



Peace AirShed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
February 2010**

Operations and Reporting
FOCUS
AIR QUALITY MONITORING



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April 13, 2010

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RE: Peace Airshed Zone Association (PASZA) – February 2010 Ambient Air Report

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **February 2010**.

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

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 Summary" and "Continuous Monitoring" pages of the report.

During the month of February 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, except for PM_{2.5} which exceeded the 24-hour AAAQO of 30 µg/m³ and exceeded the 1-hour Alberta Ambient Air Quality Guideline (AAQG) of 80 µg/m³:
 - February 6th 33.8 µg/m³ **Alberta Environment Reference #224056**
 - February 12th 102.4 µg/m³ **Alberta Environment Reference #223980**
- ◆ All analyzers and sensors at the Henry Pirker station had an operational uptime greater than 90% for the month of February.

Evergreen Park Station:

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

Smoky Heights Station:

- ◆ The measured ambient air quality was within the AAAQO for the Smoky Heights station. However, the PM_{2.5} exceeded the 1-hour AAQG of 80 µg/m³ twice during the month of February:
 - February 1st 18:00: 83.7 µg/m³ **Alberta Environment Reference #223491**
 - February 3rd 13:00: 106.3 µg/m³ **Alberta Environment Reference #224019**
- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of February.

Beaverlodge Station:

- ◆ The measured ambient air quality was within the AAAQO for the Beaverlodge station, except for PM_{2.5} which exceeded the 24-hour AAAQO of 30 µg/m³
 - February 13th 30.6 µg/m³ **Alberta Environment Reference #224131**

- ◆ All analyzers / sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of February.

Portable – Kinuso Station:

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

Valleyview Station:

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

Passive Monitoring - 43 Stations throughout the PASZA zone:

There were four duplicate sites sampled in the month of February: Poplar, Fitzsimmons, Crooked Creek and Kinuso. The NO₂ passive sample was found damaged at the Shaftesbury Site; consequently there is no passive result for said sample. The passive sample analyses were performed by MAXXAM Analytics Inc.

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

- Monthly average concentrations for SO₂ passives ranged from 0.2 ppb to 1.1 ppb, with a mean of 0.6 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.9 ppb to 14.4 ppb, with a mean of 3.1 ppb.
- Monthly average concentrations for O₃ passives ranged from 23.4 ppb to 31.7 ppb, with a mean of 71.7 ppb.

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

On Behalf of the,
Peace Airshed Zone Association

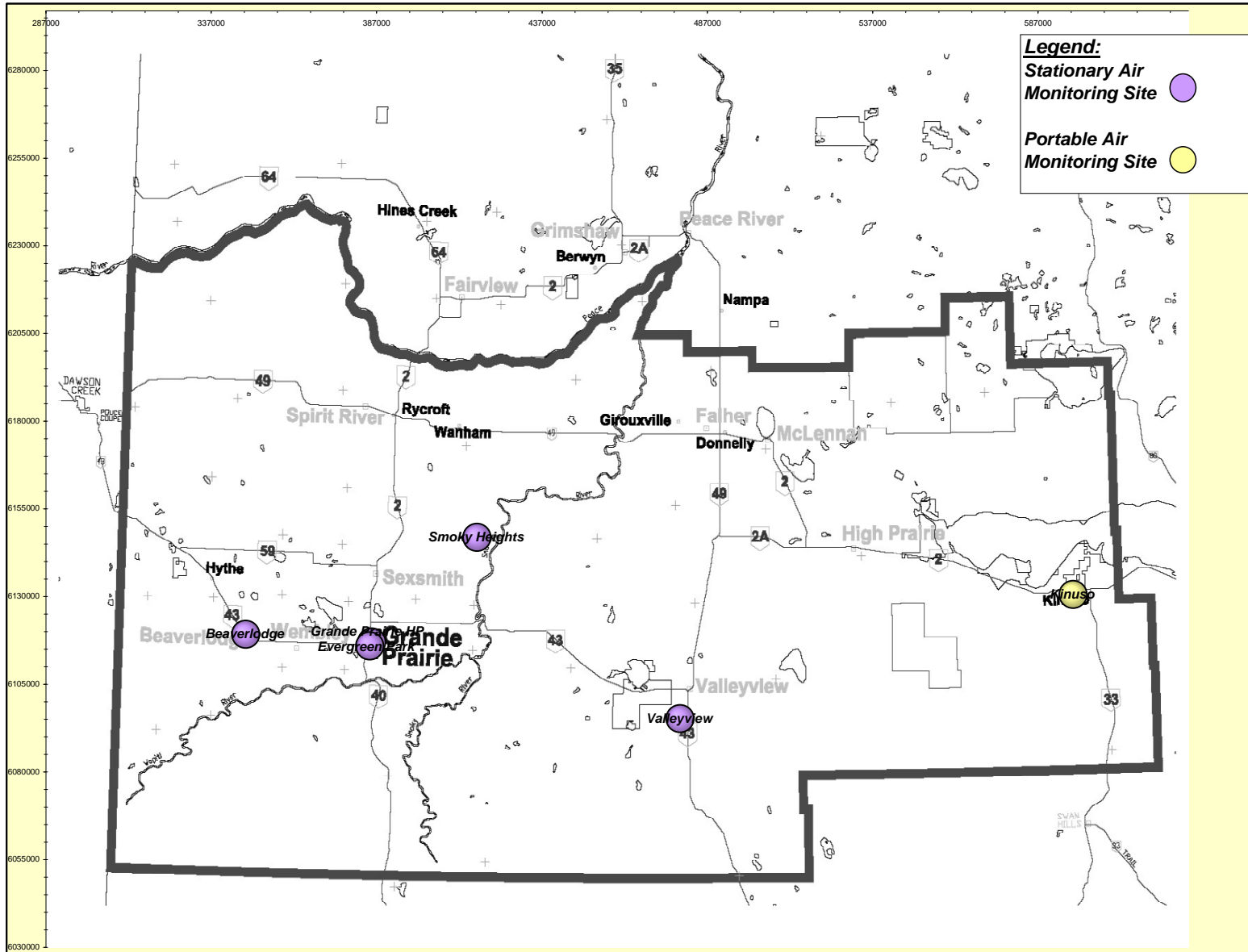


Shelly Pruden
Program Manager



Sharon Whiteley, B.Sc..
FOCUS AQM Data Specialist

Location of PASZA Continuous Monitoring Stations



PASZA Monthly Continuous Data Summary

Feb-2010 Peace Airshed Zone Association							Maximum Recorded Values				Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr		24-hr / 8-hr		
	1-hr	24-hr			1-hr	24-hr	Conc	Day	Conc	Day	
SO ₂ (ppb)	172	57	Henry Pirker	0.9	0	0	3.4	Feb-01 01:00	1.8	Feb-01	100.0%
SO ₂ (ppb)	172	57	Evergreen Park	0.5	0	0	2.2	Feb-19 15:00	1.2	Feb-06	100.0%
SO ₂ (ppb)	172	57	Smoky Heights	1.1	0	0	16.6	Feb-07 16:00	2.6	Feb-07	99.9%
SO ₂ (ppb)	172	57	Beaverlodge	0.8	0	0	2.7	Feb-27 03:00	1.8	Feb-27	99.9%
SO ₂ (ppb)	172	57	Portable-Kinuso	0.6	0	0	8.2	Feb-07 14:00	3.2	Feb-07	100.0%
SO ₂ (ppb)	172	57	Valleyview	0.4	0	0	7.8	Feb-17 20:00	0.8	Feb-09	93.9%
NO (ppb)			Henry Pirker	18.6	-	-	151.7	Feb-24 09:00	44.6	Feb-25	99.9%
NO ₂ (ppb)	212	106	Henry Pirker	24.6	0	0	55.1	Feb-17 20:00	37.1	Feb-25	99.9%
NO _x (ppb)			Henry Pirker	43.4	-	-	204.6	Feb-24 09:00	82.2	Feb-25	99.9%
NO (ppb)			Beaverlodge	3.6	-	-	54.4	Feb-10 15:00	15.1	Feb-07	99.9%
NO ₂ (ppb)	212	106	Beaverlodge	10.5	0	0	32.2	Feb-09 02:00	21.9	Feb-07	99.9%
NO _x (ppb)			Beaverlodge	14.2	-	-	86.0	Feb-10 15:00	37.2	Feb-07	99.9%
NO (ppb)			Portable-Kinuso	0.8	-	-	13.0	Feb-05 08:00	2.5	Feb-05	100.0%
NO ₂ (ppb)	212	106	Portable-Kinuso	5.3	0	0	22.5	Feb-07 04:00	12.3	Feb-07	100.0%
NO _x (ppb)			Portable-Kinuso	6.1	-	-	23.4	Feb-09 19:00	14.2	Feb-07	100.0%
O ₃ (ppb)	82		Henry Pirker	10.4	0	-	35.7	Feb-27 16:00	24.2	Feb-27	99.6%
O ₃ (ppb) - 8-hr			Henry Pirker		0				31.4	Feb-26	
O ₃ (ppb)	82		Beaverlodge	23.2	0	-	44.9	Feb-26 16:00	38.2	Feb-26	99.9%
O ₃ (ppb) - 8-hr			Beaverlodge		0				42.5	Feb-26	
O ₃ (ppb)	82		Portable-Kinuso	25.1	0	-	43.8	Feb-26 21:00	35.4	Feb-26	100.0%
O ₃ (ppb) - 8-hr			Portable-Kinuso		0				42.0	Feb-26	
CO (ppm)	13		Henry Pirker	0.34	0	-	1.6	Feb-17 20:00	0.5	Feb-25	99.9%
CO (ppm) - 8-hr		5	Henry Pirker		0				0.7	Feb-25	
THC (ppm)			Henry Pirker	2.65	-	-	4.1	Feb-08 10:00	3.5	Feb-08	99.9%
TRS (ppb)			Henry Pirker	0.5	-	-	11.0	Feb-17 20:00	0.9	Feb-07	100.0%
TRS (ppb)			Evergreen Park	0.9	-	-	2.4	Feb-10 21:00	1.3	Feb-08	100.0%
TRS (ppb)			Smoky Heights	0.2	-	-	0.8	Feb-13 05:00	0.4	Feb-06	99.9%
TRS (ppb)			Portable-Kinuso	0.5	-	-	0.8	Feb-24 18:00	0.6	Feb-06	100.0%
H ₂ S (ppb)	10	3	Valleyview	0.2	0	0	2.8	Feb-11 23:00	0.4	Feb-11	100.0%
PM _{2.5} (µg/m ³)	80	30	Henry Pirker	18.8	1	1	102.4	Feb-12 18:00	33.8	Feb-06	97.9%
PM _{2.5} (µg/m ³)	80	30	Evergreen Park	9.1	0	0	45.6	Feb-06 02:00	24.1	Feb-06	99.7%
PM _{2.5} (µg/m ³)	80	30	Smoky Heights	7.9	2	0	106.3	Feb-03 22:00	20.2	Feb-06	99.4%
PM _{2.5} (µg/m ³)	80	30	Beaverlodge	14.5	0	1	44.5	Feb-13 16:00	30.6	Feb-13	99.7%

PASZA Monthly Continuous Data Summary – continued

Feb-2010		Peace Airshed Zone Association					Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
RH (%)			Henry Pirker	73.4	-	-	86.5	Feb-28 00:00	80.0	Feb-22	100.0%
RH (%)			Evergreen Park	80.2	-	-	94.3	Feb-17 01:00	89.7	Feb-03	100.0%
RH (%)			Beaverlodge	76.5	-	-	94.6	Feb-09 23:00	90.6	Feb-05	99.9%
RH (%)			Valleyview	74.0	-	-	95.9	Feb-17 02:00	90.3	Feb-03	100.0%
SR (W/m ²)			Henry Pirker	52.4	-	-	355.7	Feb-24 14:00	86.7	Feb-24	100.0%
Temp (°C)			Henry Pirker	-8.3	-	-	9.4	Feb-25 15:00	-0.8	Feb-26	100.0%
Temp (°C)			Evergreen Park	-7.0	-	-	8.6	Feb-25 16:00	0.2	Feb-26	100.0%
Temp (°C)			Smoky Heights	-7.7	-	-	6.9	Feb-24 17:00	-0.9	Feb-26	99.9%
Temp (°C)			Beaverlodge	-4.8	-	-	9.4	Feb-24 14:00	1.7	Feb-25	99.9%
Temp (°C)			Portable-Kinuso	-6.4	-	-	10.8	Feb-26 15:00	2.4	Feb-26	100.0%
Temp (°C)			Valleyview	-5.9	-	-	9.3	Feb-25 17:00	1.5	Feb-26	100.0%
WSPD s (km/hr)			Henry Pirker	4.5	-	-	13.0	Feb-17 14:00	6.3	Feb-13	100.0%
WSPD s (km/hr)			Evergreen Park	2.4	-	-	12.0	Feb-18 14:00	4.5	Feb-26	100.0%
WSPD s (km/hr)			Smoky Heights	7.8	-	-	20.0	Feb-17 08:00	12.0	Feb-26	99.9%
WSPD s (km/hr)			Beaverlodge	4.7	-	-	30.0	Feb-25 17:00	8.5	Feb-26	99.9%
WSPD s (km/hr)			Portable-Kinuso	6.0	-	-	23.0	Feb-14 10:00	12.3	Feb-13	100.0%
WSPD s (km/hr)			Valleyview	4.2	-	-	17.0	Feb-13 21:00	11.1	Feb-13	100.0%
WSPD v (km/hr)			Henry Pirker	1.9	-	-	13.0	Feb-17 14:00	4.6	Feb-13	100.0%
WSPD v (km/hr)			Evergreen Park	0.7	-	-	12.0	Feb-18 14:00	3.9	Feb-17	100.0%
WSPD v (km/hr)			Smoky Heights	2.3	-	-	20.0	Feb-17 08:00	9.8	Feb-26	99.9%
WSPD v (km/hr)			Beaverlodge	0.7	-	-	30.0	Feb-25 17:00	6.5	Feb-25	99.9%
WSPD v (km/hr)			Portable-Kinuso	3.5	-	-	23.0	Feb-14 10:00	11.9	Feb-13	100.0%
WSPD v (km/hr)			Valleyview	1.2	-	-	17.0	Feb-13 21:00	11.0	Feb-13	100.0%
WDIR			Henry Pirker	NW	-	-	-	-	-	-	100.0%
WDIR			Evergreen Park	NNW	-	-	-	-	-	-	100.0%
WDIR			Smoky Heights	W	-	-	-	-	-	-	99.9%
WDIR			Beaverlodge	NNE	-	-	-	-	-	-	99.9%
WDIR			Portable-Kinuso	S	-	-	-	-	-	-	100.0%
WDIR			Valleyview	SSW	-	-	-	-	-	-	100.0%

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on February 9th (TRS, THC & CO) and February 10th (SO₂, NO_x, O₃ & PM_{2.5}). On February 19th a School Education Station Tour was conducted – which resulted in one or two hours being flagged for maintenance (for operation demonstration purposes).

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
NO _x /NO/NO ₂	TEI	42C	One (1) hour flagged maintenance on February 19 th .
O ₃	TEI	49C	Spans were outside target from February 1 st to 10 th – rebuilt sample pump. One (1) hour flagged invalid due to influence from other analyzer calibration. Two (2) hour flagged maintenance on February 19 th .
CO	TEI	48C	One (1) hour flagged maintenance on February 19 th .
THC	TEI	51-CLT	One (1) hour flagged maintenance on February 19 th .
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Two (2) hours were flagged for maintenance on February 19 th . Twelve (12) hours were flagged invalid due to baseline drift. One (1) 1-hour exceedence of the AAAQG: <ul style="list-style-type: none"> ◆ February 12th: 18:00: 102 µg/m³ – AE Reference #223980. One (1) 24-hour exceedence of the AAAQO: <ul style="list-style-type: none"> ◆ February 6th: 33.8 µg/m³ – AE Reference #224056
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	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on February 17th (SO₂, TRS & PM_{2.5}). Installed new Raven X modem February 17th.

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	One (1) hour was flagged invalid due to influence from other analyzer calibration. One (1) hour was flagged for baseline drift.
ET	Met One/Gill	083D	No operational issues observed.
RH	Met One/Gill		No operational issues observed.
WS	Met One/ Gill	010C	No operational issues observed.
WD	Met One/ Gill	020C	No operational issues observed.

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on February 20th (TRS, SO₂ & PM_{2.5}). One (1) hour of data was flagged invalid due to communication/DACS error on March 1st – for all parameters. Installed new Raven X modem February 24th.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No other operational issues observed.
TRS	TEI	43C	No other operational issues observed.
PM _{2.5}	R&P	1400AB	Two (2) 1-hour exceedence of the AAAQG: <ul style="list-style-type: none"> ◆ February 1st: 18:00: 84 µg/m³ – AE Reference #223491. ◆ February 3rd: 22:00: 106 µg/m³ – AE Reference #224019. Three (3) hours were flagged for baseline drift.
ET	Met One	083D	No other operational issues observed.
WS	Met One	010C	No other operational issues observed.
WD	Met One	020C	No other operational issues observed.

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on February 11th (SO₂, O₃ & NO_x & PM_{2.5}). One (1) hour of data was flagged invalid due to communication/DACS error on March 1st – for all parameters. Installed new Raven X modem February 17th.

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No other operational issues observed.
NO _x /NO/NO ₂	TEI	42C	No other operational issues observed.
O ₃	TEI	49C	No other operational issues observed.
PM _{2.5}	R&P	1400AB	One (1) 24-hour exceedence of the AAAQO: February 13 th : 30.6 µg/m ³ – AE Reference #224056 . One (1) hour was flagged for baseline drift.
ET	n/a	n/a	No other operational issues observed.
RH	n/a	n/a	No other operational issues observed.
WS	Blue Sky	857	No other operational issues observed.
WD	Blue Sky	857	No other operational issues observed.

PASZA – Kinuso (Portable) Station

General Station Issues

Routine monthly calibrations were performed on February 22nd (SO₂, TRS, NO_x & O₃). Installed new Raven modem February 22nd.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
NO _x /NO/NO ₂	TEI	42I	Replaced sample pump during calibration.
O ₃	TEI	49C	No operational issues observed.
ET	Met One		No operational issues observed.
WS	Met One		No operational issues observed.
WD	Met One		No operational issues observed.

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed February 18th (SO₂ & H₂S). Installed new Raven modem February 18th.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	Spans were outside target from February 1 st to 18 th and forty-one (41) hours were flagged for baseline drift – all issues were addressed on February 18 th (new lamp and socket was installed in analyzer).
H ₂ S	TEI	43A	No operational issues observed.
ET	Gill	Met Pak 3	No operational issues observed.
RH	Gill	Met Pak 3	No operational issues observed.
WS	Gill	Met Pak 3	No operational issues observed.
WD	Gill	Met Pak 3	No operational issues observed.

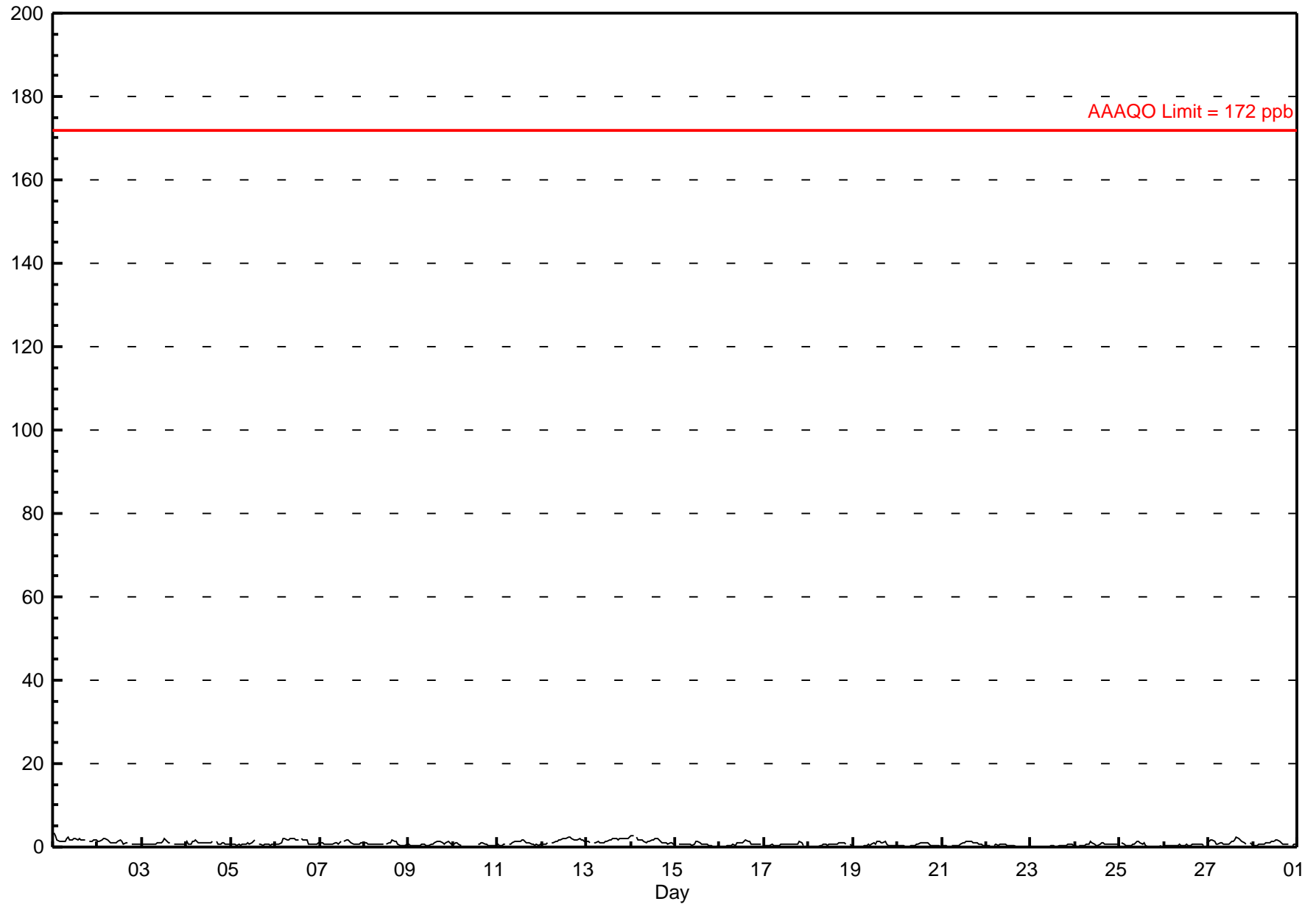
PASZA
Henry Pirker Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - February 2010

Number of Exceedences (AAAQO):		1-hr: 0		24-hr: 0		Hours in Service:		672																			
Maximum Value: 3.4 ppb on Feb 1 01:00		Maximum Daily Average: 1.8 ppb on Feb 1		Minimum Value: 0 ppb on Feb 23 04:00		Minimum Daily Average: 0.2 ppb on Feb 23		Hours of Data: 640																			
Maximum Diurnal Average: 1.2 ppb at hour 15		Minimum Diurnal Average: 0.6 ppb at hour 3		Hours of Missing Data: 32		Hours of Calibration: 32		Hours of Calibration: 32																			
Monthly Average: 0.85 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.5 Median = 0.7 Q ₃ = 1.2 P ₉₀ = 1.7 P ₉₉ = 2.4		Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	3	3	2	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	A	1	1	1	2	2	1.8	3.4	
2-Feb	1	1	2	2	2	2	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	1.2	2.2	
3-Feb	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	A	1	1	1	1	1	1	1	1	0.9	2.0	
4-Feb	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.0	1.6	
5-Feb	1	1	1	0	1	1	1	1	1	1	1	1	1	2	A	1	1	0	1	1	1	0	1	1	0.7	1.5	
6-Feb	1	1	1	1	2	2	2	2	2	2	2	2	2	A	2	2	2	2	1	1	1	1	1	1	1.4	2.2	
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	2	1	1	1	1	1	1	1	1	0.9	1.6	
8-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1	0	0	0	1	0.8	1.6	
9-Feb	1	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3	
10-Feb	1	1	1	1	0	A	0	0	0	C	C	C	C	1	1	1	1	1	1	1	0	0	0	0	0.6	1.1	
11-Feb	1	0	0	1	1	A	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	0	1	0	0.9	1.6	
12-Feb	1	1	1	1	A	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.6	2.2	
13-Feb	1	1	1	A	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1.6	2.2	
14-Feb	3	3	A	2	2	2	2	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	1	1	1.5	2.8	
15-Feb	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.6	1.4	
16-Feb	A	0	0	0	0	0	0	1	0	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0.7	1.6	
17-Feb	0	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	0.5	1.4
18-Feb	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0.5	1.1	
19-Feb	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.5	1.4	
20-Feb	0	0	0	0	0	A	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.2	
21-Feb	0	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.4	
22-Feb	0	0	0	A	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8	
23-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.2	0.7	
24-Feb	0	A	0	0	0	0	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0.6	1.4	
25-Feb	A	1	1	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0.5	1.2	
26-Feb	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1	1	1	1	1	0	A	1	0.5	1.0	
27-Feb	1	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	A	1	1	1.2	2.4	
28-Feb	0	0	0	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	A	0	1	1	0.8	1.8	
	0.8	0.8	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1.1	1.2	1.1	1.2	1.1	1.1	1.0	0.8	0.7	0.7	0.7	0.7	0.7	Diurnal Average		
	3.4	2.8	1.8	2.4	2.2	1.9	1.7	1.9	2.3	2.1	1.9	2.1	2.1	2.0	2.2	2.4	2.2	1.9	1.9	2.1	2.0	2.2	2.1	2.2	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 172 ppb		24-hr 57 ppb																							



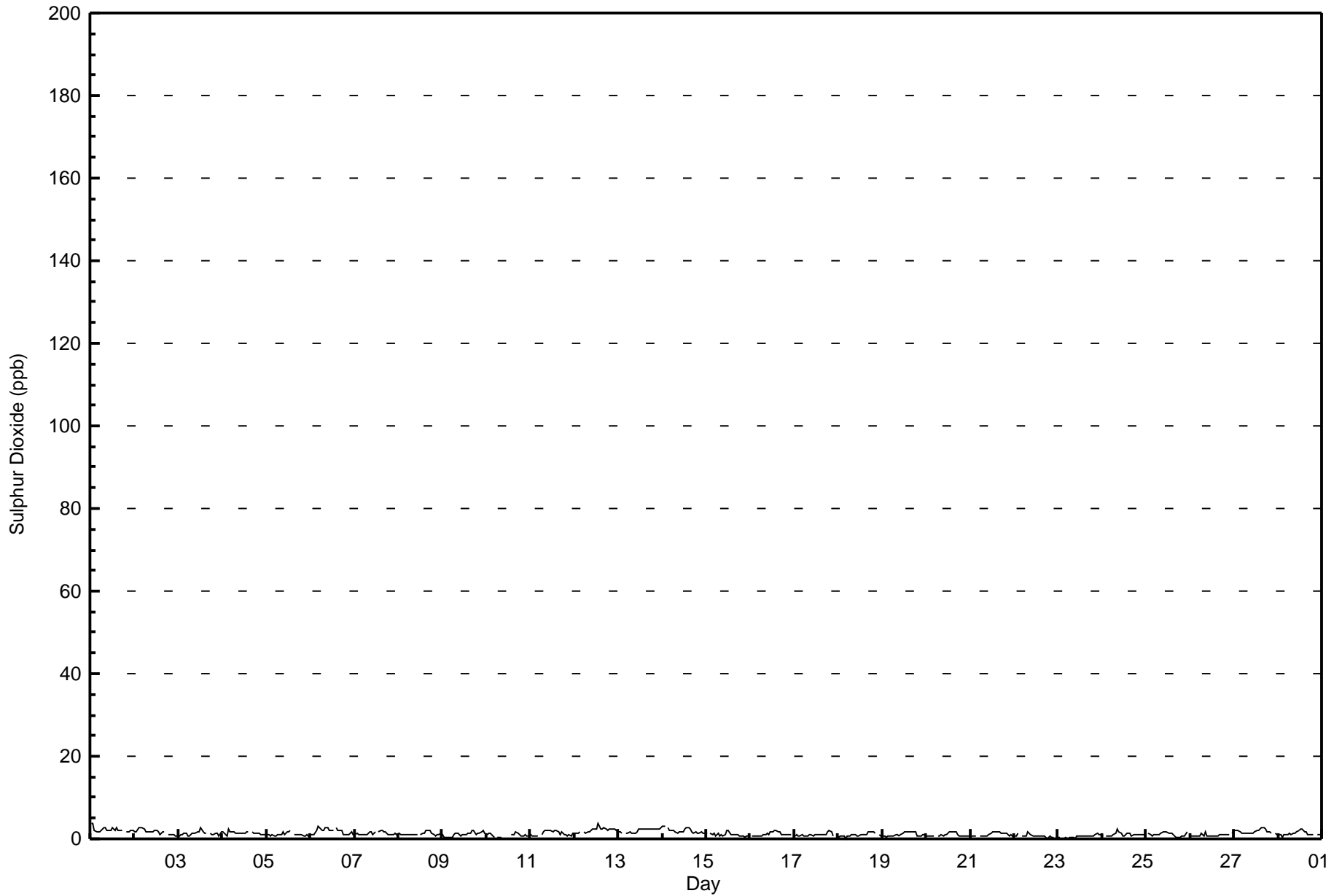
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - February 2010

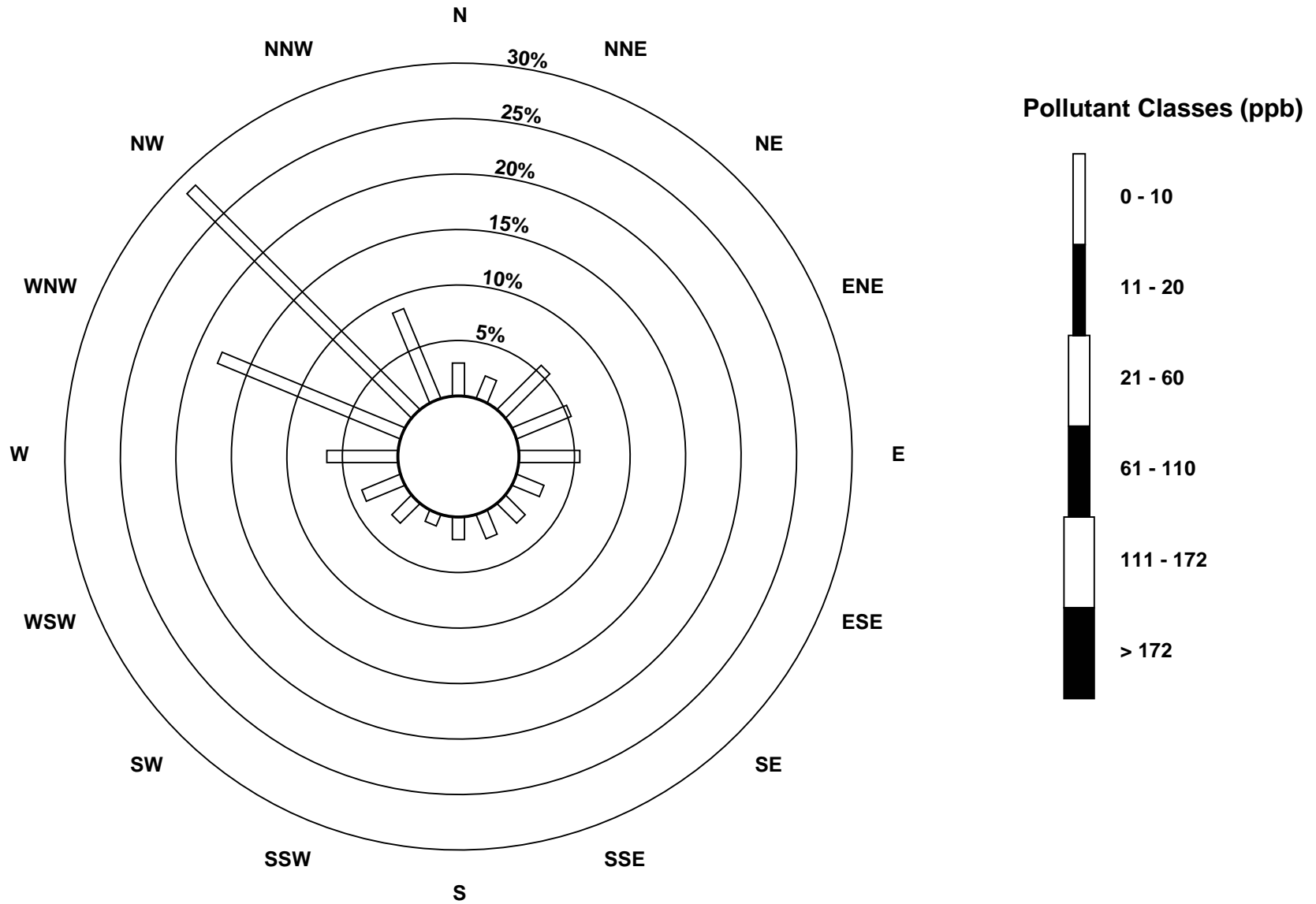
Maximum Value: 3.7 ppb on Feb 1 01:00		Maximum Daily Average: 2.2 ppb on Feb 1		Hours in Service: 672																						
Minimum Value: 0 ppb on Feb 23 04:00		Minimum Daily Average: 0.5 ppb on Feb 23		Hours of Data: 640																						
Maximum Diurnal Average: 1.6 ppb at hour 14		Minimum Diurnal Average: 1.0 ppb at hour 3		Hours of Missing Data: 32																						
Monthly Average: 1.27 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.6 Q ₁ = 0.8 Median = 1.1 Q ₃ = 1.6 P ₉₀ = 2.1 P ₉₉ = 2.9		Hours of Calibration: 32																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	4	4	2	2	2	2	3	3	3	2	2	3	2	3	2	2	2	A	2	2	2	2	2	2	2.2	3.7
2-Feb	2	2	3	3	3	2	2	2	2	2	2	2	2	1	2	2	A	1	1	1	1	1	1	1	1.6	2.6
3-Feb	1	1	1	1	1	1	1	1	1	2	2	3	2	1	1	A	1	1	1	1	1	1	2	1.3	2.8	
4-Feb	2	1	1	2	2	2	2	1	1	1	1	1	2	2	A	2	1	1	1	1	1	1	1	1.4	2.3	
5-Feb	1	1	1	1	1	1	1	1	1	2	1	2	2	2	A	1	1	1	1	1	1	1	1	1.1	1.9	
6-Feb	1	1	1	2	3	3	2	2	3	3	2	2	2	A	3	2	2	2	1	1	1	1	2	1.9	3.1	
7-Feb	1	1	1	1	1	1	1	1	2	2	1	2	A	2	2	2	2	2	1	1	1	1	1	1.3	2.1	
8-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	2	2	2	2	1	1	1	1	1	1.2	2.0	
9-Feb	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	2	2	1	1	1	2	2	1.1	2.0	
10-Feb	1	1	1	1	0	A	0	0	0	C	C	C	C	1	1	1	2	1	1	1	1	1	1	0.9	1.6	
11-Feb	1	1	1	1	1	A	1	2	2	2	2	2	2	2	2	2	1	2	1	1	1	1	1	1.3	2.1	
12-Feb	1	1	1	2	A	2	1	2	2	2	2	2	4	2	2	3	2	2	2	2	2	2	2	2.1	3.7	
13-Feb	2	2	1	A	1	1	2	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2.0	2.7	
14-Feb	3	3	A	3	2	2	2	2	1	2	2	2	3	3	2	2	1	2	1	1	2	1	1	2.0	3.2	
15-Feb	1	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	0	1	1.0	1.9	
16-Feb	A	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	A	1.1	2.0	
17-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	A	1	0.9	2.1	
18-Feb	0	1	1	1	0	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	A	1	0.9	1.5	
19-Feb	1	1	0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1.0	1.8	
20-Feb	1	1	1	1	1	A	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	0.9	1.6	
21-Feb	1	1	1	1	A	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1.1	1.7	
22-Feb	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0.7	1.8	
23-Feb	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.5	1.4	
24-Feb	1	A	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.2	
25-Feb	A	1	1	1	1	1	1	1	1	2	2	2	1	1	1	0	0	0	1	1	1	2	A	1.0	1.8	
26-Feb	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.7	
27-Feb	2	2	2	2	1	1	1	1	1	1	2	2	2	2	3	3	2	2	2	2	1	A	1	1.7	2.9	
28-Feb	1	1	0	1	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	A	1	1	1.3	2.5	
	1.2	1.2	1.0	1.1	1.1	1.1	1.1	1.2	1.3	1.3	1.3	1.5	1.6	1.6	1.6	1.5	1.5	1.4	1.2	1.2	1.1	1.1	1.2	1.1	Diurnal Average	
	3.7	3.7	2.6	2.9	3.1	2.7	2.5	2.6	2.6	2.6	2.3	2.4	2.8	3.7	2.7	2.9	2.8	2.4	2.3	2.4	2.4	2.5	2.4	2.7	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																								

Hourly Maximums for SO₂ at Henry Pirker February 2010



Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Henry Pirker - February 2010



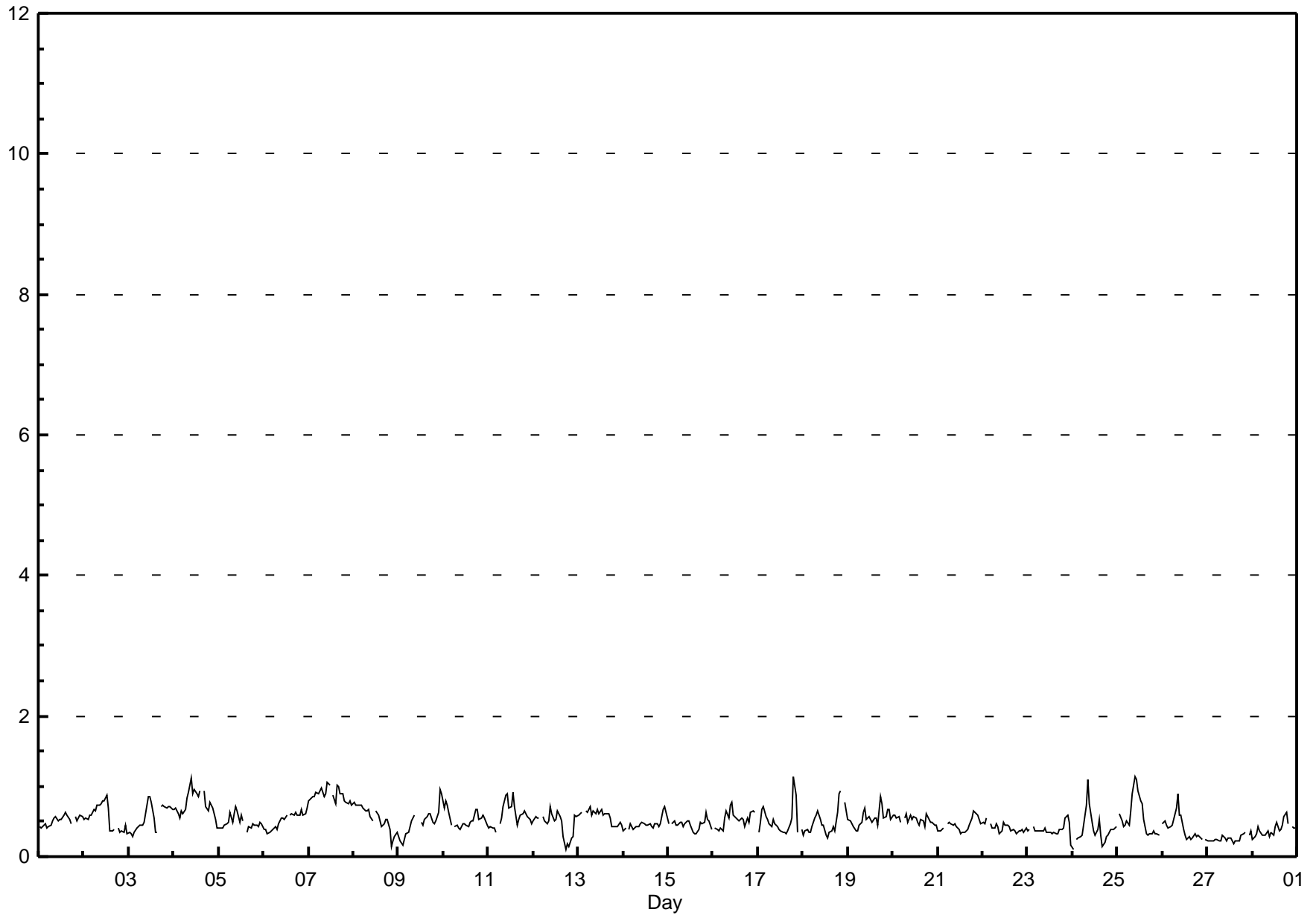
Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.1 ppb on Feb 17 20:00 Maximum Daily Average: 0.9 ppb on Feb 7		Hours in Service: 672 Hours of Data: 641 Hours of Missing Data: 31 Hours of Calibration: 31 Percent Operational Time: 100.0																								
Minimum Value: 0 ppb on Feb 12 18:00 Maximum Diurnal Average: 0.6 ppb at hour 10 Monthly Average: 0.51 ppb		Minimum Daily Average: 0.3 ppb on Feb 27 Minimum Diurnal Average: 0.4 ppb at hour 16 Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.6 P ₉₀ = 0.7 P ₉₉ = 1.0																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	0.5	0.6
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0.6	0.9
3-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	A	1	1	1	1	1	1	1	0.6	0.9
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.1
5-Feb	0	0	0	0	0	0	1	0	1	1	1	0	1	1	A	0	0	0	0	0	0	0	0	0	0.5	0.7
6-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.5	0.7
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
8-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	1	1	1	0	0	0	0	0.5	0.8
9-Feb	0	0	0	0	0	0	0	1	1	1	C	C	A	0	0	1	1	1	1	0	0	1	1	1	0.5	0.9
10-Feb	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0.5	0.8
11-Feb	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	0.6	0.9
12-Feb	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	0.5	0.7
13-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.6	0.7
14-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	0.7
15-Feb	0	A	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0.5	0.6
16-Feb	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	1	1	A	0.5	0.8
17-Feb	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	A	0	0.5	1.1
18-Feb	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	1	A	1	0.5	0.9
19-Feb	1	1	0	0	0	0	0	0	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	0.6	0.8
20-Feb	1	1	1	1	0	A	1	1	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0	0	0.5	0.6
21-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0.4	0.7
22-Feb	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
23-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4	0.6
24-Feb	0	A	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.4	1.1
25-Feb	A	1	1	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0.6	1.1
26-Feb	0	1	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.9
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4
28-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	0	0	0	0.4	0.6
																								Diurnal Average	Diurnal Maximum	
																								0.4	0.8	
																								0.5	0.8	
																								0.5	0.9	
																								0.5	0.9	
																								0.5	0.9	
																								0.5	0.9	
																								0.5	0.9	
																								0.5	1.0	
																								0.6	1.1	
																								0.6	1.1	
																								0.6	1.1	
																								0.6	1.0	
																								0.5	0.9	
																								0.5	0.9	
																								0.5	0.9	
																								0.4	1.0	
																								0.5	1.0	
																								0.5	0.9	
																								0.5	0.9	
																								0.5	1.1	
																								0.5	0.9	
																								0.5	0.8	
																								0.5	0.9	
																								0.5	0.9	

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

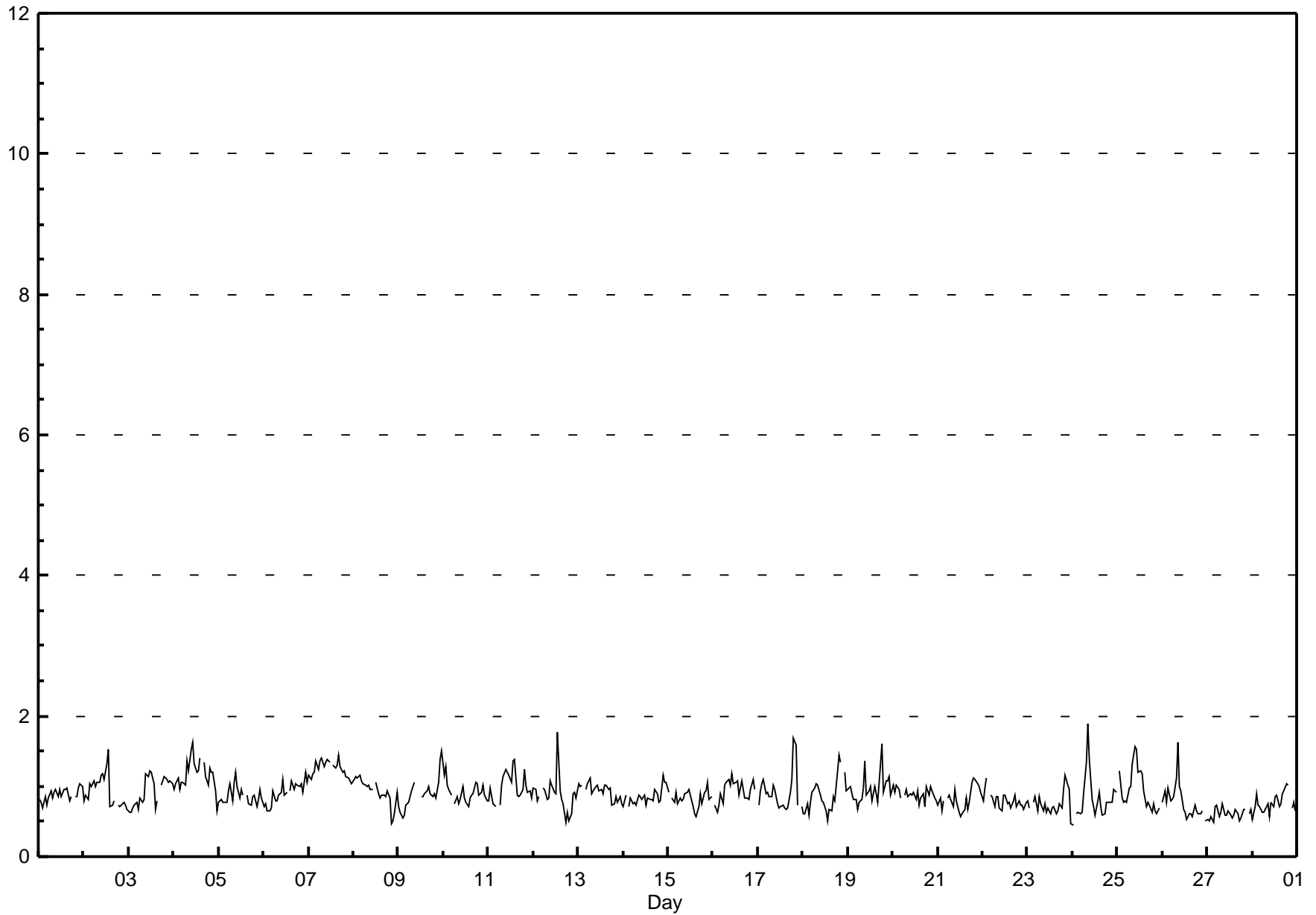


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2010

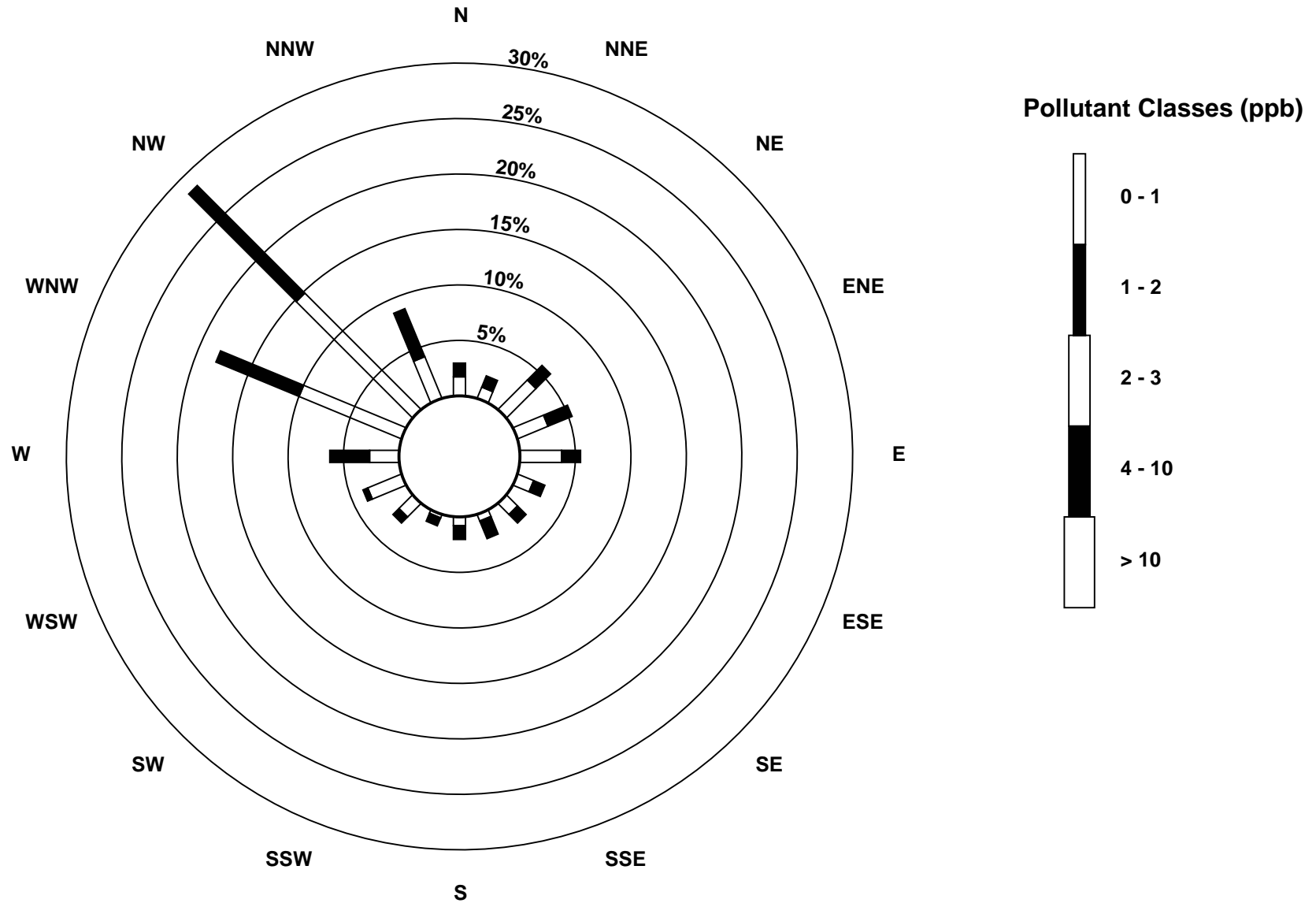
Maximum Value: 1.9 ppb on Feb 24 09:00		Maximum Daily Average: 1.2 ppb on Feb 7		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 24 01:00		Minimum Daily Average: 0.6 ppb on Feb 27		Hours of Data: 641																							
Maximum Diurnal Average: 1.0 ppb at hour 10		Minimum Diurnal Average: 0.8 ppb at hour 1		Hours of Missing Data: 31																							
Monthly Average: 0.89 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.9 Q ₃ = 1.0 P ₉₀ = 1.2 P ₉₉ = 1.6		Hours of Calibration: 31																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.9	1.0	
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	A	1	1	1	1	1	1	0.9	1.5	
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.2	
4-Feb	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	1.6	
5-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.2	
6-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.9	1.2	
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.2	1.4	
8-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	1	1	0.9	1.2	
9-Feb	1	1	1	1	1	1	1	1	1	1	C	C	A	1	1	1	1	1	1	1	1	1	1	2	0.9	1.5	
10-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3	
11-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4	
12-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	2	1	1	1	0	1	1	1	1	1	1	0.9	1.8	
13-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.1	
14-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
15-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
16-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.2	
17-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	A	1	0.9	1.7	
18-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4	
19-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1.0	1.6	
20-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0	
21-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
22-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1	
23-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	1.2	
24-Feb	0	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.9	
25-Feb	A	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.6	
26-Feb	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.6	
27-Feb	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	1	1	0.6	0.8	
28-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.0	
		0.8	0.9	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	Diurnal Average	
		1.2	1.3	1.2	1.2	1.4	1.2	1.4	1.4	1.9	1.6	1.6	1.3	1.3	1.8	1.4	1.3	1.4	1.3	1.6	1.7	1.6	1.2	1.4	1.5	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - February 2010

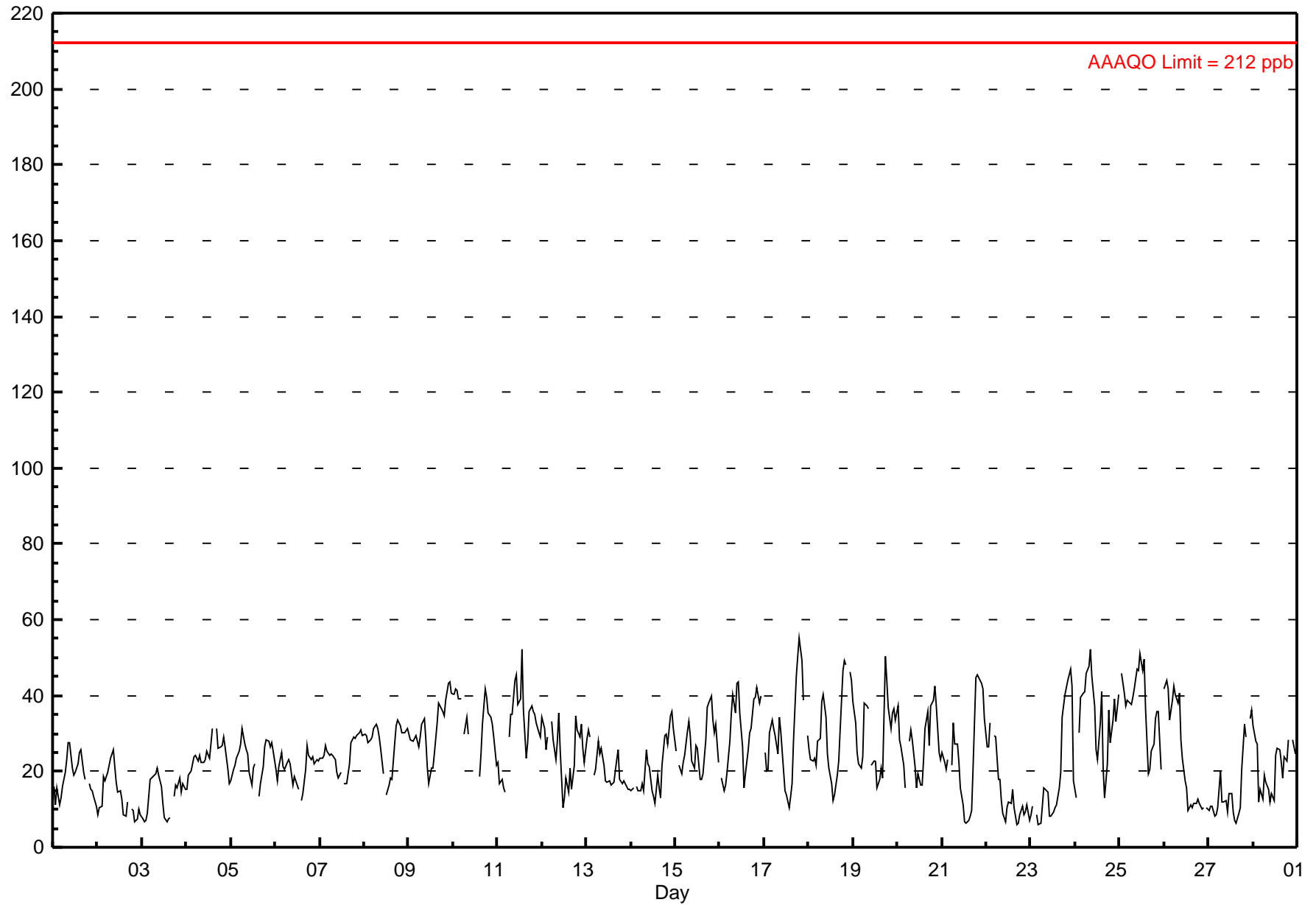


Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 55.1 ppb on Feb 17 20:00 Maximum Daily Average: 37.1 ppb on Feb 25		Hours in Service: 672 Hours of Data: 638 Hours of Missing Data: 34 Hours of Calibration: 33 Percent Operational Time: 99.9																																															
Minimum Value: 6 ppb on Feb 23 05:00 Maximum Diurnal Average: 30.7 ppb at hour 19 Monthly Average: 24.61 ppb		Minimum Daily Average: 13.6 ppb on Feb 3 Minimum Diurnal Average: 18.1 ppb at hour 16 Percentiles: P ₁ = 6.7 P ₁₀ = 10.9 Q ₁ = 16.6 Median = 23.5 Q ₃ = 31.3 P ₉₀ = 39.4 P ₉₉ = 50.0																																															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	16	11	16	11	13	16	20	23	28	28	21	19	20	22	25	26	20	18	A	17	15	15	13	11	18.4	27.8																							
2-Feb	9	10	11	19	17	20	22	24	26	21	17	15	15	13	8	8	12	A	10	10	7	8	10	9	13.8	25.7																							
3-Feb	8	7	7	9	18	18	19	19	21	19	16	12	8	7	7	8	A	13	16	16	18	15	17	15	13.6	21.0																							
4-Feb	15	19	20	22	24	24	23	24	22	23	23	25	24	27	31	A	31	26	26	27	29	26	21	17	24.0	31.5																							
5-Feb	17	20	21	23	25	27	31	27	26	25	20	16	21	22	A	13	17	21	27	28	28	26	27	25	23.3	31.2																							
6-Feb	21	18	21	25	21	20	23	23	22	17	19	18	15	A	12	14	20	27	24	23	24	22	23	23	20.6	26.7																							
7-Feb	24	24	24	27	25	24	24	24	23	20	18	20	A	17	17	20	22	27	29	29	29	30	31	30	24.2	31.1																							
8-Feb	30	29	27	28	29	31	32	31	29	26	19	A	14	17	18	18	28	32	33	32	30	30	30	31	27.2	33.4																							
9-Feb	30	29	28	29	29	27	29	32	34	28	21	17	21	21	25	33	38	37	36	35	39	43	44	41	31.0	43.6																							
10-Feb	40	42	41	39	39	A	30	34	30	C	C	C	C	C	19	25	32	42	39	35	34	33	29	22	33.6	41.9																							
11-Feb	22	17	18	16	15	A	29	35	35	44	46	38	39	52	36	23	28	36	37	36	35	33	30	29	31.6	52.2																							
12-Feb	34	31	26	29	A	33	28	23	28	35	26	11	13	18	15	21	15	22	35	31	29	32	26	22	25.4	35.4																							
13-Feb	29	31	29	A	19	20	28	25	26	22	17	17	17	17	17	17	23	26	18	17	18	17	15	15	20.8	30.8																							
14-Feb	15	16	A	16	15	15	17	15	26	22	21	15	13	12	19	16	13	22	30	30	27	35	36	31	20.6	35.7																							
15-Feb	26	A	22	19	22	24	31	33	30	23	21	27	26	18	18	19	28	37	38	40	33	30	32	22	26.9	39.9																							
16-Feb	A	18	15	16	20	28	35	40	36	43	44	35	26	16	19	26	30	31	39	39	42	38	40	A	30.8	43.7																							
17-Feb	25	20	21	30	33	31	30	25	34	31	20	15	14	11	14	17	28	45	50	55	49	39	A	29	28.9	55.1																							
18-Feb	26	23	23	24	21	28	29	38	40	34	25	21	17	12	14	19	23	31	47	49	48	A	46	44	29.6	49.3																							
19-Feb	38	33	25	22	21	24	38	37	36	M	22	23	23	16	18	21	18	50	44	37	31	35	37	34	29.7	50.2																							
20-Feb	37	28	27	22	16	A	28	31	28	21	16	19	16	16	23	31	36	27	37	39	42	37	25	23	27.2	42.4																							
21-Feb	25	22	21	23	A	21	33	27	27	23	16	11	7	6	7	8	10	21	45	46	45	43	42	34	24.5	45.6																							
22-Feb	26	26	33	A	29	29	18	18	12	9	7	10	12	12	15	10	6	6	8	11	9	9	11	7	14.6	32.9																							
23-Feb	9	11	A	9	6	6	11	16	15	15	8	8	9	10	11	16	20	34	40	42	44	47	43	18	19.4	46.8																							
24-Feb	13	A	30	39	41	41	46	48	52	45	37	26	23	33	41	21	13	22	36	28	34	39	33	40	34.0	52.2																							
25-Feb	A	46	41	37	39	38	37	39	42	47	47	51	47	50	36	19	20	25	27	34	36	36	21	A	37.1	51.1																							
26-Feb	42	44	42	34	39	42	40	38	41	28	24	18	16	10	11	11	12	12	13	11	10	10	A	10	24.2	44.1																							
27-Feb	10	11	11	8	9	10	20	12	12	12	9	14	14	9	7	6	9	10	20	33	29	A	34	36	15.1	36.3																							
28-Feb	32	28	27	12	15	13	19	17	15	12	14	12	24	26	26	22	18	24	23	28	A	29	26	24	21.3	32.1																							
																								23.8	23.6	24.1	22.6	23.1	24.6	27.4	27.9	28.4	25.9	22.0	19.7	19.0	18.8	18.9	18.1	21.1	26.8	30.7	30.6	30.2	29.2	28.6	24.7	Diurnal Average	
																								41.9	45.8	41.9	39.4	40.5	42.5	45.8	47.9	52.2	47.1	46.7	51.1	46.6	52.2	41.1	32.7	38.0	50.2	50.4	55.1	49.2	46.8	46.1	44.1	Diurnal Maximum	
C - Calibration M - Maintenance A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb																																																	



Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

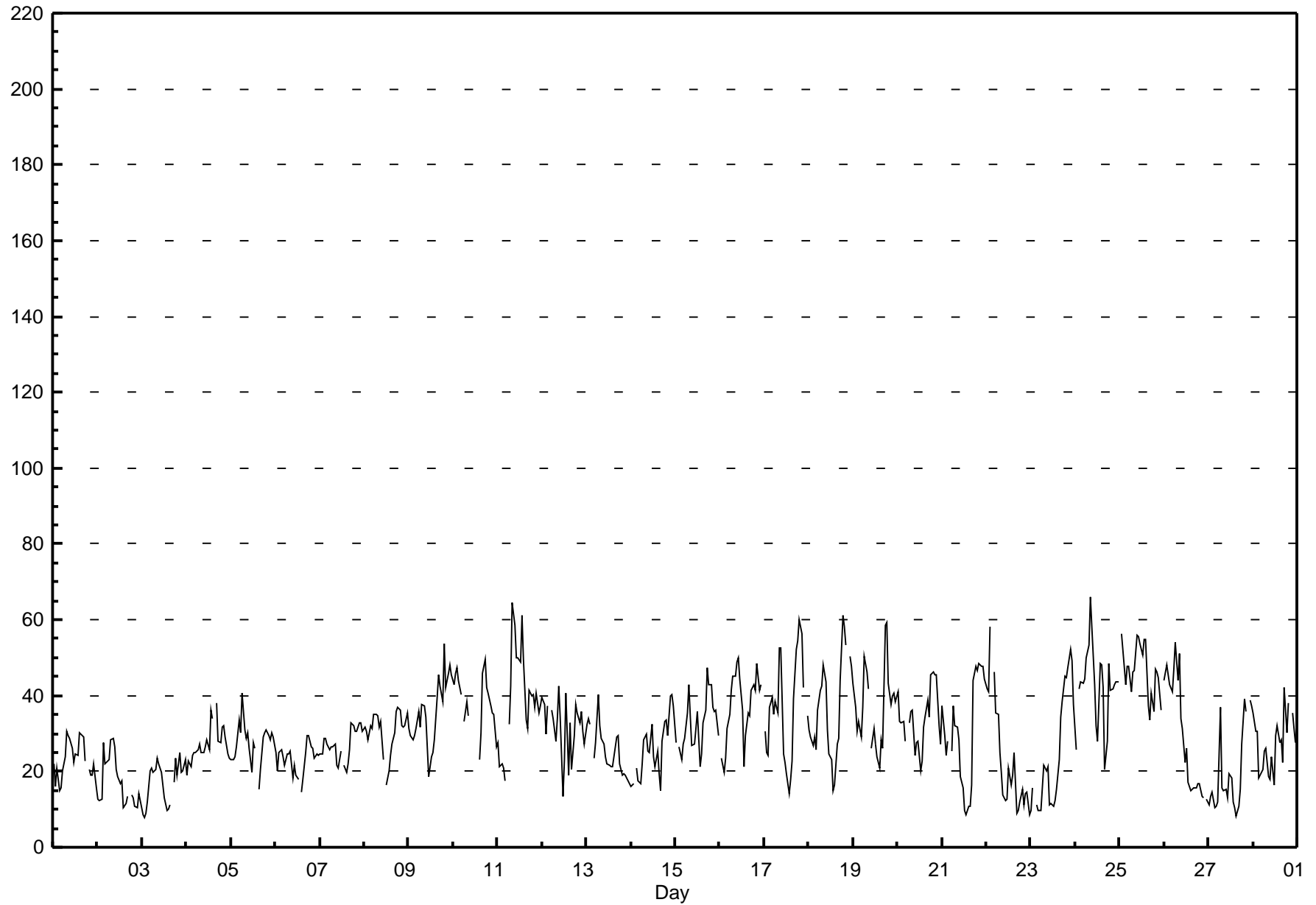
Henry Pirker - February 2010

Maximum Value: 66.0 ppb on Feb 24 09:00		Maximum Daily Average: 46.5 ppb on Feb 25		Hours in Service: 672																																												
Minimum Value: 8 ppb on Feb 3 02:00		Minimum Daily Average: 17.0 ppb on Feb 3		Hours of Data: 638																																												
Maximum Diurnal Average: 36.2 ppb at hour 20		Minimum Diurnal Average: 24.1 ppb at hour 15		Hours of Missing Data: 34																																												
Monthly Average: 30.08 ppb		Percentiles: P ₁ = 9.0 P ₁₀ = 15.1 Q ₁ = 21.5 Median = 29.1 Q ₃ = 37.6 P ₉₀ = 46.4 P ₉₉ = 58.3		Hours of Calibration: 33																																												
				Percent Operational Time: 99.9																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	22	16	21	15	16	20	24	30	29	29	26	22	25	24	30	30	29	23	A	21	19	19	22	16	23.0	30.5																						
2-Feb	13	12	13	28	22	23	23	28	29	27	21	19	17	18	10	12	14	A	14	13	11	11	14	12	17.4	28.6																						
3-Feb	9	8	9	12	20	21	20	20	23	22	20	16	13	10	10	11	A	17	23	19	25	20	20	23	17.0	24.9																						
4-Feb	19	23	21	24	25	25	26	27	25	25	26	29	26	36	34	A	38	28	27	32	32	29	25	24	27.2	37.9																						
5-Feb	23	23	24	27	34	30	41	31	29	30	26	20	28	26	A	15	21	29	30	31	30	28	30	29	27.6	40.7																						
6-Feb	25	20	25	26	24	22	25	25	25	18	22	19	18	A	15	18	25	30	30	27	26	24	24	24	23.2	29.5																						
7-Feb	25	25	29	29	27	26	26	27	27	22	21	25	A	22	20	22	26	33	32	31	31	33	33	31	26.9	32.9																						
8-Feb	32	31	28	32	31	35	35	35	32	33	23	A	17	20	24	27	30	36	37	36	32	32	32	35	30.6	36.8																						
9-Feb	31	29	29	30	31	36	32	38	37	34	27	19	24	25	28	39	45	42	39	54	42	46	48	46	35.5	53.8																						
10-Feb	43	46	47	44	40	A	33	38	35	C	C	C	C	C	23	30	46	50	42	41	37	35	35	26	38.5	49.7																						
11-Feb	28	21	22	21	18	A	33	42	64	59	50	50	49	61	50	34	31	41	40	40	37	41	35	37	39.3	64.4																						
12-Feb	39	38	30	37	A	36	34	28	34	43	34	13	23	41	19	33	20	29	38	35	33	36	31	27	31.8	42.7																						
13-Feb	32	34	33	A	23	28	40	32	29	27	24	22	22	21	21	24	29	29	22	19	19	19	17	17	25.4	40.1																						
14-Feb	16	17	A	21	17	17	22	28	30	25	25	32	24	21	25	19	15	28	33	34	30	40	40	37	26.0	40.3																						
15-Feb	27	A	26	23	27	29	35	43	35	27	27	31	36	21	25	33	36	47	43	43	37	36	36	29	32.8	47.4																						
16-Feb	A	23	20	24	31	35	41	45	45	49	50	44	36	21	29	35	35	41	43	41	48	41	43	A	37.4	49.8																						
17-Feb	31	25	24	37	39	35	38	36	53	53	24	23	20	14	18	23	39	52	55	60	56	42	A	35	36.1	60.1																						
18-Feb	31	29	27	29	26	36	41	43	48	44	31	25	23	15	16	27	29	44	61	58	53	A	50	48	36.3	61.2																						
19-Feb	43	37	31	33	29	37	50	46	42	M	26	31	27	24	21	28	26	59	59	43	38	40	41	38	36.9	59.1																						
20-Feb	41	33	33	33	28	A	33	36	36	24	28	28	20	23	32	34	39	34	46	46	46	46	32	27	33.8	46.1																						
21-Feb	37	30	24	28	A	25	37	32	32	29	19	16	10	9	11	11	17	44	48	47	48	48	48	44	30.1	48.5																						
22-Feb	42	41	58	A	46	35	35	25	20	14	12	13	21	16	19	25	9	10	12	15	11	14	15	8	22.4	58.0																						
23-Feb	10	16	A	11	10	10	15	22	20	21	11	12	11	12	15	23	34	38	45	45	47	52	49	38	24.7	52.2																						
24-Feb	26	A	42	44	43	44	50	53	66	58	43	32	28	49	48	42	21	28	49	41	42	43	44	44	42.5	66.0																						
25-Feb	A	56	47	43	48	48	41	46	47	56	56	54	51	55	55	37	33	41	36	47	46	45	36	A	46.5	56.4																						
26-Feb	44	48	46	43	41	47	54	44	51	34	31	22	26	17	15	15	16	16	17	17	14	13	A	13	29.7	54.0																						
27-Feb	11	13	14	10	11	12	37	16	15	15	13	19	18	12	10	8	11	15	27	39	36	A	39	37	19.2	39.3																						
28-Feb	35	31	31	18	19	20	25	26	19	18	24	16	29	32	27	28	22	42	30	38	A	35	31	28	27.3	42.0																						
																								28.3	27.8	28.9	27.7	28.0	29.3	33.8	33.6	34.9	32.1	27.4	25.1	24.6	24.8	24.1	25.3	27.3	34.3	36.2	36.2	34.3	33.3	33.5	29.7	Diurnal Average
																								43.9	56.4	58.0	44.0	47.9	47.8	54.0	53.5	66.0	58.7	55.5	53.6	50.6	61.2	54.7	42.3	45.8	58.6	61.2	60.1	56.4	52.2	50.2	47.7	Diurnal Maximum
C - Calibration																								M - Maintenance						A - Automated Daily Zero Span																		

Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

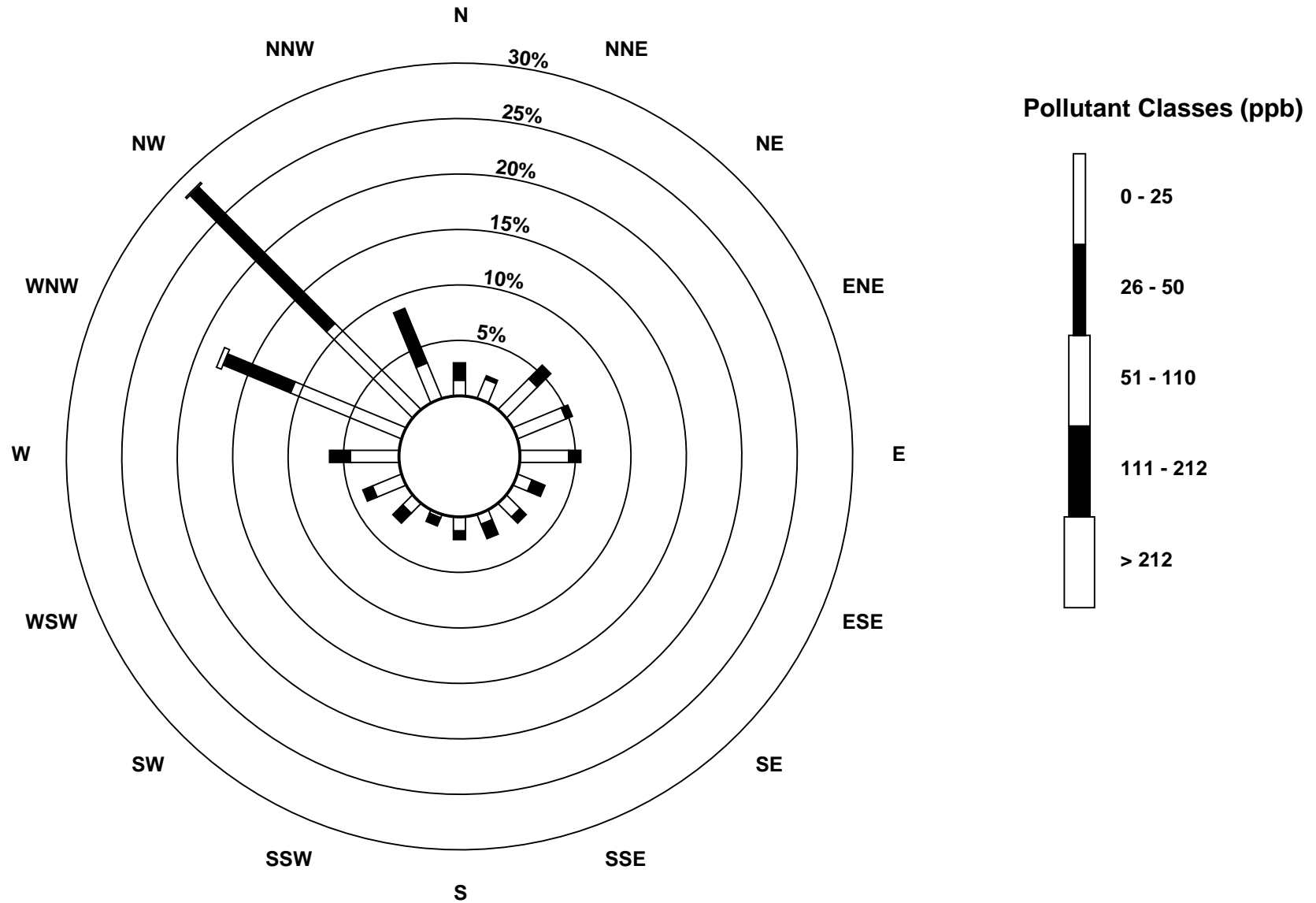
Henry Pirker - February 2010



Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - February 2010



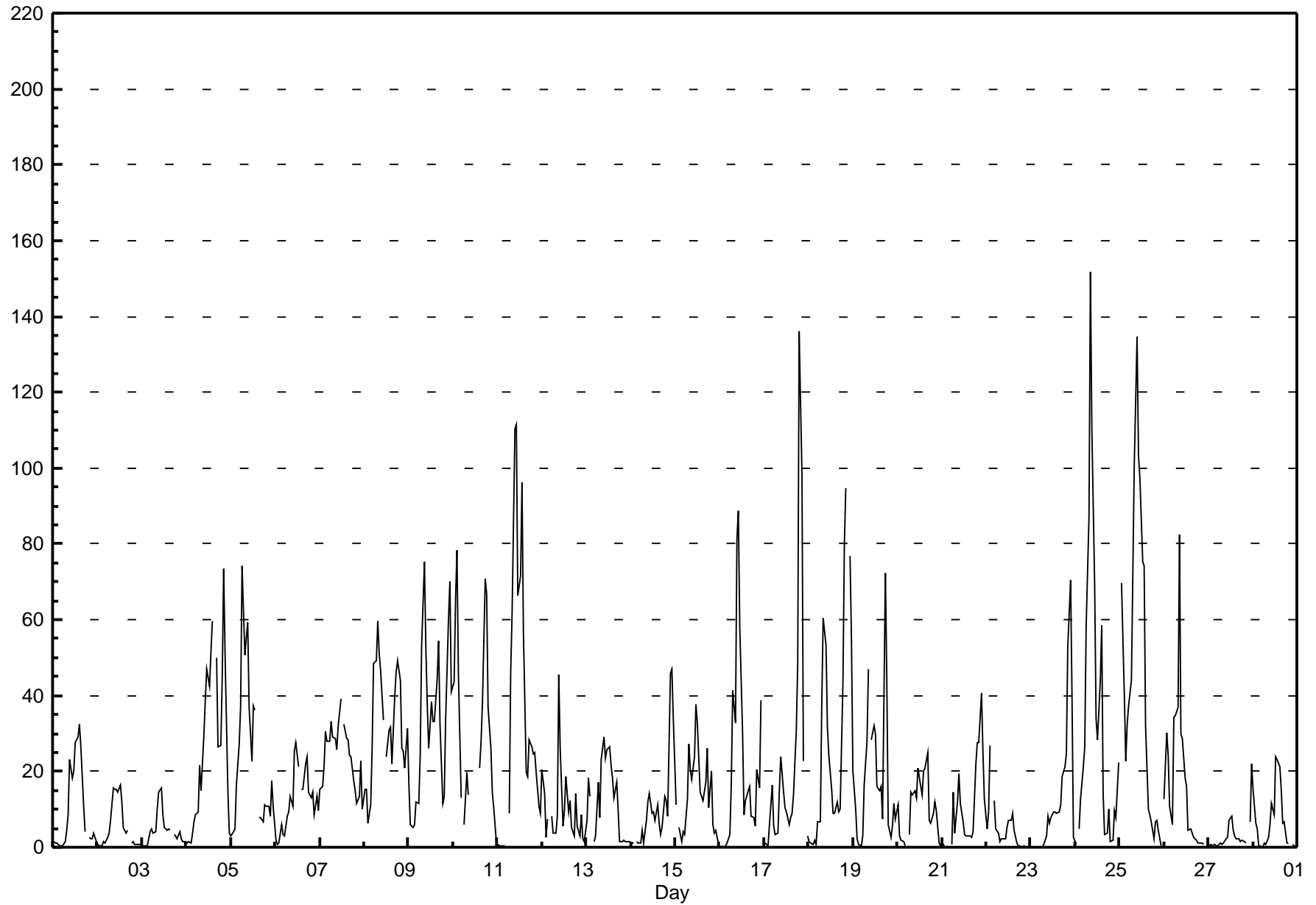
Hourly Averages

Nitrogen Oxide (NO) - ppb Henry Pirker - February 2010

Number of Exceedences (AAQO):	1-hr: 0	24-hr: 0	Hours in Service:	672
Maximum Value: 151.7 ppb on Feb 24 09:00	Maximum Daily Average: 44.6 ppb on Feb 25		Hours of Data:	638
Minimum Value: 0 ppb on Feb 23 00:00	Minimum Daily Average: 3.2 ppb on Feb 27		Hours of Missing Data:	34
Maximum Diurnal Average: 37.6 ppb at hour 10	Minimum Diurnal Average: 7.3 ppb at hour 4		Hours of Calibration:	33
Monthly Average: 18.61 ppb	Percentiles: P ₁ = 0.1 P ₁₀ = 0.8 Q ₁ = 3.1 Median = 10.9 Q ₃ = 26.1 P ₉₀ = 46.8 P ₉₉ = 110.5		Percent Operational Time:	99.9

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	1	1	1	0	0	1	1	4	8	23	18	20	27	29	33	26	11	4	A	3	2	2	4	1	9.7	32.6
2-Feb	1	0	0	1	1	2	4	7	16	15	15	14	17	12	5	4	4	A	1	1	1	1	1	1	5.4	16.6
3-Feb	0	0	0	0	4	5	4	4	10	15	16	9	5	4	5	5	A	3	3	2	4	2	1	2	4.5	15.6
4-Feb	1	1	1	4	7	9	9	22	15	30	39	47	43	51	60	A	50	26	27	45	73	51	14	4	27.3	73.5
5-Feb	3	4	5	17	27	37	74	51	55	59	37	23	37	36	A	8	8	7	11	11	11	8	18	11	24.2	74.1
6-Feb	2	1	1	6	3	3	8	9	13	11	25	27	21	A	15	15	22	24	15	13	15	9	14	10	12.3	27.4
7-Feb	15	16	21	31	28	28	33	29	29	26	32	39	A	32	29	28	24	24	18	15	11	13	23	10	24.1	39.2
8-Feb	15	15	6	11	26	48	49	60	51	47	33	A	24	31	32	22	40	46	49	44	26	25	21	31	32.8	59.8
9-Feb	16	6	5	6	12	12	24	53	75	53	38	26	38	33	33	44	54	32	12	13	34	60	70	41	33.0	75.5
10-Feb	44	65	78	46	13	A	6	20	14	C	C	C	C	C	21	28	37	71	67	37	26	15	10	1	33.2	78.4
11-Feb	1	0	0	0	0	A	9	46	62	111	112	66	72	96	57	20	19	28	26	24	25	20	11	9	35.4	111.5
12-Feb	21	14	3	8	A	8	4	4	8	45	26	6	10	19	9	12	5	3	14	6	3	9	2	2	10.4	45.3
13-Feb	7	18	13	A	1	3	17	8	23	29	24	26	27	22	18	13	17	10	2	2	2	2	1	1	12.4	28.9
14-Feb	1	1	A	1	1	1	5	1	7	12	14	9	9	7	11	6	3	5	13	12	8	46	47	34	11.2	47.0
15-Feb	11	A	5	2	4	3	13	27	21	18	24	38	33	14	13	12	17	26	10	20	6	4	5	1	14.3	37.5
16-Feb	A	0	0	0	1	3	17	41	33	81	89	58	30	8	12	15	16	8	8	6	21	16	39	A	22.9	88.6
17-Feb	1	1	0	6	16	6	4	4	15	24	15	10	9	6	8	9	14	31	48	136	99	23	A	3	21.2	136.0
18-Feb	1	1	1	2	1	7	7	38	60	53	32	24	15	9	12	9	10	44	80	95	A	77	55	27.9	94.8	
19-Feb	20	10	2	1	1	3	16	28	47	M	28	32	30	16	15	16	7	72	45	6	3	6	11	7	18.4	72.2
20-Feb	11	3	2	1	0	A	3	15	14	15	13	21	16	14	20	21	25	7	6	9	12	10	1	0	10.4	25.1
21-Feb	2	0	0	0	A	1	15	4	12	20	12	7	3	3	3	3	3	4	22	28	28	41	25	13	10.7	40.7
22-Feb	5	9	27	A	12	5	4	2	2	2	2	2	5	7	7	9	5	1	0	0	0	0	0	0	4.6	26.8
23-Feb	0	0	A	0	0	0	0	1	3	8	6	8	9	9	9	9	11	18	21	25	53	70	39	3	13.2	70.4
24-Feb	1	A	5	13	21	26	58	87	152	111	69	34	28	44	58	14	4	4	10	2	2	10	8	22	34.0	151.7
25-Feb	A	70	40	23	32	37	44	72	101	135	103	97	75	74	32	10	9	7	2	7	7	5	0	A	44.6	134.7
26-Feb	13	30	24	11	6	34	35	37	83	30	29	18	16	5	5	4	3	2	1	1	1	1	A	0	16.9	82.6
27-Feb	0	1	0	1	0	0	1	1	1	2	3	7	8	5	3	2	2	1	2	1	1	A	7	22	3.2	21.9
28-Feb	15	6	5	0	0	0	1	1	3	6	12	9	24	23	21	15	6	7	1	1	A	1	0	0	6.8	23.9
	8.0	10.6	9.5	7.3	8.5	11.3	16.6	24.1	33.3	37.6	32.0	26.2	24.4	23.5	20.2	14.0	15.7	17.8	17.7	19.7	21.0	17.1	17.3	10.9		Diurnal Average
	43.5	69.7	78.4	46.3	32.4	48.5	74.1	87.4	151.7	134.7	111.5	97.5	75.4	96.4	59.8	44.3	54.3	72.2	66.7	136.0	98.5	70.4	76.7	54.7		Diurnal Maximum

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



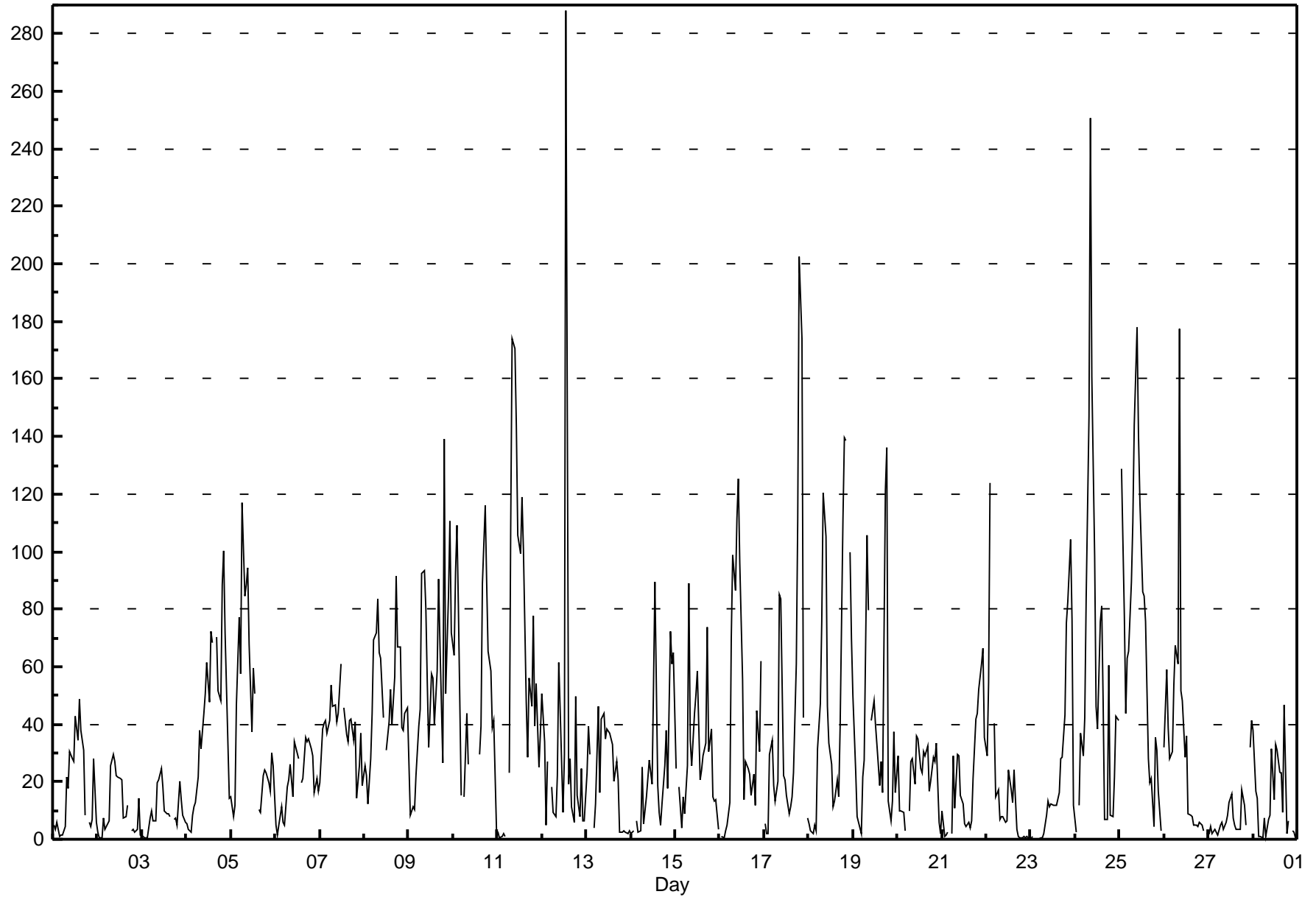
Hourly Maximums

Nitrogen Oxide (NO) - ppb Henry Pirker - February 2010

Maximum Value: 287.8 ppb on Feb 12 14:00		Maximum Daily Average: 71.0 ppb on Feb 25		Hours in Service: 672																																												
Minimum Value: 0 ppb on Feb 23 01:00		Minimum Daily Average: 8.8 ppb on Feb 27		Hours of Data: 638																																												
Maximum Diurnal Average: 62.8 ppb at hour 9		Minimum Diurnal Average: 17.1 ppb at hour 4		Hours of Missing Data: 34																																												
Monthly Average: 34.29 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 2.7 Q ₁ = 7.9 Median = 23.8 Q ₃ = 44.9 P ₉₀ = 84.3 P ₉₉ = 170.7		Hours of Calibration: 33																																												
				Percent Operational Time: 99.9																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	5	3	6	1	1	1	4	22	17	31	28	27	43	34	49	38	31	8	A	6	4	7	28	6	17.5	48.8																						
2-Feb	2	1	1	7	3	5	6	26	29	27	22	22	21	21	7	8	12	A	3	3	2	3	14	1	10.8	29.4																						
3-Feb	1	1	1	1	8	10	6	6	19	21	25	18	10	9	9	8	A	7	7	5	20	14	8	6	9.5	24.7																						
4-Feb	5	4	2	8	12	13	21	38	32	44	50	62	48	72	68	A	70	52	48	88	100	72	33	14	41.6	100.1																						
5-Feb	15	8	12	47	77	57	117	84	88	95	68	37	60	51	A	10	10	22	24	23	20	17	30	26	43.3	116.9																						
6-Feb	5	2	5	11	6	5	18	21	26	15	34	32	28	A	19	21	35	34	35	32	29	16	21	17	20.2	35.4																						
7-Feb	20	39	40	41	37	41	53	46	47	41	44	61	A	46	36	34	42	42	34	41	14	26	37	19	38.2	60.8																						
8-Feb	26	22	12	28	44	69	72	83	65	63	42	A	31	41	52	40	56	92	67	67	39	38	44	46	49.5	91.6																						
9-Feb	27	9	11	10	22	40	45	92	93	80	55	32	58	56	40	59	91	67	27	139	51	85	111	72	57.1	139.1																						
10-Feb	64	93	109	81	15	A	15	44	26	C	C	C	C	C	29	39	89	116	89	65	59	39	41	3	56.5	115.9																						
11-Feb	3	1	1	2	1	A	23	108	174	171	143	106	99	119	101	47	28	56	46	78	40	54	25	37	63.6	173.9																						
12-Feb	51	34	5	27	A	18	9	8	22	61	45	9	30	288	19	28	11	6	50	15	8	25	7	6	34.0	287.8																						
13-Feb	23	39	30	A	4	12	46	16	42	44	35	38	37	35	33	20	27	21	3	3	3	2	2	3	22.5	46.3																						
14-Feb	2	3	A	7	3	3	25	6	15	21	27	19	53	89	18	9	5	12	25	38	18	72	61	65	25.9	89.4																						
15-Feb	25	A	18	4	15	9	25	89	35	25	44	50	59	21	24	29	34	74	31	38	15	13	14	3	30.1	88.7																						
16-Feb	A	1	1	3	5	13	70	99	87	111	125	96	55	14	27	25	22	15	23	12	45	30	62	A	42.7	125.2																						
17-Feb	6	2	2	29	34	19	13	20	85	84	22	21	15	9	11	15	23	61	111	203	174	42	A	7	43.8	202.5																						
18-Feb	6	3	2	5	3	32	47	76	121	105	46	33	26	12	13	21	15	40	112	140	138	A	100	70	50.5	139.6																						
19-Feb	50	24	8	6	2	22	28	106	80	M	41	48	40	33	19	27	16	121	136	13	6	13	37	16	38.8	135.9																						
20-Feb	29	10	10	9	3	A	10	27	28	19	36	35	25	23	31	29	32	17	20	28	27	34	6	2	21.3	36.1																						
21-Feb	10	1	2	2	A	2	29	11	29	29	15	12	5	5	6	4	6	21	42	44	52	61	66	35	21.3	66.3																						
22-Feb	29	55	124	A	41	15	17	7	8	8	6	7	24	17	13	24	3	1	1	1	1	1	1	0	17.4	123.7																						
23-Feb	0	1	A	0	0	1	1	2	8	13	12	12	12	12	12	16	28	28	43	75	83	104	76	12	24.0	104.4																						
24-Feb	3	A	12	37	29	42	84	147	251	161	98	46	38	76	81	48	7	7	61	8	8	22	43	41	58.6	250.6																						
25-Feb	A	129	78	44	63	65	89	110	144	178	140	117	86	85	76	28	19	21	5	35	31	17	3	A	71.0	177.9																						
26-Feb	32	59	39	28	31	54	67	61	178	52	48	29	36	9	8	8	5	5	4	6	5	3	A	2	33.4	177.6																						
27-Feb	2	4	2	3	2	2	5	6	3	6	8	13	16	7	5	3	4	4	17	12	5	A	32	41	8.8	41.0																						
28-Feb	38	17	14	1	1	1	7	1	7	8	32	14	33	31	23	23	9	47	2	7	A	3	2	1	14.0	46.6																						
																								18.3	21.6	21.0	17.1	17.7	22.0	34.1	48.6	62.8	58.1	47.9	38.3	37.9	46.7	30.7	24.5	27.1	36.8	39.5	43.7	36.9	31.2	34.8	21.1	Diurnal Average
																								64.1	128.6	123.7	81.2	77.1	69.1	116.9	146.9	250.6	177.9	143.4	117.3	99.4	287.8	100.9	58.6	90.7	121.3	135.9	202.5	173.8	104.4	110.8	71.9	Diurnal Maximum
C - Calibration																								M - Maintenance						A - Automated Daily Zero Span																		

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Henry Pirker - February 2010

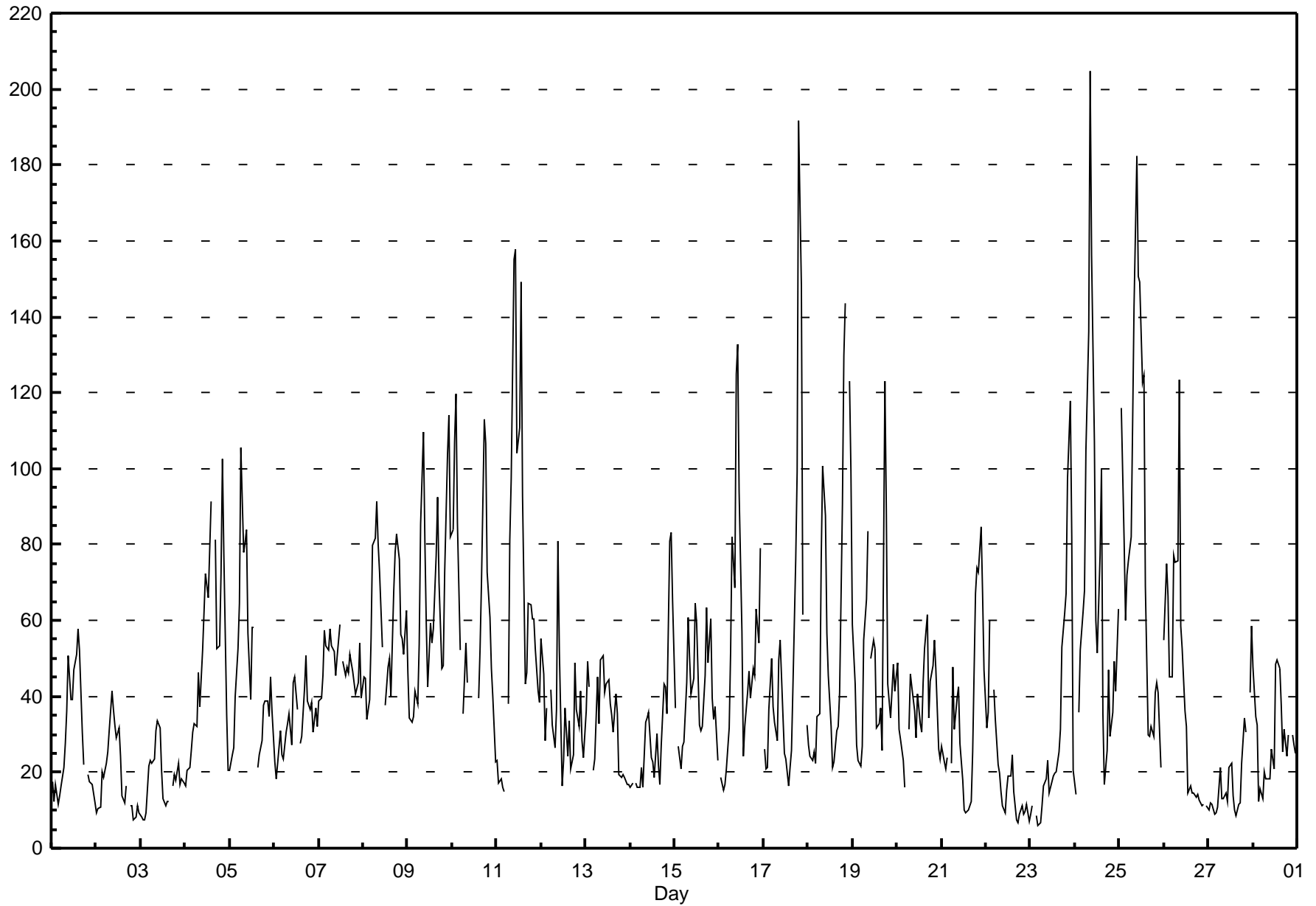


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - February 2010

Number of Exceedences (AAQO):		1-hr: 0		24-hr: 0		Hours in Service:		672																			
Maximum Value: 204.6 ppb on Feb 24 09:00		Maximum Daily Average: 82.2 ppb on Feb 25		Hours of Data:		638		Hours of Missing Data: 34																			
Minimum Value: 6 ppb on Feb 23 05:00		Minimum Daily Average: 18.2 ppb on Feb 3		Hours of Calibration:		33		Percent Operational Time: 99.9																			
Maximum Diurnal Average: 63.7 ppb at hour 10		Minimum Diurnal Average: 30.1 ppb at hour 4		Percentiles: P ₁ = 7.6 P ₁₀ = 14.0 Q ₁ = 21.9 Median = 36.3 Q ₃ = 53.5 P ₉₀ = 81.5 P ₉₉ = 153.9																							
Monthly Average: 43.38 ppb																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	18	12	17	12	14	16	21	28	36	51	39	39	47	51	58	52	31	22	A	19	18	17	17	12	28.1	57.7	
2-Feb	9	11	11	20	19	22	25	31	41	37	32	29	32	24	14	12	16	A	11	11	8	8	11	9	19.3	41.5	
3-Feb	8	7	8	9	22	23	22	24	31	34	32	20	13	11	12	12	A	17	20	18	22	17	18	17	18.2	33.7	
4-Feb	16	21	21	26	31	33	32	46	37	52	62	72	66	79	91	A	81	53	53	72	102	77	35	21	51.3	102.5	
5-Feb	20	25	26	40	52	64	105	78	81	84	56	39	58	58	A	21	25	28	38	39	39	35	45	36	47.5	105.4	
6-Feb	23	18	22	31	25	23	31	33	35	27	44	45	37	A	28	30	42	51	39	37	38	31	37	32	32.9	50.6	
7-Feb	39	40	46	57	53	52	58	53	52	46	50	59	A	49	45	48	46	51	47	44	41	44	54	40	48.4	59.0	
8-Feb	45	45	34	39	55	80	82	91	80	73	53	A	38	48	50	40	67	78	83	76	56	55	51	63	60.0	91.3	
9-Feb	46	34	33	35	41	38	54	85	109	81	59	43	59	54	58	77	92	70	47	48	73	104	114	82	64.0	114.0	
10-Feb	84	107	120	86	52	A	36	54	43	C	C	C	C	C	39	52	70	113	107	73	61	47	40	23	67.0	119.9	
11-Feb	23	17	18	16	15	A	38	81	97	155	158	104	111	149	93	43	46	65	64	61	60	53	41	38	67.3	157.6	
12-Feb	55	46	28	37	A	42	32	27	36	81	52	16	23	37	24	34	21	25	49	37	32	41	28	24	36.0	81.0	
13-Feb	36	49	43	A	21	24	45	33	49	51	41	43	44	38	35	30	41	35	19	19	19	18	17	17	33.4	50.7	
14-Feb	16	17	A	17	16	16	21	16	33	34	36	24	23	19	30	22	17	27	43	42	36	81	83	65	31.9	83.0	
15-Feb	37	A	27	21	27	28	44	61	50	41	45	65	59	33	31	32	46	64	49	61	40	34	37	23	41.4	64.6	
16-Feb	A	19	15	17	21	32	52	82	69	125	133	94	57	24	32	41	46	40	47	45	63	54	79	A	53.9	132.7	
17-Feb	26	21	21	36	50	37	33	28	50	55	35	25	23	17	21	26	42	76	99	192	148	62	A	32	50.2	191.6	
18-Feb	27	24	23	25	22	35	35	76	101	88	57	45	32	21	23	31	32	41	91	130	143	A	123	99	57.6	143.4	
19-Feb	59	43	27	23	22	27	55	65	84	M	50	55	53	32	33	37	26	123	89	43	34	41	48	41	48.3	122.9	
20-Feb	49	31	29	23	16	A	31	46	42	36	29	41	33	30	44	53	61	34	44	48	55	47	26	24	37.9	61.5	
21-Feb	27	23	21	24	A	22	48	31	39	42	28	18	10	9	10	11	12	26	67	74	73	85	67	47	35.4	84.5	
22-Feb	32	36	60	A	42	34	22	20	15	11	9	15	19	19	25	15	7	7	9	11	9	10	12	7	19.3	60.0	
23-Feb	9	11	A	9	6	7	11	17	18	23	15	16	19	20	20	25	31	53	62	67	97	118	82	20	32.9	117.8	
24-Feb	14	A	36	52	62	68	105	136	205	156	107	60	52	77	100	36	17	26	47	29	36	49	41	63	68.4	204.6	
25-Feb	A	116	81	60	72	76	82	112	143	182	151	149	123	125	69	30	29	32	30	41	43	41	21	A	82.2	182.5	
26-Feb	55	75	66	45	45	77	75	76	124	58	52	36	32	14	16	15	14	14	14	13	11	11	A	11	41.4	123.6	
27-Feb	10	12	12	9	9	11	21	13	13	15	12	21	22	14	10	9	11	12	23	34	31	A	41	59	18.4	58.5	
28-Feb	48	35	32	12	16	13	20	18	18	18	26	21	48	50	47	38	25	31	24	30	A	30	27	25	28.4	49.6	
		31.9	34.4	33.7	30.1	31.7	36.0	44.2	52.2	61.9	63.7	54.2	46.0	43.6	42.4	39.2	32.2	36.9	44.9	48.6	50.5	51.4	46.5	46.0	35.8	Diurnal Average	
		83.8	116.0	119.9	85.7	71.8	79.7	105.4	136.0	204.6	182.5	157.6	149.2	122.6	149.1	99.9	77.0	92.3	122.9	106.5	191.6	148.1	117.8	123.1	99.1	Diurnal Maximum	
C - Calibration		M - Maintenance					A - Automated Daily Zero Span																				

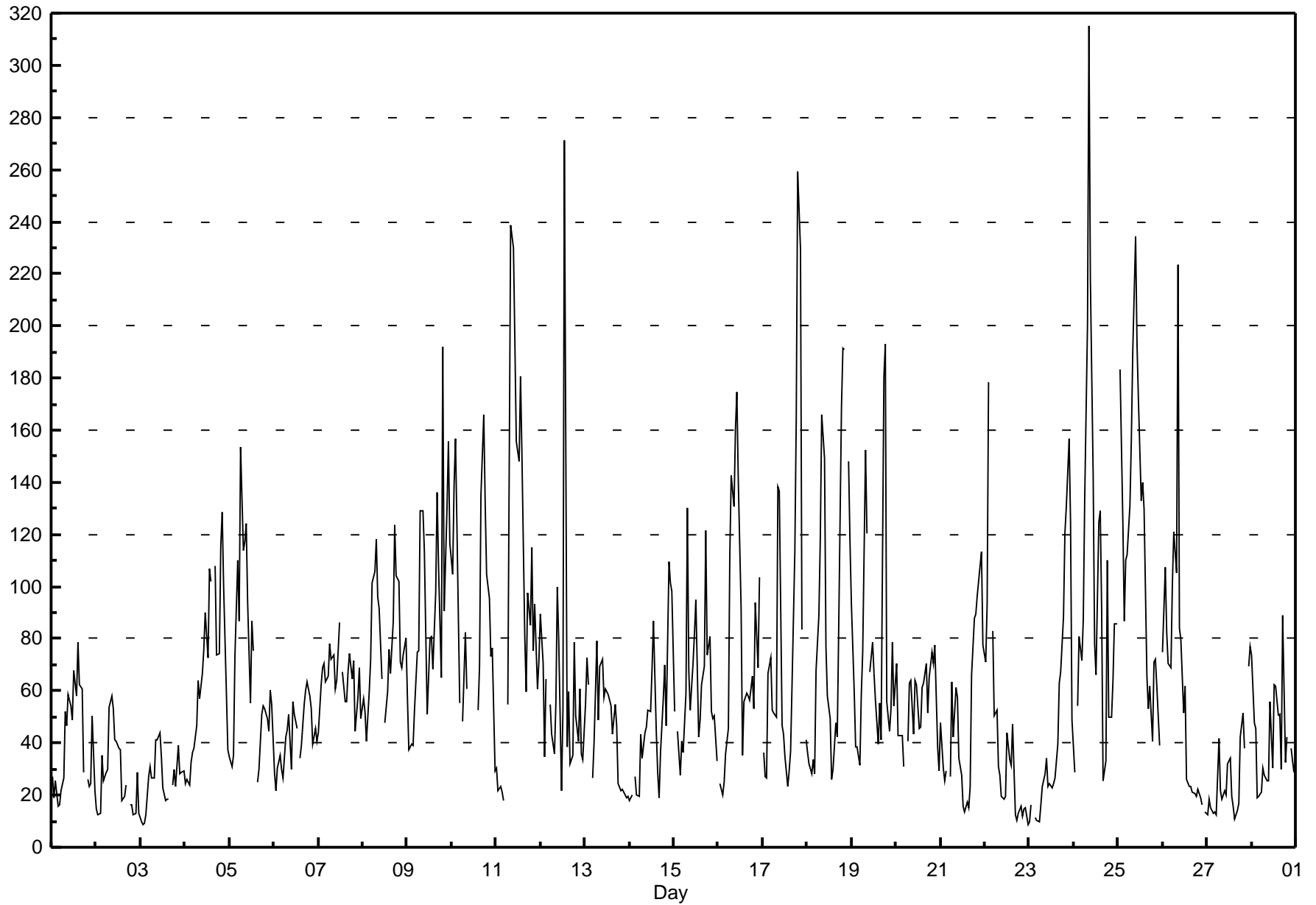


Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - February 2010

Maximum Value: 314.9 ppb on Feb 24 09:00		Maximum Daily Average: 116.4 ppb on Feb 25		Hours in Service: 672																																													
Minimum Value: 8 ppb on Feb 23 00:00		Minimum Daily Average: 25.7 ppb on Feb 3		Hours of Data: 638																																													
Maximum Diurnal Average: 97.0 ppb at hour 9		Minimum Diurnal Average: 44.4 ppb at hour 4		Hours of Missing Data: 34																																													
Monthly Average: 63.65 ppb		Percentiles: P ₁ = 10.1 P ₁₀ = 19.5 Q ₁ = 30.3 Median = 53.4 Q ₃ = 78.4 P ₉₀ = 124.0 P ₉₉ = 225.7		Hours of Calibration: 33																																													
				Percent Operational Time: 99.9																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	27	19	25	16	16	22	27	52	47	58	54	49	68	58	79	63	61	29	A	26	23	24	50	21	39.7	78.6																							
2-Feb	15	13	13	35	26	29	30	54	58	53	41	41	38	37	18	19	24	A	16	16	12	13	29	13	27.9	57.8																							
3-Feb	10	8	9	12	27	31	26	27	41	41	44	35	23	18	18	18	A	24	30	24	39	28	29	29	25.7	44.0																							
4-Feb	25	26	24	33	36	38	47	64	57	67	76	90	73	107	102	A	108	74	74	115	129	100	58	38	67.8	128.6																							
5-Feb	35	31	35	73	110	87	154	114	117	124	94	56	87	76	A	25	30	51	54	53	49	44	60	55	70.2	153.5																							
6-Feb	29	21	30	35	30	26	42	45	51	30	56	51	46	A	34	39	55	60	63	58	53	40	45	41	42.7	63.5																							
7-Feb	44	62	69	70	63	66	78	72	74	61	64	86	A	67	56	56	67	74	65	71	45	57	69	49	64.6	86.2																							
8-Feb	57	52	41	60	72	102	106	118	96	92	65	A	48	60	76	67	87	124	104	102	71	69	74	80	79.1	123.8																							
9-Feb	58	37	40	39	53	75	75	129	129	113	81	51	80	81	68	97	136	108	65	192	91	130	155	117	91.7	191.9																							
10-Feb	104	139	157	124	55	A	48	82	61	C	C	C	C	C	53	70	135	166	132	105	95	73	77	29	94.6	165.9																							
11-Feb	30	22	23	21	18	A	55	145	239	230	194	156	148	181	150	81	60	98	85	115	75	93	61	71	102.2	238.8																							
12-Feb	90	71	35	64	A	55	43	36	56	100	80	22	53	271	38	60	32	35	78	51	41	61	36	34	62.6	271.4																							
13-Feb	55	73	62	A	27	40	79	49	69	72	58	61	59	56	54	44	55	47	24	22	22	21	19	19	47.2	78.9																							
14-Feb	18	20	A	27	20	20	43	34	44	46	53	52	68	87	44	29	19	36	58	70	47	109	101	98	49.7	109.4																							
15-Feb	52	A	45	28	41	36	59	130	68	52	70	82	95	43	49	62	69	121	74	81	52	50	50	33	62.7	130.1																							
16-Feb	A	25	20	25	36	46	112	143	131	161	175	141	92	35	56	59	58	57	66	53	94	69	104	A	79.8	174.8																							
17-Feb	36	27	26	67	73	53	51	50	138	137	46	44	34	23	29	37	62	113	165	259	229	83	A	41	79.3	259.2																							
18-Feb	37	32	28	34	28	68	89	118	166	149	77	58	49	26	30	48	42	83	169	191	191	A	148	117	86.1	191.4																							
19-Feb	93	60	38	39	31	59	75	152	121	M	67	79	67	57	39	56	41	181	193	56	44	53	78	54	75.3	193.1																							
20-Feb	70	43	43	43	31	A	41	63	64	44	64	63	45	46	61	63	70	51	65	75	71	78	38	29	54.8	77.8																							
21-Feb	48	31	25	29	A	27	63	42	61	58	34	28	16	13	17	15	23	66	88	89	97	108	113	78	50.8	113.2																							
22-Feb	71	93	178	A	83	51	52	31	28	20	19	19	44	34	31	47	13	10	13	16	12	15	15	8	39.3	178.3																							
23-Feb	10	16	A	12	10	10	16	23	28	34	23	24	23	24	27	40	63	67	88	121	131	157	124	49	48.7	156.7																							
24-Feb	29	A	54	81	72	87	133	201	315	219	142	78	66	125	129	91	26	33	110	50	50	64	86	85	101.1	314.9																							
25-Feb	A	183	124	87	110	112	131	156	190	234	193	171	133	140	130	66	53	62	41	71	72	62	39	A	116.4	234.4																							
26-Feb	75	107	82	71	69	101	121	105	223	84	80	51	62	26	23	23	21	21	19	22	19	16	A	13	62.5	223.3																							
27-Feb	13	18	15	13	13	12	42	22	18	21	20	32	34	19	16	11	14	17	42	51	38	A	69	77	27.4	76.8																							
28-Feb	74	48	45	19	19	21	30	28	26	25	56	30	62	62	51	51	30	89	32	42	A	38	33	29	40.8	89.0																							
																								46.2	49.1	49.6	44.4	45.0	50.8	66.8	81.6	97.0	89.4	75.0	63.4	62.0	68.2	54.8	49.4	53.8	70.2	74.6	78.6	70.0	63.7	67.8	50.3	Diurnal Average	
																								104.4	183.4	178.3	123.6	110.3	112.2	153.5	201.3	314.9	234.4	193.5	171.3	148.3	271.4	150.3	97.5	136.3	180.6	193.1	259.2	229.2	156.7	155.4	117.1	Diurnal Maximum	
C - Calibration																								M - Maintenance						A - Automated Daily Zero Span																			



Hourly Averages

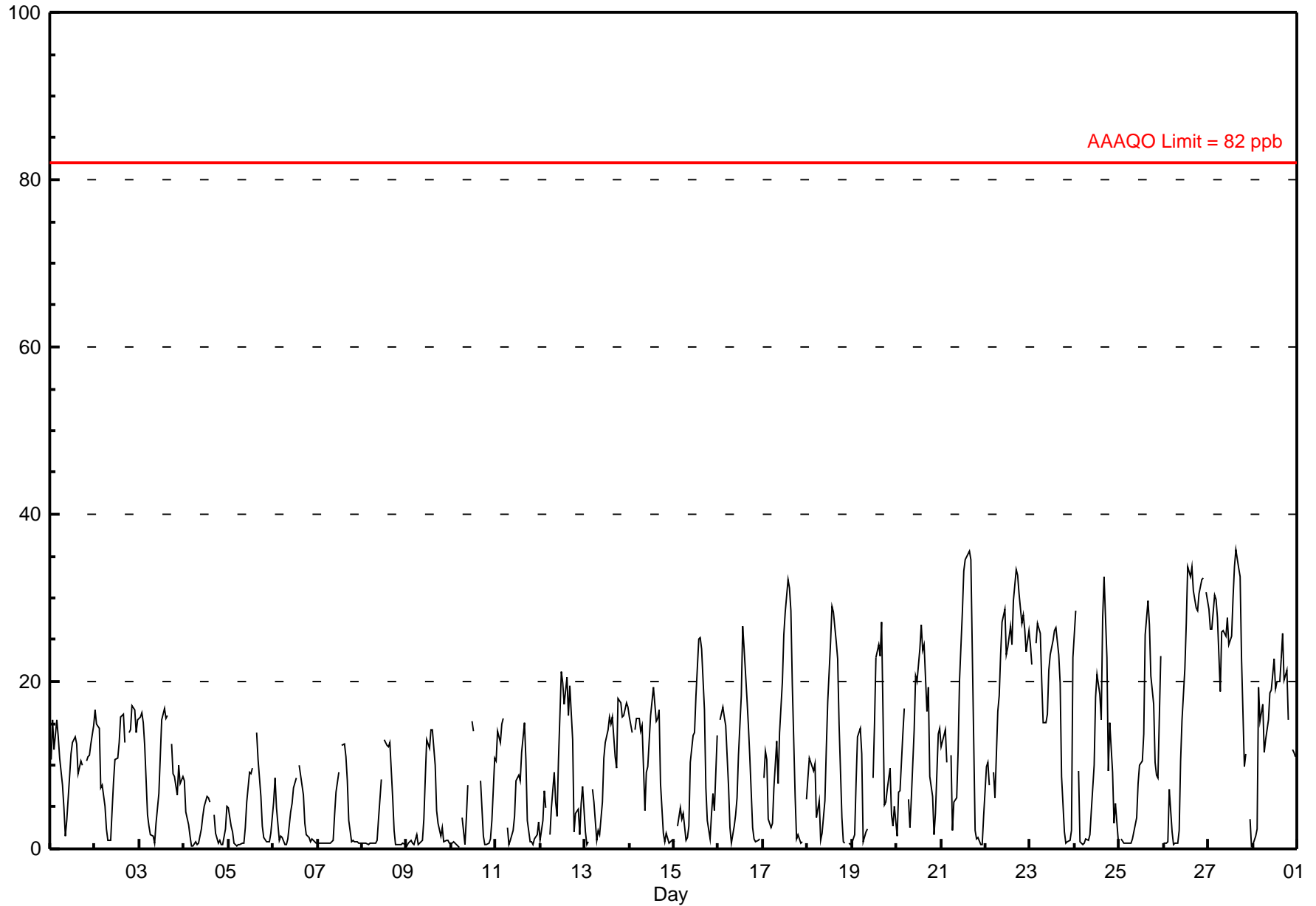
Ozone (O₃) - ppb

Henry Pirker - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 672
Maximum Value: 35.7 ppb on Feb 27 16:00	Maximum Daily Average: 24.2 ppb on Feb 27
Minimum Value: 0 ppb on Feb 10 05:00	Hours of Data: 638
Maximum Diurnal Average: 20.8 ppb at hour 16	Hours of Missing Data: 34
Monthly Average: 10.39 ppb	Hours of Calibration: 31
Minimum Daily Average: 2.8 ppb on Feb 4	Percent Operational Time: 99.6
Minimum Diurnal Average: 4.9 ppb at hour 7	
Percentiles: P ₁ = 0.4 P ₁₀ = 0.7 Q ₁ = 1.7 Median = 8.4 Q ₃ = 15.8 P ₉₀ = 25.4 P ₉₉ = 33.1	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	11	15	12	15	13	11	8	5	1	3	9	11	13	13	13	9	11	10	A	10	11	11	13	15	10.6	15.4																							
2-Feb	17	15	14	7	8	5	2	1	1	5	8	11	11	13	16	16	13	A	14	14	17	17	14	15	11.0	17.1																							
3-Feb	16	16	15	12	4	3	2	2	1	3	7	11	15	17	16	16	A	13	9	9	7	10	8	9	9.5	16.7																							
4-Feb	8	4	3	2	0	0	1	1	1	2	4	5	6	6	6	A	4	2	1	1	1	0	2	5	2.8	8.1																							
5-Feb	5	3	2	1	0	1	1	1	1	2	6	9	9	10	A	14	11	6	3	1	1	1	1	2	3.8	13.8																							
6-Feb	6	8	5	1	2	1	1	0	1	4	5	7	8	A	10	9	6	3	2	1	1	1	1	1	3.7	9.9																							
7-Feb	1	1	1	1	1	1	1	1	1	4	7	9	A	12	13	11	8	3	1	1	1	1	1	1	3.4	12.6																							
8-Feb	1	1	1	1	1	1	1	1	1	4	8	A	13	12	12	13	6	2	1	1	1	0	1	1	3.5	13.0																							
9-Feb	0	1	1	1	0	2	1	1	1	3	8	13	12	14	14	10	5	3	2	2	1	1	1	1	4.1	14.3																							
10-Feb	1	1	1	0	0	A	4	1	4	8	N	15	14	C	C	C	8	2	1	0	1	1	3	11	3.9	15.2																							
11-Feb	11	14	13	15	16	A	3	1	1	2	4	8	9	8	11	15	11	3	1	1	0	1	2	3	6.6	15.6																							
12-Feb	1	3	7	5	A	2	5	9	6	4	11	21	20	17	20	16	20	13	2	4	5	2	5	7	8.9	21.1																							
13-Feb	2	1	1	A	7	6	1	2	2	6	11	13	14	16	15	16	11	10	18	17	16	16	17	17	10.1	17.9																							
14-Feb	16	14	A	14	16	16	14	15	5	9	10	16	18	19	15	16	17	8	2	1	2	1	1	1	10.6	19.3																							
15-Feb	1	A	3	5	4	4	1	1	3	10	13	14	18	25	25	24	17	7	3	1	4	7	5	14	9.1	25.2																							
16-Feb	A	15	17	16	15	7	3	1	3	4	6	11	18	27	24	18	15	11	2	1	1	1	1	A	9.9	26.6																							
17-Feb	9	12	11	4	3	3	7	13	8	14	20	26	28	32	31	28	20	6	1	2	1	1	A	6	12.3	32.3																							
18-Feb	8	11	10	9	10	4	6	1	2	6	12	18	25	29	28	25	23	15	4	1	1	A	1	1	10.8	29.0																							
19-Feb	1	2	8	13	14	11	1	2	2	M	M	9	15	23	24	23	27	5	6	7	10	4	3	5	9.8	27.1																							
20-Feb	2	7	7	14	17	A	6	3	6	14	21	20	24	27	24	24	16	19	9	6	2	4	14	14	13.0	26.8																							
21-Feb	12	14	14	10	A	11	2	6	6	12	20	28	33	35	35	36	35	24	2	1	1	0	1	4	14.9	35.5																							
22-Feb	10	10	8	A	9	6	16	18	23	27	29	23	24	27	24	30	33	33	31	27	28	26	24	26	22.3	33.3																							
23-Feb	24	22	A	25	27	26	20	15	15	16	21	23	25	26	26	23	20	9	2	1	1	1	2	23	17.1	26.9																							
24-Feb	28	A	9	1	0	1	1	1	2	5	10	18	21	18	15	28	32	23	9	15	9	3	5	1	11.2	32.5																							
25-Feb	A	1	1	1	1	1	1	1	2	4	8	10	11	14	26	30	27	21	17	10	9	8	23	A	10.2	29.7																							
26-Feb	1	1	1	7	2	0	1	1	2	11	15	22	27	34	33	34	31	29	29	31	32	32	A	31	17.6	33.8																							
27-Feb	29	26	26	30	30	28	19	26	26	25	28	24	25	30	34	36	34	32	23	10	11	A	4	0	24.2	35.7																							
28-Feb	0	2	2	19	15	17	11	13	15	19	19	23	19	20	20	23	26	20	21	15	A	12	12	11	15.4	25.7																							
																								8.4	8.4	7.3	8.8	8.2	6.7	4.9	5.0	5.0	8.4	12.3	15.5	17.6	20.1	20.4	20.8	17.9	12.3	7.9	6.9	6.4	6.3	6.2	8.6	Diurnal Average	
																								28.7	26.3	26.2	30.3	29.8	27.6	20.1	26.0	26.0	27.2	28.7	28.3	33.1	34.5	35.3	35.7	34.5	32.7	30.5	30.5	32.2	32.4	23.6	30.6	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 Maximums

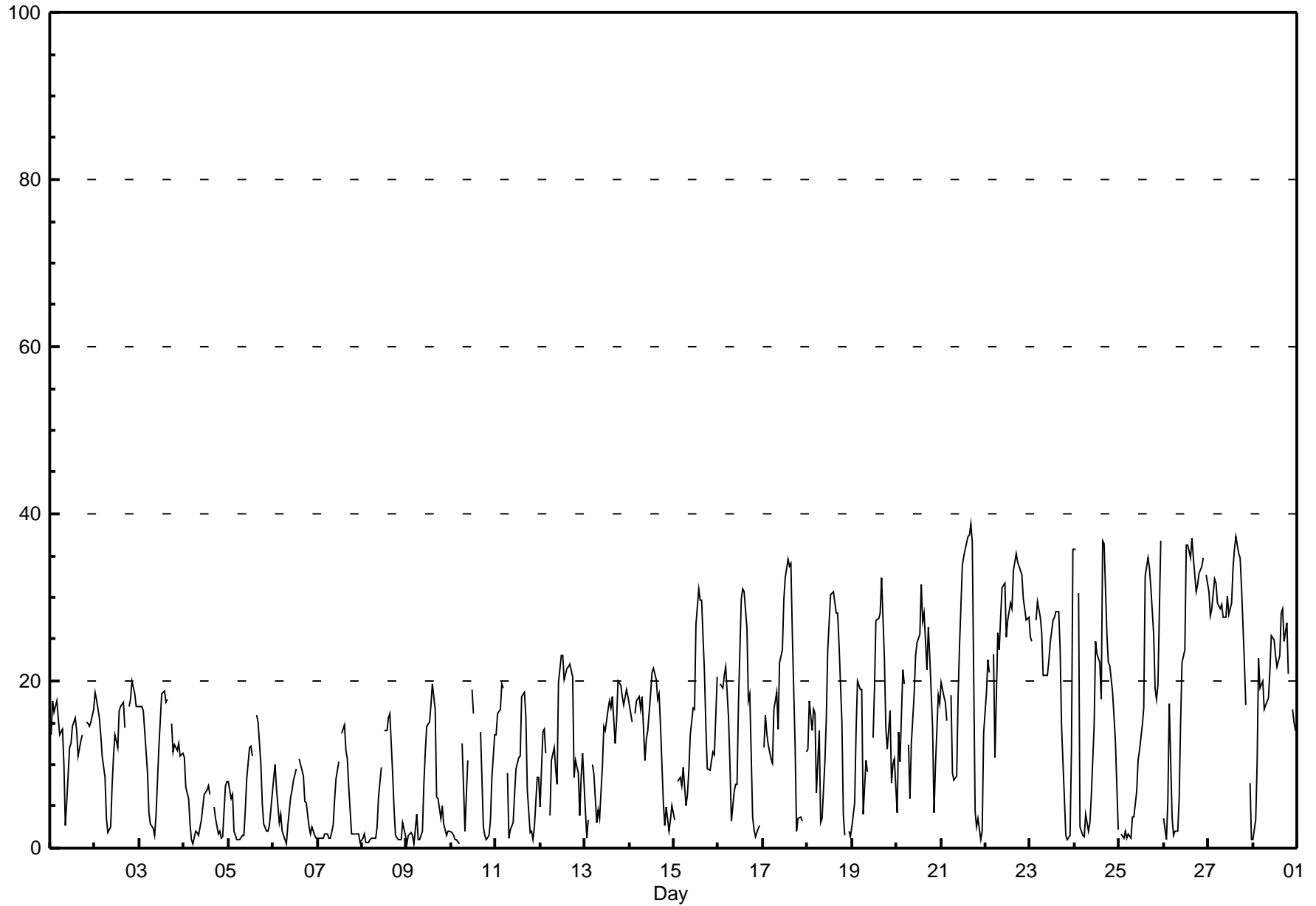
Ozone (O₃) - ppb

Henry Pirker - February 2010

Maximum Value: 38.9 ppb on Feb 21 17:00		Maximum Daily Average: 27.7 ppb on Feb 27		Hours in Service: 672																							
Minimum Value: 1 ppb on Feb 10 05:00		Minimum Daily Average: 4.3 ppb on Feb 4		Hours of Data: 638																							
Maximum Diurnal Average: 24.6 ppb at hour 16		Minimum Diurnal Average: 7.6 ppb at hour 8		Hours of Missing Data: 34																							
Monthly Average: 13.83 ppb		Percentiles: P ₁ = 0.7 P ₁₀ = 1.6 Q ₁ = 4.1 Median = 13.0 Q ₃ = 20.1 P ₉₀ = 29.3 P ₉₉ = 36.6		Hours of Calibration: 31																							
				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-Feb	14	18	16	18	16	14	14	10	3	6	12	13	15	16	14	11	13	14	A	15	15	15	15	17	13.5	17.6	
2-Feb	19	18	16	14	11	9	4	2	2	8	11	14	12	17	17	18	14	A	17	18	20	18	17	17	13.5	20.0	
3-Feb	17	17	16	14	9	4	3	2	1	4	12	15	18	19	17	18	A	15	11	12	12	12	11	11	11.9	18.8	
4-Feb	11	7	6	3	1	1	2	2	1	3	5	6	7	8	7	A	5	3	2	2	1	1	8	8	4.3	10.8	
5-Feb	8	6	6	2	1	1	1	2	2	5	8	12	12	11	A	16	15	10	5	3	2	2	3	5	6.0	16.0	
6-Feb	8	10	7	3	4	2	1	1	3	6	7	8	9	A	11	10	9	6	5	3	2	3	2	1	5.2	10.6	
7-Feb	1	1	1	1	2	2	1	1	3	6	8	10	A	14	15	12	11	7	2	2	2	2	2	1	4.6	14.8	
8-Feb	1	2	1	1	1	1	1	1	3	6	10	A	14	14	16	16	9	5	2	1	1	1	3	2	4.8	16.1	
9-Feb	1	2	2	2	1	4	1	1	2	8	12	15	15	17	20	17	6	6	4	5	3	2	2	2	6.1	19.6	
10-Feb	2	2	1	1	1	A	12	2	6	10	N	19	16	C	C	C	14	2	1	1	1	3	8	14	6.2	19.1	
11-Feb	14	16	17	20	19	A	9	1	2	3	6	10	11	11	18	19	16	7	2	2	1	2	9	9	9.6	19.6	
12-Feb	5	14	14	11	A	4	11	12	10	8	20	23	23	20	22	22	22	20	9	11	9	4	9	11	13.6	23.1	
13-Feb	4	1	3	A	10	9	3	5	3	10	15	14	17	18	17	18	13	15	20	19	18	17	19	18	12.4	20.1	
14-Feb	17	15	A	16	18	18	17	18	11	13	14	18	21	22	20	18	19	15	5	3	5	2	3	5	13.6	21.5	
15-Feb	3	A	8	8	7	10	5	6	9	14	17	17	27	31	30	30	21	15	9	9	10	11	11	21	14.4	31.0	
16-Feb	A	20	19	21	22	16	10	3	7	8	8	17	30	31	31	26	18	18	4	2	1	2	3	A	14.3	31.0	
17-Feb	12	16	14	12	11	10	17	19	14	22	24	30	32	35	34	34	26	12	2	4	4	3	A	12	17.3	34.5	
18-Feb	12	18	14	17	16	7	14	3	4	10	16	24	30	30	31	28	28	24	15	4	2	A	2	1	15.2	30.8	
19-Feb	2	5	14	20	19	19	4	10	9	M	M	13	19	27	28	28	32	23	14	12	16	8	10	11	15.7	32.4	
20-Feb	4	14	10	21	20	A	12	6	12	19	23	25	26	32	27	28	21	26	23	14	4	10	18	17	18.0	31.5	
21-Feb	20	18	17	15	A	18	9	8	9	18	24	34	35	36	37	37	39	37	4	3	4	1	2	14	19.1	38.9	
22-Feb	19	23	21	A	23	11	26	24	28	31	32	25	27	29	29	33	35	34	34	33	30	29	27	28	27.4	35.2	
23-Feb	25	25	A	27	30	28	26	21	21	21	22	25	27	28	28	28	24	15	6	1	1	2	12	36	20.7	35.7	
24-Feb	36	A	31	3	2	1	4	2	3	6	15	25	23	22	18	37	36	26	22	22	19	16	13	2	16.6	36.7	
25-Feb	A	2	1	2	1	2	1	4	4	7	11	12	15	17	33	35	34	31	26	19	18	20	37	A	14.9	36.8	
26-Feb	4	1	6	17	4	1	2	2	6	15	22	24	36	36	35	37	35	31	32	33	34	35	A	33	20.8	37.1	
27-Feb	31	28	29	32	32	29	29	29	28	28	30	28	29	34	36	37	35	35	31	22	17	A	8	1	27.7	37.2	
28-Feb	1	3	10	23	19	20	17	17	18	21	25	25	23	22	23	28	29	25	27	21	A	17	15	14	19.2	28.7	
		11.2	11.5	11.6	12.4	11.4	9.6	9.1	7.6	8.0	11.6	15.7	18.5	21.1	22.8	23.5	24.6	21.4	17.6	12.4	10.6	9.3	9.1	10.3	11.9	Diurnal Average	
		35.7	27.7	30.5	32.2	31.7	29.4	28.6	29.2	27.7	31.1	31.8	33.8	36.3	36.3	37.3	37.5	38.9	36.6	33.8	32.8	33.8	34.8	36.8	35.7	Diurnal Maximum	
C - Calibration		M - Maintenance					N - Not Valid					A - Automated Daily Zero Span															

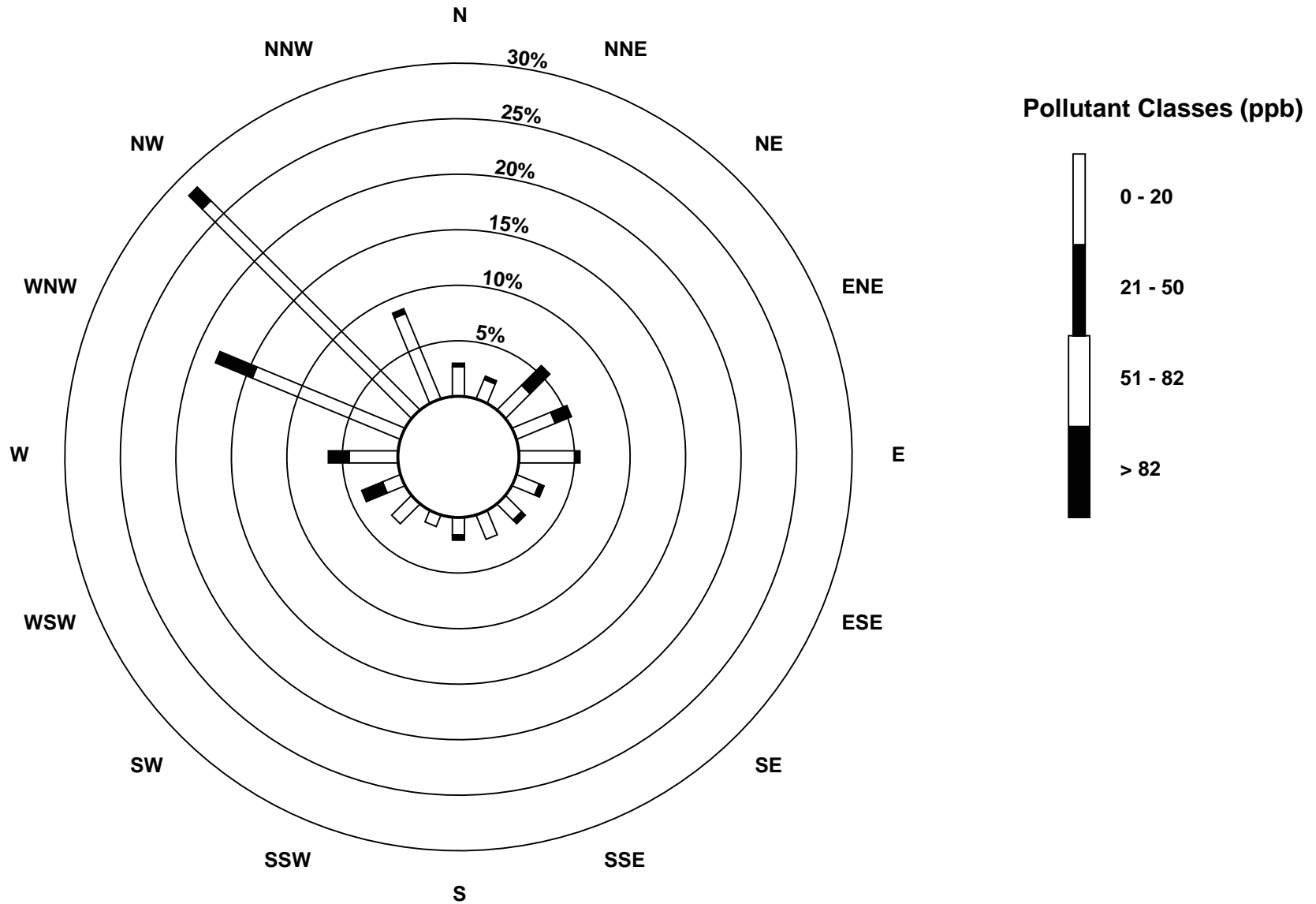
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - February 2010



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - February 2010



Eight Hour Running Averages

Ozone (O₃) - ppb

Henry Pirker - February 2010

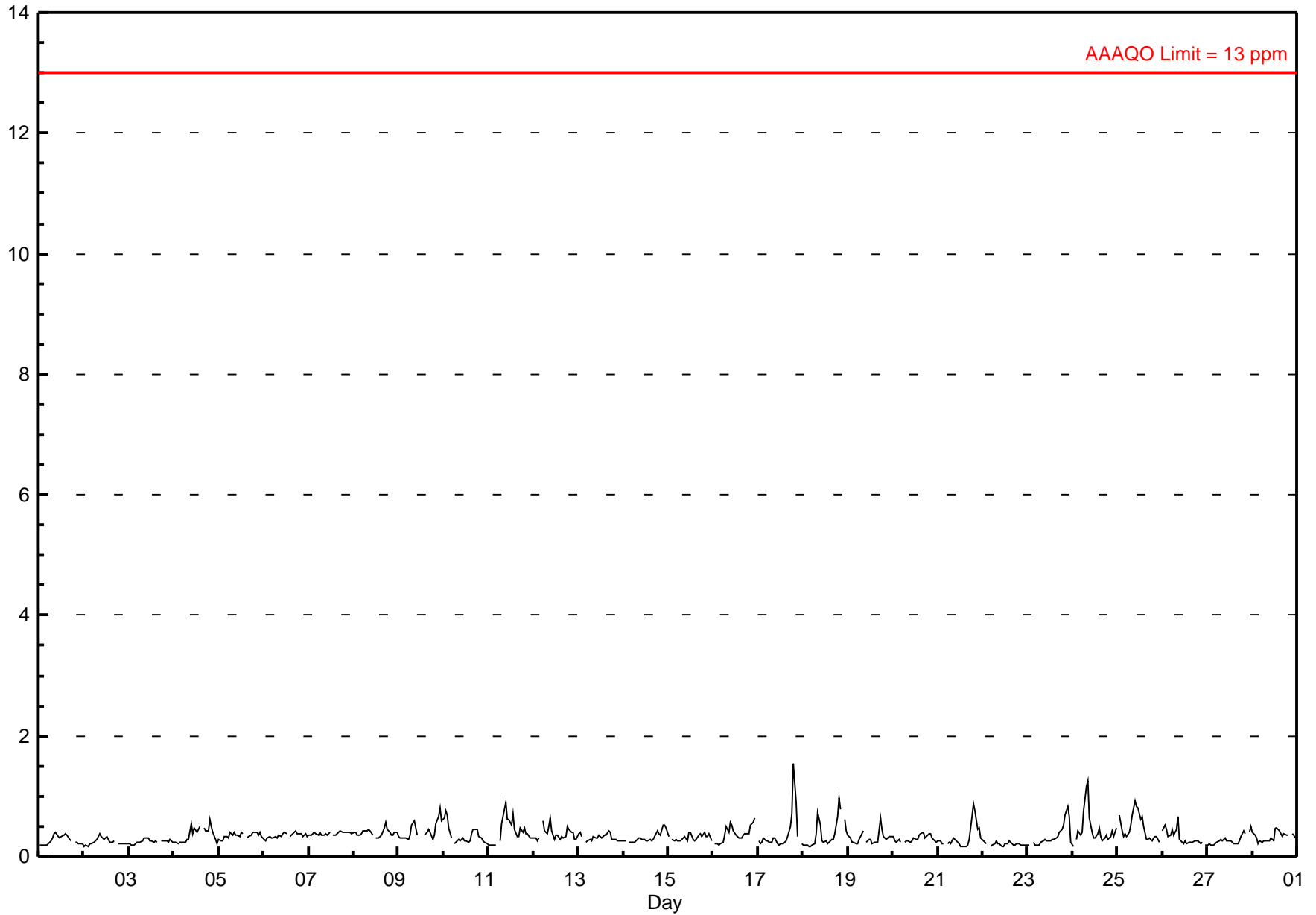
Maximum Value: 31.4 ppb on Feb 26 21:00																					Hours in Service:	672				
Minimum Value: 0.5 ppb on Feb 9 02:00																					Hours of Data:	665				
Percentiles: P ₁ = 0.7 P ₁₀ = 1.9 Q ₁ = 4.4 Median = 8.6 Q ₃ = 14.8 P ₉₀ = 21.5 P ₉₉ = 30.3																					Hours of Missing Data:	7				
																					Hours of Calibration:	3				
																					Percent Operational Time:	99.4				
Day	Hourly Period Ending At (MST)																								Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	14	13	13	13	13	12	12	11	10	9	8	8	8	8	9	9	10	11	11	11	11	11	11	11	11	13.8
2-Feb	12	13	13	13	12	12	10	9	7	5	5	5	5	6	8	10	11	12	13	14	15	15	15	15	15	15.2
3-Feb	15	15	16	15	14	12	10	9	7	5	4	4	5	7	9	11	12	13	14	13	12	11	10	9	15.5	
4-Feb	9	8	7	6	5	4	3	2	1	1	1	2	3	3	4	4	5	5	4	4	3	2	2	2	8.9	
5-Feb	2	2	2	2	2	2	2	2	1	1	1	3	4	5	5	7	9	9	9	8	7	5	5	3	9.2	
6-Feb	3	3	3	3	3	3	3	3	2	2	2	3	4	4	5	6	7	7	7	6	5	4	3	2	7.3	
7-Feb	1	1	1	1	1	1	1	1	1	1	1	2	3	3	5	7	8	9	9	8	7	6	5	3	2	9.1
8-Feb	1	1	1	1	1	1	1	1	1	1	1	2	2	4	6	7	9	10	10	8	7	6	4	3	1	9.8
9-Feb	1	1	1	1	1	1	1	1	1	1	1	2	4	5	7	8	10	10	9	8	6	5	3	2	10.0	
10-Feb	1	1	1	1	1	1	1	1	1	2	3	5	7	7	N	N	N	N	N	N	N	2	2	3	7.5	
11-Feb	4	5	7	9	10	12	12	10	9	7	6	5	4	4	6	7	9	9	8	7	6	6	4	3	11.7	
12-Feb	2	2	2	3	3	3	4	5	5	5	6	8	10	12	14	14	16	17	16	14	12	10	8	7	17.3	
13-Feb	5	4	3	3	4	4	4	3	3	3	5	6	7	8	10	11	13	13	14	15	15	15	15	15	15.3	
14-Feb	16	16	16	16	16	16	15	15	13	13	12	12	13	13	13	13	15	15	14	12	10	8	6	4	16.4	
15-Feb	2	1	1	2	2	3	3	3	3	4	5	6	8	11	14	17	18	18	17	15	13	11	8	7	18.4	
16-Feb	6	7	9	11	13	13	12	11	10	8	7	6	7	9	12	14	15	16	16	15	12	9	6	5	16.2	
17-Feb	4	4	5	5	6	6	7	8	7	8	9	12	15	19	21	23	25	24	22	19	15	11	8	5	24.9	
18-Feb	4	4	5	7	8	8	8	7	7	6	6	7	9	12	15	18	21	22	21	19	16	14	10	6	21.8	
19-Feb	3	1	2	4	6	6	6	7	7	7	7	7	7	9	13	16	20	18	16	16	13	11	8	8	20.1	
20-Feb	5	5	5	6	7	8	8	8	8	9	11	12	13	15	17	20	21	22	20	19	16	13	12	11	21.9	
21-Feb	10	9	10	11	12	13	11	10	9	9	10	12	15	18	22	26	29	31	28	25	21	17	12	8	30.6	
22-Feb	5	4	4	5	6	7	9	11	13	15	18	19	21	23	24	26	27	28	28	29	29	29	29	28	29.0	
23-Feb	27	26	25	25	25	25	24	23	21	21	21	20	20	20	21	22	23	22	19	16	13	10	7	7	27.3	
24-Feb	8	8	9	9	9	9	9	6	2	2	3	5	7	9	11	15	18	21	21	20	19	17	16	12	20.8	
25-Feb	9	6	5	3	2	1	1	1	1	1	2	3	5	6	9	13	16	18	19	19	19	18	18	16	19.3	
26-Feb	13	10	8	7	6	5	2	2	2	3	5	7	10	14	18	22	26	28	30	31	31	31	31	31	31.4	
27-Feb	30	30	30	30	29	28	27	27	26	26	26	26	25	25	27	29	29	29	30	30	28	26	26	21	16	30.4
28-Feb	12	7	4	6	6	8	8	10	12	14	16	17	17	17	18	20	21	21	21	21	21	20	18	17	21.5	
30.3 29.9 29.6 29.5 29.2 28.5 27.3 26.7 26.4 26.3 26.4 25.7 25.1 25.4 27.3 28.5 29.5 30.6 29.7 30.7 31.4 31.2 31.0 30.6																										
Diurnal Maximums																										
N - Not Valid																										

Hourly Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.55 ppm on Feb 17 20:00 Maximum Daily Average: 0.48 ppm on Feb 25		Hours in Service: 672 Hours of Data: 640 Hours of Missing Data: 32 Hours of Calibration: 31 Percent Operational Time: 99.9																																														
Minimum Value: 0.2 ppm on Feb 22 11:00 Maximum Diurnal Average: 0.45 ppm at hour 20 Monthly Average: 0.342 ppm		Minimum Daily Average: 0.21 ppm on Feb 22 Minimum Diurnal Average: 0.26 ppm at hour 5 Percentiles: P ₁ = 0.17 P ₁₀ = 0.21 Q ₁ = 0.25 Median = 0.31 Q ₃ = 0.39 P ₉₀ = 0.49 P ₉₉ = 0.88																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.27	0.39																						
2-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.39																						
3-Feb	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	0.2	0.3	0.2	A	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.25	0.31																						
4-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.4	0.5	0.4	0.4	0.5	A	0.5	0.4	0.4	0.6	0.5	0.4	0.3	0.2	0.36	0.63																						
5-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.4	A	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.35	0.41																							
6-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	A	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.35	0.44																						
7-Feb	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	A	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.38	0.44																						
8-Feb	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	A	0.3	0.3	0.3	0.3	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.40	0.57																						
9-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.5	0.4	C	C	C	0.4	0.4	0.5	0.4	0.3	0.4	0.6	0.7	0.8	0.6	0.43	0.80																						
10-Feb	0.6	0.8	0.7	0.5	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.5	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.36	0.75																						
11-Feb	0.2	0.2	0.2	0.2	0.2	A	0.3	0.5	0.7	0.9	0.6	0.6	0.5	0.7	0.5	0.3	0.3	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.42	0.89																						
12-Feb	0.3	0.3	0.3	0.3	A	0.6	0.4	0.4	0.5	0.6	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.4	0.3	0.3	0.38	0.63																						
13-Feb	0.4	0.4	0.3	A	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.32	0.42																						
14-Feb	0.3	0.3	A	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.32	0.53																						
15-Feb	0.3	A	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.32	0.40																						
16-Feb	A	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.4	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.6	A	0.38	0.65																						
17-Feb	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.7	1.5	0.9	0.3	A	0.2	0.37	1.55																						
18-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.7	0.5	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.7	1.0	0.8	A	0.6	0.4	0.38	0.98																						
19-Feb	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	M	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.6	0.5	0.3	0.3	0.3	0.3	0.31	0.63																							
20-Feb	0.3	0.3	0.2	0.3	0.2	A	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.30	0.39																						
21-Feb	0.3	0.2	0.2	0.2	A	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.7	0.9	0.8	0.4	0.5	0.3	0.32	0.87																						
22-Feb	0.3	0.2	0.2	A	0.2	0.2	0.2	0.3	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	0.21	0.26																						
23-Feb	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.7	0.8	0.7	0.2	0.34	0.84																						
24-Feb	0.2	A	0.3	0.4	0.4	0.4	0.8	1.2	1.3	0.6	0.4	0.3	0.3	0.4	0.5	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.5	0.45	1.25																						
25-Feb	A	0.7	0.4	0.3	0.4	0.3	0.4	0.5	0.7	0.9	0.8	0.8	0.6	0.7	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	A	0.48	0.92																						
26-Feb	0.4	0.5	0.5	0.3	0.3	0.4	0.4	0.5	0.7	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	A	0.2	0.32	0.65																						
27-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	A	0.4	0.5	0.27	0.50																						
28-Feb	0.4	0.4	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.4	A	0.4	0.3	0.3	0.33	0.47																						
																								0.29	0.31	0.28	0.28	0.26	0.28	0.31	0.37	0.43	0.41	0.34	0.33	0.33	0.33	0.32	0.30	0.33	0.37	0.40	0.45	0.41	0.37	0.38	0.31	Diurnal Average
																								0.64	0.75	0.69	0.46	0.38	0.59	0.76	1.17	1.25	0.92	0.84	0.80	0.63	0.72	0.50	0.41	0.48	0.63	0.72	1.55	0.90	0.84	0.80	0.58	Diurnal Maximum
C - Calibration M - Maintenance A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na																																																



Hourly Maximums

Carbon Monoxide (CO) - ppm

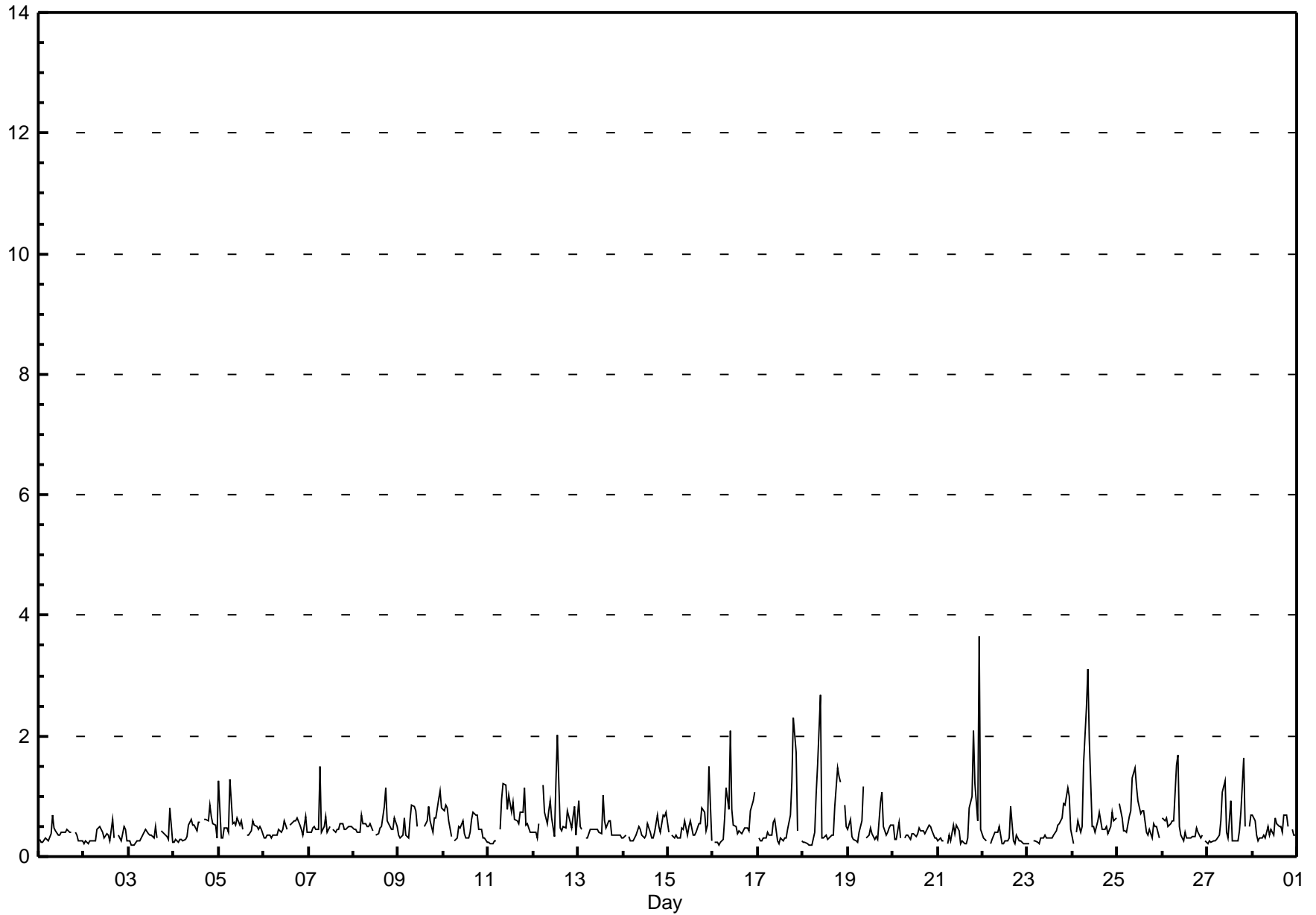
Henry Pirker - February 2010

Maximum Value: 3.65 ppm on Feb 21 23:00		Maximum Daily Average: 0.81 ppm on Feb 24		Hours in Service: 672																							
Minimum Value: 0.2 ppm on Feb 16 04:00		Minimum Daily Average: 0.31 ppm on Feb 22		Hours of Data: 640																							
Maximum Diurnal Average: 0.79 ppm at hour 10		Minimum Diurnal Average: 0.33 ppm at hour 5		Hours of Missing Data: 32																							
Monthly Average: 0.515 ppm		Percentiles: P ₁ = 0.20 P ₁₀ = 0.25 Q ₁ = 0.30 Median = 0.43 Q ₃ = 0.59 P ₉₀ = 0.84 P ₉₉ = 1.90		Hours of Calibration: 31																							
				Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	A	0.4	0.4	0.3	0.3	0.3	0.36	0.68	
2-Feb	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.4	0.4	0.3	0.6	0.3	A	0.3	0.3	0.3	0.5	0.4	0.3	0.34	0.62	
3-Feb	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.5	0.3	A	0.4	0.4	0.4	0.3	0.3	0.8	0.2	0.34	0.82	
4-Feb	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.6	0.5	0.5	0.4	0.6	0.6	A	0.6	0.6	0.6	0.9	0.7	0.5	0.5	0.3	0.46	0.85	
5-Feb	1.3	0.3	0.3	0.5	0.5	0.4	1.3	0.6	0.6	0.5	0.6	0.5	0.6	0.5	A	0.4	0.4	0.4	0.6	0.5	0.5	0.4	0.5	0.5	0.55	1.29	
6-Feb	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.4	A	0.5	0.5	0.6	0.6	0.6	0.5	0.4	0.4	0.7	0.4	0.45	0.67	
7-Feb	0.4	0.4	0.5	0.5	0.4	0.4	1.5	0.4	0.5	0.7	0.4	0.5	A	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.52	1.50	
8-Feb	0.4	0.4	0.4	0.4	0.7	0.5	0.5	0.5	0.5	0.5	0.4	A	0.4	0.4	0.5	0.5	0.8	1.1	0.6	0.5	0.5	0.7	0.5	0.54	1.13		
9-Feb	0.4	0.3	0.4	0.6	0.4	0.3	0.6	0.8	0.8	0.7	0.5	C	C	C	0.5	0.6	0.8	0.6	0.4	0.6	0.6	0.9	1.1	0.8	0.61	1.09	
10-Feb	0.7	0.8	0.8	0.6	0.3	A	0.2	0.3	0.5	0.5	0.6	0.4	0.3	0.3	0.4	0.6	0.7	0.7	0.7	0.5	0.5	0.3	0.3	0.2	0.49	0.85	
11-Feb	0.2	0.2	0.2	0.2	0.3	A	0.4	0.9	1.2	1.2	0.8	1.0	0.7	0.9	0.6	0.6	0.6	0.7	0.7	1.1	0.5	0.5	0.4	0.4	0.64	1.22	
12-Feb	0.4	0.4	0.3	0.5	A	1.2	0.7	0.5	0.8	0.9	0.6	0.3	1.2	2.0	0.5	0.4	0.5	0.5	0.8	0.7	0.5	0.7	0.8	0.4	0.68	2.03	
13-Feb	0.9	0.5	0.5	A	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.0	0.6	0.5	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.47	1.01	
14-Feb	0.3	0.3	A	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.4	0.6	0.4	0.3	0.3	0.4	0.7	0.5	0.4	0.7	0.7	0.7	0.42	0.75	
15-Feb	0.4	A	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.6	0.4	0.5	0.6	0.4	0.4	0.4	0.6	0.6	0.8	0.7	0.4	0.5	1.5	0.3	0.50	1.51	
16-Feb	A	0.2	0.2	0.2	0.2	0.3	0.6	1.1	0.8	2.1	0.8	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.8	0.9	1.1	A	0.61	2.10	
17-Feb	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.6	0.3	0.2	0.3	0.3	0.3	0.3	0.5	0.7	1.2	2.3	1.7	0.4	A	0.3	0.55	2.31	
18-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.4	1.0	1.5	2.7	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.8	1.5	1.3	1.2	A	0.9	0.5	0.67	2.67	
19-Feb	0.5	0.6	0.3	0.3	0.3	0.2	0.4	0.6	1.2	M	0.3	0.4	0.5	0.4	0.3	0.3	0.3	0.9	1.1	0.5	0.4	0.4	0.5	0.5	0.48	1.16	
20-Feb	0.5	0.3	0.3	0.6	0.3	A	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.3	0.3	0.39	0.57	
21-Feb	0.3	0.3	0.3	0.3	A	0.2	0.4	0.3	0.5	0.4	0.5	0.4	0.2	0.3	0.2	0.2	0.3	0.8	1.0	2.1	1.2	0.6	3.7	0.5	0.64	3.65	
22-Feb	0.3	0.3	0.3	A	0.2	0.3	0.4	0.4	0.4	0.5	0.2	0.2	0.3	0.3	0.3	0.8	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.31	0.84	
23-Feb	0.2	0.2	A	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.9	0.8	1.1	1.0	0.4	0.45	1.14	
24-Feb	0.2	A	0.4	0.6	0.4	0.5	1.6	2.5	3.1	1.9	0.5	0.5	0.4	0.6	0.7	0.6	0.5	0.4	0.5	0.4	0.5	0.7	0.6	0.6	0.81	3.10	
25-Feb	A	0.9	0.6	0.4	0.4	0.4	0.7	0.8	1.3	1.5	1.2	0.9	0.7	0.8	0.8	0.4	0.4	0.5	0.3	0.6	0.5	0.5	0.3	A	0.67	1.47	
26-Feb	0.6	0.6	0.6	0.5	0.5	0.6	0.6	1.5	1.7	0.5	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.4	A	0.2	0.53	1.69	
27-Feb	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.6	1.1	1.2	0.4	0.3	0.9	0.3	0.3	0.3	0.3	0.4	0.7	1.6	0.5	A	0.5	0.7	0.52	1.64	
28-Feb	0.7	0.6	0.4	0.3	0.3	0.3	0.4	0.3	0.5	0.4	0.5	0.4	0.6	0.5	0.5	0.5	0.4	0.7	0.7	0.5	A	0.4	0.4	0.4	0.45	0.70	
																								Diurnal Average			
																								Diurnal Maximum			
C - Calibration																								M - Maintenance		A - Automated Daily Zero Span	

Hourly Maximums

Carbon Monoxide (CO) - ppm

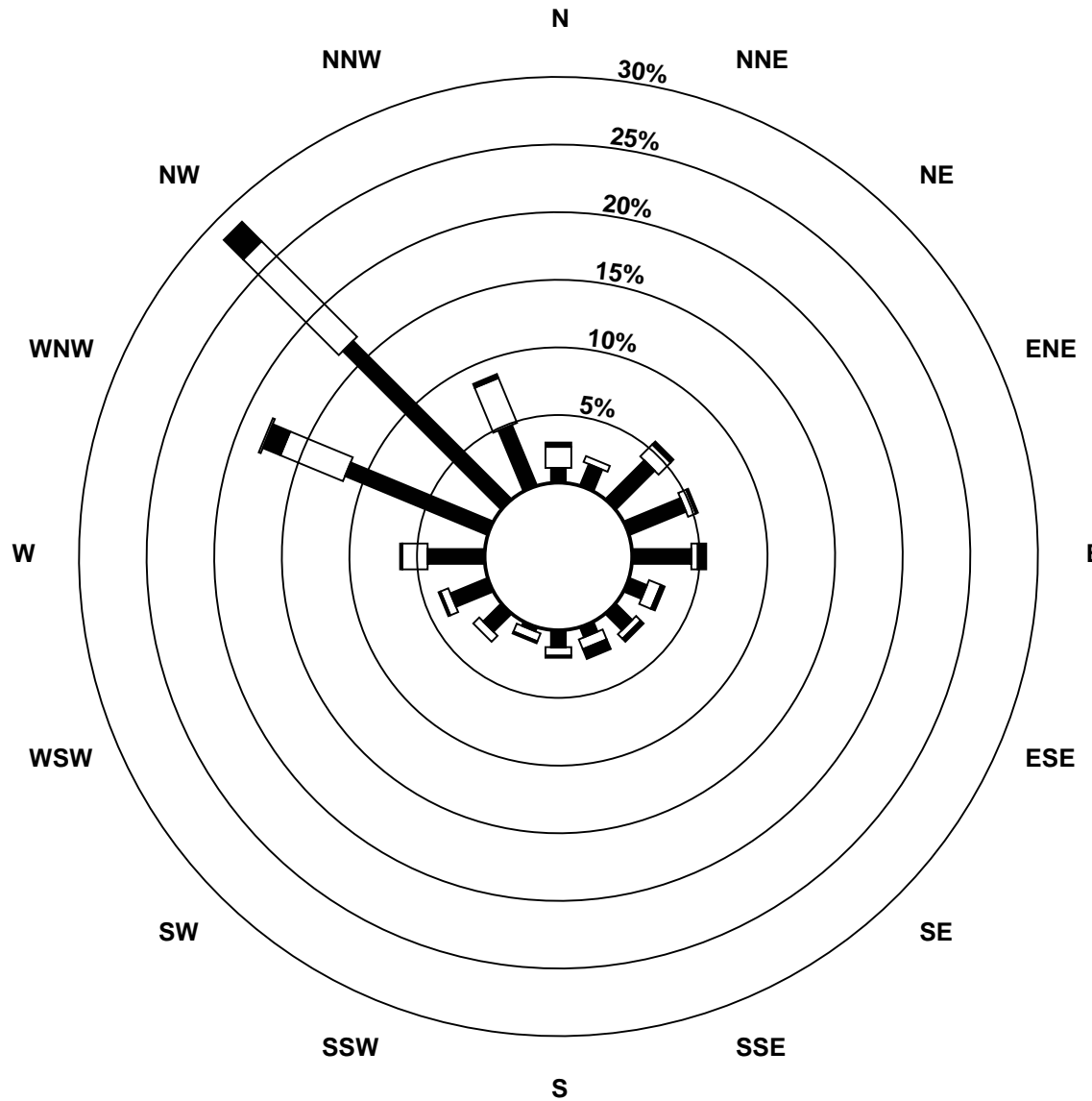
Henry Pirker - February 2010



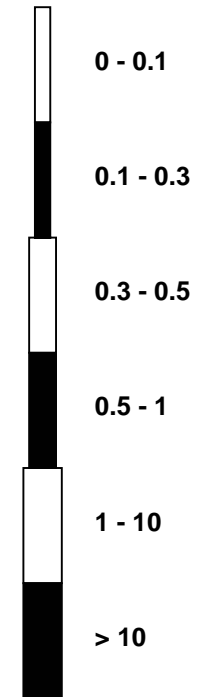
Pollutant Rose

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2010



Pollutant Classes (ppm)



Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - February 2010

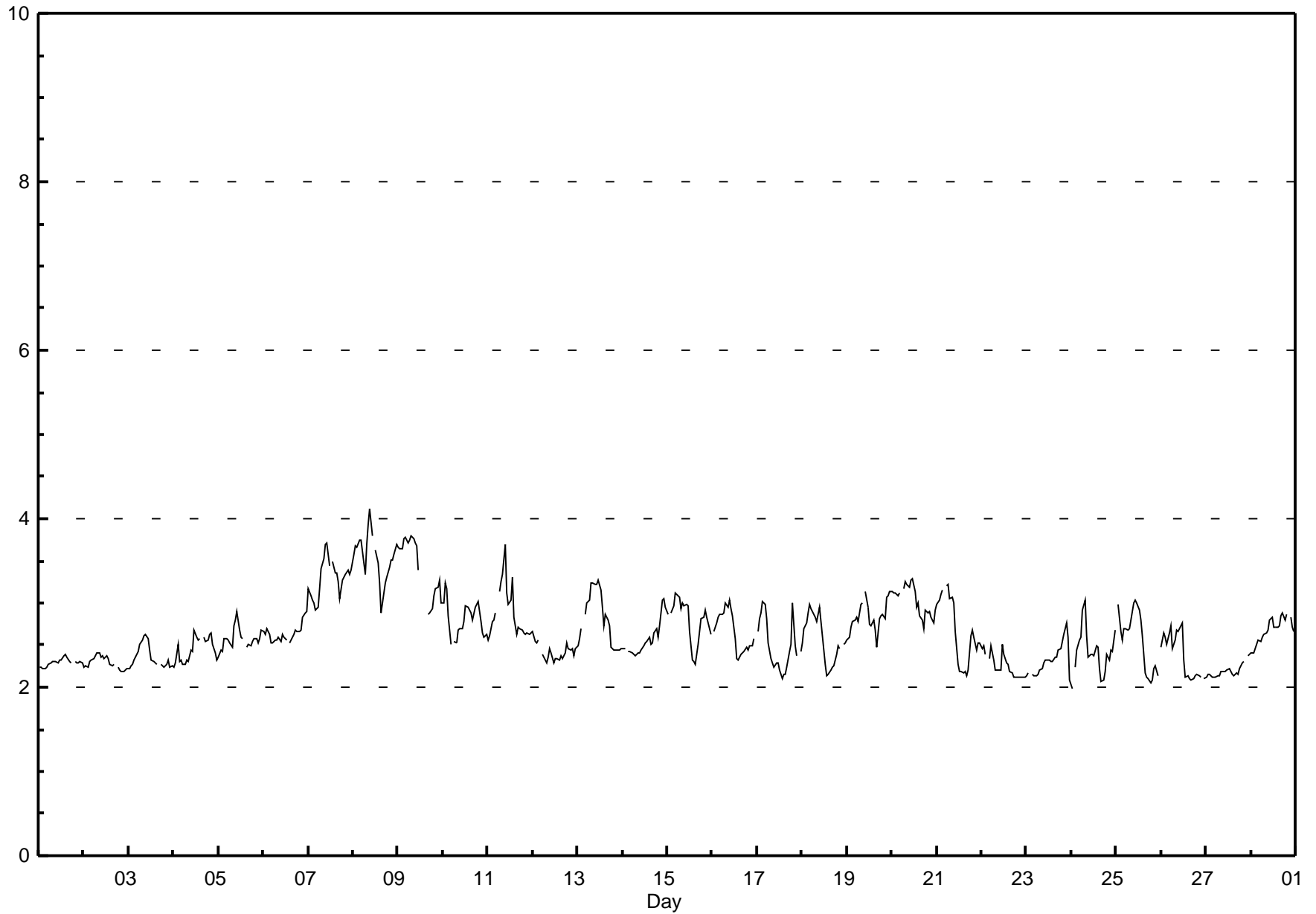
Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 0.69 ppm on Feb 25 15:00		Hours in Service: 672 Hours of Data: 666																							
Minimum Value: 0.19 ppm on Feb 18 06:00		Hours of Missing Data: 6 Hours of Calibration: 6																							
Percentiles: P ₁ = 0.20 P ₁₀ = 0.22 Q ₁ = 0.27 Median = 0.33 Q ₃ = 0.39 P ₉₀ = 0.47 P ₉₉ = 0.66		Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	0.2	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	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.36
2-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.31
3-Feb	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	0.3	0.3	0.27
4-Feb	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	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.49
5-Feb	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.40
6-Feb	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.39
7-Feb	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.40
8-Feb	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.43
9-Feb	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	N	N	N	N	N	N	0.4	0.4	0.4	0.5	0.5	0.51
10-Feb	0.5	0.6	0.6	0.6	0.6	0.6	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	0.4	0.4	0.4	0.3	0.65
11-Feb	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.63
12-Feb	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.46
13-Feb	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.39
14-Feb	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.41
15-Feb	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.43
16-Feb	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.46
17-Feb	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.6	0.6	0.7	0.6	0.65
18-Feb	0.6	0.6	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.63
19-Feb	0.6	0.6	0.5	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	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.60
20-Feb	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.38
21-Feb	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	0.3	0.3	0.4	0.4	0.5	0.5	0.50
22-Feb	0.5	0.5	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.51
23-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.53
24-Feb	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.68
25-Feb	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.69
26-Feb	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.45
27-Feb	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.36
28-Feb	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	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.40
0.63 0.59 0.63 0.65 0.61 0.60 0.52 0.51 0.66 0.66 0.68 0.66 0.65 0.68 0.69 0.67 0.62 0.54 0.48 0.50 0.59 0.60 0.65 0.65																									
Diurnal Maximums																									
N - Not Valid Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																									

Hourly Averages

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 4.12 ppm on Feb 8 10:00 Maximum Daily Average: 3.54 ppm on Feb 8		Hours in Service: 672 Hours of Data: 639 Hours of Missing Data: 33 Hours of Calibration: 32 Percent Operational Time: 99.9																																														
Minimum Value: 2.0 ppm on Feb 24 01:00 Maximum Diurnal Average: 2.81 ppm at hour 10 Monthly Average: 2.647 ppm		Minimum Daily Average: 2.19 ppm on Feb 27 Minimum Diurnal Average: 2.46 ppm at hour 16 Percentiles: P ₁ = 2.09 P ₁₀ = 2.19 Q ₁ = 2.33 Median = 2.57 Q ₃ = 2.88 P ₉₀ = 3.21 P ₉₉ = 3.75																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.3	2.3	A	2.3	2.3	2.3	2.3	2.3	2.3	2.29	2.39																						
2-Feb	2.2	2.3	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.3	2.3	2.2	2.3	A	2.2	2.2	2.2	2.2	2.2	2.2	2.29	2.41																						
3-Feb	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.6	2.6	2.6	2.6	2.4	2.3	2.3	2.3	2.3	A	2.3	2.3	2.2	2.3	2.3	2.2	2.3	2.36	2.63																						
4-Feb	2.2	2.3	2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.7	2.6	2.6	2.6	A	2.6	2.5	2.6	2.6	2.7	2.5	2.4	2.3	2.45	2.67																						
5-Feb	2.4	2.4	2.4	2.6	2.6	2.6	2.5	2.5	2.7	2.8	2.9	2.7	2.6	2.6	A	2.5	2.5	2.5	2.5	2.6	2.6	2.5	2.6	2.7	2.57	2.89																						
6-Feb	2.7	2.6	2.7	2.6	2.5	2.5	2.6	2.6	2.6	2.5	2.6	2.6	2.6	A	2.5	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.9	2.9	2.64	2.89																						
7-Feb	3.2	3.1	3.0	3.0	2.9	2.9	3.2	3.4	3.5	3.7	3.7	3.4	A	3.5	3.4	3.4	3.3	3.1	3.3	3.3	3.3	3.4	3.3	3.4	3.29	3.71																						
8-Feb	3.6	3.7	3.7	3.7	3.8	3.6	3.3	3.7	3.9	4.1	3.8	A	3.6	3.5	3.2	2.9	3.1	3.2	3.3	3.4	3.5	3.5	3.6	3.7	3.54	4.12																						
9-Feb	3.7	3.6	3.6	3.8	3.8	3.7	3.7	3.8	3.8	3.7	3.7	3.4	C	C	C	C	2.9	2.9	2.9	3.1	3.2	3.2	3.3	3.0	3.43	3.80																						
10-Feb	3.0	3.2	3.2	2.9	2.5	A	2.5	2.5	2.7	2.7	2.7	2.8	3.0	2.9	2.9	2.9	2.8	2.9	3.0	3.0	2.8	2.6	2.6	2.6	2.82	3.23																						
11-Feb	2.6	2.6	2.8	2.8	2.9	A	3.1	3.3	3.3	3.7	3.1	3.0	3.0	3.3	2.8	2.6	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.88	3.69																						
12-Feb	2.7	2.5	2.5	2.6	A	2.4	2.3	2.3	2.4	2.5	2.4	2.3	2.3	2.3	2.4	2.3	2.4	2.5	2.5	2.4	2.5	2.4	2.5	2.5	2.42	2.66																						
13-Feb	2.5	2.6	2.7	A	2.9	3.0	3.0	3.2	3.2	3.2	3.2	3.3	3.2	2.9	2.7	2.9	2.8	2.7	2.5	2.4	2.4	2.4	2.4	2.5	2.81	3.27																						
14-Feb	2.5	2.5	A	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.5	2.5	2.6	2.7	2.6	2.7	3.0	3.1	2.9	2.57	3.06																						
15-Feb	2.9	A	2.9	3.0	3.1	3.1	3.1	2.9	3.0	3.0	3.0	3.0	2.7	2.3	2.3	2.3	2.5	2.7	2.8	2.8	2.9	2.8	2.8	2.6	2.80	3.11																						
16-Feb	A	2.7	2.8	2.8	2.9	2.9	2.9	3.0	3.0	3.0	2.9	2.8	2.6	2.3	2.3	2.4	2.4	2.4	2.5	2.4	2.5	2.5	2.6	A	2.66	3.03																						
17-Feb	2.7	2.8	2.9	3.0	3.0	2.8	2.5	2.3	2.3	2.2	2.3	2.3	2.2	2.1	2.2	2.2	2.2	2.4	2.5	3.0	2.5	2.4	A	2.4	2.49	3.01																						
18-Feb	2.5	2.7	2.8	2.9	3.0	2.9	2.9	2.8	2.8	3.0	2.8	2.6	2.3	2.1	2.2	2.2	2.2	2.3	2.4	2.5	2.5	A	2.5	2.5	2.58	2.99																						
19-Feb	2.6	2.6	2.7	2.8	2.8	2.8	2.8	3.0	3.0	M	3.1	3.0	2.8	2.7	2.8	2.7	2.5	2.8	2.9	2.9	2.8	3.1	3.1	3.1	2.83	3.14																						
20-Feb	3.1	3.1	3.1	3.1	3.1	A	3.2	3.2	3.2	3.2	3.3	3.3	3.1	3.0	3.0	2.9	2.8	2.7	2.9	2.9	2.9	2.8	2.8	2.9	3.03	3.28																						
21-Feb	3.0	3.0	3.1	3.1	A	3.2	3.2	3.1	3.1	3.0	2.7	2.3	2.2	2.2	2.2	2.2	2.1	2.2	2.6	2.7	2.6	2.4	2.5	2.5	2.66	3.21																						
22-Feb	2.5	2.5	2.4	A	2.3	2.5	2.3	2.2	2.2	2.2	2.2	2.5	2.4	2.3	2.3	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.26	2.52																						
23-Feb	2.1	2.2	A	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.6	2.8	2.6	2.1	2.32	2.76																						
24-Feb	2.0	A	2.2	2.4	2.6	2.6	2.9	3.0	2.6	2.4	2.4	2.4	2.4	2.5	2.5	2.2	2.1	2.1	2.2	2.4	2.3	2.4	2.4	2.7	2.42	3.04																						
25-Feb	A	3.0	2.7	2.6	2.7	2.7	2.7	2.7	2.8	3.0	3.0	2.9	2.8	2.6	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.1	A	2.55	3.03																						
26-Feb	2.5	2.6	2.6	2.5	2.6	2.7	2.5	2.6	2.7	2.7	2.7	2.8	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	A	2.1	2.39	2.76																						
27-Feb	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.2	2.3	2.3	A	2.4	2.4	2.19	2.40																						
28-Feb	2.4	2.4	2.5	2.5	2.6	2.5	2.6	2.6	2.6	2.7	2.8	2.8	2.7	2.7	2.7	2.7	2.8	2.9	2.8	2.9	A	2.8	2.7	2.7	2.67	2.88																						
																								2.61	2.68	2.72	2.71	2.71	2.70	2.71	2.75	2.78	2.81	2.78	2.70	2.59	2.57	2.52	2.46	2.49	2.53	2.58	2.61	2.60	2.63	2.63	2.62	Diurnal Average
																								3.66	3.68	3.66	3.76	3.78	3.72	3.74	3.80	3.93	4.12	3.79	3.44	3.62	3.50	3.35	3.36	3.25	3.24	3.30	3.42	3.51	3.50	3.57	3.70	Diurnal Maximum
C - Calibration																								M - Maintenance				A - Automated Daily Zero Span																				

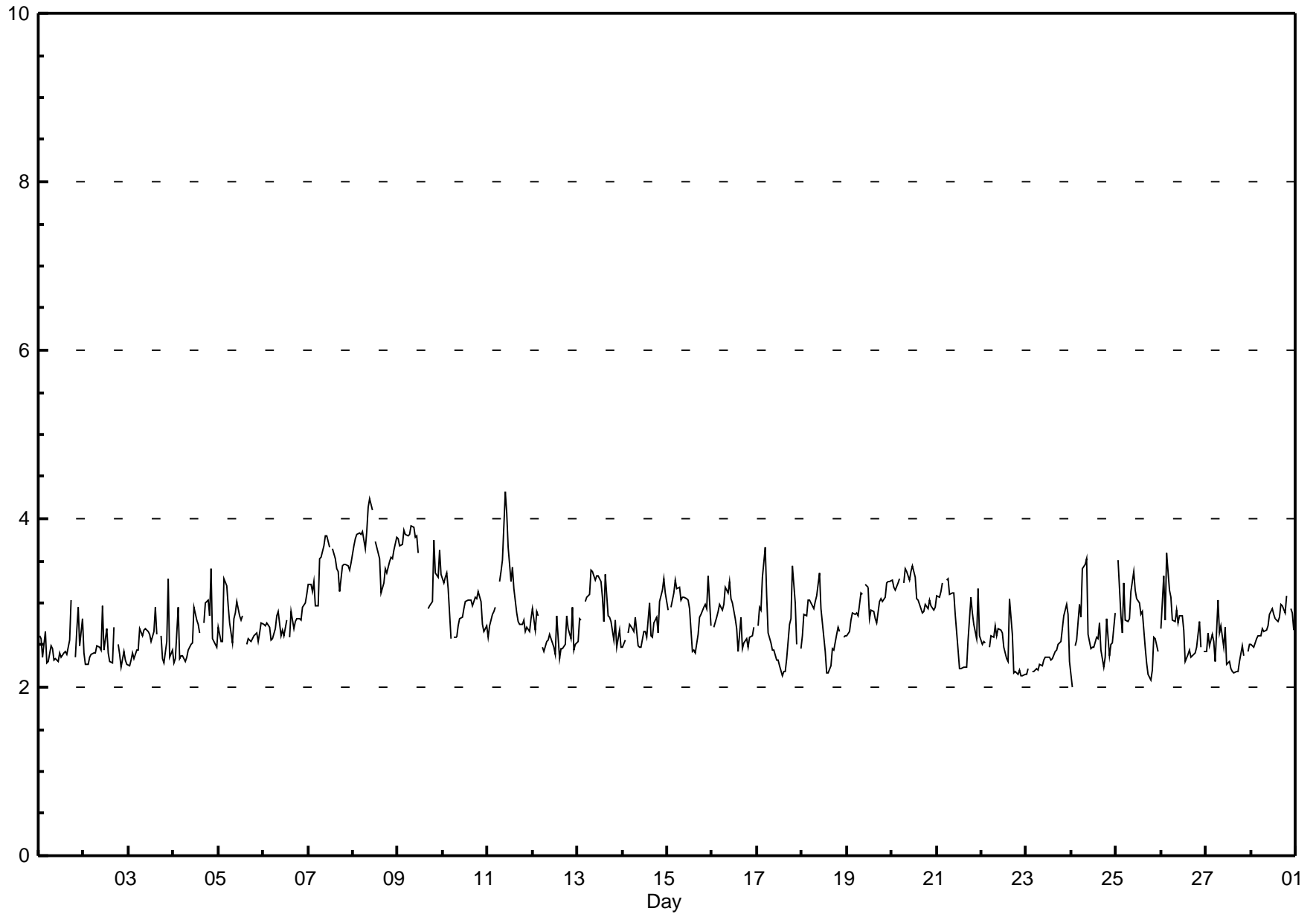


Hourly Maximums

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2010

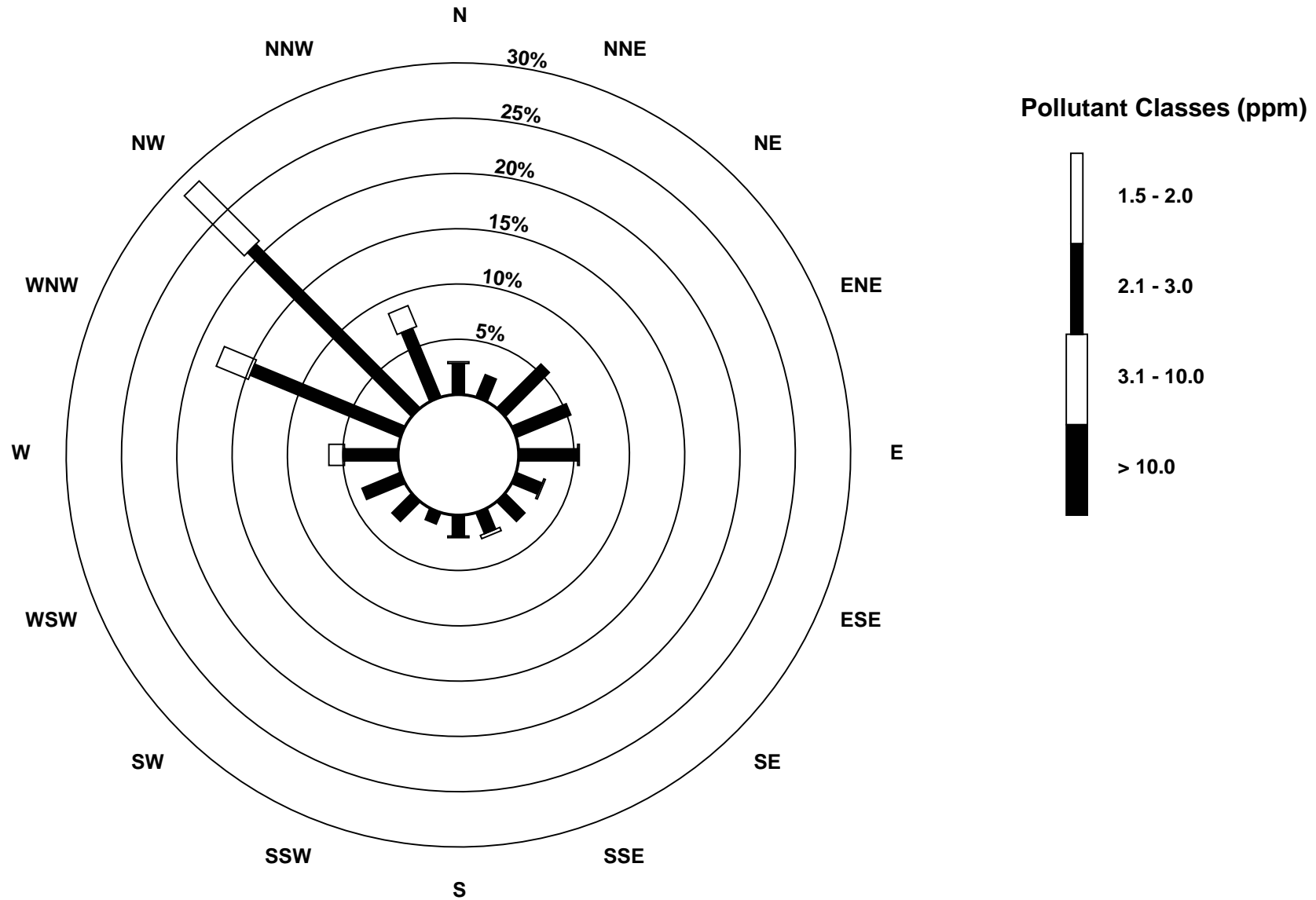
Maximum Value: 4.33 ppm on Feb 11 10:00		Maximum Daily Average: 3.68 ppm on Feb 8		Hours in Service: 672																																												
Minimum Value: 2.0 ppm on Feb 24 01:00		Minimum Daily Average: 2.41 ppm on Feb 23		Hours of Data: 639																																												
Maximum Diurnal Average: 2.97 ppm at hour 10		Minimum Diurnal Average: 2.65 ppm at hour 17		Hours of Missing Data: 33																																												
Monthly Average: 2.815 ppm		Percentiles: P ₁ = 2.15 P ₁₀ = 2.33 Q ₁ = 2.49 Median = 2.76 Q ₃ = 3.05 P ₉₀ = 3.39 P ₉₉ = 3.78		Hours of Calibration: 32																																												
				Percent Operational Time: 99.9																																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	2.6	2.6	2.4	2.7	2.3	2.3	2.5	2.5	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.4	2.6	3.0	A	2.4	2.7	2.9	2.5	2.8	2.50	3.04																						
2-Feb	2.4	2.3	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.4	3.0	2.4	2.7	2.4	2.3	2.3	2.7	A	2.5	2.4	2.2	2.4	2.3	2.3	2.43	2.97																						
3-Feb	2.3	2.3	2.4	2.3	2.4	2.4	2.7	2.6	2.7	2.7	2.7	2.6	2.5	2.7	3.0	2.6	A	2.6	2.3	2.3	2.5	3.3	2.3	2.4	2.56	3.29																						
4-Feb	2.3	2.3	3.0	2.3	2.4	2.4	2.3	2.4	2.4	2.5	2.5	2.9	2.8	2.7	2.6	A	2.8	3.0	3.0	2.8	3.4	2.6	2.5	2.5	2.63	3.41																						
5-Feb	2.7	2.5	2.5	3.3	3.2	3.0	2.8	2.5	2.8	2.9	3.0	2.9	2.8	2.8	A	2.5	2.6	2.5	2.6	2.6	2.6	2.5	2.6	2.8	2.75	3.30																						
6-Feb	2.8	2.7	2.8	2.7	2.6	2.6	2.7	2.8	2.9	2.6	2.7	2.6	2.8	A	2.6	2.9	2.7	2.8	2.8	2.8	2.8	2.9	3.0	3.1	2.77	3.11																						
7-Feb	3.2	3.2	3.1	3.3	3.0	3.0	3.5	3.5	3.7	3.8	3.8	3.7	A	3.6	3.5	3.4	3.4	3.1	3.4	3.5	3.5	3.4	3.4	3.5	3.41	3.80																						
8-Feb	3.7	3.8	3.8	3.8	3.8	3.8	3.6	3.8	4.1	4.2	4.1	A	3.7	3.6	3.5	3.1	3.2	3.4	3.4	3.5	3.5	3.5	3.6	3.8	3.68	4.23																						
9-Feb	3.8	3.7	3.7	3.9	3.8	3.8	3.8	3.9	3.9	3.8	3.8	3.6	C	C	C	C	2.9	3.0	3.0	3.7	3.4	3.3	3.6	3.3	3.59	3.92																						
10-Feb	3.2	3.3	3.4	3.2	2.6	A	2.6	2.6	2.7	2.8	2.8	2.9	3.0	3.0	3.0	3.0	3.0	3.1	3.0	3.1	3.0	2.7	2.7	2.7	2.94	3.36																						
11-Feb	2.6	2.7	2.9	2.9	3.0	A	3.3	3.4	3.5	4.3	4.1	3.7	3.3	3.4	3.2	2.9	2.8	2.7	2.7	2.8	2.7	2.7	2.7	2.8	3.08	4.33																						
12-Feb	2.9	2.7	2.9	2.8	A	2.5	2.4	2.5	2.6	2.6	2.6	2.5	2.4	2.8	2.3	2.5	2.5	2.5	2.9	2.7	2.6	3.0	2.4	2.5	2.61	2.96																						
13-Feb	2.5	2.8	2.8	A	3.0	3.1	3.1	3.4	3.4	3.3	3.3	3.3	3.3	3.1	2.8	3.3	2.9	2.8	2.8	2.6	2.8	2.5	2.7	2.5	2.95	3.39																						
14-Feb	2.5	2.6	A	2.6	2.7	2.7	2.7	2.8	2.5	2.5	2.5	2.7	2.7	2.6	3.0	2.6	2.6	2.8	2.8	2.6	3.0	3.2	3.3	3.1	2.74	3.30																						
15-Feb	2.9	A	3.0	3.1	3.3	3.2	3.2	3.0	3.1	3.1	3.1	3.0	2.9	2.4	2.4	2.4	2.6	2.8	2.9	3.0	3.0	2.9	3.3	2.7	2.93	3.33																						
16-Feb	A	2.7	2.8	2.9	3.0	2.9	3.0	3.2	3.1	3.2	3.1	3.0	2.8	2.7	2.4	2.8	2.5	2.5	2.6	2.5	2.6	2.6	2.7	A	2.80	3.25																						
17-Feb	2.7	2.9	2.9	3.3	3.7	3.1	2.6	2.5	2.4	2.4	2.3	2.3	2.3	2.1	2.2	2.2	2.3	2.7	2.8	3.4	3.0	2.5	A	2.5	2.67	3.67																						
18-Feb	2.6	2.9	2.8	3.0	3.0	3.0	2.9	3.0	3.1	3.4	2.9	2.8	2.4	2.2	2.2	2.3	2.4	2.4	2.6	2.7	2.7	A	2.6	2.6	2.72	3.35																						
19-Feb	2.6	2.7	2.8	2.9	2.9	2.9	2.8	3.1	3.1	M	3.2	3.2	2.8	2.9	2.9	2.8	2.8	3.0	3.1	3.0	3.1	3.2	3.3	3.2	2.97	3.25																						
20-Feb	3.3	3.2	3.2	3.2	3.3	A	3.2	3.4	3.4	3.3	3.4	3.4	3.3	3.0	3.0	3.0	2.9	2.9	3.0	2.9	3.0	3.0	2.9	3.0	3.14	3.44																						
21-Feb	3.1	3.1	3.1	3.2	A	3.3	3.3	3.1	3.1	3.1	2.9	2.4	2.2	2.2	2.2	2.2	2.2	2.6	3.1	2.9	2.7	2.6	3.2	2.6	2.80	3.29																						
22-Feb	2.5	2.5	2.5	A	2.5	2.6	2.6	2.7	2.6	2.7	2.7	2.7	2.5	2.3	2.3	3.0	2.6	2.2	2.2	2.1	2.2	2.1	2.1	2.2	2.46	3.04																						
23-Feb	2.2	2.2	A	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4	2.4	2.4	2.3	2.3	2.4	2.4	2.5	2.5	2.7	2.9	3.0	2.9	2.3	2.41	2.99																						
24-Feb	2.0	A	2.5	2.6	3.0	2.8	3.4	3.5	3.5	2.6	2.5	2.5	2.5	2.6	2.6	2.8	2.4	2.2	2.4	2.8	2.4	2.5	2.5	2.9	2.67	3.52																						
25-Feb	A	3.5	2.8	2.7	3.2	2.8	2.8	2.8	3.1	3.4	3.1	3.1	3.0	2.9	2.9	2.5	2.3	2.2	2.1	2.2	2.6	2.6	2.4	A	2.77	3.51																						
26-Feb	2.7	3.3	2.8	3.6	3.1	3.1	2.8	2.8	2.9	2.8	2.8	2.8	2.7	2.3	2.4	2.4	2.4	2.4	2.4	2.5	2.8	2.5	A	2.4	2.73	3.60																						
27-Feb	2.4	2.6	2.5	2.6	2.5	2.3	3.0	2.6	2.7	2.5	2.7	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.3	2.5	2.4	A	2.4	2.5	2.45	3.03																						
28-Feb	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.9	2.9	2.9	2.8	2.8	2.8	3.0	3.0	2.9	3.1	A	2.9	2.9	2.7	2.76	3.09																						
																								2.73	2.83	2.85	2.93	2.90	2.83	2.89	2.93	2.97	2.97	2.96	2.85	2.74	2.70	2.66	2.67	2.65	2.70	2.75	2.79	2.81	2.83	2.80	2.76	Diurnal Average
																								3.76	3.77	3.81	3.87	3.82	3.84	3.81	3.92	4.14	4.33	4.11	3.66	3.72	3.64	3.53	3.41	3.37	3.41	3.44	3.74	3.54	3.52	3.63	3.77	Diurnal Maximum
C - Calibration																								M - Maintenance				A - Automated Daily Zero Span																				



Pollutant Rose

Total Hydrocarbons (THC) - ppm

Henry Pirker - February 2010



Hourly Averages

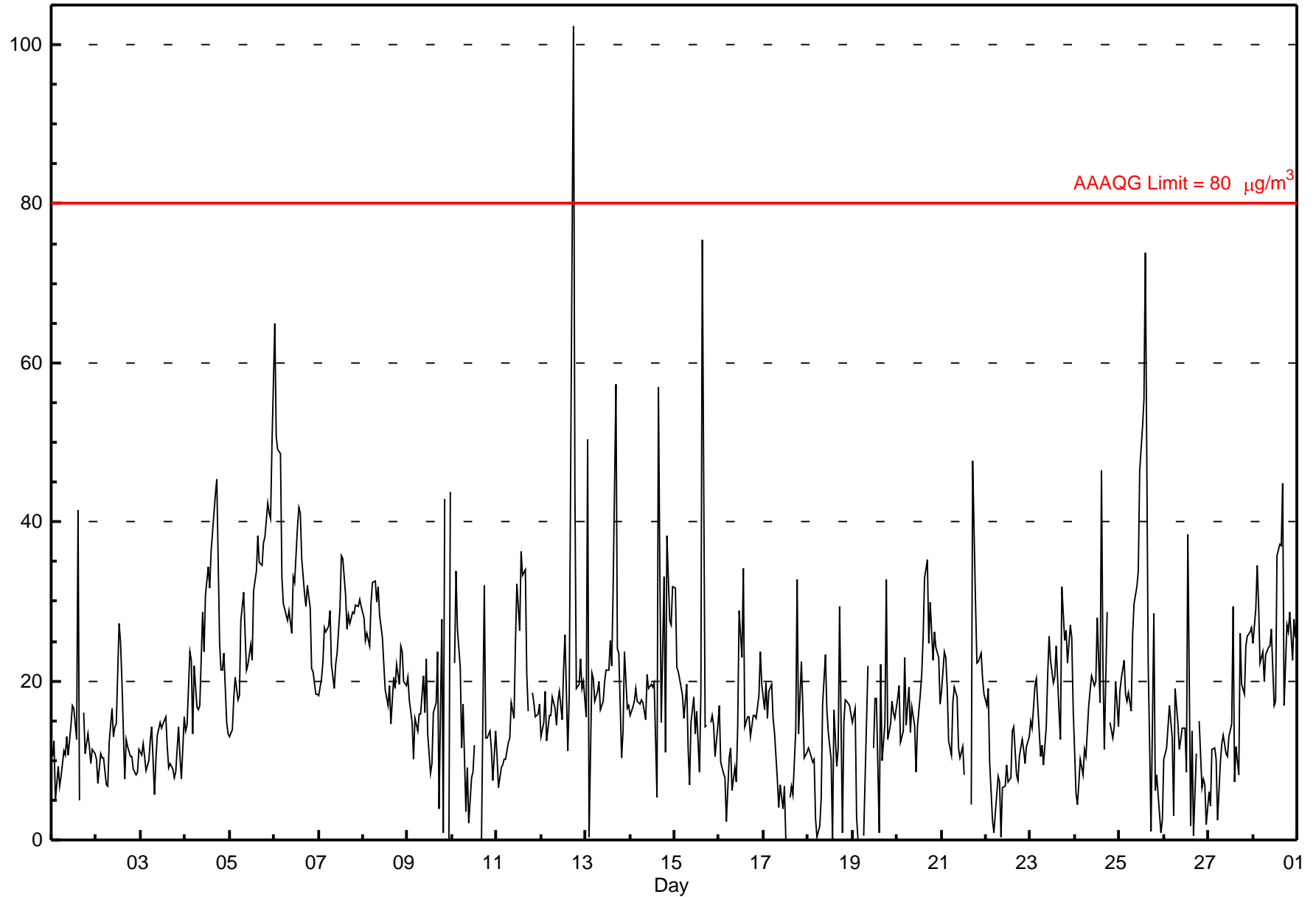
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Henry Pirker - February 2010

Number of Exceedences: 1-hr: 1 24-hr: 1	Hours in Service: 672
Maximum Value: 102.4 µg/m ³ on Feb 12 18:00	Maximum Daily Average: 33.8 µg/m ³ on Feb 6
Minimum Value: 0 µg/m ³ on Feb 9 23:00	Hours of Data: 656
Maximum Diurnal Average: 24.5 µg/m ³ at hour 14	Hours of Missing Data: 16
Monthly Average: 18.81 µg/m ³	Hours of Calibration: 2
Minimum Daily Average: 9.1 µg/m ³ on Feb 22	Percent Operational Time: 97.9
Minimum Diurnal Average: 14.1 µg/m ³ at hour 6	
Percentiles: P ₁ = 0.4 P ₁₀ = 7.3 Q ₁ = 11.5 Median = 16.9 Q ₃ = 23.6 P ₉₀ = 32.4 P ₉₉ = 55.2	

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-Feb	11	13	5	9	7	8	11	11	13	11	14	17	17	13	42	5	BD	16	11	13	12	10	11	11	12.5	41.5																						
2-Feb	10	7	11	10	10	7	7	12	16	13	14	15	27	25	20	8	13	12	11	11	9	8	8	11	12.3	27.3																						
3-Feb	11	12	10	9	10	12	14	6	10	13	15	14	15	15	12	9	10	9	8	8	14	11	8	16	11.3	15.5																						
4-Feb	14	14	24	23	13	22	17	16	17	29	24	31	34	32	36	41	43	45	25	21	21	23	15	13	24.8	45.4																						
5-Feb	13	14	18	20	18	18	28	31	26	21	22	25	23	31	34	38	35	34	37	38	42	41	40	50	29.1	49.8																						
6-Feb	65	51	49	49	33	30	28	28	29	26	33	32	39	42	41	35	31	29	32	29	21	21	18	18	33.8	65.0																						
7-Feb	18	20	22	27	26	27	29	22	19	22	23	29	36	35	31	27	28	27	29	29	30	29	30	29	26.9	35.7																						
8-Feb	28	25	26	24	30	32	33	30	32	28	25	22	19	17	19	15	20	19	22	19	24	24	20	19	23.9	32.6																						
9-Feb	20	18	15	10	15	14	16	16	21	16	23	13	8	10	16	17	24	4	28	1	43	BD	0	44	17.0	43.8																						
10-Feb	BD	22	34	27	22	12	17	4	9	2	8	8	12	C	C	0	0	32	13	13	14	11	7	14	13.3	33.9																						
11-Feb	11	7	9	9	10	10	12	13	17	15	25	32	26	36	33	34	21	16	BD	19	17	15	16	17	18.3	36.2																						
12-Feb	13	15	19	12	16	16	18	17	14	17	19	15	22	26	11	18	46	102	44	19	20	23	19	20	23.3	102.4																						
13-Feb	15	50	0	21	20	17	19	20	16	17	20	21	21	25	22	31	57	24	24	10	14	24	16	17	21.9	57.3																						
14-Feb	16	17	17	19	17	17	18	17	15	21	19	20	19	20	5	57	34	15	33	11	38	28	27	32	22.2	57.0																						
15-Feb	32	22	21	19	18	15	19	11	7	15	18	13	16	9	19	75	14	14	BD	15	16	14	11	14	18.6	75.5																						
16-Feb	17	10	8	8	2	10	12	6	9	7	14	29	23	34	14	15	15	13	16	16	15	18	24	20	14.8	34.2																						
17-Feb	16	20	15	19	20	15	13	8	4	7	4	7	0	BD	5	7	6	14	33	13	22	17	10	11	12.4	32.7																						
18-Feb	12	11	10	10	3	0	2	5	17	23	16	14	10	0	16	9	12	29	1	15	18	17	17	16	11.8	29.5																						
19-Feb	15	17	3	0	BD	BD	1	15	22	M	M	12	18	18	1	22	10	15	33	13	15	17	16	15	13.7	32.8																						
20-Feb	18	19	12	14	23	14	19	14	17	14	8	14	18	21	25	33	35	25	30	23	26	24	23	17	20.3	35.2																						
21-Feb	19	24	23	19	12	11	17	19	18	11	10	12	8	BD	40	BD	5	48	30	22	22	24	20	18	19.6	47.7																						
22-Feb	17	19	10	3	1	3	8	7	0	7	7	9	7	8	14	14	8	8	11	13	11	10	12	13	9.1	19.1																						
23-Feb	15	14	19	20	17	11	12	10	14	21	26	23	20	20	24	16	13	32	25	26	22	27	25	16	19.5	31.8																						
24-Feb	6	5	7	10	8	11	11	17	19	21	19	20	28	17	46	22	11	29	BD	15	13	14	20	14	16.7	46.4																						
25-Feb	19	20	23	18	17	19	16	26	30	32	34	46	52	55	74	22	12	1	29	6	8	6	1	2	23.7	73.8																						
26-Feb	10	12	14	17	13	3	19	15	11	13	14	14	9	38	2	14	1	11	BD	15	7	8	7	2	11.6	38.4																						
27-Feb	6	4	11	12	10	2	10	12	13	11	10	13	15	29	7	12	8	26	20	18	24	26	26	27	14.7	29.5																						
28-Feb	25	29	34	29	22	24	20	23	24	24	26	17	17	36	37	37	45	17	27	26	29	23	28	26	26.9	44.9																						
																								17.4	18.2	16.8	16.7	15.4	14.1	15.9	15.3	16.5	17.0	18.2	19.2	20.0	24.5	24.0	23.5	20.6	23.8	23.7	17.0	20.3	19.0	17.0	18.7	Diurnal Average
																								65.0	50.6	49.0	48.6	33.1	32.4	32.6	31.1	31.9	31.9	33.9	46.4	51.9	55.3	73.8	75.5	57.3	102.4	44.0	38.1	42.9	41.1	40.5	49.8	Diurnal Maximum

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

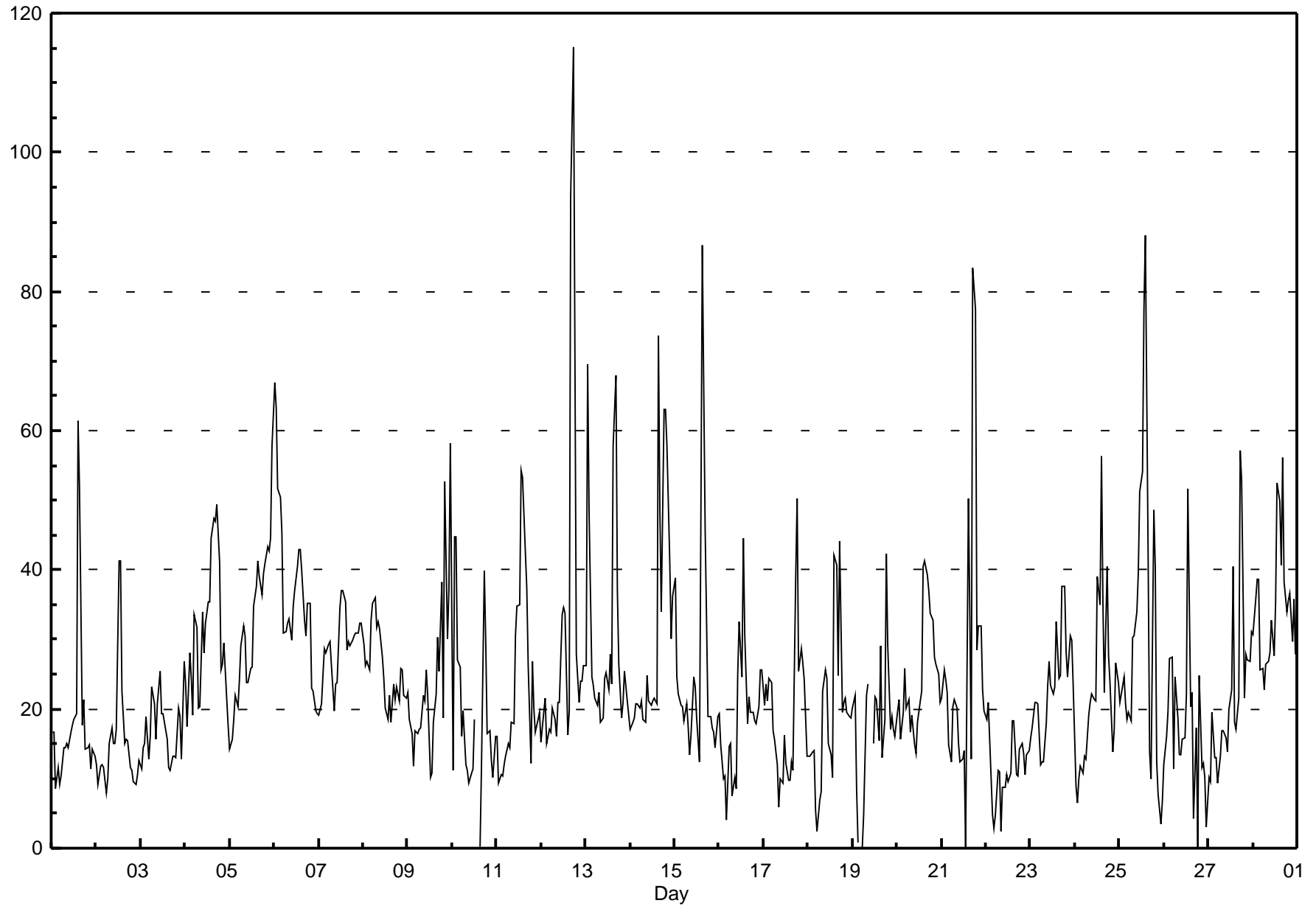


Hourly Maximums

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

Henry Pirker - February 2010

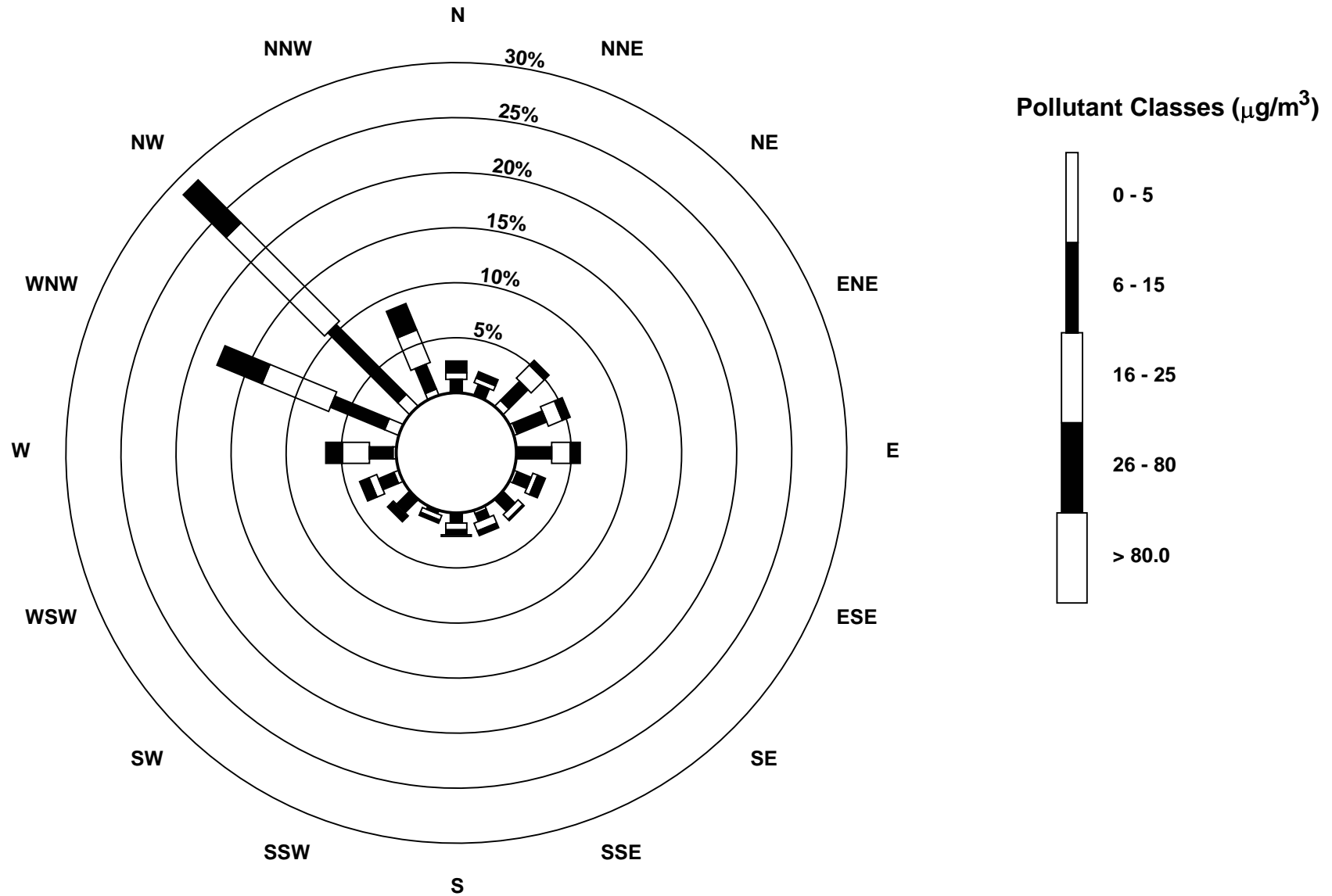
Maximum Value: 115.1 μg/m ³ on Feb 12 18:00		Maximum Daily Average: 37.1 μg/m ³ on Feb 6		Hours in Service: 672 Hours of Data: 667 Hours of Missing Data: 5 Hours of Calibration: 2 Percent Operational Time: 99.6																						
Minimum Value: 0 μg/m ³ on Feb 19 06:00 Maximum Diurnal Average: 35.0 μg/m ³ at hour 18 Monthly Average: 24.25 μg/m ³		Minimum Daily Average: 11.6 μg/m ³ on Feb 22 Minimum Diurnal Average: 16.9 μg/m ³ at hour 6 Percentiles: P ₁ = 2.8 P ₁₀ = 11.1 Q ₁ = 15.3 Median = 21.1 Q ₃ = 30.0 P ₉₀ = 40.9 P ₉₉ = 77.6																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	17	17	9	12	9	10	14	14	15	14	17	18	18	19	61	52	18	21	14	14	15	11	14	13	18.3	61.4
2-Feb	12	9	12	12	12	8	10	15	17	15	15	17	41	41	23	15	16	15	12	11	10	9	11	13	15.4	41.3
3-Feb	11	15	15	19	13	16	23	21	16	21	25	19	19	17	16	12	11	13	13	13	20	19	13	27	16.9	26.9
4-Feb	24	18	28	24	19	34	32	20	20	34	28	32	35	35	44	47	47	49	41	26	26	29	22	18	30.6	49.5
5-Feb	14	16	19	22	20	24	29	32	30	24	24	26	26	35	38	41	39	36	39	41	43	43	44	58	31.8	57.8
6-Feb	67	63	52	50	45	31	31	32	33	30	35	37	40	43	43	40	33	31	35	35	23	22	20	19	37.1	67.0
7-Feb	19	21	25	29	28	29	30	26	20	24	24	35	37	37	35	29	30	29	30	31	31	31	32	32	28.8	37.1
8-Feb	29	26	27	26	33	35	36	32	33	31	27	24	20	19	22	18	24	21	23	21	26	26	22	22	25.9	36.0
9-Feb	22	18	16	12	17	16	17	17	22	21	26	22	10	11	18	22	30	25	38	19	53	30	37	58	24.1	58.2
10-Feb	11	45	45	27	26	16	20	12	11	9	11	11	18	C	C	0	12	40	30	16	17	13	10	16	18.9	44.8
11-Feb	16	9	11	10	12	13	15	14	18	18	31	35	35	54	53	43	37	26	12	27	20	17	19	19	23.6	54.4
12-Feb	15	20	22	15	17	17	20	19	16	21	21	34	35	34	16	20	94	115	71	28	21	24	24	26	30.9	115.1
13-Feb	26	69	48	25	23	22	21	22	18	19	24	25	23	28	24	58	68	37	26	19	21	25	21	19	29.7	69.5
14-Feb	17	18	19	21	21	20	21	19	18	25	21	21	21	22	21	74	49	34	63	63	58	41	30	36	31.3	73.5
15-Feb	39	25	22	21	20	18	21	17	13	16	25	23	19	12	48	87	46	33	19	19	17	17	15	19	25.4	86.6
16-Feb	19	15	10	10	4	15	15	8	10	9	25	33	25	45	31	18	22	19	19	18	18	20	26	26	19.1	44.6
17-Feb	21	24	21	24	24	17	16	12	6	10	9	16	12	10	10	12	11	39	50	25	29	27	24	13	19.3	50.2
18-Feb	13	13	14	14	5	3	7	8	23	26	24	15	13	10	42	41	25	44	20	21	22	20	19	19	19.2	44.2
19-Feb	20	22	9	1	BD	0	5	22	24	M	M	15	22	21	15	29	13	18	42	29	17	19	17	16	17.9	42.3
20-Feb	20	21	16	19	26	20	21	17	19	15	14	18	21	23	41	41	39	37	34	33	28	26	25	21	24.8	41.3
21-Feb	22	26	24	22	15	12	20	21	20	15	12	13	14	0	50	33	13	83	78	28	32	32	23	20	26.2	83.5
22-Feb	19	21	16	5	3	5	11	11	2	9	9	11	9	11	18	18	11	10	14	15	14	10	13	14	11.6	21.0
23-Feb	16	17	21	21	21	12	12	12	18	23	27	23	22	23	33	24	25	38	38	28	25	30	30	23	23.5	37.7
24-Feb	9	7	10	12	11	13	13	19	21	22	21	21	39	35	56	36	22	41	28	24	14	17	27	24	22.5	56.4
25-Feb	21	22	25	21	18	20	18	30	30	34	39	51	54	78	88	41	14	10	49	40	12	8	3	7	30.6	88.1
26-Feb	12	16	20	27	28	11	25	19	13	13	16	16	22	52	20	22	4	17	0	25	12	12	10	3	17.3	51.7
27-Feb	10	10	19	13	13	9	13	17	17	16	14	20	23	40	18	17	22	57	53	22	28	27	27	31	22.3	57.1
28-Feb	31	36	39	39	26	26	23	26	27	28	33	28	35	52	50	41	56	38	34	36	37	30	36	28	34.7	56.2
																								Diurnal Average		
																								Diurnal Maximum		
20.4 22.8 21.8 19.7 18.8 16.9 19.2 19.1 19.0 20.1 22.1 23.5 25.4 29.9 34.6 33.2 29.6 35.0 33.1 26.0 24.5 22.7 21.9 22.8 67.0 69.5 51.7 50.4 45.4 35.1 36.0 32.4 32.9 33.9 39.4 51.2 54.1 77.6 88.1 86.6 93.6 115.1 77.6 63.1 58.1 42.7 44.5 58.2																										
C - Calibration		M - Maintenance					BD - Baseline Drift																			



Pollutant Rose

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

Henry Pirker - February 2010

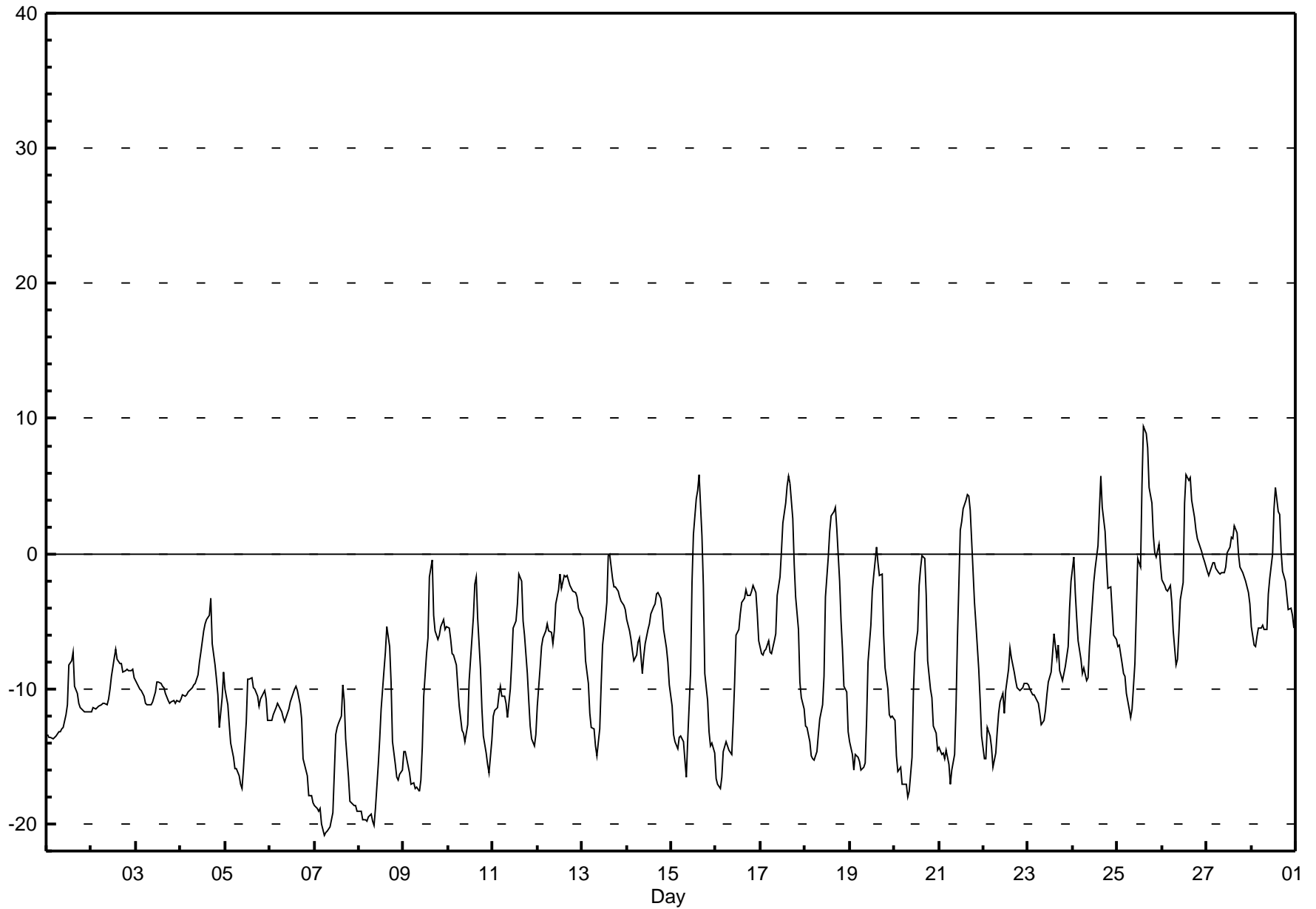


Hourly Averages

External Temperature (ET) - °C

Henry Pirker - February 2010

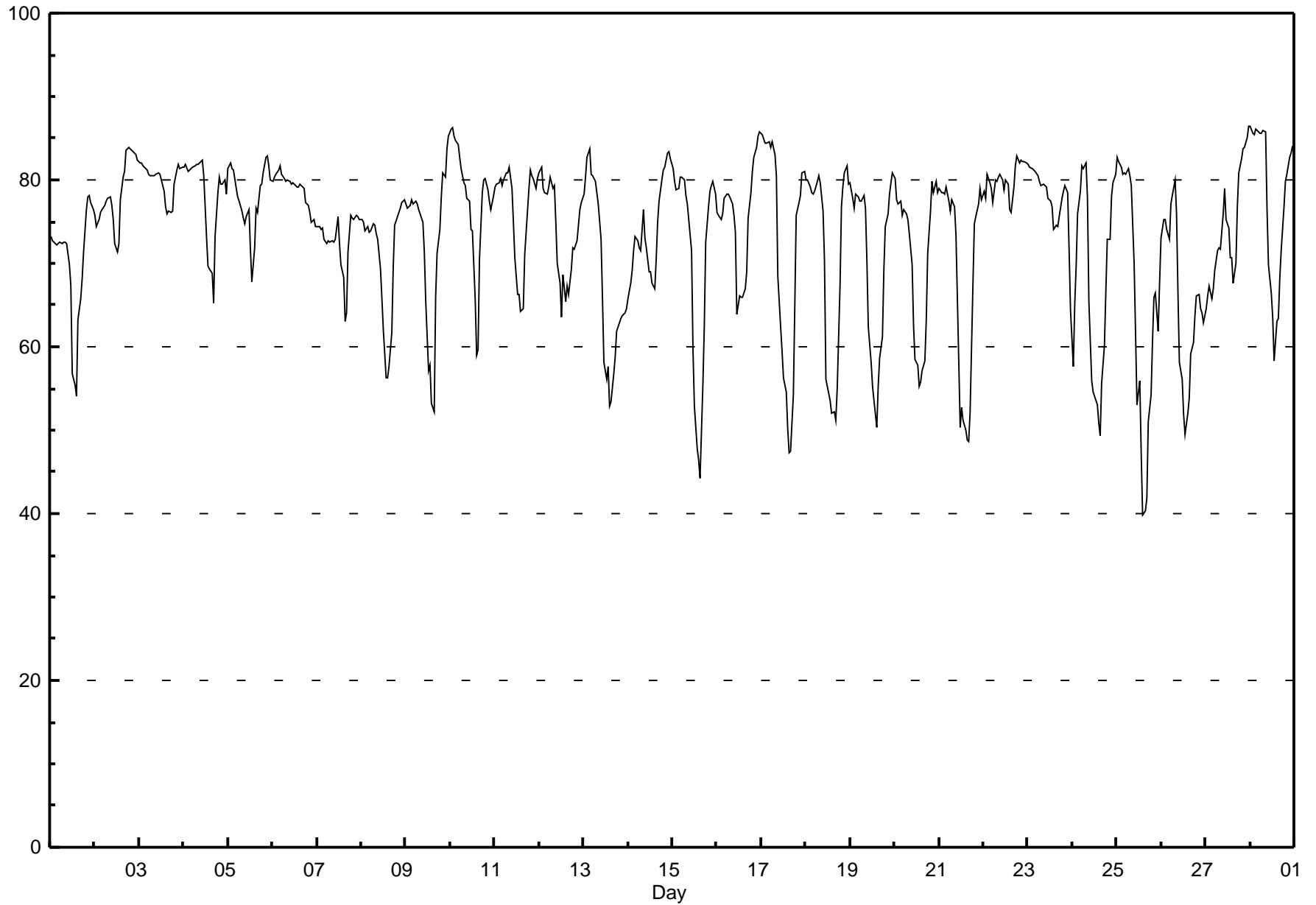
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.4 °C on Feb 25 15:00 Maximum Daily Average: -0.8 °C on Feb 26		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																								
Minimum Value: -21 °C on Feb 7 06:00 Maximum Diurnal Average: -1.9 °C at hour 16 Monthly Average: -8.25 °C		Minimum Daily Average: -17.1 °C on Feb 7 Minimum Diurnal Average: -12.3 °C at hour 9 Percentiles: P ₁ = -19.8 P ₁₀ = -15.8 Q ₁ = -12.4 Median = -9.1 Q ₃ = -3.7 P ₉₀ = -0.2 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-Feb	-13	-14	-14	-14	-14	-13	-13	-13	-13	-13	-12	-11	-8	-8	-7	-10	-10	-11	-11	-12	-12	-12	-12	-12	-11.7	-7.3
2-Feb	-12	-11	-11	-11	-11	-11	-11	-11	-11	-11	-10	-9	-8	-7	-8	-8	-8	-9	-9	-9	-9	-9	-9	-9	-9.6	-7.0
3-Feb	-10	-10	-10	-10	-11	-11	-11	-11	-11	-11	-10	-9	-9	-10	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-10.5	-9.5
4-Feb	-11	-10	-11	-10	-10	-10	-10	-10	-10	-9	-8	-7	-6	-5	-5	-5	-3	-7	-8	-9	-10	-13	-11	-9	-8.6	-3.3
5-Feb	-10	-11	-13	-14	-15	-16	-16	-16	-17	-17	-16	-12	-9	-9	-9	-10	-10	-11	-11	-11	-10	-10	-11	-12	-12.4	-9.1
6-Feb	-12	-12	-12	-11	-11	-11	-12	-12	-12	-12	-12	-11	-10	-10	-10	-10	-11	-12	-15	-16	-16	-18	-18	-18	-12.8	-9.8
7-Feb	-19	-19	-19	-19	-20	-21	-21	-21	-21	-20	-20	-19	-13	-13	-13	-12	-10	-11	-14	-17	-18	-18	-19	-19	-17.1	-9.7
8-Feb	-19	-19	-20	-20	-20	-20	-19	-20	-20	-19	-16	-14	-11	-9	-7	-5	-7	-9	-14	-16	-17	-17	-16	-16	-15.3	-5.4
9-Feb	-15	-15	-16	-16	-17	-17	-17	-17	-18	-17	-14	-11	-7	-6	-2	0	-5	-6	-6	-6	-5	-5	-6	-5	-10.4	-0.5
10-Feb	-5	-6	-7	-8	-8	-10	-11	-13	-13	-14	-13	-9	-8	-5	-2	-2	-5	-9	-12	-13	-15	-16	-16	-14	-9.7	-1.7
11-Feb	-12	-12	-11	-10	-10	-11	-11	-11	-12	-10	-8	-6	-5	-4	-1	-2	-5	-6	-9	-11	-13	-14	-14	-13	-9.2	-1.5
12-Feb	-11	-8	-7	-6	-6	-5	-6	-6	-7	-6	-4	-3	-2	-3	-2	-2	-2	-2	-3	-3	-3	-4	-4	-4	-4.4	-1.5
13-Feb	-5	-6	-8	-10	-12	-13	-13	-14	-15	-13	-10	-7	-5	-4	0	0	-2	-2	-2	-3	-3	-4	-4	-4	-6.5	-0.1
14-Feb	-5	-6	-6	-7	-8	-7	-7	-6	-9	-8	-7	-6	-5	-4	-4	-4	-3	-3	-3	-4	-6	-7	-8	-10	-5.9	-2.9
15-Feb	-11	-13	-14	-14	-14	-13	-14	-15	-17	-14	-9	-2	1	4	5	6	1	-2	-9	-11	-13	-14	-14	-15	-8.8	5.8
16-Feb	-17	-17	-17	-17	-15	-14	-14	-14	-15	-12	-10	-6	-6	-4	-4	-3	-3	-3	-3	-3	-2	-3	-4	-6	-8.9	-2.4
17-Feb	-7	-8	-7	-7	-6	-7	-7	-6	-6	-3	-2	0	2	4	5	6	5	3	-1	-3	-6	-10	-11	-11	-3.5	5.8
18-Feb	-13	-13	-14	-15	-15	-15	-15	-13	-12	-11	-9	-3	0	2	3	3	3	2	-2	-5	-7	-10	-10	-13	-7.6	3.5
19-Feb	-14	-15	-16	-15	-15	-15	-16	-16	-15	-12	-8	-5	-3	-2	1	-1	-2	-1	-6	-8	-10	-12	-12	-12	-9.6	0.5
20-Feb	-12	-15	-16	-16	-17	-17	-17	-18	-18	-15	-10	-7	-6	-2	-1	0	0	-3	-8	-10	-11	-13	-13	-15	-10.9	-0.2
21-Feb	-14	-15	-15	-15	-15	-16	-17	-16	-15	-11	-6	2	2	3	4	4	4	3	-1	-4	-5	-9	-11	-13	-7.3	4.4
22-Feb	-15	-15	-13	-14	-14	-16	-15	-13	-12	-11	-10	-12	-10	-9	-7	-8	-9	-9	-10	-10	-10	-10	-10	-10	-11.3	-7.0
23-Feb	-10	-10	-10	-10	-11	-11	-12	-13	-12	-12	-10	-9	-9	-7	-6	-8	-7	-9	-9	-9	-8	-7	-4	-2	-9.0	-2.0
24-Feb	0	-3	-5	-6	-8	-9	-8	-9	-9	-7	-4	-2	-1	1	3	6	3	2	-1	-3	-2	-4	-6	-6	-3.3	5.7
25-Feb	-7	-7	-8	-9	-9	-10	-11	-12	-11	-8	-4	0	-1	5	9	9	8	5	4	1	0	0	1	-1	-2.4	9.4
26-Feb	-2	-2	-3	-3	-2	-4	-6	-8	-8	-6	-3	-2	4	6	5	6	4	3	2	1	1	0	0	-1	-0.8	5.9
27-Feb	-1	-2	-1	-1	-1	-1	-1	-2	-1	-1	-1	0	0	1	1	2	1	0	-1	-1	-2	-2	-3	-4	-0.8	2.0
28-Feb	-5	-7	-7	-6	-5	-6	-5	-6	-6	-3	-2	0	3	5	3	3	0	-1	-2	-3	-4	-4	-5	-6	-2.8	4.9
																								Diurnal Average		
																								Diurnal Maximum		



Hourly Averages

Relative Humidity (RH) - % Henry Pirker - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 86.5 % on Feb 28 00:00 Maximum Daily Average: 80.0 % on Feb 22		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																								
Minimum Value: 40 % on Feb 25 15:00 Maximum Diurnal Average: 78.5 % at hour 7 Monthly Average: 73.37 %		Minimum Daily Average: 65.3 % on Feb 25 Minimum Diurnal Average: 61.2 % at hour 15 Percentiles: P ₁ = 47.3 P ₁₀ = 57.7 Q ₁ = 69.1 Median = 76.5 Q ₃ = 79.9 P ₉₀ = 81.9 P ₉₉ = 85.9																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	73	73	73	72	72	72	72	73	72	72	70	67	57	55	54	63	66	68	71	77	78	78	77	76	70.1	78.1
2-Feb	76	74	75	76	76	77	77	78	78	77	75	72	71	72	78	80	81	84	84	84	84	83	83	82	78.3	83.9
3-Feb	82	82	82	81	81	81	81	81	81	81	81	81	80	79	77	76	76	76	76	80	81	82	81	82	79.9	82.1
4-Feb	82	82	81	81	81	81	82	82	82	82	82	81	73	70	69	69	65	73	79	80	79	79	80	78	78.1	82.3
5-Feb	81	82	81	81	79	78	77	76	75	75	76	76	72	68	72	77	76	79	80	81	83	83	82	80	77.9	82.8
6-Feb	80	80	81	81	82	81	80	80	80	80	80	80	79	79	79	79	79	79	77	77	76	75	75	74	78.9	81.6
7-Feb	74	74	74	74	73	72	73	73	73	73	73	76	72	70	68	63	64	71	76	75	75	76	76	75	72.6	75.8
8-Feb	75	75	74	74	74	74	75	75	74	73	69	66	62	56	56	58	62	69	75	76	76	77	77	78	70.8	77.5
9-Feb	77	77	77	78	77	77	77	77	75	75	71	65	57	58	53	52	66	71	74	78	81	80	84	85	72.6	85.3
10-Feb	86	86	85	85	84	83	81	80	79	78	78	74	74	66	59	60	70	78	80	80	79	77	76	78	77.4	86.2
11-Feb	79	79	80	80	79	80	81	81	81	79	75	71	66	66	64	65	71	74	79	81	81	80	79	80	76.3	81.5
12-Feb	81	82	79	78	78	79	80	79	79	75	70	68	64	69	65	67	66	69	72	72	73	75	76	77	73.9	81.6
13-Feb	78	80	83	84	81	80	80	78	77	73	66	58	56	58	53	53	57	59	62	63	63	64	64	65	68.1	83.7
14-Feb	66	68	69	71	73	73	72	72	77	73	72	69	69	68	67	70	75	77	80	81	82	83	83	83	73.8	83.4
15-Feb	81	80	79	79	80	80	80	78	77	75	71	60	53	48	47	44	55	62	73	77	79	79	80	78	70.6	81.4
16-Feb	76	76	75	76	78	78	78	78	77	76	74	64	66	66	66	67	69	75	79	81	83	84	85	86	75.5	85.8
17-Feb	85	85	84	84	85	84	85	83	80	68	62	60	56	55	50	47	48	54	65	76	77	78	81	81	71.4	85.4
18-Feb	80	80	79	78	78	79	80	81	80	76	70	56	54	54	52	51	55	67	77	79	81	82	79	79	70.9	81.6
19-Feb	80	78	77	78	78	77	77	78	77	70	62	58	55	54	50	55	59	61	69	74	76	78	80	81	70.1	80.8
20-Feb	80	78	77	77	76	76	76	75	74	70	62	59	58	55	56	57	58	63	71	76	80	78	80	79	70.5	80.2
21-Feb	79	78	78	78	79	77	76	78	77	73	66	50	53	51	50	49	49	52	67	75	76	77	79	78	68.6	79.2
22-Feb	79	78	81	80	79	77	80	80	80	81	80	79	80	79	76	76	79	82	83	82	82	82	82	82	80.0	82.9
23-Feb	82	82	81	81	81	81	80	79	80	79	79	78	77	77	74	75	74	76	78	79	79	78	72	64	77.7	81.9
24-Feb	58	65	70	76	79	82	81	82	78	65	56	55	54	53	51	49	56	60	67	73	73	78	80	81	67.5	82.1
25-Feb	83	82	82	81	81	81	81	80	79	70	62	53	56	47	40	40	42	51	54	61	66	66	62	68	65.3	82.7
26-Feb	73	75	75	74	73	77	78	80	76	66	58	56	52	49	52	54	59	61	64	66	66	65	64	63	65.7	79.9
27-Feb	65	66	67	66	67	69	71	72	72	76	79	75	74	71	71	68	70	77	81	82	84	84	85	87	74.1	86.5
28-Feb	86	86	85	86	86	86	86	86	86	76	70	66	64	58	63	63	68	72	77	80	81	83	83	84	77.5	86.5
	77.8	77.9	78.0	78.3	78.3	78.3	78.5	78.3	77.7	74.6	71.0	66.8	64.5	62.5	61.2	61.8	64.7	68.9	73.5	76.5	77.5	78.0	78.2	78.0	Diurnal Average	
	86.5	86.2	85.4	86.1	86.0	85.5	85.6	85.9	85.8	82.2	82.3	80.6	80.0	79.5	79.1	80.3	81.1	83.6	83.9	83.8	83.7	84.0	85.3	86.5	Diurnal Maximum	

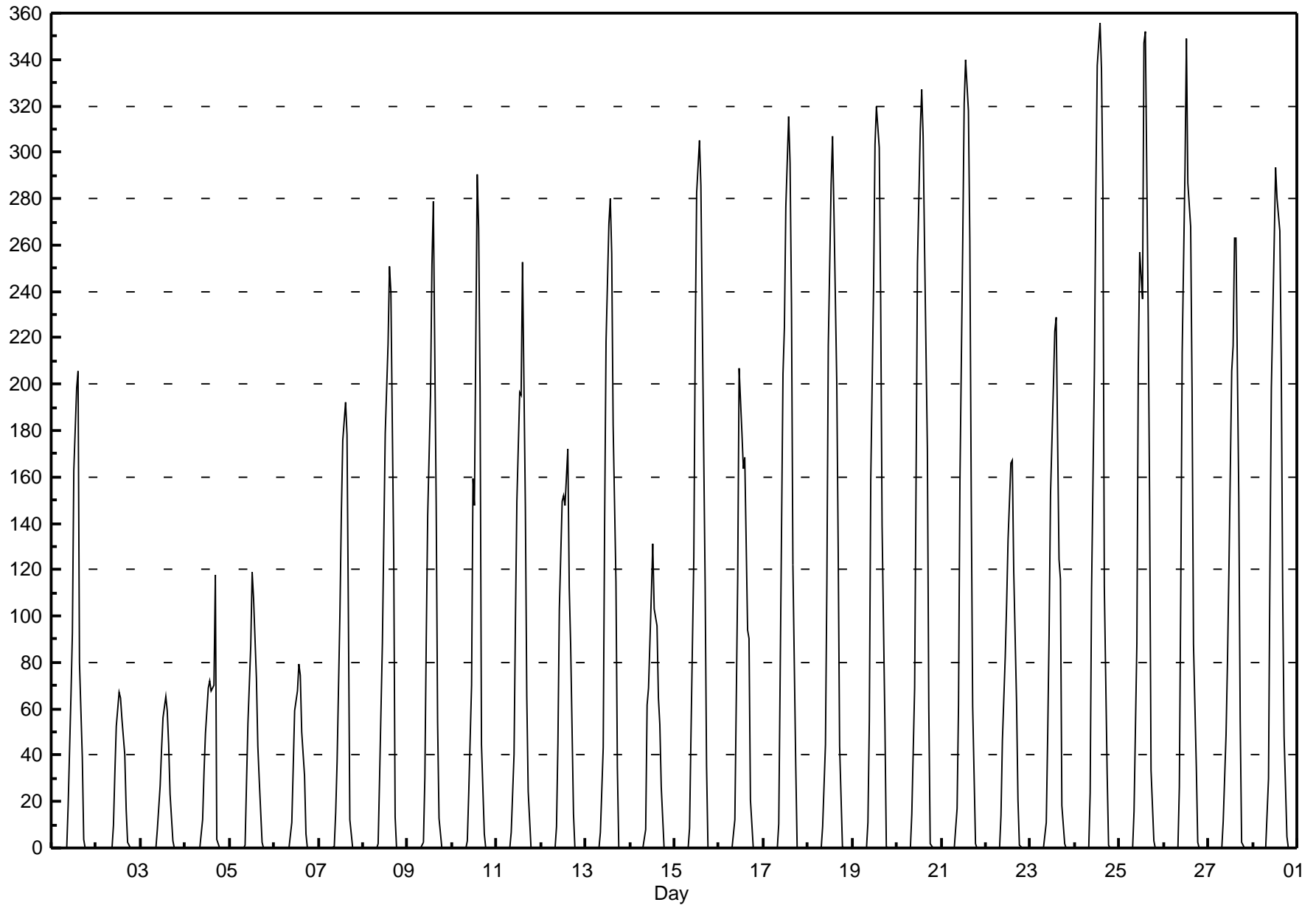


Hourly Averages

Solar Radiation (SR) - W/m²

Henry Pirker - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 355.7 W/m ² on Feb 24 14:00 Maximum Daily Average: 86.7 W/m ² on Feb 24		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																								
Minimum Value: 0 W/m ² on Feb 1 01:00 Maximum Diurnal Average: 221.4 W/m ² at hour 14 Monthly Average: 52.40 W/m ²		Minimum Daily Average: 13.7 W/m ² on Feb 3 Minimum Diurnal Average: 0.0 W/m ² at hour 1 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 68.7 P ₉₀ = 205.6 P ₉₉ = 335.0																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0	0	0	0	0	0	0	0	0	18	66	93	163	199	206	80	39	4	0	0	0	0	0	0	36.2	205.9
2-Feb	0	0	0	0	0	0	0	0	0	10	32	52	67	65	56	40	17	2	0	0	0	0	0	0	14.2	66.9
3-Feb	0	0	0	0	0	0	0	0	0	8	27	42	56	65	59	45	23	3	0	0	0	0	0	0	13.7	65.2
4-Feb	0	0	0	0	0	0	0	0	0	12	33	49	69	72	68	70	118	4	0	0	0	0	0	0	20.6	117.9
5-Feb	0	0	0	0	0	0	0	0	1	28	54	87	119	107	73	44	30	3	0	0	0	0	0	0	22.8	118.9
6-Feb	0	0	0	0	0	0	0	0	0	11	35	59	68	79	74	50	31	6	0	0	0	0	0	0	17.2	79.2
7-Feb	0	0	0	0	0	0	0	0	1	15	37	101	144	176	192	178	99	12	0	0	0	0	0	0	39.8	192.2
8-Feb	0	0	0	0	0	0	0	0	2	30	88	134	179	217	251	240	126	13	0	0	0	0	0	0	53.4	251.0
9-Feb	0	0	0	0	0	0	0	0	3	31	91	143	195	251	279	149	54	13	0	0	0	0	0	0	50.4	278.7
10-Feb	0	0	0	0	0	0	0	0	3	24	70	159	148	290	268	198	44	6	0	0	0	0	0	0	50.4	290.3
11-Feb	0	0	0	0	0	0	0	0	7	40	99	149	196	195	252	147	66	25	0	0	0	0	0	0	49.0	252.5
12-Feb	0	0	0	0	0	0	0	0	9	45	103	149	152	148	172	112	87	15	0	0	0	0	0	0	41.4	172.3
13-Feb	0	0	0	0	0	0	0	0	7	43	141	218	269	280	256	183	115	35	0	0	0	0	0	0	64.5	280.0
14-Feb	0	0	0	0	0	0	0	0	8	62	69	109	131	103	96	64	53	26	0	0	0	0	0	0	30.1	131.3
15-Feb	0	0	0	0	0	0	0	0	8	49	125	219	282	305	286	227	113	35	0	0	0	0	0	0	68.8	304.8
16-Feb	0	0	0	0	0	0	0	0	12	64	116	207	179	164	169	94	90	21	0	0	0	0	0	0	46.4	206.9
17-Feb	0	0	0	0	0	0	0	0	10	74	204	225	277	316	295	234	122	36	0	0	0	0	0	0	74.7	315.7
18-Feb	0	0	0	0	0	0	0	0	9	45	114	216	286	307	274	200	128	44	1	0	0	0	0	0	67.7	307.2
19-Feb	0	0	0	0	0	0	0	0	11	55	159	243	303	320	302	237	139	54	1	0	0	0	0	0	76.0	319.6
20-Feb	0	0	0	0	0	0	0	0	15	69	157	252	310	327	307	260	172	60	2	0	0	0	0	0	80.4	327.0
21-Feb	0	0	0	0	0	0	0	0	17	61	158	262	321	340	318	261	151	61	2	0	0	0	0	0	81.4	339.8
22-Feb	0	0	0	0	0	0	0	0	14	47	83	106	133	166	167	119	63	21	1	0	0	0	0	0	38.3	167.3
23-Feb	0	0	0	0	0	0	0	0	11	49	93	153	198	223	229	125	116	18	2	0	0	0	0	0	50.7	229.1
24-Feb	0	0	0	0	0	0	0	0	24	112	206	282	337	356	335	283	113	32	1	0	0	0	0	0	86.7	355.7
25-Feb	0	0	0	0	0	0	0	0	16	89	207	257	237	347	352	230	150	34	3	0	0	0	0	0	80.0	352.2
26-Feb	0	0	0	0	0	0	0	0	26	109	213	293	349	287	268	196	88	35	2	0	0	0	0	0	77.8	349.2
27-Feb	0	0	0	0	0	0	0	0	11	49	80	119	206	217	263	263	151	55	2	0	0	0	0	0	59.0	262.9
28-Feb	0	0	0	0	0	0	0	0	30	120	198	260	293	280	266	209	110	48	5	0	0	0	0	0	75.8	293.5
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	48.9	109.3	165.7	202.5	221.4	219.0	162.1	93.2	25.7	0.8	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
		0.0	0.0	0.0	0.0	0.0	0.0	0.2	29.9	120.5	213.3	292.9	349.2	355.7	352.2	282.8	172.2	61.1	4.8	0.0	0.0	0.0	0.0	0.0	Diurnal Maximum	



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - February 2010

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	4	4	3	4	3	2	2	2	2	4	4	4	1	3	5	5	4	5	6	6	5	5	4	4	2.4	6.5
Dir	89	92	113	92	127	113	80	67	154	163	142	157	200	279	314	352	67	80	91	90	75	59	38	54	84.9	90.8
2 Spd	3	1	2	4	4	4	3	3	4	4	4	4	2	3	5	5	4	4	6	5	5	2	2	7	2.0	7.2
Dir	56	291	306	188	222	196	177	136	118	134	134	120	70	75	112	114	76	103	100	89	97	87	9	324	112.4	323.7
3 Spd	6	7	6	6	7	6	4	4	3	4	1	5	7	7	6	7	7	5	4	4	5	4	2	3	1.7	7.2
Dir	324	327	305	288	245	246	293	307	301	294	49	95	86	76	73	75	82	58	79	101	9	30	339	40	16.4	244.7
4 Spd	0	2	3	2	1	2	2	3	2	2	2	3	1	3	3	3	2	4	4	3	2	4	5	4	0.5	4.7
Dir	24	150	165	183	223	268	289	271	179	177	264	168	254	326	323	278	63	82	59	44	19	318	347	8	334.8	347.4
5 Spd	4	4	2	1	2	1	2	2	2	4	3	5	2	5	3	4	2	3	4	2	1	1	3	4	1.8	5.1
Dir	28	26	65	128	236	348	315	313	322	286	315	350	359	274	245	271	234	321	346	5	37	288	353	298	322.6	350.3
6 Spd	5	4	1	0	2	1	3	3	3	2	4	4	2	3	3	4	4	5	3	3	3	4	3	4	1.8	4.8
Dir	316	324	346	216	101	70	11	31	92	140	346	340	70	87	106	44	3	332	315	348	303	307	342	283	354.4	315.4
7 Spd	3	2	2	1	3	2	2	2	3	3	3	2	3	4	5	3	5	5	4	7	7	3	4	4	3.2	6.7
Dir	310	306	294	258	300	302	285	323	331	302	285	308	290	286	276	275	313	325	329	317	328	328	320	293	307.1	317.1
8 Spd	4	4	4	3	1	1	3	3	4	3	4	3	3	3	4	4	4	4	4	5	4	4	4	3	3.3	5.0
Dir	311	335	298	312	5	294	316	303	317	312	313	269	268	281	275	301	317	334	314	318	306	303	296	318	306.7	318.1
9 Spd	4	4	4	4	4	4	3	3	2	4	3	2	3	4	2	2	4	5	4	2	1	2	5	2	2.4	5.1
Dir	307	305	305	322	327	315	323	342	323	326	301	279	288	290	300	262	312	318	297	326	114	146	154	296	306.5	154.4
10 Spd	3	1	2	3	4	4	4	3	4	3	2	2	2	3	5	5	5	4	4	5	5	4	4	4	3.1	5.3
Dir	126	98	324	334	297	322	305	301	309	315	293	291	284	277	304	318	331	309	306	323	322	313	308	310	310.7	317.8
11 Spd	4	4	4	3	4	3	3	2	4	1	0	3	5	7	5	5	5	5	4	5	5	5	5	4	3.3	6.6
Dir	316	311	323	319	315	310	301	318	309	170	297	153	294	324	47	292	327	320	319	307	322	320	307	333	317.0	323.5
12 Spd	2	3	4	2	1	2	4	6	3	2	2	6	2	7	6	4	7	2	3	3	2	3	4	2	1.4	6.9
Dir	17	58	280	54	338	55	126	93	123	353	44	89	61	279	324	30	96	176	4	55	51	321	323	333	33.3	279.1
13 Spd	2	1	5	5	5	4	4	4	4	4	5	4	5	6	6	5	5	4	10	10	8	10	11	13	2.7	12.6
Dir	285	189	328	344	311	333	288	314	317	311	301	296	279	306	14	32	9	39	82	81	79	81	83	85	24.5	85.2
14 Spd	12	11	8	5	5	5	5	4	4	5	5	5	7	4	4	7	5	2	3	3	4	4	3	4	1.3	12.5
Dir	84	79	74	38	41	64	61	70	320	326	304	309	301	293	232	226	157	164	351	280	271	277	306	320	10.3	83.8
15 Spd	4	2	3	4	5	4	3	3	3	3	2	0	3	3	3	2	3	4	4	4	5	5	5	4	3.2	5.1
Dir	300	311	301	306	308	333	333	292	317	329	302	263	310	267	282	255	329	322	319	296	308	322	345	320	311.8	322.3
16 Spd	5	4	5	4	4	3	3	3	4	3	2	3	4	4	5	4	5	4	3	1	3	2	3	4	2.4	5.5
Dir	308	323	316	298	314	316	309	343	302	325	275	230	266	299	279	270	231	225	192	192	101	83	305	308	290.3	278.5
17 Spd	4	6	3	3	4	5	6	7	6	6	5	5	7	13	10	8	6	5	2	1	4	4	4	5	4.6	13.0
Dir	304	295	297	236	302	314	291	302	284	288	301	289	274	248	250	240	229	223	198	297	305	318	309	318	277.7	247.8
18 Spd	5	5	4	5	4	5	5	6	5	4	4	3	7	9	8	5	4	2	3	2	3	4	4	3	3.8	8.8
Dir	323	319	321	311	316	326	287	298	313	319	308	299	250	244	244	253	11	336	303	316	323	302	319	307	297.9	243.7
19 Spd	4	4	4	3	4	3	3	3	3	4	3	5	4	5	4	5	6	4	5	5	5	5	4	4	4.0	6.3
Dir	306	312	328	310	296	330	309	300	299	312	297	286	290	306	304	290	321	1	303	335	315	323	323	339	312.5	321.2
20 Spd	3	5	4	4	4	4	4	4	4	5	2	5	5	5	6	6	7	5	4	4	4	5	6	4	4.4	7.0
Dir	338	314	329	299	300	339	313	311	321	284	280	304	276	293	295	310	305	318	318	321	342	321	324	311	310.9	318.4
21 Spd	5	3	4	4	5	4	3	4	4	5	4	5	8	9	7	6	4	3	2	2	3	1	4	5	3.5	8.6
Dir	315	326	325	304	324	319	318	307	301	319	330	321	314	309	287	283	288	20	69	99	89	155	299	313	314.4	308.9
22 Spd	5	3	4	3	3	4	4	4	5	6	2	6	4	4	2	3	4	4	5	3	4	5	4	4	1.3	5.8
Dir	307	335	39	38	326	335	53	45	48	64	36	281	284	290	298	62	70	111	121	129	109	134	136	176	52.3	63.7

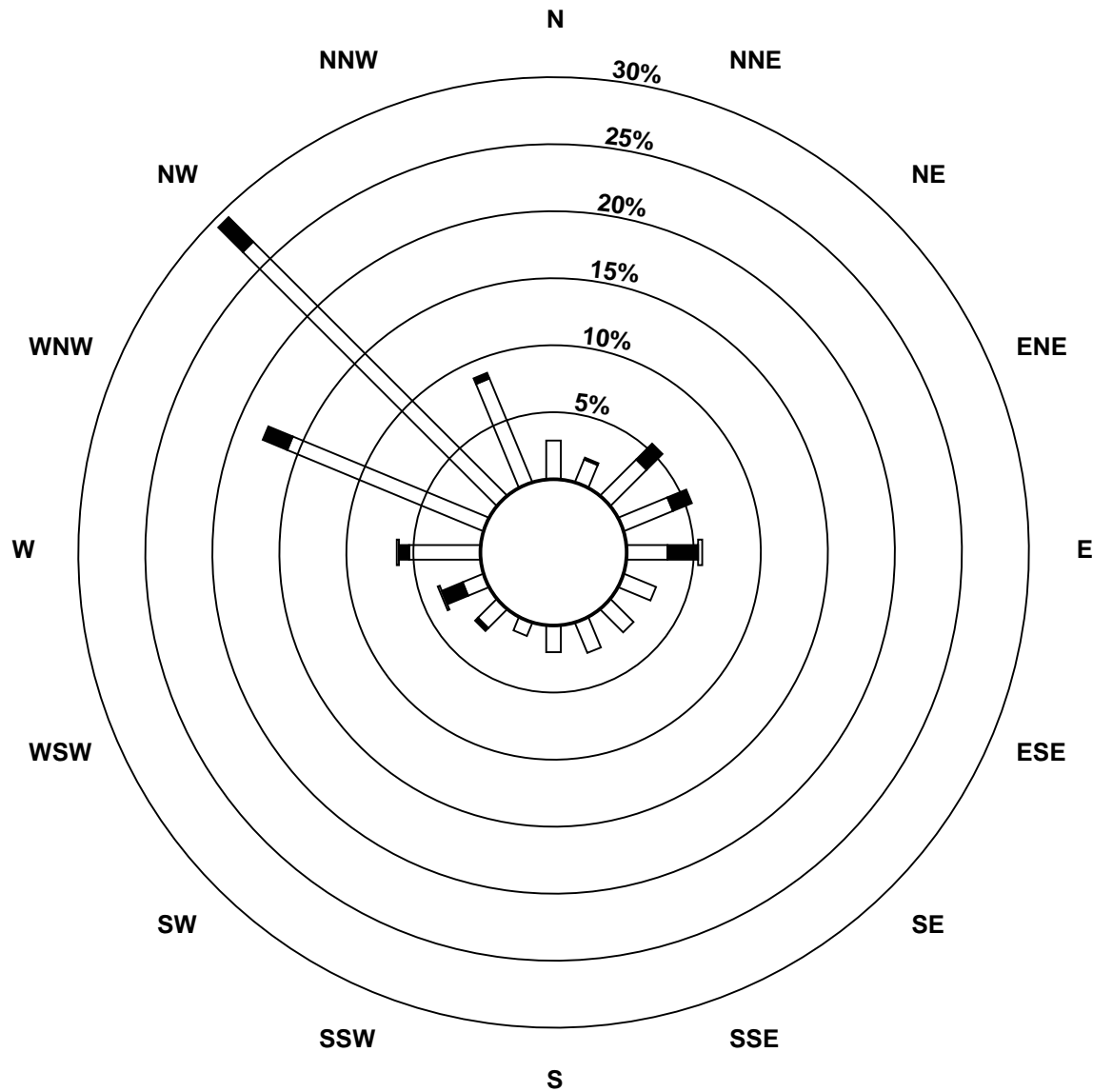
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - February 2010

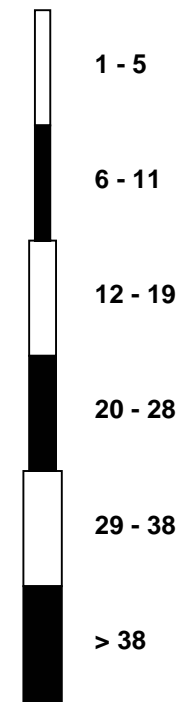
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
23 Spd	3	1	4	4	5	4	4	4	3	3	4	4	4	4	5	5	2	4	2	1	2	3	3	9	2.4	9.3	
Dir	178	314	324	290	238	238	245	235	217	291	307	280	276	302	314	300	260	318	340	118	332	117	148	272	275.2	272.2	
24 Spd	12	4	2	2	1	3	1	3	3	3	4	4	6	5	5	6	8	7	2	5	3	2	2	2	1.6	11.9	
Dir	270	291	239	243	358	173	145	151	297	320	296	290	285	314	284	55	79	80	298	341	305	355	290	83	308.2	269.7	
25 Spd	1	1	3	1	1	4	2	2	1	1	1	3	4	2	4	7	8	9	10	5	5	5	7	1	3.0	10.0	
Dir	181	269	327	143	248	333	322	327	253	282	285	285	303	287	183	246	252	260	256	265	229	215	241	167	256.5	256.0	
26 Spd	2	3	3	4	3	1	3	2	4	5	4	5	4	6	6	7	8	9	8	9	9	8	8	6	3.1	9.3	
Dir	132	192	161	183	98	103	311	307	310	308	284	280	28	46	45	45	45	44	46	50	52	56	62	66	42.4	52.5	
27 Spd	6	5	4	7	6	3	3	4	5	4	4	3	5	5	6	6	5	4	4	2	4	2	1	2	2.1	6.8	
Dir	52	49	47	55	66	66	31	50	63	63	65	315	341	289	282	283	293	335	2	39	119	105	260	209	25.3	55.0	
28 Spd	3	3	4	5	2	4	3	6	4	3	4	2	5	4	6	5	6	5	6	5	5	4	4	2	3.6	6.2	
Dir	324	323	299	316	318	298	342	323	325	287	268	289	134	308	320	294	308	307	328	329	319	320	316	332	313.1	319.6	
Spd	2.0	2.0	2.1	1.5	1.9	1.9	1.8	1.9	1.9	2.0	2.1	1.9	2.5	3.5	2.6	2.2	1.7	1.8	1.8	1.8	1.7	1.5	2.0	2.2	Diurnal Average		
Dir	330.6	335.4	327.0	318.4	305.6	317.1	315.9	324.5	318.0	312.4	305.0	293.2	294.6	294.6	296.0	301.1	342.8	349.4	352.9	4.3	0.0	351.0	332.5	328.5	Diurnal Maximum		
Spd	12.5	11.1	8.5	6.8	7.2	5.7	5.7	6.6	5.8	6.4	4.9	5.9	8.4	13.0	9.8	7.8	8.2	8.9	10.0	10.0	9.3	10.3	10.6	12.6	Diurnal Maximum		
Dir	83.8	78.6	74.2	55.0	244.7	245.8	290.6	302.1	283.7	288.2	300.8	89.0	314.1	247.8	250.1	239.8	251.6	259.9	256.0	80.5	52.5	80.6	82.6	85.2	Diurnal Maximum		
Maximum Speed Value: 13 km/h on Feb 17 14:00																				Minimum Speed Value: 0 km/h on Feb 11 11:00				Hours in Service: 672			
Maximum Daily Speed Average: 4.6 km/h on Feb 13																				Minimum Daily Speed Average: 0.5 km/h on Feb 4				Hours of Data: 672			
Maximum Diurnal Speed Average: 3.5 km/h at hour 14																				Minimum Diurnal Speed Average: 1.5 km/h at hour 22				Hours of Missing Data: 0			
Monthly Average Velocity: 1.88 km/h 321.16 deg										Speed Percentiles: P ₁ = 0.7 P ₁₀ = 1.9 Q ₁ = 2.8 Median = 3.9 Q ₃ = 4.8 P ₉₀ = 6.0 P ₉₉ = 10.2										Percent Operational Time: 100.0							
All monthly, daily, and diurnal averages have been calculated using vector methods																											
Frequency Distribution																											
		Speed Range (km/h)																									
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																				
North	41	5	0	0	0	0	46																				
NorthEast	47	21	0	0	0	0	68																				
East	34	23	3	0	0	0	60																				
SouthEast	33	4	0	0	0	0	37																				
South	26	0	0	0	0	0	26																				
SouthWest	19	12	0	0	0	0	31																				
West	78	24	2	0	0	0	104																				
NorthWest	251	49	0	0	0	0	300																				
Total	529	138	5	0	0	0	672																				

Wind Rose

Wind Speed (WS) (km/h)
Henry Pirker - February 2010



Wind Speed Classes (km/h)





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - February 2010

Maximum Speed: 13 km/h on Feb 17 14:00		Maximum Daily Speed Average: 6.3 km/h on Feb 13		Hours in Service: 672																							
Minimum Speed: 1 km/h on Feb 17 20:00		Minimum Daily Speed Average: 3.4 km/h on Feb 5		Hours of Data: 672																							
Maximum Diurnal Speed Average: 5.4 km/h at hour 17		Minimum Diurnal Speed Average: 3.8 km/h at hour 11		Hours of Missing Data: 0																							
Monthly Average Speed: 4.50 km/h		Percentiles: P ₁ = 1.8 P ₁₀ = 2.8 Q ₁ = 3.5 Median = 4.3 Q ₃ = 5.1 P ₉₀ = 6.4 P ₉₉ = 10.3		Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	5	5	4	4	3	2	3	2	2	4	4	4	3	3	5	5	5	5	7	6	5	5	4	4	4.2	6.7	
2-Feb	3	3	3	4	5	5	3	3	4	4	5	4	3	3	5	6	4	5	6	5	5	3	3	7	4.3	7.2	
3-Feb	6	7	6	6	8	6	4	4	3	4	4	5	7	7	6	7	7	5	5	4	5	4	3	4	5.3	7.6	
4-Feb	2	4	4	3	3	3	3	3	3	2	3	3	2	4	4	3	5	5	4	3	3	4	6	4	3.5	5.6	
5-Feb	4	4	3	3	3	3	3	3	2	4	4	5	3	5	4	5	4	4	4	3	2	2	3	4	3.4	5.3	
6-Feb	5	4	2	3	3	2	3	3	4	3	4	4	3	3	3	4	4	4	5	4	3	4	3	4	3.6	4.9	
7-Feb	3	3	2	2	3	2	2	2	3	3	3	2	3	4	5	3	5	6	5	7	7	4	5	4	3.7	6.9	
8-Feb	4	4	4	3	2	2	3	3	4	4	4	3	3	3	4	4	4	4	4	5	5	4	4	4	3.7	5.2	
9-Feb	4	4	4	4	4	4	3	3	2	4	3	3	3	4	3	2	4	5	5	3	3	3	5	4	3.7	5.3	
10-Feb	4	2	3	4	5	4	4	3	4	3	2	3	2	4	5	5	5	4	4	5	5	4	4	4	3.9	5.4	
11-Feb	4	4	4	4	4	3	4	3	5	2	3	4	5	7	7	6	6	5	5	5	5	5	5	7	4.7	6.9	
12-Feb	5	4	7	6	5	3	5	6	4	3	4	6	4	7	6	6	7	3	4	3	3	5	4	5	4.8	7.1	
13-Feb	3	4	5	6	6	5	5	5	5	4	5	4	5	7	6	5	5	4	10	10	9	10	11	13	6.3	12.6	
14-Feb	13	11	9	5	5	5	5	4	4	5	5	5	8	5	5	8	6	4	4	3	4	4	4	4	5.6	12.5	
15-Feb	4	3	4	5	5	4	3	4	4	3	2	3	3	3	2	4	5	4	4	5	5	5	5	5	3.8	5.3	
16-Feb	5	5	5	5	5	4	4	4	4	3	2	3	4	4	6	4	6	4	3	2	3	3	4	4	3.9	5.8	
17-Feb	4	6	3	3	5	6	6	7	6	7	5	5	8	13	10	8	6	5	2	1	4	4	4	5	5.5	13.0	
18-Feb	5	5	4	5	4	5	5	6	5	4	5	4	7	9	8	5	6	3	4	3	3	4	4	3	4.8	8.9	
19-Feb	4	4	5	3	4	4	4	4	3	4	3	5	5	6	4	5	6	4	6	6	6	5	4	5	4.5	6.5	
20-Feb	4	5	4	5	4	4	4	4	4	5	3	5	5	5	5	6	6	7	5	4	4	5	6	4	4.8	7.0	
21-Feb	5	3	4	4	5	4	4	4	4	5	5	5	9	9	7	6	4	3	3	3	3	3	4	5	4.6	8.9	
22-Feb	5	4	5	4	4	4	5	4	5	6	4	6	4	4	3	5	4	5	6	4	5	5	5	4	4.7	6.3	
23-Feb	3	4	4	4	5	5	5	4	3	3	4	4	4	5	5	5	3	4	3	3	4	5	5	10	4.4	10.3	
24-Feb	12	5	4	4	2	3	2	4	4	3	4	5	6	6	5	7	8	7	5	7	4	3	4	3	4.8	12.2	
25-Feb	2	4	4	3	4	4	4	3	3	4	5	4	4	3	5	7	9	9	10	7	6	6	8	2	5.0	10.1	
26-Feb	3	3	3	5	3	3	4	3	4	5	5	6	6	6	6	8	8	9	8	9	9	8	8	6	5.7	9.4	
27-Feb	6	5	4	7	6	3	4	4	5	4	4	4	5	5	6	6	5	4	4	3	5	3	2	2	4.5	6.8	
28-Feb	3	3	5	5	4	5	4	6	5	4	5	4	5	5	6	6	6	5	6	5	5	5	5	3	4.7	6.3	
		4.7	4.4	4.2	4.2	4.2	3.9	3.8	3.9	3.8	3.8	3.8	4.1	4.7	5.3	5.3	5.3	5.4	5.0	5.0	4.5	4.6	4.5	4.7	4.8	Diurnal Average	
		12.5	11.2	8.6	6.8	7.6	5.9	5.8	6.7	5.9	6.6	5.1	6.4	8.9	13.0	9.9	7.9	8.7	9.1	10.1	10.0	9.4	10.4	10.7	12.6	Diurnal Maximum	
All monthly, daily, and diurnal averages have been calculated using scalar methods																											

Hourly Standard Deviations

Wind Direction (WD) - deg
Henry Pirker - February 2010

Maximum Value: 97.1 deg on Feb 11 11:00																						Hours in Service:	672		
Minimum Value: 3.9 deg on Feb 17 08:00																						Hours of Data:	672		
Percentiles: P ₁ = 5.4 P ₁₀ = 10.3 Q ₁ = 14.1 Median = 22.6 Q ₃ = 39.7 P ₉₀ = 63.6 P ₉₉ = 88.7																						Hours of Missing Data:	0		
																						Hours of Calibration:	0		
																						Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	20	37	39	22	40	49	37	52	49	10	20	19	72	24	18	17	25	14	13	13	12	16	19	22	72.5
2-Feb	26	89	53	24	15	21	17	22	23	24	41	27	58	43	18	26	21	30	21	18	22	46	48	5	88.9
3-Feb	8	9	21	7	21	13	15	15	31	13	84	18	12	14	15	13	15	14	24	30	22	26	50	38	84.0
4-Feb	93	70	37	63	70	57	51	44	63	47	61	33	74	33	40	35	68	26	13	29	47	26	33	42	92.9
5-Feb	41	23	37	66	35	73	45	37	20	19	22	13	56	12	38	40	61	24	22	62	72	80	32	33	79.7
6-Feb	12	18	75	84	68	62	30	29	40	27	40	16	43	31	30	29	15	23	12	28	28	21	17	17	83.6
7-Feb	9	30	68	71	16	15	46	19	23	18	13	24	12	6	5	11	10	21	34	17	8	40	13	44	71.0
8-Feb	29	19	16	14	49	87	11	16	9	12	14	9	11	13	12	18	13	24	14	14	18	21	19	24	87.0
9-Feb	7	13	11	8	12	8	10	12	50	10	13	24	14	20	41	40	17	27	33	63	77	30	17	74	77.5
10-Feb	36	84	68	59	59	18	12	18	18	11	25	23	30	16	13	14	14	12	18	8	13	21	9	16	84.4
11-Feb	19	15	40	38	27	27	52	49	30	71	97	33	22	16	41	53	25	24	17	25	7	20	20	49	97.1
12-Feb	79	55	66	81	80	80	35	20	41	78	83	26	71	18	19	52	22	90	31	27	52	53	55	83	90.3
13-Feb	66	79	27	24	30	35	53	33	20	28	25	18	17	28	13	28	12	34	9	6	8	5	7	6	79.4
14-Feb	5	7	10	22	17	16	34	42	31	17	24	16	18	28	25	25	21	78	64	30	32	28	40	31	77.6
15-Feb	38	38	22	24	24	30	32	27	20	20	34	79	22	25	16	35	59	41	24	26	21	18	9	22	78.7
16-Feb	10	14	15	22	42	42	52	28	19	30	68	37	29	16	17	24	11	17	20	36	16	33	14	15	68.4
17-Feb	11	9	22	27	37	23	10	4	12	12	12	8	13	4	7	9	6	14	18	14	14	14	12	11	37.3
18-Feb	12	9	8	7	10	11	12	5	21	12	21	23	15	8	10	19	60	68	51	43	24	56	25	12	67.6
19-Feb	19	17	15	36	21	40	52	50	24	15	56	13	4	23	14	10	14	18	23	10	10	11	25	33	56.1
20-Feb	41	12	16	27	15	25	18	11	23	17	26	10	13	11	12	5	9	5	9	12	22	10	11	14	40.9
21-Feb	11	21	13	12	12	35	19	13	10	9	33	49	18	12	14	10	18	33	39	37	38	75	21	22	74.6
22-Feb	17	44	35	43	49	21	56	19	20	13	71	13	17	12	74	64	33	32	32	32	35	24	18	10	73.6
23-Feb	14	85	10	29	15	20	17	16	27	38	11	11	8	18	15	21	43	20	77	80	92	44	66	25	92.0
24-Feb	13	51	51	63	66	20	68	49	30	30	13	15	16	20	15	27	9	25	73	49	63	53	68	52	72.6
25-Feb	61	69	61	74	81	44	85	59	86	91	89	56	15	55	30	12	20	13	9	38	33	54	41	64	91.1
26-Feb	33	33	26	47	37	74	46	59	28	32	19	14	59	25	17	16	11	11	8	8	8	8	8	14	74.3
27-Feb	18	14	21	9	14	35	40	30	11	14	40	25	16	20	8	12	22	43	19	57	23	26	72	34	71.6
28-Feb	45	23	21	22	68	30	48	12	20	40	15	78	20	61	11	23	17	20	13	16	16	29	28	74	78.0
92.9	88.9	74.5	83.6	80.8	87.0	85.1	59.0	86.4	91.1	97.1	78.7	73.9	61.2	73.6	64.3	67.9	90.3	77.4	79.7	92.0	79.7	71.6	83.0		

PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and
Roses

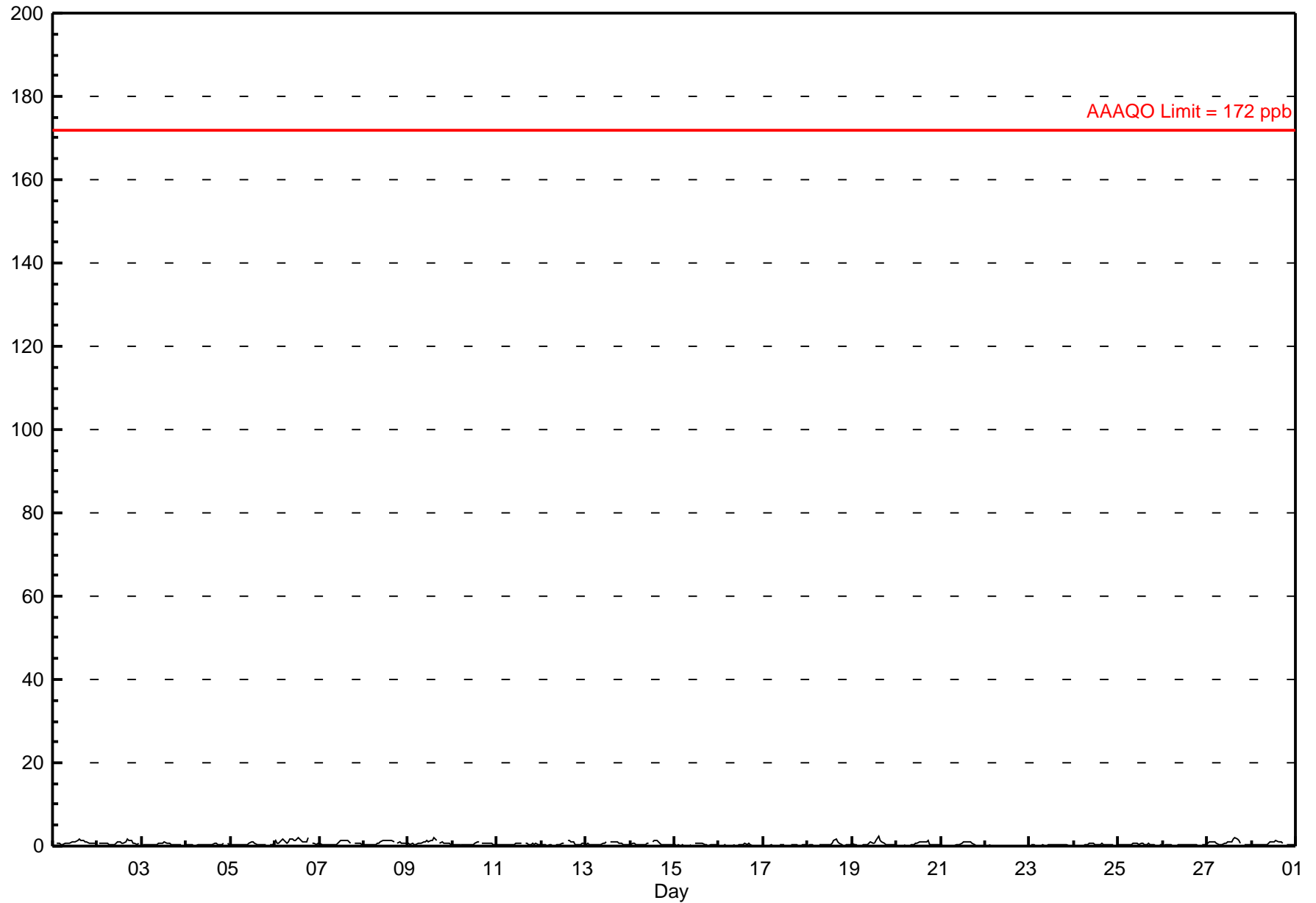
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Evergreen Park - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 672
Maximum Value: 2.2 ppb on Feb 19 15:00	Maximum Daily Average: 1.2 ppb on Feb 6
Minimum Value: 0 ppb on Feb 22 21:00	Hours of Data: 639
Maximum Diurnal Average: 1.0 ppb at hour 15	Hours of Missing Data: 33
Monthly Average: 0.52 ppb	Hours of Calibration: 33
Minimum Daily Average: 0.1 ppb on Feb 22	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.3 ppb at hour 7	
Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.4 Q ₃ = 0.7 P ₉₀ = 1.1 P ₉₉ = 1.9	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	1	A	1	1	0	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0.9	1.6
2-Feb	A	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	2	1	1	1	1	0	1	A	0.7	1.7
3-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0.5	1.1
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	A	1	0	0.3	0.6
5-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	A	0	0	0	0.4	0.9
6-Feb	1	1	1	1	2	1	1	1	2	2	2	2	2	2	1	1	1	1	2	A	1	1	0	1	1.2	2.1
7-Feb	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0.7	1.4
8-Feb	0	1	0	0	0	0	0	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	1	0.8	1.5
9-Feb	1	0	1	0	0	1	1	1	1	1	1	1	1	1	2	1	A	1	1	1	1	1	1	0	0.8	1.9
10-Feb	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	1	1	0	0.5	1.1
11-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	1	A	1	1	0	0	1	0	1	0	0	0.4	0.7
12-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	0	0	0	0	1	1	0.5	1.4
13-Feb	0	1	0	0	0	0	0	0	0	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0.6	1.1
14-Feb	0	1	1	0	0	0	0	0	0	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.3
15-Feb	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0.3	0.8
16-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	1	0	0	0	0	0	0	0.2	0.5
17-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	C	C	C	0	0	1	0	0	0	0	0	0.2	0.5
18-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	1	1	1	0	0	0	0	0	0.4	1.8
19-Feb	1	0	0	0	A	0	0	0	0	1	1	1	1	1	2	1	1	1	1	0	0	0	0	0	0.6	2.2
20-Feb	0	0	0	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.5	1.2
21-Feb	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.1
22-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
23-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.4
24-Feb	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0.3	0.8
25-Feb	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	0	0	1	0	0	0	A	0	0	0.4	0.8
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.4
27-Feb	1	1	1	1	1	1	0	0	0	1	1	1	1	1	2	2	2	2	1	A	0	0	0	0	0.9	2.0
28-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	A	0	0	0	0	0	0.6	1.4
	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.5	0.6	0.7	0.8	0.9	1.0	0.9	0.8	0.6	0.5	0.4	0.4	0.4	0.4	0.3	Diurnal Average	
	1.4	0.9	1.0	1.5	1.6	1.3	0.7	1.1	1.5	1.5	1.5	1.5	2.1	1.9	2.2	2.0	1.8	1.5	1.9	0.9	0.7	0.8	0.7	0.8	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb

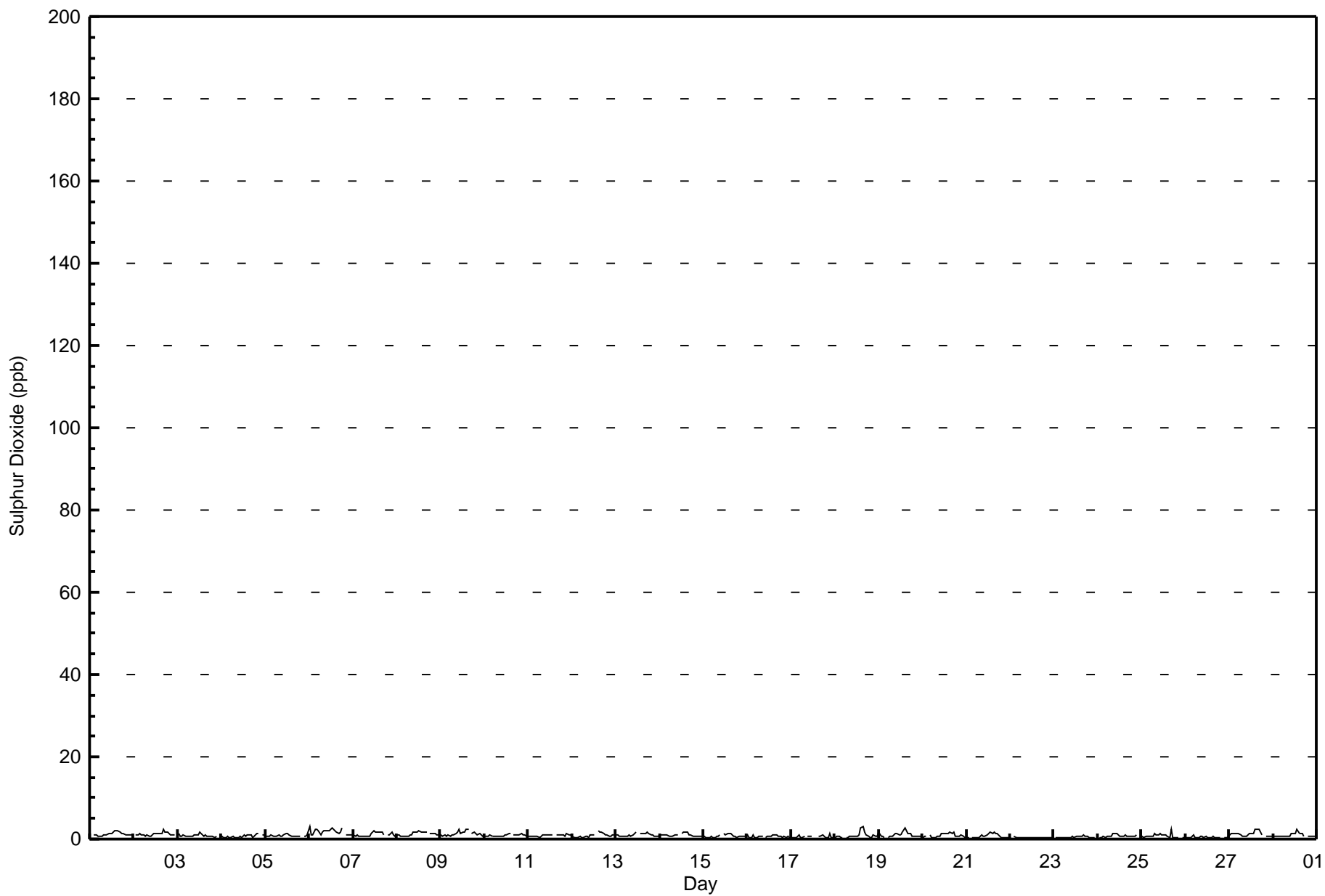


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Evergreen Park - February 2010

Maximum Value: 3.2 ppb on Feb 6 01:00		Maximum Daily Average: 1.8 ppb on Feb 6		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 24 01:00		Minimum Daily Average: 0.4 ppb on Feb 22		Hours of Data: 639																							
Maximum Diurnal Average: 1.4 ppb at hour 15		Minimum Diurnal Average: 0.6 ppb at hour 7		Hours of Missing Data: 33																							
Monthly Average: 0.90 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.6 Median = 0.7 Q ₃ = 1.1 P ₉₀ = 1.6 P ₉₉ = 2.4		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1.2	1.9	
2-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1.2	2.5	
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	0	1	A	1	0.8	1.6	
4-Feb	1	0	0	1	0	0	1	0	0	0	1	0	1	1	1	1	1	0	1	1	1	A	1	1	0.7	1.3	
5-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.3	
6-Feb	3	1	1	2	2	2	1	2	2	2	2	2	3	2	2	2	1	2	3	A	1	1	1	1	1.8	3.2	
7-Feb	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	A	1	1	2	1	1	1.1	1.9	
8-Feb	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	A	A	1	1	1	1	1	1.2	1.9	
9-Feb	1	1	1	1	1	1	1	1	1	1	2	3	1	2	2	2	A	1	2	1	1	1	1	1	1.3	2.5	
10-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.9	1.4	
11-Feb	1	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.2	
12-Feb	1	1	0	0	1	0	0	1	1	1	1	1	1	A	2	2	2	1	1	1	1	1	1	1	0.9	1.9	
13-Feb	1	1	1	1	1	1	1	1	1	1	1	2	A	2	1	2	2	2	1	1	1	1	1	1	1.0	1.6	
14-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	2	2	2	1	1	1	1	1	1	1	1	0.9	1.7	
15-Feb	1	0	0	0	1	0	0	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	0.7	1.2	
16-Feb	1	0	0	1	0	0	1	1	1	A	0	1	1	1	1	1	1	1	1	0	1	0	1	0	0.6	0.9	
17-Feb	0	0	0	0	1	0	0	1	A	1	1	1	C	C	C	1	1	1	1	0	0	1	0	0	0.6	1.2	
18-Feb	0	1	1	0	0	A	0	0	1	1	1	1	1	1	3	3	2	1	1	0	0	1	1	1	0.9	2.9	
19-Feb	2	1	1	0	A	0	1	1	1	1	1	1	1	2	3	2	1	1	1	1	1	1	1	1	1.0	2.7	
20-Feb	0	1	1	A	1	0	0	0	1	1	1	1	1	1	2	1	2	1	1	1	1	1	1	0	0.9	1.6	
21-Feb	0	0	A	0	0	0	0	0	1	1	1	1	1	2	1	2	1	1	1	0	0	0	0	0	0.7	1.6	
22-Feb	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
23-Feb	A	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	1	0	0	0	0	A	0.5	0.9	
24-Feb	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.3	
25-Feb	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	2	0	0	0	0	0	A	0	0	0.8	2.2	
26-Feb	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0	1	0	1	0	0	A	0	0	0	0.5	1.0	
27-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	A	1	1	1	1	1.3	2.4	
28-Feb	1	1	1	1	1	1	1	1	1	1	1	2	1	2	1	1	1	1	A	1	1	1	1	1	0.9	2.3	
	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.8	0.9	1.1	1.1	1.2	1.3	1.4	1.4	1.2	1.0	0.9	0.7	0.7	0.8	0.7	0.6	Diurnal Average		
	3.2	1.3	1.3	2.2	2.2	2.2	1.1	1.6	1.9	1.9	2.5	2.0	2.8	2.3	2.8	2.9	2.5	1.9	2.6	1.3	1.3	1.6	1.0	1.0	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums for SO₂ at Evergreen Park February 2010



Hourly Averages

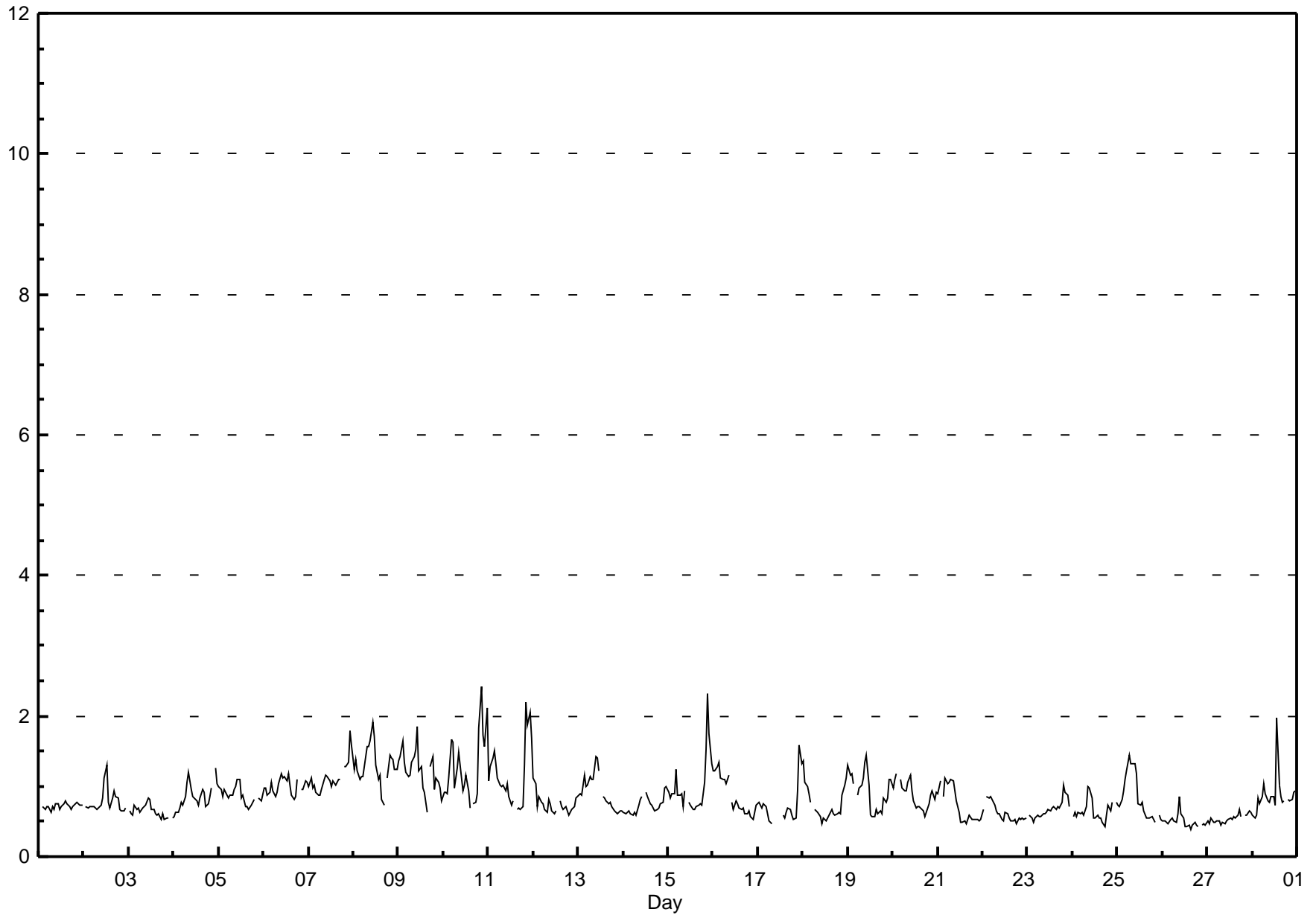
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 672
Maximum Value: 2.4 ppb on Feb 10 21:00	Maximum Daily Average: 1.3 ppb on Feb 8
Minimum Value: 0 ppb on Feb 26 16:00	Hours of Data: 639
Maximum Diurnal Average: 1.0 ppb at hour 23	Hours of Missing Data: 33
Monthly Average: 0.85 ppb	Hours of Calibration: 33
Minimum Daily Average: 0.5 ppb on Feb 26	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.7 ppb at hour 17	
Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.6 Median = 0.8 Q ₃ = 1.0 P ₉₀ = 1.3 P ₉₉ = 1.9	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
2-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.8
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.9	1.3
5-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.1
6-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.0	1.2
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	2	1.1	1.8
8-Feb	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	A	A	1	1	1	1	1	1	1.3	1.9
9-Feb	1	1	2	1	1	1	1	1	1	2	2	1	1	1	1	1	A	1	1	1	1	1	1	1	1.2	1.8
10-Feb	1	1	1	1	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	2	2	2	2	2	1.3	2.4
11-Feb	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	2	2	2	2	2	1.2	2.2
12-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
13-Feb	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
14-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
15-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	2	1	1.0	2.3
16-Feb	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
17-Feb	1	1	1	1	1	1	1	0	A	1	C	C	C	1	1	1	1	1	1	1	1	1	2	1	0.7	1.6
18-Feb	1	1	1	1	1	A	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.4
19-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.4
20-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
21-Feb	1	1	A	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	0.7	1.1
22-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.6	0.9
23-Feb	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	1.0
24-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	A	1	1	0.7	1.0
25-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	0.8	1.4
26-Feb	1	1	0	0	1	1	1	0	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0.5	0.8
27-Feb	1	0	1	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.5	0.7
28-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	A	1	1	1	1	1	0.9	2.0
	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.9	0.9	1.0	1.0	Diurnal Average	
	1.4	1.4	1.6	1.5	1.7	1.6	1.4	1.6	1.6	1.7	1.9	1.7	1.3	2.0	1.2	1.1	1.1	1.3	1.4	1.8	2.4	2.3	2.0	2.1	Diurnal Maximum	

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

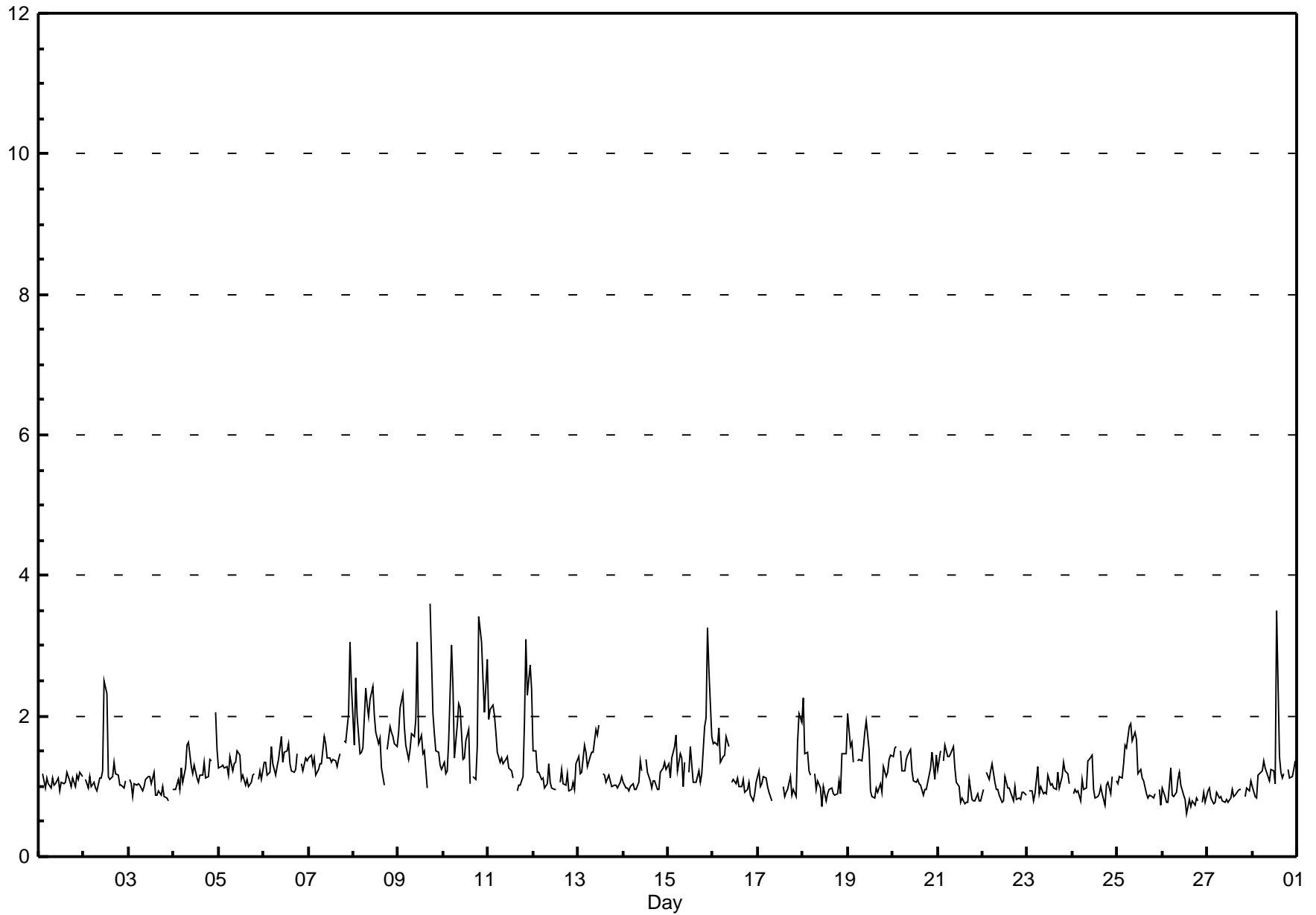


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

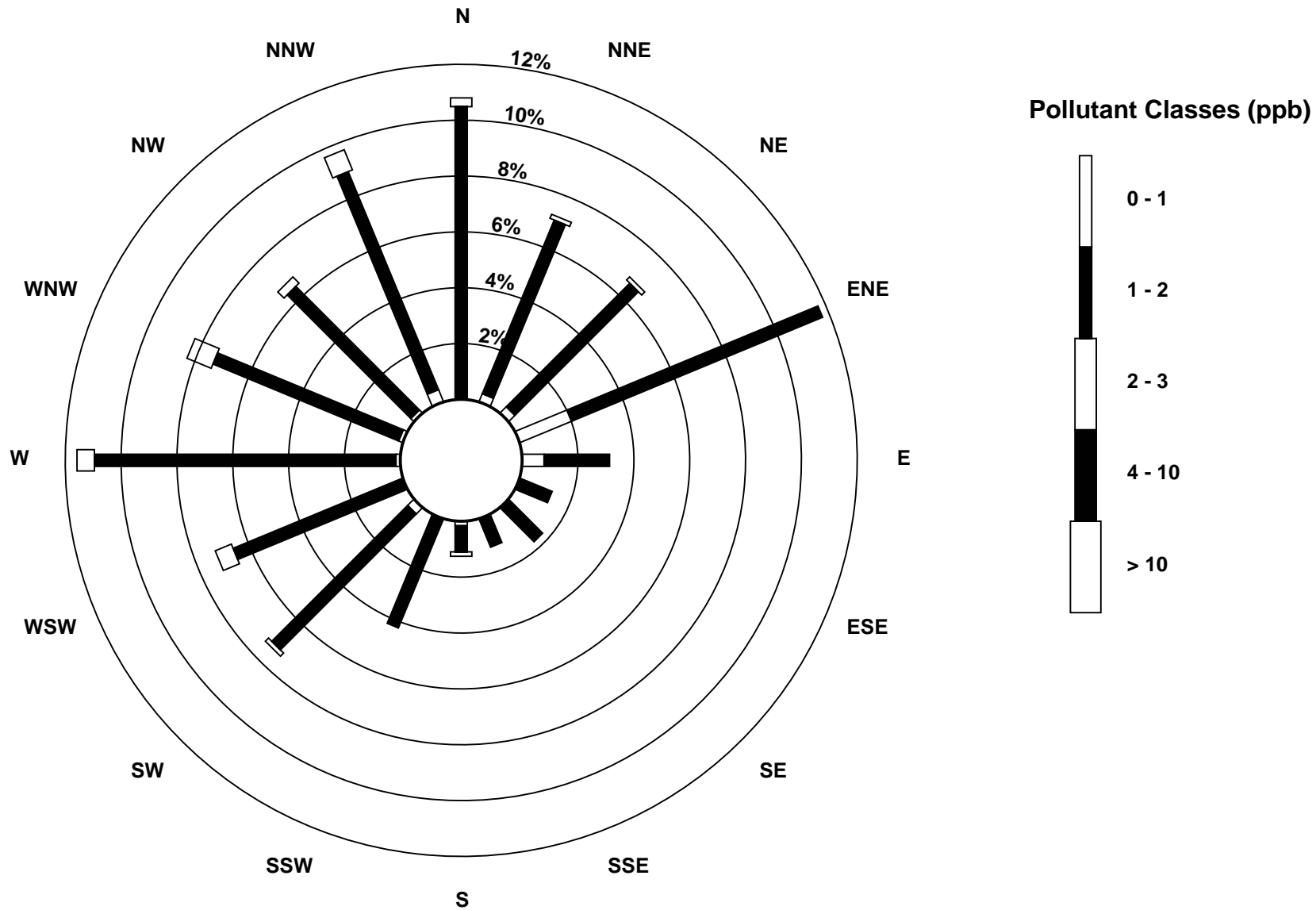
Evergreen Park - February 2010

Maximum Value: 3.6 ppb on Feb 9 18:00		Maximum Daily Average: 1.9 ppb on Feb 10		Hours in Service: 672																							
Minimum Value: 1 ppb on Feb 26 14:00		Minimum Daily Average: 0.9 ppb on Feb 26		Hours of Data: 639																							
Maximum Diurnal Average: 1.4 ppb at hour 23		Minimum Diurnal Average: 1.0 ppb at hour 16		Hours of Missing Data: 33																							
Monthly Average: 1.26 ppb		Percentiles: P ₁ = 0.7 P ₁₀ = 0.9 Q ₁ = 1.0 Median = 1.1 Q ₃ = 1.4 P ₉₀ = 1.8 P ₉₉ = 3.0		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.2	
2-Feb	A	1	1	1	1	1	1	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	1	1	A	1.2	2.5
3-Feb	1	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	1.2
4-Feb	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	1.3	2.1
5-Feb	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1.2	1.5
6-Feb	1	1	1	1	2	1	1	1	1	2	1	1	1	2	1	1	1	1	1	A	1	1	1	1	1	1.4	1.7
7-Feb	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	A	2	2	2	2	3	2	1.6	3.1
8-Feb	2	3	2	1	1	2	2	2	2	2	2	2	2	2	2	1	1	A	2	2	2	2	2	2	2	1.8	2.5
9-Feb	2	2	2	2	2	1	2	2	2	2	3	2	2	1	2	1	A	4	2	2	2	1	1	1	1	1.8	3.6
10-Feb	1	1	1	2	3	2	1	2	2	2	1	1	2	2	1	A	1	1	2	3	3	3	2	3	1.9	3.4	
11-Feb	2	2	2	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	2	3	2	3	2	1.7	3.1	
12-Feb	2	2	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-Feb	1	1	1	2	1	1	1	1	1	2	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1.3	1.9	
14-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4	
15-Feb	1	1	1	2	2	1	1	1	1	1	A	1	2	1	1	1	1	1	1	2	2	3	3	2	1.5	3.3	
16-Feb	2	2	2	2	1	1	1	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.8	
17-Feb	1	1	1	1	1	1	1	1	A	1	C	C	C	1	1	1	1	1	1	1	1	2	2	2	1.1	2.0	
18-Feb	2	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	2.3	
19-Feb	2	2	2	1	A	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.0	
20-Feb	1	2	2	A	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	1.6	
21-Feb	1	2	A	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6	
22-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3	
23-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1.0	1.4	
24-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.5	
25-Feb	1	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1.2	1.9	
26-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.9	1.3	
27-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.1	
28-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1	1	A	1	1	1	1	1	1.3	3.5	
		1.3	1.3	1.3	1.3	1.3	1.2	1.3	1.3	1.4	1.3	1.3	1.2	1.2	1.1	1.0	1.0	1.1	1.1	1.3	1.3	1.4	1.4	1.4	Diurnal Average		
		2.3	2.5	2.3	2.0	3.0	2.4	2.4	2.2	2.2	2.2	3.0	2.5	2.3	3.5	1.7	1.3	1.4	3.6	2.0	3.4	3.1	3.3	3.1	2.8	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Evergreen Park - February 2010



Hourly Averages

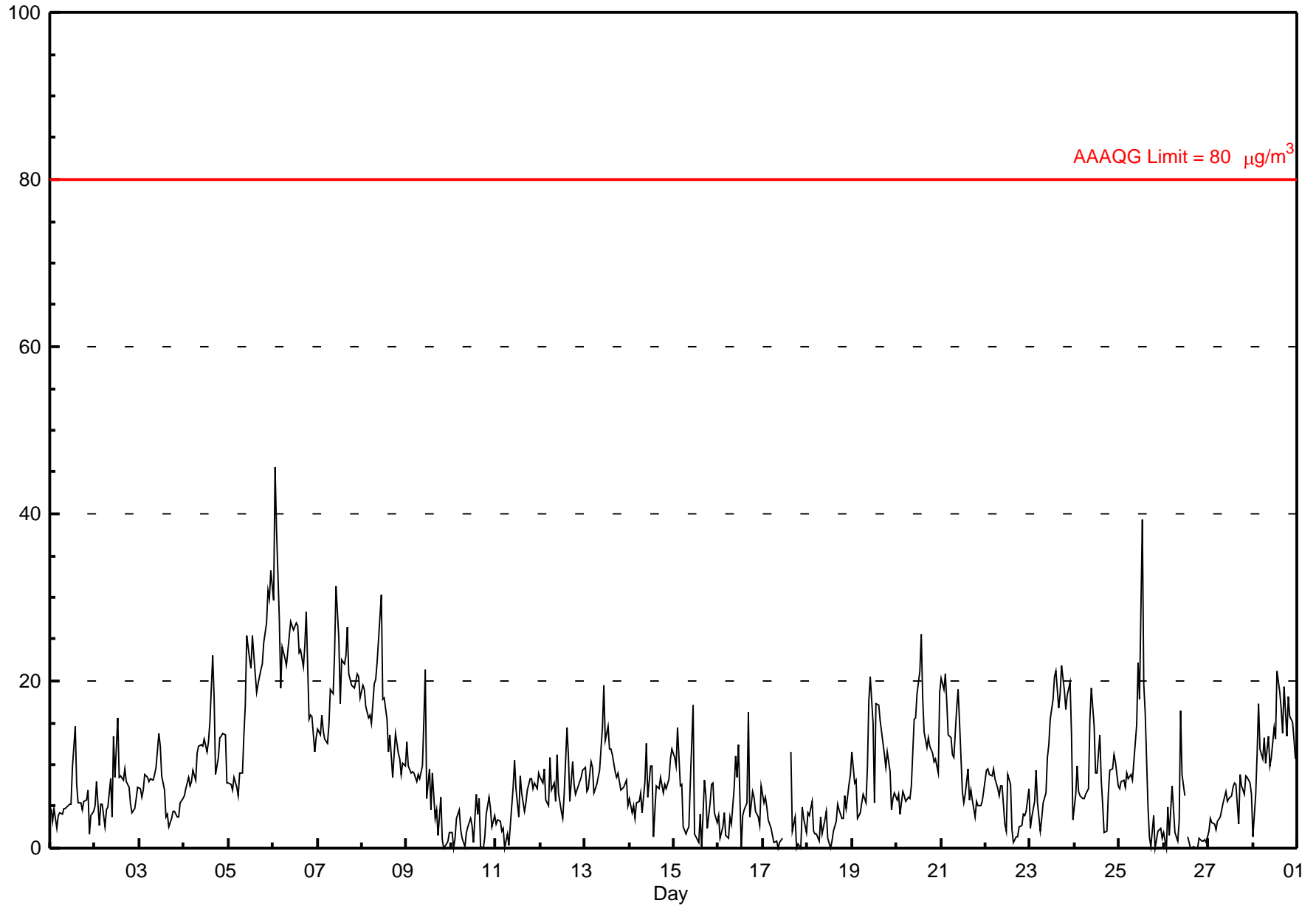
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - February 2010

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 672
Maximum Value: 45.6 µg/m ³ on Feb 6 02:00	Maximum Daily Average: 24.1 µg/m ³ on Feb 6
Minimum Value: 0 µg/m ³ on Feb 9 21:00	Hours of Data: 668
Maximum Diurnal Average: 13.8 µg/m ³ at hour 11	Hours of Missing Data: 4
Monthly Average: 9.13 µg/m ³	Hours of Calibration: 2
Minimum Daily Average: 2.7 µg/m ³ on Feb 17	Percent Operational Time: 99.7
Minimum Diurnal Average: 6.7 µg/m ³ at hour 6	
Percentiles: P ₁ = 0.0 P ₁₀ = 1.8 Q ₁ = 4.2 Median = 7.5 Q ₃ = 12.5 P ₉₀ = 19.1 P ₉₉ = 30.2	

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-Feb	5	3	5	2	4	4	4	5	5	5	5	10	15	8	5	5	5	6	6	7	2	4	4	5.3	14.6																								
2-Feb	5	8	3	5	5	3	5	5	8	4	13	8	16	8	9	8	10	8	7	5	4	5	6	7	6.9	15.6																							
3-Feb	7	6	7	9	8	8	8	8	9	10	14	12	9	7	4	4	3	4	4	4	4	4	5	6	6.8	13.8																							
4-Feb	6	7	8	7	8	9	8	11	12	12	12	13	12	13	15	23	18	9	11	13	13	14	13	8	11.6	23.0																							
5-Feb	8	8	7	8	7	6	9	9	14	17	25	23	21	25	21	19	20	21	22	25	27	31	30	33	18.2	33.1																							
6-Feb	30	46	38	27	19	24	23	22	24	27	27	26	27	27	23	24	22	24	28	15	16	16	11	13	24.1	45.6																							
7-Feb	14	14	16	14	13	13	15	19	19	23	31	25	17	22	22	23	26	21	20	19	19	21	20	18	19.4	31.4																							
8-Feb	19	19	17	16	16	15	20	20	22	25	30	18	18	15	12	14	8	11	14	11	11	9	10	10	15.8	30.3																							
9-Feb	13	10	9	9	9	8	9	8	10	15	21	6	9	5	9	4	5	2	6	1	0	0	1	2	7.1	21.3																							
10-Feb	2	0	1	3	5	2	1	0	2	3	4	3	1	7	4	6	0	0	1	4	6	5	3	4	2.7	6.5																							
11-Feb	3	3	3	2	2	0	2	0	3	7	11	7	4	9	7	4	6	7	8	8	7	8	7	9	5.3	10.6																							
12-Feb	8	8	10	6	5	11	7	8	6	11	7	4	4	6	14	11	6	10	8	6	7	8	9	9	7.9	14.5																							
13-Feb	10	7	7	10	10	7	8	9	9	14	19	13	15	12	12	11	9	8	9	7	7	7	8	5	9.7	19.4																							
14-Feb	6	4	5	4	5	6	7	4	8	13	6	10	10	1	8	7	7	9	7	8	7	8	11	12	7.1	12.5																							
15-Feb	11	10	14	7	8	3	2	2	3	8	17	2	1	1	4	0	8	6	2	5	8	8	4	3	5.7	17.2																							
16-Feb	4	1	2	4	2	1	4	3	7	11	9	12	0	4	5	5	16	4	7	6	4	4	3	7	5.2	16.2																							
17-Feb	5	6	5	3	2	2	1	1	0	1	1	N	1	C	C	12	2	4	0	1	0	5	3	2	2.7	11.6																							
18-Feb	4	4	6	2	2	2	1	4	2	3	4	1	0	1	2	3	5	5	4	4	6	5	8	9	3.5	8.9																							
19-Feb	12	8	8	4	4	5	6	5	10	18	21	15	5	17	17	15	14	11	10	12	9	5	6	7	10.1	20.5																							
20-Feb	6	6	4	7	6	6	6	6	7	15	16	18	21	26	18	14	12	13	12	11	10	11	9	19	11.6	25.5																							
21-Feb	20	19	21	17	14	13	11	11	17	19	15	7	6	6	10	6	7	6	4	6	5	5	6	7	10.7	20.8																							
22-Feb	9	9	9	9	9	8	7	6	7	7	3	2	9	8	2	1	1	1	3	3	4	4	4	7	5.6	9.5																							
23-Feb	2	4	6	9	6	2	4	5	7	11	12	15	18	20	21	17	19	22	19	17	18	20	14	3	12.1	21.8																							
24-Feb	6	10	7	6	6	6	6	7	15	19	15	9	9	14	8	5	2	2	6	9	10	11	10	8	8.6	19.1																							
25-Feb	7	8	8	7	9	8	9	8	10	15	22	18	39	20	16	5	1	0	4	0	1	2	2	1	9.2	39.3																							
26-Feb	2	0	5	2	7	5	2	1	3	16	9	6	BD	1	0	0	0	0	0	1	1	1	1	1	2.8	16.4																							
27-Feb	2	4	3	3	2	3	4	5	5	7	6	6	6	7	8	8	3	9	7	6	9	9	8	6	5.6	8.8																							
28-Feb	1	6	11	17	12	11	13	10	13	10	11	14	13	21	19	17	14	19	13	18	16	15	13	11	13.3	21.1																							
																								8.2	8.5	8.8	7.9	7.4	6.7	7.1	7.2	9.2	12.4	13.8	11.1	11.1	11.8	11.0	9.6	8.9	8.6	8.6	8.3	8.4	8.6	8.2	8.2	Diurnal Average	
																								29.7	45.6	38.3	27.4	19.1	24.1	22.7	21.9	23.5	27.2	31.4	26.1	39.3	26.7	23.4	23.7	26.5	24.3	28.3	24.6	26.9	30.8	29.8	33.1	Diurnal Maximum	

C - Calibration N - Not Valid BD - Baseline Drift
 Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m³



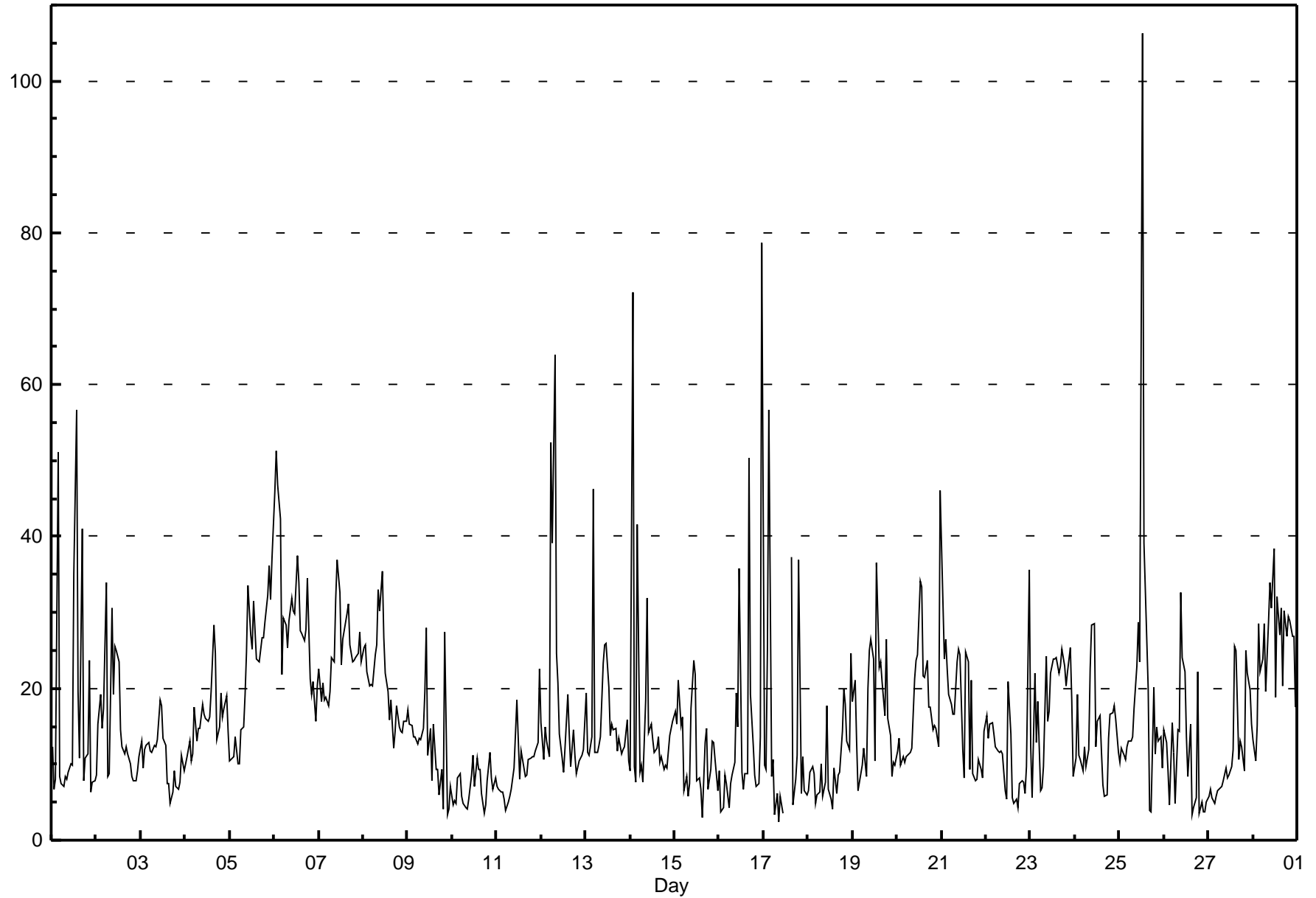


Hourly Maximums

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

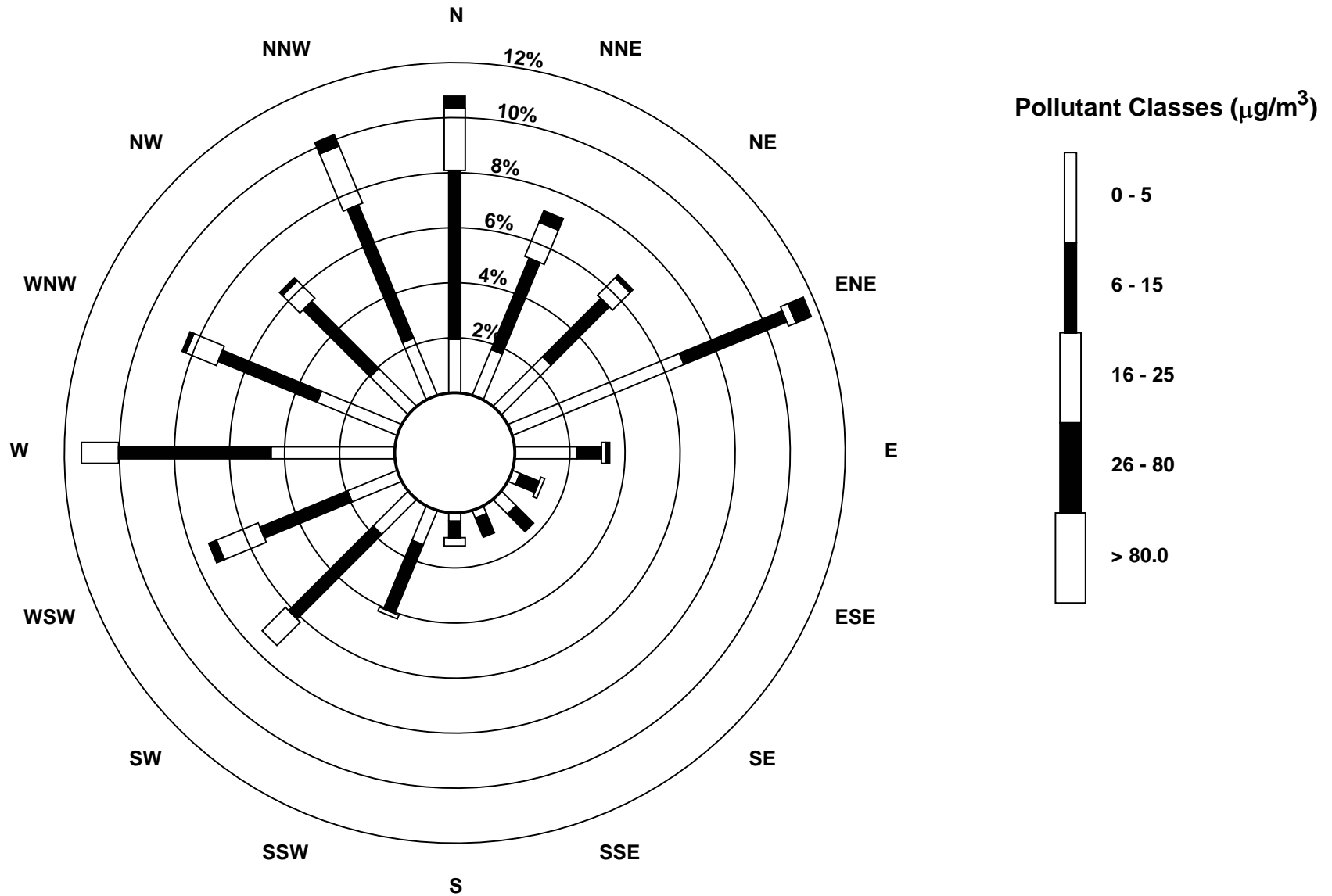
Evergreen Park - February 2010

Maximum Value: 106.2 μg/m ³ on Feb 25 13:00		Maximum Daily Average: 30.2 μg/m ³ on Feb 6		Hours in Service: 672 Hours of Data: 669 Hours of Missing Data: 3 Hours of Calibration: 2 Percent Operational Time: 99.9																																													
Minimum Value: 2 μg/m ³ on Feb 17 09:00 Maximum Diurnal Average: 21.0 μg/m ³ at hour 11 Monthly Average: 16.19 μg/m ³		Minimum Daily Average: 7.1 μg/m ³ on Feb 10 Minimum Diurnal Average: 12.8 μg/m ³ at hour 7 Percentiles: P ₁ = 3.6 P ₁₀ = 6.4 Q ₁ = 9.1 Median = 13.2 Q ₃ = 21.8 P ₉₀ = 28.6 P ₉₉ = 51.5																																															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	12	7	8	51	8	7	7	8	8	9	10	10	35	57	20	11	41	8	11	11	24	6	8	8	16.0	56.7																							
2-Feb	9	15	19	15	17	34	8	9	31	19	26	25	23	15	12	11	12	11	10	8	8	8	9	11	15.3	33.9																							
3-Feb	13	10	12	13	13	12	12	12	12	13	19	18	13	13	8	7	5	6	9	7	7	8	11	9	10.9	18.5																							
4-Feb	10	11	13	11	11	17	13	15	15	18	17	16	16	16	20	28	25	13	15	19	16	17	19	14	16.1	28.3																							
5-Feb	10	11	11	14	10	10	15	15	19	25	34	27	25	31	24	24	24	27	27	29	32	36	32	37	22.8	37.2																							
6-Feb	46	51	47	42	22	29	28	25	29	32	30	30	37	34	28	27	26	28	34	21	19	21	16	20	30.2	51.2																							
7-Feb	23	18	21	19	19	18	20	24	23	32	37	33	23	26	29	30	31	26	24	24	24	25	27	24	24.9	37.0																							
8-Feb	25	26	22	20	21	20	24	26	33	30	35	27	22	20	16	19	12	14	18	15	14	14	16	16	21.0	35.4																							
9-Feb	17	15	15	14	14	13	13	13	15	20	28	11	15	8	15	9	9	6	9	4	27	3	4	7	12.7	28.1																							
10-Feb	5	5	5	8	9	6	5	4	4	5	9	11	7	11	9	9	6	4	5	8	12	8	7	8	7.1	11.6																							
11-Feb	7	7	6	6	5	4	5	6	7	10	14	18	8	12	11	8	8	11	11	11	11	12	13	23	9.7	22.6																							
12-Feb	15	11	15	13	11	52	39	64	25	21	14	11	9	12	19	14	10	15	11	9	10	11	11	12	18.1	63.9																							
13-Feb	19	12	11	14	46	12	12	13	14	23	26	26	20	14	15	15	15	12	13	11	12	12	16	10	16.3	46.3																							
14-Feb	9	72	10	8	42	9	10	8	19	32	14	15	13	12	12	14	10	11	9	10	10	14	15	16	16.3	72.2																							
15-Feb	17	15	21	15	16	7	8	6	7	17	24	22	8	8	7	3	13	15	7	9	13	13	11	7	12.0	23.8																							
16-Feb	9	4	4	9	7	4	8	9	10	19	15	36	9	7	9	9	50	19	12	9	7	7	14	79	15.2	78.7																							
17-Feb	10	9	25	57	8	11	3	6	2	6	4	N	8	C	C	37	5	8	11	37	6	11	7	6	13.2	56.6																							
18-Feb	7	9	10	9	5	6	6	10	6	8	18	7	5	4	9	6	8	9	14	20	18	13	12	25	10.1	24.5																							
19-Feb	18	21	13	7	9	10	12	8	20	25	26	24	10	37	23	23	21	16	26	16	14	8	10	10	17.0	36.5																							
20-Feb	12	13	10	11	10	11	11	12	12	21	24	24	34	33	22	21	24	18	18	15	15	15	12	46	18.5	46.1																							
21-Feb	39	24	26	23	19	18	17	17	23	25	24	12	8	25	24	9	21	9	8	8	11	9	8	14	17.5	38.9																							
22-Feb	16	13	15	16	14	12	12	11	12	11	7	5	21	14	6	5	5	4	7	8	8	6	10	36	11.4	35.6																							
23-Feb	12	6	22	13	18	7	7	10	24	16	17	22	24	24	24	22	23	25	23	20	22	25	18	8	18.0	25.4																							
24-Feb	11	19	11	11	9	12	10	12	23	28	28	12	16	16	12	7	6	6	13	17	17	18	16	12	14.2	28.5																							
25-Feb	10	12	11	11	12	13	13	14	17	23	29	23	106	39	33	20	4	4	20	11	15	13	14	10	19.9	106.2																							
26-Feb	15	13	9	5	15	12	5	15	14	33	24	22	14	8	15	3	4	6	22	4	5	4	4	5	11.4	32.6																							
27-Feb	6	7	6	5	6	6	7	7	8	10	8	9	10	12	25	25	11	13	12	9	25	22	20	15	11.8	25.5																							
28-Feb	13	10	15	29	22	24	29	20	29	34	31	38	19	32	27	31	20	30	27	30	29	27	27	17	25.4	38.4																							
																								14.9	15.9	14.8	16.5	15.0	14.1	12.8	14.2	16.5	20.2	21.0	19.8	20.0	20.0	17.5	16.0	16.1	13.3	15.3	14.3	15.4	13.8	13.7	18.0	Diurnal Average	
																								45.9	72.2	46.8	56.6	46.3	52.3	39.2	63.9	33.1	33.9	37.0	38.4	106.2	56.7	32.7	37.2	50.3	30.2	34.4	37.0	32.3	36.2	31.6	78.7	Diurnal Maximum	
C - Calibration		N - Not Valid																																															



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Evergreen Park - February 2010

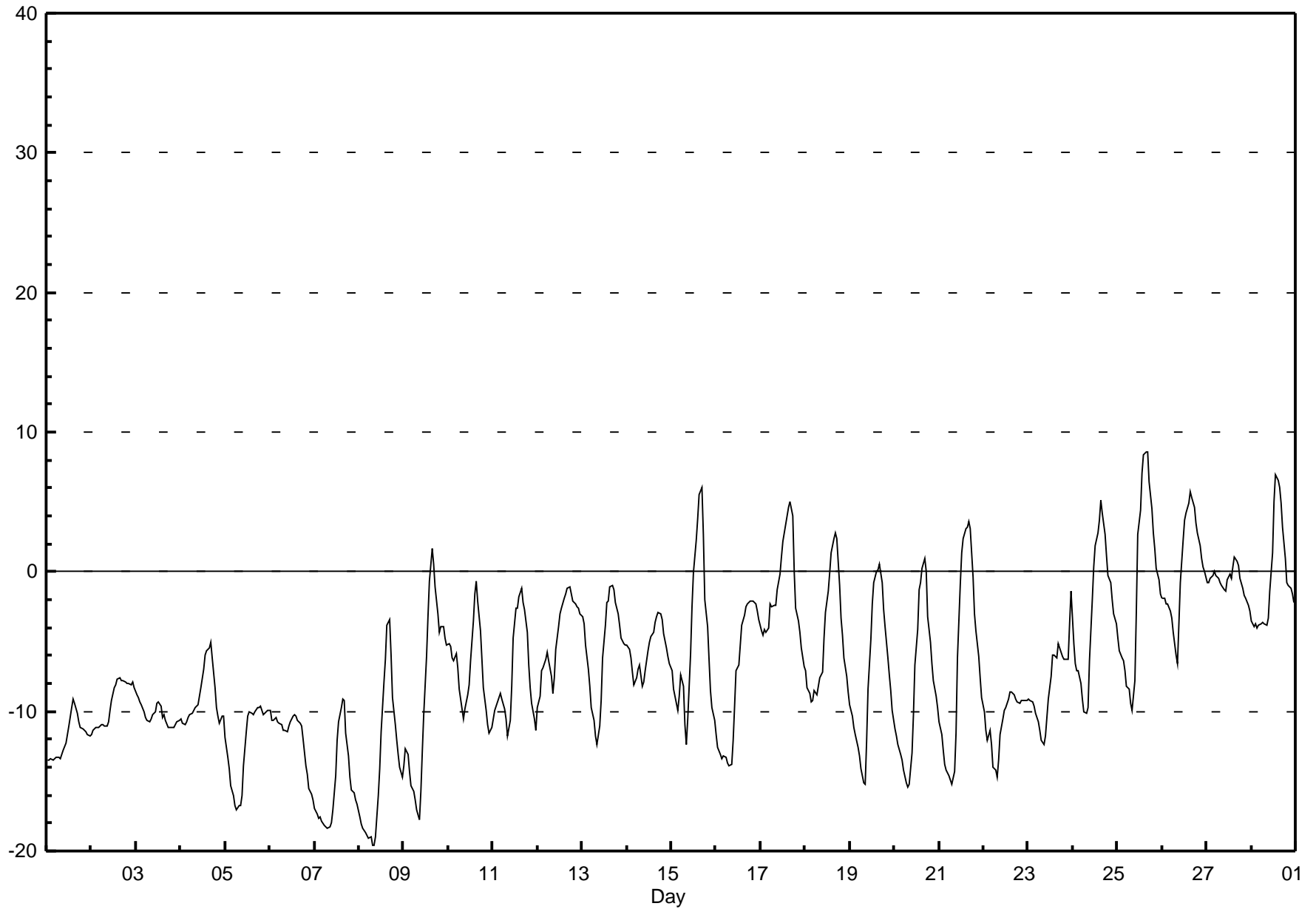


Hourly Averages

External Temperature (ET) - °C

Evergreen Park - February 2010

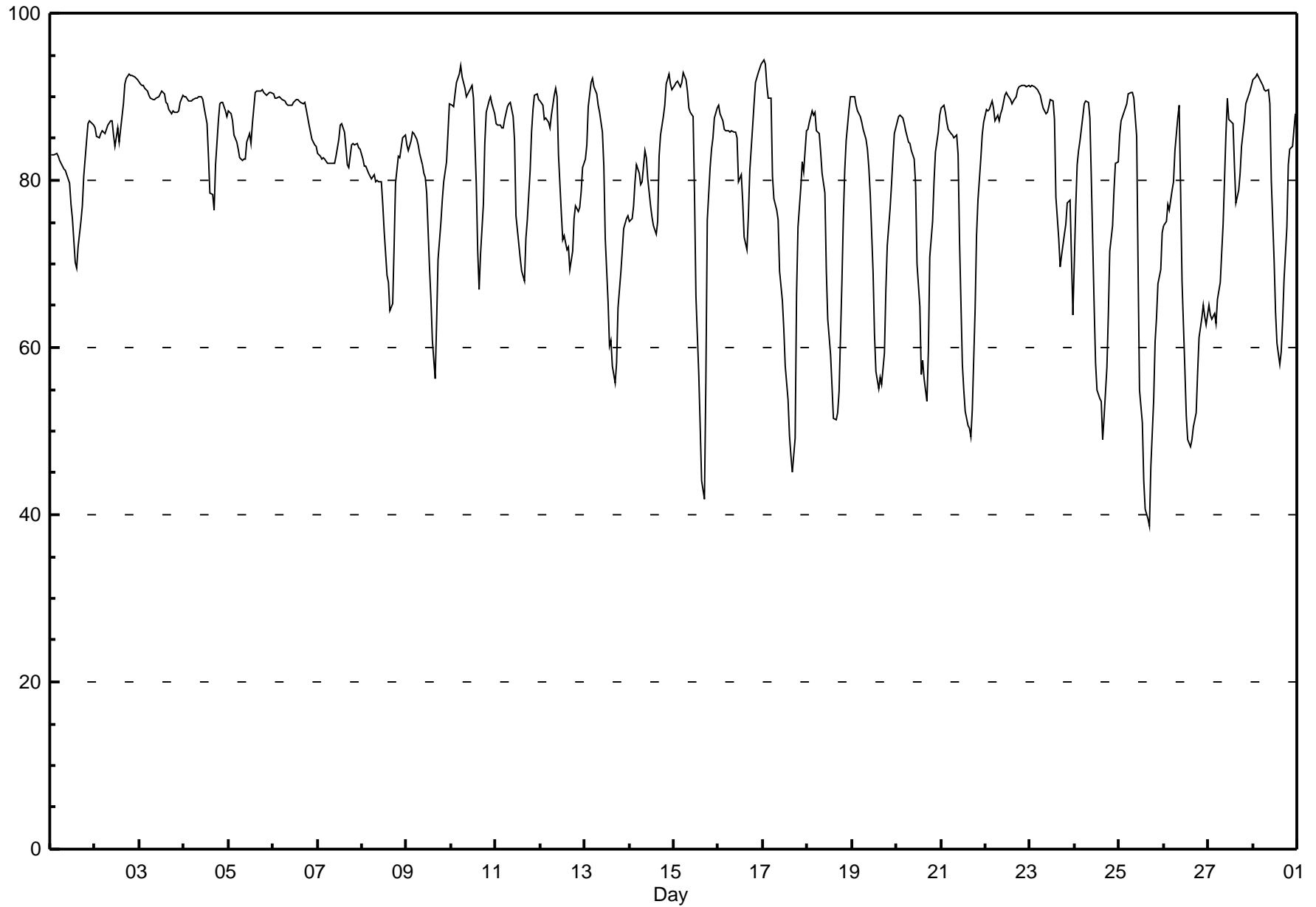
Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0		Hours in Service: 672																																														
Maximum Value: 8.6 °C on Feb 25 16:00		Maximum Daily Average: 0.2 °C on Feb 26																																														
Minimum Value: -20 °C on Feb 8 08:00		Hours of Data: 672																																														
Maximum Diurnal Average: -1.7 °C at hour 16		Hours of Missing Data: 0																																														
Monthly Average: -7.04 °C		Hours of Calibration: 0																																														
Minimum Daily Average: -15.2 °C on Feb 7		Percent Operational Time: 100.0																																														
Minimum Diurnal Average: -11.3 °C at hour 9																																																
Percentiles: P ₁ = -18.5 P ₁₀ = -13.9 Q ₁ = -10.9 Median = -8.0 Q ₃ = -2.8 P ₉₀ = 0.3 P ₉₉ = 6.5																																																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	-13	-13	-13	-13	-13	-13	-13	-13	-13	-13	-12	-12	-11	-10	-9	-9	-10	-11	-11	-11	-11	-11	-12	-12	-11.9	-9.2																						
2-Feb	-12	-11	-11	-11	-11	-11	-11	-11	-11	-11	-10	-9	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-9.4	-7.6																						
3-Feb	-9	-9	-9	-10	-10	-10	-11	-11	-10	-10	-10	-9	-9	-10	-10	-10	-11	-11	-11	-11	-11	-11	-11	-11	-10.3	-8.8																						
4-Feb	-11	-11	-11	-11	-10	-10	-10	-10	-10	-9	-9	-8	-7	-6	-6	-5	-5	-6	-8	-10	-10	-11	-10	-10	-9.0	-5.0																						
5-Feb	-12	-13	-14	-15	-16	-17	-17	-17	-17	-16	-14	-11	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-10	-12.5	-9.6																						
6-Feb	-10	-11	-11	-10	-11	-11	-11	-11	-11	-11	-11	-11	-10	-10	-10	-11	-11	-11	-12	-14	-15	-16	-16	-16	-11.7	-9.9																						
7-Feb	-17	-17	-18	-18	-18	-18	-18	-18	-18	-18	-17	-15	-12	-11	-10	-9	-9	-12	-13	-15	-16	-16	-16	-17	-15.2	-9.2																						
8-Feb	-18	-18	-18	-19	-19	-19	-19	-20	-20	-19	-16	-14	-11	-8	-6	-4	-3	-6	-9	-11	-12	-13	-14	-15	-13.8	-3.4																						
9-Feb	-14	-13	-13	-14	-15	-16	-16	-17	-18	-16	-13	-10	-6	-3	-1	2	1	-1	-3	-4	-4	-4	-5	-5	-8.7	1.6																						
10-Feb	-5	-5	-6	-6	-6	-7	-8	-10	-11	-10	-9	-8	-6	-4	-2	-1	-2	-4	-6	-8	-10	-11	-12	-11	-7.0	-0.7																						
11-Feb	-11	-10	-9	-9	-9	-9	-10	-10	-12	-11	-8	-5	-3	-3	-2	-1	-2	-3	-4	-7	-8	-9	-11	-11	-7.3	-1.2																						
12-Feb	-10	-9	-7	-7	-6	-6	-6	-7	-9	-8	-6	-4	-3	-3	-2	-2	-1	-1	-2	-2	-2	-2	-3	-3	-4.6	-1.1																						
13-Feb	-3	-4	-5	-7	-8	-10	-11	-12	-12	-11	-9	-6	-4	-2	-2	-1	-1	-1	-2	-3	-4	-5	-5	-5	-5.6	-1.0																						
14-Feb	-5	-6	-6	-7	-8	-8	-7	-7	-8	-8	-7	-6	-5	-5	-4	-4	-3	-3	-3	-3	-4	-5	-6	-7	-5.6	-2.9																						
15-Feb	-7	-8	-9	-10	-9	-7	-8	-11	-12	-11	-6	-3	0	2	4	5	6	3	-2	-4	-6	-9	-10	-11	-5.1	6.0																						
16-Feb	-12	-13	-13	-13	-13	-13	-14	-14	-14	-12	-10	-7	-7	-5	-4	-3	-2	-2	-2	-2	-2	-2	-3	-3	-7.7	-2.1																						
17-Feb	-4	-5	-4	-4	-4	-2	-3	-2	-2	-1	0	1	2	3	4	5	5	4	0	-3	-4	-4	-5	-7	-1.3	5.1																						
18-Feb	-7	-8	-9	-9	-9	-9	-9	-8	-8	-7	-5	-3	-1	0	1	2	3	2	-1	-3	-5	-6	-7	-9	-4.8	2.8																						
19-Feb	-9	-10	-11	-12	-13	-13	-14	-15	-15	-12	-8	-5	-2	-1	0	0	1	-1	-3	-4	-6	-7	-8	-10	-7.5	0.5																						
20-Feb	-11	-12	-12	-13	-13	-14	-15	-15	-15	-13	-10	-7	-4	-1	-1	0	1	0	-3	-5	-7	-8	-9	-10	-8.2	1.0																						
21-Feb	-11	-12	-13	-14	-14	-15	-15	-15	-14	-12	-6	-1	1	2	3	3	4	3	0	-3	-4	-6	-8	-9	-6.4	3.6																						
22-Feb	-10	-11	-12	-11	-12	-14	-14	-15	-13	-12	-11	-10	-10	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-10.6	-8.6																						
23-Feb	-9	-9	-9	-10	-10	-11	-11	-12	-12	-12	-10	-9	-7	-6	-6	-6	-5	-5	-6	-6	-6	-6	-4	-1	-8.0	-1.4																						
24-Feb	-5	-7	-7	-7	-8	-9	-10	-10	-10	-6	-2	0	2	3	4	5	4	3	1	0	-1	-2	-3	-4	-2.9	5.1																						
25-Feb	-5	-6	-6	-6	-7	-8	-8	-9	-10	-8	-3	3	4	7	8	9	9	9	6	5	3	2	0	-1	-2	-1.0	8.6																					
26-Feb	-2	-2	-2	-2	-3	-3	-4	-6	-7	-4	-1	2	4	4	5	6	5	5	4	3	2	1	0	0	0.2	5.7																						
27-Feb	-1	-1	-1	0	0	0	0	-1	-1	-1	-1	-1	0	0	0	1	1	0	0	-1	-2	-2	-2	-3	-0.7	1.1																						
28-Feb	-4	-4	-4	-4	-4	-4	-4	-4	-4	-3	-1	1	5	7	7	6	5	3	1	-1	-1	-1	-2	-2	-0.4	7.0																						
																								-8.8	-9.2	-9.5	-9.8	-10.0	-10.3	-10.7	-11.2	-11.3	-10.1	-8.1	-5.9	-4.3	-3.0	-2.3	-1.7	-1.8	-2.7	-4.3	-5.5	-6.3	-7.0	-7.4	-7.9	Diurnal Average
																								-0.8	-0.8	-0.5	-0.3	0.1	-0.3	-0.5	-0.8	-1.0	-1.3	-0.1	2.6	5.0	7.1	8.4	8.6	8.6	6.5	4.6	2.8	1.8	1.0	0.4	0.0	Diurnal Maximum



Hourly Averages

Relative Humidity (RH) - % Evergreen Park - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 94.3 % on Feb 17 01:00 Maximum Daily Average: 89.7 % on Feb 3																	Hours in Service: 672 Hours of Data: 672																									
Minimum Value: 39 % on Feb 25 17:00 Minimum Daily Average: 66.7 % on Feb 26 Maximum Diurnal Average: 86.4 % at hour 5 Minimum Diurnal Average: 66.7 % at hour 16 Monthly Average: 80.24 % Percentiles: P ₁ = 44.8 P ₁₀ = 60.7 Q ₁ = 75.2 Median = 84.5 Q ₃ = 89.0 P ₉₀ = 90.7 P ₉₉ = 92.8																	Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																		
1-Feb	83	83	83	83	83	82	82	81	81	81	80	77	75	70	69	72	75	77	80	85	87	87	87	87	80.5	87.2																
2-Feb	86	85	85	86	86	86	86	87	87	87	85	84	86	85	86	89	92	92	93	92	92	92	92	92	88.1	92.6																
3-Feb	92	91	91	91	91	90	90	90	90	90	90	90	91	90	89	89	89	88	88	88	88	88	89	90	89.7	91.5																
4-Feb	90	90	90	89	90	90	90	90	90	90	89	87	83	79	78	76	82	87	89	89	89	88	88	88	87.1	90.0																
5-Feb	88	88	87	85	84	84	83	82	83	83	85	86	84	87	91	91	91	91	91	90	90	90	90	90	87.3	90.9																
6-Feb	90	90	90	90	90	90	89	89	89	89	89	89	90	90	90	89	89	89	88	87	86	85	84	84	88.5	90.4																
7-Feb	83	83	83	83	82	82	82	82	82	82	83	85	87	87	86	84	82	81	84	84	84	84	84	84	83.4	86.7																
8-Feb	83	82	82	81	80	80	81	80	80	80	77	74	69	68	64	65	72	80	83	83	84	85	85	85	78.2	85.4																
9-Feb	84	84	85	86	86	85	84	83	82	81	80	78	69	66	61	56	63	70	75	78	80	82	86	89	78.0	89.1																
10-Feb	89	89	90	92	93	94	92	91	90	90	91	91	90	79	71	67	71	77	84	88	90	90	89	88	86.6	93.7																
11-Feb	87	87	87	86	86	87	89	89	89	88	85	76	72	71	69	68	73	75	81	86	88	90	90	90	82.9	90.3																
12-Feb	89	89	87	87	87	86	88	90	91	90	83	76	73	73	72	72	69	72	75	77	76	77	79	82	80.9	91.0																
13-Feb	83	84	89	92	92	91	90	89	88	86	82	73	65	60	61	58	56	58	65	69	71	74	75	76	76.1	92.2																
14-Feb	75	75	77	80	82	81	79	80	84	83	80	77	76	75	74	75	83	85	88	89	91	93	91	91	81.8	92.7																
15-Feb	91	92	92	91	92	93	92	91	89	88	88	78	66	57	50	44	42	56	75	82	84	85	87	89	78.9	92.8																
16-Feb	89	88	87	86	86	86	86	86	86	86	85	80	81	77	73	72	76	81	86	89	92	93	93	94	84.9	93.9																
17-Feb	94	94	91	90	90	81	78	76	75	69	66	62	58	54	50	47	45	49	66	74	79	82	81	86	72.4	94.3																
18-Feb	86	87	88	88	88	86	86	83	81	78	69	63	59	55	51	51	52	55	68	75	81	85	88	90	74.8	90.0																
19-Feb	90	90	89	88	88	87	86	85	84	82	78	69	61	57	55	56	56	59	67	72	77	79	83	86	76.0	90.1																
20-Feb	87	88	88	87	87	86	85	84	84	83	79	70	65	57	59	56	54	60	71	75	80	83	86	88	76.7	87.8																
21-Feb	89	89	88	87	86	86	86	85	85	83	73	58	55	52	51	50	49	53	65	73	78	83	85	87	74.0	89.0																
22-Feb	88	88	88	90	89	87	88	87	88	89	90	90	90	90	89	89	90	91	91	91	91	91	91	91	89.6	91.4																
23-Feb	91	91	91	91	91	90	89	89	88	88	89	90	89	87	78	73	70	71	74	75	77	78	71	64	82.7	91.4																
24-Feb	77	82	84	85	88	89	89	89	87	80	65	58	55	54	54	49	52	58	64	71	75	79	82	82	72.8	89.5																
25-Feb	85	87	88	89	89	90	90	90	90	85	70	55	51	44	41	39	39	46	54	61	64	68	69	74	69.1	90.5																
26-Feb	75	75	77	76	79	80	84	87	89	79	68	57	52	49	48	49	50	52	57	61	64	65	64	63	66.7	89.1																
27-Feb	65	64	63	64	63	66	68	71	75	86	90	87	87	87	82	77	79	81	84	87	89	90	91	91	78.6	91.3																
28-Feb	92	92	93	92	92	91	91	91	91	89	80	70	64	61	58	59	63	68	74	82	84	84	86	88	80.7	92.7																
																	85.8	86.0	86.2	86.3	86.4	85.9	85.8	85.7	85.6	84.4	81.1	76.3	73.3	70.2	67.9	66.7	67.5	71.0	77.0	80.5	82.5	84.0	84.6	85.2	Diurnal Average	
																	94.3	93.9	92.7	92.4	92.8	93.7	92.4	91.0	91.0	90.4	91.0	91.4	90.7	90.3	90.5	90.7	91.5	92.2	92.6	92.5	92.5	92.9	93.4	93.9	Diurnal Maximum	





Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - February 2010

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	2	2	1	2	1	1	1	2	1	0	1	1	2	2	2	2	3	3	2	2	2	3	3	2	1.3	2.8
Dir	79	86	88	68	60	58	82	73	112	99	42	275	237	259	352	49	75	70	80	65	69	60	65	73	65.4	64.9
2 Spd	2	1	1	2	2	1	1	1	1	1	2	2	1	3	1	3	3	2	2	3	2	2	1	3	0.7	3.5
Dir	56	23	136	198	233	205	164	89	124	115	146	204	114	352	74	131	136	116	80	81	74	44	31	344	101.2	343.8
3 Spd	5	4	4	3	5	3	3	2	1	1	1	0	3	4	5	3	4	3	2	2	2	1	0	1	1.4	5.5
Dir	349	345	335	288	299	294	294	303	322	320	270	80	71	69	71	59	63	76	84	63	48	72	201	116	13.0	348.7
4 Spd	1	2	1	1	1	0	2	1	1	1	1	2	1	2	2	3	3	1	1	1	1	1	1	0	0.2	2.7
Dir	206	202	199	187	189	159	217	199	155	217	250	225	259	1	6	1	48	68	357	10	349	343	316	286	280.8	0.7
5 Spd	1	0	1	0	1	0	0	1	1	0	2	2	1	3	4	4	2	2	2	1	2	2	1	1	0.6	4.4
Dir	216	274	212	251	235	51	212	31	50	346	35	13	348	258	290	279	306	301	283	39	57	71	96	65	319.9	278.7
6 Spd	1	2	1	1	1	1	1	1	0	0	0	2	2	3	3	3	2	2	1	2	1	2	1	3	1.0	3.3
Dir	312	331	4	75	219	219	354	64	58	50	352	16	22	5	12	47	29	32	344	349	33	273	325	281	1.4	12.4
7 Spd	1	1	1	1	1	1	0	1	1	1	2	1	2	3	3	3	3	3	2	2	2	1	1	1	1.1	2.9
Dir	349	344	227	235	236	347	216	342	336	284	257	250	334	350	350	353	27	34	331	331	323	330	297	258	331.8	33.8
8 Spd	0	0	1	0	0	0	0	1	1	1	1	2	3	1	2	1	2	2	2	2	1	1	0	1	0.8	2.6
Dir	269	328	231	203	90	305	316	260	252	267	301	239	256	285	310	274	345	22	350	291	316	269	265	233	289.5	255.9
9 Spd	0	0	1	1	1	1	0	0	0	0	1	3	2	3	2	2	1	1	2	1	1	0	1	1	0.8	2.6
Dir	307	199	232	279	246	229	179	276	227	282	293	246	239	249	241	256	328	333	333	260	196	145	219	232	257.6	248.5
10 Spd	1	0	1	1	1	2	2	2	1	1	2	2	2	3	3	3	3	3	1	1	1	1	1	1	1.1	3.5
Dir	60	193	23	10	260	345	348	329	303	343	297	318	278	333	24	32	39	20	4	307	322	332	275	329	347.7	24.3
11 Spd	1	1	1	1	1	1	1	0	1	0	1	2	3	3	3	3	2	2	1	1	1	1	0	1	0.8	3.2
Dir	316	312	297	334	254	269	215	245	205	3	11	151	359	31	35	16	25	17	356	333	356	346	303	41	3.3	35.4
12 Spd	2	1	2	1	1	1	1	1	1	1	2	2	2	3	2	2	2	1	1	1	1	1	1	0	0.7	3.4
Dir	47	65	279	97	59	213	104	204	233	68	65	343	353	294	347	32	105	232	45	63	52	4	345	113	21.7	294.3
13 Spd	1	1	1	1	2	1	1	1	1	1	1	2	3	3	4	3	5	4	4	4	4	4	3	4	1.6	4.8
Dir	280	191	1	338	296	303	274	268	327	353	284	323	354	19	8	30	63	64	73	73	70	70	66	68	38.8	62.9
14 Spd	4	4	3	2	3	1	2	0	2	2	2	1	5	2	4	4	3	1	1	1	2	1	2	2	0.6	4.7
Dir	72	75	63	3	26	42	48	55	267	281	260	287	281	291	269	251	185	222	57	211	234	301	263	254	293.5	281.2
15 Spd	2	1	1	1	3	2	1	1	1	0	1	3	4	3	3	2	1	2	2	1	1	1	2	1	1.1	4.1
Dir	228	32	213	300	257	277	344	202	232	272	266	281	291	320	293	268	278	11	17	7	350	298	15	339	296.8	290.6
16 Spd	1	1	0	1	0	1	1	0	1	1	2	2	4	3	4	3	3	2	0	1	1	1	1	2	1.2	4.5
Dir	315	8	294	259	18	220	234	35	215	234	288	299	285	277	294	297	288	274	124	68	81	11	330	271	287.8	285.0
17 Spd	2	2	2	2	2	4	5	5	4	6	9	8	9	10	9	8	5	2	0	0	1	1	1	0	3.9	10.0
Dir	323	282	292	253	274	316	300	310	299	286	282	285	288	283	287	276	275	268	188	145	245	263	248	317	285.8	283.1
18 Spd	1	0	0	0	1	1	3	4	3	4	6	6	10	12	10	6	3	1	0	0	0	0	0	1	2.8	12.0
Dir	280	284	206	351	243	341	256	275	267	270	276	274	275	278	281	279	354	47	63	312	331	148	249	271	278.8	277.6
19 Spd	0	1	1	1	0	0	0	0	1	0	1	2	2	3	3	4	3	3	2	2	3	1	1	0	1.0	4.3
Dir	66	265	255	267	266	334	246	18	246	351	242	270	266	349	358	1	35	32	1	3	330	311	265	42	335.7	0.7
20 Spd	1	1	1	1	1	0	0	1	0	1	2	2	3	3	4	3	3	2	2	1	1	2	2	2	1.2	4.0
Dir	26	282	297	245	267	355	262	271	326	269	254	352	338	346	0	19	8	13	354	324	348	337	323	267	336.4	0.2
21 Spd	1	1	1	1	0	1	0	0	2	2	1	2	6	4	4	6	3	2	1	1	1	1	2	1	1.3	6.3
Dir	316	229	218	7	328	274	322	345	251	42	58	348	347	349	337	328	329	53	68	89	66	36	48	15	349.4	328.4
22 Spd	2	2	2	1	1	1	2	2	1	1	3	2	2	2	2	2	3	3	3	2	1	1	2	1	1.1	3.1
Dir	12	8	10	21	285	43	54	31	357	7	62	28	297	288	355	44	19	39	53	42	64	76	207	217	22.9	19.4

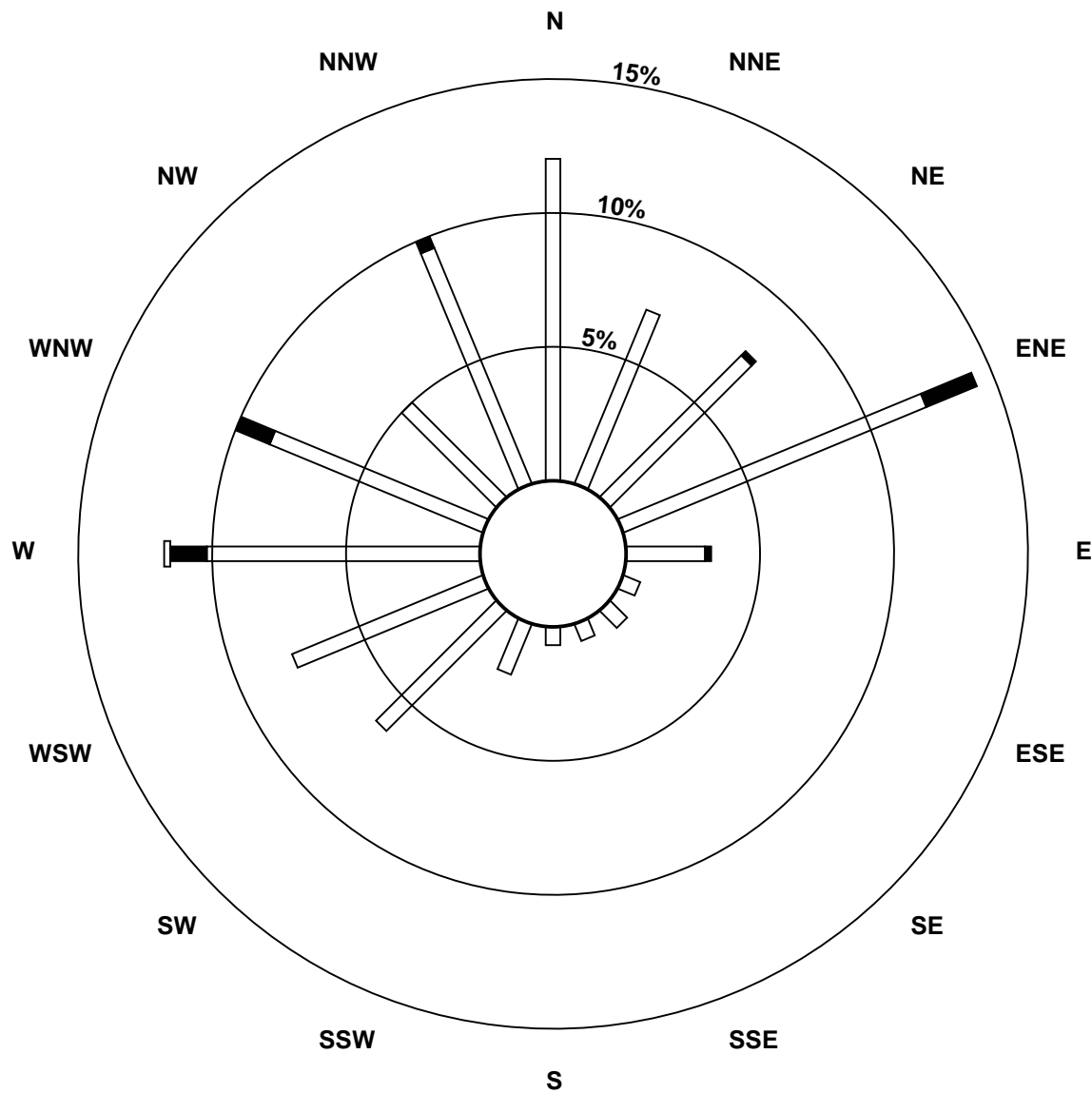
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - February 2010

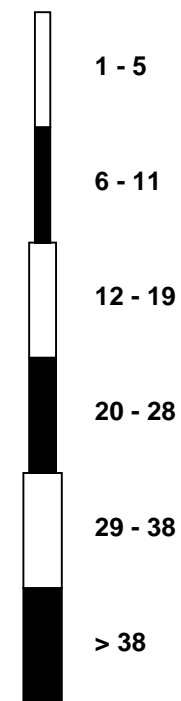
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	0	1	1	2	3	4	3	4	2	1	1	2	2	3	4	4	2	1	1	1	1	1	5	0	1.1	4.6
Dir	81	223	194	232	248	241	239	244	258	230	277	321	349	1	2	346	270	253	343	228	22	170	227	94	272.5	227.0
24 Spd	1	0	0	2	1	2	1	1	1	0	1	3	4	4	4	4	4	3	1	2	1	1	1	1	0.7	4.4
Dir	69	331	200	222	225	216	212	236	227	17	289	352	7	6	9	46	73	71	310	356	317	246	248	70	11.8	46.0
25 Spd	1	1	0	0	1	1	1	1	0	0	1	2	2	1	4	4	4	4	4	2	1	2	0	1	1.2	4.2
Dir	211	39	319	38	217	308	227	23	334	351	334	225	243	345	270	288	301	308	260	233	222	258	216	218	272.0	287.8
26 Spd	0	3	0	0	1	0	1	1	1	1	3	3	7	7	9	8	7	6	7	7	7	6	6	5	3.5	9.0
Dir	136	214	97	186	232	125	55	63	8	12	1	50	53	61	68	71	70	71	71	72	75	76	80	80	68.4	68.3
27 Spd	5	3	3	4	2	1	1	0	2	1	3	1	2	5	4	4	4	2	2	0	1	1	0	0	1.1	5.4
Dir	73	70	66	77	86	71	25	295	91	16	53	324	322	278	296	332	5	16	57	75	161	58	85	139	30.1	72.6
28 Spd	1	1	1	2	0	1	1	1	1	1	2	2	3	4	3	3	3	1	2	1	1	1	0	0	0.7	3.6
Dir	51	44	343	258	13	281	1	309	355	315	249	262	165	181	5	12	355	343	332	325	323	319	343	276	326.2	181.3
Spd	0.6	0.3	0.3	0.2	0.8	0.6	0.5	0.6	0.5	0.6	1.0	1.4	1.9	2.1	2.4	1.9	1.6	1.4	1.1	0.8	0.8	0.6	0.2	0.3	Diurnal Average	
Dir	26.4	6.6	320.0	281.5	266.3	294.2	287.4	304.2	274.1	299.7	296.2	296.3	309.1	320.1	335.6	348.0	21.7	29.5	26.5	34.0	38.5	18.8	347.2	1.6	Diurnal Maximum	
Spd	5.5	4.5	4.4	3.6	4.8	3.8	4.9	4.6	3.7	6.0	8.9	8.2	10.1	12.0	10.4	8.1	6.9	5.9	6.6	7.3	7.2	5.7	5.6	5.3	Diurnal Maximum	
Dir	348.7	75.2	334.8	76.8	299.3	316.1	300.3	310.4	298.6	286.4	281.7	284.6	274.6	277.6	281.1	70.5	70.3	71.0	71.3	72.3	75.4	76.4	80.1	80.1	Diurnal Maximum	
Maximum Speed Value: 12 km/h on Feb 18 14:00																		Minimum Speed Value: 0 km/h on Feb 13 00:00						Hours in Service:		672
Maximum Daily Speed Average: 3.9 km/h on Feb 17																		Minimum Daily Speed Average: 0.2 km/h on Feb 9						Hours of Data:		672
Maximum Diurnal Speed Average: 2.4 km/h at hour 15																		Minimum Diurnal Speed Average: 0.2 km/h at hour 23						Hours of Missing Data:		0
Monthly Average Velocity: 0.73 km/h 336.85 deg																		Speed Percentiles: P ₁ = 0.1 P ₁₀ = 0.5 Q ₁ = 0.8 Median = 1.4 Q ₃ = 2.5 P ₉₀ = 3.9 P ₉₉ = 8.9						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	131	2	0	0	0	0																	133			
NorthEast	98	2	0	0	0	0																	100			
East	60	11	0	0	0	0																	71			
SouthEast	19	0	0	0	0	0																	19			
South	24	0	0	0	0	0																	24			
SouthWest	85	0	0	0	0	0																	85			
West	121	12	1	0	0	0																	134			
NorthWest	105	1	0	0	0	0																	106			
Total	643	28	1	0	0	0																	672			

Wind Rose

Wind Speed (WS) (km/h)
Evergreen Park - February 2010



Wind Speed Classes (km/h)





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - February 2010

Maximum Speed: 12 km/h on Feb 18 14:00 Minimum Speed: 1 km/h on Feb 8 04:00 Maximum Diurnal Speed Average: 4.3 km/h at hour 15 Monthly Average Speed: 2.36 km/h		Maximum Daily Speed Average: 4.5 km/h on Feb 26 Minimum Daily Speed Average: 1.5 km/h on Feb 9 Minimum Diurnal Speed Average: 1.6 km/h at hour 9 Percentiles: P ₁ = 0.8 P ₁₀ = 1.0 Q ₁ = 1.4 Median = 1.9 Q ₃ = 2.9 P ₉₀ = 4.2 P ₉₉ = 9.0		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	2	3	2	2	1	2	2	2	1	1	1	2	3	2	3	3	3	3	3	2	3	3	3	2	2.1	2.9	
2-Feb	2	1	1	2	2	1	1	1	1	2	2	3	2	3	3	3	3	2	2	3	2	2	1	4	2.1	3.6	
3-Feb	6	4	5	3	5	4	4	2	1	1	1	2	3	4	5	3	4	4	3	2	3	2	2	2	3.1	5.5	
4-Feb	2	3	2	2	1	1	2	1	2	2	2	2	2	2	3	3	3	2	1	1	1	2	2	1	1.8	3.1	
5-Feb	2	1	1	1	1	1	1	1	1	1	2	2	2	3	5	5	3	2	2	1	2	2	1	1	1.9	4.7	
6-Feb	1	2	2	2	2	2	2	2	1	2	1	2	3	3	4	3	3	2	2	2	1	2	1	3	2.1	3.5	
7-Feb	1	1	1	1	1	1	1	1	1	1	2	2	2	3	3	3	3	3	2	2	2	2	1	1	1.8	3.1	
8-Feb	1	1	1	1	1	1	1	1	1	1	1	2	3	2	3	2	2	2	2	2	2	2	1	2	1.5	2.7	
9-Feb	1	1	1	1	1	1	1	1	1	1	2	3	2	3	2	2	1	2	2	2	2	1	2	2	1.5	2.8	
10-Feb	1	1	1	2	2	2	2	2	1	1	2	2	3	3	4	3	3	3	1	1	1	1	1	1	1.9	3.8	
11-Feb	1	1	2	1	2	1	1	2	2	1	1	2	2	3	4	4	3	2	2	1	1	1	1	3	1.9	3.8	
12-Feb	3	2	4	4	3	2	1	1	2	1	2	3	3	4	3	3	3	2	1	2	1	2	2	2	2.3	4.2	
13-Feb	2	2	2	2	2	2	2	2	1	2	1	2	2	3	3	4	4	5	4	4	4	4	4	3	4	2.8	4.9
14-Feb	4	5	3	2	3	2	2	1	2	2	2	2	5	3	4	5	3	2	2	1	2	2	2	2	2.7	5.1	
15-Feb	2	1	2	2	3	2	2	1	2	2	1	3	4	3	4	2	1	2	2	1	1	2	2	1	2.0	4.2	
16-Feb	1	1	1	2	2	2	2	1	2	2	2	2	5	4	4	3	3	2	1	1	2	1	1	2	2.0	4.6	
17-Feb	2	2	2	2	3	4	5	5	4	6	9	8	10	10	9	8	5	3	1	1	1	1	1	1	4.3	10.1	
18-Feb	1	1	1	1	2	2	3	4	3	4	6	6	10	12	11	6	5	1	1	1	1	1	1	1	3.5	12.1	
19-Feb	1	1	1	1	1	1	1	1	1	1	2	3	3	3	3	4	3	3	2	2	3	1	1	1	1.8	4.4	
20-Feb	1	1	1	1	2	1	1	1	1	2	2	2	3	3	4	3	3	2	2	1	1	2	2	2	1.9	4.1	
21-Feb	2	1	1	1	1	2	1	1	2	2	2	3	6	5	5	7	4	2	1	1	1	1	2	1	2.4	6.8	
22-Feb	2	2	2	1	2	1	2	2	2	1	1	3	3	3	2	3	3	3	3	2	1	2	2	2	2.1	3.4	
23-Feb	1	2	1	2	3	4	3	4	2	1	2	2	2	3	4	4	3	2	2	2	3	3	6	3	2.8	5.5	
24-Feb	1	2	1	2	1	2	2	1	2	1	1	3	4	4	4	5	4	3	1	3	2	2	2	1	2.3	4.6	
25-Feb	1	1	1	1	2	2	2	2	2	1	1	3	2	3	4	4	4	5	4	2	2	3	1	2	2.4	5.0	
26-Feb	2	3	2	2	2	1	1	2	2	2	3	4	7	7	9	8	7	6	7	7	7	6	6	5	4.5	9.2	
27-Feb	5	3	3	4	2	1	1	1	2	1	3	2	3	5	5	5	4	3	2	1	2	1	1	1	2.6	5.5	
28-Feb	1	1	1	2	2	2	1	2	2	2	2	2	4	4	4	4	3	2	2	2	1	1	1	1	2.0	4.4	
		1.9	1.9	1.8	1.7	2.0	1.8	1.7	1.8	1.6	1.6	2.3	2.7	3.7	4.0	4.3	3.9	3.4	2.7	2.2	2.0	2.0	1.9	1.9	1.9	Diurnal Average	
		5.5	4.6	4.7	3.9	5.1	4.3	5.1	4.7	3.8	6.1	9.0	8.3	10.2	12.1	10.5	8.3	7.0	6.0	6.6	7.3	7.2	5.7	5.7	5.4	Diurnal Maximum	
All monthly, daily, and diurnal averages have been calculated using scalar methods																											

Hourly Standard Deviations

Wind Direction (WD) - deg
Evergreen Park - February 2010

Maximum Value: 99.2 deg on Feb 25 10:00																		Hours in Service: 672							
Minimum Value: 5.5 deg on Feb 18 14:00																		Hours of Data: 672							
Percentiles: P ₁ = 8.2 P ₁₀ = 14.8 Q ₁ = 24.4 Median = 41.5 Q ₃ = 67.0 P ₉₀ = 81.7 P ₉₉ = 94.0																		Hours of Missing Data: 0							
																		Hours of Calibration: 0							
																		Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	25	50	60	34	47	31	26	29	34	75	51	59	16	21	31	35	22	16	20	21	21	18	19	24	75.3
2-Feb	28	63	65	34	12	29	23	39	29	53	34	44	62	38	71	34	40	41	25	22	28	23	44	34	70.9
3-Feb	8	9	32	28	17	21	15	21	53	48	40	88	23	19	20	30	14	32	24	35	24	68	76	94	94.3
4-Feb	75	49	72	87	71	90	22	38	30	63	54	20	38	61	38	34	40	36	71	64	64	67	61	86	90.3
5-Feb	79	79	67	73	40	89	91	45	34	76	58	39	55	30	22	23	35	31	55	43	22	24	30	41	91.0
6-Feb	76	28	62	72	76	67	57	81	85	88	71	56	51	25	24	21	23	23	43	42	52	15	39	23	88.1
7-Feb	23	63	80	25	70	59	93	14	23	42	22	17	35	17	19	19	21	14	22	37	18	44	62	43	92.8
8-Feb	79	70	26	60	68	62	91	54	45	51	41	11	18	37	46	44	35	17	29	40	28	43	90	80	90.7
9-Feb	88	73	29	50	61	66	81	70	70	87	52	10	19	29	12	39	54	39	44	78	93	82	82	82	93.5
10-Feb	70	88	73	50	74	42	39	42	37	59	39	47	57	47	25	21	16	15	60	60	57	41	58	54	88.3
11-Feb	36	34	73	70	73	88	85	82	66	85	90	72	57	20	30	37	20	25	52	48	49	59	81	77	90.2
12-Feb	58	63	89	80	71	93	62	83	81	51	36	36	31	40	51	49	49	84	28	34	40	54	41	90	93.2
13-Feb	65	64	79	60	53	69	79	90	68	62	54	43	15	26	21	22	12	12	12	8	7	10	21	9	89.9
14-Feb	9	12	18	28	24	42	43	80	39	53	16	59	27	43	16	37	36	77	35	74	34	68	25	35	79.6
15-Feb	65	77	78	89	31	41	82	61	85	82	63	16	15	33	22	32	64	20	26	68	43	49	15	49	89.2
16-Feb	57	33	76	64	84	92	65	89	26	39	40	46	18	18	21	17	14	20	63	32	37	32	32	30	91.6
17-Feb	18	27	32	15	30	28	14	14	16	14	8	10	10	9	10	7	11	49	83	79	63	39	42	58	82.6
18-Feb	45	71	85	90	71	49	19	13	13	9	13	11	8	5	9	14	55	51	85	76	71	89	78	69	89.8
19-Feb	90	39	51	55	83	95	79	94	69	69	38	38	30	42	17	11	20	19	16	16	14	25	21	75	95.2
20-Feb	39	56	59	62	52	93	93	67	65	44	46	27	29	34	14	20	21	26	30	34	34	53	22	29	92.8
21-Feb	66	78	54	48	64	62	87	73	48	30	34	58	15	23	35	24	38	9	38	79	70	57	19	59	86.6
22-Feb	42	40	32	73	61	36	52	21	41	55	33	46	60	39	41	69	24	31	18	24	57	51	50	43	73.0
23-Feb	83	61	61	48	26	29	31	19	25	20	53	44	34	24	18	46	36	62	42	82	80	75	69	84	83.9
24-Feb	68	89	95	49	30	31	74	64	50	90	53	17	18	17	17	17	11	14	71	61	73	67	74	45	95.2
25-Feb	74	71	87	89	41	76	77	79	96	99	83	67	25	74	14	19	25	39	19	34	71	68	84	91	99.2
26-Feb	73	64	94	76	82	93	74	72	52	17	13	20	13	15	12	12	14	10	9	9	9	8	10	11	94.0
27-Feb	9	15	11	16	41	38	38	93	44	52	21	48	49	11	32	44	25	40	14	87	78	69	60	78	92.5
28-Feb	42	30	57	53	85	80	53	49	61	76	23	27	36	39	53	22	24	39	26	40	39	42	67	77	84.8
	89.7	89.2	95.2	89.8	84.8	95.2	92.8	94.5	95.5	99.2	90.2	88.2	61.8	73.8	70.9	69.0	63.8	84.2	84.8	87.2	93.5	89.2	89.8	94.3	

PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

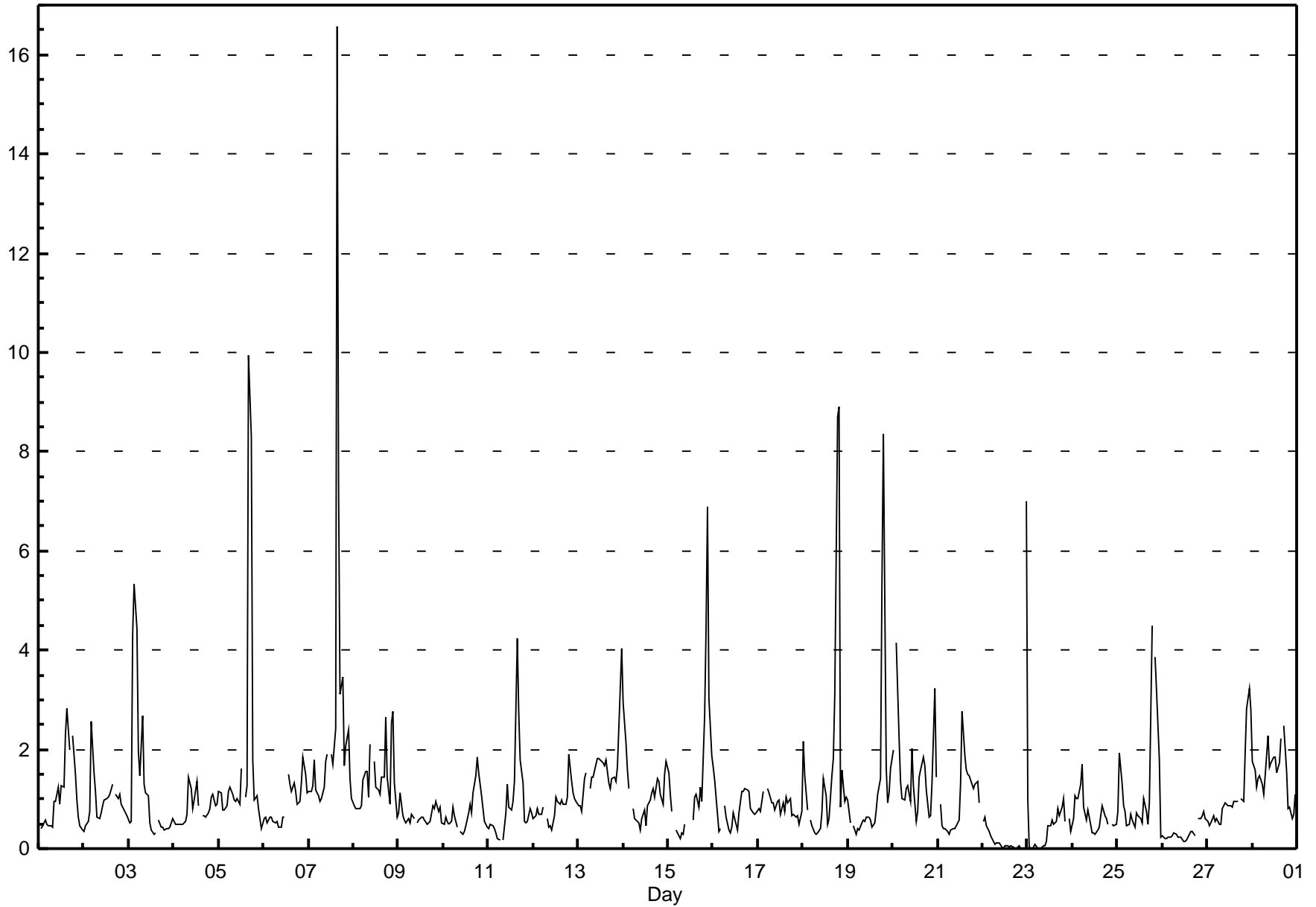
Hourly Averages

Sulphur Dioxide (SO₂) - ppb Smoky Heights - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0		Hours in Service: 672	
Maximum Value: 16.6 ppb on Feb 7 16:00		Maximum Daily Average: 2.6 ppb on Feb 7	
Minimum Value: 0 ppb on Feb 22 22:00		Hours of Data: 639	
Maximum Diurnal Average: 1.8 ppb at hour 16		Hours of Missing Data: 33	
Monthly Average: 1.10 ppb		Hours of Calibration: 32	
Minimum Daily Average: 0.3 ppb on Feb 26		Percent Operational Time: 99.9	
Minimum Diurnal Average: 0.7 ppb at hour 7		Percentiles: P ₁ = 0.0 P ₁₀ = 0.3 Q ₁ = 0.5 Median = 0.8 Q ₃ = 1.3 P ₉₀ = 1.9 P ₉₉ = 8.2	

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-Feb	N	0	0	1	0	0	0	0	1	1	1	1	1	1	2	3	2	A	2	2	1	1	0	0	1.1	2.8
2-Feb	0	0	1	1	3	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	2.6
3-Feb	1	1	4	5	4	2	1	3	1	1	1	1	0	0	0	A	1	0	0	0	0	0	0	1	1.3	5.3
4-Feb	1	0	0	0	0	0	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.4
5-Feb	1	1	1	1	1	1	1	1	1	1	1	1	2	A	1	1	10	8	2	1	1	1	1	0	1.7	9.9
6-Feb	1	1	1	1	1	1	1	1	0	0	1	1	A	1	1	1	1	1	1	1	1	2	1	1	0.9	1.8
7-Feb	1	1	1	2	1	1	1	1	1	2	2	A	2	2	2	17	7	3	3	2	2	2	1	1	2.6	16.6
8-Feb	1	1	1	1	1	1	2	2	1	2	A	2	1	1	1	1	1	3	1	1	3	3	1	1	1.4	2.8
9-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	1.1
10-Feb	0	1	1	0	1	1	1	0	A	0	0	0	0	1	1	1	1	1	2	2	1	1	1	0	0.8	1.9
11-Feb	0	0	0	0	0	0	0	A	0	1	1	1	1	1	1	4	3	2	1	1	1	1	1	1	0.9	4.2
12-Feb	1	1	1	1	1	1	A	1	0	0	0	1	1	1	1	1	1	1	1	2	1	1	1	1	0.9	1.9
13-Feb	1	1	1	1	2	A	1	1	1	2	2	2	2	2	2	2	1	1	1	1	1	2	3	4	1.6	4.0
14-Feb	3	2	2	1	A	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	2	2	1.1	2.9
15-Feb	2	1	1	A	0	0	0	0	0	0	C	C	C	1	1	1	1	1	1	3	4	7	3	2	1.5	6.9
16-Feb	2	1	1	0	0	A	1	1	0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	0.8	1.6
17-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0.9	1.2
18-Feb	2	1	1	A	1	0	0	0	0	0	1	1	1	0	1	1	2	3	9	9	1	2	1	1	1.7	8.9
19-Feb	1	1	A	0	0	0	0	1	1	1	1	1	0	1	1	1	1	1	5	8	2	1	1	2	1.3	8.4
20-Feb	2	A	4	2	1	1	1	1	1	1	1	2	1	1	1	2	2	2	1	1	1	1	3	1	1.5	4.1
21-Feb	A	1	0	0	0	0	0	0	0	0	0	1	1	3	2	2	2	1	1	1	1	1	1	A	1.0	2.8
22-Feb	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0.4	7.0
23-Feb	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	1	1	A	1	0	0.4	1.0
24-Feb	1	1	1	1	1	2	1	1	1	1	0	0	0	0	1	1	1	1	1	0	A	0	0	0	0.7	1.7
25-Feb	1	2	1	1	1	0	0	1	1	0	1	1	1	1	1	1	0	1	4	A	4	3	2	0	1.2	4.5
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	0.3	0.8
27-Feb	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	2	3	3	3	1.1	3.2
28-Feb	2	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	A	2	2	1	1	1	1	1	1.5	2.5
1.0		0.9	1.0	1.0	0.9	0.8	0.7	0.8	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.8	1.7	1.6	1.8	1.6	1.3	1.4	1.2	1.3	Diurnal Average	
2.9		2.1	4.3	5.3	4.4	2.0	1.6	2.7	2.3	2.1	2.0	1.8	1.9	2.8	2.4	16.6	9.9	8.3	8.7	8.9	4.4	6.9	3.2	7.0	Diurnal Maximum	

C - Calibration	N - Not Valid	A - Automated Daily Zero Span
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb		

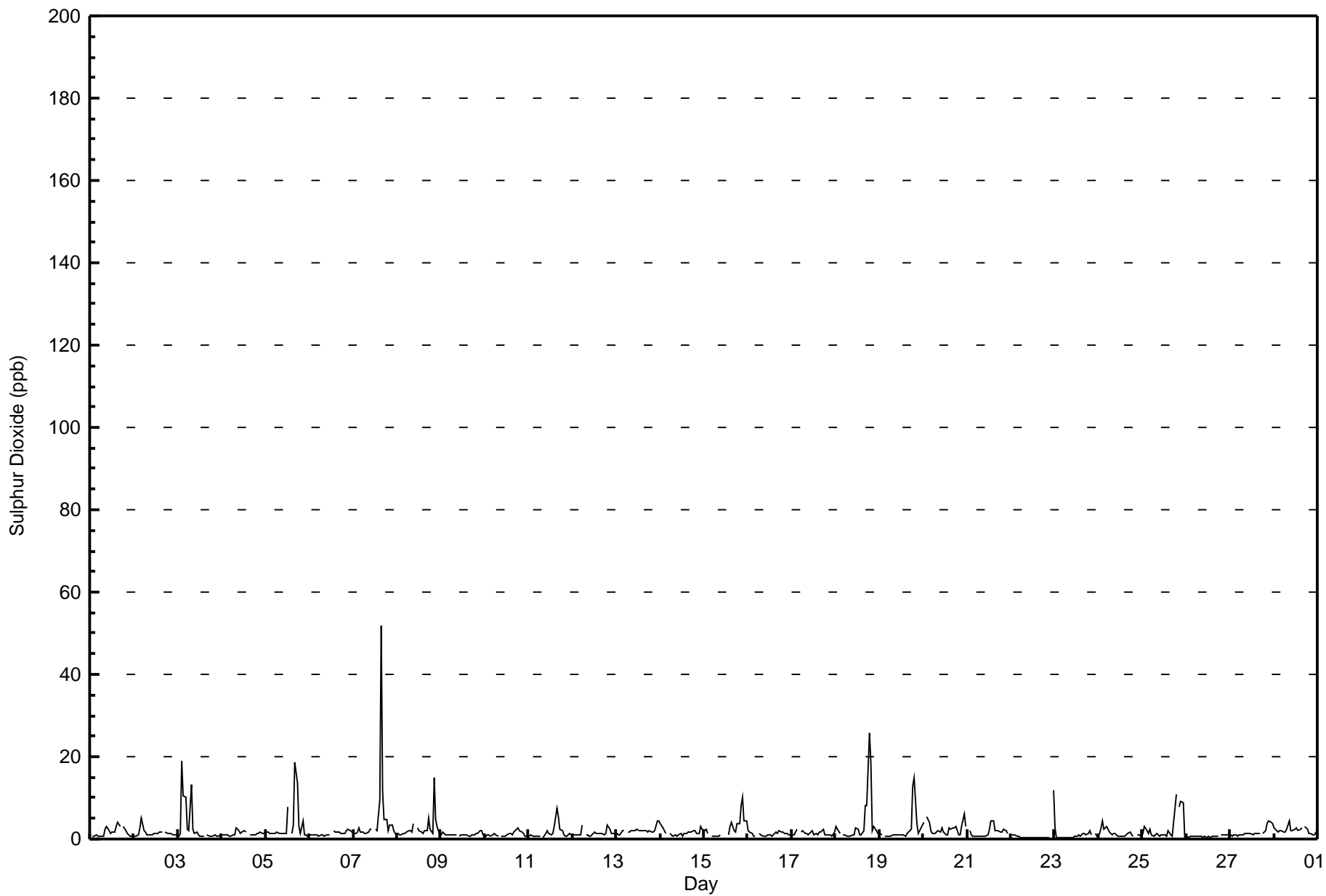


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Smoky Heights - February 2010

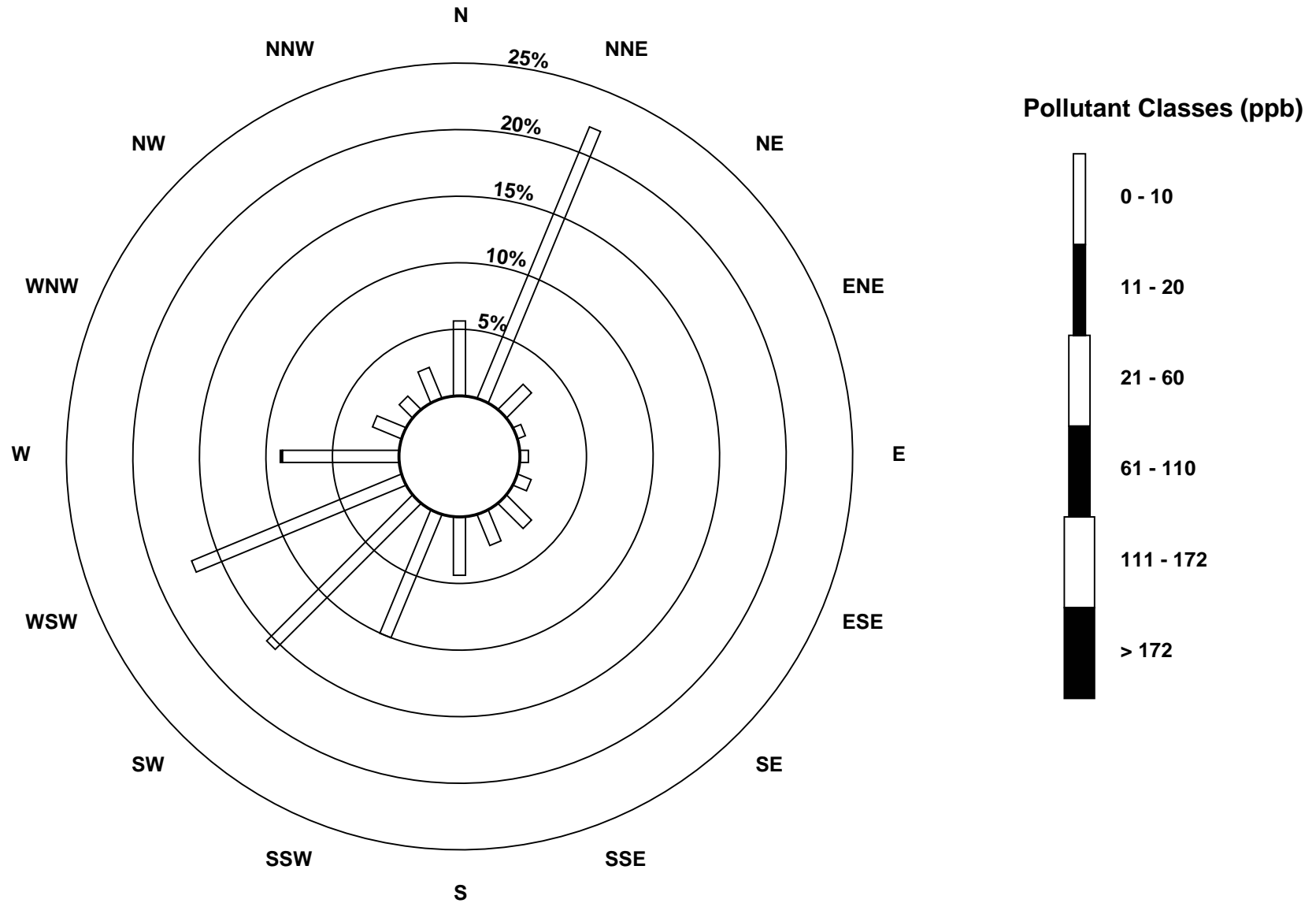
Maximum Value: 51.7 ppb on Feb 7 16:00		Maximum Daily Average: 5.2 ppb on Feb 7		Hours in Service: 672																						
Minimum Value: 0 ppb on Feb 23 03:00		Minimum Daily Average: 0.7 ppb on Feb 26		Hours of Data: 639																						
Maximum Diurnal Average: 3.8 ppb at hour 16		Minimum Diurnal Average: 1.1 ppb at hour 7		Hours of Missing Data: 33																						
Monthly Average: 1.99 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.7 Q ₁ = 0.9 Median = 1.3 Q ₃ = 2.0 P ₉₀ = 3.2 P ₉₉ = 12.0		Hours of Calibration: 32																						
				Percent Operational Time: 99.9																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	N	1	1	1	1	1	1	1	2	3	2	1	2	2	3	4	3	A	3	2	1	1	1	1	1.7	4.1
2-Feb	1	1	1	3	5	2	2	1	1	1	1	1	1	1	2	2	A	2	1	1	1	1	1	1	1.5	5.1
3-Feb	1	1	19	11	10	2	2	13	2	1	2	1	1	1	1	A	1	1	1	1	1	1	1	1	3.3	19.0
4-Feb	1	1	1	1	1	1	1	1	3	2	1	2	2	2	A	1	1	1	1	1	1	1	2	1	1.3	2.5
5-Feb	2	2	1	1	1	2	2	1	1	1	1	1	8	A	1	3	19	14	3	1	4	1	1	1	3.2	18.7
6-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	2	2	2	2	1	1	1	2	3	2	2	1.3	2.5
7-Feb	1	2	2	3	2	2	1	1	2	2	2	A	2	2	9	52	12	5	5	2	3	3	2	1	5.2	51.7
8-Feb	1	1	1	1	1	2	2	2	2	4	A	3	2	2	1	2	2	5	3	1	15	5	3	1	2.7	15.1
9-Feb	1	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	2	2	1	1.1	2.2
10-Feb	1	1	1	1	1	2	1	1	A	1	1	1	1	1	1	1	2	2	3	2	2	1	1	1	1.2	2.7
11-Feb	1	1	1	1	1	1	1	A	0	1	2	1	1	1	3	7	5	2	2	1	1	1	1	1	1.6	7.4
12-Feb	1	1	1	1	1	3	A	1	1	1	1	1	2	1	1	1	1	1	1	3	3	1	1	1	1.4	3.2
13-Feb	1	1	1	2	2	A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	4	4	2.1	4.4
14-Feb	4	3	2	1	A	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1	1	3	2	1.6	3.9
15-Feb	2	2	2	A	1	1	1	1	1	1	C	C	C	1	3	4	2	2	4	4	8	10	4	5	2.8	10.2
16-Feb	2	2	1	1	1	A	1	1	1	1	1	1	1	1	1	2	1	2	2	2	1	1	1	1	1.2	2.1
17-Feb	1	1	2	2	A	2	2	1	1	1	2	2	1	1	1	2	2	2	1	1	1	1	1	2	1.4	2.2
18-Feb	3	2	1	A	1	1	1	1	1	1	1	3	2	1	1	2	8	8	26	19	2	3	2	1	4.0	25.7
19-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	13	15	4	1	2	3	2.4	14.8
20-Feb	4	A	5	4	2	1	2	2	2	2	3	2	1	1	3	2	3	3	3	1	1	3	6	3	2.5	6.0
21-Feb	A	2	1	1	1	1	1	1	1	1	1	1	2	4	4	2	2	2	2	2	2	2	1	A	1.6	4.4
22-Feb	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	12	1.0	11.8
23-Feb	3	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	2	1	A	1	1	0.9	2.7
24-Feb	1	3	4	2	3	3	2	1	1	1	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1.4	4.3
25-Feb	1	3	2	1	2	1	1	1	1	1	1	1	1	1	2	1	1	4	11	A	8	9	9	0	2.8	10.9
26-Feb	1	0	1	1	1	1	1	1	1	0	1	0	1	0	1	1	1	1	A	1	1	1	1	1	0.7	1.0
27-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	2	4	5	4	4	1.7	4.5
28-Feb	3	2	2	2	2	2	2	2	4	2	2	2	3	2	2	3	A	3	2	1	1	1	1	2	2.1	4.3
		1.6	1.4	2.1	1.7	1.7	1.3	1.1	1.5	1.3	1.3	1.2	1.3	1.6	1.3	1.9	3.8	3.0	2.7	3.6	2.7	2.7	2.4	2.2	2.0	Diurnal Average
		3.9	3.2	19.0	10.5	10.3	3.2	2.2	13.3	4.3	3.8	2.7	2.8	7.8	4.4	9.4	51.7	18.7	13.7	25.7	18.5	15.1	10.2	8.7	11.8	Diurnal Maximum
C - Calibration		N - Not Valid					A - Automated Daily Zero Span																			

Hourly Maximums for SO₂ at Smoky Heights February 2010



Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Smoky Heights - February 2010

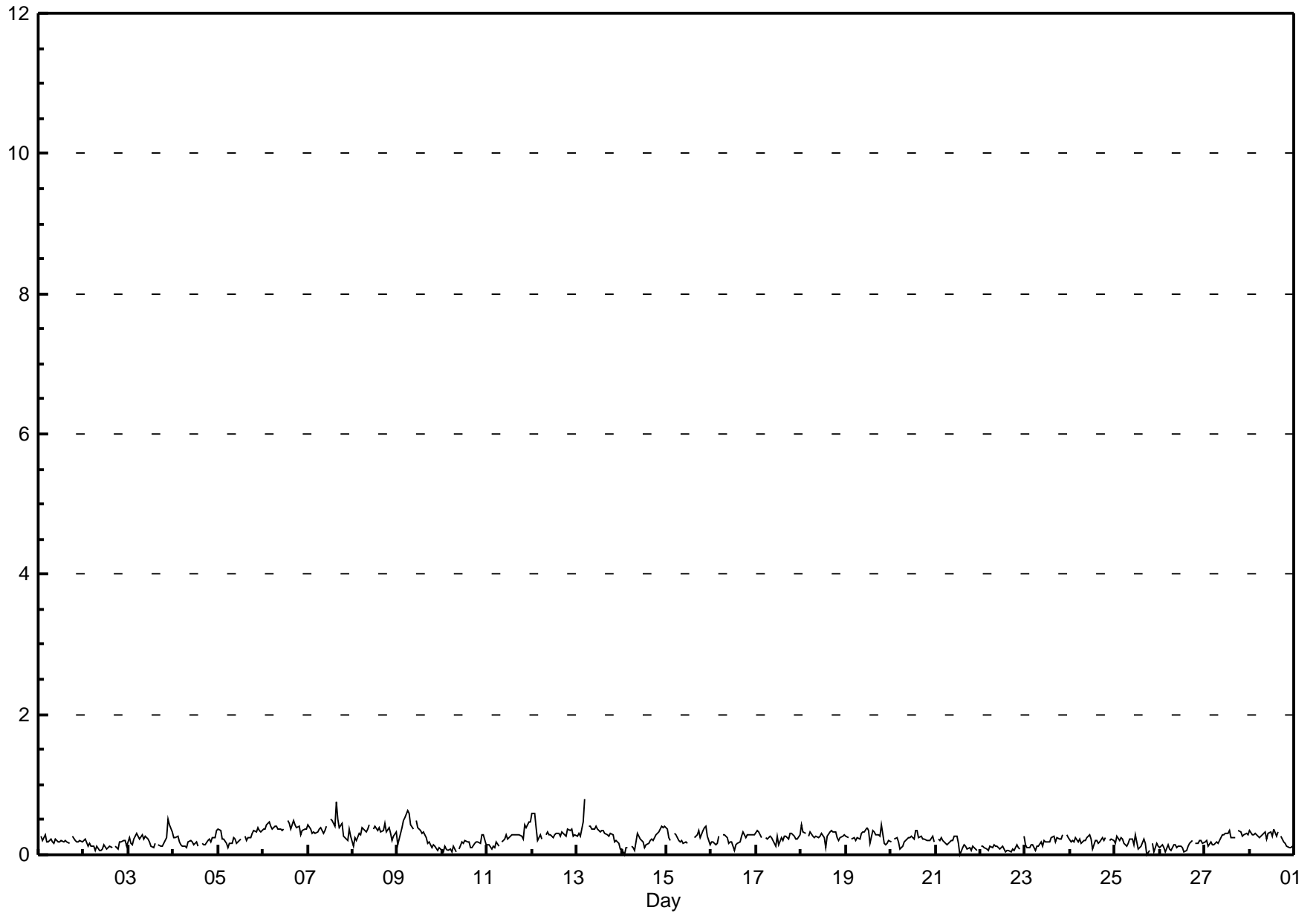


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - February 2010

Number of Exceedences (AAAQO):		1-hr: 0		24-hr: 0		Hours in Service:		672																																									
Maximum Value: 0.8 ppb on Feb 13 05:00		Maximum Daily Average: 0.4 ppb on Feb 6				Hours of Data:		639																																									
Minimum Value: 0 ppb on Feb 21 14:00		Minimum Daily Average: 0.1 ppb on Feb 22				Hours of Missing Data:		33																																									
Maximum Diurnal Average: 0.3 ppb at hour 23		Minimum Diurnal Average: 0.2 ppb at hour 6				Hours of Calibration:		32																																									
Monthly Average: 0.23 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 0.6				Percent Operational Time:		99.9																																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	N	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																							
2-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2																							
3-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0.2	0.5																							
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.2	0.3																							
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.3	0.4																							
6-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5																							
7-Feb	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	1	1	0	0	0	0	0	0	0	0.4	0.8																							
8-Feb	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5																							
9-Feb	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6																							
10-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																							
11-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																							
12-Feb	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6																							
13-Feb	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8																							
14-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4																							
15-Feb	0	0	0	A	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0.3	0.4																							
16-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																							
17-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																							
18-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																							
19-Feb	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																							
20-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4																							
21-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																							
22-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.3																							
23-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.3																							
24-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.3																							
25-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.3																							
26-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.1	0.2																							
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.2	0.4																							
28-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	0.4																							
																								0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	Diurnal Average	
																								0.6	0.6	0.4	0.5	0.8	0.6	0.6	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.8	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	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																																																	

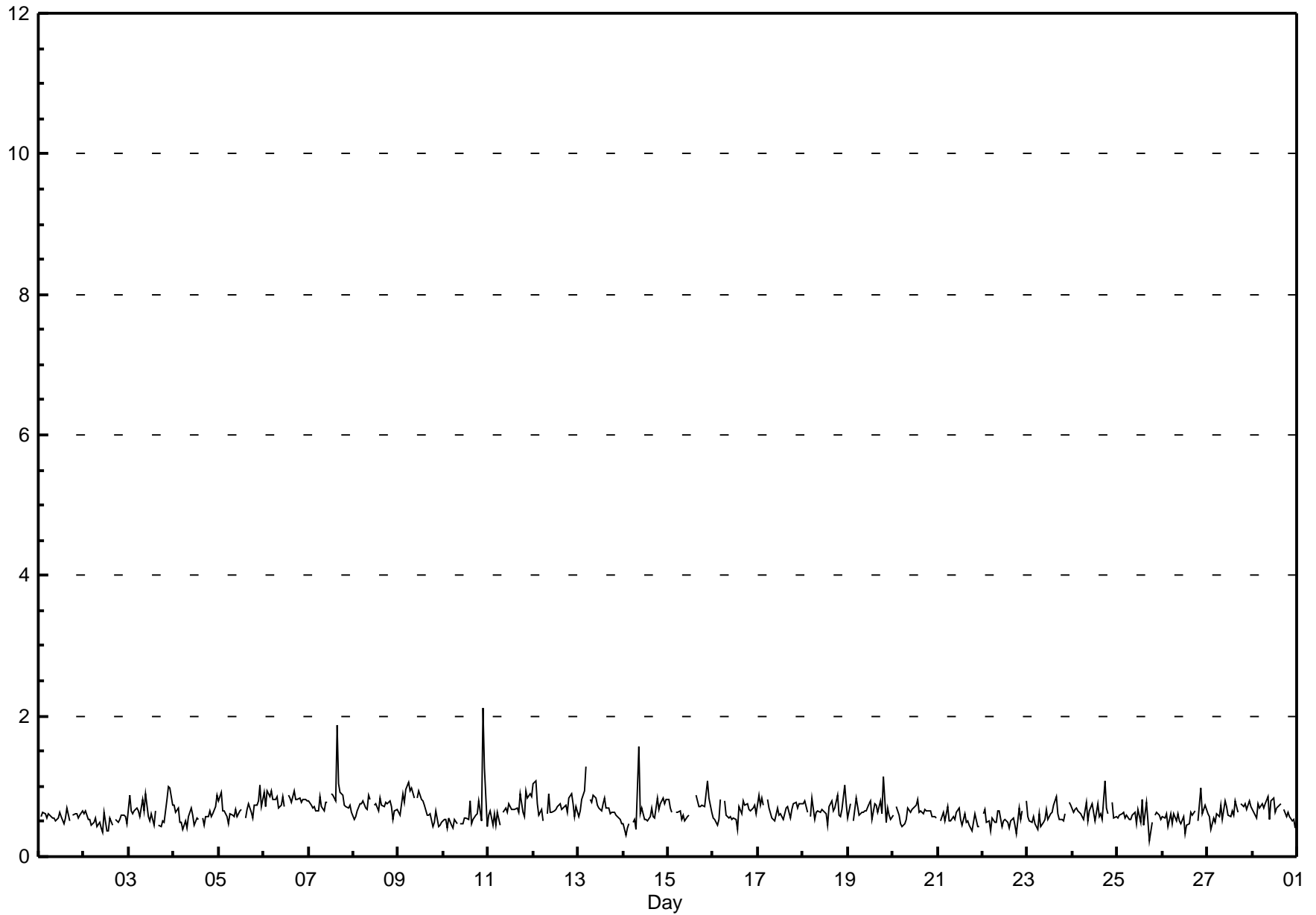


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

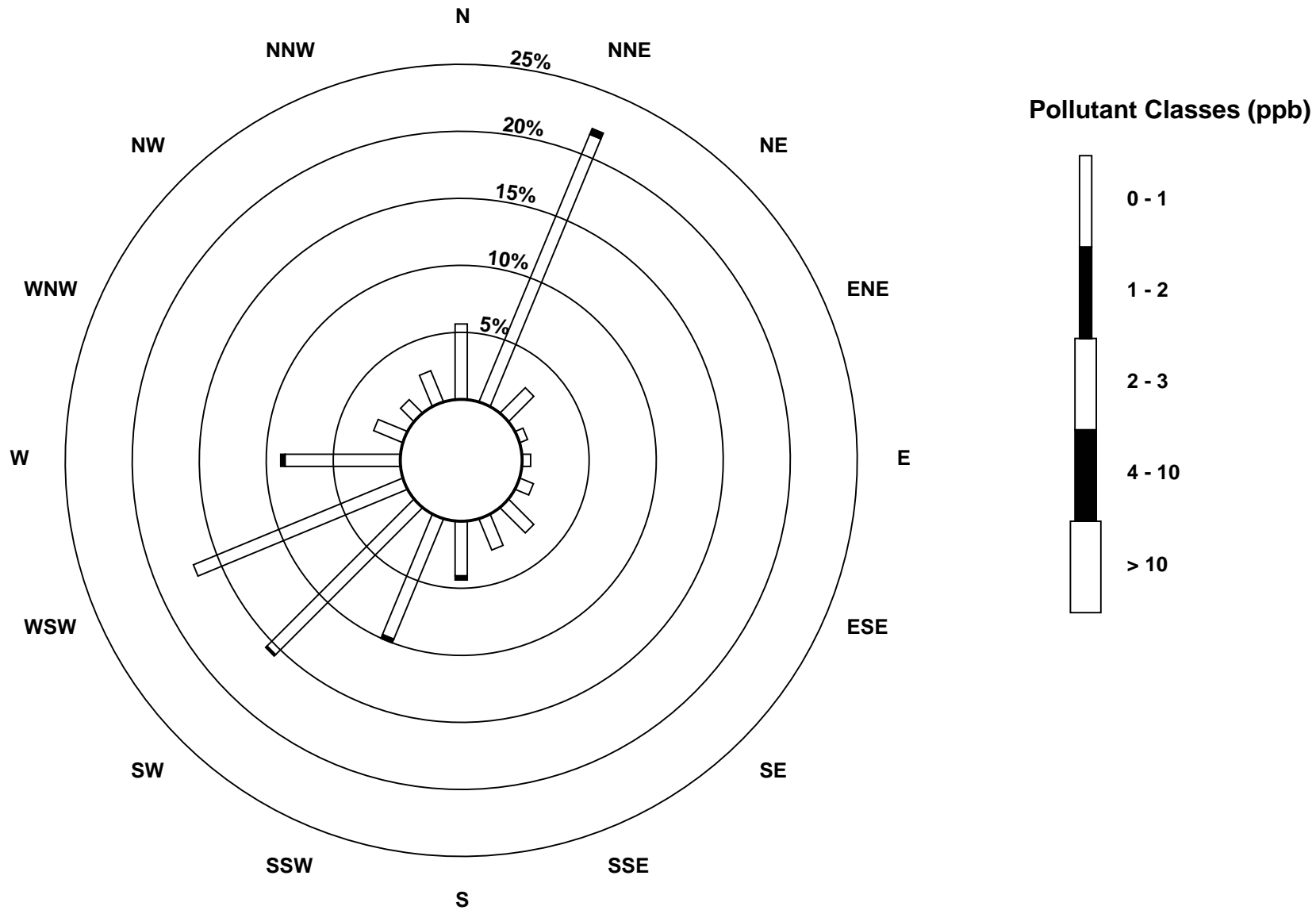
Smoky Heights - February 2010

Maximum Value: 2.1 ppb on Feb 10 22:00		Maximum Daily Average: 0.8 ppb on Feb 6		Hours in Service: 672																								
Minimum Value: 0 ppb on Feb 25 18:00		Minimum Daily Average: 0.5 ppb on Feb 2		Hours of Data: 639																								
Maximum Diurnal Average: 0.7 ppb at hour 22		Minimum Diurnal Average: 0.6 ppb at hour 13		Hours of Missing Data: 33																								
Monthly Average: 0.65 ppb		Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.0		Hours of Calibration: 32																								
				Percent Operational Time: 99.9																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1-Feb	N	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	A	A	1	1	1	1	1	1	0.6	0.7		
2-Feb	1	1	1	1	0	0	1	0	0	0	0	1	0	0	1	0	A	A	1	0	1	1	1	1	0	0.5	0.7	
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	0	1	A	A	0	0	1	0	1	1	1	1	1	0.7	1.0	
4-Feb	1	1	1	0	0	0	1	0	1	1	1	0	1	1	A	1	0	1	1	1	1	1	1	1	1	0.6	0.9	
5-Feb	1	1	1	1	1	0	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0	
6-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9	
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	2	1	1	1	1	1	1	1	1	0.8	1.9	
8-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
9-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0.7	1.1	
10-Feb	1	1	0	1	0	0	1	0	A	A	0	0	1	1	1	1	0	1	1	1	1	1	2	1	0	0.6	2.1	
11-Feb	1	1	0	1	0	1	0	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
12-Feb	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	0.7	1.1	
13-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.3		
14-Feb	0	0	0	0	A	0	1	0	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.6	
15-Feb	1	1	1	A	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	1	0.7	1.1	
16-Feb	1	1	0	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
17-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
18-Feb	1	1	1	A	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	
19-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.7	1.1	
20-Feb	1	A	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8	
21-Feb	A	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0	0	A	0.5	0.7	
22-Feb	1	1	0	1	0	1	0	0	1	1	0	1	1	0	0	1	1	0	0	1	1	1	A	1	1	0.5	0.8	
23-Feb	1	1	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.8	
24-Feb	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.6	1.1	
25-Feb	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	1	0	0	A	1	1	1	1	1	0.6	0.8	
26-Feb	1	1	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	1	A	1	1	1	1	1	1	0.6	1.0	
27-Feb	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	0.8	
28-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0	1	0	0.7	0.9	
		0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	Diurnal Average	
		1.0	1.1	0.9	0.9	1.3	1.1	0.9	1.0	1.6	0.9	0.8	0.9	0.9	0.9	0.8	1.9	1.0	1.1	0.9	1.1	1.0	2.1	1.3	0.9	Diurnal Maximum		
C - Calibration		N - Not Valid						A - Automated Daily Zero Span																				



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Smoky Heights - February 2010

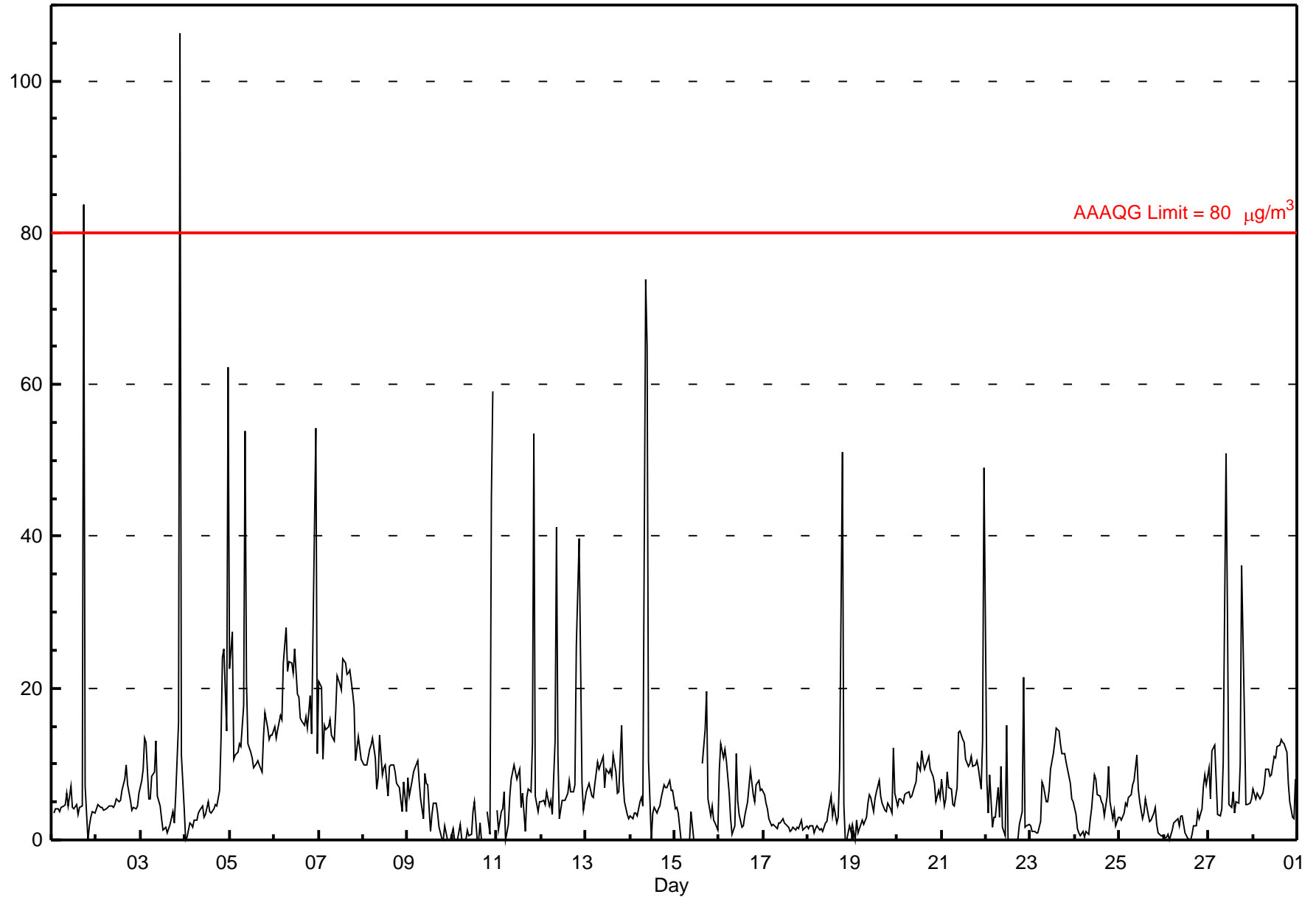


Hourly Averages

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

Smoky Heights - February 2010

Number of Exceedences: 1-hr: 2 24-hr: 0 Maximum Value: 106.3 µg/m ³ on Feb 3 22:00 Maximum Daily Average: 20.2 µg/m ³ on Feb 6																	Hours in Service: 672 Hours of Data: 667 Hours of Missing Data: 5 Hours of Calibration: 1 Percent Operational Time: 99.4																																
Minimum Value: 0 µg/m ³ on Feb 1 20:00 Maximum Diurnal Average: 12.1 µg/m ³ at hour 22 Monthly Average: 7.89 µg/m ³																	Minimum Daily Average: 2.3 µg/m ³ on Feb 17 Minimum Diurnal Average: 5.5 µg/m ³ at hour 5 Percentiles: P ₁ = 0.0 P ₁₀ = 1.1 Q ₁ = 2.9 Median = 5.3 Q ₃ = 9.8 P ₉₀ = 14.7 P ₉₉ = 53.3																																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	N	3	4	4	4	4	4	5	6	4	7	4	4	5	3	4	4	84	7	0	2	3	4	3	7.6	83.7																							
2-Feb	4	5	4	4	4	4	4	4	5	4	5	5	5	6	8	10	7	5	4	4	4	4	6	5.1	9.9																								
3-Feb	8	9	13	13	5	5	8	9	13	6	5	3	1	2	1	2	4	2	6	15	106	11	4	10.6	106.3																								
4-Feb	0	0	2	2	2	3	3	4	4	5	3	3	5	4	3	4	5	4	6	13	24	25	14	62	8.4	62.2																							
5-Feb	22	27	11	11	11	13	12	18	54	21	13	11	11	10	10	10	10	9	14	17	15	13	14	14	15.4	53.8																							
6-Feb	15	13	15	16	16	23	28	22	23	23	22	25	19	19	16	16	15	16	15	19	14	28	54	11	20.2	54.2																							
7-Feb	21	20	11	15	15	15	16	14	13	17	22	21	20	24	23	22	22	22	19	18	10	14	12	11	17.3	23.9																							
8-Feb	10	10	10	12	13	13	11	7	8	14	9	10	10	6	10	10	10	9	7	7	5	4	8	4	8.9	13.7																							
9-Feb	8	6	8	9	9	10	8	5	3	9	7	7	1	3	5	5	3	2	0	0	2	0	0	0	4.6	10.5																							
10-Feb	1	0	0	0	2	0	0	0	1	1	1	4	5	0	0	2	0	0	BD	4	1	45	59	BD	5.7	59.2																							
11-Feb	4	1	4	4	6	0	2	6	8	10	9	8	9	4	6	1	6	7	6	13	54	6	4	5	7.6	53.5																							
12-Feb	5	5	5	6	4	5	3	13	41	11	3	5	5	5	6	8	6	6	7	26	40	24	7	4	10.5	41.3																							
13-Feb	6	7	7	6	6	7	10	9	10	11	7	9	9	9	8	11	9	6	6	15	8	5	3	3	7.9	15.2																							
14-Feb	3	3	4	4	3	5	6	4	74	65	11	0	3	4	4	4	5	6	7	7	7	8	6	7	10.3	73.9																							
15-Feb	4	4	4	0	0	0	0	0	0	4	0	0	0	0	C	10	14	19	5	3	5	3	2	1	3.4	19.5																							
16-Feb	9	13	11	12	10	6	3	1	2	11	5	3	2	2	3	5	7	9	6	5	7	8	7	7	6.4	12.7																							
17-Feb	6	5	4	3	2	2	2	1	2	2	3	2	2	2	1	1	2	1	2	1	3	1	1	2	2.3	6.1																							
18-Feb	2	2	2	1	1	2	1	2	1	2	2	4	6	3	4	2	3	9	51	5	0	0	2	1	4.5	51.0																							
19-Feb	2	0	3	1	2	3	2	3	5	6	6	4	5	6	8	6	5	4	4	5	4	4	12	6	4.3	12.1																							
20-Feb	4	5	5	5	6	6	6	6	6	7	8	10	9	12	10	9	10	11	9	8	7	5	6	6	7.5	11.7																							
21-Feb	8	5	5	9	7	7	5	5	7	14	14	13	13	11	10	10	11	10	10	10	10	7	13	49	10.9	49.0																							
22-Feb	8	4	9	2	3	3	7	3	10	2	1	15	0	BD	0	0	0	0	2	4	21	2	2	2	4.2	21.5																							
23-Feb	2	1	1	1	1	2	8	7	5	5	7	9	11	13	15	14	13	11	11	10	9	8	5	5	7.3	14.6																							
24-Feb	3	2	1	0	1	0	1	1	3	4	9	8	6	6	5	5	3	6	10	5	3	4	2	3	3.7	9.8																							
25-Feb	3	3	3	5	4	6	6	7	8	11	7	5	3	3	5	3	2	3	4	4	2	1	1	1	4.2	11.1																							
26-Feb	0	0	1	0	1	2	2	3	2	3	3	1	1	0	0	1	2	2	4	3	4	7	9	7	2.4	8.6																							
27-Feb	9	5	12	13	8	3	3	4	10	51	30	5	4	6	4	5	5	10	36	16	5	5	5	5	10.8	50.9																							
28-Feb	7	5	6	6	5	6	7	9	9	8	9	11	11	12	13	13	13	13	12	7	5	3	3	8	8.4	13.2																							
																								6.5	5.9	5.8	5.8	5.5	5.6	6.0	6.1	11.9	11.8	8.0	7.4	6.5	6.5	6.7	6.9	7.0	10.4	10.0	8.4	10.2	12.1	9.7	8.8	Diurnal Average	
																								22.5	27.4	14.5	16.3	15.8	23.3	27.9	22.1	73.9	65.1	29.5	25.2	19.7	23.9	23.3	21.8	22.1	83.7	51.0	25.6	53.5	106.3	59.2	62.2	Diurnal Maximum	
C - Calibration N - Not Valid BD - Baseline Drift Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m ³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m ³																																																	

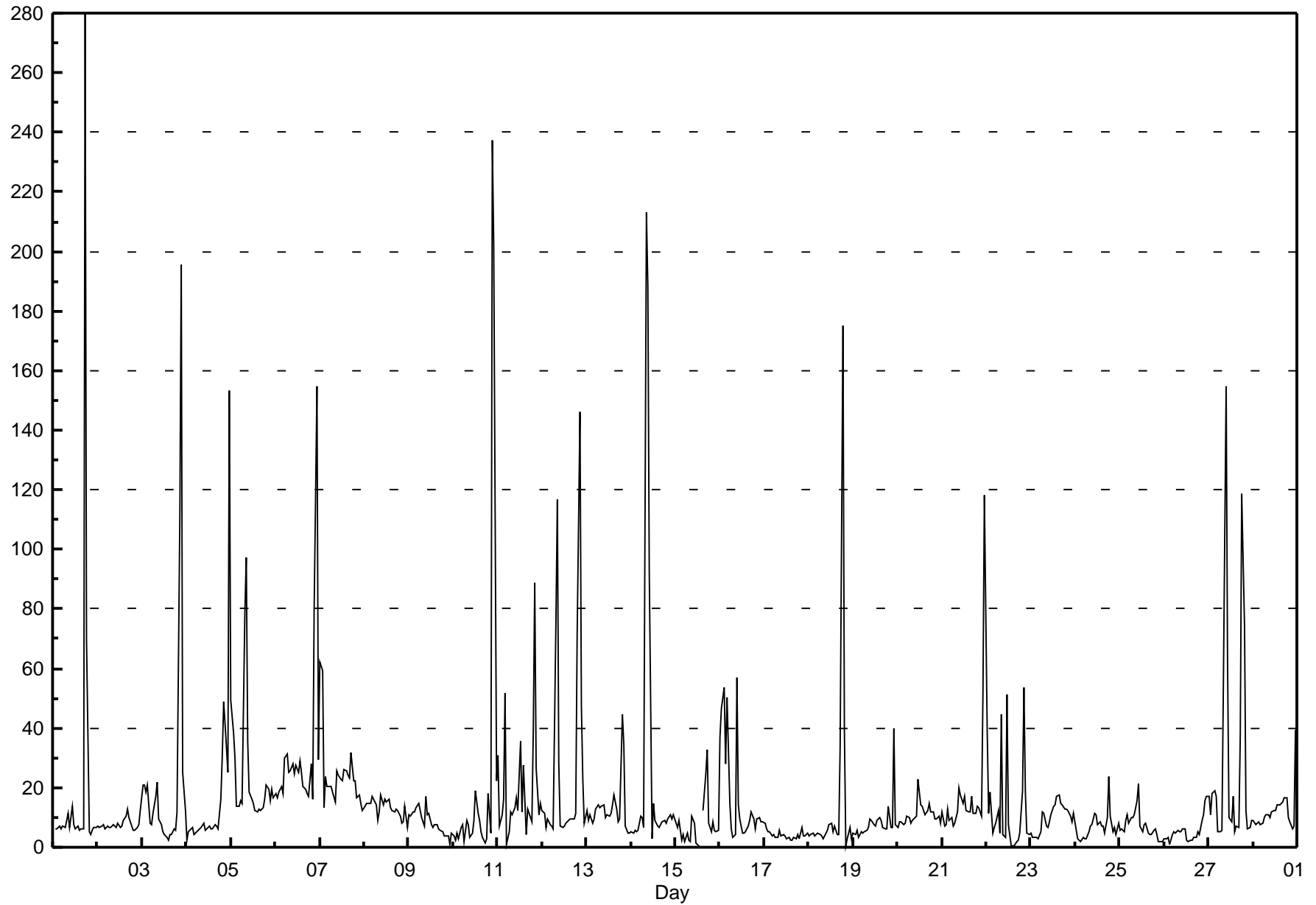


Hourly Maximums

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

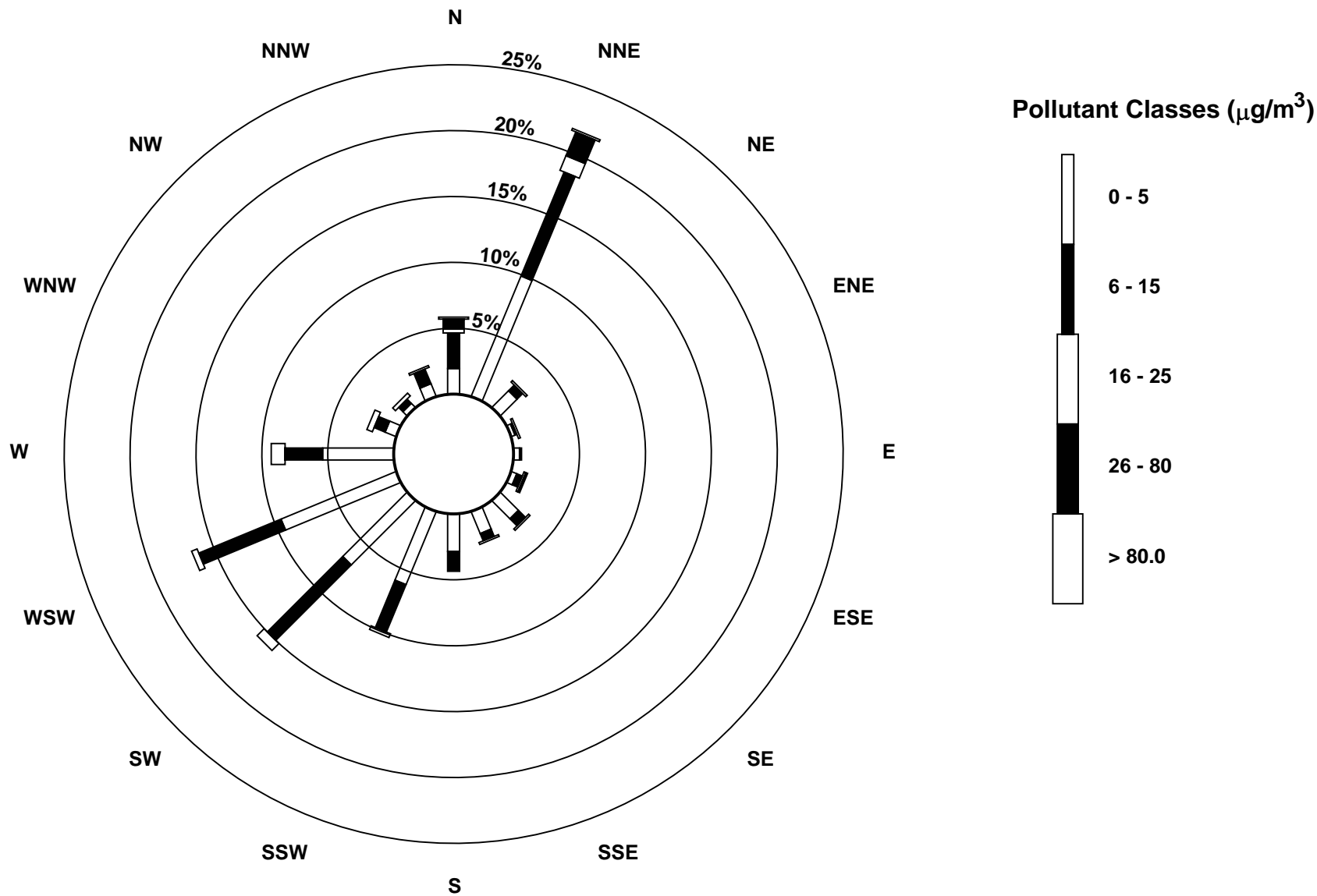
Smoky Heights - February 2010

Maximum Value: 279.8 μg/m ³ on Feb 1 18:00		Maximum Daily Average: 31.1 μg/m ³ on Feb 6																				Hours in Service: 672 Hours of Data: 670					
Minimum Value: 0 μg/m ³ on Feb 15 14:00 Maximum Diurnal Average: 29.0 μg/m ³ at hour 22 Monthly Average: 16.10 μg/m ³		Minimum Daily Average: 4.2 μg/m ³ on Feb 17 Minimum Diurnal Average: 9.2 μg/m ³ at hour 6 Percentiles: P ₁ = 1.1 P ₁₀ = 3.6 Q ₁ = 5.8 Median = 8.9 Q ₃ = 14.6 P ₉₀ = 28.0 P ₉₉ = 172.2																				Hours of Missing Data: 2 Hours of Calibration: 1 Percent Operational Time: 99.9					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	N	6	6	7	6	7	7	9	11	7	14	7	6	7	6	6	6	280	70	5	4	6	7	7	21.6	279.8	
2-Feb	7	7	7	8	6	7	6	7	8	7	7	8	7	7	9	10	13	10	7	6	6	6	8	12	7.8	12.8	
3-Feb	21	21	19	21	8	8	12	17	22	10	8	5	4	3	2	4	4	6	6	12	110	195	25	12	23.1	195.3	
4-Feb	2	5	6	6	4	5	6	6	7	8	6	6	7	6	6	7	7	6	16	31	49	41	25	153	17.6	153.1	
5-Feb	49	38	30	14	14	16	15	79	97	36	18	16	15	12	12	13	12	13	16	21	20	16	20	17	25.3	97.2	
6-Feb	18	17	18	20	18	30	32	25	26	28	25	27	25	29	25	20	20	18	17	28	16	80	154	29	31.1	154.5	
7-Feb	62	59	13	24	20	21	20	18	15	26	24	23	22	26	26	24	23	32	22	22	16	18	15	13	24.4	62.0	
8-Feb	14	15	15	15	17	16	14	9	12	18	14	16	15	16	13	12	12	13	12	11	8	9	14	7	13.2	17.5	
9-Feb	11	10	12	12	13	15	12	10	7	17	11	11	7	7	8	8	6	6	5	4	4	4	1	5	8.6	17.2	
10-Feb	4	2	5	3	6	7	2	9	8	3	5	9	19	12	9	5	3	2	3	18	5	237	202	22	25.0	237.3	
11-Feb	31	7	11	16	52	1	5	12	11	13	17	12	36	12	28	4	13	11	8	40	89	27	11	15	20.1	88.8	
12-Feb	12	11	7	9	8	7	6	76	117	28	7	7	7	8	9	10	10	10	11	71	146	47	23	8	27.3	146.4	
13-Feb	12	9	11	8	9	13	14	13	14	14	10	11	11	11	14	17	13	8	10	45	35	7	5	5	13.3	44.5	
14-Feb	5	5	6	5	6	10	10	7	213	189	93	3	15	9	7	7	8	9	9	8	10	11	10	11	27.6	213.2	
15-Feb	8	7	9	2	4	2	5	3	2	10	8	2	1	0	C	12	25	33	8	5	8	6	5	6	7.4	32.6	
16-Feb	37	47	54	28	50	15	6	4	4	57	14	10	5	5	5	7	9	12	9	6	9	10	8	9	17.5	56.8	
17-Feb	8	6	5	5	4	4	3	3	6	4	4	4	3	3	2	2	3	3	4	3	7	4	4	5	4.2	7.9	
18-Feb	4	4	5	4	4	5	4	4	3	5	6	8	8	5	7	4	4	33	175	39	1	3	6	3	14.3	175.0	
19-Feb	5	4	6	3	5	5	5	6	7	9	9	7	7	9	10	9	7	6	6	14	6	7	40	8	8.4	40.1	
20-Feb	7	9	9	8	8	10	10	8	9	10	10	23	14	14	12	11	12	15	12	12	9	10	11	8	10.9	22.9	
21-Feb	12	7	8	13	9	10	7	8	12	20	17	15	17	12	12	12	17	11	12	14	13	10	52	118	18.3	118.3	
22-Feb	39	11	18	5	7	8	12	5	45	4	3	51	8	1	1	1	2	2	5	19	54	18	5	4	13.6	53.5	
23-Feb	5	3	3	3	3	5	12	11	7	6	9	11	14	14	17	18	15	14	13	13	12	11	8	11	9.9	17.6	
24-Feb	6	3	2	2	3	3	3	5	7	8	11	11	8	8	7	7	5	10	24	10	5	7	4	8	7.0	23.9	
25-Feb	6	6	5	9	11	8	10	10	11	16	21	7	5	8	8	5	4	4	5	6	4	2	2	2	7.4	21.3	
26-Feb	3	3	3	1	4	5	5	6	5	5	6	6	2	2	2	2	3	3	5	4	9	11	16	17	5.4	17.3	
27-Feb	17	11	18	19	17	5	5	6	53	155	62	10	8	17	5	7	7	38	119	74	12	6	7	9	28.6	154.6	
28-Feb	9	7	8	9	8	8	10	11	11	10	12	12	12	14	14	15	15	16	17	10	8	6	7	39	12.0	39.3	
		15.3	12.2	11.3	10.0	11.6	9.2	9.3	13.8	26.7	25.8	16.1	12.1	11.0	9.9	10.2	9.3	9.9	22.3	22.4	19.7	24.2	29.0	24.8	20.1	Diurnal Average	
		62.0	59.1	53.7	28.1	51.6	29.8	31.5	78.9	213.2	188.6	92.6	51.0	35.6	28.8	27.7	24.4	24.7	279.8	175.0	74.1	146.4	237.3	202.3	153.1	Diurnal Maximum	
C - Calibration		N - Not Valid																									



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Smoky Heights - February 2010

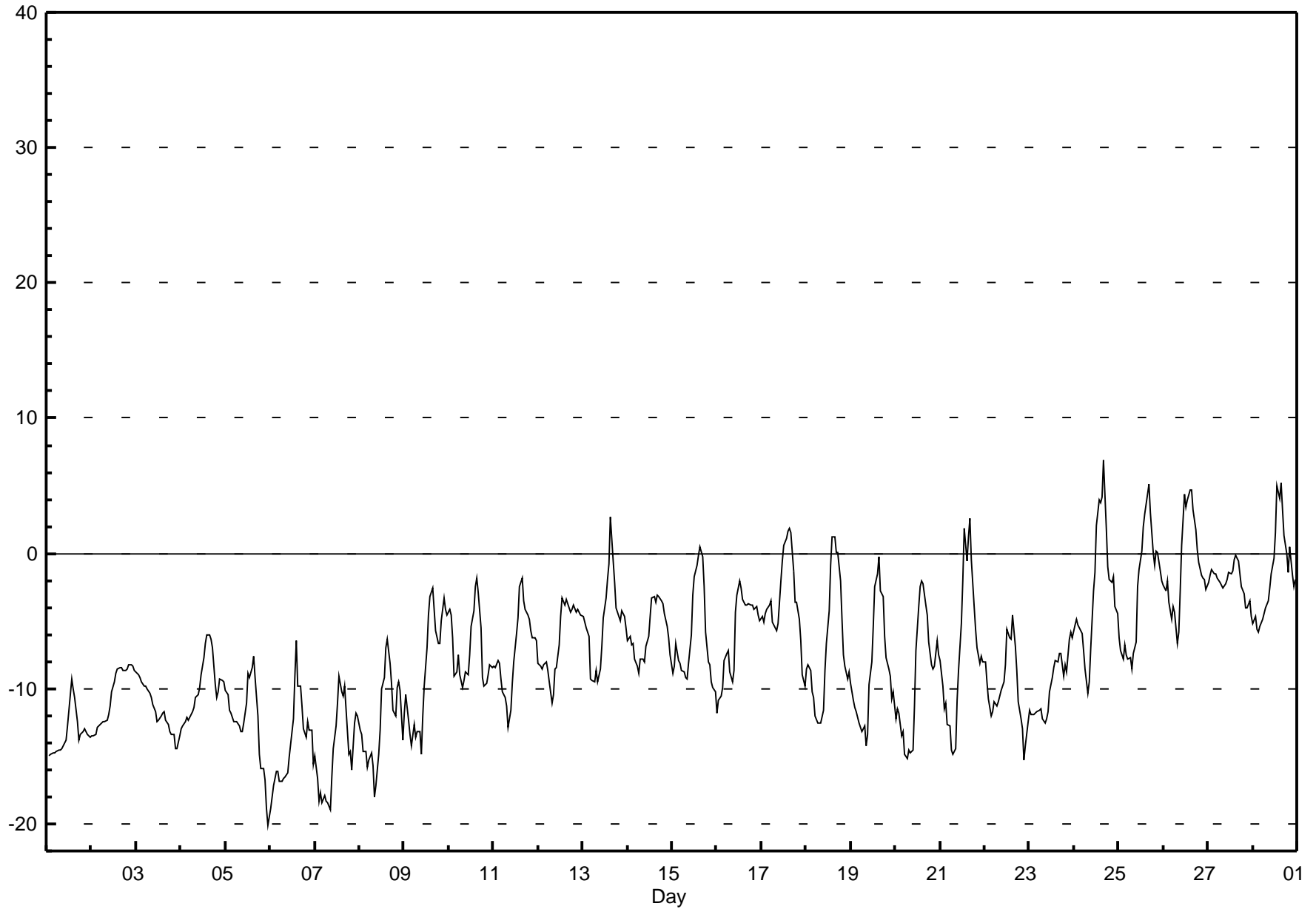


Hourly Averages

External Temperature (ET) - °C

Smoky Heights - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0		Hours in Service: 672																																														
Maximum Value: 6.9 °C on Feb 24 17:00		Maximum Daily Average: -0.9 °C on Feb 26																																														
Minimum Value: -20 °C on Feb 6 00:00		Hours of Data: 671																																														
Maximum Diurnal Average: -2.8 °C at hour 16		Hours of Missing Data: 1																																														
Monthly Average: -7.71 °C		Hours of Calibration: 0																																														
Minimum Daily Average: -14.5 °C on Feb 7		Percent Operational Time: 99.9																																														
Minimum Diurnal Average: -11.1 °C at hour 9																																																
Percentiles: P ₁ = -18.5 P ₁₀ = -13.8 Q ₁ = -11.7 Median = -8.3 Q ₃ = -4.1 P ₉₀ = -1.4 P ₉₉ = 4.4																																																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	N	-15	-15	-15	-15	-15	-15	-15	-14	-14	-14	-13	-12	-9	-10	-11	-12	-14	-13	-13	-13	-13	-13	-14	-13.3	-9.3																						
2-Feb	-14	-14	-13	-13	-13	-13	-12	-12	-12	-12	-11	-10	-10	-9	-9	-8	-8	-9	-9	-9	-8	-8	-8	-9	-10.5	-8.2																						
3-Feb	-9	-9	-9	-10	-10	-10	-10	-10	-11	-11	-12	-12	-12	-12	-12	-12	-12	-13	-13	-13	-13	-14	-14	-13	-11.6	-8.9																						
4-Feb	-13	-13	-12	-12	-12	-12	-12	-11	-11	-10	-10	-9	-8	-7	-6	-6	-6	-7	-10	-11	-10	-9	-9	-10	-9.8	-6.0																						
5-Feb	-10	-10	-12	-12	-12	-12	-12	-13	-13	-13	-13	-11	-9	-9	-8	-8	-9	-12	-15	-16	-16	-17	-19	-20	-12.6	-7.6																						
6-Feb	-19	-18	-17	-16	-16	-17	-17	-17	-17	-16	-15	-14	-12	-9	-6	-10	-10	-11	-13	-14	-12	-13	-13	-16	-14.1	-6.4																						
7-Feb	-15	-17	-18	-18	-18	-18	-18	-18	-19	-17	-14	-13	-11	-9	-10	-10	-10	-12	-15	-15	-16	-13	-12	-12	-14.5	-9.0																						
8-Feb	-13	-13	-15	-15	-16	-15	-15	-16	-18	-17	-15	-13	-10	-9	-7	-6	-8	-10	-12	-12	-10	-10	-10	-14	-12.4	-6.4																						
9-Feb	-12	-10	-12	-13	-14	-13	-14	-13	-13	-15	-12	-10	-7	-5	-3	-3	-4	-6	-7	-7	-5	-3	-4	-5	-8.7	-2.6																						
10-Feb	-4	-5	-6	-9	-9	-8	-9	-10	-9	-9	-9	-8	-5	-4	-2	-2	-3	-5	-9	-10	-10	-9	-8	-8	-7.1	-1.8																						
11-Feb	-8	-8	-8	-8	-9	-10	-11	-11	-13	-12	-10	-8	-6	-5	-2	-2	-4	-4	-5	-5	-6	-6	-6	-6	-7.2	-1.8																						
12-Feb	-8	-8	-9	-8	-8	-9	-10	-11	-10	-9	-8	-7	-5	-3	-4	-3	-4	-4	-4	-4	-4	-4	-4	-5	-6.4	-3.3																						
13-Feb	-5	-5	-5	-6	-9	-9	-9	-9	-9	-9	-7	-5	-3	-2	-1	3	-1	-2	-4	-5	-5	-4	-5	-5	-5.1	2.7																						
14-Feb	-6	-6	-7	-7	-8	-8	-9	-8	-8	-8	-7	-6	-5	-3	-3	-4	-3	-3	-4	-4	-4	-5	-6	-7	-5.8	-3.1																						
15-Feb	-9	-8	-7	-8	-8	-9	-9	-9	-9	-8	-6	-3	-2	-1	0	1	0	-2	-6	-8	-8	-9	-10	-10	-6.2	0.5																						
16-Feb	-12	-11	-11	-10	-8	-7	-7	-9	-9	-9	-4	-3	-2	-3	-3	-4	-4	-4	-4	-4	-4	-4	-5	-5	-6.0	-2.0																						
17-Feb	-5	-5	-4	-4	-4	-4	-5	-5	-6	-5	-2	-1	1	1	2	2	2	-1	-4	-4	-5	-6	-9	-10	-3.4	1.9																						
18-Feb	-9	-8	-9	-10	-11	-12	-13	-13	-13	-12	-9	-7	-4	-1	1	1	0	0	-2	-5	-7	-8	-9	-9	-6.9	1.3																						
19-Feb	-10	-11	-11	-12	-13	-13	-13	-13	-13	-14	-13	-10	-8	-5	-2	-2	0	-3	-3	-6	-8	-9	-9	-11	-10	-8.7	-0.2																					
20-Feb	-12	-12	-12	-14	-13	-15	-15	-14	-15	-15	-11	-7	-4	-2	-2	-2	-4	-5	-7	-8	-9	-8	-6	-7	-9.1	-2.1																						
21-Feb	-8	-10	-11	-11	-13	-13	-15	-15	-14	-11	-9	-5	-2	2	-1	1	3	0	-4	-6	-7	-8	-8	-8	-7.2	2.6																						
22-Feb	-8	-10	-11	-12	-12	-11	-11	-11	-11	-10	-9	-8	-6	-6	-6	-5	-7	-9	-11	-12	-13	-15	-14	-12	-10.0	-4.6																						
23-Feb	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-12	-10	-9	-8	-8	-8	-7	-7	-9	-8	-9	-6	-6	-6	-9.7	-5.8																						
24-Feb	-5	-5	-5	-5	-6	-7	-9	-10	-10	-7	-3	-1	2	4	4	4	7	2	-1	-2	-2	-2	-4	-4	-2.8	6.9																						
25-Feb	-6	-7	-8	-7	-7	-8	-8	-9	-7	-7	-2	-1	0	2	3	4	5	3	0	-1	0	0	-1	-2	-2.6	5.1																						
26-Feb	-2	-3	-2	-4	-5	-4	-4	-7	-6	-3	1	4	3	4	5	5	3	2	0	-1	-2	-2	-2	-3	-0.9	4.7																						
27-Feb	-2	-2	-1	-2	-2	-2	-2	-2	-3	-2	-2	-1	-2	-1	0	0	-1	-2	-2	-3	-4	-4	-3	-5	-2.1	-0.2																						
28-Feb	-5	-5	-6	-6	-5	-5	-4	-4	-4	-3	-2	0	2	5	4	5	3	1	0	-1	0	-2	-2	-2	-1.4	5.2																						
																								-8.9	-9.2	-9.6	-9.9	-10.3	-10.3	-10.7	-11.0	-11.1	-10.3	-8.4	-6.8	-5.1	-3.7	-3.2	-2.8	-3.5	-4.9	-6.7	-7.3	-7.5	-7.6	-8.0	-8.5	Diurnal Average
																								-2.2	-1.6	-1.2	-1.5	-1.5	-1.9	-2.1	-2.3	-2.5	-2.2	0.6	4.4	3.4	5.0	4.7	5.2	6.9	3.0	0.3	-0.7	0.4	0.1	-1.3	-2.0	Diurnal Maximum
N - Not Valid																																																



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - February 2010

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	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	N	6	6	6	8	6	6	8	7	6	7	6	4	1	3	4	5	4	3	3	5	8	9	8	5.4	9.0
Dir	N	50	49	43	42	35	31	23	26	41	22	28	47	239	15	20	23	11	43	332	12	25	27	29	29.5	26.8
2 Spd	6	4	2	2	4	6	3	5	5	5	7	5	4	5	6	6	4	3	3	4	6	4	4	5	2.4	7.5
Dir	21	359	291	348	227	212	167	168	192	193	200	191	138	131	133	128	131	138	148	170	177	126	58	31	157.5	199.5
3 Spd	3	5	7	5	6	3	5	9	9	11	12	14	10	10	9	9	9	10	9	10	9	10	9	9	8.1	13.7
Dir	27	346	5	10	341	329	360	7	20	34	31	32	33	32	31	30	20	22	24	20	13	12	12	8	18.9	32.5
4 Spd	8	4	2	2	3	3	4	1	4	2	3	2	2	3	3	4	4	3	5	7	8	11	13	14	2.8	13.8
Dir	26	30	3	107	115	172	165	198	199	150	91	130	154	141	132	99	53	25	3	14	19	18	13	17	39.6	16.8
5 Spd	13	16	14	16	15	14	15	13	15	14	12	10	7	10	9	7	7	6	7	8	10	7	2	4	8.4	16.1
Dir	15	19	23	21	25	18	17	15	17	20	20	21	10	10	7	352	8	318	281	259	274	283	270	223	5.4	21.1
6 Spd	5	5	2	2	1	1	1	2	1	1	1	2	2	1	2	1	3	5	6	6	9	10	6	4	1.7	10.4
Dir	243	253	211	263	211	204	103	78	15	238	157	125	121	311	300	291	326	324	342	0	10	19	0	348	341.9	18.5
7 Spd	7	4	3	1	3	4	5	6	6	6	6	6	6	5	9	9	7	9	3	1	3	8	10	11	4.4	10.7
Dir	38	9	323	259	260	194	222	224	231	239	228	228	214	228	259	270	273	280	285	279	253	234	213	231	245.2	230.9
8 Spd	10	10	8	10	10	10	12	11	8	8	9	9	8	8	8	7	9	10	10	13	16	11	8	12	9.0	15.6
Dir	224	224	211	201	218	217	223	226	251	245	235	230	216	256	257	218	255	243	244	267	271	264	214	196	234.5	270.7
9 Spd	12	12	11	10	11	10	9	11	11	9	10	9	9	7	6	6	4	3	7	9	13	9	4	6	7.8	13.3
Dir	208	206	196	196	197	190	189	206	200	196	198	184	184	178	142	141	177	252	238	233	258	256	176	193	201.7	258.0
10 Spd	6	6	6	7	8	5	5	5	6	5	4	4	4	4	2	4	6	6	5	4	4	5	7	7	2.6	7.6
Dir	206	230	236	258	260	251	194	230	203	222	205	191	206	244	238	209	287	308	306	29	356	10	23	26	253.0	260.0
11 Spd	8	6	4	3	1	4	6	8	7	10	9	7	7	7	7	2	6	9	8	9	10	12	12	12	2.3	12.0
Dir	23	19	22	15	255	253	229	230	201	243	215	221	224	241	255	274	286	22	9	9	12	16	18	20	317.1	20.1
12 Spd	8	9	12	9	8	5	11	8	4	8	10	11	10	7	7	7	8	7	7	7	7	6	4	1	7.3	11.7
Dir	21	21	23	16	29	29	30	31	9	25	34	25	28	31	25	6	23	31	338	11	21	17	327	275	20.6	22.7
13 Spd	4	1	3	7	3	1	8	6	10	10	9	7	7	5	3	2	9	10	6	8	7	9	13	13	1.9	13.3
Dir	114	274	270	261	197	167	224	227	228	215	208	195	164	148	315	49	26	24	21	19	67	130	140	145	169.0	144.8
14 Spd	10	16	11	12	5	2	8	6	7	8	9	8	5	3	8	10	11	11	13	11	11	10	13	11	3.6	15.6
Dir	150	151	156	160	174	69	19	16	13	15	24	27	30	231	245	222	210	229	219	201	210	241	245	216	203.2	151.2
15 Spd	6	7	10	12	13	16	20	15	13	6	7	9	11	12	10	8	8	7	9	7	3	4	2	5	8.5	20.3
Dir	229	180	242	260	261	257	255	248	226	227	229	220	222	249	238	248	261	277	280	219	272	306	292	247.3	256.6	
16 Spd	2	7	7	6	10	9	10	9	11	5	4	4	3	3	5	11	10	9	9	7	6	7	7	10	1.1	11.1
Dir	29	25	19	22	18	17	16	24	30	18	33	184	125	177	209	232	226	235	234	220	200	219	236	227	288.1	232.3
17 Spd	10	10	14	10	13	17	18	20	12	5	5	7	8	10	10	10	8	8	13	12	1	6	10	9	9.8	20.3
Dir	256	255	257	265	261	261	255	265	252	222	238	247	237	246	244	235	234	237	258	276	144	226	208	214	249.2	264.9
18 Spd	10	11	11	11	11	8	7	9	11	10	9	13	4	3	1	3	2	7	8	4	4	4	8	10	5.6	12.6
Dir	214	206	212	213	220	215	222	217	211	215	214	236	232	199	330	258	247	338	5	350	270	353	274	268	232.9	236.1
19 Spd	8	7	7	5	6	7	6	7	7	8	6	6	6	4	5	4	10	7	4	3	5	4	4	3	3.7	9.5
Dir	248	259	204	206	197	220	212	246	211	180	215	206	192	166	139	257	269	266	256	328	1	353	29	342	229.3	268.6
20 Spd	3	5	3	3	4	6	8	6	5	7	7	3	5	7	7	9	11	10	9	9	11	13	15	15	6.6	14.7
Dir	292	260	237	284	229	203	219	234	209	194	234	209	191	183	257	255	261	264	263	249	259	271	273	266	246.6	266.5
21 Spd	10	10	10	10	7	6	7	6	7	3	1	2	5	2	8	4	2	1	5	3	4	5	7	8	2.5	10.3
Dir	230	227	222	212	211	230	226	232	188	178	253	117	48	10	261	286	254	228	298	350	16	15	19	19	244.3	212.5
22 Spd	10	10	11	12	12	11	8	7	7	7	6	4	2	4	3	1	4	7	6	5	5	6	8	4	4.2	12.4
Dir	14	10	15	23	27	25	11	11	29	28	42	18	23	225	219	236	281	262	265	327	26	271	265	256	358.6	23.1

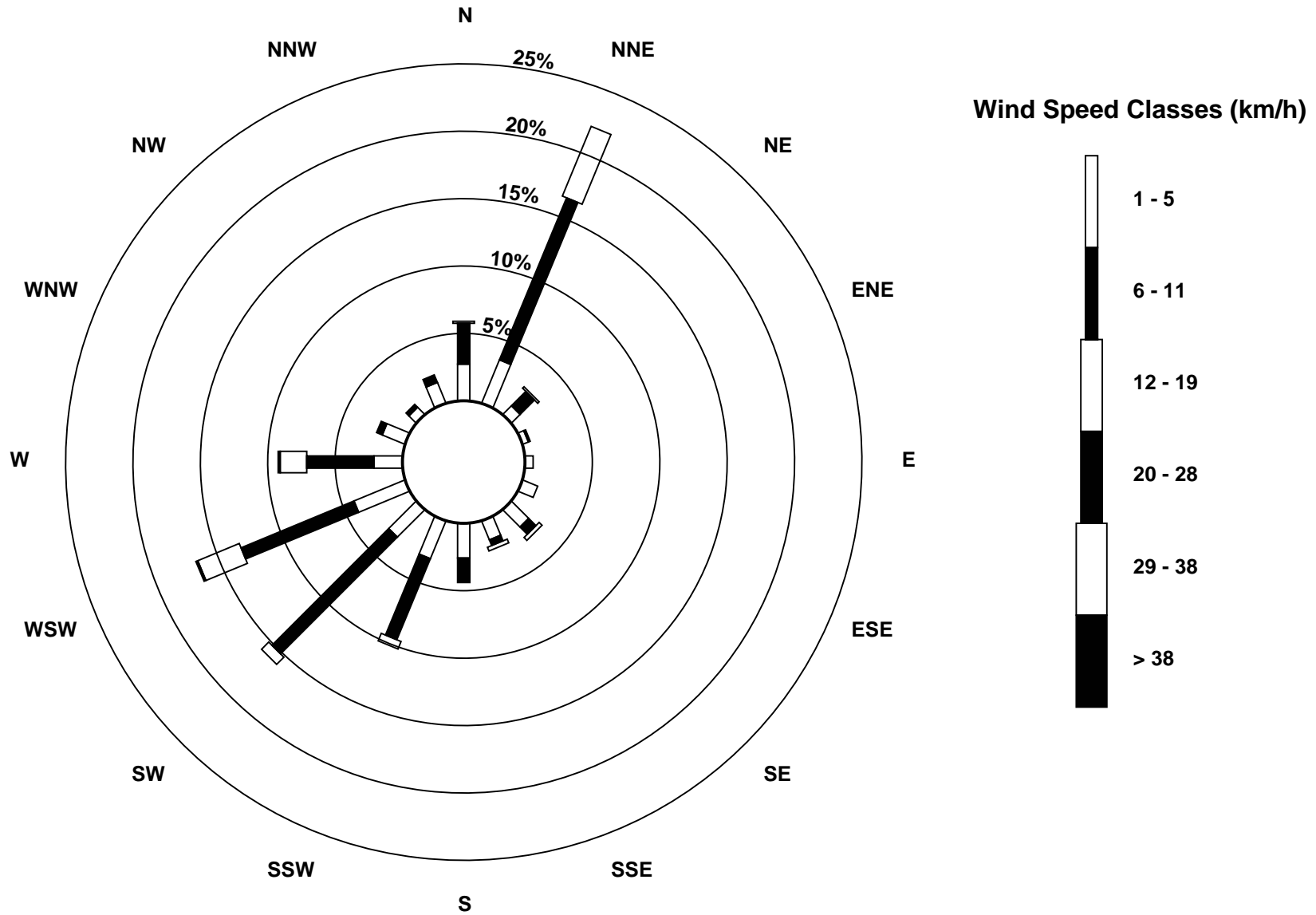
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Smoky Heights - February 2010

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	3	3	3	3	4	3	4	5	5	4	4	3	4	8	11	11	11	11	11	9	8	14	8	10	6.0	14.0
Dir	167	147	175	187	178	175	237	226	214	224	235	240	245	246	255	252	245	235	238	229	234	250	210	230	230.8	250.2
24 Spd	14	14	15	14	12	13	11	11	8	1	2	4	3	2	1	1	2	6	6	3	4	2	9	8	5.0	15.4
Dir	238	264	249	260	248	255	249	236	204	248	180	173	100	112	205	323	80	19	12	5	260	230	247	233	248.1	249.2
25 Spd	8	8	9	6	8	9	10	5	9	6	6	10	12	14	10	8	11	9	9	13	16	16	13	14	9.2	15.9
Dir	215	208	190	241	209	221	224	216	249	232	272	254	238	199	241	234	239	245	239	257	239	248	271	266	237.2	247.8
26 Spd	12	12	15	12	6	5	7	8	7	5	2	1	11	14	15	16	16	19	19	18	15	15	15	15	5.3	19.4
Dir	257	241	242	234	236	244	179	198	253	255	110	37	22	21	21	29	35	31	27	31	20	10	13	18	5.6	27.4
27 Spd	13	14	13	13	14	14	15	14	11	11	11	7	9	8	9	8	7	7	5	5	3	7	10	9	8.0	15.3
Dir	16	17	14	15	16	20	26	25	15	17	17	10	5	20	19	20	15	6	358	345	185	252	279	235	9.4	25.6
28 Spd	10	7	8	8	8	7	10	9	9	12	11	9	6	3	3	5	8	5	6	6	6	5	2	1	6.4	12.2
Dir	208	224	247	238	246	229	248	243	216	256	250	258	252	256	272	286	255	244	277	277	267	283	279	229	248.5	255.5
Spd	2.0	2.0	2.5	2.4	2.3	2.8	3.0	3.2	2.7	1.8	1.4	1.7	1.0	1.6	2.3	2.4	2.6	3.3	3.7	3.3	2.8	3.2	2.8	2.6	Diurnal Average	
Dir	254.9	261.2	252.7	260.6	255.7	251.9	253.3	257.8	242.8	245.8	244.9	235.6	211.3	223.5	270.7	267.4	282.3	299.4	296.5	303.3	294.1	297.6	293.1	271.4	Diurnal Maximum	
Spd	14.0	15.6	15.4	16.1	14.8	16.7	20.3	20.3	14.7	14.3	12.1	13.7	12.0	13.8	14.8	15.9	16.4	19.3	19.4	18.3	15.6	15.9	15.4	15.3	Diurnal Maximum	
Dir	238.0	151.2	249.2	21.1	24.7	260.9	256.6	264.9	17.0	20.0	31.4	32.5	237.7	21.3	21.1	29.4	35.4	31.4	27.4	30.9	270.7	247.8	13.4	18.4	Diurnal Maximum	
Maximum Speed Value: 20 km/h on Feb 17 08:00																			Minimum Speed Value: 1 km/h on Feb 18 15:00					Hours in Service:		672
Maximum Daily Speed Average: 9.8 km/h on Feb 26																			Minimum Daily Speed Average: 1.1 km/h on Feb 6					Hours of Data:		671
Maximum Diurnal Speed Average: 3.7 km/h at hour 19																			Minimum Diurnal Speed Average: 1.0 km/h at hour 13					Hours of Missing Data:		1
Monthly Average Velocity: 2.27 km/h 268.76 deg																			Speed Percentiles: P ₁ = 0.9 P ₁₀ = 2.8 Q ₁ = 4.5 Median = 7.2 Q ₃ = 10.0 P ₉₀ = 12.5 P ₉₉ = 16.4					Percent Operational Time:		99.9
All monthly, daily, and diurnal averages have been calculated using vector methods																										
N - Not Valid																										
Frequency Distribution																										
	Speed Range (km/h)																									
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	27	77	28	0	0	0	132																			
NorthEast	19	47	13	2	0	0	81																			
East	10	0	0	0	0	0	10																			
SouthEast	21	7	4	0	0	0	32																			
South	29	31	5	0	0	0	65																			
SouthWest	38	137	23	0	0	0	198																			
West	39	63	31	2	0	0	135																			
NorthWest	16	2	0	0	0	0	18																			
Total	199	364	104	4	0	0	671																			

Wind Rose

Wind Speed (WS) (km/h)
Smoky Heights - February 2010





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - February 2010

Maximum Speed: 20 km/h on Feb 17 08:00		Maximum Daily Speed Average: 12.0 km/h on Feb 26		Hours in Service: 672																																													
Minimum Speed: 1 km/h on Feb 6 09:00		Minimum Daily Speed Average: 3.5 km/h on Feb 6		Hours of Data: 671																																													
Maximum Diurnal Speed Average: 8.8 km/h at hour 24		Minimum Diurnal Speed Average: 6.5 km/h at hour 14		Hours of Missing Data: 1																																													
Monthly Average Speed: 7.76 km/h		Percentiles: P ₁ = 1.6 P ₁₀ = 3.5 Q ₁ = 5.0 Median = 7.4 Q ₃ = 10.1 P ₉₀ = 12.7 P ₉₉ = 16.5		Percent Operational Time: 99.9																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	N	6	6	6	8	6	6	8	7	6	8	6	4	2	3	4	5	4	4	3	5	8	9	8	5.8	9.1																							
2-Feb	6	4	3	3	5	6	4	5	5	5	8	5	4	5	6	6	4	3	4	4	6	5	4	5	4.8	7.5																							
3-Feb	3	5	7	5	6	4	5	9	9	11	12	14	10	10	9	9	10	9	10	9	9	10	9	9	8.5	13.7																							
4-Feb	8	5	4	4	3	4	4	3	5	4	4	3	3	3	3	4	5	4	5	7	8	11	13	14	5.3	13.8																							
5-Feb	13	16	14	16	15	14	15	14	15	14	12	10	7	11	9	7	7	7	8	8	10	7	4	4	10.7	16.1																							
6-Feb	5	5	3	2	1	2	1	2	1	1	1	2	2	2	2	2	3	5	6	6	9	10	7	6	3.5	10.4																							
7-Feb	7	4	4	3	4	4	5	6	6	6	6	6	6	5	9	9	7	9	4	2	4	8	10	11	6.1	10.7																							
8-Feb	11	10	8	10	10	10	12	11	8	8	9	9	8	8	8	7	9	10	10	13	16	11	8	12	9.8	15.6																							
9-Feb	12	12	12	10	11	10	9	12	11	9	10	9	9	7	6	7	5	3	7	10	13	10	5	7	9.0	13.3																							
10-Feb	6	6	7	8	8	6	5	5	6	5	5	4	4	4	3	4	6	6	5	5	4	5	7	7	5.4	7.8																							
11-Feb	8	7	4	3	2	4	6	8	7	11	9	7	7	7	7	7	5	6	9	8	9	10	12	12	7.3	12.0																							
12-Feb	8	10	12	10	8	5	12	8	5	8	10	11	10	7	7	7	8	8	7	7	7	6	5	2	7.8	11.7																							
13-Feb	4	3	4	7	6	4	8	6	11	10	9	7	8	6	3	3	9	10	7	8	7	9	13	13	7.3	13.4																							
14-Feb	10	16	11	12	6	8	8	7	7	8	9	8	5	4	9	10	11	12	14	11	11	10	13	11	9.6	15.7																							
15-Feb	6	7	12	12	13	16	20	15	13	8	8	10	11	13	10	8	8	7	9	7	4	4	4	7	9.6	20.3																							
16-Feb	3	7	7	7	10	9	10	9	11	6	4	4	3	4	5	11	10	9	9	7	6	7	7	10	7.4	11.4																							
17-Feb	10	10	14	10	13	17	18	20	13	6	6	7	8	10	10	10	8	8	13	13	5	6	11	9	10.6	20.4																							
18-Feb	10	11	11	11	11	8	7	9	11	10	10	13	9	4	3	3	5	8	8	5	5	4	9	10	8.1	12.7																							
19-Feb	8	8	7	6	6	7	7	8	7	8	6	6	6	4	5	5	10	7	4	4	5	4	4	4	6.1	9.5																							
20-Feb	4	5	4	3	5	7	8	6	5	8	7	5	5	7	8	9	11	10	9	10	11	11	13	15	7.7	14.7																							
21-Feb	10	10	10	10	7	6	7	7	7	4	2	2	6	5	10	5	3	2	5	4	4	5	7	8	6.2	10.4																							
22-Feb	10	10	11	12	12	11	9	8	7	7	6	4	3	4	3	2	4	7	6	5	5	6	8	5	6.9	12.5																							
23-Feb	4	3	3	3	4	3	4	5	5	4	4	3	4	8	11	11	11	11	12	9	9	14	9	10	6.8	14.3																							
24-Feb	14	14	15	14	12	13	11	11	8	3	3	5	3	2	2	2	2	6	6	4	5	3	9	8	7.4	15.4																							
25-Feb	8	8	9	7	9	9	11	7	9	7	6	10	12	14	10	8	11	9	9	13	16	17	14	14	10.3	16.6																							
26-Feb	12	12	15	12	7	6	8	8	8	5	3	3	11	14	15	16	16	19	19	18	15	15	15	15	12.0	19.4																							
27-Feb	13	14	13	13	14	14	15	14	12	11	11	7	9	8	9	8	7	7	5	5	5	7	11	9	10.1	15.3																							
28-Feb	10	7	8	8	8	7	10	9	10	12	11	9	6	4	4	5	8	6	6	6	7	5	3	2	7.1	12.3																							
																								8.3	8.3	8.5	8.2	7.9	7.9	8.8	8.5	8.1	7.3	7.0	6.7	6.6	6.5	6.8	6.7	7.4	7.6	7.8	7.6	7.9	8.2	8.6	8.8	Diurnal Average	
																								14.3	15.7	15.4	16.1	14.8	16.8	20.3	20.4	14.8	14.4	12.1	13.7	12.5	13.9	14.9	15.9	16.4	19.3	19.4	18.4	15.6	16.6	15.5	15.3	Diurnal Maximum	
N - Not Valid																																																	
All monthly, daily, and diurnal averages have been calculated using scalar methods																																																	

Hourly Standard Deviations

Wind Direction (WD) - deg
Smoky Heights - February 2010

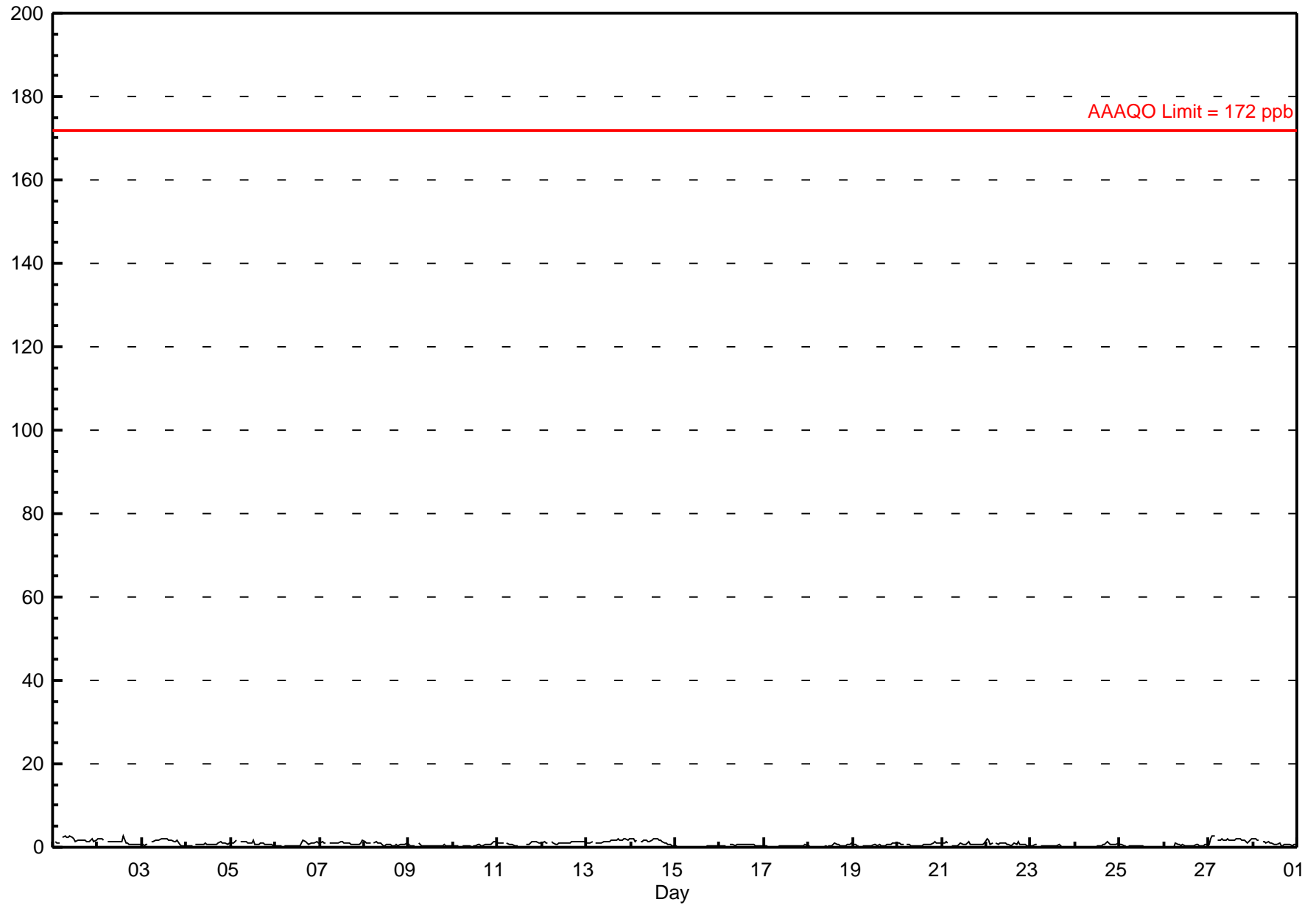
Maximum Value: 92.4 deg on Feb 7 20:00																		Hours in Service: 672																																																																																																																																									
Minimum Value: 1.8 deg on Feb 15 08:00																		Hours of Data: 671																																																																																																																																									
Percentiles: P ₁ = 2.9 P ₁₀ = 4.4 Q ₁ = 6.5 Median = 11.5 Q ₃ = 22.2 P ₉₀ = 44.7 P ₉₉ = 83.7																		Hours of Missing Data: 1																																																																																																																																									
																		Hours of Calibration: 0																																																																																																																																									
																		Percent Operational Time: 99.9																																																																																																																																									
Day	Hourly Period Ending At (MST)																								Daily Maximum																																																																																																																																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																																																																																																																																			
1-Feb	N	5	10	10	8	8	12	5	6	10	7	10	30	87	40	9	6	15	19	20	17	4	7	10	86.7																																																																																																																																		
2-Feb	13	21	69	40	34	7	31	7	19	9	8	23	8	9	6	7	13	17	33	28	13	26	33	10	69.3																																																																																																																																		
3-Feb	32	13	10	12	15	31	13	17	7	7	6	4	7	7	6	6	5	5	4	5	6	3	6	9	31.6																																																																																																																																		
4-Feb	8	36	52	87	46	46	31	67	33	67	34	35	49	32	60	28	30	25	14	6	4	4	5	5	87.3																																																																																																																																		
5-Feb	6	3	4	3	4	3	3	3	3	3	4	4	8	10	7	10	15	28	13	15	9	8	73	17	73.4																																																																																																																																		
6-Feb	13	6	27	43	73	26	39	26	12	46	51	14	22	57	46	48	22	14	11	8	13	4	42	48	73.0																																																																																																																																		
7-Feb	12	13	45	88	34	17	18	13	14	20	8	10	8	15	10	4	4	4	68	92	51	18	6	5	92.4																																																																																																																																		
8-Feb	7	7	6	4	4	5	3	6	3	6	4	6	11	5	8	11	9	6	9	6	4	8	20	4	20.1																																																																																																																																		
9-Feb	7	4	6	2	7	4	9	6	6	8	9	6	5	20	17	17	35	30	9	15	4	35	31	21	34.7																																																																																																																																		
10-Feb	14	15	25	18	13	43	22	20	9	16	23	18	13	13	58	16	15	23	11	28	17	9	8	8	58.2																																																																																																																																		
11-Feb	5	12	14	18	89	14	17	13	14	14	9	5	8	18	13	6	78	19	10	7	3	4	3	5	89.0																																																																																																																																		
12-Feb	6	7	4	35	14	50	9	23	30	12	6	5	7	10	14	12	9	17	25	9	12	12	37	73	72.8																																																																																																																																		
13-Feb	17	66	55	9	64	78	25	20	10	6	9	11	26	41	50	61	4	5	29	9	21	9	5	5	77.7																																																																																																																																		
14-Feb	10	4	8	8	38	76	9	12	9	6	5	4	30	84	17	9	13	14	6	8	6	9	12	7	84.2																																																																																																																																		
15-Feb	24	14	37	7	11	4	2	2	5	55	15	12	5	7	13	10	5	11	3	9	34	25	75	48	75.4																																																																																																																																		
16-Feb	51	5	12	38	5	5	6	8	4	34	21	26	21	43	15	15	5	6	6	10	7	10	10	14	50.6																																																																																																																																		
17-Feb	6	7	4	10	4	5	2	3	45	37	53	15	9	9	4	4	10	5	6	26	77	14	11	18	77.2																																																																																																																																		
18-Feb	18	4	5	6	6	8	21	8	7	12	14	8	78	41	91	23	79	28	9	54	20	25	6	8	91.2																																																																																																																																		
19-Feb	21	28	19	17	8	17	16	9	26	6	8	8	8	26	11	32	3	12	19	41	8	22	10	22	41.3																																																																																																																																		
20-Feb	56	15	18	56	23	15	8	11	14	19	9	41	27	9	15	4	4	4	8	9	8	10	5	6	56.4																																																																																																																																		
21-Feb	14	9	5	6	14	20	14	29	8	61	60	53	51	80	52	33	44	71	20	49	16	11	6	7	80.0																																																																																																																																		
22-Feb	6	7	4	3	4	7	6	6	11	8	13	17	47	19	16	41	23	7	6	25	7	41	8	27	47.5																																																																																																																																		
23-Feb	27	12	5	9	6	15	17	8	4	9	9	6	5	5	7	10	7	8	13	17	26	11	27	14	27.1																																																																																																																																		
24-Feb	12	8	4	5	15	4	21	10	21	62	29	39	21	42	64	77	49	5	13	32	35	84	16	22	83.6																																																																																																																																		
25-Feb	12	12	13	22	7	12	21	52	14	44	22	9	17	8	19	11	8	8	13	12	7	18	8	10	51.6																																																																																																																																		
26-Feb	10	14	12	12	36	29	16	27	14	31	45	69	9	3	5	4	4	3	4	5	5	6	5	4	69.5																																																																																																																																		
27-Feb	5	5	5	3	4	6	2	7	6	6	7	11	13	6	5	6	9	13	13	12	69	21	7	21	68.5																																																																																																																																		
28-Feb	13	7	14	10	10	10	7	16	18	7	9	11	17	42	48	15	9	25	14	21	13	14	22	83	83.5																																																																																																																																		
55.7																		65.8						69.3						88.1						89.0						77.7						39.1						67.3						44.7						67.0						60.0						69.5						77.6						86.7						91.2						76.8						78.5						70.8						67.7						92.4						77.2						83.6						75.4						83.5					
N - Not Valid																																																																																																																																																											

PASZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb Beaverlodge - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.7 ppb on Feb 27 03:00 Maximum Daily Average: 1.8 ppb on Feb 27												Hours in Service: 672 Hours of Data: 640 Hours of Missing Data: 32 Hours of Calibration: 31 Percent Operational Time: 99.9																																				
Minimum Value: 0 ppb on Feb 25 20:00 Minimum Daily Average: 0.2 ppb on Feb 15 Maximum Diurnal Average: 0.9 ppb at hour 15 Minimum Diurnal Average: 0.7 ppb at hour 12 Monthly Average: 0.80 ppb Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.4 Median = 0.7 Q ₃ = 1.1 P ₉₀ = 1.6 P ₉₉ = 2.4																																																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	N	1	1	1	A	2	3	2	2	3	2	2	1	2	2	2	2	2	1	1	2	2	2	2	1.8	2.6																						
2-Feb	2	2	2	2	A	1	1	1	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1.3	2.6																						
3-Feb	1	1	1	1	A	1	1	2	2	2	2	2	2	2	2	2	2	1	1	2	1	0	0	0	1.3	2.0																						
4-Feb	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3																						
5-Feb	1	1	1	2	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	0	0	1.0	1.7																						
6-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	2	1	1	1	1	1	1	1	1	0.6	1.6																						
7-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1.0	1.5																						
8-Feb	1	1	1	1	A	1	1	1	1	1	0	0	1	1	1	0	1	0	1	0	1	1	1	1	0.8	1.4																						
9-Feb	1	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.4	0.9																						
10-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	1	1	1	1	1	1	1	0.5	1.2																						
11-Feb	1	1	1	1	A	1	1	1	1	0	0	0	C	C	C	1	1	1	1	1	1	2	1	1	0.9	1.5																						
12-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.5																						
13-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	1.5	2.1																						
14-Feb	2	2	1	2	A	1	1	2	2	1	1	2	2	2	2	2	2	1	1	1	1	0	0	0	1.4	2.1																						
15-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4																						
16-Feb	0	0	0	0	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.5	0.8																						
17-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.6																						
18-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	1	1	1	0.4	0.9																						
19-Feb	1	1	0	0	A	0	0	0	0	0	1	1	1	0	1	0	1	0	1	1	1	1	1	1	0.6	1.0																						
20-Feb	1	1	1	1	A	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0.7	1.4																						
21-Feb	1	1	1	1	A	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3																						
22-Feb	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.9	1.9																						
23-Feb	0	0	1	1	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.7																						
24-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	0.4	1.5																						
25-Feb	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	0.7																						
26-Feb	0	0	0	0	A	0	1	1	1	0	1	0	0	0	0	0	0	1	1	0	0	0	1	1	0.4	1.0																						
27-Feb	1	2	3	3	A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	2	2	1.8	2.7																					
28-Feb	2	2	2	2	A	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	0	1	1	1.0	2.0																						
																								0.8	0.9	0.8	0.8	--	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	Diurnal Average
																								2.1	2.2	2.7	2.7	--	2.5	2.6	2.5	2.3	2.5	2.4	1.9	2.0	2.1	2.6	2.0	2.0	2.1	1.8	1.8	1.9	2.1	1.8	2.1	Diurnal Maximum
C - Calibration					N - Not Valid					A - Automated Daily Zero Span																																						
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																																																

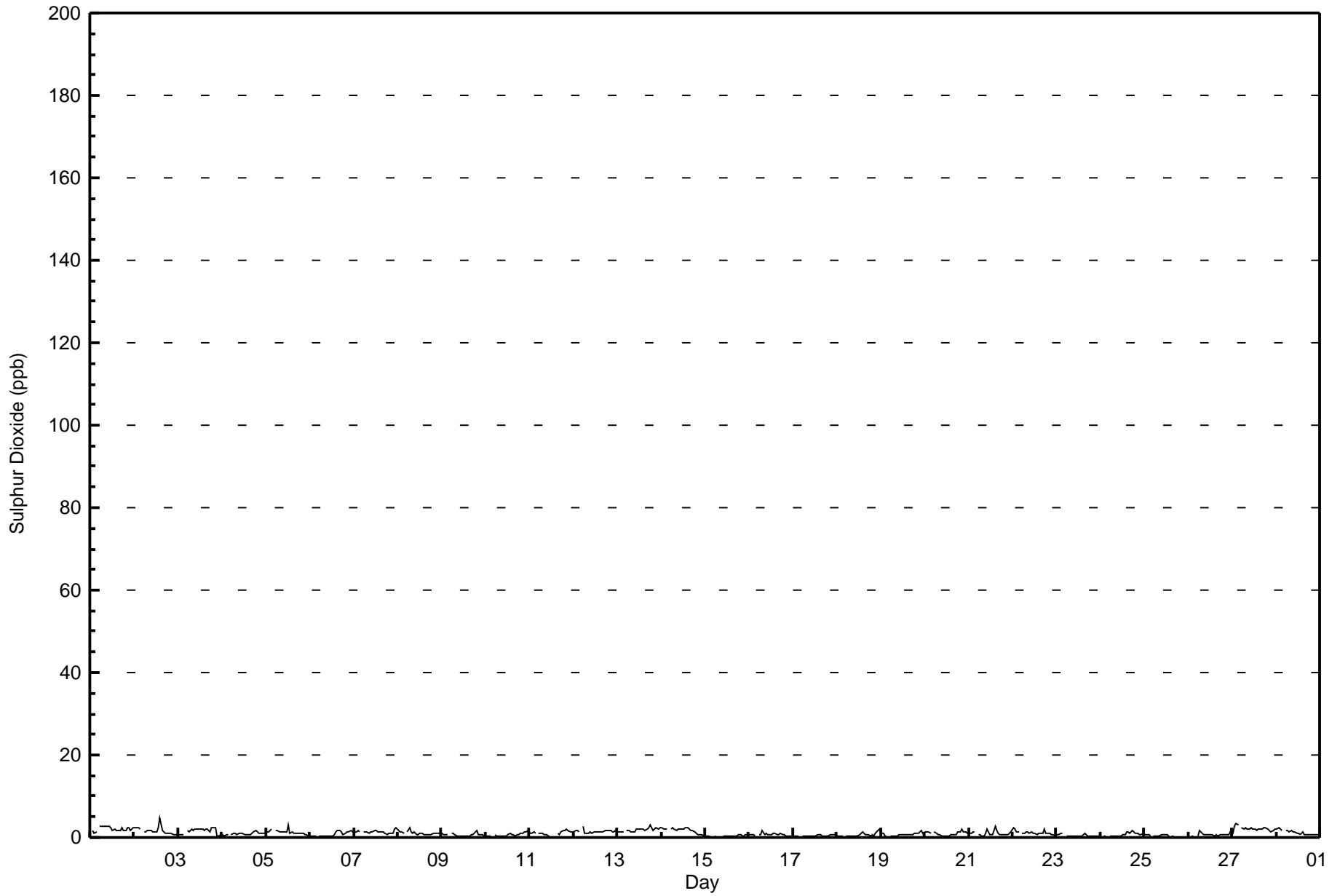


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Beaverlodge - February 2010

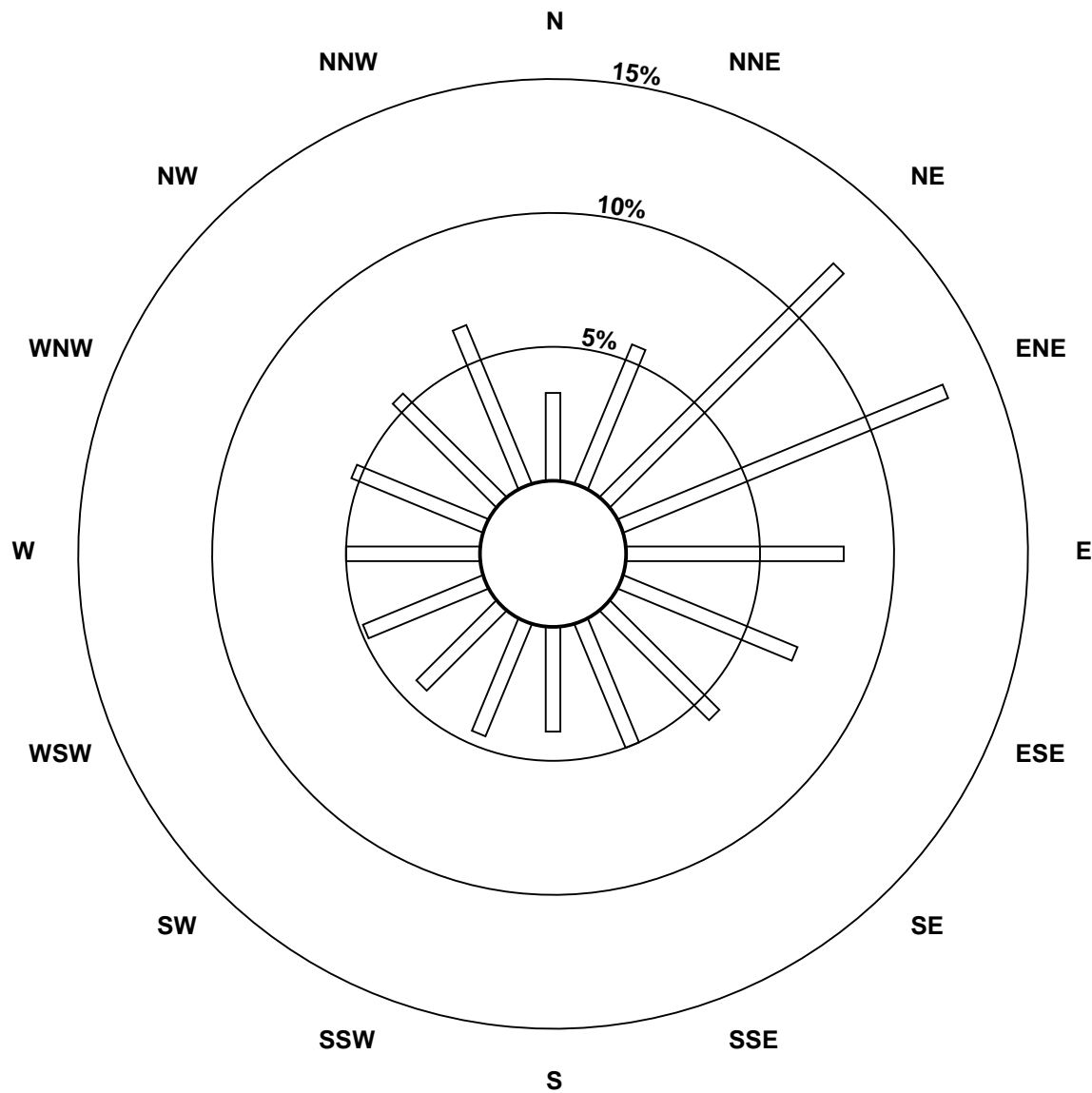
Maximum Value: 4.6 ppb on Feb 2 15:00		Maximum Daily Average: 2.1 ppb on Feb 27		Hours in Service: 672																						
Minimum Value: 0 ppb on Feb 15 09:00		Minimum Daily Average: 0.3 ppb on Feb 15		Hours of Data: 640																						
Maximum Diurnal Average: 1.3 ppb at hour 15		Minimum Diurnal Average: 0.9 ppb at hour 9		Hours of Missing Data: 32																						
Monthly Average: 1.04 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.5 Median = 0.9 Q ₃ = 1.5 P ₉₀ = 2.0 P ₉₉ = 2.7		Hours of Calibration: 31																						
				Percent Operational Time: 99.9																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	N	2	1	1	A	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2.1	2.8
2-Feb	2	3	2	2	A	1	1	2	2	2	1	2	1	3	5	2	1	1	1	1	1	1	1	1	1.6	4.6
3-Feb	1	1	1	1	A	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	0	0	1	1.6	2.4
4-Feb	1	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0.9	1.5
5-Feb	1	1	2	2	A	2	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	0	1.3	2.9
6-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	2	2	1	1	1	1	1	2	1	0.8	1.8
7-Feb	1	1	2	1	A	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	2	2	1.4	2.3
8-Feb	2	1	1	1	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.2
9-Feb	1	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	2	1	1	0	0.6	1.6
10-Feb	0	0	0	0	A	1	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	1	1	2	0.7	1.7
11-Feb	1	1	1	1	A	1	1	1	1	1	0	0	C	C	C	1	1	1	2	2	2	2	2	1	1.2	1.9
12-Feb	1	2	2	1	A	3	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	1	2	1.5	2.8
13-Feb	1	1	1	1	A	2	2	1	1	1	2	2	2	2	2	2	2	2	3	2	2	2	2	2	1.8	3.1
14-Feb	2	2	2	2	A	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	0	1.7	2.5
15-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0.3	0.7
16-Feb	1	1	1	0	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.7	1.7
17-Feb	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	1	1	1	0.4	0.8
18-Feb	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	0	1	0	1	2	2	0.6	2.0
19-Feb	1	1	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	2	1	0.8	1.6
20-Feb	1	1	1	1	A	1	1	1	1	0	0	0	0	1	1	1	1	1	1	2	2	1	1	1	0.9	1.9
21-Feb	1	1	1	1	A	1	1	0	0	1	2	1	1	1	3	2	1	1	1	1	1	1	1	1	1.0	2.6
22-Feb	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	0	1.1	2.4
23-Feb	1	1	1	1	A	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.4	1.1
24-Feb	0	0	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	2	1	1	1	1	1	1	0.6	1.8
25-Feb	1	1	1	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
26-Feb	0	0	0	0	A	0	2	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.6	1.5
27-Feb	1	3	3	3	A	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2.1	3.3
28-Feb	2	2	2	2	A	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.2
		1.1	1.1	1.1	1.0	--	1.1	1.0	1.0	0.9	1.0	1.0	0.9	1.0	1.0	1.3	1.1	1.0	1.1	1.1	1.1	1.1	1.1	1.1	Diurnal Average	
		2.4	2.7	3.3	3.0	--	2.8	2.8	2.7	2.6	2.7	2.6	2.4	2.9	2.5	4.6	2.1	2.1	2.4	3.1	2.3	2.4	2.4	2.0	2.4	Diurnal Maximum
C - Calibration		N - Not Valid				A - Automated Daily Zero Span																				

Hourly Maximums for SO₂ at Beaverlodge February 2010

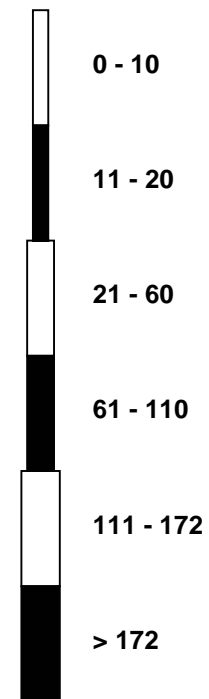


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - February 2010



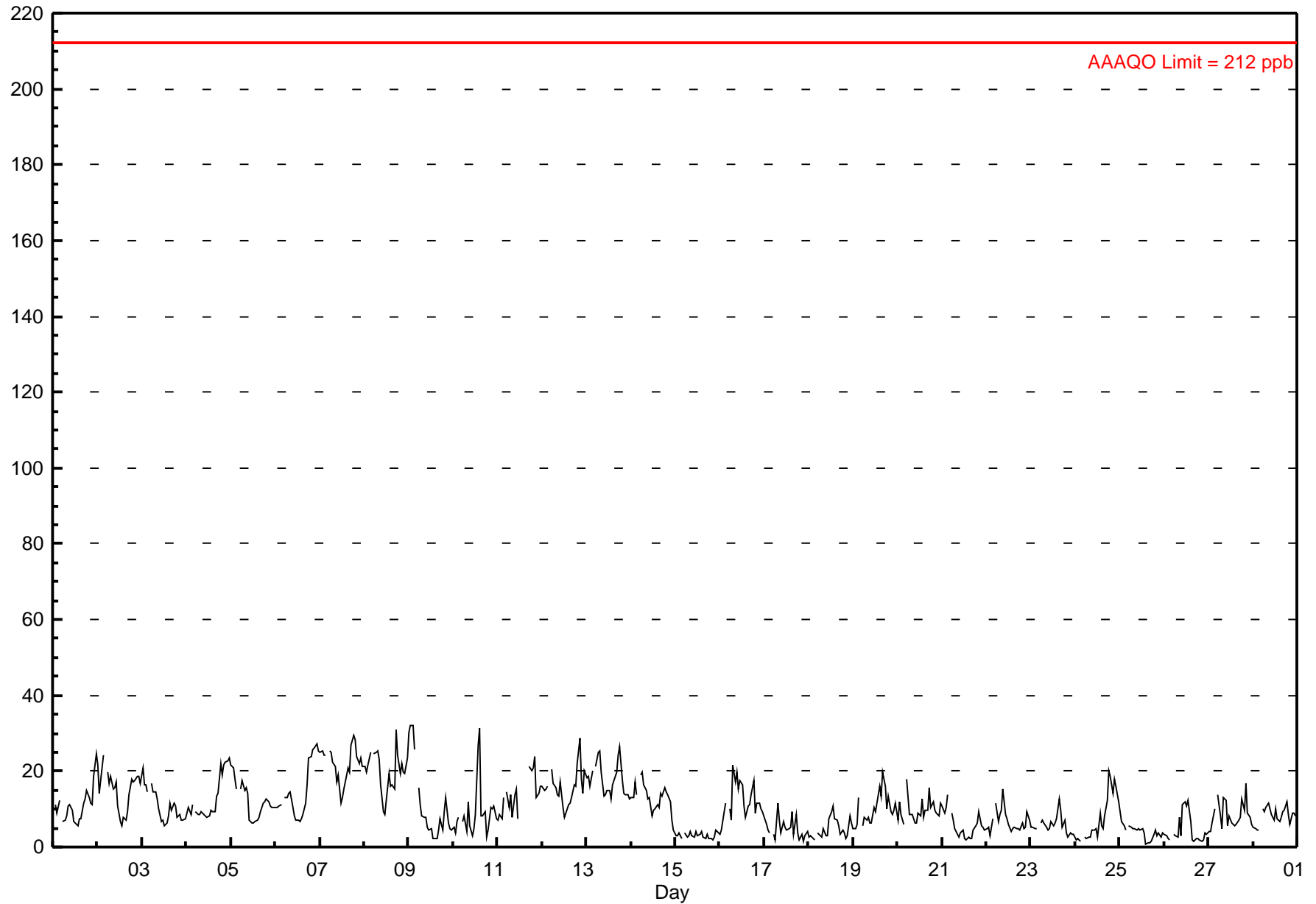
Pollutant Classes (ppb)



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb Beaverlodge - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 32.2 ppb on Feb 9 02:00 Maximum Daily Average: 21.9 ppb on Feb 7																	Hours in Service: 672 Hours of Data: 638 Hours of Missing Data: 34 Hours of Calibration: 33 Percent Operational Time: 99.9																																
Minimum Value: 1 ppb on Feb 25 15:00 Minimum Daily Average: 3.1 ppb on Feb 15 Maximum Diurnal Average: 12.7 ppb at hour 19 Minimum Diurnal Average: 7.8 ppb at hour 13 Monthly Average: 10.47 ppb Percentiles: P ₁ = 1.5 P ₁₀ = 3.1 Q ₁ = 5.2 Median = 9.0 Q ₃ = 14.2 P ₉₀ = 20.3 P ₉₉ = 28.9																																																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	N	11	9	12	A	7	7	8	11	11	10	7	6	6	7	8	12	13	15	13	12	11	18	25	10.8	24.6																							
2-Feb	22	14	21	24	A	20	17	19	15	16	17	11	7	6	8	7	9	14	18	17	17	19	19	17	15.3	24.1																							
3-Feb	21	16	16	15	A	17	14	15	13	10	7	7	5	6	8	12	10	11	11	8	8	7	7	7	10.9	20.7																							
4-Feb	9	11	9	11	A	9	8	9	9	9	8	8	8	10	9	9	14	14	22	19	21	23	23	24	12.8	23.6																							
5-Feb	22	21	18	15	A	15	18	15	16	14	7	7	6	7	7	8	9	11	12	13	12	11	11	10	12.3	21.8																							
6-Feb	11	10	11	11	A	13	13	14	15	11	8	7	7	7	8	9	12	17	24	24	26	26	27	25	14.5	27.2																							
7-Feb	25	25	24	24	A	25	25	22	21	17	19	11	13	15	19	21	20	27	30	28	24	22	24	21	21.9	29.5																							
8-Feb	21	20	22	25	A	25	25	25	23	17	9	9	12	19	16	16	15	31	24	19	22	20	19	23	19.9	31.1																							
9-Feb	30	32	32	26	A	16	11	8	8	8	5	4	5	2	2	2	4	7	4	9	13	6	5	5	10.7	32.2																							
10-Feb	5	4	7	8	A	7	8	4	12	6	3	5	9	27	31	8	8	9	3	4	11	10	11	8	8.9	31.3																							
11-Feb	7	9	7	13	A	15	10	14	8	14	15	7	C	C	C	C	C	21	20	21	24	13	14	16	13.8	23.9																							
12-Feb	16	15	15	16	A	20	17	16	14	13	17	10	8	9	11	12	13	16	16	22	29	18	14	20	15.6	28.7																							
13-Feb	18	19	16	20	A	21	25	25	20	13	14	15	15	13	16	18	20	24	26	18	14	14	14	13	17.9	26.4																							
14-Feb	13	13	17	14	A	19	20	16	15	13	13	8	10	10	11	10	14	13	16	15	14	12	7	4	12.9	19.7																							
15-Feb	3	3	4	2	A	4	2	3	4	3	3	4	3	4	4	3	2	3	2	2	2	3	5	4	3.1	4.5																							
16-Feb	3	5	9	12	A	10	7	22	17	20	15	18	17	11	8	11	11	14	18	9	11	11	10	9	12.1	21.6																							
17-Feb	7	6	4	4	A	3	2	12	7	4	7	5	4	5	5	9	3	9	4	2	3	1	3	4	4.9	11.7																							
18-Feb	3	3	2	2	A	4	3	3	5	3	3	7	9	11	7	7	6	3	5	4	2	3	8	6	4.8	10.9																							
19-Feb	5	5	6	13	A	5	8	7	8	6	6	10	9	12	16	13	20	16	10	13	9	8	10	12	9.9	19.6																							
20-Feb	7	12	8	6	A	18	9	9	9	6	6	9	8	13	8	10	10	16	10	12	10	9	8	11	9.7	17.7																							
21-Feb	11	9	11	14	A	9	7	5	3	3	4	4	2	2	3	2	2	5	6	6	9	6	5	5	5.7	13.6																							
22-Feb	5	5	3	7	A	12	7	8	10	15	9	7	6	4	5	5	5	5	4	7	5	5	9	7	6.7	15.3																							
23-Feb	5	5	5	5	A	6	7	6	5	5	5	7	6	6	8	13	10	5	7	4	3	4	3	3	5.7	12.7																							
24-Feb	2	2	2	1	A	3	2	3	2	5	4	5	3	9	6	5	8	12	20	19	14	18	16	12	7.5	20.1																							
25-Feb	9	7	5	4	A	6	5	5	5	4	5	4	5	4	1	1	1	2	4	4	3	4	2	4	4.1	9.4																							
26-Feb	3	3	2	2	A	4	3	3	8	3	11	12	11	12	7	2	2	2	2	2	2	2	4	3	4.5	12.5																							
27-Feb	4	4	6	10	A	14	8	5	13	12	6	8	6	6	6	6	7	8	13	10	17	9	8	6	8.3	16.9																							
28-Feb	5	5	5	5	A	10	9	10	12	10	9	7	10	7	7	8	9	10	12	9	6	9	9	8	8.3	11.8																							
																								10.8	10.5	10.6	11.5	--	12.0	10.7	11.1	10.9	9.7	8.7	8.1	7.8	8.9	9.0	8.7	9.5	12.1	12.7	11.8	12.2	10.8	11.2	11.2	Diurnal Average	
																								30.2	32.2	31.9	25.9	--	25.3	25.1	25.5	23.0	19.8	18.9	17.6	16.5	26.9	31.3	20.7	19.8	31.1	29.5	28.3	28.7	25.9	27.2	25.2	Diurnal Maximum	
C - Calibration					N - Not Valid					A - Automated Daily Zero Span																																							
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb																																																	



Hourly Maximums

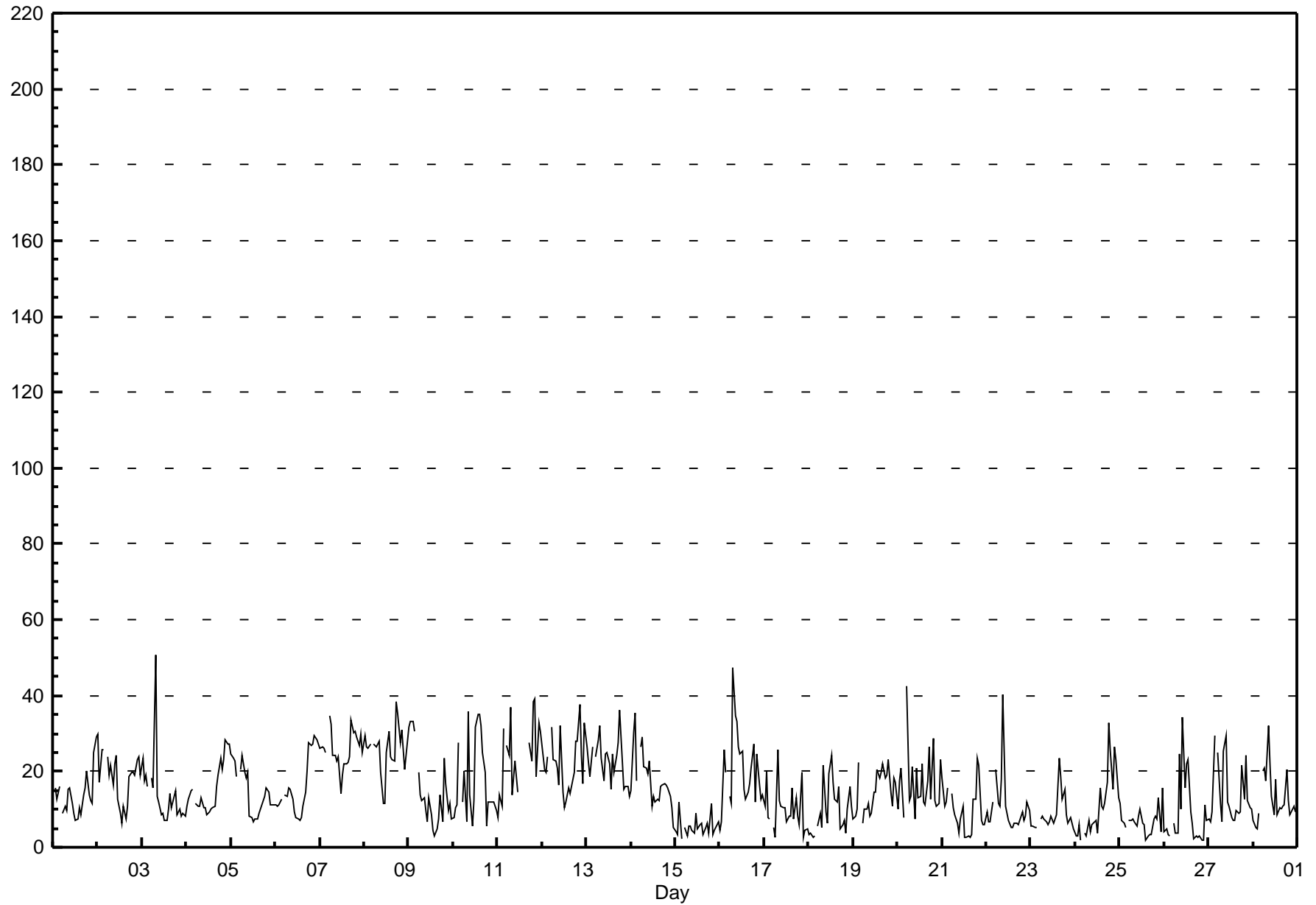
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - February 2010

Maximum Value: 50.7 ppb on Feb 3 08:00		Maximum Daily Average: 25.8 ppb on Feb 8		Hours in Service: 672																							
Minimum Value: 2 ppb on Feb 25 15:00		Minimum Daily Average: 5.5 ppb on Feb 15		Hours of Data: 638																							
Maximum Diurnal Average: 17.9 ppb at hour 9		Minimum Diurnal Average: 11.9 ppb at hour 15		Hours of Missing Data: 34																							
Monthly Average: 15.02 ppb		Percentiles: P ₁ = 2.4 P ₁₀ = 5.2 Q ₁ = 7.9 Median = 12.6 Q ₃ = 21.6 P ₉₀ = 27.4 P ₉₉ = 38.0		Hours of Calibration: 33																							
				Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	N	16	13	16	A	9	11	10	15	16	11	9	7	7	10	9	14	16	20	14	12	12	25	29	13.6	29.0	
2-Feb	30	17	26	26	A	24	19	22	17	22	24	13	9	6	11	8	11	19	20	20	19	23	24	19	18.5	30.0	
3-Feb	24	17	19	16	A	18	16	51	14	12	9	9	7	7	10	14	10	14	15	8	10	8	9	8	14.1	50.7	
4-Feb	11	13	15	15	A	11	11	11	13	10	10	9	9	10	10	11	16	19	23	20	23	28	27	27	15.4	28.3	
5-Feb	25	23	23	19	A	21	24	20	18	20	8	8	7	7	7	9	10	12	14	16	14	11	11	11	14.7	24.6	
6-Feb	11	11	11	13	A	14	14	15	15	13	9	8	7	7	8	11	14	20	28	27	27	29	28	27	16.0	29.3	
7-Feb	26	27	26	25	A	34	32	24	24	23	24	14	19	22	22	22	24	34	30	31	29	27	30	25	25.8	34.5	
8-Feb	29	27	26	27	A	27	27	27	28	20	11	12	25	31	24	23	23	39	36	28	31	26	21	28	25.8	38.5	
9-Feb	32	33	33	30	A	20	14	12	13	10	7	13	8	4	3	5	8	14	7	24	17	10	12	8	14.6	33.2	
10-Feb	8	11	11	28	A	12	20	7	36	14	6	12	32	35	35	32	25	20	6	12	12	12	12	10	17.6	35.8	
11-Feb	8	14	11	31	A	27	24	37	14	23	19	14	C	C	C	C	C	28	23	38	39	19	33	30	23.9	39.2	
12-Feb	27	20	20	24	A	32	23	23	21	17	32	14	11	12	16	14	16	20	28	28	38	24	17	33	22.1	37.6	
13-Feb	27	22	19	27	A	24	28	32	23	17	25	25	22	15	24	20	24	28	36	22	15	16	16	13	22.7	36.0	
14-Feb	15	30	35	17	A	26	29	21	21	19	23	11	14	12	13	12	16	16	17	17	16	13	10	5	17.8	35.4	
15-Feb	4	3	12	2	A	5	3	6	6	5	4	9	5	6	6	3	5	6	4	12	3	5	5	7	5.5	11.9	
16-Feb	4	7	26	20	A	13	11	47	35	33	27	25	26	15	13	14	17	21	27	12	25	16	13	14	20.0	47.4	
17-Feb	11	20	8	7	A	5	3	26	12	11	11	10	7	8	8	16	7	13	8	6	20	2	4	5	9.9	25.6	
18-Feb	4	4	3	3	A	5	9	5	21	9	6	19	24	17	13	12	16	5	6	7	4	10	16	11	10.0	24.2	
19-Feb	7	8	10	22	A	6	10	10	11	8	9	15	15	20	18	20	22	18	19	23	14	11	18	17	14.5	23.0	
20-Feb	10	18	21	8	A	43	12	13	21	7	21	13	13	22	12	11	17	27	13	29	12	11	11	23	16.9	42.6	
21-Feb	18	11	12	16	A	14	11	8	6	4	7	11	3	3	3	3	3	13	13	24	22	7	6	6	9.6	23.6	
22-Feb	9	7	7	12	A	20	11	11	18	40	11	9	7	5	5	6	6	6	7	9	7	8	12	10	10.6	40.2	
23-Feb	6	5	5	5	A	7	8	7	7	6	7	8	6	7	9	24	19	13	15	9	6	8	6	5	8.7	23.6	
24-Feb	3	3	6	2	A	4	3	7	4	6	7	7	4	16	11	10	12	17	33	26	15	26	23	13	11.1	32.6	
25-Feb	11	7	6	5	A	7	7	7	7	6	8	10	6	6	2	3	3	3	7	8	8	13	4	16	7.1	15.8	
26-Feb	4	5	3	3	A	6	4	4	25	10	34	16	22	23	9	6	2	3	3	3	2	2	11	7	9.0	34.3	
27-Feb	8	7	9	29	A	25	12	7	25	29	12	11	8	7	7	10	9	9	22	13	24	12	10	10	13.7	29.4	
28-Feb	7	5	5	9	A	20	21	18	32	22	13	9	18	8	10	10	11	11	20	12	9	10	11	9	13.1	31.9	
		14.0	13.9	15.0	16.3	--	17.2	14.9	17.4	17.9	15.4	14.1	12.2	12.6	12.7	11.9	12.5	13.4	16.5	17.8	17.7	16.9	14.3	15.2	15.2	Diurnal Average	
		31.7	33.1	35.4	31.3	--	42.6	32.3	50.7	35.8	40.2	34.3	25.0	31.6	34.9	35.1	32.0	25.1	38.5	36.0	38.2	39.2	29.3	32.8	32.9	Diurnal Maximum	
C - Calibration					N - Not Valid					A - Automated Daily Zero Span																	

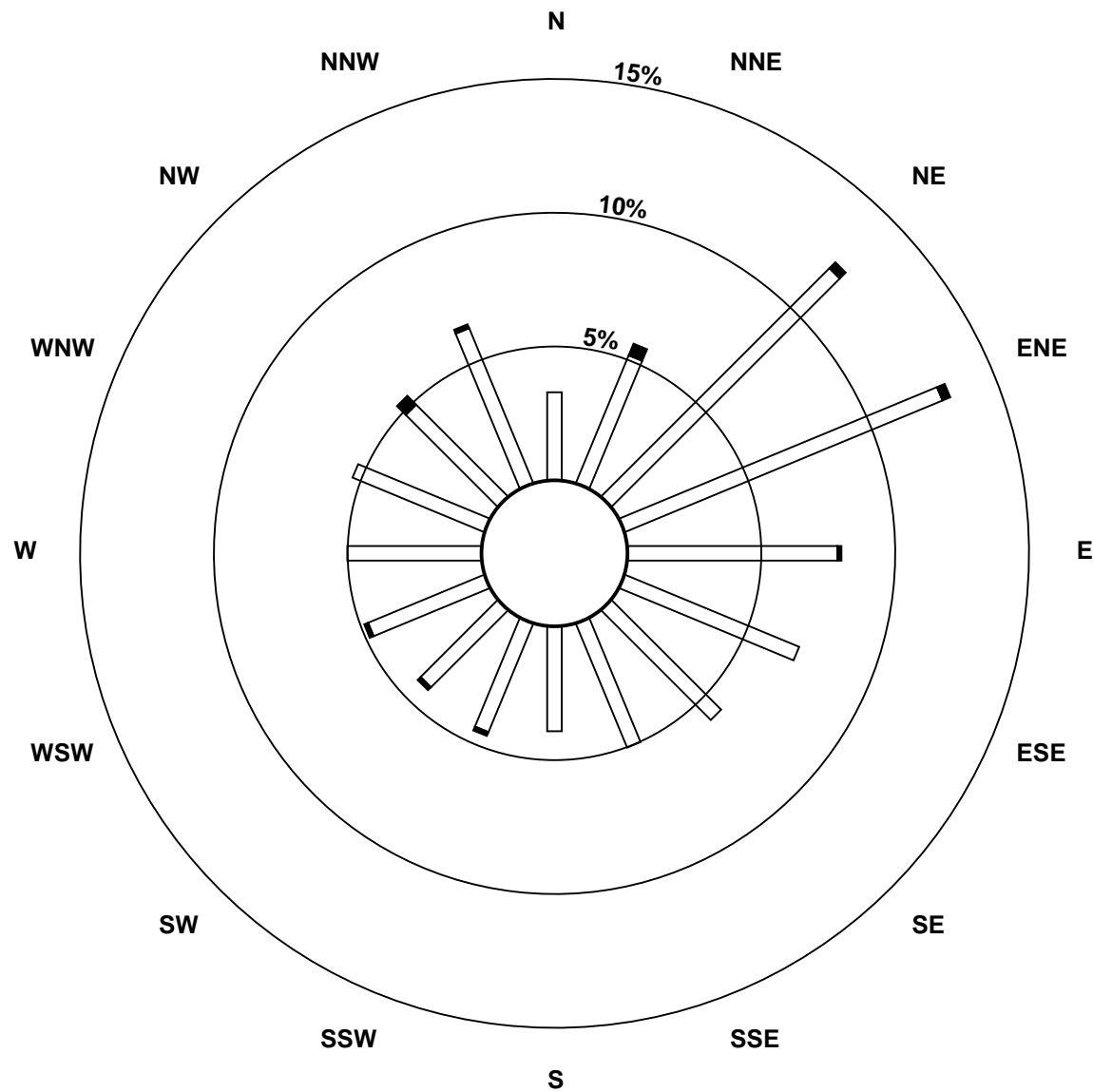
Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - February 2010

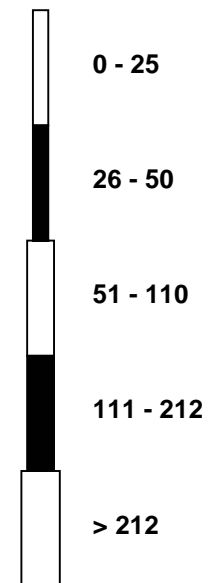


Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - February 2010



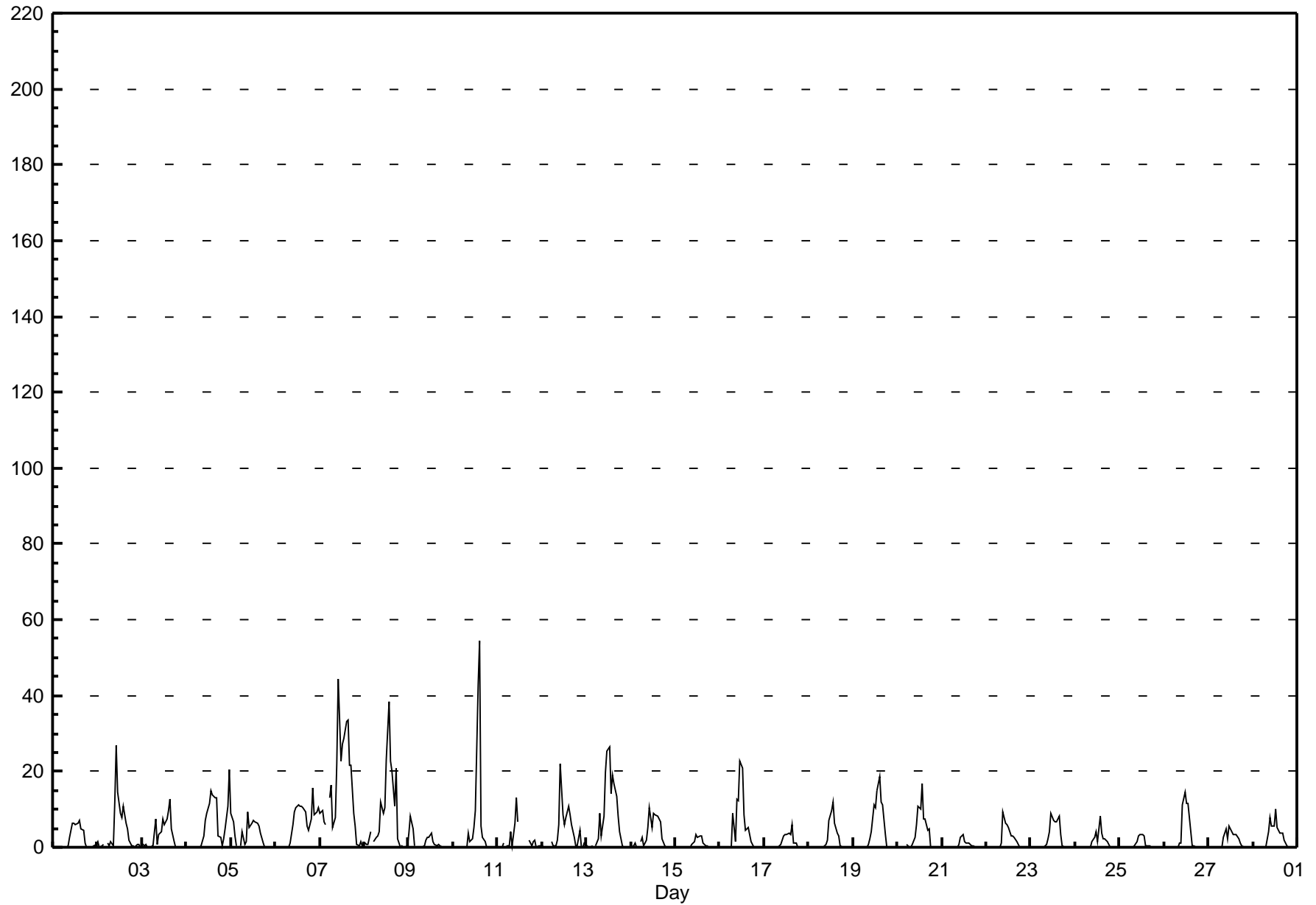
Pollutant Classes (ppb)



Hourly Averages

Nitrogen Oxide (NO) - ppb Beaverlodge - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 54.4 ppb on Feb 10 15:00 Maximum Daily Average: 15.1 ppb on Feb 7		Hours in Service: 672 Hours of Data: 638 Hours of Missing Data: 34 Hours of Calibration: 33 Percent Operational Time: 99.9																																														
Minimum Value: 0 ppb on Feb 1 02:00 Maximum Diurnal Average: 11.0 ppb at hour 14 Monthly Average: 3.56 ppb		Minimum Daily Average: 0.5 ppb on Feb 21 Minimum Diurnal Average: 0.5 ppb at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.5 Q ₃ = 4.9 P ₉₀ = 10.6 P ₉₉ = 33.1																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	N	0	0	0	A	0	0	0	0	3	6	6	6	6	7	5	5	1	0	0	0	0	0	1	2.1	7.2																						
2-Feb	2	0	0	1	A	1	0	1	1	12	27	14	9	8	11	6	5	2	0	0	0	1	1	0	4.5	26.8																						
3-Feb	1	0	1	0	A	0	1	7	1	3	4	7	6	7	10	13	5	2	0	0	0	0	0	0	2.9	12.6																						
4-Feb	0	0	0	0	A	0	0	0	0	3	7	9	12	15	14	13	13	3	2	0	2	5	11	20	5.7	20.5																						
5-Feb	9	7	3	0	A	1	4	1	2	9	5	6	7	7	6	5	4	1	0	0	0	0	0	0	3.3	9.2																						
6-Feb	0	0	0	0	A	0	0	0	1	6	9	11	11	11	11	10	9	6	4	8	16	9	9	10	6.2	15.6																						
7-Feb	9	10	7	6	A	13	16	5	8	22	44	23	27	29	33	33	22	22	9	6	1	1	2	0	15.1	44.3																						
8-Feb	1	1	1	4	A	1	2	3	4	12	9	10	23	38	23	20	11	21	2	0	0	0	0	0	8.2	38.3																						
9-Feb	4	8	5	0	A	0	0	0	0	2	2	3	4	1	1	1	1	0	0	0	0	0	0	0	1.4	8.1																						
10-Feb	0	0	0	0	A	0	0	0	4	2	2	5	10	43	54	6	2	2	0	0	0	0	0	0	5.6	54.4																						
11-Feb	0	0	0	1	A	0	0	4	0	6	13	7	C	C	C	C	C	2	0	2	2	0	1	0	2.2	13.2																						
12-Feb	0	0	0	0	A	1	0	0	2	6	22	9	6	8	11	9	6	3	0	0	5	0	0	1	3.9	22.2																						
13-Feb	0	0	0	0	A	0	2	9	3	8	20	26	26	14	19	17	13	8	4	0	0	0	0	0	7.4	26.4																						
14-Feb	0	0	1	0	A	2	3	0	2	5	11	5	9	8	8	8	7	2	0	0	0	0	0	0	3.1	10.6																						
15-Feb	0	0	0	0	A	0	0	0	0	1	1	3	3	3	3	1	1	0	0	0	0	0	0	0	0.7	3.3																						
16-Feb	0	0	0	0	A	0	0	9	2	13	12	23	21	8	4	5	4	2	0	0	0	0	0	0	4.4	22.6																						
17-Feb	0	0	0	0	A	0	0	0	0	1	3	4	3	4	3	6	1	1	0	0	0	0	0	0	1.1	5.9																						
18-Feb	0	0	0	0	A	0	0	0	0	1	2	7	10	12	6	4	3	0	0	0	0	0	0	0	2.0	11.8																						
19-Feb	0	0	0	0	A	0	0	0	1	2	4	11	10	15	18	12	11	3	0	0	0	0	0	0	3.9	18.5																						
20-Feb	0	0	0	0	A	1	0	0	1	3	6	11	10	17	8	8	4	5	0	0	0	0	0	0	3.1	16.8																						
21-Feb	0	0	0	0	A	0	0	0	0	1	2	3	1	1	1	1	0	0	0	0	0	0	0	0	0.5	3.3																						
22-Feb	0	0	0	0	A	0	0	0	1	9	6	6	5	3	3	3	2	1	0	0	0	0	0	0	1.7	9.5																						
23-Feb	0	0	0	0	A	0	0	0	1	2	4	9	7	7	7	8	3	0	0	0	0	0	0	0	2.1	9.0																						
24-Feb	0	0	0	0	A	0	0	0	0	2	3	4	2	8	4	2	2	1	1	0	0	0	0	0	1.2	8.1																						
25-Feb	0	0	0	0	A	0	0	0	0	2	3	3	3	3	0	1	0	0	0	0	0	0	0	0	0.7	3.4																						
26-Feb	0	0	0	0	A	0	0	0	1	1	11	15	12	12	4	1	0	0	0	0	0	0	0	0	2.5	14.7																						
27-Feb	0	0	0	0	A	0	0	0	3	5	2	6	4	3	3	3	2	1	0	0	0	0	0	0	1.5	5.6																						
28-Feb	0	0	0	0	A	0	0	0	4	8	6	6	10	5	4	4	4	2	0	0	0	0	0	0	2.3	10.2																						
																								1.0	0.9	0.6	0.5	--	0.8	1.0	1.5	1.5	5.3	8.9	9.0	9.5	11.0	10.3	7.5	5.2	3.3	0.9	0.6	0.9	0.5	0.8	1.2	Diurnal Average
																								9.0	9.6	6.8	6.0	--	13.0	16.4	9.0	7.8	22.0	44.3	25.5	27.1	43.0	54.4	33.4	21.7	21.8	9.1	7.6	15.6	8.7	10.7	20.5	Diurnal Maximum
C - Calibration N - Not Valid A - Automated Daily Zero Span																																																



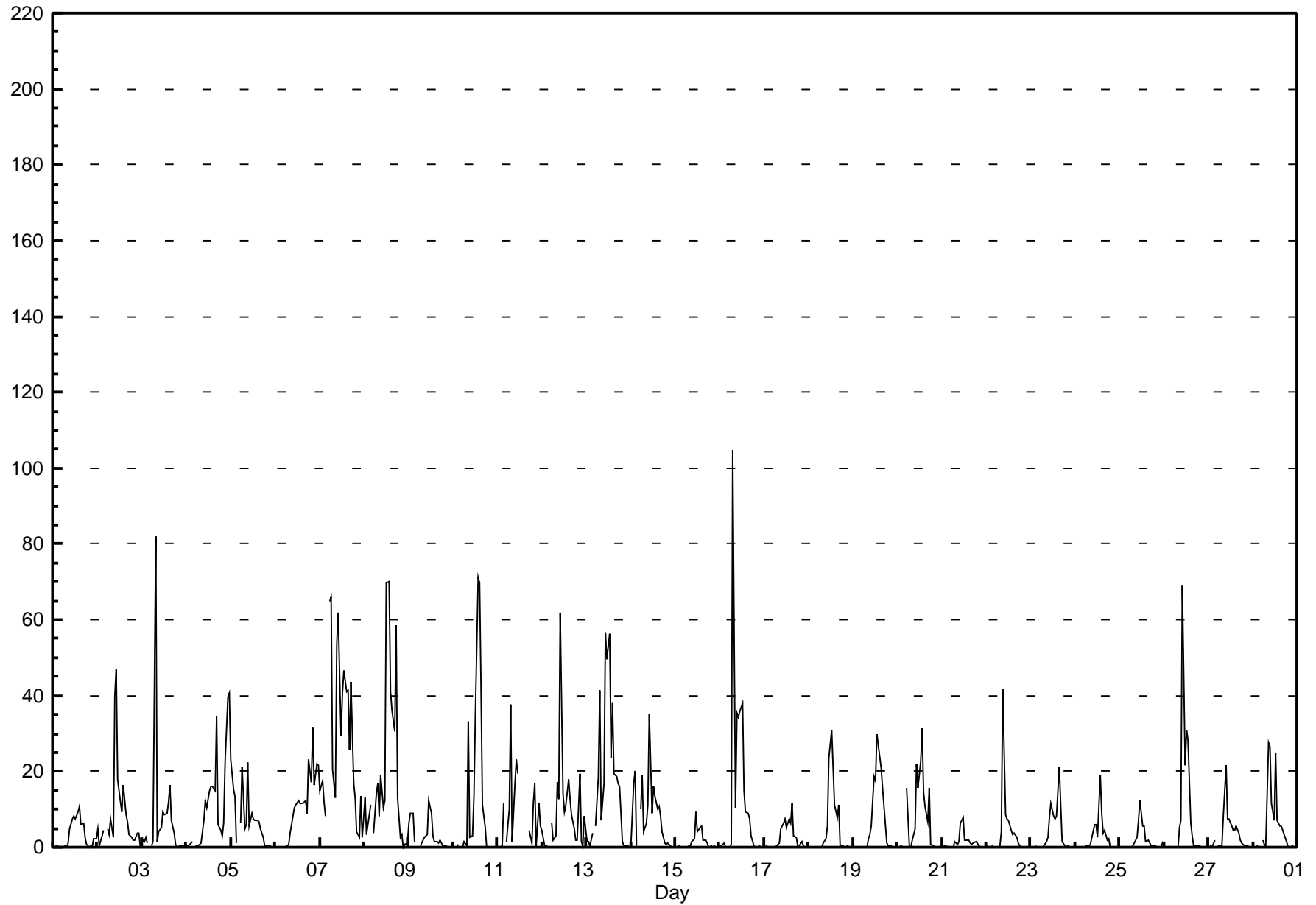
Hourly Maximums

Nitrogen Oxide (NO) - ppb Beaverlodge - February 2010

Maximum Value: 104.6 ppb on Feb 16 08:00		Maximum Daily Average: 28.4 ppb on Feb 7		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 1 22:00		Minimum Daily Average: 1.3 ppb on Feb 21		Hours of Data: 638																							
Maximum Diurnal Average: 19.4 ppb at hour 11		Minimum Diurnal Average: 1.8 ppb at hour 4		Hours of Missing Data: 34																							
Monthly Average: 7.91 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.2 Median = 2.0 Q ₃ = 9.5 P ₉₀ = 21.8 P ₉₉ = 69.5		Hours of Calibration: 33																							
				Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	N	0	0	0	A	0	0	0	1	5	8	8	7	9	11	6	6	3	1	0	0	0	2	2	3.2	10.6	
2-Feb	5	0	3	4	A	5	3	7	3	40	47	18	12	9	16	9	7	3	2	2	2	4	4	0	8.9	46.8	
3-Feb	2	1	3	1	A	0	1	82	1	4	5	9	8	9	12	17	7	4	1	0	0	0	0	0	7.3	81.9	
4-Feb	0	0	1	1	A	0	0	1	1	7	12	10	15	16	16	15	35	6	5	3	6	22	39	41	11.0	40.7	
5-Feb	23	15	13	1	A	6	21	5	6	23	6	9	8	7	7	7	5	2	0	0	0	0	0	0	7.2	23.0	
6-Feb	0	0	0	0	A	0	0	1	4	8	10	11	12	11	12	12	12	9	23	17	32	17	22	22	10.2	31.7	
7-Feb	15	17	12	8	A	65	66	20	13	54	62	29	41	47	41	41	26	44	17	13	4	2	13	2	28.4	66.1	
8-Feb	13	3	6	11	A	4	14	17	8	19	11	12	70	70	41	36	30	58	13	2	3	0	1	1	19.4	70.0	
9-Feb	6	9	9	2	A	0	0	1	2	3	3	12	9	3	2	2	1	2	0	0	0	0	0	0	2.9	12.2	
10-Feb	0	0	0	1	A	0	2	0	33	3	3	14	35	71	70	42	11	5	0	0	0	0	0	0	12.6	71.1	
11-Feb	0	0	0	11	A	2	10	38	1	17	23	19	C	C	C	C	C	4	1	12	17	0	12	5	9.6	37.6	
12-Feb	4	0	0	0	A	6	2	3	17	13	62	14	9	11	18	13	9	5	2	2	19	2	0	8	9.6	62.1	
13-Feb	2	1	0	4	A	6	19	41	7	17	57	50	56	24	38	19	19	17	16	1	0	0	0	0	17.1	56.6	
14-Feb	0	17	20	0	A	10	19	4	6	11	35	9	16	13	10	11	8	4	1	1	1	0	0	0	8.6	35.2	
15-Feb	0	0	0	0	A	0	0	0	0	2	2	9	4	5	5	2	2	1	0	0	0	0	0	0	1.5	9.5	
16-Feb	0	0	1	0	A	0	1	105	10	35	34	36	38	15	9	9	8	3	0	0	0	0	0	0	13.3	104.6	
17-Feb	0	1	0	0	A	0	0	1	1	5	6	7	5	7	6	12	3	3	0	0	1	0	0	0	2.6	11.7	
18-Feb	0	0	0	0	A	0	0	0	1	2	6	23	31	21	11	8	11	0	0	0	0	0	0	0	5.1	30.9	
19-Feb	0	0	0	0	A	0	0	0	2	3	5	18	18	30	24	21	16	6	1	0	0	0	0	0	6.3	29.8	
20-Feb	0	0	0	0	A	16	0	0	2	5	22	16	23	31	15	11	7	16	1	0	0	0	0	0	7.1	31.2	
21-Feb	0	0	0	0	A	0	0	2	1	1	6	8	2	2	2	1	1	1	1	1	0	0	0	0	1.3	7.8	
22-Feb	0	0	0	0	A	0	0	0	4	42	9	8	7	4	3	4	3	1	0	0	0	0	0	0	3.7	41.6	
23-Feb	0	0	0	0	A	0	0	0	1	3	8	11	8	8	8	21	11	2	0	0	0	0	0	0	3.6	21.4	
24-Feb	0	0	0	0	A	0	0	0	1	3	6	6	3	19	9	4	4	2	2	0	0	0	0	0	2.6	19.1	
25-Feb	0	0	0	0	A	0	0	0	1	3	7	12	6	5	1	2	1	0	0	0	0	0	0	1	1.8	12.2	
26-Feb	0	0	0	0	A	0	0	0	5	7	69	22	31	28	6	3	0	0	0	0	0	0	0	0	7.6	69.1	
27-Feb	0	0	0	2	A	0	0	0	8	22	7	8	5	4	5	6	4	2	1	0	0	0	0	0	3.3	21.7	
28-Feb	0	0	0	0	A	2	1	0	27	26	12	7	25	7	5	5	4	3	1	0	0	0	0	0	5.6	27.4	
		2.7	2.4	2.5	1.8	--	4.4	5.8	11.7	6.1	13.6	19.4	14.9	18.7	18.1	14.9	12.4	9.3	7.4	3.3	2.1	3.2	1.8	3.4	3.0	Diurnal Average	
		23.0	17.4	20.3	11.5	--	64.7	66.1	104.6	33.2	53.9	69.1	49.6	69.8	71.1	69.6	42.4	34.7	58.5	22.9	17.3	31.7	22.4	39.4	40.7	Diurnal Maximum	
C - Calibration		N - Not Valid				A - Automated Daily Zero Span																					

Hourly Maximums

Nitrogen Oxide (NO) - ppb
Beaverlodge - February 2010

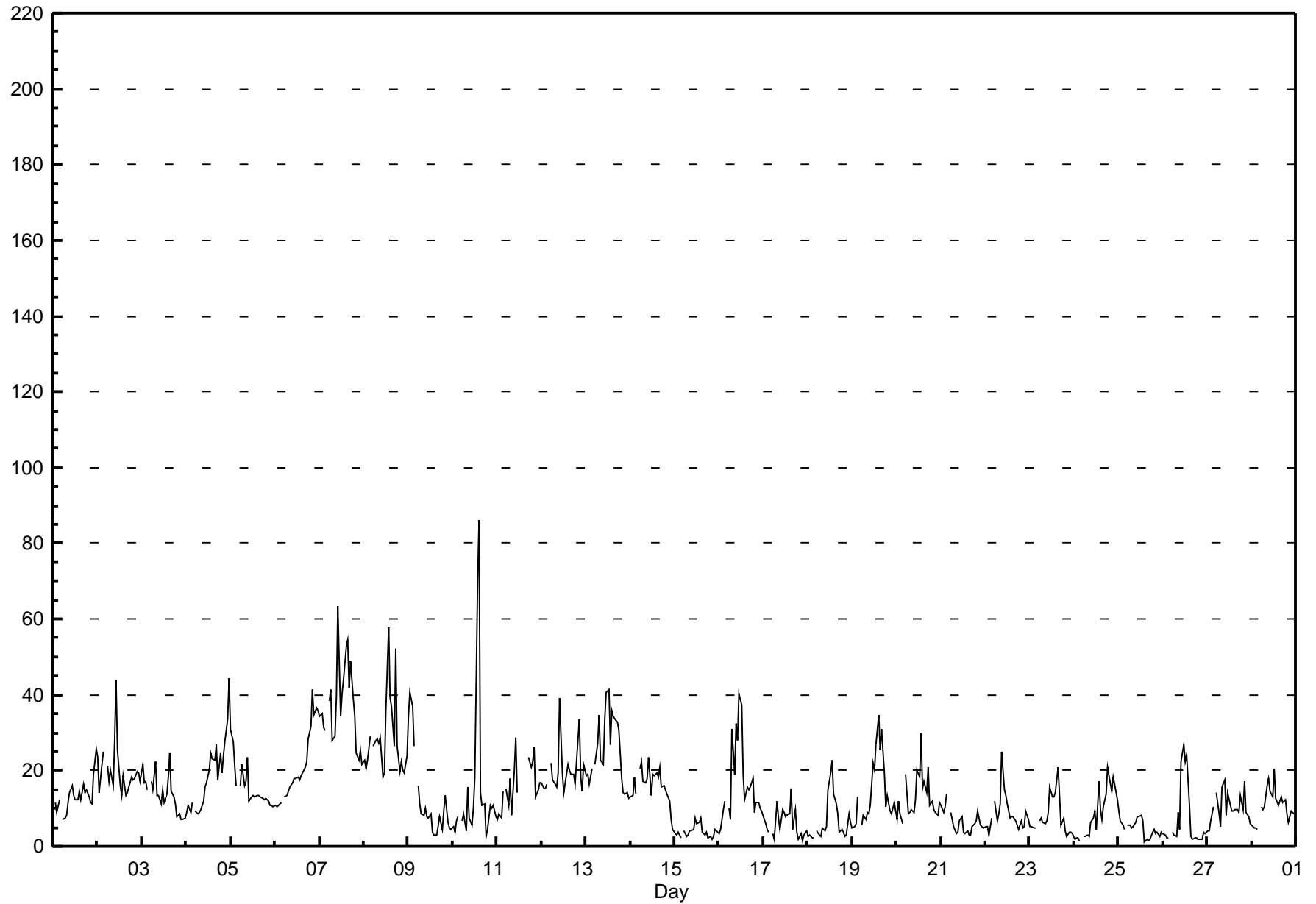


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 86.0 ppb on Feb 10 15:00 Maximum Daily Average: 37.2 ppb on Feb 7																	Hours in Service: 672 Hours of Data: 638 Hours of Missing Data: 34 Hours of Calibration: 33 Percent Operational Time: 99.9																								
Minimum Value: 1 ppb on Feb 25 15:00 Minimum Daily Average: 3.9 ppb on Feb 15 Maximum Diurnal Average: 20.1 ppb at hour 14 Minimum Diurnal Average: 11.4 ppb at hour 3 Monthly Average: 14.16 ppb Percentiles: P ₁ = 1.8 P ₁₀ = 3.6 Q ₁ = 6.6 Median = 11.8 Q ₃ = 18.7 P ₉₀ = 27.8 P ₉₉ = 51.1																																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																	
1-Feb	N	11	9	12	A	7	7	8	11	14	16	13	12	15	12	16	14	15	13	12	11	19	26	13.1	25.5																
2-Feb	24	14	22	25	A	21	17	20	16	28	44	25	16	14	19	13	14	16	18	18	18	20	20	17	19.9	44.2															
3-Feb	22	17	17	15	A	17	15	22	13	13	11	15	12	14	18	24	15	13	11	8	9	7	7	7	14.0	24.5															
4-Feb	9	11	9	11	A	9	9	9	10	12	16	17	20	25	23	23	27	18	25	19	24	28	34	44	18.7	44.3															
5-Feb	31	28	21	16	A	16	22	16	17	23	12	13	13	13	13	13	13	13	12	13	12	11	11	11	15.8	30.9															
6-Feb	11	10	11	12	A	13	13	14	16	17	18	18	18	19	19	21	22	28	32	42	35	37	36	20.8	41.6																
7-Feb	34	35	31	31	A	39	41	28	29	40	63	34	40	44	53	54	42	49	39	34	25	23	25	22	37.2	63.4															
8-Feb	23	21	23	29	A	26	28	28	27	19	18	19	36	58	39	37	26	52	27	20	22	20	20	24	28.3	58.0															
9-Feb	34	41	37	27	A	16	11	8	8	10	8	7	9	4	3	3	5	8	5	9	13	6	5	5	12.2	40.6															
10-Feb	5	4	7	8	A	7	8	4	16	7	5	10	18	70	86	14	11	11	3	4	11	10	11	8	14.7	86.0															
11-Feb	7	9	8	14	A	15	11	18	8	20	29	14	C	C	C	C	C	23	21	23	26	13	15	17	16.1	28.6															
12-Feb	17	15	15	16	A	22	17	16	16	20	39	19	14	17	22	20	19	19	16	22	33	18	15	22	19.6	39.3															
13-Feb	19	19	16	20	A	22	27	35	23	22	33	41	41	27	36	34	33	33	31	18	14	14	14	13	25.4	41.4															
14-Feb	13	14	18	14	A	21	22	17	17	18	24	13	19	19	19	18	21	16	16	15	14	12	7	4	16.1	23.7															
15-Feb	3	3	4	2	A	4	3	3	4	4	4	7	6	7	7	4	3	4	2	2	2	3	5	4	3.9	7.5															
16-Feb	3	5	10	12	A	10	7	31	19	33	28	40	37	19	12	16	15	16	18	9	12	12	10	9	16.6	40.4															
17-Feb	7	6	4	4	A	3	2	12	8	5	10	9	8	9	9	15	4	10	4	2	3	1	3	4	6.1	15.2															
18-Feb	3	3	2	2	A	4	3	3	5	4	5	15	19	23	14	11	9	4	5	4	2	3	8	6	6.8	22.9															
19-Feb	5	5	6	13	A	6	8	7	9	9	11	22	20	27	35	25	31	20	10	13	9	9	10	12	13.9	34.6															
20-Feb	7	12	9	6	A	19	9	9	10	9	12	20	18	30	15	17	14	21	11	12	10	9	8	12	13.0	29.8															
21-Feb	11	9	11	14	A	9	7	5	3	4	7	8	4	3	4	3	3	5	6	7	9	6	5	5	6.4	13.8															
22-Feb	5	5	3	7	A	12	7	9	11	25	15	14	11	7	8	8	7	6	4	7	5	5	9	7	8.6	24.9															
23-Feb	5	5	5	5	A	7	7	6	6	7	9	16	13	13	14	21	13	6	8	4	3	4	4	3	8.0	21.0															
24-Feb	2	2	2	2	A	3	2	3	3	6	7	9	4	17	10	7	11	14	21	19	14	18	16	12	8.9	20.9															
25-Feb	9	7	5	4	A	6	5	5	5	6	8	8	8	7	1	2	1	2	4	5	3	4	3	4	4.9	9.5															
26-Feb	3	3	2	2	A	4	3	3	9	4	22	27	22	24	11	2	2	2	2	2	2	2	4	4	7.1	26.8															
27-Feb	4	4	7	10	A	14	8	5	16	17	8	14	11	9	9	10	10	9	13	10	17	9	8	6	9.9	17.4															
28-Feb	5	5	5	5	A	10	10	11	16	18	14	13	20	13	11	12	13	12	12	9	6	9	9	8	10.7	20.5															
																	11.9	11.5	11.4	12.1	--	12.9	11.8	12.7	12.5	15.1	17.8	17.2	17.5	20.1	19.5	16.3	14.8	15.6	13.8	12.5	13.3	11.4	12.2	12.5	Diurnal Average
																	34.3	40.6	37.0	30.5	--	38.5	41.4	34.5	29.2	39.5	63.4	40.5	41.4	70.2	86.0	54.4	41.7	52.1	38.8	34.3	41.6	34.7	36.7	44.3	Diurnal Maximum
C - Calibration					N - Not Valid					A - Automated Daily Zero Span																															



Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

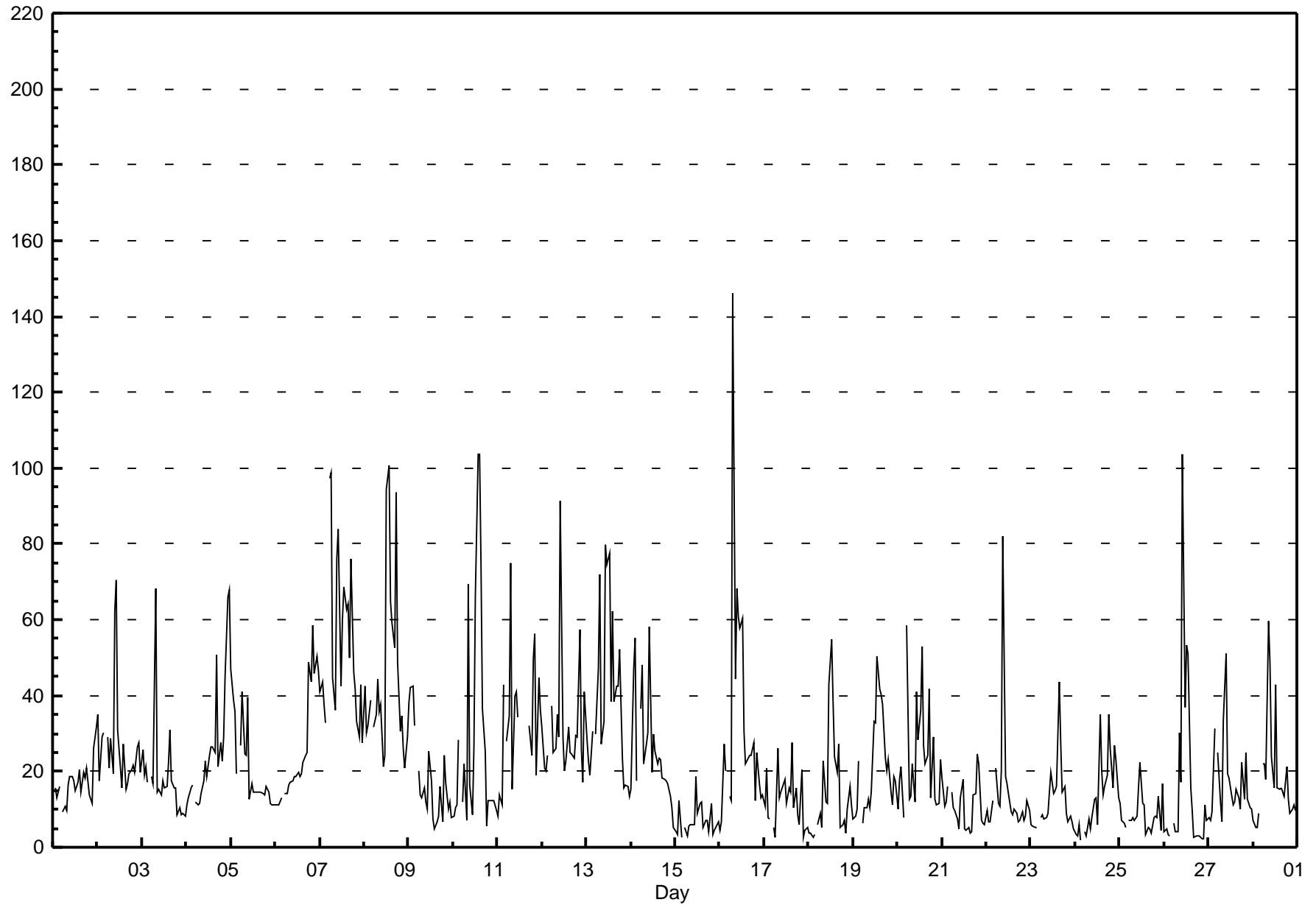
Beaverlodge - February 2010

Maximum Value: 146.0 ppb on Feb 16 08:00		Maximum Daily Average: 53.8 ppb on Feb 7		Hours in Service: 672																									
Minimum Value: 2 ppb on Feb 24 04:00		Minimum Daily Average: 6.9 ppb on Feb 15		Hours of Data: 638																									
Maximum Diurnal Average: 33.0 ppb at hour 11		Minimum Diurnal Average: 15.9 ppb at hour 22		Hours of Missing Data: 34																									
Monthly Average: 22.63 ppb		Percentiles: P ₁ = 2.6 P ₁₀ = 5.7 Q ₁ = 10.2 Median = 16.7 Q ₃ = 28.4 P ₉₀ = 46.9 P ₉₉ = 96.9		Hours of Calibration: 33																									
				Percent Operational Time: 99.9																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-Feb	N	16	13	16	A	9	11	10	16	19	19	17	15	17	21	15	20	18	21	14	13	12	26	32	16.7	31.7			
2-Feb	35	17	29	30	A	29	21	29	19	62	71	31	21	16	27	15	17	19	21	22	20	27	28	20	27.2	70.6			
3-Feb	26	19	21	17	A	19	17	68	15	15	14	18	16	16	22	31	17	15	16	8	10	8	9	8	18.5	68.1			
4-Feb	11	13	16	16	A	12	11	12	14	18	23	19	24	26	27	25	51	21	28	23	29	45	66	68	26.0	68.0			
5-Feb	47	39	36	19	A	27	41	25	24	39	13	17	15	15	15	15	14	14	14	16	15	11	11	11	21.4	46.9			
6-Feb	11	11	11	13	A	14	14	16	17	17	18	19	20	19	19	23	24	25	49	44	58	46	50	47	25.5	58.5			
7-Feb	41	44	37	33	A	97	99	45	36	76	84	43	60	69	63	64	50	76	46	42	33	29	43	27	53.8	98.6			
8-Feb	43	30	32	39	A	32	35	44	36	38	21	24	94	101	65	59	53	94	49	30	35	26	21	29	44.7	100.6			
9-Feb	38	42	42	32	A	20	14	13	16	12	10	25	18	7	5	7	8	16	7	24	17	10	12	8	17.6	42.4			
10-Feb	8	11	11	29	A	12	22	7	69	17	9	26	66	104	104	74	36	25	6	12	12	12	12	10	30.2	103.8			
11-Feb	8	14	11	43	A	28	35	75	15	40	41	34	C	C	C	C	C	32	24	50	56	19	45	36	33.7	74.8			
12-Feb	32	21	20	24	A	37	25	26	35	29	91	29	20	23	32	25	25	23	30	29	57	26	17	41	31.2	91.3			
13-Feb	28	23	19	31	A	30	47	72	27	33	80	74	78	39	62	38	42	43	52	23	16	16	16	13	39.2	79.7			
14-Feb	15	47	55	18	A	36	48	22	27	30	58	20	30	25	22	23	23	18	18	18	17	13	10	5	26.1	58.0			
15-Feb	4	3	12	2	A	5	3	6	6	6	6	19	9	11	12	5	7	7	4	12	3	5	5	7	6.9	18.6			
16-Feb	4	7	27	20	A	14	12	146	44	68	61	58	60	31	22	23	24	24	28	12	25	17	13	14	32.8	146.0			
17-Feb	11	21	8	7	A	5	3	26	13	14	17	18	12	16	15	27	11	16	9	6	20	3	4	5	12.4	27.4			
18-Feb	4	4	3	3	A	6	9	5	23	12	12	43	55	39	24	20	27	5	6	7	4	10	16	11	15.1	54.8			
19-Feb	7	8	10	23	A	7	10	10	13	10	14	33	33	50	42	40	38	23	20	23	14	11	19	18	20.8	50.2			
20-Feb	10	18	21	8	A	58	13	13	22	12	41	28	36	53	27	22	24	42	13	29	13	11	12	23	23.9	58.4			
21-Feb	18	11	12	16	A	14	11	10	7	5	13	18	5	4	5	4	4	14	14	25	22	7	6	6	10.9	24.7			
22-Feb	10	7	7	12	A	21	11	11	20	82	19	17	14	9	9	10	9	7	7	9	7	8	12	10	14.3	82.2			
23-Feb	6	6	5	5	A	8	9	8	8	9	14	20	14	15	16	44	28	14	16	9	7	8	7	5	12.1	43.6			
24-Feb	3	3	6	2	A	4	3	8	5	8	13	13	6	35	20	14	16	19	35	26	16	27	23	13	13.8	35.2			
25-Feb	11	7	6	5	A	7	7	8	7	8	16	22	12	11	3	5	5	4	8	8	8	13	4	17	8.8	22.4			
26-Feb	4	5	3	3	A	6	4	4	30	17	104	37	53	51	16	10	3	3	3	3	2	2	11	7	16.6	103.6			
27-Feb	8	7	9	31	A	25	12	7	34	51	19	18	13	11	12	15	13	10	23	13	25	13	10	10	17.0	51.2			
28-Feb	7	5	5	9	A	22	22	18	60	48	24	16	43	16	15	16	15	13	21	13	9	10	11	10	18.6	59.7			
		16.7	16.3	17.6	18.1	--	21.6	20.3	26.5	23.5	28.5	33.0	27.0	31.1	30.7	26.7	24.8	22.3	22.9	20.9	19.6	20.1	15.9	18.6	18.2	Diurnal Average			
		46.9	47.2	55.2	43.0	--	97.4	98.6	146.0	69.2	82.2	103.6	74.5	94.3	103.8	103.7	74.5	52.6	93.6	52.2	49.7	58.5	45.9	65.9	68.0	Diurnal Maximum			
C - Calibration		N - Not Valid				A - Automated Daily Zero Span																							

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - February 2010



Hourly Averages

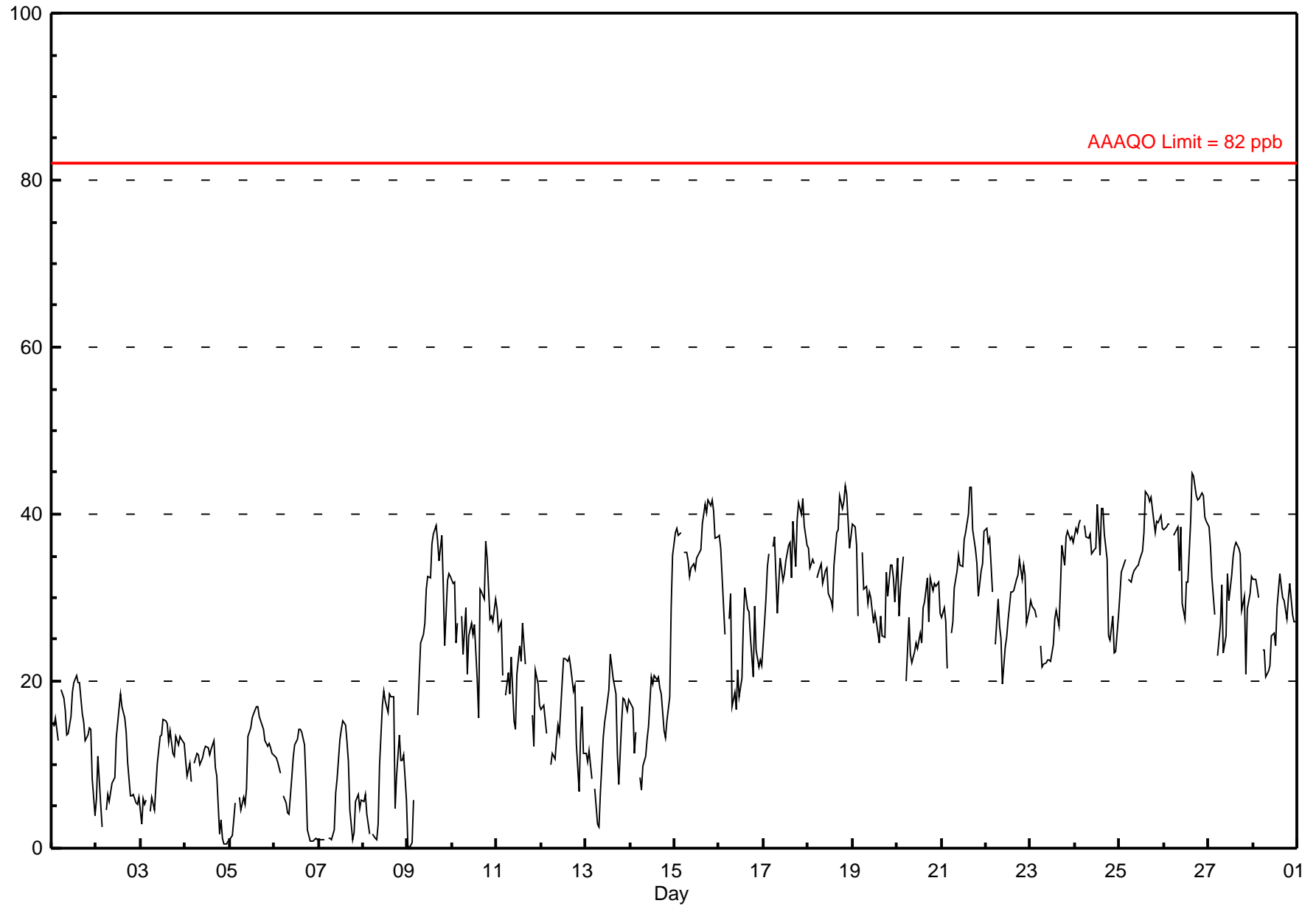
Ozone (O₃) - ppb

Beaverlodge - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 672
Maximum Value: 44.9 ppb on Feb 26 16:00	Maximum Daily Average: 38.2 ppb on Feb 26
Minimum Value: 0 ppb on Feb 9 02:00	Hours of Data: 640
Maximum Diurnal Average: 27.5 ppb at hour 16	Hours of Missing Data: 32
Monthly Average: 23.21 ppb	Hours of Calibration: 31
Minimum Daily Average: 5.9 ppb on Feb 7	Percent Operational Time: 99.9
Minimum Diurnal Average: 19.6 ppb at hour 9	
Percentiles: P ₁ = 0.9 P ₁₀ = 6.0 Q ₁ = 13.4 Median = 24.4 Q ₃ = 33.3 P ₉₀ = 37.8 P ₉₉ = 42.4	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	N	15	16	13	A	19	18	16	14	14	16	19	20	21	20	20	16	15	13	14	14	14	8	4	15.3	20.8																						
2-Feb	6	11	5	3	A	5	6	6	8	8	9	13	17	18	17	16	14	10	6	6	6	5	5	6	9.0	18.4																						
3-Feb	3	6	5	6	A	4	6	5	8	10	13	14	15	15	15	13	14	11	11	13	12	13	13	13	10.4	15.5																						
4-Feb	11	9	10	8	A	10	11	11	10	11	12	12	12	11	12	13	10	9	2	3	1	1	0	1	8.2	12.9																						
5-Feb	1	2	3	5	A	6	5	6	5	7	13	14	16	16	17	17	16	15	14	13	12	12	12	11	10.4	17.0																						
6-Feb	11	11	10	9	A	6	5	4	4	8	11	12	13	14	14	14	12	8	2	1	1	1	1	1	7.6	14.2																						
7-Feb	1	1	1	1	A	1	1	1	2	7	8	13	14	15	15	13	10	5	1	2	6	7	5	6	5.9	15.3																						
8-Feb	6	6	4	2	A	2	1	1	3	10	17	19	18	16	19	18	18	5	9	14	11	11	6	6	9.8	18.7																						
9-Feb	0	0	1	6	A	16	20	25	26	27	31	32	32	36	38	39	37	34	37	31	24	32	33	33	25.7	38.7																						
10-Feb	32	32	25	27	A	28	23	29	21	25	27	26	27	20	16	31	31	30	37	35	27	28	27	30	27.5	36.8																						
11-Feb	29	26	27	21	A	18	21	18	23	15	14	21	24	22	27	22	C	C	C	16	12	21	20	17	20.8	28.6																						
12-Feb	17	17	15	14	A	10	11	11	13	15	14	20	23	23	22	23	22	19	19	13	7	14	17	11	16.0	22.9																						
13-Feb	11	10	12	8	A	7	3	3	7	13	15	16	19	23	22	20	18	11	8	15	18	18	16	18	13.6	23.3																						
14-Feb	18	17	11	14	A	9	7	10	11	13	14	21	20	21	20	20	19	19	14	13	15	18	29	35	16.8	35.1																						
15-Feb	38	38	37	38	A	35	35	34	32	34	34	33	35	35	36	39	41	40	42	41	42	40	37	37	37.2	41.7																						
16-Feb	37	36	29	26	A	27	31	17	19	17	21	18	20	27	31	29	28	25	21	29	24	22	22	22	25.1	37.4																						
17-Feb	27	30	34	35	A	36	37	28	32	35	32	33	34	36	37	32	39	34	39	41	40	42	39	36	35.2	41.9																						
18-Feb	36	34	35	34	A	32	34	34	32	33	33	30	30	29	34	38	38	42	41	42	43	42	36	37	35.6	43.4																						
19-Feb	39	38	36	28	A	35	31	31	29	31	30	27	28	27	25	28	25	25	33	30	34	34	32	30	30.8	38.8																						
20-Feb	35	28	31	35	A	20	28	23	22	24	25	24	26	25	29	29	32	27	32	31	32	31	32	28	28.2	35.0																						
21-Feb	28	29	27	21	A	26	27	31	33	35	34	34	37	38	40	43	43	38	36	34	30	33	34	38	33.5	43.2																						
22-Feb	38	37	37	31	A	24	30	27	25	20	24	25	27	31	31	31	32	33	35	32	34	33	27	28	30.0	38.3																						
23-Feb	30	29	28	28	A	24	22	22	22	23	23	22	24	27	28	27	31	36	34	37	38	37	37	37	29.0	38.0																						
24-Feb	38	38	39	39	A	39	37	37	38	35	36	36	41	35	41	41	38	35	25	25	28	23	23	28	34.5	41.2																						
25-Feb	30	33	34	35	A	32	32	33	33	34	34	35	36	38	43	42	42	42	39	38	39	39	40	38	36.5	42.8																						
26-Feb	38	39	39	39	A	37	38	39	33	38	29	27	32	32	39	45	45	42	42	42	42	42	40	39	38.2	44.9																						
27-Feb	38	36	32	28	A	23	27	31	23	25	33	30	33	35	36	37	36	35	28	30	21	29	31	32	30.9	38.4																						
28-Feb	32	32	31	30	A	24	24	21	21	22	25	26	24	29	33	31	30	30	27	30	32	28	27	27	27.7	32.9																						
																								23.3	22.8	22.0	20.8	--	19.9	20.4	19.8	19.6	21.0	22.4	23.3	24.9	25.6	26.9	27.5	27.3	25.0	24.0	24.0	23.1	23.9	23.4	23.2	Diurnal Average
																								38.8	38.6	38.8	39.3	--	38.6	37.8	38.6	37.6	38.5	35.7	36.0	41.2	37.8	42.8	44.9	44.6	42.3	41.7	41.9	43.4	42.4	39.8	39.2	Diurnal Maximum

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



Hourly Maximums

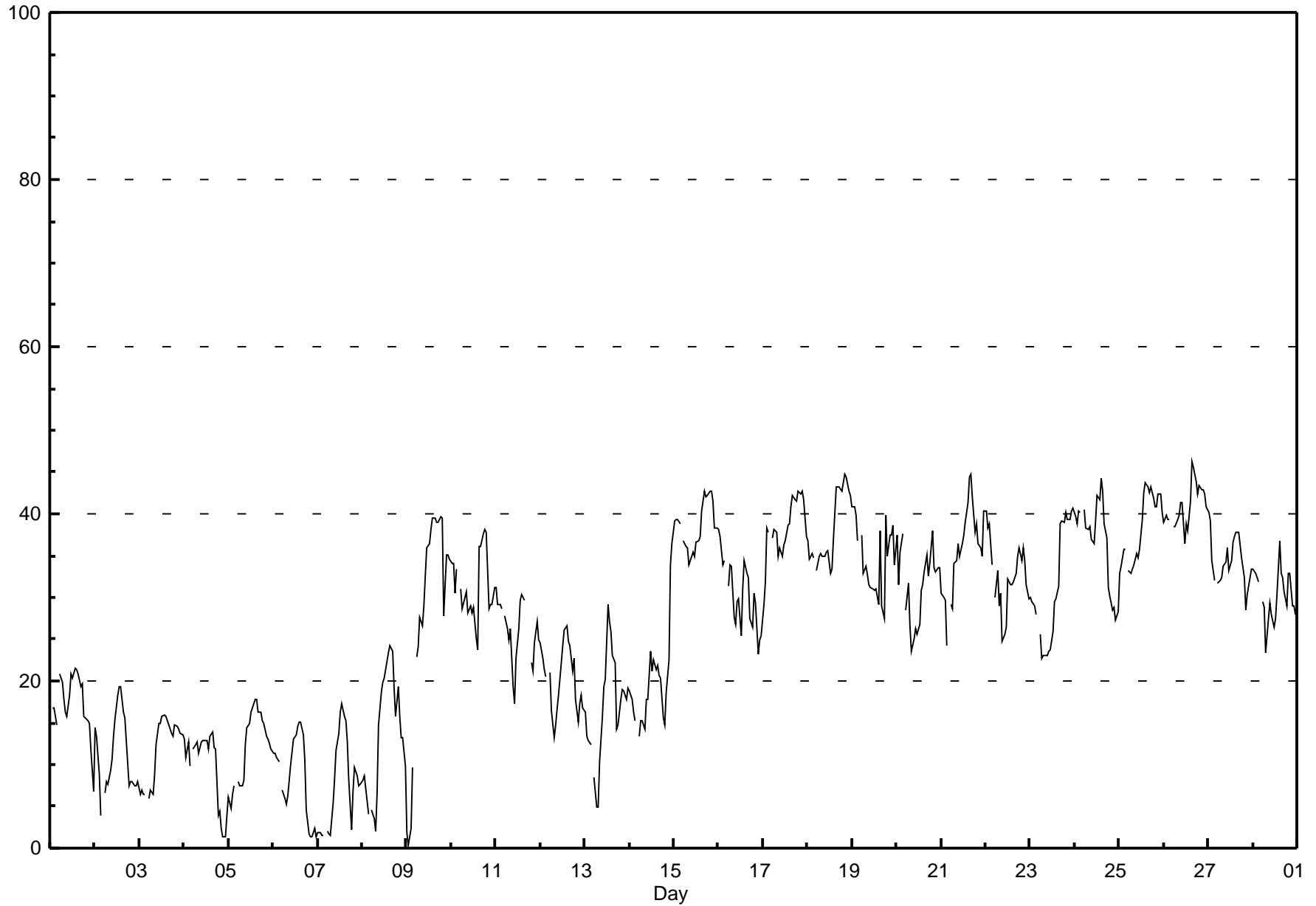
Ozone (O₃) - ppb

Beaverlodge - February 2010

Maximum Value: 46.3 ppb on Feb 26 16:00		Maximum Daily Average: 40.9 ppb on Feb 26		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 9 02:00		Minimum Daily Average: 7.8 ppb on Feb 7		Hours of Data: 640																							
Maximum Diurnal Average: 30.4 ppb at hour 16		Minimum Diurnal Average: 22.6 ppb at hour 8		Hours of Missing Data: 32																							
Monthly Average: 25.97 ppb		Percentiles: P ₁ = 1.4 P ₁₀ = 8.1 Q ₁ = 15.4 Median = 28.8 Q ₃ = 36.0 P ₉₀ = 40.1 P ₉₉ = 44.2		Hours of Calibration: 31																							
				Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	N	17	17	15	A	21	20	18	16	16	18	21	20	22	21	21	19	20	16	15	15	15	12	7	17.3	21.6	
2-Feb	14	13	9	4	A	7	8	8	9	11	13	15	18	19	19	16	16	13	7	8	8	7	7	8	11.3	19.3	
3-Feb	7	7	6	6	A	6	7	6	9	12	15	15	16	16	16	15	15	14	13	15	15	14	14	14	11.8	16.0	
4-Feb	13	11	13	10	A	12	12	13	11	13	13	13	13	12	13	14	12	12	4	4	2	1	1	4	9.8	13.8	
5-Feb	6	5	6	7	A	8	7	7	8	12	14	15	16	17	18	18	16	16	15	15	13	13	13	12	12.2	17.8	
6-Feb	11	11	11	10	A	7	6	5	6	10	11	13	14	15	15	15	14	10	5	2	1	1	2	1	8.6	15.0	
7-Feb	2	2	1	1	A	2	2	1	5	8	12	14	16	17	16	15	13	8	2	7	10	9	8	8	7.8	17.2	
8-Feb	8	9	7	4	A	5	4	2	7	15	19	20	20	22	23	24	24	19	16	19	16	13	13	10	13.8	24.3	
9-Feb	2	0	2	10	A	23	24	28	27	29	33	36	37	38	39	39	39	39	40	39	28	35	35	35	28.5	39.7	
10-Feb	34	34	31	33	A	31	29	30	31	28	29	28	29	25	24	36	36	38	38	38	29	29	29	31	31.3	38.1	
11-Feb	31	29	29	29	A	28	26	25	26	19	17	23	26	30	30	30	C	C	C	22	21	25	27	25	25.9	31.2	
12-Feb	25	23	21	21	A	21	16	13	15	17	18	22	24	26	27	25	24	21	23	18	15	17	18	17	20.3	26.6	
13-Feb	16	13	13	12	A	8	5	5	10	16	19	20	29	27	26	23	22	14	15	18	19	19	18	19	16.9	29.2	
14-Feb	19	18	16	15	A	13	15	15	14	18	18	24	21	23	21	22	21	20	16	15	19	23	34	36	19.8	36.4	
15-Feb	39	39	39	39	A	37	36	36	34	34	35	35	37	37	37	40	43	42	42	43	43	42	38	38	38.5	42.7	
16-Feb	38	37	34	34	A	31	34	34	28	27	29	30	25	31	34	33	32	27	26	30	29	23	25	25	30.4	38.1	
17-Feb	29	32	38	38	A	37	38	38	35	36	35	36	37	39	39	41	42	42	42	43	42	43	42	37	38.3	42.8	
18-Feb	37	35	35	35	A	33	35	35	35	35	35	36	33	33	37	43	43	43	43	44	45	44	43	42	38.2	44.8	
19-Feb	41	41	40	37	A	37	33	34	33	31	31	31	31	31	29	38	29	28	40	35	37	37	39	34	34.6	40.8	
20-Feb	37	31	35	38	A	29	32	27	24	25	26	26	27	31	31	33	35	33	34	38	34	33	34	33	31.5	38.0	
21-Feb	31	30	30	24	A	29	29	34	34	36	35	36	38	39	41	44	45	42	38	39	36	36	35	40	35.7	44.8	
22-Feb	40	38	39	34	A	30	33	29	30	25	26	27	32	32	31	32	33	35	36	34	36	34	31	30	32.5	40.4	
23-Feb	30	29	29	28	A	26	23	23	23	23	24	24	26	29	30	31	39	39	39	40	39	39	40	41	31.1	40.6	
24-Feb	40	39	40	40	A	41	38	38	38	37	36	39	42	42	44	43	39	37	31	30	29	29	27	28	36.9	44.2	
25-Feb	33	34	36	36	A	33	33	33	34	35	35	36	39	43	44	43	43	43	42	41	41	42	42	40	38.3	43.7	
26-Feb	39	40	39	39	A	38	38	39	40	41	41	36	39	38	42	46	46	44	42	43	43	43	42	41	40.9	46.3	
27-Feb	40	39	34	32	A	32	32	32	34	34	36	33	34	37	37	38	38	36	35	32	29	30	32	33	34.4	40.1	
28-Feb	33	33	32	32	A	30	29	23	27	29	28	26	27	30	37	33	32	31	29	33	33	29	29	28	30.2	36.8	
		25.8	24.6	24.5	23.7	--	23.3	23.0	22.6	23.0	24.1	25.1	26.0	27.4	28.5	29.4	30.4	29.9	28.4	27.0	27.2	25.9	26.0	26.1	25.6	Diurnal Average	
		40.8	40.8	40.3	40.2	--	40.6	38.4	39.4	39.9	41.3	41.4	39.2	42.2	42.6	44.2	46.3	45.7	43.8	42.8	43.8	44.8	44.4	42.8	42.2	Diurnal Maximum	
C - Calibration		N - Not Valid				A - Automated Daily Zero Span																					

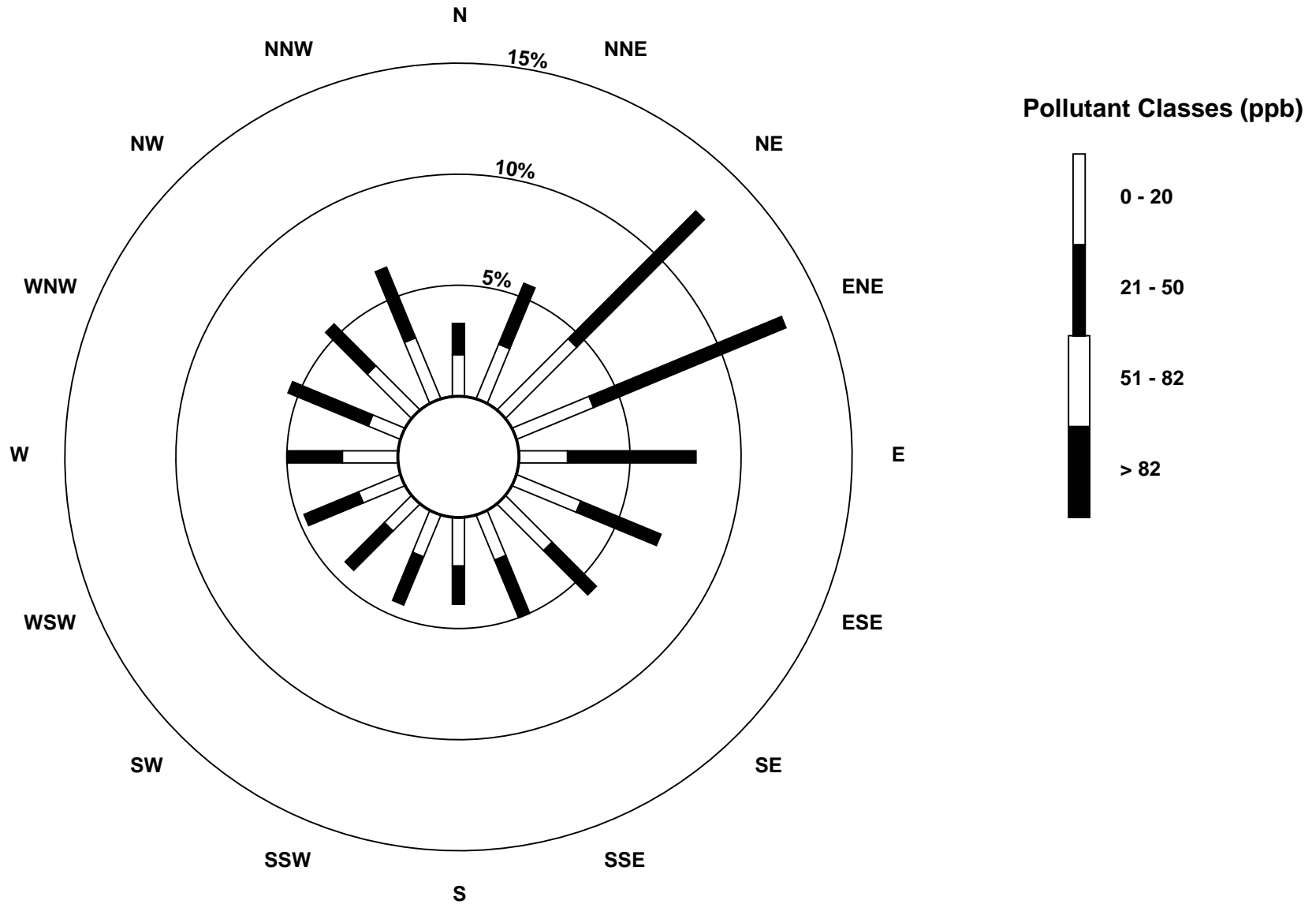
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - February 2010



Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - February 2010



Eight Hour Running Averages

Ozone (O₃) - ppb

Beaverlodge - February 2010

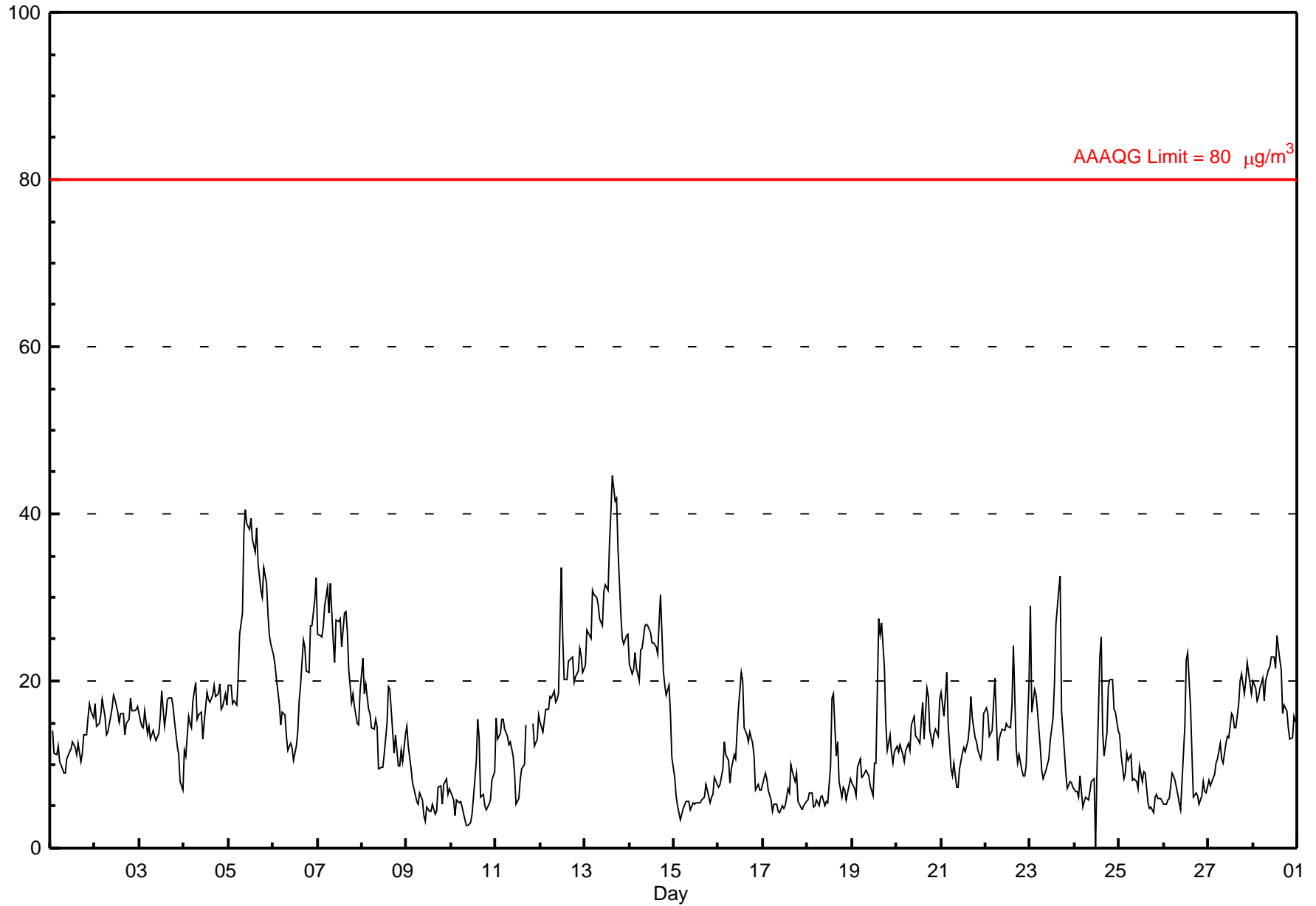
Maximum Value: 42.5 ppb on Feb 26 23:00																					Hours in Service:	672			
Minimum Value: 1.0 ppb on Feb 7 03:00																					Hours of Data:	666			
Percentiles: P ₁ = 1.2 P ₁₀ = 7.1 Q ₁ = 12.6 Median = 25.6 Q ₃ = 33.0 P ₉₀ = 37.3 P ₉₉ = 40.3																					Hours of Missing Data:	6			
																					Hours of Calibration:	6			
																					Percent Operational Time:	100.0			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	16	14	14	13	13	14	15	16	16	16	16	16	17	17	17	18	18	18	18	17	17	16	14	12	18.2
2-Feb	11	11	10	8	7	6	6	6	6	6	6	8	9	11	12	13	14	14	14	13	12	10	9	7	14.2
3-Feb	6	6	5	5	5	5	5	5	6	6	7	9	9	11	12	13	14	14	14	14	13	13	13	13	13.8
4-Feb	12	12	12	11	11	10	10	10	10	10	10	11	11	11	11	12	12	11	10	9	8	6	5	3	12.2
5-Feb	2	1	2	2	2	3	3	4	5	5	7	8	9	10	12	13	15	16	16	15	15	15	14	13	15.6
6-Feb	13	12	12	11	11	10	9	8	7	7	7	7	8	9	10	11	12	12	11	10	8	7	5	3	12.6
7-Feb	2	1	1	1	1	1	1	1	1	2	3	5	6	8	9	11	12	12	11	9	8	7	6	5	11.9
8-Feb	4	5	5	5	5	4	4	3	3	3	5	8	9	11	13	15	17	16	15	14	14	13	12	10	16.8
9-Feb	8	8	7	6	5	6	7	10	13	17	21	25	26	29	31	33	34	35	36	36	35	34	33	33	35.8
10-Feb	32	32	30	30	30	30	28	28	26	25	26	26	26	25	24	24	25	26	27	28	28	29	31	31	32.1
11-Feb	30	30	29	27	27	25	25	23	22	21	19	19	19	20	21	21	21	22	N	N	N	N	N	N	30.3
12-Feb	17	17	17	17	17	16	14	14	13	13	12	13	15	16	17	19	20	21	21	20	18	17	17	15	21.3
13-Feb	14	13	12	11	12	11	9	8	7	8	8	9	10	12	15	17	18	18	17	17	17	16	16	15	18.4
14-Feb	15	16	16	16	16	15	13	12	11	11	11	12	13	14	16	18	19	19	19	18	18	17	18	20	20.3
15-Feb	23	25	28	31	33	36	37	37	36	35	35	34	34	34	34	35	36	37	38	39	39	40	40	40	40.3
16-Feb	40	39	37	36	35	33	32	29	26	24	22	21	21	21	21	23	24	25	25	26	27	26	25	24	39.6
17-Feb	24	25	26	27	27	30	32	33	33	34	34	33	33	33	33	34	35	35	36	37	37	38	38	39	38.8
18-Feb	38	38	38	37	36	35	34	34	33	33	33	32	32	32	32	33	34	35	37	38	40	40	40	40	40.3
19-Feb	40	40	39	38	37	36	35	34	33	32	31	31	30	29	28	28	28	27	27	28	28	29	30	30	40.3
20-Feb	32	32	32	32	32	30	29	29	27	26	25	24	24	24	25	25	27	27	28	29	30	31	31	31	32.3
21-Feb	30	30	30	29	28	27	27	27	28	29	30	31	32	34	35	37	38	38	39	39	38	37	36	36	38.6
22-Feb	35	35	35	35	35	34	34	32	30	28	26	25	25	26	26	27	28	29	31	31	32	33	32	32	35.5
23-Feb	31	31	30	30	29	28	27	26	25	24	23	23	23	23	24	25	26	27	29	31	32	34	35	36	35.9
24-Feb	37	37	38	38	38	38	38	38	38	38	37	37	37	37	37	38	38	38	38	36	35	33	32	30	38.2
25-Feb	27	27	28	29	30	31	32	33	33	33	33	33	33	34	36	37	38	39	39	40	40	40	40	40	40.5
26-Feb	39	39	39	39	39	39	38	38	38	38	36	35	34	34	34	35	36	36	38	40	41	42	42	42	42.5
27-Feb	41	40	39	37	37	34	32	31	29	27	27	28	28	30	31	31	33	34	34	34	32	31	31	30	41.0
28-Feb	30	29	30	30	31	30	29	28	26	25	24	23	23	24	25	26	28	29	29	29	30	30	29	29	31.0
41.0 40.2 39.3 38.8 38.8 38.6 38.3 38.3 38.1 37.7 37.3 36.8 37.4 36.9 37.3 37.8 38.0 38.8 39.4 39.9 41.1 42.4 42.5 41.8																									
Diurnal Maximums																									
N - Not Valid																									

Hourly Averages

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

Beaverlodge - February 2010

Number of Exceedences: 1-hr: 0 24-hr: 1 Maximum Value: 44.5 µg/m ³ on Feb 13 16:00 Maximum Daily Average: 30.6 µg/m ³ on Feb 13																						Hours in Service: 672 Hours of Data: 668				
Minimum Value: 0 µg/m ³ on Feb 24 12:00 Minimum Daily Average: 5.9 µg/m ³ on Feb 15 Maximum Diurnal Average: 18.2 µg/m ³ at hour 15 Minimum Diurnal Average: 13.0 µg/m ³ at hour 7 Monthly Average: 14.52 µg/m ³ Percentiles: P ₁ = 4.0 P ₁₀ = 5.6 Q ₁ = 8.3 Median = 13.6 Q ₃ = 18.5 P ₉₀ = 25.4 P ₉₉ = 38.6																						Hours of Missing Data: 4 Hours of Calibration: 3 Percent Operational Time: 99.9				
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	N	14	11	11	12	10	9	9	9	11	11	12	13	12	11	13	10	11	14	14	16	17	17	16	12.3	17.3
2-Feb	17	15	15	16	18	16	14	14	16	17	18	18	16	15	16	16	14	15	15	18	16	16	17	17	16.0	18.2
3-Feb	15	15	14	16	14	15	13	14	13	13	14	16	19	15	16	18	18	18	17	15	12	11	8	7	14.4	18.9
4-Feb	12	11	16	15	14	18	20	15	16	16	13	15	19	18	17	18	20	18	19	20	17	17	19	17	16.6	19.8
5-Feb	19	20	17	18	17	20	26	28	38	40	39	38	39	37	35	38	34	31	30	34	32	28	25	24	29.5	40.4
6-Feb	23	22	20	17	15	16	16	13	12	13	12	10	12	14	18	19	25	24	21	21	27	27	30	32	19.1	32.4
7-Feb	26	25	25	26	29	31	28	32	25	22	27	27	28	24	28	28	26	21	17	19	17	15	15	19	24.2	31.7
8-Feb	23	19	20	17	16	14	14	16	14	10	10	10	11	15	19	19	14	11	14	10	10	12	10	14	14.1	22.7
9-Feb	15	12	10	8	7	6	5	7	6	4	3	5	4	4	5	4	4	7	7	5	8	8	6	7	6.6	14.5
10-Feb	6	6	4	6	5	6	5	3	3	3	3	4	6	10	15	13	6	6	5	5	5	6	8	9	6.2	15.4
11-Feb	16	13	14	15	15	14	13	12	13	11	9	5	6	8	10	10	15	C	C	C	15	12	13	16	12.2	16.0
12-Feb	15	14	15	17	17	18	18	19	17	18	18	34	25	20	20	22	22	23	20	20	21	24	23	21	20.1	33.6
13-Feb	22	26	26	25	31	30	30	29	27	27	31	32	31	36	40	45	42	42	36	28	25	24	25	26	30.6	44.5
14-Feb	22	21	21	23	22	20	24	24	27	27	27	26	25	25	24	23	27	30	21	19	18	20	16	11	22.6	30.3
15-Feb	8	6	5	3	4	5	6	6	6	5	5	5	5	5	5	6	6	8	7	5	6	7	9	8	5.9	8.5
16-Feb	7	8	9	13	11	10	8	9	11	11	14	17	21	20	14	14	13	14	12	11	7	8	7	7	11.5	21.0
17-Feb	8	9	8	7	6	4	5	5	4	4	5	5	5	7	7	10	9	8	9	6	5	5	6	6	6.3	10.0
18-Feb	6	7	7	5	5	6	5	6	6	5	6	5	10	18	18	11	13	8	6	7	7	6	7	8	7.9	18.4
19-Feb	8	7	6	10	11	8	9	9	9	9	7	6	10	10	27	26	27	21	15	12	14	11	10	12	12.3	27.4
20-Feb	12	11	12	11	10	12	12	12	15	16	13	13	13	15	18	13	19	18	14	12	14	14	13	18	13.8	19.1
21-Feb	19	16	18	21	15	9	9	10	7	7	9	11	12	12	13	15	18	16	13	13	12	11	12	16	13.0	21.1
22-Feb	17	16	13	14	17	20	10	13	14	14	14	15	15	14	17	24	12	10	11	9	9	9	10	20	14.1	24.3
23-Feb	29	16	19	18	17	12	9	8	9	10	11	13	16	20	27	31	32	16	11	9	7	8	8	7	15.2	32.5
24-Feb	7	7	6	9	5	6	6	6	7	8	8	0	9	23	25	14	11	14	19	20	20	17	16	14	11.5	25.2
25-Feb	14	11	8	9	11	11	11	8	8	8	7	10	8	9	9	6	5	5	4	6	6	6	6	6	8.0	13.6
26-Feb	5	5	6	6	9	9	8	6	5	4	8	15	23	23	17	11	6	7	6	5	6	8	7	7	8.9	23.5
27-Feb	8	8	8	9	10	11	12	11	10	13	13	13	16	16	14	14	17	20	21	18	20	22	20	19	14.3	22.2
28-Feb	20	19	18	18	19	20	18	20	21	22	23	23	22	25	23	21	16	17	16	14	13	13	16	15	18.9	25.4
14.8 13.5 13.3 13.7 13.6 13.5 13.0 13.0 13.2 13.0 13.6 14.4 15.6 16.8 18.2 17.9 17.2 16.3 14.9 13.9 13.7 13.6 13.5 14.2																						Diurnal Average				
29.0 26.0 25.7 26.4 30.8 31.1 30.0 31.7 37.9 40.4 38.8 38.1 39.5 37.0 40.4 44.5 41.5 41.8 35.8 33.6 31.6 27.9 29.7 32.4																						Diurnal Maximum				
C - Calibration 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																										

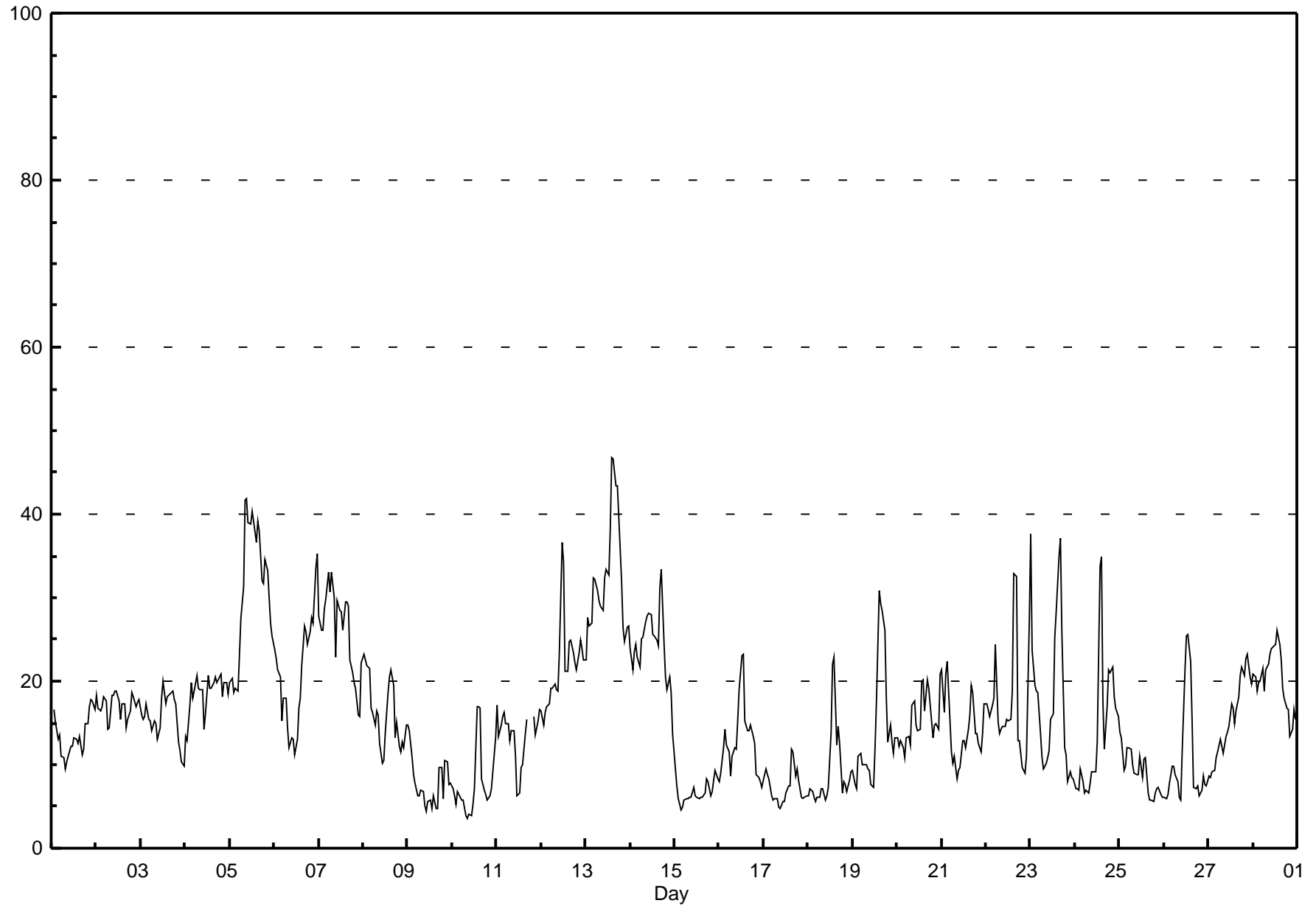


Hourly Maximums

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

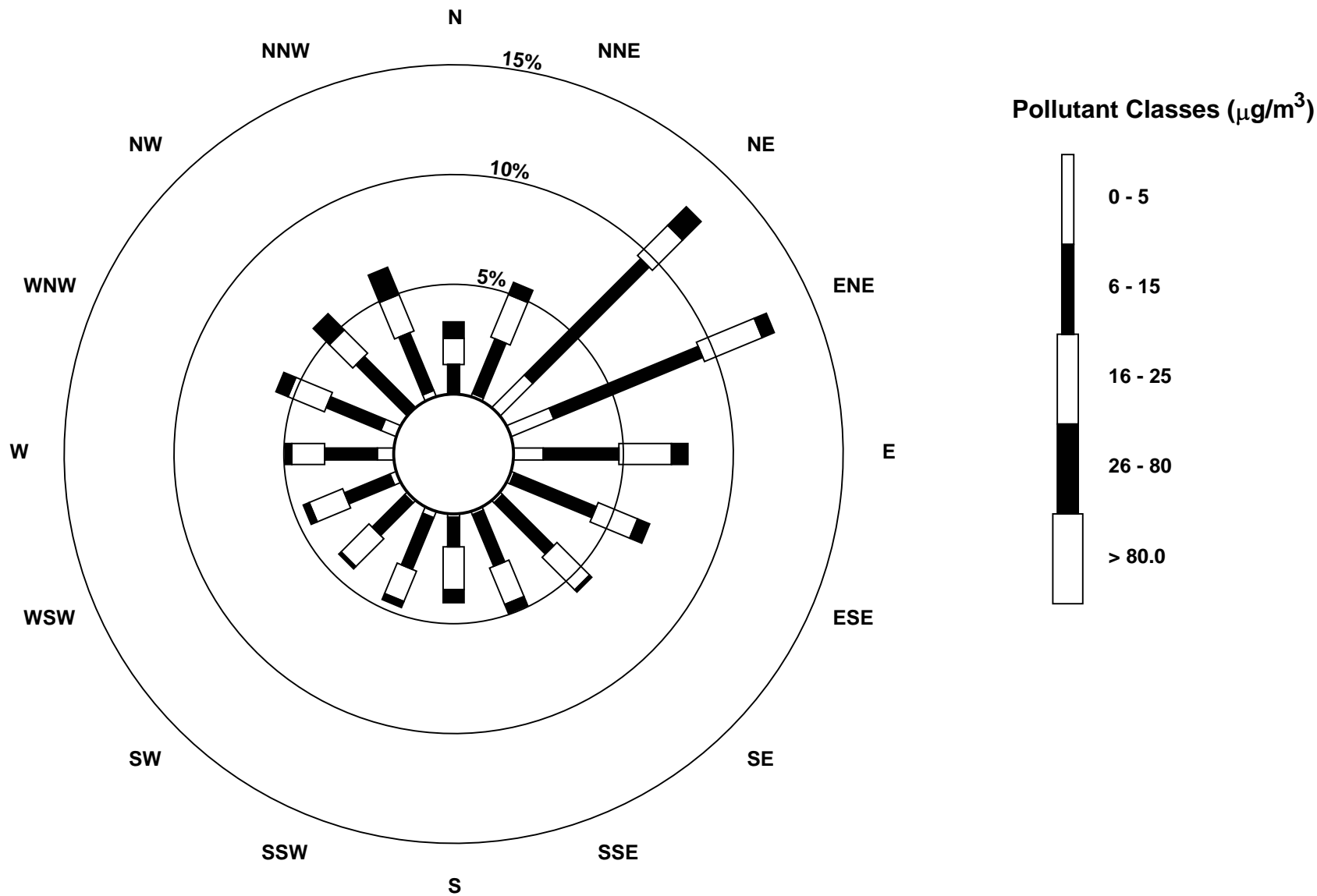
Beaverlodge - February 2010

Maximum Value: 46.7 μg/m ³ on Feb 13 15:00		Maximum Daily Average: 32.5 μg/m ³ on Feb 13		Hours in Service: 672																							
Minimum Value: 4 μg/m ³ on Feb 10 09:00		Minimum Daily Average: 6.7 μg/m ³ on Feb 15		Hours of Data: 668																							
Maximum Diurnal Average: 20.3 μg/m ³ at hour 15		Minimum Diurnal Average: 14.2 μg/m ³ at hour 8		Hours of Missing Data: 4																							
Monthly Average: 16.09 μg/m ³		Percentiles: P ₁ = 4.7 P ₁₀ = 6.5 Q ₁ = 9.5 Median = 14.9 Q ₃ = 20.4 P ₉₀ = 27.5 P ₉₉ = 40.1		Hours of Calibration: 3																							
				Percent Operational Time: 99.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	N	17	15	13	14	11	11	9	10	11	12	12	13	13	13	13	11	12	15	15	17	18	18	17	13.5	17.8	
2-Feb	18	17	16	17	18	18	14	14	18	18	19	19	18	15	17	17	14	15	16	19	18	17	18	18	17.1	18.9	
3-Feb	16	15	16	17	15	15	14	15	15	13	14	18	20	17	18	18	18	19	18	17	13	12	10	10	15.7	20.0	
4-Feb	13	13	17	20	18	19	21	19	19	19	14	16	21	19	19	20	20	20	21	21	18	20	20	18	18.5	20.9	
5-Feb	20	20	19	19	19	23	28	31	42	42	39	39	40	39	37	39	38	32	32	35	33	30	27	25	31.1	41.8	
6-Feb	24	23	21	20	15	18	18	14	12	13	13	11	13	17	18	22	27	26	24	26	28	27	34	35	20.8	35.3	
7-Feb	28	26	26	29	30	33	31	33	30	23	30	29	28	26	29	29	29	23	21	20	19	16	16	22	26.0	33.1	
8-Feb	23	23	22	22	17	16	15	16	16	13	10	11	14	19	20	21	19	13	15	12	12	13	12	15	16.2	23.3	
9-Feb	15	14	11	9	8	6	6	7	7	5	4	6	6	5	6	5	5	10	10	6	11	10	8	8	7.7	14.8	
10-Feb	7	6	5	7	6	6	6	4	4	4	4	4	5	7	17	17	17	8	7	6	6	7	9	13	7.7	16.9	
11-Feb	17	13	15	16	16	15	15	13	14	14	11	6	7	10	10	14	15	C	C	C	16	14	15	17	13.4	17.0	
12-Feb	16	15	16	17	17	19	19	20	19	19	23	37	34	21	21	25	25	23	22	21	23	25	24	23	21.9	36.6	
13-Feb	23	28	27	27	32	32	31	30	29	28	32	33	33	38	47	47	43	43	40	32	26	25	26	27	32.5	46.7	
14-Feb	24	21	24	24	23	22	25	25	27	28	28	28	26	26	25	24	31	33	24	20	19	20	19	14	24.2	33.4	
15-Feb	10	7	6	5	5	6	6	6	6	6	7	6	6	6	6	6	7	8	8	6	7	8	9	8	6.7	9.6	
16-Feb	8	9	12	14	12	12	9	11	12	12	15	19	23	23	15	14	14	15	13	13	9	8	8	7	12.8	23.3	
17-Feb	9	10	9	8	6	6	6	6	5	5	6	6	7	7	7	12	12	9	10	8	6	6	6	6	7.3	11.8	
18-Feb	6	7	7	6	6	6	6	7	7	6	6	7	14	22	23	12	15	12	7	8	8	7	8	9	9.3	22.9	
19-Feb	9	8	7	11	11	10	10	10	10	9	8	7	12	17	31	29	28	26	18	13	15	13	11	13	14.0	30.9	
20-Feb	13	12	13	12	11	13	13	12	17	18	15	14	14	20	20	16	20	19	17	13	15	15	14	21	15.4	20.9	
21-Feb	21	16	21	22	19	11	10	11	8	9	10	13	13	12	14	16	20	19	14	14	13	12	14	17	14.5	22.4	
22-Feb	17	17	16	17	18	24	15	14	14	15	15	15	15	15	19	33	33	13	13	10	9	9	11	27	16.8	32.9	
23-Feb	38	24	20	19	19	14	11	10	10	11	12	15	16	25	28	35	37	26	12	11	8	9	8	8	17.7	37.6	
24-Feb	7	7	7	10	8	7	7	7	8	9	9	9	13	34	35	18	12	17	21	21	22	18	17	16	14.0	35.0	
25-Feb	14	13	9	10	12	12	12	10	9	9	9	11	8	11	11	7	6	6	6	7	7	7	6	6	9.0	13.9	
26-Feb	6	6	6	8	10	10	9	8	6	6	11	21	25	26	22	15	7	7	7	6	7	9	8	7	10.6	25.6	
27-Feb	9	9	9	9	11	12	13	12	11	13	14	15	17	17	15	16	18	21	22	21	23	23	21	20	15.4	23.2	
28-Feb	21	20	19	20	20	21	19	21	22	23	24	24	24	26	24	23	19	18	17	17	13	14	17	15	20.1	26.1	
		16.0	14.8	14.6	15.3	14.8	14.9	14.2	14.2	14.6	14.3	14.8	16.2	17.4	19.4	20.3	20.1	19.7	18.2	16.6	15.4	15.0	14.7	14.7	15.8	Diurnal Average	
		37.6	27.6	26.6	28.7	32.3	33.0	30.9	33.1	41.7	41.8	39.0	38.8	40.3	39.1	46.7	46.7	43.4	43.5	39.6	34.6	33.3	30.1	33.5	35.3	Diurnal Maximum	
C - Calibration		N - Not Valid																									



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Beaverlodge - February 2010

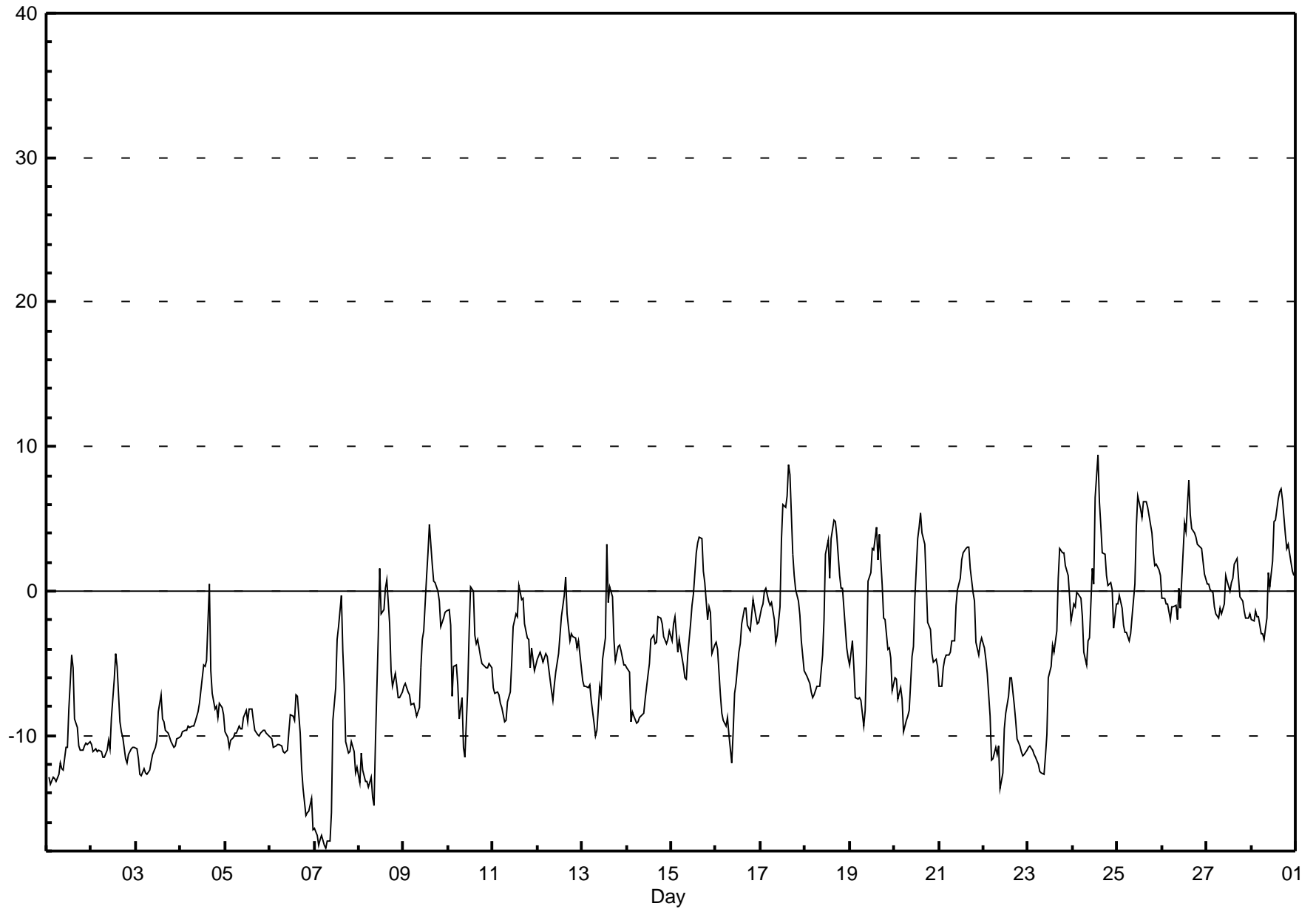


Hourly Averages

External Temperature (ET) - °C

Beaverlodge - February 2010

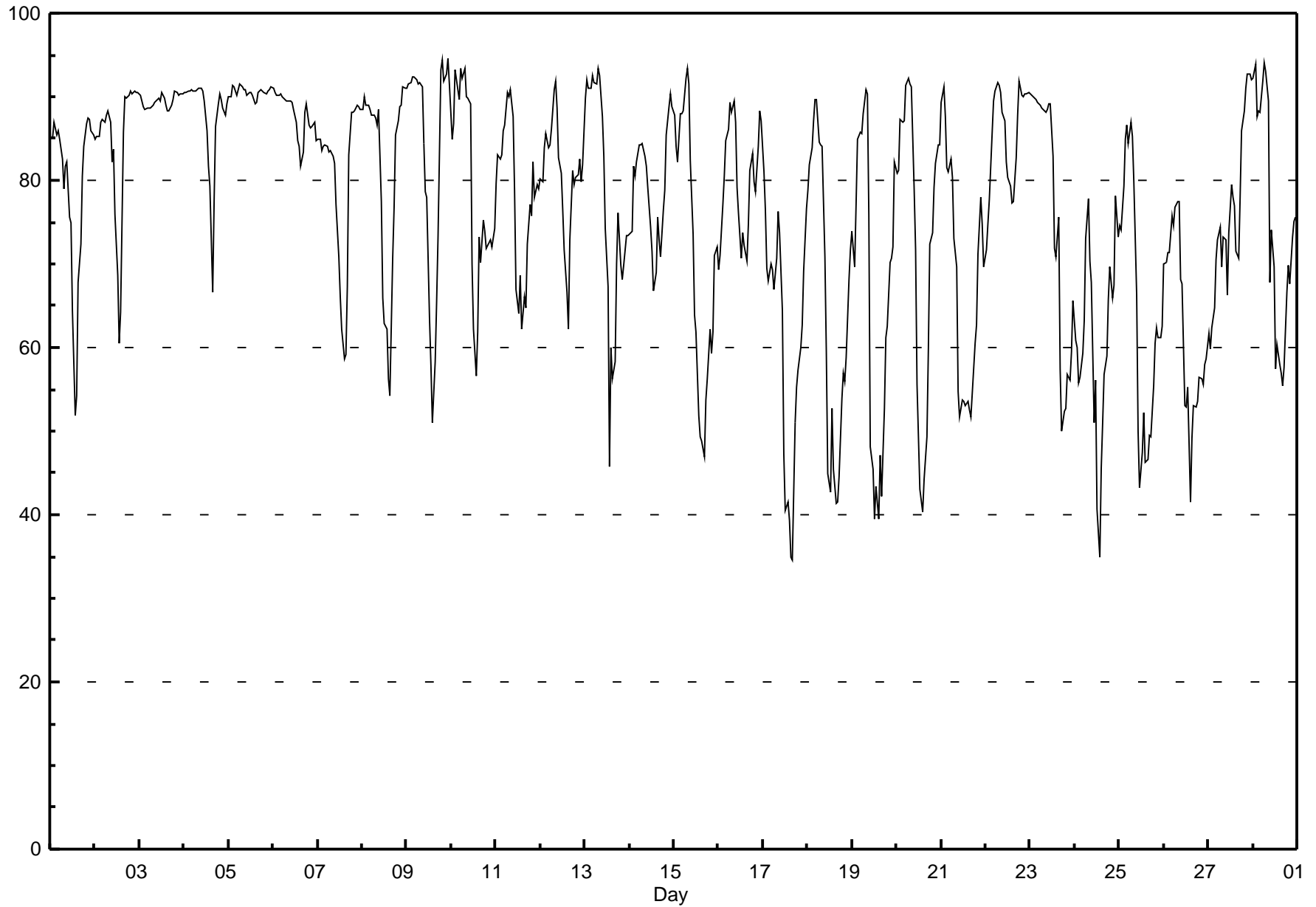
Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.4 °C on Feb 24 14:00 Maximum Daily Average: 1.7 °C on Feb 25		Hours in Service: 672 Hours of Data: 671 Hours of Missing Data: 1 Hours of Calibration: 0 Percent Operational Time: 99.9																																															
Minimum Value: -18 °C on Feb 7 07:00 Maximum Diurnal Average: 0.0 °C at hour 15 Monthly Average: -4.76 °C		Minimum Daily Average: -11.8 °C on Feb 7 Minimum Diurnal Average: -8.3 °C at hour 9 Percentiles: P ₁ = -17.2 P ₁₀ = -11.2 Q ₁ = -9.1 Median = -4.7 Q ₃ = -0.9 P ₉₀ = 2.7 P ₉₉ = 6.6																																															
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	N	-13	-13	-13	-13	-13	-13	-12	-12	-12	-11	-11	-8	-4	-5	-9	-9	-11	-11	-11	-11	-11	-11	-10	-10.8	-4.4																							
2-Feb	-11	-11	-11	-11	-11	-11	-11	-12	-11	-10	-11	-9	-6	-4	-5	-9	-10	-10	-12	-12	-11	-11	-11	-11	-10.1	-4.3																							
3-Feb	-11	-12	-13	-13	-12	-13	-13	-12	-12	-11	-11	-10	-8	-7	-9	-9	-10	-10	-10	-10	-11	-11	-10	-10	-10.7	-7.2																							
4-Feb	-10	-10	-10	-10	-9	-9	-9	-9	-9	-8	-8	-7	-5	-5	-5	1	-5	-7	-8	-8	-9	-8	-8	-9	-7.7	0.5																							
5-Feb	-10	-10	-11	-10	-10	-10	-10	-9	-10	-10	-9	-8	-9	-8	-8	-9	-10	-10	-10	-10	-10	-10	-10	-10	-9.5	-8.2																							
6-Feb	-10	-10	-11	-11	-11	-11	-11	-11	-11	-11	-10	-9	-9	-9	-7	-7	-10	-12	-14	-16	-15	-15	-14	-17	-11.3	-7.2																							
7-Feb	-16	-17	-18	-17	-17	-18	-18	-17	-17	-15	-9	-7	-3	-2	0	-4	-7	-10	-11	-11	-10	-11	-13	-12	-11.8	-0.3																							
8-Feb	-13	-11	-12	-13	-13	-14	-13	-14	-15	-10	-3	2	-2	-1	0	1	-2	-6	-7	-6	-7	-7	-7	-7	-7.5	1.6																							
9-Feb	-7	-6	-7	-7	-8	-8	-8	-9	-8	-5	-3	-3	1	3	5	2	1	1	0	-1	-2	-2	-2	-1	-3.2	4.6																							
10-Feb	-1	-2	-7	-5	-5	-6	-9	-7	-11	-12	-7	-3	0	0	-3	-4	-3	-5	-5	-5	-5	-5	-5	-5	-5.1	0.3																							
11-Feb	-7	-7	-7	-7	-8	-8	-9	-9	-8	-7	-5	-2	-2	-2	0	-1	0	-2	-3	-3	-5	-4	-6	-5	-4.9	0.4																							
12-Feb	-5	-4	-5	-5	-4	-5	-5	-7	-8	-6	-6	-4	-3	-2	0	1	-2	-3	-3	-3	-3	-4	-3	-4	-3.9	1.0																							
13-Feb	-6	-7	-7	-7	-7	-8	-9	-10	-10	-7	-7	-5	-3	3	-1	0	0	-3	-5	-4	-4	-4	-5	-5	-5.0	3.2																							
14-Feb	-5	-6	-9	-8	-9	-9	-9	-9	-9	-8	-7	-6	-5	-3	-3	-4	-4	-2	-2	-2	-3	-4	-3	-3	-5.5	-1.8																							
15-Feb	-3	-2	-2	-4	-3	-4	-5	-6	-6	-4	-2	-1	0	3	3	4	4	1	1	-2	-1	-2	-4	-4	-1.7	3.7																							
16-Feb	-4	-4	-7	-9	-9	-9	-9	-10	-12	-10	-7	-6	-4	-4	-2	-1	-1	-2	-3	-2	-1	-2	-2	-2	-5.1	-0.6																							
17-Feb	-1	-1	0	0	-1	-1	-1	-2	-4	-3	-1	3	6	6	7	9	8	3	1	0	-1	-2	-3	-5	0.7	8.7																							
18-Feb	-6	-6	-6	-7	-7	-7	-7	-7	-7	-4	-2	2	3	1	4	5	5	4	1	0	0	-1	-4	-5	-2.1	4.9																							
19-Feb	-5	-3	-5	-7	-7	-7	-8	-9	-8	-5	1	1	3	3	4	2	4	0	-2	-2	-4	-4	-5	-7	-2.9	4.4																							
20-Feb	-6	-6	-7	-7	-8	-10	-9	-9	-8	-5	-4	-1	4	4	5	4	3	1	-2	-3	-4	-5	-5	-5	-3.4	5.4																							
21-Feb	-7	-7	-5	-5	-4	-4	-4	-3	-3	-1	0	1	2	3	3	3	3	2	0	-1	-4	-4	-4	-3	-1.8	3.1																							
22-Feb	-4	-5	-6	-9	-12	-12	-11	-11	-11	-14	-13	-10	-8	-7	-6	-6	-8	-9	-10	-11	-11	-11	-11	-11	-9.4	-3.9																							
23-Feb	-11	-11	-11	-11	-12	-12	-13	-13	-13	-11	-10	-6	-5	-4	-4	-3	1	3	3	3	2	1	0	-2	-5.8	3.0																							
24-Feb	-1	-1	0	0	-1	-2	-4	-5	-3	-3	2	0	6	9	6	5	3	3	1	0	1	0	-3	-1	0.5	9.4																							
25-Feb	-1	0	-1	-2	-3	-3	-3	-3	-2	0	4	7	6	5	6	6	6	6	5	4	3	2	2	1	1	1.7	6.6																						
26-Feb	-1	-1	-1	-1	-2	-1	-1	-1	-2	0	-1	3	5	4	8	5	4	4	4	3	3	3	2	1	1.6	7.7																							
27-Feb	0	0	0	0	-1	-2	-2	-1	-2	-1	1	1	0	1	1	2	2	1	0	-1	-1	-2	-2	-2	-0.3	2.3																							
28-Feb	-2	-2	-1	-2	-2	-3	-3	-3	-2	1	0	2	5	5	6	7	7	6	4	3	3	2	1	1	1.4	7.1																							
																								-6.0	-6.2	-6.9	-7.2	-7.4	-7.8	-8.1	-8.3	-8.3	-6.9	-4.9	-3.0	-1.4	-0.5	0.0	-0.3	-1.1	-2.5	-3.6	-3.9	-4.4	-4.7	-5.2	-5.5	Diurnal Average	
																								0.4	0.4	0.1	0.2	-0.5	-1.0	-0.8	-1.0	-1.6	1.3	4.4	6.6	6.5	9.4	7.7	8.7	8.1	6.3	4.0	3.3	3.2	3.0	2.1	1.2	Diurnal Maximum	
N - Not Valid																																																	



Hourly Averages

Relative Humidity (RH) - % Beaverlodge - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 94.6 % on Feb 9 23:00 Maximum Daily Average: 90.6 % on Feb 5		Hours in Service: 672 Hours of Data: 671 Hours of Missing Data: 1 Hours of Calibration: 0 Percent Operational Time: 99.9																									
Minimum Value: 35 % on Feb 17 17:00 Maximum Diurnal Average: 86.3 % at hour 8 Monthly Average: 76.49 %		Minimum Daily Average: 60.7 % on Feb 17 Minimum Diurnal Average: 60.8 % at hour 15 Percentiles: P ₁ = 40.2 P ₁₀ = 54.2 Q ₁ = 67.7 Median = 80.9 Q ₃ = 88.9 P ₉₀ = 90.8 P ₉₉ = 93.4																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	N	85	87	85	86	85	83	79	82	82	76	75	64	52	54	68	72	81	84	87	87	87	86	85	78.8	87.5	
2-Feb	85	85	85	87	87	87	88	88	87	82	84	76	69	60	64	86	90	90	90	91	90	91	91	90	84.3	90.7	
3-Feb	90	90	89	89	89	89	89	89	89	90	90	90	90	90	89	88	88	89	90	91	91	90	90	90	89.4	90.7	
4-Feb	91	91	91	91	91	91	91	91	91	91	91	90	86	82	79	67	78	86	89	90	90	89	88	89	87.5	91.0	
5-Feb	90	90	91	91	90	91	91	91	91	91	90	91	91	90	89	89	90	91	91	91	90	91	91	91	90.6	91.5	
6-Feb	91	91	90	90	90	90	90	89	89	89	89	88	87	85	84	82	83	88	89	87	86	86	87	85	87.8	91.0	
7-Feb	85	85	84	84	84	84	83	84	83	82	77	71	66	62	59	59	67	83	88	88	88	89	89	88	79.7	89.1	
8-Feb	88	90	89	89	88	88	88	88	87	88	77	66	63	62	56	54	71	77	85	87	89	89	91	91	80.9	91.2	
9-Feb	91	91	92	92	92	92	92	92	91	84	79	78	63	58	51	58	65	73	93	94	92	93	95	91	83.1	94.6	
10-Feb	85	87	93	92	90	93	92	93	90	90	89	70	62	57	62	73	70	75	74	72	73	73	72	74	79.2	93.4	
11-Feb	80	83	82	83	86	87	90	90	91	88	79	67	64	69	62	66	65	72	77	76	82	78	80	79	78.1	90.8	
12-Feb	80	80	84	86	84	84	86	91	92	89	83	81	76	72	67	62	73	81	80	80	81	83	80	82	80.6	91.8	
13-Feb	90	92	91	91	92	92	92	93	93	88	83	74	67	46	60	56	58	70	76	70	68	70	73	73	77.4	93.4	
14-Feb	74	74	82	81	82	84	84	84	83	82	79	74	72	67	69	76	73	71	76	79	85	89	90	89	79.1	90.3	
15-Feb	88	84	82	88	88	88	92	93	91	82	74	64	62	52	49	49	47	54	56	62	59	62	71	72	71.3	93.4	
16-Feb	69	71	77	80	85	86	89	88	89	87	79	76	71	74	72	70	75	81	83	80	79	84	88	87	80.1	89.4	
17-Feb	81	76	69	68	70	69	67	71	76	74	64	47	40	42	39	35	35	51	55	57	60	63	69	77	60.7	81.1	
18-Feb	79	82	84	87	90	90	85	84	84	71	60	45	43	53	45	41	42	45	54	57	56	59	68	72	65.5	89.7	
19-Feb	74	70	77	85	86	86	88	91	90	76	48	45	40	43	40	47	42	53	61	63	70	71	72	82	66.6	90.9	
20-Feb	81	81	87	87	87	91	92	92	91	79	72	56	43	42	40	44	49	60	72	74	79	82	84	84	72.9	92.2	
21-Feb	89	91	88	81	81	83	80	73	70	55	52	54	54	53	53	53	52	55	61	63	71	78	75	70	68.0	91.2	
22-Feb	72	75	78	86	90	91	92	91	91	88	87	82	80	79	77	77	83	88	92	90	90	90	90	90	85.4	91.8	
23-Feb	90	90	90	90	89	89	89	88	88	88	89	89	83	72	71	76	57	50	52	53	57	56	60	66	75.9	90.3	
24-Feb	61	60	56	56	59	63	73	78	70	68	51	56	41	35	46	51	57	59	66	70	66	67	78	73	60.8	78.2	
25-Feb	75	74	79	85	87	84	87	85	80	66	50	43	47	52	46	47	50	49	55	61	62	61	61	63	64.6	87.0	
26-Feb	70	70	71	71	76	75	77	77	77	68	68	53	53	55	42	49	53	53	53	57	56	56	58	59	62.4	77.4	
27-Feb	62	60	62	65	70	73	74	70	73	73	66	74	80	78	77	71	71	78	86	88	91	93	93	92	75.8	92.8	
28-Feb	92	94	88	88	88	92	94	93	90	68	74	70	57	60	58	57	55	58	67	70	68	73	75	76	75.2	94.0	
		81.5	81.8	82.8	83.9	84.9	85.6	86.3	86.3	85.7	80.7	75.0	69.4	64.8	62.1	60.8	62.6	64.7	70.0	74.9	75.9	77.0	78.3	80.2	80.8	Diurnal Average	
		92.2	93.8	93.2	92.4	92.5	93.3	94.0	93.4	92.5	91.0	90.7	90.5	90.5	90.1	89.1	89.3	90.5	90.9	93.3	94.3	91.9	92.7	94.6	92.1	Diurnal Maximum	
N - Not Valid																											



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - February 2010

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	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	N	2	4	2	4	5	3	0	1	2	2	4	1	2	2	2	2	5	5	5	5	4	5	3	1.0	5.3	
Dir	N	270	265	258	212	203	187	58	243	217	194	188	186	99	116	95	98	122	114	98	95	52	10	329	142	10	
2 Spd	3	5	3	4	4	2	3	4	2	0	3	3	3	3	6	8	6	3	5	5	5	9	6	8	8	1.5	8.5
Dir	337	347	293	228	209	169	77	51	59	36	229	186	84	53	129	106	111	112	55	22	29	355	327	325	40	29	
3 Spd	7	7	6	3	2	10	11	9	7	4	5	6	2	1	7	8	7	5	7	10	10	3	4	4	1.6	11.5	
Dir	324	309	264	256	296	308	322	344	342	357	0	323	27	143	136	126	118	104	114	114	119	47	35	33	17	322	
4 Spd	1	0	0	1	1	2	2	3	3	3	2	2	1	2	2	2	3	2	4	6	2	2	1	2	0.7	5.6	
Dir	266	131	182	230	125	175	188	164	158	32	156	206	160	228	194	123	180	132	88	66	7	337	269	302	148	66	
5 Spd	5	2	3	5	1	1	3	4	2	2	3	3	6	2	3	5	5	1	3	1	1	1	1	2	0.7	5.6	
Dir	307	60	249	259	187	205	246	66	99	172	106	165	172	209	294	321	334	274	1	327	199	187	213	209	252	172	
6 Spd	3	3	6	4	5	5	3	3	5	4	2	2	4	5	2	3	2	1	2	3	3	5	2	3	1.9	5.5	
Dir	221	154	138	161	159	133	146	142	148	158	138	128	126	138	152	134	224	254	253	10	323	24	328	34	143	138	
7 Spd	1	2	1	2	3	2	3	2	1	1	2	1	2	2	1	1	2	4	1	1	2	2	2	1	1.1	3.6	
Dir	353	27	4	41	339	358	28	33	56	125	97	75	36	262	107	182	35	26	31	311	21	313	40	224	23	26	
8 Spd	2	4	1	2	1	2	3	2	1	2	2	1	3	2	0	0	5	2	1	1	1	2	4	3	1.3	4.6	
Dir	33	13	43	239	326	51	54	56	109	70	77	112	52	69	170	81	72	214	67	109	89	147	66	77	64	72	
9 Spd	4	3	2	2	3	3	3	5	4	3	4	4	3	4	3	3	2	10	11	3	5	1	1	3	1.7	11.5	
Dir	53	66	90	71	48	67	72	52	53	54	61	54	54	54	72	89	51	313	289	158	174	151	289	308	43	289	
10 Spd	2	5	3	3	4	1	1	5	3	7	5	4	2	1	4	4	2	3	3	1	1	1	3	4	0.9	7.3	
Dir	248	273	51	303	297	196	192	53	76	48	50	58	54	247	56	49	113	60	79	198	222	161	212	246	47	48	
11 Spd	2	2	2	1	4	2	5	1	3	3	4	3	3	4	6	5	4	1	1	3	1	3	4	3	0.9	6.0	
Dir	237	19	10	297	60	251	40	336	78	113	129	86	56	284	43	313	81	202	254	267	55	281	39	278	26	43	
12 Spd	4	7	7	9	4	5	4	5	4	4	5	7	5	4	3	3	7	6	2	1	6	3	3	2	1.5	9.0	
Dir	41	277	42	286	0	246	214	211	19	280	289	312	296	303	215	159	167	73	50	129	308	43	58	265	302	286	
13 Spd	2	4	7	3	2	4	0	1	2	3	1	0	1	1	4	2	2	1	4	4	4	4	4	2	0.9	7.0	
Dir	348	18	40	35	306	42	106	61	67	49	345	347	325	84	286	8	309	353	236	245	261	246	266	156	332	40	
14 Spd	2	2	4	2	3	6	4	5	1	4	5	9	6	4	4	10	7	4	1	1	2	3	4	1	1.0	10.3	
Dir	216	232	299	291	310	318	334	342	303	343	306	327	331	12	139	150	123	94	152	297	58	86	76	85	348	150	
15 Spd	3	3	6	1	4	2	1	5	2	2	3	3	6	4	5	5	5	7	6	5	8	1	1	1	2.0	8.2	
Dir	222	258	247	261	262	255	95	64	145	137	58	62	58	70	76	71	78	67	49	99	66	130	25	95	75	66	
16 Spd	4	3	7	3	3	6	6	4	5	2	4	3	2	6	6	2	1	2	4	5	2	1	3	2	1.4	6.6	
Dir	105	210	279	334	313	319	32	295	34	344	3	277	304	299	36	197	148	138	78	57	143	133	59	333	355	279	
17 Spd	6	8	11	13	10	11	11	5	1	3	2	1	0	6	6	2	1	3	5	2	3	3	4	4	2.7	12.7	
Dir	291	286	285	284	292	300	300	282	87	56	111	180	19	276	272	153	158	61	51	73	68	88	52	46	304	284	
18 Spd	6	6	6	5	6	4	2	1	2	3	1	2	1	7	9	7	5	7	7	9	11	6	1	1	3.6	10.5	
Dir	50	47	47	44	48	48	348	190	57	38	321	344	344	287	300	301	2	343	13	29	16	25	346	264	9	16	
19 Spd	6	5	1	1	4	5	1	3	4	3	2	2	3	1	2	1	1	2	1	5	2	4	2	3	1.8	5.7	
Dir	37	30	133	266	55	46	291	75	48	62	107	127	87	248	91	341	143	60	37	304	50	28	329	54	45	37	
20 Spd	4	2	3	4	1	1	5	3	3	1	2	2	0	1	1	2	3	1	3	1	1	3	4	2	1.5	5.3	
Dir	24	268	48	47	197	96	49	63	66	81	91	102	71	59	233	68	46	23	56	28	339	21	44	228	51	49	
21 Spd	0	3	5	4	3	1	3	5	8	9	9	12	15	15	13	13	10	10	6	6	1	4	9	8	5.2	15.4	
Dir	46	55	65	64	45	323	322	343	17	328	318	320	316	310	310	324	329	332	26	10	18	116	64	61	344	316	
22 Spd	6	9	4	8	3	5	2	2	4	5	5	1	3	3	3	2	4	4	8	7	7	7	5	5	2.4	8.7	
Dir	81	75	77	290	17	6	34	53	328	208	194	77	150	111	102	137	133	160	158	133	126	130	135	158	120	75	

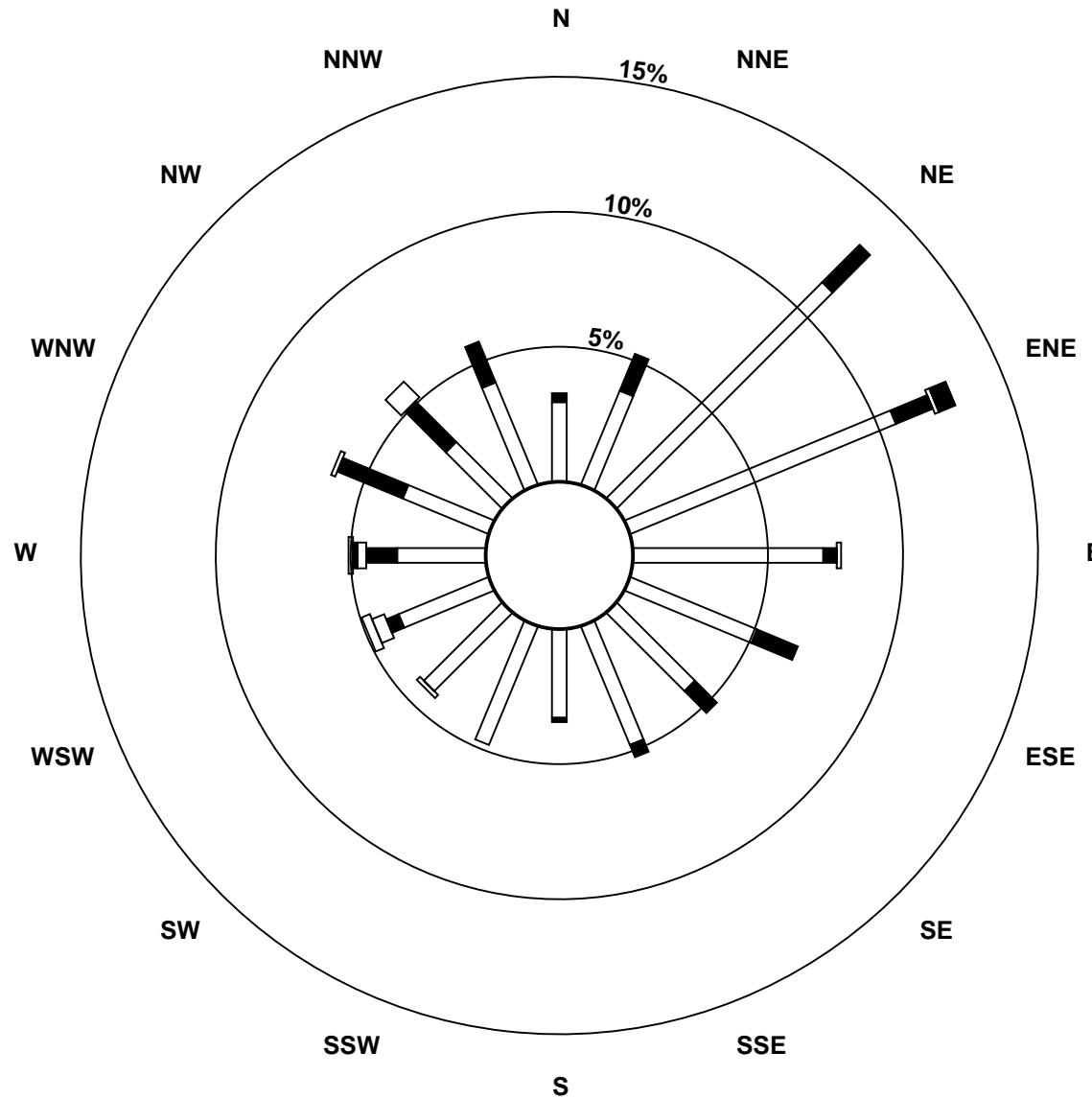
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - February 2010

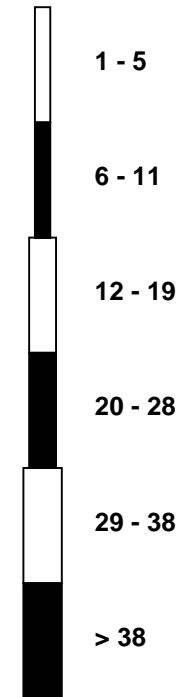
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
23 Spd	4	4	3	3	3	4	4	4	3	1	1	1	2	2	4	1	12	15	9	12	12	12	9	1	3.7	15.0	
Dir	163	162	184	202	189	199	219	202	187	152	134	111	76	42	50	282	268	252	252	245	253	265	238	187	236	252	
24 Spd	4	4	8	6	2	4	2	5	2	4	2	6	3	2	6	11	8	3	6	5	4	4	5	3	1.3	10.5	
Dir	235	222	281	293	287	232	197	51	112	92	95	57	61	120	102	108	101	109	294	65	90	201	80	96	98	108	
25 Spd	3	4	3	3	4	4	2	3	1	3	1	0	3	14	29	29	30	22	11	5	3	5	3	2	5.0	30.2	
Dir	84	67	113	118	96	158	72	68	85	73	119	338	157	220	253	258	265	271	259	220	188	217	229	211	246	265	
26 Spd	3	1	4	3	3	5	4	3	1	7	7	1	1	3	1	11	19	20	20	23	22	16	2	1	6.5	23.0	
Dir	83	87	58	102	74	63	90	66	85	44	293	354	346	258	35	84	70	75	77	74	79	83	38	267	72	74	
27 Spd	4	5	0	2	3	6	9	9	2	5	3	3	5	3	4	3	1	2	1	2	5	3	4	3	0.9	9.3	
Dir	307	44	328	230	214	311	344	12	352	340	6	203	188	212	225	246	104	314	58	44	184	113	70	59	335	344	
28 Spd	3	2	1	2	0	1	3	2	2	1	2	5	2	4	6	5	4	1	1	5	3	1	3	3	1.8	5.8	
Dir	79	98	172	65	266	218	359	335	245	137	100	89	150	89	117	103	132	97	119	53	108	180	93	117	100	117	
Spd	0.9	1.0	0.8	1.4	0.7	1.1	1.3	1.8	1.4	1.4	0.7	0.7	0.7	1.0	0.3	0.5	0.8	0.9	1.2	2.0	1.7	1.0	1.3	0.5	Diurnal Average		
Dir	15	3	338	291	331	312	356	31	51	40	33	13	38	281	253	126	89	23	52	69	79	72	40	24	Diurnal Maximum		
Spd	6.8	8.7	10.6	12.7	10.4	11.2	11.5	9.4	7.5	9.1	8.9	11.5	15.4	14.7	28.8	29.2	30.2	21.9	19.7	23.0	21.6	16.0	8.6	8.2	Diurnal Maximum		
Dir	324	75	285	284	292	300	322	344	17	328	318	320	316	310	253	258	265	271	77	74	79	83	238	61	Diurnal Maximum		
Maximum Speed Value: 30 km/h on Feb 25 17:00																		Minimum Speed Value: 0 km/h on Feb 17 13:00						Hours in Service:		672	
Maximum Daily Speed Average: 6.5 km/h on Feb 25																		Minimum Daily Speed Average: 0.7 km/h on Feb 7						Hours of Data:		671	
Maximum Diurnal Speed Average: 2.0 km/h at hour 20																		Minimum Diurnal Speed Average: 0.3 km/h at hour 15						Hours of Missing Data:		1	
Monthly Average Velocity: 0.72 km/h 27.6 deg																		Speed Percentiles: P ₁ = 0.3 P ₁₀ = 1.1 Q ₁ = 1.9 Median = 3.1 Q ₃ = 4.9 P ₉₀ = 7.3 P ₉₉ = 19.5						Percent Operational Time:		99.9	
All monthly, daily, and diurnal averages have been calculated using vector methods																											
N - Not Valid																											
Frequency Distribution																											
		Speed Range (km/h)																									
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																				
North	43	16	0	0	0	0	59																				
NorthEast	122	33	0	0	0	0	155																				
East	97	13	2	4	0	0	116																				
SouthEast	56	18	0	0	0	0	74																				
South	53	6	0	0	0	0	59																				
SouthWest	53	4	2	0	0	0	59																				
West	44	14	7	1	3	0	69																				
NorthWest	43	30	7	0	0	0	80																				
Total	511	134	18	5	3	0	671																				

Wind Rose

Wind Speed (WS) (km/h)
Beaverlodge - February 2010



Wind Speed Classes (km/h)





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - February 2010

Maximum Speed: 30 km/h on Feb 25 17:00		Maximum Daily Speed Average: 8.5 km/h on Feb 26		Hours in Service: 672																																													
Minimum Speed: 1 km/h on Feb 20 15:00		Minimum Daily Speed Average: 2.7 km/h on Feb 20		Hours of Data: 671																																													
Maximum Diurnal Speed Average: 6.2 km/h at hour 17		Minimum Diurnal Speed Average: 3.8 km/h at hour 9		Hours of Missing Data: 1																																													
Monthly Average Speed: 4.70 km/h		Percentiles: P ₁ = 1.3 P ₁₀ = 2.1 Q ₁ = 2.8 Median = 3.9 Q ₃ = 5.4 P ₉₀ = 8.0 P ₉₉ = 19.6		Percent Operational Time: 99.9																																													
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	N	4	4	2	4	5	3	1	2	2	2	4	2	2	2	2	3	5	5	5	5	4	5	3	3.4	5.4																							
2-Feb	3	5	3	4	4	3	3	4	3	2	3	3	3	3	6	8	6	3	5	5	9	7	8	8	4.7	8.6																							
3-Feb	7	7	6	3	3	10	12	9	7	4	5	6	2	2	7	8	7	5	8	10	10	4	4	4	6.3	11.7																							
4-Feb	3	2	3	2	2	3	3	3	3	3	4	2	1	2	3	2	3	3	4	6	3	3	3	5	2.9	5.8																							
5-Feb	6	3	4	5	3	2	3	4	4	3	4	4	6	3	4	6	6	3	3	3	2	2	2	3	3.7	6.3																							
6-Feb	3	3	6	5	5	5	4	4	5	4	3	3	4	5	2	3	3	2	3	6	5	5	4	5	4.0	6.0																							
7-Feb	4	3	2	2	5	5	4	3	2	3	3	2	3	2	2	2	4	5	2	3	4	3	3	3	3.0	5.4																							
8-Feb	3	6	2	3	3	2	3	2	3	3	2	2	3	3	2	2	5	2	2	2	2	2	4	3	2.7	5.7																							
9-Feb	4	3	2	3	3	3	4	5	4	3	4	4	3	4	3	3	3	11	12	4	5	2	2	3	4.1	11.6																							
10-Feb	4	5	4	4	5	3	3	5	3	7	5	4	3	2	4	4	3	3	3	2	2	2	3	5	3.6	7.4																							
11-Feb	2	2	4	3	4	4	5	3	5	3	5	3	3	5	6	6	4	2	2	3	2	4	7	7	3.9	7.0																							
12-Feb	7	8	8	13	5	5	5	5	6	4	6	7	7	5	3	4	7	7	3	2	6	4	5	3	5.6	13.0																							
13-Feb	5	5	7	6	4	5	4	3	3	3	4	3	4	1	5	3	4	3	5	4	4	4	5	4	4.1	7.2																							
14-Feb	4	4	7	5	5	9	5	6	3	5	7	9	6	4	5	11	7	5	2	4	3	5	4	3	5.4	10.8																							
15-Feb	4	5	7	2	4	3	3	5	2	3	4	3	6	4	5	5	5	7	6	5	8	4	2	2	4.4	8.3																							
16-Feb	4	3	7	6	5	8	6	5	5	5	5	4	6	8	7	3	3	3	5	5	3	2	3	4	4.7	8.0																							
17-Feb	6	8	11	13	10	11	11	5	3	3	3	3	3	6	6	3	1	4	5	2	3	3	5	4	5.6	12.8																							
18-Feb	6	6	6	5	6	4	2	2	3	3	4	3	3	7	9	7	7	7	8	9	11	6	3	2	5.5	10.7																							
19-Feb	6	5	2	3	4	5	1	3	4	3	2	2	3	2	2	3	1	3	2	6	3	5	3	3	3.2	6.0																							
20-Feb	5	2	3	4	1	1	5	3	3	1	3	2	1	1	1	2	3	2	3	4	2	4	4	3	2.7	5.3																							
21-Feb	3	4	5	4	3	1	4	5	8	9	9	12	15	15	13	13	10	10	6	6	3	4	9	8	7.5	15.4																							
22-Feb	7	9	8	8	4	7	3	2	5	5	5	2	4	3	3	3	5	5	8	7	7	7	5	6	5.3	8.8																							
23-Feb	5	5	4	3	3	4	4	4	4	2	1	2	3	2	4	3	12	15	10	12	12	13	10	4	5.9	15.2																							
24-Feb	4	4	8	6	3	4	2	5	3	4	3	6	4	2	7	11	8	5	7	6	4	4	5	3	4.9	10.6																							
25-Feb	3	4	3	3	4	4	3	4	1	3	2	3	5	15	29	29	30	22	13	5	3	6	4	3	8.4	30.3																							
26-Feb	4	2	4	4	5	5	4	4	2	7	8	4	4	4	4	11	19	20	20	23	22	16	5	5	8.5	23.1																							
27-Feb	4	5	3	3	3	7	10	9	5	5	4	4	5	3	4	4	2	2	2	2	5	4	4	3	4.3	10.0																							
28-Feb	3	2	1	3	2	3	5	4	3	1	3	5	3	4	6	5	4	2	2	5	3	2	3	4	3.3	6.0																							
																								4.4	4.5	4.8	4.5	4.1	4.7	4.4	4.2	3.8	3.8	4.0	3.9	4.0	4.3	5.5	6.0	6.2	5.9	5.5	5.6	5.3	4.7	4.3	4.1	Diurnal Average	
																								7.0	8.8	10.6	13.0	10.5	11.2	11.7	9.4	7.8	9.3	9.1	11.6	15.4	14.9	28.9	29.4	30.3	22.1	19.9	23.1	21.7	16.1	10.0	8.3	Diurnal Maximum	
N - Not Valid																																																	
All monthly, daily, and diurnal averages have been calculated using scalar methods																																																	

Hourly Standard Deviations

Wind Direction (WD) - deg
Beaverlodge - February 2010

Maximum Value: 98.6 deg on Feb 27 03:00																						Hours in Service: 672			
Minimum Value: 2.5 deg on Feb 26 17:00																						Hours of Data: 671			
Percentiles: P ₁ = 4.4 P ₁₀ = 9.3 Q ₁ = 17.8 Median = 36.1 Q ₃ = 61.0 P ₉₀ = 75.9 P ₉₉ = 91.6																						Hours of Missing Data: 1			
																						Hours of Calibration: 0			
																						Percent Operational Time: 99.9			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	N	75	31	32	15	8	19	93	52	15	19	22	43	27	35	41	23	14	6	7	15	18	10	39	92.5
2-Feb	50	24	30	20	16	45	16	5	49	82	22	33	40	22	18	7	23	30	13	12	8	39	5	4	82.2
3-Feb	11	13	18	33	43	5	11	6	14	16	12	14	78	61	7	7	5	9	12	6	7	46	26	26	77.6
4-Feb	81	97	83	77	78	51	30	39	61	22	61	39	38	58	41	66	19	30	36	15	67	59	90	66	96.8
5-Feb	51	66	53	23	81	70	25	51	55	50	24	43	8	47	52	27	15	77	38	87	44	68	78	53	87.4
6-Feb	35	25	22	22	21	14	36	30	16	28	36	28	22	12	36	14	20	41	61	60	57	31	69	70	70.3
7-Feb	80	69	64	35	53	72	51	45	92	78	27	81	59	59	66	57	90	59	70	90	53	70	75	66	91.7
8-Feb	59	54	91	35	76	32	17	48	69	31	45	41	57	54	88	95	35	78	73	73	86	44	19	19	94.6
9-Feb	10	23	40	30	21	43	35	11	10	18	10	13	50	11	12	23	46	25	9	33	9	63	70	45	69.9
10-Feb	74	32	51	58	87	90	81	10	37	8	18	20	68	77	17	12	37	36	30	51	50	40	29	28	89.6
11-Feb	39	58	71	68	11	73	25	84	50	48	21	39	43	70	21	50	23	63	65	29	77	42	80	79	84.4
12-Feb	69	41	47	61	38	31	36	21	64	31	52	10	41	39	48	44	18	34	70	62	28	26	55	67	69.5
13-Feb	67	44	15	66	67	59	90	90	63	29	80	96	69	90	68	60	67	84	19	26	16	22	34	55	95.6
14-Feb	71	70	70	67	73	51	36	41	71	46	64	16	28	59	45	17	19	36	73	64	78	45	31	60	77.7
15-Feb	66	76	59	88	70	73	81	16	43	25	71	37	13	22	9	6	10	9	6	31	7	64	88	85	88.5
16-Feb	23	45	29	67	55	53	13	75	18	60	53	56	68	38	44	82	60	46	18	11	51	40	13	63	82.4
17-Feb	7	6	3	3	6	4	10	36	68	44	49	69	96	9	11	60	18	20	4	35	30	30	12	11	96.1
18-Feb	5	8	6	8	6	16	58	74	70	28	71	49	65	27	11	7	53	10	21	8	9	56	72	91	91.0
19-Feb	26	19	83	78	12	11	64	16	6	20	24	33	29	82	59	72	63	23	66	34	73	34	58	13	82.5
20-Feb	47	57	50	14	65	75	5	33	16	45	37	36	77	72	68	26	37	54	12	91	73	42	16	41	91.0
21-Feb	90	55	8	32	71	61	39	23	15	9	14	9	4	5	8	4	6	5	14	42	75	28	6	8	90.2
22-Feb	13	5	79	13	33	32	61	13	61	24	15	82	18	28	12	21	38	33	14	9	13	10	19	14	82.2
23-Feb	14	27	47	46	39	26	17	20	23	65	66	59	60	59	22	73	16	9	27	11	12	20	65	68	73.1
24-Feb	42	20	15	11	39	14	59	28	46	22	32	10	39	56	14	6	9	60	36	23	26	45	20	19	59.5
25-Feb	29	14	25	19	28	17	72	43	63	68	60	80	55	20	5	6	3	9	33	31	36	17	45	72	79.5
26-Feb	39	48	19	55	54	19	22	26	58	16	45	67	88	73	92	24	2	6	7	5	5	6	69	88	91.7
27-Feb	32	15	99	50	35	73	22	6	72	15	57	60	21	10	20	37	81	22	90	62	10	41	10	9	98.6
28-Feb	22	42	58	71	86	80	61	60	74	76	48	21	30	16	14	18	22	78	68	15	25	45	18	28	85.6
90.2 96.8 98.6 88.5 86.7 89.6 90.0 92.5 91.7 82.2 80.1 95.6 96.1 89.8 91.7 94.6 90.1 83.6 89.9 91.0 86.4 70.1 90.4 91.0																									
N - Not Valid																									

PASZA

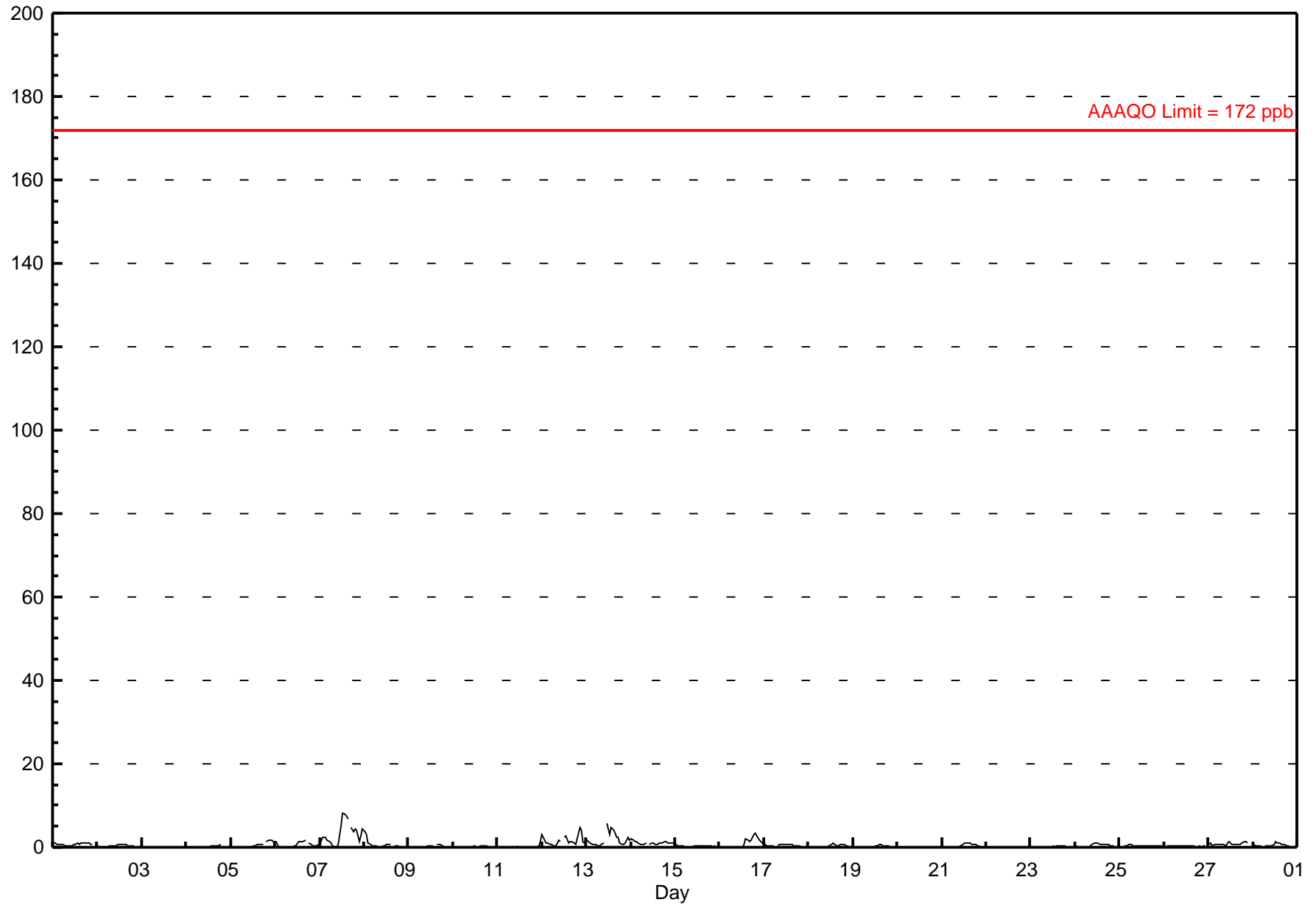
Portable – Kinuso Station

**Monthly Summary Tables, Graphs and
Roses**

Hourly Averages

Sulphur Dioxide (SO₂) - ppb Portable-Kinuso - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0		Hours in Service: 672																																														
Maximum Value: 8.2 ppb on Feb 7 14:00		Maximum Daily Average: 3.2 ppb on Feb 7																																														
Minimum Value: 0 ppb on Feb 3 02:00		Hours of Data: 639																																														
Maximum Diurnal Average: 1.0 ppb at hour 14		Hours of Missing Data: 33																																														
Monthly Average: 0.56 ppb		Hours of Calibration: 33																																														
		Percent Operational Time: 100.0																																														
		Minimum Daily Average: 0.0 ppb on Feb 22																																														
		Minimum Diurnal Average: 0.2 ppb at hour 8																																														
		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 1.3 P ₉₉ = 4.7																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	A	0	0.7	1.1																						
2-Feb	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	A	0	0	0.3	0.5																						
3-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1																						
4-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0	0	0	0	0.1	0.6																						
5-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	2	2	2	1	0.5	1.8																						
6-Feb	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	A	1	1	0	0	0	1	0.6	1.5																						
7-Feb	1	2	2	2	2	1	1	0	0	0	1	5	8	8	7	7	A	5	4	4	4	1	3	5	3.2	8.2																						
8-Feb	4	3	1	1	0	0	0	0	0	0	0	0	1	1	1	A	0	0	0	0	0	0	0	0	0.6	3.7																						
9-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0.2	0.7																						
10-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.5																						
11-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	1.3																						
12-Feb	3	2	1	1	1	1	0	0	1	2	1	A	2	3	1	1	1	1	1	1	2	5	4	2	1	1.6	4.9																					
13-Feb	2	1	1	1	1	1	0	0	1	1	A	6	3	5	5	4	2	2	1	1	1	1	2	2	1.8	5.6																						
14-Feb	2	2	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.1																						
15-Feb	1	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	0.7																						
16-Feb	0	0	0	0	0	0	0	0	0	A	0	0	0	1	2	2	1	2	3	3	3	2	1	1	0.9	3.4																						
17-Feb	1	0	0	0	0	0	0	0	0	A	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0.4	0.8																						
18-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.3	1.0																						
19-Feb	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.2	0.6																						
20-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																						
21-Feb	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0.3	1.0																						
22-Feb	0	A	0	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.0	0.0																						
23-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
24-Feb	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.4	0.9																						
25-Feb	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6																						
26-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.3																						
27-Feb	1	1	0	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3																						
28-Feb	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	A	0	0	0.4	1.2																						
																								0.6	0.6	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.8	1.0	1.0	1.0	1.0	0.6	0.8	0.7	0.7	0.7	0.6	0.5	0.5	Diurnal Average
																								3.7	2.9	2.3	2.3	1.7	1.3	0.9	0.7	1.2	1.7	1.2	5.6	8.0	8.2	7.3	6.8	2.4	4.9	3.9	4.3	4.9	4.0	2.7	4.6	Diurnal Maximum
C - Calibration A - Automated Daily Zero Span																																																
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																																																

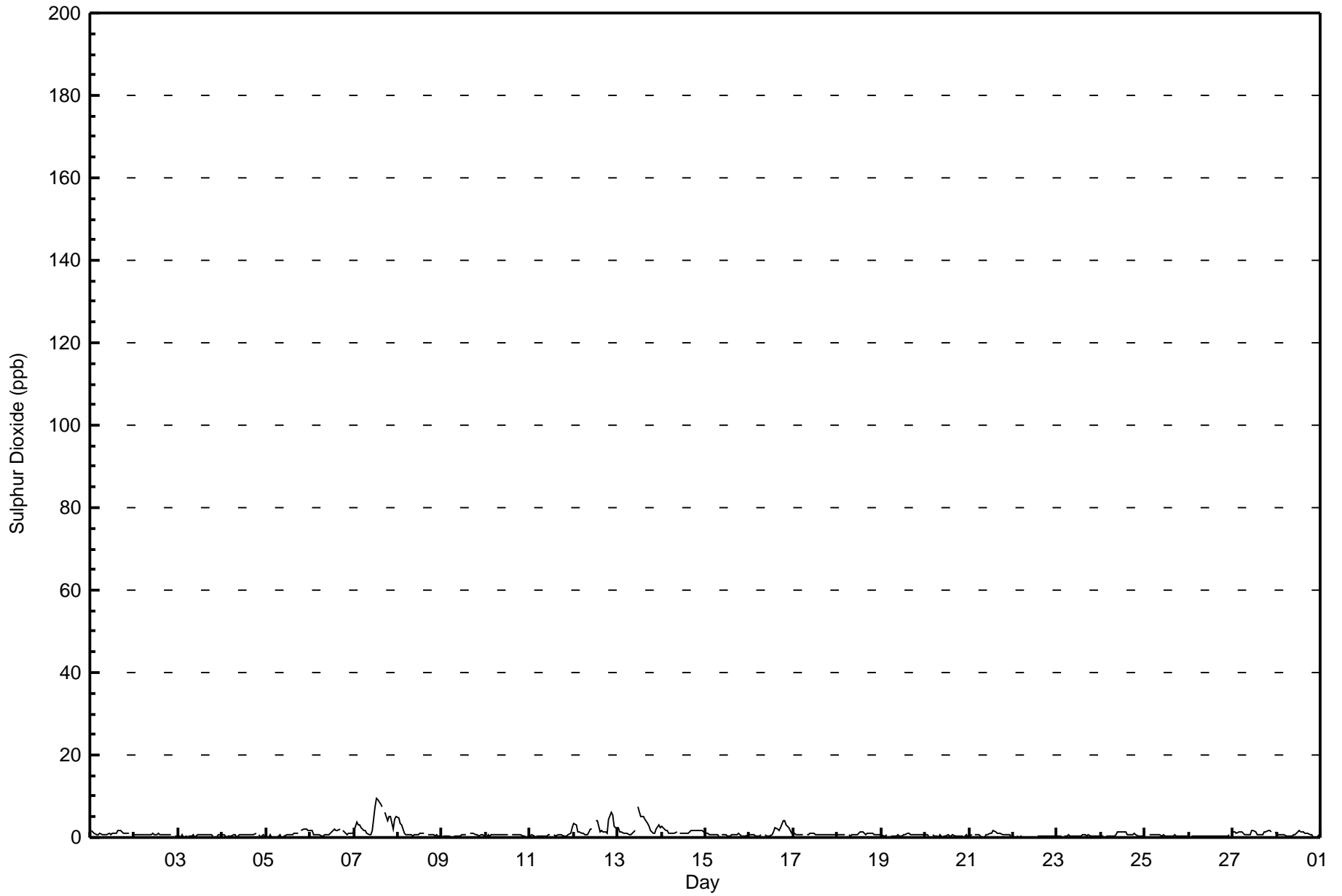


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb Portable-Kinuso - February 2010

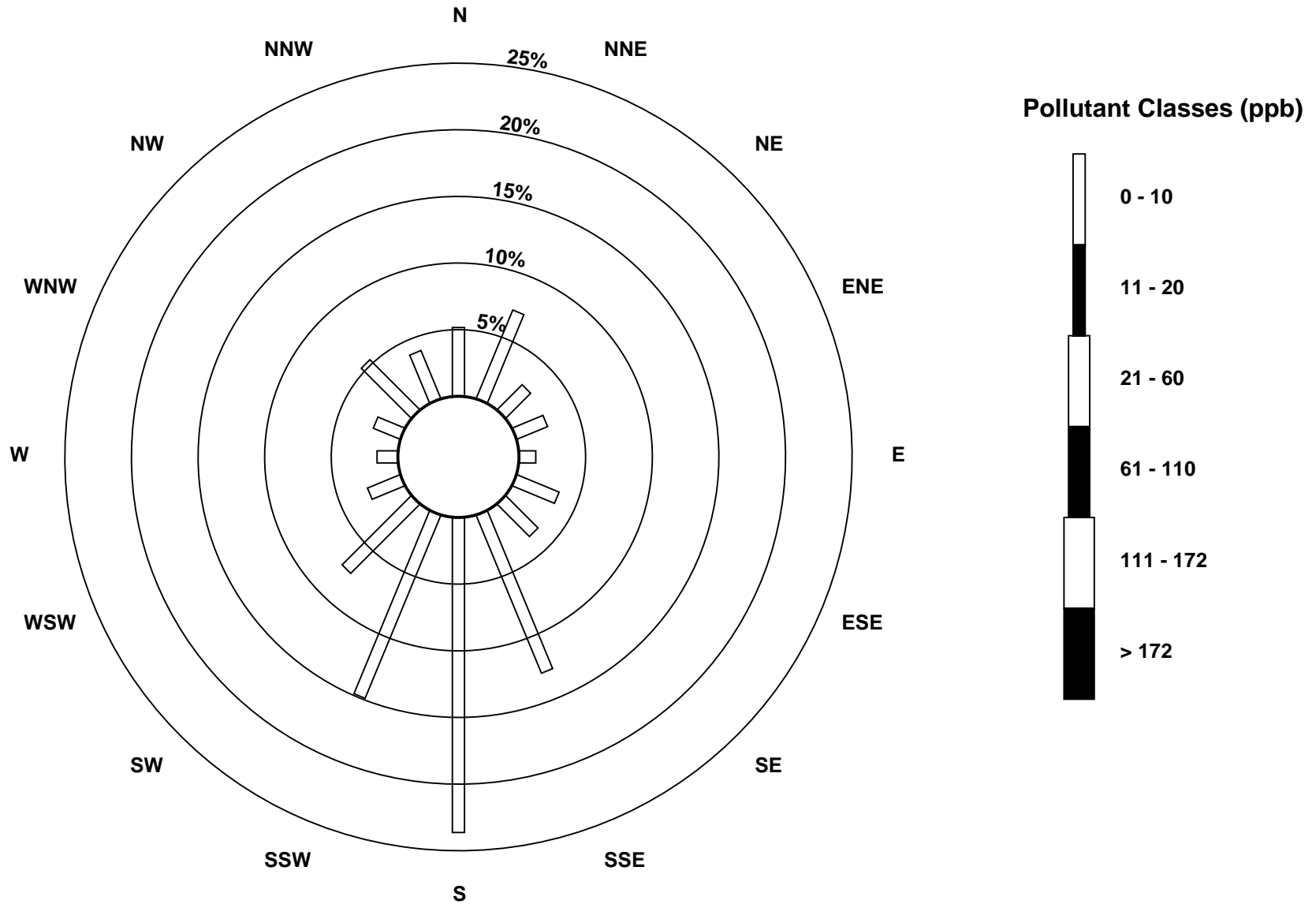
Maximum Value: 9.6 ppb on Feb 7 13:00		Maximum Daily Average: 4.1 ppb on Feb 7		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 9 07:00		Minimum Daily Average: 0.2 ppb on Feb 22		Hours of Data: 639																							
Maximum Diurnal Average: 1.4 ppb at hour 13		Minimum Diurnal Average: 0.5 ppb at hour 8		Hours of Missing Data: 33																							
Monthly Average: 0.93 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.5 Median = 0.5 Q ₃ = 1.0 P ₉₀ = 1.7 P ₉₉ = 7.5		Hours of Calibration: 33																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	A	1	1.0	1.6	
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0	0.6	0.9	
3-Feb	0	0	1	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	0	A	1	1	1	0.4	0.5	
4-Feb	1	1	0	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	0	1	0	0.5	1.1	
5-Feb	0	0	1	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	A	2	2	2	2	2	0.7	2.0	
6-Feb	2	2	1	1	1	1	0	0	1	1	1	1	2	2	2	2	2	A	2	1	1	1	1	1	1.0	2.1	
7-Feb	2	4	3	3	2	2	2	1	1	1	2	8	10	9	8	8	A	6	4	5	5	2	5	5	4.1	9.6	
8-Feb	5	4	3	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	0	1.0	4.9	
9-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	0	1	1	0	0.5	1.0	
10-Feb	0	1	0	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0.5	0.6	
11-Feb	1	1	0	0	0	0	0	0	0	1	1	1	A	1	0	1	1	1	0	0	0	1	1	2	0.5	2.5	
12-Feb	4	3	2	2	1	1	1	1	2	2	2	A	4	4	2	2	1	1	1	4	6	6	3	2	2.4	6.0	
13-Feb	2	2	2	1	1	1	1	1	1	2	A	8	5	5	5	5	4	3	2	1	1	2	3	3	2.5	7.6	
14-Feb	3	2	2	2	1	1	1	1	1	A	1	1	1	1	1	1	2	2	2	2	2	2	2	1	1.4	2.6	
15-Feb	1	1	1	1	1	1	1	0	A	1	1	1	0	1	1	1	1	1	1	0	0	0	0	1	0.6	1.0	
16-Feb	1	1	1	0	0	0	1	A	1	0	0	1	1	2	3	2	2	3	4	4	3	2	2	1	1.4	4.1	
17-Feb	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1	
18-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.5	
19-Feb	1	0	0	1	A	1	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.0	
20-Feb	1	1	0	A	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	1	0	1	0	0.4	0.5	
21-Feb	0	1	A	1	1	1	0	0	0	1	1	1	1	2	2	1	1	1	1	1	1	1	1	0	0.6	1.5	
22-Feb	1	A	0	0	0	0	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
23-Feb	0	0	0	A	0	0	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0.3	0.7	
24-Feb	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.7	1.3	
25-Feb	0	A	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.5	0.8	
26-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	A	0.4	0.8	
27-Feb	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	2	2	1	A	1	1.2	1.8	
28-Feb	1	1	1	1	1	0	0	0	0	1	1	1	2	1	1	1	1	1	1	1	0	A	0	1	0.7	1.7	
		1.0	1.0	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.7	1.2	1.4	1.4	1.3	1.3	0.9	1.1	1.0	1.1	1.1	1.0	0.9	Diurnal Average		
		4.9	3.6	3.0	3.1	2.3	1.6	1.6	1.1	1.5	2.0	2.0	7.6	9.6	9.1	8.1	7.6	3.6	6.1	4.1	5.0	6.0	5.5	4.5	5.0	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums for SO₂ at Portable-Kinuso February 2010



Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Portable-Kinuso - February 2010

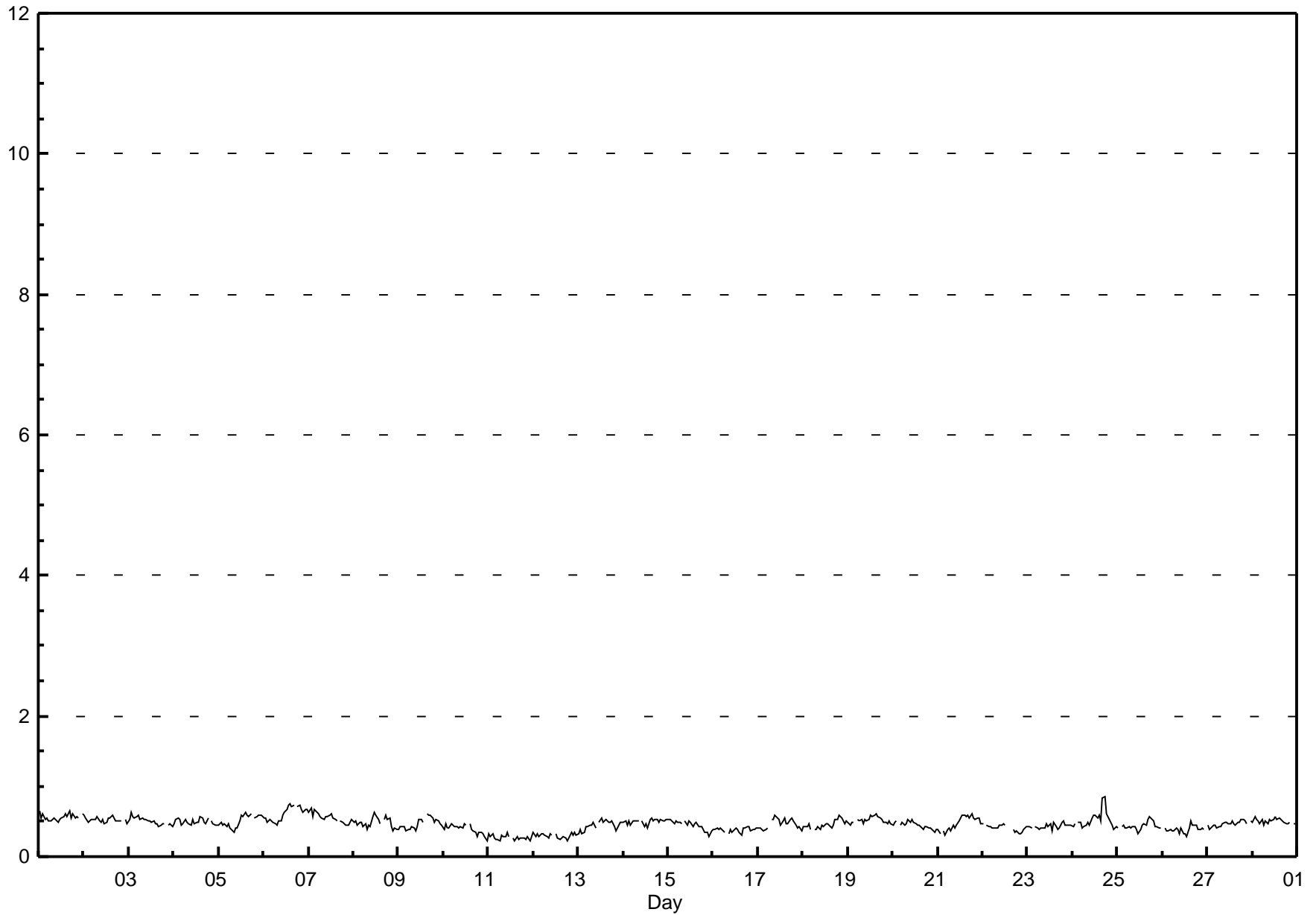


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Kinuso - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 0.8 ppb on Feb 24 18:00 Maximum Daily Average: 0.6 ppb on Feb 6												Hours in Service: 672 Hours of Data: 640 Hours of Missing Data: 32 Hours of Calibration: 32 Percent Operational Time: 100.0																																					
Minimum Value: 0 ppb on Feb 12 19:00 Minimum Daily Average: 0.3 ppb on Feb 11 Maximum Diurnal Average: 0.5 ppb at hour 13 Minimum Diurnal Average: 0.4 ppb at hour 7 Monthly Average: 0.46 ppb Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 0.7																																																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	1	1	1	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.6																							
2-Feb	1	1	0	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	1	1	A	1	0	0.5	0.6																							
3-Feb	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	A	0	0	0	0.5	0.6																							
4-Feb	0	1	1	1	0	0	1	0	0	0	1	0	0	0	1	1	0	0	1	A	0	0	0	0	0.5	0.6																							
5-Feb	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	A	1	1	1	1	1	0.5	0.6																							
6-Feb	1	1	0	1	1	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.6	0.7																							
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0	0	0	0	0	1	0.6	0.7																							
8-Feb	0	1	0	0	0	0	0	0	0	0	1	1	1	1	0	A	1	1	1	1	0	0	0	0	0.5	0.6																							
9-Feb	0	0	0	0	0	0	0	0	0	0	0	1	1	0	A	1	1	1	1	0	1	1	0	0	0.5	0.6																							
10-Feb	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.4	0.5																							
11-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3																							
12-Feb	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3																							
13-Feb	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	0	1	1	0	0	1	0	0	0	0.4	0.5																							
14-Feb	0	1	0	1	0	1	1	1	1	A	1	0	0	0	1	1	1	1	1	1	0	1	1	1	0.5	0.5																							
15-Feb	1	1	1	0	1	0	0	0	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5																							
16-Feb	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4																							
17-Feb	0	0	0	0	0	0	A	A	1	1	1	1	0	1	1	0	0	1	1	1	1	0	0	0	0.5	0.6																							
18-Feb	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.5	0.6																							
19-Feb	0	0	0	0	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0.5	0.6																							
20-Feb	0	0	1	A	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5																							
21-Feb	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.5	0.6																							
22-Feb	0	A	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0.4	0.5																							
23-Feb	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.5																							
24-Feb	0	0	A	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.5	0.8																							
25-Feb	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0.4	0.6																							
26-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	A	0.4	0.5																							
27-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	1	0	A	1	0.5	0.5																							
28-Feb	0	1	1	1	0	1	0	1	0	1	1	1	1	1	1	1	1	0	0	0	0	A	0	0	0.5	0.6																							
																								0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	Diurnal Average
																								0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.7	0.7	Diurnal Maximum
C - Calibration A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																																																	

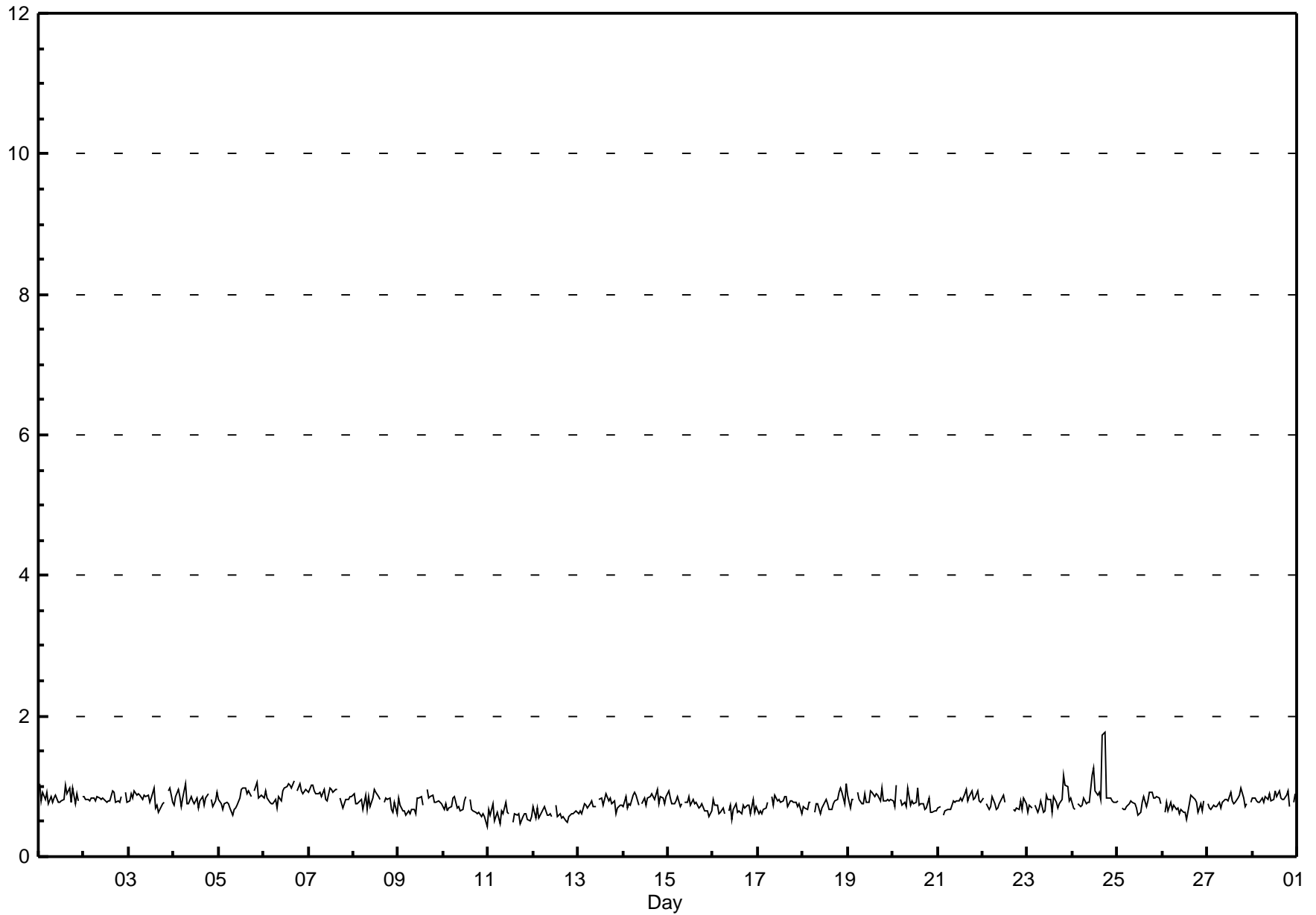


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

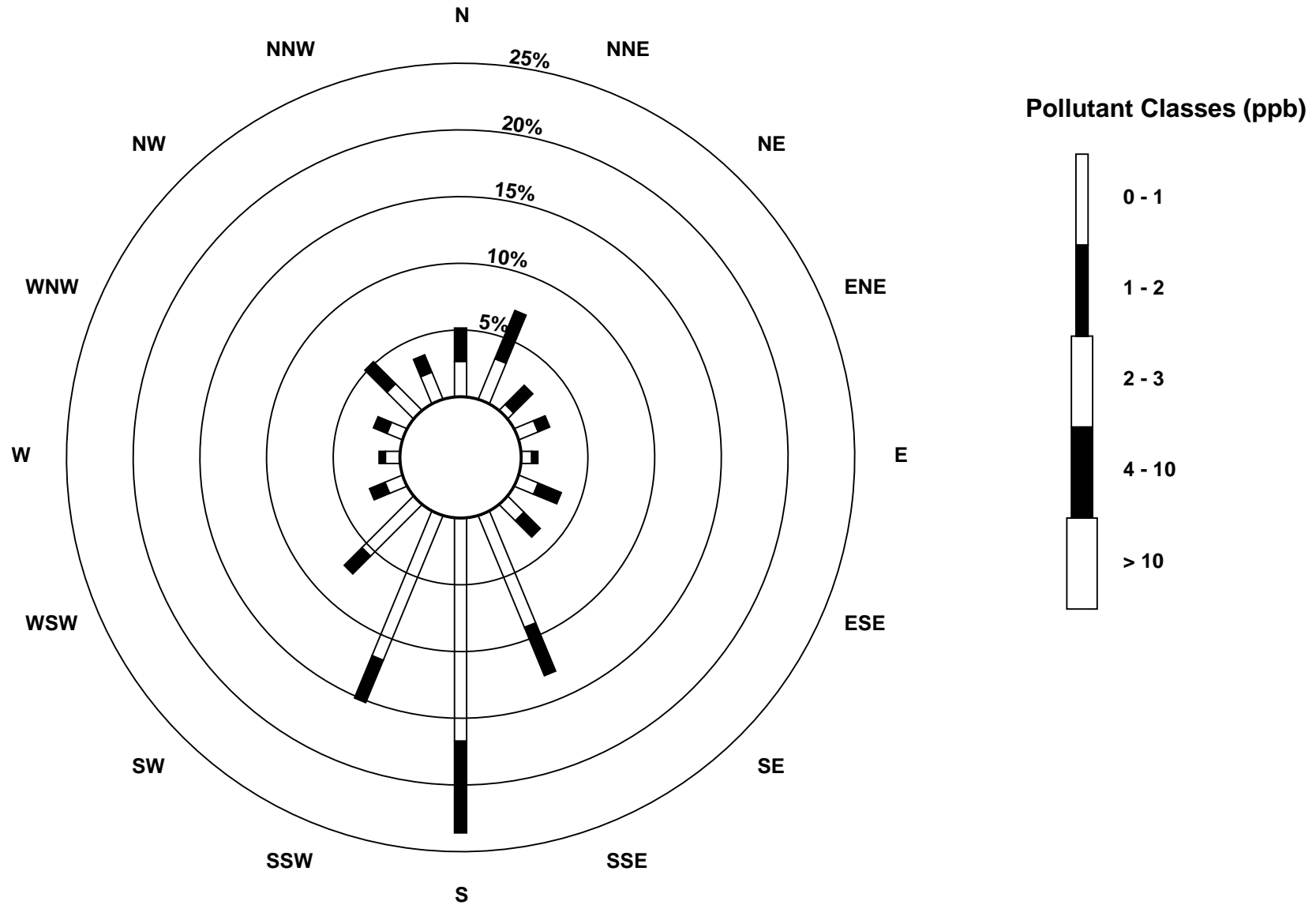
Portable-Kinuso - February 2010

Maximum Value: 1.8 ppb on Feb 24 18:00		Maximum Daily Average: 0.9 ppb on Feb 24		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 11 00:00		Minimum Daily Average: 0.6 ppb on Feb 11		Hours of Data: 640																							
Maximum Diurnal Average: 0.8 ppb at hour 13		Minimum Diurnal Average: 0.7 ppb at hour 4		Hours of Missing Data: 32																							
Monthly Average: 0.78 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 0.8 P ₉₀ = 0.9 P ₉₉ = 1.0		Hours of Calibration: 32																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	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	1.0	
2-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	0.9	
3-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0.8	1.0	
4-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.8	1.0	
5-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.1	
6-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.1	
7-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.9	1.0	
8-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.8	1.0	
9-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.8	1.0	
10-Feb	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0.7	0.9	
11-Feb	1	1	1	1	1	1	0	1	1	1	1	A	1	0	1	1	1	0	1	1	1	1	1	1	0.6	0.8	
12-Feb	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0	1	1	1	1	1	0.6	0.7	
13-Feb	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
14-Feb	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
15-Feb	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9	
16-Feb	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8	
17-Feb	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	0.9	
18-Feb	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
19-Feb	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
20-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
21-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
22-Feb	1	A	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	0.7	0.9	
23-Feb	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2	
24-Feb	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	1	0.9	1.8	
25-Feb	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9	
26-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.9	
27-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.8	1.0	
28-Feb	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	0.9	
	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	Diurnal Average	
	1.0	1.0	1.0	0.9	0.9	0.9	1.0	0.9	1.0	0.9	1.2	1.3	1.0	1.0	1.0	1.0	1.7	1.8	1.0	1.2	1.1	1.0	1.0	1.0	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Portable-Kinuso - February 2010





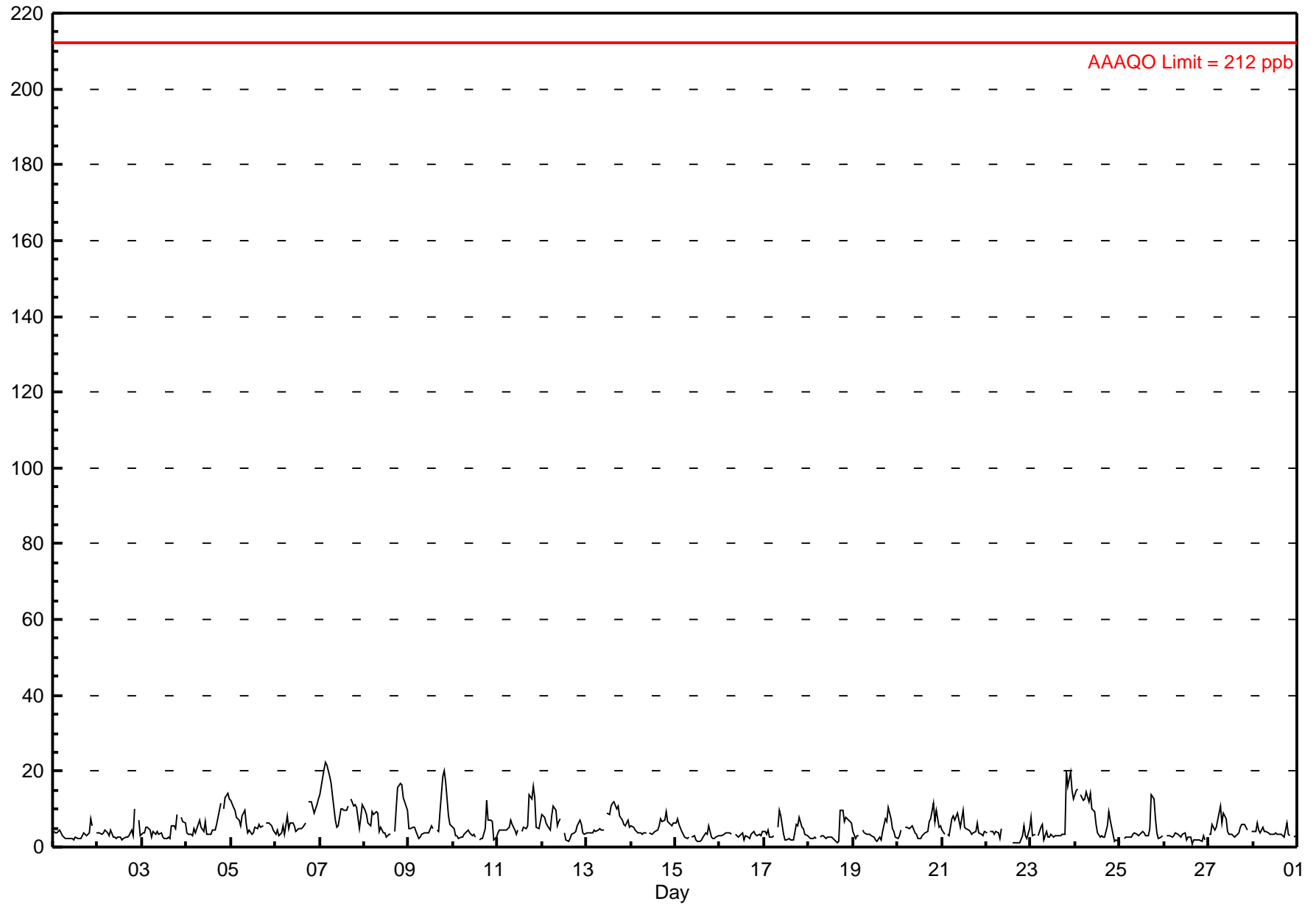
Hourly Averages

Nitrogen Dioxide (NO₂) - ppb Portable-Kinuso - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 22.5 ppb on Feb 7 04:00 Maximum Daily Average: 12.3 ppb on Feb 7	Hours in Service: 672 Hours of Data: 638 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0
Minimum Value: 1 ppb on Feb 26 16:00 Minimum Daily Average: 2.5 ppb on Feb 26 Maximum Diurnal Average: 8.3 ppb at hour 20 Minimum Diurnal Average: 3.6 ppb at hour 15 Monthly Average: 5.27 ppb Percentiles: P ₁ = 1.1 P ₁₀ = 2.3 Q ₁ = 3.0 Median = 4.0 Q ₃ = 6.2 P ₉₀ = 10.2 P ₉₉ = 19.6	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	4	4	4	4	4	3	2	2	2	2	2	2	3	2	2	2	4	3	3	4	7	6	A	4	3.3	7.5
2-Feb	4	4	3	4	4	4	3	5	3	2	2	3	2	2	2	3	3	3	5	3	10	A	7	3	3.6	10.2
3-Feb	4	4	5	5	5	3	4	3	4	3	4	3	2	2	3	2	6	6	5	9	A	8	7	6	4.4	8.7
4-Feb	4	3	3	3	5	4	6	7	5	4	7	4	3	3	4	4	6	8	11	A	10	13	14	13	6.3	14.2
5-Feb	12	11	10	8	7	5	8	10	6	4	5	3	4	5	5	6	5	5	A	6	6	6	5	4	6.4	12.5
6-Feb	3	4	3	4	6	3	8	5	6	6	6	4	5	5	5	5	7	A	12	12	10	9	11	13	6.6	12.7
7-Feb	14	18	20	22	22	19	17	13	7	5	6	10	10	10	10	11	A	13	11	11	11	5	8	11	12.3	22.5
8-Feb	10	8	6	6	9	9	9	9	4	5	4	4	3	3	3	A	4	10	16	17	16	13	12	10	8.3	16.8
9-Feb	5	5	5	5	4	2	2	3	4	4	4	4	6	5	A	4	4	9	19	20	17	8	6	6	6.6	20.2
10-Feb	5	3	3	2	3	3	3	4	4	4	3	4	3	A	2	2	2	5	12	7	7	7	2	3	4.0	12.4
11-Feb	4	4	4	5	4	4	5	7	6	4	3	4	A	4	5	5	5	14	13	16	13	5	5	7	6.5	16.1
12-Feb	9	8	6	6	5	8	11	10	6	7	7	A	4	2	1	2	3	4	4	6	7	6	4	3	5.5	10.9
13-Feb	4	4	4	4	4	4	5	5	4	4	A	9	8	11	12	12	10	11	8	7	6	6	7	5	6.7	12.1
14-Feb	5	5	5	4	4	4	3	4	4	A	4	4	4	4	4	6	7	7	7	9	7	6	5	6	5.1	9.2
15-Feb	6	8	6	4	3	3	2	3	A	3	3	2	2	1	2	3	4	3	5	3	2	2	3	3	3.3	7.6
16-Feb	3	3	3	4	4	4	3	A	4	3	3	3	4	2	3	3	2	3	4	3	3	3	3	4	3.2	4.0
17-Feb	4	3	5	3	3	3	A	5	10	8	3	2	2	2	2	2	2	6	6	8	5	5	3	3	4.1	9.6
18-Feb	2	2	2	3	2	A	3	3	3	2	3	3	3	2	2	1	2	10	10	7	8	7	7	6	4.0	9.6
19-Feb	4	2	3	3	A	5	4	3	3	3	3	2	2	3	2	4	8	7	10	7	5	4	3	4.0	10.5	
20-Feb	2	3	5	A	5	5	5	5	5	4	4	2	3	3	3	4	4	7	7	12	7	10	5	6	5.0	11.7
21-Feb	5	4	A	3	3	7	8	7	9	7	5	10	5	5	4	4	3	4	4	6	4	3	3	4	5.2	9.7
22-Feb	4	A	4	4	3	4	4	2	5	C	C	C	C	C	1	1	1	1	1	3	6	3	2	5	3.0	5.8
23-Feb	8	3	3	A	3	5	6	2	4	3	3	3	3	3	3	3	3	3	3	20	16	20	15	13	6.4	20.0
24-Feb	15	15	A	14	12	13	15	12	14	10	9	6	4	3	3	3	3	5	9	7	3	2	2	1	7.8	15.3
25-Feb	1	A	2	2	3	3	3	3	4	3	3	3	4	4	3	3	5	14	13	7	4	2	2	3	4.1	13.7
26-Feb	A	3	3	3	3	3	4	3	3	3	3	4	2	3	3	1	2	2	2	2	1	3	2	A	2.5	3.7
27-Feb	3	3	6	4	5	7	11	6	9	8	4	3	4	3	3	3	4	5	6	6	5	4	A	4	5.1	10.9
28-Feb	4	4	6	5	4	5	4	4	4	3	3	3	4	3	3	3	3	3	6	3	3	A	3	3	3.8	6.3
	5.5	5.3	5.0	5.1	5.1	5.2	5.9	5.4	5.2	4.4	4.0	3.9	3.6	3.6	3.6	3.7	4.0	6.3	7.7	8.3	7.5	6.4	5.7	5.6	Diurnal Average	
	14.9	18.3	20.4	22.5	21.5	18.7	17.0	13.4	14.1	9.9	9.4	10.0	10.3	10.8	11.6	12.1	10.1	13.8	18.6	20.2	17.3	19.8	14.8	12.8	Diurnal Maximum	

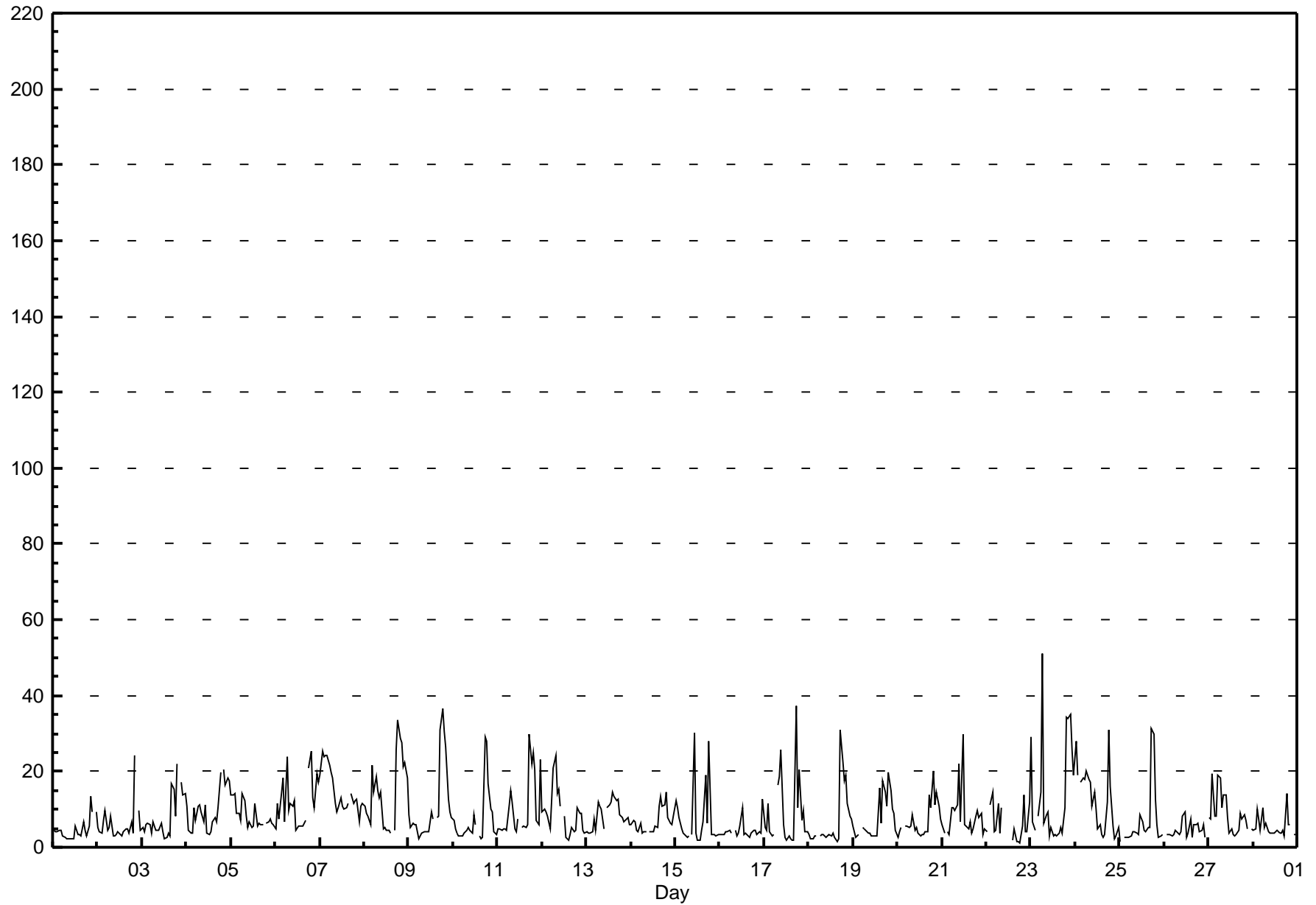
C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb



Hourly Maximums

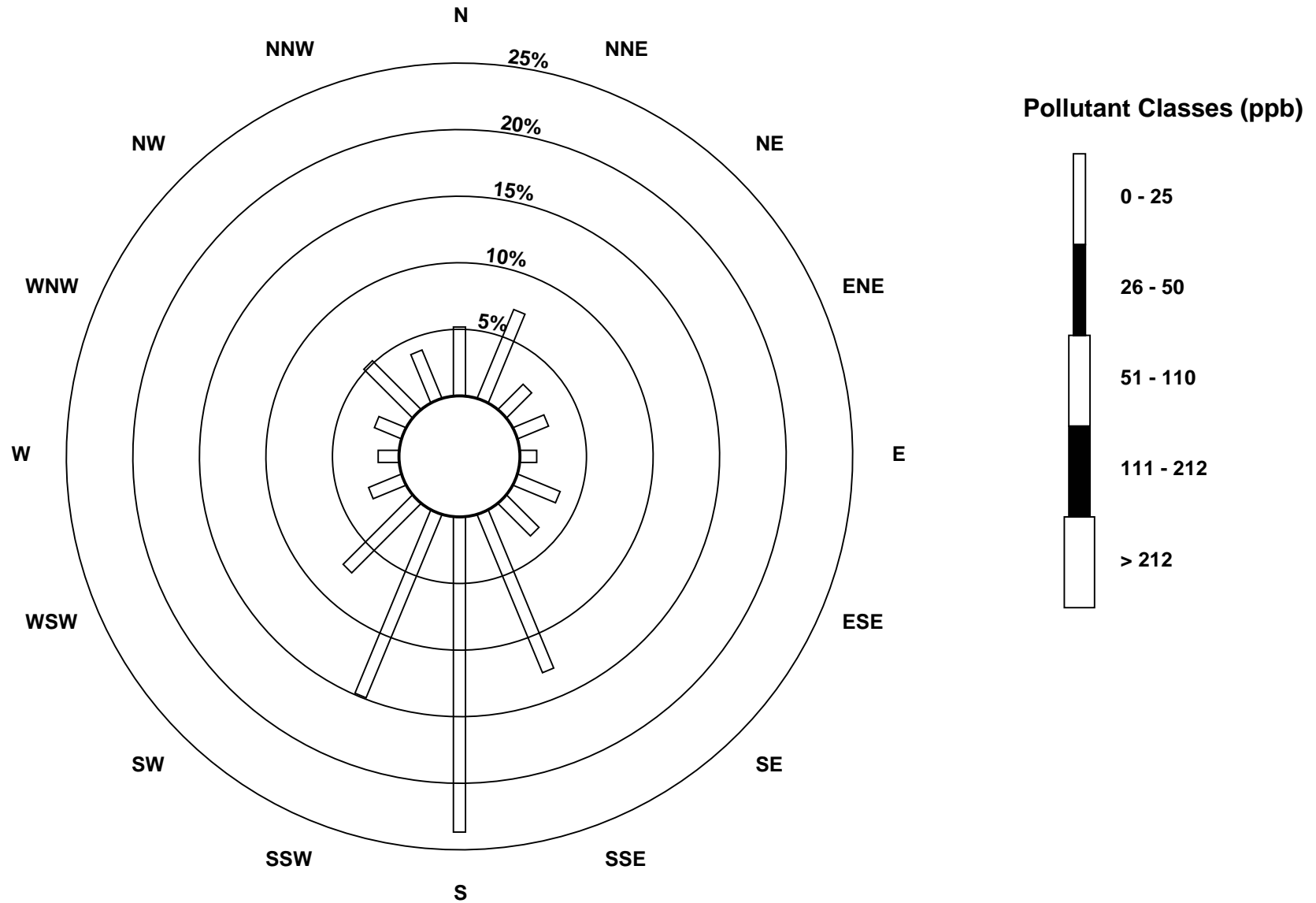
Nitrogen Dioxide (NO₂) - ppb Portable-Kinuso - February 2010

Maximum Value: 51.1 ppb on Feb 23 07:00		Maximum Daily Average: 15.0 ppb on Feb 7		Hours in Service: 672																																													
Minimum Value: 1 ppb on Feb 22 19:00		Minimum Daily Average: 4.5 ppb on Feb 16		Hours of Data: 638																																													
Maximum Diurnal Average: 15.2 ppb at hour 19		Minimum Diurnal Average: 4.9 ppb at hour 14		Hours of Missing Data: 34																																													
Monthly Average: 8.59 ppb		Percentiles: P ₁ = 1.7 P ₁₀ = 3.1 Q ₁ = 3.9 Median = 5.8 Q ₃ = 10.9 P ₉₀ = 18.6 P ₉₉ = 33.6		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-Feb	5	4	4	5	4	3	3	2	2	2	2	6	3	3	3	7	5	3	6	14	9	A	9	4.6	13.5																								
2-Feb	5	4	4	7	10	5	5	8	3	3	3	4	3	3	4	5	5	4	7	4	24	A	10	4	5.9	24.1																							
3-Feb	5	4	6	6	6	4	7	5	4	4	6	4	2	3	4	3	17	15	8	22	A	17	14	14	7.9	21.9																							
4-Feb	11	4	4	4	10	7	11	11	9	7	11	4	3	4	7	8	7	10	20	A	20	16	18	18	9.8	20.4																							
5-Feb	14	14	14	9	9	7	14	12	8	5	7	5	6	12	6	6	6	6	A	6	7	7	6	6	8.3	14.0																							
6-Feb	5	12	7	14	18	7	24	10	12	11	12	4	5	6	6	6	7	A	21	25	13	10	19	17	11.8	25.4																							
7-Feb	19	25	24	24	24	22	20	18	12	9	11	13	11	10	10	12	A	14	12	12	13	7	11	12	15.0	25.4																							
8-Feb	11	9	8	6	22	15	19	15	13	14	5	4	4	4	A	5	26	33	29	28	21	22	18	14.6	33.4																								
9-Feb	8	5	6	6	6	2	3	4	4	4	4	9	7	A	8	8	31	37	31	26	13	9	8	10.7	36.6																								
10-Feb	7	5	4	3	3	3	4	5	5	5	4	9	6	A	3	2	2	29	28	17	10	9	4	3	7.4	29.0																							
11-Feb	5	5	5	5	5	5	11	15	12	5	4	7	A	5	5	5	6	30	22	25	21	7	6	23	10.4	29.8																							
12-Feb	9	10	9	8	5	13	21	24	14	15	11	A	8	3	2	3	5	4	5	10	9	9	5	4	9.0	24.3																							
13-Feb	4	4	4	4	8	5	12	11	10	5	A	11	11	12	15	13	12	13	8	8	7	7	8	6	8.5	14.7																							
14-Feb	6	7	7	5	4	6	4	4	4	4	A	4	4	4	6	5	11	13	11	11	15	8	6	6	8	6.9	14.7																						
15-Feb	12	11	8	5	4	3	3	3	A	3	30	4	2	2	5	7	19	6	28	3	3	3	3	3	7.4	30.3																							
16-Feb	3	3	3	4	4	4	4	A	5	3	4	6	10	3	4	3	3	4	4	4	4	4	4	13	4.5	12.8																							
17-Feb	5	5	11	4	3	3	A	16	19	26	6	3	2	3	2	2	2	37	10	21	7	10	4	4	8.9	37.4																							
18-Feb	3	2	2	3	3	A	3	3	3	3	3	3	3	4	2	1	2	31	23	18	19	12	8	7	7.1	31.0																							
19-Feb	6	3	3	3	A	5	5	4	4	4	3	3	3	3	16	7	18	14	11	20	15	10	9	5	7.5	19.7																							
20-Feb	3	4	5	A	6	5	5	6	9	4	5	4	3	3	3	4	4	14	10	20	11	14	11	7	7.0	20.3																							
21-Feb	6	4	A	4	3	10	11	10	11	22	7	30	6	5	5	7	4	5	8	10	8	9	3	5	8.3	29.6																							
22-Feb	4	A	11	14	4	5	12	4	10	C	C	C	C	C	2	5	1	2	1	6	14	4	4	12	6.3	14.4																							
23-Feb	29	7	5	A	8	14	51	6	9	9	3	5	3	3	3	4	5	4	11	34	34	35	26	19	14.3	51.1																							
24-Feb	28	19	A	17	18	18	20	18	17	11	15	10	5	6	3	3	3	12	31	16	5	2	3	5	12.5	30.9																							
25-Feb	1	A	3	3	3	3	3	4	4	4	3	8	7	5	4	5	5	31	30	13	6	3	3	3	6.7	31.4																							
26-Feb	A	3	3	3	3	3	5	4	3	4	8	9	3	4	8	2	6	6	6	4	5	6	3	A	4.6	9.2																							
27-Feb	8	7	19	8	8	19	18	11	14	14	8	4	5	3	3	3	5	9	7	9	7	5	A	5	8.7	19.4																							
28-Feb	4	5	10	8	4	10	5	6	4	4	4	4	4	4	5	4	4	4	3	14	6	6	A	3	3	5.4	14.0																						
																								8.4	7.1	7.3	7.0	7.6	7.7	11.1	8.9	8.3	7.7	7.0	6.5	5.2	4.9	5.1	5.2	6.7	13.9	15.2	14.5	12.7	9.9	8.6	8.9	Diurnal Average	
																								29.1	25.4	23.9	24.3	24.1	21.7	51.1	24.3	18.7	25.7	30.3	29.6	11.1	11.8	15.7	13.4	18.9	37.4	36.6	34.4	34.0	35.0	25.8	23.0	Diurnal Maximum	
C - Calibration																								A - Automated Daily Zero Span																									



Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Portable-Kinuso - February 2010



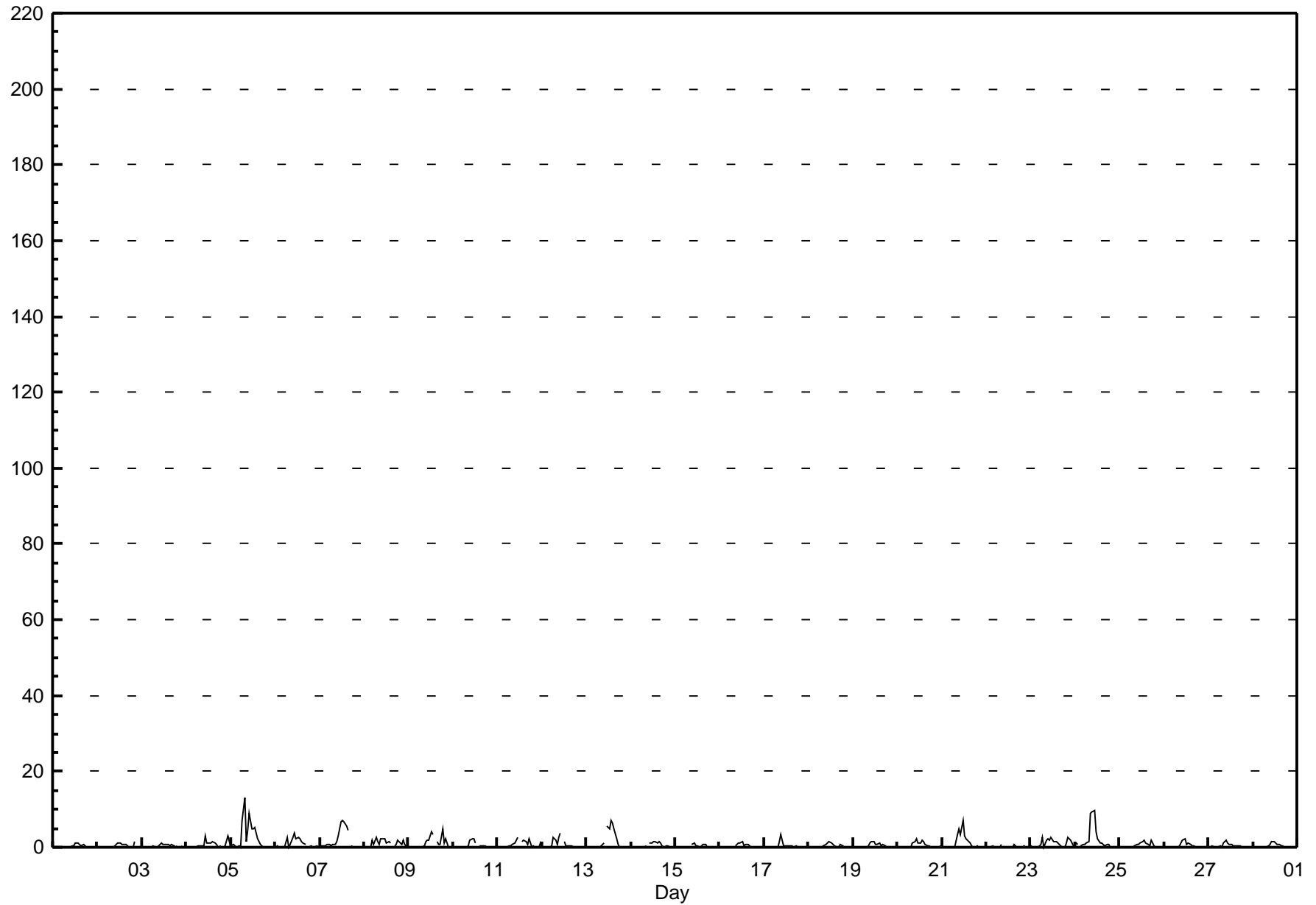
Hourly Averages

Nitrogen Oxide (NO) - ppb Portable-Kinuso - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 672
Maximum Value: 13.0 ppb on Feb 5 08:00	Maximum Daily Average: 2.5 ppb on Feb 5
Minimum Value: 0 ppb on Feb 9 08:00	Hours of Data: 638
Maximum Diurnal Average: 2.4 ppb at hour 11	Hours of Missing Data: 34
Monthly Average: 0.76 ppb	Hours of Calibration: 34
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.9 P ₉₀ = 2.0 P ₉₉ = 5.7	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	A	0	0.3	1.1
2-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	2	A	0	0	0.4	1.6
3-Feb	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	A	0	0	0	0.4	1.3
4-Feb	0	0	0	0	0	0	0	0	0	0	3	1	1	1	2	1	1	0	0	A	0	0	3	1	0.7	3.2
5-Feb	0	1	0	0	0	0	7	13	1	4	9	5	5	5	2	2	1	0	A	0	0	0	0	0	2.5	13.0
6-Feb	0	0	0	0	0	0	2	0	1	2	4	2	3	2	2	1	1	A	0	1	0	0	1	0	1.0	3.8
7-Feb	0	0	0	0	1	1	0	1	1	1	3	7	7	7	6	4	A	0	0	0	0	0	0	0	1.7	7.1
8-Feb	0	0	0	0	2	1	3	2	1	2	2	2	1	1	1	A	0	1	2	1	1	2	1	0	1.1	2.5
9-Feb	0	0	0	0	0	0	0	0	0	1	2	2	4	3	A	1	1	1	5	1	2	0	0	0	1.0	4.7
10-Feb	0	0	0	0	0	0	0	0	0	2	2	2	1	A	0	0	0	0	0	0	0	0	0	0	0.4	2.3
11-Feb	0	0	0	0	0	0	0	1	1	1	2	3	A	2	2	2	1	2	0	0	0	0	0	1	0.7	2.8
12-Feb	0	0	0	0	0	0	3	2	1	2	4	A	1	1	0	0	0	0	0	0	0	0	0	0	0.7	3.8
13-Feb	0	0	0	0	0	0	0	0	0	0	1	A	5	5	7	6	5	2	1	0	0	0	0	0	1.4	6.9
14-Feb	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	1.5
15-Feb	0	0	0	0	0	0	0	0	0	A	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0.2	1.1
16-Feb	0	0	0	0	0	0	0	A	0	1	1	1	2	0	1	1	0	0	0	0	0	0	0	0	0.3	1.5
17-Feb	0	0	0	0	0	0	A	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.5
18-Feb	0	0	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0.4	1.5
19-Feb	0	0	0	0	A	0	0	0	0	1	2	2	1	1	1	1	1	1	0	0	0	0	0	0	0.4	1.7
20-Feb	0	0	0	A	0	0	0	0	0	1	2	2	1	1	2	1	1	0	0	0	0	0	0	0	0.5	2.2
21-Feb	0	0	A	0	0	0	0	0	0	3	5	4	7	3	2	1	1	0	0	0	0	0	0	0	1.2	7.1
22-Feb	0	A	0	0	0	0	0	0	0	1	C	C	C	C	C	0	1	0	0	0	0	0	0	0	0.1	0.9
23-Feb	1	0	0	A	0	1	3	0	2	2	2	3	2	2	1	1	0	0	0	1	3	2	1	0	1.1	2.7
24-Feb	1	1	A	0	1	1	1	2	9	9	10	4	2	1	1	1	0	1	1	0	0	0	0	0	1.9	9.7
25-Feb	0	A	0	0	0	0	0	0	0	1	1	1	2	2	1	1	1	2	0	0	0	0	0	0	0.5	1.8
26-Feb	A	0	0	0	0	0	0	0	0	1	2	2	1	1	1	0	0	0	0	0	0	0	0	A	0.4	2.1
27-Feb	0	0	0	0	0	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0.4	2.0
28-Feb	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0	0.4	1.4
	0.1	0.1	0.1	0.1	0.2	0.1	0.8	0.8	1.0	1.9	2.4	2.3	1.9	1.8	1.3	1.0	0.6	0.4	0.4	0.2	0.3	0.2	0.2	0.2		Diurnal Average
	1.1	0.8	0.4	0.3	1.7	0.8	7.1	13.0	8.8	9.2	9.7	7.1	7.1	6.9	6.3	4.8	2.1	2.1	4.7	1.2	2.7	1.9	3.2	1.3		Diurnal Maximum

C - Calibration A - Automated Daily Zero Span



Hourly Maximums

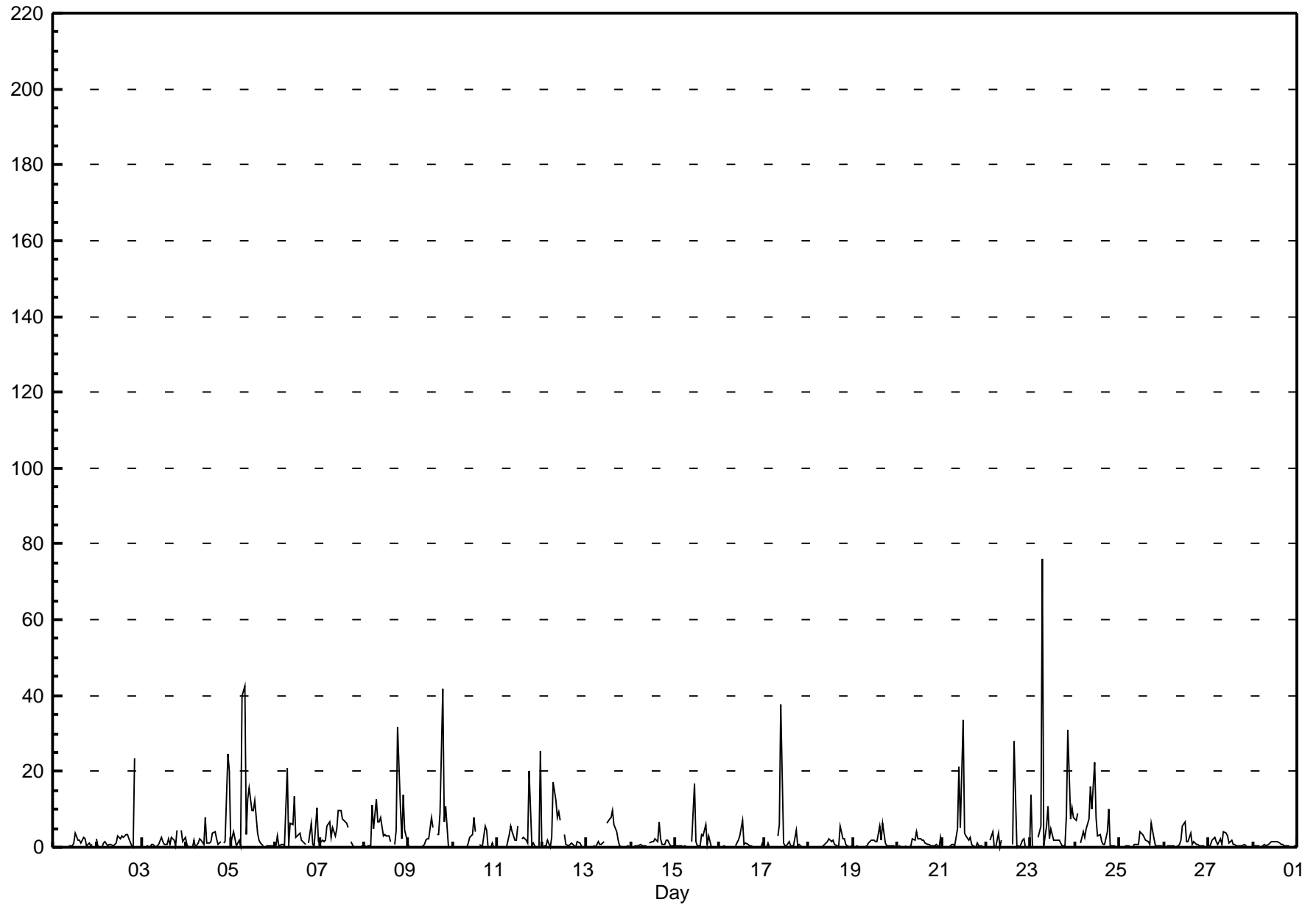
Nitrogen Oxide (NO) - ppb

Portable-Kinuso - February 2010

Maximum Value: 76.2 ppb on Feb 23 07:00		Maximum Daily Average: 8.6 ppb on Feb 23		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 11 03:00		Minimum Daily Average: 0.6 ppb on Feb 28		Hours of Data: 638																							
Maximum Diurnal Average: 7.0 ppb at hour 7		Minimum Diurnal Average: 0.5 ppb at hour 3		Hours of Missing Data: 34																							
Monthly Average: 2.72 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.8 Q ₃ = 2.5 P ₉₀ = 6.9 P ₉₉ = 29.7		Hours of Calibration: 34																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	0	0	0	0	0	0	0	0	0	0	0	1	4	2	2	1	3	2	0	1	0	1	A	2	0.9	3.6	
2-Feb	0	0	0	1	2	0	1	1	0	1	1	3	2	3	3	4	3	2	0	0	24	A	0	0	2.2	23.6	
3-Feb	0	0	0	0	0	1	1	0	0	1	2	2	1	1	2	1	3	2	0	4	A	5	1	3	1.3	4.5	
4-Feb	1	0	0	0	2	0	1	2	2	1	8	1	1	1	4	4	2	1	2	A	1	1	25	20	3.5	24.6	
5-Feb	1	4	2	0	2	0	40	42	3	13	16	10	10	12	4	2	1	0	A	0	0	1	0	0	7.2	42.3	
6-Feb	0	3	0	1	1	0	21	0	6	6	14	3	3	4	2	1	1	A	1	6	1	0	11	1	3.8	21.0	
7-Feb	1	2	1	2	5	7	3	5	3	5	10	10	7	7	6	5	A	1	0	0	0	0	0	0	3.6	9.9	
8-Feb	0	0	0	0	11	5	13	7	7	8	3	3	3	2	A	3	1	4	32	11	2	14	5	1	5.9	31.8	
9-Feb	0	0	0	0	0	0	0	0	1	2	2	2	8	5	A	3	3	9	42	7	11	0	0	0	4.2	41.8	
10-Feb	0	0	0	0	0	0	0	0	1	3	3	8	4	A	1	0	0	6	4	0	0	1	0	0	1.4	7.7	
11-Feb	0	0	0	0	0	0	3	5	4	2	2	6	A	2	2	2	1	20	0	1	0	0	0	25	3.4	25.3	
12-Feb	0	0	0	2	0	2	17	12	8	9	7	A	3	1	0	1	1	0	0	2	1	0	0	0	3.0	17.0	
13-Feb	0	0	0	0	0	0	1	1	1	1	2	A	6	8	8	10	6	4	2	0	0	0	0	0	2.1	9.7	
14-Feb	0	0	0	0	0	1	0	0	0	A	1	2	2	2	1	7	2	1	1	2	2	0	0	0	1.1	6.9	
15-Feb	0	0	0	0	0	0	0	0	A	2	17	1	0	0	3	3	6	1	3	0	0	0	0	0	1.7	16.8	
16-Feb	0	0	0	0	0	0	0	A	1	1	2	3	7	1	1	1	0	0	0	0	0	0	0	1	0.8	7.0	
17-Feb	0	0	1	0	0	0	A	3	6	38	1	0	0	1	0	0	0	4	0	1	0	0	0	0	2.6	37.6	
18-Feb	0	0	0	0	0	A	0	0	0	1	2	2	2	2	1	0	0	6	2	2	1	0	0	0	1.0	5.6	
19-Feb	0	0	0	0	A	0	0	0	1	2	2	2	2	2	5	2	6	1	0	0	0	0	0	0	1.2	6.4	
20-Feb	0	0	0	A	0	0	0	0	2	2	4	2	2	2	2	1	1	1	0	0	0	1	0	2	1.1	4.3	
21-Feb	0	0	A	0	0	1	1	0	5	21	5	33	4	3	2	3	1	0	0	1	0	0	0	0	3.5	33.4	
22-Feb	0	A	2	4	0	0	4	0	2	C	C	C	C	C	1	28	0	0	0	2	2	0	0	0	2.6	28.1	
23-Feb	14	0	0	A	3	6	76	0	5	11	2	5	2	2	2	2	1	0	0	8	31	7	10	8	8.6	76.2	
24-Feb	7	9	A	1	4	3	5	7	16	10	22	8	3	3	1	1	1	4	10	0	0	0	0	0	5.1	22.3	
25-Feb	0	A	0	0	0	0	0	0	1	1	1	4	3	2	2	2	1	6	2	0	0	0	0	0	1.2	6.3	
26-Feb	A	0	0	0	0	0	0	0	1	2	5	7	1	2	4	1	2	1	1	0	0	0	0	A	1.3	6.9	
27-Feb	0	1	2	2	2	1	2	1	4	4	3	1	2	1	1	0	0	0	0	1	0	0	A	0	1.2	4.1	
28-Feb	0	0	0	0	0	0	1	0	1	1	2	2	2	1	1	1	1	0	0	0	0	A	0	0	0.6	1.7	
		1.0	0.8	0.5	0.6	1.3	1.0	7.0	3.3	3.0	5.6	5.3	4.9	3.3	2.8	2.4	3.0	1.7	2.8	3.8	1.9	2.9	1.3	2.1	2.5	Diurnal Average	
		13.9	9.1	2.3	4.0	11.3	6.9	76.2	42.3	16.0	37.6	22.3	33.4	9.8	12.3	9.7	28.1	6.4	20.0	41.8	10.9	31.1	13.9	24.6	25.3	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

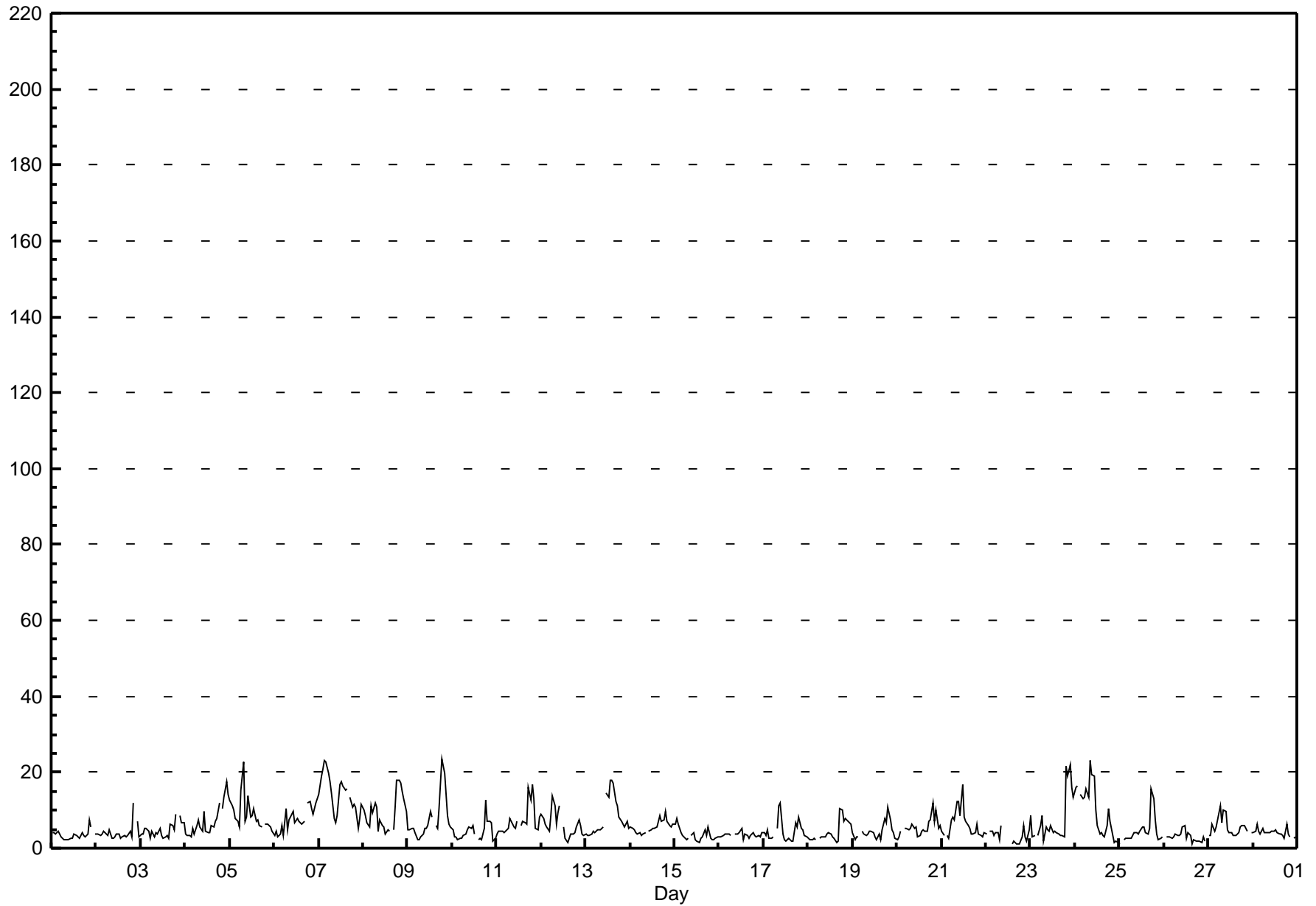
Nitrogen Oxide (NO) - ppb
Portable-Kinuso - February 2010



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb Portable-Kinuso - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0		Hours in Service: 672																								
Maximum Value: 23.4 ppb on Feb 9 19:00		Maximum Daily Average: 14.2 ppb on Feb 7																								
Minimum Value: 1 ppb on Feb 26 16:00		Hours of Data: 638																								
Maximum Diurnal Average: 8.6 ppb at hour 20		Hours of Missing Data: 34																								
Monthly Average: 6.05 ppb		Hours of Calibration: 34																								
Minimum Daily Average: 3.0 ppb on Feb 26		Percent Operational Time: 100.0																								
Minimum Diurnal Average: 4.6 ppb at hour 17																										
Percentiles: P ₁ = 1.3 P ₁₀ = 2.5 Q ₁ = 3.3 Median = 4.6 Q ₃ = 7.1 P ₉₀ = 12.1 P ₉₉ = 21.3																										
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	4	4	4	4	4	3	2	2	2	2	2	4	3	3	3	4	4	3	4	8	6	A	4	3.5	7.6	
2-Feb	4	4	3	4	5	4	3	5	3	3	3	4	3	3	3	3	3	5	3	12	A	7	3	4.0	11.9	
3-Feb	4	4	5	5	5	3	4	3	4	4	5	3	3	3	3	6	6	5	9	A	8	7	7	4.7	9.1	
4-Feb	4	3	3	3	5	4	6	7	5	5	10	4	4	4	6	6	7	8	12	A	10	14	17	14	7.0	17.5
5-Feb	13	11	10	8	7	6	15	23	7	8	14	8	9	10	7	8	6	6	A	6	6	6	6	4	8.9	22.7
6-Feb	3	5	3	4	6	3	11	5	7	9	10	7	8	7	7	6	7	A	12	12	11	9	12	13	7.6	13.1
7-Feb	14	19	21	23	23	20	18	14	8	7	9	17	18	16	15	16	A	14	11	11	11	5	8	11	14.2	23.0
8-Feb	10	9	7	6	11	9	12	11	5	8	6	6	4	5	4	A	5	11	18	18	17	15	13	10	9.4	18.0
9-Feb	5	5	5	5	4	2	2	3	4	5	5	6	10	8	A	6	5	10	23	22	20	8	6	6	7.7	23.4
10-Feb	5	3	3	2	3	3	3	4	5	6	5	6	4	A	2	2	2	5	13	7	7	7	2	3	4.4	12.8
11-Feb	4	4	4	4	4	4	5	8	7	6	5	7	A	6	7	7	6	16	13	17	13	5	5	8	7.2	16.6
12-Feb	9	8	7	6	5	8	14	11	6	9	11	A	5	2	2	2	4	4	4	6	7	6	4	3	6.2	13.7
13-Feb	4	4	4	4	4	4	5	5	5	6	A	14	14	18	18	17	12	11	8	7	6	6	7	5	8.1	18.1
14-Feb	6	5	5	4	4	4	3	4	4	A	5	5	5	5	6	7	8	7	7	10	7	6	6	6	5.6	9.7
15-Feb	6	8	6	4	3	3	2	3	A	3	4	2	2	2	2	3	5	3	6	3	2	2	3	3	3.5	7.8
16-Feb	3	3	3	4	4	4	3	A	4	4	4	4	5	2	4	3	3	3	4	3	3	3	3	4	3.5	5.2
17-Feb	4	4	5	3	2	3	A	5	11	12	4	2	2	3	2	2	2	7	6	8	5	5	3	3	4.4	11.8
18-Feb	2	2	2	3	2	A	3	3	3	3	4	4	4	3	2	1	2	10	10	7	8	7	7	6	4.3	10.5
19-Feb	4	2	3	3	A	5	4	4	4	4	5	4	3	2	4	2	5	8	7	11	7	5	4	3	4.4	10.7
20-Feb	2	3	5	A	5	5	5	5	6	5	6	3	3	5	5	4	4	7	8	12	7	10	5	6	5.5	11.9
21-Feb	5	3	A	3	3	7	8	7	12	12	9	17	8	7	6	5	4	4	4	6	4	3	3	4	6.4	16.8
22-Feb	4	A	4	4	3	4	4	2	6	C	C	C	C	C	1	2	1	1	1	3	6	3	2	5	3.2	6.0
23-Feb	9	3	3	A	3	6	8	2	6	5	5	6	4	5	4	4	4	3	3	21	19	22	16	13	7.6	22.0
24-Feb	16	16	A	14	13	14	16	13	23	19	19	10	6	4	4	3	3	6	10	7	3	2	2	1	9.8	23.1
25-Feb	1	A	2	2	3	3	3	3	4	4	4	4	5	6	4	4	5	16	13	8	4	2	3	3	4.6	15.7
26-Feb	A	3	3	3	3	3	4	4	3	4	5	6	3	4	3	1	2	2	2	2	1	3	2	A	3.0	5.8
27-Feb	3	3	6	5	6	7	11	7	10	10	5	4	4	3	3	3	4	5	6	6	5	5	A	4	5.5	11.3
28-Feb	4	4	6	5	4	5	4	4	4	4	5	5	5	4	4	4	3	3	6	4	3	A	3	3	4.2	6.4
		5.6	5.4	5.1	5.2	5.3	5.4	6.7	6.2	6.3	6.4	6.4	6.2	5.5	5.4	4.9	4.7	4.6	6.8	8.1	8.6	7.9	6.7	5.9	5.8	Diurnal Average
		16.2	18.8	21.0	23.0	22.7	19.6	17.6	22.7	23.1	19.3	19.1	16.8	17.5	17.9	18.1	17.1	12.2	16.0	23.4	21.6	19.6	22.0	17.5	14.2	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								



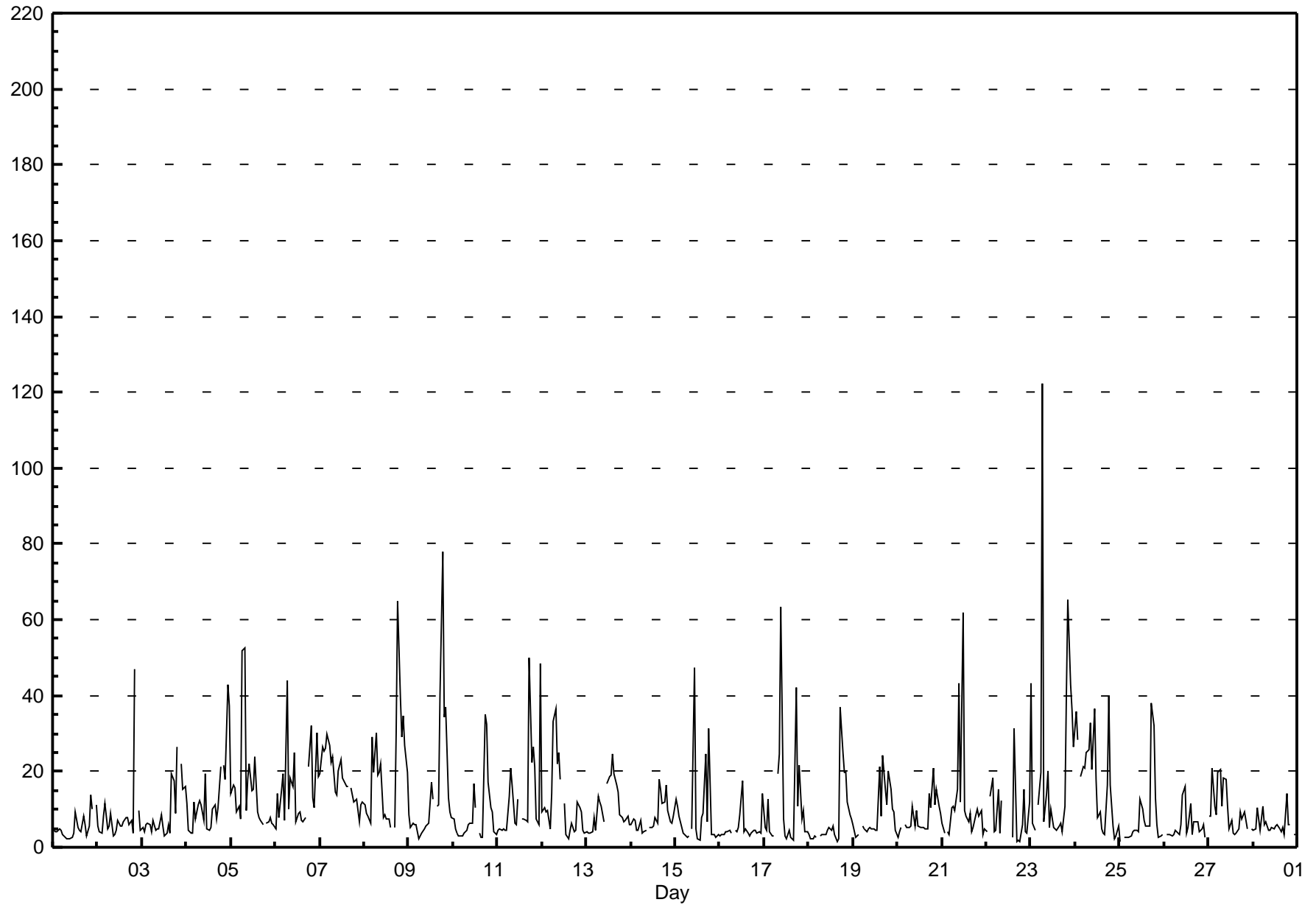
Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb Portable-Kinuso - February 2010

Maximum Value: 122.5 ppb on Feb 23 07:00		Maximum Daily Average: 22.5 ppb on Feb 23		Hours in Service: 672																							
Minimum Value: 1 ppb on Feb 22 19:00		Minimum Daily Average: 5.2 ppb on Feb 16		Hours of Data: 638																							
Maximum Diurnal Average: 18.9 ppb at hour 19		Minimum Diurnal Average: 7.3 ppb at hour 15		Hours of Missing Data: 34																							
Monthly Average: 11.13 ppb		Percentiles: P ₁ = 2.0 P ₁₀ = 3.2 Q ₁ = 4.5 Median = 6.9 Q ₃ = 13.8 P ₉₀ = 24.1 P ₉₉ = 60.7		Hours of Calibration: 34																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	5	4	4	5	5	3	3	2	2	2	3	4	9	5	4	4	8	6	3	6	14	10	A	11	5.3	13.8	
2-Feb	6	4	4	8	11	5	6	9	3	3	5	7	6	6	7	8	8	6	7	4	47	A	10	4	7.9	47.0	
3-Feb	5	4	6	6	6	4	7	5	5	5	9	6	3	4	6	4	19	18	9	27	A	22	15	16	9.1	26.5	
4-Feb	12	4	4	4	12	7	11	12	11	7	19	5	5	5	10	11	8	10	21	A	22	18	43	37	13.0	42.7	
5-Feb	14	17	16	9	11	7	52	53	10	18	22	15	15	24	9	8	7	6	A	6	7	8	6	6	15.0	52.6	
6-Feb	5	14	8	15	20	7	44	10	18	16	25	7	9	9	7	7	8	A	21	32	13	11	30	19	15.4	44.0	
7-Feb	19	27	26	26	30	27	22	24	14	14	20	23	18	17	16	16	A	16	12	12	13	7	11	12	18.4	30.0	
8-Feb	11	9	8	6	29	20	30	19	20	22	8	9	7	7	5	A	5	30	65	40	29	35	27	20	20.0	64.9	
9-Feb	8	5	6	6	6	2	3	4	5	5	6	6	17	13	A	11	11	40	78	34	37	13	9	8	14.6	77.8	
10-Feb	7	5	4	3	3	3	4	5	6	6	6	17	10	A	4	3	3	35	33	17	10	9	4	3	8.7	34.9	
11-Feb	5	5	5	5	5	5	14	21	16	6	6	13	A	7	8	7	7	50	22	26	21	7	6	48	13.6	50.0	
12-Feb	9	10	9	10	5	14	33	36	22	25	18	A	12	3	2	4	6	4	5	12	10	9	5	4	11.7	36.4	
13-Feb	4	4	4	4	8	5	13	12	11	7	A	17	19	19	25	19	16	15	9	8	7	7	8	6	10.6	24.5	
14-Feb	6	7	7	5	5	7	4	4	4	4	A	5	5	6	8	6	18	15	11	12	16	10	7	6	8	8.0	17.9
15-Feb	13	11	8	5	4	3	3	3	A	5	47	5	2	2	8	9	25	7	31	3	3	3	3	3	8.9	47.2	
16-Feb	3	3	3	4	4	4	4	A	5	4	5	9	18	4	5	4	3	4	5	4	4	4	4	14	5.2	17.5	
17-Feb	5	5	13	4	3	3	A	19	25	63	7	3	2	4	3	2	2	42	11	22	7	10	4	4	11.5	63.3	
18-Feb	3	2	2	3	3	A	3	3	3	4	4	5	5	5	3	2	2	37	25	20	20	12	8	7	7.9	37.0	
19-Feb	6	3	3	3	A	5	5	4	5	5	5	5	4	21	8	24	15	11	20	15	10	9	5	5	8.6	24.2	
20-Feb	3	4	5	A	6	5	5	6	11	6	10	6	5	5	5	5	5	14	10	21	11	15	11	9	7.9	20.8	
21-Feb	6	4	A	4	3	10	11	10	15	43	12	62	10	8	7	9	4	5	8	10	8	10	3	5	11.6	61.9	
22-Feb	4	A	13	18	4	5	15	4	12	C	C	C	C	C	2	31	1	2	1	6	15	4	4	12	8.6	31.3	
23-Feb	43	6	5	A	11	20	122	7	14	20	5	10	5	5	5	6	7	4	11	40	65	43	36	26	22.5	122.5	
24-Feb	36	28	A	19	21	21	25	26	33	21	37	18	8	9	5	4	3	16	40	16	5	2	3	6	17.5	39.9	
25-Feb	1	A	3	3	3	3	3	4	5	4	4	13	10	7	6	6	6	38	32	13	6	3	3	3	7.7	38.0	
26-Feb	A	3	3	3	3	3	5	4	4	6	14	16	4	5	11	3	7	7	7	4	5	6	3	A	5.7	16.2	
27-Feb	8	8	21	11	9	20	21	11	18	18	11	5	7	4	3	4	5	9	8	9	7	5	A	5	9.8	20.9	
28-Feb	5	5	10	8	4	11	6	7	4	4	5	5	6	6	5	4	5	3	14	6	6	A	3	3	5.9	14.3	
		9.3	7.8	7.7	7.6	8.6	8.5	17.5	11.9	11.2	13.1	12.2	11.3	8.5	7.6	7.3	8.0	8.2	16.7	18.9	16.1	15.5	11.1	10.6	11.3	Diurnal Average	
		43.1	28.3	25.5	26.0	30.0	26.9	122.5	52.6	32.9	63.3	47.2	61.9	18.7	23.8	24.5	31.3	24.8	50.0	77.8	40.3	65.1	42.9	42.7	48.4	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb
Portable-Kinuso - February 2010





Hourly Averages

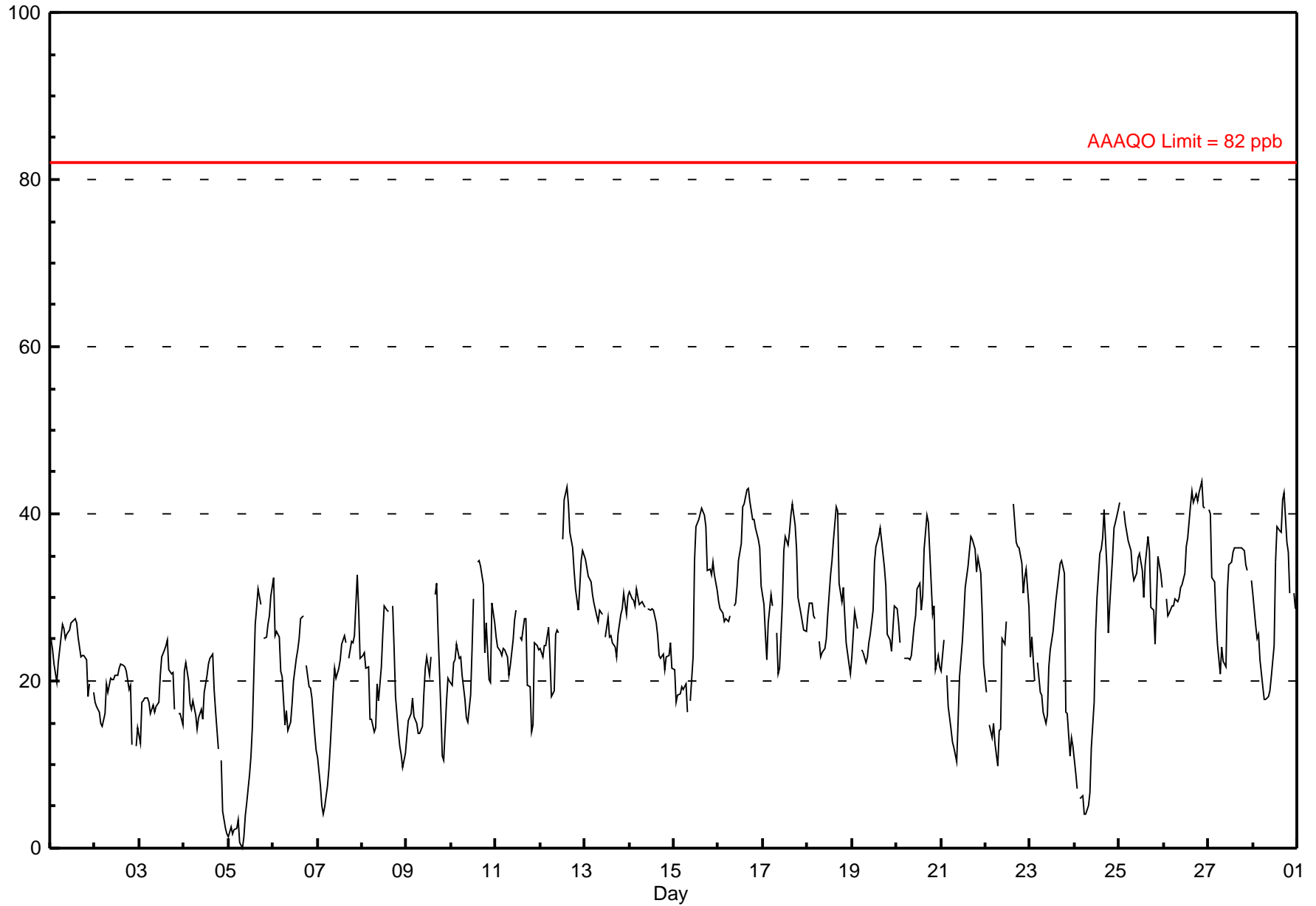
Ozone (O₃) - ppb

Portable-Kinuso - February 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	672
Maximum Value: 43.8 ppb on Feb 26 21:00	Maximum Daily Average: 35.4 ppb on Feb 26		Hours of Data:	640
Minimum Value: 0 ppb on Feb 5 08:00	Minimum Daily Average: 13.5 ppb on Feb 5		Hours of Missing Data:	32
Maximum Diurnal Average: 33.3 ppb at hour 16	Minimum Diurnal Average: 18.8 ppb at hour 8		Hours of Calibration:	32
Monthly Average: 25.10 ppb	Percentiles: P ₁ = 2.2 P ₁₀ = 14.1 Q ₁ = 19.6 Median = 25.1 Q ₃ = 31.1 P ₉₀ = 36.7 P ₉₉ = 42.5		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	25	24	22	20	22	24	27	26	25	26	27	27	27	27	25	23	23	23	23	18	20	A	19	23.8	27.4																								
2-Feb	17	17	16	15	15	16	20	19	20	20	21	21	22	22	22	22	21	19	19	12	A	12	14	18.4	22.0																								
3-Feb	13	18	18	18	18	17	16	17	16	17	18	21	23	24	24	25	21	21	21	17	A	16	16	15	18.6	24.9																							
4-Feb	21	22	20	17	17	18	16	14	16	17	15	19	21	22	23	23	19	17	12	A	11	4	2	2	15.9	23.2																							
5-Feb	1	3	2	2	2	3	1	0	1	4	5	9	11	15	27	29	31	29	A	25	25	27	28	30	13.5	31.0																							
6-Feb	32	25	26	25	21	21	15	16	14	15	17	20	23	24	25	27	28	A	22	19	19	18	14	12	20.8	32.3																							
7-Feb	11	7	5	4	5	8	10	12	19	21	20	22	23	24	25	25	A	23	25	25	25	33	28	23	18.3	32.6																							
8-Feb	23	23	22	22	15	15	14	14	20	18	22	26	29	28	28	A	29	24	18	14	12	11	10	11	19.5	28.9																							
9-Feb	13	15	16	18	16	15	14	14	15	19	22	23	21	23	A	30	32	26	17	11	11	18	20	20	18.5	31.8																							
10-Feb	19	22	23	24	23	23	21	18	16	15	18	24	30	A	34	34	34	34	32	23	27	20	20	29	27	24.2	34.4																						
11-Feb	25	24	24	23	24	24	23	21	22	25	27	28	A	25	25	27	27	19	19	14	15	25	24	24	23.2	28.5																							
12-Feb	24	23	24	24	26	23	18	19	26	26	26	A	37	42	43	41	38	36	33	31	28	31	34	36	30.0	43.2																							
13-Feb	34	34	33	32	30	29	28	27	29	28	A	25	28	25	25	25	24	23	26	28	29	31	28	30	28.3	34.5																							
14-Feb	31	30	30	29	31	29	29	29	29	A	29	29	29	29	27	25	23	23	23	21	23	23	25	22	26.8	31.1																							
15-Feb	21	17	18	18	19	19	20	16	A	18	23	34	38	39	40	41	40	39	33	33	33	34	33	31	28.6	40.6																							
16-Feb	30	29	28	27	27	27	28	A	29	29	31	34	36	41	41	43	43	41	39	39	38	37	36	31	34.2	43.1																							
17-Feb	29	26	23	27	30	29	A	26	21	22	30	36	37	36	38	40	41	39	36	30	28	27	26	26	30.5	41.2																							
18-Feb	28	29	29	28	27	A	25	23	23	24	25	28	33	34	37	41	40	32	30	31	28	25	22	21	28.8	40.9																							
19-Feb	23	28	27	26	A	24	23	22	23	25	26	28	34	36	37	38	37	34	31	26	25	24	26	29	28.4	38.4																							
20-Feb	29	27	25	A	23	23	23	23	23	27	28	31	32	28	30	36	40	39	35	28	29	21	23	22	27.9	39.9																							
21-Feb	21	25	A	21	17	14	13	12	10	15	20	25	28	31	34	36	37	37	36	33	35	33	28	22	25.3	37.2																							
22-Feb	19	A	15	13	15	13	10	14	14	25	24	27	C	C	C	41	37	36	36	34	31	32	33	29	24.9	41.2																							
23-Feb	23	25	20	A	22	19	18	16	15	16	22	24	26	28	30	33	34	34	33	16	16	11	13	12	22.0	34.4																							
24-Feb	9	7	A	6	6	4	4	5	7	12	17	26	30	35	36	37	40	33	26	29	35	38	39	41	22.7	40.5																							
25-Feb	41	A	40	39	38	37	36	33	32	33	35	35	33	30	34	37	36	29	28	24	30	35	33	31	33.9	41.4																							
26-Feb	A	30	28	28	29	29	30	30	30	31	32	33	36	37	41	43	41	42	42	43	44	41	41	A	35.4	43.8																							
27-Feb	41	40	32	32	28	24	21	24	22	22	31	34	34	35	36	36	36	36	36	34	33	A	32	31.9	40.5																								
28-Feb	30	27	25	26	23	19	18	18	18	19	20	24	34	38	38	38	42	43	37	35	31	A	31	29	28.8	42.6																							
																								23.5	23.0	22.7	21.7	21.1	20.2	19.1	18.8	19.8	21.0	23.3	26.3	29.0	30.0	31.8	33.3	33.1	30.7	28.1	26.4	25.3	25.7	25.2	23.6	Diurnal Average	
																								41.4	40.0	40.4	38.9	37.8	36.7	35.6	33.3	32.0	32.9	34.7	35.7	38.5	41.7	43.2	42.8	43.1	42.6	41.6	42.5	43.8	40.9	40.6	40.5	Diurnal Maximum	

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



Hourly Maximums

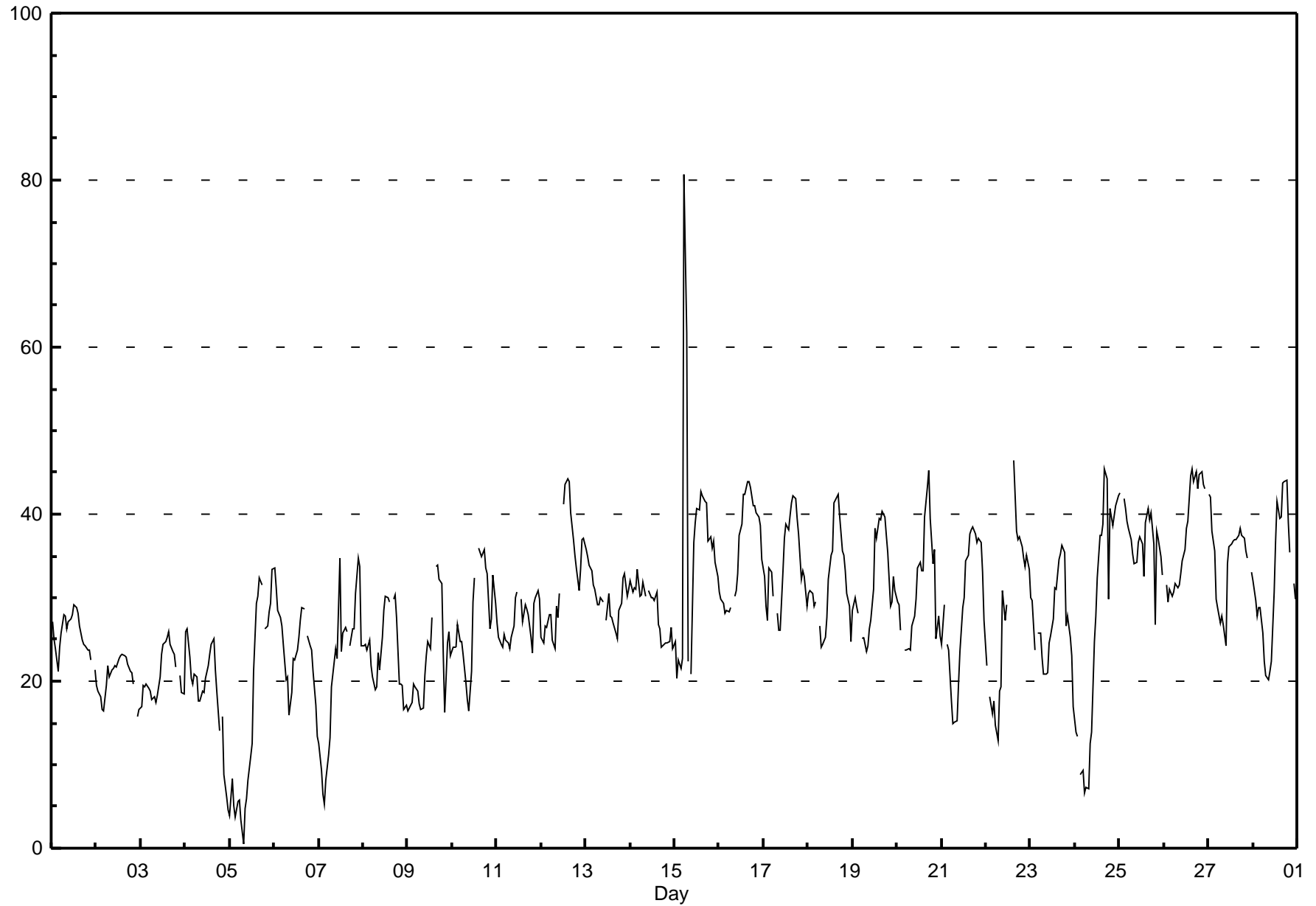
Ozone (O₃) - ppb

Portable-Kinuso - February 2010

Maximum Value: 80.6 ppb on Feb 15 06:00		Maximum Daily Average: 37.5 ppb on Feb 26		Hours in Service: 672																							
Minimum Value: 1 ppb on Feb 5 08:00		Minimum Daily Average: 16.0 ppb on Feb 5		Hours of Data: 640																							
Maximum Diurnal Average: 35.2 ppb at hour 16		Minimum Diurnal Average: 21.7 ppb at hour 8		Hours of Missing Data: 32																							
Monthly Average: 28.26 ppb		Percentiles: P ₁ = 5.1 P ₁₀ = 17.8 Q ₁ = 23.3 Median = 28.0 Q ₃ = 34.2 P ₉₀ = 39.5 P ₉₉ = 45.2		Hours of Calibration: 32																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	27	25	24	21	24	26	28	28	26	27	27	28	29	29	28	27	25	24	24	24	24	23	A	21	25.6	29.1	
2-Feb	20	19	18	17	16	20	22	21	21	22	22	23	23	23	23	23	23	22	21	21	20	A	16	17	20.4	23.3	
3-Feb	17	19	19	20	19	19	18	18	17	18	21	23	24	25	25	26	24	24	23	22	A	21	19	18	20.8	25.9	
4-Feb	26	26	23	20	20	21	21	18	18	19	19	20	22	23	24	25	21	19	14	A	16	9	6	5	18.8	26.2	
5-Feb	4	8	5	4	6	6	3	1	5	6	8	11	13	21	29	30	32	32	A	26	27	28	29	33	16.0	33.4	
6-Feb	34	31	28	28	27	24	20	20	16	19	23	23	24	25	27	29	29	A	25	24	24	21	17	13	24.0	33.5	
7-Feb	13	9	7	5	8	11	13	19	22	24	23	35	24	26	26	26	A	24	26	26	31	35	34	24	21.3	34.8	
8-Feb	24	24	24	25	22	21	19	19	23	21	25	28	30	30	A	30	30	30	28	20	20	20	17	17	23.7	30.4	
9-Feb	16	17	17	20	19	19	17	17	17	21	23	25	24	28	A	34	34	32	32	23	16	25	26	23	22.8	33.8	
10-Feb	24	24	24	27	25	25	23	20	18	16	21	29	32	A	36	35	35	36	34	33	26	27	33	29	27.5	36.0	
11-Feb	27	25	24	24	26	25	25	24	25	27	30	31	A	30	27	29	29	28	25	23	29	30	31	30	27.1	30.8	
12-Feb	25	25	27	26	28	28	25	24	29	28	31	A	41	44	44	44	40	37	35	34	31	33	37	37	32.7	44.2	
13-Feb	36	35	34	33	31	31	29	29	30	29	A	27	31	28	28	27	26	25	28	29	32	33	30	31	30.1	35.7	
14-Feb	32	31	31	31	33	30	30	32	30	A	31	30	30	30	31	27	26	24	24	25	25	25	26	24	28.6	33.4	
15-Feb	25	20	22	22	23	81	62	22	A	21	37	39	41	40	43	42	42	41	37	37	36	37	34	32	36.3	80.6	
16-Feb	31	30	29	28	29	28	29	A	30	31	33	37	39	42	42	44	44	43	41	41	40	40	39	35	35.9	44.0	
17-Feb	33	29	27	34	33	30	A	28	26	26	33	37	39	38	40	41	42	42	40	38	32	33	32	29	34.0	42.2	
18-Feb	31	31	31	29	30	A	27	24	24	25	28	32	35	36	41	42	42	40	36	35	33	31	29	25	32.0	42.4	
19-Feb	28	30	29	28	A	25	25	23	24	26	27	31	38	37	39	39	40	40	37	35	29	30	32	31	31.6	40.3	
20-Feb	29	29	26	A	24	24	24	24	27	28	30	34	34	33	33	40	43	45	40	34	36	25	28	25	31.0	45.3	
21-Feb	24	29	A	24	24	18	15	15	15	20	24	29	30	34	35	38	38	38	38	37	37	37	33	27	28.6	38.5	
22-Feb	22	A	18	16	18	15	13	19	19	31	27	29	C	C	C	46	38	37	37	36	35	34	35	33	27.9	46.4	
23-Feb	30	30	24	A	26	26	23	21	21	21	25	25	28	31	31	35	35	36	35	27	28	25	23	17	27.0	36.3	
24-Feb	14	13	A	9	9	7	7	7	13	14	25	28	32	37	37	39	45	44	30	41	39	40	41	42	26.7	45.4	
25-Feb	43	A	42	41	39	38	37	35	34	34	37	37	36	33	39	41	39	40	36	27	38	37	35	33	37.0	42.5	
26-Feb	A	32	29	31	30	31	32	31	31	33	34	36	38	39	45	45	44	45	43	45	45	44	43	A	37.5	45.4	
27-Feb	42	42	38	36	30	29	27	28	27	24	34	36	36	37	37	37	37	37	38	37	37	36	35	A	33	34.5	42.4
28-Feb	32	30	28	29	29	26	22	21	20	21	22	31	37	42	40	40	44	44	44	39	35	A	32	30	32.0	44.1	
		26.2	25.5	25.0	24.1	23.9	25.2	23.5	21.7	22.6	23.4	26.6	29.4	31.1	32.3	33.9	35.2	35.1	34.5	32.3	31.0	30.3	29.8	29.1	26.5	Diurnal Average	
		42.5	42.0	41.9	40.6	39.1	80.6	61.6	35.3	34.1	34.3	36.5	38.9	41.1	43.6	44.6	46.4	45.4	45.3	44.1	44.8	45.2	43.6	43.1	42.2	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

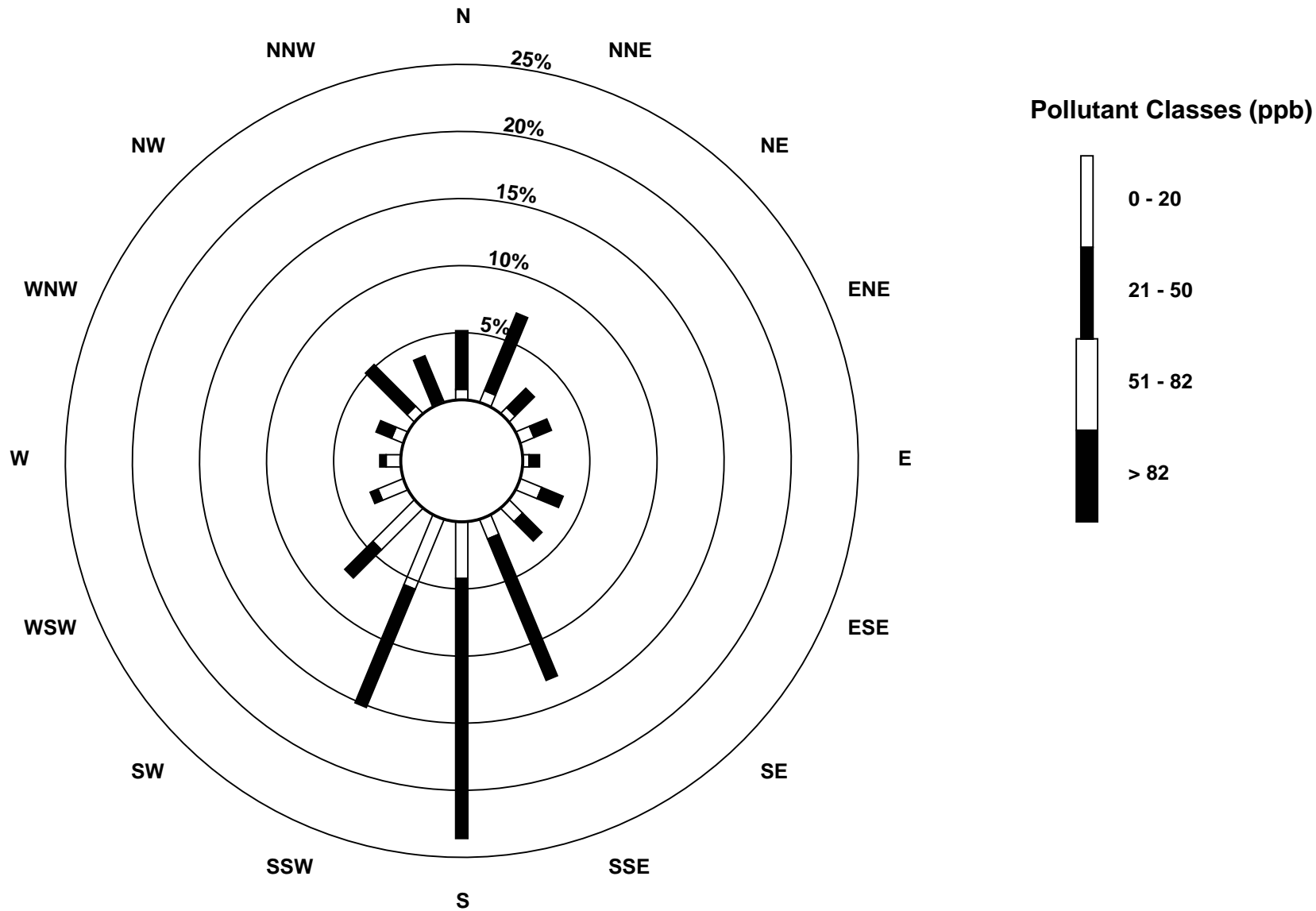
Hourly Maximums

Ozone (O₃) - ppb
Portable-Kinuso - February 2010



Pollutant Rose

Ozone (O₃) - ppb
 Portable-Kinuso - February 2010



Eight Hour Running Averages

Ozone (O₃) - ppb

Portable-Kinuso - February 2010

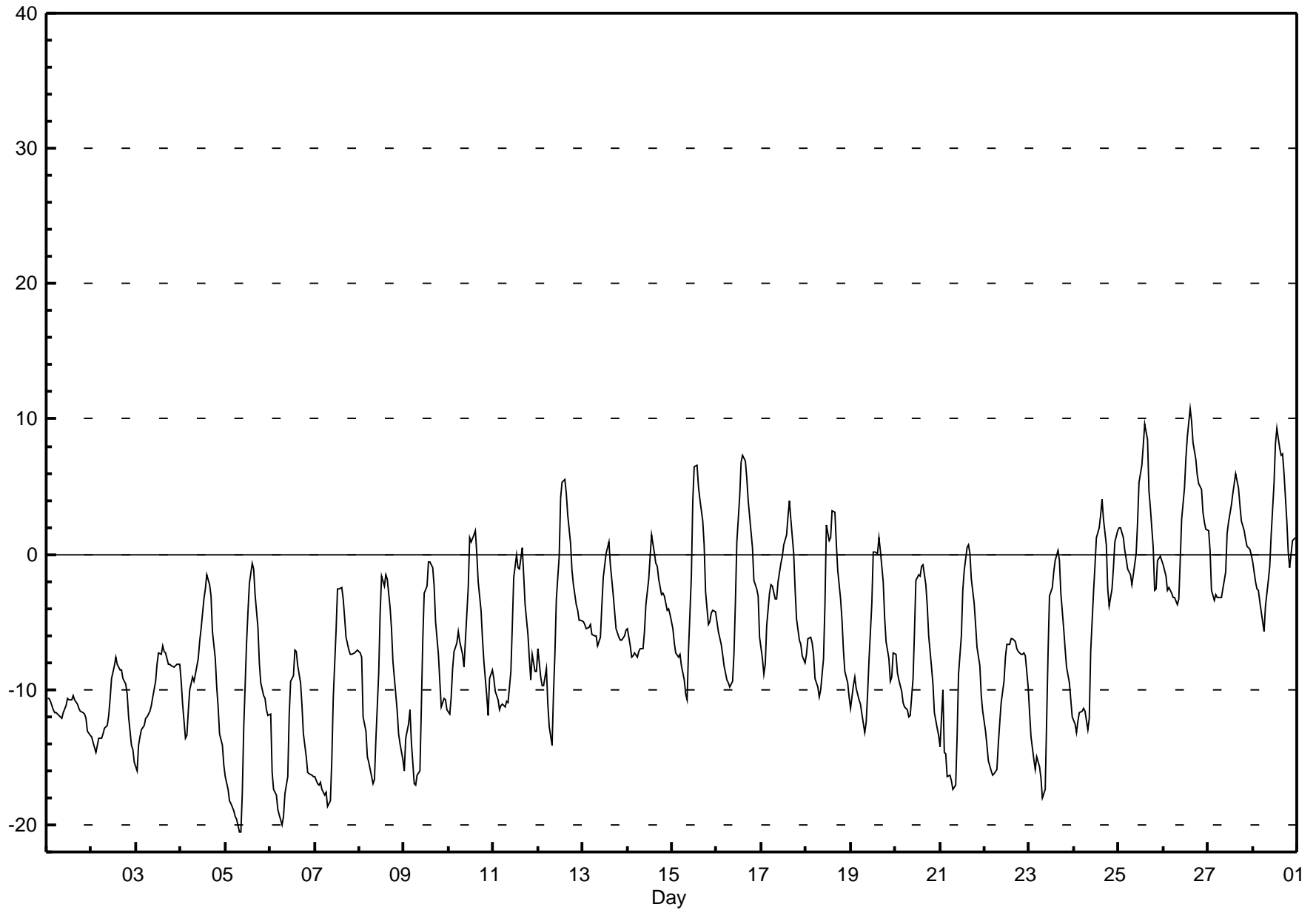
Maximum Value: 42.0 ppb on Feb 26 22:00																					Hours in Service:	672			
Minimum Value: 1.6 ppb on Feb 5 08:00																					Hours of Data:	666			
Percentiles: P ₁ = 2.9 P ₁₀ = 16.1 Q ₁ = 19.8 Median = 25.2 Q ₃ = 30.3 P ₉₀ = 35.0 P ₉₉ = 40.7																					Hours of Missing Data:	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-Feb	27	27	26	24	24	23	23	24	24	24	24	25	26	26	26	26	26	25	25	24	23	22	21	27.4	
2-Feb	20	19	19	17	17	16	17	17	17	18	18	19	20	20	21	21	21	21	21	20	20	18	17	21.2	
3-Feb	16	15	15	15	16	16	16	17	17	17	17	17	18	19	20	21	22	22	22	22	21	20	18	22.5	
4-Feb	18	18	18	18	18	18	18	18	17	17	16	16	17	17	18	19	20	20	19	19	18	15	13	9	19.8
5-Feb	7	5	3	3	2	2	2	2	2	2	2	3	4	6	9	13	16	19	21	24	26	28	28	27.9	
6-Feb	28	28	27	27	27	26	24	23	20	19	18	17	18	18	19	21	22	23	24	24	24	23	21	19	28.1
7-Feb	16	15	13	11	9	8	8	8	9	10	12	15	17	19	21	22	23	23	24	24	25	26	26	26	26.2
8-Feb	26	26	25	25	24	21	20	19	18	17	17	18	20	21	23	24	26	27	26	24	22	20	17	16	26.5
9-Feb	14	13	13	13	14	14	15	15	15	16	16	17	18	19	19	22	24	25	24	23	21	21	21	19	25.1
10-Feb	18	17	18	20	21	22	22	22	21	20	20	20	20	20	22	24	27	29	30	31	29	28	27	26	30.6
11-Feb	25	24	24	24	24	25	24	23	23	23	24	24	24	24	25	26	27	26	25	23	22	21	21	21	26.5
12-Feb	20	21	22	23	24	24	23	23	23	23	23	23	25	28	31	34	36	38	39	38	37	35	34	33	38.6
13-Feb	33	33	33	33	33	33	32	31	30	29	29	28	28	27	27	26	26	25	25	25	26	26	27	27	33.0
14-Feb	28	29	29	30	30	30	30	30	30	30	29	29	29	29	29	28	27	27	26	25	24	24	23	23	29.9
15-Feb	23	22	21	21	21	20	19	19	18	18	19	21	24	27	30	33	34	37	38	38	37	37	36	34	38.0
16-Feb	33	32	31	30	30	29	28	28	28	28	28	29	31	33	35	36	37	39	40	41	41	40	40	38	40.8
17-Feb	36	34	32	31	30	29	28	27	26	25	26	28	29	30	31	32	35	37	38	37	36	35	33	32	37.8
18-Feb	30	29	28	28	28	28	28	27	26	26	25	25	26	27	28	31	33	34	34	35	34	33	31	29	34.7
19-Feb	26	26	26	25	25	24	25	25	25	24	24	24	26	27	29	31	33	34	35	34	33	31	30	29	34.5
20-Feb	28	27	26	26	26	26	25	24	24	24	24	25	26	27	28	29	31	33	34	34	33	32	31	30	33.9
21-Feb	27	26	24	23	21	20	19	18	16	15	15	16	17	19	22	25	28	31	33	34	35	35	34	33	35.0
22-Feb	30	29	26	23	21	18	15	14	13	15	16	18	18	19	N	N	N	N	N	N	36	35	35	33	35.7
23-Feb	32	30	28	28	26	24	22	21	19	18	18	19	19	21	22	24	26	29	30	29	28	26	24	21	31.8
24-Feb	18	15	12	11	9	8	7	6	6	6	8	10	13	17	21	25	29	32	33	33	34	34	35	35	35.2
25-Feb	35	36	38	39	39	39	39	38	36	36	35	35	34	33	33	34	34	34	34	33	31	31	32	31	39.5
26-Feb	30	30	30	31	31	30	29	29	29	29	30	30	31	32	34	35	37	38	39	41	42	42	42	42	42.0
27-Feb	42	41	40	39	36	34	31	30	28	26	25	26	27	28	30	31	33	35	35	36	36	35	35	35	41.8
28-Feb	34	33	31	30	28	26	25	23	22	21	20	20	21	24	26	29	32	35	37	38	38	38	36	35	38.1
41.8 41.4 40.1 39.0 39.5 39.2 38.8 37.7 36.4 36.0 35.2 34.8 34.2 33.4 34.6 35.7 37.4 39.0 40.0 40.6 41.6 42.0 42.0 41.9																									
Diurnal Maximums																									
N - Not Valid																									

Hourly Averages

External Temperature (ET) - °C

Portable-Kinuso - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0		Hours in Service: 672																																															
Maximum Value: 10.8 °C on Feb 26 15:00		Maximum Daily Average: 2.4 °C on Feb 26																																															
Minimum Value: -21 °C on Feb 5 09:00		Hours of Data: 672																																															
Maximum Diurnal Average: 0.6 °C at hour 15		Hours of Missing Data: 0																																															
Monthly Average: -6.36 °C		Hours of Calibration: 0																																															
Minimum Daily Average: -14.2 °C on Feb 6		Percent Operational Time: 100.0																																															
Minimum Diurnal Average: -11.3 °C at hour 8																																																	
Percentiles: P ₁ = -19.1 P ₁₀ = -14.6 Q ₁ = -11.1 Median = -7.0 Q ₃ = -1.8 P ₉₀ = 1.8 P ₉₉ = 8.3																																																	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Feb	-11	-11	-11	-11	-12	-12	-12	-12	-12	-12	-11	-11	-11	-11	-10	-11	-11	-11	-11	-12	-12	-12	-12	-13	-13	-11.5	-10.4																						
2-Feb	-14	-14	-15	-14	-14	-14	-13	-13	-13	-12	-11	-9	-8	-8	-8	-9	-9	-9	-9	-10	-10	-12	-14	-14	-15	-11.7	-7.6																						
3-Feb	-16	-14	-13	-13	-13	-12	-12	-12	-11	-11	-9	-8	-7	-7	-7	-7	-7	-8	-8	-8	-8	-8	-8	-8	-8	-9.9	-6.7																						
4-Feb	-9	-11	-14	-13	-12	-10	-9	-9	-9	-8	-6	-6	-3	-3	-2	-2	-3	-6	-8	-10	-11	-13	-14	-16	-8.6	-1.6																							
5-Feb	-16	-17	-18	-18	-19	-19	-20	-20	-21	-18	-13	-7	-4	-2	-1	-1	-3	-5	-8	-9	-10	-11	-11	-12	-11.9	-0.7																							
6-Feb	-12	-16	-17	-18	-19	-19	-20	-19	-18	-16	-12	-9	-9	-7	-7	-8	-9	-11	-13	-15	-16	-16	-16	-16	-14.2	-7.1																							
7-Feb	-16	-17	-17	-17	-17	-18	-18	-19	-18	-15	-11	-6	-3	-3	-2	-3	-5	-6	-7	-7	-7	-7	-7	-7	-10.6	-2.4																							
8-Feb	-7	-8	-12	-13	-15	-15	-16	-17	-17	-14	-9	-4	-2	-2	-2	-2	-4	-6	-8	-10	-12	-13	-14	-15	-9.8	-1.5																							
9-Feb	-16	-14	-13	-12	-14	-17	-17	-16	-16	-11	-6	-3	-2	-1	-1	-1	-2	-5	-7	-9	-11	-11	-11	-12	-9.5	-0.5																							
10-Feb	-12	-11	-8	-7	-7	-6	-6	-7	-8	-6	-2	1	1	1	2	0	-2	-4	-6	-8	-10	-12	-9	-9	-5.7	1.8																							
11-Feb	-9	-10	-11	-11	-11	-11	-11	-11	-11	-9	-5	-2	0	-1	-1	1	-1	-4	-6	-8	-9	-7	-9	-9	-7.0	0.5																							
12-Feb	-7	-9	-10	-10	-8	-11	-13	-14	-10	-7	-3	0	4	5	6	4	3	1	-1	-2	-4	-4	-5	-5	-4.2	5.5																							
13-Feb	-5	-5	-5	-5	-5	-6	-6	-6	-7	-6	-4	-2	0	1	1	-1	-3	-4	-5	-6	-6	-6	-6	-6	-4.4	0.9																							
14-Feb	-5	-7	-8	-7	-7	-8	-7	-7	-7	-6	-4	-2	0	1	0	-1	-1	-2	-3	-3	-3	-4	-4	-4	-4.1	1.4																							
15-Feb	-6	-7	-7	-8	-7	-8	-9	-10	-11	-7	-2	4	7	7	5	4	2	1	-3	-5	-5	-4	-4	-4	-3.3	6.6																							
16-Feb	-5	-6	-7	-7	-8	-9	-10	-10	-9	-7	-3	1	4	7	7	7	6	4	2	1	-2	-3	-3	-6	-2.4	7.4																							
17-Feb	-8	-9	-8	-5	-3	-2	-2	-3	-3	-2	-1	0	1	1	3	4	3	0	-3	-5	-6	-7	-8	-8	-3.0	4.0																							
18-Feb	-7	-6	-6	-7	-7	-9	-10	-11	-10	-8	-4	2	1	1	3	3	1	-1	-3	-5	-7	-9	-9	-11	-4.9	3.2																							
19-Feb	-11	-10	-9	-10	-11	-11	-12	-13	-12	-10	-8	-4	0	0	0	1	0	-2	-5	-6	-8	-9	-9	-7	-6.9	1.2																							
20-Feb	-7	-9	-9	-10	-11	-11	-12	-12	-12	-9	-6	-2	-2	-2	-1	-1	-2	-4	-6	-8	-10	-12	-13	-13	-7.6	-0.8																							
21-Feb	-14	-10	-15	-15	-16	-16	-17	-17	-17	-13	-9	-6	-3	-1	0	1	0	-2	-4	-5	-7	-8	-10	-12	-9.0	0.7																							
22-Feb	-13	-14	-15	-16	-16	-16	-16	-14	-12	-11	-9	-8	-7	-7	-6	-6	-6	-7	-7	-7	-7	-7	-8	-10	-10.3	-6.3																							
23-Feb	-12	-13	-15	-16	-15	-16	-17	-18	-17	-12	-7	-3	-2	-1	0	0	0	-3	-5	-7	-8	-9	-11	-12	-9.2	0.3																							
24-Feb	-13	-13	-12	-12	-12	-11	-12	-13	-12	-7	-3	-1	1	2	3	4	3	1	-3	-4	-3	-1	1	2	-4.8	4.0																							
25-Feb	2	2	1	0	0	-1	-2	-2	-2	0	2	5	7	8	10	9	5	3	1	-3	-3	0	0	0	1.7	9.6																							
26-Feb	-1	-2	-3	-2	-3	-3	-3	-4	-3	-1	3	5	7	9	11	10	8	7	6	5	5	3	2	2	2.4	10.8																							
27-Feb	2	0	-3	-3	-3	-3	-3	-3	-3	-1	2	2	4	4	5	6	5	4	2	2	1	1	0	0	0.7	6.0																							
28-Feb	-1	-2	-3	-3	-3	-5	-6	-4	-2	-1	1	5	8	9	8	7	7	6	2	0	-1	1	1	1	1.2	9.4																							
																								-8.9	-9.3	-10.1	-10.2	-10.3	-10.7	-11.0	-11.3	-10.8	-8.6	-5.4	-2.3	-0.7	0.1	0.6	0.3	-1.0	-2.6	-4.6	-5.9	-6.9	-7.3	-7.6	-8.0	Diurnal Average	
																								2.0	2.0	1.3	0.3	-0.3	-1.1	-1.5	-2.3	-1.5	0.1	2.6	5.3	8.2	9.4	10.8	9.9	8.3	7.0	5.8	5.2	4.8	3.2	2.4	1.8	Diurnal Maximum	



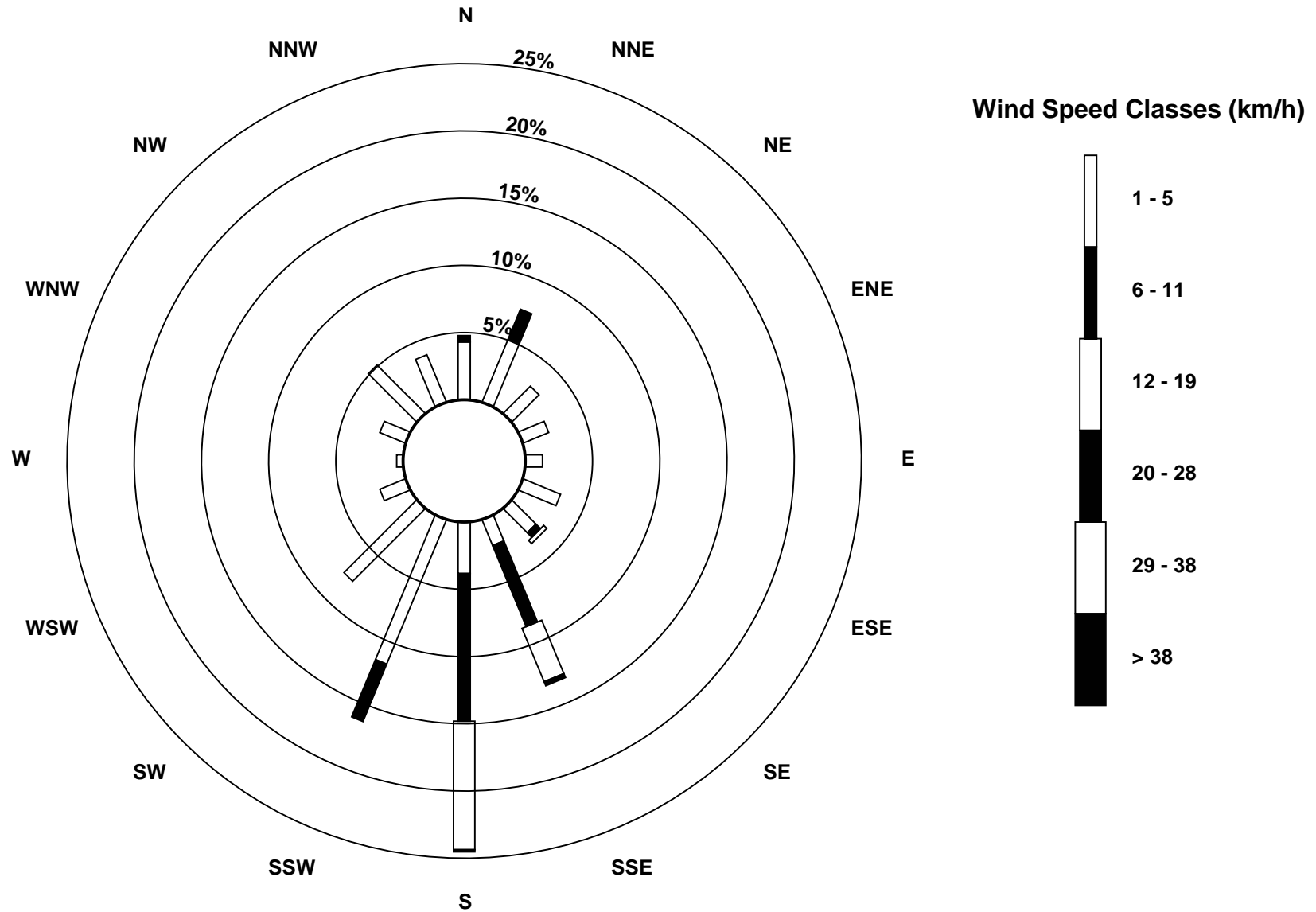
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Kinuso - February 2010

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	1	2	2	4	3	3	2	2	1	2	3	1	3	4	4	4	2	2	1	1	0	2	1	1	0.6	4.4
Dir	212	238	224	186	144	195	176	228	197	204	207	182	337	324	351	335	325	315	276	125	299	12	314	30	258	351
24 Spd	1	1	0	1	0	1	0	3	1	2	2	3	5	7	6	3	3	4	1	6	8	12	15	12	1.4	15.3
Dir	301	32	135	5	182	243	184	5	59	213	145	53	32	22	32	16	309	1	238	190	172	164	162	164	142	162
25 Spd	9	9	10	9	11	12	12	13	14	12	11	6	3	2	3	3	3	2	4	3	7	12	12	12	7.0	14.1
Dir	182	181	178	183	187	182	183	186	185	182	181	188	352	324	19	351	296	161	199	223	196	185	186	181	186	185
26 Spd	6	6	8	13	12	14	16	15	13	10	8	5	5	5	3	9	11	9	9	10	9	4	4	3	7.3	16.1
Dir	201	200	197	185	184	184	180	176	188	179	163	120	11	4	61	178	152	152	144	152	156	186	208	176	173	180
27 Spd	9	8	1	3	3	2	2	1	4	3	6	10	7	8	7	5	8	7	7	6	6	6	10	8	4.3	10.4
Dir	164	166	53	18	55	7	57	16	33	69	163	167	169	190	196	197	185	163	153	151	155	171	183	181	165	183
28 Spd	3	1	2	2	2	1	2	6	8	9	8	6	2	2	6	7	4	1	3	3	6	12	14	15	3.3	14.9
Dir	217	333	85	114	208	160	167	176	185	184	186	185	125	52	14	7	22	243	122	215	193	180	178	178	177	178
Spd	5.8	5.3	4.8	5.3	4.9	4.2	4.3	4.5	5.3	5.3	4.2	2.5	0.7	0.9	1.1	0.3	0.9	1.5	2.9	3.3	4.3	5.4	6.1	5.7	Diurnal Average	
Dir	183	185	179	179	184	184	179	180	178	180	178	169	89	13	18	20	174	163	164	165	172	177	178	177	Diurnal Maximum	
Spd	15.2	13.9	13.6	15.2	17.8	13.9	16.3	17.4	21.7	23.2	15.1	16.7	10.8	14.0	13.3	16.5	17.3	16.1	18.3	18.9	21.8	19.3	17.8	17.6	Diurnal Maximum	
Dir	160	182	182	162	159	184	163	164	168	172	175	172	189	181	166	160	172	178	171	165	166	170	170	163	Diurnal Maximum	
Maximum Speed Value: 23 km/h on Feb 14 10:00																		Minimum Speed Value: 0 km/h on Feb 4 15:00						Hours in Service: 672		
Maximum Daily Speed Average: 11.9 km/h on Feb 13																		Minimum Daily Speed Average: 0.5 km/h on Feb 2						Hours of Data: 672		
Maximum Diurnal Speed Average: 6.1 km/h at hour 23																		Minimum Diurnal Speed Average: 0.3 km/h at hour 16						Hours of Missing Data: 0		
Monthly Average Velocity: 3.50 km/h 176.9 deg																		Speed Percentiles: P ₁ = 0.3 P ₁₀ = 1.3 Q ₁ = 2.0 Median = 4.1 Q ₃ = 8.0 P ₉₀ = 12.4 P ₉₉ = 17.7						Percent Operational Time: 100.0		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Frequency Distribution																										
	Speed Range (km/h)																									
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	54	16	0	0	0	0	70																			
NorthEast	43	8	0	0	0	0	51																			
East	27	1	0	0	0	0	28																			
SouthEast	30	18	6	0	0	0	54																			
South	70	121	88	4	0	0	283																			
SouthWest	97	12	0	0	0	0	109																			
West	16	0	0	0	0	0	16																			
NorthWest	58	3	0	0	0	0	61																			
Total	395	179	94	4	0	0	672																			

Wind Rose

Wind Speed (WS) (km/h)
Portable-Kinuso - February 2010





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable-Kinuso - February 2010

Maximum Speed: 23 km/h on Feb 14 10:00		Maximum Daily Speed Average: 12.3 km/h on Feb 13		Hours in Service: 672																							
Minimum Speed: 1 km/h on Feb 2 05:00		Minimum Daily Speed Average: 2.5 km/h on Feb 2		Hours of Data: 672																							
Maximum Diurnal Speed Average: 7.2 km/h at hour 23		Minimum Diurnal Speed Average: 4.8 km/h at hour 13		Hours of Missing Data: 0																							
Monthly Average Speed: 5.99 km/h		Percentiles: P ₁ = 1.6 P ₁₀ = 2.2 Q ₁ = 2.8 Median = 4.5 Q ₃ = 8.3 P ₉₀ = 12.5 P ₉₉ = 18.0		Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	6	3	2	3	3	3	2	2	2	2	3	4	7	8	8	5	4	5	3	3	1	3	3	2	3.7	7.9	
2-Feb	3	2	2	2	1	2	2	2	2	3	3	2	2	3	3	4	3	3	2	2	3	2	3	3	2.5	4.5	
3-Feb	5	8	9	5	3	2	3	4	4	2	2	2	3	3	2	3	2	4	2	2	3	2	2	2	3.3	8.7	
4-Feb	5	4	3	4	4	6	4	4	3	3	3	3	2	2	2	3	3	2	2	3	3	3	3	3	3.2	6.2	
5-Feb	2	2	2	2	2	2	2	3	2	3	2	2	3	3	8	9	10	16	12	10	11	13	8	6	5.6	16.1	
6-Feb	7	5	5	3	2	2	2	4	6	4	2	2	4	4	5	4	3	2	2	3	3	5	5	4	3.7	7.2	
7-Feb	3	3	4	4	3	3	3	3	5	5	5	5	9	14	13	15	18	15	17	16	15	15	14	14	9.2	17.7	
8-Feb	11	9	5	6	4	4	3	5	3	3	6	6	2	5	4	4	3	2	2	2	2	2	2	3	4.1	11.3	
9-Feb	4	6	6	8	6	3	3	2	4	5	6	2	3	4	5	6	4	3	2	3	3	5	6	5	4.4	8.5	
10-Feb	6	6	7	5	5	5	3	5	4	3	4	3	5	6	7	4	2	2	1	4	4	6	10	13	5.0	12.6	
11-Feb	14	13	14	14	12	11	7	7	7	13	12	7	4	5	4	3	2	2	2	2	7	5	6	6	7.5	14.2	
12-Feb	9	5	8	8	11	5	4	5	12	8	3	4	9	12	14	17	15	13	10	10	12	13	18	18	10.1	17.9	
13-Feb	15	13	13	12	9	7	7	7	8	9	9	9	9	10	10	12	13	12	18	19	22	20	16	15	12.3	22.0	
14-Feb	15	10	9	16	18	13	17	18	22	23	15	17	11	5	5	4	3	4	4	3	4	3	3	2	10.1	23.4	
15-Feb	2	2	3	4	5	5	6	4	4	4	4	5	4	5	7	6	8	5	5	3	7	11	13	15	5.7	14.8	
16-Feb	14	14	10	14	14	9	12	14	14	12	10	8	6	8	9	12	11	8	7	9	4	8	7	3	10.0	14.5	
17-Feb	3	4	3	6	9	9	5	2	3	3	5	6	4	6	5	5	5	3	3	2	3	5	5	6	4.6	9.3	
18-Feb	7	10	12	12	9	7	5	7	8	6	5	2	6	6	5	5	5	5	5	3	3	4	4	3	6.0	12.0	
19-Feb	6	8	9	10	9	8	10	5	10	13	10	6	3	4	8	5	2	2	2	2	3	3	5	11	6.3	13.4	
20-Feb	12	7	10	10	8	9	12	12	11	12	7	2	5	5	4	4	3	3	2	3	2	2	4	4	6.2	12.1	
21-Feb	2	11	6	6	6	4	3	2	2	4	3	4	6	8	5	9	7	5	4	5	3	2	2	2	4.7	10.6	
22-Feb	2	2	2	2	2	1	1	2	2	3	2	1	3	3	3	4	4	4	3	4	3	2	3	2	2.6	4.2	
23-Feb	2	2	2	4	4	3	3	3	3	3	3	2	3	4	5	4	2	2	2	2	2	3	2	3	2.9	5.0	
24-Feb	3	3	3	3	2	2	3	4	3	2	3	3	5	7	6	4	3	4	2	6	8	12	15	13	5.0	15.3	
25-Feb	10	10	10	10	11	12	12	13	14	13	11	7	4	2	4	4	3	2	4	3	7	12	12	12	8.4	14.1	
26-Feb	7	7	8	13	12	14	16	15	13	10	8	5	5	6	5	10	11	9	10	10	10	5	4	4	8.9	16.1	
27-Feb	9	8	3	4	4	3	3	3	4	4	6	10	7	8	7	5	8	7	7	6	6	6	11	8	6.2	10.5	
28-Feb	4	2	2	2	3	3	3	7	8	9	8	6	2	3	6	7	4	2	4	3	6	12	14	15	5.7	14.9	
		6.7	6.3	6.2	6.8	6.4	5.7	5.7	5.8	6.6	6.6	5.7	4.8	4.8	5.8	6.0	6.3	5.9	5.2	5.0	5.1	5.7	6.6	7.2	7.0	Diurnal Average	
		15.4	13.9	13.7	15.6	18.1	14.0	16.5	17.5	21.9	23.4	15.3	16.9	11.0	14.1	13.6	16.6	17.7	16.1	18.5	19.0	22.0	19.5	17.9	17.8	Diurnal Maximum	
All monthly, daily, and diurnal averages have been calculated using scalar methods																											

Hourly Standard Deviations

Wind Direction (WD) - deg
Portable-Kinuso - February 2010

Maximum Value: 98.0 deg on Feb 24 02:00																								Hours in Service: 672	
Minimum Value: 3.1 deg on Feb 16 08:00																								Hours of Data: 672	
Percentiles: P ₁ = 4.3 P ₁₀ = 7.2 Q ₁ = 10.8 Median = 20.4 Q ₃ = 42.3 P ₉₀ = 68.8 P ₉₉ = 92.0																								Hours of Missing Data: 0	
																								Hours of Calibration: 0	
																								Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	11	25	34	13	32	24	30	30	20	29	22	21	20	14	10	15	25	19	25	41	82	43	44	50	82.3
2-Feb	36	24	26	61	47	37	78	20	13	12	20	52	51	76	39	14	28	43	71	62	74	74	37	24	77.8
3-Feb	23	10	10	40	37	52	53	13	26	33	35	59	71	30	88	68	82	30	57	74	49	61	66	48	88.4
4-Feb	30	44	33	62	70	37	91	89	70	60	69	28	51	68	93	38	28	17	25	61	18	20	75	90	93.2
5-Feb	20	59	63	15	13	19	23	90	14	54	70	37	38	72	25	11	9	6	8	6	7	15	20	20	89.7
6-Feb	11	33	9	59	31	16	32	16	24	32	60	48	39	34	10	17	20	80	44	74	83	48	67	51	82.6
7-Feb	80	54	24	50	76	62	53	29	10	9	12	16	46	9	8	8	12	7	8	6	7	7	7	7	80.0
8-Feb	7	8	34	29	86	52	89	13	44	19	9	15	76	24	18	31	18	50	51	47	42	73	70	35	89.0
9-Feb	24	20	26	18	38	24	24	38	17	11	12	35	82	44	11	15	27	91	51	47	29	18	16	12	91.4
10-Feb	14	15	16	22	16	22	23	18	24	16	35	63	11	7	14	15	33	69	49	10	18	13	5	5	68.8
11-Feb	5	5	7	6	7	8	16	22	29	7	7	15	57	20	13	29	40	49	16	30	10	26	26	15	56.6
12-Feb	8	53	18	8	5	37	41	24	8	23	76	35	30	9	12	8	9	10	12	18	9	13	7	7	76.0
13-Feb	9	10	9	8	13	10	14	9	12	8	10	14	18	12	14	8	8	13	10	8	8	8	8	9	17.8
14-Feb	10	32	10	14	9	8	9	7	8	7	11	8	11	72	43	22	79	17	59	15	35	22	76	70	78.5
15-Feb	73	73	62	32	23	26	24	27	19	18	27	33	25	22	25	17	8	16	27	25	9	6	5	4	73.5
16-Feb	4	4	7	5	3	9	7	3	4	6	12	10	24	17	11	8	9	11	7	17	36	13	14	91	90.8
17-Feb	39	14	39	15	8	11	18	45	47	42	20	15	29	24	20	15	12	44	42	42	20	16	18	17	47.2
18-Feb	9	6	5	5	12	10	21	12	10	11	15	61	14	29	17	12	8	20	15	33	33	12	15	20	61.4
19-Feb	13	7	8	5	7	12	7	17	9	4	8	11	63	31	6	16	93	32	5	29	16	18	19	5	93.2
20-Feb	7	15	6	6	10	8	7	12	15	5	27	55	22	12	19	11	15	49	71	74	51	61	35	63	74.4
21-Feb	28	14	20	48	46	55	89	36	90	42	70	53	19	6	28	10	19	20	23	22	30	92	36	15	92.2
22-Feb	9	11	25	24	17	8	13	15	14	8	26	20	56	25	27	21	14	25	37	25	85	59	23	34	84.6
23-Feb	54	31	21	23	60	27	42	29	64	34	25	52	41	20	27	26	47	35	67	82	94	57	87	89	94.3
24-Feb	83	98	91	96	87	66	91	62	93	39	35	35	13	13	9	27	18	26	57	26	14	5	6	9	98.0
25-Feb	30	9	5	13	9	7	6	7	6	7	6	43	47	49	38	42	27	50	13	27	21	5	8	5	50.5
26-Feb	15	14	11	7	5	4	4	5	7	13	14	28	23	31	53	16	10	8	9	7	8	35	20	50	52.6
27-Feb	12	18	88	52	64	55	82	76	36	21	20	12	22	11	12	18	12	20	7	12	15	9	9	9	87.9
28-Feb	52	65	47	52	48	76	52	20	11	11	10	14	60	80	20	12	48	21	69	20	24	5	5	5	79.7
83.2	98.0	90.8	95.9	87.1	75.8	91.3	89.7	92.9	60.2	76.0	62.8	81.7	79.7	93.2	67.6	93.2	91.4	71.2	82.1	94.3	92.2	87.0	90.8		

PASZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

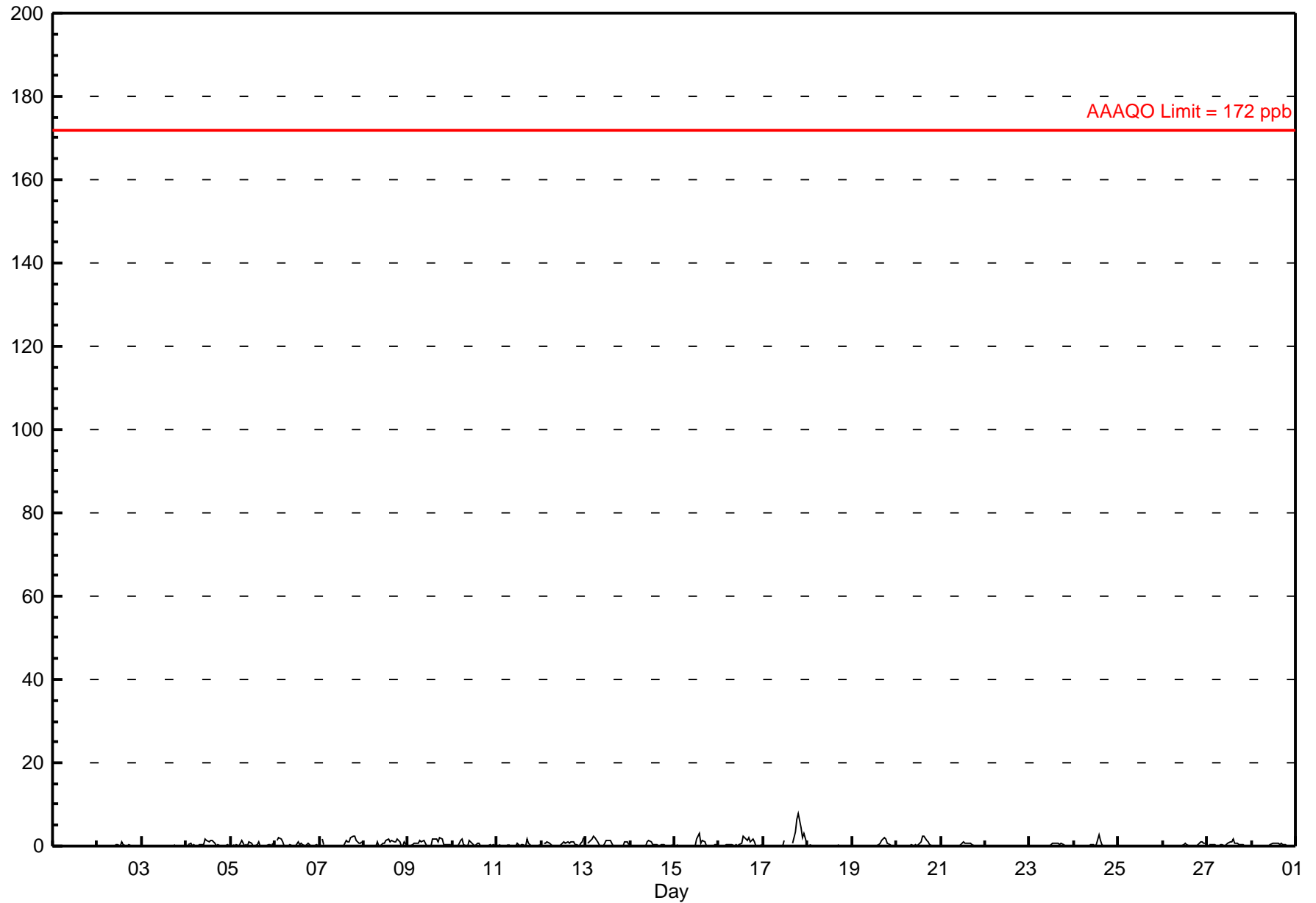
Sulphur Dioxide (SO₂) - ppb

Valleyview - February 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	672
Maximum Value: 7.8 ppb on Feb 17 20:00	Maximum Daily Average: 0.8 ppb on Feb 9		Hours of Data:	597
Minimum Value: 0 ppb on Feb 1 02:00	Minimum Daily Average: 0.0 ppb on Feb 1		Hours of Missing Data:	75
Maximum Diurnal Average: 1.0 ppb at hour 14	Minimum Diurnal Average: 0.1 ppb at hour 8		Hours of Calibration:	34
Monthly Average: 0.40 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.6 P ₉₀ = 1.2 P ₉₉ = 3.1		Percent Operational Time:	93.9

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Feb	A	0	0	0	0	0	0	0	0	0	BD	BD	BD	BD	0	0	0	0	0	0	0	0	0	0	0.0	0.1																						
2-Feb	A	0	0	0	0	0	0	0	0	BD	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.1	1.2																						
3-Feb	A	0	0	0	0	0	0	0	0	BD	BD	BD	BD	BD	BD	BD	BD	0	0	0	0	0	0	0	--	0.2																						
4-Feb	A	0	1	0	0	0	0	0	0	0	2	1	1	1	1	1	0	0	0	0	0	0	1	0	0.5	1.6																						
5-Feb	A	0	0	0	0	1	2	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0.3	1.5																						
6-Feb	A	1	2	2	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0.4	2.1																						
7-Feb	A	2	0	BD	BD	BD	BD	0	BD	BD	0	0	0	0	1	1	1	2	2	2	1	1	1	1	--	2.4																						
8-Feb	A	0	0	0	0	0	0	1	0	0	1	1	1	2	1	1	1	1	2	1	0	0	1	0	0.6	1.7																						
9-Feb	A	0	0	1	1	1	1	1	1	1	0	0	0	2	2	2	1	2	2	0	0	0	0	0	0.8	1.9																						
10-Feb	A	0	0	0	1	2	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0.3	1.5																						
11-Feb	A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	0	0	0	0.2	1.5																						
12-Feb	A	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	1	1	2	0.6	2.1																						
13-Feb	A	1	1	2	2	2	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	1	1	0	0.8	2.4																						
14-Feb	A	0	BD	0	0	BD	BD	BD	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.3																						
15-Feb	A	0	0	0	0	0	0	0	0	0	0	0	2	3	1	1	1	0	0	0	0	0	0	0	0.4	3.1																						
16-Feb	A	0	0	0	0	0	0	0	0	0	0	0	1	2	2	1	2	1	2	1	0	0	0	0	0.6	2.5																						
17-Feb	A	BD	BD	BD	BD	BD	BD	BD	BD	BD	0	1	BD	1	BD	BD	1	4	7	8	4	2	3	1	--	7.8																						
18-Feb	A	0	0	0	0	BD	BD	BD	BD	BD	C	C	C	C	C	C	0	0	0	0	0	0	0	0	--	0.2																						
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	1	0	0	0	0	0.3	1.9																						
20-Feb	A	0	0	0	0	0	0	0	0	0	0	0	1	1	3	2	1	1	0	0	0	0	0	0	0.5	2.5																						
21-Feb	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0.2	0.9																						
22-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																						
23-Feb	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0.2	0.7																						
24-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0.2	2.7																						
25-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																						
26-Feb	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0.2	0.9																						
27-Feb	A	0	0	0	0	0	0	0	0	0	0	1	1	1	2	1	1	0	0	0	0	0	0	0	0.4	1.8																						
28-Feb	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0.2	0.7																						
																								--	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.3	0.5	0.5	1.0	0.8	0.6	0.6	0.6	0.7	0.5	0.3	0.2	0.3	0.3	Diurnal Average
																								--	1.8	2.1	1.8	2.4	2.0	1.5	1.0	1.4	1.3	1.6	1.4	1.7	3.1	2.5	2.4	2.1	3.5	6.5	7.8	4.5	1.9	3.2	2.1	Diurnal Maximum

C - Calibration BD - Baseline Drift A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb



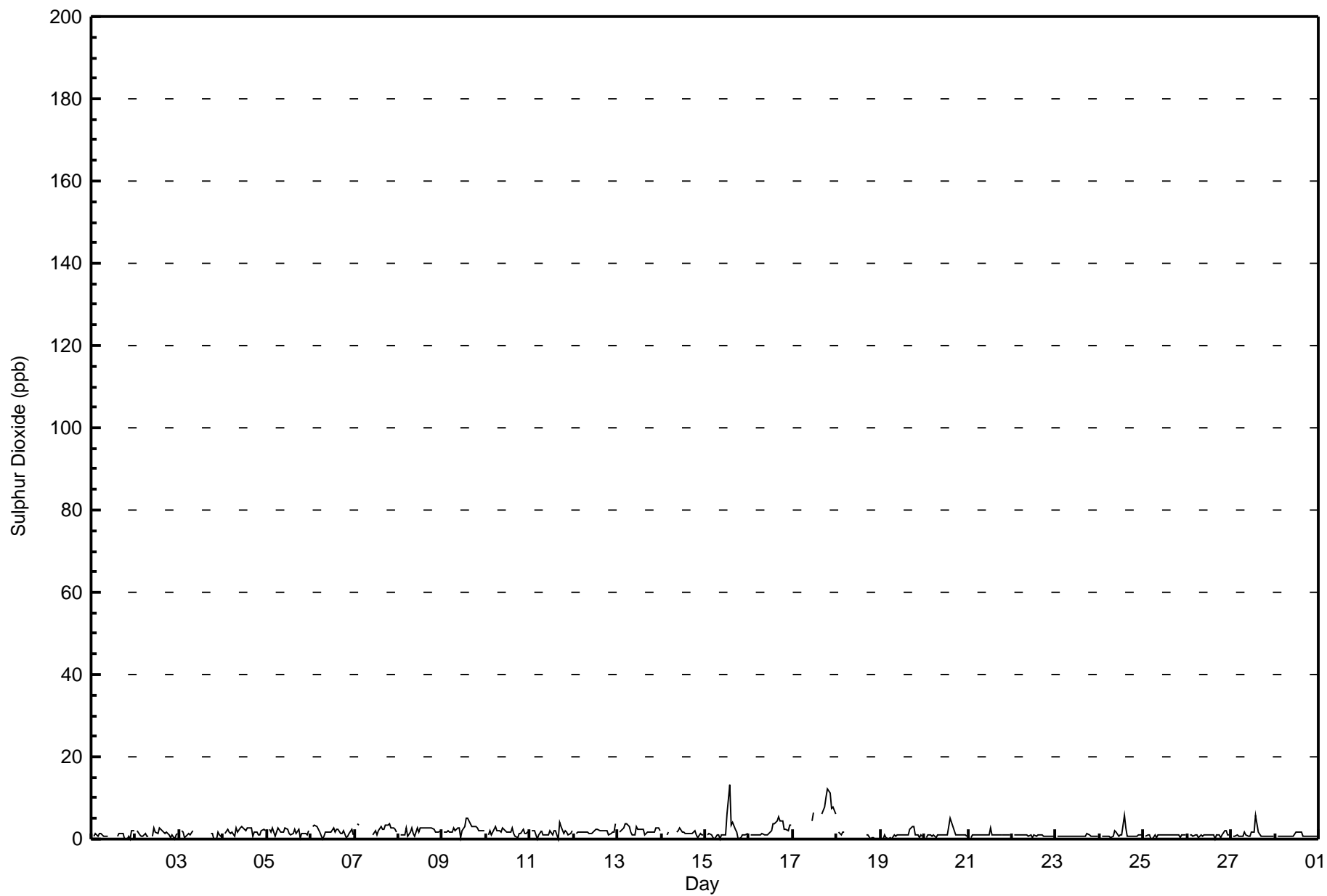
Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

Valleyview - February 2010

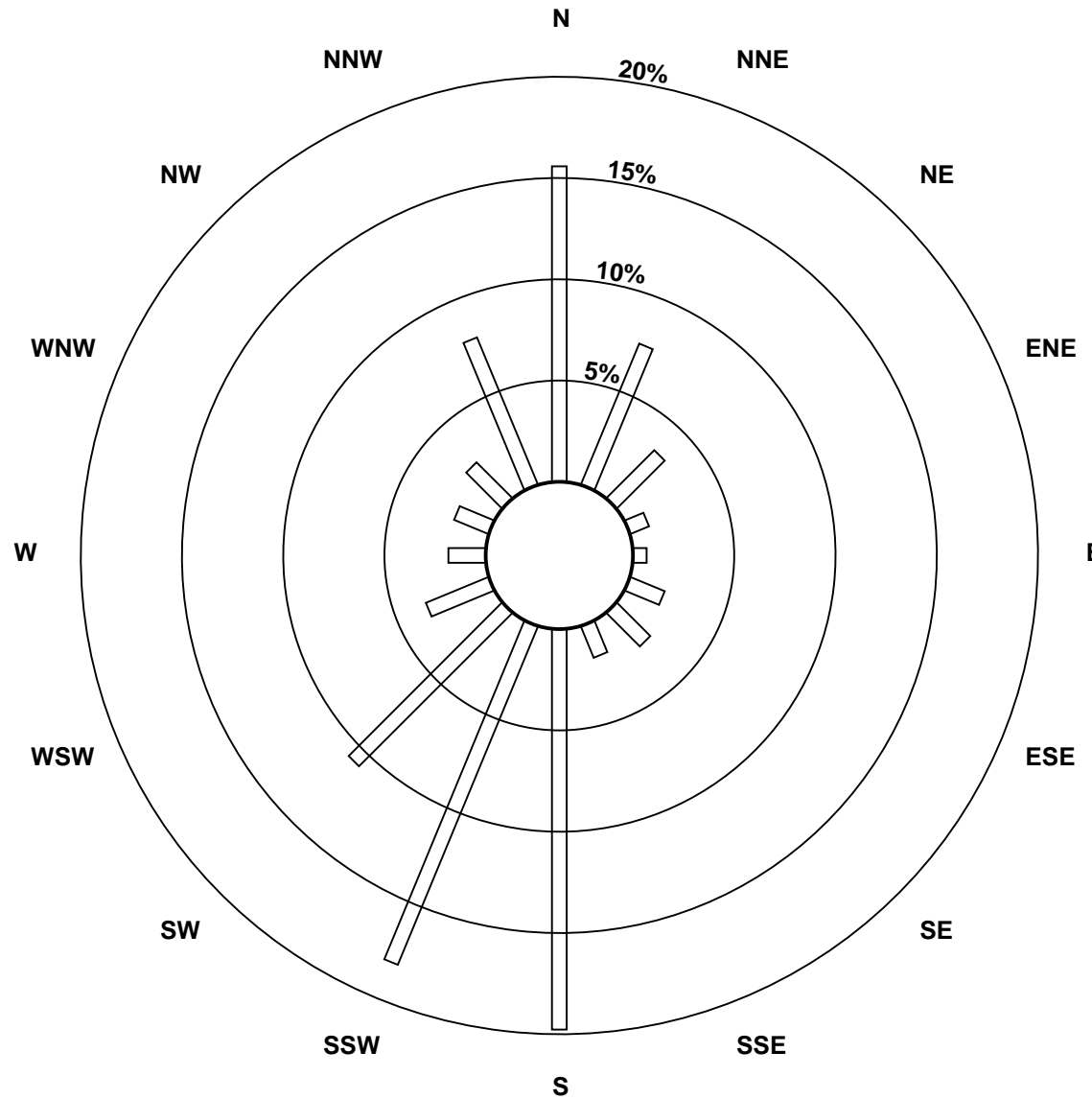
Maximum Value: 13.2 ppb on Feb 15 14:00		Maximum Daily Average: 2.5 ppb on Feb 9		Hours in Service: 672																							
Minimum Value: 0 ppb on Feb 1 19:00		Minimum Daily Average: 0.8 ppb on Feb 25		Hours of Data: 597																							
Maximum Diurnal Average: 2.9 ppb at hour 14		Minimum Diurnal Average: 1.1 ppb at hour 7		Hours of Missing Data: 75																							
Monthly Average: 1.60 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.6 Q ₁ = 0.8 Median = 1.1 Q ₃ = 2.0 P ₉₀ = 2.8 P ₉₉ = 7.6		Hours of Calibration: 34																							
				Percent Operational Time: 93.9																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	A	1	1	1	1	1	1	1	1	1	BD	BD	BD	BD	1	1	1	1	0	0	1	0	2	2	0.9	2.0	
2-Feb	A	2	1	1	1	1	1	1	BD	1	3	2	1	3	2	2	1	2	1	0	1	0	1	1	1.3	2.8	
3-Feb	A	2	2	0	1	1	1	2	BD	BD	BD	BD	BD	BD	BD	BD	BD	1	1	0	0	2	1	0	--	2.1	
4-Feb	A	1	2	2	2	2	1	3	2	3	3	3	2	3	3	3	1	2	2	1	1	2	2	2	1.9	3.0	
5-Feb	A	2	2	3	1	2	3	2	2	2	3	3	1	1	1	2	1	2	0	1	1	1	1	2	1.7	2.8	
6-Feb	A	3	3	3	2	2	0	1	2	2	2	2	3	2	2	2	1	1	2	0	1	1	2	1	1.8	3.3	
7-Feb	A	4	3	BD	BD	BD	BD	3	BD	BD	1	2	1	2	3	2	2	3	4	4	3	3	3	2	--	3.6	
8-Feb	A	1	1	1	3	1	2	3	1	1	3	2	3	3	3	3	3	3	3	3	2	2	2	2	2.0	2.8	
9-Feb	A	2	2	2	2	2	3	2	3	3	0	2	3	5	5	4	3	3	3	3	2	2	2	2	2.5	5.0	
10-Feb	A	1	2	1	2	3	2	2	2	3	2	2	2	2	3	2	1	0	1	1	2	1	1	2	1.7	3.0	
11-Feb	A	2	2	1	0	1	2	1	1	1	1	2	1	2	2	0	4	3	1	2	2	1	1	2	1.5	4.1	
12-Feb	A	1	2	2	2	2	2	2	1	1	1	2	2	2	2	2	2	2	2	1	1	2	2	4	1.8	3.6	
13-Feb	A	2	2	3	4	4	3	2	1	1	3	2	2	2	2	1	2	2	2	2	2	3	3	2	2.2	3.9	
14-Feb	A	1	BD	1	2	BD	BD	BD	2	2	3	2	2	2	1	1	1	1	2	1	0	1	1	1	1.4	2.6	
15-Feb	A	1	1	1	0	0	1	1	0	1	1	1	6	13	3	4	2	2	0	0	1	1	1	1	2.0	13.2	
16-Feb	A	1	1	1	1	1	1	1	1	1	1	2	2	4	4	5	5	4	5	3	3	2	4	4	2.4	5.5	
17-Feb	A	BD	BD	BD	BD	BD	BD	BD	BD	BD	BD	4	7	BD	6	BD	BD	6	8	10	12	11	7	8	6	--	12.2
18-Feb	A	2	1	2	2	BD	BD	BD	BD	BD	C	C	C	C	C	C	1	1	0	0	0	0	0	0	--	1.9	
19-Feb	A	0	1	0	0	0	0	1	1	1	1	1	1	1	1	1	3	3	3	1	1	0	1	1	1.0	3.1	
20-Feb	A	1	1	1	1	1	0	1	1	1	1	1	1	3	5	4	2	1	1	1	1	1	1	1	1.3	5.0	
21-Feb	A	0	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1.0	2.7	
22-Feb	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0	
23-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5	
24-Feb	A	1	1	1	1	1	0	1	2	2	1	1	1	6	3	1	1	1	1	1	1	1	1	1	1.2	5.8	
25-Feb	A	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.8	1.0	
26-Feb	A	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	1	0	1	2	2	1	1	1	0.9	1.9	
27-Feb	A	1	1	1	1	1	1	2	1	1	1	2	2	6	4	2	1	1	1	1	1	1	1	1	1.3	5.7	
28-Feb	A	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	0.8	1.6	
--		1.3	1.4	1.2	1.2	1.3	1.1	1.3	1.2	1.3	1.6	1.7	1.8	2.9	2.3	1.8	1.9	1.9	1.7	1.5	1.5	1.4	1.6	1.6	Diurnal Average		
--		3.6	3.3	2.9	3.8	3.9	3.0	2.8	2.8	2.8	4.3	6.5	6.1	13.2	5.0	4.5	6.1	7.6	10.1	12.2	11.3	7.3	7.7	6.3	Diurnal Maximum		
C - Calibration		BD - Baseline Drift						A - Automated Daily Zero Span																			

Hourly Maximums for SO₂ at Valleyview February 2010

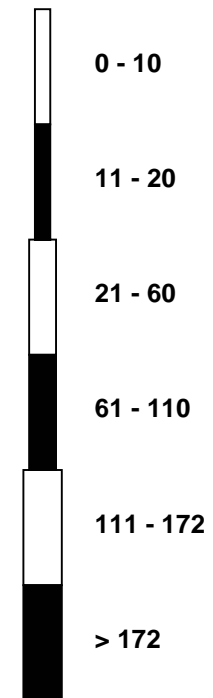


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Valleyview - February 2010



Pollutant Classes (ppb)

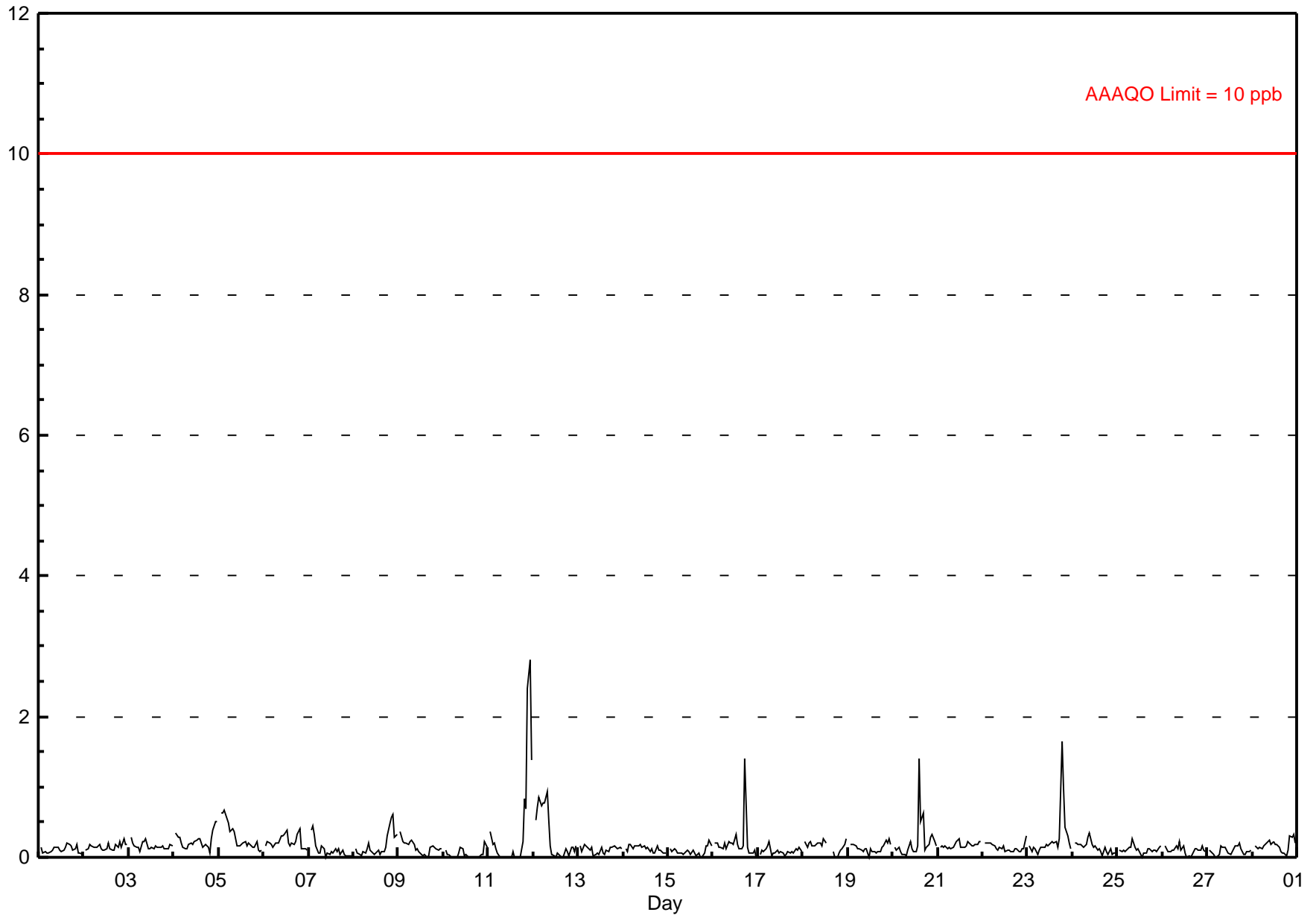


Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

Valleyview - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 2.8 ppb on Feb 11 23:00 Maximum Daily Average: 0.4 ppb on Feb 11		Hours in Service: 672 Hours of Data: 641 Hours of Missing Data: 31 Hours of Calibration: 31 Percent Operational Time: 100.0																								
Minimum Value: 0 ppb on Feb 10 05:00 Maximum Diurnal Average: 0.3 ppb at hour 23 Monthly Average: 0.17 ppb		Minimum Daily Average: 0.0 ppb on Feb 10 Minimum Diurnal Average: 0.1 ppb at hour 16 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 1.4																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
2-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
3-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
4-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	0.5
5-Feb	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7
6-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
7-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
8-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.2	0.6
9-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
10-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
11-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3	1	0.4	2.8
12-Feb	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
13-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
14-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
15-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
16-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	1.4
17-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
18-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0.2	0.3
19-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
20-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0.2	1.4
21-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
22-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
23-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0.3	1.7
24-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
25-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
26-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
27-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
28-Feb	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
--		0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	Diurnal Average	
--		0.6	0.7	0.8	0.7	0.8	0.8	0.9	0.5	0.4	0.3	0.3	0.4	0.3	1.4	0.5	0.6	1.4	1.7	1.0	0.7	2.4	2.8	1.4	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																								
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb		24-hr 3 ppb																								



Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

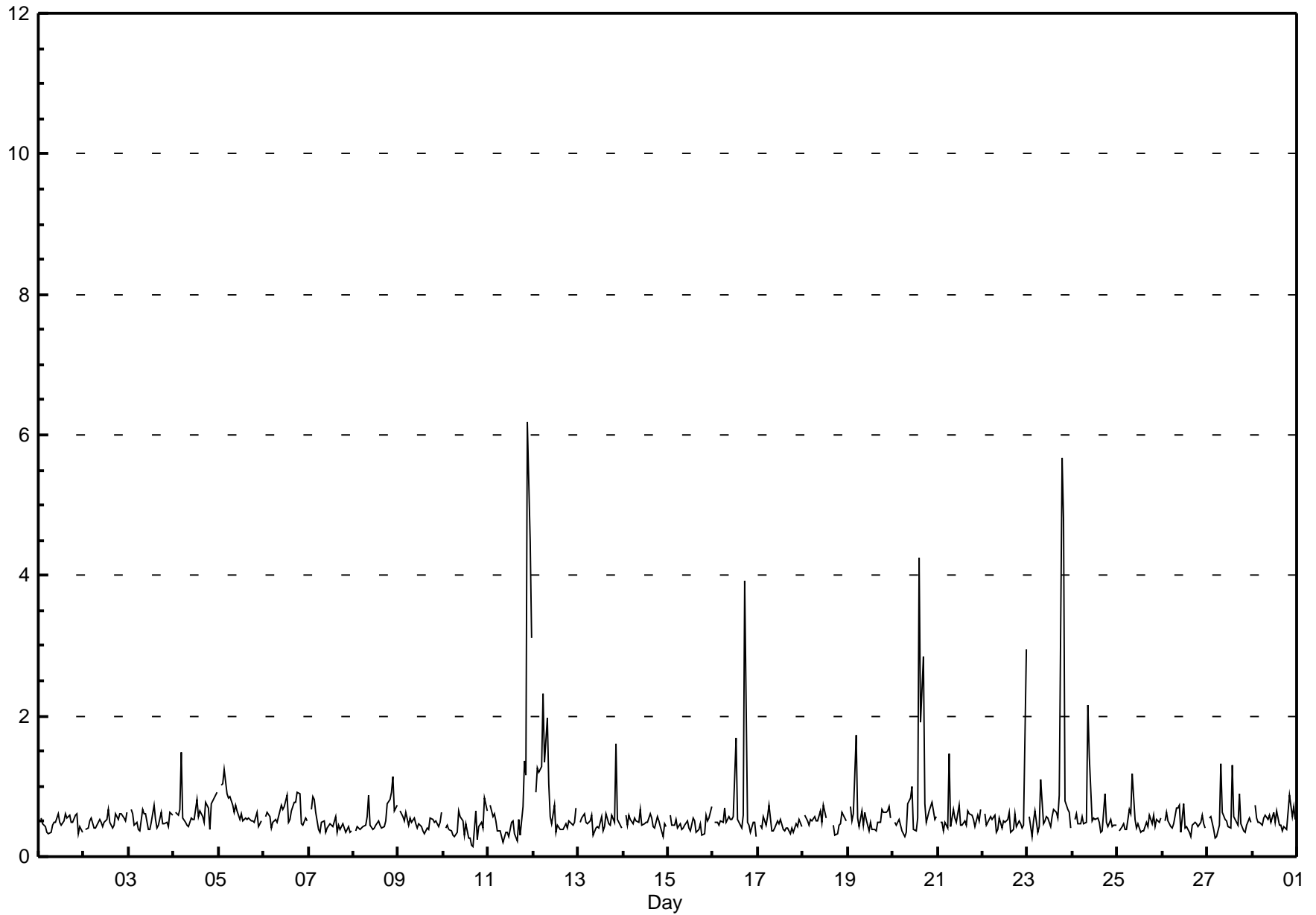
Valleyview - February 2010

Maximum Value: 6.2 ppb on Feb 11 22:00		Maximum Daily Average: 1.0 ppb on Feb 11		Hours in Service: 672																						
Minimum Value: 0 ppb on Feb 10 17:00		Minimum Daily Average: 0.4 ppb on Feb 10		Hours of Data: 641																						
Maximum Diurnal Average: 0.7 ppb at hour 22		Minimum Diurnal Average: 0.5 ppb at hour 16		Hours of Missing Data: 31																						
Monthly Average: 0.60 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.6 P ₉₀ = 0.8 P ₉₉ = 3.6		Hours of Calibration: 31																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Feb	A	1	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	0	0	1	1	0	0	0	0.5	0.6
2-Feb	A	0	0	1	1	0	0	0	1	0	0	0	1	1	0	0	0	1	1	1	1	1	1	1	0.5	0.7
3-Feb	A	1	1	0	0	0	0	1	1	1	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0.5	0.7
4-Feb	A	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	0	1	1	0	1	1	1	1	0.7	1.5
5-Feb	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0.7	1.2
6-Feb	A	1	1	1	0	0	1	0	1	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	0.6	0.9
7-Feb	A	1	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.5	0.8
8-Feb	A	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	1	1	1	1	1	1	0.6	1.1
9-Feb	A	1	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	0.5	0.7
10-Feb	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0.4	0.8
11-Feb	A	1	1	1	1	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1	6	4	3	1.0	6.2	
12-Feb	A	1	1	1	1	2	1	2	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0.8	2.3
13-Feb	A	0	1	1	0	0	1	1	0	0	0	0	1	0	0	1	0	0	1	0	2	1	0	0	0.5	1.6
14-Feb	A	1	0	1	1	0	1	1	0	1	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0.5	0.7
15-Feb	A	1	0	0	1	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	1	1	1	1	0.5	0.7
16-Feb	A	0	0	0	0	0	1	0	1	1	1	1	2	1	0	0	1	4	0	0	0	0	0	0	0.7	3.9
17-Feb	A	0	0	1	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0.4	0.7
18-Feb	A	1	1	0	1	1	1	1	1	1	0	1	1	C	C	C	0	0	0	0	0	1	1	1	0.5	0.7
19-Feb	A	1	1	1	2	1	0	1	0	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	0.6	1.7
20-Feb	A	0	0	1	0	0	0	0	1	1	1	0	0	1	4	2	3	1	0	1	1	1	1	1	0.9	4.3
21-Feb	A	0	0	0	0	0	1	0	1	1	0	1	0	0	1	0	1	1	1	1	0	1	1	1	0.6	1.5
22-Feb	A	1	0	1	1	1	1	0	0	1	0	1	0	1	1	0	0	1	0	1	0	0	0	3	0.6	3.0
23-Feb	A	1	0	1	1	0	0	1	0	1	1	1	0	1	1	1	1	6	5	1	1	1	0	0	1.0	5.7
24-Feb	A	1	1	0	0	1	0	0	2	1	1	1	1	1	0	0	0	1	0	0	1	0	0	0	0.6	2.2
25-Feb	A	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	1	0	1	0	1	0.5	1.2
26-Feb	A	1	1	1	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0.5	0.8
27-Feb	A	1	1	0	0	0	0	1	1	1	1	0	0	1	1	1	0	1	0	0	0	0	1	0	0.6	1.3
28-Feb	A	1	1	0	0	0	1	1	1	1	0	1	0	1	0	0	0	0	0	1	1	1	1	1	0.5	0.9
--	--	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.7	0.7	0.7	0.6	0.7	0.7	0.7	Diurnal Average	
--	--	1.0	1.3	1.2	1.7	2.3	1.5	2.0	2.2	1.4	1.0	0.8	1.7	1.3	4.3	1.9	2.9	3.9	5.7	4.8	1.6	6.2	4.5	3.1	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																								

Hourly Maximums

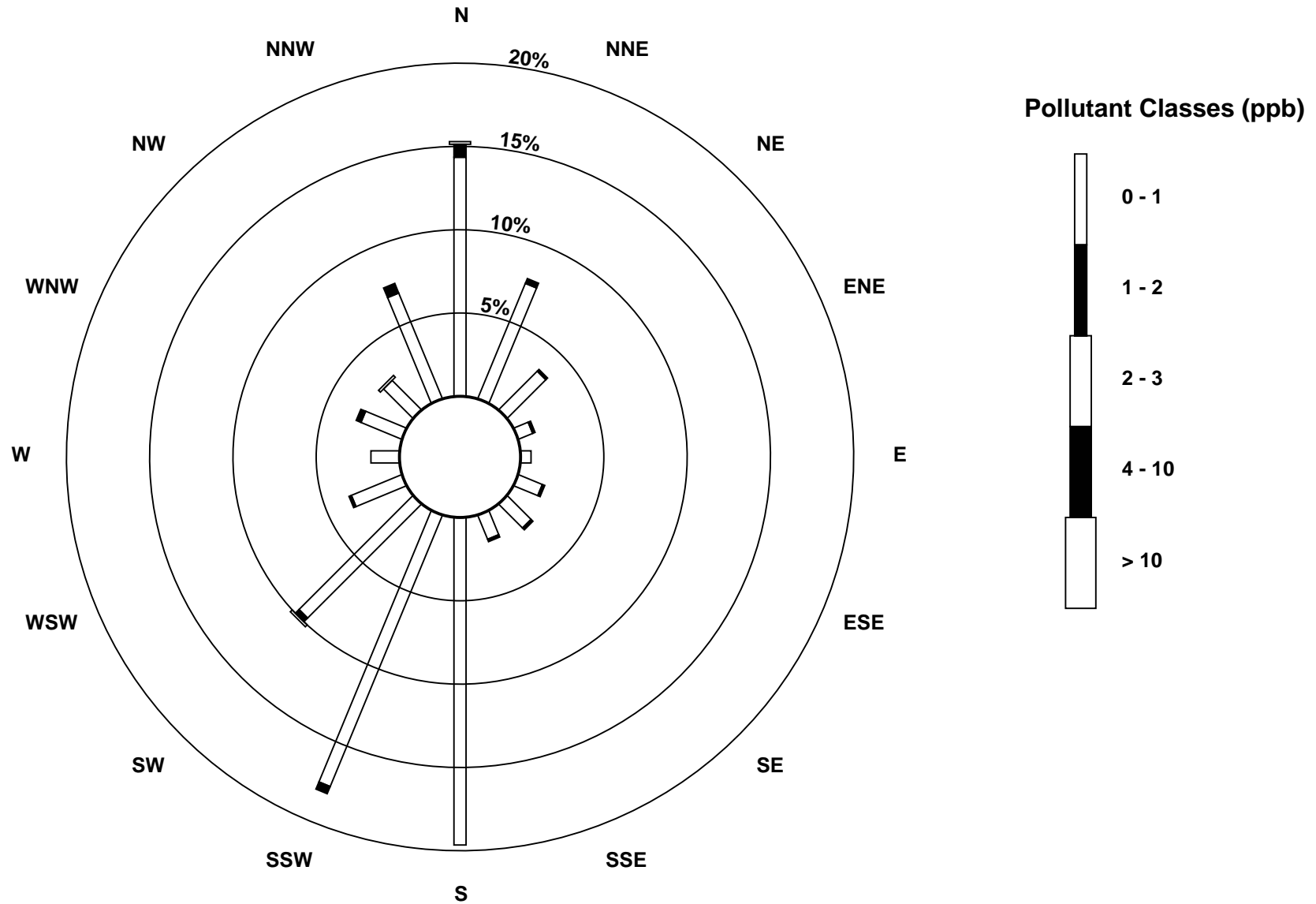
Hydrogen Sulphide (H₂S) - ppb

Valleyview - February 2010



Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb
Valleyview - February 2010

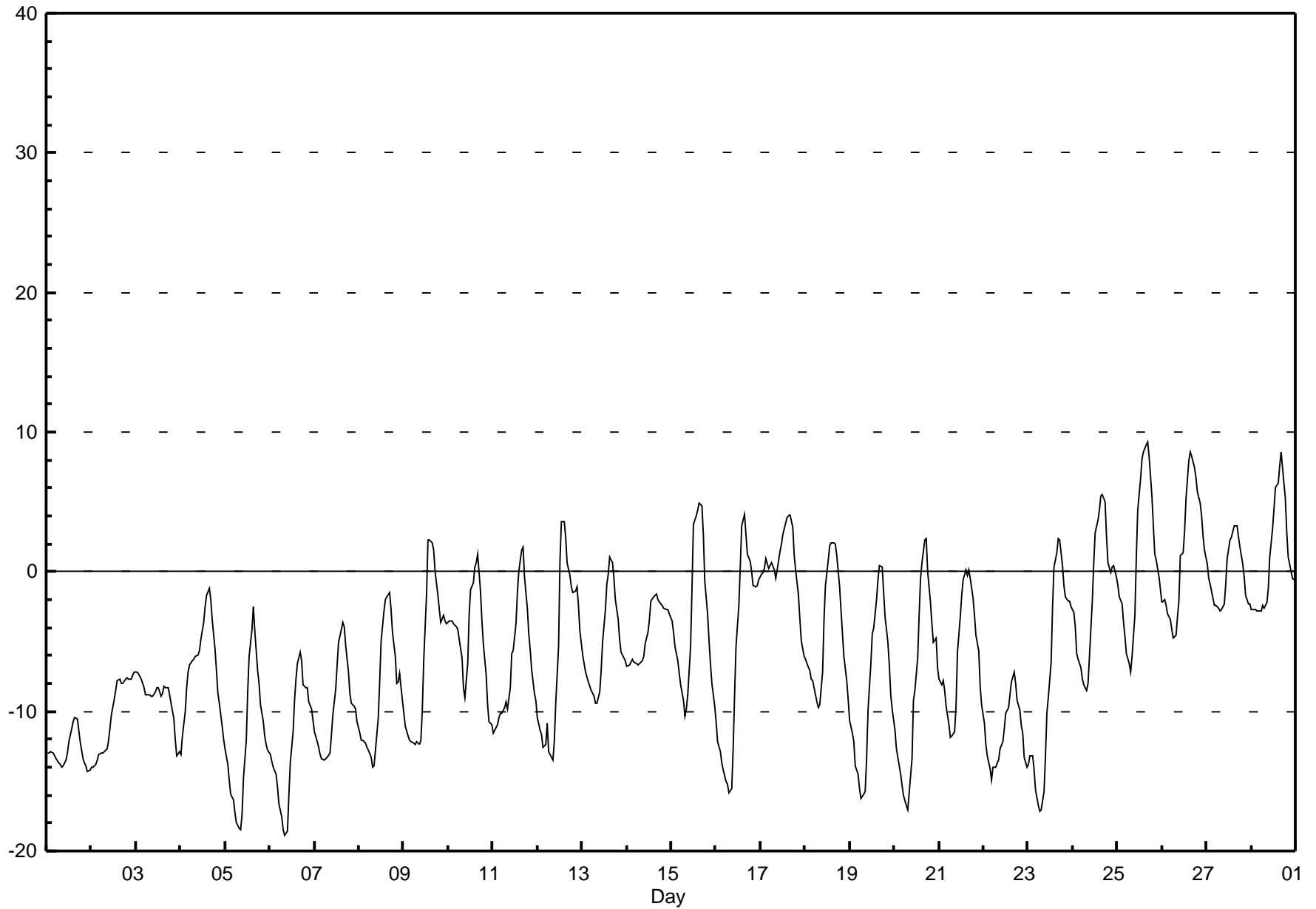


Hourly Averages

External Temperature (ET) - °C

Valleyview - February 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0		Hours in Service: 672																																														
Maximum Value: 9.3 °C on Feb 25 17:00		Maximum Daily Average: 1.5 °C on Feb 26																																														
Minimum Value: -19 °C on Feb 6 09:00		Hours of Data: 672																																														
Maximum Diurnal Average: 0.2 °C at hour 17		Hours of Missing Data: 0																																														
Monthly Average: -5.94 °C		Hours of Calibration: 0																																														
Minimum Daily Average: -12.9 °C on Feb 1		Percent Operational Time: 100.0																																														
Minimum Diurnal Average: -10.7 °C at hour 8																																																
Percentiles: P ₁ = -17.6 P ₁₀ = -13.5 Q ₁ = -10.8 Median = -6.4 Q ₃ = -1.5 P ₉₀ = 2.0 P ₉₉ = 8.2																																																
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-Feb	-13	-13	-13	-13	-13	-13	-14	-14	-14	-14	-13	-13	-12	-11	-11	-10	-11	-11	-12	-13	-14	-14	-14	-14	-12.9	-10.4																						
2-Feb	-14	-14	-14	-14	-13	-13	-13	-13	-13	-12	-11	-10	-9	-9	-8	-8	-8	-8	-8	-8	-8	-8	-7	-7	-10.3	-7.2																						
3-Feb	-7	-7	-7	-8	-8	-9	-9	-9	-9	-9	-9	-8	-8	-9	-9	-8	-8	-8	-9	-9	-11	-12	-13	-13	-9.0	-7.2																						
4-Feb	-13	-12	-10	-8	-7	-7	-6	-6	-6	-6	-6	-5	-4	-2	-2	-1	-2	-3	-6	-7	-9	-9	-11	-12	-6.7	-1.2																						
5-Feb	-13	-14	-15	-16	-16	-17	-18	-18	-19	-17	-15	-12	-9	-6	-4	-3	-4	-7	-8	-10	-11	-12	-12	-13	-12.0	-2.5																						
6-Feb	-13	-14	-14	-14	-15	-17	-18	-18	-19	-19	-16	-14	-11	-9	-8	-7	-6	-6	-8	-8	-8	-9	-10	-11	-12.2	-5.7																						
7-Feb	-11	-12	-13	-13	-13	-13	-13	-13	-13	-12	-10	-8	-7	-5	-4	-4	-4	-5	-7	-9	-9	-10	-10	-11	-9.6	-3.7																						
8-Feb	-12	-12	-12	-12	-13	-13	-13	-14	-14	-13	-10	-8	-5	-3	-2	-2	-1	-3	-4	-6	-8	-8	-7	-9	-8.5	-1.5																						
9-Feb	-10	-11	-12	-12	-12	-12	-12	-12	-12	-12	-10	-6	-2	2	2	2	2	0	-2	-3	-4	-3	-4	-4	-6.1	2.3																						
10-Feb	-4	-3	-4	-4	-4	-4	-5	-6	-8	-9	-7	-3	-1	-1	0	1	1	-1	-4	-5	-7	-10	-11	-11	-4.5	1.3																						
11-Feb	-12	-11	-11	-10	-10	-10	-10	-9	-10	-8	-6	-6	-4	-2	0	2	2	0	-3	-4	-6	-7	-9	-9	-6.4	1.7																						
12-Feb	-10	-11	-12	-13	-12	-11	-13	-13	-13	-12	-9	-5	1	4	4	2	1	0	-1	-1	-1	-1	-2	-4	-5.7	3.6																						
13-Feb	-6	-7	-7	-8	-8	-8	-9	-9	-9	-9	-7	-5	-3	-1	0	1	1	0	-2	-3	-5	-6	-6	-6	-5.2	1.0																						
14-Feb	-7	-7	-7	-6	-7	-7	-7	-7	-6	-6	-5	-4	-3	-2	-2	-2	-2	-2	-2	-2	-3	-3	-3	-3	-4.3	-1.6																						
15-Feb	-3	-4	-5	-6	-7	-8	-9	-10	-10	-9	-5	-1	3	4	4	5	5	3	-1	-3	-5	-7	-8	-10	-3.7	4.9																						
16-Feb	-11	-12	-13	-14	-14	-15	-15	-16	-16	-13	-9	-5	-2	0	3	4	3	1	1	0	-1	-1	-1	-1	-6.1	4.1																						
17-Feb	0	0	0	1	0	0	1	0	0	0	1	2	3	3	4	4	4	3	1	0	-2	-3	-5	-6	0.5	4.1																						
18-Feb	-6	-7	-7	-8	-8	-8	-9	-10	-10	-7	-3	-1	1	2	2	2	1	-1	-3	-4	-6	-8	-9	-9	-4.4	2.0																						
19-Feb	-11	-12	-12	-14	-15	-16	-16	-16	-16	-13	-10	-7	-4	-4	-2	-1	0	0	-1	-3	-5	-7	-9	-10	-8.4	0.5																						
20-Feb	-11	-13	-13	-15	-15	-16	-17	-17	-16	-13	-9	-9	-6	-3	0	1	2	2	0	-2	-4	-5	-5	-7	-8.0	2.4																						
21-Feb	-8	-8	-8	-8	-10	-11	-12	-12	-11	-10	-6	-3	-2	-1	0	0	0	0	-2	-3	-5	-6	-8	-10	-5.9	0.2																						
22-Feb	-11	-12	-13	-14	-15	-14	-14	-14	-13	-13	-12	-11	-10	-10	-9	-8	-7	-8	-9	-10	-11	-12	-13	-14	-11.6	-7.2																						
23-Feb	-14	-13	-13	-14	-16	-17	-17	-17	-16	-13	-10	-9	-6	-3	0	1	2	2	0	-1	-2	-2	-2	-2	-7.5	2.3																						
24-Feb	-3	-4	-6	-6	-7	-8	-8	-8	-8	-6	-2	1	3	4	4	5	6	5	3	1	0	0	0	0	-1.5	5.5																						
25-Feb	-1	-2	-2	-4	-5	-6	-7	-7	-6	-3	1	4	7	8	9	9	9	8	5	3	1	1	0	-1	0.9	9.3																						
26-Feb	-2	-2	-2	-3	-3	-4	-5	-5	-3	-2	1	1	3	5	8	9	8	7	7	6	5	4	3	2	1.5	8.6																						
27-Feb	1	-1	-1	-2	-2	-2	-3	-3	-3	-2	-1	1	2	2	3	3	3	3	2	1	0	-2	-2	-2	-0.2	3.3																						
28-Feb	-3	-3	-3	-3	-3	-3	-2	-3	-2	-1	1	3	5	6	6	8	9	7	5	3	1	0	-1	-1	1.2	8.6																						
																								-8.1	-8.6	-8.9	-9.3	-9.7	-10.1	-10.5	-10.7	-10.6	-9.4	-7.1	-5.1	-2.9	-1.4	-0.3	0.2	0.2	-0.8	-2.3	-3.6	-4.8	-5.6	-6.4	-7.1	Diurnal Average
																								0.5	-0.1	0.3	0.9	0.2	0.5	0.6	0.1	-0.5	0.1	1.4	4.4	6.7	8.0	8.5	9.0	9.3	8.3	6.8	5.7	4.9	4.0	2.6	1.6	Diurnal Maximum



Hourly Averages

Relative Humidity (RH) - %

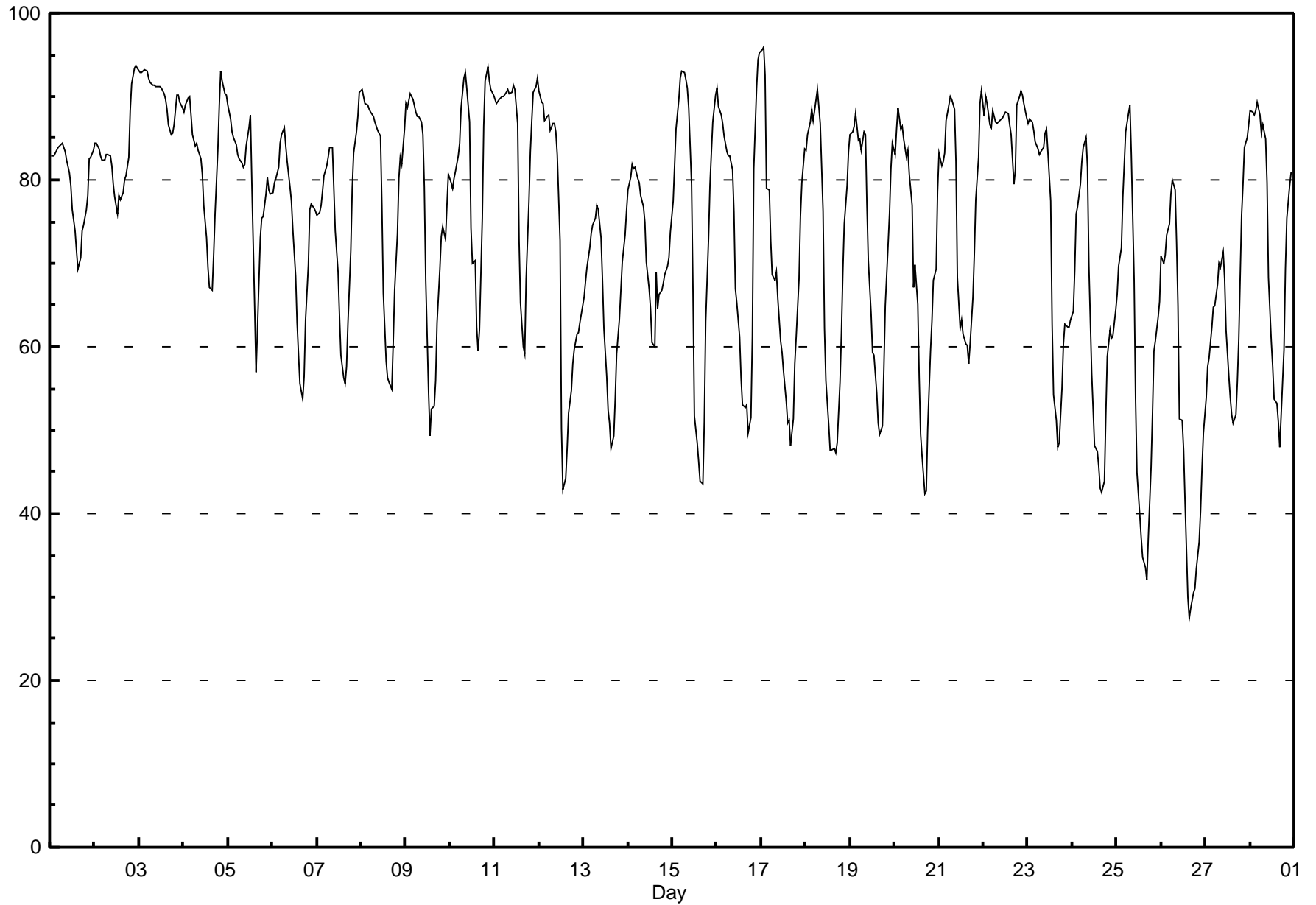
Valleyview - February 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 95.9 % on Feb 17 02:00 Maximum Daily Average: 90.3 % on Feb 3		Hours in Service: 672 Hours of Data: 672 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																									
Minimum Value: 27 % on Feb 26 16:00 Maximum Diurnal Average: 84.4 % at hour 8 Monthly Average: 73.95 %		Minimum Daily Average: 53.3 % on Feb 26 Minimum Diurnal Average: 55.4 % at hour 17 Percentiles: P ₁ = 32.7 P ₁₀ = 51.6 Q ₁ = 62.8 Median = 78.6 Q ₃ = 86.2 P ₉₀ = 90.0 P ₉₉ = 93.4																									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	83	83	83	84	84	84	84	84	83	82	81	79	76	74	72	69	71	74	75	76	78	83	84	79.5	84.4		
2-Feb	84	84	84	83	82	82	83	83	83	82	79	78	76	78	78	78	80	81	83	88	92	93	94	93	83.4	93.8	
3-Feb	93	93	93	93	93	92	92	91	91	91	91	91	91	90	90	88	87	85	86	87	90	90	89	89	90.3	93.1	
4-Feb	88	89	90	90	88	85	84	84	84	82	81	77	73	70	67	67	71	76	84	89	93	92	90	90	82.6	93.0	
5-Feb	89	87	86	85	84	83	83	82	82	82	84	86	88	80	65	57	62	73	75	76	78	80	79	78	79.3	89.0	
6-Feb	78	80	80	81	84	85	86	84	82	79	78	74	68	63	59	56	54	56	63	70	76	77	77	76	73.7	86.2	
7-Feb	76	76	77	79	80	82	83	84	84	79	74	69	64	59	56	56	58	63	72	79	83	86	88	90	74.8	90.5	
8-Feb	91	90	89	89	88	88	88	87	86	86	85	77	66	58	56	56	55	61	67	74	80	83	82	86	77.9	90.9	
9-Feb	89	89	90	90	90	88	88	88	87	85	79	68	55	49	53	53	56	63	69	73	74	73	77	81	75.3	90.4	
10-Feb	80	79	80	81	83	84	89	92	93	91	87	74	70	70	62	60	62	75	86	92	94	92	91	90	81.6	93.5	
11-Feb	90	89	90	90	90	90	90	91	90	91	91	91	87	73	65	60	59	68	77	83	87	91	91	92	84.0	92.3	
12-Feb	91	89	89	87	88	88	86	87	87	86	83	73	50	43	44	48	52	55	58	60	62	62	63	64	70.5	90.7	
13-Feb	66	68	69	72	74	75	75	77	76	73	68	62	56	52	51	48	49	54	59	63	67	70	73	76	65.6	77.0	
14-Feb	79	80	82	81	81	80	80	78	77	75	70	67	65	61	60	69	65	66	67	68	69	70	71	74	72.2	81.9	
15-Feb	77	82	86	90	92	93	93	92	91	89	79	67	52	49	46	44	44	51	63	73	79	83	87	90	74.7	93.1	
16-Feb	91	89	88	87	85	83	83	83	81	76	67	65	61	56	53	53	53	50	51	61	81	91	94	95	74.1	95.2	
17-Feb	96	96	93	79	79	73	69	68	69	66	61	59	57	53	51	51	48	51	58	61	68	76	80	84	68.5	95.9	
18-Feb	84	85	87	88	87	88	91	89	87	76	62	56	51	48	48	48	47	48	56	62	69	75	79	83	70.6	90.8	
19-Feb	85	86	86	88	85	85	84	86	85	77	70	64	59	59	54	51	50	51	57	65	72	76	81	84	72.5	88.0	
20-Feb	83	86	89	86	87	85	83	84	81	77	67	70	65	56	49	47	42	43	50	60	63	68	69	79	69.5	88.6	
21-Feb	83	82	82	83	87	89	90	90	88	82	68	62	63	61	60	60	58	60	66	71	78	83	89	91	76.2	90.6	
22-Feb	88	90	89	87	86	88	87	87	87	87	87	88	88	88	87	85	79	81	89	90	91	90	89	87	87.4	90.8	
23-Feb	87	87	87	86	85	84	83	83	84	86	86	83	77	63	54	51	48	48	55	60	63	62	62	63	72.0	87.2	
24-Feb	64	69	76	77	80	82	84	85	82	70	57	53	48	48	46	43	42	44	52	59	62	61	61	64	62.8	85.1	
25-Feb	66	70	72	78	82	86	88	89	83	68	54	45	40	37	35	34	32	37	46	52	59	61	64	65	60.1	88.9	
26-Feb	71	70	71	73	75	78	80	79	73	65	51	51	48	41	30	27	29	31	31	33	37	40	45	50	53.3	80.0	
27-Feb	54	58	59	62	65	65	67	70	69	71	68	62	56	54	52	51	52	56	61	76	80	84	85	87	65.1	86.6	
28-Feb	88	88	88	88	89	88	86	87	85	80	68	61	58	54	53	51	48	52	60	69	75	79	81	81	73.2	89.3	
		81.9	82.6	83.4	83.5	84.0	84.1	84.2	84.4	83.2	79.8	74.2	69.7	64.6	60.2	57.0	55.7	55.4	59.0	64.8	70.3	75.0	77.5	79.1	81.0	Diurnal Average	
		95.6	95.9	93.1	93.1	93.1	93.1	92.9	92.2	92.9	91.2	91.4	91.2	91.0	90.3	89.6	88.5	86.6	85.3	88.9	91.9	93.5	93.4	94.3	95.2	Diurnal Maximum	

Hourly Averages

Relative Humidity (RH) - %

Valleyview - February 2010



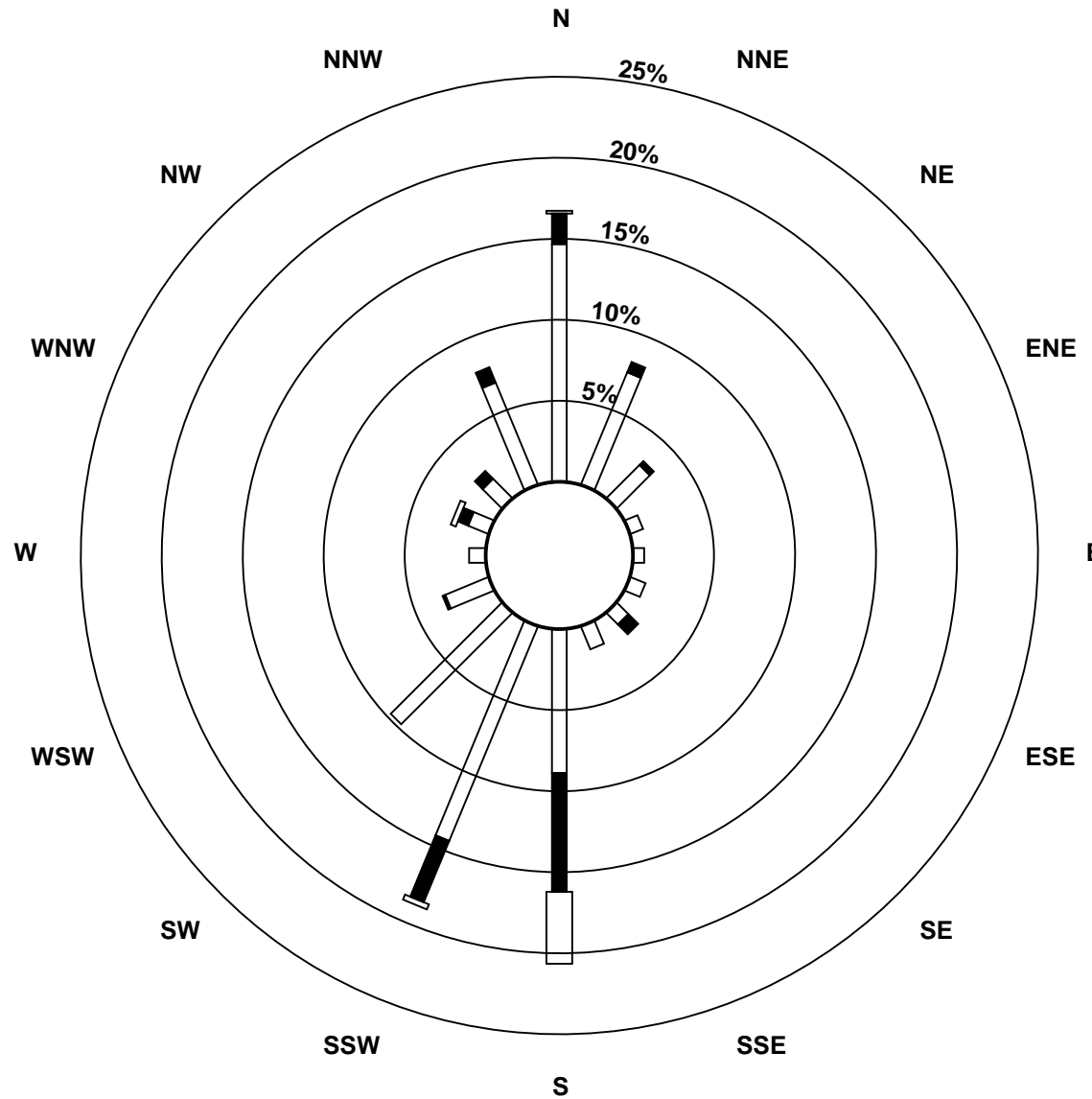
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - February 2010

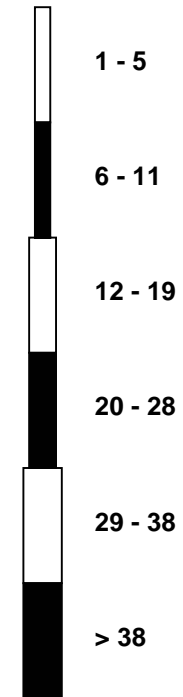
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
23 Spd	1	1	1	1	1	1	1	1	1	2	1	3	4	4	3	4	3	3	2	4	4	4	6	5	0.8	6.0		
Dir	221	51	46	195	196	175	213	212	193	188	184	350	354	336	331	352	16	357	225	213	217	215	206	212	254	206		
24 Spd	2	0	2	2	4	4	4	4	1	0	2	0	2	3	2	3	5	3	1	1	2	4	4	4	0.9	4.6		
Dir	227	224	213	220	200	210	220	220	218	46	196	175	2	354	26	47	76	79	52	327	197	142	199	213	192	76		
25 Spd	4	1	2	1	1	1	1	1	1	3	4	5	6	7	4	3	1	1	2	3	1	2	3	3	2.2	7.1		
Dir	208	182	178	196	278	249	248	248	273	225	201	182	188	256	241	202	197	212	220	239	99	148	220	211	214	256		
26 Spd	3	3	2	1	1	1	1	1	1	2	3	4	5	5	5	11	8	7	10	8	4	3	2	4	2.3	10.8		
Dir	180	178	179	275	235	241	204	253	221	207	191	8	336	317	137	138	130	130	138	141	136	139	102	106	143	138		
27 Spd	2	2	2	2	2	2	2	2	2	4	2	2	4	5	4	3	5	4	5	6	5	3	1	2	2.0	6.4		
Dir	90	78	41	356	351	39	6	42	2	343	8	228	240	280	346	3	347	349	8	8	332	348	172	263	351	8		
28 Spd	0	1	1	1	1	1	1	1	1	1	2	2	2	1	4	2	1	2	0	1	2	2	1	1	0.2	3.9		
Dir	38	204	184	345	5	193	179	235	282	203	183	190	327	349	10	119	105	359	223	279	202	220	176	178	217	10		
Spd	2.1	1.9	1.9	2.1	1.8	1.8	2.0	1.8	1.7	1.9	2.1	1.2	1.0	1.5	1.3	1.2	1.2	1.3	0.3	1.1	2.2	2.5	3.0	2.6	Diurnal Average			
Dir	196	195	202	207	205	205	214	215	214	206	192	217	262	302	332	353	4	6	343	196	195	191	196	196	Diurnal Maximum			
Spd	13.1	15.8	15.9	16.6	15.0	16.6	14.1	14.3	15.4	14.7	12.5	12.7	13.8	11.8	11.5	10.8	9.8	8.1	10.6	15.3	17.2	14.8	11.3	13.3	Diurnal Maximum			
Dir	192	188	181	186	182	184	187	182	184	186	188	185	188	189	189	138	193	193	191	183	184	186	190	187	Diurnal Maximum			
Maximum Speed Value: 17 ppb on Feb 13 21:00																			Minimum Speed Value: 0 ppb on Feb 12 02:00					Hours in Service:				672
Maximum Daily Speed Average: 11.0 ppb on Feb 13																			Minimum Daily Speed Average: 0.1 ppb on Feb 28					Hours of Data:				672
Maximum Diurnal Speed Average: 3.0 ppb at hour 23																			Minimum Diurnal Speed Average: 0.3 ppb at hour 19					Hours of Missing Data:				0
Monthly Average Velocity: 1.23 ppb 210.7 deg																			Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.8 Q ₁ = 1.6 Median = 2.9 Q ₃ = 4.7 P ₉₀ = 9.3 P ₉₉ = 15.3					Percent Operational Time:				100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																												
Frequency Distribution																												
	Speed Range (ppb)																											
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																					
North	136	18	1	0	0	0	155																					
NorthEast	47	6	0	0	0	0	53																					
East	12	0	0	0	0	0	12																					
SouthEast	18	6	0	0	0	0	24																					
South	110	61	35	0	0	0	206																					
SouthWest	134	3	0	0	0	0	137																					
West	32	4	1	0	0	0	37																					
NorthWest	34	12	2	0	0	0	48																					
Total	523	110	39	0	0	0	672																					

Wind Rose

Wind Speed (WS) (km/h)
Valleyview - February 2010



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - February 2010

Maximum Speed: 17 km/h on Feb 13 21:00		Maximum Daily Speed Average: 11.1 km/h on Feb 13		Hours in Service: 672																							
Minimum Speed: 1 km/h on Feb 22 04:00		Minimum Daily Speed Average: 1.9 km/h on Feb 28		Hours of Data: 672																							
Maximum Diurnal Speed Average: 5.5 km/h at hour 13		Minimum Diurnal Speed Average: 3.7 km/h at hour 4		Hours of Missing Data: 0																							
Monthly Average Speed: 4.21 km/h		Percentiles: P ₁ = 0.9 P ₁₀ = 1.4 Q ₁ = 2.0 Median = 3.2 Q ₃ = 4.9 P ₉₀ = 9.4 P ₉₉ = 15.4		Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Feb	5	4	2	3	4	5	5	5	4	5	4	4	3	2	2	3	3	5	5	5	4	4	6	5	4.1	5.9	
2-Feb	5	6	6	5	1	1	2	2	2	2	2	3	2	4	2	2	3	2	1	4	6	5	4	3	3.0	6.2	
3-Feb	2	2	3	4	10	8	3	3	2	2	2	2	4	7	5	4	4	4	4	4	3	2	3	3	3.8	10.5	
4-Feb	4	4	4	5	9	9	10	8	9	7	9	9	7	5	3	3	1	4	4	3	3	2	2	2	5.1	9.6	
5-Feb	2	1	1	2	1	1	1	2	1	2	1	2	3	5	5	3	5	5	3	9	6	6	10	11	3.7	11.0	
6-Feb	9	7	6	4	2	2	1	1	1	3	2	3	4	4	5	5	5	3	1	4	8	8	10	13	4.8	13.0	
7-Feb	13	12	13	12	9	8	7	7	8	10	12	13	14	12	11	10	10	8	11	12	11	11	9	2	10.2	13.8	
8-Feb	2	5	3	4	4	4	4	3	4	5	5	5	3	3	3	2	1	2	1	3	5	4	2	2	3.5	5.4	
9-Feb	3	4	4	3	3	3	3	3	3	5	4	3	4	3	3	4	3	2	2	2	1	3	3	3	3.0	4.9	
10-Feb	3	3	3	2	3	2	1	2	2	2	2	2	2	4	3	3	2	2	2	1	1	2	3	2	2.2	4.3	
11-Feb	3	1	2	1	1	2	3	2	2	3	2	4	3	4	4	4	3	2	2	3	1	2	1	2	2.4	4.4	
12-Feb	1	1	1	1	3	2	3	3	4	3	2	4	8	5	4	7	8	6	4	2	2	9	10	10	4.3	10.0	
13-Feb	13	10	10	9	10	9	12	10	13	10	11	10	11	11	12	9	9	6	8	15	17	15	11	13	11.1	17.3	
14-Feb	13	16	16	17	15	17	14	14	16	15	13	12	11	9	7	4	6	8	9	8	7	5	4	4	10.8	16.8	
15-Feb	4	4	3	4	5	3	3	3	4	4	4	4	2	3	2	2	3	4	2	2	2	2	1	1	2.9	4.6	
16-Feb	1	1	2	2	1	2	1	1	2	1	1	2	3	3	3	1	5	5	4	2	3	3	3	3	2.3	5.5	
17-Feb	2	2	5	6	3	6	12	12	11	7	5	12	11	8	9	7	6	6	4	2	2	3	2	3	6.0	12.2	
18-Feb	3	3	3	4	2	2	4	5	4	4	3	5	6	5	6	7	5	5	6	4	1	2	2	2	3.9	7.3	
19-Feb	2	3	1	1	1	1	2	2	2	1	2	3	3	5	5	4	4	4	4	2	1	2	2	2	2.5	5.1	
20-Feb	1	2	2	1	1	2	2	2	2	1	2	2	4	5	3	2	5	3	2	2	3	2	2	3	2.4	4.7	
21-Feb	1	3	3	2	2	3	4	3	3	3	2	4	14	10	10	8	9	8	6	4	1	2	3	2	4.5	13.5	
22-Feb	2	4	3	1	2	4	4	3	5	4	4	4	3	3	3	3	3	5	7	5	3	1	3	3	3.3	6.7	
23-Feb	1	2	1	1	1	1	1	1	1	1	2	2	4	4	4	3	4	3	4	4	4	4	6	5	2.6	6.1	
24-Feb	3	1	3	2	4	4	4	4	4	1	1	2	2	2	3	3	3	5	3	1	1	2	5	4	2.9	4.8	
25-Feb	4	2	2	1	1	1	1	1	1	3	4	5	7	7	4	3	2	2	2	3	4	3	3	3	3.0	7.3	
26-Feb	3	3	2	1	1	2	2	2	1	2	3	4	6	5	7	11	8	7	10	9	5	3	2	4	4.4	11.3	
27-Feb	2	3	2	2	2	2	2	2	2	3	4	2	4	4	5	4	3	5	4	5	7	5	3	2	3.4	6.6	
28-Feb	1	1	2	1	1	2	1	2	1	1	2	2	3	2	4	3	2	3	2	2	2	2	2	1	1.9	4.1	
3.9		3.9	3.8	3.7	3.8	3.8	4.0	3.9	4.0	4.0	3.9	4.8	5.5	5.1	4.9	4.6	4.5	4.2	4.1	4.3	4.0	4.1	4.3	4.0	Diurnal Average		
13.2		15.9	16.0	16.7	15.1	16.8	14.2	14.4	15.6	14.8	12.6	12.9	13.8	11.9	11.6	11.3	9.8	8.2	10.7	15.4	17.3	14.9	11.4	13.4	Diurnal Maximum		
All monthly, daily, and diurnal averages have been calculated using scalar methods																											

Hourly Standard Deviations

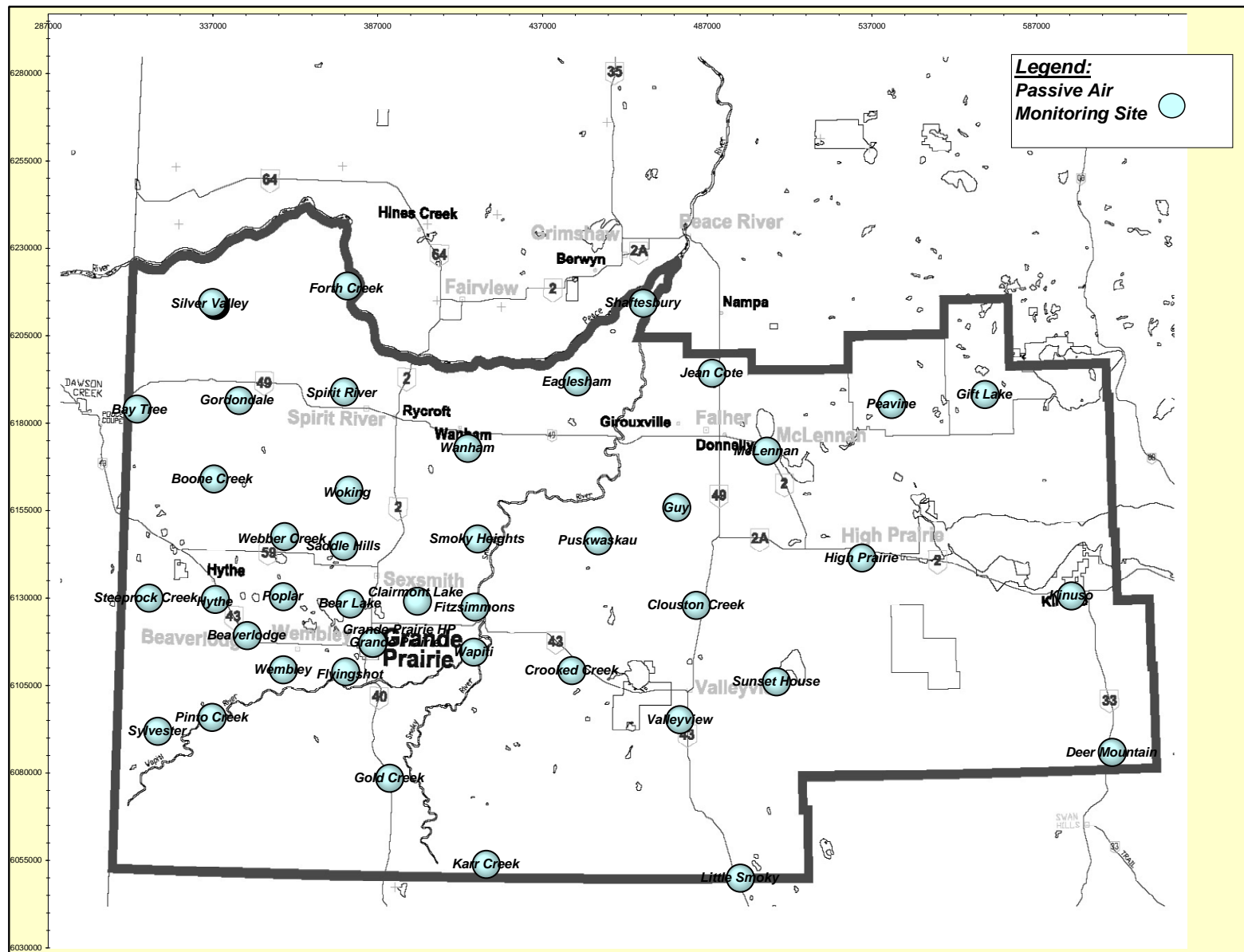
Wind Direction (WD) - deg
Valleyview - February 2010

Maximum Value: 95.3 deg on Feb 24 02:00																						Hours in Service:	672		
Minimum Value: 3.3 deg on Feb 8 09:00																						Hours of Data:	672		
Percentiles: P ₁ = 4.7 P ₁₀ = 7.1 Q ₁ = 10.2 Median = 20.2 Q ₃ = 42.5 P ₉₀ = 68.0 P ₉₉ = 91.7																						Hours of Missing Data:	0		
																						Hours of Calibration:	0		
																						Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Feb	9	13	18	28	18	13	10	13	13	16	21	15	12	23	35	13	22	9	16	12	27	12	9	12	34.9
2-Feb	15	8	13	25	74	66	32	58	40	38	23	19	62	22	80	17	18	50	93	24	13	13	62	40	93.1
3-Feb	35	43	21	15	13	12	14	13	29	25	27	24	18	12	11	17	16	11	48	9	21	54	63	42	63.1
4-Feb	16	38	38	29	7	10	10	10	10	14	10	10	12	14	35	25	53	14	18	15	14	93	39	48	92.8
5-Feb	82	78	73	21	41	43	19	20	37	24	42	30	53	51	60	76	82	39	76	7	6	5	7	6	82.3
6-Feb	7	7	6	14	29	57	59	92	36	36	18	8	6	7	7	5	4	31	93	21	6	7	7	6	93.3
7-Feb	6	7	7	7	7	7	7	6	5	7	7	9	7	8	7	8	7	7	6	6	6	7	8	11	11.4
8-Feb	11	12	20	12	11	5	7	5	3	4	5	13	12	30	42	13	16	48	50	79	81	6	13	13	81.5
9-Feb	9	8	6	10	12	10	15	18	14	4	11	10	20	49	22	15	40	39	22	47	34	27	15	15	49.2
10-Feb	8	43	68	62	62	65	85	84	73	81	54	68	88	8	14	15	49	31	34	89	44	42	27	22	89.0
11-Feb	32	75	63	48	44	45	55	53	56	10	86	17	16	8	9	14	12	31	30	32	77	28	75	91	91.2
12-Feb	71	88	90	84	81	95	71	28	18	24	53	19	32	14	88	10	7	10	17	43	21	7	7	7	95.1
13-Feb	7	9	7	8	8	7	7	6	6	8	8	10	9	8	9	9	7	11	12	7	6	6	7	7	11.6
14-Feb	8	6	7	8	9	8	8	8	11	8	7	7	7	9	17	23	16	7	8	10	12	8	14	9	23.2
15-Feb	12	9	10	8	17	25	18	22	9	5	17	8	42	55	81	30	17	11	50	66	65	80	68	41	81.0
16-Feb	72	50	59	33	50	25	71	61	26	38	88	38	22	18	69	25	26	11	13	47	30	10	11	12	87.7
17-Feb	20	10	37	11	37	12	8	7	7	17	30	16	8	7	7	7	10	9	49	74	27	21	26	15	74.1
18-Feb	8	6	13	11	17	31	8	15	25	13	12	27	30	19	16	16	19	7	9	21	89	23	8	34	89.4
19-Feb	37	15	31	29	61	60	29	22	13	39	48	17	90	8	7	13	5	4	13	38	83	51	33	36	90.5
20-Feb	48	30	45	80	47	19	30	24	45	46	38	9	5	6	10	9	12	9	19	65	29	17	33	62	79.6
21-Feb	68	27	8	33	31	20	22	29	40	25	33	47	8	11	14	10	9	8	9	31	45	61	27	38	67.8
22-Feb	88	25	17	76	84	22	7	13	9	13	9	11	23	36	16	26	16	17	6	15	26	79	10	15	88.2
23-Feb	50	39	45	57	41	38	69	25	28	12	75	66	14	18	27	15	20	55	42	15	13	8	6	8	75.4
24-Feb	39	95	63	26	20	11	8	10	44	91	13	92	25	17	44	31	12	17	52	75	47	44	25	9	95.3
25-Feb	17	85	57	52	53	66	41	28	56	18	10	10	13	17	20	21	60	49	34	16	70	64	34	8	85.1
26-Feb	21	28	63	75	76	59	72	68	63	22	46	15	23	18	68	19	9	11	10	9	19	35	48	15	76.0
27-Feb	37	31	38	42	37	61	23	29	47	18	27	71	30	23	24	20	13	19	17	16	13	24	64	39	71.3
28-Feb	78	39	37	48	73	55	52	58	55	21	33	39	61	64	19	38	56	27	75	69	25	32	86	42	85.8
88.2	95.3	90.1	83.8	83.8	95.1	84.5	91.8	73.4	91.5	87.7	92.1	90.5	64.1	88.0	75.5	82.3	54.9	93.3	89.0	89.4	92.8	85.8	91.2		

PASZA

Monthly Passive Data Summary

Location of PASZA Passive Monitoring Stations



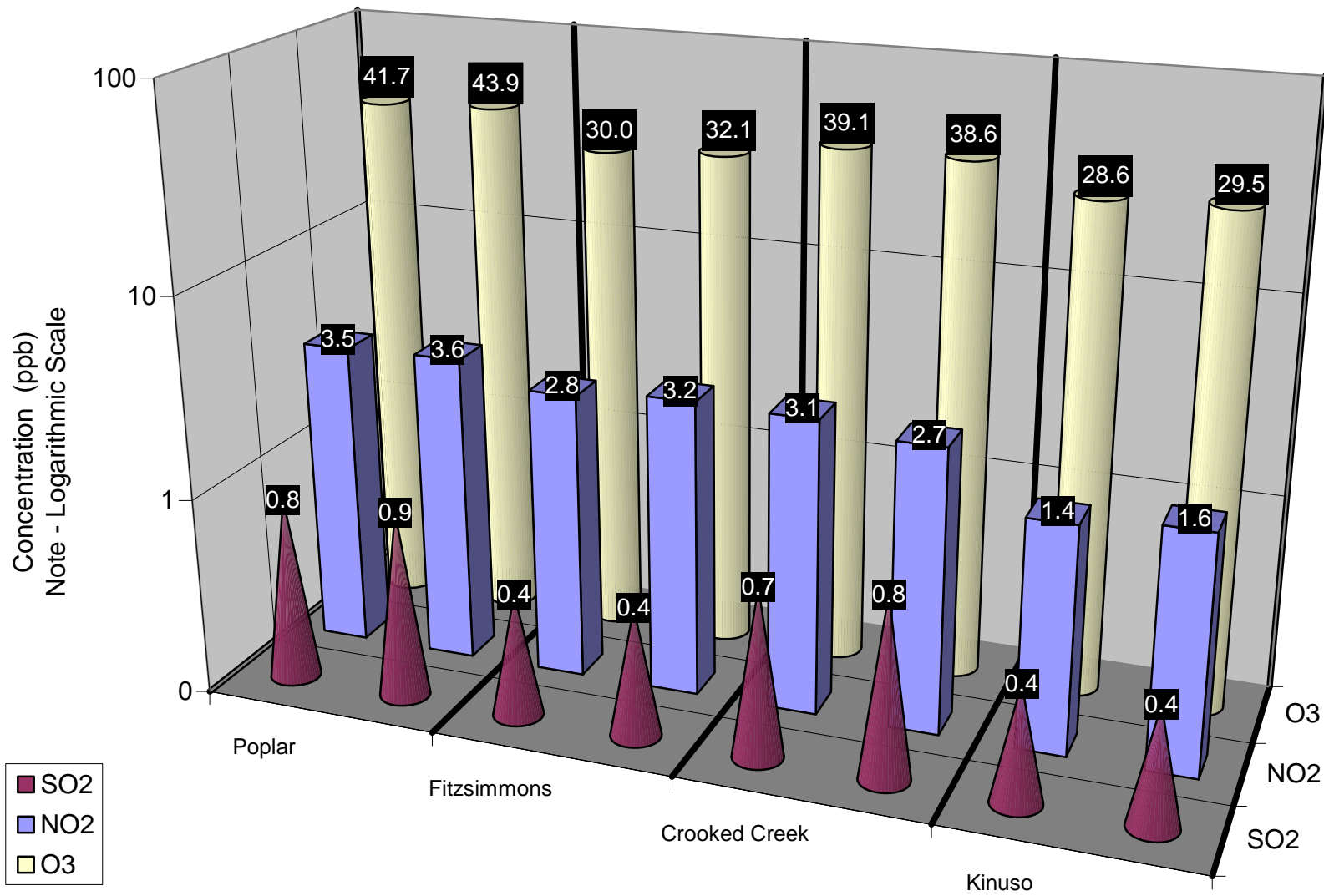
PASZA Passive Results for February 2010

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
17a	Poplar	0.8	41.7	3.5	
17b	Poplar	0.9	43.9	3.6	
30a	Fitzsimmons	0.4	30.0	2.8	
30b	Fitzsimmons	0.4	32.1	3.2	
37a	Crooked Creek	0.7	39.1	3.1	
37b	Crooked Creek	0.8	38.6	2.7	
47a	Kinuso	0.4	28.6	1.4	
47b	Kinuso	0.4	29.5	1.6	
1	Silver Valley	1.0	47.5	2.9	08-27-081-11 W6M
2	Bay Tree	0.5	44.3	2.9	13-16-078-13 W6M
3	Fourth Creek	0.7	37.9	1.6	04-13-082-07 W6M
4	Gordondale	0.9	71.7	2.9	04-34-078-10 W6M
5	Boone Creek	0.6	49.2	2.7	01-23-076-11 W6M
7	Steeprock Creek	0.4	44.8	1.9	09-35-072-13 W6M
9	Spirit River	0.6	55.5	3.1	08-12-079-07 W6M
10	Woking	1.0	55.2	2.1	01-13-076-07 W6M
11	Webber Creek	0.9	55.0	3.2	09-36-074-09 W6M
12	Hythe	0.5	35.6	4.3	14-36-072-11 W6M
14	Sylvester	0.2	28.8	1.8	08-06-069-12 W6M
16	Beaverlodge	0.5	33.8	5.2	15-36-071-10 W6M
17	Poplar	0.9	42.8	3.6	13-06-073-08 W6M
18	Saddle Hills	0.8	53.8	1.9	04-25-074-07 W6M
19	Wanham	0.7	35.9	1.3	16-22-077-03 W6M
20	Shaftesbury	0.5	35.0	N/A	04-03-082-23 W5M
21	Eaglesham	0.5	32.4	1.2	16-21-079-25 W5M
23	Bear Lake	1.0	47.4	3.2	15-31-072-06 W6M

PASZA Passive Results for February 2010 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	0.4	32.2	4.6	12-31-070-08 W6M
25	Pinto Creek	0.3	33.8	2.6	04-24-069-11 W6M
26	Flyingshot	0.4	32.7	5.3	15-36-070-07 W6M
27	Grande Prairie I	0.7	25.7	14.3	08-15-071-06 W6M
28	Clairmont Lake	0.8	45.7	2.6	09-06-073-04 W6M
29	Smoky Heights	0.9	34.1	3.0	04-06-075-02 W6M
30	Fitzsimmons	0.4	31.1	3.0	15-36-072-03 W6M
32	Gold Creek	0.4	27.5	4.4	06-33-067-05 W6M
33	Wapiti	0.5	34.8	3.8	02-25-071-03 W6M
34	Puskaskau	0.3	31.3	1.0	15-35-074-25 W5M
35	Jean Cote	0.6	45.0	1.6	12-35-079-21 W5M
36	Guy	0.5	34.5	1.1	03-04-076-22 W5M
37	Crooked Creek	0.8	38.9	2.9	16-01-071-26 W5M
38	Karr Creek	0.2	31.4	1.6	10-16-065-02 W6M
39	Clouston Creek	0.7	35.5	1.5	12-01-073-22 W5M
40	McLennan	0.6	44.4	1.4	03-29-077-19 W5M
41	Valleyview	1.1	41.4	2.8	09-30-069-22 W5M
42	Sunset House	0.9	39.8	1.5	05-32-070-19 W5M
43	High Prairie	0.4	31.5	2.1	16-13-074-17 W5M
44	Peavine	0.4	32.0	0.9	03-05-079-15 W5M
45	Gift Lake	0.3	33.9	1.0	10-07-079-12 W5M
46	Little Smoky	1.0	30.3	4.4	12-01-065-21 W5M
47	Kinuso	0.4	29.1	1.5	12-10-073-10 W5M
48	Deer Mountain	0.7	35.1	1.6	15-22-068-09 W5M
49	Grande Prairie HP	0.6	23.4	14.4	17-26-071-06 W6M

*BDL = Below Detection Level



Duplicate Summary Chart

Passive Summary for February 2010

Stats	Sulphur Dioxide SO ₂	Ozone O ₃	Nitrogen Dioxide NO ₂
	ppb	ppb	ppb

Passive Summary for February 2010 (PASZA Zone)			
Mean	0.6	38.6	3.1
Standard Deviation	0.2	9.7	2.8
Minimum	0.2	23.4	0.9
Minimum At	Sylvester (#14)	Grande Prairie HP (#49)	Peavine (#44)
Maximum	1.1	71.7	14.4
Maximum At	Valleyview (#41)	Gordondale (#4)	Grande Prairie HP (#49)

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

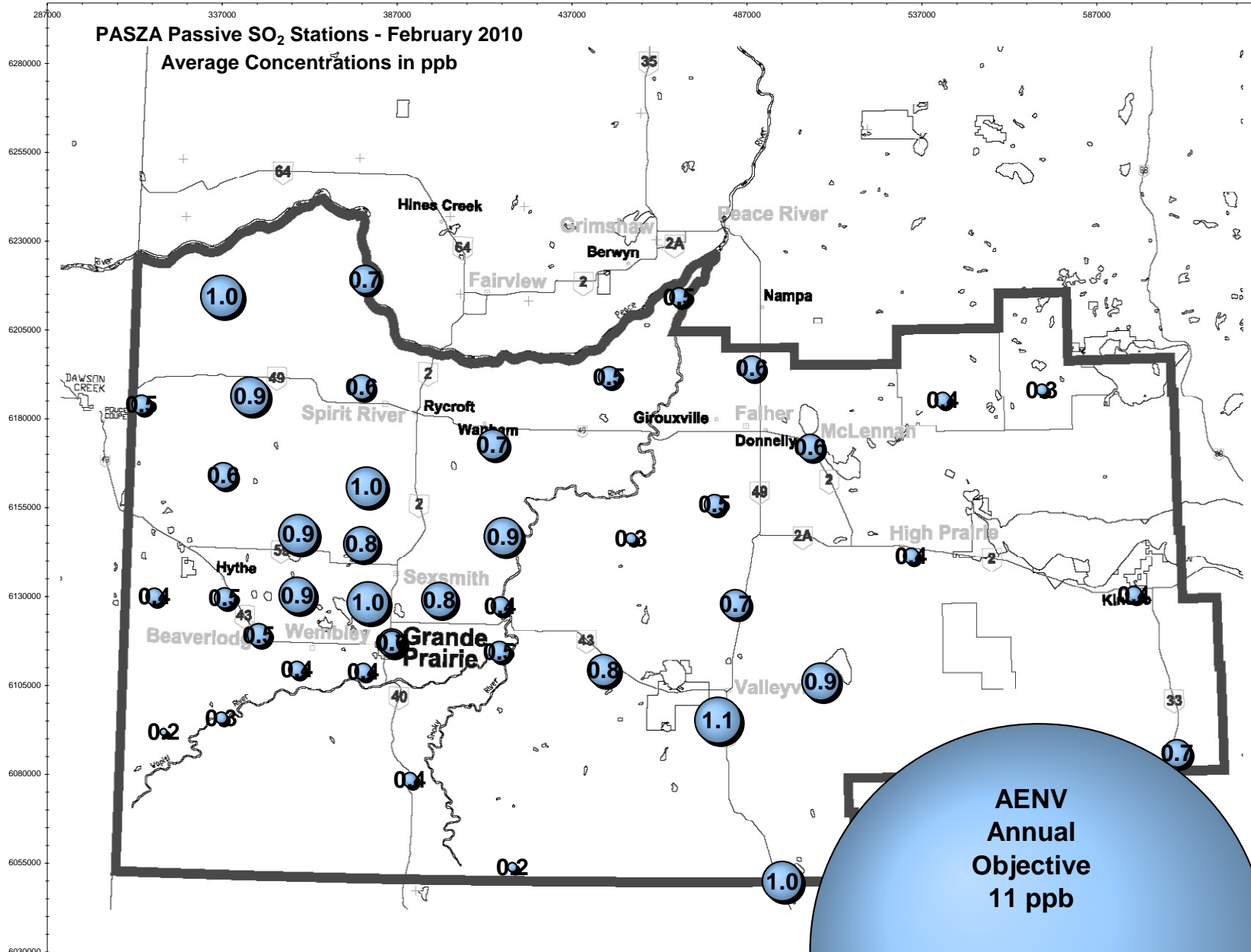
	SO ₂	O ₃	NO ₂
PASZA Beaverlodge station	0.8	23.2	10.5
PASZA Beaverlodge passive	0.5	33.8	5.2

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

	SO ₂	O ₃	NO ₂
PASZA Henry Pirker station	0.9	10.4	24.6
PASZA Grande Prairie passive	0.6	23.4	14.4

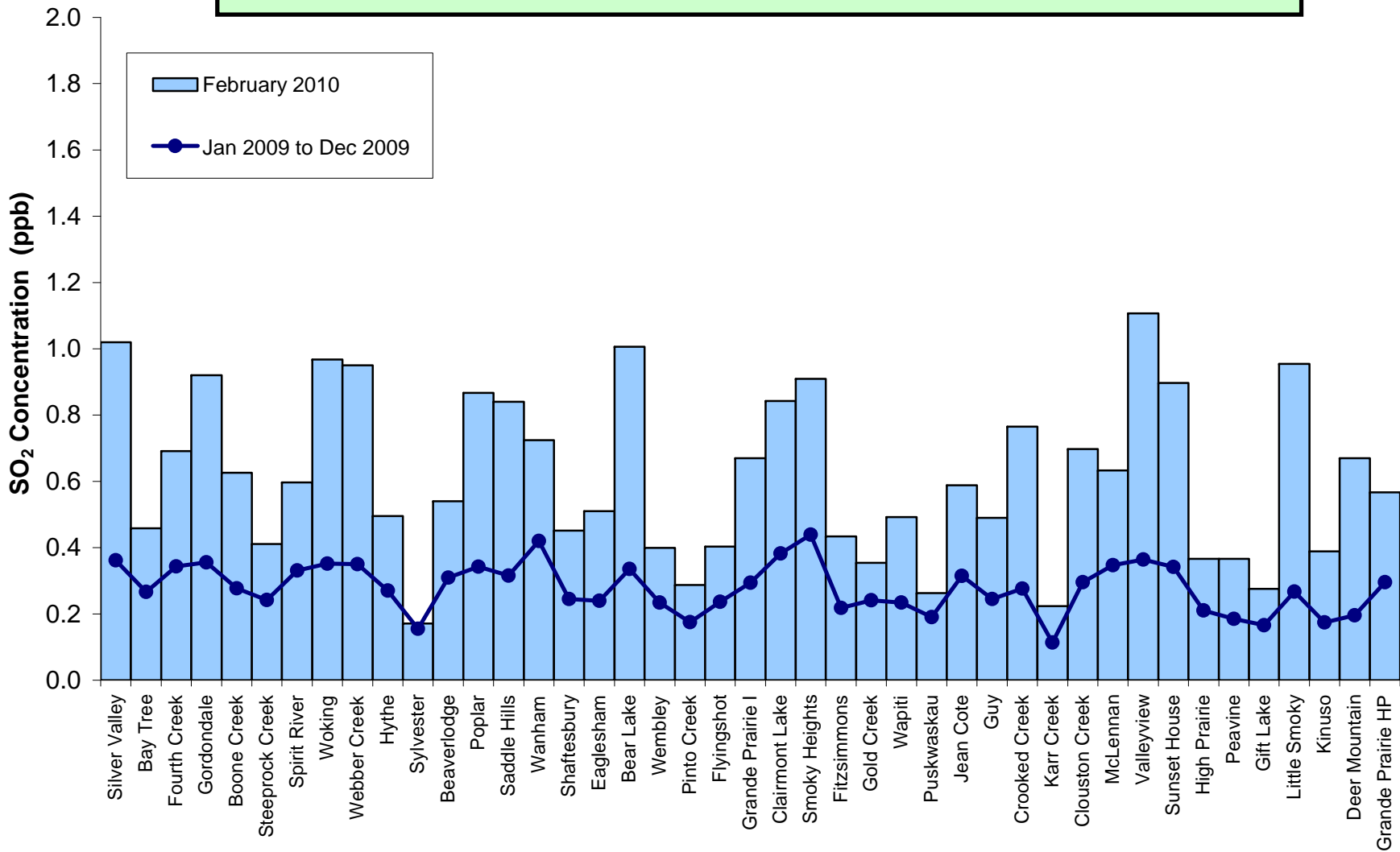
Comparison between Continuous and Passive monitoring at Kinuso (passive #47 Kinuso)

	SO ₂	O ₃	NO ₂
PASZA Portable Kinuso station	0.6	25.1	5.3
PASZA Kinuso passive	0.4	29.1	1.5

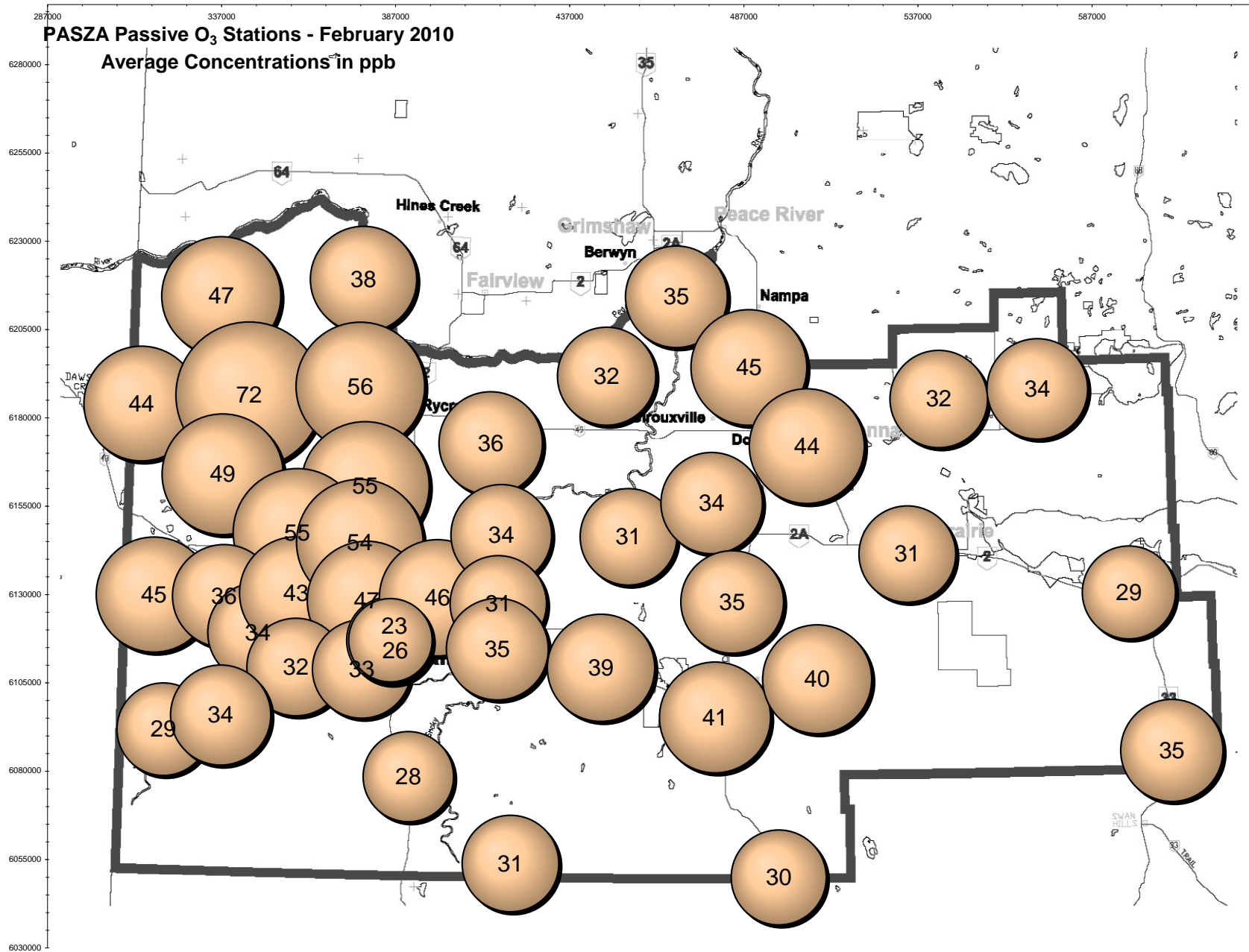


SO₂ Bubble Chart

Alberta Ambient Air Quality Objective - Annual SO₂ Objective is 11 ppb

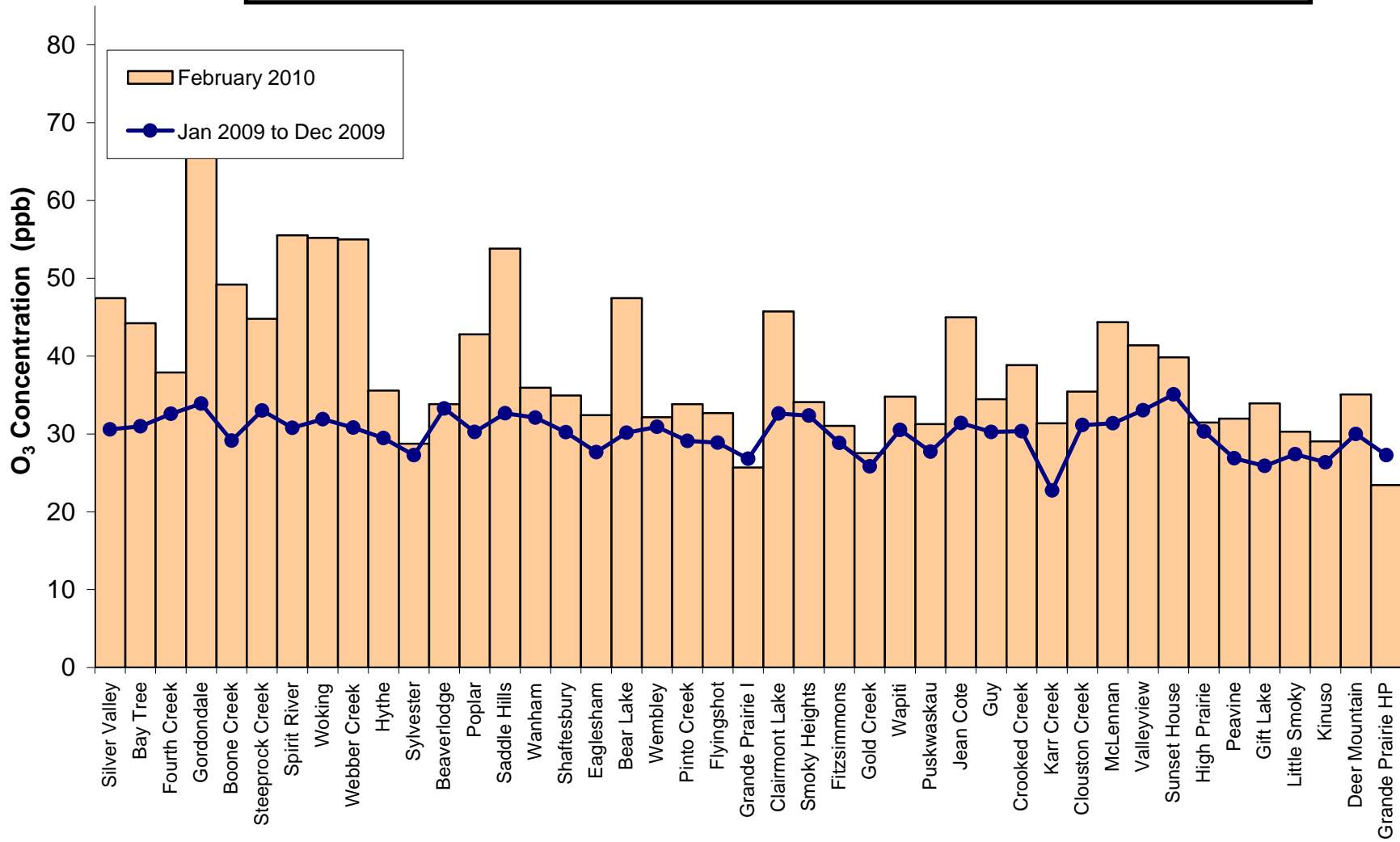


SO₂ Summary Chart



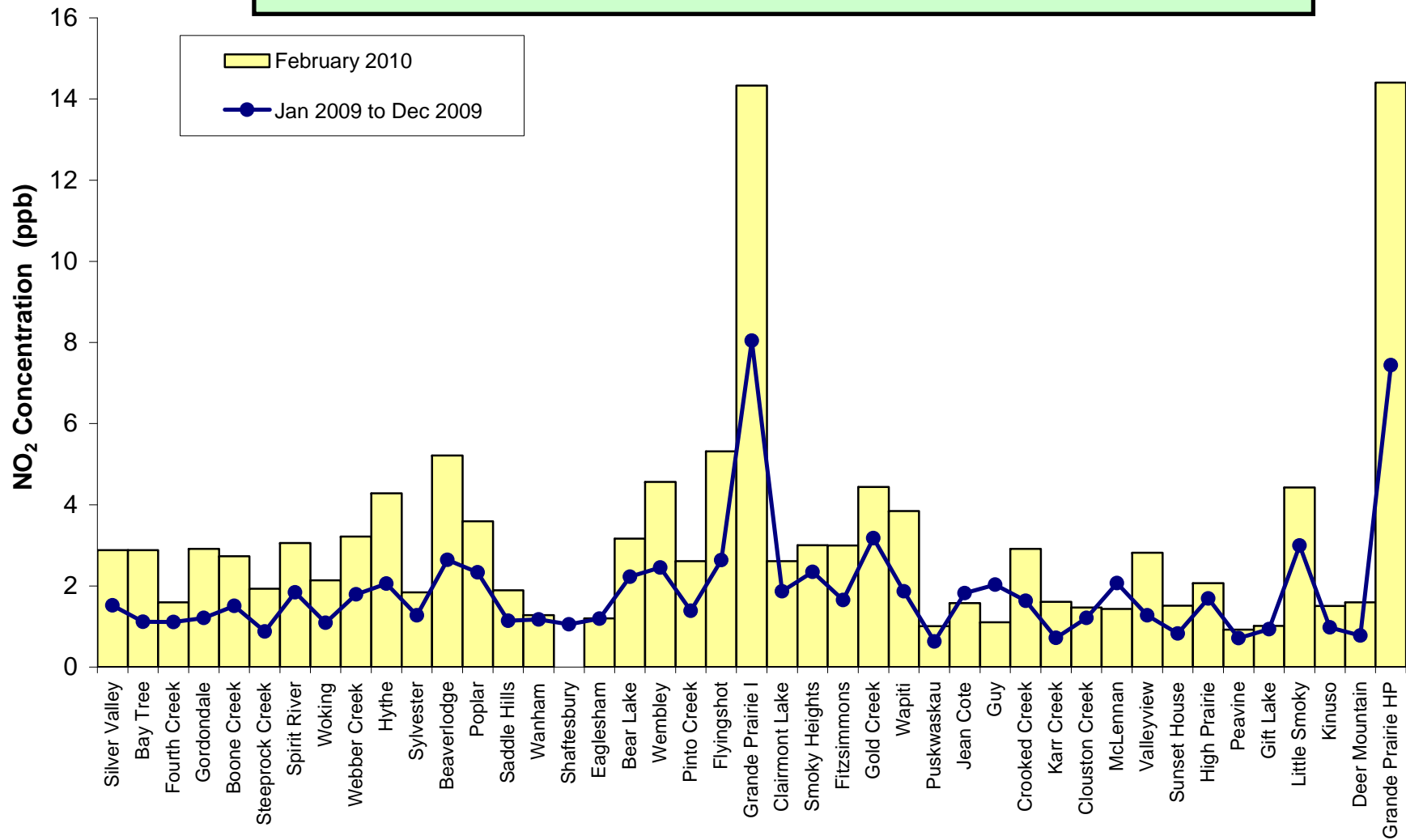
O₃ Bubble Chart

Alberta Ambient Air Quality Objective - No Annual O₃ Objective



O₃ Summary Chart

Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 32 ppb



NO₂ Summary Chart

PASZA

**ALBERTA ENVIRONMENT
INCIDENCE REPORTS**

February 2010

Air Monitoring Directive Exceedence Report

Alberta Environment
 Environmental Service Response Centre
 111 Twin Atria Building
 4999 – 98th Avenue
 Edmonton, Alberta T6B 2X3
 Phone: (780) 422-4505
 Fax: (780) 427-1044

Reference Number:	223491	Reported To (AENV Contact):	Steven
Date & Time Incident Reported to AENV:	Feb 01, 2010 @ 18:30 MST	Reported By:	Lenin Flores
Reported on Behalf of:	PASZA	Approval Number (if applicable):	Not applicable
Location(s) of Incident:	Smoky Heights Air Quality station		
Start Date & Time of Incident:	Feb 01 @ 17:00 MST	End Date & Time of Incident:	Feb 01 @ 18:00 MST
Reason or Nature of Incident:			
The PM _{2.5} analyzer (TEOM) within the Smoky Heights station, currently located South of Grande Prairie at LSD 13-8-074-02 W6, exceeded the AENV hourly average PM _{2.5} hourly guideline (80 µg/m ³) as detailed below:			
Feb 01 17:00 – 18:00 MST PM _{2.5} = 93.1 µg/m ³ WS= 4.5 km/h WD=8.4 deg (N)			
Immediate Actions Taken:			
Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.			
Investigation Details:			
Operation of the PM _{2.5} analyzer appear normal during the time of this report.			
Actions Taken to Prevent Reoccurrence (if any):			
Not applicable			
Additional Actions Required (if any):			
Not applicable			
Report Completed By:	Kelly Baragar	Date Report Submitted:	Feb 02, 2010
7-Day Letter Due Date:	February 09, 2010		

Air Monitoring Directive Exceedence Report

Alberta Environment
 Environmental Service Response Centre
 111 Twin Atria Building
 4999 – 98th Avenue
 Edmonton, Alberta T6B 2X3
 Phone: (780) 422-4505
 Fax: (780) 427-1044

Reference Number:	224019	Reported To (AENV Contact):	Diane
Date & Time Incident Reported to AENV:	Feb 03, 2010 @ 23:00 MST	Reported By:	Lenin Flores
Reported on Behalf of:	PASZA	Approval Number (if applicable):	Not applicable
Location(s) of Incident:	Smoky Heights Air Quality station		
Start Date & Time of Incident:	Feb 03 @ 21:00 MST	End Date & Time of Incident:	Feb 03 @ 22:00 MST
Reason or Nature of Incident:			
The PM _{2.5} analyzer (TEOM) within the Smoky Heights station, currently located South of Grande Prairie at LSD 13-8-074-02 W6, exceeded the AENV hourly average PM _{2.5} hourly guideline (80 µg/m ³) as detailed below: Feb 03 21:00 – 22:00 MST PM _{2.5} = 106.3 µg/m ³ WS= 10.1 km/h WD=12 deg (N)			
Immediate Actions Taken:			
Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.			
Investigation Details:			
Operation of the PM _{2.5} analyzer appear normal during the time of this report.			
Actions Taken to Prevent Reoccurrence (if any):			
Not applicable			
Additional Actions Required (if any):			
Not applicable			
Report Completed By:	Kelly Baragar	Date Report Submitted:	Feb 05, 2010
7-Day Letter Due Date:	February 10, 2010		

Air Monitoring Directive Exceedence Report

Alberta Environment
 Environmental Service Response Centre
 111 Twin Atria Building
 4999 – 98th Avenue
 Edmonton, Alberta T6B 2X3
 Phone: (780) 422-4505
 Fax: (780) 427-1044

Reference Number:	224056	Reported To (AENV Contact):	Carsten
Date & Time Incident Reported to AENV:	Feb 07, 2010	Reported By:	Lenin Flores
Reported on Behalf of:	PASZA	Approval Number (if applicable):	Not applicable
Location(s) of Incident:	Henry Pirker Air Quality station (107 Ave & 104 St, Grande Prairie)		
Start Date & Time of Incident:	Feb 06 @ 00:00 MST	End Date & Time of Incident:	Feb 06 @ 23:00 MST
Reason or Nature of Incident:			
<p>The PM_{2.5} analyzer (TEOM) within the Henry Pirker station, currently located at 107 Avenue and 104 Street, Grande Prairie, exceeded the AENV 24 hour average PM_{2.5} hourly guideline (30 µg/m³) as detailed below:</p> <p>Feb 06, 2010 PM_{2.5}= 35.1 µg/m³ WS= 3.1 km/h WD=204 deg (SSW) All averages are displayed as 24-hour averages.</p>			
Immediate Actions Taken:			
Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.			
Investigation Details:			
Operations of the PM _{2.5} analyzer appear normal during the incident. Subsequent station visits indicated normal diagnostics on the TEOM.			
Actions Taken to Prevent Reoccurrence (if any):			
Not applicable			
Additional Actions Required (if any):			
Not applicable			
Report Completed By:	Kelly Baragar	Date Report Submitted:	Feb 09, 2010
7-Day Letter Due Date:	February 13, 2010		

Air Monitoring Directive Exceedence Report

Alberta Environment
 Environmental Service Response Centre
 111 Twin Atria Building
 4999 – 98th Avenue
 Edmonton, Alberta T6B 2X3
 Phone: (780) 422-4505
 Fax: (780) 427-1044

Reference Number:	223980	Reported To (AENV Contact):	Stephen
Date & Time Incident Reported to AENV:	February 12, 2010 @ 19:00MST	Reported By:	Focus - Brad Moyles
Reported on Behalf of:	PASZA - by Focus	Approval Number (if applicable):	
Location(s) of Incident:	PASZA – Henry Pirker		
Start Date & Time of Incident:	February 12, 2010 @ 17:00MST.	End Date & Time of Incident:	February 12, 2010 @ 18:00MST.
The PM _{2.5} analyzer (TEOM) within the Henry Pirker station, currently located at 107 Avenue and 104 Street, Grande Prairie, exceeded the AENV hourly average PM _{2.5} hourly guideline (80 µg/m ³) as detailed below: Feb 12, 2010 PM _{2.5} = 106.8 µg/m ³ WS= 2.1 km/h WD=177 deg (SSW)			
Immediate Actions Taken:			
Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.			
Investigation Details:			
Operations of the PM _{2.5} analyzer appear normal during the incident. Subsequent station visits indicated normal diagnostics on the TEOM.			
Actions Taken to Prevent Reoccurrence (if any):			
Not applicable			
Additional Actions Required (if any):			
Not applicable			
Report Completed By:	Brad Moyles	Date Report Submitted:	February 17, 2010
7-Day Letter Due Date:			

Air Monitoring Directive Exceedence Report

Alberta Environment
 Environmental Service Response Centre
 111 Twin Atria Building
 4999 – 98th Avenue
 Edmonton, Alberta T6B 2X3
 Phone: (780) 422-4505
 Fax: (780) 427-1044

Reference Number:	224131	Reported To (AENV Contact):	Nancy
Date & Time Incident Reported to AENV:	February 14, 2010 @ 10:00MST	Reported By:	Focus - Brad Moyles
Reported on Behalf of:	PASZA - by Focus	Approval Number (if applicable):	
Location(s) of Incident:	PASZA – Beaverlodge Station		
Start Date & Time of Incident:	February 13, 2010 @ 00:00MST.	End Date & Time of Incident:	February 13, 2010 @ 24:00MST.
<p>The PM_{2.5} analyzer (TEOM) within the Beaverlodge station, currently located 2 km West from the town of Beaverlodge (near Agricultural research center), exceeded the AENV 24 hour average PM_{2.5} hourly guideline (30 µg/m³) as detailed below:</p> <p>Feb 06, 2010 PM_{2.5}= 30.5 µg/m³ WS= 2.7 km/h WD=193.7 deg (SSW) All averages are displayed as 24-hour averages.</p>			
<p>Confirmed validity of data and reported ASAP to AENV Environmental Service Response Centre.</p>			
Investigation Details:			
<p>Operations of the PM_{2.5} analyzer appear normal during the incident. Subsequent station visits indicated normal diagnostics on the TEOM.</p>			
Actions Taken to Prevent Reoccurrence (if any):			
<p>Not applicable</p>			
Additional Actions Required (if any):			
<p>Not applicable</p>			
Report Completed By:	Brad Moyles	Date Report Submitted:	February 17, 2010
7-Day Letter Due Date:			

February 2010 Calibration Reports

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

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

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

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

**PASZA – Kinuso (Portable) Station with the following calibrations:
SO₂, TRS, NO, NO₂, NO_x & O₃,**

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

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

Calibration Date	February 10, 2010	Previous Calibration	January 13, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:30	End Time (MST)	13:01
Barometric Pressure	0.921 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Conc	50.6 ppb	Cal Gas Cert Date	13/3/2009
		Cal Gas Cylinder #	AAL 15377
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	<u>Before</u>		<u>After</u>
Calculated slope	1.003746	Calculated slope	1.004809
Calculated intercept	-1.630304	Calculated intercept	-0.913416
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.6		8.6	
Coefficient	.803		.819	
Pressure	641.0	mm Hg	642.1	mm Hg
Flow	0.476	lpm	0.475	lpm
Lamp Voltage	44433	Hz	44501	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	0.3	N/A
4988	39.83	400.8	399.7	1.0029
4988	19.91	201.2	201.0	1.0010
4988	9.95	100.7	102.1	0.9866
4989	0.00	0.0	0.1	As Found Zero
4988	39.83	400.8	391.8	As Found Span
Average Correction Factor				0.9968

Calculated value of As Found Response: 391.5 ppb Percent Change of As Found: 2.3%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	239.8	ppb	238.8	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



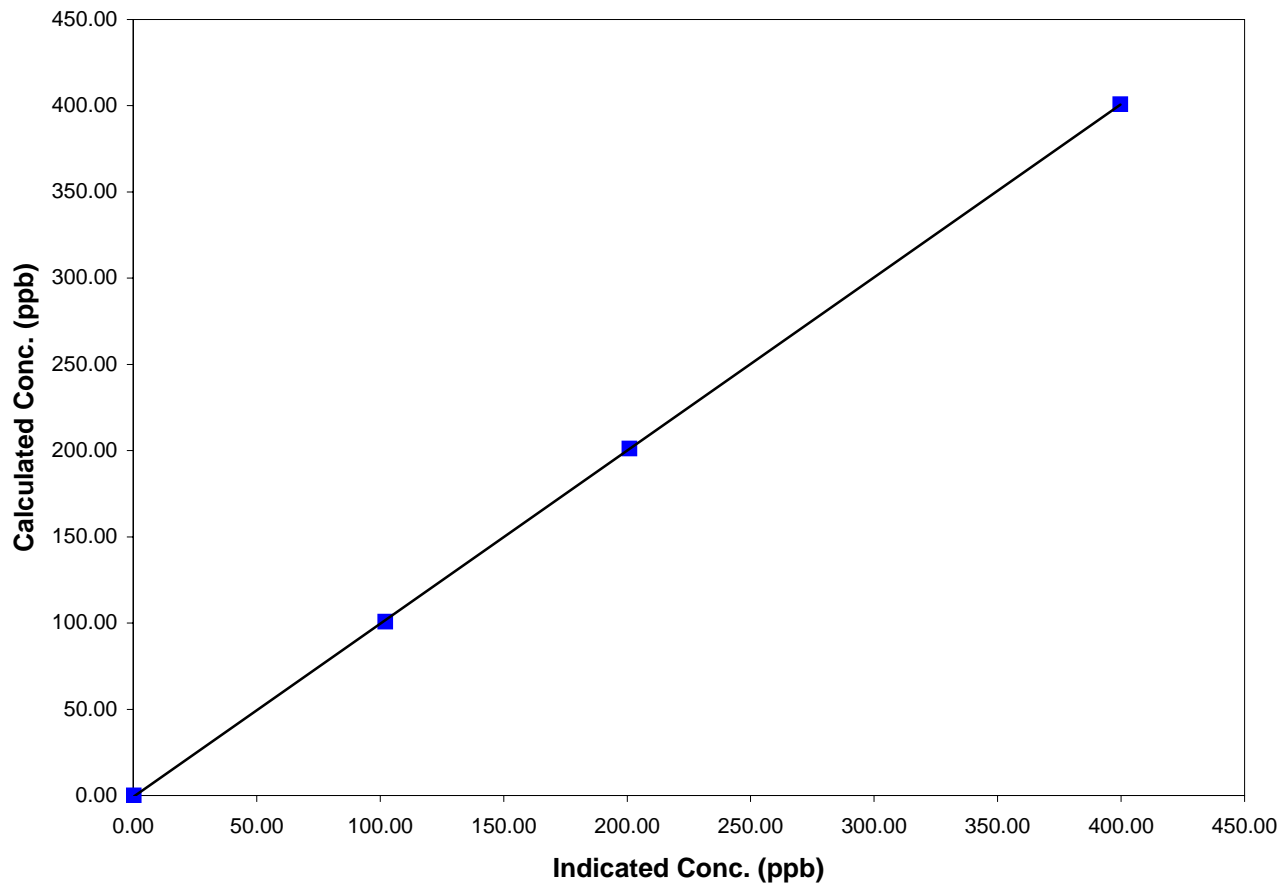
Station Information

Calibration Date	February 10, 2010	Previous Calibration	January 13, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:30	End Time (MST)	13:01
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

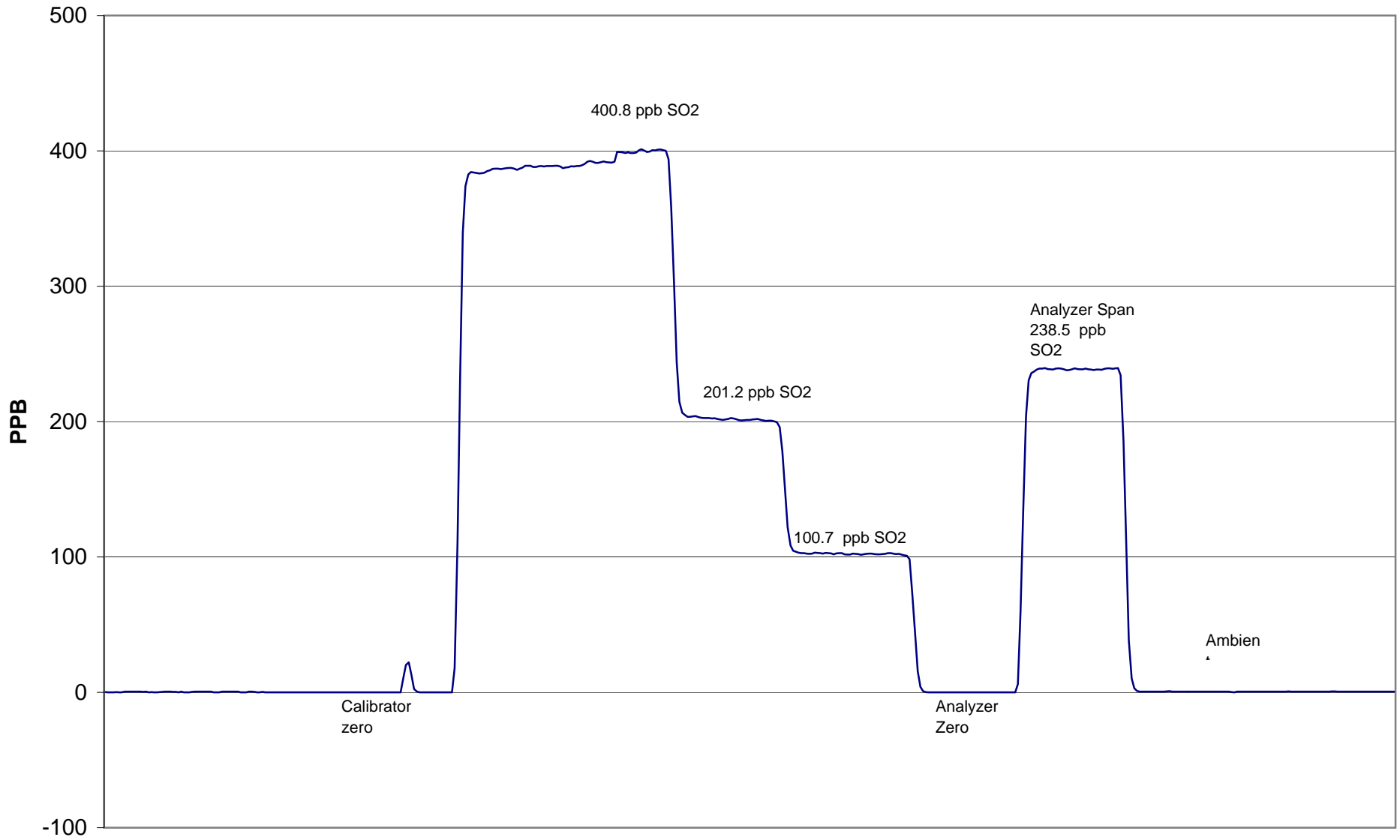
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A	Correlation Coefficient	0.999985
400.8	399.7	1.0029		
201.2	201.0	1.0010	Slope	1.004809
100.7	102.1	0.9866		
			Intercept	-0.913416

SO2 Calibration Curve

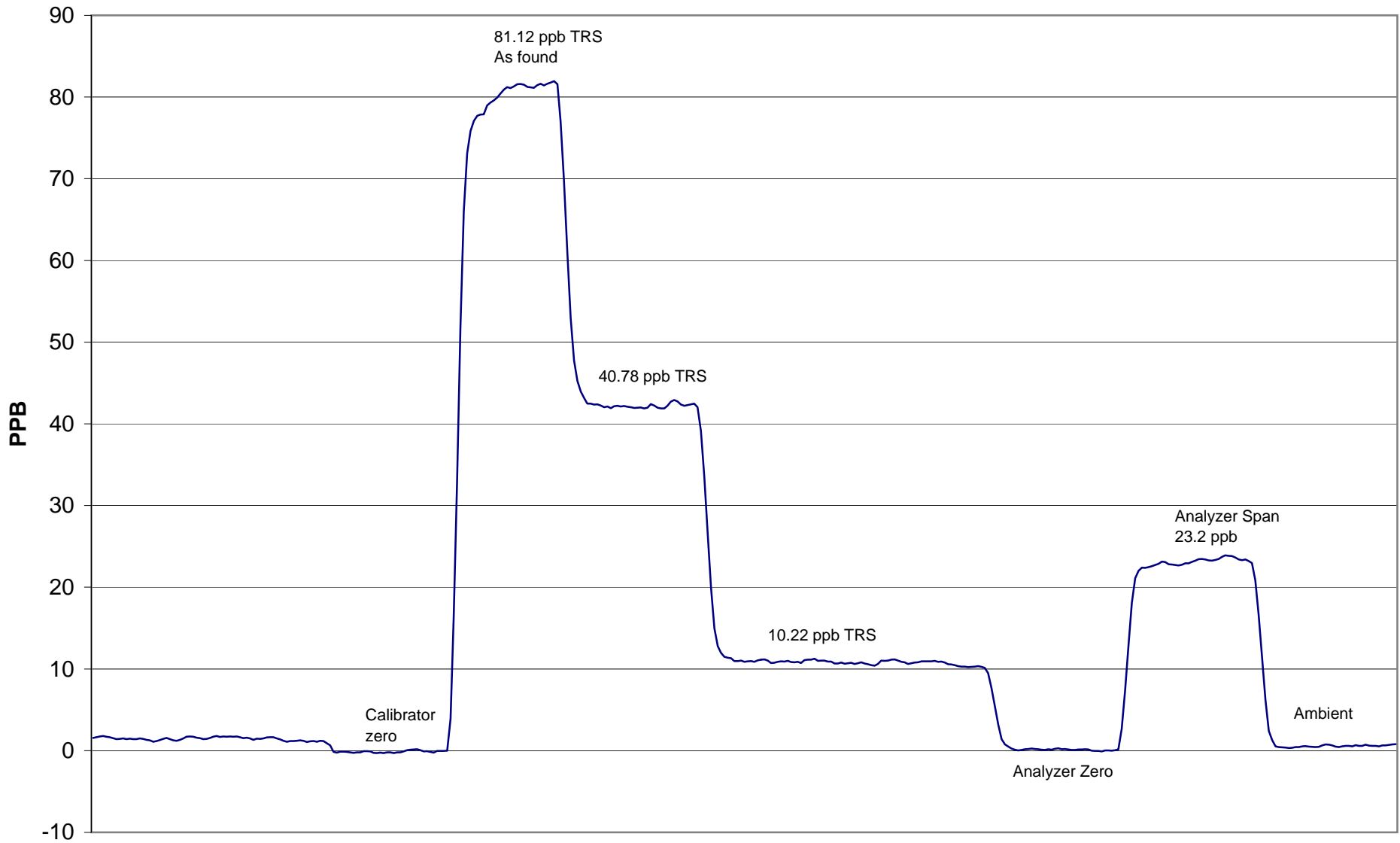


Henry Pirker SO₂ Calibration



February 10, 2010

Henry Pirker TRS Calibration



February 9, 2010

Calibration Report

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



Station Information

Calibration Date	February 10, 2010	Previous Calibration	January 13, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	Routine	Installation	Removal
Start Time (MST)	9:30	End Time (MST)	13:57
Barometric Pressure	0.958	Atm	Station Temperature
Calibrator	EnviroNics	Serial Number	3474
NO Cal Gas Conc	49.6	ppm	Cal Gas Expiry Date
NOx Cal Gas Conc	49.6	ppm	Cal Gas Serial #
			AAL 15377

DACS Information

DACS make Focus AP1000 DACS serial No. _____

Parameter		NO2	NOx	NO
Before	Data Slope	1.001053	1.004077	1.003089
	Data Offset	0.745285	-2.181754	-2.046094
After	Data Slope	0.999145	1.006663	1.004880
	Data Offset	-0.198753	-2.455020	-2.210996
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 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	9.6	mV	9.9	mV
NOx bkgnd	10.0	mV	10.5	mV
NO coefficient	0.730		0.744	
NOx coefficient	1.002		1.001	
NO2 conv temp	318.0	Deg C	319.0	Deg C
PMT Temp	-2.5	Deg C	-2.5	Deg C
PMT Volt	-786.0	mV	-787.0	mV
R Cell Press	170.0	in Hg	170.6	in Hg
Sample Flow	0.764	ccm	0.767	ccm

Notes:

Calibration Report

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



Station Information

Calibration Date: February 10, 2010 Station Location: Henry Pirker

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4989	0.00	0.0	0.0	0.0	0.5	0.1	0.1	N/A	N/A
1	4988	39.82	392.8	392.8	0.0	391.7	392.1	-0.4	1.0028	1.0019
2	4988	19.87	196.8	196.8	0.0	198.8	198.9	-0.2	0.9902	0.9893
3	4988	9.91	98.3	98.3	0.0	102.2	102.3	-0.2	0.9626	0.9615
AFZ	4991	0.00	0.0	0.0	0.0	0.6	0.2	0.1	0.0000	0.0000
AFS	4988	39.84	393.0	393.0	0.0	386.0	385.0	0.9	1.0182	1.0208
Average Correction Factor									0.9852	0.9842

As Found Concentrations: NO_x= 383.2 NO= 382.8 As Found Percent Change NO_x= -2.5% NO= -2.6%

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	0.5	0.1	0.1	N/A	N/A	N/A	N/A
NO point	392.2	392.2	0.0	392.1	392.2	-0.2	1.0004	1.0000	N/A	N/A
300	392.2	97.9	294.3	392.4	97.9	294.6	0.9997	1.0000	0.9990	100.1%
200	392.2	190.2	202.1	392.6	190.2	202.6	0.9990	1.0000	0.9973	100.3%
100	392.2	281.4	110.8	392.5	281.4	111.2	0.9993	1.0000	0.9965	100.4%
Average Correction Factor							0.9993	1.0000	0.9976	100.2%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.0	ppb	-0.1	-0.3	0.0	ppb
Auto span	168.4	169.5	1.2	ppb	178.1	177.2	1.0	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PASZA



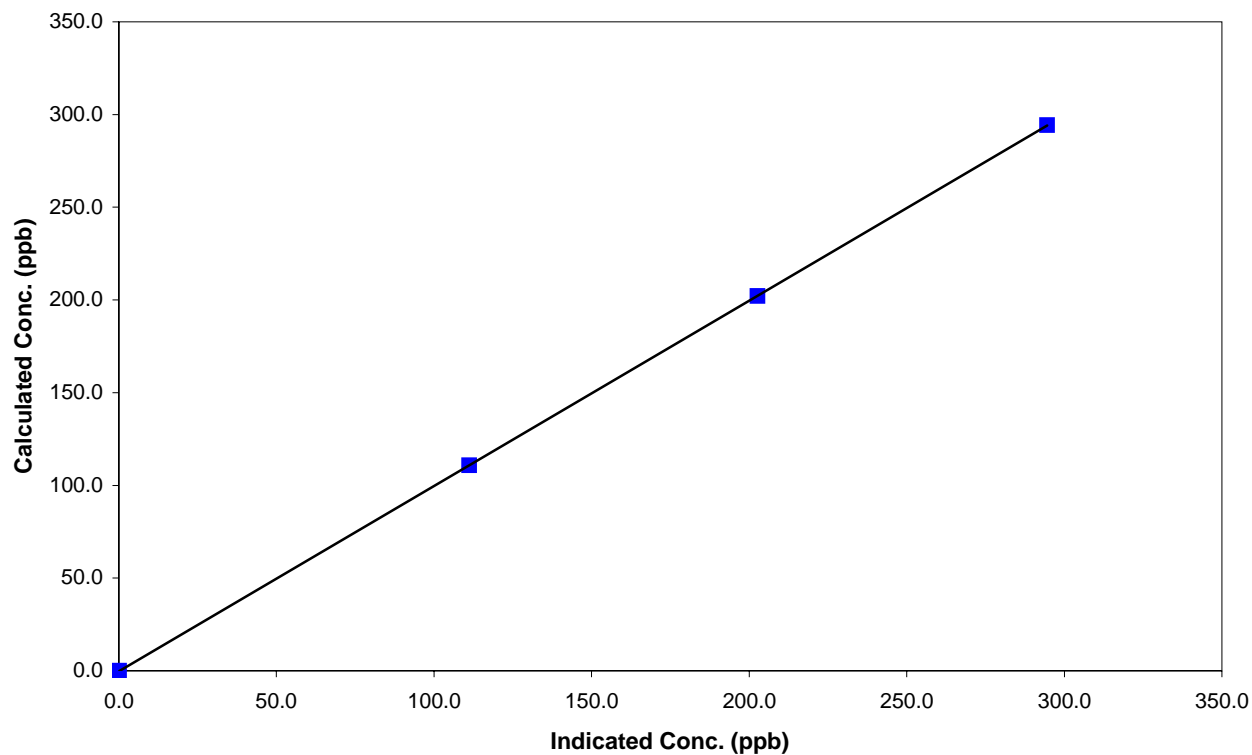
Station Information

Calibration Date	February 10, 2010	Previous Calibration	January 13, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:30	End Time (MST)	13:57
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	0.999998
294.3	294.6	0.9990		
202.1	202.6	0.9973	Slope	0.999145
110.8	111.2	0.9965		
			Intercept	-0.198753

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



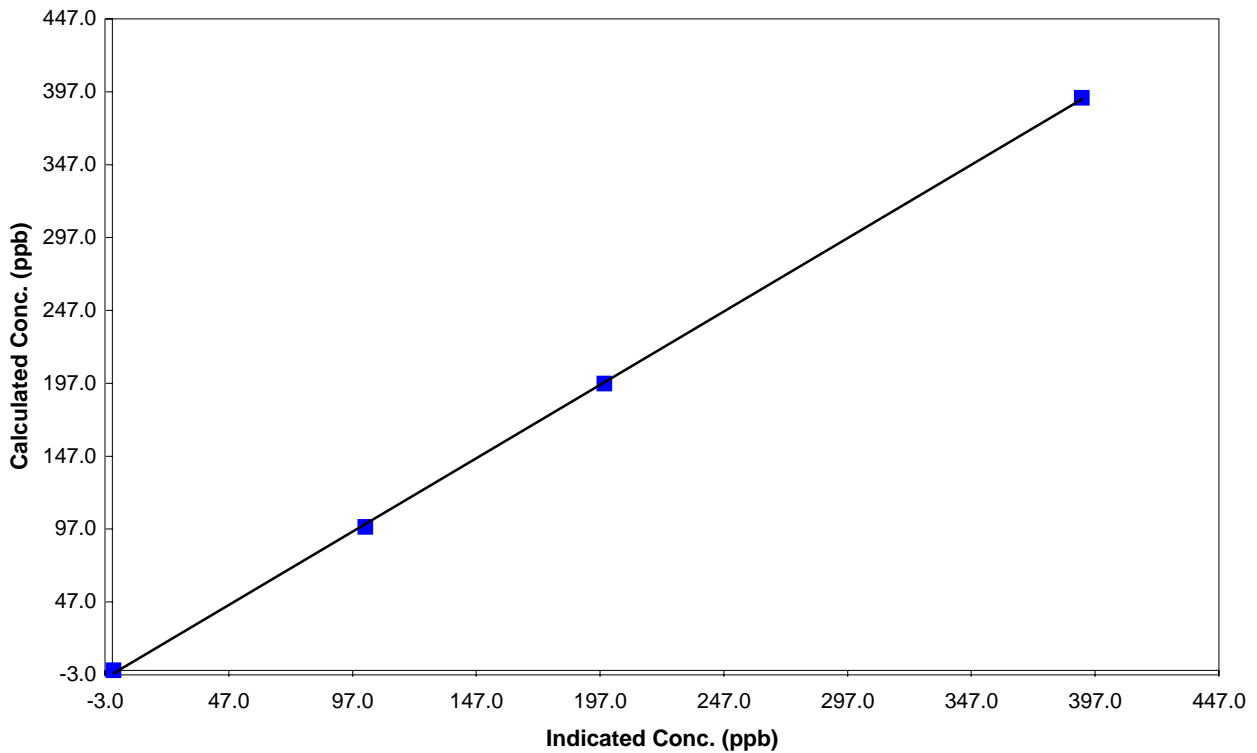
Station Information

Calibration Date	February 10, 2010	Previous Calibration	January 13, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:30	End Time (MST)	13:57
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	0.5	N/A	Correlation Coefficient	0.999888
392.8	391.7	1.0028		
196.8	198.8	0.9902		
98.3	102.2	0.9626	Slope	1.006663
			Intercept	-2.455020

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



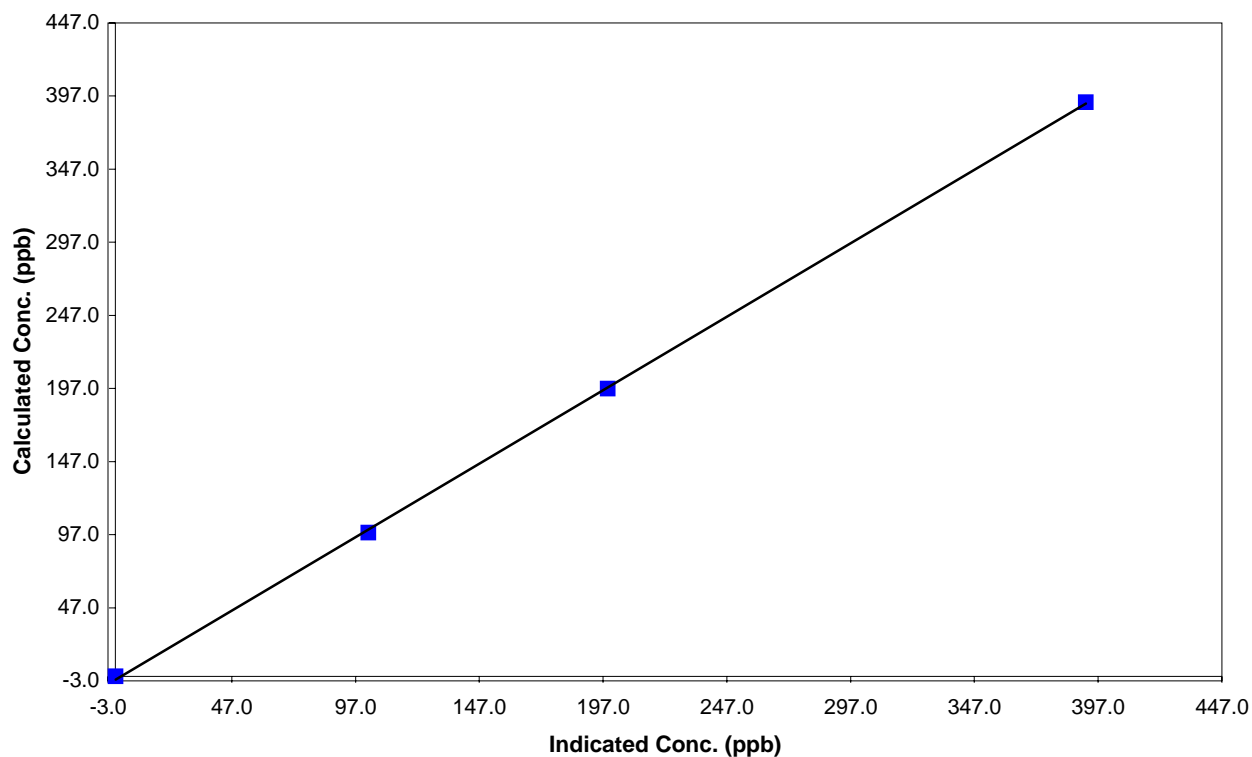
Station Information

Calibration Date	February 10, 2010	Previous Calibration	January 13, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	9:30	End Time (MST)	13:57
Analyzer make	TEI 42C	Analyzer serial #	508011073

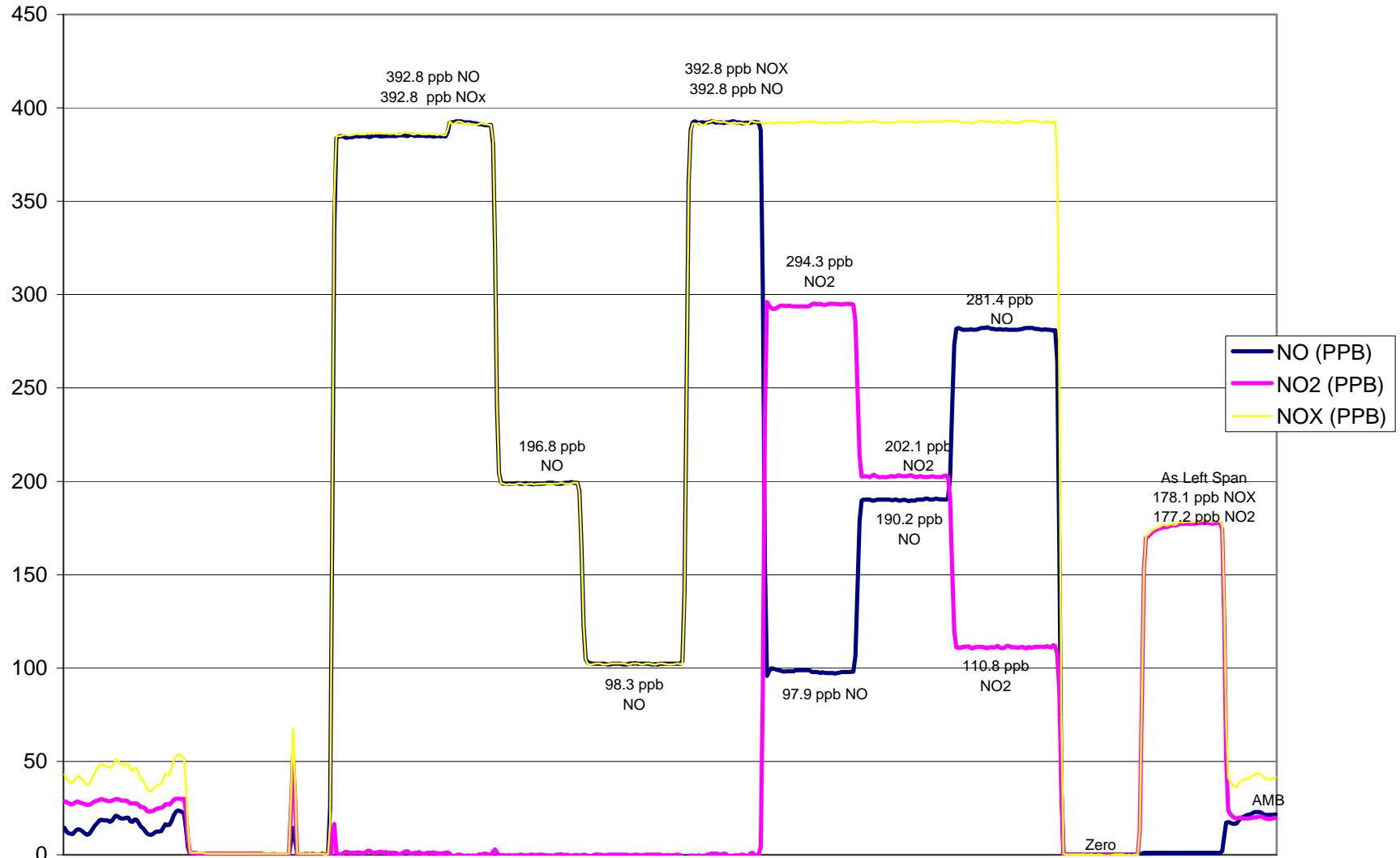
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999869
392.8	392.1	1.0019		
196.8	198.9	0.9893		
98.3	102.3	0.9615	Slope	1.004880
			Intercept	-2.210996

NO Calibration Curve



Henry Pirker NO_x Calibration



February 10, 2010

Calibration Report



Parameter 03
 Air Monitoring Network PASZA

Station Information

Calibration Date	February 10, 2010	Previous Calibration	January 13, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	13:06	End Time (MST)	15:05
Barometric Pressure	0.920 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	1.004478	Calculated slope	1.008120
Calculated intercept	1.800408	Calculated intercept	0.278954
Analyzer make	TECO 49C	Analyzer serial #	607415761

	before		after	
Concentration range	500	ppb	500	ppb
offset	-1.0	ppb	-0.5	ppb
slope	1.014		1.014	
O3 Lamp temp	71.1	Deg C	71	Deg C
Intensities	90117/76842	mV	90903/80527	mV
Pressure	684	inches Hg	683.5	inches Hg
Flow A	0.716	ccm	0.716	ccm
Flow B	0.732	Deg C	0.732	Deg C

Calibration Data

Referenced concentration (ppb)	Dilution air flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0	4991	0.0	0.1	N/A
300	4988	294.3	292.1	1.0075
200	4988	202.1	199.7	1.0118
100	4988	110.8	109.3	1.0141
0	4991	0.0	0.7	As found zero
300	4988	294.3	291.5	As found span
Average Correction Factor				1.0111

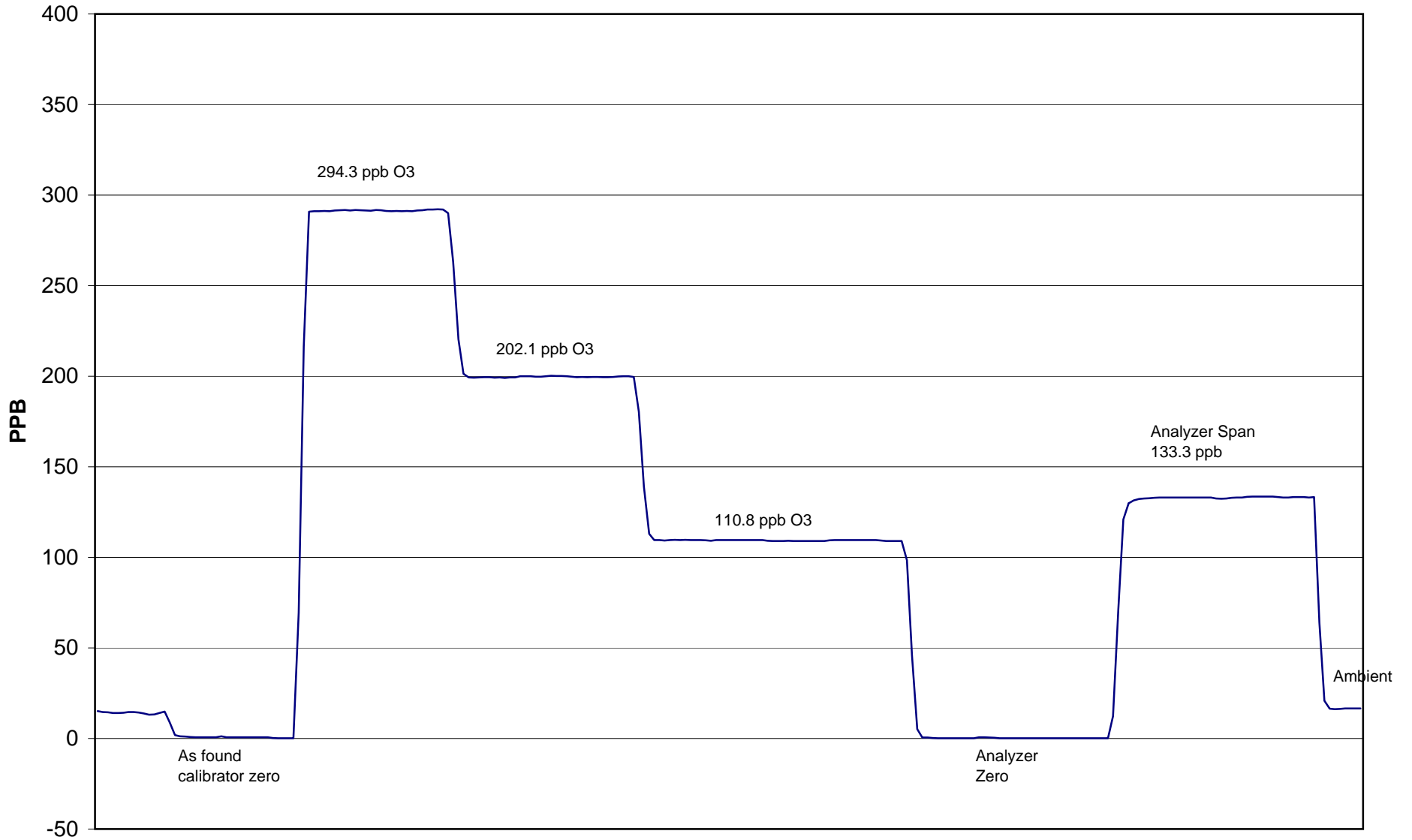
Calculated value of As Found Response: 293.9 ppm Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	138.2	ppb	133.1	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Henry Pirker O₃ Calibration



February 10, 2010

Calibration Report



Parameter CO
 Air Monitoring Network PASZA

Station Information

Calibration Date	February 9, 2010	Previous Calibration	January 14, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	11:16	End Time (MST)	13:27
Barometric Pressure	0.924 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Conc	3000 ppm	Cal Gas Expiry Date	AUG 28/05
		Cal Gas Cylinder #	AAL20565
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	1.012117	Calculated slope	1.030147
Calculated intercept	-0.563480	Calculated intercept	-0.574396
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.017		1.037	
CO zero setting	8.274		8.696	
Sample pressure	684.7	mm Hg	675.5	mm Hg
Sample Flow	1.134	LPM	1.126	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)
4991	0.00	0.00	0.21	N/A
4988	39.83	23.77	23.40	1.0158
4988	19.88	11.91	12.41	0.9598
4988	9.93	5.96	6.63	0.8987
4990	0.00	0.00	0.21	As Found Zero
4988	39.83	23.77	23.38	As Found Span
Average Correction Factor				0.9581

Calculated value of As Found Response: 22.889 ppm Percent Change of As Found: 3.7%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.80	ppm	18.18	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter CO
 Air Monitoring Network PASZA

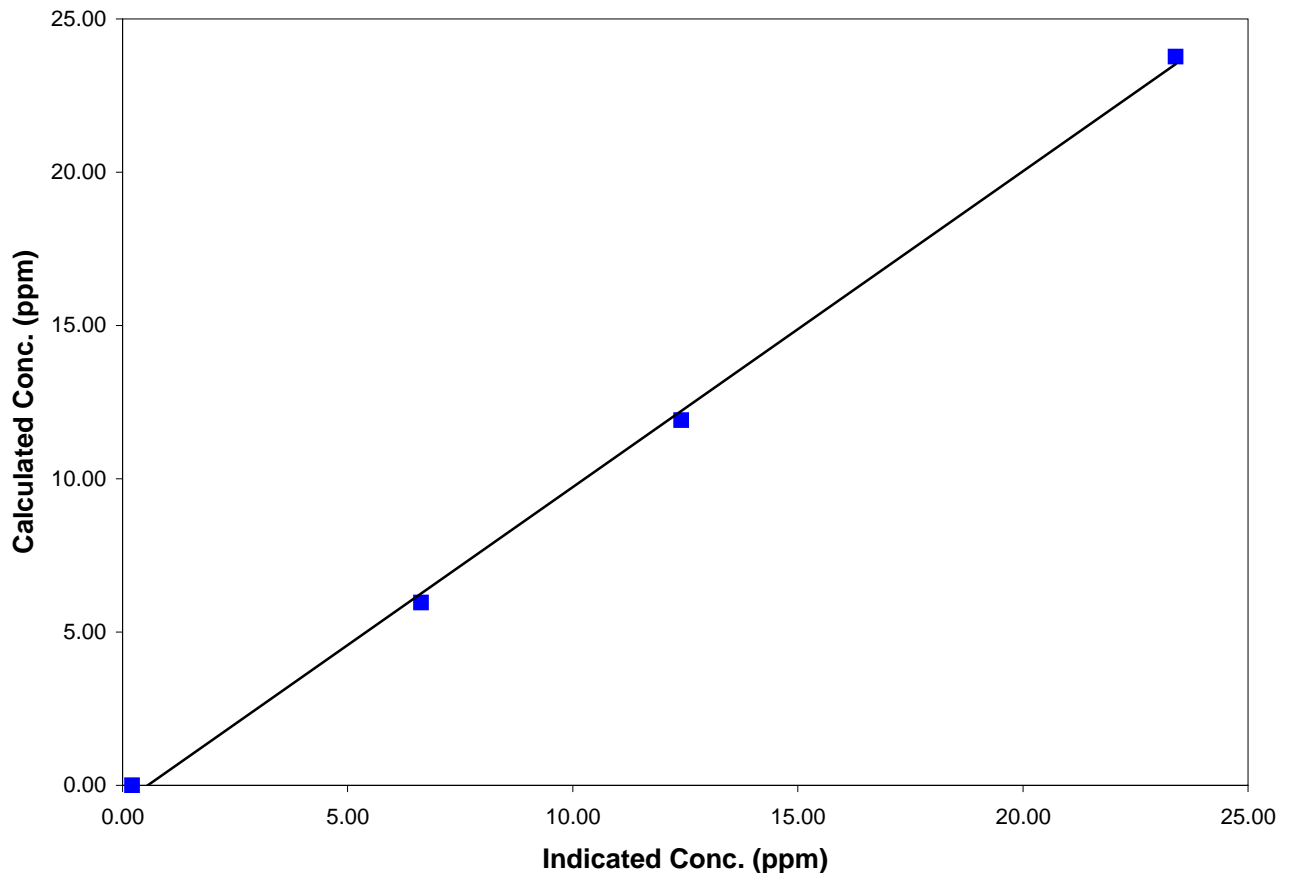
Station Information

Calibration Date	February 9, 2010	Previous Calibration	January 14, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:16	End Time (MST)	13:27
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

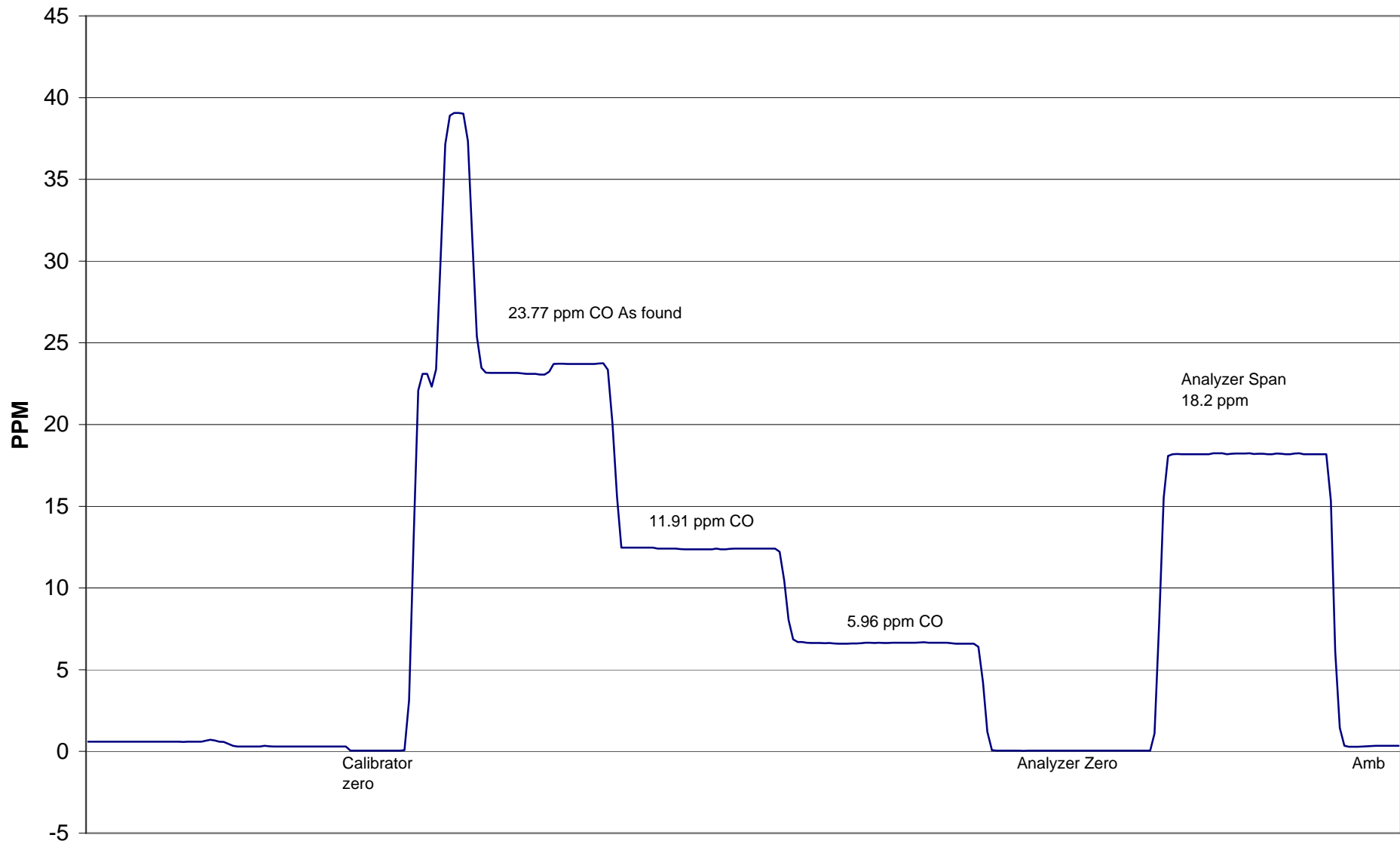
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.212	N/A		
23.766	23.396	1.0158	Correlation Coefficient	0.998829
11.909	12.408	0.9598		
5.957	6.629	0.8987	Slope	1.030147
			Intercept	-0.574396

CO Calibration Curve



Henry Pirker CO Calibration



February 9, 2010

Calibration Report



Parameter THC
 Air Monitoring Network PASZA

Station Information

Calibration Date	February 9, 2010	Previous Calibration	January 14, 2010
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	12:55	End Time (MST)	15:20
Barometric Pressure	0.924 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	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
Calculated slope	1.022781	Calculated slope	1.019968
Calculated intercept	-0.011703	Calculated intercept	-0.019944
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	9615	capture	9615	capture
THC zero counts	431	capture	431	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)
4988	0.00	0.00	0.04	N/A
4988	69.50	20.93	20.58	1.0169
4989	29.94	9.09	8.82	1.0308
4988	9.92	3.02	3.03	0.9977
4988	0.00	0.00	0.04	As Found Zero
4988	69.50	20.93	20.58	As Found Span
Average Correction Factor				1.0151

Calculated value of As Found Response: 20.995 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.10	ppm	0.02	ppm
Auto span	21.34	ppm	21.56	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter THC
 Air Monitoring Network PASZA

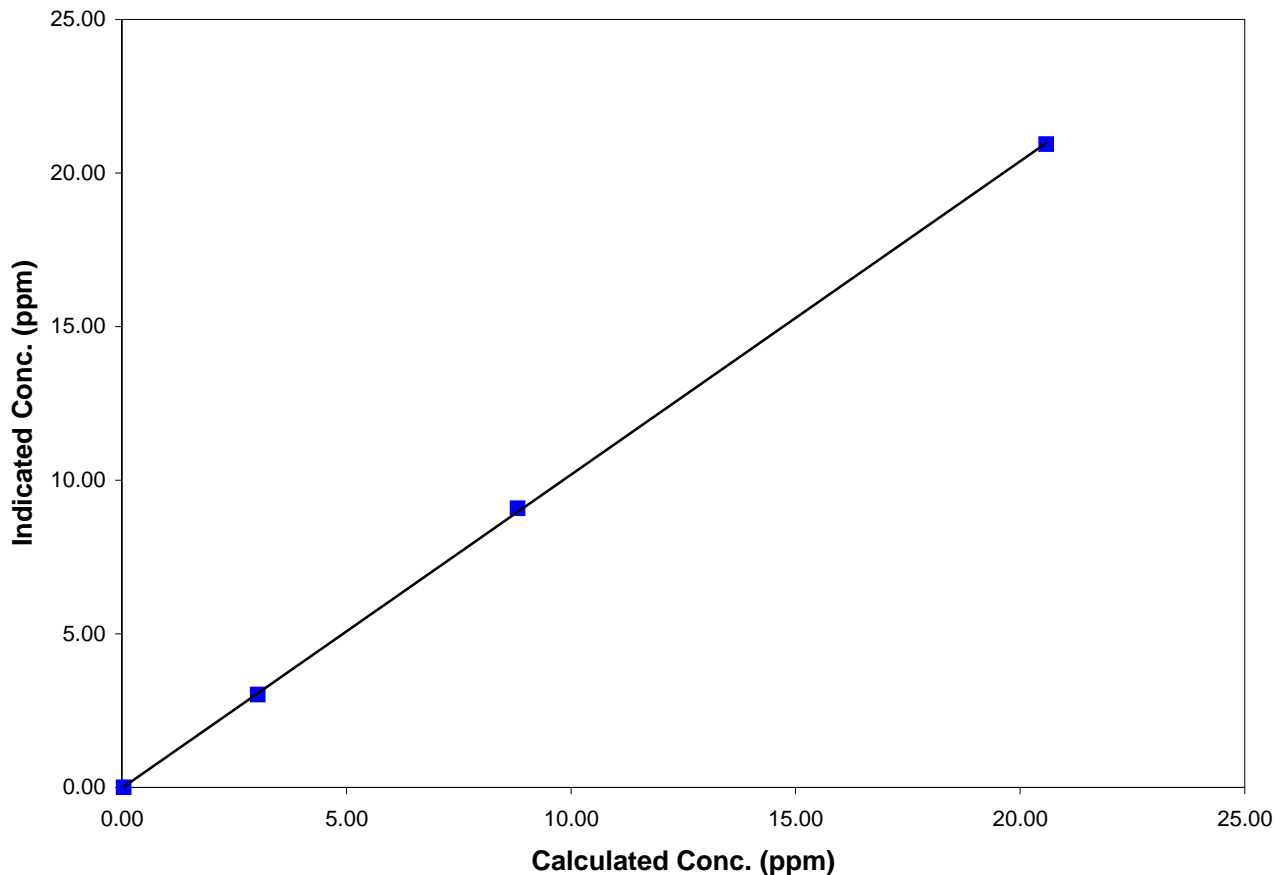
Station Information

Calibration Date	February 9, 2010	Previous Calibration	January 14, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	12:55	End Time (MST)	15:20
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

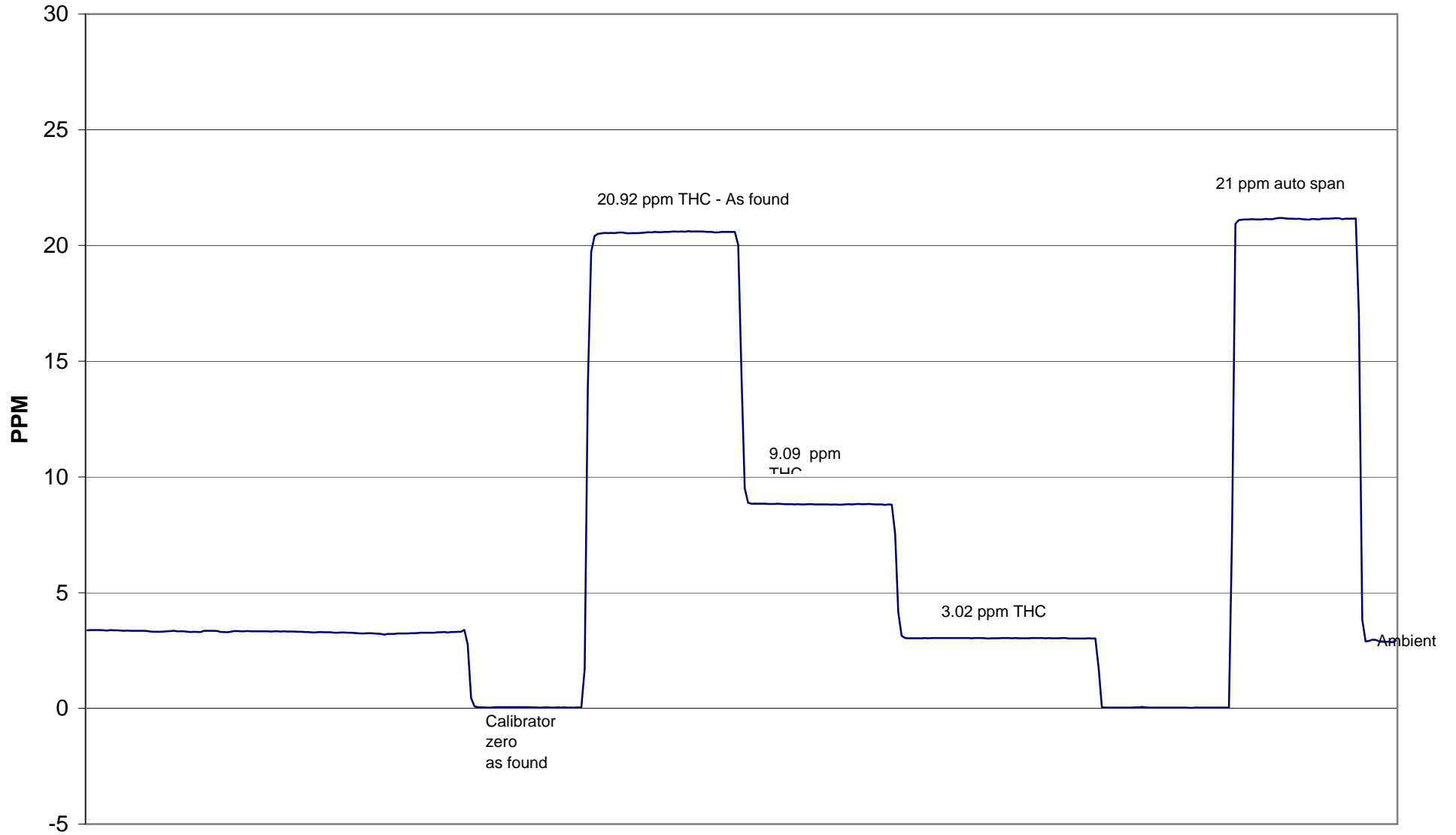
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.045	N/A		
20.932	20.584	1.0169	Correlation Coefficient	0.999929
9.087	8.815	1.0308		
3.023	3.030	0.9977	Slope	1.019968
			Intercept	-0.019944

THC Calibration Curve



Henry Pirker THC Calibration



February 9, 2010

FDMS AB TEOM PM2.5 AUDIT



STATION: Henry Pirker
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 10-Feb-10

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	AMU 1697
Site Number	1
Inlet Type	PM 10 / SCC
FAdj. Main Setting	0.975
FAdj. Aux. Setting	0.960
T-Case Indicated / Set Point	30/30
T-Air Indicated / Set Point	30/30
T-Cap Indicated / Set Point	30/30
Splitter Assembly Alignment (cm)	15.5

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

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	17-Jan-10
Previous Calibration	NA

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

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

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.070	0.000
PUMP OFF	0.000	0.000
NET	0.070	0.000
LIMITS	<0.15	<0.60

J

	Ambient Temp. (°C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
SET POINT (S)	na	na	13020	13.67	3.000
INDICATED (I)	2.2	0.920	13020	13.67	3.000
MEASURED (AF)	1.3	0.919	13020	13.68	3.001
MEASURED (M)	1.3	0.919	12935	13.68	3.001
DIFFERENCE (M-I)	-0.9	-0.001	-0.7%	0.07	0.03
LIMITS	± 2⁰ C	± 0.005 atm	± 2.5 %	± 1.0 L/min	± 0.2 L/min

As Found Data
 Adjusted Data

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

COMMENTS: Pass

Sample Head Inspection Or Cleaning: TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACEMENT:
 PM10: Cleaned TEOM IN LINE: FDMS Water knock out: Good
 PM2.5: Cleaned Main: Good In Line Audit filter(Bowl with internal screen): Good
 AUX: Good FDMS 47 mm Filter Cassette: Good

Calibration Report



Parameter SO₂
 Air Monitoring Network PASZA

Station Information

Calibration Date	February 17, 2010	Previous Calibration	January 19, 2010
Station Number	2	Station Location	Evergreen Park
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	12:00	End Time (MST)	14:45
Barometric Pressure	0.941 ATM	Station Temperature	20.0 Deg C
Calibrator	Enviroics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.031987	Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	1.002124	Calculated slope	0.995063
Calculated intercept	-1.966664	Calculated intercept	-2.191508
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	10.5		10.5	
coefficient	1.045		1.045	
Lamp Voltage	835	volts	835	volts
Chamber Temp	45	Deg C	45.3	Deg C
Perm Gas Temp	45	Deg C	44.99	Deg C
Pressure	676.8	mm Hg	675.3	mm Hg
Sample Flow	455	ccm	455	ccm
Lamp Intensity	90	%	90	%

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)
4990	0.0	0.00	0.0	N/A
4990	39.85	400.89	404.0	0.9922
4990	19.91	201.09	205.1	0.9804
4990	9.95	100.70	105.8	0.9519
4990	0.0	0.00	0.8	As Found Zero
4990	39.85	400.89	404.0	As Found Span
Average Correction Factor				0.9748

Calculated value of As Found Response: 402.022 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.7	ppm	1.0	ppm
Auto span	266.0	ppm	285.7	ppm

Notes:

Calibration Performed By: Grover Christiansen

Calibration Summary



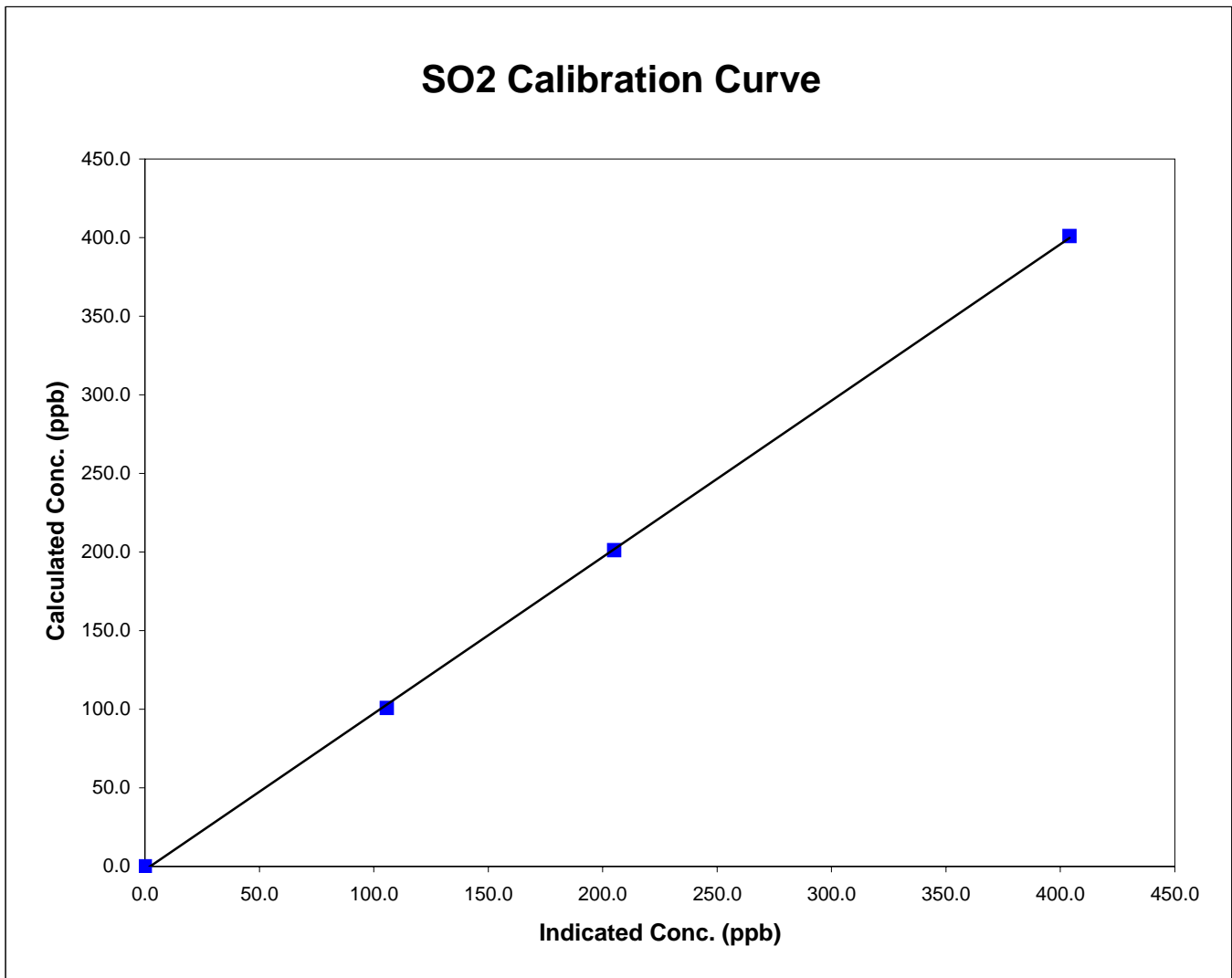
Parameter SO2
 Air Monitoring Network PASZA

Station Information

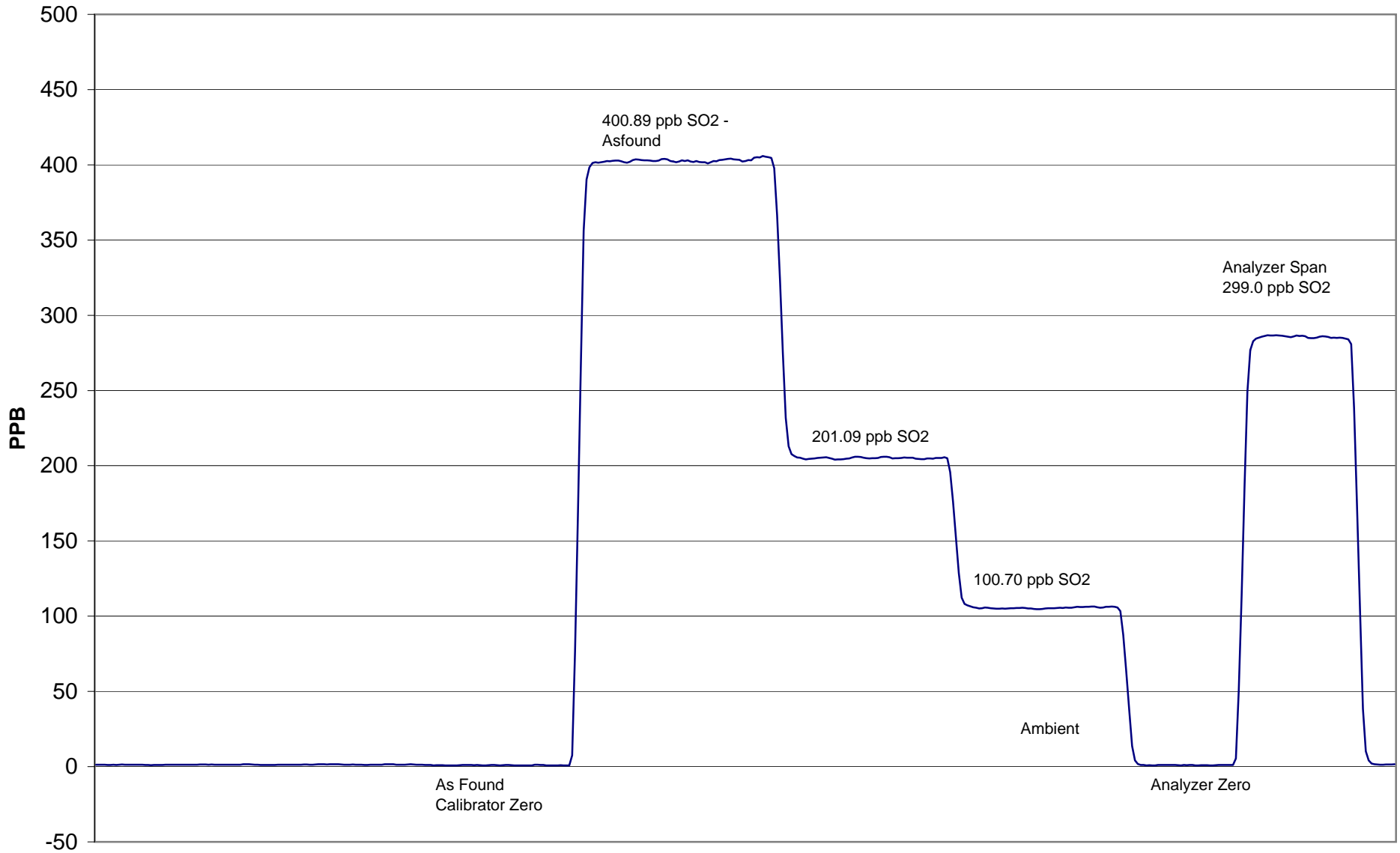
Calibration Date	February 17, 2010	Previous Calibration	January 19, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	12:00	End Time (MST)	14:45
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
400.9	404.0	0.9922	Correlation Coefficient	0.999863
201.1	205.1	0.9804		
100.7	105.8	0.9519	Slope	0.995063
			Intercept	-2.191508



Evergreen Park SO₂ Calibration



February 17, 2010

Calibration Summary

Parameter TRS
 Air Monitoring Network PASZA



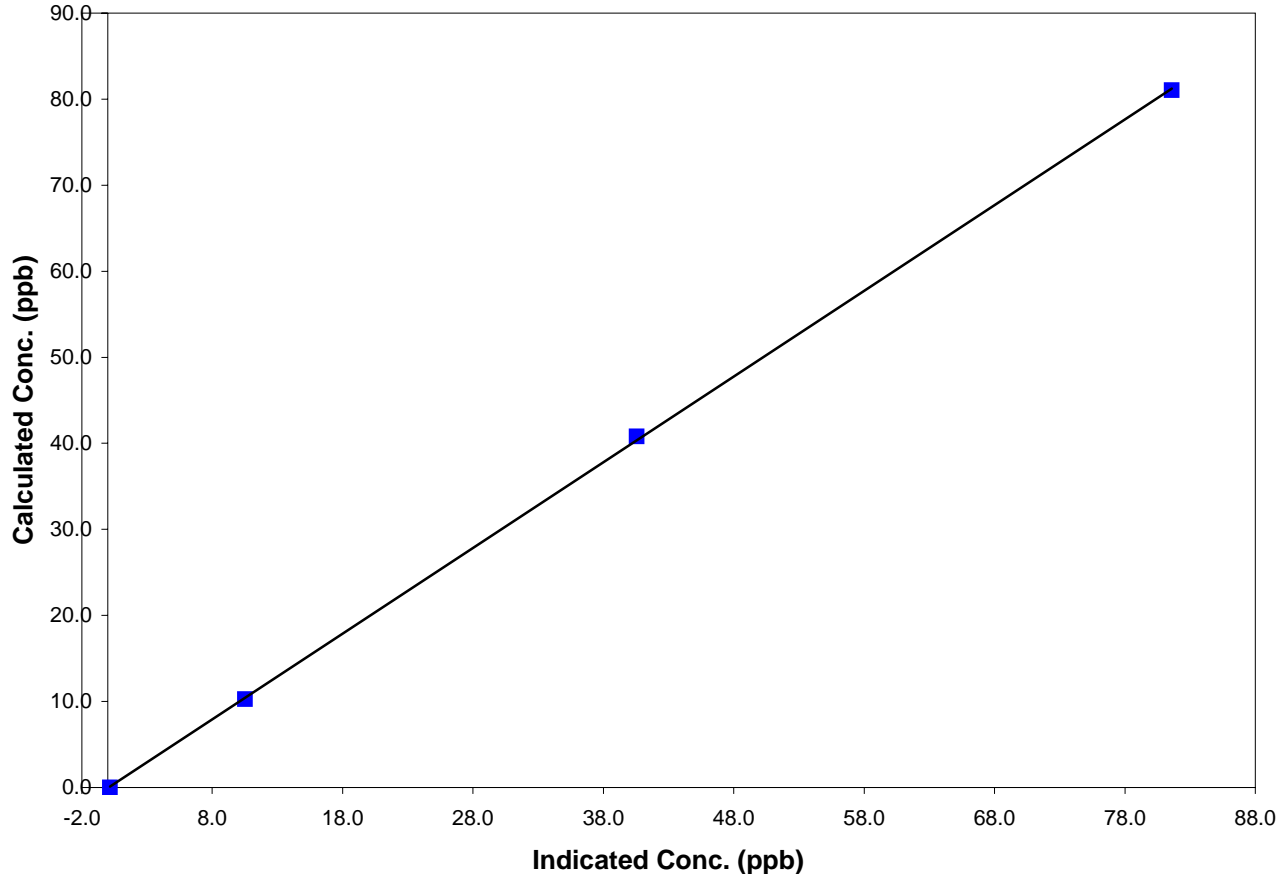
Station Information

Calibration Date	<u>February 17, 2010</u>	Previous Calibration	<u>January 19, 2010</u>
Station Number	<u>2</u>	Station Location	<u>Evergreen Park</u>
Start Time (MST)	<u>10:30</u>	End Time (MST)	<u>13:14</u>
Analyzer make/model	<u>TEI Model 43C</u>	Analyzer serial #	<u>436610005</u>

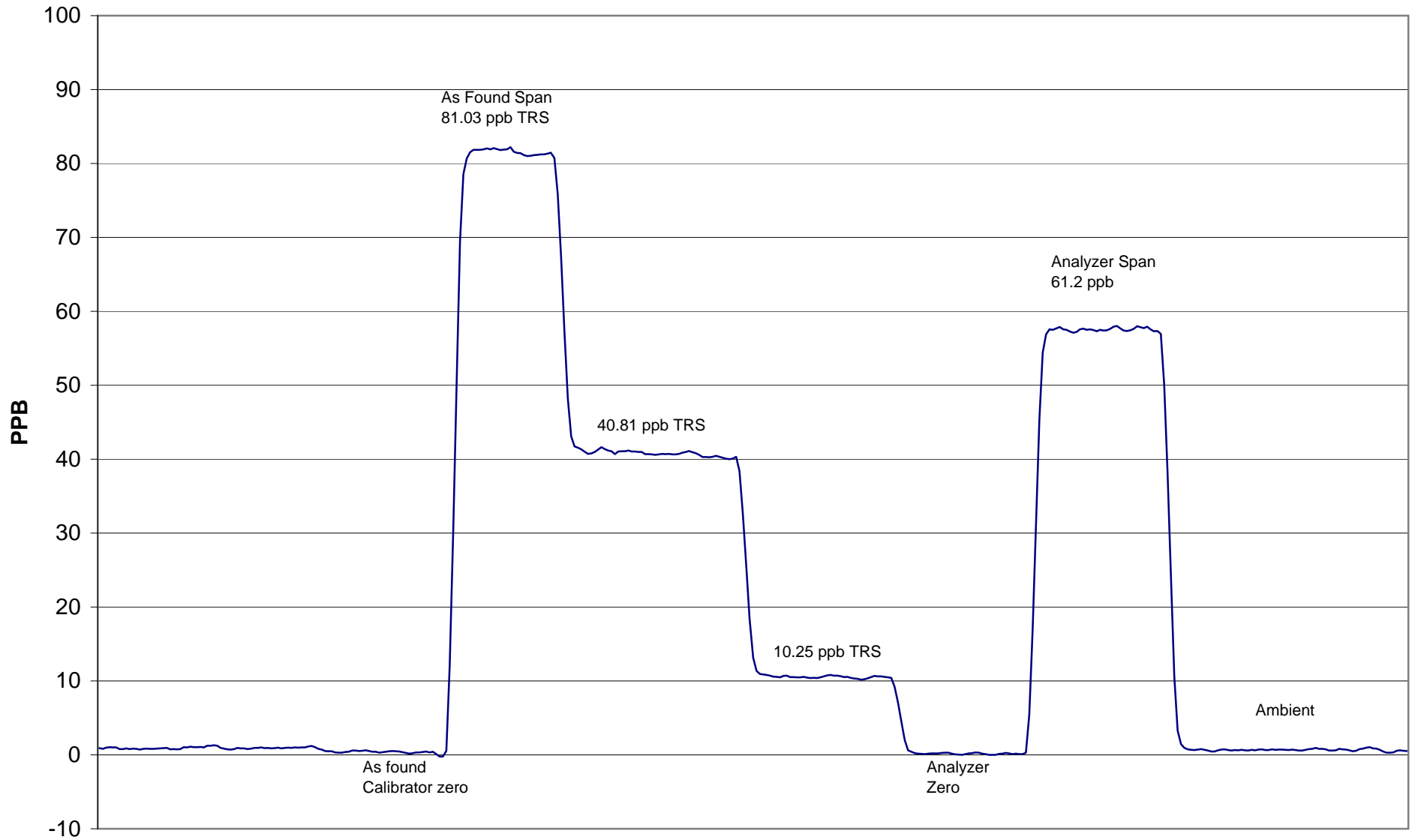
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999925
81.0	81.6	0.9930		
40.8	40.6	1.0064		
10.2	10.5	0.9754	Slope	0.996296
			Intercept	-0.056965

TRS Calibration Curve



Evergreen Park TRS Calibration



February 17, 2010

AB TEOM PM2.5 Calibration



STATION: Evergreen Park
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 17-Feb-10

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	21551
Site Number	2
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.000
T-Case Indicated / Set Point	40/40
T-Air Indicated / Set Point	40/40
T-Cap Indicated / Set Point	40/40
Splitter Assembly Alignment (cm)	15.5

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

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	Jan 19,2010
Previous Calibration	NA

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

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

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.010	0.010
PUMP OFF	0.000	0.000
NET	0.010	0.010
LIMITS	<0.15	<0.60

	Ambient Temp. (°C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
SET POINT (S)	na	na	10124	13.67	3.000
INDICATED (I)	4.7	0.936	10124	13.67	3.000
<i>As Found Data</i> MEASURED (AF)	4.0	0.936	10124	13.70	3.005
<i>Adjusted Data</i> MEASURED (M)	4.0	0.936	10202	13.70	3.005
DIFFERENCE (M-I)	-0.7	0.000	0.8%	0.22	0.17
LIMITS	± 2 ° C	± 0.005 atm	± 2.5 %	± 1.0 L/min	± 0.2 L/min

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

COMMENTS: PASS

TEOM was reading 0.942 atmospheres when 0.936 was measured independantly. TEOM pressure reading was adj to match external.

Sample Head Inspection/Cleaning:

PM10: Cleaned
 PM2.5: Cleaned

Large In Line Filter Inspection & Or Cleaning:

Main: Good
 Aux: Replaced.

Calibration Report



Parameter SO₂
 Air Monitoring Network PASZA

Station Information

Calibration Date	February 15, 2010	Previous Calibration	January 20, 2010
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:45	End Time (MST)	13:35
Barometric Pressure	0.931 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Cert Date	6/8/2008
Correction factor	0.031647	Cal Gas Cylinder #	AAL 15377
DACS make	Focus AP1000	DACS serial No.	45272
DACS voltage range	0 - 10 volt	DACS channel #	6
	<u>Before</u>		<u>After</u>
Calculated slope	1.006311	Calculated slope	1.000792
Calculated intercept	-1.766108	Calculated intercept	-1.580174
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.5		8.5	
coefficient	0.706		0.706	
Lamp Voltage	924	volts	925	volts
Chamber Temp	45	Deg C	45	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	647.3	mm Hg	647.2	mm Hg
Sample Flow	427	ccm	430	ccm
Lamp Intensity	88	%	89	%

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)
4990	0.0	0.00	0.2	N/A
4989	39.84	400.87	401.7	0.9979
4990	19.95	201.49	202.7	0.9939
4990	9.95	100.70	104.2	0.9666
4990	0.0	0.00	0.4	As Found Zero
4990	39.85	400.89	401.8	As Found Span
Average Correction Factor				0.9861

Calculated value of As Found Response: 402.178 ppm Percent Change of As Found: -0.3%

	before calibration		after calibration	
Auto zero	0.7	ppb	0.4	ppb
Auto span	315.5	ppb	304.1	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



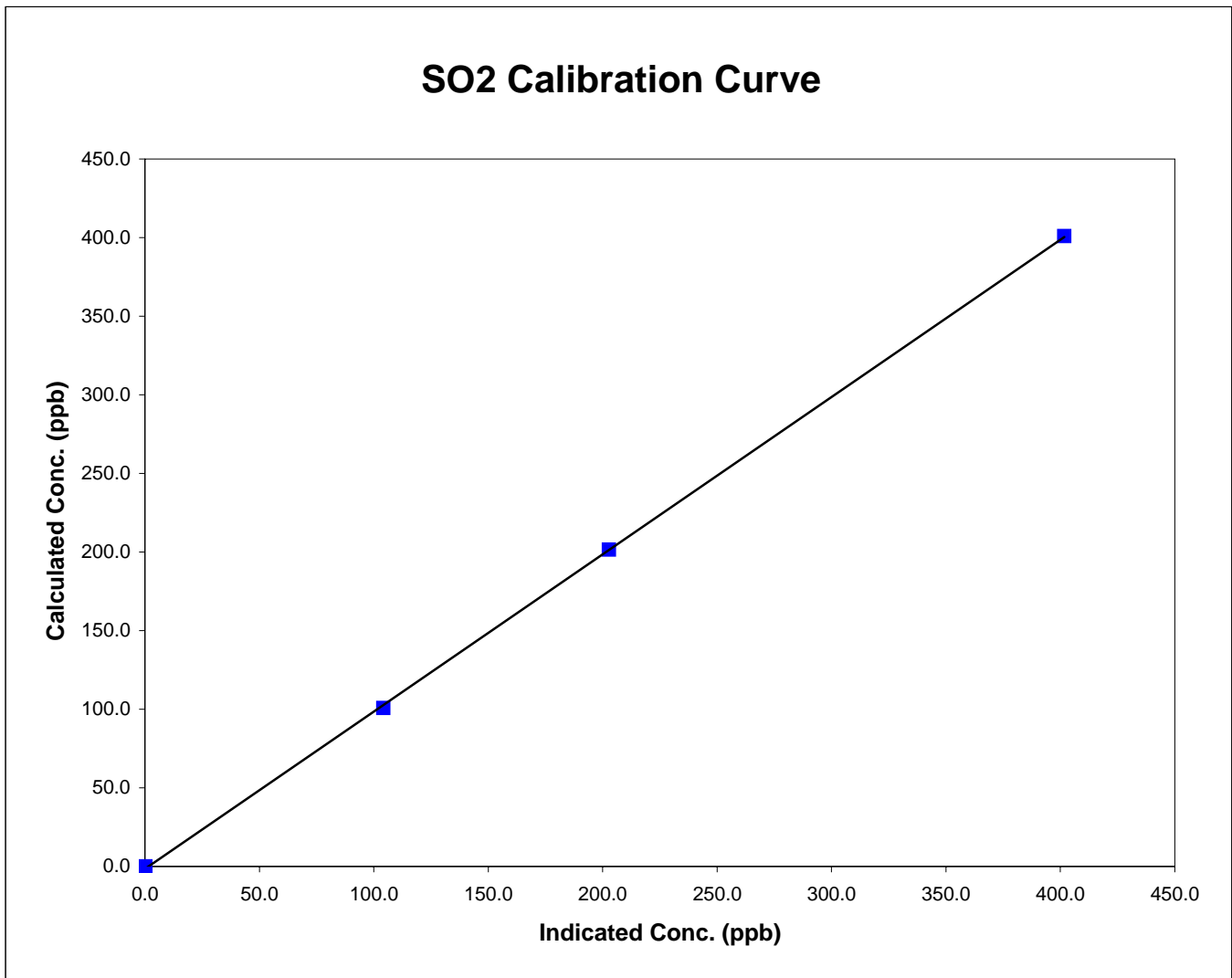
Parameter SO2
 Air Monitoring Network PASZA

Station Information

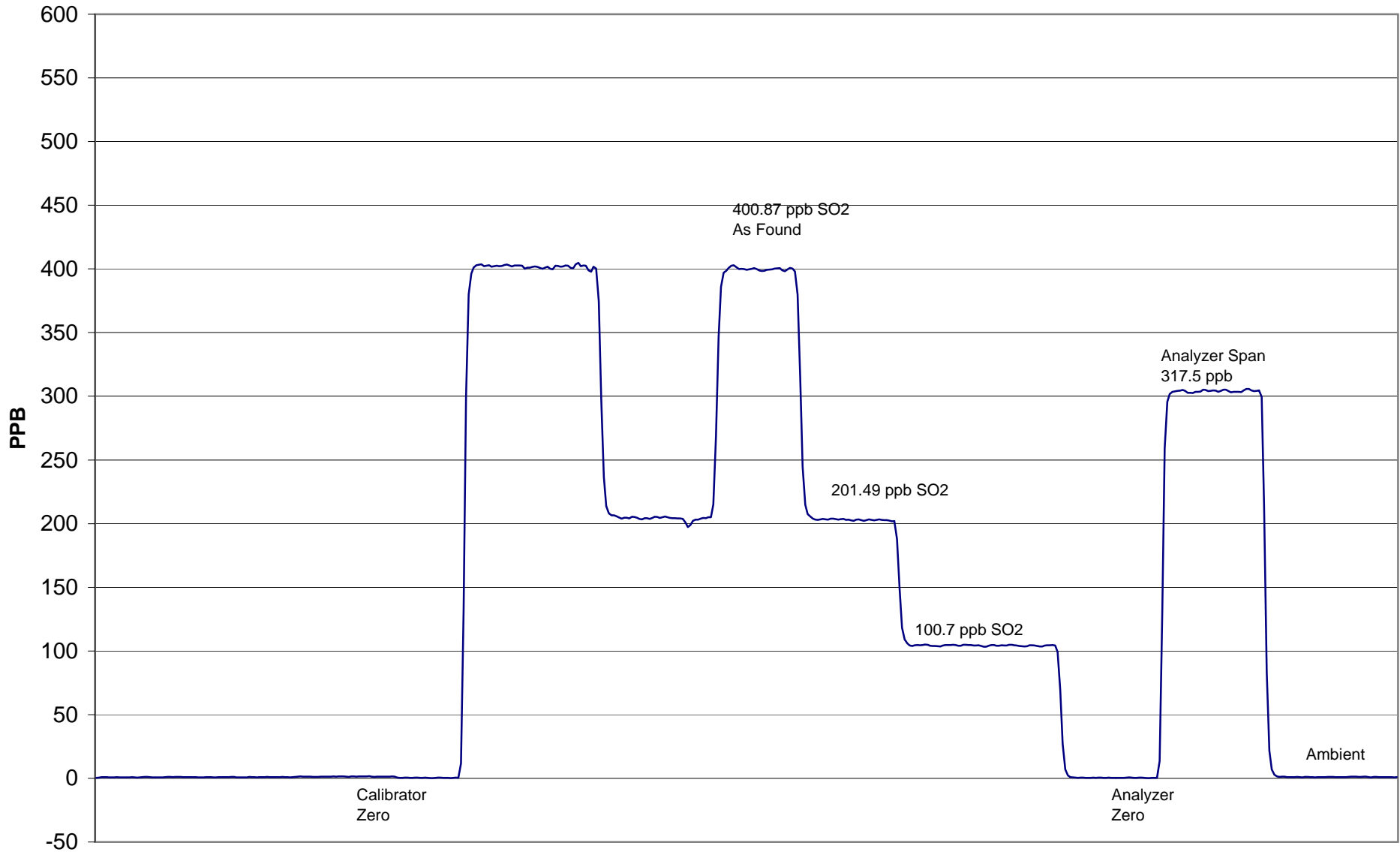
Calibration Date	February 15, 2010	Previous Calibration	January 20, 2010
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:45	End Time (MST)	13:35
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999931
400.9	401.7	0.9979		
201.5	202.7	0.9939	Slope	1.000792
100.7	104.2	0.9666		
			Intercept	-1.580174



Smoky Heights SO₂ Calibration



February 15, 2010

Calibration Report



Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	<u> </u> February 15, 2010 <u> </u>	Previous Calibration	<u> </u> January 20, 2010 <u> </u>
Station Number	<u> </u> 3 <u> </u>	Station Location	<u> </u> Smoky Heights <u> </u>
Reason:	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Install <input type="checkbox"/> Removal	Other:	<u> </u>
Start Time (MST)	<u> </u> 12:10 <u> </u>	End Time (MST)	<u> </u> 14:42 <u> </u>
Barometric Pressure	<u> </u> 0.927 ATM <u> </u>	Station Temperature	<u> </u> 20.0 Deg C <u> </u>
Calibrator	<u> </u> Environics 6100 <u> </u>	Serial Number	<u> </u> 3474 <u> </u>
Cal Gas Conc	<u> </u> 5.15 ppm <u> </u>	Cal Gas Expiry Date	<u> </u> 4/2/2009 <u> </u>
Correction factor	<u> </u> 0.031511 <u> </u>	Cal Gas Cylinder #	<u> </u> ALM013295 <u> </u>
DACS make	<u> </u> Focus AP1000 <u> </u>	DACS serial No.	<u> </u> 52620 <u> </u>
DACS voltage range	<u> </u> 0 - 10 volt <u> </u>	DACS channel #	<u> </u> 5 <u> </u>
	<u> </u> Before <u> </u>		<u> </u> After <u> </u>
Calculated slope	<u> </u> 0.996972 <u> </u>	Calculated slope	<u> </u> 0.997404 <u> </u>
Calculated intercept	<u> </u> -0.037164 <u> </u>	Calculated intercept	<u> </u> -0.088449 <u> </u>

Analyzer make TEI Model 43C Analyzer serial # 0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	14.6	ppb	15	ppb
coefficient	1.02		1.043	
Lamp Voltage	769	volts	764	volts
Chamber Temp	43.9	Deg C	43.9	Deg C
Perm Gas Temp	45	Deg C	44.9	Deg C
Pressure	455.9	mm Hg	458.9	mm Hg
Sample Flow	691	ccm	698	ccm
Lamp Intensity	32,105	mv	32,291	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)
4990	0.0	0.00	0.3	N/A
4989	79.77	81.05	81.5	0.9943
4989	39.84	40.80	40.7	1.0029
4990	9.93	10.23	10.3	0.9943
4990	0.0	0.00	0.0	As Found Zero
4989	79.77	81.05	81.5	As Found Span
Average Correction Factor				0.9972

Calculated value of As Found Response: 81.22 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	-0.4	ppm	0.0	ppm
Auto span	44.1	ppm	40.8	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter **TRS**
 Air Monitoring Network **PASZA**

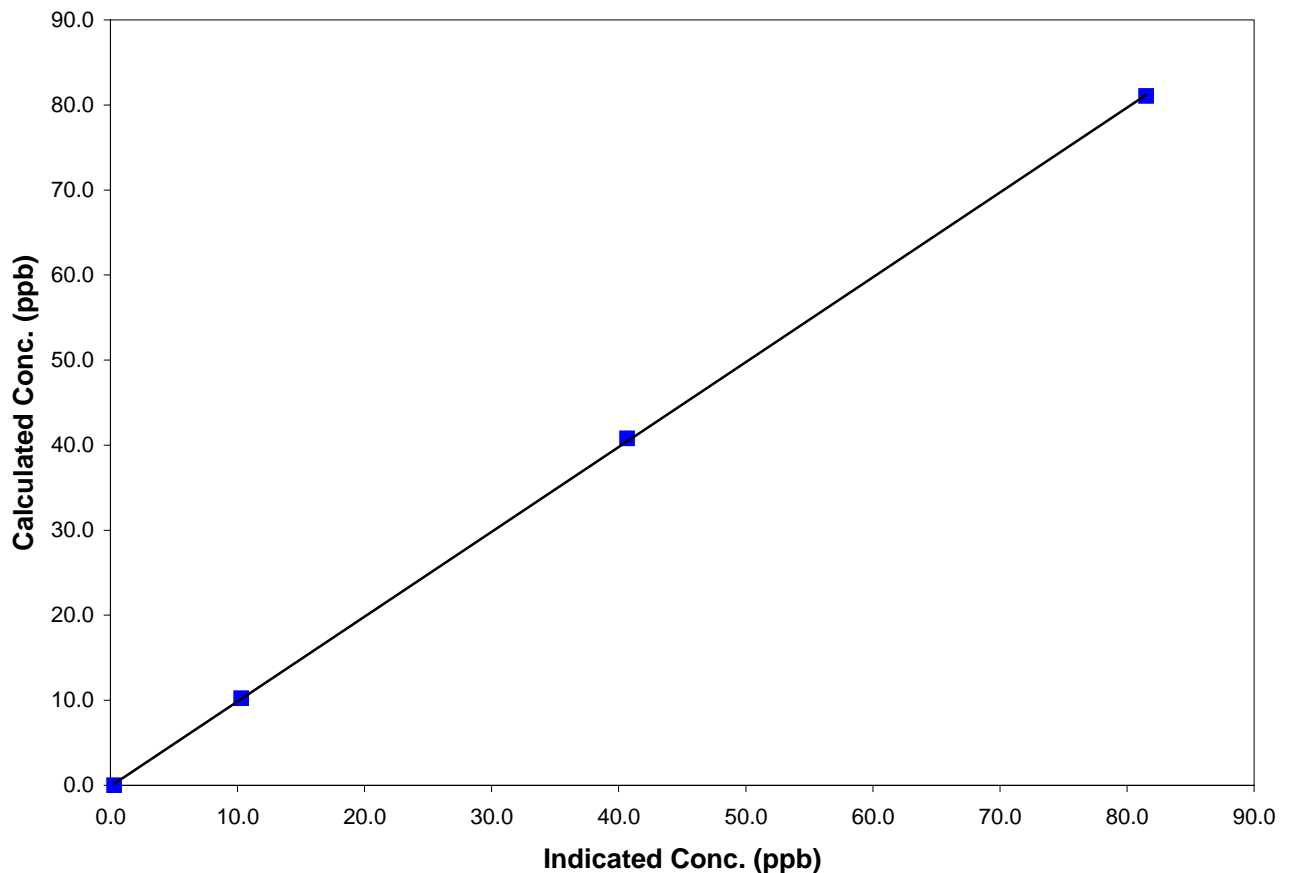
Station Information

Calibration Date	<u> </u> February 15, 2010 <u> </u>	Previous Calibration	<u> </u> January 20, 2010 <u> </u>
Station Number	<u> </u> 3 <u> </u>	Station Location	<u> </u> Smoky Heights <u> </u>
Start Time (MST)	<u> </u> 12:10 <u> </u>	End Time (MST)	<u> </u> 14:42 <u> </u>
Analyzer make/model	<u> </u> TEI Model 43C <u> </u>	Analyzer serial #	<u> </u> 0436610005 <u> </u>

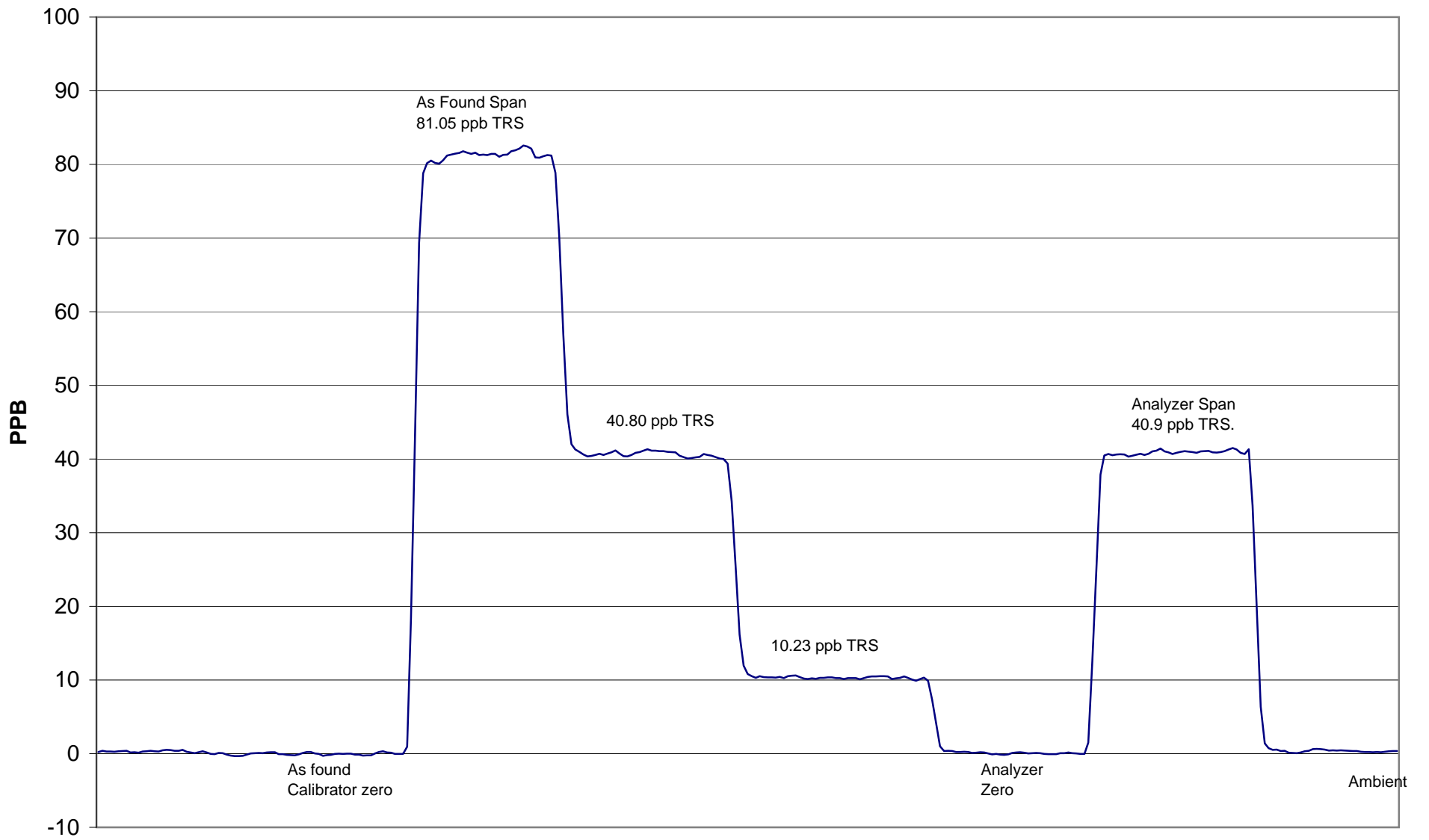
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
			Correlation Coefficient	Slope
0.0	0.3	N/A	0.999957	0.997404
81.0	81.5	0.9943		
40.8	40.7	1.0029		
10.2	10.3	0.9943	Intercept	-0.088449

TRS Calibration Curve



Smoky Heights TRS Calibration



February 15, 2010

AB TEOM PM2.5 Calibration



STATION: Smoky Heights
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 15-Feb-10

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	24634
Site Number	3
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.000
T-Case Indicated / Set Point	40/40
T-Air Indicated / Set Point	40/40
T-Cap Indicated / Set Point	40/40
Splitter Assembly Alignment (cm)	15.5

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

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	Jan20,2010
Previous Calibration	NA

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

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

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	0.007	0.008
PUMP OFF	0.000	0.000
NET	0.007	0.008
LIMITS	<0.15	<0.65

	Ambient Temp. (°C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
SET POINT (S)	na	na	12122	13.67	3.000
INDICATED (I)	-0.8	0.931	12122	13.67	3.000
<i>As Found Data</i> MEASURED (AF)	-0.5	0.930	12122	13.69	3.004
<i>Adjusted Data</i> MEASURED (M)	-0.5	0.930	12184	13.69	3.004
DIFFERENCE (M-I)	0.3	-0.001	0.5%	0.15	0.13
LIMITS	± 2 ° C	± 0.005 atm	± 2.5 %	± 1.0 L/min	± 0.2 L/min

Ko Audit Filter data Weight: 0.11043 Serial #: CVK 2564

COMMENTS: PASS

Sample filter replaced.

Sample Head Inspection/Cleaning:

PM10:Cleaned

PM2.5:Cleaned

Large In Line Filter Inspection & Or Replacement:

Main: Good

Aux: Good

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

Calibration Date	February 11, 2010	Previous Calibration	January 15, 2010
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	12:15	End Time (MST)	14:55
Barometric Pressure	0.905 atm	Station Temperature	23.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	10.06 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	CC 114395		
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 10 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.992143	Calculated slope	1.005067
Calculated intercept	0.006043	Calculated intercept	-0.315286
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.57		2.58	
Coefficient	0.897		0.902	
PMT	-812.5	V	-812.9	V
UV Lamp Voltage	1072	V	1071	V
Chamber Temp	45.1	Deg C	45.1	Deg C
Pressure	659.2	mm Hg	657.1	mm Hg
Sample Flow	0.485	LPM	0.484	LPM
Lamp Intesity	84%	%	84%	%

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)
4988	0.00	0.0	0.0	N/A
4988	39.82	79.7	79.4	1.0040
4988	19.87	39.9	40.3	0.9895
4988	9.91	19.9	20.4	0.9763
4988	0.00	0.0	0.1	As found zero
4988	39.82	79.7	79.4	As found span
Average Correction Factor				0.9899

Calculated value of As Found Response: 78.642 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	-0.3	ppb	-0.2	ppb
Auto span	57.8	ppb	58.6	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



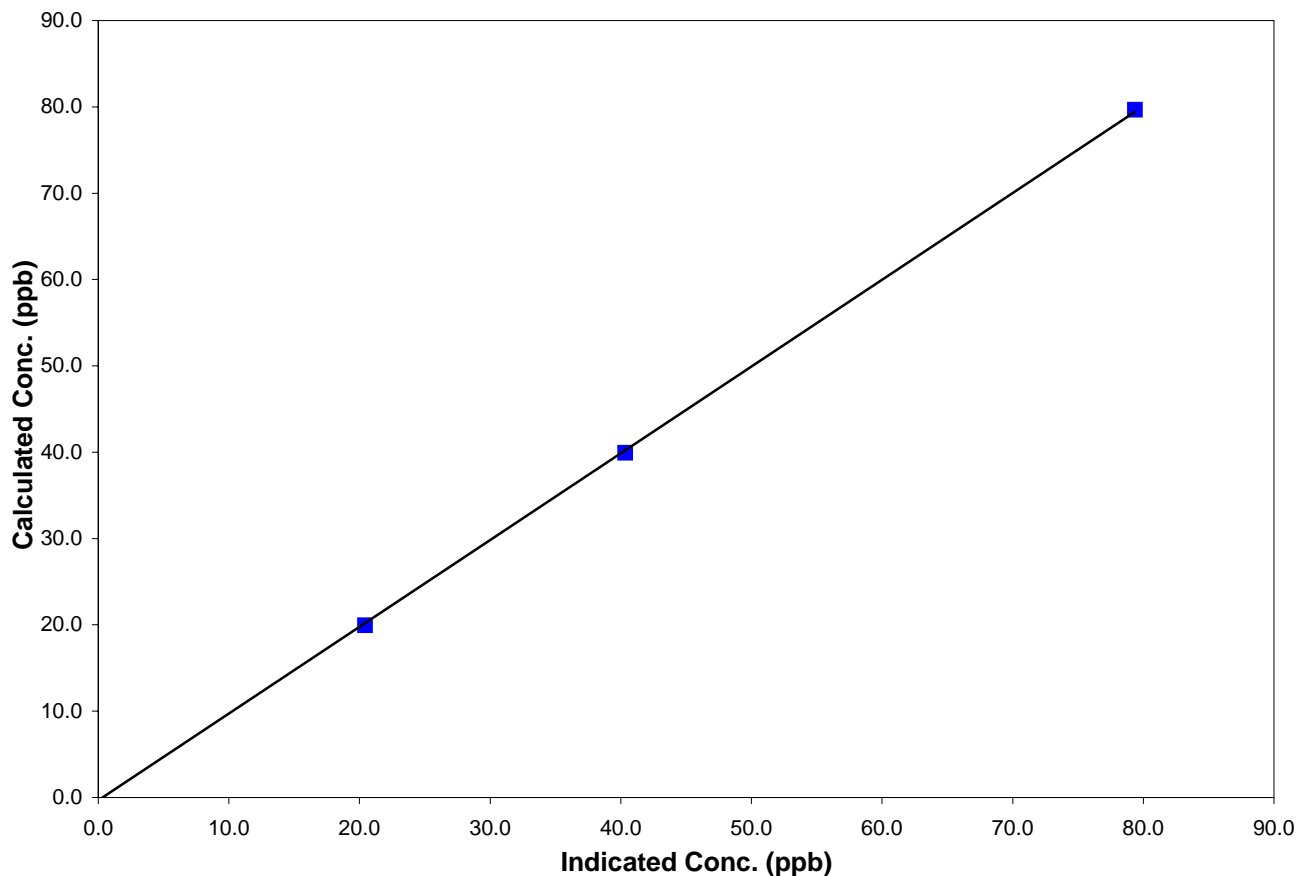
Station Information

Calibration Date	February 11, 2010	Previous Calibration	January 15, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:15	End Time (MST)	14:55
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

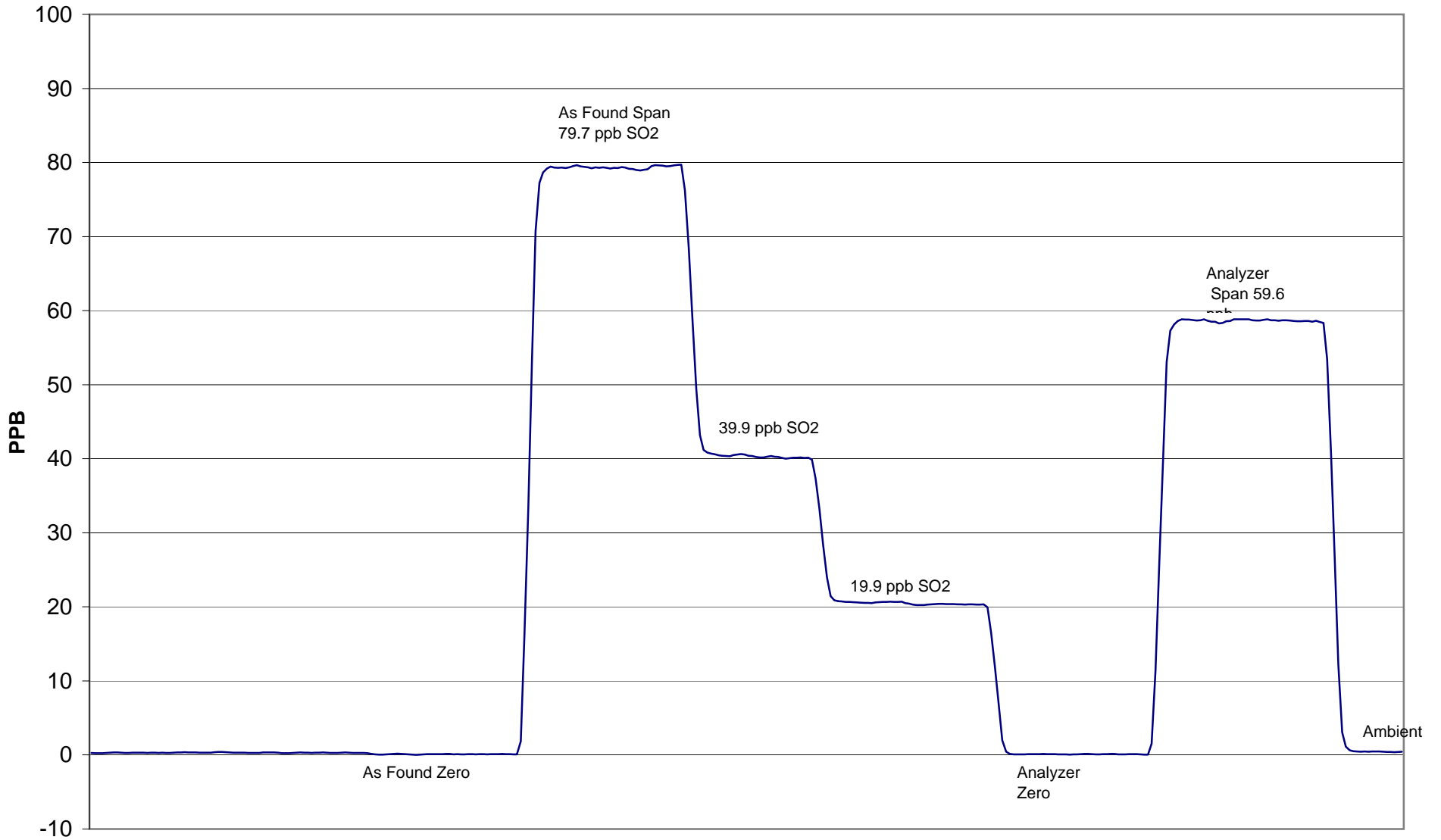
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
79.7	79.4	1.0040	Correlation Coefficient	0.999899
39.9	40.3	0.9895		
19.9	20.4	0.9763	Slope	1.005067
			Intercept	-0.315286

SO2 Calibration Curve



Beaverlodge SO₂ Calibration



February 11, 2010

Calibration Report

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



Station Information

Calibration Date	February 11, 2010	Previous Calibration	January 15, 2010
Station Number	4	Station Location	BeaverLodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal
Start Time (MST)	12:15	End Time (MST)	16:56
Barometric Pressure	0.905 Atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics	Serial Number	2844
NO Cal Gas Conc	50.1 ppm	Cal Gas Expiry Date	
NOx Cal Gas Conc	50.2 ppm	Cal Gas Serial #	CC-114395

DACS Information

DACS make AP1000 DACS serial No. _____

Parameter		NO2	NOx	NO
Before	Data Slope	0.994249	1.002020	1.002392
	Data Offset	-0.263178	-1.333138	-0.372877
After	Data Slope	0.995207	1.002993	1.003549
	Data Offset	0.411071	-1.911114	-0.993884
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model **TEI 42i** Analyzer serial # **906535068**

Test Point	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
NO offset	2.5	mV	2.3	mV
NOx bkgnd	3.0	mV	2.9	mV
NO coefficient	1.470		1.427	
NOx coefficient	0.994		0.993	
NO2 conv temp	327.1	Deg C	322.4	Deg C
PMT Temp	-3.0	Deg C	-3.0	Deg C
PMT Volt	-675.6	mV	-676.0	mV
R Cell Press	182.8	in Hg	178.0	in Hg
Sample Flow	0.735	ccm	0.748	ccm

Notes:

Calibration Report



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

Station Information

Calibration Date: February 11, 2010 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	0.4	-0.1	0.1	N/A	N/A
1	4988	39.82	397.6	396.8	0.8	397.4	395.6	0.3	1.0005	1.0029
2	4988	19.87	199.2	198.8	0.4	201.6	200.2	0.9	0.9881	0.9930
3	4988	9.91	99.5	99.3	0.2	102.5	100.7	1.4	0.9709	0.9868
AFZ	4988	0.00	0.0	0.0	0.0	0.4	-0.1	0.1	0.0000	0.0000
AFS	4988	39.84	397.8	397.0	0.8	397.4	395.6	0.3	1.0010	1.0034
Average Correction Factor									0.9865	0.9942

As Found Concentrations: NO_x= 395.7 NO= 395.3 As Found Percent Change NO_x= -0.5% NO= -0.4%

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	0.4	-0.1	0.1	N/A	N/A	N/A	N/A
NO point	396.0	396.0	0.0	397.6	396.0	0.2	0.9959	1.0000	N/A	N/A
400	396.0	99.3	296.6	398.5	99.3	298.2	0.9936	1.0000	0.9948	100.5%
200	396.0	191.5	204.5	396.9	191.5	204.6	0.9977	1.0000	0.9993	100.1%
100	396.0	284.0	112.0	396.2	284.0	111.5	0.9995	1.0000	1.0045	99.6%
Average Correction Factor							0.9969	1.0000	0.9995	100.0%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.2	-0.3	-0.2	ppb	-0.1	-0.3	-0.1	ppb
Auto span	175.3	173.3	2.1	ppb	220.9	219.1	1.7	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PASZA



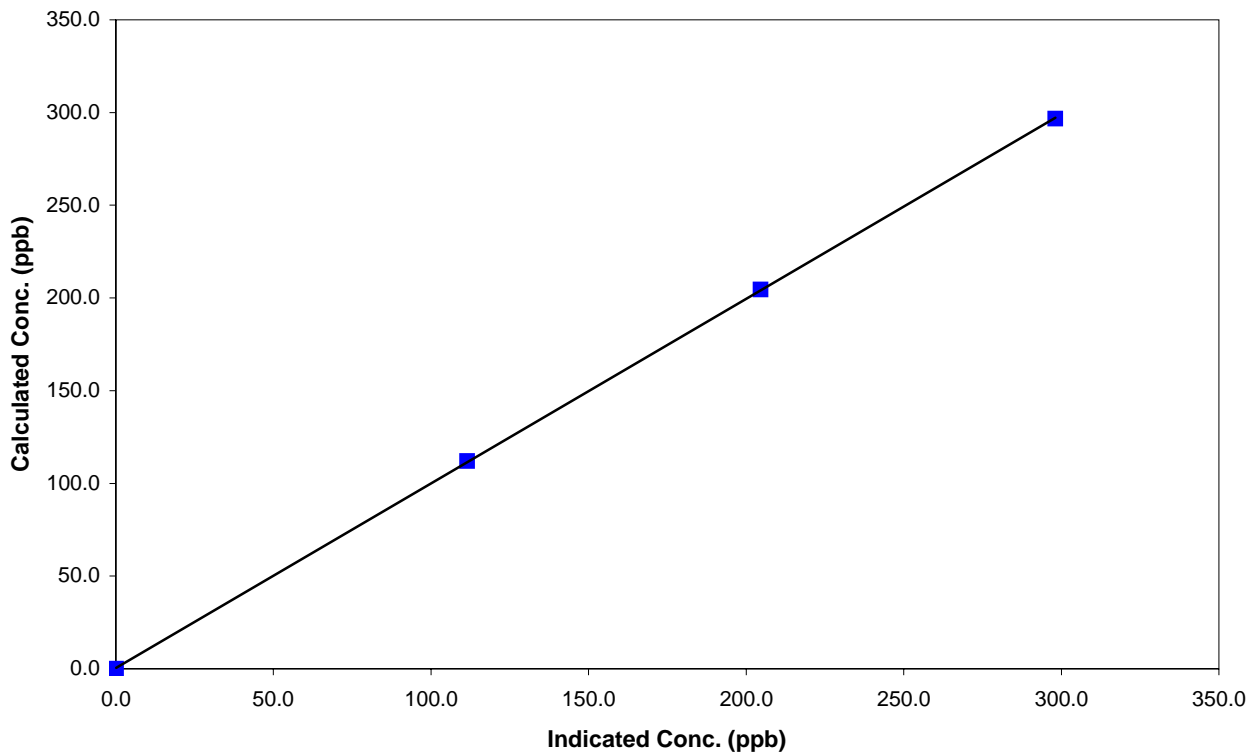
Station Information

Calibration Date	February 11, 2010	Previous Calibration	January 15, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	12:15	End Time (MST)	16:56
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	0.999977
296.6	298.2	0.9948		
204.5	204.6	0.9993	Slope	0.995207
112.0	111.5	1.0045		
			Intercept	0.411071

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



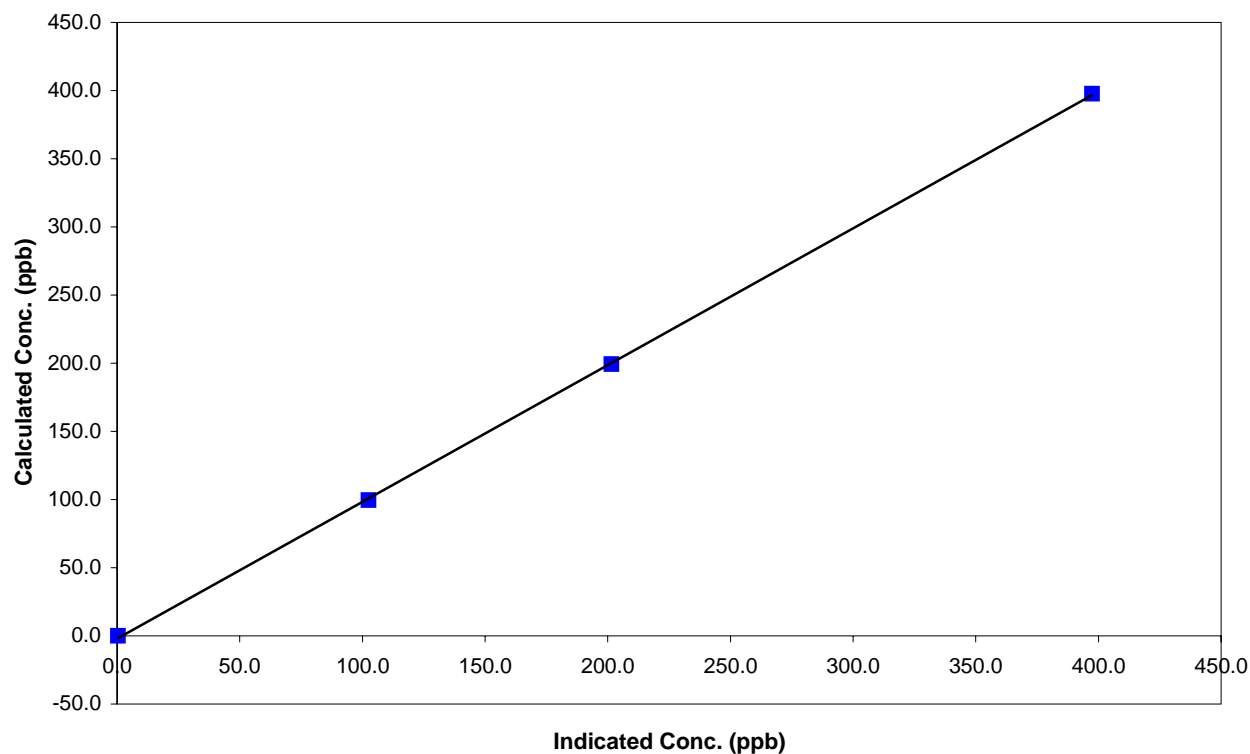
Station Information

Calibration Date	February 11, 2010	Previous Calibration	January 15, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	12:15	End Time (MST)	16:56
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	0.4	N/A	Correlation Coefficient	0.999927
397.6	397.4	1.0005		
199.2	201.6	0.9881	Slope	1.002993
99.5	102.5	0.9709		
			Intercept	-1.911114

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



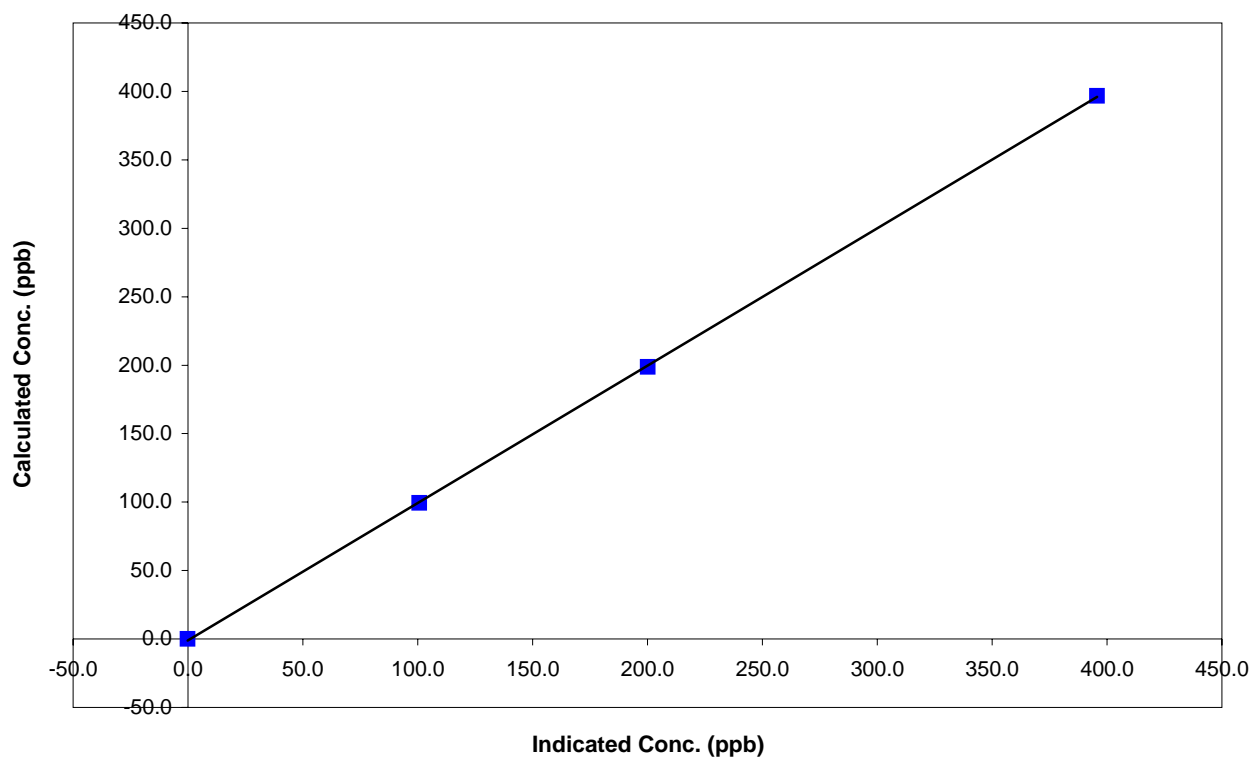
Station Information

Calibration Date	February 11, 2010	Previous Calibration	January 15, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	12:15	End Time (MST)	16:56
Analyzer make	TEI 42i	Analyzer serial #	906535068

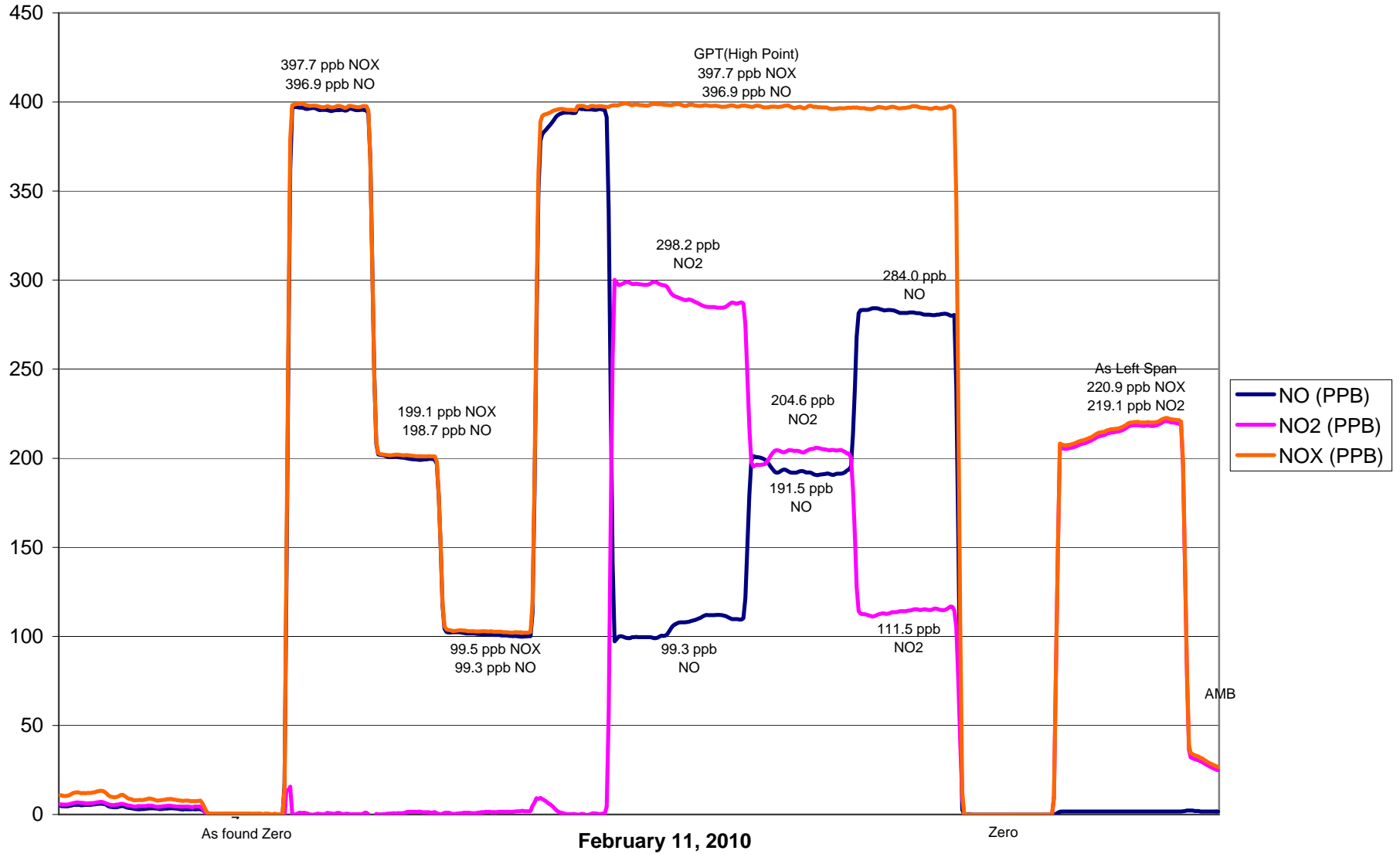
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999960
396.8	395.6	1.0029		
198.8	200.2	0.9930		
99.3	100.7	0.9868		
			Slope	1.003549
			Intercept	-0.993884

NO Calibration Curve



Beaverlodge NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

Calibration Date	February 11, 2010	Previous Calibration	January 15, 2010
Station Number	4	Station Location	Beaverlodge
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	15:50	End Time (MST)	18:15
Barometric Pressure	0.905 atm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.992230	Calculated slope	0.987251
Calculated intercept	-0.010103	Calculated intercept	1.399816
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-1.00	ppb	-1.00	ppb
slope	1.041		1.041	
Lamp temp	56.4	mV	56.2	mV
Lamp Intensity A/B	71175 / 71026	mV	71405 / 71350	mV
Pressure	656	mm Hg	670.6	mm Hg
Flow A	688	ccm	703	ccm
Flow B	635	ccm	650	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)
4990	0.00	0.0	-0.4	N/A
4990	0.00	297.0	300.2	0.9893
4990	0.00	204.5	205.3	0.9961
4990	0.00	112.0	110.6	1.0122
4990	0.00	0.0	0.1	As found zero
4990	0.00	297.0	300.2	As found span
Average Correction Factor				0.9992

Calculated value of As Found Response: 297.7 ppm Percent Change of As Found: 0.3%

	before calibration		after calibration	
Auto zero	0.1	ppb	1.5	ppb
Auto span	114.3	ppb	125.5	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter O3
Air Monitoring Network PASZA



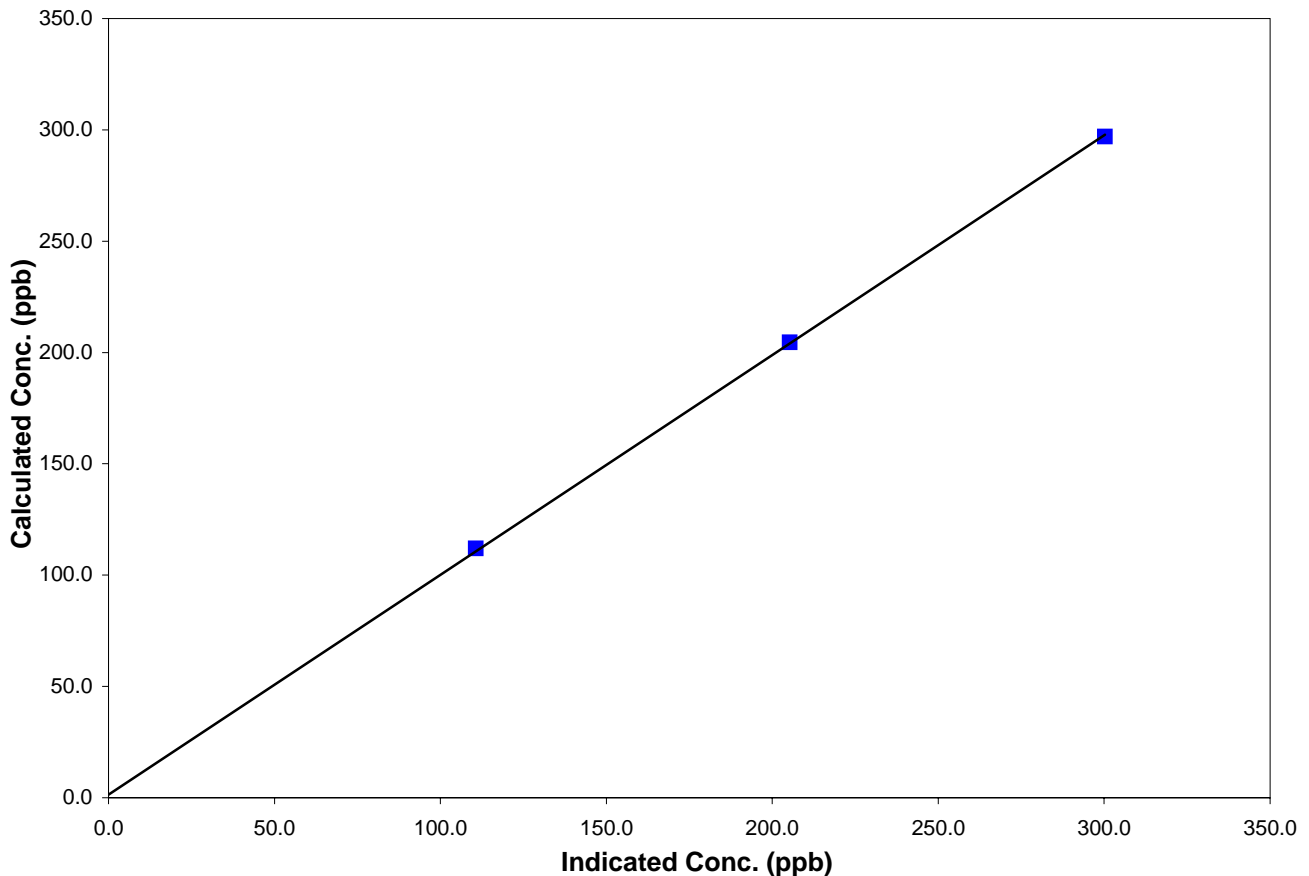
Station Information

Calibration Date	<u> February 11, 2010 </u>	Previous Calibration	<u> January 15, 2010 </u>
Station Number	<u> 4 </u>	Station Location	<u> Beaverlodge </u>
Start Time (MST)	<u> 15:50 </u>	End Time (MST)	<u> 18:15 </u>
Analyzer make/model	<u> Teco 49C </u>	Analyzer serial #	<u> 49C-76443-383 </u>

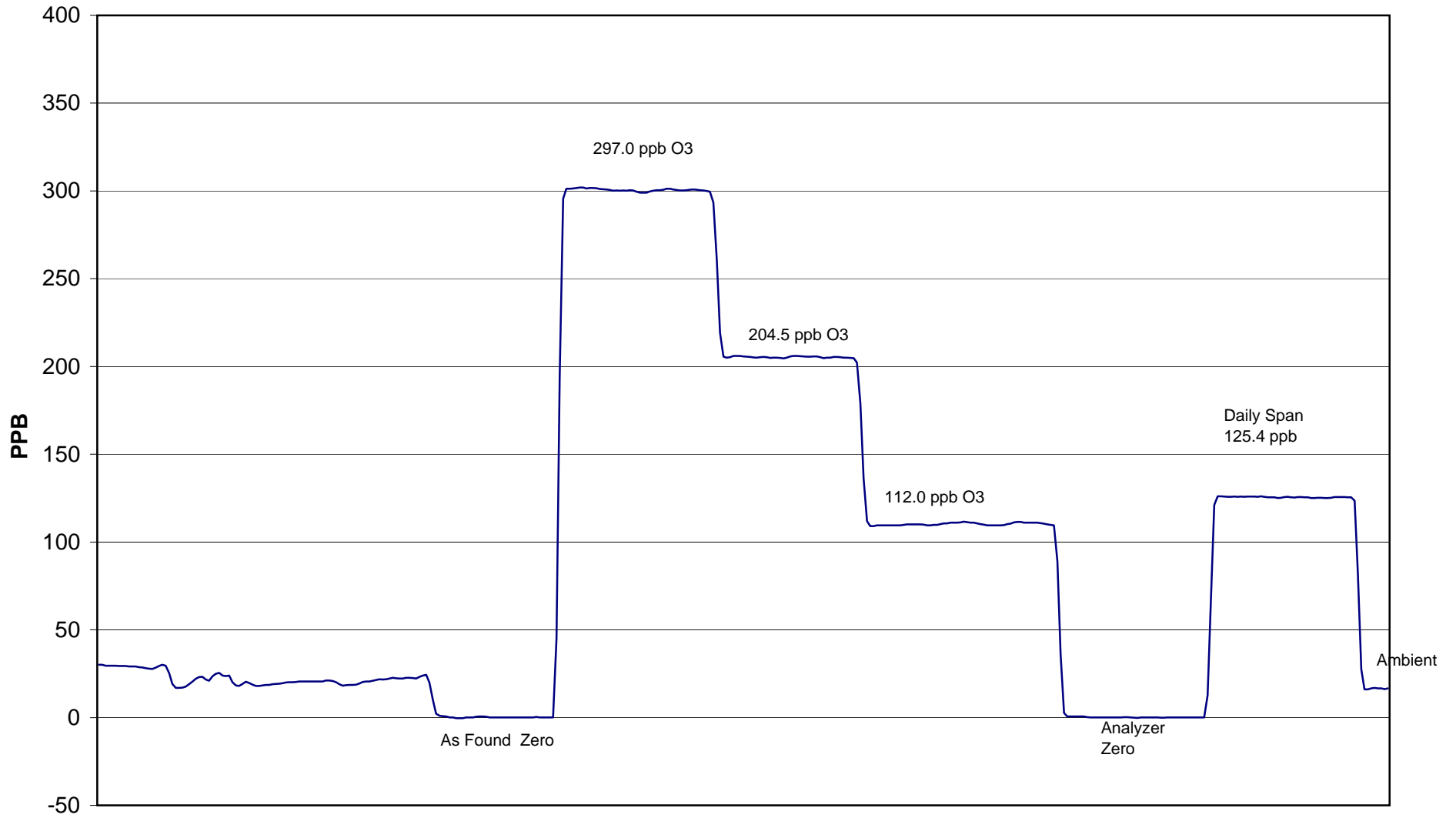
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.4	NA		
297.0	300.2	0.9893	Correlation Coefficient	0.999925
204.5	205.3	0.9961		
112.0	110.6	1.0122	Slope	0.987251
			Intercept	1.399816

O3 Calibration Curve



Beaverlodge O₃ Calibration



February 11, 2010

FDMS TEOM PM2.5 AUDIT



STATION: BeaverLodge
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 11-Feb-10

MONITOR INFO / PARAMETER VALUES:

Make/Model	TEOM AB
Configuration	PM2.5
Serial Number	AMU1649
Site Number	4
Inlet Type	PM 10 / SCC
FAdj. Main Setting	1.000
FAdj. Aux. Setting	1.000
T-Case Indicated / Set Point	30/30
T-Air Indicated / Set Point	30/30
T-Cap Indicated / Set Point	30/30
Splitter Assembly Alignment (cm)	15.5

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

RECENT CALIBRATION AND AUDIT HISTORY

Previous Audit	Jan-16-10
Previous Calibration	

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

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

LEAK CHECK	Indicated Flow (lpm)	
	Main	Auxiliary
PUMP ON	-0.080	0.220
PUMP OFF	0.000	0.060
NET	-0.080	0.160
LIMITS	<0.15	<0.65

	Ambient Temp. (°C)	Ambient Pres. (atm)	Ko *	Bypass flow (lpm)	Sample flow (lpm)
SET POINT (S)	na	na	14287	13.67	3.000
INDICATED (I)	-3.7	0.905	14287	13.67	3.000
MEASURED (AF)	-3.6	0.905	14287	13.70	3.003
MEASURED (M)	-3.6	0.905	14119	13.70	3.003
DIFFERENCE (M-I)	0.1	0.000	-1.2%	0.22	0.10
LIMITS	± 2 ° C	± 0.005 atm	± 2.5 %	± 1.0 L/min	± 0.2 L/min

As Found Data
Adjusted Data

Ko Audit Filter data Weight: 0.11477 Serial #: CVK 3532

COMMENTS:

PASS

Sample Head Inspection Or Cleaning: TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACEMENT:
 PM10: Cleaned. TEOM IN LINE: FDMS Water knock out: Good
 PM2.5: Cleaned Main: Good In Line Audit filter(Bowl with internal screen): Good
 AUX: Good FDMS 47 mm Filter Cassette: Replaced

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

Calibration Date	February 22, 2010	Previous Calibration	January 27, 2010
Station Number	9	Station Location	Rover - Kinuso
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	9:30	End Time (MST)	12:04
Barometric Pressure	27.66 inches Hg	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL 16161		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 10 volt	DACS channel #	9
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.003820	Calculated slope	1.004170
Calculated intercept	-1.866516	Calculated intercept	-1.955323
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	8.8		8.8	
Coefficient	0.869		0.869	
UV Lamp Voltage	805	V	806	V
Chamber Temp	44.5	C	44.6	C
Perm Gas Temp	45	C	45	C
Pressure	685.6	mm Hg	685.3	mm Hg
Sample Flow	0.494	LPM	0.494	LPM
Lamp Intesity	47613	Hz	47648	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)
4988	0.00	0.0	0.4	N/A
4988	39.83	400.8	400.4	1.0011
4988	19.88	200.9	202.4	0.9923
4988	9.93	100.5	103.9	0.9676
4988	0.00	0.0	-0.3	As found zero
4988	39.89	401.4	400.7	As found span
Average Correction Factor				0.9870

Calculated value of As Found Response: 400.627 ppm Percent Change of As Found: 0.2%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	258.2	ppm	256.9	ppm

Notes: Internal Pump Replaced

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA

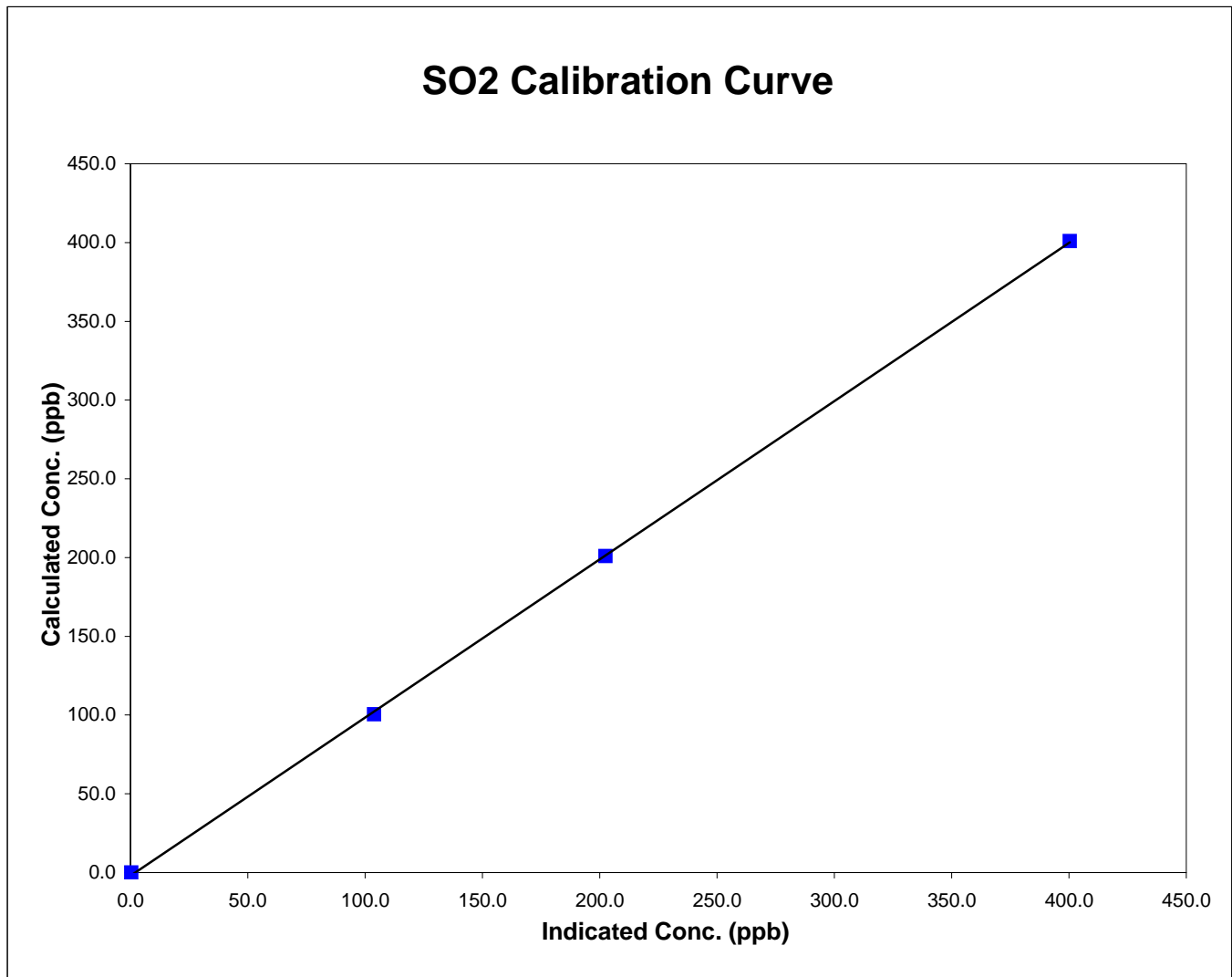


Station Information

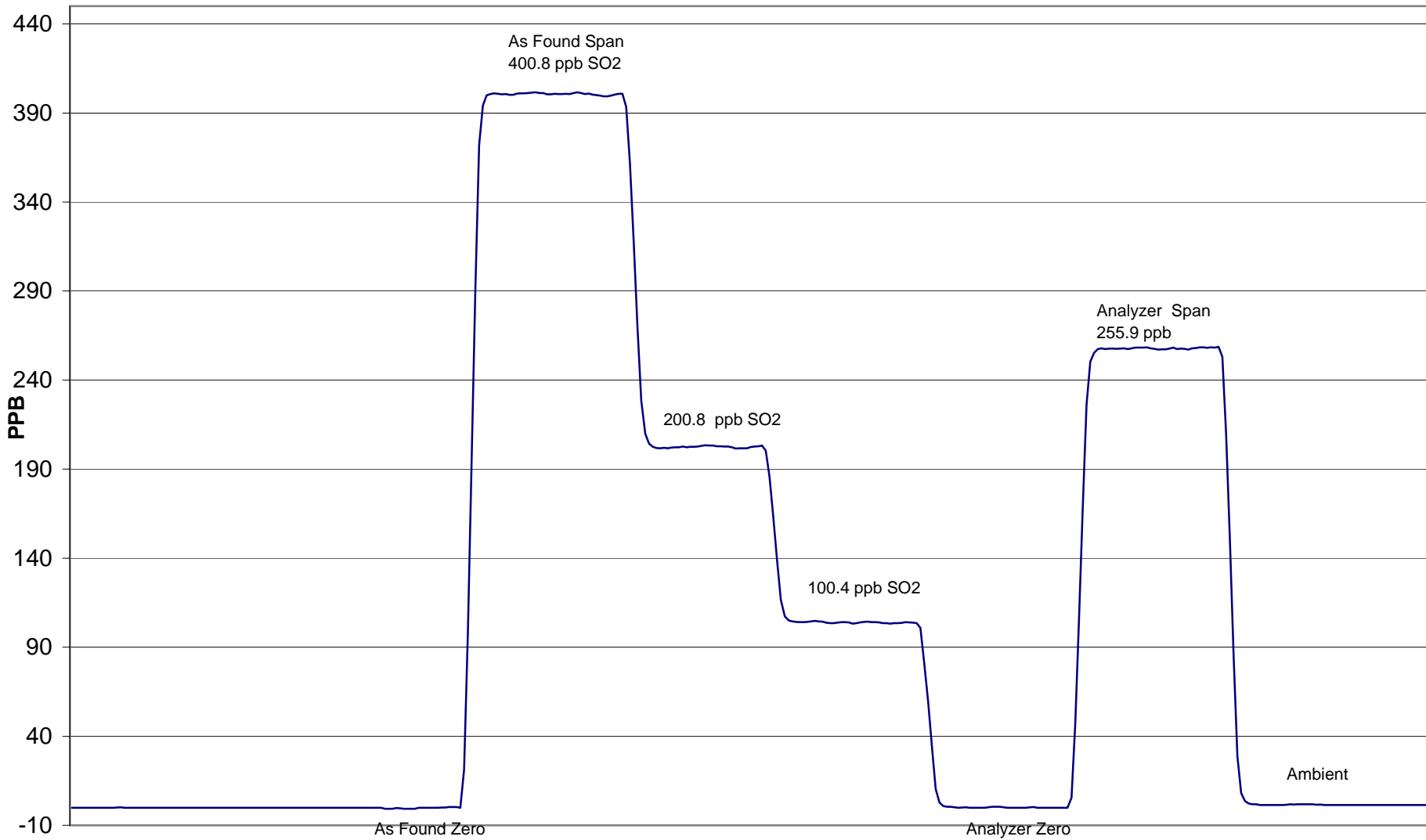
Calibration Date	February 22, 2010	Previous Calibration	January 27, 2010
Station Number	9	Station Location	Rover - Kinuso
Start Time (MST)	9:30	End Time (MST)	12:04
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A		
400.8	400.4	1.0011	Correlation Coefficient	0.999924
200.9	202.4	0.9923		
100.5	103.9	0.9676	Slope	1.004170
			Intercept	-1.955323



Kinuso SO₂ Calibration



February 22, 2010

Calibration Summary

Parameter TRS

Air Monitoring Network PASZA



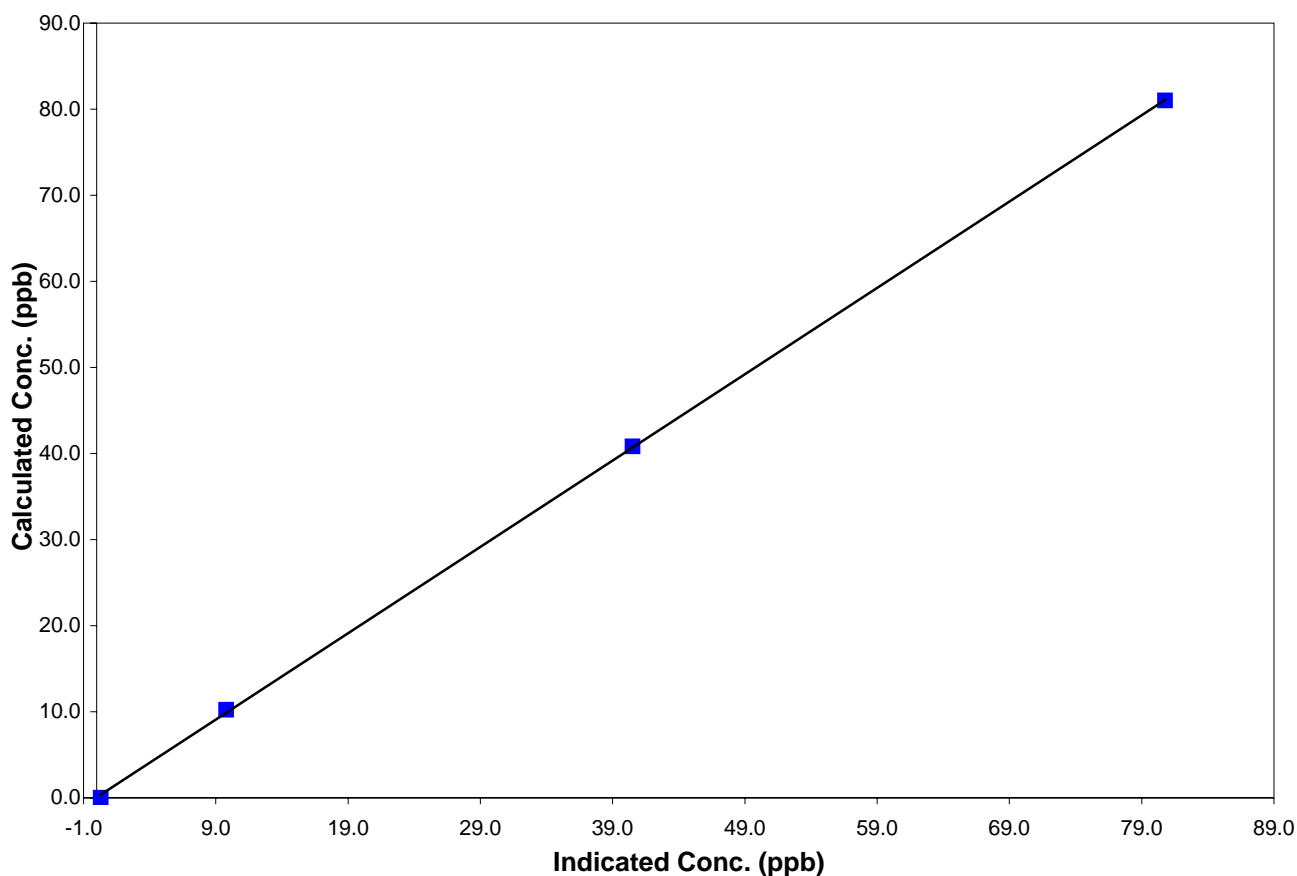
Station Information

Calibration Date	<u>February 22, 2010</u>	Previous Calibration	<u>January 27, 2010</u>
Station Number	<u>9</u>	Station Location	<u>Rover-Kinuso</u>
Start Time (MST)	<u>13:26</u>	End Time (MST)	<u>16:05</u>
Analyzer make/model	<u>TEI 43C</u>	Analyzer serial #	<u>609716238</u>

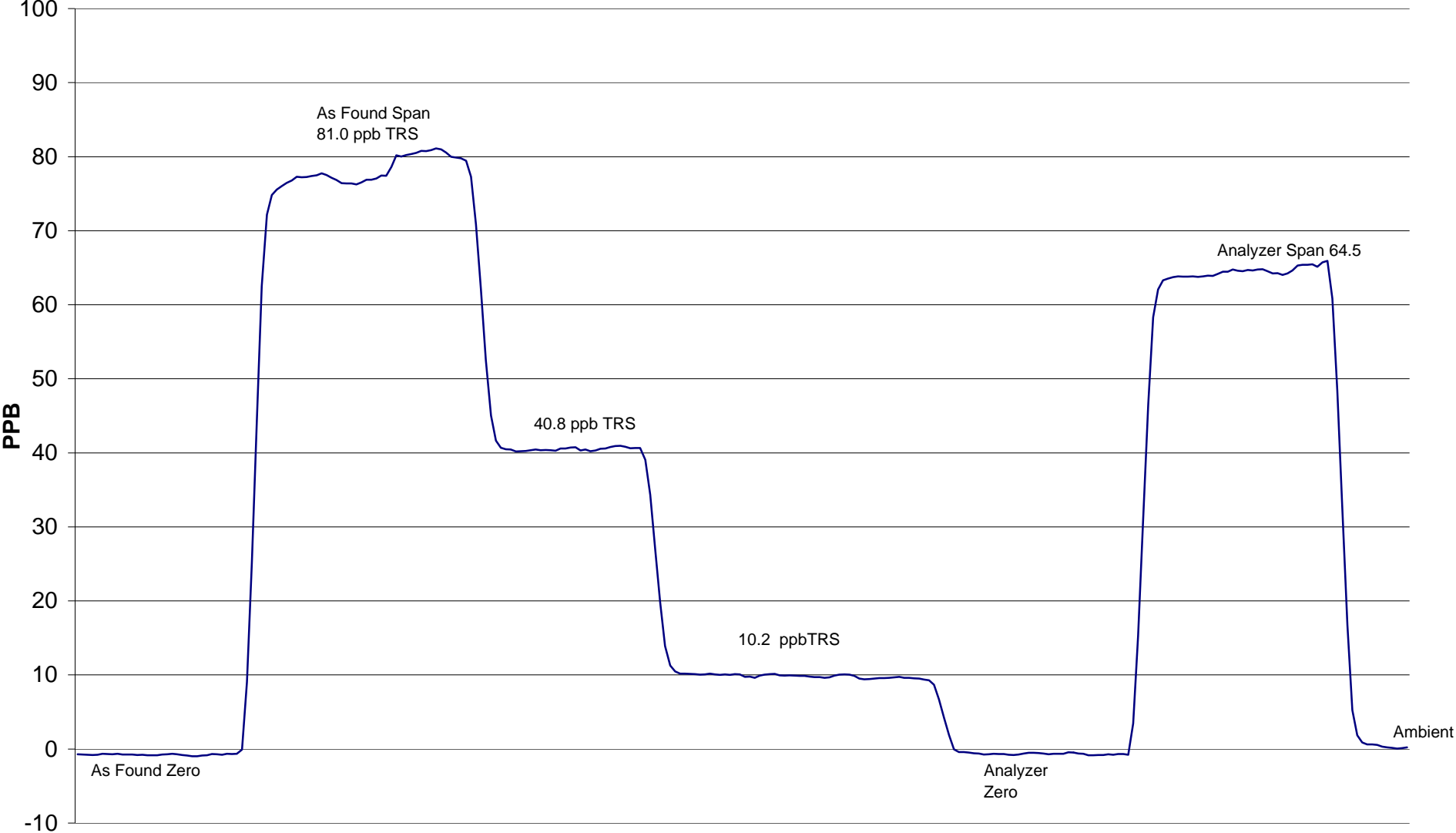
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
81.0	80.8	1.0028	Correlation Coefficient	0.999934
40.8	40.5	1.0076		
10.2	9.8	1.0438	Slope	1.003275
			Intercept	0.059218

TRS Calibration Curve



Kinuso TRS Calibration



February 22, 2010

Calibration Report

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



Station Information

Calibration Date	February 22, 2010	Previous Calibration	January 27, 2010
Station Number	9	Station Location	Rover Kinuso
Reason:	Routine	Installation	Removal
Start Time (MST)	9:30	End Time (MST)	13:40
Barometric Pressure	0.916 Atm	Station Temperature	25.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
NO Cal Gas Conc	49.6 ppm	Cal Gas Expiry Date	July 2, 2007
NOx Cal Gas Conc	49.6 ppm	Cal Gas Serial #	CC114395

DACS Information

DACS make **Focus AP1000** DACS serial No. **52662**

Parameter		NO2	NOx	NO
Before	Data Slope	1.000345	0.997931	1.003778
	Data Offset	1.384724	-2.627872	-2.945132
After	Data Slope	0.995302	1.002122	1.008232
	Data Offset	1.252389	-2.445870	-2.818105
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model **TEI 42i** Analyzer serial # **701120011**

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO offset	3.9	mV	5.5	mV
NOx bkgnd	4.0	mV	5.7	mV
NO coefficient	0.774		1.124	
NOx coefficient	0.998		1.000	
NO2 conv temp	323.4	Deg C	323.9	Deg C
PMT Temp	-3.1	Deg C	-3.1	Deg C
PMT Volt	-829.5	mV	-829.5	mV
R Cell Press	185.3	in Hg	192.3	in Hg
Sample Flow	0.439	ccm	0.432	ccm

Notes:

Calibration Report

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



Station Information

Calibration Date: February 22, 2010 Station Location: Rover Kinuso

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	4990	0.00	0.0	0.0	0.0	0.2	0.5	-0.7	N/A	N/A
1	4988	39.85	393.1	393.1	0.0	393.5	391.5	-0.7	0.9991	1.0041
2	4988	19.87	196.8	196.8	0.0	200.2	199.1	-0.6	0.9829	0.9883
3	4988	9.93	98.5	98.5	0.0	102.9	102.9	-0.7	0.9579	0.9579
AFZ	4988	0.00	0.0	0.0	0.0	0.2	0.4	-0.9	0.0000	0.0000
AFS	4988	39.85	393.1	393.1	0.0	395.0	393.0	-0.7	0.9952	1.0002
Average Correction Factor									0.9800	0.9834

As Found Concentrations: NO_x= 392.2 NO= 389.6 As Found Percent Change NO_x= -0.2% NO= -0.9%

GPT Calibration Data

Dilution Flow 4988 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	0.4	0.4	0.0	0.2	0.5	-0.7	N/A	N/A	N/A	N/A
NO point	393.5	393.5	0.0	395.4	393.5	-1.0	0.9950	1.0000	N/A	N/A
300	393.5	176.9	216.6	395.9	176.9	216.8	0.9939	1.0000	0.9988	100.1%
200	393.5	245.3	148.2	395.0	245.3	147.3	0.9961	1.0000	1.0060	99.4%
100	393.5	311.7	81.8	394.3	311.7	80.2	0.9980	1.0000	1.0199	98.1%
Average Correction Factor							0.9960	1.0000	1.0082	99.2%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.1	-1.0	0.6	ppb	0.4	-0.9	0.7	ppb
Auto span	305.0	300.2	3.0	ppb	312.6	308.0	2.9	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter NO₂

Air Monitoring Network PASZA



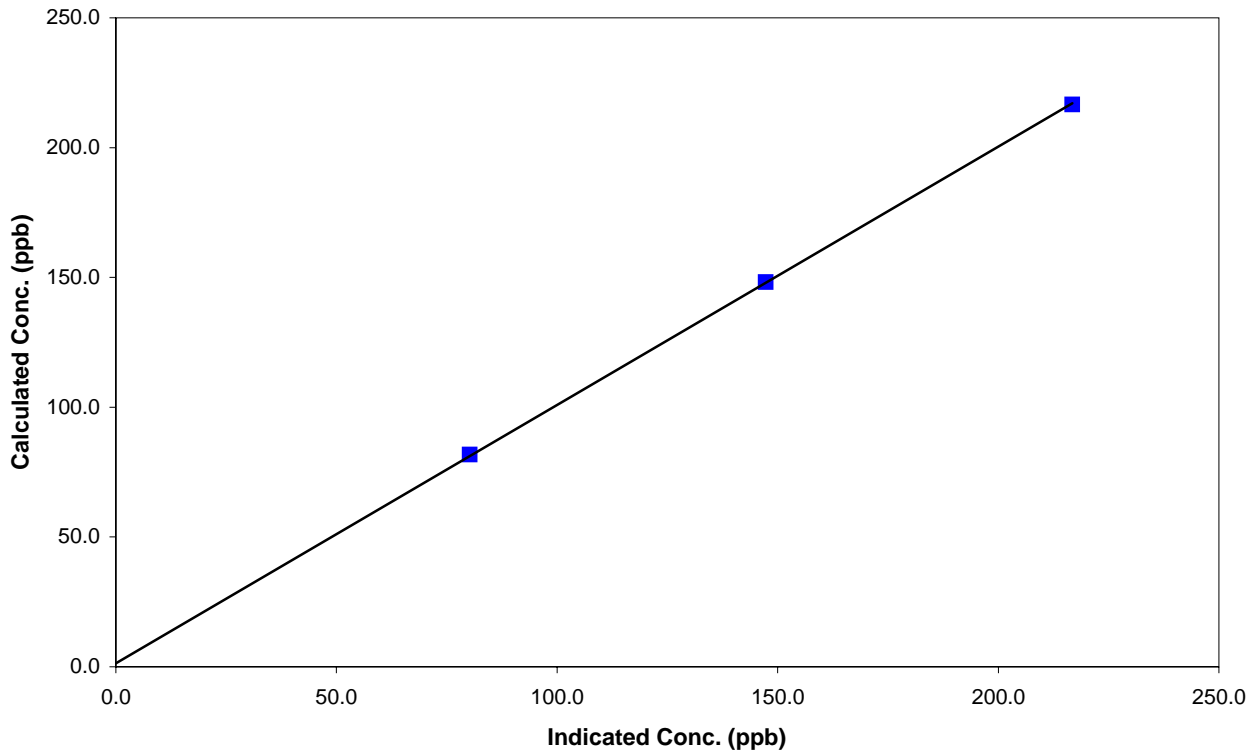
Station Information

Calibration Date	February 22, 2010	Previous Calibration	January 27, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:30	End Time (MST)	13:39
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.7	N/A		
216.6	216.8	0.9988	Correlation Coefficient	0.999954
148.2	147.3	1.0060		
81.8	80.2	1.0199	Slope	0.995302
			Intercept	1.252389

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



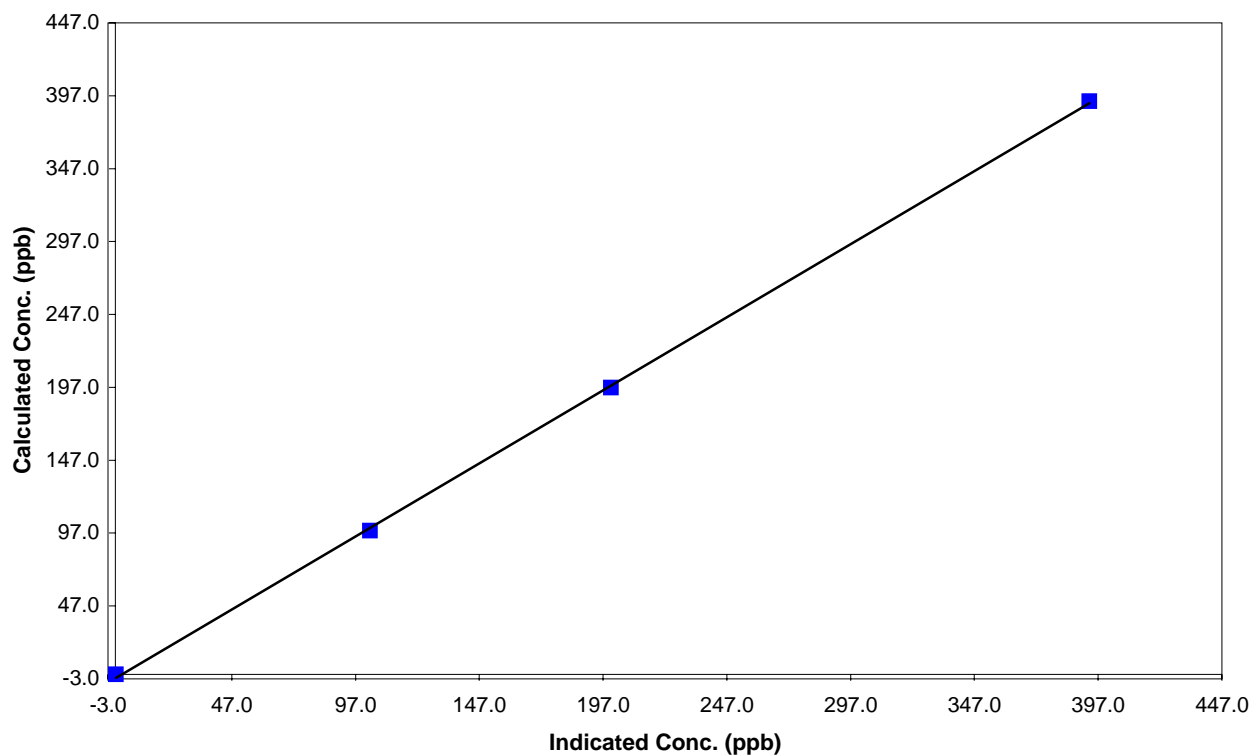
Station Information

Calibration Date	February 22, 2010	Previous Calibration	January 27, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:30	End Time (MST)	13:39
Analyzer make	TEI 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999846
393.1	393.5	0.9991		
196.8	200.2	0.9829		
98.5	102.9	0.9579	Slope	1.002122
			Intercept	-2.445870

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



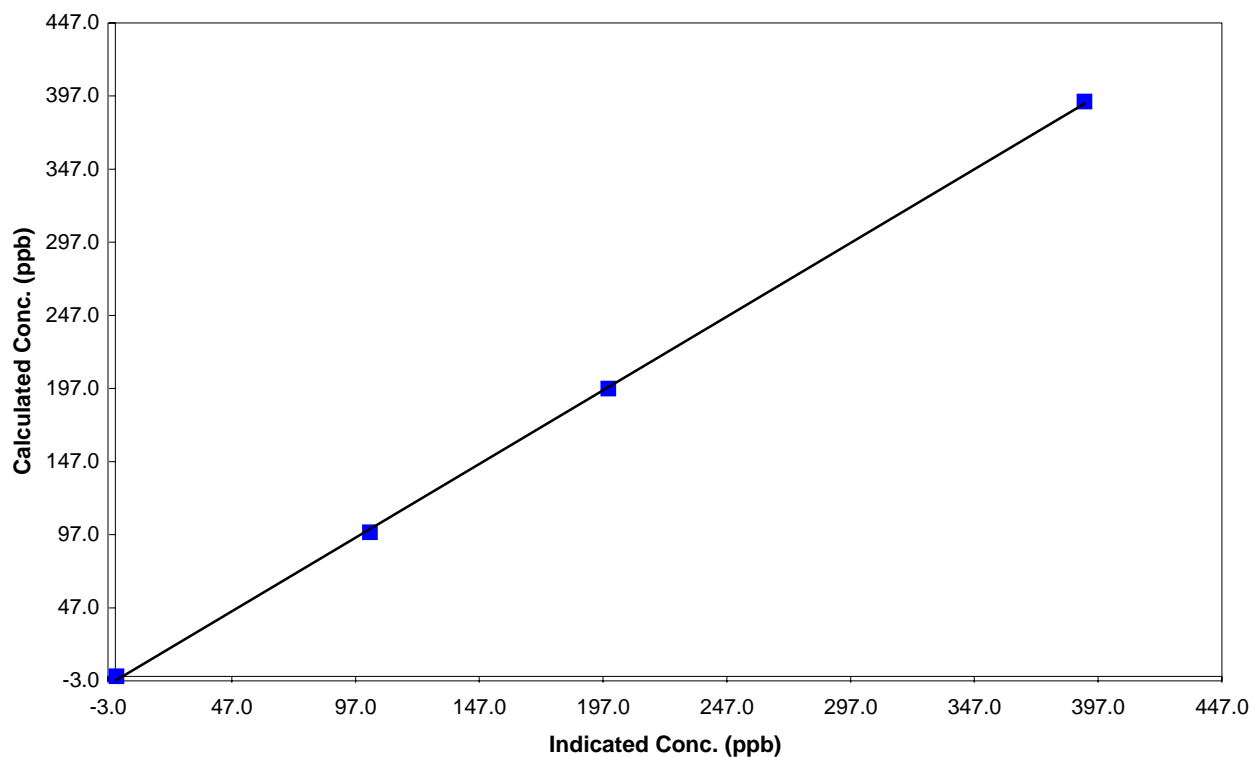
Station Information

Calibration Date	February 22, 2010	Previous Calibration	January 27, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:30	End Time (MST)	13:39
Analyzer make	TEI 42i	Analyzer serial #	701120011

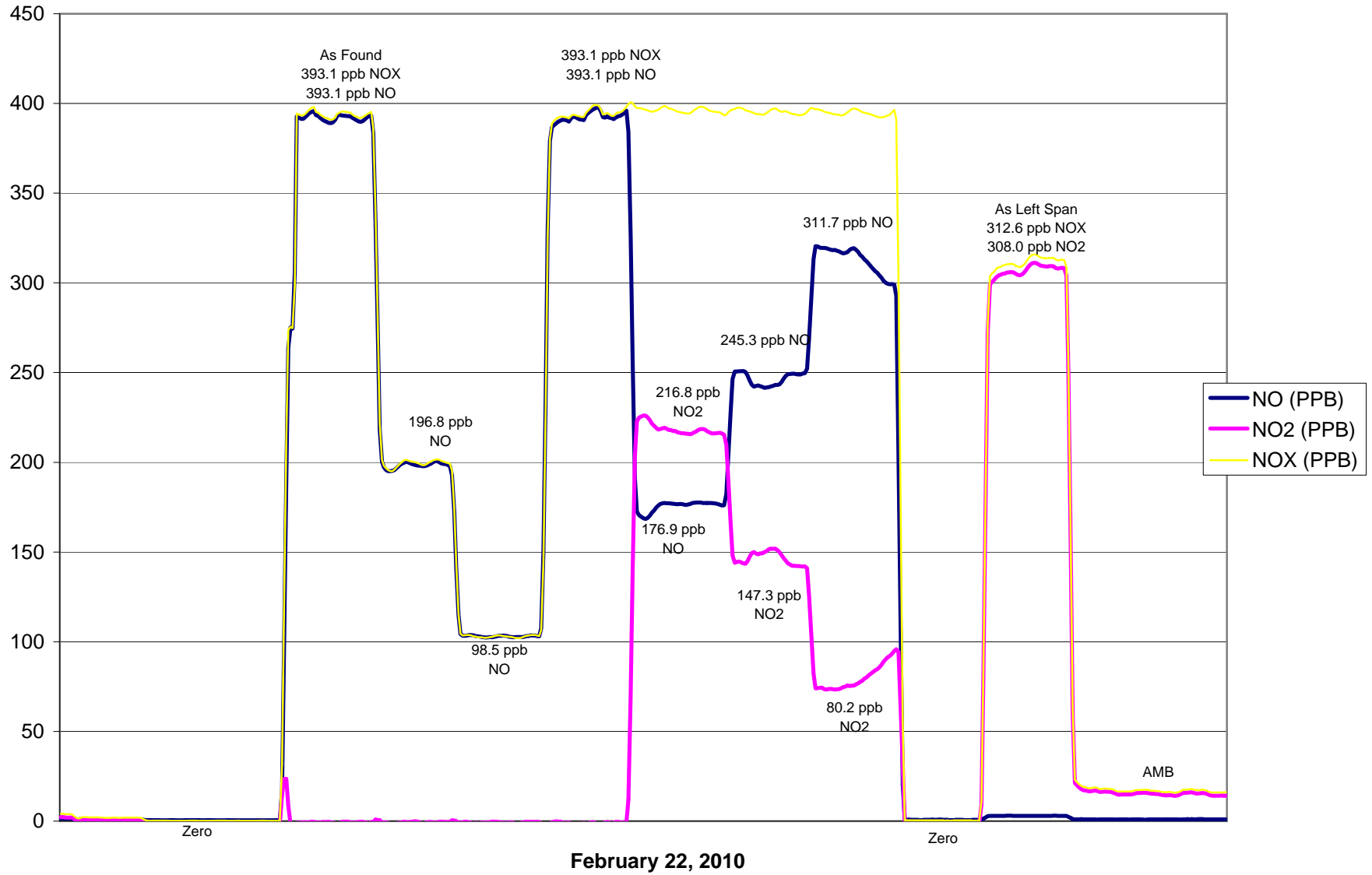
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999837
393.1	391.5	1.0041		
196.8	199.1	0.9883	Slope	1.008232
98.5	102.9	0.9579		
			Intercept	-2.818105

NO Calibration Curve



Kinuso NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

Calibration Date	February 22, 2010	Previous Calibration	January 27, 2010
Station Number	9	Station Location	Rover - Kinuso
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	12:20	End Time (MST)	14:15
Barometric Pressure	0.935 atm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0-5	DACS channel #	7
	Before		After
Calculated slope	0.999429	Calculated slope	1.066602
Calculated intercept	-0.317820	Calculated intercept	2.471033
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-13.8	ppb	-13.8	ppb
Span	1.517		1.517	
Cell A	90644	Hz	90644	Hz
Cell B	98378	Hz	98378	Hz
Pressure	711	in Hg	709	in Hg
CellA Flow	724	ccm	724	ccm
Cell B Flow	692	cmm	692	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	0.00	0.0	0.0	N/A
4990	0.00	294.3	275.3	1.0689
4990	0.00	202.1	186.3	1.0847
4990	0.00	110.8	98.4	1.1266
4990	0.00	0.0	-0.3	As found zero
4990	0.00	294.3	275.3	As found span
Average Correction Factor				1.0934

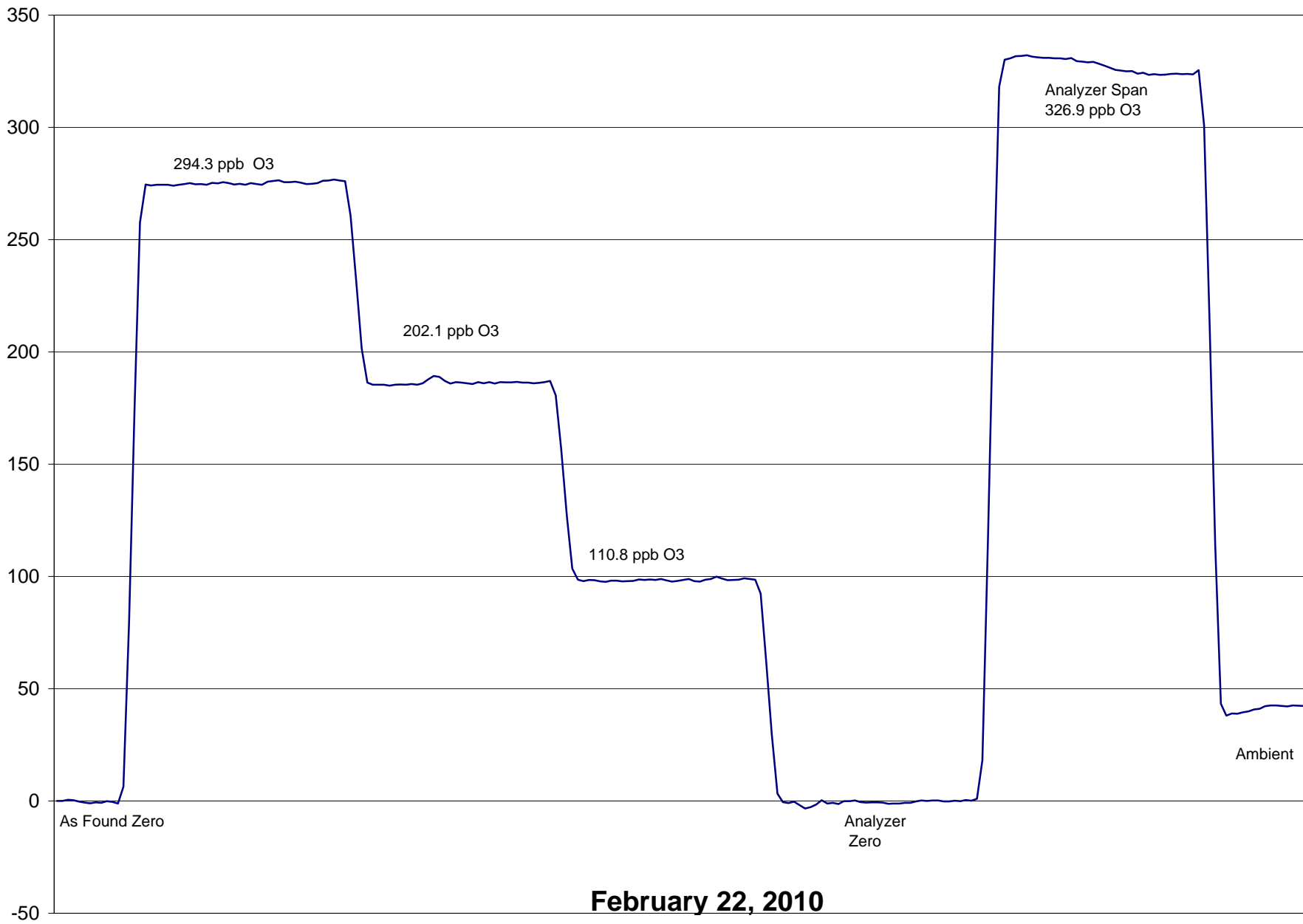
Calculated value of As Found Response: 275.1 ppm Percent Change of As Found: -6.5%

	before calibration		after calibration	
Auto zero	1.2	ppb	2.1	ppb
Auto span	275.5	ppb	326.9	ppb

Notes: **Used Calc NO2 from H.P. cal this month. No adjustment was made to O3 analyzer.**

Calibration Performed By: Grover Christiansen

Kinuso O₃ Calibration



February 22, 2010

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

Calibration Date	February 18, 2010	Previous Calibration	January 24, 2010
Station Number	6	Station Location	Valleyview
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	10:20	End Time (MST)	14:42
Barometric Pressure	29.90 inches Hg	Station Temperature	25.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Cert Date	12/3/2009
Gas Cert Reference	AAL 56996		
DACS make	Focus AP1000	DACS serial No.	45274
DACS voltage range	0 - 10 volt	DACS channel #	4
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	500
DACS Scale Low	0	DACS intercept	0
Calculated slope	1.003043	Calculated slope	1.004645
Calculated intercept	-1.321377	Calculated intercept	-2.244554
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	29.6		24.4	
Coefficient	0.713		0.886	
UV Lamp Voltage	701	LPM	917	LPM
Chamber Temp	44.2	V	44.2	V
Perm Gas Temp	35.1	C	35.1	C
Pressure	626.8	in Hg	626.3	in Hg
Sample Flow	0.47	LPM	0.472	LPM
Lamp Intesity	45235	Hz	48434	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)
4990	0.00	0.0	0.2	N/A
4990	39.85	400.9	400.2	1.0016
4990	19.92	201.2	203.4	0.9891
4990	9.90	100.2	104.2	0.9620
4990	0.00	0.0	-0.2	As found zero
4990	39.88	401.2	400.2	As found span
Average Correction Factor				0.9842

Calculated value of As Found Response: 400.335 ppm Percent Change of As Found: 0.2%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	158.3	ppm	150.3	ppm

Notes: **Replace lamp & socket - allow stabilize-calibrate.**

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



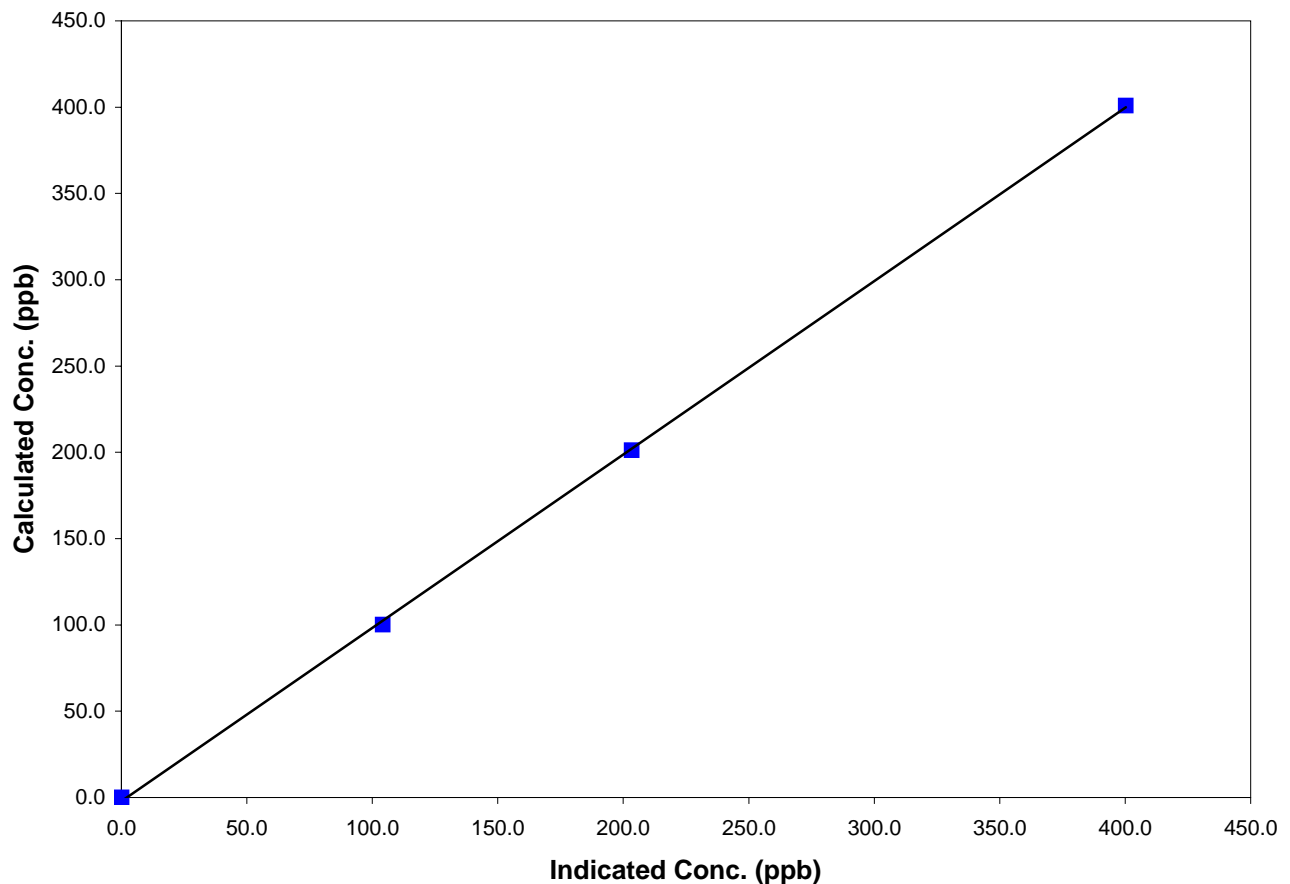
Station Information

Calibration Date	February 18, 2010	Previous Calibration	January 24, 2010
Station Number	6	Station Location	Valleyview
Start Time (MST)	10:20	End Time (MST)	14:42
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

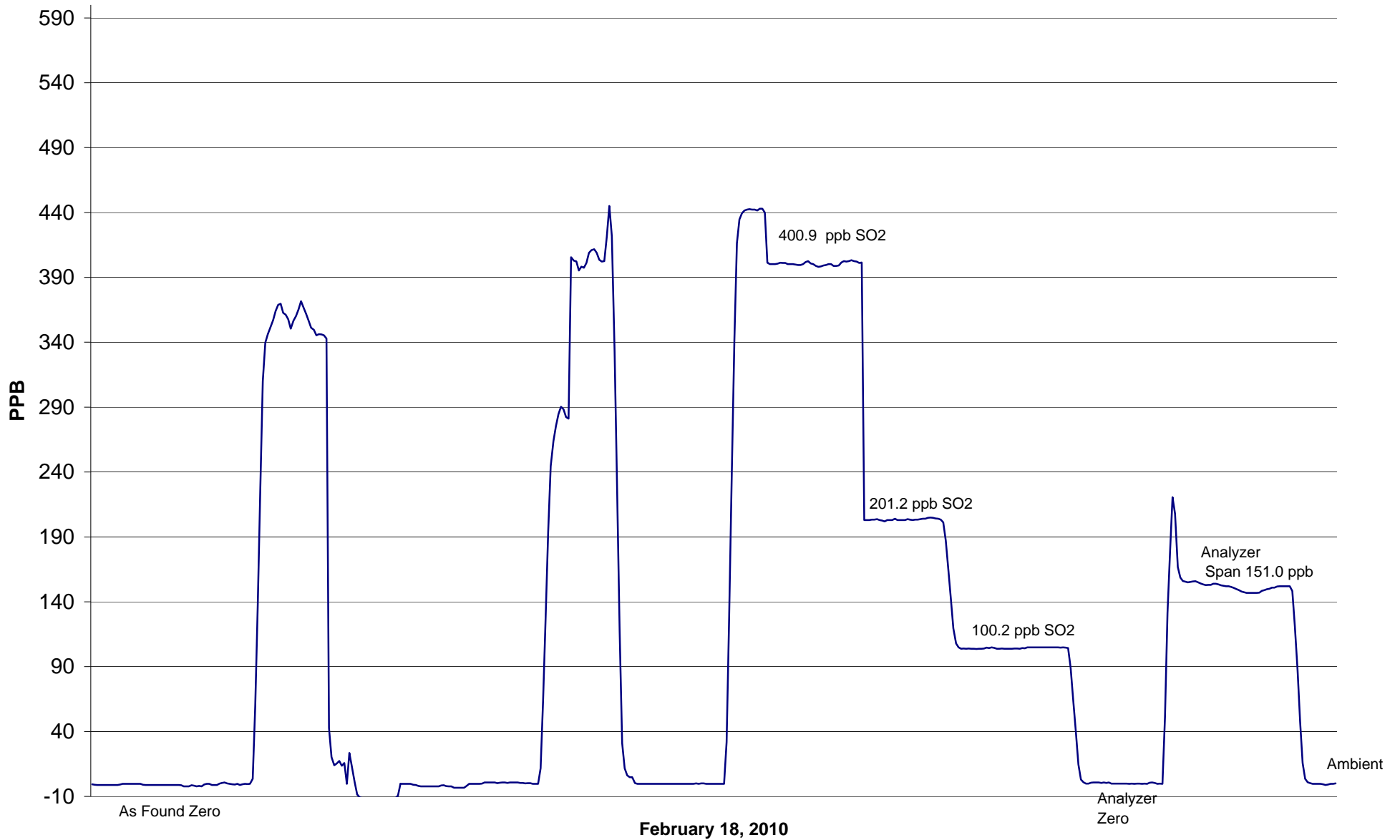
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A		
400.9	400.2	1.0016	Correlation Coefficient	0.999873
201.2	203.4	0.9891		
100.2	104.2	0.9620	Slope	1.004645
			Intercept	-2.244554

SO2 Calibration Curve



Valleyview SO₂ Calibration



Calibration Report



Parameter H2S

Air Monitoring Network PASZA

Station Information

Calibration Date	February 18, 2010		Previous Calibration	January 24, 2010	
Station Number	5		Station Location	Valleyview	
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal	<input type="checkbox"/> Other:	
Start Time (MST)	13:45:00 PM		End Time (MST)	15:55	
Barometric Pressure	0.00	inches Hg	Station Temperature	23.0	Deg C
Calibrator	EnviroNics 6100		Serial Number	3474	
Cal Gas Concentration	5.15	ppm	Cal Gas Expiry Date	4/4/2009	
Gas Cert Reference	ALM013295				
DACS make	Focus AP1000		DACS serial No.	1	
DACS voltage range	0 - 10 volt		DACS channel #	9	
	<u>Before</u>			<u>After</u>	
DACS Scale High	100		DACS slope	100	
DACS Scale Low	0		DACS intercept	0	
Calculated slope	1.006408		Calculated slope	1.006449	
Calculated intercept	-0.229808		Calculated intercept	-0.428970	
Analyzer make	TEI Model 43i - APSCB		Analyzer serial #	701120010	

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	5.0	ppb	5.1	ppb
Coefficient	1.097		1.097	
Lamp Voltage	790	V	792	V
Chamber Temp	45.2	c	45	c
Perm Oven Temp	45.01	c	45	c
Pressure	643	mm Hg	642	mm Hg
Sample Flow	429	ccm	428	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)
4988	0.00	0.0	0.2	N/A
4988	79.72	81.0	80.7	1.0040
4988	39.83	40.8	41.4	0.9850
4988	9.93	10.2	10.6	0.9672
4989	0.00	0.0	0.2	As found zero
4989	79.81	81.1	82.0	As found span
Average Correction Factor				0.9854

Calculated value of As Found Response: 82.13 ppm Percent Change of As Found: -1.3%

	before calibration		after calibration	
Auto zero	0.1	ppm	-0.1	ppm
Auto span	62.4	ppm	59.5	ppm

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter H2S

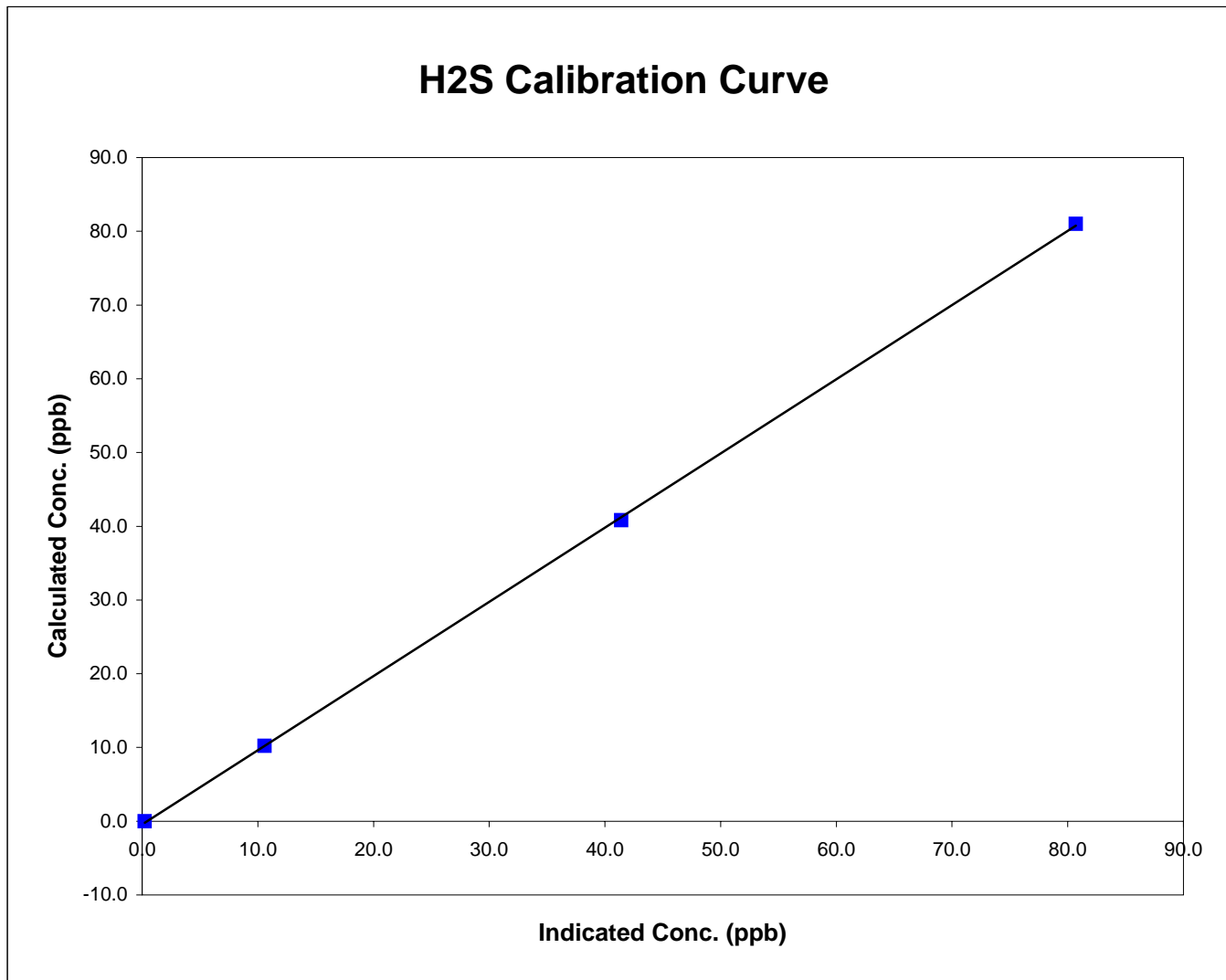
Air Monitoring Network PASZA

Station Information

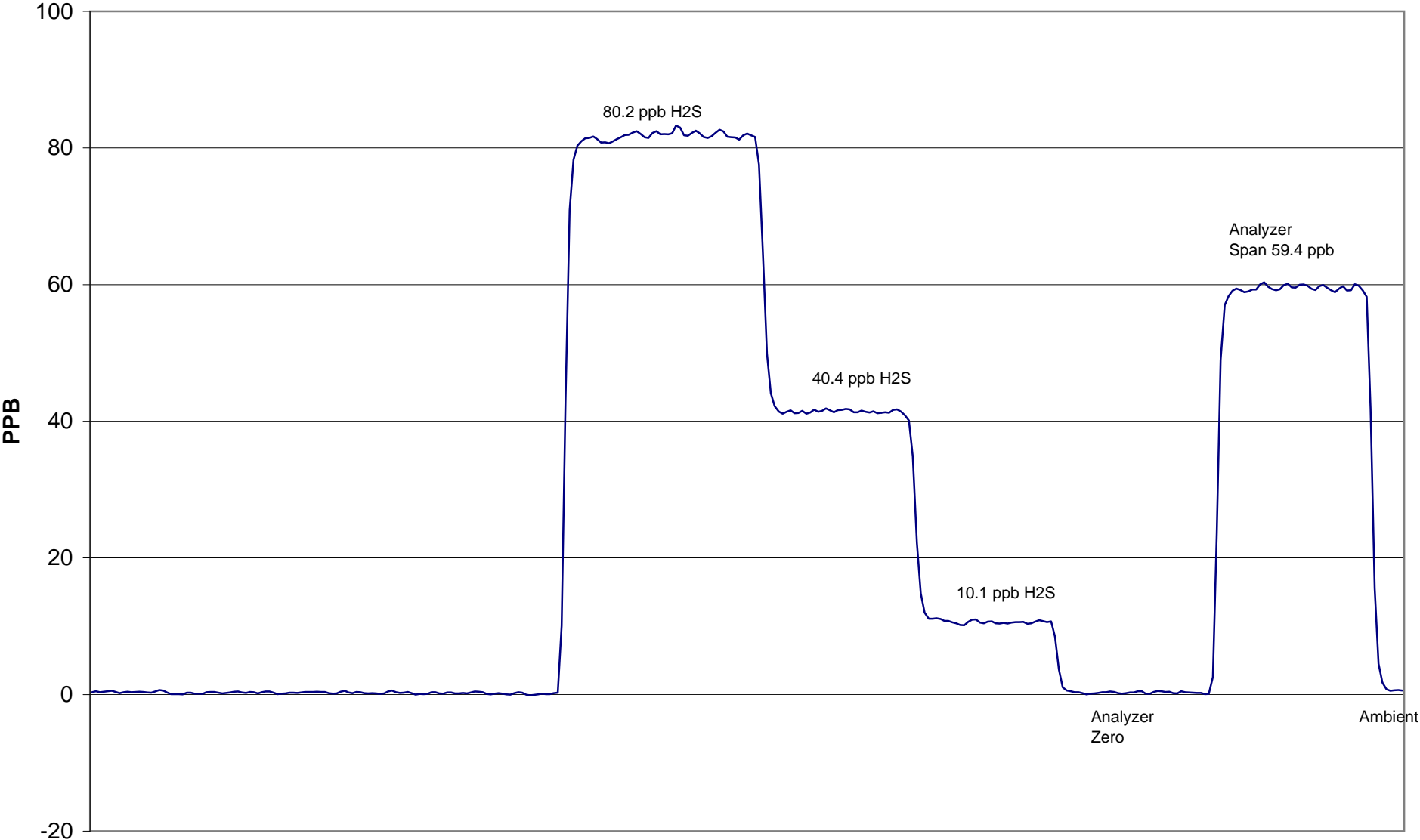
Calibration Date	<u>February 18, 2010</u>	Previous Calibration	<u>January 24, 2010</u>
Station Number	<u>5</u>	Station Location	<u>Valleyview</u>
Start Time (MST)	<u>13:45:00 PM</u>	End Time (MST)	<u>15:55</u>
Analyzer make/model	<u>TEI Model 43i - APSCB</u>	Analyzer serial #	<u>701120010</u>

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999922
81.0	80.7	1.0040		
40.8	41.4	0.9850		
10.2	10.6	0.9672	Slope	1.006449
			Intercept	-0.428970



Valleyview H₂S Calibration



February 18, 2010