Mar	44	88	69	84	79	97	73	82	58	64	37	24	25	26	20	14	12	13	11	21	61	72	77	84	97.4
15-Mar	64	75	81	20	94	55	31	16	12	21	19	21	24	19	20	16	15	96	71	78	73	75	66	66	95.7
16-Mar	43	61	28	16	53	68	88	71	52	9	12	15	17	14	11	11	12	12	10	30	29	88	92	86	91.7
17-Mar	87	63	59	81	80	47	16	8	18	14	14	13	14	13	12	14	13	11	11	12	68	44	37	21	86.7
18-Mar	20	20	12	7	11	13	19	16	15	21	30	30	15	11	19	20	20	40	28	32	70	48	72	69	71.5
19-Mar	29	77	64	80	47	12	14	19	15	34	22	24	34	29	19	27	26	21	20	34	93	63	88	85	93.2
20-Mar	92	81	36	25	29	9	15	18	13	20	11	17	21	20	24	24	23	33	40	11	90	45	24	18	92.2
21-Mar	18	11	27	45	13	8	8	10	16	23	38	23	21	19	17	22	23	14	12	14	14	13	25	53	53.2
22-Mar	53	51	55	72	23	34	41	36	30	23	20	29	30	33	29	23	28	23	19	15	62	20	30	42	72.1
23-Mar	70	52	51	59	91	64	30	33	26	24	36	20	22	24	24	20	18	16	14	14	8	41	49	70	91.0
24-Mar	63	78	74	98	39	58	55	63	23	34	38	34	43	12	31	25	29	25	41	44	25	84	72	74	97.8
25-Mar	49	83	36	70	82	68	89	71	75	22	60	32	20	30	21	27	33	37	32	63	92	94	80	77	94.1
26-Mar	71	64	40	77	91	91	81	60	91	38	37	19	13	15	15	13	10	8	11	12	19	19	41	80	91.4
27-Mar	70	78	85	80	86	26	70	74	59	42	68	18	21	62	32	23	23	19	17	68	98	20	33	20	98.4
28-Mar	67	95	73	40	80	63	66	65	34	30	39	73	25	22	18	13	14	14	15	61	9	45	79	17	95.2
29-Mar	11	13	28	15	28	29	25	31	48	58	32	25	31	21	21	16	45	30	15	37	56	83	35	43	82.9
30-Mar	25	46	55	8	47	93	84	37	26	10	13	16	20	20	25	19	18	11	24	12	17	8	7	8	93.1
31-Mar	35	45	31	56	51	53	70	58	10	10	14	25	16	17	27	24	38	31	39	20	76	27	56	77	77.5
92.2 95.2 85.4 97.8 93.7 97.4 88.9 91.3 90.5 77.6 71.0 72.7 42.8 62.5 37.8 36.6 76.6 95.7 90.0 77.6 98.4 94.1 91.7 86.0																									

PAZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

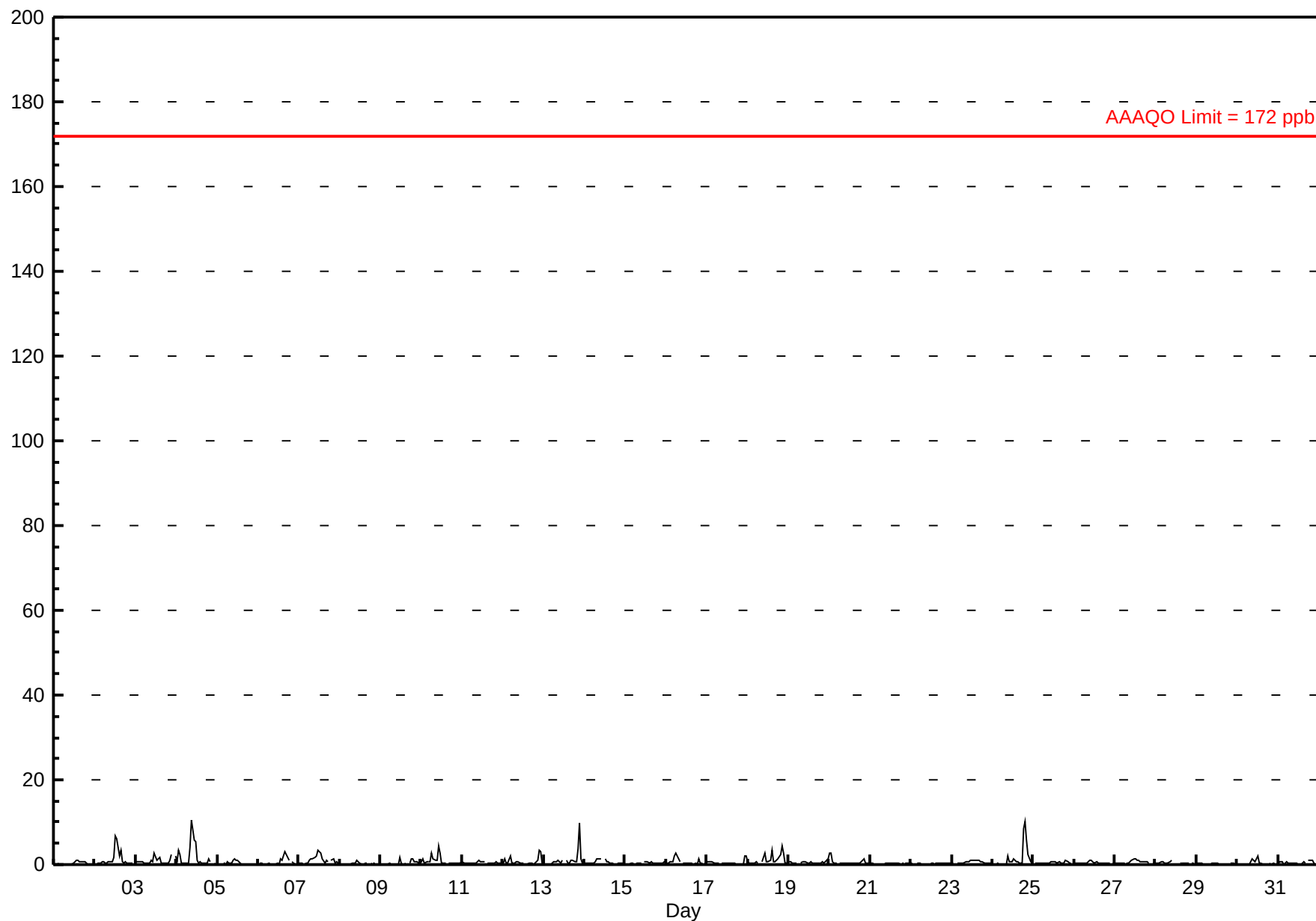
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 10.6 ppb on Mar 4 10:00 Maximum Daily Average: 1.8 ppb on Mar 4																				Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 37 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Mar 5 23:00 Maximum Diurnal Average: 1.1 ppb at hour 12 Monthly Average: 0.64 ppb										Minimum Daily Average: 0.1 ppb on Mar 29 Minimum Diurnal Average: 0.3 ppb at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.6 P ₉₀ = 1.3 P ₉₉ = 5.6																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.1
2-Mar	A	0	0	0	1	1	0	0	1	1	1	2	7	6	2	4	1	0	1	0	0	0	0	A	1.3	6.9
3-Mar	1	1	1	1	1	0	0	0	0	1	1	3	1	1	2	0	0	0	0	0	1	2	A	2	0.9	2.6
4-Mar	1	4	2	0	0	0	0	0	4	11	6	6	1	0	1	0	0	0	0	1	1	A	0	0	1.8	10.6
5-Mar	0	0	0	0	0	0	1	0	0	1	1	1	1	0	0	0	0	0	0	0	A	0	0	0	0.3	1.2
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	2	1	A	1	0	0	0	0.5	2.9
7-Mar	0	0	0	0	0	0	1	1	1	2	2	3	3	3	1	0	1	1	A	1	1	0	1	0	1.0	3.3
8-Mar	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	A	0	0	0	0	0	0.2	1.1
9-Mar	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	A	0	1	1	1	1	0	0.4	1.8
10-Mar	1	1	0	1	1	1	3	1	1	1	4	3	0	0	0	A	0	0	0	0	0	0	0	0	0.9	4.3
11-Mar	1	0	0	0	0	0	0	0	0	1	1	1	1	1	A	0	0	0	0	0	1	0	0	0	0.4	0.9
12-Mar	0	1	0	0	2	0	0	0	1	1	0	0	0	A	0	0	0	0	0	0	1	4	3	0	0.7	3.5
13-Mar	0	0	0	0	0	0	1	1	1	1	0	1	A	1	0	0	1	1	1	1	4	10	1	0	1.1	10.0
14-Mar	0	0	0	0	0	0	1	1	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0.6	1.5
15-Mar	0	0	0	0	0	0	0	0	0	0	A	1	1	1	0	1	0	0	0	0	0	0	0	1	0.4	0.7
16-Mar	0	0	1	1	1	2	3	1	1	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.6	2.6
17-Mar	1	1	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0.4	2.1
18-Mar	1	0	0	0	0	1	0	A	1	2	3	1	1	1	3	1	1	1	1	2	5	3	0	0	1.2	4.6
19-Mar	1	1	0	0	0	0	A	0	1	1	1	0	0	1	0	0	0	0	0	0	1	0	1	1	0.5	1.2
20-Mar	3	3	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.6	2.7
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
23-Mar	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.6	1.2
24-Mar	0	A	0	0	0	0	0	0	0	2	1	1	1	1	1	1	0	0	8	10	6	2	1	1	1.6	10.2
25-Mar	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	1	1	0	0	A	0.5	0.9
26-Mar	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	A	0	0	0.4	0.9
27-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	A	0	1	0.6	1.3
28-Mar	0	0	0	1	1	0	0	0	1	1	C	C	C	C	0	0	0	0	0	0	A	0	0	0	0.4	1.0
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4
30-Mar	0	0	0	0	0	0	0	0	1	1	1	1	2	0	0	0	0	0	0	A	0	0	0	0	0.4	2.2
31-Mar	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	A	1	1	1	0	0	0	0.4	1.0
0.4 0.6 0.4 0.3 0.3 0.4 0.5 0.4 0.6 1.0 1.0 1.1 0.9 0.9 0.6 0.6 0.5 0.4 0.7 0.9 1.0 1.0 0.5 0.5																								Diurnal Average		
2.7 3.5 2.3 0.7 2.1 2.1 2.8 1.5 4.0 10.6 5.8 5.6 6.9 6.2 3.3 3.5 2.9 1.7 8.5 10.2 5.8 10.0 2.9 2.2																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2012



Hourly Maximums

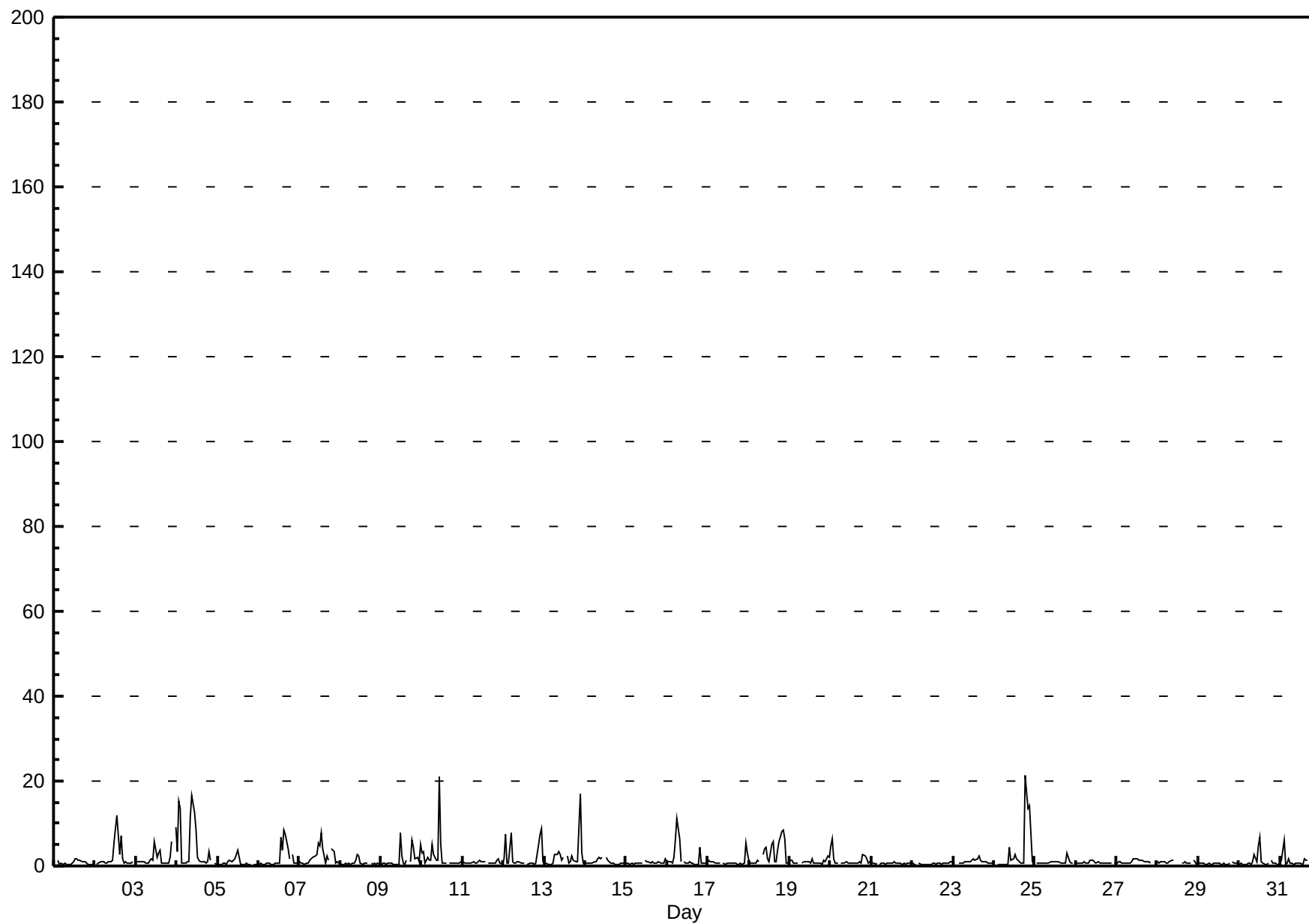
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - March 2012

Maximum Value: 21.4 ppb on Mar 24 19:00																				Maximum Daily Average: 4.3 ppb on Mar 4					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 13 05:00																				Minimum Daily Average: 0.5 ppb on Mar 29					Hours of Data: 707	
Maximum Diurnal Average: 2.4 ppb at hour 22																				Minimum Diurnal Average: 0.7 ppb at hour 4					Hours of Missing Data: 37	
Monthly Average: 1.53 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.8 Q ₃ = 1.3 P ₉₀ = 2.9 P ₉₉ = 13.9					Hours of Calibration: 37	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	A	1	0	1	0	1	0	0	0	1	2	2	2	1	1	1	1	1	1	0	0	0	0	0.8	1.6
2-Mar	A	0	1	1	1	1	1	1	1	1	1	6	9	12	3	7	2	1	1	1	1	1	1	A	2.3	11.7
3-Mar	1	1	1	1	1	1	1	1	1	2	1	6	2	3	4	1	1	1	1	1	2	6	A	9	2.0	9.0
4-Mar	3	15	14	1	1	1	1	1	11	17	12	9	2	1	1	1	1	1	1	3	1	A	1	0	4.3	16.5
5-Mar	0	0	0	1	1	0	1	1	1	1	2	3	4	0	0	0	0	1	0	0	A	0	0	0	0.9	3.6
6-Mar	0	1	0	0	0	1	1	0	0	0	1	1	1	7	4	8	7	4	2	A	3	1	1	0	1.8	8.4
7-Mar	1	1	1	0	1	1	1	2	2	2	3	5	5	8	4	1	2	1	A	4	3	1	1	1	2.2	7.7
8-Mar	1	0	0	1	0	1	0	1	1	1	3	2	1	0	1	1	1	A	1	0	1	0	1	0	0.7	2.7
9-Mar	0	1	1	0	1	1	1	0	0	0	0	8	2	1	0	1	A	1	6	4	2	2	1	5	1.7	7.7
10-Mar	3	4	1	2	1	1	5	3	1	1	21	5	1	1	1	A	1	1	1	1	1	1	1	1	2.4	21.0
11-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	1	1	0.9	1.6
12-Mar	2	7	1	1	8	1	1	1	1	1	1	1	1	A	0	1	1	1	0	1	5	7	9	1	2.2	8.8
13-Mar	1	1	0	0	0	1	3	3	3	3	1	2	A	2	1	1	2	1	1	1	9	17	3	1	2.5	17.1
14-Mar	1	1	1	1	1	1	1	2	2	2	2	A	2	1	1	1	1	1	0	0	1	1	1	0	1.0	2.0
15-Mar	1	1	0	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	0.8	1.7
16-Mar	1	1	1	1	2	6	11	6	1	A	1	1	1	1	1	1	0	0	0	4	1	1	1	1	1.9	11.2
17-Mar	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	0	1	1	0	1	5	3	1.0	5.4
18-Mar	1	1	1	1	1	1	1	A	3	4	4	2	1	5	6	1	1	4	6	8	8	6	1	1	2.9	8.3
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	2	1	1	1	1	1	0	1	1	2	2	1.0	2.5
20-Mar	5	7	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	3	2	2	1	1	1.4	6.6
21-Mar	1	1	0	1	A	0	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	0.6	0.9
22-Mar	1	0	0	A	1	0	0	0	0	0	0	0	0	1	1	0	1	0	1	1	1	1	1	1	0.6	0.9
23-Mar	1	1	A	1	1	1	1	1	1	1	1	1	2	1	2	2	1	1	1	1	1	1	1	1	1.0	2.2
24-Mar	1	A	0	0	0	0	0	0	0	5	1	2	3	2	1	1	1	1	21	17	14	14	1	1	3.8	21.4
25-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	1	1	A	0.9	2.9
26-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.3
27-Mar	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	A	1	1	1.0	1.7
28-Mar	1	1	1	1	1	1	1	1	1	1	C	C	C	C	1	1	1	1	1	1	A	1	1	0	0.9	1.4
29-Mar	1	1	1	1	0	0	1	0	0	1	1	1	1	0	0	1	0	0	1	A	1	1	1	1	0.5	0.9
30-Mar	0	1	0	0	0	1	1	0	1	3	1	5	7	1	1	0	0	1	A	1	1	1	0	0	1.1	6.8
31-Mar	1	2	6	0	1	2	1	1	1	1	1	1	1	0	2	1	1	A	1	2	2	1	0	1	1.2	6.3
																									Diurnal Average	
																									Diurnal Maximum	
C - Calibration																									A - Automated Daily Zero Span	

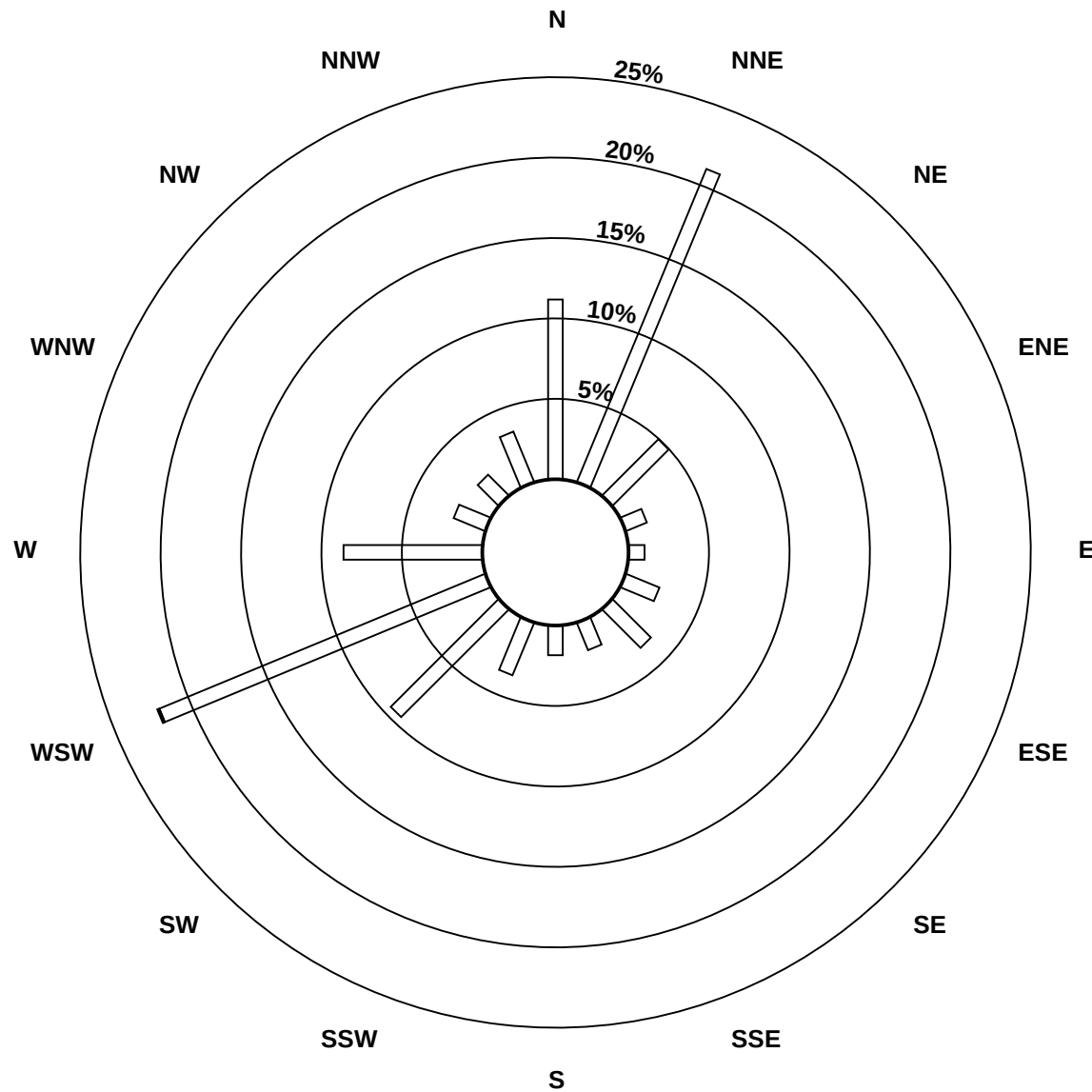
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2012

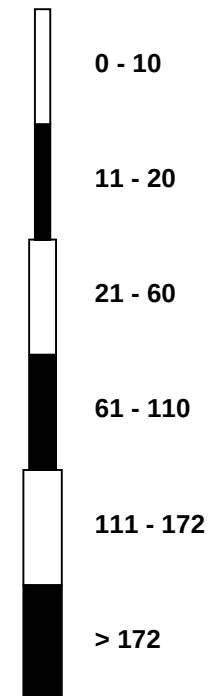


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - March 2012

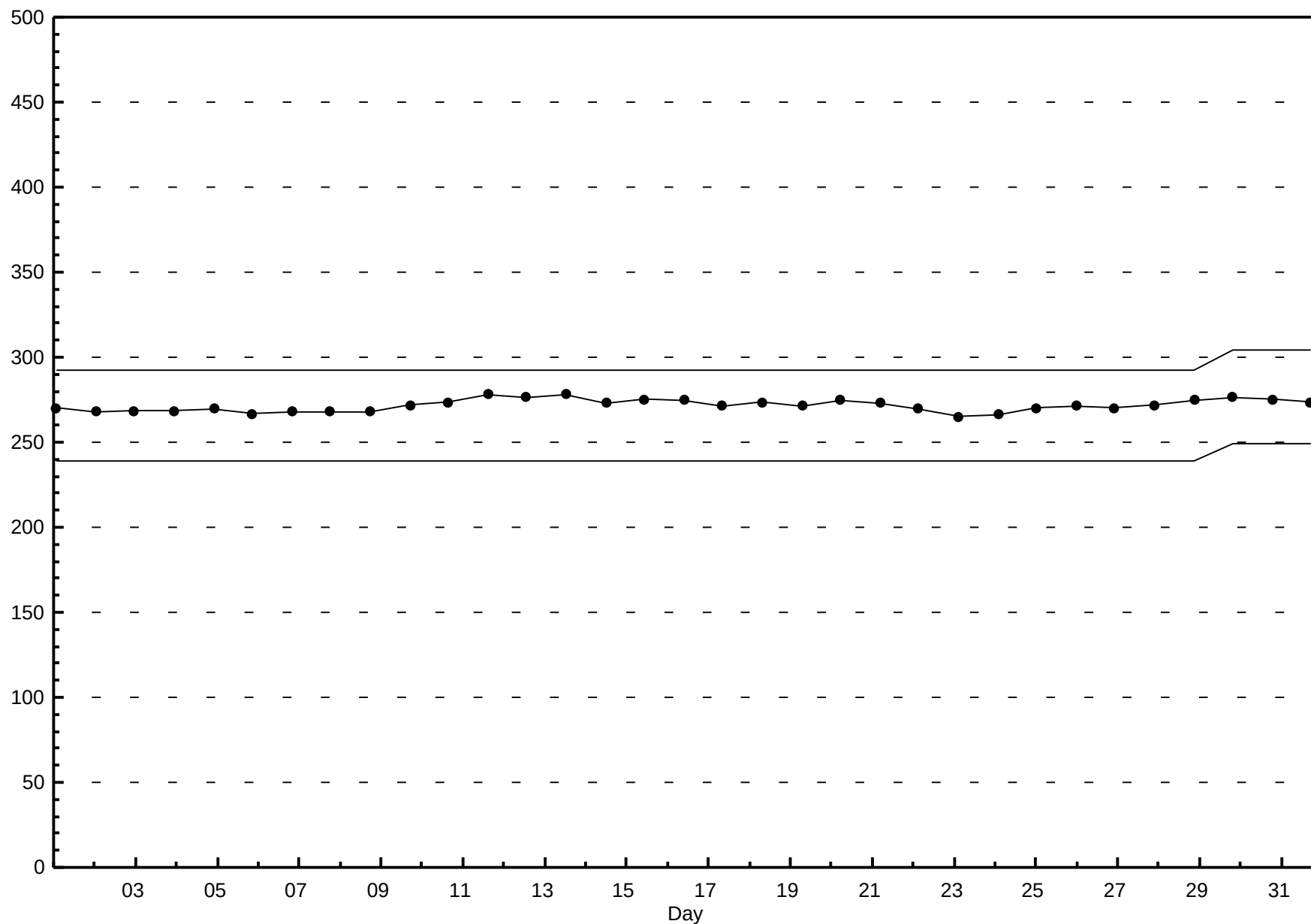


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Smoky Heights - March 2012



Hourly Averages

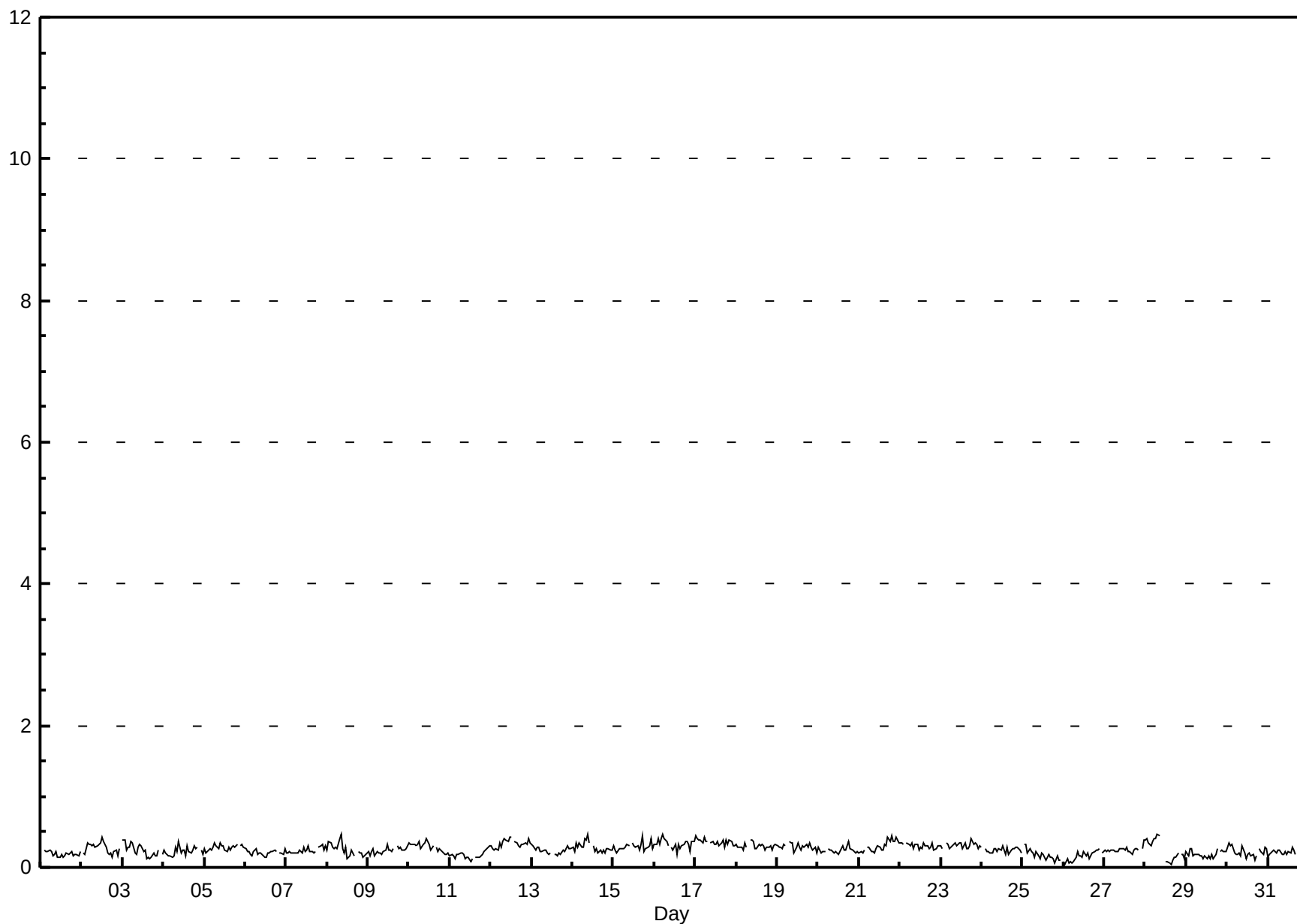
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.5 ppb on Mar 28 08:00 Maximum Daily Average: 0.4 ppb on Mar 17																					Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0					
Minimum Value: 0 ppb on Mar 26 02:00 Maximum Diurnal Average: 0.3 ppb at hour 1 Monthly Average: 0.26 ppb										Minimum Daily Average: 0.2 ppb on Mar 26 Minimum Diurnal Average: 0.2 ppb at hour 17 Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 0.4																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
2-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.4
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.4
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.4
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.3
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.3
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.5
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.3
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4
11-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
13-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
14-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
15-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
16-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
17-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4
18-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
23-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
24-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
25-Mar	A	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
26-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.4
28-Mar	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.5
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.3
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.4
0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.2 0.2 0.2 0.2 0.2 0.2 0.3 0.3 0.3 0.3 0.3 0.3																								Diurnal Average		
0.4 0.4 0.4 0.4 0.4 0.5 0.4 0.5 0.5 0.5 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - March 2012



Hourly Maximums

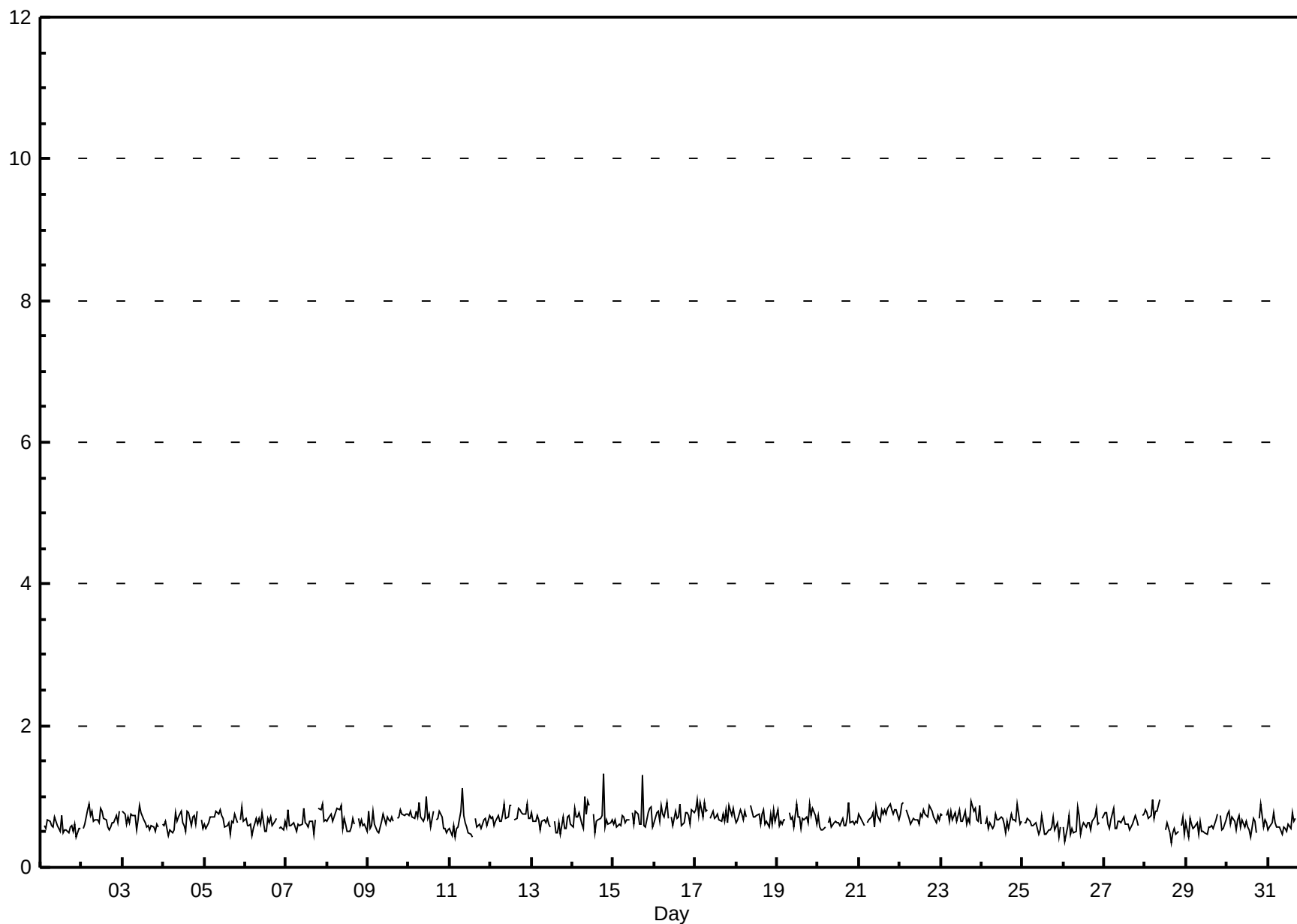
Total Reduced Sulphur (TRS) - ppb

Smoky Heights - March 2012

Maximum Value: 1.3 ppb on Mar 14 19:00																				Maximum Daily Average: 0.8 ppb on Mar 17										Hours in Service: 744									
Minimum Value: 0 ppb on Mar 28 16:00																				Minimum Daily Average: 0.6 ppb on Mar 1										Hours of Data: 708									
Maximum Diurnal Average: 0.7 ppb at hour 19																				Minimum Diurnal Average: 0.6 ppb at hour 14										Hours of Missing Data: 36									
Monthly Average: 0.67 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 0.9										Hours of Calibration: 36									
																				Percent Operational Time: 100.0																			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24															
1-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	0	1	1	0.6	0.7													
2-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.9													
3-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	0.9													
4-Mar	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.8													
5-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	A	1	1	1	0.7	0.8													
6-Mar	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.6	0.8													
7-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	1	1	1	1	1	0.7	0.9													
8-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.7	0.9													
9-Mar	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	0.8													
10-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	0.7	1.0													
11-Mar	1	0	1	0	1	1	1	1	1	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	0.6	1.1													
12-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
13-Mar	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	1	0	1	1	1	1	1	1	0.6	0.8													
14-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.3													
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3													
16-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
17-Mar	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9													
18-Mar	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9													
21-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
23-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
24-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.7	0.9													
25-Mar	A	1	1	1	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	0	1	A	0.6	0.7													
26-Mar	1	0	1	1	0	1	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.8													
27-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8													
28-Mar	1	1	1	1	1	1	1	1	1	C	C	C	1	1	0	0	0	1	0	1	A	1	1	0	0.6	1.0													
29-Mar	1	0	1	1	1	1	1	0	1	1	1	0	0	1	1	1	1	1	1	A	1	1	1	1	0.6	0.8													
30-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	A	1	1	1	1	1	0.6	0.9													
31-Mar	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.6	0.8													
0.7 0.7 0.6 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.6																									Diurnal Average														
0.8 0.9 0.9 0.9 1.0 0.9 0.9 1.1 1.0 0.9 1.0 0.9 0.9 0.8 0.8 0.9 0.8 1.3 1.3 0.9 0.9 0.9 0.9 0.9																									Diurnal Maximum														
C - Calibration																									A - Automated Daily Zero Span														

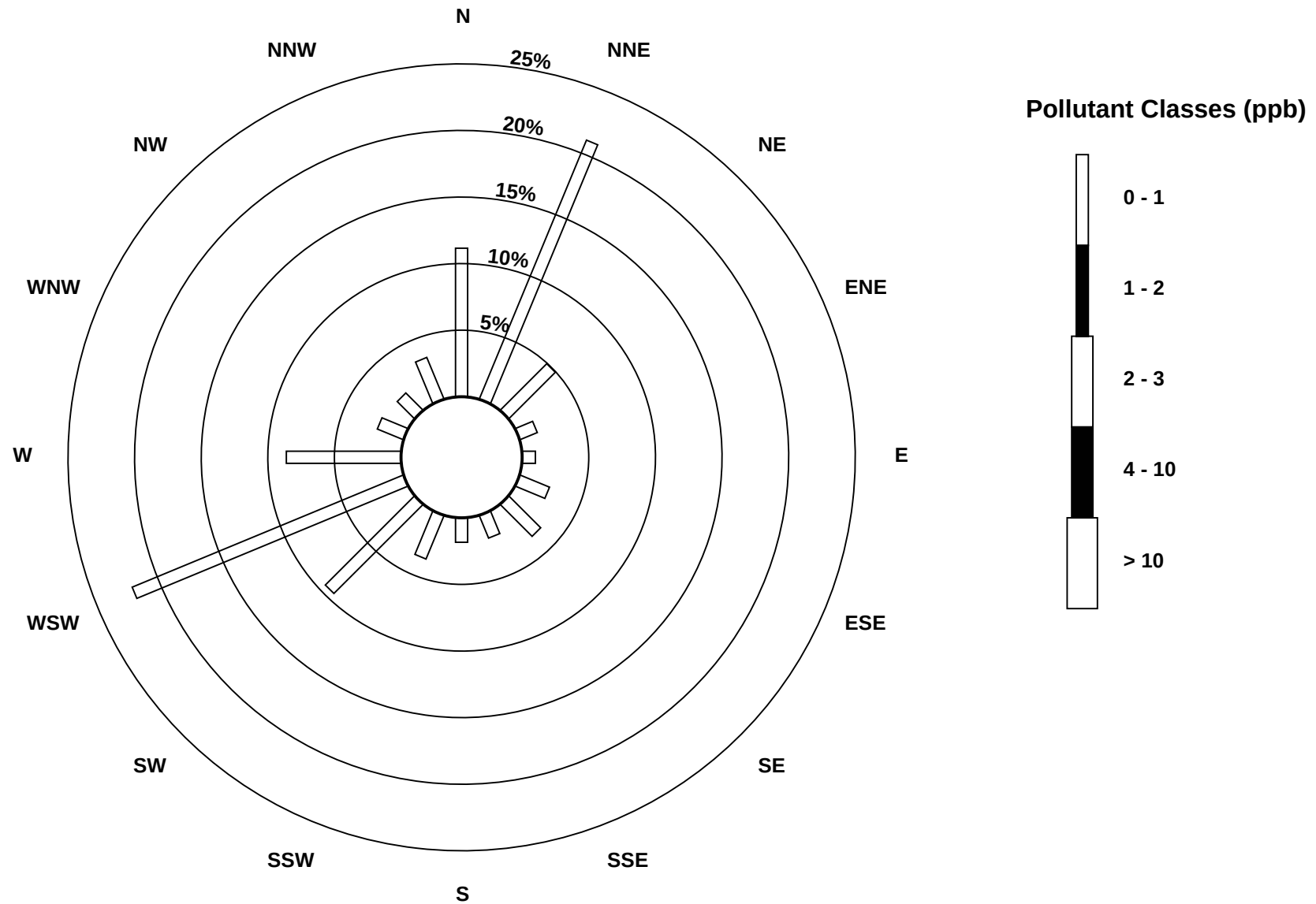
Hourly Maximums

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - March 2012



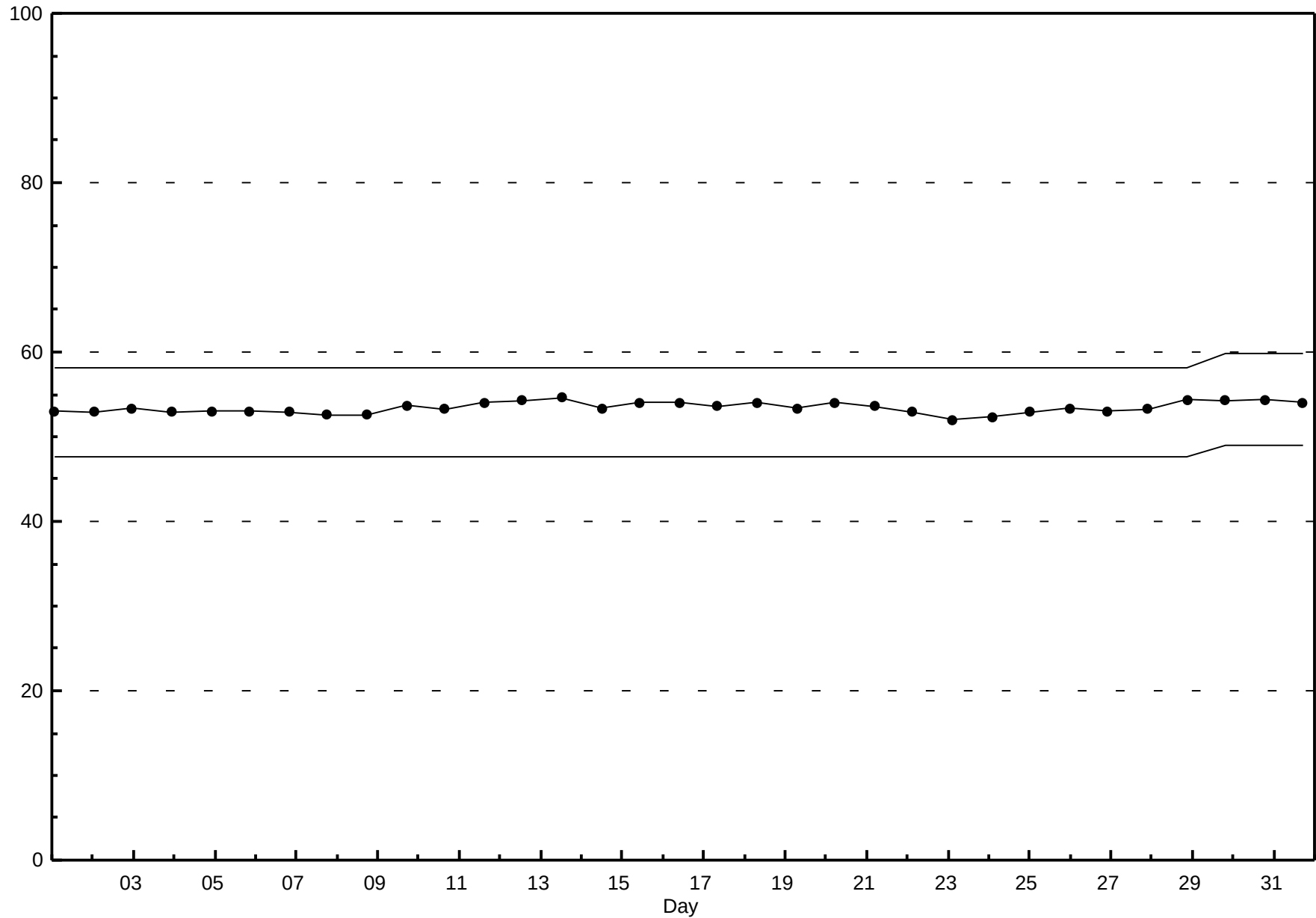
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - March 2012



Span Responses

Total Reduced Sulphur (TRS)
Smoky Heights - March 2012



Hourly Averages

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

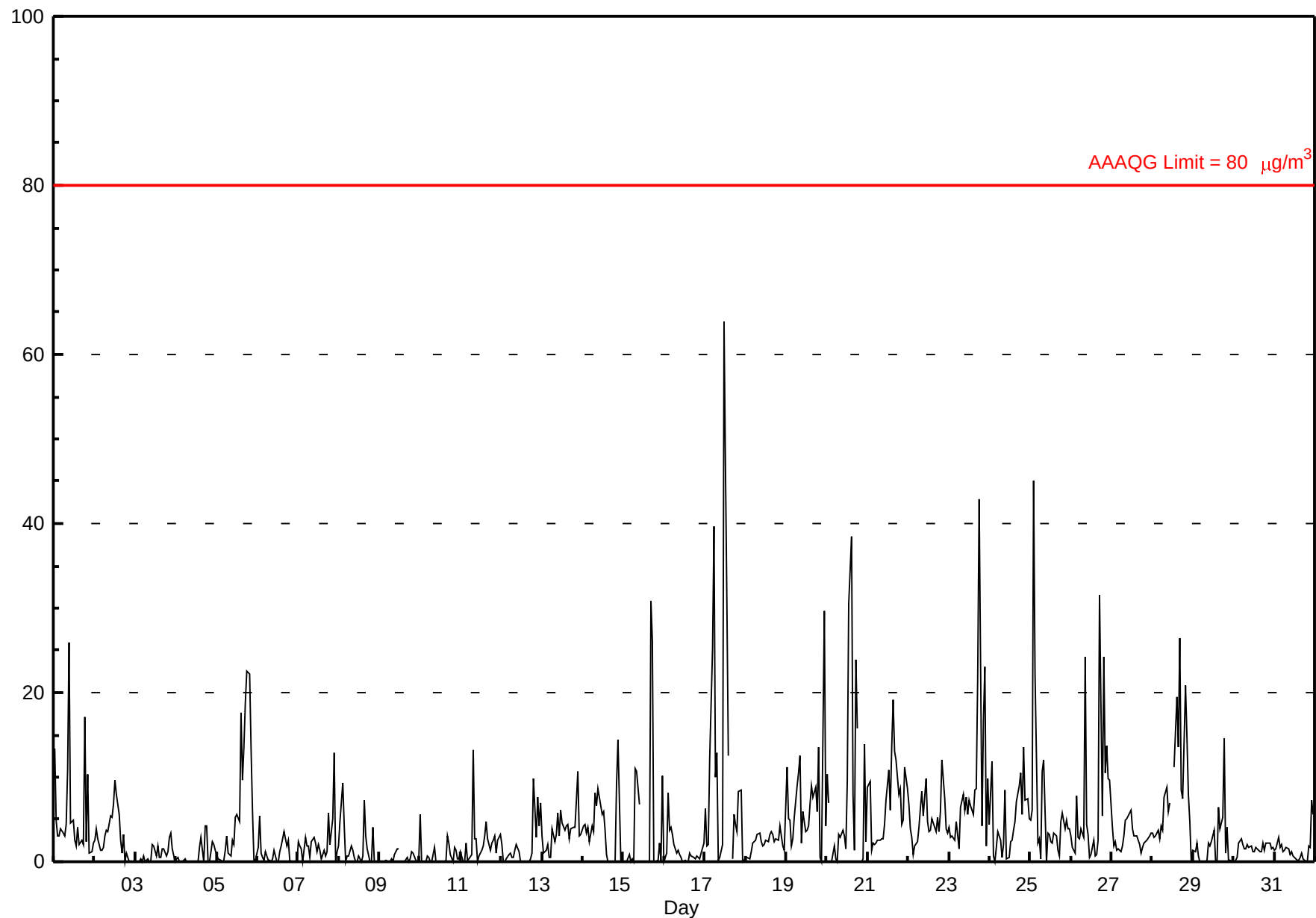
Smoky Heights - March 2012

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 63.9 µg/m³ on Mar 17 12:00 Minimum Value: 0 µg/m³ on Mar 2 19:00 Maximum Diurnal Average: 6.7 µg/m³ at hour 18 Monthly Average: 4.06 µg/m³																								Hours in Service: 744 Hours of Data: 736 Hours of Missing Data: 8 Hours of Calibration: 0 Percent Operational Time: 98.9		
Maximum Daily Average: 12.9 µg/m³ on Mar 17 Minimum Daily Average: 0.3 µg/m³ on Mar 9 Minimum Diurnal Average: 2.2 µg/m³ at hour 7 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 2.2 Q ₃ = 4.7 P ₉₀ = 9.7 P ₉₉ = 25.6																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	13	5	3	3	4	3	3	4	11	26	5	5	3	2	4	2	3	2	17	2	10	1	1	2	5.6	25.9
2-Mar	2	4	3	1	1	2	3	4	4	5	5	7	10	8	6	3	1	3	0	1	0	0	0	0	3.0	9.7
3-Mar	0	0	0	0	0	1	0	0	0	0	2	2	1	2	1	0	2	2	1	1	3	3	1	0	0.9	3.3
4-Mar	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	4	4	0	0	2	2	1	0.8	4.3
5-Mar	1	0	0	0	0	1	3	1	1	3	2	5	6	5	18	10	13	19	23	22	13	6	0	0	6.3	22.6
6-Mar	2	5	1	1	0	1	0	0	0	0	1	0	0	1	2	3	4	2	3	0	0	0	0	0	1.1	5.5
7-Mar	2	2	2	0	3	2	2	1	2	3	2	1	2	1	0	1	1	1	6	2	5	13	0	1	2.3	13.0
8-Mar	2	5	9	4	0	1	1	2	1	1	0	0	1	0	1	7	3	2	0	0	4	0	0	0	1.8	9.4
9-Mar	0	0	0	0	0	0	0	0	0	1	1	2	N	0	0	0	1	0	0	1	1	0	0	0	0.3	1.6
10-Mar	6	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	3	2	1	0	2	1	0	0	0.8	5.6
11-Mar	1	0	0	2	0	0	1	13	3	3	0	1	1	2	3	5	3	1	2	2	3	1	3	3	2.2	13.2
12-Mar	2	0	0	0	1	1	0	1	1	2	1	0	0	N	0	0	0	0	1	10	3	8	4	7	1.9	9.8
13-Mar	3	1	1	2	1	1	4	2	3	6	3	6	5	4	4	4	3	4	4	4	7	11	3	3	3.7	10.7
14-Mar	4	4	3	4	2	4	4	8	7	9	8	6	6	4	1	0	0	0	0	0	9	14	0	0	4.0	14.4
15-Mar	0	0	0	1	0	0	0	11	11	7	N	0	0	0	0	0	31	26	0	0	0	2	0	10	4.3	30.9
16-Mar	0	1	8	4	4	3	2	1	1	1	0	0	0	0	0	1	1	0	0	1	0	0	1	2	1.4	8.1
17-Mar	6	2	2	12	25	40	10	13	0	1	2	64	47	30	13	N	0	6	4	3	8	8	0	0	12.9	63.9
18-Mar	1	1	0	1	2	2	3	3	3	2	2	2	3	2	3	4	3	2	3	2	4	3	2	1	2.3	4.3
19-Mar	11	5	5	2	3	5	9	10	13	2	6	4	4	4	7	9	8	9	6	14	0	0	30	4	7.0	29.7
20-Mar	10	7	N	0	2	0	0	3	3	4	3	2	9	31	39	8	1	24	16	N	0	0	14	2	8.1	38.5
21-Mar	9	9	1	2	2	2	3	3	3	3	4	7	11	6	14	19	13	12	8	9	4	5	11	9	7.0	19.2
22-Mar	7	4	3	1	2	2	4	6	8	5	10	5	3	4	5	4	4	5	4	6	12	7	4	3	5.0	12.0
23-Mar	4	3	3	3	5	3	2	6	8	6	8	6	7	7	6	8	9	22	43	4	17	23	2	10	8.9	43.0
24-Mar	4	12	1	0	2	4	3	0	2	8	0	1	2	3	4	5	7	9	10	6	13	7	7	5	4.8	13.5
25-Mar	5	6	45	22	2	3	0	11	12	0	3	3	2	2	3	3	1	1	5	6	4	5	4	4	6.4	45.1
26-Mar	3	2	1	8	3	3	4	3	24	4	3	1	1	3	1	1	2	32	5	24	10	14	10	10	7.1	31.5
27-Mar	4	2	2	1	1	1	2	3	5	5	5	6	4	3	3	3	2	1	2	2	2	3	3	3	2.9	6.1
28-Mar	3	3	3	4	3	4	4	8	9	6	7	M	M	11	19	14	27	8	8	21	15	8	5	0	8.6	26.5
29-Mar	1	1	2	1	0	0	0	0	0	2	2	2	4	0	0	6	4	5	15	1	4	0	0	0	2.1	14.6
30-Mar	0	0	1	2	3	2	2	1	2	2	2	1	1	2	2	1	1	2	1	2	2	2	2	2	1.6	2.8
31-Mar	1	2	3	2	2	1	1	2	2	1	1	1	1	0	0	1	1	0	0	0	2	2	7	6	1.5	7.3
																								Diurnal Average		
																								Diurnal Maximum		
M - Maintenance N - Not Valid Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³																										

Hourly Averages

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

Smoky Heights - March 2012



Hourly Maximums

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

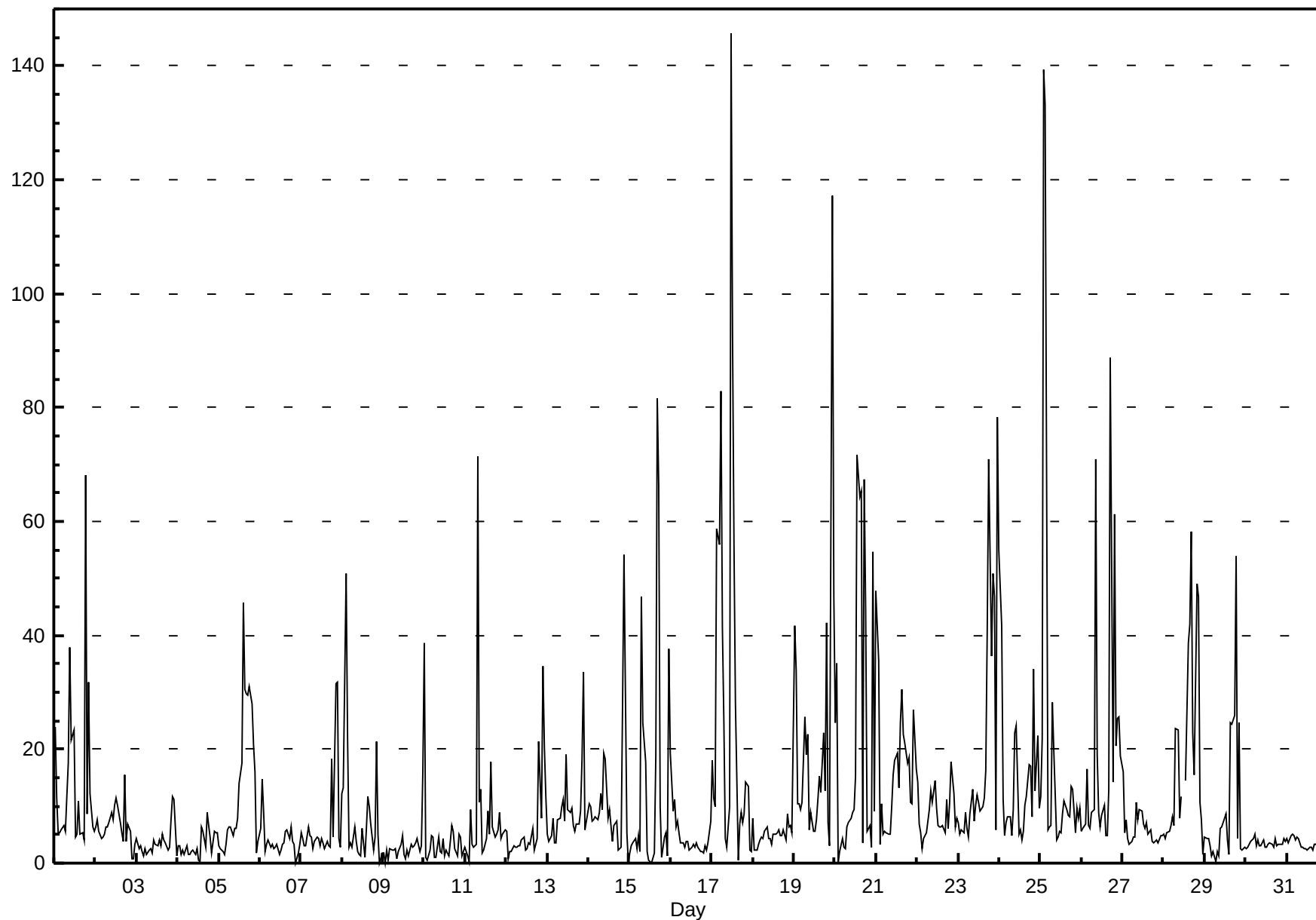
Smoky Heights - March 2012

Maximum Value: 145.7 μg/m ³ on Mar 17 12:00																								Maximum Daily Average: 29.5 μg/m ³ on Mar 17								Hours in Service: 744	
Minimum Value: 0 μg/m ³ on Mar 6 22:00																								Minimum Daily Average: 2.9 μg/m ³ on Mar 9								Hours of Data: 742	
Maximum Diurnal Average: 16.8 μg/m ³ at hour 18																								Minimum Diurnal Average: 6.3 μg/m ³ at hour 5								Hours of Missing Data: 2	
Monthly Average: 11.04 μg/m ³																								Percentiles: P ₁ = 0.3 P ₁₀ = 2.0 Q ₁ = 3.2 Median = 5.6 Q ₃ = 10.5 P ₉₀ = 24.5 P ₉₉ = 77.4								Hours of Calibration: 0	
Percent Operational Time: 99.7																																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum							
1-Mar	24	12	5	5	6	7	6	12	18	38	21	23	5	5	11	5	5	4	68	9	32	12	6	6	14.3	68.2							
2-Mar	6	8	6	4	5	5	6	6	7	9	8	10	11	10	7	5	4	16	4	7	6	1	1	3	6.4	15.6							
3-Mar	4	3	3	2	1	2	2	2	2	2	4	3	3	4	3	5	4	3	2	3	8	12	11	1	3.8	11.8							
4-Mar	3	3	2	2	1	3	2	1	2	2	1	2	1	0	6	6	3	9	7	4	2	6	5	5	3.3	8.9							
5-Mar	3	2	2	1	3	6	6	6	5	6	6	8	14	18	46	31	30	29	31	28	21	16	2	4	13.5	45.7							
6-Mar	6	15	9	2	3	4	3	3	2	3	3	1	2	3	4	6	6	4	6	4	3	0	2	3	4.1	14.7							
7-Mar	5	4	3	3	6	5	5	2	4	5	4	3	4	4	3	4	3	3	18	5	31	32	4	3	6.8	31.8							
8-Mar	12	13	51	22	3	4	3	6	4	2	2	1	6	1	6	12	10	7	2	5	21	5	0	2	8.3	50.8							
9-Mar	2	0	2	0	2	2	2	2	1	2	3	5	1	1	2	1	3	3	3	4	2	3	16		2.9	16.1							
10-Mar	39	1	1	2	5	5	1	1	5	2	2	4	1	2	1	4	7	5	2	1	5	5	1	2	4.3	38.6							
11-Mar	3	1	0	9	3	3	3	71	11	13	2	2	4	9	5	18	6	4	5	6	9	4	5	6	8.5	71.3							
12-Mar	6	1	2	2	3	3	3	3	3	4	5	2	2	4	3	6	2	3	4	21	8	35	20	12	6.6	34.7							
13-Mar	5	4	5	8	4	4	8	8	10	11	7	19	9	9	10	7	6	7	7	9	18	34	6	7	9.2	33.7							
14-Mar	11	10	7	8	8	8	9	12	10	19	18	8	10	7	4	7	7	2	2	3	28	54	5	0	10.7	54.3							
15-Mar	2	3	4	4	2	5	2	47	25	18	2	0	0	0	2	19	82	66	10	1	5	5	1	38	14.3	81.6							
16-Mar	19	9	11	6	7	5	4	4	3	4	4	2	3	3	3	4	3	2	2	2	3	2	3	7	4.8	19.3							
17-Mar	18	12	10	59	56	83	42	25	4	3	10	146	93	56	28	1	7	9	7	9	14	13	2	2	29.5	145.7							
18-Mar	8	2	2	3	4	5	4	5	6	4	4	3	5	5	5	6	5	5	6	4	9	6	7	5	5.0	8.6							
19-Mar	42	34	11	11	10	11	26	19	23	6	9	6	6	8	11	15	12	23	13	42	7	3	117	47	21.2	117.3							
20-Mar	25	35	0	2	4	3	2	6	7	8	9	10	15	72	64	65	4	67	44	6	7	3	55	9	21.7	71.8							
21-Mar	48	36	3	11	5	6	5	5	5	10	15	18	19	13	25	31	23	21	18	19	11	11	27	17	16.6	47.7							
22-Mar	14	7	5	3	4	5	7	9	13	11	14	10	7	6	6	7	5	11	6	10	18	12	6	8	8.6	17.8							
23-Mar	7	5	6	5	9	6	4	9	13	7	10	12	11	9	10	12	16	41	71	36	51	47	6	78	20.0	78.2							
24-Mar	55	42	11	5	7	8	8	5	9	23	24	5	6	4	6	10	12	17	17	8	34	13	23	10	15.1	55.0							
25-Mar	12	22	139	133	6	6	7	28	20	4	5	6	5	9	11	9	8	8	13	13	5	10	8	10	20.7	139.4							
26-Mar	6	6	7	17	7	6	9	9	71	19	9	6	8	10	5	5	13	89	14	61	21	25	26	19	19.5	88.7							
27-Mar	16	5	8	4	3	4	5	4	11	8	9	9	7	6	7	5	6	4	4	4	4	4	5	5	6.0	15.9							
28-Mar	5	4	5	6	7	8	7	24	23	8	12	M	M	15	39	42	58	23	16	49	47	11	8	1	18.9	58.2							
29-Mar	5	4	4	3	1	2	0	2	1	6	6	7	9	4	1	25	24	26	54	4	25	2	2	3	9.3	54.0							
30-Mar	2	3	3	4	4	5	3	4	3	3	4	3	3	3	4	3	3	4	3	3	3	3	4	4	3.5	5.1							
31-Mar	4	4	5	5	5	4	5	4	3	3	2	2	2	3	3	2	3	3	4	4	6	6	30	21	5.6	30.0							
13.4 10.0 10.7 11.4 6.3 7.4 6.4 11.2 10.4 8.5 7.6 11.3 9.1 9.8 11.0 12.1 12.3 16.8 15.0 12.4 14.9 12.7 13.0 11.4																								Diurnal Average									
55.0 41.6 139.4 133.2 55.9 82.8 41.6 71.3 70.9 37.9 24.3 145.7 92.8 71.8 64.3 65.2 81.6 88.7 70.9 61.3 50.8 54.3 117.3 78.2																								Diurnal Maximum									
M - Maintenance																																	

Hourly Maximums

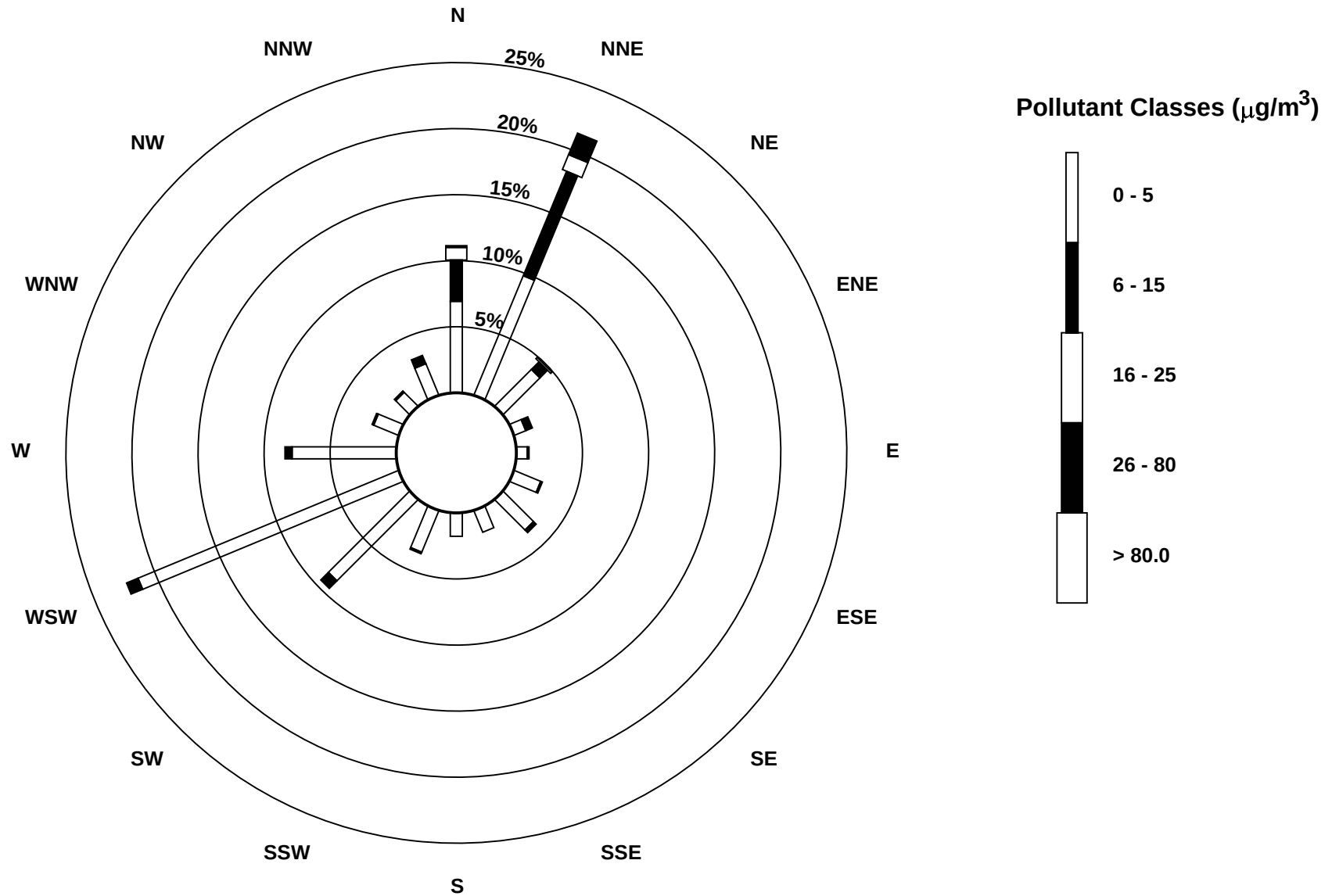
Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$

Smoky Heights - March 2012



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Smoky Heights - March 2012



Hourly Averages

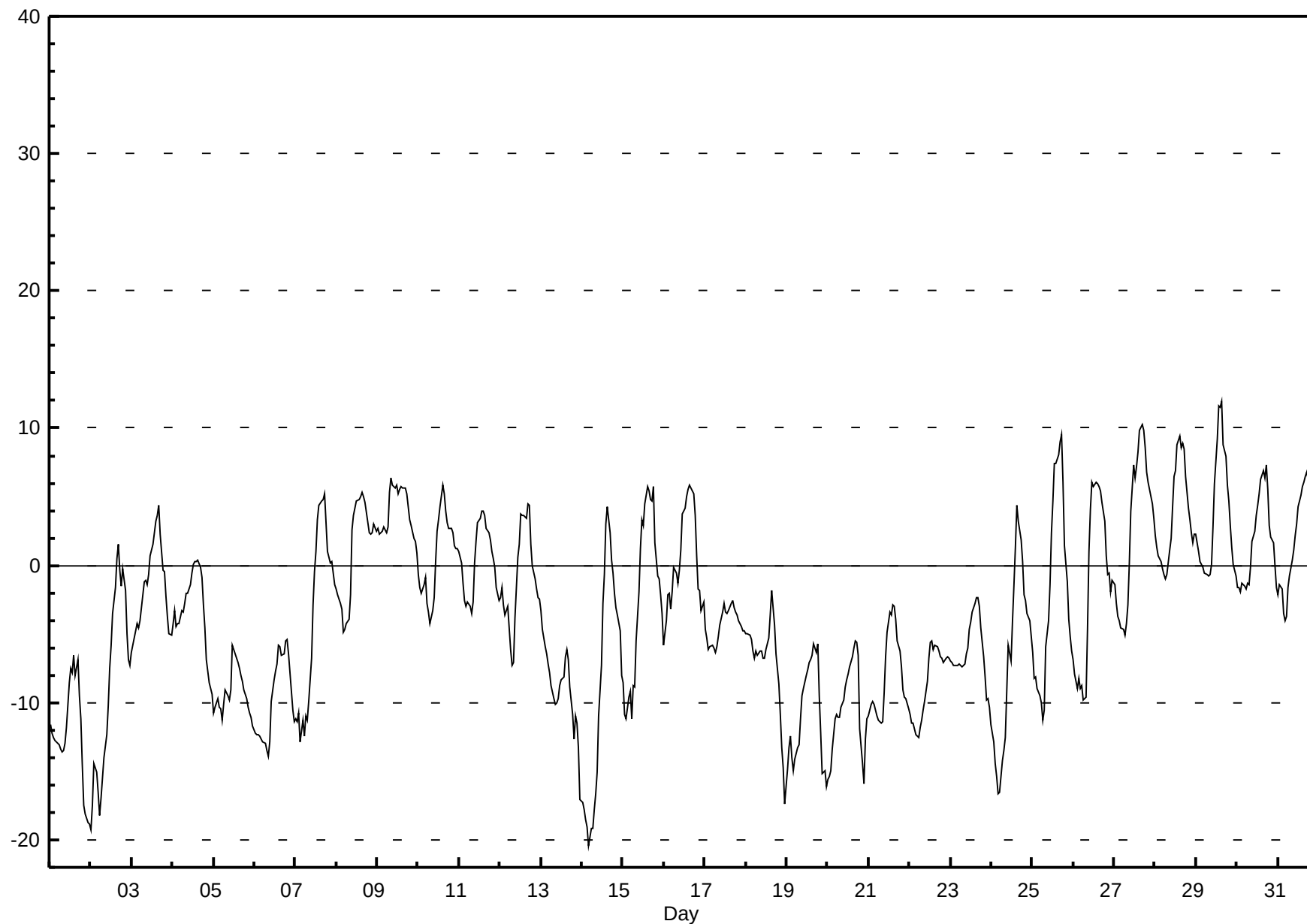
External Temperature (ET) - °C

Smoky Heights - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 11.9 °C on Mar 29 16:00 Maximum Daily Average: 3.9 °C on Mar 9																					Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0					
Minimum Value: -20 °C on Mar 14 05:00 Minimum Daily Average: -12.2 °C on Mar 1 Maximum Diurnal Average: 1.7 °C at hour 16 Minimum Diurnal Average: -7.8 °C at hour 6 Monthly Average: -3.73 °C Percentiles: P ₁ = -18.6 P ₁₀ = -12.4 Q ₁ = -8.6 Median = -3.5 Q ₃ = 1.3 P ₉₀ = 4.9 P ₉₉ = 9.2																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	-12	-12	-13	-13	-13	-13	-13	-14	-14	-13	-12	-9	-8	-8	-7	-8	-7	-10	-11	-15	-17	-18	-19	-19	-12.2	-6.5
2-Mar	-19	-17	-14	-15	-17	-18	-17	-15	-14	-12	-10	-8	-6	-4	-2	0	2	0	-2	0	-2	-5	-7	-7	-8.7	1.5
3-Mar	-6	-5	-5	-4	-5	-4	-3	-1	-1	-1	-1	1	2	2	3	4	4	2	0	0	-2	-4	-5	-5	-1.5	4.4
4-Mar	-4	-3	-4	-4	-4	-3	-3	-3	-2	-2	-1	-1	0	0	0	0	0	-1	-3	-5	-7	-9	-9	-9	-3.2	0.3
5-Mar	-11	-10	-10	-10	-10	-11	-10	-9	-9	-10	-9	-6	-6	-7	-7	-7	-8	-8	-9	-10	-10	-11	-11	-12	-9.3	-5.8
6-Mar	-12	-12	-12	-12	-13	-13	-13	-13	-14	-13	-10	-8	-8	-7	-6	-6	-7	-6	-5	-5	-6	-8	-11	-11	-9.7	-5.4
7-Mar	-11	-11	-11	-13	-11	-12	-11	-11	-10	-7	-3	-1	1	3	4	5	5	5	3	1	0	0	-1	-1	-3.6	5.2
8-Mar	-2	-2	-3	-3	-5	-5	-4	-4	-2	3	4	4	5	5	5	5	5	3	2	2	2	3	2	2	1.1	5.4
9-Mar	3	2	2	2	3	2	3	5	6	6	6	6	5	6	6	6	6	5	4	3	3	2	2	1	3.9	6.4
10-Mar	-1	-2	-2	-1	-1	-3	-3	-4	-3	-2	0	2	3	4	6	5	4	3	3	3	2	1	1	1	0.7	5.9
11-Mar	1	0	-1	-3	-3	-3	-3	-3	-3	0	2	3	3	4	4	4	3	2	2	1	1	0	-2	-3	0.3	4.0
12-Mar	-2	-2	-3	-4	-3	-5	-6	-7	-7	-4	1	2	4	4	4	3	5	4	2	0	-1	-2	-2	-2	-0.9	4.5
13-Mar	-3	-5	-6	-6	-7	-8	-9	-10	-10	-10	-10	-9	-8	-8	-7	-6	-7	-9	-11	-13	-11	-12	-13	-17	-8.9	-3.3
14-Mar	-17	-18	-19	-19	-20	-19	-19	-18	-17	-15	-11	-7	-3	-1	3	4	2	0	-1	-2	-3	-4	-5	-8	-8.9	4.3
15-Mar	-9	-11	-11	-10	-9	-11	-9	-9	-5	-2	1	3	3	5	6	5	5	5	6	2	-1	-1	-2	-4	-2.2	5.7
16-Mar	-6	-4	-2	-2	-3	-2	0	-1	-1	0	1	4	4	5	5	6	6	5	4	1	-2	-2	-3	-3	0.4	5.8
17-Mar	-5	-5	-6	-6	-6	-6	-6	-6	-5	-4	-3	-3	-3	-4	-3	-3	-3	-3	-4	-4	-4	-5	-5	-5	-4.4	-2.6
18-Mar	-5	-5	-5	-5	-6	-7	-6	-7	-6	-6	-7	-7	-6	-5	-4	-2	-3	-4	-6	-9	-11	-13	-15	-17	-7.0	-1.9
19-Mar	-15	-13	-12	-14	-15	-14	-13	-13	-11	-10	-9	-8	-8	-7	-7	-7	-6	-6	-6	-9	-12	-15	-15	-16	-10.9	-5.7
20-Mar	-16	-15	-15	-13	-11	-11	-11	-11	-10	-10	-9	-8	-8	-7	-7	-6	-5	-6	-7	-12	-14	-16	-13	-11	-10.5	-5.5
21-Mar	-11	-10	-10	-10	-10	-11	-11	-11	-11	-9	-7	-5	-3	-4	-3	-3	-4	-6	-6	-7	-9	-10	-10	-10	-8.0	-2.9
22-Mar	-11	-11	-11	-12	-12	-13	-12	-11	-11	-10	-8	-7	-6	-5	-6	-6	-6	-6	-7	-7	-7	-7	-7	-7	-8.6	-5.5
23-Mar	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-4	-3	-3	-2	-2	-3	-5	-7	-8	-10	-10	-10	-6.2	-2.4
24-Mar	-12	-13	-14	-15	-17	-16	-14	-13	-12	-9	-6	-7	-4	-1	1	4	3	2	0	-2	-3	-3	-4	-5	-6.7	4.3
25-Mar	-6	-8	-8	-9	-10	-10	-11	-11	-6	-4	-1	2	5	7	7	8	9	9	6	1	-1	-4	-5	-6	-1.9	9.5
26-Mar	-7	-8	-9	-8	-9	-9	-10	-10	-5	1	4	6	6	6	6	6	5	5	3	1	-1	-1	-2	-1	-1.2	6.1
27-Mar	-1	-3	-4	-4	-5	-5	-5	-4	-3	0	4	7	6	7	8	10	10	10	9	7	6	6	5	3	2.7	10.2
28-Mar	2	1	1	0	0	-1	-1	-1	1	2	4	6	7	9	9	9	9	8	7	4	3	2	2	2	3.6	9.5
29-Mar	2	1	0	0	0	-1	-1	-1	-1	0	3	6	9	12	12	12	9	8	6	5	3	1	0	-1	3.5	11.9
30-Mar	-2	-2	-2	-1	-1	-2	-1	-1	0	2	2	4	4	5	6	7	6	7	6	3	2	2	0	-2	1.8	7.3
31-Mar	-2	-1	-2	-4	-4	-4	-2	-1	0	1	2	3	4	5	6	6	6	7	6	3	0	-3	-4	-4	0.9	6.8
-6.6 -6.9 -7.1 -7.3 -7.6 -7.8 -7.6 -7.3 -6.2 -4.7 -2.9 -1.2 -0.3 0.6 1.4 1.7 1.5 0.8 -0.4 -2.2 -3.6 -4.6 -5.3 -6.0																									Diurnal Average	
2.7 2.3 2.3 2.5 2.8 2.4 2.8 5.3 6.4 5.8 5.6 7.3 9.2 11.6 11.6 11.9 10.2 9.9 8.6 6.8 6.0 5.5 4.5 3.5																									Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Smoky Heights - March 2012



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2012

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	20	17	18	17	12	14	12	8	7	7	8	7	0	9	2	5	7	7	6	5	4	4	3	4	7.4	19.7
Dir	15	2	355	357	356	351	351	2	15	12	0	37	167	332	336	251	277	297	15	17	36	334	6	236	355.0	15.0
2 Spd	7	9	9	9	12	11	11	11	11	9	7	11	11	13	17	20	16	17	13	24	11	11	13	14	10.8	24.4
Dir	253	244	204	209	218	226	238	256	234	222	227	245	249	235	237	259	275	304	240	313	297	237	237	229	249.2	312.6
3 Spd	17	14	17	13	12	8	11	17	18	15	20	22	21	18	16	28	25	17	18	19	16	18	19	22	16.6	28.0
Dir	241	247	250	236	232	251	223	211	220	251	253	249	244	248	264	281	297	264	255	259	244	247	254	262	251.7	280.5
4 Spd	23	24	21	18	18	18	18	20	20	16	17	17	17	20	19	16	16	15	13	14	12	10	10	9	16.3	23.5
Dir	252	252	266	264	264	262	258	255	248	255	252	253	237	236	235	237	238	242	252	252	248	221	232	260	249.7	252.3
5 Spd	8	10	9	7	9	8	7	13	14	14	9	6	19	17	19	20	19	21	18	17	16	14	14	13	7.0	20.9
Dir	241	233	236	245	207	245	247	271	269	268	250	325	340	350	6	6	13	24	19	19	23	27	47	37	342.3	23.9
6 Spd	11	7	7	4	7	5	6	5	5	11	9	9	12	15	14	16	18	18	23	24	18	19	16	15	6.7	23.9
Dir	31	9	49	40	48	49	79	87	78	140	167	202	244	254	252	235	239	229	240	256	232	238	258	267	240.9	256.3
7 Spd	17	15	13	13	11	14	17	16	17	22	27	25	22	26	26	27	26	31	14	10	8	17	14	10	14.4	31.4
Dir	261	266	261	235	239	254	251	260	261	254	243	246	249	246	242	247	252	258	274	334	360	13	35	51	259.1	257.6
8 Spd	9	6	7	6	5	6	7	9	15	28	25	23	16	16	15	8	7	15	5	2	4	5	12	5	7.4	27.6
Dir	46	29	32	4	274	232	255	292	248	243	239	238	225	225	227	235	201	211	182	168	66	194	169	227	233.2	243.3
9 Spd	6	9	8	8	9	6	5	20	29	23	22	27	37	34	33	33	19	23	22	20	22	17	20	15	18.6	37.4
Dir	199	214	231	217	223	175	103	210	213	223	234	246	241	232	240	248	243	243	251	235	229	256	240	245	234.1	240.9
10 Spd	9	14	10	16	10	8	10	8	10	9	9	10	14	10	5	12	16	14	9	11	15	11	11	8	6.5	16.5
Dir	231	269	253	258	253	199	235	276	271	244	265	205	190	216	259	140	135	146	139	136	150	156	122	161	200.3	135.3
11 Spd	10	6	3	3	5	3	5	6	7	1	7	5	4	3	5	7	6	7	10	4	17	14	10	13	0.7	17.1
Dir	181	173	184	4	324	317	43	21	43	154	144	150	134	57	14	25	19	29	75	329	252	273	222	255	293.9	252.0
12 Spd	18	26	25	22	23	15	18	15	11	5	2	7	7	13	17	17	15	14	15	12	11	11	9	13	2.5	26.0
Dir	252	248	237	233	246	260	252	263	245	264	145	132	108	107	108	101	82	76	42	26	354	353	4	12	254.7	248.1
13 Spd	17	16	18	14	17	21	17	15	15	11	14	9	4	6	1	4	10	14	7	8	6	9	6	3	8.0	20.9
Dir	14	4	17	9	359	356	358	340	338	340	318	36	48	290	224	181	252	246	264	266	344	355	345	249	342.8	355.8
14 Spd	2	7	7	8	6	7	5	7	6	7	8	10	8	10	4	2	10	15	14	11	8	7	6	4	2.1	15.2
Dir	243	257	264	258	258	255	238	261	222	207	235	244	222	235	249	47	43	49	50	52	25	10	351	301	283.3	49.0
15 Spd	8	10	9	4	5	3	6	8	12	7	9	12	24	18	15	12	9	7	5	6	6	0	4	6	2.1	23.8
Dir	252	251	212	206	291	245	353	31	27	33	94	131	138	119	109	91	22	15	221	245	262	75	349	22	102.6	137.9
16 Spd	6	14	14	16	17	15	20	15	17	14	9	30	31	23	23	20	19	15	11	12	11	8	8	10	15.1	31.2
Dir	267	266	269	261	259	257	253	240	220	248	287	233	233	236	233	236	239	234	252	270	264	278	262	286	248.1	232.7
17 Spd	2	5	6	7	12	14	15	17	21	24	22	23	27	26	28	25	24	24	26	24	23	17	19	20	17.7	28.2
Dir	146	243	275	11	21	19	16	22	32	34	34	25	23	20	24	30	29	19	21	18	16	13	2	2	20.4	23.9
18 Spd	13	11	13	10	11	9	12	10	13	18	21	22	20	16	9	8	12	12	13	14	7	4	6	3	8.0	21.5
Dir	344	272	278	316	245	267	308	246	247	248	253	240	238	248	257	1	3	347	355	348	38	237	280	102	280.0	239.8
19 Spd	4	13	12	11	10	10	10	12	14	15	15	15	13	13	14	15	11	10	7	6	7	4	6	5	10.2	15.3
Dir	49	25	18	34	26	16	17	18	18	23	17	24	6	2	0	9	4	22	12	9	331	336	3	9	14.0	17.0
20 Spd	8	8	8	8	11	14	17	16	18	19	17	17	21	22	16	13	11	10	7	5	4	1	3	4	10.7	21.6
Dir	18	26	24	18	29	30	29	31	33	32	34	21	20	21	13	359	353	3	358	312	321	287	337	207	18.8	21.2
21 Spd	7	13	14	11	12	15	18	18	19	14	12	12	11	12	13	15	18	17	16	16	16	17	18	20	14.5	20.1
Dir	357	41	46	35	30	28	29	34	33	33	27	14	6	5	15	14	16	19	18	12	18	19	19	17	22.4	16.6
22 Spd	19	18	20	21	19	17	17	18	19	20	18	19	16	16	18	17	16	15	14	18	15	18	15	16	17.2	21.4
Dir	18	20	16	16	20	20	24	16	16	15	11	18	1	351	353	354	352	353	351	11	13	18	16	13	10.4	15.7

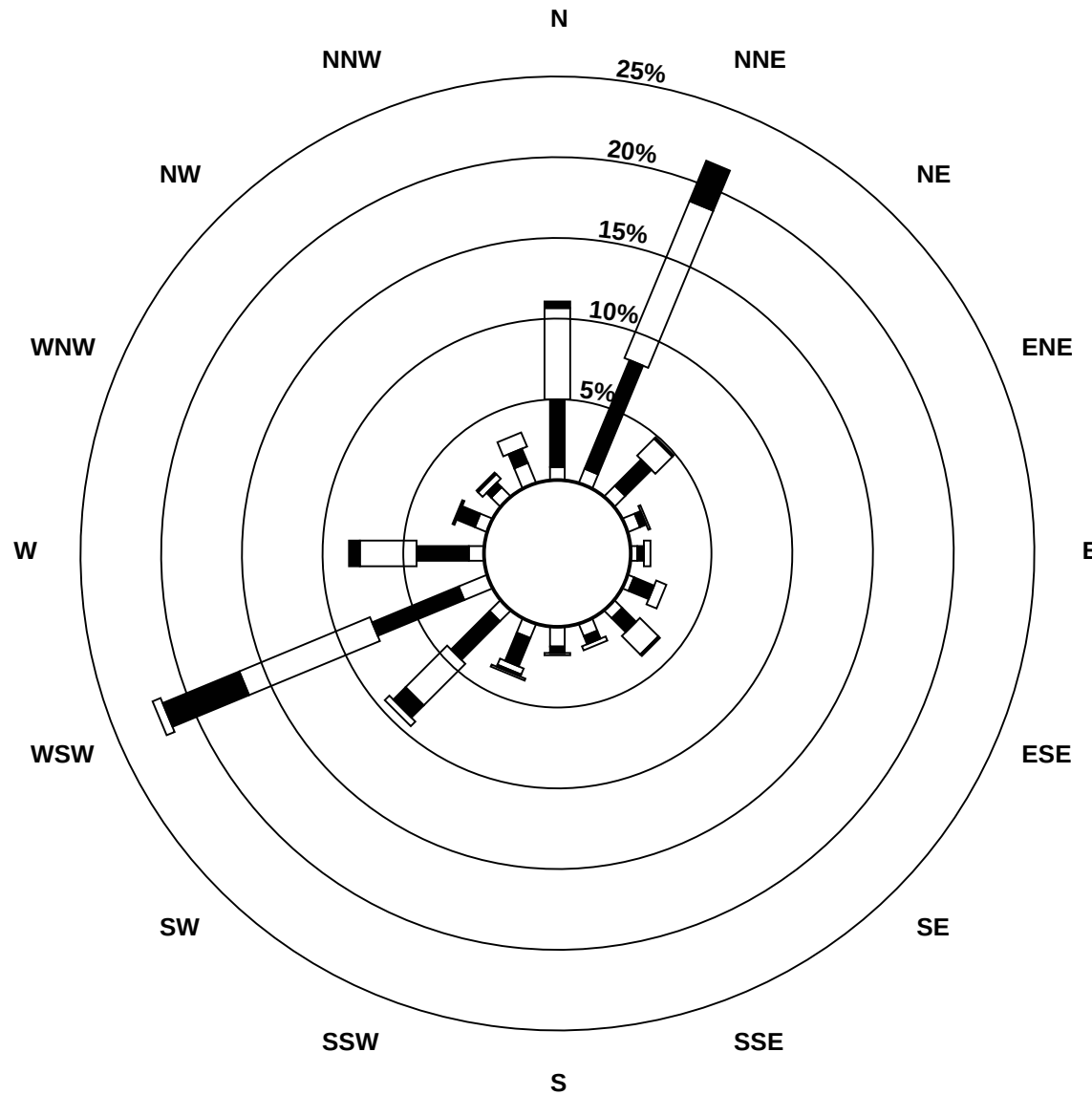
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - March 2012

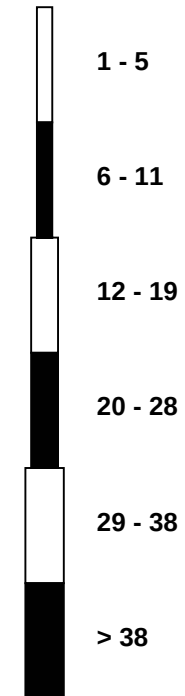
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
23 Spd	13	15	10	11	11	9	10	14	13	11	12	11	14	11	12	12	12	11	12	11	11	13	14	14	11.8	15.1				
Dir	13	10	6	1	4	24	16	19	24	30	19	24	21	12	10	17	10	8	13	355	10	5	4	13	12.9	10.4				
24 Spd	12	13	7	4	2	4	7	6	6	3	4	9	9	6	2	2	8	12	13	11	11	12	13	11	4.5	13.2				
Dir	11	14	9	319	280	243	245	215	207	242	262	259	267	273	258	28	9	6	9	355	7	36	8	15	343.8	8.4				
25 Spd	10	7	6	6	7	7	2	2	5	4	5	3	1	1	5	6	6	2	4	12	4	5	7	3	2.7	11.9				
Dir	26	38	24	16	24	28	348	65	28	179	234	251	206	348	349	12	21	58	260	327	327	200	268	293	355.0	326.6				
26 Spd	7	8	1	4	4	7	4	2	3	7	8	9	13	14	13	14	15	15	12	10	11	11	12	14	7.3	15.2				
Dir	266	288	317	32	174	301	216	297	359	50	42	33	26	17	8	8	10	18	24	21	21	15	20	17	11.8	18.2				
27 Spd	15	12	9	10	9	9	9	12	11	8	4	0	13	11	4	6	10	10	11	13	17	19	17	14	5.8	18.7				
Dir	15	19	15	15	17	18	13	25	20	17	11	248	144	140	208	123	116	112	106	107	127	128	140	140	82.8	128.3				
28 Spd	13	11	13	10	8	7	7	4	7	11	8	7	12	6	8	5	11	12	15	11	4	22	11	9	3.9	21.6				
Dir	134	135	135	141	120	108	104	92	78	125	57	84	126	103	35	75	23	31	32	28	353	259	247	285	90.1	259.3				
29 Spd	10	15	12	11	7	1	1	1	1	3	2	2	4	4	3	6	4	9	8	18	7	4	6	4	2.4	18.4				
Dir	194	224	207	206	163	150	152	153	145	125	84	16	26	108	182	20	182	54	321	240	339	177	243	268	212.1	239.5				
30 Spd	3	7	10	14	12	5	7	8	10	12	14	18	19	17	19	15	10	10	13	12	12	14	14	12	11.7	19.4				
Dir	182	219	250	250	258	213	206	243	250	234	235	237	238	241	237	230	238	223	230	222	225	234	248	247	236.2	236.8				
31 Spd	14	15	16	8	14	15	20	17	22	25	25	25	21	18	16	16	12	9	7	4	5	7	2	5	13.9	25.2				
Dir	254	241	227	237	255	256	237	253	237	240	241	238	233	235	235	254	241	249	243	232	255	264	293	257	242.8	237.8				
Spd	3.3	4.8	4.0	3.9	3.8	3.8	3.7	4.2	3.6	3.7	4.5	5.0	4.7	4.8	4.4	4.0	4.4	4.1	4.1	5.4	3.6	3.3	3.2	3.7	Diurnal Average					
Dir	308.6	289.9	286.5	295.0	291.6	306.1	303.3	300.1	290.7	274.0	275.9	259.6	252.4	267.3	281.5	303.1	322.1	326.7	332.4	323.7	324.6	306.1	310.6	314.5	Diurnal Maximum					
Spd	22.5	26.0	25.4	21.9	22.6	20.9	20.0	20.2	28.9	27.6	26.8	30.0	37.4	34.0	33.4	32.7	26.2	31.4	26.3	24.4	22.5	21.6	19.8	21.6	Diurnal Maximum					
Dir	252.0	248.1	237.4	233.0	245.7	355.8	237.3	255.5	213.2	243.3	243.5	233.3	240.9	231.9	240.3	247.6	251.5	257.6	21.0	312.6	16.3	259.3	240.3	262.2						
Maximum Speed Value: 37 km/h on Mar 9 13:00																				Minimum Speed Value: 0 km/h on Mar 15 22:00					Hours in Service:					744
Maximum Daily Speed Average: 18.6 km/h on Mar 9																				Minimum Daily Speed Average: 0.7 km/h on Mar 25					Hours of Data:					744
Maximum Diurnal Speed Average: 5.4 km/h at hour 20																				Minimum Diurnal Speed Average: 3.2 km/h at hour 23					Hours of Missing Data:					0
Monthly Average Velocity: 3.79 km/h 296.96 deg																				Speed Percentiles: P ₁ = 1.2 P ₁₀ = 4.4 Q ₁ = 7.2 Median = 11.5 Q ₃ = 16.3 P ₉₀ = 20.1 P ₉₉ = 28.9					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	11	61	109	15	0	0	196																							
NorthEast	13	37	40	9	1	0	100																							
East	7	13	8	0	0	0	28																							
SouthEast	9	13	16	1	0	0	39																							
South	10	14	2	0	0	0	26																							
SouthWest	14	55	62	36	6	0	173																							
West	14	50	66	18	3	0	151																							
NorthWest	16	9	4	2	0	0	31																							
Total	94	252	307	81	10	0	744																							

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - March 2012

Maximum Speed: 38 km/h on Mar 9 13:00																								Maximum Daily Speed Average: 20.0 km/h on Mar 9										Hours in Service: 744			
Minimum Speed: 1 km/h on Mar 29 06:00																								Minimum Daily Speed Average: 5.9 km/h on Mar 25										Hours of Data: 744			
Maximum Diurnal Speed Average: 15.3 km/h at hour 13																								Minimum Diurnal Speed Average: 10.3 km/h at hour 6										Hours of Missing Data: 0			
Monthly Average Speed: 12.56 km/h																								Percentiles: P ₁ = 3.1 P ₁₀ = 5.3 Q ₁ = 7.8 Median = 11.9 Q ₃ = 16.5 P ₉₀ = 20.3 P ₉₉ = 28.9										Percent Operational Time: 100.0			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24													
1-Mar	20	17	18	17	13	14	12	9	7	7	8	7	4	11	6	5	7	7	7	5	5	5	3	4	9.2	19.9											
2-Mar	8	10	9	9	12	11	11	11	11	9	8	12	11	13	17	20	17	17	14	26	12	11	13	14	12.8	25.6											
3-Mar	18	14	17	13	13	9	11	18	18	15	21	22	21	18	18	28	26	19	19	19	16	18	19	22	18.0	28.2											
4-Mar	23	24	21	18	18	18	18	20	20	16	17	17	17	20	19	16	16	15	13	14	13	10	10	9	16.7	23.7											
5-Mar	9	11	9	8	9	8	7	13	14	14	9	10	19	17	19	20	19	21	19	17	16	14	14	13	13.8	21.0											
6-Mar	11	7	7	5	7	5	6	5	5	11	9	10	12	15	14	16	18	18	23	24	18	19	17	15	12.4	24.4											
7-Mar	17	15	13	13	12	15	17	16	17	22	27	25	22	26	26	27	26	31	18	12	11	17	14	10	18.7	31.5											
8-Mar	9	6	7	7	6	7	8	10	16	28	25	23	16	16	15	8	7	15	6	5	4	6	12	7	11.2	27.7											
9-Mar	9	10	10	9	9	7	5	20	29	24	22	27	38	34	33	33	20	23	22	20	23	18	20	15	20.0	37.7											
10-Mar	10	14	11	17	12	8	12	9	10	9	9	11	14	11	5	12	17	14	9	11	15	11	11	8	11.3	16.8											
11-Mar	10	7	5	4	5	4	6	6	7	3	7	6	4	4	6	8	8	8	10	6	18	15	10	13	7.4	18.0											
12-Mar	18	26	25	22	23	16	18	15	11	6	4	7	7	14	18	17	16	14	15	12	11	11	10	13	14.5	26.1											
13-Mar	17	16	18	14	17	21	17	15	15	11	15	9	5	8	5	5	10	14	7	9	7	9	7	4	11.5	21.3											
14-Mar	4	7	7	8	6	7	6	8	7	7	9	10	9	10	5	5	10	15	14	11	8	7	7	5	8.0	15.2											
15-Mar	8	10	10	5	6	5	6	8	12	7	9	13	24	18	15	14	9	8	12	7	8	5	5	6	9.6	24.0											
16-Mar	7	14	14	16	17	15	20	15	17	14	10	30	31	23	23	20	19	15	12	12	11	8	9	12	16.0	31.3											
17-Mar	4	5	7	7	13	14	15	17	21	24	22	23	27	26	28	25	25	24	26	24	23	17	19	20	19.0	28.3											
18-Mar	15	12	13	11	12	9	12	11	13	18	21	22	21	16	10	9	12	12	13	14	8	5	7	5	12.6	21.6											
19-Mar	5	13	12	12	10	10	10	12	14	15	15	15	14	14	14	15	12	10	7	6	7	5	7	5	10.7	15.4											
20-Mar	8	8	8	8	11	14	17	16	18	19	17	18	21	22	16	14	12	10	7	5	4	4	6	5	12.0	21.7											
21-Mar	7	13	14	11	12	15	18	18	19	14	12	12	11	12	13	15	18	17	16	16	16	17	18	20	14.8	20.1											
22-Mar	19	18	20	22	19	17	17	18	19	20	18	19	17	17	18	17	17	16	14	18	15	18	15	16	17.6	21.5											
23-Mar	14	15	10	11	11	9	10	14	13	12	12	11	14	11	12	13	12	11	12	11	12	13	14	14	12.1	15.2											
24-Mar	12	13	8	6	3	5	7	7	6	3	4	9	9	7	3	4	9	12	13	11	11	12	14	11	8.3	13.6											
25-Mar	10	7	6	6	7	7	4	3	5	5	6	3	3	4	6	7	6	3	4	13	7	6	8	6	5.9	12.6											
26-Mar	7	9	4	5	5	8	7	4	6	7	8	9	13	14	13	14	15	15	12	10	11	11	12	14	9.8	15.2											
27-Mar	15	12	9	10	10	9	9	12	11	8	5	4	13	11	7	7	10	11	11	14	17	19	17	14	11.0	18.9											
28-Mar	13	11	13	10	8	8	7	5	8	11	10	8	12	6	9	8	11	12	15	11	8	22	12	12	10.4	21.9											
29-Mar	15	15	12	11	8	1	1	1	1	4	3	3	4	4	5	6	13	11	11	19	8	6	6	5	7.3	19.5											
30-Mar	4	7	11	14	12	7	8	9	10	12	14	18	19	17	19	15	10	10	13	13	13	14	15	12	12.4	19.4											
31-Mar	14	15	16	9	14	15	20	18	22	25	25	25	21	18	16	16	12	9	8	4	5	7	4	5	14.4	25.3											
11.6 12.3 11.7 10.9 10.9 10.3 11.1 11.7 13.0 12.9 13.0 14.1 15.3 14.9 14.0 14.2 14.1 14.1 12.9 12.9 11.7 11.6 11.3 10.8																								Diurnal Average													
22.9 26.1 25.4 22.0 23.1 21.3 20.1 20.3 28.9 27.7 26.9 30.1 37.7 34.2 33.4 32.9 26.3 31.5 26.3 25.6 22.7 21.9 20.0 21.6																								Diurnal Maximum													
All monthly, daily, and diurnal averages have been calculated using scalar methods																																					

Hourly Standard Deviations

Wind Direction (WD) - deg
Smoky Heights - March 2012

Maximum Value: 98.1 deg on Mar 25 14:00																			Hours in Service: 744						
Minimum Value: 0.2 deg on Mar 29 07:00																			Hours of Data: 744						
																			Hours of Missing Data: 0						
Percentiles: P ₁ = 2.6 P ₁₀ = 4.7 Q ₁ = 6.3 Median = 10.5 Q ₃ = 20.0 P ₉₀ = 40.4 P ₉₉ = 83.2																			Hours of Calibration: 0						
																			Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	8	9	9	9	11	11	11	11	8	11	12	8	85	33	67	9	25	13	35	14	10	18	45	42	85.2
2-Mar	20	10	8	5	9	7	5	7	14	14	27	11	12	8	5	12	25	16	18	22	31	8	15	14	31.2
3-Mar	23	14	15	15	14	12	14	9	12	8	12	9	7	10	28	7	15	21	5	10	11	5	5	2	28.0
4-Mar	10	6	3	3	3	5	7	6	3	6	6	8	5	5	4	5	3	2	10	7	12	11	8	20	19.7
5-Mar	14	12	21	28	7	23	21	5	4	5	7	70	15	11	13	9	10	6	9	6	6	6	6	9	70.4
6-Mar	6	16	23	15	10	22	11	16	14	13	17	25	13	10	11	7	6	11	9	12	4	4	8	9	24.7
7-Mar	12	7	11	10	7	8	5	4	5	6	4	9	7	5	4	5	5	3	46	31	57	10	6	15	56.8
8-Mar	10	12	13	24	20	26	27	33	15	4	4	6	5	4	3	8	14	12	11	73	40	41	6	33	73.2
9-Mar	52	17	41	31	10	17	30	14	3	7	3	8	7	6	4	6	13	4	9	6	6	7	7	34	51.7
10-Mar	44	9	14	19	80	31	28	31	14	6	10	22	8	28	47	14	6	5	9	8	7	12	10	22	80.1
11-Mar	13	9	54	57	12	23	16	14	22	74	12	25	26	65	30	25	41	25	18	36	21	14	9	8	74.2
12-Mar	6	5	3	6	12	12	6	5	17	14	72	9	17	19	11	8	9	9	5	7	12	14	9	6	71.8
13-Mar	7	10	8	14	10	11	16	8	10	17	14	26	48	47	84	44	11	3	14	26	24	15	46	27	83.8
14-Mar	68	15	11	13	8	17	22	8	24	11	12	12	26	8	60	87	9	5	5	6	14	16	20	32	87.5
15-Mar	10	9	19	30	47	61	22	8	7	14	14	19	7	9	8	28	9	22	72	25	53	93	41	24	93.2
16-Mar	32	7	6	5	8	9	7	4	8	13	28	3	4	6	5	4	4	3	10	5	21	15	30	56	56.4
17-Mar	69	24	28	20	6	4	5	5	6	5	5	6	6	6	6	5	5	4	4	5	6	7	7	11	69.0
18-Mar	37	24	10	15	24	19	16	20	10	5	5	4	6	9	20	20	12	10	10	9	42	39	33	58	57.8
19-Mar	22	5	6	11	8	11	7	7	5	5	7	9	9	12	13	10	14	11	14	27	19	38	11	23	38.0
20-Mar	24	6	11	5	5	4	4	4	4	5	7	8	5	6	8	12	12	13	12	23	21	82	66	35	82.2
21-Mar	25	13	7	7	5	5	4	4	4	5	7	7	13	10	8	7	5	5	5	6	4	5	4	5	25.4
22-Mar	5	4	4	5	5	6	6	7	5	7	8	7	14	11	9	10	9	10	11	9	6	5	6	9	14.2
23-Mar	6	7	9	8	9	6	6	5	9	10	7	11	10	11	10	7	8	7	7	11	9	11	8	9	11.1
24-Mar	5	10	26	61	57	20	5	17	14	10	27	8	7	15	56	78	20	16	13	11	17	16	15	7	78.0
25-Mar	7	15	7	9	9	14	57	56	13	43	19	43	73	98	26	26	22	59	16	22	85	26	17	73	98.1
26-Mar	26	20	89	61	45	39	56	68	62	24	16	6	6	12	8	8	6	4	4	5	4	5	3	5	89.2
27-Mar	6	5	4	5	6	6	7	7	6	8	53	95	10	11	58	52	14	13	10	13	8	8	8	11	94.6
28-Mar	19	9	6	6	13	14	12	37	23	7	36	34	13	25	27	47	7	7	6	5	61	10	13	42	60.8
29-Mar	55	8	8	12	22	2	0	0	20	31	60	57	23	41	77	20	93	35	39	21	22	61	20	29	93.5
30-Mar	47	16	13	6	19	67	24	11	6	8	6	6	6	4	4	8	4	7	11	23	18	18	3	7	66.8
31-Mar	3	7	3	19	12	8	6	18	4	4	5	5	7	7	10	11	12	10	12	30	20	12	70	26	70.1
69.0 23.9 89.2 61.1 80.1 66.8 56.9 68.0 62.1 74.2 71.8 94.6 85.2 98.1 83.8 87.5 93.5 58.7 71.9 73.2 85.2 93.2 70.1 73.3																									

PAZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

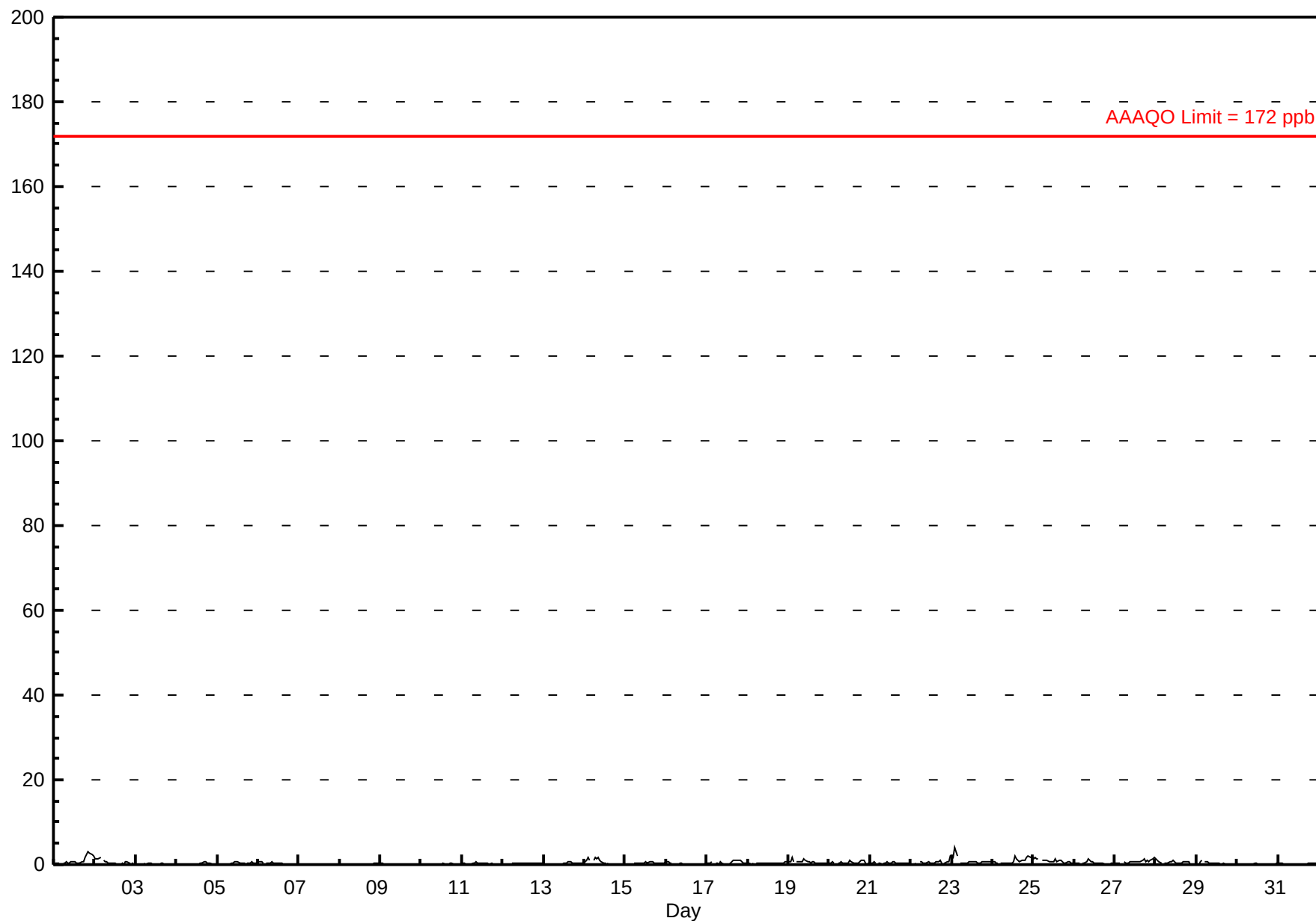
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.9 ppb on Mar 23 03:00 Maximum Daily Average: 1.0 ppb on Mar 1																				Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Mar 30 17:00 Maximum Diurnal Average: 0.6 ppb at hour 3 Monthly Average: 0.40 ppb										Minimum Daily Average: 0.1 ppb on Mar 9 Minimum Diurnal Average: 0.3 ppb at hour 12 Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.3 Q ₃ = 0.5 P ₉₀ = 0.8 P ₉₉ = 2.2																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	0	0	0	A	0	0	1	0	0	1	1	1	0	0	0	1	1	2	2	3	3	3	2	1.0	3.2
2-Mar	2	1	1	2	A	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.5	1.7
3-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
4-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0.2	0.6
5-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0.3	0.6
6-Mar	1	1	1	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
7-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
8-Mar	0	0	0	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
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
10-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Mar	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
12-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
13-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.3	0.8
14-Mar	1	1	2	1	A	1	2	1	2	1	1	0	0	0	0	C	C	C	0	0	0	0	0	0	0.7	1.7
15-Mar	0	0	0	0	A	0	1	0	0	0	0	0	1	0	1	1	1	0	1	0	0	0	0	0	0.4	0.7
16-Mar	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
17-Mar	0	0	0	1	A	0	0	0	1	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0.5	1.2
18-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.7
19-Mar	1	1	2	1	A	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0.6	1.8
20-Mar	0	0	1	0	A	0	0	1	0	0	0	0	1	1	0	0	0	0	1	1	1	0	0	0	0.4	1.0
21-Mar	0	0	1	0	A	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0.4	0.6
22-Mar	0	0	0	0	A	1	1	0	0	0	1	0	0	0	0	1	1	1	0	0	0	1	1	2	0.5	2.2
23-Mar	2	2	4	2	A	0	0	0	0	0	1	1	1	1	1	0	0	0	1	1	1	1	1	1	0.9	3.9
24-Mar	1	1	0	0	A	0	0	0	0	0	0	0	1	2	1	1	1	1	1	1	2	2	2	2	0.9	2.2
25-Mar	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0.9	1.7
26-Mar	0	0	0	0	A	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.3
27-Mar	0	0	0	0	A	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.7	1.7	
28-Mar	1	1	1	1	A	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1	0	0	0	0	0.5	1.2
29-Mar	0	0	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
30-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
31-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
0.4 0.4 0.6 0.4 -- 0.4 0.3 0.4 0.4 0.4 0.3 0.3 0.3 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.4 0.5 Diurnal Average																										
2.0 1.7 3.9 1.9 -- 1.1 1.5 1.5 1.6 1.2 0.9 0.8 0.9 2.0 1.4 1.2 1.1 1.2 1.8 2.4 3.2 2.9 2.5 2.2 Diurnal Maximum																										
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2012



Hourly Maximums

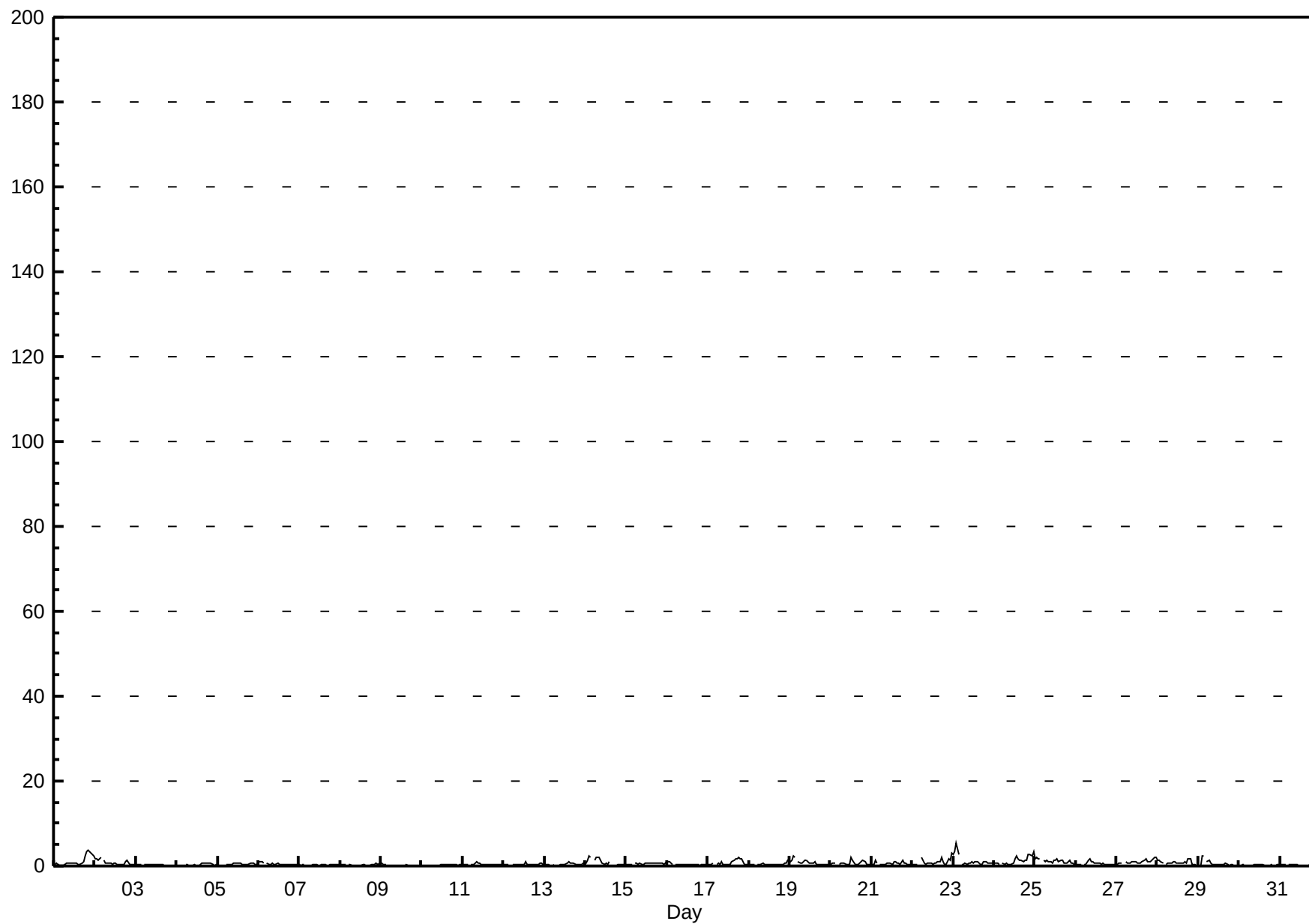
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - March 2012

Maximum Value: 5.5 ppb on Mar 23 03:00																			Maximum Daily Average: 1.3 ppb on Mar 24										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 8 12:00																			Minimum Daily Average: 0.2 ppb on Mar 9										Hours of Data: 710	
Maximum Diurnal Average: 0.8 ppb at hour 3																			Minimum Diurnal Average: 0.5 ppb at hour 12										Hours of Missing Data: 34	
Monthly Average: 0.59 ppb																			Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.7 P ₉₀ = 1.3 P ₉₉ = 2.9										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-Mar	0	1	0	0	A	0	0	1	1	1	1	1	1	0	0	0	1	1	2	3	4	3	3	2	1.2	3.7				
2-Mar	2	2	1	2	A	1	1	1	1	1	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0.7	2.0				
3-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3				
4-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0.3	0.8				
5-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1	1	1	0	0	0.4	0.8				
6-Mar	1	1	1	1	A	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0				
7-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3				
8-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.2	0.6				
9-Mar	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5				
10-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.5				
11-Mar	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9				
12-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0.4	1.1				
13-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1	0.4	1.0				
14-Mar	1	1	2	2	A	1	2	2	2	1	1	0	1	0	1	C	C	C	0	0	0	0	0	0	1.0	2.3				
15-Mar	0	0	0	0	A	1	1	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0.6	0.8				
16-Mar	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0				
17-Mar	0	0	0	1	A	0	1	0	1	0	0	0	0	0	1	1	2	2	2	2	2	0	0	0	0.8	1.9				
18-Mar	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	1.2				
19-Mar	1	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.9	2.3				
20-Mar	0	1	1	1	A	0	1	1	1	0	0	0	2	1	0	0	0	1	1	1	1	0	0	0	0.7	1.9				
21-Mar	0	0	1	1	A	0	0	0	0	1	1	1	0	1	1	1	1	0	1	1	1	0	0	0	0.6	1.3				
22-Mar	0	0	0	0	A	2	1	1	0	1	1	1	0	1	1	1	1	2	1	0	0	2	1	3	0.9	3.1				
23-Mar	3	3	6	3	A	0	0	1	0	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1.2	5.5				
24-Mar	1	1	1	0	A	1	0	1	0	0	0	1	2	2	2	1	1	1	1	1	3	3	2	3	1.3	3.4				
25-Mar	2	2	2	2	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	0	1.1	1.9				
26-Mar	0	0	0	0	A	0	0	1	2	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0.6	1.7				
27-Mar	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	2	2	2	1.0	2.1				
28-Mar	1	1	1	1	A	0	1	1	1	1	1	1	1	1	1	1	1	1	2	2	0	0	0	0	0.8	1.8				
29-Mar	0	0	2	2	A	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.6	2.4				
30-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4				
31-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0.3	0.6				
0.6 0.7 0.8 0.7 -- 0.5 0.5 0.5 0.6 0.5 0.5 0.5 0.6 0.6 0.5 0.5 0.5 0.6 0.7 0.7 0.7 0.6 0.6 0.7																								Diurnal Average						
2.6 3.4 5.5 2.8 -- 2.1 1.9 2.0 2.0 1.5 1.4 1.2 1.9 2.5 1.7 1.4 1.6 1.9 2.3 3.3 3.7 3.4 2.7 3.4																								Diurnal Maximum						
C - Calibration																								A - Automated Daily Zero Span						

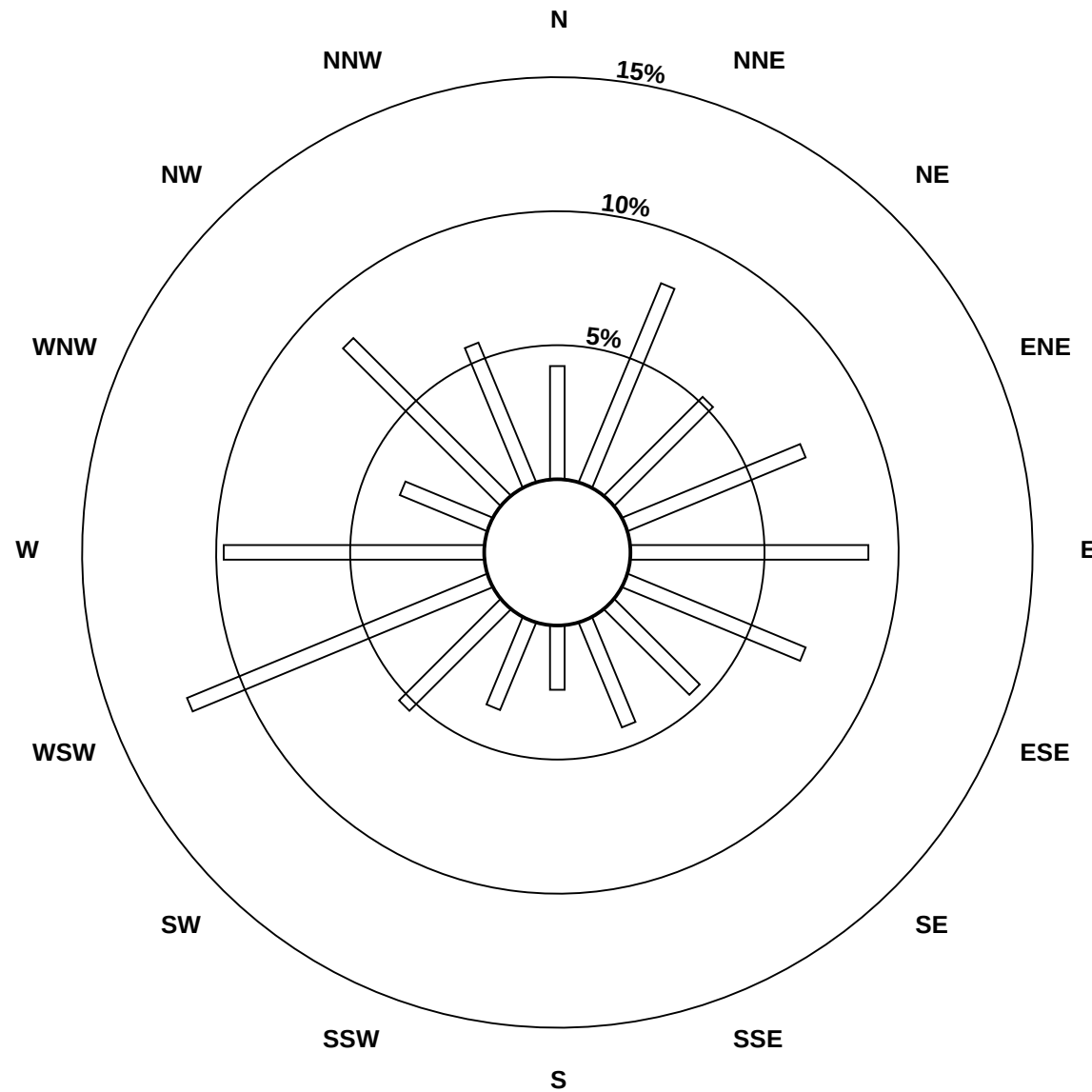
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2012

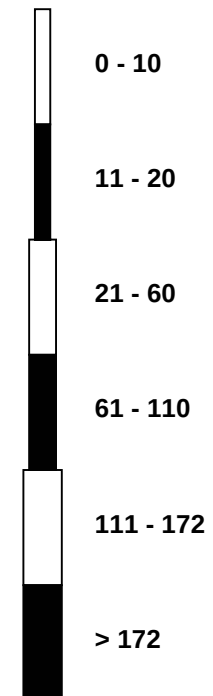


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - March 2012

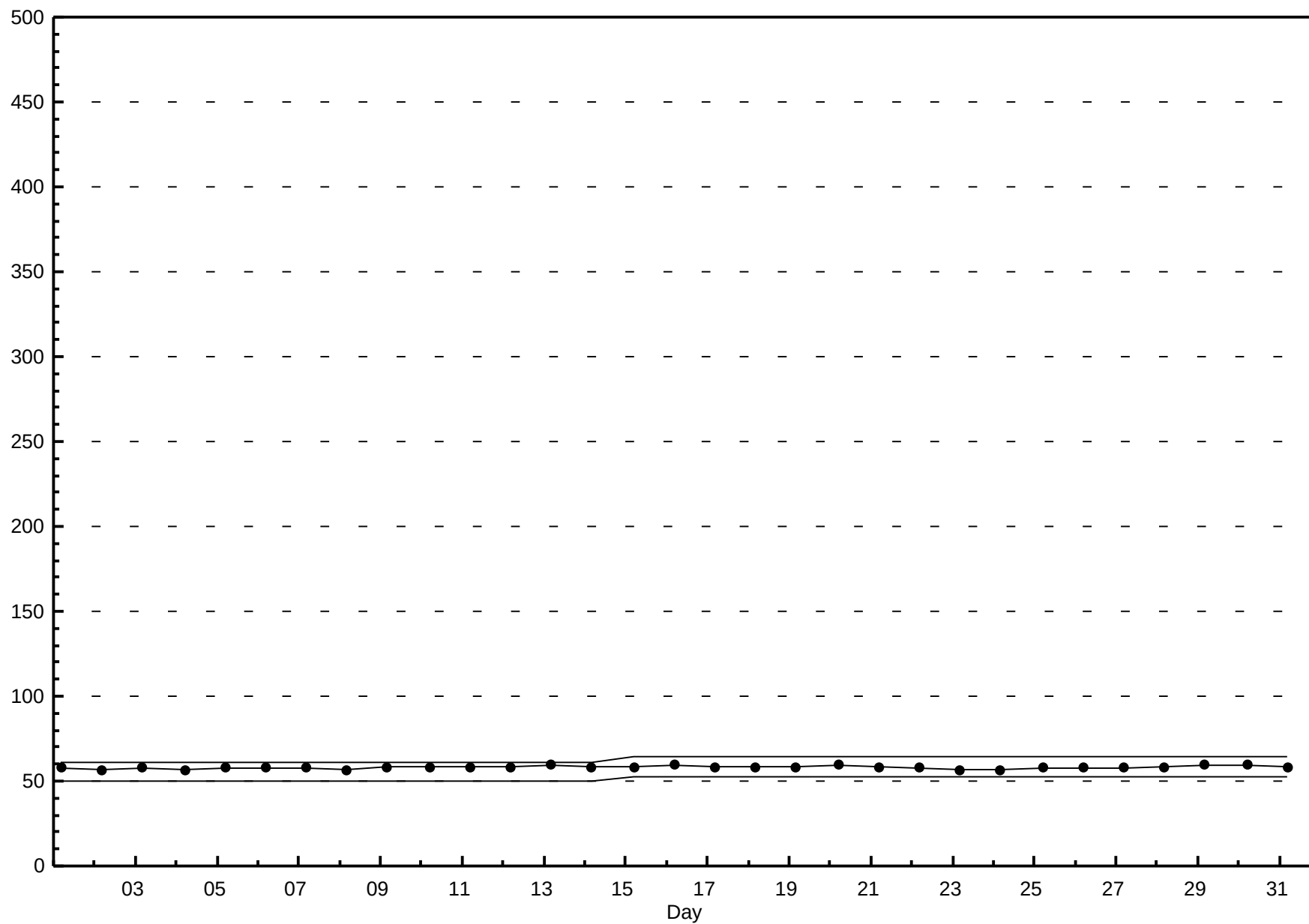


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Beaverlodge - March 2012



Hourly Averages

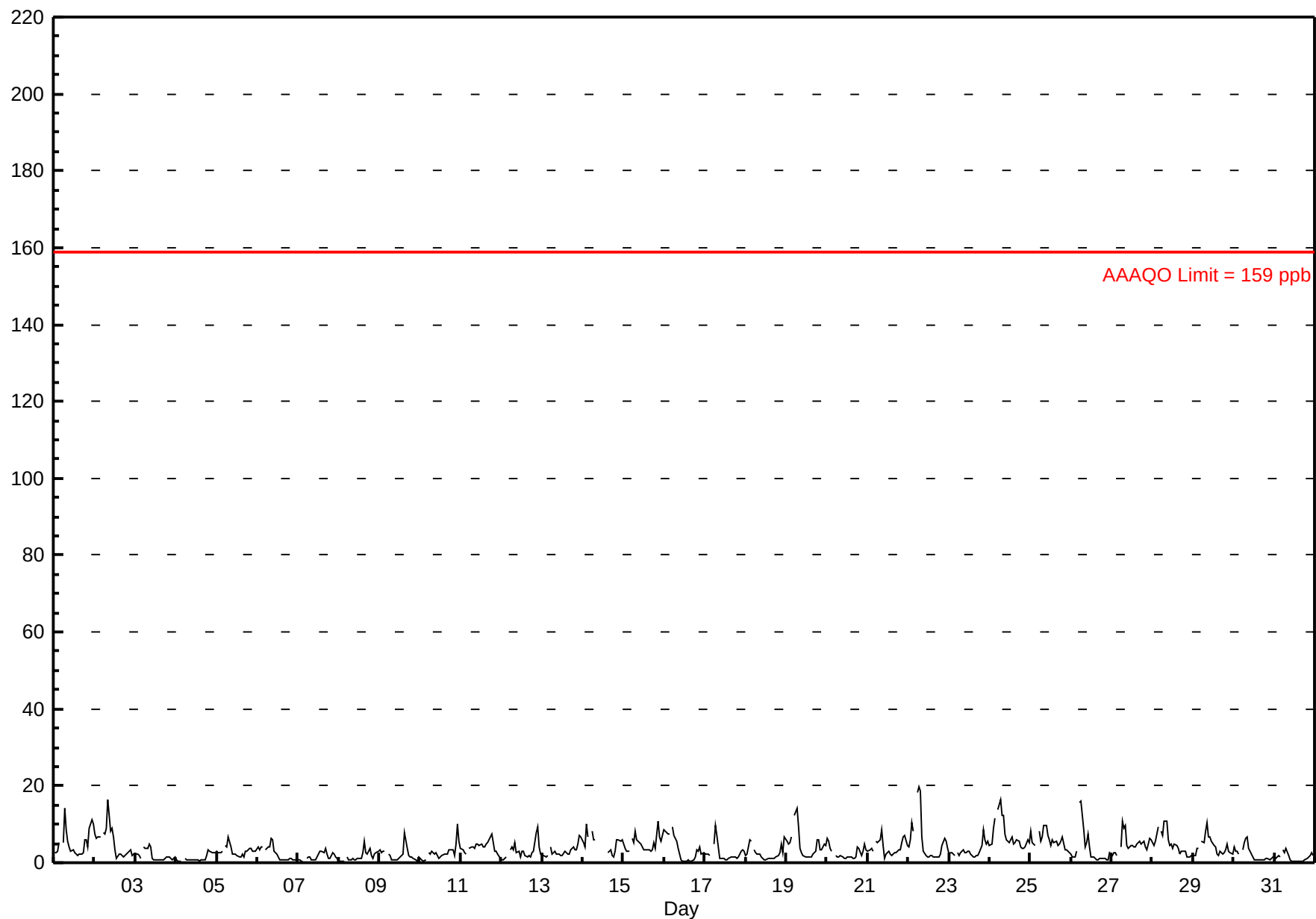
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 19.7 ppb on Mar 22 07:00 Maximum Daily Average: 7.1 ppb on Mar 24																				Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0						
Minimum Value: 0 ppb on Mar 4 02:00 Maximum Diurnal Average: 6.2 ppb at hour 7 Monthly Average: 3.51 ppb										Minimum Daily Average: 1.2 ppb on Mar 4 Minimum Diurnal Average: 2.1 ppb at hour 15 Percentiles: P ₁ = 0.5 P ₁₀ = 0.8 Q ₁ = 1.5 Median = 2.8 Q ₃ = 4.8 P ₉₀ = 6.9 P ₉₉ = 15.6																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	2	3	3	5	A	5	14	9	5	4	3	3	3	2	2	2	2	3	6	6	4	9	11	10	5.1	14.2
2-Mar	7	6	7	7	A	8	8	9	17	8	9	7	3	1	2	2	2	1	2	2	3	3	2	2	5.1	16.5
3-Mar	2	2	2	1	A	4	4	4	5	4	1	1	1	1	1	1	1	1	2	1	1	1	1	2	1.9	5.0
4-Mar	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	3	3	1.2	3.3
5-Mar	3	2	3	3	A	5	4	7	4	2	2	2	2	2	2	2	1	3	3	4	4	3	3	3	3.0	6.9
6-Mar	4	3	4	4	A	3	4	4	6	6	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2.4	6.4
7-Mar	1	1	0	0	A	1	1	1	1	1	1	1	2	3	3	3	4	2	1	1	3	2	1	1	1.5	3.7
8-Mar	0	0	0	1	A	1	1	1	1	1	1	1	1	1	3	6	3	2	4	2	1	2	3	3	1.7	5.7
9-Mar	3	3	3	3	A	2	2	1	1	1	1	1	1	2	2	8	4	2	2	1	1	1	1	2	2.0	7.9
10-Mar	1	1	1	1	A	3	2	3	2	3	2	1	1	2	2	2	2	3	3	3	2	5	10	6	2.7	10.1
11-Mar	4	3	3	2	A	4	4	4	4	5	5	4	5	4	4	5	5	7	7	5	3	3	2	1	4.1	7.4
12-Mar	1	1	1	2	A	3	4	3	5	3	3	2	3	3	2	1	2	2	3	3	8	9	4	2	3.0	9.2
13-Mar	2	2	2	2	A	4	2	3	2	2	2	2	2	3	3	2	2	3	4	3	3	5	7	7	3.0	6.9
14-Mar	5	4	10	7	A	8	6	6	C	C	C	C	C	C	C	3	3	2	2	3	6	6	6	6	--	10.2
15-Mar	5	4	3	3	A	6	5	8	6	5	5	4	3	3	3	3	3	3	5	4	11	7	6	7	4.9	10.9
16-Mar	9	8	7	7	A	10	7	6	4	2	1	1	0	0	1	1	1	1	1	3	3	4	2	3	3.5	9.5
17-Mar	2	2	2	2	A	5	10	7	4	1	1	1	1	1	1	1	1	2	1	1	1	3	3	3	2.5	9.8
18-Mar	2	2	6	6	A	3	3	2	2	1	1	1	1	1	1	1	1	1	2	2	3	5	3	7	2.4	6.7
19-Mar	5	5	5	7	A	12	14	9	4	3	2	1	1	2	1	1	2	3	6	6	3	3	5	5	4.7	14.1
20-Mar	6	6	4	3	A	2	1	1	2	2	1	1	1	1	1	1	1	2	4	4	2	3	5	3	2.5	6.3
21-Mar	3	3	4	3	A	6	5	6	8	5	1	2	3	2	2	2	3	3	3	3	5	7	7	5	3.9	8.5
22-Mar	4	6	10	8	A	18	20	18	7	3	2	1	1	2	2	1	1	1	2	2	5	6	5	4	5.7	19.7
23-Mar	2	3	3	2	A	3	2	3	3	3	3	3	3	2	2	1	2	2	3	4	9	6	5	6	3.1	8.5
24-Mar	4	5	9	12	A	14	16	12	12	7	6	5	6	7	5	5	6	6	4	4	4	4	6	5	7.1	16.4
25-Mar	8	5	5	4	A	8	6	7	10	10	7	6	4	6	5	5	4	5	6	7	3	3	3	3	5.7	9.8
26-Mar	2	2	2	3	A	16	16	9	4	5	8	4	1	2	1	1	1	1	1	1	1	1	1	3	3.7	16.0
27-Mar	2	3	3	2	A	4	11	9	10	4	4	4	4	4	4	5	6	5	5	6	4	3	7	6	4.9	10.7
28-Mar	5	4	6	9	A	8	7	11	11	6	5	5	4	5	5	4	2	3	3	3	2	1	2	2	4.9	10.8
29-Mar	2	2	4	4	A	6	5	8	10	7	7	6	4	4	2	2	3	2	2	4	5	3	3	2	4.2	10.4
30-Mar	4	3	3	2	A	3	5	6	7	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2.3	6.9
31-Mar	1	1	2	2	A	3	3	4	2	1	1	1	1	0	0	0	0	1	1	1	1	2	3	2	1.4	3.7
3.4 3.1 3.7 3.8 -- 5.8 6.2 5.9 5.4 3.6 3.0 2.6 2.3 2.3 2.1 2.4 2.3 2.4 2.9 3.1 3.4 3.7 3.8 3.6																								Diurnal Average		
8.5 8.0 10.5 11.7 -- 18.3 19.7 18.5 16.5 9.8 9.0 6.6 5.9 6.6 5.2 7.9 6.0 6.5 7.4 6.6 10.9 9.2 11.4 10.1																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 159 ppb 24-hr 106 ppb																										

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2012



Hourly Maximums

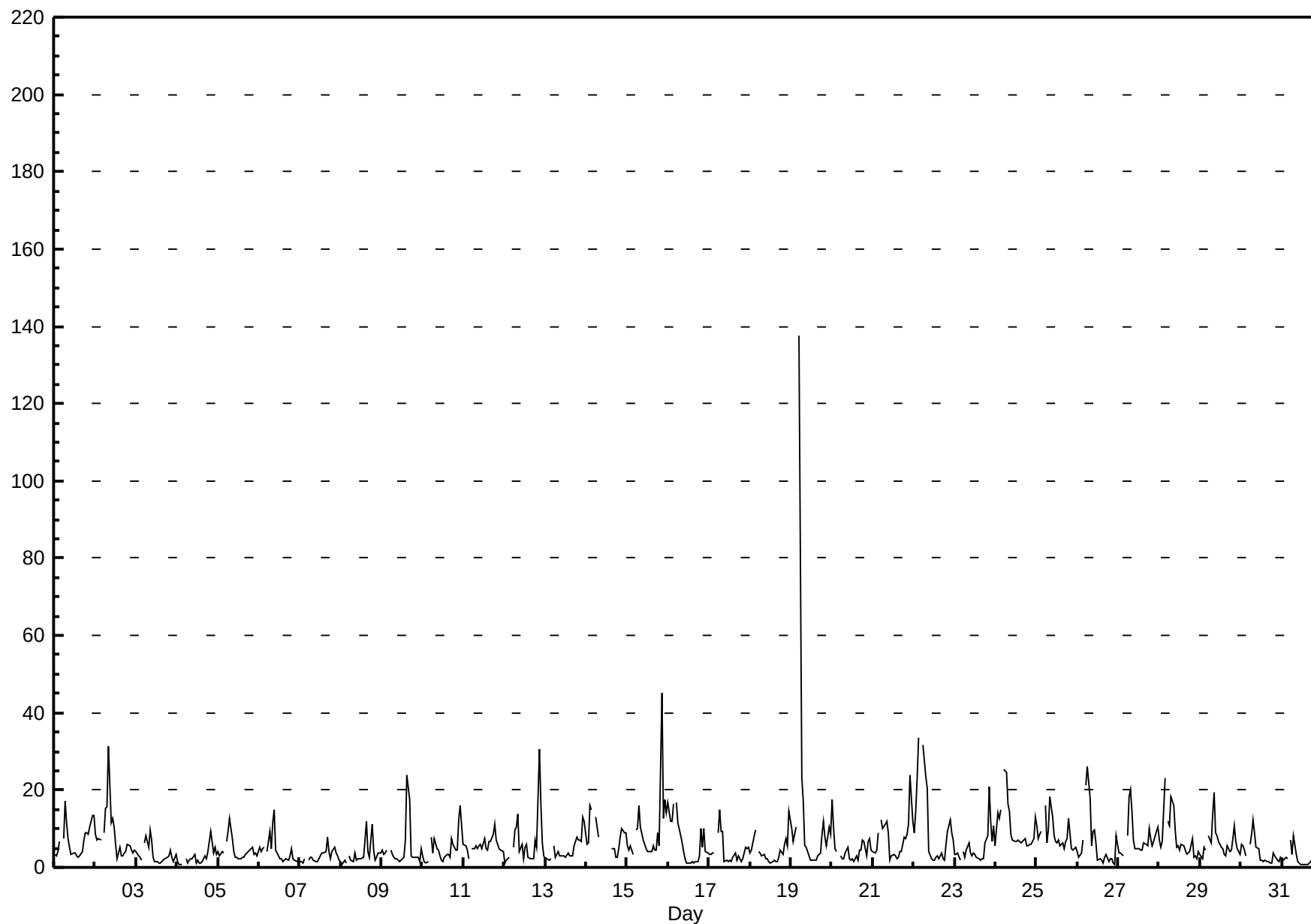
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - March 2012

Maximum Value: 137.6 ppb on Mar 19 06:00																				Maximum Daily Average: 12.9 ppb on Mar 19										Hours in Service: 744	
Minimum Value: 1 ppb on Mar 4 04:00																				Minimum Daily Average: 2.7 ppb on Mar 4										Hours of Data: 706	
Maximum Diurnal Average: 13.4 ppb at hour 6																				Minimum Diurnal Average: 3.1 ppb at hour 14										Hours of Missing Data: 38	
Monthly Average: 6.11 ppb																				Percentiles: P ₁ = 0.8 P ₁₀ = 1.7 Q ₁ = 2.5 Median = 4.3 Q ₃ = 7.4 P ₉₀ = 12.1 P ₉₉ = 26.1										Hours of Calibration: 38	
																				Percent Operational Time: 100.0											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	3	3	4	7	A	8	17	12	7	5	3	4	4	3	2	3	4	7	9	9	9	11	13	13	7.0	17.3					
2-Mar	9	7	7	7	A	9	15	16	31	12	13	11	6	2	5	3	3	4	4	6	6	4	4	4	8.1	31.5					
3-Mar	4	3	3	2	A	6	8	5	10	7	3	2	1	1	1	2	2	2	3	3	4	3	2	3	3.5	9.8					
4-Mar	1	1	1	1	A	2	1	2	2	2	3	1	2	1	1	2	3	2	4	7	9	4	5	3	2.7	9.3					
5-Mar	4	3	4	4	A	7	9	13	7	4	3	3	2	2	3	3	3	4	4	5	5	3	4	3	4.4	12.7					
6-Mar	5	4	5	5	A	4	10	5	12	15	4	3	2	2	1	2	2	2	3	5	2	2	2	2	4.3	14.8					
7-Mar	2	1	1	2	A	2	3	3	2	1	2	2	3	4	4	4	8	4	2	4	5	4	3	2	2.9	7.9					
8-Mar	1	1	2	1	A	3	2	1	4	2	2	2	2	3	7	12	4	3	11	4	2	3	4	4	3.5	11.7					
9-Mar	4	3	4	4	A	5	3	3	2	2	2	2	2	3	7	24	17	3	3	3	3	2	2	5	4.7	24.0					
10-Mar	3	2	1	1	A	8	4	7	5	5	3	2	2	2	3	4	3	8	6	5	4	12	16	11	5.0	16.1					
11-Mar	6	6	4	2	A	5	5	6	5	6	6	5	8	5	4	7	7	8	11	7	6	5	4	4	5.7	11.4					
12-Mar	1	2	2	3	A	5	10	10	14	4	6	2	5	6	2	2	2	2	7	5	30	17	6	3	6.4	30.5					
13-Mar	2	2	2	2	A	6	3	4	3	3	3	3	3	4	3	3	3	6	8	7	7	7	13	12	4.7	13.1					
14-Mar	6	6	16	15	A	13	10	8	C	C	C	C	C	C	C	5	5	3	3	5	8	10	9	9	--	16.1					
15-Mar	5	4	6	3	A	10	10	16	10	7	6	5	4	4	4	6	4	5	9	5	45	13	18	14	9.3	45.0					
16-Mar	17	12	12	17	A	17	12	8	6	4	2	1	1	1	2	1	1	1	3	10	5	10	4	4	6.6	16.9					
17-Mar	3	3	4	4	A	9	15	9	9	2	2	1	2	2	3	4	2	3	2	2	2	5	5	5	4.3	14.9					
18-Mar	4	5	8	10	A	4	4	3	3	2	2	1	1	2	2	1	1	3	4	3	6	8	6	15	4.2	14.7					
19-Mar	10	7	9	10	A	138	23	17	6	5	4	2	2	2	2	2	3	4	9	12	8	6	10	9	12.9	137.6					
20-Mar	18	10	5	4	A	3	2	2	4	5	2	2	2	2	3	2	4	4	7	7	3	7	7	5	4.8	17.6					
21-Mar	4	4	5	9	A	12	10	11	12	9	2	3	3	3	2	3	4	4	8	7	8	11	24	12	7.4	24.0					
22-Mar	9	15	23	34	A	32	28	23	21	4	2	2	2	2	3	2	4	2	2	6	9	12	9	7	11.0	33.6					
23-Mar	3	3	4	2	A	4	2	5	6	4	3	4	4	3	2	2	2	2	6	8	21	12	7	11	5.2	20.8					
24-Mar	6	14	13	15	A	25	25	17	14	9	7	7	7	7	7	6	7	8	5	5	6	6	8	13	10.3	25.4					
25-Mar	11	8	9	9	A	16	6	10	18	13	8	7	6	7	6	6	5	7	7	13	5	5	5	5	8.3	18.4					
26-Mar	4	3	4	7	A	21	26	18	6	9	10	6	2	2	2	1	3	3	1	2	2	1	1	8	6.2	26.1					
27-Mar	4	4	3	3	A	8	18	20	14	7	5	5	5	4	4	6	6	5	10	7	5	7	9	10	7.5	20.2					
28-Mar	7	5	7	23	A	12	11	18	16	10	5	5	4	6	6	4	3	4	4	7	3	3	2	4	7.4	23.1					
29-Mar	3	2	5	4	A	8	6	14	19	9	8	7	5	5	3	3	6	4	4	7	11	7	5	3	6.6	19.5					
30-Mar	6	6	5	3	A	6	9	12	9	5	5	2	2	2	2	1	1	1	1	4	3	2	2	3	3.9	12.5					
31-Mar	2	2	2	2	A	7	3	8	3	1	1	1	1	1	1	1	1	1	2	2	4	6	4	16	3	3.3	16.1				
5.4 4.9 5.7 7.0 -- 13.4 10.0 9.9 9.4 5.8 4.2 3.4 3.2 3.1 3.2 4.1 4.0 3.8 5.3 5.9 8.0 6.6 7.2 6.8																								Diurnal Average							
17.6 14.6 23.2 33.6 -- 137.6 27.7 23.4 31.5 14.8 12.5 10.5 7.6 7.1 7.2 24.0 17.4 8.4 11.4 12.6 45.0 16.6 24.0 14.7																								Diurnal Maximum							
C - Calibration																								A - Automated Daily Zero Span							

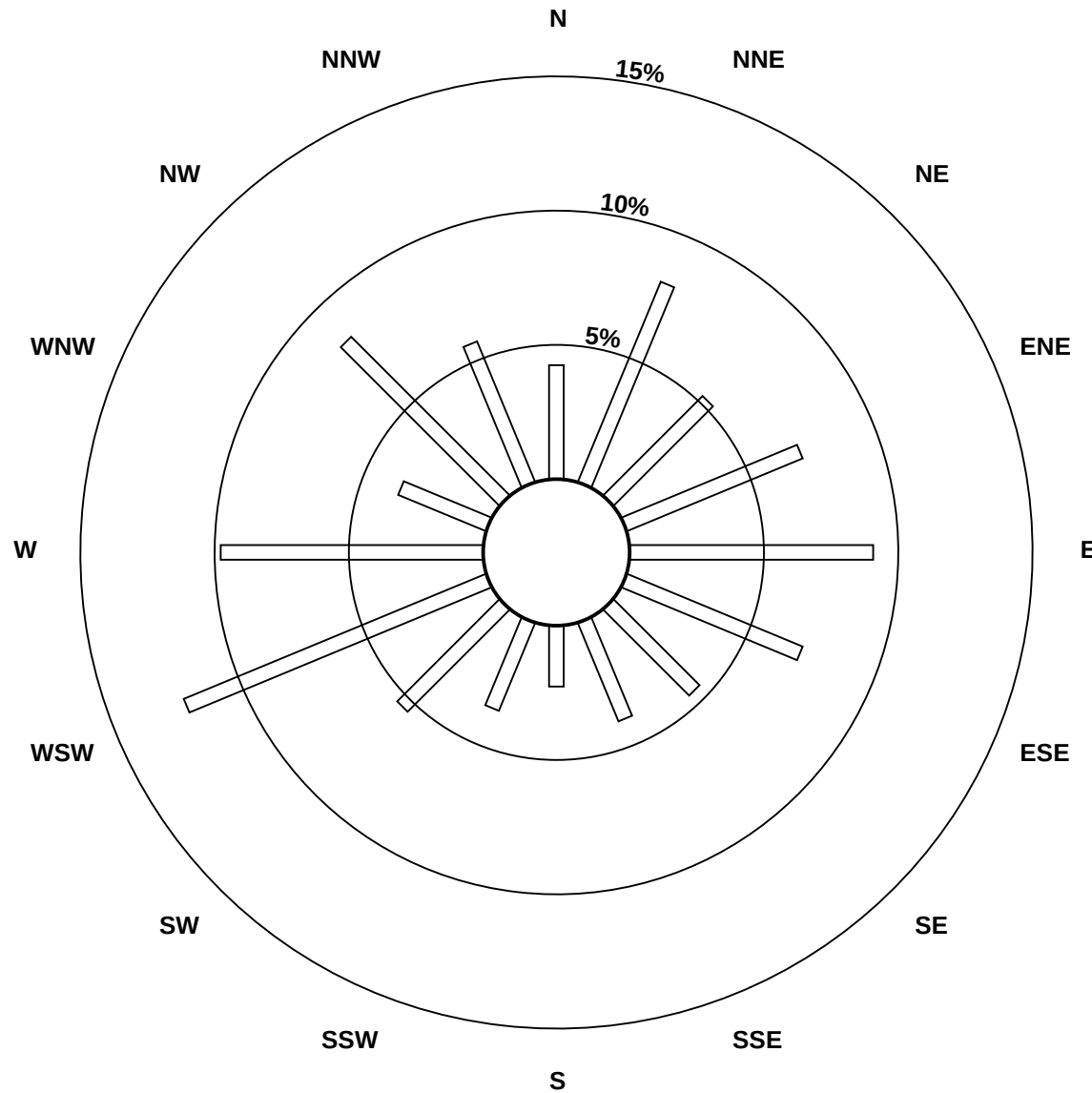
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2012



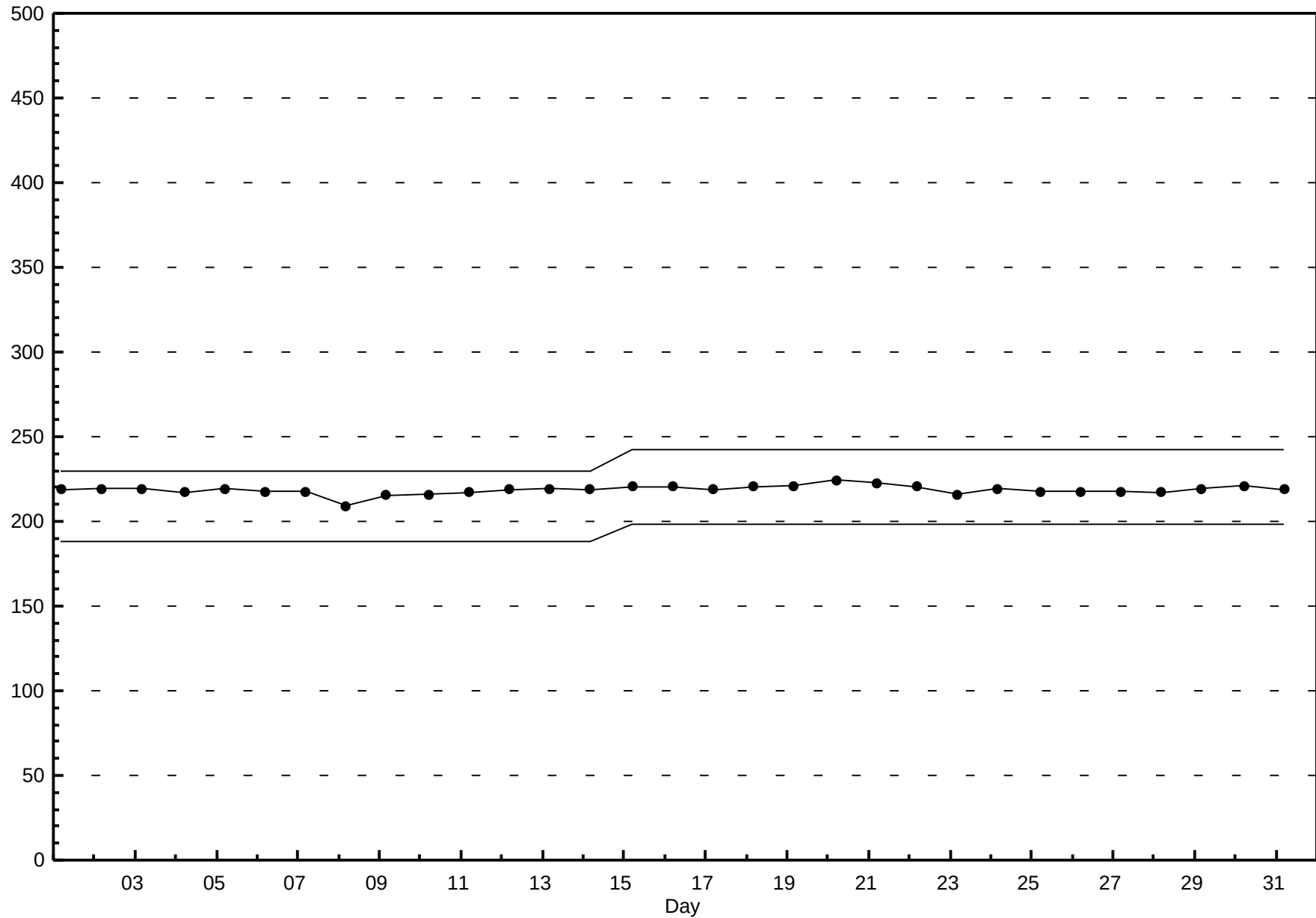
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - March 2012



Span Responses

Nitrogen Dioxide (NO₂)
Beaverlodge - March 2012



Hourly Averages

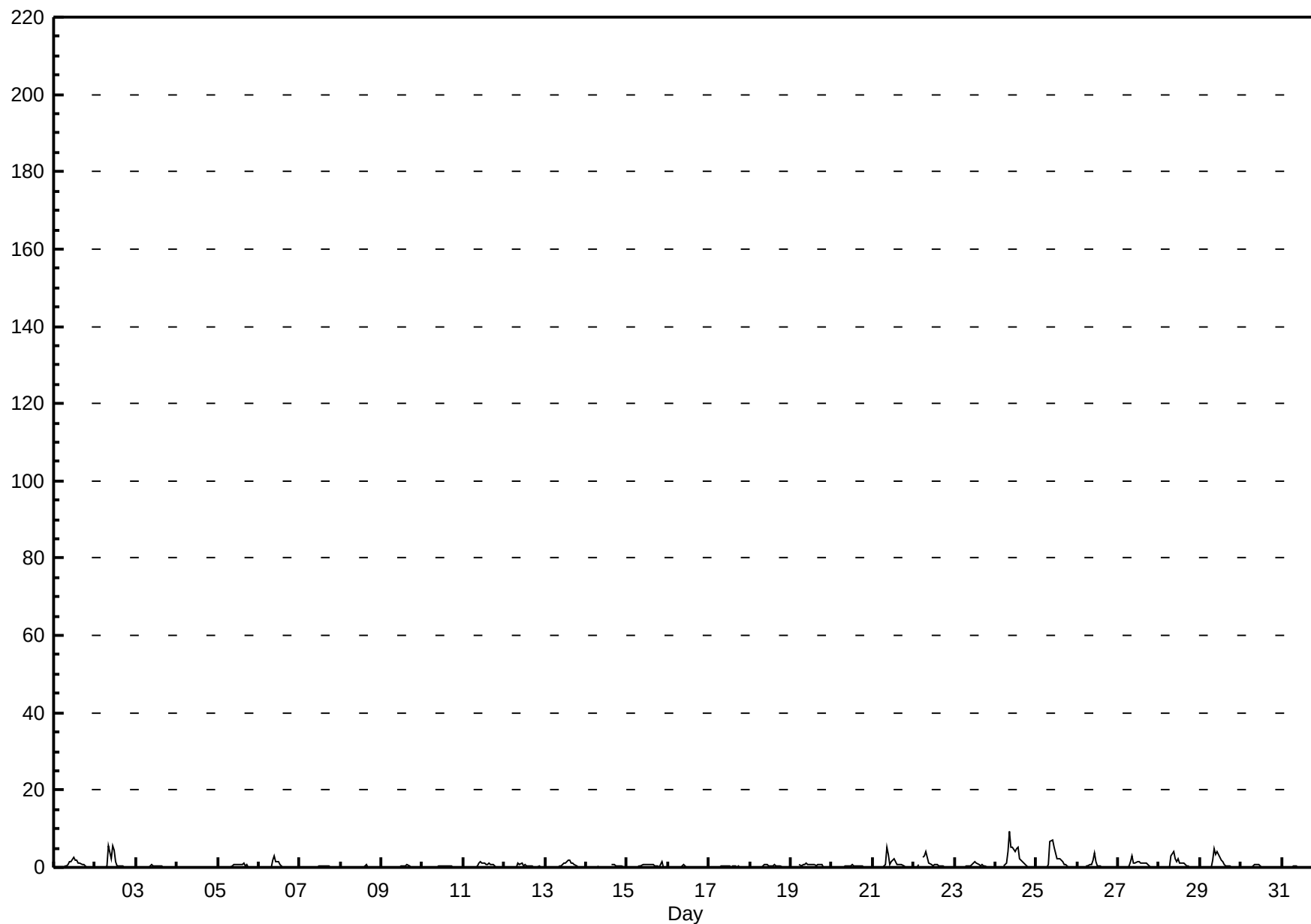
Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.4 ppb on Mar 24 09:00 Maximum Daily Average: 2.0 ppb on Mar 24																								Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0		
Minimum Value: 0 ppb on Mar 10 04:00 Maximum Diurnal Average: 1.7 ppb at hour 9 Monthly Average: 0.49 ppb												Minimum Daily Average: 0.1 ppb on Mar 4 Minimum Diurnal Average: 0.0 ppb at hour 2 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.5 P ₉₀ = 1.2 P ₉₉ = 5.3														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	0	0	0	A	0	0	0	1	1	2	3	2	2	1	1	1	1	0	0	0	0	0	0	0.7	2.6
2-Mar	0	0	0	0	A	0	0	0	6	2	5	5	2	0	0	0	0	0	0	0	0	0	0	0	1.0	5.7
3-Mar	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
4-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
5-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0.3	1.0
6-Mar	0	0	0	0	A	0	0	0	2	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	3.1
7-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
8-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.6
9-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.8
10-Mar	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
11-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.3
12-Mar	0	0	0	0	A	0	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.1
13-Mar	0	0	0	0	A	0	0	0	0	0	1	1	1	2	2	1	1	1	0	0	0	0	0	0	0.5	1.8
14-Mar	0	0	0	0	A	0	0	0	C	C	C	C	C	C	C	1	1	0	0	0	0	0	0	0	--	0.9
15-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0.4	1.5
16-Mar	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
17-Mar	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
18-Mar	0	0	0	0	A	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.7
19-Mar	0	0	0	0	A	1	0	1	1	1	1	1	1	1	1	0	1	1	1	0	0	0	0	0	0.5	1.0
20-Mar	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0.2	0.6
21-Mar	0	0	0	0	A	0	0	1	5	3	1	2	2	1	1	1	1	1	0	0	0	0	0	0	0.8	5.1
22-Mar	0	0	0	1	A	3	3	4	3	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.8	4.1
23-Mar	0	0	0	0	A	0	0	0	0	1	1	1	2	1	1	0	1	0	0	0	0	0	0	0	0.4	1.5
24-Mar	0	0	0	0	A	0	1	4	9	5	5	4	5	5	2	2	1	1	0	0	0	0	0	0	2.0	9.4
25-Mar	0	0	0	0	A	0	0	1	7	7	5	4	2	2	2	1	1	1	0	0	0	0	0	0	1.5	7.1
26-Mar	0	0	0	0	A	0	0	1	1	2	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.6
27-Mar	0	0	0	0	A	0	0	1	3	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.7	2.9
28-Mar	0	0	0	0	A	0	0	3	4	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0.8	4.1
29-Mar	0	0	0	0	A	0	0	2	5	4	4	3	2	2	1	0	0	0	0	0	0	0	0	0	1.0	4.7
30-Mar	0	0	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
31-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
0.0 0.0 0.0 0.1 -- 0.2 0.2 0.7 1.7 1.4 1.4 1.2 1.0 0.9 0.6 0.6 0.5 0.4 0.2 0.1 0.1 0.1 0.1 0.1																								Diurnal Average		
0.2 0.1 0.2 0.7 -- 2.7 2.9 4.2 9.4 7.1 5.4 4.6 4.8 5.3 2.4 1.7 1.4 0.9 0.7 0.2 1.5 0.2 0.2 0.1																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2012



Hourly Maximums

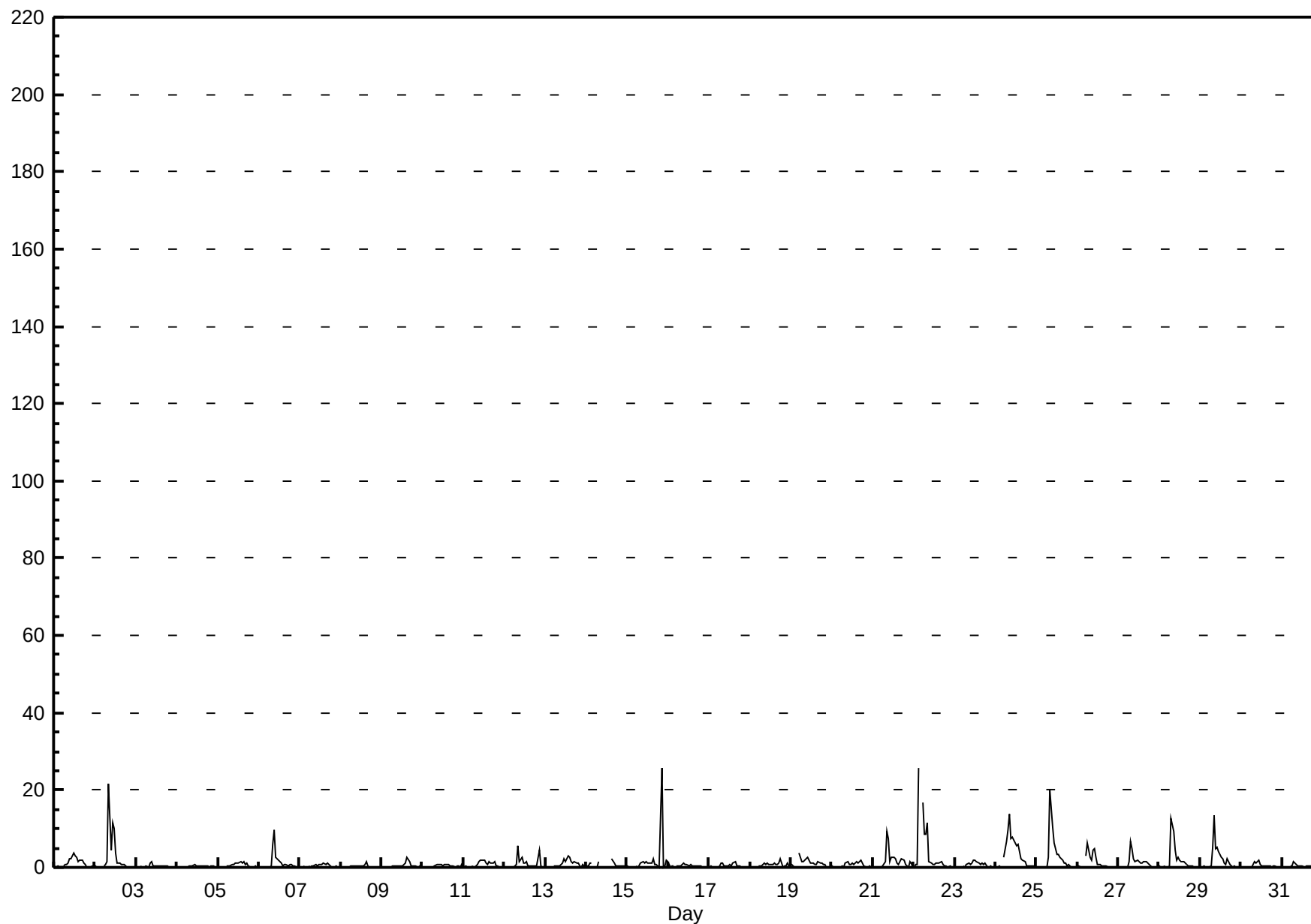
Nitrogen Oxide (NO) - ppb

Beaverlodge - March 2012

Maximum Value: 25.8 ppb on Mar 15 21:00																				Maximum Daily Average: 3.7 ppb on Mar 22					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 14 07:00																				Minimum Daily Average: 0.3 ppb on Mar 4					Hours of Data: 706	
Maximum Diurnal Average: 4.5 ppb at hour 9																				Minimum Diurnal Average: 0.2 ppb at hour 2					Hours of Missing Data: 38	
Monthly Average: 1.15 ppb																				Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.4 Q ₃ = 1.1 P ₉₀ = 2.3 P ₉₉ = 13.0					Hours of Calibration: 38	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	0	0	0	A	0	1	1	1	2	2	4	3	3	2	2	2	1	1	0	0	0	0	0	1.1	3.6
2-Mar	0	0	0	0	A	0	1	2	22	5	11	10	4	1	1	1	1	1	0	0	0	0	0	0	2.6	21.6
3-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0.4	1.3
4-Mar	0	0	0	0	A	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
5-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.6	1.4
6-Mar	0	0	0	0	A	0	0	0	6	10	3	2	1	1	1	1	1	0	1	1	0	0	0	0	1.2	9.8
7-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.0
8-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0.3	1.6
9-Mar	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	3	2	0	0	0	0	0	0	0	0.5	2.6
10-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0.4	0.8
11-Mar	0	0	0	0	A	0	0	0	1	2	2	2	2	1	1	1	1	1	1	0	0	0	0	0	0.7	1.9
12-Mar	0	0	0	0	A	0	1	1	6	1	3	1	1	1	1	1	0	0	0	1	4	0	0	0	1.0	5.8
13-Mar	0	0	0	0	A	0	0	0	1	1	1	2	1	3	3	2	1	1	1	1	0	0	1	0	0.9	2.9
14-Mar	0	0	1	1	A	0	0	1	C	C	C	C	C	C	C	2	1	0	0	0	0	0	0	0	--	2.1
15-Mar	0	0	0	0	A	0	0	1	1	2	1	1	1	1	1	2	1	1	0	0	0	26	0	0	1.8	25.8
16-Mar	2	0	0	1	A	0	0	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0.5	1.5
17-Mar	0	0	0	0	A	0	0	1	1	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0.4	1.4
18-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	2	0	0	1	1	1	0.7	2.3
19-Mar	1	1	0	0	A	4	2	2	2	2	3	1	1	1	1	1	1	1	1	1	1	0	0	0	1.1	3.8
20-Mar	0	0	0	0	A	0	0	0	1	1	1	1	1	1	2	1	2	2	1	0	0	0	0	0	0.7	2.0
21-Mar	0	0	0	0	A	0	0	1	9	7	1	2	2	2	1	1	2	2	2	1	0	0	2	0	1.7	9.2
22-Mar	0	1	1	26	A	17	9	8	12	2	1	1	1	1	1	1	1	1	0	1	0	0	0	0	3.7	25.6
23-Mar	0	0	0	0	A	0	0	1	1	1	1	2	2	1	1	1	1	1	1	0	0	0	0	0	0.6	1.8
24-Mar	0	0	1	0	A	3	7	10	14	8	8	6	6	6	4	2	2	1	0	0	0	1	0	0	3.4	13.9
25-Mar	0	0	0	0	A	0	0	3	20	10	6	5	3	3	3	2	1	1	1	1	0	0	0	0	2.6	20.3
26-Mar	0	0	0	0	A	3	6	3	2	5	5	3	1	1	0	0	0	0	0	0	0	0	0	0	1.3	6.3
27-Mar	0	0	0	0	A	0	1	7	5	2	2	2	2	1	1	2	1	1	1	0	0	0	0	0	1.3	6.6
28-Mar	0	0	0	0	A	0	0	13	9	4	2	3	2	1	1	1	1	1	0	0	0	0	0	0	1.8	12.5
29-Mar	0	0	0	0	A	0	0	5	13	5	5	4	3	2	1	1	2	1	0	0	0	0	0	0	1.9	13.3
30-Mar	0	0	0	0	A	0	0	1	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	1.8
31-Mar	0	0	0	0	A	0	0	2	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0.4	2.4
0.2 0.2 0.2 1.0 -- 1.0 1.0 2.0 4.5 2.6 2.2 1.9 1.5 1.3 1.1 1.1 1.0 0.8 0.6 0.3 1.2 0.2 0.3 0.2																									Diurnal Average	
1.5 0.7 1.0 25.6 -- 16.9 8.6 12.5 21.6 10.3 11.5 10.1 5.6 6.0 4.1 2.6 2.2 2.3 2.3 1.2 25.8 0.5 2.4 1.8																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - March 2012



Hourly Averages

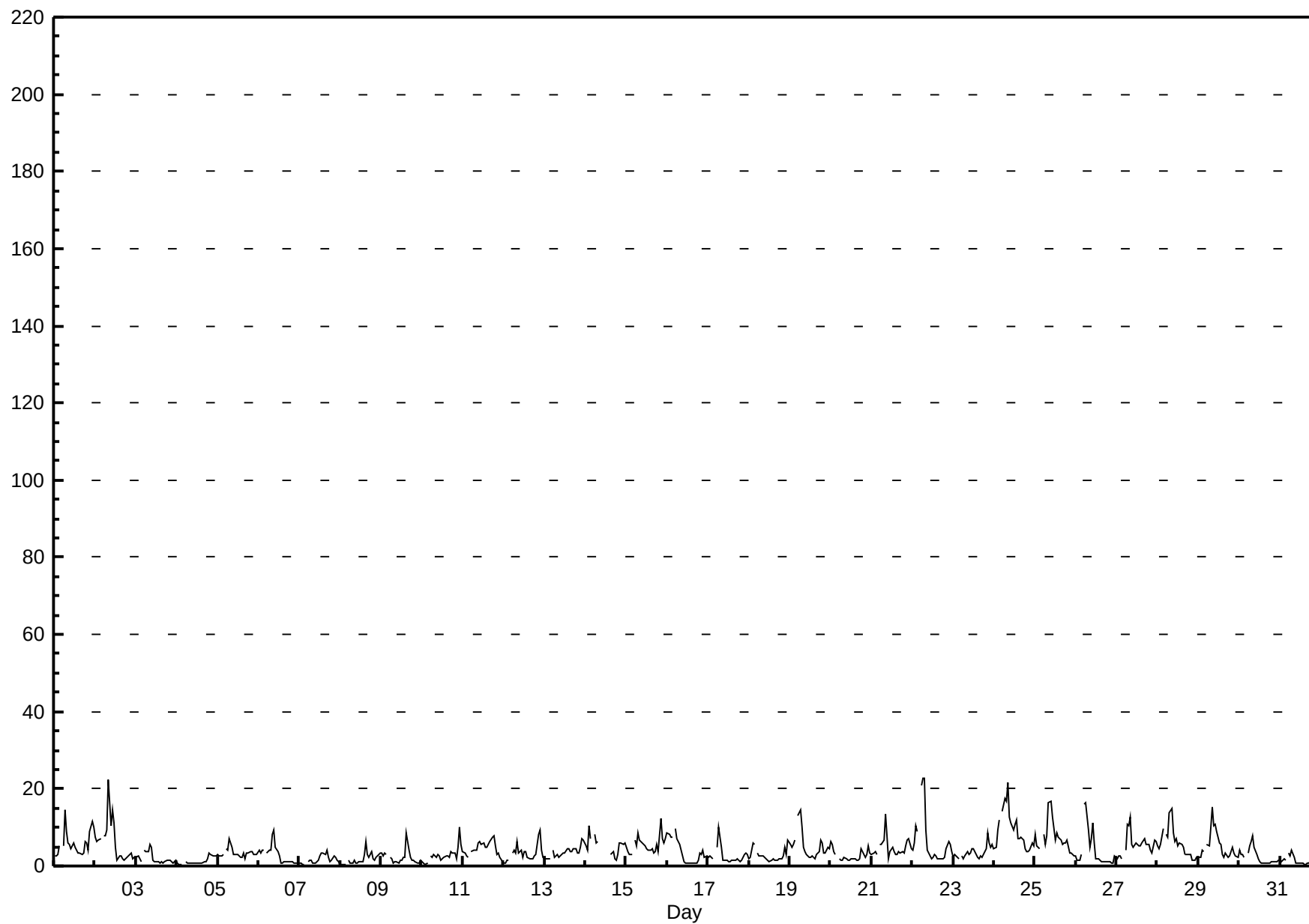
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 22.7 ppb on Mar 22 08:00 Maximum Daily Average: 9.2 ppb on Mar 24																				Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0							
Minimum Value: 0 ppb on Mar 4 02:00 Maximum Diurnal Average: 7.1 ppb at hour 9 Monthly Average: 4.01 ppb										Minimum Daily Average: 1.2 ppb on Mar 4 Minimum Diurnal Average: 2.7 ppb at hour 18 Percentiles: P ₁ = 0.5 P ₁₀ = 0.9 Q ₁ = 1.8 Median = 3.1 Q ₃ = 5.3 P ₉₀ = 7.9 P ₉₉ = 16.6																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	3	3	3	5	A	5	14	9	6	6	5	6	5	4	3	3	3	3	6	6	4	9	11	10	5.8	14.4	
2-Mar	7	6	7	7	A	8	8	9	22	11	14	11	5	2	2	3	2	2	2	2	3	3	2	2	6.1	22.3	
3-Mar	2	2	2	1	A	4	4	4	5	5	2	1	1	1	1	1	1	1	2	1	2	1	1	2	2.0	5.5	
4-Mar	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	3	3	1.2	3.3	
5-Mar	3	3	3	3	A	5	4	7	5	3	3	3	3	2	2	3	2	4	3	4	4	3	3	3	3.3	7.0	
6-Mar	4	3	4	4	A	3	4	4	8	9	5	4	2	1	1	1	1	1	1	1	1	1	1	1	2.8	9.1	
7-Mar	1	1	0	0	A	1	2	2	1	1	1	2	3	3	3	3	4	2	1	1	3	2	1	1	1.7	4.1	
8-Mar	1	0	0	1	A	1	1	1	1	1	1	1	1	1	3	6	3	2	4	2	1	2	3	3	1.8	6.3	
9-Mar	3	3	3	3	A	2	2	1	1	1	1	1	2	2	2	9	4	2	2	2	1	1	1	2	2.2	8.7	
10-Mar	1	1	1	1	A	3	2	3	2	3	3	2	2	2	3	3	2	4	3	3	2	5	10	6	2.8	10.1	
11-Mar	4	3	3	2	A	4	4	4	4	6	6	6	6	5	5	6	6	7	8	5	3	3	2	1	4.5	7.9	
12-Mar	1	1	1	2	A	3	4	3	6	3	4	2	4	4	2	2	2	2	3	3	8	9	4	2	3.3	9.3	
13-Mar	2	2	2	2	A	4	2	3	2	3	3	3	3	5	4	4	4	4	5	3	3	5	7	7	3.6	7.1	
14-Mar	5	4	10	7	A	8	6	6	C	C	C	C	C	C	C	3	4	2	2	3	6	6	6	6	--	10.4	
15-Mar	5	4	3	3	A	7	5	9	7	6	6	5	4	4	4	4	4	4	6	4	12	7	6	7	5.4	12.4	
16-Mar	9	8	8	7	A	10	7	6	4	3	1	1	1	1	1	1	1	1	1	3	3	4	2	3	3.7	9.6	
17-Mar	2	2	2	2	A	5	10	7	5	1	1	1	1	1	1	2	2	2	1	1	1	3	3	3	2.7	10.0	
18-Mar	2	2	6	6	A	3	3	2	3	2	2	1	1	2	2	1	1	2	2	2	3	5	3	7	2.7	6.8	
19-Mar	6	5	5	7	A	13	15	10	5	4	3	2	2	3	2	2	3	4	7	6	3	4	5	5	5.2	14.6	
20-Mar	6	6	4	3	A	2	1	1	2	2	2	2	2	2	2	1	2	2	4	4	2	3	5	3	2.8	6.4	
21-Mar	3	3	4	3	A	6	5	7	14	8	2	4	5	4	3	3	4	3	4	3	5	7	7	5	4.8	13.6	
22-Mar	4	6	11	9	A	21	23	23	9	4	3	2	2	3	2	2	2	2	2	2	5	6	6	4	6.6	22.7	
23-Mar	2	3	3	2	A	3	2	3	4	3	3	5	5	4	2	2	3	2	3	4	9	6	5	6	3.6	8.7	
24-Mar	4	5	9	12	A	14	18	17	22	13	11	9	11	12	7	7	7	7	4	4	4	4	6	5	9.2	21.8	
25-Mar	8	5	5	4	A	8	6	8	17	17	13	10	7	9	8	7	5	6	6	7	3	3	3	3	7.2	17.0	
26-Mar	2	2	2	3	A	16	17	9	5	7	11	6	2	2	1	1	1	1	1	1	1	1	1	3	4.1	16.5	
27-Mar	2	3	3	2	A	4	11	10	13	6	5	6	6	5	5	6	7	6	6	6	4	3	7	6	5.6	12.6	
28-Mar	5	4	6	10	A	8	7	14	15	8	6	7	5	6	6	5	3	3	3	3	2	2	2	2	5.7	14.9	
29-Mar	2	2	4	4	A	6	5	10	15	10	11	9	6	5	3	2	3	2	3	4	5	3	3	2	5.2	15.1	
30-Mar	4	3	3	2	A	4	5	6	8	5	3	2	1	1	1	1	1	1	1	1	1	1	1	1	2.5	7.7	
31-Mar	1	1	2	2	A	3	3	4	2	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	1.5	4.1	
3.4 3.1 3.8 3.8 -- 6.0 6.4 6.6 7.1 5.1 4.4 3.8 3.3 3.2 2.8 3.0 2.8 2.7 3.1 3.1 3.5 3.8 3.9 3.7																										Diurnal Average	
8.7 8.1 10.6 11.8 -- 21.1 22.6 22.7 22.3 17.0 14.5 11.2 10.8 11.9 7.5 8.7 7.5 7.4 7.9 6.7 12.4 9.3 11.5 10.2																										Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																											

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - March 2012



Hourly Maximums

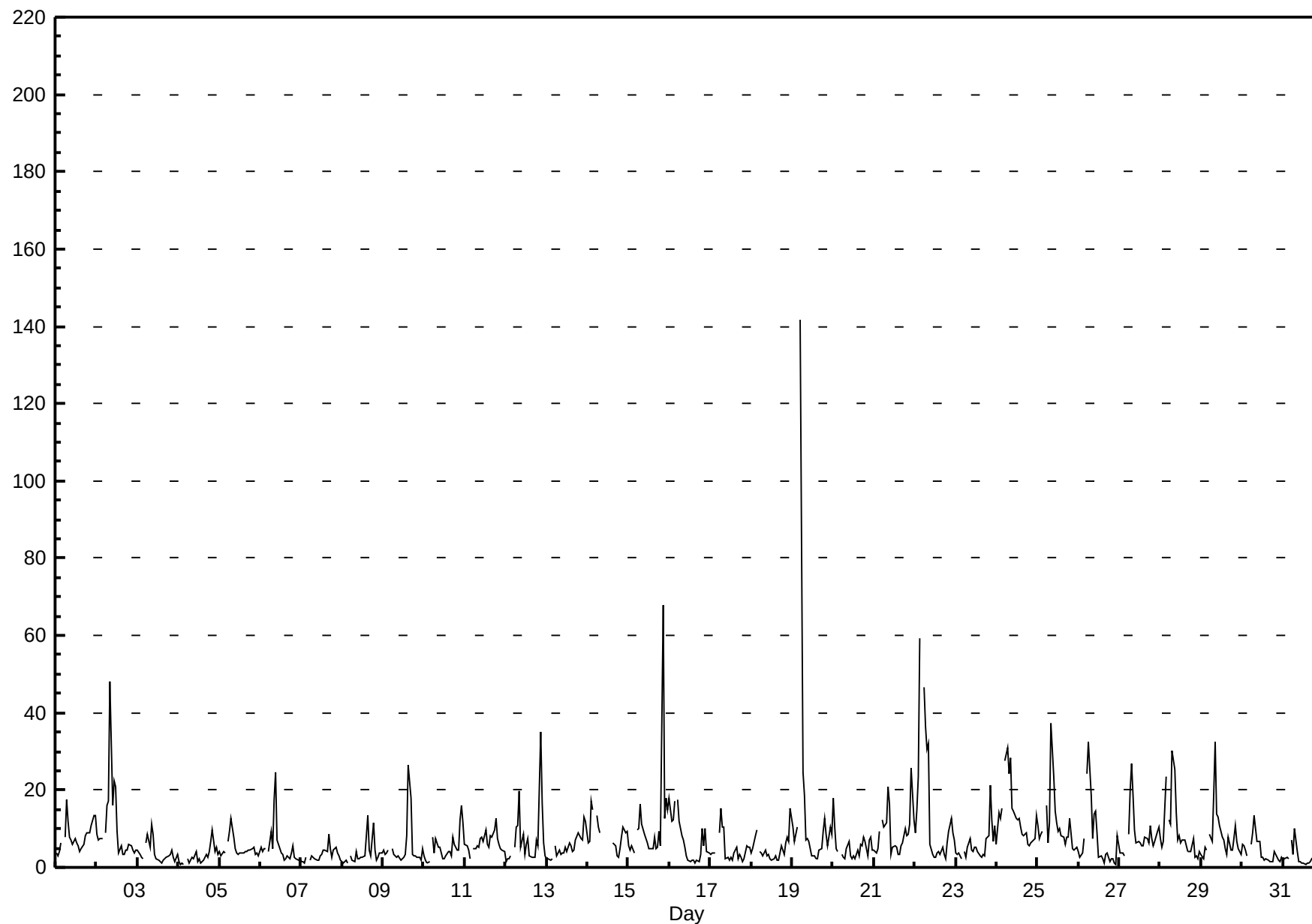
Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - March 2012

Maximum Value: 141.7 ppb on Mar 19 06:00																				Maximum Daily Average: 14.5 ppb on Mar 22					Hours in Service: 744	
Minimum Value: 1 ppb on Mar 4 04:00																				Minimum Daily Average: 2.9 ppb on Mar 4					Hours of Data: 706	
Maximum Diurnal Average: 14.3 ppb at hour 6																				Minimum Diurnal Average: 4.3 ppb at hour 15					Hours of Missing Data: 38	
Monthly Average: 7.15 ppb																				Percentiles: P ₁ = 1.0 P ₁₀ = 2.0 Q ₁ = 3.0 Median = 4.9 Q ₃ = 8.4 P ₉₀ = 13.5 P ₉₉ = 36.1					Hours of Calibration: 38	
																				Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	4	3	4	7	A	8	18	12	8	7	6	7	7	6	4	5	6	8	9	9	9	11	13	13	7.9	17.7
2-Mar	9	7	8	7	A	9	16	17	48	16	22	21	9	4	6	4	3	4	4	6	6	4	4	5	10.4	48.3
3-Mar	4	3	3	2	A	6	8	5	11	8	3	2	2	1	1	2	2	2	3	3	4	3	2	3	3.8	11.1
4-Mar	1	1	1	1	A	2	1	2	2	2	4	2	2	1	1	2	3	2	4	7	10	4	5	3	2.9	9.7
5-Mar	4	3	4	4	A	7	9	13	8	5	4	4	4	4	4	4	4	5	4	5	5	3	4	3	4.9	12.8
6-Mar	5	4	5	5	A	4	9	5	17	25	7	5	4	3	2	2	3	2	4	6	2	2	2	2	5.5	24.6
7-Mar	2	1	1	3	A	2	3	3	2	2	2	3	3	4	5	4	8	5	3	4	5	4	3	2	3.2	8.4
8-Mar	2	1	2	1	A	3	2	2	4	2	2	3	3	3	8	13	4	3	11	4	2	3	4	4	3.7	13.4
9-Mar	4	3	4	4	A	5	3	3	3	3	2	2	3	3	8	26	18	3	3	3	3	3	2	5	5.1	26.3
10-Mar	3	2	1	1	A	8	4	7	5	5	4	2	2	3	4	4	3	8	6	5	5	12	16	11	5.3	16.0
11-Mar	6	6	5	2	A	5	5	6	5	7	8	7	10	6	5	8	8	10	13	7	6	5	4	4	6.4	12.8
12-Mar	1	2	2	3	A	5	10	11	20	5	9	3	6	8	3	3	2	2	7	6	35	17	7	3	7.4	34.9
13-Mar	2	2	2	2	A	6	3	4	3	4	4	5	4	7	6	4	4	7	9	8	7	7	13	12	5.5	13.2
14-Mar	6	7	17	15	A	13	11	9	C	C	C	C	C	C	C	6	6	3	3	5	8	10	9	9	--	17.1
15-Mar	5	4	6	4	A	10	10	16	11	9	7	6	5	5	5	8	5	5	9	6	68	13	18	15	10.8	67.8
16-Mar	18	12	12	17	A	17	12	8	7	5	3	2	1	2	2	1	2	1	3	10	6	10	4	4	7.0	18.0
17-Mar	3	4	4	4	A	9	15	10	11	2	2	2	3	2	4	5	2	3	3	2	2	5	5	5	4.7	15.2
18-Mar	4	5	8	10	A	4	4	3	4	3	3	2	2	2	3	2	2	4	6	3	6	8	7	15	4.8	15.3
19-Mar	11	7	9	10	A	142	25	19	7	7	7	3	3	3	2	2	4	5	9	13	8	6	10	9	14.0	141.7
20-Mar	18	11	5	4	A	3	3	2	5	7	3	2	3	2	5	3	6	6	8	7	3	7	8	5	5.4	17.8
21-Mar	4	4	5	9	A	12	10	12	21	16	3	5	5	5	3	3	6	6	10	8	9	11	26	12	9.0	25.7
22-Mar	9	15	24	59	A	47	37	31	32	6	3	2	3	4	4	3	5	3	2	6	9	13	9	7	14.5	59.3
23-Mar	4	3	4	2	A	4	3	5	7	5	4	5	5	4	3	3	3	3	8	8	21	12	7	11	5.8	21.1
24-Mar	6	14	13	15	A	28	31	24	28	15	15	13	12	13	11	9	8	9	6	6	6	7	8	14	13.4	30.9
25-Mar	11	8	9	9	A	16	6	12	37	23	14	11	9	10	8	8	6	8	8	13	5	5	5	5	10.7	37.2
26-Mar	4	3	4	7	A	24	32	19	7	14	14	9	3	3	2	1	3	4	2	2	2	1	1	8	7.4	32.5
27-Mar	4	4	4	3	A	8	20	27	19	10	6	7	7	6	5	8	8	6	11	8	6	7	9	11	8.7	26.9
28-Mar	7	5	7	23	A	12	11	30	25	14	7	8	7	7	7	6	4	4	4	8	3	3	2	4	9.1	30.4
29-Mar	3	2	5	4	A	8	7	19	33	14	13	11	8	7	5	3	8	5	5	7	11	7	5	3	8.4	32.6
30-Mar	6	6	5	3	A	6	9	13	10	7	7	3	3	2	2	2	2	1	1	4	3	2	2	3	4.3	13.3
31-Mar	2	2	3	2	A	7	3	10	4	2	1	1	1	1	1	1	2	2	3	4	6	4	19	4	3.6	18.7
5.6 4.9 5.8 7.9 -- 14.3 11.0 11.6 13.6 8.3 6.4 5.3 4.6 4.3 4.3 5.0 4.9 4.6 5.8 6.2 9.1 6.7 7.4 6.9																									Diurnal Average	
18.0 14.8 23.5 59.3 -- 141.7 36.5 30.7 48.3 24.6 22.3 20.7 12.2 12.9 10.5 26.3 17.9 9.8 12.8 12.7 67.8 16.7 25.7 15.3																									Diurnal Maximum	
C - Calibration A - Automated Daily Zero Span																										

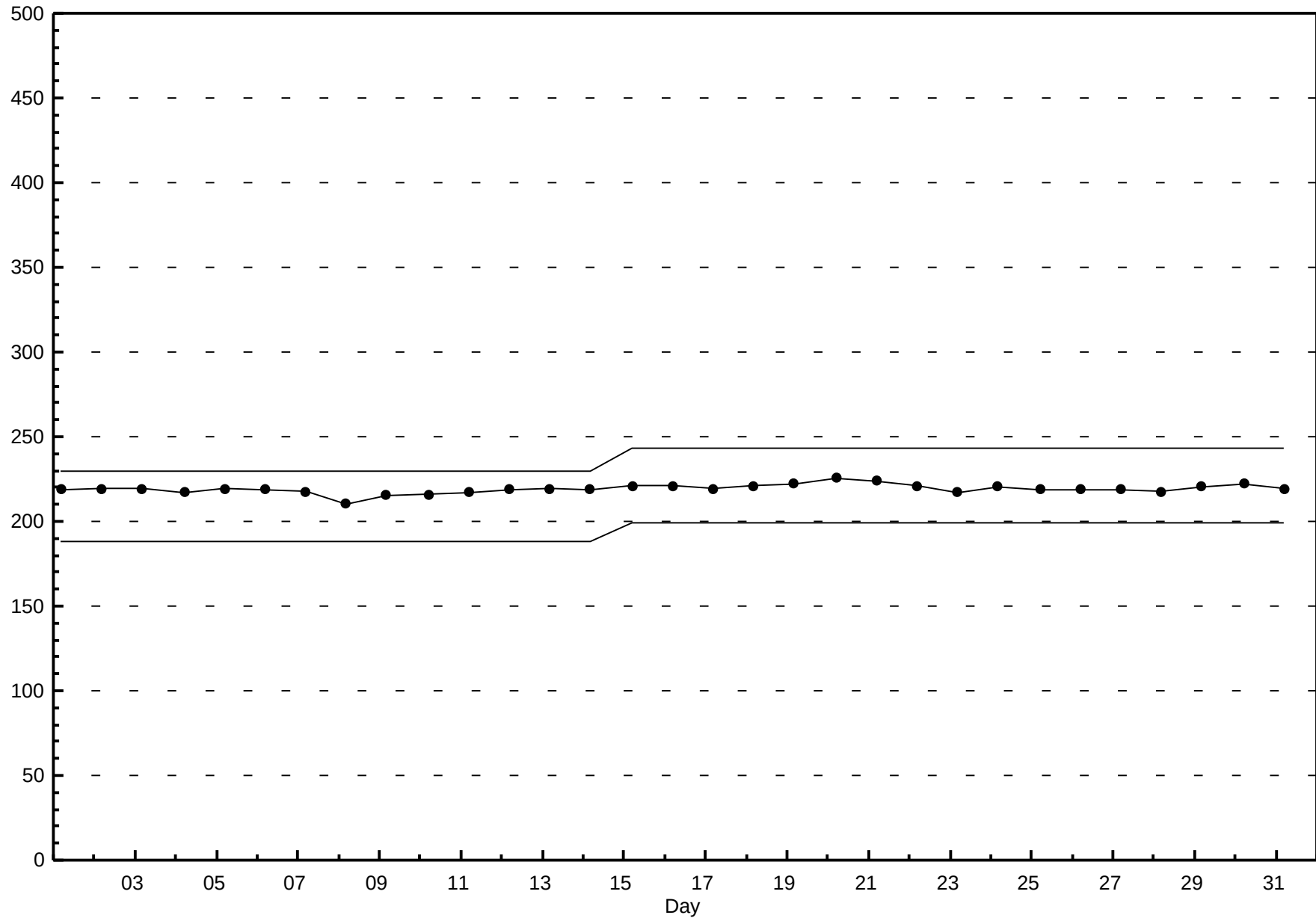
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Beaverlodge - March 2012



Span Responses

Oxides of Nitrogen (NO_x)
Beaverlodge - March 2012



Hourly Averages

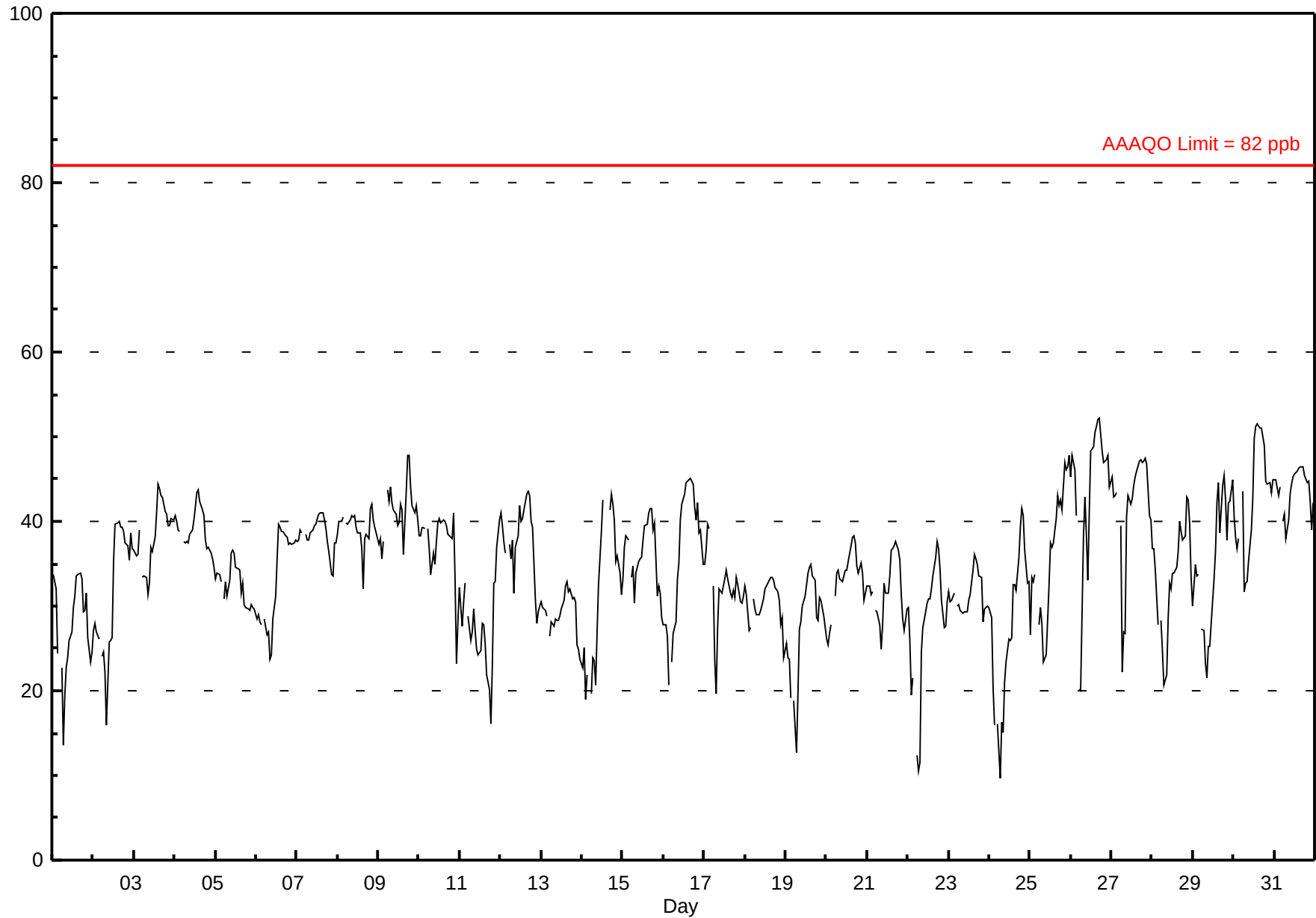
Ozone (O₃) - ppb

Beaverlodge - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 52.2 ppb on Mar 26 18:00 Maximum Daily Average: 43.7 ppb on Mar 31																								Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0		
Minimum Value: 10 ppb on Mar 24 07:00 Maximum Diurnal Average: 39.2 ppb at hour 18 Monthly Average: 34.65 ppb												Minimum Daily Average: 27.4 ppb on Mar 22 Minimum Diurnal Average: 28.3 ppb at hour 7 Percentiles: P ₁ = 15.8 P ₁₀ = 25.5 Q ₁ = 29.7 Median = 34.8 Q ₃ = 39.9 P ₉₀ = 43.8 P ₉₉ = 51.0														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	34	33	32	24	A	23	14	19	23	24	26	27	30	31	33	34	34	33	29	29	32	26	23	25	27.7	33.9
2-Mar	27	28	27	26	A	24	25	22	16	26	26	26	35	40	40	40	39	39	39	38	37	35	39	37	31.8	40.0
3-Mar	37	36	36	39	A	33	33	33	31	33	37	37	38	41	44	44	43	43	41	41	40	40	40	40	38.3	44.3
4-Mar	41	40	39	39	A	38	37	38	37	38	39	40	42	43	44	42	41	41	38	37	37	36	36	35	39.0	43.8
5-Mar	33	34	34	33	A	31	33	31	33	36	37	36	35	34	34	32	33	30	30	30	30	30	30	30	32.5	36.7
6-Mar	28	29	28	28	A	28	27	27	24	24	28	31	36	40	39	39	39	38	38	37	37	37	37	38	33.0	39.6
7-Mar	38	38	39	39	A	39	38	38	39	39	40	40	40	41	41	41	40	39	38	36	34	34	37	37	38.4	41.0
8-Mar	39	40	40	41	A	40	40	40	41	40	41	39	39	39	37	32	38	39	38	42	42	40	39	38	39.2	42.1
9-Mar	37	38	36	38	A	44	42	44	42	41	41	40	40	42	41	36	43	48	48	44	42	41	42	40	41.3	47.8
10-Mar	38	38	39	39	A	39	37	34	36	35	38	40	40	40	40	40	39	39	38	38	41	33	23	28	37.1	41.0
11-Mar	32	28	31	33	A	29	26	27	30	27	25	24	25	28	28	26	22	20	16	23	33	33	37	40	27.9	40.2
12-Mar	41	39	38	36	A	37	36	38	32	37	38	42	40	40	41	43	44	43	40	39	31	28	29	30	37.5	43.5
13-Mar	31	30	29	29	A	27	28	28	29	28	28	29	30	31	32	33	32	32	31	31	30	25	25	24	29.2	32.8
14-Mar	23	25	19	22	A	20	24	23	21	27	32	39	43	C	C	C	41	43	42	40	35	36	34	31	31.0	43.1
15-Mar	33	37	38	38	A	33	35	30	34	35	36	36	38	39	40	41	42	42	39	40	31	32	32	29	36.0	41.6
16-Mar	28	28	26	21	A	23	27	28	33	35	40	42	43	45	45	45	45	44	42	40	42	39	39	35	36.3	45.0
17-Mar	35	37	40	39	A	32	24	20	27	32	31	32	33	34	33	32	31	32	31	33	33	31	30	31	31.9	39.6
18-Mar	32	31	27	27	A	31	30	29	29	29	30	31	32	33	33	33	33	33	32	32	31	28	29	24	30.4	33.4
19-Mar	26	24	24	19	A	19	13	20	27	28	30	31	33	34	35	35	34	33	29	28	31	31	29	27	27.7	34.9
20-Mar	26	26	27	28	A	31	34	34	33	33	34	34	34	35	37	38	38	37	35	34	35	34	31	32	33.0	38.2
21-Mar	32	32	31	32	A	30	29	28	25	28	33	32	31	34	37	37	37	38	37	35	31	28	27	30	31.9	37.6
22-Mar	30	26	19	22	A	12	10	11	25	27	29	30	31	31	32	34	36	38	37	34	31	28	28	31	27.4	37.6
23-Mar	32	30	31	32	A	30	30	30	29	29	29	29	31	31	34	36	36	35	34	33	28	30	30	30	31.3	36.1
24-Mar	30	29	20	16	A	16	10	16	15	21	23	26	26	26	32	33	32	36	39	42	41	37	33	33	27.4	41.6
25-Mar	27	33	33	34	A	28	30	28	23	24	28	32	37	37	38	40	43	42	43	41	47	46	46	48	36.0	47.8
26-Mar	45	48	46	41	A	20	20	38	43	39	33	41	48	49	50	51	52	52	48	47	47	47	48	44	43.4	52.2
27-Mar	45	43	43	43	A	39	22	27	27	40	43	42	43	44	45	46	47	47	47	47	47	47	41	40	41.6	47.4
28-Mar	37	37	34	28	A	28	25	21	22	28	33	32	34	34	35	36	40	39	38	38	43	43	40	33	33.8	42.9
29-Mar	30	35	34	34	A	27	27	23	22	25	25	28	33	36	42	45	39	44	45	43	38	42	42	45	35.0	45.5
30-Mar	41	38	37	38	A	44	32	33	33	35	39	43	50	51	52	51	51	50	49	45	44	45	43	45	42.9	51.6
31-Mar	45	45	43	44	A	40	41	38	40	43	44	45	46	46	46	46	46	46	45	45	45	42	39	42	43.7	46.5
33.9 34.0 32.9 32.2 -- 30.2 28.3 28.9 29.7 32.0 33.5 34.7 36.6 37.6 38.7 38.7 39.0 39.2 37.9 37.5 36.9 35.6 34.8 34.5																								Diurnal Average		
45.2 47.7 46.1 44.1 -- 43.8 42.4 44.1 43.0 43.3 44.3 45.2 49.9 51.2 51.6 51.2 52.0 52.2 49.1 47.1 47.4 47.3 47.8 47.8																								Diurnal Maximum		
C - Calibration A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																										

Hourly Averages

Ozone (O₃) - ppb
Beaverlodge - March 2012



Hourly Maximums

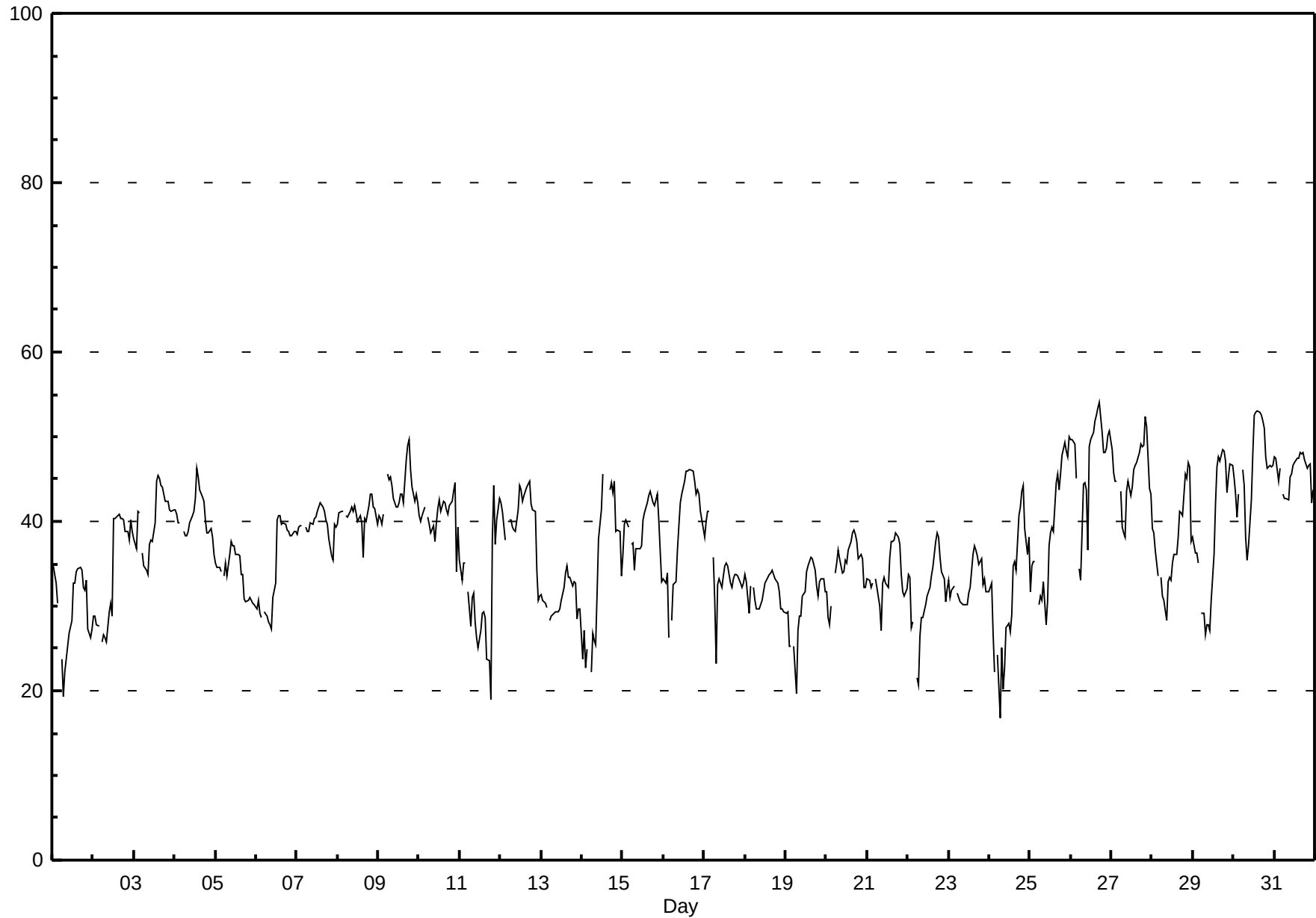
Ozone (O₃) - ppb

Beaverlodge - March 2012

Maximum Value: 54.1 ppb on Mar 26 18:00																					Maximum Daily Average: 47.3 ppb on Mar 26					Hours in Service: 744	
Minimum Value: 17 ppb on Mar 24 07:00																					Minimum Daily Average: 29.6 ppb on Mar 1					Hours of Data: 710	
Maximum Diurnal Average: 40.8 ppb at hour 18																					Minimum Diurnal Average: 32.5 ppb at hour 7					Hours of Missing Data: 34	
Monthly Average: 37.21 ppb																					Percentiles: P ₁ = 22.2 P ₁₀ = 28.7 Q ₁ = 32.2 Median = 37.6 Q ₃ = 42.2 P ₉₀ = 46.2 P ₉₉ = 52.6					Hours of Calibration: 34	
																										Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Mar	35	34	33	30	A	24	19	22	24	25	27	28	33	33	34	34	35	34	32	32	33	27	26	27	29.6	34.7	
2-Mar	29	29	28	28	A	26	27	26	26	29	30	29	40	40	41	41	40	40	40	39	39	38	40	39	34.0	40.9	
3-Mar	38	37	41	41	A	36	35	34	34	37	38	38	40	45	45	45	44	44	42	42	42	41	41	41	40.1	45.5	
4-Mar	41	41	40	40	A	39	38	38	39	40	41	41	43	46	45	44	43	42	40	39	39	39	38	36	40.5	46.2	
5-Mar	35	35	35	34	A	34	35	34	36	38	37	37	36	36	36	34	34	31	30	31	31	31	30	30	33.8	37.6	
6-Mar	30	31	29	29	A	29	29	28	28	27	31	33	40	41	41	40	40	40	39	39	38	38	39	39	34.6	40.8	
7-Mar	38	39	39	39	A	39	39	39	40	40	40	40	41	42	42	42	41	40	40	38	36	35	40	39	39.6	42.3	
8-Mar	40	41	41	41	A	41	40	41	42	41	42	41	40	41	40	36	40	40	42	43	43	42	41	40	40.8	43.2	
9-Mar	41	40	40	41	A	46	45	45	44	43	42	42	42	43	43	42	47	49	50	46	44	42	43	42	43.6	49.7	
10-Mar	41	40	41	42	A	41	40	39	39	38	40	42	43	41	42	42	41	41	42	42	44	45	34	39	40.7	44.6	
11-Mar	35	33	35	35	A	32	28	31	32	28	26	25	27	29	29	29	24	24	19	38	44	37	40	43	31.4	44.2	
12-Mar	42	41	39	38	A	40	40	39	39	39	41	44	44	42	43	44	44	45	42	41	41	34	31	31	40.3	44.7	
13-Mar	31	31	30	30	A	28	29	29	29	29	29	30	31	32	34	35	33	33	32	33	33	29	30	30	30.9	34.7	
14-Mar	24	27	23	25	A	22	27	26	25	32	38	41	46	C	C	C	44	45	43	45	39	39	39	34	34.1	45.7	
15-Mar	36	40	40	39	A	37	37	34	37	37	37	37	40	41	42	43	43	43	42	42	43	40	36	33	39.2	43.5	
16-Mar	33	33	34	26	A	28	33	33	37	40	42	43	45	46	46	46	46	46	45	43	44	43	41	39	39.6	46.2	
17-Mar	38	40	41	41	A	36	31	23	33	33	32	34	35	35	35	33	32	33	34	34	34	33	32	33	34.0	41.2	
18-Mar	34	33	29	32	A	32	31	30	30	30	31	32	33	33	34	34	34	34	33	33	32	30	30	29	31.8	34.2	
19-Mar	29	29	25	25	A	25	20	27	29	29	31	32	34	35	35	36	36	34	32	31	33	33	33	32	30.7	35.7	
20-Mar	32	29	28	30	A	34	35	37	36	34	34	35	35	37	38	39	39	38	38	36	36	36	32	32	34.7	39.1	
21-Mar	33	33	32	33	A	33	32	30	27	33	33	33	32	36	38	38	38	39	38	37	34	32	31	32	33.8	38.7	
22-Mar	34	33	27	28	A	22	21	26	29	29	30	31	32	32	34	35	38	39	38	36	34	33	31	32	31.4	38.6	
23-Mar	33	31	32	32	A	32	31	31	30	30	30	30	32	32	36	37	37	36	35	36	33	33	32	32	32.7	37.1	
24-Mar	32	33	27	22	A	24	17	25	20	23	27	28	27	29	35	35	34	41	42	44	44	39	36	38	31.4	44.2	
25-Mar	32	35	35	35	A	30	31	31	33	28	31	37	39	39	39	45	46	44	46	48	49	48	48	50	39.0	50.0	
26-Mar	50	50	49	45	A	34	33	44	45	44	37	49	50	51	52	53	53	54	51	48	48	49	50	51	47.3	54.1	
27-Mar	49	46	45	45	A	44	39	39	38	44	45	43	44	46	47	47	48	49	49	49	52	51	44	43	45.4	52.4	
28-Mar	39	39	37	34	A	33	31	31	28	33	33	33	35	36	36	38	41	41	41	46	45	47	46	38	37.4	47.0	
29-Mar	38	36	36	35	A	29	29	27	28	28	27	31	36	42	46	48	47	48	48	47	43	45	47	47	38.7	48.5	
30-Mar	45	43	41	43	A	46	44	38	35	37	42	48	53	53	53	53	53	52	51	48	46	47	46	47	46.2	53.1	
31-Mar	48	48	45	46	A	43	43	43	42	45	46	47	47	48	47	48	48	48	47	46	47	47	42	44	45.8	48.2	
36.6 36.4 35.4 35.0 -- 33.5 32.5 32.9 33.3 34.2 35.2 36.6 38.5 39.4 40.3 40.4 40.8 40.8 40.1 40.3 40.1 38.8 37.8 37.4																								Diurnal Average			
49.6 49.6 49.1 46.2 -- 46.1 44.8 45.2 44.6 45.2 45.6 48.8 52.5 52.8 53.1 53.0 53.4 54.1 51.0 49.1 52.4 51.1 50.1 50.6																								Diurnal Maximum			
C - Calibration A - Automated Daily Zero Span																											

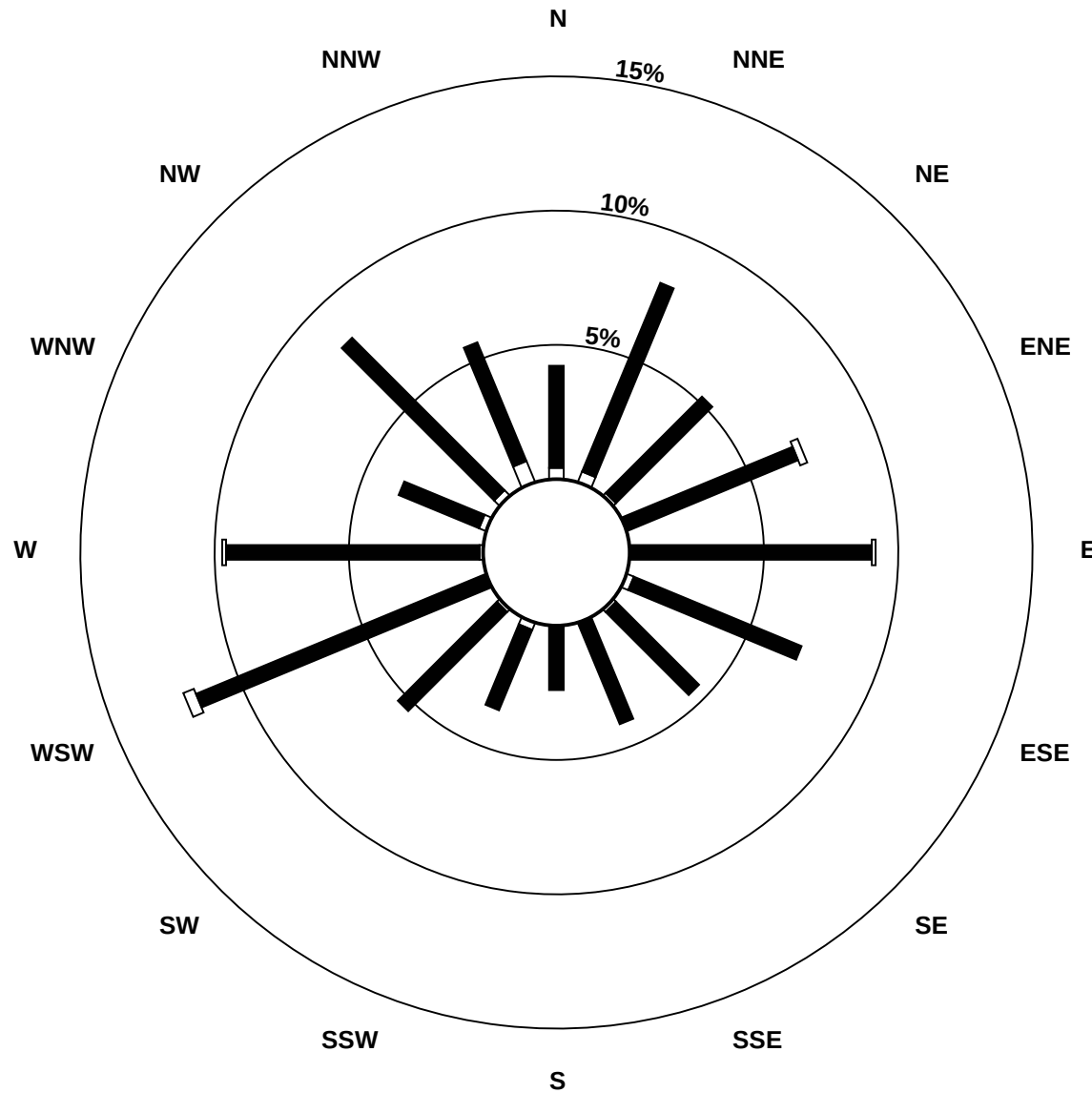
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - March 2012

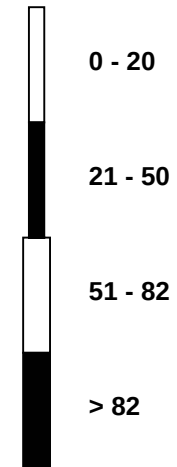


Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - March 2012



Pollutant Classes (ppb)



Eight Hour Running Averages

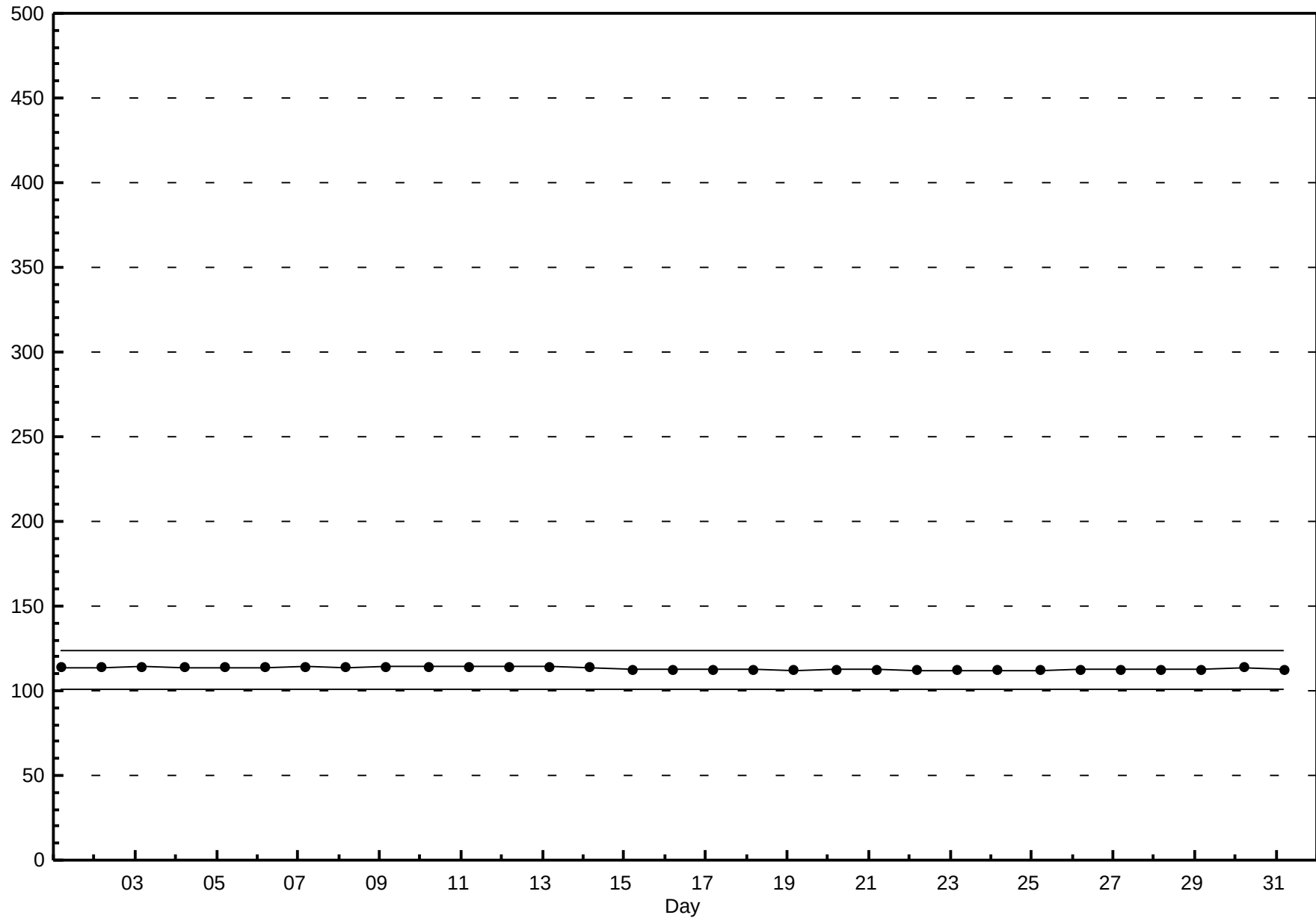
Ozone (O₃) - ppb

Beaverlodge - March 2012

Maximum Value: 49.8 ppb on Mar 30 20:00																								Hours in Service: 744		
Minimum Value: 16.4 ppb on Mar 24 10:00																								Hours of Data: 738		
Percentiles: P ₁ = 19.2 P ₁₀ = 26.5 Q ₁ = 29.9 Median = 34.6 Q ₃ = 39.0 P ₉₀ = 42.5 P ₉₉ = 49.1																								Hours of Missing Data: 6		
																								Hours of Calibration: 6		
																								Percent Operational Time: 100.0		
Day	Hourly Period Ending At (MST)																							Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	35	34	34	32	32	30	28	26	24	23	22	23	24	27	28	30	31	31	32	32	31	30	29		34.9	
2-Mar	28	27	27	27	26	26	26	26	24	24	23	24	25	27	29	31	34	36	37	39	39	38	38	38		39.0
3-Mar	38	37	37	37	37	37	36	35	35	34	34	34	34	35	37	38	40	41	41	42	42	42	41	41		42.1
4-Mar	41	40	40	40	40	40	39	39	38	38	38	38	39	39	40	41	41	42	41	41	40	39	38	37		41.5
5-Mar	36	36	35	35	34	34	33	33	33	33	33	34	34	34	35	35	35	34	33	32	32	31	30	30		36.5
6-Mar	30	29	29	29	29	29	28	28	27	27	27	27	28	30	31	33	35	36	37	38	38	38	38	38		38.5
7-Mar	38	38	38	38	38	38	38	38	38	39	39	39	39	39	40	40	40	40	40	40	39	38	37	37		40.2
8-Mar	37	37	37	38	38	39	39	40	40	40	40	40	40	39	38	38	38	37	38	38	38	38	39	39		40.3
9-Mar	39	39	39	38	38	39	39	40	41	41	42	42	42	41	40	41	41	42	43	43	43	43	44		43.5	
10-Mar	43	42	41	40	40	39	39	38	38	37	37	37	37	37	38	39	39	39	40	39	39	39	36	35		42.9
11-Mar	34	33	32	31	30	29	29	29	29	29	28	27	27	26	27	27	26	25	24	23	24	25	26	28		34.1
12-Mar	30	33	35	37	38	38	38	38	37	36	36	37	37	38	39	39	41	41	42	41	40	39	37	35		41.7
13-Mar	34	32	31	30	29	29	29	29	28	28	28	28	28	29	29	30	30	31	31	31	31	31	30	29		33.8
14-Mar	28	27	25	24	23	22	22	22	22	22	24	27	29	30	31	N	N	N	N	N	N	40	39	38		39.7
15-Mar	37	36	36	35	35	35	35	35	35	35	34	34	35	35	36	37	38	39	39	40	39	38	37	36		40.0
16-Mar	34	32	31	28	28	27	26	26	27	28	30	33	34	37	39	41	42	44	44	44	43	43	42	41		43.8
17-Mar	39	39	38	38	38	37	34	32	31	31	29	28	29	29	30	32	32	32	32	32	32	32	32	32		39.5
18-Mar	32	32	31	30	30	30	30	30	29	29	29	30	30	30	31	31	32	32	33	33	33	32	31	30		32.7
19-Mar	29	28	27	25	25	23	21	21	21	21	22	24	25	27	30	32	32	33	33	32	32	32	31	30		33.0
20-Mar	29	28	28	28	28	28	28	29	30	31	32	33	33	34	34	35	35	36	36	36	36	36	35	34		36.2
21-Mar	34	33	33	32	32	31	31	31	30	29	29	29	29	30	31	32	33	35	35	36	36	35	34	33		35.6
22-Mar	32	31	28	27	26	24	21	19	18	18	20	21	22	24	27	30	31	33	33	34	34	34	33	33		34.0
23-Mar	32	31	30	30	30	30	31	31	30	30	30	30	30	30	30	31	32	33	33	34	33	33	33	32		33.7
24-Mar	31	30	29	27	26	24	22	20	17	16	17	18	19	20	23	25	27	29	31	33	35	36	36	36		36.4
25-Mar	36	35	35	34	33	31	31	30	30	29	28	28	29	30	31	33	35	37	39	40	41	42	44	45		44.5
26-Mar	45	45	46	46	46	42	38	37	37	35	33	33	35	39	43	44	45	47	49	50	50	49	49	48		49.8
27-Mar	47	46	46	45	45	44	40	38	35	35	35	34	35	36	39	41	44	45	45	46	46	47	46	45		47.4
28-Mar	44	43	41	39	38	35	33	30	28	27	26	27	28	29	30	32	34	35	36	37	38	39	40	39		44.1
29-Mar	38	37	37	36	35	33	31	30	29	27	26	25	26	27	29	32	34	37	39	41	42	42	42	42		42.3
30-Mar	43	42	41	40	40	41	39	37	36	36	36	37	38	39	42	44	46	48	50	50	49	48	47	46		49.8
31-Mar	46	45	44	44	44	44	43	42	42	41	42	42	42	43	44	45	45	46	46	46	46	45	44	44		46.0
Diurnal Maximums																										
N - Not Valid																										

Span Responses

Ozone (O₃)
Beaverlodge - March 2012

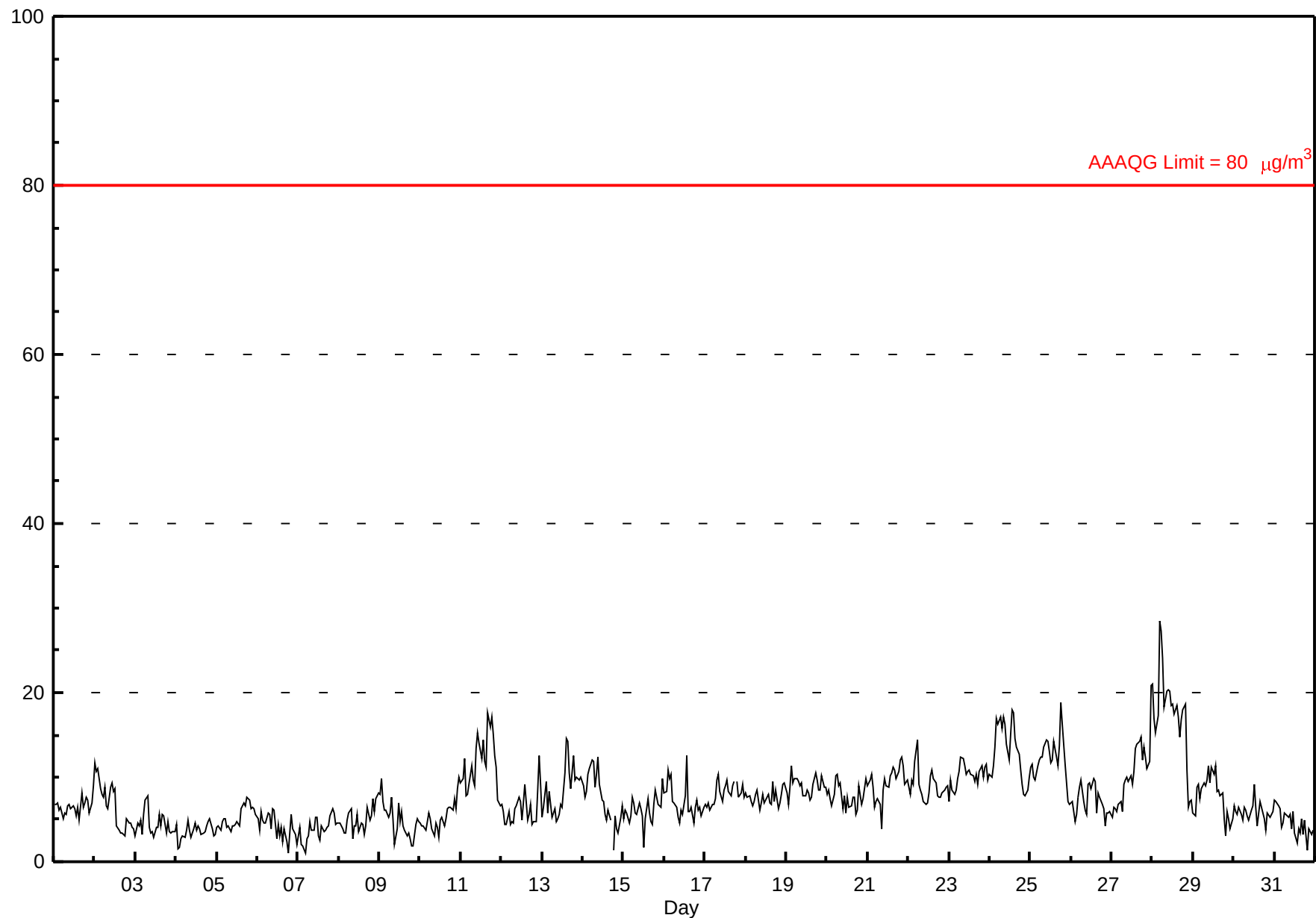


Hourly Averages

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

Beaverlodge - March 2012

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 28.5 µg/m³ on Mar 28 05:00 Maximum Daily Average: 17.5 µg/m³ on Mar 28																				Hours in Service: 744 Hours of Data: 742 Hours of Missing Data: 2 Hours of Calibration: 0 Percent Operational Time: 99.7						
Minimum Value: 1 µg/m³ on Mar 7 05:00 Maximum Diurnal Average: 8.3 µg/m³ at hour 7 Monthly Average: 7.62 µg/m³ Minimum Daily Average: 3.6 µg/m³ on Mar 4 Minimum Diurnal Average: 6.9 µg/m³ at hour 22 Percentiles: P ₁ = 1.8 P ₁₀ = 3.7 Q ₁ = 5.0 Median = 6.9 Q ₃ = 9.4 P ₉₀ = 12.0 P ₉₉ = 20.1																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	7	7	7	6	6	5	6	6	7	7	6	7	6	5	6	5	8	6	7	8	7	6	7	9	6.5	8.9
2-Mar	12	11	11	9	8	8	9	7	6	9	9	8	9	4	4	3	3	3	3	5	4	5	4	4	6.6	11.7
3-Mar	3	5	4	5	3	6	7	8	4	3	4	3	4	4	6	4	6	5	3	5	4	3	4	4	4.4	7.8
4-Mar	4	2	2	3	3	3	4	5	4	3	4	5	4	4	4	3	3	3	4	5	5	4	3	3	3.6	5.0
5-Mar	4	4	4	5	5	5	4	4	3	4	4	4	5	4	6	7	7	7	8	7	6	6	6	6	5.3	7.7
6-Mar	5	4	6	5	5	5	6	6	4	6	6	3	4	3	4	2	4	2	1	3	6	4	3	2	4.1	6.2
7-Mar	3	4	2	2	1	3	3	5	4	4	5	5	3	3	4	4	4	4	4	5	6	6	4	5	3.8	6.3
8-Mar	5	5	4	3	3	5	6	6	3	4	4	6	4	5	4	3	4	7	5	5	8	6	7	8	5.0	8.2
9-Mar	8	10	7	6	6	5	6	8	5	2	4	7	5	6	4	4	3	3	3	2	2	4	5	5	5.0	9.9
10-Mar	5	4	4	4	5	6	5	4	3	4	4	3	5	5	4	5	6	6	7	6	7	6	9	10	5.3	10.1
11-Mar	9	10	12	8	8	9	11	10	9	13	15	14	12	14	12	11	18	16	17	15	13	11	7	7	11.8	17.7
12-Mar	7	6	4	4	6	4	5	5	6	7	8	7	5	7	9	5	6	7	4	5	5	9	12	9	6.3	12.5
13-Mar	5	6	10	6	8	7	5	6	5	5	6	7	7	11	15	14	11	9	13	10	10	10	10	10	8.4	14.6
14-Mar	9	8	8	10	11	12	12	9	10	12	9	7	7	6	5	6	5	M	1	5	4	3	5	7	7.5	12.4
15-Mar	5	6	6	4	5	8	7	6	6	7	6	5	2	5	8	6	5	4	7	9	7	7	7	10	6.1	9.8
16-Mar	8	8	11	10	10	7	7	6	5	5	6	6	8	12	6	6	6	5	6	7	6	6	5	7	7.1	12.5
17-Mar	7	6	7	6	7	7	7	10	10	8	7	8	9	10	8	8	9	9	N	9	8	8	9	8	8.1	10.3
18-Mar	8	8	8	7	7	7	8	8	6	7	8	7	7	8	7	7	10	7	9	6	7	8	9	9	7.6	9.5
19-Mar	8	7	9	11	9	10	10	9	9	9	8	8	8	8	7	8	9	11	10	8	9	10	9	9	8.9	11.4
20-Mar	8	8	7	7	8	10	10	9	9	6	8	6	8	6	7	8	8	6	6	9	7	7	9	10	7.8	10.3
21-Mar	9	10	10	9	7	7	8	7	4	9	10	9	9	10	10	11	11	10	11	12	12	11	9	10	9.3	12.3
22-Mar	9	8	10	9	12	14	9	9	8	7	7	7	8	10	11	10	9	8	8	8	8	8	9	9	8.9	14.4
23-Mar	7	10	8	8	8	10	11	12	12	11	10	11	11	10	10	9	10	9	11	11	10	11	11	10	10.2	12.4
24-Mar	10	10	11	14	17	16	17	16	17	16	14	12	15	18	18	15	14	13	11	9	8	8	8	10	13.2	17.9
25-Mar	11	12	10	10	11	12	12	12	14	14	14	13	12	12	14	12	11	14	19	16	11	9	7	7	12.1	18.8
26-Mar	7	7	5	6	8	9	10	7	6	6	9	9	9	10	10	6	8	8	7	6	4	6	6	6	7.2	9.8
27-Mar	5	6	6	6	7	7	6	9	10	10	9	10	9	11	13	14	14	15	12	14	12	11	12	21	10.4	20.8
28-Mar	21	17	15	17	28	27	24	18	20	20	20	19	19	18	18	17	15	17	18	19	11	6	7	7	17.5	28.5
29-Mar	6	5	9	9	7	9	9	9	10	11	9	11	10	11	8	8	8	8	5	3	6	5	4	5	7.8	11.4
30-Mar	7	6	6	7	6	5	6	6	5	5	6	7	9	6	4	7	6	6	5	4	6	5	6	6	5.9	9.2
31-Mar	7	7	7	6	4	5	6	6	5	6	4	6	3	2	4	3	5	3	5	1	4	4	3	4	4.6	7.3
7.4 7.3 7.4 7.1 7.8 8.1 8.3 8.0 7.4 7.8 7.9 7.7 7.6 8.1 8.1 7.5 7.9 7.7 7.6 7.7 7.2 6.9 7.0 7.5																								Diurnal Average		
21.1 17.0 15.2 17.3 28.5 27.2 24.0 18.3 20.1 20.3 20.2 18.5 18.6 17.9 18.4 17.1 17.7 16.8 18.8 18.6 12.5 11.3 12.5 20.8																								Diurnal Maximum		
M - Maintenance N - Not Valid																										
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³																										



Hourly Maximums

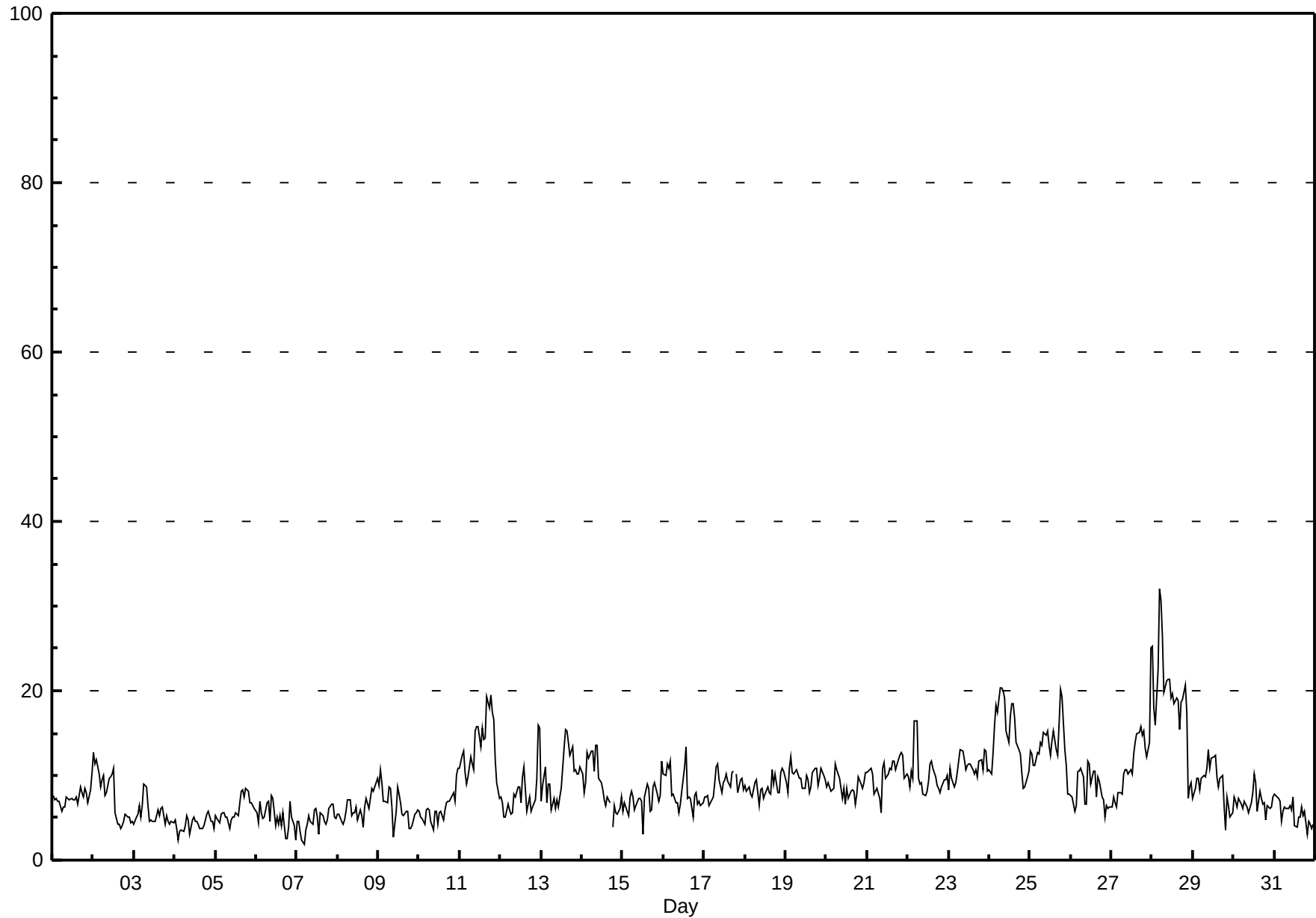
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Beaverlodge - March 2012

Maximum Value: 32.0 μg/m ³ on Mar 28 05:00																				Maximum Daily Average: 19.4 μg/m ³ on Mar 28										Hours in Service: 744	
Minimum Value: 2 μg/m ³ on Mar 7 05:00																				Minimum Daily Average: 4.3 μg/m ³ on Mar 4										Hours of Data: 742	
Maximum Diurnal Average: 9.4 μg/m ³ at hour 7																				Minimum Diurnal Average: 8.0 μg/m ³ at hour 22										Hours of Missing Data: 2	
Monthly Average: 8.74 μg/m ³																				Percentiles: P ₁ = 3.0 P ₁₀ = 4.6 Q ₁ = 6.0 Median = 7.9 Q ₃ = 10.5 P ₉₀ = 13.5 P ₉₉ = 20.2										Hours of Calibration: 0	
																				Percent Operational Time: 99.7											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
1-Mar	8	7	7	7	7	6	6	6	8	7	7	7	7	7	7	9	8	8	8	8	7	8	10	7.4	10.3						
2-Mar	13	11	12	10	9	9	10	8	8	10	10	10	11	6	4	4	4	5	6	5	5	4	5	7.5	12.6						
3-Mar	4	5	6	7	5	6	9	9	6	5	5	5	5	6	5	6	6	4	5	5	4	5	4	5.5	8.9						
4-Mar	5	4	2	3	4	3	4	5	5	3	5	5	5	5	4	4	4	4	5	5	6	5	5	4	4.3	5.8					
5-Mar	5	5	4	5	6	6	5	5	4	5	5	5	6	5	7	8	8	7	8	8	7	7	7	6	6.0	8.5					
6-Mar	6	4	7	6	5	5	7	7	5	8	7	4	5	4	5	4	6	3	3	4	7	5	4	2	5.1	7.7					
7-Mar	5	5	3	2	2	4	4	5	5	4	6	6	5	3	6	5	5	4	5	6	7	7	5	5	4.7	6.5					
8-Mar	5	5	5	4	5	6	7	7	5	6	6	6	5	6	5	4	6	7	6	7	8	8	9	10	6.2	9.7					
9-Mar	9	11	9	7	7	7	9	9	6	3	6	9	8	7	6	5	6	6	4	4	4	5	6	6	6.5	10.6					
10-Mar	6	5	5	4	6	6	6	5	4	6	6	4	6	6	5	6	7	7	7	8	8	7	10	11	6.2	10.9					
11-Mar	11	12	13	10	9	10	12	11	11	15	16	16	13	16	14	14	19	18	19	17	17	12	9	7	13.5	19.4					
12-Mar	7	7	5	5	7	6	5	6	8	7	9	9	7	10	11	6	7	8	6	6	7	10	16	16	7.8	16.0					
13-Mar	7	9	11	7	9	9	6	7	6	7	6	7	9	13	16	15	14	12	13	10	11	10	10	11	9.8	15.5					
14-Mar	10	8	9	13	12	13	13	10	14	14	10	9	8	7	6	7	7	M	4	6	6	5	6	7	8.9	13.6					
15-Mar	6	7	6	5	7	8	8	6	6	7	7	7	3	7	9	8	6	6	9	9	8	7	8	12	7.2	11.7					
16-Mar	10	10	11	11	12	8	8	7	7	6	7	8	11	13	7	7	7	5	8	8	7	7	6	7	8.2	13.4					
17-Mar	8	7	8	7	7	7	9	11	11	9	8	9	9	10	9	9	10	11	N	10	8	10	10	8	9.0	11.4					
18-Mar	9	8	9	8	7	8	9	9	6	8	8	7	8	9	8	8	11	9	10	8	8	10	11	10	8.7	10.9					
19-Mar	9	8	11	12	10	10	11	10	10	10	8	9	10	9	8	9	10	11	11	9	10	11	10	9	9.8	12.1					
20-Mar	9	9	9	8	8	11	11	10	10	7	8	7	8	7	8	8	8	7	8	10	9	8	9	10	8.7	11.4					
21-Mar	10	11	11	10	8	8	8	7	6	11	11	10	10	11	11	12	12	11	12	12	13	12	10	10	10.3	12.7					
22-Mar	10	9	10	10	16	16	10	9	9	8	8	8	9	11	12	11	10	9	8	8	9	9	9	10	10.0	16.5					
23-Mar	8	11	10	9	9	10	12	13	13	12	11	11	11	11	11	10	11	10	12	12	11	13	13	10	11.0	13.1					
24-Mar	11	10	13	16	18	17	20	20	20	19	15	14	17	18	18	17	14	13	13	10	8	9	10	10	14.7	20.4					
25-Mar	13	13	11	11	13	13	14	14	15	15	15	14	12	14	15	13	12	16	20	19	13	11	8	8	13.4	20.2					
26-Mar	8	7	6	6	11	11	11	10	7	7	12	11	9	10	10	8	10	9	8	7	5	6	6	6	8.4	11.6					
27-Mar	6	7	7	6	8	8	8	10	11	11	10	11	10	13	14	15	15	16	15	15	13	12	14	25	11.7	25.2					
28-Mar	25	18	16	23	32	31	26	20	21	21	21	19	20	18	19	19	16	19	19	21	17	7	9	9	19.4	32.0					
29-Mar	7	8	10	10	8	10	10	10	11	13	11	12	12	12	10	9	10	10	7	4	7	7	5	6	9.0	13.1					
30-Mar	8	7	6	7	7	6	7	7	6	6	7	8	10	9	6	8	7	7	7	5	6	6	6	7	6.9	10.2					
31-Mar	8	8	7	7	5	6	6	6	6	7	6	7	4	4	5	5	6	5	6	3	5	4	4	4	5.6	7.8					
8.5 8.3 8.3 8.3 9.0 9.2 9.4 9.0 8.6 8.8 8.9 8.8 8.8 9.3 9.1 8.7 9.1 8.9 8.9 8.8 8.4 8.0 8.1 8.6																									Diurnal Average						
25.2 18.0 15.9 22.6 32.0 30.6 26.5 20.4 21.1 21.3 21.3 19.2 19.7 18.5 19.1 18.9 19.4 18.7 20.2 20.6 17.5 13.1 16.0 25.2																									Diurnal Maximum						
M - Maintenance N - Not Valid																															

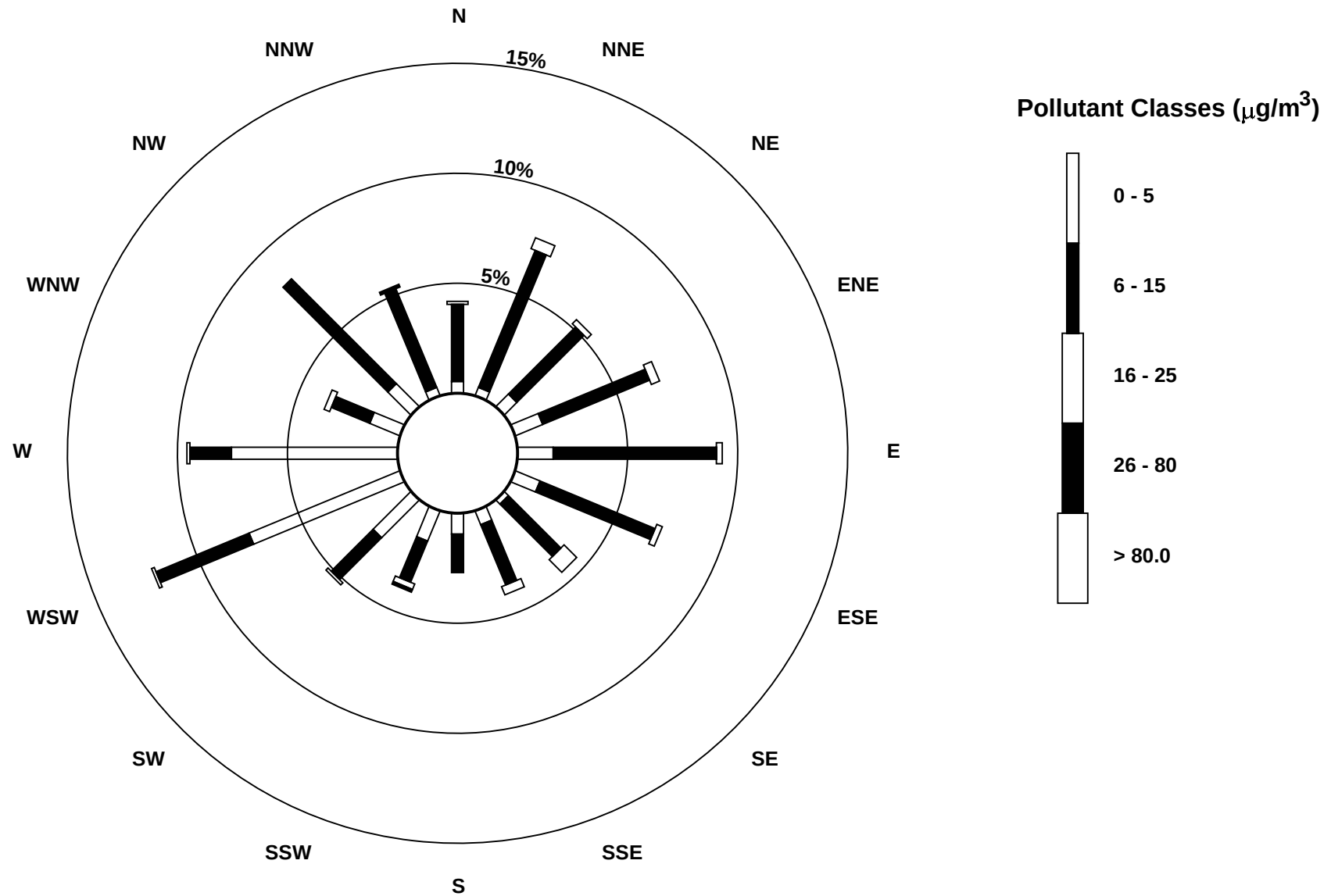
Hourly Maximums

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Beaverlodge - March 2012



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Beaverlodge - March 2012



Hourly Averages

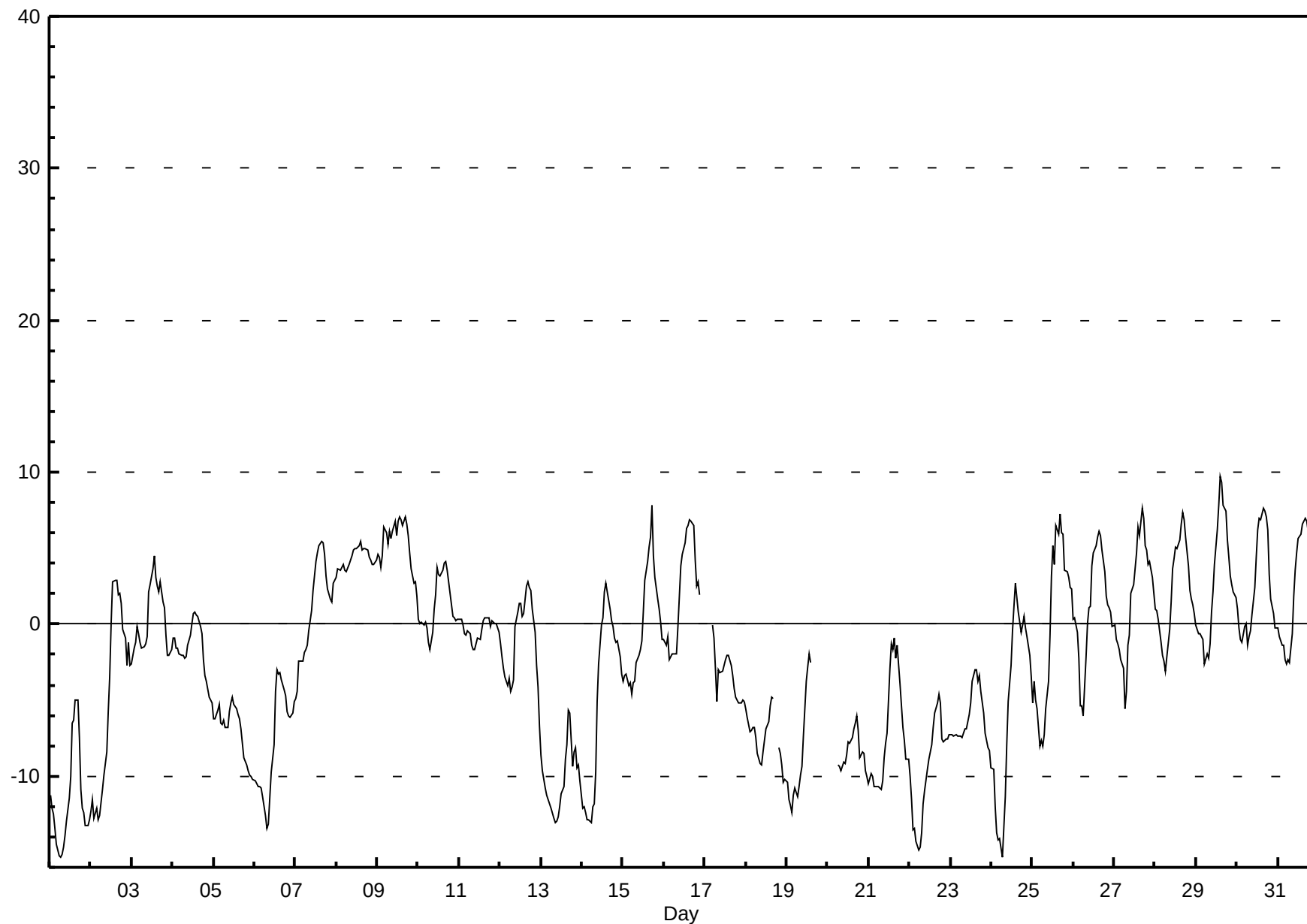
External Temperature (ET) - °C

Beaverlodge - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.8 °C on Mar 29 15:00 Maximum Daily Average: 5.3 °C on Mar 9																				Hours in Service: 744 Hours of Data: 721 Hours of Missing Data: 23 Hours of Calibration: 0 Percent Operational Time: 96.9							
Minimum Value: -15 °C on Mar 1 07:00 Maximum Diurnal Average: 1.6 °C at hour 16 Monthly Average: -2.42 °C										Minimum Daily Average: -11.6 °C on Mar 1 Minimum Diurnal Average: -6.0 °C at hour 7 Percentiles: P ₁ = -14.5 P ₁₀ = -10.8 Q ₁ = -6.9 Median = -1.6 Q ₃ = 2.1 P ₉₀ = 5.0 P ₉₉ = 7.6																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Mar	-11	-12	-12	-13	-14	-15	-15	-15	-15	-14	-13	-11	-10	-6	-6	-5	-5	-7	-11	-12	-12	-13	-13	-13	-11.6	-5.0	
2-Mar	-12	-12	-13	-12	-13	-13	-12	-11	-10	-8	-6	-4	0	3	3	3	2	2	1	0	-1	-3	-1	-3	-4.9	2.9	
3-Mar	-3	-2	-1	0	-1	-1	-2	-1	-1	-1	2	3	4	4	3	2	2	3	1	1	-1	-2	-2	-2	0.3	4.5	
4-Mar	-1	-1	-2	-2	-2	-2	-2	-2	-2	-1	-1	0	1	1	1	0	0	-1	-2	-3	-4	-5	-5	-5	-1.7	0.8	
5-Mar	-6	-6	-6	-5	-7	-7	-6	-7	-7	-6	-5	-5	-5	-6	-6	-6	-7	-8	-9	-9	-10	-10	-10	-10	-7.0	-4.8	
6-Mar	-10	-10	-11	-11	-11	-11	-13	-13	-13	-11	-10	-8	-4	-3	-3	-3	-4	-4	-5	-6	-6	-6	-6	-5	-7.8	-3.0	
7-Mar	-5	-4	-2	-2	-2	-2	-2	-1	0	1	2	3	4	5	5	5	5	5	3	2	2	1	3	3	1.2	5.5	
8-Mar	3	4	4	4	4	4	3	4	4	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4.3	5.4	
9-Mar	5	4	4	5	6	6	5	6	6	6	7	6	7	7	7	7	7	7	6	5	4	3	3	2	5.3	7.1	
10-Mar	0	0	0	0	0	0	-1	-2	-1	1	2	4	3	3	4	4	4	4	3	1	1	0	0	0	1.3	4.2	
11-Mar	0	0	0	-1	-1	0	-1	-1	-2	-2	-1	-1	-1	0	0	0	0	0	0	0	0	0	0	-1	-0.4	0.4	
12-Mar	-1	-2	-3	-4	-4	-4	-4	-4	-4	0	1	1	1	1	1	2	3	2	2	1	-1	-3	-4	-7	-1.2	2.8	
13-Mar	-9	-10	-11	-11	-12	-12	-12	-13	-13	-13	-13	-12	-11	-11	-9	-8	-6	-6	-9	-8	-8	-9	-9	-10	-10.2	-5.7	
14-Mar	-12	-12	-12	-13	-13	-13	-12	-12	-10	-5	-3	0	0	2	3	2	1	0	0	-1	-1	-1	-2	-3	-4.9	2.7	
15-Mar	-4	-3	-3	-4	-4	-5	-4	-4	-2	-2	-2	-1	1	3	4	5	6	8	5	3	2	1	0	-1	-0.1	7.9	
16-Mar	-1	-1	-1	-2	-2	-2	-2	-2	0	2	4	5	5	6	7	7	7	6	4	2	3	2	N	N	2.1	6.9	
17-Mar	N	N	N	N	0	-1	-3	-5	-3	-3	-3	-3	-2	-2	-2	-3	-3	-4	-5	-5	-5	-5	-5	-5	-3.4	-0.1	
18-Mar	-6	-6	-7	-7	-7	-7	-7	-8	-9	-9	-8	-8	-7	-6	-5	-5	-5	N	N	-8	-8	-9	-10	-10	-7.5	-4.8	
19-Mar	-10	-12	-12	-12	-11	-11	-11	-11	-10	-9	-7	-4	-3	-2	-2	N	N	N	N	N	N	N	N	N	N	--	-1.9
20-Mar	N	N	N	N	N	N	-9	-9	-10	-9	-9	-9	-8	-8	-7	-7	-7	-6	-7	-9	-8	-8	-10	-10	-8.3	-6.0	
21-Mar	-10	-10	-10	-11	-11	-11	-11	-11	-10	-9	-8	-7	-3	-1	-2	-1	-2	-1	-4	-5	-7	-8	-9	-9	-7.1	-0.9	
22-Mar	-10	-11	-14	-13	-14	-15	-15	-14	-12	-11	-10	-9	-8	-8	-7	-6	-5	-5	-5	-8	-8	-8	-8	-7	-9.5	-4.6	
23-Mar	-7	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-4	-3	-3	-4	-3	-4	-6	-7	-8	-8	-8	-6.2	-3.0	
24-Mar	-9	-10	-12	-14	-14	-14	-15	-13	-11	-8	-5	-3	0	1	3	2	1	0	0	1	0	-1	-2	-3	-5.4	2.7	
25-Mar	-5	-4	-5	-6	-8	-8	-8	-7	-6	-4	-1	3	5	4	7	6	7	6	6	4	3	3	2	2	-0.1	7.2	
26-Mar	0	0	0	-2	-5	-5	-6	-2	0	1	1	4	5	5	6	6	6	5	4	2	1	1	1	0	1.1	6.1	
27-Mar	0	-1	-1	-2	-2	-3	-6	-4	-1	-1	2	3	4	5	6	6	8	7	5	5	4	4	3	2	1.7	7.6	
28-Mar	1	1	0	-1	-2	-2	-3	-2	0	1	4	4	5	5	6	7	7	7	6	4	2	2	1	1	2.2	7.4	
29-Mar	0	-1	-1	-1	-1	-3	-2	-2	-1	1	2	4	6	8	10	9	8	7	6	4	3	3	2	2	2.6	9.8	
30-Mar	1	0	-1	-1	0	0	-1	-1	0	1	2	4	6	7	7	8	7	7	6	3	2	1	0	0	2.4	7.7	
31-Mar	0	-1	-1	-1	-2	-3	-2	-2	-1	2	4	5	6	6	7	7	7	7	6	5	3	2	0	1	2.2	7.0	
																									Diurnal Average		
																									Diurnal Maximum		
N - Not Valid																											

Hourly Averages

External Temperature (ET) - °C
Beaverlodge - March 2012



Hourly Averages

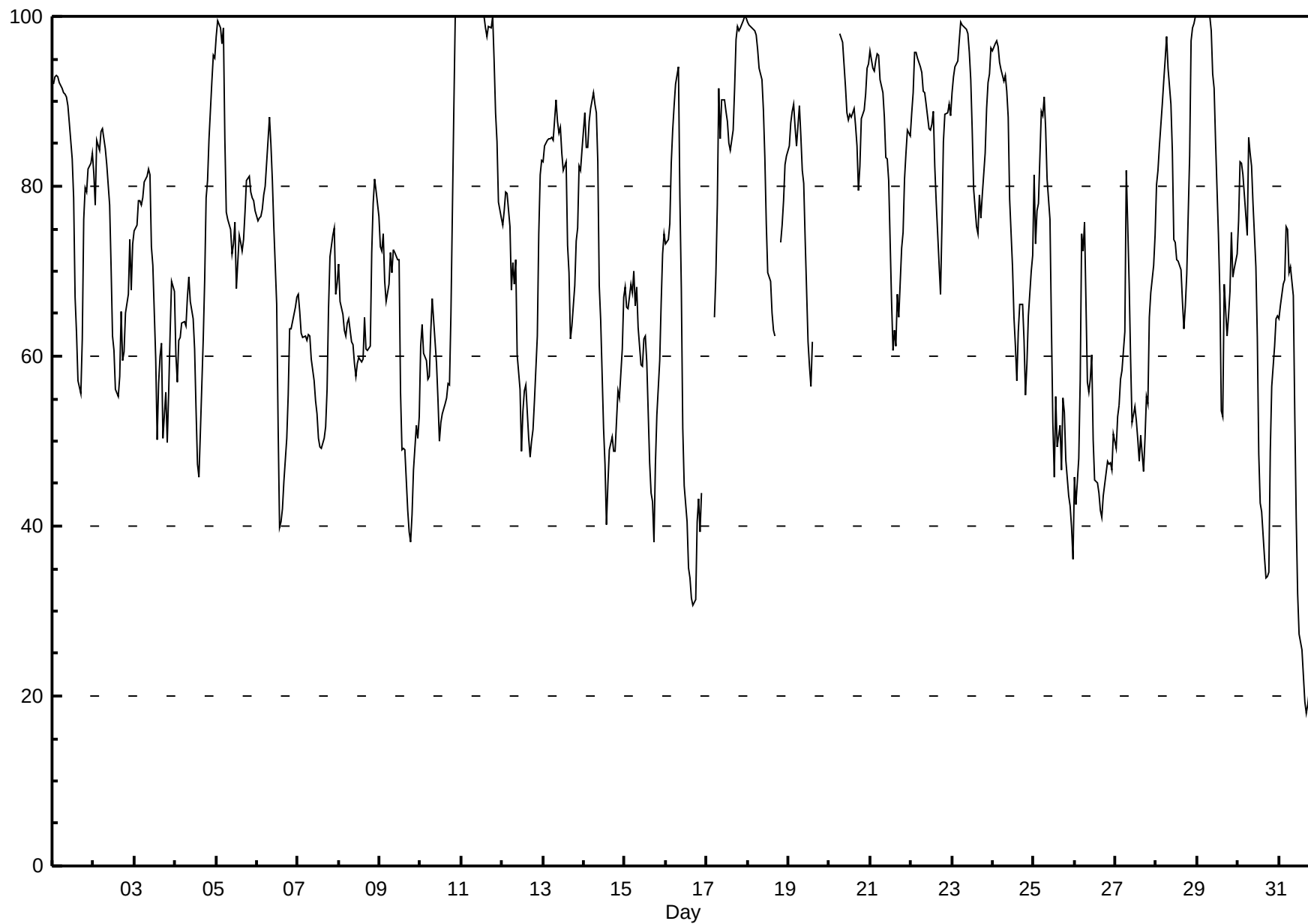
Relative Humidity (RH) - %

Beaverlodge - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 100.0 % on Mar 10 21:00 Maximum Daily Average: 96.5 % on Mar 11																								Hours in Service: 744 Hours of Data: 721 Hours of Missing Data: 23 Hours of Calibration: 0 Percent Operational Time: 96.9		
Minimum Value: 18 % on Mar 31 17:00 Maximum Diurnal Average: 83.5 % at hour 7 Monthly Average: 71.81 %												Minimum Daily Average: 44.1 % on Mar 31 Minimum Diurnal Average: 57.8 % at hour 16 Percentiles: P ₁ = 25.8 P ₁₀ = 47.8 Q ₁ = 59.5 Median = 72.7 Q ₃ = 86.6 P ₉₀ = 95.8 P ₉₉ = 100.0														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	92	93	93	93	92	92	91	91	91	90	87	83	79	67	63	57	56	62	76	80	79	82	83	84	81.4	93.0
2-Mar	81	78	85	84	86	87	86	84	83	78	70	62	61	56	55	58	65	59	60	65	67	74	68	73	72.0	86.8
3-Mar	75	75	78	78	78	79	81	81	82	81	73	71	60	50	57	60	62	50	56	50	56	63	69	68	68.0	82.1
4-Mar	60	57	62	62	64	64	64	67	69	66	64	61	54	47	46	51	62	69	79	81	86	92	95	95	67.4	95.4
5-Mar	98	99	99	97	99	86	77	76	75	72	73	76	68	74	73	72	74	77	81	81	79	79	78	77	80.8	99.4
6-Mar	76	76	76	77	79	80	85	88	85	81	75	66	52	40	41	42	45	50	56	63	63	64	66	67	66.4	88.1
7-Mar	67	65	63	62	62	62	63	62	60	57	55	53	50	49	49	50	52	56	66	72	74	75	67	69	60.9	75.1
8-Mar	71	67	65	63	62	64	64	62	61	59	58	59	60	59	60	64	61	61	61	72	78	81	80	77	65.3	80.9
9-Mar	73	72	74	69	66	68	72	70	73	72	71	71	56	49	49	49	42	39	38	41	47	52	50	53	59.1	74.4
10-Mar	61	64	60	60	57	58	63	67	62	59	55	50	52	53	54	55	57	57	65	89	100	100	100	100	66.5	100.0
11-Mar	100	100	100	100	100	100	100	100	100	100	100	100	100	100	99	98	99	99	100	95	89	85	78	76	96.5	100.0
12-Mar	75	77	79	79	75	68	71	68	71	60	56	49	54	56	57	50	48	50	51	55	62	74	81	83	64.7	83.0
13-Mar	83	85	85	86	86	86	85	90	88	86	87	84	82	83	73	70	62	64	68	74	75	82	82	84	80.4	90.2
14-Mar	89	85	85	88	89	91	90	89	83	68	64	51	47	40	45	49	51	49	49	52	56	55	61	67	66.3	91.0
15-Mar	68	66	66	68	67	70	66	68	63	59	59	62	62	59	48	44	43	38	47	53	59	66	72	74	60.4	74.4
16-Mar	73	74	76	83	87	89	92	94	79	68	51	45	41	35	34	32	31	31	41	43	39	44	N	N	58.2	94.0
17-Mar	N	N	N	N	65	70	78	92	86	90	90	89	88	85	84	87	92	97	99	98	99	99	100	100	89.3	100.0
18-Mar	99	99	99	99	98	98	96	94	93	89	83	76	70	69	65	63	62	N	N	73	75	78	83	84	83.9	99.2
19-Mar	85	87	89	90	87	85	89	86	82	80	74	62	59	56	62	N	N	N	N	N	N	N	N	N	--	89.6
20-Mar	N	N	N	N	N	N	98	98	97	92	89	88	88	88	89	87	85	79	82	88	89	91	94	94	89.8	97.9
21-Mar	96	94	94	95	96	95	92	91	88	83	83	81	66	61	63	61	67	65	73	75	81	84	87	86	81.5	95.9
22-Mar	89	91	96	96	95	94	93	91	91	90	87	87	87	89	82	78	71	67	76	85	88	89	90	88	87.1	95.8
23-Mar	91	93	94	95	97	99	99	99	98	98	96	93	87	80	75	74	79	76	79	84	89	92	93	96	89.9	99.3
24-Mar	96	97	97	96	95	94	92	93	91	88	78	71	65	61	57	63	66	66	62	55	59	65	70	72	77.0	97.1
25-Mar	81	73	77	78	89	88	91	87	81	76	64	52	46	55	49	52	47	55	53	48	44	42	40	36	62.7	90.5
26-Mar	46	43	48	57	74	72	76	57	56	57	60	50	45	45	44	42	41	44	46	48	47	48	47	51	51.8	75.7
27-Mar	49	53	54	57	58	63	82	75	68	60	52	54	52	50	48	51	46	50	55	54	65	67	71	74	58.8	81.9
28-Mar	80	82	85	90	92	95	98	94	90	84	74	73	71	71	70	66	63	66	70	83	97	99	99	100	83.0	100.0
29-Mar	100	100	100	100	100	100	100	100	98	93	92	85	74	67	54	53	68	62	65	68	75	69	70	72	81.9	100.0
30-Mar	76	83	83	81	77	74	86	84	82	78	70	62	49	43	42	36	34	34	35	49	57	61	64	65	62.7	85.8
31-Mar	64	66	68	69	75	75	70	70	67	53	41	32	27	25	22	19	18	19	21	25	26	30	38	35	44.1	75.3
79.1 79.1 80.3 81.1 81.6 81.5 83.5 82.8 80.4 76.4 72.0 67.7 62.9 60.2 58.3 57.8 58.2 58.4 62.3 66.6 70.0 72.8 75.0 75.9 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 98.6 97.7 98.9 98.6 100.0 98.2 100.0 100.0 100.0																									Diurnal Average	Diurnal Maximum
N - Not Valid																										

Hourly Averages

Relative Humidity (RH) - %
Beaverlodge - March 2012



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2012

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	10	10	9	11	13	14	13	10	9	8	8	5	4	0	1	4	6	4	4	4	4	2	3	4	4.3	13.8
Dir	11	13	357	317	319	324	327	332	334	340	340	336	18	339	180	100	88	74	88	79	111	143	157	116	353	324
2 Spd	3	3	3	3	2	3	3	4	4	4	3	2	20	37	41	38	29	25	22	12	13	1	6	2	8.9	41.4
Dir	154	148	62	73	90	104	100	96	134	128	101	217	256	262	267	268	260	271	279	259	268	160	260	111	262	267
3 Spd	4	2	2	5	4	3	4	3	3	5	20	28	25	22	26	27	25	26	16	25	16	11	14	11	11.1	27.9
Dir	67	194	240	255	175	124	73	74	152	358	283	269	282	303	324	300	279	287	280	268	252	249	249	265	281	269
4 Spd	19	22	15	14	9	13	7	12	11	11	12	12	14	13	14	17	16	13	12	10	8	2	4	3	11.2	21.6
Dir	257	253	244	250	240	237	246	243	242	231	239	253	277	281	278	246	232	238	226	224	209	178	202	188	245	253
5 Spd	3	3	2	2	3	2	8	7	6	12	15	16	19	17	15	17	18	16	13	13	10	12	13	11	9.5	18.8
Dir	169	80	89	260	43	303	295	294	302	310	317	318	327	352	352	336	336	323	324	327	332	327	321	310	327	327
6 Spd	11	9	9	3	3	3	5	6	7	5	8	11	15	31	34	35	31	30	27	20	19	19	21	20	12.8	34.9
Dir	305	315	313	316	51	62	96	91	119	156	202	219	234	258	264	262	249	245	250	248	251	247	248	245	252	262
7 Spd	14	12	30	27	23	25	19	22	32	33	40	39	43	43	40	42	40	31	22	14	8	0	2	11	25.3	43.3
Dir	239	246	259	259	263	267	272	272	266	266	265	265	267	266	265	262	256	251	247	238	232	40	289	247	261	266
8 Spd	18	24	20	30	38	25	25	32	40	27	24	15	12	9	6	4	6	6	7	8	7	9	8	4	12.1	39.8
Dir	242	252	249	249	256	254	250	255	263	262	260	242	234	237	197	115	77	90	99	72	81	100	116	140	248	263
9 Spd	11	14	6	2	25	14	20	33	28	26	29	38	39	41	40	47	40	36	39	33	20	23	28	12	25.0	47.1
Dir	191	183	168	168	230	220	219	233	231	236	246	257	269	266	263	255	261	267	265	266	265	264	259	273	251	255
10 Spd	14	16	10	7	11	13	12	11	8	2	6	6	10	10	12	8	6	6	6	6	6	3	5	6	2.8	15.7
Dir	262	252	245	252	272	261	235	218	239	152	194	193	170	126	118	109	83	50	39	74	29	321	306	99	219	252
11 Spd	6	5	7	6	6	3	4	7	6	8	5	2	5	4	2	5	5	5	7	8	3	8	6	17	1.9	17.1
Dir	121	135	103	107	61	53	200	158	119	125	115	185	21	327	59	133	138	303	273	272	158	238	209	235	165	235
12 Spd	19	18	17	16	6	5	3	4	5	4	8	15	21	22	24	24	26	23	3	6	3	15	16	23	3.3	25.6
Dir	233	228	233	233	250	273	38	55	59	86	123	108	92	80	84	80	75	72	55	26	346	314	320	312	71	75
13 Spd	22	21	18	15	19	19	19	21	16	14	12	14	13	9	8	8	4	5	5	5	3	1	8	10	10.9	22.0
Dir	319	322	323	323	326	324	322	313	319	320	316	315	317	317	323	313	49	106	67	34	24	226	332	11	326	319
14 Spd	10	4	4	6	3	3	3	3	3	0	4	5	9	7	11	19	18	20	21	10	5	3	2	2	5.6	21.2
Dir	16	350	329	50	124	108	84	119	76	85	80	174	154	150	118	93	81	85	96	123	130	78	179	133	96	96
15 Spd	4	5	4	6	4	5	6	9	16	24	21	17	16	14	12	3	3	1	4	6	4	5	5	7	6.7	23.6
Dir	70	60	95	77	110	85	95	116	107	105	99	118	92	97	93	14	147	96	323	9	17	49	324	2	89	105
16 Spd	11	5	4	5	5	6	4	1	8	11	18	28	27	30	32	29	26	19	16	11	7	6	5	2	12.0	31.6
Dir	319	1	300	171	194	220	220	242	241	228	235	238	241	239	238	243	246	246	242	250	276	229	264	117	242	238
17 Spd	2	4	3	10	5	5	12	11	8	17	15	17	18	17	16	15	16	15	14	11	9	10	8	9	8.9	17.7
Dir	107	41	337	332	352	20	321	314	56	66	55	55	45	53	36	19	15	18	13	2	336	313	314	336	18	45
18 Spd	10	7	6	7	12	13	15	15	12	15	15	16	15	12	11	12	12	10	7	6	4	8	11	4	9.5	15.9
Dir	348	326	316	290	300	310	309	309	310	306	299	305	317	332	331	332	1	5	31	27	9	337	29	328	326	305
19 Spd	9	1	5	2	3	1	9	7	10	11	6	4	1	1	4	5	10	11	6	4	8	4	2	5	2.8	11.4
Dir	7	247	277	111	85	351	319	347	16	27	23	74	132	149	76	45	133	134	134	106	54	79	78	70	52	27
20 Spd	2	6	5	5	12	16	16	13	10	7	13	14	8	9	11	9	9	7	4	8	6	10	10	8	7.1	16.0
Dir	178	109	90	86	87	84	95	86	26	67	43	39	3	341	11	23	18	32	117	104	96	110	98	85	64	84
21 Spd	9	8	10	10	8	7	9	5	5	3	12	8	2	3	4	2	7	4	12	7	2	8	9	6	3.6	12.1
Dir	73	72	89	101	99	119	116	129	150	154	120	150	125	39	51	75	20	61	105	39	282	282	287	285	94	120
22 Spd	2	4	1	2	1	3	7	1	9	10	8	9	10	9	11	8	8	8	10	9	4	2	3	4	4.8	10.5
Dir	313	266	288	356	287	351	336	341	11	11	347	347	346	352	349	30	33	27	65	61	13	271	317	12	4	349

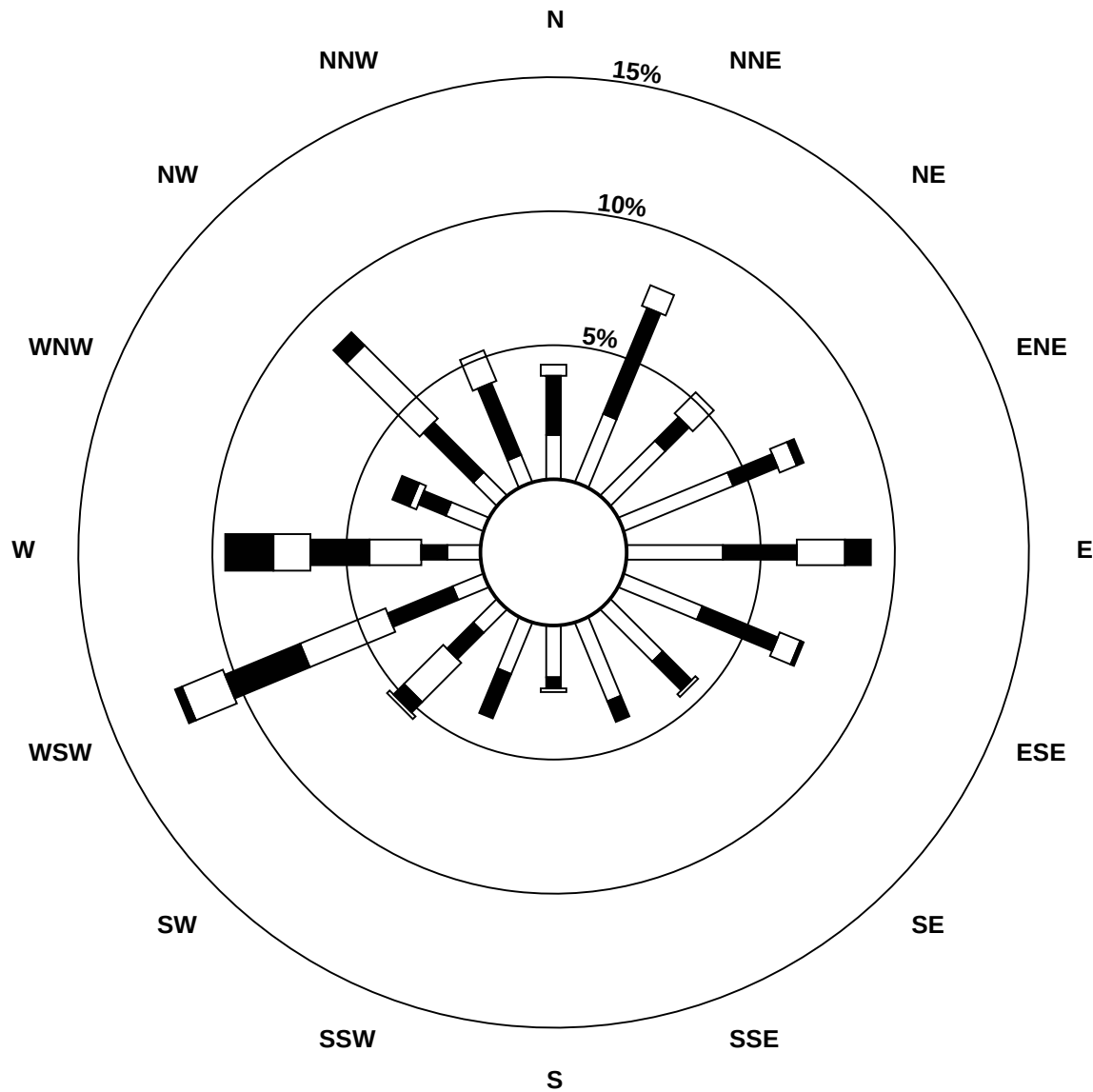
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - March 2012

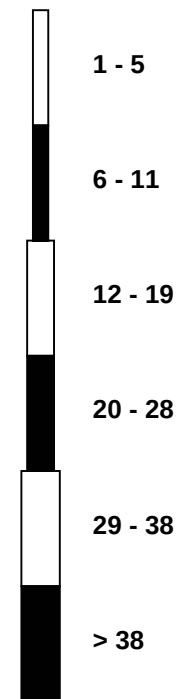
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
23 Spd	4	6	7	5	5	8	8	5	2	9	11	8	7	6	5	6	12	11	5	5	1	1	1	2	4.6	11.8			
Dir	21	32	44	51	38	105	89	32	45	105	96	104	117	80	71	130	126	95	43	13	30	271	115	281	81	126			
24 Spd	2	2	4	2	3	1	2	2	1	1	2	2	2	3	2	4	6	14	16	10	11	9	9	6	3.2	16.2			
Dir	62	84	229	23	30	29	13	50	206	106	146	129	143	128	152	250	359	342	33	355	24	20	331	21	14	33			
25 Spd	5	0	1	3	3	3	2	1	1	3	2	2	2	2	2	5	4	6	3	5	7	10	9	7	0.4	9.7			
Dir	78	275	99	62	210	120	128	109	197	180	120	115	37	268	147	23	163	161	159	287	351	319	317	328	360	319			
26 Spd	2	7	7	4	4	2	5	8	13	3	5	7	17	18	17	17	16	17	14	13	13	11	4	2	6.9	18.2			
Dir	337	325	354	359	189	207	8	351	14	60	190	116	92	88	88	89	70	67	60	55	59	73	74	249	65	88			
27 Spd	0	3	4	5	2	1	3	3	0	6	1	3	5	3	4	6	3	7	9	2	7	8	5	3	1.3	9.2			
Dir	277	226	153	86	206	35	285	320	13	21	186	200	152	93	70	28	32	17	21	292	14	75	195	234	46	21			
28 Spd	4	3	4	4	2	3	5	2	3	6	1	7	8	6	5	5	11	10	8	20	10	10	5	5	0.9	20.2			
Dir	75	91	157	203	208	327	73	126	164	111	86	139	140	130	10	72	39	52	32	251	250	16	313	231	82	251			
29 Spd	5	5	3	4	5	3	2	2	4	1	3	5	8	6	6	8	7	10	9	3	5	6	5	6	1.6	10.0			
Dir	91	83	133	109	116	157	163	245	282	269	247	117	138	133	75	87	325	251	274	227	152	219	198	227	168	251			
30 Spd	6	2	8	1	2	5	5	2	6	6	12	12	18	16	10	21	21	25	22	16	17	15	9	8	9.6	25.0			
Dir	193	101	197	48	242	40	176	173	208	202	221	223	229	239	258	257	266	262	258	243	242	245	239	256	241	262			
31 Spd	5	9	6	6	7	2	5	4	10	22	24	23	23	17	19	20	17	17	10	2	2	4	4	3	9.1	23.9			
Dir	234	239	205	208	189	201	240	201	203	240	248	252	272	275	270	263	259	261	283	1	13	17	57	68	253	248			
Spd	2.5	2.7	2.8	2.4	3.1	2.2	2.5	3.2	3.1	2.1	4.0	4.9	4.9	5.5	4.9	5.5	4.1	4.0	3.2	3.5	2.4	2.5	3.8	3.1	Diurnal Average				
Dir	285	270	263	268	260	279	282	273	272	265	259	252	267	276	289	281	284	291	294	286	296	298	282	286	Diurnal Maximum				
Spd	22.0	24.4	30.3	29.9	38.4	25.1	25.1	33.4	39.8	33.5	39.5	39.1	43.0	43.3	41.4	47.1	40.4	35.6	38.6	33.1	20.2	22.6	28.4	22.6	Diurnal Maximum				
Dir	319	252	259	249	256	254	250	233	263	266	265	265	267	266	267	255	261	267	265	266	265	264	259	312					
Maximum Speed Value: 47 km/h on Mar 9 16:00																		Minimum Speed Value: 0 km/h on Mar 25 02:00										Hours in Service: 744	
Maximum Daily Speed Average: 25.3 km/h on Mar 9																		Minimum Daily Speed Average: 0.4 km/h on Mar 25										Hours of Data: 744	
Maximum Diurnal Speed Average: 5.5 km/h at hour 14																		Minimum Diurnal Speed Average: 2.1 km/h at hour 10										Hours of Missing Data: 0	
Monthly Average Velocity: 3.37 km/h 277.0 deg																		Speed Percentiles: P ₁ = 0.6 P ₁₀ = 2.2 Q ₁ = 3.9 Median = 7.6 Q ₃ = 14.2 P ₉₀ = 22.2 P ₉₉ = 39.5										Percent Operational Time: 100.0	
All monthly, daily, and diurnal averages have been calculated using vector methods																													
Frequency Distribution																													
Speed Range (km/h)																													
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total																
North	27		38		11		0		0		0		76																
NorthEast	38		34		14		0		0		0		86																
East	54		45		19		10		0		0		128																
SouthEast	48		28		4		0		0		0		80																
South	28		18		1		0		0		0		47																
SouthWest	20		25		37		9		7		0		98																
West	21		20		19		38		16		17		131																
NorthWest	16		35		38		9		0		0		98																
Total	252		243		143		66		23		17		744																

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - March 2012

Maximum Speed: 48 km/h on Mar 9 16:00																				Maximum Daily Speed Average: 27.1 km/h on Mar 9										Hours in Service: 744	
Minimum Speed: 1 km/h on Mar 14 10:00																				Minimum Daily Speed Average: 4.6 km/h on Mar 25										Hours of Data: 744	
Maximum Diurnal Speed Average: 15.7 km/h at hour 16																				Minimum Diurnal Speed Average: 7.9 km/h at hour 24										Hours of Missing Data: 0	
Monthly Average Speed: 10.84 km/h																				Percentiles: P ₁ = 2.1 P ₁₀ = 3.3 Q ₁ = 4.8 Median = 8.1 Q ₃ = 14.3 P ₉₀ = 22.6 P ₉₉ = 39.9										Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	10	10	9	11	13	14	13	10	9	8	8	6	5	3	3	4	6	4	4	4	5	3	3	4	7.1	13.8					
2-Mar	3	3	4	3	3	4	3	4	4	4	3	3	20	38	42	39	29	25	22	12	13	5	7	2	12.3	41.6					
3-Mar	4	4	4	6	4	3	4	3	3	7	20	28	25	22	26	27	25	26	16	25	16	11	14	11	14.1	28.0					
4-Mar	19	22	15	14	9	13	7	12	11	11	12	12	15	14	15	17	16	13	12	10	8	4	5	3	12.1	21.8					
5-Mar	4	3	3	3	3	4	8	7	6	12	15	16	19	18	16	18	18	16	13	13	10	12	13	11	10.9	18.9					
6-Mar	12	9	9	3	3	3	5	6	8	5	8	11	15	32	34	35	31	30	27	20	20	19	21	20	16.1	35.1					
7-Mar	14	13	30	27	23	25	19	22	32	34	40	39	43	43	40	42	40	32	22	15	8	3	3	11	25.9	43.4					
8-Mar	18	25	20	30	39	25	25	32	40	27	24	15	12	9	7	5	6	6	7	8	7	9	8	4	17.0	39.9					
9-Mar	11	14	7	4	25	14	20	33	28	26	30	38	39	42	40	48	41	36	39	33	20	23	29	12	27.1	47.5					
10-Mar	15	16	11	7	12	13	12	12	9	3	6	7	11	11	12	8	6	6	6	7	6	4	5	6	8.8	15.8					
11-Mar	6	5	7	7	7	4	4	8	7	8	5	3	6	4	3	6	7	9	8	9	8	9	8	17	6.8	17.4					
12-Mar	19	18	17	16	7	7	5	5	6	4	8	15	21	22	24	24	26	23	6	7	5	15	16	23	14.1	25.6					
13-Mar	22	21	18	16	20	20	19	21	16	14	12	14	13	10	8	8	5	6	5	5	3	3	8	10	12.4	22.1					
14-Mar	10	4	5	6	3	4	3	3	3	1	4	5	9	8	11	19	19	20	21	11	5	4	2	3	7.7	21.3					
15-Mar	4	5	4	6	6	6	6	9	17	24	21	17	17	14	13	6	5	2	4	7	6	6	9	9	9.3	23.6					
16-Mar	12	6	5	5	5	6	6	3	8	11	19	28	27	30	32	29	26	19	16	11	7	6	6	3	13.6	31.8					
17-Mar	3	5	3	10	8	5	12	11	8	17	15	17	18	17	16	15	16	15	14	12	10	10	8	10	11.5	17.9					
18-Mar	10	7	7	7	12	13	15	15	13	15	16	16	16	12	11	12	13	11	8	7	5	9	11	6	11.0	16.1					
19-Mar	10	7	5	3	3	3	9	8	10	12	6	4	3	3	5	5	10	11	6	4	8	5	4	5	6.3	11.5					
20-Mar	3	6	5	5	12	16	16	13	11	9	14	14	9	10	11	9	9	8	6	8	6	10	10	8	9.5	16.1					
21-Mar	9	8	11	10	8	7	9	5	5	6	12	8	3	4	4	3	7	7	14	7	5	8	9	7	7.4	13.8					
22-Mar	3	4	2	4	3	4	7	2	9	10	8	10	10	9	11	9	8	8	10	9	5	3	3	4	6.6	10.8					
23-Mar	4	6	7	5	5	8	8	6	3	9	12	9	7	7	6	7	12	11	6	6	3	2	2	3	6.4	12.3					
24-Mar	4	4	4	3	5	2	3	2	3	1	4	3	2	3	3	4	10	16	16	13	12	10	9	9	6.0	16.4					
25-Mar	5	2	2	4	3	3	3	2	2	3	3	3	3	5	3	7	5	7	3	8	8	10	9	7	4.6	9.8					
26-Mar	4	8	8	6	5	4	5	9	13	7	6	8	17	18	17	17	16	17	14	13	13	11	5	4	10.2	18.5					
27-Mar	4	4	5	5	2	2	7	4	3	6	4	4	5	5	5	6	4	8	9	4	8	9	6	6	5.2	9.3					
28-Mar	4	4	4	4	4	4	5	3	3	6	3	8	9	7	6	6	11	10	8	22	12	11	10	5	7.0	21.7					
29-Mar	5	6	4	4	5	4	3	3	4	3	4	5	8	7	7	9	9	12	9	5	5	6	6	6	5.8	11.8					
30-Mar	7	4	9	4	4	5	6	3	6	6	12	12	18	16	12	21	21	25	22	16	17	15	9	9	11.7	25.1					
31-Mar	7	10	7	6	7	4	5	5	10	23	24	24	23	18	20	20	18	18	11	3	3	4	4	3	11.6	24.1					
8.5 8.5 8.1 7.9 8.6 8.1 8.8 9.1 10.1 10.7 12.2 13.0 14.5 14.9 15.0 15.7 15.3 14.7 12.5 10.8 8.7 8.3 8.4 7.9																									Diurnal Average						
22.1 24.5 30.3 30.0 38.5 25.1 25.3 33.4 39.9 33.5 39.6 39.2 43.1 43.4 41.6 47.5 40.7 35.7 38.8 33.2 20.4 22.7 28.5 22.7																									Diurnal Maximum						
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - March 2012

Maximum Value: 98.5 deg on Mar 25 02:00																			Hours in Service: 744						
Minimum Value: 1.9 deg on Mar 6 21:00																			Hours of Data: 744						
																			Hours of Missing Data: 0						
Percentiles: P ₁ = 2.8 P ₁₀ = 4.9 Q ₁ = 7.7 Median = 16.4 Q ₃ = 38.1 P ₉₀ = 61.1 P ₉₉ = 92.5																			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-Mar	4	5	20	5	3	5	4	7	7	9	11	24	39	91	77	14	6	22	16	17	45	50	23	13	90.7
2-Mar	26	13	45	16	38	37	28	17	24	23	34	66	10	7	6	5	4	7	4	8	8	79	40	42	79.3
3-Mar	28	73	76	43	17	35	32	35	42	43	14	4	8	13	13	11	5	8	5	6	8	9	3	8	75.8
4-Mar	6	8	3	5	6	4	7	5	2	10	7	18	11	11	19	11	8	10	3	5	4	68	49	16	67.8
5-Mar	47	24	41	61	40	86	18	6	4	5	5	8	6	20	18	12	8	6	6	7	10	10	5	6	85.7
6-Mar	7	10	8	33	17	15	6	10	18	15	17	8	16	12	7	6	5	4	5	3	2	2	3	2	32.5
7-Mar	4	12	4	3	4	4	4	3	3	3	4	4	5	5	6	5	4	4	3	5	9	85	54	5	84.6
8-Mar	5	6	4	4	4	4	6	5	4	4	4	12	4	6	21	35	8	10	23	14	19	11	16	28	34.8
9-Mar	9	6	27	68	4	7	7	3	2	5	4	10	6	6	6	7	7	4	5	4	7	4	6	18	68.0
10-Mar	16	4	64	46	27	11	15	23	26	38	23	21	20	13	7	10	12	18	16	35	9	39	7	50	64.4
11-Mar	13	22	17	14	21	63	23	18	18	16	24	44	48	38	59	45	41	79	43	36	86	41	32	12	86.4
12-Mar	4	3	4	4	63	56	54	29	34	19	12	9	7	6	5	4	4	5	67	40	68	9	5	4	67.9
13-Mar	5	5	6	7	7	7	7	8	20	11	7	11	13	14	14	24	49	17	14	15	46	86	17	7	86.5
14-Mar	7	25	31	25	16	42	37	25	54	76	29	24	10	16	19	6	8	7	6	28	16	19	54	36	75.8
15-Mar	33	8	23	11	44	26	11	7	13	4	6	9	11	16	16	60	66	86	60	33	52	49	94	42	94.3
16-Mar	44	44	58	9	13	15	61	70	8	5	9	7	7	7	6	7	5	7	6	5	7	16	27	72	72.2
17-Mar	48	13	32	17	64	47	14	11	21	11	10	10	8	7	14	6	6	6	9	14	13	7	9	13	64.2
18-Mar	9	13	12	9	10	6	6	5	8	7	8	11	11	11	15	15	17	19	21	18	31	21	11	50	49.9
19-Mar	26	80	27	71	62	87	6	19	6	6	17	44	82	89	32	30	32	6	17	25	15	30	85	18	88.9
20-Mar	56	32	25	24	10	6	6	15	15	43	14	6	23	17	9	9	9	12	54	21	16	8	5	6	56.1
21-Mar	5	7	11	18	8	13	13	13	28	58	13	15	41	48	32	59	9	53	33	21	64	12	12	13	64.5
22-Mar	55	45	75	71	65	42	26	93	20	11	17	25	14	17	13	24	14	17	12	10	51	46	33	16	93.0
23-Mar	15	10	11	21	26	16	15	21	62	19	7	18	16	31	30	22	16	8	28	40	76	70	94	64	93.6
24-Mar	72	64	26	66	61	61	48	44	89	41	52	50	38	37	59	42	48	28	8	35	28	31	19	52	89.0
25-Mar	22	99	78	51	27	25	32	57	55	39	58	58	71	92	61	52	39	20	41	56	28	7	8	9	98.5
26-Mar	69	16	26	65	58	73	32	10	5	68	37	54	9	9	10	8	10	5	5	5	7	7	23	83	83.3
27-Mar	95	49	28	23	44	67	70	52	88	22	95	42	32	60	42	31	41	18	8	74	32	27	25	62	94.5
28-Mar	60	64	24	12	57	58	12	63	35	33	96	25	20	34	32	29	15	12	16	39	39	17	60	20	96.4
29-Mar	18	17	36	39	22	40	45	61	43	78	47	38	27	28	49	36	40	33	15	57	29	20	20	8	78.0
30-Mar	20	58	22	83	91	8	37	77	9	10	6	7	14	9	34	13	9	5	8	3	3	5	13	41	91.2
31-Mar	70	23	21	26	11	67	17	46	7	15	8	15	14	19	22	15	16	12	28	47	35	27	13	38	70.3
94.5 98.5 77.9 82.6 91.2 86.9 69.7 93.0 89.0 78.0 96.4 65.9 81.6 91.6 76.7 59.7 65.7 85.8 66.6 74.2 86.4 86.5 94.3 83.3																									

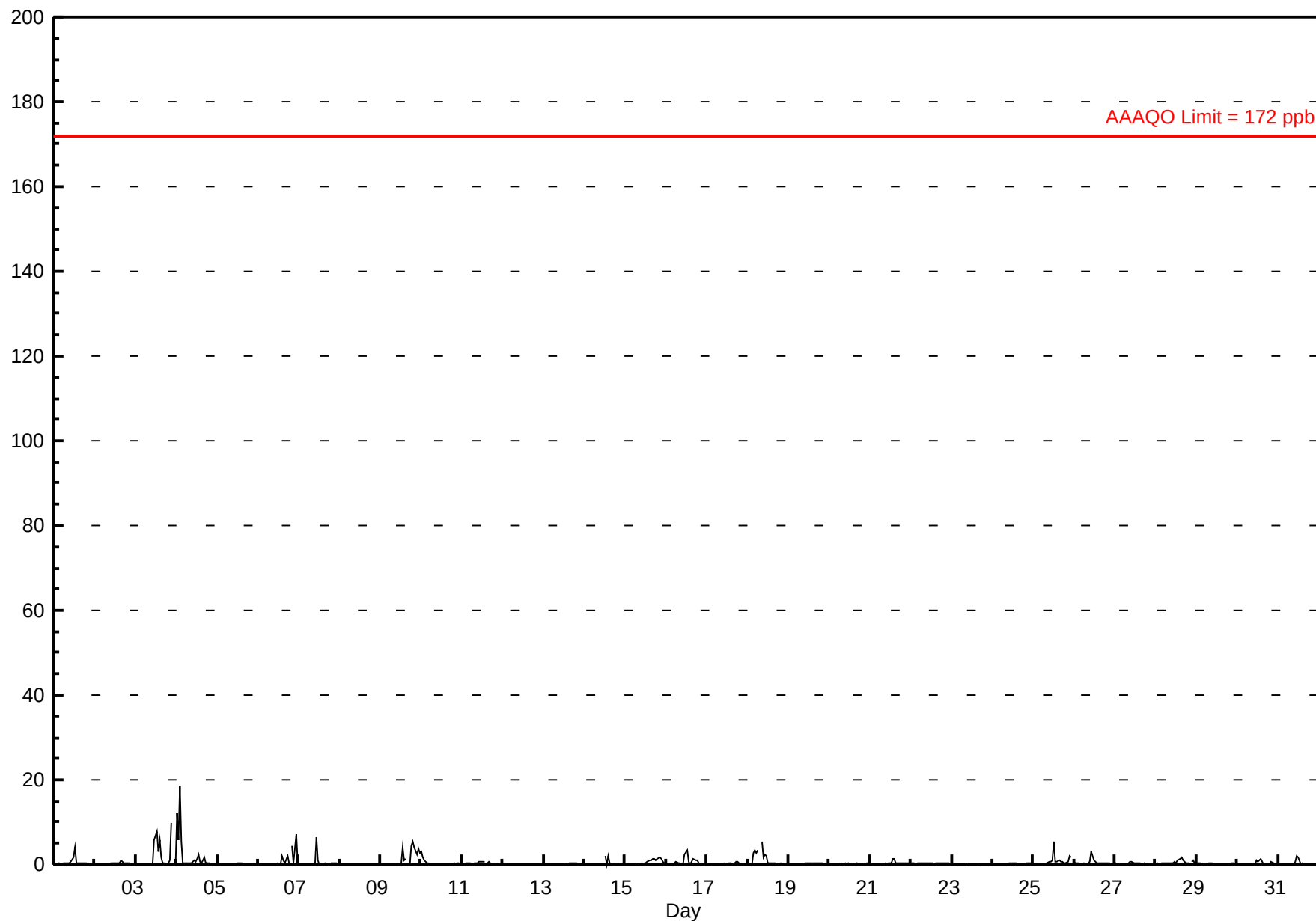
PAZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Valleyview - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 18.6 ppb on Mar 4 03:00 Maximum Daily Average: 2.4 ppb on Mar 4																				Hours in Service: 744 Hours of Data: 703 Hours of Missing Data: 41 Hours of Calibration: 39 Percent Operational Time: 99.7							
Minimum Value: 0 ppb on Mar 3 06:00 Minimum Daily Average: 0.0 ppb on Mar 8 Maximum Diurnal Average: 1.2 ppb at hour 13 Minimum Diurnal Average: 0.1 ppb at hour 8 Monthly Average: 0.46 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.9 P ₉₉ = 5.6																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Mar	0	A	0	0	0	0	0	0	0	0	1	2	4	0	0	0	0	0	0	0	0	0	0	0	0.5	4.0	
2-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	A	0.2	0.9
3-Mar	0	0	0	0	0	0	0	0	0	0	0	6	8	3	6	2	0	0	0	0	1	10	A	0	1.6	9.7	
4-Mar	12	6	19	5	0	0	0	0	0	0	1	1	1	2	1	0	2	0	0	0	0	A	0	0	2.4	18.6	
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4	
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	2	0	A	5	0	7	0	0.8	7.1		
7-Mar	0	0	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	0	A	0	0	0	0	0	0.4	6.5	
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.1	
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	1	A	0	4	5	4	2	4	3	1.3	5.3	
10-Mar	3	2	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	3.1	
11-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	0	1	0	0	0	0	0	0	0	0.2	0.6	
12-Mar	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	0	0	0	0	0	0	0	0	--	0.0	
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
14-Mar	0	0	0	0	0	0	0	0	0	0	0	A	2	0	2	0	0	0	0	0	0	0	0	0	0.2	2.1	
15-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	1	1	1	1	1	2	1	1	0	0.6	1.5	
16-Mar	0	0	0	0	0	0	1	0	0	A	0	2	3	1	0	1	1	1	1	0	0	0	0	0	0.5	3.4	
17-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.2	0.8	
18-Mar	0	0	0	3	3	3	3	A	5	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	1.1	5.4	
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.5	
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
23-Mar	0	0	A	0	0	0	0	0	0	0	0	0	N	N	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
24-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
25-Mar	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	1	2	2	A	0.8	5.3	
26-Mar	1	0	0	0	0	0	0	0	0	1	3	2	1	0	0	0	0	0	0	0	0	0	A	0	0.5	3.2	
27-Mar	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.8	
28-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	1	1	0	0	A	1	1	0	0.6	1.8		
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4	
30-Mar	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	A	0	1	0	0	0	0	0.2	1.4	
31-Mar	0	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0	A	0	0	0	0	0	0	0.2	2.1	
0.6 0.3 0.7 0.3 0.2 0.2 0.2 0.1 0.3 0.3 0.7 0.8 1.2 0.7 0.7 0.5 0.3 0.3 0.4 0.4 0.5 0.7 0.6 0.2 12.3 5.9 18.6 5.4 3.3 2.8 3.3 0.4 5.4 1.6 6.5 5.9 7.8 4.0 5.6 1.9 1.8 1.9 4.4 5.3 4.6 9.7 7.1 2.6																								Diurnal Average	Diurnal Maximum		
C - Calibration N - Not Valid A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																											



Hourly Maximums

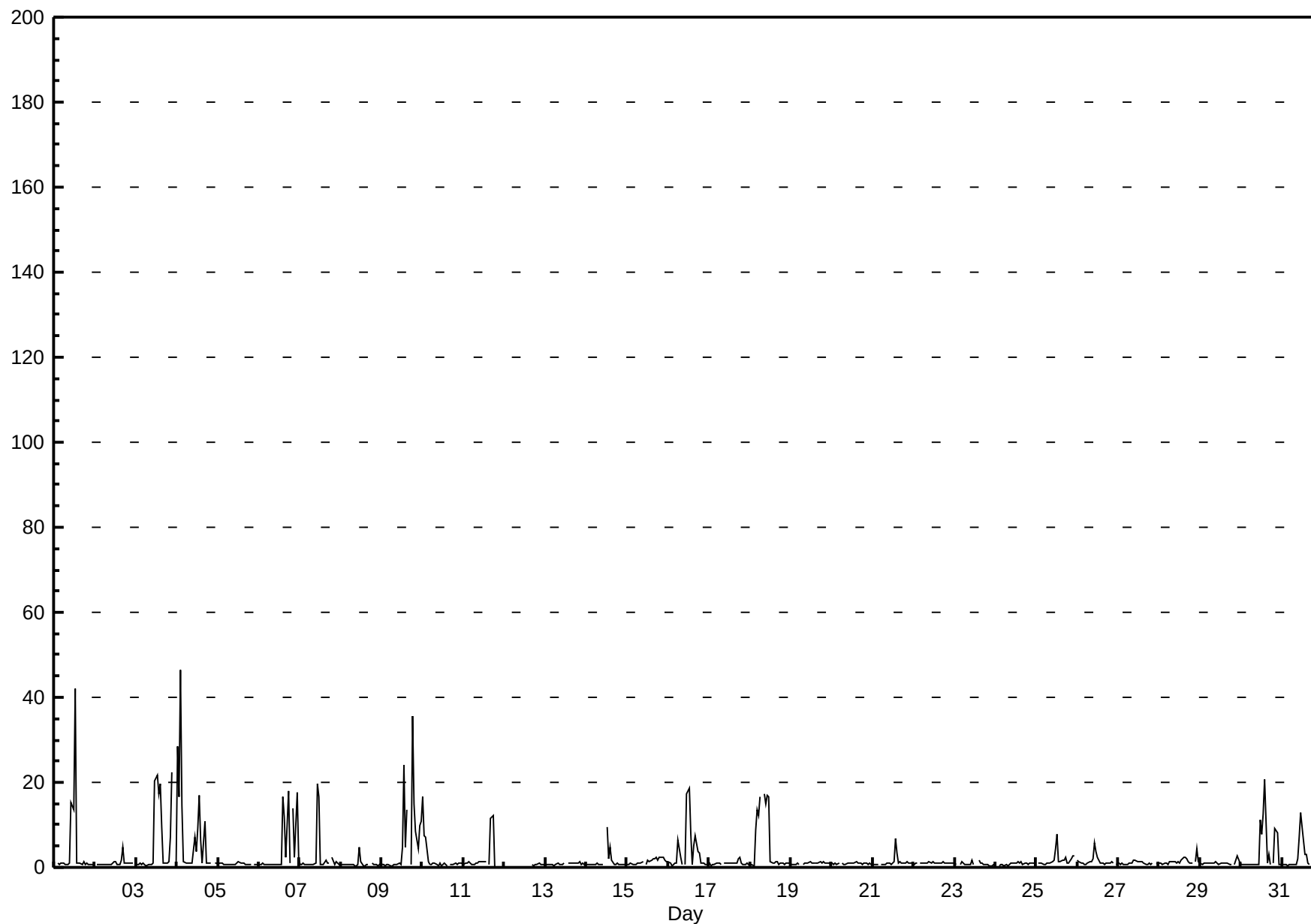
Sulphur Dioxide (SO₂) - ppb

Valleyview - March 2012

Maximum Value: 46.4 ppb on Mar 4 03:00																				Maximum Daily Average: 7.5 ppb on Mar 4					Hours in Service: 744	
Minimum Value: 0 ppb on Mar 11 19:00																				Minimum Daily Average: 0.8 ppb on Mar 5					Hours of Data: 703	
Maximum Diurnal Average: 5.5 ppb at hour 13																				Minimum Diurnal Average: 0.9 ppb at hour 8					Hours of Missing Data: 41	
Monthly Average: 2.25 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.9 Q ₃ = 1.2 P ₉₀ = 4.7 P ₉₉ = 21.3					Hours of Calibration: 39	
																				Percent Operational Time: 99.7						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	1	A	1	1	1	1	1	1	1	1	15	14	42	1	1	1	1	1	1	1	1	1	1	1	3.9	42.1
2-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	1	1	1	1	1	1	A	1.1	4.7
3-Mar	1	1	1	1	1	1	0	1	1	1	1	20	22	17	20	9	1	1	1	1	7	23	A	1	5.7	22.5
4-Mar	29	17	46	15	1	1	1	1	1	1	7	4	9	17	6	1	11	1	1	1	1	A	1	1	7.5	46.4
5-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.2
6-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	17	12	2	18	1	A	14	3	18	2	4.2	18.1
7-Mar	1	1	1	1	1	1	1	1	1	1	20	17	1	1	1	2	1	1	A	2	1	1	1	1	2.4	19.5
8-Mar	1	1	1	1	1	1	1	1	0	0	1	5	1	0	1	1	A	A	1	1	1	1	0	1	0.8	4.9
9-Mar	1	1	0	1	1	0	1	1	1	1	1	1	5	24	5	14	A	1	36	15	8	4	10	11	6.1	35.5
10-Mar	17	8	7	1	1	1	1	1	1	1	1	0	1	1	0	A	1	1	1	1	1	1	1	1	2.1	16.6
11-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	11	12	0	0	0	0	0	0	1.7	12.3
12-Mar	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	1	0	1	1	1	1	1	1	--	1.0
13-Mar	0	1	1	1	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
14-Mar	1	1	1	1	1	1	1	1	1	1	1	A	10	2	5	2	1	1	1	1	1	1	1	1	1.4	9.6
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	2	1	2	2	2	2	2	2	2	2	2	1	1.4	2.3
16-Mar	1	1	0	1	1	1	6	2	1	A	1	17	19	8	1	5	7	4	3	1	1	1	1	1	3.7	18.6
17-Mar	1	0	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1.0	2.4
18-Mar	1	1	0	9	14	12	17	A	17	15	17	17	1	1	1	1	1	1	1	1	1	1	1	1	5.7	17.4
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
21-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	7	3	1	1	1	1	1	1	1	1	1	1.3	6.7
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.3
23-Mar	1	1	A	1	1	1	1	1	1	1	2	1	N	N	2	1	1	1	1	1	0	0	0	1	0.8	1.8
24-Mar	0	A	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
25-Mar	A	1	1	1	1	1	1	1	1	1	2	5	8	2	2	2	2	2	1	1	2	3	3	A	1.8	7.9
26-Mar	2	1	1	1	1	1	1	1	1	2	6	4	2	1	1	1	1	1	1	1	1	1	A	1	1.5	5.8
27-Mar	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	1.7
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	3	2	1	1	1	A	1	4	1	1.5	4.5
29-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	3	1	1.0	2.8
30-Mar	1	1	1	1	1	1	1	1	1	1	1	11	8	12	21	1	3	1	A	1	9	8	1	1	3.6	20.8
31-Mar	1	1	1	0	1	1	1	1	1	2	7	13	10	3	3	1	1	A	1	1	1	1	1	1	2.2	12.9
2.3 1.6 2.5 1.5 1.2 1.1 1.5 0.9 1.4 1.5 3.3 4.9 5.5 3.8 3.5 2.4 2.1 2.1 2.2 1.5 2.2 2.1 2.0 1.2																								Diurnal Average		
28.6 16.8 46.4 14.7 13.7 12.2 16.7 2.3 17.4 14.9 19.5 20.3 42.1 24.1 20.8 13.6 11.5 18.1 35.5 15.0 13.8 22.5 17.6 11.0																								Diurnal Maximum		
C - Calibration N - Not Valid A - Automated Daily Zero Span																										

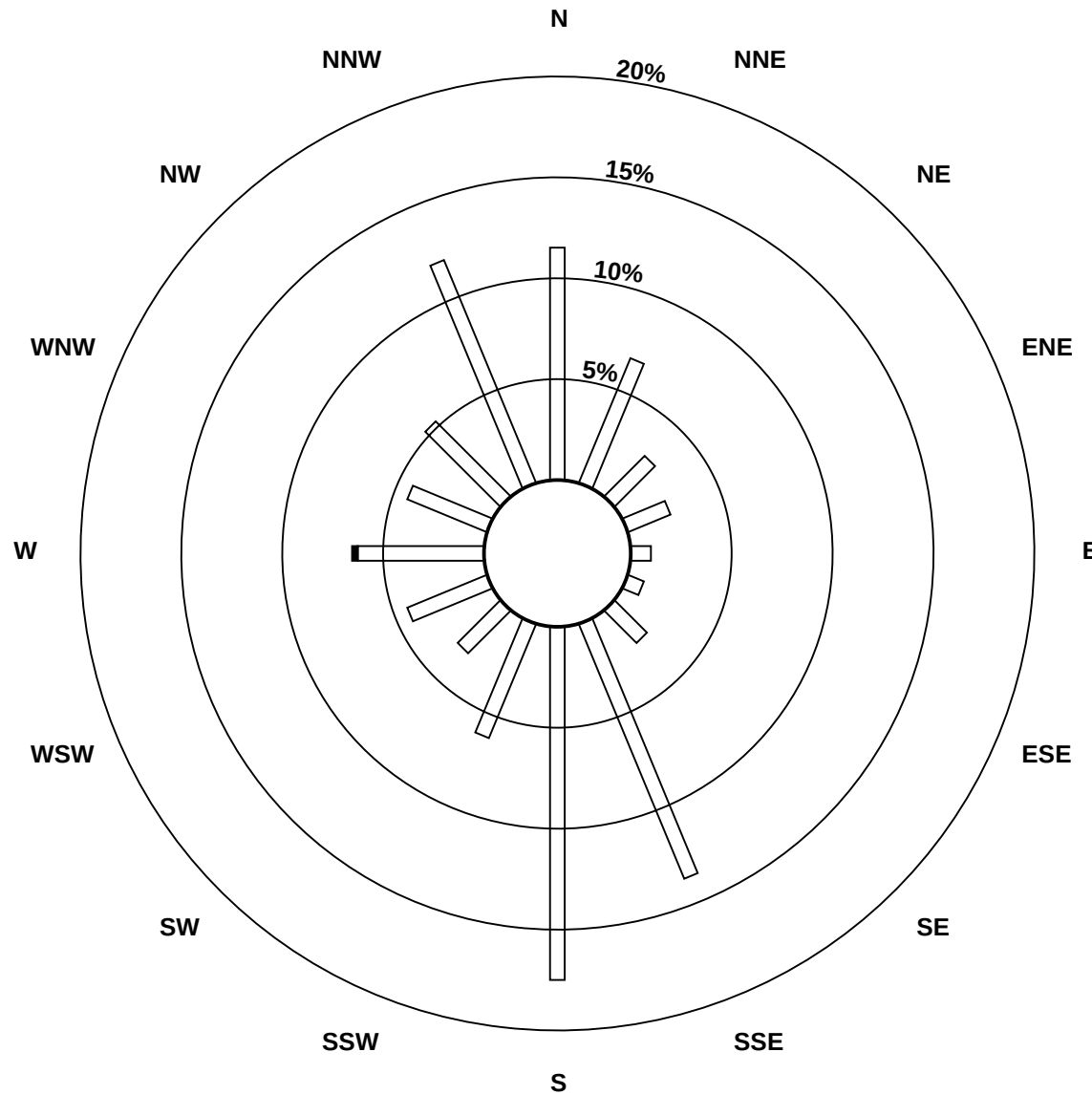
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb
Valleyview - March 2012

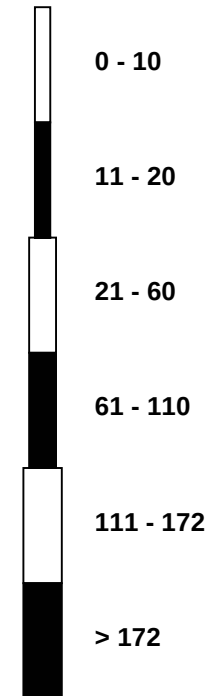


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - March 2012

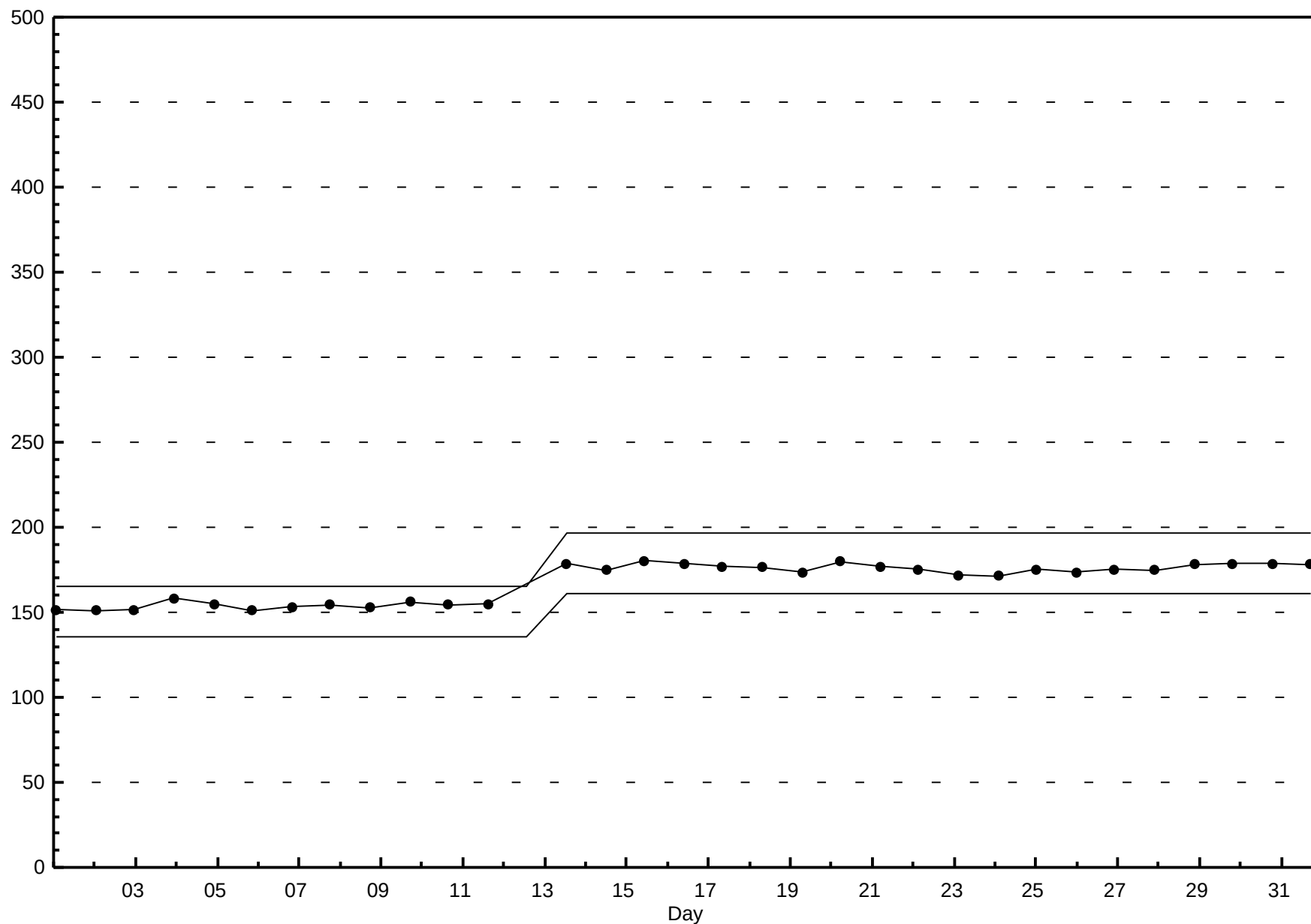


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Valleyview - March 2012



Hourly Averages

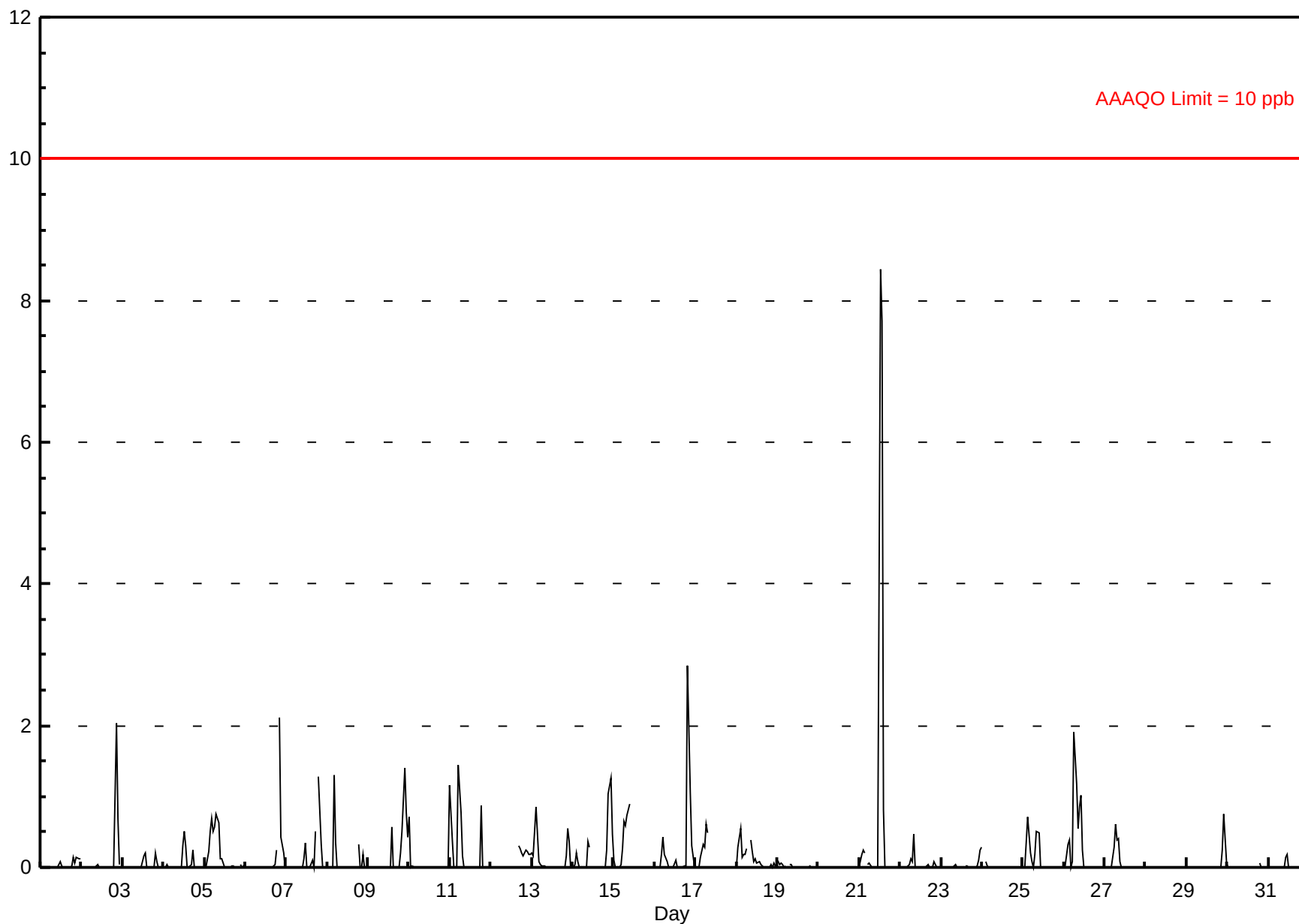
Hydrogen Sulphide (H₂S) - ppb

Valleyview - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744						
Maximum Value: 8.4 ppb on Mar 21 13:00 Maximum Daily Average: 0.8 ppb on Mar 21																				Hours of Data: 706						
Minimum Value: 0 ppb on Mar 1 01:00 Minimum Daily Average: 0.0 ppb on Mar 20																				Hours of Missing Data: 38						
Maximum Diurnal Average: 0.3 ppb at hour 13 Minimum Diurnal Average: 0.0 ppb at hour 16																				Hours of Calibration: 36						
Monthly Average: 0.12 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.0 P ₉₀ = 0.3 P ₉₉ = 1.9																				Percent Operational Time: 99.7						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
2-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	A	0.1	2.0
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.2
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0.1	0.5
5-Mar	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.8
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	2	0	0	0	0.1	2.1
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	1	0	0	0	0	0.1	1.3
8-Mar	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0.1	1.3
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	1	1	1	0	0.2	1.4
10-Mar	1	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	0.7
11-Mar	1	0	0	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0.2	1.4
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0.1	0.3
13-Mar	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0.1	0.9
14-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0.2	1.3
15-Mar	0	0	0	0	0	0	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
16-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	3	2	1	0	0	0.3	2.8
17-Mar	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	0.6
18-Mar	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	8	8	1	0	0	0	0	0	0	0	0	0	0.8	8.4
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.5
23-Mar	0	0	A	0	0	0	0	0	0	0	0	0	N	N	0	0	0	0	0	0	0	0	0	0	0.0	0.3
24-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
25-Mar	A	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.1	0.7
26-Mar	0	0	0	0	0	0	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.9
27-Mar	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.6
28-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.0	0.0
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0.0	0.7
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.1
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	2	0.1	1.6
0.1 0.0 0.1 0.1 0.1 0.1 0.2 0.1 0.1 0.1 0.1 0.0 0.3 0.3 0.0 0.0 0.0 0.0 0.1 0.2 0.3 0.2 0.1 0.1																									Diurnal Average	
1.2 0.4 0.9 0.7 1.3 1.4 1.9 1.2 0.7 0.9 1.0 0.3 8.4 7.7 0.8 0.1 0.3 0.5 0.9 2.8 2.1 1.4 1.3 1.6																									Diurnal Maximum	
C - Calibration N - Not Valid A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										

Hourly Averages

Hydrogen Sulphide (H_2S) - ppb
Valleyview - March 2012



Hourly Maximums

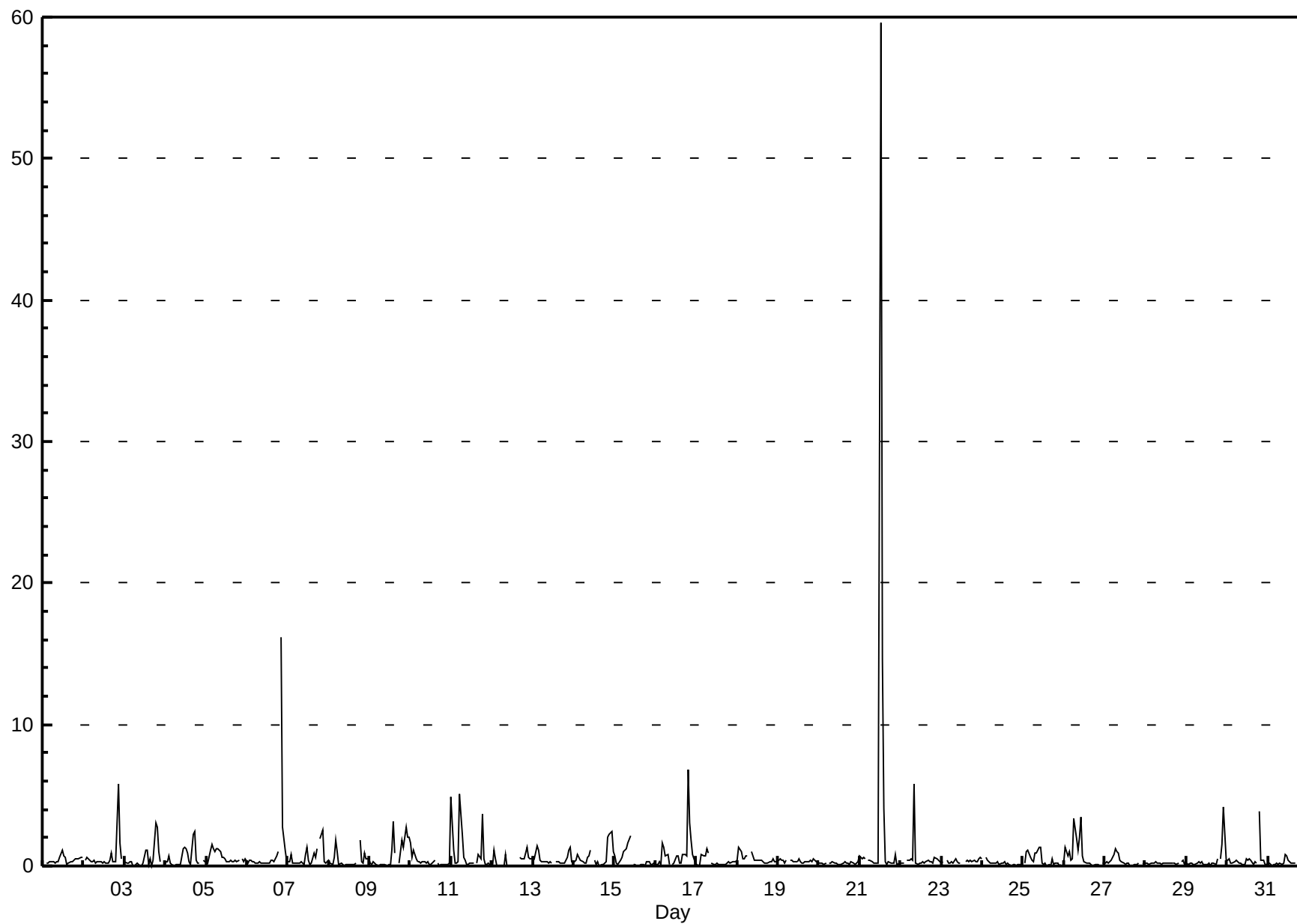
Hydrogen Sulphide (H₂S) - ppb

Valleyview - March 2012

Maximum Value: 59.6 ppb on Mar 21 13:00																				Hours in Service: 744						
Maximum Daily Average: 3.7 ppb on Mar 21																				Hours of Data: 706						
Minimum Value: 0 ppb on Mar 3 10:00																				Hours of Missing Data: 38						
Maximum Diurnal Average: 2.4 ppb at hour 13																				Hours of Calibration: 36						
Monthly Average: 0.63 ppb																				Percent Operational Time: 99.7						
Minimum Daily Average: 0.2 ppb on Mar 28																										
Minimum Diurnal Average: 0.3 ppb at hour 16																										
Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.5 P ₉₀ = 1.1 P ₉₉ = 5.7																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	A	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0.4	1.2
2-Mar	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	6	2	1	A	0.7	5.7
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	3	3	1	0	A	0	0.5	3.0
4-Mar	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0	0	2	2	0	0	0	A	0	0	0.6	2.4
5-Mar	0	0	1	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	1	0.6	1.6
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	16	3	1	0	1.2	16.2
7-Mar	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	A	2	3	0	0	0	0.6	2.6
8-Mar	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	A	2	0	0	1	0	1	0.4	1.9
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	A	0	1	2	1	3	2	2	0.8	3.1
10-Mar	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	1.6
11-Mar	5	1	0	0	0	5	2	1	0	0	0	0	0	0	A	0	1	0	4	0	0	0	0	0	1.0	5.1
12-Mar	0	1	1	0	0	0	0	0	1	0	0	0	C	C	C	C	1	1	0	1	1	1	1	1	0.4	1.3
13-Mar	1	1	1	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0.5	1.4
14-Mar	0	0	1	1	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	2	2	2	1	0.6	2.5
15-Mar	1	0	0	0	1	1	1	1	2	2	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.1
16-Mar	0	0	0	0	2	1	1	1	0	A	0	0	1	1	0	0	1	1	1	7	3	2	1	0	1.0	6.8
17-Mar	0	0	0	1	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
18-Mar	0	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.4
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
21-Mar	1	0	1	0	A	0	0	0	0	0	0	0	60	15	4	0	0	0	0	0	0	1	0	0	3.7	59.6
22-Mar	0	0	0	A	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.5	5.8
23-Mar	0	0	A	0	0	0	0	0	1	0	0	0	N	N	0	0	0	0	0	0	0	0	1	1	0.3	0.6
24-Mar	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
25-Mar	A	0	1	1	1	0	0	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	A	0.5	1.3
26-Mar	0	1	1	1	0	1	3	2	1	2	3	1	0	0	0	0	0	0	0	0	0	A	0	0	0.8	3.4
27-Mar	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.2
28-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.4
29-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	2	4	0	0.4	4.2
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	4	0	0	0	0	0.4	3.8
31-Mar	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	9	0.7	9.0
0.5 0.4 0.5 0.4 0.4 0.6 0.6 0.5 0.6 0.4 0.5 0.3 2.4 0.8 0.4 0.3 0.3 0.4 0.6 0.8 1.4 0.7 0.6 0.7																									Diurnal Average	
4.9 1.4 1.4 1.6 1.8 5.1 3.3 1.9 5.8 2.1 3.4 1.3 59.6 14.7 4.0 0.9 2.3 2.4 3.6 6.8 16.2 2.8 4.2 9.0																									Diurnal Maximum	
C - Calibration N - Not Valid A - Automated Daily Zero Span																										

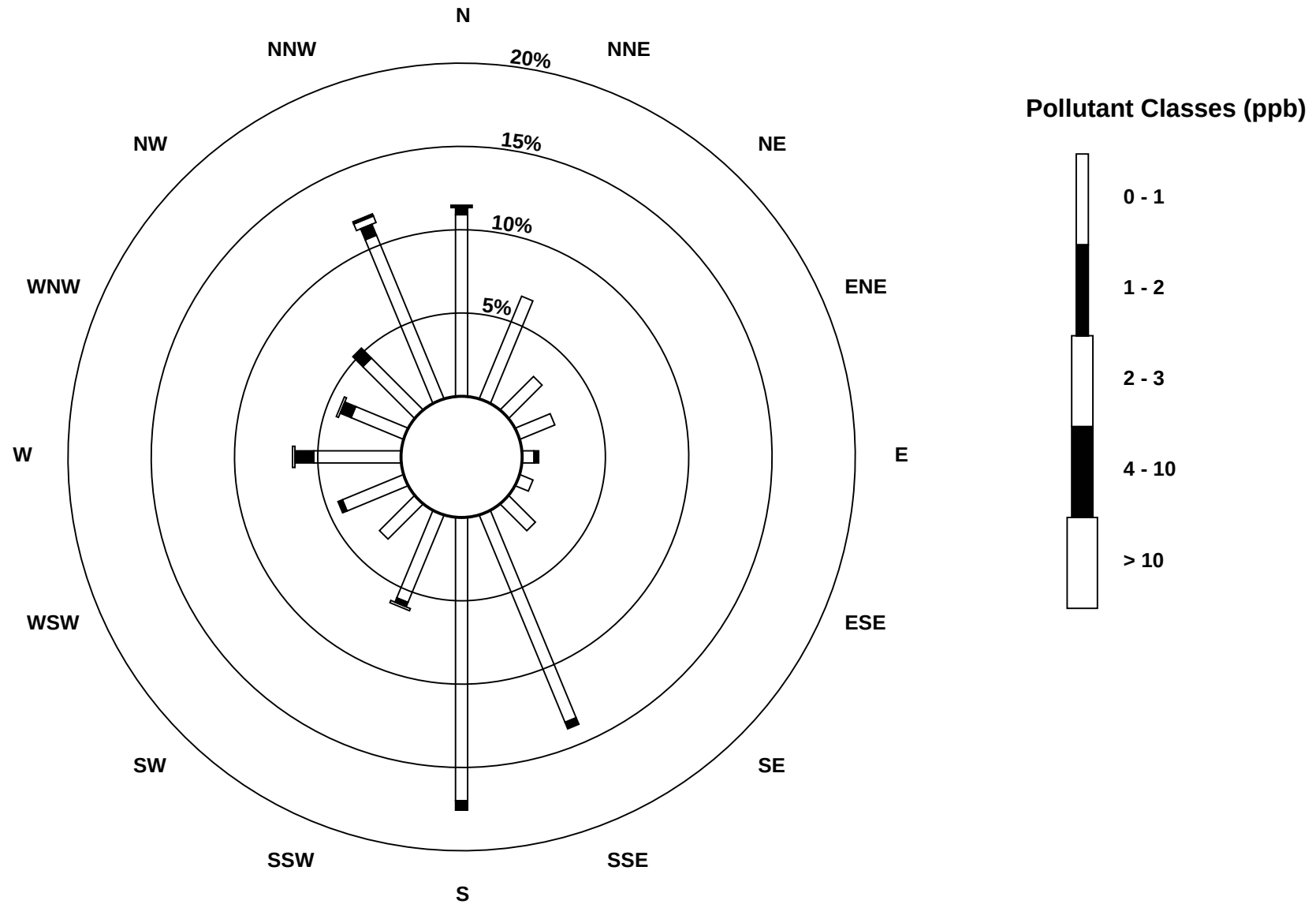
Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2012



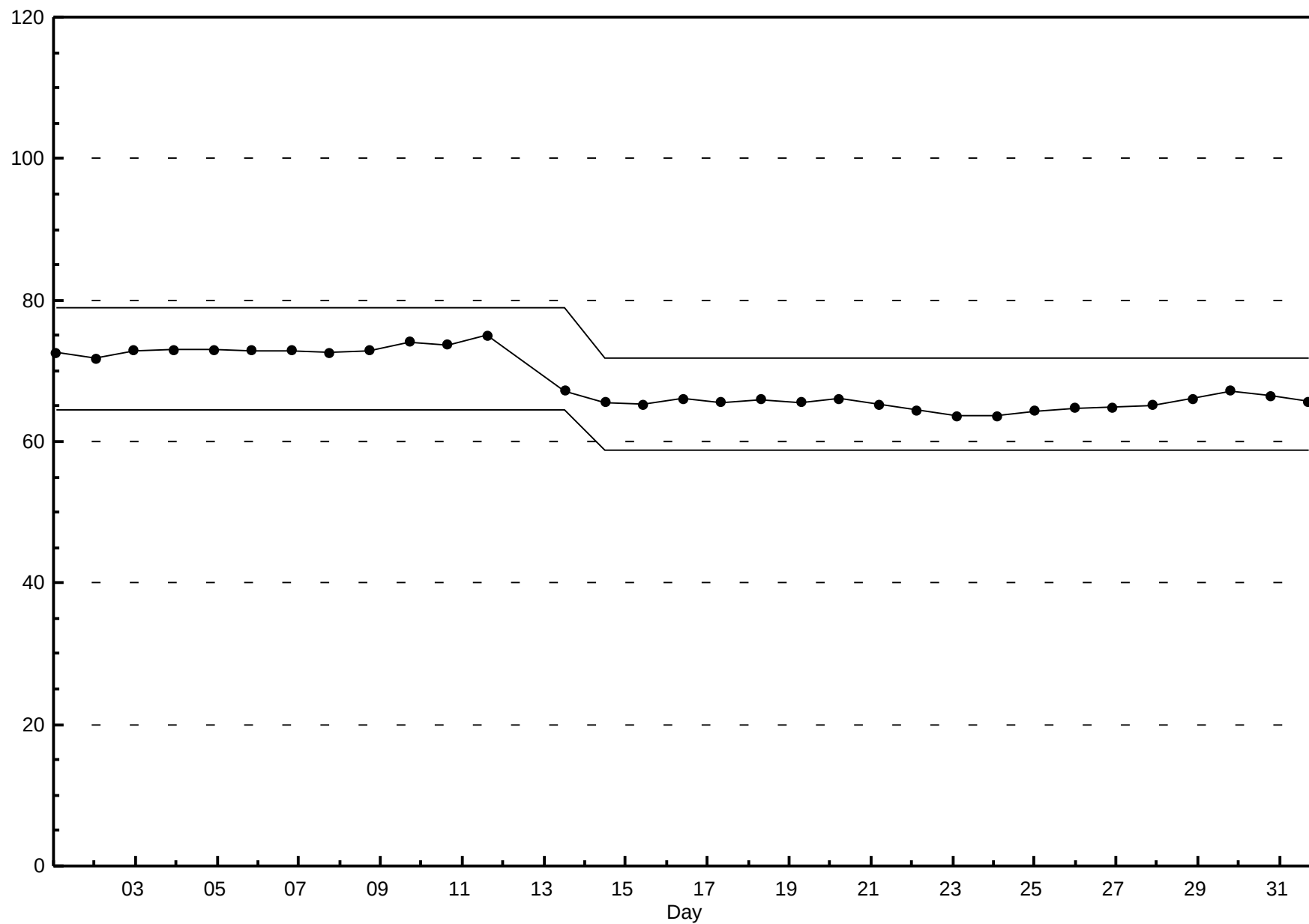
Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb
Valleyview - March 2012



Span Responses

Hydrogen Sulphide (H₂S)
Valleyview - March 2012



Hourly Averages

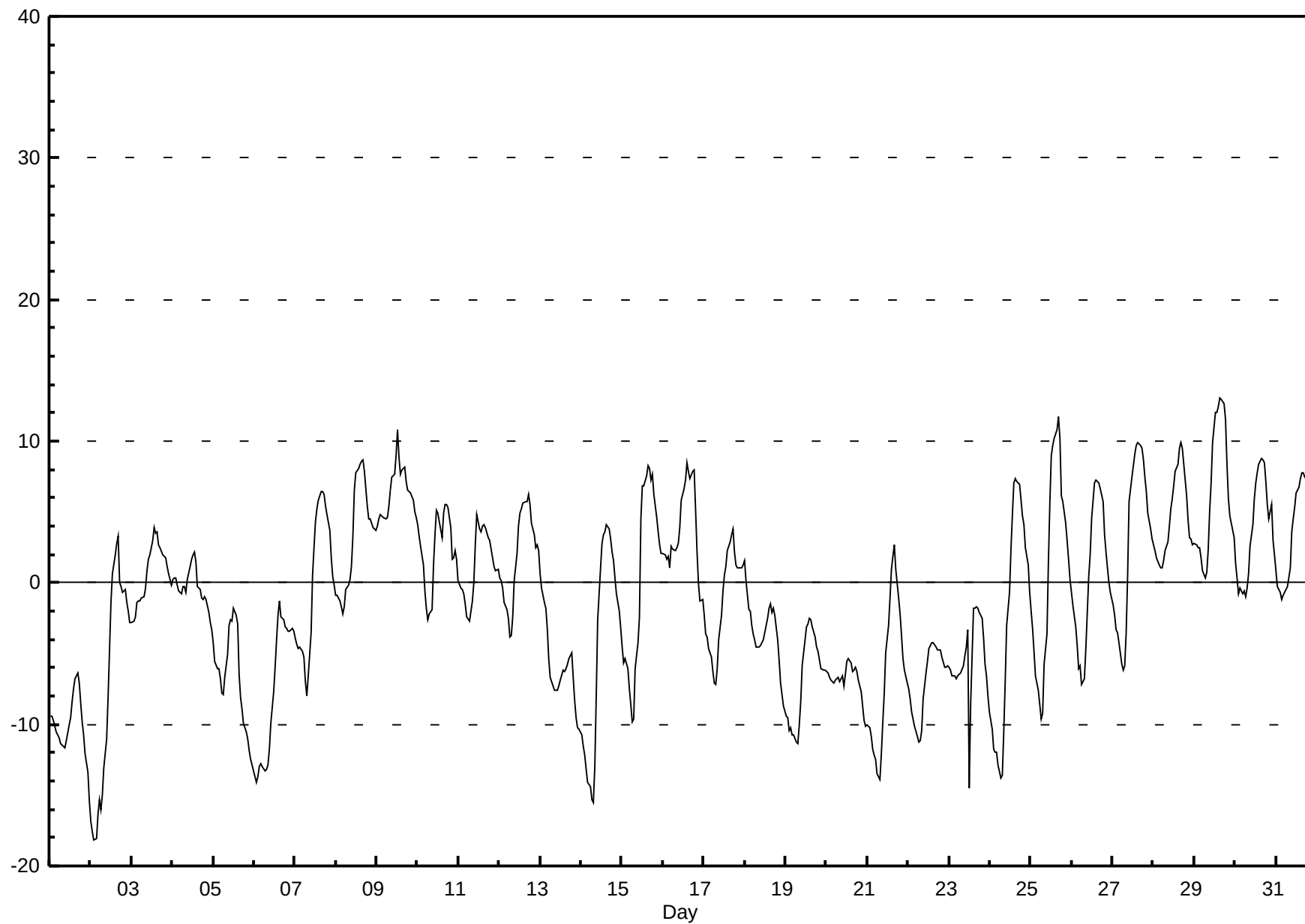
External Temperature (ET) - °C

Valleyview - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 13.0 °C on Mar 29 16:00 Maximum Daily Average: 6.4 °C on Mar 9																					Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0					
Minimum Value: -18 °C on Mar 2 03:00 Maximum Diurnal Average: 3.4 °C at hour 16 Monthly Average: -1.31 °C										Minimum Daily Average: -10.1 °C on Mar 1 Minimum Diurnal Average: -6.1 °C at hour 7 Percentiles: P ₁ = -15.4 P ₁₀ = -10.1 Q ₁ = -6.1 Median = -0.9 Q ₃ = 3.4 P ₉₀ = 7.0 P ₉₉ = 11.4																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	-9	-9	-10	-10	-11	-11	-11	-11	-12	-12	-11	-10	-10	-8	-7	-7	-6	-7	-8	-10	-11	-12	-13	-15	-10.1	-6.3
2-Mar	-17	-18	-18	-18	-16	-15	-16	-15	-13	-11	-8	-5	-1	1	2	3	3	0	0	-1	-1	-1	-2	-3	-7.1	3.2
3-Mar	-3	-3	-2	-1	-1	-1	-1	-1	0	1	2	2	3	4	3	4	3	2	2	2	2	1	1	0	0.7	3.9
4-Mar	0	0	0	0	-1	-1	0	0	-1	0	1	2	2	2	1	0	0	-1	-1	-1	-1	-2	-3	-3	-0.3	2.1
5-Mar	-4	-6	-6	-6	-7	-8	-8	-7	-5	-3	-3	-3	-2	-2	-3	-6	-8	-9	-10	-10	-11	-12	-12	-13	-6.8	-1.8
6-Mar	-14	-14	-14	-13	-13	-13	-13	-13	-13	-12	-10	-8	-6	-4	-2	-1	-2	-3	-3	-3	-3	-3	-3	-3	-7.8	-1.3
7-Mar	-4	-4	-5	-5	-5	-5	-7	-8	-7	-3	1	2	4	5	6	6	6	6	5	5	4	2	0	0	0.0	6.5
8-Mar	-1	-1	-1	-2	-2	-2	0	0	0	1	3	7	8	8	8	9	9	8	5	5	5	4	4	4	3.2	8.7
9-Mar	4	4	5	5	5	5	5	5	7	7	8	9	11	9	8	8	8	7	7	6	6	6	5	5	6.4	10.8
10-Mar	4	3	3	1	-1	-2	-3	-2	-2	1	3	5	5	4	3	5	6	6	5	4	2	2	2	2	2.4	5.6
11-Mar	0	0	0	-1	-1	-2	-3	-2	-1	0	3	5	4	4	4	4	4	3	3	2	2	1	1	1	1.2	4.8
12-Mar	0	0	0	-1	-2	-3	-4	-4	-2	0	2	4	5	5	6	6	6	6	5	4	3	3	3	2	1.9	6.2
13-Mar	1	0	-1	-2	-3	-5	-7	-7	-8	-8	-8	-7	-7	-6	-6	-6	-6	-5	-5	-7	-8	-9	-10	-10	-5.9	0.7
14-Mar	-11	-12	-12	-13	-14	-14	-15	-16	-13	-8	-3	1	3	3	4	4	4	3	2	2	0	-1	-2	-3	-4.6	4.1
15-Mar	-5	-6	-5	-6	-8	-9	-10	-10	-6	-4	-2	4	7	7	8	8	8	7	8	6	5	4	3	2	0.3	8.2
16-Mar	2	2	2	2	1	3	2	2	3	3	4	6	7	7	9	8	7	8	8	5	2	0	-1	-1	3.7	8.5
17-Mar	-2	-4	-4	-5	-5	-6	-7	-7	-6	-4	-2	-1	1	1	2	3	3	4	2	1	1	1	1	1	-1.3	3.8
18-Mar	2	0	-2	-2	-3	-4	-4	-5	-5	-4	-4	-3	-2	-2	-2	-2	-2	-2	-2	-4	-5	-7	-8	-9	-3.5	1.6
19-Mar	-9	-10	-10	-10	-11	-11	-11	-11	-10	-8	-6	-4	-3	-3	-3	-3	-3	-4	-4	-5	-6	-6	-6	-6	-6.8	-2.5
20-Mar	-6	-6	-7	-7	-7	-7	-7	-7	-7	-7	-7	-6	-6	-5	-6	-6	-6	-6	-6	-7	-8	-9	-10	-10	-6.9	-5.4
21-Mar	-10	-10	-11	-12	-12	-12	-13	-14	-12	-10	-8	-5	-3	-1	1	2	3	1	-1	-2	-4	-5	-6	-7	-6.4	2.7
22-Mar	-7	-8	-9	-10	-10	-11	-11	-11	-10	-8	-6	-6	-5	-4	-4	-4	-5	-5	-5	-5	-5	-6	-6	-6	-7.0	-4.2
23-Mar	-6	-6	-7	-7	-7	-7	-6	-6	-6	-5	-5	-3	-15	-9	-2	-2	-2	-2	-2	-3	-4	-6	-7	-8	-5.4	-1.7
24-Mar	-9	-10	-12	-12	-12	-13	-14	-14	-11	-7	-3	-1	2	5	7	7	7	7	6	5	4	3	1	-1	-2.6	7.3
25-Mar	-2	-3	-5	-7	-8	-9	-10	-9	-6	-4	1	6	9	10	10	11	12	10	6	6	4	3	2	0	1.2	11.7
26-Mar	-1	-2	-3	-4	-6	-6	-7	-7	-5	-2	0	2	4	7	7	7	7	7	6	3	2	1	0	-1	0.5	7.3
27-Mar	-2	-2	-3	-4	-4	-6	-6	-6	-3	0	6	7	8	9	10	10	10	10	9	7	6	5	4	3	2.8	9.9
28-Mar	3	2	2	1	1	1	2	2	3	4	5	6	7	8	8	9	10	9	8	6	4	3	3	3	4.7	9.9
29-Mar	3	3	2	2	2	1	0	1	2	5	7	10	12	12	12	13	13	13	12	8	6	5	4	3	6.3	13.0
30-Mar	1	0	-1	0	-1	-1	-1	0	1	3	4	6	7	8	8	9	9	9	7	5	4	5	3	2	3.6	8.7
31-Mar	1	0	-1	-1	-1	-1	-1	0	1	4	5	5	6	7	7	8	8	7	7	6	4	1	-1	0	3.0	7.8
																									Diurnal Average	
																									Diurnal Maximum	

Hourly Averages

External Temperature (ET) - °C
Valleyview - March 2012



Hourly Averages

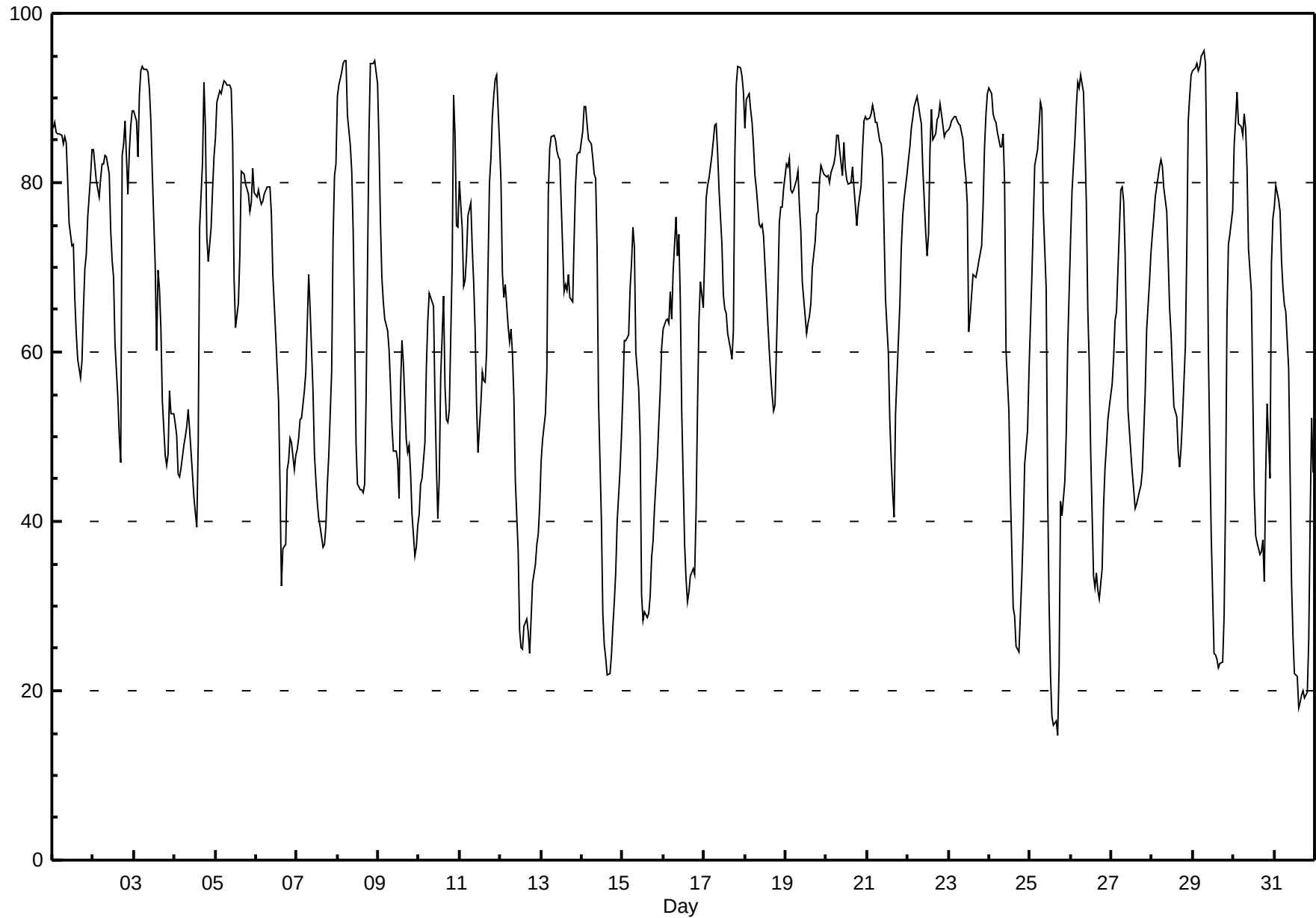
Relative Humidity (RH) - %

Valleyview - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 95.7 % on Mar 29 07:00 Maximum Daily Average: 84.9 % on Mar 22																								Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0		
Minimum Value: 15 % on Mar 25 17:00 Maximum Diurnal Average: 80.2 % at hour 7 Monthly Average: 65.71 %												Minimum Daily Average: 44.4 % on Mar 12 Minimum Diurnal Average: 48.2 % at hour 17 Percentiles: P ₁ = 19.5 P ₁₀ = 36.4 Q ₁ = 49.9 Median = 69.4 Q ₃ = 82.9 P ₉₀ = 88.0 P ₉₉ = 94.1														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	86	87	86	86	86	86	85	85	85	80	75	73	73	66	62	59	57	59	65	70	72	76	81	84	75.9	87.1
2-Mar	84	82	80	78	80	82	82	83	83	81	74	71	69	61	55	50	47	83	85	87	79	84	87	88	76.5	88.4
3-Mar	88	87	83	90	93	94	93	93	93	91	87	81	70	60	70	67	63	54	48	47	48	56	53	53	73.5	93.8
4-Mar	52	50	46	45	46	49	50	51	53	51	46	43	41	39	49	75	82	92	87	74	71	75	79	83	59.5	91.9
5-Mar	85	89	91	91	91	92	92	91	92	91	85	69	63	66	71	81	81	81	80	79	77	78	82	79	82.3	92.0
6-Mar	78	79	78	77	78	79	79	80	80	76	69	62	58	54	44	32	37	37	46	47	50	49	46	48	61.1	79.6
7-Mar	48	50	52	52	55	58	63	69	65	55	48	45	42	40	39	37	37	40	44	48	58	73	81	82	53.5	82.2
8-Mar	90	91	93	94	94	94	88	84	81	74	63	49	44	44	44	43	44	55	86	94	94	94	94	92	76.1	94.5
9-Mar	85	75	69	66	64	63	60	56	51	48	48	47	43	56	61	59	50	48	49	46	41	36	37	39	54.0	84.8
10-Mar	41	44	45	49	58	64	67	66	65	55	47	40	45	57	67	56	52	52	53	70	90	86	75	75	59.1	90.3
11-Mar	80	75	68	69	71	76	78	72	68	63	54	48	54	58	57	56	60	80	83	88	90	92	93	85	71.5	92.7
12-Mar	80	69	66	68	63	61	63	60	55	45	36	27	25	25	28	28	27	24	28	33	35	37	38	42	44.4	80.2
13-Mar	47	50	53	58	79	84	85	86	85	84	83	83	77	67	68	67	69	66	66	73	80	83	84	84	73.3	85.6
14-Mar	86	89	89	87	85	85	83	81	80	72	54	40	29	26	24	22	22	24	28	31	34	40	46	50	54.5	89.0
15-Mar	55	61	61	62	67	71	75	72	60	56	50	31	28	29	29	29	31	36	38	42	47	52	55	60	49.9	74.7
16-Mar	63	64	64	63	67	64	69	76	71	74	66	53	37	33	30	32	34	34	34	41	54	64	68	65	55.0	76.0
17-Mar	71	78	80	81	83	85	87	87	84	79	73	67	65	65	62	60	59	63	83	92	94	94	92	91	78.0	93.7
18-Mar	86	90	90	89	87	84	81	79	75	75	74	70	63	60	57	55	53	54	67	75	77	77	79	79	73.9	90.5
19-Mar	82	82	83	79	79	79	80	81	77	74	68	64	62	63	64	66	70	73	76	77	80	82	81	81	75.2	82.9
20-Mar	81	81	80	81	82	83	86	86	84	81	85	82	80	80	80	82	80	77	75	77	80	84	87	88	81.7	87.8
21-Mar	87	88	88	89	88	87	87	85	85	83	74	66	60	52	47	43	40	53	61	66	72	76	78	81	72.4	89.2
22-Mar	83	84	87	88	89	90	89	88	87	82	74	71	74	84	89	85	86	88	88	89	88	85	86	86	84.9	90.1
23-Mar	86	87	87	88	88	87	87	87	85	82	81	77	62	64	69	69	69	70	71	73	77	84	88	91	79.5	90.5
24-Mar	91	90	88	87	87	86	84	84	86	80	60	53	44	37	30	29	25	25	29	33	39	47	51	58	59.3	91.2
25-Mar	63	69	75	82	84	87	89	89	77	67	44	31	22	17	16	16	15	23	42	41	45	50	61	67	53.0	89.5
26-Mar	73	79	85	89	92	91	93	91	85	77	65	59	48	34	32	34	32	31	34	42	46	49	52	54	61.1	92.7
27-Mar	56	59	64	65	70	79	79	78	72	62	53	48	46	44	42	42	44	44	46	51	55	63	68	72	58.3	79.4
28-Mar	74	76	78	81	82	83	82	79	77	71	65	62	58	54	52	48	46	49	52	61	72	87	90	93	69.7	92.7
29-Mar	93	94	94	93	94	95	96	94	81	60	49	39	24	24	24	23	23	23	29	42	64	73	74	77	61.8	95.7
30-Mar	84	87	91	87	87	86	88	86	81	72	67	55	43	38	37	36	36	38	33	46	54	45	71	76	63.6	90.7
31-Mar	77	80	78	77	71	68	66	65	58	45	33	27	22	22	18	19	20	20	19	20	26	41	52	46	44.4	79.7
75.5 76.4 76.5 77.1 78.8 79.7 80.2 79.6 76.2 70.6 63.0 56.0 51.0 49.1 49.0 48.5 48.2 51.4 55.2 59.5 64.1 68.1 71.2 72.4																								Diurnal Average		
93.2 93.6 94.0 94.0 94.5 95.0 95.7 94.1 93.1 91.0 87.3 82.7 80.3 83.7 88.6 85.0 85.7 91.9 87.7 94.0 94.0 94.1 94.3 92.7																								Diurnal Maximum		

Hourly Averages

Relative Humidity (RH) - %
Valleyview - March 2012



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2012

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	8	6	8	8	9	9	8	4	3	6	5	3	3	3	3	2	2	4	5	4	5	3	0	1	4.5	8.9
Dir	348	351	351	358	350	342	344	353	15	3	353	6	2	27	33	31	2	338	349	342	339	335	211	178	353	342
2 Spd	1	1	1	0	0	1	1	1	1	1	2	4	6	7	5	3	9	20	16	10	2	2	2	3	1.1	19.6
Dir	196	208	187	152	118	160	186	227	216	177	169	162	167	169	166	339	307	346	333	312	288	156	171	199	297	346
3 Spd	2	2	3	2	3	4	3	3	3	2	4	9	12	12	12	10	10	6	8	8	9	12	11	6	4.7	12.3
Dir	197	199	201	200	177	171	172	173	173	171	180	258	268	271	257	313	337	301	298	274	264	265	262	248	261	271
4 Spd	10	11	11	7	6	5	6	5	4	2	5	11	9	8	8	8	4	2	4	5	2	2	2	2	5.2	11.5
Dir	260	261	263	257	252	247	257	245	235	200	276	285	283	276	243	245	259	197	191	223	159	178	176	194	252	261
5 Spd	1	0	0	2	1	1	3	1	1	1	2	4	4	8	10	14	15	13	13	14	18	17	14	15	6.2	17.5
Dir	190	318	150	187	344	7	317	149	160	160	281	320	335	300	341	16	13	15	18	12	4	5	1	355	1	4
6 Spd	10	4	4	1	0	1	2	2	4	6	8	8	8	9	4	10	6	11	13	13	13	3	8	3	2.8	13.2
Dir	348	327	325	354	73	137	134	149	157	163	164	165	159	162	185	250	346	289	289	270	270	254	266	226	251	289
7 Spd	3	3	3	2	2	2	2	1	3	3	8	16	15	17	15	16	16	16	15	15	8	7	5	4	6.1	16.6
Dir	187	186	189	191	189	190	202	183	157	158	266	283	291	296	299	286	289	283	279	279	349	18	27	3	286	296
8 Spd	4	0	2	1	2	3	4	3	3	3	4	4	5	7	4	5	3	6	1	2	0	1	1	3	2.1	6.8
Dir	40	349	4	282	194	190	177	189	195	189	184	225	236	232	208	162	148	217	260	122	0	186	196	184	199	232
9 Spd	4	7	6	6	6	5	4	5	5	6	3	6	17	15	7	7	13	7	2	6	9	12	9	7	5.0	16.6
Dir	174	171	173	177	176	178	181	179	179	174	180	242	250	275	275	265	287	326	269	262	271	275	270	274	244	250
10 Spd	8	2	3	2	2	1	2	0	1	3	4	4	6	5	5	2	4	5	3	10	8	3	2	1	2.6	10.2
Dir	275	239	251	195	202	202	187	343	126	180	161	182	170	178	165	157	134	129	131	167	154	104	87	319	170	167
11 Spd	1	2	4	1	1	1	2	3	6	6	4	2	6	9	9	4	8	2	2	2	1	2	1	2	0.4	8.9
Dir	247	180	171	200	179	300	177	176	175	169	168	134	345	339	3	354	309	33	283	48	153	231	200	228	276	3
12 Spd	2	3	2	2	3	2	3	3	2	4	5	5	6	8	9	9	11	10	8	7	3	2	2	2	4.4	10.9
Dir	200	257	176	181	175	180	204	215	191	169	165	163	148	141	129	155	153	156	166	168	166	180	179	182	163	153
13 Spd	2	2	5	4	9	14	14	11	10	9	10	13	10	10	11	10	6	3	0	1	0	1	4	6	5.8	14.0
Dir	164	147	350	16	8	4	1	10	9	11	2	333	304	317	313	324	333	50	186	228	93	80	342	345	348	1
14 Spd	5	6	1	1	1	1	0	1	3	3	2	2	2	4	5	6	7	6	5	1	2	1	1	1	0.9	6.8
Dir	358	334	256	199	186	198	224	168	179	179	172	224	307	349	15	57	69	71	62	63	178	254	190	232	44	69
15 Spd	1	2	1	1	1	1	1	2	1	2	4	9	10	10	14	13	11	10	9	9	6	4	4	5	4.4	13.6
Dir	201	165	184	344	173	320	359	332	282	311	339	150	153	159	159	154	162	152	167	174	174	171	186	179	163	159
16 Spd	5	6	5	3	3	2	3	4	5	5	4	4	9	5	4	2	6	3	1	1	1	2	1	2	1.9	8.6
Dir	174	179	182	176	319	260	219	203	170	175	186	237	282	316	276	353	303	304	277	334	192	181	164	202	230	282
17 Spd	1	0	1	2	1	3	1	2	5	6	7	9	10	14	11	12	9	7	5	3	3	4	4	3	4.3	13.7
Dir	171	173	185	1	16	323	95	3	354	355	7	4	4	20	26	24	33	107	104	10	39	358	356	53	21	20
18 Spd	2	9	9	7	12	10	13	15	13	10	7	8	8	7	8	9	14	10	6	9	7	6	6	5	6.8	14.6
Dir	48	285	275	258	269	270	278	277	277	285	291	280	309	328	359	24	343	336	345	357	353	348	0	360	309	277
19 Spd	3	2	5	6	6	4	4	2	3	7	6	7	12	13	14	13	13	13	9	6	6	6	7	5	6.7	13.6
Dir	23	352	23	26	17	22	337	333	357	342	348	295	332	340	345	353	349	355	360	12	5	326	333	2	350	345
20 Spd	4	3	2	3	3	2	4	5	7	6	10	11	10	13	13	17	14	9	7	4	1	1	0	1	5.4	16.7
Dir	32	72	75	48	29	31	69	56	48	58	358	19	25	13	2	340	345	6	11	26	73	253	171	159	16	340
21 Spd	2	1	2	2	2	1	3	3	3	3	4	4	4	4	4	5	7	9	8	7	6	7	7	5	4.1	9.0
Dir	351	46	4	315	21	347	344	9	17	342	325	338	345	349	348	1	4	354	4	2	348	352	348	342	353	354
22 Spd	6	4	4	4	3	3	3	2	4	6	9	16	14	14	14	18	16	13	7	4	5	5	3	1	6.6	18.0
Dir	339	3	348	8	14	9	11	354	354	0	353	343	338	333	332	341	340	337	316	313	258	247	232	200	337	341

Hourly Averages

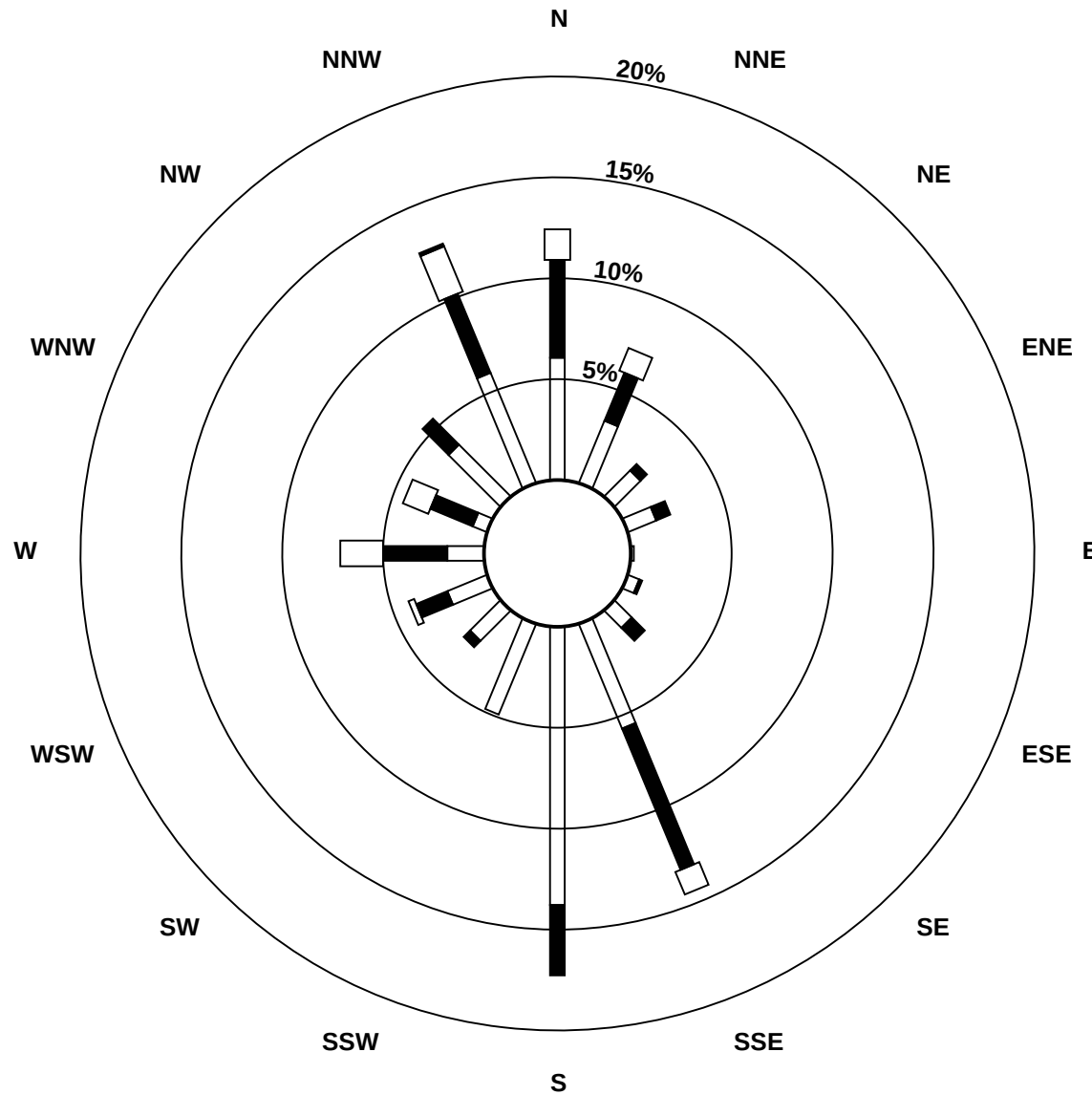
Wind Speed (km/h)
Wind Direction (deg)
Valleyview - March 2012

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
23 Spd	2	2	2	1	2	1	0	1	1	2	4	4	5	8	11	12	11	9	8	5	4	5	1	0	3.1	11.9	
Dir	185	178	182	181	181	181	80	142	54	314	337	316	319	332	341	342	345	6	16	43	344	332	298	36	344	342	
24 Spd	0	0	1	1	1	1	0	1	0	4	6	7	6	5	4	2	5	7	5	4	5	4	2	1	1.8	6.9	
Dir	326	294	172	188	230	203	51	159	52	164	173	160	171	167	161	346	50	67	67	73	109	126	77	89	129	160	
25 Spd	1	1	1	0	0	0	0	1	1	2	6	6	4	10	11	9	5	4	8	0	4	4	5	4	2.2	10.9	
Dir	84	356	201	213	275	261	27	3	320	319	168	169	160	168	161	154	159	339	339	134	179	184	173	169	169	161	
26 Spd	3	1	0	1	1	1	4	0	2	1	3	5	6	4	7	11	11	11	10	9	6	4	3	3	3.7	11.5	
Dir	170	296	45	314	303	216	346	345	321	347	316	339	334	53	41	11	23	34	27	13	18	11	16	1	13	23	
27 Spd	3	3	3	3	0	0	1	1	1	1	12	12	13	12	11	12	10	7	7	7	8	9	9	10	5.2	12.8	
Dir	8	338	349	333	28	168	311	206	253	29	164	161	161	166	168	166	157	157	151	147	152	157	162	165	160	161	
28 Spd	13	11	8	8	6	8	9	11	11	10	9	11	11	8	7	6	6	7	6	8	11	5	4	3	7.8	12.7	
Dir	168	169	172	169	175	169	172	166	162	156	164	172	168	170	167	161	136	126	128	147	167	205	253	218	166	168	
29 Spd	2	2	3	3	2	2	3	3	4	5	7	6	8	9	10	9	8	8	4	8	11	2	3	1	3.3	10.6	
Dir	193	182	181	174	155	138	157	170	166	170	160	162	180	156	152	153	144	179	306	299	292	242	276	147	179	292	
30 Spd	1	1	2	2	2	1	0	0	2	3	2	3	8	8	5	5	3	3	3	5	6	7	4	4	2.3	7.9	
Dir	208	168	171	189	203	206	101	142	159	185	198	268	301	278	277	261	313	342	316	239	218	240	193	180	246	278	
31 Spd	3	3	3	2	4	3	2	3	4	5	12	9	4	6	3	4	5	7	5	3	2	4	2	2	1.4	11.7	
Dir	181	165	197	161	190	201	200	192	187	223	275	278	279	325	334	37	13	15	8	14	14	345	334	336	293	275	
Spd	0.5	0.9	0.9	0.5	0.6	0.6	0.7	0.7	0.6	0.6	1.0	2.2	2.7	2.5	1.7	2.6	3.7	3.1	2.7	1.6	1.2	1.4	1.2	0.6	Diurnal Average		
Dir	261	234	239	236	267	269	284	219	185	189	241	263	278	294	317	338	347	357	344	312	297	295	294	266			
Spd	12.7	11.5	10.6	8.0	12.1	13.7	14.0	14.6	12.9	10.1	11.8	16.5	16.6	16.6	15.3	18.0	16.4	19.6	16.3	14.5	17.5	17.4	14.2	14.9	Diurnal Maximum		
Dir	168	261	263	358	269	4	1	277	277	285	164	283	250	296	299	341	340	346	333	279	4	5	1	355			
Maximum Speed Value: 20 km/h on Mar 2 18:00							Minimum Speed Value: 0 km/h on Mar 24 07:00													Hours in Service: 744							
Maximum Daily Speed Average: 7.8 km/h on Mar 18							Minimum Daily Speed Average: 0.4 km/h on Mar 14													Hours of Data: 744							
Maximum Diurnal Speed Average: 3.7 km/h at hour 17							Minimum Diurnal Speed Average: 0.5 km/h at hour 4													Hours of Missing Data: 0							
Monthly Average Velocity: 1.07 km/h 301.0 deg							Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.9 Q ₁ = 2.1 Median = 4.2 Q ₃ = 7.8 P ₉₀ = 11.3 P ₉₉ = 16.6													Percent Operational Time: 100.0							
All monthly, daily, and diurnal averages have been calculated using vector methods																											
Frequency Distribution																											
Speed Range (km/h)																											
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total														
North	77		66		30		1		0		0		174														
NorthEast	32		13		4		0		0		0		49														
East	18		3		0		0		0		0		21														
SouthEast	28		26		1		0		0		0		55														
South	157		61		11		0		0		0		229														
SouthWest	36		11		0		0		0		0		47														
West	25		36		26		0		0		0		87														
NorthWest	44		30		8		0		0		0		82														
Total	417		246		80		1		0		0		744														

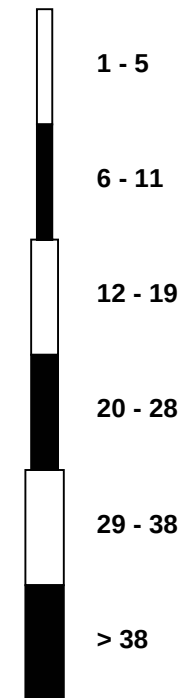
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - March 2012

Maximum Speed: 20 km/h on Mar 2 18:00																		Maximum Daily Speed Average: 9.0 km/h on Mar 18										Hours in Service: 744	
Minimum Speed: 1 km/h on Mar 1 23:00																		Minimum Daily Speed Average: 3.2 km/h on Mar 14										Hours of Data: 744	
Maximum Diurnal Speed Average: 9.1 km/h at hour 14																		Minimum Diurnal Speed Average: 3.1 km/h at hour 4										Hours of Missing Data: 0	
Monthly Average Speed: 5.63 km/h																		Percentiles: P ₁ = 0.7 P ₁₀ = 1.3 Q ₁ = 2.4 Median = 4.6 Q ₃ = 8.2 P ₉₀ = 11.4 P ₉₉ = 16.6										Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Mar	8	6	8	8	9	9	8	4	4	6	5	3	4	3	3	3	3	5	5	4	5	4	1	1	4.9	8.9			
2-Mar	1	1	1	1	1	1	1	1	1	3	2	4	6	7	5	5	10	20	16	10	2	2	2	3	4.4	19.8			
3-Mar	2	2	3	2	3	4	4	3	3	2	4	9	12	13	12	11	11	7	8	8	10	12	11	6	6.7	12.6			
4-Mar	10	12	11	7	6	5	6	5	4	2	6	12	9	8	9	9	4	3	4	6	2	2	2	2	6.1	11.6			
5-Mar	1	1	1	2	1	2	4	1	1	1	2	4	4	8	11	14	15	13	13	14	18	17	14	15	7.4	17.7			
6-Mar	10	4	4	1	1	1	2	2	4	6	8	8	8	9	6	10	8	12	13	13	13	4	8	3	6.7	13.4			
7-Mar	3	3	3	2	2	2	2	2	3	3	9	17	16	17	16	16	16	16	16	15	10	7	5	4	8.5	16.8			
8-Mar	4	1	2	2	2	3	4	3	3	3	4	5	5	7	5	5	3	8	3	2	1	2	1	3	3.3	7.6			
9-Mar	4	7	6	6	6	5	4	5	6	6	3	7	17	16	8	8	13	8	3	6	9	12	9	7	7.5	16.7			
10-Mar	8	2	3	3	2	1	2	2	2	3	4	4	6	6	6	2	4	5	3	10	8	4	2	2	3.9	10.3			
11-Mar	2	2	4	1	1	1	2	3	6	6	4	3	6	9	9	6	9	6	3	3	1	2	2	3	3.9	9.1			
12-Mar	2	3	2	2	3	2	3	3	2	4	5	5	6	9	10	9	11	11	8	7	3	2	2	2	5.0	11.0			
13-Mar	2	2	6	5	10	14	14	11	11	9	10	13	10	11	11	10	6	3	1	1	1	2	5	6	7.2	14.2			
14-Mar	5	6	2	1	1	1	1	1	3	3	3	3	4	4	5	6	7	6	6	3	2	1	1	1	3.2	6.9			
15-Mar	1	2	2	1	1	2	2	2	1	2	5	10	10	11	14	13	11	11	9	9	6	4	4	5	5.7	13.7			
16-Mar	6	6	5	3	4	3	3	5	5	5	4	5	9	6	5	3	6	3	1	2	1	2	2	2	4.0	9.2			
17-Mar	1	1	1	2	2	4	3	2	5	6	7	9	11	14	11	12	10	8	6	3	3	4	4	3	5.5	13.9			
18-Mar	2	9	9	7	13	10	13	15	13	10	8	9	8	7	9	9	14	10	7	9	7	7	6	5	9.0	14.7			
19-Mar	3	2	6	6	6	4	5	3	3	7	7	7	12	13	14	13	13	13	9	6	6	6	7	5	7.3	13.7			
20-Mar	4	4	3	3	3	2	4	5	8	7	10	12	10	13	13	17	14	9	7	4	2	1	1	1	6.5	16.8			
21-Mar	2	1	2	3	2	2	3	3	4	4	4	4	4	4	4	5	7	9	8	7	7	7	7	5	4.4	9.0			
22-Mar	6	4	4	4	3	3	3	2	4	6	10	16	14	14	14	18	16	13	7	4	5	5	3	1	7.5	18.0			
23-Mar	2	2	2	1	2	1	1	1	1	3	4	5	6	8	11	12	11	9	8	5	5	5	1	1	4.5	11.9			
24-Mar	1	1	1	1	1	1	1	1	1	4	6	7	6	5	4	2	5	7	5	5	5	5	2	1	3.3	7.1			
25-Mar	1	1	1	1	1	1	1	1	1	2	6	6	4	10	11	9	5	7	8	2	4	4	5	4	4.0	11.1			
26-Mar	3	1	1	2	3	2	4	2	2	2	3	5	6	6	9	11	12	11	10	9	6	4	4	3	5.0	11.9			
27-Mar	4	3	3	3	2	1	1	1	1	2	12	13	13	12	11	12	10	7	7	7	8	9	9	11	6.7	13.1			
28-Mar	13	11	8	8	6	8	9	11	11	10	9	11	11	8	7	6	7	7	6	9	11	6	4	4	8.4	12.8			
29-Mar	2	2	3	3	2	2	3	3	4	5	7	6	8	10	10	9	8	8	5	9	11	3	4	2	5.4	10.8			
30-Mar	2	1	2	2	2	1	1	1	3	3	2	5	8	9	6	6	4	3	3	6	7	8	4	4	3.9	8.8			
31-Mar	3	3	3	2	4	3	2	3	4	5	12	9	6	6	5	5	7	7	5	3	2	4	3	2	4.6	12.2			
3.8 3.5 3.6 3.1 3.3 3.2 3.7 3.5 4.0 4.5 6.0 7.5 8.4 9.1 8.8 8.9 9.1 8.6 6.9 6.5 5.8 5.0 4.4 3.8																									Diurnal Average				
12.8 11.6 10.7 8.0 12.6 13.9 14.2 14.7 13.1 10.4 12.2 16.7 16.7 16.8 15.5 18.0 16.5 19.8 16.3 14.6 17.7 17.5 14.4 15.0																									Diurnal Maximum				
All monthly, daily, and diurnal averages have been calculated using scalar methods																													

Hourly Standard Deviations

Wind Direction (WD) - deg

Valleyview - March 2012

Maximum Value: 99.6 deg on Mar 26 08:00																				Hours in Service: 744					
Minimum Value: 4.5 deg on Mar 22 17:00																				Hours of Data: 744					
																				Hours of Missing Data: 0					
Percentiles: P ₁ = 5.7 P ₁₀ = 7.7 Q ₁ = 10.2 Median = 16.8 Q ₃ = 31.4 P ₉₀ = 63.3 P ₉₉ = 92.6																				Hours of Calibration: 0					
																				Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	7	7	7	8	10	6	9	10	12	17	16	19	19	29	30	33	27	18	13	7	9	19	65	35	65.0
2-Mar	16	22	27	58	89	23	27	41	33	75	38	11	8	7	18	64	26	9	5	15	52	22	22	9	88.8
3-Mar	8	11	10	12	6	12	7	10	8	15	9	32	13	14	11	30	30	33	20	17	17	8	8	15	32.5
4-Mar	10	8	8	12	11	10	9	16	21	17	39	11	12	19	31	12	30	58	16	31	36	32	18	6	58.2
5-Mar	19	95	64	29	49	93	66	35	19	17	47	19	26	16	31	7	8	9	8	9	8	6	9	7	94.6
6-Mar	8	10	12	65	50	22	34	21	14	10	10	9	12	10	53	12	45	21	10	17	14	28	13	26	64.8
7-Mar	6	8	6	10	10	17	22	29	13	14	31	9	11	9	9	9	11	8	7	6	38	18	13	31	38.1
8-Mar	28	87	29	50	32	24	7	10	9	11	8	30	15	15	27	10	12	33	92	66	92	26	49	7	91.6
9-Mar	7	5	6	9	7	7	7	8	8	7	16	31	7	21	23	29	10	32	49	17	12	9	16	20	49.2
10-Mar	18	53	28	60	28	23	25	82	60	9	17	13	11	13	12	46	22	14	15	10	16	24	19	93	93.4
11-Mar	52	15	8	57	35	72	17	17	7	10	19	66	20	8	13	36	20	81	46	66	37	40	46	15	80.6
12-Mar	29	33	36	15	14	7	11	13	23	12	16	15	17	20	10	13	11	11	9	6	7	25	42	16	42.3
13-Mar	29	60	35	54	17	9	9	13	14	16	10	17	10	12	19	16	23	29	69	27	86	78	18	13	86.0
14-Mar	15	7	63	24	25	69	74	67	18	8	44	64	58	12	21	21	15	13	20	68	61	57	52	44	74.0
15-Mar	18	23	61	63	78	59	47	43	92	28	50	14	31	13	10	9	11	10	10	7	7	9	7	9	91.8
16-Mar	5	6	8	51	53	57	28	38	10	10	8	30	22	43	44	72	20	43	45	92	52	28	80	11	92.2
17-Mar	33	76	51	44	95	42	74	33	8	9	11	12	15	8	9	8	25	21	30	16	25	10	12	28	95.1
18-Mar	28	31	26	20	16	19	13	8	12	15	23	28	20	17	26	21	6	11	18	8	13	14	14	17	31.5
19-Mar	17	90	16	11	9	69	53	70	21	9	14	19	8	6	6	9	9	11	14	15	10	12	8	20	89.6
20-Mar	21	25	29	30	22	20	24	24	25	29	10	19	12	11	10	6	9	14	14	22	69	75	68	80	80.4
21-Mar	46	41	23	34	59	54	12	23	16	19	10	15	10	14	20	20	15	8	8	9	33	9	7	10	59.1
22-Mar	10	13	12	12	12	14	12	30	11	8	10	7	6	7	8	6	5	7	12	13	22	16	24	24	29.6
23-Mar	19	12	11	79	12	29	58	54	72	31	11	23	10	13	10	5	6	11	11	18	28	11	54	78	79.3
24-Mar	84	84	33	23	42	47	94	9	94	61	9	12	11	12	19	35	23	12	13	34	23	16	35	50	94.1
25-Mar	66	78	49	67	68	74	82	68	47	26	25	12	27	10	11	13	16	83	14	81	26	8	8	10	82.8
26-Mar	11	85	81	79	69	75	15	100	47	77	36	8	9	60	31	14	15	10	12	6	9	12	52	19	99.6
27-Mar	16	16	17	23	91	88	34	62	65	86	17	10	13	11	9	9	11	13	10	10	11	11	9	9	91.1
28-Mar	7	7	6	7	8	8	6	7	10	14	13	9	8	9	11	18	22	14	10	14	8	24	24	21	24.0
29-Mar	31	23	7	9	16	21	14	7	11	9	12	10	16	13	12	13	15	20	37	25	14	40	59	60	59.8
30-Mar	29	49	31	11	13	61	84	64	18	14	31	58	24	25	35	29	31	21	24	28	27	18	18	7	84.3
31-Mar	8	19	9	18	9	9	14	7	7	32	18	22	50	41	60	52	70	16	12	18	40	22	70	72	71.9
83.7 94.6 80.7 79.3 95.1 93.0 94.1 99.6 93.8 85.7 49.6 65.9 58.5 60.2 60.4 71.6 69.9 82.8 91.6 92.2 91.6 78.0 80.2 93.4																									

PAZA

Portable – Sunset House Station

Monthly Summary Tables, Graphs and Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

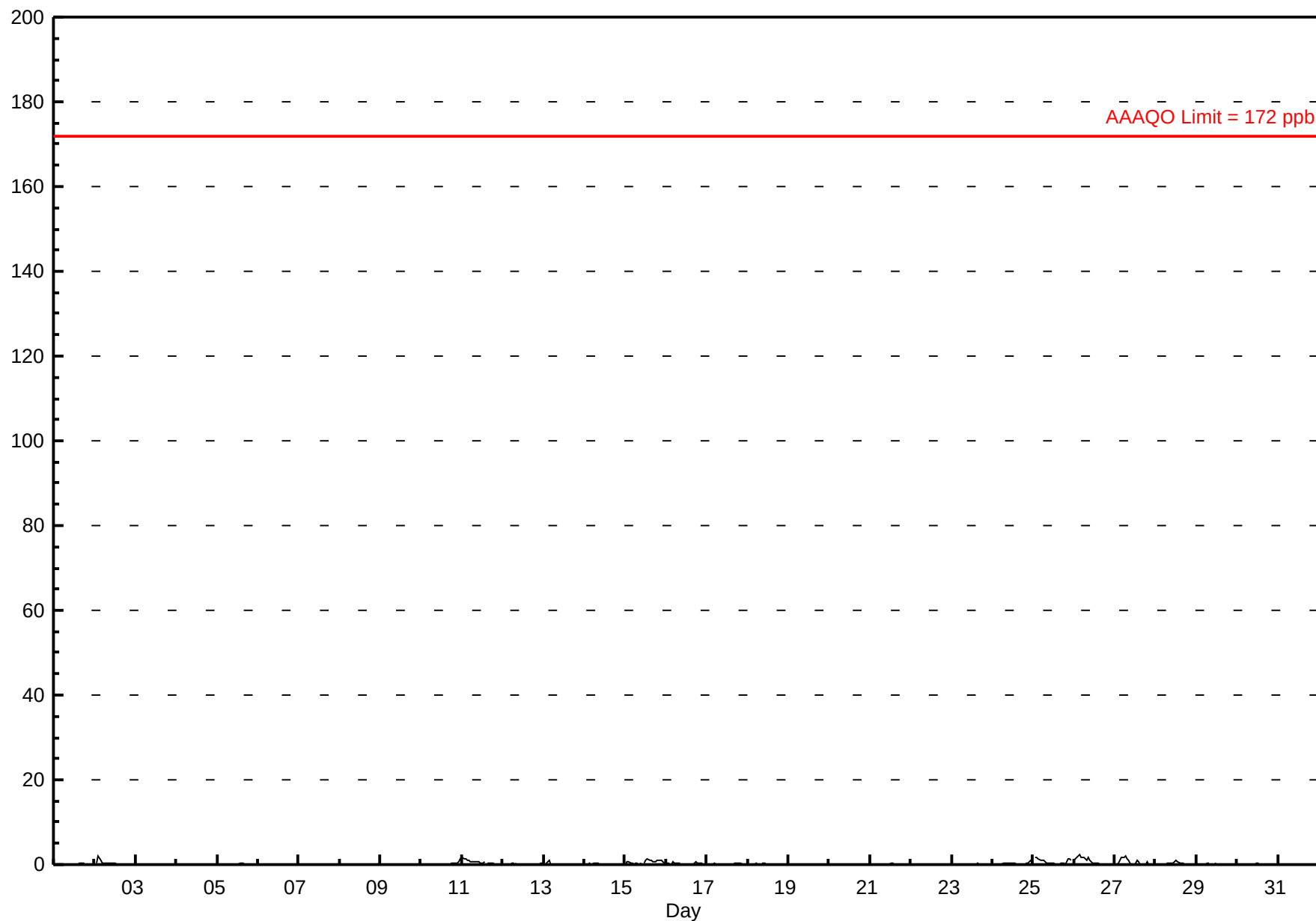
Sunset House - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744						
Maximum Value: 2.4 ppb on Mar 26 04:00																				Maximum Daily Average: 0.8 ppb on Mar 26		Hours of Data: 704				
Minimum Value: 0 ppb on Mar 1 08:00																				Minimum Daily Average: 0.0 ppb on Mar 7		Hours of Missing Data: 40				
Maximum Diurnal Average: 0.3 ppb at hour 3																				Minimum Diurnal Average: 0.1 ppb at hour 17		Hours of Calibration: 37				
Monthly Average: 0.17 ppb																				Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.2 P ₉₀ = 0.5 P ₉₉ = 1.6		Percent Operational Time: 99.6				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
2-Mar	A	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.9
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.1
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.0
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.0
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.0
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.2
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.0
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0.2	1.3
11-Mar	2	1	1	1	1	1	1	1	1	C	C	C	C	C	A	0	0	0	0	0	0	0	0	0	0.6	1.6
12-Mar	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.1	0.3
13-Mar	0	0	1	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9
14-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
15-Mar	0	1	1	0	0	0	0	0	0	0	A	0	1	2	1	1	1	1	1	1	1	1	1	0	0.6	1.5
16-Mar	0	0	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.7
17-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
18-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
23-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
24-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.9
25-Mar	A	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	A	0.7	1.7
26-Mar	1	1	2	2	2	2	2	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.8	2.4
27-Mar	0	0	0	1	2	2	2	1	1	0	0	0	0	1	1	0	0	0	0	1	0	A	0	0	0.5	2.1
28-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0.2	1.1
29-Mar	0	0	0	0	0	0	0	0	D	D	D	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.5
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.5
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.0
0.1 0.2 0.3 0.3 0.3 0.2 0.3 0.2 0.2 0.2 0.1 0.1 0.2 0.2 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1 0.1																									Diurnal Average	
1.6 1.6 2.1 2.4 1.8 1.6 2.1 1.3 1.6 1.1 0.7 0.8 1.2 1.5 1.1 0.9 0.8 0.8 0.8 1.0 1.3 1.2 1.0 1.3																									Diurnal Maximum	
C - Calibration D - DAS Failure A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 48 ppb 30-day 11 ppb																										

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Sunset House - March 2012



Hourly Maximums

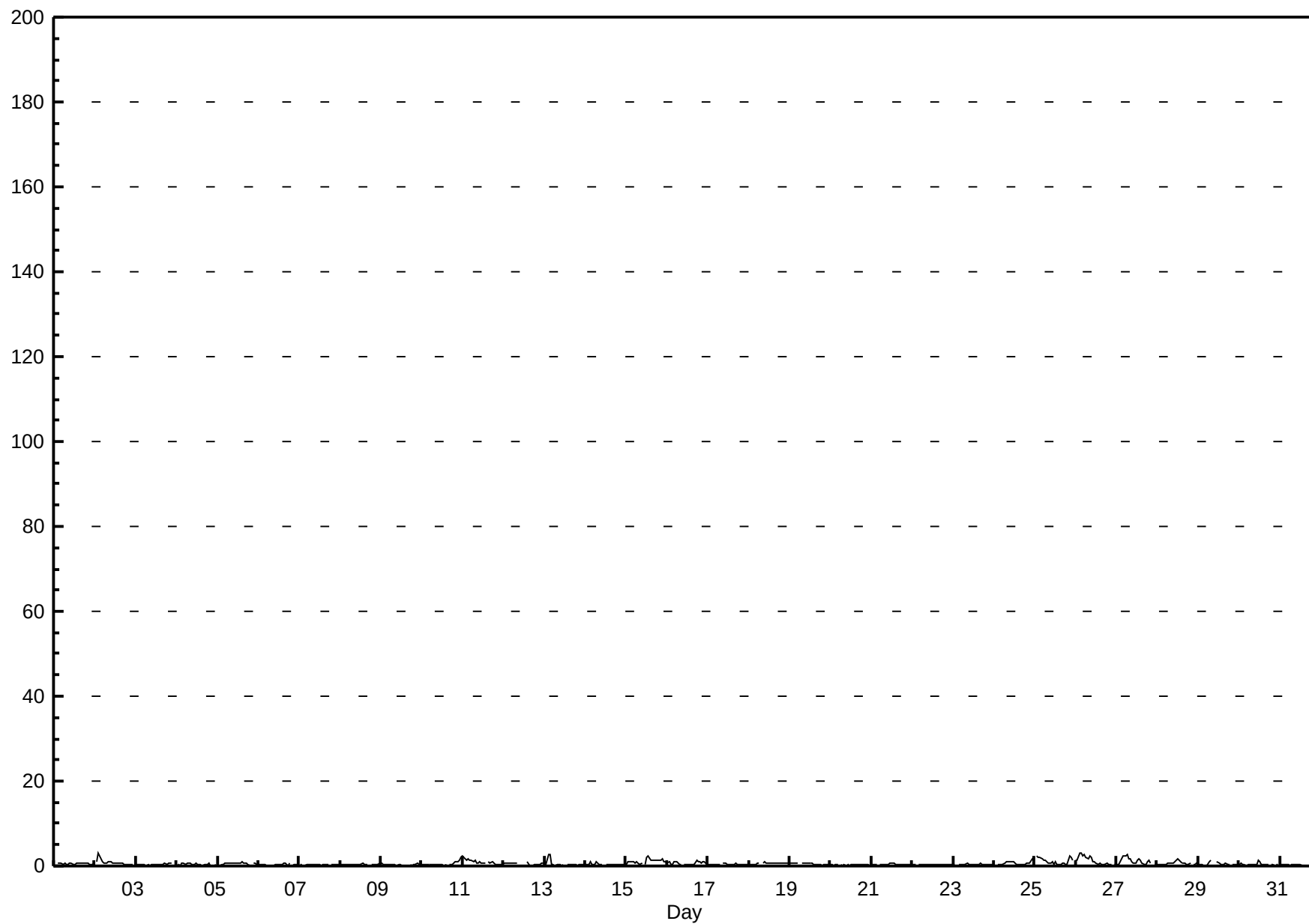
Sulphur Dioxide (SO₂) - ppb

Sunset House - March 2012

Maximum Value: 3.1 ppb on Mar 2 03:00																			Maximum Daily Average: 1.3 ppb on Mar 26										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 3 09:00																			Minimum Daily Average: 0.2 ppb on Mar 31										Hours of Data: 704	
Maximum Diurnal Average: 0.8 ppb at hour 4																			Minimum Diurnal Average: 0.5 ppb at hour 16										Hours of Missing Data: 40	
Monthly Average: 0.56 ppb																			Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.6 P ₉₀ = 1.0 P ₉₉ = 2.5										Hours of Calibration: 37	
																													Percent Operational Time: 99.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
1-Mar	1	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0.6	0.7				
2-Mar	A	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	A	0.8	3.1				
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	1	0.4	0.5				
4-Mar	0	0	0	1	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	1	0	A	0	0	0.3	0.5				
5-Mar	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	1	1	0	0.5	1.1				
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	A	0	1	0	0	0.3	0.5				
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4				
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	1	0.3	0.7				
9-Mar	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0.2	0.7				
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	1	1	1	1	2	0.5	1.9				
11-Mar	2	2	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	0	0	1	1.0	2.4				
12-Mar	1	1	1	1	1	1	1	1	1	C	C	C	C	C	1	0	0	0	0	0	0	0	1	1	0.5	1.0				
13-Mar	1	0	3	3	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.6	2.8				
14-Mar	0	0	0	1	0	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9				
15-Mar	0	1	1	1	1	1	1	1	0	1	A	0	2	2	2	1	1	1	1	1	1	2	1	1	1.1	2.4				
16-Mar	1	1	0	0	1	1	1	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0.7	1.5				
17-Mar	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.5	0.7				
18-Mar	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0				
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	0.6				
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4				
21-Mar	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.8				
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4				
23-Mar	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6				
24-Mar	0	A	0	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	0	1	1	1	2	1	0.6	1.6				
25-Mar	A	2	2	2	2	1	1	1	1	1	1	0	1	0	0	0	1	1	0	0	2	2	1	A	1.1	2.3				
26-Mar	1	1	3	3	2	3	2	2	2	2	1	1	1	0	1	0	0	0	1	0	0	0	A	0	1.3	3.0				
27-Mar	0	0	1	2	2	2	3	2	2	1	1	1	1	2	1	1	0	0	1	1	1	A	0	0	1.1	2.8				
28-Mar	0	0	0	0	0	0	1	1	1	1	1	1	2	1	1	1	1	0	0	1	A	0	0	1	0.6	1.8				
29-Mar	0	0	0	0	0	0	1	1	D	D	D	1	1	0	0	0	1	0	0	A	0	0	0	0	0.5	1.4				
30-Mar	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0.4	1.3				
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.3				
																								Diurnal Average						
																								Diurnal Maximum						
C - Calibration				D - DAS Failure				A - Automated Daily Zero Span																						

Hourly Maximums

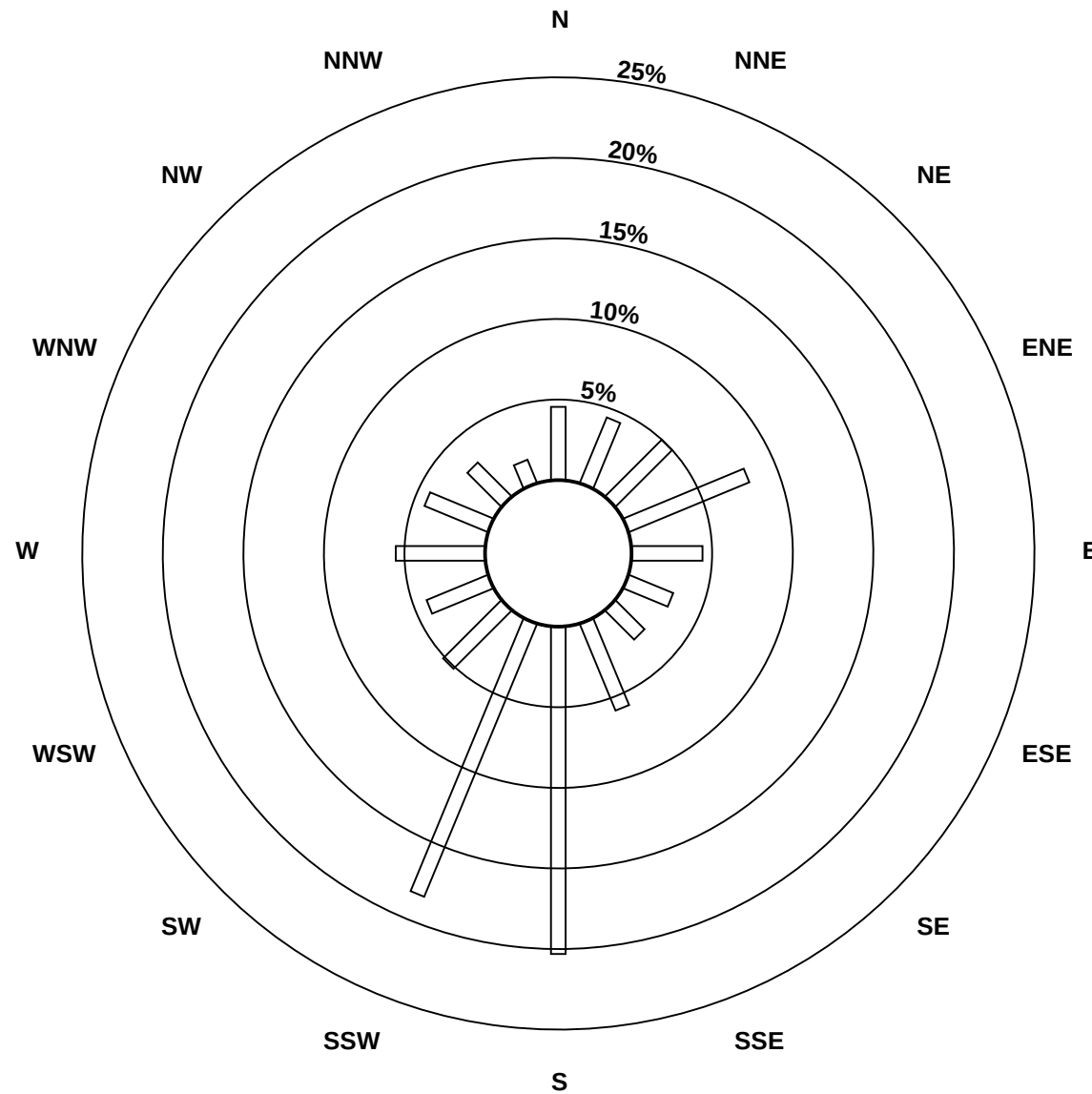
Sulphur Dioxide (SO₂) - ppb
Sunset House - March 2012



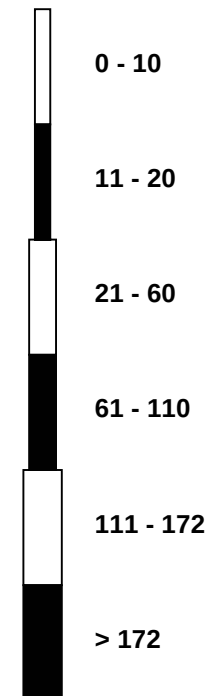
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Sunset House - March 2012

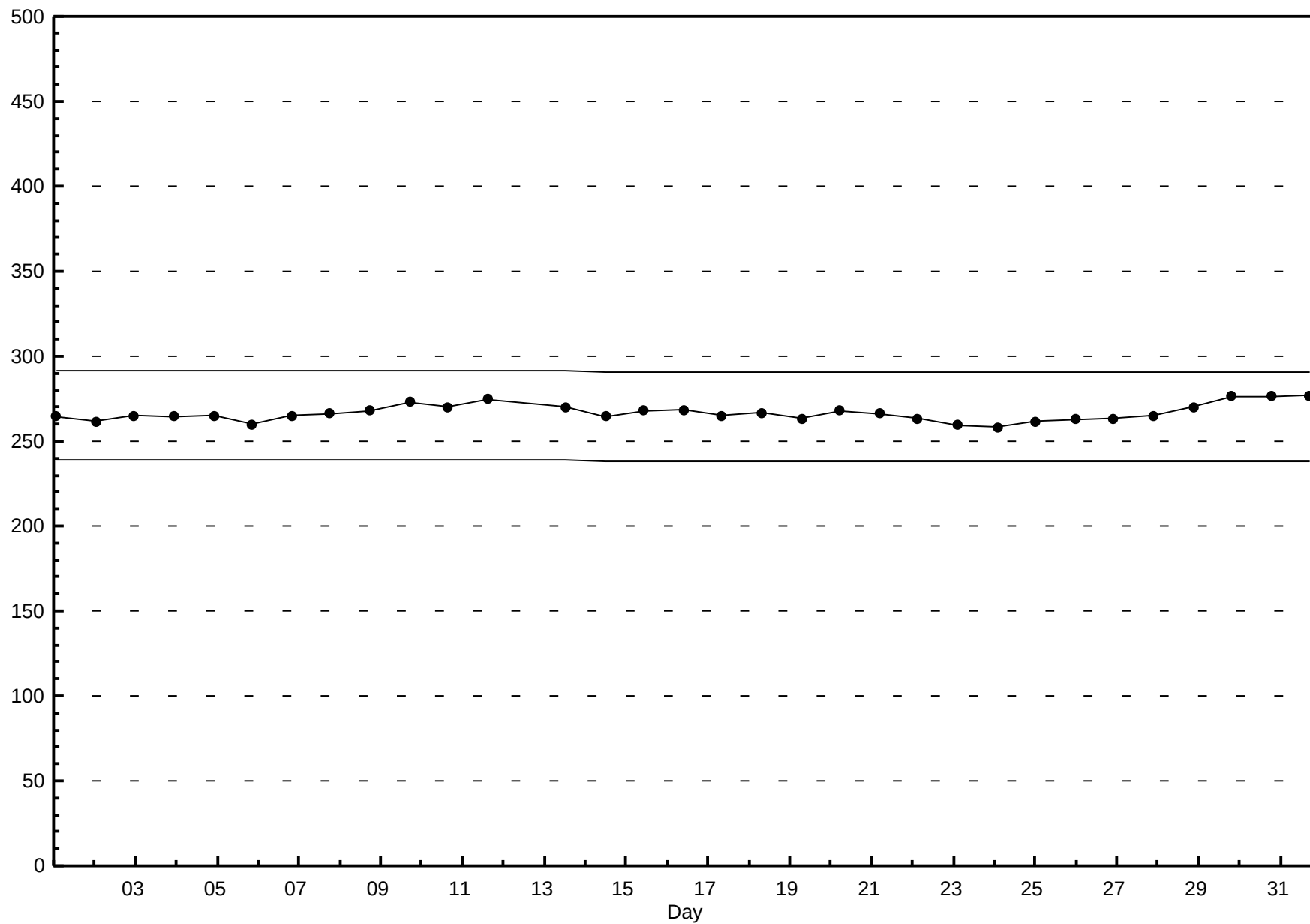


Pollutant Classes (ppb)



Span Responses

Sulphur Dioxide (SO₂)
Sunset House - March 2012



Hourly Averages

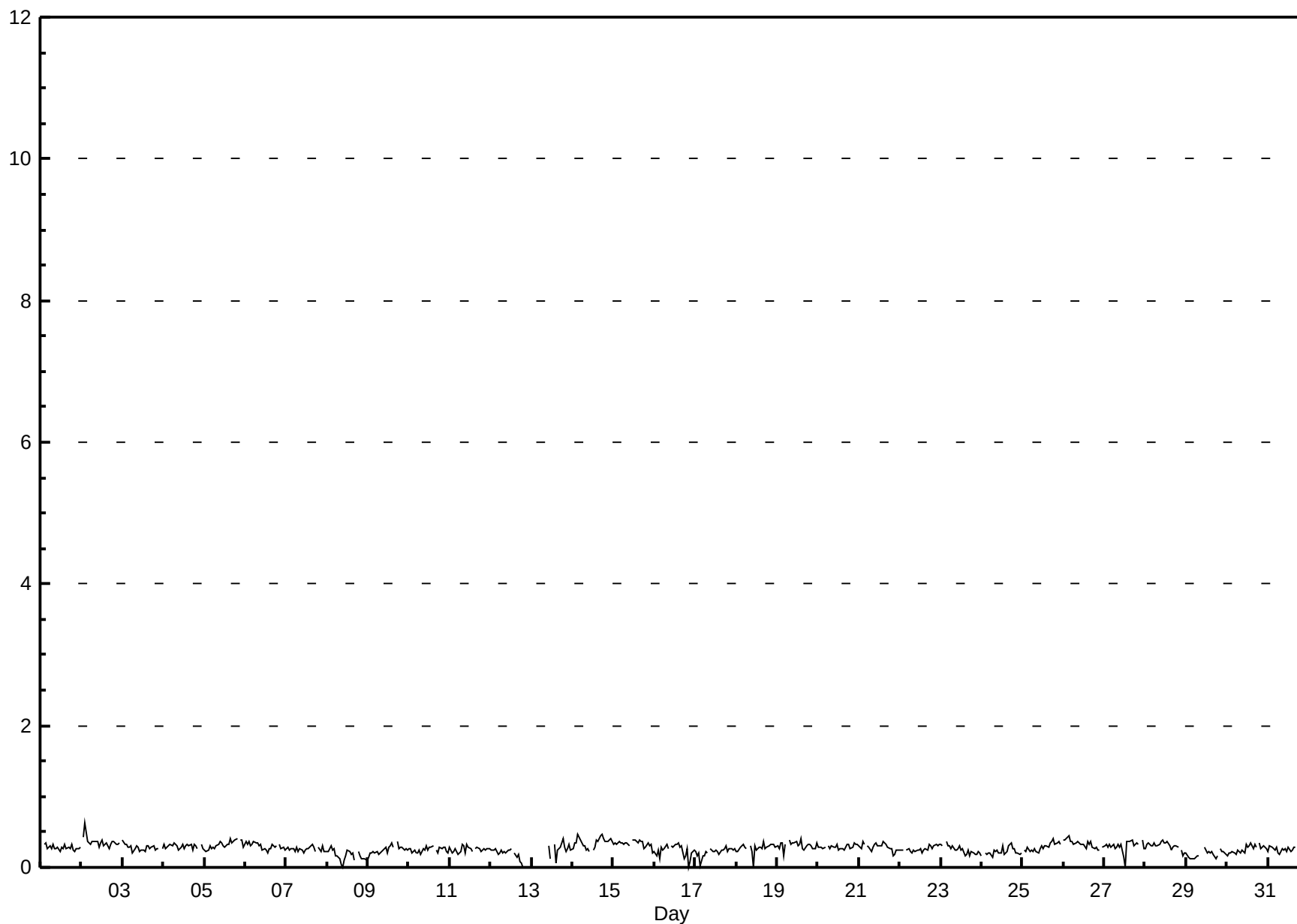
Total Reduced Sulphur (TRS) - ppb

Sunset House - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																			Hours in Service: 744							
Maximum Value: 0.6 ppb on Mar 2 03:00																			Maximum Daily Average: 0.4 ppb on Mar 2		Hours of Data: 704					
Minimum Value: 0 ppb on Mar 8 10:00																			Minimum Daily Average: 0.2 ppb on Mar 12		Hours of Missing Data: 40					
Maximum Diurnal Average: 0.3 ppb at hour 17																			Minimum Diurnal Average: 0.2 ppb at hour 24		Hours of Calibration: 37					
Monthly Average: 0.27 ppb																			Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 0.4		Percent Operational Time: 99.6					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
2-Mar	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	0.6
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.3
5-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.4
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.4
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.3
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.3
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.3
11-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.3
12-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.2	0.3
13-Mar	0	0	0	0	0	0	C	C	C	C	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
14-Mar	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
15-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
16-Mar	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
17-Mar	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
18-Mar	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3
23-Mar	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
24-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
25-Mar	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.4
26-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.4
28-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.4
29-Mar	0	0	0	0	0	0	0	0	D	D	D	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3
30-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.3
																									Diurnal Average	
																									Diurnal Maximum	
C - Calibration D - DAS Failure 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
Sunset House - March 2012



Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

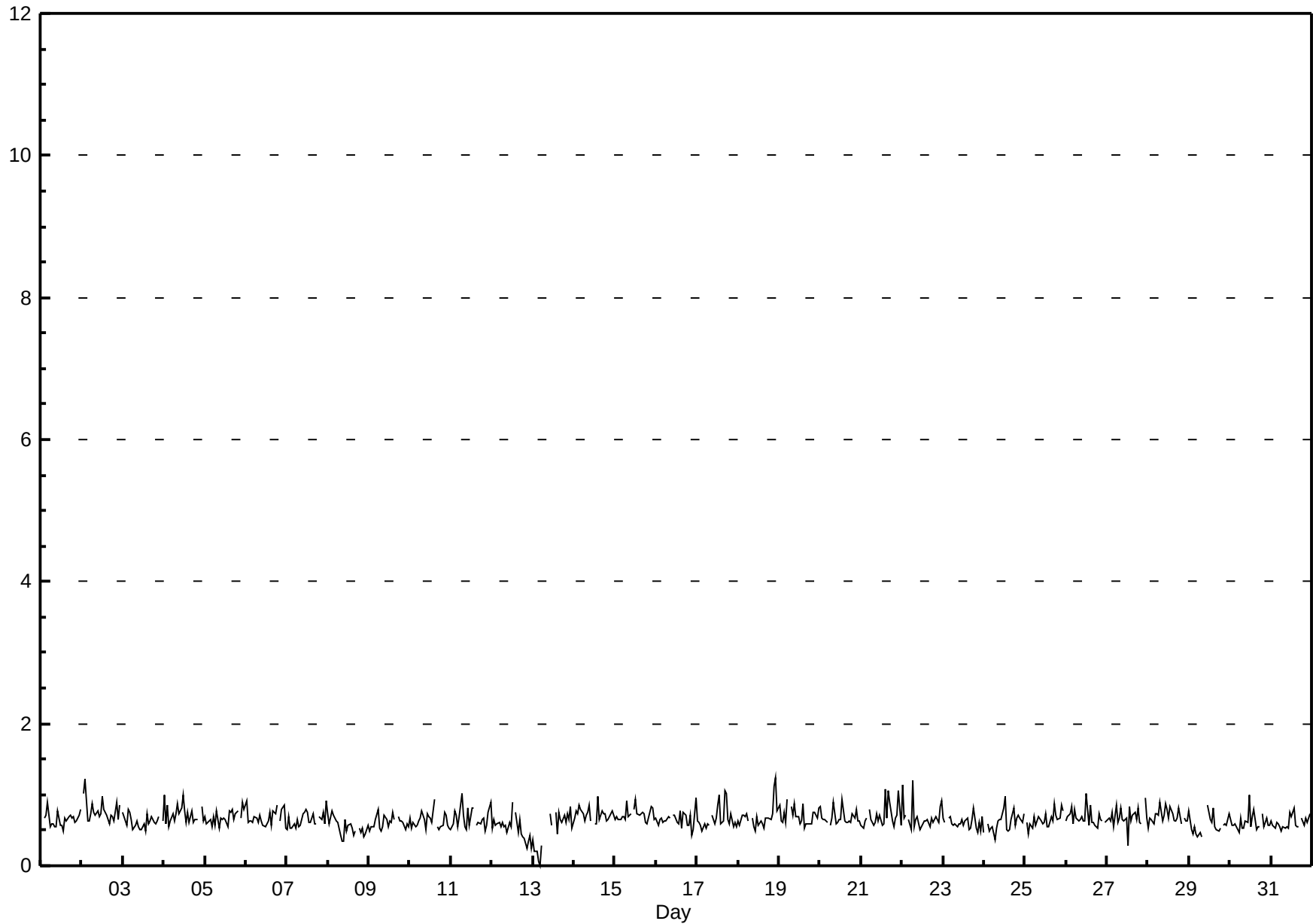
Sunset House - March 2012

Maximum Value: 1.2 ppb on Mar 18 23:00																				Maximum Daily Average: 0.8 ppb on Mar 2										Hours in Service: 744									
Minimum Value: 0 ppb on Mar 13 05:00																				Minimum Daily Average: 0.5 ppb on Mar 13										Hours of Data: 704									
Maximum Diurnal Average: 0.7 ppb at hour 23																				Minimum Diurnal Average: 0.6 ppb at hour 5										Hours of Missing Data: 40									
Monthly Average: 0.65 ppb																				Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.1										Hours of Calibration: 37									
																				Percent Operational Time: 99.6																			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24															
1-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
2-Mar	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.2													
3-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	0.6	0.8													
4-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	1.0													
5-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.7	0.9													
6-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.7	0.9													
7-Mar	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	0.9													
8-Mar	1	1	1	1	1	1	1	0	0	0	1	0	1	1	1	0	0	A	1	1	0	1	0	1	0.5	0.8													
9-Mar	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8													
10-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.6	0.9													
11-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	1	1	0.7	1.0													
12-Mar	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	0	1	0	0	0	0	0	0	0	0.5	0.9													
13-Mar	0	0	0	0	0	0	C	C	C	C	1	1	A	1	0	1	1	1	1	1	1	1	1	1	0.5	0.8													
14-Mar	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0													
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
16-Mar	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.6	0.9													
17-Mar	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1													
18-Mar	1	1	1	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2													
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9													
21-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1													
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2													
23-Mar	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0.6	0.8													
24-Mar	0	A	1	0	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.6	1.0													
25-Mar	A	1	0	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													
26-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0													
27-Mar	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0													
28-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	0.9													
29-Mar	1	1	0	1	0	0	0	0	D	D	D	1	1	1	1	1	1	0	1	A	1	1	1	1	0.6	0.9													
30-Mar	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.6	1.0													
31-Mar	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.6	0.8													
0.7 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.6 0.7 0.7 0.7 0.7 0.7 0.6 0.7 0.7 0.6 0.6 0.6 0.7 0.7 0.7																									Diurnal Average														
1.1 1.0 1.2 0.9 0.9 0.9 1.2 0.9 0.9 0.9 0.9 1.0 1.0 1.0 1.1 0.8 1.1 1.0 0.9 0.8 0.9 1.1 1.2 0.9																									Diurnal Maximum														
C - Calibration							D - DAS Failure							A - Automated Daily Zero Span																									

Hourly Maximums

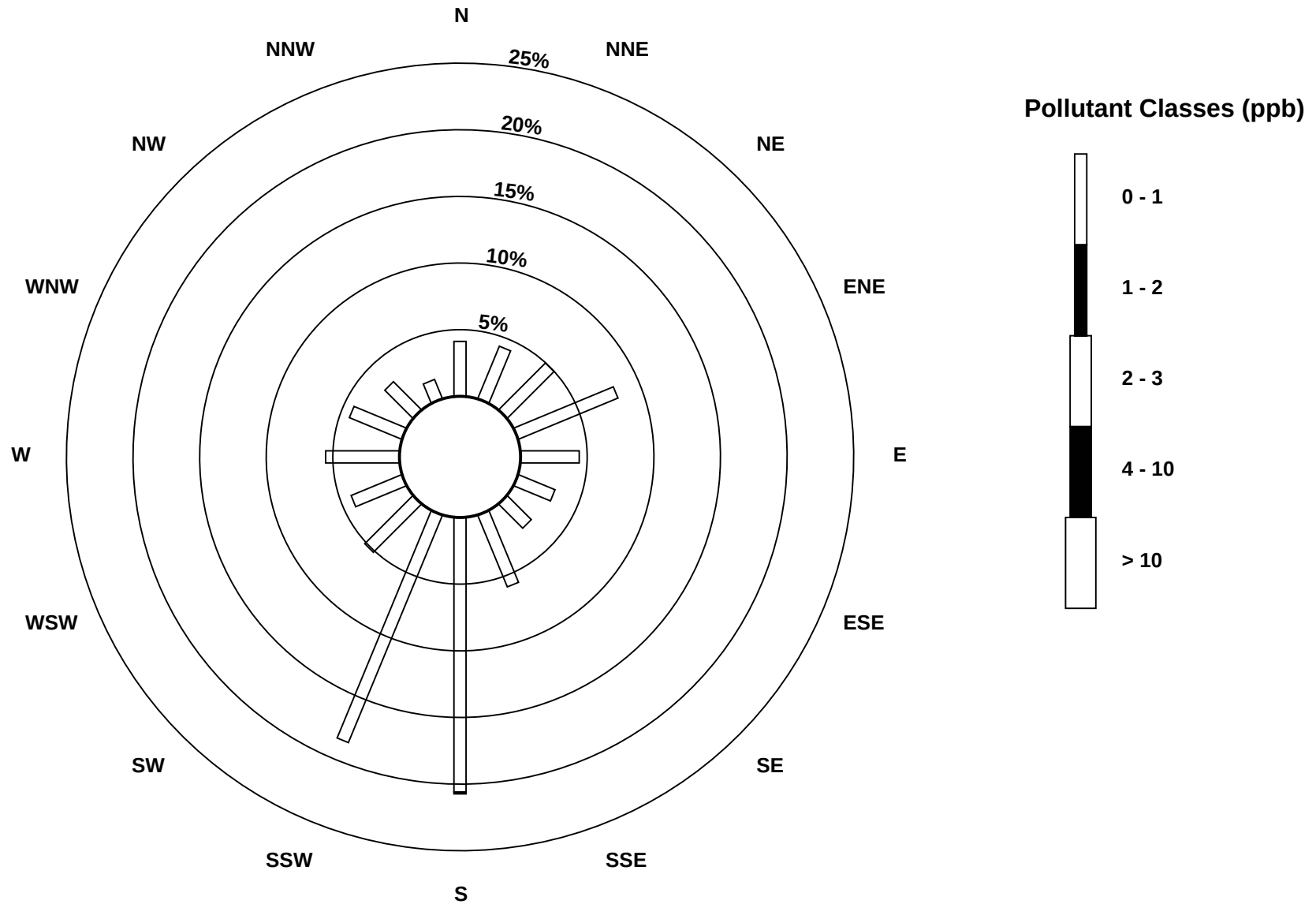
Total Reduced Sulphur (TRS) - ppb

Sunset House - March 2012



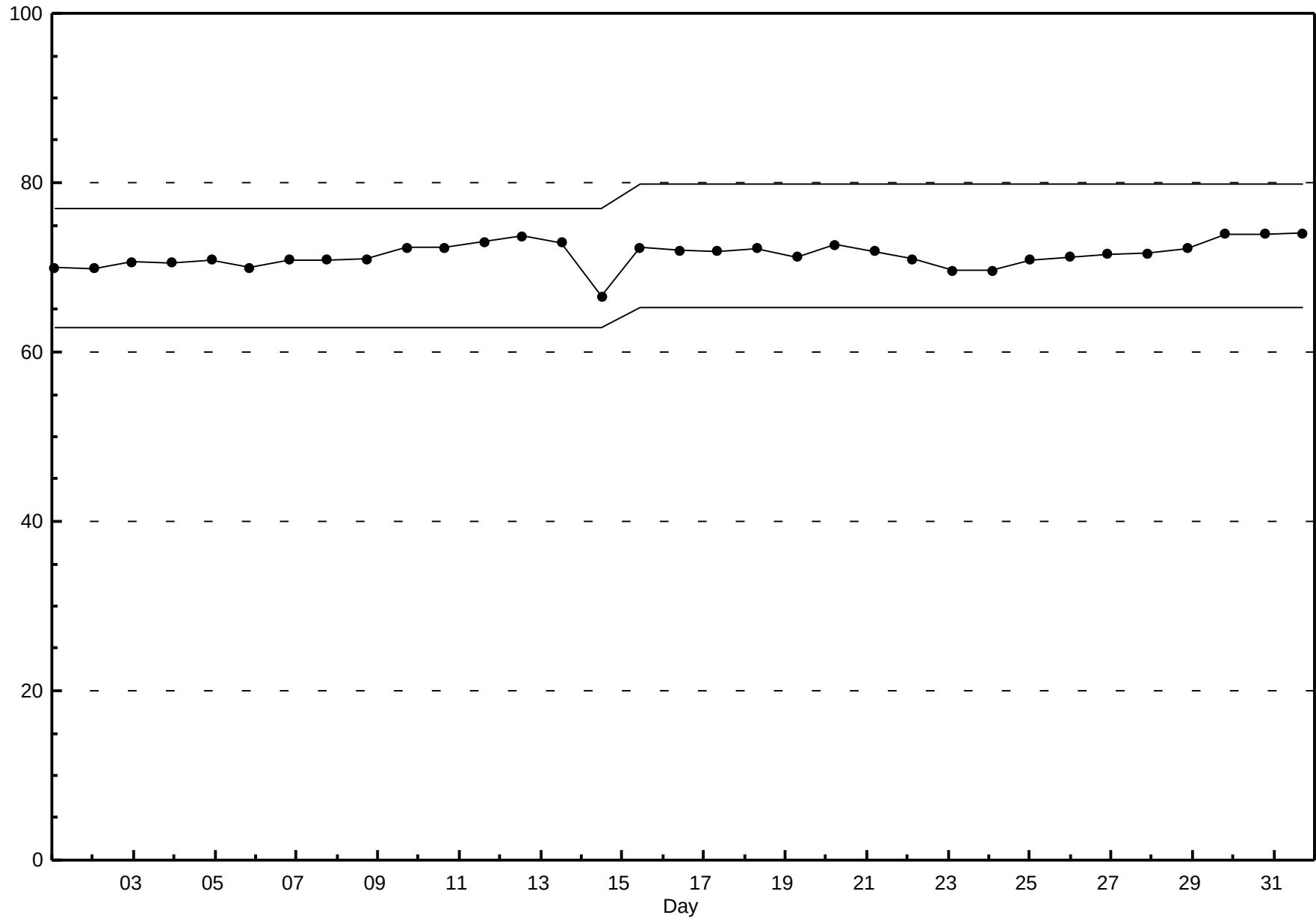
Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Sunset House - March 2012



Span Responses

Total Reduced Sulphur (TRS)
Sunset House - March 2012



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

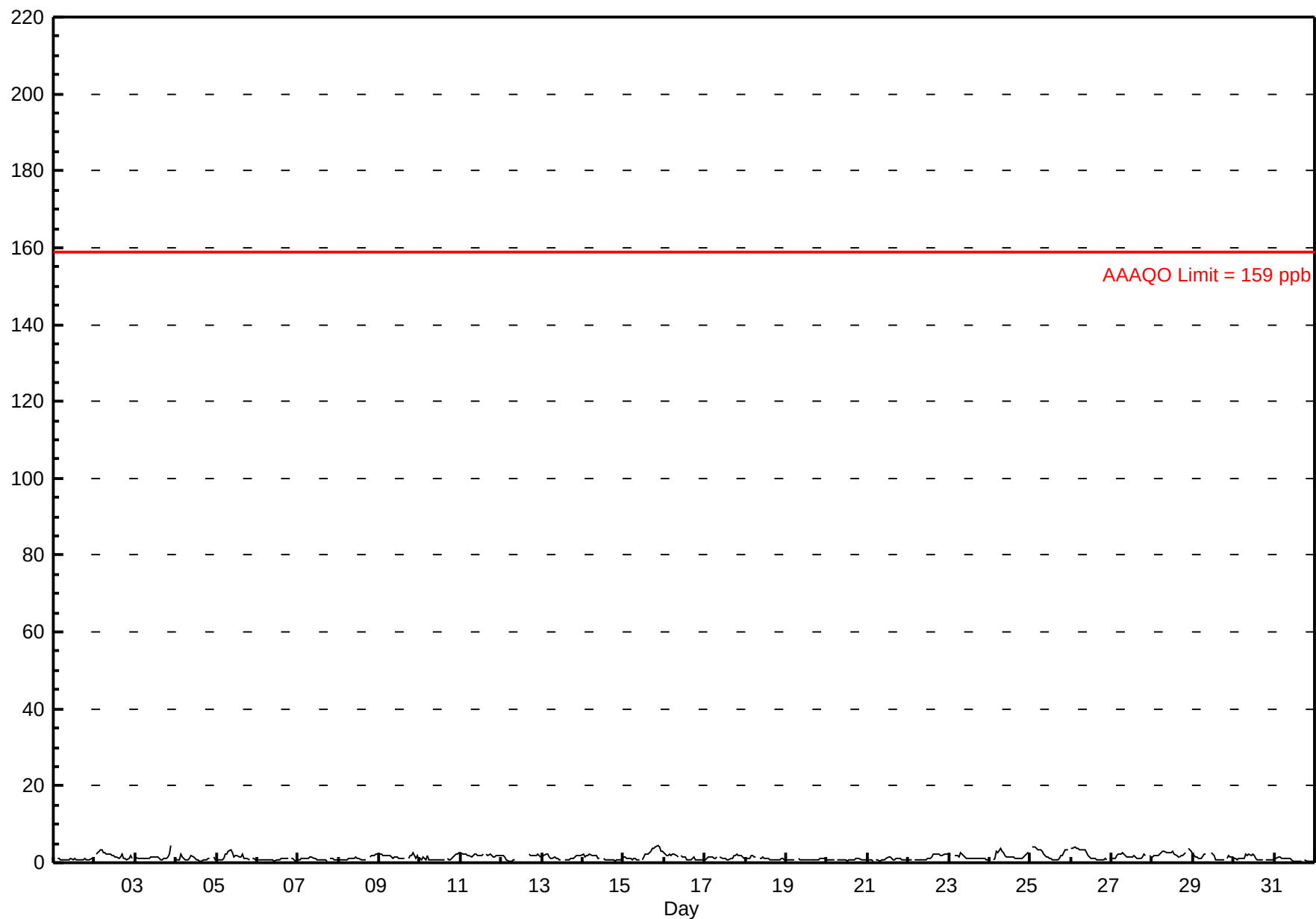
Sunset House - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																				Hours in Service: 744							
Maximum Value: 4.4 ppb on Mar 15 21:00																				Maximum Daily Average: 2.4 ppb on Mar 28				Hours of Data: 702			
Minimum Value: 0 ppb on Apr 1 00:00																				Minimum Daily Average: 0.8 ppb on Mar 31				Hours of Missing Data: 42			
Maximum Diurnal Average: 1.7 ppb at hour 22																				Minimum Diurnal Average: 1.0 ppb at hour 15				Hours of Calibration: 39			
Monthly Average: 1.38 ppb																				Percentiles: P ₁ = 0.4 P ₁₀ = 0.7 Q ₁ = 0.8 Median = 1.1 Q ₃ = 1.8 P ₉₀ = 2.4 P ₉₉ = 4.0				Percent Operational Time: 99.6			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5		
2-Mar	A	2	3	3	3	3	3	2	2	2	2	2	1	1	2	2	1	1	1	1	2	1	A	1	1.9	3.3	
3-Mar	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2	4	A	1	1.4	4.3	
4-Mar	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1.0	2.1	
5-Mar	1	1	1	1	1	2	2	3	3	3	2	2	2	1	2	2	1	1	1	1	A	1	1	1	1.5	3.4	
6-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.2	
7-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.3	
8-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	2	2	2	1.2	2.1	
9-Mar	2	2	2	2	2	2	2	1	1	2	1	1	1	1	1	1	A	1	2	2	2	1	2	1	1.6	2.4	
10-Mar	1	1	2	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	2	3	1.1	2.6	
11-Mar	3	2	2	2	2	2	2	2	2	2	2	2	2	A	2	2	2	2	2	2	1	2	2	2	2.0	2.7	
12-Mar	2	2	1	1	1	0	0	1	1	C	C	C	C	C	C	C	2	2	2	2	2	2	2	2	--	2.2	
13-Mar	2	2	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	2	2	2	2	1.4	2.3	
14-Mar	2	2	2	2	2	2	2	2	2	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1.2	2.4	
15-Mar	1	1	1	1	1	1	1	1	1	1	A	1	2	2	2	2	3	4	4	4	4	4	3	3	2.1	4.4	
16-Mar	3	2	2	2	2	2	2	2	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1.4	2.5	
17-Mar	1	1	2	2	1	1	1	1	A	2	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1.4	2.2	
18-Mar	1	1	1	2	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.9	
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
21-Mar	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5	
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	1.4	2.4	
23-Mar	2	2	A	2	2	2	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	2.6	
24-Mar	1	A	1	1	3	3	4	3	3	2	2	1	2	1	1	1	1	1	1	1	1	2	3	2	1.8	3.7	
25-Mar	A	4	4	4	4	4	3	3	3	2	2	1	1	1	1	1	1	1	2	2	3	3	A	1	2.3	4.1	
26-Mar	4	4	4	4	4	3	3	3	3	2	2	1	1	1	1	1	1	1	1	1	1	1	A	1	2.1	3.9	
27-Mar	1	1	1	2	2	2	3	2	2	2	1	1	2	2	2	1	1	1	2	2	A	2	2	2	1.7	2.7	
28-Mar	2	2	2	2	2	3	3	3	3	2	2	3	3	2	2	2	2	2	2	A	4	3	3	3	2.4	3.7	
29-Mar	2	2	1	1	1	1	2	2	D	D	D	3	2	1	1	1	1	1	A	1	2	2	1	1	1.4	2.6	
30-Mar	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	A	1	1	1	1	1	1.2	2.4	
31-Mar	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	1	1	0	0	0	0	0.8	1.5	
		1.4	1.5	1.5	1.6	1.6	1.5	1.6	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1.0	1.1	1.1	1.2	1.3	1.4	1.5	1.7	1.5	1.3	Diurnal Average	
		3.6	4.0	4.1	4.0	3.7	3.4	3.7	3.3	3.4	2.7	2.5	2.7	2.8	2.4	2.1	2.5	2.8	3.5	3.7	4.2	4.4	4.3	3.2	3.0	Diurnal Maximum	
C - Calibration		D - DAS Failure						A - Automated Daily Zero Span																			
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 159 ppb						24-hr 106 ppb																			

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Sunset House - March 2012



Hourly Maximums

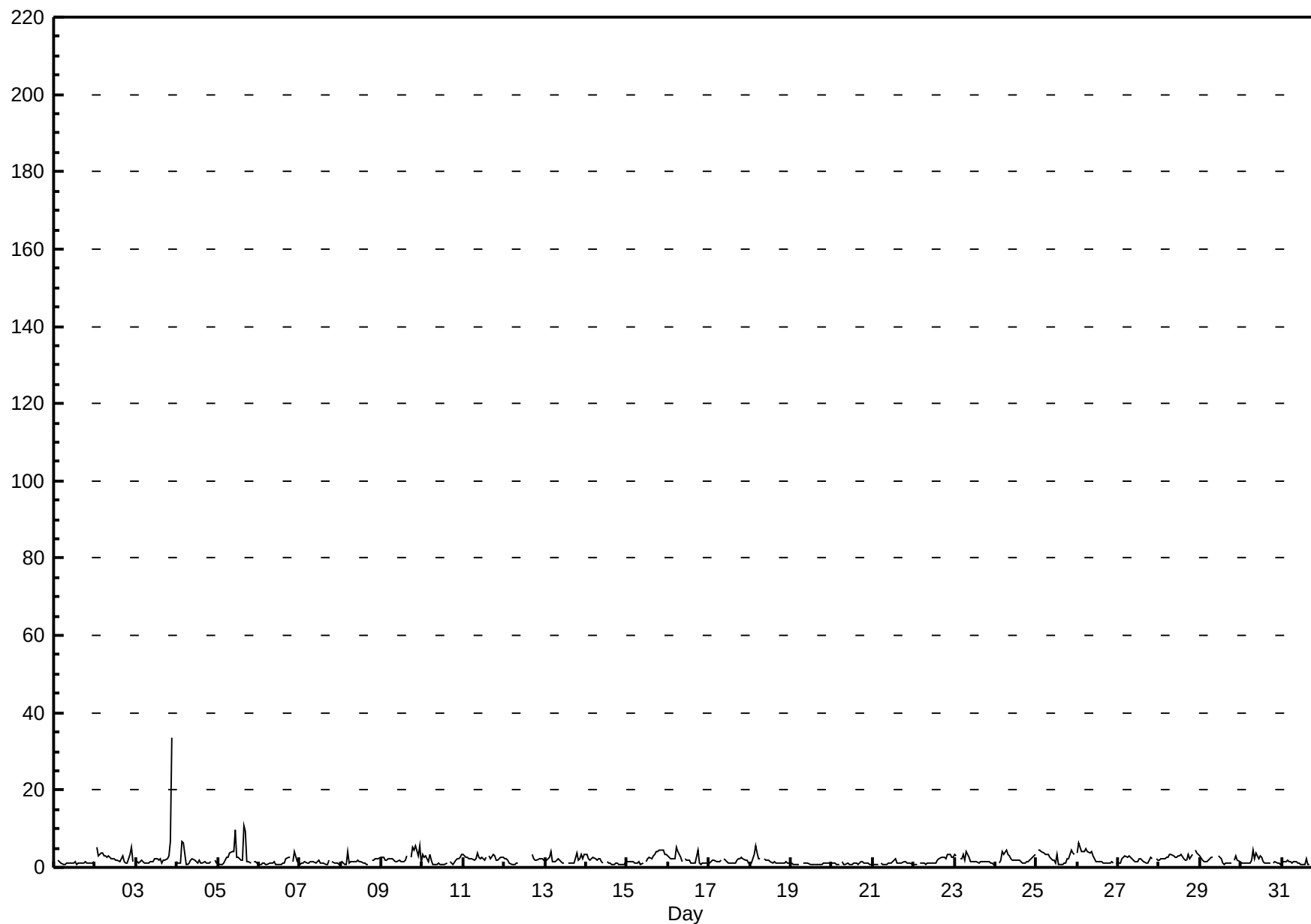
Nitrogen Dioxide (NO₂) - ppb

Sunset House - March 2012

Maximum Value: 33.6 ppb on Mar 3 22:00																				Maximum Daily Average: 3.3 ppb on Mar 3										Hours in Service: 744	
Minimum Value: 0 ppb on Apr 1 00:00																				Minimum Daily Average: 1.0 ppb on Mar 19										Hours of Data: 702	
Maximum Diurnal Average: 3.3 ppb at hour 22																				Minimum Diurnal Average: 1.4 ppb at hour 15										Hours of Missing Data: 42	
Monthly Average: 1.92 ppb																				Percentiles: P ₁ = 0.6 P ₁₀ = 0.9 Q ₁ = 1.1 Median = 1.5 Q ₃ = 2.3 P ₉₀ = 3.4 P ₉₉ = 6.1										Hours of Calibration: 39	
																				Percent Operational Time: 99.6											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	2	A	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1	1	1	1	1.2	1.7					
2-Mar	A	5	3	4	4	3	3	3	3	2	2	2	2	2	1	2	3	1	1	1	3	5	1	A	2.6	5.3					
3-Mar	2	1	1	2	1	1	1	1	2	2	2	2	2	2	2	1	2	2	2	3	7	34	A	2	3.3	33.6					
4-Mar	1	1	1	7	6	1	1	1	2	2	2	2	1	2	1	1	1	1	1	1	1	A	2	1	1.8	6.9					
5-Mar	1	1	1	1	2	3	3	4	4	4	10	3	3	2	2	11	9	1	2	1	A	2	1	1	3.0	10.9					
6-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	2	A	1	4	2	1	1.4	3.9					
7-Mar	1	1	1	1	1	1	1	1	2	1	2	2	1	1	1	1	1	2	A	1	1	1	1	1	1.2	1.8					
8-Mar	1	1	1	1	4	1	1	1	1	1	2	2	2	2	1	1	1	A	2	2	2	2	2	2	1.6	4.0					
9-Mar	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	3	A	2	5	4	6	3	5	1	2.6	5.5					
10-Mar	3	3	3	2	3	2	1	1	1	1	1	1	1	1	1	A	2	1	1	2	2	2	3	3	1.7	3.4					
11-Mar	3	2	2	2	2	2	2	2	4	3	2	2	2	2	A	3	2	3	3	2	2	2	3	3	2.5	3.8					
12-Mar	2	2	2	1	1	1	1	1	1	C	C	C	C	C	C	C	3	2	2	2	2	2	2	2	--	3.2					
13-Mar	2	2	3	4	2	2	1	2	2	1	1	1	A	1	1	1	1	1	4	2	2	3	2	3	1.9	4.2					
14-Mar	3	2	2	2	3	2	2	2	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1.6	3.5					
15-Mar	2	2	1	1	1	1	1	1	1	1	A	1	2	3	2	3	3	4	4	5	5	5	3	3	2.4	4.6					
16-Mar	3	2	2	2	2	5	4	3	2	A	2	2	2	1	1	1	1	4	1	1	1	1	1	1	2.0	5.2					
17-Mar	1	2	2	2	2	1	1	2	A	2	1	1	1	1	1	1	2	2	2	3	2	2	2	1	1.6	2.5					
18-Mar	1	1	3	6	4	2	2	A	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.8	5.5					
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2					
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5					
21-Mar	1	1	1	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1.1	2.1					
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	2	3	2	2	2	3	3	2	3	1.7	3.4					
23-Mar	3	3	A	2	2	3	2	4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.9	4.0					
24-Mar	1	A	1	2	4	4	4	3	3	2	2	2	2	2	2	1	1	1	2	1	2	2	3	3	2.2	4.3					
25-Mar	A	5	4	4	4	4	3	3	3	2	2	1	3	1	1	1	1	1	2	2	5	4	3	A	2.7	4.5					
26-Mar	4	6	4	4	4	5	4	4	4	3	2	2	1	1	1	1	1	1	1	1	1	A	1	2.5	6.3						
27-Mar	1	1	2	3	3	3	3	3	2	2	2	2	2	2	2	2	1	1	2	2	2	A	2	2	2.0	3.0					
28-Mar	2	2	2	2	3	3	3	3	3	3	3	3	3	3	3	2	2	3	2	3	A	5	4	3	2.8	4.5					
29-Mar	3	2	2	1	1	2	3	3	D	D	D	3	2	1	1	1	1	1	1	A	2	3	2	2	1.8	3.2					
30-Mar	1	1	1	1	1	1	2	4	2	4	2	3	2	1	1	1	1	1	A	1	2	1	1	1	1.7	4.4					
31-Mar	1	1	2	2	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	0	0	1.1	2.1					
1.8 2.0 1.9 2.2 2.3 2.0 2.0 2.1 1.9 1.8 1.9 1.6 1.7 1.5 1.4 1.7 1.8 1.8 1.9 1.8 2.2 3.3 1.9 1.7																									Diurnal Average						
3.9 6.3 4.4 6.9 6.4 5.2 4.3 4.4 4.1 4.0 9.6 3.2 3.4 3.2 2.3 10.9 9.1 4.4 5.1 4.5 6.8 33.6 5.4 3.5																									Diurnal Maximum						
C - Calibration					D - DAS Failure					A - Automated Daily Zero Span																					

Hourly Maximums

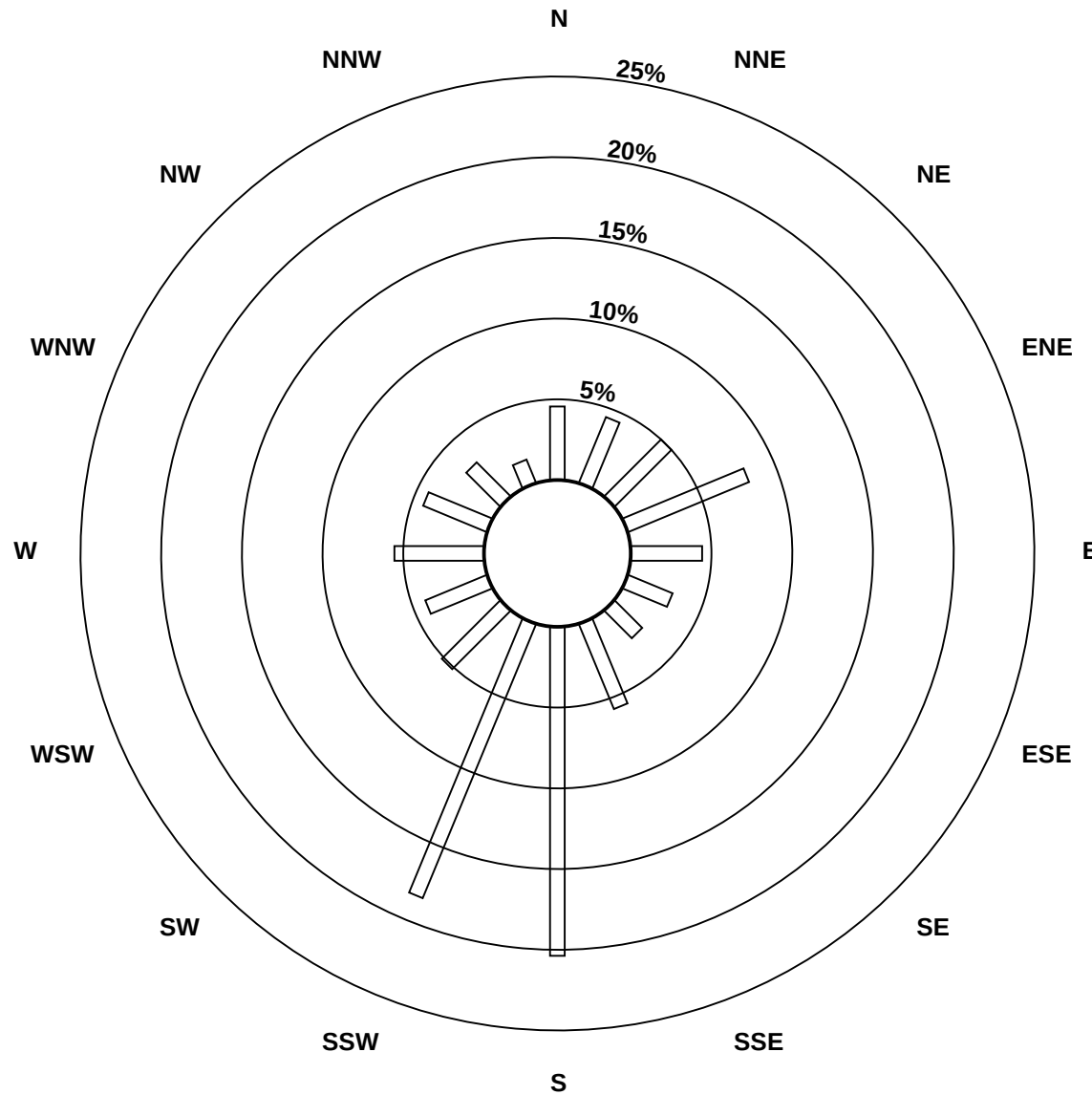
Nitrogen Dioxide (NO₂) - ppb
Sunset House - March 2012



Pollutant Rose

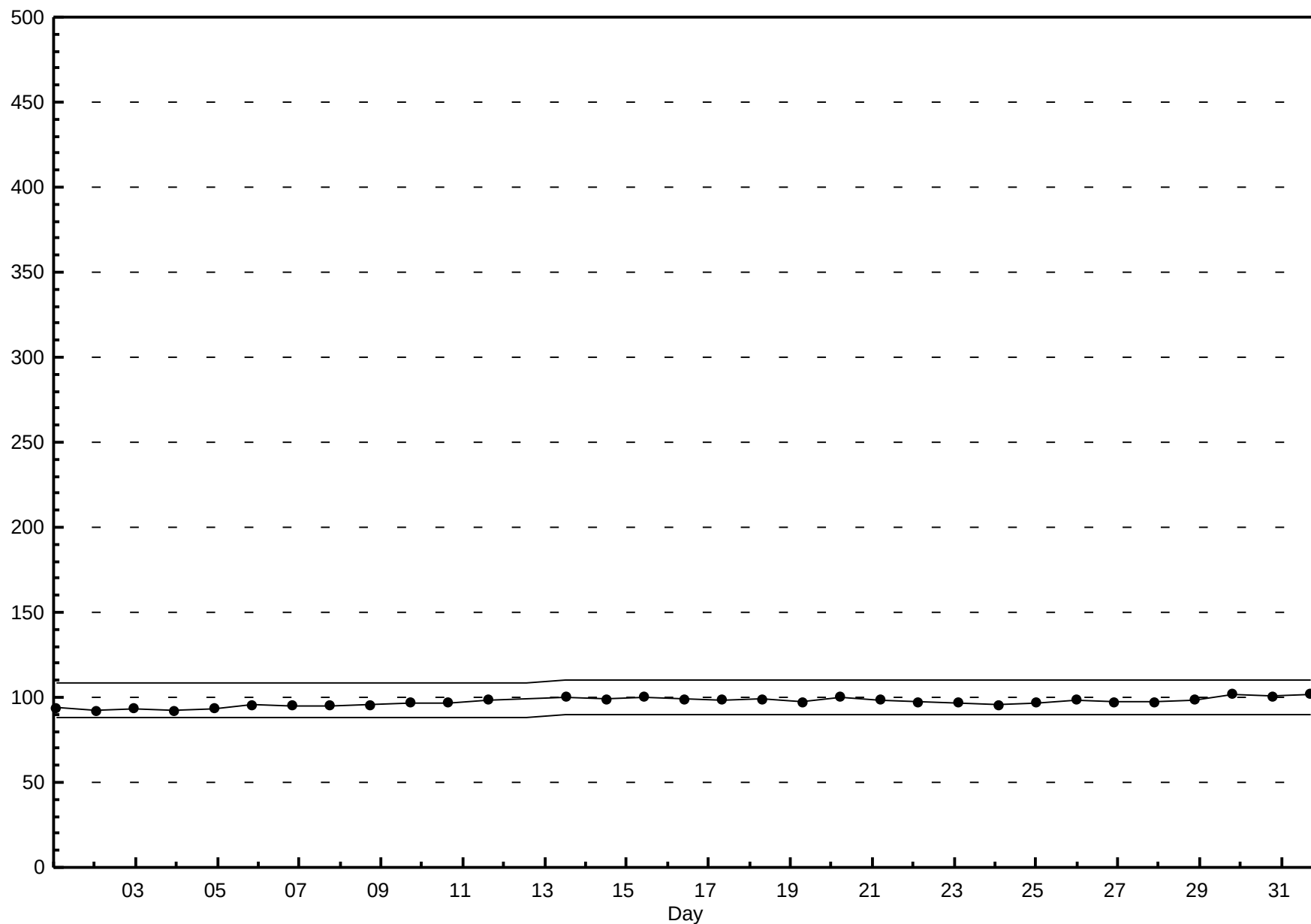
Nitrogen Dioxide (NO₂) - ppb

Sunset House - March 2012



Span Responses

Nitrogen Dioxide (NO₂)
Sunset House - March 2012



Hourly Averages

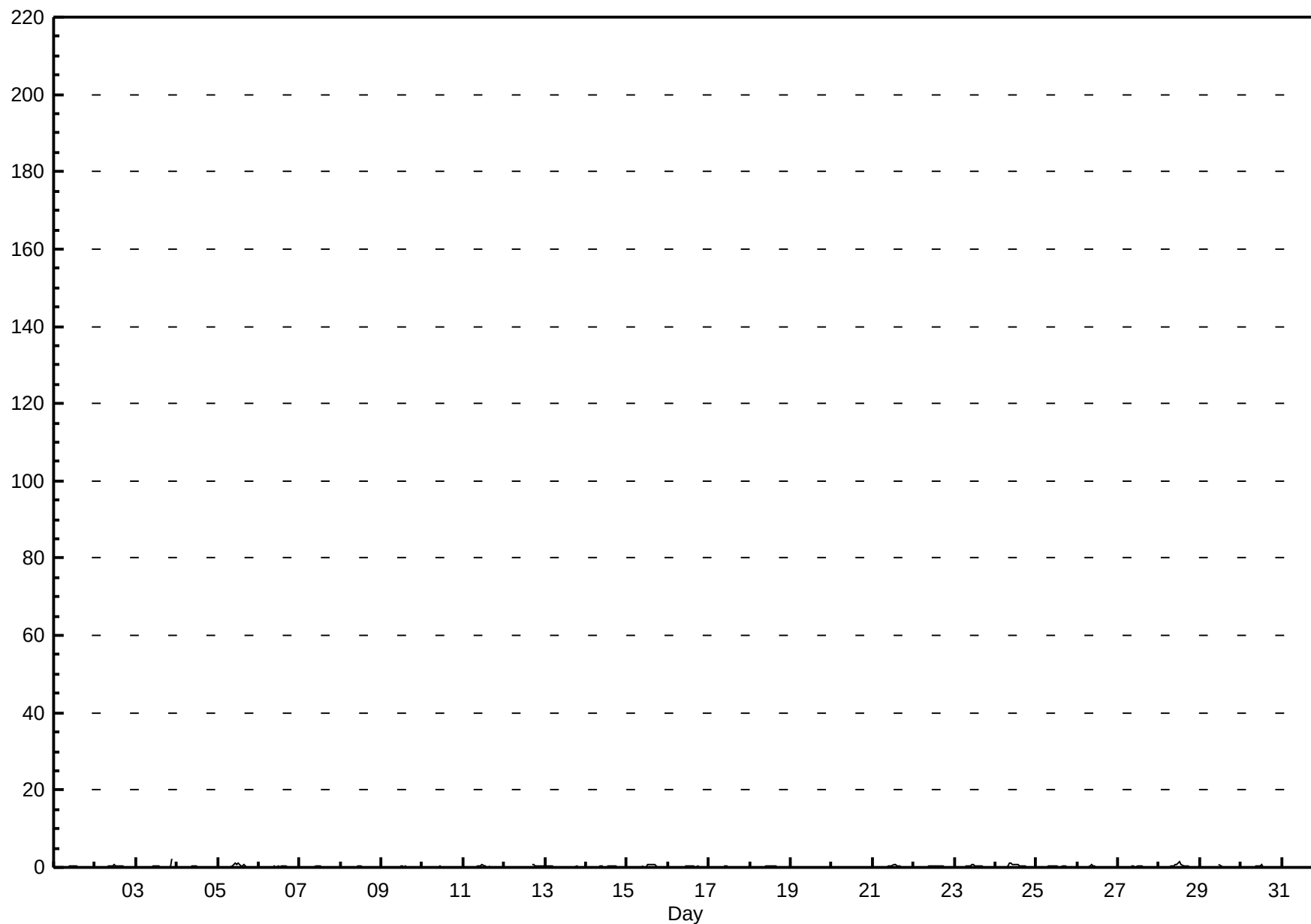
Nitrogen Oxide (NO) - ppb

Sunset House - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.1 ppb on Mar 3 22:00 Maximum Daily Average: 0.3 ppb on Mar 24																				Hours in Service: 744 Hours of Data: 702 Hours of Missing Data: 42 Hours of Calibration: 39 Percent Operational Time: 99.6						
Minimum Value: 0 ppb on Mar 2 00:00 Minimum Daily Average: 0.0 ppb on Mar 31 Maximum Diurnal Average: 0.4 ppb at hour 13 Minimum Diurnal Average: 0.0 ppb at hour 1 Monthly Average: 0.13 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 = 1.0																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
2-Mar	A	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0.2	0.6
3-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	A	0	0.2	2.1
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.5
5-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	1	0	0	0	A	0	0	0	0.3	1.0
6-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.5
7-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.4
8-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0.1	0.3
9-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.0	0.2
11-Mar	0	0	0	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0.1	0.7
12-Mar	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	1	1	0	0	0	0	0	0	--	0.6
13-Mar	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
14-Mar	0	0	0	0	0	0	0	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
15-Mar	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0.2	0.7
16-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
17-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
18-Mar	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
21-Mar	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.1	0.7
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
23-Mar	0	0	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
24-Mar	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.1
25-Mar	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.5
26-Mar	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.7
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.1	0.5
28-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0.3	1.4
29-Mar	0	0	0	0	0	0	0	0	D	D	D	1	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.6
30-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0.1	0.6
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.2
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.2 0.3 0.4 0.4 0.4 0.3 0.2 0.2 0.2 0.1 0.1 0.0 0.0 0.1 0.0 0.0																								Diurnal Average		
0.3 0.2 0.2 0.2 0.2 0.1 0.1 0.5 1.1 1.1 1.0 1.0 1.4 0.8 0.6 0.7 0.6 0.6 0.4 0.3 0.3 2.1 0.3 0.3																								Diurnal Maximum		
C - Calibration D - DAS Failure A - Automated Daily Zero Span																										

Hourly Averages

Nitrogen Oxide (NO) - ppb
Sunset House - March 2012



Hourly Maximums

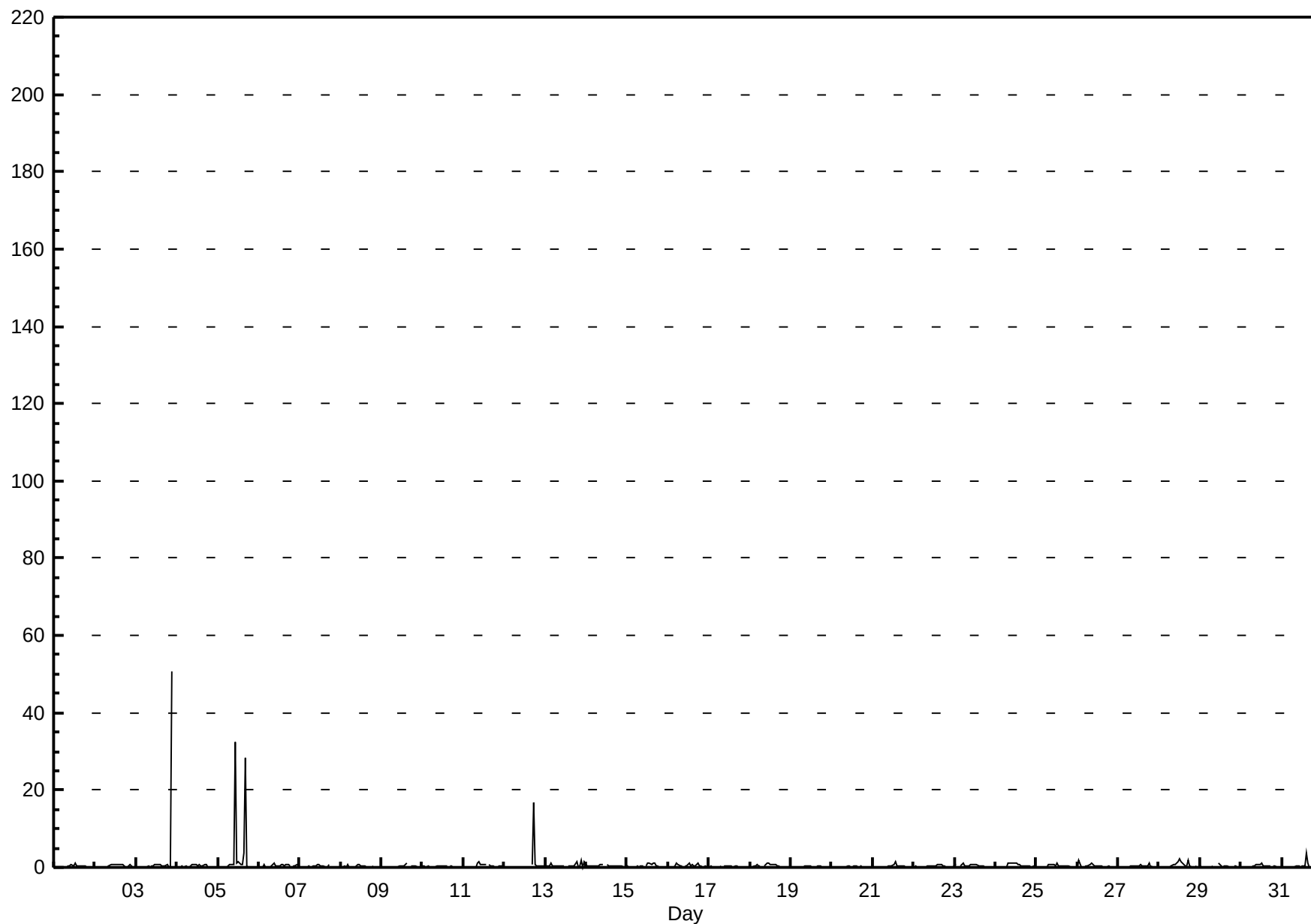
Nitrogen Oxide (NO) - ppb

Sunset House - March 2012

Maximum Value: 50.9 ppb on Mar 3 22:00																			Maximum Daily Average: 3.2 ppb on Mar 5																			Hours in Service: 744	
Minimum Value: 0 ppb on Mar 12 02:00																			Minimum Daily Average: 0.2 ppb on Mar 19																			Hours of Data: 702	
Maximum Diurnal Average: 2.0 ppb at hour 22																			Minimum Diurnal Average: 0.2 ppb at hour 3																			Hours of Missing Data: 42	
Monthly Average: 0.52 ppb																			Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.8 P ₉₉ = 1.5																			Hours of Calibration: 39	
																																						Percent Operational Time: 99.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24															
1-Mar	0	A	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0													
2-Mar	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	1	0	0	A	0.4	0.9													
3-Mar	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	0	0	51	A	0	2.5	50.9													
4-Mar	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	1	0	0	0	A	0	0	0.3	0.7													
5-Mar	0	0	0	0	0	0	0	1	1	1	33	1	2	1	1	4	29	0	0	0	A	0	0	0	3.2	32.5													
6-Mar	0	0	0	1	0	0	0	0	1	1	0	0	0	1	1	0	1	1	0	A	0	0	1	0	0.4	1.1													
7-Mar	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	A	0	0	0	0	0	0.2	0.8													
8-Mar	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0.2	0.8													
9-Mar	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	A	0	0	0	1	0	0	0	0.3	0.9													
10-Mar	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.5													
11-Mar	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0.4	1.4													
12-Mar	0	0	0	0	0	0	0	0	0	C	C	C	C	C	C	C	1	17	1	0	0	0	0	0	--	16.8													
13-Mar	0	0	0	1	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	2	0	2	0.5	1.9													
14-Mar	0	0	0	0	0	0	0	0	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7													
15-Mar	0	0	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0.4	1.2													
16-Mar	0	0	0	0	0	1	1	0	0	A	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0.4	1.2													
17-Mar	0	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6													
18-Mar	0	0	0	0	1	0	0	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	1.1													
19-Mar	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3													
20-Mar	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3													
21-Mar	0	0	0	0	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.3													
22-Mar	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.3	0.7													
23-Mar	1	1	A	0	1	1	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0.5	1.1													
24-Mar	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0.5	1.2													
25-Mar	A	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	A	0.4	1.0													
26-Mar	0	2	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	1.9													
27-Mar	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	A	0	0	0.3	1.1													
28-Mar	0	0	0	0	0	0	0	0	1	1	1	1	2	2	1	0	0	2	0	0	A	0	0	0	0.5	2.2													
29-Mar	0	0	0	0	0	0	0	0	D	D	D	1	0	0	0	0	0	0	0	A	0	0	0	0	0.2	1.0													
30-Mar	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	A	1	0	0	0	0	0.3	1.0													
31-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	0	A	0	0	0	0	0	0	0.3	3.6													
Diurnal Average																																							
Diurnal Maximum																																							
C - Calibration																																							
D - DAS Failure																																							
A - Automated Daily Zero Span																																							

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Sunset House - March 2012



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

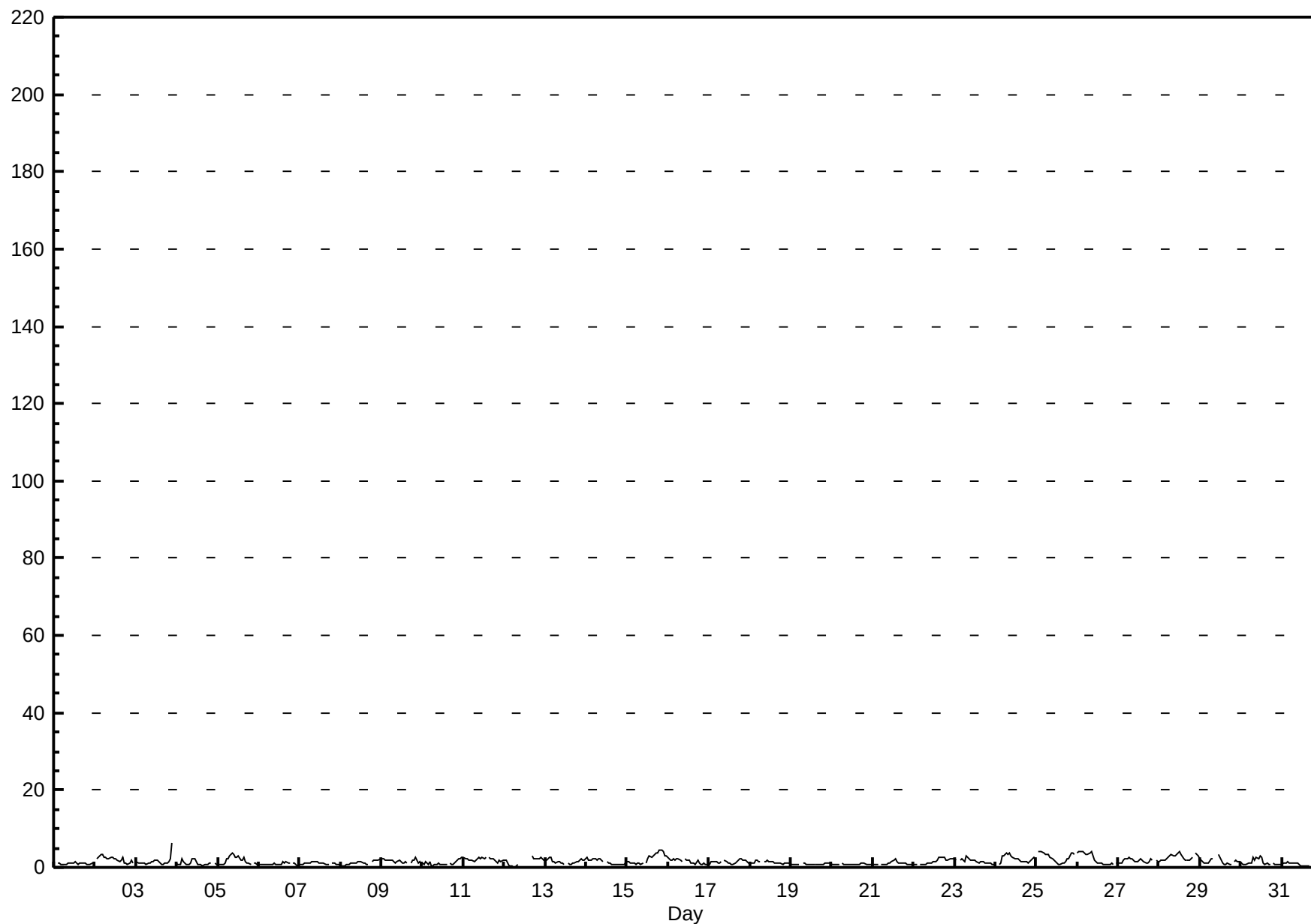
Sunset House - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0																		Hours in Service: 744								
Maximum Value: 6.4 ppb on Mar 3 22:00 Maximum Daily Average: 2.6 ppb on Mar 28																		Hours of Data: 702								
Minimum Value: 0 ppb on Mar 12 07:00 Minimum Daily Average: 0.7 ppb on Mar 31																		Hours of Missing Data: 42								
Maximum Diurnal Average: 1.8 ppb at hour 22 Minimum Diurnal Average: 1.2 ppb at hour 15																		Hours of Calibration: 39								
Monthly Average: 1.51 ppb Percentiles: P ₁ = 0.4 P ₁₀ = 0.7 Q ₁ = 0.9 Median = 1.3 Q ₃ = 2.0 P ₉₀ = 2.6 P ₉₉ = 4.1																		Percent Operational Time: 99.6								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
2-Mar	A	2	3	3	3	3	3	2	2	2	3	2	2	1	2	3	1	1	1	1	2	1	A	2.1	3.3	
3-Mar	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	2	6	A	1.5	6.4	
4-Mar	1	1	1	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1.1	2.3	
5-Mar	1	1	1	1	1	2	2	3	4	3	3	3	3	2	2	3	2	1	1	1	A	1	1	1.8	3.6	
6-Mar	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.4	
7-Mar	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.5	
8-Mar	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	1	A	2	2	2	2	2	1.2	2.1	
9-Mar	2	2	2	2	2	2	2	1	1	1	2	1	1	1	1	1	A	1	2	2	2	1	2	1.6	2.4	
10-Mar	1	1	2	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	2	1.1	2.6	
11-Mar	3	2	2	2	2	2	2	2	2	2	2	3	2	2	A	2	2	2	2	2	1	2	2	2.0	2.7	
12-Mar	2	2	1	0	0	0	0	0	1	C	C	C	C	C	C	C	3	2	2	2	2	2	2	--	2.9	
13-Mar	2	2	3	2	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	2	2	2	2	1.5	2.5	
14-Mar	2	2	2	2	2	2	2	2	2	2	1	A	1	1	1	1	1	1	1	1	1	1	1	1.4	2.5	
15-Mar	2	1	1	1	1	1	1	1	1	1	A	1	2	3	3	3	3	4	4	4	5	4	3	2.3	4.5	
16-Mar	3	2	2	2	2	2	2	2	2	A	2	2	2	1	1	1	1	2	1	1	1	1	1	1.5	2.5	
17-Mar	1	1	2	2	1	1	1	2	A	2	1	1	1	1	1	1	1	2	2	2	2	2	1	1.5	2.3	
18-Mar	1	1	1	2	2	2	2	A	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1.3	2.0	
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3	
21-Mar	1	1	1	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1.0	2.2	
22-Mar	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	3	3	3	2	2	2	2	2	1.5	2.7	
23-Mar	2	2	A	2	2	2	2	3	2	2	2	2	2	1	1	1	2	1	1	1	1	1	1	1.6	2.8	
24-Mar	1	A	1	1	3	3	4	4	4	3	2	2	2	2	2	2	1	1	1	1	2	2	3	2.1	3.9	
25-Mar	A	4	4	4	4	3	3	3	3	2	2	1	1	1	1	1	1	1	2	2	4	4	3	A	2.5	4.2
26-Mar	4	4	4	4	4	4	3	4	4	3	2	1	1	1	1	1	1	1	1	1	1	A	1	2.2	4.1	
27-Mar	1	1	1	2	2	2	3	2	2	2	1	2	2	2	1	1	1	1	2	2	A	2	2	1.8	2.7	
28-Mar	2	2	2	2	2	3	3	3	3	3	3	4	4	3	2	2	2	2	3	A	4	3	3	2.6	4.2	
29-Mar	2	2	1	1	1	1	2	2	D	D	D	3	2	1	1	1	1	1	A	1	2	2	1	1.4	3.2	
30-Mar	1	1	1	1	1	1	1	2	2	2	2	3	2	1	1	1	1	1	A	1	1	1	1	1.3	2.9	
31-Mar	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	1	1	0	0	0	0.7	1.4	
1.4		1.5	1.5	1.6	1.6	1.5	1.6	1.7	1.7	1.7	1.7	1.6	1.6	1.4	1.2	1.3	1.3	1.4	1.4	1.5	1.5	1.8	1.5	1.3	Diurnal Average	
3.7		4.1	4.2	4.1	3.8	3.5	3.9	3.6	4.1	3.3	3.3	3.7	4.2	3.2	2.6	3.1	3.5	3.9	3.9	4.3	4.5	6.4	3.3	2.9	Diurnal Maximum	
C - Calibration		D - DAS Failure						A - Automated Daily Zero Span																		

Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Sunset House - March 2012



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

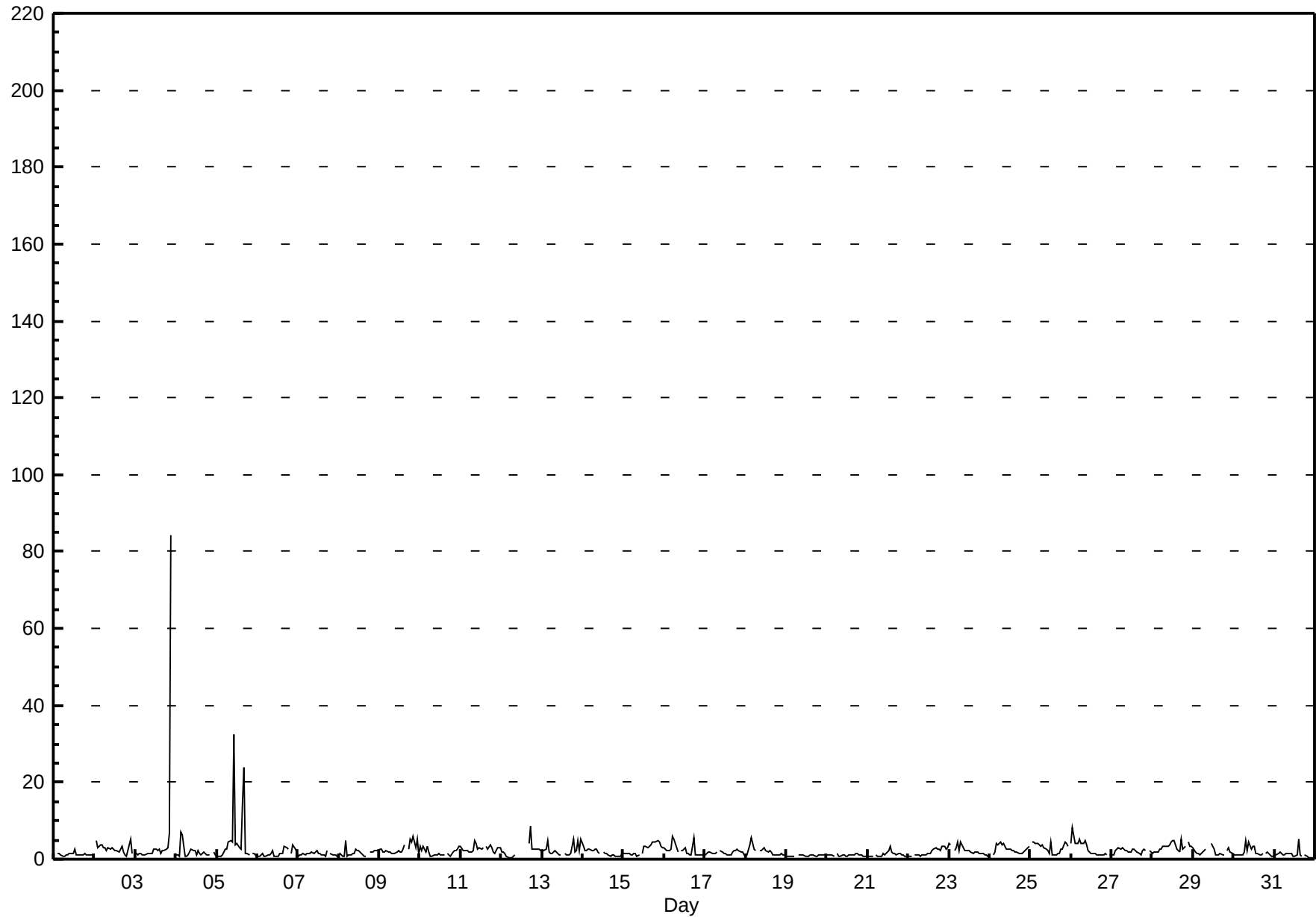
Sunset House - March 2012

Maximum Value: 84.2 ppb on Mar 3 22:00																			Maximum Daily Average: 5.6 ppb on Mar 3										Hours in Service: 744	
Minimum Value: 0 ppb on Mar 12 06:00																			Minimum Daily Average: 1.0 ppb on Mar 19										Hours of Data: 702	
Maximum Diurnal Average: 5.1 ppb at hour 22																			Minimum Diurnal Average: 1.8 ppb at hour 24										Hours of Missing Data: 42	
Monthly Average: 2.24 ppb																			Percentiles: P ₁ = 0.6 P ₁₀ = 0.9 Q ₁ = 1.2 Median = 1.7 Q ₃ = 2.5 P ₉₀ = 3.9 P ₉₉ = 6.3										Hours of Calibration: 39	
																													Percent Operational Time: 99.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
1-Mar	2	A	2	1	1	1	1	1	1	1	2	1	2	1	1	1	1	1	2	1	1	1	1	1	1.3	2.5				
2-Mar	A	5	3	4	4	3	3	2	3	3	3	3	2	2	2	3	3	2	1	1	4	5	1	A	2.8	5.4				
3-Mar	2	1	1	2	1	1	1	1	1	2	2	3	3	2	3	2	2	2	3	3	7	84	A	1	5.6	84.2				
4-Mar	1	1	1	7	6	1	1	1	2	3	2	2	1	2	1	1	2	2	1	1	1	A	2	1	1.9	7.0				
5-Mar	1	1	1	1	2	3	3	4	5	4	32	4	4	3	3	15	24	1	1	1	A	2	1	1	5.1	32.3				
6-Mar	1	1	1	2	1	1	1	1	2	2	1	1	1	1	2	2	3	3	3	A	1	4	2	2	1.6	3.8				
7-Mar	1	1	1	1	1	2	1	1	2	1	2	2	1	1	1	1	1	2	A	1	1	1	1	1	1.4	2.3				
8-Mar	1	1	1	1	5	1	1	1	1	2	2	2	2	2	1	1	1	A	A	2	2	2	2	2	1.7	4.8				
9-Mar	2	3	2	2	2	2	2	2	1	2	2	2	2	2	3	4	A	3	5	4	6	3	5	1	2.7	6.0				
10-Mar	3	2	3	2	3	2	1	1	1	1	1	1	1	1	1	A	2	1	1	2	2	2	2	3	1.8	3.5				
11-Mar	3	2	2	2	2	2	2	2	5	4	3	3	3	3	A	4	2	4	3	2	1	2	3	3	2.7	4.8				
12-Mar	2	2	2	1	0	0	0	1	1	C	C	C	C	C	C	C	C	4	8	2	2	3	3	2	2	--	8.5			
13-Mar	2	2	3	5	2	2	1	2	2	2	1	1	A	1	1	1	1	1	5	2	2	5	2	5	2.3	5.2				
14-Mar	4	2	2	2	3	2	2	3	2	2	2	A	2	1	1	1	1	1	1	1	1	1	1	2	1.7	3.5				
15-Mar	2	2	1	1	1	1	1	2	1	1	A	1	3	3	3	4	4	4	4	5	5	5	3	3	2.7	4.7				
16-Mar	3	2	2	2	3	6	5	3	2	A	2	2	3	2	2	1	1	5	1	1	1	1	1	1	2.3	6.1				
17-Mar	1	2	2	2	2	1	1	2	A	2	2	2	1	1	1	1	2	2	2	2	2	2	2	1	1.7	2.5				
18-Mar	1	1	4	6	4	3	2	A	2	2	3	3	2	2	2	2	1	1	1	1	1	1	1	1	2.1	5.7				
19-Mar	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3				
20-Mar	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1.1	1.6				
21-Mar	1	1	1	1	A	1	1	1	1	1	1	2	2	3	2	1	1	1	1	1	1	1	1	1	1.3	3.3				
22-Mar	1	1	1	A	1	1	1	1	1	1	1	2	1	2	2	3	3	3	3	2	3	3	3	3	1.8	3.4				
23-Mar	4	4	A	2	3	4	2	4	3	2	2	2	2	2	1	2	2	2	1	1	1	1	1	1	2.2	4.3				
24-Mar	1	A	1	2	4	4	4	4	4	3	3	2	3	2	2	2	2	2	2	1	2	2	3	3	2.6	4.4				
25-Mar	A	5	4	4	4	4	3	4	3	3	2	2	4	1	1	1	1	2	3	3	5	4	3	A	3.0	4.6				
26-Mar	4	8	4	4	4	5	4	4	5	4	2	2	2	1	1	1	1	1	1	1	1	1	A	1	2.8	8.3				
27-Mar	1	1	2	2	3	3	3	3	2	2	2	2	3	3	2	2	1	1	2	3	2	A	2	2	2.1	3.0				
28-Mar	2	2	2	2	2	3	3	4	3	3	4	4	5	5	3	2	2	5	3	3	A	5	4	3	3.2	5.2				
29-Mar	3	2	1	1	1	2	2	2	D	D	D	4	3	1	1	1	1	1	1	A	2	3	2	2	1.9	4.0				
30-Mar	1	1	1	1	1	1	2	5	2	4	3	3	3	2	1	1	1	1	A	2	2	1	1	1	1.9	4.9				
31-Mar	1	1	2	2	1	1	1	2	2	1	2	1	1	1	5	1	1	A	1	1	0	0	0	0	1.2	5.2				
1.8		2.1	1.8	2.2	2.3	2.0	2.0	2.2	2.2	2.2	3.1	2.1	2.2	1.9	1.8	2.1	2.5	2.3	2.0	1.8	2.2	5.1	2.0	1.8	Diurnal Average					
4.0		8.3	4.4	7.0	6.4	6.1	5.1	4.9	4.9	4.5	32.3	4.4	5.0	4.7	5.2	14.7	23.9	8.5	5.2	4.6	6.9	84.2	5.3	5.1	Diurnal Maximum					
C - Calibration				D - DAS Failure				A - Automated Daily Zero Span																						

Hourly Maximums

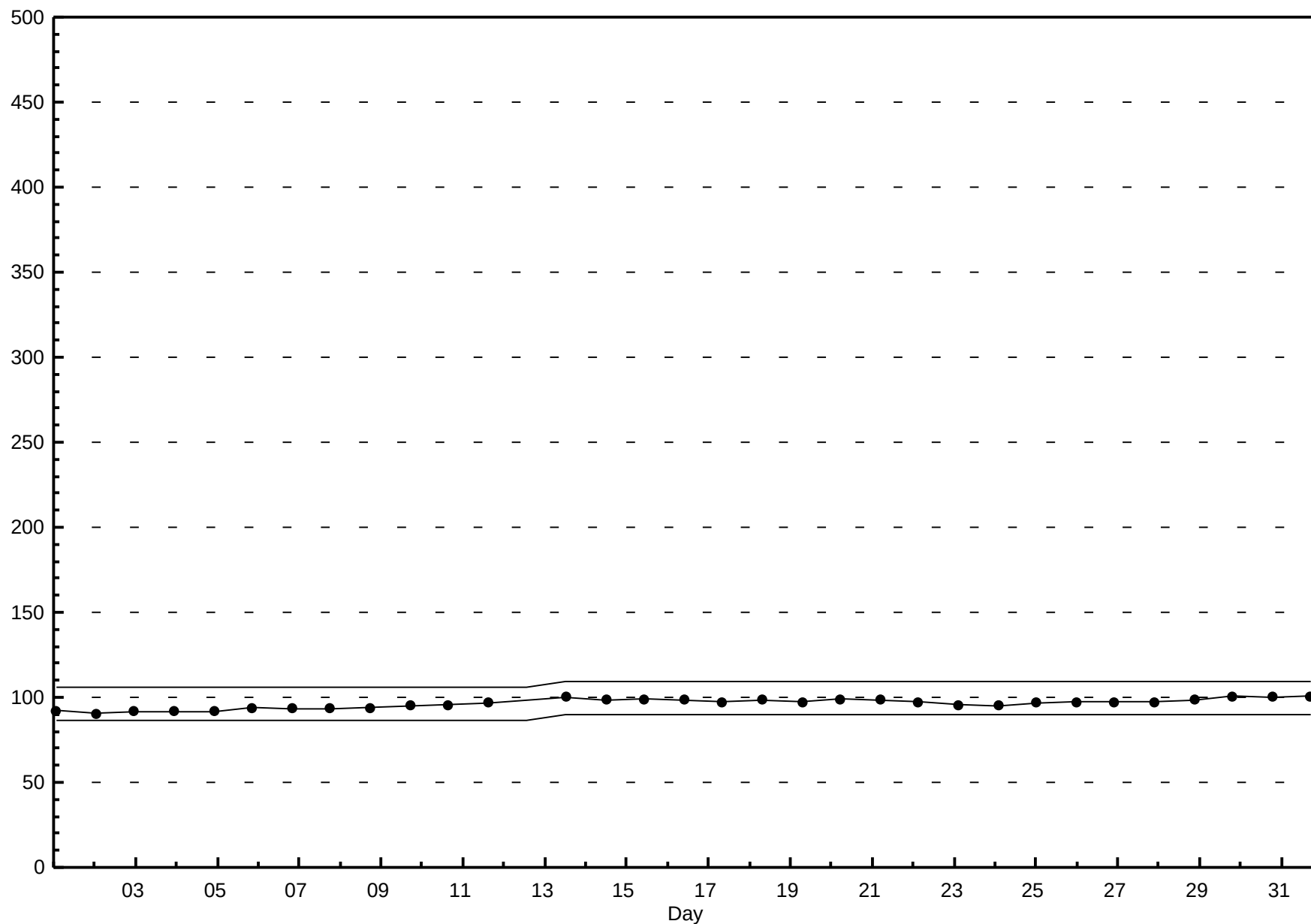
Oxides of Nitrogen (NO_x) - ppb

Sunset House - March 2012



Span Responses

Oxides of Nitrogen (NO_x)
Sunset House - March 2012



Hourly Averages

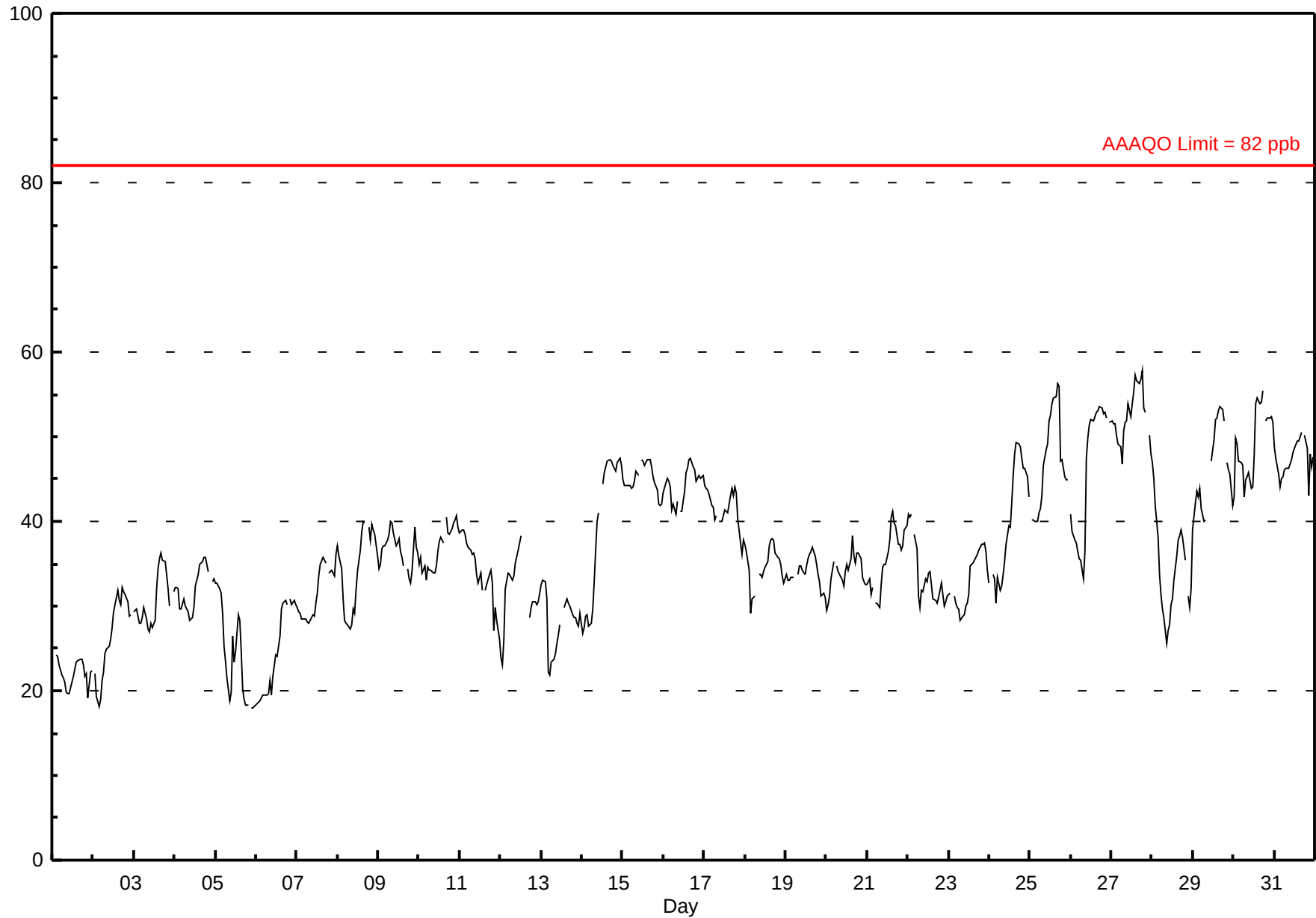
Ozone (O₃) - ppb

Sunset House - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 57.9 ppb on Mar 27 19:00 Maximum Daily Average: 52.6 ppb on Mar 27																				Hours in Service: 744 Hours of Data: 705 Hours of Missing Data: 39 Hours of Calibration: 36 Percent Operational Time: 99.6							
Minimum Value: 18 ppb on Mar 5 23:00 Maximum Diurnal Average: 40.3 ppb at hour 17 Monthly Average: 36.44 ppb										Minimum Daily Average: 22.1 ppb on Mar 1 Minimum Diurnal Average: 33.2 ppb at hour 7 Percentiles: P ₁ = 18.5 P ₁₀ = 25.9 Q ₁ = 30.4 Median = 35.2 Q ₃ = 43.0 P ₉₀ = 48.7 P ₉₉ = 55.8																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Mar	22	A	24	24	23	22	21	21	20	20	20	21	22	23	23	24	24	24	23	22	22	19	22	22	22.1	24.2	
2-Mar	A	22	19	18	19	21	22	24	25	25	26	27	29	30	32	31	30	32	32	31	31	29	29	A	26.6	32.3	
3-Mar	29	30	29	28	28	29	30	28	27	27	28	28	28	32	34	36	36	35	35	34	32	30	A	32	30.6	36.2	
4-Mar	32	32	32	30	30	31	30	30	29	28	29	30	32	33	34	35	35	36	36	35	34	A	33	33	32.1	35.8	
5-Mar	33	33	32	32	29	25	24	22	19	20	26	23	25	29	28	25	20	19	18	18	A	18	18	18	24.1	32.7	
6-Mar	19	19	19	19	19	20	19	20	21	19	22	24	24	25	26	30	30	31	30	A	31	30	31	30	24.3	30.9	
7-Mar	30	29	29	29	28	29	28	28	28	29	29	30	32	34	35	36	35	35	A	34	34	34	34	36	31.5	36.1	
8-Mar	37	36	34	31	28	28	28	27	28	30	29	32	34	37	39	40	40	A	39	38	40	39	38	36	34.2	39.9	
9-Mar	34	35	37	37	37	38	38	40	40	39	37	38	38	36	36	35	A	34	33	33	34	39	37	36	36.6	40.1	
10-Mar	35	36	34	35	33	35	34	34	34	34	34	35	36	38	38	37	A	41	39	38	39	40	40	41	39	36.7	40.7
11-Mar	39	39	39	38	37	37	37	36	36	36	34	33	34	32	A	32	32	34	34	33	27	30	28	26	34.0	39.0	
12-Mar	24	23	26	32	34	34	33	33	34	35	37	37	38	A	C	C	C	29	30	30	30	30	30	31	31.6	38.4	
13-Mar	32	33	33	31	22	22	23	24	24	26	27	28	A	30	30	31	30	30	29	29	29	28	28	29	28.1	33.0	
14-Mar	27	27	29	29	28	28	30	33	37	40	41	A	44	46	47	47	47	47	47	46	46	47	47	47	39.4	47.4	
15-Mar	45	44	44	44	44	44	44	45	46	45	A	47	47	47	47	47	47	46	45	45	44	42	42	42	45.0	47.4	
16-Mar	43	45	45	45	44	41	42	41	42	A	41	41	44	46	46	47	48	46	46	45	45	45	45	45	44.3	47.5	
17-Mar	44	44	44	43	42	42	40	41	A	40	40	41	41	41	41	43	44	43	44	43	40	37	36	38	41.4	44.3	
18-Mar	37	36	34	29	31	31	31	A	34	34	33	34	35	35	37	38	38	38	36	36	36	35	34	33	34.5	38.0	
19-Mar	34	33	33	33	33	33	A	34	35	35	34	34	35	36	36	36	37	36	35	34	33	31	32	31	34.0	36.9	
20-Mar	29	30	31	33	35	A	35	34	34	34	33	32	34	35	34	36	38	36	35	36	36	33	33	33	34.0	38.3	
21-Mar	33	33	31	32	A	30	30	30	33	35	35	35	36	38	40	41	40	39	37	37	37	37	39	40	35.6	41.2	
22-Mar	41	41	41	A	38	37	31	30	32	32	33	33	34	34	32	31	31	30	31	32	33	30	31	31	33.4	40.9	
23-Mar	31	32	A	31	30	30	30	28	29	29	30	30	31	35	35	35	36	36	37	37	37	37	36	34	33.0	37.4	
24-Mar	33	A	34	33	30	33	32	32	34	35	37	39	39	42	45	48	49	49	49	47	46	46	45	43	40.2	49.3	
25-Mar	A	40	40	40	40	41	41	43	47	48	49	52	53	54	55	55	56	56	47	47	45	45	45	A	47.3	56.3	
26-Mar	41	39	38	37	36	36	35	33	36	47	50	51	52	52	52	53	53	54	53	53	53	52	A	52	46.1	53.6	
27-Mar	52	52	52	50	49	49	47	51	52	52	54	52	54	55	57	57	56	57	58	53	53	A	50	48	52.6	57.9	
28-Mar	47	45	42	38	34	31	30	29	26	27	28	30	31	33	36	38	38	39	38	35	A	31	30	32	34.2	46.9	
29-Mar	39	42	44	43	44	42	40	40	D	D	D	47	50	52	52	53	54	53	52	A	47	46	46	42	46.3	53.6	
30-Mar	43	50	49	47	47	47	43	45	45	46	44	44	48	54	54	54	54	55	A	52	52	52	52	52	49.1	55.3	
31-Mar	49	48	46	44	45	45	46	46	46	47	47	48	49	49	50	50	50	A	50	49	43	48	47	48	47.4	50.5	
35.7 36.1 35.4 34.6 34.0 33.6 33.2 33.4 33.5 34.2 34.7 36.0 37.7 38.7 39.8 40.1 40.3 39.3 38.6 38.0 38.2 36.7 36.5 36.5																									Diurnal Average		
51.8 51.6 51.6 50.2 49.1 48.8 46.9 50.8 51.7 51.9 53.9 52.3 53.9 55.3 57.4 56.6 56.3 56.8 57.9 53.4 52.8 52.2 52.3 51.7																									Diurnal Maximum		
C - Calibration D - DAS Failure A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																											

Hourly Averages

Ozone (O₃) - ppb
Sunset House - March 2012



Hourly Maximums

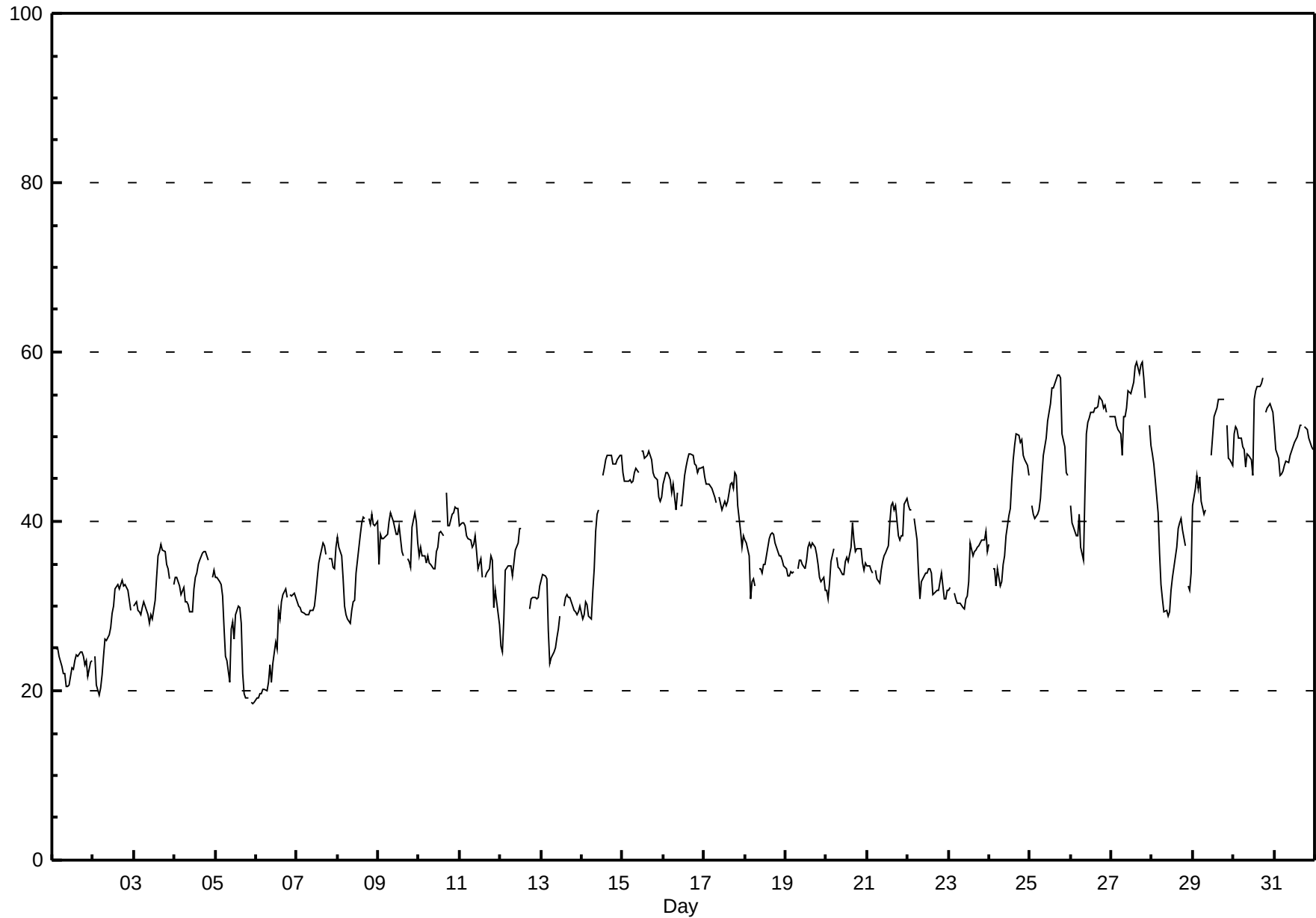
Ozone (O₃) - ppb

Sunset House - March 2012

Maximum Value: 58.9 ppb on Mar 27 16:00																								Maximum Daily Average: 54.0 ppb on Mar 27				Hours in Service: 744	
Minimum Value: 18 ppb on Mar 5 23:00																								Minimum Daily Average: 23.1 ppb on Mar 1				Hours of Data: 705	
Maximum Diurnal Average: 41.4 ppb at hour 17																								Minimum Diurnal Average: 34.5 ppb at hour 7				Hours of Missing Data: 39	
Monthly Average: 37.77 ppb																								Percentiles: P ₁ = 19.3 P ₁₀ = 27.9 Q ₁ = 31.8 Median = 36.4 Q ₃ = 44.8 P ₉₀ = 50.4 P ₉₉ = 57.2				Hours of Calibration: 36	
Percent Operational Time: 99.6																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Mar	23	A	25	25	24	23	22	22	21	21	21	23	23	24	24	24	25	25	24	23	23	22	23	24	23.1	25.0			
2-Mar	A	24	21	19	20	22	24	26	26	27	27	29	30	32	33	32	33	33	32	33	32	31	30	A	28.0	33.1			
3-Mar	30	31	30	29	29	30	31	30	29	28	29	28	31	33	36	36	37	37	36	35	34	33	A	33	32.0	37.2			
4-Mar	33	33	33	32	31	32	30	30	30	29	29	32	33	34	35	35	36	36	36	36	35	A	33	34	33.2	36.4			
5-Mar	33	33	33	33	31	27	24	24	21	27	28	26	29	30	30	28	22	20	19	19	A	19	18	19	25.8	33.4			
6-Mar	19	19	20	20	20	20	20	21	23	21	23	26	25	29	28	30	31	32	31	A	31	31	31	31	25.4	32.0			
7-Mar	30	30	30	29	29	29	29	29	29	29	30	31	33	35	36	38	37	36	A	36	36	35	34	37	32.5	37.5			
8-Mar	38	37	36	33	30	29	28	28	29	30	31	34	35	38	40	41	40	A	40	40	41	40	39	40	35.6	40.8			
9-Mar	35	38	38	38	38	38	40	41	40	40	38	38	40	38	37	36	A	36	35	35	39	41	40	37	38.1	41.0			
10-Mar	36	37	36	36	35	36	35	35	34	34	36	37	39	39	38	A	43	39	39	41	41	42	41	41	38.0	43.5			
11-Mar	39	40	40	39	38	38	38	37	37	38	36	34	36	33	A	33	34	34	36	35	30	32	30	28	35.6	39.9			
12-Mar	25	25	28	34	35	35	35	34	35	37	37	39	39	A	C	C	C	30	31	31	31	31	31	32	32.7	39.2			
13-Mar	33	34	34	33	27	23	24	25	25	26	27	29	A	30	31	31	31	31	30	29	29	29	29	30	29.2	33.8			
14-Mar	28	29	30	30	29	28	32	34	39	41	41	A	45	46	47	48	48	48	47	47	47	47	48	48	40.4	47.8			
15-Mar	46	45	45	45	45	45	45	46	46	46	A	48	48	47	48	48	48	47	46	45	45	43	42	43	45.7	48.3			
16-Mar	44	46	46	45	45	43	44	41	43	A	42	42	45	47	47	48	48	48	47	47	46	46	46	46	45.4	48.0			
17-Mar	45	44	44	44	44	43	43	42	A	43	41	42	42	42	42	44	45	44	46	45	42	39	37	38	42.7	45.8			
18-Mar	38	37	36	31	33	33	32	A	34	34	34	35	35	37	38	38	39	38	37	36	36	36	35	35	35.6	38.7			
19-Mar	34	33	33	34	34	34	A	34	35	35	35	34	35	37	37	37	37	37	36	35	33	33	33	32	34.8	37.4			
20-Mar	32	31	33	35	37	A	36	35	34	34	34	35	36	35	37	40	38	36	37	37	37	35	34	35	35.3	39.8			
21-Mar	35	35	34	34	A	34	33	33	34	35	36	36	37	40	42	42	41	42	38	38	38	38	42	43	37.5	42.8			
22-Mar	42	41	41	A	40	38	34	31	33	33	34	34	34	34	34	31	32	32	32	33	34	31	31	32	34.4	41.8			
23-Mar	32	32	A	32	31	30	30	30	30	30	31	31	33	37	36	36	37	37	37	38	38	38	39	36	34.0	38.9			
24-Mar	37	A	34	34	32	34	32	33	35	36	38	41	41	45	47	49	50	50	49	50	48	47	47	45	41.6	50.3			
25-Mar	A	42	41	40	41	41	43	45	48	50	52	53	54	56	56	57	57	57	57	50	49	46	45	A	49.1	57.3			
26-Mar	42	40	39	38	38	41	37	35	43	50	52	52	53	55	56	56	58	59	57	58	59	55	A	51	47.6	54.8			
27-Mar	52	52	52	51	50	48	52	52	53	55	55	55	56	56	58	59	57	58	59	57	55	A	51	49	54.0	58.9			
28-Mar	48	47	45	41	36	33	31	29	29	29	29	32	33	35	37	39	40	40	39	37	A	32	32	34	36.0	47.9			
29-Mar	42	44	45	44	45	42	41	41	D	D	D	48	52	53	53	54	54	54	54	A	51	47	47	47	48.1	54.3			
30-Mar	50	51	51	50	50	49	48	46	48	48	47	45	54	55	56	56	56	57	A	53	53	54	53	53	51.5	56.9			
31-Mar	51	48	47	45	46	46	47	47	47	48	48	49	49	50	51	51	51	A	51	51	50	49	49	48	48.7	51.3			
37.1 37.2 36.7 35.9 35.5 35.0 34.5 34.6 35.0 35.6 36.0 37.3 39.3 40.0 41.0 41.3 41.4 40.3 39.9 39.4 40.0 37.9 37.8 38.0																								Diurnal Average					
52.3 52.3 52.3 51.3 50.8 50.4 48.4 52.4 52.4 53.4 55.4 55.1 55.7 56.4 58.4 58.9 57.4 58.4 58.8 56.9 54.6 53.8 53.4 52.9																								Diurnal Maximum					
C - Calibration D - DAS Failure A - Automated Daily Zero Span																													

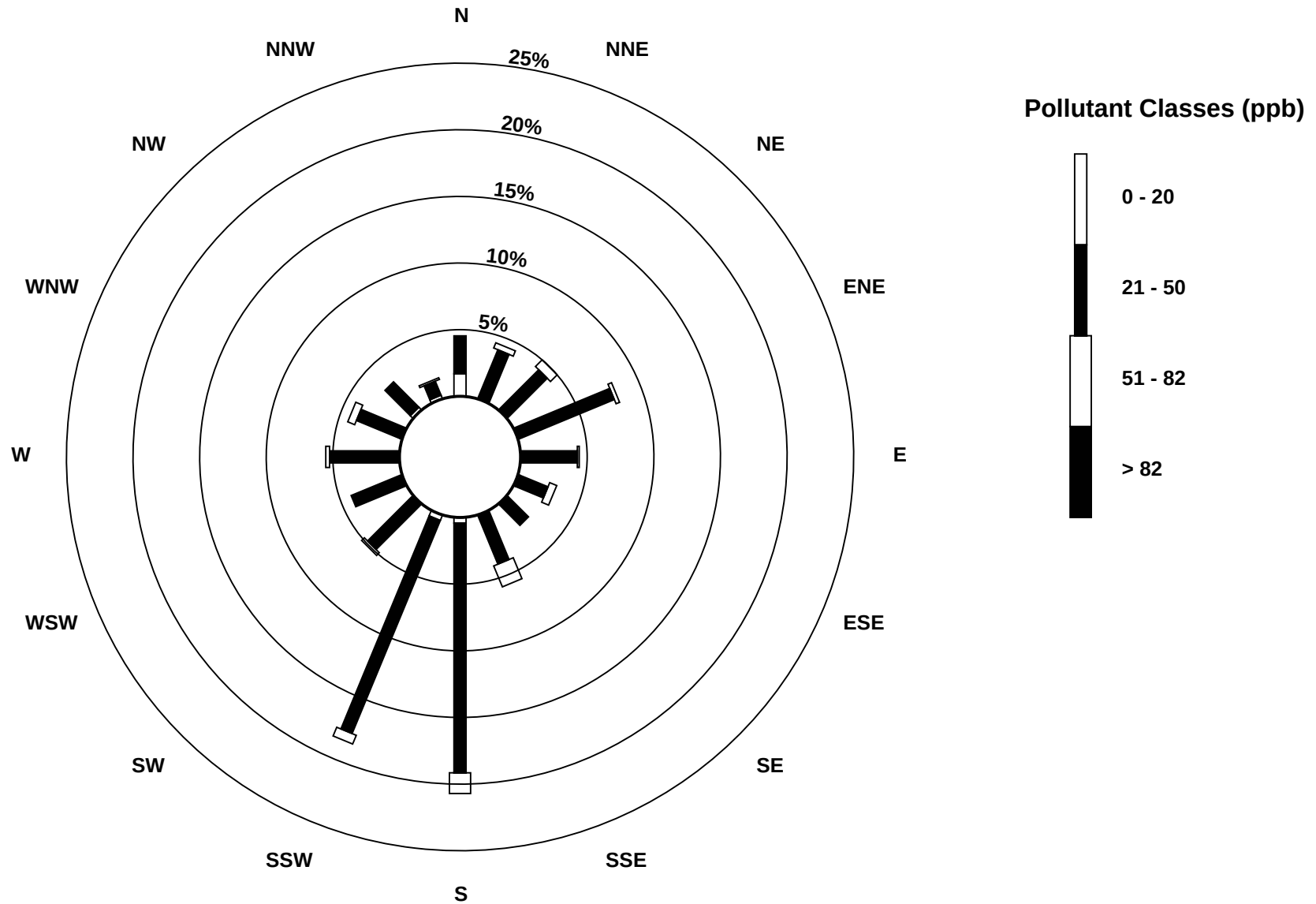
Hourly Maximums

Ozone (O₃) - ppb
Sunset House - March 2012



Pollutant Rose

Ozone (O₃) - ppb
Sunset House - March 2012



Eight Hour Running Averages

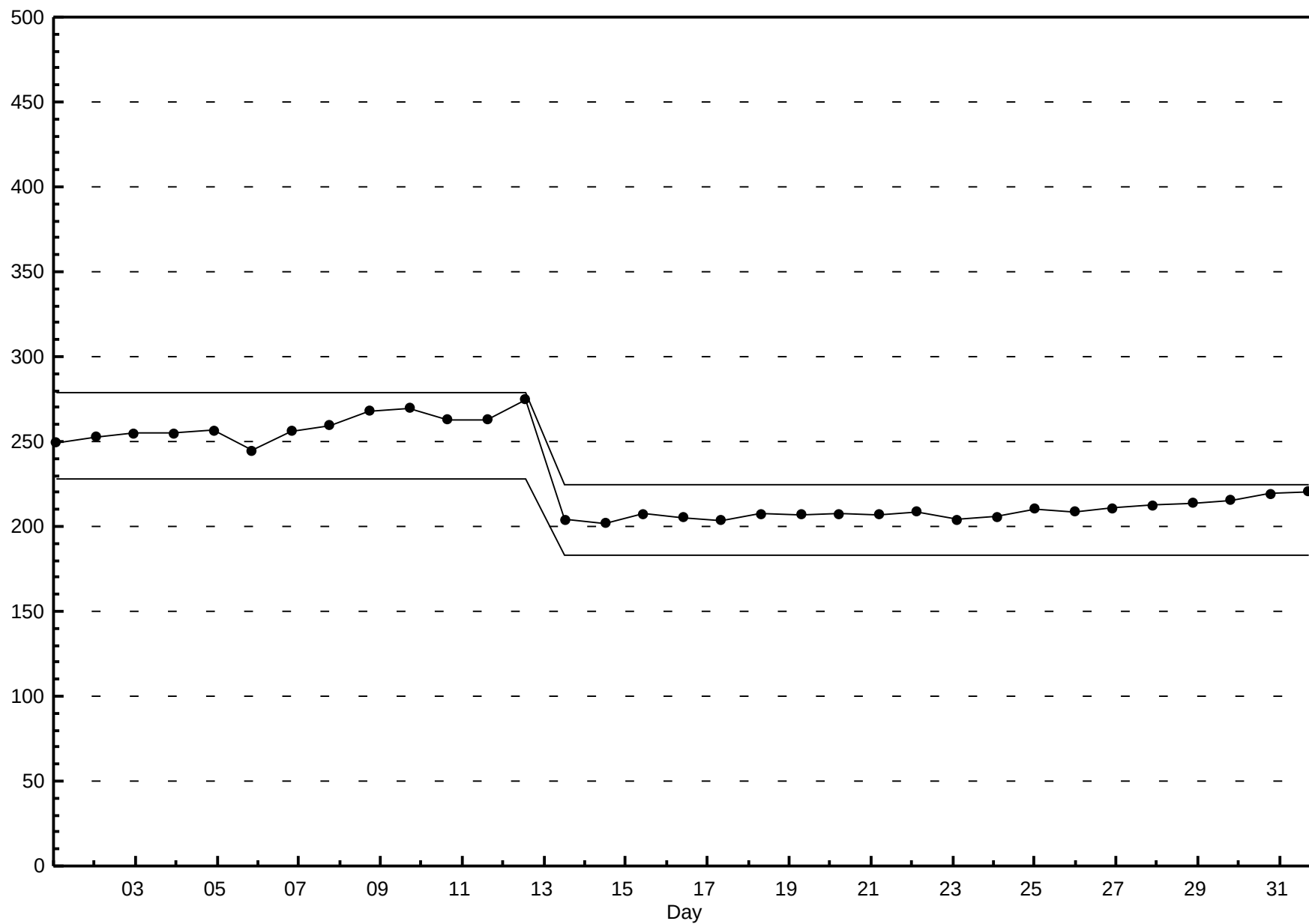
Ozone (O₃) - ppb

Sunset House - March 2012

Maximum Value: 55.9 ppb on Mar 27 20:00																					Hours in Service: 744				
Minimum Value: 18.3 ppb on Mar 6 02:00																					Hours of Data: 731				
Percentiles: P ₁ = 18.9 P ₁₀ = 25.7 Q ₁ = 30.5 Median = 34.9 Q ₃ = 42.9 P ₉₀ = 48.4 P ₉₉ = 54.5																					Hours of Missing Data: 13				
																					Hours of Calibration: 7				
																					Percent Operational Time: 99.2				
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	20	20	21	21	22	22	22	23	22	22	21	21	21	21	21	21	22	22	23	23	23	23	22	22	23.0
2-Mar	22	22	21	21	20	21	21	21	21	22	23	24	25	26	27	28	29	30	30	31	31	31	31	31	31.1
3-Mar	30	30	30	29	29	29	29	29	29	28	28	28	28	29	29	30	31	32	33	34	34	34	34	33	34.3
4-Mar	33	32	32	31	31	31	31	31	30	30	29	30	30	30	31	31	32	33	34	34	35	35	35	35	34.9
5-Mar	34	34	33	33	32	31	30	29	27	25	25	23	23	23	24	24	25	24	23	23	23	21	19	19	34.2
6-Mar	18	18	18	18	19	19	19	19	19	20	20	21	21	22	23	24	25	27	28	28	29	30	30	30	30.5
7-Mar	30	30	30	30	30	29	29	29	29	29	28	29	29	30	31	32	32	33	34	34	35	35	35	35	34.8
8-Mar	35	35	35	34	34	33	32	31	30	29	29	29	29	31	32	33	35	36	37	38	39	39	39	39	39.2
9-Mar	38	37	37	37	37	37	37	37	38	38	38	38	38	38	38	37	37	36	36	35	34	35	35	35	38.4
10-Mar	35	35	35	36	36	35	35	34	34	34	34	34	35	35	36	36	37	38	38	39	39	39	40	40	39.6
11-Mar	39	39	39	39	39	39	38	38	37	37	36	36	35	35	34	34	33	33	33	33	32	32	31	31	39.5
12-Mar	29	28	27	27	28	28	29	30	31	33	34	35	35	35	36	N	N	N	N	N	N	N	30	30	35.7
13-Mar	30	31	31	31	30	29	29	28	27	26	25	24	25	26	27	28	29	29	30	30	30	29	29	29	31.5
14-Mar	28	28	28	28	28	28	28	29	30	32	33	34	36	39	41	43	45	46	46	46	47	47	47	47	46.8
15-Mar	46	46	46	46	45	45	45	44	44	45	45	45	46	46	46	47	47	47	47	46	46	45	45	44	47.1
16-Mar	44	43	43	43	43	43	43	43	43	43	42	42	42	42	43	44	45	45	46	46	46	46	46	46	46.2
17-Mar	45	45	45	45	44	44	43	42	42	42	41	41	41	41	41	41	41	42	42	43	43	42	41	41	45.3
18-Mar	40	39	38	36	35	34	33	33	32	32	32	33	33	34	35	35	35	36	36	37	37	37	36	36	39.9
19-Mar	35	34	34	34	33	33	33	33	34	34	34	34	34	35	35	35	35	35	36	36	35	35	34	34	35.6
20-Mar	33	32	31	31	32	32	32	33	33	34	34	34	34	34	34	35	35	35	36	36	36	36	35	35	35.9
21-Mar	34	34	34	33	33	32	32	31	31	32	32	32	33	34	35	37	38	38	38	39	39	39	38	38	38.7
22-Mar	38	39	39	39	39	39	38	37	36	34	33	33	33	32	32	33	32	32	32	32	32	31	31	31	39.5
23-Mar	31	31	31	31	31	31	31	30	30	30	30	30	30	30	31	32	33	34	34	35	36	36	37	36	36.5
24-Mar	36	36	36	35	34	33	33	33	33	33	33	34	35	36	38	40	42	44	45	46	47	48	48	47	47.6
25-Mar	47	45	44	43	42	41	41	41	42	43	44	45	47	48	50	52	53	54	53	53	52	51	50	49	53.6
26-Mar	47	44	43	41	40	39	37	37	36	37	39	41	43	45	47	49	51	52	53	53	53	53	53	53	53.0
27-Mar	53	52	52	52	51	51	50	50	50	50	50	51	51	52	53	54	55	55	56	56	56	56	55	54	55.9
28-Mar	52	51	48	46	43	42	39	37	34	32	30	29	29	29	30	31	33	34	35	36	37	37	36	35	52.3
29-Mar	35	35	36	37	38	39	41	42	42	42	N	N	N	N	N	N	51	52	52	52	52	51	50	48	52.2
30-Mar	47	46	46	46	46	46	46	46	47	46	45	45	45	46	48	49	50	51	52	53	54	53	53	53	53.6
31-Mar	52	51	50	49	48	48	47	46	46	46	46	46	47	47	48	48	49	49	49	50	49	49	48	48	52.0
52.6 52.3 52.1 51.7 51.2 50.7 50.2 50.1 50.1 50.1 50.4 50.7 51.3 52.1 53.4 54.1 54.7 55.3 55.8 55.9 55.8 55.9 54.9 53.6																									
Diurnal Maximums																									
N - Not Valid																									

Span Responses

Ozone (O₃)
Sunset House - March 2012



Hourly Averages

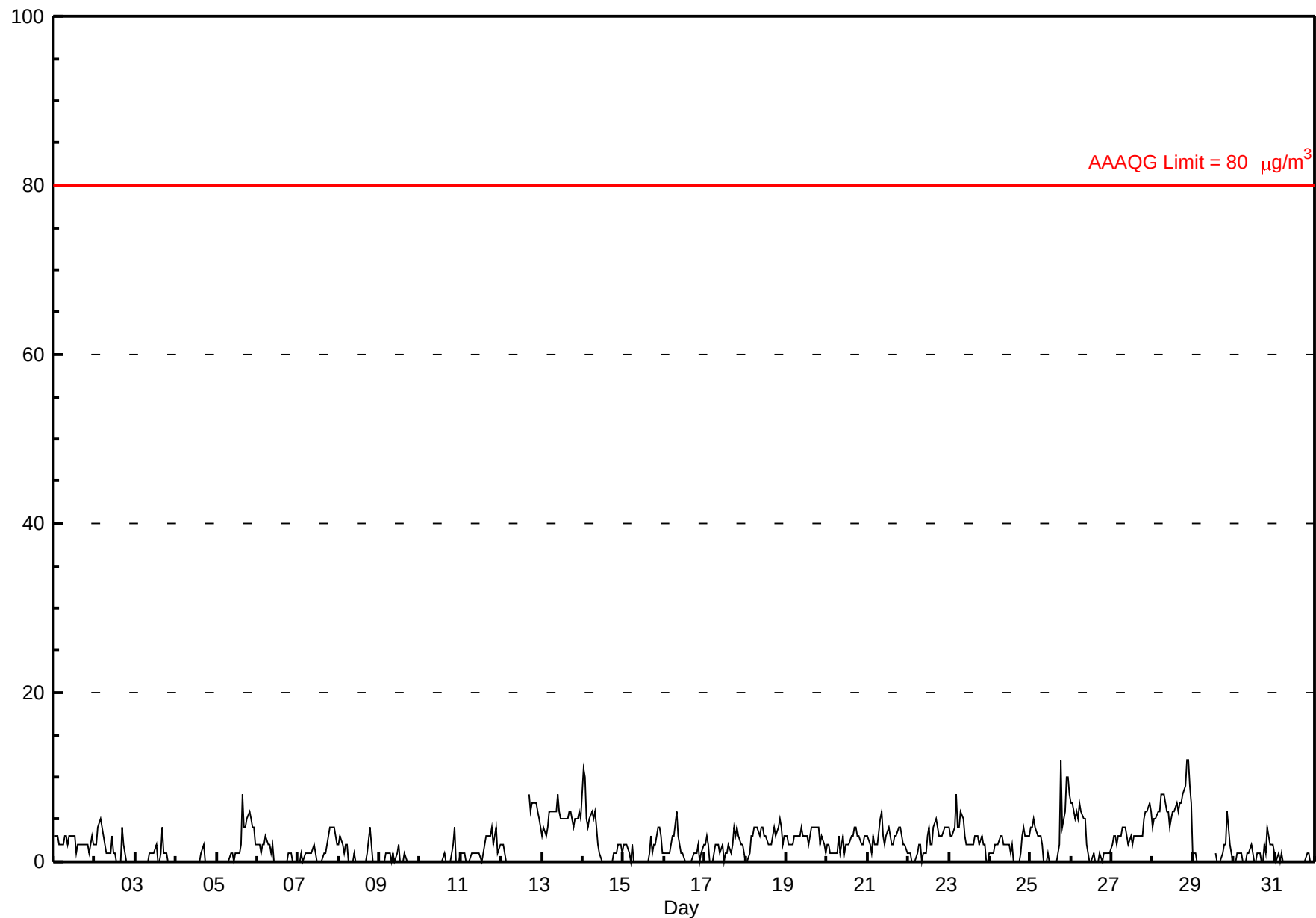
PM2.5 (PM_{2.5}) - µg/m³

Sunset House - March 2012

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 12.0 µg/m³ on Mar 25 19:00 Minimum Value: 0 µg/m³ on Mar 2 14:00 Maximum Diurnal Average: 3.2 µg/m³ at hour 21 Monthly Average: 2.06 µg/m³																								Hours in Service: 744 Hours of Data: 734 Hours of Missing Data: 10 Hours of Calibration: 0 Percent Operational Time: 98.7		
Maximum Daily Average: 7.0 µg/m³ on Mar 28 Minimum Daily Average: 0.1 µg/m³ on Mar 4 Minimum Diurnal Average: 1.2 µg/m³ at hour 14 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 2.0 Q ₃ = 3.0 P ₉₀ = 5.0 P ₉₉ = 10.0																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
1-Mar	3	3	3	2	2	2	3	3	2	3	3	3	3	1	2	2	2	2	2	2	2	1	3	2	2.3	3.0
2-Mar	2	2	4	5	4	3	2	1	1	1	3	1	1	0	0	0	4	2	1	0	0	0	0	0	1.5	5.0
3-Mar	0	0	0	N	N	0	0	0	1	1	1	1	2	0	0	1	4	1	1	0	0	0	0	0	0.6	4.0
4-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0.1	2.0
5-Mar	0	0	0	0	0	0	0	0	1	1	0	1	1	1	2	8	4	4	5	6	5	4	4	2	2.0	8.0
6-Mar	2	2	1	2	2	3	2	2	1	2	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0.9	3.0
7-Mar	0	0	1	0	1	1	1	1	1	2	1	0	0	0	0	1	1	2	3	4	4	4	3	2	1.4	4.0
8-Mar	2	3	2	1	2	2	0	0	0	1	0	0	0	0	0	0	0	1	4	2	0	0	0	0	0.8	4.0
9-Mar	0	0	0	0	1	1	1	0	1	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0.3	2.0
10-Mar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	4	0	0	0	0.3	4.0
11-Mar	1	1	1	0	0	0	1	1	1	1	1	1	0	1	2	3	3	3	4	2	3	4	1	2	1.5	4.0
12-Mar	2	2	1	0	0	0	0	0	0	0	0	0	0	M	M	M	8	6	7	7	7	6	5	4	2.6	8.0
13-Mar	3	4	3	4	6	6	6	6	6	8	6	5	5	5	5	5	6	6	4	5	5	5	6	5	5.2	8.0
14-Mar	11	10	5	4	5	6	5	6	4	2	1	0	0	0	0	0	0	0	1	1	1	2	2	1	2.8	11.0
15-Mar	2	2	2	1	0	2	0	0	0	0	0	0	0	0	0	1	3	1	2	2	4	4	3	1	1.3	4.0
16-Mar	1	1	1	1	2	3	3	6	3	2	1	1	0	0	0	0	0	1	1	1	2	0	1	2	1.4	6.0
17-Mar	2	3	2	0	0	1	2	2	2	1	2	0	1	1	2	1	2	4	3	4	3	2	2	1	1.8	4.0
18-Mar	0	0	1	3	3	4	4	4	3	4	4	3	3	2	2	2	3	4	3	4	5	4	2	3	2.9	5.0
19-Mar	3	2	2	2	2	3	3	3	3	4	3	3	3	2	3	4	4	4	4	4	2	3	2	1	2.9	4.0
20-Mar	2	2	1	1	1	1	1	3	1	3	1	2	2	2	3	3	4	4	3	3	2	2	3	3	2.2	4.0
21-Mar	3	2	1	3	2	2	2	5	6	3	2	3	4	3	2	2	3	3	4	4	3	2	2	1	2.8	6.0
22-Mar	1	1	0	0	0	1	2	2	0	1	1	3	4	2	2	4	5	4	3	3	3	4	4	4	2.3	5.0
23-Mar	4	3	3	4	8	4	4	6	5	3	2	2	2	2	2	3	3	3	2	3	2	2	0	0	3.0	8.0
24-Mar	1	1	1	2	2	2	3	3	2	2	2	2	1	2	0	0	0	0	1	3	4	3	3	3	1.8	4.0
25-Mar	4	4	5	4	3	3	3	2	0	0	1	0	0	0	0	0	1	2	12	4	6	10	10	8	3.4	12.0
26-Mar	7	7	5	6	5	7	6	5	5	2	1	0	0	1	0	0	0	1	0	1	1	1	1	1	2.6	7.0
27-Mar	2	3	3	2	3	3	4	4	4	3	2	3	2	3	3	3	3	3	3	5	6	6	7	6	3.6	7.0
28-Mar	4	5	5	6	6	8	8	8	6	6	4	5	6	6	7	6	7	7	8	9	12	12	9	7	7.0	12.0
29-Mar	1	1	0	0	0	0	0	0	D	D	D	D	D	1	0	0	0	1	2	2	6	4	2	0	1.1	6.0
30-Mar	0	0	1	1	1	0	0	0	1	1	2	1	0	0	1	1	0	0	2	1	4	2	2	2	1.0	4.0
31-Mar	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0.2	1.0
2.1 2.1 1.8 1.8 2.1 2.2 2.1 2.4 2.0 1.9 1.5 1.4 1.3 1.2 1.3 1.7 2.3 2.2 2.8 2.8 3.2 2.8 2.5 2.0																								Diurnal Average		
11.0 10.0 5.0 6.0 8.0 8.0 8.0 8.0 6.0 8.0 6.0 5.0 6.0 6.0 7.0 8.0 8.0 7.0 12.0 9.0 12.0 12.0 10.0 8.0																								Diurnal Maximum		
D - DAS Failure M - Maintenance N - Not Valid																										
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³																										

Hourly Averages

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Sunset House - March 2012



Hourly Maximums

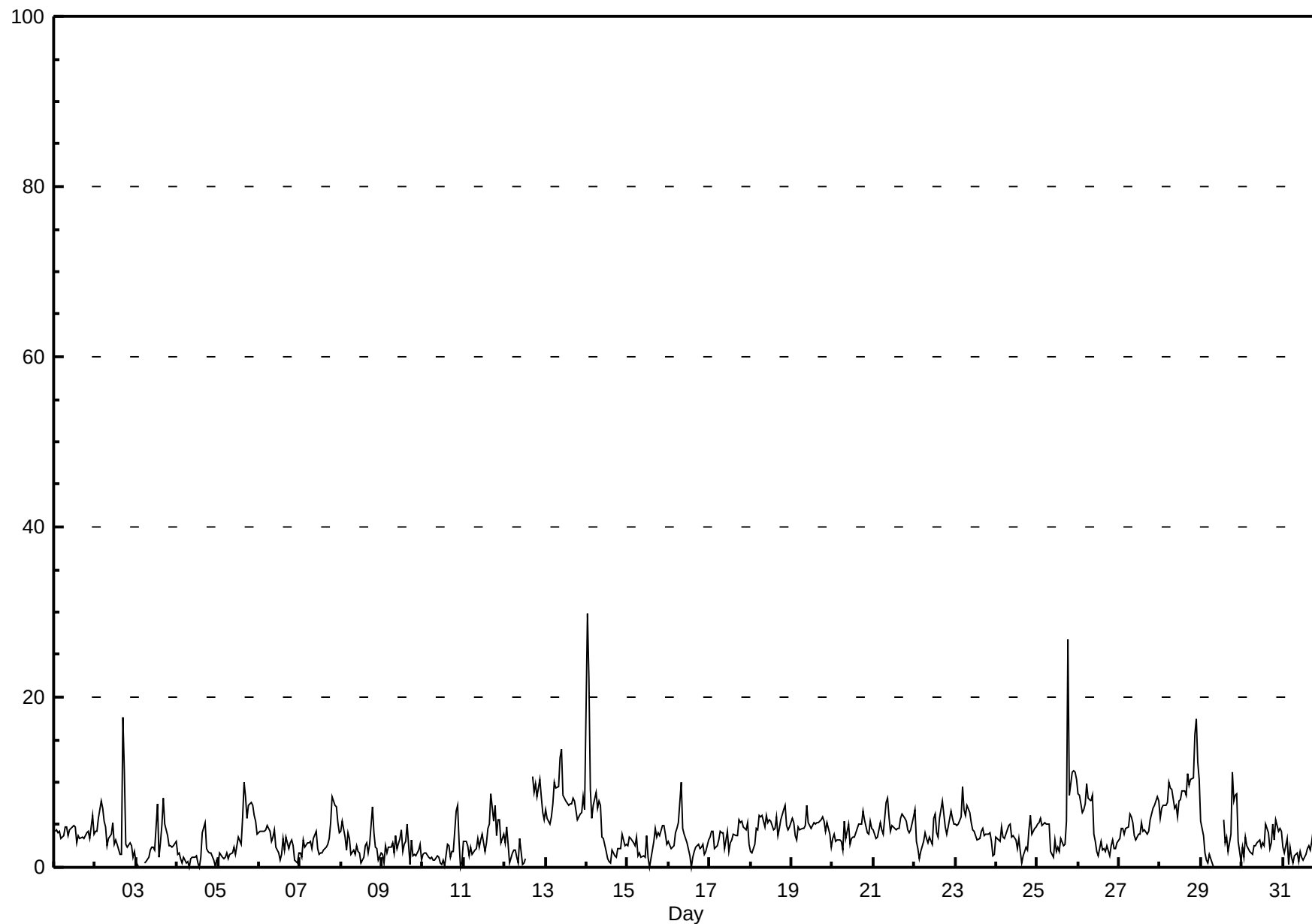
PM2.5 (PM_{2.5}) - µg/m³

Sunset House - March 2012

Maximum Value: 29.8 μg/m³ on Mar 14 01:00																								Maximum Daily Average: 9.3 μg/m³ on Mar 28				Hours in Service: 744	
Minimum Value: 0 μg/m³ on Mar 3 02:00																								Minimum Daily Average: 1.3 μg/m³ on Mar 4				Hours of Data: 734	
Maximum Diurnal Average: 5.6 μg/m³ at hour 19																								Minimum Diurnal Average: 2.9 μg/m³ at hour 14				Hours of Missing Data: 10	
Monthly Average: 4.09 μg/m³																								Percentiles: P ₁ = 0.0 P ₁₀ = 1.2 Q ₁ = 2.2 Median = 3.6 Q ₃ = 5.3 P ₉₀ = 7.5 P ₉₉ = 12.4				Hours of Calibration: 0	
Percent Operational Time: 98.7																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Mar	4	4	4	4	3	4	5	5	4	4	5	5	5	3	4	3	4	3	4	4	4	3	6	4	4.1	6.0			
2-Mar	4	4	6	8	7	5	5	3	3	4	5	3	3	3	1	1	18	11	3	2	3	2	1	2	4.5	17.7			
3-Mar	1	0	0	N	N	1	1	1	2	2	2	2	7	1	3	5	8	5	4	2	3	2	3	3	2.7	8.2			
4-Mar	2	2	1	1	1	0	1	0	1	1	1	1	0	0	1	4	5	2	2	2	2	1	0	1	1.3	5.3			
5-Mar	0	2	1	1	1	2	1	1	2	2	1	2	4	3	6	10	8	6	7	8	7	6	5	4	3.8	10.0			
6-Mar	4	4	4	4	4	5	4	3	3	4	2	2	1	1	3	2	4	2	3	3	3	1	1	2	2.9	5.0			
7-Mar	2	1	3	2	3	3	3	2	3	4	2	1	2	2	2	2	3	3	5	8	7	7	5	4	3.4	8.3			
8-Mar	4	5	4	2	4	3	2	2	2	2	2	2	0	1	3	3	2	3	7	4	2	2	1	2	2.7	7.1			
9-Mar	2	0	2	2	2	2	3	2	4	2	3	4	2	3	3	5	0	3	1	2	1	2	3	1	2.3	5.1			
10-Mar	2	2	2	1	1	1	1	1	1	1	1	0	1	0	3	3	1	2	2	7	7	3	0	1	1.8	7.3			
11-Mar	3	3	3	1	2	2	2	2	3	2	3	4	2	3	5	5	9	5	7	4	6	6	3	4	3.7	8.7			
12-Mar	3	5	3	1	2	2	2	1	1	3	0	0	1	M	M	M	11	9	10	8	10	8	6	6	4.4	10.7			
13-Mar	7	6	5	6	7	10	9	10	13	14	9	8	8	7	7	7	8	8	6	6	6	7	8	7	7.9	13.9			
14-Mar	30	22	9	6	7	9	7	8	7	4	3	2	1	1	1	2	1	1	2	2	2	4	3	3	5.7	29.8			
15-Mar	3	4	3	3	3	4	1	2	1	1	1	4	1	0	2	3	5	4	4	4	5	5	4	3	2.8	5.0			
16-Mar	3	2	2	3	4	5	5	10	5	4	3	3	1	0	1	2	2	3	2	2	3	2	2	3	3.0	10.0			
17-Mar	4	4	4	2	3	3	4	4	4	2	4	2	3	3	4	4	4	6	5	5	5	4	5	3	3.8	5.7			
18-Mar	2	2	3	5	4	6	6	6	5	6	5	6	5	4	5	6	4	5	6	7	7	5	4	5	4.9	7.3			
19-Mar	6	5	4	3	5	4	5	5	5	7	5	5	5	5	5	5	5	6	6	5	4	5	4	2	4.9	7.2			
20-Mar	3	4	3	3	3	3	2	5	3	5	3	3	4	4	5	5	5	5	7	6	4	4	5	5	4.1	6.6			
21-Mar	4	3	4	4	5	4	4	8	8	6	4	5	5	4	5	5	6	6	6	5	4	4	4	6	5.0	8.1			
22-Mar	7	3	2	1	2	3	4	3	3	4	3	6	6	4	4	6	8	6	5	4	5	7	6	5	4.4	7.7			
23-Mar	5	5	5	6	10	7	6	7	6	5	4	4	4	3	3	4	5	4	4	4	4	3	1	1	4.7	9.5			
24-Mar	4	3	3	5	4	3	4	5	5	4	4	3	2	3	2	0	1	2	2	4	6	4	5	5	3.5	6.2			
25-Mar	5	5	6	5	5	5	5	5	2	1	3	2	2	2	3	2	3	5	27	8	11	11	11	10	6.1	26.8			
26-Mar	9	9	7	7	8	10	8	8	8	4	3	2	1	3	2	2	2	2	1	3	3	2	2	3	4.5	9.8			
27-Mar	3	5	5	4	5	5	6	6	5	4	3	4	4	5	4	4	4	4	6	6	7	7	8	8	5.1	8.3			
28-Mar	6	7	7	7	8	10	9	9	7	7	6	8	8	9	9	9	11	10	10	11	16	17	12	10	9.3	17.4			
29-Mar	5	4	2	1	0	2	1	0	D	D	D	D	D	D	6	3	4	2	4	11	8	9	9	3	1	3.8	11.1		
30-Mar	2	1	3	3	2	2	2	2	3	3	3	2	3	3	5	4	2	3	5	3	6	4	5	4	3.1	5.6			
31-Mar	2	2	3	0	2	1	0	1	2	1	2	1	1	2	2	3	2	3	4	6	8	2	2	6	2.5	8.5			
4.5 4.1 3.6 3.3 3.9 4.1 3.8 4.1 4.1 3.9 3.3 3.2 3.1 2.9 3.5 4.0 4.9 4.6 5.6 5.0 5.5 4.9 4.2 3.9																								Diurnal Average					
29.8 22.2 9.1 7.8 9.5 10.1 9.3 10.0 12.9 13.9 8.6 8.2 8.0 9.0 9.0 10.0 17.7 11.3 26.8 10.5 15.6 17.4 12.4 10.4																								Diurnal Maximum					
D - DAS Failure M - Maintenance N - Not Valid																													

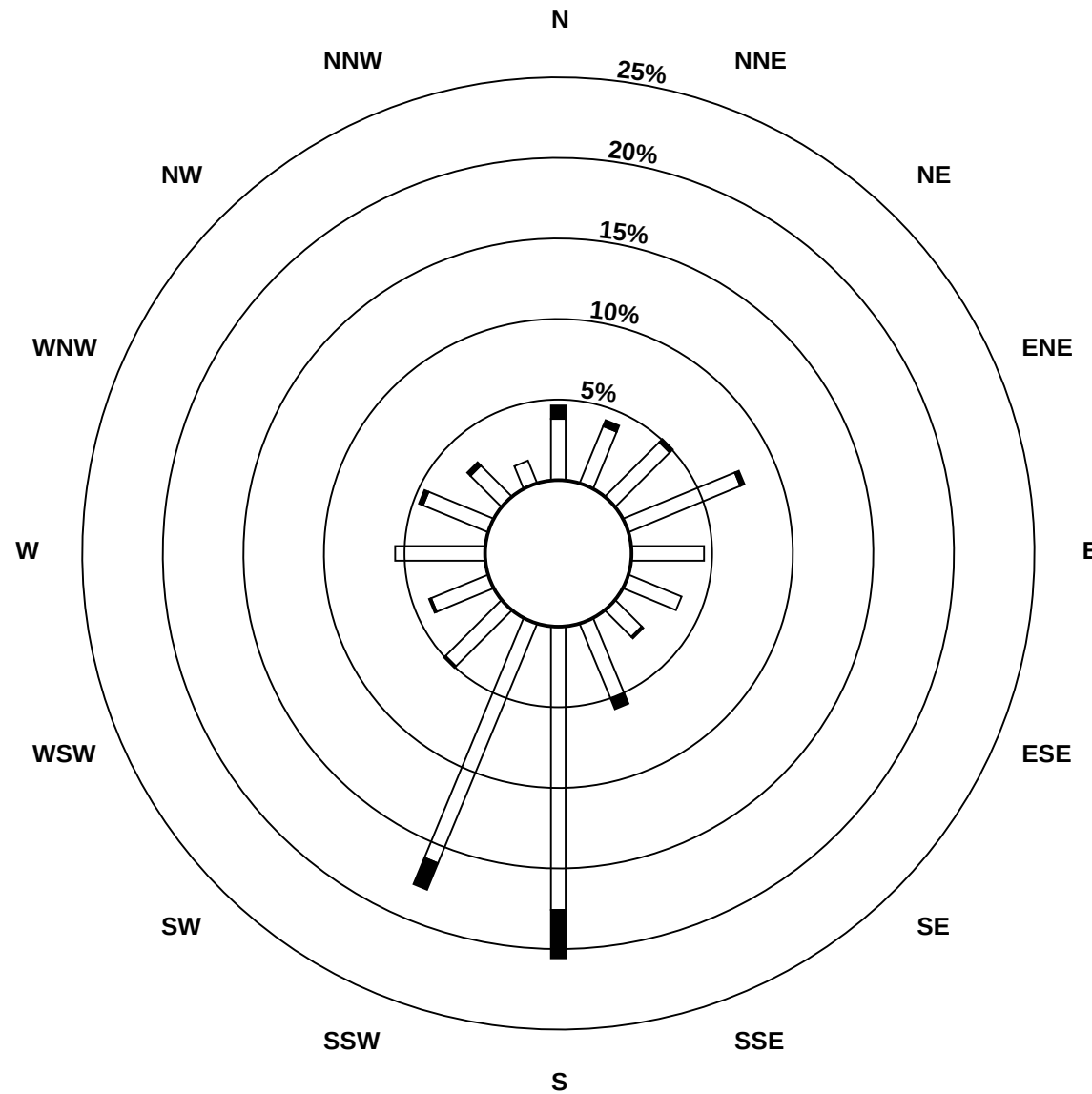
Hourly Maximums

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Sunset House - March 2012

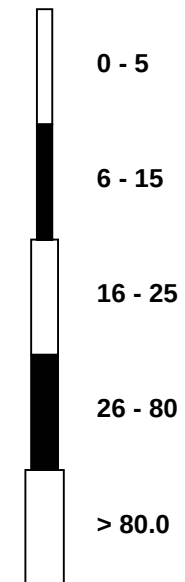


Pollutant Rose

PM_{2.5} (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Sunset House - March 2012



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



Hourly Averages

External Temperature (ET) - °C

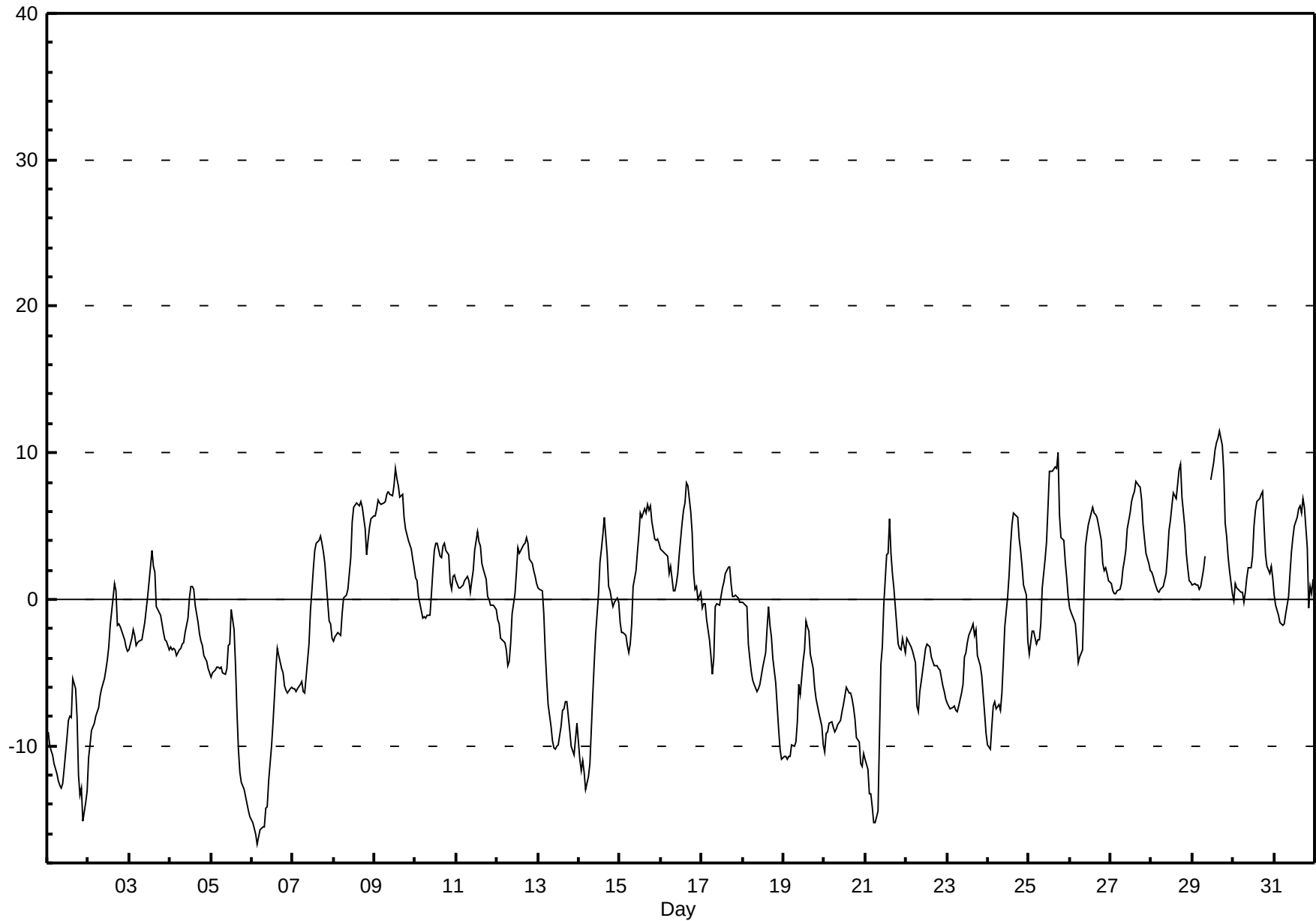
Sunset House - March 2012

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 11.5 °C on Mar 29 17:00 Maximum Daily Average: 6.1 °C on Mar 9																								Hours in Service: 744 Hours of Data: 741 Hours of Missing Data: 3 Hours of Calibration: 0 Percent Operational Time: 99.6		
Minimum Value: -17 °C on Mar 6 04:00 Maximum Diurnal Average: 2.4 °C at hour 16 Monthly Average: -1.55 °C												Minimum Daily Average: -10.8 °C on Mar 1 Minimum Diurnal Average: -4.6 °C at hour 7 Percentiles: P ₁ = -15.3 P ₁₀ = -9.9 Q ₁ = -5.4 Median = -1.0 Q ₃ = 2.7 P ₉₀ = 5.9 P ₉₉ = 8.7														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Mar	-9	-10	-10	-11	-11	-12	-12	-13	-13	-13	-12	-9	-8	-8	-8	-5	-6	-8	-12	-13	-13	-15	-14	-13	-10.8	-5.4
2-Mar	-11	-10	-9	-8	-8	-8	-7	-7	-6	-5	-5	-4	-3	-2	0	1	1	-2	-2	-2	-2	-3	-3	-4	-4.6	1.1
3-Mar	-3	-3	-2	-2	-3	-3	-3	-3	-2	-2	-1	0	2	3	2	2	0	-1	-1	-2	-2	-3	-3	-3	-1.3	3.4
4-Mar	-3	-3	-3	-3	-4	-3	-3	-3	-3	-2	-1	0	1	1	1	0	-2	-2	-3	-3	-4	-4	-5	-5	-2.5	0.8
5-Mar	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-3	-3	-1	-2	-5	-8	-10	-12	-13	-13	-14	-14	-14	-15	-7.3	-0.7
6-Mar	-15	-16	-16	-17	-16	-16	-16	-15	-14	-14	-12	-10	-9	-7	-5	-3	-4	-5	-5	-6	-6	-6	-6	-6	-10.2	-3.3
7-Mar	-6	-6	-6	-6	-6	-6	-6	-6	-5	-3	-1	1	2	3	4	4	4	4	3	2	0	-2	-2	-3	-1.5	4.3
8-Mar	-3	-3	-2	-2	-2	-1	0	0	1	2	3	5	6	7	6	6	7	6	5	3	4	5	6	6	2.7	6.6
9-Mar	6	6	7	7	6	7	7	7	7	7	7	8	9	8	8	7	7	6	5	4	4	3	3	2	6.1	8.9
10-Mar	1	1	0	-1	-1	-1	-1	-1	-1	0	2	3	4	4	3	3	4	4	3	3	1	1	2	2	1.4	3.8
11-Mar	1	1	1	1	1	1	2	1	1	1	2	3	5	4	4	2	2	1	0	0	0	0	0	-1	1.3	4.6
12-Mar	-1	-2	-3	-3	-3	-3	-4	-4	-3	-1	0	2	3	3	3	4	4	4	4	3	2	2	2	1	0.4	4.3
13-Mar	1	1	1	-1	-4	-5	-7	-9	-10	-10	-10	-10	-10	-9	-8	-8	-7	-7	-9	-10	-10	-11	-10	-9	-7.1	0.8
14-Mar	-11	-12	-11	-12	-13	-12	-11	-9	-6	-4	-2	0	3	3	4	6	3	1	1	0	-1	0	0	0	-3.5	5.6
15-Mar	-2	-2	-2	-2	-3	-4	-3	-2	1	2	3	4	6	6	6	6	6	6	6	5	4	4	4	4	2.3	6.5
16-Mar	3	3	3	3	3	2	2	1	1	1	2	3	5	6	7	8	8	6	5	2	1	1	0	1	3.1	7.9
17-Mar	-1	0	0	-1	-3	-4	-5	-4	-1	0	0	0	1	1	2	2	2	1	0	0	0	0	0	0	-0.4	2.2
18-Mar	0	0	0	-3	-4	-5	-6	-6	-6	-6	-6	-5	-5	-4	-2	-1	-2	-3	-4	-6	-7	-9	-10	-11	-4.6	-0.2
19-Mar	-11	-11	-11	-11	-11	-10	-10	-10	-8	-6	-6	-4	-3	-1	-2	-2	-4	-5	-6	-7	-7	-8	-9	-10	-7.2	-1.5
20-Mar	-10	-9	-9	-8	-8	-9	-9	-9	-9	-8	-8	-7	-7	-6	-6	-6	-7	-7	-8	-9	-10	-11	-11	-11	-8.5	-6.0
21-Mar	-11	-12	-13	-13	-14	-15	-15	-14	-9	-4	-3	0	3	3	5	3	2	1	-2	-3	-3	-3	-3	-4	-5.3	5.5
22-Mar	-3	-3	-3	-3	-4	-4	-7	-8	-6	-6	-4	-3	-3	-3	-3	-4	-5	-4	-5	-5	-5	-6	-6	-7	-4.6	-2.6
23-Mar	-7	-7	-7	-7	-7	-8	-8	-7	-6	-6	-4	-4	-3	-2	-2	-2	-3	-2	-4	-5	-5	-6	-8	-9	-5.4	-1.7
24-Mar	-10	-10	-9	-7	-7	-7	-7	-8	-6	-4	-2	0	2	4	5	6	6	6	4	3	2	1	0	-3	-1.7	5.9
25-Mar	-4	-3	-2	-2	-3	-3	-3	-2	1	3	4	6	9	9	9	9	9	10	6	4	4	3	1	0	2.7	10.0
26-Mar	-1	-1	-1	-2	-3	-4	-4	-3	0	4	4	5	5	6	6	6	6	5	4	2	2	2	2	1	1.8	6.3
27-Mar	1	1	0	0	1	1	1	2	3	3	5	6	7	7	7	8	8	8	7	5	4	3	2	2	3.8	8.0
28-Mar	2	2	1	1	0	1	1	1	2	3	5	5	6	7	7	8	9	9	7	5	3	2	1	1	3.7	9.2
29-Mar	1	1	1	1	1	1	2	3	D	D	D	8	9	10	11	11	11	10	9	5	4	3	2	0	5.0	11.5
30-Mar	0	1	1	1	0	0	0	1	1	2	2	3	5	6	7	7	7	7	5	3	2	2	2	1	2.8	7.4
31-Mar	0	0	-1	-2	-2	-2	-2	-1	0	2	3	4	5	6	6	6	6	7	6	4	-1	1	0	1	2.0	6.9
																								Diurnal Average		
																								Diurnal Maximum		
D - DAS Failure																										

Hourly Averages

External Temperature (ET) - °C

Sunset House - March 2012



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Sunset House - March 2012

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	15	11	10	9	9	9	9	9	8	7	6	6	6	7	6	3	2	3	4	5	4	4	6	9	4.3	15.0
Dir	58	48	38	28	25	21	12	7	6	355	313	307	316	315	338	31	57	314	45	67	63	125	173	191	19.4	58.0
2 Spd	13	17	19	17	16	18	17	14	17	15	14	14	17	13	10	10	17	15	14	12	6	5	10	10	10.6	19.4
Dir	187	187	183	183	183	178	178	188	181	187	192	195	193	202	204	255	294	285	291	289	275	238	195	187	204.4	182.5
3 Spd	13	14	13	8	7	11	14	12	9	10	10	9	9	11	19	26	19	6	7	7	6	5	8	7	7.6	26.4
Dir	185	179	185	207	198	194	194	199	205	202	209	223	242	272	307	305	306	272	238	212	249	233	210	208	230.4	305.4
4 Spd	8	8	8	6	6	8	8	9	10	9	9	8	11	10	12	12	11	11	9	9	9	9	10	10	8.0	12.1
Dir	207	213	213	245	202	207	206	210	202	205	213	251	281	280	276	274	227	210	203	202	192	198	195	198	221.7	276.4
5 Spd	11	12	13	14	14	15	15	11	11	6	3	5	3	5	14	19	18	18	18	15	15	14	15	13	2.5	18.9
Dir	189	188	181	181	178	181	183	197	191	210	237	274	278	314	353	353	353	358	350	349	358	357	350	353	311.2	353.4
6 Spd	12	11	5	5	4	6	3	3	3	8	13	16	18	19	15	8	7	12	15	17	14	9	10	10	5.8	18.8
Dir	354	357	325	294	340	6	331	115	151	205	189	197	195	194	203	252	276	287	275	285	279	249	232	235	247.3	193.8
7 Spd	9	10	11	10	9	9	9	10	8	8	8	13	15	21	22	23	22	22	20	13	14	13	12	16	7.2	22.9
Dir	230	223	204	205	219	222	208	209	209	221	238	269	283	292	295	295	294	293	290	318	29	61	57	66	275.6	295.4
8 Spd	14	7	5	3	7	15	14	12	13	14	13	9	8	9	11	12	7	13	12	10	11	15	18	21	9.6	20.6
Dir	86	104	135	132	216	181	191	198	193	197	204	225	228	241	217	204	191	186	227	182	153	166	170	176	186.9	176.2
9 Spd	18	18	19	20	20	20	21	22	21	18	16	11	16	16	13	17	15	18	14	9	10	16	16	13	12.4	21.7
Dir	187	192	190	190	191	191	191	193	201	202	209	244	282	273	254	291	280	295	279	255	251	274	275	276	230.2	193.4
10 Spd	12	11	4	5	5	5	7	6	9	12	12	11	11	9	10	9	9	12	10	17	20	24	24	20	9.2	24.2
Dir	241	270	263	255	225	210	203	204	189	190	190	202	212	219	196	178	153	149	129	167	176	152	139	151	181.3	138.6
11 Spd	16	20	20	18	14	13	12	14	9	4	9	6	12	15	12	9	4	7	5	4	2	6	7	7	3.9	20.1
Dir	178	178	173	166	177	170	173	171	212	219	11	345	26	29	5	323	351	268	89	80	203	215	201	211	175.7	172.6
12 Spd	6	7	6	9	10	8	6	8	9	9	11	11	10	13	17	18	20	27	23	20	18	15	12	10	11.6	26.9
Dir	209	216	205	210	205	206	196	202	198	189	193	175	179	146	146	154	143	149	168	173	186	187	187	181	175.7	149.0
13 Spd	11	13	9	2	13	17	15	16	15	14	13	16	15	11	12	9	9	4	3	6	6	4	7	5	4.5	16.7
Dir	177	175	180	339	37	28	13	8	357	353	319	311	307	316	312	318	312	295	253	219	213	207	192	223	325.1	28.4
14 Spd	7	6	3	4	5	8	11	15	17	16	12	10	8	9	6	3	9	12	15	17	13	8	8	12	4.7	17.0
Dir	23	62	181	196	187	208	190	189	186	194	204	228	248	288	296	344	60	76	90	98	125	169	180	190	169.4	186.1
15 Spd	13	13	13	11	11	9	9	15	18	21	25	26	30	28	29	30	25	26	24	19	20	18	19	20	18.7	30.1
Dir	190	180	174	177	171	168	138	136	133	151	135	127	153	154	160	163	173	172	174	182	176	180	183	185	162.7	163.3
16 Spd	20	18	19	18	10	7	6	6	13	17	14	11	11	10	9	6	5	8	3	6	7	6	6	12	8.5	20.0
Dir	185	183	182	186	210	238	265	212	185	190	203	212	237	259	274	323	290	266	247	191	175	168	183	178	205.0	184.7
17 Spd	10	14	14	9	6	3	6	9	6	13	18	21	22	24	26	25	18	16	14	16	15	13	13	15	11.5	25.6
Dir	183	178	178	176	167	110	58	63	44	45	55	69	70	64	75	74	78	74	85	92	92	97	92	92	85.5	74.9
18 Spd	13	9	1	9	12	13	13	12	15	13	12	11	11	12	11	6	9	10	10	13	13	9	5	6	4.8	14.6
Dir	91	76	75	272	276	281	276	266	273	273	275	275	279	291	294	300	6	9	28	42	46	56	45	64	314.3	272.7
19 Spd	8	12	12	14	13	19	22	14	21	6	9	13	14	11	14	15	16	14	12	10	12	8	6	4	10.5	21.7
Dir	60	64	65	72	76	86	80	84	81	96	57	44	28	25	10	19	352	6	2	14	60	49	354	40	48.8	79.7
20 Spd	4	5	7	5	6	6	12	11	14	15	17	17	19	18	19	14	12	10	10	4	3	3	5	4	7.9	18.9
Dir	63	72	67	117	130	107	79	78	68	70	58	57	52	42	40	32	348	336	347	13	65	109	163	156	55.1	40.0
21 Spd	3	5	4	4	4	5	3	4	8	7	8	5	4	5	6	6	7	11	12	12	13	10	11	11	4.7	12.7
Dir	169	133	88	115	102	76	87	76	55	61	13	351	289	330	319	317	6	25	56	58	61	57	116	82	54.2	61.1
22 Spd	19	22	18	18	18	13	16	14	18	22	24	19	16	18	19	19	16	14	7	7	4	11	8	7	11.9	24.3
Dir	116	120	107	105	102	86	39	43	71	83	81	71	64	53	49	44	38	41	31	26	79	191	205	209	77.1	81.0

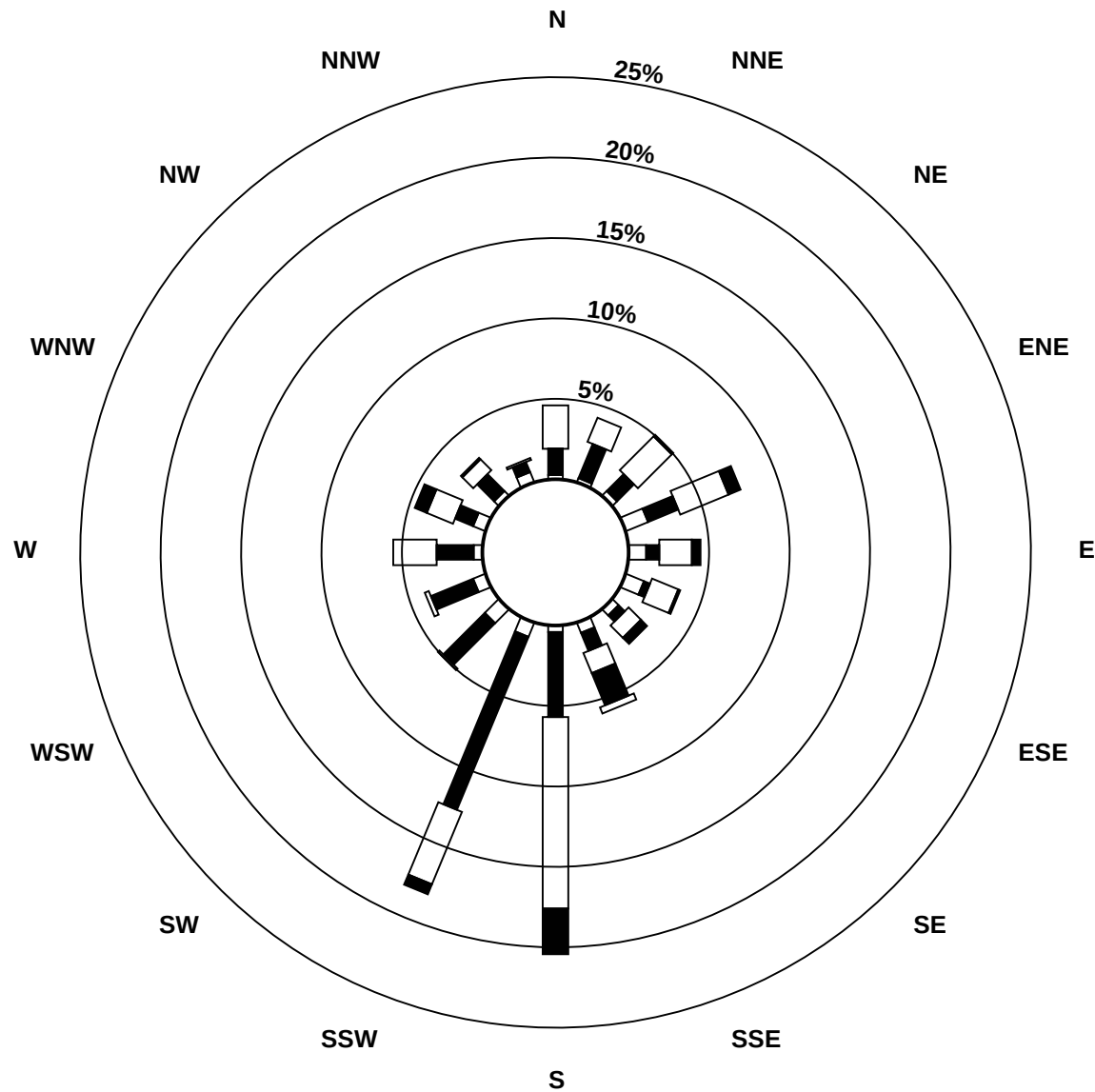
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Sunset House - March 2012

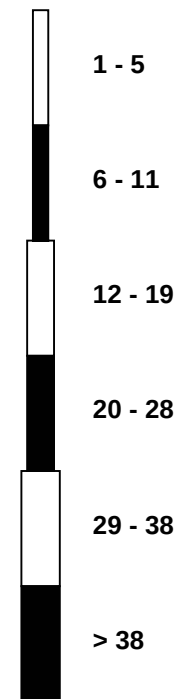
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
23 Spd	6	6	4	2	2	4	2	5	7	10	10	11	11	13	9	8	12	12	11	12	11	8	3	2	4.9	12.9	
Dir	205	216	193	233	219	236	283	62	49	32	52	27	10	18	15	6	5	36	34	56	66	75	75	78	34.6	18.4	
24 Spd	2	5	7	10	12	13	16	16	19	17	16	14	15	13	10	9	7	5	8	13	15	16	8	4	9.7	18.7	
Dir	106	154	169	174	171	177	183	191	188	191	192	197	199	196	191	198	214	162	93	112	122	143	131	97	172.9	188.3	
25 Spd	5	6	11	13	10	9	13	16	13	13	14	11	9	18	18	16	12	4	10	2	15	17	18	15	10.9	18.4	
Dir	111	152	179	176	171	174	178	184	187	188	194	196	191	176	184	182	177	212	351	123	177	177	180	190	180.9	183.9	
26 Spd	15	10	7	7	6	5	7	3	8	10	12	10	15	12	17	19	20	19	19	17	20	19	15	14	8.2	20.2	
Dir	186	194	172	178	163	200	186	82	55	51	60	49	22	37	25	32	40	44	53	58	73	93	105	111	69.3	39.7	
27 Spd	14	13	15	15	14	16	18	21	24	24	26	26	23	24	21	17	17	19	20	20	24	25	25	25	19.1	26.2	
Dir	113	113	120	111	110	132	140	151	169	170	164	163	158	157	165	173	162	151	153	155	161	164	171	178	154.4	163.7	
28 Spd	26	25	16	18	14	17	10	15	22	16	12	13	10	10	10	11	7	3	13	13	20	20	12	13	13.9	26.3	
Dir	172	176	174	180	176	184	171	180	178	172	165	195	209	210	213	200	176	247	188	167	192	199	210	205	185.3	172.2	
29 Spd	9	10	10	14	16	17	18	18	D	D	D	15	15	13	14	13	16	15	9	6	7	7	7	7	10.1	17.6	
Dir	227	208	208	202	196	180	171	174	D	D	D	194	180	195	181	184	162	179	329	89	299	217	206	154	189.1	174.0	
30 Spd	8	9	9	9	8	6	1	4	2	6	9	9	8	14	15	11	12	10	10	4	8	7	9	11	6.3	14.6	
Dir	183	197	188	181	191	197	221	278	221	218	219	228	255	279	292	291	291	279	293	291	226	206	226	203	239.4	292.1	
31 Spd	10	10	13	11	11	13	11	10	11	11	11	12	11	11	10	9	7	6	1	2	7	8	8	12	5.7	13.0	
Dir	204	201	194	200	196	189	199	209	211	237	275	274	243	236	254	246	259	290	181	94	84	75	83	99	214.8	194.2	
Spd	6.7	7.3	7.7	7.1	6.3	6.4	5.8	6.2	6.2	6.0	4.6	3.7	3.0	2.4	2.0	2.2	1.7	0.8	0.5	2.5	4.3	5.8	6.2	6.6	Diurnal Average		
Dir	168.3	170.6	171.2	177.4	174.9	174.1	171.3	173.7	170.0	177.3	175.6	197.8	218.4	237.5	260.9	286.6	313.0	289.6	357.6	124.2	142.8	159.8	170.8	169.4	Diurnal Maximum		
Spd	26.3	24.6	20.1	19.8	20.5	19.5	21.7	21.7	24.2	24.1	26.2	26.2	29.9	28.2	29.2	30.1	24.5	26.9	23.6	20.1	23.8	24.6	24.7	25.3	Diurnal Maximum		
Dir	172.2	176.1	172.6	190.1	191.4	191.2	79.7	193.4	168.9	170.2	163.7	163.3	152.7	153.9	159.7	163.3	172.9	149.0	174.2	172.7	160.9	163.9	171.4	177.6			
Maximum Speed Value: 30 km/h on Mar 15 16:00																									Minimum Speed Value: 1 km/h on Mar 31 19:00		
Maximum Daily Speed Average: 19.1 km/h on Mar 27																									Minimum Daily Speed Average: 2.5 km/h on Mar 1		
Maximum Diurnal Speed Average: 7.7 km/h at hour 3																									Minimum Diurnal Speed Average: 0.5 km/h at hour 19		
Monthly Average Velocity: 4.06 km/h 176.26 deg																									Speed Percentiles: P ₁ = 2.2 P ₁₀ = 5.0 Q ₁ = 7.9 Median = 11.2 Q ₃ = 15.1 P ₉₀ = 19.0 P ₉₉ = 26.2		
All monthly, daily, and diurnal averages have been calculated using vector methods																									Hours in Service: 744		
																									Hours of Data: 741		
																									Hours of Missing Data: 3		
																									Percent Operational Time: 99.6		
D - DAS Failure																											
Frequency Distribution																											
Speed Range (km/h)																											
Direction	0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total														
North	6		21		25		0		0		0		52														
NorthEast	7		35		42		5		0		0		89														
East	19		12		32		10		0		0		73														
SouthEast	8		12		15		14		2		0		51														
South	8		69		128		36		2		0		243														
SouthWest	13		90		16		0		0		0		119														
West	8		31		34		2		0		0		75														
NorthWest	6		19		8		6		0		0		39														
Total	75		289		300		73		4		0		741														

Wind Rose

Wind Speed (WS) (km/h)
Sunset House - March 2012



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Sunset House - March 2012

Maximum Speed: 30 km/h on Mar 15 13:00																				Maximum Daily Speed Average: 20.5 km/h on Mar 27										Hours in Service: 744	
Minimum Speed: 2 km/h on Mar 24 00:00																				Minimum Daily Speed Average: 7.1 km/h on Mar 1										Hours of Data: 741	
Maximum Diurnal Speed Average: 14.5 km/h at hour 15																				Minimum Diurnal Speed Average: 10.3 km/h at hour 5										Hours of Missing Data: 3	
Monthly Average Speed: 12.19 km/h																				Percentiles: P ₁ = 3.3 P ₁₀ = 5.7 Q ₁ = 8.2 Median = 11.5 Q ₃ = 15.4 P ₉₀ = 19.5 P ₉₉ = 26.5										Percent Operational Time: 99.6	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
1-Mar	15	11	10	9	9	9	9	9	9	8	6	6	6	7	6	4	2	4	4	5	4	4	6	9	7.1	15.0					
2-Mar	13	17	20	17	16	18	17	15	17	15	15	14	17	13	10	11	18	15	14	12	6	6	10	10	14.0	19.5					
3-Mar	13	14	13	9	7	11	14	12	9	10	10	9	9	12	20	27	19	7	10	7	7	5	8	7	11.2	26.5					
4-Mar	9	8	8	6	7	8	9	9	10	9	9	9	11	10	12	13	11	12	9	9	9	9	10	10	9.5	13.0					
5-Mar	11	12	13	14	14	15	15	12	11	6	4	6	4	5	15	19	18	18	18	15	15	14	15	13	12.6	19.1					
6-Mar	12	11	5	5	5	6	4	4	5	9	13	17	18	19	15	10	7	12	15	17	14	9	11	10	10.5	19.1					
7-Mar	10	10	11	10	9	9	9	10	8	8	9	14	15	22	22	23	22	22	21	16	15	13	12	17	14.0	23.0					
8-Mar	14	9	6	4	7	16	14	12	13	14	13	10	8	10	11	12	8	14	12	10	11	15	18	21	11.8	20.7					
9-Mar	18	18	19	20	21	20	21	22	21	18	16	11	16	17	13	18	16	18	14	9	10	16	16	13	16.7	21.8					
10-Mar	12	11	4	6	6	5	7	6	9	12	12	11	11	9	10	9	9	13	10	18	20	24	24	21	11.7	24.3					
11-Mar	16	20	20	18	14	13	12	14	9	8	9	7	12	15	13	10	9	7	8	5	4	6	7	7	11.1	20.1					
12-Mar	6	7	6	9	10	8	6	8	9	10	11	11	10	14	17	18	20	27	24	20	18	15	12	10	12.8	27.1					
13-Mar	11	13	9	6	13	17	16	17	15	15	14	16	15	11	12	10	9	5	3	6	6	4	8	6	10.6	17.1					
14-Mar	8	6	3	4	6	8	12	15	17	16	12	11	9	9	7	5	10	12	15	17	15	8	8	12	10.2	17.1					
15-Mar	13	13	13	11	11	9	10	15	18	21	25	26	30	28	29	30	25	26	24	20	20	18	19	20	19.8	30.5					
16-Mar	20	18	20	18	11	7	8	8	13	17	14	11	11	11	9	7	6	8	4	6	8	6	6	12	10.8	20.1					
17-Mar	10	14	14	9	6	4	6	9	7	13	18	21	22	25	26	25	18	16	14	16	15	14	13	15	14.6	25.9					
18-Mar	13	9	6	9	12	14	13	13	15	13	12	11	11	12	11	7	9	10	10	13	13	9	6	6	10.7	14.8					
19-Mar	8	12	13	14	13	19	22	15	21	8	10	13	14	11	14	15	16	14	12	11	12	9	7	4	12.8	21.7					
20-Mar	4	5	7	6	6	7	13	11	15	15	17	18	19	19	19	14	12	10	10	4	4	4	5	5	10.4	19.1					
21-Mar	4	5	4	4	5	5	4	4	8	7	8	5	5	5	6	6	7	11	12	12	13	10	13	13	7.4	13.1					
22-Mar	19	22	18	18	18	14	16	14	18	22	24	20	16	18	19	19	16	14	7	7	7	11	8	7	15.5	24.4					
23-Mar	6	6	5	4	4	4	3	6	7	11	10	11	11	13	10	9	13	12	11	12	11	8	3	2	8.0	13.1					
24-Mar	3	6	7	10	12	13	16	16	19	17	16	15	15	13	11	10	8	6	8	13	15	17	8	5	11.6	18.8					
25-Mar	5	6	11	13	10	9	13	16	13	13	14	12	10	19	19	16	12	5	11	7	16	17	18	15	12.5	18.8					
26-Mar	15	10	7	7	7	6	7	4	9	10	12	11	15	13	17	19	20	19	19	17	20	19	15	14	13.1	20.3					
27-Mar	14	13	15	15	14	16	18	21	24	24	27	27	24	24	22	18	18	20	20	20	24	25	25	25	20.5	26.6					
28-Mar	26	25	16	18	14	18	11	15	22	16	13	13	11	10	11	12	8	7	13	13	20	20	12	13	14.9	26.5					
29-Mar	10	10	10	14	16	17	18	18	D	D	D	15	15	13	15	13	17	20	14	7	10	7	8	7	13.0	20.2					
30-Mar	8	9	9	9	8	6	3	4	4	6	9	9	9	14	15	11	12	10	11	5	8	8	10	11	8.8	14.9					
31-Mar	10	10	13	11	11	13	11	10	11	11	11	13	12	12	11	9	9	7	4	3	7	8	9	12	9.9	13.0					
11.4 11.7 10.8 10.6 10.3 11.1 11.5 11.7 12.9 12.9 13.2 13.0 13.3 13.9 14.5 13.8 13.1 12.8 12.3 11.4 12.2 11.6 11.2 11.4																									Diurnal Average						
26.5 24.7 20.1 19.9 20.5 19.6 21.7 21.8 24.4 24.3 26.5 26.6 30.5 28.5 29.5 30.3 25.0 27.1 23.9 20.3 24.0 24.8 24.9 25.5																									Diurnal Maximum						
D - DAS Failure																															
All monthly, daily, and diurnal averages have been calculated using scalar methods																															

Hourly Standard Deviations

Wind Direction (WD) - deg

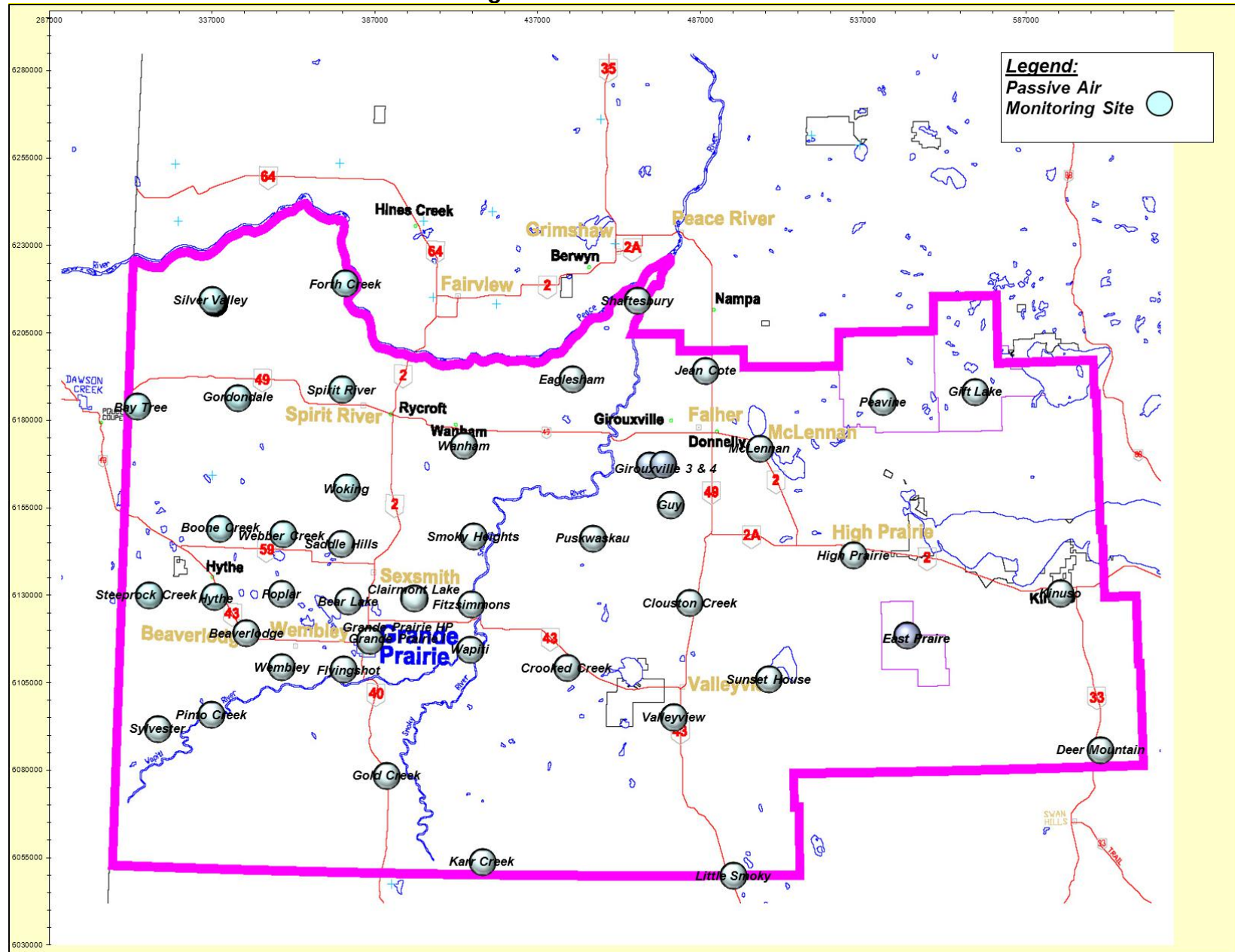
Sunset House - March 2012

Maximum Value: 89.2 deg on Mar 11 21:00																		Hours in Service: 744							
Minimum Value: 2.9 deg on Mar 2 01:00																		Hours of Data: 741							
																		Hours of Missing Data: 3							
Percentiles: P ₁ = 3.9 P ₁₀ = 5.6 Q ₁ = 7.8 Median = 10.8 Q ₃ = 17.3 P ₉₀ = 30.2 P ₉₉ = 71.0																		Hours of Calibration: 0							
																		Percent Operational Time: 99.6							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Mar	6	6	6	11	9	8	6	8	5	15	10	18	15	12	25	17	35	48	26	23	28	8	18	4	48.5
2-Mar	3	5	5	6	5	6	8	11	8	17	12	9	8	9	13	30	18	13	8	9	25	45	7	6	45.4
3-Mar	6	6	10	14	9	5	5	13	11	8	8	18	19	10	16	6	11	20	40	13	23	22	14	9	40.0
4-Mar	10	10	10	18	16	10	10	9	10	10	11	29	9	9	11	22	12	12	10	8	4	5	4	4	28.6
5-Mar	4	4	4	5	4	6	6	23	15	25	31	23	40	23	21	9	9	6	9	9	9	9	8	8	40.3
6-Mar	8	7	23	14	25	13	53	38	59	21	8	10	11	10	12	30	13	10	12	6	8	17	9	9	58.7
7-Mar	10	11	6	8	10	9	8	8	10	9	18	11	9	7	7	6	6	8	10	31	23	11	12	11	31.4
8-Mar	9	48	23	43	19	10	9	8	8	6	12	13	15	17	9	11	23	13	9	16	15	5	6	6	47.6
9-Mar	6	10	6	6	5	5	5	6	6	6	8	19	11	11	19	12	9	8	14	14	14	10	9	10	18.8
10-Mar	14	20	53	25	20	14	12	9	7	8	10	17	15	14	17	12	21	16	11	20	9	11	6	12	52.8
11-Mar	8	6	5	6	14	6	17	19	17	73	15	29	12	7	22	25	62	18	71	52	89	12	13	11	89.2
12-Mar	10	11	12	11	10	9	14	9	9	11	13	14	20	18	14	13	7	8	11	7	6	5	8	5	19.7
13-Mar	7	6	9	83	13	13	17	16	9	15	11	9	8	10	7	10	11	35	39	9	9	18	11	33	83.2
14-Mar	33	13	38	9	22	6	9	6	5	7	10	14	23	13	39	74	26	5	9	6	28	11	5	6	73.9
15-Mar	4	8	7	6	5	7	15	4	15	6	11	9	11	8	8	6	11	10	9	8	6	6	5	6	15.4
16-Mar	6	5	6	9	25	23	39	44	10	6	11	10	13	19	11	35	70	15	36	7	12	20	18	8	70.4
17-Mar	9	4	4	8	34	36	15	14	25	11	8	7	8	6	9	7	9	8	12	8	7	7	8	8	35.6
18-Mar	6	9	82	9	14	8	11	17	11	10	11	11	15	12	12	34	14	6	14	9	12	8	14	13	82.4
19-Mar	9	6	8	5	4	5	5	28	7	57	29	14	12	15	15	13	10	12	8	17	12	16	24	26	56.9
20-Mar	21	17	12	32	21	26	15	15	15	14	8	9	9	12	10	13	12	10	9	36	44	35	25	30	44.1
21-Mar	26	7	18	25	28	20	30	27	7	17	10	37	21	21	23	42	15	7	10	8	9	13	34	35	42.0
22-Mar	6	3	6	4	4	17	6	9	4	7	6	10	10	11	9	8	8	8	15	10	48	7	11	12	48.4
23-Mar	15	14	22	58	68	19	57	31	13	14	18	15	12	10	18	25	16	11	9	9	8	8	40	26	68.0
24-Mar	35	17	13	4	3	5	9	5	5	6	9	14	13	14	20	21	28	40	11	4	8	12	25	23	40.3
25-Mar	16	22	5	4	8	14	8	7	11	7	10	18	33	16	12	12	12	31	35	77	7	5	6	4	77.1
26-Mar	6	28	17	7	39	43	26	44	7	11	16	23	9	23	8	6	6	7	5	4	7	8	5	7	44.0
27-Mar	4	7	5	4	6	9	5	9	7	7	9	11	13	11	12	18	15	10	8	6	6	7	7	7	18.2
28-Mar	6	6	18	8	10	10	15	9	9	14	17	16	23	17	24	21	33	85	14	10	8	16	11	9	85.1
29-Mar	16	9	6	6	6	6	5	5	D	D	D	14	14	17	15	17	15	43	61	31	58	18	12	13	60.8
30-Mar	12	6	4	5	11	13	74	43	55	21	13	13	26	9	11	12	11	14	16	30	20	25	16	9	73.9
31-Mar	9	5	6	7	8	5	7	8	9	16	17	19	21	22	24	23	42	39	87	60	28	13	11	9	86.7
34.8 47.6 82.4 83.2 68.0 43.0 73.9 44.0 58.7 73.2 30.6 37.0 40.3 23.1 39.3 73.9 70.4 85.1 86.7 77.1 89.2 45.4 40.1 35.0																									
D - DAS Failure																									

PAZA

Monthly Passive Data Summary

Location of PAZA Passive Monitoring Stations



PAZA Passive Results for March 2012

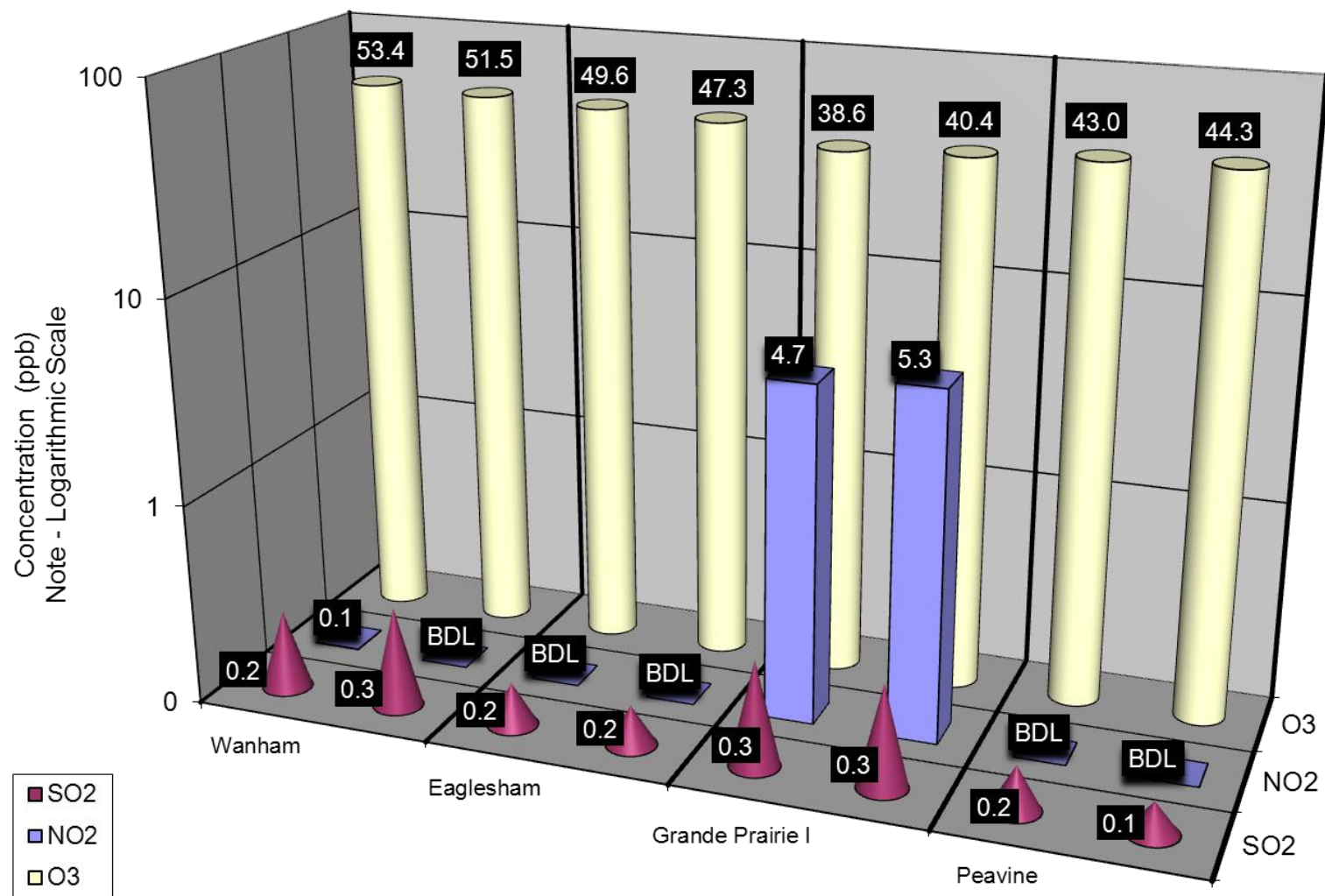
Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	H2S ppb	Site Legal
Duplicates						
19a	Wanham	0.2	53.4	0.1		
19b	Wanham	0.3	51.5	BDL		
21a	Eaglesham	0.2	49.6	BDL		
21b	Eaglesham	0.2	47.3	BDL		
27a	Grande Prairie I	0.3	38.6	4.7		
27b	Grande Prairie I	0.3	40.4	5.3		
44a	Peavine	0.2	43.0	BDL		
44b	Peavine	0.1	44.3	BDL		
63a	Girouxville 3				0.3	
63b	Girouxville 3				0.3	
1	Silver Valley	0.3	45.7	BDL		08-27-081-11 W6M
2	Bay Tree	0.2	39.3	0.8		13-16-078-13 W6M
3	Fourth Creek	0.2	46.3	BDL		04-13-082-07 W6M
4	Gordondale	0.4	49.9	0.4		04-34-078-10 W6M
5	Boone Creek	0.3	50.5	0.3		16-36-074-11 W6M
7	Steeprock Creek	0.3	46.1	BDL		09-35-072-13 W6M
9	Spirit River	0.1	45.6	0.2		08-12-079-07 W6M
10	Woking	0.3	48.5	BDL		01-13-076-07 W6M
11	Webber Creek	1.5	53.3	0.2		09-36-074-09 W6M
12	Hythe	0.2	40.0	0.7		14-36-072-11 W6M
14	Sylvester	0.1	40.2	BDL		08-06-069-12 W6M
16	Beaverlodge	0.3	39.7	1.2		15-36-071-10 W6M
17	Poplar	0.6	43.9	0.6		13-06-073-08 W6M
18	Saddle Hills	0.4	52.5	BDL		04-25-074-07 W6M
19	Wanham	0.3	52.5	0.1		16-22-077-03 W6M
20	Shaftesbury	0.2	55.3	0.2		04-03-082-23 W5M
21	Eaglesham	0.2	48.5	BDL		16-21-079-25 W5M
23	Bear Lake	0.3	51.7	0.3		15-31-072-06 W6M

PAZA Passive Results for March 2012 (Continued)

24	Wembley	0.2	36.5	0.6	12-31-070-08 W6M
25	Pinto Creek	0.1	47.1	0.6	04-24-069-11 W6M
26	Flyingshot	0.2	40.0	1.0	15-36-070-07 W6M
27	Grande Prairie I	0.3	39.5	5.0	08-15-071-06 W6M
28	Clairmont Lake	0.5	57.9	BDL	09-06-073-04 W6M
29	Smoky Heights	0.5	51.9	0.5	04-06-075-02 W6M
30	Fitzsimmons	0.2	57.2	BDL	15-36-072-03 W6M
32	Gold Creek	0.1	34.4	0.7	06-33-067-05 W6M
33	Wapiti	0.2	50.1	BDL	02-25-071-03 W6M
34	Puskwaskau	0.1	48.1	BDL	15-35-074-25 W5M
35	Jean Cote	0.2	56.5	BDL	12-35-079-21 W5M
36	Guy	0.2	49.4	BDL	03-04-076-22 W5M
37	Crooked Creek	0.2	51.4	BDL	16-01-071-26 W5M
38	Karr Creek	BDL	39.9	BDL	10-16-065-02 W6M
39	Clouston Creek	0.1	41.6	0.2	12-01-073-22 W5M
40	McLennan	0.3	51.7	0.1	03-29-077-19 W5M
41	Valleyview	0.2	51.1	BDL	09-30-069-22 W5M
42	Sunset House	0.2	51.1	BDL	05-32-070-19 W5M
43	High Prairie	0.1	45.5	0.2	16-13-074-17 W5M
44	Peavine	0.2	43.6	BDL	03-05-079-15 W5M
45	Gift Lake	0.2	44.0	BDL	0.1 10-07-079-12 W5M
46	Little Smoky	0.2	46.5	0.7	12-01-065-21 W5M
47	Kinuso	0.1	41.7	0.2	12-10-073-10 W5M
48	Deer Mountain	0.2	45.4	BDL	15-22-068-09 W5M
49	Grande Prairie HP	0.3	36.0	4.8	17-26-071-06 W6M
62	East Prairie	0.1	43.1	0.3	13-02-072-15 W5M
63	Girouxville 3			0.3	14-02-077-23 W5M
64	Girouxville 4			0.1	4-08-077-22 W5M

*BDL = Below Detection Level

*N/S - No sample



Duplicate Summary Chart

Passive Summary for March 2012

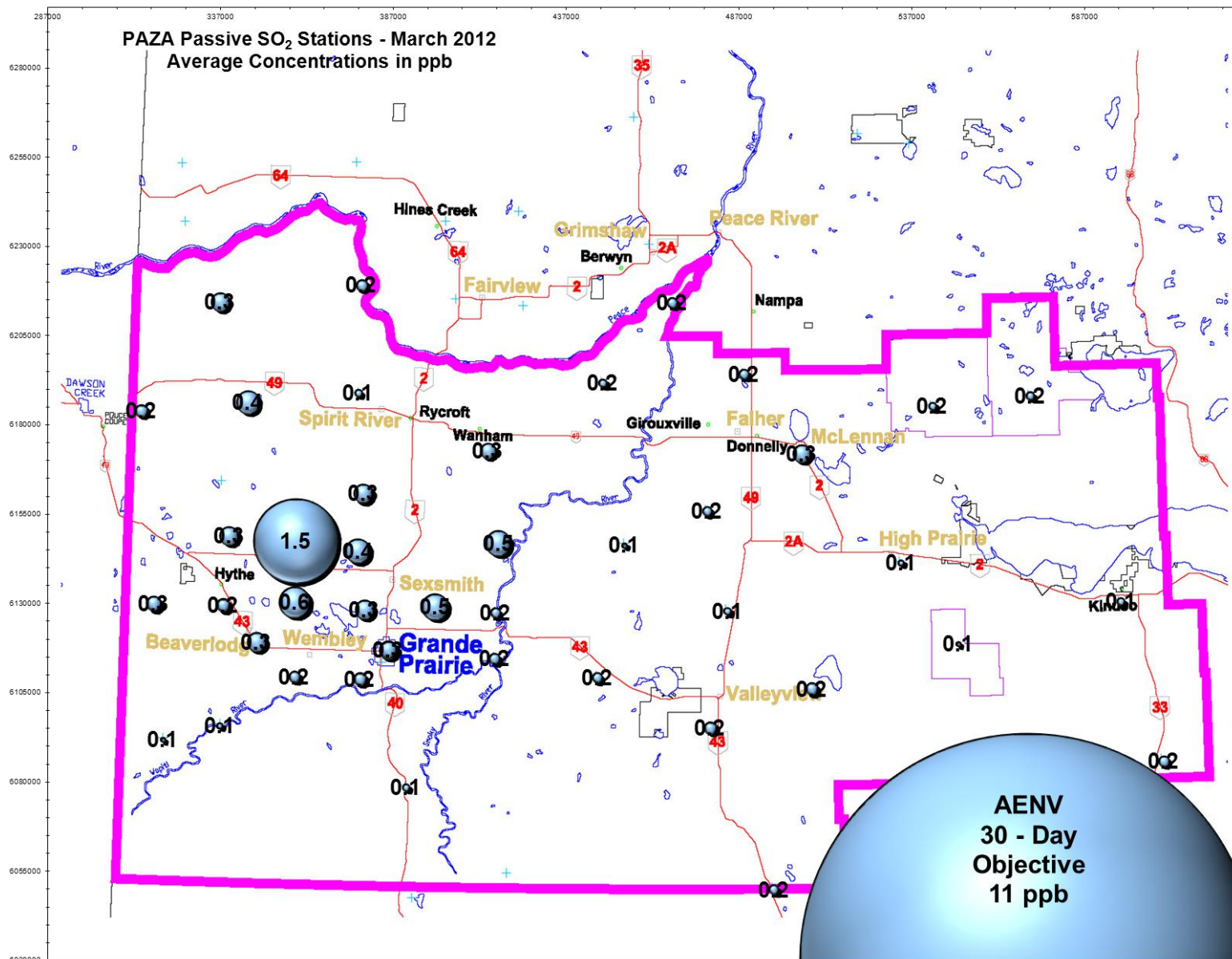
Stats	Sulphur Dioxide SO ₂	Ozone O ₃	Nitrogen Dioxide NO ₂	Hydrogen Sulphide H ₂ S
	ppb	ppb	ppb	ppb
Passive Summary for March 2012 (PAZA Zone)				
Mean	0.3	46.6	0.8	0.2
Standard Deviation	0.2	5.9	1.3	0.1
Minimum	0.1	34.4	0.1	0.1
Minimum At	East Prairie (#62)	Gold Creek (#32)	Wanham (#19a)	Gift Lake (#45)
Maximum	1.5	57.9	5.0	0.3
Maximum At	Webber Creek (#11)	Clairmont Lake (#28)	Grande Prairie I (#27)	Girouxville 3

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

	SO ₂	O ₃	NO ₂
PAZA Beaverlodge station	0.4	34.7	3.5
PAZA Beaverlodge passive	0.3	39.7	1.2

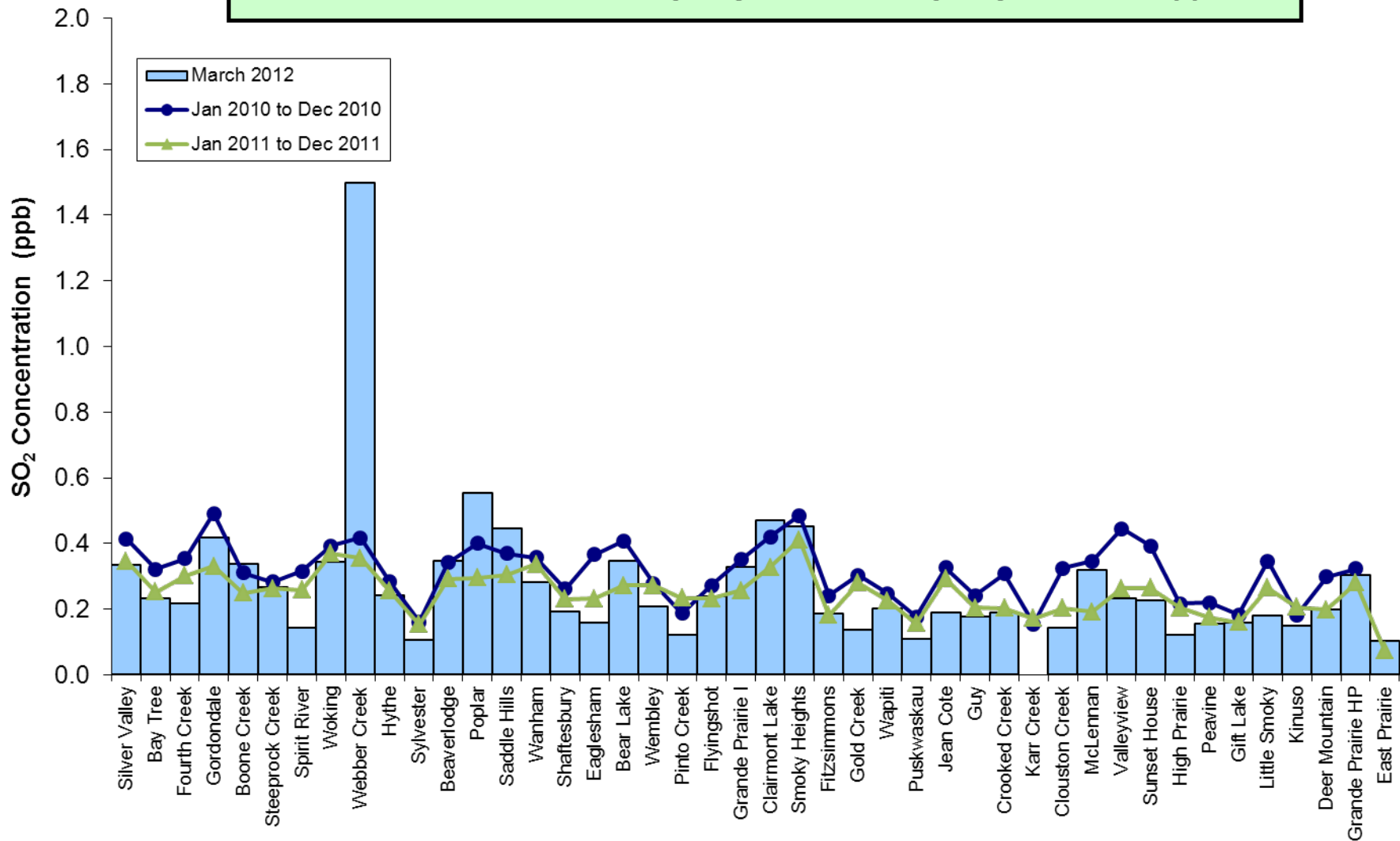
Comparison between Continuous and Passive monitoring at Henry Pirker (passive #49 Grande Prairie HP)

	SO ₂	O ₃	NO ₂
PAZA Henry Pirker station	0.4	26.5	11.9
PAZA Grande Prairie passive	0.3	36.0	4.8

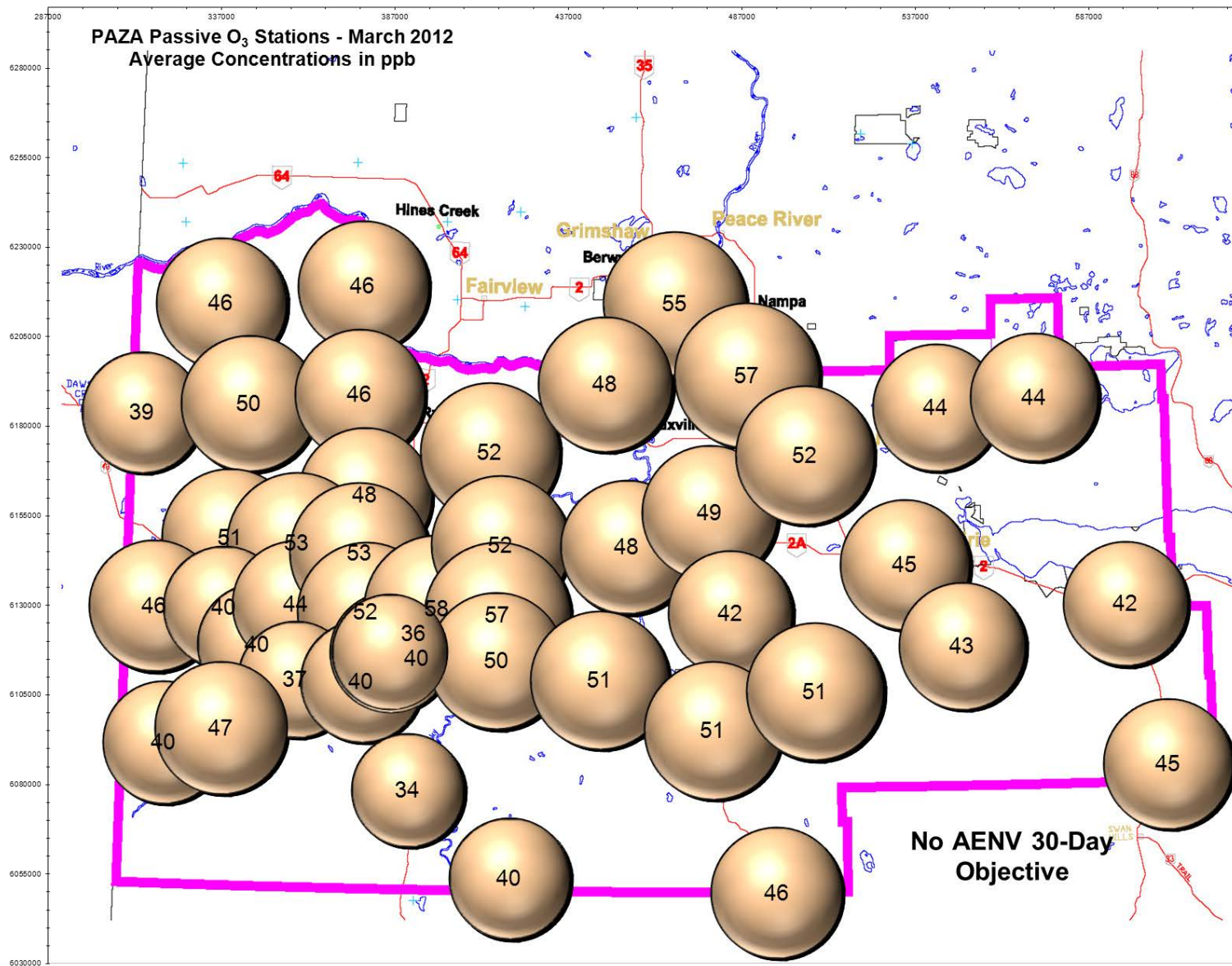


SO₂ Bubble Chart

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

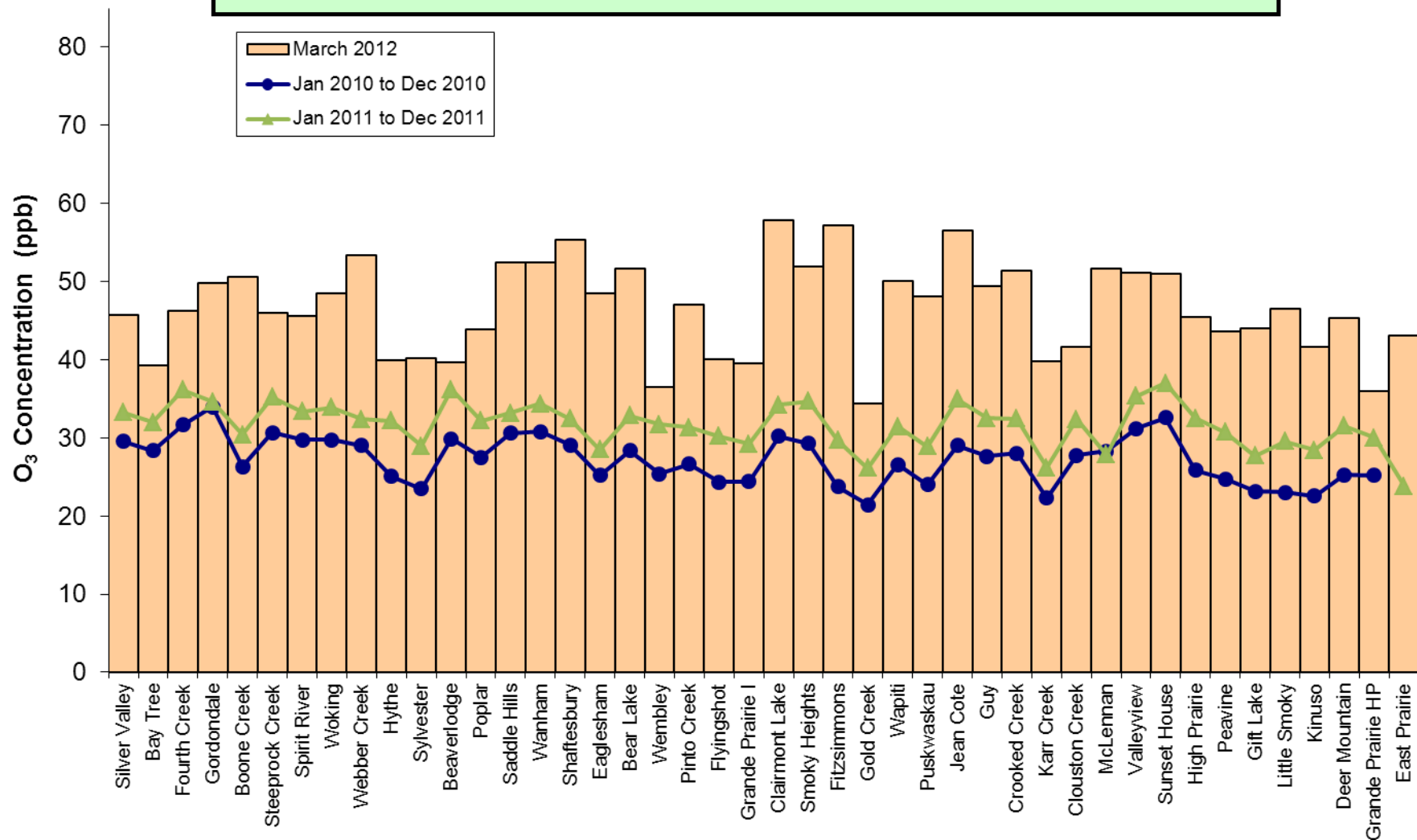


SO₂ Summary Chart

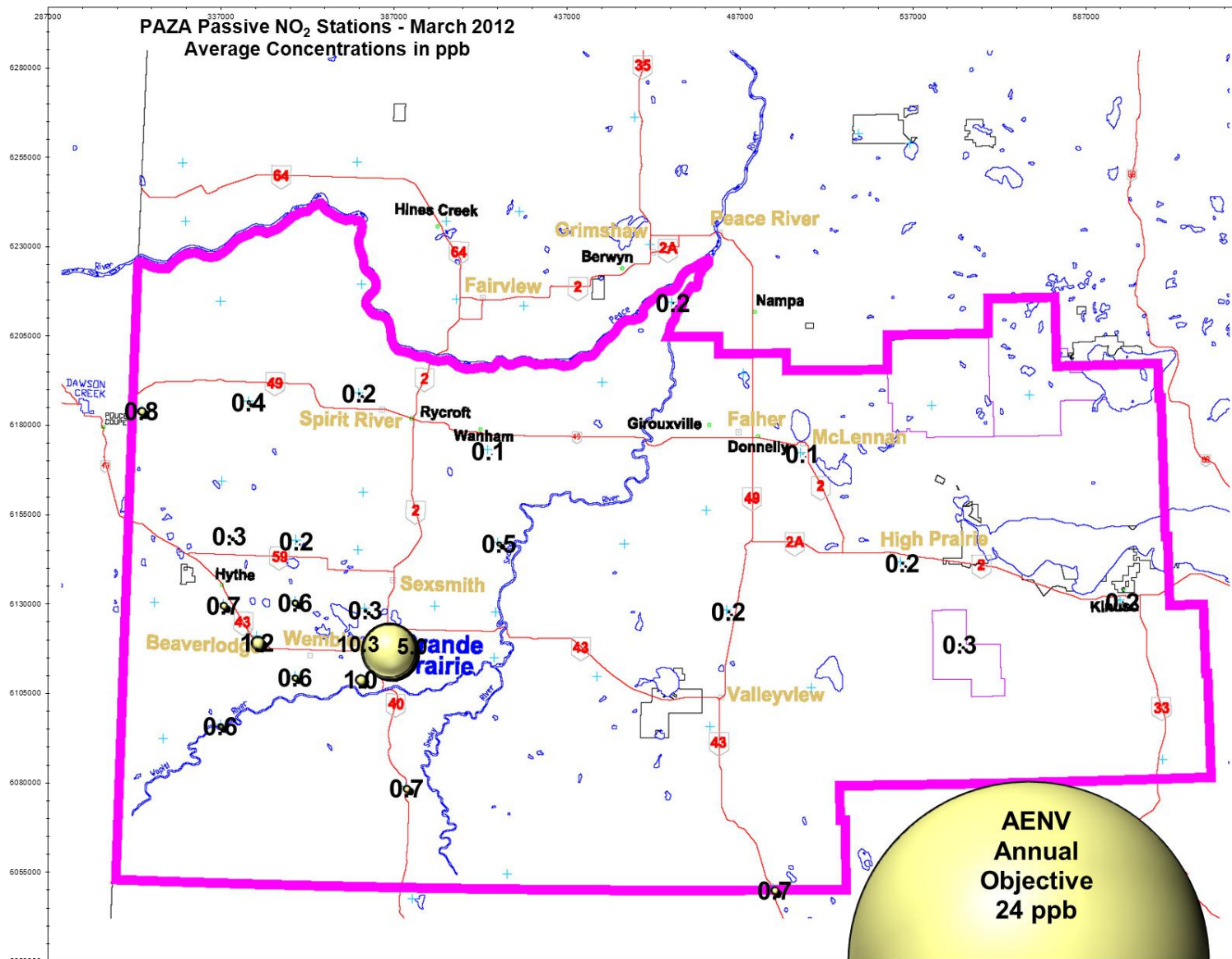


O₃ Bubble Chart

Alberta Ambient Air Quality Objective - No Annual O₃ Objective

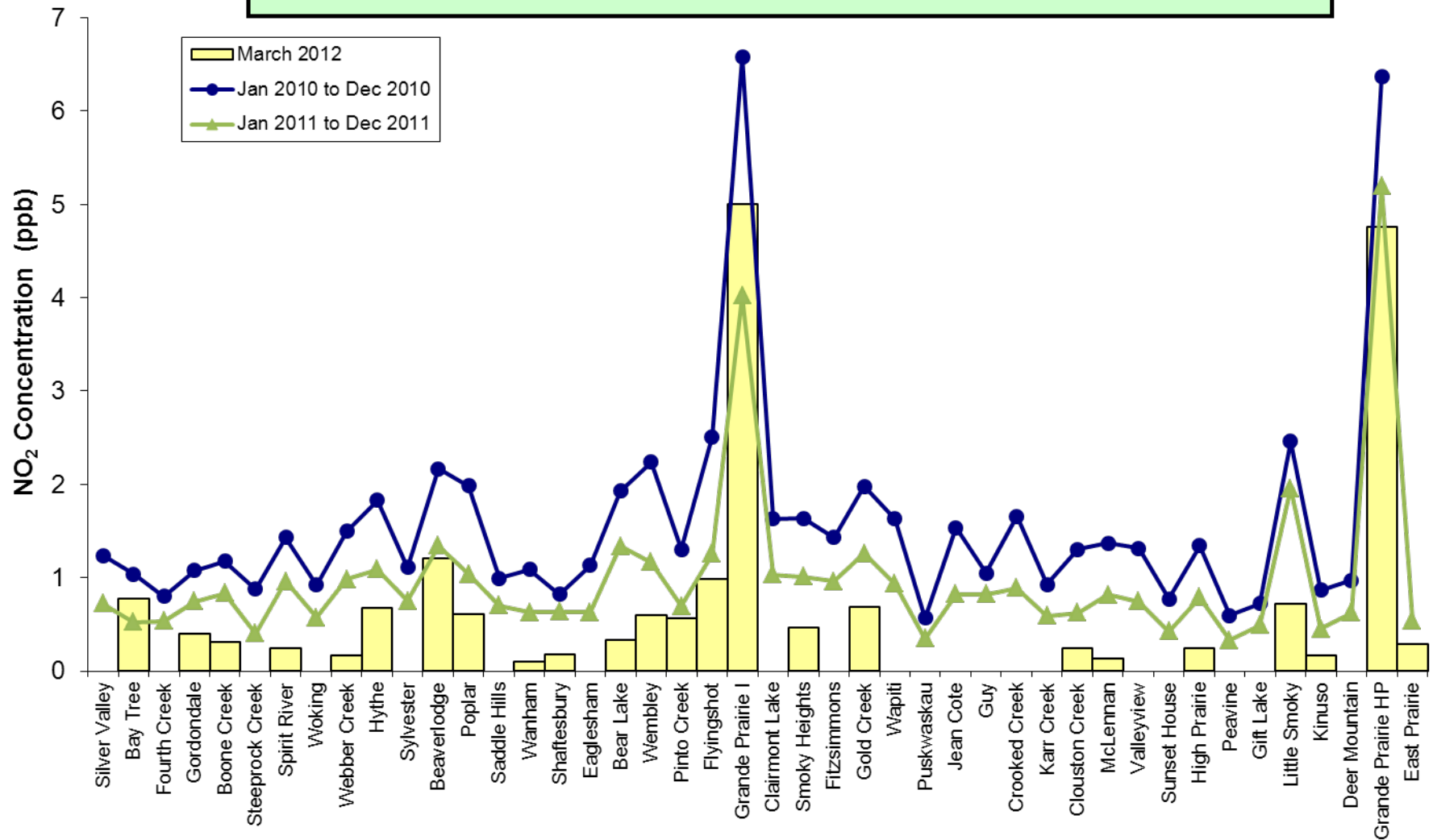


O₃ Summary Chart

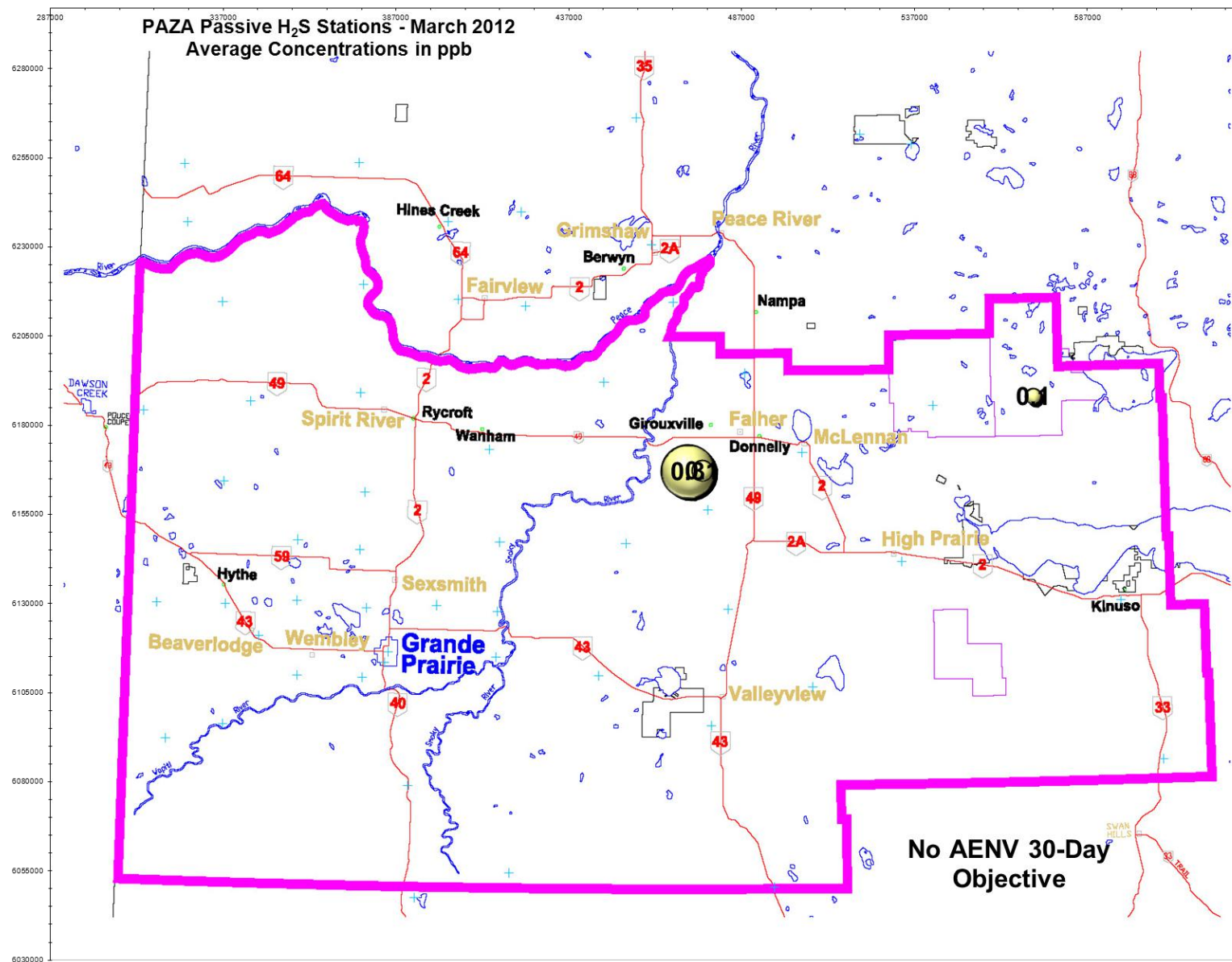


NO₂ Bubble Chart

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



NO₂ Summary Chart



H₂S Bubble Chart

March 2012 Calibration Reports

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

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

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

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

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

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

Calibration Report

Parameter SO2

Air Monitoring Network PASZA



Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:
Start Time (MST)	10:00	End Time (MST)	13:22
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Conc	49.8 ppm	Cal Gas Cert Date	3/28/2013
		Cal Gas Cylinder #	LL85275
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.998532	Calculated slope	1.005024
Calculated intercept	-1.092943	Calculated intercept	-2.022829
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.9		8.9	
Coefficient	0.772		0.772	
Pressure	639.2	mm Hg	634.4	mm Hg
Flow	0.507	lpm	0.504	lpm
Lamp Voltage	44244	Hz	44437	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)
4989	0.00	0.0	0.0	N/A
4989	39.84	394.5	393.6	1.0025
4989	19.91	198.0	199.9	0.9903
4989	9.94	99.0	102.6	0.9650
4989	0.00	0.0	0.0	As Found Zero
4989	39.84	394.5	393.6	As Found Span
Average Correction Factor				0.9859

Calculated value of As Found Response: 391.9 ppb Percent Change of As Found: 0.7%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	235.4	ppb	234.4	ppb

Notes:

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



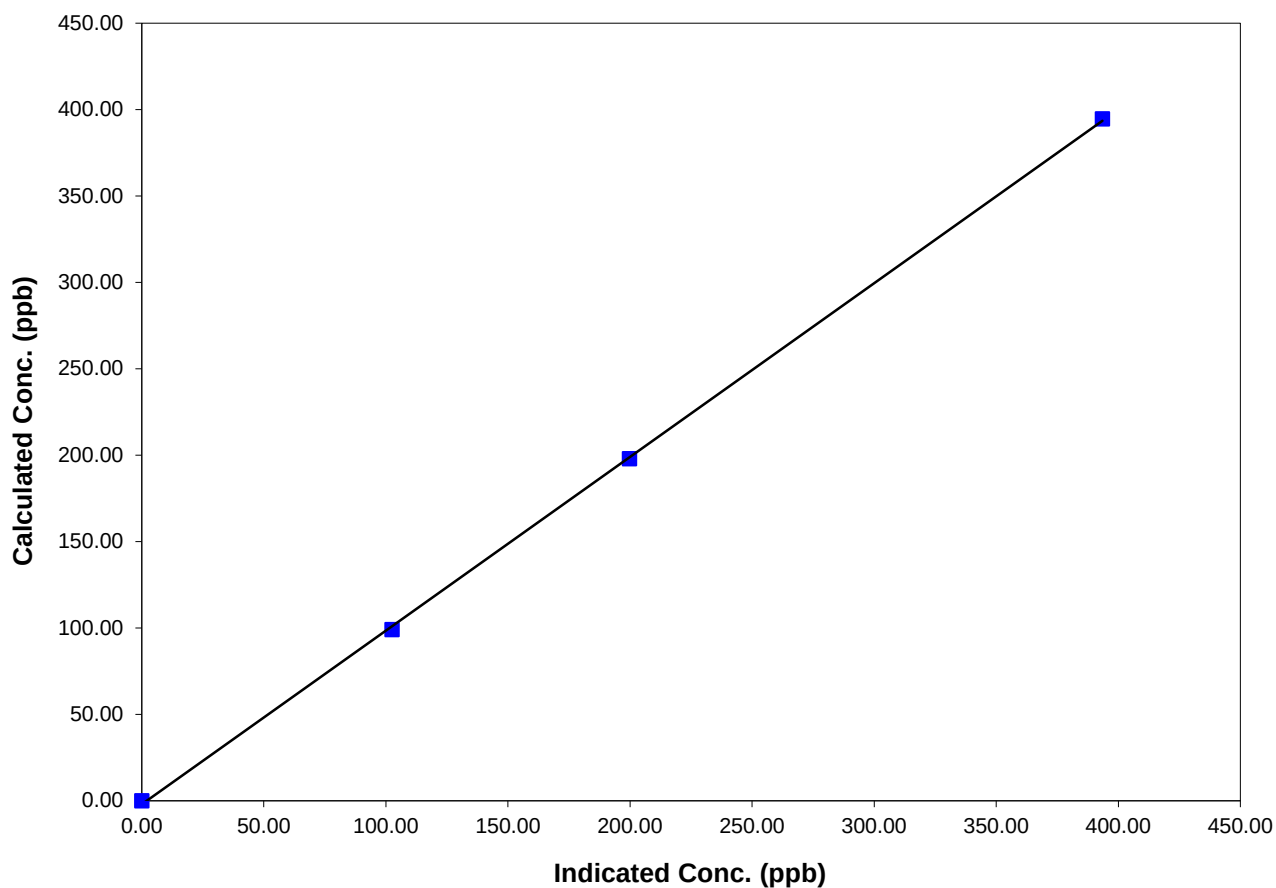
Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:00	End Time (MST)	13:22
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

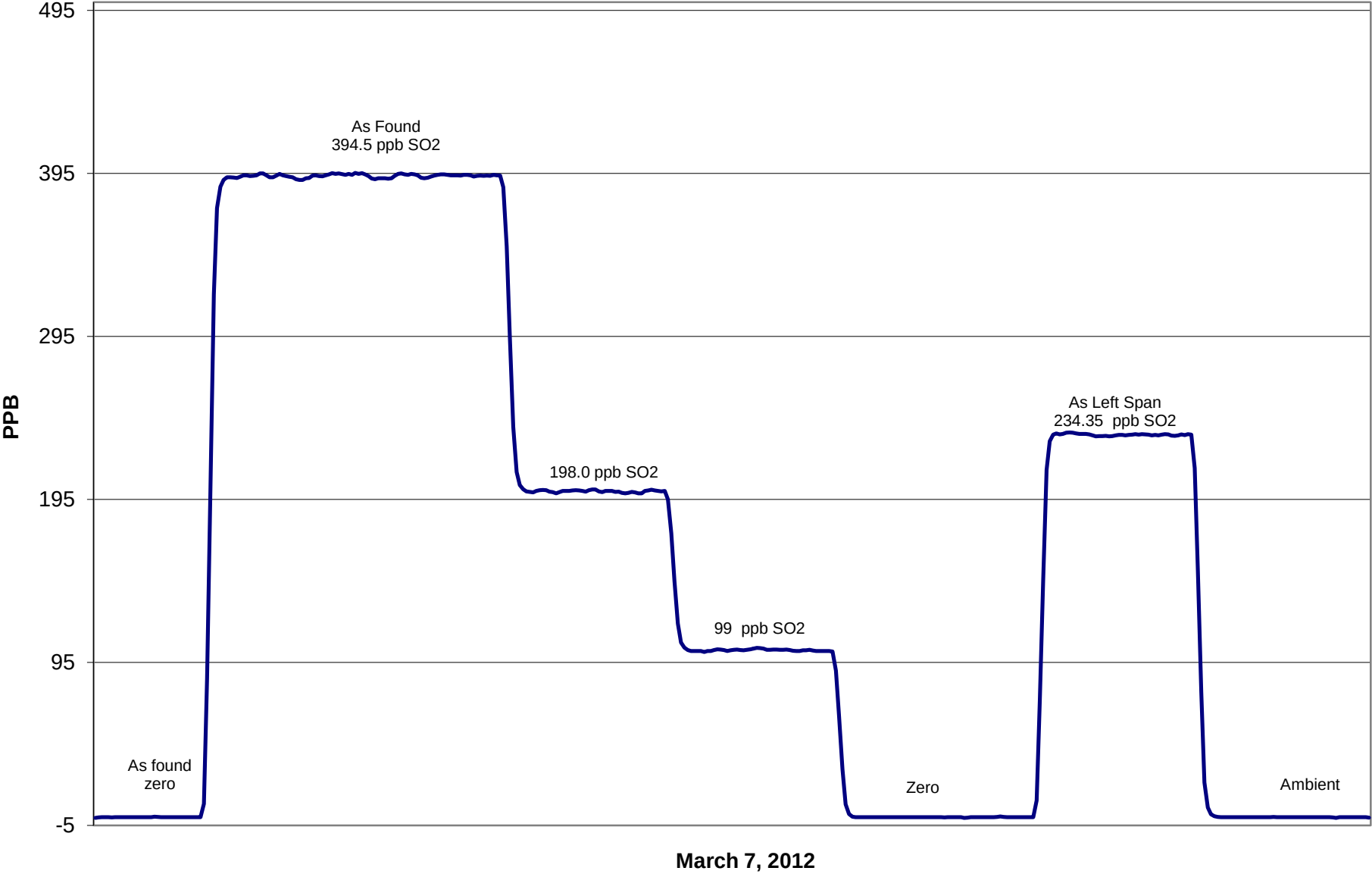
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999880
394.5	393.6	1.0025		
198.0	199.9	0.9903		
99.0	102.6	0.9650	Slope	1.005024
			Intercept	-2.022829

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Installation	Removal
Start Time (MST)	9:55	End Time (MST)	15:20
Barometric Pressure	0.918	Atm	Station Temperature
Calibrator	EnviroNics	Serial Number	3474
NO Cal Gas Conc	52.5	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	52.5	ppm	Cal Gas Serial #
			March 28, 2013
			LL85275

DACS Information

DACS make	CR3000	DACS serial No.	5408
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Parameter	NO2	NOx	NO
Before			
Data Slope	0.999643	1.003601	1.003322
Data Offset	-0.029022	-2.295570	-1.713859
After			
Data Slope	0.998671	0.996737	0.995497
Data Offset	-0.937001	-1.690517	-1.306321
Channel #	8	6	7
Voltage Range	0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42C	Analyzer serial #	508011073
---------------------	---------	-------------------	-----------

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	10.5	mV	10.7	mV
NOx bkgnd	10.8	mV	11.0	mV
NO coefficient	0.773		0.786	
NOx coefficient	0.994		1.001	
NO2 conv temp	318.0	Deg C	318.0	Deg C
PMT Temp	-2.5	Deg C	-2.5	Deg C
PMT Volt	-786.0	mV	-786.0	mV
R Cell Press	173.1	in Hg	170.6	in Hg

Calibration Report

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



Calibration Date: March 7, 2012 Station Location: Henry Pirker

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4989	0.00	0.0	0.0	0.0	0.1	0.0	0.0	N/A	N/A
1	4989	39.82	415.7	415.7	0.0	418.1	418.5	-0.4	0.9943	0.9934
2	4989	19.91	208.7	208.7	0.0	211.4	210.8	0.5	0.9871	0.9898
3	4989	9.94	104.4	104.4	0.0	108.4	108.0	0.3	0.9632	0.9662
AFZ	4989	0.00	0.0	0.0	0.0	0.1	0.0	0.0	0.0000	0.0000
AFS	4989	39.83	415.8	415.8	0.0	407.1	409.1	-2.1	1.0215	1.0164
Average Correction Factor									0.9815	0.9831

As Found Concentrations: NO_x= 404.7 NO= 407.4 As Found Percent Change NO_x= -2.7% NO= -2.0%

Dilution Flow		4989	ccm	Source Gas Flow		39.85	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	0.0	0.0	0.0	0.1	0.0	0.0	N/A	N/A	N/A	N/A
NO point	414.8	414.8	0.0	415.3	414.8	0.5	0.9988	1.0000	N/A	N/A
300	414.8	119.3	295.5	415.6	119.3	296.6	0.9980	1.0000	0.9966	100.3%
200	414.8	211.5	203.3	415.3	211.5	203.9	0.9987	1.0000	0.9969	100.3%
100	414.8	303.8	111.0	417.7	303.8	113.9	0.9932	1.0000	0.9744	102.6%
Average Correction Factor							0.9966	1.0000	0.9893	101.1%

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.0	ppb	0.1	0.0	0.2	ppb
Auto span	168.4	169.5	1.2	ppb	164.6	163.7	1.0	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PASZA



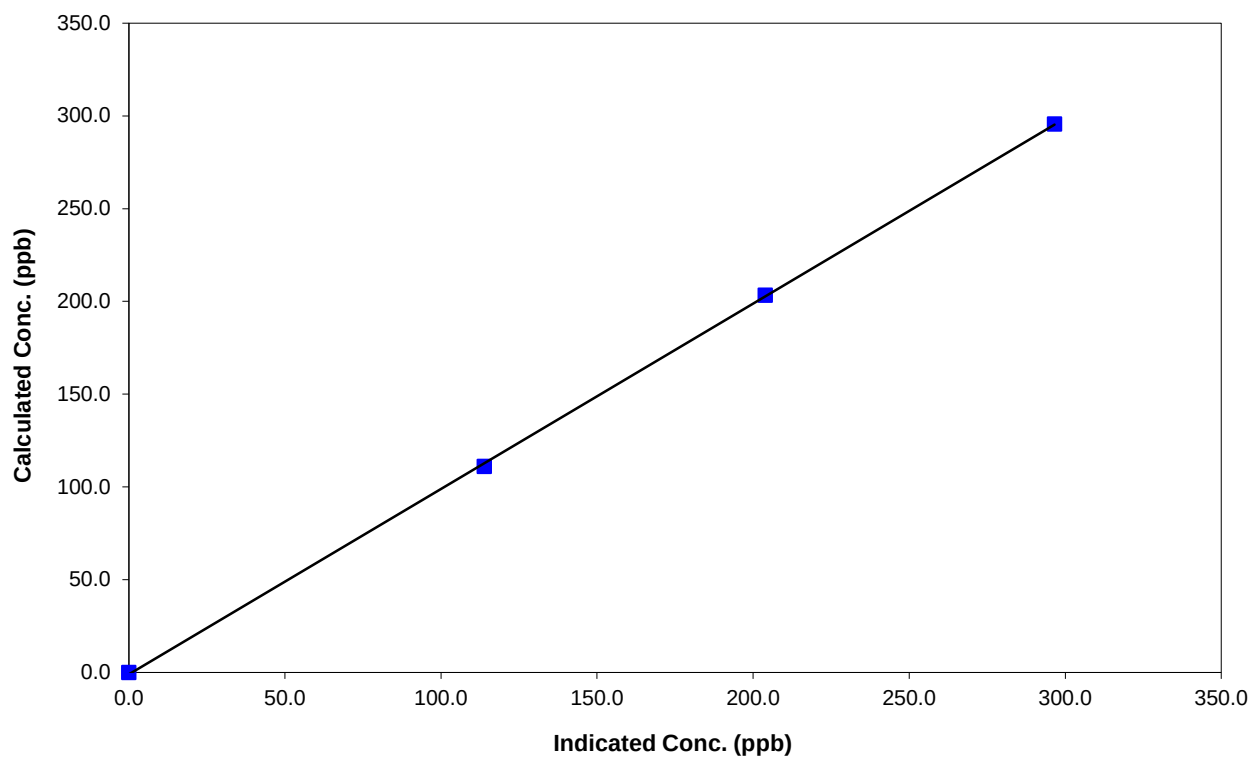
Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:55	End Time (MST)	15:20
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999903
295.5	296.6	0.9966		
203.3	203.9	0.9969		
111.0	113.9	0.9744	Slope	0.998671
			Intercept	-0.937001

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



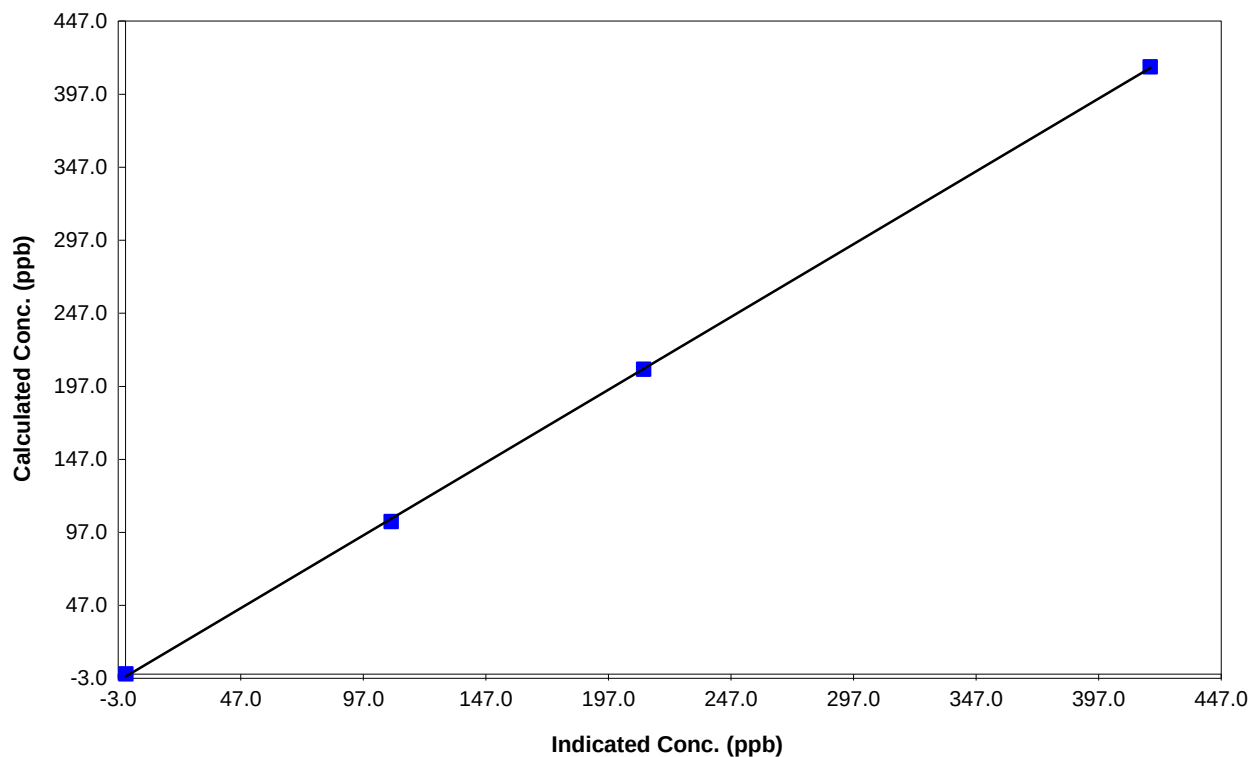
Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:55	End Time (MST)	15:20
Analyzer make	TEI 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999927
415.7	418.1	0.9943		
208.7	211.4	0.9871		
104.4	108.4	0.9632	Slope	0.996737
			Intercept	-1.690517

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



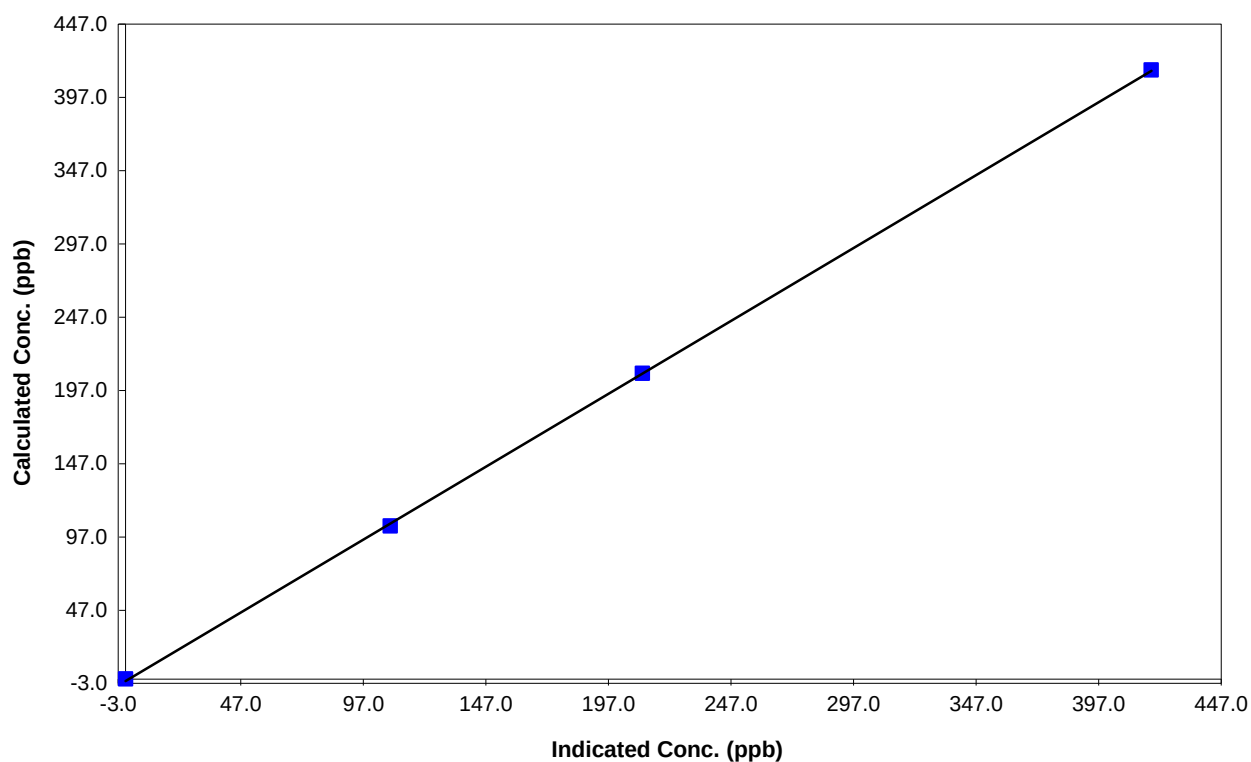
Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:55	End Time (MST)	15:20
Analyzer make	TEI 42C	Analyzer serial #	508011073

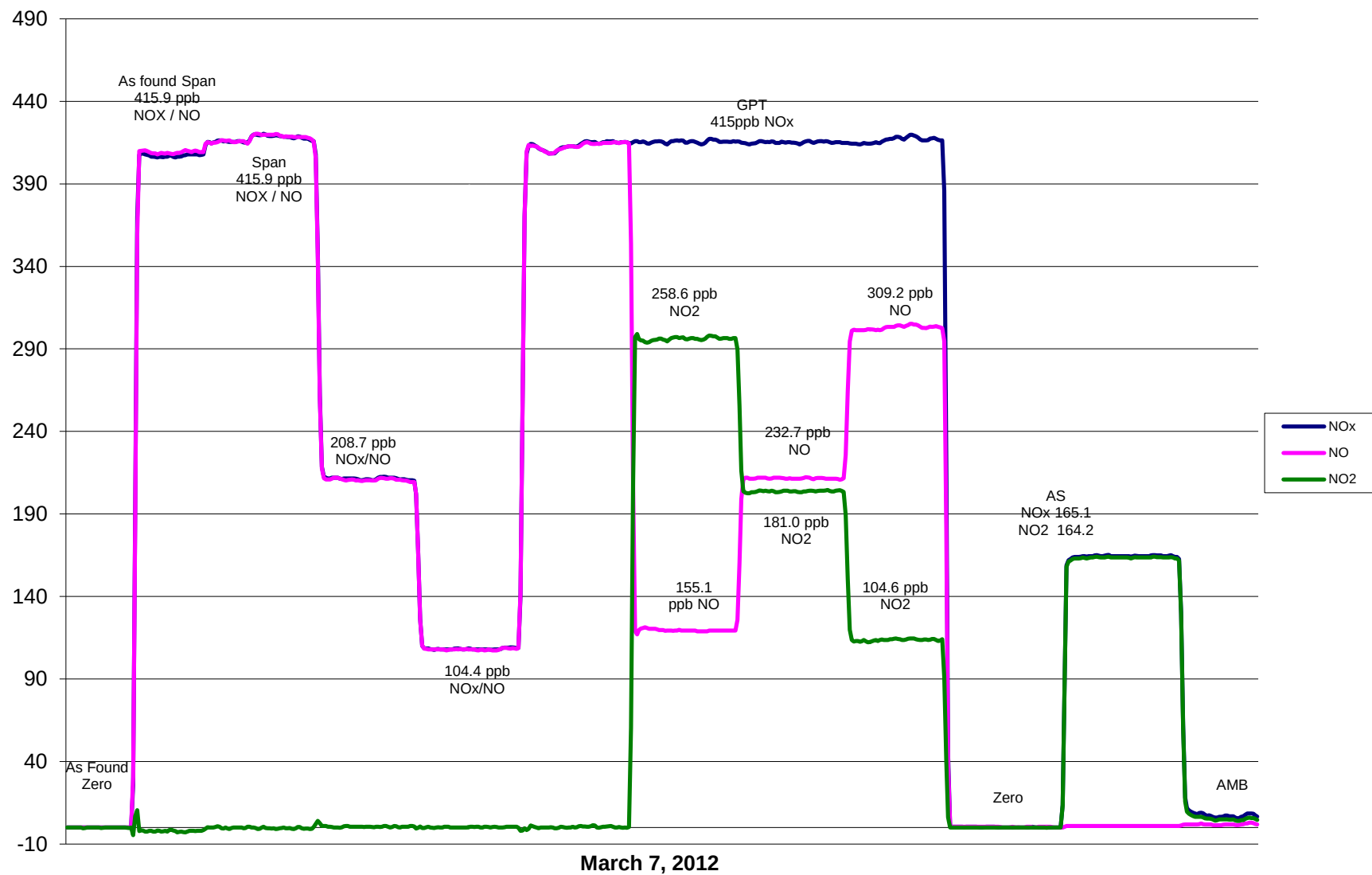
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999943
415.7	418.5	0.9934		
208.7	210.8	0.9898		
104.4	108.0	0.9662	Slope	0.995497
			Intercept	-1.306321

NO Calibration Curve



PASZA NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	13:25	End Time (MST)	16:35
Barometric Pressure	0.928 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	5
	Before		After
Calculated slope	0.988095	Calculated slope	1.045328
Calculated intercept	-0.640419	Calculated intercept	-0.903123
Analyzer make	TECO 49C	Analyzer serial #	607415761

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.6	ppb	-0.6	ppb
slope	1.011		1.011	
O3 Lamp temp	71.1	Deg C	71.1	Deg C
Intensities	81235/71359	mV	81405/71544	mV
Pressure	685.9	inches Hg	686.1	inches Hg
Flow A	0.717	ccm	0.717	ccm
Flow B	0.735	ccm	0.736	ccm

Calibration Data

Referenced concentration (ppb)	Dilution air flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0	4989	0.0	0.4	N/A
300	4989	295.5	283.7	1.0417
200	4989	203.3	194.6	1.0448
100	4989	111.0	108.1	1.0264
0	4989	0.0	0.4	As found zero
300	4989	295.5	283.7	As found span
Average Correction Factor				1.0377

Calculated value of As Found Response: 279.2 ppm Percent Change of As Found: -5.5%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	161.8	ppb	159.0	ppb

Notes: No adjustment made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter O3

Air Monitoring Network PASZA



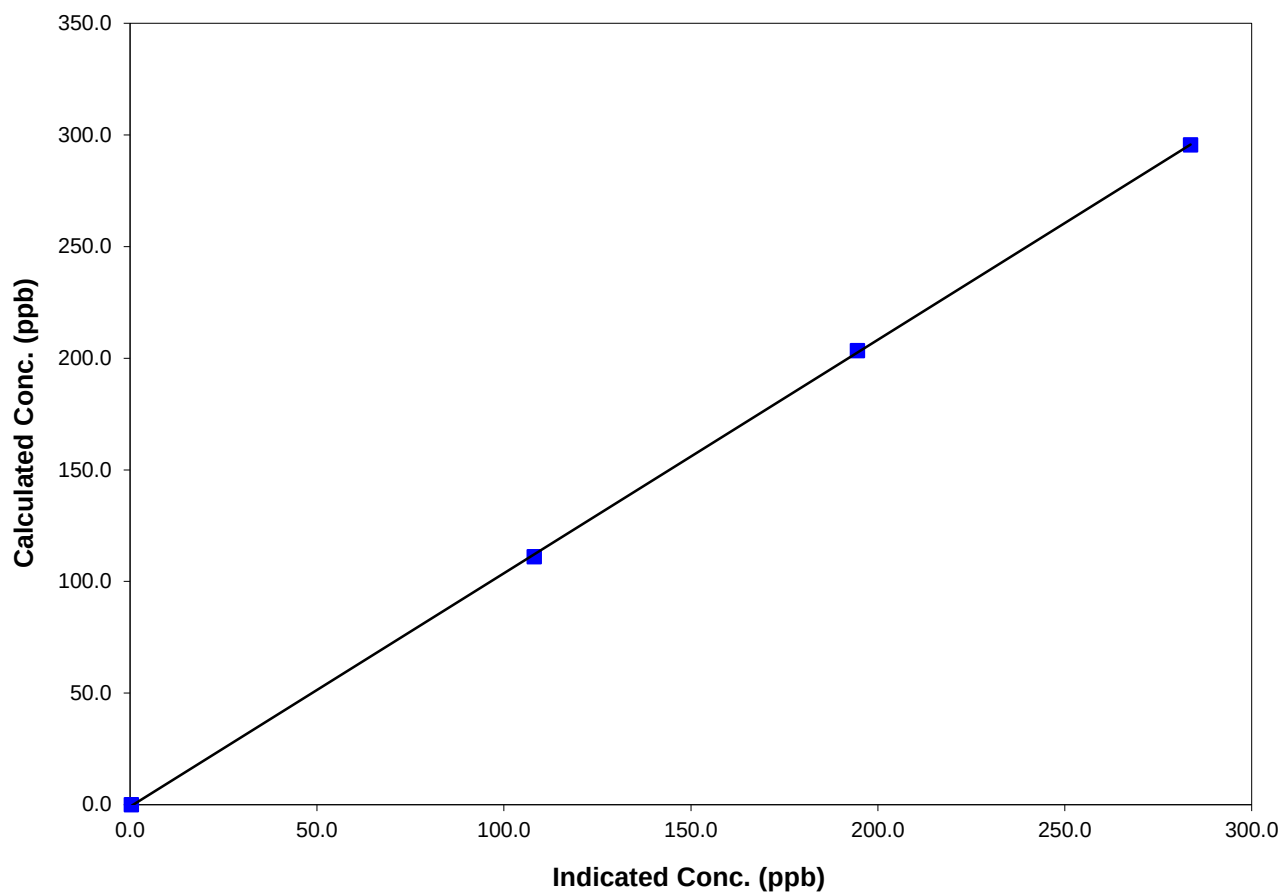
Station Information

Calibration Date	March 7, 2012	Previous Calibration	February 3, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:25	End Time (MST)	16:35
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

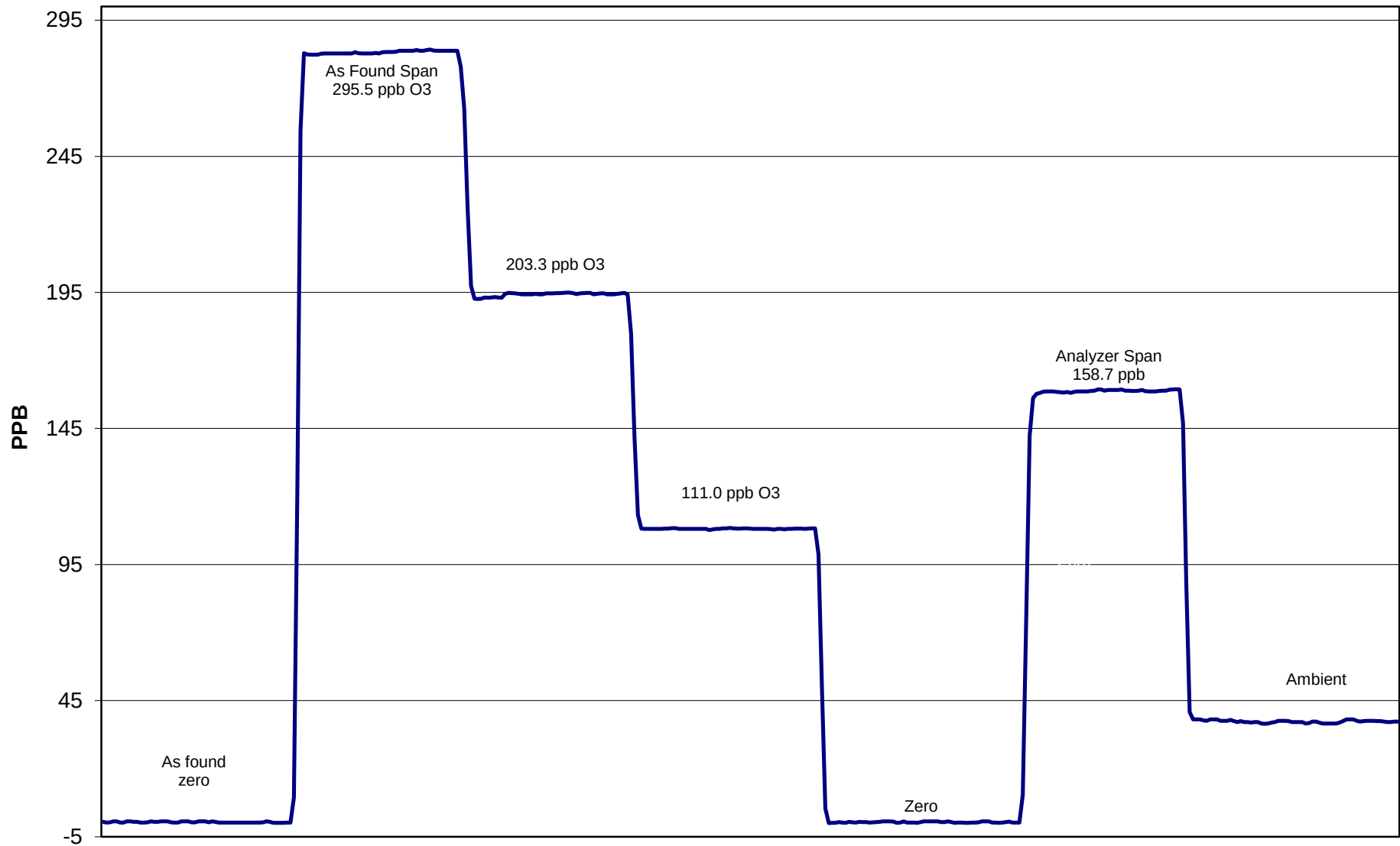
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	NA	Correlation Coefficient	0.999955
295.5	283.7	1.0417		
203.3	194.6	1.0448		
111.0	108.1	1.0264	Slope	1.045328
			Intercept	-0.903123

O3 Calibration Curve



O3 Calibration



March 7, 2012

Calibration Report

Parameter CO

Air Monitoring Network PASZA



Station Information

Calibration Date	March 6, 2012	Previous Calibration	February 2, 2012
Station Number	1	Station Location	Henry Pirker
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	11:35	End Time (MST)	15:25
Barometric Pressure	0.920 ATM	Station Temperature	21.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	1.000991	Calculated slope	1.008923
Calculated intercept	-0.559397	Calculated intercept	-0.496863
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.088		1.088	
CO zero setting	2.484		2.459	
Sample pressure	683.2	mm Hg	693.2	mm Hg
Sample Flow	1.140	LPM	1.151	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)
4988	0.00	0.00	0.36	N/A
4988	39.83	23.77	23.97	0.9913
4988	19.90	11.92	12.39	0.9624
4988	9.93	5.96	6.53	0.9127
4988	0.00	0.00	0.36	As Found Zero
4988	39.85	23.78	23.97	As Found Span
Average Correction Factor				0.9555

Calculated value of As Found Response: 23.080 ppm Percent Change of As Found: 2.9%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.56	ppm	19.46	ppm

Notes: No adjustments needed

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter CO

Air Monitoring Network PASZA



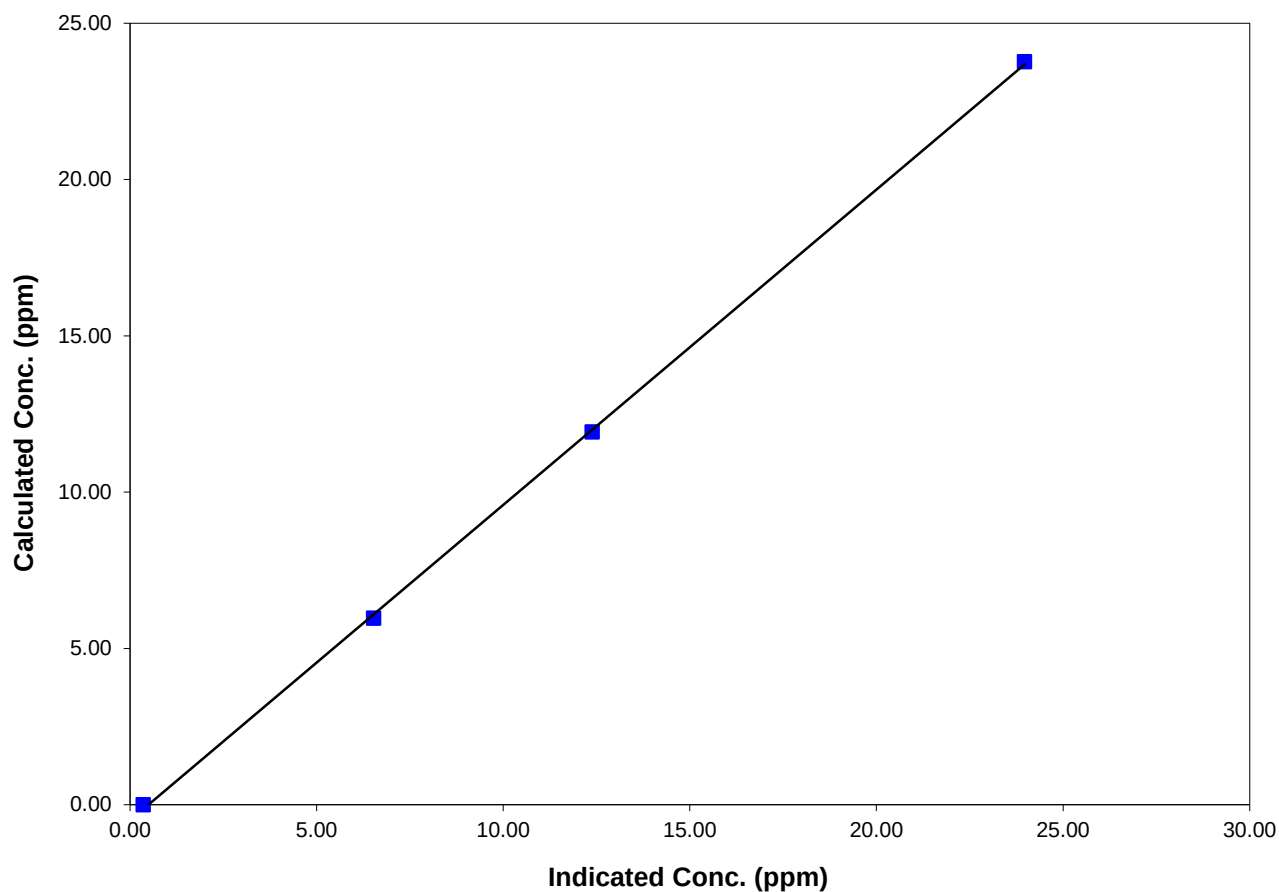
Station Information

Calibration Date	March 6, 2012	Previous Calibration	February 2, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:35	End Time (MST)	15:25
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

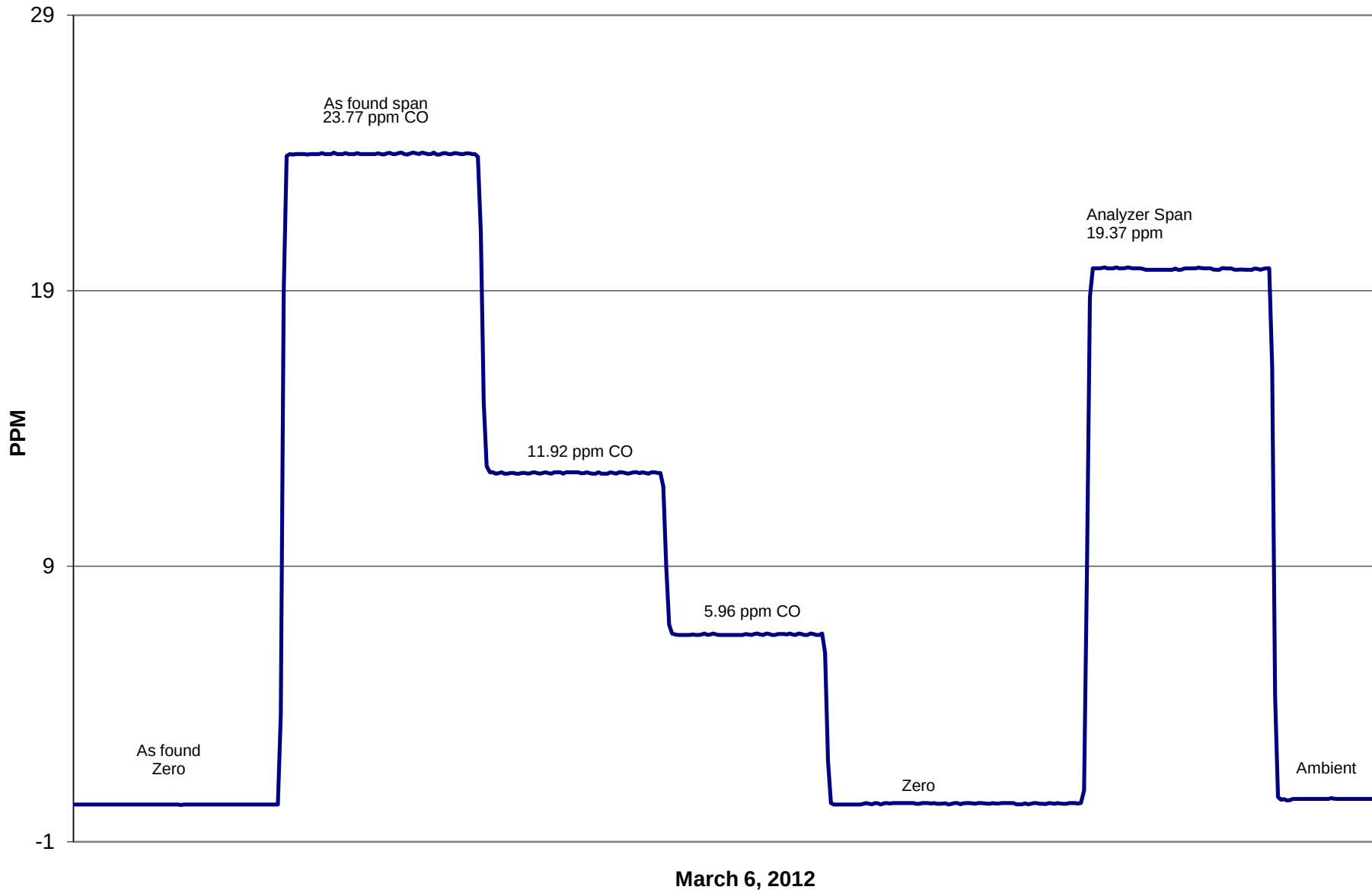
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.357	N/A	Correlation Coefficient	0.999845
23.766	23.974	0.9913		
11.921	12.387	0.9624		
5.960	6.531	0.9127	Slope	1.008923
			Intercept	-0.496863

CO Calibration Curve



CO Calibration



Calibration Report



Parameter THC

Air Monitoring Network PASZA

Station Information

Calibration Date	March 6, 2012	Previous Calibration	February 2, 2012
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	14:00	End Time (MST)	17:44
Barometric Pressure	0.920 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	701 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	2/4/2010
Cal Gas CH4 equiv	1523.25 ppm	Cal Gas Cylinder #	ALM 004476
DACS make	CR3000	DACS serial No.	5408
DACS voltage range	0 - 1 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	1.046026	Calculated slope	1.056003
Calculated intercept	-0.262011	Calculated intercept	-0.220889
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.50	psi	6.50	psi
THC span counts	9616	capture	9616	capture
THC zero counts	447	capture	447	capture

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.00	0.00	0.20	N/A
4989	69.79	21.01	20.13	1.0439
4989	29.87	9.07	8.72	1.0394
4989	9.92	3.02	3.14	0.9639
4989	0.00	0.00	0.20	As Found Zero
4989	69.79	21.01	20.13	As Found Span
Average Correction Factor				1.0157

Calculated value of As Found Response: 20.591 ppm Percent Change of As Found: 2.0%

	before calibration		after calibration	
Auto zero	0.10	ppm	-0.01	ppm
Auto span	21.83	ppm	22.94	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter THC

Air Monitoring Network PASZA



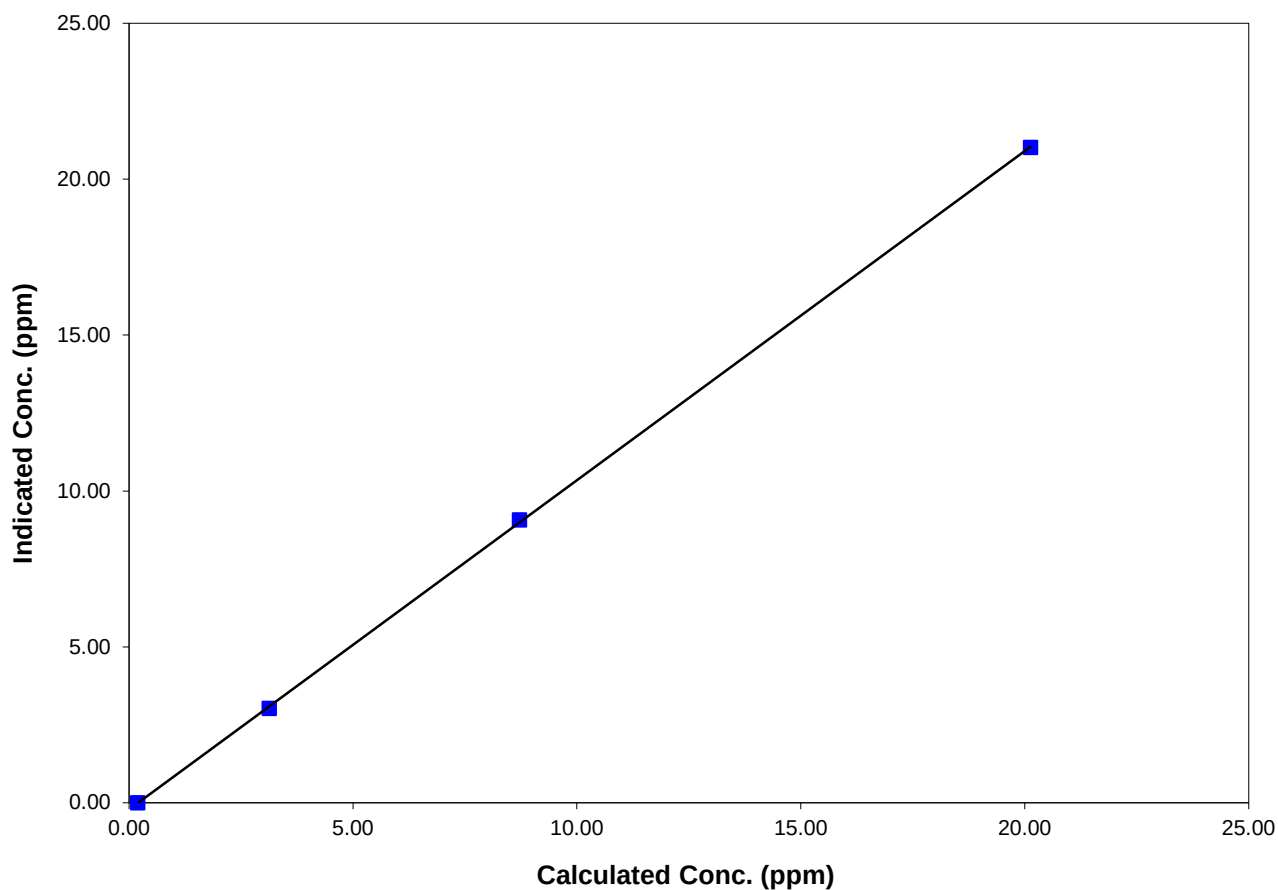
Station Information

Calibration Date	March 6, 2012	Previous Calibration	February 2, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:00	End Time (MST)	17:44
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

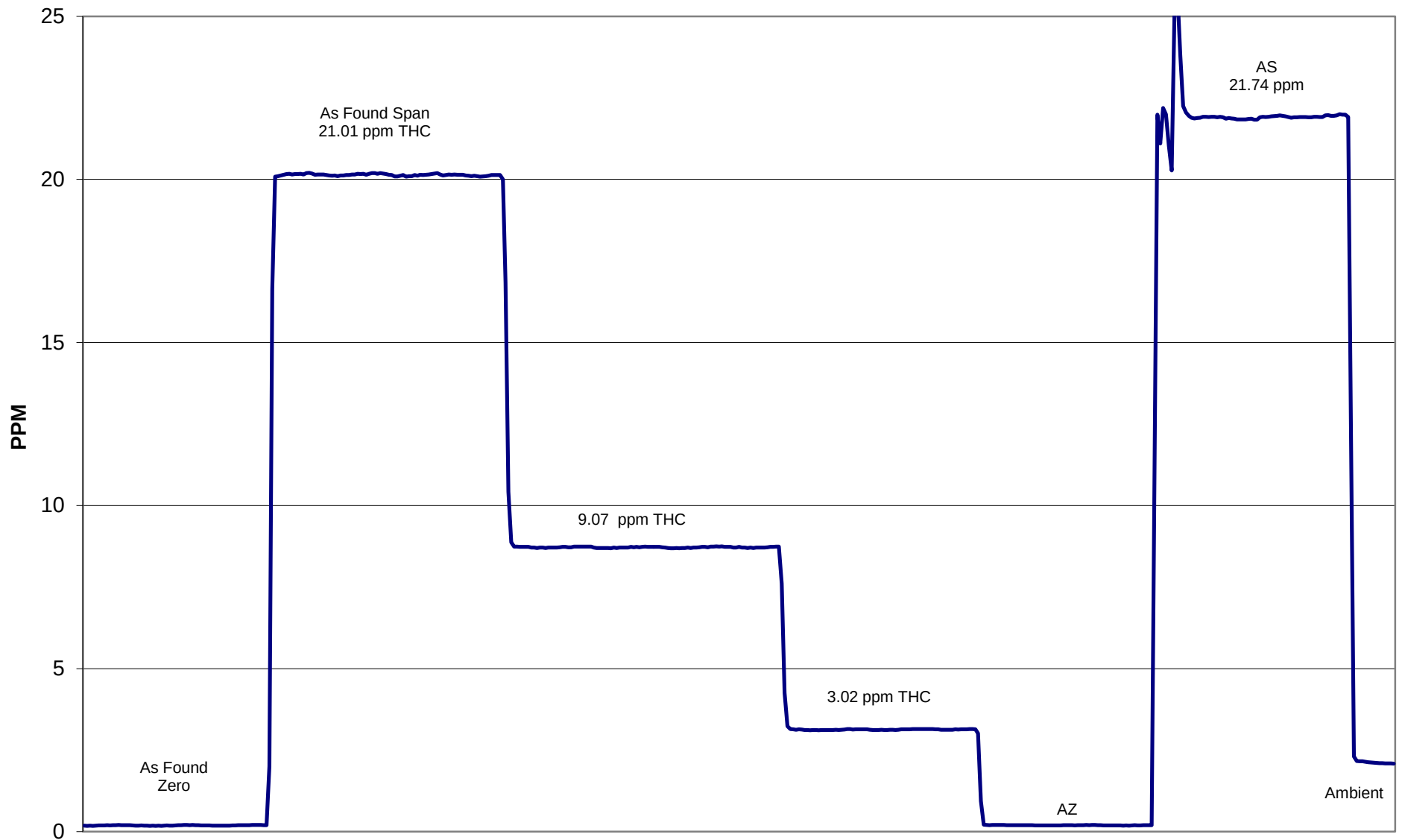
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.196	N/A		
21.014	20.130	1.0439	Correlation Coefficient	0.999957
9.066	8.722	1.0394		
3.023	3.136	0.9639	Slope	1.056003
			Intercept	-0.220889

THC Calibration Curve

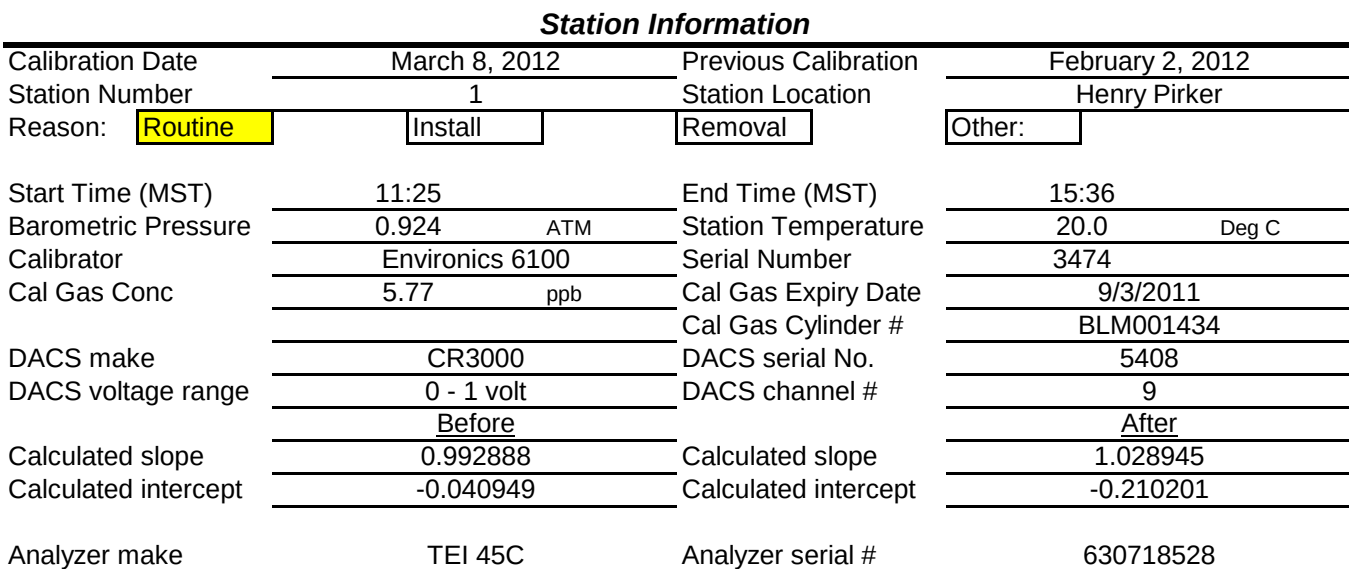


THC Calibration



March 6, 2012

Parameter	TRS
Air Monitoring Network	



Concentration range Coefficient Background Pressure Flow Lamp Voltage	before		after	
	0 - 100	ppb	0 - 100	ppb
	1.066		1.066	
	10.8		10.8	
	658.7	mm Hg	657.6	mm Hg
	0.457	ccm	0.457	ccm
	822	v	822	v

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)		Correction factor (Cc/lc)
4989	0.00	0.00	0.16	N/A
4989	69.78	79.59	77.57	1.0260
4989	34.88	40.06	39.09	1.0249
4989	8.96	10.34	10.33	1.0010
4989	0.00	0.00	0.16	As Found Zero
4989	69.78	79.59	77.57	As Found Span
Average Correction Factor				1.0173

Calculated value of As Found Response: 76.8 ppb Percent Change of As Found: 3.5%

	before calibration		after calibration	
Auto zero	-0.29	ppb	-0.07	ppb
Auto span	33.10	ppb	32.90	ppb

Notes: No span adjustment made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter TRS

Air Monitoring Network PASZA



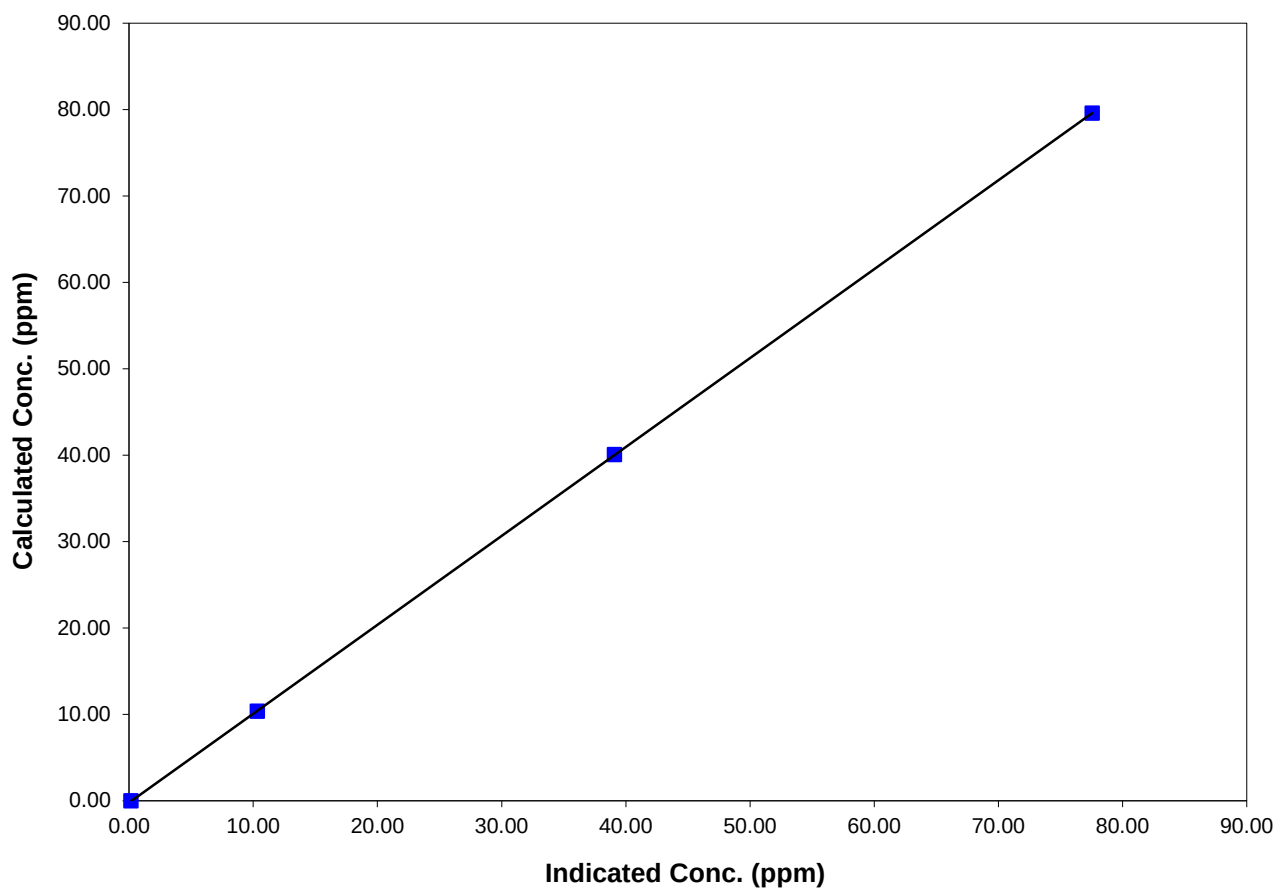
Station Information

Calibration Date	March 8, 2012	Previous Calibration	February 2, 2012
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:25	End Time (MST)	15:36
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

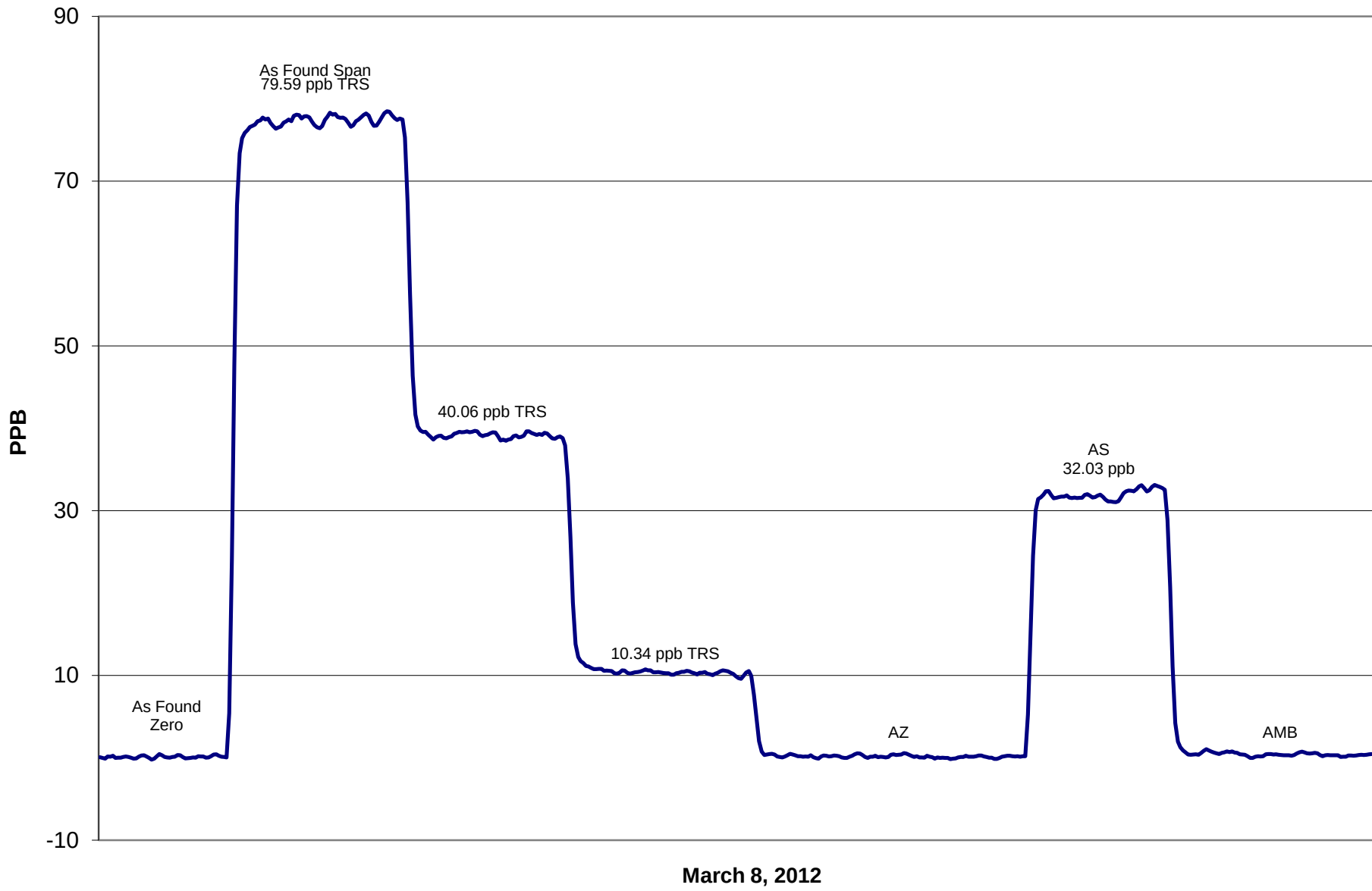
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.162	N/A	Correlation Coefficient	0.999997
79.590	77.571	1.0260		
40.060	39.088	1.0249		
10.344	10.334	1.0010	Slope	1.028945
			Intercept	-0.210201

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PASZA

Station Information

Calibration Date	March 21, 2012	Previous Calibration	February 29, 2012
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	10:48	End Time (MST)	15:17
Barometric Pressure	0.916 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	3/28/2013
Correction factor	0.031137	Cal Gas Cylinder #	SGAL3245
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	0.998624	Calculated slope	0.995205
Calculated intercept	-0.791909	Calculated intercept	-0.077883
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	11.2		12.1	
coefficient	1.072		1.159	
Lamp Voltage	830	volts	830	volts
Chamber Temp	45.2	Deg C	45.2	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	661.9	mm Hg	662.8	mm Hg
Sample Flow	0.452	ccm	0.453	ccm
Lamp Intensity	90	%	90	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.00	-0.4	N/A
4989	39.84	394.5	396.8	0.9943
4989	20.15	200.3	200.1	1.0011
4989	10.10	100.6	102.6	0.9806
4989	0.0	0.0	-0.3	As Found Zero
4989	39.84	394.5	361.3	As Found Span
Average Correction Factor				0.9920

Calculated value of As Found Response: 360.398 ppm Percent Change of As Found: **8.7%**

	before calibration		after calibration	
Auto zero	0.6	ppm	-0.6	ppm
Auto span	292.7	ppm	286.7	ppm

Notes: Flash lamp socket needs replacement. Adjusted Span

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



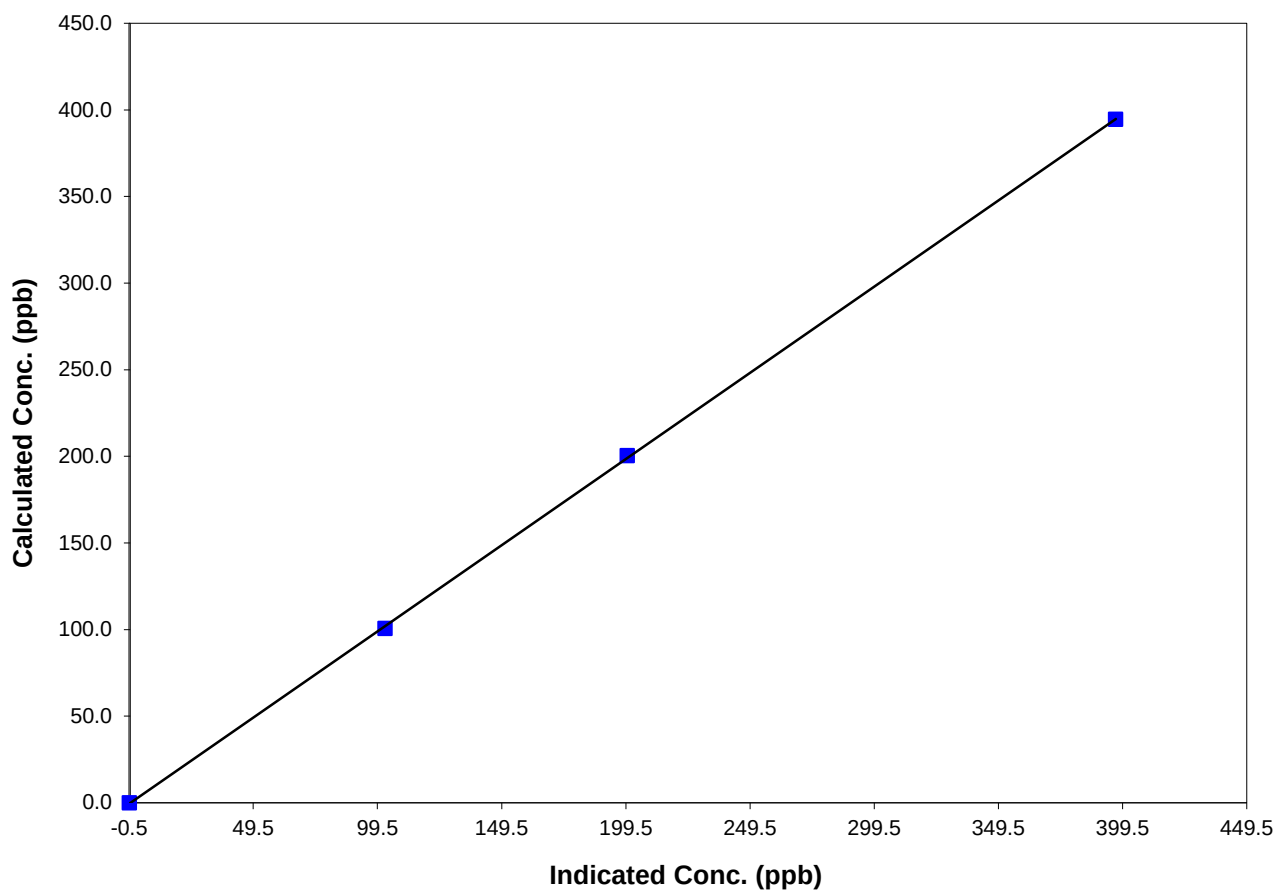
Station Information

Calibration Date	March 21, 2012	Previous Calibration	February 29, 2012
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	10:48	End Time (MST)	15:17
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

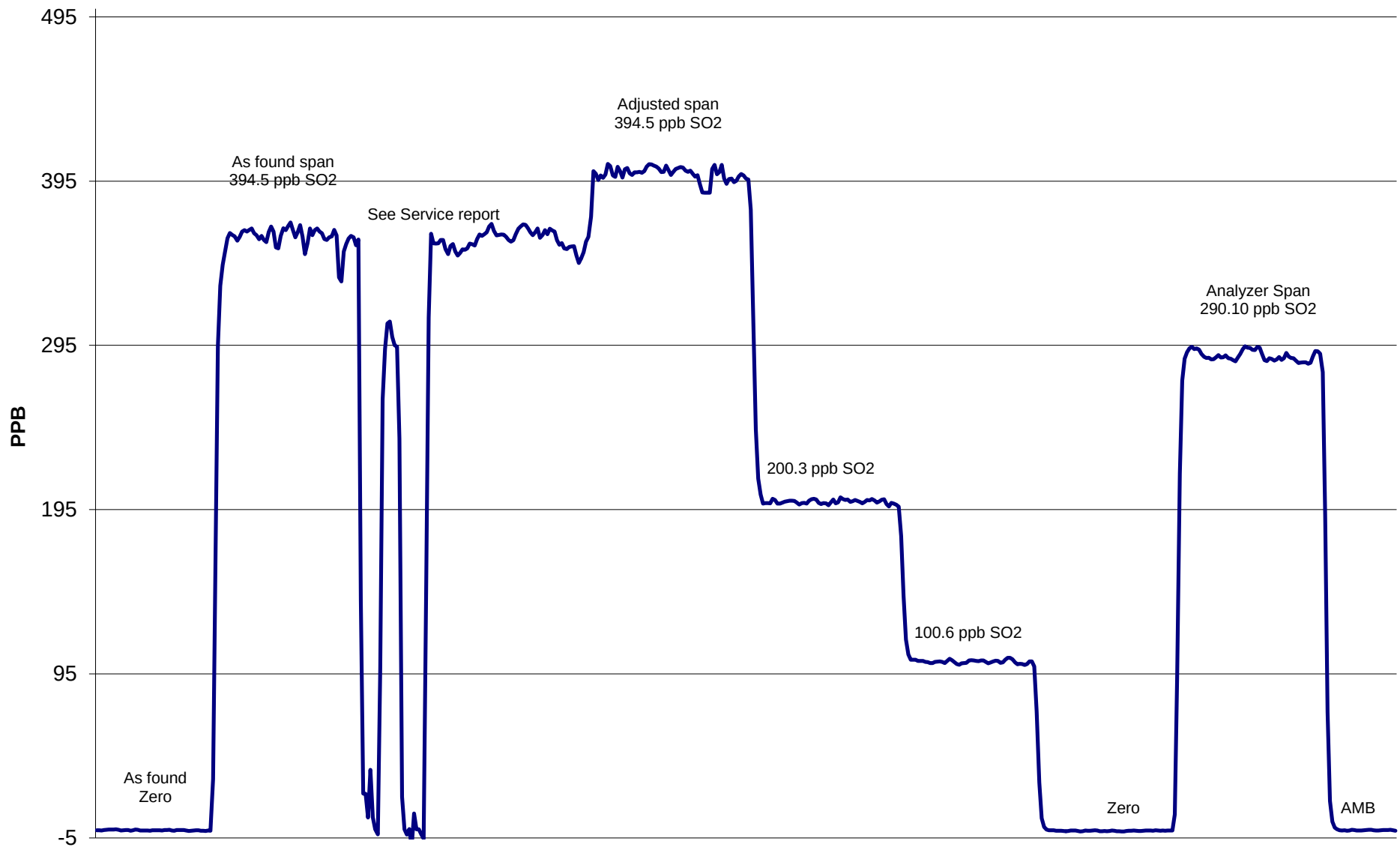
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	N/A		
394.5	396.8	0.9943	Correlation Coefficient	0.999955
200.3	200.1	1.0011		
100.6	102.6	0.9806	Slope	0.995205
			Intercept	-0.077883

SO2 Calibration Curve



SO2 Calibration



March 21, 2012

Calibration Report



Parameter SO₂

Air Monitoring Network PASZA

Station Information

Calibration Date	March 24, 2012	Previous Calibration	March 21, 2012
Station Number	2	Station Location	Evergreen Park
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	9:00	End Time (MST)	14:03
Barometric Pressure	0.928 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	3/28/2013
Correction factor	0.031545	Cal Gas Cylinder #	SGAL3245
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.995205	Calculated slope	1.006711
Calculated intercept	-0.077883	Calculated intercept	-2.167942
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	12.1		11.6	
coefficient	1.159		1.193	
Lamp Voltage	830	volts	828	volts
Chamber Temp	45.2	Deg C	45.2	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	672.8	mm Hg	671.9	mm Hg
Sample Flow	0.452	ccm	0.456	ccm
Lamp Intensity	90	%	90	%

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.00	0.2	N/A
4989	39.84	394.5	393.3	1.0032
4989	20.15	200.3	201.4	0.9945
4989	10.10	100.6	104.5	0.9626
4989	0.0	0.0	0.6	As Found Zero
4989	39.84	394.5	405.5	As Found Span
Average Correction Factor				0.9868

Calculated value of As Found Response: 402.876 ppm Percent Change of As Found: -2.1%

	before calibration		after calibration	
Auto zero	0.6	ppm	0.4	ppm
Auto span	292.7	ppm	283.9	ppm

Notes: Still waiting for fan, socket & lamp installed.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



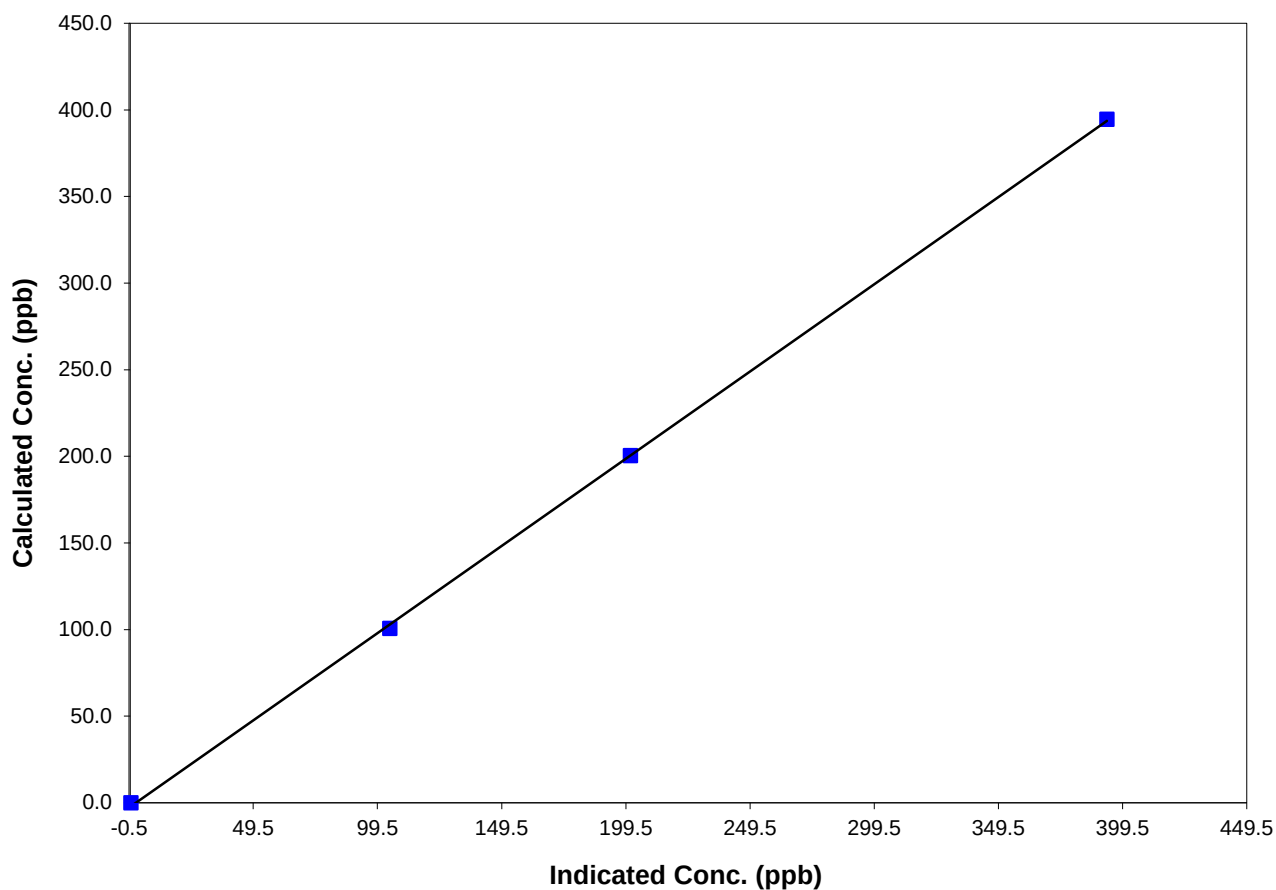
Station Information

Calibration Date	March 24, 2012	Previous Calibration	March 21, 2012
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	9:00	End Time (MST)	14:03
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

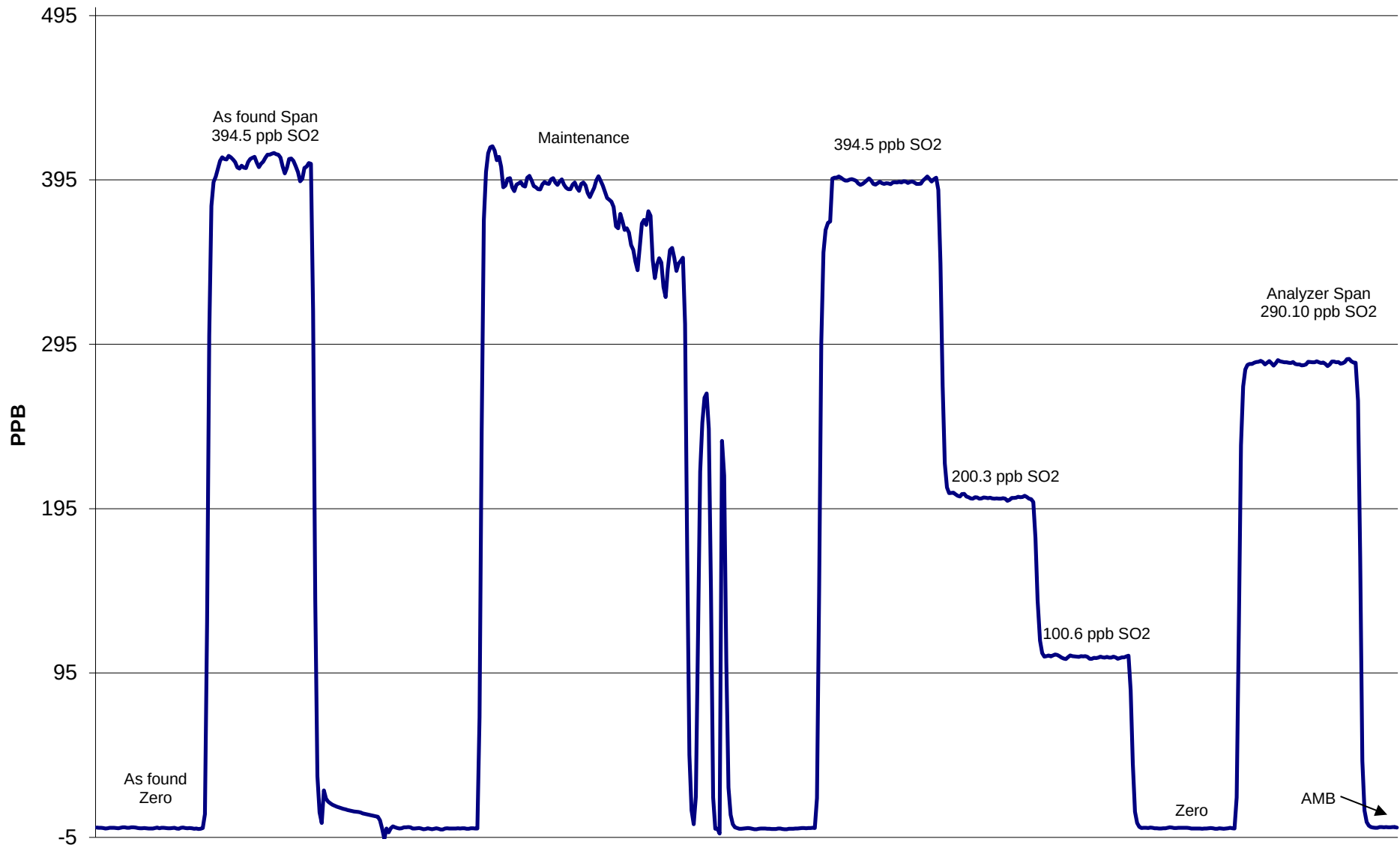
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999877
394.5	393.3	1.0032		
200.3	201.4	0.9945		
100.6	104.5	0.9626	Slope	1.006711
			Intercept	-2.167942

SO2 Calibration Curve



SO2 Calibration



March 24, 2012

Calibration Report



Parameter TRS

Air Monitoring Network PASZA

Station Information

Calibration Date	March 21, 2012	Previous Calibration	February 29, 2012
Station Number	2	Station Location	Evergreen Park
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	8:55	End Time (MST)	12:24
Barometric Pressure	0.913 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	3474
Cal Gas Conc	5.77 ppm	Cal Gas Expiry Date	9/3/2011
Correction factor	0.031035	Cal Gas Cylinder #	BLM1715
DACS make	CR3000	DACS serial No.	5236
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.997122	Calculated slope	1.000745
Calculated intercept	-0.105565	Calculated intercept	-0.210469

Analyzer make TEI Model 43C Analyzer serial # 436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	19.7	ppb	19.7	ppb
coefficient	0.922		0.922	
Lamp Voltage	812	volts	812	volts
Chamber Temp	45	Deg C	44.3	Deg C
Perm Gas Temp	45.01	Deg C	44.97	Deg C
Pressure	639.7	mm Hg	639.5	mm Hg
Sample Flow	0.473	ccm	0.473	ccm
Lamp Intensity	45,204	mv	45,499	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)
4989	0.00	0.00	0.0	N/A
4989	69.81	79.62	79.8	0.9979
4989	34.88	40.06	40.1	0.9983
4989	8.96	10.34	10.9	0.9523
4989	0.00	0.00	0.0	As Found Zero
4989	69.81	79.62	79.8	As Found Span
Average Correction Factor				0.9829

Calculated value of As Found Response: 79.43 ppm Percent Change of As Found: **0.2%**

	before calibration		after calibration	
Auto zero	0.2	ppm	-0.1	ppm
Auto span	71.9	ppm	72.1	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter TRS

Air Monitoring Network PASZA



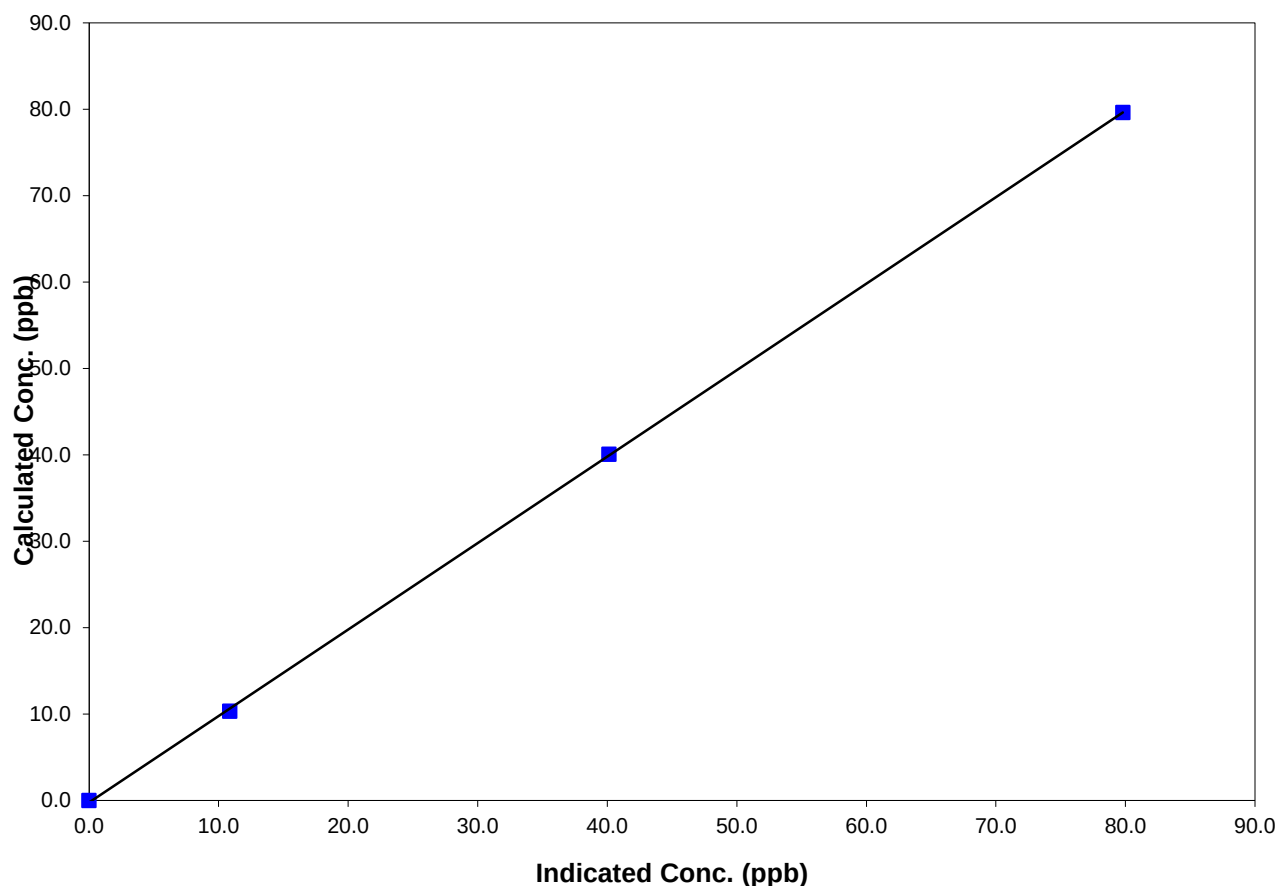
Station Information

Calibration Date	March 21, 2012	Previous Calibration	February 29, 2012
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:55	End Time (MST)	12:24
Analyzer make/model	TEI Model 43C	Analyzer serial #	436610005

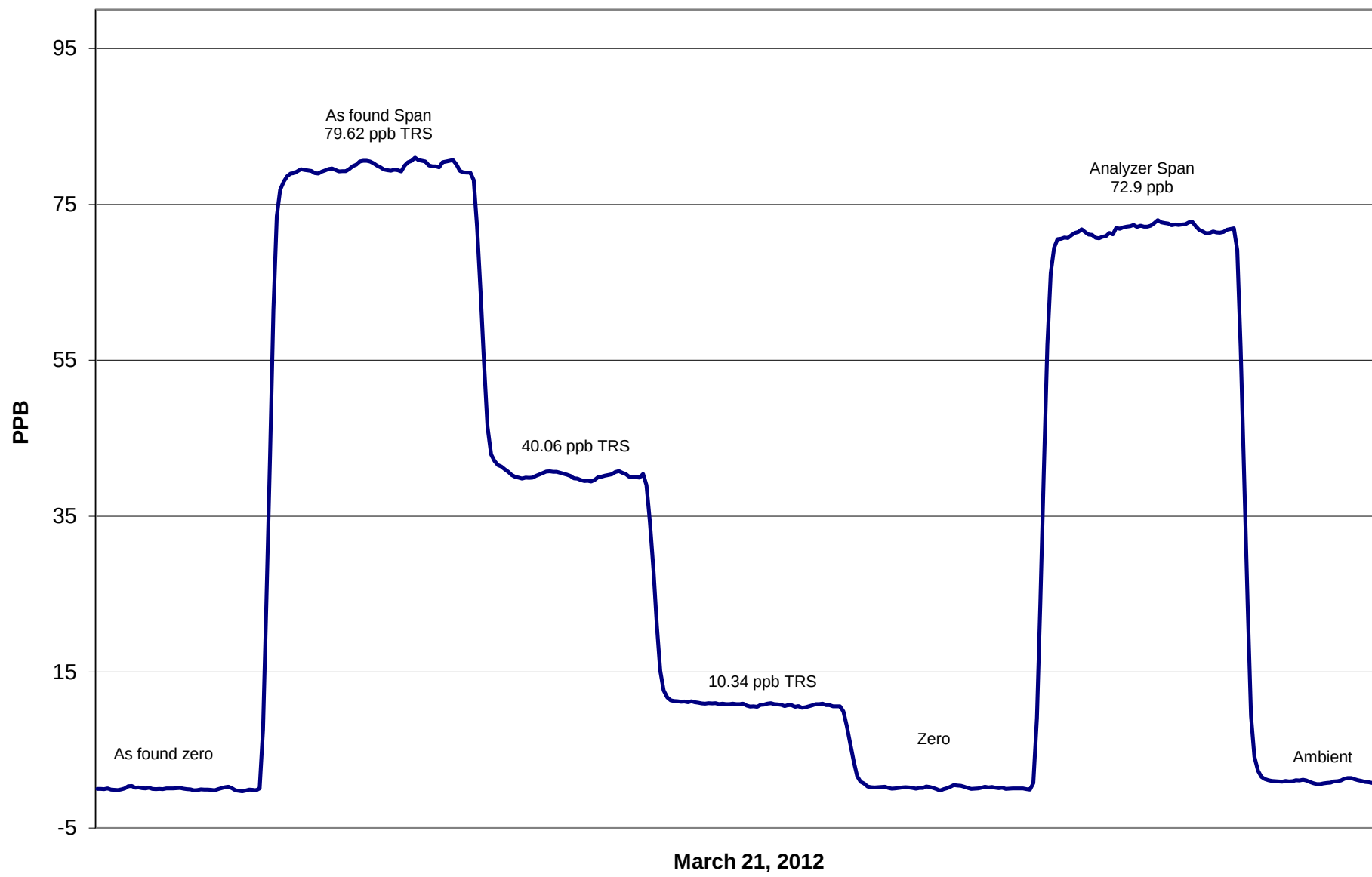
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999958
79.6	79.8	0.9979		
40.1	40.1	0.9983		
10.3	10.9	0.9523	Slope	1.000745
			Intercept	-0.210469

TRS Calibration Curve



TRS Calibration



Calibration Report



Parameter SO₂

Air Monitoring Network PASZA

Station Information

Calibration Date	March 28, 2012	Previous Calibration	February 10, 2012
Station Number	3	Station Location	Smokey Heights
Reason:	☒ Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	10:25	End Time (MST)	14:00
Barometric Pressure	0.909 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	49.8 ppm	Cal Gas Cert Date	3/28/2011
Correction factor	0.030899	Cal Gas Cylinder #	LL85275
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	6
	Before		After
Calculated slope	0.996406	Calculated slope	0.994084
Calculated intercept	-2.492315	Calculated intercept	-2.518770
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	9.8		10	
coefficient	0.978		0.978	
Lamp Voltage	920	volts	920	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	658.1	mm Hg	659.9	mm Hg
Sample Flow	0.434	ccm	0.435	ccm
Lamp Intensity	87	%	87	%

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)
4989	0.0	0.00	0.5	N/A
4989	39.84	394.53	398.2	0.9908
4989	19.91	197.95	203.2	0.9740
4989	9.94	99.02	103.8	0.9537
4989	0.0	0.00	0.5	As Found Zero
4989	39.84	394.53	398.7	As Found Span
Average Correction Factor				0.9729

Calculated value of As Found Response: 394.238 ppm Percent Change of As Found: 0.1%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.6	ppb
Auto span	304.5	ppb	277.2	ppb

Notes: No adjust.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



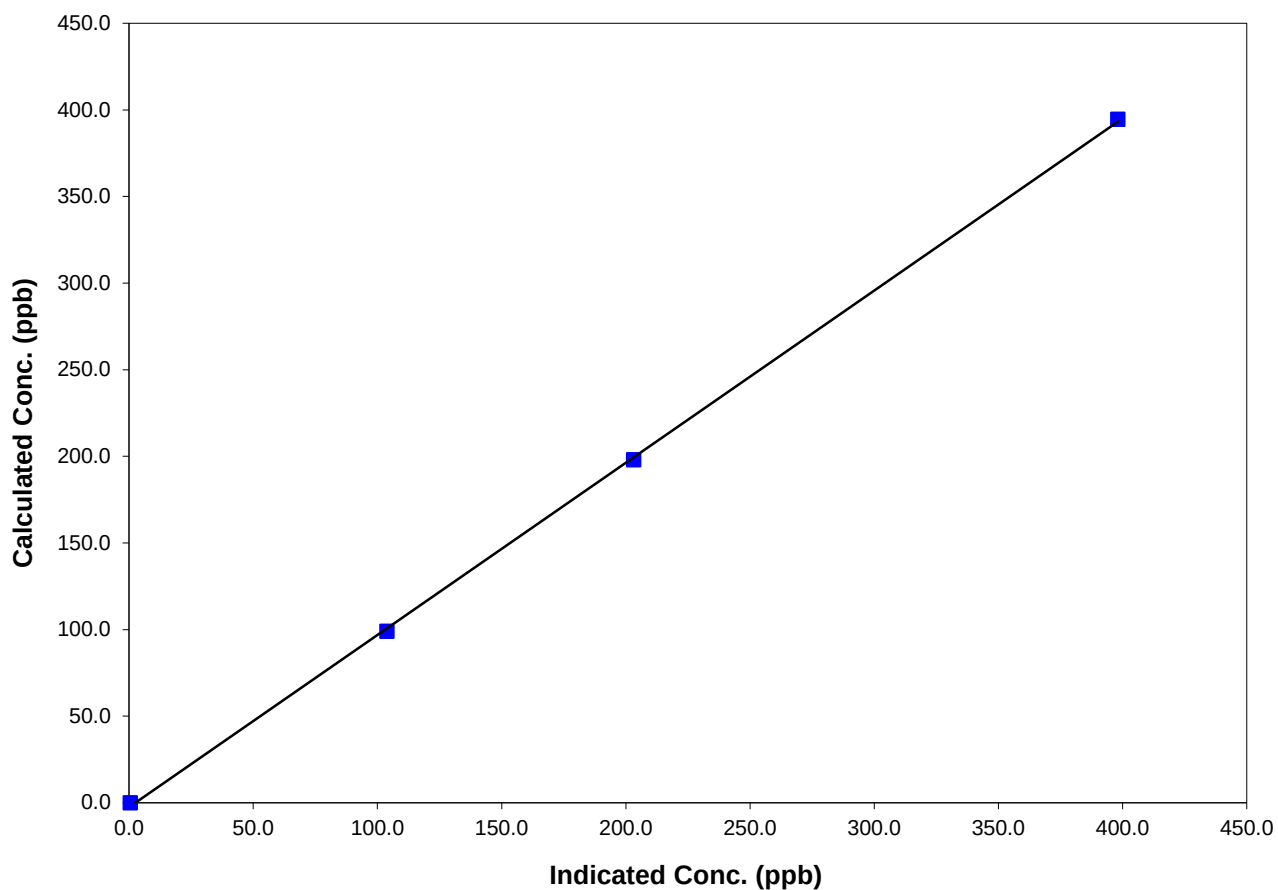
Station Information

Calibration Date	March 28, 2012	Previous Calibration	February 10, 2012
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	10:25	End Time (MST)	14:00
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

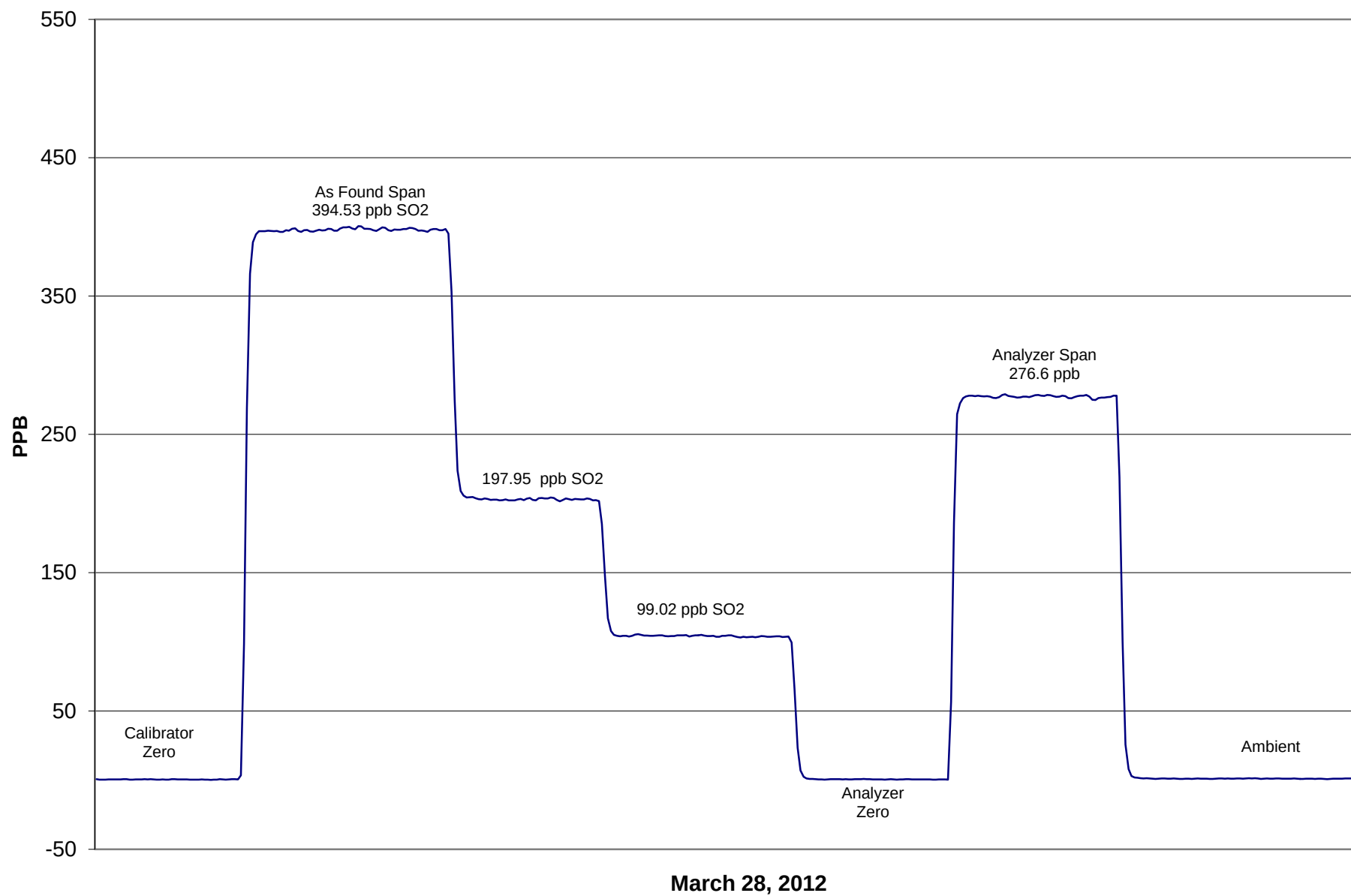
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999874
394.5	398.2	0.9908		
198.0	203.2	0.9740		
99.0	103.8	0.9537	Slope	0.994084
			Intercept	-2.518770

SO2 Calibration Curve



Smokey Heights SO₂ Calibration



Calibration Report



Parameter TRS

Air Monitoring Network PASZA

Station Information

Calibration Date	March 28, 2012	Previous Calibration	February 10, 2012
Station Number	3	Station Location	Smokey Heights
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	8:40	End Time (MST)	12:05
Barometric Pressure	0.909 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Conc	5.77 ppm	Cal Gas Expiry Date	9/3/2011
Correction factor	0.030899	Cal Gas Cylinder #	BLM001434
DACS make	CR3000	DACS serial No.	5238
DACS voltage range	0 - 5 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	0.998410	Calculated slope	1.009694
Calculated intercept	-0.769283	Calculated intercept	-0.330838

Analyzer make TEI Model 43C Analyzer serial # 0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	17.4	ppb	18.6	ppb
coefficient	0.946		0.946	
Lamp Voltage	797	volts	807	volts
Chamber Temp	44	Deg C	44.99	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	541.5	mm Hg	527.6	mm Hg
Sample Flow	0.587	ccm	0.573	ccm
Lamp Intensity	35,382	mv	35,003	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)
4989	0.0	0.00	-0.1	N/A
4989	69.80	79.61	79.0	1.0076
4989	34.88	40.06	40.2	0.9966
4989	8.96	10.34	11.0	0.9403
4989	0.0	0.00	0.7	As Found Zero
4989	69.80	79.61	79.0	As Found Span
Average Correction Factor				0.9815

Calculated value of As Found Response: 77.32 ppm Percent Change of As Found: 2.9%

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.5	ppm
Auto span	52.9	ppm	54.0	ppm

Notes: No span adjust

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter TRS

Air Monitoring Network PASZA



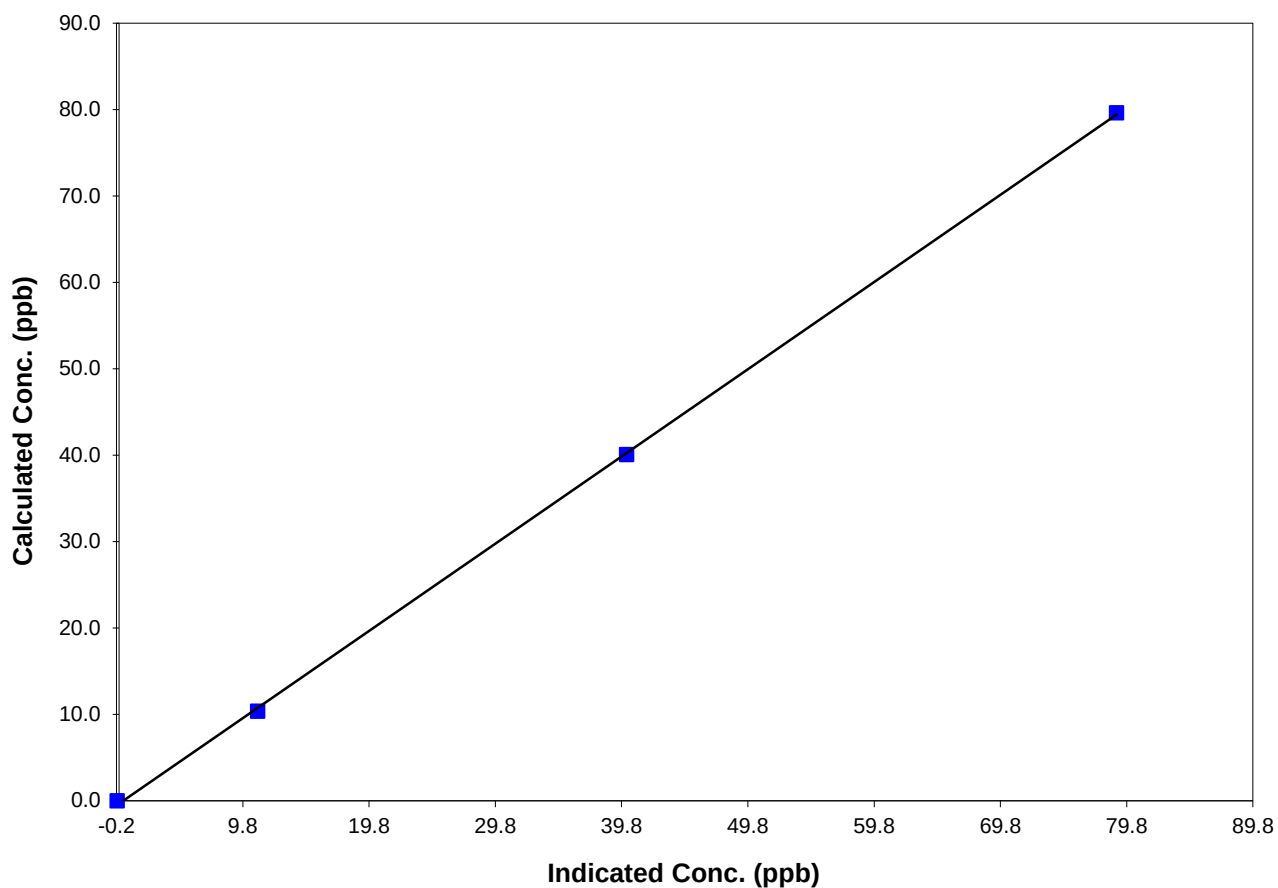
Station Information

Calibration Date	March 28, 2012	Previous Calibration	February 10, 2012
Station Number	3	Station Location	Smokey Heights
Start Time (MST)	8:40	End Time (MST)	12:05
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

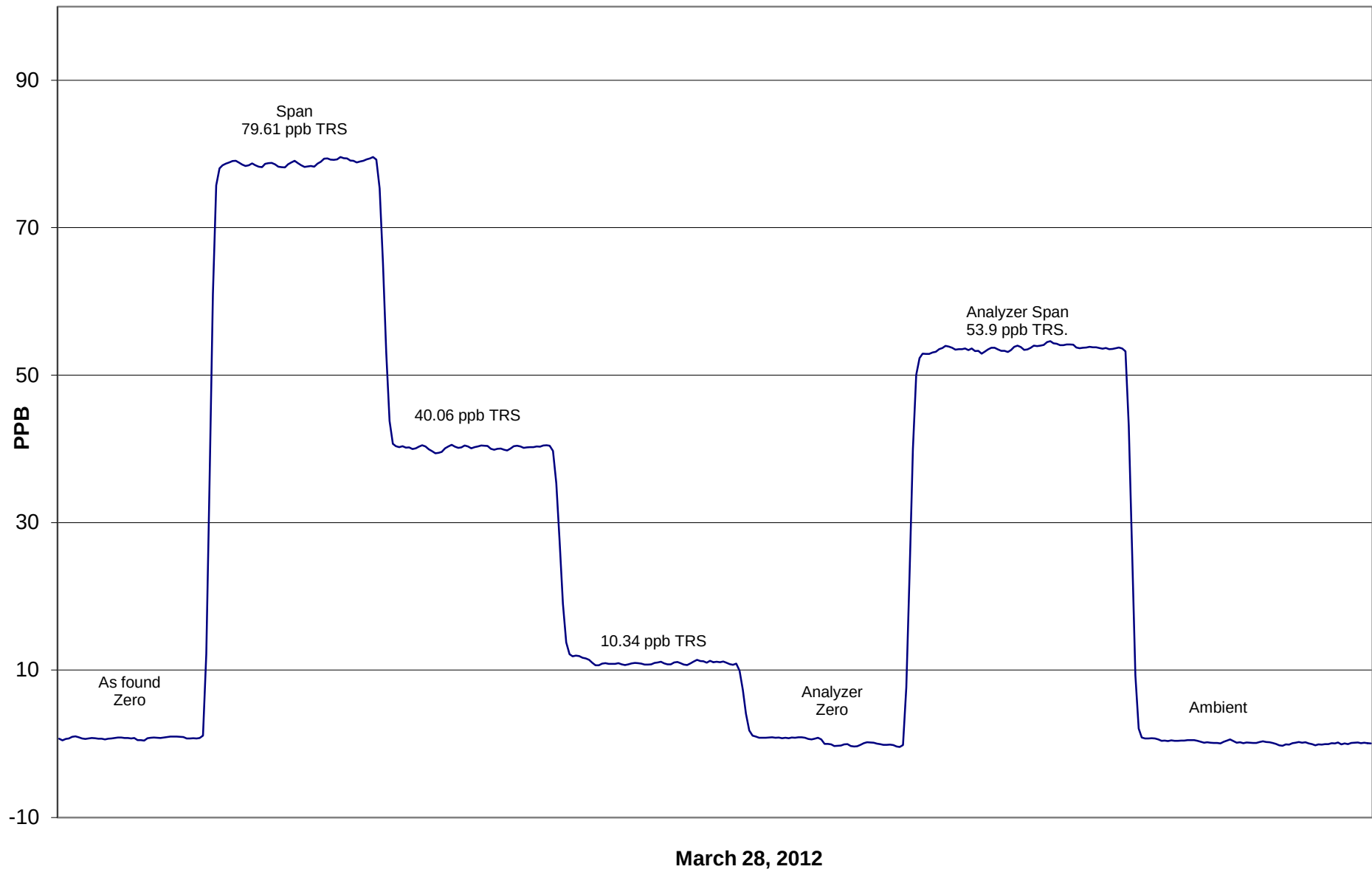
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999876
79.6	79.0	1.0076		
40.1	40.2	0.9966		
10.3	11.0	0.9403	Slope	1.009694
			Intercept	-0.330838

TRS Calibration Curve



Smokey Heights TRS Calibration



Calibration Report

Parameter SO2

Air Monitoring Network PASZA



Station Information

Calibration Date	March 14, 2012	Previous Calibration	February 5, 2012
Station Number	4	Station Location	Beaverlodge
Reason:	☒ Routine	☐ Install	☐ Removal
			☐ Other:
Start Time (MST)	15:00	End Time (MST)	18:06
Barometric Pressure	0.899 atm	Station Temperature	23.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	10.1 ppm	Cal Gas Expiry Date	1/25/2010
Gas Cert Reference	SAGL 671		
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	0.995984	Calculated slope	1.002765
Calculated intercept	-0.733106	Calculated intercept	-0.860842
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.37		2.37	
Coefficient	1.071		1.071	
PMT	-767.8	V	-767.6	V
UV Lamp Voltage	1051	V	1052	V
Chamber Temp	45	Deg C	45.2	Deg C
Pressure	654	mm Hg	653.1	mm Hg
Sample Flow	0.482	LPM	0.481	LPM
Lamp Intesity	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)
4989	0.00	0.0	0.3	N/A
4989	39.83	80.0	80.3	0.9962
4989	19.90	40.1	41.2	0.9729
4989	9.93	20.1	21.4	0.9367
4989	0.00	0.0	0.3	As found zero
4989	39.83	80.0	80.3	As found span
Average Correction Factor				0.9686

Calculated value of As Found Response: 78.986 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	-0.3	ppb	-0.6	ppb
Auto span	58.2	ppb	58.6	ppb

Notes: No adjustments made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



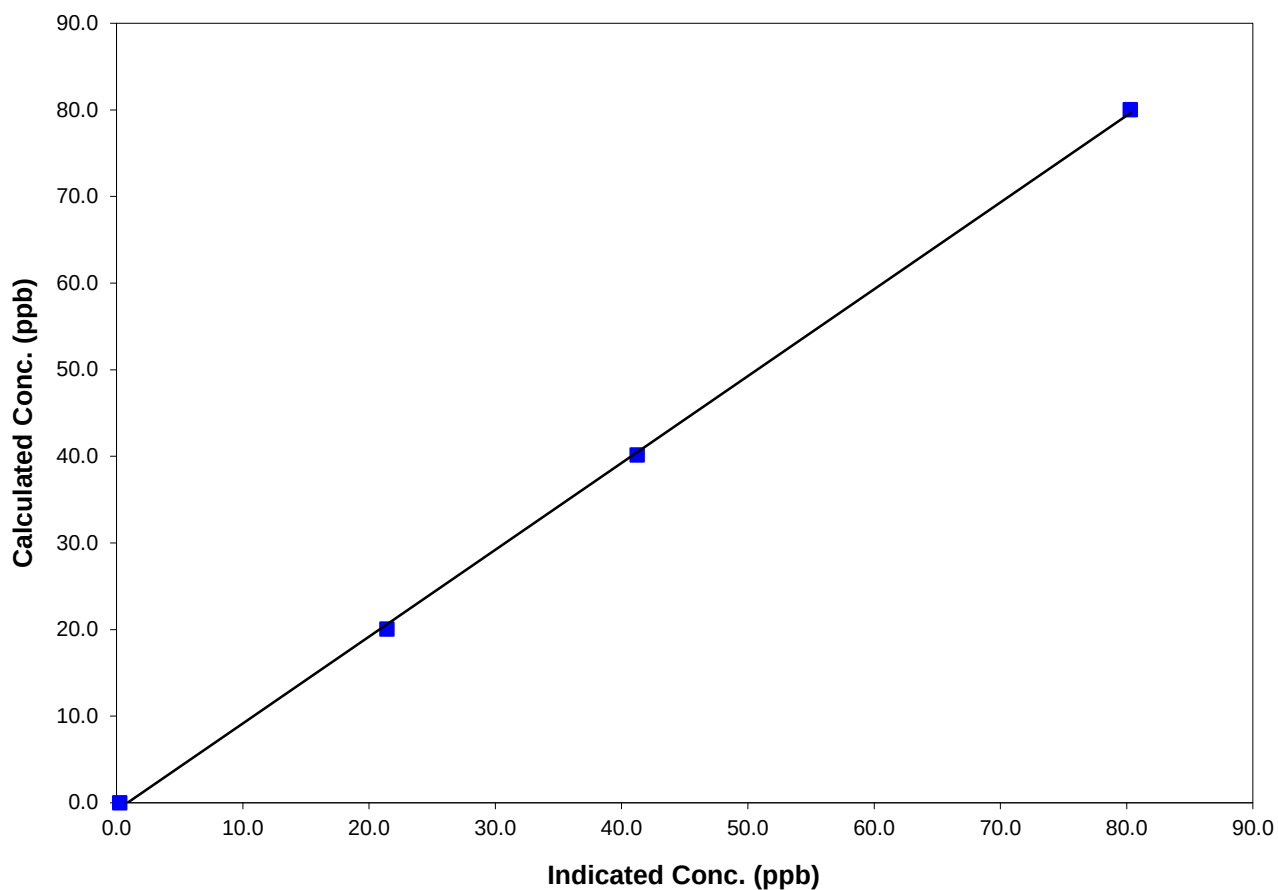
Station Information

Calibration Date	March 14, 2012	Previous Calibration	February 5, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	15:00	End Time (MST)	18:06
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

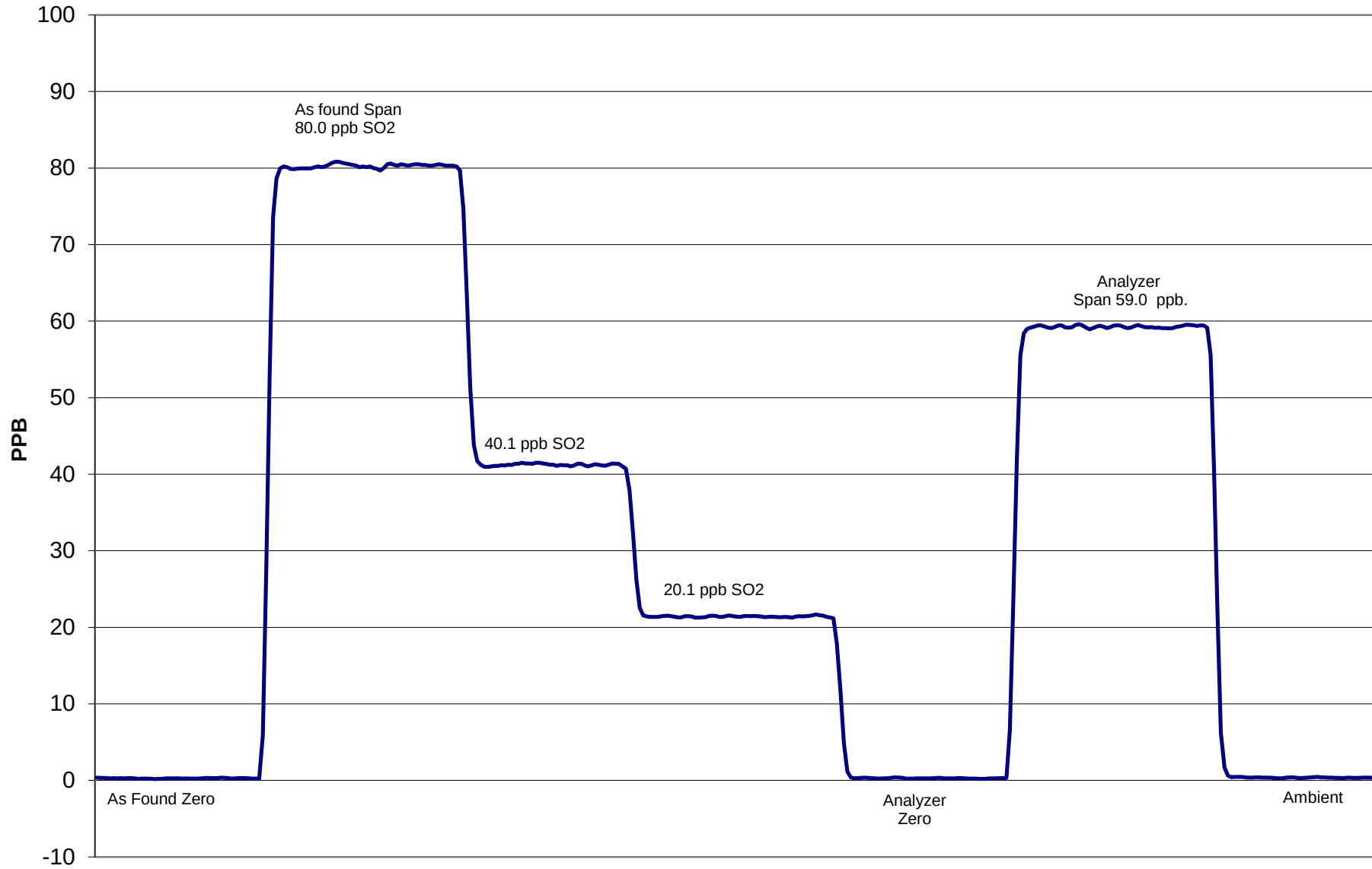
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999742
80.0	80.3	0.9962		
40.1	41.2	0.9729		
20.1	21.4	0.9367	Slope	1.002765
			Intercept	-0.860842

SO2 Calibration Curve



SO2 Calibration



March 14, 2012

Parameter

Air Monitoring Network

NO_x-NO-NO₂

PAZA



Station Information

Calibration Date	March 14, 2012		Previous Calibration	February 5, 2012	
Station Number	4		Station Location	Beaverlodge	
Reason:	☒ Routine	☐ Installation	☐ Removal	Other:	
Start Time (MST)	8:50		End Time (MST)	14:38	
Barometric Pressure	0.899	Atm	Station Temperature	23.0	Deg C
Calibrator	EnviroNics		Serial Number	2844	
NO Cal Gas Conc	52.5	ppm	Cal Gas Expiry Date	March 28, 2013	
NOx Cal Gas Conc	52.5	ppm	Cal Gas Serial #	LL8575	

DACS Information

DACS make	AP1000	DACS serial No.	
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	Parameter	NO2	NOx	NO
Before	Data Slope	0.998706	1.002531	1.003183
	Data Offset	-0.149139	-2.768092	-2.467744
After	Data Slope	0.999841	1.007735	1.008115
	Data Offset	0.375366	-2.378101	-2.020992
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	2.0	mV	2.1	mV
NOx bkgnd	2.2	mV	2.3	mV
NO coefficient	1.349		1.366	
NOx coefficient	0.999		0.999	
NO2 conv temp	325.7	Deg C	326.8	Deg C
PMT Temp	-3.0	Deg C	-2.9	Deg C
PMT Volt	-671.9	mV	-671.2	mV
R Cell Press	166.9	in Hg	166.6	in Hg
Sample Flow	0.781	ccm	0.770	ccm

Notes:

Calibration Report

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



Station Information

Calibration Date: March 14, 2012 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	4989	0.00	0.0	0.0	0.0	0.1	-0.1	0.0	N/A	N/A
1	4989	39.84	415.9	415.9	0.0	414.0	413.8	0.0	1.0045	1.0052
2	4989	19.91	208.7	208.7	0.0	210.2	209.3	0.1	0.9930	0.9972
3	4989	9.93	104.3	104.3	0.0	108.5	108.1	0.2	0.9615	0.9651
AFZ	4989	0.00	0.0	0.0	0.0	0.1	-0.1	0.0	0.0000	0.0000
AFS	4989	39.84	415.9	415.9	0.8	414.0	413.8	0.0	1.0045	1.0052
Average Correction Factor									0.9863	0.9892

As Found Concentrations: NO_x= 411.2 NO= 411.3 As Found Percent Change NO_x= -1.1% NO= -1.1%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	-0.1	-0.1	0.0	0.1	-0.1	0.0	N/A	N/A	N/A	N/A
NO point	418.8	418.8	0.0	419.1	418.8	0.0	0.9994	1.0000	N/A	N/A
300	418.8	126.0	292.8	419.4	126.0	292.9	0.9986	1.0000	0.9998	100.0%
200	418.8	215.8	203.0	418.7	215.8	202.3	1.0002	1.0000	1.0034	99.7%
100	418.8	303.9	114.9	418.3	303.9	114.2	1.0013	1.0000	1.0065	99.4%
Average Correction Factor							1.0000	1.0000	1.0032	99.7%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	0.1	-0.1	0.0	ppb
Auto span	238.0	235.5	1.6	ppb	224.1	222.1	1.3	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PAZA



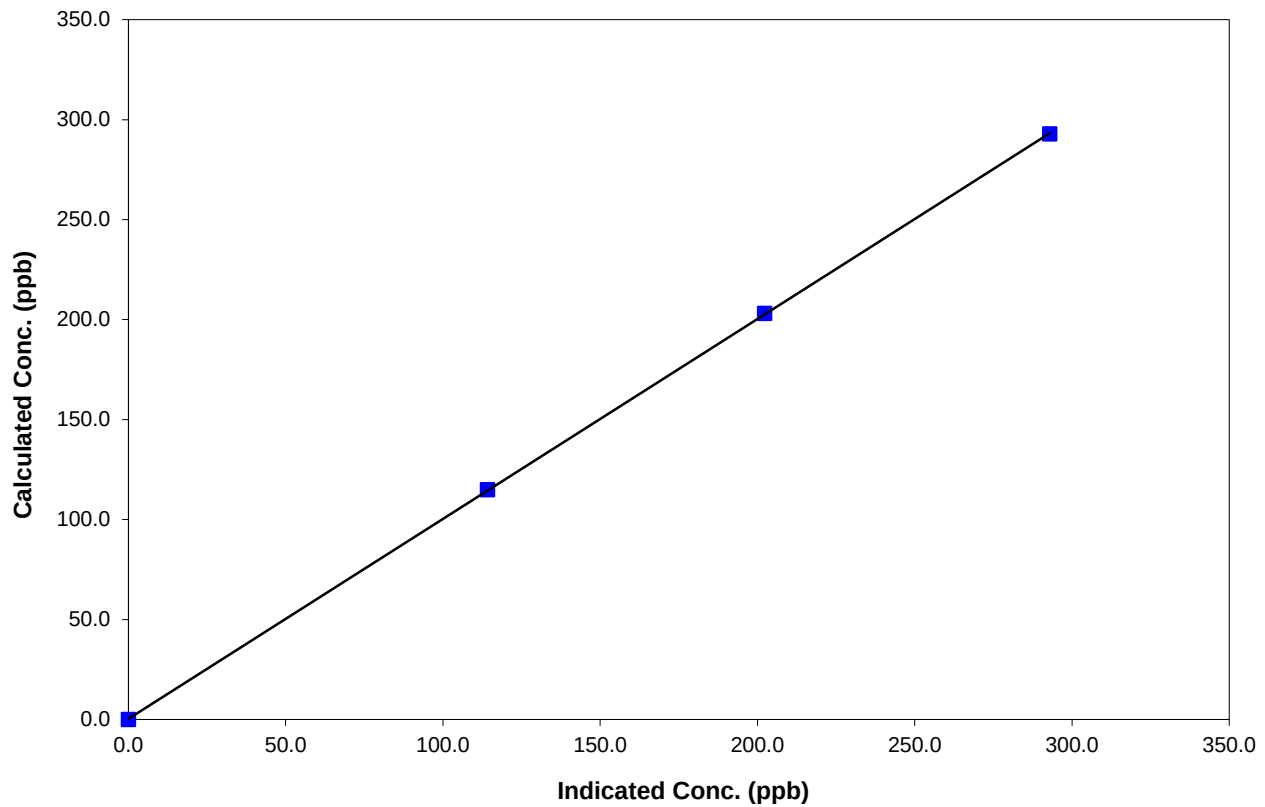
Station Information

Calibration Date	March 14, 2012	Previous Calibration	February 5, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:50	End Time (MST)	14:38
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	0.999989
292.8	292.9	0.9998		
203.0	202.3	1.0034		
114.9	114.2	1.0065	Slope	0.999841
			Intercept	0.375366

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PAZA



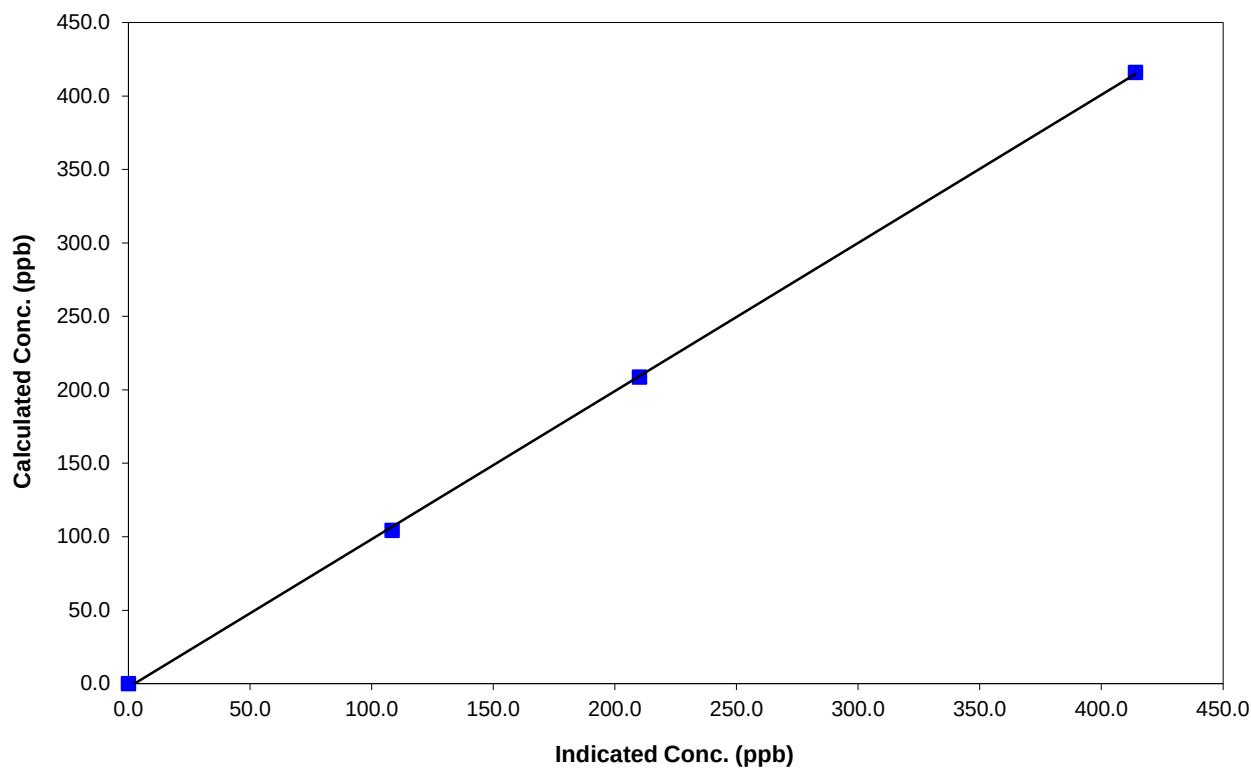
Station Information

Calibration Date	March 14, 2012	Previous Calibration	February 5, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:50	End Time (MST)	14:38
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	0.999853
415.9	414.0	1.0045		
208.7	210.2	0.9930		
104.3	108.5	0.9615	Slope	1.007735
			Intercept	-2.378101

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PAZA



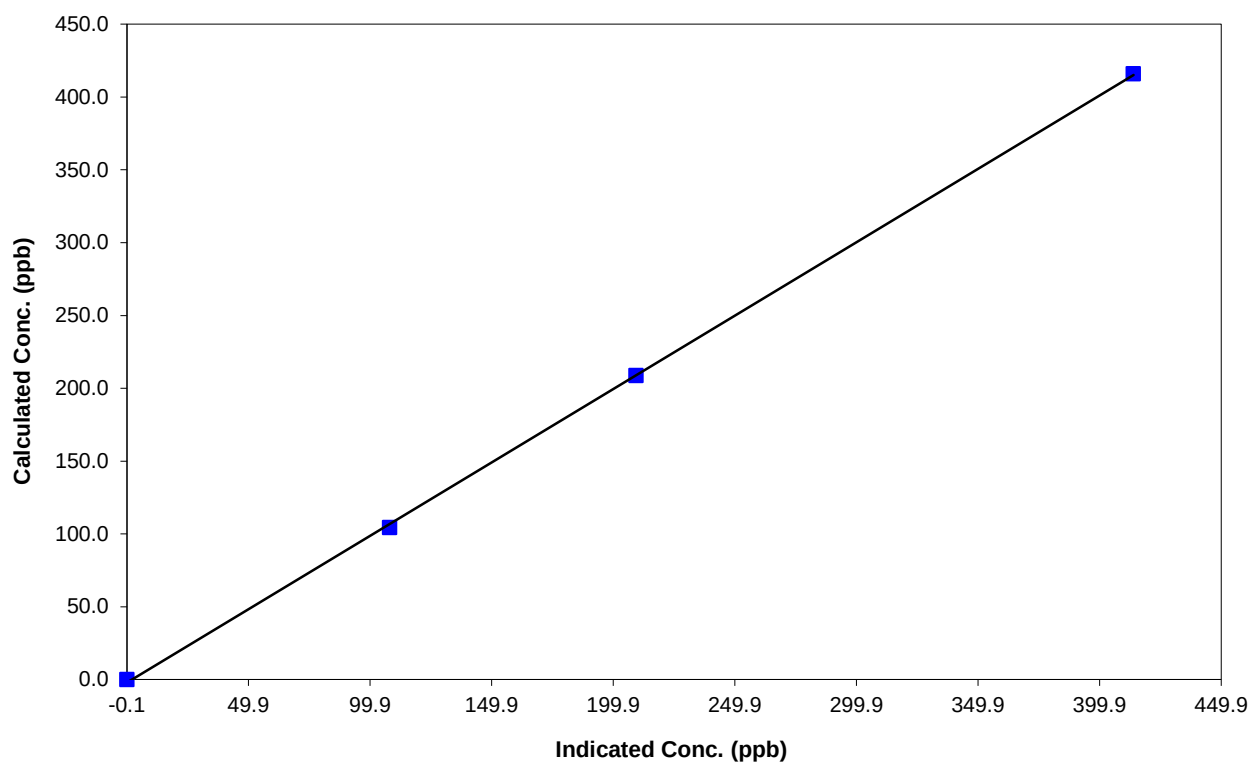
Station Information

Calibration Date	March 14, 2012	Previous Calibration	February 5, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:50	End Time (MST)	14:38
Analyzer make	TEI 42i	Analyzer serial #	906535068

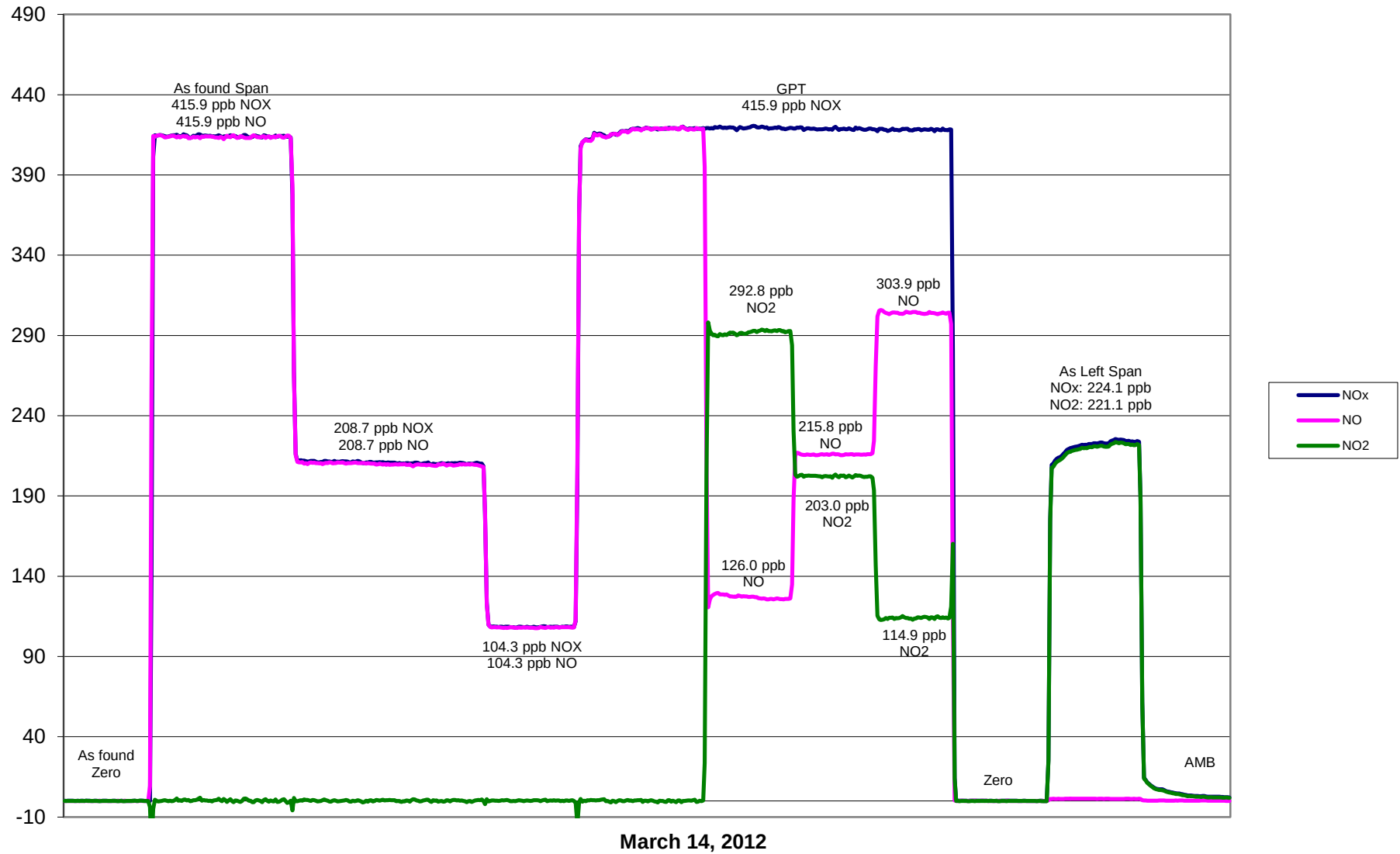
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999873
415.9	413.8	1.0052		
208.7	209.3	0.9972		
104.3	108.1	0.9651	Slope	1.008115
			Intercept	-2.020992

NO Calibration Curve



PASZA Beaverlodge NO_x Calibration



Calibration Report

Parameter 03

Air Monitoring Network PASZA



Station Information

Calibration Date	March 14, 2012	Previous Calibration	February 5, 2012
Station Number	4	Station Location	Beaverlodge
Reason:	Routine	Install	Removal
		Other:	

Start Time (MST)	13:15	End Time (MST)	16:01
Barometric Pressure	0.899 atm	Station Temperature	23.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA

DACS make	CR3000	DACS serial No.	5237
DACS voltage range	0 - 5 volt	DACS channel #	9
	Before		After
Calculated slope	0.998476	Calculated slope	0.996949
Calculated intercept	0.542914	Calculated intercept	-0.574433

Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383
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	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.90	ppb	-0.90	ppb
slope	1.030		1.000	
Lamp temp	56.3	mV	56.3	mV
Lamp Intensity A/B	55066/61547	mV	54683/60752	mV
Pressure	689.8	mm Hg	674.7	mm Hg
Flow A	0.76	ccm	0.752	ccm
Flow B	0.713	ccm	0.703	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)
4989	0.0	0.0	-0.3	N/A
4989	0.3	292.8	293.4	0.9979
4989	0.2	203.0	204.7	0.9917
4989	0.1	114.9	117.1	0.9812
4989	0.0	0.0	-0.3	As found zero
4989	0.3	292.8	289.9	As found span
Average Correction Factor				0.9903

Calculated value of As Found Response: 290.3 ppm Percent Change of As Found: **-0.8%**

	before calibration		after calibration	
Auto zero	0.1	ppb	-0.9	ppb
Auto span	114.3	ppb	113.4	ppb

Notes: No span adjustment made.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter O3

Air Monitoring Network PASZA



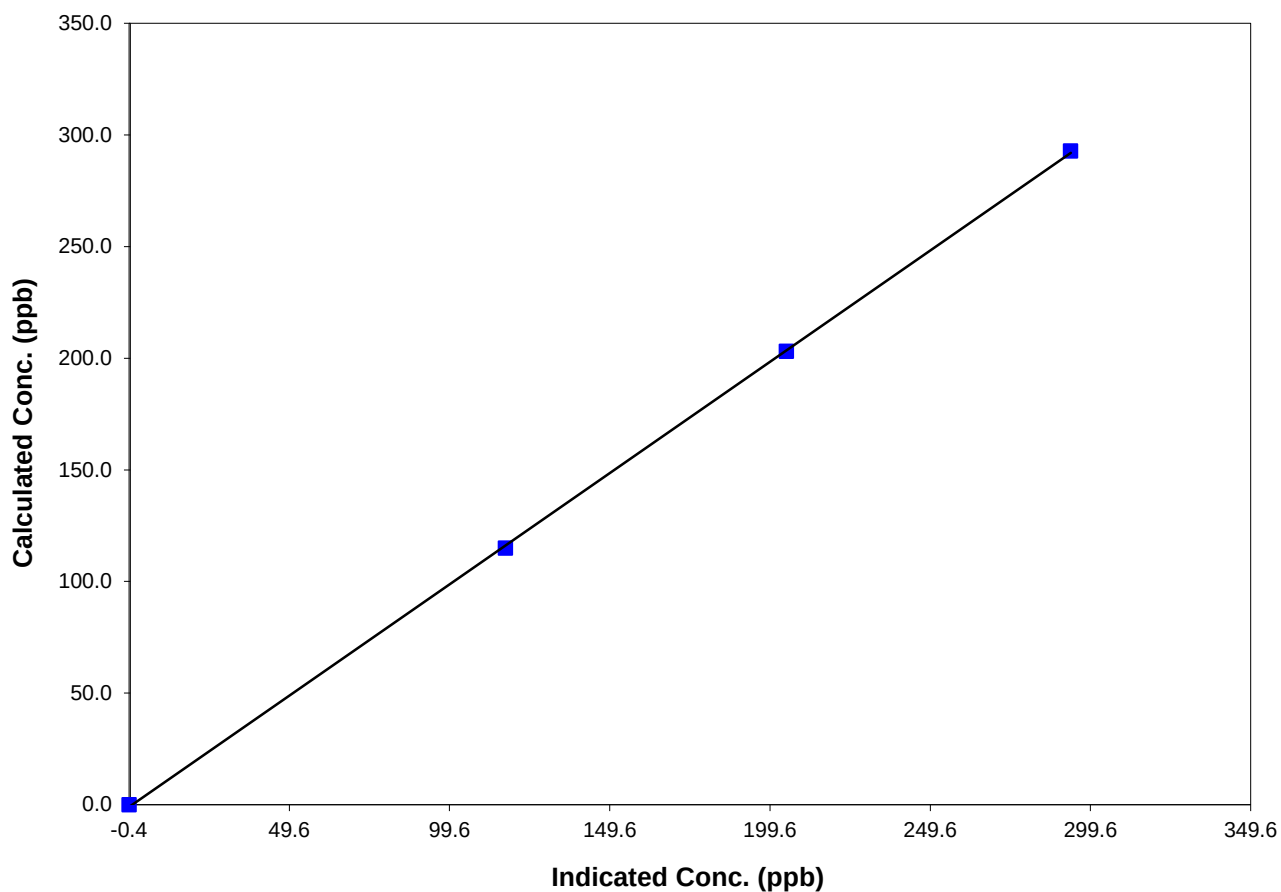
Station Information

Calibration Date	March 14, 2012	Previous Calibration	February 5, 2012
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:15	End Time (MST)	16:01
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

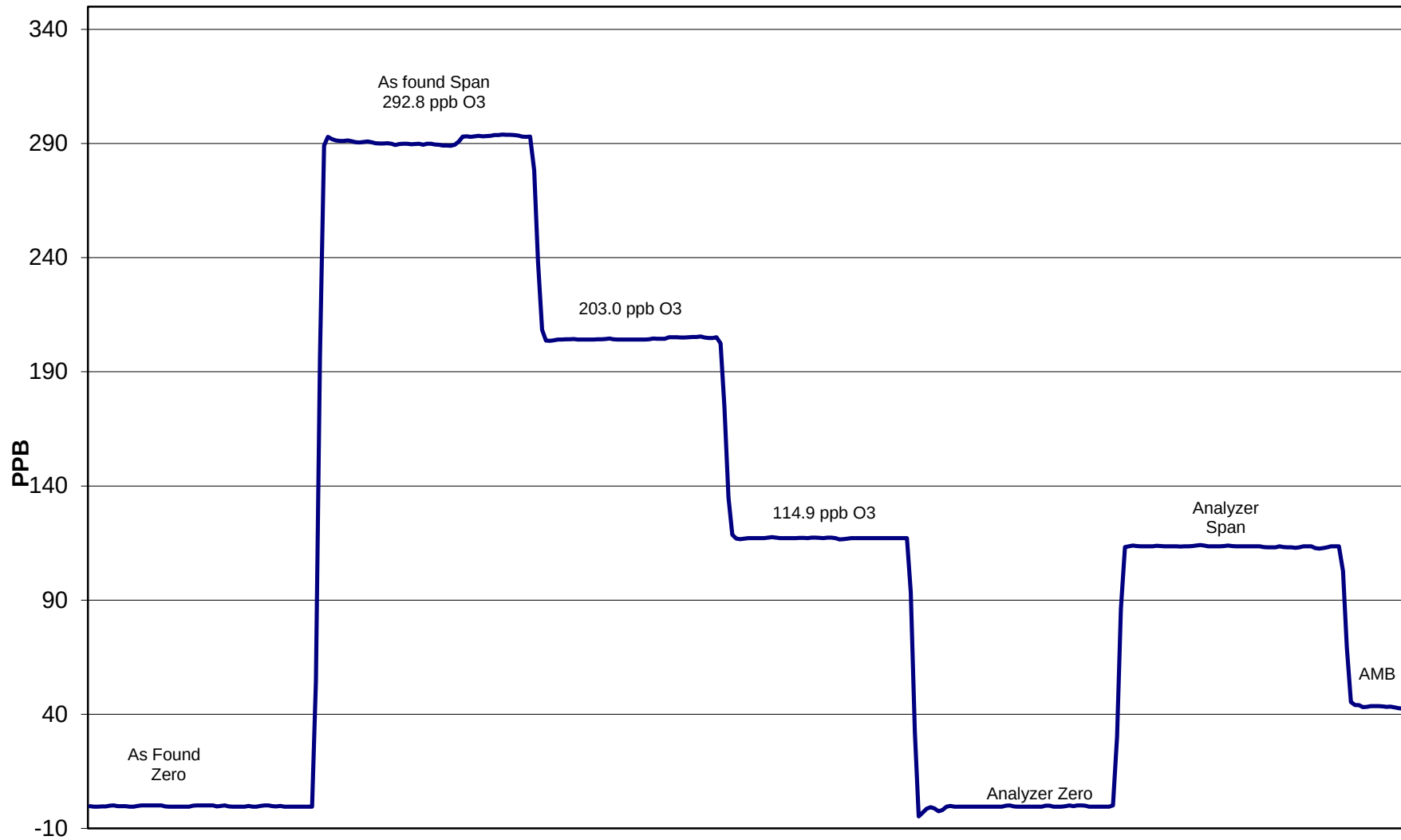
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	NA	Correlation Coefficient	0.999927
292.8	293.4	0.9979		
203.0	204.7	0.9917		
114.9	117.1	0.9812	Slope	0.996949
			Intercept	-0.574433

O3 Calibration Curve



O3 Calibration



March 14, 2012

Calibration Report

Parameter SO2

Air Monitoring Network PASZA



Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 14, 2012
Station Number	6	Station Location	Valleyview
Reason:	Routine	Install	Removal
		Other:	
Start Time (MST)	9:06	End Time (MST)	13:15
Barometric Pressure	702.00 mmHg	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	50.58 ppm	Cal Gas Cert Date	11/29/2011
Gas Cylinder Num.	LL158102	Cal gas Exp. Date	11/29/2013
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	1.005356	Calculated slope	0.992272
Calculated intercept	-2.677803	Calculated intercept	1.492818
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	30.9		35.3	
Coefficient	0.865		0.977	
UV Lamp Voltage	964	LPM	966	LPM
Chamber Temp	44.4	V	44.2	V
Perm Gas Temp	28	C	25.7	C
Pressure	607.1	in Hg	597	in Hg
Sample Flow	0.559	LPM	0.554	LPM
Lamp Intensity	47964	Hz	48167	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)
4997	0.00	0.0	0.0	N/A
4997	39.93	401.0	403.0	0.9949
4997	19.97	201.3	201.5	0.9990
4997	9.94	100.4	97.7	1.0280
4997	0.00	0.0	0.0	As found zero
4997	39.93	401.0	351.1	As found span
Average Correction Factor				1.0073

Calculated value of As Found Response: 350.4 ppm Percent Change of As Found: **12.6%**

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	155.5	ppm	179.2	ppm

Notes: Cal went well, adjustment made to span. Possible cause of adjustment, is new cal gear / gas being used

Calibration Performed By: Virginia McKergow

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



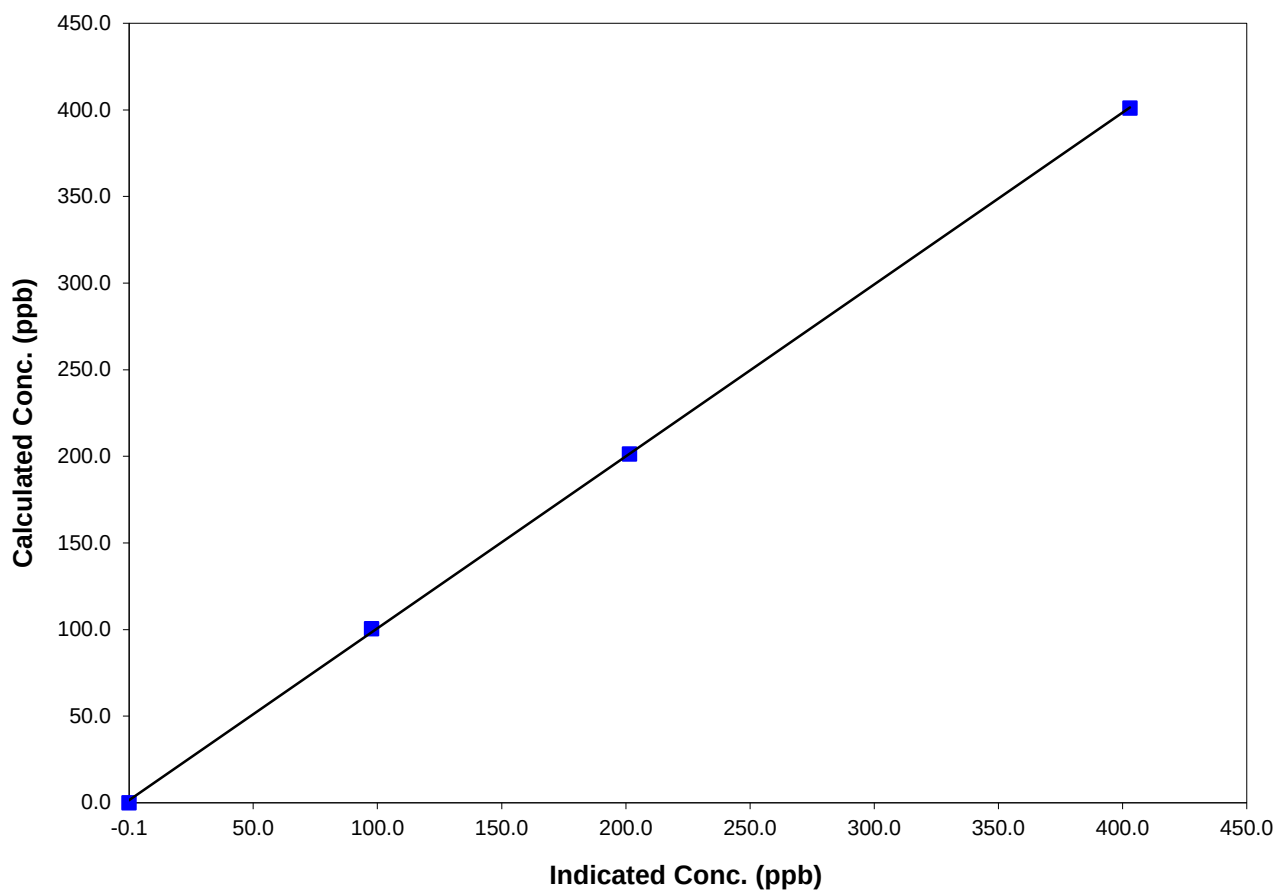
Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 14, 2012
Station Number	6	Station Location	Valleyview
Start Time (MST)	9:06	End Time (MST)	14:42
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

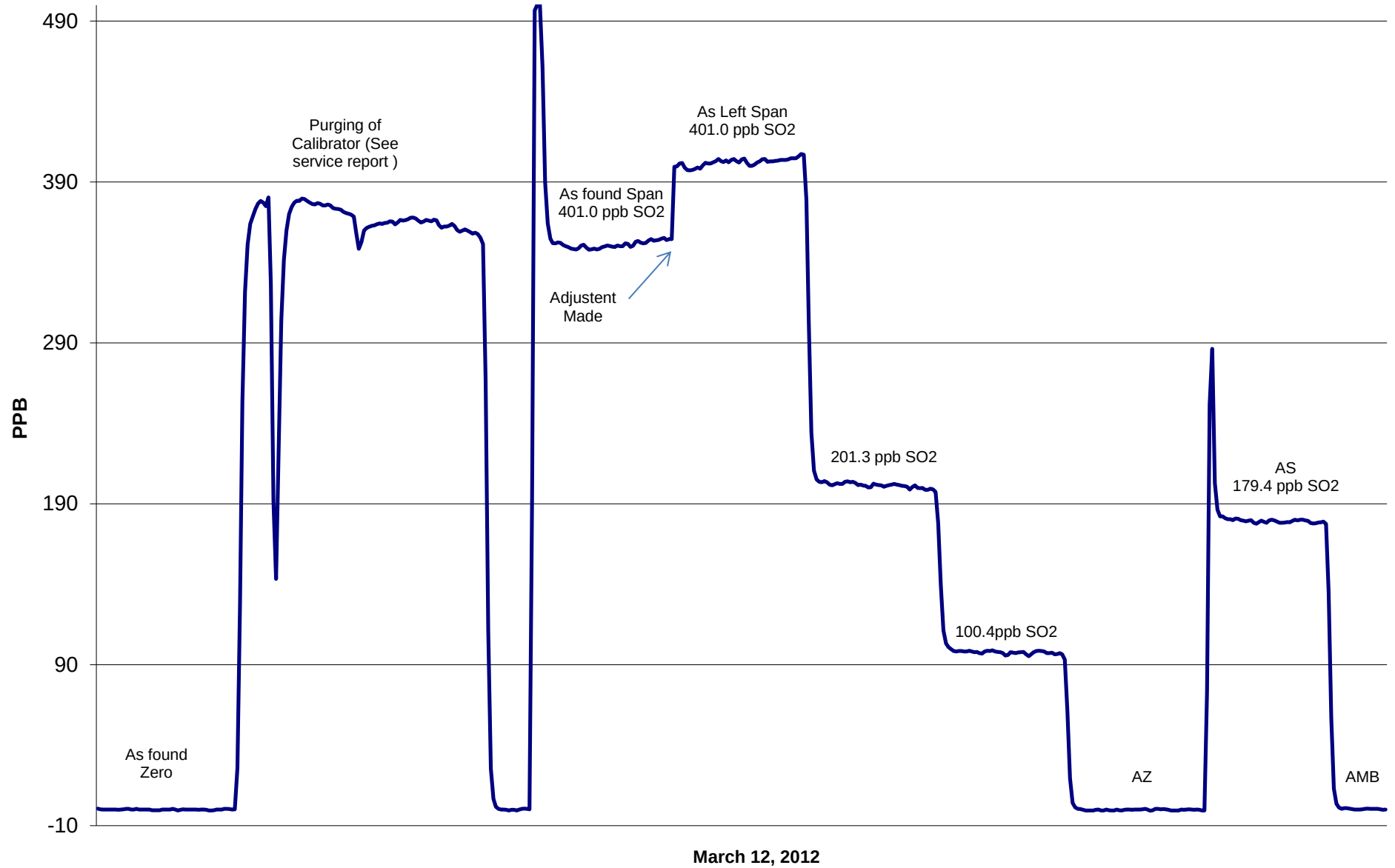
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999929
401.0	403.0	0.9949		
201.3	201.5	0.9990		
100.4	97.7	1.0280	Slope	0.992272
			Intercept	1.492818

SO2 Calibration Curve



SO2 Calibration



Calibration Report

Parameter H2S

Air Monitoring Network PASZA



Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 14, 2012
Station Number	6	Station Location	Valleyview
Reason:	Routine	☐ Install	☐ Removal
		☐ Other:	
Start Time (MST)	12:20	End Time (MST)	16:10
Barometric Pressure	702.00 mm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3016
Cal Gas Concentration	5.02 ppm	Cal Gas Expiry Date	7/22/2011
Gas Cert Reference	BLM001715		
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	0.994324	Calculated slope	0.991380
Calculated intercept	-0.663710	Calculated intercept	0.360495
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	7.1	ppb	6.4	ppb
Coefficient	1.368		1.2	
Lamp Voltage	785	v	788	v
Chamber Temp	45.1	c	45.0	c
Perm Oven Temp	45.01	c	44.33	c
Pressure	620.00	mm Hg	607.60	mm Hg
Sample Flow	420	ccm	0.413	ccm
Lamp Intensity	91.0	%	91.0	%

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)
4989	0.00	0.0	-0.1	N/A
4997	79.93	79.0	79.5	0.9938
4997	39.95	39.8	39.5	1.0072
4997	14.96	15.0	14.5	1.0306
4997	0.00	0.0	-0.1	As found zero
4997	79.93	79.0	89.6	As found span
Average Correction Factor				1.0105

Calculated value of As Found Response: 88.50 ppm Percent Change of As Found: **-12.0%**

	before calibration		after calibration	
Auto zero	0.0	ppm	0.5	ppm
Auto span	70.6	ppm	67.0	ppm

Notes: Cal went well, adjustment made to span. Possible cause, new cal gear / gas being used

Calibration Performed By: Virginia McKergow

Calibration Summary

Parameter H2S

Air Monitoring Network PASZA



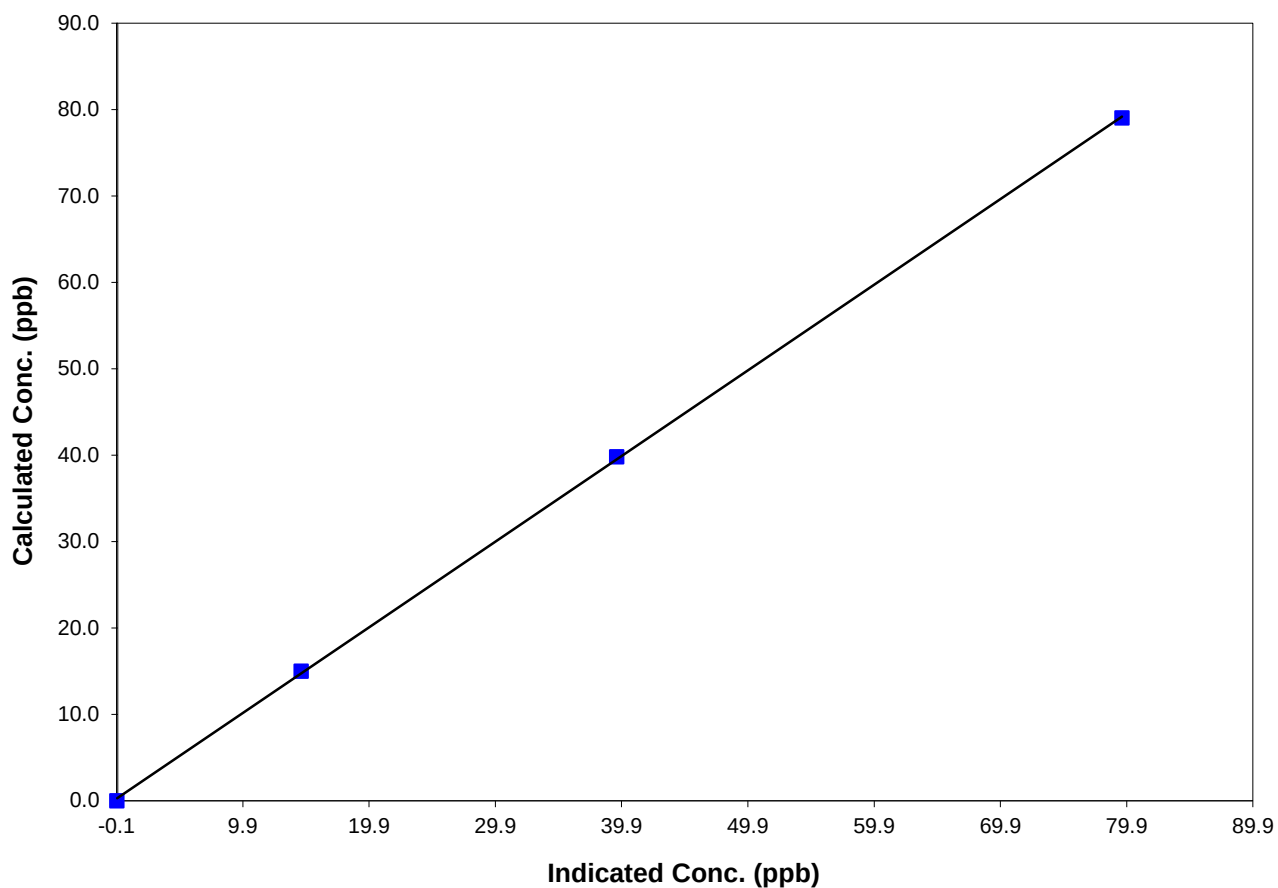
Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 14, 2012
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:20	End Time (MST)	16:10
Analyzer make/model	TEI Model 43i - APSCB	Analyzer serial #	701120010

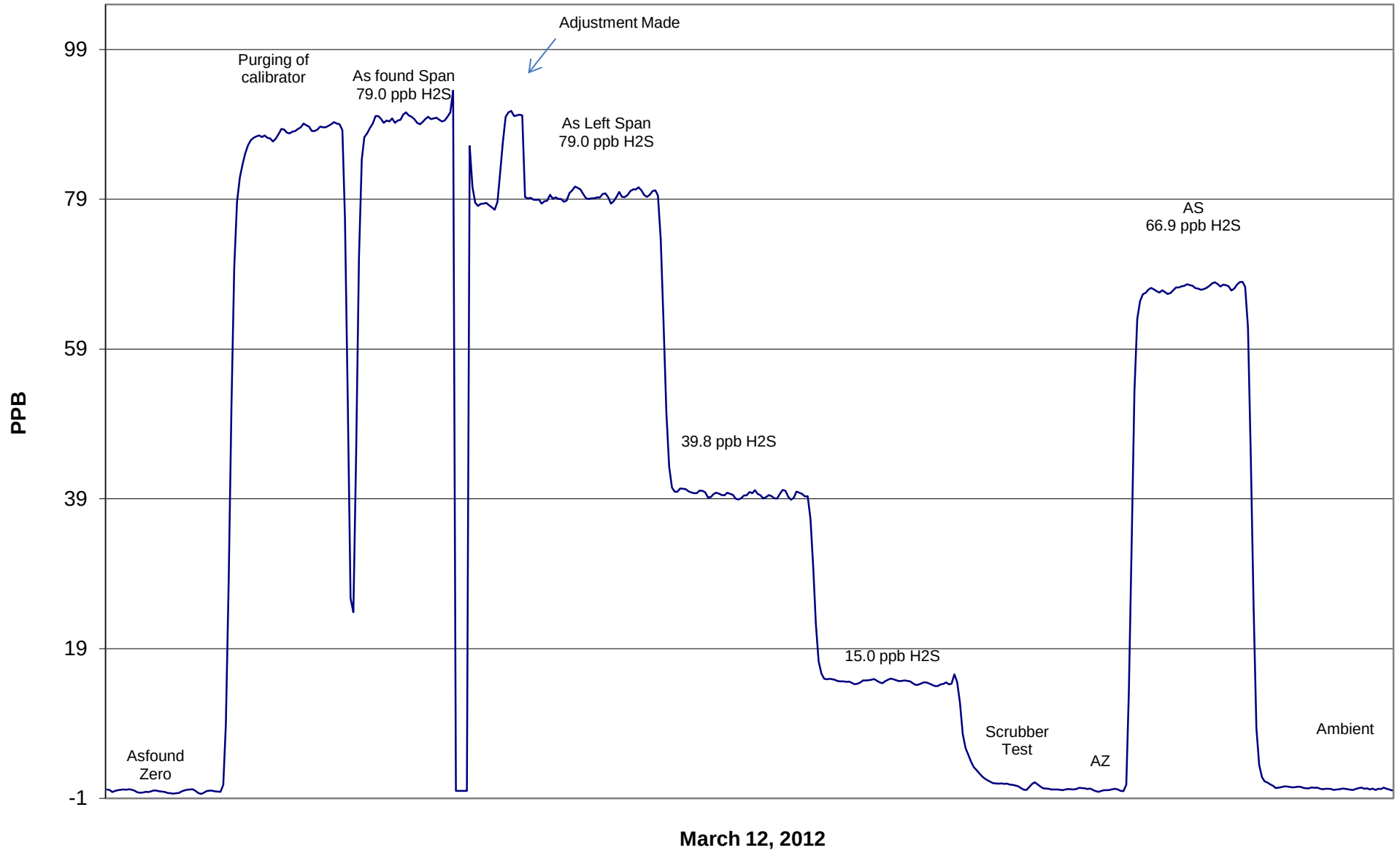
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
79.0	79.5	0.9938	Correlation Coefficient	0.999934
39.8	39.5	1.0072		
15.0	14.5	1.0306	Slope	0.991380
			Intercept	0.360495

H2S Calibration Curve



H2S Calibration



Calibration Report

Parameter SO2

Air Monitoring Network PASZA



Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 15, 2012
Station Number	9	Station Location	Sunset House
Reason:	Routine	Install	Removal
			Other:
Start Time (MST)	10:10	End Time (MST)	13:50
Barometric Pressure	31.70 inches Hg	Station Temperature	19.7 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	49.8 ppm	Cal Gas Expiry Date	4/6/2012
Gas Cert Reference	SGAL3245		
DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volt	DACS channel #	2
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.998582	Calculated slope	1.002264
Calculated intercept	-1.357476	Calculated intercept	-2.008437
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	16.5		16.6	
Coefficient	0.983		0.972	
UV Lamp Voltage	824	V	824	V
Chamber Temp	44.2	C	44.6	C
Perm Gas Temp	45	C	45	C
Pressure	650.1	mm Hg	643.3	mm Hg
Sample Flow	0.475	LPM	0.471	LPM
Lamp Intensity	37687	Hz	37742	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)
4989	0.00	0.0	0.1	N/A
4989	39.84	394.5	394.8	0.9994
4989	19.90	197.9	200.0	0.9895
4989	9.93	98.9	103.0	0.9609
4989	0.00	0.0	0.0	As found zero
4989	39.84	394.5	397.9	As found span
Average Correction Factor				0.9833

Calculated value of As Found Response: 396.0 ppm Percent Change of As Found: -0.4%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	264.0	ppm	275.7	ppm

Notes: Slight span adjustment

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



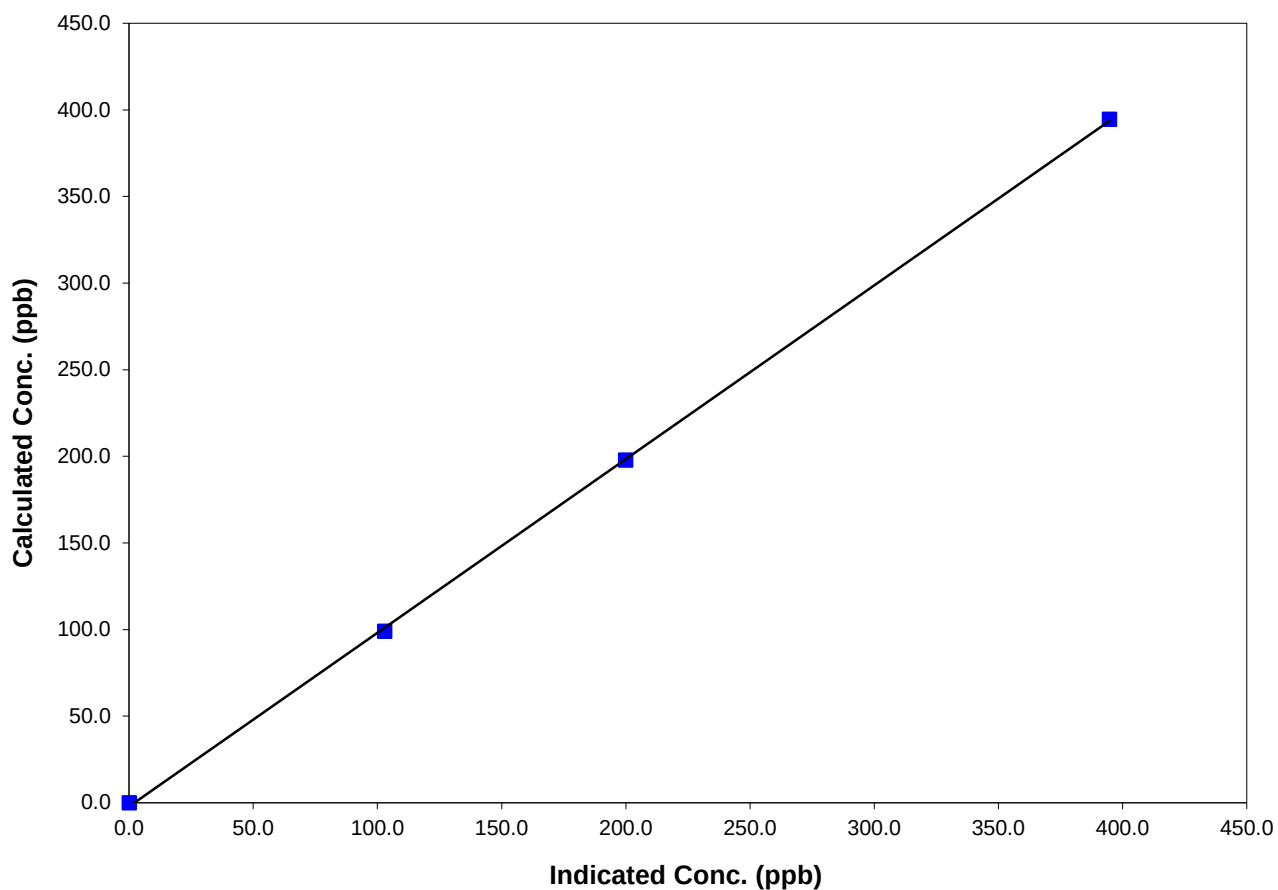
Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 15, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	10:10	End Time (MST)	13:50
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

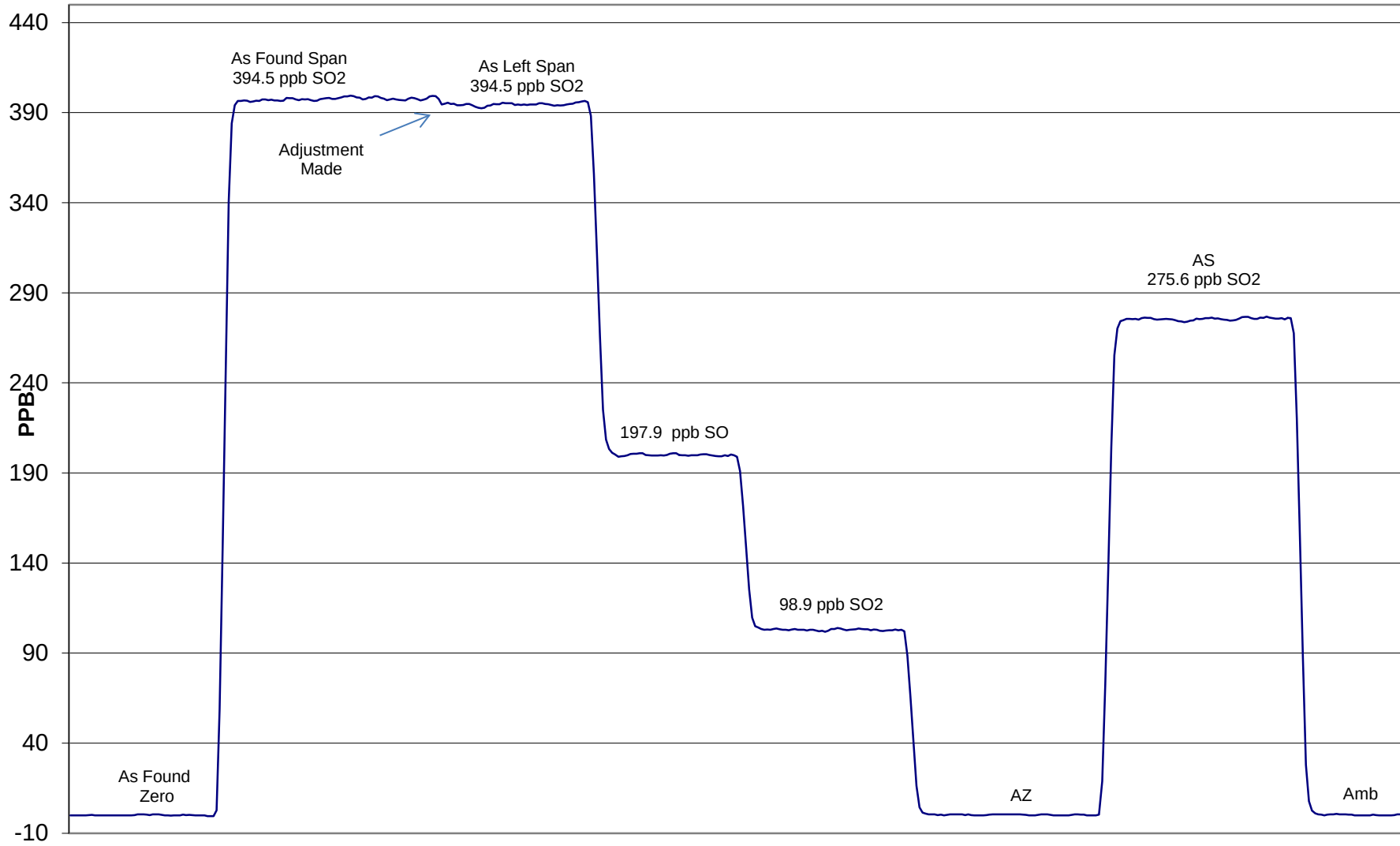
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999884
394.5	394.8	0.9994		
197.9	200.0	0.9895		
98.9	103.0	0.9609	Slope	1.002264
			Intercept	-2.008437

SO2 Calibration Curve



SO2 Calibration



March 12, 2012

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 15, 2012
Station Number	9	Station Location	Sunset House
Reason:	Routine	Install	Removal
Other:			
Start Time (MST)	10:10	End Time (MST)	16:00
Barometric Pressure	0.907	Atm	Station Temperature
Calibrator	EnviroNics	Serial Number	3474
NO Cal Gas Conc	52.5	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	52.5	ppm	Cal Gas Serial #
			LL8575

DACS Information

DACS make	CR3000	DACS serial No.	5407
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Parameter	NO2	NOx	NO
Before			
Data Slope	0.997531	0.997655	1.003661
Data Offset	-0.041240	-3.000822	-3.510851
After			
Data Slope	0.998250	0.999517	1.003974
Data Offset	-0.697557	-3.182108	-3.216075
Channel #	5	3	4
Voltage Range	0 - 5 VDC	0 - 5 VDC	0 - 5 VDC

Analyzer Information

Analyzer make/model	TEI 42i	Analyzer serial #	0701120011
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Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	4.8	mV	4.4	mV
NOx bkgnd	7.3	mV	4.6	mV
NO coefficient	1.171		1.166	
NOx coefficient	1.003		1.000	
NO2 conv temp	325.0	Deg C	324.7	Deg C
PMT Temp	-3.1	Deg C	-3.1	Deg C
PMT Volt	-773.3	mV	-773.3	mV
R Cell Press	150.0	in Hg	151.5	in Hg
Sample Flow	0.850	ccm	0.847	ccm

NOTES: Adjust zero. R Cell Press is low. Flow is still good but 100 cc lower than last cal.
Slight adjust span.

Calibration Report

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



Station Information

Calibration Date: March 12, 2012 Station Location: Sunset House

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	4989	0.00	0.0	0.0	0.0	0.7	0.7	0.2	N/A	N/A
1	4989	39.83	415.8	415.8	0.0	417.8	415.9	0.2	0.9951	0.9997
2	4989	19.90	208.6	208.6	0.0	213.3	212.6	-0.1	0.9778	0.9812
3	4989	9.93	104.3	104.3	0.0	109.9	109.4	0.5	0.9491	0.9533
AFZ	4989	0.00	0.0	0.0	0.0	-1.9	0.2	-2.0	0.0000	0.0000
AFS	4989	39.83	415.8	415.8	0.0	424.1	420.1	2.2	0.9805	0.9898
Average Correction Factor									0.9740	0.9781

As Found Concentrations: NO_x= 423.0 NO= 416.4 As Found Percent Change NO_x= 1.7% NO= 0.1%

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.84 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	0.7	0.7	0.2	N/A	N/A	N/A	N/A
NO point	415.1	415.1	0.0	415.8	415.1	-1.3	0.9983	1.0000	N/A	N/A
300	415.1	137.7	277.4	417.9	137.7	278.6	0.9933	1.0000	0.9956	100.4%
200	415.1	224.5	190.5	417.6	224.5	190.9	0.9938	1.0000	0.9979	100.2%
100	415.1	315.9	99.2	418.9	315.9	101.1	0.9908	1.0000	0.9809	102.0%
Average Correction Factor							0.9926	1.0000	0.9915	100.9%

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	1.5	0.7	0.9	ppb
Auto span	200.0	197.1	1.6	ppb	103.8	101.6	1.8	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PASZA



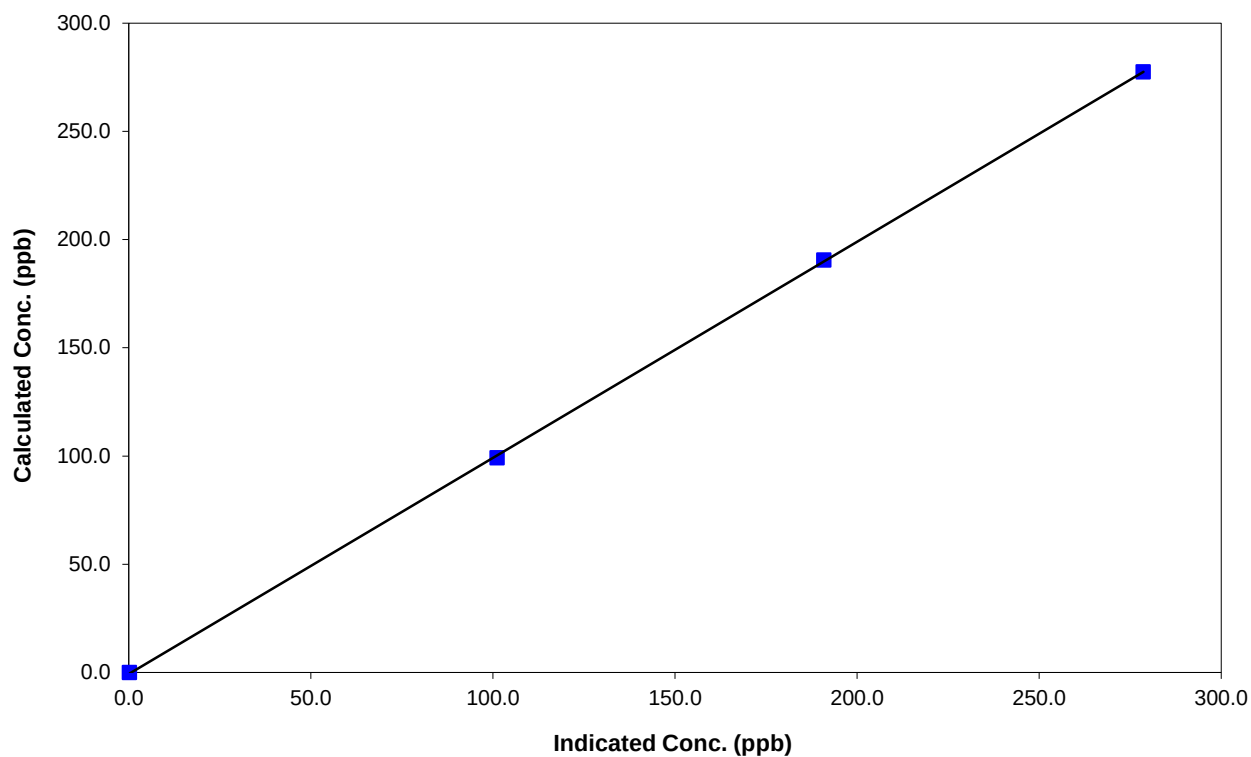
Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 15, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	10:10	End Time (MST)	16:00
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999959
277.4	278.6	0.9956		
190.5	190.9	0.9979		
99.2	101.1	0.9809	Slope	0.998250
			Intercept	-0.697557

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



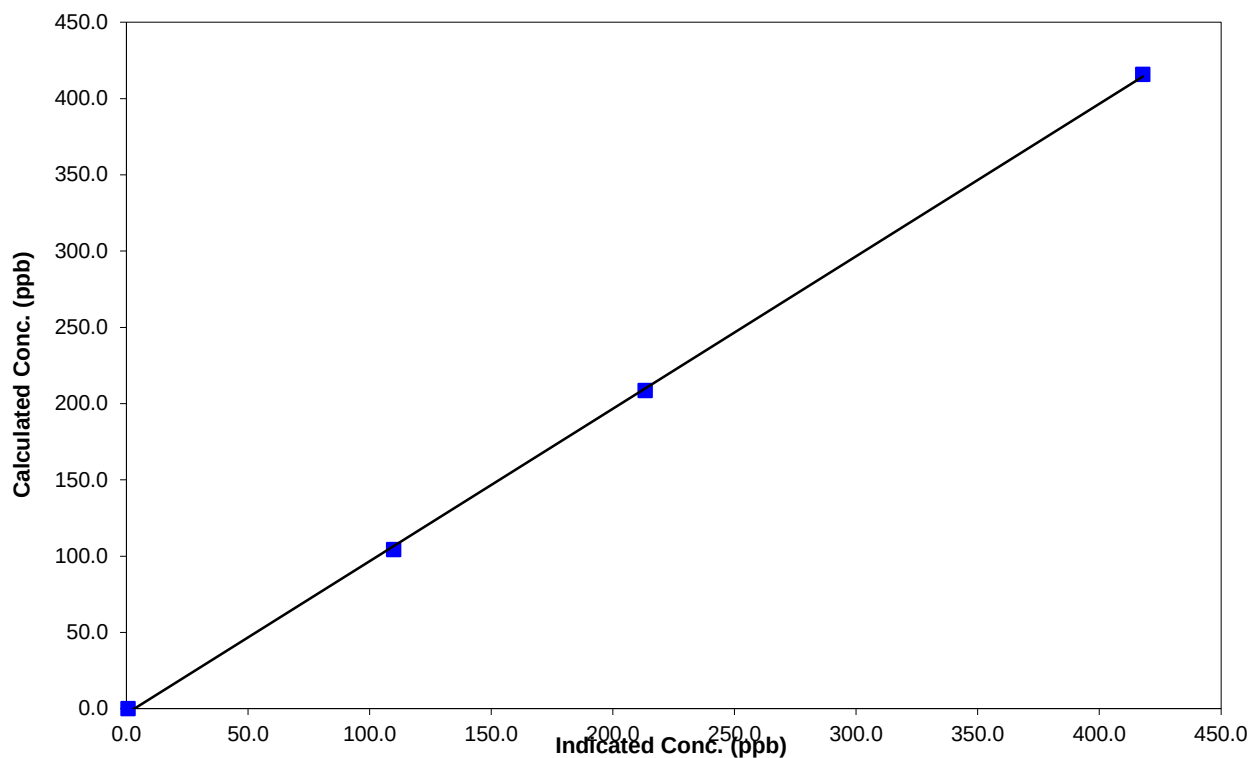
Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 15, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	10:10	End Time (MST)	16:00
Analyzer make	TEI 42i	Analyzer serial #	0701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	N/A	Correlation Coefficient	0.999836
415.8	417.8	0.9951		
208.6	213.3	0.9778		
104.3	109.9	0.9491	Slope	0.999517
			Intercept	-3.182108

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



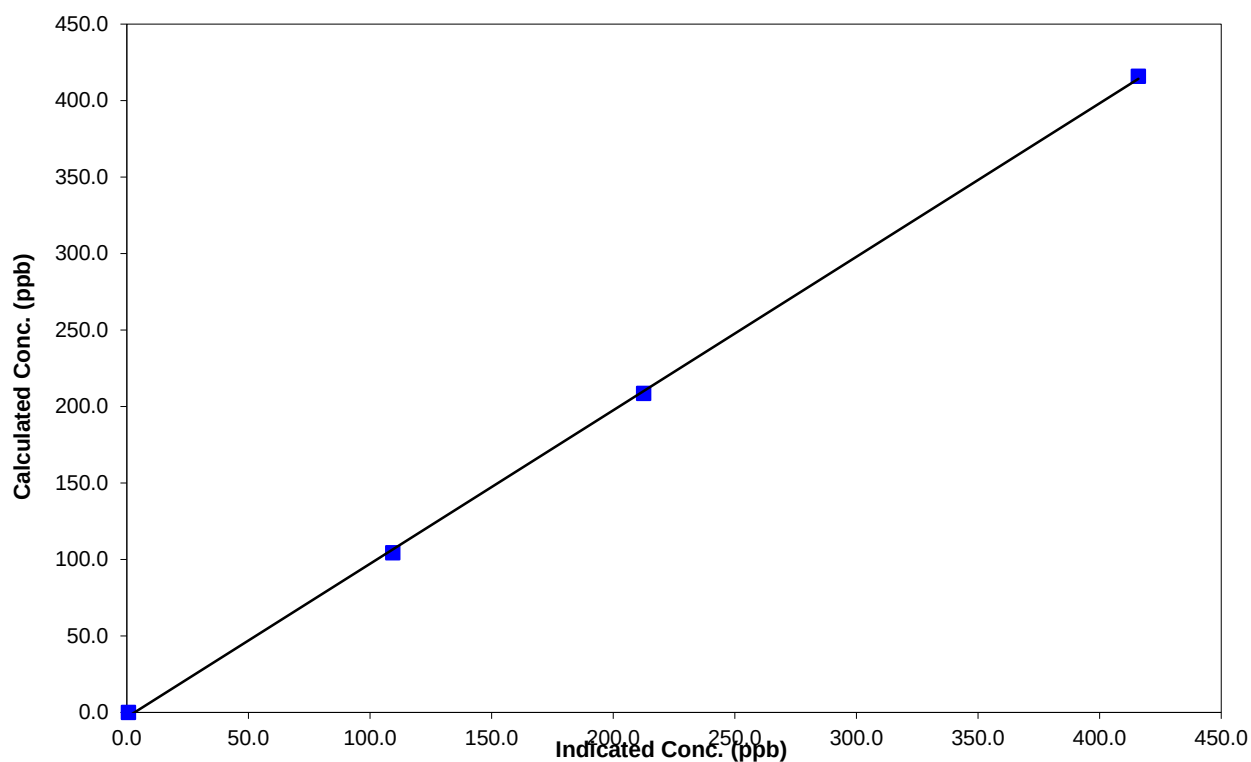
Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 15, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	10:10	End Time (MST)	16:00
Analyzer make	TEI 42i	Analyzer serial #	0701120011

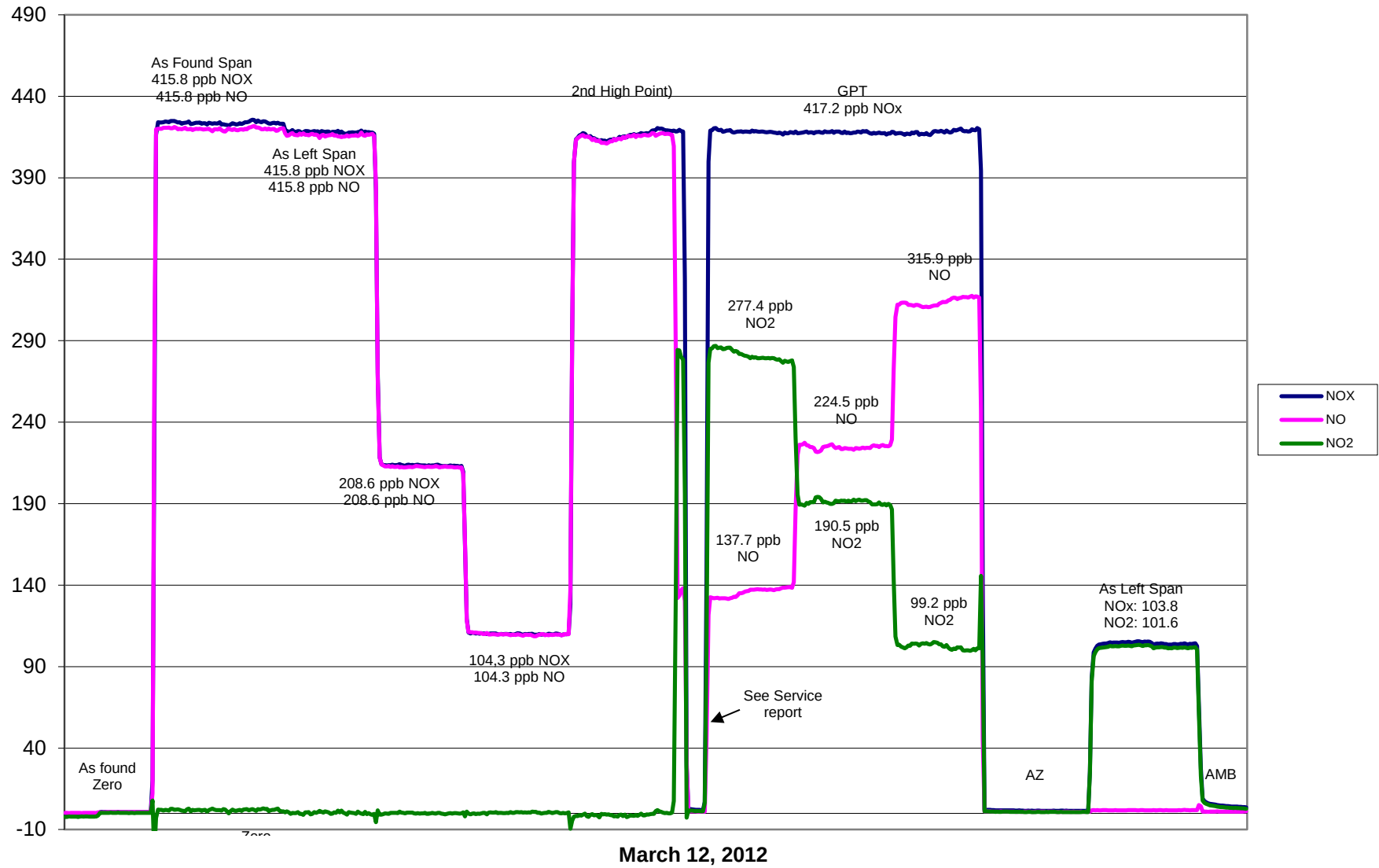
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	N/A	Correlation Coefficient	0.999826
415.8	415.9	0.9997		
208.6	212.6	0.9812		
104.3	109.4	0.9533	Slope	1.003974
			Intercept	-3.216075

NO Calibration Curve



PASZA Sunset House NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

Calibration Date	March 12, 2012	Previous Calibration	February 21, 2012
Station Number	9	Station Location	Sunset House
Reason:	Routine	☐ Install	☐ Removal remove ☐ Other:

Start Time (MST)	14:08	End Time (MST)	17:31
Barometric Pressure	0.894 atm	Station Temperature	15.7 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474

DACS make	CR3000	DACS serial No.	5407
DACS voltage range	0 - 5 Volts	DACS channel #	6
	Before		After
Calculated slope	1.000962	Calculated slope	0.997642
Calculated intercept	-0.472265	Calculated intercept	-1.135493

Analyzer make	TEI Model 49C	Analyzer serial #	49C-0609716240
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	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-1	ppb	0.4	ppb
Span	1.808		1.454	
Cell A intensity	69782	Hz	67630	Hz
Cell B intensity	98212	Hz	98007	Hz
Pressure	664.3	in Hg	664.30	in Hg
CellA Flow	0.931	ccm	0.931	ccm
Cell B Flow	0.714	cmm	0.714	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.0	0.0	0.4	N/A
4990	300	277.4	280.0	0.9907
4990	200	190.5	189.6	1.0048
4990	100	99.2	103.0	0.9635
4990	0.0	0.0	1.5	As found zero
4990	300	277.4	348.2	As found span
Average Correction Factor				0.9863

Calculated value of As Found Response: 346.6 ppm Percent Change of As Found: 24.9%

	before calibration		after calibration	
Auto zero	0.6	ppb	-1.0	ppb
Auto span	137.7	ppb	206.9	ppb

Notes: Cal went great, adjusted zero and high point.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter 03

Air Monitoring Network PASZA



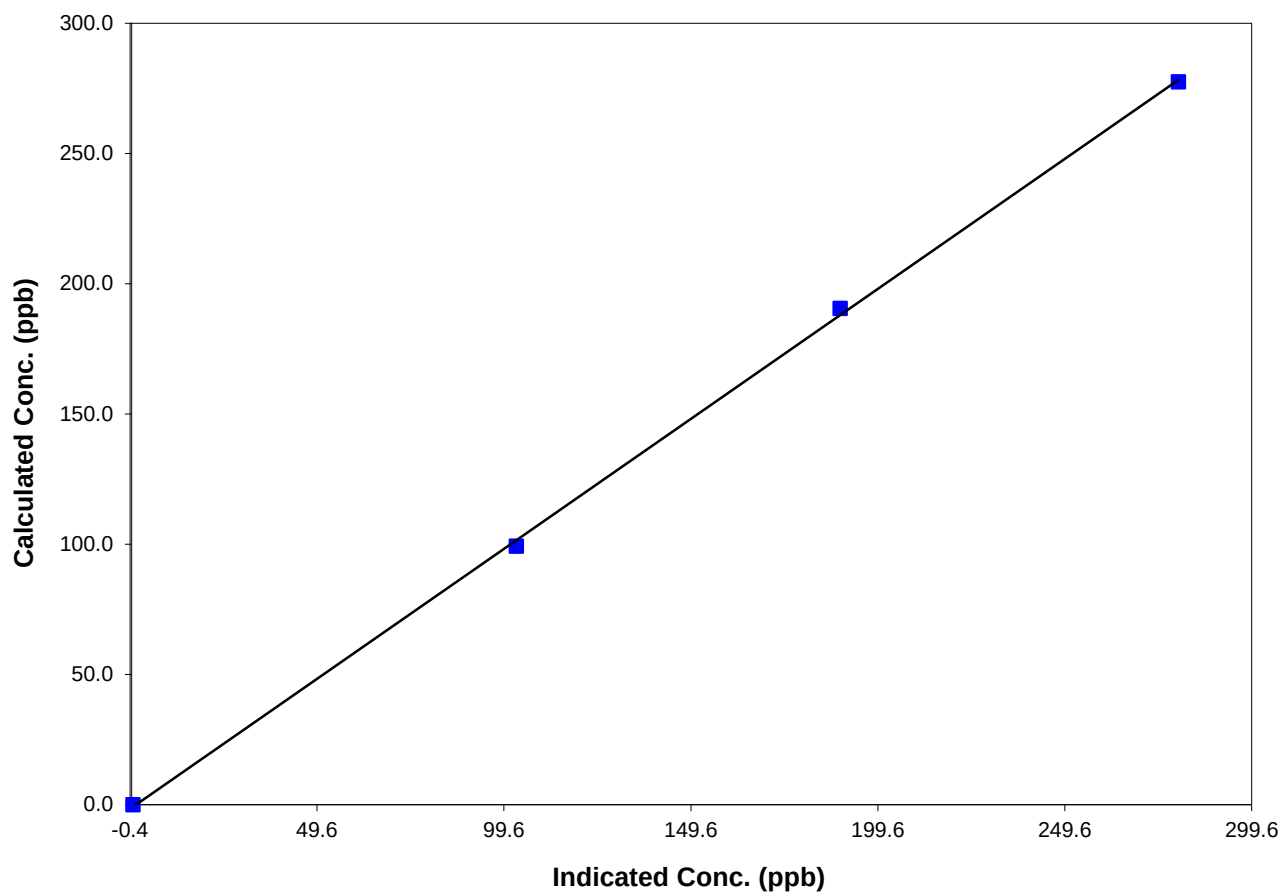
Station Information

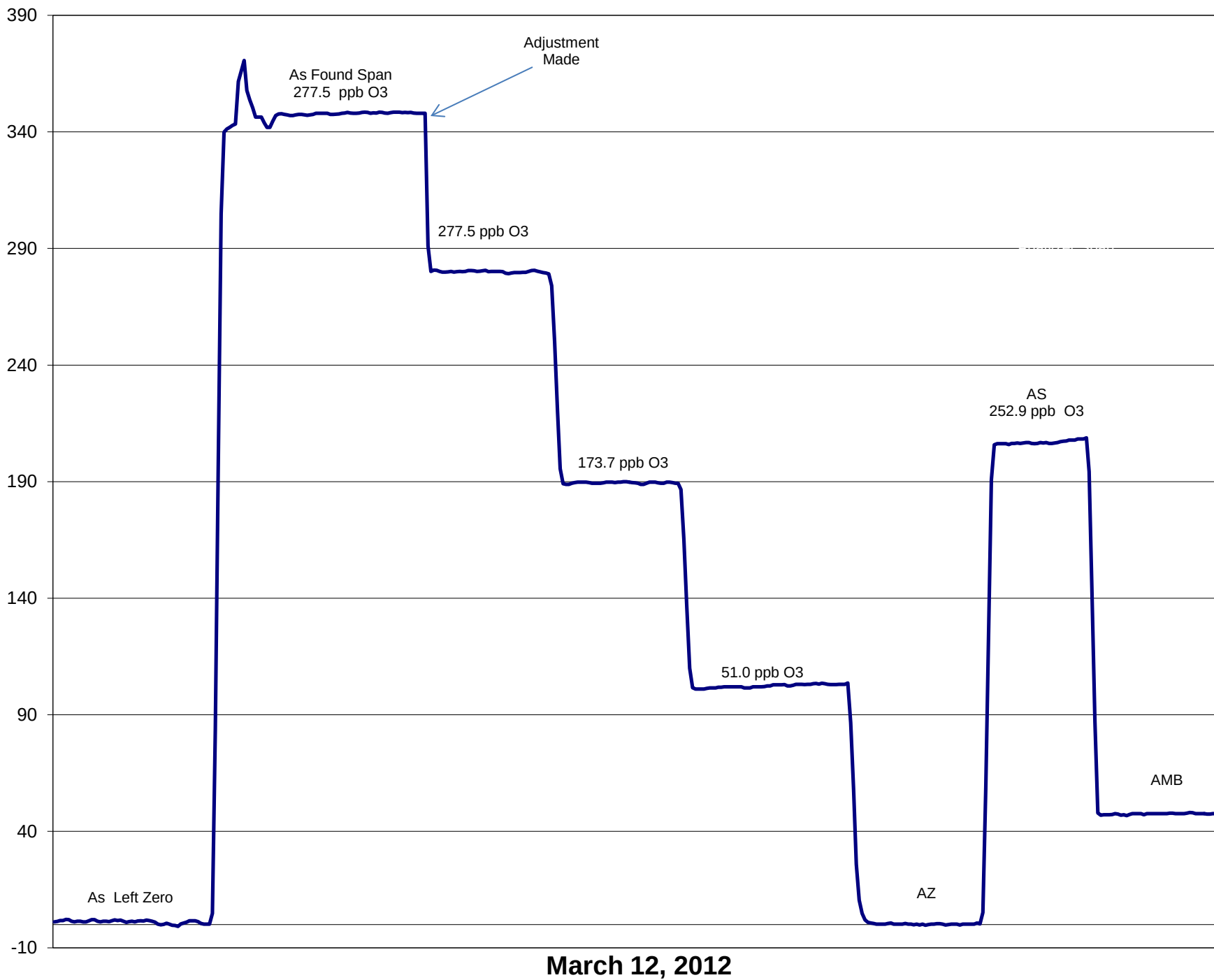
Calibration Date	March 12, 2012	Previous Calibration	February 21, 2012
Station Number	9	Station Location	Sunset House
Start Time (MST)	14:08	End Time (MST)	17:31
Analyzer make/model	TEI Model 49C	Analyzer serial #	49C-0609716240

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	NA	Correlation Coefficient	0.999695
277.4	280.0	0.9907		
190.5	189.6	1.0048		
99.2	103.0	0.9635	Slope	0.997642
			Intercept	-1.135493

O3 Calibration Curve





FOCUS
AIR QUALITY MONITORING

Calibration Date		March 13, 2012		Previous Calibration		February 15, 2012	
Station Name		PAZA Rover		Station Location		Sunset House	
Reason:	Routine	Install		Removal		Other:	
Start Time (MST)	6:35			End Time (MST)	10:10		
Barometric Pressure	27.5	inches Hg		Station Temperature	20.0	Deg C	
Calibrator	EnviroNics 6100			Serial Number	3016		
Cal Gas Concentration	5.02	ppm		Cal Gas Expiry Date	6/11/2011		
Gas Cert Reference	BLM001715						
DACS make	CR3000			DACS serial No.	5407		
DACS voltage range	0 - 5 Volt			DACS channel #	1		
	<u>Before</u>				<u>After</u>		
DACS Scale High	100			DACS slope	100		
DACS Scale Low	0			DACS intercept	0		
Calculated slope	1.029385			Calculated slope	0.994912		
Calculated intercept	0.161234			Calculated intercept	1.037080		
Analyzer make	TEI 43C			Analyzer serial #	609716238		

Calibration Data

Calculated value of As Found Response: 79.67 ppm Percent Change of As Found: -0.8%

Notes: cal went well, minor adjustment made to span only

318 of 320

Calibration Summary

Parameter TRS

Air Monitoring Network PASZA



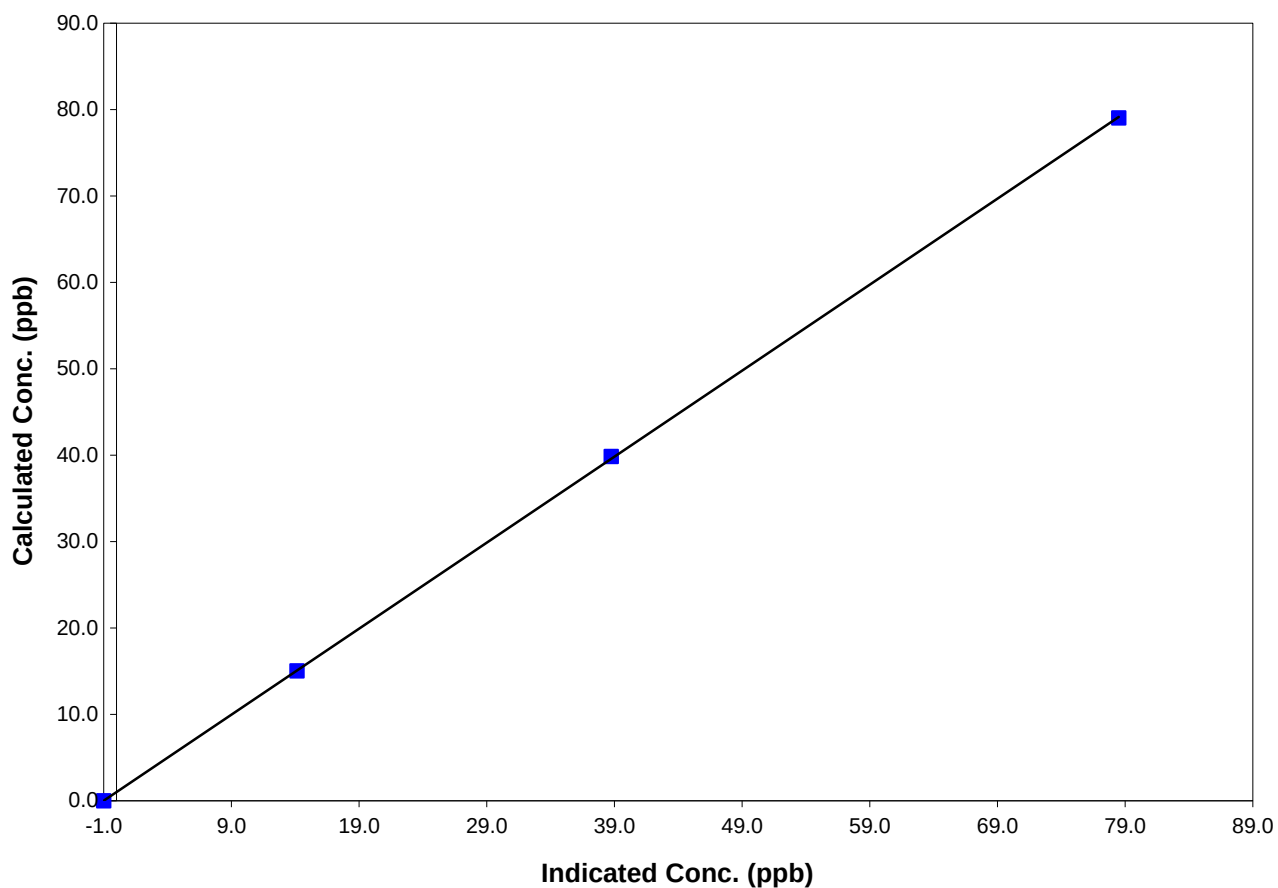
Station Information

Calibration Date	March 13, 2012	Previous Calibration	February 15, 2012
Station Number	PAZA Rover	Station Location	Sunset House
Start Time (MST)	6:35	End Time (MST)	10:10
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.0	N/A	Correlation Coefficient	0.999978
79.0	78.5	1.0068		
39.8	38.8	1.0279		
15.0	14.1	1.0620	Slope	0.994912
			Intercept	1.037080

TRS Calibration Curve



TRS Calibration

