



Peace AirShed Zone Association

Ambient Air Monitoring Network Summary

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

Operations and Reporting
FOCUS
AIR QUALITY MONITORING



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July 13, 2010

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

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

From May 10th to May 13th Alberta Environment conducted a calibration audit of all instruments within the PASZA network; for more information regarding the audit please contact Shelly Pruden, Program Manager at 780.833.4343.

During the month of May the following events were noted:

Henry Pirker Station:

- ◆ The measured ambient air quality was within the Alberta Ambient Air Quality Objectives (AAAQO) for the Henry Pirker station.
- ◆ All analyzers and sensors at the Henry Pirker station had an operational uptime greater than 90% for the month of May, with the exception of the PM_{2.5} TEOM analyzer which was less than 90% operational – **Alberta Environment Reference # 236223**.
- ◆ Alberta Environment calibration audit was performed on May 12th at the Henry Pirker station.

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 May.
- ◆ Alberta Environment calibration audit was performed on May 11th at the Evergreen Park station.

Smoky Heights Station:

- ◆ The measured ambient air quality was within the AAAQO for the Smoky Heights station.
- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90% for the month of May.
- ◆ Alberta Environment calibration audit was performed on May 10th at the Smoky Heights station.

Beaverlodge Station:

- ◆ The measured ambient air quality was within the AAAQO for the Beaverlodge station.

- ◆ All analyzers / sensors at the Beaverlodge station had an operational uptime greater than 90% for the month of May, with the exception of the PM_{2.5} TEOM analyzer which was less than 90% operational – **Alberta Environment Reference #237096**.
- ◆ Alberta Environment calibration audit was performed on May 11th at the Beaverlodge station.

Portable – Kinuso Station:

- ◆ The measured ambient air quality was within the AAAQO for the Kinuso station.
- ◆ All analyzers / sensors at the Kinuso station were less than 90% for the month of May - **Alberta Environment Reference #37095**.
- ◆ Alberta Environment calibration audit was performed on May 13th at the Kinuso station.

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 May.
- ◆ Alberta Environment calibration audit was performed on May 10th at the Valleyview station.

Passive Monitoring - 43 Stations throughout the PASZA zone:

There were four duplicate sites sampled in the month of May: Sylvester, Shaftesbury, Eaglesham and Sunset House. The NO₂ passive sampler from Clouston Creek was damaged on route to the lab, there is no 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 0.1 ppb to 1.3 ppb, with a mean of 0.2 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.2 ppb to 2.4 ppb, with a mean of 0.7 ppb.
- Monthly average concentrations for O₃ passives ranged from 29.8 ppb to 44.8 ppb, with a mean of 36.2 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

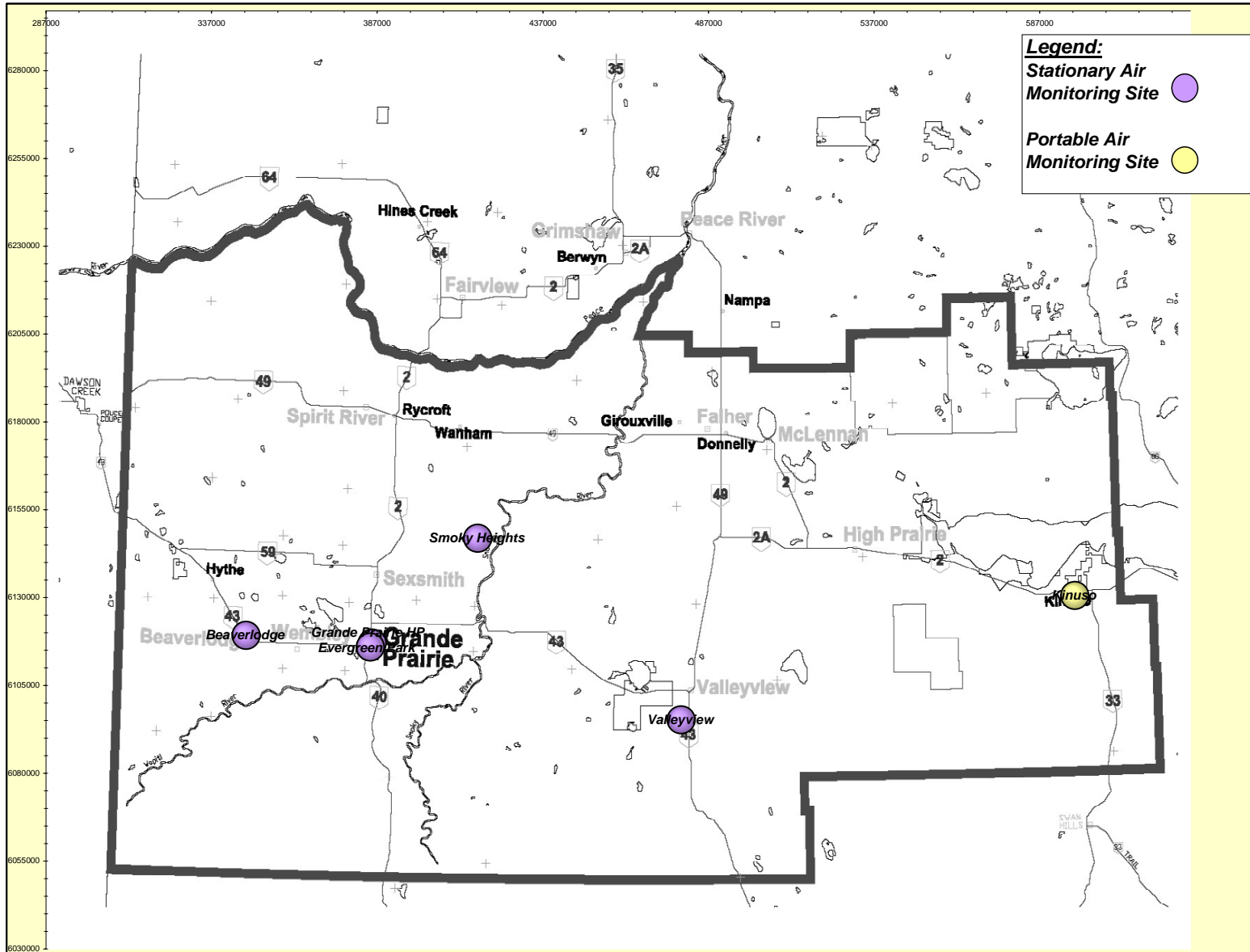


Shelly Pruden
Program Manager



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

Location of PASZA Continuous Monitoring Stations



PASZA Monthly Continuous Data Summary

May-2010 Peace Airshed Zone Association							Maximum Recorded Values				Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	24-hr / 8-hr			
	1-hr	24-hr			1-hr	24-hr		Day	Day		
SO ₂ (ppb)	172	57	Henry Pirker	0.2	0	0	2.4	May-17 22:00	0.5	May-18	100.0%
SO ₂ (ppb)	172	57	Evergreen Park	0.1	0	0	0.8	May-07 10:00	0.2	May-18	99.7%
SO ₂ (ppb)	172	57	Smoky Heights	0.3	0	0	6.4	May-05 03:00	1.3	May-05	99.9%
SO ₂ (ppb)	172	57	Beaverlodge	0.2	0	0	3.7	May-08 03:00	0.8	May-18	99.9%
SO ₂ (ppb)	172	57	Portable-Kinuso	0.1	0	0	1.4	May-16 08:00	0.5	May-16	84.0%
SO ₂ (ppb)	172	57	Valleyview	0.0	0	0	1.8	May-17 09:00	0.1	May-22	99.1%
NO (ppb)			Henry Pirker	0.6	0	0	13.9	May-06 08:00	1.6	May-06	100.0%
NO ₂ (ppb)	212	106	Henry Pirker	4.8	0	0	26.6	May-05 23:00	8.8	May-10	100.0%
NO _x (ppb)			Henry Pirker	5.6	0	0	36.1	May-06 08:00	10.0	May-10	100.0%
NO (ppb)			Beaverlodge	0.2	0	0	7.7	May-31 07:00	0.6	May-31	99.9%
NO ₂ (ppb)	212	106	Beaverlodge	1.7	0	0	13.3	May-05 06:00	3.0	May-06	99.9%
NO _x (ppb)			Beaverlodge	2.0	0	0	16.8	May-15 07:00	3.5	May-06	99.9%
NO (ppb)			Portable-Kinuso	0.1	0	0	6.6	May-31 18:00	0.6	May-31	84.0%
NO ₂ (ppb)	212	106	Portable-Kinuso	1.0	0	0	7.6	May-05 21:00	1.8	May-19	84.0%
NO _x (ppb)			Portable-Kinuso	1.1	0	0	9.7	May-31 18:00	2.0	May-19	84.0%
O ₃ (ppb)	82		Henry Pirker	32.0	0	-	56.0	May-18 14:00	40.4	May-28	100.0%
O ₃ (ppb) - 8-hr			Henry Pirker		0				52.9	May-15	
O ₃ (ppb)	82		Beaverlodge	38.8	0	-	61.4	May-14 17:00	49.6	May-15	99.9%
O ₃ (ppb) - 8-hr			Beaverlodge		0				58.5	May-15	
O ₃ (ppb)	82		Portable-Kinuso	32.4	0	-	60.9	May-12 19:00	49.3	May-16	83.9%
O ₃ (ppb) - 8-hr			Portable-Kinuso		0				57.3	May-12	
CO (ppm)	13		Henry Pirker	0.19	0	-	0.4	May-14 22:00	0.2	May-18	100.0%
CO (ppm) - 8-hr		5	Henry Pirker		0				0.3	May-15	
THC (ppm)			Henry Pirker	2.02	-	-	2.5	May-07 03:00	2.3	May-06	96.8%
TRS (ppb)			Henry Pirker	0.2	-	-	1.5	May-01 08:00	0.4	May-25	100.0%
TRS (ppb)			Evergreen Park	0.5	-	-	1.2	May-15 04:00	0.6	May-03	99.6%
TRS (ppb)			Smoky Heights	0.3	-	-	1.9	May-03 03:00	0.5	May-03	99.9%
TRS (ppb)			Portable-Kinuso	0.4	-	-	2.4	May-04 04:00	0.9	May-04	84.0%
H ₂ S (ppb)	10	3	Valleyview	0.1	0	0	1.3	May-16 16:00	0.2	May-21	99.1%
PM _{2.5} (µg/m ³)	80	30	Henry Pirker	8.4	0	0	33.2	May-11 19:00	14.2	May-26	80.5%
PM _{2.5} (µg/m ³)	80	30	Evergreen Park	3.7	0	0	41.7	May-12 14:00	8.7	May-18	99.1%
PM _{2.5} (µg/m ³)	80	30	Smoky Heights	3.3	0	0	41.5	May-13 23:00	8.1	May-18	98.5%
PM _{2.5} (µg/m ³)	80	30	Beaverlodge	7.2	0	0	37.0	May-29 08:00	13.1	May-18	78.5%

PASZA Monthly Continuous Data Summary – continued

May-2010		Peace Airshed Zone Association					Maximum Recorded Values				
							1-hr		24-hr / 8-hr		
RH (%)			Henry Pirker	53.8	-	-	92.0	May-31 07:00	88.6	May-21	100.0%
RH (%)			Evergreen Park	55.8	-	-	98.4	May-31 08:00	94.8	May-21	99.6%
RH (%)			Beaverlodge	53.9	-	-	97.4	May-21 23:00	92.9	May-21	99.9%
RH (%)			Valleyview	58.2	-	-	99.8	May-09 10:00	94.4	May-21	99.1%
SR (W/m ²)			Henry Pirker	182.4	-	-	764.2	May-10 13:00	254.2	May-10	100.0%
Temp (°C)			Henry Pirker	9.3	-	-	25.2	May-18 15:00	18.2	May-18	100.0%
Temp (°C)			Evergreen Park	9.0	-	-	23.5	May-15 18:00	18.0	May-18	99.6%
Temp (°C)			Smoky Heights	8.9	-	-	23.9	May-18 15:00	17.3	May-18	99.9%
Temp (°C)			Beaverlodge	9.0	-	-	23.4	May-15 17:00	16.8	May-18	99.9%
Temp (°C)			Portable-Kinuso	8.4	-	-	27.8	May-18 15:00	19.0	May-16	83.9%
Temp (°C)			Valleyview	8.3	-	-	25.5	May-18 14:00	18.6	May-18	99.1%
WSPD s (km/hr)			Henry Pirker	10.3	-	-	31.0	May-12 13:00	18.6	May-12	99.6%
WSPD s (km/hr)			Evergreen Park	6.5	-	-	25.0	May-12 14:00	13.5	May-02	99.6%
WSPD s (km/hr)			Smoky Heights	12.0	-	-	39.0	May-12 16:00	25.8	May-02	99.9%
WSPD s (km/hr)			Beaverlodge	12.6	-	-	44.0	May-02 13:00	25.1	May-27	99.9%
WSPD s (km/hr)			Portable-Kinuso	6.5	-	-	21.0	May-18 22:00	9.1	May-04	83.9%
WSPD s (km/hr)			Valleyview	6.4	-	-	23.0	May-03 18:00	12.7	May-04	99.1%
WSPD v (km/hr)			Henry Pirker	2.4	-	-	30.0	May-12 16:00	17.9	May-12	99.6%
WSPD v (km/hr)			Evergreen Park	2.0	-	-	25.0	May-12 14:00	12.8	May-02	99.6%
WSPD v (km/hr)			Smoky Heights	3.1	-	-	39.0	May-12 17:00	25.1	May-02	99.9%
WSPD v (km/hr)			Beaverlodge	1.5	-	-	44.0	May-02 13:00	24.8	May-27	99.9%
WSPD v (km/hr)			Portable-Kinuso	0.5	-	-	21.0	May-18 22:00	7.9	May-04	83.9%
WSPD v (km/hr)			Valleyview	2.6	-	-	23.0	May-03 18:00	12.1	May-21	99.1%
WDIR			Henry Pirker	WNW	-	-	-	-	-	-	99.6%
WDIR			Evergreen Park	NW	-	-	-	-	-	-	99.6%
WDIR			Smoky Heights	WNW	-	-	-	-	-	-	99.9%
WDIR			Beaverlodge	NNW	-	-	-	-	-	-	99.9%
WDIR			Portable-Kinuso	S	-	-	-	-	-	-	83.9%
WDIR			Valleyview	NNW	-	-	-	-	-	-	99.1%

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on May 8th (THC), May 17th (SO₂, TRS, NO_x & O₃), May 18th (PM_{2.5}) and May 19th (CO). A tour of the station was conducted on May 25th by the PASZA Administrator – no issues were observed. An Alberta Environment Audit was performed on May 12th.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
NOx/NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	Spans outside target from May 1 st to 3 rd , 5 th , 9 th to 17 th – suspect zero air supply may have been an issue and was checked during May 17 th calibration – no issues after calibration.
CO	TEI	48C	No operational issues observed.
THC	TEI	51-CLT	Spans outside target range from May 6 th to May 8 th due to span cylinder running out on May 7 th . Cylinder replaced on May 8 th . No other operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	One (1) hour was flagged for maintenance on May 5 th – troubleshooting power concerns to unit. One hundred and eight (108) hours were flagged invalid due to analogue / motherboard failing. Another thirty-two (32) hours were flagged for baseline drift. AE Reference #236223 . The motherboard was replaced May 18 th - three (3) hours maintenance along with calibration. One (1) hour was flagged maintenance on May 19 th to clean the PM heads and ensure all modes and signals were set up correctly.
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	Three (3) hours were flagged invalid due to freezing conditions –flatlining.
WD	Met One	020C	No operational issues observed.

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on May 23rd (SO₂, TRS & PM_{2.5}). A DACS/ Communication error occurred on May 11th – two (2) hours were flagged invalid for all parameters. An Alberta Environment Audit was performed on May 11th.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No other operational issues observed, other than above noted DACS error..
TRS	TEI	43C	One (1) hour was flagged invalid on May 23 rd due to tech activity at the station.
PM _{2.5}	R&P	1400AB	One (1) hour was flagged invalid on May 23 rd due to tech activity at the station. A total of four (4) hours were flagged for baseline drift.
ET	Met One/Gill	083D	One (1) hour was flagged invalid on May 23 rd due to tech activity at the station.
RH	Met One/Gill		One (1) hour was flagged invalid on May 23 rd due to tech activity at the station.
WS	Met One/ Gill	010C	One (1) hour was flagged invalid on May 23 rd due to tech activity at the station.
WD	Met One/ Gill	020C	One (1) hour was flagged invalid on May 23 rd due to tech activity at the station.

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on May 26th (TRS, SO₂ & PM_{2.5}). A power failure occurred on May 21st resulting in one (1) hour of invalid data for all parameters. An Alberta Environment Audit was performed on May 10th.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed, other than above noted power failure.
TRS	TEI	43C	No operational issues observed, other than above noted power failure.
PM _{2.5}	R&P	1400AB	A total of ten (10) hours were flagged for baseline drift, and one (1) hour for above noted power failure.
ET	Met One	083D	No operational issues observed, other than above noted power failure.
WS	Met One	010C	No operational issues observed, other than above noted power failure.
WD	Met One	020C	No operational issues observed, other than above noted power failure.

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on May 20th (SO₂, O₃ & NO_x & PM_{2.5}). One (1) hour of data was flagged invalid due to communication/DACS error on May 1st – for all parameters. An Alberta Environment Audit was performed on May 11th.

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No other operational issues observed.
NOx/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	Four (4) hours were flagged maintenance on May 4 th - TEOM was swapped out with the TEOM unit at Henry Pirker (to troubleshoot failures in the Henry Pirker TEOM unit). One (1) hour was flagged invalid on May 30 th – due to power bump. One hundred and fifty-nine (159) hours were flagged invalid due to leak check failure from the Audit performed on May 11 th - Alberta Environment Reference #237096.
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 April 14th (SO₂, TRS, NO_x & O₃). Throughout the month of May the DACS continued to fail (memory configuration corruption) resulting in one hundred and two (102) hours of invalid data for all parameters. The station also had a number of power issues throughout the month (seventeen (17) hours) affecting all parameters. The combined hours resulted in less than 90% operational uptime for all parameters for the month of May – **Alberta Environment Reference #237095**.

An Alberta Environment Audit was performed on May 13th.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	A total of one hundred and nineteen (119) hours were invalidated due to DACS or power failures.
TRS	TEI	43C	A total of one hundred and nineteen (119) hours were invalidated due to DACS or power failures.
NO _x /NO/NO ₂	TEI	42I	A total of one hundred and nineteen (119) hours were invalidated due to DACS or power failures.
O ₃	TEI	49C	A total of one hundred and nineteen (119) hours were invalidated due to DACS or power failures. One (1) hour on May 13 th was flagged invalid due to tech activity at the station.
ET	Met One		A total of one hundred and nineteen (119) hours were invalidated due to DACS or power failures. One (1) hour on May 13 th was flagged invalid due to tech activity at the station.
WS	Met One		A total of one hundred and nineteen (119) hours were invalidated due to DACS or power failures. One (1) hour on May 13 th was flagged invalid due to tech activity at the station.
WD	Met One		A total of one hundred and nineteen (119) hours were invalidated due to DACS or power failures. One (1) hour on May 13 th was flagged invalid due to tech activity at the station.

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed May 24th (SO₂ & H₂S). Seven (7) hours were flagged invalid due to a DACS/communication error on May 24th for all parameters. An Alberta Environment Audit was performed on May 10th.

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed, except above noted DACS error.
H ₂ S	TEI	43A	No operational issues observed, except above noted DACS error.
ET	Gill	Met Pak 3	No operational issues observed, except above noted DACS error.
RH	Gill	Met Pak 3	No operational issues observed, except above noted DACS error.
WS	Gill	Met Pak 3	No operational issues observed, except above noted DACS error.
WD	Gill	Met Pak 3	No operational issues observed, except above noted DACS error.

PASZA
Henry Pirker Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

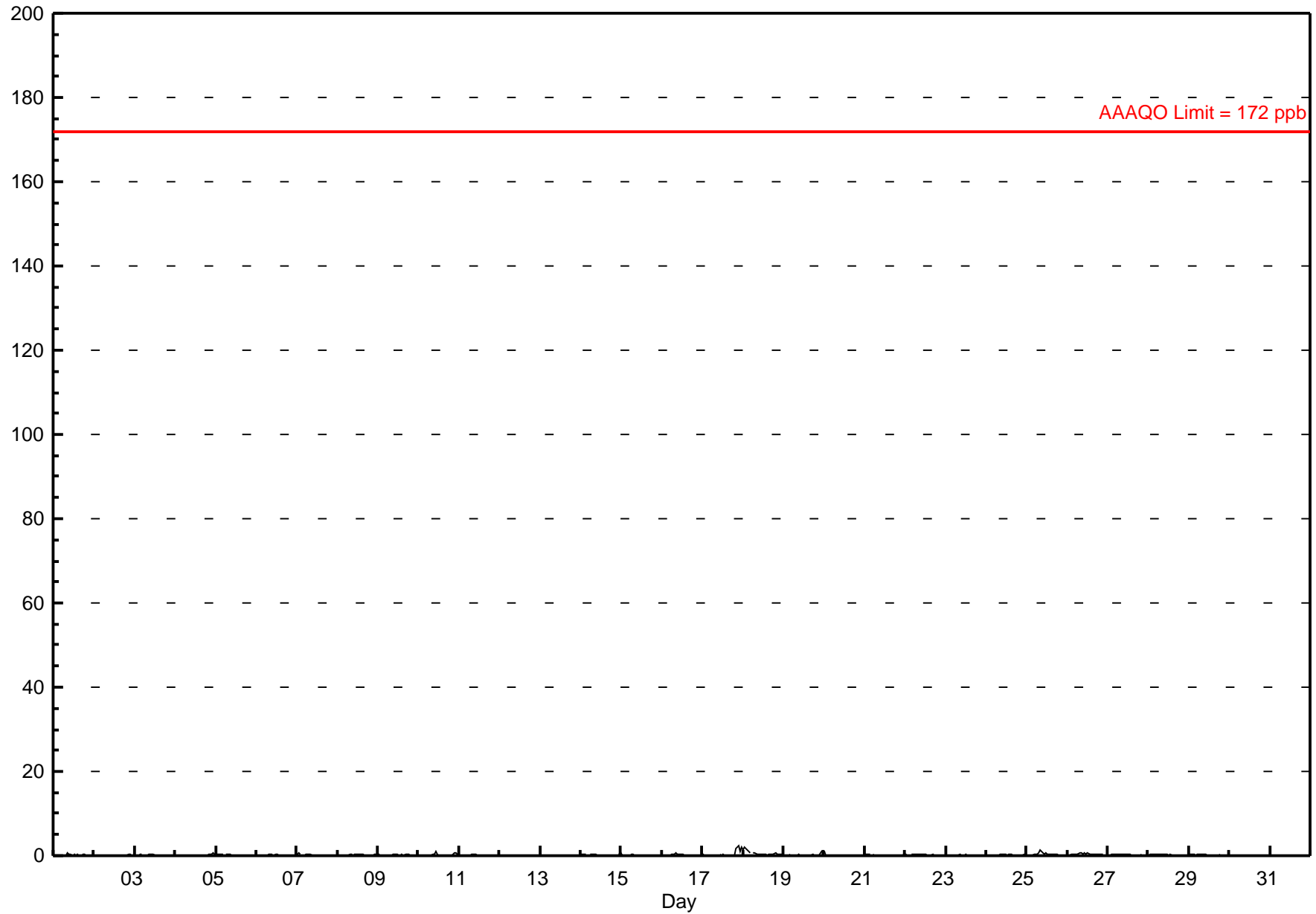
Sulphur Dioxide (SO₂) - ppb

Henry Pirker - May 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 2.4 ppb on May 17 22:00	Maximum Daily Average: 0.5 ppb on May 18		Hours of Data:	706
Minimum Value: 0 ppb on May 1 23:00	Minimum Daily Average: 0.0 ppb on May 12		Hours of Missing Data:	38
Maximum Diurnal Average: 0.3 ppb at hour 9	Minimum Diurnal Average: 0.1 ppb at hour 20		Hours of Calibration:	38
Monthly Average: 0.16 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.4 P ₉₉ = 1.2		Percent Operational Time:	100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-May	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6	
2-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
3-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
4-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	0.6	
5-May	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
6-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
7-May	0	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
8-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
9-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
10-May	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0.2	0.9	
11-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
12-May	0	0	A	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
13-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
14-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.2	0.9	
15-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
16-May	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6	
17-May	0	0	0	0	0	A	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	2	2	1	2	0.5	2.4
18-May	1	2	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.5	1.9	
19-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.2	1.1	
20-May	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1	
21-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
22-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
23-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
24-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
25-May	A	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.3	
26-May	0	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	A	0	0.3	0.7	
27-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.4	
28-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.2	0.4	
29-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.2	0.4	
30-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.2	
31-May	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	
	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Diurnal Average	
	1.4	1.9	1.2	0.9	0.5	0.4	0.8	0.8	1.3	0.6	0.9	0.6	0.6	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.6	1.7	2.4	1.1	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

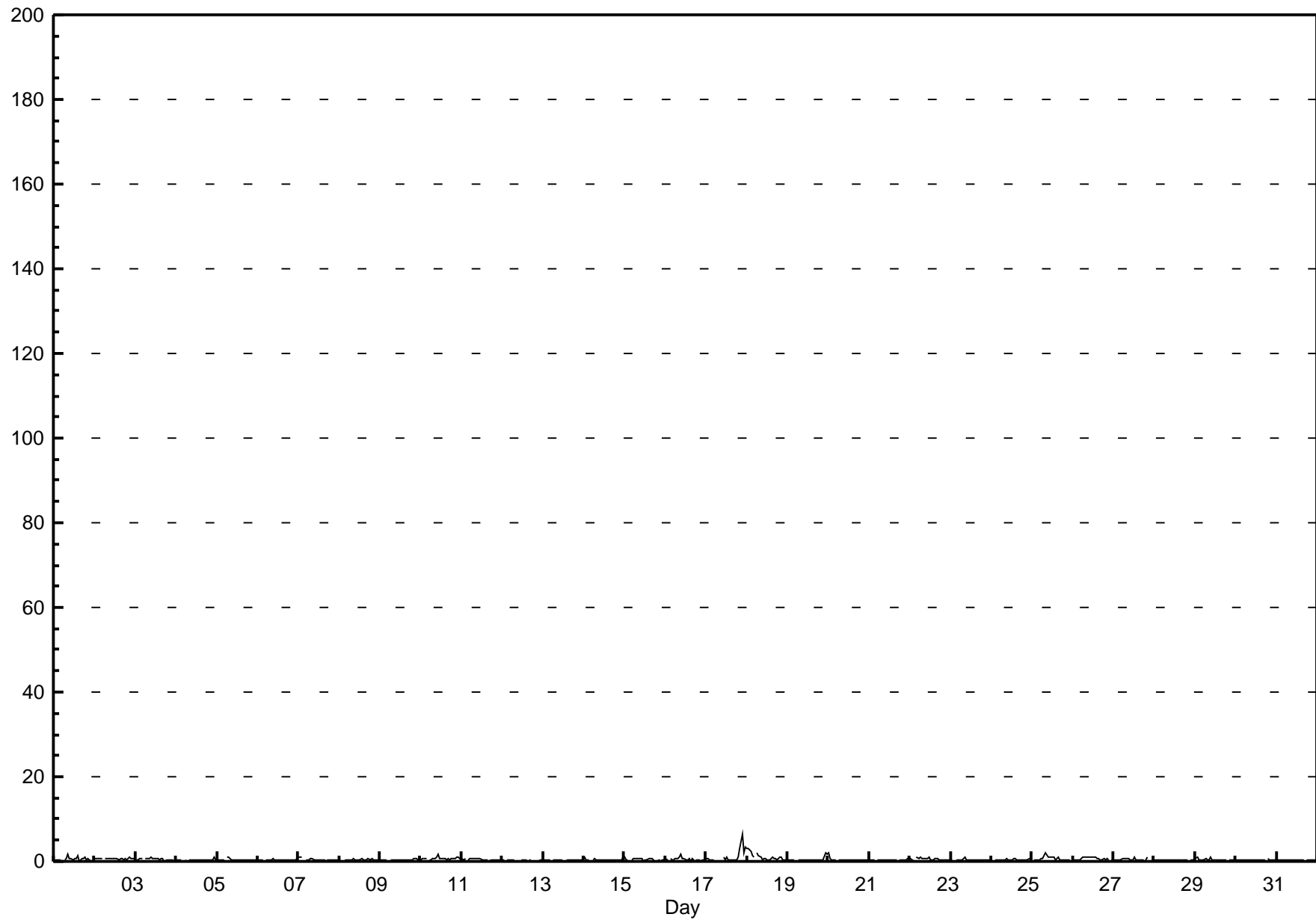
Henry Pirker - May 2010

Maximum Value: 6.5 ppb on May 17 22:00		Maximum Daily Average: 1.2 ppb on May 17		Hours in Service: 744																						
Minimum Value: 0 ppb on May 7 17:00		Minimum Daily Average: 0.3 ppb on May 12		Hours of Data: 706																						
Maximum Diurnal Average: 0.6 ppb at hour 9		Minimum Diurnal Average: 0.4 ppb at hour 18		Hours of Missing Data: 38																						
Monthly Average: 0.53 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.5 P ₉₀ = 0.8 P ₉₉ = 2.0		Hours of Calibration: 38																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-May	0	0	0	0	0	A	0	1	2	1	1	0	1	1	2	0	1	1	1	0	1	0	0	0	0.5	1.7
2-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	0	1	0	1	1	1	1	0.6	1.1
3-May	0	0	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0.5	1.0
4-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	1.0
5-May	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0
6-May	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.0
7-May	1	1	1	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.0
8-May	0	0	A	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0.5	0.8
9-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	0.5	0.5
10-May	0	1	1	1	A	0	0	1	1	1	2	1	1	1	1	0	1	0	1	1	1	1	1	1	0.6	1.5
11-May	1	0	1	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0.4	0.6
12-May	0	0	A	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.5
13-May	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
14-May	1	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	1.5
15-May	1	0	0	A	1	1	1	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0.4	1.0
16-May	1	0	A	1	0	0	1	1	1	2	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0.5	1.6
17-May	1	1	0	0	0	A	0	C	C	C	1	0	1	0	0	0	0	0	0	1	3	6	2	3	1.2	6.5
18-May	3	3	2	1	1	A	2	1	1	0	1	1	0	0	1	1	1	1	0	1	1	0	0	0	1.1	3.0
19-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0.6	2.0
20-May	2	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.9
21-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.9
22-May	1	0	0	A	1	1	1	1	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0.5	1.0
23-May	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
24-May	0	A	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0.5	0.7
25-May	A	0	0	0	0	1	1	1	1	2	1	1	1	1	0	1	0	0	0	0	0	0	0	A	0.7	1.9
26-May	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	0	A	0	0.6	1.0
27-May	0	0	0	0	0	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	1	A	0	0	0.5	1.0
28-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.5	0.5
29-May	1	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.5	0.9
30-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.3	0.8
31-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5
		0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	Diurnal Average
		3.0	3.0	2.5	1.5	1.0	0.8	2.2	1.5	1.9	1.6	1.5	1.1	1.0	0.9	1.5	1.0	0.8	0.6	1.1	1.0	3.0	6.5	2.1	3.5	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

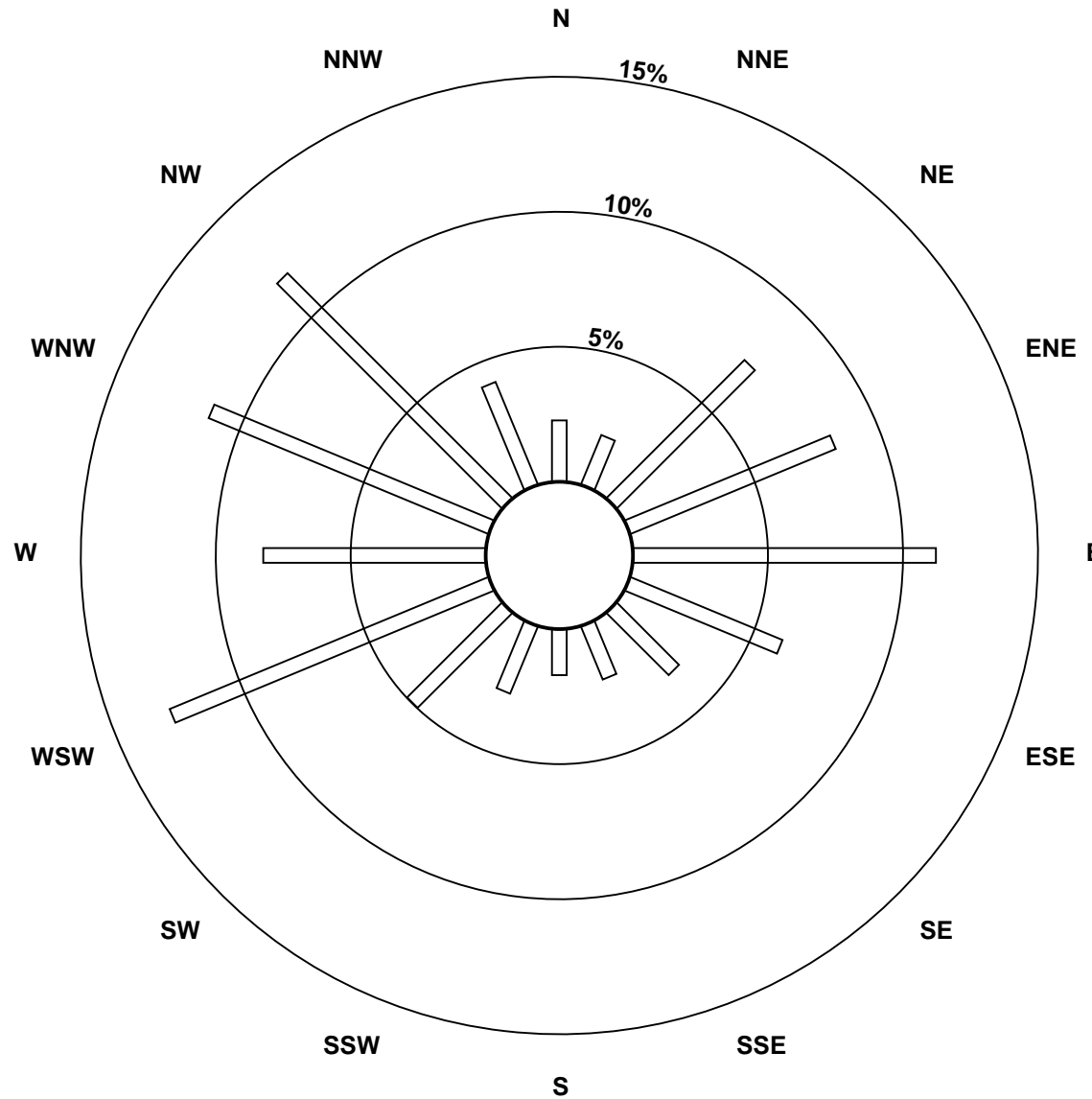
Henry Pirker - May 2010



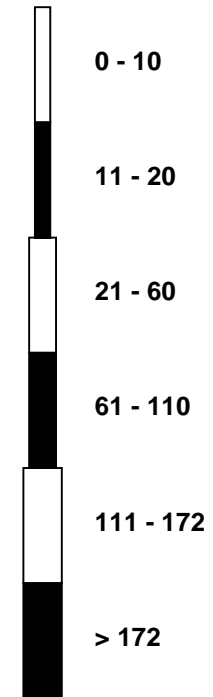
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Henry Pirker - May 2010



Pollutant Classes (ppb)

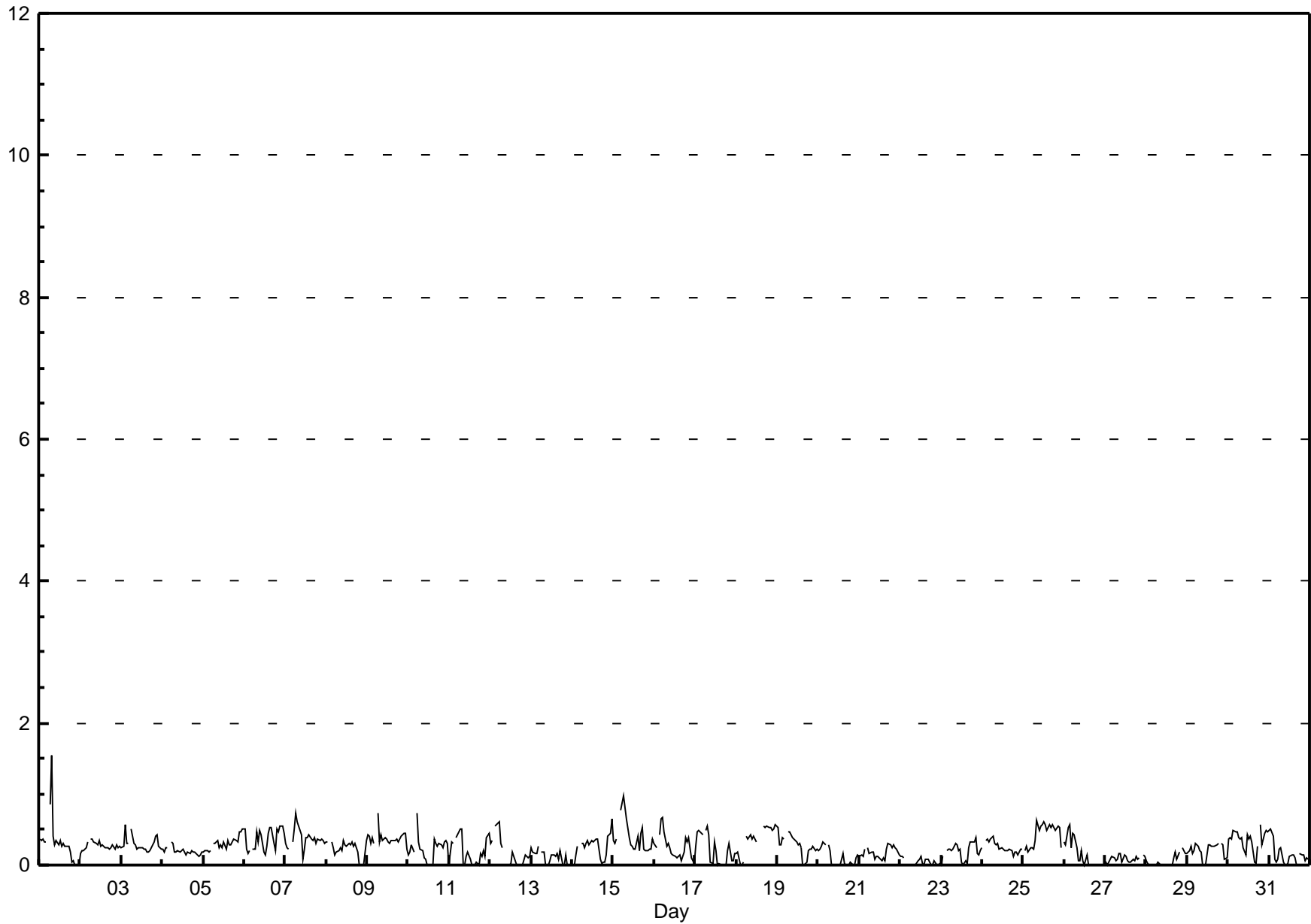


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Henry Pirker - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.5 ppb on May 1 08:00 Maximum Daily Average: 0.4 ppb on May 25		Hours in Service: 744 Hours of Data: 706 Hours of Missing Data: 38 Hours of Calibration: 38 Percent Operational Time: 100.0																																														
Minimum Value: 0 ppb on May 1 22:00 Maximum Diurnal Average: 0.4 ppb at hour 7 Monthly Average: 0.24 ppb		Minimum Daily Average: 0.0 ppb on May 22 Minimum Diurnal Average: 0.2 ppb at hour 16 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 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-May	0	0	0	0	0	A	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5																						
2-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																						
3-May	0	0	1	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6																						
4-May	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																						
5-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5																						
6-May	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	1	0	0.4	0.5																						
7-May	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7																						
8-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4																						
9-May	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7																						
10-May	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7																						
11-May	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																						
12-May	0	0	A	1	1	1	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6																						
13-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
14-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	0.7																						
15-May	0	0	0	A	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	1.0																						
16-May	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7																						
17-May	0	0	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																						
18-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																						
19-May	1	0	0	0	0	A	0	0	0	0	0	0	0	0	C	C	C	1	1	1	1	1	0	1	0.4	0.6																						
20-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5																						
21-May	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																						
22-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																						
23-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4																						
24-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																						
25-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																						
26-May	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6																						
27-May	0	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-May	0	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																						
29-May	0	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																						
30-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	0.4	0.6																						
31-May	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.1	0.5																						
																								0.2	0.2	0.3	0.3	0.3	0.3	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	Diurnal Average
																								0.5	0.5	0.6	0.6	0.8	0.9	1.0	1.5	0.7	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	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																																																

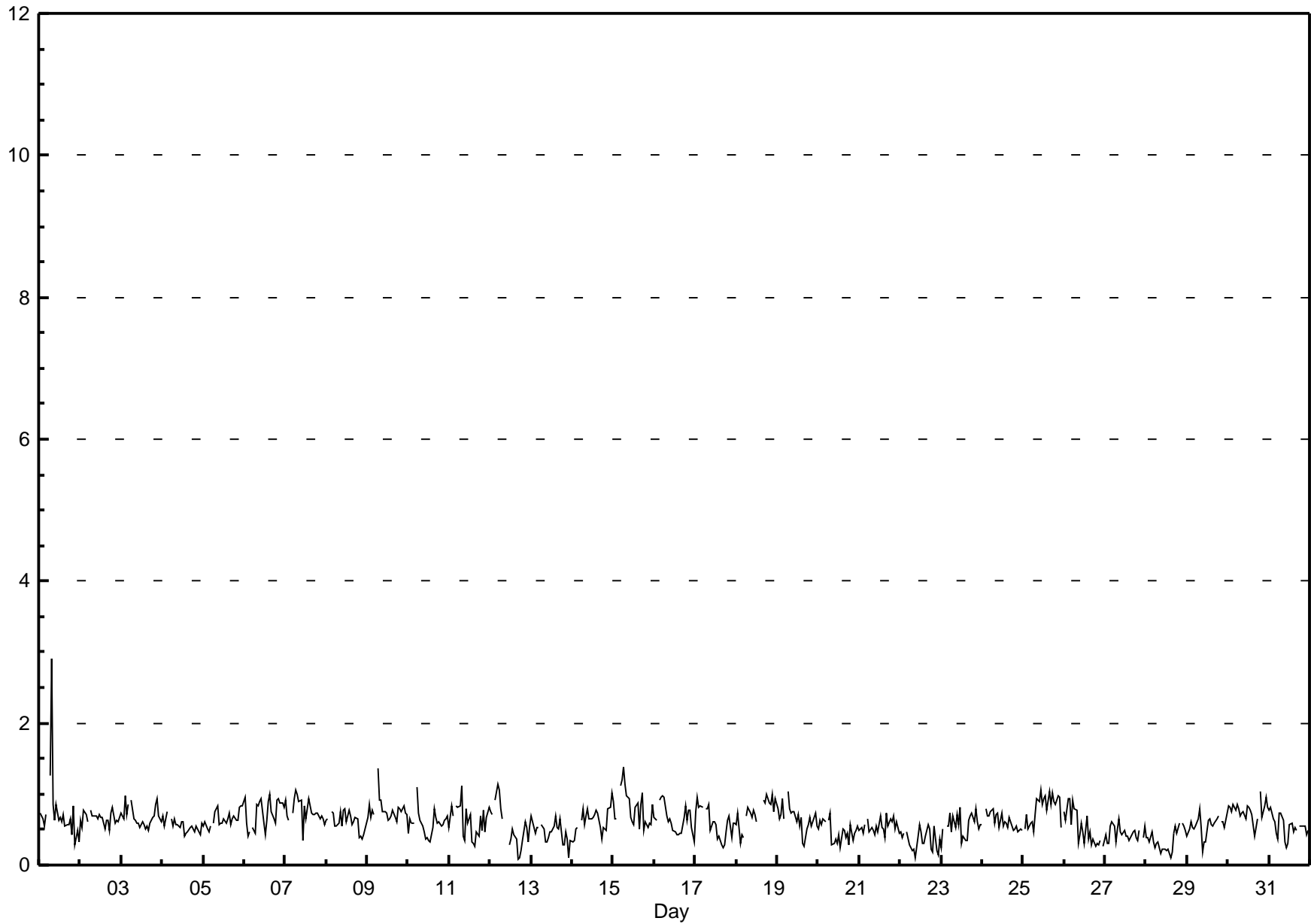


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

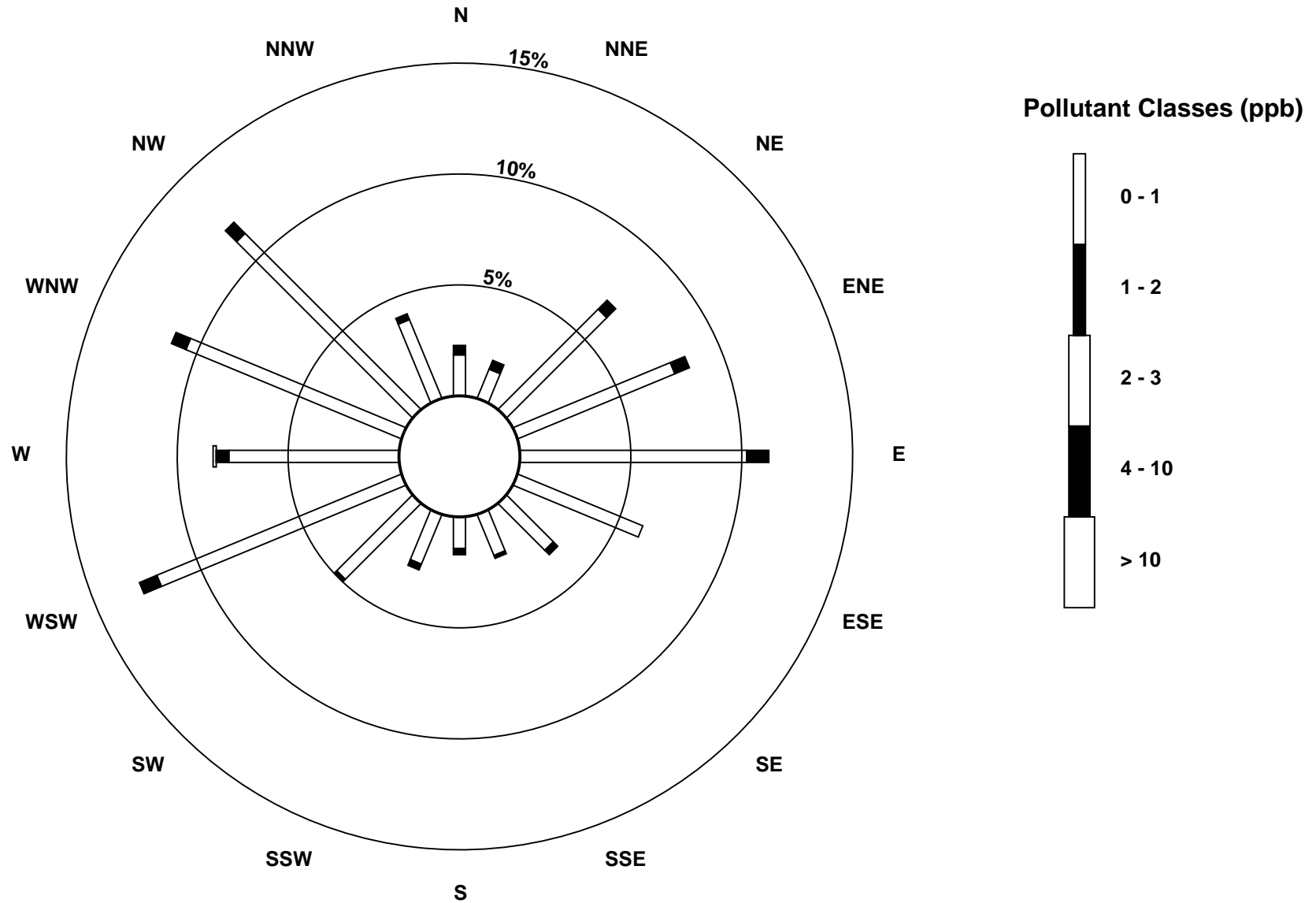
Henry Pirker - May 2010

Maximum Value: 2.9 ppb on May 1 08:00		Maximum Daily Average: 0.8 ppb on May 15		Hours in Service: 744																						
Minimum Value: 0 ppb on May 12 17:00		Minimum Daily Average: 0.3 ppb on May 28		Hours of Data: 706																						
Maximum Diurnal Average: 0.8 ppb at hour 8		Minimum Diurnal Average: 0.5 ppb at hour 16		Hours of Missing Data: 38																						
Monthly Average: 0.61 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.9 P ₉₉ = 1.1		Hours of Calibration: 38																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-May	1	1	1	1	1	A	1	3	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0.7	2.9
2-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.7	0.8
3-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.7	1.0
4-May	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	1	1	0	0	1	0	0	1	0.6	0.8
5-May	1	1	1	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
6-May	1	1	0	0	A	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
7-May	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
8-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0.6	0.8
9-May	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	1.4
10-May	0	1	1	1	A	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0.6	1.1
11-May	1	1	1	A	1	1	1	1	0	0	1	1	1	0	0	0	0	0	1	0	1	0	1	1	0.6	1.1
12-May	1	1	A	1	1	1	1	1	C	C	C	0	0	1	0	0	0	0	0	0	1	1	0	1	0.5	1.1
13-May	1	1	0	1	1	A	1	1	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0.5	0.7
14-May	0	0	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	1	0.6	1.0
15-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0.8	1.4
16-May	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	0	0.6	1.0
17-May	1	1	1	1	1	A	1	1	1	0	1	1	1	0	0	0	0	0	0	1	1	0	1	1	0.6	0.9
18-May	1	1	0	0	0	A	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	0.7	1.0
19-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	0.7	1.0
20-May	1	1	1	1	1	A	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0.5	0.7
21-May	0	1	0	1	A	1	0	1	0	0	1	0	1	1	1	0	1	1	1	1	1	1	1	0	0.5	0.7
22-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0.3	0.6
23-May	0	1	A	1	1	1	0	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0.6	0.8
24-May	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	1	0	0.6	0.8
25-May	A	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.8	1.1
26-May	1	1	1	1	1	1	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	A	0.5	0.9
27-May	0	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.7
28-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0.3	0.6
29-May	0	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	A	1	1	1	0.6	0.8
30-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	1	1	1	1	1	0.8	1.0
31-May	1	1	1	1	0	0	1	1	1	0	0	0	1	1	0	1	0	A	1	1	1	1	0	0	0.5	0.8
		0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	Diurnal Average
		1.0	0.9	1.0	0.9	1.1	1.2	1.4	2.9	1.0	0.9	1.1	0.9	0.9	1.0	0.9	1.0	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								



Pollutant Rose

Total Reduced Sulphur (TRS) - ppb
Henry Pirker - May 2010



Hourly Averages

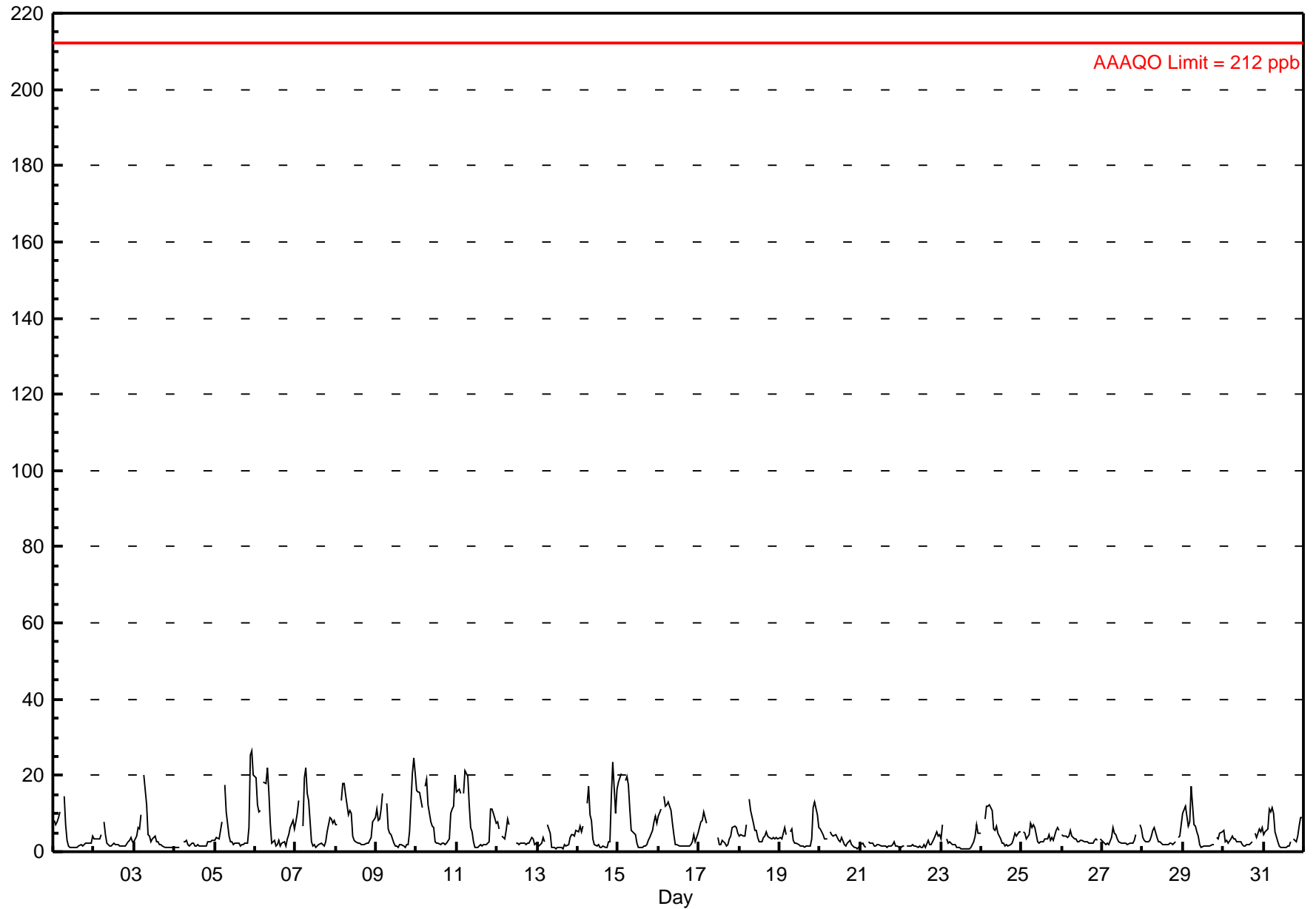
Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 26.6 ppb on May 5 23:00	Maximum Daily Average: 8.8 ppb on May 10
Minimum Value: 1 ppb on May 23 16:00	Hours of Data: 705
Maximum Diurnal Average: 10.7 ppb at hour 7	Hours of Missing Data: 39
Monthly Average: 4.82 ppb	Hours of Calibration: 39
Minimum Daily Average: 1.7 ppb on May 21	Percent Operational Time: 100.0
Minimum Diurnal Average: 1.7 ppb at hour 16	
Percentiles: P ₁ = 0.9 P ₁₀ = 1.3 Q ₁ = 1.8 Median = 2.9 Q ₃ = 6.1 P ₉₀ = 11.2 P ₉₉ = 20.9	

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-May	8	7	8	9	11	A	14	7	3	2	1	1	1	1	1	1	2	1	2	2	2	2	4	4.1	14.4	
2-May	3	3	3	3	5	A	8	4	2	2	2	2	2	2	1	1	1	1	1	2	3	3	4	3	2.7	8.0
3-May	3	4	6	6	10	A	20	12	5	4	2	3	4	3	3	2	2	2	1	1	1	1	1	1	4.2	20.0
4-May	1	1	1	1	A	3	3	3	2	2	2	2	2	2	2	2	1	1	1	1	3	3	3	3	1.9	3.0
5-May	3	4	3	6	8	A	17	10	4	3	3	2	2	2	1	2	2	2	2	2	6	25	27	20	6.8	26.6
6-May	19	12	10	11	A	18	18	22	15	7	2	3	1	2	3	2	2	3	2	3	5	6	8	6	7.9	22.0
7-May	8	10	13	A	7	19	22	15	13	3	2	2	1	2	2	2	2	2	3	5	9	9	8	8	7.2	21.8
8-May	7	7	A	13	18	18	15	10	11	10	4	3	3	2	2	2	2	2	2	2	3	4	8	9	6.8	18.0
9-May	11	8	8	11	15	A	13	6	5	4	2	1	1	2	2	1	1	1	2	2	5	21	24	21	7.4	24.5
10-May	16	16	16	12	A	17	19	12	8	7	6	2	2	2	2	2	2	2	2	3	10	11	12	20	8.8	20.1
11-May	16	16	15	A	15	21	20	12	6	5	3	1	1	2	2	2	2	2	2	3	11	11	10	7	8.1	21.2
12-May	8	6	A	4	3	6	9	7	C	C	C	2	2	2	2	2	2	2	2	2	4	3	2	2	3.6	8.7
13-May	2	1	2	4	3	A	7	5	1	1	1	1	1	1	1	1	2	2	2	4	5	4	4	6	2.6	7.0
14-May	5	7	5	7	A	13	17	10	8	3	2	1	2	1	1	1	1	1	2	3	15	24	10	17	6.8	23.5
15-May	18	19	21	A	19	20	18	11	5	5	4	2	1	1	1	1	2	2	3	4	6	8	9	7	8.1	20.6
16-May	9	11	A	15	12	12	13	11	7	4	2	2	1	1	2	2	1	2	2	2	3	4	3	5	5.4	14.6
17-May	6	8	8	10	8	A	14	C	C	C	C	4	2	2	3	2	2	2	3	4	6	7	6	5	5.4	14.1
18-May	4	4	4	4	7	A	14	11	8	6	6	4	3	2	4	4	5	4	4	3	4	3	4	3	5.0	14.0
19-May	4	3	5	7	4	A	5	6	3	2	2	1	1	1	1	1	2	2	3	11	13	10	6	4.2	13.1	
20-May	6	5	4	3	3	A	5	5	4	4	4	3	3	4	2	2	2	3	3	2	1	1	1	1	3.1	5.8
21-May	2	2	1	1	A	2	2	2	2	2	2	2	1	2	2	1	1	1	2	2	3	2	2	1	1.7	2.7
22-May	1	2	1	A	2	2	1	2	2	1	1	2	1	1	2	1	3	2	2	3	4	5	4	4	2.1	5.3
23-May	3	7	A	3	2	3	2	2	2	1	1	1	1	1	1	1	1	1	1	3	4	7	5	5	2.4	7.1
24-May	5	A	9	12	12	12	11	6	6	7	5	3	2	2	2	2	2	2	2	3	5	4	5	5	5.3	12.3
25-May	A	5	5	3	5	7	6	7	6	2	2	3	2	3	3	3	5	3	4	3	6	6	6	A	4.4	7.4
26-May	5	4	4	4	4	6	4	3	3	3	2	3	3	3	3	3	2	2	2	3	3	3	A	3	3.3	5.6
27-May	3	2	2	2	2	4	6	5	4	3	3	2	2	2	2	2	2	2	2	3	4	A	7	6	3.3	7.0
28-May	4	3	3	3	3	4	6	6	4	3	3	2	2	2	2	2	2	2	2	3	A	4	4	7	3.2	7.2
29-May	10	12	9	7	8	17	7	7	5	4	2	1	2	1	1	1	1	2	2	A	4	3	5	5	5.1	17.3
30-May	6	2	3	2	3	4	3	3	3	3	3	2	2	1	2	2	2	3	A	5	4	6	5	7	3.3	6.5
31-May	5	5	6	11	10	12	10	5	2	2	1	1	1	1	1	2	3	A	3	3	4	7	9	9	4.9	11.6
	6.7	6.7	6.6	6.5	7.6	10.4	10.7	7.6	5.2	3.6	2.5	2.2	1.8	1.8	1.9	1.7	2.0	1.9	2.2	2.8	5.0	7.0	6.9	6.9	Diurnal Average	
	19.5	19.3	20.6	14.6	18.7	21.2	21.8	22.0	15.5	10.2	6.3	3.7	4.3	3.6	3.8	4.0	5.3	4.1	3.8	5.2	14.6	25.2	26.6	20.7	Diurnal Maximum	

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

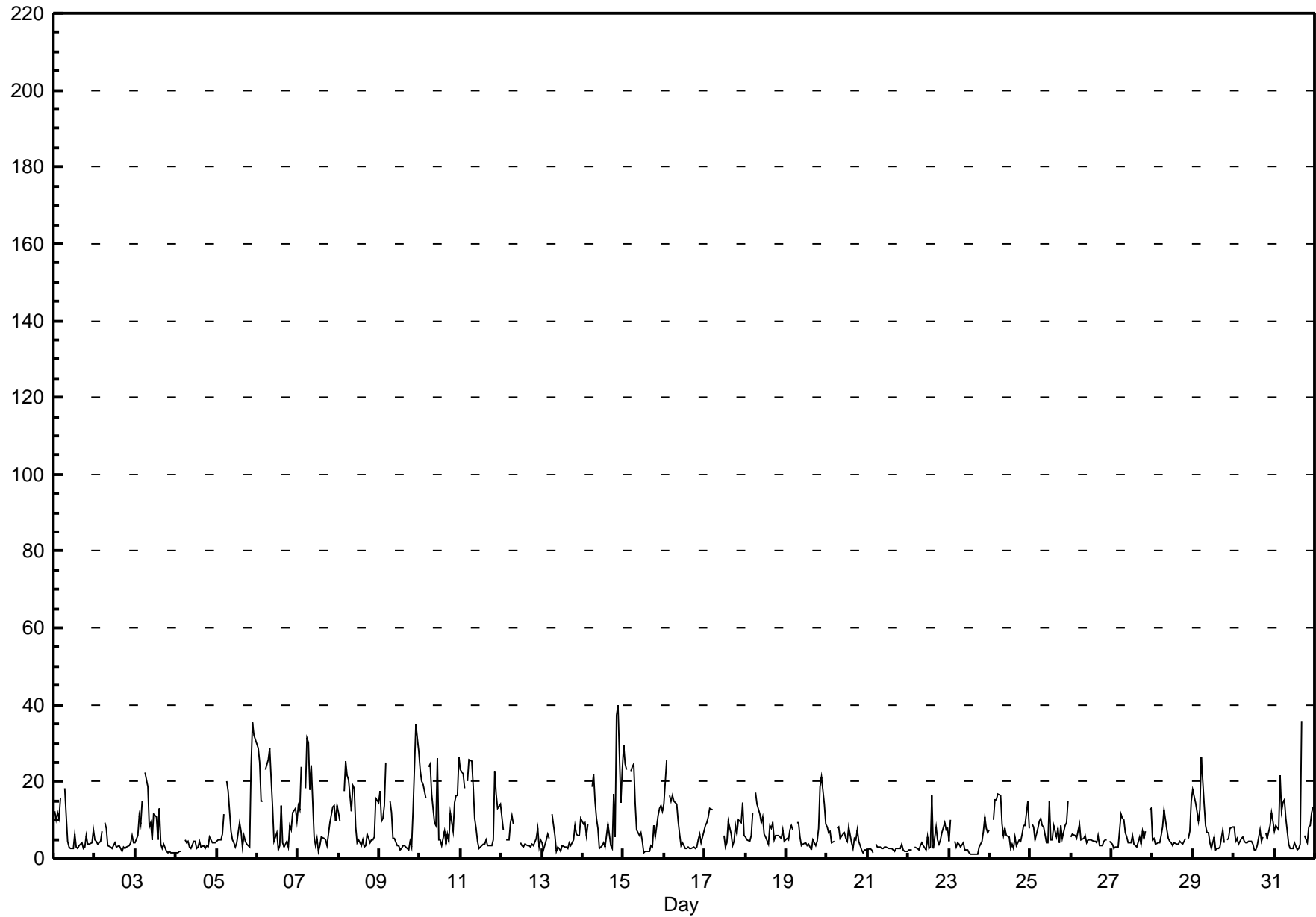


Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - May 2010

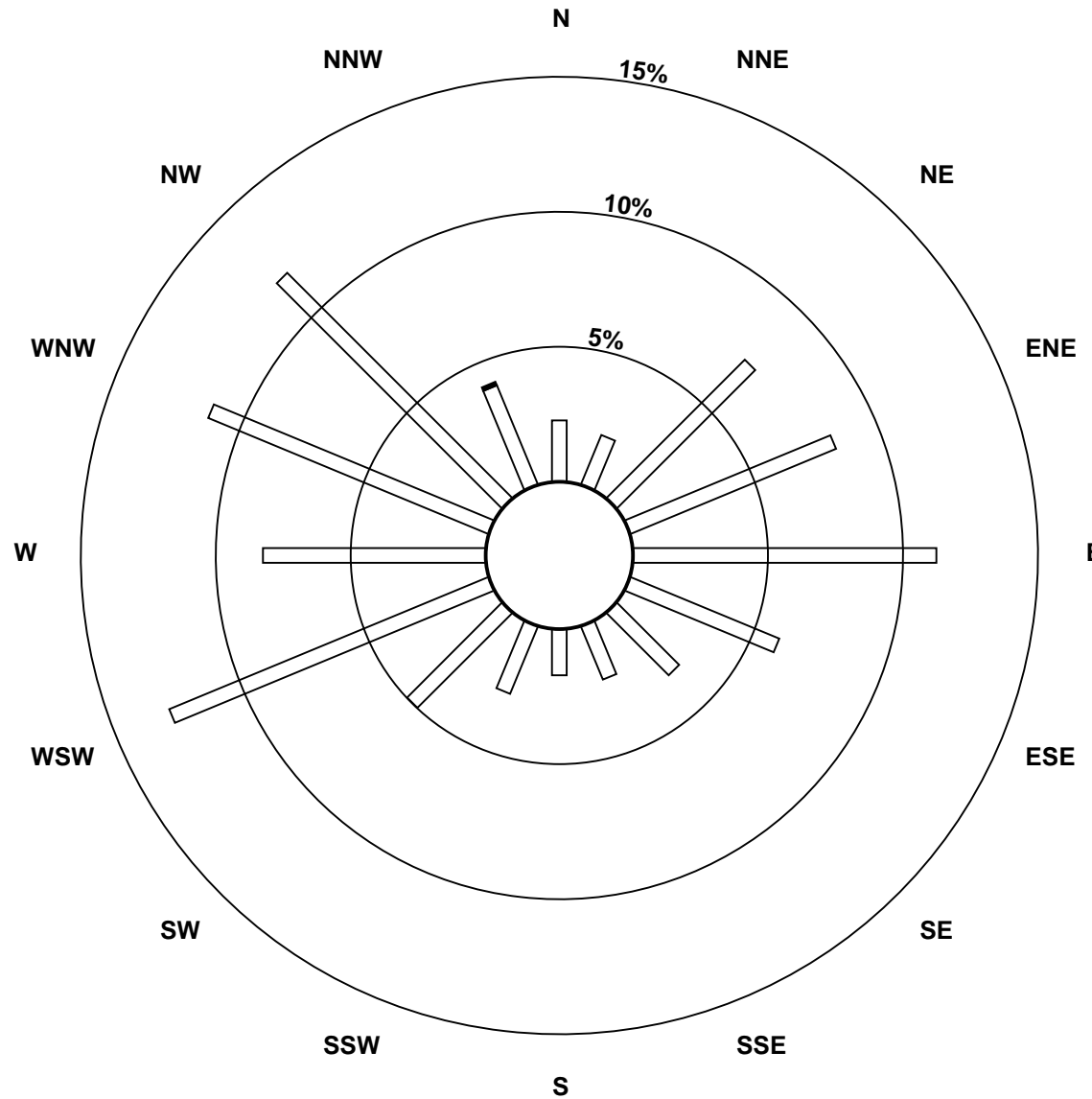
Maximum Value: 39.9 ppb on May 14 22:00		Maximum Daily Average: 13.7 ppb on May 10		Hours in Service: 744																						
Minimum Value: 1 ppb on May 23 16:00		Minimum Daily Average: 2.6 ppb on May 21		Hours of Data: 705																						
Maximum Diurnal Average: 14.7 ppb at hour 6		Minimum Diurnal Average: 3.6 ppb at hour 14		Hours of Missing Data: 39																						
Monthly Average: 7.83 ppb		Percentiles: P ₁ = 1.5 P ₁₀ = 2.5 Q ₁ = 3.5 Median = 5.2 Q ₃ = 9.5 P ₉₀ = 16.6 P ₉₉ = 31.1		Hours of Calibration: 39																						
				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-May	12	10	12	11	16	A	18	11	5	3	3	6	3	3	3	4	3	3	6	4	4	4	7	6.6	18.3	
2-May	5	4	4	4	7	A	9	8	3	3	2	3	4	3	3	2	2	3	2	3	3	4	6	4	4.1	9.5
3-May	4	6	11	9	15	A	22	18	8	9	5	12	11	5	13	4	3	4	2	2	2	2	1	2	7.4	22.5
4-May	2	2	2	2	A	5	4	4	3	3	4	4	3	3	4	3	3	2	3	3	5	4	4	4	3.4	5.5
5-May	4	5	5	6	11	A	20	17	7	5	4	3	4	9	7	3	6	5	4	3	24	36	32	31	10.9	35.6
6-May	29	25	15	15	A	23	26	29	21	13	4	7	2	3	14	4	3	4	3	9	7	12	13	10	12.7	28.9
7-May	14	13	24	A	18	31	30	18	24	5	3	5	2	3	6	5	5	3	6	9	13	14	10	14	12.0	31.3
8-May	12	10	A	17	25	21	20	12	19	18	8	4	5	3	5	3	3	6	4	5	5	5	16	15	10.6	25.5
9-May	17	10	10	14	25	A	15	12	5	5	3	2	3	3	3	2	2	4	3	12	35	31	28	10.9	35.1	
10-May	23	20	19	15	A	24	24	17	9	8	26	5	3	7	4	7	5	12	7	14	16	17	26	13.7	26.5	
11-May	23	22	18	A	20	26	25	19	10	8	4	3	3	4	4	5	3	3	3	5	23	17	13	14	12.1	25.6
12-May	11	8	A	5	5	9	11	9	C	C	C	4	3	3	4	3	3	3	4	3	5	8	3	5	5.6	11.3
13-May	4	2	5	6	5	A	11	6	2	3	3	2	3	3	3	2	4	4	5	9	6	6	6	10	4.8	11.5
14-May	9	9	6	9	A	19	22	15	10	8	3	3	4	3	6	9	3	2	17	5	37	40	14	23	12.1	39.9
15-May	29	25	23	A	23	24	24	14	7	6	7	4	2	2	2	2	3	3	8	5	11	13	14	12	11.6	29.3
16-May	14	26	A	17	15	16	15	14	10	7	3	4	2	2	3	3	3	3	2	3	5	6	4	7	8.0	25.6
17-May	8	9	11	13	13	A	25	C	C	C	C	6	3	4	10	6	3	4	8	6	10	9	14	6	8.9	24.7
18-May	6	5	4	6	12	A	17	14	12	9	11	6	6	4	9	8	9	5	6	6	5	5	8	4	7.7	17.1
19-May	5	5	7	8	7	A	9	9	5	4	4	4	3	4	3	2	5	3	4	8	19	21	14	9	7.1	21.3
20-May	8	7	7	4	4	A	8	8	5	6	7	5	5	8	4	3	5	5	7	5	2	2	2	2	5.2	8.4
21-May	2	3	2	2	A	4	3	3	3	3	3	3	3	3	2	2	3	3	3	3	4	2	2	2	2.6	3.7
22-May	2	2	2	A	3	3	2	3	4	3	2	6	3	3	16	3	8	5	4	5	7	9	7	8	4.8	16.4
23-May	5	10	A	5	3	4	4	3	4	2	2	2	2	1	1	1	1	1	3	4	7	11	8	7	4.0	10.7
24-May	8	A	10	15	15	17	16	9	6	8	6	6	3	4	3	6	3	5	4	6	8	9	15	8	8.2	16.6
25-May	A	9	8	5	8	10	11	8	8	4	4	15	5	5	9	6	8	4	8	5	9	9	15	A	7.8	15.0
26-May	6	6	6	5	7	9	5	5	6	4	5	5	5	4	4	4	6	3	4	4	5	5	A	5	5.2	9.0
27-May	4	3	3	3	3	11	10	10	7	5	4	4	6	4	4	3	6	4	7	5	7	A	13	13	6.0	13.1
28-May	5	5	4	4	4	6	8	13	8	5	4	4	3	4	4	4	4	4	4	4	A	5	7	15	5.7	14.9
29-May	18	15	12	10	13	27	14	9	7	7	4	3	6	2	3	3	8	4	A	5	5	8	8	8	8.2	26.6
30-May	8	5	5	4	5	6	4	4	4	4	5	4	2	2	4	7	5	6	A	7	5	8	12	10	5.4	12.1
31-May	7	8	8	22	12	15	15	10	4	3	3	2	4	2	3	4	36	A	6	4	8	9	12	14	9.2	35.9
		10.2	9.6	9.1	8.8	11.4	14.7	14.6	11.2	7.8	5.9	5.1	4.7	3.9	3.6	5.3	3.9	5.2	3.8	5.3	5.1	9.3	11.1	10.8	10.7	Diurnal Average
		29.3	25.6	24.0	21.8	25.5	31.3	30.0	28.9	24.4	18.5	26.2	15.0	10.9	9.4	16.4	9.0	35.9	7.5	16.8	9.4	37.5	39.9	32.1	31.0	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								



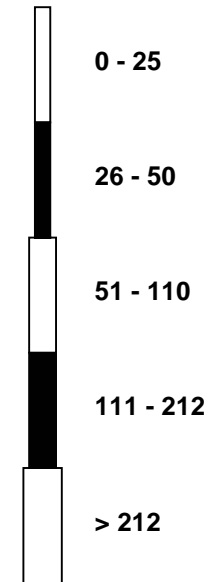
Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb

Henry Pirker - May 2010



Pollutant Classes (ppb)



Hourly Averages

Nitrogen Oxide (NO) - ppb

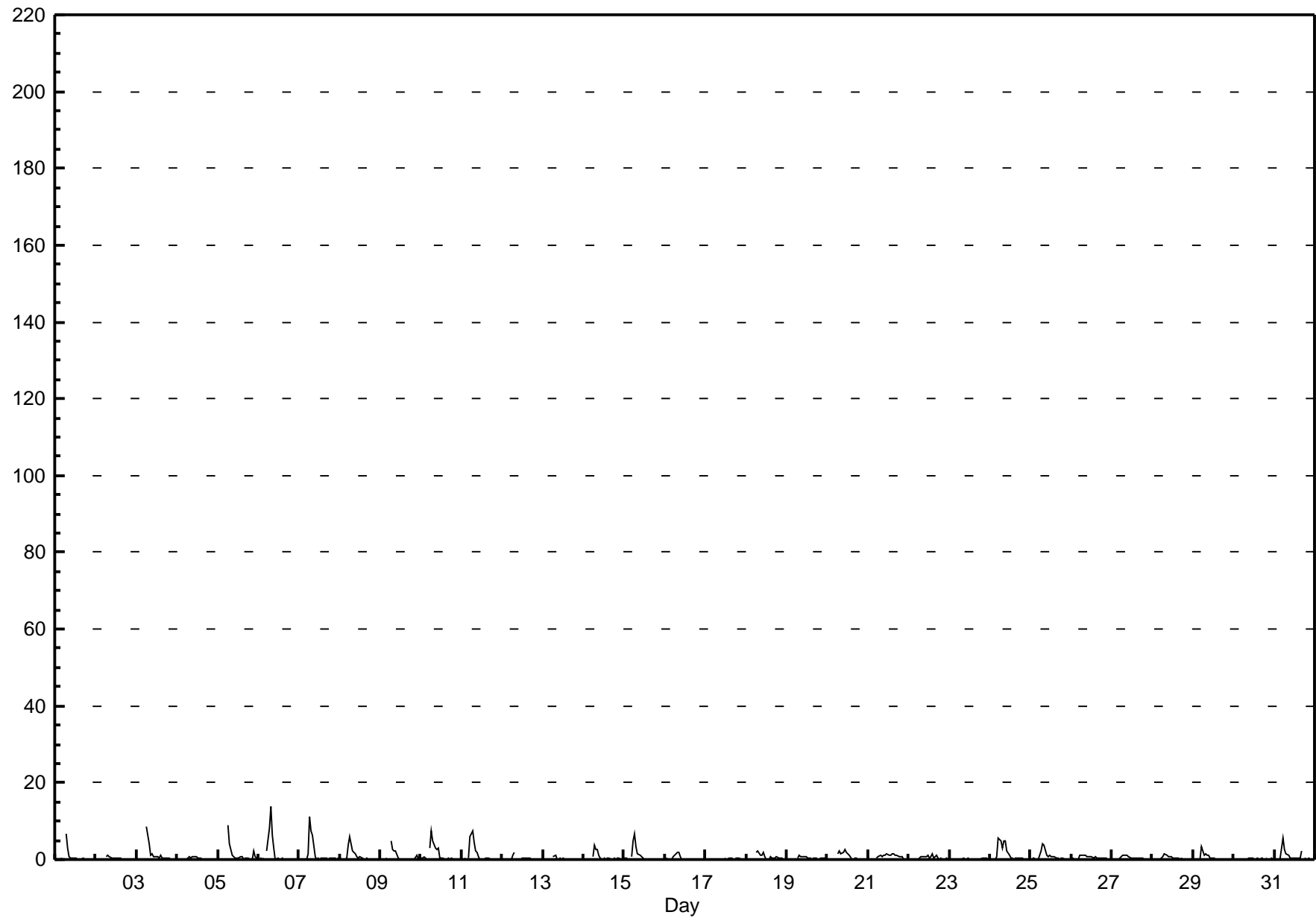
Henry Pirker - May 2010

Number of Exceedences (AAQO):		1-hr: 0 24-hr: 0		Hours in Service:		744																					
Maximum Value: 13.9 ppb on May 6 08:00		Maximum Daily Average: 1.6 ppb on May 6		Hours of Data:		705																					
Minimum Value: 0 ppb on May 1 21:00		Minimum Daily Average: 0.1 ppb on May 23		Hours of Missing Data:		39																					
Maximum Diurnal Average: 3.5 ppb at hour 7		Minimum Diurnal Average: 0.1 ppb at hour 4		Hours of Calibration:		39																					
Monthly Average: 0.64 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.6 P ₉₀ = 1.5 P ₉₉ = 7.3		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-May	0	0	0	0	0	A	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	6.7	
2-May	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0	
3-May	0	0	0	0	0	A	9	4	1	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0.9	8.7	
4-May	0	0	0	0	A	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
5-May	0	0	0	0	0	A	9	4	1	1	0	0	0	1	1	0	0	0	0	0	0	0	2	1	1.0	9.1	
6-May	0	0	0	0	A	2	8	14	6	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1.6	13.9	
7-May	0	0	0	A	0	1	11	7	6	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1.4	11.0	
8-May	0	0	A	0	1	4	6	2	2	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.8	6.0	
9-May	0	0	0	0	0	A	5	3	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.7	5.0	
10-May	0	0	1	0	A	3	7	5	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1.2	7.4	
11-May	0	0	0	A	0	6	8	5	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.1	7.5	
12-May	0	0	A	0	0	0	1	2	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.7	
13-May	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1	
14-May	0	0	0	0	A	1	4	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.8	
15-May	0	0	0	A	1	5	7	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	6.8	
16-May	0	0	A	0	0	1	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9	
17-May	0	0	0	0	0	A	4	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	4.2	
18-May	0	0	0	0	0	A	2	2	1	1	2	1	0	0	1	0	1	0	1	0	0	0	0	0	0.5	2.1	
19-May	0	0	0	0	0	A	0	1	1	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	0.3	1.0	
20-May	0	0	0	0	0	A	1	2	1	2	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0.7	2.6	
21-May	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.7	1.5	
22-May	0	0	0	A	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0.4	1.4	
23-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
24-May	0	A	0	0	1	6	5	3	5	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1.3	5.5	
25-May	A	0	0	0	0	1	2	4	4	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.8	4.0	
26-May	0	0	0	0	0	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	A	0.5	1.1	
27-May	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0.4	1.2	
28-May	0	0	0	0	0	0	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0.3	1.7	
29-May	0	0	0	0	0	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	3.2	
30-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.1	0.4	
31-May	0	0	0	1	3	6	3	2	1	1	0	0	0	0	0	0	2	A	0	0	0	0	0	0	0.9	5.8	
		0.1	0.1	0.1	0.1	0.3	1.9	3.5	2.7	1.8	1.2	0.8	0.5	0.4	0.3	0.4	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	Diurnal Average	
		0.3	0.4	0.6	0.6	3.1	6.1	11.0	13.9	6.5	5.0	3.0	2.0	1.4	1.2	1.5	1.4	2.3	1.0	0.8	0.7	0.6	2.4	0.7	0.5	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Averages

Nitrogen Oxide (NO) - ppb

Henry Pirker - May 2010

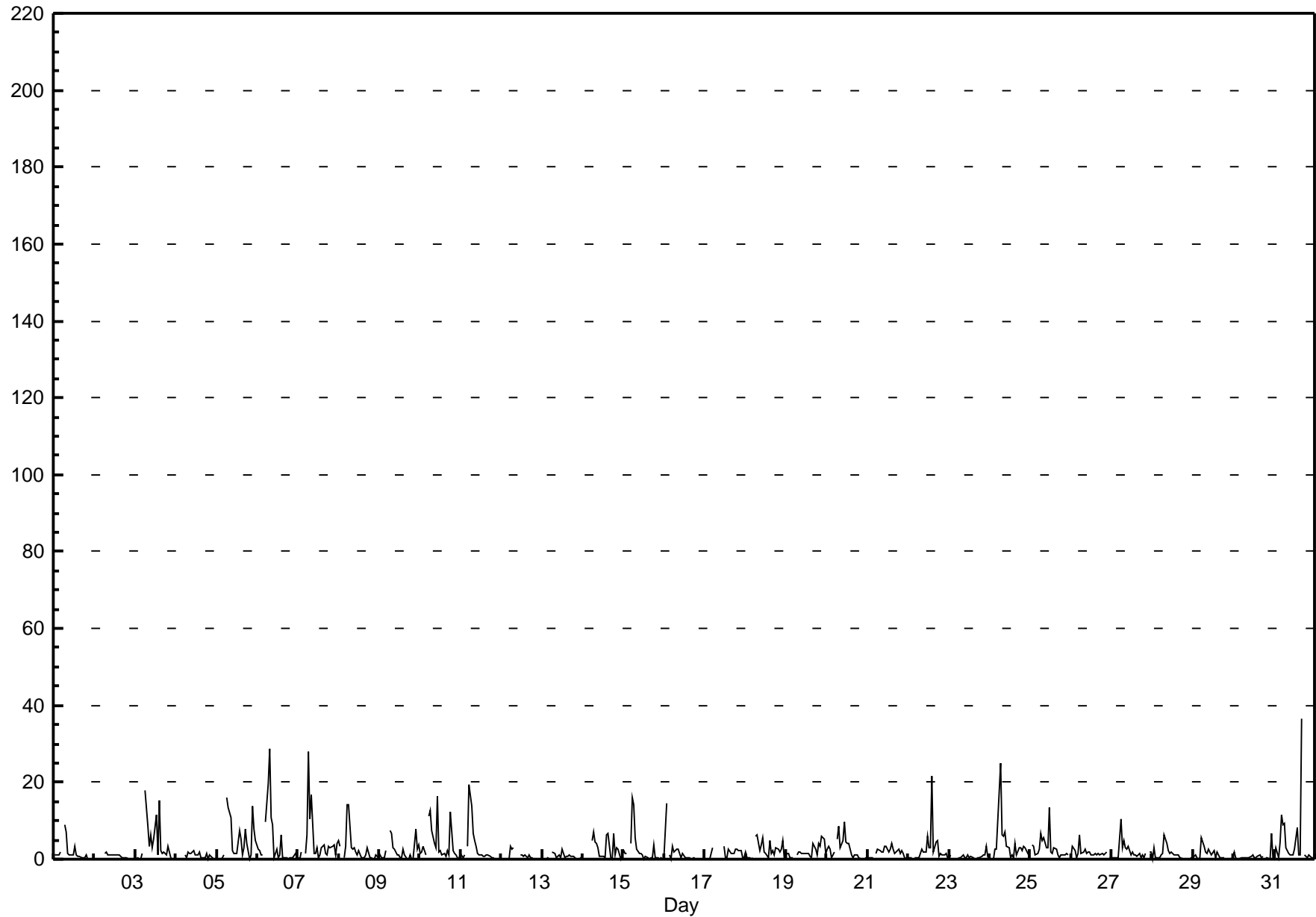


Hourly Maximums

Nitrogen Oxide (NO) - ppb

Henry Pirker - May 2010

Maximum Value: 36.4 ppb on May 31 17:00		Maximum Daily Average: 4.5 ppb on May 5		Hours in Service: 744																							
Minimum Value: 0 ppb on May 12 02:00		Minimum Daily Average: 0.6 ppb on May 2		Hours of Data: 705																							
Maximum Diurnal Average: 8.0 ppb at hour 7		Minimum Diurnal Average: 0.6 ppb at hour 4		Hours of Missing Data: 39																							
Monthly Average: 2.32 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.5 Median = 1.0 Q ₃ = 2.5 P ₉₀ = 5.6 P ₉₉ = 19.5		Hours of Calibration: 39																							
				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-May	1	1	1	1	2	A	9	7	1	1	1	1	3	1	1	1	1	0	0	1	0	0	0	0	1.5	9.1	
2-May	0	0	0	0	0	A	1	2	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.6	2.0	
3-May	0	0	0	0	1	A	18	8	3	6	3	5	11	1	15	2	1	2	1	3	2	0	0	0	3.8	17.8	
4-May	0	0	0	0	A	1	1	2	2	1	2	1	1	1	2	1	1	0	1	0	1	1	0	0	0.8	2.2	
5-May	0	0	0	0	1	A	16	14	11	2	1	1	1	7	5	1	3	8	4	0	1	14	8	5	4.5	15.9	
6-May	2	2	1	1	A	10	20	29	11	9	0	2	0	1	6	0	0	0	0	0	0	0	0	2	0	4.3	28.6
7-May	0	0	2	A	2	6	28	11	17	2	1	3	1	1	3	4	1	1	3	3	3	4	1	4	4.4	27.9	
8-May	5	3	A	1	3	14	14	3	3	3	2	1	2	1	1	1	3	1	0	0	0	1	1	1	2.7	14.0	
9-May	1	1	1	1	2	A	8	7	3	3	1	1	1	1	2	1	0	0	1	0	0	8	3	4	2.0	8.0	
10-May	1	2	3	1	A	11	13	8	4	3	17	2	2	1	2	1	2	1	12	2	2	1	1	0	4.0	16.6	
11-May	1	1	1	A	3	20	14	7	5	4	2	1	1	1	1	1	1	1	1	0	0	0	0	0	2.8	19.5	
12-May	0	0	A	0	0	3	3	3	C	C	C	C	1	1	1	1	1	1	1	0	0	0	0	0	0.8	3.3	
13-May	0	0	0	1	0	A	2	2	1	1	1	1	3	1	1	1	1	1	1	1	0	0	0	0	0.6	2.5	
14-May	0	0	0	0	A	5	7	5	4	3	1	1	1	1	6	7	1	0	7	1	3	3	0	1	2.4	7.1	
15-May	2	2	2	A	4	16	14	6	3	2	2	1	0	1	1	0	0	1	4	1	1	0	0	0	2.6	15.9	
16-May	0	15	A	1	0	3	2	3	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1.4	14.6	
17-May	0	0	0	0	3	A	12	C	C	C	C	3	1	1	3	1	1	1	2	3	2	2	0	0	2.0	12.2	
18-May	2	0	0	0	0	A	6	6	2	4	6	2	1	0	5	1	2	1	3	2	2	3	5	0	2.4	6.3	
19-May	1	1	0	1	0	A	1	2	2	2	1	1	1	1	1	0	4	2	1	4	3	6	5	1	2.0	6.0	
20-May	2	3	3	1	2	A	5	8	3	5	10	4	4	4	1	1	1	1	1	0	0	0	0	1	2.6	9.6	
21-May	1	0	1	1	A	1	3	2	2	2	3	3	2	3	4	3	2	2	2	2	2	1	1	0	1.8	4.0	
22-May	1	1	1	A	0	1	1	2	3	2	2	6	3	3	22	2	4	5	1	1	1	1	1	1	2.7	21.7	
23-May	0	1	A	0	0	0	0	1	1	1	1	1	1	1	0	0	0	1	1	1	1	1	3	1	0.6	3.4	
24-May	1	A	0	2	3	10	25	7	6	7	4	3	1	1	1	4	1	3	3	2	3	3	1	2	4.0	24.8	
25-May	A	4	3	1	1	3	7	5	6	3	3	13	2	1	3	2	1	1	1	1	1	1	1	A	3.0	13.4	
26-May	1	3	2	1	1	6	2	2	3	2	2	2	1	1	2	1	1	1	1	1	2	2	A	1	1.7	6.3	
27-May	1	1	0	1	1	10	3	5	3	3	3	1	2	1	1	1	1	1	1	1	1	A	2	2	1.9	10.5	
28-May	0	3	1	0	0	1	2	6	4	2	2	2	1	1	1	1	1	1	0	0	A	0	0	1	1.3	6.5	
29-May	0	1	1	0	1	6	4	2	2	3	2	1	2	1	2	1	1	0	0	A	0	0	0	0	1.2	5.5	
30-May	2	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	7	0	0.8	6.9	
31-May	0	3	1	5	12	9	9	3	2	1	1	1	3	8	1	1	36	A	1	1	1	1	1	1	4.3	36.4	
		0.9	1.6	0.8	0.6	1.7	6.5	8.0	5.5	3.7	2.6	2.6	2.3	1.8	1.5	3.0	1.3	2.4	1.3	1.9	1.1	1.1	1.8	1.4	0.9	Diurnal Average	
		4.7	14.6	3.3	4.5	11.5	19.5	27.9	28.6	16.7	8.8	16.6	13.4	11.4	8.4	21.7	6.5	36.4	7.7	12.4	4.1	3.4	14.0	7.8	4.8	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									





Hourly Averages

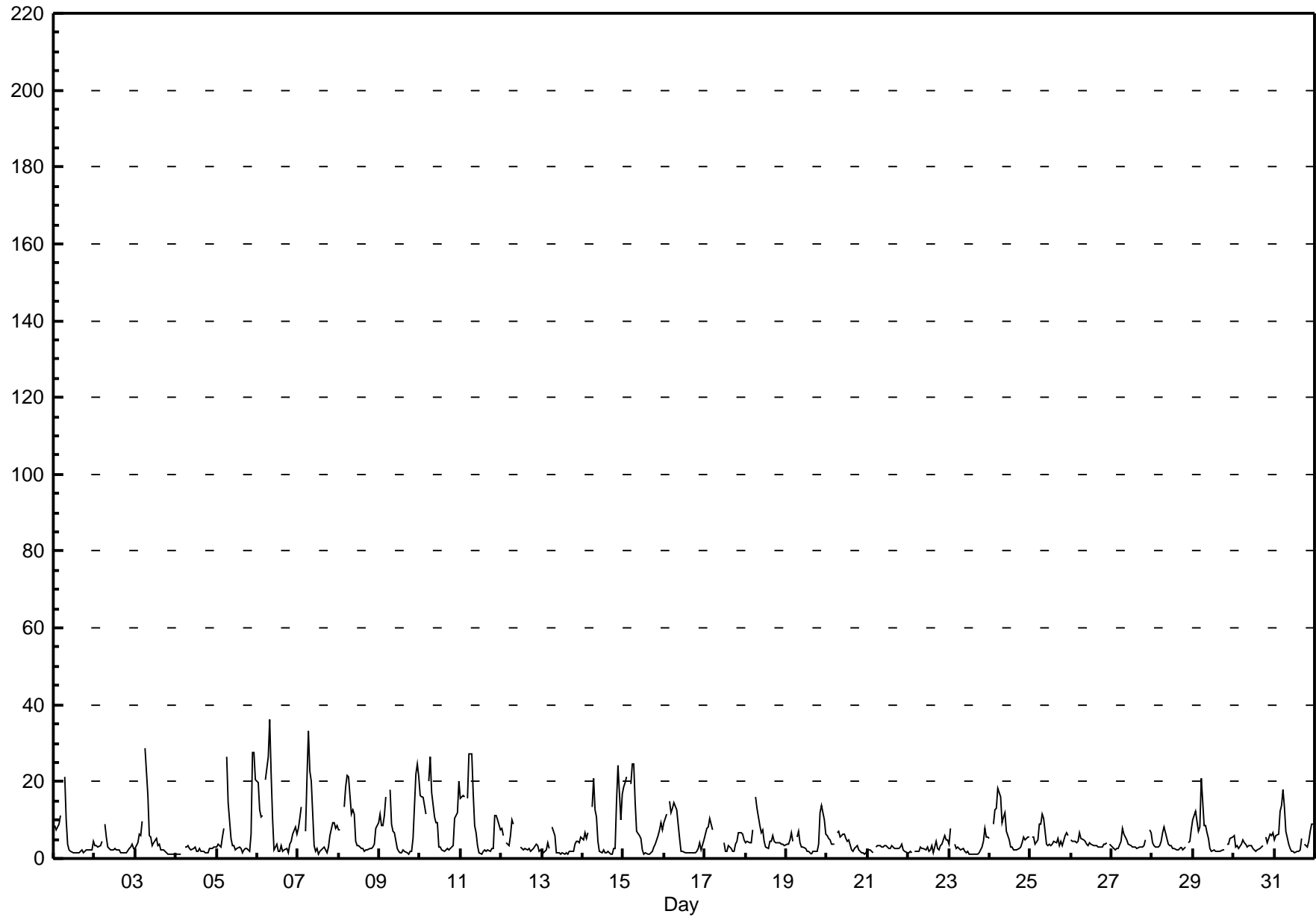
Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - May 2010

Number of Exceedences (AAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 36.1 ppb on May 6 08:00	Maximum Daily Average: 10.0 ppb on May 10		Hours of Data:	705
Minimum Value: 1 ppb on May 13 12:00	Minimum Daily Average: 2.1 ppb on May 4		Hours of Missing Data:	39
Maximum Diurnal Average: 14.3 ppb at hour 7	Minimum Diurnal Average: 2.2 ppb at hour 16		Hours of Calibration:	39
Monthly Average: 5.61 ppb	Percentiles: P ₁ = 1.1 P ₁₀ = 1.6 Q ₁ = 2.3 Median = 3.5 Q ₃ = 6.7 P ₉₀ = 12.7 P ₉₉ = 27.3		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-May	9	8	8	9	11	A	21	10	4	2	2	2	2	1	2	2	2	2	2	2	2	2	2	4	4.8	21.3	
2-May	3	4	3	3	5	A	9	5	3	2	2	2	3	2	2	2	2	2	2	2	2	2	3	4	2	3.0	8.8
3-May	3	4	6	6	10	A	29	16	6	6	3	4	5	3	4	2	2	2	2	1	1	1	1	1	5.2	28.8	
4-May	1	1	1	1	A	3	3	4	2	2	3	3	2	2	2	2	2	1	2	1	3	3	3	3	2.1	3.5	
5-May	3	4	3	6	8	A	27	15	5	3	3	2	3	3	3	2	2	2	3	2	6	28	27	21	7.8	27.7	
6-May	20	13	11	11	A	21	26	36	22	10	2	4	2	2	3	2	2	3	2	4	5	6	8	6	9.6	36.1	
7-May	8	10	14	A	7	21	33	23	20	3	2	3	1	2	2	3	2	2	3	6	9	9	8	9	8.7	33.0	
8-May	7	8	A	13	19	22	21	12	13	12	5	3	3	3	3	2	2	2	2	2	3	4	8	9	7.7	21.7	
9-May	11	9	9	11	16	A	18	9	7	7	2	1	1	2	2	1	1	1	2	2	5	22	25	21	8.1	24.8	
10-May	16	16	16	12	A	20	27	17	11	9	9	3	3	2	2	3	2	3	3	3	10	11	12	20	10.0	26.6	
11-May	16	16	16	A	16	27	27	17	8	7	3	1	1	2	2	2	2	2	3	3	11	11	10	7	9.2	27.4	
12-May	8	6	A	4	3	6	10	9	C	C	C	C	3	3	2	3	2	3	2	2	4	3	2	2	3.9	9.9	
13-May	2	2	2	4	3	A	8	6	1	1	2	1	2	1	2	1	2	2	2	4	5	4	4	6	2.8	8.0	
14-May	5	7	5	7	A	13	21	13	11	4	2	2	2	1	1	2	1	1	3	3	15	24	10	17	7.4	24.1	
15-May	19	20	21	A	19	25	25	15	7	6	5	2	1	1	1	1	2	2	3	4	6	8	9	7	9.1	24.7	
16-May	9	12	A	15	12	13	14	13	9	5	2	2	2	1	2	2	1	2	1	2	3	4	2	5	5.8	14.7	
17-May	6	8	8	10	8	A	18	C	C	C	C	4	2	2	3	3	2	2	4	5	7	7	6	5	5.8	18.3	
18-May	4	4	4	4	7	A	16	13	9	7	7	4	3	3	5	4	6	5	4	4	4	4	4	3	5.6	16.1	
19-May	4	4	5	7	4	A	5	7	4	3	3	3	2	2	1	2	2	2	2	4	12	14	10	6	4.6	13.8	
20-May	6	5	5	4	4	A	7	7	6	6	7	5	4	5	2	2	3	3	3	2	1	1	1	1	4.0	7.1	
21-May	2	2	2	1	A	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	4	2	2	1	2.7	3.6	
22-May	1	2	2	A	2	2	2	3	3	3	2	3	2	2	4	2	4	3	2	3	4	6	5	5	2.8	5.8	
23-May	4	8	A	4	3	3	3	2	3	2	2	2	1	1	1	1	1	1	1	3	5	8	6	5	2.9	7.7	
24-May	5	A	9	13	13	18	16	9	11	12	7	5	3	3	2	2	2	3	3	4	6	5	6	6	7.0	18.1	
25-May	A	6	5	4	5	9	9	12	11	4	4	4	3	4	4	4	5	3	4	3	6	7	6	A	5.5	11.5	
26-May	5	4	4	4	5	7	5	5	5	4	3	4	4	3	3	3	3	3	3	4	4	4	A	4	4.1	6.8	
27-May	3	3	2	2	2	5	8	6	6	5	4	3	3	3	3	2	3	3	3	3	5	A	7	7	4.0	7.8	
28-May	4	3	3	3	3	5	7	8	5	4	4	3	3	3	2	2	3	3	2	3	A	4	4	8	3.8	8.2	
29-May	10	12	10	7	8	21	9	9	7	5	3	2	2	2	2	2	2	2	2	A	4	4	5	6	5.9	20.9	
30-May	6	3	3	3	4	5	4	4	3	3	3	3	2	2	2	2	3	3	A	6	4	6	6	7	3.8	6.9	
31-May	5	6	7	12	14	18	13	7	4	2	2	2	2	2	2	2	5	A	4	3	4	7	9	9	6.1	17.8	
	6.9	6.9	6.8	6.7	8.1	12.6	14.3	10.5	7.1	4.9	3.5	2.9	2.4	2.2	2.5	2.2	2.5	2.3	2.5	3.1	5.3	7.4	7.1	7.1	Diurnal Average		
	19.7	19.7	21.1	14.7	19.5	27.3	33.0	36.1	22.0	12.0	9.3	5.2	5.2	4.9	4.6	4.3	5.9	4.6	4.4	5.8	15.0	27.7	27.4	21.2	Diurnal Maximum		

C - Calibration A - Automated Daily Zero Span

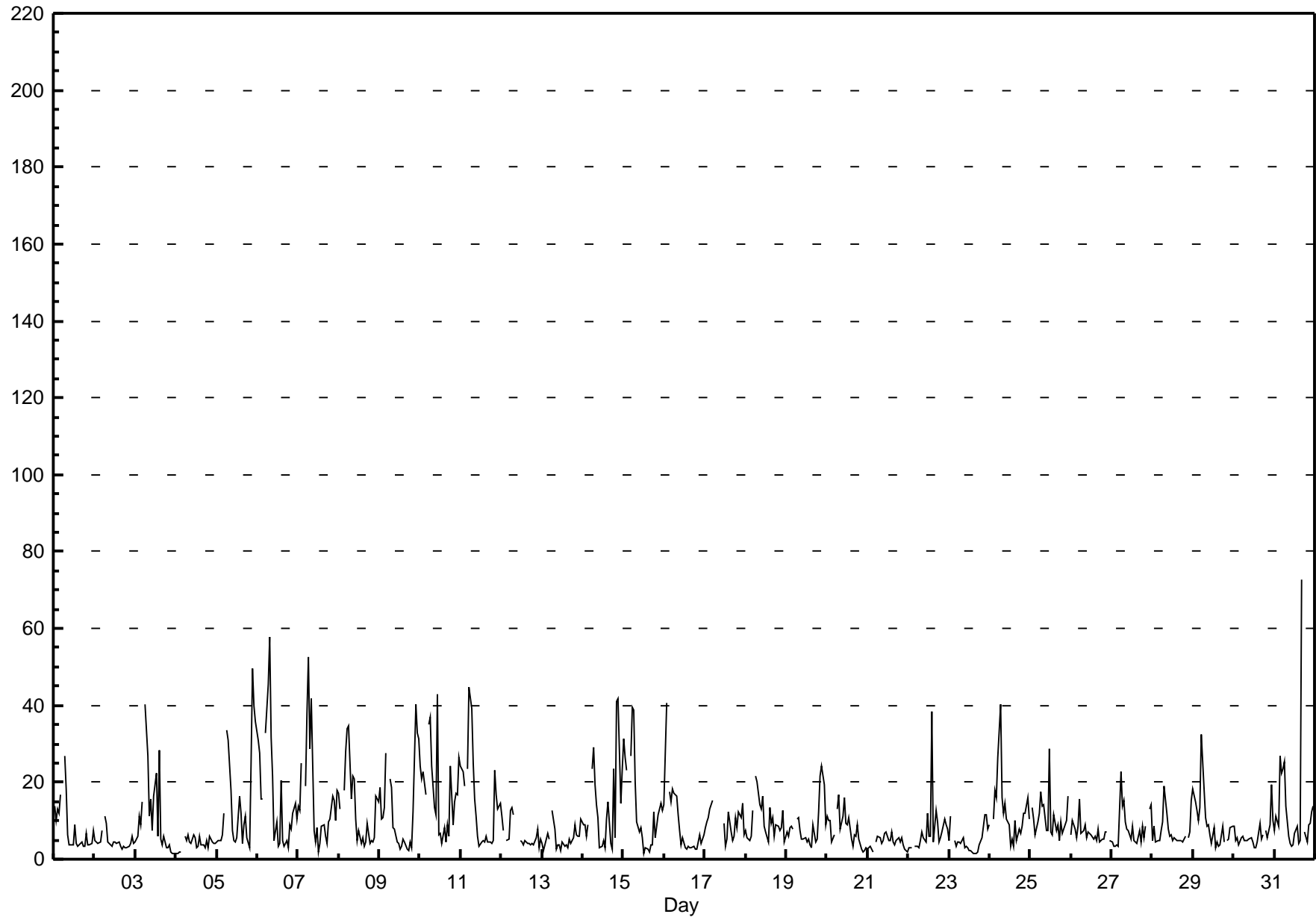


Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

Henry Pirker - May 2010

Maximum Value: 72.9 ppb on May 31 17:00		Maximum Daily Average: 17.5 ppb on May 10		Hours in Service: 744																							
Minimum Value: 1 ppb on May 23 17:00		Minimum Daily Average: 4.1 ppb on May 4		Hours of Data: 705																							
Maximum Diurnal Average: 22.2 ppb at hour 7		Minimum Diurnal Average: 5.0 ppb at hour 14		Hours of Missing Data: 39																							
Monthly Average: 10.07 ppb		Percentiles: P ₁ = 1.6 P ₁₀ = 3.3 Q ₁ = 4.5 Median = 6.8 Q ₃ = 12.3 P ₉₀ = 21.7 P ₉₉ = 41.8		Hours of Calibration: 39																							
				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-May	14	10	13	12	17	A	27	18	6	4	4	4	9	4	3	4	5	3	3	7	4	4	4	7	8.1	27.0	
2-May	5	4	4	4	7	A	11	10	5	4	3	4	5	4	4	4	2	4	3	3	4	4	6	4	4.7	11.0	
3-May	4	6	11	9	15	A	40	27	11	16	7	16	22	6	28	5	4	6	3	3	4	2	2	2	10.9	40.1	
4-May	2	2	2	2	A	6	5	6	4	4	6	6	3	4	6	4	4	3	5	3	6	5	4	4	4.1	6.4	
5-May	4	5	5	7	12	A	34	31	18	7	5	4	6	16	12	4	9	11	6	3	25	49	40	36	15.2	49.5	
6-May	31	27	16	16	A	33	45	58	32	22	5	10	3	4	20	5	3	5	3	9	8	12	15	10	17.0	57.8	
7-May	14	13	25	A	19	38	53	29	42	7	5	8	2	4	8	9	6	4	10	10	17	15	10	18	15.9	52.6	
8-May	17	13	A	18	28	34	35	16	22	21	10	5	7	4	5	4	4	9	4	5	5	6	16	15	13.2	34.6	
9-May	19	10	11	14	28	A	21	19	8	8	4	4	3	3	5	4	3	2	4	3	12	40	33	31	12.6	40.2	
10-May	24	21	23	17	A	35	37	24	13	12	43	6	7	4	8	4	9	6	24	9	15	17	17	27	17.5	42.8	
11-May	24	23	19	A	24	45	39	25	16	11	6	3	5	5	4	6	4	4	4	5	23	17	13	14	14.7	44.6	
12-May	11	8	A	5	5	13	13	12	C	C	C	5	5	4	5	4	4	4	4	4	5	8	3	5	6.3	13.4	
13-May	4	2	5	7	5	A	13	8	3	4	4	2	4	3	4	3	5	4	6	9	6	6	6	11	5.3	12.7	
14-May	9	9	6	9	A	23	29	19	14	11	3	4	5	3	11	15	4	3	23	6	41	42	15	24	14.2	41.8	
15-May	31	27	23	A	27	40	39	20	10	7	8	5	2	3	3	2	4	4	12	6	12	13	14	13	14.0	39.7	
16-May	14	40	A	17	15	18	17	17	12	8	4	5	3	3	3	3	3	3	2	3	5	6	4	7	9.2	40.5	
17-May	8	10	11	13	15	A	37	C	C	C	C	9	4	5	12	7	5	6	11	8	12	11	15	6	10.8	36.6	
18-May	7	6	5	6	13	A	22	20	14	13	17	8	7	4	14	9	11	6	9	9	7	8	13	5	10.0	21.6	
19-May	7	6	8	9	8	A	10	11	8	5	5	6	5	5	4	3	9	4	5	12	22	24	19	9	8.8	24.2	
20-May	11	10	10	5	6	A	13	17	8	11	16	9	9	11	5	3	6	6	9	5	3	2	2	3	7.9	16.9	
21-May	3	3	3	2	A	4	6	5	4	5	7	7	5	5	7	4	4	5	5	4	5	4	2	2	4.5	7.0	
22-May	3	3	3	A	4	4	3	5	7	5	4	12	6	6	38	4	13	10	4	5	7	11	9	8	7.6	38.3	
23-May	5	11	A	5	3	4	4	4	5	3	3	3	2	2	2	1	1	2	4	5	9	12	12	8	4.9	11.6	
24-May	9	A	11	18	16	26	40	16	12	14	10	9	3	5	3	10	5	8	7	8	12	12	16	10	12.3	40.4	
25-May	A	13	10	6	10	12	17	14	14	7	7	29	7	6	12	8	9	5	10	7	9	10	16	A	10.8	28.6	
26-May	6	10	8	6	9	16	7	8	9	6	7	7	6	5	6	5	8	4	5	5	7	7	A	5	7.0	15.6	
27-May	5	3	3	4	3	23	14	15	10	8	8	5	8	5	4	4	7	4	8	5	9	A	13	14	8.0	22.6	
28-May	5	8	4	5	5	7	10	19	12	8	6	6	5	5	5	5	5	5	4	6	A	6	7	15	7.2	19.1	
29-May	18	15	13	10	13	32	18	11	9	9	7	4	8	3	4	3	4	9	5	A	5	5	8	8	9.6	32.3	
30-May	9	5	5	4	5	6	5	5	5	5	5	4	3	3	5	9	5	6	A	7	5	9	19	10	6.4	19.4	
31-May	7	11	8	27	22	24	25	14	6	4	3	4	7	8	4	5	73	A	7	4	9	9	12	14	13.5	72.9	
		11.0	11.2	9.8	9.4	12.9	21.1	22.2	16.7	11.6	8.6	7.7	6.9	5.7	5.0	8.3	5.2	7.7	5.2	7.0	6.0	10.4	12.5	12.2	11.5	Diurnal Average	
		31.4	40.5	25.0	27.0	28.0	44.6	52.6	57.8	41.6	21.5	42.8	28.6	22.4	16.4	38.3	15.1	72.9	11.3	24.3	12.1	40.9	49.5	40.0	35.8	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									



Hourly Averages

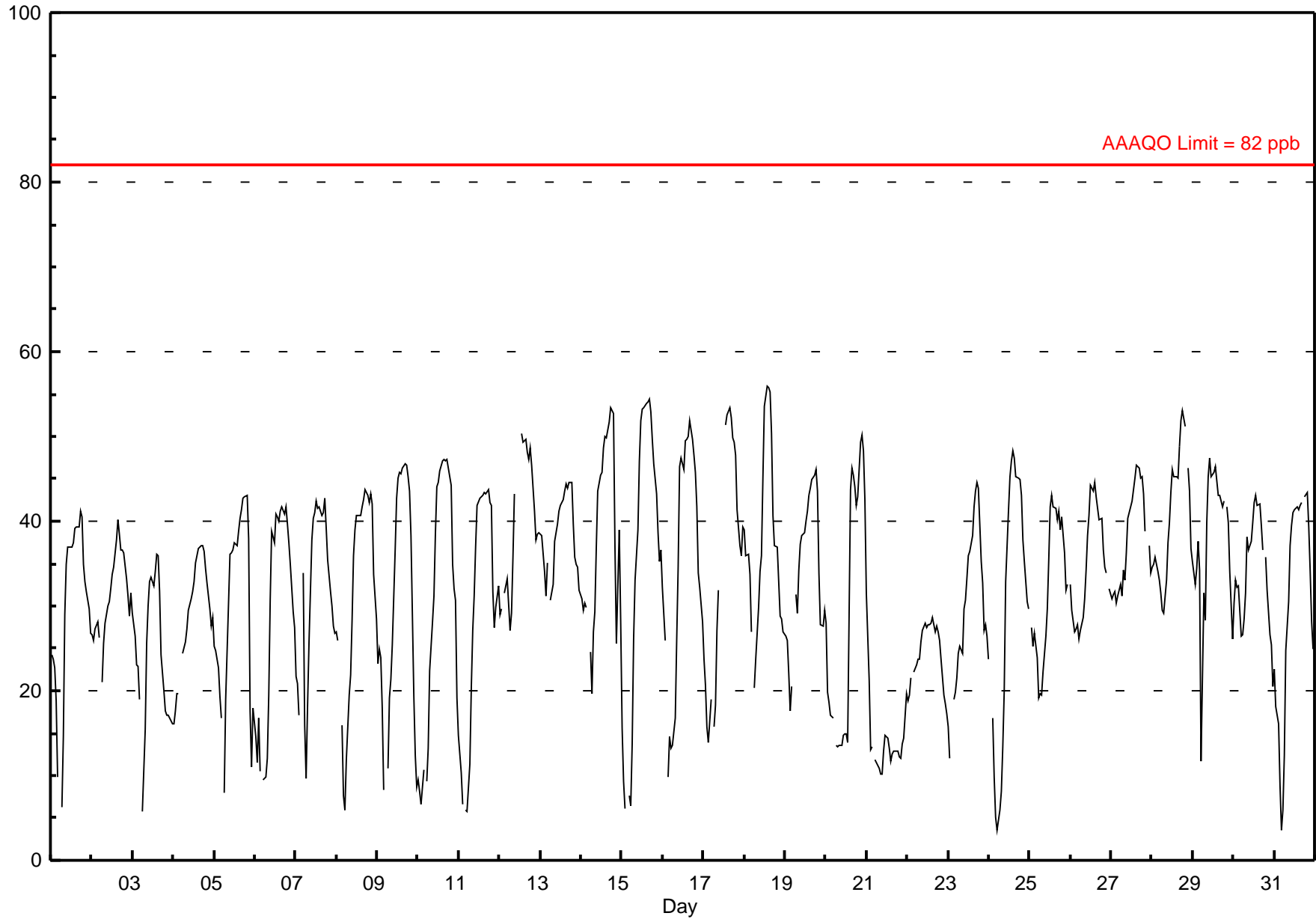
Ozone (O₃) - ppb

Henry Pirker - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 56.0 ppb on May 18 14:00	Maximum Daily Average: 40.4 ppb on May 28
Minimum Value: 4 ppb on May 31 05:00	Hours of Data: 706
Maximum Diurnal Average: 43.0 ppb at hour 16	Hours of Missing Data: 38
Monthly Average: 32.03 ppb	Hours of Calibration: 38
Minimum Daily Average: 14.1 ppb on May 21	Percent Operational Time: 100.0
Minimum Diurnal Average: 17.1 ppb at hour 6	
Percentiles: P ₁ = 6.0 P ₁₀ = 13.4 Q ₁ = 24.4 Median = 33.1 Q ₃ = 41.6 P ₉₀ = 46.0 P ₉₉ = 53.5	

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-May	24	24	23	19	10	A	6	15	29	35	37	37	37	37	39	39	39	41	41	35	33	32	30	27	29.9	41.2																						
2-May	27	26	27	28	26	A	21	26	28	30	30	32	34	35	38	40	39	37	37	36	33	31	29	32	31.3	40.2																						
3-May	29	26	23	23	19	A	6	15	26	30	33	33	32	34	36	36	32	24	20	18	17	17	16	16	24.5	36.1																						
4-May	16	18	20	20	A	24	25	26	27	29	31	32	33	35	36	37	37	37	36	34	33	30	28	29	29.2	37.1																						
5-May	25	25	23	19	17	A	8	19	30	36	36	37	38	37	39	40	41	43	43	43	38	18	11	18	29.7	43.0																						
6-May	15	12	17	10	A	9	10	12	20	31	39	37	41	41	40	41	42	41	42	40	37	35	29	27	29.0	41.7																						
7-May	22	21	17	A	34	16	10	18	26	38	40	41	42	42	42	41	41	43	39	35	32	30	28	27	31.4	42.7																						
8-May	27	26	A	16	8	6	12	19	22	28	36	39	41	41	41	42	43	44	43	42	43	42	34	29	31.4	43.7																						
9-May	23	25	24	18	8	A	11	19	21	26	37	43	45	46	46	46	47	47	45	44	38	19	12	9	30.3	46.8																						
10-May	9	8	7	11	A	9	13	22	28	31	39	44	45	46	47	47	47	47	46	44	35	32	31	19	30.8	47.2																						
11-May	15	10	7	A	6	6	11	20	27	31	37	42	43	43	43	43	43	44	42	42	32	27	30	32	29.4	43.8																						
12-May	29	30	A	32	33	30	27	29	36	43	C	C	C	50	49	50	48	47	49	47	41	38	38	39	39.2	50.4																						
13-May	38	38	34	31	35	A	31	33	38	39	40	41	42	43	43	44	44	45	45	40	36	35	35	32	38.3	44.6																						
14-May	31	29	30	30	A	25	20	27	29	37	44	45	46	49	50	50	52	53	53	53	37	26	39	28	38.3	53.3																						
15-May	16	9	6	A	8	6	14	26	33	39	47	52	53	53	54	54	54	53	50	47	43	39	35	37	36.0	54.4																						
16-May	32	26	A	10	15	13	13	17	26	34	46	47	46	49	50	50	52	50	48	46	42	34	32	28	35.1	51.8																						
17-May	24	21	16	14	19	A	16	18	27	32	C	C	C	51	53	53	52	50	49	48	41	37	36	39	34.8	53.4																						
18-May	39	36	36	34	27	A	20	24	30	34	36	45	54	56	56	55	50	41	37	37	33	29	28	27	37.6	56.0																						
19-May	26	26	22	18	21	A	31	29	34	37	38	39	40	41	43	44	45	45	46	43	34	28	28	29	34.3	46.0																						
20-May	28	20	19	17	17	A	14	13	14	14	15	15	15	14	44	46	45	44	42	43	49	50	48	43	29.0	50.2																						
21-May	32	21	13	13	A	12	11	11	10	10	13	15	14	13	12	13	13	13	13	12	12	14	14	20	14.1	31.5																						
22-May	19	19	21	A	22	23	24	24	26	27	28	28	28	28	28	29	27	28	27	26	24	20	18	17	24.3	28.7																						
23-May	16	12	A	19	20	21	24	25	24	30	31	33	36	36	38	42	44	45	44	35	33	27	28	26	30.0	44.6																						
24-May	24	A	17	10	5	4	6	8	13	20	33	41	45	47	48	48	45	45	45	43	38	35	31	30	29.6	48.3																						
25-May	A	27	25	27	24	19	20	19	22	26	30	36	42	43	42	41	40	41	39	40	36	32	33	A	32.0	43.1																						
26-May	32	29	27	27	28	26	27	29	31	34	38	41	44	44	45	43	41	40	40	37	35	34	A	32	35.0	44.6																						
27-May	31	31	32	30	31	33	31	34	33	36	40	42	42	44	45	47	46	45	45	43	39	A	37	34	37.9	46.6																						
28-May	35	35	36	34	33	32	29	29	33	37	40	43	46	45	45	45	49	52	53	51	A	46	44	37	40.4	53.0																						
29-May	35	32	34	38	34	12	32	28	40	45	48	45	46	46	45	43	43	42	42	A	42	40	34	26	37.9	47.5																						
30-May	30	33	32	32	26	27	29	31	38	37	38	40	42	43	42	42	39	37	A	36	32	27	25	20	33.8	43.0																						
31-May	23	18	16	9	4	6	12	25	30	37	39	41	41	42	41	42	42	A	43	43	39	34	28	25	29.6	43.5																						
																								25.7	23.8	22.3	21.8	20.4	17.1	18.2	22.3	27.5	32.1	35.8	38.1	39.7	41.1	42.5	43.0	42.7	42.0	41.5	39.4	35.2	31.2	29.6	27.8	Diurnal Average
																								38.9	38.4	36.2	37.6	35.1	32.6	31.6	34.2	39.9	45.3	47.5	51.8	53.6	56.0	55.8	55.3	54.4	53.3	53.0	52.7	49.3	50.2	48.3	42.6	Diurnal Maximum

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



Hourly Maximums

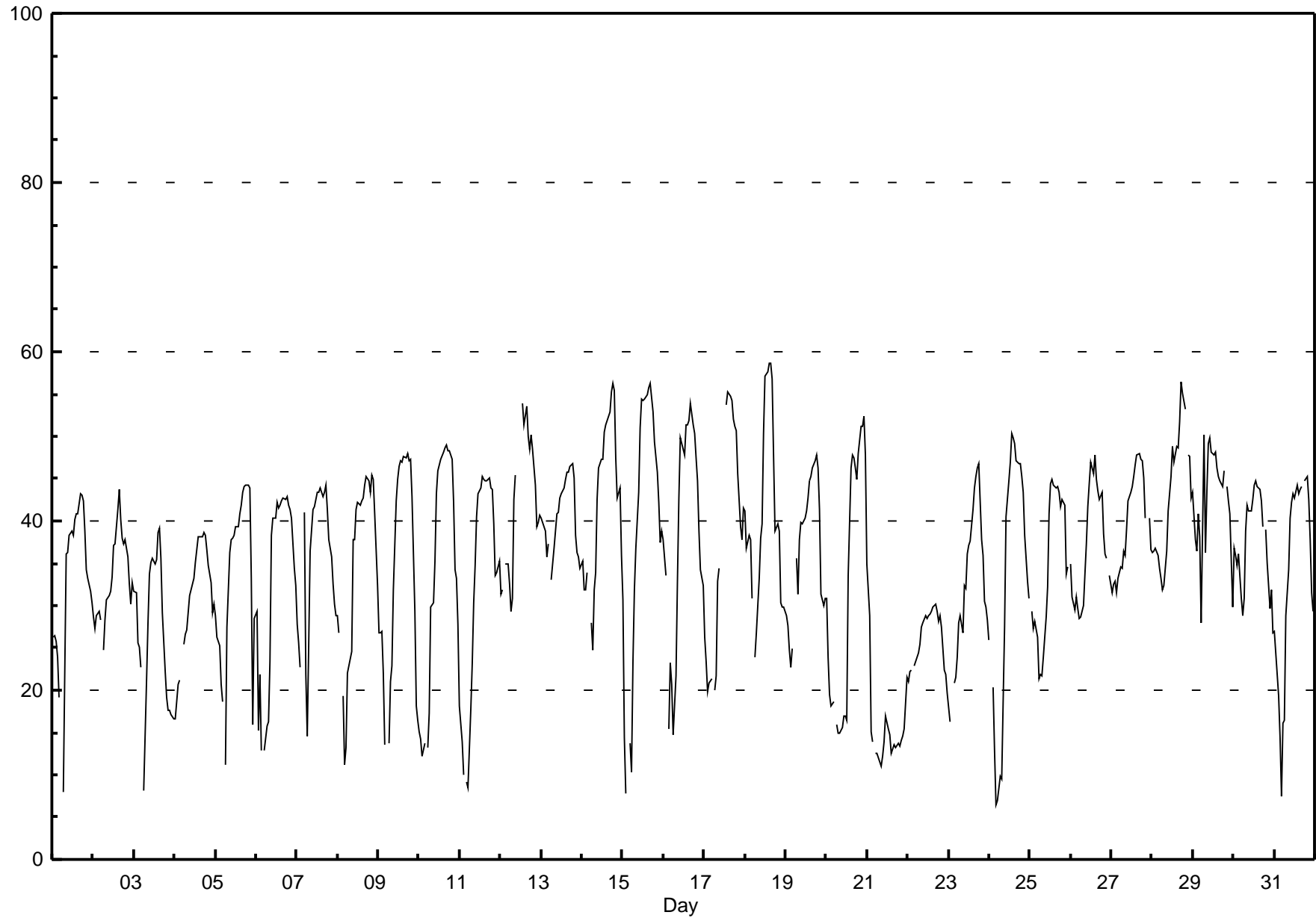
Ozone (O₃) - ppb

Henry Pirker - May 2010

Maximum Value: 58.6 ppb on May 18 16:00		Maximum Daily Average: 43.1 ppb on May 28		Hours in Service: 744																							
Minimum Value: 6 ppb on May 24 05:00		Minimum Daily Average: 15.6 ppb on May 21		Hours of Data: 706																							
Maximum Diurnal Average: 44.9 ppb at hour 16		Minimum Diurnal Average: 21.2 ppb at hour 6		Hours of Missing Data: 38																							
Monthly Average: 35.02 ppb		Percentiles: P ₁ = 9.1 P ₁₀ = 17.6 Q ₁ = 27.9 Median = 36.5 Q ₃ = 43.8 P ₉₀ = 47.9 P ₉₉ = 56.3		Hours of Calibration: 38																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-May	26	26	26	24	19	A	8	22	36	36	38	39	38	40	41	41	43	43	42	39	34	33	32	30	33.0	43.3	
2-May	29	27	29	29	28	A	25	28	31	31	32	33	37	37	41	44	40	38	37	38	36	33	30	33	33.3	43.8	
3-May	32	31	26	25	23	A	8	21	28	34	35	36	35	36	39	39	36	29	22	19	18	18	17	17	27.0	39.1	
4-May	17	19	21	21	A	25	27	27	29	31	33	33	35	37	38	38	38	39	38	37	35	33	29	30	30.8	38.7	
5-May	29	26	25	21	19	A	11	27	36	38	38	38	39	39	41	42	43	44	44	44	44	33	16	28	33.3	44.3	
6-May	29	15	22	13	A	13	16	16	23	38	40	40	42	41	42	42	43	43	43	42	41	40	34	32	32.8	42.9	
7-May	28	26	23	A	41	22	15	25	36	41	42	43	43	43	44	43	43	44	41	38	36	32	30	29	35.1	44.3	
8-May	29	27	A	19	11	13	22	24	25	38	38	41	42	42	43	44	45	45	43	45	45	41	32		34.6	45.4	
9-May	27	27	27	22	14	A	14	21	23	32	42	45	46	47	47	48	48	48	47	47	43	29	18	16	33.8	48.0	
10-May	15	14	12	14	A	13	17	30	30	35	43	46	47	47	48	49	49	48	48	47	42	34	33	28	34.4	49.0	
11-May	18	14	10	A	9	9	18	23	30	35	40	43	44	45	45	45	45	45	44	44	40	34	34	35	32.5	45.3	
12-May	31	32	A	35	35	33	29	31	43	45	C	C	C	54	51	54	50	48	50	49	44	39	40	41	41.7	53.9	
13-May	40	40	39	36	37	A	33	37	39	41	41	43	43	44	45	46	46	46	47	45	38	36	36	34	40.5	46.8	
14-May	35	32	32	34	A	28	25	32	34	43	46	47	47	51	51	52	53	55	56	55	48	43	44	36	42.5	56.3	
15-May	31	14	8	A	14	10	23	32	37	43	51	54	54	54	55	56	56	55	53	49	46	42	37	39	39.8	56.3	
16-May	38	34	A	16	23	21	15	22	33	43	50	49	48	51	51	52	54	51	50	47	45	39	34	32	39.0	53.8	
17-May	26	23	20	21	21	A	20	22	33	34	C	C	C	54	55	55	54	52	51	51	46	39	38	42	37.8	55.2	
18-May	41	37	38	38	31	A	24	27	33	38	40	50	57	58	59	59	57	48	39	40	39	30	30	30	40.9	58.6	
19-May	29	28	25	23	25	A	36	31	38	40	40	40	41	43	45	45	46	47	48	46	41	31	30	31	36.9	47.7	
20-May	31	24	19	18	19	A	16	15	15	16	17	17	16	34	46	48	47	46	45	48	51	51	52	48	32.2	52.4	
21-May	35	29	15	14	A	12	12	11	11	12	14	17	15	15	12	13	13	13	14	13	14	14	16	21	15.6	35.0	
22-May	21	22	22	A	23	24	24	25	27	28	29	28	29	29	29	30	30	29	28	29	27	22	22	20	26.1	30.2	
23-May	18	16	A	21	22	24	28	29	27	32	32	36	37	38	41	44	45	46	47	38	36	30	30	28	32.4	46.8	
24-May	26	A	20	13	6	7	10	9	19	28	40	45	47	50	50	49	47	47	47	45	43	38	33	31	32.6	50.4	
25-May	A	29	27	28	26	21	22	22	24	29	32	41	44	45	44	44	44	43	42	42	42	34	35	A	34.6	44.9	
26-May	35	31	29	31	30	28	29	30	34	37	42	44	47	46	48	45	43	42	43	39	36	36	A	34	37.3	47.8	
27-May	32	33	33	32	33	34	34	36	36	39	42	43	44	45	47	48	48	47	47	45	40	A	40	37	39.8	47.9	
28-May	36	37	37	36	34	33	32	32	37	41	43	45	49	47	49	49	52	56	55	53	A	48	48	43	43.1	56.5	
29-May	43	38	36	41	38	28	50	36	44	49	50	48	48	48	46	45	45	44	46	A	44	42	41	30	42.7	50.2	
30-May	37	36	35	36	31	29	31	39	42	41	41	43	44	45	44	44	44	42	39	A	39	35	30	32	27	37.4	44.8
31-May	27	24	19	14	7	16	16	29	34	40	42	43	43	44	43	44	44	A	45	45	42	38	32	29	33.2	45.2	
		29.7	27.0	25.0	24.9	23.8	21.2	22.2	26.2	31.2	35.8	38.4	40.4	41.5	43.5	44.5	44.9	44.9	44.1	43.5	41.9	39.0	34.9	32.8	31.4	Diurnal Average	
		43.4	39.8	38.7	40.8	41.1	34.5	50.2	38.9	43.6	49.1	51.0	54.4	57.1	57.6	58.6	58.6	56.9	56.5	56.3	55.4	51.1	51.3	52.4	47.8	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

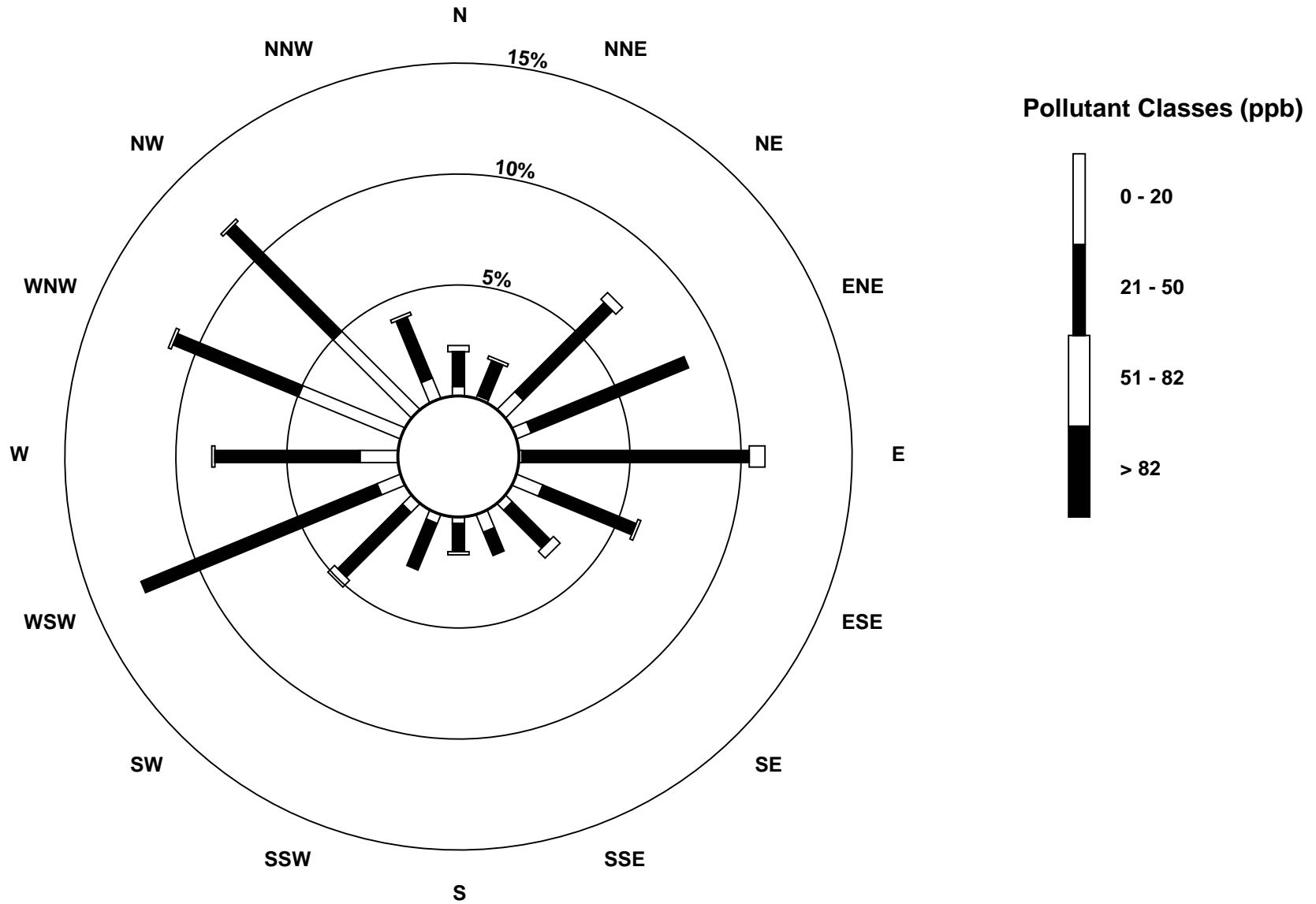
Hourly Maximums

Ozone (O₃) - ppb
Henry Pirker - May 2010



Pollutant Rose

Ozone (O₃) - ppb
Henry Pirker - May 2010



Eight Hour Running Averages

Ozone (O₃) - ppb

Henry Pirker - May 2010

Maximum Value: 52.9 ppb on May 15 19:00																					Hours in Service:	744			
Minimum Value: 9.0 ppb on May 24 09:00																					Hours of Data:	731			
Percentiles: P ₁ = 10.6 P ₁₀ = 17.5 Q ₁ = 24.5 Median = 32.6 Q ₃ = 39.3 P ₉₀ = 43.8 P ₉₉ = 50.9																					Hours of Missing Data:	13			
																					Hours of Calibration:	13			
																					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-May	29	27	25	24	21	22	19	17	18	19	21	24	28	29	33	36	38	38	39	39	38	37	36	35	38.9
2-May	33	31	29	29	28	27	26	26	26	27	27	28	29	29	32	33	35	35	36	37	37	36	35	34	36.8
3-May	33	32	30	28	26	26	23	20	20	20	22	23	25	26	30	33	33	33	31	29	27	25	23	20	33.3
4-May	18	17	17	18	18	19	20	21	23	24	26	28	28	30	31	32	34	35	35	36	36	35	34	33	35.7
5-May	32	30	28	26	24	24	21	19	20	22	24	26	29	30	34	37	38	39	40	40	41	38	35	32	40.5
6-May	28	25	21	17	14	13	13	12	13	16	19	23	25	29	32	36	39	40	41	41	40	40	38	37	40.8
7-May	34	32	29	27	26	24	21	20	20	23	26	28	29	32	36	39	41	41	41	41	39	38	36	34	41.4
8-May	33	30	29	26	23	20	17	16	15	16	18	21	25	30	33	36	39	41	42	42	42	41	40	40	42.4
9-May	37	35	33	30	25	23	20	18	18	20	24	29	31	35	39	42	44	46	46	45	41	37	33	33	45.6
10-May	28	23	18	14	11	9	9	11	14	17	22	27	29	34	38	41	43	45	46	46	45	43	41	38	46.2
11-May	34	29	24	21	17	13	11	11	12	15	20	23	27	32	36	39	41	42	43	43	42	40	38	37	42.9
12-May	35	33	32	30	30	31	30	30	31	33	33	33	N	N	N	N	N	N	49	49	48	46	45	43	48.9
13-May	42	41	39	37	37	36	35	34	34	34	35	37	37	38	40	41	42	43	43	43	42	41	40	39	43.4
14-May	37	35	33	32	32	30	28	27	27	28	30	32	34	37	41	44	46	49	50	51	50	47	45	43	50.7
15-May	38	33	27	23	19	16	12	12	15	19	25	28	34	40	45	48	51	53	53	52	51	49	47	45	52.9
16-May	42	39	37	32	28	24	21	18	17	18	22	27	30	35	40	44	47	49	49	49	48	46	44	41	49.0
17-May	38	34	30	26	23	22	20	18	19	20	21	N	N	N	N	N	N	N	51	51	50	48	46	44	51.4
18-May	42	41	39	37	35	35	33	31	30	29	29	31	35	37	42	46	48	49	49	48	46	42	39	35	49.2
19-May	32	30	29	26	25	24	24	25	26	27	30	33	36	36	38	40	41	42	43	43	43	41	39	37	43.5
20-May	35	32	29	25	23	22	20	18	16	15	15	14	14	14	18	22	26	30	33	37	41	45	46	46	46.0
21-May	44	41	37	34	31	26	21	16	13	12	12	12	12	12	12	12	13	13	13	13	13	13	13	14	43.8
22-May	15	15	16	17	19	20	21	22	23	24	25	25	26	26	27	28	28	28	28	27	27	26	25	23	27.8
23-May	22	20	19	18	17	18	19	20	21	23	24	26	28	30	32	34	36	38	40	40	40	38	37	35	40.0
24-May	33	31	27	23	20	16	13	10	9	10	12	16	21	27	32	37	41	44	46	46	45	43	41	39	45.8
25-May	38	36	33	30	28	26	25	23	23	23	24	27	30	32	35	37	39	40	41	40	39	38	37	37	41.1
26-May	36	35	33	31	30	29	28	28	28	29	30	32	34	36	38	40	41	42	42	42	41	39	39	37	42.3
27-May	36	34	33	32	32	31	31	32	32	33	34	35	36	38	40	41	43	44	45	45	44	44	43	41	44.7
28-May	40	38	37	36	35	34	33	33	33	33	33	35	36	38	40	42	44	46	47	48	49	49	49	47	48.8
29-May	45	43	40	38	38	33	32	31	31	33	34	35	37	41	43	45	45	45	44	44	43	42	41	38	45.4
30-May	37	35	34	34	32	30	29	30	31	32	32	33	35	37	39	40	40	40	41	40	39	36	34	31	40.7
31-May	28	26	25	21	18	15	13	14	15	17	20	24	29	34	37	39	41	41	42	42	42	41	39	36	42.1
45.4 42.6 40.0 38.0 37.6 36.3 35.2 34.3 34.2 34.3 35.1 36.5 37.5 41.2 44.7 48.2 50.9 52.6 52.9 52.3 51.0 49.2 48.5 47.3																									
Diurnal Maximums																									
N - Not Valid																									

Hourly Averages

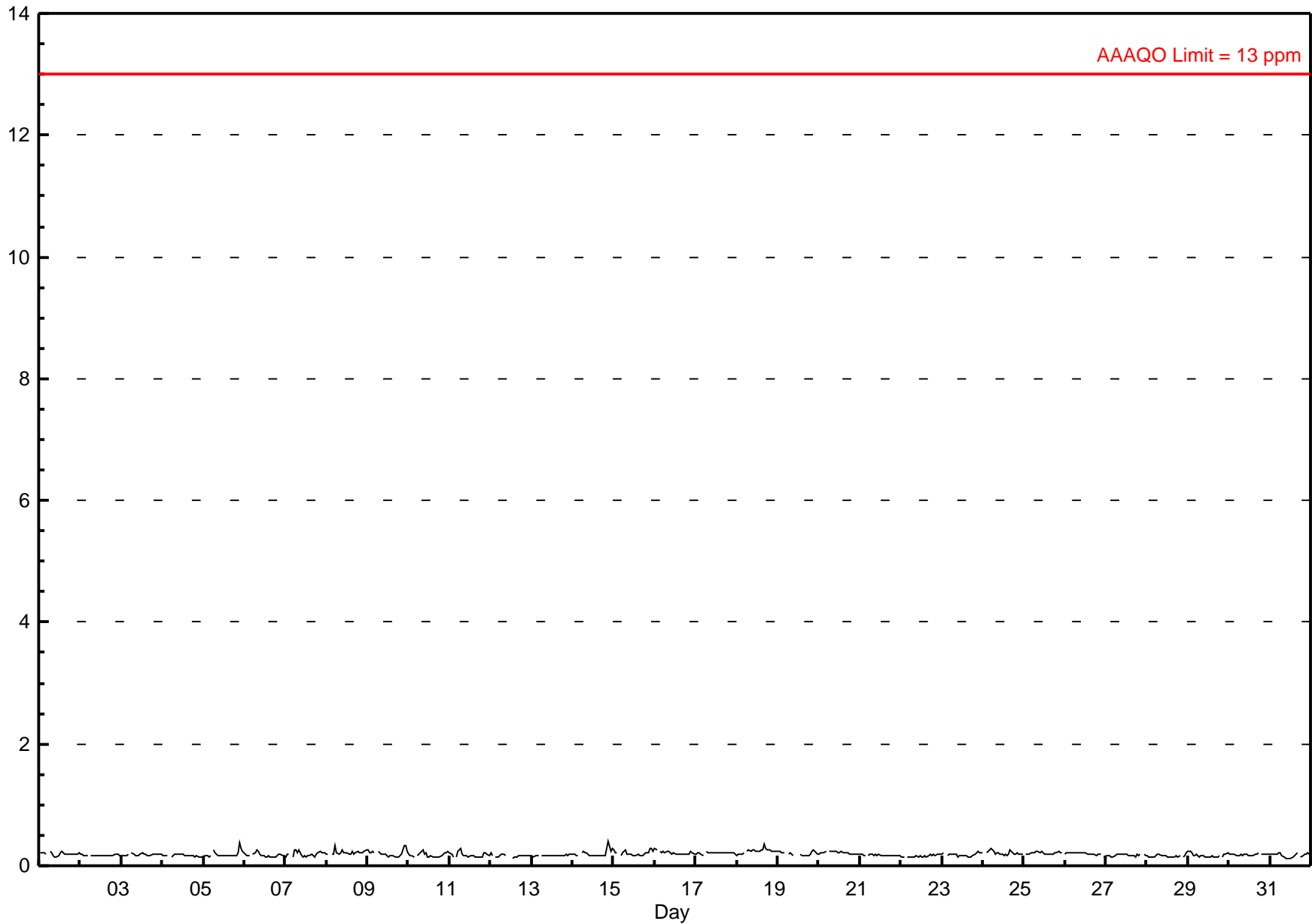
Carbon Monoxide (CO) - ppm

Henry Pirker - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 0.39 ppm on May 14 22:00	Maximum Daily Average: 0.24 ppm on May 18
Minimum Value: 0.1 ppm on May 31 13:00	Hours of Data: 706
Maximum Diurnal Average: 0.22 ppm at hour 22	Hours of Missing Data: 38
Monthly Average: 0.188 ppm	Hours of Calibration: 38
Minimum Daily Average: 0.16 ppm on May 22	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.17 ppm at hour 16	
Percentiles: P ₁ = 0.13 P ₁₀ = 0.15 Q ₁ = 0.16 Median = 0.18 Q ₃ = 0.21 P ₉₀ = 0.23 P ₉₉ = 0.28	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.24																						
2-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.20																						
3-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.21																						
4-May	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.19																						
5-May	0.2	0.2	0.2	0.2	0.2	A	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.19	0.38																						
6-May	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.27																						
7-May	0.1	0.2	0.2	A	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.27																						
8-May	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.22	0.34																						
9-May	0.3	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.20	0.32																						
10-May	0.2	0.2	0.2	0.1	A	0.2	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.26																						
11-May	0.2	0.2	0.1	A	0.1	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	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.18	0.29																						
12-May	0.2	0.2	A	0.2	0.1	0.2	0.2	0.2	0.2	0.2	C	C	C	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.20																						
13-May	0.2	0.1	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.19																						
14-May	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.3	0.20	0.39																						
15-May	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	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.21	0.28																						
16-May	0.3	0.3	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.29																						
17-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.24																						
18-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.24	0.35																						
19-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.20	0.25																						
20-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.25																						
21-May	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.19																						
22-May	0.2	0.2	0.1	A	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.16	0.20																						
23-May	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18	0.24																						
24-May	0.2	A	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.29																						
25-May	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.25																						
26-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.20	0.22																						
27-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.17	0.19																						
28-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.1	0.2	0.2	0.16	0.20																						
29-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.17	0.23																						
30-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.18	0.20																						
31-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17	0.22																						
																								0.19	0.19	0.18	0.18	0.18	0.20	0.21	0.20	0.20	0.18	0.18	0.18	0.18	0.17	0.18	0.17	0.18	0.17	0.18	0.18	0.20	0.22	0.21	0.20	Diurnal Average	
																								0.29	0.26	0.23	0.25	0.25	0.34	0.29	0.27	0.26	0.26	0.26	0.25	0.24	0.25	0.25	0.25	0.35	0.28	0.26	0.25	0.28	0.39	0.32	0.29	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na

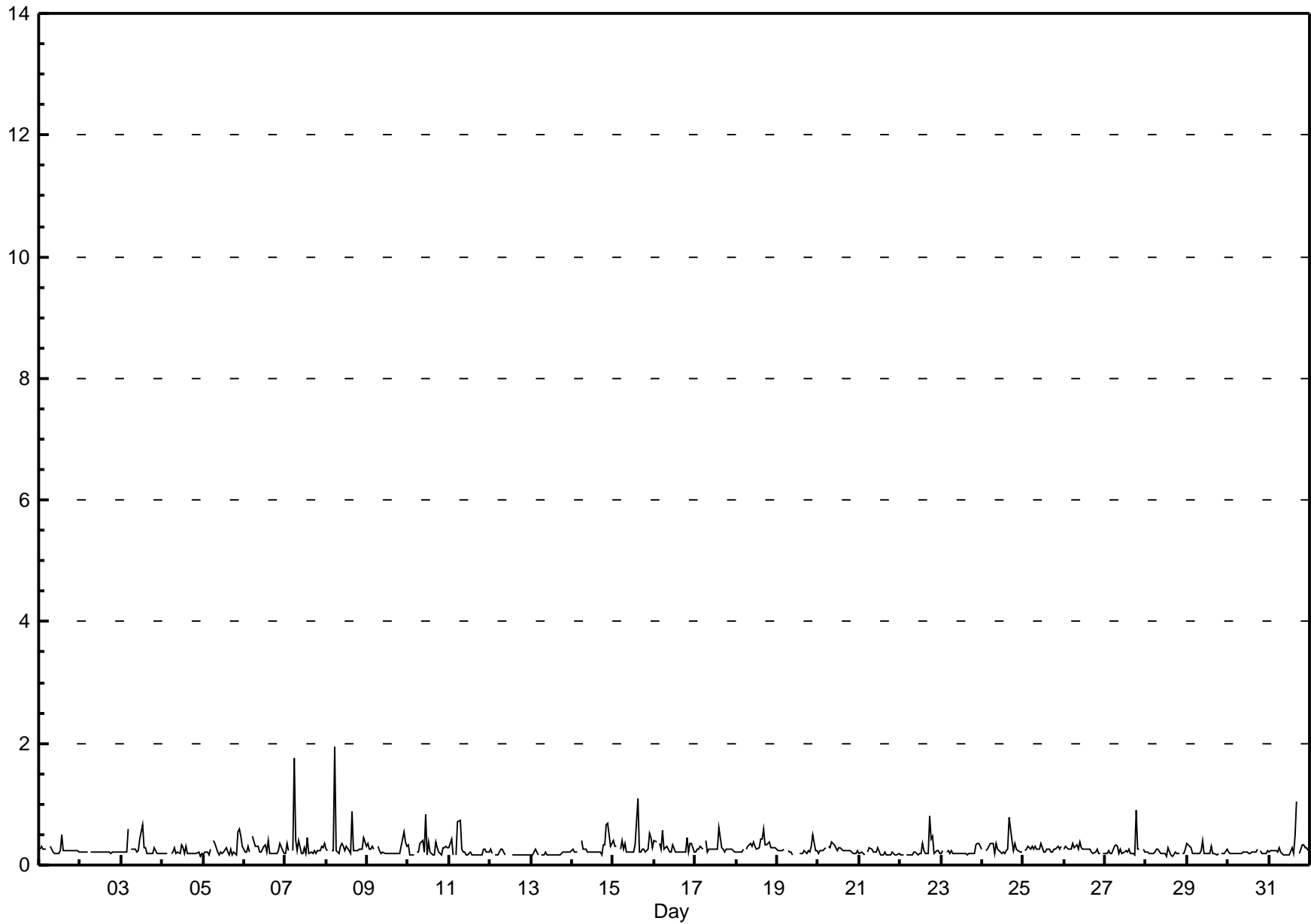


Hourly Maximums

Carbon Monoxide (CO) - ppm

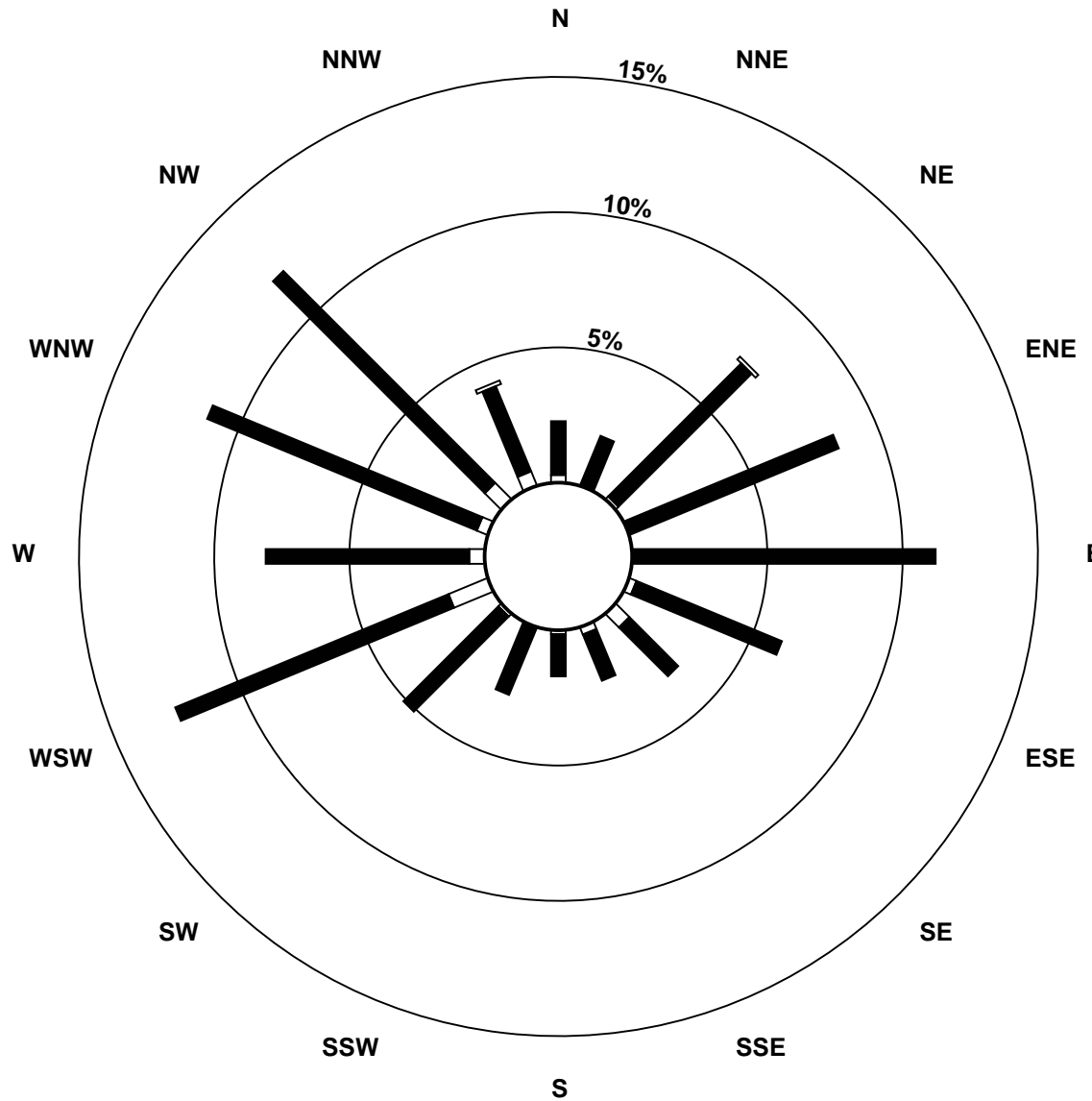
Henry Pirker - May 2010

Maximum Value: 1.94 ppm on May 8 06:00		Maximum Daily Average: 0.37 ppm on May 8		Hours in Service: 744																						
Minimum Value: 0.2 ppm on May 28 16:00		Minimum Daily Average: 0.19 ppm on May 12		Hours of Data: 706																						
Maximum Diurnal Average: 0.46 ppm at hour 6		Minimum Diurnal Average: 0.23 ppm at hour 4		Hours of Missing Data: 38																						
Monthly Average: 0.258 ppm		Percentiles: P ₁ = 0.16 P ₁₀ = 0.17 Q ₁ = 0.20 Median = 0.22 Q ₃ = 0.27 P ₉₀ = 0.35 P ₉₉ = 0.79		Hours of Calibration: 38																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-May	0.3	0.3	0.3	0.3	0.3	A	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.49
2-May	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21	0.22
3-May	0.2	0.2	0.2	0.2	0.6	A	0.3	0.3	0.3	0.2	0.2	0.4	0.7	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.27	0.67
4-May	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22	0.34
5-May	0.2	0.2	0.2	0.2	0.3	A	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.6	0.6	0.5	0.3	0.26	0.59
6-May	0.2	0.2	0.3	0.2	A	0.5	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.26	0.49
7-May	0.2	0.3	0.2	A	0.2	1.8	0.4	0.2	0.4	0.2	0.2	0.3	0.2	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.33	1.76
8-May	0.3	0.2	A	0.2	0.2	1.9	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.9	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.3	0.37	1.94
9-May	0.4	0.3	0.3	0.3	0.3	A	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	0.5	0.4	0.3	0.26	0.54
10-May	0.3	0.2	0.2	0.2	A	0.2	0.2	0.4	0.4	0.2	0.8	0.2	0.4	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.28	0.82
11-May	0.3	0.4	0.2	A	0.2	0.7	0.7	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	0.3	0.3	0.2	0.2	0.25	0.73
12-May	0.3	0.2	A	0.2	0.2	0.2	0.3	0.3	0.2	0.2	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.26
13-May	0.2	0.2	0.3	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19	0.25
14-May	0.3	0.2	0.2	0.2	A	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.7	0.7	0.3	0.4	0.29	0.69
15-May	0.4	0.3	0.3	A	0.3	0.4	0.3	0.4	0.2	0.2	0.2	0.2	0.2	0.3	1.1	0.2	0.2	0.3	0.3	0.2	0.3	0.5	0.4	0.3	0.32	1.10
16-May	0.4	0.4	A	0.4	0.3	0.6	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.4	0.4	0.2	0.29	0.57
17-May	0.2	0.3	0.3	0.3	0.3	A	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.27	0.61
18-May	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.4	0.3	0.4	0.3	0.2	0.3	0.4	0.4	0.6	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.31	0.59
19-May	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	C	C	C	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.2	0.2	0.24	0.50
20-May	0.2	0.2	0.2	0.2	0.3	A	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25	0.38
21-May	0.2	0.2	0.2	0.2	A	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20	0.28
22-May	0.2	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.8	0.4	0.5	0.2	0.2	0.2	0.2	0.25	0.81
23-May	0.2	0.2	A	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.23	0.35
24-May	0.3	A	0.2	0.3	0.3	0.3	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.8	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.29	0.79
25-May	A	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	A	0.26	0.35
26-May	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	A	0.2	0.26	0.39
27-May	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.9	0.3	0.3	A	0.3	0.2	0.26	0.91
28-May	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.20	0.28
29-May	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	A	0.2	0.2	0.3	0.23	0.41
30-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	A	0.2	0.2	0.2	0.2	0.2	0.21	0.25
31-May	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	0.3	0.2	0.5	1.1	A	0.2	0.3	0.3	0.3	0.3	0.2	0.28	1.05
		0.24	0.24	0.23	0.23	0.25	0.46	0.29	0.26	0.25	0.23	0.24	0.23	0.24	0.25	0.27	0.24	0.27	0.24	0.25	0.25	0.27	0.30	0.27	0.24	Diurnal Average
		0.41	0.42	0.31	0.36	0.59	1.94	0.73	0.36	0.40	0.41	0.82	0.42	0.67	0.49	1.10	0.89	1.05	0.81	0.91	0.46	0.67	0.69	0.46	0.36	Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

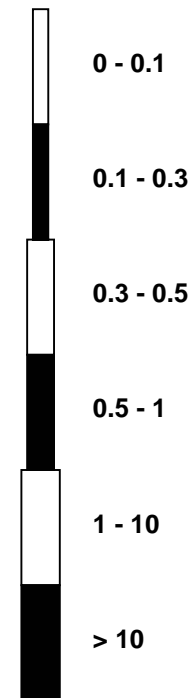


Pollutant Rose

Carbon Monoxide (CO) - ppm
Henry Pirker - May 2010



Pollutant Classes (ppm)



Eight Hour Running Averages

Carbon Monoxide (CO) - ppm

Henry Pirker - May 2010

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 0.27 ppm on May 15 04:00		Hours in Service: 744 Hours of Data: 731 Hours of Missing Data: 13 Hours of Calibration: 13 Percent Operational Time: 100.0																							
Minimum Value: 0.14 ppm on May 31 15:00																									
Percentiles: P ₁ = 0.15 P ₁₀ = 0.16 Q ₁ = 0.17 Median = 0.19 Q ₃ = 0.21 P ₉₀ = 0.22 P ₉₉ = 0.26																									
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-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
2-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
3-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
4-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
5-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
6-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
7-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
8-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
9-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
10-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.22
11-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.21
12-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	0.1	0.2	0.2	0.2	0.2	0.2	0.19
13-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17
14-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.23
15-May	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
16-May	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.25
17-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
18-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.27
19-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N	N	N	N	N	N	0.2	0.2	0.2	0.2	0.2	0.2	0.24
20-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
21-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
22-May	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.18
23-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
24-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.24
25-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.22
26-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.21
27-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
28-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.17
29-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
30-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.20
31-May	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.19
0.24 0.25 0.26 0.27 0.26 0.25 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.25 0.25 0.25 0.25 0.26 0.27 0.27 0.27 0.27 0.26 0.26 0.26																									
Diurnal Maximums																									
N - Not Valid Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																									

Hourly Averages

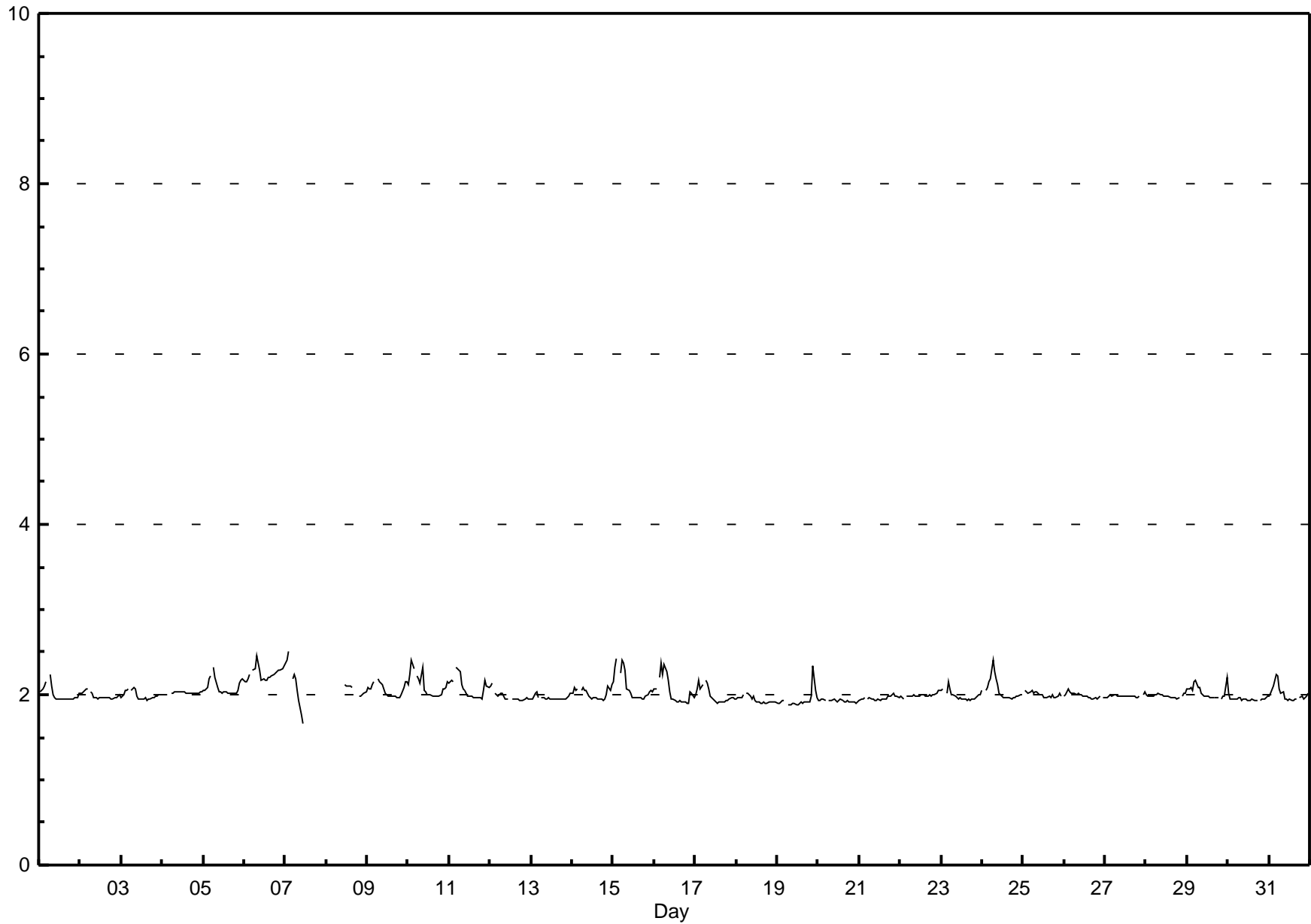
Total Hydrocarbons (THC) - ppm

Henry Pirker - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 2.50 ppm on May 7 03:00	Maximum Daily Average: 2.25 ppm on May 6
Minimum Value: 1.7 ppm on May 7 11:00	Hours of Data: 684
Maximum Diurnal Average: 2.12 ppm at hour 6	Hours of Missing Data: 60
Monthly Average: 2.016 ppm	Hours of Calibration: 36
Minimum Daily Average: 1.93 ppm on May 20	Percent Operational Time: 96.8
Minimum Diurnal Average: 1.97 ppm at hour 18	
Percentiles: P ₁ = 1.89 P ₁₀ = 1.93 Q ₁ = 1.95 Median = 1.98 Q ₃ = 2.04 P ₉₀ = 2.16 P ₉₉ = 2.40	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-May	2.0	2.0	2.1	2.1	2.1	A	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.01	2.25																						
2-May	2.0	2.0	2.0	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.07																						
3-May	2.0	2.0	2.0	2.1	2.1	A	2.0	2.1	2.1	2.0	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.99	2.08																							
4-May	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.02	2.03																							
5-May	2.0	2.1	2.1	2.2	2.2	A	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.2	2.09	2.33																						
6-May	2.2	2.2	2.2	2.2	A	2.3	2.3	2.5	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.25	2.45																							
7-May	2.4	2.4	2.5	A	2.2	2.2	2.2	2.1	1.9	1.8	1.7	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.50																							
8-May	N	N	N	N	N	N	N	N	N	N	M	2.1	2.1	2.1	2.1	2.1	C	C	C	2.0	2.0	2.0	2.0	2.0	--	2.11																							
9-May	2.1	2.1	2.1	2.1	2.1	A	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.2	2.06	2.19																							
10-May	2.1	2.2	2.4	2.3	A	2.2	2.2	2.1	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.10	2.41																							
11-May	2.1	2.2	2.2	A	2.3	2.3	2.3	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.1	2.1	2.08	2.33																							
12-May	2.1	2.1	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	C	C	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.98	2.13																							
13-May	1.9	1.9	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.03																							
14-May	2.0	2.1	2.1	2.1	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.1	2.0	2.1	2.01	2.12																							
15-May	2.2	2.3	2.4	A	2.3	2.4	2.4	2.3	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.09	2.43																							
16-May	2.1	2.1	A	2.2	2.4	2.2	2.4	2.3	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.04	2.37																							
17-May	2.0	2.1	2.2	2.1	2.1	A	2.2	2.1	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.99	2.17																							
18-May	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.94	2.02																							
19-May	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.3	2.1	2.0	1.93	2.34																							
20-May	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.93	1.95																							
21-May	1.9	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.02																							
22-May	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	1.99	2.06																							
23-May	2.1	2.1	A	2.0	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	1.99	2.15																							
24-May	2.0	A	2.1	2.1	2.2	2.2	2.4	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.05	2.40																							
25-May	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.00	2.04																							
26-May	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	1.99	2.07																							
27-May	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	1.98	2.03																							
28-May	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	1.99	2.02																							
29-May	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.2	2.03	2.20																							
30-May	2.0	2.0	1.9	1.9	2.0	2.0	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.9	2.0	2.0	2.0	2.0	1.95	2.01																							
31-May	2.0	2.0	2.1	2.2	2.2	2.2	2.1	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	2.0	1.9	2.0	2.0	2.0	2.0	2.01	2.23																							
																								2.04	2.06	2.08	2.06	2.09	2.12	2.10	2.08	2.04	2.00	1.97	1.98	1.97	1.97	1.97	1.97	1.97	1.97	1.97	1.99	2.03	2.02	2.04	Diurnal Average		
																								2.37	2.40	2.50	2.31	2.37	2.41	2.40	2.45	2.37	2.30	2.18	2.19	2.16	2.17	2.21	2.20	2.22	2.24	2.25	2.26	2.28	2.34	2.31	2.34	Diurnal Maximum	

C - Calibration M - Maintenance N - Not Valid A - Automated Daily Zero Span

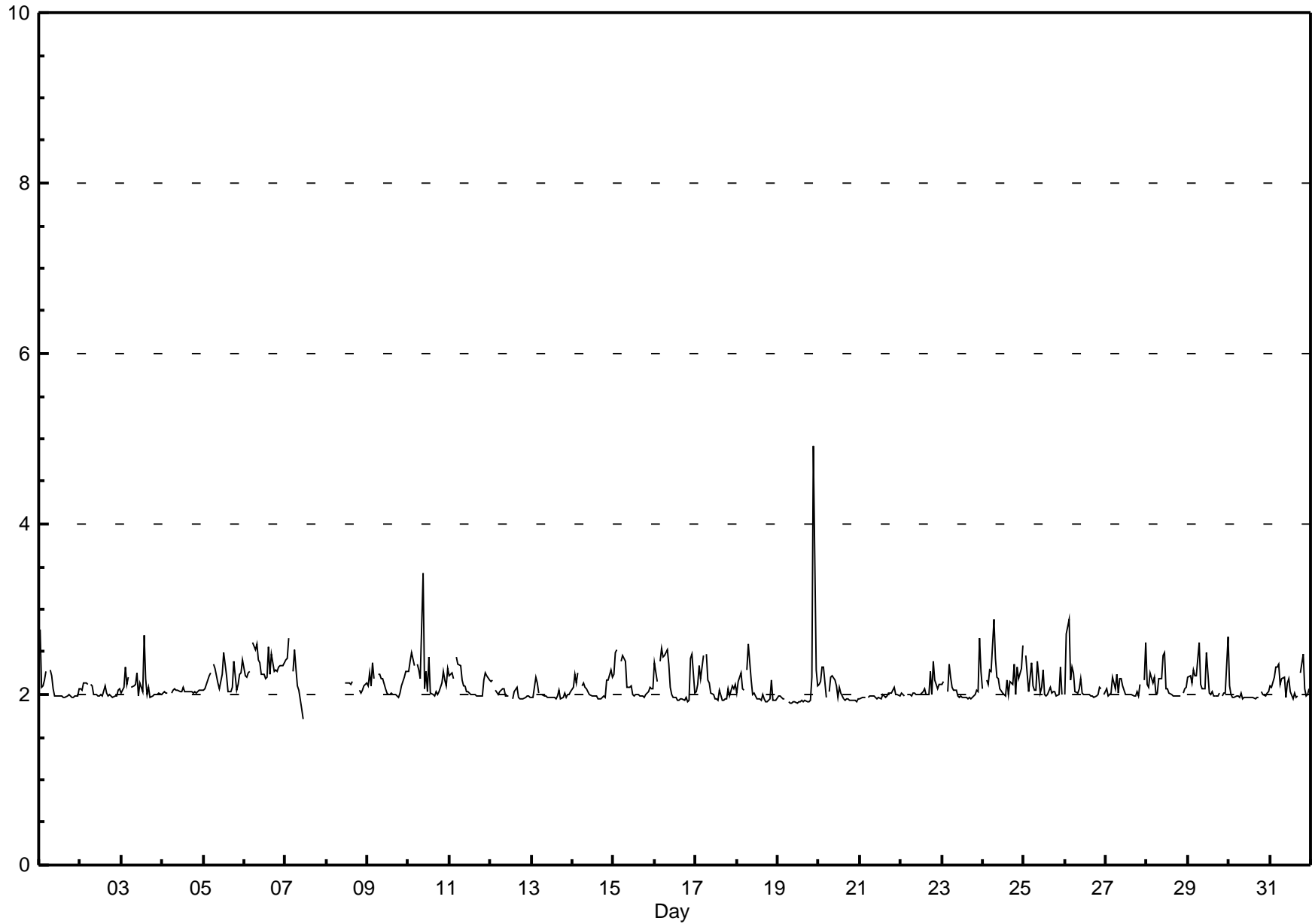


Hourly Maximums

Total Hydrocarbons (THC) - ppm

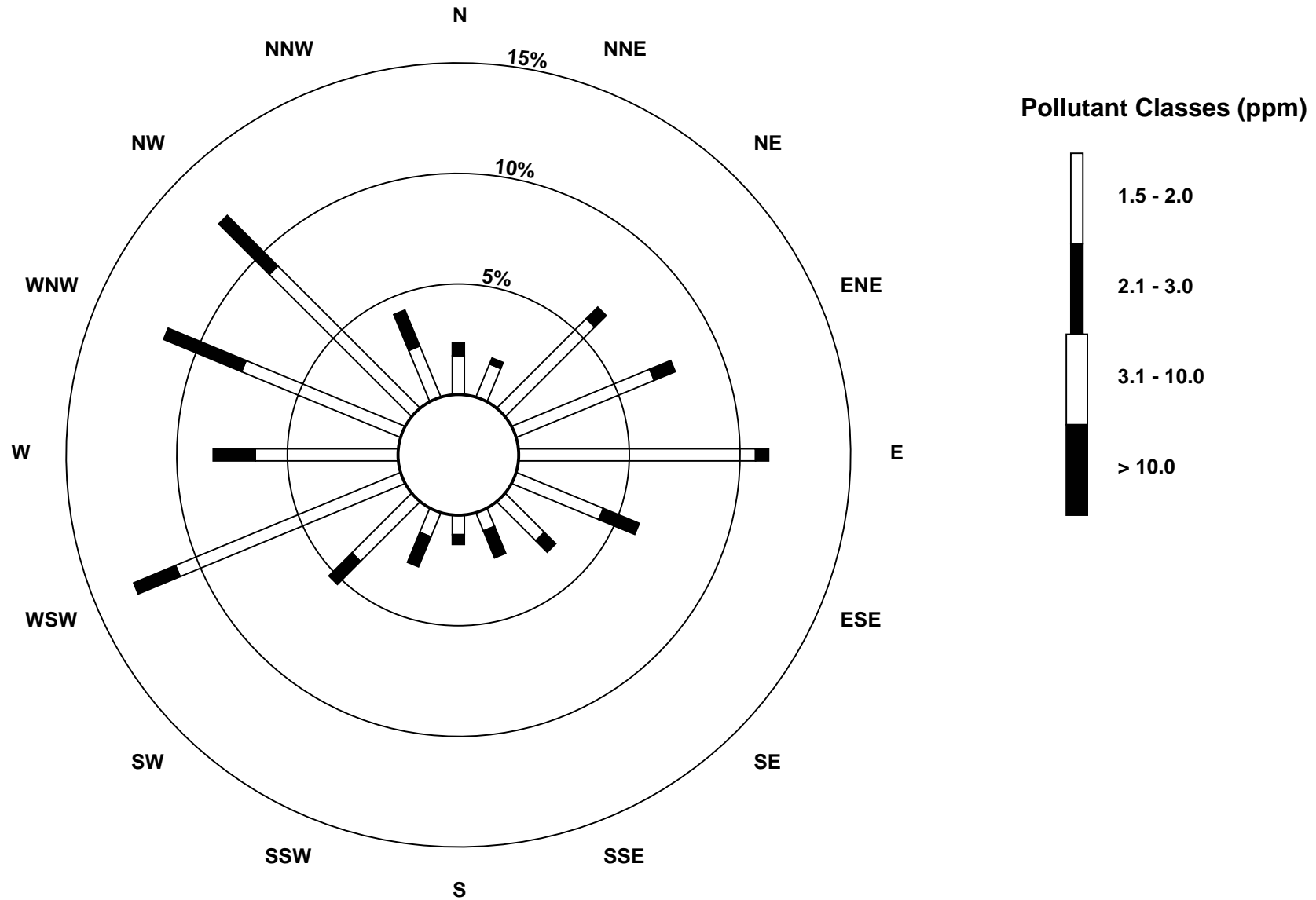
Henry Pirker - May 2010

Maximum Value: 4.92 ppm on May 19 22:00		Maximum Daily Average: 2.34 ppm on May 6		Hours in Service: 744																																												
Minimum Value: 1.7 ppm on May 7 11:00		Minimum Daily Average: 1.99 ppm on May 30		Hours of Data: 684																																												
Maximum Diurnal Average: 2.22 ppm at hour 3		Minimum Diurnal Average: 2.00 ppm at hour 16		Hours of Missing Data: 60																																												
Monthly Average: 2.104 ppm		Percentiles: P ₁ = 1.91 P ₁₀ = 1.96 Q ₁ = 1.98 Median = 2.04 Q ₃ = 2.17 P ₉₀ = 2.33 P ₉₉ = 2.69		Hours of Calibration: 36																																												
Percent Operational Time: 96.8																										Daily Average	Daily Maximum																					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-May	2.8	2.1	2.1	2.2	2.3	A	2.3	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.07	2.76																					
2-May	2.1	2.0	2.1	2.1	2.1	A	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.03	2.14																					
3-May	2.0	2.1	2.3	2.1	2.2	A	2.1	2.1	2.1	2.2	2.0	2.1	2.0	2.7	2.2	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.10	2.70																					
4-May	2.0	2.0	2.0	2.0	A	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.04	2.09																						
5-May	2.1	2.1	2.2	2.2	2.3	A	2.4	2.3	2.1	2.1	2.2	2.2	2.5	2.2	2.0	2.0	2.0	2.1	2.4	2.0	2.1	2.2	2.3	2.4	2.19	2.49																						
6-May	2.2	2.2	2.3	2.3	A	2.6	2.5	2.6	2.4	2.4	2.2	2.2	2.2	2.2	2.6	2.2	2.5	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.34	2.61																						
7-May	2.4	2.4	2.7	A	2.3	2.5	2.3	2.1	2.1	1.8	1.7	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.66																						
8-May	N	N	N	N	N	N	N	N	N	N	M	2.1	2.1	2.1	2.1	2.2	C	C	C	2.0	2.0	2.1	2.1	2.1	--	2.16																						
9-May	2.1	2.3	2.1	2.4	2.2	A	2.2	2.2	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.12	2.37																						
10-May	2.3	2.4	2.5	2.3	A	2.4	2.3	2.2	3.4	2.1	2.3	2.0	2.4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.3	2.2	2.1	2.3	2.24	3.42																					
11-May	2.2	2.2	2.2	A	2.4	2.4	2.3	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.2	2.2	2.13	2.44																						
12-May	2.2	2.2	A	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	C	C	2.0	2.0	2.1	2.0	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.02	2.17																						
13-May	2.0	2.0	2.2	2.1	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.00	2.20																						
14-May	2.1	2.2	2.1	2.3	A	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.2	2.2	2.3	2.2	2.08	2.30																						
15-May	2.2	2.5	2.5	A	2.4	2.5	2.4	2.4	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.15	2.52																						
16-May	2.4	2.2	A	2.4	2.5	2.4	2.5	2.5	2.4	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	2.4	2.5	2.0	2.16	2.54																						
17-May	2.0	2.1	2.3	2.2	2.5	A	2.5	2.2	2.1	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.1	2.0	2.1	2.1	2.08	2.47																						
18-May	2.0	2.1	2.2	2.1	2.1	A	2.3	2.6	2.2	2.0	2.0	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.2	1.9	1.9	1.9	2.05	2.60																						
19-May	2.0	2.0	2.0	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.2	4.9	2.3	2.1	2.09	4.92																						
20-May	2.1	2.2	2.3	2.3	2.0	A	2.0	2.2	2.2	2.2	2.1	2.0	2.1	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.05	2.33																						
21-May	1.9	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	2.0	2.0	2.0	1.99	2.08																						
22-May	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.0	2.0	2.3	2.0	2.4	2.2	2.1	2.1	2.1	2.06	2.40																						
23-May	2.1	2.2	A	2.0	2.4	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.7	2.3	2.08	2.66																						
24-May	2.1	A	2.2	2.1	2.3	2.3	2.9	2.4	2.2	2.2	2.1	2.0	2.0	2.0	2.2	2.0	2.2	2.1	2.3	2.0	2.3	2.2	2.3	2.6	2.21	2.88																						
25-May	A	2.5	2.2	2.0	2.4	2.1	2.0	2.1	2.4	2.0	2.1	2.3	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.3	2.0	A	2.12	2.46																						
26-May	2.0	2.7	2.9	2.2	2.3	2.3	2.0	2.0	2.1	2.2	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	2.1	A	2.0	2.12	2.87																						
27-May	2.1	2.0	2.0	2.0	2.2	2.1	2.2	2.0	2.2	2.2	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.1	A	2.2	2.6	2.09	2.61																						
28-May	2.1	2.1	2.3	2.1	2.2	2.0	2.0	2.2	2.2	2.5	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.1	2.1	2.10	2.49																						
29-May	2.2	2.2	2.1	2.3	2.2	2.2	2.6	2.1	2.1	2.1	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.7	2.15	2.68																						
30-May	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	A	2.0	2.0	2.0	2.0	2.0	1.99	2.11																						
31-May	2.1	2.1	2.2	2.3	2.3	2.4	2.1	2.2	2.2	2.0	2.1	2.2	2.0	1.9	2.0	2.0	2.0	A	2.3	2.5	2.1	2.0	2.0	2.1	2.13	2.48																						
																								2.13	2.17	2.22	2.16	2.22	2.22	2.21	2.17	2.16	2.07	2.05	2.05	2.04	2.03	2.03	2.00	2.01	2.00	2.03	2.04	2.08	2.19	2.13	2.16	Diurnal Average
																								2.76	2.72	2.87	2.38	2.54	2.61	2.88	2.60	3.42	2.45	2.49	2.49	2.49	2.70	2.55	2.23	2.48	2.27	2.39	2.48	2.33	4.92	2.66	2.68	Diurnal Maximum
C - Calibration																								M - Maintenance				N - Not Valid				A - Automated Daily Zero Span																



Pollutant Rose

Total Hydrocarbons (THC) - ppm
Henry Pirker - May 2010

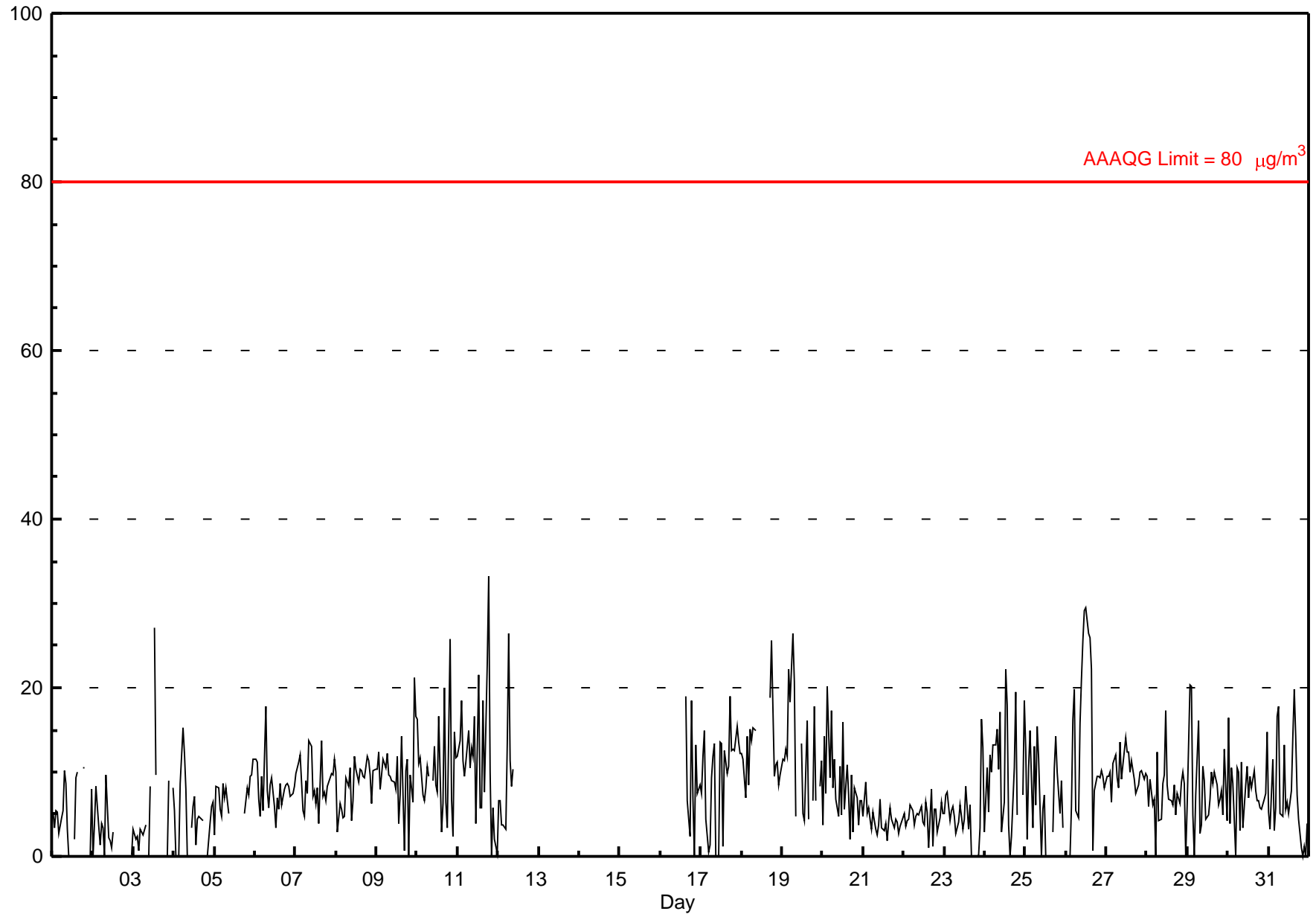


Hourly Averages

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

Henry Pirker - May 2010

Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 33.2 µg/m ³ on May 11 19:00		Maximum Daily Average: 14.2 µg/m ³ on May 26		Hours in Service: 744 Hours of Data: 585																																													
Minimum Value: 0 µg/m ³ on May 1 11:00 Maximum Diurnal Average: 11.0 µg/m ³ at hour 16 Monthly Average: 8.38 µg/m ³		Minimum Daily Average: 4.3 µg/m ³ on May 21 Minimum Diurnal Average: 5.9 µg/m ³ at hour 21 Percentiles: P ₁ = 0.0 P ₁₀ = 2.6 Q ₁ = 4.7 Median = 7.8 Q ₃ = 10.8 P ₉₀ = 15.1 P ₉₉ = 26.4		Hours of Missing Data: 159 Hours of Calibration: 14 Percent Operational Time: 80.5																																													
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-May	5	3	5	5	3	5	5	10	9	3	0	C	C	2	9	10	BD	BD	11	11	BD	BD	0	8	5.8	10.6																							
2-May	0	4	8	4	1	4	3	0	10	2	2	1	3	BD	BD	BD	BD	BD	BD	N	N	N	N	0	--	9.7																							
3-May	3	2	2	1	3	3	3	4	BD	0	8	BD	27	10	BD	26	BD	BD	BD	BD	0	9	BD	8	--	27.0																							
4-May	5	0	0	0	9	15	12	8	0	BD	3	6	7	1	4	5	4	4	C	C	0	4	6	6	4.8	15.3																							
5-May	2	8	8	6	5	9	7	8	5	N	N	N	N	N	N	N	N	M	5	8	7	9	10	12	--	11.6																							
6-May	11	11	7	5	10	5	18	8	6	8	9	6	3	7	6	9	6	8	8	9	8	7	7	8	8.0	17.8																							
7-May	10	11	11	12	5	5	9	7	14	13	7	8	6	8	4	14	7	8	7	8	9	10	10	12	8.9	13.8																							
8-May	10	3	6	6	5	5	9	8	10	4	7	12	10	9	10	10	9	9	12	11	10	6	10	10	8.5	11.9																							
9-May	10	12	8	10	12	10	12	10	9	9	9	8	12	4	7	14	1	10	11	0	10	6	21	17	9.7	21.2																							
10-May	16	11	12	7	7	8	11	9	BD	9	13	9	8	17	3	6	20	6	3	26	7	2	15	12	10.3	25.8																							
11-May	12	14	19	11	10	11	15	10	13	12	17	4	21	6	6	19	8	23	33	10	0	6	2	0	11.7	33.2																							
12-May	7	7	4	4	3	13	26	11	8	10	C	C	C	C	N	N	N	N	N	N	N	N	N	N	--	26.5																							
13-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																							
14-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																							
15-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																							
16-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	C	19	7	2	18	7	0	13	8	9	--	18.9																							
17-May	7	12	15	4	1	1	9	12	13	0	0	14	13	1	13	10	11	19	13	13	12	15	14	12	9.8	19.0																							
18-May	12	11	7	14	8	15	14	15	15	M	M	M	C	C	C	C	C	19	26	9	11	11	8	10	--	25.5																							
19-May	11	11	13	12	22	18	26	21	5	BD	M	13	5	4	10	16	4	BD	7	18	7	BD	8	11	12.2	26.4																							
20-May	4	14	7	20	9	17	8	12	7	5	11	5	16	6	11	7	2	10	3	8	7	4	7	7	8.5	20.1																							
21-May	5	9	5	6	4	3	5	3	3	4	7	3	3	4	2	4	6	4	3	4	4	3	3	5	4.3	8.8																							
22-May	5	4	4	4	6	5	4	5	5	5	6	4	4	6	5	1	8	1	6	6	3	5	6	5	4.7	7.9																							
23-May	5	7	8	4	5	6	5	3	4	6	5	3	4	8	3	6	0	BD	BD	0	0	3	16	13	5.3	16.3																							
24-May	3	10	5	12	10	13	13	15	10	17	3	6	22	18	4	0	2	11	20	5	BD	BD	7	18	10.3	22.2																							
25-May	13	2	10	15	3	13	6	15	12	0	6	7	0	0	BD	BD	3	11	14	10	5	9	3	BD	7.5	15.4																							
26-May	BD	BD	0	6	16	20	5	5	16	21	26	29	30	26	26	22	1	8	9	10	9	10	10	8	14.2	29.6																							
27-May	9	10	10	6	11	12	9	8	14	9	11	14	12	12	10	11	9	7	8	9	10	10	9	10	10.1	14.0																							
28-May	9	6	9	6	7	0	12	4	4	9	10	17	8	7	6	8	5	8	6	9	10	9	0	0	7.4	17.3																							
29-May	6	20	20	5	0	7	16	3	4	11	9	4	5	7	10	9	10	8	6	7	8	5	13	4	8.2	20.3																							
30-May	16	4	11	9	0	10	10	3	11	3	8	11	7	9	8	10	8	7	7	6	6	7	7	15	8.0	16.5																							
31-May	5	3	11	3	6	17	18	5	5	13	6	6	5	8	14	20	14	7	4	1	0	1	0	4	7.4	19.8																							
																								7.9	8.1	8.4	7.3	6.7	9.4	10.8	8.3	8.4	7.6	7.8	8.7	10.1	7.8	8.2	11.0	6.7	8.9	10.5	8.4	5.9	7.3	8.4	8.6	Diurnal Average	
																								16.5	20.3	20.2	20.1	22.3	19.8	26.5	20.7	15.7	21.0	25.6	29.2	29.6	26.5	26.0	25.9	20.0	22.9	33.2	25.8	12.5	15.5	21.2	18.4	Diurnal Maximum	
C - Calibration M - Maintenance 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																																																	

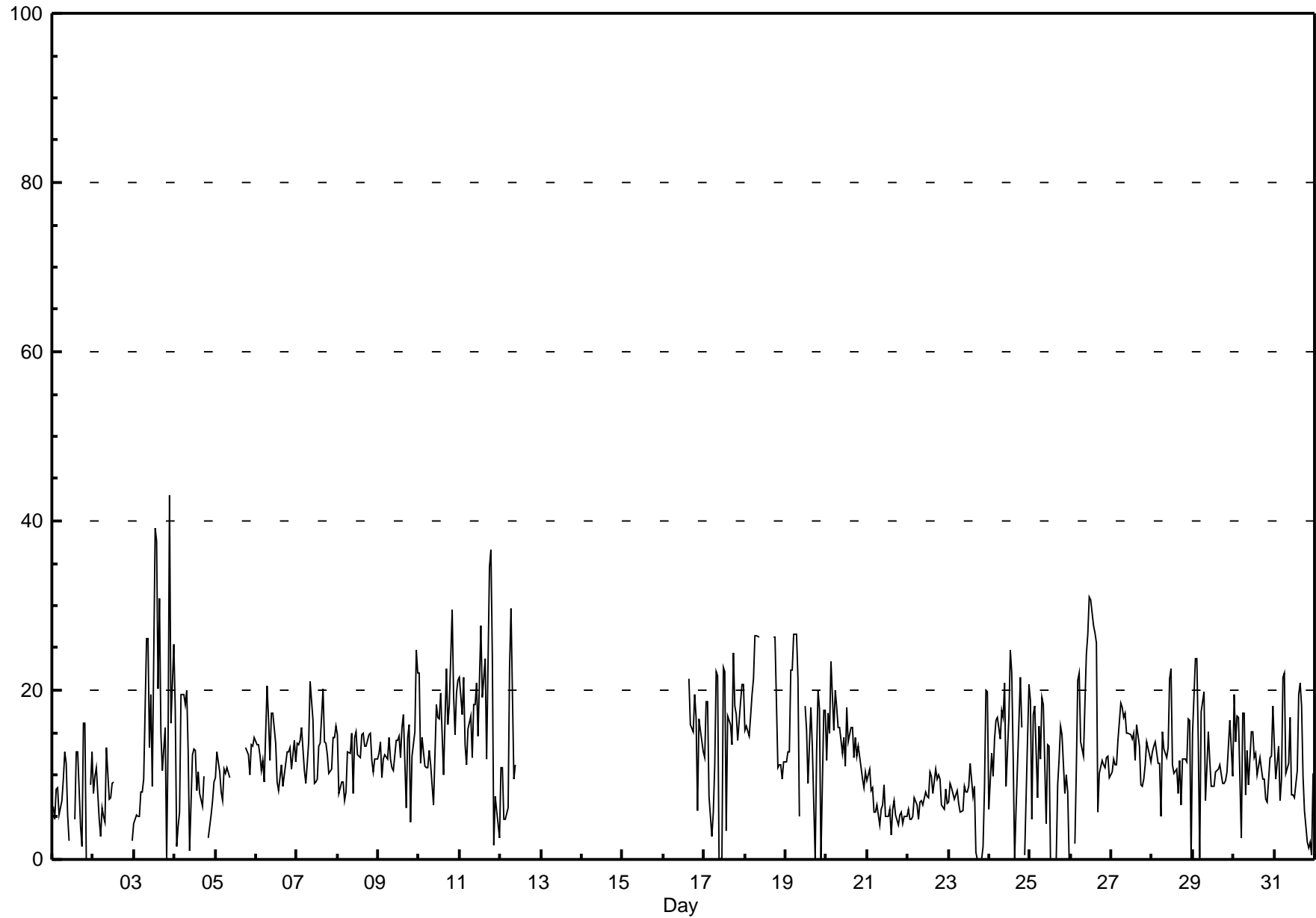


Hourly Maximums

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

Henry Pirker - May 2010

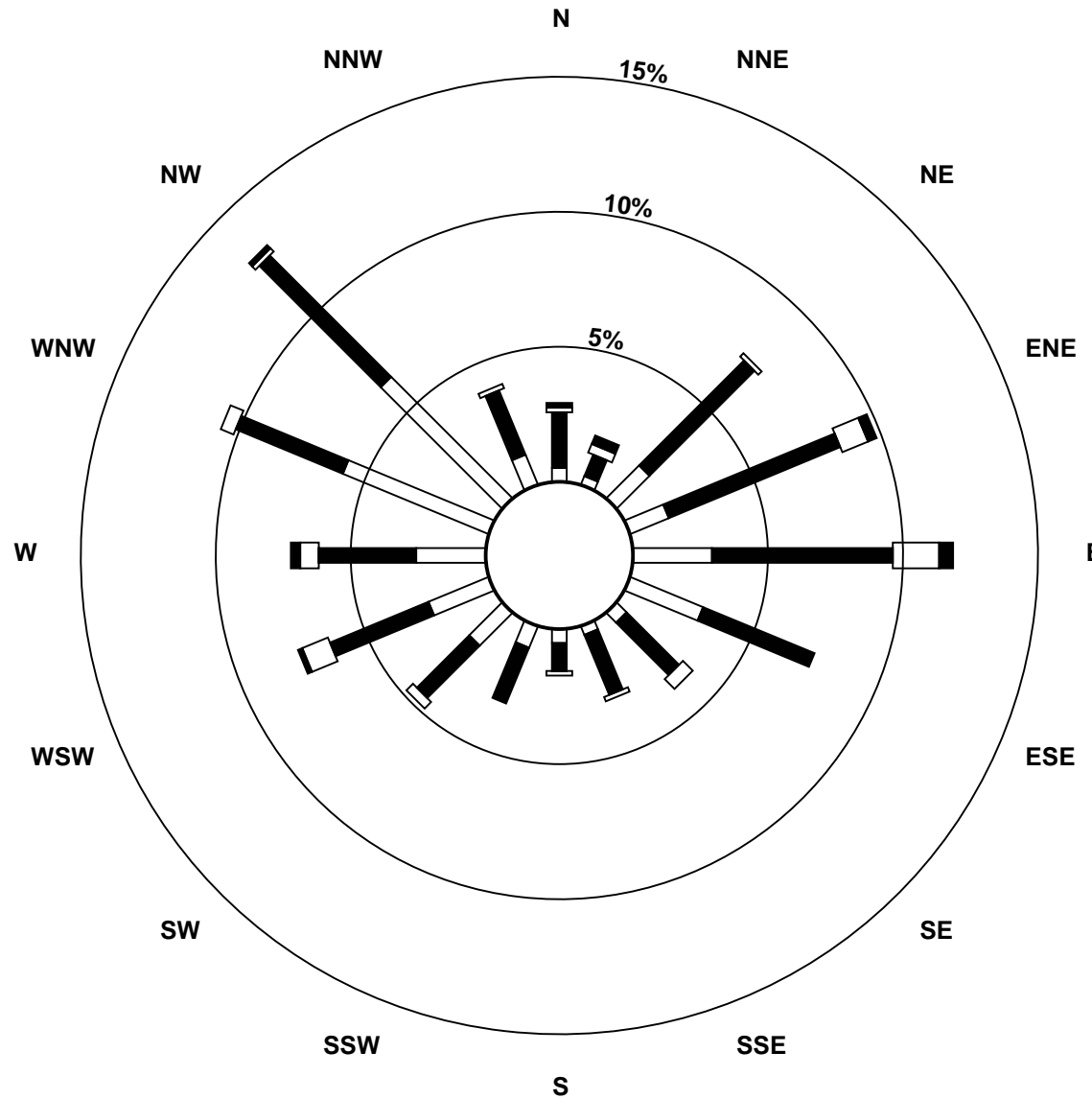
Maximum Value: 43.0 μg/m ³ on May 3 22:00		Maximum Daily Average: 17.4 μg/m ³ on May 11		Hours in Service: 744																							
Minimum Value: 0 μg/m ³ on May 1 21:00		Minimum Daily Average: 6.1 μg/m ³ on May 21		Hours of Data: 606																							
Maximum Diurnal Average: 14.9 μg/m ³ at hour 7		Minimum Diurnal Average: 9.1 μg/m ³ at hour 21		Hours of Missing Data: 138																							
Monthly Average: 12.51 μg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 5.1 Q ₁ = 8.4 Median = 12.0 Q ₃ = 15.9 P ₉₀ = 20.9 P ₉₉ = 29.2		Hours of Calibration: 14																							
				Percent Operational Time: 83.3																							
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-May	6	5	8	8	5	7	9	13	11	5	2	C	C	5	13	13	4	2	16	16	0	BD	9	13	8.1	16.1	
2-May	8	10	11	5	3	6	5	4	13	7	7	9	9	BD	BD	BD	BD	BD	0	N	N	N	N	2	--	13.3	
3-May	4	5	5	5	8	8	9	26	26	13	19	9	39	38	20	31	15	11	16	0	14	43	16	25	16.9	43.0	
4-May	18	2	4	6	20	20	18	20	13	1	12	13	13	8	10	8	6	10	C	C	3	5	7	9	10.2	20.1	
5-May	10	13	10	8	7	11	10	11	10	N	N	N	N	N	N	N	N	M	13	12	10	13	13	14	--	14.3	
6-May	14	14	12	10	12	9	21	17	12	17	17	14	9	8	10	11	9	11	13	13	13	11	14	12	12.5	20.6	
7-May	14	13	14	16	11	9	11	14	21	16	9	9	9	13	14	20	14	14	12	10	11	14	14	16	13.3	21.0	
8-May	15	8	9	9	7	8	13	13	15	8	14	15	12	12	15	15	13	13	15	15	12	10	12	12	12.1	15.1	
9-May	13	14	10	12	12	12	14	12	11	11	14	14	15	12	16	17	6	14	16	4	12	15	25	22	13.4	24.8	
10-May	22	11	14	11	11	11	13	11	6	12	18	17	17	20	10	16	22	16	18	29	19	15	20	21	15.9	29.4	
11-May	22	17	22	14	11	15	17	12	18	18	21	15	28	19	21	24	12	35	37	24	2	7	6	3	17.4	36.6	
12-May	11	11	5	5	6	23	30	19	9	11	C	C	C	C	N	N	N	N	N	N	N	N	N	N	--	29.7	
13-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--	
14-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--	
15-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--	
16-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	C	21	16	15	19	17	6	17	15	13	--	21.3	
17-May	12	19	19	7	3	6	11	22	22	0	0	23	22	3	17	16	14	24	18	17	14	19	21	21	14.5	24.5	
18-May	15	16	15	17	19	21	27	27	26	M	M	M	C	C	C	C	C	C	26	26	11	11	10	12	--	26.5	
19-May	12	13	13	22	22	27	27	21	5	BD	M	18	15	9	14	18	13	0	13	20	18	0	18	18	15.2	26.6	
20-May	12	17	15	23	15	20	18	16	16	12	14	11	18	14	16	16	12	14	12	13	11	9	8	10	14.3	23.4	
21-May	9	11	8	8	6	6	6	4	6	6	9	5	5	6	3	6	7	5	4	5	6	4	5	5	6.1	10.6	
22-May	6	5	5	5	7	6	5	7	7	6	8	7	7	10	10	8	11	9	10	10	6	6	8	7	7.4	10.6	
23-May	7	9	9	7	8	8	7	6	6	9	8	8	9	11	7	9	1	0	BD	0	2	8	20	20	7.7	20.0	
24-May	6	12	10	14	16	17	14	18	17	21	9	17	25	22	12	0	6	16	21	16	BD	1	14	21	14.1	24.8	
25-May	19	5	17	18	7	16	12	19	18	4	14	13	0	0	0	0	9	12	16	15	8	10	8	0	10.0	19.2	
26-May	BD	BD	2	11	21	22	14	12	18	24	27	31	31	28	27	26	6	10	12	11	11	12	12	10	17.1	31.1	
27-May	10	12	11	11	14	18	18	17	17	15	15	15	14	15	12	16	13	9	9	10	11	14	12	12	13.3	18.4	
28-May	13	13	14	11	11	5	15	13	12	13	21	23	11	10	11	8	12	6	12	12	12	17	16	0	12.1	22.6	
29-May	15	24	24	14	0	17	20	7	11	15	12	9	9	10	11	11	11	9	9	9	10	13	16	10	12.3	23.8	
30-May	20	14	17	17	3	17	17	8	13	9	15	15	12	12	10	12	11	9	9	7	7	12	12	18	12.3	19.5	
31-May	14	9	13	7	10	22	22	10	11	17	8	8	7	11	20	21	18	10	6	2	1	2	1	10	10.8	22.0	
		12.4	11.6	11.6	11.2	10.2	13.6	14.9	14.0	13.7	11.4	12.8	13.8	14.6	12.9	12.9	14.2	10.8	12.1	14.1	11.9	9.1	11.6	12.8	12.3	Diurnal Average	
		22.0	23.8	23.8	23.4	22.4	26.6	29.7	26.5	26.3	24.3	26.6	31.1	39.1	37.6	26.7	30.9	22.5	34.6	36.6	29.4	19.3	43.0	24.8	25.4	Diurnal Maximum	
C - Calibration		M - Maintenance			N - Not Valid			BD - Baseline Drift																			



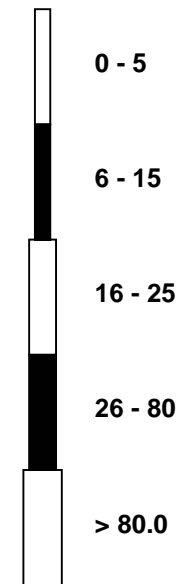
Pollutant Rose

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

Henry Pirker - May 2010



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

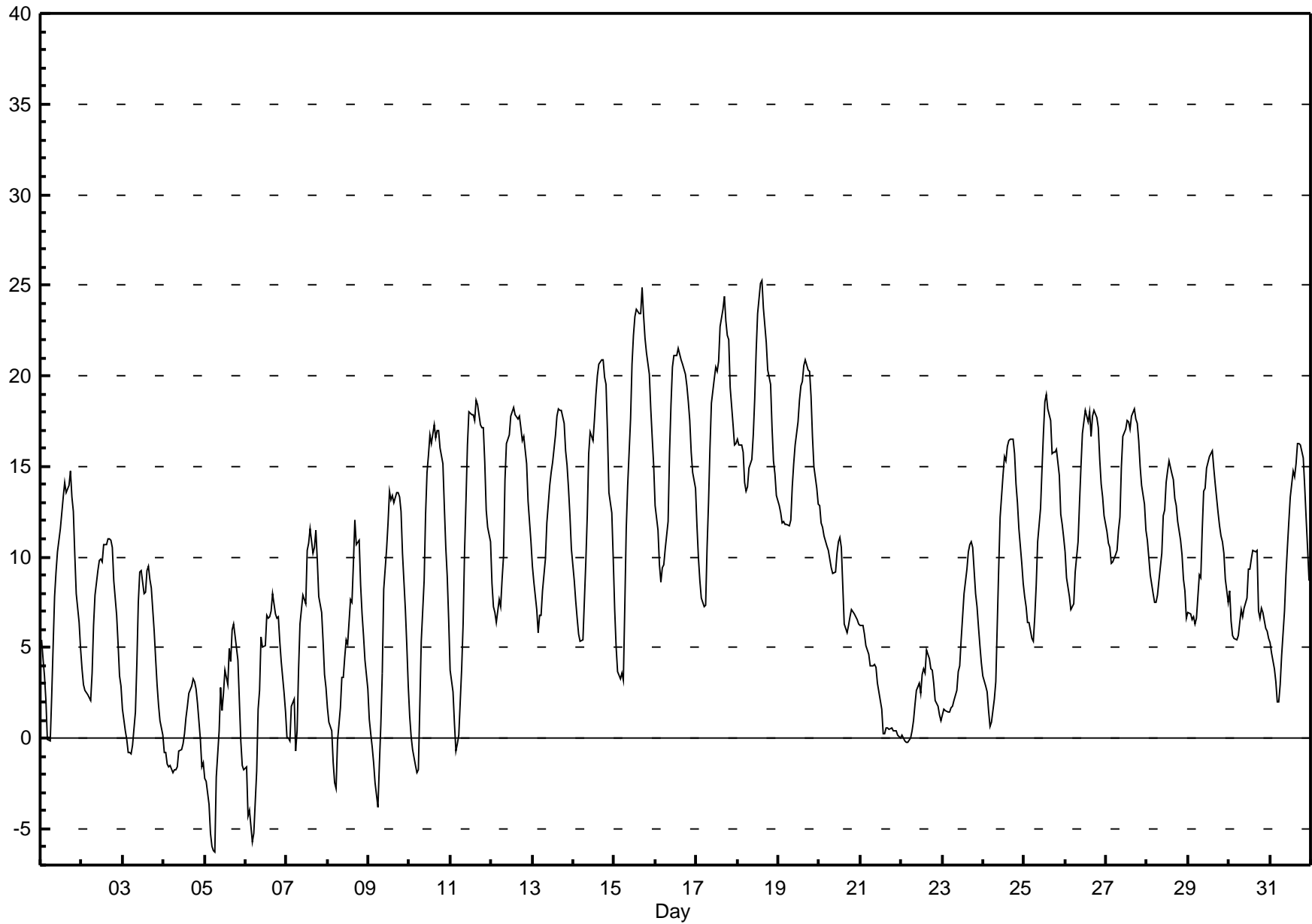


Hourly Averages

External Temperature (ET) - °C

Henry Pirker - May 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0										Hours in Service: 744																																						
Maximum Value: 25.2 °C on May 18 15:00										Maximum Daily Average: 18.2 °C on May 18										Hours of Data: 744																												
Minimum Value: -6 °C on May 5 07:00										Minimum Daily Average: 0.1 °C on May 4										Hours of Missing Data: 0																												
Maximum Diurnal Average: 14.1 °C at hour 17										Minimum Diurnal Average: 3.4 °C at hour 6										Hours of Calibration: 0																												
Monthly Average: 9.30 °C										Percentiles: P ₁ = -4.3 P ₁₀ = 0.4 Q ₁ = 3.8 Median = 9.2 Q ₃ = 14.7 P ₉₀ = 18.0 P ₉₉ = 23.6										Percent Operational Time: 100.0																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-May	5	4	3	2	0	0	2	5	8	9	10	12	12	13	14	14	14	15	13	13	10	8	6	5	8.3	14.8																						
2-May	4	3	3	2	2	2	4	6	8	9	10	10	10	11	11	11	11	11	11	9	7	5	3	3	6.9	11.0																						
3-May	2	0	0	-1	-1	-1	0	1	4	8	9	9	8	8	9	10	9	8	6	4	3	2	1	0	4.1	9.5																						
4-May	-1	-1	-1	-2	-2	-2	-2	-2	-2	-1	-1	0	0	1	2	2	3	3	3	3	2	0	-2	-1	0.1	3.3																						
5-May	-2	-2	-4	-5	-6	-6	-6	-2	0	3	2	3	4	3	5	4	6	6	6	4	2	0	-2	-2	0.4	6.3																						
6-May	-2	-4	-4	-5	-6	-5	-2	2	3	6	5	5	7	7	7	7	8	7	7	7	5	4	3	1	2.5	8.0																						
7-May	0	0	0	2	2	-1	0	4	6	8	8	7	10	11	12	10	11	12	10	8	7	5	4	3	5.7	11.6																						
8-May	2	1	0	-1	-2	-3	0	2	3	3	4	5	5	8	8	10	12	11	11	8	7	6	4	3	4.4	12.1																						
9-May	1	0	0	-1	-2	-4	-1	1	4	8	10	12	14	13	13	13	14	14	13	12	10	7	5	3	6.6	13.6																						
10-May	1	0	-1	-1	-2	-2	2	5	9	12	15	16	17	16	17	17	17	17	16	15	13	11	9	7	9.4	17.3																						
11-May	4	3	1	-1	0	0	4	6	10	13	16	18	18	18	18	19	18	17	17	17	15	13	12	11	11.1	18.7																						
12-May	9	7	7	6	8	7	9	10	14	16	17	18	18	18	18	18	18	17	16	17	15	13	12	11	13.3	18.2																						
13-May	10	9	7	6	7	7	8	10	12	13	14	15	15	17	18	18	18	18	17	16	15	14	12	10	12.7	18.2																						
14-May	9	8	7	6	5	5	8	10	12	16	17	16	18	19	20	21	21	21	20	20	17	14	12	10	13.7	20.9																						
15-May	7	5	4	3	4	3	7	12	14	18	21	22	23	24	23	23	25	23	22	21	20	18	17	15	15.6	24.9																						
16-May	13	11	10	9	9	10	10	12	16	18	20	21	21	22	21	21	21	20	19	19	18	16	15	14	16.0	21.5																						
17-May	12	10	9	8	7	7	10	13	16	18	20	20	20	21	23	24	24	24	23	22	19	17	16	16	16.6	24.4																						
18-May	16	16	16	16	14	14	14	15	15	17	19	21	23	25	25	24	23	22	20	20	17	15	15	13	18.2	25.2																						
19-May	13	12	12	12	12	12	12	12	14	15	16	17	19	19	20	21	21	20	20	19	17	15	14	13	15.7	20.9																						
20-May	13	12	12	11	11	10	10	9	9	9	10	11	11	11	6	6	6	6	7	7	7	7	7	6	8.9	12.8																						
21-May	6	6	6	5	5	5	4	4	4	4	3	3	2	0	0	1	1	0	1	0	0	0	0	0	2.5	6.2																						
22-May	0	0	0	0	0	0	0	1	2	3	3	2	4	4	4	5	4	4	4	3	2	2	1	1	2.0	4.9																						
23-May	1	2	2	1	1	2	2	2	3	4	4	5	7	8	9	10	11	11	11	8	7	6	5	4	5.2	10.9																						
24-May	3	3	3	1	1	1	2	3	6	9	12	14	16	15	16	16	17	17	16	14	13	12	10	9	9.5	16.5																						
25-May	8	7	6	6	6	5	7	8	11	13	15	17	19	19	18	18	16	16	16	14	12	12	11	11	12.3	19.0																						
26-May	10	9	8	7	7	7	9	11	13	15	17	17	18	17	18	17	18	18	18	17	15	14	13	12	13.6	18.1																						
27-May	11	11	11	10	10	10	10	11	12	15	17	17	17	17	17	18	18	18	17	16	15	14	13	12	14.1	18.1																						
28-May	11	10	9	8	8	7	8	9	10	12	13	14	15	15	15	14	13	13	12	11	10	9	8	7	10.8	15.3																						
29-May	7	7	7	7	6	7	9	9	11	14	14	15	16	16	16	15	14	12	12	11	11	10	9	8	10.8	15.9																						
30-May	8	6	6	6	5	6	6	7	7	7	8	9	9	10	10	10	10	10	7	7	7	6	6	6	7.4	10.4																						
31-May	5	5	4	3	2	2	3	5	7	9	11	12	13	15	14	15	16	16	16	15	14	12	10	9	9.8	16.2																						
																								6.0	5.2	4.5	3.9	3.6	3.4	4.8	6.5	8.5	10.4	11.5	12.4	13.2	13.6	13.8	13.9	14.1	13.7	13.1	12.2	10.8	9.2	8.1	7.0	Diurnal Average
																								16.5	16.1	16.1	15.8	14.1	13.6	13.9	14.9	16.0	18.5	20.6	22.3	23.4	25.1	25.2	23.7	24.9	23.3	22.3	22.0	20.1	18.2	16.5	16.3	Diurnal Maximum

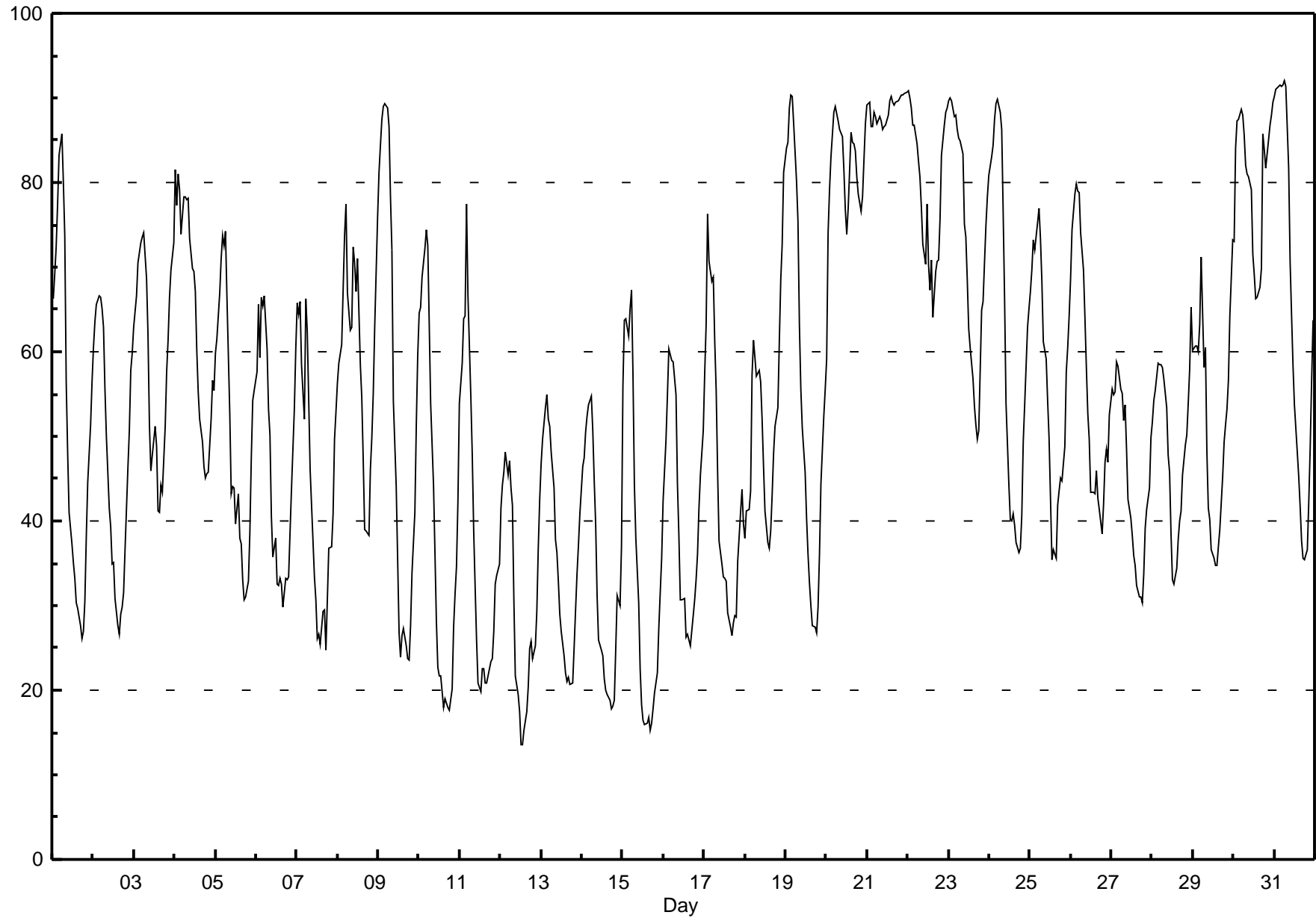


Hourly Averages

Relative Humidity (RH) - %

Henry Pirker - May 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 92.0 % on May 31 07:00 Maximum Daily Average: 88.6 % on May 21																	Hours in Service: 744 Hours of Data: 744 Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0																																
Minimum Value: 13 % on May 12 14:00 Minimum Daily Average: 30.7 % on May 12 Maximum Diurnal Average: 73.2 % at hour 6 Minimum Diurnal Average: 38.0 % at hour 17 Monthly Average: 53.79 % Percentiles: P ₁ = 16.5 P ₁₀ = 26.6 Q ₁ = 36.8 Median = 52.7 Q ₃ = 70.5 P ₉₀ = 85.8 P ₉₉ = 90.6																																																	
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-May	66	69	72	77	83	86	80	74	56	48	41	37	35	33	30	30	28	26	27	31	38	45	51	56	50.9	85.7																							
2-May	60	64	66	67	66	65	63	56	50	41	39	35	35	31	28	27	29	30	31	37	46	51	58	60	47.2	66.5																							
3-May	63	67	71	72	73	74	74	69	62	51	46	48	51	49	41	41	44	43	51	58	61	67	70	73	59.0	74.0																							
4-May	82	77	81	79	74	78	78	78	78	73	70	70	67	60	55	52	49	46	45	46	46	52	57	55	64.5	81.6																							
5-May	60	62	67	71	74	72	74	67	53	43	44	44	40	43	38	37	33	31	31	33	39	47	54	55	50.5	74.3																							
6-May	58	66	59	66	66	67	60	53	50	40	36	38	32	32	33	33	30	33	33	33	39	44	53	60	46.5	66.6																							
7-May	66	64	66	58	52	66	62	54	46	38	33	31	26	27	25	29	30	25	31	37	37	41	50	53	43.6	66.3																							
8-May	56	59	61	67	74	77	67	62	63	72	70	67	71	58	55	47	39	39	38	46	50	55	63	76	59.7	77.4																							
9-May	81	84	87	89	89	89	87	78	72	54	44	35	27	24	26	27	25	24	24	28	34	41	51	60	53.4	89.3																							
10-May	65	65	69	72	74	73	63	54	44	36	28	23	22	22	18	19	18	18	18	20	28	31	35	42	39.9	74.4																							
11-May	54	59	64	64	77	67	55	48	39	32	26	21	20	23	23	21	21	23	23	24	27	33	34	35	37.9	77.4																							
12-May	42	44	46	48	45	47	44	42	31	22	20	17	14	13	15	17	20	25	26	24	25	29	37	43	30.7	48.1																							
13-May	47	50	53	55	52	51	48	44	38	36	33	29	27	24	22	21	21	21	21	25	30	34	37	41	35.8	55.0																							
14-May	46	48	50	52	54	55	51	45	40	31	26	25	24	21	20	20	19	18	18	19	25	31	30	37	33.5	54.7																							
15-May	56	64	64	62	65	67	58	44	38	30	23	18	16	16	17	15	16	18	20	22	27	31	36	35.0	67.3																								
16-May	42	49	55	60	60	59	59	55	44	38	31	31	31	26	27	26	25	29	31	33	36	42	45	51	41.0	60.4																							
17-May	57	63	76	71	68	69	61	55	46	38	35	33	33	33	29	27	26	28	29	29	35	41	44	40	44.5	76.2																							
18-May	38	41	41	44	57	61	59	57	58	56	52	46	41	37	37	39	43	48	51	53	61	68	73	81	51.9	81.1																							
19-May	84	85	89	90	90	87	80	75	63	56	51	46	40	36	33	30	28	27	30	36	44	52	56	55.6	90.3																								
20-May	59	74	79	83	88	89	88	87	86	85	81	77	74	77	86	85	85	84	81	79	77	78	83	87	81.3	88.9																							
21-May	89	89	87	87	88	88	87	88	87	86	87	87	88	90	90	90	89	90	90	90	90	90	90	91	88.6	90.7																							
22-May	91	90	89	87	87	85	82	81	77	73	70	77	70	67	71	64	69	71	71	76	83	87	88	89	78.9	90.8																							
23-May	90	90	90	88	88	86	85	85	83	75	74	68	63	60	57	54	51	50	51	65	66	70	75	78	72.6	90.0																							
24-May	81	83	84	88	89	90	88	86	77	66	54	44	40	40	41	39	37	36	37	41	49	54	63	65	61.4	89.9																							
25-May	67	70	73	72	75	77	73	68	61	59	54	50	43	35	37	36	42	44	45	45	49	58	60	64	56.5	76.9																							
26-May	69	74	79	80	79	79	74	70	64	58	53	50	43	43	43	46	43	41	38	42	47	48	47	53	56.8	79.9																							
27-May	56	55	55	59	58	56	55	52	54	48	42	40	38	36	35	32	31	31	30	34	39	41	44	50	44.7	58.8																							
28-May	52	54	56	59	59	58	58	57	53	48	46	38	33	33	34	38	40	41	45	49	50	54	58	65	49.1	65.2																							
29-May	60	61	61	60	63	71	58	60	48	42	40	37	36	35	35	37	39	45	49	51	53	57	64	73	51.5	73.3																							
30-May	73	84	87	87	89	88	86	82	81	81	79	72	69	66	66	68	70	86	84	82	83	87	88	89	80.3	89.5																							
31-May	90	91	91	92	91	92	92	91	82	71	64	59	54	48	45	42	38	36	35	37	42	49	57	64	64.6	92.0																							
																								64.5	67.6	69.9	71.2	72.5	73.2	69.4	65.1	58.9	52.6	48.1	44.9	42.0	40.0	39.1	38.4	38.0	38.8	39.6	42.3	46.6	51.5	56.2	60.5	Diurnal Average	
																								90.8	91.0	91.3	91.6	91.3	91.5	92.0	91.4	87.3	86.2	86.5	86.8	87.9	89.7	90.1	89.5	89.2	89.5	89.7	90.0	90.3	90.4	90.5	90.7	Diurnal Maximum	

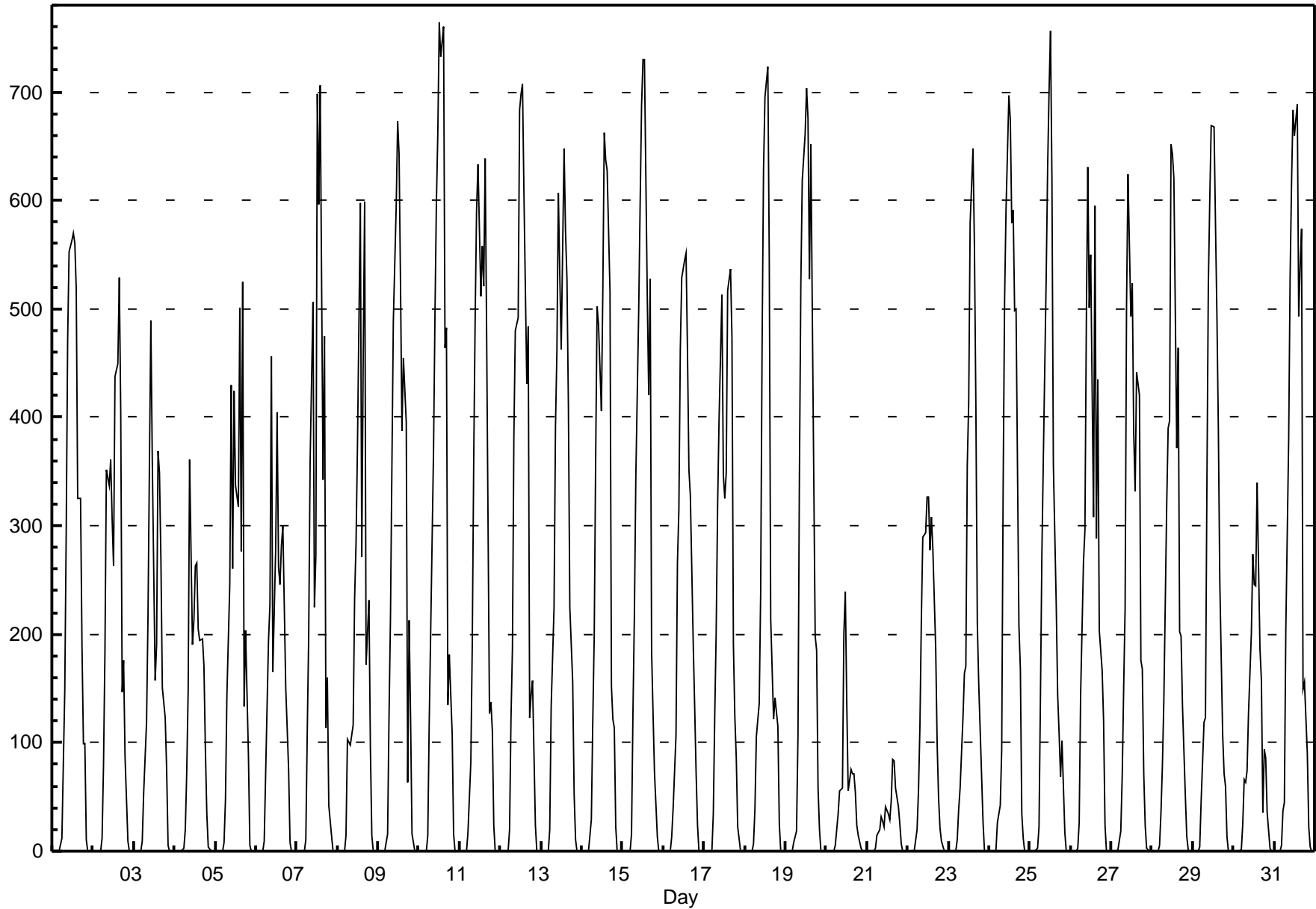


Hourly Averages

Solar Radiation (SR) - W/m²

Henry Pirker - May 2010

Number of Exceedences (AAAQO):		1-hr: 0		24-hr: 0		Hours in Service: 744																Daily Average		Daily Maximum			
Maximum Value: 764.2 W/m ² on May 10 13:00		Maximum Daily Average: 254.2 W/m ² on May 10		Hours of Data: 744																							
Minimum Value: 0 W/m ² on May 1 01:00		Minimum Daily Average: 23.7 W/m ² on May 21		Hours of Missing Data: 0																							
Maximum Diurnal Average: 493.3 W/m ² at hour 13		Minimum Diurnal Average: 0.0 W/m ² at hour 1		Hours of Calibration: 0																							
Monthly Average: 182.38 W/m ²		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 82.3 Q ₃ = 333.3 P ₉₀ = 543.4 P ₉₉ = 715.7		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-May	0	0	0	0	0	12	81	148	294	470	553	563	570	560	518	325	326	189	99	99	11	0	0	0	200.8	570.4	
2-May	0	0	0	0	0	11	80	183	351	337	360	307	263	438	450	529	404	146	176	87	9	0	0	0	172.1	528.8	
3-May	0	0	0	0	0	9	54	119	216	357	490	360	158	191	369	348	269	150	123	75	5	0	0	0	137.3	489.6	
4-May	0	0	0	0	0	2	20	73	148	361	190	213	263	265	205	194	195	170	94	34	5	0	0	0	101.4	361.3	
5-May	0	0	0	0	0	8	48	145	245	430	260	424	337	317	502	276	525	134	204	89	5	0	0	0	164.6	525.4	
6-May	0	0	0	0	0	9	134	194	228	456	165	279	404	261	247	282	301	151	114	76	8	0	0	0	137.8	456.0	
7-May	0	0	0	0	0	10	110	199	360	506	224	272	697	596	706	342	475	114	160	42	13	0	0	0	201.1	706.3	
8-May	0	0	0	0	0	14	103	98	107	116	232	285	375	598	272	458	600	172	232	95	15	0	0	0	157.1	599.5	
9-May	0	0	0	0	0	16	125	215	356	489	594	673	642	522	387	454	395	64	213	123	16	0	0	0	220.2	672.9	
10-May	0	0	0	0	0	15	119	201	369	494	598	662	764	732	760	464	483	135	181	109	16	0	0	0	254.2	764.2	
11-May	0	0	0	0	0	17	83	190	359	489	590	633	511	558	520	639	479	128	138	111	24	0	0	0	227.9	638.8	
12-May	0	0	0	0	0	20	123	187	382	479	492	684	698	707	608	431	483	123	144	158	24	0	0	0	239.3	706.6	
13-May	0	0	0	0	0	20	134	225	392	461	606	532	463	648	571	528	411	224	155	53	11	0	0	0	226.4	648.1	
14-May	0	0	0	0	0	30	121	199	361	503	486	406	516	663	638	628	516	151	122	114	22	0	0	0	228.2	663.0	
15-May	0	0	0	0	0	16	128	218	345	499	597	687	730	730	509	420	528	184	126	73	14	0	0	0	241.8	730.1	
16-May	0	0	0	0	0	13	40	107	265	315	462	529	545	552	459	352	327	192	134	73	24	0	0	0	182.9	551.7	
17-May	0	0	0	0	0	34	125	202	318	398	513	346	325	350	517	537	473	190	124	85	23	0	0	0	190.1	537.0	
18-May	0	0	0	0	0	6	39	106	136	238	466	627	695	723	546	214	168	122	142	115	25	0	0	0	182.0	722.6	
19-May	0	0	0	0	0	8	19	106	345	523	618	661	704	676	528	651	495	198	185	59	20	0	0	0	241.5	703.6	
20-May	0	0	0	0	0	6	19	35	55	58	201	239	138	56	75	71	72	55	24	14	3	0	0	0	46.7	239.2	
21-May	0	0	0	0	0	3	14	20	32	27	23	40	35	29	46	85	83	58	40	26	6	0	0	0	23.7	84.5	
22-May	0	0	0	0	0	20	55	115	215	289	294	326	327	278	308	278	186	99	49	21	10	0	0	0	119.6	327.0	
23-May	0	0	0	0	0	11	38	58	123	165	171	355	414	579	647	555	410	211	154	68	27	0	0	0	166.1	647.5	
24-May	0	0	0	0	2	26	42	94	334	508	591	696	674	579	591	498	499	207	168	34	11	0	0	0	231.5	696.3	
25-May	0	0	0	0	2	22	143	274	361	528	629	701	756	620	357	228	144	108	69	101	17	0	0	0	210.8	755.8	
26-May	0	0	0	0	2	26	145	267	297	491	631	501	550	309	595	289	435	204	167	120	24	0	0	0	210.5	630.8	
27-May	0	0	0	0	2	19	70	150	223	503	624	494	523	386	332	441	421	176	169	71	24	3	0	0	193.0	624.1	
28-May	0	0	0	0	5	35	79	138	319	391	397	651	642	620	371	464	202	198	133	50	13	1	0	0	196.3	651.2	
29-May	0	0	0	0	4	47	119	123	334	520	601	669	667	578	493	388	249	107	72	59	13	0	0	0	210.2	669.2	
30-May	0	0	0	0	2	25	66	64	73	127	201	274	246	245	340	186	158	36	95	86	36	3	0	0	94.2	340.4	
31-May	0	0	0	0	5	37	45	204	379	529	616	683	659	689	493	539	574	150	157	90	23	4	0	0	244.8	688.7	
		0.0	0.0	0.0	0.0	0.8	17.7	81.3	150.3	268.6	388.9	434.7	476.6	493.3	485.6	450.3	390.2	364.0	146.7	134.3	77.8	16.0	0.4	0.0	0.0	Diurnal Average	
		0.0	0.0	0.0	0.0	5.1	46.8	144.7	273.6	391.7	529.3	630.8	700.6	764.2	732.0	759.8	651.3	599.5	224.3	232.0	157.9	35.5	3.6	0.0	0.0	Diurnal Maximum	



Hourly Averages

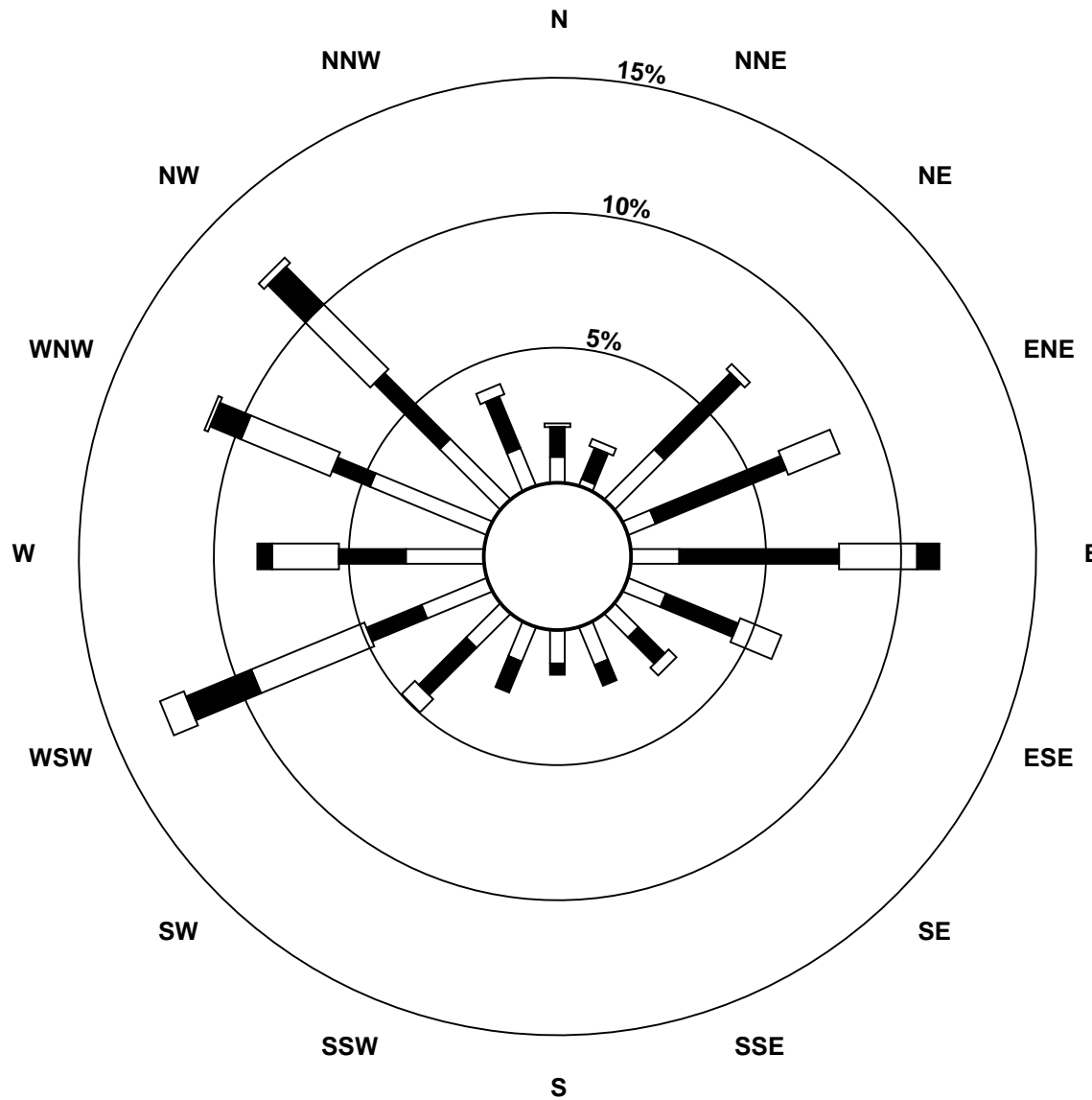
Wind Speed (km/h)
Wind Direction (deg)
Henry Pirker - May 2010

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	2	4	5	5	6	5	6	4	9	11	14	13	10	9	8	9	5	0	11	9	8	9	7	3.3	14.0	
Dir	221	121	318	308	288	267	292	273	299	292	279	290	298	287	280	278	287	250	272	89	106	100	81	92	291.2	290.1	
24 Spd	8	6	2	1	1	3	4	2	2	3	1	1	3	2	8	8	9	8	9	8	6	7	7	7	2.8	9.2	
Dir	110	115	124	14	163	157	157	212	219	142	38	241	257	173	351	15	24	55	59	82	61	50	46	55	66.1	58.5	
25 Spd	7	6	6	9	6	5	6	5	4	7	6	9	12	13	14	10	8	4	12	11	7	7	9	10	7.2	13.9	
Dir	63	59	65	83	79	102	121	103	90	102	91	80	82	69	76	97	178	186	96	104	78	64	83	85	88.5	76.3	
26 Spd	10	7	6	7	8	7	11	11	9	11	13	14	18	19	21	20	20	20	21	17	13	12	14	11	13.2	21.5	
Dir	89	68	51	74	81	72	95	102	82	81	81	75	78	87	91	91	87	91	82	78	73	73	74	76	82.3	81.9	
27 Spd	11	11	12	10	12	12	11	15	13	15	17	17	17	18	19	20	19	18	17	14	10	8	7	7	13.5	19.7	
Dir	74	76	86	79	74	74	67	80	66	64	73	82	88	87	91	95	94	89	88	90	85	99	85	70	82.4	95.0	
28 Spd	9	10	9	8	11	10	10	13	12	14	16	15	16	13	18	16	16	13	13	13	10	5	2	1	10.2	17.5	
Dir	75	71	74	72	77	82	86	82	82	80	77	81	82	85	100	109	107	108	132	138	159	156	198	343	94.9	109.2	
29 Spd	4	3	5	4	3	3	2	5	1	5	10	10	9	10	10	13	12	8	6	4	6	5	6	5	2.9	12.9	
Dir	129	92	87	81	45	294	258	320	240	35	99	84	75	97	93	123	105	144	135	260	239	228	275	303	104.3	123.3	
30 Spd	5	10	6	1	6	5	4	3	9	10	8	6	6	8	11	8	11	18	9	8	6	4	2	2	3.4	18.0	
Dir	94	109	120	276	313	313	301	274	233	227	253	229	217	205	198	200	175	103	152	133	159	173	278	316	185.6	102.9	
31 Spd	3	4	3	1	2	4	6	8	9	8	8	8	7	8	10	12	14	15	13	14	11	9	7	6	6.8	15.0	
Dir	300	317	355	107	193	152	133	113	132	135	110	115	135	130	112	127	124	114	116	105	93	88	89	109	115.0	113.9	
Spd	2.2	1.6	1.7	1.4	2.7	2.3	2.7	3.4	3.9	3.3	3.4	3.3	2.1	2.9	3.6	3.7	3.1	2.4	2.0	1.8	1.9	2.5	2.4	2.3	Diurnal Average		
Dir	3.1	11.2	341.7	328.4	297.2	296.9	298.0	278.3	274.5	272.9	290.7	300.2	275.7	283.4	288.1	280.5	275.0	281.7	296.7	284.8	290.8	308.0	327.3	348.0	Diurnal Maximum		
Spd	16.4	20.3	19.4	18.6	18.5	18.0	20.6	19.5	23.0	23.3	22.1	24.2	30.3	30.3	28.4	30.3	28.6	29.5	29.6	29.5	29.0	27.1	28.1	25.4	Diurnal Maximum		
Dir	305.1	303.3	302.9	303.1	306.3	307.8	266.3	304.0	288.0	259.6	255.6	313.1	253.4	256.0	254.5	255.3	250.3	250.2	303.6	306.5	304.9	304.5	308.5	313.8	Diurnal Maximum		
Maximum Speed Value: 30 km/h on May 12 16:00																		Minimum Speed Value: 0 km/h on May 6 16:00						Hours in Service: 744			
Maximum Daily Speed Average: 17.9 km/h on May 12																		Minimum Daily Speed Average: 1.7 km/h on May 6						Hours of Data: 741			
Maximum Diurnal Speed Average: 3.9 km/h at hour 9																		Minimum Diurnal Speed Average: 1.4 km/h at hour 4						Hours of Missing Data: 3			
Monthly Average Velocity: 2.36 km/h 296.35 deg																		Speed Percentiles: P ₁ = 0.8 P ₁₀ = 2.7 Q ₁ = 4.7 Median = 8.1 Q ₃ = 13.2 P ₉₀ = 18.6 P ₉₉ = 29.4						Percent Operational Time: 99.6			
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	17	17	1	0	0	0	35																				
NorthEast	22	50	10	0	0	0	82																				
East	22	81	43	8	0	0	154																				
SouthEast	19	22	7	0	0	0	48																				
South	17	10	2	0	0	0	29																				
SouthWest	24	33	13	8	1	0	79																				
West	44	33	58	20	7	0	162																				
NorthWest	39	49	37	23	4	0	152																				
Total	204	295	171	59	12	0	741																				

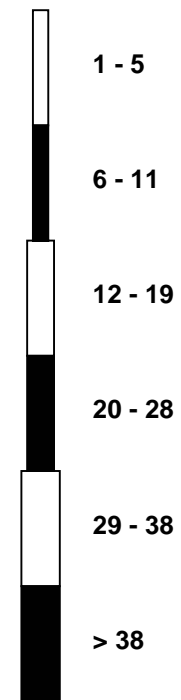
Wind Rose

Wind Speed (WS) (km/h)

Henry Pirker - May 2010



Wind Speed Classes (km/h)





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Henry Pirker - May 2010

Maximum Speed: 31 km/h on May 12 13:00		Maximum Daily Speed Average: 18.6 km/h on May 12																				Hours in Service: 744					
Minimum Speed: 2 km/h on May 17 06:00		Minimum Daily Speed Average: 5.8 km/h on May 17																				Hours of Data: 741					
Maximum Diurnal Speed Average: 13.7 km/h at hour 15		Minimum Diurnal Speed Average: 6.6 km/h at hour 4																				Hours of Missing Data: 3					
Monthly Average Speed: 10.29 km/h		Percentiles: P ₁ = 2.4 P ₁₀ = 4.0 Q ₁ = 5.8 Median = 8.8 Q ₃ = 13.6 P ₉₀ = 19.2 P ₉₉ = 29.4																				Percent Operational Time: 99.6					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-May	7	7	6	3	5	5	6	9	16	19	18	16	14	15	14	16	14	16	14	20	17	16	12	9	12.2	19.6	
2-May	10	9	10	10	9	8	4	11	14	21	21	24	21	26	27	31	27	24	25	26	18	16	9	6	17.0	30.8	
3-May	8	4	6	4	3	3	4	7	7	5	7	7	8	17	20	21	20	26	30	30	29	27	28	26	14.5	29.7	
4-May	17	20	20	19	19	18	16	20	21	24	21	20	21	18	14	12	15	14	15	16	15	14	10	8	16.8	23.5	
5-May	7	6	6	6	6	8	5	6	6	5	6	8	6	9	7	8	6	7	6	4	4	3	4	4	6.0	9.4	
6-May	3	6	6	5	5	4	4	4	5	5	6	9	6	9	9	4	6	6	5	4	7	8	8	7	5.8	8.7	
7-May	6	5	4	9	4	4	3	4	7	7	6	8	7	7	9	10	8	7	12	8	6	7	6	6	6.8	11.9	
8-May	6	5	5	3	2	4	4	4	3	7	9	14	14	13	11	6	5	6	7	11	10	7	7	5	7.0	14.4	
9-May	4	5	4	4	2	3	3	6	5	4	6	8	6	8	8	12	8	9	11	12	7	5	3	4	6.1	12.0	
10-May	5	4	5	4	4	4	7	7	7	5	5	7	9	10	9	9	9	7	12	7	7	6	6	4	6.6	12.0	
11-May	4	3	5	3	3	3	4	8	9	8	9	9	10	20	15	14	18	19	13	10	6	7	7	8	9.0	19.6	
12-May	6	5	5	5	12	10	5	15	17	22	21	25	31	31	29	31	29	30	29	22	18	15	18	16	18.6	31.1	
13-May	10	11	11	7	15	16	15	18	23	19	18	18	14	13	14	15	17	14	18	14	14	15	14	10	14.7	23.2	
14-May	6	6	5	6	6	5	5	8	8	9	11	13	9	10	9	11	9	6	9	10	6	4	5	3	7.4	13.1	
15-May	4	4	4	5	4	2	3	4	7	5	5	6	6	7	7	5	8	10	10	10	10	8	8	7	6.3	10.5	
16-May	4	4	4	4	5	5	5	6	7	10	16	13	15	14	16	18	20	21	20	20	15	11	12	9	11.4	21.3	
17-May	6	2	3	4	4	2	4	5	5	4	6	5	10	5	5	7	6	6	9	7	8	9	9	10	5.8	9.9	
18-May	11	12	10	9	7	10	7	8	8	8	8	7	8	7	9	8	10	15	15	13	12	12	10	11	9.8	15.4	
19-May	6	7	6	10	14	16	21	17	21	24	22	20	18	16	16	14	11	13	9	8	5	6	7	7	13.0	23.7	
20-May	9	8	10	11	9	10	11	12	10	9	10	11	10	8	28	25	25	22	15	15	20	22	19	18	14.3	27.8	
21-May	11	10	13	16	18	18	20	19	21	22	22	24	24	19	16	13	14	16	13	11	10	12	12	10	16.0	24.4	
22-May	11	11	9	N	N	N	13	12	14	14	12	12	10	11	11	7	8	5	3	4	4	6	7	6	9.0	13.8	
23-May	3	3	5	6	5	7	5	6	4	9	11	14	13	11	10	9	9	6	6	11	9	8	9	7	7.9	14.3	
24-May	8	6	2	2	2	3	5	3	4	5	5	5	5	6	9	9	10	9	10	9	7	7	7	7	6.0	10.2	
25-May	7	6	6	9	6	6	6	5	5	8	7	10	13	13	15	13	9	4	13	11	8	7	9	10	8.5	14.5	
26-May	10	8	6	7	8	7	11	11	9	11	14	15	18	20	21	20	20	21	22	18	13	12	14	11	13.6	21.7	
27-May	11	11	12	10	12	12	11	15	13	15	17	17	17	18	20	20	19	19	17	14	11	8	7	8	13.9	19.9	
28-May	9	10	9	8	11	10	10	10	13	13	15	17	16	15	18	17	17	13	13	10	5	3	3	3	11.7	17.9	
29-May	5	3	5	4	3	3	3	5	3	7	11	11	10	11	11	14	13	9	8	5	7	6	6	6	7.0	13.6	
30-May	6	11	7	3	6	5	4	4	9	10	9	7	7	8	12	9	13	18	10	8	7	4	4	2	7.6	18.2	
31-May	3	4	3	2	3	5	6	9	9	9	9	9	8	9	11	13	14	16	13	14	11	9	7	6	8.5	15.6	
		7.2	6.9	6.8	6.6	7.0	7.2	7.5	8.9	10.0	11.0	11.7	12.6	12.5	13.0	13.7	13.6	13.4	13.5	13.2	12.5	10.5	9.7	9.3	8.1	Diurnal Average	
		16.6	20.4	19.5	18.7	18.5	18.0	20.7	19.6	23.2	23.7	22.5	24.6	31.1	30.8	28.9	30.8	29.1	29.8	29.7	29.5	29.0	27.1	28.2	25.6	Diurnal Maximum	
N - Not Valid All monthly, daily, and diurnal averages have been calculated using scalar methods																											

Hourly Standard Deviations

Wind Direction (WD) - deg

Henry Pirker - May 2010

Maximum Value: 97.4 deg on May 7 04:00		Hours in Service: 744																							
Minimum Value: 3.5 deg on May 13 23:00		Hours of Data: 741																							
Percentiles: P ₁ = 3.9 P ₁₀ = 6.6 Q ₁ = 10.3 Median = 17.3 Q ₃ = 37.8 P ₉₀ = 61.8 P ₉₉ = 90.2		Hours of Missing Data: 3																							
		Hours of Calibration: 0																							
		Percent Operational Time: 99.6																							
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-May	12	9	7	90	49	62	15	11	12	11	15	18	26	20	19	20	17	15	15	8	7	6	10	11	90.5
2-May	10	8	7	5	14	8	26	20	11	11	18	11	14	10	12	11	13	11	12	10	6	9	12	32	32.0
3-May	41	71	35	47	45	14	13	12	37	41	45	43	25	43	14	16	13	9	4	4	4	4	4	6	70.9
4-May	8	5	6	6	5	4	7	5	6	8	7	8	7	13	16	16	13	10	12	7	8	4	5	11	16.2
5-May	20	12	9	8	10	5	7	9	34	85	71	55	64	48	66	49	87	75	53	48	81	66	16	12	87.2
6-May	40	13	7	15	15	76	30	22	22	64	91	44	70	51	54	97	72	37	38	47	17	18	10	9	96.5
7-May	24	82	94	97	59	69	29	75	33	56	68	56	76	75	55	34	29	49	16	11	8	9	9	11	97.4
8-May	11	12	47	52	47	58	68	42	76	20	31	18	14	21	22	79	84	74	48	17	25	56	21	38	84.3
9-May	22	13	22	34	40	49	53	18	26	53	59	61	73	78	54	91	53	34	21	38	26	51	59	50	91.0
10-May	32	53	36	28	15	31	20	15	19	40	68	96	62	39	67	33	61	57	21	31	13	13	15	35	95.7
11-May	29	44	31	64	21	45	75	11	15	14	24	58	38	23	20	35	17	11	11	13	21	11	11	8	75.3
12-May	7	17	41	54	9	22	53	9	10	9	11	13	13	11	11	10	11	8	5	6	5	7	6	8	54.3
13-May	27	10	30	52	6	6	6	14	8	16	18	17	29	29	26	20	26	19	15	11	8	5	4	37	51.9
14-May	39	32	17	22	24	32	15	18	15	33	34	16	32	44	41	51	42	51	22	16	8	19	44	39	51.4
15-May	80	75	31	33	40	59	36	24	23	47	69	62	72	50	82	88	97	35	14	8	6	6	11	6	97.0
16-May	39	69	92	80	41	62	55	77	20	23	12	32	23	23	18	17	23	11	11	12	6	7	9	23	92.5
17-May	44	58	33	27	41	61	33	29	30	73	45	89	21	81	89	59	79	47	21	16	13	11	14	10	89.5
18-May	8	10	20	44	61	24	19	17	14	20	34	53	60	66	52	37	17	14	12	12	16	12	12	12	66.2
19-May	29	37	75	26	8	5	6	6	9	10	11	12	17	18	19	24	22	16	19	20	21	23	13	12	74.9
20-May	14	17	10	11	18	14	11	11	9	17	15	23	16	63	11	6	5	6	6	10	4	4	4	27	62.6
21-May	18	7	7	5	5	4	4	7	6	6	5	6	5	7	4	4	4	4	6	5	7	4	5	6	18.0
22-May	6	7	7	N	N	N	5	8	8	8	11	11	13	15	12	17	29	33	86	33	31	22	10	26	85.9
23-May	28	56	62	14	24	16	26	19	53	13	13	12	16	21	24	27	19	51	84	11	11	10	10	10	84.0
24-May	8	12	33	75	66	28	25	43	72	67	91	80	71	78	38	26	27	18	20	29	21	13	11	10	91.3
25-May	8	9	10	6	10	18	20	27	41	24	39	20	17	18	17	41	30	42	39	9	13	10	7	5	41.7
26-May	5	14	14	20	9	10	11	11	15	14	15	12	10	8	10	9	9	11	8	8	8	7	7	7	20.0
27-May	6	8	7	9	7	7	8	9	14	12	13	12	14	9	9	8	9	12	11	10	12	8	16	8	15.8
28-May	6	6	6	11	6	8	9	10	13	16	13	16	16	16	24	12	14	13	13	11	13	13	49	82	82.1
29-May	40	44	15	12	18	34	62	11	80	48	30	30	27	23	30	20	23	21	38	44	15	31	17	35	80.1
30-May	47	14	17	74	11	10	16	28	13	18	19	35	30	23	17	29	29	10	26	15	19	31	59	44	73.8
31-May	43	28	43	81	55	63	21	15	18	26	31	37	43	39	20	26	21	16	13	10	7	6	10	16	80.9
	80.2	82.4	93.7	97.4	66.3	75.7	75.3	77.3	80.1	85.3	91.3	95.7	75.6	81.2	89.1	96.5	97.0	75.2	85.9	48.3	81.4	66.3	59.3	82.1	
N - Not Valid																									

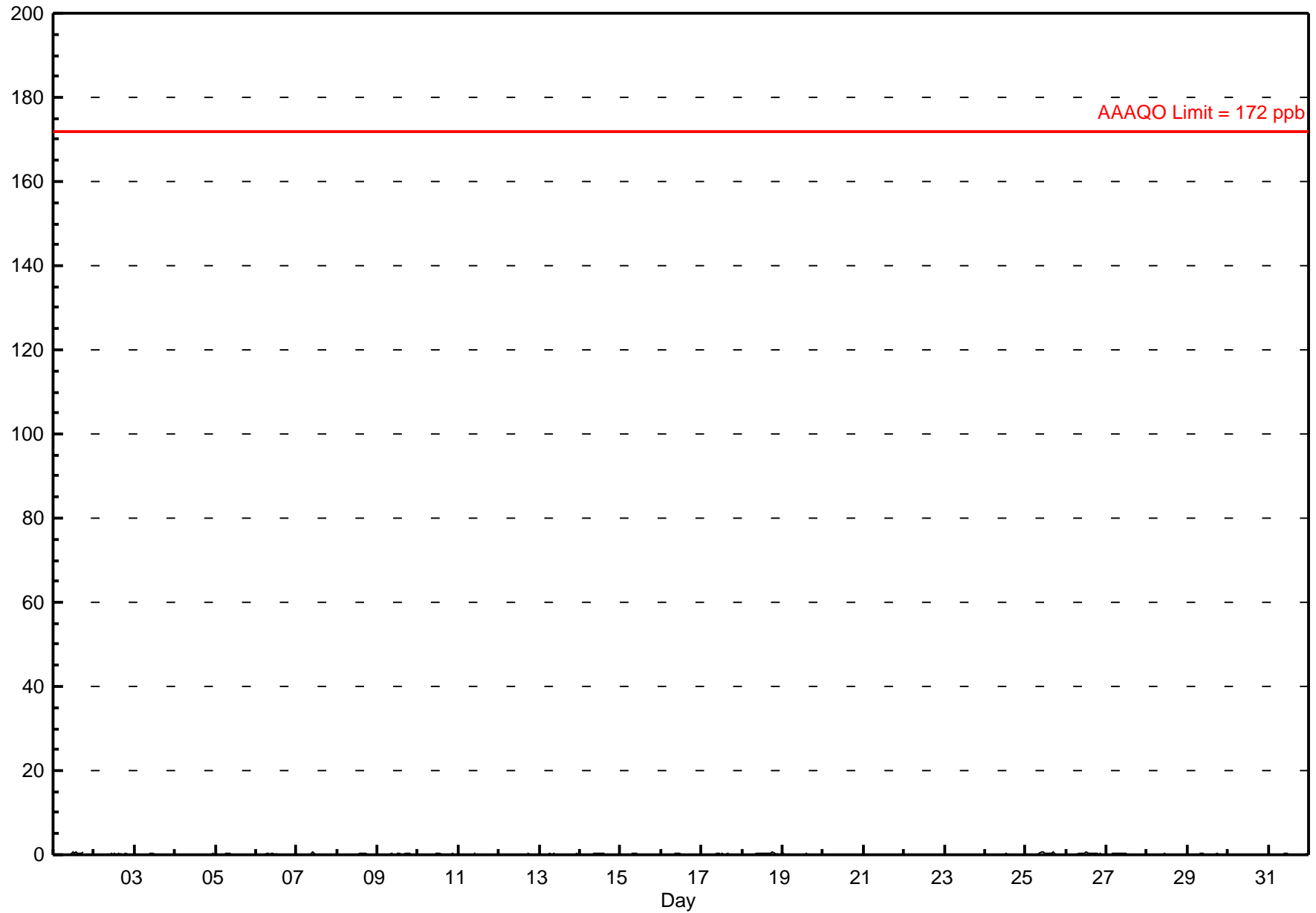
PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Evergreen Park - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0		Hours in Service: 744																																															
Maximum Value: 0.8 ppb on May 7 10:00		Maximum Daily Average: 0.2 ppb on May 18																																															
Minimum Value: 0 ppb on May 3 20:00		Hours of Data: 705																																															
Maximum Diurnal Average: 0.2 ppb at hour 10		Hours of Missing Data: 39																																															
Monthly Average: 0.10 ppb		Hours of Calibration: 37																																															
		Percent Operational Time: 99.7																																															
		Minimum Daily Average: 0.0 ppb on May 23																																															
		Minimum Diurnal Average: 0.0 ppb at hour 4																																															
		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.1 P ₉₀ = 0.2 P ₉₉ = 0.5																																															
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-May	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	A	0	0	0	0	0	0	0.2	0.7																						
2-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.1	0.2																						
3-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.4																						
4-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.0	0.3																						
5-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
6-May	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
7-May	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8																						
8-May	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
9-May	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
10-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																						
11-May	0	0	0	0	0	0	0	0	A	0	0	D	D	C	C	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
12-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
13-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
14-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
15-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
16-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
17-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
18-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	A	0	0.2	0.5																						
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2																						
20-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.1																						
21-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.0	0.1																						
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.0	0.1																						
23-May	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0																						
24-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.4																						
25-May	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.7																						
26-May	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																						
27-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																						
28-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
29-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																						
30-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.0	0.1																						
31-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.2																						
																								0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average	
																								0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.5	0.8	0.5	0.7	0.5	0.5	0.4	0.4	0.7	0.5	0.5	0.3	0.2	0.2	0.3	0.2	Diurnal Maximum	
C - Calibration																								D - DAS Failure				A - Automated Daily Zero Span																					
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																																																	



Hourly Maximums

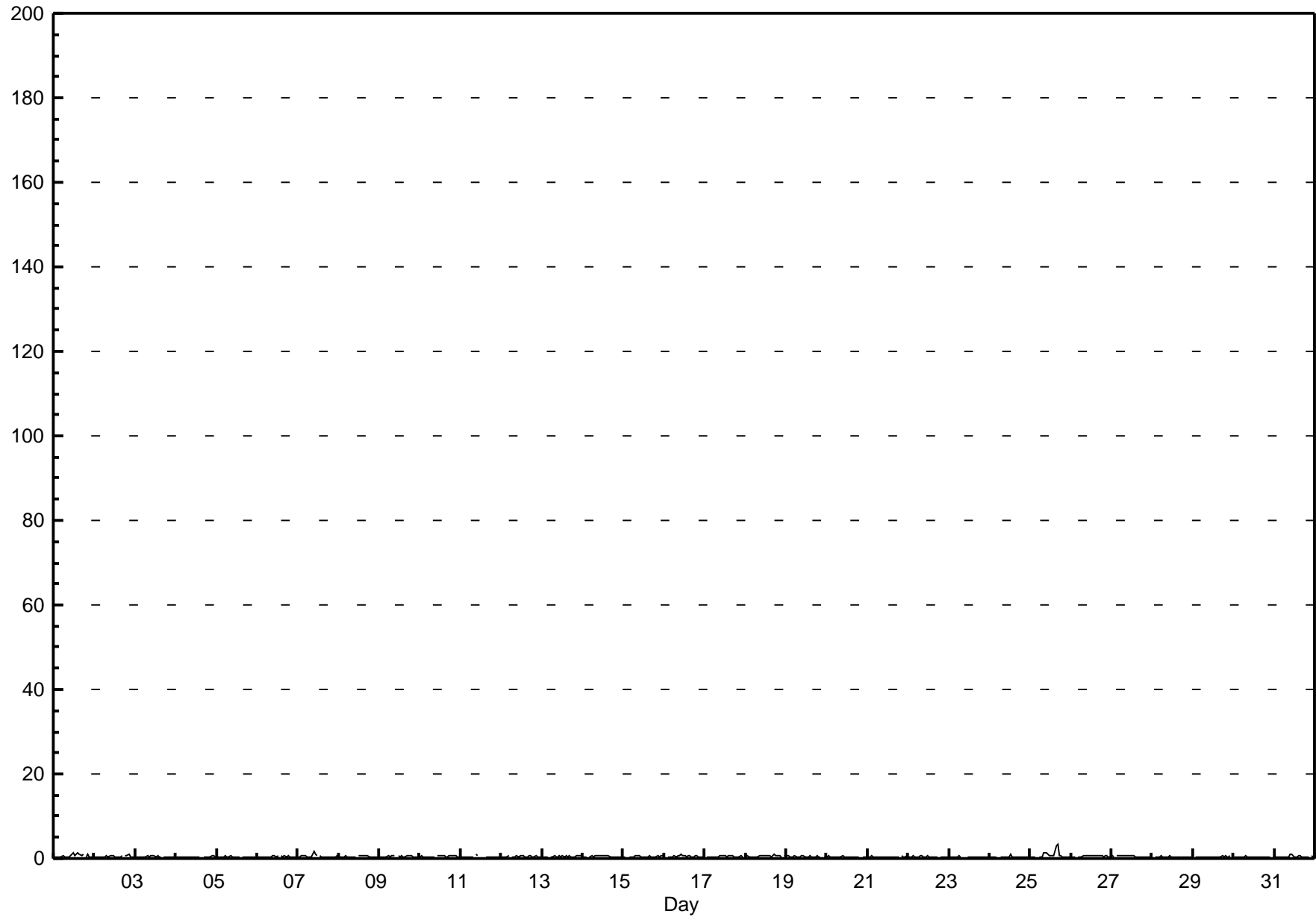
Sulphur Dioxide (SO₂) - ppb

Evergreen Park - May 2010

Maximum Value: 3.4 ppb on May 25 17:00		Maximum Daily Average: 0.8 ppb on May 25		Hours in Service: 744																						
Minimum Value: 0 ppb on May 23 18:00		Minimum Daily Average: 0.2 ppb on May 23		Hours of Data: 705																						
Maximum Diurnal Average: 0.6 ppb at hour 10		Minimum Diurnal Average: 0.3 ppb at hour 4		Hours of Missing Data: 39																						
Monthly Average: 0.43 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 1.1		Hours of Calibration: 37																						
				Percent Operational Time: 99.7																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-May	0	0	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1	1	A	0	1	0	0	0	0.6	1.4
2-May	0	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	1	A	1	1	1	0	0	0	0.5	0.9
3-May	0	0	0	0	0	0	0	1	0	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0.4	0.8
4-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	1	0	0.3	0.6
5-May	0	0	0	0	0	1	0	0	1	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.4	0.5
6-May	1	0	0	0	0	0	0	1	0	1	1	1	1	A	1	0	1	1	1	0	0	0	0	0	0.5	0.7
7-May	1	1	1	1	1	0	0	0	1	2	1	1	A	1	0	0	0	0	0	0	0	0	1	0	0.5	1.7
8-May	1	0	0	0	1	0	0	0	0	0	0	A	1	1	1	1	1	1	0	0	0	0	0	0	0.4	0.6
9-May	0	0	0	0	0	1	0	1	1	1	A	1	0	1	0	0	1	1	1	1	1	0	0	0	0.5	0.6
10-May	0	1	0	0	0	0	0	0	0	A	1	1	1	1	1	0	0	1	1	1	1	1	0	0	0.5	0.8
11-May	0	0	0	0	0	0	0	0	A	1	1	D	D	C	C	0	0	1	0	0	0	0	0	0	0.4	1.0
12-May	0	0	0	0	1	A	0	0	0	1	0	1	1	1	0	0	1	1	0	0	1	0	0	1	0.4	0.5
13-May	0	0	0	0	A	0	0	1	0	0	1	0	1	0	1	0	1	0	0	0	1	1	1	1	0.4	0.6
14-May	0	0	0	A	0	1	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0.4	0.7
15-May	0	0	A	0	0	0	0	1	1	1	0	0	0	0	0	1	1	0	0	0	1	0	1	1	0.4	0.5
16-May	1	A	0	0	0	0	1	0	1	1	1	1	0	1	1	0	0	1	1	0	0	0	0	0	0.4	0.9
17-May	A	0	0	0	0	0	0	0	0	1	1	1	1	0	1	1	1	0	0	0	0	1	0	A	0.4	0.6
18-May	1	1	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0	1	0.6	1.1
19-May	1	1	0	0	0	1	0	0	0	1	1	0	0	0	1	1	0	0	1	0	0	A	0	0	0.4	0.6
20-May	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.3	0.6
21-May	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0	1	0.3	0.6
22-May	0	0	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.5
23-May	0	0	0	0	0	0	1	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
24-May	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
25-May	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	3	3	1	1	0	0	0	0	0	0.8	3.4
26-May	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0.5	0.8
27-May	1	0	A	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.6
28-May	0	A	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
29-May	A	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	1	A	0.4	0.6
30-May	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0.3	0.6
31-May	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	1	0	0	0	0	0	A	1	0	0.4	0.9
		0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	Diurnal Average
		0.6	0.6	0.5	0.6	0.7	0.6	0.7	0.6	1.4	1.7	1.1	1.2	1.0	1.0	1.4	3.0	3.4	1.1	0.8	0.8	1.1	0.6	0.6	0.6	Diurnal Maximum
C - Calibration		D - DAS Failure					A - Automated Daily Zero Span																			

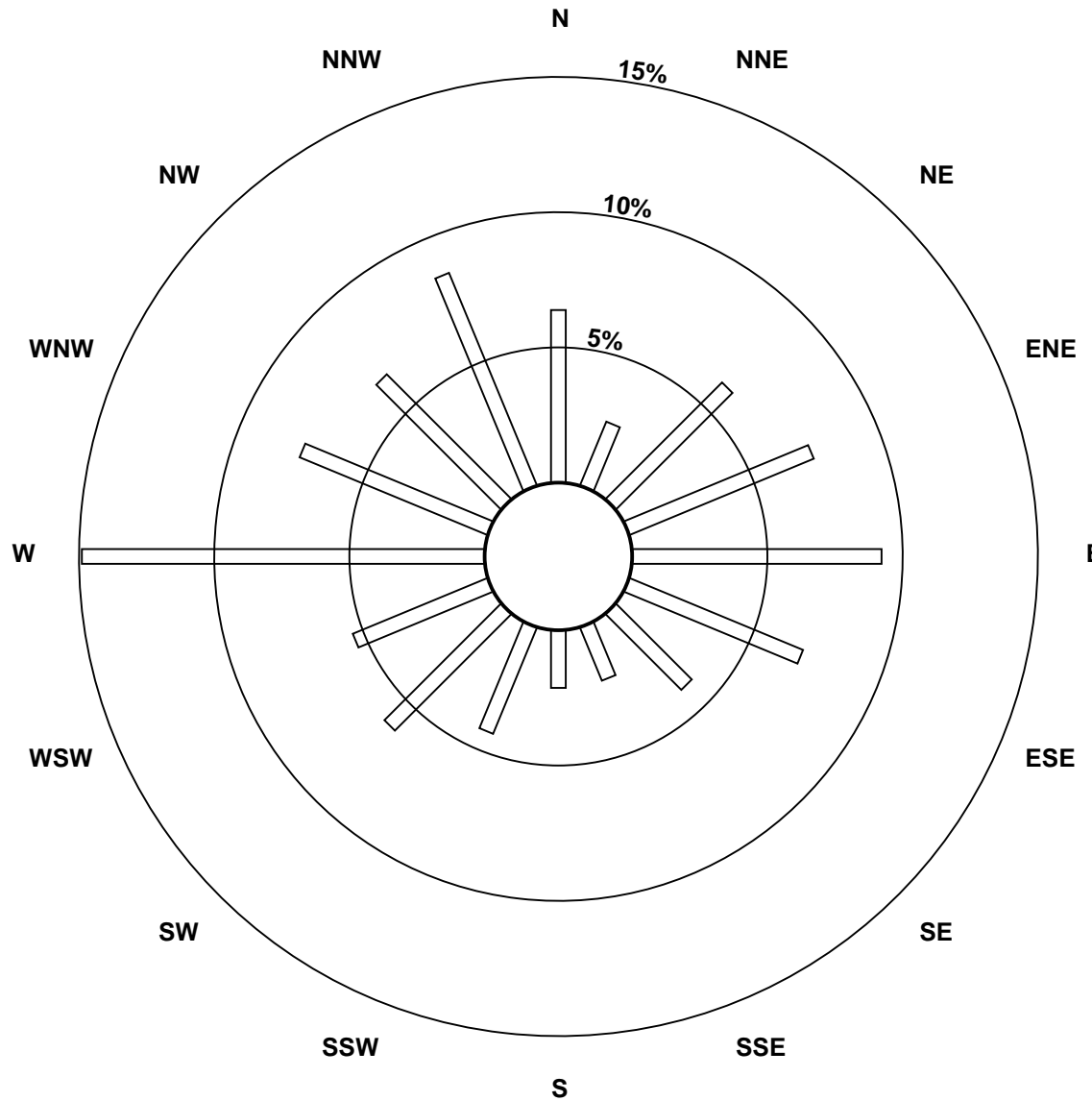
Hourly Maximums

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

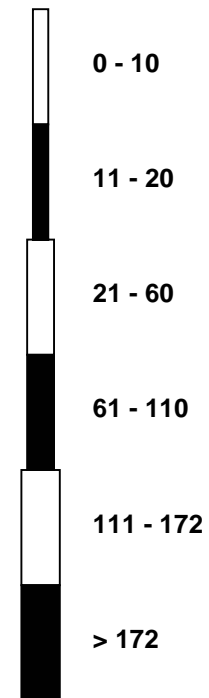


Pollutant Rose

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



Pollutant Classes (ppb)



Hourly Averages

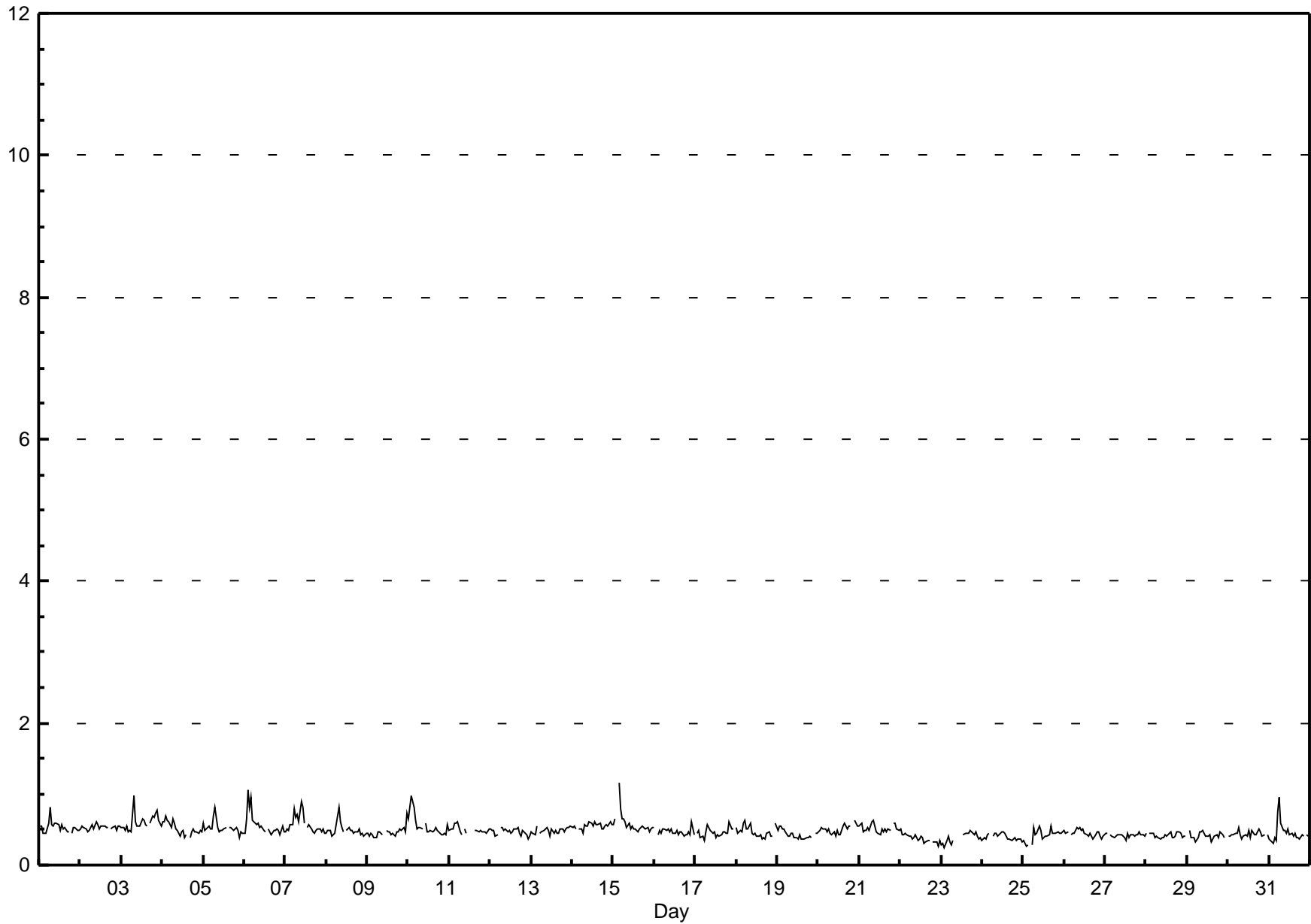
Total Reduced Sulphur (TRS) - ppb

Evergreen Park - May 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 1.2 ppb on May 15 04:00	Maximum Daily Average: 0.6 ppb on May 3		Hours of Data:	704
Minimum Value: 0 ppb on May 23 03:00	Minimum Daily Average: 0.4 ppb on May 22		Hours of Missing Data:	40
Maximum Diurnal Average: 0.5 ppb at hour 8	Minimum Diurnal Average: 0.5 ppb at hour 18		Hours of Calibration:	37
Monthly Average: 0.48 ppb	Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 0.9		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-May	1	1	0	0	0	1	1	1	1	1	1	1	0	1	1	1	0	0	A	0	1	1	0	0	0.5	0.8	
2-May	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	0.5	0.6	
3-May	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.6	1.0	
4-May	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0.5	0.7	
5-May	1	0	1	1	1	1	1	1	1	0	0	0	1	1	A	1	1	1	0	1	0	0	0	0	0.5	0.8	
6-May	0	1	1	1	1	1	1	1	1	1	1	0	0	A	1	0	0	0	0	0	0	0	1	0	0.6	1.1	
7-May	0	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	0	0	0	1	0	0	0	0	0.6	0.9	
8-May	0	0	0	0	0	0	1	1	1	1	0	0	A	0	1	0	0	0	0	0	0	0	0	0	0.5	0.8	
9-May	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	1	0	0.5	0.7	
10-May	1	1	1	1	1	0	1	1	0	A	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0.6	1.0	
11-May	0	1	1	1	1	1	0	0	A	1	0	D	D	C	C	0	0	0	0	0	0	0	0	1	0.5	0.6	
12-May	1	0	0	0	0	A	1	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.5	0.5	
13-May	0	0	0	1	A	0	0	0	1	1	0	0	1	0	0	0	0	1	1	0	1	1	1	1	0.5	0.5	
14-May	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.6	
15-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	1	0.6	1.2	
16-May	1	A	0	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0.5	0.6	
17-May	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	0.6	
18-May	1	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.5	0.6	
19-May	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.6	
20-May	0	0	1	1	1	0	1	0	0	0	0	0	0	0	1	1	1	1	1	1	A	1	1	1	0.5	0.6	
21-May	1	1	0	0	0	1	0	1	1	1	0	0	0	1	0	1	0	1	0	A	1	1	1	0	0.5	0.6	
22-May	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.4	0.5	
23-May	0	0	0	0	0	0	0	0	N	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
24-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
25-May	0	0	0	0	A	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.4	0.6	
26-May	0	0	0	A	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
27-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
28-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
29-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
30-May	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	A	0	0.4	0.5
31-May	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0.5	1.0	
	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	Diurnal Average		
	0.6	0.8	1.1	1.2	0.9	0.8	1.0	1.0	0.6	0.9	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.6	0.7	Diurnal Maximum	

C - Calibration D - DAS Failure N - Not Valid A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb

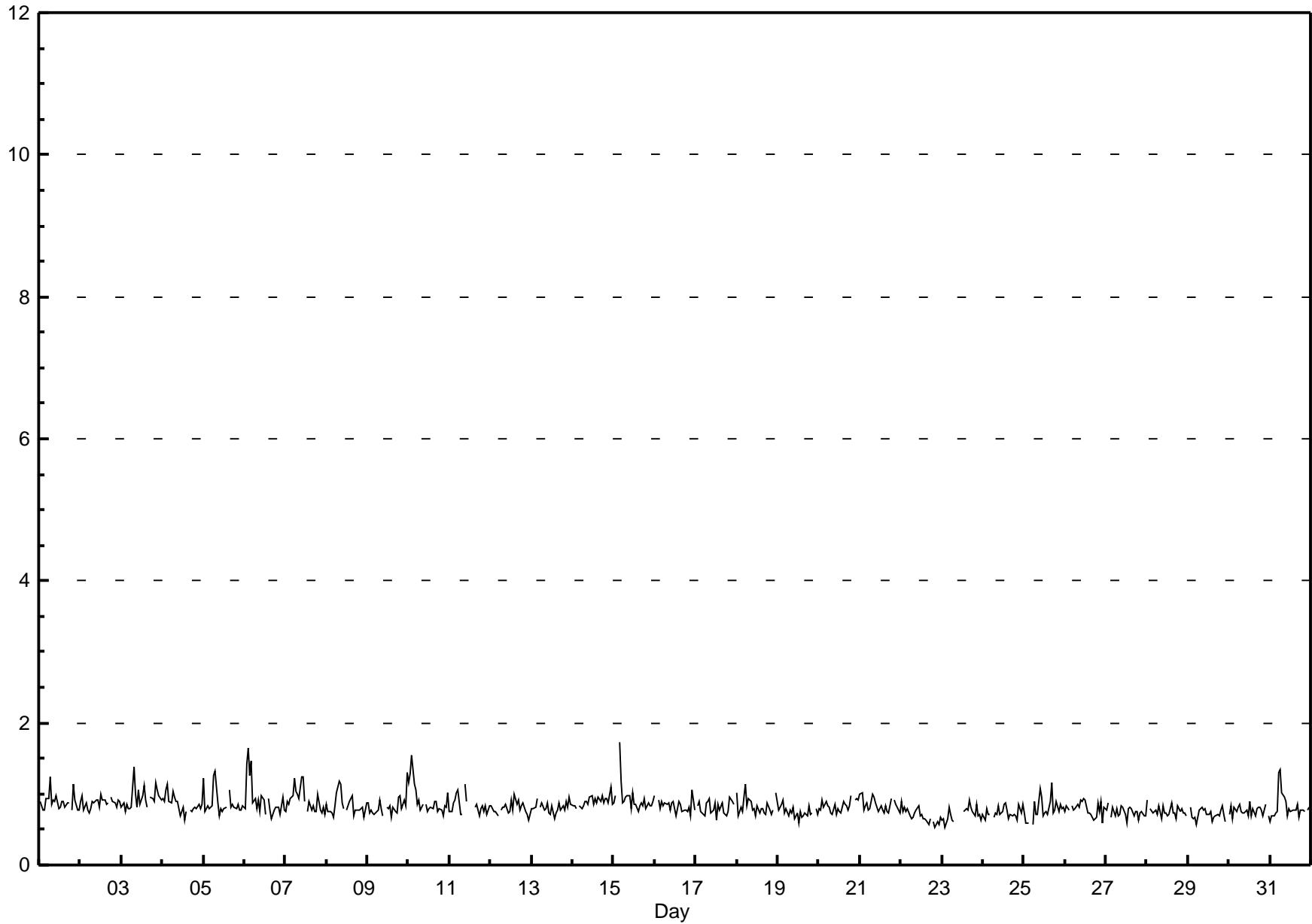


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

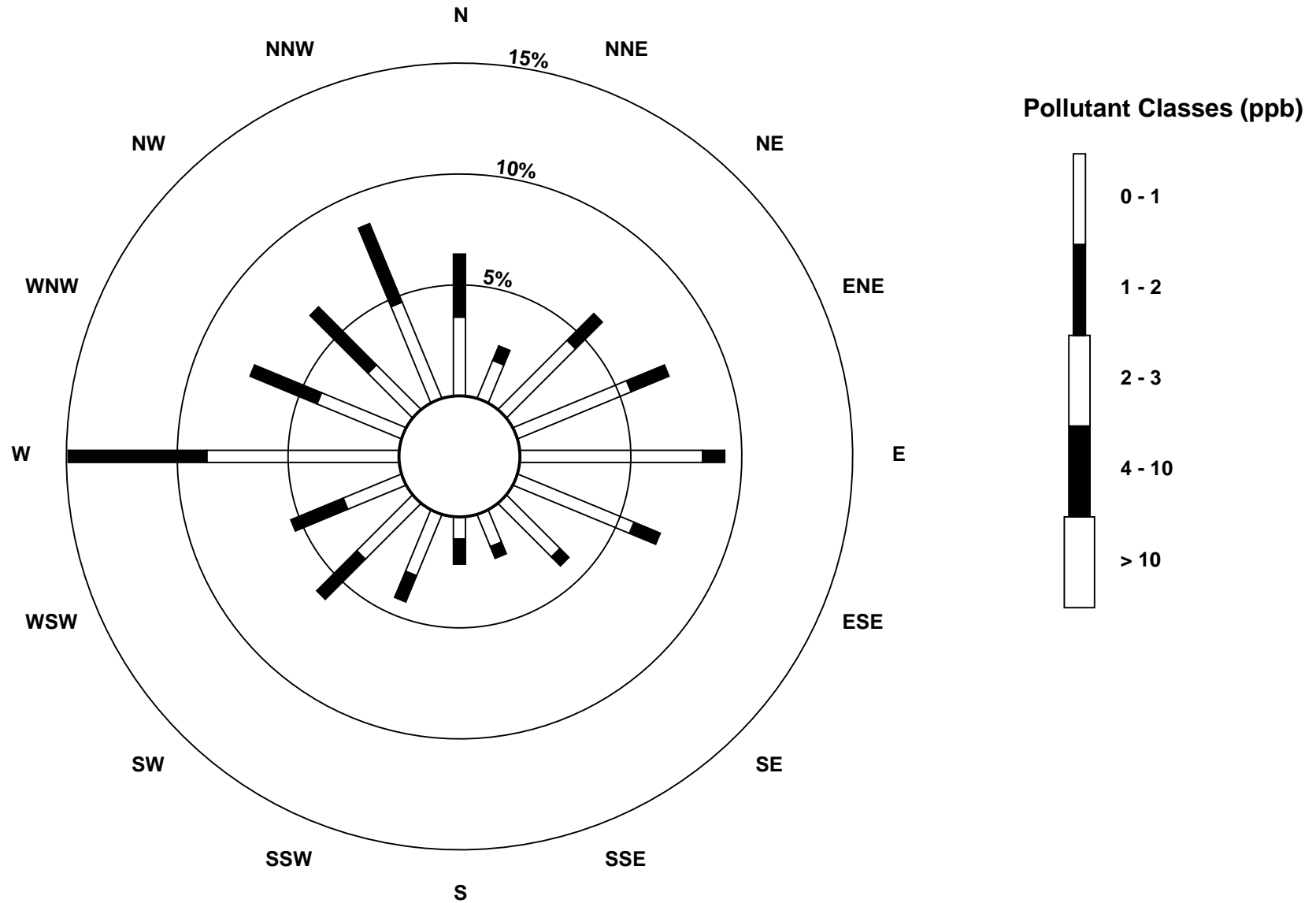
Evergreen Park - May 2010

Maximum Value: 1.7 ppb on May 15 04:00		Maximum Daily Average: 0.9 ppb on May 3		Hours in Service: 744																								
Minimum Value: 1 ppb on May 22 21:00		Minimum Daily Average: 0.7 ppb on May 22		Hours of Data: 704																								
Maximum Diurnal Average: 0.9 ppb at hour 8		Minimum Diurnal Average: 0.8 ppb at hour 18		Hours of Missing Data: 40																								
Monthly Average: 0.82 ppb		Percentiles: P ₁ = 0.6 P ₁₀ = 0.7 Q ₁ = 0.7 Median = 0.8 Q ₃ = 0.9 P ₉₀ = 1.0 P ₉₉ = 1.3		Hours of Calibration: 37																								
				Percent Operational Time: 99.6																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24				
1-May	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	1.2		
2-May	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	1.0		
3-May	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	1.4		
4-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.9	1.1		
5-May	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	1.3		
6-May	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6		
7-May	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	1.2		
8-May	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2		
9-May	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3		
10-May	1	1	2	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.5		
11-May	1	1	1	1	1	1	1	1	A	1	1	D	D	C	C	1	1	1	1	1	1	1	1	1	0.8	1.1		
12-May	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		
13-May	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		
14-May	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		
15-May	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7		
16-May	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		
17-May	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	1.0		
18-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1		
19-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.7	0.9		
20-May	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		
21-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.0		
22-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.7	0.9		
23-May	1	1	1	1	1	1	1	1	N	1	C	C	C	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9		
24-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9		
25-May	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2		
26-May	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	0.9		
27-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9		
28-May	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		
29-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8		
30-May	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	0.9		
31-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.3		
		0.8	0.8	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.9	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		
		1.2	1.4	1.6	1.7	1.5	1.3	1.3	1.4	1.1	1.2	1.2	1.0	1.0	1.1	1.0	1.1	1.2	1.0	1.0	1.0	1.0	1.2	1.1	1.1	1.3	Diurnal Maximum	
C - Calibration		D - DAS Failure				N - Not Valid				A - Automated Daily Zero Span																		



Pollutant Rose

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



Hourly Averages

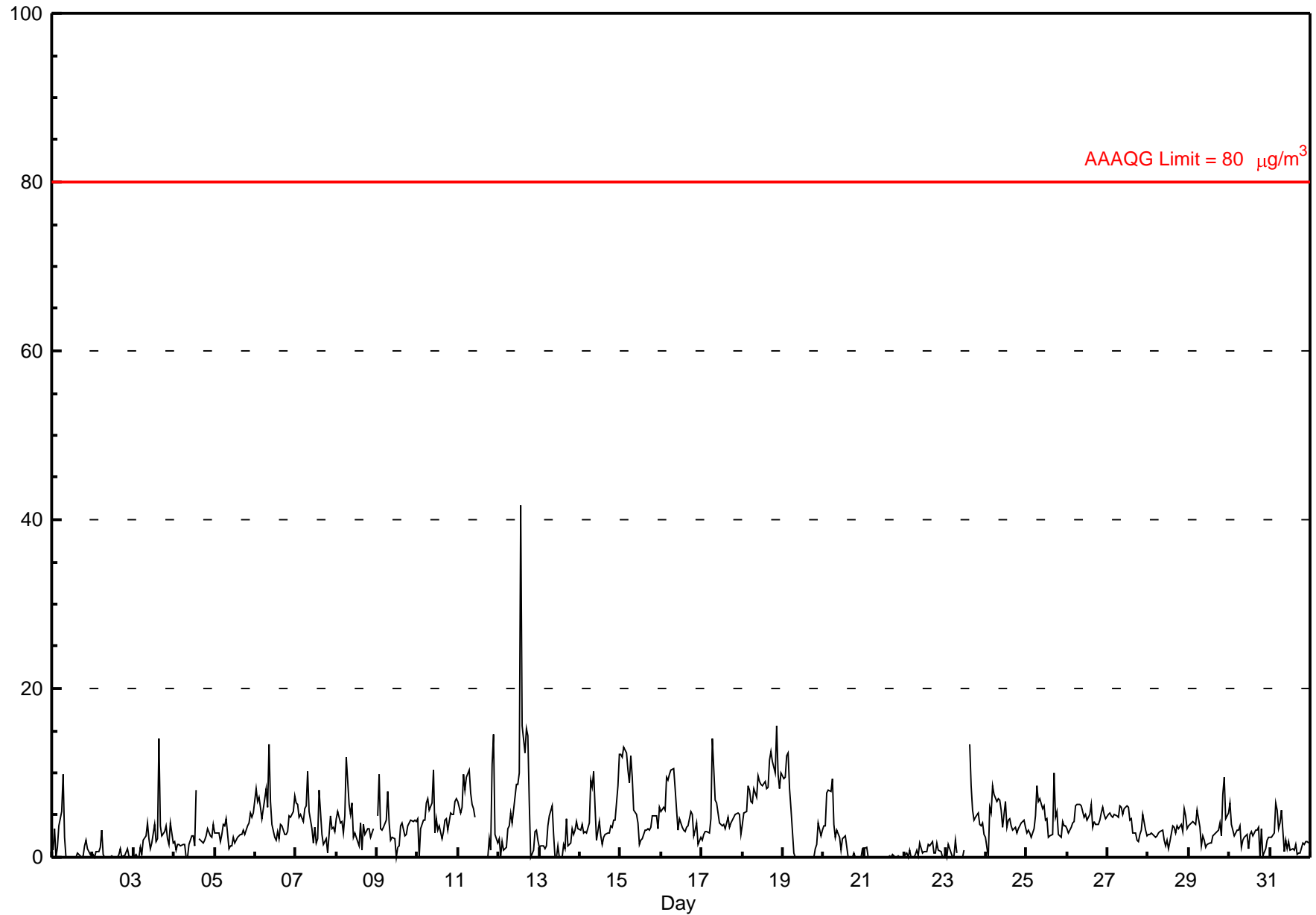
Particulate Matter 2.5 (PM_{2.5}) - µg/m³

Evergreen Park - May 2010

Number of Exceedences: 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 41.7 µg/m ³ on May 12 14:00	Maximum Daily Average: 8.7 µg/m ³ on May 18
Minimum Value: 0 µg/m ³ on May 1 03:00	Hours of Data: 734
Maximum Diurnal Average: 5.7 µg/m ³ at hour 7	Hours of Missing Data: 10
Monthly Average: 3.72 µg/m ³	Hours of Calibration: 3
Minimum Daily Average: 0.1 µg/m ³ on May 21	Percent Operational Time: 99.1
Minimum Diurnal Average: 2.6 µg/m ³ at hour 13	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 1.5 Median = 3.2 Q ₃ = 5.1 P ₉₀ = 8.1 P ₉₉ = 14.0	

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-May	1	3	0	1	4	5	10	2	0	0	0	0	0	0	1	0	0	0	0	1	2	1	0	0	1.4	9.9																						
2-May	0	0	1	1	1	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0.4	3.3																						
3-May	0	0	0	0	1	0	2	2	4	2	1	2	4	2	2	14	4	3	3	4	2	2	4	2	2.5	14.0																						
4-May	2	1	2	1	1	2	2	0	0	2	2	3	1	8	BD	2	2	2	2	3	3	2	2	4	2.1	8.0																						
5-May	3	3	3	2	3	4	4	5	1	1	1	2	2	2	2	3	3	3	3	4	4	5	5	5	3.0	5.2																						
6-May	8	7	7	6	5	6	8	6	13	7	4	2	2	3	2	4	4	3	3	3	5	5	5	7	5.2	13.5																						
7-May	6	6	5	5	4	6	6	10	5	3	2	4	2	2	8	3	2	2	2	0	5	3	4	3	4.1	10.2																						
8-May	4	5	4	4	3	5	12	6	5	6	2	3	2	1	4	1	4	3	3	3	2	3	3	BD	4.0	11.9																						
9-May	5	10	3	3	4	4	8	4	2	2	2	0	1	1	4	4	3	3	4	4	4	4	4	4	3.7	9.8																						
10-May	5	0	3	4	4	6	7	6	6	10	3	5	3	4	2	3	4	5	3	5	5	5	7	7	4.7	10.4																						
11-May	7	5	6	10	8	9	10	8	6	6	5	D	D	14	C	BD	BD	0	2	1	11	15	3	2	6.7	14.5																						
12-May	2	0	2	1	1	3	4	5	4	6	9	9	10	42	16	12	15	14	6	0	1	3	3	2	7.1	41.7																						
13-May	1	1	1	1	1	4	5	6	3	0	0	1	0	0	2	1	5	1	2	3	3	3	4	3	2.2	6.1																						
14-May	3	4	3	3	3	4	9	8	10	6	2	4	3	2	2	3	3	3	4	4	4	4	8	12	4.7	12.2																						
15-May	12	12	13	12	10	9	12	10	6	5	4	2	2	2	3	3	3	3	4	5	5	5	3	6	6.3	13.0																						
16-May	5	6	6	10	9	10	10	10	8	6	3	5	4	3	3	4	4	6	5	3	3	4	2	2	5.4	10.5																						
17-May	2	3	3	3	3	5	14	11	7	6	4	4	4	4	3	5	4	4	4	5	5	5	5	3	4.8	14.1																						
18-May	4	5	5	9	8	7	7	8	7	10	9	9	8	9	8	8	11	12	11	10	16	10	8	10	8.7	15.6																						
19-May	9	10	12	12	8	6	1	0	0	0	0	0	0	0	0	0	0	0	1	2	4	2	3	3	2.9	12.4																						
20-May	4	4	8	8	8	9	4	2	3	2	1	2	2	2	0	0	0	0	0	0	0	0	0	1	2.6	9.3																						
21-May	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.2																						
22-May	0	0	0	1	0	0	0	1	0	2	0	1	1	1	1	1	2	0	0	2	1	1	0	0	0.7	1.8																						
23-May	1	0	2	0	0	0	2	1	N	0	0	1	C	C	13	9	6	4	5	5	4	4	4	3	3.0	13.3																						
24-May	2	0	6	5	8	7	7	7	7	6	4	7	4	4	5	4	3	4	3	3	4	4	4	4	4.6	8.5																						
25-May	3	3	3	2	3	5	8	7	7	6	6	4	5	2	3	3	10	5	5	3	2	4	4	4	4.5	10.0																						
26-May	3	3	4	4	4	6	6	6	6	5	5	5	4	5	6	4	4	4	4	4	5	6	5	5	4.8	6.3																						
27-May	5	5	5	5	5	5	5	6	6	5	6	6	6	4	5	3	3	2	2	3	3	5	3	2	4.4	6.2																						
28-May	3	3	3	2	2	3	3	3	3	2	1	2	1	2	4	3	3	4	3	4	3	6	5	3	3.0	5.8																						
29-May	4	4	4	4	4	6	4	1	3	2	1	1	2	2	2	3	3	3	4	3	7	9	5	5	3.6	9.5																						
30-May	6	4	3	3	3	3	4	1	2	2	3	1	3	3	3	3	3	4	0	3	0	1	2	2	2.6	6.5																						
31-May	2	2	3	6	6	3	4	6	1	2	1	2	1	1	1	2	0	1	1	2	2	2	2	2	2.2	6.4																						
																								3.7	3.6	3.8	4.2	4.1	4.7	5.7	4.8	4.2	3.6	2.6	2.8	2.6	4.2	3.6	3.5	3.6	3.1	2.9	2.9	3.7	4.1	3.5	3.6	Diurnal Average
																								12.3	11.9	13.0	12.4	10.4	9.8	14.1	10.5	13.5	10.4	9.1	8.7	10.0	41.7	15.7	14.0	15.2	14.3	11.3	10.0	15.6	14.5	8.5	12.2	Diurnal Maximum

C - Calibration D - DAS Failure 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



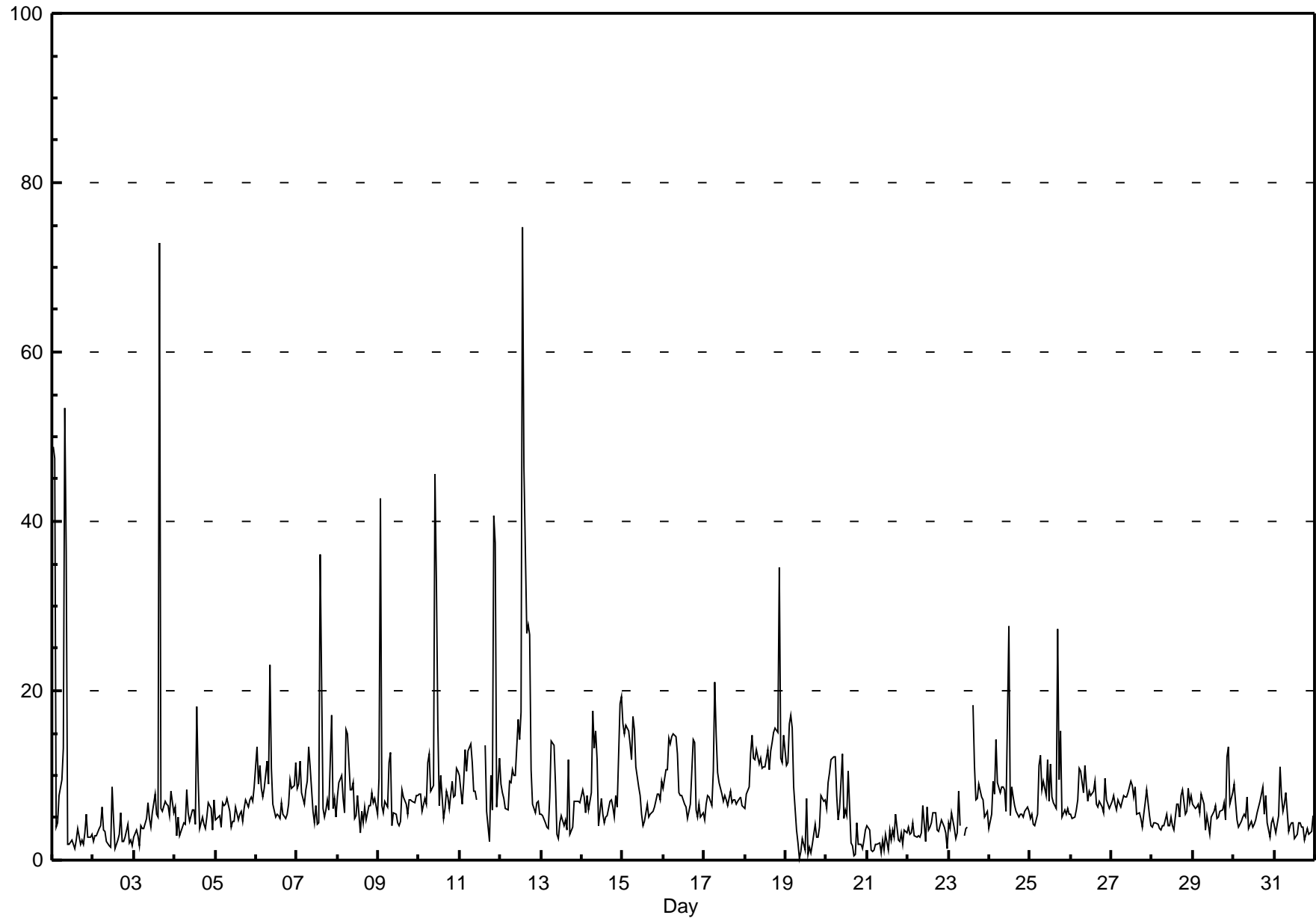


Hourly Maximums

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

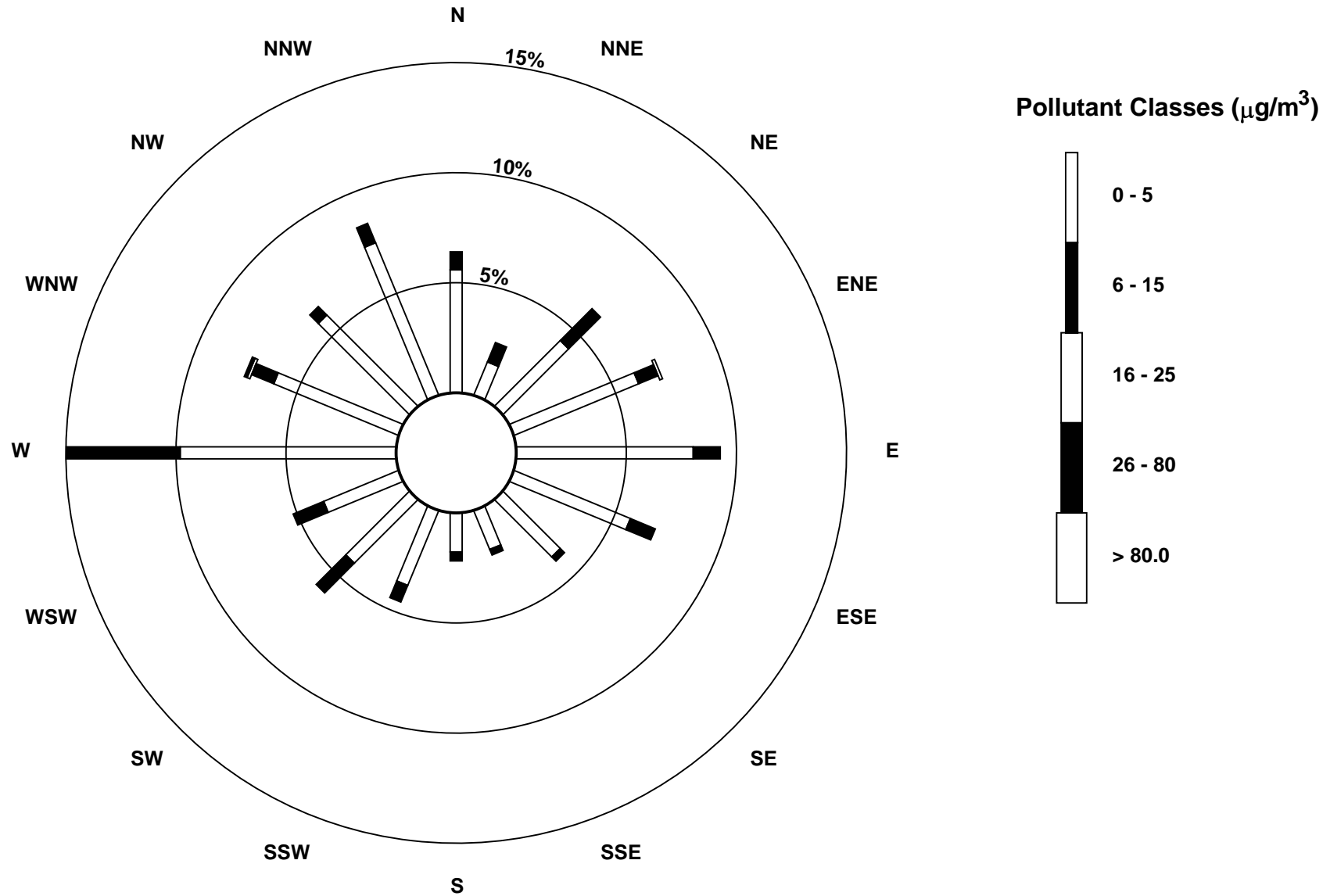
Evergreen Park - May 2010

Maximum Value: 74.7 µg/m ³ on May 12 14:00		Maximum Daily Average: 15.7 µg/m ³ on May 12		Hours in Service: 744																							
Minimum Value: 0 µg/m ³ on May 19 09:00		Minimum Daily Average: 2.5 µg/m ³ on May 21		Hours of Data: 738																							
Maximum Diurnal Average: 10.0 µg/m ³ at hour 14		Minimum Diurnal Average: 5.8 µg/m ³ at hour 20		Hours of Missing Data: 6																							
Monthly Average: 7.71 µg/m ³		Percentiles: P ₁ = 1.0 P ₁₀ = 2.9 Q ₁ = 4.4 Median = 6.2 Q ₃ = 8.4 P ₉₀ = 12.9 P ₉₉ = 45.6		Hours of Calibration: 3																							
				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-May	49	47	4	4	8	10	13	53	36	2	2	2	2	1	2	4	2	2	2	3	5	3	3	3	11.0	53.5	
2-May	2	3	3	4	4	6	4	3	2	2	2	9	5	1	2	3	6	2	2	3	4	2	2	2	3.2	8.7	
3-May	3	3	3	2	4	4	4	5	7	5	4	6	8	5	5	73	6	6	7	7	6	5	8	6	7.9	72.8	
4-May	6	3	5	3	3	4	4	8	6	5	6	6	4	18	9	4	5	4	4	5	7	6	4	7	5.7	18.1	
5-May	5	5	5	4	7	7	7	7	6	4	5	5	6	5	5	6	5	6	7	6	7	8	7	9	5.9	8.6	
6-May	13	9	11	8	8	8	12	9	23	11	7	5	5	5	7	5	5	5	5	7	10	8	9	12	8.6	23.1	
7-May	9	9	12	8	7	8	9	13	11	6	4	7	4	4	36	6	5	6	7	6	17	6	7	5	8.9	36.1	
8-May	8	9	10	7	6	15	15	8	8	9	5	5	8	3	6	4	6	5	6	6	8	7	7	5	7.4	15.5	
9-May	10	43	6	6	7	6	12	13	4	6	5	4	4	5	8	8	7	5	7	7	7	7	8	8	8.4	42.8	
10-May	8	8	6	7	7	12	13	8	9	46	33	16	6	10	5	6	8	7	6	9	7	8	11	10	11.1	45.6	
11-May	10	7	9	13	10	13	14	12	8	8	7	D	D	60	C	14	6	2	10	6	41	37	6	12	14.5	59.6	
12-May	9	8	7	6	6	9	9	11	10	10	17	14	18	75	46	27	28	27	11	7	6	7	7	5	15.7	74.7	
13-May	5	5	4	4	4	8	14	14	9	3	3	4	5	4	5	4	12	3	4	7	7	7	7	7	6.2	14.1	
14-May	8	8	6	8	6	8	18	13	15	12	4	7	5	4	5	5	7	7	6	5	8	6	18	19	8.7	19.4	
15-May	16	15	16	15	14	12	17	15	11	9	8	5	4	5	7	5	5	6	6	6	8	8	7	9	9.5	17.0	
16-May	9	11	11	14	14	15	15	15	13	8	8	8	7	6	5	6	7	14	14	6	5	7	5	6	9.3	14.9	
17-May	5	7	8	8	6	11	21	15	10	9	8	7	8	7	6	8	7	7	7	7	7	8	6	6	8.2	20.9	
18-May	6	8	9	13	15	12	12	13	11	12	11	11	11	13	11	13	14	15	16	15	35	12	12	15	13.0	34.6	
19-May	11	12	16	17	16	9	4	2	0	1	3	1	7	1	2	1	2	4	3	3	4	8	7	7	5.8	17.0	
20-May	6	9	10	12	12	12	8	5	6	12	5	6	5	11	2	2	0	1	4	2	2	1	2	4	5.8	12.5	
21-May	4	4	1	1	1	2	2	2	1	2	1	3	1	4	2	4	3	5	2	2	3	2	4	3	2.5	5.4	
22-May	4	3	3	4	3	3	3	3	3	6	2	6	4	4	4	6	6	4	3	4	5	4	3	1	3.8	6.4	
23-May	4	4	6	4	3	3	8	4	N	3	4	4	C	C	18	11	7	7	9	7	7	5	5	6	6.2	18.3	
24-May	4	5	9	8	14	9	8	9	9	8	6	28	5	9	7	7	6	5	5	5	5	6	6	6	7.9	27.6	
25-May	5	5	4	4	5	11	12	8	9	8	12	7	11	7	7	6	27	10	15	5	6	5	6	5	8.5	27.3	
26-May	5	5	5	6	7	11	11	8	11	9	7	8	8	8	9	7	6	7	6	6	10	7	7	6	7.5	11.1	
27-May	7	8	7	6	7	6	7	8	7	8	8	9	9	8	9	5	6	5	4	5	7	8	5	4	6.8	9.3	
28-May	4	4	4	4	4	4	4	4	5	4	4	5	4	3	7	7	5	8	8	5	6	9	7	8	5.3	8.5	
29-May	7	6	6	7	6	8	7	3	5	4	3	5	6	6	5	5	6	6	7	5	12	13	7	8	6.3	13.4	
30-May	9	7	5	4	5	5	5	5	7	4	5	4	4	5	6	7	8	9	5	8	4	3	4	5	5.5	9.0	
31-May	4	3	5	11	8	6	7	8	3	4	4	4	3	3	4	4	4	4	2	4	3	3	3	5	4.6	11.0	
		8.2	9.1	7.0	7.1	7.2	8.2	9.5	9.8	8.9	7.7	6.4	7.1	6.1	10.0	8.4	8.8	7.3	6.6	6.5	5.8	8.6	7.3	6.5	6.9	Diurnal Average	
		48.8	47.5	16.1	17.0	15.5	15.5	20.9	53.5	36.4	45.6	32.9	27.6	17.5	74.7	46.5	72.8	27.8	26.5	15.6	15.1	40.7	37.4	18.4	19.4	Diurnal Maximum	
C - Calibration		D - DAS Failure			N - Not Valid																						



Pollutant Rose

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





Hourly Averages

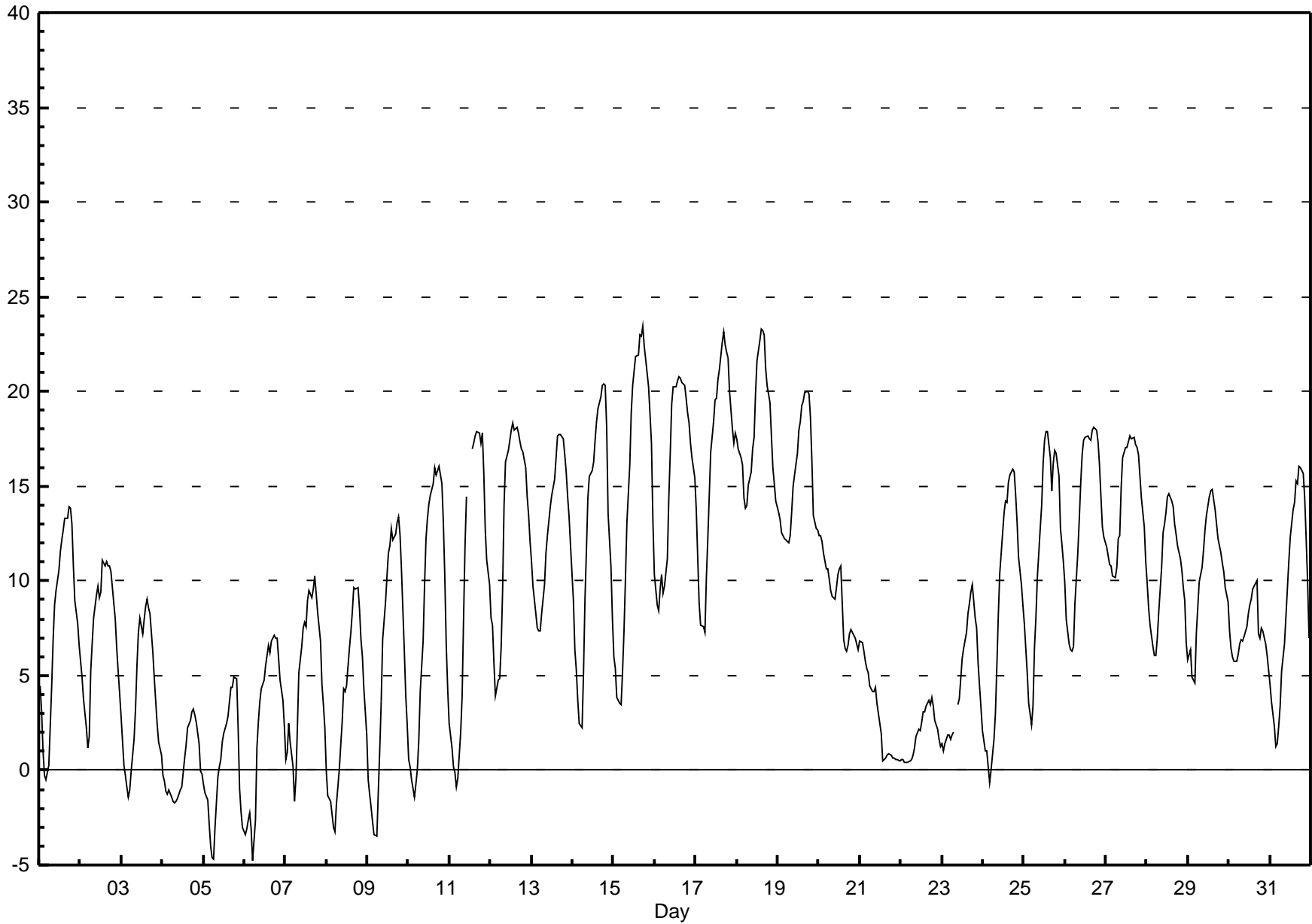
External Temperature (ET) - °C

Evergreen Park - May 2010

Number of Exceedences (AAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 23.5 °C on May 15 18:00	Maximum Daily Average: 18.0 °C on May 18		Hours of Data:	741
Minimum Value: -5 °C on May 6 06:00	Minimum Daily Average: 0.2 °C on May 5		Hours of Missing Data:	3
Maximum Diurnal Average: 13.3 °C at hour 17	Minimum Diurnal Average: 3.2 °C at hour 5		Hours of Calibration:	0
Monthly Average: 8.97 °C	Percentiles: P ₁ = -3.3 P ₁₀ = 0.4 Q ₁ = 3.6 Median = 8.8 Q ₃ = 14.2 P ₉₀ = 17.7 P ₉₉ = 22.9		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-May	4	3	1	0	0	0	2	4	7	9	10	11	12	12	13	13	13	14	14	13	11	9	8	7	7.9	13.9
2-May	6	5	4	2	1	2	5	7	8	9	10	9	9	11	11	11	11	11	10	10	8	6	5	4	7.3	11.1
3-May	3	0	0	-1	-1	-1	0	2	3	6	7	8	7	8	9	9	9	8	6	5	4	2	1	1	3.9	9.1
4-May	0	-1	-1	-1	-1	-1	-2	-2	-2	-1	-1	-1	0	1	1	2	3	3	3	3	3	1	0	0	0.2	3.3
5-May	-1	-1	-2	-3	-4	-5	-5	-3	0	0	1	1	2	3	3	4	4	4	5	5	2	-1	-2	-3	0.2	4.9
6-May	-3	-3	-3	-2	-3	-5	-3	1	3	4	4	5	6	6	7	6	7	7	7	7	6	5	4	2	2.7	7.1
7-May	1	1	2	2	0	-2	0	2	5	7	8	8	8	9	10	9	10	10	9	8	7	5	3	2	5.1	10.2
8-May	0	-1	-2	-2	-3	-3	-2	0	1	3	4	4	4	6	7	8	10	10	10	8	7	6	4	2	3.4	9.7
9-May	-1	-1	-2	-3	-3	-3	-1	1	4	7	9	10	12	12	13	12	12	13	13	12	11	6	4	2	5.8	13.4
10-May	1	0	-1	-1	-1	0	2	4	7	10	12	13	14	15	15	16	16	16	16	15	13	10	7	4	8.4	16.0
11-May	2	1	0	0	-1	0	2	4	8	12	14	D	D	17	17	18	18	18	17	18	16	13	11	10	9.7	17.9
12-May	8	8	6	4	5	5	7	10	14	16	17	17	18	18	18	18	18	17	17	17	16	14	13	12	13.0	18.4
13-May	11	10	8	7	7	7	8	10	11	12	13	14	15	15	17	18	18	18	18	17	16	14	13	12	12.9	17.7
14-May	9	6	5	4	3	2	5	9	12	14	16	16	16	17	18	19	20	20	20	20	18	14	11	8	12.6	20.4
15-May	6	5	4	4	3	5	7	10	13	16	19	20	21	22	22	23	23	23	22	22	20	19	17	13	15.1	23.5
16-May	10	9	8	10	10	9	10	11	14	17	19	20	20	21	21	21	20	20	20	19	18	17	17	15	15.7	20.8
17-May	14	11	9	8	8	7	10	12	15	17	18	20	20	21	21	23	23	22	22	22	20	18	17	18	16.4	23.1
18-May	17	17	17	16	14	14	14	15	16	17	18	20	22	23	23	23	23	21	20	19	18	16	15	14	18.0	23.3
19-May	14	13	13	12	12	12	12	12	14	15	16	17	18	18	19	19	20	20	20	19	16	13	13	13	15.4	20.1
20-May	12	12	12	11	11	11	10	9	9	9	10	10	11	11	7	6	6	7	7	7	7	7	7	6	9.0	12.4
21-May	7	7	6	6	5	5	4	4	4	4	4	3	2	1	1	1	1	1	1	1	1	1	1	0	2.9	6.8
22-May	1	1	0	0	0	0	1	1	1	2	2	2	3	3	3	3	4	3	4	3	3	2	2	1	1.9	3.9
23-May	1	1	1	2	2	2	2	2	N	3	4	5	6	6	7	8	9	9	10	8	8	6	4	3	4.8	9.8
24-May	2	1	1	0	-1	0	2	3	6	8	10	13	14	14	14	15	16	16	16	15	13	11	10	9	8.6	15.9
25-May	8	6	5	4	2	3	6	8	10	13	14	16	17	18	18	17	15	16	17	17	16	13	12	11	11.7	17.9
26-May	10	8	7	6	6	7	9	11	13	15	17	17	18	18	17	17	18	18	18	17	16	14	13	12	13.5	18.1
27-May	12	11	11	11	10	10	11	12	12	15	17	17	17	17	18	17	18	17	17	17	16	14	13	11	14.2	17.7
28-May	10	9	8	7	6	6	7	8	11	13	13	14	14	15	14	14	13	12	12	11	11	10	9	7	10.5	14.6
29-May	6	6	5	5	5	7	10	10	11	12	13	13	14	15	15	14	14	12	12	11	11	10	10	9	10.4	14.9
30-May	7	6	6	6	6	6	7	7	7	7	8	8	9	9	10	10	10	7	7	7	7	7	6	5	7.3	10.1
31-May	5	4	2	1	1	2	3	5	7	8	10	11	12	14	14	15	15	16	16	16	14	12	10	7	9.2	16.1
	5.9	5.0	4.3	3.6	3.2	3.3	4.6	6.2	8.1	9.6	10.7	11.4	12.0	12.7	13.0	13.3	13.3	13.3	13.1	12.6	11.3	9.5	8.3	7.1	Diurnal Average	
	17.5	17.0	16.5	16.1	14.4	13.9	14.0	15.0	15.7	17.0	19.4	20.3	21.6	22.7	23.3	23.2	23.1	23.5	22.4	21.8	20.3	18.8	17.3	17.8	Diurnal Maximum	

D - DAS Failure N - Not Valid



Hourly Averages

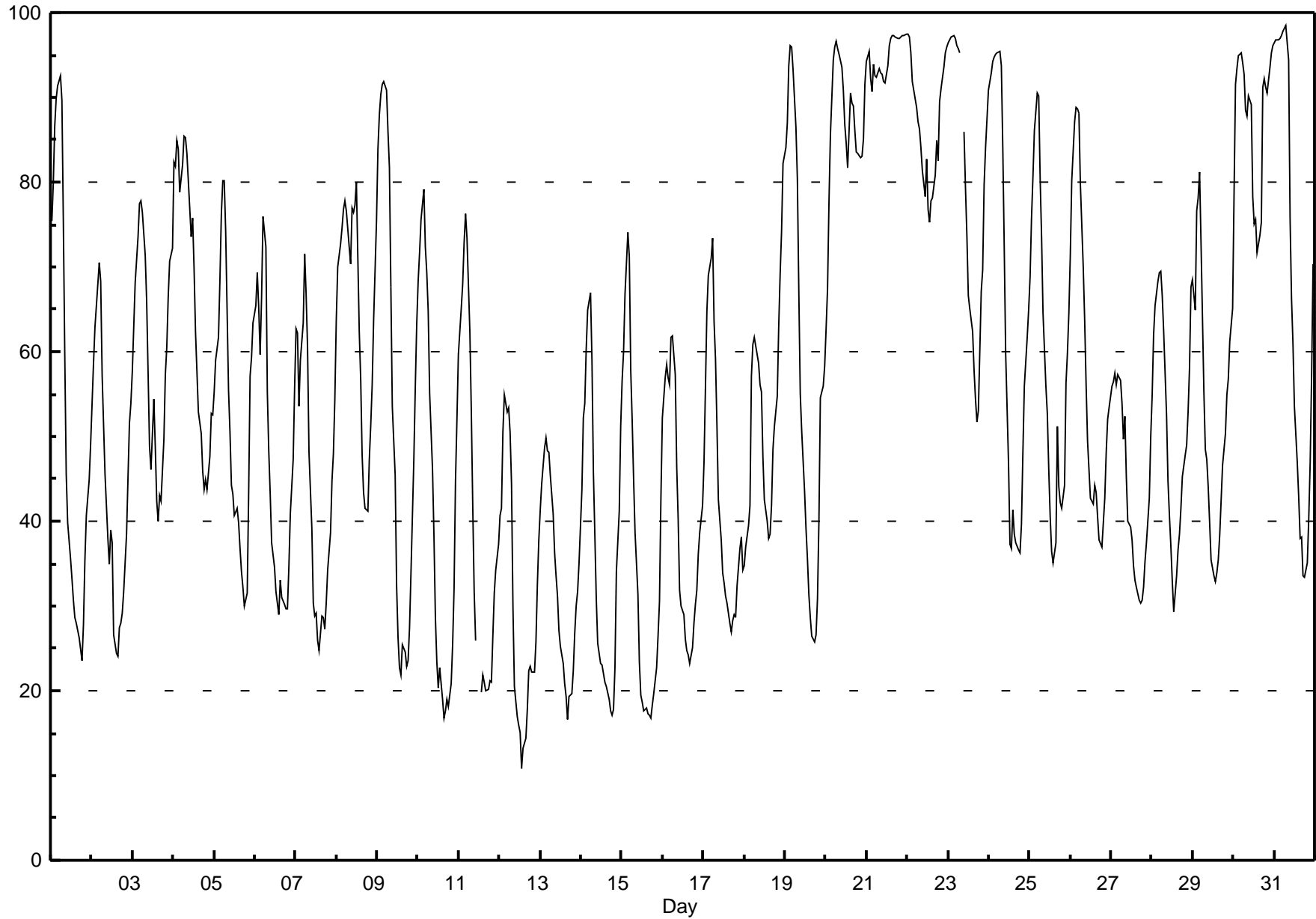
Relative Humidity (RH) - %

Evergreen Park - May 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 98.4 % on May 31 08:00 Maximum Daily Average: 94.8 % on May 21		Hours in Service: 744 Hours of Data: 741 Hours of Missing Data: 3 Hours of Calibration: 0 Percent Operational Time: 99.6																									
Minimum Value: 11 % on May 12 14:00 Maximum Diurnal Average: 77.8 % at hour 6 Monthly Average: 55.76 %		Minimum Daily Average: 30.4 % on May 12 Minimum Diurnal Average: 38.8 % at hour 16 Percentiles: P ₁ = 16.8 P ₁₀ = 25.6 Q ₁ = 36.2 Median = 53.5 Q ₃ = 75.7 P ₉₀ = 91.8 P ₉₉ = 97.3																									
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-May	75	80	87	90	91	92	90	75	59	46	40	36	33	31	29	28	26	25	24	28	35	41	45	49	52.3	92.5	
2-May	54	59	63	68	71	68	57	51	46	38	35	39	38	27	24	24	28	28	29	32	38	45	51	54	44.4	70.6	
3-May	58	68	71	74	77	78	76	71	66	57	49	46	54	49	42	40	43	42	50	57	61	66	71	72	60.0	77.9	
4-May	82	82	85	84	79	82	85	85	83	80	74	76	70	62	58	53	50	46	44	45	44	48	53	53	66.8	85.4	
5-May	55	59	62	69	76	80	80	74	55	51	44	43	41	42	40	37	34	32	30	32	43	57	59	63	52.4	80.2	
6-May	65	69	65	60	66	76	72	55	48	43	38	35	32	30	29	33	31	30	30	30	35	41	47	56	46.5	75.9	
7-May	63	62	54	59	63	72	67	61	48	39	30	29	29	26	25	29	29	27	30	34	39	45	48	54	44.2	71.5	
8-May	64	70	73	75	77	78	77	72	70	77	76	77	80	62	57	48	43	42	41	47	51	56	64	75	64.7	80.0	
9-May	84	88	90	92	92	91	86	82	68	54	46	32	26	23	22	25	25	23	23	27	34	47	56	63	54.1	91.8	
10-May	68	72	76	79	72	69	65	55	46	38	29	23	20	23	19	17	18	19	18	21	25	32	45	52	41.7	79.1	
11-May	60	65	68	73	76	73	62	53	42	32	26	D	D	20	22	21	20	20	21	21	26	32	34	37	41.1	76.3	
12-May	41	42	50	55	53	53	51	44	30	21	17	16	15	11	13	14	18	22	23	22	22	26	33	38	30.4	54.9	
13-May	41	44	49	50	48	48	45	41	36	34	31	27	25	23	21	19	17	19	20	22	27	30	32	35	32.7	49.9	
14-May	44	52	54	60	65	67	59	46	38	31	26	23	23	22	21	20	19	18	17	18	23	34	41	51	36.3	66.9	
15-May	57	60	67	74	71	58	52	45	39	31	23	19	19	18	18	17	17	17	18	20	23	26	30	43	35.9	74.1	
16-May	52	57	58	57	56	62	62	57	46	40	32	30	29	26	25	24	23	25	28	30	32	36	39	42	40.4	61.8	
17-May	47	56	65	69	71	73	64	59	51	43	38	34	33	31	30	28	27	28	29	29	32	37	38	34	43.6	73.4	
18-May	35	37	39	42	57	61	62	61	59	56	55	48	43	40	38	38	42	48	51	55	63	69	74	82	52.3	82.3	
19-May	84	87	94	96	96	93	86	80	67	55	51	44	39	36	31	29	26	26	27	31	40	55	56	58	57.8	96.1	
20-May	63	67	78	86	94	96	97	96	95	94	91	87	85	82	91	89	89	86	83	83	83	83	85	92	86.4	96.5	
21-May	94	95	92	91	94	93	92	93	93	93	92	92	94	96	97	97	97	97	97	97	97	97	97	97	97	94.8	97.4
22-May	97	97	95	92	91	89	87	86	84	81	78	83	77	75	78	78	81	85	83	89	91	94	95	96	86.8	97.4	
23-May	96	97	97	97	97	96	96	95	N	86	79	74	67	65	62	58	54	52	53	67	70	80	84	87	78.7	97.3	
24-May	91	93	94	95	95	95	95	94	84	72	60	47	37	37	41	39	37	37	36	40	48	56	62	65	64.6	95.5	
25-May	69	76	81	86	91	90	81	74	65	56	53	46	41	36	35	37	51	44	42	42	44	56	60	65	59.1	90.6	
26-May	71	80	87	89	89	88	80	70	64	56	49	46	43	42	44	43	40	38	37	40	43	48	52	53	58.0	88.9	
27-May	56	56	57	56	57	57	54	50	52	45	40	39	38	35	33	32	31	30	31	32	35	38	43	50	43.6	57.5	
28-May	55	62	65	68	69	69	67	62	53	45	41	37	33	29	34	37	38	42	45	48	49	53	58	68	51.1	69.5	
29-May	68	65	77	78	81	73	55	49	47	44	40	35	34	33	34	35	38	47	48	50	55	57	61	65	52.9	81.2	
30-May	79	92	93	95	95	94	93	89	88	90	89	78	75	76	72	74	75	91	92	91	90	93	95	96	87.3	96.0	
31-May	96	97	97	97	97	98	98	98	94	76	66	61	54	47	43	38	38	34	33	35	40	47	57	70	67.2	98.4	
		66.6	70.5	73.6	75.9	77.7	77.8	73.9	68.5	60.6	55.0	49.6	46.7	44.1	40.4	39.6	38.8	38.9	39.4	39.8	42.4	46.4	52.4	57.0	61.8	Diurnal Average	
		97.4	97.0	97.1	97.3	97.2	97.8	98.1	98.4	95.1	93.6	91.8	91.7	93.7	96.2	97.0	97.3	97.3	97.2	97.0	97.0	97.1	97.2	97.3	97.4	Diurnal Maximum	
D - DAS Failure		N - Not Valid																									

Hourly Averages

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



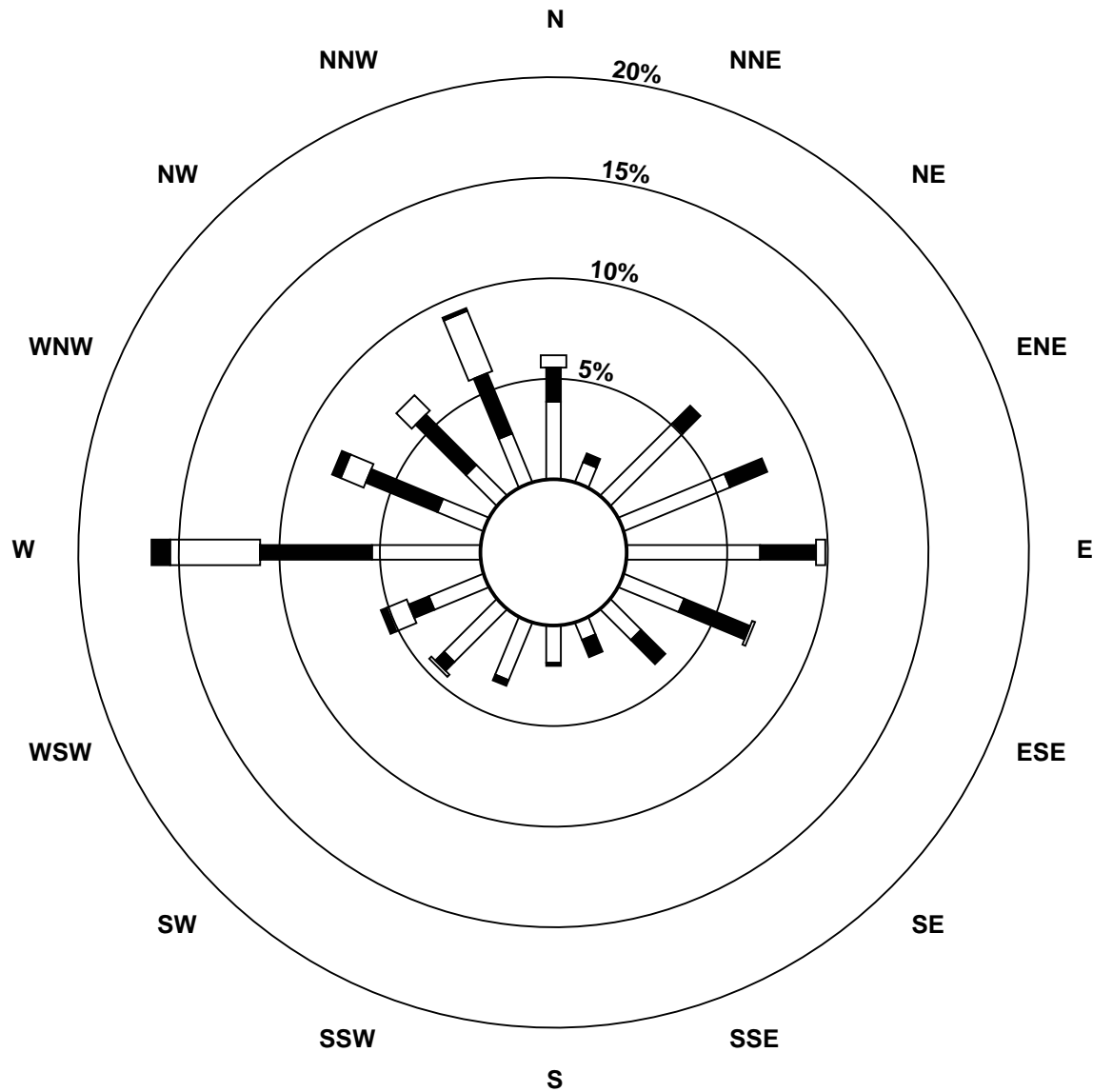
Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Evergreen Park - May 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	1	2	4	5	3	6	N	3	8	7	9	7	6	5	5	2	1	5	3	2	3	2	2.0	8.9
Dir	274	114	309	291	286	256	232	253	N	337	266	293	336	322	337	289	272	288	137	96	107	96	86	95	298.3	336.0
24 Spd	1	0	1	0	1	2	2	3	3	3	3	1	4	2	5	6	8	7	7	4	2	3	3	4	1.4	7.9
Dir	196	192	36	63	190	197	216	274	266	254	284	195	237	22	35	50	53	60	70	93	87	61	60	79	59.2	53.0
25 Spd	2	1	2	0	1	1	0	1	2	3	3	4	6	7	7	6	7	1	9	6	3	3	4	3	2.2	9.1
Dir	88	77	76	359	289	221	255	241	355	133	153	126	86	99	73	161	245	239	115	134	106	76	86	86	112.9	115.4
26 Spd	3	2	2	4	4	3	3	4	4	5	8	9	9	9	12	11	12	12	12	9	8	5	5	4	6.6	12.4
Dir	86	78	67	84	89	75	103	111	89	104	113	96	94	110	103	102	99	101	101	88	94	78	79	80	96.3	98.7
27 Spd	5	5	4	6	5	6	6	6	7	8	9	10	10	9	9	10	10	9	10	7	5	3	3	3	6.8	10.2
Dir	90	88	82	99	88	88	89	90	82	82	90	97	105	95	98	111	107	103	105	114	114	113	92	83	97.3	111.3
28 Spd	3	3	3	3	3	4	4	4	6	8	8	9	9	9	10	8	8	7	6	5	5	0	1	4.8	9.5	
Dir	81	79	83	80	88	88	93	89	110	121	109	109	93	128	153	119	130	150	169	154	194	197	261	59	122.5	118.7
29 Spd	1	2	1	0	1	0	0	1	2	4	5	7	6	6	5	7	7	5	3	3	3	2	4	2	1.8	7.1
Dir	139	83	70	68	32	353	336	128	49	94	89	108	101	104	107	139	128	187	177	283	221	203	265	271	125.7	139.3
30 Spd	3	3	0	1	2	2	1	3	5	8	6	4	5	7	9	7	7	9	5	2	2	1	1	0	2.4	9.0
Dir	120	135	95	354	329	317	280	239	245	255	278	246	238	218	221	219	188	119	198	150	181	199	53	265	217.3	220.8
31 Spd	0	0	0	1	1	2	2	3	5	5	4	3	5	5	7	6	8	8	8	7	5	4	1	1	3.5	8.5
Dir	140	107	110	235	225	174	174	136	158	146	130	130	132	153	154	138	109	134	127	124	108	103	104	97	133.6	126.5
Spd	1.0	0.6	0.8	1.1	1.3	1.3	1.9	2.9	3.6	3.3	3.2	2.3	3.0	2.9	3.3	2.8	2.7	2.5	1.6	1.5	1.5	1.9	1.8	1.3	Diurnal Average	
Dir	4.0	343.5	339.1	332.3	297.1	301.5	285.8	283.9	295.8	297.8	298.0	311.6	316.3	313.7	313.6	307.4	301.2	304.0	319.3	298.2	315.2	310.4	319.8	331.2	Diurnal Maximum	
Spd	11.4	11.3	11.4	10.7	10.1	11.9	12.4	15.7	13.8	19.2	19.2	20.8	20.5	24.6	21.4	22.5	23.7	23.4	21.8	18.8	18.0	16.7	16.3	15.8	Diurnal Maximum	
Dir	334.3	328.0	317.3	319.2	331.3	336.8	274.0	275.1	334.9	259.1	265.4	267.6	264.0	282.6	287.6	282.1	269.0	276.8	271.3	335.5	332.9	327.8	277.6	338.7	Diurnal Maximum	
Maximum Speed Value: 25 km/h on May 12 14:00		Minimum Speed Value: 0 km/h on May 9 00:00																Hours in Service: 744								
Maximum Daily Speed Average: 12.8 km/h on May 2		Minimum Daily Speed Average: 0.5 km/h on May 6																Hours of Data: 741								
Maximum Diurnal Speed Average: 3.6 km/h at hour 9		Minimum Diurnal Speed Average: 0.6 km/h at hour 2																Hours of Missing Data: 3								
Monthly Average Velocity: 2.01 km/h 307.67 deg		Speed Percentiles: P ₁ = 0.2 P ₁₀ = 0.8 Q ₁ = 2.1 Median = 4.5 Q ₃ = 8.6 P ₉₀ = 12.3 P ₉₉ = 21.8																Percent Operational Time: 99.6								
All monthly, daily, and diurnal averages have been calculated using vector methods																										
D - DAS Failure N - Not Valid																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	41	25	14	3	0	0	83																			
NorthEast	62	24	0	0	0	0	86																			
East	75	46	5	0	0	0	126																			
SouthEast	32	25	0	0	0	0	57																			
South	31	6	0	0	0	0	37																			
SouthWest	70	9	2	0	0	0	81																			
West	56	56	42	13	0	0	167																			
NorthWest	32	45	27	0	0	0	104																			
Total	399	236	90	16	0	0	741																			

Wind Rose

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



Wind Speed Classes (km/h)





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Evergreen Park - May 2010

Maximum Speed: 25 km/h on May 12 14:00		Maximum Daily Speed Average: 13.5 km/h on May 2																				Hours in Service: 744					
Minimum Speed: 1 km/h on May 5 22:00		Minimum Daily Speed Average: 3.1 km/h on May 6																				Hours of Data: 741					
Maximum Diurnal Speed Average: 9.7 km/h at hour 15		Minimum Diurnal Speed Average: 3.1 km/h at hour 2																				Hours of Missing Data: 3					
Monthly Average Speed: 6.49 km/h		Percentiles: P ₁ = 0.9 P ₁₀ = 1.5 Q ₁ = 2.8 Median = 5.5 Q ₃ = 9.2 P ₉₀ = 12.7 P ₉₉ = 22.2																				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-May	2	1	1	1	2	3	5	7	12	14	13	11	12	12	13	10	10	11	13	11	11	11	8	10	8.5	13.9	
2-May	9	6	7	4	3	5	12	13	14	20	19	14	15	23	22	20	18	19	20	16	13	14	11	8	13.5	22.8	
3-May	3	2	3	1	1	1	1	2	5	4	5	7	7	7	12	14	17	20	22	19	18	17	16	16	9.2	22.1	
4-May	12	12	12	11	9	11	10	12	14	15	17	14	16	13	12	10	9	8	8	7	11	13	9	5	11.2	16.8	
5-May	3	3	4	3	2	2	2	2	4	3	4	5	5	6	5	6	7	4	4	3	1	1	1	1	3.4	6.8	
6-May	1	1	1	1	1	1	2	2	5	5	5	7	4	5	5	6	4	4	3	2	2	2	2	1	3.1	6.9	
7-May	1	3	4	2	3	2	3	3	4	7	6	6	5	7	6	9	8	7	8	5	2	3	4	3	4.6	8.8	
8-May	1	1	2	1	2	1	1	2	2	2	6	9	7	7	7	4	6	5	6	10	7	3	2	1	4.0	9.7	
9-May	2	1	1	1	1	1	2	5	7	3	4	6	8	7	7	9	6	6	5	10	2	2	1	1	4.1	10.2	
10-May	2	2	2	2	4	4	6	6	6	5	4	5	6	8	5	7	3	5	3	4	3	2	2	1	4.0	7.7	
11-May	1	1	2	1	3	2	2	5	7	6	7	D	D	13	14	12	14	14	8	6	3	4	3	4	6.1	14.3	
12-May	2	2	1	1	2	3	2	4	12	17	20	21	21	25	22	23	24	24	22	18	14	12	16	13	13.4	25.2	
13-May	9	8	4	5	8	10	12	16	15	13	12	12	12	11	14	11	13	11	10	7	8	9	7	4	10.2	15.9	
14-May	2	2	1	1	1	1	2	8	7	7	10	10	8	7	7	7	7	6	6	3	2	1	1	1	4.5	10.3	
15-May	1	1	1	1	3	3	3	7	6	3	3	6	7	7	5	4	6	5	6	4	4	4	2	1	3.9	7.2	
16-May	2	1	2	4	2	2	4	5	6	10	12	11	12	12	12	16	16	18	16	15	9	8	5	4	8.5	18.3	
17-May	2	1	1	2	2	1	3	3	3	3	4	5	7	6	6	6	6	5	5	6	6	4	5	7	4.1	7.2	
18-May	6	4	4	4	3	4	2	1	3	4	6	5	5	5	6	4	7	10	11	11	10	6	5	5	5.5	11.2	
19-May	4	2	4	6	9	9	11	10	13	17	16	14	11	12	12	9	7	6	6	4	1	1	3	2	8.0	17.4	
20-May	3	3	4	6	4	4	7	6	5	7	8	7	4	6	15	13	17	19	12	7	9	11	12	10	8.1	18.7	
21-May	7	6	9	11	10	12	12	12	12	14	17	20	16	12	10	9	11	13	12	9	7	7	6	7	10.8	19.7	
22-May	5	8	9	9	8	10	10	9	11	10	9	7	8	6	5	4	3	2	2	2	2	2	3	3	6.0	11.3	
23-May	2	2	2	2	4	5	3	6	N	4	9	8	10	7	7	6	6	3	2	5	3	2	3	2	4.5	9.5	
24-May	1	1	2	1	1	2	2	3	4	3	4	5	5	5	6	7	8	7	8	4	3	3	3	4	3.8	8.4	
25-May	2	2	2	1	1	1	1	2	3	4	6	7	7	8	8	9	8	2	10	6	3	3	4	3	4.3	9.6	
26-May	3	2	2	4	4	3	3	4	4	6	9	10	10	10	12	12	13	13	12	10	8	6	5	5	7.1	12.9	
27-May	5	5	4	6	5	6	6	7	8	9	10	11	11	10	10	11	10	9	10	7	5	3	3	3	7.2	11.0	
28-May	3	3	3	3	3	4	4	5	7	9	9	10	10	10	10	10	9	9	8	6	5	5	2	2	6.2	10.4	
29-May	1	2	1	1	1	1	1	2	3	5	6	8	8	7	6	8	8	6	4	4	4	4	4	3	4.1	8.4	
30-May	3	4	2	2	2	2	2	3	6	8	6	5	5	7	9	7	8	9	6	3	2	2	2	1	4.4	9.4	
31-May	2	1	1	1	2	2	3	3	5	5	5	5	7	6	8	8	8	9	9	7	5	4	2	1	4.6	8.8	
		3.4	3.1	3.1	3.2	3.5	3.8	4.5	5.6	7.1	7.8	8.8	9.0	8.9	9.2	9.7	9.3	9.6	9.3	9.0	7.5	5.9	5.4	4.8	4.2	Diurnal Average	
		11.8	11.6	11.7	10.9	10.3	12.1	12.5	15.9	14.9	19.5	19.6	21.4	21.4	25.2	22.3	23.1	24.1	23.8	22.2	19.2	18.4	17.2	16.4	16.1	Diurnal Maximum	
D - DAS Failure N - Not Valid All monthly, daily, and diurnal averages have been calculated using scalar methods																											



Hourly Standard Deviations

Wind Direction (WD) - deg

Evergreen Park - May 2010

Maximum Value: 97.6 deg on May 9 00:00																						Hours in Service: 744			
Minimum Value: 5.0 deg on May 2 01:00																						Hours of Data: 741			
Percentiles: P ₁ = 6.1 P ₁₀ = 10.3 Q ₁ = 14.8 Median = 26.2 Q ₃ = 54.2 P ₉₀ = 75.6 P ₉₉ = 92.5																						Hours of Missing Data: 3			
																						Hours of Calibration: 0			
																						Percent Operational Time: 99.6			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-May	40	63	76	75	72	76	15	12	11	17	21	25	24	20	21	23	26	22	13	17	9	7	8	6	75.7
2-May	5	10	8	28	28	17	6	9	13	10	16	23	16	15	15	14	14	11	12	12	10	8	10	7	28.1
3-May	65	85	20	86	79	58	49	19	13	52	57	50	62	53	21	24	14	11	10	11	12	14	15	13	85.9
4-May	16	14	12	12	14	13	16	12	12	12	10	16	15	16	15	21	27	23	28	17	17	8	9	20	27.7
5-May	32	20	10	10	24	41	20	21	38	73	43	79	65	56	58	67	45	79	54	58	73	67	53	44	78.9
6-May	90	52	25	16	47	55	36	31	25	23	71	36	81	71	49	39	78	73	68	40	55	21	27	79	90.1
7-May	90	62	69	47	67	34	47	61	48	40	93	59	58	64	61	33	39	48	20	15	11	16	7	9	92.7
8-May	48	48	26	87	18	87	77	47	25	88	65	21	22	31	37	89	58	60	34	29	67	77	65	98	97.6
9-May	72	82	84	82	46	60	75	17	17	65	73	44	54	63	75	61	50	60	69	29	91	70	70	76	91.0
10-May	90	66	66	51	13	15	14	16	24	32	54	82	61	38	77	69	81	33	64	45	16	40	77	80	90.4
11-May	75	92	39	89	51	16	10	15	16	22	26	D	D	26	34	23	27	16	15	17	12	6	7	5	92.0
12-May	35	22	72	39	22	13	28	23	11	10	12	14	17	13	16	14	10	10	12	9	7	8	7	9	72.0
13-May	9	9	57	33	8	7	7	8	24	23	31	24	27	38	35	30	21	30	22	18	9	6	5	54	56.5
14-May	93	65	67	93	88	64	60	16	21	42	40	28	41	60	68	66	43	58	51	37	28	71	73	77	93.4
15-May	58	83	90	90	29	14	19	17	19	47	72	52	63	54	82	76	40	76	23	14	16	13	27	39	89.8
16-May	48	94	87	56	71	97	88	58	17	13	32	29	25	40	30	16	14	11	11	20	14	12	17	37	96.6
17-May	69	94	56	76	69	82	21	33	32	82	77	59	59	83	41	46	53	23	19	10	10	9	11	10	94.2
18-May	10	39	26	92	69	38	62	62	38	48	38	65	84	76	40	32	20	12	13	12	16	17	21	21	91.5
19-May	19	69	61	35	11	9	9	9	14	12	14	19	28	28	33	37	35	49	46	16	24	65	9	13	69.5
20-May	11	17	23	18	22	23	18	19	19	14	13	21	25	83	17	14	11	8	10	26	15	15	11	36	82.9
21-May	24	22	12	11	12	9	12	12	14	12	10	9	11	13	14	14	14	12	13	12	15	14	12	12	24.5
22-May	16	10	9	9	10	10	9	9	8	14	13	25	14	26	34	31	93	35	26	31	42	28	18	45	92.5
23-May	88	47	86	51	24	12	13	12	N	39	25	27	21	27	29	33	36	61	82	19	16	22	13	29	87.5
24-May	75	81	28	88	63	28	61	42	40	54	60	78	62	77	30	31	21	23	21	27	29	5	6	8	87.8
25-May	23	34	20	68	40	40	85	58	56	66	65	55	44	32	26	59	37	71	25	19	22	10	9	11	84.7
26-May	8	17	15	10	12	17	30	30	32	33	30	28	20	20	17	18	17	20	15	18	16	13	13	12	33.3
27-May	12	12	15	14	15	16	23	24	16	21	24	25	24	20	21	20	21	20	15	15	16	10	11	8	25.1
28-May	6	8	8	11	12	13	18	18	25	22	26	30	25	27	25	25	23	22	22	22	14	9	92	61	92.1
29-May	56	36	46	83	41	60	73	73	59	42	42	41	41	44	43	33	29	27	49	44	36	68	14	83	83.3
30-May	25	31	79	29	18	25	54	24	22	12	19	31	24	18	17	23	28	15	36	38	22	69	71	90	90.1
31-May	93	85	89	68	91	43	38	41	30	30	58	59	65	50	36	39	24	29	19	19	12	9	51	69	92.9
93.4	94.3	89.8	93.3	91.1	96.6	88.1	73.0	59.3	87.7	92.7	81.7	83.6	83.4	82.4	89.4	92.5	78.9	81.7	58.2	91.0	77.1	92.1	97.6		
D - DAS Failure N - Not Valid																									

PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

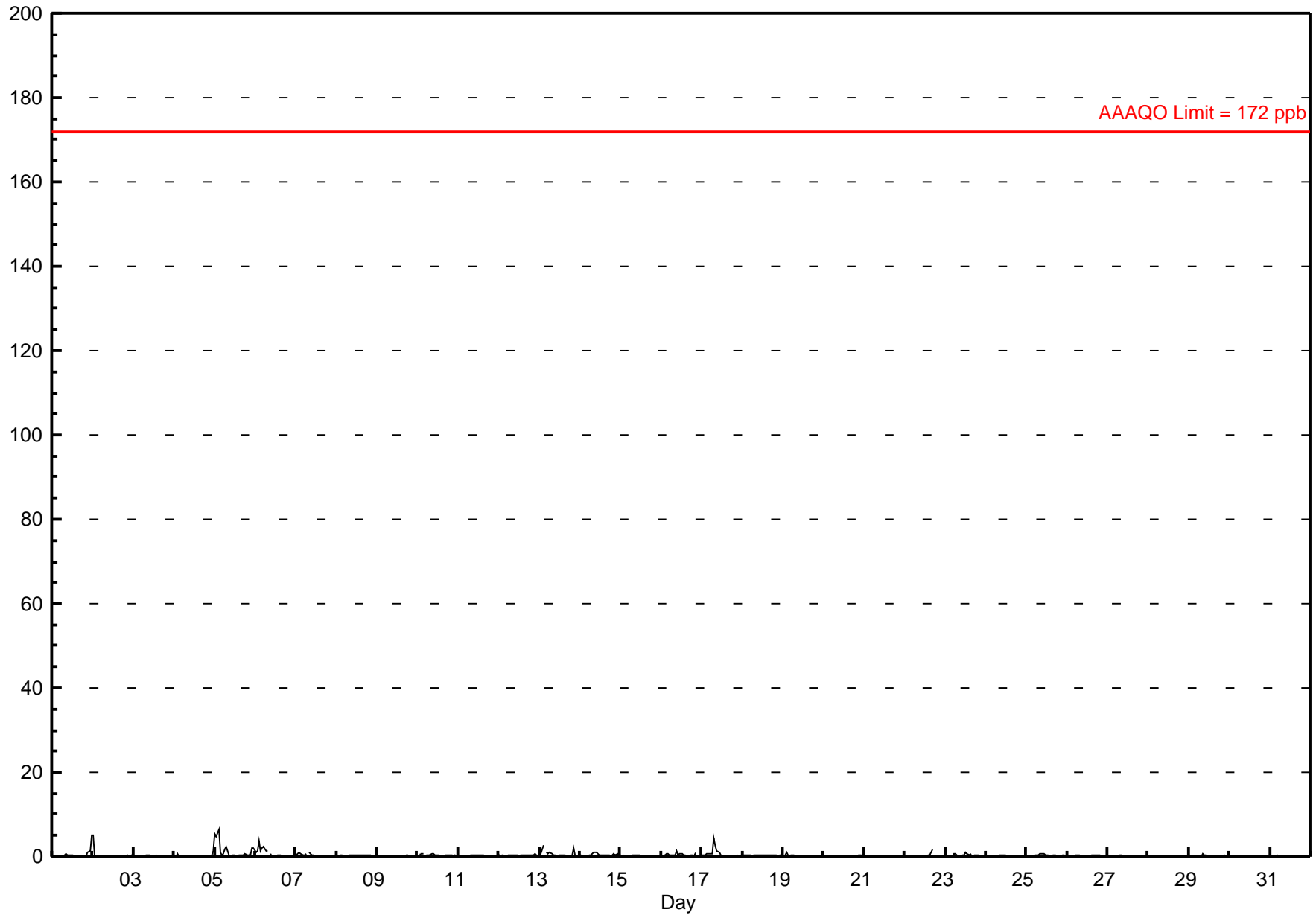
Sulphur Dioxide (SO₂) - ppb

Smoky Heights - May 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 6.4 ppb on May 03:00	Maximum Daily Average: 1.3 ppb on May 5		Hours of Data:	704
Minimum Value: 0 ppb on May 2 15:00	Minimum Daily Average: 0.0 ppb on May 21		Hours of Missing Data:	40
Maximum Diurnal Average: 0.6 ppb at hour 3	Minimum Diurnal Average: 0.1 ppb at hour 20		Hours of Calibration:	39
Monthly Average: 0.28 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.5 P ₉₉ = 3.2		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-May	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	1	1	5	0.5	5.1
2-May	5	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	5.1
3-May	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
4-May	0	0	1	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	1.4
5-May	6	5	6	1	0	1	2	2	0	A	0	0	1	0	0	0	0	0	1	0	0	0	2	2	1.3	6.4
6-May	1	1	4	1	2	2	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	3.6
7-May	0	1	1	1	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
8-May	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
9-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
10-May	0	0	1	1	A	0	0	0	1	1	0	0	0	C	C	0	0	0	0	0	0	0	0	0	0.3	0.6
11-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
12-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.7
13-May	1	1	3	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0.6	2.8
14-May	0	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0.4	1.1
15-May	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	0.5
16-May	A	0	0	1	1	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0	A	0.4	1.2
17-May	0	0	0	1	1	1	1	4	3	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.6	4.4
18-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.3	0.5
19-May	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.9
20-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.1	0.4
21-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	P	0	0	0	0	0.0	0.1
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	A	0	0	0	0	0	0	0	0.1	1.6
23-May	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1	A	0	0	0	0	0	0	0	0	0.3	1.0
24-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.1	0.3
25-May	0	0	0	0	0	0	0	0	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.7
26-May	0	0	0	0	0	0	0	0	C	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0.2	0.5
27-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
28-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
29-May	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
30-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
31-May	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
	0.5	0.4	0.6	0.2	0.3	0.3	0.3	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.4	Diurnal Average	
	5.5	4.6	6.4	1.4	2.1	2.3	1.6	4.4	2.6	1.2	1.0	0.5	1.0	0.6	0.5	0.7	1.6	0.5	0.5	0.3	2.0	1.2	1.9	5.1	Diurnal Maximum	

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

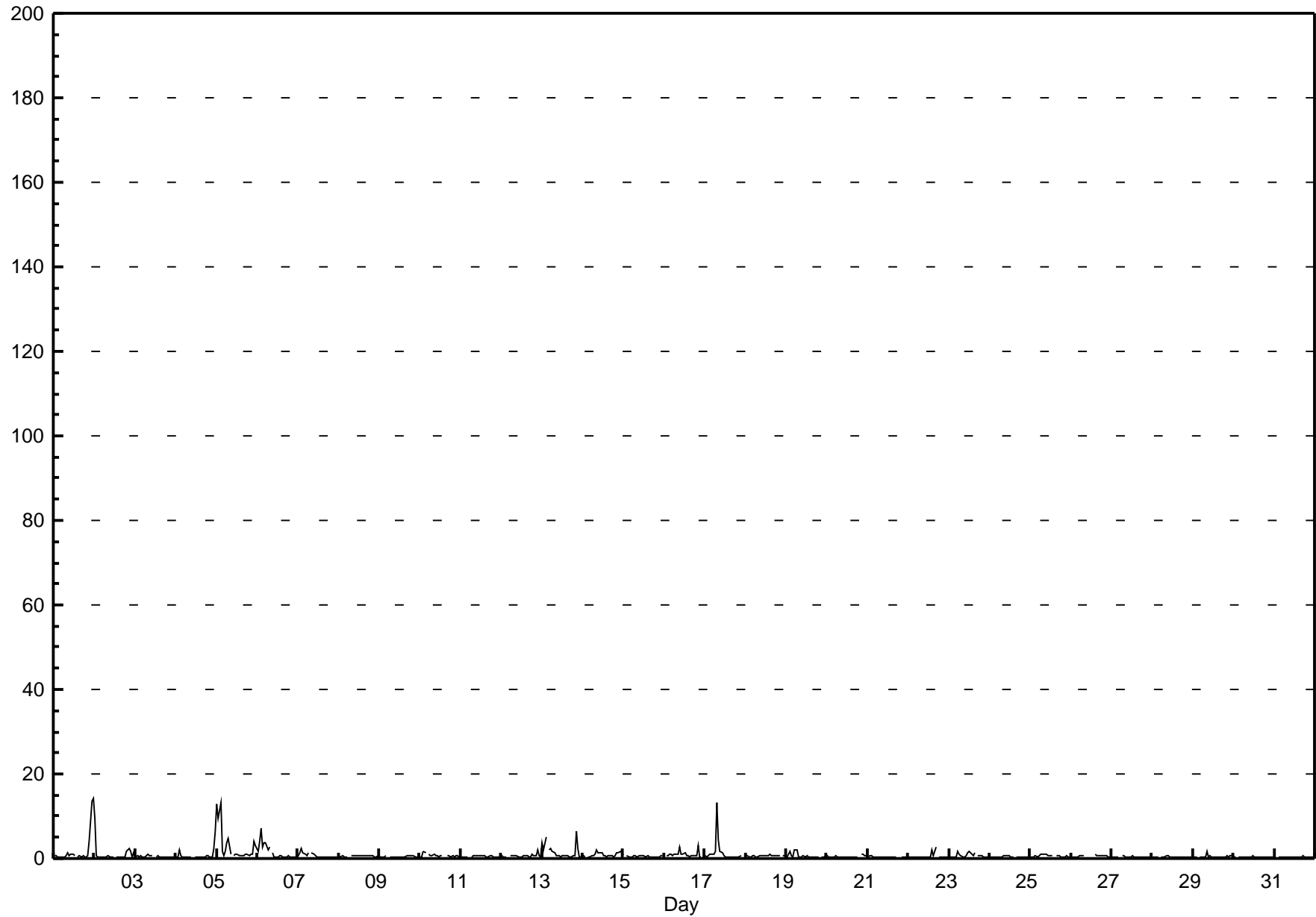


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

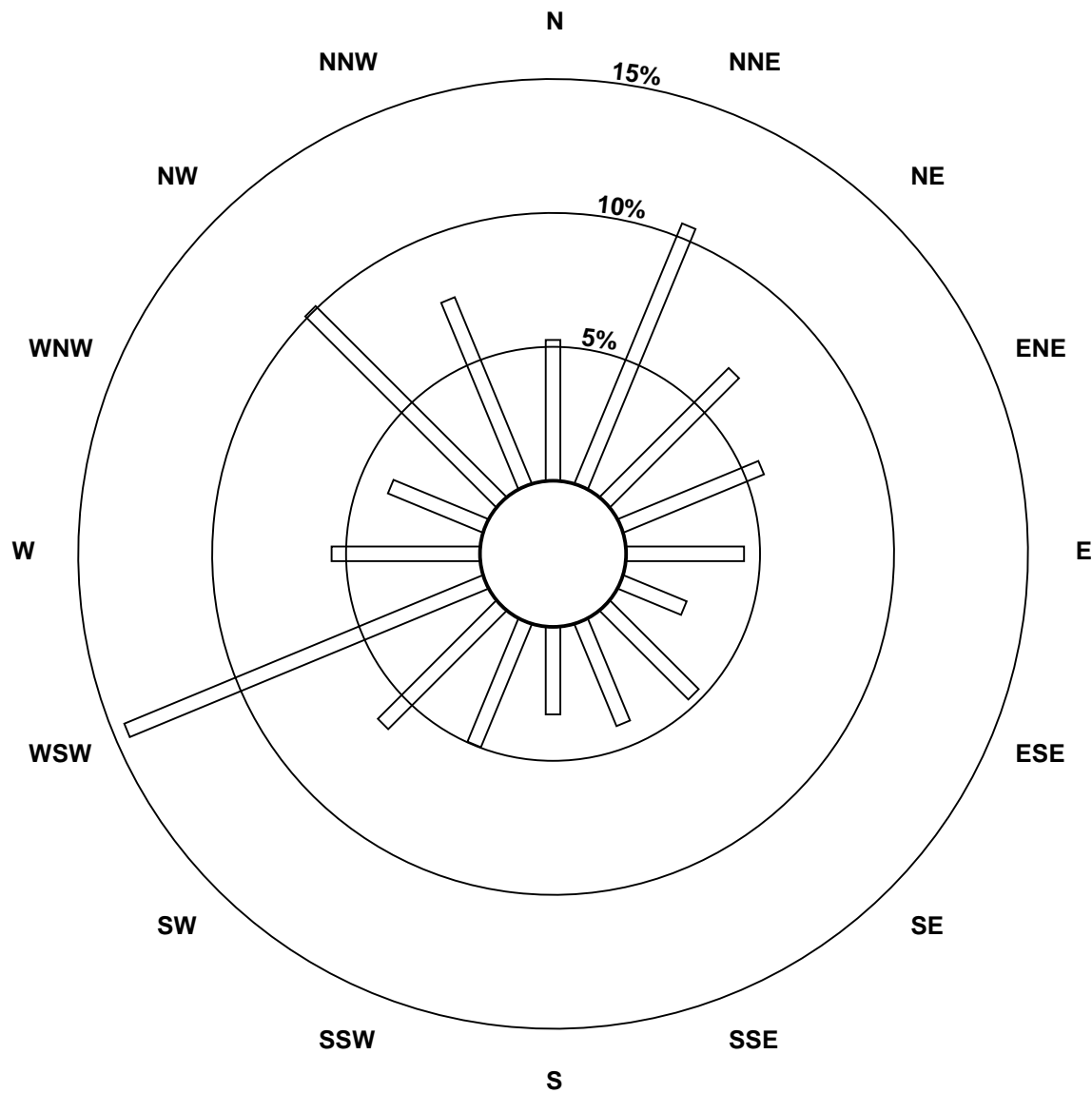
Smoky Heights - May 2010

Maximum Value: 14.4 ppb on May 2 00:00		Maximum Daily Average: 2.9 ppb on May 5		Hours in Service: 744																							
Minimum Value: 0 ppb on May 21 18:00		Minimum Daily Average: 0.4 ppb on May 21		Hours of Data: 704																							
Maximum Diurnal Average: 1.5 ppb at hour 3		Minimum Diurnal Average: 0.5 ppb at hour 18		Hours of Missing Data: 40																							
Monthly Average: 0.80 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 1.3 P ₉₉ = 9.4		Hours of Calibration: 39																							
				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-May	1	1	0	0	0	0	0	1	2	1	1	1	1	A	0	1	0	1	0	0	1	4	13	14	1.9	14.4	
2-May	10	1	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	2	2	2	0	1	1.0	9.5	
3-May	0	1	0	1	0	0	0	1	1	1	1	A	0	1	0	0	0	0	0	0	0	0	0	0	0.5	0.9	
4-May	0	1	2	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	2	6	0.9	6.5	
5-May	13	9	13	2	1	2	4	5	1	A	1	1	1	1	1	1	1	1	1	1	1	1	4	3	2.9	13.2	
6-May	2	4	7	3	4	4	2	3	A	1	0	0	0	1	1	0	0	0	1	0	0	0	1	0	1.5	7.3	
7-May	1	2	2	1	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	2.4	
8-May	0	0	1	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0.6	0.8	
9-May	0	0	0	0	1	A	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0.4	0.7	
10-May	0	0	2	1	A	1	1	1	1	1	1	0	1	1	C	C	1	1	0	1	0	1	1	0	0.7	1.8	
11-May	0	0	0	0	0	A	0	1	1	1	1	1	1	1	1	0	0	1	1	0	0	0	0	0	0.5	0.7	
12-May	1	0	0	0	A	1	1	1	1	1	0	0	1	1	1	0	0	1	1	1	1	2	1	0	0.6	1.9	
13-May	4	2	5	A	2	2	2	1	1	1	1	0	1	1	1	1	0	0	1	1	6	2	0	0	1.5	6.3	
14-May	1	0	A	0	0	1	1	1	2	1	1	1	1	1	0	1	1	1	0	1	1	1	2	1	0.9	1.9	
15-May	1	A	1	0	0	0	1	1	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	1	0.5	1.0	
16-May	A	1	1	1	1	1	1	1	1	3	1	1	1	1	1	0	1	1	1	1	3	0	0	A	1.0	3.0	
17-May	1	0	1	1	1	1	2	13	4	2	1	1	0	0	0	0	0	0	0	0	0	1	A	1	1.4	13.3	
18-May	1	1	1	0	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.6	0.9	
19-May	0	1	2	1	0	2	2	0	0	1	0	1	0	0	0	0	0	0	0	1	A	0	0	1	0.7	2.1	
20-May	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	A	1	1	1	1	0.5	0.9	
21-May	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	P	0	0	0	0	0.4	0.7	
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	A	0	0	0	0	0	0	0	0.5	2.7	
23-May	0	0	0	0	0	2	1	1	0	0	1	1	2	2	1	1	A	1	1	1	0	0	0	0	0.7	1.7	
24-May	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0.4	0.7	
25-May	0	0	0	1	0	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0	0	1	0	0	0.6	1.1	
26-May	0	0	0	0	0	1	1	1	C	C	C	C	C	C	1	1	1	1	1	1	1	1	0	0	0.6	1.1	
27-May	0	0	0	0	0	A	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
28-May	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
29-May	0	0	0	A	0	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	1	0	1	1	0.5	1.6	
30-May	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
31-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.4	0.5	
		1.3	1.0	1.5	0.6	0.6	0.8	0.8	1.2	0.8	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.8	0.8	1.1	1.3	Diurnal Average	
		12.9	9.4	13.2	2.6	3.6	3.7	3.6	13.3	4.4	2.7	1.5	1.3	1.7	1.5	1.9	1.3	2.7	1.1	1.1	1.6	6.3	4.2	13.4	14.4	Diurnal Maximum	
C - Calibration		P - Power Failure						A - Automated Daily Zero Span																			

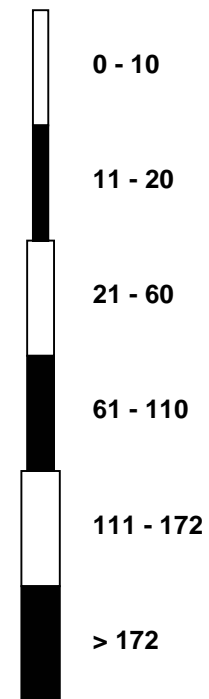


Pollutant Rose

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



Pollutant Classes (ppb)

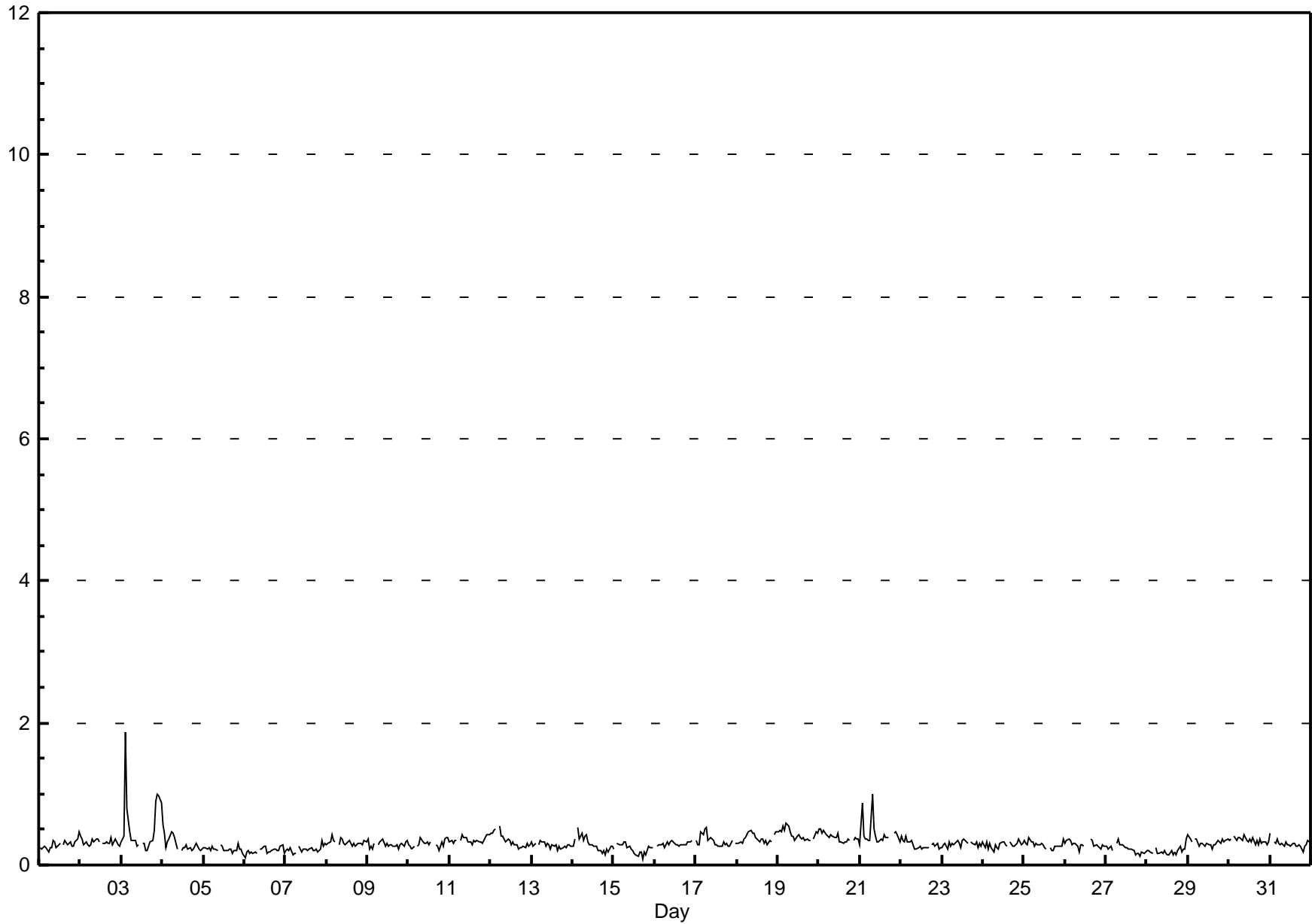


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Smoky Heights - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.9 ppb on May 3 03:00 Maximum Daily Average: 0.5 ppb on May 3		Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 36 Percent Operational Time: 99.9																																																
Minimum Value: 0 ppb on May 15 18:00 Maximum Diurnal Average: 0.4 ppb at hour 3 Monthly Average: 0.31 ppb		Minimum Daily Average: 0.2 ppb on May 28 Minimum Diurnal Average: 0.3 ppb at hour 18 Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.3 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 0.9																																																
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																										
1-May	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	0.5																								
2-May	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																								
3-May	0	0	2	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	1	1	0.5	1.9																								
4-May	1	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	0.6																								
5-May	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																								
6-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																								
7-May	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																								
8-May	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																								
9-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																								
10-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	C	C	0	0	0	0	0	0	0	0	0.3	0.4																								
11-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4																								
12-May	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6																								
13-May	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																								
14-May	0	0	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5																								
15-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3																								
16-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3																								
17-May	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5																								
18-May	0	0	0	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																								
19-May	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.4	0.6																								
20-May	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0.4	0.5																								
21-May	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	A	P	0	0	0	0.4	1.0																								
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.4																								
23-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.3	0.4																								
24-May	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																								
25-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0.3	0.4																								
26-May	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0.3	0.4																								
27-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4																								
28-May	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																								
29-May	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																								
30-May	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																								
31-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4																								
																								0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
																								0.6	0.9	1.9	0.8	0.6	0.6	0.6	1.0	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.9	1.0	1.0	0.9	0.3	0.4
C - Calibration P - Power Failure A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																																																		

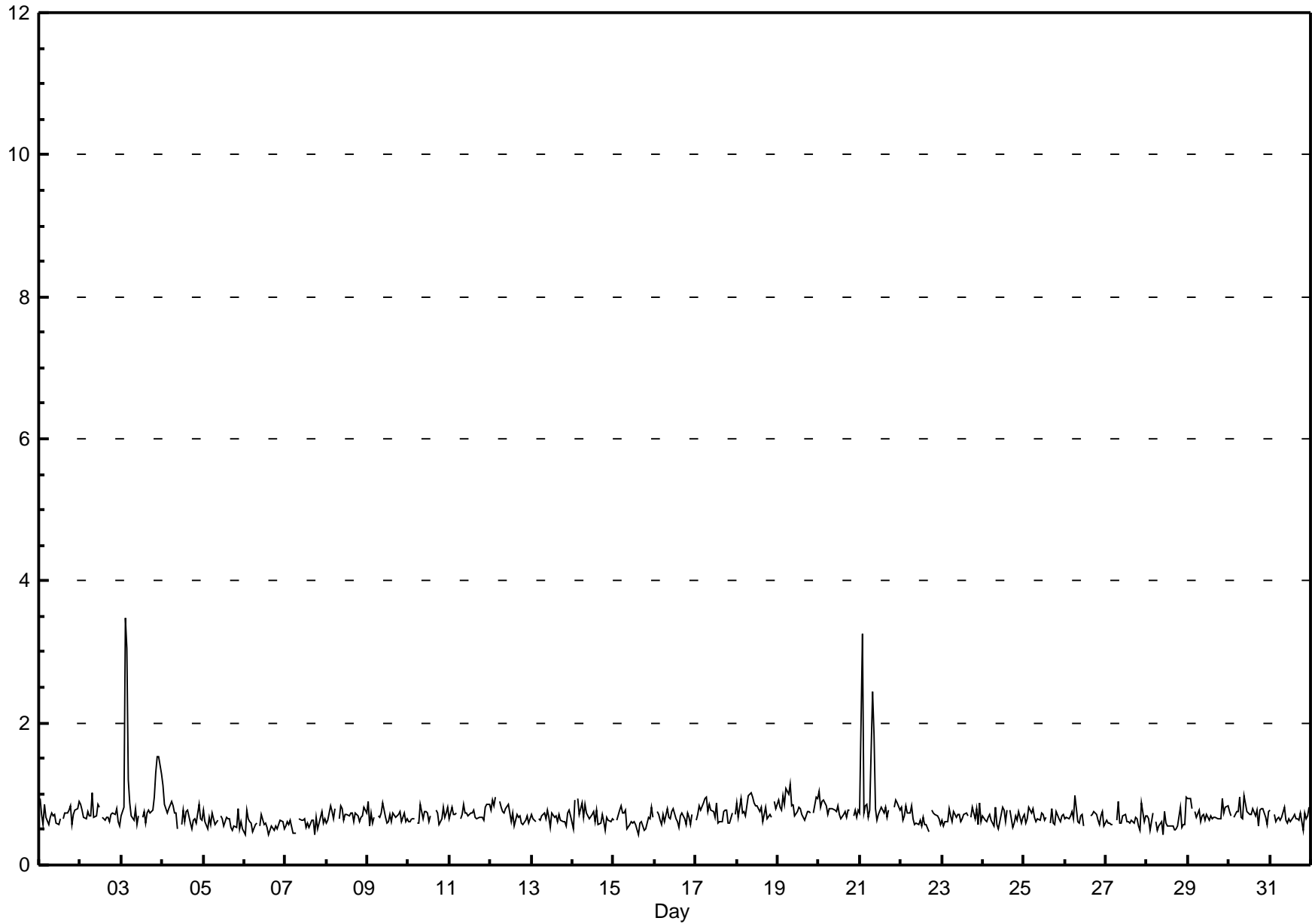


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

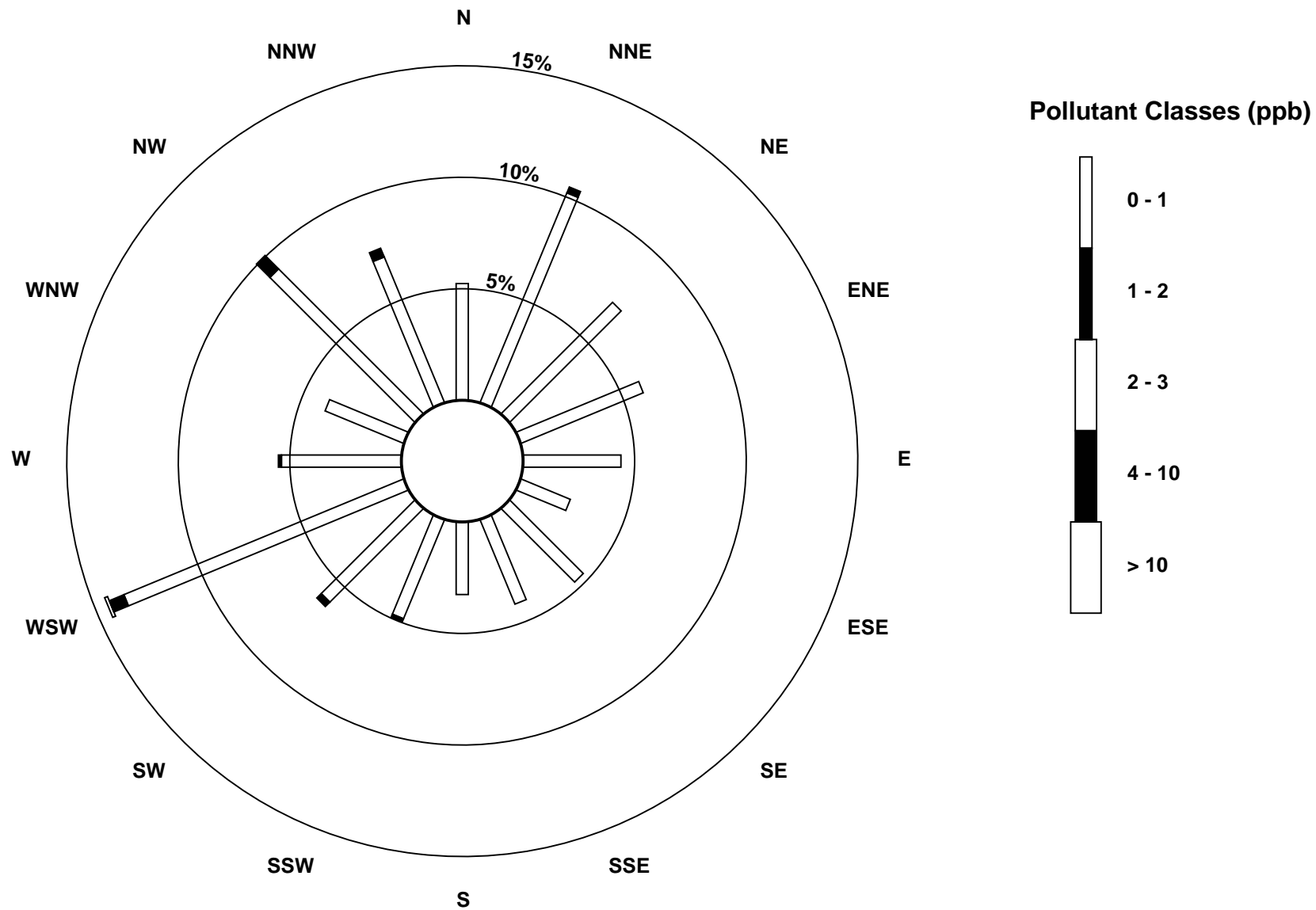
Smoky Heights - May 2010

Maximum Value: 3.5 ppb on May 3 03:00		Maximum Daily Average: 1.1 ppb on May 3		Hours in Service: 744																						
Minimum Value: 0 ppb on May 15 15:00		Minimum Daily Average: 0.6 ppb on May 6		Hours of Data: 707																						
Maximum Diurnal Average: 0.8 ppb at hour 4		Minimum Diurnal Average: 0.6 ppb at hour 20		Hours of Missing Data: 37																						
Monthly Average: 0.71 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 0.8 P ₉₉ = 1.5		Hours of Calibration: 36																						
				Percent Operational Time: 99.9																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-May	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.7	0.9
2-May	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
3-May	1	1	3	3	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	2	2	1	1.1	3.5
4-May	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
5-May	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0.6	0.8
6-May	0	1	1	1	1	0	1	1	A	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	0.6	0.8
7-May	1	1	1	1	0	0	0	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0.6	0.8
8-May	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
9-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
10-May	1	1	1	1	A	1	1	1	1	1	1	1	1	1	C	C	1	1	1	1	1	1	1	1	0.7	0.9
11-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
12-May	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
13-May	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	0.8
14-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	0.9
15-May	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	0.6	0.8
16-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
17-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
18-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
19-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0.8	1.1
20-May	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
21-May	1	3	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	P	1	1	1	1	1.0	3.3
22-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	1	1	1	1	1	1	0.7	0.8
23-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0.7	0.9
24-May	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	0.7	0.8
25-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	0.7	0.8
26-May	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	1	0.7	1.0
27-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0.6	0.9
28-May	1	1	0	1	A	1	0	1	1	0	1	1	1	1	1	1	0	0	1	1	1	1	1	1	0.6	1.0
29-May	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
30-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
31-May	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.7	0.8
		0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.7	Diurnal Average
		1.1	3.3	3.5	3.0	1.2	1.1	1.0	2.4	1.8	1.0	0.9	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	1.0	1.3	1.5	1.5	1.3	Diurnal Maximum
C - Calibration		P - Power Failure					A - Automated Daily Zero Span																			



Pollutant Rose

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



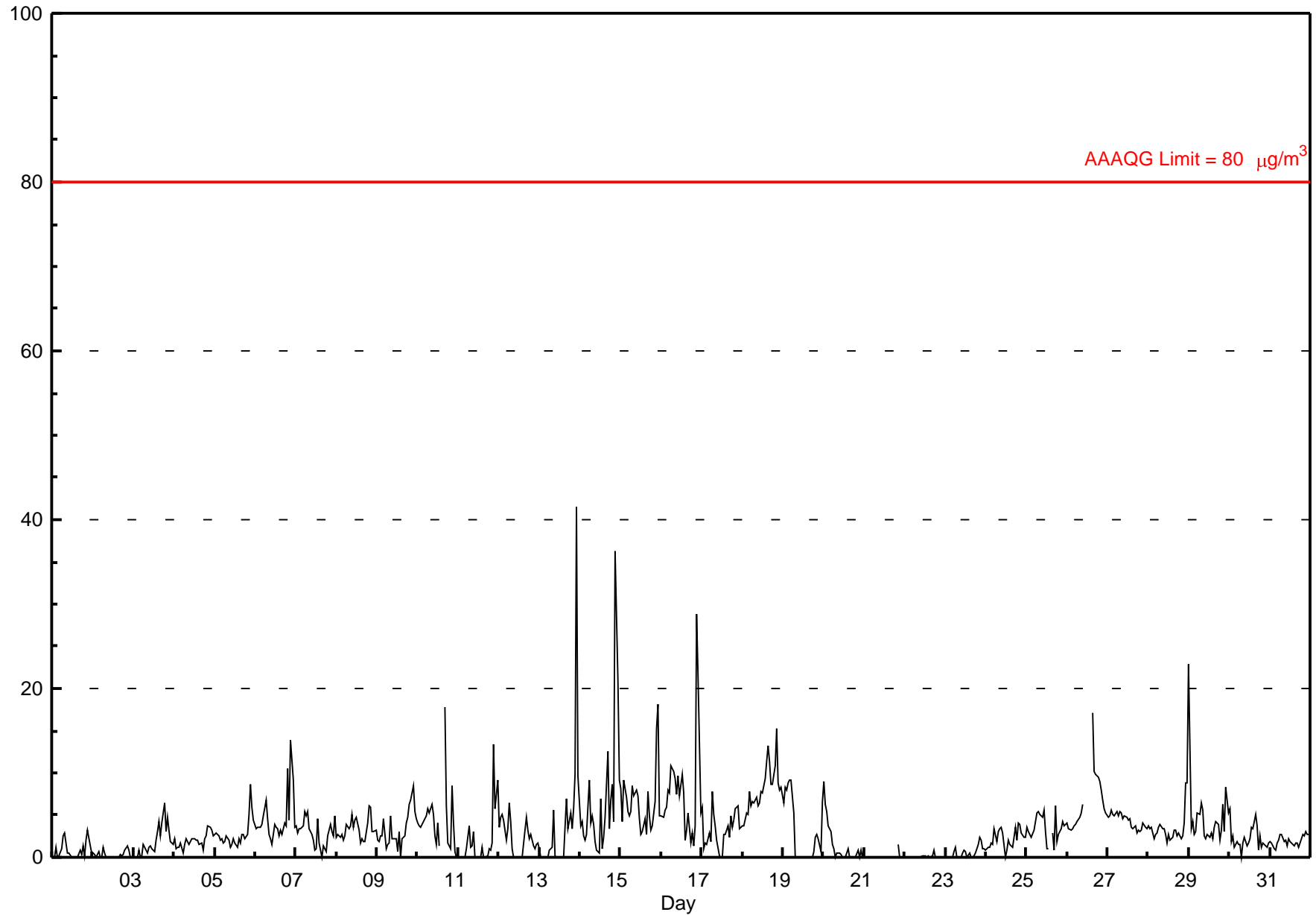


Hourly Averages

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

Smoky Heights - May 2010

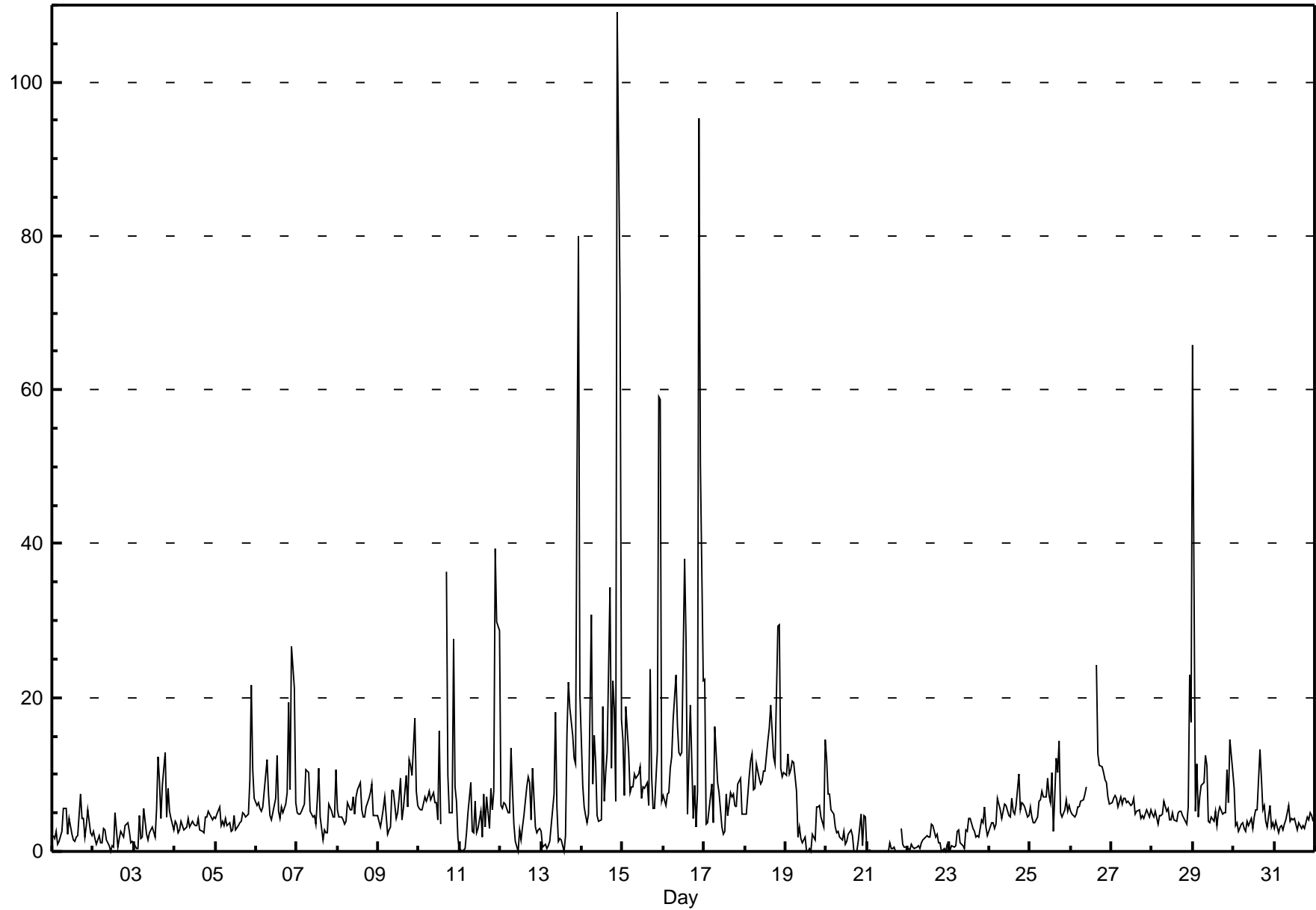
Number of Exceedences: 1-hr: 0 24-hr: 0 Maximum Value: 41.5 μg/m ³ on May 13 23:00 Maximum Daily Average: 8.1 μg/m ³ on May 18																			Hours in Service: 744 Hours of Data: 726 Hours of Missing Data: 18 Hours of Calibration: 7 Percent Operational Time: 98.5							
Minimum Value: 0 μg/m ³ on May 1 01:00 Minimum Daily Average: 0.1 μg/m ³ on May 22 Maximum Diurnal Average: 6.6 μg/m ³ at hour 22 Minimum Diurnal Average: 1.9 μg/m ³ at hour 12 Monthly Average: 3.26 μg/m ³ Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.9 Median = 2.5 Q ₃ = 4.5 P ₉₀ = 7.0 P ₉₉ = 16.2																										
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-May	0	0	1	0	0	1	3	3	2	1	1	0	0	0	0	0	1	0	1	0	2	3	1	1	0.8	3.2
2-May	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0.3	1.4
3-May	0	0	0	1	0	0	2	1	1	1	1	1	1	2	3	4	3	4	6	3	5	3	2	2	1.9	6.4
4-May	2	1	1	1	2	0	2	2	2	2	2	2	2	2	2	2	2	1	2	3	4	4	3	3	2.0	3.8
5-May	3	3	3	2	2	2	2	2	2	1	1	2	2	1	2	2	3	3	2	3	5	9	6	4	2.8	8.6
6-May	3	4	4	4	4	5	7	5	3	2	2	4	4	3	3	3	3	4	4	11	4	14	9	4	4.6	14.0
7-May	4	3	3	3	4	5	5	5	3	3	2	1	1	5	2	0	1	1	1	2	4	3	3	5	2.9	5.5
8-May	2	3	2	3	2	3	4	3	4	5	4	5	3	2	2	2	2	2	4	6	6	3	3	3	3.3	6.1
9-May	2	2	2	3	5	1	1	2	5	2	2	2	1	3	0	2	2	4	5	6	7	8	5	5	3.2	8.5
10-May	4	4	4	4	5	5	6	5	6	5	3	2	4	1	C	C	18	6	2	1	8	4	1	0	4.4	17.9
11-May	0	0	0	0	0	1	4	1	1	3	0	0	0	0	1	0	0	0	1	1	2	13	6	9	1.8	13.4
12-May	4	5	5	4	2	3	6	4	1	0	0	0	0	0	0	3	5	3	2	3	1	1	2	2	2.4	6.4
13-May	1	0	0	0	0	0	1	1	6	0	0	0	0	0	4	7	3	5	3	6	10	41	10	4.1	41.5	
14-May	4	4	2	2	3	9	4	5	4	2	1	1	7	1	2	5	13	3	7	9	4	36	21	9	6.6	36.3
15-May	8	4	9	7	5	5	5	8	7	8	7	5	3	3	5	3	8	5	3	4	7	15	18	5	6.6	18.2
16-May	5	5	6	6	8	8	11	10	9	8	10	7	10	8	2	3	5	2	3	1	4	29	22	5	7.7	28.8
17-May	6	1	2	1	3	2	8	5	4	2	0	0	0	3	3	4	2	5	4	4	6	6	3	3	3.2	7.8
18-May	4	4	5	5	8	6	7	6	7	6	8	8	9	11	13	11	9	9	11	15	9	8	8	8	8.1	15.2
19-May	6	8	8	9	9	9	5	0	0	BD	BD	BD	BD	BD	BD	BD	0	0	1	2	3	2	1	7	3.9	9.1
20-May	9	6	5	4	3	2	1	0	0	0	0	0	0	0	1	0	0	BD	0	0	1	0	1	0	1.5	8.9
21-May	0	0	0	0	0	0	0	0	BD	BD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.6
22-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.1	0.8
23-May	0	0	0	0	0	1	1	0	0	0	0	1	1	0	1	0	0	0	1	2	2	2	1	1	0.5	2.3
24-May	1	1	1	2	2	3	2	3	3	4	3	0	1	2	1	1	1	3	2	4	4	3	2	2	2.2	4.1
25-May	4	3	3	2	3	4	5	5	5	5	6	3	1	1	BD	3	1	6	2	3	3	4	4	4	3.5	6.1
26-May	4	3	3	3	4	4	4	5	5	6	C	C	C	C	C	17	10	10	9	9	8	7	6	5	6.5	17.2
27-May	5	5	6	5	5	5	5	5	5	5	5	5	4	5	4	3	4	3	3	3	3	4	4	3	4.3	5.7
28-May	4	3	3	2	3	3	4	4	3	3	3	2	3	2	2	3	3	3	3	2	2	4	9	9	3.4	8.9
29-May	23	3	4	3	3	5	5	7	6	3	2	3	2	3	2	4	4	4	2	3	6	3	8	5	4.7	22.9
30-May	6	2	3	1	2	2	1	0	2	2	1	2	2	3	3	5	4	1	3	1	2	1	1	2	2.2	5.8
31-May	2	2	1	1	2	2	3	3	2	2	1	2	2	2	1	2	2	1	2	3	2	3	3	3	2.0	3.1
3.7 2.6 2.8 2.6 2.8 3.1 3.7 3.3 3.3 2.8 2.2 1.9 2.1 2.2 2.0 3.0 3.7 2.9 2.8 3.5 4.2 6.6 6.2 3.8 Diurnal Average																			22.9 8.3 9.1 8.8 9.1 9.1 10.9 10.1 9.4 7.9 9.6 7.9 9.8 9.3 11.3 17.2 17.9 9.9 9.5 10.9 15.2 36.3 41.5 9.7 Diurnal Maximum							
C - Calibration P - Power Failure 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

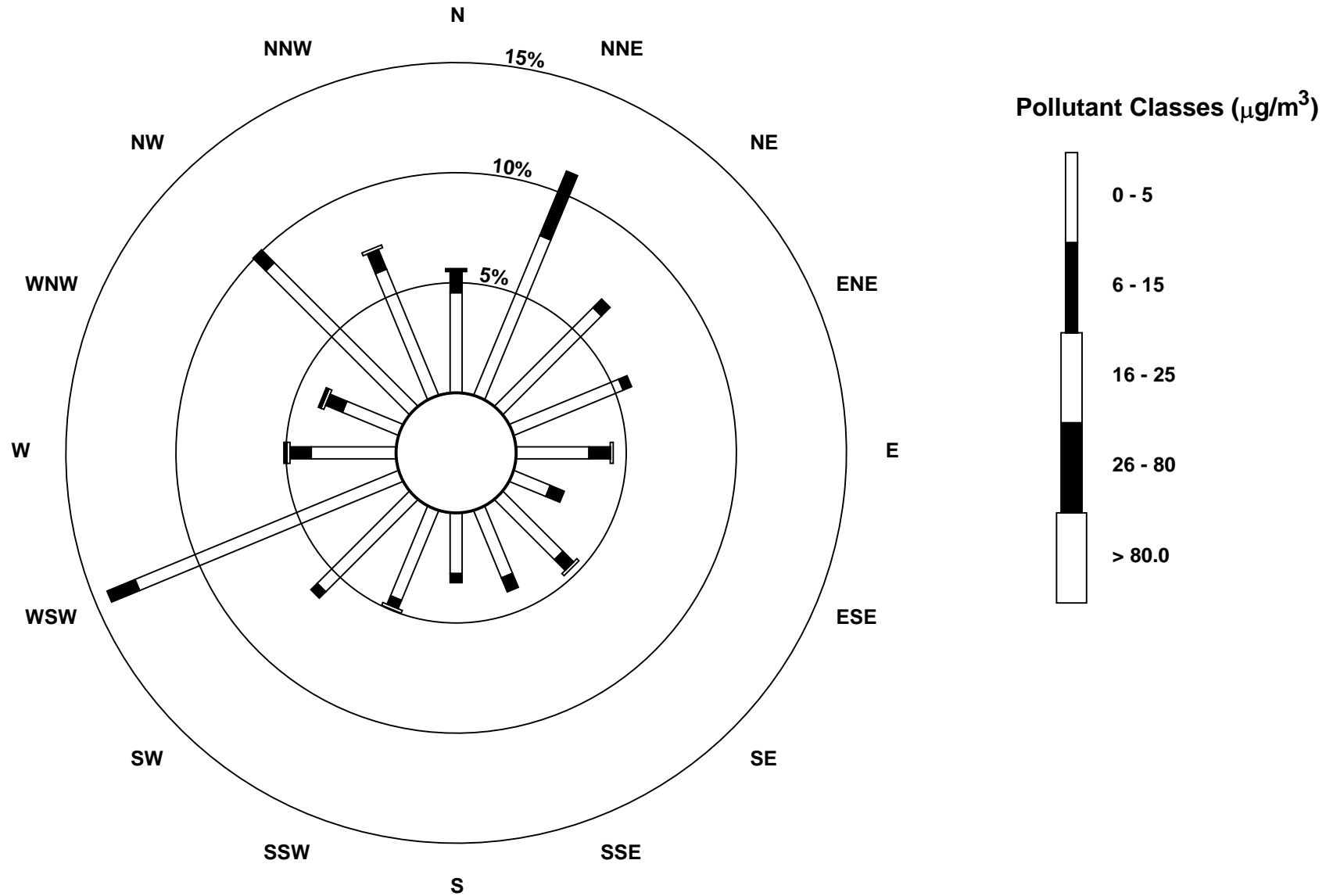
Particulate Matter 2.5 (PM_{2.5}) - μg/m³ Smoky Heights - May 2010

Maximum Value: 109.1 μg/m ³ on May 14 22:00 Minimum Value: 0 μg/m ³ on May 11 02:00 Maximum Diurnal Average: 17.3 μg/m ³ at hour 22 Monthly Average: 6.84 μg/m ³		Maximum Daily Average: 18.5 μg/m ³ on May 14 Minimum Daily Average: 0.3 μg/m ³ on May 21 Minimum Diurnal Average: 4.1 μg/m ³ at hour 2 Percentiles: P ₁ = 0.0 P ₁₀ = 1.1 Q ₁ = 2.9 Median = 4.8 Q ₃ = 7.5 P ₉₀ = 12.3 P ₉₉ = 58.3		Hours in Service: 744 Hours of Data: 736 Hours of Missing Data: 8 Hours of Calibration: 7 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-May	2	2	3	1	1	3	6	6	6	2	4	2	2	1	2	2	7	4	4	2	3	5	2	2	3.1	7.4	
2-May	3	2	1	2	1	1	3	3	1	1	0	1	1	5	1	2	3	2	2	3	4	3	1	1	1.9	5.1	
3-May	1	0	0	5	2	2	6	2	2	2	3	3	2	6	12	9	4	9	13	4	8	5	4	3	4.5	12.8	
4-May	4	4	2	3	4	3	3	3	4	3	4	4	3	3	4	3	3	2	5	4	5	5	4	4	3.6	5.2	
5-May	4	5	6	3	4	3	4	3	4	3	3	5	3	3	4	4	5	5	4	5	9	22	11	7	5.4	21.6	
6-May	6	6	6	5	6	8	12	7	5	4	5	7	12	5	4	6	5	6	8	19	8	27	21	6	8.5	26.6	
7-May	5	5	5	5	6	11	10	10	5	4	5	4	7	11	5	1	3	2	2	6	5	5	4	11	5.7	10.7	
8-May	5	5	4	4	4	4	6	5	5	7	5	7	8	9	5	4	4	6	7	8	9	5	5	5	5.7	9.0	
9-May	4	3	4	6	7	2	3	3	8	8	4	5	7	9	4	6	10	6	12	11	10	17	8	6	6.8	17.3	
10-May	6	5	5	7	6	7	8	7	8	6	6	4	16	4	C	C	36	10	5	5	28	8	6	2	8.9	36.3	
11-May	0	0	0	0	2	5	9	3	2	7	3	3	5	2	7	3	7	3	8	5	8	39	30	29	7.6	39.3	
12-May	6	6	6	6	5	5	13	8	4	1	0	3	1	3	5	8	10	9	4	11	3	3	3	3	5.2	13.3	
13-May	3	1	1	0	1	1	3	7	18	6	1	2	2	0	2	15	22	19	15	12	11	49	80	21	12.1	80.0	
14-May	9	6	5	4	5	31	9	15	12	5	4	4	19	6	10	13	34	11	22	19	6	109	72	17	18.5	109.1	
15-May	15	7	19	13	8	8	8	10	10	10	11	7	8	8	9	6	24	10	6	6	13	59	59	6	14.1	59.1	
16-May	7	6	7	8	11	12	17	23	16	13	13	13	38	27	5	12	19	4	9	3	8	95	50	22	18.3	95.2	
17-May	22	4	4	5	9	4	16	13	9	8	3	2	3	7	5	8	7	7	6	6	9	9	5	5	7.3	22.3	
18-May	5	5	10	12	13	8	8	11	10	9	9	11	10	14	16	19	16	12	11	29	29	11	10	10	12.4	29.4	
19-May	10	13	10	11	12	12	8	2	3	2	1	2	0	0	0	0	2	2	6	6	6	5	3	15	5.3	14.6	
20-May	12	7	8	5	5	3	2	3	2	2	3	1	1	2	3	2	0	0	0	1	5	1	5	4	3.2	12.0	
21-May	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	P	3	1	1	1	0.3	3.0	
22-May	0	0	1	0	0	1	1	0	1	1	2	2	2	2	3	3	2	2	1	1	0	0	0	1	1.2	3.5	
23-May	1	0	1	1	1	3	3	1	1	0	3	3	4	4	3	3	2	2	2	4	4	6	3	2	2.3	5.7	
24-May	3	4	4	3	4	7	5	4	5	6	6	5	4	7	5	5	6	10	5	6	6	6	5	5	5.2	10.0	
25-May	6	5	4	4	5	6	7	8	7	7	9	7	6	10	3	12	10	14	5	4	5	7	5	6	6.8	14.3	
26-May	5	5	5	5	6	6	7	7	7	8	C	C	C	C	C	24	13	11	11	10	9	9	7	6	8.5	24.2	
27-May	6	7	7	7	6	7	6	7	7	6	6	6	6	7	5	5	5	4	5	4	5	5	5	5	5.9	7.3	
28-May	5	4	5	4	5	5	5	6	5	6	4	4	5	4	4	5	5	5	5	4	3	6	23	17	6.0	23.0	
29-May	66	5	11	5	7	9	9	13	11	4	4	4	4	5	3	5	6	5	5	5	11	6	15	10	9.5	65.8	
30-May	8	3	4	3	4	4	3	3	4	3	4	3	4	5	5	13	10	5	6	4	3	6	3	4	4.8	13.2	
31-May	3	4	2	3	3	3	4	4	6	4	4	4	4	3	4	3	3	3	3	5	4	5	5	4	3.8	6.0	
7.5		4.1	4.8	4.5	4.8	5.9	6.6	6.4	6.0	4.8	4.3	4.2	6.3	5.9	4.8	6.8	9.1	6.2	6.3	7.1	7.8	17.3	14.6	7.7	Diurnal Average		
65.8		12.6	18.9	12.9	12.7	30.8	17.1	22.9	18.1	12.9	12.5	12.9	38.0	27.3	16.0	24.2	36.3	18.7	22.1	29.2	29.4	109.1	80.0	28.8	Diurnal Maximum		
C - Calibration		P - Power Failure																									



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
Smoky Heights - May 2010





Hourly Averages

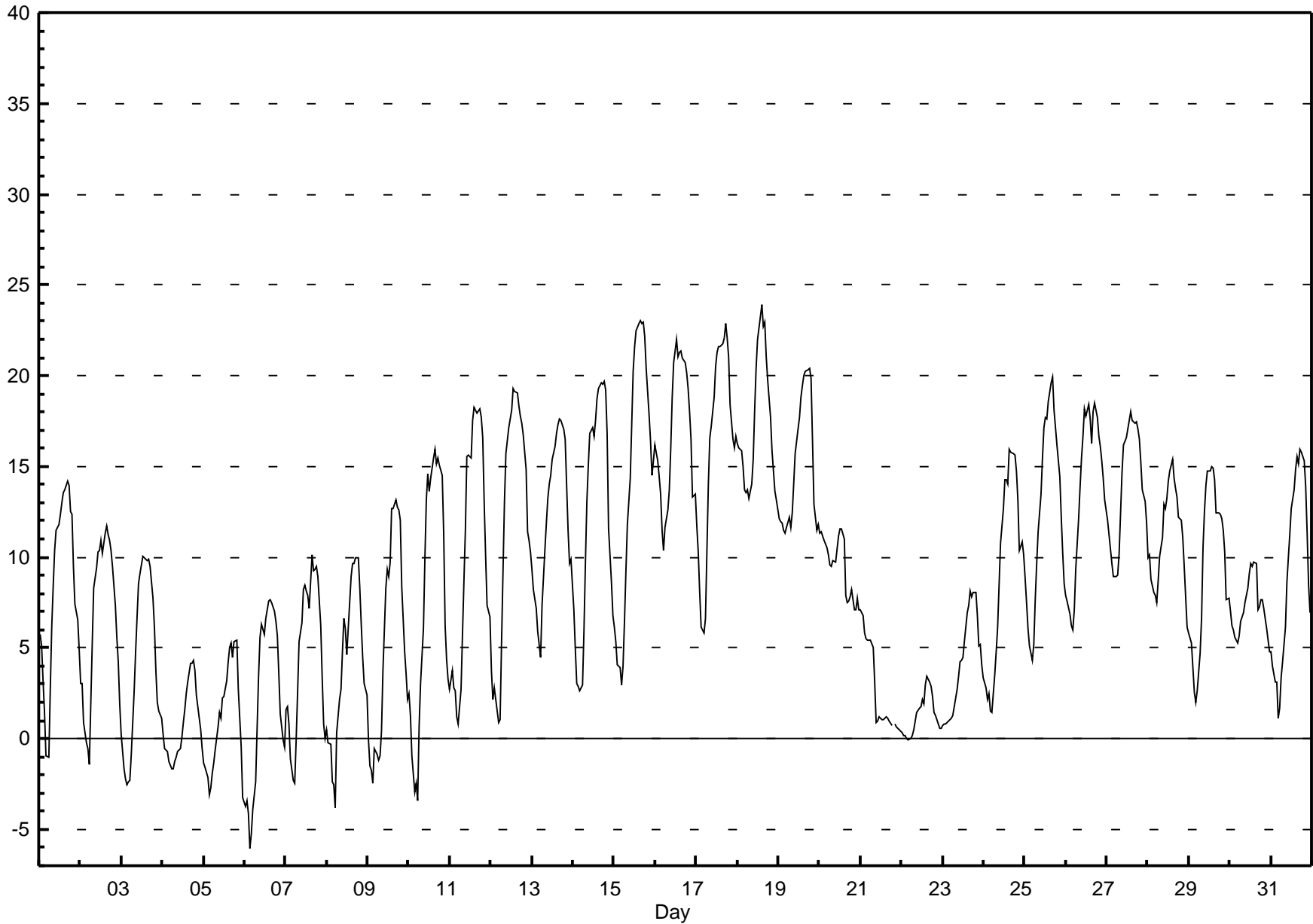
External Temperature (ET) - °C

Smoky Heights - May 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 23.9 °C on May 18 15:00	Maximum Daily Average: 17.3 °C on May 18		Hours of Data:	743
Minimum Value: -6 °C on May 6 04:00	Minimum Daily Average: 0.8 °C on May 4		Hours of Missing Data:	1
Maximum Diurnal Average: 13.7 °C at hour 16	Minimum Diurnal Average: 2.8 °C at hour 5		Hours of Calibration:	0
Monthly Average: 8.90 °C	Percentiles: P ₁ = -3.4 P ₁₀ = 0.4 Q ₁ = 3.2 Median = 8.7 Q ₃ = 14.2 P ₉₀ = 17.7 P ₉₉ = 22.8		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-May	6	5	3	1	-1	-1	3	6	8	10	11	12	12	13	14	14	14	14	13	12	10	7	7	5	8.3	14.2																							
2-May	3	3	1	0	-1	-1	2	5	8	9	10	10	11	10	11	12	11	11	10	10	7	6	4	2	6.5	11.7																							
3-May	0	-2	-2	-3	-2	-2	-1	3	5	7	9	9	10	10	10	10	10	9	8	6	4	2	1	1	4.2	10.0																							
4-May	0	-1	-1	-1	-1	-2	-2	-1	-1	-1	-1	0	1	2	2	3	4	4	4	4	2	1	1	-1	0.8	4.3																							
5-May	-1	-2	-2	-3	-3	-2	-1	-1	1	1	1	2	2	3	4	5	5	5	5	5	3	1	0	-3	1.1	5.5																							
6-May	-4	-3	-4	-6	-5	-4	-2	1	3	6	6	6	7	7	8	8	8	7	6	6	4	1	0	0	2.2	7.7																							
7-May	2	2	1	-1	-2	-2	0	3	5	6	8	8	8	8	7	10	9	9	9	9	6	3	1	0	4.6	10.1																							
8-May	0	0	0	-2	-3	-4	0	2	3	5	7	6	5	7	9	10	10	10	10	8	6	5	3	2	4.1	9.9																							
9-May	0	-1	-2	-2	-1	-1	-1	-1	0	4	8	9	9	10	13	13	13	13	13	12	8	5	4	2	5.2	13.1																							
10-May	2	1	-1	-3	-2	-3	1	3	6	10	13	15	14	14	15	16	15	16	15	14	11	6	4	3	7.8	16.0																							
11-May	3	4	3	3	1	1	3	6	9	11	16	16	15	18	18	18	18	18	18	17	13	10	7	7	10.4	18.2																							
12-May	4	2	3	2	1	1	5	9	13	16	17	18	18	19	19	19	18	18	17	17	15	11	11	10	11.8	19.3																							
13-May	9	8	7	6	5	4	7	10	12	13	14	14	15	16	17	17	18	18	17	16	14	11	10	10	12.1	17.6																							
14-May	7	5	3	3	3	3	6	10	13	15	17	17	17	18	19	19	20	20	20	19	17	12	9	7	12.3	19.7																							
15-May	6	5	4	4	3	4	6	9	12	14	17	20	22	22	23	23	23	23	22	20	18	16	14	15	14.5	23.0																							
16-May	16	15	14	13	11	10	12	13	14	16	19	21	22	21	21	21	21	21	20	19	18	16	13	13	16.8	22.0																							
17-May	12	10	8	6	6	7	10	14	17	17	19	20	21	22	22	22	22	23	22	21	18	17	16	17	16.2	22.9																							
18-May	16	16	16	15	14	14	14	13	14	15	18	20	22	23	24	23	23	21	20	18	16	15	14	13	17.3	23.9																							
19-May	12	12	12	12	11	12	12	12	12	14	16	17	18	19	19	20	20	20	20	20	16	13	11	12	15.1	20.4																							
20-May	11	11	11	11	11	10	10	9	10	10	10	11	12	12	11	8	7	8	8	8	7	7	8	7	9.5	11.6																							
21-May	7	7	6	6	5	5	5	5	3	1	1	1	1	1	1	1	1	1	1	P	1	1	1	0	2.7	7.1																							
22-May	0	0	0	0	0	0	0	0	1	1	2	2	2	2	3	3	3	3	2	1	1	1	1	1	1.3	3.4																							
23-May	1	1	1	1	1	1	1	2	3	3	4	4	4	5	7	7	8	8	8	8	7	5	5	4	4.2	8.1																							
24-May	3	3	2	2	2	1	3	5	6	8	11	13	14	14	14	16	16	16	16	15	13	10	11	10	9.4	16.0																							
25-May	9	8	6	5	4	5	8	10	11	13	15	17	18	18	19	20	20	18	17	16	14	12	10	9	12.6	19.9																							
26-May	8	8	7	6	6	7	9	12	14	15	17	18	18	18	16	18	19	18	17	16	15	14	13	13	13.6	18.5																							
27-May	12	11	10	10	9	9	9	10	12	15	16	17	17	18	18	18	17	17	17	17	15	14	13	12	13.9	18.0																							
28-May	10	10	9	8	8	8	9	10	11	13	13	13	14	15	15	14	14	13	12	12	11	9	8	6	11.1	15.4																							
29-May	6	5	4	3	2	3	5	7	11	13	14	15	15	15	15	14	12	12	12	12	10	8	8	8	9.6	15.0																							
30-May	7	6	6	6	5	6	6	7	7	7	8	9	10	9	10	10	7	7	8	8	7	6	5	5	7.2	9.7																							
31-May	5	4	3	3	1	2	3	4	6	9	10	11	13	14	15	16	15	16	16	15	14	11	8	7	9.2	15.9																							
																								5.6	5.0	4.1	3.3	2.8	2.9	4.6	6.3	8.0	9.7	11.2	12.0	12.5	13.0	13.6	13.7	13.6	13.4	13.1	12.8	10.5	8.4	7.1	6.4	Diurnal Average	
																								16.2	16.0	15.8	15.0	13.7	13.5	13.7	14.0	16.5	17.2	18.8	20.7	22.0	23.3	23.9	23.0	23.0	23.0	22.9	22.1	21.0	18.4	16.5	16.0	16.7	Diurnal Maximum

P - Power Failure



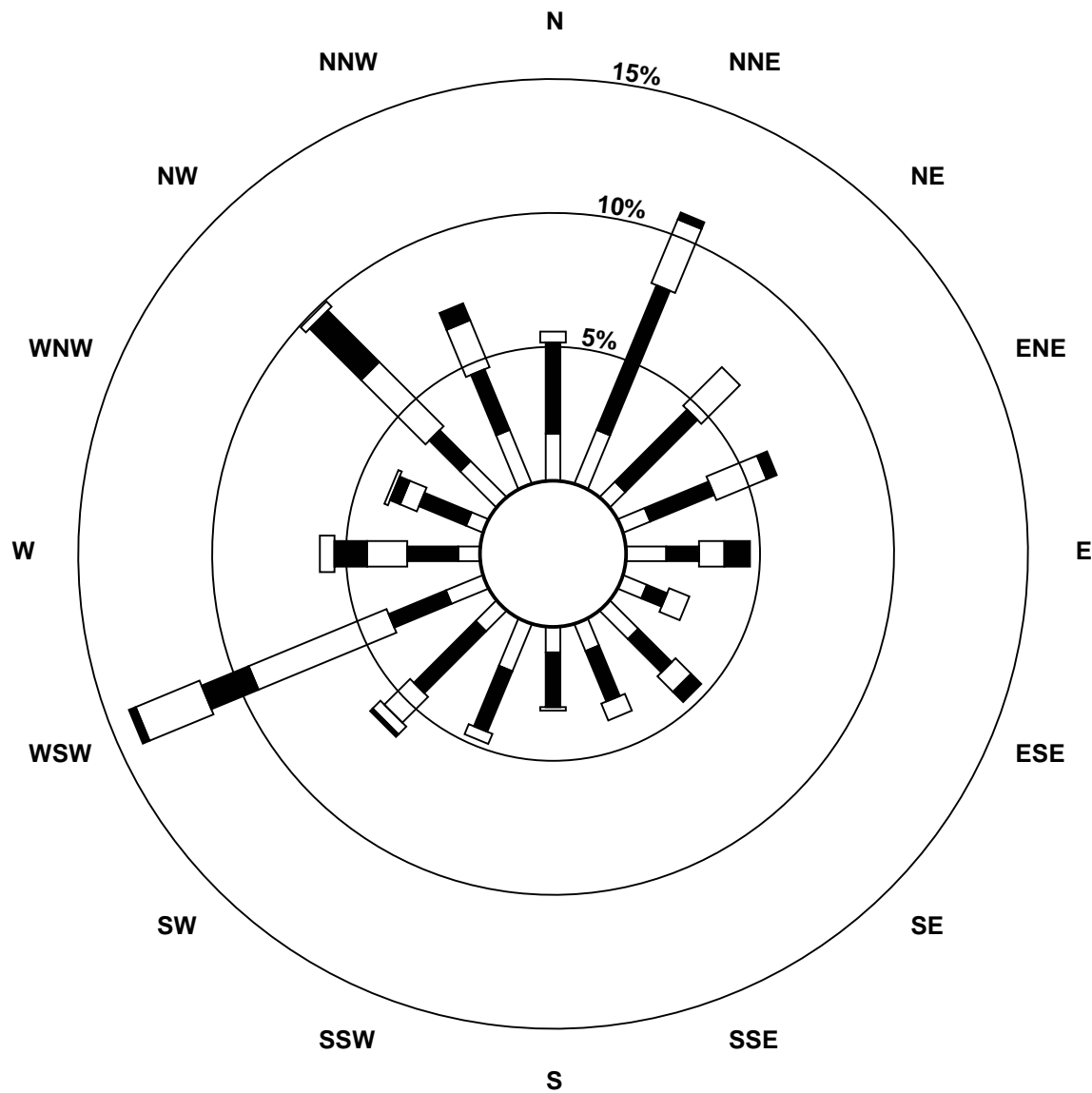
Hourly Averages

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

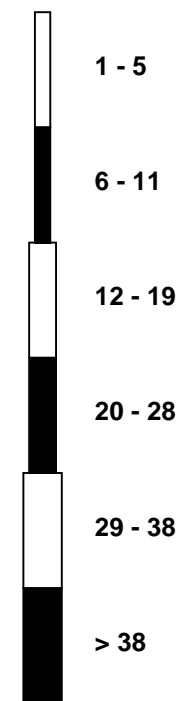
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	5	4	4	5	4	3	3	4	7	6	6	4	5	7	5	4	6	2	5	6	7	4	4	2	0.7	7.2
Dir	257	247	202	244	308	47	157	257	268	290	9	359	309	301	338	23	59	94	171	154	116	70	69	170	299.5	115.8
24 Spd	4	3	2	3	3	4	7	7	9	9	6	6	5	6	5	4	3	9	10	9	7	8	11	12	2.8	11.7
Dir	219	190	213	186	33	48	166	164	146	154	170	176	217	141	147	106	356	43	45	48	31	31	48	54	97.4	54.1
25 Spd	8	8	6	5	7	7	8	8	8	9	11	14	15	13	14	10	11	17	20	15	8	8	4	4	7.8	20.5
Dir	42	17	19	14	17	28	29	31	32	45	27	59	73	93	98	61	55	98	132	128	119	120	106	39	70.6	132.2
26 Spd	4	6	7	9	6	6	9	8	7	8	10	12	16	21	19	15	19	20	18	15	15	14	14	12	10.5	20.6
Dir	53	36	21	21	19	19	43	56	39	48	58	64	56	85	111	145	107	90	106	88	76	73	73	65	74.9	84.9
27 Spd	11	10	10	10	10	13	14	14	13	18	22	22	21	20	20	20	20	21	18	16	12	11	12	9	14.4	22.4
Dir	55	58	48	43	26	16	27	42	43	48	58	81	79	76	73	81	93	92	82	77	70	61	75	69	65.3	58.2
28 Spd	8	13	10	13	13	11	11	10	11	11	18	18	18	17	18	15	25	25	22	18	8	9	5	1	10.9	25.2
Dir	55	66	46	59	63	62	58	47	70	65	88	81	73	54	104	107	126	131	135	135	155	169	244	318	92.2	130.6
29 Spd	2	2	6	2	2	2	2	2	3	9	8	9	9	7	6	9	13	5	4	7	5	7	4	7	2.5	13.4
Dir	292	336	309	309	309	17	52	179	92	61	62	66	79	70	98	91	151	63	66	282	342	330	270	127	65.7	150.9
30 Spd	7	5	4	3	4	4	5	9	14	13	7	6	5	11	12	12	16	10	6	6	10	6	3	2	5.5	15.8
Dir	136	209	289	323	324	308	263	248	234	253	218	192	205	202	196	209	131	191	175	180	199	211	213	244	209.8	131.2
31 Spd	2	5	3	3	1	4	4	4	5	5	7	9	6	7	8	7	8	16	13	11	8	5	2	1	4.6	15.8
Dir	16	16	53	341	54	27	82	188	202	146	157	177	158	144	133	143	166	144	155	153	157	126	136	160	146.0	144.1
Spd	3.4	2.7	3.6	3.2	3.4	3.3	2.1	2.0	2.3	2.5	2.4	3.0	4.8	4.4	4.7	5.7	5.2	4.0	3.2	2.2	2.9	3.4	3.9	3.6	Diurnal Average	
Dir	329.3	325.4	319.1	299.6	300.7	309.4	295.8	275.6	280.8	290.4	277.6	289.1	288.3	287.0	268.6	265.5	261.4	263.1	261.8	260.0	300.2	319.1	314.9	329.0	Diurnal Maximum	
Spd	18.6	19.8	20.5	22.6	22.3	22.9	22.0	23.0	31.8	34.5	38.7	38.0	38.2	34.0	37.9	38.8	39.0	36.4	34.6	30.8	29.5	22.9	21.7	22.4	Diurnal Maximum	
Dir	250.0	249.6	244.2	307.8	305.0	300.9	306.3	252.3	225.0	227.8	233.4	238.8	244.0	251.3	244.5	239.6	238.9	241.8	245.1	244.7	250.4	244.6	255.1	317.4	Diurnal Maximum	
Maximum Speed Value: 39 km/h on May 12 17:00																		Minimum Speed Value: 0 km/h on May 3 07:00						Hours in Service: 744		
Maximum Daily Speed Average: 25.1 km/h on May 2																		Minimum Daily Speed Average: 0.7 km/h on May 23						Hours of Data: 743		
Maximum Diurnal Speed Average: 5.7 km/h at hour 16																		Minimum Diurnal Speed Average: 2.0 km/h at hour 8						Hours of Missing Data: 1		
Monthly Average Velocity: 3.14 km/h 290.94 deg																		Speed Percentiles: P ₁ = 1.0 P ₁₀ = 3.6 Q ₁ = 5.7 Median = 9.3 Q ₃ = 15.4 P ₉₀ = 20.8 P ₉₉ = 36.8						Percent Operational Time: 99.9		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
P - Power Failure																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	29	61	17	0	0	0	107																			
NorthEast	15	51	38	3	0	0	107																			
East	18	20	19	10	0	0	67																			
SouthEast	15	27	10	4	0	0	56																			
South	18	36	5	1	0	0	60																			
SouthWest	15	38	33	7	16	5	114																			
West	12	35	35	20	8	0	110																			
NorthWest	20	27	41	31	3	0	122																			
Total	142	295	198	76	27	5	743																			

Wind Rose

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



Wind Speed Classes (km/h)





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Smoky Heights - May 2010

Maximum Speed: 39 km/h on May 2 16:00 Minimum Speed: 2 km/h on May 29 00:00 Maximum Diurnal Speed Average: 16.5 km/h at hour 17 Monthly Average Speed: 12.01 km/h		Maximum Daily Speed Average: 25.8 km/h on May 2 Minimum Daily Speed Average: 5.6 km/h on May 23 Minimum Diurnal Speed Average: 8.2 km/h at hour 5 Percentiles: P ₁ = 2.3 P ₁₀ = 4.6 Q ₁ = 6.6 Median = 10.2 Q ₃ = 15.9 P ₉₀ = 21.0 P ₉₉ = 37.3		Hours in Service: 744 Hours of Data: 743 Hours of Missing Data: 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-May	5	4	4	6	3	5	6	8	17	22	20	24	23	17	18	17	18	19	12	15	13	15	22	18	13.7	24.4																							
2-May	13	14	11	13	13	11	11	18	32	35	39	37	39	31	38	39	38	37	32	30	30	23	20	15	25.8	39.3																							
3-May	12	8	9	8	6	6	3	4	10	12	11	13	13	16	20	23	23	29	32	30	28	22	20	23	15.8	31.5																							
4-May	18	15	16	14	16	17	15	15	21	21	20	20	21	21	19	18	16	14	16	11	19	20	18	12	17.2	21.0																							
5-May	11	6	7	7	7	7	8	9	8	9	9	8	10	7	8	8	11	7	4	5	8	7	6	6	7.6	10.8																							
6-May	5	5	5	4	2	2	3	3	6	7	8	9	6	9	5	8	7	8	5	9	7	8	8	6	6.0	9.2																							
7-May	11	8	9	11	6	6	6	7	11	10	11	10	12	13	13	11	14	8	12	11	10	7	6	6	9.5	13.6																							
8-May	7	6	7	5	6	3	3	8	11	12	11	16	8	8	6	8	6	10	9	18	20	11	6	6	8.7	19.9																							
9-May	3	3	4	4	6	6	6	8	7	9	9	13	15	17	10	12	13	12	11	8	5	4	7	6	8.3	17.0																							
10-May	6	4	3	5	5	3	3	5	5	5	6	8	24	18	10	12	18	10	9	7	5	4	3	3	7.6	24.2																							
11-May	5	6	8	8	8	7	9	9	9	10	12	16	19	13	18	17	10	18	20	15	11	8	11	9	11.5	19.7																							
12-May	7	8	10	9	10	8	9	12	17	30	38	38	35	35	36	33	39	33	35	31	17	14	17	18	22.6	39.2																							
13-May	19	20	21	16	15	15	19	24	22	17	18	15	13	13	18	20	19	16	14	17	13	9	12	12	16.5	23.6																							
14-May	11	8	7	12	10	11	9	10	7	9	7	14	15	12	12	17	18	15	17	9	8	5	5	4	10.6	18.0																							
15-May	4	4	4	4	3	4	4	5	7	9	9	7	8	9	10	10	8	6	7	6	6	5	6	9	6.5	10.4																							
16-May	15	15	13	10	7	6	8	6	8	10	10	7	12	18	18	21	24	21	21	18	14	8	6	8	12.7	23.6																							
17-May	9	7	5	5	8	10	7	5	3	5	6	6	8	9	10	6	5	9	10	10	9	10	12	12	7.9	12.1																							
18-May	12	13	12	11	6	10	11	14	15	18	17	16	15	13	15	16	18	22	21	19	16	15	16	13	14.7	21.8																							
19-May	15	11	10	8	6	12	22	23	17	27	30	29	28	25	21	16	13	9	5	7	7	6	6	10	15.1	30.3																							
20-May	11	11	13	11	13	14	15	14	11	10	12	15	13	11	6	30	31	29	24	20	14	6	16	8	14.9	31.0																							
21-May	9	12	17	23	22	23	22	21	24	15	21	26	26	23	25	27	25	21	20	P	20	18	16	17	20.6	26.9																							
22-May	16	9	17	17	17	17	16	16	15	15	14	11	11	10	12	11	9	7	5	4	2	2	6	7	11.2	17.4																							
23-May	5	5	4	5	5	3	4	5	7	7	6	5	6	8	8	6	6	5	5	6	7	5	5	5	5.6	7.7																							
24-May	4	4	4	4	4	4	7	7	9	9	7	7	8	8	8	6	4	10	11	9	8	8	11	12	7.2	11.9																							
25-May	8	8	6	5	7	7	8	8	9	9	11	15	16	14	14	11	12	18	21	16	9	9	5	4	10.4	21.0																							
26-May	5	6	7	9	6	6	9	9	8	9	11	14	17	21	21	15	19	20	18	16	15	14	14	12	12.5	21.1																							
27-May	11	10	10	10	10	13	14	14	14	18	23	23	22	20	21	21	21	22	19	16	12	11	12	9	15.6	22.9																							
28-May	9	14	11	13	13	12	12	10	11	13	18	19	19	18	19	16	26	25	22	18	8	9	6	2	14.3	25.6																							
29-May	3	3	6	3	3	2	2	2	5	9	9	11	10	8	7	11	16	6	6	7	7	8	5	10	6.6	16.0																							
30-May	9	7	5	4	5	4	5	10	15	13	9	7	6	11	12	18	17	11	7	7	10	6	4	3	8.4	17.9																							
31-May	3	5	4	3	3	4	4	5	6	6	8	10	8	9	10	9	9	16	13	11	8	5	3	2	7.0	16.4																							
																								9.0	8.3	8.7	8.6	8.2	8.4	9.0	10.1	11.8	13.2	14.2	15.2	15.7	15.0	15.2	15.8	16.5	16.0	14.9	13.5	11.8	9.8	10.0	9.3	Diurnal Average	
																								18.7	19.9	20.6	22.7	22.4	23.0	22.2	23.6	32.0	34.9	39.2	38.5	38.7	35.0	38.5	39.3	39.2	36.7	35.1	31.1	29.6	23.0	21.8	22.6	Diurnal Maximum	
P - Power Failure																																																	
All monthly, daily, and diurnal averages have been calculated using scalar methods																																																	



Hourly Standard Deviations

Wind Direction (WD) - deg

Smoky Heights - May 2010

Maximum Value: 95.9 deg on May 5 14:00																	Hours in Service: 744								
Minimum Value: 2.0 deg on May 11 21:00																	Hours of Data: 743								
Percentiles: P ₁ = 3.6 P ₁₀ = 6.1 Q ₁ = 9.2 Median = 16.3 Q ₃ = 32.9 P ₉₀ = 54.3 P ₉₉ = 88.1																	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-May	23	32	26	31	45	39	43	24	19	10	16	12	11	19	22	23	15	12	7	8	17	8	3	3	45.0
2-May	3	6	9	5	3	7	6	14	7	8	8	12	10	13	10	10	10	7	7	6	5	5	6	7	13.8
3-May	8	56	5	23	25	27	88	25	12	12	30	27	22	22	13	13	13	10	7	7	7	9	7	8	88.5
4-May	9	12	8	9	10	7	9	9	7	10	10	12	10	13	15	13	22	18	14	13	7	7	6	10	22.1
5-May	6	29	13	6	4	9	12	14	26	27	45	60	44	96	58	95	20	31	70	45	6	21	25	20	95.9
6-May	5	33	39	68	68	58	75	41	37	31	41	25	91	48	74	45	74	33	31	13	41	22	16	10	90.6
7-May	10	35	27	36	56	17	63	29	12	20	25	25	37	76	31	42	27	26	18	25	6	5	11	6	76.1
8-May	6	25	7	10	9	24	90	17	19	17	35	22	76	29	68	43	46	37	18	14	15	15	26	28	89.7
9-May	50	88	41	24	25	32	16	17	16	19	21	75	40	28	63	39	22	36	47	9	18	30	49	7	88.2
10-May	12	63	69	45	32	74	85	29	32	48	56	72	48	19	62	37	29	70	43	20	15	29	26	36	85.5
11-May	24	5	6	12	8	13	11	14	19	14	25	47	29	24	32	51	61	24	14	6	2	11	5	5	60.8
12-May	23	10	8	8	9	12	8	10	21	8	9	9	9	14	10	10	7	8	9	8	7	9	5	3	22.6
13-May	5	5	4	7	11	5	6	14	12	17	20	28	37	24	25	16	18	14	11	7	3	14	5	8	36.7
14-May	11	21	9	4	23	16	11	7	45	24	76	55	24	31	42	28	22	14	15	27	8	8	6	82	81.8
15-May	48	18	69	16	37	79	47	20	19	20	20	48	82	76	67	49	46	71	41	5	11	58	32	33	82.3
16-May	9	6	10	15	50	80	54	59	46	18	32	72	46	20	20	15	11	14	7	6	17	19	43	24	79.9
17-May	13	39	17	46	16	6	14	30	74	55	38	78	59	76	49	84	53	17	12	8	4	4	4	4	84.0
18-May	5	6	22	17	26	11	10	15	6	8	11	12	13	19	14	11	10	7	8	9	6	7	7	10	26.5
19-May	12	12	12	18	34	16	6	4	8	7	9	8	11	13	16	22	47	56	88	47	7	12	16	8	88.2
20-May	6	6	8	9	7	10	6	7	12	10	9	16	16	16	59	41	4	5	4	8	17	26	37	32	58.8
21-May	7	9	4	6	4	5	8	9	10	9	6	6	5	5	4	4	7	5	6	P	6	5	6	6	9.6
22-May	7	6	6	7	6	6	7	7	7	7	9	10	14	14	15	11	16	17	33	60	51	78	11	12	78.0
23-May	6	34	15	20	39	23	46	43	18	33	25	38	35	40	55	48	27	76	30	25	14	35	33	71	76.4
24-May	20	43	59	47	58	24	32	22	17	18	33	35	59	51	62	65	57	19	14	10	9	11	12	11	64.8
25-May	20	12	17	13	9	7	9	10	15	17	16	15	16	24	23	27	28	20	13	7	9	17	30	21	29.9
26-May	30	14	6	4	16	11	10	8	15	15	26	27	19	13	24	10	9	12	8	9	5	5	8	12	29.6
27-May	9	10	10	7	10	5	6	8	8	9	11	13	14	13	14	18	10	10	14	10	8	5	5	17	17.8
28-May	18	13	14	11	10	10	12	13	18	34	15	19	18	14	24	21	11	10	10	10	7	16	40	46	46.1
29-May	61	37	7	88	54	43	34	35	57	17	34	31	32	41	37	38	41	19	58	18	43	20	48	49	87.8
30-May	52	38	22	48	24	17	13	25	20	8	36	38	43	13	11	50	22	30	26	13	5	23	22	72	72.3
31-May	55	20	37	36	79	22	28	47	28	44	30	33	48	40	39	51	45	16	15	10	7	22	50	73	79.1
	60.8	88.2	69.0	87.8	79.1	79.9	89.7	59.5	74.5	55.1	75.9	78.4	90.6	95.9	73.6	95.4	74.4	76.4	88.2	60.0	50.6	78.0	49.6	81.8	
P - Power Failure																									

PASZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

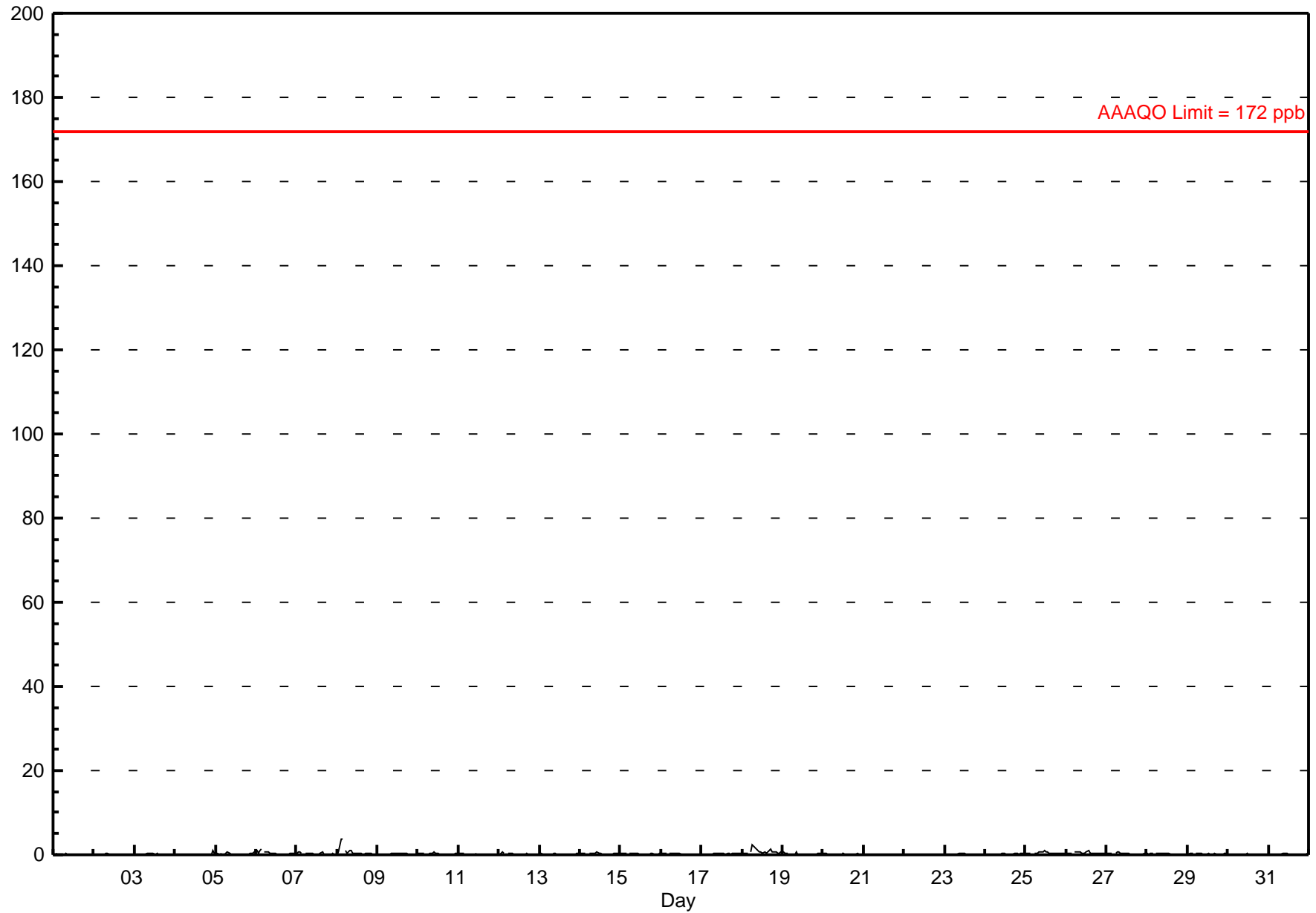
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - May 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 3.7 ppb on May 8 03:00	Maximum Daily Average: 0.8 ppb on May 18		Hours of Data:	706
Minimum Value: 0 ppb on May 4 00:00	Minimum Daily Average: 0.0 ppb on May 21		Hours of Missing Data:	38
Maximum Diurnal Average: 0.4 ppb at hour 9	Minimum Diurnal Average: 0.1 ppb at hour 20		Hours of Calibration:	37
Monthly Average: 0.21 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 0.4 P ₉₉ = 1.2		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-May	D	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																									
2-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																									
3-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																									
4-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.1	1.0																									
5-May	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.5																									
6-May	1	0	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2																									
7-May	0	1	1	0	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.3	0.8																									
8-May	0	1	4	4	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	3.7																									
9-May	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																									
10-May	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8																									
11-May	0	0	0	0	A	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4																									
12-May	0	0	1	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																									
13-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																									
14-May	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6																									
15-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																									
16-May	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																									
17-May	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																									
18-May	0	0	0	0	A	1	3	2	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	0.8	2.5																										
19-May	1	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6																									
20-May	0	0	0	0	A	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																									
21-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2																									
22-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																									
23-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																									
24-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																									
25-May	0	0	0	0	A	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.4	0.9																									
26-May	0	0	0	0	A	1	1	1	1	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0.4	0.9																									
27-May	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6																									
28-May	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																									
29-May	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																									
30-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																									
31-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																									
																								0.2	0.2	0.4	0.3	--	0.2	0.3	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	Diurnal Average
																								0.9	0.8	3.7	3.6	--	0.9	2.5	2.0	1.4	1.2	0.8	0.9	0.7	0.9	0.5	0.7	0.9	1.2	0.7	0.6	0.8	0.4	1.0	0.6	0.1	0.1	0.6	Diurnal Maximum

C - Calibration D - DAS Failure 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

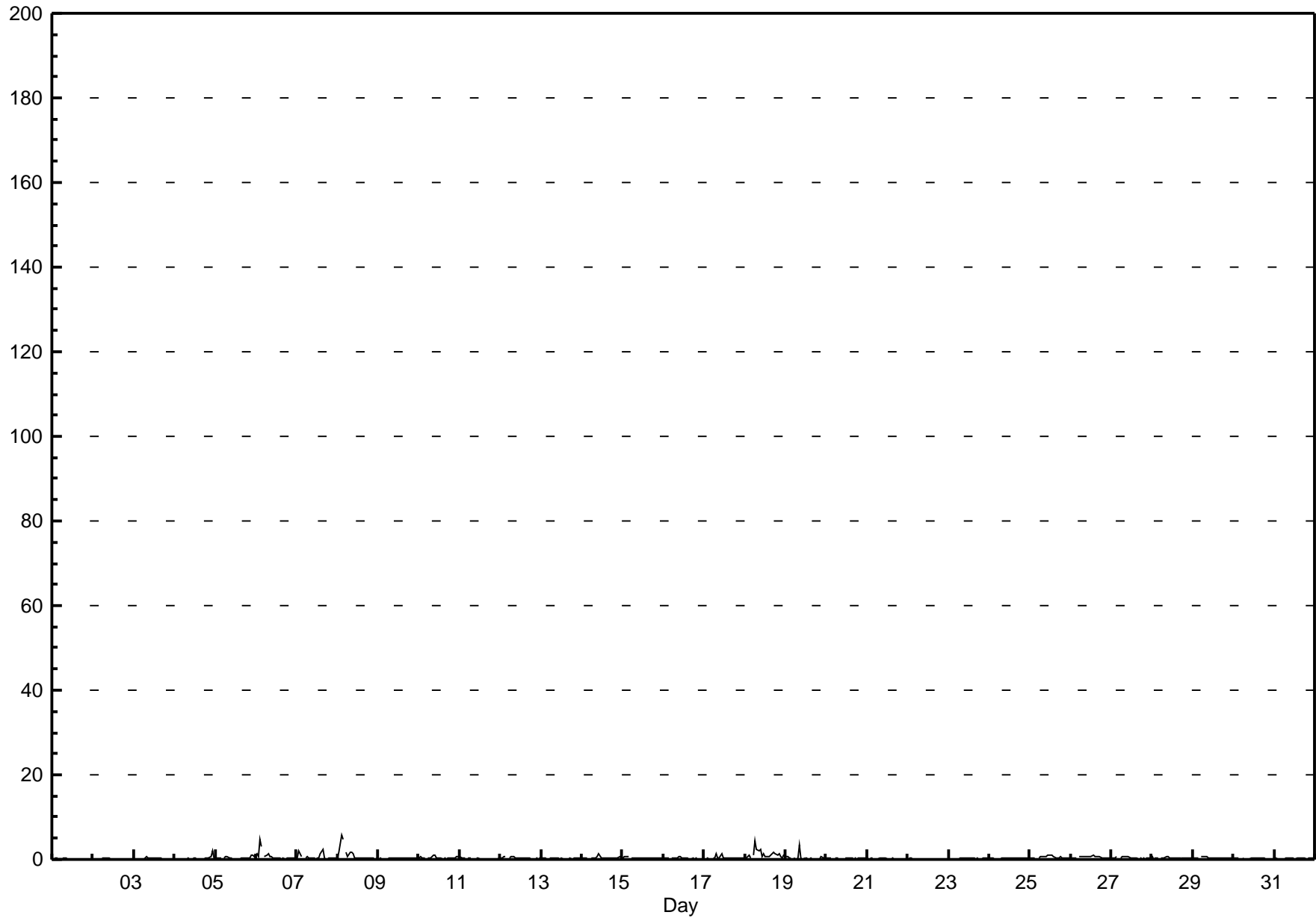
Beaverlodge - May 2010

Maximum Value: 5.8 ppb on May 8 03:00		Maximum Daily Average: 1.2 ppb on May 18		Hours in Service: 744																						
Minimum Value: 0 ppb on May 22 10:00		Minimum Daily Average: 0.1 ppb on May 22		Hours of Data: 706																						
Maximum Diurnal Average: 0.7 ppb at hour 3		Minimum Diurnal Average: 0.3 ppb at hour 19		Hours of Missing Data: 38																						
Monthly Average: 0.38 ppb		Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.7 P ₉₉ = 2.1		Hours of Calibration: 37																						
				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-May	D	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
2-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
3-May	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
4-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0.3	1.9
5-May	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.4	1.0
6-May	1	1	5	3	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.6
7-May	0	2	1	1	A	0	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0.6	2.3
8-May	0	2	6	5	A	2	1	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	5.8
9-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
10-May	1	1	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	1.1
11-May	1	0	0	0	A	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
12-May	0	0	1	1	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
13-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
14-May	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	1.5
15-May	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
16-May	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
17-May	0	0	0	0	A	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2
18-May	0	0	1	0	A	1	5	2	2	2	1	1	1	1	1	1	2	1	1	2	1	0	1	0	1.2	4.5
19-May	1	1	0	0	A	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.4	3.5
20-May	0	0	0	0	A	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
21-May	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
22-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
23-May	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
24-May	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
25-May	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0.6	1.1
26-May	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.6	1.0
27-May	0	0	0	1	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
28-May	1	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
29-May	0	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
30-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3
31-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
		0.3	0.4	0.7	0.5	--	0.4	0.5	0.6	0.6	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	0.3	0.3	Diurnal Average
		1.3	1.9	5.8	4.7	--	1.6	4.5	2.4	3.5	2.3	1.5	1.4	0.9	1.0	1.3	2.3	1.3	1.8	1.3	1.1	1.5	0.9	1.9	0.9	Diurnal Maximum
C - Calibration					D - DAS Failure					A - Automated Daily Zero Span																

Hourly Maximums

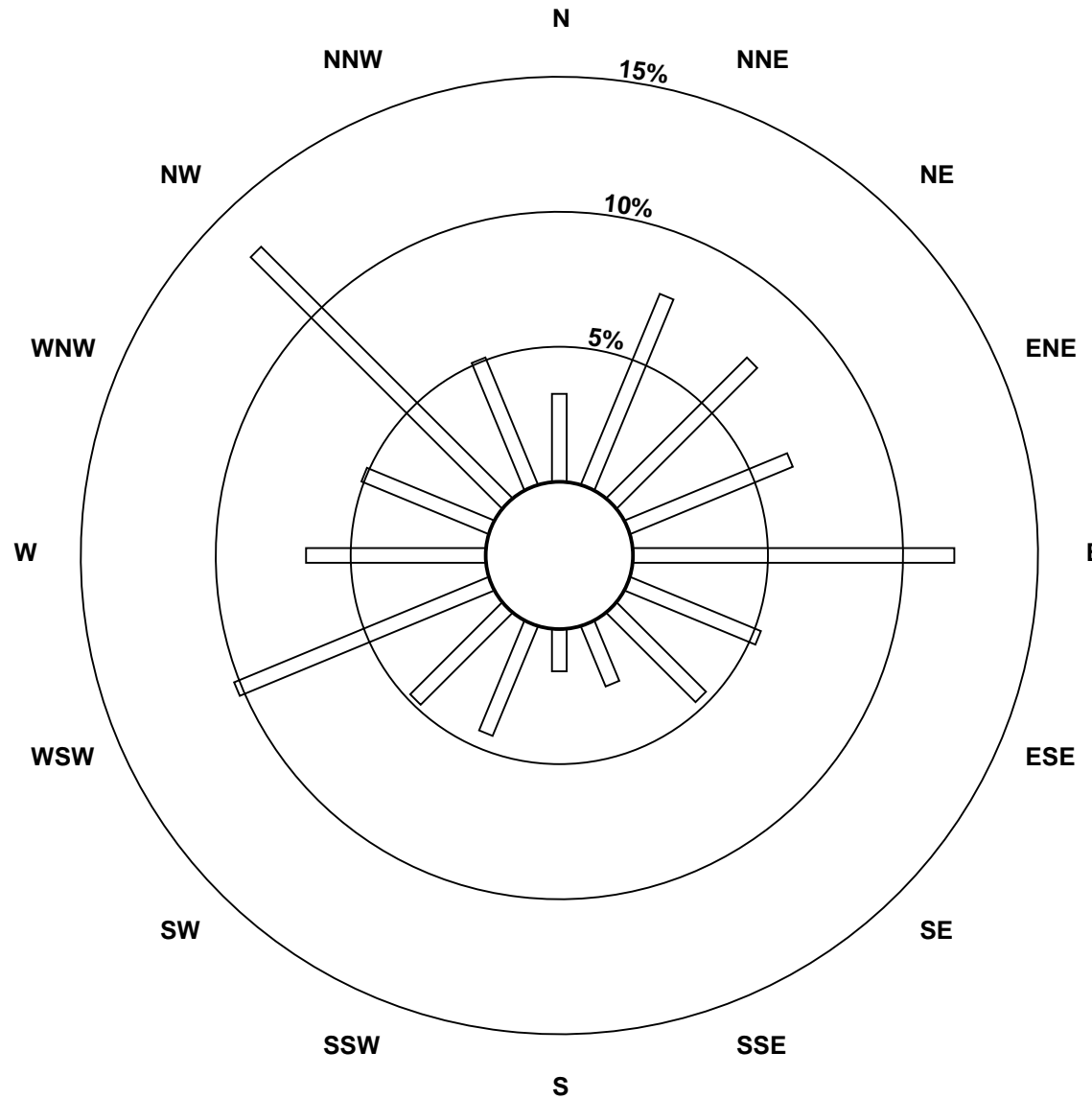
Sulphur Dioxide (SO₂) - ppb

Beaverlodge - May 2010

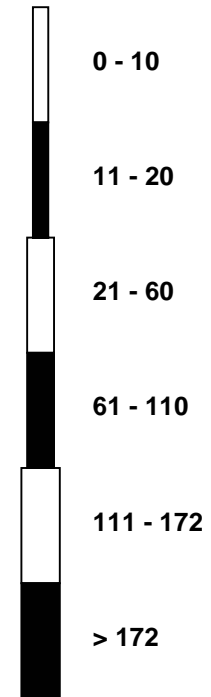


Pollutant Rose

Sulphur Dioxide (SO₂) - ppb
Beaverlodge - May 2010



Pollutant Classes (ppb)



Hourly Averages

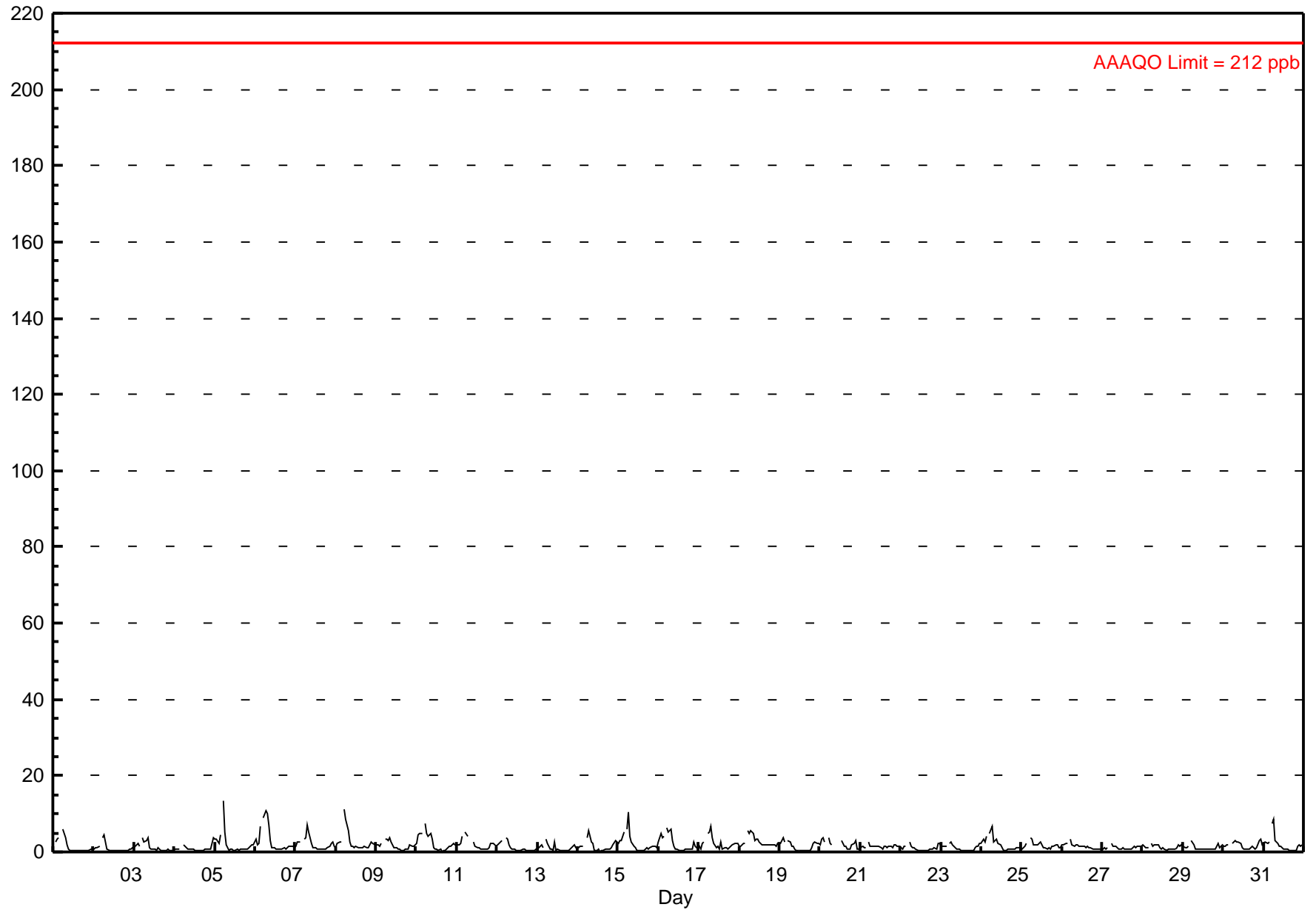
Nitrogen Dioxide (NO₂) - ppb

Beaverlodge - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0															Hours in Service: 744												
Maximum Value: 13.3 ppb on May 5 06:00															Maximum Daily Average: 3.0 ppb on May 6		Hours of Data: 704										
Minimum Value: 0 ppb on May 14 14:00															Minimum Daily Average: 1.0 ppb on May 4		Hours of Missing Data: 40										
Maximum Diurnal Average: 4.7 ppb at hour 6															Minimum Diurnal Average: 0.7 ppb at hour 16		Hours of Calibration: 39										
Monthly Average: 1.71 ppb															Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.7 Median = 1.3 Q ₃ = 2.2 P ₉₀ = 3.4 P ₉₉ = 8.4		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-May	D	3	3	4	A	6	5	4	2	1	0	0	0	0	0	0	0	0	1	0	1	0	1	1	1.5	5.8	
2-May	1	1	1	2	A	4	4	3	1	0	0	1	0	1	0	0	0	0	0	0	0	1	1	1	1.0	4.5	
3-May	1	2	2	2	A	4	2	3	4	1	1	1	1	1	1	1	1	0	0	1	1	1	0	1	1.3	3.7	
4-May	1	1	1	1	A	2	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	2	4	1.0	3.8	
5-May	3	3	2	5	A	13	5	2	1	1	1	0	1	1	1	1	1	1	1	1	1	1	2	2	2.1	13.3	
6-May	3	2	2	7	A	9	11	10	7	3	1	1	1	1	1	1	1	1	1	1	1	1	2	1	3.0	10.7	
7-May	2	3	3	3	A	3	4	7	5	2	1	1	1	1	1	1	1	1	1	1	1	2	3	1	2.1	7.1	
8-May	1	2	3	3	A	11	9	5	3	1	2	1	1	1	1	1	1	1	1	1	2	3	2	2	2.6	11.2	
9-May	2	2	2	2	A	4	3	3	4	3	1	1	1	1	1	1	0	1	1	1	2	1	1	2	1.6	3.7	
10-May	2	5	5	5	A	8	5	4	5	3	1	1	1	0	1	0	0	1	1	2	1	2	2	2	2.4	7.5	
11-May	2	2	2	4	A	5	4	C	C	C	3	1	1	1	1	1	1	1	1	2	2	2	2	1.9	5.2		
12-May	2	2	3	3	A	4	3	2	1	1	1	0	0	1	0	1	1	0	0	0	1	1	0	1	1.2	3.9	
13-May	1	1	2	1	A	3	2	1	1	1	3	0	1	0	0	0	0	0	1	1	1	2	2	1	1.1	3.5	
14-May	1	2	1	2	A	4	6	4	3	2	1	1	1	0	0	0	1	1	1	1	1	2	3	3	1.7	5.7	
15-May	2	3	3	5	A	6	10	4	2	2	1	0	0	0	1	1	1	1	1	1	1	2	1	1	2.2	10.5	
16-May	3	5	4	4	A	7	5	6	3	1	1	1	0	0	1	0	1	1	1	1	1	3	2	1	2.1	6.5	
17-May	1	1	2	2	A	5	5	7	4	2	1	1	1	3	1	1	1	1	1	1	2	2	2	2	2.2	6.6	
18-May	2	2	2	2	A	6	5	6	5	3	4	3	3	2	2	2	2	2	2	2	2	2	2	2	2.7	5.6	
19-May	2	3	4	3	A	3	3	2	1	1	0	0	0	1	0	0	0	0	0	1	2	3	2	2	1.5	3.7	
20-May	2	3	4	3	A	4	2	2	C	C	C	C	C	C	3	2	1	1	1	1	2	2	3	1	1	2.0	3.8
21-May	1	2	1	1	A	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1.4	2.5	
22-May	1	1	1	1	A	3	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	2	2	1.0	2.5	
23-May	2	1	2	2	A	2	2	2	1	1	1	1	0	0	0	0	0	0	0	1	1	2	1	2	1.1	2.5	
24-May	2	3	3	4	A	5	7	3	3	3	2	2	1	1	0	0	1	1	1	1	1	1	1	1	2.0	6.8	
25-May	1	1	1	2	A	4	3	2	2	2	2	3	2	1	1	1	1	1	2	1	2	2	1	1	1.7	3.9	
26-May	2	2	2	2	A	3	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1.4	3.2	
27-May	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1.1	2.2	
28-May	2	2	1	1	A	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1.3	2.1	
29-May	2	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1.1	2.9	
30-May	2	1	2	2	A	2	3	3	3	3	2	1	1	1	1	1	1	2	1	1	1	3	3	2	1.7	3.3	
31-May	2	2	2	3	A	7	8	3	2	2	1	1	1	1	1	0	0	0	1	1	1	2	1	2	2.0	8.5	
	1.7	2.0	2.2	2.6	--	4.7	4.1	3.2	2.4	1.6	1.3	1.0	0.9	0.8	0.7	0.7	0.7	0.8	0.8	1.0	1.3	1.7	1.6	1.6	Diurnal Average		
	3.5	4.7	4.8	6.7	--	13.3	10.7	10.2	7.1	3.4	3.5	3.2	2.6	2.8	1.8	1.9	1.9	2.0	1.8	2.0	2.3	3.1	3.3	3.8	Diurnal Maximum		
C - Calibration															D - DAS Failure					A - Automated Daily Zero Span							
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb																											

Hourly Averages

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - May 2010

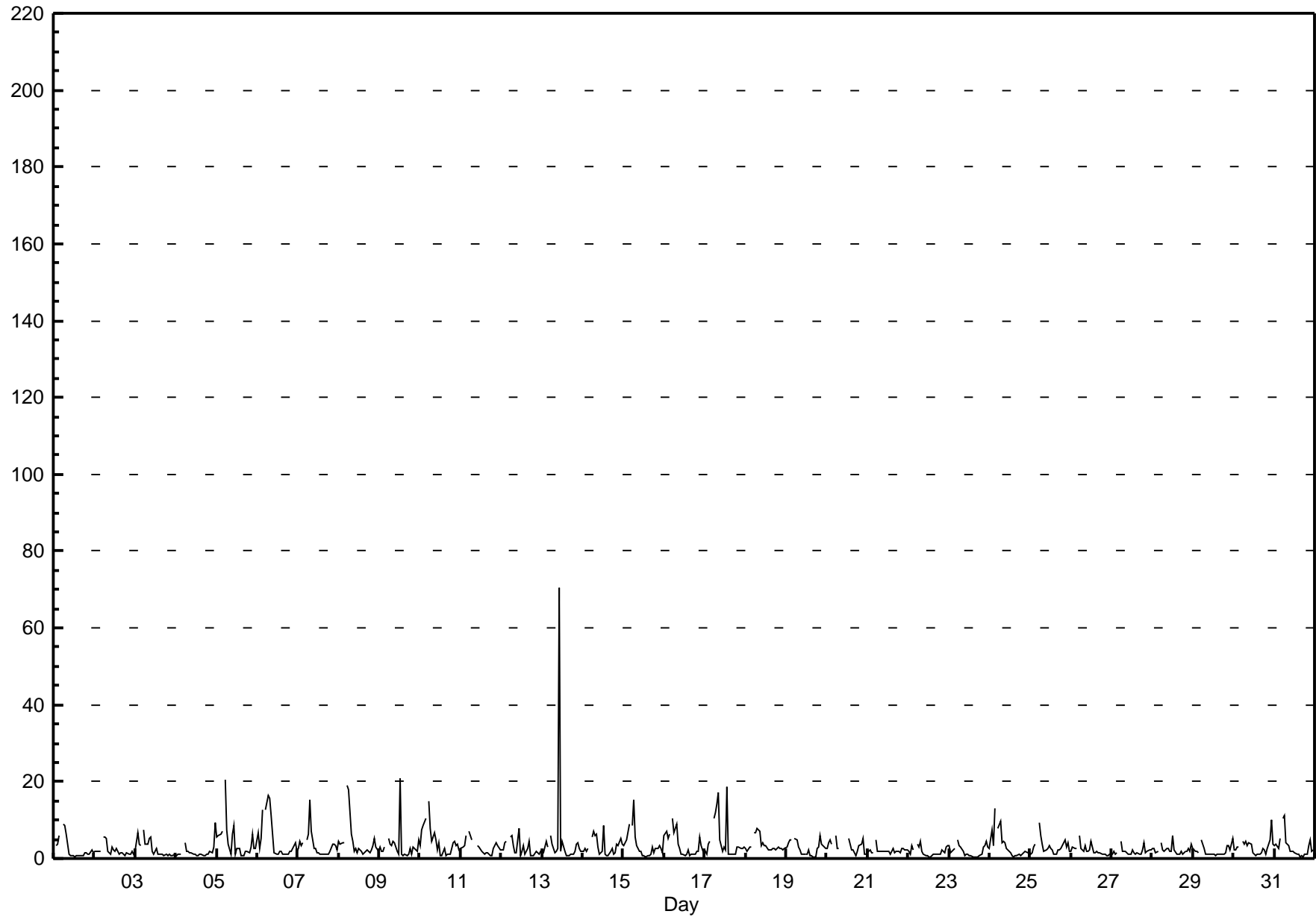


Hourly Maximums

Nitrogen Dioxide (NO₂) - ppb

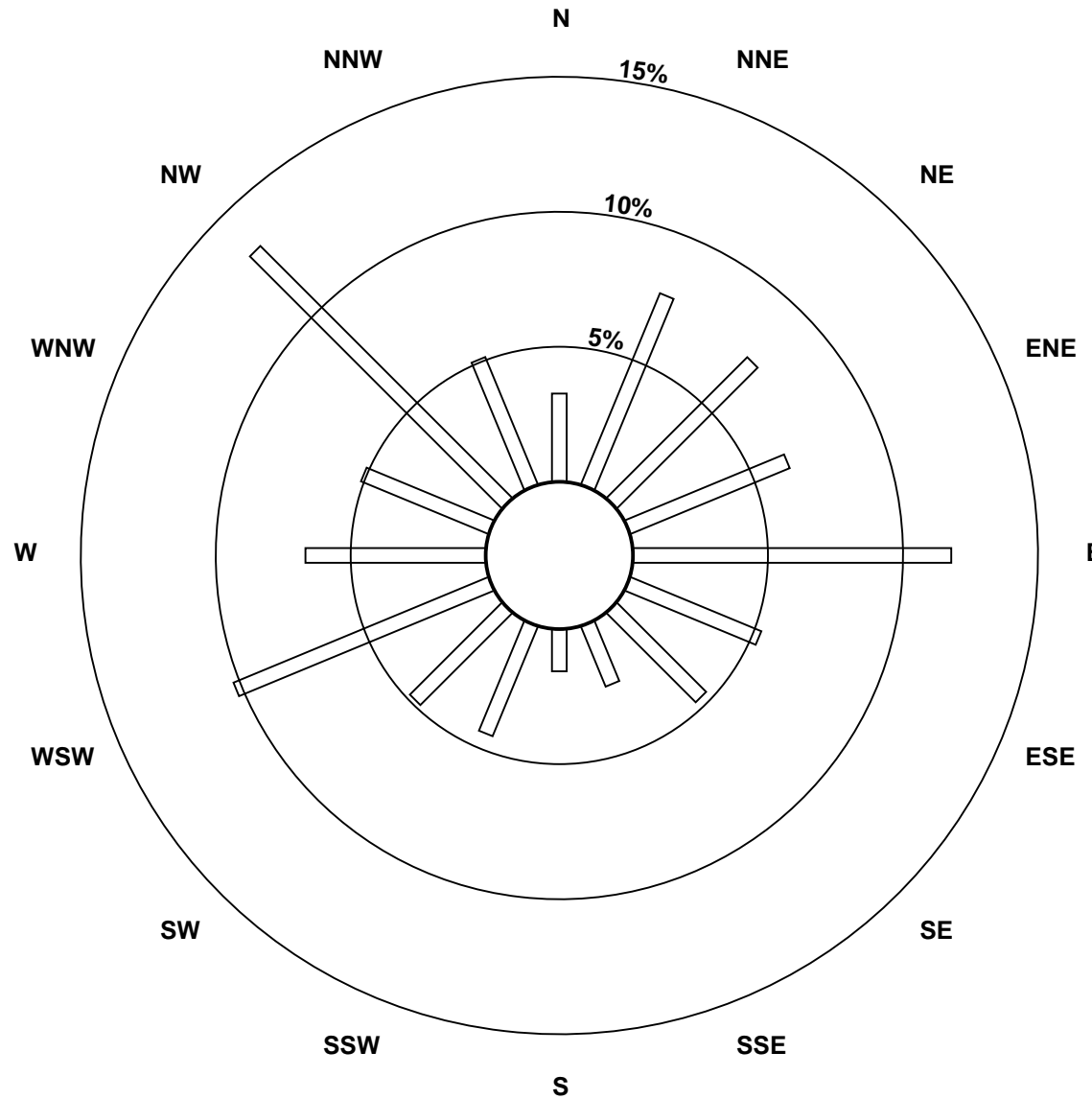
Beaverlodge - May 2010

Maximum Value: 70.7 ppb on May 13 11:00		Maximum Daily Average: 5.3 ppb on May 13		Hours in Service: 744																							
Minimum Value: 0 ppb on May 23 17:00		Minimum Daily Average: 1.7 ppb on May 4		Hours of Data: 704																							
Maximum Diurnal Average: 7.7 ppb at hour 6		Minimum Diurnal Average: 1.2 ppb at hour 16		Hours of Missing Data: 40																							
Monthly Average: 3.07 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.9 Q ₁ = 1.2 Median = 2.2 Q ₃ = 3.6 P ₉₀ = 5.9 P ₉₉ = 17.0		Hours of Calibration: 39																							
				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-May	D	3	4	6	A	9	9	7	4	1	1	0	1	1	1	1	1	1	1	1	1	2	1	2.6	9.0		
2-May	2	2	2	2	A	5	6	5	2	1	3	2	2	3	1	1	1	1	1	1	1	1	2	1	2.1	5.7	
3-May	2	7	4	3	A	8	4	4	5	6	2	1	2	1	1	1	1	1	1	1	1	1	1	1	2.5	7.5	
4-May	1	1	1	1	A	4	2	2	1	1	1	1	1	1	1	1	1	1	1	1	2	1	3	9	1.7	9.5	
5-May	5	6	6	7	A	20	7	4	1	6	9	1	3	2	1	1	1	2	2	1	3	6	3	3	4.4	20.4	
6-May	7	3	5	13	A	13	17	16	11	6	1	1	1	2	2	1	1	1	1	2	2	3	4	2	5.0	16.5	
7-May	3	4	3	4	A	5	6	15	7	3	3	1	2	1	1	1	1	1	2	4	4	4	4	2	3.4	15.4	
8-May	4	4	4	4	A	19	18	6	5	2	3	1	3	2	1	1	2	2	1	2	3	5	3	2	4.3	19.1	
9-May	3	2	2	3	A	5	4	4	4	4	2	1	21	1	1	1	1	1	3	1	3	2	2	5	3.3	21.0	
10-May	3	8	9	11	A	15	8	4	7	5	2	4	1	1	3	1	1	1	1	4	4	3	4	2	4.4	14.8	
11-May	3	3	3	6	A	7	5	C	C	C	4	3	2	1	1	1	1	1	3	3	4	3	2	2.9	7.3		
12-May	2	2	4	5	A	6	6	3	2	1	8	1	2	3	1	3	5	1	1	2	1	1	2	2.7	7.9		
13-May	1	1	4	3	A	6	4	1	2	3	71	2	4	2	1	1	1	1	2	4	4	3	2	5.3	70.7		
14-May	2	3	2	3	A	6	7	6	6	3	1	2	9	1	1	1	2	3	1	1	4	4	5	4	3.2	8.5	
15-May	3	4	5	9	A	8	15	6	3	2	2	1	1	1	1	1	3	2	3	3	3	3	1	3.4	15.3		
16-May	6	7	5	6	A	10	7	9	4	3	1	1	1	2	1	1	1	1	2	2	6	3	1	3.5	10.4		
17-May	2	1	4	4	A	11	12	14	17	5	2	3	2	19	1	1	1	1	3	3	2	3	3	5.0	18.5		
18-May	2	2	3	3	A	7	7	8	7	3	4	3	3	2	2	2	3	3	2	3	3	2	3	3.5	7.9		
19-May	3	4	5	5	A	5	5	3	2	1	1	1	1	2	1	1	1	1	2	3	6	4	3	3	2.7	5.9	
20-May	3	4	5	4	A	6	3	3	C	C	C	C	C	5	2	2	2	1	2	3	4	5	1	1	3.1	6.0	
21-May	1	2	1	1	A	5	2	2	2	2	2	2	2	1	2	3	1	2	2	1	3	3	2	2	2.0	4.9	
22-May	2	1	3	2	A	4	3	5	2	1	1	1	0	1	1	1	1	1	1	2	1	3	3	1.8	4.7		
23-May	3	2	2	2	A	5	3	3	2	1	1	1	1	1	0	0	0	1	1	3	3	4	3	1.9	4.9		
24-May	3	8	4	13	A	8	10	4	4	4	3	2	1	1	1	1	1	1	1	2	2	1	2	3.3	13.1		
25-May	1	1	3	4	A	9	6	4	2	2	3	3	3	2	1	1	2	2	3	3	5	3	4	2	3.0	9.5	
26-May	2	3	3	3	A	6	3	2	4	2	2	2	5	2	1	2	1	1	1	1	1	1	1	2.1	6.0		
27-May	1	2	1	1	A	5	2	2	2	1	1	1	2	1	1	2	1	1	2	4	1	2	2	1.8	4.6		
28-May	3	2	1	2	A	4	2	2	3	2	2	2	6	2	1	1	1	2	1	2	2	3	2	4	2.3	5.9	
29-May	3	2	2	2	A	5	2	1	1	1	1	1	1	1	1	1	1	1	1	4	3	2	5	1.9	5.1		
30-May	2	2	3	3	A	4	4	4	3	4	4	1	1	1	1	1	1	2	2	1	2	5	10	4	3.0	10.0	
31-May	3	4	3	5	A	11	11	4	3	2	2	2	1	1	1	0	1	0	1	1	3	5	2	2	3.0	11.2	
		2.7	3.2	3.4	4.5	--	7.7	6.4	5.1	4.1	2.8	4.7	1.7	2.8	2.1	1.2	1.2	1.3	1.4	1.4	1.9	2.7	3.0	2.8	2.6	Diurnal Average	
		6.9	7.6	8.5	13.1	--	20.4	17.9	15.7	17.3	6.5	70.7	4.1	21.0	18.5	2.8	2.6	4.5	3.1	2.8	4.0	5.9	6.2	10.0	9.5	Diurnal Maximum	
C - Calibration		D - DAS Failure				A - Automated Daily Zero Span																					

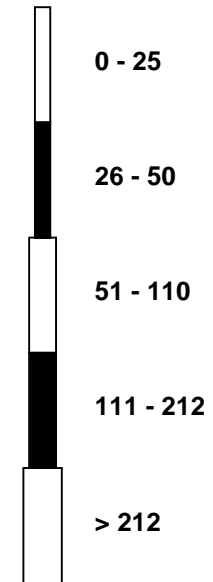


Pollutant Rose

Nitrogen Dioxide (NO₂) - ppb
Beaverlodge - May 2010



Pollutant Classes (ppb)



Hourly Averages

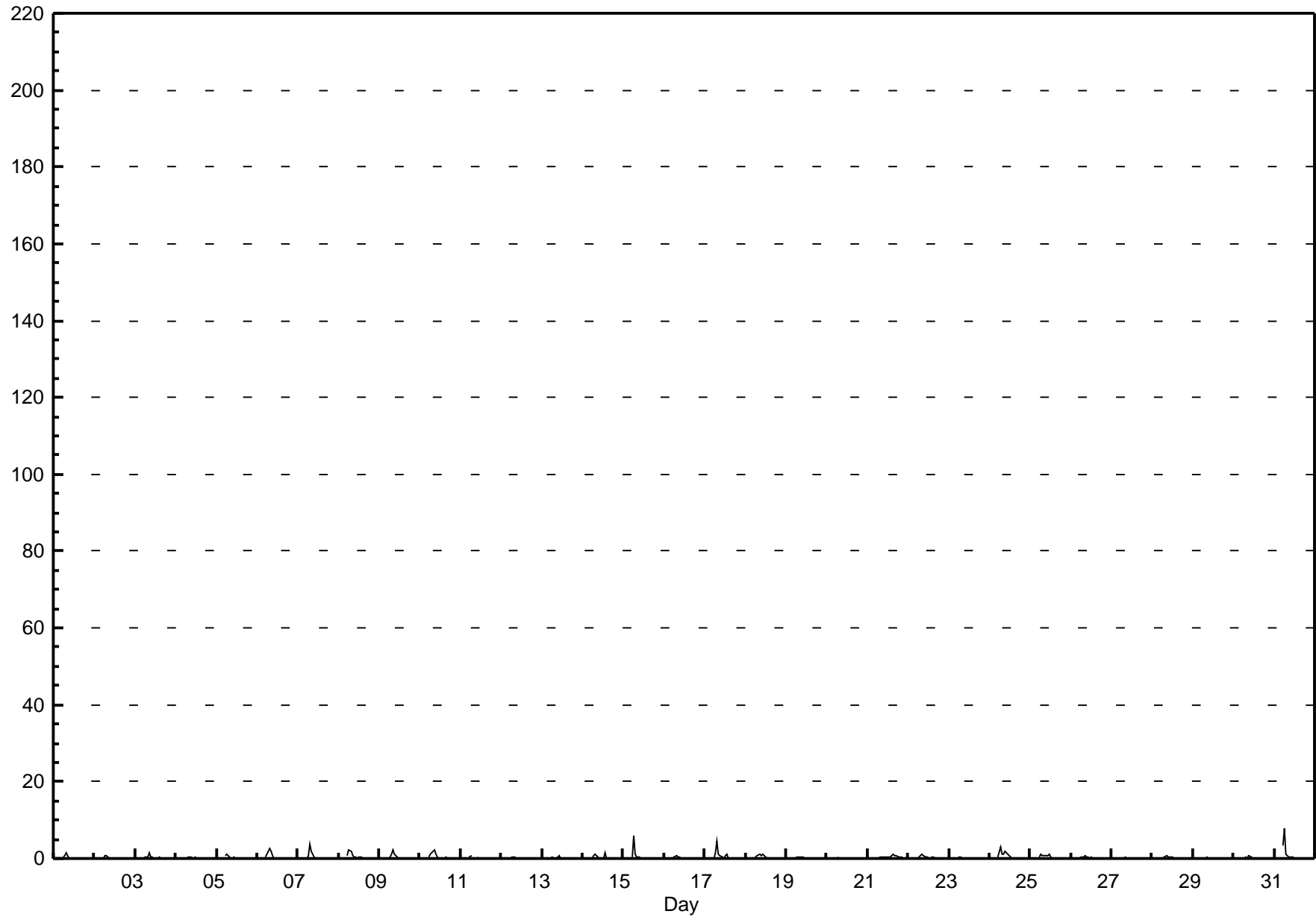
Nitrogen Oxide (NO) - ppb

Beaverlodge - May 2010

Number of Exceedences (AAQO):		1-hr: 0		24-hr: 0		Hours in Service:		744																		
Maximum Value: 7.7 ppb on May 31 07:00		Maximum Daily Average: 0.6 ppb on May 31				Hours of Data:		704																		
Minimum Value: 0 ppb on May 1 02:00		Minimum Daily Average: 0.0 ppb on May 29				Hours of Missing Data:		40																		
Maximum Diurnal Average: 1.1 ppb at hour 7		Minimum Diurnal Average: 0.0 ppb at hour 24				Hours of Calibration:		39																		
Monthly Average: 0.21 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.2 P ₉₀ = 0.6 P ₉₉ = 2.2				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-May	D	0	0	0	A	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
2-May	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
3-May	0	0	0	0	A	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6
4-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
5-May	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.9
6-May	0	0	0	0	A	0	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.5
7-May	0	0	0	0	A	0	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	3.7
8-May	0	0	0	0	A	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.3
9-May	0	0	0	0	A	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	2.1
10-May	0	0	0	0	A	0	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.2
11-May	0	0	0	0	A	0	1	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
12-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
13-May	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
14-May	0	0	0	0	A	0	1	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0.2	1.6
15-May	0	0	0	0	A	0	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	6.0
16-May	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8
17-May	0	0	0	0	A	0	1	4	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.4	4.4
18-May	0	0	0	0	A	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
19-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4
20-May	0	0	0	0	A	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
21-May	0	0	0	0	A	0	0	0	0	0	1	1	0	0	1	1	1	1	1	0	0	0	0	0	0.3	0.9
22-May	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.2
23-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
24-May	0	0	0	0	A	1	3	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.1
25-May	0	0	0	0	A	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.0
26-May	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
27-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
28-May	0	0	0	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
29-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
30-May	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
31-May	0	0	0	0	A	3	8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	7.7
		0.0	0.0	0.0	0.0	--	0.3	1.1	1.0	0.8	0.5	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	Diurnal Average	
		0.0	0.2	0.2	0.2	--	3.2	7.7	4.4	2.2	1.9	1.3	1.0	0.8	1.6	0.6	0.9	0.8	0.7	0.5	0.2	0.2	0.0	0.0	Diurnal Maximum	
C - Calibration		D - DAS Failure				A - Automated Daily Zero Span																				

Hourly Averages

Nitrogen Oxide (NO) - ppb
Beaverlodge - May 2010



Hourly Maximums

Nitrogen Oxide (NO) - ppb

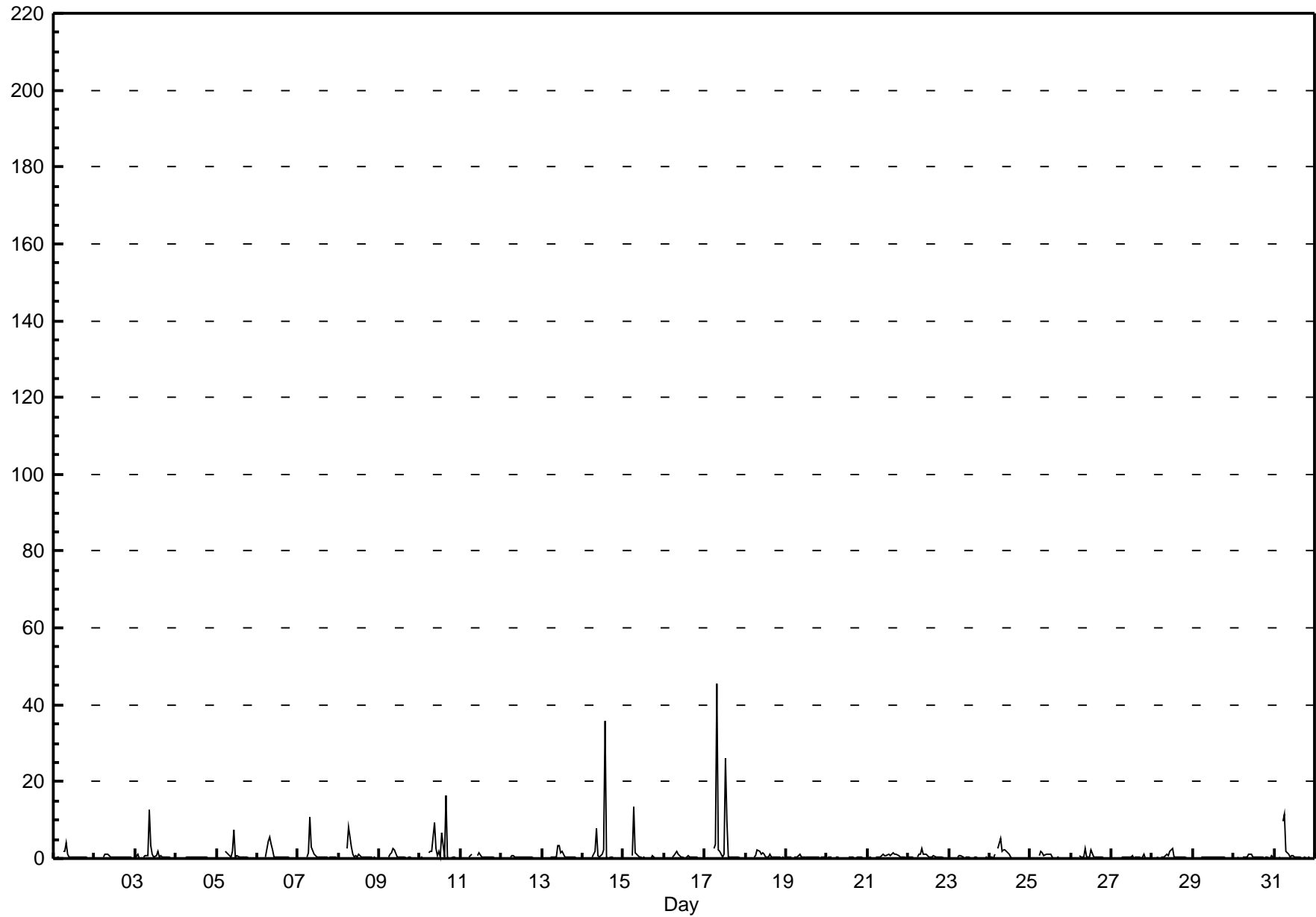
Beaverlodge - May 2010

Maximum Value: 45.5 ppb on May 17 08:00		Maximum Daily Average: 4.1 ppb on May 17		Hours in Service: 744																							
Minimum Value: 0 ppb on May 1 02:00		Minimum Daily Average: 0.1 ppb on May 29		Hours of Data: 704																							
Maximum Diurnal Average: 3.2 ppb at hour 8		Minimum Diurnal Average: 0.0 ppb at hour 24		Hours of Missing Data: 40																							
Monthly Average: 0.75 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.5 P ₉₀ = 1.4 P ₉₉ = 11.1		Hours of Calibration: 39																							
				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-May	D	0	0	0	A	2	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	4.1	
2-May	0	0	0	0	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2	
3-May	0	1	0	0	A	0	1	1	13	3	1	0	1	2	0	1	0	0	0	0	0	0	0	0	1.1	12.8	
4-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
5-May	0	0	0	0	A	2	1	1	0	2	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0.7	7.4	
6-May	0	0	0	0	A	0	4	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	5.5	
7-May	0	0	0	0	A	0	1	11	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	10.8	
8-May	0	0	0	0	A	2	8	3	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0.8	8.0	
9-May	0	0	0	0	A	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.5	
10-May	0	0	0	0	A	1	2	2	9	3	1	2	0	7	0	16	0	0	0	0	0	0	0	0	1.9	16.4	
11-May	0	0	0	0	A	0	1	C	C	C	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4	
12-May	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8	
13-May	0	0	0	0	A	0	0	0	0	3	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0.6	3.3	
14-May	0	0	0	0	A	0	1	2	8	1	0	1	2	36	0	0	0	0	0	0	0	0	0	0	2.3	35.9	
15-May	0	0	0	0	A	1	13	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.8	13.3	
16-May	0	0	0	0	A	0	1	2	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.3	2.0	
17-May	0	0	0	0	A	3	4	45	2	2	0	1	26	10	0	0	0	0	0	0	0	0	0	0	4.1	45.5	
18-May	0	0	0	0	A	0	1	2	2	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0.5	2.4	
19-May	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0	
20-May	0	0	0	0	A	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
21-May	0	0	0	0	A	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.6	1.5	
22-May	0	0	0	0	A	0	1	1	2	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0.5	2.5	
23-May	0	0	0	0	A	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7	
24-May	0	0	0	1	A	3	5	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0.9	5.2	
25-May	0	0	0	0	A	1	2	2	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.5	2.0	
26-May	0	0	0	0	A	1	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0.4	2.4	
27-May	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0.3	1.0	
28-May	0	0	0	0	A	0	0	0	1	1	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0.5	2.7	
29-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
30-May	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.3	1.2	
31-May	0	0	0	0	A	10	12	2	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.2	11.7	
		0.0	0.1	0.0	0.1	--	1.0	2.2	3.2	2.2	1.1	1.0	0.6	1.5	2.0	0.3	0.8	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.0	Diurnal Average	
		0.2	1.2	0.2	0.9	--	9.6	13.3	45.5	12.8	3.3	7.4	2.2	26.1	35.9	1.0	16.4	1.1	1.0	0.7	1.0	0.5	0.4	0.6	0.2	Diurnal Maximum	
C - Calibration					D - DAS Failure					A - Automated Daily Zero Span																	

Hourly Maximums

Nitrogen Oxide (NO) - ppb

Beaverlodge - May 2010

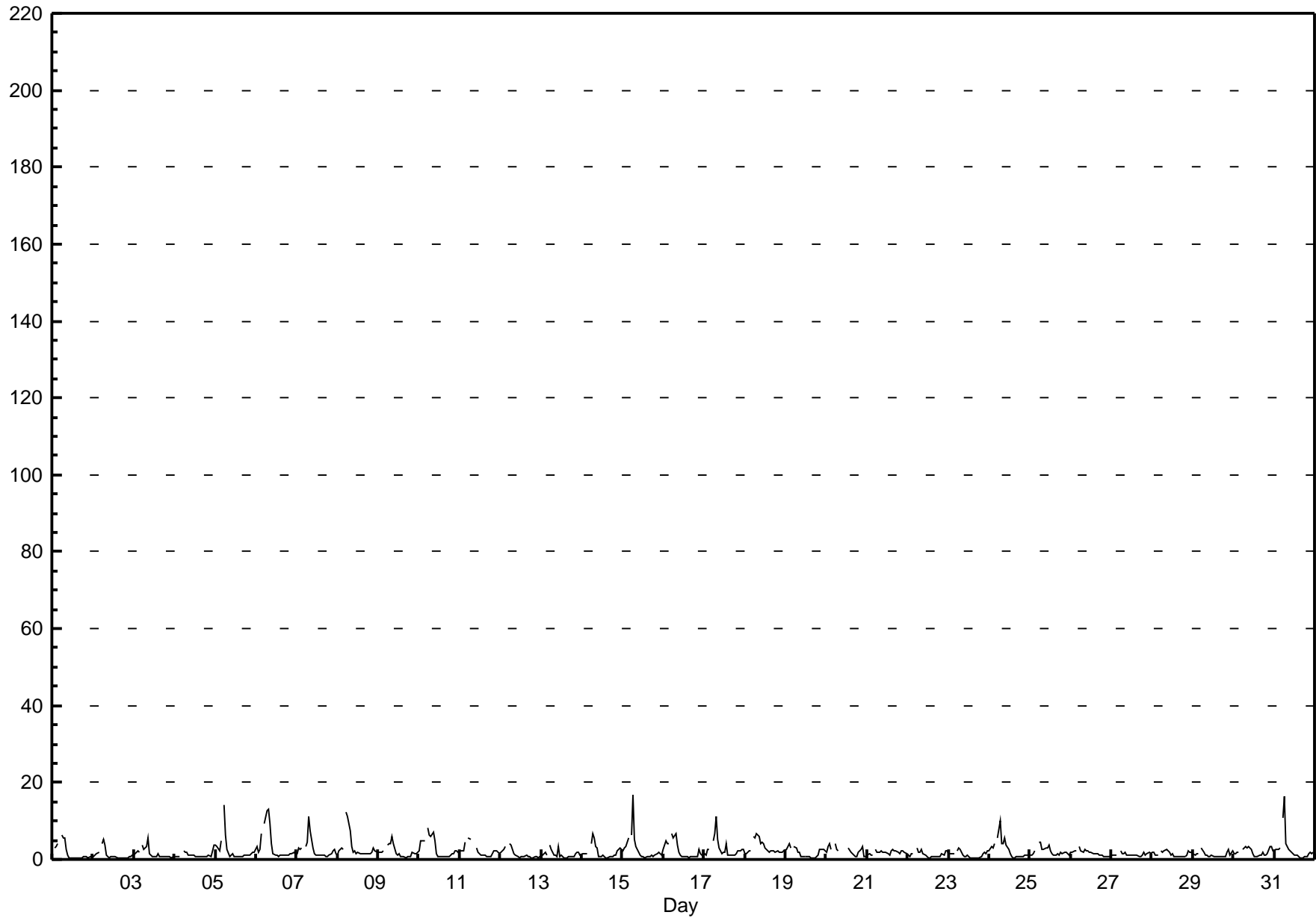


Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 16.8 ppb on May 15 07:00 Maximum Daily Average: 3.5 ppb on May 6		Hours in Service: 744 Hours of Data: 704 Hours of Missing Data: 40 Hours of Calibration: 39 Percent Operational Time: 99.9																																														
Minimum Value: 0 ppb on May 22 13:00 Maximum Diurnal Average: 5.4 ppb at hour 7 Monthly Average: 2.03 ppb		Minimum Daily Average: 1.2 ppb on May 4 Minimum Diurnal Average: 0.9 ppb at hour 17 Percentiles: P ₁ = 0.4 P ₁₀ = 0.6 Q ₁ = 0.8 Median = 1.5 Q ₃ = 2.3 P ₉₀ = 4.0 P ₉₉ = 10.6																																														
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-May	D	3	3	4	A	6	6	5	3	1	0	0	0	1	0	0	0	0	1	1	1	1	1	1	1.8	6.3																						
2-May	1	1	1	2	A	4	5	4	1	0	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1.2	5.2																						
3-May	1	2	2	2	A	4	3	3	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.6	5.5																						
4-May	1	1	1	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	1.2	3.9																						
5-May	4	3	2	5	A	14	6	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2.4	14.3																						
6-May	3	2	2	7	A	9	13	13	9	4	1	1	1	1	1	1	1	1	1	1	1	1	2	1	3.5	12.9																						
7-May	2	3	3	3	A	3	4	11	7	3	1	1	1	1	1	1	1	1	1	1	2	2	3	2	2.5	11.0																						
8-May	1	2	3	3	A	12	11	8	3	2	2	2	2	2	1	1	1	2	1	1	2	3	2	2	3.0	12.3																						
9-May	2	2	2	2	A	4	4	4	6	4	2	1	1	1	1	1	1	1	1	1	2	2	1	2	2.0	6.0																						
10-May	2	5	5	5	A	8	6	6	7	5	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2.9	8.1																						
11-May	2	2	2	4	A	6	5	C	C	C	3	2	1	1	1	1	1	1	1	1	2	2	2	2	2.1	5.5																						
12-May	2	2	3	3	A	4	4	2	1	1	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1.4	4.1																						
13-May	1	1	2	1	A	4	3	1	1	1	3	1	1	0	0	1	1	1	1	1	1	2	2	1	1.3	3.7																						
14-May	1	2	2	2	A	4	7	5	3	3	1	1	1	1	1	1	1	1	1	1	1	2	3	3	2.0	6.7																						
15-May	2	3	3	5	A	6	17	5	3	2	1	1	1	1	1	1	1	1	1	1	2	2	2	1	2.7	16.8																						
16-May	3	5	4	4	A	7	6	7	4	2	1	1	1	1	1	1	1	1	1	1	1	3	2	1	2.3	6.8																						
17-May	1	1	2	2	A	5	7	11	5	3	1	2	2	4	1	1	1	1	1	2	2	2	2	2	2.8	11.2																						
18-May	2	2	2	2	A	6	5	7	6	4	5	4	3	2	2	2	2	2	2	2	2	2	2	2	3.1	6.6																						
19-May	3	3	4	3	A	3	3	2	2	1	1	1	1	1	1	1	0	1	1	1	3	3	3	2	1.8	4.0																						
20-May	2	3	4	3	A	4	2	2	C	C	C	C	C	3	2	2	1	1	1	2	2	3	1	1	2.2	4.0																						
21-May	1	2	1	1	A	3	2	2	2	2	2	2	2	1	2	3	2	2	2	2	2	2	2	1	1.8	2.7																						
22-May	1	1	2	1	A	3	2	2	3	2	1	1	0	0	1	1	1	1	1	1	1	1	2	2	1.3	2.9																						
23-May	2	1	2	2	A	2	3	2	1	1	1	1	1	0	0	0	0	0	0	1	1	2	2	2	1.2	2.9																						
24-May	2	3	3	4	A	6	10	4	4	5	4	3	1	1	0	1	1	1	1	1	1	1	1	1	2.5	10.1																						
25-May	1	1	1	2	A	4	5	3	2	3	3	4	2	2	1	1	1	1	2	2	2	2	1	1	2.1	4.5																						
26-May	2	2	2	2	A	3	2	2	3	2	2	2	2	2	1	2	1	1	1	1	1	1	1	1	1.7	3.5																						
27-May	1	1	1	1	A	2	2	2	2	1	1	1	1	1	1	1	1	1	1	2	1	1	2	2	1.3	2.3																						
28-May	2	2	1	1	A	2	2	2	3	2	2	1	2	1	1	1	1	1	1	1	1	2	2	2	1.5	2.7																						
29-May	2	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	1.3	3.1																						
30-May	2	2	2	2	A	2	3	3	3	3	3	3	1	1	1	1	1	2	1	1	1	3	3	2	2.0	3.4																						
31-May	2	3	2	3	A	11	16	4	3	2	2	2	1	1	1	1	0	0	1	1	1	2	2	2	2.7	16.3																						
																								1.8	2.2	2.3	2.7	--	5.1	5.4	4.3	3.3	2.2	1.7	1.3	1.1	1.1	0.9	0.9	0.9	0.9	0.9	1.1	1.4	1.8	1.7	1.7	Diurnal Average
																								3.6	4.8	5.0	6.9	--	14.3	16.8	12.9	9.3	5.4	4.6	4.0	3.0	3.9	2.1	2.5	2.1	2.2	2.0	2.2	2.5	3.2	3.4	3.9	Diurnal Maximum
C - Calibration D - DAS Failure A - Automated Daily Zero Span																																																



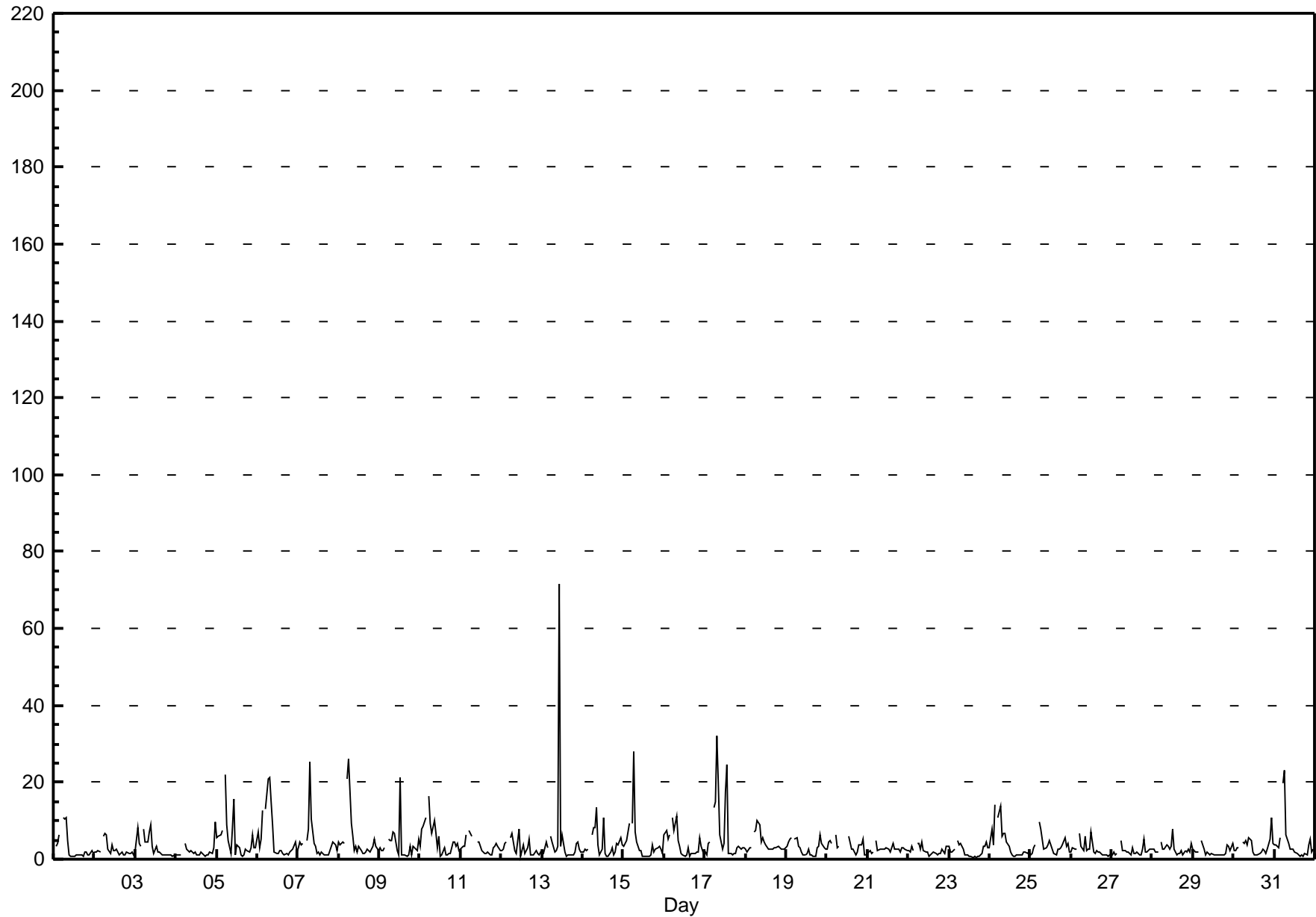


Hourly Maximums

Oxides of Nitrogen (NO_x) - ppb

Beaverlodge - May 2010

Maximum Value: 71.7 ppb on May 13 11:00		Maximum Daily Average: 7.4 ppb on May 17		Hours in Service: 744																							
Minimum Value: 0 ppb on May 23 17:00		Minimum Daily Average: 2.0 ppb on May 4		Hours of Data: 704																							
Maximum Diurnal Average: 8.7 ppb at hour 6		Minimum Diurnal Average: 1.5 ppb at hour 16		Hours of Missing Data: 40																							
Monthly Average: 3.68 ppb		Percentiles: P ₁ = 0.7 P ₁₀ = 1.0 Q ₁ = 1.5 Median = 2.5 Q ₃ = 4.2 P ₉₀ = 6.9 P ₉₉ = 22.2		Hours of Calibration: 39																							
				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-May	D	3	4	6	A	11	10	11	5	1	1	1	1	1	1	1	1	2	2	1	1	2	2	3.1	10.7		
2-May	2	2	2	2	A	6	7	6	3	2	4	2	2	3	1	2	2	1	1	2	2	2	2	1	2.5	6.8	
3-May	2	8	4	4	A	8	4	4	7	9	3	1	3	2	2	2	1	1	1	1	1	1	1	3.1	9.0		
4-May	1	1	1	1	A	4	2	2	2	2	2	2	1	1	1	2	1	1	1	1	2	2	3	10	2.0	9.6	
5-May	6	6	6	7	A	22	9	5	1	8	15	1	4	3	1	1	1	3	2	2	3	6	3	3	5.2	22.2	
6-May	7	3	5	13	A	13	21	21	15	9	2	2	2	2	2	2	1	2	1	2	2	3	4	2	5.9	21.3	
7-May	3	4	4	4	A	5	8	26	10	4	3	2	2	1	2	1	1	1	1	2	5	4	4	2	4.3	25.5	
8-May	5	4	4	4	A	21	26	9	6	2	4	2	3	2	2	2	2	2	2	2	3	5	3	2	5.2	26.1	
9-May	3	2	2	3	A	5	5	5	7	7	2	1	21	1	1	1	1	1	3	1	3	3	2	5	3.8	21.4	
10-May	3	8	9	11	A	17	9	7	10	7	3	6	1	1	3	1	1	2	1	4	5	3	4	2	5.1	16.5	
11-May	3	3	3	6	A	7	6	C	C	C	4	5	2	2	1	2	2	1	1	3	4	4	4	2	3.3	7.5	
12-May	2	2	4	5	A	6	7	4	2	2	8	1	2	4	1	3	5	1	1	1	2	1	1	2	3.0	8.0	
13-May	2	2	4	3	A	6	4	2	2	3	72	3	6	2	1	1	1	1	1	2	4	4	3	2	5.7	71.7	
14-May	2	3	2	3	A	6	8	8	13	4	1	3	11	2	1	1	2	3	1	2	4	4	5	4	4.0	13.3	
15-May	3	4	5	9	A	9	28	7	4	2	2	1	1	1	1	1	4	2	3	3	3	3	2	4.3	28.1		
16-May	6	7	5	6	A	11	7	11	5	4	1	1	1	1	3	1	1	1	1	2	2	6	3	1	3.9	11.2	
17-May	2	1	4	4	A	13	15	32	20	6	3	4	17	25	1	1	1	1	1	3	3	3	3	3	7.4	32.1	
18-May	3	2	3	3	A	7	8	10	9	4	6	5	4	2	3	3	3	3	3	3	3	3	3	3	4.1	10.3	
19-May	3	4	5	6	A	5	6	3	3	2	1	1	2	3	1	1	1	1	3	3	6	4	3	3	3.1	6.2	
20-May	3	4	5	4	A	6	3	3	C	C	C	C	C	6	3	3	2	1	2	4	4	5	1	1	3.3	6.3	
21-May	2	2	2	2	A	5	2	3	3	3	3	3	3	2	3	4	3	3	3	2	3	3	2	2	2.6	4.9	
22-May	2	2	3	2	A	4	4	3	5	2	2	2	1	1	1	2	2	1	1	1	2	2	3	3	2.3	4.7	
23-May	3	2	2	3	A	5	4	4	2	1	1	1	1	1	0	1	0	1	1	1	3	3	5	3	2.1	4.9	
24-May	3	8	4	14	A	11	14	6	7	7	4	3	2	1	1	1	1	1	1	1	2	2	2	2	4.2	14.2	
25-May	1	1	3	4	A	10	8	5	3	3	4	5	4	3	1	1	3	3	3	4	6	3	4	2	3.6	9.7	
26-May	2	3	3	3	A	7	3	2	6	2	3	3	7	2	2	2	2	2	1	1	1	1	1	1	2.6	7.0	
27-May	1	2	1	2	A	5	2	2	2	2	2	1	3	1	1	2	1	1	3	5	2	2	3	2	2.1	5.3	
28-May	3	3	2	2	A	4	3	3	4	3	3	3	8	3	1	1	1	2	1	2	2	3	2	4	2.7	7.8	
29-May	3	2	2	2	A	5	3	1	2	2	1	2	1	1	1	1	1	1	1	2	4	3	2	4	2.0	5.0	
30-May	2	2	3	3	A	5	4	5	4	5	5	2	1	1	1	1	2	3	2	1	3	5	11	4	3.3	10.8	
31-May	4	4	3	5	A	20	23	6	4	3	3	3	2	1	1	1	1	1	1	1	4	5	2	3	4.3	23.1	
		2.8	3.4	3.5	4.7	--	8.7	8.6	7.3	5.7	3.8	5.6	2.3	3.9	2.6	1.5	1.5	1.6	1.6	1.7	2.2	3.0	3.2	3.0	2.7	Diurnal Average	
		7.2	8.2	8.6	14.2	--	22.2	28.1	32.1	19.9	9.0	71.7	6.0	21.4	24.6	3.1	4.2	5.1	3.9	3.2	5.3	6.2	6.4	10.8	9.6	Diurnal Maximum	
C - Calibration		D - DAS Failure				A - Automated Daily Zero Span																					

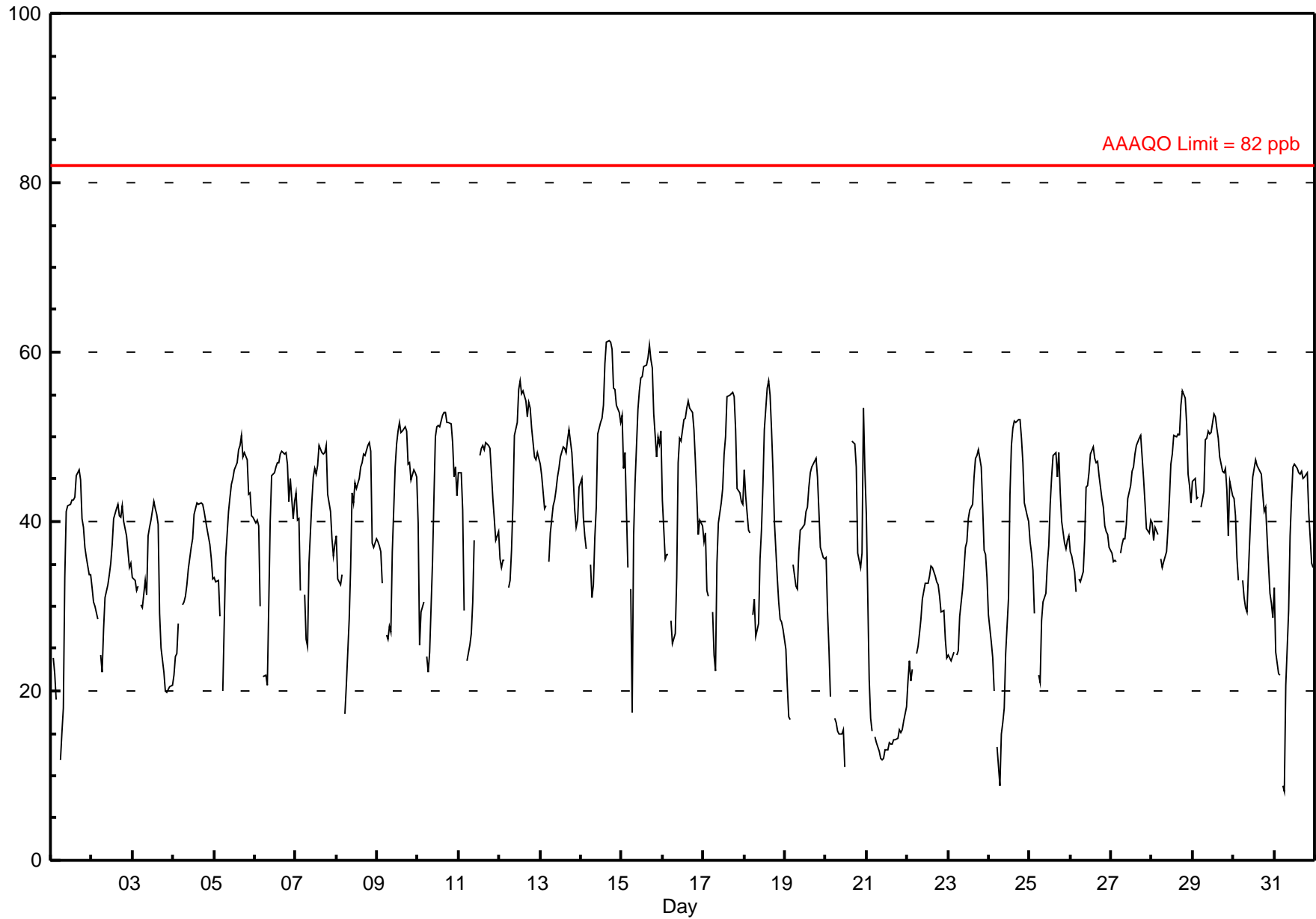


Hourly Averages

Ozone (O₃) - ppb

Beaverlodge - May 2010

Number of Exceedences (AAAQO):		1-hr: 0	24-hr: 0	Hours in Service:		744																				
Maximum Value: 61.4 ppb on May 14 17:00		Maximum Daily Average: 49.6 ppb on May 15		Hours of Data:		707																				
Minimum Value: 8 ppb on May 31 07:00		Minimum Daily Average: 15.8 ppb on May 21		Hours of Missing Data:		37																				
Maximum Diurnal Average: 47.6 ppb at hour 16		Minimum Diurnal Average: 25.8 ppb at hour 7		Hours of Calibration:		36																				
Monthly Average: 38.78 ppb		Percentiles: P ₁ = 11.7 P ₁₀ = 23.5 Q ₁ = 32.5 Median = 40.3 Q ₃ = 46.9 P ₉₀ = 51.0 P ₉₉ = 59.1		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-May	D	24	22	19	A	12	15	18	33	41	42	42	43	43	45	46	45	40	39	37	36	34	34	34	34.2	46.0
2-May	32	30	30	29	A	24	22	27	31	33	34	35	37	40	42	42	41	41	42	40	38	36	35	35	34.6	42.0
3-May	33	33	32	32	A	30	30	33	31	38	39	40	42	42	41	40	29	25	22	20	20	20	21	21	31.1	42.4
4-May	22	24	24	28	A	30	30	31	32	34	37	38	41	41	42	42	42	42	41	40	39	37	36	33	35.2	42.2
5-May	33	33	33	29	A	20	28	36	41	43	44	45	46	47	49	49	50	48	48	47	43	43	41	40	40.7	50.1
6-May	40	40	39	30	A	22	22	21	30	40	45	46	46	47	47	48	48	48	48	47	42	45	40	42	40.2	48.3
7-May	43	40	40	32	A	31	26	25	35	42	45	46	46	47	49	48	48	48	49	43	41	38	36	37	40.8	49.0
8-May	38	33	33	34	A	17	21	28	35	43	42	45	44	45	46	47	48	48	49	49	48	37	37	38	39.4	49.4
9-May	38	37	36	33	A	27	26	28	27	36	46	49	51	52	50	51	51	51	47	47	45	46	46	45	41.9	51.6
10-May	40	25	29	30	A	24	22	25	35	43	50	51	51	51	53	53	53	52	52	51	49	45	46	43	42.4	52.9
11-May	46	46	41	30	A	24	25	27	31	38	C	C	48	49	49	49	49	49	49	46	43	40	38	39	40.6	49.3
12-May	36	35	35	35	A	32	33	37	42	50	52	56	57	55	55	54	52	54	53	51	48	47	48	47	46.3	56.6
13-May	47	45	42	42	A	35	39	42	43	44	45	46	48	49	49	48	50	51	48	45	41	39	40	44	44.4	50.8
14-May	45	41	38	37	A	35	31	33	38	42	50	52	52	54	59	61	61	61	60	56	56	54	53	52	48.7	61.4
15-May	52	46	48	35	A	32	18	38	44	53	55	57	57	58	59	59	61	59	58	53	48	50	49	51	49.6	60.9
16-May	42	36	36	36	A	28	26	27	33	47	50	49	52	52	53	54	53	53	51	47	43	39	40	40	42.9	54.2
17-May	38	39	32	31	A	29	24	22	35	40	42	44	48	50	55	55	55	55	55	51	44	43	42	42	42.2	55.2
18-May	46	43	39	39	A	29	31	26	28	36	39	44	51	56	57	55	51	46	40	33	31	29	28	27	39.3	56.6
19-May	25	21	17	17	A	35	32	32	36	39	40	41	42	44	46	46	47	47	47	45	41	37	36	36	36.6	47.4
20-May	36	29	25	19	A	17	16	15	15	15	11	C	C	C	49	49	49	47	36	35	36	53	46	30.7	53.4	
21-May	41	21	17	15	A	15	14	13	12	12	12	13	13	14	14	14	14	14	15	15	15	16	18	15.8	40.8	
22-May	21	24	21	23	A	24	25	27	28	31	33	33	33	34	35	35	33	33	33	31	29	29	26	24	28.9	34.7
23-May	24	24	24	24	A	24	25	29	32	34	37	38	40	41	42	45	47	48	48	47	42	37	36	33	35.7	48.5
24-May	29	26	24	20	A	13	9	15	16	18	24	31	43	49	51	52	52	52	52	50	47	42	41	40	34.6	52.0
25-May	38	36	34	29	A	22	21	28	31	32	35	37	42	45	48	48	45	48	43	40	37	37	38	38	37.1	48.2
26-May	36	36	34	32	A	33	33	34	38	44	44	46	48	49	48	47	47	45	43	42	40	39	38	37	40.5	48.8
27-May	36	35	35	35	A	36	37	38	38	40	43	44	46	47	48	49	50	50	48	45	42	39	39	40	41.8	50.2
28-May	40	38	39	39	A	36	35	35	36	39	43	47	48	50	50	50	54	55	55	52	46	44	42	42	44.4	55.5
29-May	45	45	43	43	A	42	44	50	50	51	50	53	52	51	50	48	46	46	44	38	45	43	43	43	46.7	52.7
30-May	43	41	36	33	A	33	31	30	29	34	42	45	46	47	47	46	46	43	41	42	38	32	30	29	38.4	47.2
31-May	32	25	22	22	A	9	8	21	30	38	43	46	47	46	46	46	46	45	45	46	41	38	35	35	35.2	46.7
37.3		33.9	32.3	30.0	--	26.5	25.8	28.7	32.8	37.7	40.7	42.2	45.3	46.4	47.3	47.6	47.2	46.8	45.7	43.4	40.6	38.4	38.3	37.8	Diurnal Average	
52.5		46.3	48.1	42.8	--	41.7	43.6	49.6	49.9	53.2	55.4	57.0	57.1	58.2	58.6	61.2	61.4	61.2	60.3	55.8	55.6	53.7	53.4	51.7	Diurnal Maximum	
C - Calibration		D - DAS Failure				A - Automated Daily Zero Span																				
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 82 ppb				24-hr na																				



Hourly Maximums

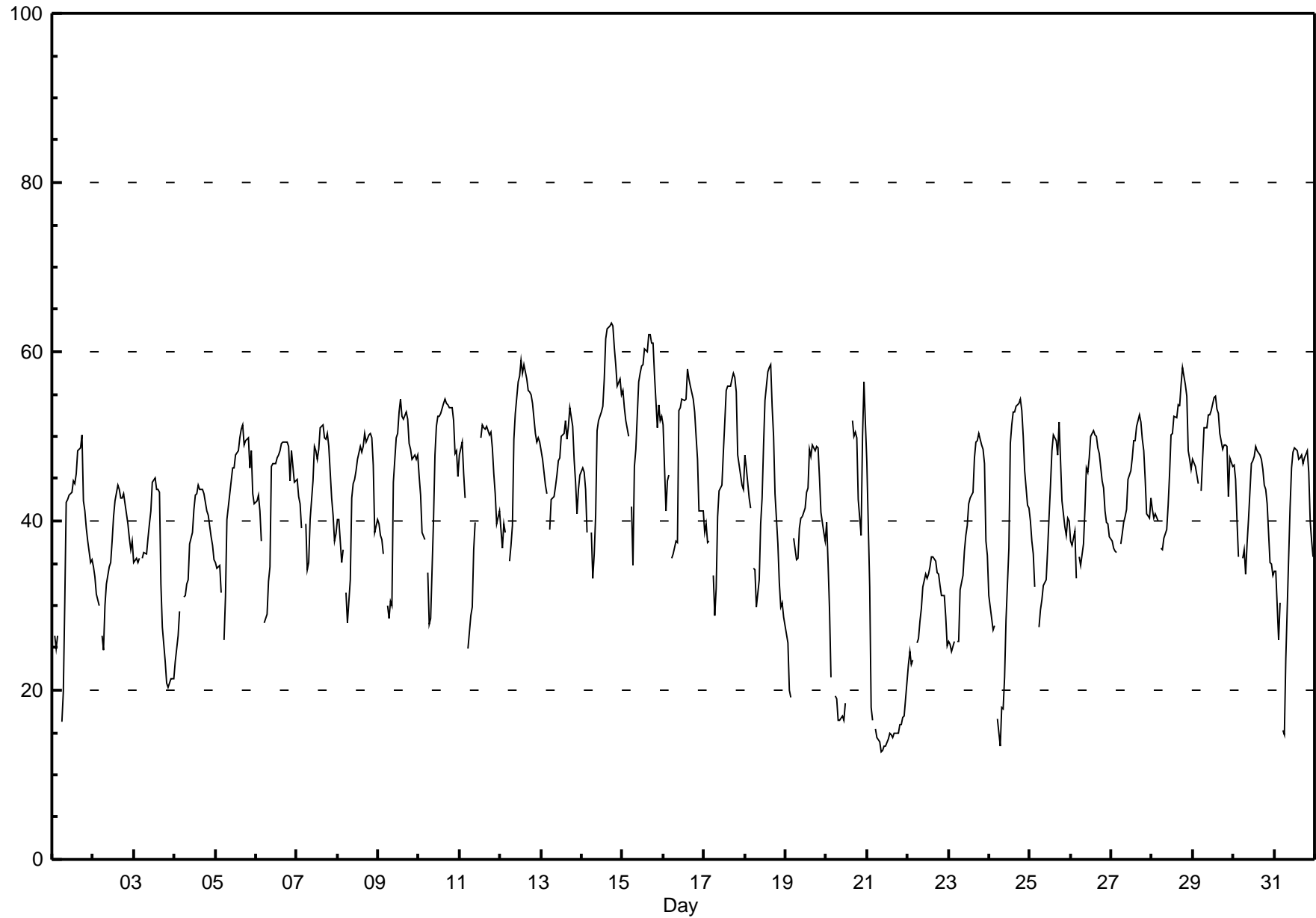
Ozone (O₃) - ppb

Beaverlodge - May 2010

Maximum Value: 63.5 ppb on May 14 18:00		Maximum Daily Average: 54.2 ppb on May 15																			Hours in Service: 744					
Minimum Value: 13 ppb on May 21 09:00		Minimum Daily Average: 17.4 ppb on May 21																			Hours of Data: 707					
Maximum Diurnal Average: 49.7 ppb at hour 16		Minimum Diurnal Average: 30.4 ppb at hour 7																			Hours of Missing Data: 37					
Monthly Average: 41.67 ppb		Percentiles: P ₁ = 14.4 P ₁₀ = 26.4 Q ₁ = 35.6 Median = 43.2 Q ₃ = 49.3 P ₉₀ = 53.5 P ₉₉ = 61.3																			Hours of Calibration: 36					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-May	D	26	25	27	A	16	20	30	42	42	43	43	45	44	46	48	49	50	42	41	39	38	35	35	37.7	50.2
2-May	35	33	31	30	A	26	25	30	33	35	35	38	40	42	44	44	43	43	43	42	40	38	37	38	36.7	44.2
3-May	35	36	35	36	A	36	36	36	38	40	41	45	45	44	44	43	33	27	23	21	20	21	21	21	33.8	45.1
4-May	23	25	26	29	A	31	31	33	33	37	39	41	43	43	44	44	44	43	42	41	41	38	37	35	36.8	44.2
5-May	35	34	35	32	A	26	31	40	43	45	46	46	48	48	50	51	51	49	50	50	46	48	43	42	43.1	51.4
6-May	42	43	41	38	A	28	29	33	35	46	47	47	47	48	48	49	49	49	49	49	45	48	45	45	43.5	49.4
7-May	45	43	42	39	A	40	34	35	40	45	49	48	47	48	51	51	50	50	50	49	43	41	38	38	44.2	51.4
8-May	40	40	35	37	A	32	28	33	43	44	45	46	47	49	48	49	50	49	50	50	50	47	39	40	43.1	50.4
9-May	40	38	38	36	A	30	28	30	30	45	50	50	53	54	52	52	53	52	49	48	47	48	47	48	44.3	54.4
10-May	45	43	39	38	A	34	28	28	40	48	51	52	52	53	54	54	54	54	53	53	52	48	48	45	46.4	54.4
11-May	48	49	46	43	A	25	29	30	37	40	C	C	50	51	51	51	51	50	51	49	46	43	40	41	43.8	51.4
12-May	39	37	40	39	A	35	37	40	50	53	56	57	59	57	58	57	55	55	55	54	50	49	50	49	49.2	59.0
13-May	48	47	44	43	A	39	43	43	44	45	47	47	50	50	52	50	51	53	51	47	45	41	44	46	46.6	53.4
14-May	46	46	44	39	A	39	33	36	41	51	52	53	54	57	62	63	63	63	63	60	59	56	57	55	51.7	63.5
15-May	55	53	52	50	A	42	35	46	49	56	58	58	58	60	60	62	62	61	61	57	51	54	52	52	54.2	62.1
16-May	51	41	45	45	A	36	36	38	38	53	53	54	54	54	58	57	56	54	53	50	47	41	41	41	47.7	58.0
17-May	39	40	37	38	A	34	29	32	41	43	44	48	52	55	56	56	57	57	57	55	48	45	44	44	45.7	57.4
18-May	48	46	43	42	A	34	34	30	33	40	43	49	54	58	58	59	54	50	43	37	33	30	30	29	42.4	58.5
19-May	27	26	20	19	A	38	35	36	39	40	40	41	43	44	48	48	49	48	49	49	45	41	39	38	39.2	49.0
20-May	40	35	30	21	A	19	19	16	16	17	16	18	C	C	C	52	50	50	50	43	38	50	57	52	34.5	56.5
21-May	47	32	18	16	A	15	14	14	13	13	13	13	14	15	15	14	15	15	15	16	16	17	17	21	17.4	46.9
22-May	23	25	23	24	A	26	26	28	30	32	34	33	34	35	36	36	35	34	34	32	31	31	29	25	30.2	35.8
23-May	26	25	25	26	A	26	26	32	34	36	38	39	42	43	43	47	49	49	50	49	48	47	38	36	38.0	50.3
24-May	31	29	27	28	A	17	13	18	18	21	28	37	49	51	53	53	54	54	54	53	50	46	42	42	37.7	54.4
25-May	40	38	36	32	A	27	30	31	32	33	37	41	44	48	50	50	48	52	47	42	39	38	40	40	39.8	51.8
26-May	38	37	39	33	A	36	35	37	41	46	46	47	50	51	50	50	49	48	45	44	41	40	40	38	42.6	50.6
27-May	38	37	36	36	A	37	38	40	40	41	45	46	47	49	49	51	52	52	50	48	45	41	40	43	43.6	52.5
28-May	41	40	41	40	A	37	37	38	39	42	46	50	50	52	52	54	54	56	58	56	55	48	47	46	46.9	58.1
29-May	47	46	45	44	A	44	51	51	51	53	53	55	55	53	53	50	48	49	49	49	49	43	47	46	49.4	54.7
30-May	47	45	40	36	A	36	37	34	37	40	47	47	48	49	48	48	47	46	44	44	42	35	35	34	41.9	48.8
31-May	34	34	26	30	A	15	15	24	36	42	46	48	49	48	47	47	48	47	48	48	46	40	38	36	38.8	48.7
		39.8	37.8	35.6	34.3	--	30.8	30.4	33.0	36.6	40.8	42.9	44.7	47.5	48.6	49.4	49.7	49.2	48.8	47.7	46.1	43.4	41.6	40.5	40.0	Diurnal Average
		55.5	53.5	51.9	50.0	--	43.6	51.0	51.1	51.0	56.4	57.5	58.4	59.0	60.4	61.6	62.8	63.1	63.5	63.1	60.5	58.5	55.9	56.8	55.0	Diurnal Maximum
C - Calibration		D - DAS Failure				A - Automated Daily Zero Span																				

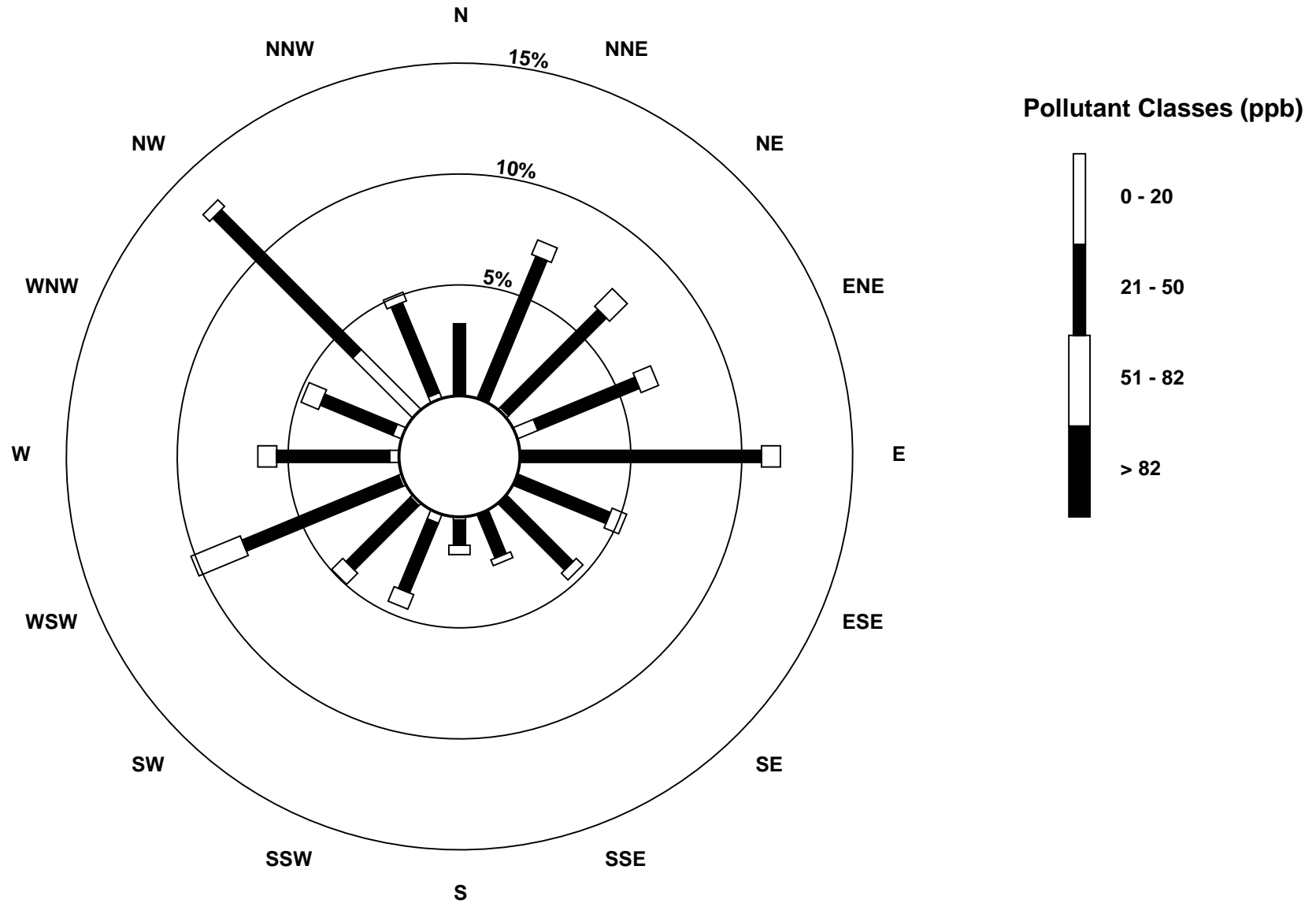
Hourly Maximums

Ozone (O₃) - ppb
Beaverlodge - May 2010



Pollutant Rose

Ozone (O₃) - ppb
Beaverlodge - May 2010



Eight Hour Running Averages

Ozone (O₃) - ppb
Beaverlodge - May 2010

Maximum Value: 58.5 ppb on May 15 19:00																					Hours in Service:	744			
Minimum Value: 12.8 ppb on May 21 15:00																					Hours of Data:	737			
Percentiles: P ₁ = 13.5 P ₁₀ = 25.6 Q ₁ = 32.9 Median = 39.5 Q ₃ = 45.3 P ₉₀ = 49.1 P ₉₉ = 57.6																					Hours of Missing Data:	7			
																					Hours of Calibration:	7			
																					Percent Operational Time:	100.0			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-May	32	29	27	25	24	21	19	18	20	23	26	29	31	35	38	42	43	44	43	43	42	41	40	39	43.6
2-May	37	35	34	33	32	30	29	28	28	28	28	29	30	32	35	37	38	39	40	41	41	40	39	38	40.6
3-May	38	37	35	34	34	33	32	32	32	32	34	35	36	37	38	39	39	37	35	33	30	27	25	22	39.2
4-May	21	21	21	22	23	24	26	27	29	30	32	33	34	36	37	39	40	41	41	41	41	41	40	39	41.5
5-May	38	37	36	34	33	31	30	30	31	33	34	37	38	41	44	45	47	47	48	48	48	47	46	45	47.9
6-May	44	43	42	40	39	36	33	31	29	29	30	32	34	37	40	44	46	47	47	47	47	47	46	45	47.4
7-May	45	44	43	41	41	39	37	34	33	33	34	36	37	39	42	45	46	47	48	47	47	46	44	43	47.6
8-May	41	40	37	36	36	33	30	29	29	30	31	33	34	38	41	43	45	46	46	47	48	47	45	44	47.6
9-May	43	42	40	38	37	35	34	32	30	30	32	34	36	39	42	45	48	50	50	50	49	48	48	47	50.2
10-May	46	43	40	38	37	34	31	28	27	30	33	36	38	41	45	48	51	52	52	52	52	51	50	49	52.0
11-May	48	47	46	43	42	39	36	34	32	31	29	N	32	36	40	44	47	49	49	48	48	47	45	44	48.7
12-May	42	41	39	38	37	36	35	35	36	38	40	43	45	48	50	53	54	54	55	54	53	52	51	50	54.6
13-May	49	48	47	46	46	44	42	42	41	41	41	42	43	44	46	46	47	48	49	48	48	46	45	45	49.5
14-May	44	43	42	41	41	40	39	37	36	36	38	40	42	44	47	51	54	56	58	58	59	58	58	57	58.5
15-May	55	54	52	49	49	45	40	39	37	38	39	43	44	48	53	55	57	58	59	58	57	56	55	54	58.5
16-May	51	48	46	43	43	40	36	33	32	33	35	37	39	42	45	49	51	52	52	52	51	49	47	46	52.3
17-May	44	42	40	38	37	35	33	31	30	31	32	34	36	38	42	46	49	51	52	53	52	52	50	48	53.0
18-May	47	46	44	42	42	40	38	36	34	33	33	33	36	39	42	46	49	50	50	49	46	43	39	36	49.9
19-May	32	29	26	24	23	24	25	25	27	30	33	36	37	38	39	41	42	43	44	45	45	44	43	42	44.9
20-May	41	38	36	32	31	28	25	23	20	17	16	15	15	15	N	N	N	N	N	N	44	43	44	44	44.4
21-May	43	39	36	33	33	30	24	19	15	14	13	13	13	13	13	13	13	14	14	14	14	15	15	15	42.9
22-May	16	17	18	19	20	21	22	24	25	26	27	29	29	30	32	33	33	33	33	33	33	32	31	30	33.4
23-May	29	28	26	26	25	24	24	25	26	27	29	31	32	35	37	39	41	42	44	45	45	44	44	42	45.1
24-May	40	37	34	31	29	26	22	19	18	16	17	18	21	26	31	36	40	44	48	50	51	50	48	47	50.6
25-May	45	43	41	38	37	34	31	30	29	28	28	29	31	34	37	40	41	44	45	45	44	43	42	41	45.2
26-May	40	38	37	36	36	35	35	34	34	35	37	39	40	42	44	45	47	47	47	46	45	44	43	41	46.7
27-May	40	39	38	37	37	36	36	36	36	37	38	39	40	42	43	44	46	47	48	48	47	46	45	44	47.8
28-May	43	41	40	39	39	38	37	37	37	37	39	40	42	44	45	47	49	51	52	52	51	51	50	50	52.0
29-May	49	48	46	45	44	43	43	44	45	46	47	48	49	50	51	51	51	50	49	49	48	46	45	44	50.9
30-May	44	43	42	40	40	39	37	35	33	32	33	35	36	38	40	42	44	45	45	45	44	42	40	38	45.3
31-May	36	34	31	29	27	24	21	20	19	21	24	28	30	35	40	43	45	46	46	46	45	44	43	41	45.9
55.5 53.6 52.1 49.5 48.6 45.5 43.3 44.3 45.1 45.9 47.0 48.0 48.6 50.0 52.8 55.4 57.5 58.2 58.5 58.1 58.5 58.5 57.8 56.6																									
Diurnal Maximums																									
N - Not Valid																									

Hourly Averages

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

Beaverlodge - May 2010

Number of Exceedences: 1-hr: 0 24-hr: 0		Hours in Service: 744																																														
Maximum Value: 37.0 µg/m ³ on May 29 08:00		Hours of Data: 579																																														
Minimum Value: 0 µg/m ³ on May 22 01:00		Hours of Missing Data: 165																																														
Maximum Diurnal Average: 8.6 µg/m ³ at hour 8		Hours of Calibration: 5																																														
Monthly Average: 7.22 µg/m ³		Percent Operational Time: 78.5																																														
Maximum Daily Average: 13.1 µg/m ³ on May 18		Percentages: P ₁ = 1.2 P ₁₀ = 3.2 Q ₁ = 5.3 Median = 7.0 Q ₃ = 8.9 P ₉₀ = 10.7 P ₉₉ = 16.6																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-May	D	11	12	11	11	12	12	10	10	7	5	5	4	4	7	8	6	6	9	9	8	8	7	8	8.3	12.4																						
2-May	8	7	6	6	8	6	6	8	6	7	8	7	8	11	7	6	8	8	7	6	7	7	7	6	7.1	10.9																						
3-May	7	7	5	5	6	7	6	7	7	8	7	8	9	8	8	11	8	8	9	8	7	8	8	7	7.4	10.7																						
4-May	7	6	6	6	7	6	6	7	6	7	7	8	10	11	10	10	9	M	M	M	M	N	N	N	--	10.7																						
5-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
6-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
7-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
8-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
9-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
10-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
11-May	N	N	N	N	N	N	N	C	C	C	C	C	5	3	5	5	4	5	4	5	5	9	8	9	--	9.4																						
12-May	7	8	8	7	8	7	7	7	9	7	6	6	5	7	4	5	3	6	6	7	7	7	6	6	6.6	8.9																						
13-May	7	7	6	5	5	5	6	7	4	3	4	7	5	7	6	6	5	8	6	6	7	8	10	10	6.3	10.1																						
14-May	8	7	7	7	9	10	8	9	8	9	11	8	5	8	7	8	8	7	7	9	10	9	11	10	8.3	11.2																						
15-May	11	12	11	11	12	12	12	12	10	9	8	5	7	6	5	6	7	6	7	7	13	17	12	11	9.5	16.8																						
16-May	11	13	12	10	10	12	11	11	10	9	8	7	9	4	5	5	5	6	6	6	5	6	6	5	8.1	12.7																						
17-May	6	5	5	6	6	7	8	9	8	7	8	6	7	9	10	9	9	10	12	10	11	11	11	9	8.3	11.5																						
18-May	7	8	8	10	12	9	10	10	11	12	16	15	15	16	15	15	17	17	17	22	20	13	12	10	13.1	21.5																						
19-May	11	13	15	15	16	10	5	4	4	1	2	3	2	3	2	4	5	4	5	5	5	5	5	5	6.2	15.8																						
20-May	5	6	6	9	9	8	9	7	7	7	5	6	8	8	4	3	2	5	4	5	3	4	6	4	5.9	9.4																						
21-May	3	3	3	3	4	4	2	1	1	2	3	0	2	2	2	2	1	2	3	2	2	2	2	3	2.3	4.0																						
22-May	0	0	1	1	1	1	2	3	1	2	2	2	2	4	1	2	2	3	2	2	2	3	4	3	1.9	3.6																						
23-May	3	3	4	3	3	2	3	3	6	6	4	4	4	4	4	2	3	2	3	5	4	4	4	6	3.8	6.1																						
24-May	7	7	7	9	8	8	8	9	9	8	8	7	8	5	5	6	7	5	7	7	9	6	5	4	7.0	9.2																						
25-May	6	6	6	5	7	9	8	8	8	9	8	8	9	9	6	6	6	5	7	11	8	8	6	7	7.3	11.0																						
26-May	7	7	7	8	9	8	8	10	7	7	9	11	11	10	9	9	11	10	11	9	9	9	8	8	8.9	11.2																						
27-May	9	10	8	8	9	8	8	10	10	10	12	12	12	12	10	10	9	9	11	7	11	12	9	10	9.7	12.2																						
28-May	9	7	8	6	6	7	7	7	10	10	10	11	9	8	9	6	8	9	7	8	5	5	20	12	8.4	20.3																						
29-May	6	8	8	8	6	5	7	37	22	9	7	5	7	9	9	11	9	9	7	6	6	6	9	10	9.5	37.0																						
30-May	P	6	8	10	8	7	7	8	7	7	7	7	7	7	7	7	6	7	9	5	4	5	6	6	6.8	9.6																						
31-May	5	5	7	8	7	5	3	4	6	8	7	8	7	7	7	6	6	6	7	5	5	6	6	7	6.2	8.1																						
																								6.8	7.1	7.2	7.4	7.8	7.3	7.1	8.6	7.8	7.1	7.1	6.9	7.1	7.3	6.6	6.7	6.6	6.8	7.2	7.2	7.1	7.4	7.8	7.3	Diurnal Average
																								11.0	13.2	14.5	14.6	15.8	12.2	12.4	37.0	22.3	11.7	15.6	14.8	15.0	15.8	15.0	14.8	16.9	16.7	17.4	21.5	19.9	16.8	20.3	12.0	Diurnal Maximum
C - Calibration P - Power Failure D - DAS Failure M - Maintenance N - Not Valid																																																
Alberta Ambient Air Quality Guideline (AAAQG): 1-hr 80 µg/m ³ Alberta Ambient Air Quality Objective (AAAQO): 24-hr 30 µg/m ³																																																

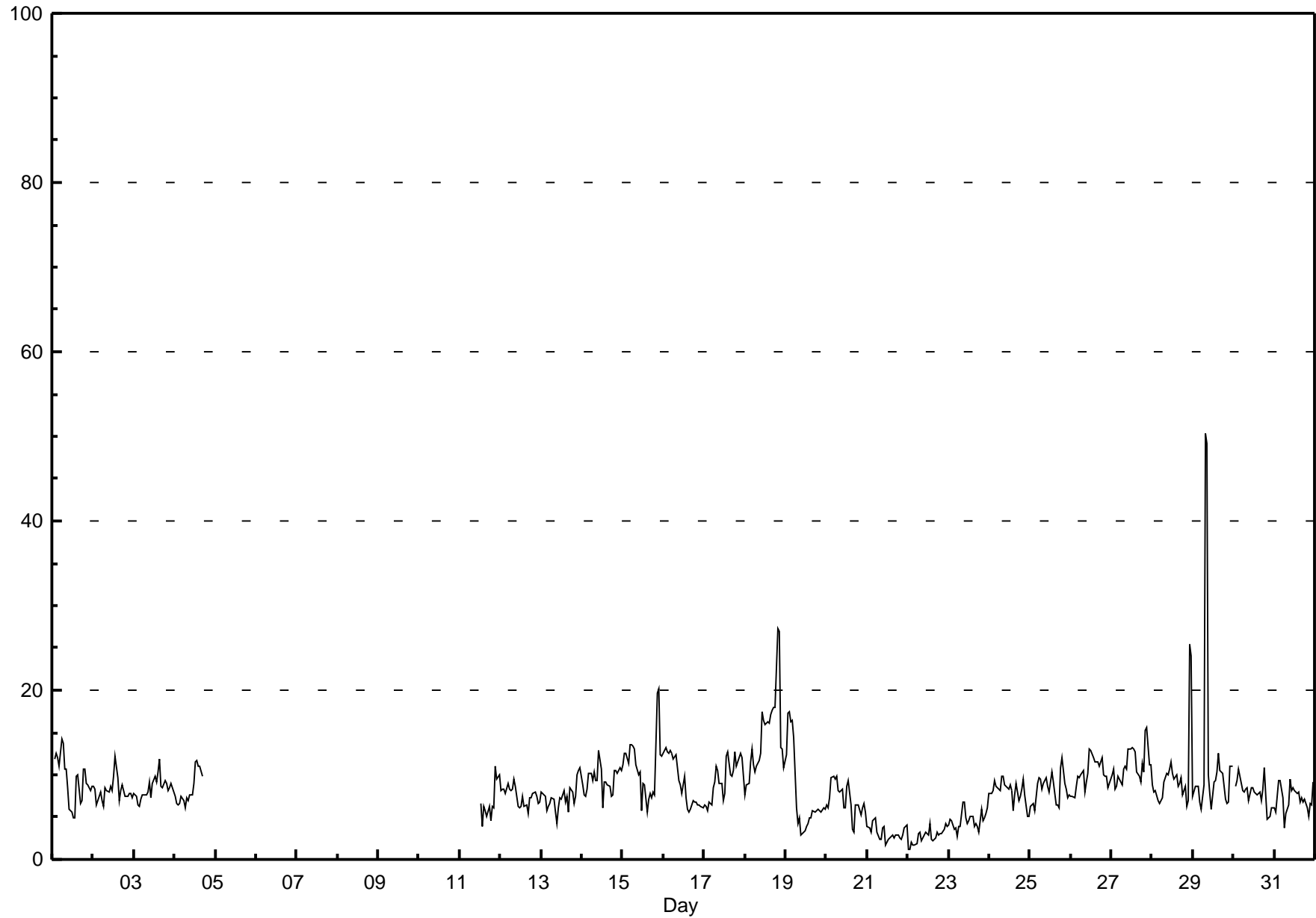


Hourly Maximums

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

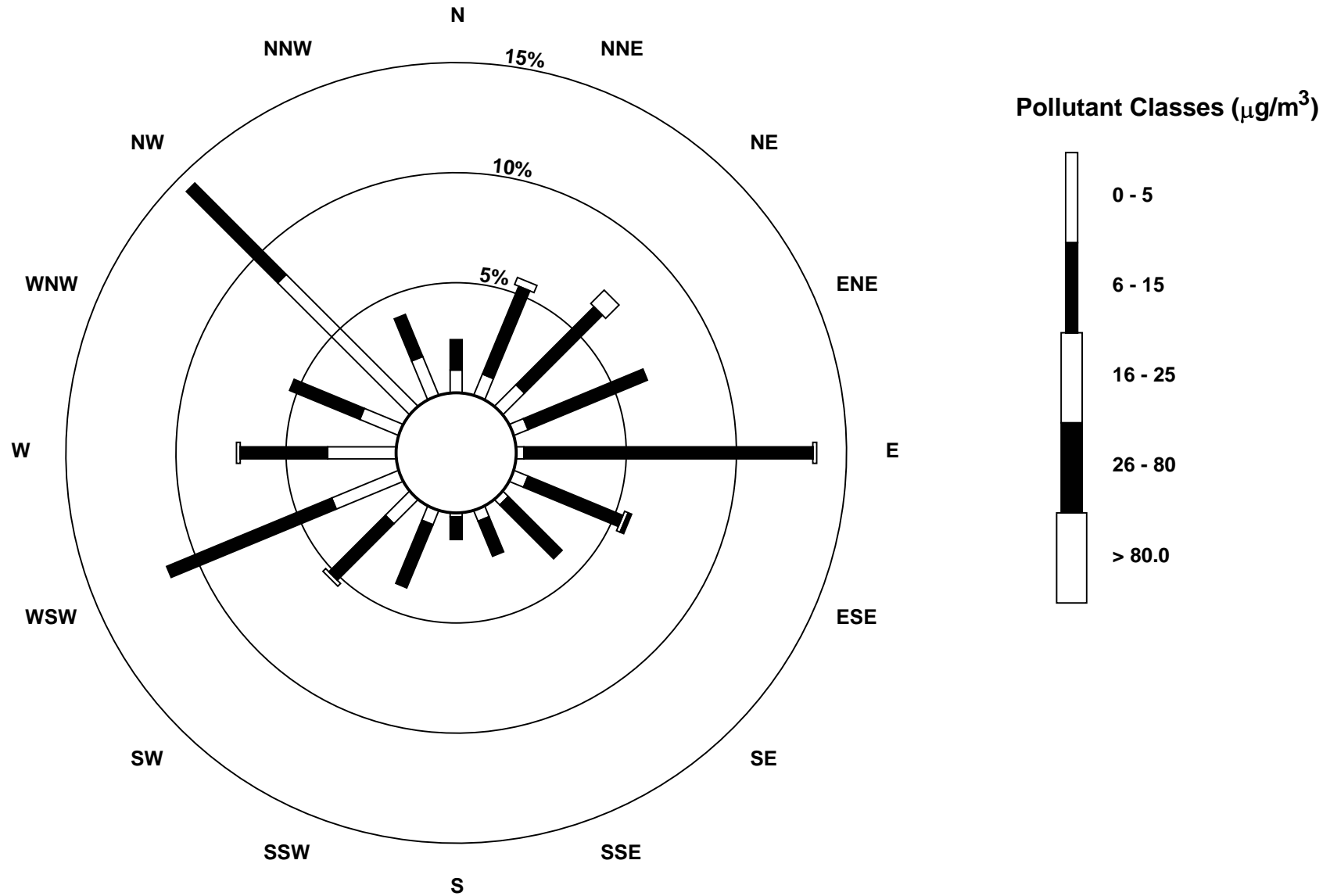
Beaverlodge - May 2010

Maximum Value: 50.3 μg/m ³ on May 29 08:00		Maximum Daily Average: 14.6 μg/m ³ on May 18		Hours in Service: 744																																												
Minimum Value: 1 μg/m ³ on May 22 02:00		Minimum Daily Average: 2.7 μg/m ³ on May 22		Hours of Data: 579																																												
Maximum Diurnal Average: 10.1 μg/m ³ at hour 8		Minimum Diurnal Average: 7.5 μg/m ³ at hour 17		Hours of Missing Data: 165																																												
Monthly Average: 8.41 μg/m ³		Percentiles: P ₁ = 2.0 P ₁₀ = 4.0 Q ₁ = 6.3 Median = 8.1 Q ₃ = 10.0 P ₉₀ = 12.3 P ₉₉ = 23.6		Hours of Calibration: 5																																												
				Percent Operational Time: 78.5																																												
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-May	D	12	13	12	11	14	14	11	11	8	6	6	5	5	10	10	7	7	11	11	9	9	8	9	9.4	14.2																						
2-May	9	8	6	7	8	7	6	9	8	8	9	8	10	12	10	7	8	9	8	7	7	8	8	7	8.1	12.2																						
3-May	8	7	6	6	7	8	8	8	8	9	7	9	10	9	10	12	9	8	9	9	8	8	9	8	8.4	11.9																						
4-May	7	7	6	7	7	7	6	7	7	8	8	9	12	12	11	11	10	M	M	M	M	N	N	N	--	11.7																						
5-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
6-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
7-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
8-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
9-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
10-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--																						
11-May	N	N	N	N	N	N	N	C	C	C	C	C	7	4	6	6	5	6	5	6	6	11	10	10	--	11.1																						
12-May	8	8	8	8	9	8	8	8	9	9	6	6	6	7	6	6	5	7	7	8	8	8	7	7	7.5	9.5																						
13-May	8	8	8	6	6	7	7	7	6	4	6	7	7	8	7	7	6	8	8	7	8	10	10	11	7.4	10.8																						
14-May	9	8	7	8	10	10	9	10	9	9	13	11	6	9	9	9	9	7	8	11	10	10	11	10	9.3	12.8																						
15-May	11	13	12	11	14	13	13	13	11	10	10	6	9	9	6	7	8	7	8	8	20	20	12	12	11.0	20.1																						
16-May	13	13	13	13	13	13	12	12	11	9	9	8	10	7	6	6	6	7	7	7	6	6	6	6	9.1	13.3																						
17-May	6	6	6	7	6	8	9	11	11	9	9	7	8	12	13	10	10	11	13	11	11	12	12	10	9.5	12.7																						
18-May	8	9	9	12	13	11	10	11	12	12	17	16	16	16	16	17	18	18	18	27	27	13	13	11	14.6	27.2																						
19-May	12	17	17	16	16	14	6	4	5	3	3	3	4	4	5	5	6	6	6	6	6	6	6	6	7.6	17.4																						
20-May	6	6	7	10	10	10	10	8	8	8	6	6	9	9	6	4	3	6	6	6	5	6	7	6	7.0	9.8																						
21-May	4	4	3	5	5	5	3	2	2	4	4	2	2	3	3	3	3	3	3	2	2	3	4	4	3.2	4.9																						
22-May	1	1	2	2	2	2	3	3	2	3	3	3	3	4	2	2	2	3	3	3	3	4	4	4	2.7	4.3																						
23-May	4	5	5	4	4	3	4	4	7	7	5	4	5	5	5	4	4	4	3	6	5	5	5	6	4.6	6.8																						
24-May	8	8	8	9	9	9	8	10	10	9	9	8	9	8	6	8	9	7	7	8	10	8	5	5	8.1	9.9																						
25-May	6	6	7	6	9	10	10	8	9	10	9	8	9	10	9	6	7	6	11	12	9	8	7	8	8.3	12.0																						
26-May	7	7	7	9	10	10	10	11	8	9	10	13	13	12	12	12	11	11	12	10	10	10	9	9	10.0	13.1																						
27-May	10	11	8	9	10	9	9	11	11	11	13	13	13	13	13	10	10	9	11	10	15	16	11	11	11.1	15.5																						
28-May	9	8	8	7	7	7	7	9	10	10	11	11	10	10	10	9	9	10	8	9	6	7	25	24	10.0	25.5																						
29-May	7	9	9	9	7	6	9	50	49	10	8	6	9	9	10	13	11	10	9	7	7	7	11	11	12.2	50.3																						
30-May	P	9	9	11	9	8	8	8	8	7	8	8	8	8	8	8	7	8	11	8	5	5	6	6	7.9	10.8																						
31-May	6	6	9	9	8	7	4	5	7	10	8	8	8	8	8	7	7	7	7	6	5	7	7	9	7.2	9.5																						
																								7.7	8.1	8.1	8.3	8.7	8.5	8.1	10.1	9.9	8.1	8.2	7.8	8.3	8.6	8.3	7.9	7.5	7.8	8.2	8.5	8.7	8.6	8.9	8.7	Diurnal Average
																								12.6	17.3	17.4	16.3	16.4	14.3	13.8	50.3	49.2	12.5	17.5	16.4	15.9	16.3	16.1	17.1	17.7	17.9	17.9	27.2	26.9	20.1	25.5	24.0	Diurnal Maximum
C - Calibration		P - Power Failure			D - DAS Failure			M - Maintenance			N - Not Valid																																					



Pollutant Rose

Particulate Matter 2.5 (PM_{2.5}) - μg/m³
Beaverlodge - May 2010

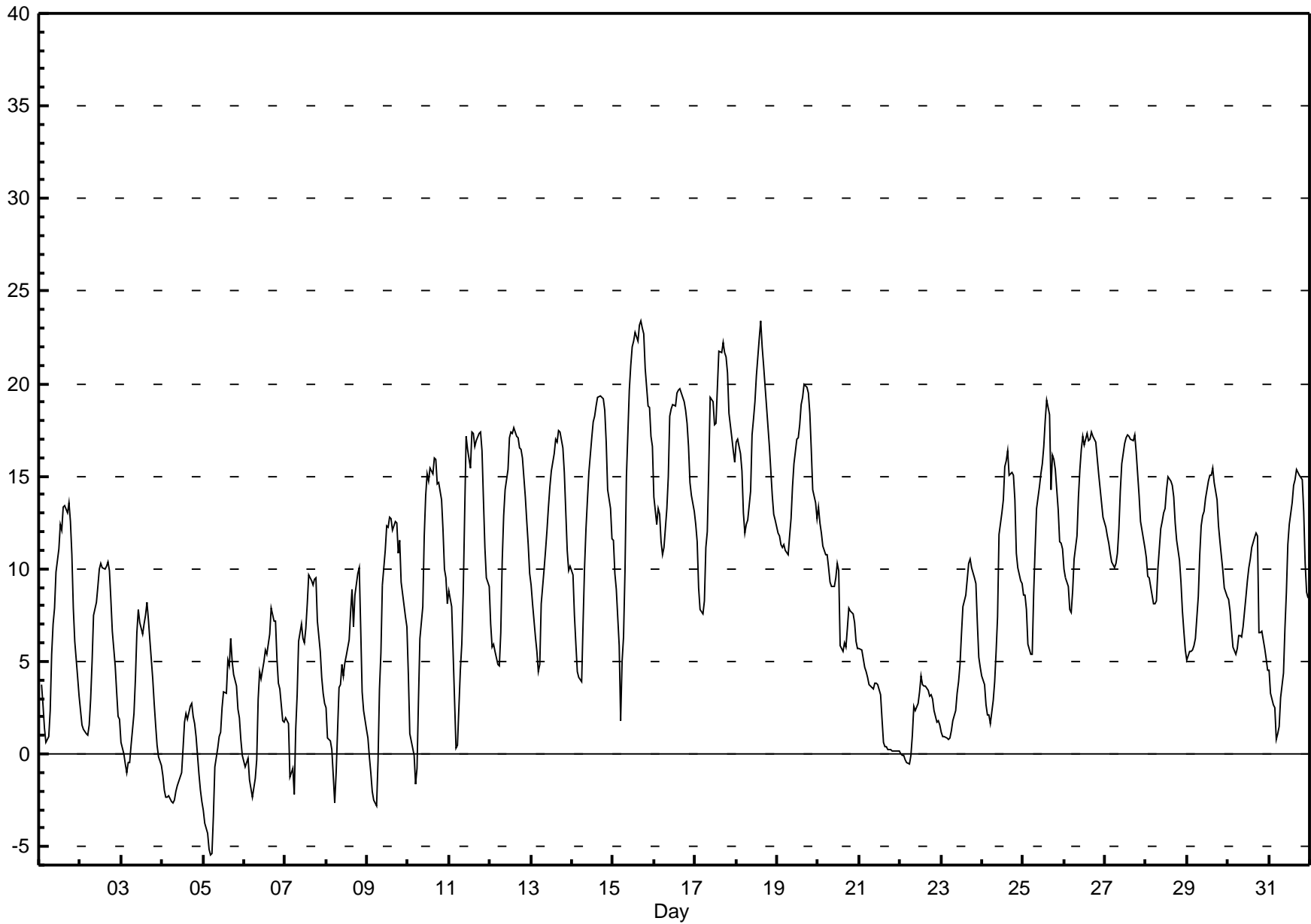


Hourly Averages

External Temperature (ET) - °C

Beaverlodge - May 2010

Number of Exceedences (AAQO):		1-hr: 0		24-hr: 0		Hours in Service:		744																			
Maximum Value: 23.4 °C on May 15 17:00		Maximum Daily Average: 16.8 °C on May 18		Hours of Data:		743		Hours of Missing Data:		1																	
Minimum Value: -5 °C on May 5 05:00		Minimum Daily Average: -0.6 °C on May 4		Hours of Calibration:		0		Percent Operational Time:		99.9																	
Maximum Diurnal Average: 13.3 °C at hour 16		Minimum Diurnal Average: 3.4 °C at hour 5		Percentiles: P ₁ = -2.8 P ₁₀ = 0.5 Q ₁ = 3.8 Median = 9.1 Q ₃ = 13.9 P ₉₀ = 17.3 P ₉₉ = 22.2																							
Monthly Average: 8.97 °C																											
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-May	D	4	3	1	1	1	2	5	7	8	10	11	12	12	13	13	13	14	13	11	8	6	4	3	7.6	13.5	
2-May	2	2	1	1	1	2	3	5	7	8	9	10	10	10	10	10	10	10	8	7	5	3	2	2	5.8	10.4	
3-May	1	0	-1	-1	-1	0	0	2	4	7	8	7	6	7	8	8	7	6	4	3	2	1	0	-1	3.2	8.2	
4-May	-1	-2	-2	-2	-2	-3	-3	-3	-2	-2	-1	-1	0	2	2	2	3	3	2	2	1	-1	-2	-3	-0.6	2.8	
5-May	-3	-4	-4	-5	-5	-5	-3	-1	0	1	1	3	3	3	5	5	6	5	4	4	2	2	1	0	0.6	6.2	
6-May	-1	0	0	-1	-2	-2	-1	0	3	4	4	5	6	5	6	6	8	7	7	5	4	3	2	2	2.9	7.9	
7-May	2	2	2	-1	-1	-2	1	3	6	7	6	6	7	8	10	9	9	9	10	7	6	4	3	3	4.8	9.6	
8-May	2	1	1	0	-1	-3	-1	4	4	5	4	5	6	8	9	7	9	10	10	7	3	2	1		4.1	10.1	
9-May	1	0	-1	-2	-3	-3	0	3	5	9	11	12	12	13	13	12	13	12	11	12	9	8	7	7	6.8	12.8	
10-May	4	1	1	0	-2	-1	3	6	8	12	14	15	15	15	15	16	16	15	15	14	12	10	10	8	9.2	16.0	
11-May	9	8	5	3	0	0	5	6	9	13	17	16	15	17	17	17	17	17	17	16	14	11	10	9	11.3	17.4	
12-May	7	6	6	6	5	5	7	10	13	14	15	17	17	17	18	17	17	17	16	16	14	13	11	10	12.2	17.7	
13-May	9	8	6	6	4	5	8	10	11	12	13	14	15	16	17	17	18	17	17	15	13	11	10	10	11.8	17.5	
14-May	10	7	6	4	4	4	7	10	12	14	15	17	18	18	19	19	19	19	19	19	17	14	13	12	13.2	19.3	
15-May	12	10	9	6	2	5	6	10	15	20	21	22	22	23	22	23	23	23	23	21	19	19	17	17	16.2	23.4	
16-May	14	12	13	13	11	11	11	13	15	18	19	19	19	20	20	20	19	19	19	18	17	15	14	13	15.9	19.7	
17-May	12	11	9	8	8	8	11	12	15	19	19	18	18	20	22	22	22	22	21	21	18	17	16	16	16.1	22.2	
18-May	17	17	16	15	13	12	12	13	14	17	18	19	20	22	23	22	21	20	19	17	15	14	13	13	16.8	23.4	
19-May	12	12	11	11	11	11	11	12	13	14	16	17	17	18	19	19	20	20	19	18	16	14	14	13	14.9	20.0	
20-May	13	12	12	11	11	11	10	9	9	9	10	10	10	6	6	6	6	7	8	8	8	7	6	6	8.7	13.3	
21-May	6	6	5	5	4	4	4	4	3	4	4	4	3	2	1	0	0	0	0	0	0	0	0	0	2.5	5.7	
22-May	0	0	0	0	0	-1	0	1	3	2	3	3	4	4	4	4	3	3	3	3	2	2	2	2	1.9	4.2	
23-May	1	1	1	1	1	1	1	2	2	3	4	5	6	8	9	9	10	10	10	10	9	7	5	5	5.1	10.5	
24-May	4	4	3	2	2	2	3	4	6	7	12	13	14	16	16	16	15	15	15	14	11	10	9	9	9.2	16.4	
25-May	9	9	8	6	5	5	9	11	13	14	15	16	17	18	19	18	14	16	16	15	13	11	11	11	12.5	19.1	
26-May	10	10	9	8	8	9	11	12	14	15	16	17	17	17	17	17	17	17	17	16	15	14	14	13	13.7	17.4	
27-May	12	12	11	11	10	10	10	11	12	14	16	17	17	17	17	17	17	17	17	16	15	14	13	12	11	13.7	17.3
28-May	11	10	9	9	8	8	8	10	12	13	13	13	14	15	15	15	14	12	12	10	9	8	7	6	10.8	15.0	
29-May	5	6	6	6	6	6	9	11	12	13	13	14	15	15	15	15	15	14	12	11	11	10	9	9	10.7	15.5	
30-May	8	8	7	6	5	6	6	6	6	7	8	9	10	11	11	12	12	12	7	7	7	6	5	5	7.7	12.0	
31-May	4	3	3	3	1	1	1	3	4	7	9	11	12	14	14	15	15	15	15	15	13	10	9	8	8.6	15.4	
		6.4	5.6	5.0	4.1	3.4	3.4	4.9	6.6	8.3	10.0	11.0	11.8	12.2	12.7	13.2	13.3	13.2	13.0	12.4	11.5	10.0	8.6	7.6	7.0	Diurnal Average	
		16.9	17.0	16.2	15.3	13.0	11.9	12.4	13.2	15.4	19.7	21.0	22.0	22.3	22.8	23.4	23.2	23.4	23.0	22.7	20.8	18.8	18.7	17.1	16.6	Diurnal Maximum	
D - DAS Failure																											



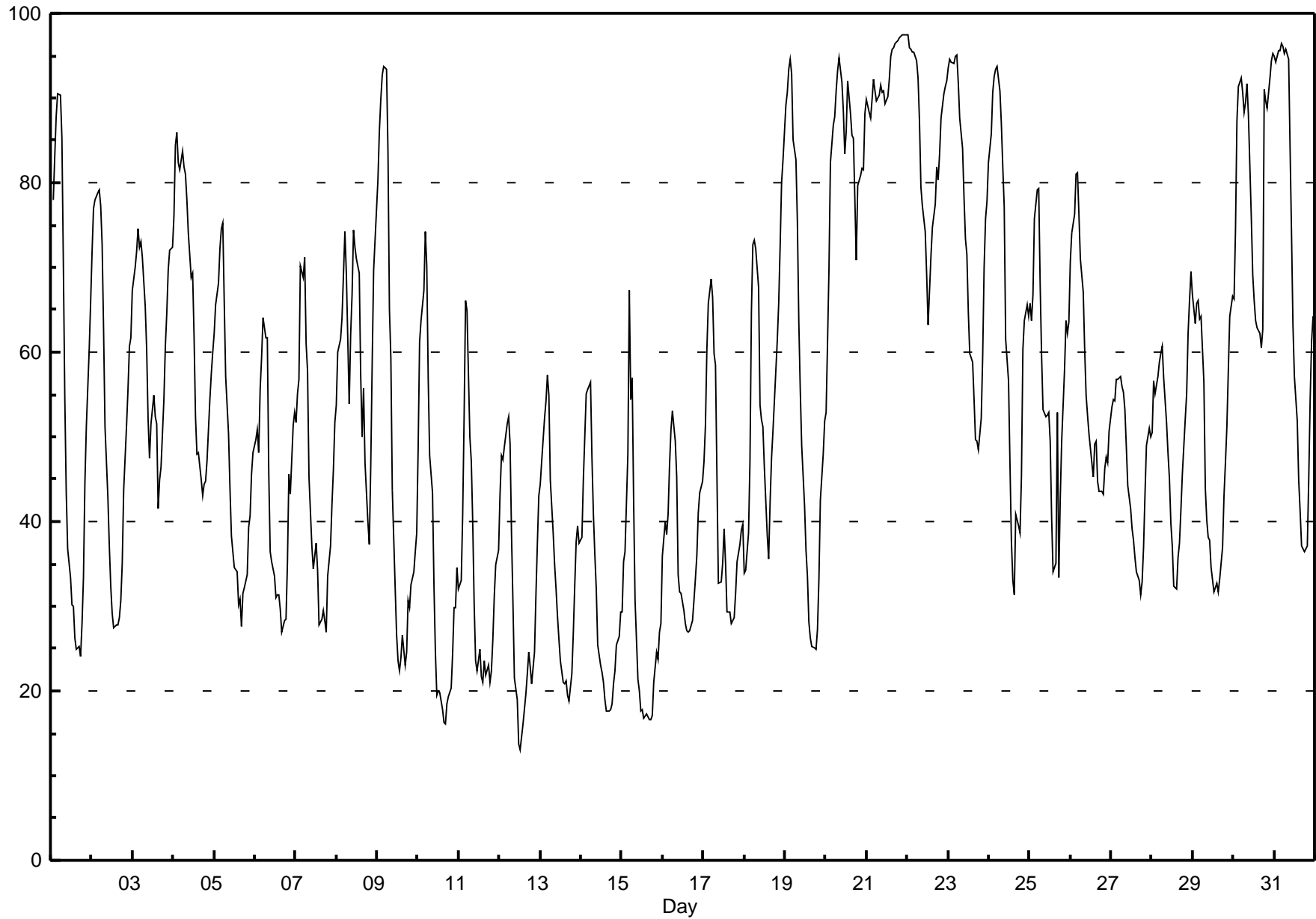


Hourly Averages

Relative Humidity (RH) - %

Beaverlodge - May 2010

Number of Exceedences (AAQO): 1-hr: 0 24-hr: 0 Maximum Value: 97.4 % on May 21 23:00 Maximum Daily Average: 92.9 % on May 21																		Hours in Service: 744 Hours of Data: 743									
Minimum Value: 13 % on May 12 13:00 Minimum Daily Average: 29.3 % on May 15 Maximum Diurnal Average: 75.0 % at hour 5 Minimum Diurnal Average: 38.0 % at hour 16 Monthly Average: 53.87 % Percentiles: P ₁ = 16.6 P ₁₀ = 25.3 Q ₁ = 34.9 Median = 51.4 Q ₃ = 71.1 P ₉₀ = 89.7 P ₉₉ = 96.5																		Hours of Missing Data: 1 Hours of Calibration: 0 Percent Operational Time: 99.9									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-May	D	78	83	88	91	90	85	70	55	44	37	33	30	30	26	25	24	28	33	45	51	60	66	52.1	90.6		
2-May	72	77	78	79	79	77	73	63	51	43	37	32	29	28	28	28	29	31	35	44	51	56	61	62	51.7	79.2	
3-May	67	70	72	75	72	73	71	65	60	52	47	52	55	52	51	41	45	46	54	61	65	70	72	72	60.9	74.5	
4-May	76	84	86	82	81	84	82	81	78	74	69	69	62	52	48	48	45	43	44	45	47	54	58	60	64.7	85.9	
5-May	62	66	68	72	75	75	66	57	50	44	38	36	35	34	30	31	28	31	32	34	39	41	46	48	47.4	75.3	
6-May	50	51	48	56	59	64	62	62	46	36	35	34	31	31	31	30	27	28	28	35	46	43	51	53	43.2	64.0	
7-May	52	55	57	70	69	71	61	58	45	37	34	36	37	34	28	29	29	28	27	34	37	42	46	52	44.5	71.3	
8-May	54	60	62	64	69	74	69	54	62	67	74	72	71	69	57	50	56	47	40	37	47	59	70	77	60.9	76.8	
9-May	80	86	90	93	94	93	84	65	59	44	32	27	24	22	24	27	23	25	31	30	33	34	36	39	49.7	93.8	
10-May	49	61	64	67	74	70	57	48	43	32	25	19	20	20	18	16	16	19	19	20	24	30	30	35	36.5	74.3	
11-May	32	33	41	52	66	65	50	47	40	30	24	22	25	22	21	23	22	23	21	22	26	31	35	37	33.8	66.1	
12-May	43	48	47	49	52	52	49	39	30	22	19	14	13	15	16	20	22	25	23	21	25	31	37	43	31.4	52.4	
13-May	44	47	52	54	57	55	45	39	35	32	29	26	24	21	21	21	20	19	22	27	32	38	39	38	34.8	57.2	
14-May	38	45	50	55	56	56	47	41	36	32	25	23	22	21	19	18	18	18	18	21	22	25	26	29	31.8	56.4	
15-May	29	35	37	48	67	54	57	42	31	21	20	18	18	17	17	17	17	17	17	21	25	24	27	28	29.3	67.2	
16-May	36	40	38	41	47	51	53	50	45	34	32	31	29	28	27	27	27	28	31	33	36	41	43	45	37.2	53.1	
17-May	47	51	60	66	69	66	60	58	45	33	33	35	39	35	29	29	28	28	29	32	35	37	39	40	42.7	68.6	
18-May	34	34	39	47	65	73	73	72	68	54	52	51	46	39	36	42	48	51	54	61	66	73	80	83	55.8	82.7	
19-May	89	91	93	95	93	85	83	75	64	56	49	42	37	34	28	26	25	25	27	33	43	48	52	54	54.9	94.6	
20-May	53	61	70	82	87	88	91	93	95	92	88	83	86	92	88	86	85	78	71	80	81	82	81	88	82.5	94.8	
21-May	90	88	88	90	92	91	90	90	92	91	91	89	90	92	95	96	96	97	97	97	97	97	97	97	97	92.9	97.4
22-May	97	96	96	95	95	94	92	87	79	77	74	69	63	67	71	75	77	82	80	83	88	90	91	92	84.0	97.4	
23-May	93	95	94	94	95	95	92	88	84	78	73	72	65	60	59	54	50	50	49	52	60	70	76	78	73.9	95.1	
24-May	82	86	91	93	93	94	91	87	82	77	62	57	47	38	33	31	41	39	39	45	60	64	66	64	65.0	93.7	
25-May	66	64	67	76	79	79	68	60	53	52	52	53	50	40	34	35	53	33	43	49	58	64	62	64	56.4	79.3	
26-May	71	74	76	81	81	76	71	67	60	55	53	50	49	45	49	50	45	44	44	43	46	48	47	51	57.3	81.1	
27-May	54	54	54	57	57	57	56	55	53	49	44	41	39	38	36	34	33	31	33	37	43	49	51	50	46.1	57.1	
28-May	51	57	55	57	59	60	61	57	52	48	45	40	37	32	32	32	36	37	41	46	52	55	62	70	50.3	69.5	
29-May	67	63	66	66	64	64	56	44	40	38	38	35	32	32	33	32	33	37	43	47	51	58	64	67	48.7	66.9	
30-May	66	74	87	91	92	91	88	90	92	88	76	69	66	64	63	62	60	63	91	90	89	92	94	95	80.6	95.3	
31-May	95	94	96	96	96	96	95	96	95	84	74	63	57	52	45	41	37	37	36	37	45	55	61	64	68.7	96.4	
61.3 65.1 67.9 72.0 75.0 74.7 70.3 64.5 58.7 52.1 47.8 45.0 42.8 40.5 38.5 38.0 38.6 38.3 40.3 43.6 48.6 53.3 56.9 59.2 97.4 95.9 95.8 95.6 96.4 96.0 95.3 95.8 94.8 91.8 90.8 89.3 90.1 92.2 94.9 95.8 96.0 96.5 96.8 97.1 97.2 97.4 97.4 97.4																								Diurnal Average Diurnal Maximum			
D - DAS Failure																											



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - May 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	D	5	1	3	4	1	4	1	12	17	17	18	18	19	22	22	20	25	29	24	21	18	11	6	13.1	28.6
Dir	D	155	217	271	37	315	275	240	266	264	257	254	256	263	250	250	261	253	255	245	239	247	243	234	253	255
2 Spd	8	7	9	7	5	3	3	10	21	35	41	42	44	40	38	37	36	36	36	34	24	17	8	6	22.1	43.8
Dir	229	217	211	213	201	183	151	200	217	242	249	249	254	244	252	245	243	245	248	242	240	238	239	206	241	254
3 Spd	3	0	2	2	1	2	3	9	10	9	9	17	18	13	13	16	20	25	25	24	23	22	24	23	11.8	24.8
Dir	171	299	239	19	343	342	18	323	327	12	27	19	15	359	319	339	336	324	322	320	317	324	328	334	336	322
4 Spd	22	18	16	16	17	16	16	15	17	18	21	21	19	17	17	16	13	12	13	13	12	11	9	7	15.3	22.0
Dir	325	311	312	315	315	314	318	318	318	313	313	313	323	323	314	327	321	317	311	315	330	347	345	320	319	325
5 Spd	9	11	12	10	11	10	5	9	12	10	6	10	7	8	5	7	5	12	6	4	5	6	9	9	5.6	12.5
Dir	318	317	321	328	329	332	1	17	15	21	350	334	352	6	75	52	77	113	125	142	88	22	8	23	6	113
6 Spd	9	9	9	7	6	2	7	1	1	4	3	2	3	8	5	4	3	6	4	5	8	3	7	9	3.2	9.4
Dir	29	20	18	17	353	343	340	222	191	204	98	283	349	350	262	348	143	127	124	8	33	21	36	29	18	18
7 Spd	9	10	11	5	6	3	1	4	2	4	7	6	8	12	5	13	13	10	9	11	10	12	11	11	6.7	12.9
Dir	26	25	23	45	307	50	52	285	270	152	126	64	20	44	75	45	50	34	78	44	27	26	34	50	40	45
8 Spd	9	4	2	3	1	2	4	3	7	10	17	12	13	14	11	8	3	5	3	2	2	5	7	5	4.0	17.0
Dir	71	241	341	355	33	192	304	207	185	153	124	110	110	120	126	139	132	298	176	63	348	89	93	95	120	124
9 Spd	5	2	3	4	1	4	3	3	4	4	4	4	9	8	18	21	7	13	17	5	4	7	7	9	3.1	21.3
Dir	90	96	66	58	70	48	54	186	195	160	203	276	265	247	228	206	251	339	232	193	208	301	327	324	244	206
10 Spd	7	1	4	2	1	1	1	1	4	3	3	2	3	5	7	8	9	8	6	4	7	9	6	7	1.5	8.8
Dir	7	16	315	44	77	200	150	132	252	239	246	304	23	336	213	269	239	272	304	337	17	30	63	82	321	239
11 Spd	7	2	5	1	3	4	1	2	6	5	2	5	9	14	23	27	19	13	15	14	12	10	2	4	6.5	26.8
Dir	74	128	57	228	71	52	70	184	212	218	260	299	232	229	228	239	241	233	239	233	240	243	221	215	233	239
12 Spd	2	3	2	3	4	2	12	13	24	28	29	37	40	38	38	42	37	35	32	31	24	26	26	18	21.5	42.2
Dir	140	121	133	141	140	127	223	227	237	240	240	253	258	249	257	254	246	256	247	261	259	256	261	264	249	254
13 Spd	6	7	4	8	6	2	11	22	21	19	14	10	10	14	20	26	19	22	21	19	15	13	7	10	13.2	25.7
Dir	294	269	248	253	257	274	266	271	281	280	268	290	254	265	250	237	275	270	269	256	248	245	240	273	264	237
14 Spd	7	1	3	3	3	4	2	2	3	5	10	4	5	6	4	7	8	5	3	5	8	10	7	2	2.1	9.9
Dir	291	258	154	71	54	63	115	138	222	267	274	273	222	303	288	284	290	300	313	35	25	33	29	232	315	33
15 Spd	3	4	6	3	5	4	3	3	2	1	5	4	6	8	7	6	5	15	12	11	10	4	7	9	2.3	14.7
Dir	251	321	35	226	23	24	236	224	197	100	168	183	183	208	206	123	181	120	128	97	97	217	45	26	131	120
16 Spd	1	11	10	3	4	3	4	5	8	8	17	22	25	28	25	20	19	22	21	13	17	10	8	9	10.8	28.5
Dir	331	325	6	350	327	251	24	275	289	291	259	278	247	254	248	246	229	227	233	249	268	282	304	319	263	254
17 Spd	10	9	5	1	2	3	2	4	2	3	7	8	6	8	6	4	11	9	8	10	11	13	15	17	3.9	16.7
Dir	322	321	213	103	50	14	41	212	294	88	120	156	197	87	79	199	80	58	59	51	37	41	29	34	54	34
18 Spd	20	23	5	9	12	19	13	7	8	9	14	11	9	6	10	16	21	23	26	15	16	13	18	17	13.6	25.9
Dir	46	55	352	19	43	26	25	8	352	57	43	30	55	50	43	40	37	38	48	27	12	22	23	35	35	48
19 Spd	9	5	7	8	14	20	19	18	27	31	29	25	24	21	14	11	5	8	7	7	6	10	13	12	10.8	30.7
Dir	347	299	308	259	264	257	266	263	256	259	259	267	263	277	274	282	317	320	340	24	20	31	38	35	280	259
20 Spd	16	4	6	17	18	15	17	13	15	15	19	17	8	25	19	19	21	23	15	4	4	9	21	14	7.7	24.8
Dir	61	153	29	58	63	75	60	68	69	59	56	61	101	278	295	305	342	3	5	262	317	304	295	296	15	278
21 Spd	11	10	12	15	15	15	17	20	20	22	22	24	23	21	19	18	18	18	17	15	15	13	12	11	16.7	23.8
Dir	296	319	317	314	312	312	316	306	301	305	307	309	313	318	311	304	306	306	310	312	307	313	311	341	310	309
22 Spd	13	14	10	9	10	9	11	10	10	12	11	10	12	10	11	8	10	7	10	8	9	9	7	8	9.6	13.7
Dir	4	357	338	335	329	323	321	314	324	317	314	334	341	336	312	339	315	320	306	312	309	325	313	320	327	357

Hourly Averages

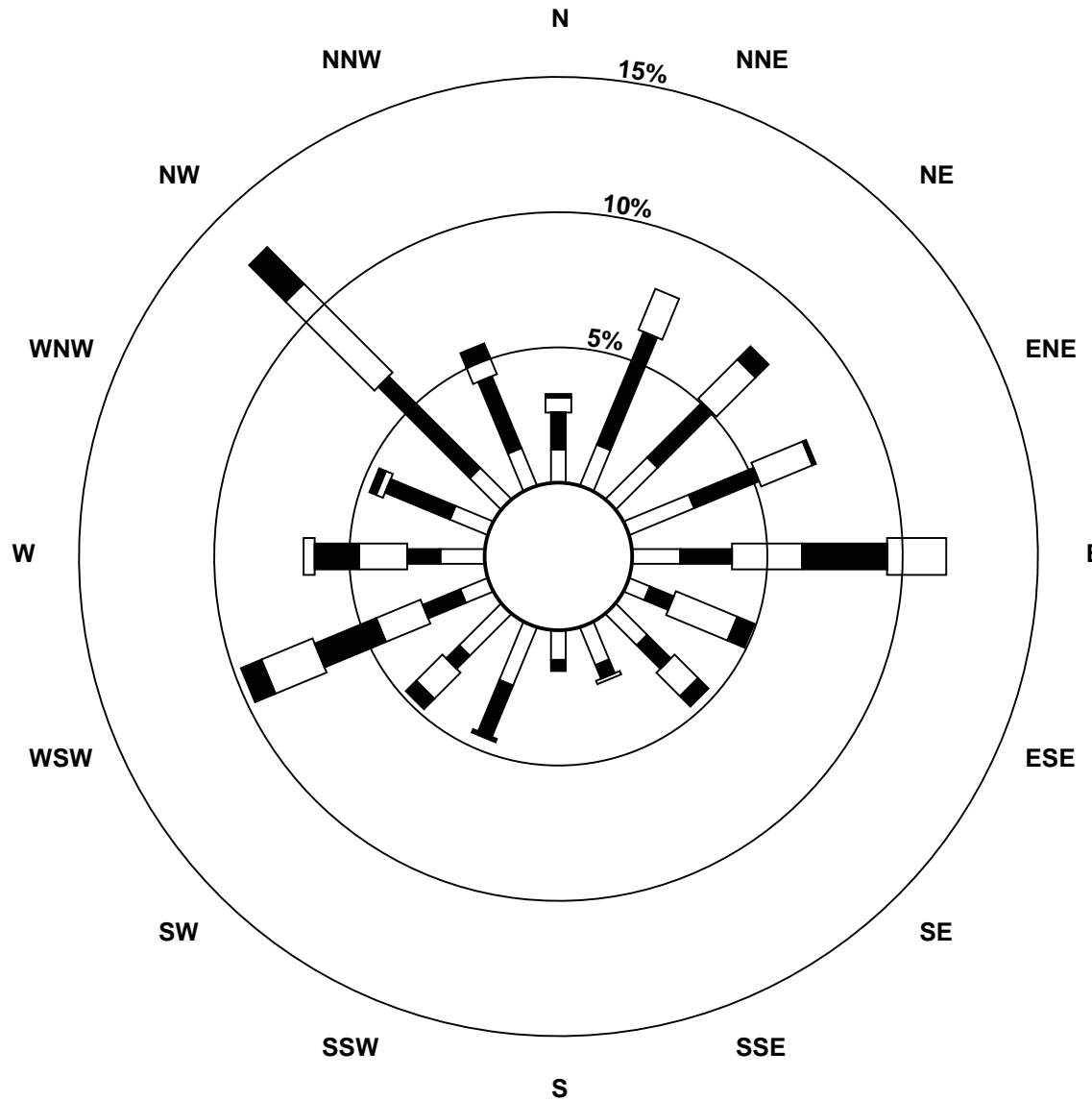
Wind Speed (km/h)
Wind Direction (deg)
Beaverlodge - May 2010

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	8	7	5	6	8	7	6	7	9	10	8	8	8	5	5	6	4	2	3	2	2	5	8	6	4.2	9.6
Dir	311	310	303	284	268	293	332	326	306	303	302	296	298	30	51	307	321	229	262	1	108	67	48	46	317	303
24 Spd	3	1	1	4	6	1	1	4	1	2	2	2	2	4	5	4	13	13	13	14	10	12	16	19	4.9	18.8
Dir	101	152	6	322	336	301	290	182	305	200	111	36	71	100	64	58	36	61	65	77	34	27	47	53	51	53
25 Spd	14	9	8	3	4	3	1	3	3	3	9	12	17	16	15	20	26	13	5	17	11	10	10	10	8.1	26.1
Dir	57	59	36	218	234	308	10	50	90	156	127	103	110	106	100	103	140	117	89	84	73	49	71	70	95	140
26 Spd	11	10	11	9	7	9	9	10	13	17	21	23	27	30	30	30	32	33	32	32	28	27	29	27	20.6	33.3
Dir	80	64	35	29	97	64	80	102	96	103	88	90	85	87	94	93	84	91	86	85	80	81	81	85	85	91
27 Spd	26	25	24	27	27	28	28	29	26	27	29	29	29	31	32	30	28	29	27	19	15	13	10	12	24.8	31.6
Dir	86	85	87	88	86	84	84	89	85	76	81	82	80	86	86	91	92	93	99	96	86	94	87	77	87	86
28 Spd	12	14	16	17	16	16	14	13	14	18	21	25	26	25	23	21	24	25	23	19	12	4	3	5	15.7	26.0
Dir	79	71	82	84	80	90	90	90	90	96	90	82	82	90	95	124	113	118	134	147	137	152	89	44	99	82
29 Spd	8	7	7	7	8	7	7	8	6	13	13	13	14	13	16	16	19	22	16	12	6	4	3	7	8.7	21.6
Dir	50	78	77	63	63	54	59	114	109	105	102	100	95	107	98	120	126	135	140	133	191	155	85	286	107	135
30 Spd	7	9	5	9	3	1	1	3	7	13	7	7	9	10	11	12	11	10	27	11	7	4	2	6	3.8	27.3
Dir	327	40	94	113	76	87	113	219	194	232	241	197	193	212	204	216	212	233	104	147	145	199	206	34	178	104
31 Spd	6	1	1	2	3	4	2	10	13	9	10	12	12	13	17	20	21	22	19	18	11	7	11	12	9.3	22.3
Dir	29	3	69	303	17	306	195	146	142	141	126	129	125	116	120	101	110	100	113	117	113	82	91	94	112	100
Spd	5.1	3.5	3.4	2.6	2.9	2.8	2.4	1.0	2.6	2.6	1.6	2.3	2.0	2.4	3.3	3.1	1.1	0.6	0.9	0.3	1.9	3.2	4.7	5.1	Diurnal Average	
Dir	25	19	16	19	14	17	6	290	271	263	264	304	279	277	243	242	249	308	209	259	334	347	11	19	Diurnal Maximum	
Spd	25.8	24.7	24.4	26.9	27.0	28.0	28.1	29.3	26.9	34.8	41.3	42.3	43.8	39.7	38.2	42.2	37.1	36.5	35.5	34.0	28.0	27.4	28.7	26.6	Diurnal Maximum	
Dir	86	85	87	88	86	84	84	89	256	242	249	249	254	244	252	254	246	245	248	242	80	81	81	85	Diurnal Maximum	
Maximum Speed Value: 44 km/h on May 2 13:00		Minimum Speed Value: 0 km/h on May 3 02:00												Hours in Service: 744												
Maximum Daily Speed Average: 24.8 km/h on May 27		Minimum Daily Speed Average: 1.5 km/h on May 10												Hours of Data: 743												
Maximum Diurnal Speed Average: 5.1 km/h at hour 24		Minimum Diurnal Speed Average: 0.3 km/h at hour 20												Hours of Missing Data: 1												
Monthly Average Velocity: 1.52 km/h 337.4 deg		Speed Percentiles: P ₁ = 0.8 P ₁₀ = 2.6 Q ₁ = 5.1 Median = 9.6 Q ₃ = 16.7 P ₉₀ = 24.5 P ₉₉ = 36.8												Percent Operational Time: 99.9												
All monthly, daily, and diurnal averages have been calculated using vector methods																										
D - DAS Failure																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	20	30	13	2	0	0	65																			
NorthEast	28	52	33	7	0	0	120																			
East	25	27	36	23	20	0	131																			
SouthEast	25	17	19	7	0	0	68																			
South	18	11	0	0	0	0	29																			
SouthWest	27	21	18	14	9	1	90																			
West	20	22	20	22	9	7	100																			
NorthWest	20	58	41	21	0	0	140																			
Total	183	238	180	96	38	8	743																			

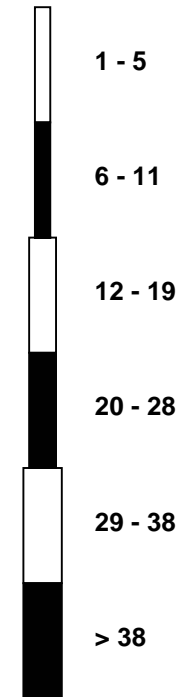
Wind Rose

Wind Speed (WS) (km/h)

Beaverlodge - May 2010



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Beaverlodge - May 2010

Maximum Speed: 44 km/h on May 2 13:00	Maximum Daily Speed Average: 25.1 km/h on May 27	Hours in Service: 744
Minimum Speed: 1 km/h on May 9 05:00	Minimum Daily Speed Average: 6.0 km/h on May 14	Hours of Data: 743
Maximum Diurnal Speed Average: 17.7 km/h at hour 18	Minimum Diurnal Speed Average: 7.9 km/h at hour 3	Hours of Missing Data: 1
Monthly Average Speed: 12.56 km/h	Percentiles: P ₁ = 1.9 P ₁₀ = 3.8 Q ₁ = 6.5 Median = 10.2 Q ₃ = 17.2 P ₉₀ = 24.7 P ₉₉ = 37.4	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-May	D	5	3	5	6	3	4	3	12	17	18	19	19	20	22	23	20	26	29	24	21	18	12	7	14.7	28.9
2-May	8	7	9	7	5	4	4	10	22	35	42	43	44	40	39	38	37	37	36	34	25	17	10	6	23.3	44.4
3-May	4	3	4	3	2	3	4	9	10	10	10	17	19	15	14	18	21	25	25	24	23	22	24	23	13.8	25.0
4-May	22	18	16	16	17	16	16	16	17	18	21	21	19	18	18	17	13	13	14	13	13	11	9	7	15.8	22.2
5-May	9	11	12	10	11	10	5	10	12	10	8	11	10	9	7	10	9	13	7	6	6	7	10	9	9.2	12.7
6-May	9	9	9	7	7	3	7	6	3	4	7	6	7	9	7	5	5	7	5	6	8	3	7	9	6.4	9.4
7-May	9	10	11	6	7	4	2	5	4	5	8	11	11	13	8	15	13	11	10	11	10	12	11	12	9.2	14.5
8-May	10	8	4	4	2	2	5	4	7	10	17	13	14	15	11	10	7	6	6	2	2	6	7	5	7.4	17.2
9-May	6	3	3	4	1	4	4	3	5	5	5	7	11	12	18	22	11	16	17	6	5	8	7	9	8.0	22.1
10-May	9	3	5	3	3	2	2	2	4	4	5	6	6	12	10	10	11	11	6	4	7	9	7	7	6.2	12.1
11-May	8	4	5	3	3	5	2	3	6	5	4	7	16	16	23	28	19	14	15	14	12	10	3	4	9.6	28.2
12-May	3	3	3	4	5	3	13	14	24	28	30	38	40	38	39	43	38	36	32	31	24	26	26	18	23.2	42.6
13-May	6	8	6	9	7	4	11	23	21	19	15	12	12	16	21	26	20	23	21	19	15	13	7	10	14.3	26.1
14-May	7	4	4	3	3	5	2	3	3	6	10	7	7	8	7	8	9	7	4	5	8	10	8	4	6.0	10.2
15-May	4	6	6	4	6	5	3	4	2	3	6	7	10	11	10	9	9	15	12	11	10	5	7	9	7.3	15.2
16-May	9	13	11	9	6	7	6	6	9	8	18	22	26	29	25	20	20	22	21	13	17	10	8	9	14.3	29.2
17-May	10	9	6	3	4	5	3	4	3	4	8	9	8	9	9	8	12	10	8	10	11	13	15	17	8.2	16.7
18-May	20	23	8	11	14	19	13	9	9	10	15	12	10	8	12	16	21	23	26	19	16	13	18	17	15.1	26.1
19-May	10	7	8	8	14	20	19	18	27	31	29	26	24	22	15	12	8	10	8	7	6	10	14	12	15.3	31.0
20-May	16	7	8	18	18	15	17	13	15	16	19	17	9	27	19	20	22	23	17	5	4	9	22	14	15.5	27.4
21-May	11	10	12	15	15	15	18	20	20	22	22	24	23	21	20	18	18	18	17	15	15	13	12	12	17.0	23.9
22-May	13	14	10	9	10	10	11	10	10	12	11	11	12	11	11	9	10	8	10	8	9	9	7	8	10.2	13.8
23-May	8	7	5	6	8	7	6	7	9	10	9	9	9	7	6	7	4	5	4	3	3	5	8	7	6.7	9.8
24-May	3	3	3	5	7	4	3	4	3	3	4	4	5	5	6	6	13	13	13	15	12	12	16	19	7.5	18.8
25-May	14	9	8	3	5	5	2	4	4	4	9	13	17	16	16	20	26	14	6	17	11	10	10	10	10.7	26.3
26-May	11	10	11	9	8	9	10	10	13	17	21	23	28	30	30	31	32	33	32	32	28	27	29	27	21.3	33.5
27-May	26	25	24	27	27	28	28	29	26	27	30	30	29	31	32	30	29	29	27	19	15	13	10	12	25.1	32.0
28-May	12	14	16	17	16	16	14	13	14	19	21	26	26	26	24	22	24	25	23	19	13	5	3	6	17.3	26.4
29-May	9	7	7	7	8	7	8	9	7	13	14	15	15	14	18	17	19	22	17	12	7	5	7	7	11.2	21.8
30-May	8	12	6	9	3	2	2	3	7	13	8	7	9	10	11	12	12	11	29	11	7	5	4	6	8.7	28.7
31-May	6	4	2	3	5	4	5	10	13	10	10	13	13	14	18	20	22	23	20	18	11	7	11	12	11.4	22.6
	9.9	8.9	7.9	8.0	8.1	8.0	8.0	9.1	11.1	12.9	14.6	15.6	16.4	17.2	17.0	17.7	17.4	17.7	16.7	14.0	12.1	11.0	11.2	10.7	Diurnal Average	
	25.9	24.8	24.5	27.0	27.1	28.1	28.2	29.4	27.1	35.2	41.6	42.8	44.4	40.1	38.7	42.6	37.6	36.9	35.8	34.1	28.1	27.5	28.8	26.7	Diurnal Maximum	

D - DAS Failure
All monthly, daily, and diurnal averages have been calculated using scalar methods

Hourly Standard Deviations

Wind Direction (WD) - deg

Beaverlodge - May 2010

Maximum Value: 98.1 deg on May 1 08:00		Hours in Service: 744																								
Minimum Value: 2.0 deg on May 28 00:00		Hours of Data: 743																								
Percentiles: P ₁ = 3.1 P ₁₀ = 5.4 Q ₁ = 8.5 Median = 16.4 Q ₃ = 40.3 P ₉₀ = 64.2 P ₉₉ = 85.4		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-May	D	22	84	83	71	74	23	98	15	10	20	19	23	17	15	19	11	16	8	6	2	5	7	26	98.1	
2-May	6	8	7	10	15	35	53	14	11	9	8	9	9	8	9	10	9	8	7	4	5	4	62	24	61.9	
3-May	60	80	74	60	47	49	25	13	15	25	21	26	13	30	22	21	20	8	7	6	6	6	7	10	79.5	
4-May	7	7	5	7	6	6	7	6	12	10	7	10	16	17	14	18	18	23	15	8	12	6	5	9	23.1	
5-May	7	2	3	16	16	20	25	17	13	21	50	35	45	34	51	58	75	12	24	66	24	26	7	5	75.0	
6-May	2	6	6	50	50	94	12	87	83	39	73	80	86	34	53	50	77	40	47	45	9	38	11	4	93.8	
7-May	5	3	4	55	29	34	58	57	67	63	41	65	42	35	66	51	23	22	27	16	5	4	5	11	66.7	
8-May	8	77	58	46	71	73	27	58	23	20	9	15	17	19	15	41	75	40	82	55	32	48	17	10	81.9	
9-May	28	42	18	19	47	13	17	41	42	42	60	62	46	63	22	17	47	45	8	25	23	29	9	8	63.4	
10-May	58	95	44	76	76	76	75	51	28	53	62	82	81	68	55	58	47	48	19	25	27	6	21	17	94.7	
11-May	16	81	40	72	33	11	67	30	12	38	79	67	60	45	16	18	15	22	14	5	6	6	59	36	81.2	
12-May	44	28	49	30	37	62	17	20	5	8	10	11	10	11	9	8	10	7	7	6	6	3	4	10	62.2	
13-May	26	20	42	9	40	81	12	6	9	11	24	37	37	26	21	10	21	12	13	4	7	3	19	10	80.5	
14-May	13	91	45	18	36	58	36	38	39	31	16	68	56	57	72	45	43	45	53	17	12	6	65	67	90.6	
15-May	53	53	32	56	40	45	35	16	67	76	45	72	70	53	50	60	61	14	21	6	17	54	15	12	75.8	
16-May	82	31	27	73	62	76	62	61	19	21	16	19	12	14	15	14	11	11	7	11	5	9	6	5	82.1	
17-May	3	14	13	70	69	70	66	17	81	53	22	32	53	25	52	71	18	22	15	7	8	7	9	5	80.6	
18-May	6	7	56	53	37	4	11	36	33	24	21	22	30	52	48	13	7	5	7	42	8	6	12	9	55.8	
19-May	35	55	44	11	8	6	7	6	5	8	11	12	15	15	28	22	73	44	36	13	7	6	6	4	72.9	
20-May	12	49	60	21	5	10	7	8	11	9	7	11	22	31	5	16	14	6	44	28	22	11	9	18	59.6	
21-May	7	10	5	5	4	7	8	5	4	5	5	5	7	9	14	15	13	4	4	4	5	6	4	22	21.5	
22-May	11	8	12	12	10	6	5	8	7	7	8	17	14	16	15	31	10	23	8	13	6	17	6	6	30.8	
23-May	7	10	9	13	7	24	9	9	10	14	23	15	29	57	55	37	44	79	46	51	53	31	9	15	79.3	
24-May	38	75	65	47	28	95	71	34	85	45	75	59	84	52	56	64	17	14	20	26	27	6	9	3	94.6	
25-May	10	24	44	34	29	62	67	40	45	78	22	19	14	15	17	10	9	26	25	10	10	7	10	15	78.4	
26-May	5	15	14	7	38	6	11	10	11	11	11	10	8	8	9	9	6	5	6	5	3	3	3	4	38.0	
27-May	3	4	5	3	4	4	4	4	4	6	10	9	11	8	9	8	11	7	8	8	4	4	6	2	11.2	
28-May	4	6	5	4	3	6	6	7	11	11	9	14	10	14	19	13	11	9	15	8	21	32	22	25	31.5	
29-May	20	6	8	9	4	5	25	15	32	17	22	26	21	24	22	16	15	9	11	14	15	64	71	11	70.6	
30-May	28	44	30	14	30	72	58	15	23	15	31	30	21	16	14	17	12	33	22	12	20	13	79	14	79.3	
31-May	7	84	81	55	60	26	66	10	9	13	19	21	25	22	18	12	10	10	11	6	11	8	5	3	83.8	
		82.1	94.7	83.5	83.2	76.1	94.6	74.5	98.1	85.1	78.4	79.4	82.0	86.1	67.8	71.9	70.6	77.3	79.3	81.9	66.1	52.8	64.4	79.3	66.7	
D - DAS Failure																										

PASZA

Portable – Kinuso Station

Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Portable-Kinuso - May 2010

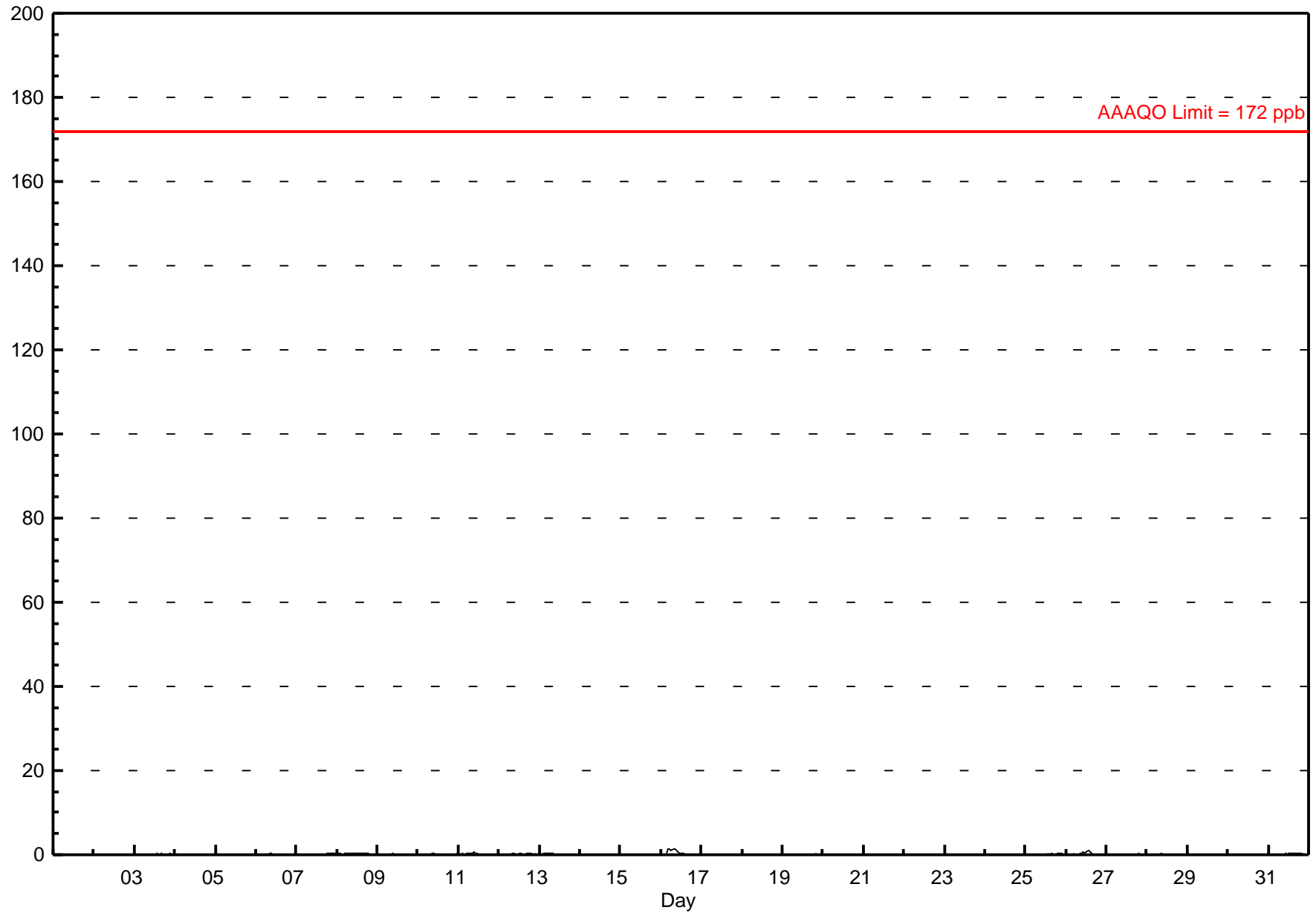
Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 1.4 ppb on May 16 08:00	Maximum Daily Average: 0.5 ppb on May 16
Minimum Value: 0 ppb on May 1 01:00	Hours of Data: 586
Maximum Diurnal Average: 0.2 ppb at hour 10	Hours of Missing Data: 158
Monthly Average: 0.10 ppb	Hours of Calibration: 39
Minimum Daily Average: 0.0 ppb on May 23	Percent Operational Time: 84.0
Minimum Diurnal Average: 0.0 ppb at hour 23	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.1 P ₉₀ = 0.2 P ₉₉ = 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-May	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																								
2-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																								
3-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																								
4-May	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2																								
5-May	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1																								
6-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																								
7-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																								
8-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5																								
9-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2																								
10-May	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3																								
11-May	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6																								
12-May	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.2																								
13-May	0	0	0	0	0	0	0	0	0	C	C	C	C	0	D	D	D	D	D	D	D	D	D	D	--	0.2																								
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--																								
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--																								
16-May	D	D	D	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	D	D	D	0.5	1.4																								
17-May	A	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	0.1																								
18-May	D	D	D	D	D	D	D	D	0	0	0	0	0	D	0	0	0	0	0	0	0	0	0	A	--	0.2																								
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																								
20-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0.0	0.1																								
21-May	0	0	0	A	0	0	0	0	0	0	D	D	D	D	D	D	D	0	0	0	0	0	0	0	--	0.0																								
22-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0																								
23-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0																								
24-May	0	A	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	0	0	0	0	0	--	0.1																								
25-May	0	0	0	0	0	0	0	D	D	D	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4																								
26-May	0	0	0	A	0	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0.2	0.9																								
27-May	0	0	0	A	0	0	0	0	0	0	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2																								
28-May	0	0	A	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																								
29-May	0	A	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																								
30-May	A	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	0.2																								
31-May	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																								
																								0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average
																								0.2	0.2	0.2	0.3	1.2	1.2	1.1	1.4	1.4	1.1	0.7	0.4	0.6	0.9	0.6	0.3	0.5	0.3	0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.2	Diurnal Maximum

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

Hourly Averages

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



Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

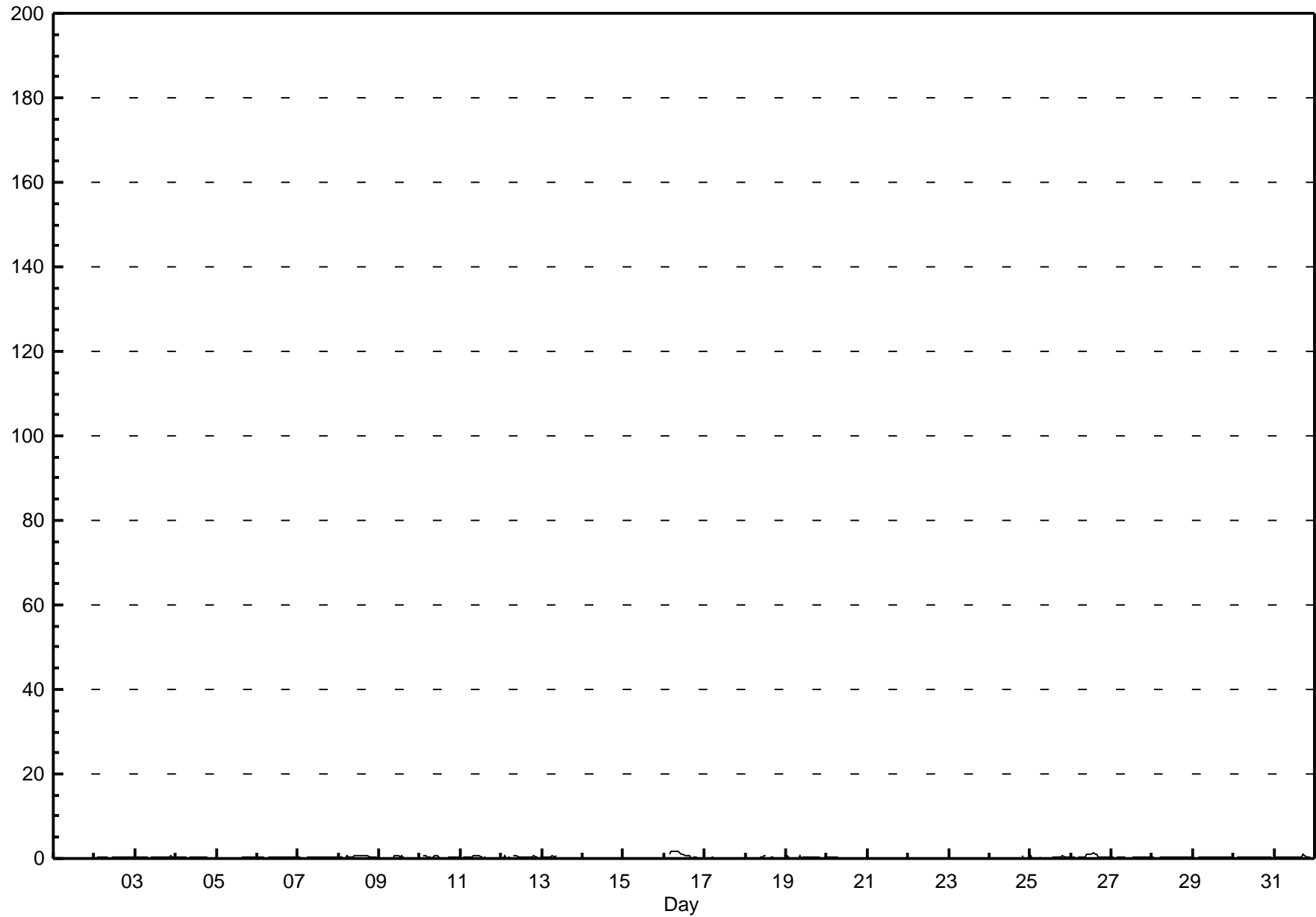
Portable-Kinuso - May 2010

Maximum Value: 1.6 ppb on May 16 06:00		Maximum Daily Average: 1.0 ppb on May 16		Hours in Service: 744																							
Minimum Value: 0 ppb on May 9 23:00		Minimum Daily Average: 0.1 ppb on May 23		Hours of Data: 586																							
Maximum Diurnal Average: 0.4 ppb at hour 10		Minimum Diurnal Average: 0.2 ppb at hour 2		Hours of Missing Data: 158																							
Monthly Average: 0.29 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.3 P ₉₀ = 0.6 P ₉₉ = 1.4		Hours of Calibration: 39																							
				Percent Operational Time: 84.0																							
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-May	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
2-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
3-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.7	
4-May	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
5-May	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.2	
6-May	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	
7-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
8-May	0	0	0	A	0	1	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0.5	0.8	
9-May	0	0	A	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0.2	0.6	
10-May	0	A	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6	
11-May	A	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
12-May	0	0	1	0	0	0	P	1	1	1	0	0	0	0	0	0	0	0	1	1	0	0	A	1	0.4	0.7	
13-May	0	0	0	0	0	0	1	0	1	C	C	C	C	0	D	D	D	D	D	D	D	D	D	D	--	0.7	
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
16-May	D	D	D	1	2	2	2	2	2	1	1	1	1	1	1	1	0	0	0	0	D	D	D	1	1.0	1.6	
17-May	A	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	0.5	
18-May	D	D	D	D	D	D	D	D	0	0	0	1	1	D	0	0	0	0	0	0	0	0	0	1	--	0.6	
19-May	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.2	0.7	
20-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0.1	0.2	
21-May	0	0	0	A	0	0	0	0	0	D	D	D	D	D	D	D	D	0	0	0	0	0	0	0	--	0.1	
22-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
23-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
24-May	0	A	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	1	0	0	0	--	0.5		
25-May	1	0	0	0	0	0	0	D	D	D	C	C	C	0	0	0	0	0	0	1	0	0	0	0.3	0.6		
26-May	0	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.5	1.3		
27-May	0	0	A	0	0	0	0	0	0	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0.3	0.3		
28-May	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4		
29-May	0	A	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		
30-May	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4		
31-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	A	A	0.5	1.0	
		0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	Diurnal Average		
		0.6	0.4	0.6	1.1	1.6	1.6	1.5	1.6	1.6	1.5	1.1	1.1	0.9	1.3	1.1	0.8	0.7	1.0	0.6	0.7	0.5	0.7	0.4	0.6	Diurnal Maximum	
C - Calibration		P - Power Failure					D - DAS Failure					A - Automated Daily Zero Span															

Hourly Maximums

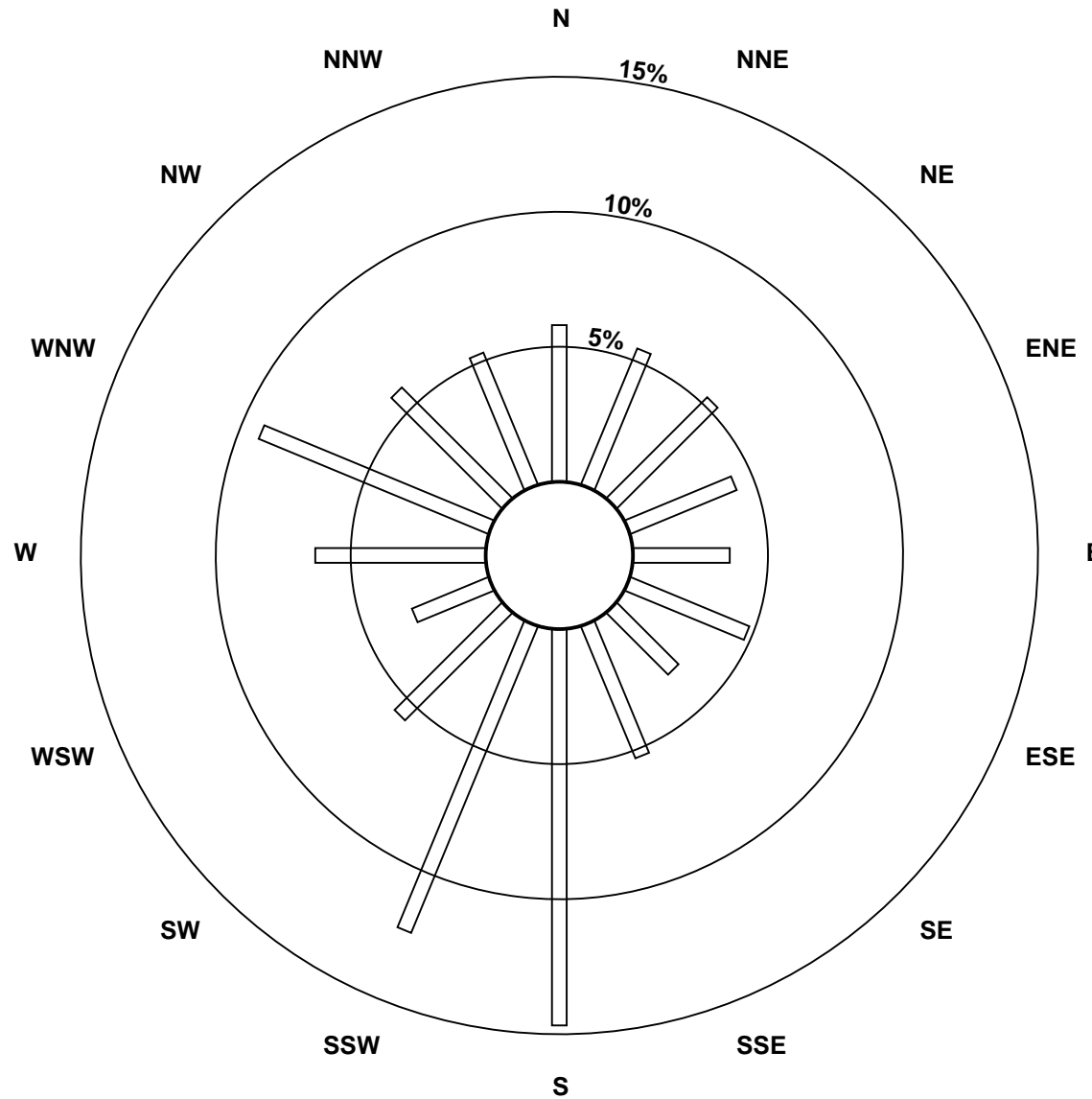
Sulphur Dioxide (SO₂) - ppb

Portable-Kinuso - May 2010

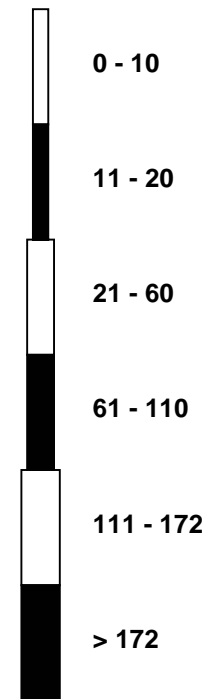


Pollutant Rose

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



Pollutant Classes (ppb)

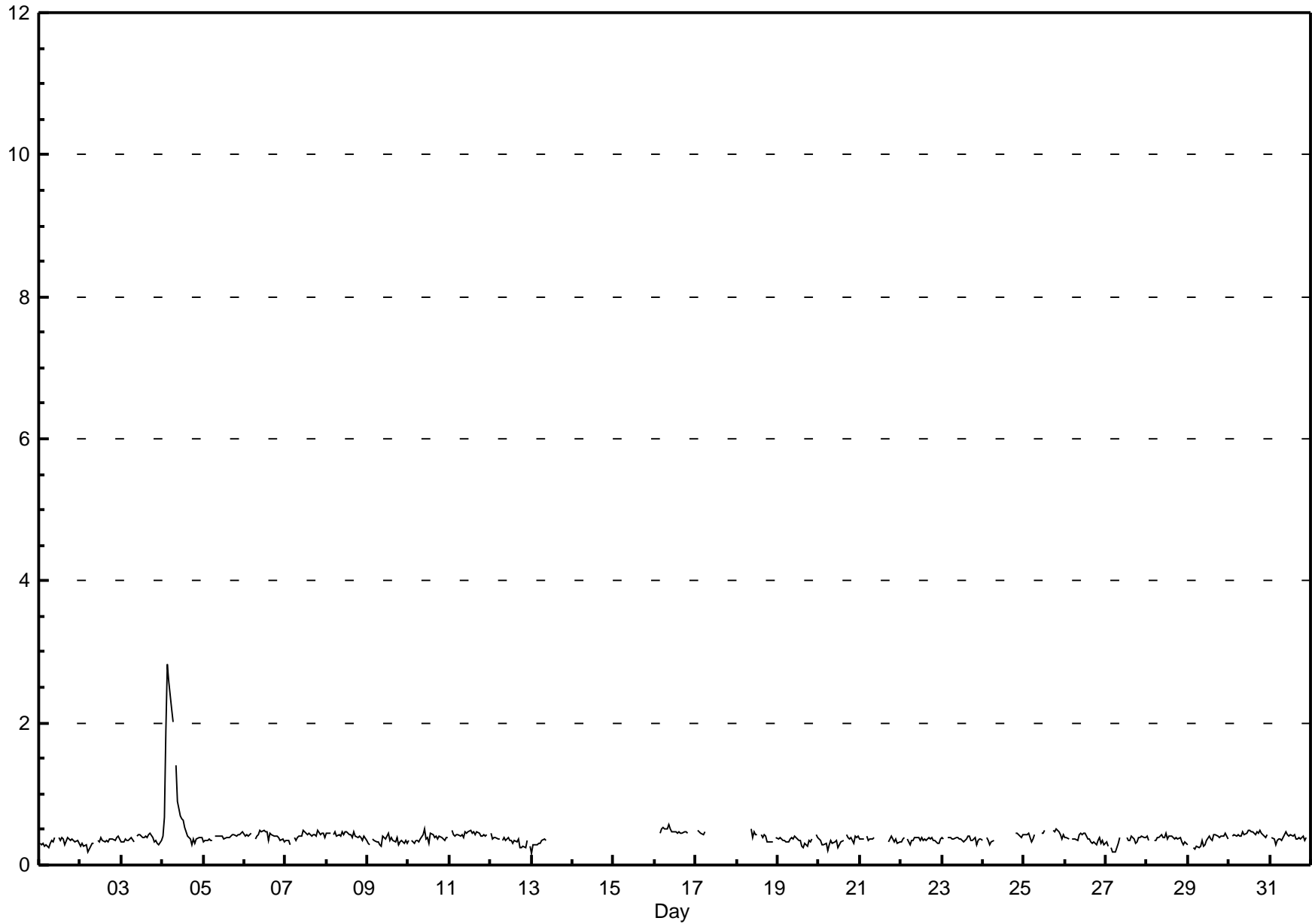


Hourly Averages

Total Reduced Sulphur (TRS) - ppb

Portable-Kinuso - May 2010

Number of Exceedences (AAAQO):		1-hr: 0		24-hr: 0		Hours in Service:		744																					
Maximum Value: 2.8 ppb on May 4 04:00		Maximum Daily Average: 0.9 ppb on May 4		Minimum Value: 0 ppb on May 13 01:00		Minimum Daily Average: 0.3 ppb on May 2		Hours of Data: 585																					
Maximum Diurnal Average: 0.5 ppb at hour 4		Minimum Diurnal Average: 0.4 ppb at hour 1		Hours of Missing Data: 159		Hours of Calibration: 40		Percent Operational Time: 84.0																					
Monthly Average: 0.40 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.4 P ₉₀ = 0.5 P ₉₉ = 1.2		Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24					
1-May	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4		
2-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4		
3-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
4-May	0	1	2	3	3	2	2	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0.9	2.8		
5-May	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
6-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
7-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
8-May	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	0.4	0.5		
9-May	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	0.3	0.4		
10-May	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
11-May	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	0.4	0.5		
12-May	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4		
13-May	0	0	0	0	0	0	0	0	0	C	C	C	C	0	D	D	D	D	D	D	D	D	D	D	D	--	0.4		
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--		
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--		
16-May	D	D	D	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	D	D	D	0	0.5	0.6		
17-May	A	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	0.5		
18-May	D	D	D	D	D	D	D	D	1	0	0	0	0	D	0	0	0	0	0	0	0	0	0	0	0	--	0.5		
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.4		
20-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0	0.3	0.4		
21-May	0	0	0	A	0	0	0	0	0	0	D	D	D	D	D	D	D	0	0	0	0	0	0	0	0	--	0.4		
22-May	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	0.4	0.4		
23-May	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	0.4	0.4		
24-May	0	A	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	0	0	0	0	0	0	--	0.5		
25-May	0	0	0	0	0	0	0	D	D	D	0	0	0	C	C	C	C	0	0	0	0	0	0	0	0	--	0.5		
26-May	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	0.4	0.4		
27-May	0	0	A	0	0	0	0	0	0	0	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4		
28-May	0	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.4		
29-May	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4		
30-May	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5		
31-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0.4	0.5		
		0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average			
		0.4	0.7	1.9	2.8	2.6	2.2	2.0	0.5	1.4	0.9	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	Diurnal Maximum			
C - Calibration		P - Power Failure						D - DAS Failure						A - Automated Daily Zero Span															
Alberta Ambient Air Quality Objectives (AAAQO):		1-hr 10 ppb				24-hr 3 ppb																							

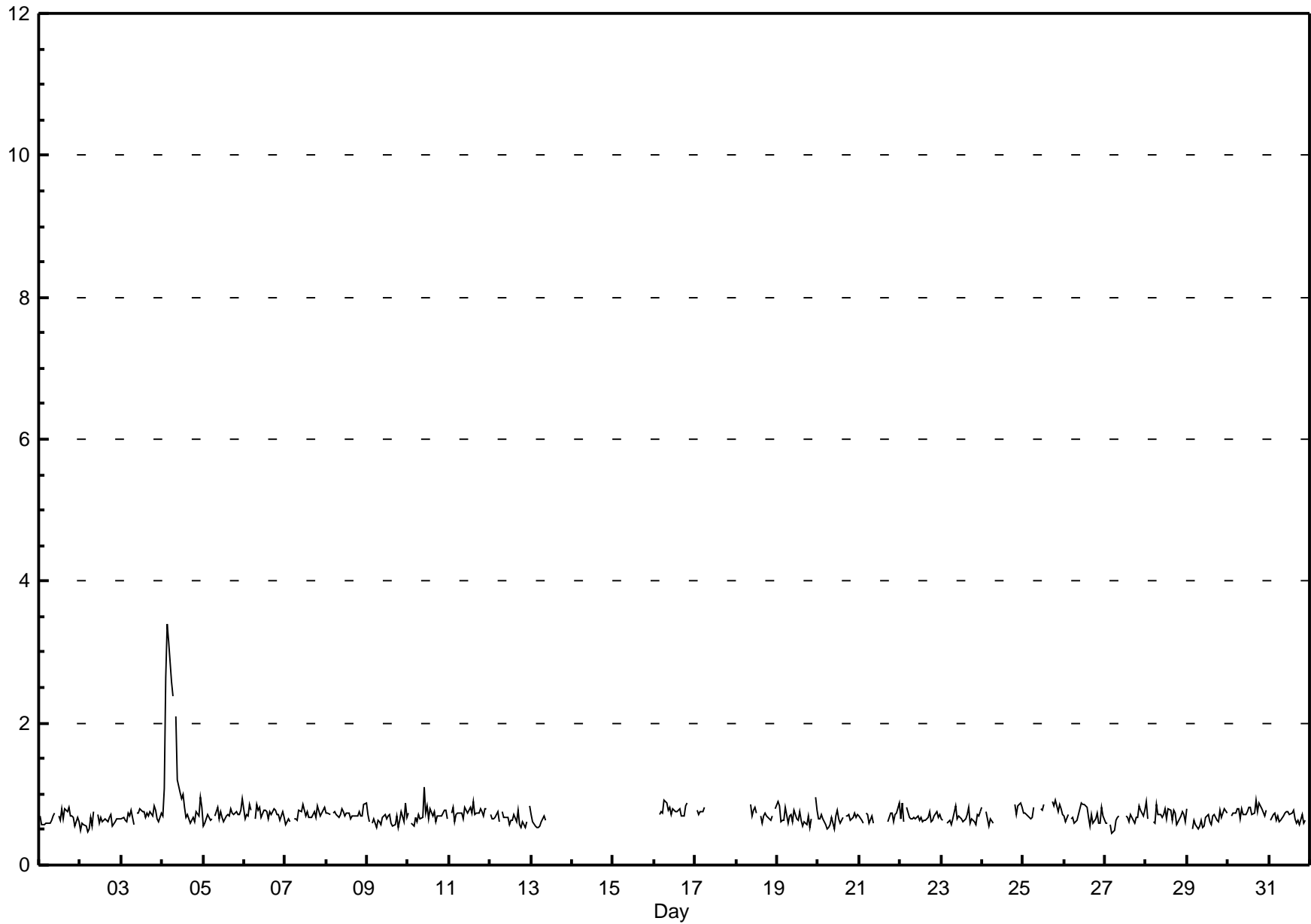


Hourly Maximums

Total Reduced Sulphur (TRS) - ppb

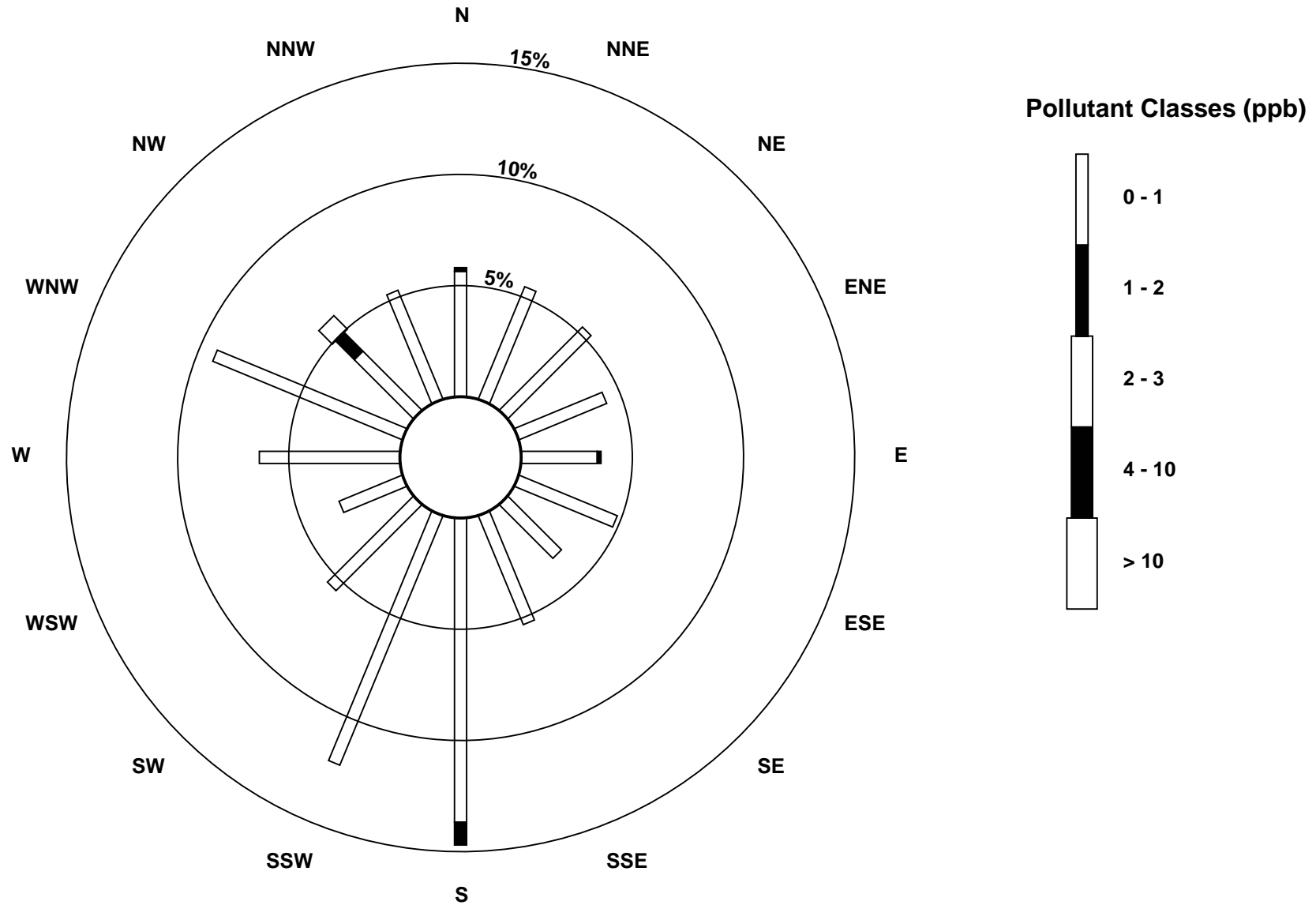
Portable-Kinuso - May 2010

Maximum Value: 3.4 ppb on May 4 04:00		Maximum Daily Average: 1.3 ppb on May 4		Hours in Service: 744																																													
Minimum Value: 0 ppb on May 27 05:00		Minimum Daily Average: 0.6 ppb on May 2		Hours of Data: 585																																													
Maximum Diurnal Average: 0.8 ppb at hour 23		Minimum Diurnal Average: 0.7 ppb at hour 8		Hours of Missing Data: 159																																													
Monthly Average: 0.72 ppb		Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.6 Median = 0.7 Q ₃ = 0.8 P ₉₀ = 0.8 P ₉₉ = 2.0		Hours of Calibration: 40																																													
				Percent Operational Time: 84.0																																													
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-May	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	0.8																							
2-May	0	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7																							
3-May	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	0.8																							
4-May	1	1	3	3	3	3	2	A	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.4																							
5-May	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9																							
6-May	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8																							
7-May	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9																							
8-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9																							
9-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9																							
10-May	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1																							
11-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9																							
12-May	1	1	1	1	1	1	P	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.7	0.8																							
13-May	1	1	1	1	1	1	1	1	1	C	C	C	C	0	D	D	D	D	D	D	D	D	D	D	--	0.7																							
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--																							
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--																							
16-May	D	D	D	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	D	D	D	0.8	0.9																							
17-May	A	1	1	1	1	1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	0.8																							
18-May	D	D	D	D	D	D	D	D	D	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	--	0.8																							
19-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0																							
20-May	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	P	1	1	1	1	1	1	1	1	0.6	0.8																							
21-May	1	1	1	A	1	1	1	1	1	D	D	D	D	D	D	D	D	1	1	1	1	1	1	1	--	0.9																							
22-May	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9																							
23-May	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8																							
24-May	1	A	1	1	1	1	1	P	P	P	P	P	P	P	P	P	P	P	P	1	1	1	1	1	--	0.9																							
25-May	1	1	1	1	1	1	1	D	D	D	1	1	1	C	C	C	C	1	1	1	1	1	1	1	--	0.9																							
26-May	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																							
27-May	1	1	A	1	0	0	1	1	1	P	P	P	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8																							
28-May	1	1	A	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																							
29-May	1	A	A	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8																							
30-May	A	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																							
31-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	0.7	0.8																							
																								0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	Diurnal Average	
																								0.9	1.1	2.7	3.4	3.2	2.6	2.4	0.9	2.1	1.2	1.0	0.9	1.0	0.8	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.9	1.0	0.9	Diurnal Maximum
C - Calibration																								P - Power Failure				D - DAS Failure				A - Automated Daily Zero Span																	



Pollutant Rose

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



Hourly Averages

Nitrogen Dioxide (NO₂) - ppb

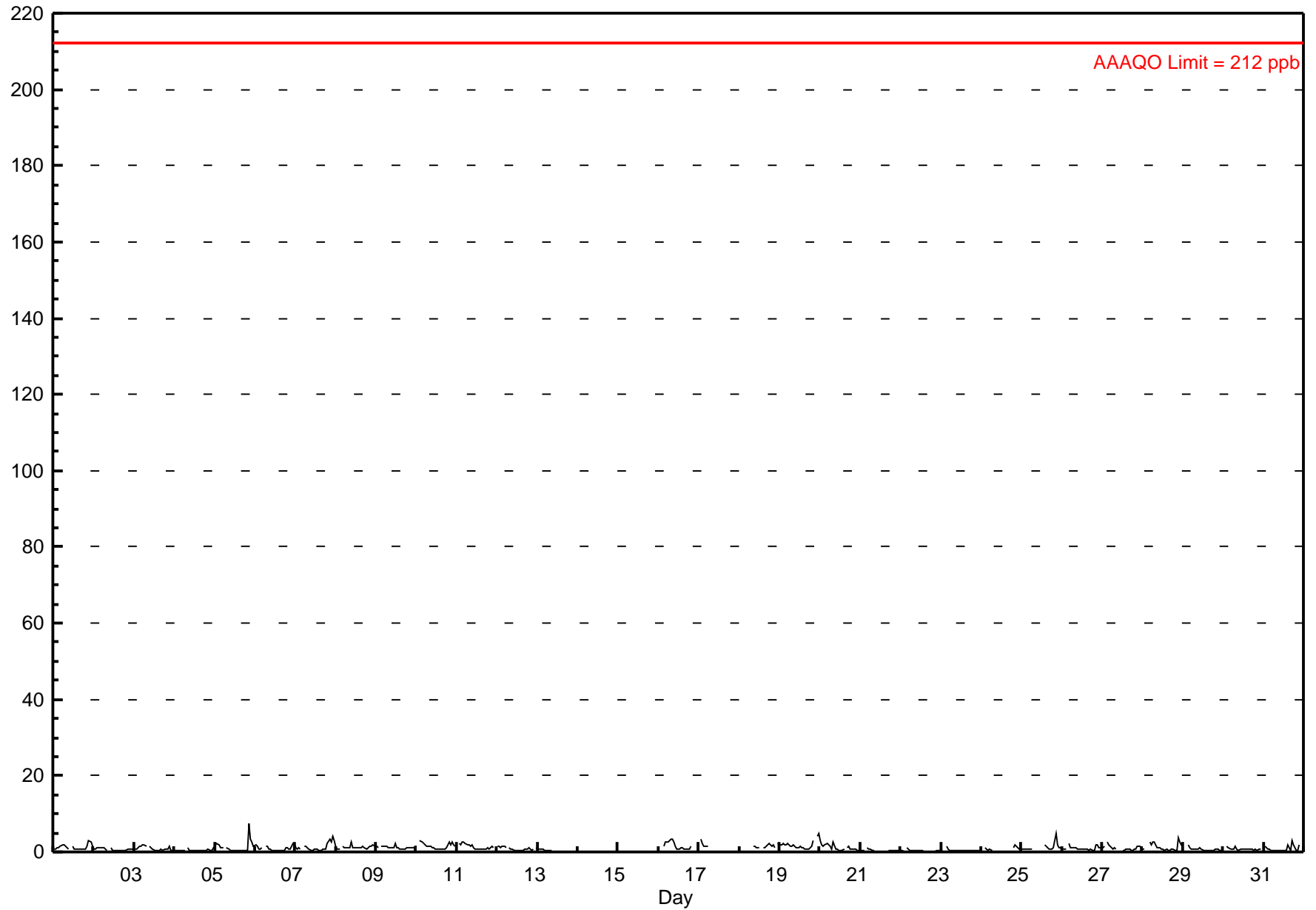
Portable-Kinuso - May 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 7.6 ppb on May 5 21:00	Maximum Daily Average: 1.8 ppb on May 19		Hours of Data:	585
Minimum Value: 0 ppb on May 22 03:00	Minimum Daily Average: 0.3 ppb on May 22		Hours of Missing Data:	159
Maximum Diurnal Average: 1.5 ppb at hour 21	Minimum Diurnal Average: 0.6 ppb at hour 14		Hours of Calibration:	40
Monthly Average: 1.03 ppb	Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.5 Median = 0.8 Q ₃ = 1.4 P ₉₀ = 2.0 P ₉₉ = 3.7		Percent Operational Time:	84.0

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-May	1	1	1	1	2	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	2	3	3	2	1.2	2.9
2-May	1	1	1	1	1	1	1	1	0	A	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0.7	1.1
3-May	1	1	1	1	1	2	2	2	A	2	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1.0	1.9
4-May	0	0	0	0	0	0	0	A	1	1	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0.4	1.2
5-May	2	2	2	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	1	8	3	3	2	1.3	7.6
6-May	2	1	1	1	1	A	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	2	2	0.9	2.3
7-May	1	1	1	1	A	1	2	1	1	1	0	1	1	1	1	1	1	1	1	2	3	3	4	3	1.3	4.0
8-May	2	1	1	A	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	2	2	2	2	1.3	2.6
9-May	1	1	A	2	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.1
10-May	1	A	3	3	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	1.5	2.9
11-May	A	2	2	3	3	2	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	2	1	A	1.4	2.5
12-May	2	1	1	1	1	1	P	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	A	1	0.8	1.6
13-May	1	1	1	1	0	0	0	0	0	0	C	C	C	C	1	D	D	D	D	D	D	D	D	D	--	0.8
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
16-May	D	D	D	1	3	3	3	3	3	2	2	1	1	1	1	1	1	1	1	1	D	D	D	4	1.8	3.7
17-May	A	3	2	1	1	1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	3.5
18-May	D	D	D	D	D	D	D	D	2	1	1	1	1	D	1	1	1	2	2	2	2	1	A	2	--	2.3
19-May	2	2	2	2	2	2	1	2	2	1	1	2	1	1	1	1	1	1	1	1	3	A	4	5	1.8	4.9
20-May	3	2	1	2	2	2	1	1	3	1	1	1	1	1	1	P	1	1	1	1	1	1	0	0	1.2	3.0
21-May	0	0	0	A	1	1	1	1	0	D	D	D	D	D	D	D	D	0	0	0	0	0	0	0	--	1.2
22-May	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
23-May	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
24-May	0	A	1	1	0	1	0	P	P	P	P	P	P	P	P	P	P	P	P	1	2	2	1	1	--	1.9
25-May	1	1	1	1	1	1	1	D	D	D	C	C	C	C	2	1	1	1	1	1	5	2	1	1	--	4.9
26-May	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	2	2	1	1	1.0	2.3
27-May	1	2	A	3	2	1	1	1	1	P	P	P	1	1	1	1	1	1	1	1	1	1	2	1	1.0	2.6
28-May	1	1	A	A	3	2	3	3	1	1	1	1	1	1	0	1	1	1	1	0	0	4	3	2	1.3	3.8
29-May	1	A	A	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	1	0	0.7	1.7
30-May	A	A	2	1	1	1	1	2	1	0	1	1	1	1	1	1	1	1	0	1	0	1	1	A	0.8	1.7
31-May	A	1	1	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	2	0	0	2	A	A	0.9	3.1

C - Calibration P - Power Failure D - DAS Failure 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

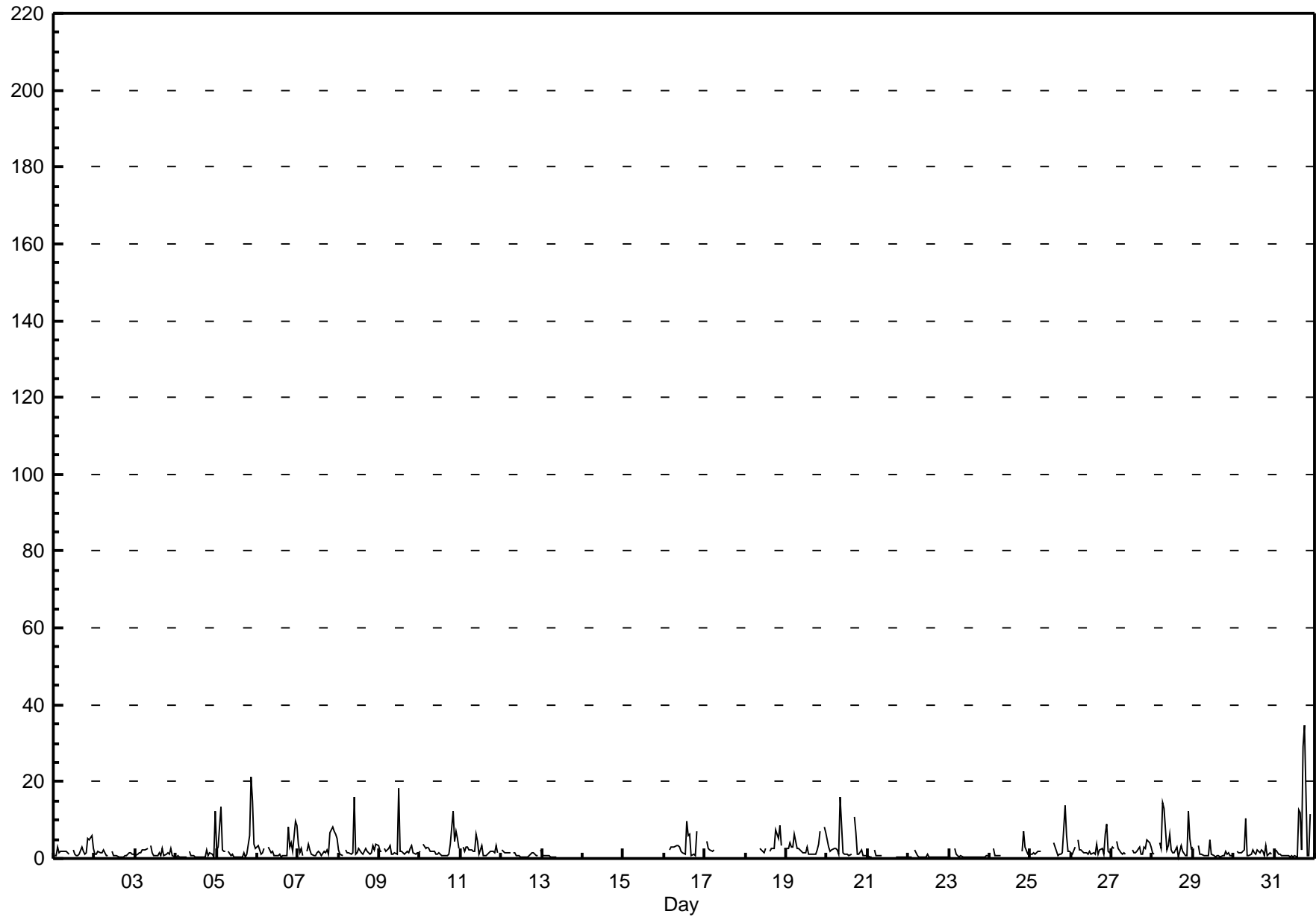
Portable-Kinuso - May 2010

Maximum Value: 34.5 ppb on May 31 19:00		Maximum Daily Average: 5.4 ppb on May 31		Hours in Service: 744																							
Minimum Value: 0 ppb on May 22 18:00		Minimum Daily Average: 0.5 ppb on May 22		Hours of Data: 585																							
Maximum Diurnal Average: 4.1 ppb at hour 22		Minimum Diurnal Average: 1.3 ppb at hour 14		Hours of Missing Data: 159																							
Monthly Average: 2.29 ppb		Percentiles: P ₁ = 0.3 P ₁₀ = 0.5 Q ₁ = 0.8 Median = 1.4 Q ₃ = 2.5 P ₉₀ = 4.5 P ₉₉ = 15.9		Hours of Calibration: 40																							
				Percent Operational Time: 84.0																							
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-May	1	1	3	1	2	2	2	2	1	1	A	2	1	1	1	1	3	2	1	1	5	5	6	3	2.1	5.9	
2-May	1	1	2	1	1	2	2	1	1	A	2	1	1	1	0	0	0	0	1	1	1	1	1	1	1.1	2.2	
3-May	1	1	1	2	2	2	2	2	A	3	1	1	1	1	1	3	1	1	1	1	1	3	1	0	1.5	3.2	
4-May	0	1	0	0	0	0	0	A	2	1	1	0	1	0	0	0	0	0	2	1	1	1	1	12	1.2	12.2	
5-May	2	3	13	2	2	2	A	2	1	1	0	0	0	0	0	0	2	1	1	6	21	15	4	3	3.6	21.2	
6-May	3	2	1	2	2	A	3	2	1	2	1	1	1	1	0	1	1	1	8	3	4	2	10	8	2.6	9.6	
7-May	4	1	2	1	A	2	4	2	1	1	1	2	2	1	1	2	1	2	1	7	8	7	6	5	2.8	8.1	
8-May	2	1	1	A	2	1	1	1	1	16	1	2	3	2	1	2	3	2	1	1	3	2	4	3	2.5	16.0	
9-May	2	2	A	2	2	3	3	1	1	2	1	18	2	2	1	1	2	2	3	3	1	1	1	2	2.5	18.4	
10-May	2	A	4	3	3	3	2	2	2	2	1	2	1	1	1	1	1	1	4	12	4	7	5	3	2.8	12.3	
11-May	A	3	2	3	3	2	2	2	2	6	5	1	3	1	1	1	1	2	2	2	1	3	1	A	2.3	6.2	
12-May	2	2	1	2	2	1	P	2	1	1	1	0	1	1	1	1	1	1	1	2	1	1	A	2	1.2	2.3	
13-May	1	1	1	1	1	1	1	1	1	C	C	C	C	1	D	D	D	D	D	D	D	D	D	D	--	1.0	
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
16-May	D	D	D	2	3	3	3	3	3	3	2	2	1	10	6	7	1	1	1	7	D	D	D	6	3.5	9.7	
17-May	A	5	3	2	2	2	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	4.5	
18-May	D	D	D	D	D	D	D	D	3	2	2	2	3	D	2	3	3	3	7	5	8	3	A	3	--	8.5	
19-May	3	3	4	3	3	6	3	3	2	2	1	1	3	1	1	1	1	1	2	4	7	A	8	7	3.1	8.1	
20-May	5	3	2	2	2	3	2	1	16	1	1	1	1	1	1	P	11	7	1	1	2	1	1	1	2.9	15.9	
21-May	1	0	0	A	2	1	1	1	1	D	D	D	D	D	D	D	D	1	1	1	1	0	0	0	--	2.2	
22-May	0	1	0	A	2	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.3	
23-May	0	0	A	3	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.6	2.6	
24-May	1	A	3	1	1	1	1	P	P	P	P	P	P	P	P	P	P	P	P	2	7	3	1	1	--	6.9	
25-May	1	1	1	1	2	2	2	D	D	D	C	C	C	C	4	2	1	1	1	2	14	6	2	2	--	13.9	
26-May	1	1	3	A	5	2	2	2	2	1	1	2	1	2	1	4	1	2	2	1	6	9	2	2	2.4	9.1	
27-May	3	3	A	4	3	2	1	2	1	P	P	P	2	2	1	2	3	1	1	3	3	5	4	3	2.4	4.7	
28-May	2	1	A	A	4	3	14	13	2	3	6	2	1	2	3	0	2	3	2	1	1	12	5	2	3.9	14.4	
29-May	3	A	A	3	1	1	1	1	1	1	5	1	1	1	1	1	0	1	1	2	1	1	1	1	1.2	4.8	
30-May	A	A	2	2	1	2	2	10	1	1	1	2	1	1	2	1	2	2	1	3	1	1	1	A	2.0	10.3	
31-May	A	2	1	1	1	1	1	1	1	1	1	0	1	0	13	12	2	29	35	1	1	12	A	A	5.4	34.5	
		1.8	1.7	2.4	1.9	2.1	1.9	2.2	2.3	1.9	2.3	1.6	2.0	1.3	1.3	1.8	1.8	1.8	2.5	3.2	2.7	4.1	4.1	2.9	2.9	Diurnal Average	
		4.8	4.5	13.3	4.5	4.8	6.4	14.4	12.9	15.9	16.0	6.2	18.4	3.5	9.7	12.8	12.1	10.8	29.0	34.5	12.3	21.2	15.0	9.6	12.2	Diurnal Maximum	
C - Calibration		P - Power Failure					D - DAS Failure					A - Automated Daily Zero Span															

Hourly Maximums

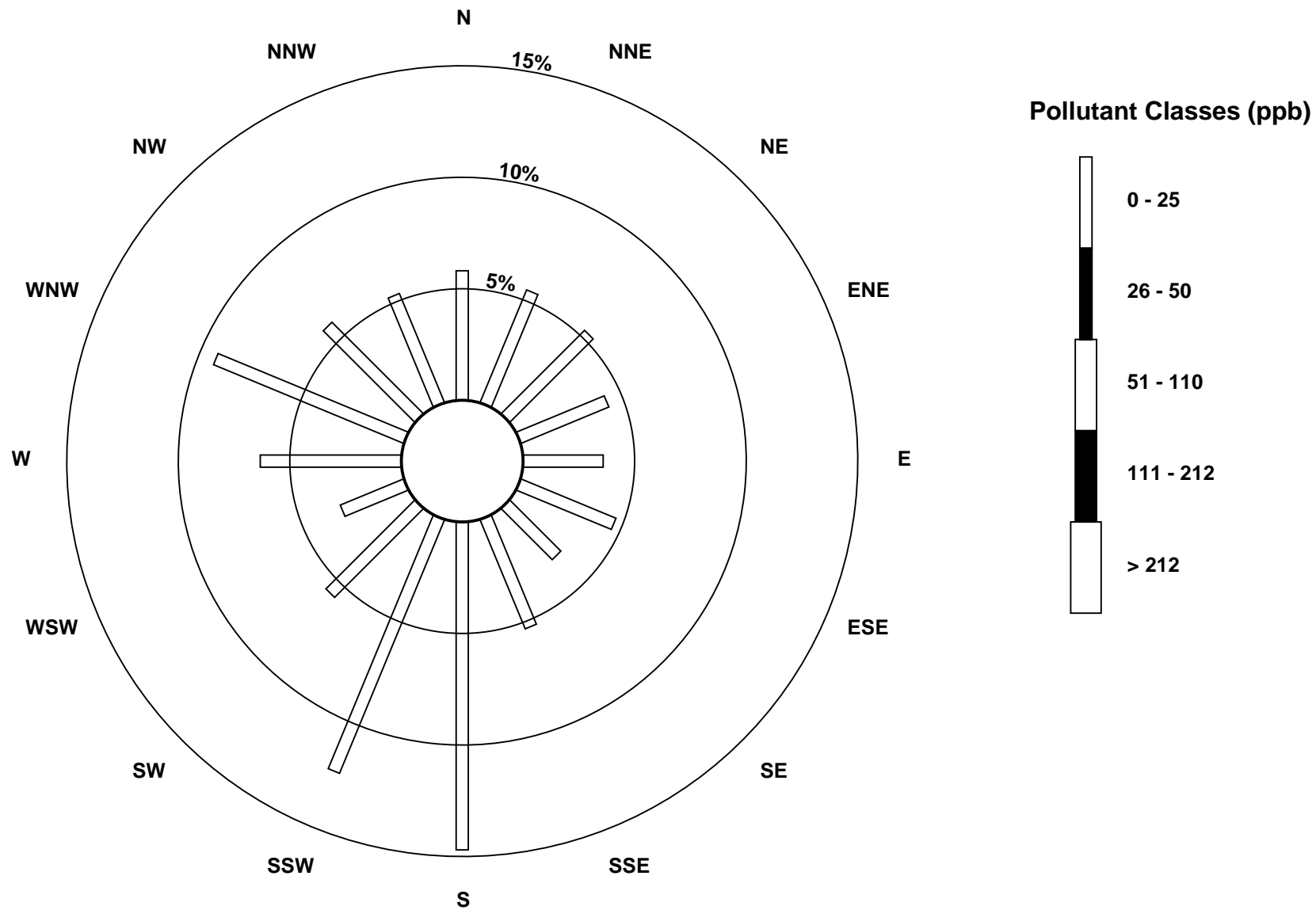
Nitrogen Dioxide (NO₂) - ppb

Portable-Kinuso - May 2010



Pollutant Rose

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



Hourly Averages

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

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 6.6 ppb on May 31 18:00	Maximum Daily Average: 0.6 ppb on May 31		Hours of Data:	585
Minimum Value: 0 ppb on May 3 22:00	Minimum Daily Average: 0.0 ppb on May 4		Hours of Missing Data:	159
Maximum Diurnal Average: 0.3 ppb at hour 18	Minimum Diurnal Average: 0.1 ppb at hour 22		Hours of Calibration:	40
Monthly Average: 0.13 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.1 P ₉₀ = 0.2 P ₉₉ = 1.5		Percent Operational Time:	84.0

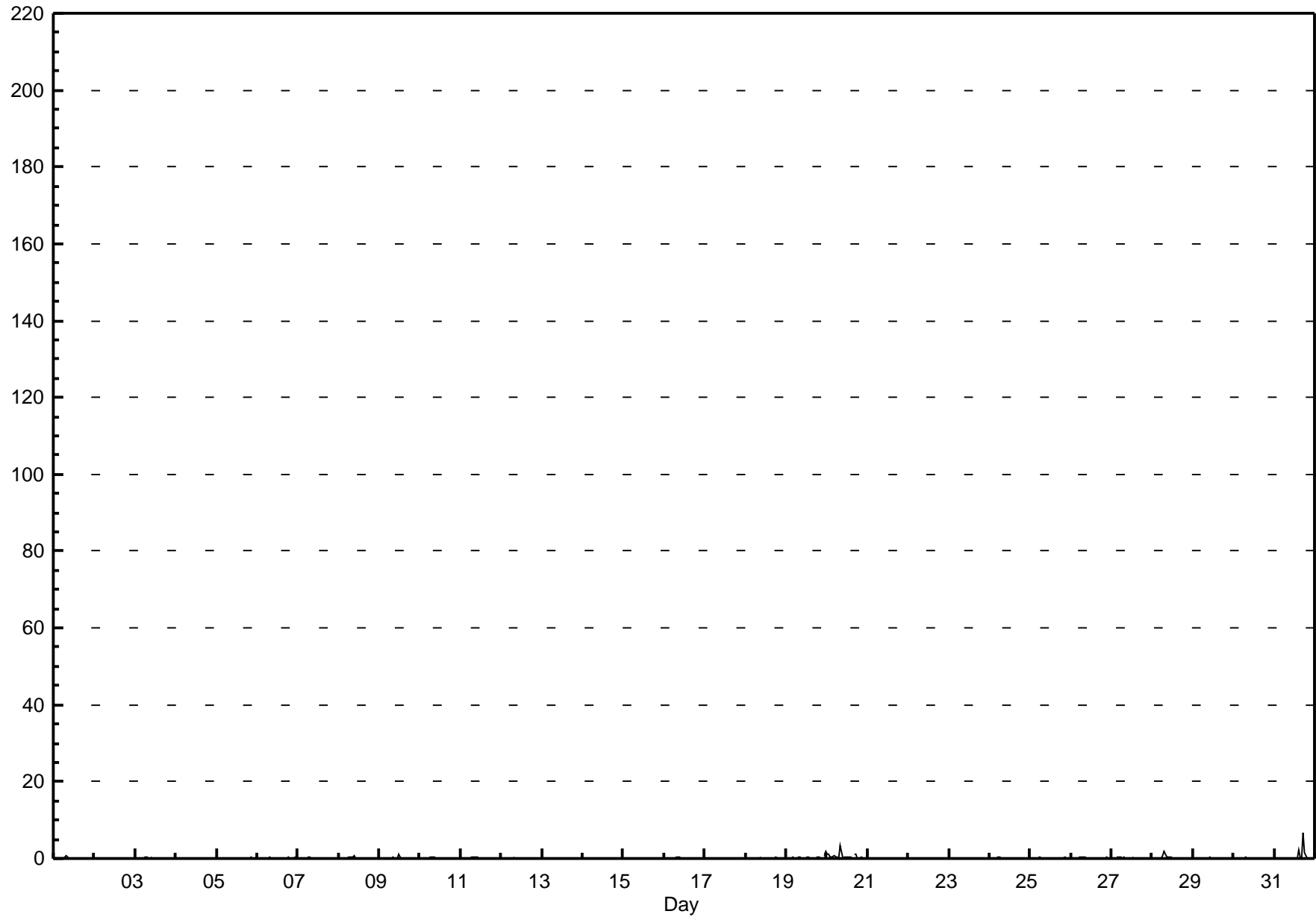
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-May	0	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6	
2-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
3-May	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
4-May	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2	
5-May	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5	
6-May	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
7-May	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2	
8-May	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.8	
9-May	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.1	
10-May	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	0.5	
11-May	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	
12-May	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.3	
13-May	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	D	D	D	D	D	D	D	D	D	--	0.0	
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
16-May	D	D	D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	D	D	D	0.1	0.4	
17-May	A	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	0.0	
18-May	D	D	D	D	D	D	D	D	0	0	0	0	0	D	0	0	0	0	0	0	0	0	0	A	0	--	0.3
19-May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0.3	1.8	
20-May	1	1	0	0	1	0	0	0	0	3	0	0	0	0	0	P	1	1	0	0	0	0	0	0	0.5	3.3	
21-May	0	0	0	A	0	0	0	0	0	0	D	D	D	D	D	D	D	0	0	0	0	0	0	0	--	0.1	
22-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
23-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1	
24-May	0	A	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	0	0	0	0	0	--	0.2	
25-May	0	0	0	0	0	0	0	D	D	D	C	C	C	C	0	0	0	0	0	0	0	0	0	0	--	0.5	
26-May	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
27-May	0	0	0	A	0	0	0	0	0	0	P	P	P	0	0	0	0	0	0	0	0	0	0	0	0.1	0.4	
28-May	0	0	0	A	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.8	
29-May	0	0	A	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	
30-May	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	
31-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	7	2	0	0	0	A	A	0.6	6.6	

0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Diurnal Average
1.0	1.0	0.2	0.4	0.6	0.5	0.9	1.8	3.3	0.8	0.5	1.1	0.3	0.2	2.2	0.4	1.0	6.6	1.6	0.3	0.5	0.3	0.7	1.8	Diurnal Maximum		

C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span

Hourly Averages

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



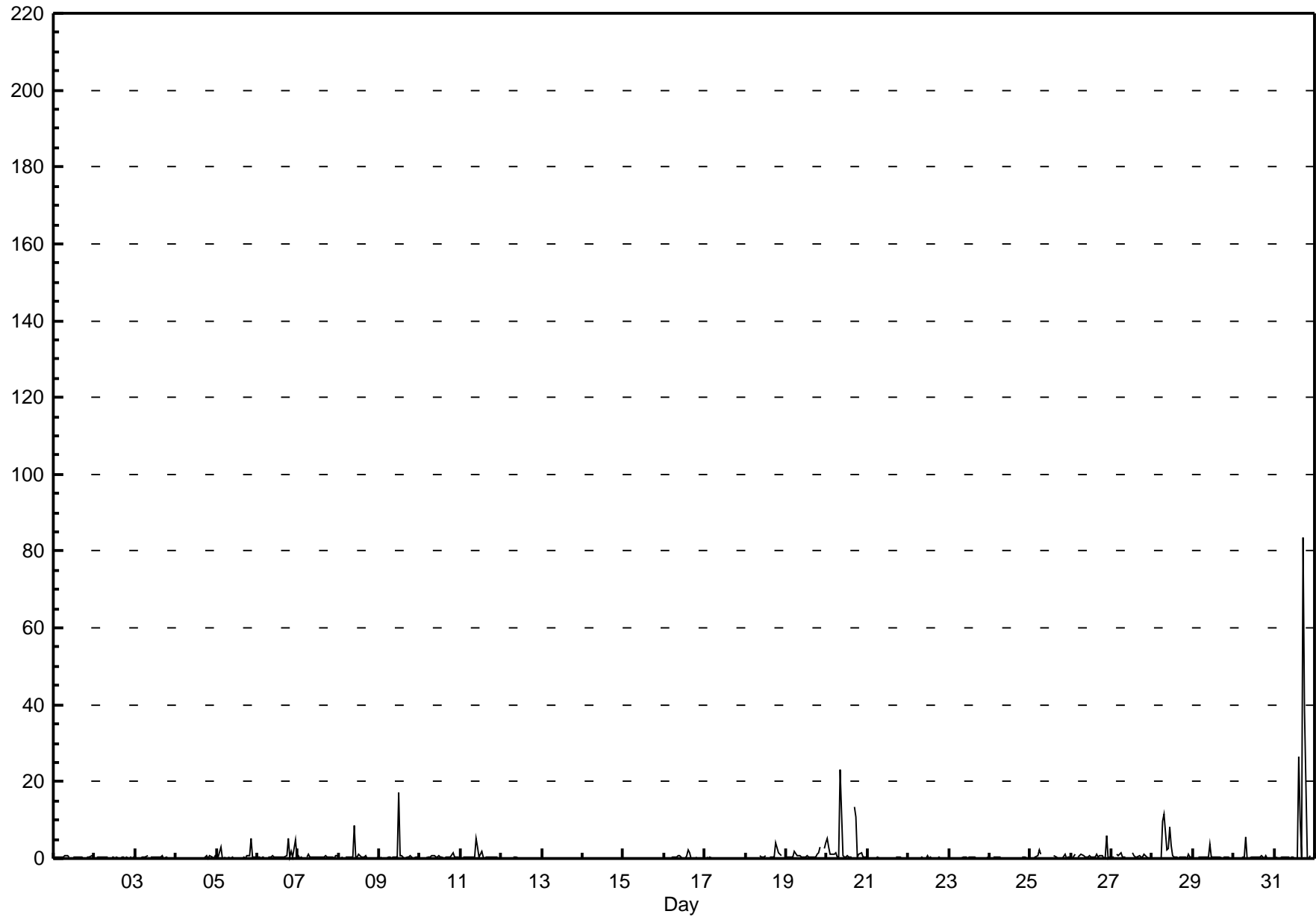
Hourly Maximums

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

Maximum Value: 83.6 ppb on May 31 18:00		Maximum Daily Average: 7.7 ppb on May 31		Hours in Service: 744																							
Minimum Value: 0 ppb on May 12 20:00		Minimum Daily Average: 0.1 ppb on May 12		Hours of Data: 585																							
Maximum Diurnal Average: 3.9 ppb at hour 18		Minimum Diurnal Average: 0.3 ppb at hour 4		Hours of Missing Data: 159																							
Monthly Average: 0.88 ppb		Percentiles: P ₁ = 0.0 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.2 Q ₃ = 0.5 P ₉₀ = 0.9 P ₉₉ = 12.3		Hours of Calibration: 40																							
				Percent Operational Time: 84.0																							
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-May	0	0	0	0	0	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.8	
2-May	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
3-May	0	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.8	
4-May	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0.2	0.9	
5-May	0	0	3	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	1	1	5	0	0	0	0.6	5.3	
6-May	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	1	5	0	2	0	5	0	0.8	5.3	
7-May	1	0	0	0	A	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0.4	1.0	
8-May	0	0	0	A	0	0	0	0	0	0	9	0	0	1	0	0	1	0	0	0	0	0	0	0	0.7	8.6	
9-May	0	0	A	0	0	0	0	0	0	0	0	17	1	1	0	0	0	0	1	0	0	0	0	0	1.0	17.3	
10-May	0	A	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0.4	1.5	
11-May	A	0	0	0	0	0	0	1	0	5	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0.7	5.1	
12-May	0	0	0	0	0	0	P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.1	0.5	
13-May	0	0	0	0	0	0	0	0	0	0	C	C	C	C	0	D	D	D	D	D	D	D	D	D	--	0.2	
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
16-May	D	D	D	0	0	0	0	0	1	1	0	0	0	1	2	1	0	0	0	0	D	D	D	0	0.5	2.3	
17-May	A	0	0	0	0	0	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	0.3	
18-May	D	D	D	D	D	D	D	D	1	0	0	0	1	D	0	0	0	0	4	2	1	1	A	0	--	4.1	
19-May	0	0	0	0	0	2	1	1	1	0	0	0	1	0	0	0	0	0	1	1	3	A	3	4	0.9	4.2	
20-May	5	3	1	1	1	2	0	0	23	1	0	1	1	0	0	P	14	11	0	1	2	0	0	0	3.0	23.0	
21-May	0	0	0	A	0	0	0	0	0	D	D	D	D	D	D	D	D	0	0	0	0	0	0	0	--	0.2	
22-May	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.9	
23-May	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
24-May	0	A	0	0	0	0	0	P	P	P	P	P	P	P	P	P	P	P	P	0	0	0	0	0	--	0.3	
25-May	0	0	0	0	1	2	1	D	D	D	C	C	C	C	1	0	0	0	0	0	1	0	0	0	--	2.1	
26-May	0	0	1	A	0	1	1	1	0	0	0	1	0	0	0	1	0	1	1	0	1	6	0	0	0.8	5.9	
27-May	0	0	A	1	1	1	0	0	0	P	P	P	2	1	0	0	1	0	0	1	1	0	0	0	0.6	1.5	
28-May	0	0	A	A	0	0	10	12	2	2	8	3	1	0	0	0	0	0	0	0	0	1	0	0	2.0	11.7	
29-May	0	A	A	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	3.6	
30-May	A	A	0	0	0	0	0	5	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	A	0.5	5.4	
31-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	27	10	1	84	39	0	0	1	A	A	7.7	83.6	
		0.4	0.3	0.4	0.3	0.3	0.5	0.8	1.1	1.3	1.0	0.9	1.2	0.5	0.3	1.4	0.7	0.9	3.9	2.2	0.4	0.7	0.5	0.5	0.4	Diurnal Average	
		5.3	3.1	3.0	1.2	1.1	2.1	9.8	11.7	23.0	8.6	8.3	17.3	1.9	0.6	26.7	9.9	13.6	83.6	38.9	1.6	5.3	5.9	4.9	4.2	Diurnal Maximum	
C - Calibration		P - Power Failure					D - DAS Failure					A - Automated Daily Zero Span															

Hourly Maximums

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



Hourly Averages

Oxides of Nitrogen (NO_x) - ppb

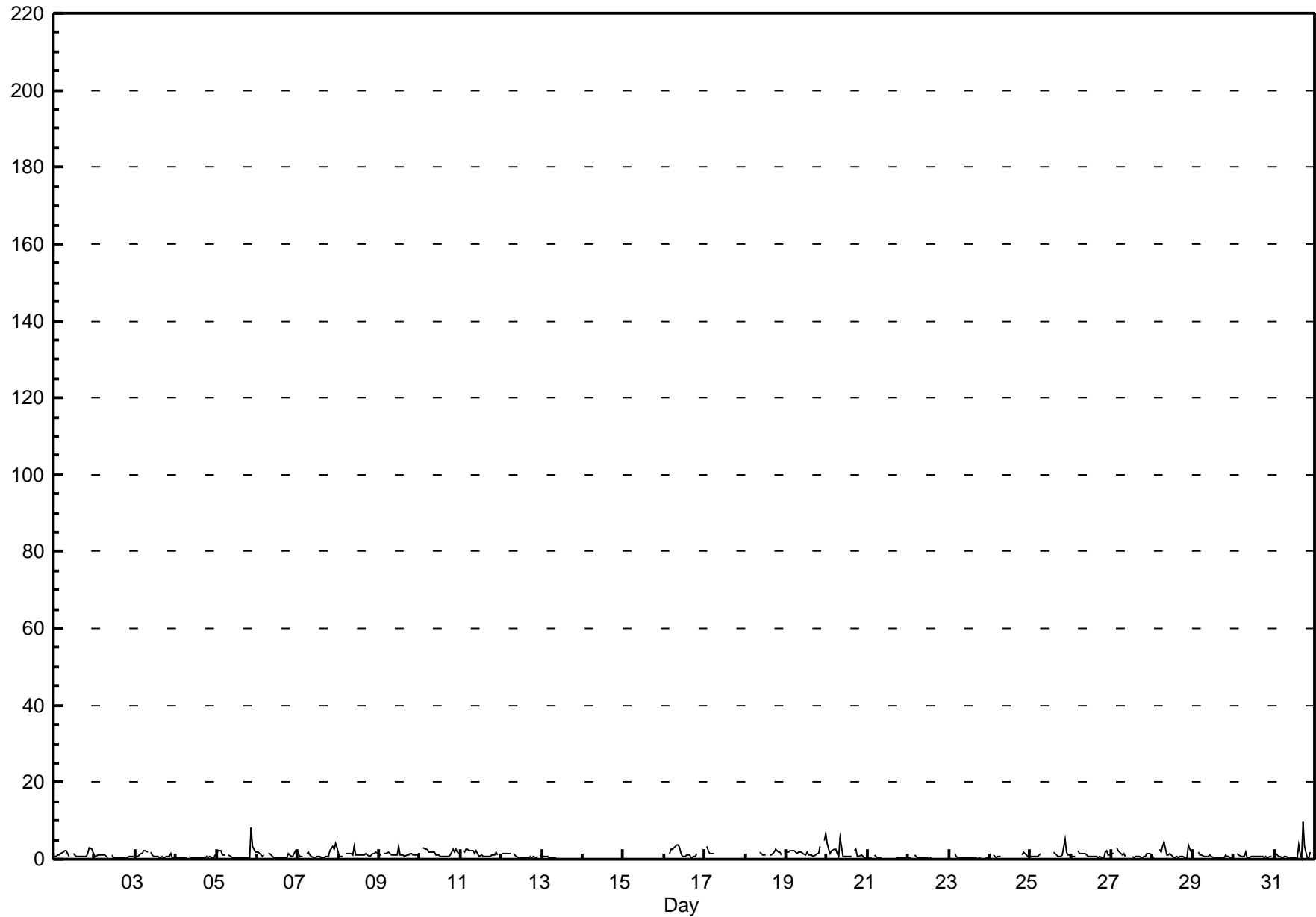
Portable-Kinuso - May 2010

Number of Exceedences (AAAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 9.7 ppb on May 31 18:00	Maximum Daily Average: 2.0 ppb on May 19		Hours of Data:	585
Minimum Value: 0 ppb on May 22 18:00	Minimum Daily Average: 0.3 ppb on May 22		Hours of Missing Data:	159
Maximum Diurnal Average: 1.6 ppb at hour 21	Minimum Diurnal Average: 0.6 ppb at hour 14		Hours of Calibration:	40
Monthly Average: 1.12 ppb	Percentiles: P ₁ = 0.1 P ₁₀ = 0.3 Q ₁ = 0.5 Median = 0.8 Q ₃ = 1.4 P ₉₀ = 2.2 P ₉₉ = 4.6		Percent Operational Time:	84.0

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-May	1	1	1	1	2	2	2	2	1	1	A	1	1	1	1	1	1	1	1	1	2	3	3	2	1.3	2.9
2-May	1	1	1	1	1	1	1	1	0	A	1	1	0	0	0	0	0	0	0	1	1	1	1	1	0.7	1.2
3-May	1	1	1	1	1	2	2	2	A	2	1	1	1	1	1	1	1	0	1	1	1	1	0	0	1.0	2.2
4-May	0	0	0	0	0	0	0	A	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0.4	1.2
5-May	2	2	2	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	1	8	3	3	2	1.3	8.1
6-May	2	1	1	1	1	A	2	1	1	1	0	0	0	0	0	0	0	0	2	1	1	1	2	2	1.0	2.3
7-May	1	1	1	1	A	1	2	1	1	1	0	1	1	1	1	1	1	1	1	2	3	3	4	3	1.3	4.0
8-May	2	1	1	A	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	2	2	2	2	1.4	3.4
9-May	1	1	A	2	1	2	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.2
10-May	1	A	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	3	2	2	2	2	1.6	2.9
11-May	A	2	2	3	3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	2	1	A	1.5	2.6
12-May	2	1	1	1	1	1	P	2	1	1	0	0	0	0	0	0	0	0	1	1	0	1	A	1	0.8	1.6
13-May	1	1	1	1	0	0	0	0	0	0	C	C	C	C	0	D	D	D	D	D	D	D	D	D	--	0.7
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
16-May	D	D	D	1	3	3	3	4	4	3	2	1	1	1	1	1	1	1	1	1	D	D	D	4	1.9	3.8
17-May	A	4	2	1	1	1	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	3.5
18-May	D	D	D	D	D	D	D	D	2	2	1	1	1	D	1	1	1	2	3	2	2	1	A	2	--	2.7
19-May	2	2	2	2	2	2	2	2	2	2	1	1	2	1	1	1	1	1	1	2	3	A	5	7	2.0	6.7
20-May	4	3	2	2	3	2	1	1	6	1	1	1	1	1	1	P	2	3	1	1	1	1	0	0	1.6	5.8
21-May	0	0	0	A	1	1	1	0	0	0	D	D	D	D	D	D	D	0	0	0	0	0	0	0	--	1.2
22-May	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
23-May	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.4
24-May	0	A	1	1	0	1	1	P	P	P	P	P	P	P	P	P	P	P	P	1	2	2	1	1	--	2.0
25-May	1	1	1	1	1	1	1	D	D	D	C	C	C	C	2	1	1	1	1	1	5	2	1	1	--	5.1
26-May	1	1	1	A	2	1	1	1	2	1	1	1	1	1	1	1	0	1	1	0	2	2	1	1	1.1	2.4
27-May	1	2	A	3	2	2	1	1	1	1	P	P	P	1	1	1	1	0	0	1	1	1	2	1	1.1	2.8
28-May	1	1	A	A	3	2	3	5	1	1	1	1	1	1	1	0	1	1	1	0	0	4	3	2	1.4	4.5
29-May	2	A	A	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0.7	1.8
30-May	A	A	2	1	1	1	1	2	1	0	1	1	1	1	1	1	1	1	0	1	0	1	1	A	0.8	1.9
31-May	A	1	1	1	0	0	1	1	0	0	0	0	0	0	4	1	0	10	4	0	0	2	A	A	1.4	9.7

1.1	1.2	1.2	1.4	1.4	1.3	1.3	1.5	1.3	1.1	0.9	0.8	0.7	0.6	0.8	0.6	0.7	1.1	0.9	0.9	1.6	1.4	1.4	1.5	Diurnal Average	
3.9	3.5	2.9	2.8	2.6	2.7	3.4	4.5	5.8	3.4	1.6	3.2	1.9	1.3	3.9	1.5	2.2	9.7	3.5	2.6	8.1	3.9	4.7	6.7	Diurnal Maximum	

C - Calibration P - Power Failure D - DAS Failure A - Automated Daily Zero Span



Hourly Maximums

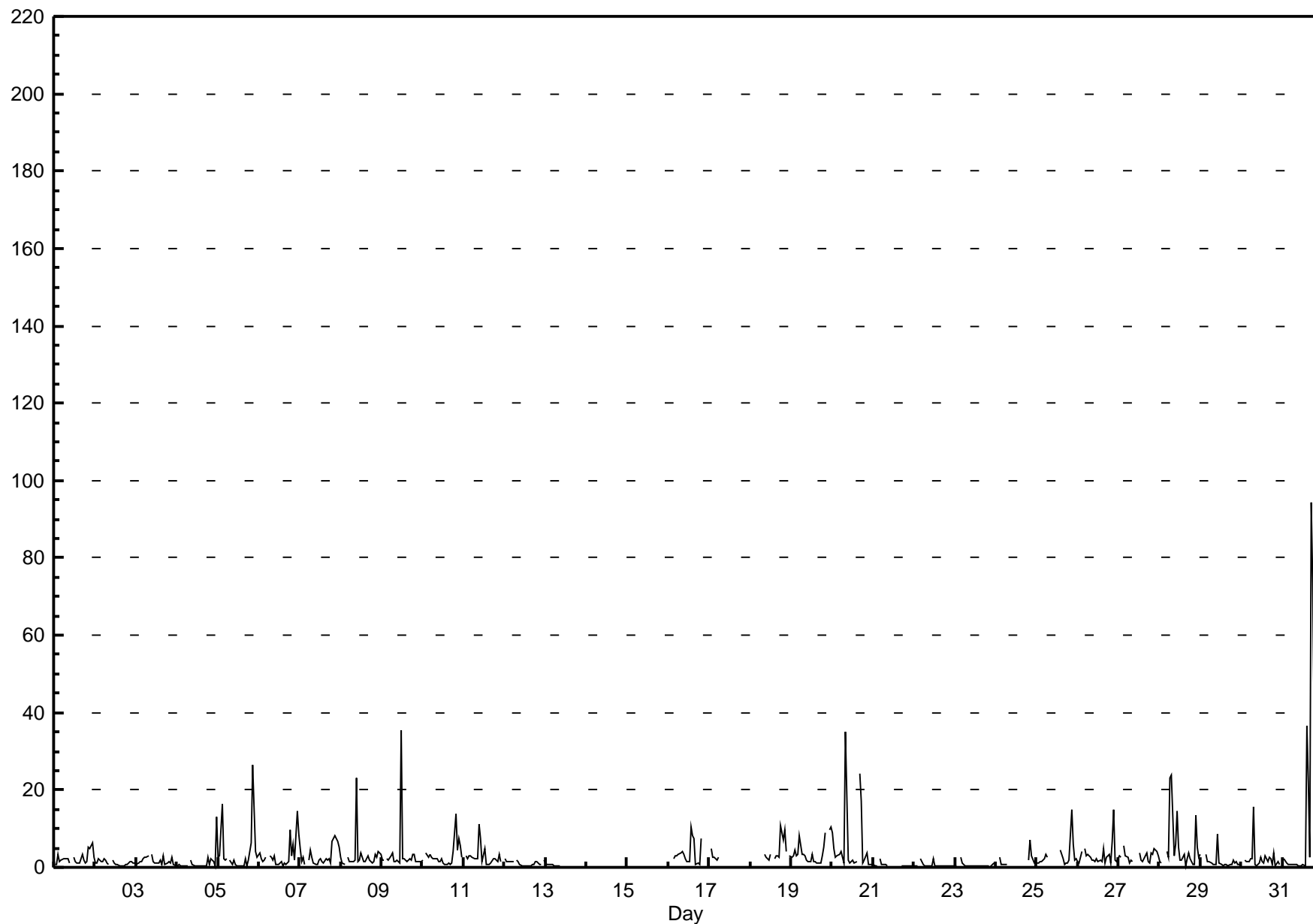
Oxides of Nitrogen (NO_x) - ppb

Portable-Kinuso - May 2010

Maximum Value: 94.2 ppb on May 31 18:00		Maximum Daily Average: 12.0 ppb on May 31		Hours in Service: 744																							
Minimum Value: 0 ppb on May 23 21:00		Minimum Daily Average: 0.5 ppb on May 22		Hours of Data: 585																							
Maximum Diurnal Average: 5.6 ppb at hour 18		Minimum Diurnal Average: 1.4 ppb at hour 14		Hours of Missing Data: 159																							
Monthly Average: 2.97 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.4 Q ₁ = 0.8 Median = 1.6 Q ₃ = 2.7 P ₉₀ = 5.2 P ₉₉ = 23.7		Hours of Calibration: 40																							
				Percent Operational Time: 84.0																							
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-May	1	1	3	2	2	2	2	2	2	1	A	3	1	1	1	1	3	2	1	1	5	5	6	3	2.3	6.4	
2-May	1	1	2	1	1	2	2	1	1	A	2	1	1	1	0	0	0	0	1	1	1	1	1	1	1.1	2.3	
3-May	1	1	1	2	2	3	3	3	A	4	1	1	1	1	2	1	3	1	1	1	1	3	1	0	1.6	3.5	
4-May	0	1	0	0	0	0	0	A	2	1	0	0	0	0	0	0	0	0	2	1	2	2	0	13	1.2	13.0	
5-May	3	3	16	2	2	2	A	2	1	2	1	0	0	0	0	0	2	1	2	6	27	15	4	3	4.1	26.6	
6-May	4	2	1	2	3	A	3	3	2	3	1	1	1	1	0	1	1	1	10	3	6	2	15	9	3.2	14.6	
7-May	5	1	3	1	A	2	5	2	1	1	1	2	2	1	1	2	2	2	1	7	8	7	7	5	3.0	8.2	
8-May	3	1	1	A	2	2	1	1	2	23	1	2	4	2	1	2	3	2	1	1	3	2	4	3	3.0	23.3	
9-May	2	2	A	2	2	3	4	1	1	2	1	35	2	2	2	1	2	2	3	3	2	1	1	2	3.5	35.4	
10-May	2	A	4	3	3	3	2	2	2	1	1	2	1	1	1	1	1	1	4	14	5	7	6	3	3.0	14.0	
11-May	A	3	2	3	3	3	2	2	2	11	8	1	5	1	1	1	1	2	2	2	1	3	1	A	2.8	11.3	
12-May	2	2	1	2	1	2	P	2	2	1	1	0	0	0	0	0	1	1	1	1	1	1	1	A	2	1.1	2.4
13-May	1	1	1	1	1	0	0	0	0	C	C	C	C	1	D	D	D	D	D	D	D	D	D	D	--	1.0	
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
16-May	D	D	D	2	3	3	3	4	4	3	2	2	1	10	8	7	1	1	1	7	D	D	D	6	3.9	10.4	
17-May	A	5	3	3	2	2	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	4.7	
18-May	D	D	D	D	D	D	D	D	3	3	2	2	3	D	2	3	3	3	11	7	10	4	A	3	--	10.8	
19-May	3	3	4	3	3	8	3	3	3	2	2	2	3	2	1	1	1	1	3	5	9	A	10	10	3.7	10.3	
20-May	9	5	3	3	3	4	2	1	35	2	1	1	2	1	1	P	24	17	1	2	4	1	1	1	5.4	35.1	
21-May	1	0	0	A	2	1	1	1	0	D	D	D	D	D	D	D	D	1	0	1	0	0	0	0	--	2.2	
22-May	0	1	0	A	2	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.3	
23-May	0	0	A	3	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.6	2.5	
24-May	1	A	2	1	1	1	1	P	P	P	P	P	P	P	P	P	P	P	P	2	7	3	1	1	--	7.1	
25-May	1	1	1	1	2	3	3	D	D	D	C	C	C	C	5	2	1	1	1	2	15	6	2	2	--	14.9	
26-May	1	1	4	A	5	3	3	3	2	2	2	2	1	2	1	5	1	3	3	1	7	15	2	1	3.1	15.1	
27-May	3	3	A	5	3	3	1	2	2	P	P	P	4	2	2	2	4	1	1	4	3	5	4	3	2.8	5.5	
28-May	2	1	A	A	4	3	23	24	3	6	15	5	2	2	3	1	2	4	2	1	1	13	5	2	5.6	23.7	
29-May	3	A	A	3	1	1	1	1	1	1	8	1	1	0	1	1	0	1	1	2	1	1	1	1	1.5	8.4	
30-May	A	A	2	2	1	2	2	16	1	1	1	3	1	1	3	1	3	2	1	4	0	1	1	A	2.3	15.7	
31-May	A	2	1	1	1	1	1	1	1	0	1	0	1	0	37	22	3	94	73	0	1	12	A	A	12.0	94.2	
		2.1	1.7	2.6	2.0	2.2	2.2	2.8	3.3	2.9	3.2	2.4	3.1	1.6	1.4	3.0	2.4	2.5	5.6	5.0	3.0	4.7	4.6	3.2	3.1	Diurnal Average	
		9.1	4.8	16.2	5.5	5.0	8.1	23.2	23.7	35.1	23.3	14.5	35.4	5.0	10.4	36.6	21.9	24.3	94.2	73.4	14.0	26.6	15.4	14.6	13.0	Diurnal Maximum	
C - Calibration		P - Power Failure					D - DAS Failure					A - Automated Daily Zero Span															

Hourly Maximums

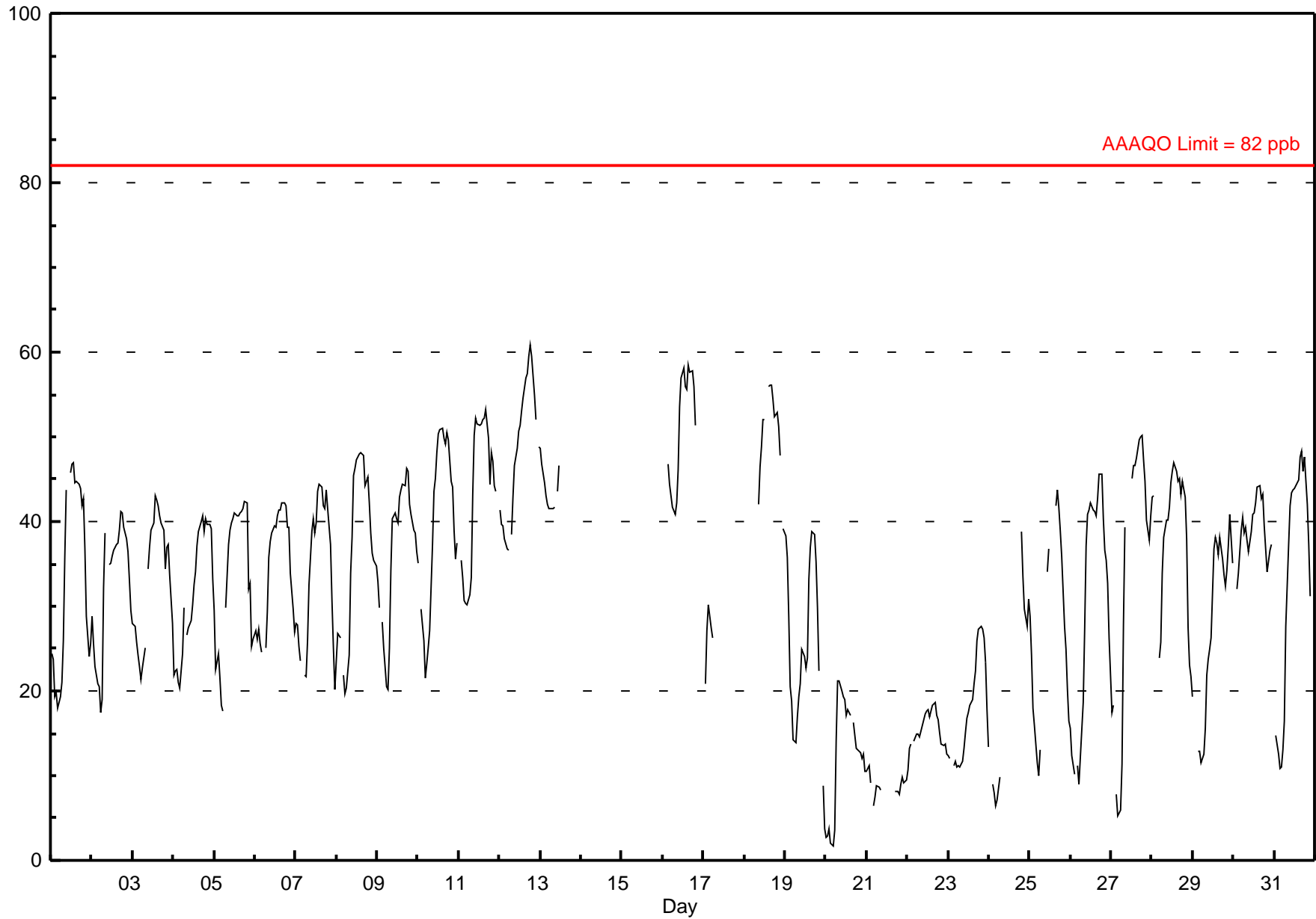
Oxides of Nitrogen (NO_x) - ppb
Portable-Kinuso - May 2010



Hourly Averages

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

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 60.9 ppb on May 12 19:00 Maximum Daily Average: 49.3 ppb on May 16																		Hours in Service: 744 Hours of Data: 587									
Minimum Value: 2 ppb on May 20 05:00 Minimum Daily Average: 12.6 ppb on May 20 Maximum Diurnal Average: 43.1 ppb at hour 16 Minimum Diurnal Average: 19.9 ppb at hour 6 Monthly Average: 32.37 ppb Percentiles: P ₁ = 2.8 P ₁₀ = 12.8 Q ₁ = 21.5 Median = 35.6 Q ₃ = 42.1 P ₉₀ = 47.9 P ₉₉ = 57.8																		Hours of Missing Data: 157 Hours of Calibration: 37 Percent Operational Time: 83.9									
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-May	24	24	19	20	18	19	21	26	36	44	A	46	47	47	45	45	44	44	42	43	37	29	24	26	33.4	47.0	
2-May	29	26	23	21	21	17	19	32	39	A	35	35	36	37	37	37	39	41	41	39	38	37	33	29	32.2	41.2	
3-May	28	28	26	24	23	21	23	25	A	34	37	39	40	43	42	42	41	40	39	34	37	37	34	28	33.3	43.1	
4-May	22	22	22	21	20	24	30	A	27	28	28	30	32	34	37	39	40	41	39	40	40	40	39	33	31.7	40.6	
5-May	29	23	24	21	18	18	A	30	37	39	40	40	41	41	41	41	41	41	42	42	32	33	25	26	33.3	42.3	
6-May	27	26	27	26	25	A	25	29	36	38	39	40	39	41	41	41	42	42	42	39	39	34	30	27	34.6	42.2	
7-May	28	28	25	24	A	22	22	26	33	39	40	39	40	44	44	44	42	42	44	41	37	31	25	20	33.8	44.4	
8-May	24	27	26	A	22	20	20	24	34	38	45	46	47	48	48	48	44	45	42	39	36	35	35	36.6	48.2		
9-May	33	30	A	28	25	21	20	25	34	40	41	40	40	43	44	44	44	46	46	42	41	39	39	36	36.6	46.3	
10-May	35	A	30	26	22	23	25	27	37	44	45	48	50	51	51	50	49	51	50	45	44	39	36	37	39.7	51.0	
11-May	A	35	33	31	30	30	31	33	43	50	52	51	51	52	52	52	53	50	44	48	47	44	44	A	43.6	53.2	
12-May	41	40	40	38	37	37	P	38	43	47	49	51	51	53	55	57	57	59	61	60	55	52	A	49	48.6	60.9	
13-May	49	47	45	43	42	41	41	41	42	N	44	47	C	C	D	D	D	D	D	D	D	D	D	D	--	48.6	
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
16-May	D	D	D	47	44	43	42	41	42	46	54	57	58	56	56	58	58	58	56	51	D	D	D	21	49.3	58.5	
17-May	A	21	27	30	28	26	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	30.2	
18-May	D	D	D	D	D	D	D	D	42	46	49	52	52	D	56	56	56	54	52	53	51	48	A	39	--	56.1	
19-May	38	36	29	20	19	14	14	17	19	21	25	24	23	24	33	37	39	38	35	30	22	A	9	4	24.8	38.7	
20-May	3	3	4	2	2	4	14	21	21	20	19	19	17	18	17	P	16	15	13	13	13	12	13	11	12.6	21.3	
21-May	11	11	9	A	6	7	9	9	8	D	D	D	D	D	D	D	D	8	8	8	9	10	9	9	--	11.1	
22-May	11	13	14	A	14	15	15	15	15	16	17	18	18	17	18	18	19	17	17	15	14	14	14	13	15.4	18.6	
23-May	12	12	A	11	12	11	11	11	12	13	15	17	17	18	19	21	22	26	27	28	27	26	23	18	17.9	27.6	
24-May	13	A	9	8	6	7	10	P	P	P	P	P	P	P	P	P	P	P	P	39	34	30	28	31	--	38.8	
25-May	29	24	18	16	12	10	13	D	D	D	34	37	C	C	C	42	44	42	39	36	28	25	20	16	26.9	43.8	
26-May	16	12	10	A	11	9	12	19	27	37	41	41	42	41	41	41	43	46	46	40	37	35	33	26	30.7	45.5	
27-May	17	18	A	8	5	6	11	28	39	P	P	P	45	47	47	47	50	50	47	45	40	38	41	34.0	50.1		
28-May	43	43	A	A	24	26	34	38	40	40	42	45	46	47	46	45	45	43	45	43	38	27	23	22	38.3	46.9	
29-May	19	A	A	A	13	13	12	13	16	22	24	25	26	37	38	37	36	38	36	34	32	34	37	41	35	28.0	40.8
30-May	A	A	32	34	39	40	39	39	38	36	39	41	41	42	44	44	43	43	39	37	34	37	37	A	39.0	44.2	
31-May	A	15	13	11	11	13	16	28	37	42	43	44	44	45	45	48	48	46	48	42	37	31	A	A	33.6	48.3	
Diurnal Average 25.3 24.5 23.0 22.7 20.3 19.9 21.2 26.6 32.1 35.5 37.4 38.9 39.8 40.2 41.5 43.1 42.5 40.9 40.1 38.2 34.9 32.9 28.3 26.3																								Diurnal Average			
Diurnal Maximum 48.6 46.8 44.6 46.8 44.3 43.0 41.7 41.4 43.2 50.2 53.6 56.9 58.1 55.9 56.0 58.5 57.6 59.4 60.9 59.6 54.9 52.1 43.6 48.8																								Diurnal Maximum			
C - Calibration P - Power Failure D - DAS Failure N - Not Valid A - Automated Daily Zero Span																											
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																											



Hourly Maximums

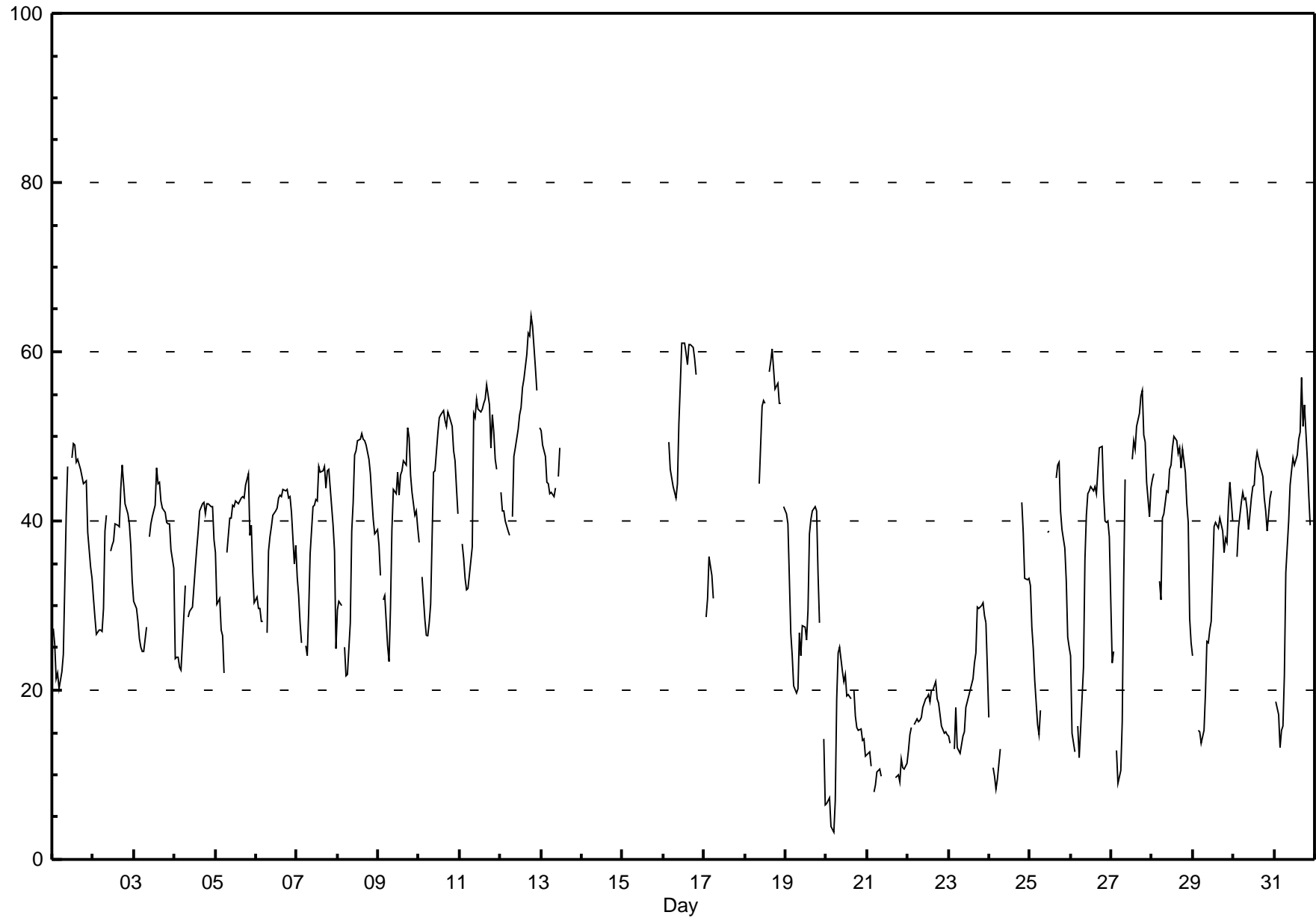
Ozone (O₃) - ppb

Portable-Kinuso - May 2010

Maximum Value: 64.2 ppb on May 12 19:00		Maximum Daily Average: 52.9 ppb on May 16		Hours in Service: 744																							
Minimum Value: 3 ppb on May 20 05:00		Minimum Daily Average: 15.2 ppb on May 20		Hours of Data: 587																							
Maximum Diurnal Average: 45.6 ppb at hour 16		Minimum Diurnal Average: 23.3 ppb at hour 6		Hours of Missing Data: 157																							
Monthly Average: 35.74 ppb		Percentiles: P ₁ = 6.9 P ₁₀ = 15.5 Q ₁ = 25.5 Median = 39.3 Q ₃ = 45.2 P ₉₀ = 51.1 P ₉₉ = 61.0		Hours of Calibration: 37																							
				Percent Operational Time: 83.9																							
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-May	27	25	21	22	20	22	24	32	41	47	A	47	49	49	47	47	46	45	44	45	45	39	35	33	37.1	49.1	
2-May	31	29	27	27	27	27	30	39	41	A	36	37	38	40	39	39	44	47	44	42	41	40	37	33	36.2	46.6	
3-May	31	30	28	26	25	25	25	28	A	38	40	41	42	46	44	45	42	41	41	40	40	40	37	34	35.9	46.3	
4-May	24	24	24	23	22	29	32	A	29	29	30	32	35	37	39	41	42	42	41	42	42	42	42	38	33.9	42.1	
5-May	36	30	31	27	26	22	A	36	40	40	42	42	42	42	42	43	43	43	44	46	38	40	34	30	37.4	45.5	
6-May	31	30	30	28	28	A	27	36	38	39	41	41	42	43	43	43	44	44	44	43	43	41	35	37	37.8	43.7	
7-May	33	31	28	26	A	25	24	29	36	42	42	43	42	46	46	46	46	44	46	46	42	39	37	25	37.6	46.4	
8-May	29	31	30	A	25	22	22	28	39	42	48	48	49	50	50	50	49	49	47	46	43	40	38	39	39.8	50.4	
9-May	37	34	A	31	31	25	23	30	39	44	43	46	43	45	46	47	47	51	50	46	43	41	41	39	40.0	51.0	
10-May	37	A	33	28	26	26	28	30	46	46	48	50	52	52	53	52	51	53	52	51	48	47	44	41	43.4	53.1	
11-May	A	37	36	33	32	32	35	37	53	52	54	53	53	54	54	56	54	49	53	50	47	46	A	46.6	56.0		
12-May	43	41	41	40	39	38	P	41	48	49	51	53	53	56	57	60	62	62	64	63	58	55	A	51	51.1	64.2	
13-May	51	49	48	45	44	43	43	43	44	N	45	49	C	C	D	D	D	D	D	D	D	D	D	D	--	50.6	
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--	
16-May	D	D	D	49	46	45	44	43	44	52	56	61	61	60	58	61	61	60	59	57	D	D	D	34	52.9	61.1	
17-May	A	29	31	36	34	31	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	35.8	
18-May	D	D	D	D	D	D	D	D	44	49	54	54	54	D	58	59	60	58	56	56	54	54	A	42	--	60.3	
19-May	41	40	33	27	24	21	20	27	24	28	28	26	30	39	40	41	42	41	34	28	A	14	6	29.2	41.8		
20-May	7	7	7	4	3	7	19	24	25	22	21	22	19	20	19	P	20	17	16	15	16	14	14	12	15.2	25.1	
21-May	12	13	11	A	8	9	10	11	10	D	D	D	D	D	D	D	D	10	10	9	12	11	11	11	--	12.7	
22-May	13	15	16	A	16	17	16	16	17	18	19	19	20	19	20	20	21	19	19	17	16	15	15	15	17.2	20.9	
23-May	15	14	A	13	18	13	13	13	15	15	18	19	19	20	21	23	24	30	30	30	30	29	28	22	20.5	30.4	
24-May	17	A	11	10	8	10	13	P	P	P	P	P	P	P	P	P	P	P	P	42	39	33	33	33	--	42.1	
25-May	32	28	25	21	16	15	18	D	D	D	39	39	C	C	C	45	47	47	41	39	37	33	26	25	31.7	46.9	
26-May	24	15	13	A	16	12	15	23	35	41	43	44	44	43	44	43	46	49	49	43	40	40	40	38	34.8	48.7	
27-May	23	25	A	13	9	10	16	33	45	P	P	P	47	50	49	51	53	55	55	50	49	45	44	44	38.1	55.4	
28-May	45	46	A	A	33	31	40	41	44	43	46	47	49	50	49	48	49	46	49	46	42	40	28	26	42.5	50.0	
29-May	24	A	A	A	15	15	14	15	20	26	26	27	28	39	40	40	39	40	39	36	38	38	42	45	40	31.1	44.7
30-May	A	A	36	39	42	43	43	43	41	39	43	44	44	47	48	46	46	45	43	41	39	43	44	A	42.8	48.2	
31-May	A	19	17	13	15	16	22	34	40	44	46	47	47	48	50	50	57	51	54	47	43	40	A	A	38.1	56.9	
		28.9	27.7	26.2	25.9	24.1	23.3	24.7	30.4	36.2	38.2	39.9	41.3	42.1	42.8	44.0	45.6	45.5	43.9	43.2	41.7	39.0	37.9	33.2	31.2	Diurnal Average	
		50.6	49.0	47.6	49.3	46.1	45.1	44.0	42.9	52.7	52.2	56.2	61.1	61.0	59.8	58.4	60.9	62.1	61.9	64.2	63.1	58.1	55.4	46.1	50.9	Diurnal Maximum	
C - Calibration		P - Power Failure					D - DAS Failure					N - Not Valid					A - Automated Daily Zero Span										

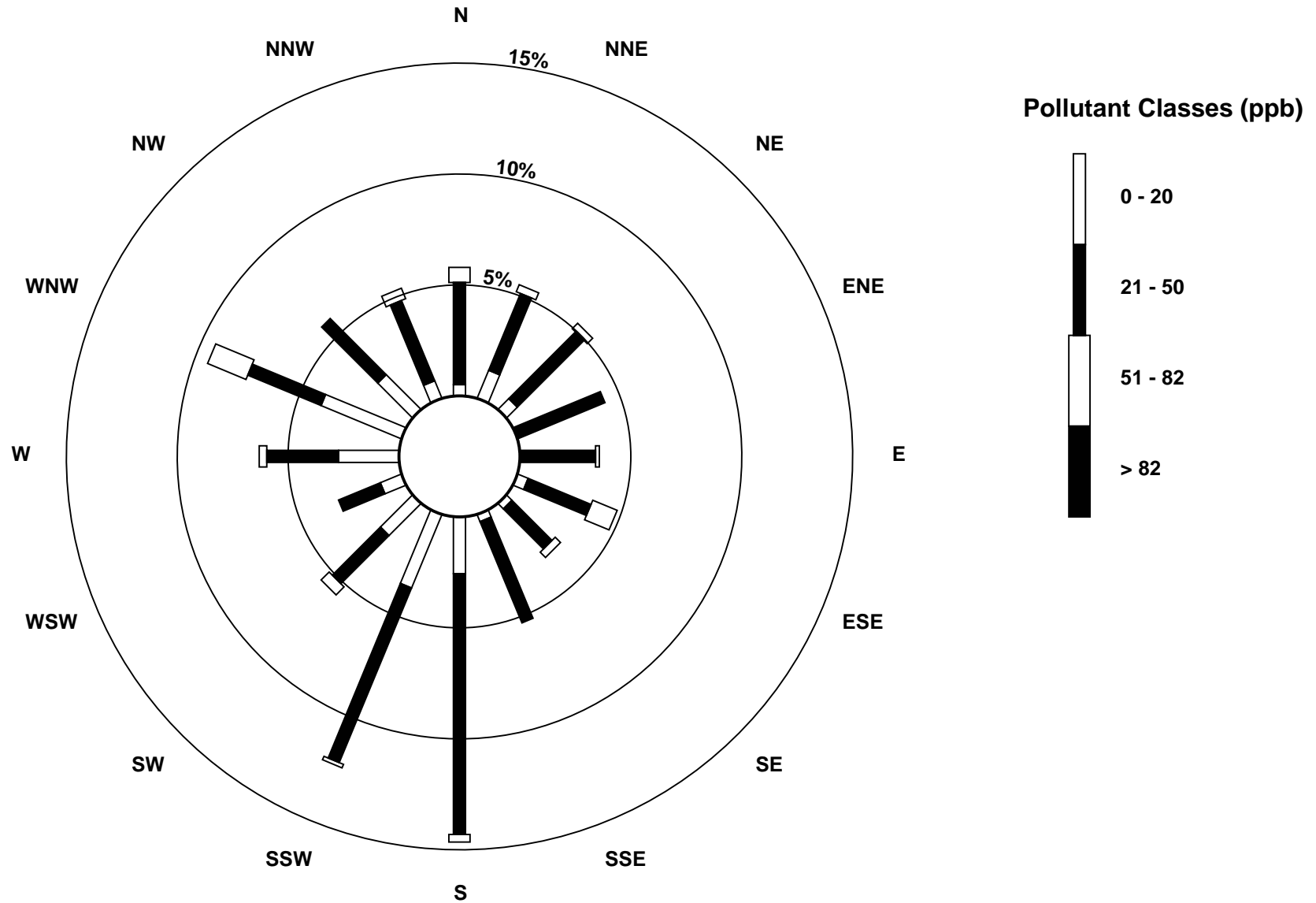
Hourly Maximums

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



Pollutant Rose

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



Eight Hour Running Averages

Ozone (O₃) - ppb

Portable-Kinuso - May 2010

Maximum Value: 57.3 ppb on May 12 23:00																					Hours in Service:	744			
Minimum Value: 3.7 ppb on May 20 06:00																					Hours of Data:	594			
Percentiles: P ₁ = 8.5 P ₁₀ = 14.7 Q ₁ = 23.9 Median = 34.0 Q ₃ = 41.1 P ₉₀ = 46.8 P ₉₉ = 56.6																					Hours of Missing Data:	150			
																					Hours of Calibration:	10			
																					Percent Operational Time:	81.2			
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-May	38	35	31	28	24	22	22	21	23	25	26	30	34	38	41	44	45	45	45	45	43	41	38	36	45.3
2-May	34	32	29	27	25	23	23	23	25	25	26	28	30	33	36	37	37	37	38	38	39	39	38	37	38.7
3-May	36	34	32	30	28	27	25	25	24	25	27	29	31	34	37	40	40	40	41	40	40	39	38	36	40.7
4-May	34	32	30	28	26	24	24	23	24	25	25	27	28	30	31	32	34	35	37	38	39	39	40	39	39.6
5-May	38	35	34	31	29	26	24	23	24	27	29	32	35	38	39	40	40	41	41	41	40	39	37	35	41.3
6-May	34	32	30	28	27	26	26	26	28	29	31	33	35	36	38	39	40	41	41	41	41	40	39	37	41.0
7-May	35	33	31	29	28	26	25	25	26	27	29	31	32	35	38	40	41	42	42	43	42	41	38	35	42.6
8-May	33	31	29	27	25	23	23	23	25	26	29	31	34	38	41	44	46	47	47	46	45	44	42	41	46.9
9-May	39	37	36	34	32	30	27	26	26	28	29	31	33	35	38	41	42	43	43	44	44	43	43	42	43.8
10-May	41	40	37	35	32	30	28	27	27	29	31	34	37	41	44	47	49	49	50	50	49	47	45	44	49.9
11-May	43	41	39	37	35	33	33	32	33	35	38	40	43	46	48	51	52	52	51	50	50	49	48	47	51.8
12-May	46	44	43	42	40	39	39	39	39	40	41	43	45	47	48	51	52	54	56	57	57	57	57	56	57.3
13-May	55	53	51	48	47	45	45	44	43	42	42	43	43	N	N	N	N	N	N	N	N	N	N	N	54.9
14-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
15-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--
16-May	N	N	N	N	N	N	N	N	43	44	45	46	48	49	51	53	55	57	57	56	56	56	N	N	57.0
17-May	N	N	N	N	N	25	25	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	25.5
18-May	N	N	N	N	N	N	N	N	N	N	N	N	N	N	50	50	53	54	54	54	54	53	53	51	54.3
19-May	48	45	42	37	33	28	26	23	21	19	19	19	20	21	23	26	28	30	32	32	34	30	25	48.0	
20-May	20	15	11	7	4	4	4	7	9	11	13	15	17	19	19	19	18	17	16	16	15	14	14	13	20.2
21-May	12	12	11	11	10	10	9	9	9	8	N	N	N	N	N	N	N	N	N	N	N	N	9	9	12.4
22-May	9	10	10	11	11	12	13	14	14	15	15	16	16	16	17	17	17	18	18	17	17	16	16	15	17.6
23-May	14	14	13	13	12	12	12	12	11	12	12	13	13	14	15	17	18	19	21	22	24	25	25	25	25.1
24-May	24	23	21	18	15	12	10	9	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	23.6
25-May	32	31	29	26	23	21	19	17	15	N	N	N	N	N	N	N	N	N	N	N	N	N	38	31	38.3
26-May	28	24	20	18	16	14	12	13	14	18	22	25	29	33	36	39	41	42	43	42	42	41	40	38	42.6
27-May	35	32	30	25	20	16	13	13	17	16	16	N	N	N	N	N	N	48	48	48	48	47	46	45	47.9
28-May	44	43	42	42	38	36	35	35	34	34	35	36	39	41	43	44	44	45	45	45	44	42	39	36	45.1
29-May	33	31	29	24	20	17	15	14	15	16	17	19	22	25	28	31	33	34	35	36	36	36	36	36	36.0
30-May	36	36	35	36	36	37	36	37	37	37	38	39	39	39	40	41	41	42	42	42	41	40	39	39	42.2
31-May	38	33	29	24	21	17	13	15	18	21	25	29	33	37	41	43	45	45	46	46	45	43	43	42	45.9
54.9 53.1 50.8 48.4 46.6 45.1 44.6 43.7 43.1 43.5 44.8 46.1 47.8 49.4 51.1 53.3 55.3 56.8 57.0 56.7 57.1 57.0 57.3 56.2																									
Diurnal Maximums																									
N - Not Valid																									

Hourly Averages

External Temperature (ET) - °C

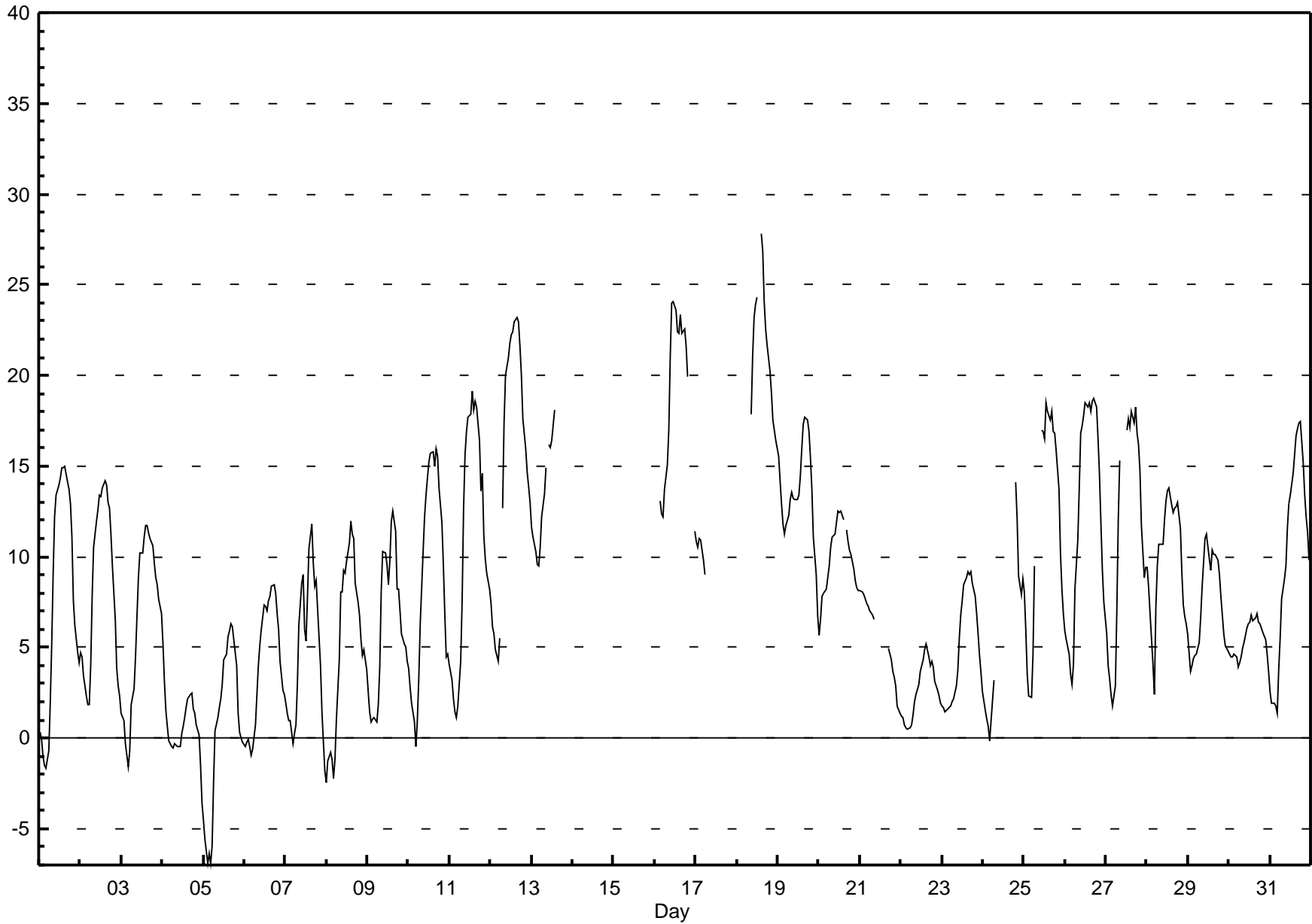
Portable-Kinuso - May 2010

Number of Exceedences (AAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 27.8 °C on May 18 15:00	Maximum Daily Average: 19.0 °C on May 16		Hours of Data:	624
Minimum Value: -7 °C on May 5 05:00	Minimum Daily Average: 0.6 °C on May 5		Hours of Missing Data:	120
Maximum Diurnal Average: 13.8 °C at hour 16	Minimum Diurnal Average: 2.7 °C at hour 5		Hours of Calibration:	0
Monthly Average: 8.40 °C	Percentiles: P ₁ = -3.9 P ₁₀ = 0.9 Q ₁ = 3.6 Median = 7.9 Q ₃ = 12.6 P ₉₀ = 17.4 P ₉₉ = 24.0		Percent Operational Time:	83.9

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-May	0	0	-1	-1	-2	-1	2	5	9	12	13	14	14	15	15	15	14	14	13	11	8	6	5	4	7.7	15.0
2-May	5	4	3	2	2	2	4	8	11	12	13	13	13	14	14	14	13	13	11	10	7	4	3	2	8.2	14.2
3-May	1	1	0	-1	-2	-1	2	3	4	7	9	10	10	11	12	12	11	11	11	10	9	8	8	7	6.4	11.8
4-May	5	3	2	1	0	-1	-1	0	0	0	0	0	1	1	2	2	2	2	2	1	1	0	-1	-4	0.7	5.2
5-May	-5	-6	-7	-6	-7	-6	-2	0	1	2	2	3	4	5	6	6	6	6	5	4	1	0	0	0	0.6	6.3
6-May	-1	0	0	0	-1	-1	1	2	4	5	6	7	7	7	8	8	8	8	8	7	6	4	3	2	4.1	8.4
7-May	2	1	1	1	0	0	1	3	6	9	9	6	5	8	10	12	10	8	9	7	4	1	0	-2	4.6	11.8
8-May	-2	-1	-1	-1	-2	-1	1	4	8	8	9	9	10	11	12	11	11	9	7	7	5	5	5	4	5.3	11.9
9-May	3	1	1	1	1	1	2	4	8	10	10	10	8	10	12	13	11	8	8	7	6	5	5	4	6.2	12.5
10-May	4	3	2	1	0	1	3	6	10	12	13	14	15	16	16	15	16	16	14	12	10	7	4	5	8.9	16.0
11-May	4	3	2	1	1	2	4	8	13	16	17	18	18	19	18	19	18	16	14	15	11	10	9	8	11.0	19.1
12-May	7	6	6	5	4	6	P	13	17	20	21	22	22	22	23	23	23	22	20	18	16	15	14	13	15.5	23.2
13-May	12	11	10	10	9	11	12	13	15	N	16	16	16	18	D	D	D	D	D	D	D	D	D	D	--	18.1
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
16-May	D	D	D	13	12	12	14	15	17	21	24	24	24	22	22	23	22	23	22	20	D	D	D	11	19.0	24.0
17-May	11	11	11	11	10	9	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	11.0
18-May	D	D	D	D	D	D	D	D	18	21	23	24	24	D	28	27	24	23	22	20	19	18	17	16	--	27.8
19-May	16	14	13	12	11	12	12	13	14	13	13	13	13	14	16	17	18	18	17	15	14	11	9	7	13.6	17.7
20-May	6	7	8	8	8	9	9	11	11	11	12	13	12	13	12	P	11	11	10	10	9	9	8	8	9.8	12.5
21-May	8	8	8	8	7	7	7	7	7	D	D	D	D	D	D	D	D	5	4	4	3	3	2	1	--	8.1
22-May	1	1	1	1	0	1	1	1	2	2	3	4	4	4	5	5	4	4	4	4	3	3	2	2	2.6	5.2
23-May	2	2	1	2	2	2	2	2	3	4	6	7	8	8	9	9	9	9	9	8	7	6	5	4	5.1	9.2
24-May	3	2	1	1	0	1	3	P	P	P	P	P	P	P	P	P	P	P	P	14	12	9	8	9	--	14.1
25-May	8	6	4	2	2	5	9	D	D	D	17	17	16	18	18	18	18	17	17	16	14	10	8	7	11.8	18.5
26-May	6	5	5	4	3	4	8	11	14	17	17	18	18	18	18	18	19	19	18	16	15	12	9	7	12.5	18.7
27-May	6	4	3	2	2	3	7	12	15	P	P	P	17	18	17	18	17	18	17	16	15	12	9	9	11.3	18.2
28-May	9	8	7	4	2	7	9	11	11	11	12	13	14	14	13	12	13	13	13	12	9	7	7	6	9.9	13.8
29-May	6	4	4	4	5	5	5	7	8	10	11	11	10	9	10	10	10	10	9	8	7	6	5	5	7.4	11.3
30-May	5	4	5	5	5	4	4	5	5	5	6	6	6	7	6	7	7	6	6	6	6	5	5	4	5.4	6.8
31-May	3	2	2	2	1	4	5	8	9	10	12	13	13	15	16	17	17	17	17	15	13	12	11	10	10.1	17.4

4.6	3.9	3.3	3.2	2.7	3.4	4.9	6.8	9.2	10.3	11.8	12.2	12.5	12.7	13.5	13.8	13.4	12.5	11.8	10.8	8.8	7.2	6.1	5.6	Diurnal Average	
15.5	14.2	13.0	13.1	12.3	12.2	13.7	15.1	17.8	21.1	24.0	24.0	24.3	22.4	27.8	26.9	24.1	22.6	21.7	20.2	19.1	17.5	17.0	16.4	Diurnal Maximum	

P - Power Failure D - DAS Failure N - Not Valid



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Portable-Kinuso - May 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	10	9	8	6	6	10	9	9	8	3	5	9	9	9	12	9	8	5	3	2	1	2	3	6	1.3	11.8
Dir	186	178	176	161	196	192	191	175	166	332	349	29	25	31	35	34	37	341	280	228	139	228	195	197	147	35
2 Spd	10	7	3	4	5	4	5	4	4	5	6	5	4	4	5	4	9	6	4	4	5	5	6	11	4.2	11.1
Dir	186	192	183	198	200	191	198	205	243	257	274	260	230	279	256	283	276	274	270	207	200	182	184	183	222	183
3 Spd	8	6	11	9	8	10	8	7	5	4	8	7	11	6	7	8	10	5	3	2	5	6	10	10	0.8	11.2
Dir	189	190	186	191	192	197	184	185	191	12	18	17	36	46	24	28	29	344	356	312	323	306	346	351	3	36
4 Spd	11	10	11	10	7	9	10	9	9	9	9	10	11	10	9	10	9	10	13	10	10	4	2	1	7.9	12.9
Dir	323	316	321	322	313	311	321	314	309	306	308	322	322	318	316	323	345	355	27	10	20	358	277	168	329	27
5 Spd	1	2	2	3	3	3	4	2	5	7	6	8	8	7	6	5	6	6	6	4	3	2	3	3	2.3	7.9
Dir	191	241	148	215	205	203	192	307	342	342	332	341	336	346	338	337	9	339	16	2	46	150	225	211	333	336
6 Spd	3	3	5	2	1	2	3	3	0	1	5	5	5	4	4	5	4	0	3	4	1	2	3	1	0.3	5.4
Dir	165	211	214	195	110	217	209	132	35	2	67	5	13	2	2	352	288	252	104	93	179	288	113	239	48	67
7 Spd	4	3	7	8	4	7	6	3	2	4	5	3	6	1	3	2	8	9	3	4	0	3	2	2	2.4	9.4
Dir	179	182	190	191	176	195	200	134	340	329	341	357	173	100	131	340	164	160	159	25	119	185	199	229	178	160
8 Spd	4	8	12	4	6	9	7	5	3	7	7	5	3	3	8	11	10	7	4	5	2	5	6	3	3.1	11.5
Dir	199	195	180	166	164	186	192	174	165	53	50	155	80	168	106	72	85	276	289	207	169	193	164	140	155	180
9 Spd	7	5	7	8	3	1	3	6	5	4	2	10	10	8	4	6	9	7	9	8	8	10	12	10	3.4	11.6
Dir	194	193	188	185	218	115	171	186	178	178	259	42	63	80	4	349	52	163	63	126	165	162	160	166	141	160
10 Spd	8	7	7	6	6	8	9	8	4	3	6	6	7	8	7	3	6	4	5	1	2	4	2	7	1.4	9.4
Dir	169	194	212	215	199	190	177	186	195	10	4	3	2	11	9	335	238	352	11	75	168	191	185	195	205	177
11 Spd	9	10	10	10	13	12	11	9	6	2	4	4	2	6	4	2	4	7	6	3	7	7	9	7	5.5	12.7
Dir	191	188	189	190	184	186	189	191	189	356	37	9	328	233	235	226	175	144	129	210	168	169	172	185	185	184
12 Spd	9	11	12	13	12	12	P	8	4	6	7	8	9	8	7	8	8	8	8	6	5	5	5	5	5.1	12.8
Dir	191	183	184	182	189	179	P	174	201	282	289	285	290	290	284	282	288	297	298	283	275	271	276	278	243	182
13 Spd	5	6	5	5	6	7	7	8	8	N	9	9	9	9	D	D	D	D	D	D	D	D	D	D	--	9.3
Dir	275	280	275	274	276	287	285	285	284	N	294	298	306	284	D	D	D	D	D	D	D	D	D	D	--	298
14 Spd	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
Dir	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
15 Spd	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
Dir	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--
16 Spd	D	D	D	10	12	14	12	12	13	13	12	3	3	4	7	3	3	7	4	1	D	D	D	2	4.4	14.3
Dir	D	D	D	175	171	173	177	174	174	173	179	202	95	335	23	56	303	13	338	292	D	D	D	213	172	173
17 Spd	2	3	4	4	2	5	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	4.6
Dir	212	218	202	198	232	207	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	207
18 Spd	D	D	D	D	D	D	D	D	5	8	13	15	10	D	12	15	14	11	10	13	16	21	12	3	--	20.9
Dir	D	D	D	D	D	D	D	D	99	114	114	106	132	D	123	123	137	121	112	106	101	82	91	134	--	82
19 Spd	2	4	2	2	2	1	2	1	3	4	3	3	3	2	4	5	7	5	8	8	4	1	2	2	1.2	8.1
Dir	122	46	34	250	121	253	264	117	230	284	256	263	160	353	350	341	4	359	50	62	38	311	234	229	3	50
20 Spd	1	2	2	1	2	2	4	4	8	8	7	9	10	10	12	P	11	10	10	9	5	4	4	5	5.0	12.1
Dir	193	177	239	221	227	237	32	43	32	32	36	24	35	38	35	P	24	17	20	15	19	315	335	336	22	35
21 Spd	6	7	6	6	10	7	6	4	5	D	D	D	D	D	D	D	D	6	6	5	5	4	5	4	--	10.1
Dir	345	354	348	346	2	353	341	297	304	D	D	D	D	D	D	D	D	282	276	277	279	270	282	278	--	2
22 Spd	3	4	3	3	3	2	2	4	3	5	5	4	5	4	4	5	5	4	4	3	4	3	4	3	3.5	4.7
Dir	279	290	286	279	286	292	281	296	301	310	308	310	302	326	315	309	305	294	312	286	279	280	290	286	298	310

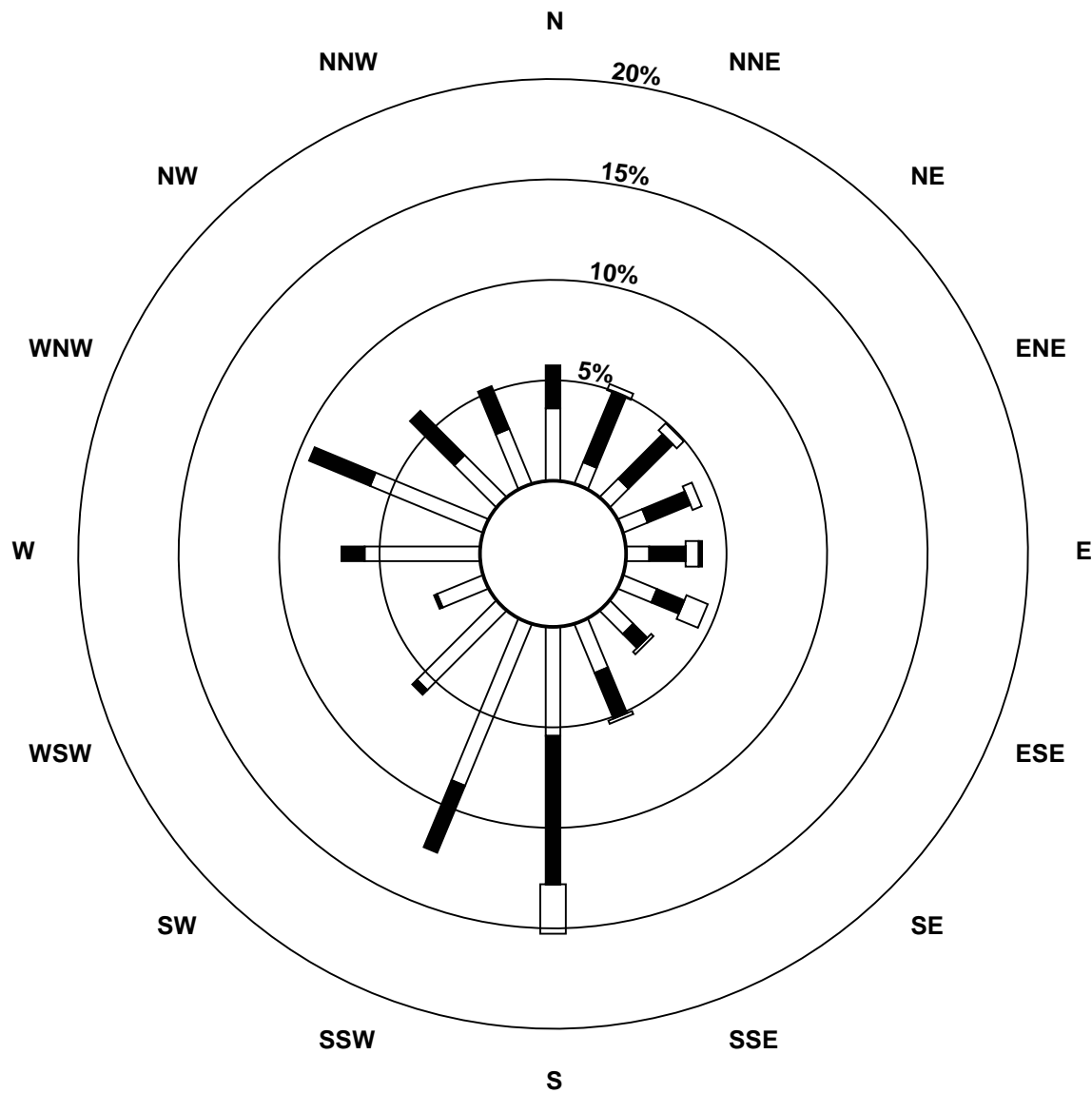
Hourly Averages

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

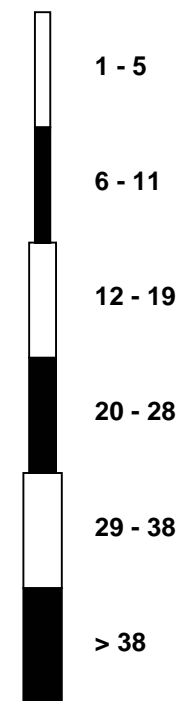
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	3	3	3	3	3	3	3	4	5	5	5	6	5	6	5	5	5	5	5	4	3	2	2	2	3.9	6.1
Dir	286	281	287	276	278	289	287	293	292	296	311	311	303	301	300	301	300	298	290	281	270	220	217	292	303	
24 Spd	2	3	6	6	8	9	7	P	P	P	P	P	P	P	P	P	P	P	4	5	4	5	8	--	9.2	
Dir	218	221	192	195	187	182	195	P	P	P	P	P	P	P	P	P	P	P	119	154	161	205	200	--	182	
25 Spd	7	4	2	1	2	2	2	D	D	D	6	10	8	7	7	1	4	3	4	4	1	1	3	2	2.7	10.5
Dir	203	202	125	224	173	132	205	D	D	D	121	99	133	114	98	202	233	231	203	199	199	140	197	217	157	99
26 Spd	3	5	6	3	2	3	4	1	7	9	15	11	10	11	11	10	11	12	12	9	4	4	2	2	4.9	14.9
Dir	207	189	185	175	207	194	175	118	27	66	70	80	72	67	56	68	51	41	60	70	80	59	299	268	71	70
27 Spd	2	1	2	2	2	1	2	1	9	P	P	P	10	13	12	12	10	13	9	10	8	5	4	6	5.0	12.7
Dir	259	236	260	268	259	250	255	296	134	P	P	P	103	86	83	87	85	110	99	98	93	72	64	69	95	86
28 Spd	7	5	1	1	1	2	4	7	7	9	10	13	9	8	9	3	2	5	3	8	2	2	1	2	3.1	13.0
Dir	117	117	169	267	251	246	63	70	97	62	73	76	97	109	151	200	29	40	179	199	205	230	236	221	104	76
29 Spd	2	1	2	2	3	3	3	3	2	2	1	3	10	12	7	9	6	8	4	5	5	4	5	1	3.4	11.5
Dir	216	188	234	191	195	192	202	187	193	195	124	165	183	189	182	165	181	181	187	135	86	112	58	313	173	189
30 Spd	2	1	2	5	8	7	3	1	4	3	8	12	11	7	7	6	9	11	4	2	3	2	1	1	3.6	11.6
Dir	319	273	285	19	45	49	58	251	185	206	25	33	35	35	41	29	29	40	356	311	342	116	189	217	31	33
31 Spd	1	1	3	3	2	3	5	4	2	0	2	1	1	2	2	3	3	1	1	4	2	6	5	6	1.9	5.6
Dir	24	153	213	203	186	187	186	193	127	173	145	223	323	356	10	183	169	328	246	195	224	175	194	189	190	175
Spd	2.9	2.8	3.4	3.2	2.8	3.6	3.1	2.4	1.3	1.2	2.2	3.2	2.6	2.3	2.8	2.1	2.2	1.6	2.0	1.1	1.0	1.2	1.4	2.1	Diurnal Average	
Dir	201	205	204	205	199	199	201	195	194	359	20	24	41	24	41	31	32	13	32	95	110	160	184	206		
Spd	10.6	10.8	12.0	12.8	12.7	14.3	12.1	11.5	13.0	12.9	14.9	15.0	11.2	12.7	12.2	15.2	13.9	12.7	12.9	13.5	15.5	20.9	12.4	11.1	Diurnal Maximum	
Dir	323	183	184	182	184	173	177	174	174	173	70	106	36	86	123	123	137	110	27	106	101	82	91	183		
Maximum Speed Value: 21 km/h on May 18 22:00		Minimum Speed Value: 0 km/h on May 31 10:00												Hours in Service: 744												
Maximum Daily Speed Average: 7.9 km/h on May 4		Minimum Daily Speed Average: 0.3 km/h on May 31												Hours of Data: 624												
Maximum Diurnal Speed Average: 3.6 km/h at hour 6		Minimum Diurnal Speed Average: 1.0 km/h at hour 21												Hours of Missing Data: 120												
Monthly Average Velocity: 0.47 km/h 171.0 deg		Speed Percentiles: P ₁ = 0.5 P ₁₀ = 1.7 Q ₁ = 3.1 Median = 4.9 Q ₃ = 8.0 P ₉₀ = 10.1 P ₉₉ = 13.9												Percent Operational Time: 83.9												
All monthly, daily, and diurnal averages have been calculated using vector methods																										
P - Power Failure D - DAS Failure N - Not Valid																										
Frequency Distribution																										
		Speed Range (km/h)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	31	37	0	0	0	0	68																			
NorthEast	17	41	8	0	0	0	66																			
East	10	24	10	1	0	0	45																			
SouthEast	25	14	5	0	0	0	44																			
South	76	81	17	0	0	0	174																			
SouthWest	62	6	0	0	0	0	68																			
West	62	27	0	0	0	0	89																			
NorthWest	37	33	0	0	0	0	70																			
Total	320	263	40	1	0	0	624																			

Wind Rose

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



Wind Speed Classes (km/h)



Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Portable-Kinuso - May 2010

Maximum Speed: 21 km/h on May 18 22:00		Maximum Daily Speed Average: 9.1 km/h on May 4		Hours in Service: 744																																												
Minimum Speed: 2 km/h on May 30 02:00		Minimum Daily Speed Average: 4.1 km/h on May 31		Hours of Data: 624																																												
Maximum Diurnal Speed Average: 8.9 km/h at hour 13		Minimum Diurnal Speed Average: 4.9 km/h at hour 24		Hours of Missing Data: 120																																												
Monthly Average Speed: 6.46 km/h		Percentiles: P ₁ = 1.8 P ₁₀ = 2.6 Q ₁ = 4.0 Median = 5.9 Q ₃ = 8.7 P ₉₀ = 10.9 P ₉₉ = 14.2		Percent Operational Time: 83.9																																												
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-May	10	9	9	7	6	10	9	9	8	5	7	10	11	12	13	10	9	7	3	2	3	3	4	6	7.5	13.0																						
2-May	10	7	4	4	5	4	5	5	5	6	7	7	7	6	6	5	9	6	5	5	6	5	6	11	6.1	11.2																						
3-May	8	6	11	9	8	10	9	8	5	5	8	8	12	7	8	9	11	6	4	3	5	6	11	11	7.9	11.6																						
4-May	11	10	11	10	8	9	10	9	9	9	9	10	11	10	10	10	10	11	13	11	10	4	2	2	9.1	13.1																						
5-May	2	2	3	4	3	4	4	4	6	8	7	9	9	9	8	7	8	7	7	4	3	2	3	3	5.4	8.9																						
6-May	3	3	5	4	3	2	4	3	3	5	7	7	7	7	6	6	5	5	5	5	3	2	4	3	4.5	7.5																						
7-May	6	5	8	8	5	7	6	5	4	5	7	7	8	5	6	6	13	10	5	4	3	3	3	2	6.0	13.2																						
8-May	4	8	12	4	7	10	7	5	4	7	8	9	6	6	9	12	10	8	4	5	3	5	7	5	6.9	11.8																						
9-May	7	6	7	8	4	3	3	6	6	6	5	11	11	9	6	7	12	11	9	9	8	10	12	10	7.7	11.7																						
10-May	8	8	7	6	6	8	9	8	5	5	7	8	9	10	9	6	7	7	5	3	3	4	5	7	6.7	9.5																						
11-May	9	10	10	10	13	12	11	9	6	5	7	8	6	8	7	6	6	9	7	4	7	8	9	8	8.1	12.8																						
12-May	9	11	12	13	13	12	P	8	6	7	8	9	10	9	8	9	9	8	8	6	5	5	5	5	8.4	12.9																						
13-May	5	6	5	6	7	7	7	8	9	N	10	10	10	9	D	D	D	D	D	D	D	D	D	D	--	9.8																						
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--																						
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	--																						
16-May	D	D	D	10	12	14	12	12	13	13	13	6	8	5	8	7	5	8	5	2	D	D	D	2	8.6	14.4																						
17-May	2	3	4	5	3	5	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--	4.8																						
18-May	D	D	D	D	D	D	D	D	7	10	13	15	12	D	13	16	15	12	10	14	16	21	14	6	--	21.2																						
19-May	3	5	4	2	3	2	3	2	4	4	4	4	4	3	5	6	7	5	8	8	4	2	2	2	4.1	8.4																						
20-May	3	3	3	2	2	2	5	5	8	8	8	10	10	10	12	P	11	10	10	9	6	4	5	6	6.6	12.3																						
21-May	6	7	6	6	10	7	6	4	5	D	D	D	D	D	D	D	D	7	6	5	5	5	4	--	10.4																							
22-May	4	4	3	3	3	3	2	4	4	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4.1	5.2																						
23-May	4	4	3	3	3	4	4	4	5	6	6	7	6	7	6	6	6	6	6	5	4	3	2	2	4.6	6.9																						
24-May	3	3	6	7	8	9	8	P	P	P	P	P	P	P	P	P	P	P	P	P	5	5	4	5	8	--	9.4																					
25-May	7	4	3	2	3	3	2	D	D	D	8	11	10	8	8	6	4	3	5	5	2	2	4	3	4.9	11.4																						
26-May	3	5	7	5	4	4	4	4	8	10	15	12	12	12	11	11	11	13	12	9	4	4	3	3	7.7	15.3																						
27-May	3	2	2	2	2	2	2	2	10	P	P	P	11	14	13	13	11	13	10	10	9	5	4	7	7.0	13.6																						
28-May	7	6	4	2	2	2	5	8	8	9	11	14	10	11	10	4	3	5	5	8	3	2	2	2	5.9	13.6																						
29-May	2	2	2	2	3	3	3	4	3	3	3	3	5	11	12	8	9	7	8	4	6	6	5	6	4.9	11.8																						
30-May	2	2	2	6	8	7	4	2	4	4	8	12	11	8	8	6	10	11	4	3	3	3	3	2	5.5	11.8																						
31-May	2	2	3	4	3	3	5	4	3	4	5	4	5	5	5	5	6	4	3	5	3	6	5	6	4.1	6.0																						
																								5.3	5.3	5.8	5.5	5.6	6.0	5.8	5.6	6.1	6.5	7.9	8.6	8.9	8.2	8.3	7.7	8.4	7.8	6.4	5.8	5.1	4.9	5.2	4.9	Diurnal Average
																								10.7	11.0	12.2	12.9	12.8	14.4	12.2	11.7	13.2	13.2	15.3	15.4	11.8	13.6	13.0	15.8	14.6	13.4	13.1	13.7	15.8	21.2	13.5	11.2	Diurnal Maximum
P - Power Failure D - DAS Failure N - Not Valid																																																
All monthly, daily, and diurnal averages have been calculated using scalar methods																																																

Hourly Standard Deviations

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

Maximum Value: 97.8 deg on May 6 09:00																		Hours in Service: 744									
Minimum Value: 4.7 deg on May 9 22:00																		Hours of Data: 624									
Percentiles: P ₁ = 5.4 P ₁₀ = 11.5 Q ₁ = 18.2 Median = 28.5 Q ₃ = 46.5 P ₉₀ = 67.1 P ₉₉ = 87.4																		Hours of Missing Data: 120									
																		Hours of Calibration: 0									
																		Percent Operational Time: 83.9									
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-May	9	15	10	25	19	7	9	13	24	71	51	44	44	47	29	37	23	43	22	20	72	43	41	18	72.3		
2-May	7	13	24	27	23	22	16	27	31	32	43	35	63	48	34	52	21	32	34	26	14	36	14	7	63.3		
3-May	21	26	10	8	18	7	16	16	20	51	28	31	15	51	45	32	38	27	51	45	16	15	27	18	50.8		
4-May	9	9	10	13	11	14	10	14	12	12	13	15	14	14	13	14	18	18	12	15	7	21	31	59	58.9		
5-May	56	20	51	26	22	20	12	71	39	27	39	28	33	37	62	64	49	43	36	32	29	49	36	31	71.1		
6-May	25	34	21	70	72	54	19	48	98	84	56	63	61	70	65	44	56	88	71	41	72	55	54	58	97.8		
7-May	58	58	29	9	32	9	25	55	76	62	49	76	50	93	61	87	83	15	58	53	85	35	52	60	93.3		
8-May	15	7	7	37	20	13	15	30	53	24	35	62	72	76	49	28	18	27	19	28	75	21	52	52	76.2		
9-May	15	33	10	8	41	82	40	22	33	53	67	51	33	31	63	32	42	55	19	18	9	5	5	7	82.0		
10-May	12	15	12	10	14	10	9	11	55	77	38	49	46	57	43	75	37	72	34	87	43	26	66	7	87.1		
11-May	5	5	6	8	5	5	8	9	21	79	73	69	78	42	55	75	60	43	24	52	7	19	8	17	78.9		
12-May	8	13	11	6	7	6	P	12	46	27	30	26	24	28	27	26	25	18	19	19	21	21	20	19	46.0		
13-May	19	17	18	22	20	19	21	20	19	N	20	19	17	23	D	D	D	D	D	D	D	D	D	D	22.9		
14-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--		
15-May	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	--		
16-May	D	D	D	9	8	6	8	8	11	13	18	69	73	56	45	88	53	26	28	47	D	D	D	33	87.9		
17-May	25	22	19	26	31	18	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	30.7		
18-May	D	D	D	D	D	D	D	D	47	49	20	14	33	D	21	17	19	21	23	10	11	10	35	82	82.5		
19-May	65	52	75	31	68	47	47	94	46	41	43	36	43	75	33	32	20	34	17	11	30	70	45	46	93.7		
20-May	83	72	48	52	31	57	38	26	17	20	19	23	15	16	10	P	15	12	13	14	39	30	31	24	83.3		
21-May	23	23	16	18	13	16	29	33	28	D	D	D	D	D	D	D	D	23	22	28	26	27	24	27	32.9		
22-May	29	28	28	28	27	32	34	28	37	31	32	34	37	37	45	36	35	28	36	38	24	34	30	29	44.6		
23-May	30	26	26	25	28	32	34	43	25	27	33	35	42	32	36	36	36	29	38	28	37	31	20	26	43.2		
24-May	29	32	18	13	12	13	11	P	P	P	P	P	P	P	P	P	P	P	P	P	25	13	30	26	14	32.2	
25-May	13	22	69	49	65	55	42	D	D	D	44	22	32	30	35	79	38	27	34	19	48	76	58	51	78.9		
26-May	15	27	35	69	66	52	37	79	20	23	13	25	30	18	26	18	20	16	12	9	23	31	26	47	79.5		
27-May	63	85	21	49	40	45	17	68	29	P	P	P	31	21	17	18	20	19	17	15	14	19	9	18	85.0		
28-May	18	23	77	63	49	47	38	17	20	16	25	18	32	42	17	54	64	14	59	13	40	52	42	28	77.2		
29-May	39	54	33	52	22	23	30	24	32	43	75	44	21	13	19	14	29	21	27	38	20	38	48	58	74.9		
30-May	34	22	26	38	10	19	50	70	36	51	32	10	12	22	29	23	23	11	35	52	38	64	66	54	69.5		
31-May	77	65	22	23	25	24	16	30	79	96	80	82	84	84	86	68	76	83	73	24	29	22	17	13	96.5		
Average	83.3	85.0	77.2	69.7	72.1	82.0	50.4	93.7	97.8	96.5	79.9	81.6	84.0	93.3	86.1	87.9	83.0	87.6	72.8	87.1	84.8	75.9	66.3	82.5			
P - Power Failure D - DAS Failure N - Not Valid																											

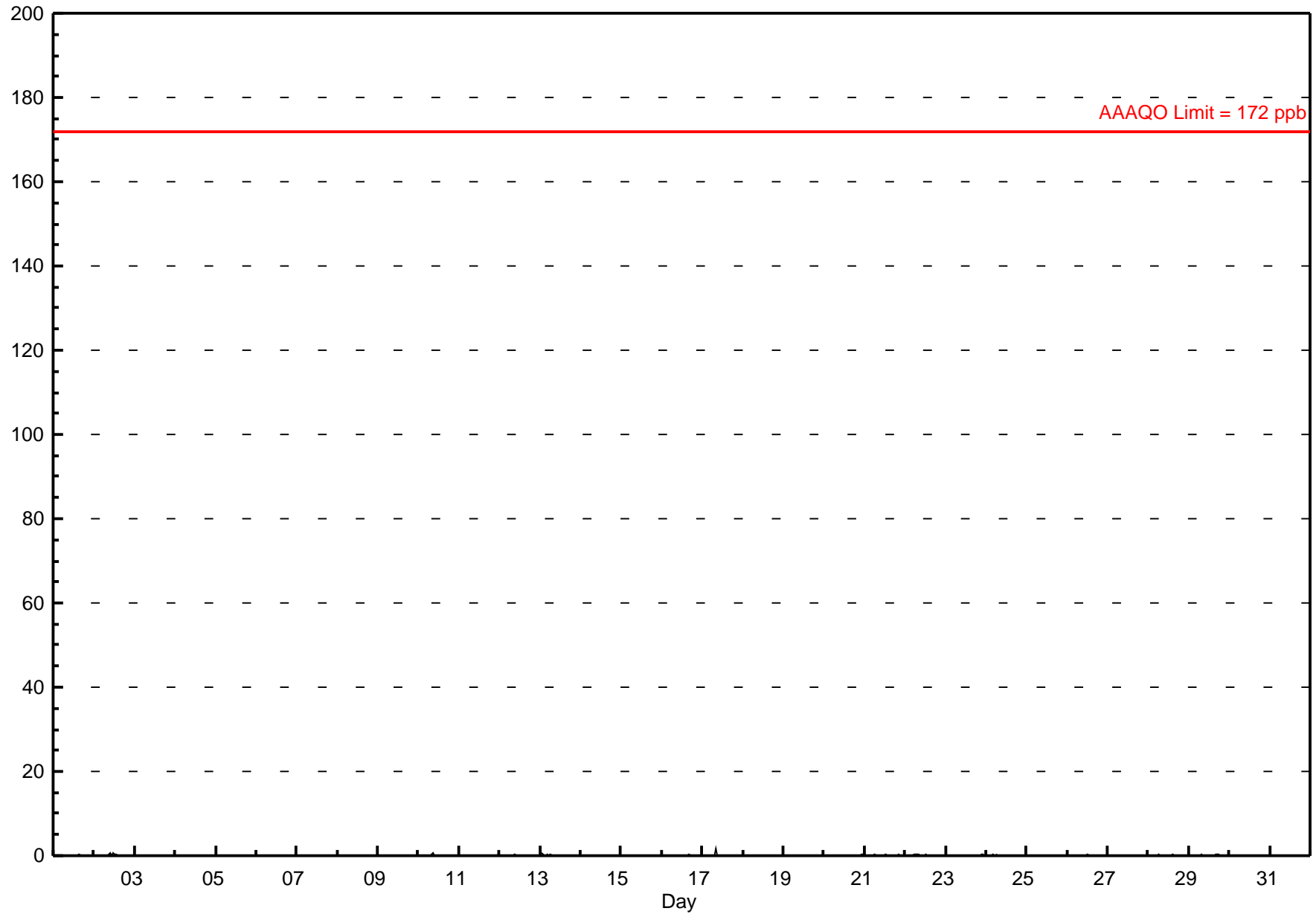
PASZA
Valleyview Station
Monthly Summary Tables, Graphs and
Roses

Hourly Averages

Sulphur Dioxide (SO₂) - ppb

Valleyview - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.8 ppb on May 17 09:00 Maximum Daily Average: 0.1 ppb on May 22		Hours in Service: 744 Hours of Data: 700 Hours of Missing Data: 44 Hours of Calibration: 37 Percent Operational Time: 99.1																								
Minimum Value: 0 ppb on May 1 02:00 Maximum Diurnal Average: 0.1 ppb at hour 9 Monthly Average: 0.04 ppb		Minimum Daily Average: 0.0 ppb on May 3 Minimum Diurnal Average: 0.0 ppb at hour 20 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.1 P ₉₀ = 0.1 P ₉₉ = 0.3																								
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-May	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	0.3
2-May	A	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
3-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
4-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
5-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
6-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
7-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
8-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
9-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
10-May	A	0	0	0	0	0	0	0	1	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6
11-May	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
12-May	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
13-May	A	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
14-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
15-May	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-May	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
17-May	A	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.8
18-May	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
19-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.1
20-May	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
21-May	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
22-May	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
23-May	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
24-May	A	0	0	0	0	0	0	D	D	D	D	D	D	D	D	C	C	C	0	0	0	0	0	0	--	0.3
25-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
26-May	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
27-May	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
28-May	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
29-May	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
30-May	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
31-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
		--	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Diurnal Average
		--	0.5	0.2	0.2	0.3	0.2	0.5	0.2	1.8	0.7	0.1	0.6	0.3	0.2	0.2	0.3	0.3	0.2	0.1	0.2	0.2	0.2	0.3	0.2	Diurnal Maximum
C - Calibration D - DAS Failure A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																										

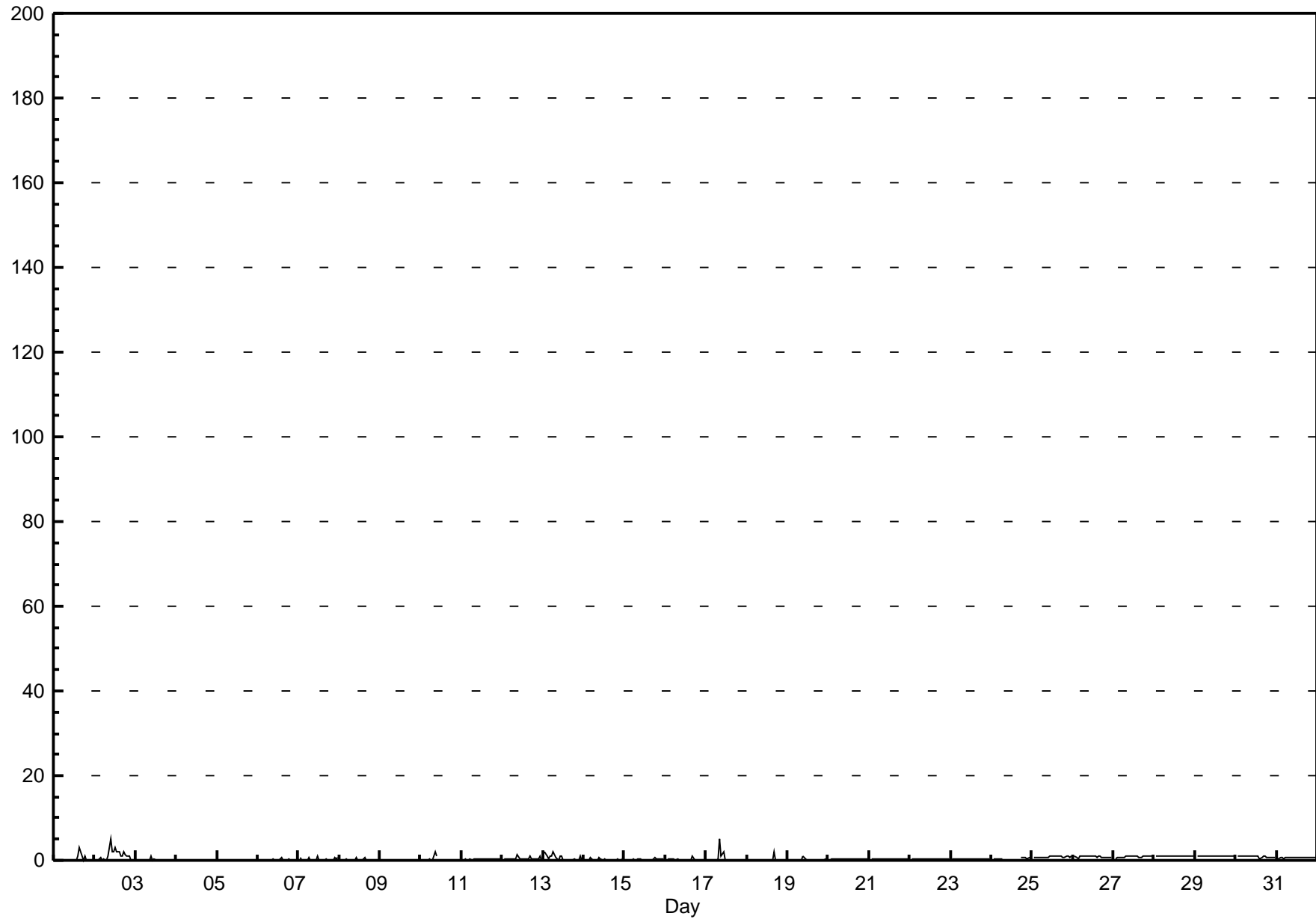


Hourly Maximums

Sulphur Dioxide (SO₂) - ppb

Valleyview - May 2010

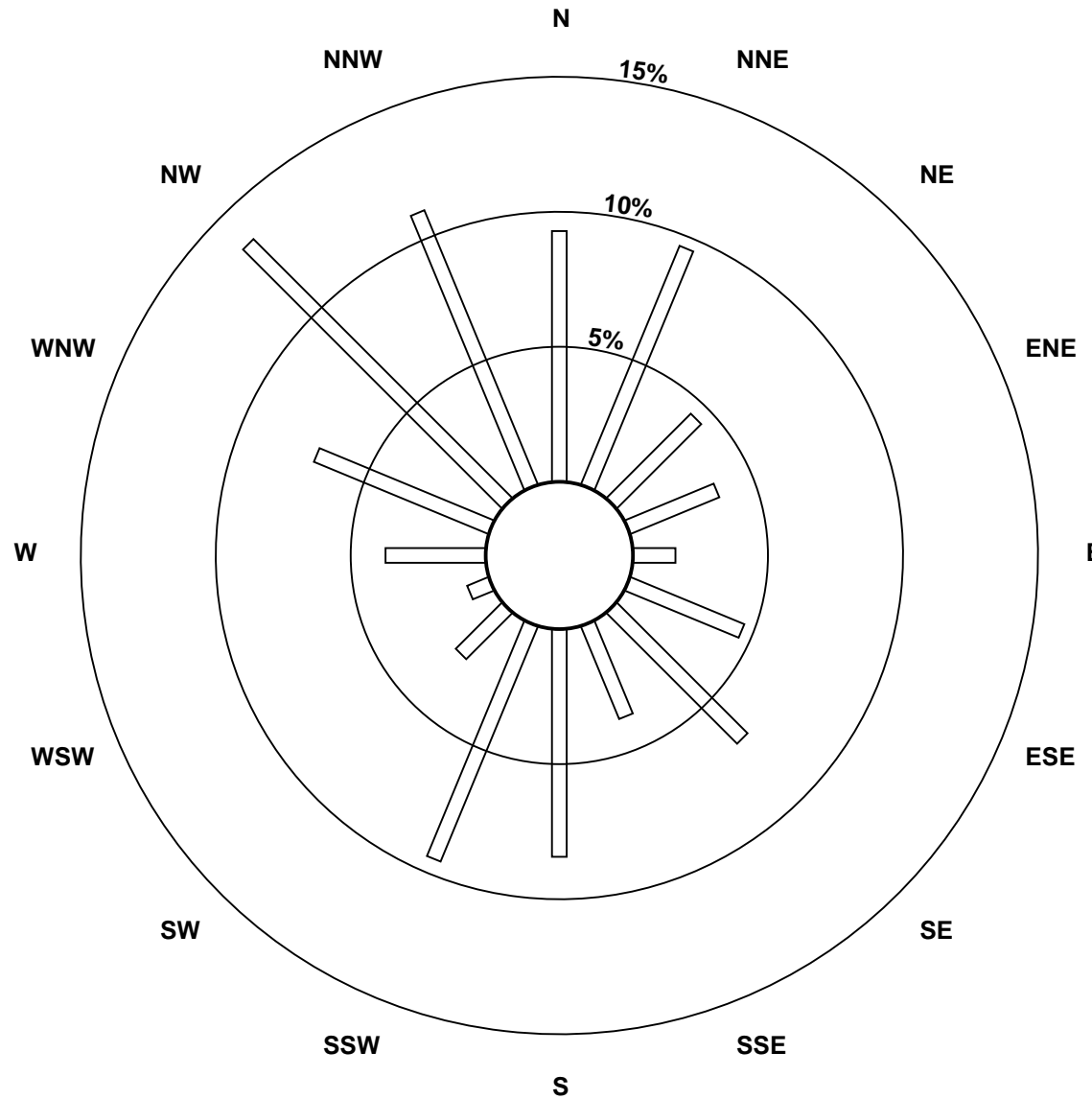
Maximum Value: 5.0 ppb on May 2 10:00 Minimum Value: 0 ppb on May 2 02:00 Maximum Diurnal Average: 0.7 ppb at hour 10 Monthly Average: 0.40 ppb		Maximum Daily Average: 1.1 ppb on May 2 Minimum Daily Average: 0.0 ppb on May 9 Minimum Diurnal Average: 0.3 ppb at hour 4 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.8 P ₉₀ = 1.0 P ₉₉ = 2.0		Hours in Service: 744 Hours of Data: 700 Hours of Missing Data: 44 Hours of Calibration: 37 Percent Operational Time: 99.1																						
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-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	1	0	1	0	0	0	0	0	0.3	3.0
2-May	A	0	0	1	0	0	0	0	1	5	2	2	3	2	2	1	1	2	1	1	1	0	0	0	1.1	5.0
3-May	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
4-May	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
5-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
6-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.1	0.5
7-May	A	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0.2	1.0
8-May	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	0.7
9-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
10-May	A	0	0	0	0	0	0	0	2	1	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.2	2.0
11-May	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	0.2
12-May	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0.3	1.2
13-May	A	2	1	0	1	1	2	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0.6	2.1
14-May	A	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.9
15-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.2	0.8
16-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	1.1
17-May	A	0	0	0	0	0	0	0	5	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	5.0
18-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0.1	2.1
19-May	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
20-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
21-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
22-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
23-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4
24-May	A	0	0	0	0	0	0	D	D	D	D	D	D	D	C	C	C	1	1	1	1	0	1	1	--	0.8
25-May	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	1.0
26-May	A	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	0.9
27-May	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0
28-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
29-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
30-May	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.9	1.0
31-May	A	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
	--	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.6	0.7	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.4	0.3	0.4	0.4	Diurnal Average	
	--	2.1	1.1	1.0	1.1	1.1	2.1	1.0	5.0	5.0	2.0	2.0	2.9	2.0	2.0	3.0	2.1	2.0	1.2	1.0	1.0	1.0	1.1	1.0	Diurnal Maximum	
C - Calibration		D - DAS Failure						A - Automated Daily Zero Span																		



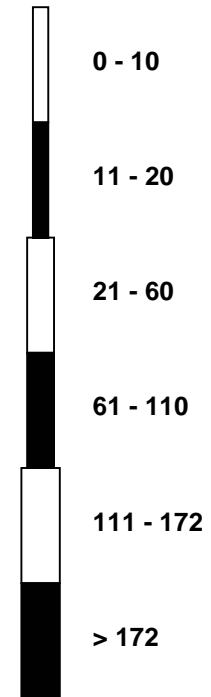
Pollutant Rose

Sulphur Dioxide (SO₂) - ppb

Valleyview - May 2010



Pollutant Classes (ppb)

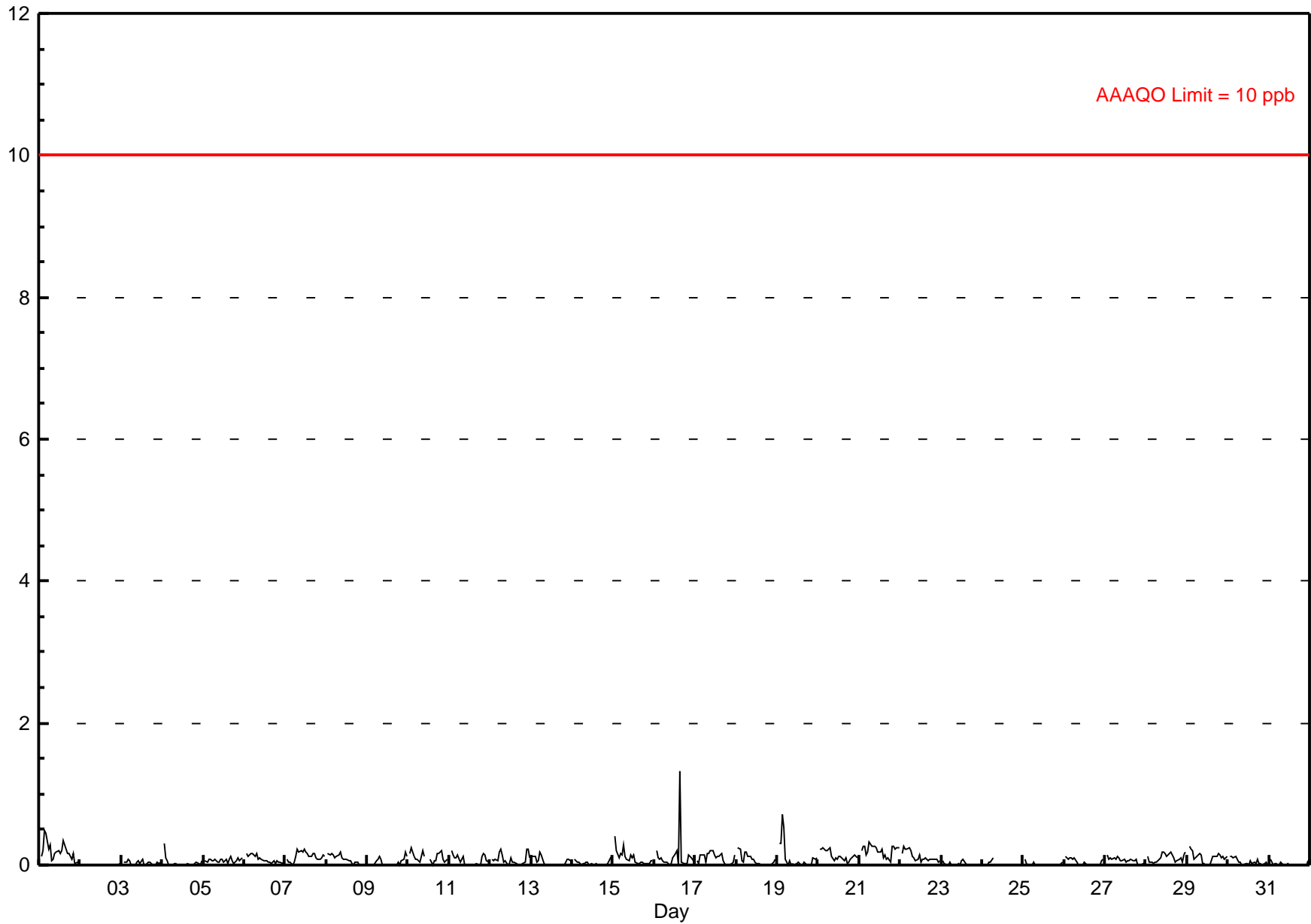


Hourly Averages

Hydrogen Sulphide (H₂S) - ppb

Valleyview - May 2010

Number of Exceedences (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.3 ppb on May 16 16:00 Maximum Daily Average: 0.2 ppb on May 21		Hours in Service: 744 Hours of Data: 700 Hours of Missing Data: 44 Hours of Calibration: 37 Percent Operational Time: 99.1																								
Minimum Value: 0 ppb on May 2 00:00 Maximum Diurnal Average: 0.1 ppb at hour 2 Monthly Average: 0.07 ppb		Minimum Daily Average: 0.0 ppb on May 2 Minimum Diurnal Average: 0.0 ppb at hour 19 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.1 P ₉₀ = 0.2 P ₉₉ = 0.3																								
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5
2-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
3-May	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
4-May	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	0.3
5-May	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	0.1
6-May	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
7-May	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
8-May	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
9-May	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
10-May	A	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
11-May	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
12-May	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
13-May	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
14-May	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
15-May	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
16-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.1	1.3
17-May	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-May	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
19-May	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
20-May	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
21-May	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-May	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-May	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
24-May	A	0	0	0	0	0	0	D	D	D	D	D	D	D	D	C	C	C	0	0	0	0	0	0	--	0.1
25-May	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-May	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
27-May	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	0.1
28-May	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
29-May	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
30-May	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
31-May	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
		--	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	Diurnal Average
		--	0.4	0.3	0.7	0.5	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	1.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	Diurnal Maximum
C - Calibration D - DAS Failure A - Automated Daily Zero Span Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 10 ppb 24-hr 3 ppb																										



Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

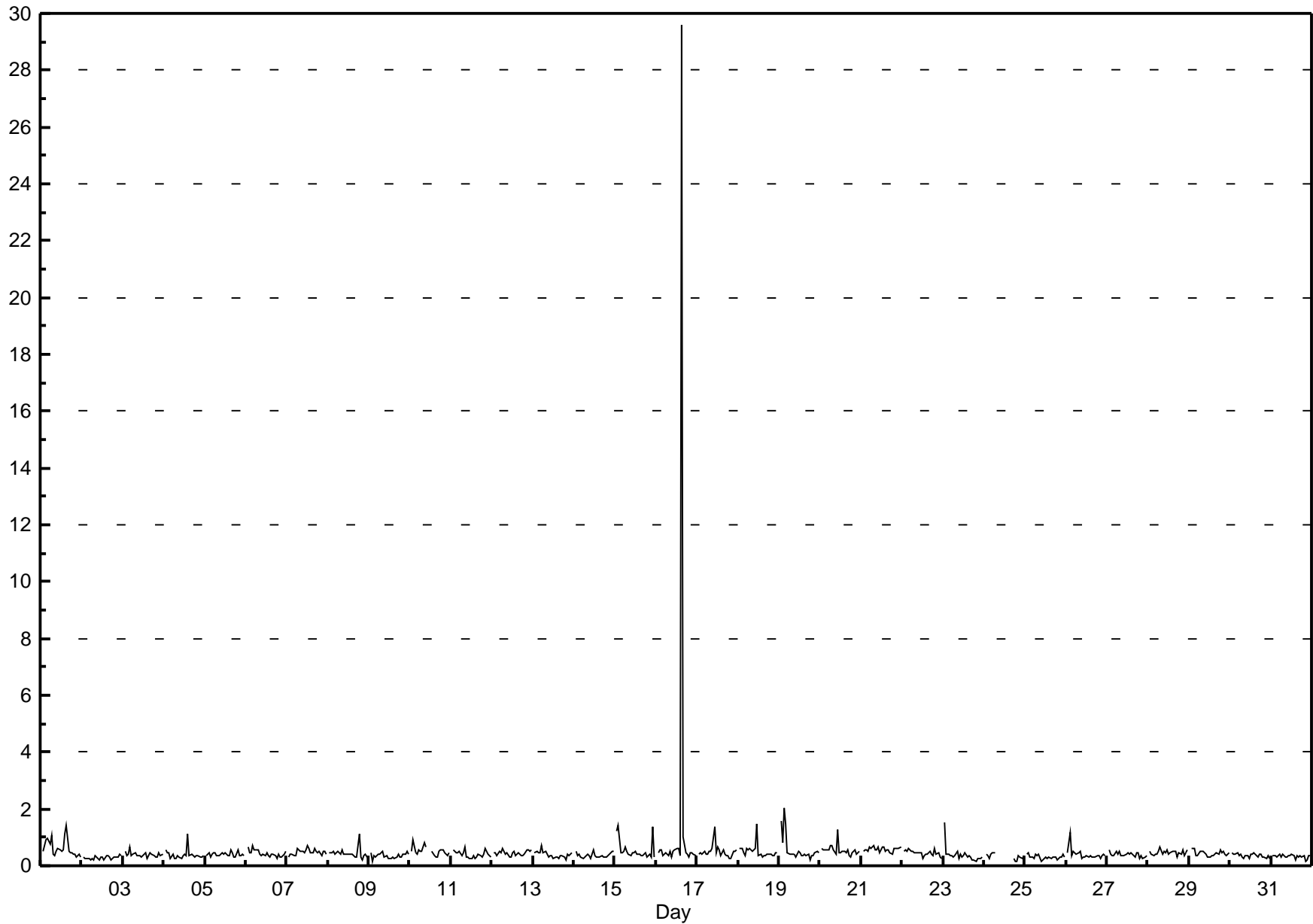
Valleyview - May 2010

Maximum Value: 29.6 ppb on May 16 16:00		Maximum Daily Average: 1.7 ppb on May 16		Hours in Service: 744																							
Minimum Value: 0 ppb on May 24 19:00		Minimum Daily Average: 0.3 ppb on May 2		Hours of Data: 700																							
Maximum Diurnal Average: 1.4 ppb at hour 16		Minimum Diurnal Average: 0.4 ppb at hour 20		Hours of Missing Data: 44																							
Monthly Average: 0.48 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.6 P ₉₉ = 1.4		Hours of Calibration: 37																							
				Percent Operational Time: 99.1																							
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-May	A	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0.6	1.4	
2-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
3-May	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
4-May	A	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.4	1.1	
5-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0.4	0.6	
6-May	A	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.4	0.7	
7-May	A	0	0	0	0	0	1	1	0	1	0	1	1	1	0	0	1	0	0	1	0	1	0	0	0.5	0.7	
8-May	A	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	1.1	
9-May	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
10-May	A	0	1	0	0	1	0	0	1	1	C	C	C	0	0	0	0	1	1	1	0	0	0	0	0.5	0.9	
11-May	A	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.4	0.7	
12-May	A	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	1	1	1	1	0.5	0.6	
13-May	A	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
14-May	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.5	
15-May	A	1	1	0	0	1	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0.5	1.4	
16-May	A	0	1	1	0	0	0	0	0	1	1	1	1	0	30	1	0	0	0	0	0	0	0	0	1.7	29.6	
17-May	A	0	0	0	0	0	0	1	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1	0	0.5	1.4	
18-May	A	1	1	0	0	1	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.5	
19-May	A	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.0	
20-May	A	1	1	1	1	1	1	1	1	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0.5	1.3	
21-May	A	0	1	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	0	1	1	1	1	1	0.6	0.7	
22-May	A	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0.4	0.6	
23-May	A	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.5	
24-May	A	0	0	0	0	0	0	D	D	D	D	D	D	D	C	C	C	0	0	0	0	0	0	0	--	0.5	
25-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5	
26-May	A	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2	
27-May	A	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
28-May	A	1	0	0	0	0	1	1	0	1	0	1	0	0	1	1	0	0	0	0	1	0	0	1	0.5	0.7	
29-May	A	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0.4	0.6	
30-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5	
31-May	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
		--	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	1.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	Diurnal Average		
		--	1.6	1.4	2.0	1.5	0.8	1.1	0.7	0.8	0.6	1.4	1.5	0.7	0.7	1.1	29.6	1.0	0.5	1.1	0.6	0.6	0.6	1.4	0.6	Diurnal Maximum	
C - Calibration		D - DAS Failure						A - Automated Daily Zero Span																			

Hourly Maximums

Hydrogen Sulphide (H₂S) - ppb

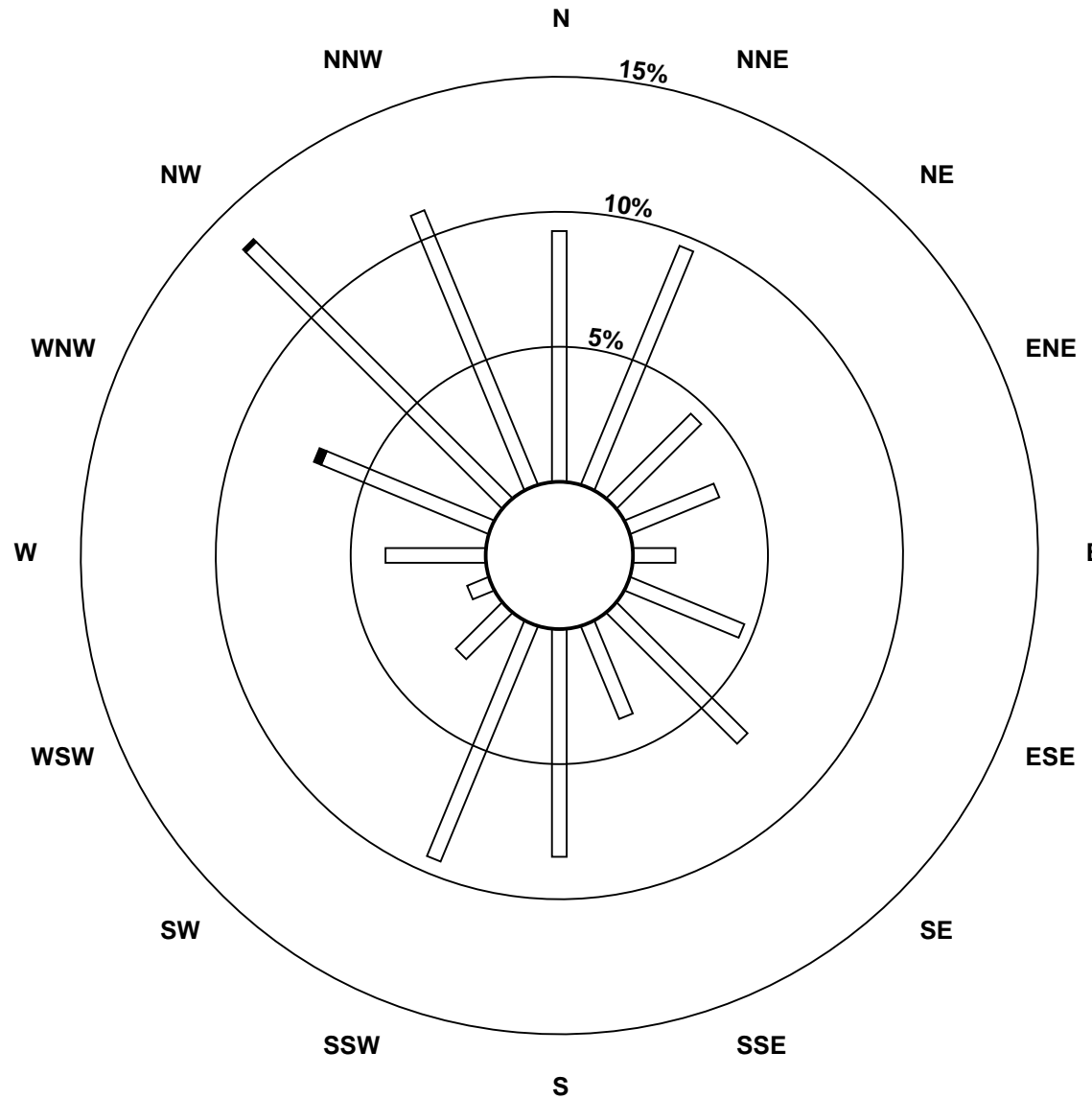
Valleyview - May 2010



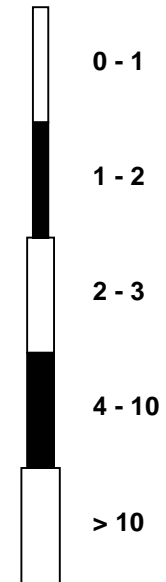
Pollutant Rose

Hydrogen Sulphide (H₂S) - ppb

Valleyview - May 2010



Pollutant Classes (ppb)



Hourly Averages

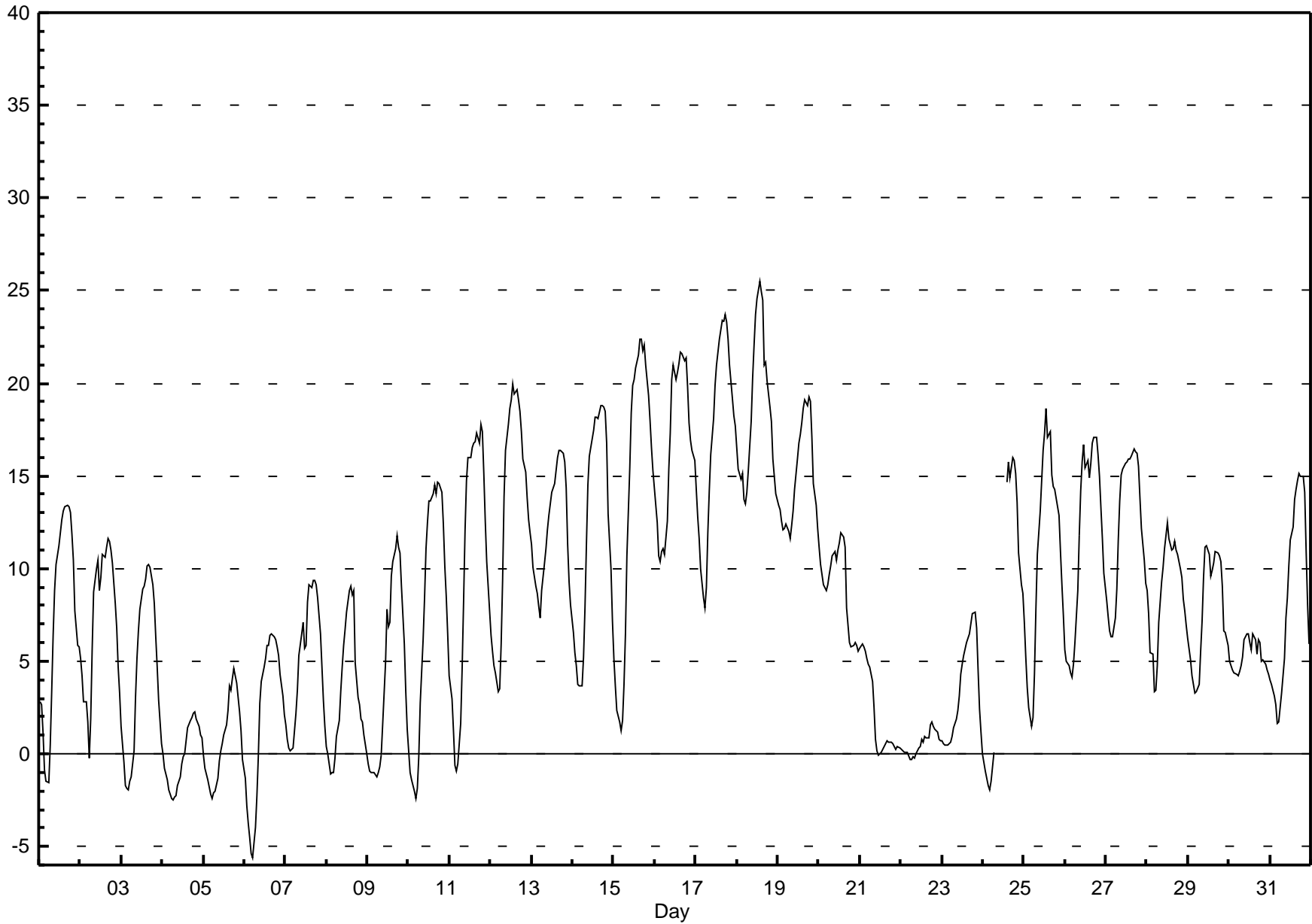
External Temperature (ET) - °C

Valleyview - May 2010

Number of Exceedences (AAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 25.5 °C on May 18 14:00	Maximum Daily Average: 18.6 °C on May 18		Hours of Data:	737
Minimum Value: -6 °C on May 6 06:00	Minimum Daily Average: -0.1 °C on May 4		Hours of Missing Data:	7
Maximum Diurnal Average: 12.7 °C at hour 16	Minimum Diurnal Average: 2.7 °C at hour 5		Hours of Calibration:	0
Monthly Average: 8.33 °C	Percentiles: P ₁ = -2.4 P ₁₀ = 0.0 Q ₁ = 2.7 Median = 7.8 Q ₃ = 13.6 P ₉₀ = 17.5 P ₉₉ = 23.1		Percent Operational Time:	99.1

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-May	3	3	1	-1	-1	-2	0	3	6	9	10	11	12	13	13	13	13	13	13	12	10	8	6	6	7.3	13.4
2-May	5	4	3	3	2	0	2	6	9	10	10	9	10	11	11	11	12	11	11	10	8	7	5	3	7.1	11.6
3-May	1	0	-2	-2	-2	-2	-1	0	3	5	7	8	9	9	9	10	10	10	9	8	6	5	3	1	4.4	10.2
4-May	0	-1	-1	-1	-2	-2	-3	-2	-2	-2	-1	-1	0	0	1	1	2	2	2	2	2	2	1	1	-0.1	2.3
5-May	0	-1	-1	-2	-2	-2	-2	-2	-1	0	0	1	1	2	2	4	3	4	5	4	3	2	1	0	0.7	4.6
6-May	-1	-3	-4	-5	-5	-6	-4	-2	0	3	4	5	5	6	6	6	7	6	6	6	5	4	3	2	1.9	6.5
7-May	2	1	0	0	0	1	2	3	5	6	7	6	6	8	9	9	9	9	9	8	6	5	3	1	4.9	9.4
8-May	0	0	-1	-1	-1	0	1	2	3	5	6	7	8	9	9	9	9	5	3	3	2	2	1	0	3.3	9.0
9-May	-1	-1	-1	-1	-1	-1	-1	-1	0	2	5	8	7	7	10	10	11	12	11	11	9	6	3	1	4.4	11.8
10-May	0	-1	-1	-2	-2	-2	0	3	6	8	11	12	14	14	14	15	14	15	15	14	12	10	9	6	7.6	14.7
11-May	4	3	1	-1	-1	-1	2	5	8	12	15	16	16	17	17	17	17	17	18	17	15	13	10	8	10.2	17.8
12-May	6	6	5	4	3	3	6	9	14	16	18	19	19	20	19	20	19	18	17	16	15	14	13	12	13.0	19.9
13-May	11	10	9	9	8	7	9	10	11	12	13	13	14	15	15	16	16	16	16	16	14	11	9	8	12.1	16.4
14-May	7	5	5	4	4	4	5	8	11	15	16	17	18	18	18	18	19	19	19	18	17	13	10	7	12.2	18.8
15-May	5	4	2	2	1	2	4	6	11	15	18	20	20	21	22	22	22	22	22	21	19	18	17	15	13.8	22.4
16-May	14	13	11	10	11	11	11	13	15	17	20	21	20	21	21	22	22	21	21	20	18	17	16	16	16.7	21.7
17-May	14	13	12	10	8	8	9	12	14	16	18	20	21	22	22	23	23	24	23	22	21	19	18	18	17.1	23.7
18-May	17	15	15	15	14	13	14	15	18	20	22	24	25	26	25	24	21	21	20	19	18	16	15	14	18.6	25.5
19-May	13	13	13	12	12	12	12	12	12	13	14	16	17	17	18	19	19	19	19	19	17	15	13	12	15.0	19.2
20-May	11	10	10	9	9	9	10	10	11	11	10	11	11	12	12	11	8	7	6	6	6	6	6	6	9.0	11.9
21-May	6	6	6	6	5	5	5	4	3	1	0	0	0	0	0	1	1	1	1	1	0	0	0	0	2.1	5.9
22-May	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2	2	1	1	1	1	1	0.5	1.7
23-May	1	1	0	1	1	1	1	1	2	2	3	4	5	5	6	6	6	7	8	8	7	5	2	1	3.5	7.6
24-May	0	-1	-1	-2	-2	-1	0	D	D	D	D	D	D	D	15	16	15	16	16	15	14	11	9	9	--	16.0
25-May	7	5	4	2	1	2	4	8	11	13	15	16	17	19	17	17	15	14	14	14	13	11	9	8	10.7	18.6
26-May	6	5	5	4	4	5	6	9	12	14	16	17	15	16	15	16	17	17	17	16	15	13	12	10	11.7	17.1
27-May	8	7	7	6	6	7	9	12	14	15	15	16	16	16	16	16	16	16	16	16	14	12	10	9	12.3	16.4
28-May	9	8	5	5	3	3	5	7	9	10	11	12	13	12	11	11	11	11	11	10	10	8	8	7	8.8	12.5
29-May	6	5	4	4	3	3	4	6	7	10	11	11	11	10	10	10	11	11	11	10	9	7	7	6	7.7	11.3
30-May	5	5	5	4	4	4	4	5	5	6	6	6	6	6	6	6	5	6	6	5	5	5	5	4	5.3	6.4
31-May	4	4	3	3	2	2	2	3	5	7	8	10	12	12	14	14	15	15	15	15	14	11	8	6	8.5	15.1
	5.3	4.4	3.6	3.1	2.7	2.7	3.7	5.5	7.4	9.1	10.4	11.1	11.5	12.0	12.4	12.7	12.6	12.5	12.3	11.7	10.5	8.9	7.5	6.4	Diurnal Average	
	16.5	15.4	14.8	15.2	13.7	13.5	14.1	15.3	17.9	20.3	22.0	23.7	24.5	25.5	24.9	24.5	23.3	23.7	23.3	22.4	20.9	19.2	18.2	17.7	Diurnal Maximum	

D - DAS Failure





Hourly Averages

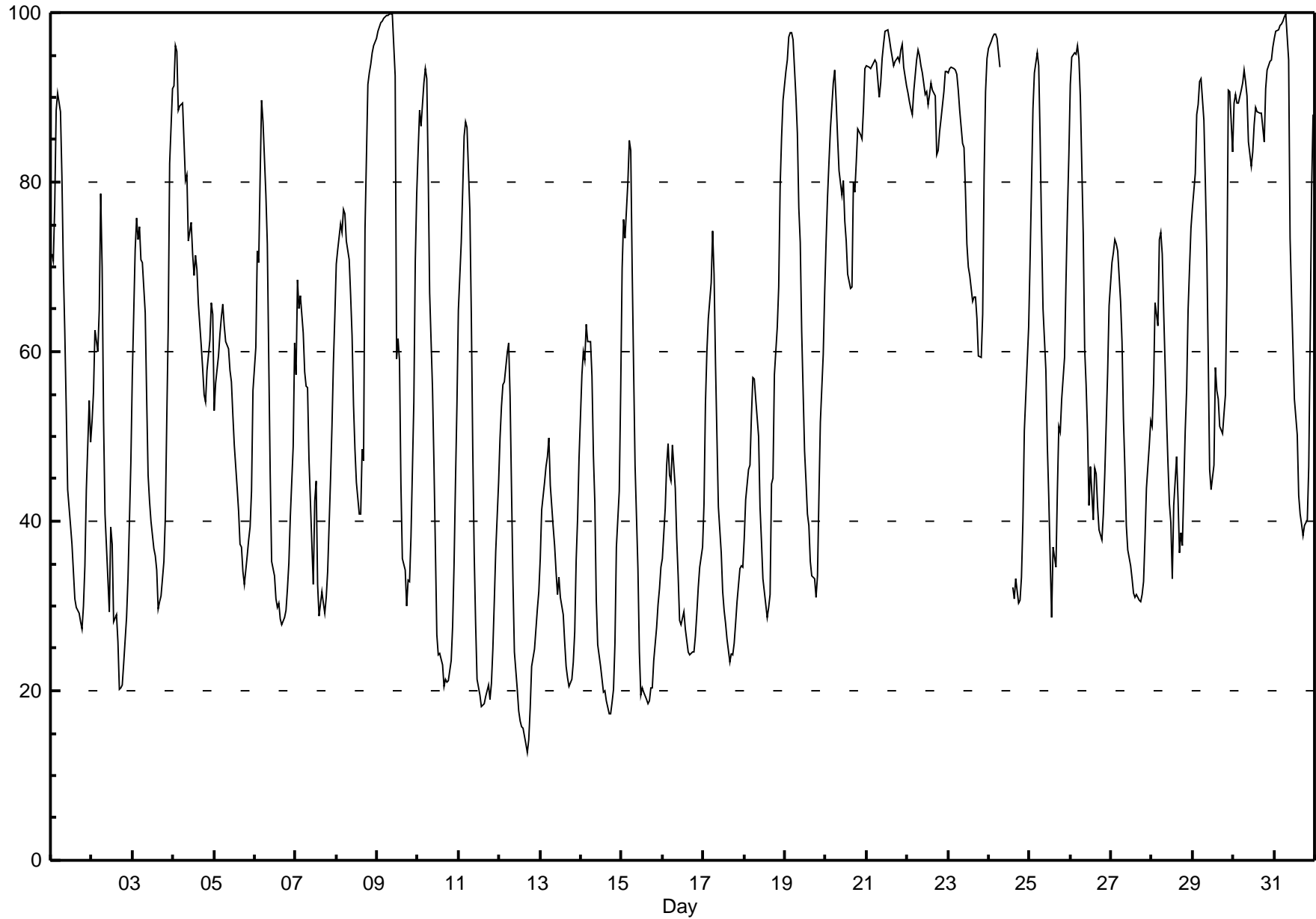
Relative Humidity (RH) - %

Valleyview - May 2010

Number of Exceedences (AAQO):	1-hr: 0	24-hr: 0	Hours in Service:	744
Maximum Value: 99.8 % on May 9 10:00	Maximum Daily Average: 94.4 % on May 21		Hours of Data:	737
Minimum Value: 13 % on May 12 17:00	Minimum Daily Average: 32.2 % on May 12		Hours of Missing Data:	7
Maximum Diurnal Average: 80.8 % at hour 6	Minimum Diurnal Average: 40.2 % at hour 16		Hours of Calibration:	0
Monthly Average: 58.19 %	Percentiles: P ₁ = 17.3 P ₁₀ = 26.6 Q ₁ = 35.6 Median = 56.3 Q ₃ = 82.3 P ₉₀ = 93.5 P ₉₉ = 99.5		Percent Operational Time:	99.1

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-May	72	71	77	89	91	88	81	70	62	53	44	40	37	34	31	30	29	28	27	30	35	44	54	49	52.7	90.6																						
2-May	52	55	62	60	65	79	70	52	41	33	29	39	37	28	29	26	20	20	21	23	29	33	40	47	41.3	78.6																						
3-May	57	72	76	73	75	71	71	65	55	45	42	40	37	36	34	30	31	31	35	40	52	63	82	91	54.3	91.1																						
4-May	91	96	95	88	89	89	85	80	81	73	75	71	69	71	70	66	61	58	55	54	58	61	66	64	73.7	96.2																						
5-May	53	56	60	62	64	66	63	61	60	58	57	52	49	44	41	37	37	34	33	36	38	39	44	55	50.0	65.6																						
6-May	61	72	71	81	90	87	78	73	59	46	35	34	31	30	30	28	28	29	30	32	35	41	49	61	50.3	89.6																						
7-May	57	68	65	67	62	58	56	56	47	37	33	42	45	33	29	32	30	29	31	34	45	51	59	64	47.1	68.5																						
8-May	70	72	75	74	77	76	73	71	67	62	54	48	45	41	41	49	47	74	91	93	94	95	96	97	70.1	97.0																						
9-May	98	98	99	99	99	100	100	100	100	100	92	59	62	59	44	36	34	30	33	33	38	54	71	79	71.5	99.8																						
10-May	84	88	87	92	93	92	81	67	56	47	37	27	24	24	23	21	21	21	21	24	28	35	45	54	49.6	93.4																						
11-May	65	73	79	85	87	87	77	64	49	36	28	21	19	18	18	19	19	21	19	21	25	31	37	45	43.4	87.1																						
12-May	50	53	56	57	60	61	55	44	33	25	20	18	17	16	16	14	13	14	18	23	25	27	30	32	32.2	61.0																						
13-May	36	41	45	46	48	50	44	39	37	34	31	33	31	29	26	23	21	21	21	23	27	35	40	47	34.6	49.9																						
14-May	57	60	59	63	61	61	57	48	42	31	25	23	21	20	20	19	17	17	19	20	26	37	44	55	37.6	63.1																						
15-May	70	76	73	80	85	84	70	58	47	34	25	20	20	20	19	18	19	20	20	24	28	30	32	35	41.9	85.0																						
16-May	36	41	47	49	45	45	49	44	38	34	28	28	29	27	26	25	24	25	25	26	29	32	35	37	34.3	49.1																						
17-May	42	54	60	64	68	74	69	59	50	42	36	32	30	28	26	23	24	24	26	28	31	34	35	35	41.4	74.2																						
18-May	38	43	46	47	52	57	57	54	50	42	38	33	32	29	30	31	44	45	57	63	68	79	85	90	50.4	89.7																						
19-May	93	94	97	98	98	97	90	86	77	73	62	48	45	41	39	35	34	33	31	34	43	52	60	67	63.6	97.6																						
20-May	73	78	82	86	92	93	89	85	81	79	80	75	73	69	67	68	80	79	82	86	86	85	89	93	81.4	93.4																						
21-May	94	94	93	94	94	94	94	90	92	95	96	98	98	97	96	95	94	94	95	94	96	96	93	91	94.4	98.0																						
22-May	90	89	89	88	91	94	96	95	94	93	90	91	89	90	92	91	90	83	84	86	88	91	93	93	90.4	95.7																						
23-May	93	93	94	93	93	93	91	89	85	84	79	73	70	69	66	66	66	64	59	59	64	81	91	95	79.6	94.5																						
24-May	96	97	97	97	98	97	94	D	D	D	D	D	D	D	32	31	33	30	31	33	40	51	59	63	--	97.5																						
25-May	71	80	89	93	95	94	85	74	65	58	49	43	36	29	37	35	44	51	51	54	59	68	76	83	63.3	95.3																						
26-May	92	95	95	95	96	95	90	74	60	56	51	42	46	40	46	46	42	39	38	41	46	51	58	65	62.4	96.1																						
27-May	71	72	73	73	72	66	61	52	46	39	37	35	33	31	31	31	31	30	31	33	38	44	49	52	47.1	73.2																						
28-May	51	56	66	63	73	74	72	65	52	47	42	40	33	42	48	43	36	39	37	51	56	65	70	74	53.9	74.5																						
29-May	77	81	88	89	92	92	87	80	72	60	46	44	47	58	55	54	51	50	53	55	68	91	91	84	69.3	92.3																						
30-May	89	90	89	89	91	92	93	92	90	85	82	84	87	89	88	88	88	86	85	91	93	94	94	96	89.4	95.9																						
31-May	97	98	98	98	99	99	100	100	94	73	67	61	54	50	43	41	40	38	39	40	46	62	79	88	71.0	99.8																						
																								70.1	74.5	76.8	78.5	80.4	80.8	76.6	69.5	62.7	55.7	50.4	46.4	44.9	43.1	41.7	40.2	40.3	40.6	41.9	44.7	49.4	56.6	62.7	67.1	Diurnal Average
																								97.7	98.4	98.7	99.1	99.4	99.6	99.7	99.8	99.8	99.8	96.3	97.7	98.0	97.0	95.8	94.7	93.8	94.2	94.7	94.2	95.5	96.3	96.1	97.0	Diurnal Maximum

D - DAS Failure



Hourly Averages

Wind Speed (km/h)
Wind Direction (deg)
Valleyview - May 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	0	0	0	1	1	1	3	4	12	15	11	12	12	11	10	8	8	9	5	2	3	3	3	4.6	14.5	
Dir	159	320	74	213	320	345	215	210	213	308	325	318	326	319	310	296	305	324	312	312	234	202	201	232	306	325	
2 Spd	3	3	4	4	3	2	3	5	6	11	13	14	14	13	16	12	16	16	13	10	4	6	3	3	7.0	16.3	
Dir	205	176	192	199	199	182	186	196	249	277	278	288	294	272	276	293	285	276	270	286	259	263	213	215	268	276	
3 Spd	2	3	1	3	1	1	2	0	0	4	7	10	12	14	17	18	17	23	22	22	21	19	18	20	9.2	22.5	
Dir	183	172	206	205	192	297	198	304	135	43	5	21	21	18	2	356	356	352	335	334	333	319	333	1	349	352	
4 Spd	11	12	13	15	15	15	15	15	14	14	14	17	17	16	15	16	16	13	10	9	4	2	4	5	12.0	17.4	
Dir	8	5	354	348	334	338	340	341	348	348	344	336	330	334	320	319	328	321	314	345	350	8	24	353	339	336	
5 Spd	13	12	8	6	4	4	7	7	5	6	8	6	7	7	3	3	4	3	4	3	2	3	2	1	5.0	13.4	
Dir	12	16	18	16	6	2	14	21	42	29	1	6	354	346	345	299	354	335	334	313	345	57	24	9	6	12	
6 Spd	0	1	2	1	1	1	1	1	1	1	2	2	2	1	4	4	3	3	4	4	1	1	1	1	0.9	4.1	
Dir	234	40	351	175	210	59	41	201	149	11	272	333	22	89	330	270	264	298	315	304	290	336	179	179	309	330	
7 Spd	1	0	1	2	1	8	5	5	6	4	4	5	8	3	3	9	4	8	7	6	5	3	3	4	3.0	9.2	
Dir	259	113	206	186	286	15	25	46	73	100	0	301	31	27	93	36	69	1	117	92	117	37	35	2	45	36	
8 Spd	1	2	4	2	2	2	1	1	3	7	8	2	3	4	8	12	7	9	2	5	3	1	1	2	1.6	12.1	
Dir	359	31	323	14	56	340	12	43	44	13	18	46	157	110	138	125	126	192	152	138	169	32	215	192	103	125	
9 Spd	3	1	3	5	5	5	5	5	5	4	5	4	6	4	4	2	5	1	2	2	1	1	2	1	2.2	6.4	
Dir	198	207	188	188	176	181	184	187	185	165	145	150	51	140	68	229	185	290	286	67	144	322	186	183	168	51	
10 Spd	1	1	1	1	1	2	3	3	3	1	2	3	3	2	3	4	3	5	3	6	3	4	5	2	1	0.4	5.5
Dir	229	218	299	200	175	192	203	197	133	15	34	3	55	353	314	317	350	6	20	134	124	140	180	267	31	20	
11 Spd	1	2	2	1	1	3	3	4	3	2	2	3	7	7	10	9	10	7	2	1	2	4	3	3	2.1	9.9	
Dir	158	127	239	220	207	206	201	203	185	191	230	303	319	320	323	295	273	326	350	66	200	196	204	205	272	273	
12 Spd	4	4	5	5	4	3	4	5	4	11	11	13	15	13	19	18	18	16	17	13	11	7	7	12	8.0	19.5	
Dir	194	191	191	190	194	193	187	186	244	275	263	277	286	290	307	296	294	318	297	316	312	297	271	287	284	307	
13 Spd	14	4	7	3	6	5	14	16	17	18	18	15	13	13	12	11	11	11	8	4	1	2	3	4	8.2	18.4	
Dir	290	261	262	243	265	266	293	299	308	300	299	307	316	318	330	323	344	354	357	10	227	202	203	191	306	299	
14 Spd	4	4	3	4	6	4	3	4	3	4	6	9	7	11	13	12	13	10	8	5	1	2	1	0	3.2	12.9	
Dir	190	195	199	196	197	198	197	203	199	303	297	283	307	299	323	323	316	332	340	34	162	194	194	108	292	316	
15 Spd	1	1	1	1	0	1	2	3	4	3	4	1	5	7	2	2	4	5	3	5	5	8	7	6	2.1	8.0	
Dir	41	205	205	176	121	200	229	187	200	174	173	188	347	352	166	235	175	164	193	139	144	139	151	177	168	139	
16 Spd	5	3	4	4	4	5	4	7	5	4	4	4	6	8	10	7	9	9	7	13	10	6	7	3	3.0	12.7	
Dir	192	214	193	187	181	193	196	187	194	190	201	281	307	333	336	295	293	317	350	341	336	331	311	322	292	341	
17 Spd	3	3	2	2	2	3	2	2	0	1	2	2	2	4	5	5	6	5	7	7	7	6	5	4	1.9	7.0	
Dir	315	168	176	224	198	174	189	188	314	60	44	72	156	341	6	30	59	66	63	57	50	23	29	62	51	57	
18 Spd	4	3	5	2	3	3	4	4	4	2	1	1	2	3	4	4	4	10	5	4	2	5	2	0	2.1	9.7	
Dir	358	30	325	345	340	4	21	356	26	2	134	169	201	192	35	316	234	322	11	330	117	2	340	325	349	322	
19 Spd	2	0	1	2	3	4	12	9	11	10	12	14	13	13	9	7	5	6	7	4	3	3	3	3	4.9	14.4	
Dir	11	292	94	290	312	261	288	289	299	293	299	318	314	348	353	0	13	12	14	58	60	32	81	10	328	318	
20 Spd	3	3	3	7	8	6	5	4	6	9	12	12	11	14	16	15	22	21	19	16	15	12	13	11	9.3	22.0	
Dir	358	12	24	26	45	47	56	59	19	19	18	19	16	351	342	349	320	315	313	315	317	320	319	309	344	320	
21 Spd	11	10	13	13	13	13	15	21	19	13	12	12	13	14	14	14	12	12	10	11	7	8	10	11	12.1	20.6	
Dir	309	335	332	313	311	320	325	352	341	314	316	313	304	306	309	314	308	316	318	323	315	313	329	335	321	352	
22 Spd	13	12	10	11	9	8	8	9	11	11	13	12	14	13	10	9	9	10	9	7	5	3	3	4	9.0	13.5	
Dir	339	338	336	334	326	329	330	330	338	334	338	347	344	2	6	17	9	3	348	345	345	316	309	336	343	344	

Hourly Averages

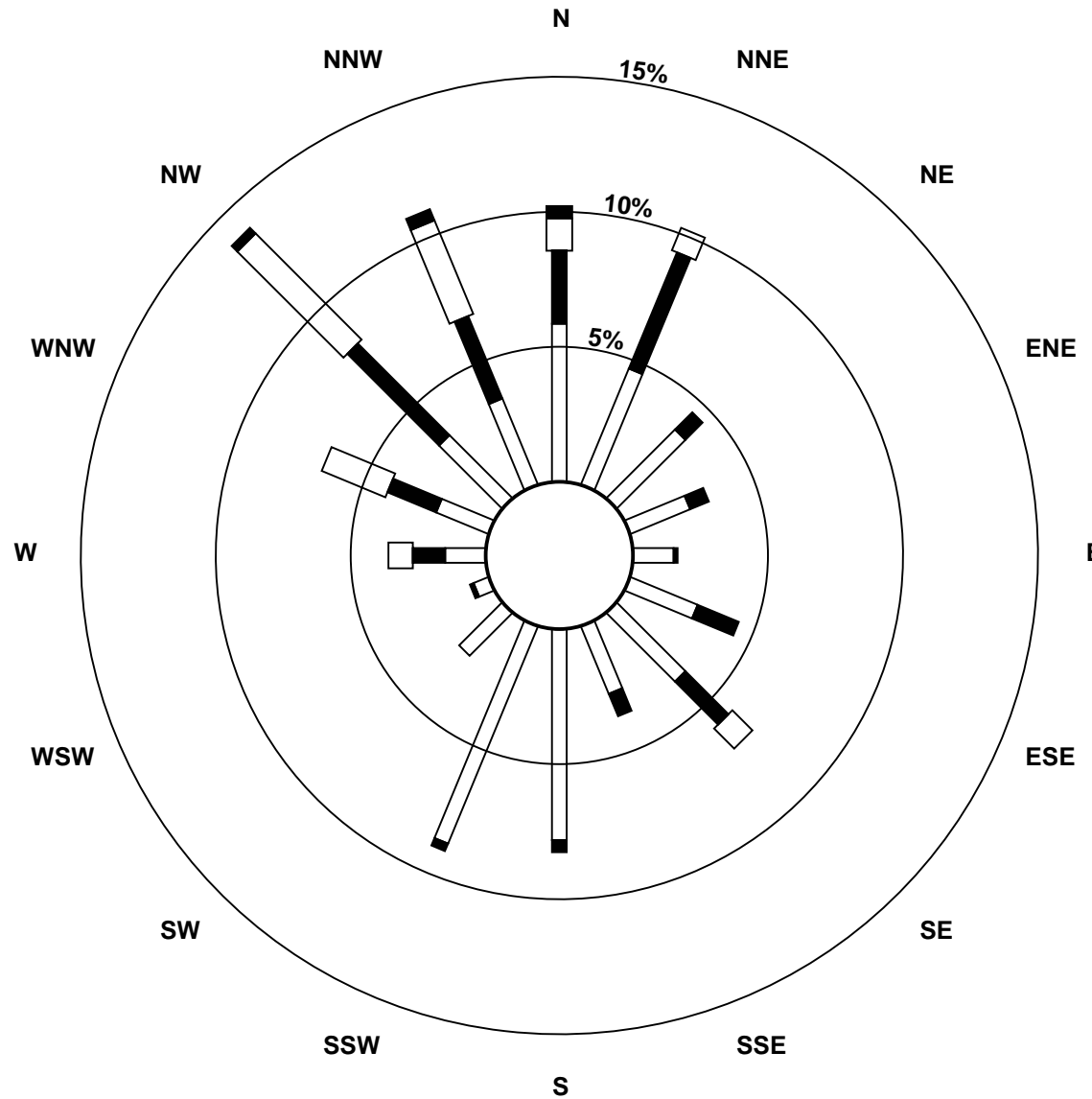
Wind Speed (km/h)
Wind Direction (deg)
Valleyview - May 2010

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	1	1	2	3	4	5	6	7	8	8	10	9	9	8	7	8	5	3	1	1	1	4.6	9.9
Dir	322	308	326	309	289	284	295	297	318	303	311	305	326	320	305	320	310	333	322	353	32	87	3	182	317	320
24 Spd	1	1	1	0	1	2	2	D	D	D	D	D	D	D	3	2	4	4	5	4	3	1	2	2	--	4.9
Dir	168	174	200	202	311	30	7	D	D	D	D	D	D	D	161	131	109	104	120	116	127	45	119	161	--	120
25 Spd	2	1	2	1	2	0	1	1	1	0	5	6	4	3	11	10	10	5	5	7	3	2	3	1	2.5	10.6
Dir	185	258	169	164	189	339	334	31	35	44	73	64	48	69	130	144	158	191	149	143	134	139	184	104	133	130
26 Spd	1	3	2	1	0	0	1	2	4	3	1	6	4	8	5	5	6	6	7	6	5	4	3	4	2.8	8.1
Dir	204	42	11	343	331	358	340	133	137	3	86	148	137	160	134	109	102	115	107	114	99	106	97	36	111	160
27 Spd	4	4	4	5	4	5	4	4	7	14	13	12	13	14	12	9	9	7	6	7	6	3	3	3	5.4	14.4
Dir	41	14	353	3	18	17	34	74	122	133	135	127	137	131	136	131	135	133	141	146	138	121	105	103	119	133
28 Spd	3	3	3	2	5	4	4	1	8	9	7	6	6	9	7	7	10	7	6	4	1	2	1	1	3.0	9.9
Dir	99	66	336	25	354	2	359	46	137	129	118	109	151	179	131	117	111	120	156	195	266	185	175	151	124	111
29 Spd	1	1	0	1	2	1	1	1	1	1	2	3	3	4	3	3	1	2	3	3	2	2	3	5	0.6	4.6
Dir	344	339	164	314	187	193	195	7	75	145	185	97	107	183	184	189	262	300	21	12	104	213	52	115	131	115
30 Spd	6	6	6	6	6	8	7	7	3	8	11	9	7	3	8	8	7	3	5	6	3	5	2	1	5.7	10.7
Dir	23	32	26	20	21	17	7	13	7	9	14	21	49	52	10	33	19	324	22	16	346	22	333	64	18	14
31 Spd	2	2	1	2	0	1	1	2	1	3	2	2	2	1	2	2	2	3	4	3	2	2	0	1	0.7	4.1
Dir	358	321	8	353	41	219	191	112	144	164	272	296	219	349	145	161	184	126	122	131	152	128	241	199	153	122
Spd	1.7	1.5	1.6	1.4	1.4	1.6	2.0	1.7	1.6	2.8	3.7	4.0	4.4	4.4	4.3	4.1	3.8	4.7	3.7	2.9	1.4	1.3	1.2	1.3	Diurnal Average	
Dir	334	356	329	325	317	330	321	328	332	328	329	331	337	331	335	331	324	331	336	350	348	332	325	333	Diurnal Maximum	
Spd	13.7	12.0	13.2	15.4	15.4	15.0	15.1	20.6	18.7	18.1	18.4	17.4	16.5	15.9	19.5	18.4	22.0	22.5	21.5	22.2	21.2	19.1	18.2	20.0	Diurnal Maximum	
Dir	290	338	354	348	334	338	325	352	341	300	299	336	330	334	307	356	320	352	335	334	333	319	333	1	Diurnal Maximum	
Maximum Speed Value: 23 ppb on May 3 18:00																		Minimum Speed Value: 0 ppb on May 29 03:00						Hours in Service: 744		
Maximum Daily Speed Average: 12.1 ppb on May 21																		Minimum Daily Speed Average: 0.4 ppb on May 6						Hours of Data: 737		
Maximum Diurnal Speed Average: 4.7 ppb at hour 18																		Minimum Diurnal Speed Average: 1.2 ppb at hour 23						Hours of Missing Data: 7		
Monthly Average Velocity: 2.57 ppb 332.3 deg																		Speed Percentiles: P ₁ = 0.2 P ₁₀ = 1.0 Q ₁ = 2.3 Median = 4.1 Q ₃ = 8.4 P ₉₀ = 13.0 P ₉₉ = 20.2						Percent Operational Time: 99.1		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
D - DAS Failure																										
Frequency Distribution																										
		Speed Range (ppb)																								
Direction	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38	Total																			
North	66	54	33	3	0	0	156																			
NorthEast	56	20	0	0	0	0	76																			
East	30	7	0	0	0	0	37																			
SouthEast	39	32	7	0	0	0	78																			
South	117	12	0	0	0	0	129																			
SouthWest	45	0	0	0	0	0	45																			
West	21	12	14	0	0	0	47																			
NorthWest	50	53	59	7	0	0	169																			
Total	424	190	113	10	0	0	737																			

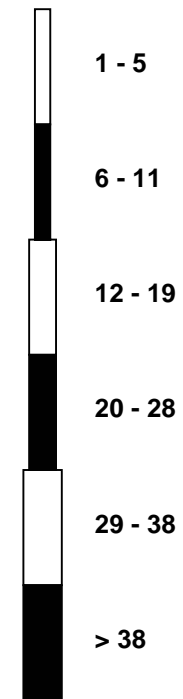
Wind Rose

Wind Speed (WS) (km/h)

Valleyview - May 2010



Wind Speed Classes (km/h)





Hourly Averages - Wind Speed (Scalar)

Wind Speed (km/h)

Valleyview - May 2010

Maximum Speed: 23 km/h on May 3 18:00 Minimum Speed: 1 km/h on May 1 04:00 Maximum Diurnal Speed Average: 9.6 km/h at hour 15 Monthly Average Speed: 6.41 km/h		Maximum Daily Speed Average: 12.7 km/h on May 4 Minimum Daily Speed Average: 2.6 km/h on May 31 Minimum Diurnal Speed Average: 3.9 km/h at hour 4 Percentiles: P ₁ = 1.0 P ₁₀ = 1.7 Q ₁ = 3.0 Median = 4.8 Q ₃ = 8.9 P ₉₀ = 13.5 P ₉₉ = 20.6		Hours in Service: 744 Hours of Data: 737 Hours of Missing Data: 7 Percent Operational Time: 99.1																							
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-May	3	2	1	1	2	1	1	4	5	12	15	12	12	14	12	10	9	9	9	5	2	3	3	4	6.4	15.0	
2-May	3	3	4	4	3	3	3	5	6	12	14	14	15	13	16	14	17	17	14	10	5	6	3	3	8.6	16.8	
3-May	3	3	1	3	1	1	2	1	2	5	8	10	13	14	17	19	18	23	22	22	21	19	19	20	11.2	22.8	
4-May	11	12	14	15	16	15	15	15	14	14	14	18	17	16	15	16	17	13	10	10	5	3	4	6	12.7	17.6	
5-May	14	12	8	6	4	4	7	7	5	7	9	7	8	7	5	6	5	4	4	3	3	3	2	2	6.1	13.5	
6-May	1	2	2	1	1	1	1	1	2	2	3	4	4	4	6	4	4	5	4	4	2	2	1	1	2.7	6.0	
7-May	1	2	2	3	3	8	5	6	7	6	9	8	9	6	5	10	6	9	9	7	5	4	4	4	5.7	10.1	
8-May	2	3	5	2	3	3	2	3	3	7	9	6	5	6	9	13	8	10	3	5	3	1	1	2	4.8	12.5	
9-May	3	2	3	5	5	5	5	5	5	4	6	5	7	5	5	6	5	3	3	3	2	3	3	2	4.1	7.5	
10-May	1	2	2	1	1	2	3	3	2	3	3	4	5	5	5	4	7	5	6	3	5	5	3	1	3.4	6.9	
11-May	1	2	2	1	1	3	3	4	3	3	3	6	8	8	10	10	11	9	3	2	2	4	3	3	4.4	10.8	
12-May	4	4	5	5	4	3	4	5	5	11	11	14	16	15	20	19	19	16	18	13	11	7	7	12	10.3	20.3	
13-May	14	5	7	4	6	5	14	16	17	19	19	16	14	14	13	12	12	12	9	5	1	2	3	4	10.1	19.0	
14-May	4	4	3	4	6	4	3	4	4	5	7	10	9	12	14	13	14	11	9	5	2	2	1	2	6.2	13.6	
15-May	2	2	1	1	1	1	2	3	4	4	4	4	8	7	5	5	5	6	3	5	5	8	8	6	4.2	8.1	
16-May	5	3	4	4	4	6	4	7	5	4	4	8	8	9	11	7	9	10	7	13	10	6	7	3	6.6	12.8	
17-May	4	3	2	2	2	3	2	2	2	3	4	4	4	6	6	6	7	5	7	7	7	6	5	4	4.2	7.2	
18-May	5	3	5	2	3	4	4	4	4	4	4	4	4	4	5	5	8	10	6	5	5	6	3	2	4.5	10.1	
19-May	2	1	2	2	4	4	12	9	11	10	13	15	13	13	11	8	7	6	7	4	3	3	3	4	7.0	14.9	
20-May	3	4	4	7	8	6	6	4	6	9	13	12	11	14	16	16	23	22	19	16	15	12	13	11	11.2	22.7	
21-May	11	10	13	13	13	13	15	21	19	13	12	12	13	14	14	15	12	12	10	11	7	8	10	11	12.6	20.9	
22-May	13	12	10	11	9	9	9	9	11	12	13	12	14	13	11	9	9	10	9	7	5	3	3	4	9.5	13.7	
23-May	5	4	3	2	2	2	3	4	5	7	8	8	8	10	9	10	9	7	8	6	3	1	1	1	5.2	10.4	
24-May	1	1	1	1	1	2	2	D	D	D	D	D	D	D	5	3	5	5	5	4	4	3	3	2	--	5.3	
25-May	2	2	2	2	2	2	1	2	3	3	6	7	6	4	11	10	11	5	5	7	4	3	3	1	4.3	11.0	
26-May	1	3	2	2	2	1	1	2	5	4	5	7	6	9	5	5	7	7	7	6	5	4	3	4	4.3	8.5	
27-May	4	5	4	5	4	6	4	4	7	15	13	12	13	14	12	9	10	8	6	7	6	3	3	3	7.4	14.6	
28-May	4	3	4	2	5	4	4	2	8	9	7	6	6	9	8	8	10	7	7	4	1	2	1	1	5.2	10.3	
29-May	1	1	1	1	2	1	1	2	2	2	3	4	6	4	4	3	2	4	4	4	3	2	4	5	2.7	5.5	
30-May	6	6	6	7	6	8	7	7	4	9	11	10	8	4	8	8	8	4	6	6	4	5	3	2	6.3	10.9	
31-May	2	2	2	2	1	1	1	2	2	3	4	4	3	5	4	3	4	4	4	3	2	2	1	1	2.6	4.6	
		4.4	3.9	4.1	3.9	4.1	4.2	4.8	5.5	5.9	7.4	8.5	8.7	9.1	9.4	9.6	9.2	9.5	8.9	7.9	6.9	5.1	4.6	4.3	4.3	Diurnal Average	
		13.8	12.1	13.6	15.5	15.5	15.1	15.2	20.9	18.8	18.7	19.0	17.6	17.0	16.2	20.3	18.8	22.7	22.8	21.7	22.4	21.3	19.2	19.0	20.2	Diurnal Maximum	
D - DAS Failure All monthly, daily, and diurnal averages have been calculated using scalar methods																											

Hourly Standard Deviations

Wind Direction (WD) - deg

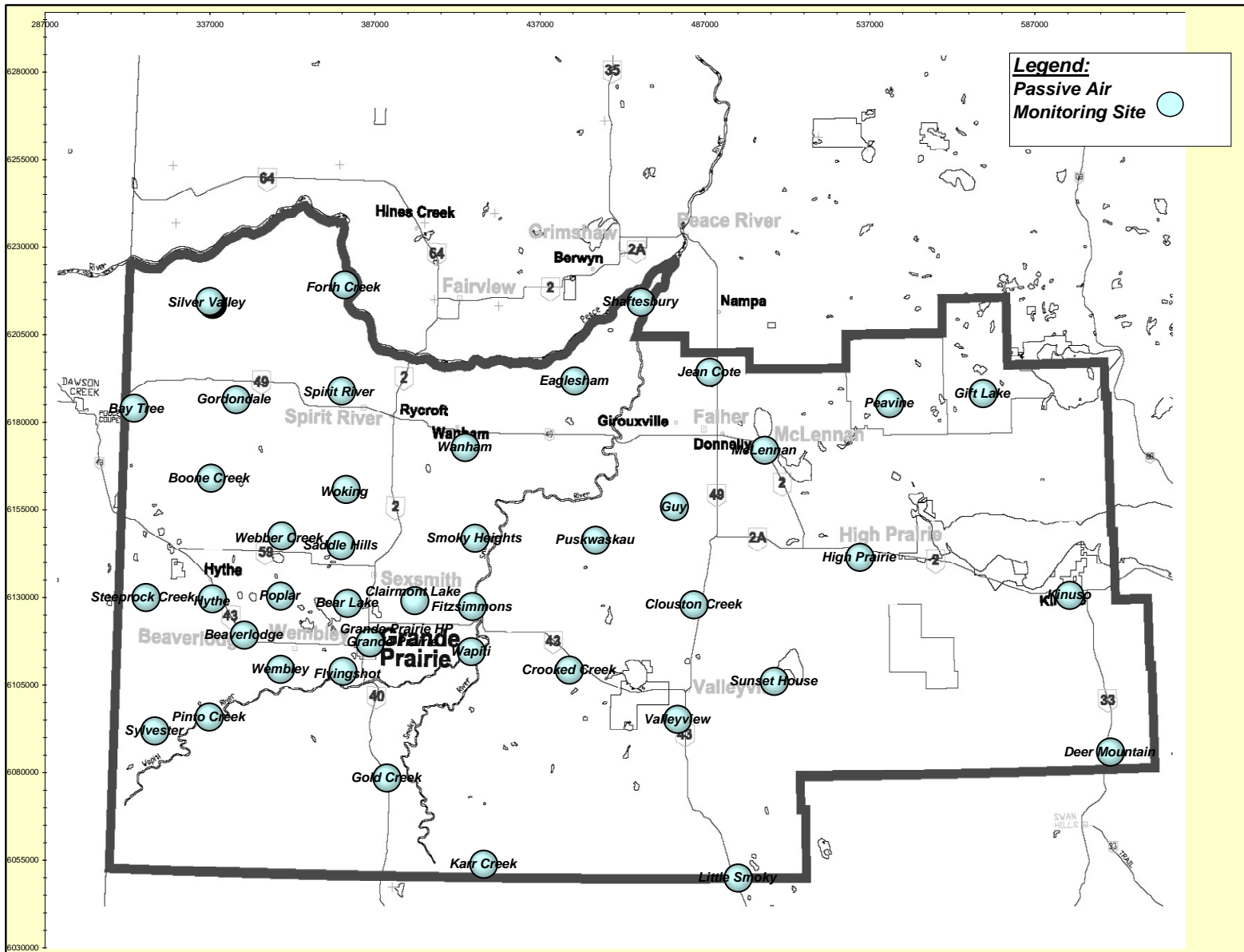
Valleyview - May 2010

Maximum Value: 99.1 deg on May 25 10:00																	Hours in Service: 744								
Minimum Value: 3.5 deg on May 14 05:00																	Hours of Data: 737								
Percentiles: P ₁ = 5.1 P ₁₀ = 8.9 Q ₁ = 13.1 Median = 24.2 Q ₃ = 49.2 P ₉₀ = 70.9 P ₉₉ = 95.1																	Hours of Missing Data: 7								
																	Hours of Calibration: 0								
																	Percent Operational Time: 99.1								
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-May	52	83	85	98	69	64	59	42	39	28	15	24	19	28	26	24	26	30	11	10	33	8	19	28	97.8
2-May	26	17	14	8	8	19	18	16	28	23	22	18	20	22	19	34	17	14	13	13	16	11	8	24	34.4
3-May	55	12	23	11	82	56	20	99	90	31	29	25	20	18	16	10	18	9	7	6	5	7	17	8	98.9
4-May	8	11	13	7	6	6	5	5	6	8	8	8	13	12	13	13	11	12	11	15	29	35	50	33	50.1
5-May	6	7	8	8	11	10	12	15	22	34	42	33	29	33	77	71	52	65	30	15	57	30	18	92	92.0
6-May	93	47	15	72	73	76	70	60	46	58	67	77	85	82	63	48	50	61	32	17	57	69	19	47	93.1
7-May	71	89	41	56	76	7	16	16	25	52	91	51	27	80	62	27	57	37	40	27	13	42	27	20	90.8
8-May	90	50	26	66	66	60	45	66	44	11	21	89	73	60	29	19	25	28	66	22	31	47	40	22	89.9
9-May	17	49	14	13	16	20	18	17	23	37	28	40	40	49	46	71	27	93	58	32	61	87	33	53	93.0
10-May	71	51	76	30	43	16	9	45	89	37	41	53	79	61	55	50	73	70	23	35	27	11	22	65	88.8
11-May	73	42	31	22	69	11	9	7	22	38	62	66	33	35	25	33	28	46	66	96	36	7	9	9	96.1
12-May	8	6	4	6	4	9	12	15	39	17	22	18	22	28	16	16	15	11	13	9	9	11	6	10	39.0
13-May	6	39	18	29	9	10	10	10	10	13	15	20	22	24	19	32	22	20	14	12	67	18	9	7	67.0
14-May	5	9	7	6	4	5	8	8	23	55	50	43	54	37	22	19	18	29	26	17	64	27	71	82	81.8
15-May	83	57	20	43	96	50	47	21	15	28	49	95	54	32	80	70	44	29	29	27	10	7	12	11	95.6
16-May	6	25	12	9	18	33	33	11	25	19	35	63	67	30	24	32	25	15	33	8	5	13	18	30	67.2
17-May	35	27	22	17	19	14	16	24	88	66	69	69	70	69	52	45	35	32	17	10	10	9	13	18	88.4
18-May	19	13	34	45	44	32	31	13	30	80	92	80	68	57	64	32	63	17	39	51	71	46	55	85	92.4
19-May	47	98	50	58	44	47	17	13	14	14	14	15	16	17	30	48	55	16	18	30	30	25	23	42	97.8
20-May	54	27	58	12	13	14	19	29	15	11	12	14	16	15	10	11	15	7	9	9	7	8	7	10	57.8
21-May	11	11	10	8	8	8	8	10	7	14	9	9	8	7	8	8	8	8	7	10	11	10	9	8	13.6
22-May	7	7	8	8	11	12	13	13	7	9	9	10	9	13	14	15	13	10	11	9	16	39	16	21	39.5
23-May	13	15	16	40	18	22	32	24	28	19	25	22	19	20	18	20	20	22	24	27	17	67	42	63	66.5
24-May	80	69	83	87	58	40	33	D	D	D	D	D	D	D	75	75	45	46	27	19	23	81	42	30	87.0
25-May	30	57	47	83	36	90	53	60	72	99	41	40	58	64	14	21	29	18	18	15	27	20	10	76	99.1
26-May	54	19	20	59	77	89	77	68	24	79	76	24	45	19	11	28	25	23	19	16	14	11	24	11	89.1
27-May	11	23	26	25	13	9	15	26	37	10	13	16	13	15	14	24	16	15	14	12	6	15	9	9	36.9
28-May	21	19	76	51	11	16	22	66	13	15	29	34	21	22	31	24	17	21	28	9	63	16	16	66	75.5
29-May	48	71	89	55	16	17	73	36	57	86	62	53	54	29	20	23	75	73	41	56	85	37	57	29	89.0
30-May	20	12	10	10	8	9	12	11	25	17	12	13	27	40	17	15	12	34	34	7	43	14	50	56	56.1
31-May	28	37	51	24	83	28	62	42	75	42	72	82	61	93	69	65	61	49	28	26	31	34	80	54	92.7
93.1	97.8	89.0	97.8	95.6	90.2	77.1	98.9	89.6	99.1	92.4	95.3	84.6	92.7	80.0	75.4	74.7	93.0	66.2	96.1	85.5	86.9	80.3	92.0		
D - DAS Failure																									

PASZA

Monthly Passive Data Summary

Location of PASZA Passive Monitoring Stations



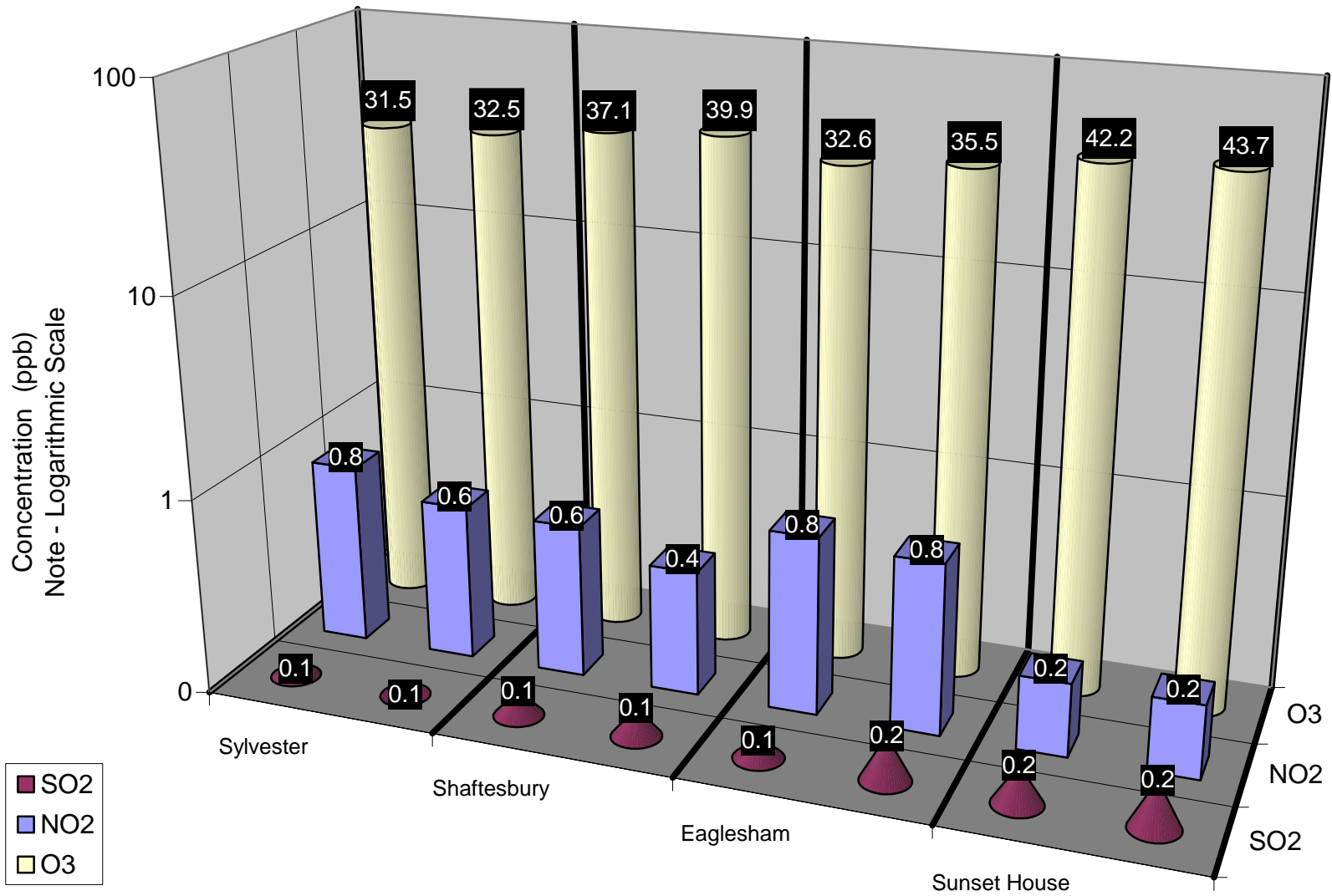
PASZA Passive Results for May 2010

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
14a	Sylvester	0.1	31.5	0.8	
14b	Sylvester	0.1	32.5	0.6	
20a	Shaftesbury	0.1	37.1	0.6	
20b	Shaftesbury	0.1	39.9	0.4	
21a	Eaglesham	0.1	32.6	0.8	
21b	Eaglesham	0.2	35.5	0.8	
42a	Sunset House	0.2	42.2	0.2	
42b	Sunset House	0.2	43.7	0.2	
1	Silver Valley	0.2	37.6	0.6	08-27-081-11 W6M
2	Bay Tree	0.1	37.1	0.3	13-16-078-13 W6M
3	Fourth Creek	0.2	37.2	0.3	04-13-082-07 W6M
4	Gordondale	1.3	44.8	0.6	04-34-078-10 W6M
5	Boone Creek	0.2	32.3	0.5	01-23-076-11 W6M
7	Steeprock Creek	0.1	41.4	0.3	09-35-072-13 W6M
9	Spirit River	0.2	34.7	1.2	08-12-079-07 W6M
10	Woking	0.2	33.7	0.4	01-13-076-07 W6M
11	Webber Creek	0.2	38.0	0.8	09-36-074-09 W6M
12	Hythe	0.2	32.7	0.8	14-36-072-11 W6M
14	Sylvester	0.1	32.0	0.7	08-06-069-12 W6M
16	Beaverlodge	0.2	41.2	0.6	15-36-071-10 W6M
17	Poplar	0.2	36.3	1.4	13-06-073-08 W6M
18	Saddle Hills	0.2	38.8	0.4	04-25-074-07 W6M
19	Wanham	0.2	42.7	0.4	16-22-077-03 W6M
20	Shaftesbury	0.1	38.5	0.5	04-03-082-23 W5M
21	Eaglesham	0.1	34.0	0.8	16-21-079-25 W5M
23	Bear Lake	0.2	35.1	1.5	15-31-072-06 W6M

PASZA Passive Results for May 2010 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	0.1	33.2	1.1	12-31-070-08 W6M
25	Pinto Creek	0.2	37.8	0.5	04-24-069-11 W6M
26	Flyingshot	0.2	32.9	0.6	15-36-070-07 W6M
27	Grande Prairie I	0.1	38.0	2.4	08-15-071-06 W6M
28	Clairmont Lake	0.2	42.2	0.7	09-06-073-04 W6M
29	Smoky Heights	0.2	39.4	0.7	04-06-075-02 W6M
30	Fitzsimmons	0.1	32.8	0.3	15-36-072-03 W6M
32	Gold Creek	0.3	32.7	0.8	06-33-067-05 W6M
33	Wapiti	0.2	35.8	0.5	02-25-071-03 W6M
34	Puskwaskau	0.1	34.2	0.2	15-35-074-25 W5M
35	Jean Cote	0.1	31.4	2.3	12-35-079-21 W5M
36	Guy	0.2	38.1	1.0	03-04-076-22 W5M
37	Crooked Creek	0.2	41.0	0.7	16-01-071-26 W5M
38	Karr Creek	0.1	37.2	0.3	10-16-065-02 W6M
39	Clouston Creek	0.2	39.0	N/A	12-01-073-22 W5M
40	McLennan	0.1	33.3	1.5	03-29-077-19 W5M
41	Valleyview	0.2	37.8	0.5	09-30-069-22 W5M
42	Sunset House	0.2	38.9	0.5	05-32-070-19 W5M
43	High Prairie	0.1	33.7	1.0	16-13-074-17 W5M
44	Peavine	0.1	33.0	0.2	03-05-079-15 W5M
45	Gift Lake	0.1	30.6	0.3	10-07-079-12 W5M
46	Little Smoky	0.2	36.5	0.8	12-01-065-21 W5M
47	Kinuso	0.1	29.8	0.3	12-10-073-10 W5M
48	Deer Mountain	0.1	30.9	0.4	15-22-068-09 W5M
49	Grande Prairie HP	0.2	39.3	1.7	17-26-071-06 W6M

*BDL = Below Detection Level



Duplicate Summary Chart

Passive Summary for May 2010

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

Passive Summary for May 2010 (PASZA Zone)			
Mean	0.2	36.2	0.7
Standard Deviation	0.2	3.6	0.5
Minimum	0.1	29.8	0.2
Minimum At	Sylvester (#14)	Kinuso (#47)	Puskwaskau (#34)
Maximum	1.3	44.8	2.4
Maximum At	Gordondale (#4)	Gordondale (#4)	Grande Prairie I (#27)

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

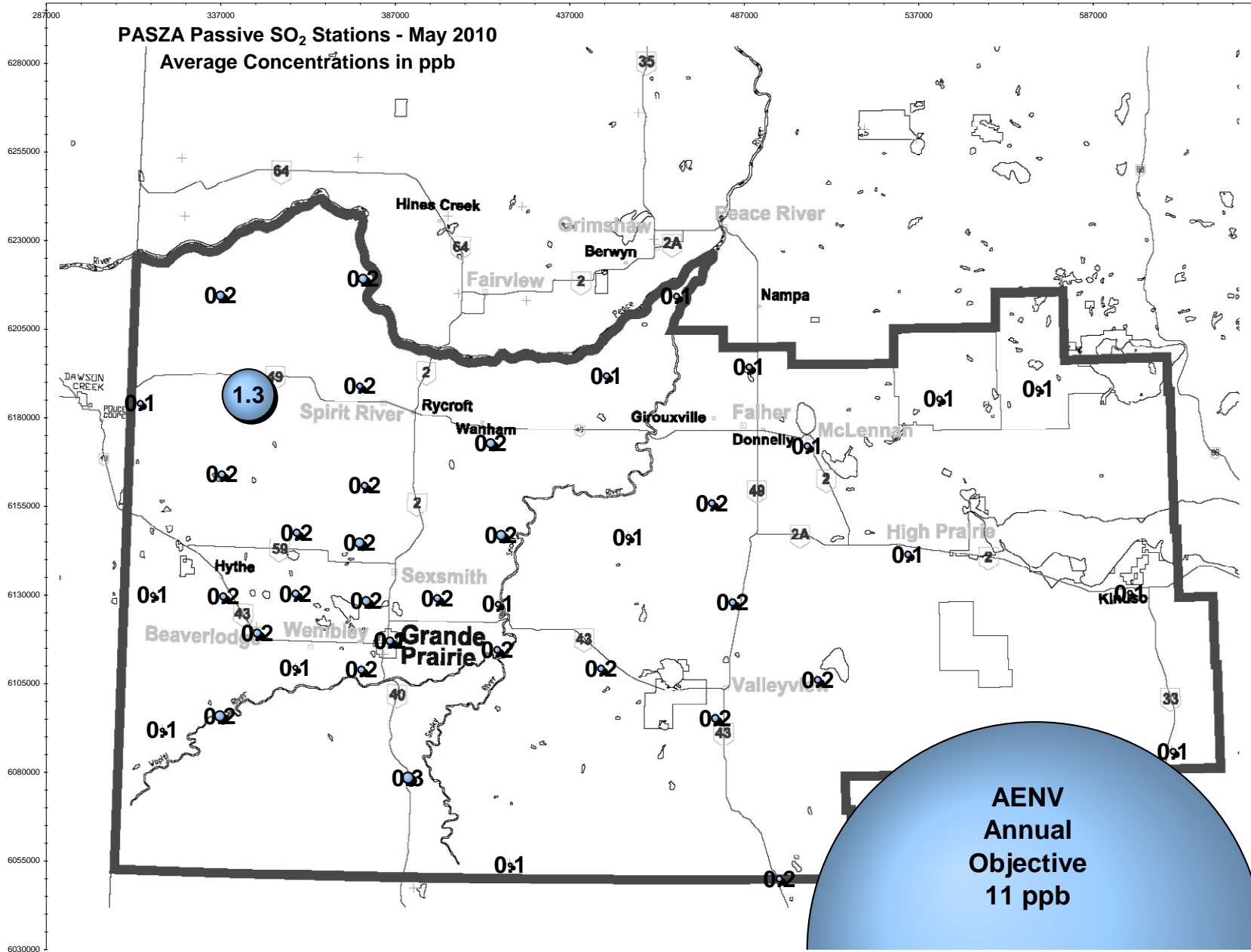
	SO ₂	O ₃	NO ₂
PASZA Beaverlodge station	0.2	38.8	1.7
PASZA Beaverlodge passive	0.2	41.2	0.6

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

	SO ₂	O ₃	NO ₂
PASZA Henry Pirker station	0.2	32.0	4.8
PASZA Grande Prairie passive	0.2	39.3	1.7

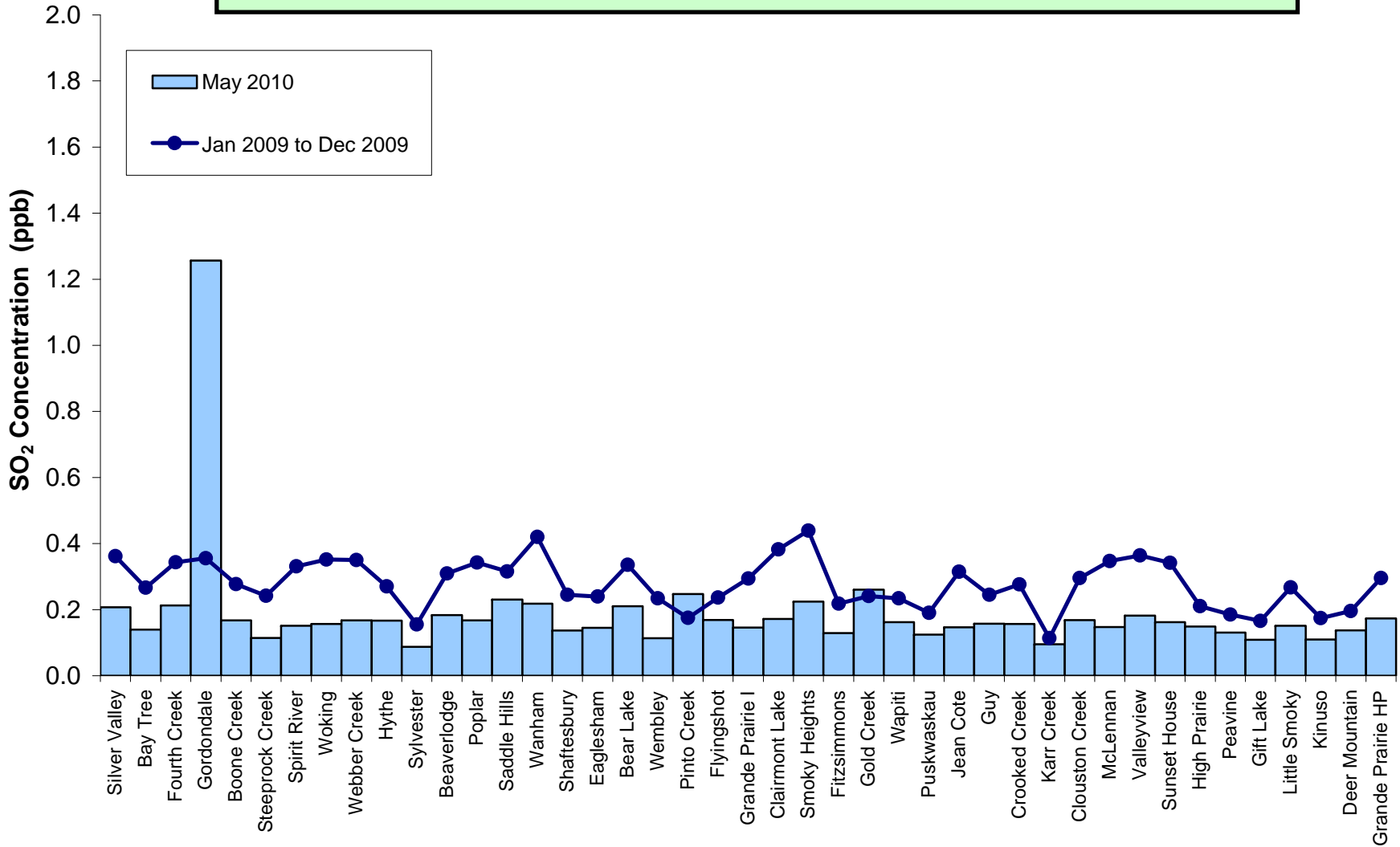
Comparison between Continuous and Passive monitoring at Kinuso (passive #47 Kinuso)

	SO ₂	O ₃	NO ₂
PASZA Portable Kinuso station	0.1	32.4	1.0
PASZA Kinuso passive	0.1	29.8	0.3

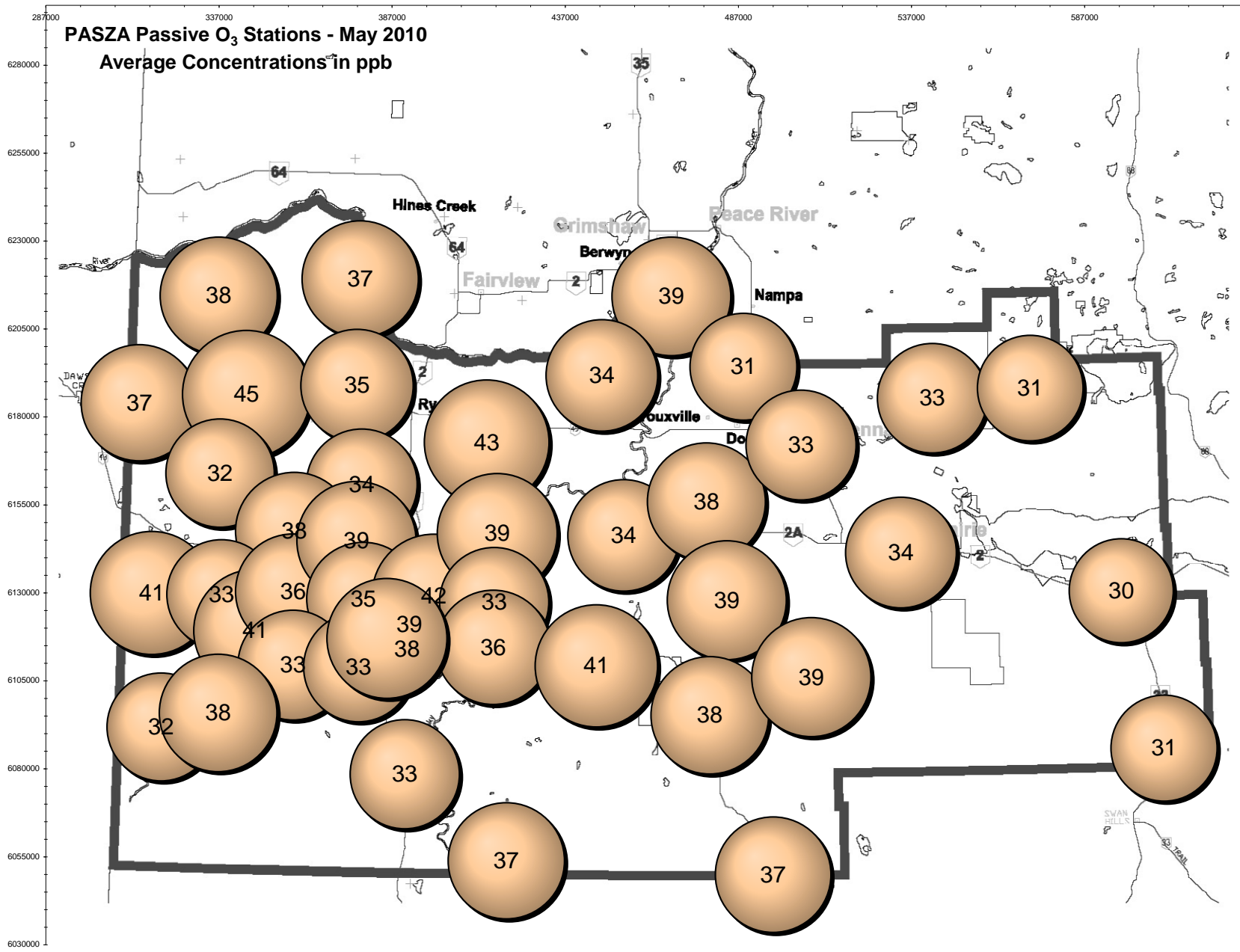


SO₂ Bubble Chart

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

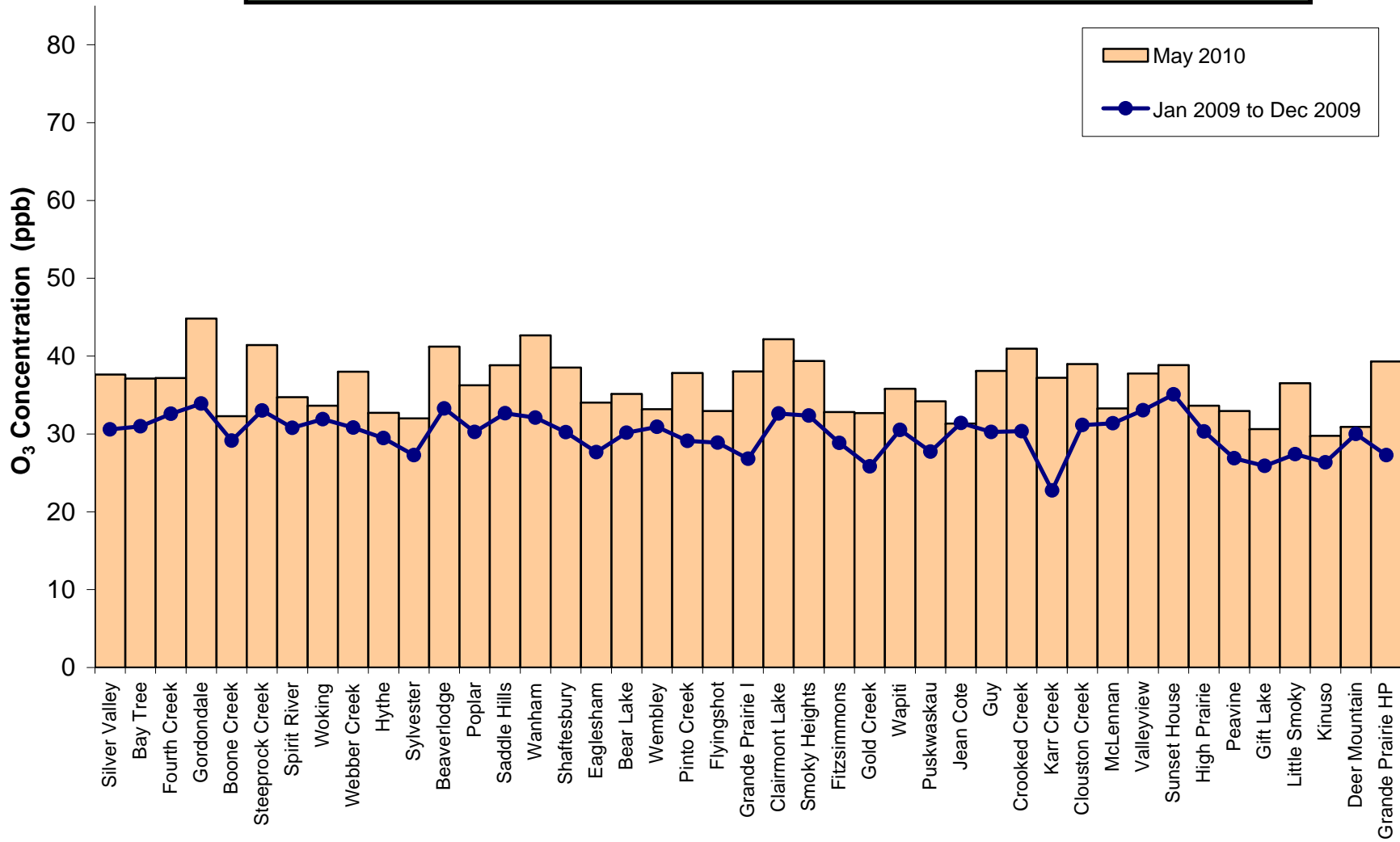


SO₂ Summary Chart



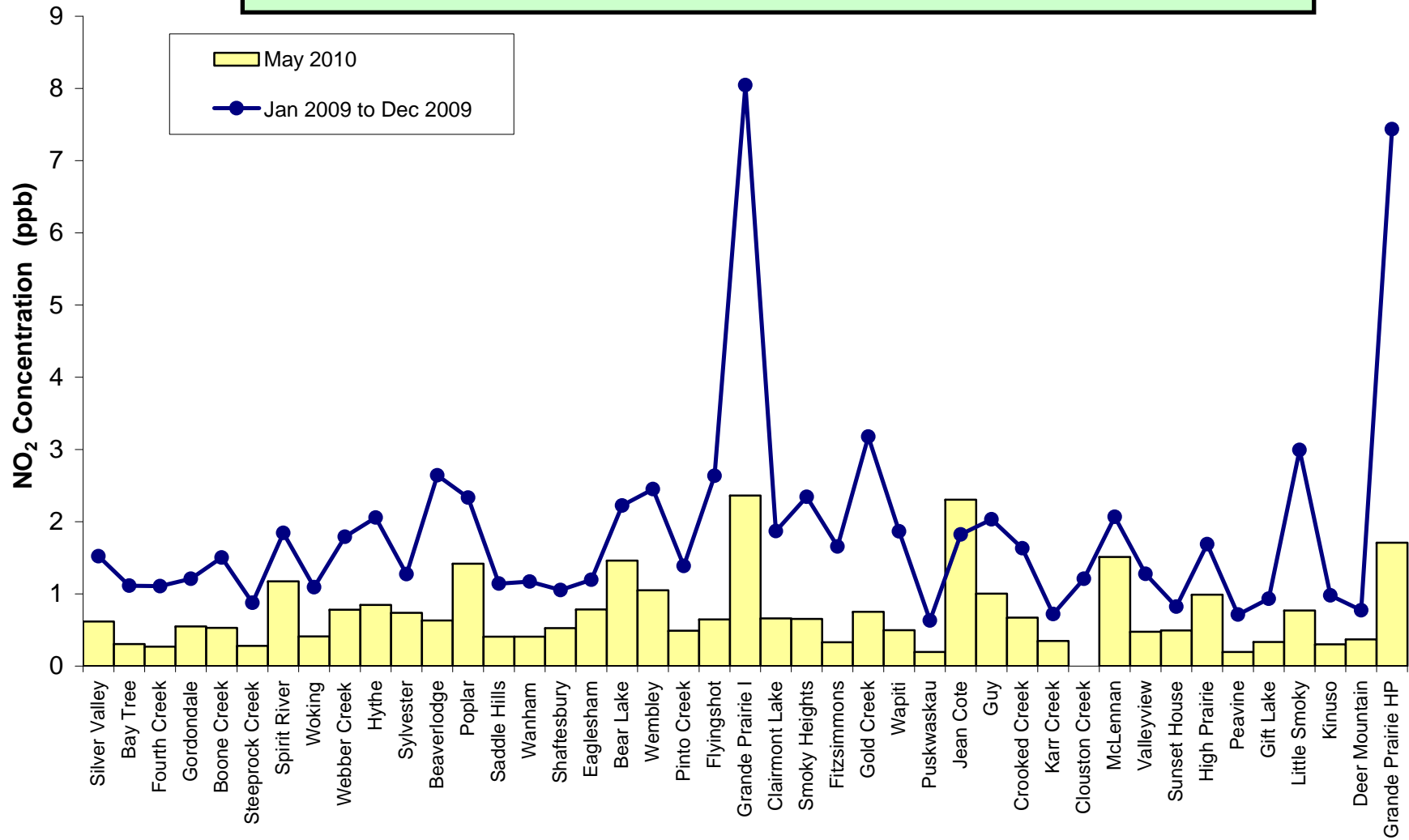
O₃ Bubble Chart

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

May 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	May 17, 2010	Previous Calibration	April 22, 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)	7:15	End Time (MST)	9:28
Barometric Pressure	0.925 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
	Before		After
Calculated slope	0.999514	Calculated slope	1.003486
Calculated intercept	-1.295951	Calculated intercept	-2.272684
Analyzer make	TEI 43C	Analyzer serial #	610816292

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.4		8.4	
Coefficient	.799		.817	
Pressure	641.7	mm Hg	638.6	mm Hg
Flow	0.480	lpm	0.479	lpm
Lamp Voltage	44713	Hz	44449	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
4989	39.83	400.8	400.6	1.0005
4989	19.91	201.1	203.8	0.9868
4989	9.93	100.5	104.4	0.9632
4989	0.00	0.0	0.0	As Found Zero
4989	39.83	400.8	390.0	As Found Span
Average Correction Factor				0.9835

Calculated value of As Found Response: 388.5 ppb Percent Change of As Found: 3.1%

	before calibration		after calibration	
Auto zero	0.1	ppb	0.1	ppb
Auto span	239.8	ppb	236.6	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



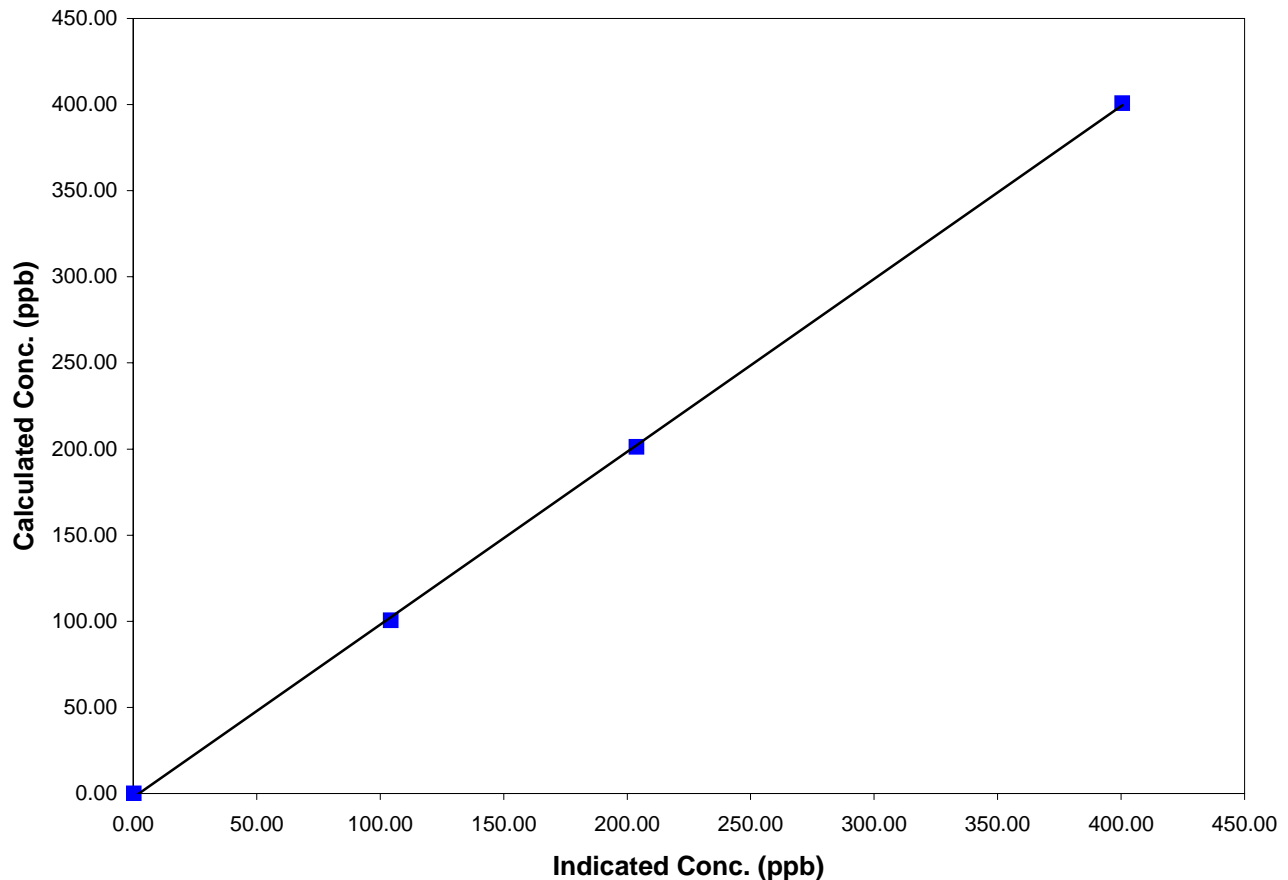
Station Information

Calibration Date	May 17, 2010	Previous Calibration	April 22, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	9:28
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

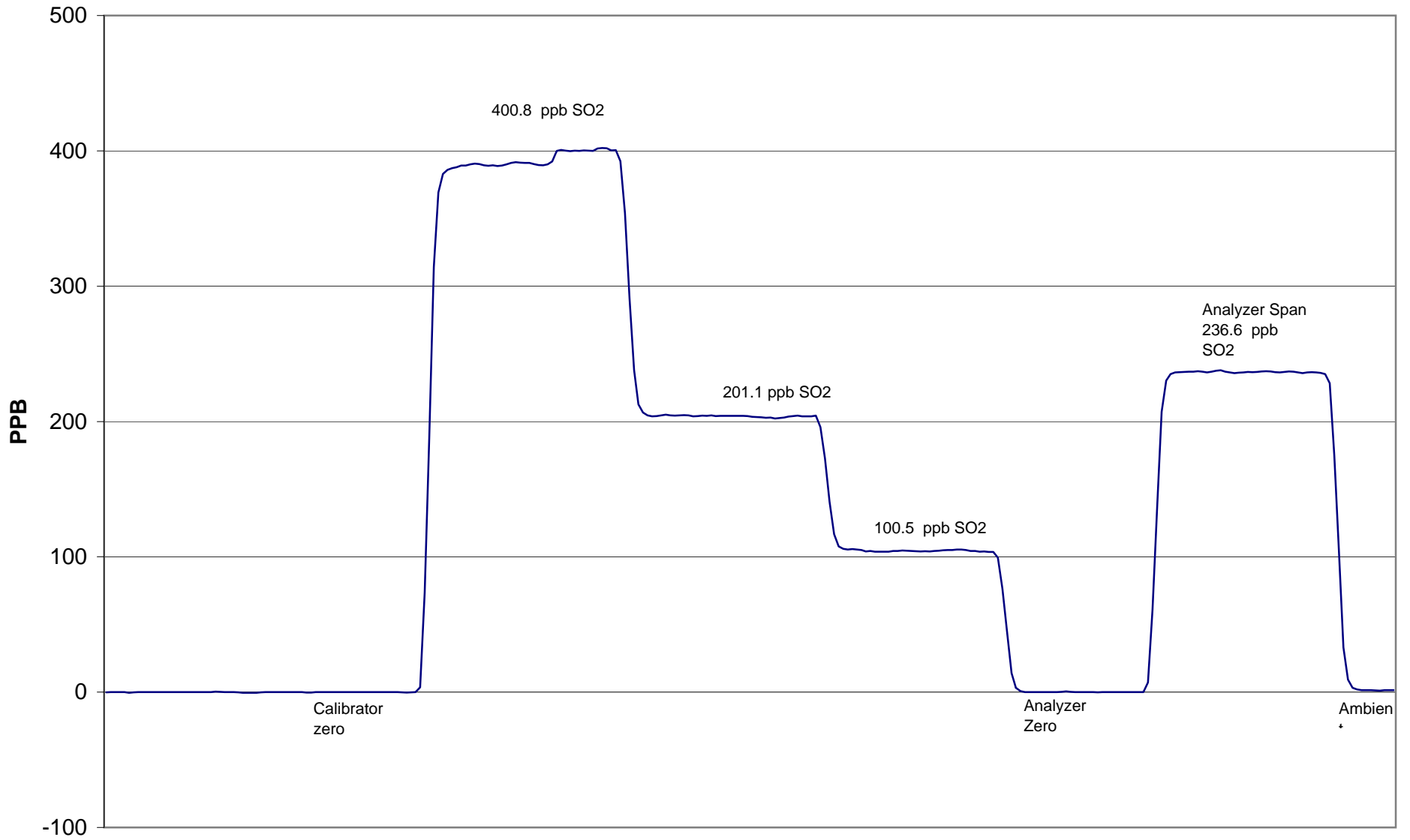
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	N/A		
400.8	400.6	1.0005	Correlation Coefficient	0.999884
201.1	203.8	0.9868		
100.5	104.4	0.9632	Slope	1.003486
			Intercept	-2.272684

SO₂ Calibration Curve



Henry Pirker SO₂ Calibration



May 17, 2010

Calibration Report



Parameter
 Air Monitoring Network

Station Information

Calibration Date	<u> </u> May 18, 2010 <u> </u>	Previous Calibration	<u> </u> April 29, 2010 <u> </u>
Station Number	<u> </u> 1 <u> </u>	Station Location	<u> </u> Henry Pirker <u> </u>
Reason:	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Install <input type="checkbox"/> Removal	Other:	<u> </u>
Start Time (MST)	<u> </u> 13:00:00 PM <u> </u>	End Time (MST)	<u> </u> 15:56:00 PM <u> </u>
Barometric Pressure	<u> </u> 0.915 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 ppb <u> </u>	Cal Gas Expiry Date	<u> </u> 7/31/2008 <u> </u>
		Cal Gas Cylinder #	<u> </u> ALM013295 <u> </u>
DACS make	<u> </u> Focus AP1000 <u> </u>	DACS serial No.	<u> </u> 1 <u> </u>
DACS voltage range	<u> </u> 0 - 1 volt <u> </u>	DACS channel #	<u> </u> 9 <u> </u>
	<u> </u> Before <u> </u>		<u> </u> After <u> </u>
Calculated slope	<u> </u> 1.013971 <u> </u>	Calculated slope	<u> </u> 0.981843 <u> </u>
Calculated intercept	<u> </u> -0.149264 <u> </u>	Calculated intercept	<u> </u> -0.152978 <u> </u>
Analyzer make	<u> </u> TEI 45C <u> </u>	Analyzer serial #	<u> </u> 630718528 <u> </u>

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.812		.812	
Background	17.5		17.5	
Pressure	650.4	mm Hg	653.2	mm Hg
Flow	0.467	ccm	0.467	ccm
Lamp Voltage	847	V	848	V

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)
4988	0.00	0.00	-0.03	N/A
4989	79.83	81.11	82.72	0.9805
4989	39.81	40.77	41.72	0.9773
4989	9.93	10.23	10.76	0.9504
4989	0.00	0.00	-0.02	As Found Zero
4989	79.83	81.11	82.72	As Found Span
Average Correction Factor				0.9694

Calculated value of As Found Response: 83.7 ppb Percent Change of As Found: -3.3%

	before calibration		after calibration	
Auto zero	<u> </u> -0.29 <u> </u>	ppb	<u> </u> -0.11 <u> </u>	ppb
Auto span	<u> </u> 22.60 <u> </u>	ppb	<u> </u> 21.66 <u> </u>	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter **TRS**

Air Monitoring Network **PASZA**

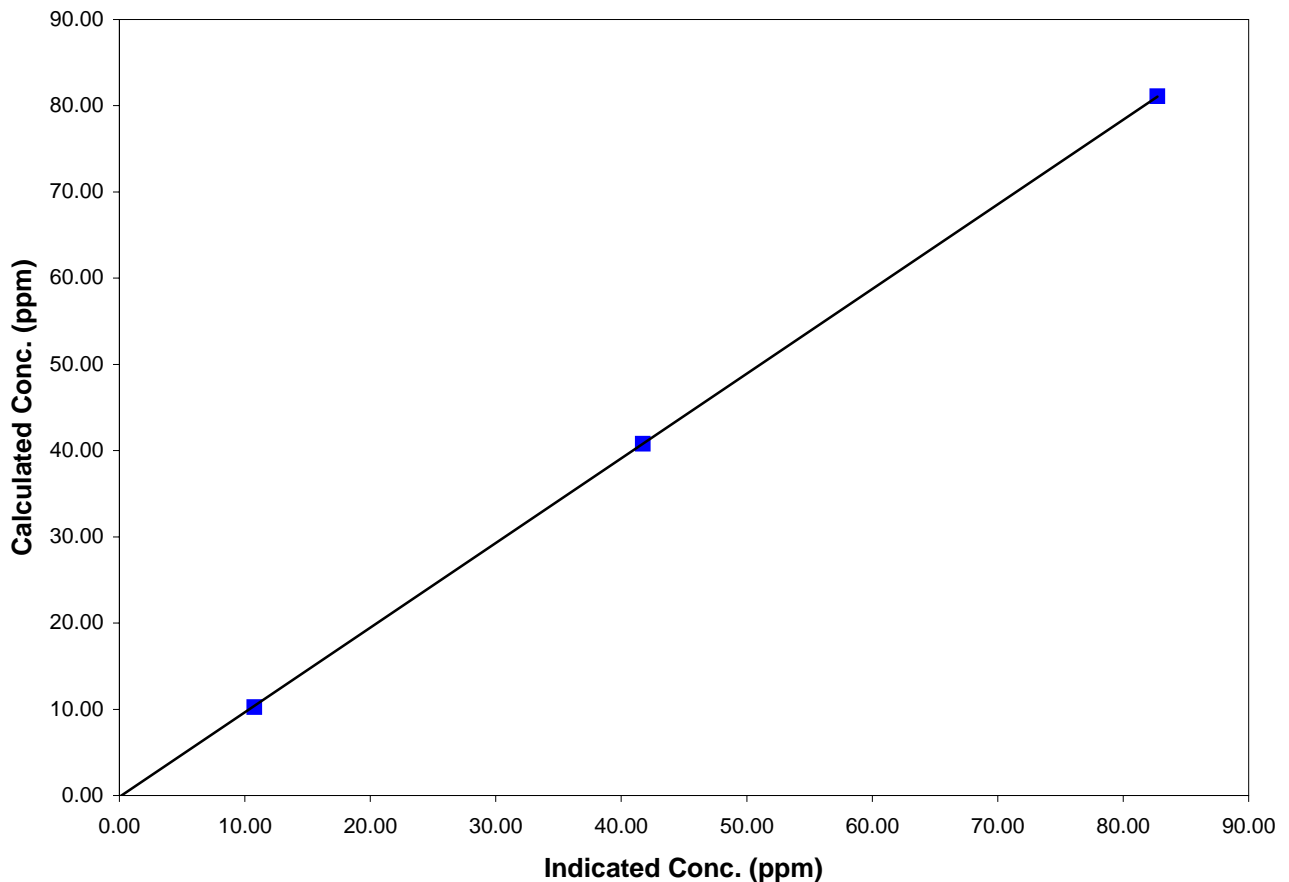
Station Information

Calibration Date	May 18, 2010	Previous Calibration	April 29, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	13:00:00 PM	End Time (MST)	15:56:00 PM
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

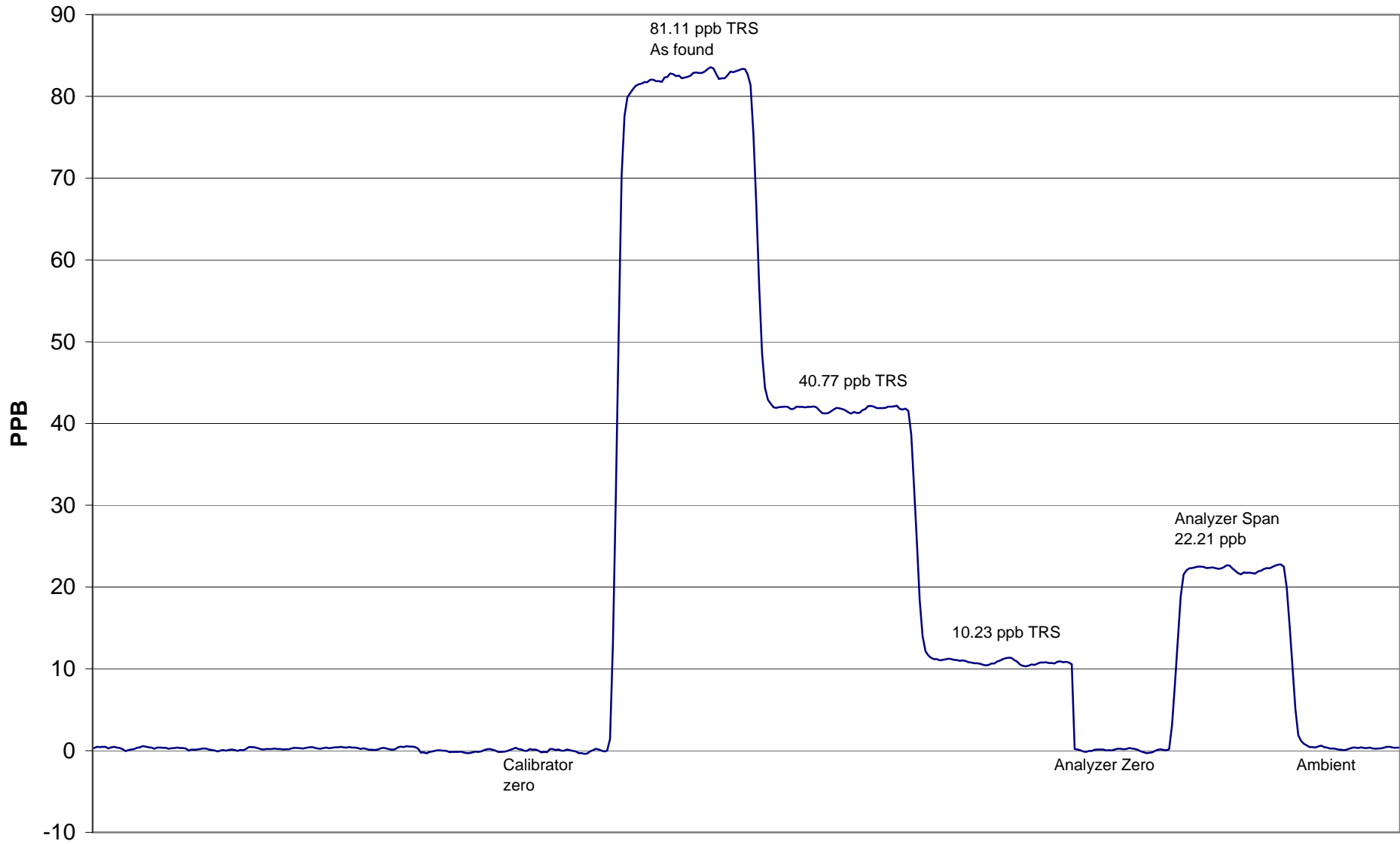
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.027	N/A	Correlation Coefficient	0.999982
81.108	82.720	0.9805		
40.769	41.718	0.9773	Slope	0.981843
10.230	10.764	0.9504		
			Intercept	-0.152978

TRS Calibration Curve



Henry Pirker TRS Calibration



May 18, 2010

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date May 17, 2010 Previous Calibration April 22, 2010
 Station Number 1 Station Location Henry Pirker

Reason: Routine Installation Removal Other: _____

Start Time (MST) 7:15 End Time (MST) 14:00
 Barometric Pressure 0.925 Atm Station Temperature 25.0 Deg C
 Calibrator EnviroNics Serial Number 3474
 NO Cal Gas Conc 49.6 ppm Cal Gas Expiry Date June 8, 2008
 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	1.000758	1.004382	1.003461
	Data Offset	0.017075	-1.422679	-1.168688
After	Data Slope	1.000050	1.006028	1.004617
	Data Offset	-0.279852	-2.733204	-2.481294
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	10.4	mV	10.4	mV
NOx bkgnd	10.8	mV	10.6	mV
NO coefficient	0.772		0.772	
NOx coefficient	1.001		1.001	
NO2 conv temp	318.0	Deg C	318.0	Deg C
PMT Temp	-2.4	Deg C	-2.5	Deg C
PMT Volt	-786.0	mV	-787.0	mV
R Cell Press	175.4	in Hg	172.5	in Hg
Sample Flow	0.747	ccm	0.754	ccm

Notes:

Calibration Report

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



Station Information

Calibration Date: **May 17, 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	0.1	0.0	0.1	N/A	N/A
1	4989	39.85	393.0	393.0	0.0	391.9	392.4	-0.5	1.0029	1.0017
2	4989	19.91	197.2	197.2	0.0	200.3	200.1	0.2	0.9843	0.9855
3	4989	9.93	98.5	98.5	0.0	103.2	103.0	0.1	0.9549	0.9563
AFZ	4989	0.00	0.0	0.0	0.0	0.1	0.0	0.1	0.0000	0.0000
AFS	4989	39.83	392.8	392.8	0.0	386.6	385.8	0.8	1.0163	1.0183
Average Correction Factor									0.9807	0.9812

As Found Concentrations: **NO_x= 385.1** **NO= 384.6** As Found Percent Change **NO_x= -2.0%** **NO= -2.1%**

GPT Calibration Data

Dilution Flow 4989 ccm Source Gas Flow 39.85 ccm

O3 Setpoint (ppb)	Indicated NO high point (ppb)	Indicated NO drop conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.1	0.0	0.1	N/A	N/A	N/A	N/A
NO point	394.0	394.0	0.0	393.9	394.0	-0.1	1.0002	1.0000	N/A	N/A
300	394.0	98.9	295.1	394.3	98.9	295.2	0.9991	1.0000	0.9996	100.0%
200	394.0	191.1	202.9	394.3	191.1	203.3	0.9993	1.0000	0.9981	100.2%
100	394.0	281.7	112.3	394.2	281.7	112.7	0.9994	1.0000	0.9962	100.4%
Average Correction Factor							0.9993	1.0000	0.9980	100.2%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	-0.1	0.0	0.0	ppb	-0.3	-0.1	0.0	ppb
Auto span	168.4	169.5	1.2	ppb	173.1	172.3	0.8	ppb

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter NO₂

Air Monitoring Network PASZA

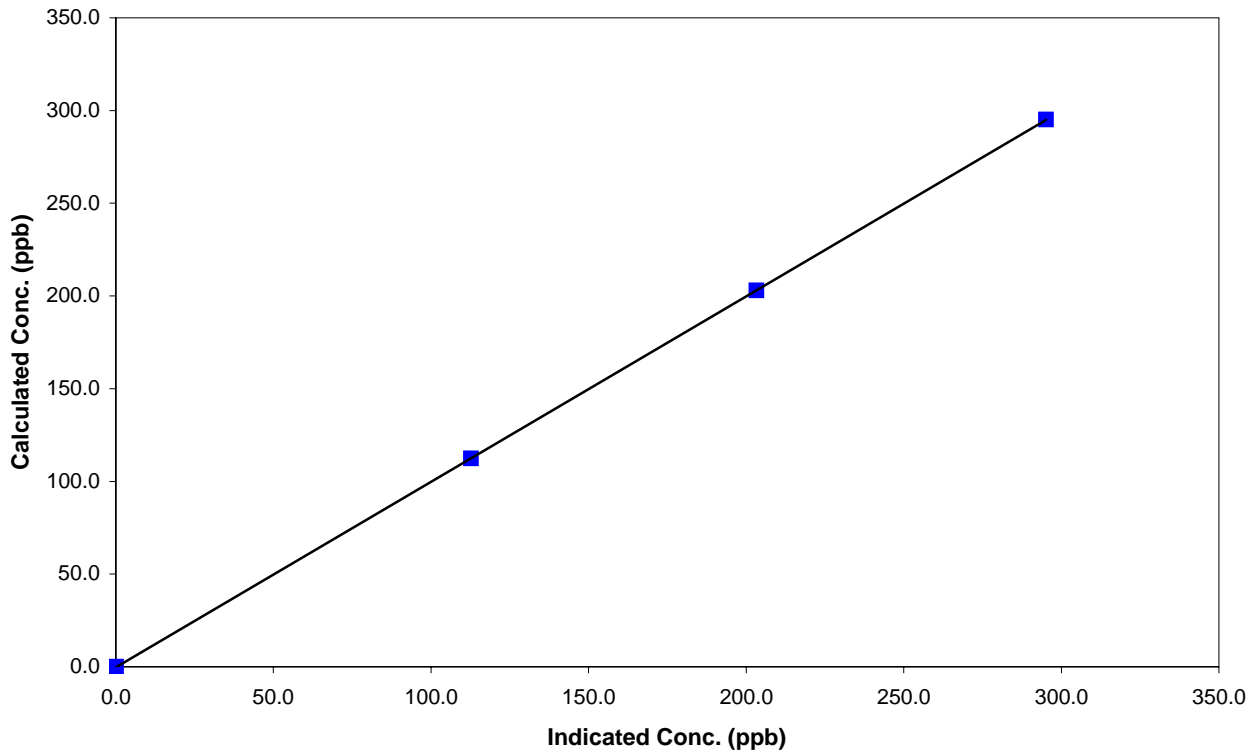
Station Information

Calibration Date	May 17, 2010	Previous Calibration	April 22, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	14:00
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
295.1	295.2	0.9996		
202.9	203.3	0.9981	Slope	1.000050
112.3	112.7	0.9962		
			Intercept	-0.279852

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



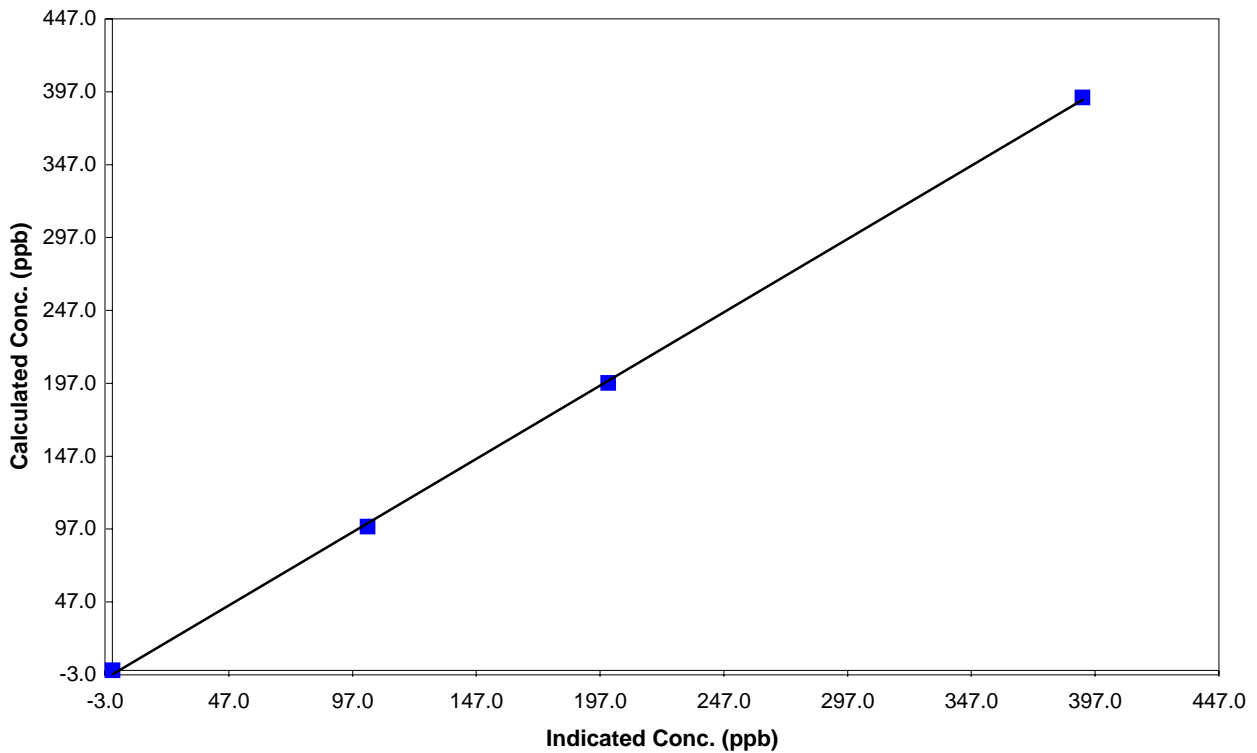
Station Information

Calibration Date	May 17, 2010	Previous Calibration	April 22, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	14:00
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	0.999781
393.0	391.9	1.0029		
197.2	200.3	0.9843	Slope	1.006028
98.5	103.2	0.9549		
			Intercept	-2.733204

NO_x Calibration Curve



Calibration Summary



Parameter NO

Air Monitoring Network PASZA

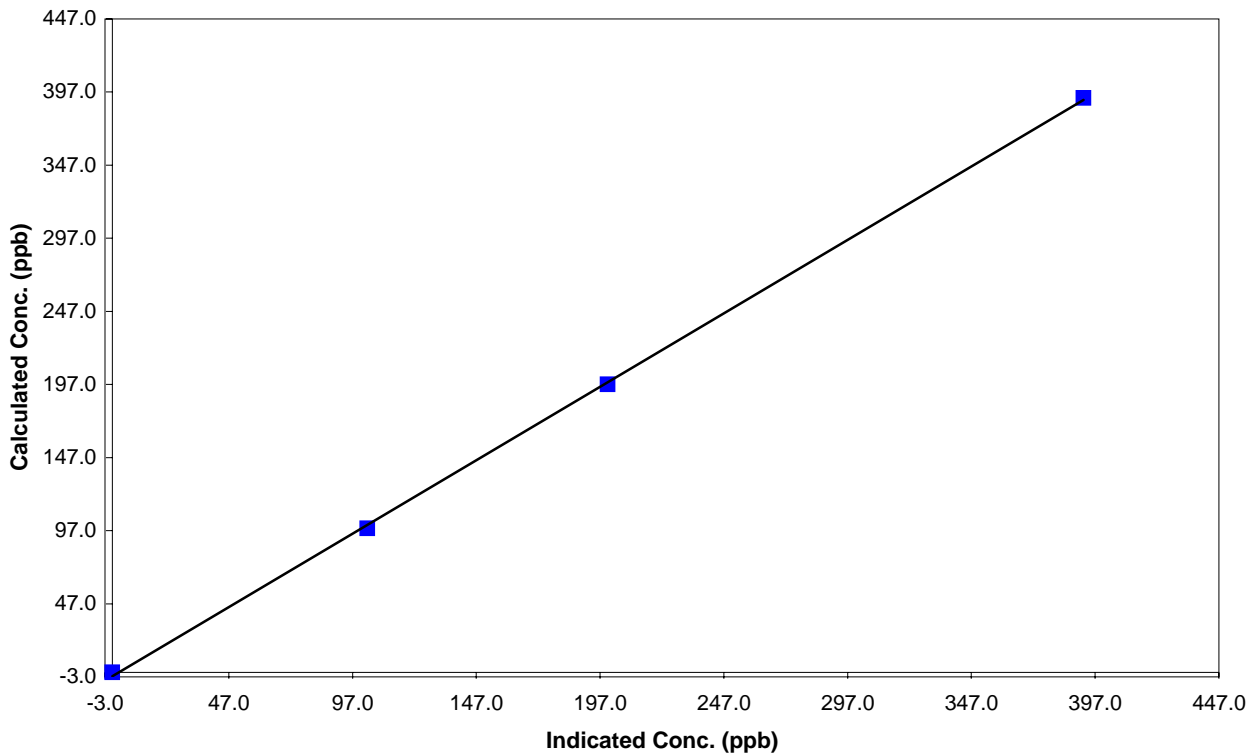
Station Information

Calibration Date	May 17, 2010	Previous Calibration	April 22, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	7:15	End Time (MST)	14:00
Analyzer make	TEI 42C	Analyzer serial #	508011073

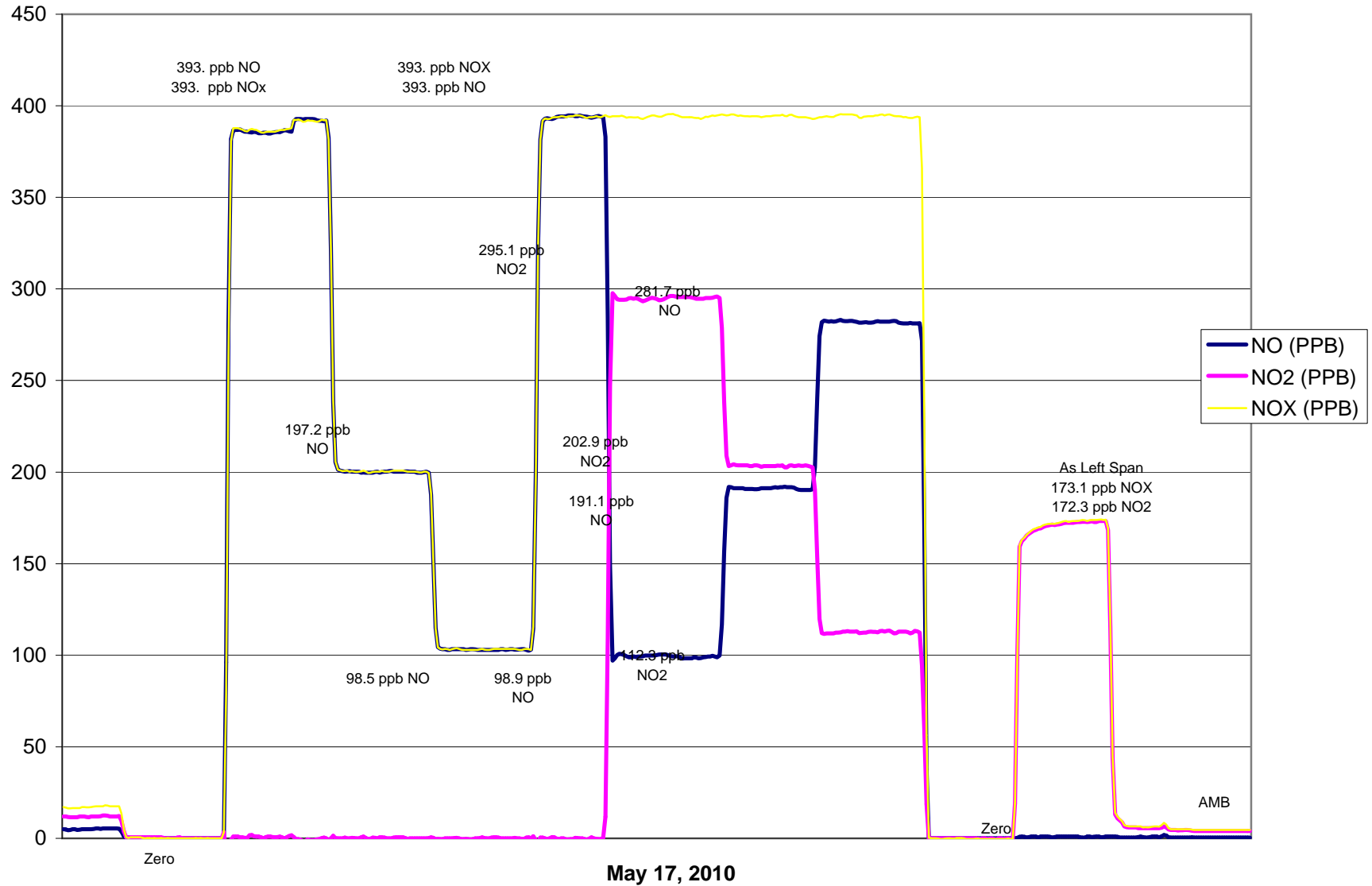
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999809
393.0	392.4	1.0017		
197.2	200.1	0.9855	Slope	1.004617
98.5	103.0	0.9563		
			Intercept	-2.481294

NO Calibration Curve



Henry Pirker NO_x Calibration



Calibration Report



Parameter 03
Air Monitoring Network _____

PASZA

Station Information

Calibration Date	<u>May 17, 2010</u>	Previous Calibration	<u>April 22, 2010</u>
Station Number	<u>1</u>	Station Location	<u>Henry Pirker</u>
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
		<input type="checkbox"/> Other:	
Start Time (MST)	<u>10:15</u>	End Time (MST)	<u>12:33</u>
Barometric Pressure	<u>0.925</u> atm	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>Enviroics 6100</u>	Serial Number	<u>3474</u>
Cal Gas Concentration	<u>NA</u>	Cal Gas Expiry Date	<u>NA</u>
DACS make	<u>Focus AP1000</u>	DACS serial No.	<u>45269</u>
DACS voltage range	<u>0 - 1 volt</u>	DACS channel #	<u>5</u>
	<u>Before</u>		<u>After</u>
Calculated slope	<u>1.002628</u>	Calculated slope	<u>0.995931</u>
Calculated intercept	<u>-0.903550</u>	Calculated intercept	<u>-0.573223</u>
Analyzer make	<u>TECO 49C</u>	Analyzer serial #	<u>607415761</u>

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.7	ppb	-0.4	ppb
slope	0.922		1.028	
O3 Lamp temp	71	Deg C	71	Deg C
Intensities	85598/73938	mV	85832/74027	mV
Pressure	685.6	inches Hg	685.1	inches Hg
Flow A	0.720	ccm	0.719	ccm
Flow B	0.735	ccm	0.735	ccm

Calibration Data

Referenced concentration (ppb)	Dilution air flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0	4991	0.0	0.1	N/A
300	4989	295.1	296.4	0.9955
200	4989	202.9	204.6	0.9917
100	4989	112.3	114.0	0.9854
0	4989	0.0	0.5	As found zero
300	4989	295.1	265.7	As found span
Average Correction Factor				0.9909

Calculated value of As Found Response: 264.9 ppm Percent Change of As Found: -10.2%

	before calibration		after calibration	
Auto zero	0.3	ppb	0.3	ppb
Auto span	153.0	ppb	153.2	ppb

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter O3
Air Monitoring Network PASZA

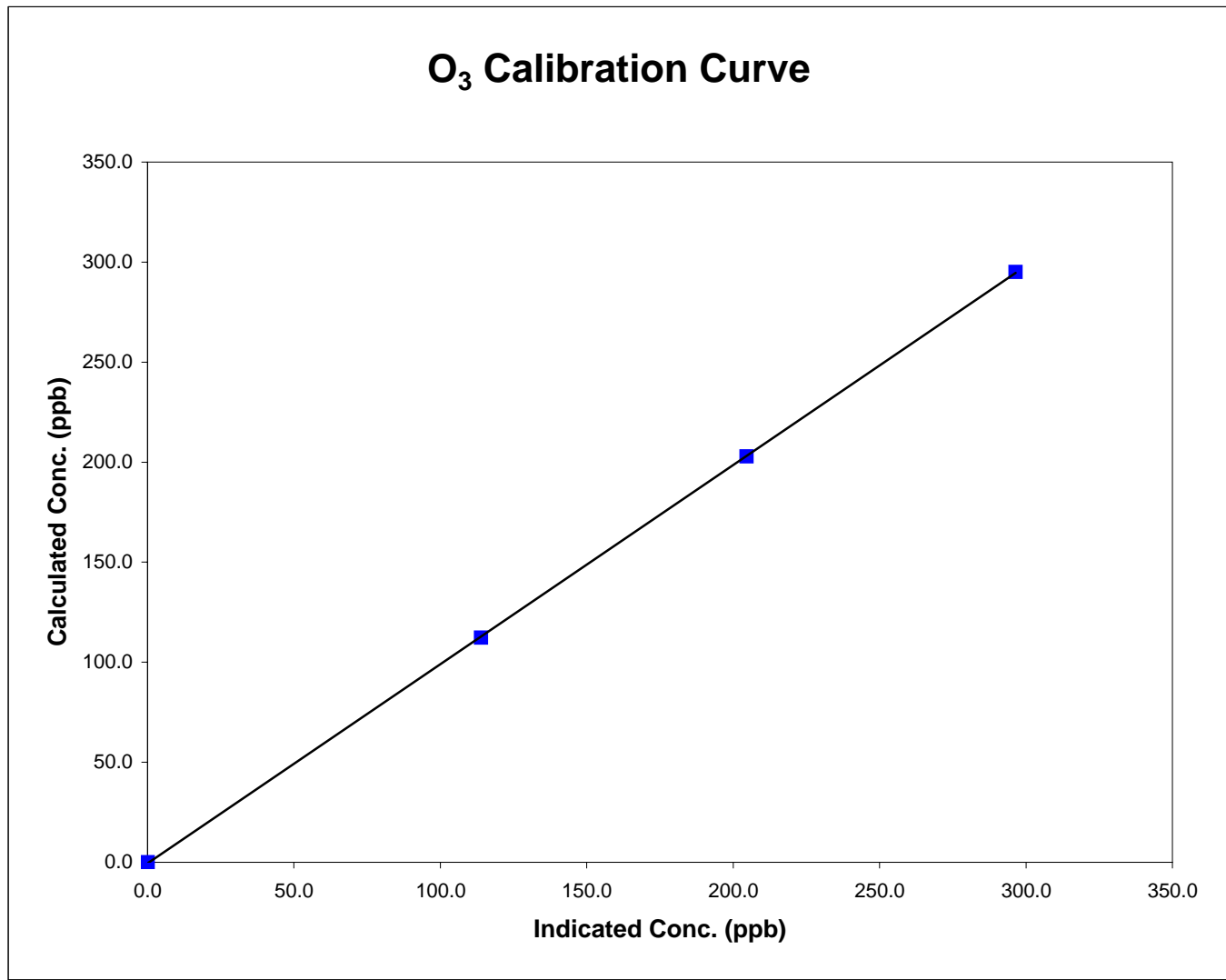


Station Information

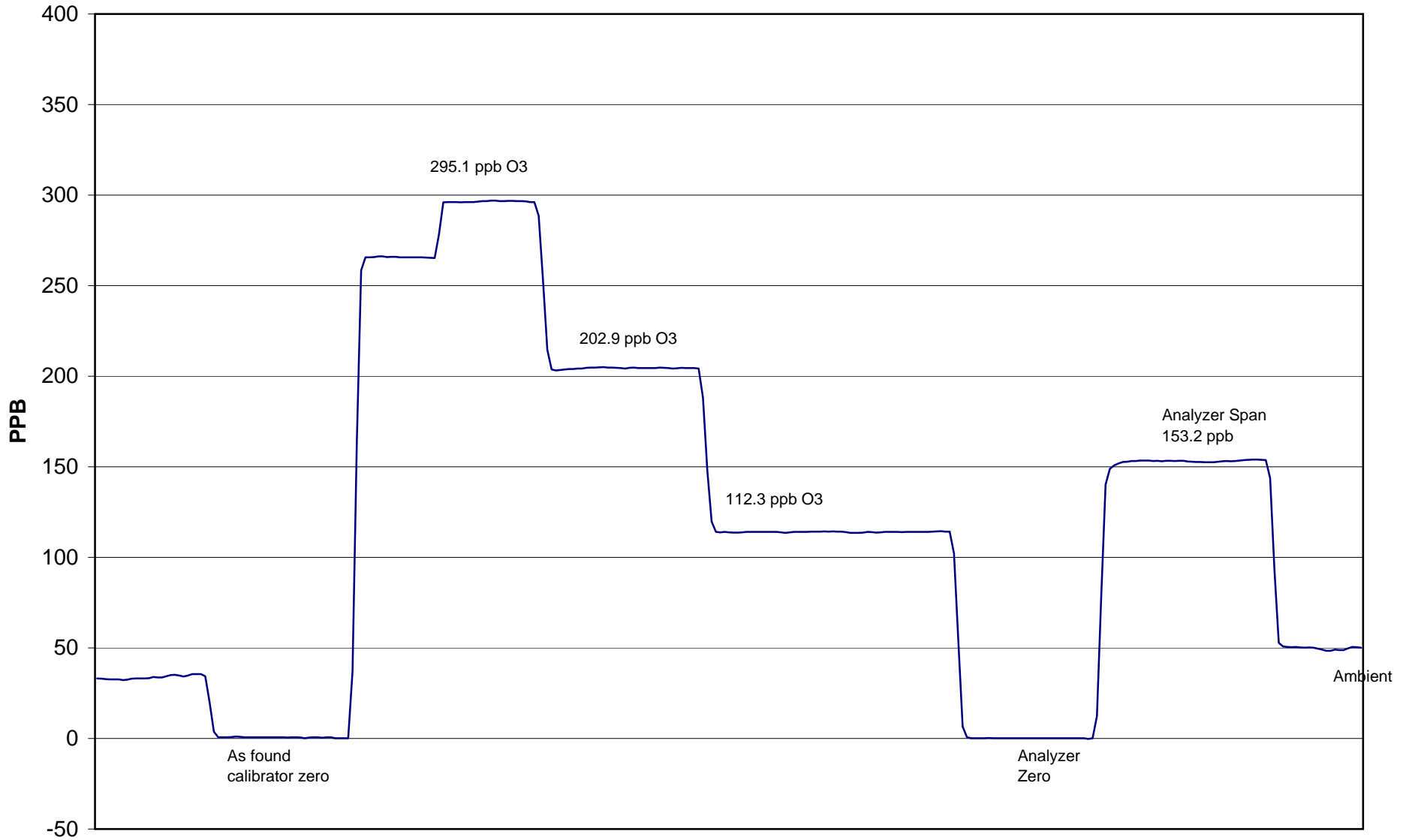
Calibration Date	<u> May 17, 2010 </u>	Previous Calibration	<u> April 22, 2010 </u>
Station Number	<u> 1 </u>	Station Location	<u> Henry Pirker </u>
Start Time (MST)	<u> 10:15 </u>	End Time (MST)	<u> 12:33 </u>
Analyzer make/model	<u> TECO 49C </u>	Analyzer serial #	<u> 607415761 </u>

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA	Correlation Coefficient	0.999981
295.1	296.4	0.9955		
202.9	204.6	0.9917		
112.3	114.0	0.9854	Slope	0.995931
			Intercept	-0.573223



Henry Pirker O₃ Calibration



May 17, 2010

Calibration Report



Parameter CO
 Air Monitoring Network PASZA

Station Information

Calibration Date	May 19, 2010	Previous Calibration	April 29, 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)	10:40	End Time (MST)	12:49
Barometric Pressure	0.919 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	1.027080	Calculated slope	1.005928
Calculated intercept	-0.408177	Calculated intercept	-0.208527
Analyzer make	TEI Model 48C	Analyzer serial #	508011062

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.062		1.062	
CO zero setting	9.574		9.690	
Sample pressure	684.7	mm Hg	672.3	mm Hg
Sample Flow	1.135	LPM	1.122	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	0.14	N/A
4989	39.84	23.77	23.80	0.9986
4989	19.90	11.92	12.09	0.9858
4989	9.95	5.97	6.21	0.9616
4990	0.00	0.00	0.14	As Found Zero
4989	39.84	23.77	23.80	As Found Span
Average Correction Factor				0.9820

Calculated value of As Found Response: 23.891 ppm Percent Change of As Found: -0.5%

	before calibration		after calibration	
Auto zero	0.03	ppm	0.03	ppm
Auto span	19.80	ppm	19.44	ppm

Notes: _____

Calibration Performed By: Courtney Thompson

Calibration Summary



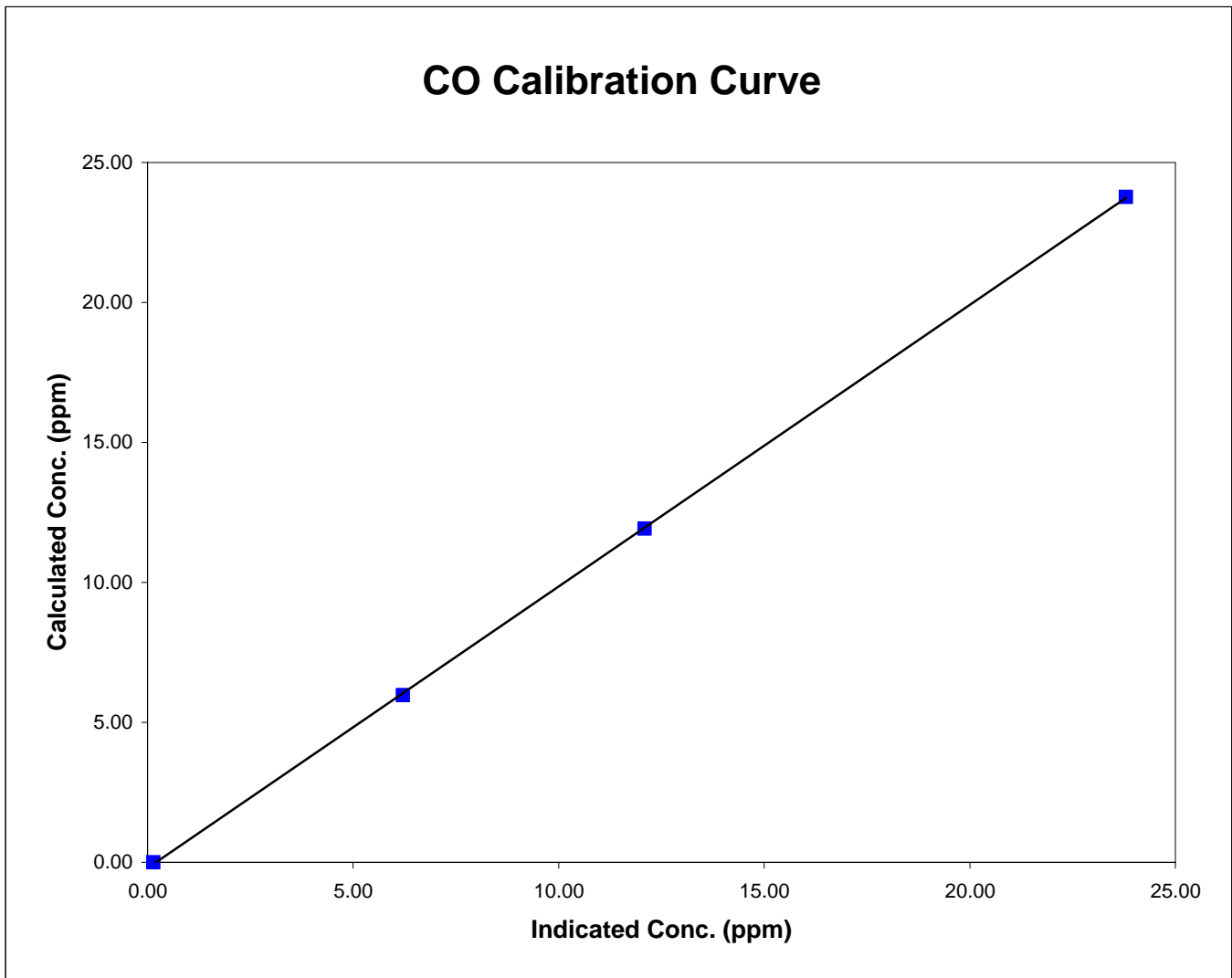
Parameter CO
 Air Monitoring Network PASZA

Station Information

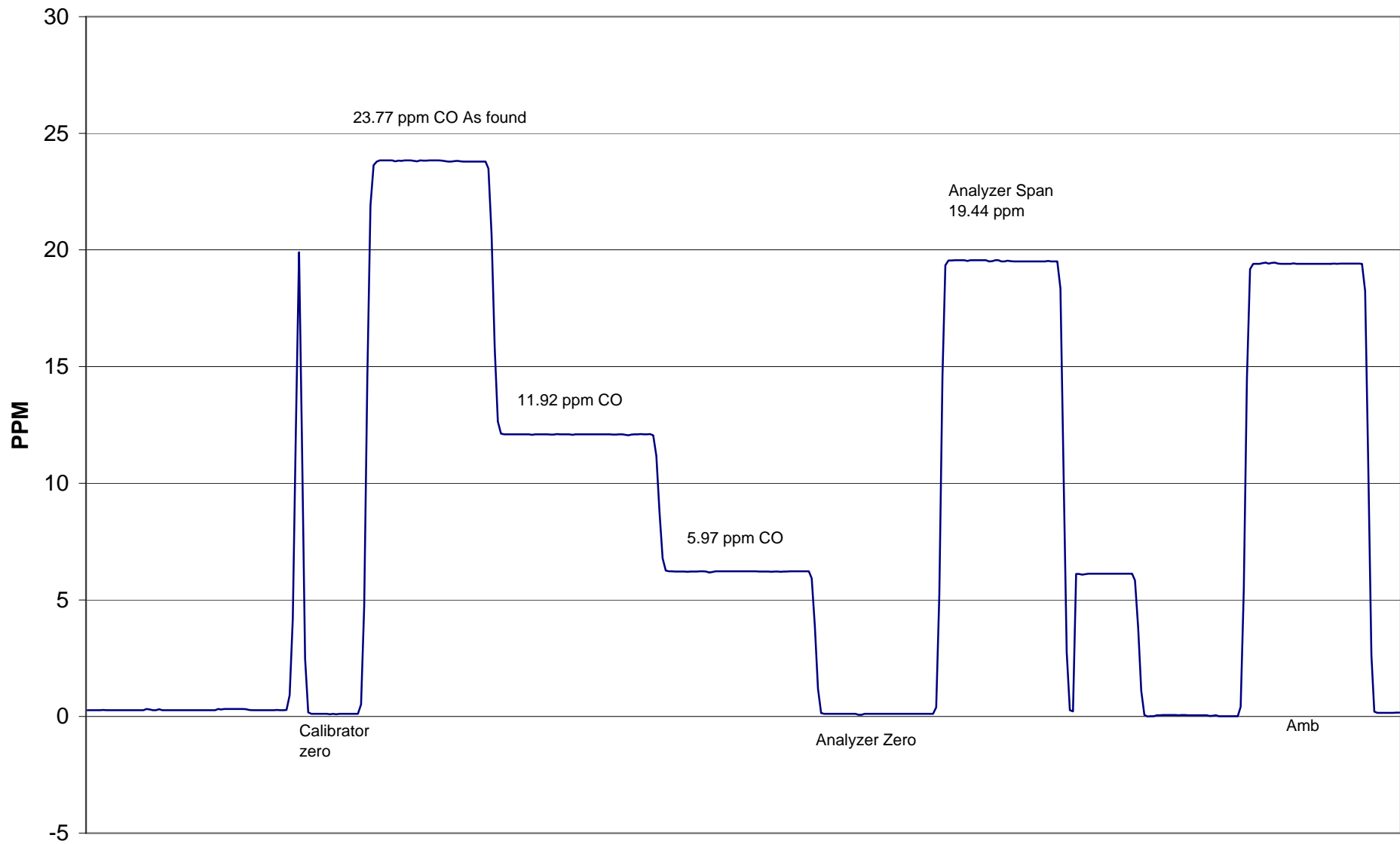
Calibration Date	May 19, 2010	Previous Calibration	April 29, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	10:40	End Time (MST)	12:49
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.141	N/A	Correlation Coefficient	0.999963
23.767	23.800	0.9986		
11.919	12.091	0.9858	Slope	1.005928
5.971	6.210	0.9616		
			Intercept	-0.208527



Henry Pirker CO Calibration



May 19, 2010

Calibration Report



Parameter THC
 Air Monitoring Network PASZA

Station Information

Calibration Date	<u>May 8, 2010</u>	Previous Calibration	<u>April 29, 2010</u>
Station Number	<u>1</u>	Station Location	<u>Henry Pirker</u>
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	<u>16:30</u>	End Time (MST)	<u>19:00</u>
Barometric Pressure	<u>0.919</u> ATM	Station Temperature	<u>20.0</u> Deg C
Calibrator	<u>EnviroNics 6100</u>	Serial Number	<u>3474</u>
Cal Gas Concentration	<u>701 ppm CH4/ 299 ppm C3H8</u>	Cal Gas Expiry Date	<u>2/4/2010</u>
Cal Gas CH4 equiv	<u>1523.25</u> ppm	Cal Gas Cylinder #	<u>ALM 004476</u>
DACS make	<u>Focus AP1000</u>	DACS serial No.	<u>1</u>
DACS voltage range	<u>0 - 1 volt</u>	DACS channel #	<u>9</u>
	<u>Before</u>		<u>After</u>
Calculated slope	<u>1.023615</u>	Calculated slope	<u>1.003975</u>
Calculated intercept	<u>-0.043188</u>	Calculated intercept	<u>-0.035023</u>
Analyzer make	<u>TEI Model 51C-LT</u>	Analyzer serial #	<u>51CLT-79009-390</u>

	before		after	
Concentration range	<u>0 - 25</u>	<u>ppm</u>	<u>0 - 25</u>	<u>ppm</u>
THC sample pressure	<u>6.50</u>	<u>psi</u>	<u>6.50</u>	<u>psi</u>
THC span counts	<u>9615</u>	<u>capture</u>	<u>9610</u>	<u>capture</u>
THC zero counts	<u>431</u>	<u>capture</u>	<u>450</u>	<u>capture</u>

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	0.03	N/A
4989	69.77	21.01	20.98	1.0013
4989	29.94	9.09	9.02	1.0076
4989	9.92	3.02	3.10	0.9750
4988	0.00	0.00	2.35	As Found Zero
4989	69.50	20.93	22.85	As Found Span
Average Correction Factor				0.9946

Calculated value of As Found Response: 20.946 ppm Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	<u>0.10</u>	<u>ppm</u>	<u>-0.02</u>	<u>ppm</u>
Auto span	<u>21.34</u>	<u>ppm</u>	<u>25.06</u>	<u>ppm</u>

Notes: _____

Calibration Performed By: Grover Christiansen

Calibration Summary



Parameter THC
 Air Monitoring Network PASZA

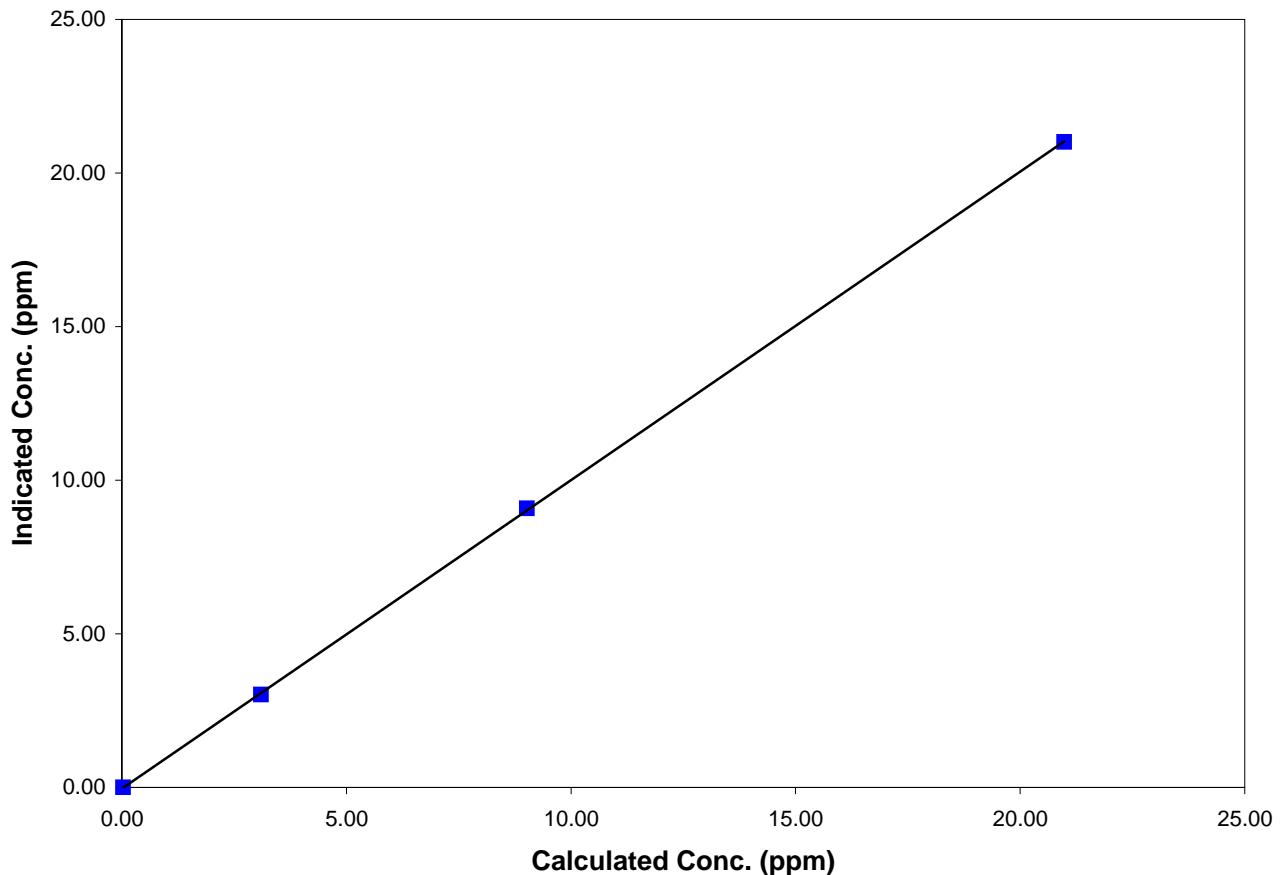
Station Information

Calibration Date	May 8, 2010	Previous Calibration	April 29, 2010
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	16:30	End Time (MST)	19:00
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

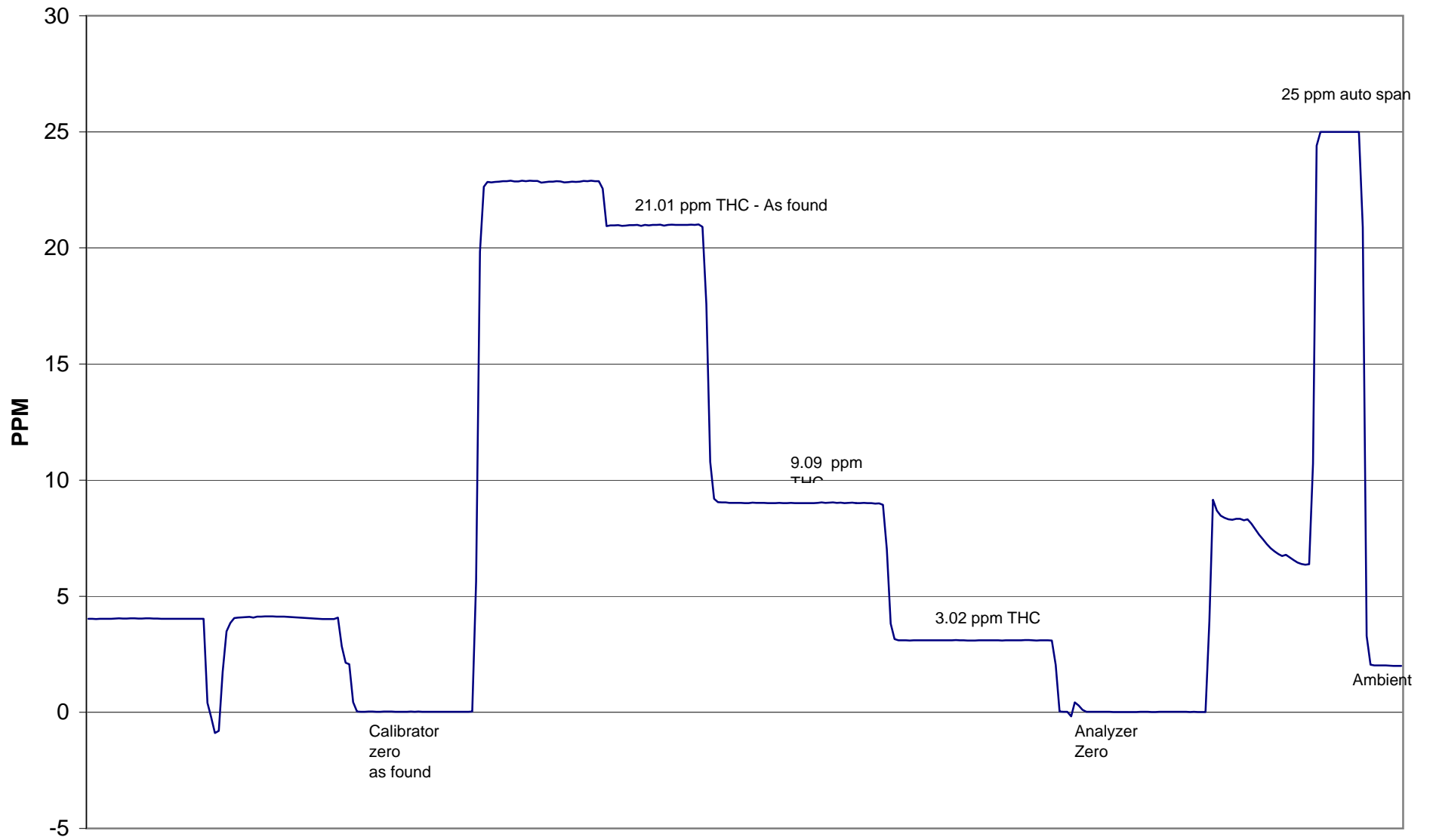
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.027	N/A	Correlation Coefficient	0.999969
21.008	20.981	1.0013		
9.087	9.018	1.0076	Slope	1.003975
3.023	3.100	0.9750		
			Intercept	-0.035023

THC Calibration Curve



Henry Pirker THC Calibration



May 8, 2010

FDMS AB TEOM PM2.5 AUDIT



STATION: Henry Pirker
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 5/18/2010

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	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	29-Apr-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	0.000	0.000
PUMP OFF	0.030	-0.080
NET	-0.030	0.080
LIMITS	<0.15	<0.60

	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)	21.5	0.915	XXXXXXXXXX	13.65	3.000
<i>As Found Data</i> MEASURED (AF)	21.5	0.915	XXXXXXXXXX	13.68	3.001
<i>Adjusted Data</i> MEASURED (M)	21.5	0.915	12919	13.68	3.001
DIFFERENCE (M-I)	0.0	0.000	-0.8%	0.07	0.03
LIMITS	± 2⁰ 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

Sample Head Inspection Or Cleaning:

PM10: Cleaned
 PM2.5: Cleaned

TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACEMENT:

TEOM IN LINE: FDMS Water knck out:Goor
 Main: Good
 AUX: Replace next cal. FDMS 47 mm Filter Cassette: Replaced

Calibration Report



Parameter SO₂

Air Monitoring Network PASZA

Station Information

Calibration Date	May 23, 2010	Previous Calibration	April 20, 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)	8:46	End Time (MST)	11:12
Barometric Pressure	0.920 ATM	Station Temperature	5.2 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.032937	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	1.007590	Calculated slope	1.001218
Calculated intercept	-1.995693	Calculated intercept	-2.004445
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	10.9		11	
coefficient	1.041		1.051	
Lamp Voltage	833	volts	831	volts
Chamber Temp	45	Deg C	45.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	665	mm Hg	662.2	mm Hg
Sample Flow	448	ccm	446	ccm
Lamp Intensity	90	%	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	0.4	N/A
4989	39.85	400.97	401.6	0.9986
4989	19.91	201.13	204.0	0.9859
4989	9.96	100.82	104.1	0.9683
	0.0			
4989	0.0	0.00	0.4	As Found Zero
4989	39.85	400.97	397.8	As Found Span
Average Correction Factor				0.9843

Calculated value of As Found Response: 398.428 ppm Percent Change of As Found: 0.6%

	before calibration		after calibration	
Auto zero	0.7	ppm	0.5	ppm
Auto span	286.9	ppm	293.5	ppm

Notes:

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary



Parameter SO2
 Air Monitoring Network PASZA

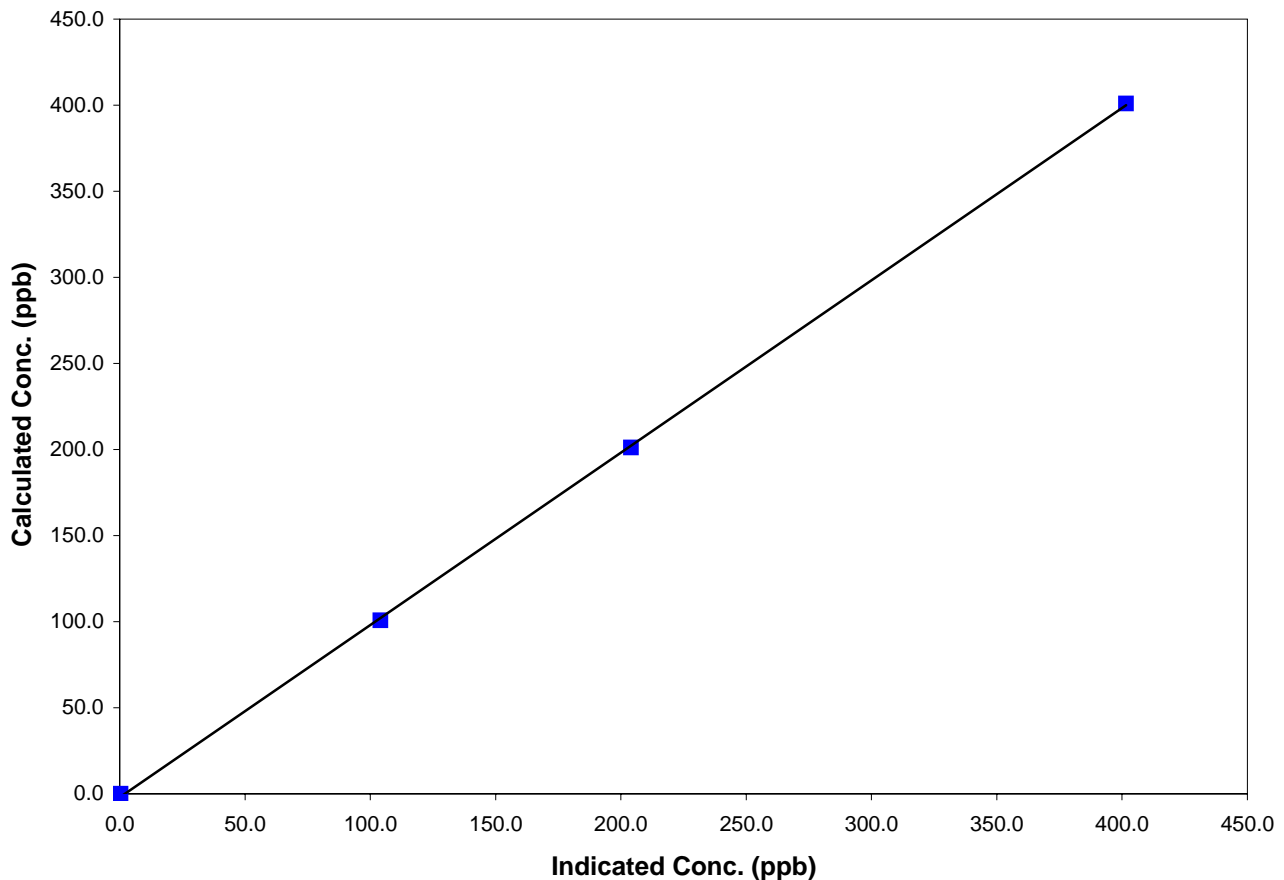
Station Information

Calibration Date	May 23, 2010	Previous Calibration	April 20, 2010
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	8:46	End Time (MST)	11:12
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

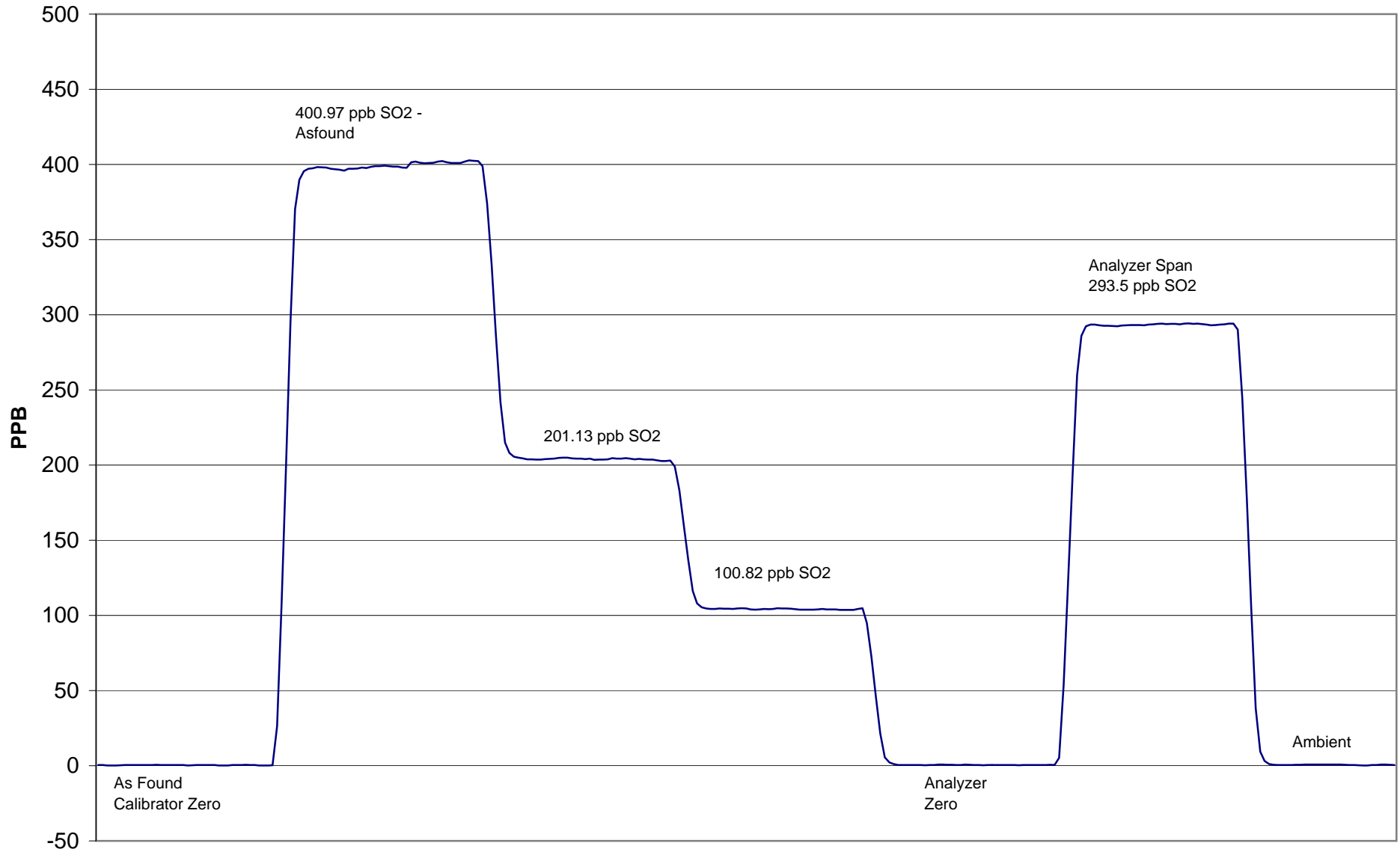
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.4	N/A	Correlation Coefficient	0.999924
401.0	401.6	0.9986		
201.1	204.0	0.9859	Slope	1.001218
100.8	104.1	0.9683		
			Intercept	-2.004445

SO2 Calibration Curve



Evergreen Park SO₂ Calibration



May 23, 2010

Calibration Report



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

Station Information

Calibration Date	<u> </u> May 23, 2010	Previous Calibration	<u> </u> March 15, 2010
Station Number	<u> </u> 2	Station Location	<u> </u> Evergreen Park
Reason:	Routine <input type="checkbox"/> Install <input type="checkbox"/> Removal <input type="checkbox"/> Other: <input type="checkbox"/>		
Start Time (MST)	<u> </u> 10:00	End Time (MST)	<u> </u> 12:05
Barometric Pressure	<u> </u> 0.920 ATM	Station Temperature	<u> </u> 5.9 Deg C
Calibrator	<u> </u> Environics 6100	Serial Number	<u> </u> 3474
Cal Gas Conc	<u> </u> 5.15 ppm	Cal Gas Expiry Date	<u> </u> 4/2/2009
Correction factor	<u> </u> 0.032854	Cal Gas Cylinder #	<u> </u> ALM 013295
DACS make	<u> </u> Focus AP1000	DACS serial No.	<u> </u> 52620
DACS voltage range	<u> </u> 0 - 10 volt	DACS channel #	<u> </u> 5
	<u> </u> Before		<u> </u> After
Calculated slope	<u> </u> 0.998584	Calculated slope	<u> </u> 1.008746
Calculated intercept	<u> </u> -0.294885	Calculated intercept	<u> </u> -0.322021
Analyzer make	<u> </u> TEI Model 43C	Analyzer serial #	<u> </u> 436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.5	ppb	15.5	ppb
coefficient	0.859		0.859	
Lamp Voltage	815	volts	812	volts
Chamber Temp	44.1	Deg C	44.1	Deg C
Perm Gas Temp	45.01	Deg C	45.06	Deg C
Pressure	638.9	mm Hg	639.6	mm Hg
Sample Flow	0.478	ccm	0.478	ccm
Lamp Intensity	45,525	mv	45,372	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	0.00	0.00	0.2	N/A
4991	79.79	81.04	80.5	1.0065
4991	39.87	40.81	41.0	0.9946
4990	9.95	10.25	10.5	0.9736
4990	0.00	0.00	0.2	As Found Zero
4990	79.79	81.05	80.5	As Found Span
Average Correction Factor				0.9916

Calculated value of As Found Response: 79.90 ppm Percent Change of As Found: 1.4%

	before calibration		after calibration	
Auto zero	-0.5	ppm	0.0	ppm
Auto span	62.0	ppm	58.1	ppm

Notes: _____

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary

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

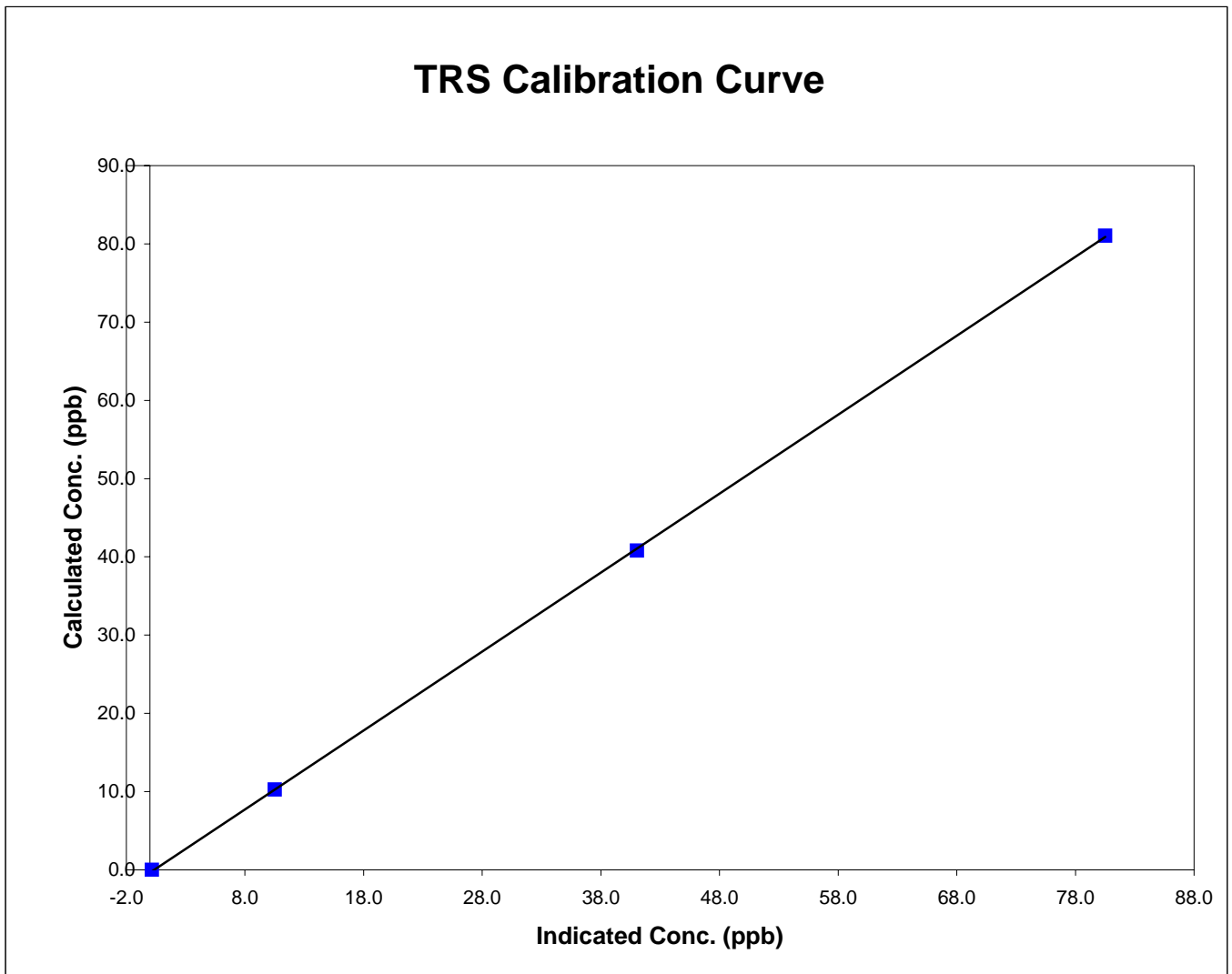


Station Information

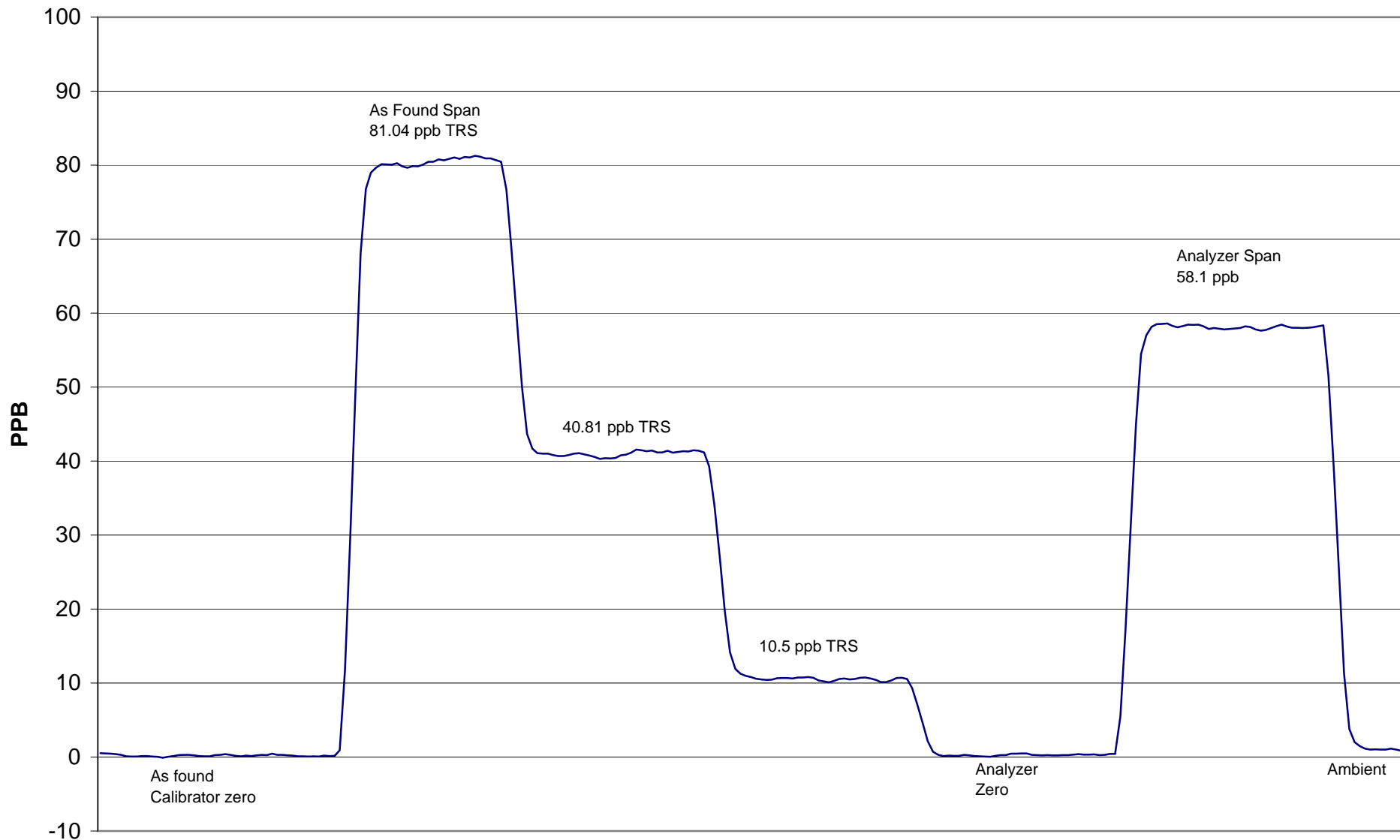
Calibration Date	<u> </u> May 23, 2010	Previous Calibration	<u> </u> March 15, 2010
Station Number	<u> </u> 2	Station Location	<u> </u> Evergreen Park
Start Time (MST)	<u> </u> 10:00	End Time (MST)	<u> </u> 12:05
Analyzer make/model	<u> </u> TEI Model 43C	Analyzer serial #	<u> </u> 436610005

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999970
81.0	80.5	1.0065		
40.8	41.0	0.9946		
10.2	10.5	0.9736	Slope	1.008746
			Intercept	-0.322021



Evergreen Park TRS Calibration



May 23, 2010

AB TEOM PM2.5 Calibration



STATION: Evergreen Park
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 23-May-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	0.985
FAdj. Aux. Setting	0.975
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	20-Apr-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	0.010	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)	6.4	0.919	10124	13.67	3.000
<i>As Found Data</i> MEASURED (AF)	5.6	0.918	10118	13.71	3.002
<i>Adjusted Data</i> MEASURED (M)	5.6	0.918	10118	13.71	3.002
DIFFERENCE (M-I)	-0.8	-0.001	-0.1%	0.29	0.07
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

Back on line at _____

Sample Head Inspection/Cleaning:

PM10: Cleaned
 PM2.5: Cleaned

Large In Line Filter Inspection & Or Cleaning:

Main: Good
 Aux: Good

Calibration Report



Parameter SO₂
 Air Monitoring Network PASZA

Station Information

Calibration Date	May 26, 2010	Previous Calibration	April 15, 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)	8:27	End Time (MST)	13:17
Barometric Pressure	0.929 ATM	Station Temperature	14.7 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Cert Date	6/8/2008
Correction factor	0.032161	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	1.003480	Calculated slope	1.004469
Calculated intercept	-2.605437	Calculated intercept	-2.232628
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	8.2		8.5	
coefficient	0.696		0.714	
Lamp Voltage	919	volts	920	volts
Chamber Temp	45.1	Deg C	45.2	Deg C
Perm Gas Temp	44.99	Deg C	45	Deg C
Pressure	673.5	mm Hg	673.5	mm Hg
Sample Flow	0.444	ccm	0.444	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)
4989	0.0	0.00	0.6	N/A
4989	39.84	400.87	400.5	1.0010
4989	19.91	201.13	203.4	0.9890
4989	9.95	100.72	104.0	0.9682
4989	0.0	0.00	0.6	As Found Zero
4989	39.85	400.97	386.6	As Found Span
Average Correction Factor				0.9861

Calculated value of As Found Response: 384.680 ppm Percent Change of As Found: 4.1%

	before calibration		after calibration	
Auto zero	0.4	ppb	0.7	ppb
Auto span	304.1	ppb	314.7	ppb

Notes: _____

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary



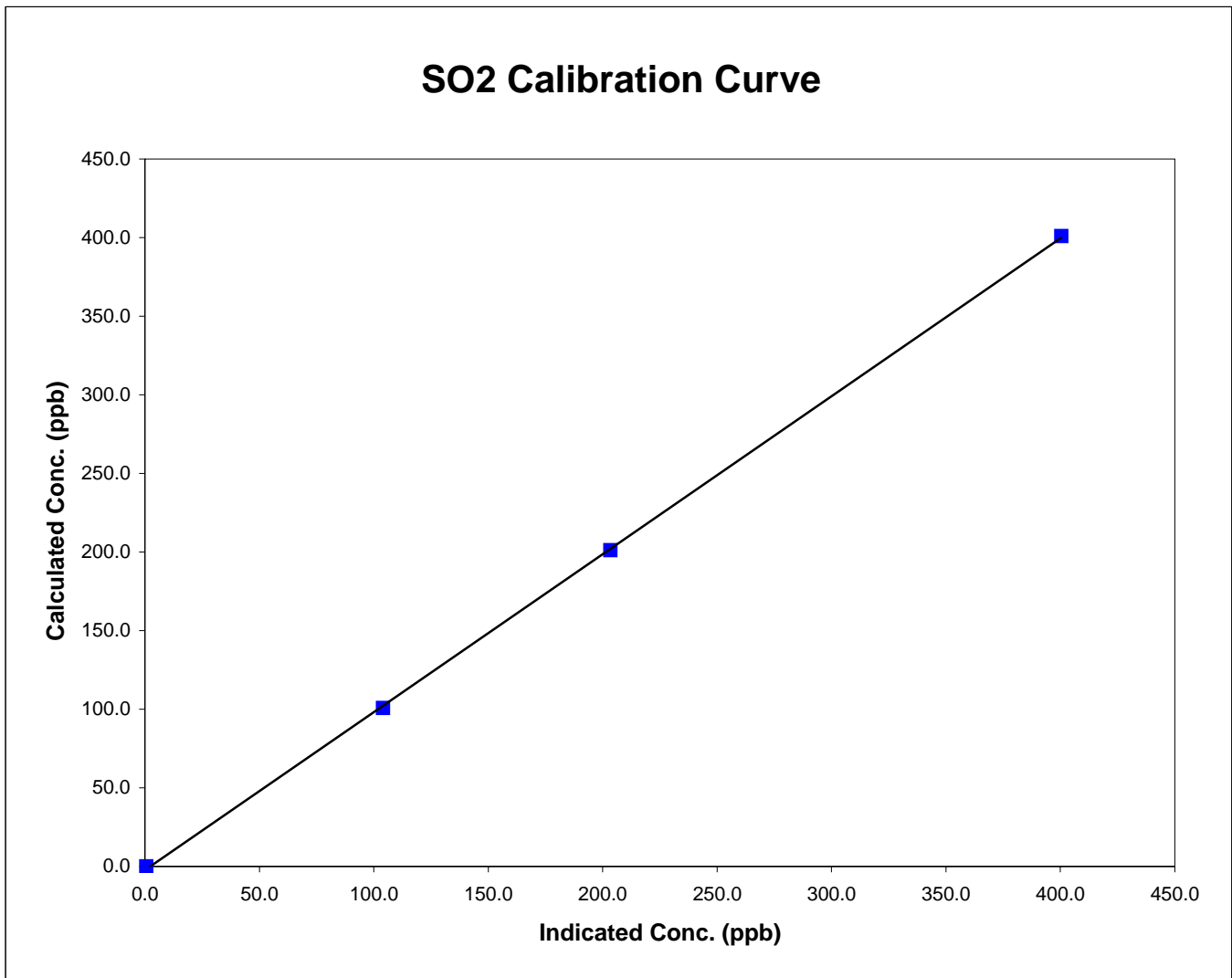
Parameter SO2
 Air Monitoring Network PASZA

Station Information

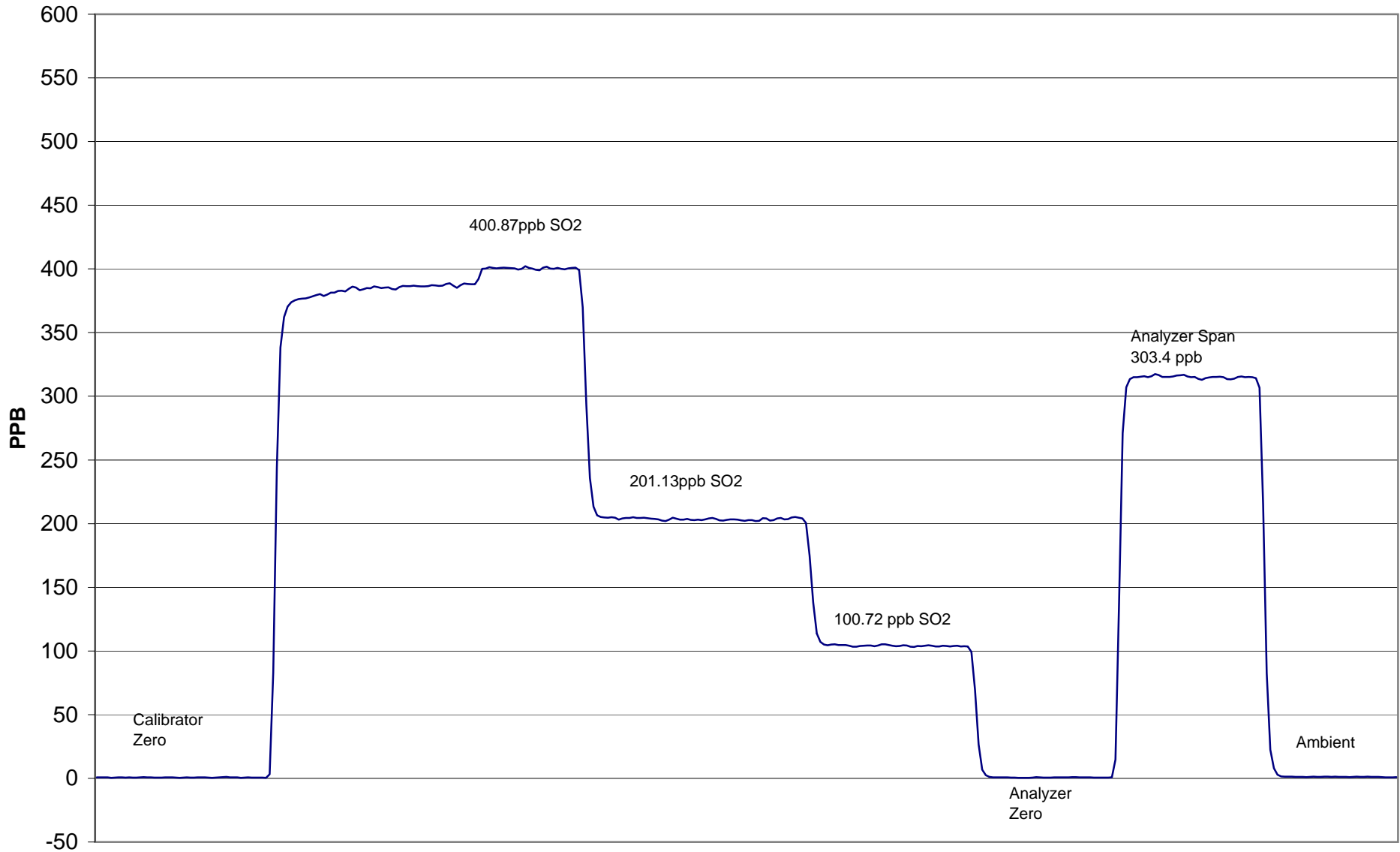
Calibration Date	May 26, 2010	Previous Calibration	April 15, 2010
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	8:27	End Time (MST)	13:17
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	N/A	Correlation Coefficient	0.999927
400.9	400.5	1.0010		
201.1	203.4	0.9890		
100.7	104.0	0.9682	Slope	1.004469
			Intercept	-2.232628



Smoky Heights SO₂ Calibration



May 26, 2010

Calibration Report



Parameter
 Air Monitoring Network

Station Information

Calibration Date	May 26, 2010		Previous Calibration	April 15, 2010
Station Number	3		Station Location	Smoky Heights
Reason:	<input checked="checked" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal	<input type="checkbox"/> Other:
Start Time (MST)	11:00		End Time (MST)	14:19
Barometric Pressure	0.929	ATM	Station Temperature	14.7 Deg C
Calibrator	EnviroNics 6100		Serial Number	3474
Cal Gas Conc	5.15	ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.032161		Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000		DACS serial No.	52620
DACS voltage range	0 - 10 volt		DACS channel #	5
	<u>Before</u>			<u>After</u>
Calculated slope	1.000724		Calculated slope	1.010320
Calculated intercept	-0.357246		Calculated intercept	-0.162887
Analyzer make	TEI Model 43C		Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background coefficient	14.1	ppb	13.7	ppb
Lamp Voltage	765	volts	765	volts
Chamber Temp	43.7	Deg C	43.7	Deg C
Perm Gas Temp	45.01	Deg C	44.99	Deg C
Pressure	484.8	mm Hg	505.08	mm Hg
Sample Flow	0.723	ccm	0.747	ccm
Lamp Intensity	32,203	mv	32,354	mv

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.00	0.1	N/A
4989	79.77	81.05	80.4	1.0082
4989	39.85	40.81	40.5	1.0071
4989	9.94	10.24	10.4	0.9864
4989	0.0	0.00	0.1	As Found Zero
4989	79.77	81.05	80.4	As Found Span
Average Correction Factor				1.0006

Calculated value of As Found Response: 79.98 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	0.0	ppm	-0.1	ppm
Auto span	40.8	ppm	40.9	ppm

Notes: _____

Calibration Performed By: Grover Christiansen/Courtney Thompson

Calibration Summary



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

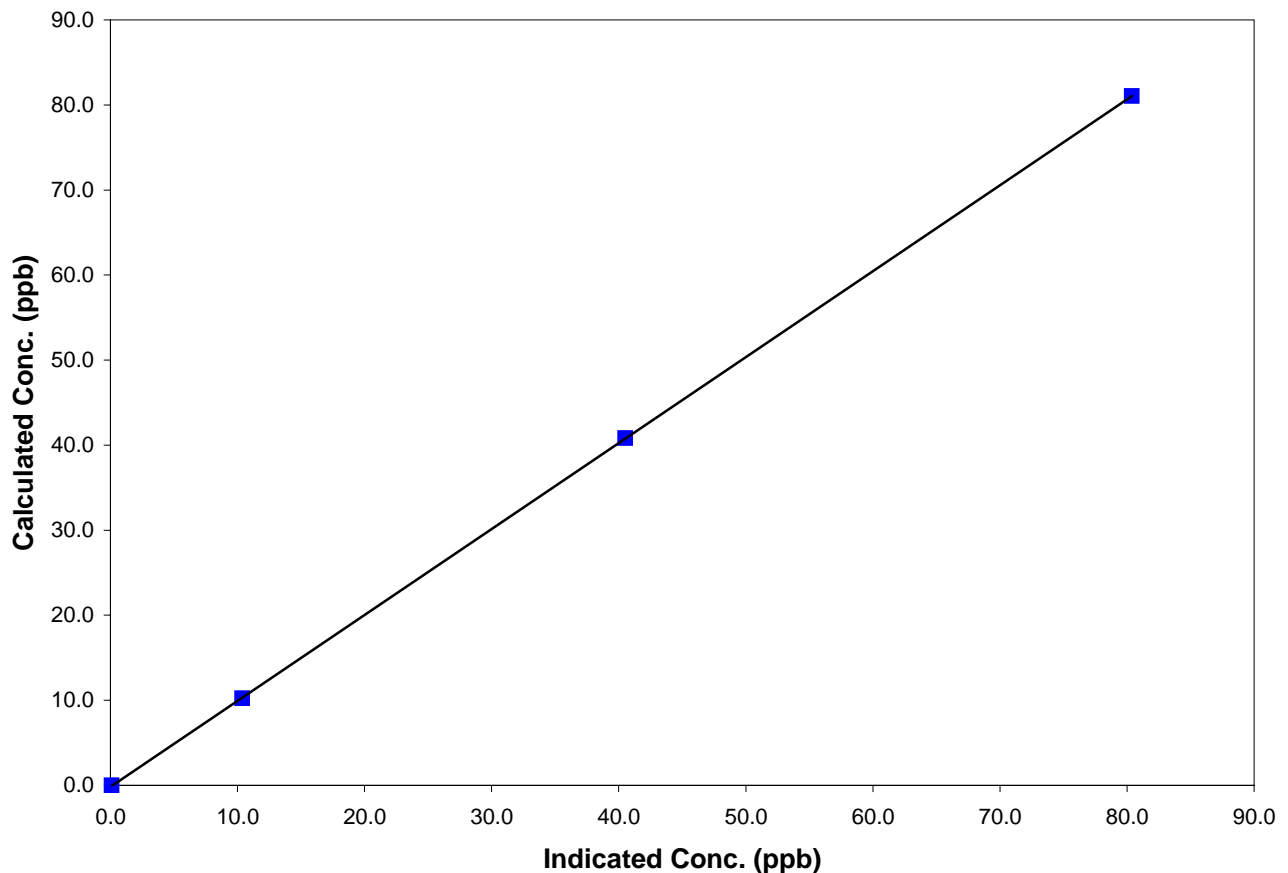
Station Information

Calibration Date	<u> </u> May 26, 2010 <u> </u>	Previous Calibration	<u> </u> April 15, 2010 <u> </u>
Station Number	<u> </u> 3 <u> </u>	Station Location	<u> </u> Smoky Heights <u> </u>
Start Time (MST)	<u> </u> 11:00 <u> </u>	End Time (MST)	<u> </u> 14:19 <u> </u>
Analyzer make/model	<u> </u> TEI Model 43C <u> </u>	Analyzer serial #	<u> </u> 0436610005 <u> </u>

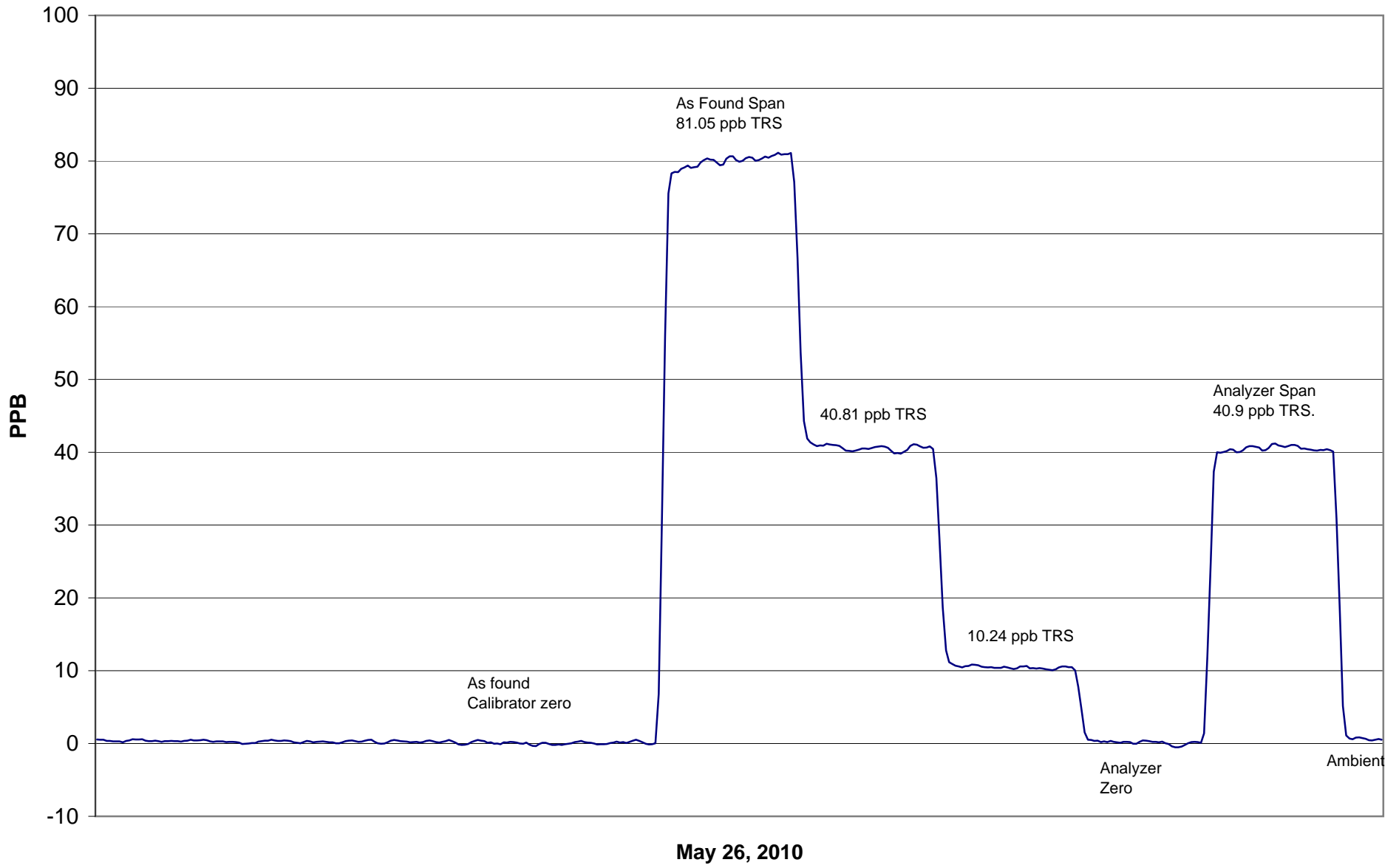
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A	Correlation Coefficient	0.999997
81.0	80.4	1.0082		
40.8	40.5	1.0071	Slope	1.010320
10.2	10.4	0.9864		
			Intercept	-0.162887

TRS Calibration Curve



Smoky Heights TRS Calibration



AB TEOM PM2.5 Calibration



STATION: Smoky Heights
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christansen
 DATE: 26-May-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	15-Apr-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	0.000	0.060
PUMP OFF	0.000	0.001
NET	0.000	0.059
LIMITS	<0.15	<0.60

	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)	19.6	0.929	12122	13.68	3.000
MEASURED (AF)	18.8	0.930	12122	13.64	2.970
MEASURED (M)	18.8	0.930	12218	13.64	2.970
DIFFERENCE (M-I)	-0.8	0.001	0.8%	-0.22	-0.03
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: 0.10814 Serial #: CVK 3831

COMMENTS: PASS

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

PM10: Cleaned Main: Good
 PM2.5: Cleaned Aux: Good
 259 of 293

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

Calibration Date	May 20, 2010	Previous Calibration	March 11, 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)	8:30	End Time (MST)	11:05
Barometric Pressure	0.895 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	0.994833	Calculated slope	1.010634
Calculated intercept	-0.326546	Calculated intercept	0.082732
Analyzer make	TEI Model 43i-TLE	Analyzer serial #	713021137

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.6		2.47	
Coefficient	0.886		0.886	
PMT	-812.9	V	-812.9	V
UV Lamp Voltage	1069	V	1070	V
Chamber Temp	45.2	Deg C	44.8	Deg C
Pressure	658.3	mm Hg	656.5	mm Hg
Sample Flow	0.493	LPM	0.492	LPM
Lamp Intesity	86%	%	87%	%

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	78.9	1.0102
4988	19.90	40.0	39.2	1.0208
4988	9.93	20.0	19.9	1.0069
4988	0.00	0.0	0.0	As found zero
4988	39.82	79.7	78.9	As found span
Average Correction Factor				1.0126

Calculated value of As Found Response: 78.146 ppm Percent Change of As Found: 1.9%

	before calibration		after calibration	
Auto zero	-0.3	ppb	0.2	ppb
Auto span	57.8	ppb	58.7	ppb

Notes: _____

Calibration Performed By: Courtney Thompson

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA

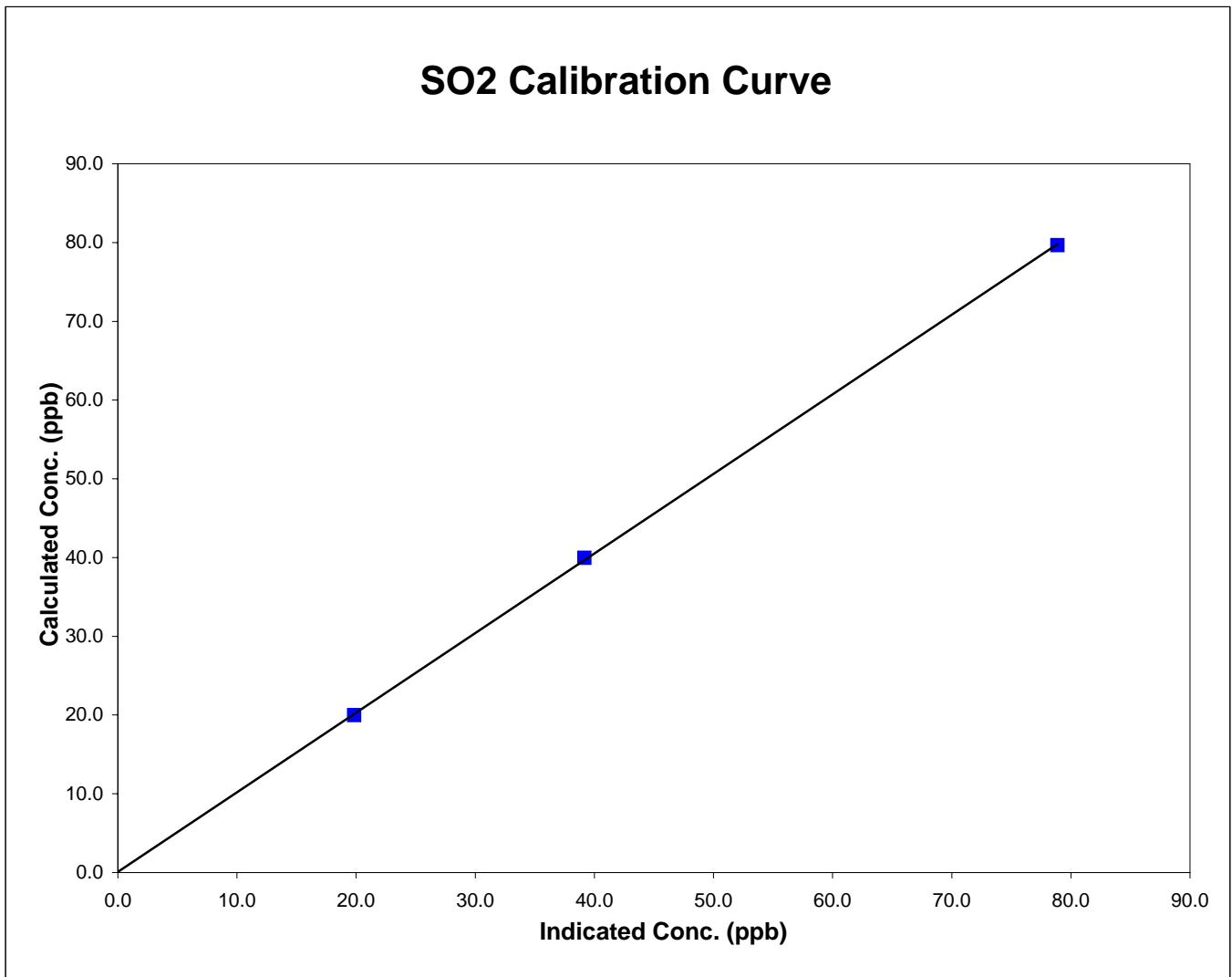


Station Information

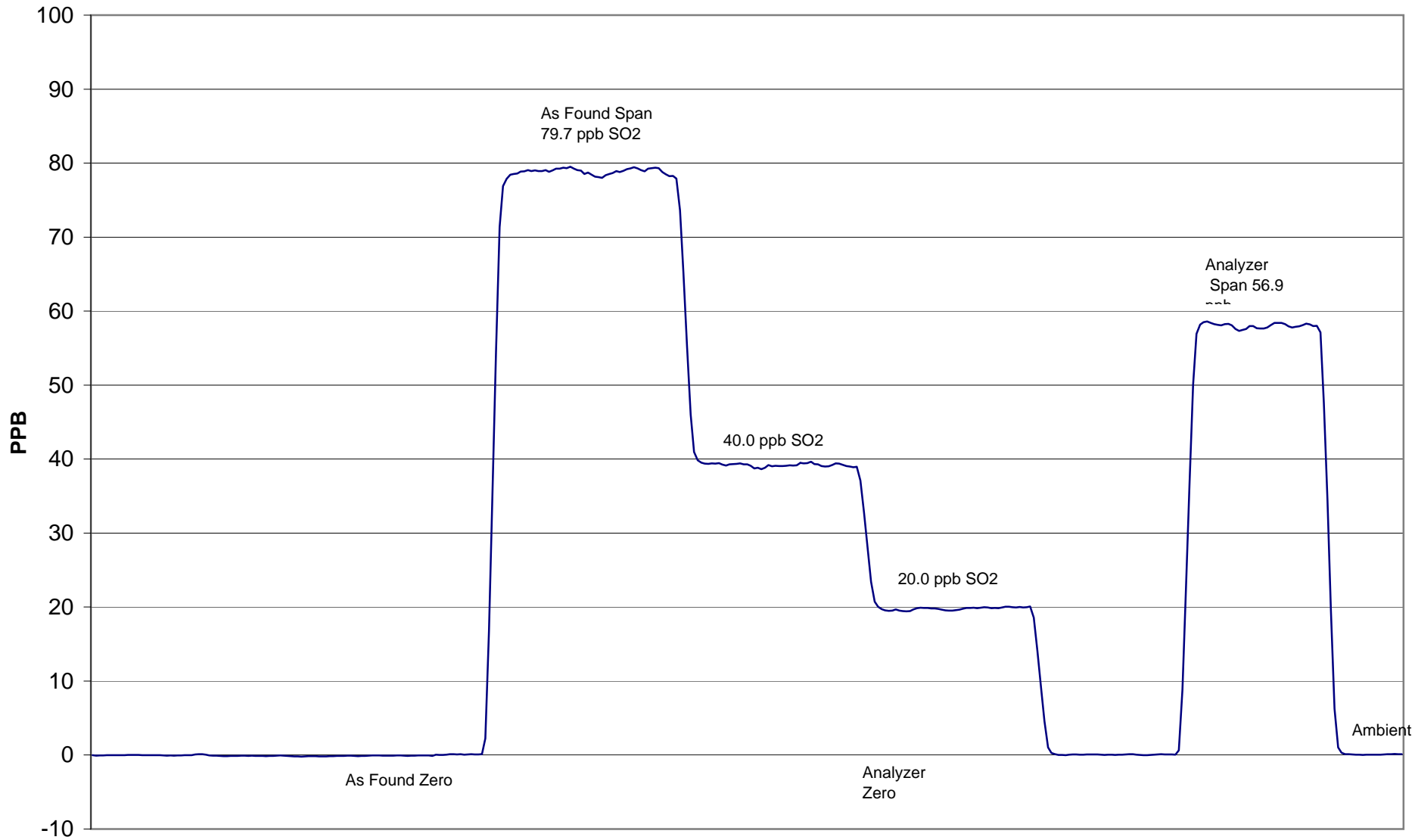
Calibration Date	May 20, 2010	Previous Calibration	March 11, 2010
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	8:30	End Time (MST)	11:05
Analyzer make/model	TEI Model 43i-TLE	Analyzer serial #	713021137

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
79.7	78.9	1.0102	Correlation Coefficient	0.999959
40.0	39.2	1.0208		
20.0	19.9	1.0069	Slope	1.010634
			Intercept	0.082732



Beaverlodge SO₂ Calibration



May 20, 2010

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date May 20, 2010 Previous Calibration March 11, 2010
 Station Number 4 Station Location BeaverLodge

Reason: Routine Installation Removal Other: _____

Start Time (MST) 8:40 End Time (MST) 13:17
 Barometric Pressure 0.895 Atm Station Temperature 9.0 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	0.991968	1.002560	1.003800
	Data Offset	-0.462201	-2.288247	-1.228742
After	Data Slope	0.995237	1.001981	1.002299
	Data Offset	-0.712453	-1.670713	-0.622375
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/ AMU 1796

Test Point	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
NO offset	2.3	mV	2.4	mV
NOx bkgnd	2.6	mV	2.9	mV
NO coefficient	1.371		1.405	
NOx coefficient	0.994		0.994	
NO2 conv temp	325.0	Deg C	325.0	Deg C
PMT Temp	-2.8	Deg C	-3.0	Deg C
PMT Volt	676.7	mV	-676.4	mV
R Cell Press	177.4	in Hg	177.7	in Hg
Sample Flow	0.754	ccm	0.751	ccm

Calibration Report

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



Station Information

Calibration Date: **May 20, 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	0.2	-0.1	0.0	N/A	N/A
1	4988	39.82	397.6	396.8	0.8	397.8	396.1	0.3	0.9995	1.0018
2	4988	19.90	199.5	199.1	0.4	201.3	199.8	1.1	0.9908	0.9964
3	4988	9.93	99.7	99.5	0.2	102.8	100.5	1.9	0.9706	0.9905
AFZ	4988	0.00	0.0	0.0	0.0	0.3	-0.1	0.1	0.0000	0.0000
AFS	4988	39.84	397.8	397.0	0.8	388.0	386.7	0.0	1.0251	1.0265
Average Correction Factor									0.9870	0.9962

As Found Concentrations: **NO_x= 385.5** **NO= 385.6** As Found Percent Change **NO_x= -3.1%** **NO= -2.9%**

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	0.2	-0.1	0.0	N/A	N/A	N/A	N/A
NO point	396.1	396.1	0.0	257.9	396.1	0.2	1.5359	1.0000	N/A	N/A
300	396.1	122.1	274.0	398.6	122.1	275.6	0.9937	1.0000	0.9943	100.6%
200	396.1	218.1	178.0	398.7	218.1	179.7	0.9934	1.0000	0.9904	101.0%
100	396.1	304.3	91.8	399.1	304.3	94.0	0.9924	1.0000	0.9767	102.4%
Average Correction Factor							0.9932	1.0000	0.9871	101.3%

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	211.8	210.1	1.4	ppb

Calibration Performed By: Courtney Thompson

Calibration Summary



Parameter NO₂

Air Monitoring Network PASZA

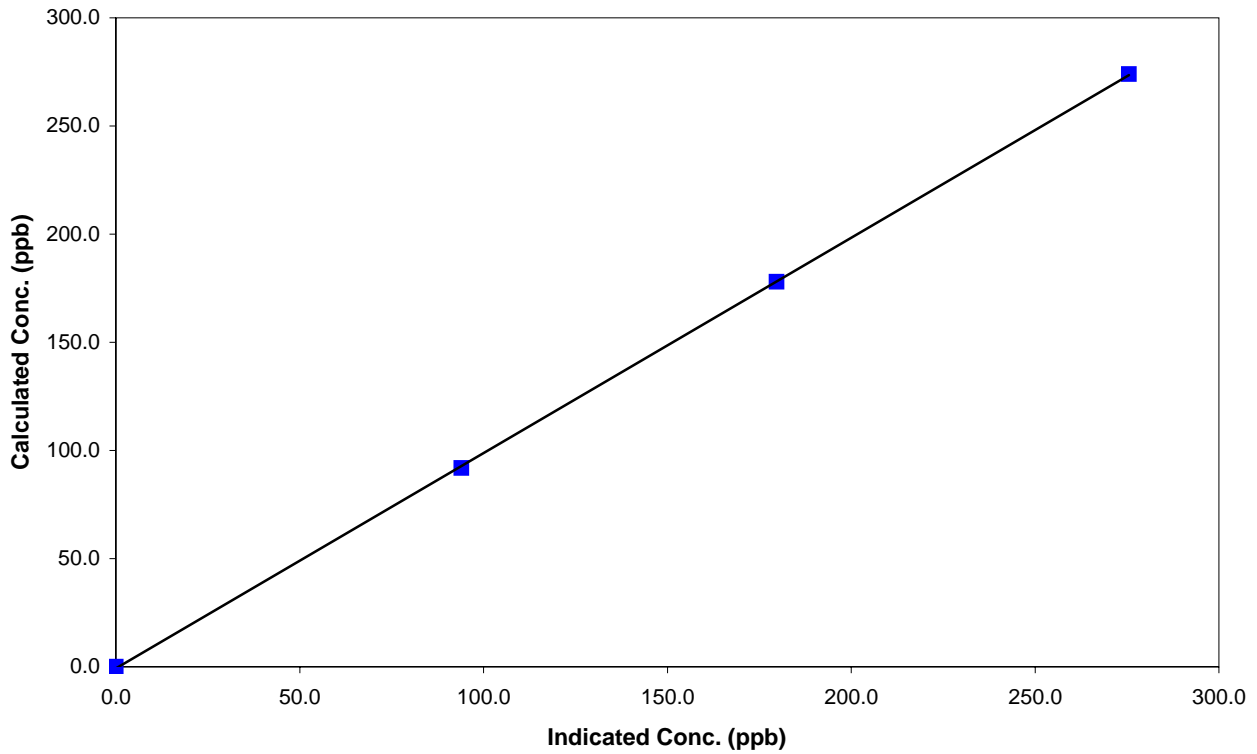
Station Information

Calibration Date	May 20, 2010	Previous Calibration	March 11, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:40	End Time (MST)	13:17
Analyzer make	TEI 42i	Analyzer serial #	906535068/ AMU 1796

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
274.0	275.6	0.9943	Correlation Coefficient	0.999956
178.0	179.7	0.9904		
91.8	94.0	0.9767	Slope	0.995237
			Intercept	-0.712453

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



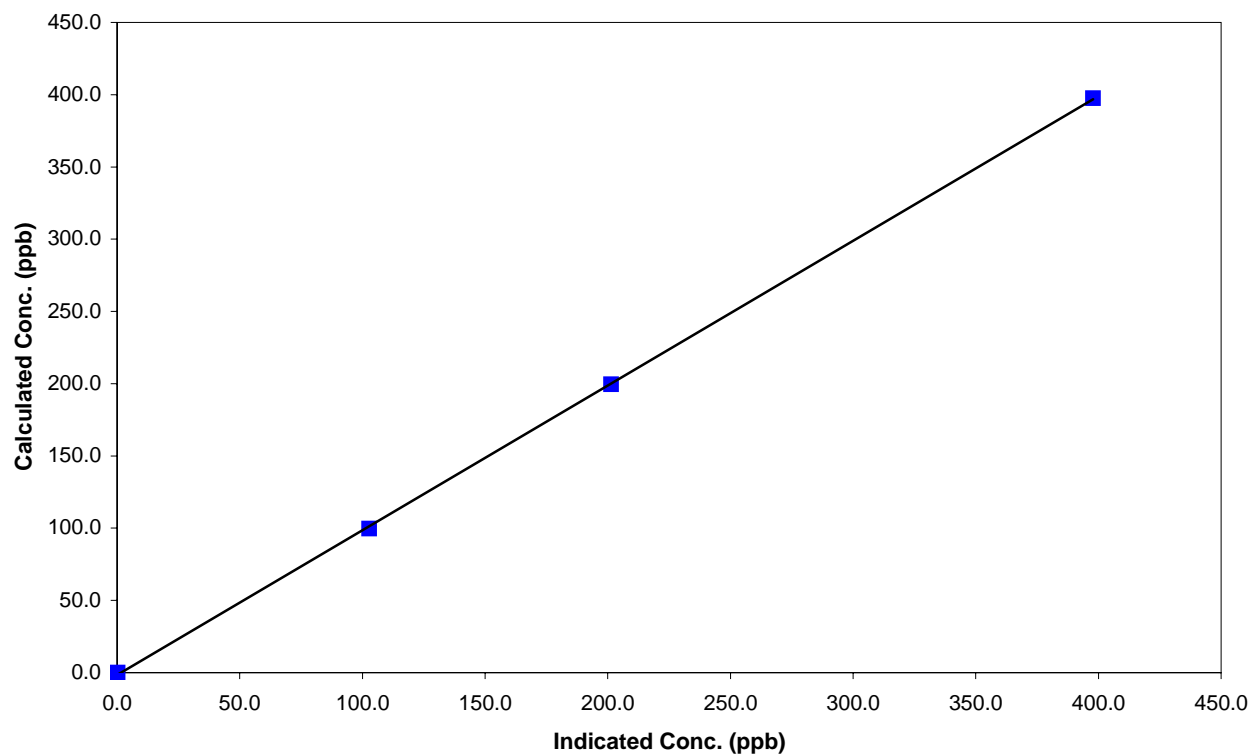
Station Information

Calibration Date	May 20, 2010	Previous Calibration	March 11, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:40	End Time (MST)	13:17
Analyzer make	TEI 42i	Analyzer serial #	906535068/ AMU 1796

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	N/A	Correlation Coefficient	0.999939
397.6	397.8	0.9995		
199.5	201.3	0.9908		
99.7	102.8	0.9706	Slope	1.001981
			Intercept	-1.670713

NO_x Calibration Curve



Calibration Summary



Parameter NO

Air Monitoring Network PASZA

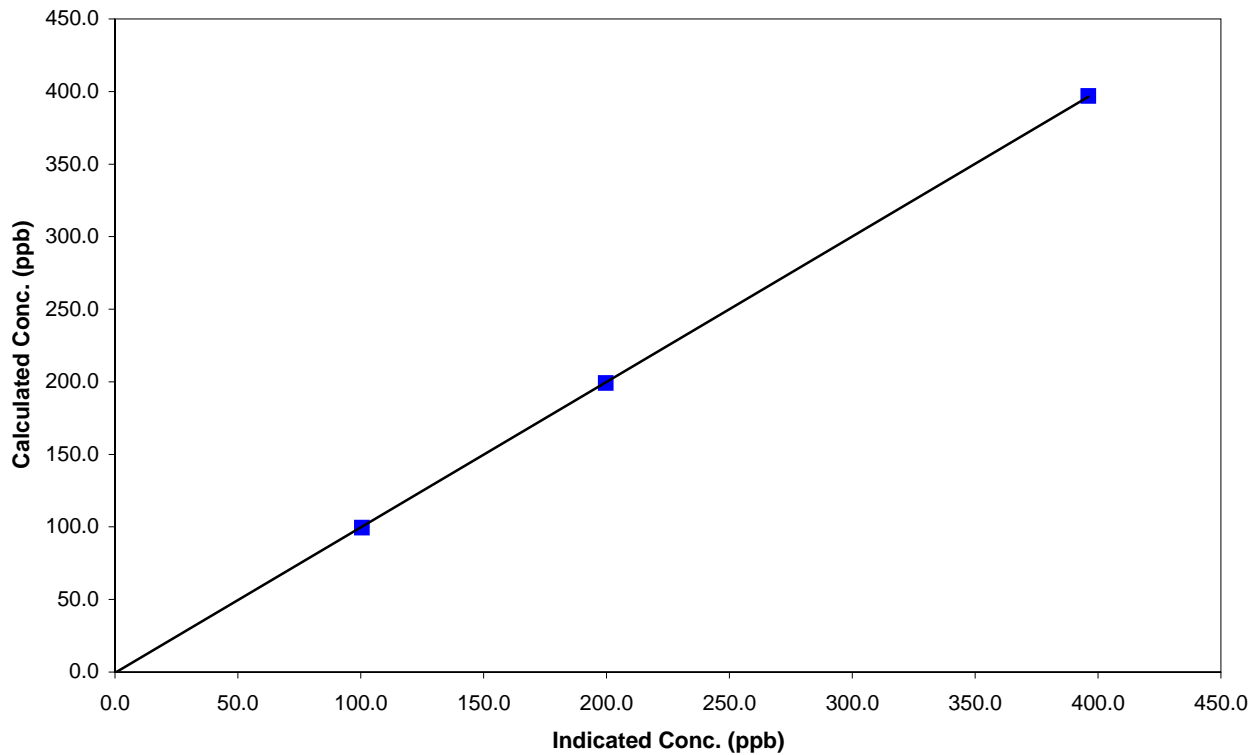
Station Information

Calibration Date	May 20, 2010	Previous Calibration	March 11, 2010
Station Number	4	Station Location	BeaverLodge
Start Time (MST)	8:40	End Time (MST)	13:17
Analyzer make	TEI 42i	Analyzer serial #	906535068/ AMU 1796

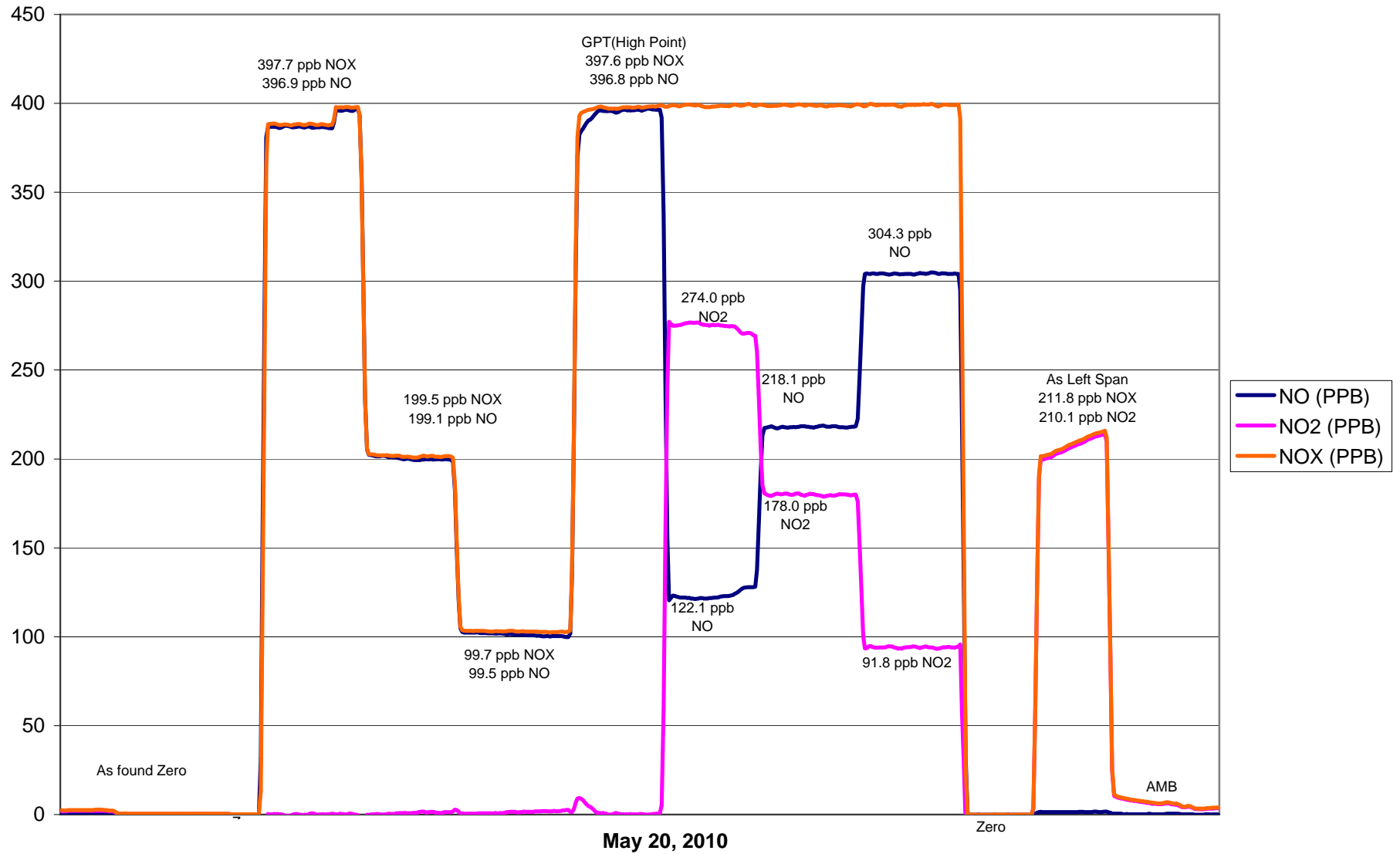
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A	Correlation Coefficient	0.999985
396.8	396.1	1.0018		
199.1	199.8	0.9964		
99.5	100.5	0.9905	Slope	1.002299
			Intercept	-0.622375

NO Calibration Curve



PASZA Beaverlodge NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

Calibration Date	May 20, 2010	Previous Calibration	March 11, 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)	12:00	End Time (MST)	14:25
Barometric Pressure	0.915 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	1.017875	Calculated slope	1.014237
Calculated intercept	0.394900	Calculated intercept	-1.774581
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383/AMU1614

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.70	ppb	-0.80	ppb
slope	1.026		1.062	
Lamp temp	56.5	mV	56.5	mV
Lamp Intensity A/B	69432/68603	mV	69447/68663	mV
Pressure	679.9	mm Hg	658.8	mm Hg
Flow A	706	ccm	689	ccm
Flow B	654	ccm	635	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	274.0	269.2	1.0177
4990	0.00	178.0	180.3	0.9873
4990	0.00	91.8	94.0	0.9761
4990	0.00	0.0	-0.4	As found zero
4990	0.00	274.0	259.8	As found span
Average Correction Factor				0.9937

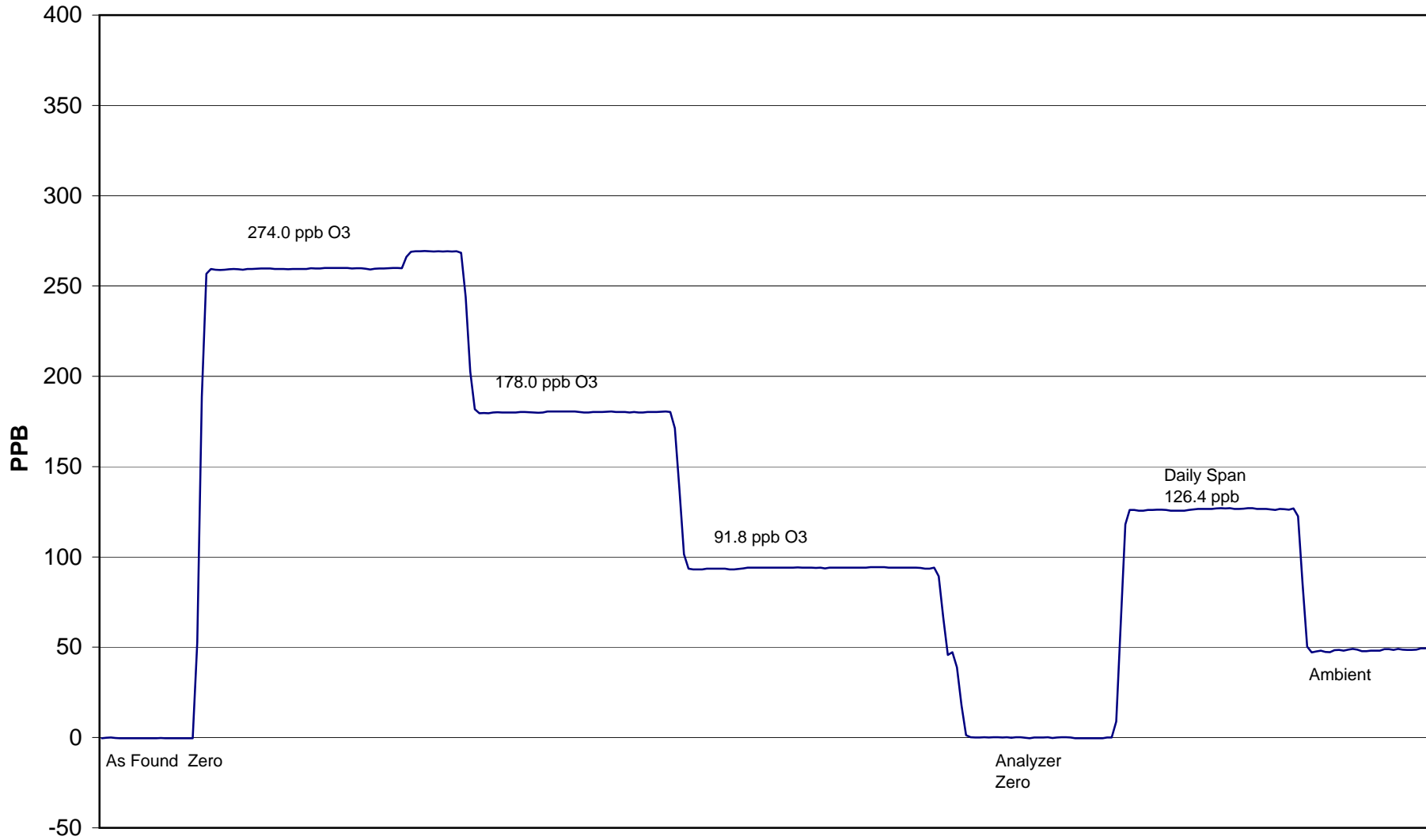
Calculated value of As Found Response: 265.2 ppm Percent Change of As Found: -3.2%

	before calibration		after calibration	
Auto zero	0.1	ppb	-1.8	ppb
Auto span	114.3	ppb	126.4	ppb

Notes: _____

Calibration Performed By: Courtney Thompson

Beaverlodge O₃ Calibration



May 20, 2010

FDMS TEOM PM2.5 AUDIT



STATION: BeaverLodge
 LOCATION: PASZA - Grande Prairie

OPERATOR: Grover Christiansen
 DATE: 4-May-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	12-Apr-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	0.050
NET	-0.080	0.170
LIMITS	<0.15	<0.60

	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)	2.7	0.916	14287	13.67	3.000
<i>As Found Data</i> MEASURED (AF)	2.6	0.916	14287	13.70	3.003
<i>Adjusted Data</i> MEASURED (M)	2.6	0.916	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

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

COMMENTS: 8500C FDMS was removed after disabling the data to Cal Mode. Unit was installed at H.P. and H.P.'s unit was transported back to Beaverlodge to replace the unit removed. Although a K.O. was not performed all other parameters were identical to what was noted on April's calibration. Have informed Harry Benders that PM 2.5 data from both H.P. and BL will be flagged in the CAL mode while observing the data over the next period.

PASS

Sample Head Inspection Or Cleaning:

PM10: Inspected
 PM2.5: Inspected

TEOM / FDMS IN LINE FILTER INSPECTION OR REPLACEMENT:

TEOM IN LINE: FDMS Water knock out: Good
 Main: Good
 AUX: Good FDMS 47 mm Filter Cassette: Replaced

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

Calibration Date	May 25, 2010	Previous Calibration	April 14, 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)	9:15	End Time (MST)	12:13
Barometric Pressure	27.66 inches Hg	Station Temperature	15.7 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	1.001160	Calculated slope	0.997578
Calculated intercept	0.232411	Calculated intercept	-0.646236
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	8.8		10.1	
Coefficient	0.889		1.004	
UV Lamp Voltage	798	V	798	V
Chamber Temp	44.5	C	44.5	C
Perm Gas Temp	45	C	45	C
Pressure	681.3	mm Hg	682.9	mm Hg
Sample Flow	0.491	LPM	0.493	LPM
Lamp Intesity	47929	Hz	47678	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.00	0.0	-0.2	N/A
4989	39.84	400.9	402.0	0.9972
4989	19.90	201.0	202.7	0.9917
4988	9.93	100.5	102.2	0.9834
4989	0.00	0.0	0.1	As found zero
4989	39.84	400.9	311.4	As found span
Average Correction Factor				0.9907

Calculated value of As Found Response: 311.916 ppm Percent Change of As Found: 22.2%

	before calibration		after calibration	
Auto zero	0.3	ppm	0.3	ppm
Auto span	256.9	ppm	260.2	ppm

Notes: Calibration following a power outage. Known to be off line from 8:30ish-6ish on May 24th 2010.

Calibration Performed By: Grover/Courtney

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



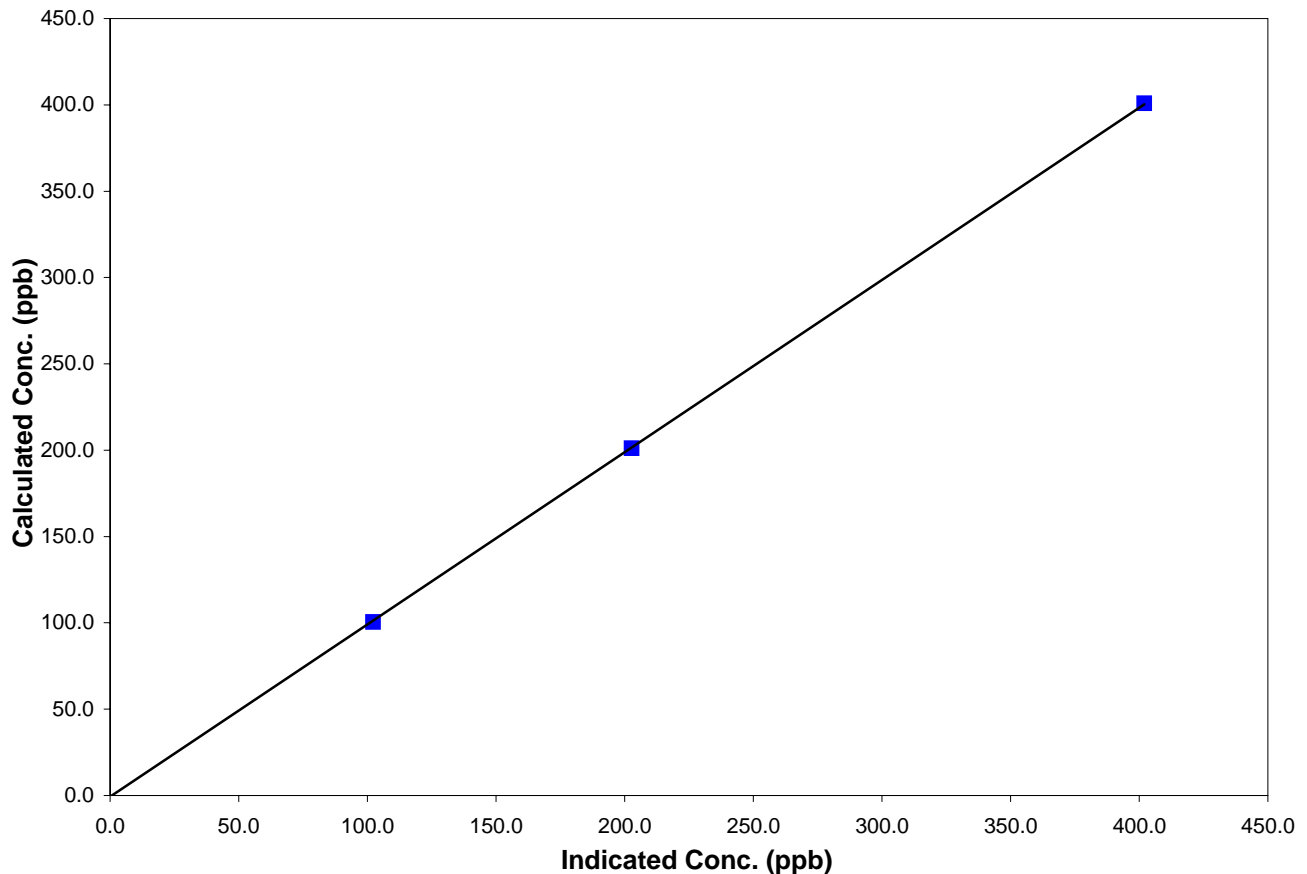
Station Information

Calibration Date	May 25, 2010	Previous Calibration	April 14, 2010
Station Number	9	Station Location	Rover - Kinuso
Start Time (MST)	9:15	End Time (MST)	12:13
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

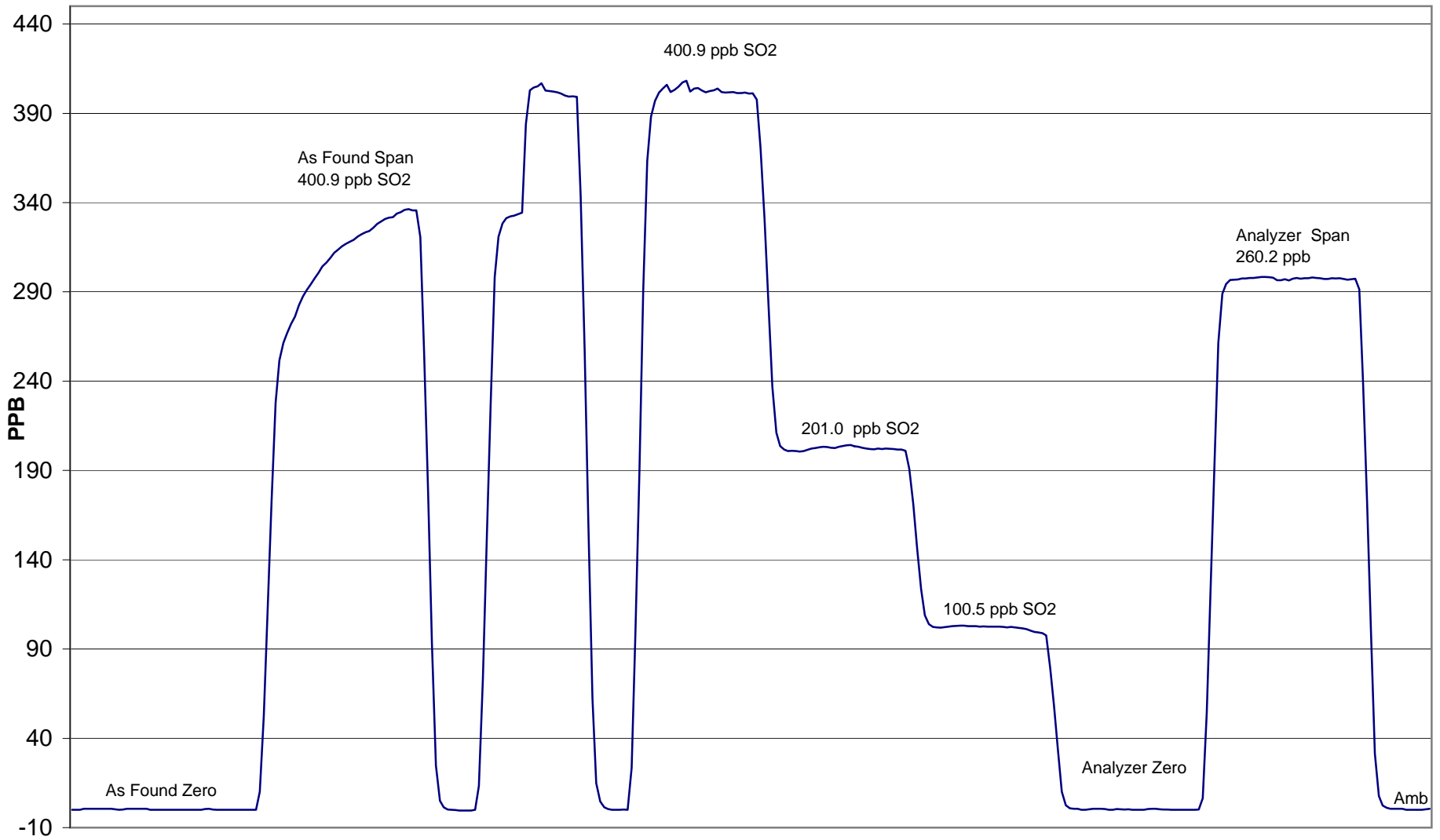
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
400.9	402.0	0.9972	Correlation Coefficient	0.999978
201.0	202.7	0.9917		
100.5	102.2	0.9834	Slope	0.997578
			Intercept	-0.646236

SO2 Calibration Curve



Kinuso SO₂ Calibration



May 25, 2010

Calibration Report

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



Station Information

Calibration Date	<u> </u> May 25, 2010	Previous Calibration	<u> </u> April 14, 2010
Station Number	<u> </u> 9	Station Location	<u> </u> Rover-Kinuso
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	<u> </u> 15:31	End Time (MST)	<u> </u> 16:44
Barometric Pressure	<u> </u> 27.5 inches Hg	Station Temperature	<u> </u> 15.7 Deg C
Calibrator	<u> </u> Environics 6100	Serial Number	<u> </u> 3474
Cal Gas Concentration	<u> </u> 5.15 ppm	Cal Gas Expiry Date	<u> </u> 11/15/2005
Gas Cert Reference	<u> </u> ALM013295		
DACS make	<u> </u> Focus AP1000	DACS serial No.	<u> </u> 52662
DACS voltage range	<u> </u> 0 - 5 volt	DACS channel #	<u> </u> 8
	<u> </u> Before		<u> </u> After
DACS Scale High	<u> </u> 100	DACS slope	<u> </u> 100
DACS Scale Low	<u> </u> 0	DACS intercept	<u> </u> 0
Calculated slope	<u> </u> 0.997144	Calculated slope	<u> </u> 0.989409
Calculated intercept	<u> </u> 0.595238	Calculated intercept	<u> </u> 0.425370
Analyzer make	<u> </u> TEI 43C	Analyzer serial #	<u> </u> 609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	10.1	ppb	10.7	ppb
Coefficient	1.375		1.452	
Lamp Voltage	791	V	791	V
Chamber Temp	43.7	C	43.6	C
Perm gas Temp	45	C	45	C
Pressure	668	mmHg	665	mmHg
Sample Flow	.432	ccm	.432	ccm
Lamp Intensity	39221.0	Hz	39343.0	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.0	0.0	-0.6	N/A
4989	79.74	81.0	81.4	0.9959
4989	39.80	40.8	41.0	0.9951
4989	9.93	10.2	10.0	1.0278
4989	0.00	0.0	-0.6	As found zero
4989	79.74	81.0	75.6	As found span
Average Correction Factor				1.0063

Calculated value of As Found Response: 76.59 ppm Percent Change of As Found: 5.5%

	before calibration		after calibration	
Auto zero	-0.6	ppm	0.0	ppm
Auto span	64.8	ppm	65.7	ppm

Notes:

Calibration Performed By: Grover/ Courtney

Calibration Summary

Parameter
 Air Monitoring Network
TRS
PASZA

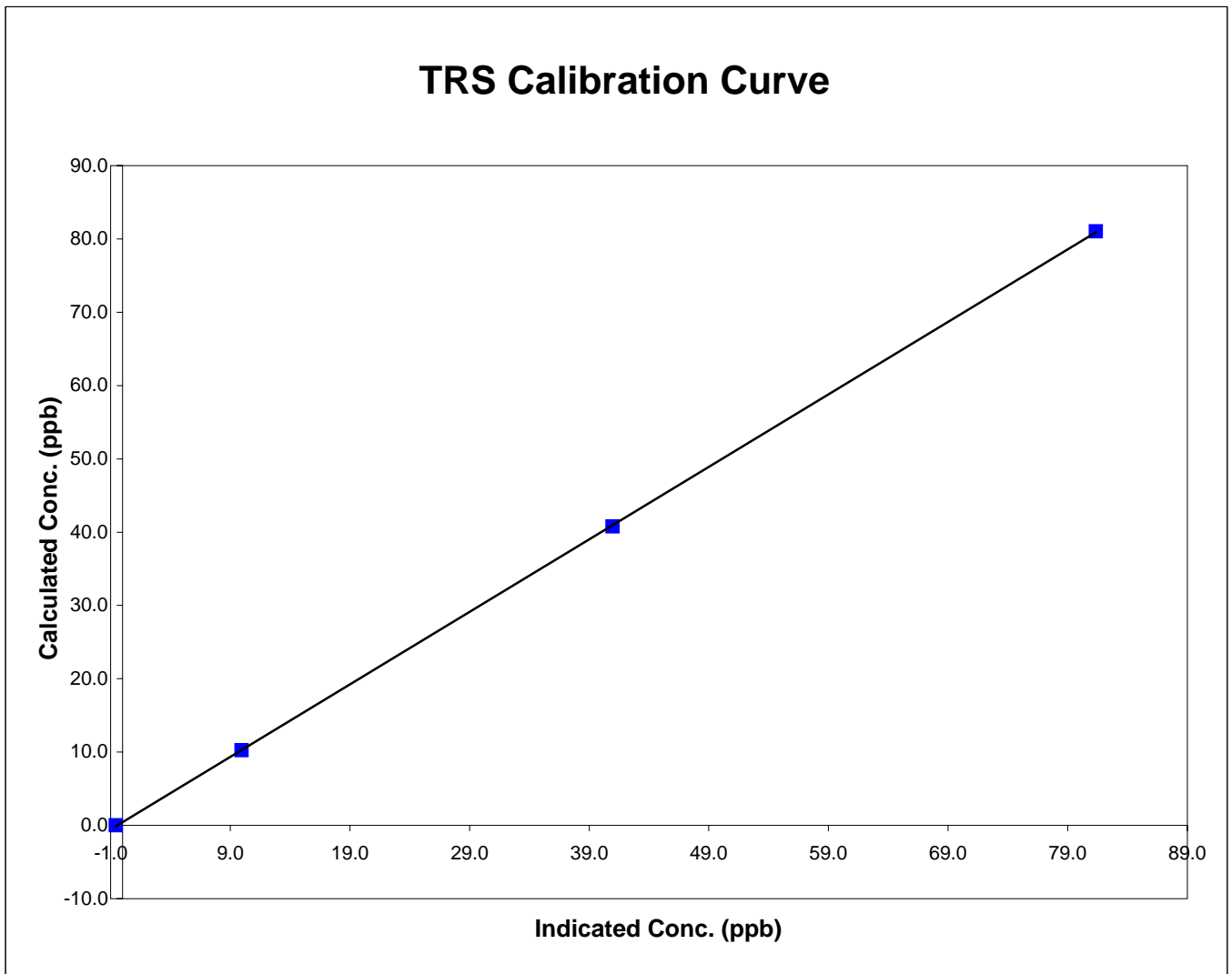


Station Information

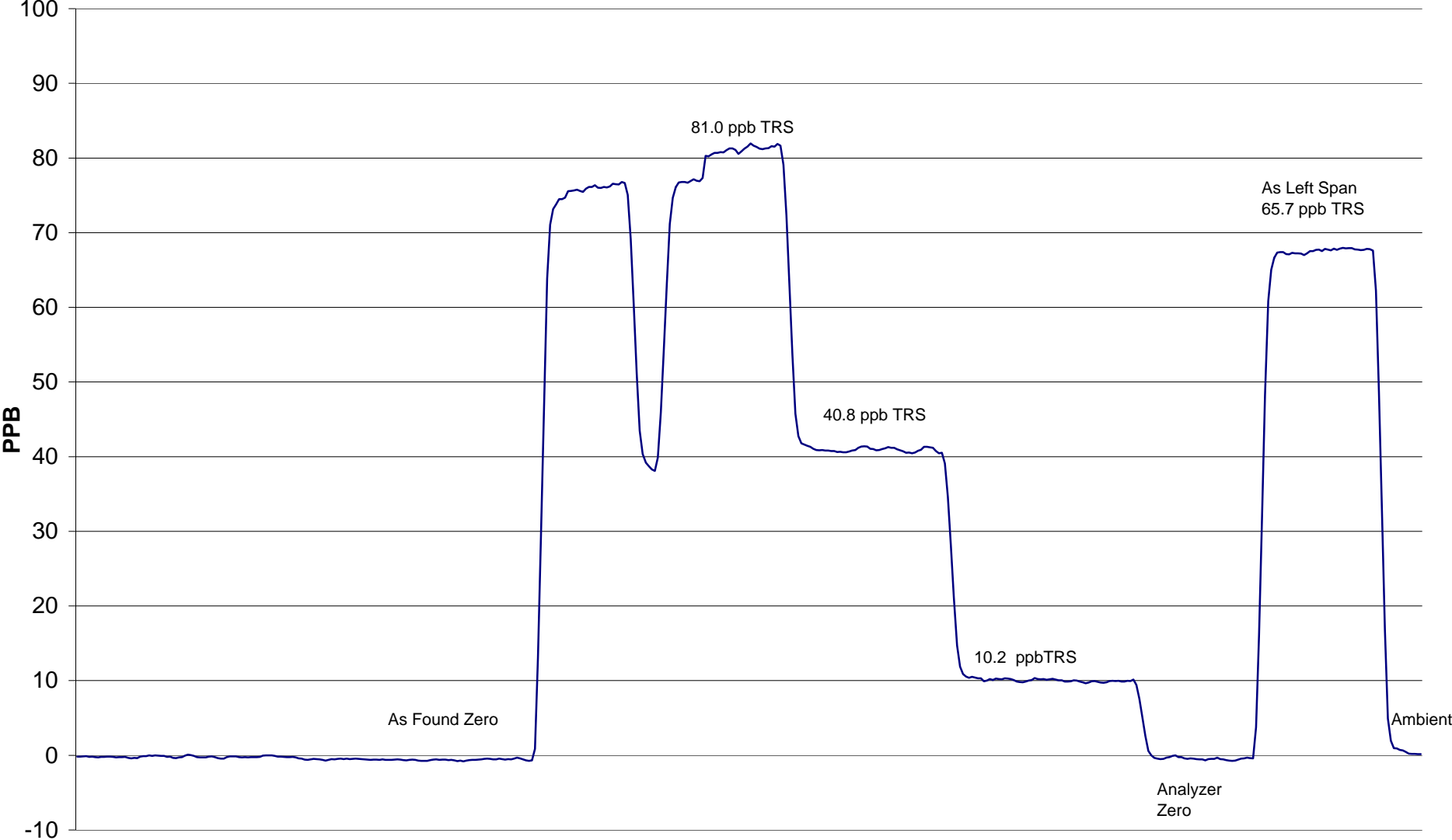
Calibration Date	<u> </u> <u> </u> <u> </u>	Previous Calibration	<u> </u> <u> </u> <u> </u>
Station Number	<u> </u> <u> </u> <u> </u>	Station Location	<u> </u> <u> </u> <u> </u>
Start Time (MST)	<u> </u> <u> </u> <u> </u>	End Time (MST)	<u> </u> <u> </u> <u> </u>
Analyzer make/model	<u> </u> <u> </u> <u> </u>	Analyzer serial #	<u> </u> <u> </u> <u> </u>
	May 25, 2010	April 14, 2010	
	9	Rover-Kinuso	
	15:31	16:44	
	TEI 43C	609716238	

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.6	N/A		
81.0	81.4	0.9959	Correlation Coefficient	0.999983
40.8	41.0	0.9951		
10.2	10.0	1.0278	Slope	0.989409
			Intercept	0.425370



Kinuso TRS Calibration



May 25, 2010

Calibration Report

Parameter

NO_x-NO-NO₂

Air Monitoring Network

PASZA



Station Information

Calibration Date	May 25, 2010	Previous Calibration	April 14, 2010		
Station Number	9	Station Location	Rover Kinuso		
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Installation	<input type="checkbox"/> Removal	Other: _____	
Start Time (MST)	9:15	End Time (MST)	14:06		
Barometric Pressure	0.916	Atm	Station Temperature	15.7	Deg C
Calibrator	EnviroNics 6100		Serial Number	3474	
NO Cal Gas Conc	49.6	ppm	Cal Gas Expiry Date	July 2, 2007	
NO _x Cal Gas Conc	49.6	ppm	Cal Gas Serial #	CC114395	

DACS Information

DACS make	Focus AP1000	DACS serial No.	52662	
Parameter		NO ₂	NO _x	NO
Before	Data Slope	1.000759	0.998007	1.003851
	Data Offset	1.507418	-2.380580	-2.852062
After	Data Slope	1.004289	0.999128	1.006602
	Data Offset	2.872985	-2.692304	-3.352176
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	4.4	mV	4.9	mV
NO _x bkgnd	4.5	mV	5.1	mV
NO coefficient	0.810		0.878	
NO _x coefficient	1.001		0.999	
NO ₂ conv temp	325.8	Deg C	323.2	Deg C
PMT Temp	-2.7	Deg C	-2.7	Deg C
PMT Volt	-829.5	mV	-829.4	mV
R Cell Press	156.6	in Hg	156.6	in Hg

Calibration Report

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



Station Information

Calibration Date: **May 25, 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	4989	0.00	0.0	0.0	0.0	0.1	0.5	-1.5	N/A	N/A
1	4989	39.84	392.9	392.9	0.0	394.5	392.2	-0.6	0.9960	1.0020
2	4989	19.90	197.1	197.1	0.0	201.5	200.7	-1.0	0.9781	0.9820
3	4988	9.93	98.5	98.5	0.0	103.8	104.0	-0.9	0.9491	0.9476
AFZ	4989	0.00	0.0	0.0	0.0	0.1	0.6	-0.9	0.0000	0.0000
AFS	4989	39.85	393.0	393.0	0.0	366.9	363.6	0.2	1.0711	1.0809
Average Correction Factor									0.9744	0.9772

As Found Concentrations: **NO_x= 364.5** **NO= 360.2** As Found Percent Change **NO_x= -7.3%** **NO= -8.4%**

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	0.6	0.6	0.0	0.1	0.5	-1.5	N/A	N/A	N/A	N/A
NO point	394.2	394.2	0.0	396.4	394.2	-0.7	0.9945	1.0000	N/A	N/A
300	394.2	170.8	223.3	393.4	170.8	220.4	1.0020	1.0000	1.0132	98.7%
200	394.2	250.3	143.9	392.6	250.3	140.0	1.0039	1.0000	1.0283	97.2%
100	394.2	317.2	77.0	391.7	317.2	72.0	1.0062	1.0000	1.0695	93.5%
Average Correction Factor							1.0040	1.0000	1.0370	96.5%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO2	NO		NOx	NO2	NO	
Auto zero	0.4	-0.9	0.7	ppb	0.2	-0.8	0.7	ppb
Auto span	312.6	308.0	2.9	ppb	299.9	294.3	3.9	ppb

Calibration Performed By: Grover Christiansen/Courtney

Calibration Summary

Parameter NO₂

Air Monitoring Network PASZA



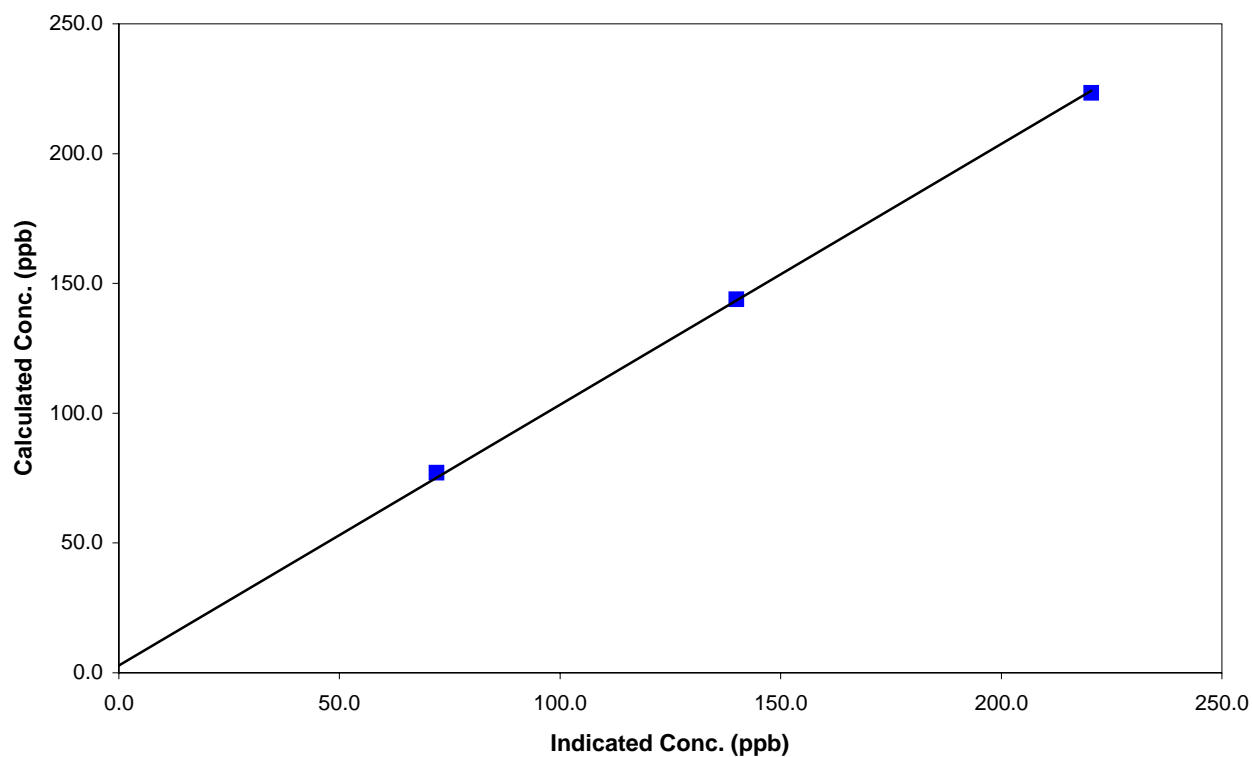
Station Information

Calibration Date	May 25, 2010	Previous Calibration	April 14, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:15	End Time (MST)	13:12
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	-1.5	N/A	Correlation Coefficient	0.999767
223.3	220.4	1.0132		
143.9	140.0	1.0283	Slope	1.004289
77.0	72.0	1.0695		
			Intercept	2.872985

NO₂ Calibration Curve



Calibration Summary

Parameter NO_x

Air Monitoring Network PASZA



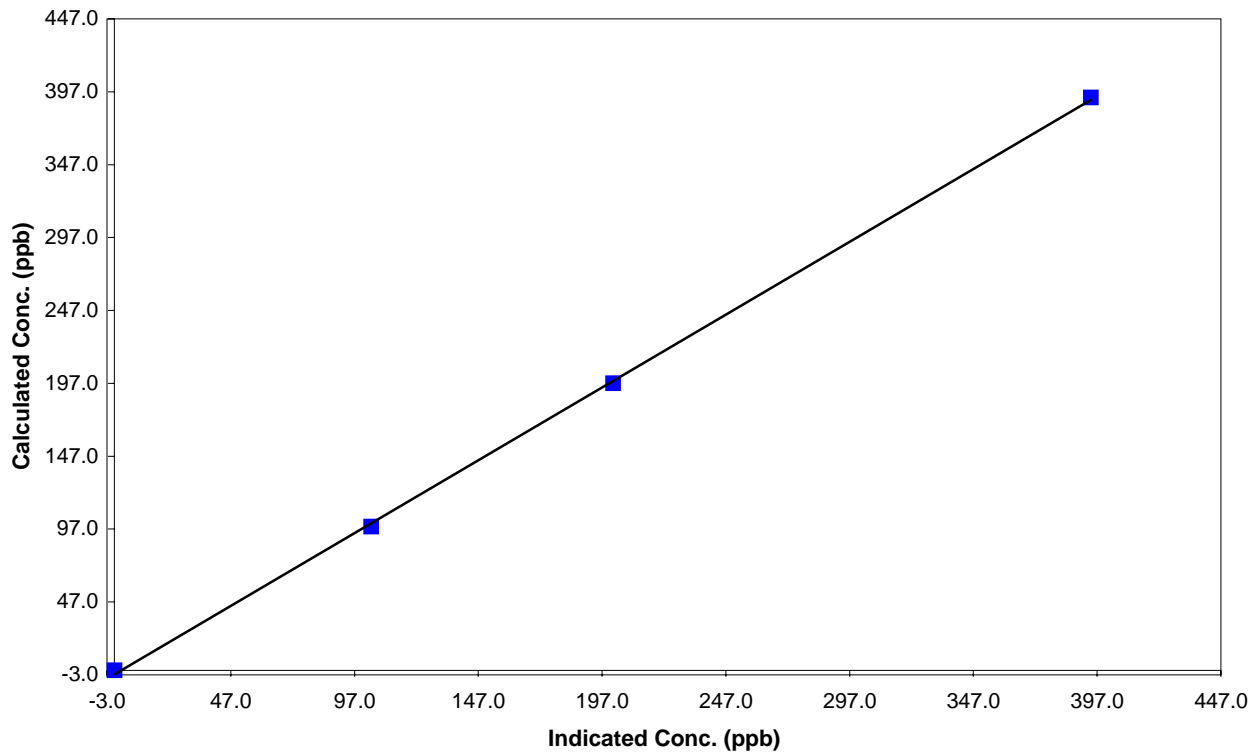
Station Information

Calibration Date	May 25, 2010	Previous Calibration	April 14, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:15	End Time (MST)	13:12
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	0.1	N/A	Correlation Coefficient	0.999792
392.9	394.5	0.9960		
197.1	201.5	0.9781	Slope	0.999128
98.5	103.8	0.9491		
			Intercept	-2.692304

NO_x Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



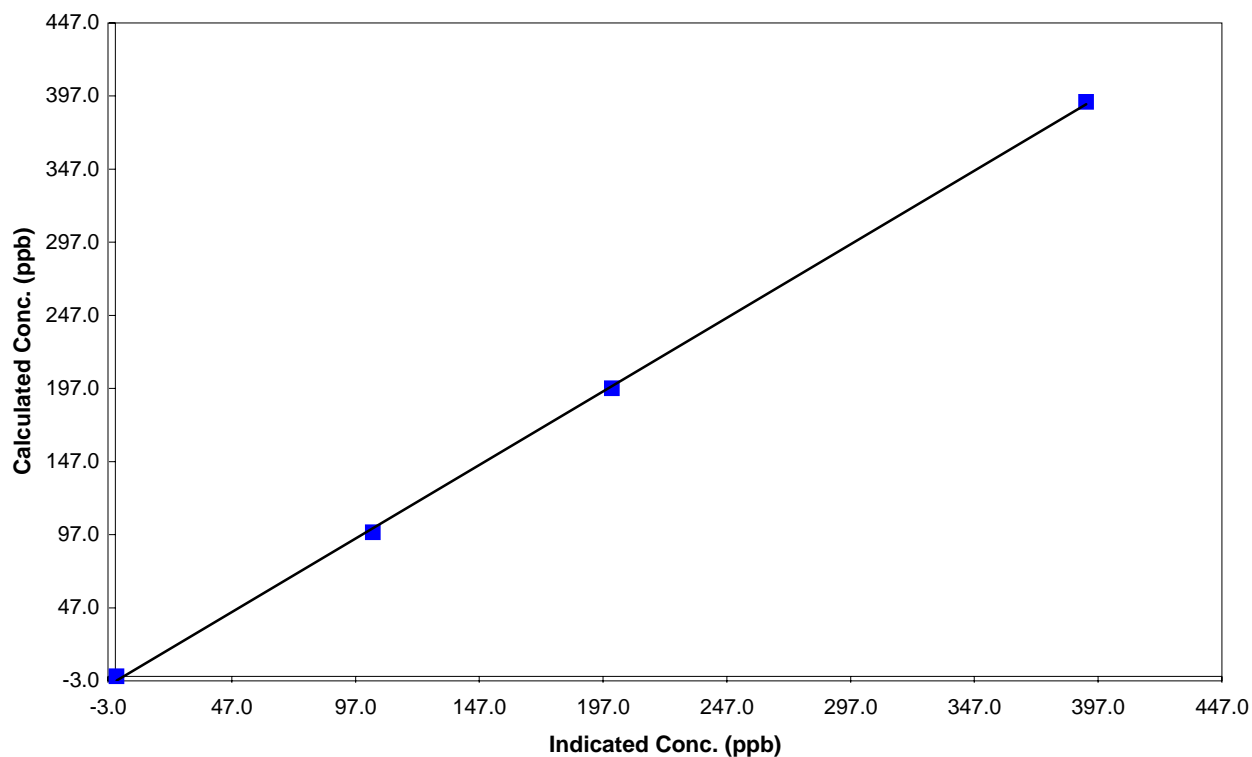
Station Information

Calibration Date	May 25, 2010	Previous Calibration	April 14, 2010
Station Number	9	Station Location	Rover Kinuso
Start Time (MST)	9:15	End Time (MST)	13:12
Analyzer make	TEI 42i	Analyzer serial #	701120011

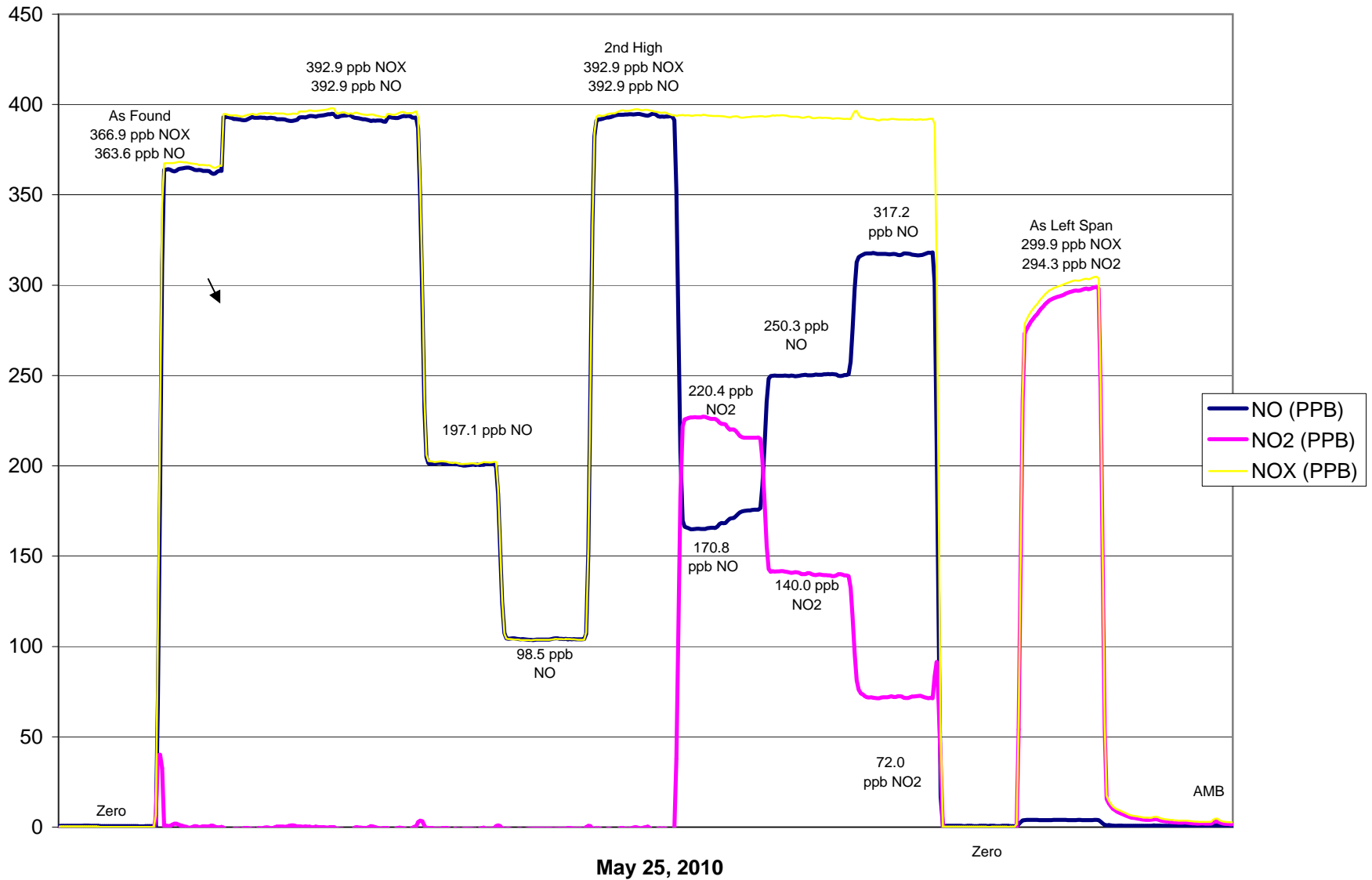
Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999757
392.9	392.2	1.0020		
197.1	200.7	0.9820	Slope	1.006602
98.5	104.0	0.9476		
			Intercept	-3.352176

NO Calibration Curve



Kinuso NO_x Calibration



Calibration Report



Parameter 03

Air Monitoring Network PASZA

Station Information

Calibration Date	May 25, 2010	Previous Calibration	April 14, 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)	11:55	End Time (MST)	14:59
Barometric Pressure	0.935 atm	Station Temperature	15.7 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	1.009731	Calculated slope	1.054356
Calculated intercept	0.619882	Calculated intercept	-3.855283
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	-14.5	ppb	-16.3	ppb
Span	1.479		1.479	
Cell A intensity	85683	Hz	80691	Hz
Cell B intensity	101165	Hz	95237	Hz
Pressure	704	in Hg	704	in Hg
CellA Flow	0.718	ccm	0.721	ccm
Cell B Flow	0.691	cmm	0.691	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)
4988	0.00	0.0	0.1	N/A
49.88	0.30	223.3	211.7	1.0546
4990	0.20	143.9	143.4	1.0038
4990	0.10	77.0	80.7	0.9541
4990	0.00	0.0	0.1	As found zero
4990	0.30	223.3	211.9	As found span
Average Correction Factor				1.0042

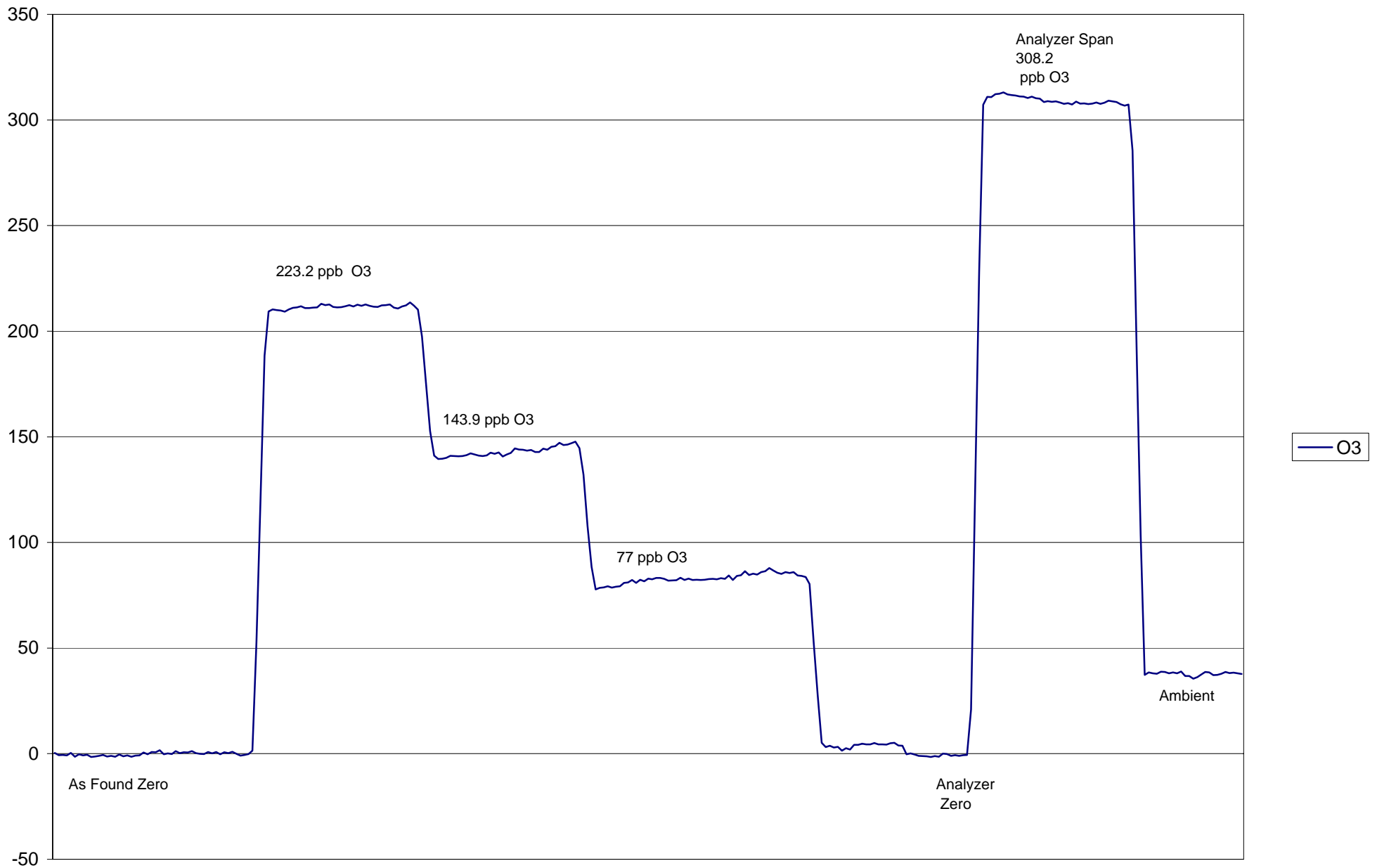
Calculated value of As Found Response: 214.4 ppm Percent Change of As Found: -4.0%

	before calibration		after calibration	
Auto zero	2.1	ppb	-4.7	ppb
Auto span	326.9	ppb	308.2	ppb

Notes: _____

Calibration Performed By: Grover/ Courney

Kinuso O₃ Calibration



May 25, 2010

Calibration Report



Parameter SO2

Air Monitoring Network PASZA

Station Information

Calibration Date	May 24, 2010	Previous Calibration	April 13, 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)	12:46	End Time (MST)	15:21
Barometric Pressure	702.00 mm	Station Temperature	14.7 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	1.002671	Calculated slope	1.002396
Calculated intercept	-1.876147	Calculated intercept	-2.325015
Analyzer make	TEI 45C	Analyzer serial #	45C-57531-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	25.4		24.6	
Coefficient	0.883		0.875	
UV Lamp Voltage	919	LPM	917	LPM
Chamber Temp	44.2	V	44	V
Perm Gas Temp	35.02	C	36	C
Pressure	617.3	in Hg	617.6	in Hg
Sample Flow	0.468	LPM	0.468	LPM
Lamp Intensity	48906	Hz	48851	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.00	0.0	0.0	N/A
4989	39.85	401.0	401.0	0.9999
4989	19.89	200.9	204.3	0.9836
4989	9.94	100.6	104.8	0.9596
4989	0.00	0.0	0.0	As found zero
4989	39.88	401.3	404.0	As found span
Average Correction Factor				0.9811

Calculated value of As Found Response: 403.212 ppm Percent Change of As Found: -0.5%

	before calibration		after calibration	
Auto zero	0.0	ppm	0.0	ppm
Auto span	150.3	ppm	152.1	ppm

Notes: A span adjustment was performed.

Part of the initial high point was not captured on the DACS due to configuration issues.

Calibration Performed By: Grover Christiansen

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA

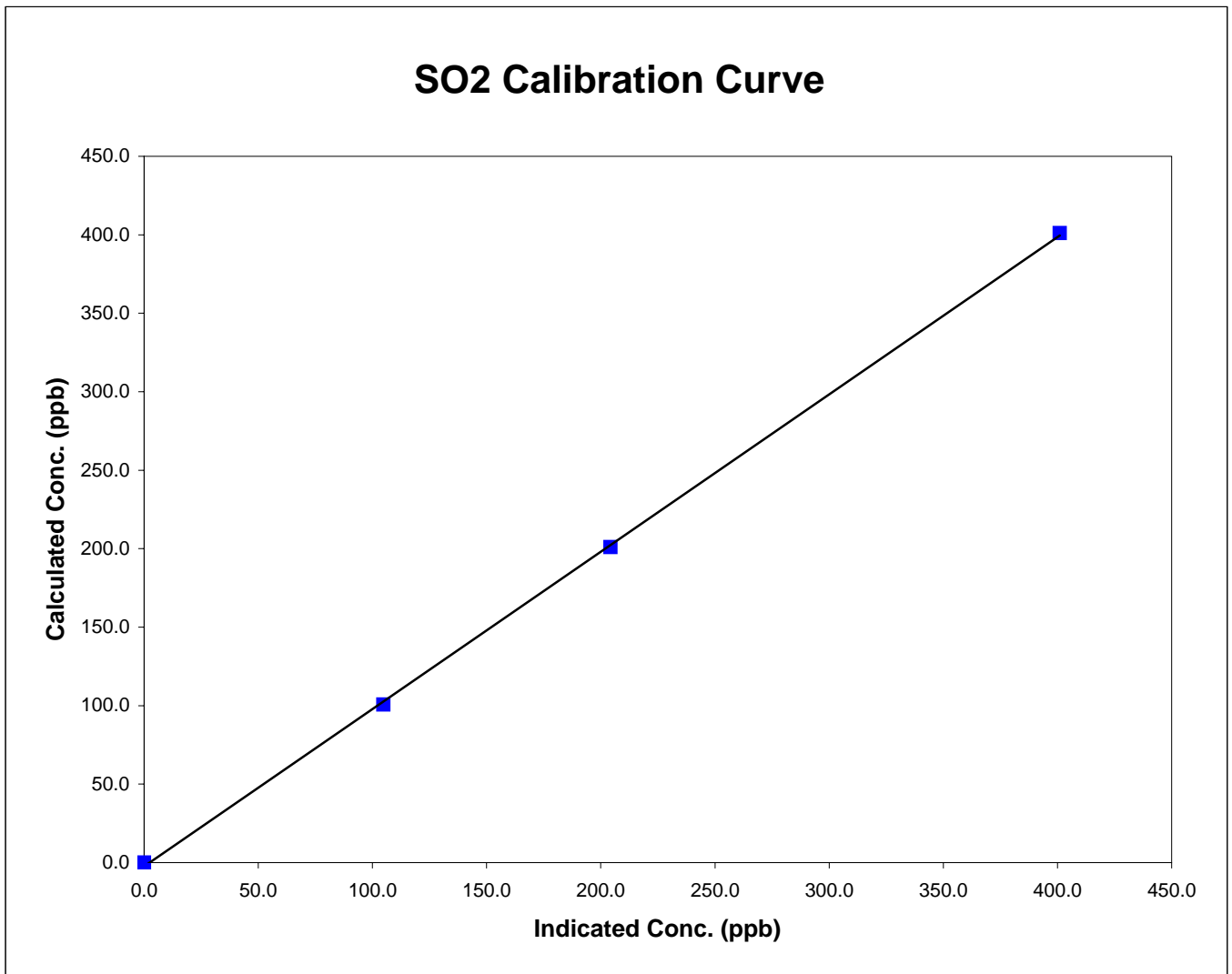


Station Information

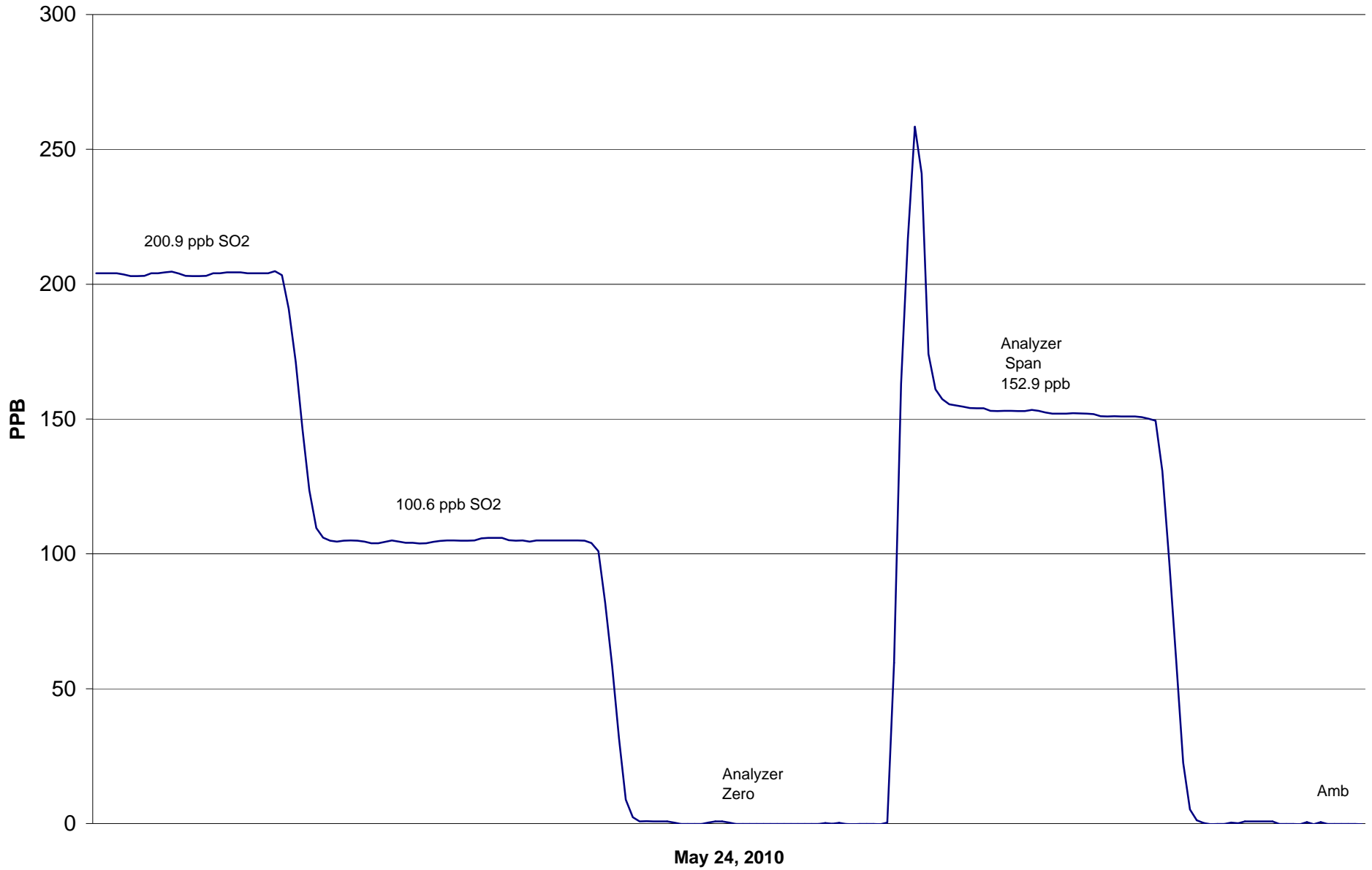
Calibration Date	May 24, 2010	Previous Calibration	April 13, 2010
Station Number	6	Station Location	Valleyview
Start Time (MST)	12:46	End Time (MST)	14:42
Analyzer make/model	TEI 45C	Analyzer serial #	45C-57531-313

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
401.0	401.0	0.9999	Correlation Coefficient	0.999839
200.9	204.3	0.9836		
100.6	104.8	0.9596	Slope	1.002396
			Intercept	-2.325015



Valleyview SO₂ Calibration



Calibration Report



Parameter H2S

Air Monitoring Network PASZA

Station Information

Calibration Date	May 24, 2010	Previous Calibration	April 13, 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)	14:02	End Time (MST)	17:00
Barometric Pressure	702.00 mm	Station Temperature	14.7 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	1.009008	Calculated slope	1.000385
Calculated intercept	-0.145253	Calculated intercept	-0.235862
Analyzer make	TEI Model 43i - APSCB	Analyzer serial #	701120010

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	4.9	ppb	4.8	ppb
Coefficient	1.085		1.056	
Lamp Voltage	789	v	789	v
Chamber Temp	45.02	c	45.5	c
Perm Oven Temp	45	c	45	c
Pressure	655	mm Hg	651	mm Hg
Sample Flow	.325	ccm	.323	ccm
Lamp Intensity	91.0	%	91.0	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4989	0.00	0.0	0.1	N/A
4989	79.75	81.0	81.2	0.9980
4989	39.83	40.8	41.1	0.9928
4989	9.93	10.2	10.5	0.9723
4989	0.00	0.0	0.2	As found zero
4989	79.75	81.0	82.7	As found span
Average Correction Factor				0.9877

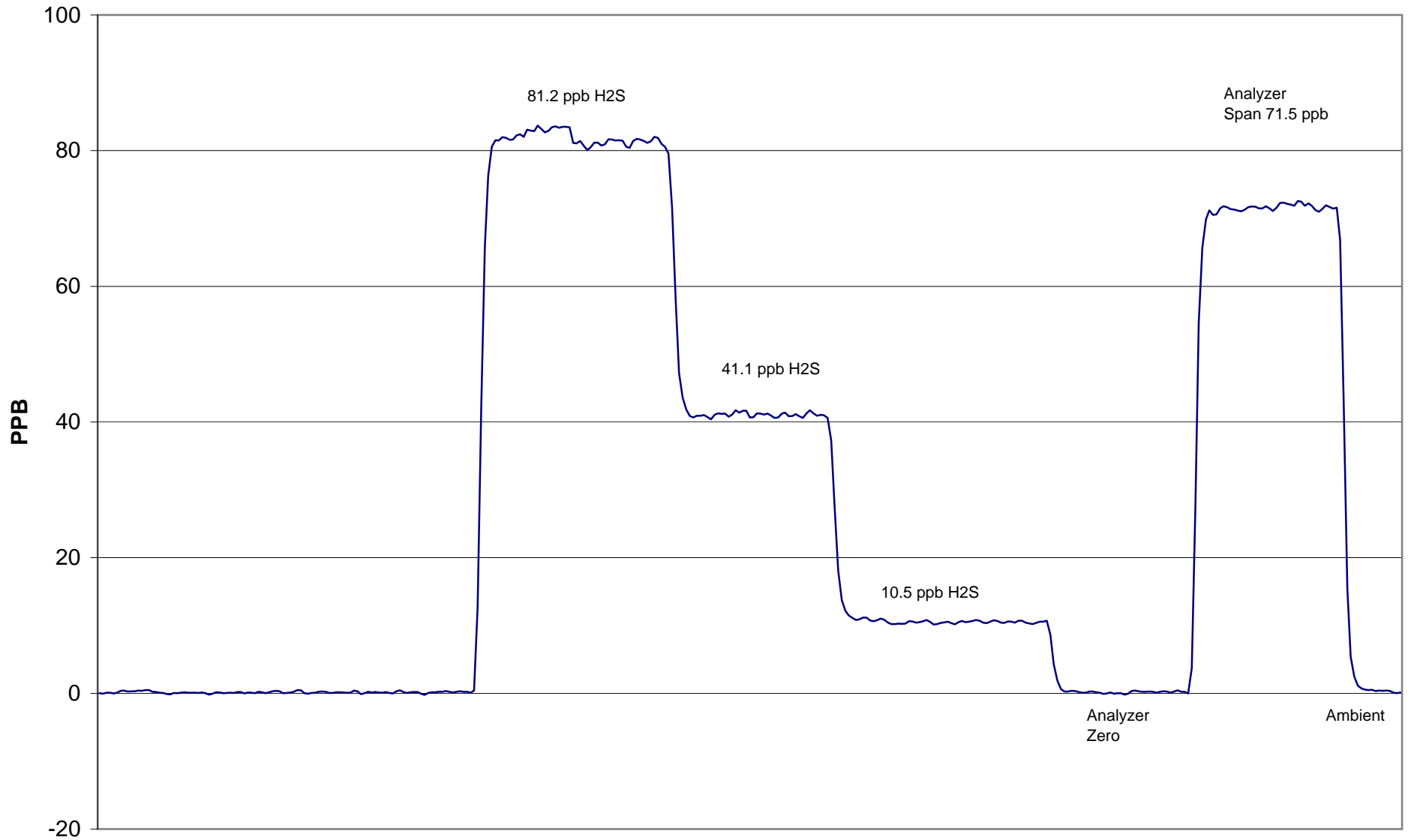
Calculated value of As Found Response: 83.11 ppm Percent Change of As Found: -2.6%

	before calibration		after calibration	
Auto zero	-0.1	ppm	-0.1	ppm
Auto span	59.5	ppm	71.5	ppm

Notes: _____

Calibration Performed By: Grover Christiansen/Courtney Thompson

Valleyview H₂S Calibration



May 24, 2010