



Peace AirShed Zone Association

Ambient Air Monitoring Network Summary

**Continuous Ambient Air Quality Monitoring Program
Monthly Report
August 2008**

Operations and Reporting
FOCUS
AIR QUALITY MONITORING



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September 30, 2008

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RE: Peace Airshed Zone Association (PASZA) – August 2008 Ambient Air Report

Enclosed is the PASZA Ambient Monitoring Network Report for the month of **August 2008**.

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

The measured ambient air quality was within the Provincial and Federal objectives for the Henry Pirker, Evergreen Park, Smoky Heights, Beaverlodge, Spirit River and Valleyview stations.

During the month of August the following events were noted:

Henry Pirker Station:

- ◆ Spans for the SO₂ analyzer increased from August 16th to the 21st due to a failing perm tube; followed by no spans from August 22nd to 26th due to a broken perm tube; perm tube replaced on August 26th.
- ◆ Power bump on August 12th resulted in one (1) hour of invalid data for the THC analyzer.
- ◆ The THC analyzer had twenty-one (21) hours of invalid data on August 31st due to flame going out.
- ◆ Power bump on August 21st resulted in two (2) hours of invalid data for the TRS analyzer.
- ◆ All analyzers / sensors at the Henry Pirker station had an operational uptime greater than 90%.

Evergreen Park Station:

- ◆ Several power bumps throughout the month played havoc on the TEOM; total of six (6) hours of invalid data.
- ◆ All analyzers / sensors at the Evergreen Park station had an operational uptime greater than 90%.

Smoky Heights Station:

- ◆ Several power bumps throughout the month played havoc on the TEOM; total of four (4) hours of invalid data.
- ◆ All analyzers / sensors at the Smoky Heights station had an operational uptime greater than 90%.

Beaverlodge Station:

- ◆ Several power bumps throughout the month played havoc on the TEOM; total of five (5) hours of invalid data.

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

Portable – Spirit River Station:

- ◆ Missing data from August 7th to the 9th and August 10th to the 11th due to failure of the DACS for a total of seventy-two (72) hours of invalid data for all analyzers and sensors.
- ◆ TRS analyzer spans increased from August 25th to end of month due to a small leak in pump.
- ◆ All analyzers / sensors at the Spirit River station had an operational uptime greater than 90%.

Valleyview Station:

- ◆ All analyzers / sensors at the Valleyview station had an operational uptime of 100%.

Passive Monitoring - 54 Stations throughout the PASZA zone:

There were seven duplicate sites sampled in the month of August: Silver Valley, Forth Creek, Beaverlodge, Poplar, Pinto Creek, Simon Lake Store and Grande Prairie HP. The O₃ sample result at the Ronan site was void (result was questionable). The passive sample analyses were performed by MAXXAM Analytics Inc.

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

- Monthly average concentrations for SO₂ passives ranged from 0.1 ppb to 0.5 ppb, with a mean of 0.3 ppb.
- Monthly average concentrations for NO₂ passives ranged from 0.3 ppb to 3.9 ppb, with a mean of 1.3 ppb.
- Monthly average concentrations for O₃ passives ranged from 18.7 ppb to 35.6 ppb, with a mean of 25.6 ppb.

If you have any questions, please contact the Focus Intec office at 1.403.255.9440 (Kelly Baragar or Sharon Whiteley).

On Behalf of the,
Peace Airshed Zone Association



Michael Bisaga
PASZA Program Manager



Sharon Whiteley, B.Sc..
AQM Data Specialist

PASZA Monthly Continuous Data Summary

Aug-2008 Peace Airshed Zone Association							Maximum Recorded Values				Operational Time (%)
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		1-hr		24-hr / 8-hr		
	1-hr	24-hr			1-hr	24-hr	Conc	Day	Conc	Day	
SO ₂ (ppb)	172	57	Henry Pirker	0.4	0	0	10.1	Aug-06 12:00	1.6	Aug-08	100.0%
SO ₂ (ppb)	172	57	Evergreen Park	0.6	0	0	20.0	Aug-06 12:00	2.4	Aug-17	100.0%
SO ₂ (ppb)	172	57	Smoky Heights	0.3	0	0	3.9	Aug-04 06:00	1.0	Aug-04	100.0%
SO ₂ (ppb)	172	57	Beaverlodge	0.4	0	0	9.6	Aug-17 04:00	1.8	Aug-15	100.0%
SO ₂ (ppb)	172	57	Portable-Spirit River	0.3	0	0	3.9	Aug-15 02:00	0.9	Aug-15	90.3%
SO ₂ (ppb)	172	57	Valleyview	0.8	0	0	13.1	Aug-02 20:00	3.6	Aug-02	100.0%
NO (ppb)			Henry Pirker	1.7	-	-	27.2	Aug-15 09:00	5.9	Aug-15	100.0%
NO ₂ (ppb)	212	106	Henry Pirker	5.3	0	0	24.9	Aug-08 10:00	11.9	Aug-15	100.0%
NO _x (ppb)			Henry Pirker	7.1	-	-	49.5	Aug-15 09:00	17.8	Aug-15	100.0%
NO (ppb)			Beaverlodge	0.5	-	-	12.0	Aug-15 07:00	1.3	Aug-15	100.0%
NO ₂ (ppb)	212	106	Beaverlodge	2.7	0	0	13.1	Aug-08 09:00	5.4	Aug-15	100.0%
NO _x (ppb)			Beaverlodge	3.3	-	-	21.3	Aug-15 07:00	6.9	Aug-15	100.0%
NO (ppb)			Portable-Spirit River	0.6	-	-	23.8	Aug-24 06:00	5.0	Aug-24	90.3%
NO ₂ (ppb)	212	106	Portable-Spirit River	2.6	0	0	18.8	Aug-24 01:00	5.6	Aug-24	90.3%
NO _x (ppb)			Portable-Spirit River	3.1	-	-	32.8	Aug-24 06:00	10.4	Aug-24	90.3%
O ₃ (ppb)	82		Henry Pirker	22.8	0	-	76.2	Aug-08 13:00	38.1	Aug-08	100.0%
O ₃ (ppb) - 8-hr		65	Henry Pirker			0			62.9	Aug-08	
O ₃ (ppb)	82		Beaverlodge	21.1	0	-	61.8	Aug-09 19:00	40.0	Aug-08	100.0%
O ₃ (ppb) - 8-hr		65	Beaverlodge			0			55.4	Aug-08	
O ₃ (ppb)	82		Portable-Spirit River	20.0	0	-	55.3	Aug-09 15:00	30.3	Aug-06	90.3%
O ₃ (ppb) - 8-hr		65	Portable-Spirit River			0			52.0	Aug-09	
CO (ppm)	13		Henry Pirker	0.05	0	-	0.4	Aug-14 23:00	0.1	Aug-15	100.0%
CO (ppm) - 8-hr		5	Henry Pirker			0			0.2	Aug-15	
THC (ppm)			Henry Pirker	1.94	-	-	2.8	Aug-17 22:00	2.2	Aug-08	97.0%
TRS (ppb)			Henry Pirker	0.3	-	-	1.4	Aug-18 06:00	0.6	Aug-15	99.7%
TRS (ppb)			Evergreen Park	0.6	-	-	3.1	Aug-18 05:00	1.1	Aug-15	100.0%
TRS (ppb)			Smoky Heights	0.5	-	-	1.3	Aug-03 05:00	0.7	Aug-14	100.0%
TRS (ppb)			Portable-Spirit River	0.6	-	-	1.3	Aug-31 07:00	0.8	Aug-24	90.3%
H ₂ S (ppb)	10	3	Valleyview	0.1	0	0	1.8	Aug-17 07:00	0.3	Aug-17	100.0%
PM _{2.5} (µg/m ³)	80	30	Henry Pirker	3.9	0	0	40.4	Aug-08 19:00	15.2	Aug-08	95.0%
PM _{2.5} (µg/m ³)	80	30	Evergreen Park	5.1	0	0	41.7	Aug-27 16:00	13.8	Aug-08	93.4%
PM _{2.5} (µg/m ³)	80	30	Smoky Heights	3.8	0	0	30.9	Aug-15 21:00	11.0	Aug-08	96.1%
PM _{2.5} (µg/m ³)	80	30	Beaverlodge	4.1	0	0	34.7	Aug-17 21:00	16.5	Aug-08	93.8%

Continuous Network Equipment Summary

PASZA – Henry Pirker Station

General Station Issues

Routine monthly calibrations were performed on August 7th (SO₂, NO_x & O₃), August 8th (CO & TRS) and August 11th (THC). A second SO₂ calibration was done on August 21st to address span issues.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	Spans for the SO ₂ analyzer increased from August 16 th to the 21 st due to a failing perm tube; followed by no spans from August 22 nd to 26 th due to a broken perm tube; perm tube replaced on August 26 th .
NO _x /NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
CO	TEI	48C	No operational issues observed.
THC	TEI	51-CLT	A power bump resulted in one (1) hour of invalid data on August 12 th . The THC analyzer had twenty-one (21) hours of invalid data on August 31 st due to flame going out.
TRS	TEI	43C	A power bump resulted in two (2) hours of invalid data on August 21 st .
PM _{2.5}	R&P	1400AB	Thirty-seven (37) hours were flagged invalid due to excessive baseline drift.
RH	Met One	083D	No operational issues observed.
AT	Met One	083D	No operational issues observed.
SR	Met One	096-1	No operational issues observed.
WS/WD	Met One	010C/020C	No operational issues observed.

PASZA – Evergreen Park Station

General Station Issues

Routine monthly calibrations were performed on August 28th (SO₂ & TRS).

Parameter	Make	Model	Notes
SO ₂	TEI	43i	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Power bumps resulted in a total of seven (7) hours flagged invalid. Forty-two (42) hours were flagged invalid due to excessive baseline drift.
AT	Met One	083D	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

PASZA – Smoky Heights Station

General Station Issues

Routine monthly calibrations were performed on August 25th (TRS & PM_{2.5}) and August 28th (SO₂).

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No operational issues observed.
TRS	TEI	43C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Power bumps resulted in a total of four (4) hours of invalid data. Twenty-five (25) hours were flagged invalid due to excessive baseline drift.
AT	Met One	083D	No operational issues observed.
WS	Met One	010C	No operational issues observed.
WD	Met One	020C	No operational issues observed.

PASZA – Beaverlodge Station

General Station Issues

Routine monthly calibrations were performed on August 12th (SO₂ & NO_x) and August 18th (O₃).

Parameter	Make	Model	Notes
SO ₂	TEI	43CTL	No operational issues observed.
NO _x /NO/NO ₂	TEI	42C	No operational issues observed.
O ₃	TEI	49C	No operational issues observed.
PM _{2.5}	R&P	1400AB	Power bumps resulted in a total of five (5) hours of invalid data. Forty-one (41) hours were flagged invalid due to excessive baseline drift.
AT	n/a	n/a	No operational issues observed.
RH	n/a	n/a	No operational issues observed.
WS	Blue Sky	857	No operational issues observed.
WD	Blue Sky	857	No operational issues observed.

PASZA – Spirit River (Portable) Station

General Station Issues

Routine monthly calibrations were performed on August 20th (TRS) and August 22nd (SO₂, NO_x & O₃). Missing data from August 7th to the 9th and August 10th to the 11th due to failure of the DACS for a total of seventy-two (72) hours of invalid data for all analyzers and sensors.

Parameter	Make	Model	Notes
SO ₂	TEI	43C	No other operational issues observed.
NOx/NO/NO ₂	TEI	42i	No other operational issues observed.
TRS	TEI	43C	TRS analyzer spans increased from August 25 th to end of month due to a small leak in pump.
O ₃	TEI	49C	No other operational issues observed.
AT	Gill	Met Pak 3	No other operational issues observed.
RH	Gill	Met Pak 3	No other operational issues observed.
WS	Met One		No other operational issues observed.
WD	Met One		No other operational issues observed.

PASZA – Valleyview Station

General Station Issues

Routine monthly calibrations were performed on August 19th (SO₂ & H₂S).

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

PASZA

Henry Pirker Station

Monthly Summary Tables, Graphs and
Roses

**Peace Airshed Zone Association
Summary of Hourly Averages**

**Henry Pirker - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

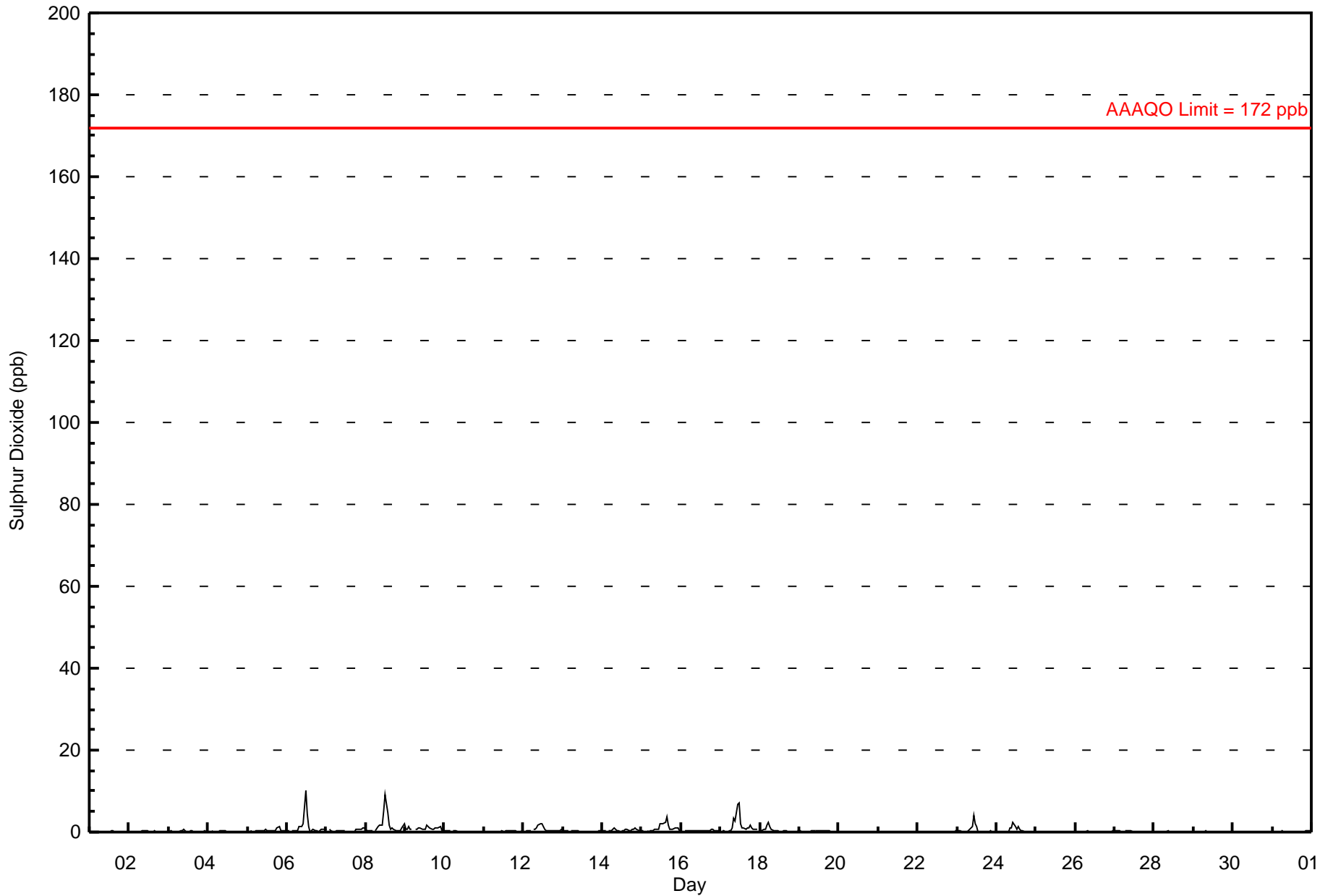
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 10.1 ppb on Aug 6 12:00	Maximum Daily Average: 1.6 ppb on Aug 8
Minimum Value: 0 ppb on Aug 1 06:00	Hours of Data: 704
Minimum Daily Average: 0.0 ppb on Aug 30	Hours of Missing Data: 40
Maximum Diurnal Average: 1.1 ppb at hour 12	Hours of Calibration: 40
Monthly Average: 0.37 ppb	Percent Operational Time: 100.0
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.4 P ₉₀ = 0.9 P ₉₉ = 4.1	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
2-Aug	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
3-Aug	0	0	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.7
4-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
5-Aug	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0.4	1.5
6-Aug	0	0	A	0	0	0	0	1	1	1	2	10	4	1	0	0	1	1	0	0	0	1	1	1	1.2	10.1
7-Aug	1	A	1	0	0	0	0	0	0	0	0	0	C	C	C	0	0	0	1	1	1	1	1	1	0.4	0.9
8-Aug	1	0	0	0	0	A	0	1	2	2	2	5	9	5	2	1	1	1	0	0	0	0	1	2	1.6	9.3
9-Aug	1	1	1	1	1	A	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	0	0	0.9	1.7
10-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
11-Aug	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
12-Aug	0	0	0	0	0	A	1	1	1	2	2	2	1	1	0	0	0	0	0	0	0	0	1	0	0.7	2.0
13-Aug	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
14-Aug	0	0	0	A	0	0	1	1	1	0	0	0	0	0	1	1	0	0	1	1	1	1	0	0	0.5	1.0
15-Aug	0	0	A	0	0	0	0	0	1	1	1	2	2	2	2	4	2	1	1	1	1	1	1	0	1.0	3.6
16-Aug	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.4	0.6
17-Aug	A	0	0	0	0	0	0	1	3	3	7	7	2	1	1	1	1	1	2	1	1	1	1	A	1.5	7.2
18-Aug	0	0	1	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.5	2.3
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0	0	0.2	0.5
20-Aug	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	0.1
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0.0	0.1
22-Aug	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	0.2
23-Aug	0	0	0	0	A	0	0	0	1	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0.5	4.1
24-Aug	0	0	0	A	0	0	0	0	1	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0.4	2.4
25-Aug	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
26-Aug	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	0	0.0	0.3
27-Aug	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
28-Aug	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
29-Aug	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.2
30-Aug	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
31-Aug	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

0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.5	0.8	1.1	0.8	0.5	0.4	0.4	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.3	Diurnal Average	
0.8	0.7	1.3	0.6	1.6	2.3	1.4	1.3	3.4	2.6	6.8	10.1	9.3	4.7	2.5	3.6	1.7	0.9	1.7	1.5	1.1	1.2	1.0	1.9	Diurnal Maximum	

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

Hourly Averages for SO₂ at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

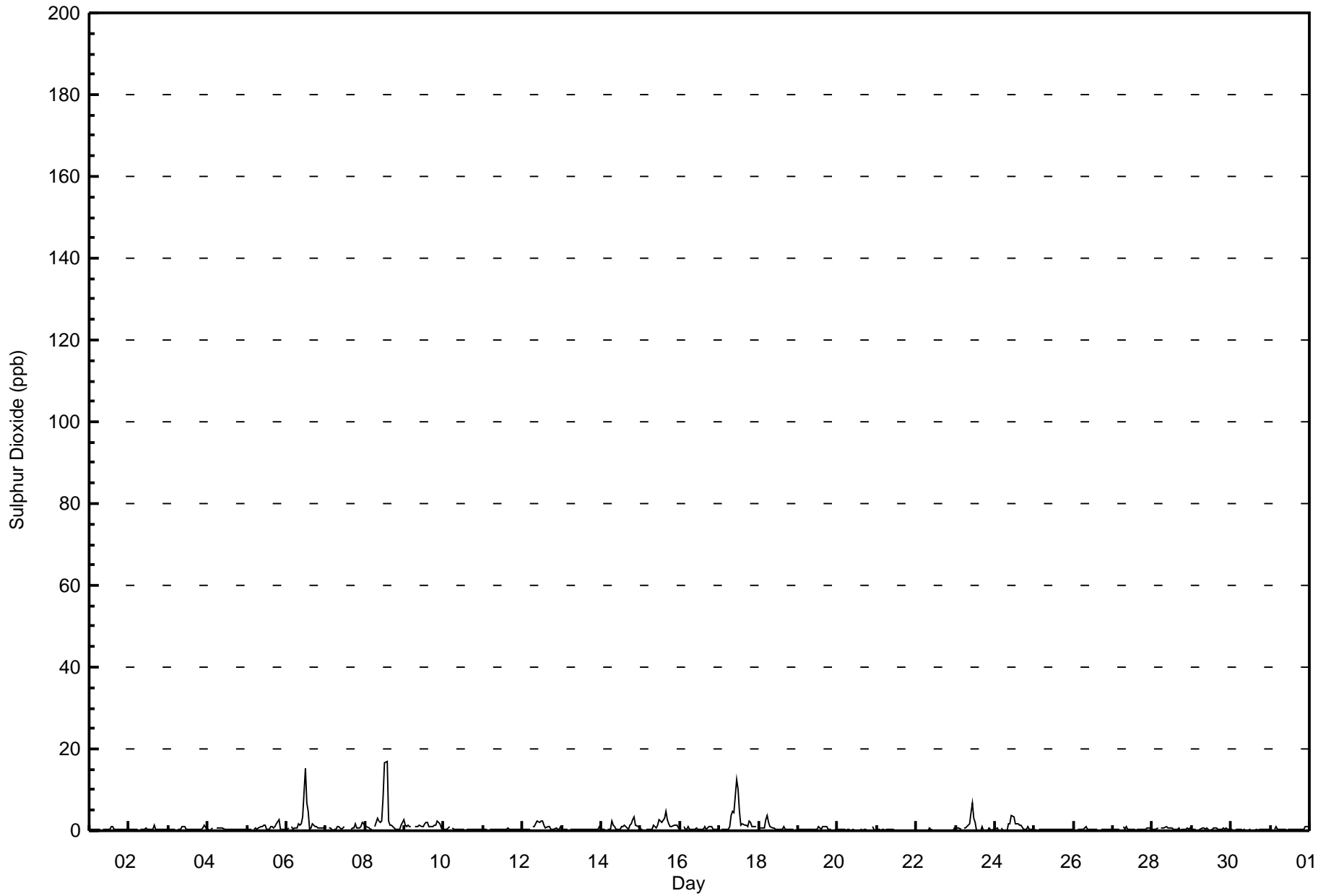
**Henry Pirker - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 16.9 ppb on Aug 8 14:00	Maximum Daily Average: 3.0 ppb on Aug 8	Hours in Service: 744
Minimum Value: 0 ppb on Aug 20 06:00	Minimum Daily Average: 0.1 ppb on Aug 22	Hours of Data: 704
Maximum Diurnal Average: 1.8 ppb at hour 12	Minimum Diurnal Average: 0.4 ppb at hour 3	Hours of Missing Data: 40
Monthly Average: 0.79 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.8 P ₉₀ = 1.5 P ₉₉ = 5.9	Hours of Calibration: 40
		Percent Operational Time: 100.0

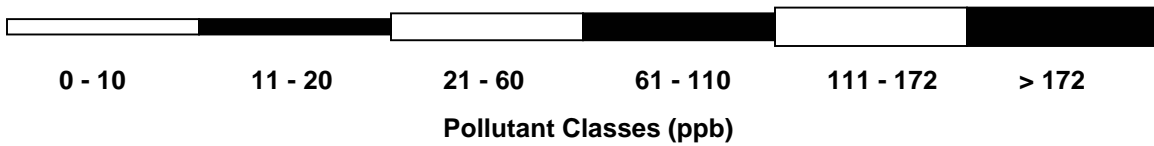
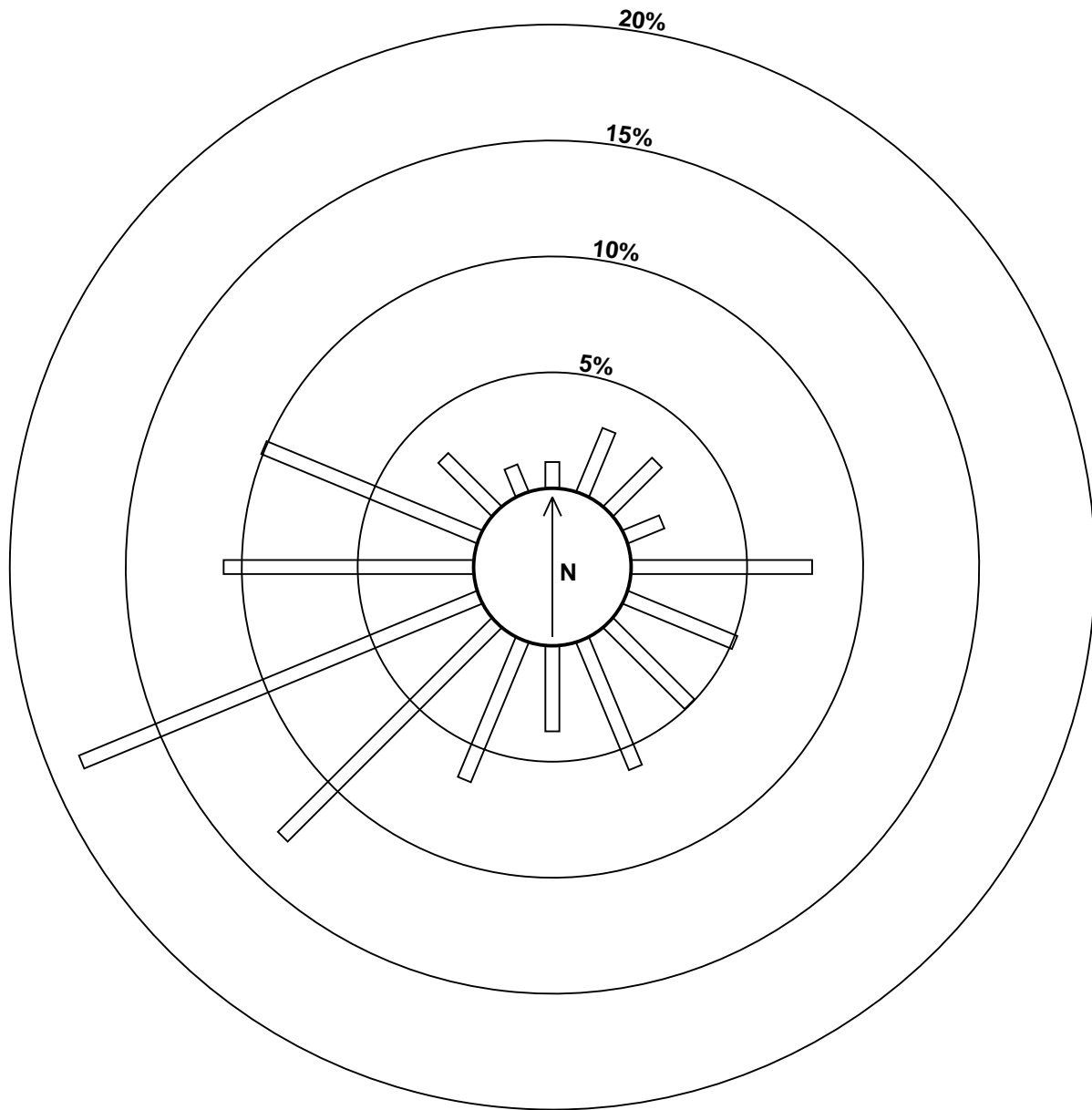
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0.5	0.9
2-Aug	0	0	0	0	0	0	0	A	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0.4	1.4
3-Aug	0	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2	0	0.5	1.5
4-Aug	0	0	0	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
5-Aug	0	0	0	A	0	1	0	1	1	1	1	1	0	0	1	1	1	1	2	3	0	0	0	0	0.8	2.8
6-Aug	0	1	A	1	0	1	1	2	1	2	3	15	7	5	0	1	2	1	1	1	1	1	1	1	2.0	15.2
7-Aug	1	A	1	1	0	0	1	1	1	0	1	1	C	C	C	0	1	1	2	1	1	1	2	2	0.8	2.0
8-Aug	1	1	1	0	0	A	1	3	2	2	2	8	16	17	2	1	1	1	0	0	0	0	1	3	3.0	16.9
9-Aug	1	1	1	1	1	A	1	1	1	1	1	1	2	2	2	1	1	1	1	1	2	2	1	1	1.3	2.2
10-Aug	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
11-Aug	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.5	0.5
12-Aug	0	0	0	0	0	A	0	1	1	2	2	2	2	1	1	1	0	0	0	0	1	0	0	1	1.0	2.5
13-Aug	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
14-Aug	0	0	0	A	0	0	2	1	1	0	0	0	1	1	1	1	0	1	2	3	3	1	1	1	1.1	3.4
15-Aug	0	0	A	0	0	0	0	0	1	1	1	3	2	2	3	5	3	2	1	1	1	2	2	1	1.4	4.6
16-Aug	0	A	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	1	1	1	1	1	1	1	0.6	1.0
17-Aug	A	0	0	0	0	0	1	4	5	4	13	10	5	1	2	1	2	1	2	2	1	1	1	A	2.7	12.7
18-Aug	1	1	1	1	3	4	2	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	A	0	0.8	3.7
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	1	0	0	A	0	0	0.6	1.0
20-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	0	0.3	1.0
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0	0.2	0.5
22-Aug	0	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.1	0.6
23-Aug	1	1	1	1	A	1	1	1	2	4	7	3	2	0	0	0	1	0	0	0	0	1	0	0	1.1	6.6
24-Aug	0	1	0	A	1	0	0	0	2	2	4	3	2	2	2	1	1	0	0	0	1	0	0	0	1.0	3.8
25-Aug	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
26-Aug	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	A	A	0	0	0	0	0	0	1	0.4	0.9
27-Aug	0	0	0	0	0	A	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.5	1.0
28-Aug	1	0	0	1	A	1	1	1	1	1	1	1	1	0	1	0	1	0	0	1	0	1	1	1	0.5	1.0
29-Aug	0	0	0	A	0	1	1	1	1	1	0	0	1	1	1	1	1	1	0	1	0	1	0	0	0.4	0.6
30-Aug	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5
31-Aug	0	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	0.9
	0.5	0.4	0.4	0.5	0.5	0.6	0.6	0.8	0.9	0.9	1.4	1.8	1.6	1.3	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	Diurnal Average	
	1.5	1.0	1.5	1.0	2.7	3.7	2.4	3.9	4.8	4.4	12.7	15.2	16.5	16.9	3.1	4.6	2.6	1.6	2.5	2.8	3.4	1.7	2.0	2.7	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for SO₂ at Henry Pirker August 2008



Pollutant Rose for SO₂ at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Henry Pirker - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 1.4 ppb on Aug 18 06:00	Maximum Daily Average: 0.6 ppb on Aug 15
Minimum Value: 0 ppb on Aug 23 15:00	Hours of Data: 707
Maximum Diurnal Average: 0.4 ppb at hour 6	Hours of Missing Data: 37
Monthly Average: 0.31 ppb	Hours of Calibration: 35
Minimum Daily Average: 0.2 ppb on Aug 30	Percent Operational Time: 99.7
Minimum Diurnal Average: 0.2 ppb at hour 17	
Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.4 P ₉₀ = 0.5 P ₉₉ = 0.8	

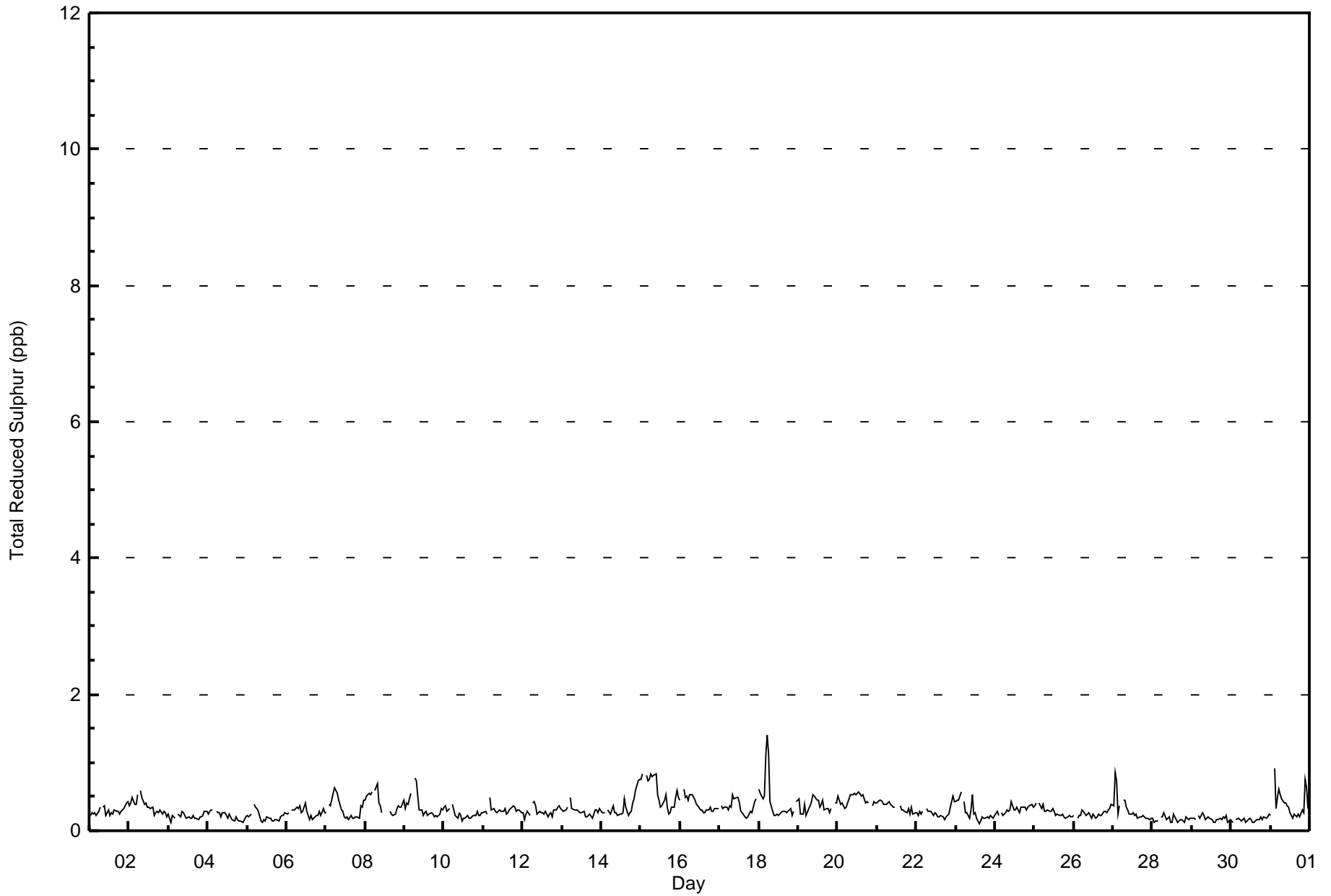
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
2-Aug	0	0	0	0	0	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6	
3-Aug	0	0	0	0	0	A	0	0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

0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	Diurnal Average	
0.8	0.8	0.9	0.8	1.1	1.4	1.1	0.8	0.8	0.8	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.8	0.7	0.7	Diurnal Maximum	

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 Averages for TRS at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Henry Pirker - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 2.0 ppb on Aug 18 07:00	Maximum Daily Average: 0.9 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 28 13:00	Minimum Daily Average: 0.5 ppb on Aug 30	Hours of Data: 707
Maximum Diurnal Average: 0.8 ppb at hour 6	Minimum Diurnal Average: 0.6 ppb at hour 18	Hours of Missing Data: 37
Monthly Average: 0.66 ppb	Percentiles: P ₁ = 0.4 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 P ₉₉ = 1.3	Hours of Calibration: 35
		Percent Operational Time: 99.7

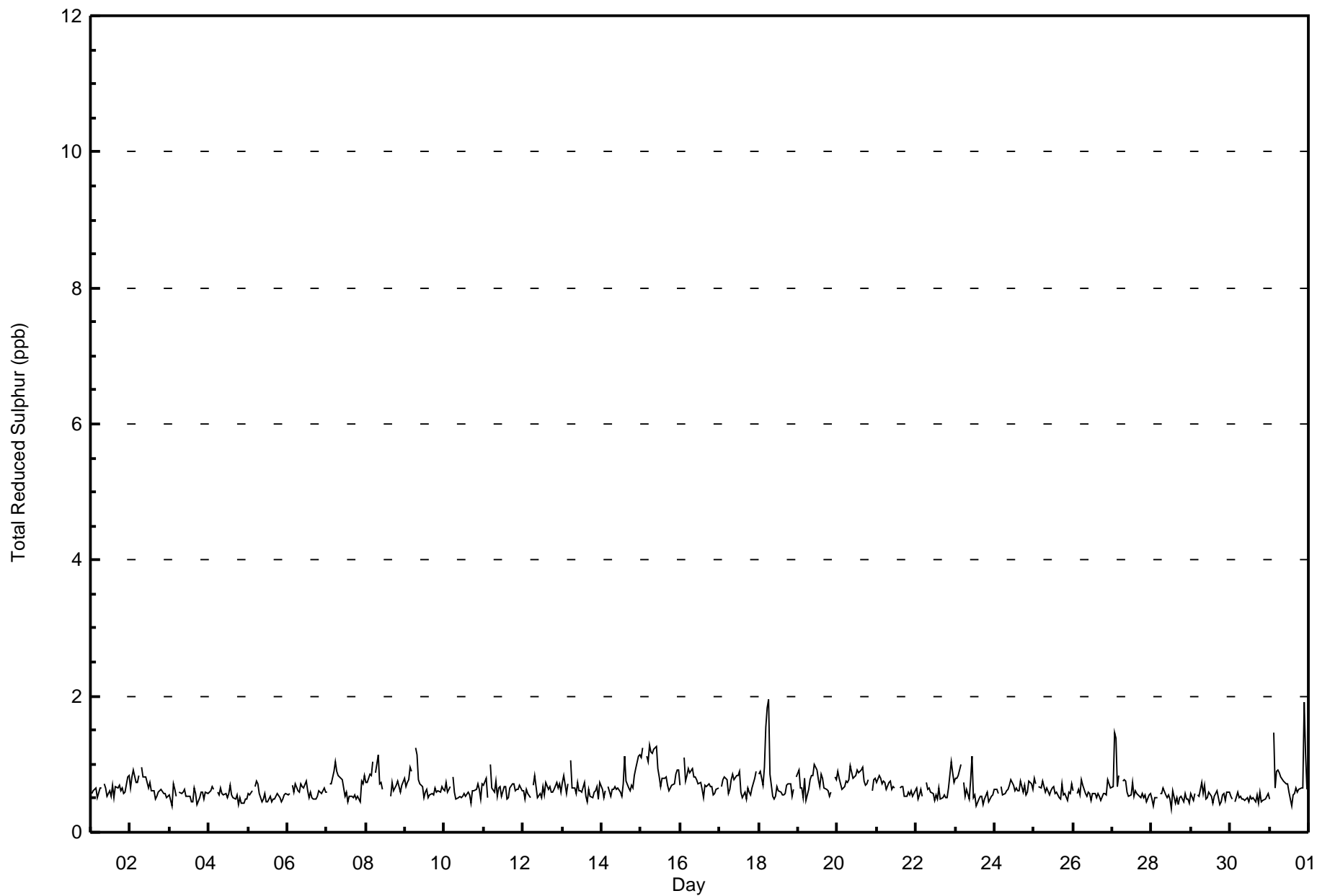
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
2-Aug	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0.7	1.0
3-Aug	1	0	1	1	1	A	1	1	1	1	1	1	0	0	1	1	0	1	1	1	1	0	1	1	0.5	0.7
4-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	0	1	0	1	0	0	0	0.5	0.7
5-Aug	1	1	1	A	1	1	1	1	0	0	1	0	0	1	0	0	0	1	1	1	0	0	1	1	0.5	0.7
6-Aug	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	0.6	0.7
7-Aug	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	0	1	1	1	1	0.7	1.0
8-Aug	1	1	1	1	1	A	1	1	1	1	C	C	C	C	1	1	1	1	1	1	1	1	1	1	0.8	1.1
9-Aug	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.2
10-Aug	1	1	1	1	A	1	1	0	1	1	1	1	1	1	1	1	0	1	1	1	1	1	0	1	0.6	0.8
11-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0.6	1.0
12-Aug	1	0	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0.6	0.8
13-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	1	0	1	0.6	1.1
14-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.1
15-Aug	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
16-Aug	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
17-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	0.7	0.9
18-Aug	1	1	1	1	2	2	2	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.0
19-Aug	1	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.0
20-Aug	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
21-Aug	1	1	1	1	1	1	1	1	1	1	1	P	P	1	1	1	1	1	1	1	1	1	1	1	0.7	0.8
22-Aug	1	0	1	1	1	A	1	1	1	1	0	1	0	1	0	1	0	1	1	1	1	1	1	1	0.6	1.0
23-Aug	1	1	1	1	A	1	1	1	0	1	1	1	0	0	1	1	0	1	0	1	0	0	1	1	0.6	1.1
24-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.8
25-Aug	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	0	1	1	1	0.6	0.8
26-Aug	1	A	1	1	1	1	1	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	1	0.6	0.8
27-Aug	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0.7	1.5
28-Aug	0	0	1	1	A	1	1	1	1	1	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0.5	0.7
29-Aug	1	0	1	A	1	1	1	1	1	0	1	1	0	1	1	1	0	0	1	1	0	1	1	1	0.5	0.7
30-Aug	1	0	A	0	1	1	1	0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	1	0.5	0.6
31-Aug	0	A	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	2	1	0.8	1.9

0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	Diurnal Average
1.1	1.5	1.5	1.1	1.5	1.8	2.0	1.2	1.2	1.3	1.1	0.9	0.9	0.9	1.1	1.0	0.7	0.7	0.7	0.7	0.8	0.8	1.9	1.1	1.1	Diurnal Maximum	

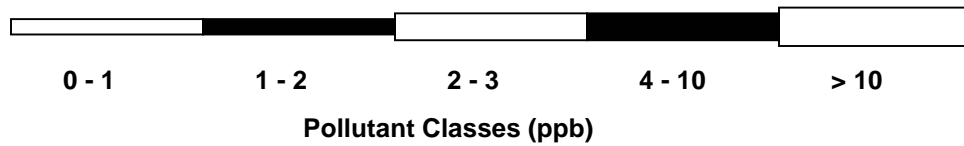
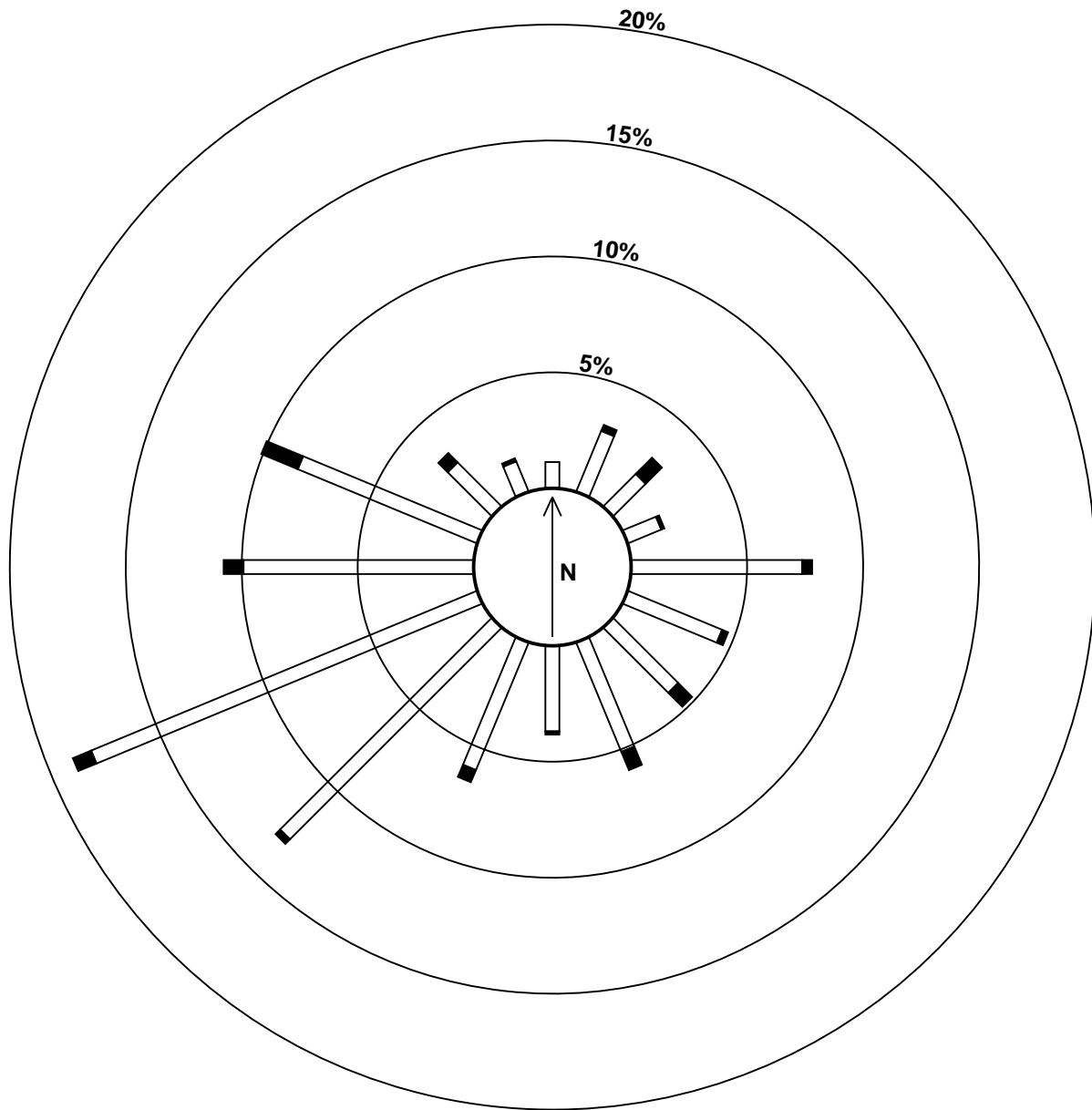
C - Calibration P - Power Failure A - Automated Daily Zero Span

Hourly Maximums for TRS at Henry Pirker

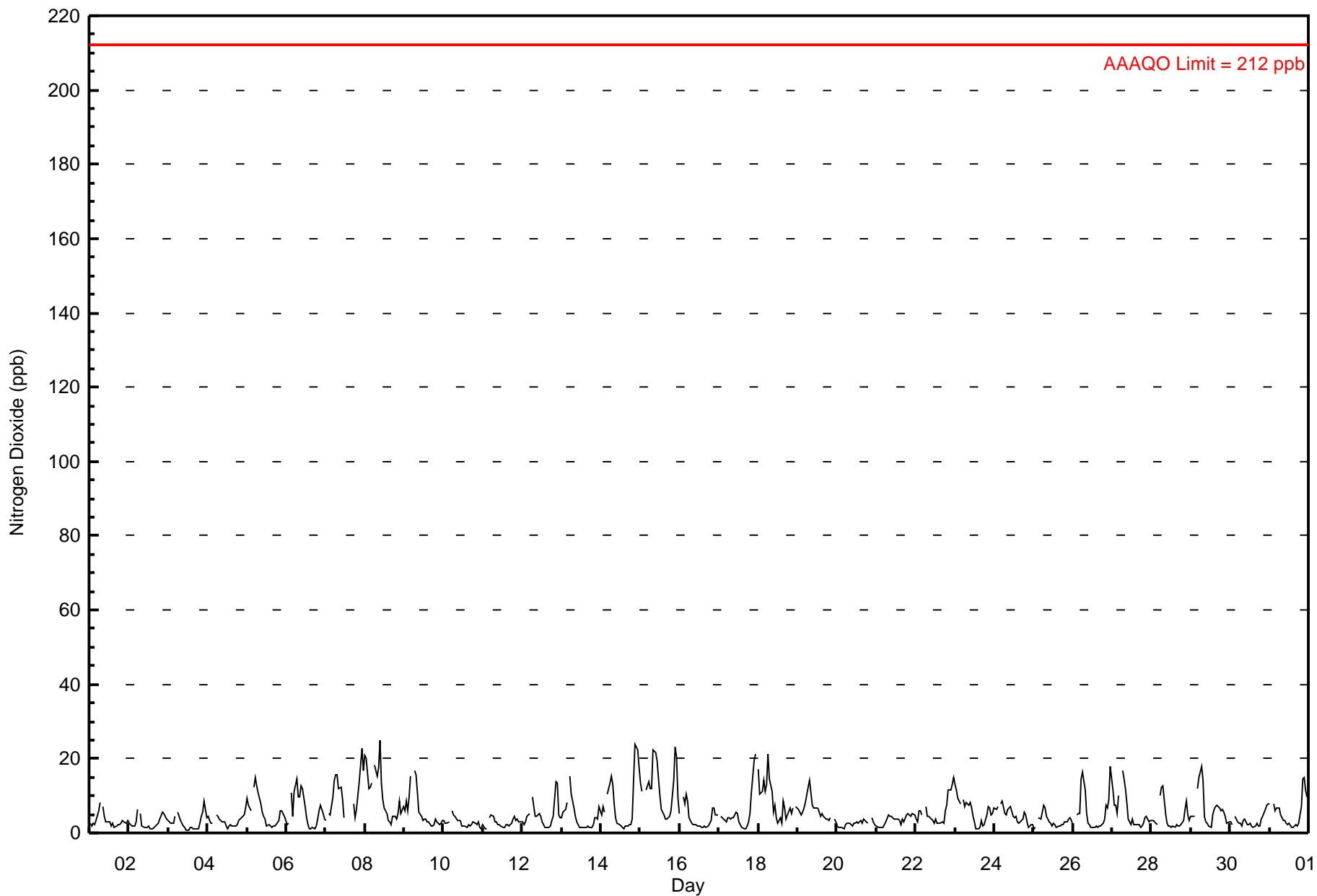
August 2008



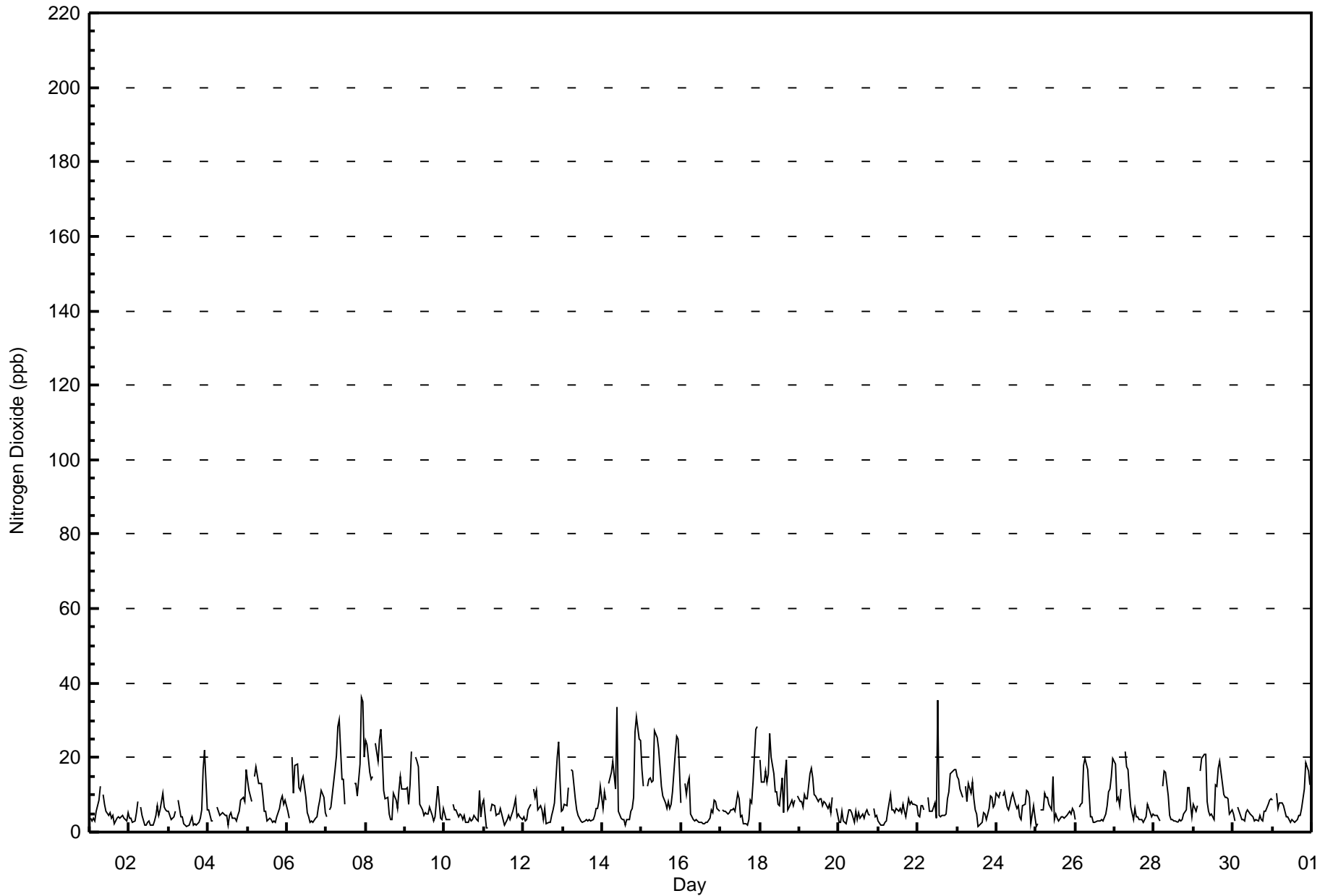
Pollutant Rose for TRS at Henry Pirker August 2008



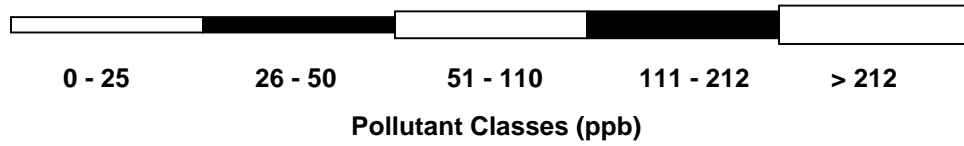
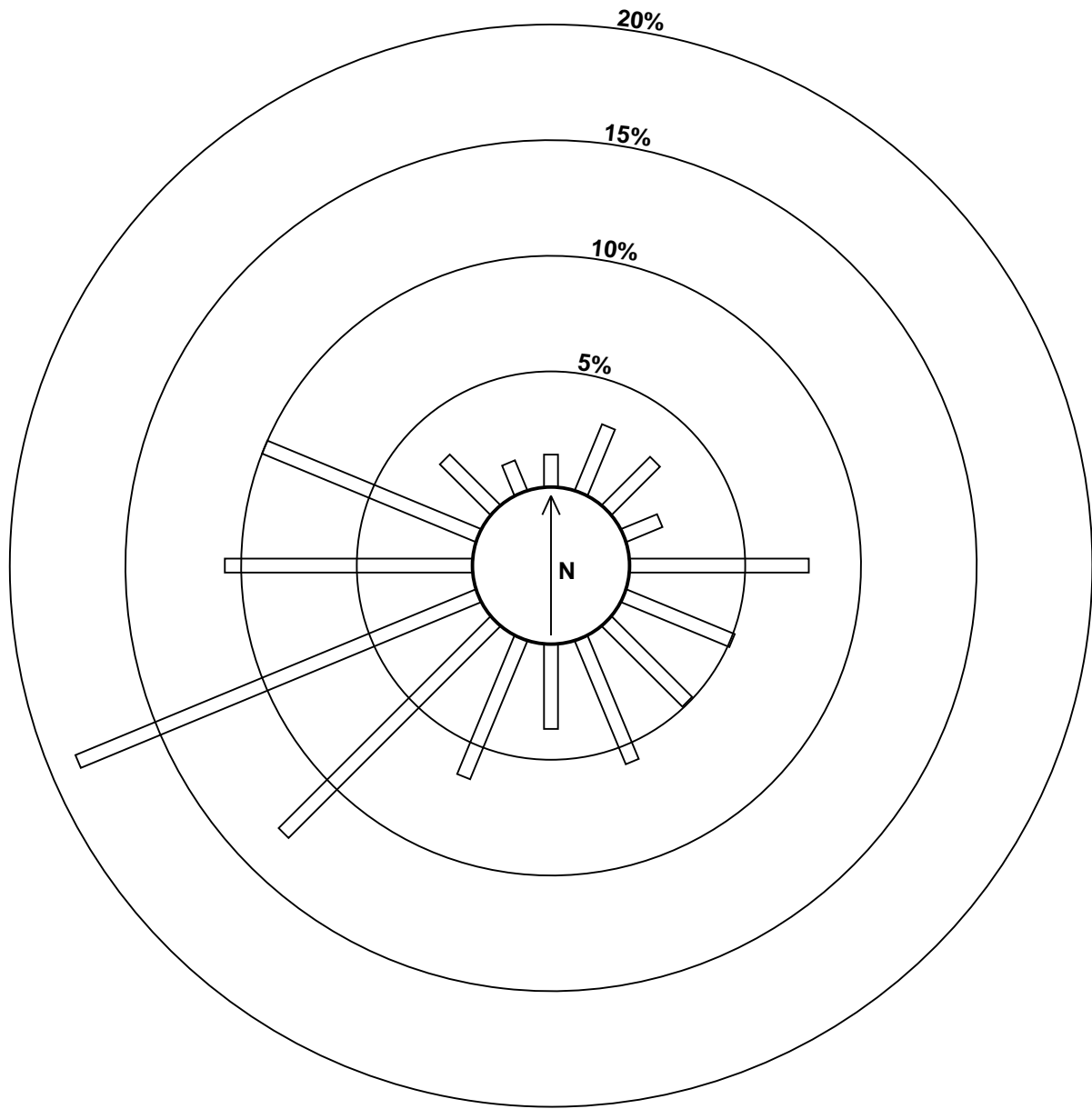
Hourly Averages for NO₂ at Henry Pirker August 2008



Hourly Maximums for NO₂ at Henry Pirker August 2008



Pollutant Rose for NO₂ at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Henry Pirker - Nitrogen Oxide (NO) - ppb
August 1, 2008 to September 1, 2008**

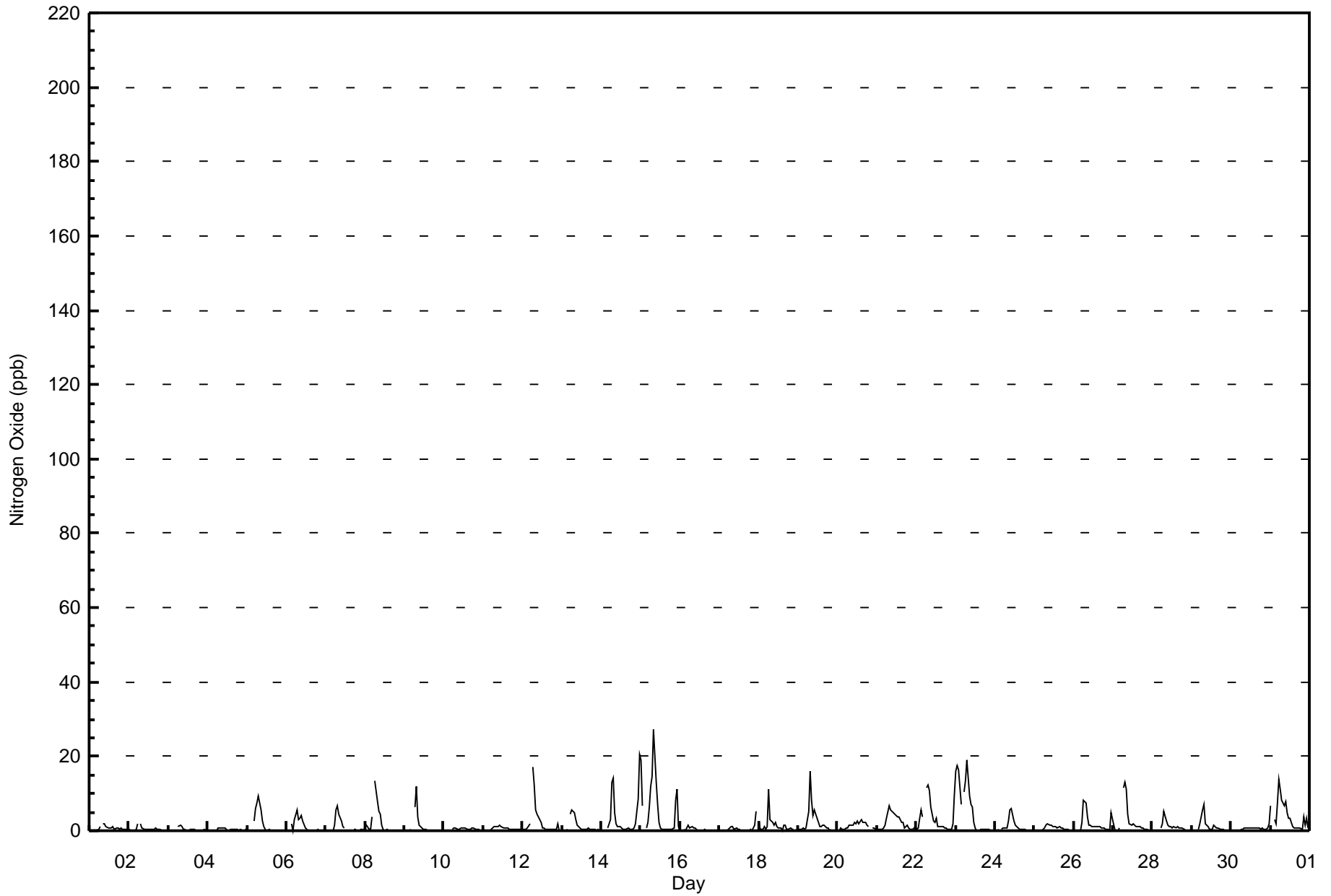
Maximum Value: 27.2 ppb on Aug 15 09:00	Maximum Daily Average: 5.9 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 1 01:00	Minimum Daily Average: 0.3 ppb on Aug 3	Hours of Data: 708
Maximum Diurnal Average: 6.5 ppb at hour 8	Minimum Diurnal Average: 0.4 ppb at hour 20	Hours of Missing Data: 36
Monthly Average: 1.70 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.5 Q ₃ = 1.4 P ₉₀ = 5.0 P ₉₉ = 16.1	Hours of Calibration: 36
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	0	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.6	1.9
2-Aug	0	0	0	0	0	2	A	2	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0.5	2.0
3-Aug	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.4
4-Aug	0	0	0	0	A	0	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0.3	0.8
5-Aug	0	0	0	A	3	6	8	9	5	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.6	9.5
6-Aug	0	0	A	2	0	3	5	3	4	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1.1	5.5
7-Aug	0	A	0	0	0	1	6	7	5	3	1	1	C	C	C	C	A	1	0	0	0	0	0	1.4	6.8	
8-Aug	1	1	0	0	4	A	14	8	5	5	2	0	0	0	0	0	0	0	0	0	0	0	0	1.8	13.6	
9-Aug	0	0	0	0	0	A	6	12	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.1	11.8	
10-Aug	0	0	0	0	A	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0.4	0.7	
11-Aug	0	0	0	A	0	0	1	1	1	1	1	1	1	1	1	1	0	0	1	1	0	1	0	0.6	1.4	
12-Aug	0	0	0	1	2	A	17	12	6	5	3	2	1	1	0	0	0	0	0	0	1	2	0	2.4	17.1	
13-Aug	0	0	0	0	A	5	6	5	3	1	1	1	0	1	0	1	1	1	0	0	1	0	0	1.2	5.8	
14-Aug	0	0	0	A	1	3	13	14	5	2	1	1	1	0	0	1	1	1	1	0	1	2	8	3.3	20.5	
15-Aug	19	7	A	1	2	6	12	15	27	13	7	2	1	0	0	0	0	0	0	0	1	8	11	5.9	27.2	
16-Aug	0	A	0	0	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6	
17-Aug	A	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	5	0.6	5.0	
18-Aug	3	0	0	1	0	1	11	3	2	2	2	1	1	1	0	2	1	0	1	1	0	0	A	1.5	11.1	
19-Aug	0	0	0	1	0	1	5	16	8	4	6	3	2	1	1	1	1	1	1	0	0	A	0	2.4	15.9	
20-Aug	0	0	1	0	0	1	1	1	1	2	2	2	2	2	3	2	2	2	1	1	A	1	1	1.3	2.9	
21-Aug	0	0	0	0	1	1	3	7	6	5	5	4	4	4	3	2	2	1	2	1	0	0	0	2.3	6.7	
22-Aug	1	1	3	6	4	A	11	12	11	6	3	2	3	1	1	1	1	1	1	0	0	0	2	3.6	12.2	
23-Aug	16	17	17	7	A	11	13	19	9	7	6	2	1	0	0	0	1	0	0	0	0	0	0	5.6	19.1	
24-Aug	0	0	0	A	0	1	1	1	3	5	6	2	1	1	1	0	0	1	1	0	0	0	0	1.1	6.0	
25-Aug	0	0	A	0	0	0	1	2	2	2	2	1	1	1	1	1	1	1	0	1	0	0	0	0.7	1.7	
26-Aug	0	A	0	0	0	2	8	8	4	2	2	1	1	1	1	1	1	1	0	0	0	0	5	1.7	8.4	
27-Aug	1	0	0	0	1	A	12	13	11	4	2	1	2	1	1	1	1	1	1	0	0	0	0	2.4	13.2	
28-Aug	0	0	0	0	A	1	2	5	3	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0.9	5.4	
29-Aug	0	0	0	A	0	2	6	7	2	1	1	1	0	2	1	1	1	0	0	0	0	0	0	1.1	7.0	
30-Aug	0	0	A	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0.6	1.9	
31-Aug	7	A	3	2	7	14	11	8	7	8	5	3	3	1	1	1	1	1	1	0	4	1	3	4.0	13.7	

1.6	1.1	1.0	0.8	1.1	2.5	6.0	6.5	4.6	3.0	2.2	1.3	1.0	0.8	0.7	0.7	0.7	0.5	0.5	0.4	0.4	0.7	1.1	1.4	Diurnal Average
19.0	17.4	16.5	7.1	7.4	13.7	17.1	19.1	27.2	13.0	7.1	4.4	3.7	3.9	3.1	2.2	2.4	2.2	1.5	1.1	3.6	8.0	11.2	20.5	Diurnal Maximum

C - Calibration A - Automated Daily Zero Span

Hourly Averages for NO at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

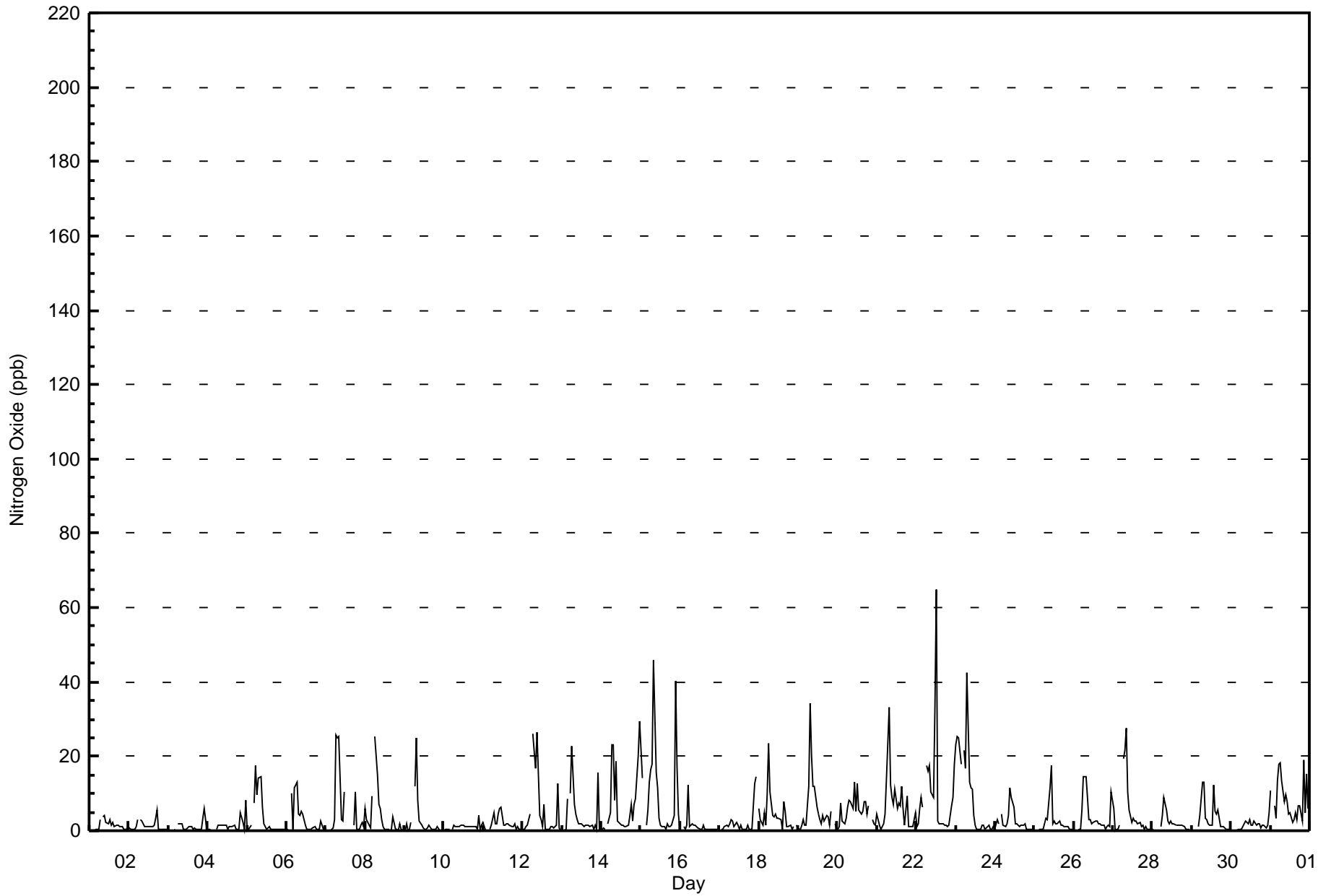
**Henry Pirker - Nitrogen Oxide (NO) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 64.8 ppb on Aug 22 13:00	Maximum Daily Average: 10.5 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 26 03:00	Minimum Daily Average: 1.1 ppb on Aug 3	Hours of Data: 708
Maximum Diurnal Average: 13.0 ppb at hour 8	Minimum Diurnal Average: 1.1 ppb at hour 20	Hours of Missing Data: 36
Monthly Average: 4.17 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.5 Q ₁ = 0.5 Median = 1.5 Q ₃ = 4.5 P ₉₀ = 12.1 P ₉₉ = 32.7	Hours of Calibration: 36
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	1	1	3	A	4	4	2	2	3	2	2	1	2	2	1	1	1	1	1	1	1.4	4.0
2-Aug	1	1	1	1	1	3	A	3	3	1	1	1	1	1	1	2	3	6	1	1	1	1	1	1	1.4	5.7
3-Aug	1	0	0	0	1	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	0	3	6	0	1.1	6.1
4-Aug	1	0	0	0	A	1	2	2	2	2	2	2	1	1	1	1	2	1	1	1	5	2	1	8	1.4	8.4
5-Aug	0	1	1	A	8	17	10	14	15	6	2	1	1	1	1	1	1	0	1	0	1	1	1	1	3.5	17.5
6-Aug	1	0	A	10	1	12	13	5	4	5	4	2	1	1	1	1	1	1	1	1	1	3	1	1	2.8	13.2
7-Aug	1	A	0	0	1	3	26	25	25	3	3	10	C	C	C	C	A	1	10	1	1	2	2	1	6.4	25.9
8-Aug	6	3	2	1	9	A	25	15	7	6	3	1	0	0	0	0	0	4	1	0	0	2	0	0	3.8	25.3
9-Aug	0	2	0	1	2	A	12	25	8	3	2	1	1	1	1	1	1	0	1	0	1	0	0	0	2.6	25.1
10-Aug	0	0	0	0	A	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	1	1	1.1	4.0
11-Aug	2	0	0	A	1	1	5	2	2	4	6	6	1	2	2	2	1	1	1	2	1	1	1	1	1.9	6.4
12-Aug	1	1	1	1	5	A	26	21	17	26	4	3	1	7	1	1	1	1	1	1	1	13	1	0	5.8	26.4
13-Aug	0	0	1	9	A	10	23	7	5	3	2	2	1	1	1	1	2	1	1	1	1	16	1	1	3.9	22.7
14-Aug	0	1	1	A	2	5	23	23	8	18	3	2	1	1	1	1	1	4	7	2	7	8	20	29	7.4	29.4
15-Aug	22	14	A	2	6	13	16	18	46	16	12	4	2	1	1	1	2	1	1	2	4	40	17	5	10.5	45.7
16-Aug	1	A	1	1	2	12	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1.3	12.4
17-Aug	A	0	1	1	1	1	2	3	3	1	2	1	1	1	1	0	0	1	1	1	1	13	15	A	2.3	14.6
18-Aug	6	3	1	5	1	10	23	11	4	4	4	3	3	3	1	8	5	1	1	1	1	1	A	2	4.5	23.5
19-Aug	1	1	1	3	1	1	12	34	20	12	12	6	5	3	2	4	3	4	4	1	5	A	2	0	6.0	34.1
20-Aug	0	1	8	2	2	4	6	8	8	6	13	5	13	5	5	5	8	8	5	7	A	3	2	2	5.4	13.0
21-Aug	4	2	1	1	2	4	14	33	12	9	7	11	6	8	7	12	6	1	9	1	1	1	1	5	6.6	33.1
22-Aug	1	2	6	9	7	A	18	16	18	11	9	34	65	2	2	2	2	1	1	1	1	7	9	18	10.5	64.8
23-Aug	23	25	25	18	A	22	17	42	13	11	11	4	1	0	0	0	1	1	0	1	1	0	0	1	9.6	42.5
24-Aug	0	3	2	A	4	1	1	2	4	12	9	6	2	2	1	1	1	1	2	1	0	1	1	1	2.5	11.6
25-Aug	0	0	A	1	0	1	2	4	3	11	17	2	3	2	2	2	1	1	1	1	1	1	1	0	2.5	17.4
26-Aug	0	A	0	0	1	6	15	15	9	3	3	2	2	2	3	2	2	2	2	1	1	1	1	10	3.5	14.6
27-Aug	6	0	1	1	2	A	20	22	28	10	6	2	3	3	2	2	2	1	1	1	1	1	1	1	4.9	27.6
28-Aug	1	0	0	0	A	1	4	9	5	3	2	2	2	2	2	2	1	2	2	1	1	0	1	0	1.8	9.0
29-Aug	0	0	0	A	1	4	13	13	4	3	2	2	1	12	5	4	5	1	1	1	1	1	0	0	3.3	13.1
30-Aug	0	0	A	0	0	0	0	1	2	2	2	3	1	1	2	1	2	2	1	1	1	1	1	5	1.4	5.0
31-Aug	11	A	7	3	13	18	18	13	8	10	8	4	5	2	3	5	3	7	7	3	19	5	15	6	8.4	18.9
	3.0	2.2	2.2	2.6	2.8	6.0	11.8	13.0	9.3	6.7	5.0	4.1	4.3	2.4	1.8	2.2	2.1	2.0	2.1	1.1	2.0	3.8	3.9	3.3	Diurnal Average	
	23.0	25.3	25.0	17.8	13.4	21.5	26.1	42.5	45.7	26.4	17.4	33.7	64.8	12.5	6.6	11.9	8.0	7.9	10.4	6.7	18.9	40.2	20.0	29.4	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for NO at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

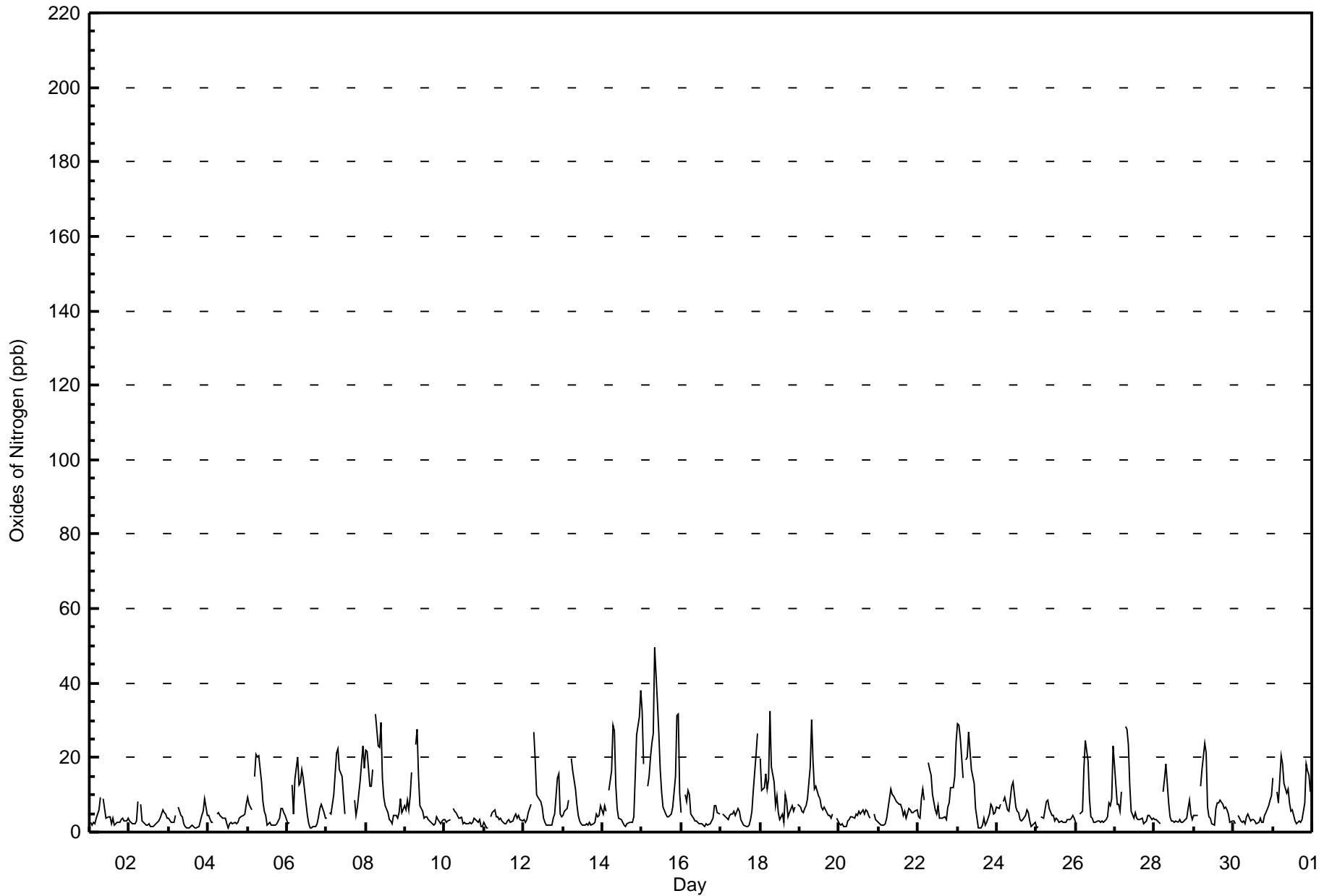
**Henry Pirker - Oxides of Nitrogen (NO_x) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 49.5 ppb on Aug 15 09:00	Maximum Daily Average: 17.8 ppb on Aug 15	Hours in Service: 744
Minimum Value: 1 ppb on Aug 11 02:00	Minimum Daily Average: 3.1 ppb on Aug 3	Hours of Data: 708
Maximum Diurnal Average: 16.0 ppb at hour 7	Minimum Diurnal Average: 3.0 ppb at hour 15	Hours of Missing Data: 36
Monthly Average: 7.05 ppb	Percentiles: P ₁ = 1.2 P ₁₀ = 2.1 Q ₁ = 2.9 Median = 4.5 Q ₃ = 8.2 P ₉₀ = 16.7 P ₉₉ = 31.5	Hours of Calibration: 36
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Aug	3	2	2	2	4	6	9	A	9	6	4	4	4	2	4	2	3	3	3	3	4	3	3	4	3.8	9.2																							
2-Aug	3	3	2	2	3	8	A	7	3	2	2	2	1	1	2	2	2	3	3	4	6	5	5	4	3.3	8.3																							
3-Aug	4	3	3	3	4	A	7	5	4	2	2	1	1	2	2	1	1	1	1	3	5	6	9	4	3.1	9.0																							
4-Aug	5	4	3	3	A	5	5	4	4	4	4	2	1	2	3	2	3	2	3	4	4	5	5	7	3.5	7.3																							
5-Aug	9	7	6	A	15	21	20	20	13	8	6	4	2	2	2	2	2	2	2	4	6	6	5	5	7.4	20.9																							
6-Aug	2	3	A	13	5	14	20	13	13	17	15	8	5	2	1	1	2	1	2	4	6	8	5	4	7.1	20.3																							
7-Aug	4	A	5	5	10	16	21	22	17	15	10	5	C	C	C	C	A	9	5	7	14	19	23	17	12.3	23.2																							
8-Aug	22	22	12	12	17	A	32	23	23	29	15	9	7	5	3	3	2	5	5	4	5	9	5	7	12.0	31.6																							
9-Aug	6	9	6	10	16	A	23	28	15	7	5	4	4	4	3	3	2	2	2	4	3	2	3	3	7.2	27.7																							
10-Aug	3	3	3	3	A	6	6	5	4	4	4	2	3	2	2	3	2	3	4	3	3	3	2	1	3.2	6.2																							
11-Aug	3	1	1	A	4	5	6	4	4	3	4	3	2	2	3	3	3	3	4	5	4	4	3	3	3.4	5.8																							
12-Aug	3	2	3	5	7	A	27	19	10	9	8	7	4	3	2	2	2	2	4	5	15	16	5	4	7.2	26.8																							
13-Aug	4	6	6	9	A	20	16	12	7	4	3	2	2	2	2	2	2	2	2	2	5	4	4	7	5.5	19.8																							
14-Aug	5	7	6	A	11	17	29	27	13	6	4	3	2	2	2	2	2	3	3	4	15	26	31	38	11.2	37.9																							
15-Aug	32	18	A	12	15	20	24	27	49	35	26	17	11	7	5	4	4	4	5	7	15	31	32	11	17.8	49.5																							
16-Aug	5	A	10	8	11	10	5	4	3	3	3	2	2	2	2	2	2	2	3	4	7	7	5	5	4.6	11.3																							
17-Aug	A	5	4	4	3	4	5	5	5	5	6	6	3	2	2	1	1	2	3	6	11	21	26	A	6.0	26.4																							
18-Aug	20	11	12	15	12	14	32	18	13	7	10	5	3	5	3	10	8	4	5	7	6	7	A	7	10.2	32.3																							
19-Aug	7	6	5	6	7	9	18	30	19	12	12	10	9	7	6	7	6	4	4	4	5	A	4	3	8.6	30.2																							
20-Aug	2	2	2	2	2	3	3	4	4	4	5	4	5	5	6	5	6	6	4	4	A	5	3	3	3.8	6.1																							
21-Aug	2	2	2	2	2	4	6	12	10	10	9	8	8	8	6	5	6	4	6	6	5	5	6	6	5.8	11.6																							
22-Aug	4	4	9	12	9	A	18	17	15	10	6	5	7	4	4	4	4	3	7	8	12	12	15	24	9.2	24.2																							
23-Aug	29	29	25	15	A	19	20	27	17	15	13	6	4	1	1	2	4	2	2	5	7	7	5	5	11.3	29.1																							
24-Aug	7	6	7	A	8	9	6	6	9	12	13	7	5	5	3	3	3	4	6	5	3	1	2	2	5.9	13.3																							
25-Aug	1	2	A	4	4	6	8	8	6	4	4	3	4	3	3	3	3	3	3	3	3	4	4	4	3.9	8.5																							
26-Aug	2	A	5	5	6	17	25	19	9	4	4	3	3	3	3	3	3	3	3	4	8	7	9	23	7.4	24.8																							
27-Aug	13	8	8	6	11	A	28	28	23	13	5	4	5	4	3	3	4	2	3	3	5	5	3	4	8.2	28.5																							
28-Aug	3	3	3	2	A	11	14	18	8	4	3	3	3	3	3	3	3	3	3	4	6	9	5	4	5.2	18.2																							
29-Aug	4	5	5	A	12	17	24	21	7	4	4	2	2	6	8	8	8	7	6	7	6	5	3	3	7.5	23.9																							
30-Aug	3	2	A	5	3	3	3	2	4	5	3	3	3	3	2	2	4	3	3	4	5	7	8	10	3.9	9.8																							
31-Aug	15	A	11	8	14	20	18	13	10	11	8	6	6	3	2	3	3	3	4	8	18	16	15	11	9.8	20.4																							
																								7.6	6.3	6.2	6.6	8.3	11.4	16.0	14.9	11.4	8.9	7.1	4.8	4.1	3.4	3.0	3.2	3.3	3.2	3.6	4.6	7.2	8.8	8.5	7.8	Diurnal Average	
																								32.4	28.7	25.5	15.5	16.9	20.9	32.3	30.2	49.5	34.5	26.4	16.7	10.9	7.6	7.7	10.2	8.4	8.5	6.7	7.8	18.3	31.3	31.5	37.9	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Averages for NO_x at Henry Pirker August 2008

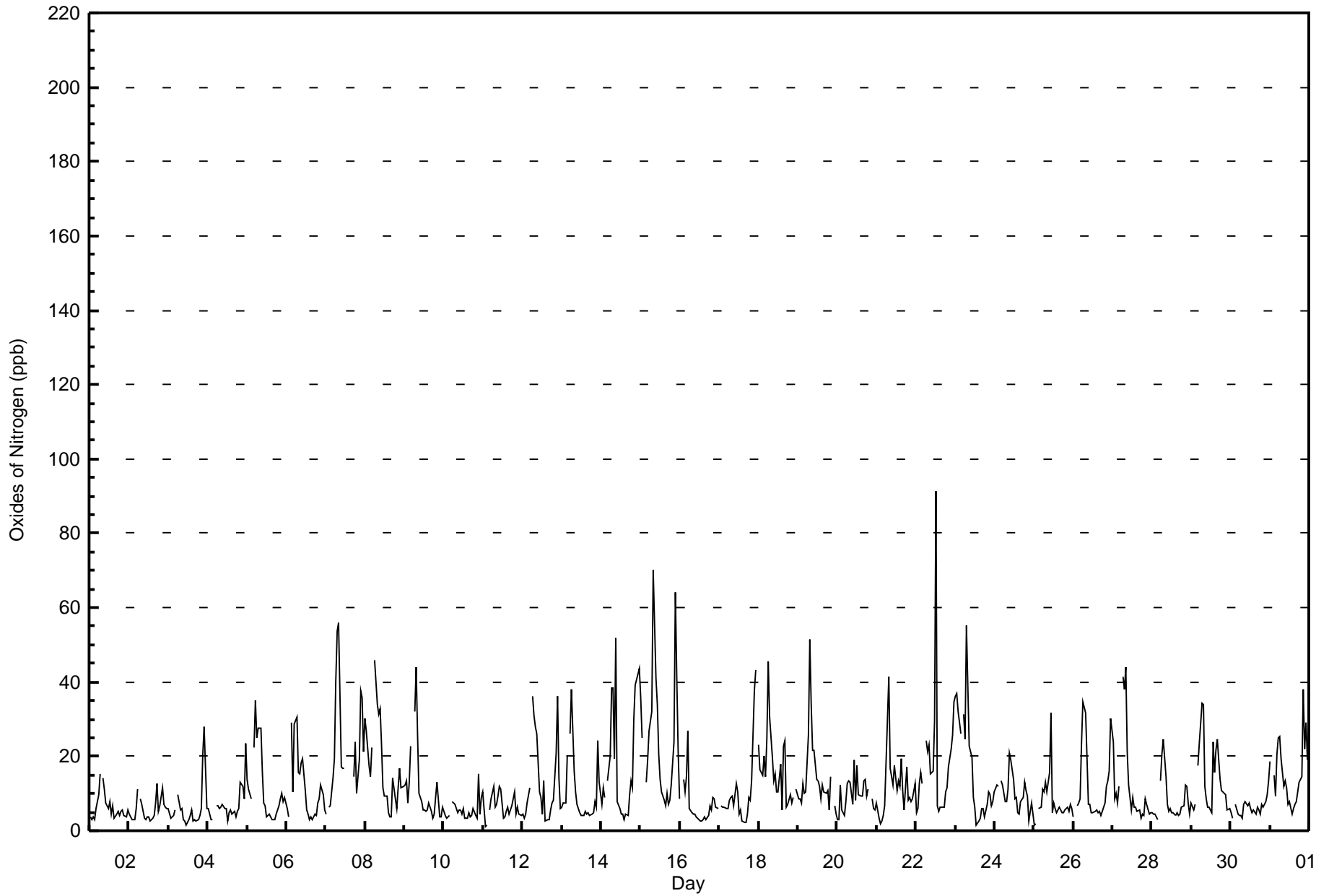


**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Henry Pirker - Oxides of Nitrogen (NO_x) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 91.4 ppb on Aug 22 13:00		Maximum Daily Average: 25.0 ppb on Aug 15		Hours in Service: 744																							
Minimum Value: 1 ppb on Aug 11 02:00		Minimum Daily Average: 5.6 ppb on Aug 10		Hours of Data: 708																							
Maximum Diurnal Average: 24.2 ppb at hour 8		Minimum Diurnal Average: 5.6 ppb at hour 15		Hours of Missing Data: 36																							
Monthly Average: 11.87 ppb		Percentiles: P ₁ = 2.1 P ₁₀ = 3.7 Q ₁ = 5.1 Median = 7.9 Q ₃ = 13.9 P ₉₀ = 26.0 P ₉₉ = 50.9		Hours of Calibration: 36																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	4	3	4	3	6	10	15	A	14	11	8	6	8	5	7	3	5	5	4	5	6	4	4	6	6.3	15.3	
2-Aug	5	4	3	3	6	11	A	9	7	3	3	4	4	3	3	4	8	13	5	7	12	7	7	6	5.8	12.7	
3-Aug	6	3	4	4	6	A	10	6	6	3	3	2	3	4	5	3	3	2	3	4	6	20	28	6	6.0	27.9	
4-Aug	6	5	3	3	A	7	7	6	6	7	6	6	3	5	6	5	5	4	5	6	13	12	9	23	6.8	23.3	
5-Aug	14	11	9	A	22	35	25	28	28	16	8	7	4	5	4	3	3	3	5	7	9	10	8	9	11.7	35.1	
6-Aug	6	4	A	29	11	29	31	16	15	18	19	11	6	5	3	4	3	4	4	7	9	12	10	6	11.3	30.6	
7-Aug	5	A	6	7	14	19	40	54	56	17	17	17	C	C	C	C	A	14	24	10	19	38	36	21	22.9	55.8	
8-Aug	30	27	17	14	22	A	46	34	31	33	23	12	9	9	5	4	4	14	9	6	12	17	12	12	17.4	45.8	
9-Aug	12	14	8	13	23	A	32	44	26	10	8	6	6	5	6	8	5	3	4	9	13	4	4	6	11.6	44.2	
10-Aug	5	4	3	4	A	8	8	7	5	5	5	4	6	3	3	5	4	4	6	4	3	15	4	9	5.6	15.2	
11-Aug	10	1	1	A	6	9	12	6	7	9	12	11	3	4	5	6	4	7	8	11	5	7	4	4	6.7	12.1	
12-Aug	4	3	5	8	12	A	36	31	28	26	11	9	5	13	3	3	3	5	7	8	21	36	14	6	12.9	36.1	
13-Aug	6	8	8	20	A	26	38	16	11	7	6	5	4	4	5	4	5	4	5	5	8	7	24	13	10.3	38.2	
14-Aug	7	12	9	A	14	20	38	38	20	52	8	6	5	4	3	4	4	10	14	12	30	39	42	44	18.8	51.9	
15-Aug	36	25	A	13	19	27	29	32	70	41	34	20	14	10	8	7	10	7	8	12	24	64	41	21	25.0	70.1	
16-Aug	8	A	14	10	14	27	6	5	4	5	4	3	3	3	3	4	3	4	7	6	9	9	6	6	7.1	27.0	
17-Aug	A	7	6	6	6	6	8	9	9	7	13	11	5	6	3	2	2	4	9	8	14	38	43	A	10.0	43.1	
18-Aug	23	16	15	20	15	25	45	31	20	14	15	11	10	18	6	23	24	6	7	10	8	9	A	11	16.5	45.3	
19-Aug	9	9	8	13	10	10	26	51	34	22	22	14	14	12	9	12	10	10	11	6	14	A	7	5	14.6	51.3	
20-Aug	3	3	12	6	4	8	13	13	13	7	19	8	17	10	9	9	14	14	9	11	A	8	6	5	9.7	19.0	
21-Aug	7	3	2	3	4	7	18	41	17	14	12	17	11	13	12	20	11	5	17	8	9	8	9	13	11.8	41.4	
22-Aug	5	6	13	16	13	A	24	21	23	15	16	29	91	7	5	6	6	6	10	12	17	22	26	35	18.5	91.4	
23-Aug	36	37	32	26	A	31	25	55	23	21	20	9	6	2	3	3	6	6	4	7	10	10	7	8	16.8	55.0	
24-Aug	10	12	12	A	14	12	8	8	11	21	19	14	8	9	5	4	8	9	13	11	9	3	7	4	10.1	20.9	
25-Aug	2	2	A	6	7	11	11	13	10	16	32	5	7	6	5	6	5	5	5	6	6	5	7	6	8.0	31.7	
26-Aug	4	A	7	8	8	23	35	32	19	7	7	5	5	5	5	5	5	4	6	7	12	13	16	30	11.7	34.6	
27-Aug	24	8	10	7	12	A	41	38	44	21	12	5	9	6	6	5	5	3	4	4	8	7	4	5	12.8	44.1	
28-Aug	5	4	5	3	A	14	21	25	15	7	5	6	5	5	4	5	4	4	6	7	12	12	8	4	8.0	24.6	
29-Aug	8	6	7	A	18	24	34	34	12	9	7	6	5	24	16	22	24	14	11	11	10	10	6	6	13.9	34.2	
30-Aug	5	3	A	7	4	4	4	3	7	8	7	8	6	5	6	4	6	5	4	7	6	8	10	14	6.2	13.5	
31-Aug	19	A	15	9	21	25	25	20	12	14	11	7	8	4	6	7	8	10	13	14	38	22	29	19	15.5	37.9	
		10.8	8.9	8.7	10.0	11.9	17.0	23.7	24.2	19.4	15.1	12.6	9.1	9.6	7.1	5.6	6.7	7.0	6.8	8.0	8.0	12.4	15.9	14.5	12.1	Diurnal Average	
		36.1	36.9	32.0	29.2	22.6	35.1	45.8	55.0	70.1	51.9	34.0	29.5	91.4	23.9	15.5	22.7	24.5	14.4	23.7	14.4	37.9	64.1	43.1	43.6	Diurnal Maximum	
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums for NO_x at Henry Pirker August 2008



Peace Airshed Zone Association Summary of Hourly Averages

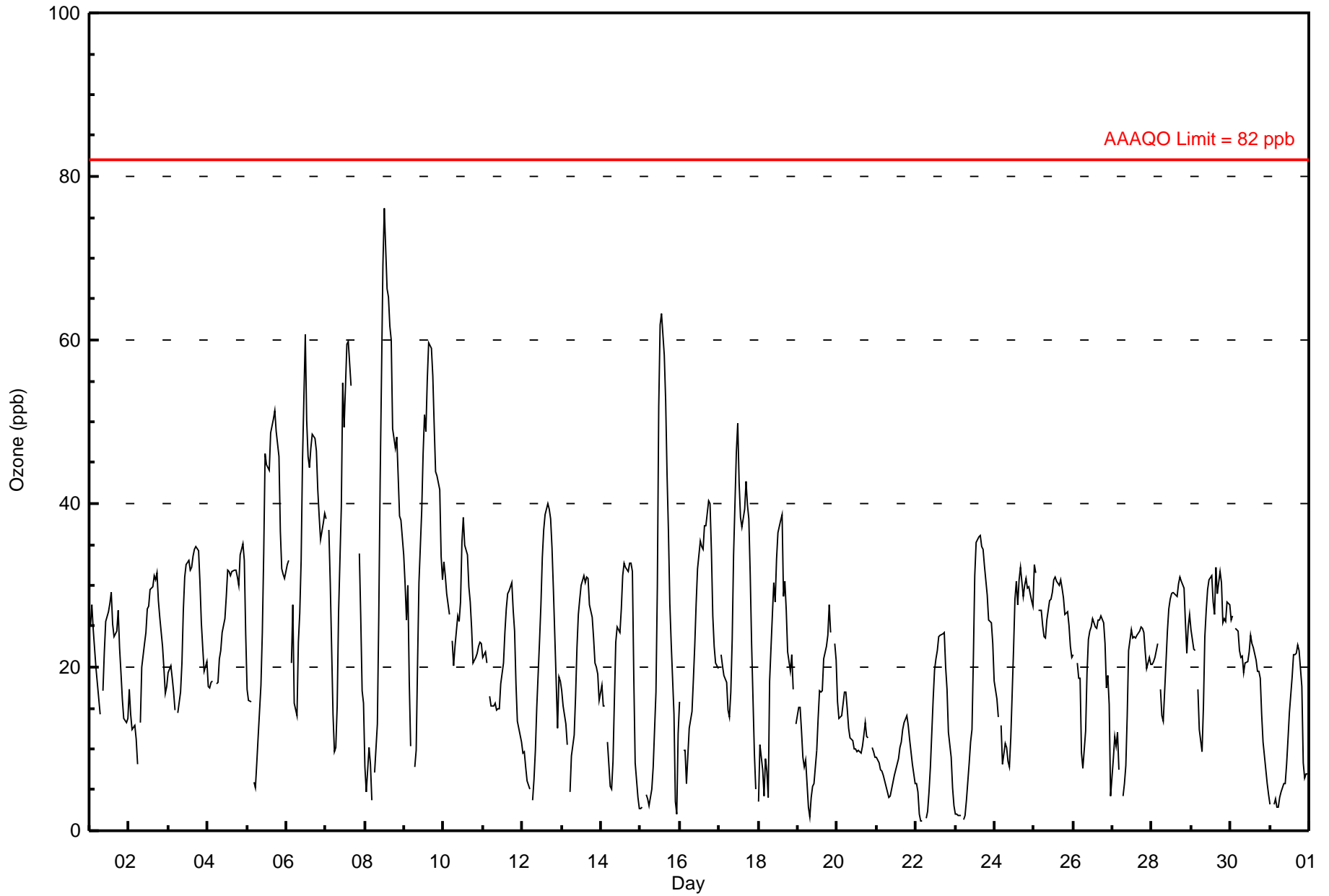
Henry Pirker - Ozone (O₃) - ppb August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0		Hours in Service: 744
Maximum Value: 76.2 ppb on Aug 8 13:00		Maximum Daily Average: 38.1 ppb on Aug 8
Minimum Value: 1 ppb on Aug 22 05:00		Hours of Data: 709
Maximum Diurnal Average: 33.0 ppb at hour 15		Hours of Missing Data: 35
Monthly Average: 22.75 ppb		Hours of Calibration: 35
Percentiles: P ₁ = 1.9 P ₁₀ = 6.7 Q ₁ = 13.0 Median = 22.2 Q ₃ = 30.2 P ₉₀ = 38.4 P ₉₉ = 61.6		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-Aug	25	28	25	22	20	16	14	A	17	22	26	27	28	29	25	24	24	27	22	19	16	14	13	14	21.6	29.1
2-Aug	17	14	12	13	11	8	A	13	20	23	24	27	27	29	30	31	31	32	28	26	22	20	17	18	21.5	31.6
3-Aug	19	20	19	17	15	A	14	17	20	27	31	33	33	32	32	34	34	35	34	30	25	22	20	21	25.4	34.7
4-Aug	18	17	18	18	A	18	18	21	22	24	26	29	32	32	31	32	32	32	31	30	34	35	33	24	26.4	35.1
5-Aug	17	16	16	A	6	5	8	11	18	24	34	46	45	44	49	50	50	51	49	46	37	32	31	31	31.1	51.4
6-Aug	33	33	A	21	28	16	14	23	27	33	45	61	50	46	44	47	48	48	46	42	38	36	38	39	37.1	60.6
7-Aug	38	A	37	30	14	10	10	15	27	40	55	49	54	59	60	54	C	C	A	A	34	26	17	16	34.0	59.8
8-Aug	8	5	10	8	4	A	7	13	26	43	56	69	76	66	65	62	60	49	47	48	43	39	38	34	38.1	76.2
9-Aug	30	26	30	18	10	A	8	10	21	30	39	46	51	49	55	60	59	56	50	44	43	42	34	31	36.5	59.6
10-Aug	33	31	29	26	A	23	20	22	26	26	28	35	38	35	34	30	28	25	21	21	22	22	23	23	27.0	38.3
11-Aug	21	22	21	A	16	15	15	16	15	15	15	18	21	24	27	29	29	30	27	24	18	13	13	11	19.8	30.3
12-Aug	10	10	8	6	5	A	4	6	10	15	23	28	33	37	39	40	39	38	35	29	18	12	19	18	21.0	40.0
13-Aug	17	15	13	10	A	5	9	12	16	22	26	28	30	31	30	31	31	28	26	24	21	20	19	16	20.9	31.1
14-Aug	18	15	15	A	11	6	5	8	16	23	25	24	27	31	33	32	32	33	33	32	19	8	4	3	19.7	32.8
15-Aug	3	3	A	4	4	3	4	5	8	17	30	52	62	63	58	53	44	37	28	23	14	4	2	12	23.1	63.1
16-Aug	16	A	10	10	6	9	13	15	19	23	28	32	35	35	34	37	37	40	40	34	26	23	21	20	24.4	40.4
17-Aug	A	21	20	19	18	15	14	17	23	34	46	50	42	38	37	39	43	40	38	31	23	9	5	A	28.4	49.9
18-Aug	4	11	7	4	9	7	4	18	26	30	28	33	36	38	39	29	31	27	22	20	21	17	A	13	20.6	38.6
19-Aug	15	15	12	9	8	9	3	2	4	5	6	10	14	17	17	17	21	23	24	28	24	A	23	21	14.2	27.6
20-Aug	16	14	14	14	17	17	15	13	11	11	10	10	10	10	10	10	12	13	12	11	A	10	10	9	12.0	16.9
21-Aug	9	8	7	7	7	6	5	4	4	5	6	7	8	9	10	11	12	13	14	13	11	10	8	6	8.4	14.0
22-Aug	6	5	2	1	1	A	1	2	5	8	16	20	21	22	24	24	24	24	20	17	12	9	5	3	11.9	24.2
23-Aug	2	2	2	2	A	1	2	4	8	11	12	21	31	35	36	36	35	34	32	29	26	26	25	23	18.9	36.1
24-Aug	18	16	14	A	13	8	11	10	9	8	11	22	28	31	28	31	32	29	30	31	30	30	28	27	21.5	32.3
25-Aug	33	31	A	27	27	25	24	24	26	28	28	29	31	31	31	30	31	30	28	26	27	25	22	21	27.6	32.6
26-Aug	22	A	20	19	19	9	8	12	19	23	24	25	26	25	25	26	26	26	25	23	17	19	15	4	19.9	26.3
27-Aug	9	12	10	12	7	A	4	6	8	14	22	25	24	24	24	24	24	25	25	24	22	20	21	20	17.6	25.0
28-Aug	20	21	21	23	A	17	14	13	21	24	27	28	29	29	29	29	30	31	31	30	25	22	25	26	24.6	31.0
29-Aug	25	22	22	A	17	12	10	15	24	27	30	31	31	28	27	32	29	32	30	25	26	26	28	28	25.0	32.2
30-Aug	26	26	A	25	24	22	21	21	19	20	21	22	24	23	22	21	19	20	19	14	11	7	6	4	19.1	26.2
31-Aug	3	A	3	4	3	3	4	5	6	6	8	11	14	19	22	22	22	23	22	18	8	6	7	7	10.6	22.7
17.6 17.0 15.5 14.2 12.3 11.4 10.1 12.5 16.8 21.4 26.0 30.6 32.7 32.9 33.0 33.0 32.3 31.6 29.6 27.1 23.8 20.1 19.0 18.0 Diurnal Average																										
38.1 33.0 36.8 30.3 27.7 25.1 23.8 23.6 26.7 42.7 55.9 69.2 76.2 66.2 65.3 61.7 59.9 55.6 49.6 48.1 43.4 41.7 38.0 38.9 Diurnal Maximum																										

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

Hourly Averages for O₃ at Henry Pirker August 2008



Peace Airshed Zone Association

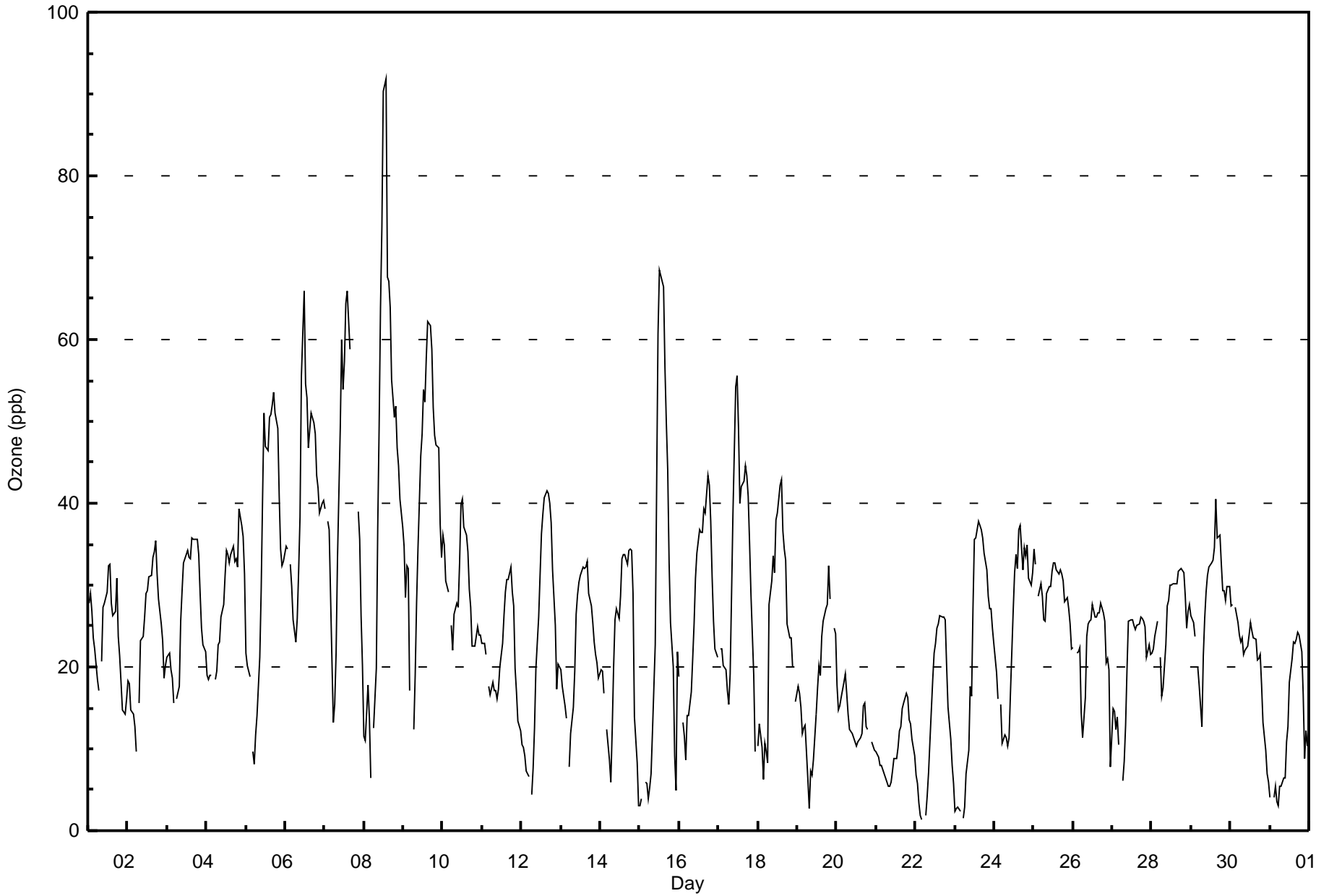
Summary of Hourly Maximums

Henry Pirker - Ozone (O₃) - ppb

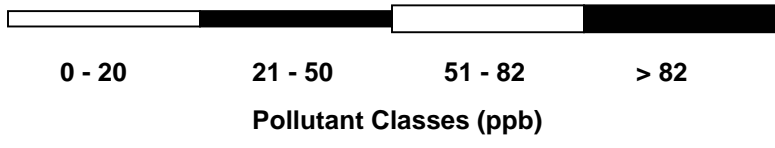
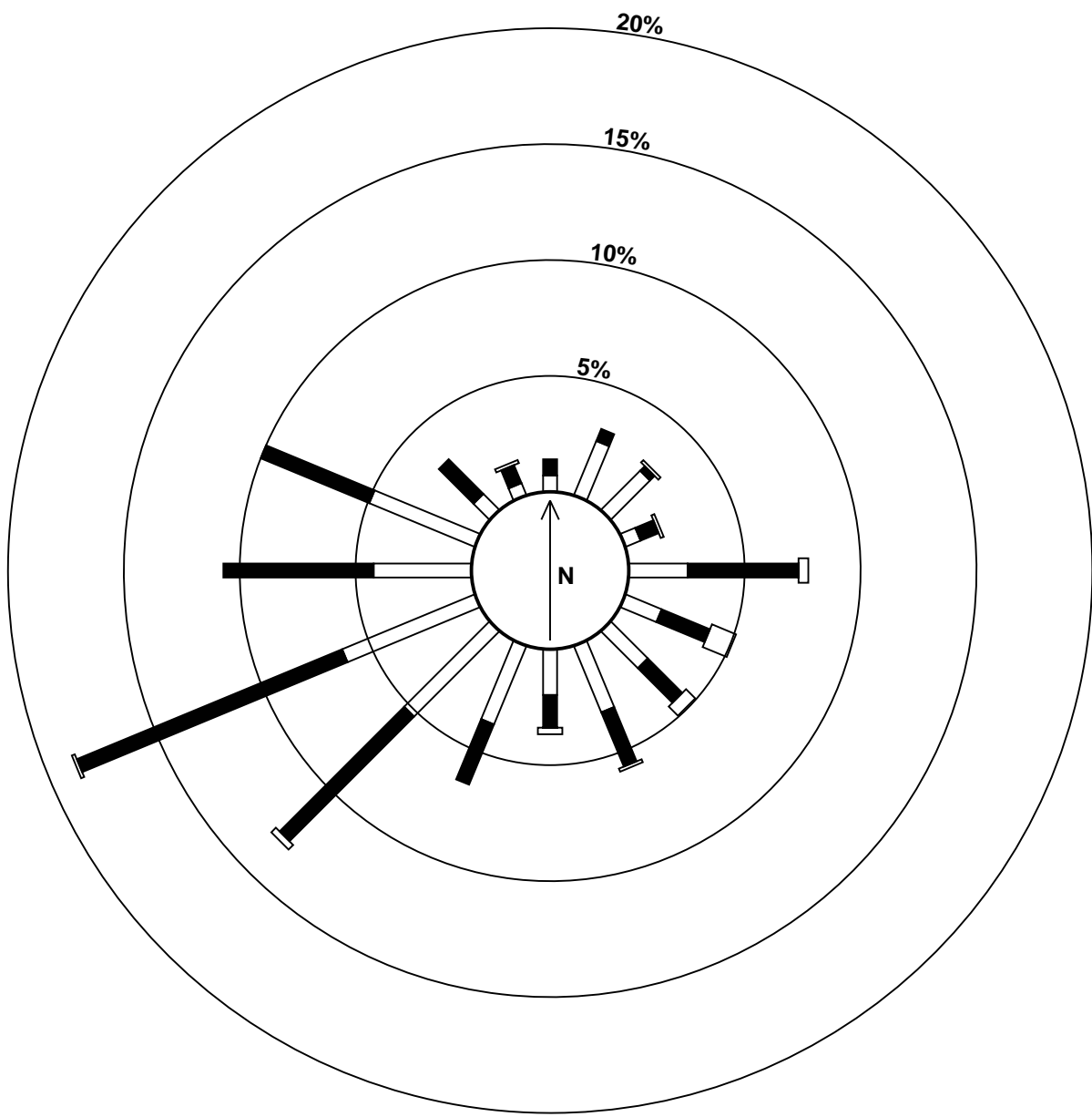
August 1, 2008 to September 1, 2008

Maximum Value: 91.8 ppb on Aug 8 14:00		Maximum Daily Average: 44.5 ppb on Aug 8		Hours in Service: 744																						
Minimum Value: 1 ppb on Aug 22 05:00		Minimum Daily Average: 10.1 ppb on Aug 21		Hours of Data: 709																						
Maximum Diurnal Average: 36.1 ppb at hour 14		Minimum Diurnal Average: 12.6 ppb at hour 7		Hours of Missing Data: 35																						
Monthly Average: 25.62 ppb		Percentiles: P ₁ = 2.8 P ₁₀ = 9.1 Q ₁ = 16.2 Median = 25.1 Q ₃ = 32.7 P ₉₀ = 41.6 P ₉₉ = 66.7		Hours of Calibration: 35																						
				Percent Operational Time: 100.0																						
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	28	29	27	24	22	19	17	A	21	27	28	29	32	33	28	26	27	31	24	21	18	15	14	16	24.1	32.6
2-Aug	18	18	15	14	13	10	A	16	23	24	26	29	29	31	31	33	34	35	31	28	25	23	19	20	23.8	35.4
3-Aug	21	22	20	19	16	A	16	18	26	29	33	33	34	33	33	36	36	36	36	34	29	25	23	22	27.3	35.7
4-Aug	19	19	19	19	A	19	19	23	23	26	28	31	34	34	33	34	35	33	33	32	39	37	36	31	28.5	39.4
5-Aug	22	20	19	A	10	8	12	14	21	29	40	51	47	46	51	51	52	53	51	49	41	34	32	33	34.2	53.5
6-Aug	35	34	A	33	30	26	23	26	32	38	56	66	55	53	47	49	51	50	48	43	42	39	40	40	41.5	66.0
7-Aug	39	A	38	37	21	13	15	22	33	49	60	54	57	64	66	59	C	C	A	A	39	36	26	20	39.4	66.0
8-Aug	12	11	18	14	6	A	13	20	37	49	64	74	90	92	68	67	64	55	51	52	47	45	41	37	44.5	91.8
9-Aug	35	28	32	32	17	A	12	19	28	34	46	49	54	52	58	62	62	59	52	48	47	47	37	33	41.1	62.2
10-Aug	36	35	31	29	A	25	22	27	28	27	33	40	40	37	36	34	29	27	22	22	24	25	24	24	29.5	40.5
11-Aug	23	23	22	A	18	17	18	17	17	16	17	20	23	26	29	31	31	32	29	27	20	17	13	12	21.7	32.1
12-Aug	11	10	9	7	7	A	4	8	13	20	26	31	36	39	41	42	41	40	38	32	25	17	20	20	23.3	41.5
13-Aug	20	18	15	14	A	8	12	15	20	26	29	30	31	32	32	32	33	29	27	25	23	22	21	19	23.1	32.8
14-Aug	20	19	17	A	12	9	6	12	20	26	27	26	29	33	34	34	33	34	34	34	29	14	8	3	22.3	34.5
15-Aug	3	4	A	6	6	4	5	7	12	23	42	61	68	68	66	57	50	44	33	25	20	9	5	22	27.8	68.4
16-Aug	19	A	13	12	9	14	14	17	21	25	31	34	37	36	36	39	39	43	42	38	31	26	22	21	26.9	43.3
17-Aug	A	22	22	20	20	17	15	19	29	39	54	56	49	40	42	43	44	43	41	35	29	19	10	A	32.2	55.6
18-Aug	10	13	10	6	11	10	8	28	31	34	31	38	39	42	43	37	34	33	25	24	24	20	A	16	24.6	42.9
19-Aug	18	17	15	12	13	13	6	3	7	7	9	14	17	20	19	24	26	27	28	32	28	A	25	24	17.5	32.4
20-Aug	18	15	15	16	18	19	17	14	12	12	11	11	10	11	11	12	15	16	13	12	A	11	10	10	13.5	19.1
21-Aug	10	9	8	8	7	7	6	5	5	6	7	9	9	10	12	13	15	16	17	16	14	13	11	9	10.1	16.8
22-Aug	7	6	3	2	1	A	2	4	7	11	18	22	23	25	25	26	26	26	26	20	15	11	8	6	13.9	26.2
23-Aug	2	3	3	2	A	1	3	7	10	18	16	27	36	36	38	37	37	36	34	32	29	27	27	25	21.1	37.7
24-Aug	23	19	16	A	15	11	12	11	10	11	17	27	32	34	32	37	37	32	35	34	35	31	30	32	24.8	37.4
25-Aug	34	33	A	29	30	29	26	26	29	30	30	32	33	33	32	31	32	31	30	28	29	27	25	22	29.6	34.5
26-Aug	22	A	22	22	22	14	11	16	24	25	26	26	28	26	26	27	27	28	27	26	21	21	20	8	22.3	27.7
27-Aug	15	15	12	14	10	A	6	8	13	20	26	26	26	25	25	25	25	26	26	26	25	21	23	22	19.9	26.1
28-Aug	22	22	24	26	A	21	16	17	23	28	28	30	30	30	30	30	32	32	32	31	29	25	27	28	26.6	32.1
29-Aug	26	25	24	A	20	18	13	21	26	29	31	32	33	33	35	40	36	36	33	29	29	28	30	30	28.6	40.5
30-Aug	27	28	A	27	25	24	23	23	22	22	23	24	25	24	23	23	21	21	21	18	13	10	7	6	21.0	27.6
31-Aug	4	A	4	5	3	3	5	5	6	6	11	13	18	21	23	23	23	24	24	22	17	9	12	10	12.8	24.3
	19.9	19.1	17.5	17.2	14.7	14.3	12.6	15.6	20.2	24.7	29.8	33.6	35.7	36.1	35.6	35.9	34.9	34.3	32.1	29.9	27.8	23.4	21.5	20.7		Diurnal Average
	39.4	34.9	37.8	36.8	30.2	28.7	25.8	27.6	36.9	49.1	63.9	73.7	90.4	91.8	67.7	67.1	63.8	58.8	51.7	51.8	47.2	46.7	40.6	40.3		Diurnal Maximum
C - Calibration		A - Automated Daily Zero Span																								

Hourly Maximums for O₃ at Henry Pirker August 2008



Pollutant Rose for O₃ at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Eight Hour Running Averages**

**Henry Pirker - Ozone (O₃) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 62.9 ppb on Aug 8 18:00	Hours in Service: 744 Hours of Data: 737 Hours of Missing Data: 7 Hours of Calibration: 7 Percent Operational Time: 100.0
Minimum Value: 2.0 ppb on Aug 23 07:00	
Percentiles: P ₁ = 3.2 P ₁₀ = 8.7 Q ₁ = 14.7 Median = 21.9 Q ₃ = 28.8 P ₉₀ = 36.0 P ₉₉ = 54.8	

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-Aug	24	23	23	22	22	21	21	21	20	19	20	20	21	23	25	25	26	26	26	25	23	21	20	19	26.2
2-Aug	18	16	15	14	14	13	13	13	13	14	16	18	20	23	24	27	28	29	29	29	29	27	26	24	29.4
3-Aug	23	21	20	19	18	18	17	17	17	18	20	22	25	26	28	30	32	33	33	33	32	31	29	28	33.3
4-Aug	26	23	21	20	19	19	18	18	19	20	21	23	24	25	27	28	30	31	31	31	32	32	32	31	32.3
5-Aug	30	28	26	25	21	17	13	11	11	13	15	19	24	29	34	39	43	46	48	48	47	45	43	41	48.0
6-Aug	39	36	35	31	30	27	25	24	23	23	26	31	34	37	41	44	47	49	49	46	45	44	43	42	48.8
7-Aug	41	40	38	37	33	29	25	22	20	23	25	27	32	39	45	50	53	55	N	N	N	N	N	N	55.3
8-Aug	N	18	16	15	12	10	8	8	10	16	22	31	41	45	52	58	62	63	62	59	55	52	48	45	62.9
9-Aug	41	38	36	32	28	27	22	19	18	18	19	23	29	32	38	44	49	52	53	53	52	51	48	45	53.1
10-Aug	41	38	36	34	32	30	28	26	26	25	25	26	27	29	31	32	32	32	31	29	27	25	24	23	41.4
11-Aug	22	22	22	22	21	20	19	18	17	16	15	16	16	17	19	20	22	24	26	26	26	25	23	21	26.5
12-Aug	18	16	13	11	9	9	8	7	7	8	10	13	17	19	24	28	32	35	36	36	34	31	29	26	36.3
13-Aug	23	21	18	15	15	14	13	12	12	13	14	17	19	22	25	27	29	29	29	29	28	26	25	23	29.5
14-Aug	21	20	18	18	16	14	12	11	11	12	13	15	17	20	23	26	28	30	31	32	30	28	24	20	31.5
15-Aug	17	13	10	6	4	3	3	4	4	6	9	15	23	30	37	43	47	50	49	46	40	32	25	20	49.7
16-Aug	17	14	11	10	8	9	11	11	11	13	15	18	22	25	27	30	33	35	36	37	36	34	32	30	36.7
17-Aug	29	26	24	21	20	19	18	18	18	20	23	27	30	33	36	39	41	42	41	39	36	33	29	27	42.0
18-Aug	21	17	13	9	7	7	7	8	11	13	16	20	23	27	31	32	33	33	32	30	28	26	24	22	33.0
19-Aug	19	18	16	15	13	12	10	9	8	6	6	6	7	8	9	11	13	16	18	20	21	22	23	23	23.3
20-Aug	23	21	20	18	17	17	16	15	14	14	13	13	12	11	11	10	10	11	11	11	11	11	11	11	22.5
21-Aug	11	10	9	9	8	8	7	7	6	6	6	6	6	6	7	7	9	10	11	11	12	12	12	11	11.8
22-Aug	10	9	8	6	5	4	3	3	3	3	5	8	10	12	15	17	20	22	22	22	21	19	17	14	22.3
23-Aug	12	9	7	5	4	2	2	2	3	4	6	9	11	16	20	24	27	30	33	34	33	32	30	29	33.6
24-Aug	27	24	22	21	19	17	15	13	11	10	10	11	13	16	18	21	24	26	29	30	30	30	30	30	30.1
25-Aug	30	30	30	29	29	28	28	27	26	26	26	26	27	28	28	29	30	30	30	30	29	28	27	26	30.0
26-Aug	25	25	23	22	21	19	17	16	15	16	17	18	18	20	23	24	25	25	25	25	24	23	22	20	25.5
27-Aug	17	16	14	12	11	10	8	9	8	9	11	12	15	16	18	20	22	24	24	24	24	23	23	23	24.2
28-Aug	22	22	21	21	21	21	20	19	19	19	20	21	22	23	25	27	28	29	29	30	29	28	28	28	29.6
29-Aug	27	26	25	24	23	21	19	18	18	18	19	21	22	24	26	29	29	30	30	29	29	28	29	28	29.9
30-Aug	28	27	26	26	26	26	25	24	23	22	22	21	21	21	22	22	22	21	21	20	19	17	15	13	27.5
31-Aug	10	9	7	6	4	4	3	4	4	4	5	6	7	9	11	13	15	18	19	20	19	18	16	14	20.1
	41.4	39.5	38.1	36.5	33.1	29.6	27.8	27.2	26.2	25.7	26.1	31.1	41.5	44.6	51.8	57.9	62.1	62.9	61.8	59.2	55.1	51.6	48.3	44.7	

N - Not Valid
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb

**Peace Airshed Zone Association
Summary of Hourly Averages**

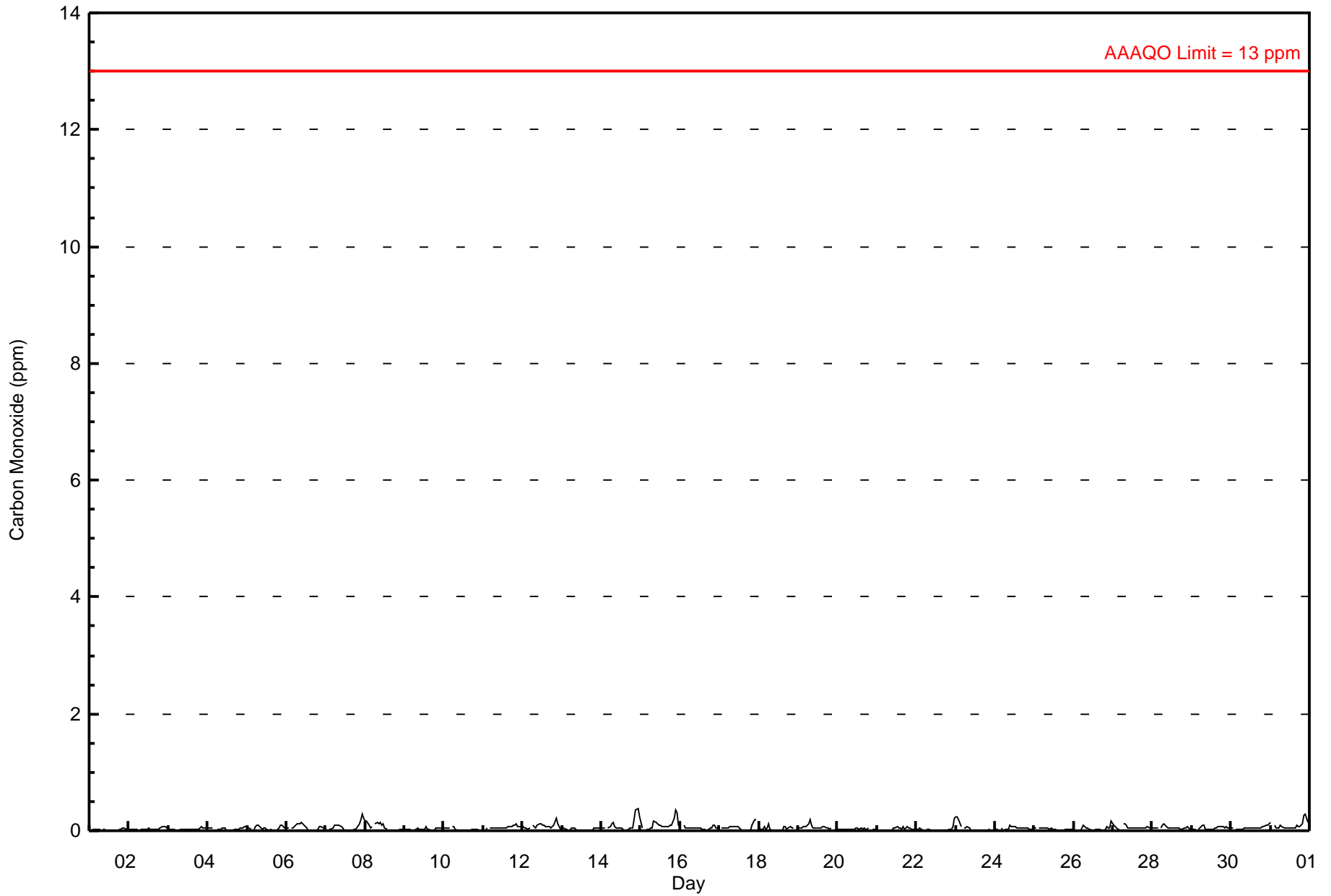
**Henry Pirker - Carbon Monoxide (CO) - ppm
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 0.37 ppm on Aug 14 23:00	Maximum Daily Average: 0.11 ppm on Aug 15
Minimum Value: 0.0 ppm on Aug 1 01:00	Hours of Data: 709
Minimum Daily Average: 0.02 ppm on Aug 1	Hours of Missing Data: 35
Maximum Diurnal Average: 0.09 ppm at hour 22	Hours of Calibration: 35
Monthly Average: 0.048 ppm	Percent Operational Time: 100.0
Percentiles: P ₁ = 0.00 P ₁₀ = 0.00 Q ₁ = 0.02 Median = 0.04 Q ₃ = 0.06 P ₉₀ = 0.09 P ₉₉ = 0.27	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.02	0.05	
2-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.03	0.07
3-Aug	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.03	0.08	
4-Aug	0.1	0.1	0.1	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.03	0.08	
5-Aug	0.1	0.0	0.0	A	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.04	0.10	
6-Aug	0.1	0.1	A	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.06	0.14	
7-Aug	0.0	A	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.2	0.07	0.29		
8-Aug	0.2	0.2	0.1	0.1	0.1	A	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.0	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.0	0.08	0.18	
9-Aug	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.03	0.07	
10-Aug	0.1	0.1	0.1	0.1	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.06	
11-Aug	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.06	0.11	
12-Aug	0.1	0.1	0.0	0.0	0.0	A	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.08	0.21	
13-Aug	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.03	0.05	
14-Aug	0.1	0.1	0.1	A	0.0	0.1	0.1	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	0.2	0.4	0.4	0.2	0.09	0.37	
15-Aug	0.1	0.1	A	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.1	0.11	0.35	
16-Aug	0.1	A	0.1	0.1	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	0.1	0.1	0.1	0.1	0.1	0.1	0.05	0.10	
17-Aug	A	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.2	A	0.05	0.18	
18-Aug	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.1	A	0.0	0.04	0.11	
19-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	A	0.0	0.06	0.20	
20-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.03	0.05	
21-Aug	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	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.07	
22-Aug	0.0	0.0	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.02	0.21	
23-Aug	0.2	0.2	0.2	0.1	A	0.1	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	0.0	0.0	0.04	0.24	
24-Aug	0.0	0.0	0.0	A	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.04	0.10	
25-Aug	0.0	0.0	A	0.1	0.0	0.1	0.0	0.1	0.0	0.0	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	0.03	0.05	
26-Aug	0.0	A	0.0	0.0	0.0	0.1	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	0.1	0.0	0.1	0.2	0.03	0.15	
27-Aug	0.1	0.1	0.1	0.0	0.0	A	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.06	0.11	
28-Aug	0.1	0.1	0.1	0.1	A	0.1	0.1	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	0.1	0.1	0.1	0.0	0.05	0.11	
29-Aug	0.0	0.0	0.0	A	0.0	0.1	0.1	0.1	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	0.05	0.09	
30-Aug	0.0	0.1	A	0.0	0.0	0.0	0.0	0.0	0.1	0.1	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	0.05	0.12	
31-Aug	0.2	A	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.2	0.1	0.10	0.28	
	0.06	0.05	0.04	0.04	0.03	0.04	0.07	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.08	0.09	0.08	0.07	Diurnal Average	
	0.23	0.24	0.19	0.07	0.07	0.08	0.13	0.20	0.16	0.15	0.13	0.11	0.10	0.09	0.08	0.08	0.09	0.08	0.09	0.12	0.27	0.36	0.37	0.23	Diurnal Maximum		

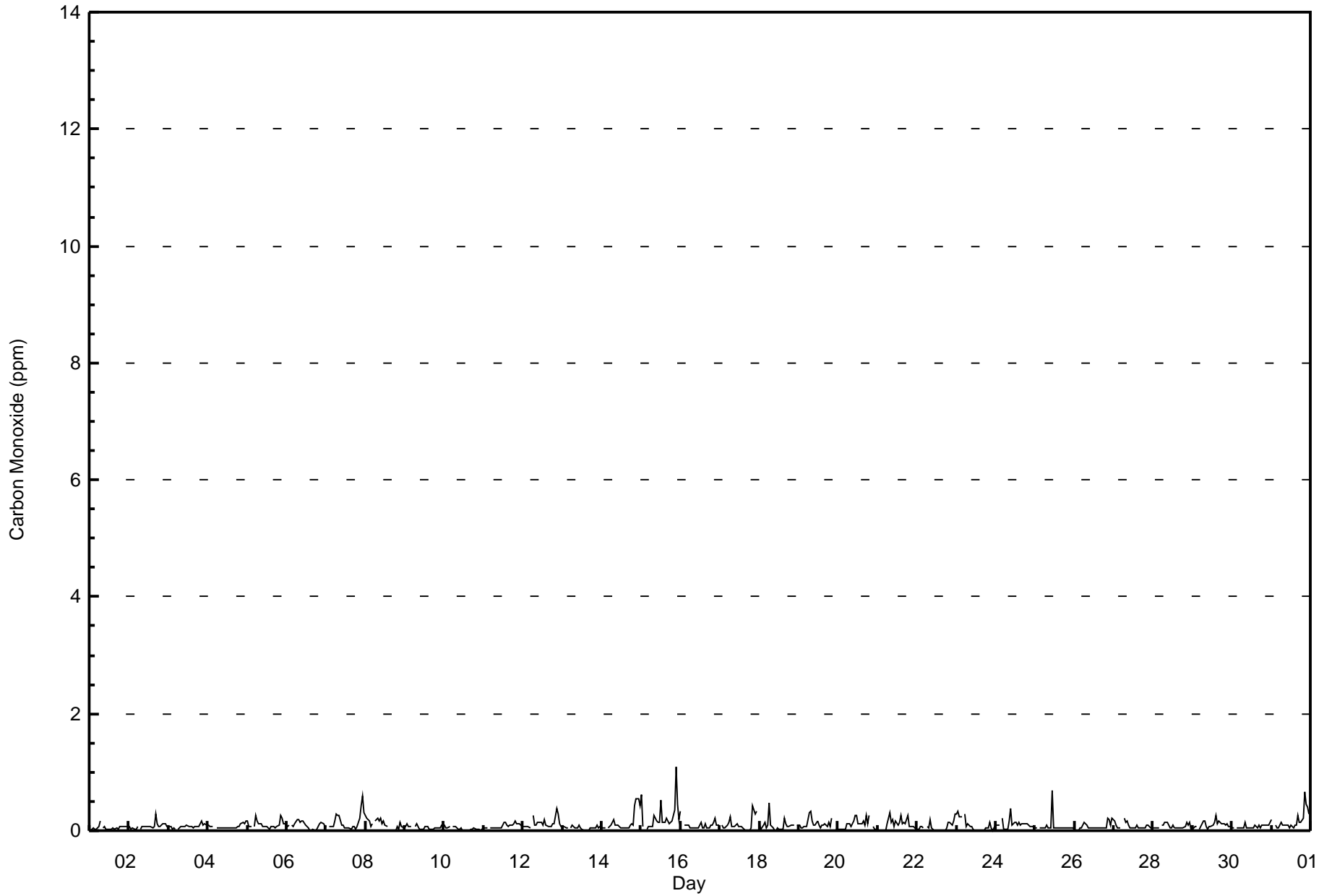
C - Calibration A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 13 ppm 24-hr na

Hourly Averages for CO at Henry Pirker August 2008

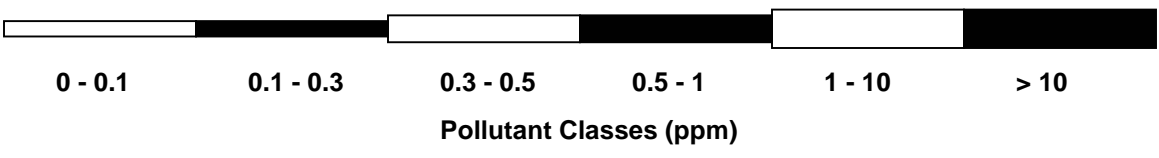
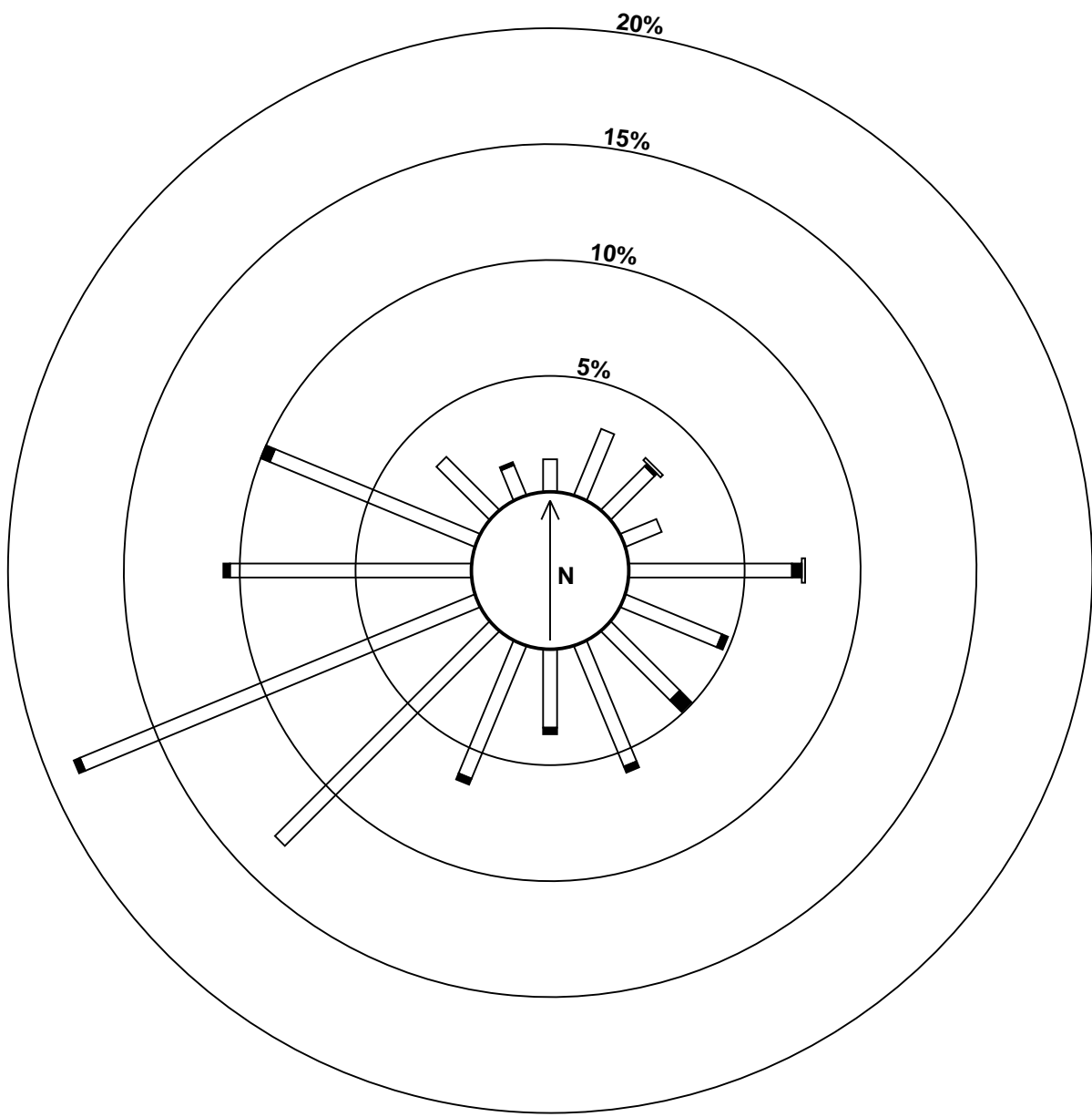


Hourly Maximums for CO at Henry Pirker

August 2008



Pollutant Rose for CO at Henry Pirker August 2008

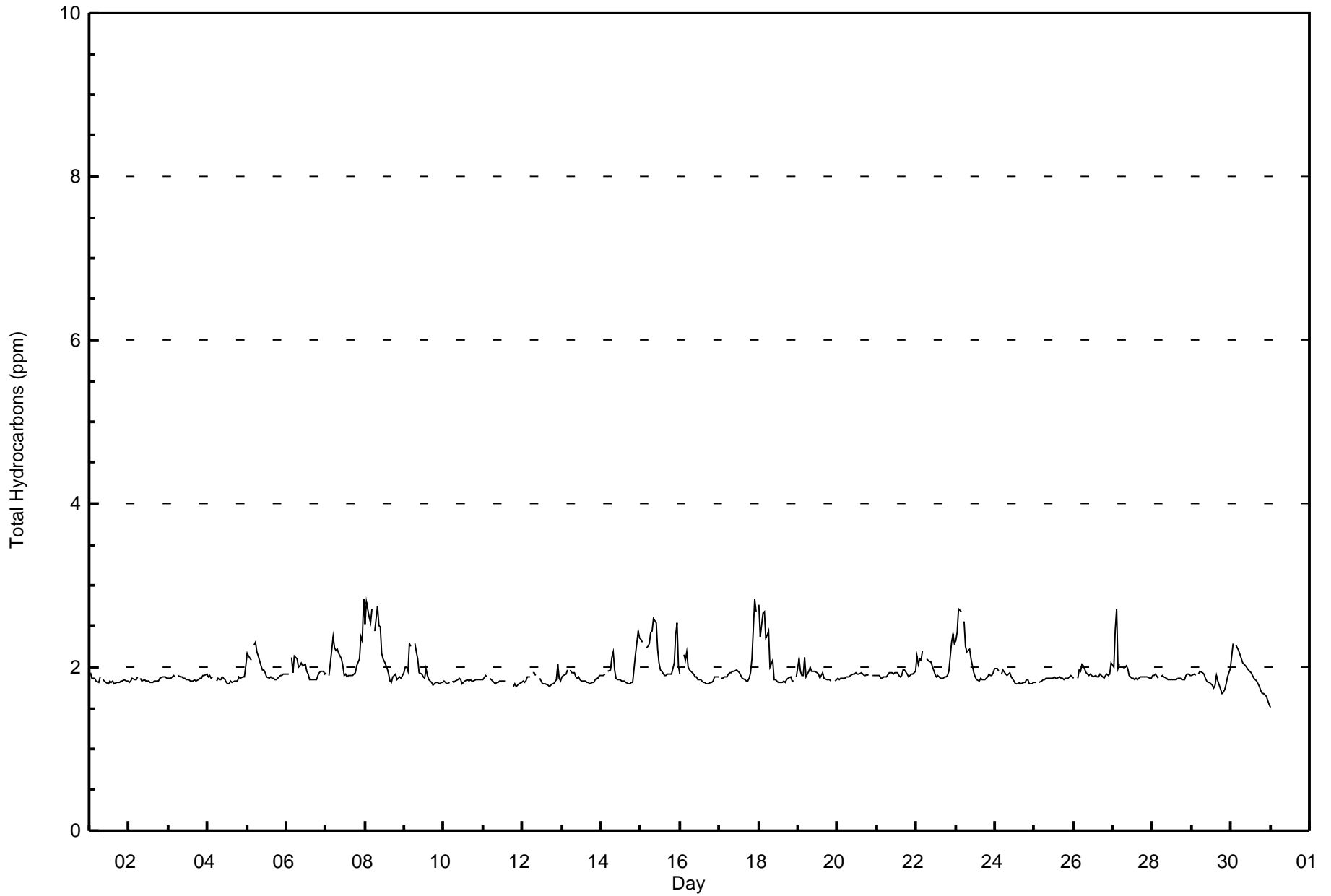


Peace Airshed Zone Association
Summary of Eight Hour Running Averages

Henry Pirker - Carbon Monoxide (CO) - ppm
August 1, 2008 to September 1, 2008

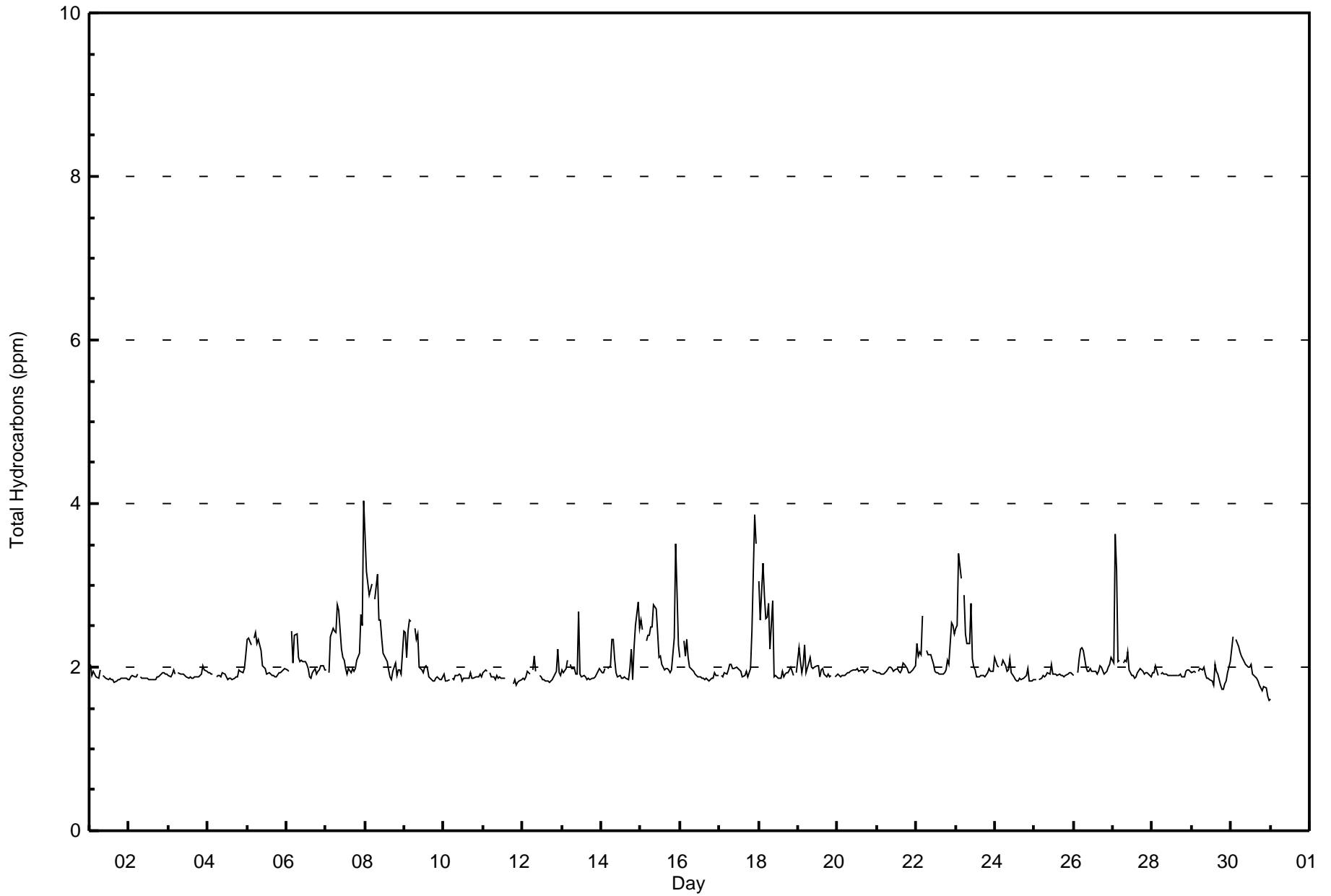
Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 0.20 ppm on Aug 15 03:00		Hours in Service: 744 Hours of Data: 737 Hours of Missing Data: 7 Hours of Calibration: 7 Percent Operational Time: 100.0																							
Minimum Value: 0.00 ppm on Aug 6 20:00 Percentiles: P ₁ = 0.00 P ₁₀ = 0.01 Q ₁ = 0.02 Median = 0.04 Q ₃ = 0.06 P ₉₀ = 0.09 P ₉₉ = 0.17																									
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-Aug	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
2-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
3-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
4-Aug	0.1	0.1	0.1	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	0.0	0.0	0.0	0.0	0.0	0.06
5-Aug	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06
6-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.10
7-Aug	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.11
8-Aug	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N	N	N	N	N	N	N	0.0	0.0	0.16
9-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
10-Aug	0.0	0.0	0.0	0.1	0.1	0.1	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	0.0	0.0	0.06
11-Aug	0.0	0.0	0.0	0.0	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	0.09
12-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09
13-Aug	0.1	0.1	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	0.0	0.0	0.0	0.0	0.0	0.0	0.08
14-Aug	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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.16
15-Aug	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.20
16-Aug	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.17
17-Aug	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07
18-Aug	0.1	0.1	0.1	0.1	0.1	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	0.0	0.1	0.1	0.09
19-Aug	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.09
20-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04
21-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.05
22-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03
23-Aug	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	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	0.15
24-Aug	0.0	0.0	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	0.0	0.0	0.0	0.0	0.06
25-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
26-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05
27-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.08
28-Aug	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07
29-Aug	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.06
30-Aug	0.1	0.1	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	0.0	0.1	0.1	0.1	0.1	0.1	0.07
31-Aug	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.16
Diurnal Maximums																									
N - Not Valid Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 5 ppm																									

Hourly Averages for THC at Henry Pirker August 2008

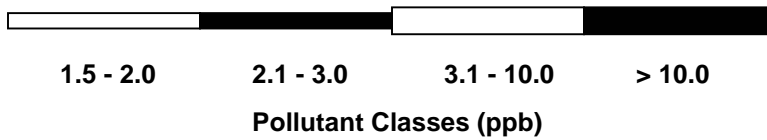
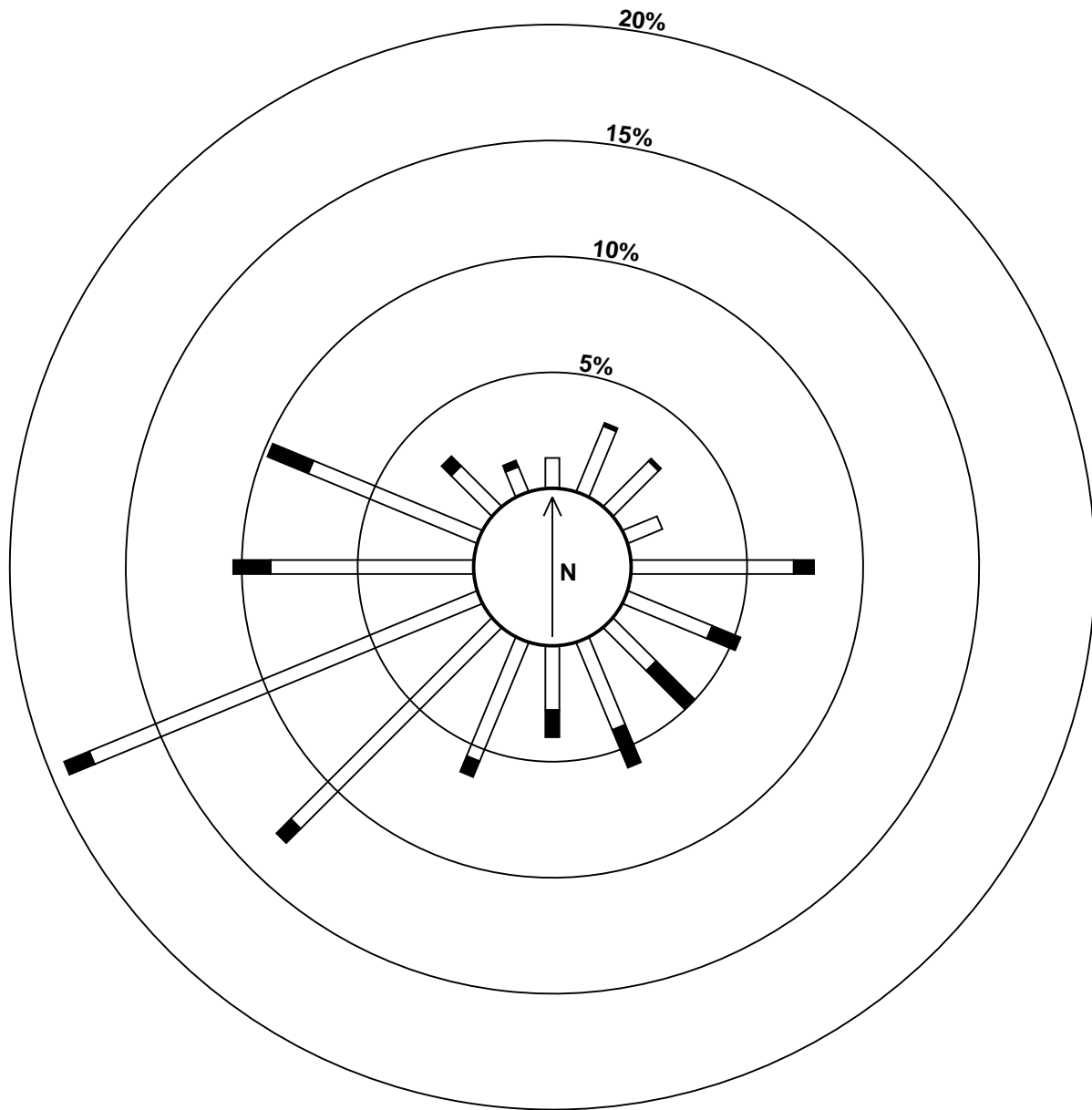


Hourly Maximums for THC at Henry Pirker

August 2008



Pollutant Rose for THC at Henry Pirker August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Henry Pirker - Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
August 1, 2008 to September 1, 2008**

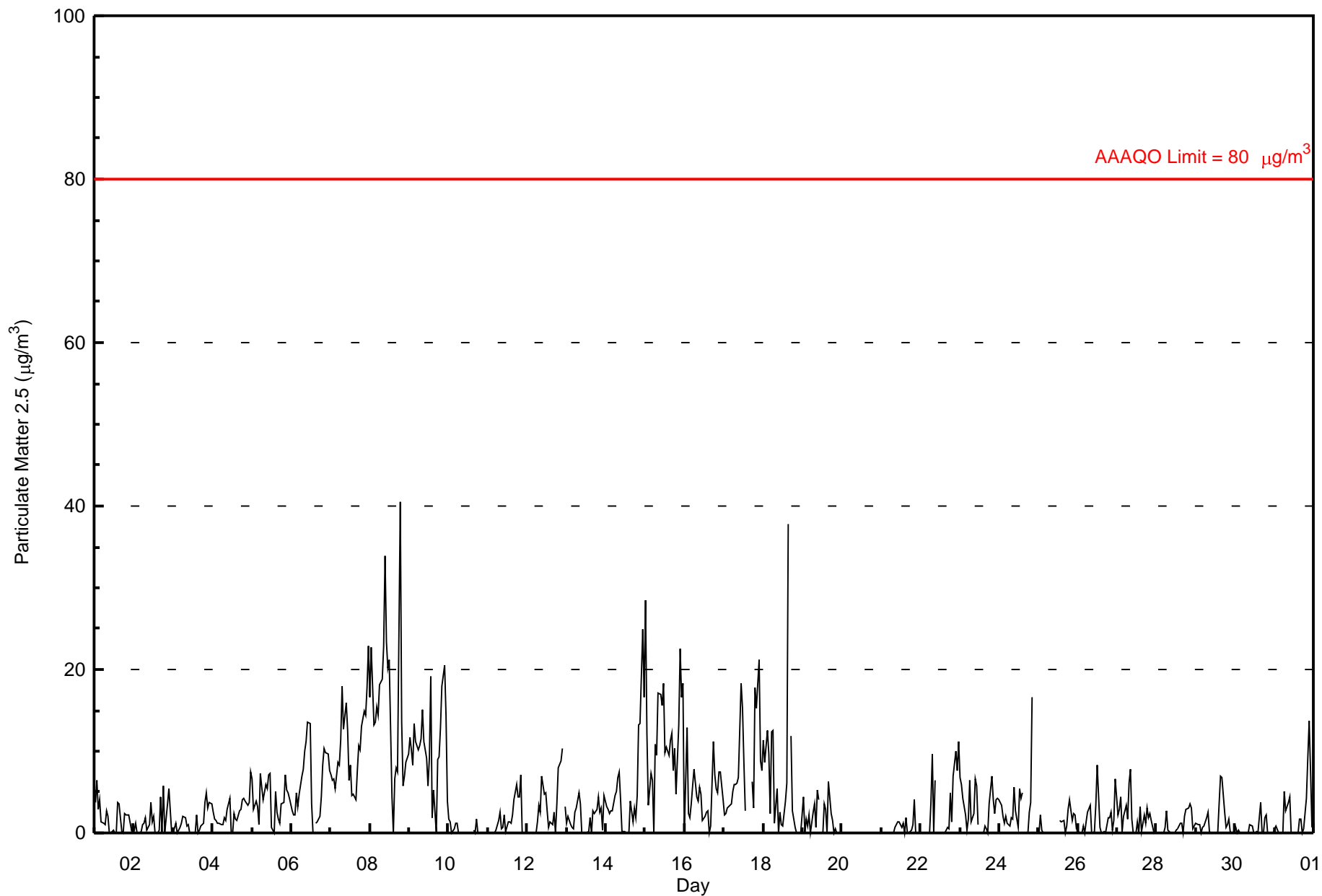
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 40.4 $\mu\text{g}/\text{m}^3$ on Aug 8 19:00	Maximum Daily Average: 15.2 $\mu\text{g}/\text{m}^3$ on Aug 8
Minimum Value: 0 $\mu\text{g}/\text{m}^3$ on Aug 1 10:00	Hours of Data: 707
Minimum Daily Average: 0.0 $\mu\text{g}/\text{m}^3$ on Aug 20	Hours of Missing Data: 37
Maximum Diurnal Average: 6.3 $\mu\text{g}/\text{m}^3$ at hour 22	Hours of Calibration: 0
Monthly Average: 3.91 $\mu\text{g}/\text{m}^3$	Percent Operational Time: 95.0
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 2.1 Q ₃ = 5.3 P ₉₀ = 11.1 P ₉₉ = 22.7	

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-Aug	4	6	3	4	1	1	1	3	2	0	0	0	0	4	4	0	0	2	2	2	2	0	1	1.8	6.5	
2-Aug	0	1	0	0	0	1	1	2	0	1	4	1	2	0	0	4	0	6	0	4	5	3	0	1.5	5.7	
3-Aug	0	1	0	0	1	1	2	2	1	1	0	0	0	2	0	0	1	1	4	5	3	4	4	1.4	4.8	
4-Aug	3	2	2	1	1	1	1	2	2	3	4	0	0	2	2	2	3	3	4	4	4	3	4	2.5	7.5	
5-Aug	7	3	4	3	1	7	6	4	6	5	7	7	1	0	5	3	2	1	4	4	7	5	5	4	4.2	7.4
6-Aug	3	2	2	5	3	5	7	8	10	11	14	13	4	0	BD	1	1	2	4	8	10	10	10	8	6.1	13.5
7-Aug	7	6	7	5	9	8	11	18	13	16	13	6	8	5	5	4	8	11	10	13	15	14	18	23	10.5	22.9
8-Aug	17	23	13	14	15	14	18	19	23	34	23	20	21	4	0	7	8	7	40	14	6	7	9	10	15.2	40.4
9-Aug	12	10	8	13	11	10	11	12	15	11	9	6	9	19	2	5	0	9	9	13	18	21	14	4	10.5	20.5
10-Aug	2	1	0	0	1	1	0	BD	BD	0	0	0	BD	BD	BD	0	0	2	0	0	BD	BD	BD	0	--	1.7
11-Aug	0	0	0	0	0	0	2	2	1	1	2	0	1	1	1	2	4	6	4	4	7	0	0	0	1.7	7.2
12-Aug	0	0	0	BD	0	0	1	3	3	7	5	5	3	1	1	1	2	0	4	8	9	10	BD	3	3.0	10.4
13-Aug	1	2	1	1	1	3	3	5	4	0	0	0	0	0	2	0	3	2	3	4	3	3	0	5	1.9	4.9
14-Aug	3	3	2	3	3	5	5	7	7	4	0	0	0	BD	0	4	1	3	2	5	13	13	25	17	5.4	24.9
15-Aug	28	12	3	7	6	0	11	10	17	17	16	18	10	10	10	11	12	8	10	5	13	22	17	18	12.2	28.4
16-Aug	0	13	2	2	4	6	8	4	4	6	5	2	2	3	3	0	1	11	7	5	5	8	7	4	4.6	12.8
17-Aug	2	2	3	3	4	5	6	6	6	7	18	15	9	3	BD	BD	BD	6	3	18	15	21	9	8	8.1	21.2
18-Aug	11	9	13	10	2	12	13	1	5	0	3	1	1	4	6	38	BD	12	3	1	0	0	0	0	6.2	37.9
19-Aug	4	0	2	1	2	0	3	4	1	5	4	BD	0	4	3	0	6	2	1	0	1	0	BD	0	1.9	6.3
20-Aug	0	BD	0	0	BD	BD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
21-Aug	0	0	0	0	0	0	0	0	1	1	1	1	1	0	2	0	0	0	0	1	4	0	0	BD	0.6	4.0
22-Aug	0	BD	BD	BD	0	0	4	10	0	6	BD	BD	1	BD	0	0	1	0	5	1	7	10	8	11	3.5	11.2
23-Aug	7	6	4	2	0	2	6	1	2	7	6	1	BD	BD	0	1	0	0	4	7	4	2	4	4	3.2	6.9
24-Aug	4	3	2	1	2	1	1	2	2	6	3	1	5	4	5	BD	BD	0	3	4	17	BD	0	BD	3.2	16.6
25-Aug	0	2	0	0	BD	0	BD	0	0	0	0	0	BD	2	1	1	0	1	3	4	2	2	2	1	1.0	4.0
26-Aug	0	0	0	1	0	1	3	3	0	0	0	3	8	1	0	0	0	0	2	2	3	0	2	7	1.5	8.4
27-Aug	2	3	4	0	2	3	2	6	8	2	0	0	1	0	3	0	2	1	3	2	2	2	0	0	2.1	7.8
28-Aug	0	0	0	0	0	1	3	0	0	0	0	0	0	1	1	1	0	2	3	3	4	3	1	1	1.0	3.6
29-Aug	1	1	1	0	1	1	2	3	0	0	0	0	0	0	4	7	7	3	1	1	2	0	0	0	1.4	7.0
30-Aug	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	4	0	0	2	2	0	0	0	0	0.5	3.7
31-Aug	0	1	0	0	0	0	5	3	4	4	0	0	0	0	0	2	2	0	1	4	9	14	8	1	2.4	13.7

3.9	3.9	2.6	2.7	2.4	3.0	4.5	4.6	4.5	5.0	4.6	3.5	3.1	2.4	2.1	3.4	2.4	3.0	4.6	4.6	6.3	6.3	5.3	4.8	Diurnal Average	
28.4	22.6	13.1	13.5	15.4	14.4	18.2	18.8	22.8	33.9	23.4	20.2	21.3	19.1	9.5	37.9	12.3	11.9	40.4	17.8	18.0	22.5	24.9	22.9	Diurnal Maximum	

BD - Baseline Drift
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 $\mu\text{g}/\text{m}^3$ 24-hr 30 $\mu\text{g}/\text{m}^3$

Hourly Averages for PM_{2.5} at Henry Pirker August 2008

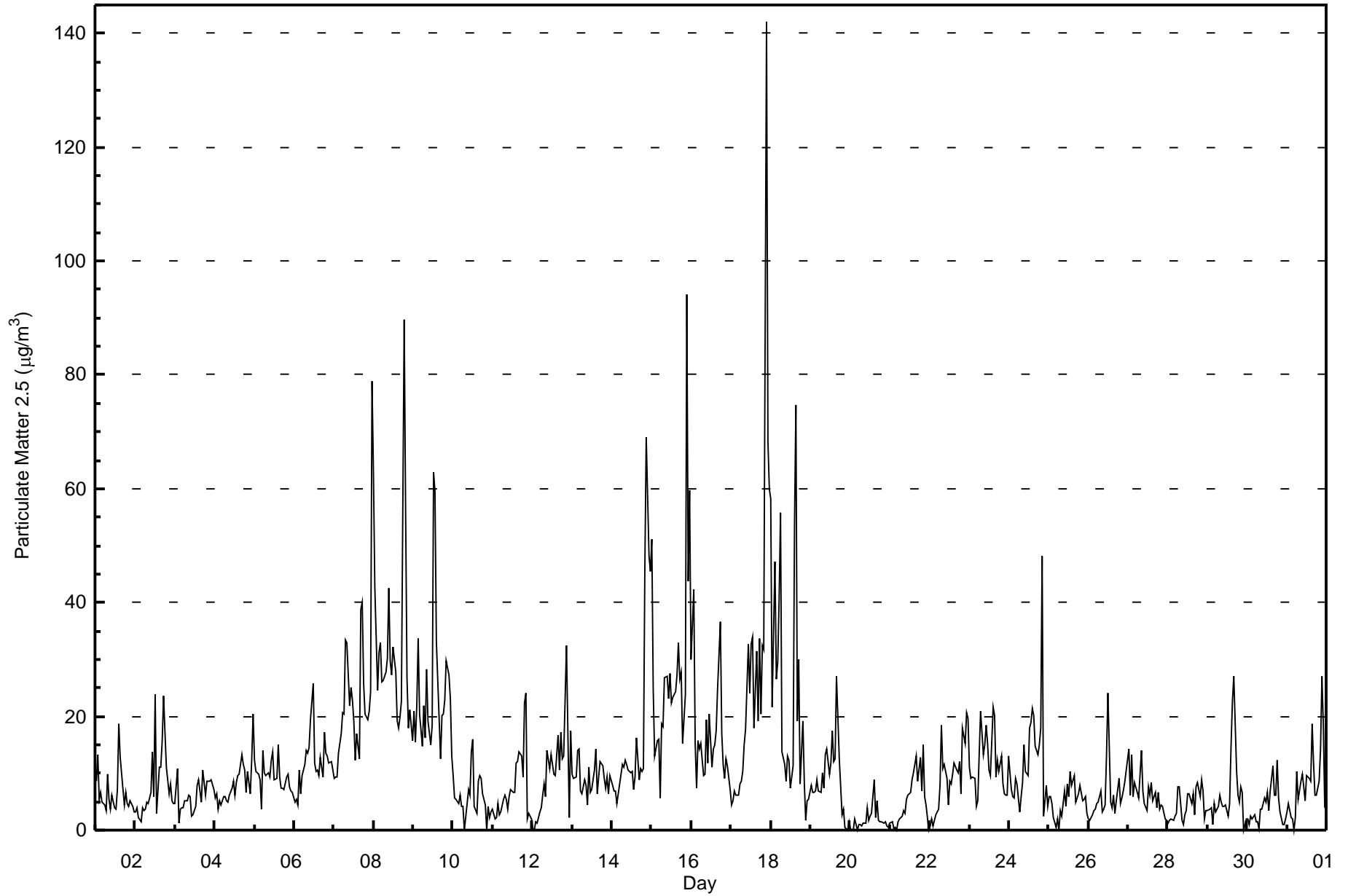


**Peace Airshed Zone Association
Summary of Hourly Maximums**

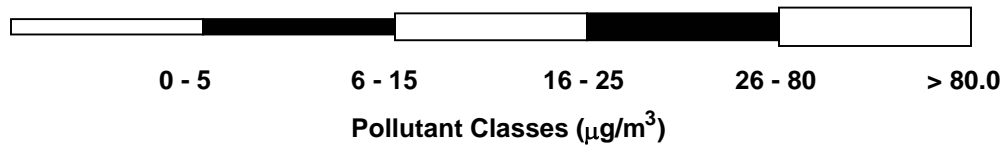
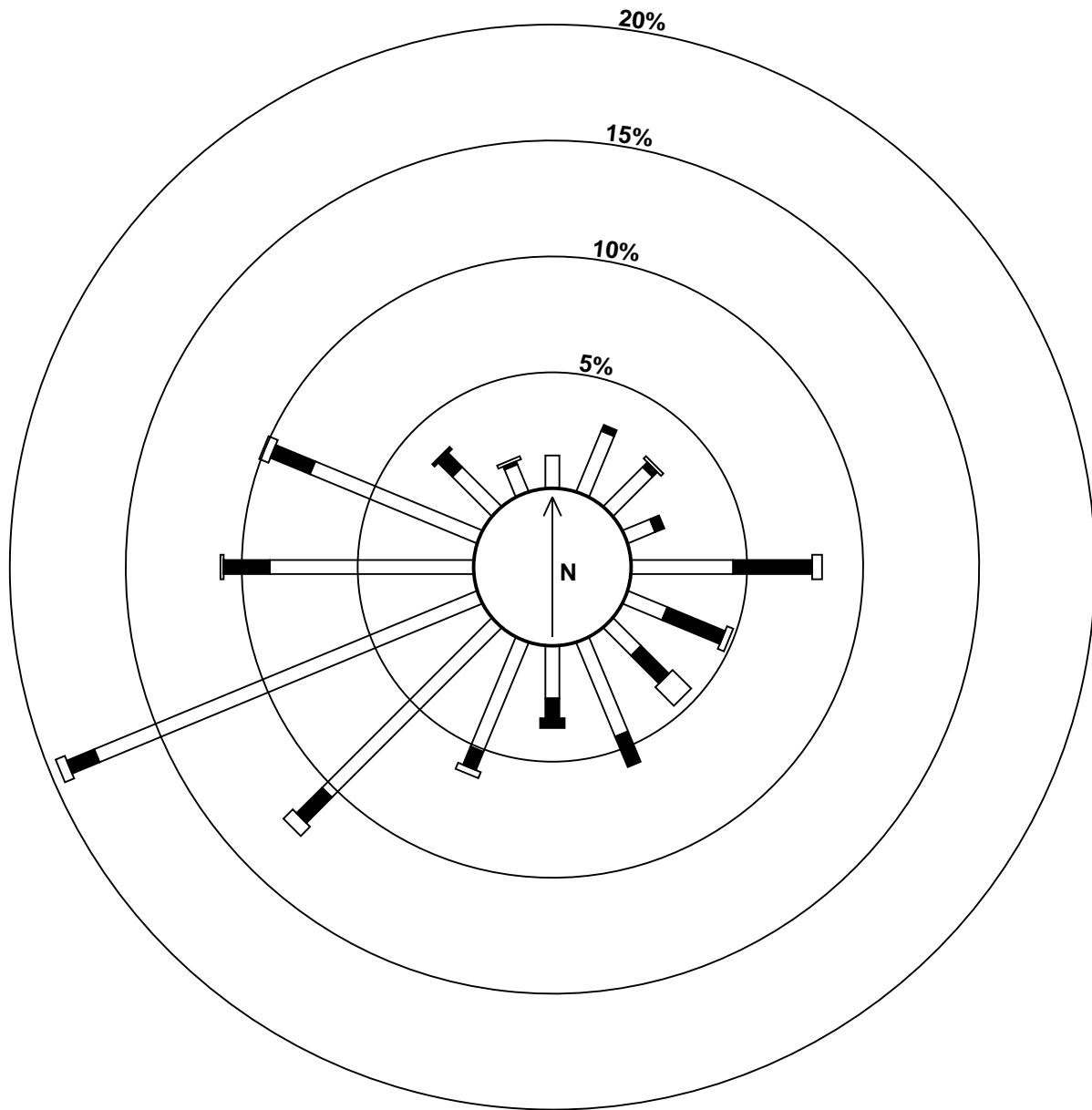
**Henry Pirker - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
August 1, 2008 to September 1, 2008**

Maximum Value: 142.1 µg/m ³ on Aug 17 22:00		Maximum Daily Average: 32.2 µg/m ³ on Aug 8		Hours in Service: 744																							
Minimum Value: 0 µg/m ³ on Aug 10 08:00		Minimum Daily Average: 1.8 µg/m ³ on Aug 20		Hours of Data: 744																							
Maximum Diurnal Average: 17.9 µg/m ³ at hour 22		Minimum Diurnal Average: 7.9 µg/m ³ at hour 4		Hours of Missing Data: 0																							
Monthly Average: 11.90 µg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 2.1 Q ₁ = 4.7 Median = 8.5 Q ₃ = 14.2 P ₉₀ = 24.3 P ₉₉ = 67.6		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	9	13	6	7	5	4	3	10	5	4	6	4	4	7	19	13	7	4	7	5	4	5	4	3	6.6	18.6	
2-Aug	3	4	2	2	4	3	4	5	5	7	14	6	24	3	11	11	15	24	17	11	6	8	5	5	8.3	23.8	
3-Aug	5	11	1	4	4	4	5	5	6	6	3	3	4	8	9	7	5	11	6	9	8	9	9	7	6.1	10.7	
4-Aug	6	6	4	5	5	6	6	5	5	6	7	8	6	8	10	10	13	12	11	7	10	6	12	20	8.1	20.4	
5-Aug	12	10	10	9	4	14	10	10	10	9	12	14	9	9	15	9	7	7	7	9	10	8	7	7	9.5	15.0	
6-Aug	5	5	4	11	6	10	12	14	13	14	19	26	12	10	10	9	13	9	17	13	13	12	12	11	11.8	25.9	
7-Aug	9	9	9	14	17	21	20	34	33	22	25	23	19	12	17	12	39	40	26	20	19	21	24	79	23.6	78.9	
8-Aug	63	43	25	31	33	26	26	28	30	42	30	27	32	28	19	18	20	23	90	56	27	18	21	16	32.2	89.7	
9-Aug	21	16	22	34	20	15	22	16	28	19	15	18	63	60	33	26	12	20	20	23	30	27	23	13	24.9	62.9	
10-Aug	9	6	5	5	6	4	4	0	5	7	6	14	16	4	3	9	10	9	6	5	0	4	2	3	5.9	16.0	
11-Aug	4	2	2	5	3	3	5	6	5	4	6	7	7	7	12	12	14	13	9	22	24	2	3	2	7.4	24.0	
12-Aug	0	0	2	1	3	4	6	8	6	14	11	13	11	10	10	17	10	17	12	13	32	17	2	17	9.9	32.4	
13-Aug	10	9	9	14	14	7	6	9	8	4	11	7	7	11	14	6	9	12	11	9	7	9	6	9	9.2	14.2	
14-Aug	8	7	7	5	6	10	11	11	12	12	10	10	10	7	9	16	9	11	10	11	45	69	48	45	16.7	69.2	
15-Aug	51	25	13	16	16	6	19	18	27	27	23	27	22	23	24	27	33	27	28	15	24	94	44	60	28.7	94.2	
16-Aug	30	42	15	7	16	14	15	10	10	19	12	20	11	14	15	18	25	37	17	12	9	12	11	7	16.6	42.3	
17-Aug	4	5	7	6	6	8	9	10	15	18	33	24	33	34	18	31	19	34	20	33	32	142	68	60	27.9	142.1	
18-Aug	58	22	47	26	29	41	56	14	11	9	13	12	7	11	54	75	19	30	8	19	8	2	5	5	24.3	74.8	
19-Aug	8	7	7	7	9	7	7	10	7	13	14	10	12	17	12	13	27	12	8	3	4	1	0	2	8.9	27.0	
20-Aug	0	0	0	2	0	1	1	1	1	1	4	2	3	3	9	2	5	2	2	2	1	1	1	1	1.8	8.7	
21-Aug	1	1	0	1	0	1	2	2	3	3	5	6	7	9	10	11	13	9	13	7	15	6	5	0	5.4	15.0	
22-Aug	1	2	1	2	3	4	8	18	11	11	9	4	9	8	10	12	11	10	12	6	18	15	21	20	9.4	20.6	
23-Aug	11	9	9	9	4	5	13	21	13	15	18	15	11	10	22	20	9	12	10	13	8	6	6	6	11.6	21.5	
24-Aug	13	7	6	6	9	8	3	6	8	15	10	10	18	19	21	20	15	13	15	18	48	3	8	4	12.7	48.3	
25-Aug	6	6	5	2	0	2	0	3	2	7	4	8	6	10	8	10	5	6	7	8	5	5	6	3	5.1	10.3	
26-Aug	2	2	3	3	4	5	5	7	3	4	4	13	24	5	4	6	3	5	9	5	6	7	8	10	6.1	24.0	
27-Aug	14	6	13	6	8	7	6	10	14	7	5	3	8	6	8	5	7	4	7	4	5	4	2	2	6.7	14.4	
28-Aug	1	2	2	2	2	3	8	8	2	1	3	4	6	6	5	6	3	8	8	6	9	7	2	3	4.4	8.9	
29-Aug	3	4	4	1	5	3	4	6	5	4	4	4	3	5	15	23	27	10	6	5	8	7	0	2	6.5	27.1	
30-Aug	2	1	3	2	3	1	2	0	4	4	6	5	7	4	7	11	6	6	12	6	3	1	1	2	4.0	12.4	
31-Aug	3	5	2	2	0	2	10	6	9	10	8	5	10	9	9	19	12	6	6	9	14	27	18	4	8.5	27.0	
		12.0	9.2	7.9	7.9	7.9	8.0	10.0	10.0	10.3	10.9	11.3	11.4	13.5	12.2	14.2	15.6	13.6	14.3	14.2	12.3	14.6	17.9	12.4	13.8	Diurnal Average	
		63.1	42.7	47.2	33.7	32.9	40.6	55.8	33.5	33.0	42.5	32.8	27.4	62.9	59.5	53.8	74.8	38.9	40.0	89.7	56.5	48.3	142.1	68.4	78.9	Diurnal Maximum	

Hourly Maximums for PM_{2.5} at Henry Pirker August 2008



Pollutant Rose for PM_{2.5} at Henry Pirker August 2008



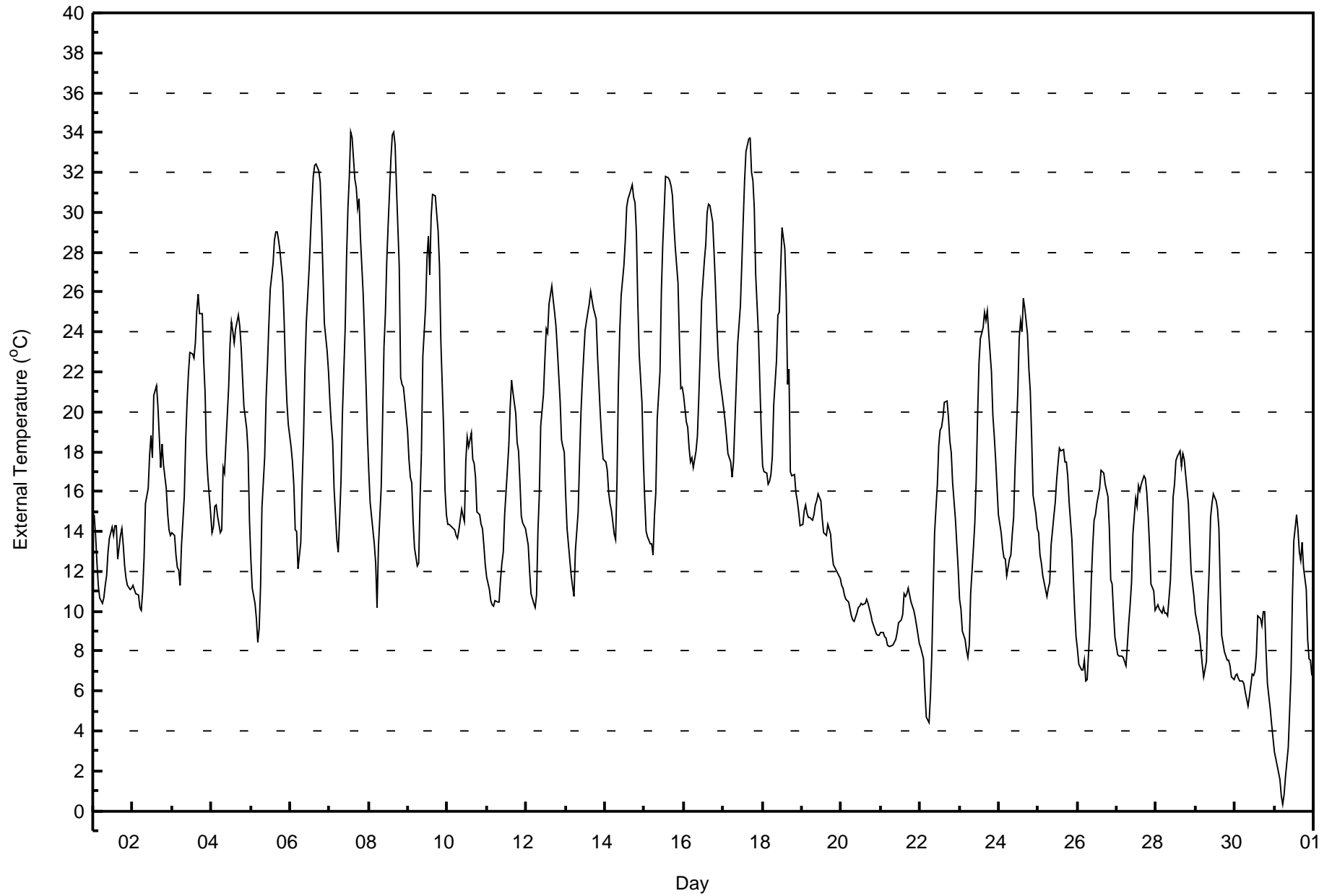
**Peace Airshed Zone Association
Summary of Hourly Averages**

**Henry Pirker - External Temperature (ET) - °C
August 1, 2008 to September 1, 2008**

Maximum Value: 34.0 °C on Aug 8 16:00		Maximum Daily Average: 24.6 °C on Aug 17		Hours in Service: 744																							
Minimum Value: 0 °C on Aug 31 06:00		Minimum Daily Average: 6.9 °C on Aug 30		Hours of Data: 744																							
Maximum Diurnal Average: 22.3 °C at hour 15		Minimum Diurnal Average: 10.7 °C at hour 6		Hours of Missing Data: 0																							
Monthly Average: 16.63 °C		Percentiles: P ₁ = 3.0 P ₁₀ = 8.4 Q ₁ = 11.3 Median = 15.4 Q ₃ = 21.2 P ₉₀ = 27.3 P ₉₉ = 33.2		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	15	14	12	11	11	10	11	11	12	13	14	14	14	14	14	13	14	14	13	12	12	11	11	11	12.6	14.8	
2-Aug	11	11	11	11	10	10	11	13	15	16	18	19	18	21	21	20	19	17	18	17	16	15	14	14	15.3	21.3	
3-Aug	14	14	13	12	12	11	13	16	19	20	22	23	23	23	25	26	25	25	23	21	18	17	15	15	18.8	25.9	
4-Aug	14	14	15	15	15	14	14	17	17	18	21	23	25	24	23	24	25	24	23	22	20	19	18	15	19.2	24.9	
5-Aug	13	11	10	10	8	9	11	15	18	21	22	24	26	27	29	29	29	29	28	27	25	22	20	19	20.1	29.0	
6-Aug	18	18	16	14	14	12	13	16	19	22	24	27	29	30	32	32	32	32	32	29	27	24	23	22	23.3	32.4	
7-Aug	21	19	19	16	14	13	15	17	20	24	28	30	32	34	34	32	31	30	31	29	26	24	21	19	24.0	34.0	
8-Aug	17	15	14	13	12	10	13	16	20	23	25	28	29	33	34	34	33	31	27	22	21	21	21	19	22.2	34.0	
9-Aug	18	17	16	14	13	12	12	16	18	23	25	28	29	27	30	31	31	30	29	27	24	19	16	15	21.6	30.9	
10-Aug	14	14	14	14	14	14	14	14	15	15	15	18	19	18	19	18	17	17	15	15	14	14	13	12	15.3	18.9	
11-Aug	12	11	11	10	10	11	10	10	12	12	13	15	17	18	20	22	21	20	18	18	17	15	14	14	14.7	21.6	
12-Aug	14	13	12	11	10	10	11	14	16	19	21	23	24	24	25	26	26	25	24	23	21	19	18	18	18.6	26.3	
13-Aug	16	14	13	12	11	11	13	15	18	20	22	23	24	25	25	26	26	25	25	23	21	20	19	18	19.3	26.0	
14-Aug	17	17	16	15	15	14	14	17	21	24	26	27	29	30	31	31	31	31	30	29	25	23	20	18	23.0	31.4	
15-Aug	16	14	14	13	13	13	15	16	20	22	26	28	30	32	32	32	31	31	29	28	26	24	21	21	22.8	31.8	
16-Aug	21	19	19	18	17	18	17	18	19	21	23	26	28	28	30	30	30	29	28	26	24	23	22	21	23.2	30.4	
17-Aug	20	19	19	18	17	17	17	19	21	23	25	27	30	32	33	34	34	32	32	30	27	24	21	19	24.6	33.8	
18-Aug	17	17	17	16	17	17	18	20	23	25	25	27	29	28	26	21	22	17	17	17	16	16	15	14	19.9	29.2	
19-Aug	14	15	15	15	15	15	15	15	15	16	16	16	15	14	14	14	14	14	13	12	12	12	12	12	14.1	15.9	
20-Aug	11	11	11	11	10	10	10	10	9	10	10	10	10	10	10	11	10	10	10	9	9	9	9	9	10.0	11.3	
21-Aug	9	9	9	9	8	8	8	8	8	9	9	9	10	10	11	11	11	11	10	10	10	10	9	8	9.4	11.2	
22-Aug	8	8	8	6	5	4	6	8	11	14	16	18	19	19	20	20	21	20	18	18	16	15	13	12	13.5	20.5	
23-Aug	11	10	9	9	8	8	8	11	13	14	17	20	22	24	24	25	25	25	24	22	20	19	18	16	16.7	25.1	
24-Aug	15	14	13	13	13	12	13	13	14	15	17	21	24	25	24	26	25	24	22	21	19	16	15	14	17.7	25.7	
25-Aug	14	13	12	12	11	11	11	11	13	15	15	17	17	18	18	18	17	17	17	15	14	12	10	9	14.1	18.2	
26-Aug	8	7	7	7	8	7	7	9	12	13	15	15	15	16	17	17	17	16	16	14	12	11	10	9	11.8	17.1	
27-Aug	8	8	8	8	8	7	8	9	10	11	14	16	15	16	16	16	17	17	16	15	13	11	11	10	12.0	16.8	
28-Aug	10	10	10	10	10	10	10	10	12	14	16	16	18	18	18	17	18	18	17	15	14	12	11	11	13.5	18.0	
29-Aug	10	9	9	8	7	7	7	10	12	15	15	16	16	15	14	11	9	8	8	8	8	7	7	7	10.1	15.9	
30-Aug	7	7	7	6	7	6	6	6	5	6	7	7	7	8	10	10	9	10	10	8	6	5	4	4	6.9	10.0	
31-Aug	3	3	2	2	1	0	1	2	3	5	7	11	14	15	14	13	13	13	12	11	9	8	8	7	7.2	14.8	
		13.4	12.8	12.3	11.6	11.1	10.7	11.4	13.0	14.8	16.7	18.3	20.0	21.1	21.8	22.3	22.2	22.1	21.4	20.6	19.2	17.5	16.0	14.9	13.9	Diurnal Average	
		20.8	19.5	19.2	18.2	17.5	17.7	17.8	20.4	22.6	24.8	27.7	30.2	31.8	34.0	33.9	34.0	33.8	32.1	31.6	30.2	27.0	24.4	23.0	22.0	Diurnal Maximum	

Hourly Averages for External Temperature at Henry Pirker

August 2008



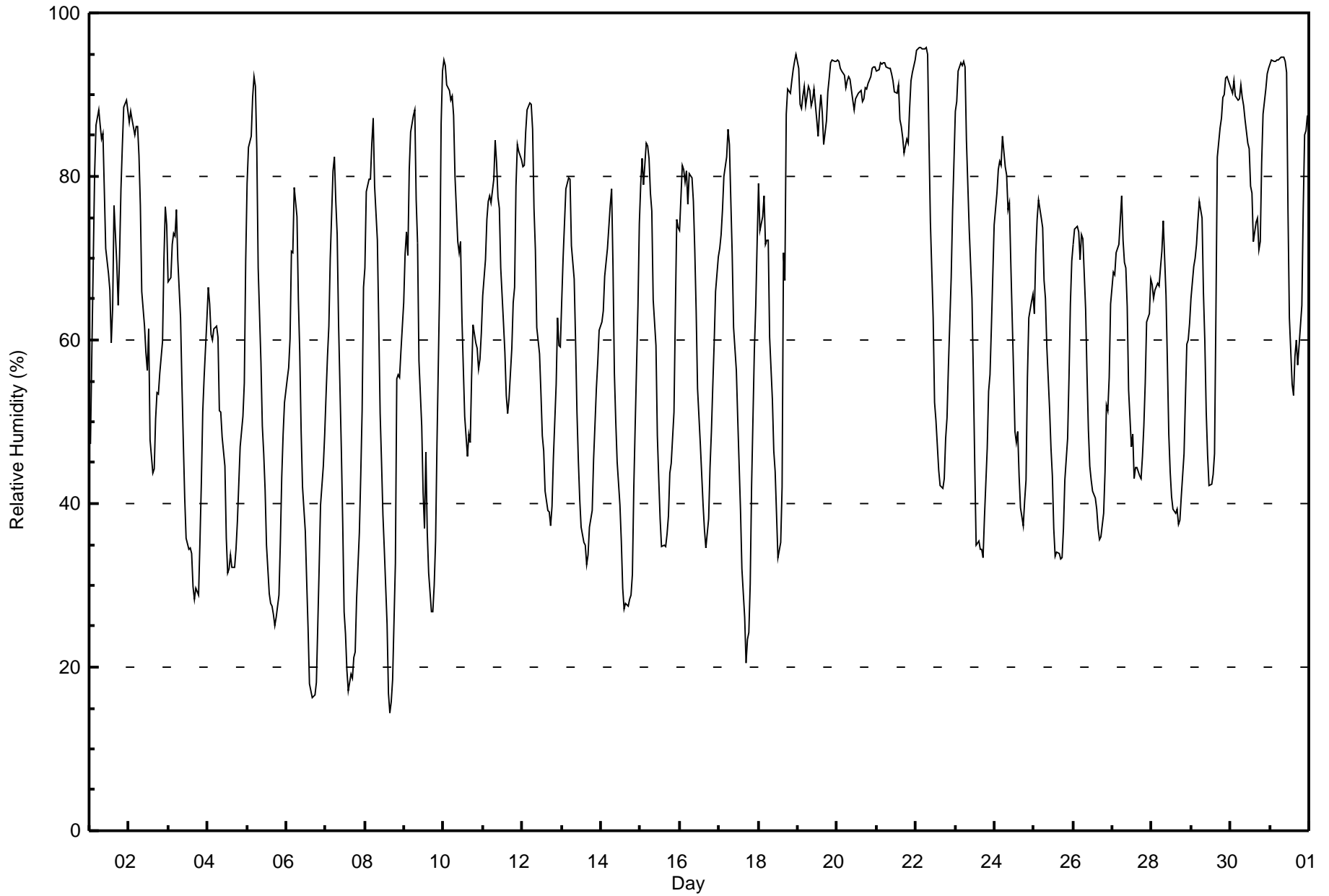
**Peace Airshed Zone Association
Summary of Hourly Averages**

**Henry Pirker - Relative Humidity (RH) - %
August 1, 2008 to September 1, 2008**

Maximum Value: 95.8 % on Aug 22 03:00 Maximum Daily Average: 91.4 % on Aug 20																						Hours in Service: 744 Hours of Data: 744					
Minimum Value: 14 % on Aug 8 16:00 Minimum Daily Average: 43.7 % on Aug 6 Maximum Diurnal Average: 82.9 % at hour 6 Minimum Diurnal Average: 44.1 % at hour 15 Monthly Average: 63.67 % Percentiles: P ₁ = 18.0 P ₁₀ = 34.7 Q ₁ = 46.0 Median = 65.3 Q ₃ = 82.2 P ₉₀ = 91.1 P ₉₉ = 95.2																						Hours of Missing Data: 0 Hours of Calibration: 0 Percent Operational Time: 100.0					
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	47	59	69	80	86	88	86	85	85	78	71	68	66	60	64	76	69	64	70	78	84	89	89	88	75.1	89.3	
2-Aug	87	88	87	85	86	86	82	76	66	62	58	56	61	48	44	44	50	54	53	56	60	70	76	74	67.1	88.0	
3-Aug	67	68	72	73	73	76	70	63	55	47	41	36	34	35	34	30	28	30	29	35	43	51	55	62	50.2	75.9	
4-Aug	66	64	61	60	61	62	60	51	51	48	45	36	32	32	34	32	32	34	38	42	47	51	55	70	48.5	69.7	
5-Aug	79	84	85	90	92	91	83	69	57	49	46	42	35	29	28	27	27	25	26	29	35	43	48	52	53.0	92.2	
6-Aug	55	57	60	71	71	79	75	65	59	49	42	37	31	25	18	17	16	17	18	25	32	40	45	49	43.7	78.7	
7-Aug	53	58	62	70	81	82	77	73	62	47	38	27	24	20	17	19	19	21	22	28	36	43	51	66	45.7	82.4	
8-Aug	69	78	80	80	84	87	79	72	62	51	45	39	34	25	17	14	16	18	33	55	56	55	59	65	53.0	87.2	
9-Aug	71	73	70	81	85	88	88	77	72	57	49	41	37	46	36	31	27	27	30	35	47	67	86	93	59.1	92.8	
10-Aug	94	94	91	90	89	90	87	80	72	71	72	63	57	51	46	49	47	56	62	60	59	56	58	61	68.9	94.3	
11-Aug	65	70	75	77	78	77	80	84	82	77	76	69	62	58	53	51	53	59	65	66	79	84	83	82	71.0	84.5	
12-Aug	81	81	85	88	89	89	86	76	71	62	58	53	48	46	42	39	39	37	40	46	55	63	59	59	62.2	89.0	
13-Aug	65	70	78	79	80	80	72	68	60	51	45	40	37	35	35	33	34	37	39	45	50	54	57	61	54.4	79.8	
14-Aug	62	64	68	69	71	76	79	69	56	50	45	40	35	30	27	28	27	28	29	31	42	50	64	74	50.6	78.5	
15-Aug	79	82	79	84	84	82	78	76	65	59	48	43	38	35	35	35	36	38	44	45	51	64	75	74	59.5	84.0	
16-Aug	73	81	81	79	81	77	80	80	77	71	64	54	47	43	40	37	35	38	44	49	54	60	66	70	61.7	81.3	
17-Aug	71	73	76	80	82	86	84	77	70	62	56	50	45	39	32	26	20	23	24	30	42	59	64	72	56.1	85.8	
18-Aug	79	73	75	78	72	72	72	60	53	46	44	39	33	35	42	71	67	88	91	90	92	93	94	95	68.9	94.9	
19-Aug	93	89	88	90	91	89	91	91	89	89	91	87	85	88	90	88	84	87	90	92	94	94	94	94	89.9	94.3	
20-Aug	94	94	93	93	92	91	92	92	92	89	88	90	90	90	91	89	89	91	91	91	91	92	93	93	93	91.4	94.3
21-Aug	93	93	94	94	94	94	93	93	93	92	92	90	90	91	87	86	85	83	85	84	88	92	93	94	90.6	94.2	
22-Aug	95	96	96	96	96	96	96	95	84	74	63	52	50	47	44	42	42	43	48	50	57	68	76	82	70.3	95.8	
23-Aug	88	89	93	94	94	94	93	84	74	69	65	56	45	35	35	34	34	33	38	47	54	56	61	68	63.9	94.0	
24-Aug	74	78	81	82	81	85	81	80	76	77	69	56	49	47	49	43	40	37	40	43	55	63	65	66	63.2	84.9	
25-Aug	63	70	75	77	75	74	67	65	59	52	47	43	37	34	34	34	33	33	37	43	48	55	64	70	53.7	77.2	
26-Aug	72	74	74	73	70	73	72	64	56	49	45	43	41	41	39	37	36	36	39	44	52	51	55	64	54.1	73.9	
27-Aug	68	68	71	71	72	78	72	70	69	64	54	47	48	43	44	44	43	43	46	49	55	62	63	67	58.8	77.6	
28-Aug	67	65	66	67	67	69	71	75	65	57	49	44	41	39	39	39	38	38	41	46	53	59	60	62	54.8	74.5	
29-Aug	65	69	70	72	75	77	75	66	60	51	46	42	42	43	46	63	82	86	87	90	90	92	92	91	69.7	92.3	
30-Aug	91	90	92	90	89	90	91	90	89	87	84	83	79	78	72	74	75	71	72	82	88	91	92	93	84.7	93.3	
31-Aug	94	94	94	94	94	94	94	95	95	94	93	76	63	55	53	58	60	57	59	64	76	85	86	87	79.7	94.5	
74.9 76.9 78.7 80.8 81.7 82.9 80.9 76.1 70.1 64.0 59.0 53.0 48.9 45.9 44.1 44.9 44.7 46.2 49.3 54.0 60.2 66.2 70.4 74.2																						Diurnal Average					
95.4 95.6 95.8 95.7 95.6 95.7 95.7 94.9 94.5 94.1 92.7 90.3 90.2 91.1 90.5 89.2 89.4 90.9 90.8 92.1 94.0 94.3 94.0 94.9																						Diurnal Maximum					

Hourly Averages for Relative Humidity at Henry Pirker

August 2008



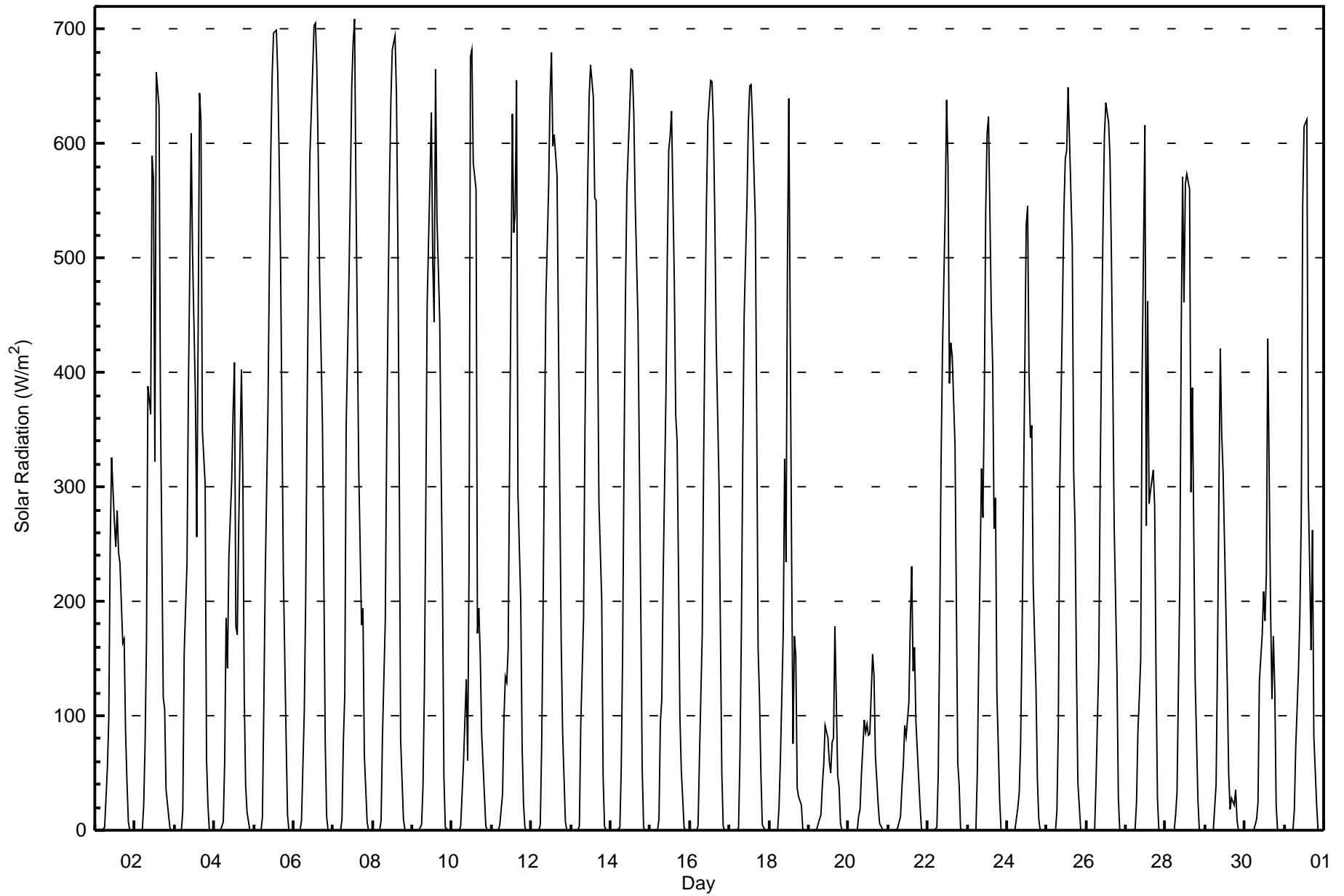
**Peace Airshed Zone Association
Summary of Hourly Averages**

**Henry Pirker - Solar Radiation (SR) - W/m²
August 1, 2008 to September 1, 2008**

Maximum Value: 709.0 W/m ² on Aug 7 14:00	Maximum Daily Average: 261.3 W/m ² on Aug 5	Hours in Service: 744
Minimum Value: 0 W/m ² on Aug 1 01:00	Minimum Daily Average: 34.6 W/m ² on Aug 19	Hours of Data: 744
Maximum Diurnal Average: 501.5 W/m ² at hour 13	Minimum Diurnal Average: 0.0 W/m ² at hour 23	Hours of Missing Data: 0
Monthly Average: 172.30 W/m ²	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 49.7 Q ₃ = 314.8 P ₉₀ = 569.0 P ₉₉ = 682.1	Hours of Calibration: 0
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	3	28	55	97	249	326	269	248	279	243	233	164	167	86	43	7	0	0	0	104.0	326.0
2-Aug	0	0	0	0	0	21	77	165	388	363	589	568	322	662	633	371	247	116	106	36	11	0	0	0	194.8	662.3
3-Aug	0	0	0	0	0	18	155	233	383	492	609	503	381	256	439	644	620	350	302	62	21	0	0	0	227.9	644.3
4-Aug	0	0	0	0	0	8	61	185	142	239	305	365	409	178	171	262	402	312	119	39	16	0	0	0	133.9	409.4
5-Aug	0	0	0	0	0	11	106	218	370	491	590	660	697	699	661	587	500	360	226	80	14	0	0	0	261.3	699.2
6-Aug	0	0	0	0	0	8	103	202	364	488	589	664	703	705	666	588	482	355	224	77	13	0	0	0	259.7	705.5
7-Aug	0	0	0	0	0	10	78	119	354	482	561	651	688	709	560	315	247	179	194	66	7	0	0	0	217.6	709.0
8-Aug	0	0	0	0	0	8	84	183	339	459	562	638	683	695	644	518	317	79	9	2	0	0	0	0	217.4	695.0
9-Aug	0	0	0	0	0	4	38	123	277	461	570	627	496	445	665	536	446	317	211	46	2	0	0	0	219.3	664.6
10-Aug	0	0	0	0	0	3	32	59	132	61	231	676	682	583	561	172	194	154	85	31	4	0	0	0	152.5	682.0
11-Aug	0	0	0	0	0	5	32	99	134	129	159	316	626	523	539	656	296	200	74	23	2	0	0	0	158.9	655.8
12-Aug	0	0	0	0	0	5	75	191	334	463	563	642	680	598	607	572	437	293	164	85	7	0	0	0	238.1	679.7
13-Aug	0	0	0	0	0	4	92	185	350	470	567	641	668	641	553	550	446	287	201	48	4	0	0	0	237.8	668.3
14-Aug	0	0	0	0	0	2	55	158	326	465	560	630	666	664	625	548	445	320	192	54	3	0	0	0	238.1	665.6
15-Aug	0	0	0	0	0	10	93	114	220	380	504	594	607	628	480	363	340	226	99	52	2	0	0	0	196.4	628.2
16-Aug	0	0	0	0	0	3	64	172	323	446	546	619	655	654	616	536	426	304	176	51	3	0	0	0	233.2	654.7
17-Aug	0	0	0	0	0	3	64	171	326	449	547	617	651	651	620	535	363	158	116	50	5	0	0	0	222.0	651.2
18-Aug	0	0	0	0	0	0	20	63	173	325	234	493	639	238	75	170	153	36	29	22	2	0	0	0	111.4	639.0
19-Aug	0	0	0	0	0	1	10	14	39	57	91	80	60	50	76	80	179	47	38	7	0	0	0	0	34.6	178.7
20-Aug	0	0	0	0	0	0	12	18	49	96	86	93	83	84	154	135	65	45	22	6	1	0	0	0	39.5	153.5
21-Aug	0	0	0	0	0	0	3	12	38	57	92	82	112	181	231	139	159	95	45	21	1	0	0	0	52.9	231.2
22-Aug	0	0	0	0	0	3	49	167	319	416	543	638	582	390	426	415	337	197	59	39	1	0	0	0	190.9	638.3
23-Aug	0	0	0	0	0	2	51	150	317	274	377	540	609	623	454	406	264	291	121	26	0	0	0	0	187.6	623.2
24-Aug	0	0	0	0	0	2	20	33	75	168	284	529	546	400	343	354	215	125	45	10	0	0	0	0	131.2	545.6
25-Aug	0	0	0	0	0	0	17	91	299	460	542	587	594	649	604	512	314	265	142	41	1	0	0	0	213.2	649.2
26-Aug	0	0	0	0	0	1	43	149	309	429	527	606	636	619	588	504	396	266	137	29	0	0	0	0	218.2	635.5
27-Aug	0	0	0	0	0	1	24	86	116	150	395	616	266	463	286	296	315	283	133	28	0	0	0	0	144.1	615.8
28-Aug	0	0	0	0	0	0	14	33	216	433	571	461	565	574	560	295	387	261	132	25	0	0	0	0	188.6	573.7
29-Aug	0	0	0	0	0	0	40	151	295	422	346	312	192	128	50	18	28	22	36	8	0	0	0	0	85.4	421.5
30-Aug	0	0	0	0	0	0	5	10	25	130	171	208	184	224	429	195	114	170	124	22	0	0	0	0	83.8	429.0
31-Aug	0	0	0	0	0	0	17	71	141	189	276	546	615	621	296	232	158	263	82	22	0	0	0	0	147.1	621.1
	0.0	0.0	0.0	0.0	0.0	4.4	50.4	118.7	234.5	328.8	416.6	499.1	501.5	477.9	446.9	378.6	305.1	211.1	120.2	37.1	4.0	0.0	0.0	0.0	Diurnal Average	
	0.1	0.3	0.3	0.3	0.3	21.4	155.2	233.2	387.6	491.6	608.8	675.9	703.1	709.0	666.2	655.8	620.4	360.2	302.1	85.1	21.5	0.1	0.1	0.1	Diurnal Maximum	

Hourly Averages for Solar Radiation at Henry Pirker August 2008

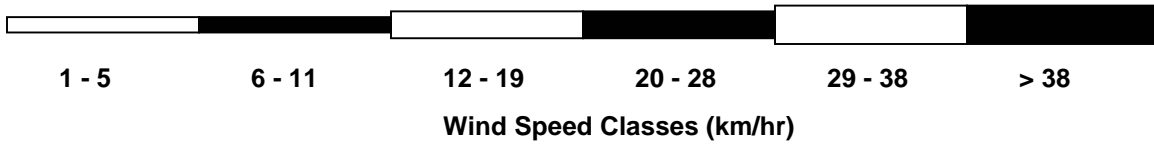
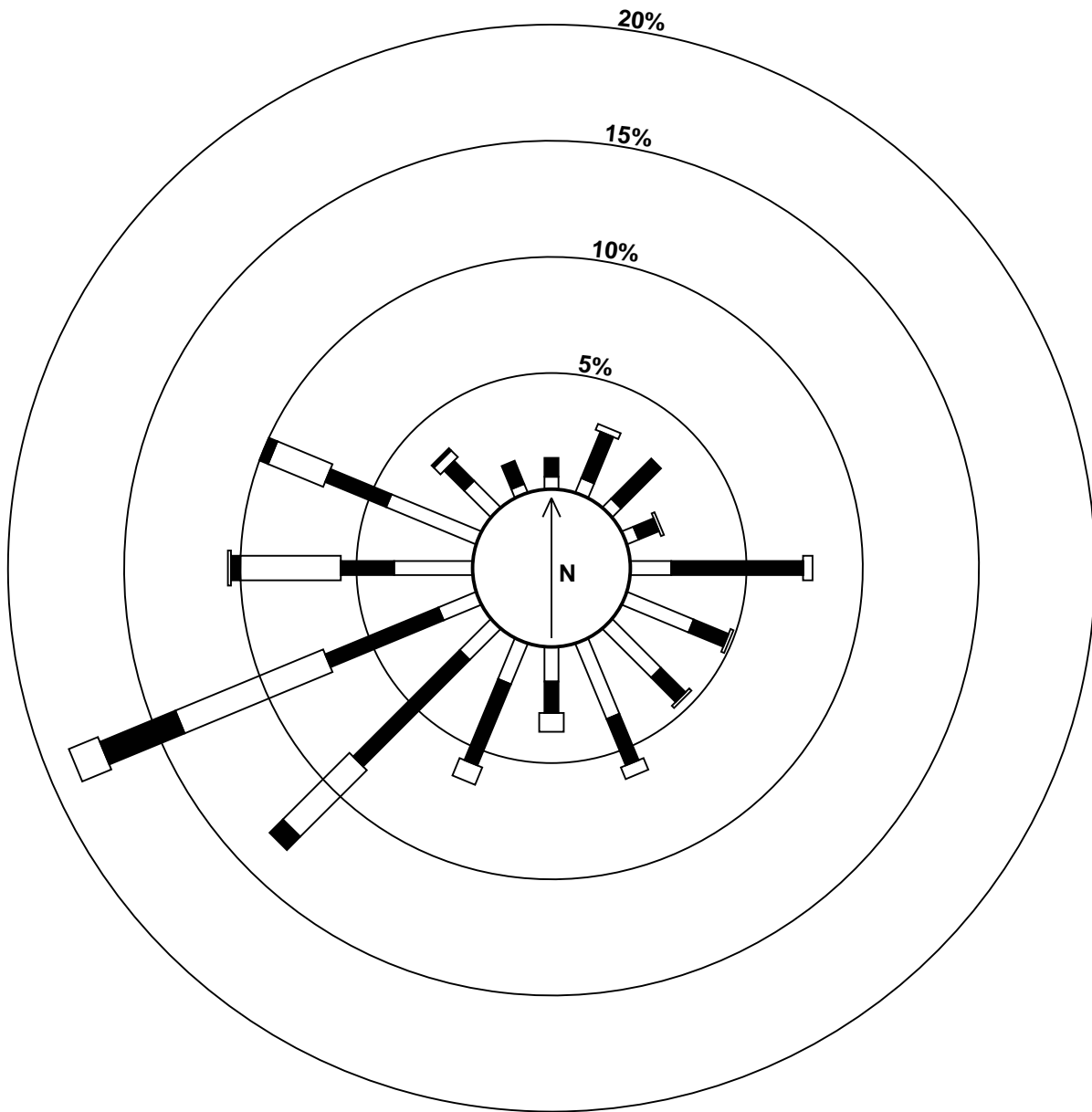


Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker
 August 1, 2008 to September 1, 2008
 WS (km/h), WD (deg)

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	1	1	3	3	5	4	5	5	4	5	7	8	12	17	15	11	10	12	11	10	9	10	9	6	6.8	16.7
Dir	173	113	158	157	154	122	108	153	141	120	106	125	136	148	157	140	116	97	89	84	81	76	94	97	119.0	148.5
24 Spd	4	5	4	5	3	4	6	6	6	5	7	10	9	9	10	6	12	16	19	15	13	16	12	12	4.3	18.9
Dir	101	108	88	98	78	98	91	100	105	99	138	148	130	93	93	131	187	185	179	182	277	283	254	238	160.3	179.0
25 Spd	17	17	19	21	13	13	15	17	17	19	21	20	24	26	31	27	25	24	23	20	18	15	12	9	19.0	30.8
Dir	245	241	241	240	226	217	226	230	233	236	232	237	235	243	260	258	248	243	250	257	256	239	236	225	241.8	259.7
26 Spd	7	7	7	8	8	8	8	8	15	17	24	35	34	26	24	31	29	26	20	14	7	9	3	3	14.9	35.2
Dir	219	228	204	196	205	199	202	226	236	237	244	249	256	245	245	253	250	246	250	246	248	248	162	101	240.9	249.3
27 Spd	4	5	2	3	5	4	4	5	7	8	13	18	16	24	25	24	27	30	26	22	16	9	13	12	12.6	30.1
Dir	146	147	191	279	302	297	282	223	223	222	236	237	230	247	256	255	248	247	244	242	243	224	224	228	241.8	246.6
28 Spd	10	8	8	12	12	8	11	13	20	26	29	28	27	30	30	29	30	27	27	18	11	6	10	9	17.4	29.9
Dir	215	205	192	211	208	217	229	216	234	243	251	264	256	247	247	252	245	248	259	255	241	217	198	211	240.9	245.5
29 Spd	8	8	9	9	7	7	7	8	11	14	13	7	6	3	6	6	7	8	12	9	10	11	10	9	7.3	13.6
Dir	224	230	217	218	223	222	228	230	242	253	256	253	297	7	350	318	300	273	245	261	247	259	276	270	253.0	253.2
30 Spd	9	11	11	11	13	14	12	14	8	2	7	11	8	8	9	10	11	10	12	9	6	5	3	3	7.2	13.9
Dir	247	245	240	264	269	278	285	294	343	202	278	267	257	205	210	223	238	279	241	210	183	163	187	157	251.2	277.6
31 Spd	3	5	1	1	2	3	2	4	4	3	3	4	3	4	4	9	5	6	5	3	2	4	3	3	0.7	9.2
Dir	133	149	149	213	292	306	283	280	274	254	283	263	211	230	282	336	1	42	73	83	145	156	214	153	269.7	336.3
Spd	3.4	3.3	3.2	3.4	3.1	2.9	3.1	4.2	5.8	6.3	7.3	8.3	7.5	6.9	7.1	7.0	7.2	6.7	6.3	4.8	4.3	3.3	2.7	3.0	Diurnal Average	
Dir	227.9	219.0	217.8	224.5	232.2	237.1	238.5	235.3	241.7	244.4	247.4	251.7	249.8	250.3	253.6	258.5	257.6	257.5	243.5	235.2	233.4	231.3	216.4	223.7	Diurnal Maximum	
Spd	16.9	17.3	18.6	20.8	13.5	13.9	15.3	16.8	20.4	26.5	28.6	35.2	34.3	29.6	30.8	31.0	29.9	30.1	26.8	22.4	19.0	18.3	15.6	15.5	Diurnal Maximum	
Dir	245.2	241.4	241.0	239.6	226.0	277.6	226.4	229.8	234.0	242.8	250.5	249.3	255.8	247.4	259.7	252.9	245.5	246.6	258.6	242.3	241.5	241.4	243.5	192.2	Diurnal Maximum	
Maximum Speed Value: 35 km/h on Aug 26 12:00																		Minimum Speed Value: 0 km/h on Aug 19 07:00						Hours in Service: 744		
Maximum Daily Speed Average: 19.0 km/h on Aug 25																		Minimum Daily Speed Average: 0.7 km/h on Aug 31						Hours of Data: 744		
Maximum Diurnal Speed Average: 8.3 km/h at hour 12																		Minimum Diurnal Speed Average: 2.7 km/h at hour 23						Hours of Missing Data: 0		
Monthly Average Velocity: 4.93 km/h 242.89 deg																		Speed Percentiles: P ₁ = 1.2 P ₁₀ = 3.1 Q ₁ = 4.8 Median = 8.3 Q ₃ = 12.2 P ₉₀ = 18.1 P ₉₉ = 29.4						Percent Operational Time: 100.0		
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Percentage Frequency Distribution																										
Direction	Speed Range (km/h)							Total																		
	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38																				
North	0.67	2.42	0.00	0.00	0.00	0.00	3.09																			
NorthEast	1.34	3.90	0.54	0.00	0.00	0.00	5.78																			
East	3.36	8.06	0.67	0.00	0.00	0.00	12.10																			
SouthEast	5.91	4.30	0.67	0.00	0.00	0.00	10.89																			
South	2.96	3.76	1.48	0.00	0.00	0.00	8.20																			
SouthWest	3.09	11.16	9.68	2.82	0.54	0.00	27.28																			
West	6.45	5.38	7.39	2.96	1.08	0.00	23.25																			
NorthWest	3.63	3.63	1.61	0.54	0.00	0.00	9.41																			
Total	27.42	42.61	22.04	6.32	1.61	0.00	100.00																			

Wind Rose for WS at Henry Pirker August 2008



Peace Airshed Zone Association
Summary of Hourly Averages - Wind Speed (Scalar)

Henry Pirker - Wind Speed (WS) - km/h
August 1, 2008 to September 1, 2008

Maximum Speed: 36 km/h on Aug 26 12:00	Maximum Daily Speed Average: 19.6 km/h on Aug 25	Hours in Service: 744
Minimum Speed: 2 km/h on Aug 6 06:00	Minimum Daily Speed Average: 4.5 km/h on Aug 31	Hours of Data: 744
Maximum Diurnal Speed Average: 13.2 km/h at hour 15	Minimum Diurnal Speed Average: 6.9 km/h at hour 6	Hours of Missing Data: 0
Monthly Average Speed: 10.05 km/h	Percentiles: P ₁ = 2.8 P ₁₀ = 4.0 Q ₁ = 5.6 Median = 8.7 Q ₃ = 12.4 P ₉₀ = 18.6 P ₉₉ = 29.7	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-Aug	11	11	10	9	11	5	4	5	7	10	13	13	15	15	16	14	13	19	22	18	14	15	16	12	12.5	21.7
2-Aug	14	14	13	16	12	9	12	13	20	22	20	20	19	20	22	21	16	12	11	10	8	9	9	9	14.7	22.5
3-Aug	9	12	10	9	8	7	10	11	10	13	18	18	18	14	18	20	19	16	17	12	7	5	6	8	12.3	19.9
4-Aug	9	10	11	12	12	10	9	12	15	15	11	18	15	10	9	13	12	16	13	12	11	7	6	4	11.4	17.6
5-Aug	3	5	3	5	3	5	6	4	7	6	8	8	9	10	8	7	7	7	8	9	10	9	9	8	6.9	10.4
6-Aug	8	6	5	3	6	2	5	6	4	4	5	7	11	12	10	8	8	6	8	12	10	8	9	9	7.2	12.1
7-Aug	6	8	8	5	4	4	4	4	7	5	6	8	6	6	8	10	11	5	9	8	6	5	4	3	6.3	10.8
8-Aug	4	4	4	4	3	3	4	5	3	4	5	6	8	6	6	6	5	8	21	20	9	7	12	7	6.9	20.9
9-Aug	6	5	3	2	4	4	3	3	6	7	8	9	8	11	8	7	7	9	10	10	23	19	10	8	7.9	22.6
10-Aug	11	14	14	13	8	9	9	8	10	9	13	15	18	24	23	16	16	14	14	14	13	16	16	16	14.0	24.4
11-Aug	13	12	10	8	8	9	11	9	7	6	6	8	7	8	7	12	10	17	17	16	19	12	16	15	10.9	19.1
12-Aug	13	10	8	4	5	6	4	4	6	4	4	5	5	6	6	7	9	9	9	7	5	7	11	10	7.0	13.3
13-Aug	8	6	5	3	4	5	8	9	15	18	19	21	19	19	18	20	20	19	20	13	13	9	5	6	12.7	20.8
14-Aug	8	6	8	8	8	6	5	6	7	14	21	21	19	17	17	16	14	12	9	6	3	4	2	3	10.1	21.0
15-Aug	4	5	5	3	4	4	4	3	3	4	4	4	5	6	8	8	11	10	8	7	5	3	4	8	5.4	10.7
16-Aug	5	4	5	4	5	12	13	16	18	13	10	6	6	6	5	6	6	10	12	11	8	9	10	9	8.7	17.8
17-Aug	9	9	7	9	8	6	6	6	6	7	7	7	6	7	7	7	6	6	6	8	3	3	3	3	6.3	9.4
18-Aug	3	3	4	4	5	6	6	9	13	15	13	14	11	10	10	7	10	14	5	6	8	6	5	6	8.0	15.1
19-Aug	5	7	7	6	4	5	3	4	4	5	7	10	11	10	9	8	10	10	9	8	8	7	5	7	7.0	11.0
20-Aug	7	8	9	10	11	12	10	9	11	12	11	11	9	10	12	11	10	10	9	9	11	10	10	9	10.0	11.9
21-Aug	10	10	10	11	12	11	11	11	10	10	10	9	9	8	6	8	6	4	4	3	6	6	5	5	8.1	12.1
22-Aug	5	5	4	4	4	5	5	5	6	5	13	19	20	18	17	16	14	13	8	6	5	5	4	4	8.8	20.2
23-Aug	3	2	3	3	5	5	5	5	5	6	8	9	13	17	15	12	11	12	12	10	9	10	9	6	8.1	17.2
24-Aug	4	5	4	5	4	4	7	7	6	6	7	10	10	9	10	8	13	16	19	15	18	16	12	13	9.5	19.2
25-Aug	17	18	19	21	14	13	15	17	18	19	22	21	24	27	31	28	26	25	23	20	19	15	12	9	19.6	31.1
26-Aug	8	8	7	8	8	8	8	9	15	18	25	36	35	27	24	32	29	26	21	14	8	9	4	4	16.2	35.5
27-Aug	4	5	4	4	5	5	4	6	7	9	13	18	17	25	25	25	27	30	26	23	16	10	13	12	13.9	30.4
28-Aug	10	8	8	12	12	8	11	13	21	27	29	29	28	30	30	29	30	28	27	19	11	7	10	9	18.6	30.3
29-Aug	8	8	9	9	7	8	7	9	11	14	14	8	6	5	6	7	8	10	12	9	10	11	10	9	8.9	13.8
30-Aug	9	11	11	12	13	14	12	14	9	3	8	11	8	8	9	10	12	10	12	9	6	5	3	4	9.3	13.9
31-Aug	3	5	3	3	3	3	3	4	4	4	4	5	5	6	6	10	6	6	5	4	2	4	4	4	4.5	10.0

7.7	7.8	7.5	7.4	7.1	6.9	7.3	8.1	9.4	10.1	11.6	13.0	12.9	13.2	13.2	13.2	13.0	13.2	13.1	11.1	9.8	8.7	8.2	7.7	Diurnal Average
17.0	17.6	18.9	20.9	13.7	13.9	15.5	16.9	20.6	26.7	29.0	35.5	34.7	30.0	31.1	31.6	30.3	30.4	26.9	22.6	22.6	19.4	15.8	15.7	Diurnal Maximum

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

**Peace Airshed Zone Association
Summary of Hourly Standard Deviations**

**Henry Pirker - Wind Direction (WD) - deg
August 1, 2008 to September 1, 2008**

Maximum Value: 93.2 deg on Aug 8 22:00																								Hours in Service:	744
Minimum Value: 4.3 deg on Aug 6 23:00																								Hours of Data:	744
Percentiles: P ₁ = 4.9 P ₁₀ = 8.0 Q ₁ = 10.8 Median = 15.7 Q ₃ = 30.1 P ₉₀ = 55.4 P ₉₉ = 84.6																								Hours of Missing Data:	0
																								Hours of Calibration:	0
																								Percent Operational Time:	100.0
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	12	9	8	20	18	21	20	21	20	17	14	18	12	10	19	8	7	14	7	8	7	7	6	8	21.4
2-Aug	6	8	9	6	10	9	7	9	11	8	12	11	10	12	12	17	16	30	17	14	19	9	11	18	29.9
3-Aug	20	17	10	16	8	12	10	11	18	13	10	10	11	11	17	13	19	16	12	18	30	15	11	21	30.2
4-Aug	14	14	7	8	11	9	16	15	10	9	14	17	16	16	11	16	12	11	9	8	30	17	69	27	68.9
5-Aug	36	33	61	24	62	36	12	38	19	34	29	31	33	32	44	58	53	47	27	16	7	4	6	5	61.8
6-Aug	5	8	10	40	13	52	22	22	32	68	55	34	20	21	33	51	52	58	36	7	7	8	4	6	68.0
7-Aug	13	6	6	81	36	41	25	70	17	32	32	35	87	80	57	21	62	46	13	8	8	24	13	20	87.4
8-Aug	51	71	39	40	67	47	30	16	36	82	41	53	32	79	73	67	70	11	57	26	64	93	11	26	93.2
9-Aug	70	24	31	66	67	33	56	29	12	19	20	26	65	18	40	38	50	28	18	10	45	21	43	44	70.2
10-Aug	29	15	10	10	15	7	15	24	16	17	15	18	22	14	12	16	21	11	11	18	12	10	13	9	29.0
11-Aug	11	8	8	11	13	14	12	17	28	30	49	29	51	38	84	35	20	11	8	8	5	10	6	5	84.0
12-Aug	6	10	12	46	20	15	37	33	21	63	60	73	55	91	56	52	34	16	10	9	6	9	7	10	90.6
13-Aug	6	26	31	69	62	31	13	18	8	12	11	12	11	17	17	14	15	13	9	4	7	12	28	19	69.4
14-Aug	9	10	9	7	7	26	17	15	26	14	17	11	12	15	16	18	15	13	13	13	53	16	57	33	57.1
15-Aug	19	13	17	20	27	14	11	18	34	45	37	71	57	62	33	21	16	13	9	10	22	67	17	52	70.6
16-Aug	44	55	66	44	19	13	7	7	6	11	17	46	48	71	74	66	65	81	18	9	7	6	5	7	81.3
17-Aug	5	5	7	6	10	11	14	14	25	23	34	31	44	60	47	53	33	39	20	14	20	69	57	47	68.6
18-Aug	64	69	69	79	71	90	35	25	10	12	11	14	32	28	59	78	59	20	62	21	24	50	62	13	90.2
19-Aug	28	23	22	26	34	33	85	67	55	16	22	13	10	10	8	13	10	12	12	13	8	27	25	17	85.0
20-Aug	15	14	12	12	11	10	12	12	14	20	13	12	13	11	12	11	12	11	12	13	12	11	13	16	19.5
21-Aug	12	14	12	10	11	14	12	14	13	13	14	17	14	14	21	16	32	36	56	30	22	19	29	21	55.8
22-Aug	12	16	20	19	20	64	40	66	44	41	13	11	12	15	13	18	16	12	14	9	13	10	40	55	65.6
23-Aug	64	76	41	55	15	25	14	20	41	35	22	19	22	15	17	18	16	10	9	5	5	6	8	12	76.1
24-Aug	25	24	38	27	27	18	9	12	20	38	13	14	26	13	14	32	19	11	9	10	50	6	13	10	49.9
25-Aug	7	12	10	6	10	9	8	8	11	11	13	14	13	12	8	12	12	10	8	7	9	7	8	11	14.2
26-Aug	13	18	11	17	14	11	15	12	16	12	15	8	9	11	14	10	8	9	11	9	30	14	46	36	45.7
27-Aug	16	11	65	45	25	21	28	22	16	16	13	16	15	12	10	11	10	8	7	6	7	12	8	8	65.4
28-Aug	12	11	18	12	12	13	12	7	8	7	10	10	13	10	9	11	9	8	6	10	17	12	6	8	17.6
29-Aug	10	14	9	10	22	12	14	15	13	11	16	27	28	61	28	37	24	32	9	10	9	10	13	13	60.5
30-Aug	12	8	9	17	13	5	6	8	35	69	19	12	20	17	18	17	17	18	11	20	16	12	18	28	69.4
31-Aug	23	8	92	85	55	23	50	27	26	55	41	40	55	61	67	29	47	24	25	32	9	22	55	45	91.7
	70.2	76.1	91.7	85.4	71.1	90.2	85.0	69.8	54.9	82.1	60.3	73.5	87.4	90.6	84.0	78.4	70.1	81.3	62.2	31.7	64.1	93.2	68.9	55.1	

PASZA

Evergreen Park Station

Monthly Summary Tables, Graphs and
Roses

**Peace Airshed Zone Association
Summary of Hourly Averages**

**Evergreen Park - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

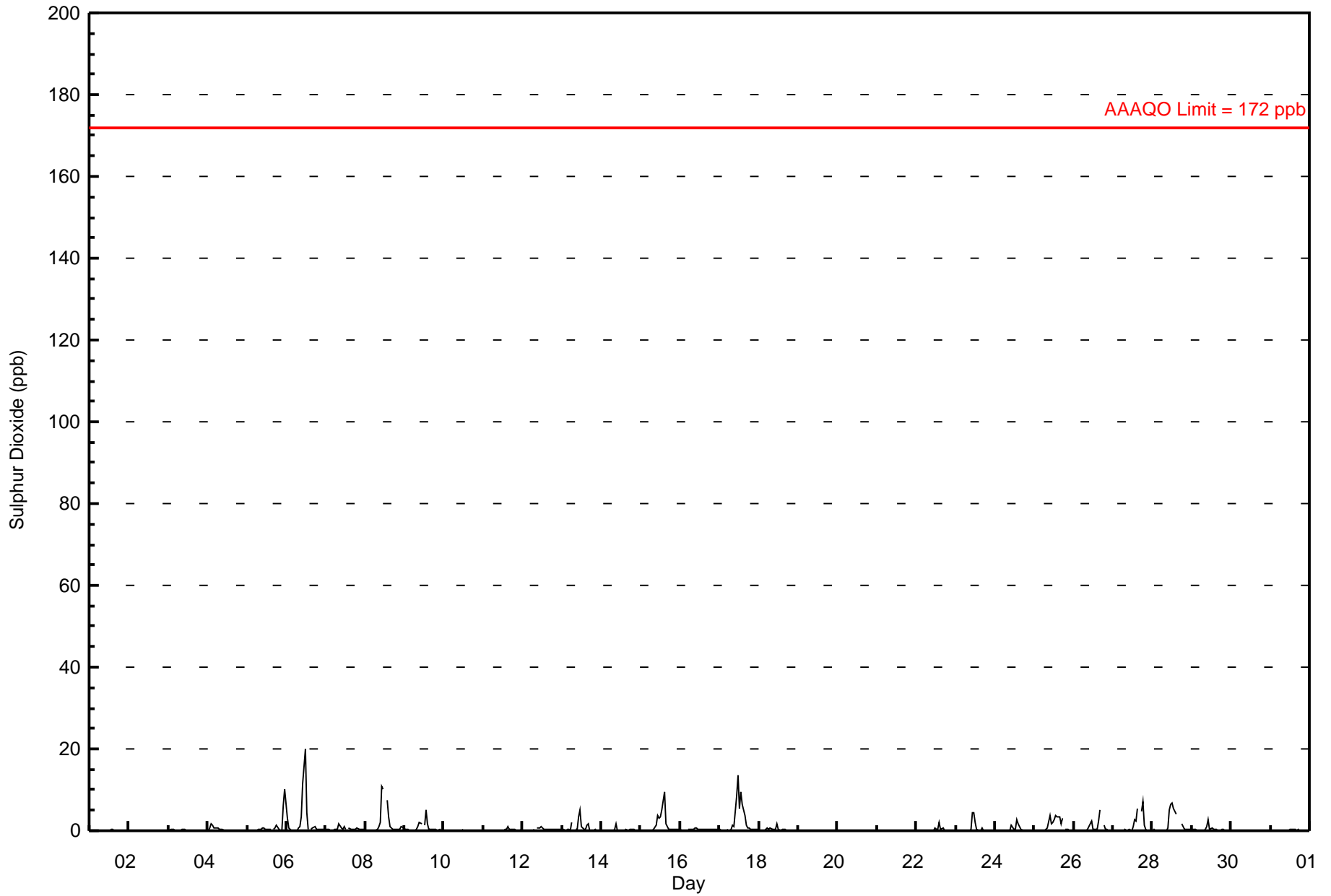
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 20.0 ppb on Aug 6 12:00	Maximum Daily Average: 2.4 ppb on Aug 17
Minimum Value: 0 ppb on Aug 1 05:00	Hours of Data: 710
Maximum Diurnal Average: 2.5 ppb at hour 12	Hours of Missing Data: 34
Monthly Average: 0.61 ppb	Hours of Calibration: 34
Minimum Daily Average: 0.0 ppb on Aug 20	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.1 ppb at hour 5	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.1 Q ₃ = 0.3 P ₉₀ = 1.4 P ₉₉ = 9.3	

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-Aug	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	0.3
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.0	0.1
3-Aug	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	0.3
4-Aug	0	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0.3	1.7
5-Aug	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	A	0	1	2	0	0	0	6	10	1.0	10.2	
6-Aug	3	1	0	0	0	0	0	1	1	3	11	20	4	0	A	0	1	1	0	0	0	0	0	0	2.2	20.0	
7-Aug	0	0	0	0	0	0	0	0	2	1	0	1	0	A	1	0	0	0	0	1	0	0	0	0	0.4	1.7	
8-Aug	0	0	0	0	0	0	0	0	1	2	11	10	A	8	3	1	1	0	0	0	0	1	1	1.8	10.9		
9-Aug	0	0	0	0	0	0	0	0	1	2	2	A	1	5	2	1	0	0	0	0	0	0	0	0	0.7	5.0	
10-Aug	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	0.3	
11-Aug	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0.2	0.8	
12-Aug	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.3	1.0	
13-Aug	0	0	0	0	0	0	2	A	0	0	3	5	1	0	0	1	2	0	0	0	0	0	0	0	0.8	5.1	
14-Aug	0	0	0	0	0	0	A	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.6	
15-Aug	0	0	0	0	0	A	0	0	0	1	4	3	3	5	10	2	1	1	0	0	0	0	0	0	1.4	9.7	
16-Aug	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-Aug	0	0	0	A	0	0	0	0	1	1	8	13	5	10	6	4	1	1	1	0	0	0	0	0	2.4	13.5	
18-Aug	0	0	A	0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9	
19-Aug	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	
20-Aug	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	
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0.0	0.1	
22-Aug	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	1	0	0	0	0	A	0	0	0.2	2.1	
23-Aug	0	0	0	0	0	0	0	0	0	0	4	4	2	0	0	0	1	0	0	0	0	A	0	0	0.6	4.4	
24-Aug	0	0	0	0	0	0	0	0	0	0	1	0	0	3	2	1	0	0	0	A	0	0	0	0	0.4	2.8	
25-Aug	0	0	0	0	0	0	0	1	4	2	2	3	4	3	3	2	3	A	0	0	0	0	0	0	1.2	3.7	
26-Aug	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	2	5	A	1	0	0	0	0	0	0.7	5.0	
27-Aug	0	0	0	0	0	0	0	0	0	0	0	0	1	3	3	5	A	5	7	1	0	0	0	0	1.2	7.1	
28-Aug	0	0	0	0	0	0	0	0	0	1	5	6	7	5	4	C	C	C	2	0	0	0	0	0	1.5	6.8	
29-Aug	0	0	0	0	0	A	0	0	0	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	2.9	
30-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	
31-Aug	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3	

0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.8	2.0	2.5	1.1	1.5	1.3	0.8	0.6	0.5	0.6	0.3	0.2	0.1	0.4	0.5	Diurnal Average	
3.0	0.8	1.7	1.3	0.5	0.8	2.1	0.8	1.7	3.6	11.4	20.0	6.8	9.6	9.7	5.3	5.0	4.8	7.1	1.4	0.4	0.5	6.2	10.2	Diurnal Maximum	

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

Hourly Averages for SO₂ at Evergreen Park August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Evergreen Park - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

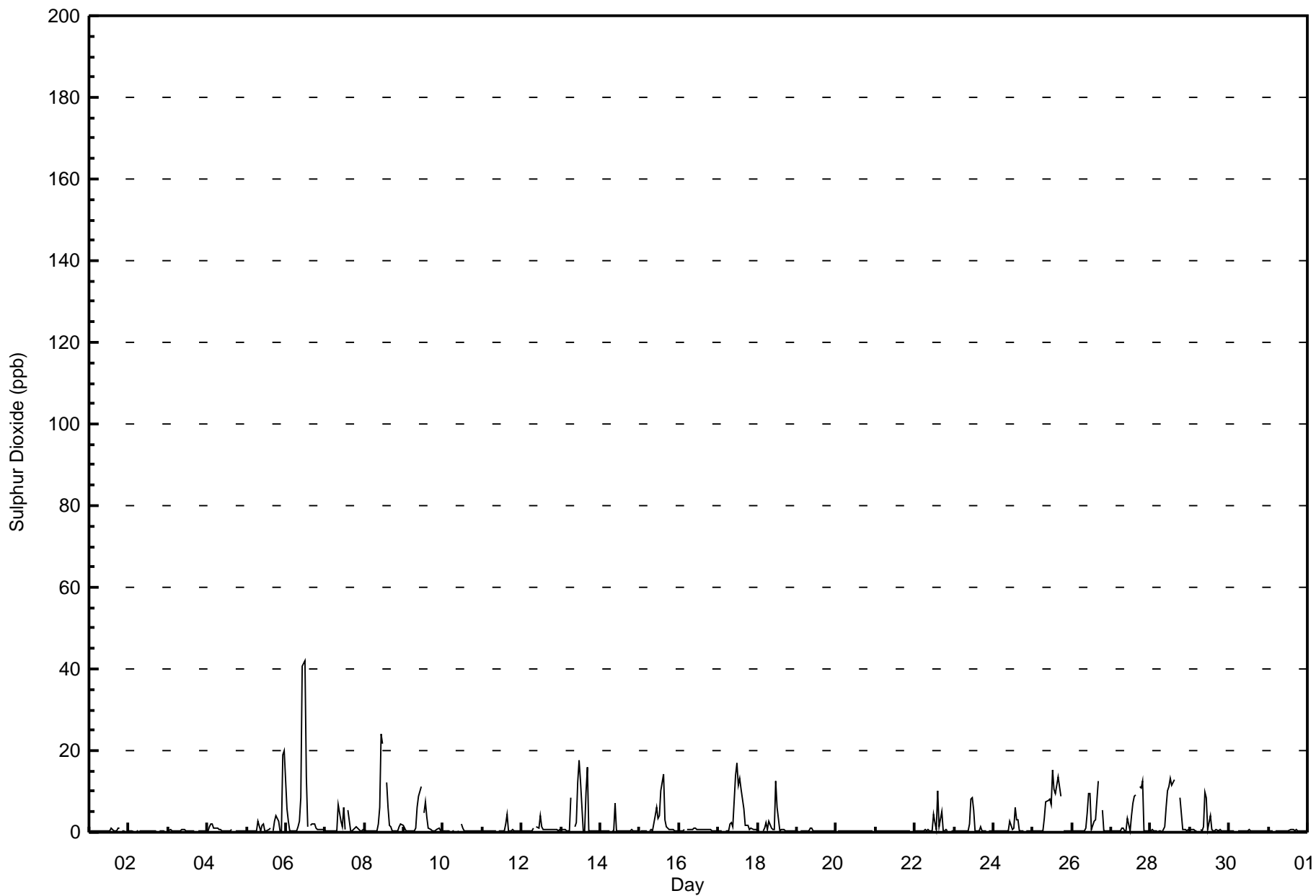
Maximum Value: 42.2 ppb on Aug 6 12:00	Maximum Daily Average: 5.7 ppb on Aug 6	Hours in Service: 744
Minimum Value: 0 ppb on Aug 2 05:00	Minimum Daily Average: 0.3 ppb on Aug 2	Hours of Data: 710
Maximum Diurnal Average: 5.8 ppb at hour 12	Minimum Diurnal Average: 0.3 ppb at hour 5	Hours of Missing Data: 34
Monthly Average: 1.70 ppb	Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.8 P ₉₀ = 5.2 P ₉₉ = 16.7	Hours of Calibration: 34
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	A	0	0	0	0	0.4	1.2
2-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.3	0.4
3-Aug	0	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.7
4-Aug	0	1	2	2	1	1	1	1	1	0	0	0	0	0	0	1	A	0	0	0	0	0	0	0	0.7	2.1
5-Aug	0	0	0	0	0	0	0	3	0	2	2	0	0	1	1	A	0	3	4	3	0	0	19	20	2.7	20.0
6-Aug	6	3	0	0	0	0	0	1	3	9	41	42	14	1	A	2	2	2	1	1	1	1	1	1	5.7	42.2
7-Aug	0	0	0	0	0	0	0	0	7	3	1	6	1	A	6	0	0	1	1	1	1	0	0	1	1.4	6.7
8-Aug	1	0	0	0	0	0	0	0	2	6	24	22	A	12	6	2	1	0	0	0	0	1	2	2	3.7	24.1
9-Aug	1	0	0	0	0	0	0	1	6	9	11	A	5	7	4	1	1	0	0	0	1	1	0	0	2.2	11.2
10-Aug	0	0	0	0	0	0	0	0	0	0	A	2	1	0	0	0	0	0	0	0	0	0	0	0	0.4	2.2
11-Aug	0	0	0	0	0	0	0	0	0	0	A	0	0	0	2	4	0	0	1	0	0	0	0	0	0.6	4.3
12-Aug	0	0	0	0	0	0	0	1	A	1	1	4	1	1	1	1	1	1	1	1	1	1	0	1	0.8	4.1
13-Aug	1	1	1	0	0	0	8	A	1	2	12	18	13	0	0	10	16	0	0	0	0	0	0	0	3.8	17.5
14-Aug	0	0	0	0	0	0	A	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.7	7.2
15-Aug	0	0	0	0	0	A	0	1	0	4	6	3	4	10	14	3	1	1	1	1	1	0	0	0	2.4	14.3
16-Aug	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0.6	0.9
17-Aug	0	0	0	A	0	0	0	2	2	1	14	17	12	13	11	6	2	2	2	1	1	1	1	1	3.9	16.8
18-Aug	0	0	A	0	1	2	1	3	1	1	1	13	6	0	1	1	1	0	0	0	0	0	0	0	1.5	12.6
19-Aug	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
20-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	0.3
21-Aug	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
22-Aug	0	0	0	0	0	0	1	0	1	0	0	4	2	1	10	1	5	0	0	1	0	A	0	0	1.3	10.1
23-Aug	0	0	0	0	0	0	0	0	0	2	8	8	5	0	0	0	1	0	0	0	A	0	0	0	1.3	8.3
24-Aug	0	0	0	0	0	0	0	0	0	0	3	1	1	6	3	3	0	0	0	A	0	0	0	0	1.0	6.2
25-Aug	0	0	0	0	0	0	0	4	7	8	8	7	15	11	10	14	11	9	A	1	0	0	0	0	4.7	15.2
26-Aug	0	0	0	0	0	0	0	1	5	9	9	1	3	3	8	12	A	5	0	0	0	0	0	0	2.6	12.5
27-Aug	0	0	0	0	0	0	1	1	0	0	3	0	4	7	9	9	A	11	11	13	0	0	0	0	3.2	12.5
28-Aug	0	1	0	0	0	0	0	0	1	6	10	11	13	11	13	C	C	C	8	1	1	1	0	1	3.8	13.1
29-Aug	1	1	1	0	0	A	1	0	1	10	9	1	4	1	0	0	1	0	1	0	0	0	0	0	1.4	9.9
30-Aug	0	0	0	0	A	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
31-Aug	0	0	0	A	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0.4	0.6

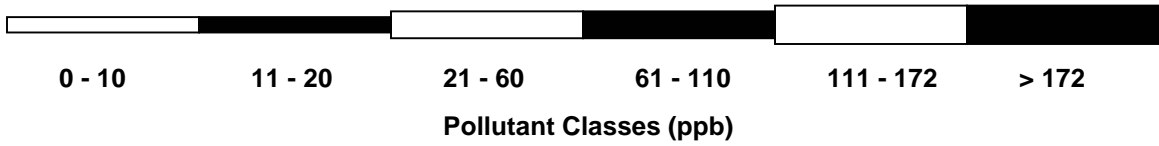
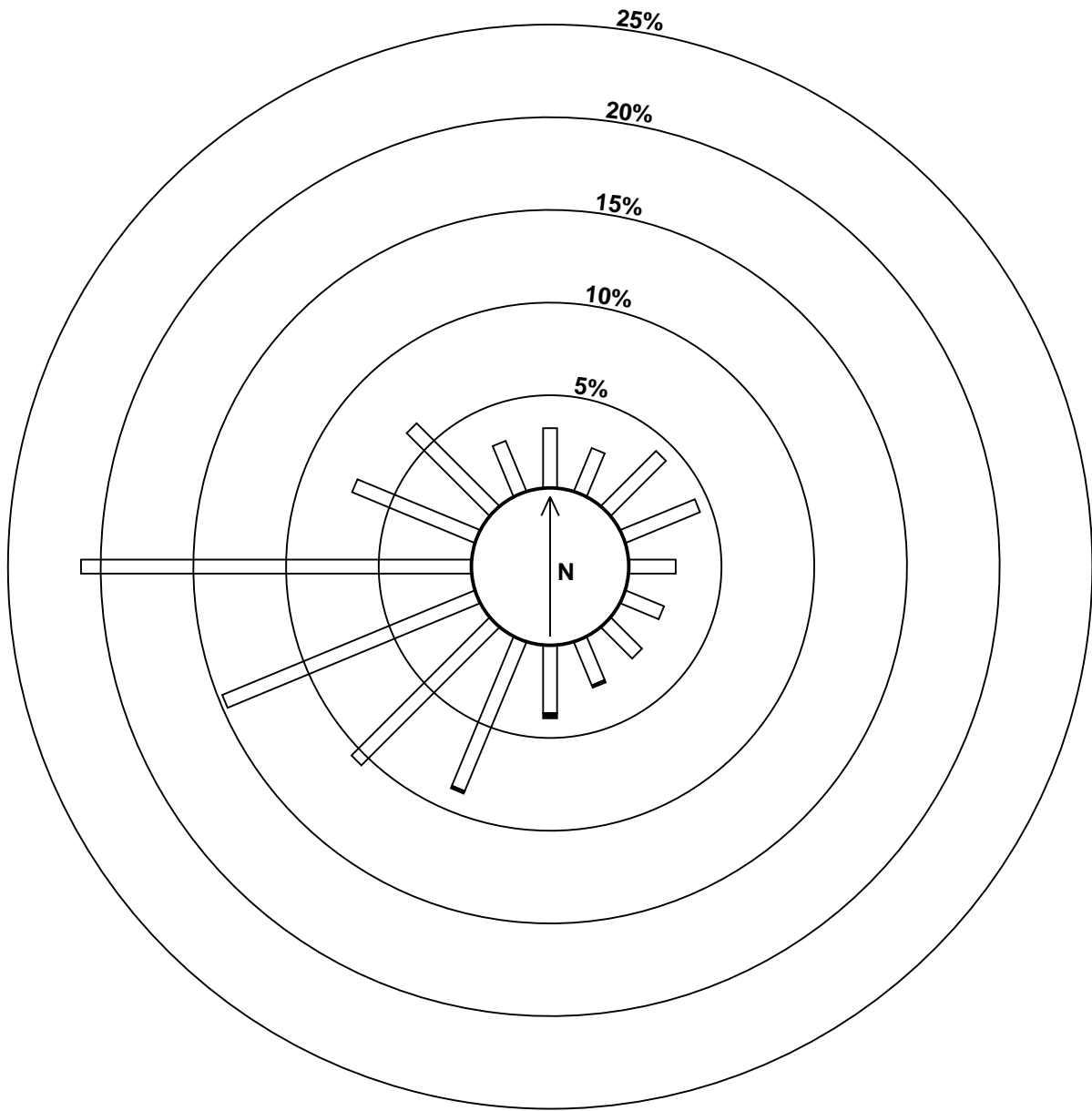
0.6	0.5	0.4	0.4	0.3	0.4	0.7	0.8	1.4	2.7	5.6	5.8	3.6	3.1	3.2	2.4	2.1	1.3	1.5	1.0	0.4	0.5	1.0	1.1	Diurnal Average
5.8	2.8	2.1	1.9	1.1	2.3	8.3	3.6	7.5	9.9	40.6	42.2	15.2	13.2	14.3	13.6	15.9	11.3	11.0	12.5	0.9	1.3	19.0	20.0	Diurnal Maximum

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for SO₂ at Evergreen Park August 2008



Pollutant Rose for SO₂ at Evergreen Park August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Evergreen Park - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

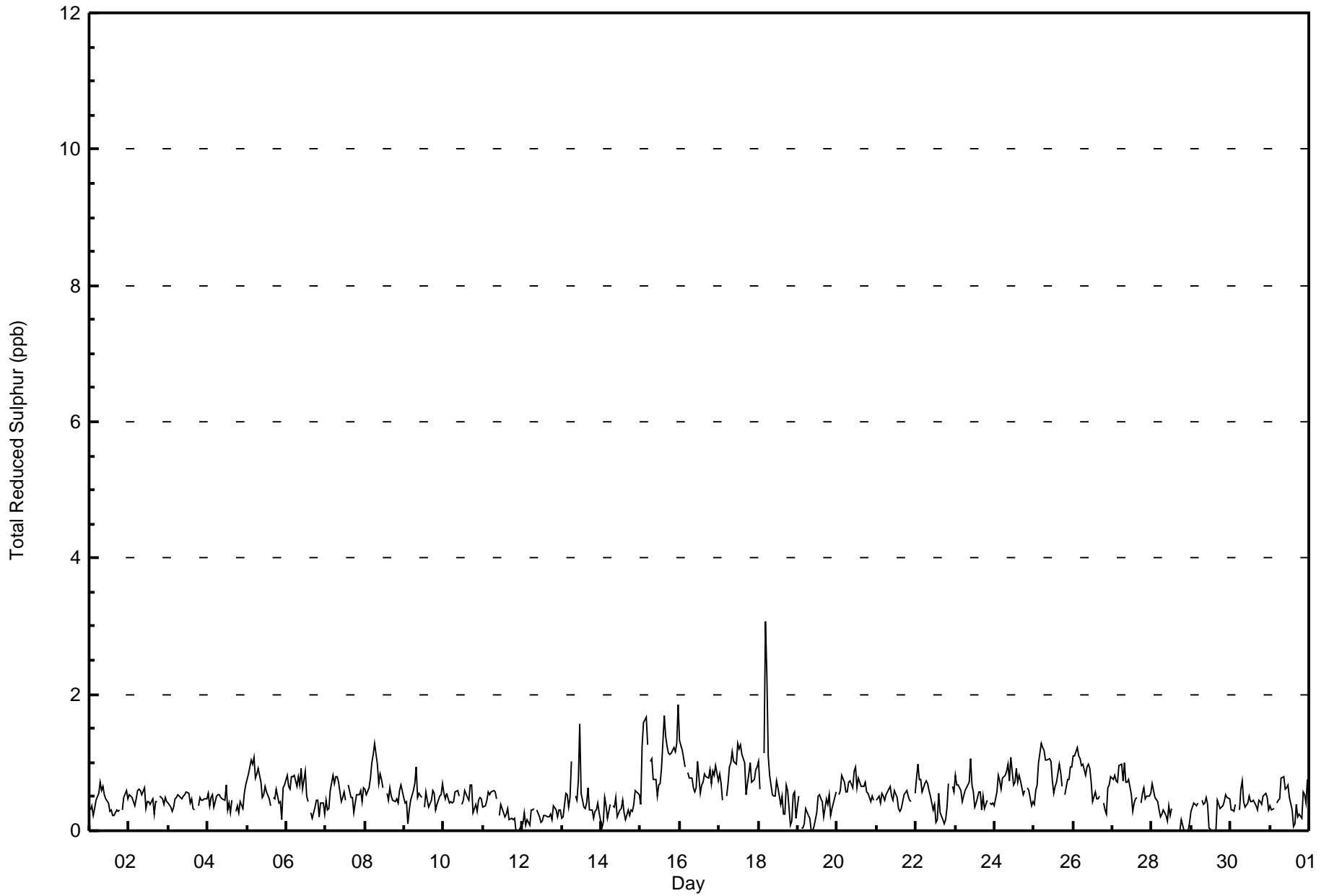
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 3.1 ppb on Aug 18 05:00	Maximum Daily Average: 1.1 ppb on Aug 15
Minimum Value: 0 ppb on Aug 11 21:00	Hours of Data: 709
Minimum Daily Average: 0.2 ppb on Aug 12	Hours of Missing Data: 35
Maximum Diurnal Average: 0.7 ppb at hour 7	Hours of Calibration: 35
Monthly Average: 0.55 ppb	Percent Operational Time: 100.0
Percentiles: P ₁ = 0.0 P ₁₀ = 0.2 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 0.9 P ₉₉ = 1.6	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	1	0	0.4	0.7
2-Aug	1	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	1	0	0	0	0.5	0.6
3-Aug	0	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	A	0	0	0	0	0	0	0.4	0.6
4-Aug	1	0	0	1	0	1	1	1	0	0	0	1	0	0	0	0	A	0	0	0	0	0	1	1	0.4	0.7
5-Aug	1	1	1	1	1	1	1	1	1	0	1	1	1	0	0	A	0	0	1	0	0	0	1	1	0.6	1.1
6-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0.6	0.9
7-Aug	0	0	0	1	1	1	1	1	1	0	0	1	0	A	1	0	0	0	0	1	1	1	0	1	0.5	0.8
8-Aug	1	1	1	1	1	1	1	1	1	1	1	A	1	0	1	1	0	0	0	0	1	1	0	1	0.7	1.3
9-Aug	0	0	0	0	0	1	1	1	0	1	0	A	0	1	0	0	0	1	1	0	0	1	1	1	0.5	0.9
10-Aug	1	0	1	0	0	0	0	1	1	1	A	0	0	1	0	0	1	1	0	0	0	0	0	0	0.5	0.7
11-Aug	0	0	0	1	1	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
12-Aug	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
13-Aug	0	0	1	1	0	0	1	A	1	0	1	2	1	0	0	0	1	0	0	0	0	0	0	0	0.5	1.6
14-Aug	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.3	0.6
15-Aug	0	1	2	2	1	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	2	1.1	1.8
16-Aug	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	1.3
17-Aug	1	1	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3
18-Aug	1	1	A	1	3	2	1	1	1	0	1	1	1	0	1	0	0	1	1	0	0	1	0	1	0.7	3.1
19-Aug	1	A	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	0.3	0.6
20-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0.6	0.9
21-Aug	0	1	0	1	1	0	1	1	1	1	0	1	0	0	0	0	0	1	1	1	0	0	A	1	0.5	0.7
22-Aug	1	1	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0	0	1	A	1	1	0.5	1.0
23-Aug	1	1	1	1	0	1	1	1	1	1	1	0	0	1	1	0	1	0	1	0	0	A	0	0	0.5	1.0
24-Aug	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	0	0.7	1.1
25-Aug	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	0.8	1.3
26-Aug	1	1	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	A	0	0	0	0	1	1	0.8	1.2
27-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	A	0	1	1	0	1	1	1	0.6	1.0
28-Aug	1	1	0	0	0	0	0	0	0	0	0	0	0	C	C	C	A	0	0	0	0	0	0	0	0.2	0.7
29-Aug	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.5
30-Aug	0	0	0	0	A	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0.4	0.7
31-Aug	0	0	0	A	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0.4	0.8

0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	Diurnal Average
1.3	1.2	1.6	1.7	3.1	2.3	1.3	1.1	1.2	1.0	1.1	1.6	1.2	1.3	1.7	1.4	1.2	1.1	1.1	1.1	1.2	1.2	1.3	1.8	Diurnal Maximum	

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

Hourly Averages for TRS at Evergreen Park August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Evergreen Park - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

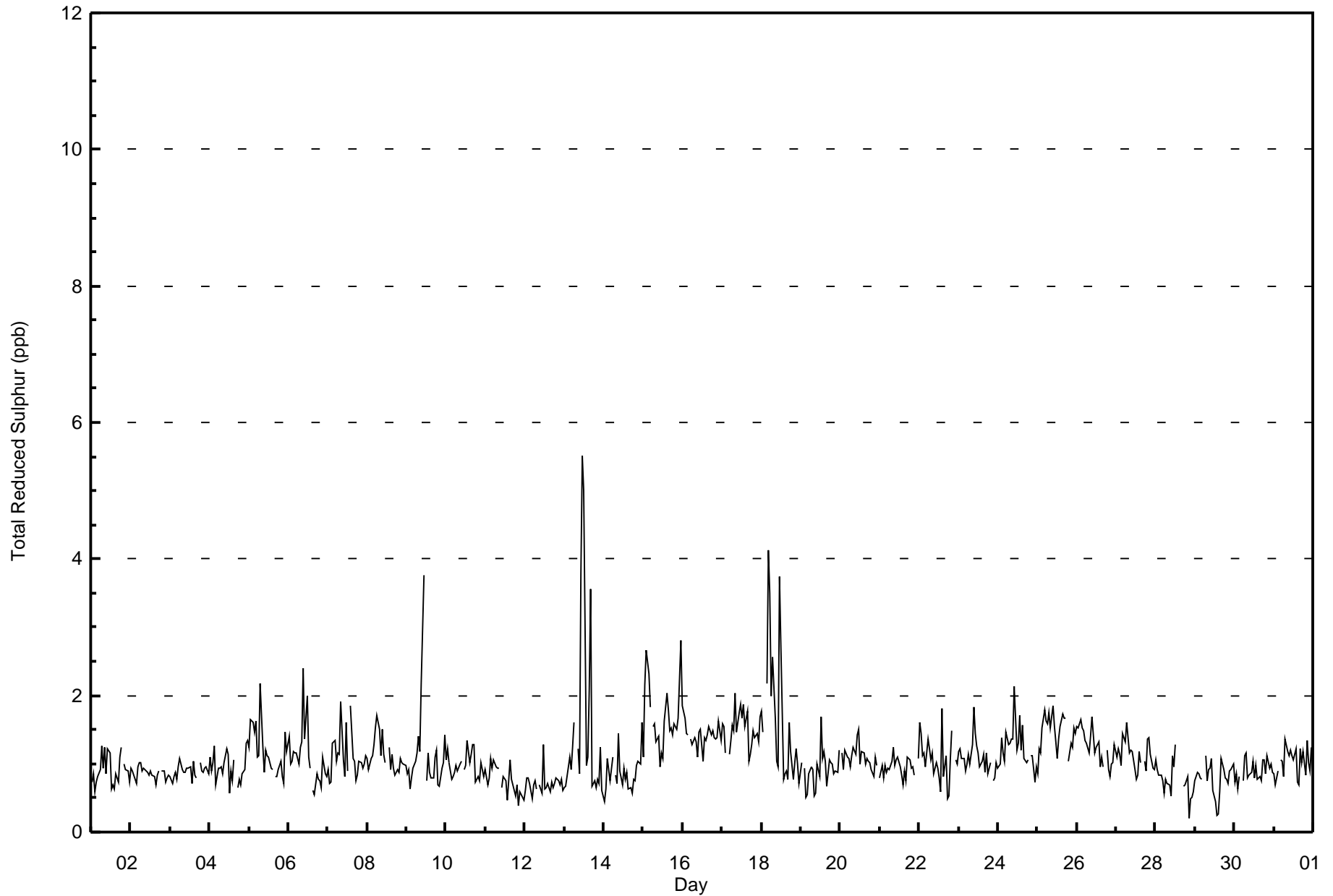
Maximum Value: 5.5 ppb on Aug 13 12:00	Maximum Daily Average: 1.7 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 28 21:00	Minimum Daily Average: 0.7 ppb on Aug 12	Hours of Data: 709
Maximum Diurnal Average: 1.4 ppb at hour 12	Minimum Diurnal Average: 0.9 ppb at hour 20	Hours of Missing Data: 35
Monthly Average: 1.10 ppb	Percentiles: P ₁ = 0.5 P ₁₀ = 0.7 Q ₁ = 0.8 Median = 1.0 Q ₃ = 1.2 P ₉₀ = 1.6 P ₉₉ = 3.4	Hours of Calibration: 35
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.3
2-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	0.9	1.0
3-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.9	1.1
4-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.0	1.3
5-Aug	1	2	2	1	2	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1.2	2.2
6-Aug	1	1	1	1	1	1	1	1	1	2	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1.1	2.4
7-Aug	1	1	1	1	1	1	1	1	2	1	1	2	1	A	2	1	1	1	1	1	1	1	1	1	1.1	1.9
8-Aug	1	1	1	1	1	2	2	2	1	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7
9-Aug	1	1	1	1	1	1	1	1	1	2	4	A	1	1	1	1	1	1	1	1	1	1	1	1	1.1	3.8
10-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.3
11-Aug	1	1	1	1	1	1	1	1	1	1	A	1	1	1	0	1	1	1	1	1	1	0	1	0	0.8	1.1
12-Aug	1	1	1	1	0	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.3
13-Aug	1	1	1	1	1	1	2	A	1	1	4	6	5	1	1	2	4	1	1	1	1	1	1	1	1.6	5.5
14-Aug	0	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	0.9	1.6
15-Aug	1	2	3	2	2	A	2	2	1	1	1	1	1	2	2	2	1	2	1	2	2	2	2	3	1.7	2.8
16-Aug	2	2	1	1	A	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	2	1	1.4	1.8
17-Aug	2	2	1	A	1	1	2	1	2	1	2	2	2	2	2	2	1	1	1	1	1	1	1	2	1.5	2.0
18-Aug	2	1	A	2	4	3	2	3	2	1	1	4	3	1	1	1	1	2	1	1	1	1	1	1	1.7	4.1
19-Aug	1	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	0.9	1.7
20-Aug	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1.1	1.5
21-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.2
22-Aug	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	0	1	1	1	1	1	1.1	1.8
23-Aug	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.8
24-Aug	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1	2	1	1	1	1	A	1	1	1	1.2	2.1
25-Aug	1	1	1	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2	A	1	1	1	2	1.5	1.9
26-Aug	2	2	2	2	1	1	1	1	1	2	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1.3	1.7
27-Aug	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1.1	1.6
28-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	A	1	1	1	0	0	1	1	0.7	1.3
29-Aug	1	1	1	1	1	A	1	1	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	0.8	1.1
30-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
31-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.4

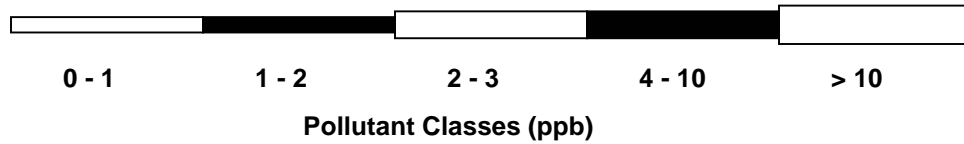
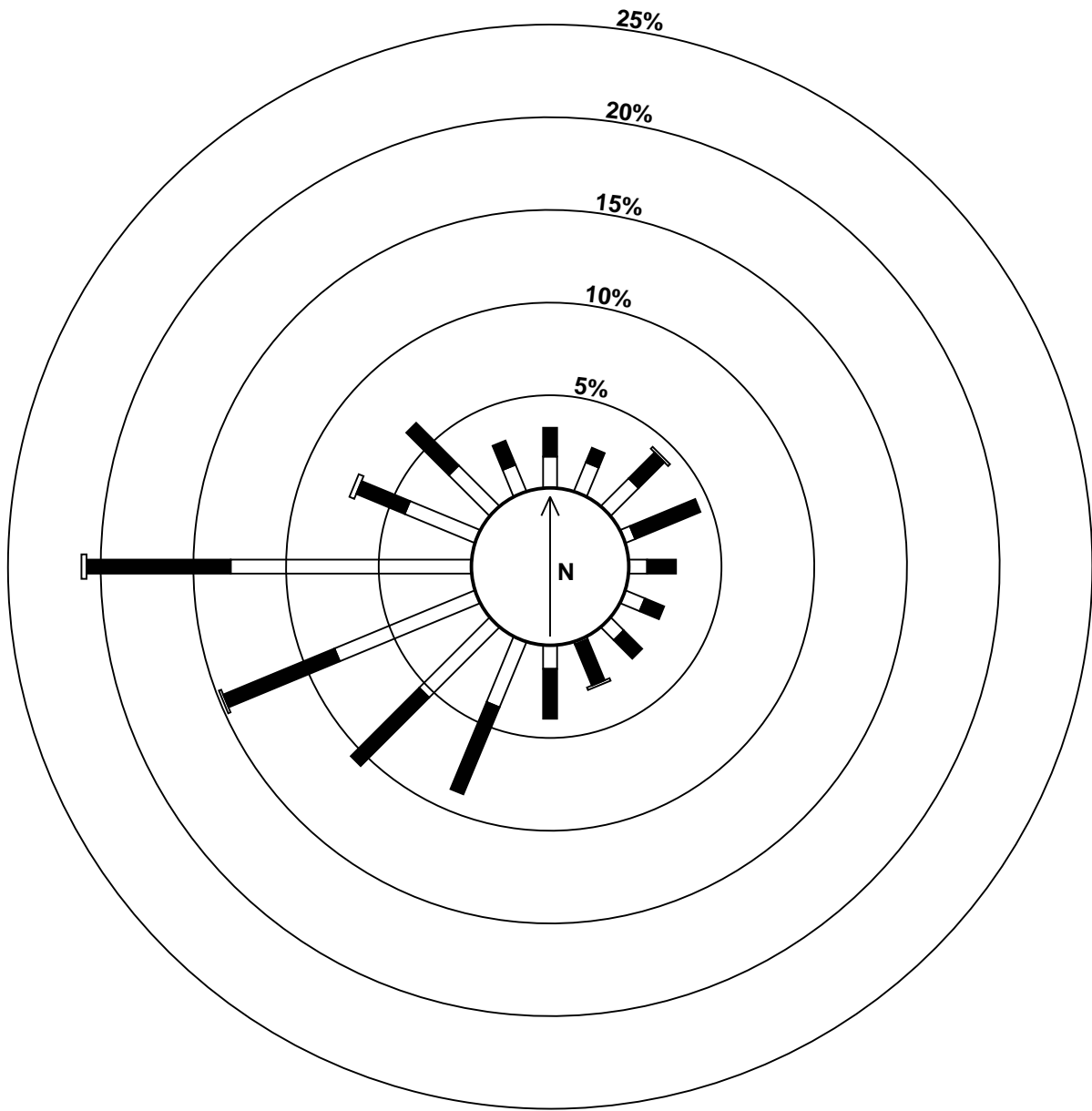
1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.4	1.2	1.0	1.1	1.1	1.1	1.0	1.0	0.9	1.0	1.0	1.0	1.1	Diurnal Average
1.8	2.2	2.7	2.3	4.1	3.5	2.0	2.6	2.0	2.4	3.8	5.5	5.0	1.9	2.0	2.1	3.6	1.7	1.5	1.6	1.5	1.7	2.2	2.8	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for TRS at Evergreen Park August 2008



Pollutant Rose for TRS at Evergreen Park August 2008



Peace Airshed Zone Association
Summary of Hourly Averages

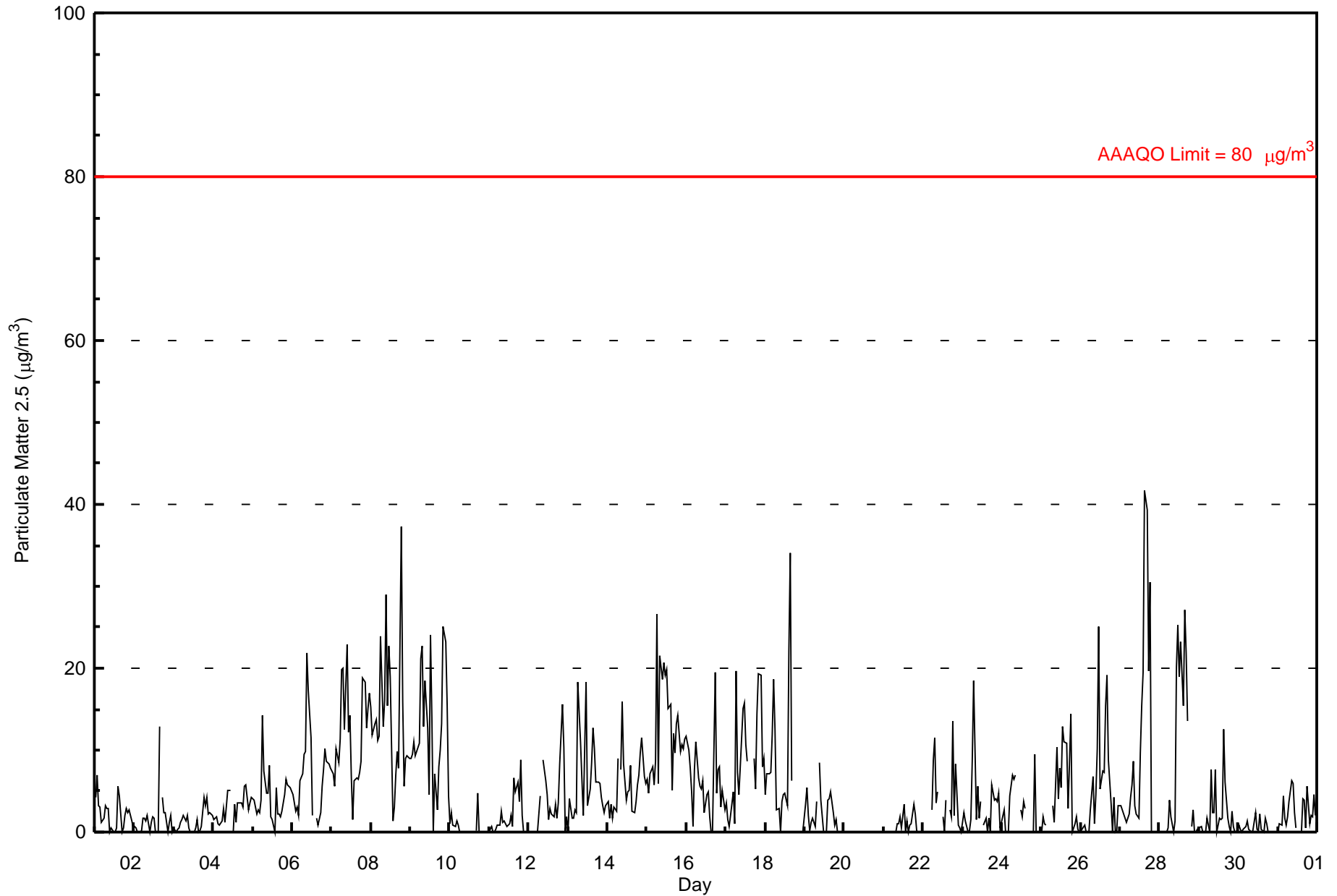
Evergreen Park - Particulate Matter 2.5 (PM_{2.5}) - $\mu\text{g}/\text{m}^3$
August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 41.7 $\mu\text{g}/\text{m}^3$ on Aug 27 16:00	Maximum Daily Average: 13.8 $\mu\text{g}/\text{m}^3$ on Aug 8
Minimum Value: 0 $\mu\text{g}/\text{m}^3$ on Aug 1 10:00	Hours of Data: 695
Maximum Diurnal Average: 8.3 $\mu\text{g}/\text{m}^3$ at hour 16	Hours of Missing Data: 49
Monthly Average: 5.12 $\mu\text{g}/\text{m}^3$	Hours of Calibration: 0
Minimum Daily Average: 0.0 $\mu\text{g}/\text{m}^3$ on Aug 20	Percent Operational Time: 93.4
Minimum Diurnal Average: 2.6 $\mu\text{g}/\text{m}^3$ at hour 3	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.6 Median = 2.7 Q ₃ = 7.3 P ₉₀ = 13.7 P ₉₉ = 26.2	

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-Aug	4	7	3	3	1	2	3	3	3	0	0	0	0	1	6	4	0	1	2	3	2	3	1	0	2.2	7.0
2-Aug	1	1	0	0	0	2	2	1	2	0	1	2	2	0	0	13	BD	4	2	2	0	1	2	0	1.7	12.9
3-Aug	0	0	0	1	1	2	2	1	2	1	0	0	0	1	1	0	0	1	4	3	4	2	2	2	1.3	4.2
4-Aug	2	2	2	1	1	1	3	1	3	5	5	BD	0	3	1	4	4	4	3	6	6	3	4	4	2.8	5.7
5-Aug	4	4	2	3	2	4	14	7	5	5	8	2	1	0	5	2	2	2	3	4	6	6	6	5	4.3	14.2
6-Aug	5	4	3	3	2	6	7	9	10	22	17	12	2	BD	BD	2	1	2	6	8	10	9	8	8	7.0	21.9
7-Aug	7	7	6	10	8	11	20	20	13	23	12	14	7	1	6	7	6	7	9	19	18	13	15	17	11.6	22.9
8-Aug	15	12	13	14	11	12	24	13	16	29	15	23	19	1	3	7	10	8	37	16	6	9	9	9	13.8	37.2
9-Aug	9	9	11	9	10	11	21	23	13	18	13	5	24	14	0	7	3	8	10	13	25	23	15	4	12.4	25.0
10-Aug	1	2	1	1	1	1	0	0	BD	BD	0	BD	BD	BD	0	BD	0	5	0	BD	BD	BD	0	0	--	4.7
11-Aug	0	1	0	0	0	1	1	3	1	1	1	1	1	2	1	7	5	6	4	9	2	0	0	0	1.9	8.8
12-Aug	BD	0	0	0	0	0	2	4	P	9	6	5	1	3	2	2	3	2	4	8	16	10	0	2	3.6	15.5
13-Aug	0	4	2	2	3	2	18	11	7	2	10	18	3	5	9	13	10	6	6	6	4	3	2	3	6.2	18.4
14-Aug	4	2	3	2	3	3	9	P	8	16	8	4	5	5	8	3	2	4	6	7	10	11	7	6	5.8	15.9
15-Aug	6	5	7	8	6	9	27	6	22	19	21	19	20	15	16	5	12	10	13	14	10	11	10	11	12.5	26.6
16-Aug	12	10	8	5	1	8	11	7	6	5	6	2	5	5	2	0	0	19	5	8	8	3	5	3	5.9	19.5
17-Aug	4	1	1	2	5	1	20	7	5	8	15	16	11	9	BD	BD	BD	9	5	14	19	19	8	9	8.9	19.7
18-Aug	5	7	7	7	12	19	12	3	3	0	4	5	5	3	22	34	6	P	8	BD	BD	0	0	0	7.7	34.0
19-Aug	3	5	2	0	1	2	1	4	P	9	4	0	BD	0	4	4	5	2	1	2	0	0	BD	0	2.3	8.5
20-Aug	0	BD	0	0	BD	BD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
21-Aug	0	0	0	0	0	0	0	0	1	1	2	1	3	0	1	0	1	1	3	2	0	0	0	BD	0.7	3.5
22-Aug	4	BD	BD	BD	BD	3	9	12	4	5	BD	BD	2	0	4	BD	3	2	14	2	8	1	0	0	--	13.6
23-Aug	1	2	1	0	0	2	9	19	2	6	2	4	BD	1	2	0	2	0	6	4	4	4	5	1	3.2	18.5
24-Aug	1	3	0	0	0	4	7	6	7	P	P	3	2	4	3	BD	BD	0	BD	0	9	0	0	BD	2.7	9.5
25-Aug	0	2	1	1	BD	0	BD	3	1	10	4	8	5	13	11	11	3	8	14	0	1	2	0	0	4.5	14.4
26-Aug	0	0	1	0	0	0	3	7	1	5	10	25	5	8	7	15	19	9	3	0	4	0	0	3	5.3	25.1
27-Aug	3	3	2	2	1	2	4	6	9	3	2	2	10	15	19	42	39	20	30	0	0	BD	0	0	9.3	41.7
28-Aug	0	0	0	0	0	1	4	2	0	1	20	25	19	23	15	27	22	14	P	1	3	0	0	0	7.7	27.1
29-Aug	1	1	0	0	0	2	0	8	2	2	8	0	2	1	2	13	6	2	1	0	3	1	0	0	2.2	12.6
30-Aug	1	0	0	0	1	1	0	0	0	0	2	0	0	2	0	0	2	1	0	0	0	BD	0	0	0.5	2.4
31-Aug	0	1	1	4	2	1	2	4	6	6	2	1	BD	0	0	4	4	1	6	1	2	2	5	2	2.4	6.3
	3.1	3.3	2.6	2.6	2.6	3.7	7.8	6.3	5.3	7.3	6.9	6.9	5.7	4.7	5.2	8.3	6.1	5.2	7.0	5.2	6.2	4.8	3.5	3.1		Diurnal Average
	15.3	11.9	13.2	13.7	11.9	18.7	26.6	22.6	21.6	29.0	20.6	25.3	24.1	23.2	22.2	41.7	39.3	19.6	37.2	18.8	25.0	23.2	15.4	17.0		Diurnal Maximum

P - Power Failure BD - Baseline Drift
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 $\mu\text{g}/\text{m}^3$ 24-hr 30 $\mu\text{g}/\text{m}^3$

Hourly Averages for PM_{2.5} at Evergreen Park August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

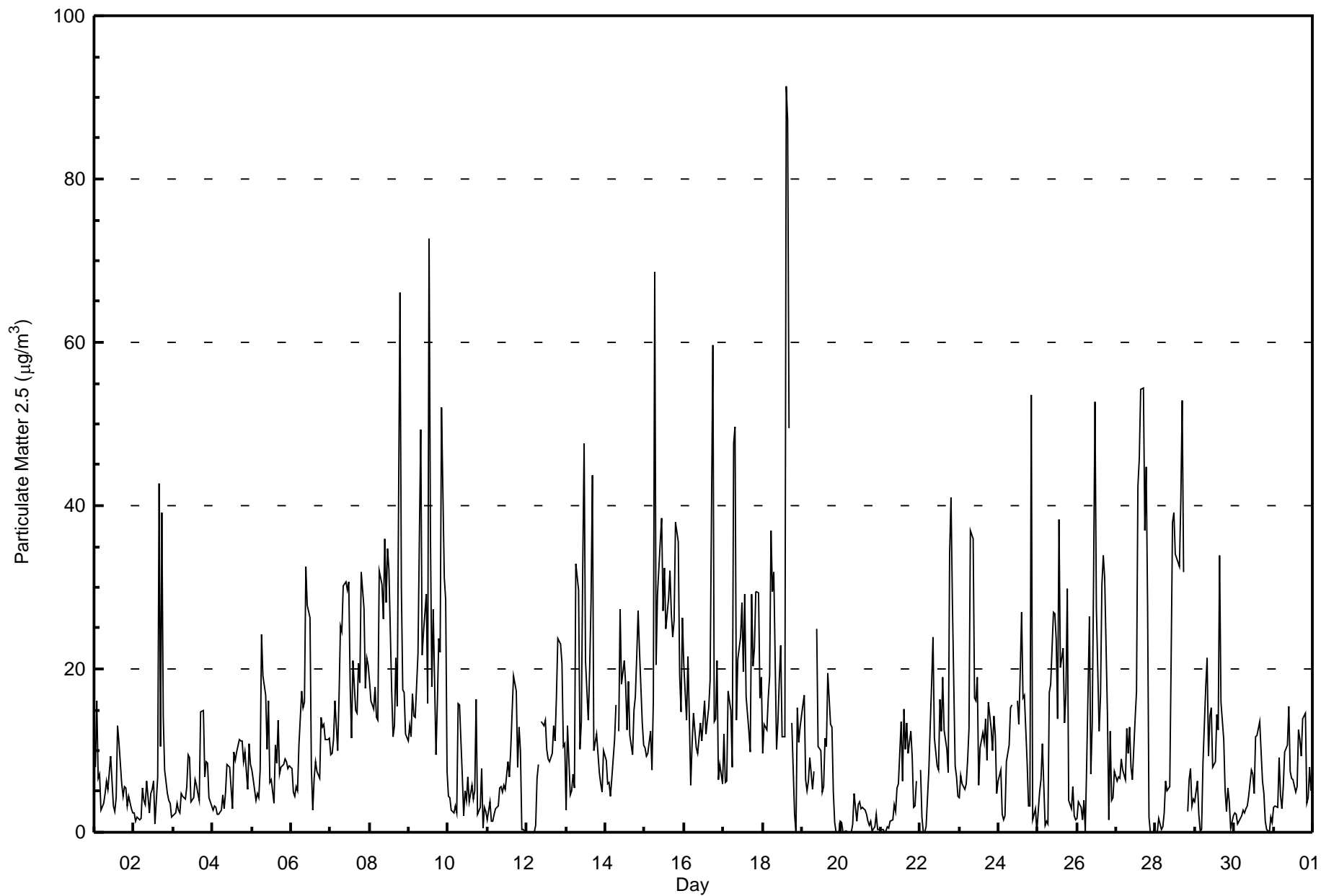
**Evergreen Park - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
August 1, 2008 to September 1, 2008**

Maximum Value: 91.4 µg/m ³ on Aug 18 15:00	Maximum Daily Average: 25.6 µg/m ³ on Aug 15	Hours in Service: 744
Minimum Value: 0 µg/m ³ on Aug 12 00:00	Minimum Daily Average: 1.4 µg/m ³ on Aug 20	Hours of Data: 736
Maximum Diurnal Average: 20.2 µg/m ³ at hour 16	Minimum Diurnal Average: 5.1 µg/m ³ at hour 5	Hours of Missing Data: 8
Monthly Average: 12.54 µg/m ³	Percentiles: P ₁ = 0.0 P ₁₀ = 1.6 Q ₁ = 4.3 Median = 9.3 Q ₃ = 16.2 P ₉₀ = 29.2 P ₉₉ = 50.0	Hours of Calibration: 0
		Percent Operational Time: 98.9

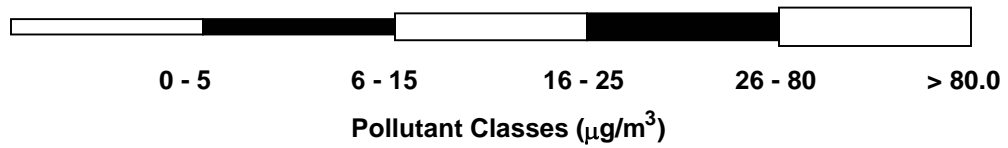
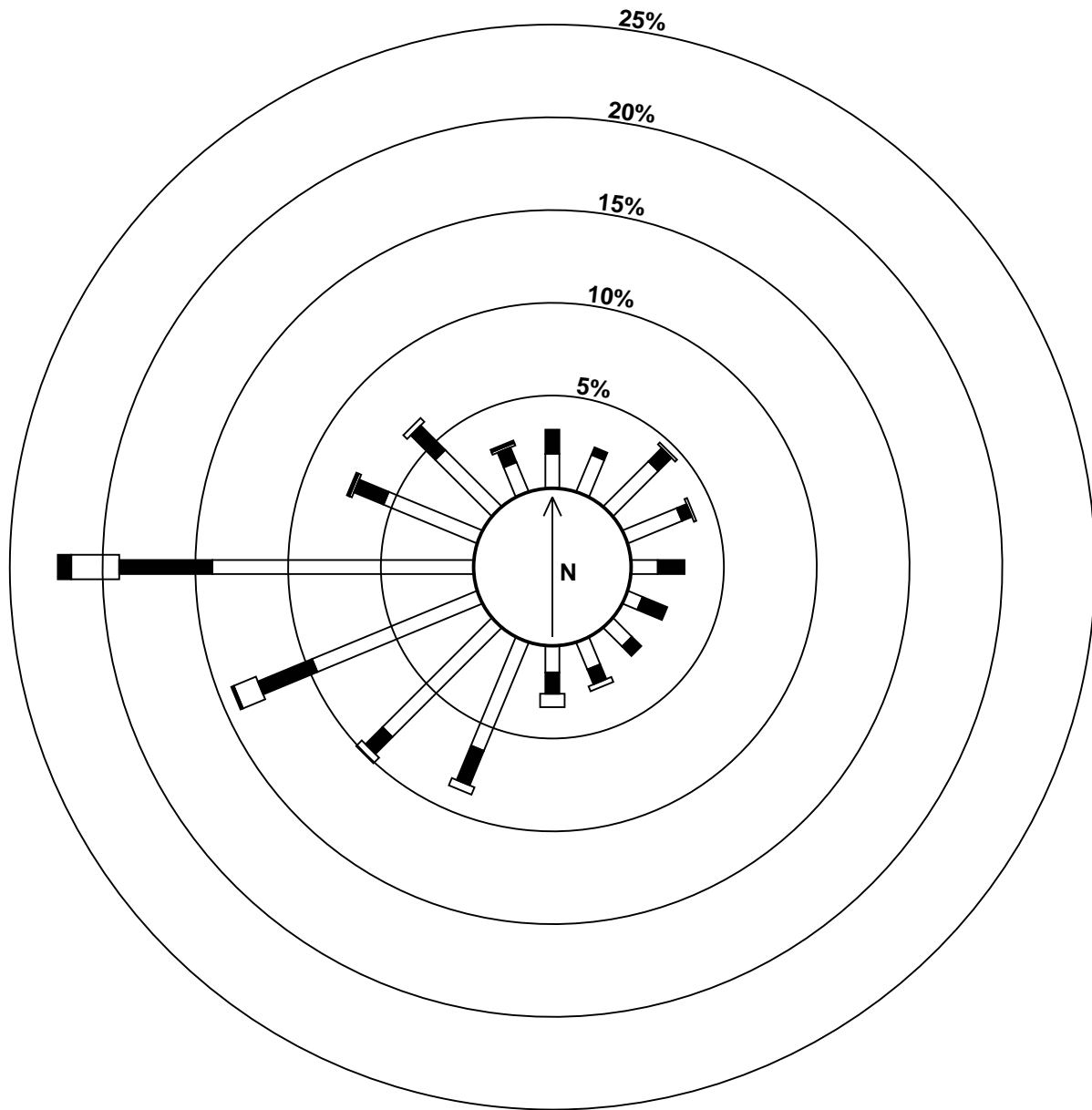
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	8	16	7	7	3	4	5	6	5	7	9	3	2	4	13	11	6	4	6	5	3	4	3	2	6.0	16.1
2-Aug	2	1	2	1	2	5	4	3	6	2	5	5	6	1	7	43	10	39	14	8	5	4	4	2	7.6	42.7
3-Aug	2	2	4	3	2	5	4	4	6	9	9	4	4	6	6	5	4	15	15	7	9	8	4	3	5.8	14.9
4-Aug	3	3	3	2	2	3	5	3	5	8	8	6	3	10	9	10	11	11	11	9	10	5	11	8	6.6	11.4
5-Aug	8	6	4	5	4	8	24	19	17	10	16	6	6	4	11	9	14	7	8	8	9	9	8	8	9.5	24.2
6-Aug	8	5	4	6	5	11	17	15	16	33	28	26	8	3	7	9	7	7	14	13	13	11	11	12	12.0	32.6
7-Aug	9	10	11	16	10	17	25	25	30	31	30	31	18	11	21	15	15	21	18	32	27	18	21	21	20.1	31.9
8-Aug	19	16	15	18	14	14	32	30	26	36	28	35	32	17	12	13	21	15	66	30	18	17	12	11	22.8	66.1
9-Aug	13	12	17	14	14	22	36	49	22	25	29	16	73	36	18	27	9	16	24	22	52	31	29	7	25.5	72.7
10-Aug	4	4	3	2	3	2	16	16	7	2	5	4	7	4	6	4	5	16	2	3	8	0	3	2	5.4	16.3
11-Aug	2	4	1	1	2	3	3	5	6	5	6	9	7	10	15	19	17	8	13	10	0	0	0	0	6.3	19.2
12-Aug	0	0	0	0	0	1	7	8	P	14	13	14	10	9	9	10	13	11	17	24	23	21	11	11	9.7	23.8
13-Aug	3	13	5	5	7	5	33	30	10	14	32	48	21	14	20	28	44	10	12	10	7	6	5	10	16.3	47.7
14-Aug	9	6	6	4	7	11	16	P	12	27	18	21	18	12	18	12	10	15	17	22	27	22	13	11	14.5	27.2
15-Aug	10	9	10	12	8	16	69	21	29	36	38	27	32	25	29	32	27	24	26	38	36	19	15	26	25.6	68.7
16-Aug	21	14	22	14	6	11	15	10	10	12	13	11	16	12	14	15	19	60	14	14	21	7	8	6	15.1	59.7
17-Aug	12	6	6	17	15	8	48	50	14	21	24	28	20	29	17	12	10	29	20	23	29	29	16	19	21.0	49.6
18-Aug	10	13	13	16	19	37	29	32	10	14	19	23	12	12	91	87	50	P	13	2	0	15	11	13	23.5	91.4
19-Aug	16	17	6	5	6	9	5	7	P	25	11	10	5	6	12	10	20	13	13	5	1	0	0	1	8.8	24.9
20-Aug	1	0	0	0	0	0	0	1	5	1	3	4	3	3	3	2	1	1	1	0	1	2	0	0	1.4	4.8
21-Aug	0	0	0	0	1	1	1	2	3	3	5	6	13	6	15	10	13	10	12	9	3	3	6	BD	5.4	15.1
22-Aug	8	2	0	0	1	8	13	18	24	11	8	8	16	12	19	12	10	7	34	41	28	8	7	4	12.5	41.0
23-Aug	4	7	6	5	6	9	13	37	36	16	16	19	6	10	12	11	14	9	16	13	10	14	12	5	12.7	37.0
24-Aug	6	8	2	1	2	9	11	15	16	P	P	16	13	19	27	16	17	8	3	3	54	2	3	0	11.4	53.6
25-Aug	3	5	6	11	1	1	1	17	18	27	27	24	14	38	20	23	13	17	30	4	3	6	2	2	13.0	38.4
26-Aug	2	4	3	2	4	0	8	26	7	13	31	53	28	12	17	30	34	31	14	2	12	4	4	7	14.6	52.7
27-Aug	6	7	7	9	8	6	13	10	13	8	6	14	17	42	46	54	54	37	45	28	2	0	0	1	18.0	54.5
28-Aug	0	0	2	0	1	2	6	5	6	21	38	39	34	34	32	41	53	32	P	3	7	8	3	4	16.1	53.0
29-Aug	4	6	2	0	0	8	18	21	9	14	15	8	9	14	13	34	16	11	5	3	5	4	0	2	9.3	34.0
30-Aug	2	2	1	1	2	3	2	3	3	4	8	7	5	12	12	14	10	6	5	1	0	0	2	1	4.5	13.6
31-Aug	3	3	3	9	5	3	6	10	11	16	7	7	6	5	6	12	11	9	14	15	3	4	8	5	7.5	15.5
	6.3	6.5	5.5	6.1	5.1	7.8	15.6	16.7	13.2	15.5	16.9	17.0	15.1	13.9	17.7	20.2	18.1	17.0	16.6	13.1	14.1	9.1	7.5	6.9		Diurnal Average
	20.6	16.7	21.6	17.9	19.1	37.0	68.7	49.6	35.8	36.0	38.4	52.7	72.7	42.4	91.4	87.2	54.5	59.7	66.1	41.0	53.6	31.1	28.5	26.4		Diurnal Maximum

P - Power Failure BD - Baseline Drift

Hourly Maximums for PM_{2.5} at Evergreen Park August 2008



Pollutant Rose for PM_{2.5} at Evergreen Park August 2008

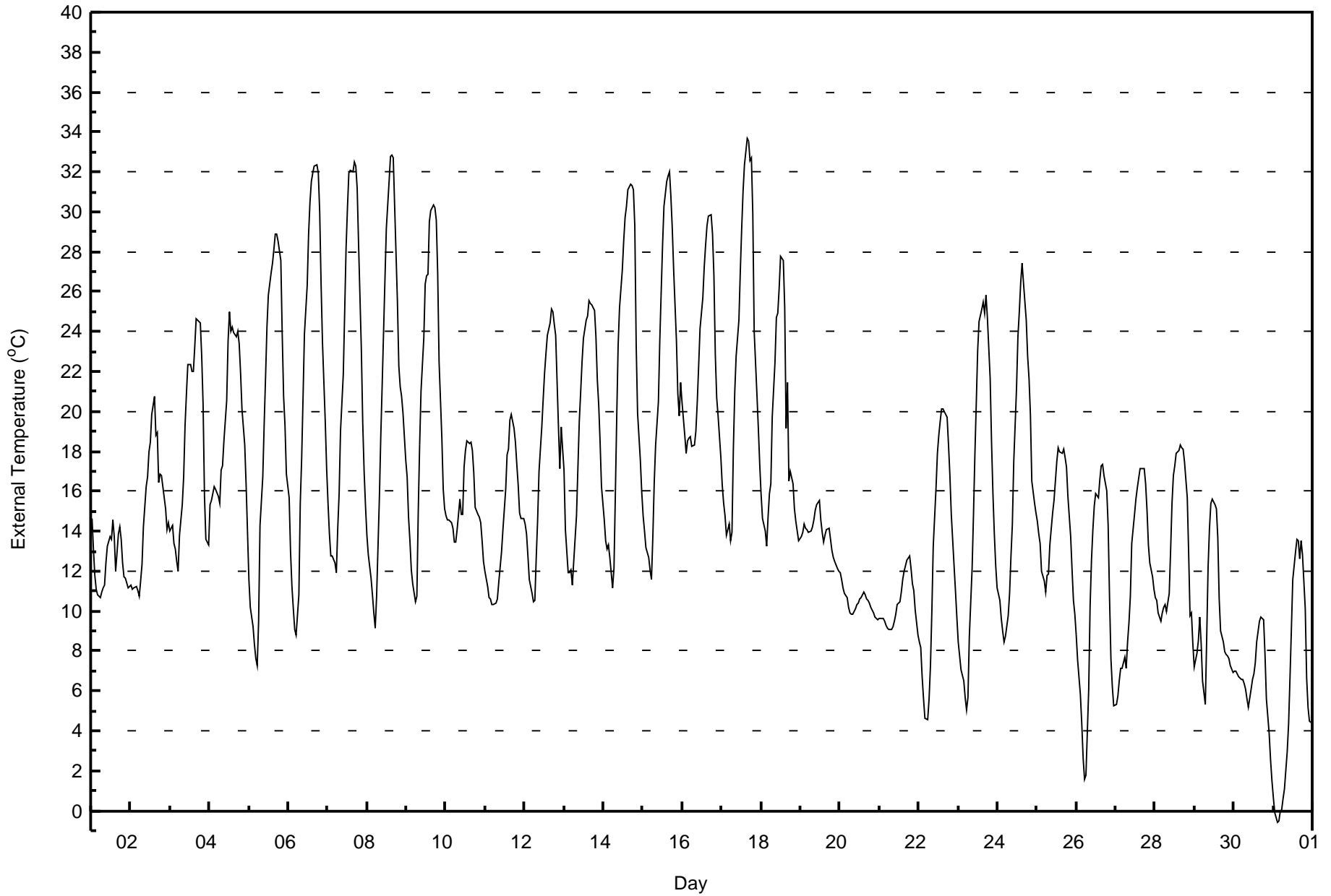


Peace Airshed Zone Association
Summary of Hourly Averages

Evergreen Park - External Temperature (ET) - °C
August 1, 2008 to September 1, 2008

Maximum Value: 33.7 °C on Aug 17 16:00																						Maximum Daily Average: 23.0 °C on Aug 17																						Hours in Service: 744	
Minimum Value: -1 °C on Aug 31 03:00																						Minimum Daily Average: 6.1 °C on Aug 31																						Hours of Data: 744	
Maximum Diurnal Average: 22.1 °C at hour 17																						Minimum Diurnal Average: 9.9 °C at hour 6																						Hours of Missing Data: 0	
Monthly Average: 16.04 °C																						Percentiles: P ₁ = 1.1 P ₁₀ = 7.9 Q ₁ = 11.0 Median = 14.8 Q ₃ = 20.0 P ₉₀ = 26.8 P ₉₉ = 32.5																						Hours of Calibration: 0	
																						Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																					
1-Aug	15	13	12	11	11	11	11	11	11	12	13	14	14	15	14	12	14	14	14	12	12	12	11	11	12.4	14.6																			
2-Aug	11	11	11	11	11	11	12	12	14	16	17	18	18	20	21	19	19	16	17	17	16	15	14	14	15.1	20.8																			
3-Aug	14	14	13	13	12	12	14	15	17	19	21	22	22	22	22	23	25	25	24	23	20	16	14	13	18.2	24.6																			
4-Aug	15	16	16	16	16	16	15	17	17	19	21	24	25	24	24	24	24	24	23	22	20	18	16	14	19.4	25.0																			
5-Aug	12	10	9	8	8	7	9	14	17	19	22	24	26	27	27	28	29	29	29	28	24	21	19	17	19.3	28.9																			
6-Aug	16	13	11	10	9	9	11	15	18	21	24	26	29	31	32	32	32	32	32	30	26	23	19	17	21.6	32.4																			
7-Aug	15	14	13	13	12	12	14	16	19	22	25	28	30	32	32	32	32	32	31	28	23	19	17	15	22.0	32.5																			
8-Aug	14	13	12	11	10	9	11	16	19	21	24	27	29	31	33	33	33	30	26	22	21	21	20	18	20.9	32.8																			
9-Aug	17	15	14	12	11	10	11	15	18	21	24	26	27	27	30	30	30	30	30	27	22	19	16	15	20.7	30.4																			
10-Aug	15	15	15	14	14	13	13	14	16	15	15	17	18	19	18	18	18	17	15	15	15	14	14	12	15.4	18.5																			
11-Aug	12	11	11	11	10	10	10	11	11	12	13	14	16	18	18	20	20	19	18	17	16	15	15	15	14.3	19.8																			
12-Aug	14	14	13	12	11	10	11	13	15	17	19	21	22	23	24	24	25	25	24	24	19	17	19	18	18.1	25.2																			
13-Aug	17	14	12	12	12	11	12	15	17	20	21	22	24	25	25	26	25	25	25	24	22	20	18	16	19.2	25.5																			
14-Aug	15	14	13	13	13	11	12	16	20	23	25	27	29	30	30	31	31	31	31	29	23	20	18	16	21.7	31.4																			
15-Aug	15	14	13	13	12	12	14	16	18	20	24	26	28	30	32	32	32	31	29	27	24	21	20	21	21.8	32.0																			
16-Aug	20	19	18	19	19	19	18	18	19	20	22	24	26	27	28	29	30	30	29	27	23	21	20	18	22.6	29.9																			
17-Aug	16	15	15	14	14	14	14	18	21	23	25	27	29	31	32	34	34	33	33	30	24	21	19	17	23.0	33.7																			
18-Aug	16	15	14	13	15	16	16	20	22	25	25	26	28	28	25	19	21	16	17	16	15	15	14	14	18.8	27.8																			
19-Aug	14	14	14	14	14	14	14	14	15	15	15	16	15	14	13	14	14	14	14	13	13	13	12	12	13.9	15.6																			
20-Aug	12	12	11	11	11	10	10	10	10	10	10	10	11	11	11	11	11	11	10	10	10	10	10	10	10.4	12.0																			
21-Aug	10	10	10	9	9	9	9	9	9	9	10	10	10	11	12	12	12	13	13	12	11	11	10	9	10.4	12.8																			
22-Aug	8	8	7	6	5	5	6	7	10	13	16	18	19	20	20	20	20	20	18	17	15	12	11	10	12.9	20.1																			
23-Aug	8	8	7	7	6	5	6	9	12	15	18	20	23	24	25	25	25	26	25	22	18	16	14	12	15.7	25.8																			
24-Aug	11	11	10	9	8	9	10	11	13	14	17	21	24	25	26	27	26	25	23	22	20	17	15	15	17.0	27.4																			
25-Aug	15	14	13	12	11	11	12	12	13	15	16	17	17	18	18	18	18	18	17	16	14	12	11	10	14.4	18.2																			
26-Aug	9	8	6	4	3	2	2	6	10	13	14	15	16	16	17	17	17	17	16	14	11	8	6	5	10.4	17.3																			
27-Aug	5	6	7	7	7	8	7	8	9	11	13	15	16	16	17	17	17	17	16	15	13	12	12	11	11.8	17.2																			
28-Aug	11	11	10	10	10	10	10	10	11	13	15	17	17	18	18	18	18	18	17	16	13	10	10	8	13.3	18.3																			
29-Aug	7	8	9	10	8	6	5	9	12	14	15	16	15	15	14	11	9	8	8	8	8	8	7	7	9.9	15.6																			
30-Aug	7	7	7	7	7	7	6	6	6	5	6	7	7	7	8	10	10	10	10	8	6	4	3	1	6.6	9.7																			
31-Aug	1	0	-1	-1	0	0	1	1	3	4	7	9	12	13	14	14	13	14	13	10	7	5	5	4	6.1	13.6																			
																								Diurnal Average																					
																								Diurnal Maximum																					
12.5 11.7 11.0 10.7 10.3 9.9 10.5 12.4 14.3 16.1 17.8 19.5 20.7 21.5 21.9 21.9 22.1 21.6 20.9 19.4 16.9 15.0 13.8 12.8																																													
20.4 18.8 17.9 18.5 18.7 18.8 18.2 19.7 22.5 24.7 25.2 28.2 30.2 32.0 32.7 33.7 33.5 32.6 32.7 30.0 26.4 23.4 19.9 21.4																																													

Hourly Averages for External Temperature at Evergreen Park August 2008

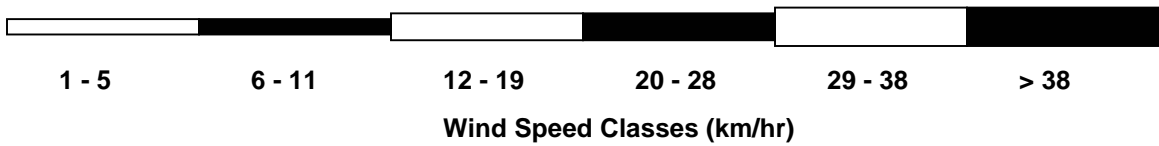
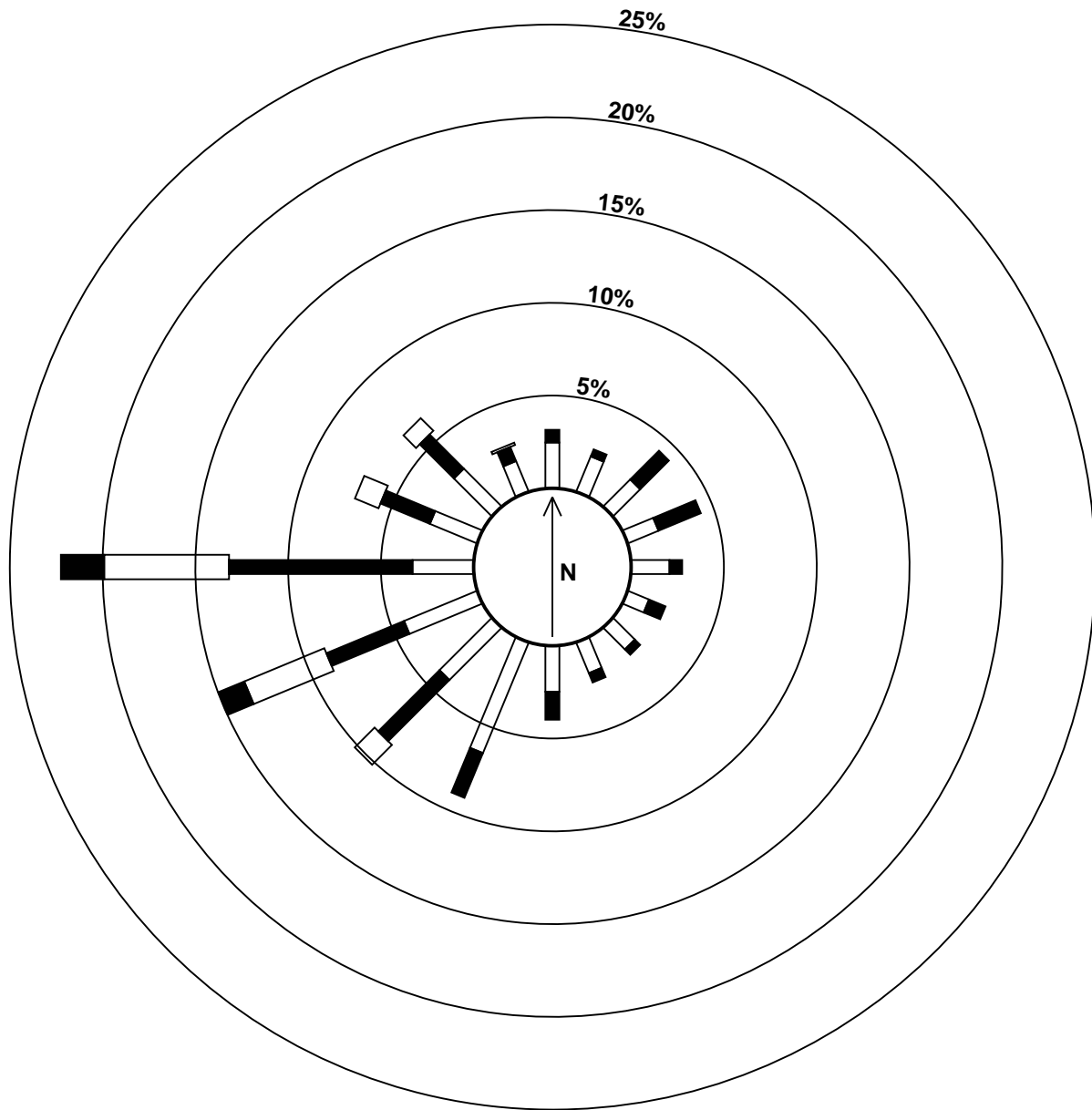


**Peace Airshed Zone Association
Summary of Hourly Averages**

Evergreen Park
August 1, 2008 to September 1, 2008
WS (km/h), WD (deg)

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	1	1	3	3	1	1	1	3	2	2	5	7	10	10	9	8	6	8	8	6	6	5	3	2	3.3	10.5
Dir	217	230	208	212	214	201	249	213	160	178	144	134	170	180	173	163	134	115	109	93	87	80	43	51	146.7	180.5
24 Spd	1	1	1	1	2	3	4	3	1	2	5	6	7	7	6	5	14	18	16	13	10	10	10	14	3.5	17.5
Dir	125	46	26	355	4	72	68	61	112	67	174	187	156	133	123	190	229	216	218	219	274	308	272	259	221.3	215.9
25 Spd	13	13	16	18	15	13	17	15	17	19	23	22	19	19	21	19	15	16	14	12	10	9	9	11	15.4	22.7
Dir	268	262	263	265	247	232	249	251	252	261	252	253	252	262	278	279	284	263	271	271	268	259	235	247	260.0	252.3
26 Spd	10	7	8	3	2	2	3	6	9	14	18	25	23	23	21	20	20	21	19	12	2	3	1	0	10.5	25.0
Dir	232	220	217	206	160	185	166	192	233	250	251	272	271	250	254	268	273	254	254	249	292	227	190	156	251.7	271.8
27 Spd	3	4	3	4	3	3	4	5	6	8	12	16	15	18	18	25	23	21	22	17	13	14	13	11	11.1	24.5
Dir	225	211	227	304	302	285	195	235	231	249	257	264	256	277	277	265	271	273	267	260	243	241	244	247	259.8	264.9
28 Spd	11	11	9	13	15	13	10	12	16	20	24	26	22	25	25	24	23	20	15	9	5	6	9	6	14.6	26.2
Dir	232	225	219	223	228	236	245	244	250	258	269	262	267	262	263	268	271	277	274	271	253	215	223	219	254.6	262.2
29 Spd	5	6	10	11	6	7	1	7	10	14	13	10	5	4	5	5	5	7	9	6	8	8	7	6	5.9	13.9
Dir	223	239	232	236	236	234	229	253	245	253	272	275	328	27	34	342	310	303	261	284	258	264	297	274	265.6	253.4
30 Spd	7	8	8	8	8	8	8	8	7	1	7	9	9	8	9	11	11	10	9	6	5	3	2	2	6.2	11.1
Dir	254	257	262	266	268	270	301	310	5	216	229	289	272	232	228	246	242	228	238	227	210	217	222	258	255.8	242.5
31 Spd	1	3	2	2	2	2	4	3	4	5	3	4	4	5	5	5	5	6	3	2	2	2	3	3	1.3	5.7
Dir	252	235	237	242	203	204	232	323	237	247	325	330	270	256	307	356	57	58	57	142	260	244	245	200	274.5	57.6
Spd	3.4	3.2	3.3	3.5	3.1	3.0	3.1	4.7	5.7	6.2	7.1	7.4	6.7	6.5	6.3	6.3	5.6	5.1	5.7	3.9	3.6	3.5	2.8	3.3	Diurnal Average	
Dir	246.7	245.8	243.8	257.3	249.5	256.8	261.8	256.5	254.3	263.0	260.0	269.6	270.3	269.7	273.1	275.2	278.4	273.9	254.0	247.8	251.2	248.4	246.5	251.0		
Spd	13.4	13.2	16.0	17.6	14.9	12.9	17.0	15.3	17.0	20.0	24.2	26.2	23.1	25.4	25.0	24.5	23.5	21.0	23.3	17.2	21.7	16.8	12.8	13.5	Diurnal Maximum	
Dir	267.5	261.8	263.5	265.2	247.4	232.4	249.2	250.9	252.1	258.4	269.4	262.2	271.2	261.9	262.7	264.9	271.3	273.4	237.1	260.4	247.5	240.2	230.7	259.1		
Maximum Speed Value: 26 km/h on Aug 28 12:00		Minimum Speed Value: 0 km/h on Aug 18 05:00																Hours in Service: 744								
Maximum Daily Speed Average: 15.4 km/h on Aug 25		Minimum Daily Speed Average: 0.7 km/h on Aug 15																Hours of Data: 744								
Maximum Diurnal Speed Average: 7.4 km/h at hour 12		Minimum Diurnal Speed Average: 2.8 km/h at hour 23																Hours of Missing Data: 0								
Monthly Average Velocity: 4.64 km/h 260.98 deg		Speed Percentiles: P ₁ = 0.7 P ₁₀ = 1.9 Q ₁ = 3.6 Median = 6.3 Q ₃ = 9.8 P ₉₀ = 14.6 P ₉₉ = 24.0																Percent Operational Time: 100.0								
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Percentage Frequency Distribution																										
Direction	Speed Range (km/h)							Total																		
	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38																				
North	3.90	1.48	0.00	0.00	0.00	0.00	5.38																			
NorthEast	3.63	4.97	0.00	0.00	0.00	0.00	8.60																			
East	2.96	2.15	0.00	0.00	0.00	0.00	5.11																			
SouthEast	2.69	2.02	0.00	0.00	0.00	0.00	4.70																			
South	5.11	3.76	0.00	0.00	0.00	0.00	8.87																			
SouthWest	10.08	7.26	3.76	0.27	0.00	0.00	21.37																			
West	6.59	14.38	10.48	4.03	0.00	0.00	35.48																			
NorthWest	4.17	4.44	1.88	0.00	0.00	0.00	10.48																			
Total	39.11	40.46	16.13	4.30	0.00	0.00	100.00																			

Wind Rose for WS at Evergreen Park August 2008



Peace Airshed Zone Association
Summary of Hourly Averages - Wind Speed (Scalar)

Evergreen Park - Wind Speed (WS) - km/h
August 1, 2008 to September 1, 2008

Maximum Speed: 26 km/h on Aug 28 12:00	Maximum Daily Speed Average: 16.1 km/h on Aug 25	Hours in Service: 744
Minimum Speed: 2 km/h on Aug 22 04:00	Minimum Daily Speed Average: 4.1 km/h on Aug 31	Hours of Data: 744
Maximum Diurnal Speed Average: 11.2 km/h at hour 12	Minimum Diurnal Speed Average: 5.9 km/h at hour 5	Hours of Missing Data: 0
Monthly Average Speed: 8.22 km/h	Percentiles: P ₁ = 2.5 P ₁₀ = 3.2 Q ₁ = 4.6 Median = 7.0 Q ₃ = 10.4 P ₉₀ = 15.3 P ₉₉ = 24.4	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	10	7	7	7	6	4	6	7	8	9	10	13	14	13	12	10	8	14	18	17	11	13	11	10	10.2	18.5
2-Aug	11	11	9	13	11	9	10	14	13	15	15	15	13	16	17	15	12	10	9	7	6	9	7	10	11.5	16.9
3-Aug	9	12	7	8	7	7	9	10	11	10	13	15	13	9	12	15	15	14	16	9	4	4	4	6	10.0	15.8
4-Aug	7	8	7	9	10	12	9	13	11	8	8	12	12	10	12	12	9	13	11	8	8	5	5	3	9.3	12.7
5-Aug	3	3	4	3	3	5	3	3	6	5	7	8	9	9	10	7	6	6	6	5	5	5	4	4	5.3	9.7
6-Aug	4	4	3	4	3	3	3	4	4	4	5	8	8	9	9	8	7	7	7	7	6	5	5	4	5.5	9.0
7-Aug	3	3	3	3	3	3	3	5	9	6	8	7	6	5	7	8	8	5	7	6	3	3	3	3	4.9	8.7
8-Aug	4	3	3	4	3	2	3	4	4	5	6	6	7	7	7	7	6	6	26	14	6	7	5	6	6.2	25.8
9-Aug	5	5	3	3	3	3	3	4	8	8	9	8	7	7	6	7	7	6	7	6	23	17	7	8	7.0	22.5
10-Aug	10	13	12	7	6	9	9	8	9	11	13	15	23	23	20	21	15	12	9	11	13	16	13	13	12.9	23.1
11-Aug	9	9	9	7	7	6	7	9	8	6	4	6	7	7	5	9	9	15	13	14	15	11	11	11	9.0	15.4
12-Aug	10	11	9	6	6	6	6	9	8	5	5	6	7	7	7	6	7	7	7	5	4	4	6	7	6.8	10.8
13-Aug	7	4	5	5	6	5	7	12	13	14	18	17	16	16	14	17	16	15	16	8	6	7	6	4	10.6	17.8
14-Aug	4	4	4	5	5	4	4	5	8	13	14	14	16	15	13	9	9	8	6	4	3	3	3	3	7.4	16.3
15-Aug	2	2	2	3	4	3	3	4	4	5	5	5	4	5	6	5	6	6	5	3	3	3	3	6	4.1	6.4
16-Aug	5	5	5	5	7	9	12	13	13	11	9	7	7	7	7	6	7	6	7	5	5	6	5	4	7.1	13.3
17-Aug	4	4	3	4	5	3	3	3	6	6	7	6	7	7	6	6	6	4	4	5	3	4	4	3	4.7	7.3
18-Aug	5	3	4	3	4	7	5	9	13	15	13	12	10	8	7	6	6	10	5	6	4	4	4	5	6.9	15.3
19-Aug	3	5	4	3	4	4	3	5	4	5	5	8	9	8	6	6	9	7	5	5	5	5	5	4	5.2	8.8
20-Aug	6	7	7	8	7	9	9	7	8	8	8	8	8	8	10	9	9	9	9	7	8	9	8	8	7.9	9.5
21-Aug	8	9	8	9	10	9	8	7	7	7	5	6	6	6	6	5	6	3	3	4	5	5	5	3	6.2	9.5
22-Aug	6	4	2	2	3	5	3	5	6	8	11	16	18	13	14	16	11	10	4	3	4	3	3	3	7.2	18.2
23-Aug	3	3	4	3	3	2	2	3	4	4	6	7	11	11	10	8	6	8	8	6	6	5	3	3	5.4	11.3
24-Aug	3	3	3	2	4	3	4	3	3	4	5	7	7	7	6	7	14	18	16	13	15	11	10	14	7.7	17.7
25-Aug	14	13	16	18	15	13	17	15	17	20	23	22	20	20	22	19	16	17	15	12	10	10	9	11	16.1	23.3
26-Aug	10	7	8	5	4	3	4	7	10	14	18	26	24	23	22	21	20	21	19	12	4	4	3	3	12.2	25.7
27-Aug	3	4	4	4	4	4	5	6	7	8	13	16	16	19	19	25	24	21	22	17	13	14	13	11	12.1	24.9
28-Aug	11	11	9	13	15	13	11	12	16	20	25	26	22	26	25	25	23	20	15	9	6	7	9	7	15.6	26.5
29-Aug	5	7	10	11	7	8	5	8	10	14	14	11	6	5	6	6	5	7	9	6	8	8	7	6	7.9	14.1
30-Aug	7	8	8	8	8	8	9	9	8	4	7	10	9	9	10	11	11	10	9	6	5	3	3	3	7.7	11.4
31-Aug	2	3	3	3	3	3	4	4	4	6	5	6	5	6	6	7	6	6	4	3	3	3	3	3	4.1	7.2

6.2	6.2	6.0	6.1	5.9	6.0	6.0	7.3	8.5	8.9	10.1	11.2	11.2	11.0	10.9	11.0	10.3	10.3	10.2	8.0	7.2	6.8	6.0	6.1	Diurnal Average
13.6	13.4	16.2	17.9	15.0	13.1	17.1	15.4	17.3	20.3	24.7	26.5	23.6	25.8	25.3	24.9	23.9	21.4	25.8	17.4	22.5	17.3	13.1	13.7	Diurnal Maximum

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

Peace Airshed Zone Association
Summary of Hourly Standard Deviations

Evergreen Park - Wind Direction (WD) - deg
August 1, 2008 to September 1, 2008

Maximum Value: 97.0 deg on Aug 16 00:00																								Hours in Service:	744
Minimum Value: 3.7 deg on Aug 10 06:00																								Hours of Data:	744
Percentiles: P ₁ = 6.3 P ₁₀ = 10.1 Q ₁ = 14.1 Median = 22.4 Q ₃ = 43.5 P ₉₀ = 68.9 P ₉₉ = 88.1																								Hours of Missing Data:	0
																								Hours of Calibration:	0
																								Percent Operational Time:	100.0
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	11	24	20	23	21	27	19	19	16	18	18	19	18	23	21	28	24	20	10	7	8	9	13	11	27.8
2-Aug	11	13	23	10	13	16	13	12	15	17	17	18	21	23	21	27	21	56	17	25	11	8	9	10	55.6
3-Aug	18	10	13	20	18	14	10	12	14	18	37	17	25	23	25	17	14	22	11	14	40	13	4	17	39.7
4-Aug	10	11	12	8	8	7	11	9	12	14	15	18	29	27	23	22	14	16	17	12	43	33	88	49	88.3
5-Aug	69	61	78	59	63	64	72	49	18	35	36	43	47	53	40	93	82	62	43	23	13	17	25	29	93.2
6-Aug	24	9	39	48	78	62	36	73	27	41	60	41	47	38	50	48	57	55	24	23	12	11	10	15	78.3
7-Aug	51	62	72	61	74	75	32	48	20	32	24	34	70	73	66	31	26	75	15	13	72	83	70	62	83.2
8-Aug	85	89	69	47	43	80	56	20	42	70	43	52	62	58	68	36	55	19	48	49	84	62	29	15	89.2
9-Aug	67	23	82	50	83	61	58	41	16	25	23	46	89	36	85	49	62	33	32	33	16	14	57	38	89.2
10-Aug	26	11	8	18	23	4	18	14	14	9	17	17	18	9	12	13	12	22	24	16	12	8	11	9	26.4
11-Aug	14	9	8	14	10	12	14	17	16	54	67	44	44	56	82	50	38	12	12	8	7	9	8	13	82.0
12-Aug	12	12	15	19	18	18	24	14	29	61	62	84	71	73	80	72	46	30	22	15	30	22	28	30	83.6
13-Aug	17	41	29	14	14	17	17	8	11	16	21	19	25	22	21	22	21	18	14	13	18	16	37	25	41.2
14-Aug	19	54	26	22	8	36	29	43	16	13	15	25	17	21	32	32	30	31	27	18	61	64	60	32	64.3
15-Aug	24	44	31	26	36	26	26	22	17	31	43	72	77	60	50	53	38	27	17	32	79	62	57	97	97.0
16-Aug	46	31	65	27	15	18	14	13	17	22	27	48	61	72	62	64	52	74	26	19	14	9	19	10	74.0
17-Aug	15	20	40	24	12	29	28	70	34	44	32	72	54	59	74	66	69	60	49	23	38	24	27	53	73.8
18-Aug	42	74	91	89	93	57	55	13	8	9	10	16	40	26	51	92	41	21	48	26	46	75	61	38	93.2
19-Aug	75	68	23	68	52	53	77	20	55	17	45	22	15	22	24	25	11	35	42	28	21	35	19	29	76.9
20-Aug	18	20	19	20	25	19	15	24	24	24	20	19	19	20	17	17	16	20	20	17	15	16	14	18	24.6
21-Aug	16	15	18	17	15	15	17	15	16	19	23	31	25	20	22	36	27	72	87	49	14	19	13	34	87.4
22-Aug	13	21	69	34	32	10	28	15	29	15	18	10	13	15	15	11	14	12	18	24	17	83	74	52	83.0
23-Aug	91	84	74	35	76	65	68	43	64	64	38	34	21	24	27	27	31	18	17	10	13	15	33	66	90.7
24-Aug	81	85	68	73	46	35	15	38	83	75	32	28	23	27	23	46	10	7	9	6	49	17	16	7	85.4
25-Aug	10	8	9	10	7	7	7	8	11	11	13	11	15	16	14	14	16	14	11	12	10	11	8	9	16.0
26-Aug	11	16	13	75	76	61	33	31	24	15	14	13	12	9	12	13	12	11	8	10	69	44	85	86	86.0
27-Aug	22	19	31	23	28	44	21	29	22	12	14	15	18	18	15	11	11	11	9	8	10	8	8	8	43.6
28-Aug	6	5	6	6	10	8	9	8	8	9	11	9	12	10	10	12	11	12	11	12	44	47	6	11	47.0
29-Aug	26	37	9	6	55	36	88	22	13	9	15	26	28	31	35	30	42	28	20	20	10	18	17	16	88.3
30-Aug	9	8	11	14	11	15	13	15	30	82	14	21	19	20	16	19	14	11	13	13	8	28	43	30	82.2
31-Aug	58	22	26	58	57	48	25	40	29	20	69	53	50	46	34	51	25	26	25	69	57	37	20	38	69.2
	90.7	89.2	90.9	89.4	93.2	79.8	88.3	72.8	83.2	82.2	69.0	83.6	89.2	73.3	85.3	93.2	82.2	74.7	87.4	69.2	83.5	83.2	88.3	97.0	

PASZA

Smoky Heights Station

Monthly Summary Tables, Graphs and
Roses

**Peace Airshed Zone Association
Summary of Hourly Averages**

**Smoky Heights - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

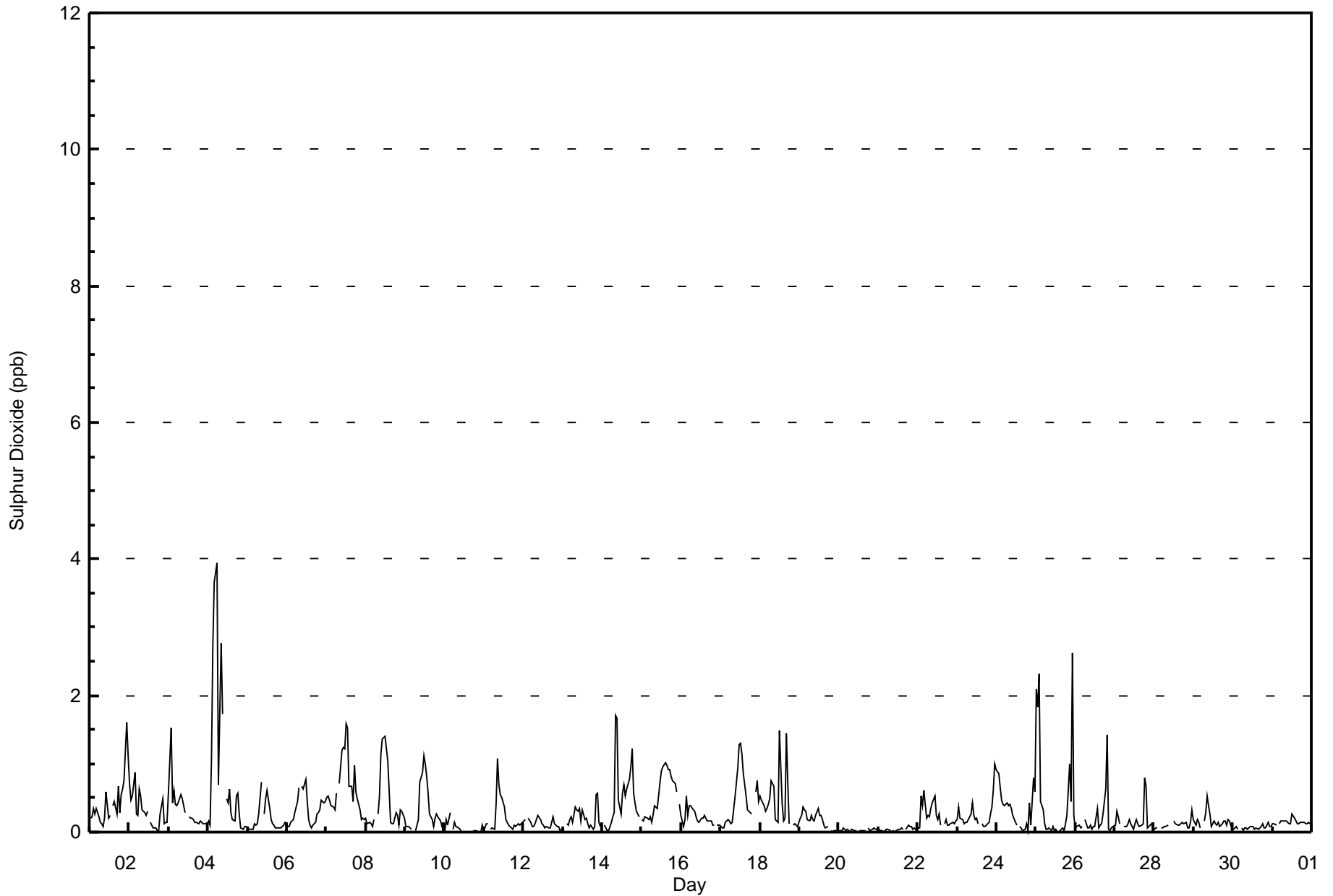
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 3.9 ppb on Aug 4 06:00 Maximum Daily Average: 1.0 ppb on Aug 4	Hours of Data: 710
Minimum Value: 0 ppb on Aug 10 01:00 Minimum Daily Average: 0.0 ppb on Aug 20	Hours of Missing Data: 34
Maximum Diurnal Average: 0.4 ppb at hour 10 Minimum Diurnal Average: 0.2 ppb at hour 16	Hours of Calibration: 34
Monthly Average: 0.30 ppb Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.7 P ₉₉ = 2.0	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	0	0	0	0	0	0	1	0	0	A	0	0	0	1	0	1	1	1	2	1	0.4	1.6
2-Aug	1	0	1	1	0	0	1	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9
3-Aug	1	2	0	1	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.3	1.5
4-Aug	0	0	1	3	4	4	1	2	3	2	A	0	0	1	0	0	0	1	1	0	0	0	0	0	1.0	3.9
5-Aug	0	0	0	0	0	0	0	0	1	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	0.7
6-Aug	0	0	0	0	0	0	0	1	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.8
7-Aug	1	1	0	0	0	0	1	A	1	1	1	1	2	2	1	1	0	1	1	0	0	0	0	0	0.7	1.6
8-Aug	0	0	0	0	0	0	A	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.5	1.4
9-Aug	0	0	0	0	0	A	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0.3	1.1
10-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
11-Aug	0	0	0	A	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.1
12-Aug	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
13-Aug	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0.2	0.6
14-Aug	A	0	0	0	0	0	0	0	2	2	0	0	1	1	1	1	1	1	1	1	1	0	0	A	0.5	1.7
15-Aug	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	A	0	0.5	1.0
16-Aug	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0.2	0.5
17-Aug	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	A	1	0	0.5	1.3
18-Aug	1	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	1	1	0	A	0	0	0	0	0.4	1.5
19-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.2	0.4
20-Aug	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
21-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0.0	0.1
22-Aug	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	A	0	0	0	0	0	0	0	0	0.2	0.6
23-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.2	1.0
24-Aug	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	1	1	0.3	0.9
25-Aug	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	0.5	2.6
26-Aug	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0.2	1.4
27-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0.2	0.8
28-Aug	0	0	0	A	0	0	0	0	0	0	C	C	A	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3
29-Aug	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	0.5
30-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
31-Aug	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.3

0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	Diurnal Average
2.1	1.8	2.3	2.7	3.7	3.9	0.7	1.8	2.8	1.7	1.4	1.4	1.6	1.5	1.0	1.0	1.5	1.0	1.2	1.4	1.0	0.8	2.6	1.1	Diurnal Maximum	

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

Hourly Averages for SO₂ at Smoky Heights August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Smoky Heights - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

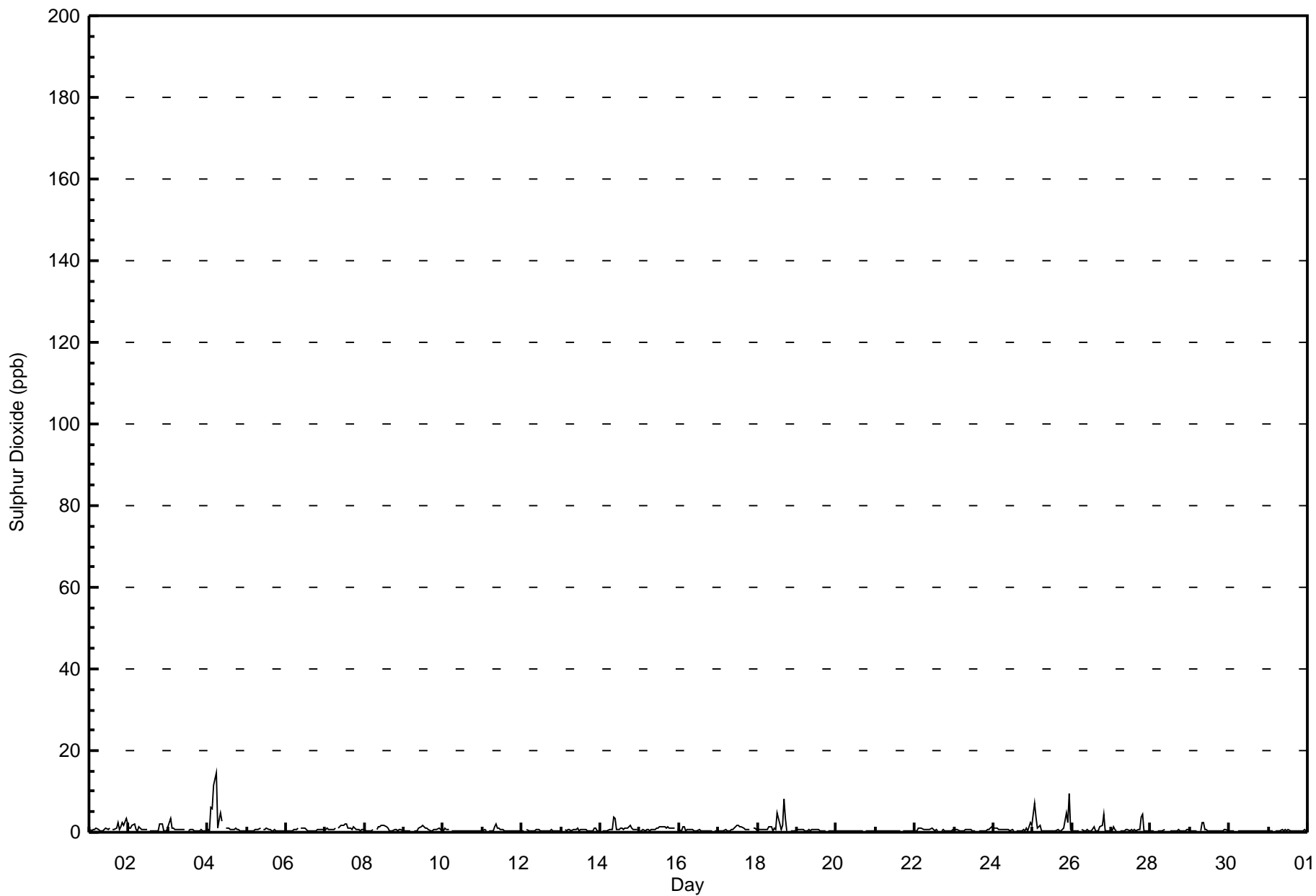
Maximum Value: 14.5 ppb on Aug 4 06:00	Maximum Daily Average: 2.6 ppb on Aug 4	Hours in Service: 744
Minimum Value: 0 ppb on Aug 21 09:00	Minimum Daily Average: 0.3 ppb on Aug 21	Hours of Data: 710
Maximum Diurnal Average: 1.0 ppb at hour 6	Minimum Diurnal Average: 0.5 ppb at hour 7	Hours of Missing Data: 34
Monthly Average: 0.77 ppb	Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.7 P ₉₀ = 1.3 P ₉₉ = 5.9	Hours of Calibration: 34
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	0	1	1	1	1	0	0	0	1	1	1	1	A	1	1	1	3	1	1	3	2	3	2	1.1	3.3
2-Aug	1	1	2	2	1	0	1	1	1	1	1	1	A	0	0	0	0	0	0	2	2	0	0	0	0.8	2.0
3-Aug	1	3	1	1	1	1	1	1	1	1	1	A	0	1	1	1	0	0	0	0	1	0	0	0	0.8	3.4
4-Aug	1	0	6	6	11	14	1	3	5	3	A	1	1	1	1	1	1	1	1	1	0	0	0	2.6	14.5	
5-Aug	0	0	0	0	0	1	1	1	1	A	1	1	1	1	1	0	0	1	0	0	0	0	0	0.5	1.1	
6-Aug	0	0	0	1	1	1	1	1	A	1	1	1	1	1	0	0	0	0	1	1	1	1	1	0.6	1.1	
7-Aug	1	1	1	1	1	1	1	A	1	2	2	2	2	2	1	1	1	1	1	1	1	0	1	1.0	2.1	
8-Aug	1	0	0	0	0	1	A	1	1	1	2	2	2	1	1	0	0	0	1	1	0	1	1	0.8	1.8	
9-Aug	0	0	0	0	0	A	0	0	0	1	1	2	1	1	1	1	0	0	1	1	1	1	1	0.7	1.7	
10-Aug	0	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0	
11-Aug	0	1	0	A	0	0	0	1	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.6	1.9	
12-Aug	1	0	A	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.6	
13-Aug	0	A	1	0	1	1	0	1	1	1	1	0	1	1	1	1	0	0	0	0	1	1	0	0.6	1.0	
14-Aug	A	0	0	0	0	1	1	1	4	3	1	1	1	1	1	1	1	1	2	1	1	1	1	1.0	3.8	
15-Aug	0	0	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.9	1.4	
16-Aug	1	0	2	1	0	1	1	1	1	0	0	0	1	0	1	1	0	0	0	0	0	A	0	0.6	1.5	
17-Aug	0	0	0	0	1	0	0	0	1	1	1	2	2	1	1	1	1	1	1	1	A	1	1	0.8	1.6	
18-Aug	1	1	1	1	1	1	1	1	1	0	1	1	5	2	1	2	8	3	0	A	0	1	0	1.4	8.1	
19-Aug	1	1	1	1	1	0	0	1	0	1	1	1	1	1	0	0	0	0	A	0	0	0	0	0.5	0.7	
20-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0.3	0.4	
21-Aug	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	
22-Aug	0	0	1	1	1	1	1	1	1	1	1	0	1	0	0	A	0	1	0	0	0	0	0	0.6	1.0	
23-Aug	0	1	1	0	0	0	0	1	1	1	1	0	0	0	A	0	0	0	0	0	1	1	1	0.6	1.3	
24-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	A	0	0	0	0	1	0	1	0	2	0.7	2.4	
25-Aug	4	7	4	1	2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	5	3	10	1.8	9.7	
26-Aug	0	0	0	0	0	A	1	0	0	1	0	0	0	1	0	0	0	1	2	4	0	0	0	0.7	4.3	
27-Aug	0	1	1	0	A	0	0	0	0	1	1	0	1	0	1	0	1	1	4	4	0	0	0	0.8	4.4	
28-Aug	0	0	0	A	0	0	0	0	1	C	C	A	0	0	0	0	0	1	0	0	0	1	1	0.4	0.8	
29-Aug	0	0	0	0	0	A	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0.6	2.4	
30-Aug	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	
31-Aug	0	0	1	A	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0.5	0.5	

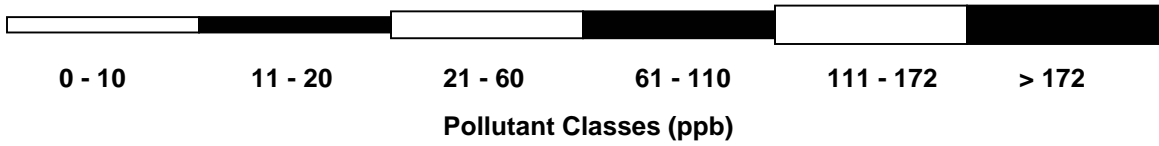
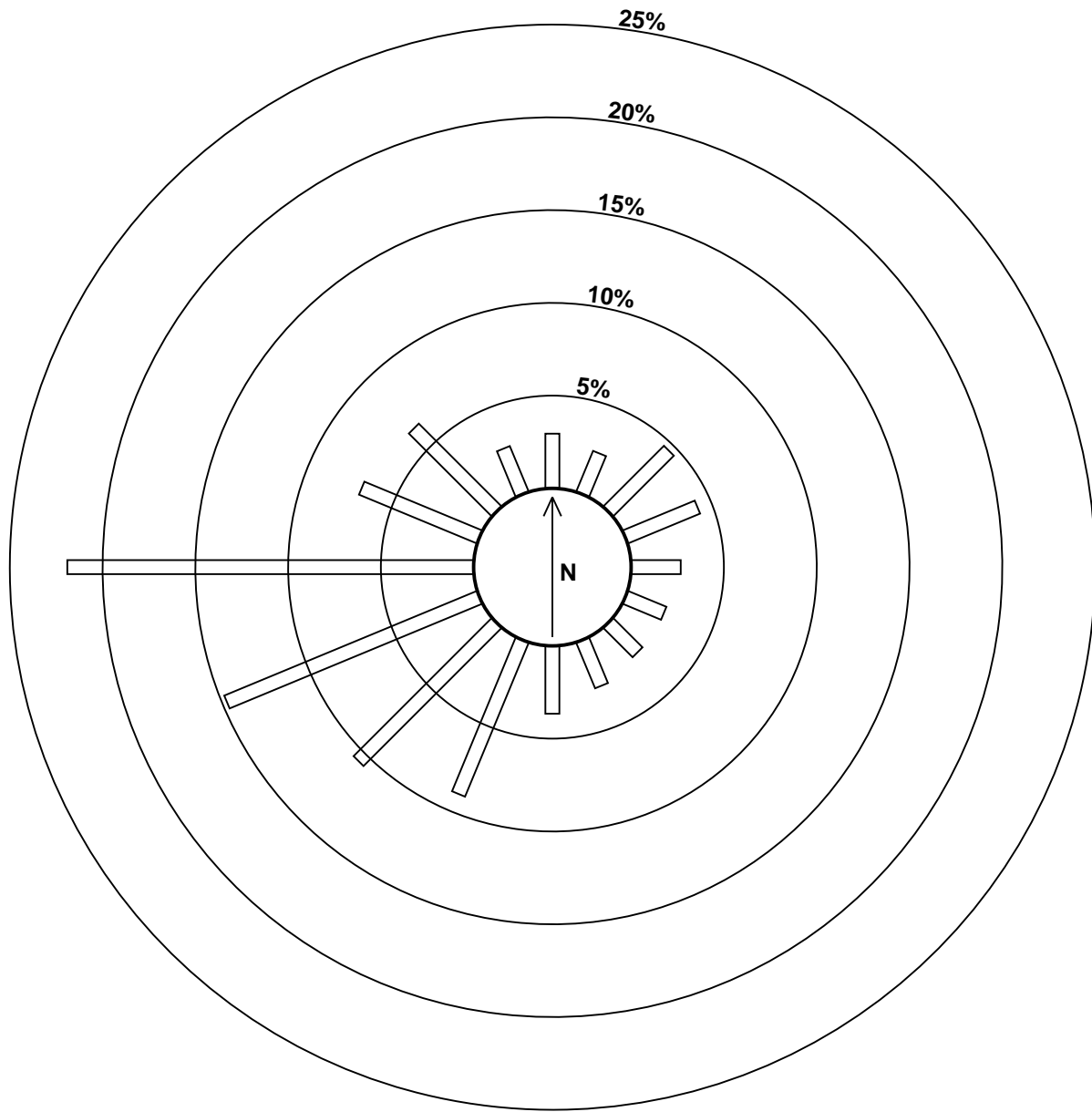
0.7	0.9	0.9	0.8	0.9	1.0	0.5	0.7	1.0	0.8	0.7	0.7	0.9	0.7	0.6	0.6	0.8	0.7	0.7	0.9	0.8	0.6	1.0	0.6	Diurnal Average	
4.5	7.3	6.0	5.9	11.4	14.5	1.2	3.0	4.9	3.4	1.8	1.8	4.8	2.0	1.4	1.5	8.1	3.3	3.7	4.4	4.9	2.5	9.7	2.0	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for SO₂ at Smoky Heights August 2008



Pollutant Rose for SO₂ at Smoky Heights August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Smoky Heights - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 1.3 ppb on Aug 3 05:00	Maximum Daily Average: 0.7 ppb on Aug 14
Minimum Value: 0 ppb on Aug 31 14:00	Hours of Data: 708
Maximum Diurnal Average: 0.6 ppb at hour 6	Hours of Missing Data: 36
Monthly Average: 0.47 ppb	Hours of Calibration: 36
Minimum Daily Average: 0.2 ppb on Aug 30	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.4 ppb at hour 16	
Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.3 Median = 0.4 Q ₃ = 0.5 P ₉₀ = 0.7 P ₉₉ = 1.0	

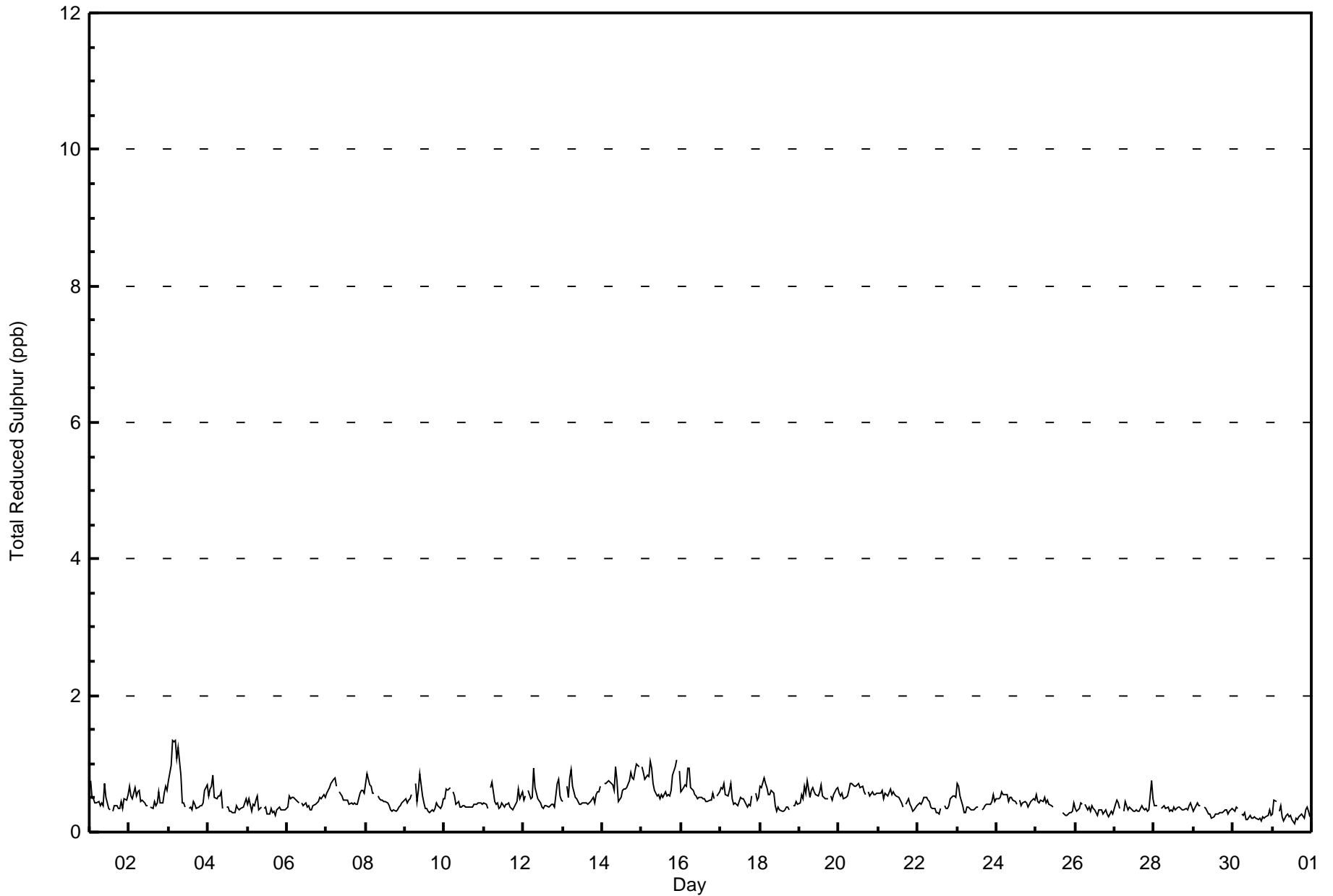
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	1	0	0	0	0	0	0	0	1	1	0	0	A	0	0	0	0	0	0	0	0	0	1	0.4	0.7
2-Aug	1	1	0	1	1	1	1	0	0	0	0	0	A	0	0	0	0	0	1	0	0	1	1	1	0.5	0.7
3-Aug	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	1	1	0.7	1.3
4-Aug	1	1	1	1	1	0	1	1	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.8
5-Aug	0	0	0	0	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
6-Aug	0	1	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0.4	0.5
7-Aug	1	1	1	1	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.8
8-Aug	1	1	1	1	1	1	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.9
9-Aug	0	0	0	0	1	A	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
10-Aug	0	1	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
11-Aug	0	0	0	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4	0.7
12-Aug	0	1	A	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0.5	0.9
13-Aug	0	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.9
14-Aug	A	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
15-Aug	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	A	1	0.7	1.1
16-Aug	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	0	1	0	A	1	1	0.6	0.9
17-Aug	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	A	1	0	1	0.5	0.7
18-Aug	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0.5	0.8
19-Aug	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	A	1	0	1	1	1	0.6	0.8
20-Aug	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.6	0.7
21-Aug	1	1	1	0	1	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0.5	0.6
22-Aug	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	1	1	0.4	0.5
23-Aug	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	1	0	0.4	0.7
24-Aug	0	0	1	1	1	1	0	1	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0.5	0.6
25-Aug	1	0	0	0	0	1	0	0	0	0	0	C	C	C	C	A	0	0	0	0	0	0	0	0	0.4	0.6
26-Aug	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
27-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.4	0.7
28-Aug	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	0.4
29-Aug	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
30-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
31-Aug	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.5

0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	Diurnal Average
0.9	1.0	1.3	1.3	1.3	1.1	1.2	0.8	1.0	0.9	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.9	0.8	0.8	1.0	1.1	1.0	0.9	Diurnal Maximum	

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

Hourly Averages for TRS at Smoky Heights

August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Smoky Heights - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 2.0 ppb on Aug 15 20:00	Maximum Daily Average: 1.2 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 30 09:00	Minimum Daily Average: 0.6 ppb on Aug 30	Hours of Data: 708
Maximum Diurnal Average: 1.0 ppb at hour 6	Minimum Diurnal Average: 0.7 ppb at hour 13	Hours of Missing Data: 36
Monthly Average: 0.85 ppb	Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.8 Q ₃ = 0.9 P ₉₀ = 1.1 P ₉₉ = 1.6	Hours of Calibration: 36
		Percent Operational Time: 100.0

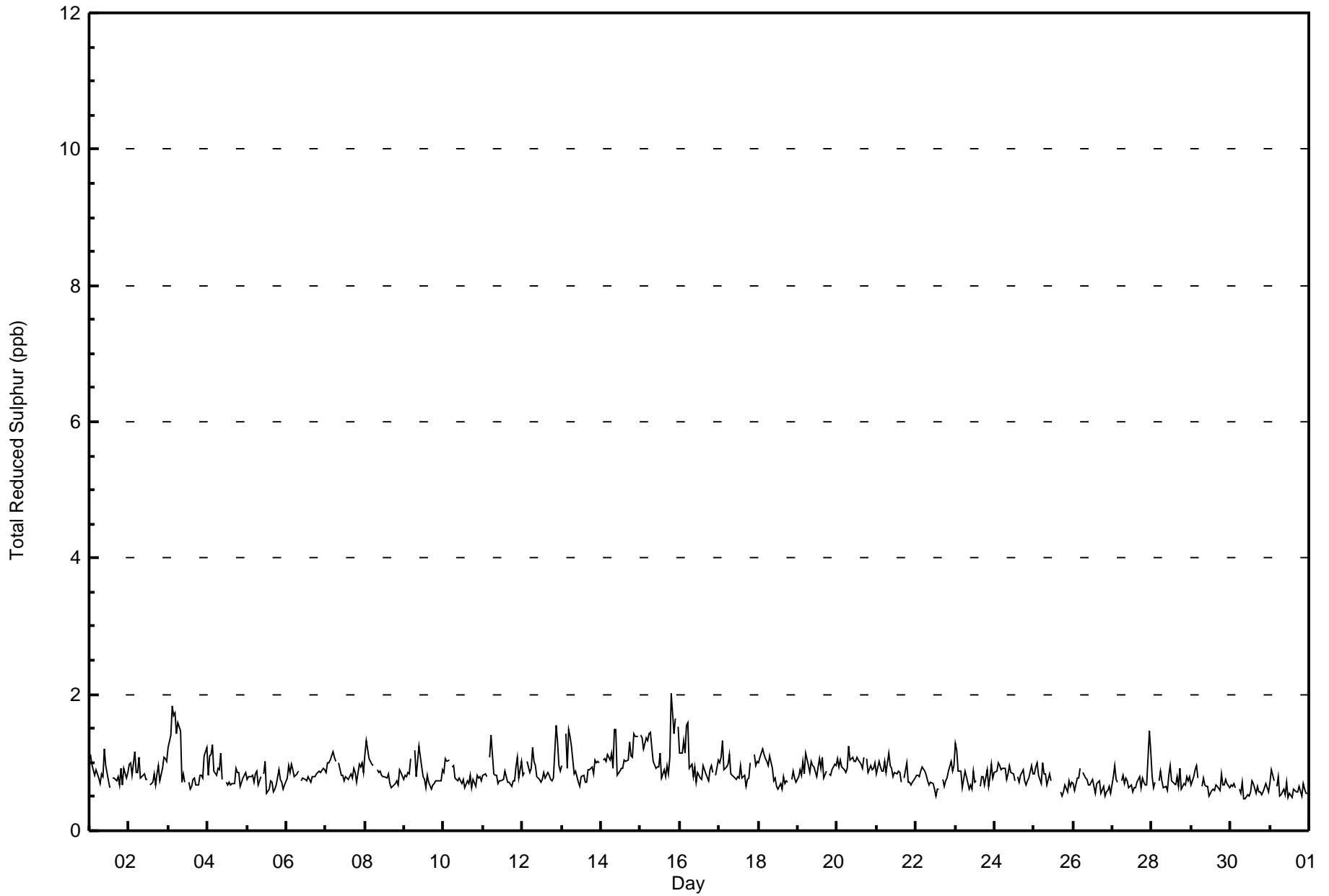
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0.8	1.2
2-Aug	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2
3-Aug	1	1	2	2	2	1	2	1	1	1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

0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	Diurnal Average
1.4	1.4	1.8	1.7	1.7	1.6	1.6	1.5	1.5	1.5	1.5	1.0	1.0	1.1	1.1	1.0	1.1	1.1	1.3	1.1	2.0	1.6	1.6	1.5	1.5	Diurnal Maximum

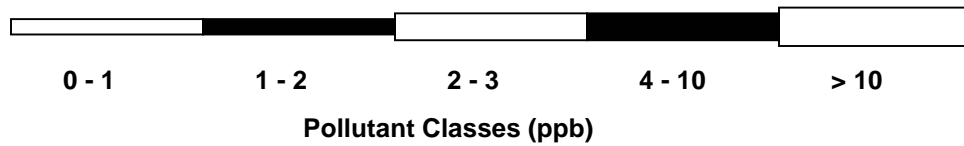
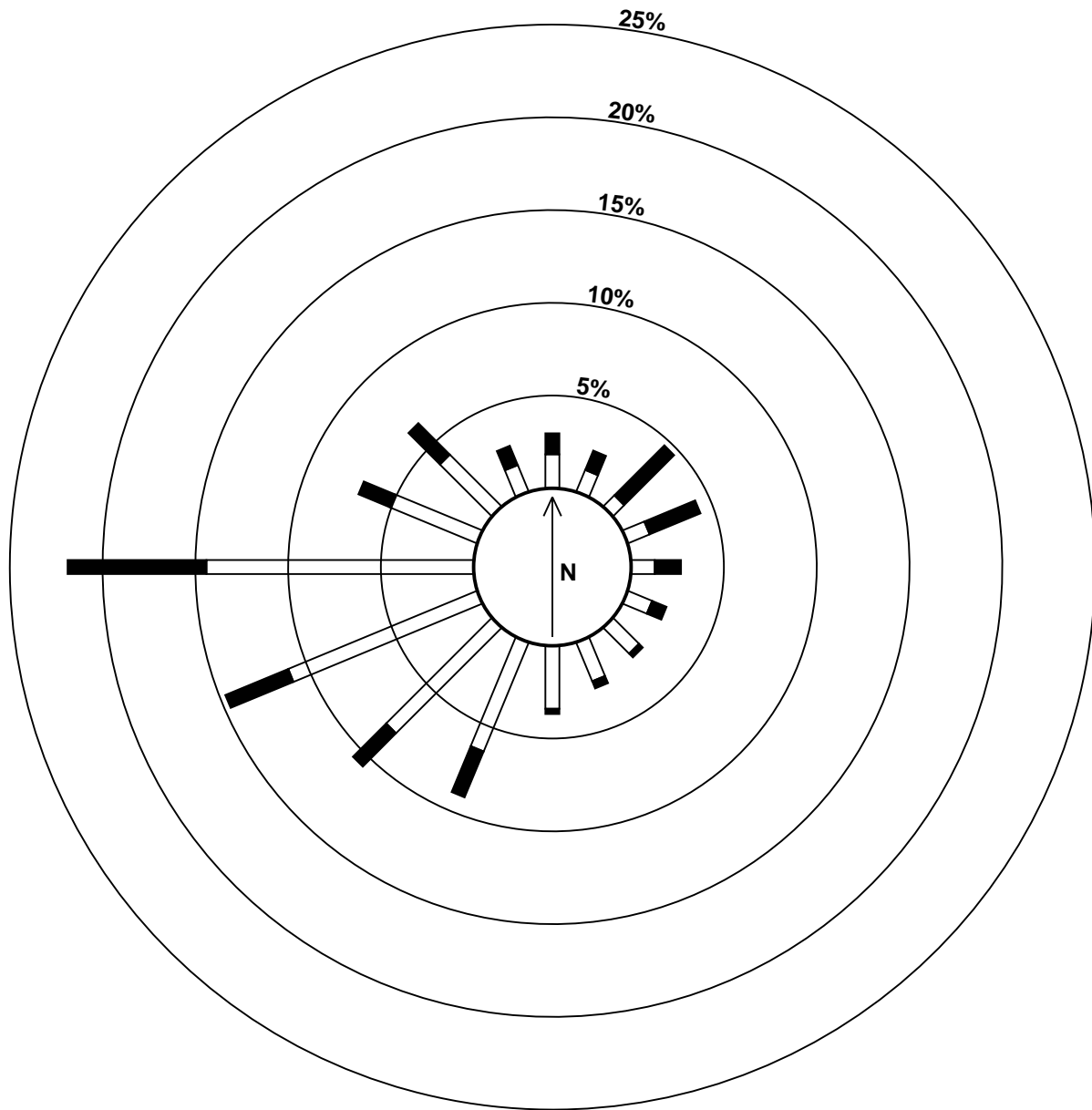
C - Calibration A - Automated Daily Zero Span

Hourly Maximums for TRS at Smoky Heights

August 2008



Pollutant Rose for TRS at Smoky Heights August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

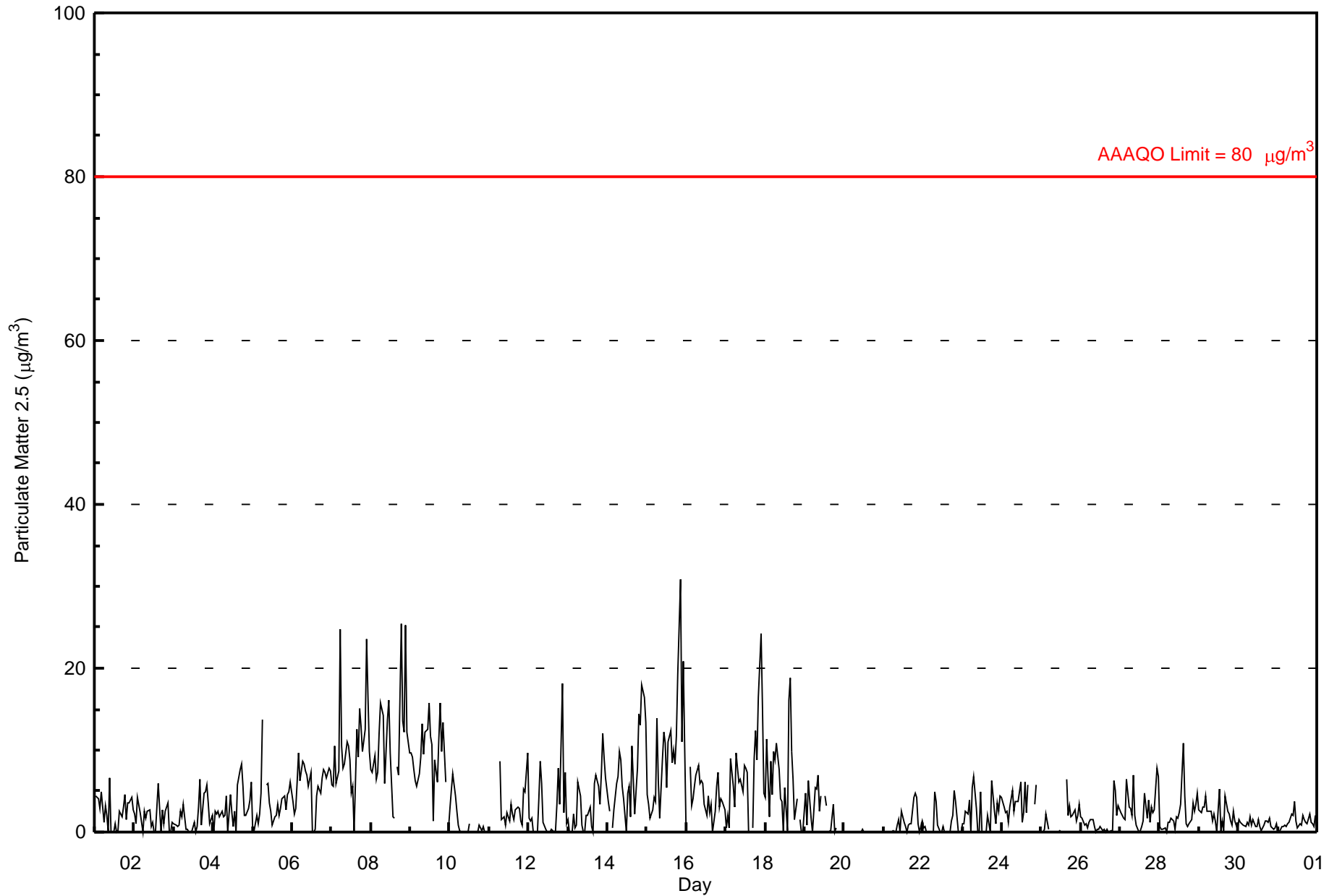
**Smoky Heights - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 30.9 µg/m ³ on Aug 15 21:00	Maximum Daily Average: 11.0 µg/m ³ on Aug 8
Minimum Value: 0 µg/m ³ on Aug 1 09:00	Hours of Data: 713
Maximum Diurnal Average: 6.3 µg/m ³ at hour 21	Hours of Missing Data: 31
Monthly Average: 3.79 µg/m ³	Hours of Calibration: 2
Minimum Daily Average: 0.0 µg/m ³ on Aug 20	Percent Operational Time: 96.1
Minimum Diurnal Average: 2.4 µg/m ³ at hour 1	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.7 Median = 2.4 Q ₃ = 5.6 P ₉₀ = 9.6 P ₉₉ = 19.1	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	4	4	4	3	5	1	3	2	0	7	0	0	1	0	0	3	2	3	5	2	4	4	4	3	2.6	6.7
2-Aug	2	1	4	2	1	0	3	2	3	3	1	1	0	0	6	3	0	3	1	3	4	0	0	1	1.8	5.9
3-Aug	1	1	1	1	3	2	3	0	0	0	0	1	0	1	3	6	1	5	5	6	4	1	2	1.9	6.5	
4-Aug	0	3	2	3	2	3	2	2	4	0	5	2	1	3	0	6	8	8	6	2	2	3	4	6	3.1	8.4
5-Aug	0	0	2	1	2	5	14	P	6	6	3	2	1	2	2	3	2	3	4	4	3	5	5	6	3.6	13.8
6-Aug	4	2	3	6	10	6	9	8	7	7	6	7	0	0	0	4	6	5	7	8	7	7	8	7	5.6	9.7
7-Aug	6	6	11	6	7	25	11	8	8	11	11	9	5	6	0	12	9	15	13	10	13	24	16	10	10.4	24.8
8-Aug	8	7	9	6	7	12	16	14	6	10	14	16	10	2	2	BD	8	7	25	14	12	25	12	10	11.0	25.3
9-Aug	10	9	8	6	6	7	9	13	10	12	13	16	12	11	1	9	6	11	16	10	13	6	P	1	9.3	15.7
10-Aug	3	5	7	4	3	1	0	0	0	BD	0	0	1	BD	BD	BD	0	0	1	0	1	0	0	BD	1.4	7.1
11-Aug	0	0	0	0	0	BD	9	2	2	2	1	2	1	3	2	2	3	3	3	1	1	5	5	10	2.4	9.7
12-Aug	2	1	2	0	BD	0	4	9	6	1	0	0	0	0	0	0	0	3	8	3	18	2	7	1	3.0	18.1
13-Aug	1	0	0	2	1	1	6	4	1	0	0	2	2	3	1	0	6	7	6	3	7	12	9	7	3.4	12.1
14-Aug	4	3	P	1	3	6	7	10	9	6	4	0	5	6	2	11	2	5	8	14	13	18	17	13	7.1	18.0
15-Aug	5	3	2	3	4	4	14	6	2	9	12	11	5	11	12	8	10	8	12	19	31	11	21	10	9.7	30.9
16-Aug	0	BD	8	3	4	6	7	8	6	6	6	3	2	4	2	3	0	3	6	7	3	4	4	3	4.3	8.2
17-Aug	0	2	1	9	6	3	10	8	6	7	5	8	8	7	0	BD	1	9	12	9	16	24	15	5	7.4	24.2
18-Aug	4	11	2	9	5	10	9	11	8	4	4	0	6	0	16	19	10	6	1	4	BD	2	0	0	6.1	18.8
19-Aug	5	1	6	4	2	0	5	5	7	3	4	BD	4	3	BD	0	0	3	0	1	BD	0	0	0	2.6	6.9
20-Aug	0	0	0	0	BD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.3
21-Aug	0	0	0	0	0	0	0	0	1	2	0	2	1	1	0	1	1	1	4	5	4	1	0	1	1.1	4.8
22-Aug	1	1	0	0	BD	BD	0	5	4	1	0	0	1	0	BD	0	0	1	2	5	4	0	P	0	1.2	5.1
23-Aug	1	1	2	2	4	0	5	7	3	0	0	5	0	BD	0	2	1	0	6	3	1	3	3	4	2.3	6.7
24-Aug	4	3	2	3	1	3	5	3	4	4	4	6	1	2	6	2	6	BD	BD	BD	3	6	BD	0	3.4	6.1
25-Aug	0	0	0	2	0	BD	1	BD	0	0	0	0	0	C	C	6	2	3	2	2	3	1	2	3	1.5	6.5
26-Aug	2	2	1	1	0	1	2	2	1	0	0	0	1	0	0	0	0	0	0	0	6	5	2	3	1.2	6.2
27-Aug	2	2	2	2	6	3	3	2	7	2	1	0	0	1	1	5	2	4	1	3	2	3	8	7	2.9	7.9
28-Aug	1	0	0	0	0	1	1	2	1	0	2	2	2	3	11	4	1	1	1	1	4	3	3	5	2.1	10.8
29-Aug	3	2	3	3	4	3	3	3	1	2	1	0	5	0	1	0	4	2	2	1	1	3	1	0	2.1	5.2
30-Aug	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0	1	1	1	1	2	1	0	0	1	1.0	1.8
31-Aug	0	0	1	1	1	1	1	1	2	2	4	1	1	1	1	2	2	1	1	2	1	1	1	2	1.2	3.8
	2.4	2.4	2.8	2.7	3.1	3.7	5.2	4.7	3.7	3.6	3.2	3.3	2.5	2.5	2.6	3.9	3.2	4.0	5.3	4.8	6.3	5.8	5.3	4.0	Diurnal Average	
	9.6	11.3	10.6	9.0	9.7	24.8	15.8	14.2	9.6	12.3	13.7	16.0	11.7	11.0	16.1	18.8	10.1	15.0	25.3	19.3	30.9	25.3	20.9	13.4	Diurnal Maximum	

C - Calibration P - Power Failure BD - Baseline Drift
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 µg/m³ 24-hr 30 µg/m³

Hourly Averages for PM_{2.5} at Smoky Heights August 2008

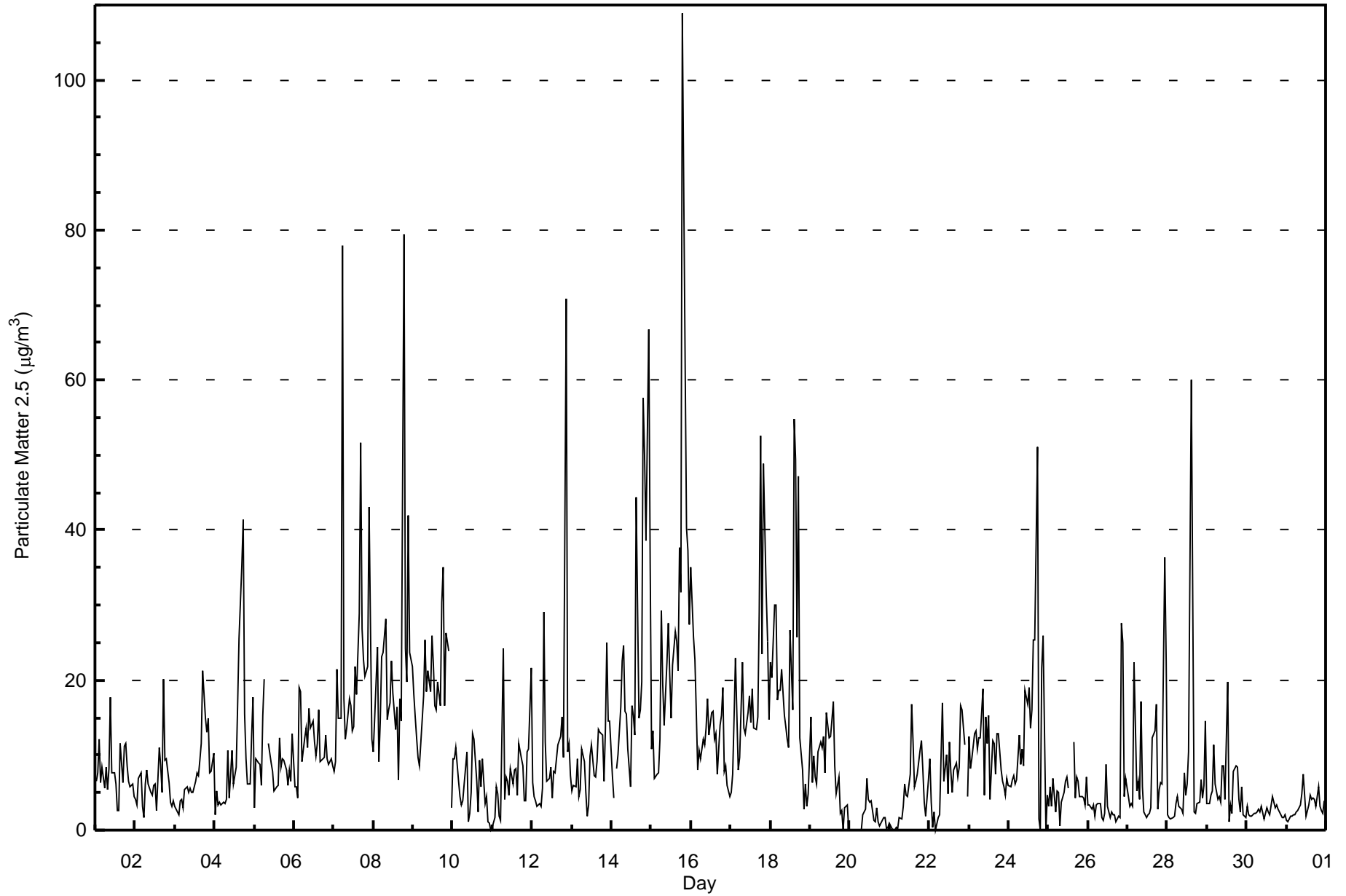


**Peace Airshed Zone Association
Summary of Hourly Maximums**

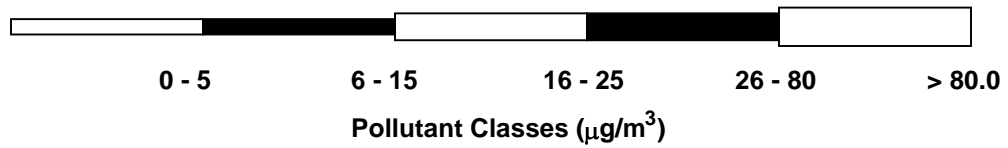
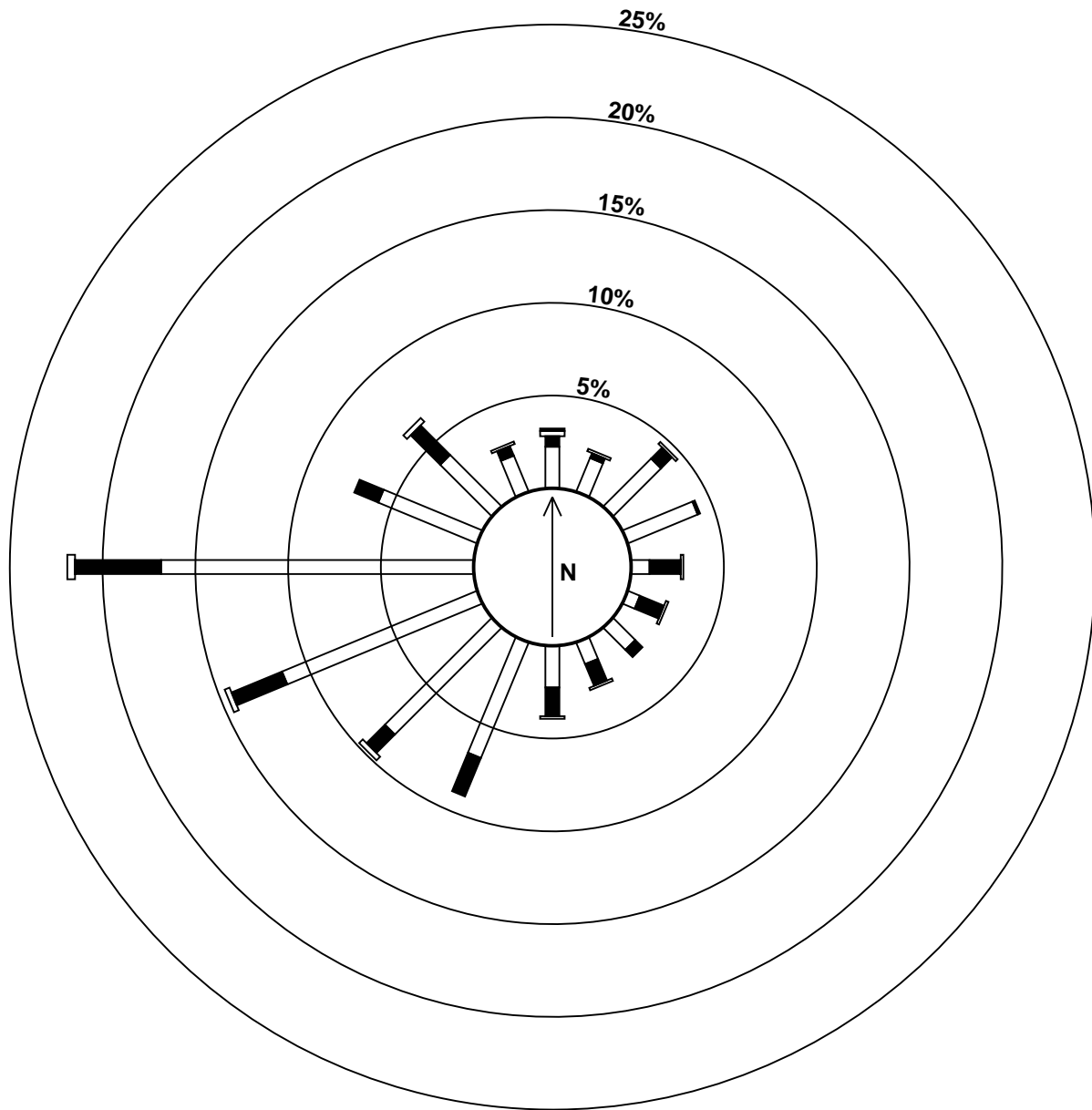
**Smoky Heights - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
August 1, 2008 to September 1, 2008**

Maximum Value: 108.9 µg/m ³ on Aug 15 20:00		Maximum Daily Average: 27.0 µg/m ³ on Aug 15		Hours in Service: 744																							
Minimum Value: 0 µg/m ³ on Aug 11 00:00		Minimum Daily Average: 1.5 µg/m ³ on Aug 20		Hours of Data: 738																							
Maximum Diurnal Average: 16.1 µg/m ³ at hour 18		Minimum Diurnal Average: 6.8 µg/m ³ at hour 2		Hours of Missing Data: 6																							
Monthly Average: 10.91 µg/m ³		Percentiles: P ₁ = 0.0 P ₁₀ = 2.0 Q ₁ = 3.9 Median = 7.7 Q ₃ = 14.5 P ₉₀ = 22.6 P ₉₉ = 57.7		Hours of Calibration: 2																							
				Percent Operational Time: 99.5																							
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-Aug	7	8	12	6	8	6	8	5	8	18	8	8	6	3	3	12	6	11	12	9	7	6	6	4	7.7	17.7	
2-Aug	4	3	7	8	3	2	6	8	6	5	5	6	6	3	11	9	5	20	9	10	6	4	3	4	6.3	20.2	
3-Aug	3	2	2	4	4	3	5	6	5	6	5	5	7	8	7	9	12	21	15	13	15	8	8	10	7.6	21.2	
4-Aug	2	5	3	4	3	4	4	4	11	4	11	6	7	8	17	25	35	41	15	10	6	6	13	18	11.0	41.5	
5-Aug	3	10	9	9	6	15	20	P	12	10	9	8	5	6	6	12	8	9	9	8	6	8	6	13	9.0	20.1	
6-Aug	6	6	4	19	18	9	12	14	11	16	14	15	12	10	11	16	9	10	10	13	9	9	9	8	11.3	19.0	
7-Aug	8	9	22	15	15	78	18	12	14	18	17	13	14	22	18	29	52	27	23	21	22	43	27	12	22.7	78.0	
8-Aug	10	15	25	9	15	23	24	28	15	16	17	23	18	13	16	7	18	15	79	24	20	42	24	22	21.5	79.4	
9-Aug	18	15	12	10	9	15	18	25	18	21	18	26	22	17	16	20	17	30	35	17	26	24	P	3	18.8	35.1	
10-Aug	9	10	11	6	4	3	4	6	10	1	2	5	13	12	7	2	9	6	10	4	5	1	1	0	5.9	12.8	
11-Aug	0	2	6	5	2	1	24	4	7	6	5	8	6	8	8	5	11	9	9	4	4	10	11	22	7.4	24.2	
12-Aug	6	4	4	3	4	3	6	29	12	7	7	8	4	8	8	11	12	12	15	10	71	10	11	7	11.4	70.9	
13-Aug	5	6	6	10	5	5	11	9	5	2	3	10	11	7	7	9	13	13	13	7	13	25	15	15	9.4	24.9	
14-Aug	7	4	P	8	10	16	23	25	16	16	11	6	17	15	13	44	15	16	20	58	50	39	67	36	23.0	66.8	
15-Aug	11	13	7	7	8	12	29	19	14	22	28	21	15	22	27	25	21	38	32	109	63	40	37	27	27.0	108.9	
16-Aug	35	26	23	16	8	11	10	12	11	14	18	13	16	16	12	13	8	14	15	19	8	9	6	4	13.9	35.1	
17-Aug	5	8	15	23	8	10	16	22	14	13	16	18	14	19	14	13	15	29	52	23	49	31	25	15	19.5	52.5	
18-Aug	22	20	30	30	17	19	19	21	15	14	12	11	27	16	55	49	26	47	12	8	3	6	3	5	20.3	54.9	
19-Aug	15	6	10	7	6	11	12	11	13	8	16	12	13	15	17	9	5	7	2	3	0	3	3	0	8.4	17.1	
20-Aug	0	0	0	0	0	0	0	0	2	3	7	4	4	4	1	1	3	1	1	1	2	2	0	0	1.5	7.0	
21-Aug	1	0	0	0	0	0	2	1	3	6	5	4	7	17	12	6	6	8	11	12	8	4	2	7	5.1	16.8	
22-Aug	9	4	0	2	0	2	2	10	17	7	10	5	12	8	5	8	9	7	8	17	16	11	P	4	7.6	16.9	
23-Aug	13	8	10	13	13	11	12	12	19	5	15	12	15	4	12	12	8	13	13	8	7	6	5	7	10.4	18.7	
24-Aug	6	6	7	7	6	7	13	9	11	9	19	17	19	14	16	25	25	51	2	0	22	26	0	5	13.3	51.0	
25-Aug	3	6	3	7	2	5	5	1	4	5	7	7	6	C	C	12	4	7	6	4	4	4	3	7	5.2	11.8	
26-Aug	3	3	3	3	2	3	4	3	2	1	2	9	3	2	2	2	2	1	2	2	28	25	4	7	5.0	27.7	
27-Aug	4	3	3	3	22	5	7	4	17	6	2	2	2	2	3	12	13	17	3	5	6	6	36	23	8.7	36.3	
28-Aug	2	2	1	2	2	3	5	3	3	2	8	5	6	10	60	31	2	2	4	4	7	4	6	14	7.8	60.0	
29-Aug	4	4	5	5	11	6	4	5	4	9	9	4	20	1	3	2	8	9	8	4	2	6	2	2	5.6	19.7	
30-Aug	3	2	2	2	2	2	2	3	2	3	2	2	3	3	2	4	4	3	3	3	2	2	2	2	2.5	4.4	
31-Aug	1	1	2	2	2	2	2	3	3	5	8	5	2	3	5	4	4	4	4	3	6	3	3	2	4	3.3	7.5
		7.4	6.8	8.1	7.9	7.0	9.4	10.5	10.5	9.8	8.9	10.0	9.5	10.7	9.8	13.1	14.2	12.5	16.1	14.5	13.9	15.8	13.6	11.7	9.9	Diurnal Average	
		35.1	25.7	30.0	30.0	22.4	78.0	29.2	29.1	18.7	22.3	27.6	25.8	26.7	22.0	60.0	49.4	51.7	51.0	79.4	108.9	70.9	43.2	66.8	35.9	Diurnal Maximum	
C - Calibration		P - Power Failure																									

Hourly Maximums for PM_{2.5} at Smoky Heights August 2008



Pollutant Rose for PM_{2.5} at Smoky Heights August 2008



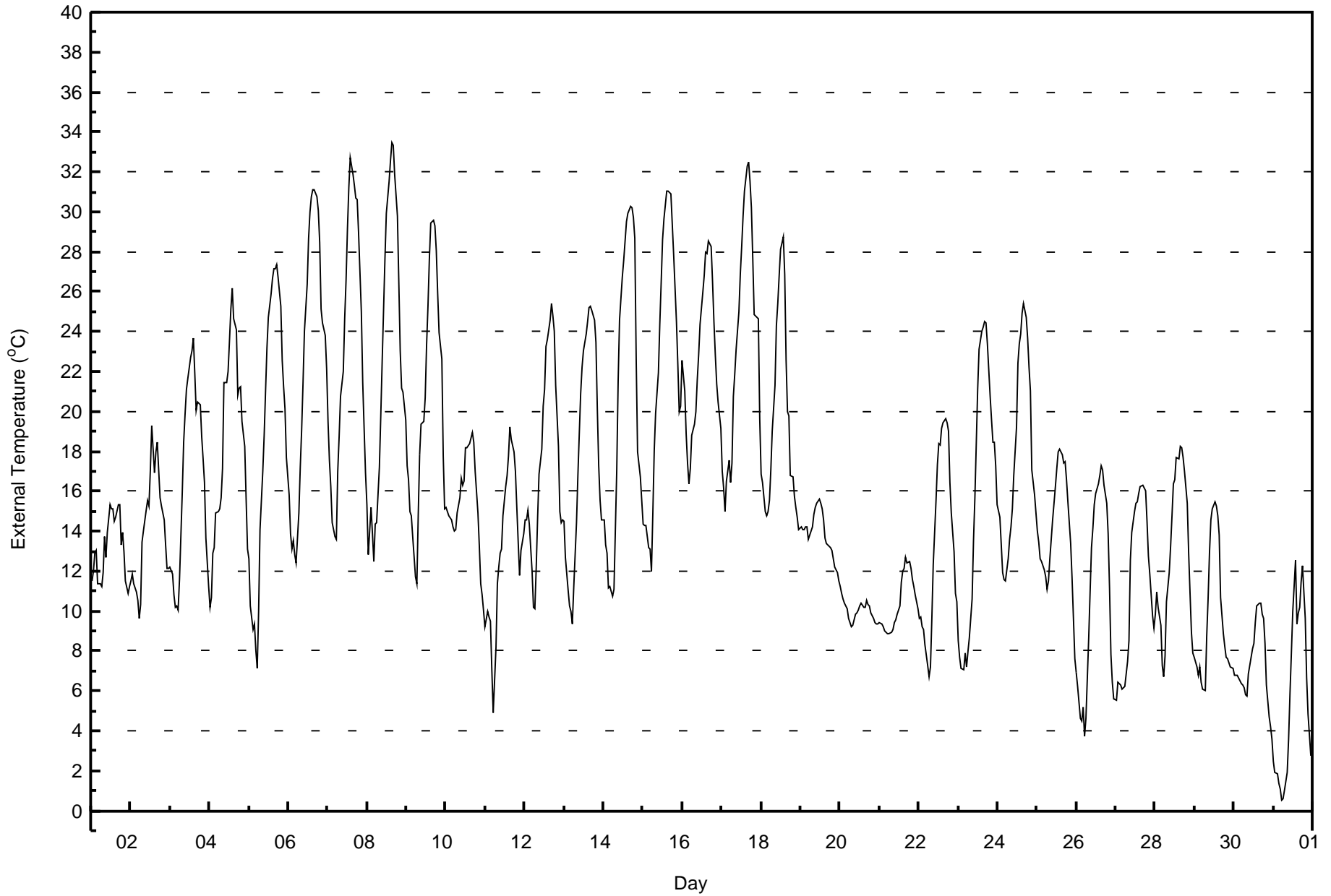
**Peace Airshed Zone Association
Summary of Hourly Averages**

**Smoky Heights - External Temperature (ET) - °C
August 1, 2008 to September 1, 2008**

Maximum Value: 33.5 °C on Aug 8 16:00		Maximum Daily Average: 23.8 °C on Aug 17		Hours in Service: 744																																														
Minimum Value: 1 °C on Aug 31 06:00		Minimum Daily Average: 5.6 °C on Aug 31		Hours of Data: 744																																														
Maximum Diurnal Average: 21.7 °C at hour 16		Minimum Diurnal Average: 10.2 °C at hour 6		Hours of Missing Data: 0																																														
Monthly Average: 16.00 °C		Percentiles: P ₁ = 1.9 P ₁₀ = 7.9 Q ₁ = 10.9 Median = 15.0 Q ₃ = 20.3 P ₉₀ = 26.4 P ₉₉ = 31.5		Hours of Calibration: 0																																														
				Percent Operational Time: 100.0																																														
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																										
1-Aug	11	12	13	13	11	11	11	12	14	13	14	15	15	14	15	15	15	13	14	13	12	11	11	13.1	15.3																									
2-Aug	11	12	11	11	11	10	10	13	14	15	16	15	17	19	17	18	18	17	16	15	15	13	12	12	14.1	19.3																								
3-Aug	12	12	11	10	10	10	12	16	18	20	21	22	23	23	24	22	20	20	19	18	16	14	11	16.8	23.7																									
4-Aug	10	11	13	13	15	15	15	16	17	21	21	22	24	25	26	25	24	21	21	21	20	18	16	13	18.5	26.2																								
5-Aug	13	10	9	9	8	7	10	14	17	19	21	23	25	26	27	27	27	27	27	25	23	21	20	18	18.9	27.4																								
6-Aug	16	14	13	14	13	12	15	17	19	21	24	26	29	30	31	31	31	31	30	28	25	24	24	22	22.6	31.1																								
7-Aug	20	18	16	14	14	14	17	19	21	22	25	27	29	31	33	32	31	31	31	29	25	21	19	17	23.1	32.7																								
8-Aug	15	13	15	14	13	14	14	17	20	23	25	28	30	32	33	33	33	32	30	26	23	21	21	20	22.7	33.5																								
9-Aug	17	17	15	15	14	12	11	15	18	19	19	21	23	25	28	29	30	29	28	26	24	23	18	15	20.4	29.6																								
10-Aug	15	15	15	15	14	14	14	15	16	17	16	17	18	18	18	19	19	18	17	15	13	11	11	10	15.4	19.0																								
11-Aug	9	10	10	9	7	5	8	11	12	13	13	15	16	17	18	19	19	18	17	15	13	12	13	14	13.1	19.2																								
12-Aug	15	15	15	14	12	10	10	12	15	17	18	20	21	23	24	25	25	25	24	21	18	15	14	15	17.6	25.4																								
13-Aug	15	13	11	10	10	9	11	14	17	19	21	22	23	24	25	25	25	25	25	23	20	17	16	15	18.1	25.3																								
14-Aug	15	13	13	11	11	11	11	14	17	22	25	27	28	29	29	30	30	30	30	29	23	18	17	16	20.7	30.2																								
15-Aug	14	14	14	13	13	12	15	18	20	22	24	26	29	30	31	31	31	31	29	28	25	22	20	20	22.2	31.1																								
16-Aug	23	21	19	17	16	17	19	19	20	22	23	24	26	27	28	28	29	28	27	24	23	21	20	19	22.5	28.5																								
17-Aug	17	16	15	17	18	16	17	21	22	23	25	27	28	30	31	32	33	31	30	28	25	25	25	20	23.8	32.5																								
18-Aug	17	16	15	15	15	16	17	19	21	24	25	27	28	29	27	23	20	20	17	17	16	15	15	14	19.5	28.7																								
19-Aug	14	14	14	14	14	14	14	14	15	15	15	16	15	15	15	14	13	13	13	13	13	12	12	12	13.9	15.6																								
20-Aug	11	11	11	10	10	10	9	9	9	10	10	10	10	10	10	10	11	10	10	10	10	9	9	9	10.0	11.2																								
21-Aug	9	9	9	9	9	9	9	9	9	9	10	10	10	11	12	12	13	12	12	12	12	11	11	10	10.4	12.7																								
22-Aug	10	10	9	9	8	7	7	7	10	12	16	17	18	18	19	19	20	19	19	16	15	13	11	10	13.4	19.7																								
23-Aug	9	8	7	7	8	7	8	9	11	14	16	18	21	23	24	24	24	24	23	21	20	18	18	17	15.8	24.5																								
24-Aug	15	15	13	12	12	12	13	14	14	15	17	19	22	23	24	25	25	25	24	22	21	17	16	15	17.9	25.4																								
25-Aug	14	13	13	12	12	12	11	12	13	15	15	16	17	18	18	18	17	17	17	15	13	12	10	8	14.1	18.1																								
26-Aug	7	6	5	5	5	4	5	9	11	13	14	15	16	16	17	17	17	16	15	14	11	8	6	6	10.8	17.2																								
27-Aug	6	6	6	6	6	6	7	7	8	13	14	15	15	15	16	16	16	16	16	14	13	12	10	9	11.3	16.3																								
28-Aug	10	11	10	9	7	7	8	10	12	13	15	16	17	18	18	18	18	18	17	15	13	11	9	8	12.8	18.2																								
29-Aug	8	7	7	7	6	6	6	9	11	13	15	15	15	15	14	11	9	8	8	8	7	7	7	7	9.7	15.5																								
30-Aug	7	7	7	7	6	6	6	6	6	7	8	8	8	9	10	10	10	10	10	8	6	5	4	4	7.3	10.4																								
31-Aug	2	2	2	1	1	1	1	1	2	4	6	8	10	13	9	10	10	11	12	10	7	5	4	3	5.6	12.6																								
	12.5		11.9		11.5		11.1		10.6		10.2		11.0		12.9		14.4		16.2		17.6		19.0		20.3		21.2		21.6		21.7		21.5		21.1		20.3		18.8		16.8		15.1		13.9		12.8		Diurnal Average	
	22.5		21.0		18.8		17.4		17.6		17.1		18.8		20.8		21.8		24.3		25.4		27.6		30.0		31.5		32.7		33.5		33.3		31.8		30.6		29.0		25.2		24.7		24.6		22.1		Diurnal Maximum	

Hourly Averages for External Temperature at Smoky Heights

August 2008

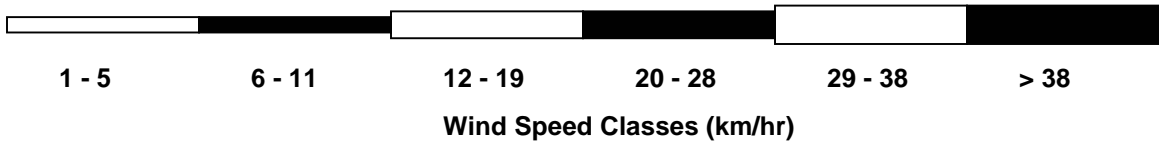
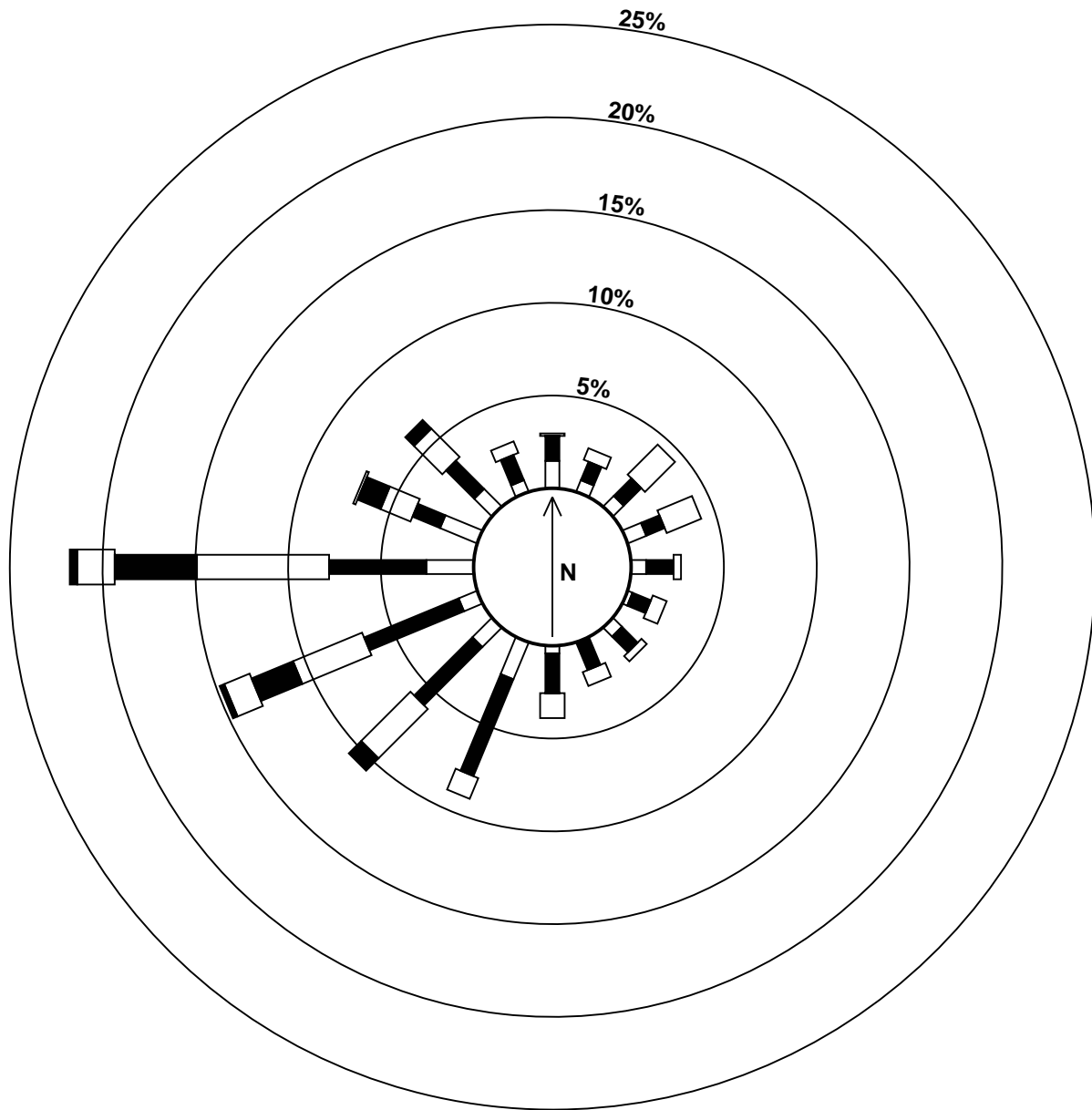


Peace Airshed Zone Association
Summary of Hourly Averages

Smoky Heights
 August 1, 2008 to September 1, 2008
 WS (km/h), WD (deg)

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	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	7	6	8	10	8	7	7	8	8	8	9	11	16	16	15	15	15	13	11	11	6	8	8	6.3	16.2	
Dir	217	230	208	212	214	201	249	213	160	178	144	134	170	180	173	163	134	115	109	93	87	80	43	51	154.9	180.5	
24 Spd	3	7	5	5	5	5	5	5	7	11	10	9	8	11	5	1	5	7	22	23	13	14	15	15	2.5	22.6	
Dir	125	46	26	355	4	72	68	61	112	67	174	187	156	133	123	190	229	216	218	219	274	308	272	259	213.4	219.1	
25 Spd	16	13	12	24	24	27	28	28	26	35	36	34	34	37	39	37	33	28	26	26	21	21	15	11	25.6	38.5	
Dir	268	262	263	265	247	232	249	251	252	261	252	253	252	262	278	279	284	263	271	271	268	259	235	247	260.5	278.0	
26 Spd	14	13	11	15	17	12	14	19	24	39	38	40	42	39	38	34	35	36	31	21	13	7	7	9	20.3	42.0	
Dir	232	220	217	206	160	185	166	192	233	250	251	272	271	250	254	268	273	254	254	249	292	227	190	156	245.2	271.2	
27 Spd	11	10	5	8	6	5	6	7	10	17	18	25	27	25	27	28	27	29	24	20	19	19	12	15	15.8	29.0	
Dir	225	211	227	304	302	285	195	235	231	249	257	264	256	277	277	265	271	273	267	260	243	241	244	247	258.7	273.4	
28 Spd	19	26	19	16	11	10	12	22	25	32	34	33	27	33	32	34	35	32	32	23	16	15	13	13	22.1	35.1	
Dir	232	225	219	223	228	236	245	244	250	258	269	262	267	262	263	268	271	272	274	271	253	215	223	219	254.3	271.3	
29 Spd	13	14	5	12	12	14	14	15	17	18	20	13	8	2	6	6	7	5	16	16	12	19	15	11	10.3	20.0	
Dir	223	239	232	236	236	234	229	253	245	253	272	275	328	27	34	342	310	303	261	284	258	264	297	274	262.2	272.4	
30 Spd	8	9	12	15	14	12	15	11	11	11	12	9	9	7	10	8	9	11	10	10	9	9	10	6	8.5	15.2	
Dir	254	257	262	266	268	270	301	310	5	216	229	289	272	232	228	246	242	228	238	227	210	217	222	258	253.9	266.4	
31 Spd	8	9	7	6	5	5	6	7	5	6	2	7	6	5	5	5	8	3	2	4	6	8	7	7	3.4	9.2	
Dir	252	235	237	242	203	204	232	323	237	247	325	330	270	256	307	356	57	58	57	142	260	244	245	200	253.5	234.8	
Spd	5.3	5.2	4.7	6.3	5.4	4.8	5.9	6.9	7.9	10.8	11.2	11.2	9.9	9.3	9.7	9.0	7.2	6.1	6.7	5.9	4.8	4.9	3.7	4.3	Diurnal Average		
Dir	247.7	237.1	240.8	260.9	246.9	254.8	253.7	250.6	248.2	258.6	256.5	265.9	267.9	268.1	272.2	275.8	281.8	276.7	253.0	248.1	250.9	241.9	253.4	254.0	Diurnal Maximum		
Spd	23.0	26.4	18.9	24.3	23.6	27.4	28.5	27.6	25.6	38.5	37.6	40.2	42.0	39.2	38.5	37.2	35.1	36.2	32.0	26.1	21.5	21.0	26.0	23.8	Diurnal Maximum		
Dir	287.5	225.1	264.7	265.2	247.4	232.4	249.2	250.9	252.1	249.7	250.7	271.8	271.2	250.2	278.0	279.3	271.3	254.0	274.1	271.3	268.3	258.9	276.9	305.0	Diurnal Maximum		
Maximum Speed Value: 42 km/h on Aug 26 13:00																		Minimum Speed Value: 0 km/h on Aug 12 16:00						Hours in Service:		744	
Maximum Daily Speed Average: 25.6 km/h on Aug 25																		Minimum Daily Speed Average: 1.3 km/h on Aug 12						Hours of Data:		744	
Maximum Diurnal Speed Average: 11.2 km/h at hour 12																		Minimum Diurnal Speed Average: 3.7 km/h at hour 23						Hours of Missing Data:		0	
Monthly Average Velocity: 6.83 km/h 258.94 deg																		Speed Percentiles: P ₁ = 1.7 P ₁₀ = 4.6 Q ₁ = 6.5 Median = 10.4 Q ₃ = 15.1 P ₉₀ = 23.0 P ₉₉ = 36.8						Percent Operational Time:		100.0	
All monthly, daily, and diurnal averages have been calculated using vector methods																											
Percentage 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	1.34	3.36	0.67	0.00	0.00	0.00	5.38																				
NorthEast	1.21	2.42	4.97	0.00	0.00	0.00	8.60																				
East	0.94	2.69	1.48	0.00	0.00	0.00	5.11																				
SouthEast	0.67	2.55	1.48	0.00	0.00	0.00	4.70																				
South	1.34	4.70	2.82	0.00	0.00	0.00	8.87																				
SouthWest	2.02	11.16	6.18	1.75	0.27	0.00	21.37																				
West	3.09	10.08	10.48	7.26	3.76	0.81	35.48																				
NorthWest	1.88	3.90	3.23	1.48	0.00	0.00	10.48																				
Total	12.50	40.86	31.32	10.48	4.03	0.81	100.00																				

Wind Rose for WS at Smoky Heights August 2008



Peace Airshed Zone Association
Summary of Hourly Averages - Wind Speed (Scalar)

Smoky Heights - Wind Speed (WS) - km/h
August 1, 2008 to September 1, 2008

Maximum Speed: 42 km/h on Aug 26 13:00	Maximum Daily Speed Average: 26.6 km/h on Aug 25	Hours in Service: 744
Minimum Speed: 2 km/h on Aug 5 06:00	Minimum Daily Speed Average: 5.7 km/h on Aug 15	Hours of Data: 744
Maximum Diurnal Speed Average: 16.7 km/h at hour 12	Minimum Diurnal Speed Average: 9.5 km/h at hour 6	Hours of Missing Data: 0
Monthly Average Speed: 12.64 km/h	Percentiles: P ₁ = 2.7 P ₁₀ = 5.5 Q ₁ = 7.3 Median = 11.0 Q ₃ = 15.4 P ₉₀ = 23.6 P ₉₉ = 37.2	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-Aug	9	6	13	14	17	12	12	10	7	14	12	15	19	20	13	17	15	23	16	20	18	14	13	13	14.2	23.4
2-Aug	15	14	12	10	8	7	11	17	15	20	20	20	20	16	17	18	16	13	11	11	10	12	12	14.3	20.2	
3-Aug	11	13	14	15	16	14	14	13	18	17	19	18	18	18	19	17	6	7	7	8	7	6	5	6	12.7	18.8
4-Aug	8	10	19	18	19	17	17	18	17	24	23	23	21	11	11	14	16	11	7	9	11	8	6	6	14.3	23.5
5-Aug	6	5	9	6	4	2	4	7	8	9	11	10	11	10	12	10	12	13	15	14	12	11	11	9	9.2	15.0
6-Aug	6	5	8	7	7	8	8	8	10	11	10	11	14	17	13	12	12	13	14	12	11	16	17	13	11.0	16.8
7-Aug	7	6	6	6	6	9	7	5	7	8	7	7	7	7	8	13	12	13	10	7	10	7	5	4	7.6	13.2
8-Aug	5	3	4	10	7	8	6	6	7	11	13	12	12	13	11	8	9	11	11	24	17	8	6	7	9.5	23.6
9-Aug	8	6	6	5	7	4	8	7	8	9	9	12	10	10	8	7	11	10	13	9	11	24	30	24	10.7	29.6
10-Aug	23	20	15	10	11	13	16	20	18	25	24	30	25	24	30	30	25	25	24	16	10	9	10	12	19.5	30.5
11-Aug	11	13	10	8	4	3	8	9	10	9	10	7	7	7	7	8	8	8	12	9	5	7	12	12	8.5	13.0
12-Aug	11	9	7	6	5	6	9	5	4	6	5	7	7	6	7	5	7	8	6	7	3	5	6	8	6.4	11.1
13-Aug	7	7	6	13	14	14	14	16	22	28	26	21	20	24	24	24	23	23	20	21	10	8	7	8	16.6	28.4
14-Aug	5	5	7	11	9	6	5	6	9	13	20	30	27	24	24	25	20	17	13	4	4	5	4	4	12.2	29.7
15-Aug	4	3	5	5	5	4	3	2	4	5	5	7	8	9	8	9	7	8	7	4	4	7	9	7	5.7	8.8
16-Aug	19	13	11	13	13	11	15	15	13	9	10	9	7	8	7	8	7	8	8	7	9	7	6	4	9.8	18.5
17-Aug	4	4	5	5	5	3	3	5	8	10	13	14	12	9	9	11	11	8	6	5	6	6	12	9	7.8	13.5
18-Aug	8	8	8	9	8	11	14	12	15	23	25	22	19	16	15	15	10	21	8	6	9	14	10	8	13.0	25.1
19-Aug	9	10	9	6	7	6	8	6	5	4	8	8	7	7	5	11	12	7	10	9	12	9	12	12	8.3	12.4
20-Aug	11	11	13	11	12	12	13	14	13	14	13	13	15	15	14	14	16	15	15	14	14	13	14	15	13.6	16.5
21-Aug	16	16	16	16	15	14	13	14	14	13	14	13	13	11	12	9	8	5	3	5	6	5	7	10	11.2	16.4
22-Aug	8	13	13	12	12	8	12	12	14	16	19	24	24	17	27	22	21	18	16	9	7	7	6	5	14.3	27.1
23-Aug	5	7	7	8	10	9	7	8	8	8	8	9	12	17	17	16	15	15	13	11	12	7	9	8	10.1	16.9
24-Aug	4	8	6	5	5	6	5	6	7	11	11	10	9	12	6	3	5	9	23	23	15	15	15	16	9.8	22.8
25-Aug	16	13	12	24	24	28	29	28	26	36	36	34	35	38	39	37	34	29	26	26	22	21	15	11	26.6	39.2
26-Aug	14	14	11	15	17	12	15	19	24	39	38	41	42	40	39	35	36	37	31	21	13	8	7	9	24.0	42.3
27-Aug	11	10	5	8	6	5	6	7	10	18	19	26	28	26	28	29	27	29	24	21	19	19	12	16	17.0	29.1
28-Aug	19	26	19	16	11	10	12	22	25	32	34	33	27	33	32	34	35	32	32	23	16	15	13	13	23.6	35.4
29-Aug	13	14	6	13	12	14	14	15	17	18	20	14	9	5	6	9	10	7	17	16	12	20	15	11	12.8	20.5
30-Aug	9	9	12	15	14	12	15	12	11	11	12	10	10	8	10	9	11	11	10	10	9	9	10	6	10.7	15.2
31-Aug	8	9	8	7	5	5	7	7	5	6	4	7	7	7	9	6	9	3	3	5	6	8	7	7	6.5	9.3

10.0	10.1	9.7	10.5	10.2	9.5	10.6	11.3	12.2	15.4	16.1	16.7	16.2	15.6	15.7	15.6	15.1	14.9	14.0	12.4	10.7	10.6	10.4	9.8	Diurnal Average
23.2	26.5	19.0	24.5	24.0	27.6	28.5	27.7	25.7	38.8	38.0	40.8	42.3	39.6	39.2	37.4	35.8	36.5	32.2	26.2	21.5	24.0	29.6	24.4	Diurnal Maximum

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

Peace Airshed Zone Association
Summary of Hourly Standard Deviations

Smoky Heights - Wind Direction (WD) - deg
August 1, 2008 to September 1, 2008

Maximum Value: 92.9 deg on Aug 9 06:00																								Hours in Service:	744
Minimum Value: 2.2 deg on Aug 3 05:00																								Hours of Data:	744
Percentiles: P ₁ = 3.1 P ₁₀ = 5.7 Q ₁ = 8.2 Median = 13.6 Q ₃ = 24.7 P ₉₀ = 46.2 P ₉₉ = 77.9																								Hours of Missing Data:	0
																								Hours of Calibration:	0
																								Percent Operational Time:	100.0
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	25	31	10	22	6	16	7	10	34	11	12	22	11	10	18	15	19	23	18	9	5	5	6	4	34.2
2-Aug	8	8	46	44	10	11	5	14	8	6	11	9	13	17	11	11	7	28	9	12	5	9	8	11	46.2
3-Aug	6	5	5	5	2	2	3	21	8	10	16	16	12	18	21	33	56	60	43	49	23	23	31	21	60.0
4-Aug	8	20	2	3	3	5	3	4	12	9	7	7	12	32	44	30	12	31	30	26	7	36	61	31	61.2
5-Aug	30	60	22	49	40	76	17	14	20	14	16	32	29	41	41	49	23	15	12	5	3	9	10	8	75.9
6-Aug	19	10	6	11	6	5	10	11	10	18	23	17	16	21	43	32	28	15	11	3	3	10	7	10	42.8
7-Aug	38	31	23	17	14	11	15	54	23	33	41	40	55	58	79	24	16	23	14	10	21	69	36	39	79.2
8-Aug	27	64	17	13	22	11	25	34	14	13	17	20	19	26	30	55	57	19	20	50	18	41	76	51	75.6
9-Aug	55	32	22	10	7	93	9	34	18	11	16	15	17	19	38	68	22	26	24	10	12	76	28	13	92.9
10-Aug	8	12	29	29	11	4	9	5	15	9	8	9	15	15	9	8	12	13	8	18	25	26	14	9	28.9
11-Aug	17	6	7	29	38	47	13	12	22	40	36	45	58	63	43	63	54	12	15	8	42	13	5	5	63.1
12-Aug	5	20	9	11	33	20	4	23	44	38	79	78	65	92	67	93	63	58	39	11	54	53	11	22	92.7
13-Aug	28	17	14	5	5	3	4	4	6	8	14	12	19	14	16	15	11	10	10	6	6	17	22	6	28.1
14-Aug	23	13	10	6	9	6	14	7	10	16	13	7	10	13	13	8	13	13	13	15	13	34	46	18	45.6
15-Aug	27	55	19	32	8	25	76	36	22	29	28	36	36	23	38	24	18	24	22	25	21	20	12	58	75.8
16-Aug	65	70	46	45	6	64	10	7	13	26	33	28	51	73	70	48	35	34	23	15	9	28	32	42	72.8
17-Aug	47	63	32	65	21	56	37	18	18	13	17	18	18	27	22	26	19	13	15	16	13	40	20	10	64.6
18-Aug	53	17	25	23	33	32	37	12	6	7	7	12	16	16	12	26	41	10	25	59	20	6	16	14	59.3
19-Aug	17	47	18	43	56	37	28	28	75	44	49	26	17	24	48	18	10	14	12	20	9	14	9	7	74.6
20-Aug	7	8	7	8	8	8	6	8	8	10	8	6	7	8	7	6	6	7	7	7	6	6	6	5	9.8
21-Aug	6	6	6	6	7	5	7	6	6	7	7	7	8	12	17	20	15	23	52	30	11	12	13	8	52.1
22-Aug	12	6	11	7	7	10	6	6	8	8	15	12	13	13	12	10	11	10	6	12	12	28	23	32	31.7
23-Aug	52	9	20	13	4	10	12	10	7	13	15	18	19	16	19	15	16	9	5	7	9	24	20	14	52.1
24-Aug	53	18	22	16	10	16	18	20	15	15	22	17	30	14	24	74	33	71	7	9	40	24	9	8	74.2
25-Aug	6	16	10	7	9	6	4	5	6	7	8	9	8	11	11	6	8	9	6	6	4	3	4	11	15.6
26-Aug	5	9	17	4	8	14	15	7	6	8	8	10	7	8	9	9	11	8	6	6	9	37	17	6	37.3
27-Aug	8	17	31	16	11	23	16	13	7	11	12	10	10	9	9	8	7	6	6	7	3	4	8	11	30.9
28-Aug	5	3	4	4	17	4	5	6	9	8	7	9	12	9	7	8	7	7	5	5	9	4	7	5	17.2
29-Aug	5	6	24	19	9	18	10	7	8	9	13	20	37	89	15	58	51	42	7	6	4	9	6	15	88.9
30-Aug	20	10	6	5	5	6	18	13	11	9	13	24	20	28	21	28	37	11	18	12	13	22	4	15	37.2
31-Aug	10	8	16	13	9	18	11	12	20	15	63	19	32	49	67	52	25	46	55	41	22	6	6	10	66.9
65.1	70.3	46.2	64.6	55.7	92.9	75.8	54.0	74.6	43.8	78.6	78.2	64.7	92.2	79.2	92.7	62.5	71.1	55.1	59.3	53.8	75.8	75.6	58.1		

PASZA

Beaverlodge Station

Monthly Summary Tables, Graphs and
Roses

**Peace Airshed Zone Association
Summary of Hourly Averages**

**Beaverlodge - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

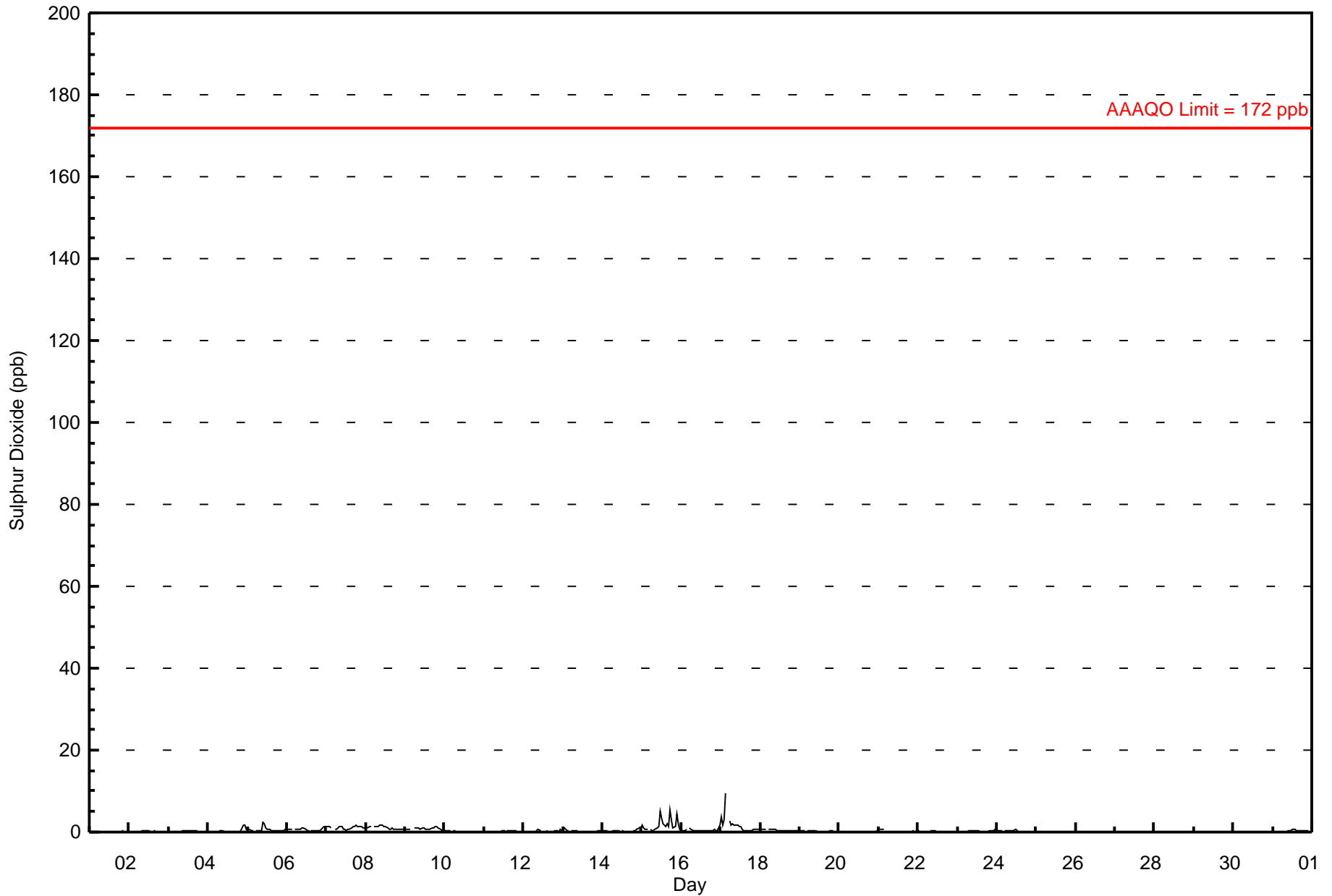
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 9.6 ppb on Aug 17 04:00	Maximum Daily Average: 1.8 ppb on Aug 15
Minimum Value: 0 ppb on Aug 31 04:00	Hours of Data: 710
Maximum Diurnal Average: 0.6 ppb at hour 4	Hours of Missing Data: 34
Monthly Average: 0.38 ppb	Hours of Calibration: 34
Minimum Daily Average: 0.0 ppb on Aug 25	Percent Operational Time: 100.0
Minimum Diurnal Average: 0.3 ppb at hour 15	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.9 P ₉₉ = 3.0	

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-Aug	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
2-Aug	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
3-Aug	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	0.5
4-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	0.3	1.7
5-Aug	1	1	0	0	A	0	0	0	0	2	2	1	1	1	0	0	0	0	0	0	0	0	0	1	0.6	2.3
6-Aug	1	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	0.6	1.3
7-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1.1	1.5
8-Aug	1	1	1	1	A	1	1	1	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.6
9-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0.8	1.4
10-Aug	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
11-Aug	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
12-Aug	0	0	0	0	A	0	0	0	0	1	0	C	C	C	0	0	0	0	0	0	0	1	0	0	0.2	0.6
13-Aug	1	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.0
14-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.3	1.2
15-Aug	2	1	1	1	A	1	0	0	1	1	1	5	3	2	1	2	1	5	3	1	1	5	2	1	1.8	5.4
16-Aug	0	0	0	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0.5	1.6
17-Aug	4	2	3	10	A	3	2	2	2	2	2	2	1	1	1	0	0	0	0	0	1	1	1	1	1.7	9.6
18-Aug	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
19-Aug	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
20-Aug	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
21-Aug	1	1	1	1	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
22-Aug	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-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.5
24-Aug	1	0	0	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
25-Aug	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
26-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
27-Aug	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
28-Aug	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-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
30-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
31-Aug	0	0	0	0	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.2	0.6

0.5	0.4	0.4	0.6	--	0.4	0.3	0.3	0.4	0.5	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.5	0.4	0.4	Diurnal Average	
3.7	1.8	3.1	9.6	--	2.9	1.7	2.1	1.6	2.3	1.9	5.0	3.3	2.0	1.5	2.0	1.4	5.4	2.9	1.4	1.3	4.5	1.9	1.6	Diurnal Maximum	

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

Hourly Averages for SO₂ at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Beaverlodge - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 15.4 ppb on Aug 17 04:00	Maximum Daily Average: 3.3 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 25 02:00	Minimum Daily Average: 0.1 ppb on Aug 25	Hours of Data: 710
Maximum Diurnal Average: 0.9 ppb at hour 12	Minimum Diurnal Average: 0.4 ppb at hour 20	Hours of Missing Data: 34
Monthly Average: 0.59 ppb	Percentiles: P ₁ = 0.1 P ₁₀ = 0.1 Q ₁ = 0.2 Median = 0.3 Q ₃ = 0.6 P ₉₀ = 1.3 P ₉₉ = 4.6	Hours of Calibration: 34
		Percent Operational Time: 100.0

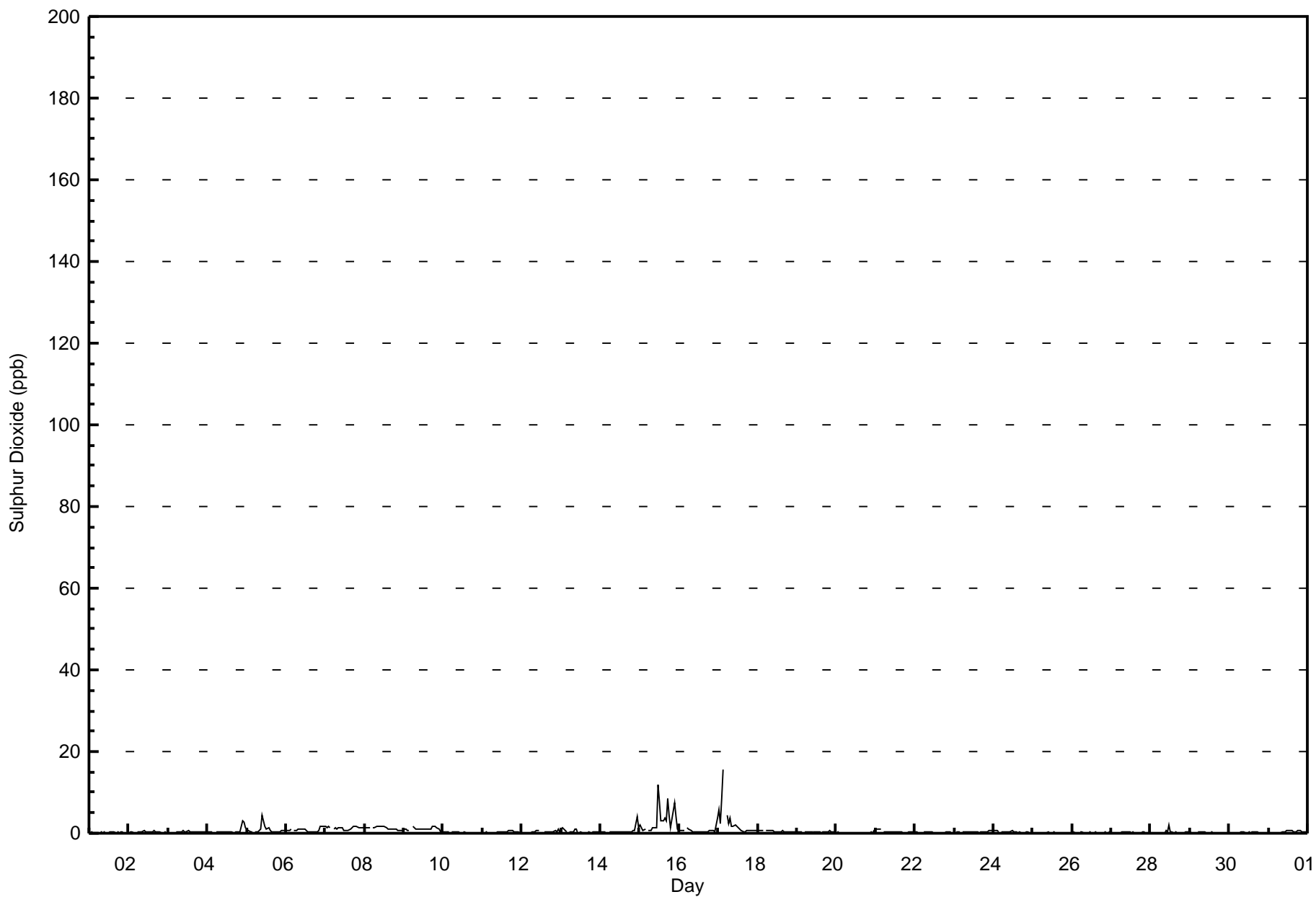
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.5	
2-Aug	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0.3	0.5	
3-Aug	0	0	0	0	A	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
4-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	1	0.5	3.0
5-Aug	1	1	0	0	A	0	0	0	1	4	3	2	1	1	1	0	0	0	0	0	0	1	1	1	0.9	4.2	
6-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	2	2	2	0.8	1.7	
7-Aug	2	1	2	1	A	1	1	1	1	2	1	1	1	1	1	1	1	2	2	2	1	1	1	1	1.3	1.8	
8-Aug	1	1	1	1	A	1	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1.2	1.7	
9-Aug	1	1	1	1	A	2	1	1	1	1	1	1	1	1	1	1	1	2	2	2	1	1	0	0	1.0	1.7	
10-Aug	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	
11-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0.3	0.7	
12-Aug	0	0	0	0	A	0	0	0	0	0	1	C	C	C	0	0	0	0	0	0	0	1	0	1	0	0.4	1.0
13-Aug	1	1	1	0	A	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.2	
14-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	1	0.5	4.1
15-Aug	2	1	1	1	A	1	1	1	1	1	2	12	8	3	3	4	3	9	4	1	6	7	4	1	3.3	12.0	
16-Aug	1	1	1	1	A	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	4	0.7	3.8	
17-Aug	6	2	9	15	A	5	2	4	2	2	2	2	1	1	1	0	0	1	1	1	1	1	1	1	2.5	15.4	
18-Aug	1	1	1	1	A	1	1	1	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.5	0.8	
19-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	0.5	
20-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.2	0.7	
21-Aug	1	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	1.1	
22-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4	
23-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.3	0.7	
24-Aug	1	1	1	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.7	
25-Aug	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	
26-Aug	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	
27-Aug	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	
28-Aug	0	0	0	0	A	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.9	
29-Aug	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-Aug	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-Aug	0	0	0	0	A	0	0	0	0	0	0	1	1	1	1	0	0	1	1	1	1	0	0	0	0.4	0.8	

0.7	0.5	0.7	0.9	--	0.5	0.5	0.5	0.5	0.7	0.6	0.9	0.7	0.5	0.4	0.4	0.4	0.6	0.5	0.4	0.6	0.7	0.7	0.6	Diurnal Average	
5.7	2.3	8.6	15.4	--	4.6	2.4	3.6	1.7	4.2	2.9	12.0	7.8	2.9	3.1	3.8	3.1	8.6	4.5	1.6	5.6	7.5	4.2	3.8	Diurnal Maximum	

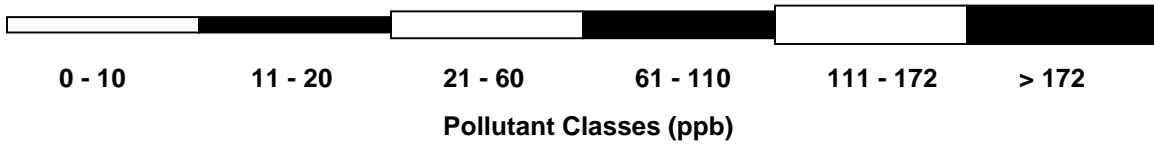
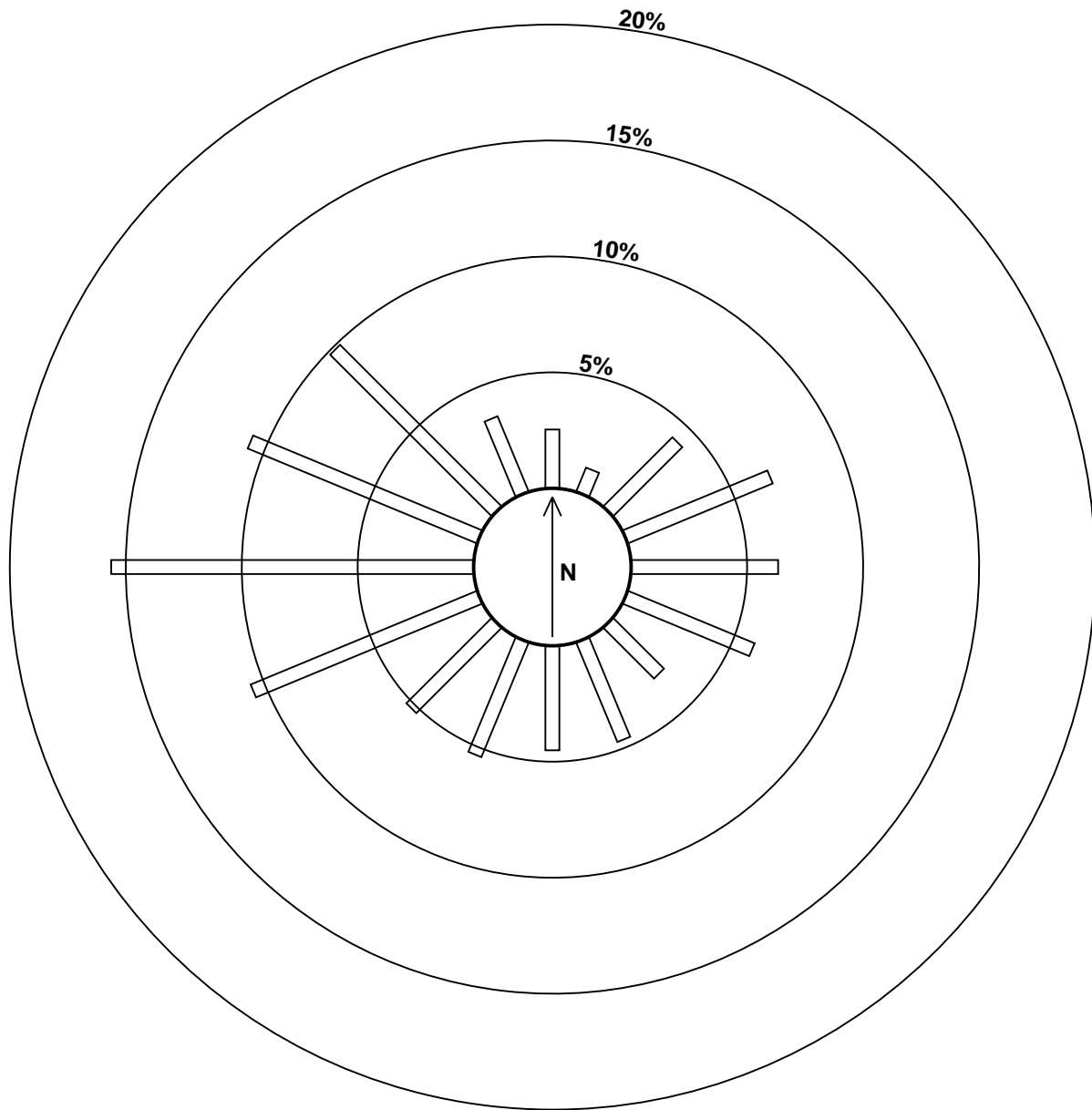
C - Calibration A - Automated Daily Zero Span

Hourly Maximums for SO₂ at Beaverlodge

August 2008



Pollutant Rose for SO₂ at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

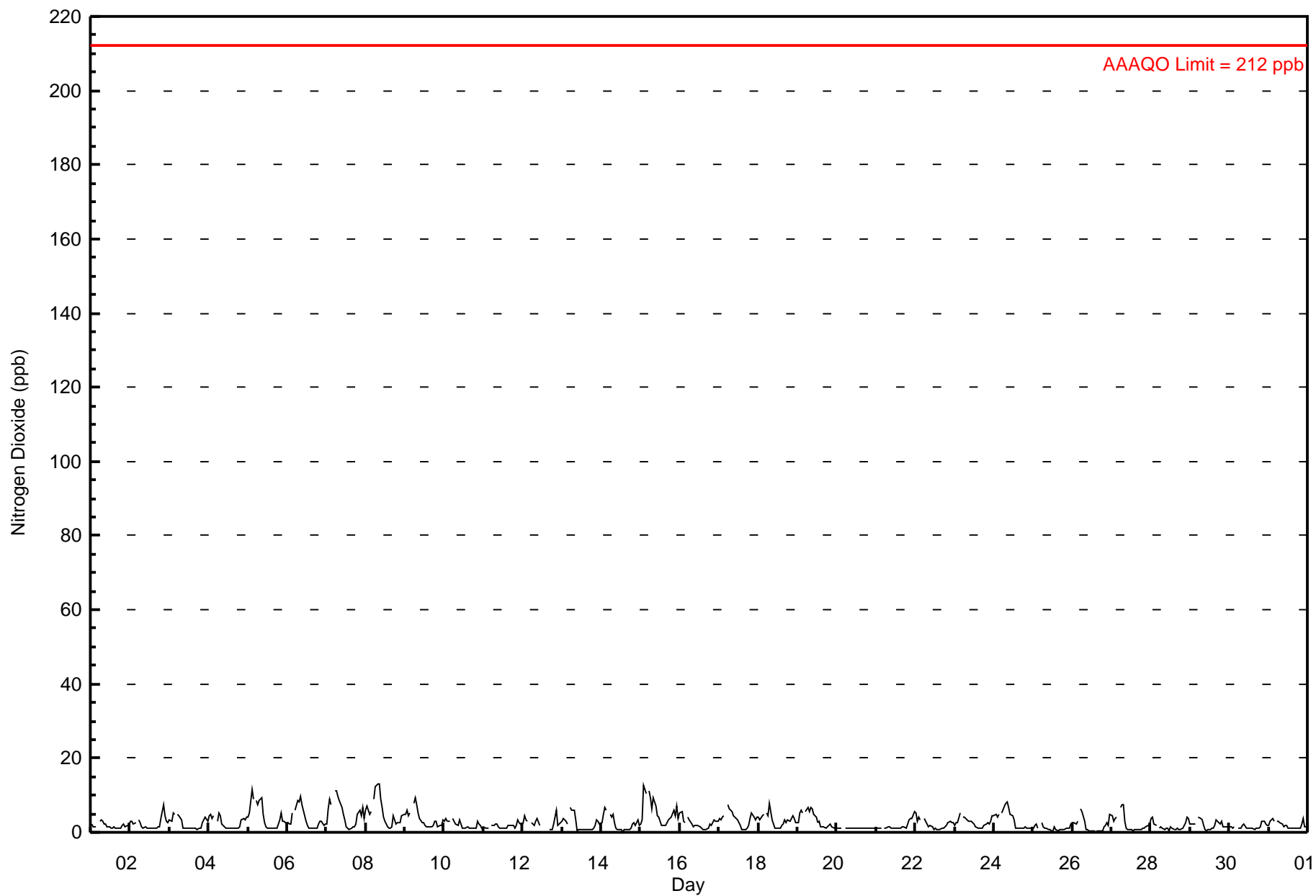
**Beaverlodge - Nitrogen Dioxide (NO₂) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 13.1 ppb on Aug 8 09:00	Maximum Daily Average: 5.4 ppb on Aug 15
Minimum Value: 0 ppb on Aug 14 14:00	Hours of Data: 708
Maximum Diurnal Average: 4.9 ppb at hour 7	Hours of Missing Data: 36
Monthly Average: 2.69 ppb	Hours of Calibration: 36
Minimum Daily Average: 1.0 ppb on Aug 20	Percent Operational Time: 100.0
Minimum Diurnal Average: 1.0 ppb at hour 15	
Percentiles: P ₁ = 0.4 P ₁₀ = 0.9 Q ₁ = 1.0 Median = 2.0 Q ₃ = 3.5 P ₉₀ = 5.6 P ₉₉ = 11.1	

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-Aug	2	2	2	1	A	3	3	3	2	2	2	2	1	1	2	1	1	1	1	2	2	1	2	2	1.8	3.3
2-Aug	3	3	2	3	A	3	2	1	1	2	1	1	1	1	1	1	1	2	2	4	7	5	3	3	2.3	7.5
3-Aug	3	3	5	5	A	5	4	3	1	1	1	1	1	1	1	1	1	1	1	1	3	3	4	3	2.4	5.3
4-Aug	4	5	4	4	A	3	5	4	2	2	1	1	1	1	1	1	1	1	1	2	3	4	3	4	2.5	5.1
5-Aug	4	5	12	9	A	9	8	9	9	5	3	2	1	1	1	1	1	1	1	3	5	3	3	3	4.2	11.5
6-Aug	3	2	2	5	A	6	9	8	10	7	6	3	2	1	1	1	1	1	1	2	3	3	2	2	3.5	9.7
7-Aug	2	6	9	8	A	11	11	10	9	7	5	3	1	1	1	1	1	1	2	5	6	5	7	4	5.0	11.1
8-Aug	6	7	5	6	A	9	12	13	13	9	7	4	3	2	1	1	1	4	2	3	3	3	4	5	5.3	13.1
9-Aug	5	6	5	5	A	8	9	8	5	4	2	3	2	2	1	1	1	2	3	3	1	2	2	3	3.6	9.2
10-Aug	3	4	3	3	A	4	3	2	2	4	2	1	1	1	1	1	1	1	1	1	3	2	2	1	2.0	3.9
11-Aug	1	1	1	1	A	2	2	2	2	2	1	1	1	1	1	2	2	2	2	1	2	3	3	2	1.7	3.5
12-Aug	3	4	3	3	A	3	2	2	3	4	2	C	C	C	C	C	1	1	1	2	6	2	2	3	2.5	6.0
13-Aug	3	4	3	2	A	7	6	6	3	0	1	1	1	1	1	1	1	1	1	1	2	4	3	2	2.3	6.6
14-Aug	3	5	7	6	A	5	4	5	3	1	1	1	1	0	1	1	1	1	1	2	3	2	3	2	2.5	6.6
15-Aug	2	3	13	10	A	11	9	6	9	7	4	4	3	2	2	2	3	3	4	4	6	5	7	4	5.4	12.8
16-Aug	5	6	3	3	A	4	3	2	1	2	2	2	2	1	1	1	1	1	2	2	3	3	3	3	2.4	5.6
17-Aug	4	3	4	5	A	8	6	6	6	4	4	3	3	2	1	1	1	1	2	4	5	4	3	4	3.6	7.6
18-Aug	4	3	5	5	A	5	5	8	3	2	1	1	1	1	2	2	3	3	3	3	4	4	4	3	3.3	8.0
19-Aug	3	5	6	5	A	6	7	6	7	7	5	4	3	3	2	1	2	1	2	2	2	2	1	1	3.5	6.7
20-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
21-Aug	1	1	1	1	A	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	3	4	4	6	1.7	5.5
22-Aug	5	3	4	3	A	4	3	2	2	2	1	1	1	1	1	1	1	1	1	2	3	3	3	3	2.2	5.1
23-Aug	2	3	3	5	A	4	4	4	3	3	3	3	2	2	1	1	1	1	2	2	3	2	3	4	2.6	5.1
24-Aug	5	5	4	5	A	5	7	8	8	7	5	5	3	1	1	1	1	1	1	2	1	1	1	1	3.5	8.1
25-Aug	1	2	2	1	A	3	1	1	1	1	1	0	0	1	1	0	1	1	1	1	1	1	1	2	1.1	2.6
26-Aug	3	2	2	3	A	6	6	3	1	1	1	1	0	1	0	0	0	1	1	2	2	2	2	5	1.9	6.5
27-Aug	4	3	4	4	A	7	7	7	3	1	1	1	1	0	1	1	1	1	1	1	1	2	2	2	2.4	7.4
28-Aug	4	4	2	2	A	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	2	3	4	4	1.7	4.0
29-Aug	2	2	2	2	A	4	4	3	2	1	1	1	1	1	1	2	3	2	2	3	2	1	2	2	2.0	4.3
30-Aug	1	1	1	2	A	1	1	1	2	2	1	1	1	1	1	1	1	1	1	1	3	3	2	2	1.4	3.0
31-Aug	2	3	4	3	A	3	3	2	2	2	2	2	1	1	1	1	1	1	1	1	2	4	2	2	1.9	3.8
	3.0	3.5	3.9	3.9	--	4.9	4.9	4.5	3.8	3.0	2.2	1.8	1.4	1.1	1.0	1.1	1.2	1.3	1.5	2.1	3.0	2.8	2.8	2.8	Diurnal Average	
	6.0	6.9	12.8	10.4	--	11.1	12.3	13.0	13.1	8.8	6.9	4.6	3.2	3.0	1.9	2.2	3.5	4.5	3.6	4.8	7.5	4.5	7.1	5.5	Diurnal Maximum	

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

Hourly Averages for NO₂ at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Beaverlodge - Nitrogen Dioxide (NO₂) - ppb
August 1, 2008 to September 1, 2008**

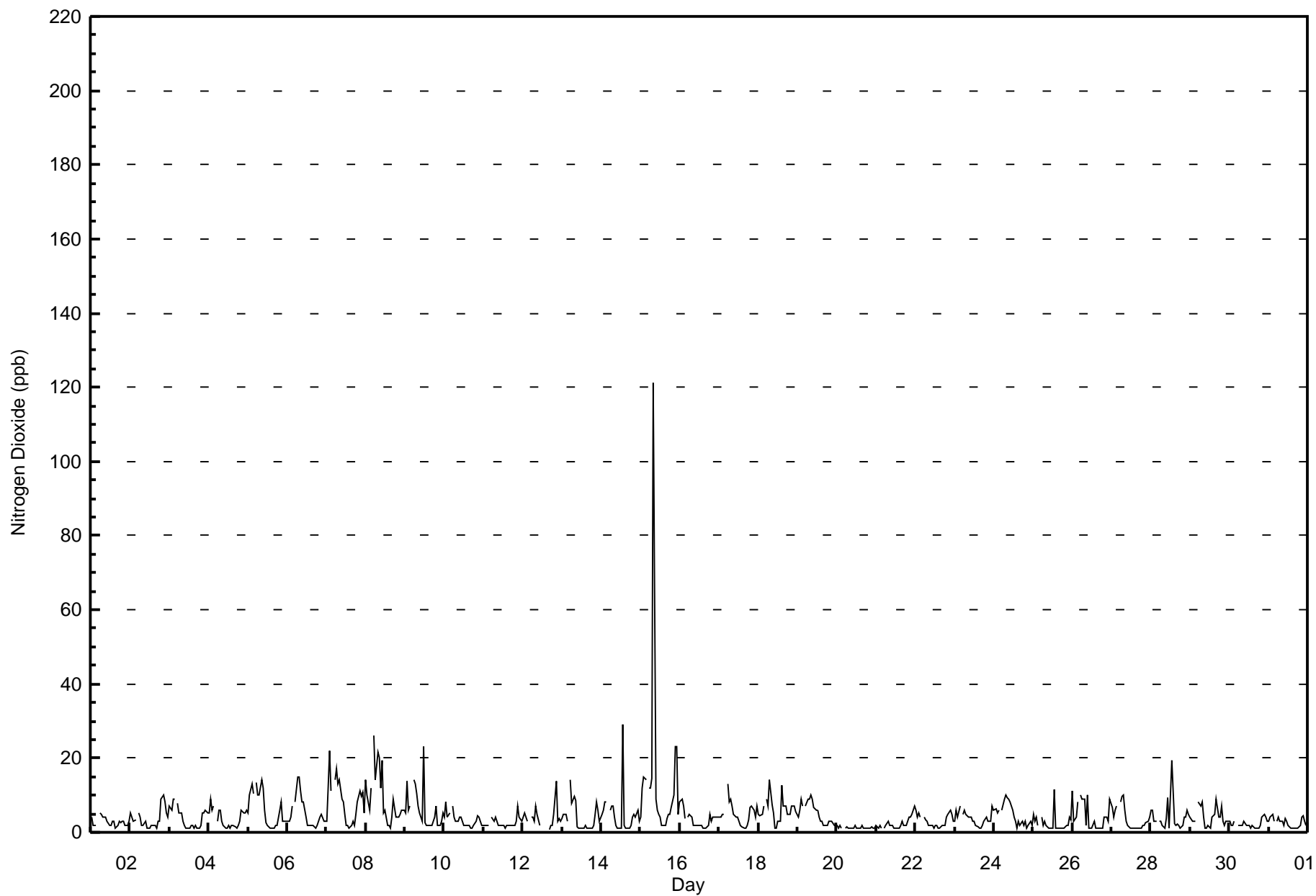
Maximum Value: 121.3 ppb on Aug 15 09:00	Maximum Daily Average: 13.8 ppb on Aug 15	Hours in Service: 744
Minimum Value: 1 ppb on Aug 12 17:00	Minimum Daily Average: 1.2 ppb on Aug 20	Hours of Data: 708
Maximum Diurnal Average: 9.4 ppb at hour 9	Minimum Diurnal Average: 1.8 ppb at hour 16	Hours of Missing Data: 36
Monthly Average: 4.54 ppb	Percentiles: P ₁ = 0.9 P ₁₀ = 1.0 Q ₁ = 2.0 Median = 3.0 Q ₃ = 6.0 P ₉₀ = 9.1 P ₉₉ = 21.4	Hours of Calibration: 36
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	4	2	2	2	A	5	5	4	4	4	3	2	2	3	3	1	2	3	3	3	3	2	2	3	2.9	5.0
2-Aug	5	4	3	3	A	5	4	2	2	3	1	1	1	2	2	2	1	3	3	9	10	8	5	4	3.7	10.1
3-Aug	7	6	9	9	A	8	5	5	3	2	1	1	1	2	2	1	2	1	1	2	5	5	6	5	3.9	9.1
4-Aug	5	9	6	7	A	3	6	6	3	2	1	1	2	1	2	2	1	1	2	3	6	5	5	6	3.7	9.1
5-Aug	5	10	13	10	A	14	10	10	14	12	6	2	2	1	1	1	1	2	2	6	8	3	3	3	6.1	14.2
6-Aug	3	3	4	7	A	8	15	15	11	8	8	4	2	2	2	2	1	2	3	4	5	3	3	5.1	15.0	
7-Aug	3	12	22	11	A	14	17	13	14	9	8	5	2	2	1	2	3	2	5	8	11	10	11	5	8.3	22.1
8-Aug	14	10	6	12	A	26	14	22	20	12	19	5	6	2	2	1	4	9	4	4	4	5	6	6	9.3	26.1
9-Aug	5	14	6	7	A	14	13	10	7	5	3	23	3	2	2	2	2	3	4	7	2	2	3	5	6.3	23.3
10-Aug	4	8	4	5	A	7	4	3	3	4	4	3	2	2	2	2	1	1	2	3	4	4	3	2	3.4	8.1
11-Aug	2	2	2	2	A	4	3	4	3	2	2	2	1	2	2	2	2	2	2	2	3	7	4	3	2.6	7.1
12-Aug	4	5	4	3	A	4	4	3	7	5	2	C	C	C	C	C	1	2	2	5	14	3	4	3	4.1	13.9
13-Aug	4	5	5	3	A	14	8	10	9	2	1	1	1	1	2	1	1	1	1	2	5	8	6	3	4.0	14.0
14-Aug	5	6	8	8	A	6	7	7	4	2	1	1	1	29	2	1	1	1	2	4	5	4	6	3	4.9	29.2
15-Aug	4	12	15	14	A	12	12	15	121	9	6	5	4	2	2	2	4	5	5	7	10	23	23	5	13.8	121.3
16-Aug	8	9	7	4	A	4	5	4	2	2	2	2	2	1	1	1	2	5	3	4	4	4	4	4	3.5	9.1
17-Aug	4	4	5	5	A	13	8	9	7	5	4	4	3	2	2	1	1	2	3	7	7	6	4	7	4.9	13.1
18-Aug	5	4	5	7	A	9	7	14	7	5	1	1	3	3	13	7	7	7	5	5	7	7	7	6	6.2	14.1
19-Aug	4	6	9	7	A	7	9	9	10	9	7	6	6	4	3	3	2	2	2	3	3	3	2	2	5.1	10.0
20-Aug	2	1	2	1	A	1	2	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1.2	2.0
21-Aug	2	1	2	1	A	1	2	3	2	2	2	1	1	1	1	2	3	2	2	3	4	4	5	7	2.3	7.0
22-Aug	6	4	5	4	A	4	4	3	2	2	2	1	2	2	1	1	2	2	2	4	5	6	5	3	3.1	6.0
23-Aug	3	6	4	7	A	5	6	5	4	4	4	3	3	2	2	1	1	2	3	4	3	3	3	7	3.7	7.1
24-Aug	6	6	5	6	A	6	9	10	9	9	8	6	4	3	1	3	2	3	2	3	1	2	3	2	4.8	10.0
25-Aug	5	3	4	2	A	4	2	3	2	1	1	1	1	11	1	1	1	1	1	1	2	2	4	3	2.5	11.4
26-Aug	11	3	4	8	A	10	9	9	2	10	1	1	1	3	1	1	1	1	1	4	4	4	3	9	4.4	11.2
27-Aug	7	4	6	7	A	8	10	10	6	3	2	1	1	1	1	1	1	1	1	2	2	3	3	4	3.6	10.0
28-Aug	6	6	3	3	A	3	3	2	1	4	9	1	10	19	2	2	2	2	1	2	4	4	6	5	4.4	19.2
29-Aug	4	3	3	3	A	8	7	8	4	1	1	2	1	4	5	5	9	4	4	7	3	2	3	3	4.1	9.0
30-Aug	3	2	2	3	A	2	2	2	2	3	2	2	2	1	2	1	1	1	1	2	4	5	4	3	2.2	5.0
31-Aug	3	4	5	3	A	3	4	3	3	2	4	3	2	1	1	1	1	1	1	2	4	4	3	2	2.6	5.0

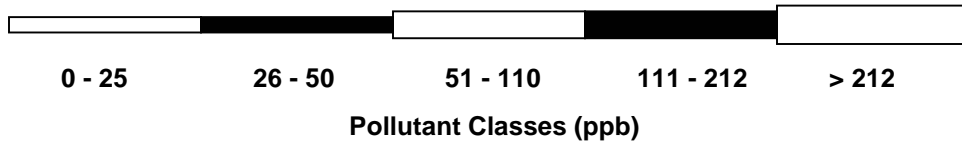
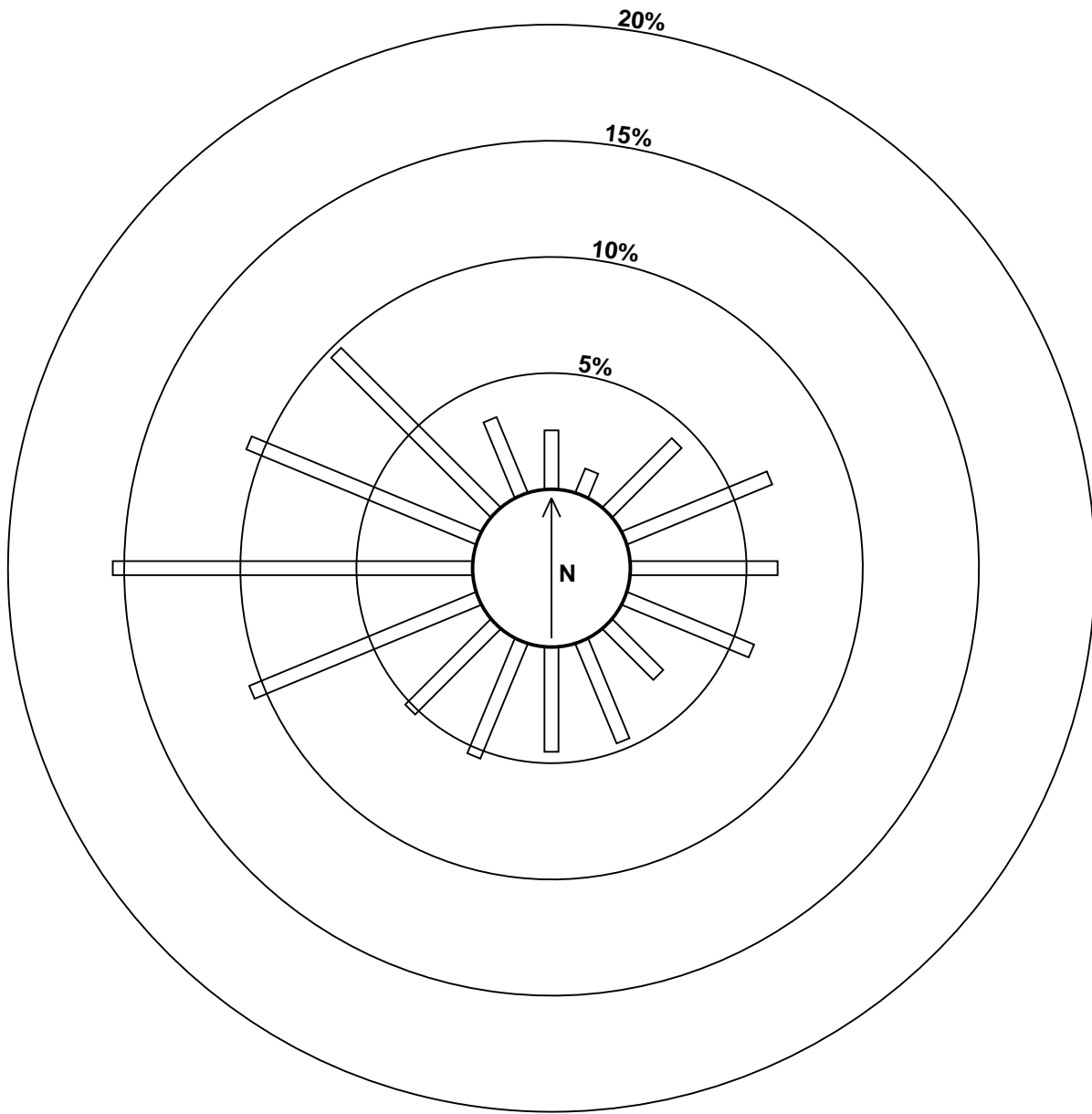
5.0	5.6	5.8	5.7	--	7.5	6.9	7.2	9.4	4.6	3.8	3.1	2.4	3.7	2.1	1.8	2.0	2.3	2.4	3.9	4.9	5.0	4.8	4.1	Diurnal Average	
14.2	13.6	22.1	14.1	--	26.1	17.1	21.7	121.3	12.1	19.2	23.3	10.0	29.2	12.5	6.9	9.0	9.1	5.0	9.1	13.9	23.1	23.1	9.0	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for NO₂ at Beaverlodge August 2008



Pollutant Rose for NO₂ at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

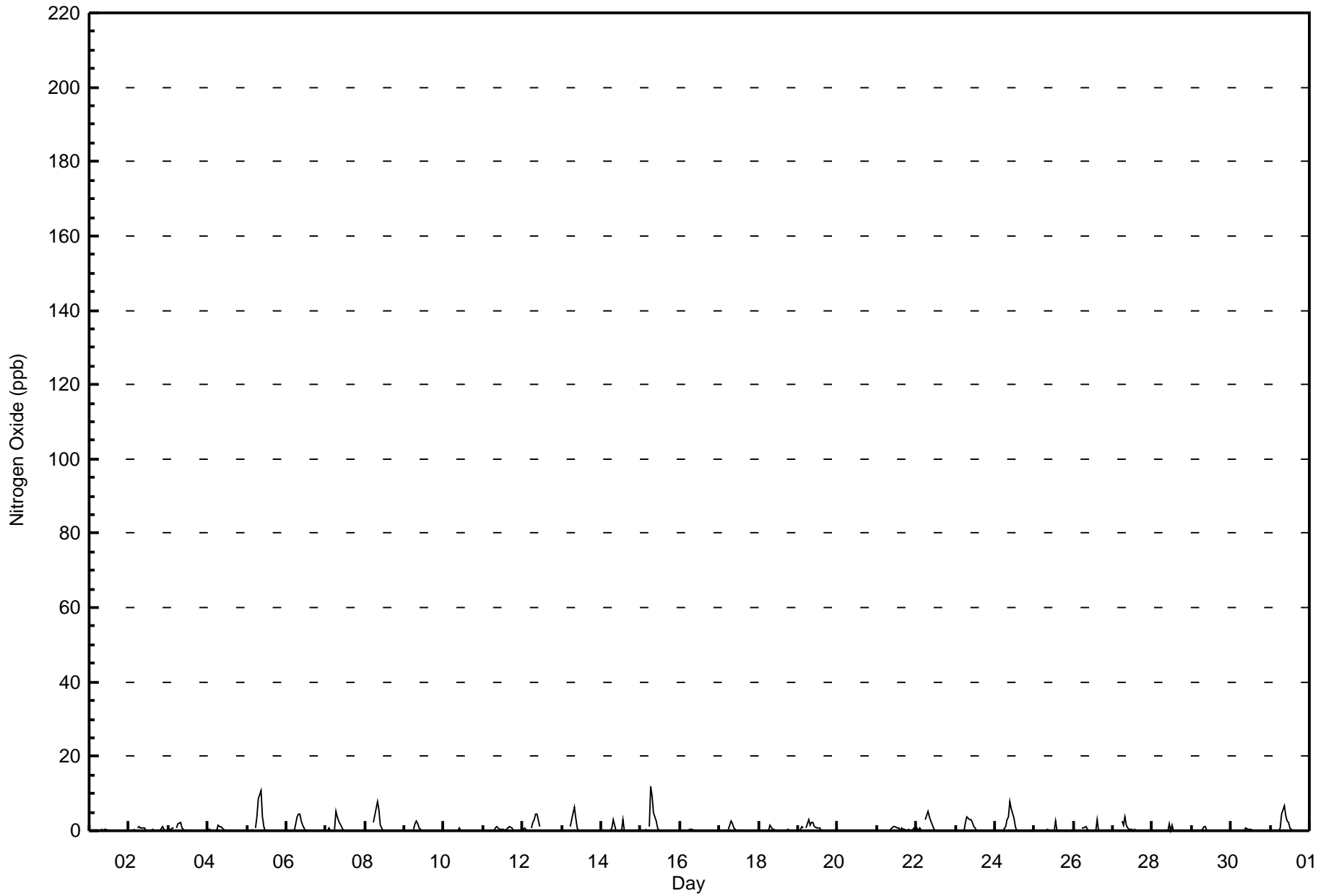
**Beaverlodge - Nitrogen Oxide (NO) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 12.0 ppb on Aug 15 07:00	Maximum Daily Average: 1.3 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 1 04:00	Minimum Daily Average: 0.0 ppb on Aug 20	Hours of Data: 708
Maximum Diurnal Average: 2.7 ppb at hour 8	Minimum Diurnal Average: 0.0 ppb at hour 19	Hours of Missing Data: 36
Monthly Average: 0.48 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 0.2 P ₉₀ = 1.4 P ₉₉ = 6.2	Hours of Calibration: 36
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.5
2-Aug	0	0	0	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.3	1.0
3-Aug	0	0	1	1	A	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.2
4-Aug	0	0	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	1.5
5-Aug	0	0	0	0	A	1	4	9	11	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	10.7
6-Aug	0	0	0	0	A	0	4	4	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.6
7-Aug	0	0	1	0	A	0	5	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	5.3
8-Aug	0	0	0	0	A	2	4	8	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	7.7
9-Aug	0	0	0	0	A	1	2	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	2.8
10-Aug	0	0	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.7
11-Aug	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0.3	1.0
12-Aug	0	1	0	0	A	1	2	3	4	4	1	C	C	C	C	C	0	0	0	0	0	0	0	0	1.0	4.5
13-Aug	0	0	0	0	A	1	3	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	6.5
14-Aug	0	0	0	0	A	0	1	3	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0.4	3.1
15-Aug	0	0	0	0	A	1	12	9	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1.3	12.0
16-Aug	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
17-Aug	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	2.5
18-Aug	0	0	0	0	A	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.4
19-Aug	0	0	1	1	A	1	3	2	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0.7	3.1
20-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
21-Aug	0	0	0	0	A	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	1	0.3	1.2
22-Aug	1	0	1	0	A	3	4	5	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.9	5.2
23-Aug	0	0	0	0	A	0	2	4	3	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0.7	3.6
24-Aug	0	0	0	0	A	0	1	3	4	8	6	3	1	0	0	0	0	0	0	0	0	0	0	0	1.2	7.8
25-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0.1	2.8
26-Aug	0	0	0	0	A	1	1	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0.3	2.8
27-Aug	0	0	0	0	A	3	2	4	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0.5	3.9
28-Aug	0	0	0	0	A	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0.2	2.0
29-Aug	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	1.2
30-Aug	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-Aug	0	0	0	0	A	0	1	4	7	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	1.0	6.8
	0.1	0.1	0.1	0.1	--	0.5	1.8	2.7	2.2	1.4	0.7	0.3	0.2	0.3	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	Diurnal Average	
	0.9	0.7	1.0	0.9	--	3.0	12.0	9.2	10.7	7.8	6.1	3.3	1.4	3.1	2.8	0.9	1.0	0.7	0.2	0.4	1.0	0.4	0.4	1.2	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Averages for NO at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Beaverlodge - Nitrogen Oxide (NO) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 113.8 ppb on Aug 26 15:00	Maximum Daily Average: 6.1 ppb on Aug 26	Hours in Service: 744
Minimum Value: 0 ppb on Aug 6 13:00	Minimum Daily Average: 0.3 ppb on Aug 16	Hours of Data: 708
Maximum Diurnal Average: 6.8 ppb at hour 8	Minimum Diurnal Average: 0.2 ppb at hour 19	Hours of Missing Data: 36
Monthly Average: 1.79 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.0 Q ₃ = 1.0 P ₉₀ = 4.8 P ₉₉ = 19.3	Hours of Calibration: 36
		Percent Operational Time: 100.0

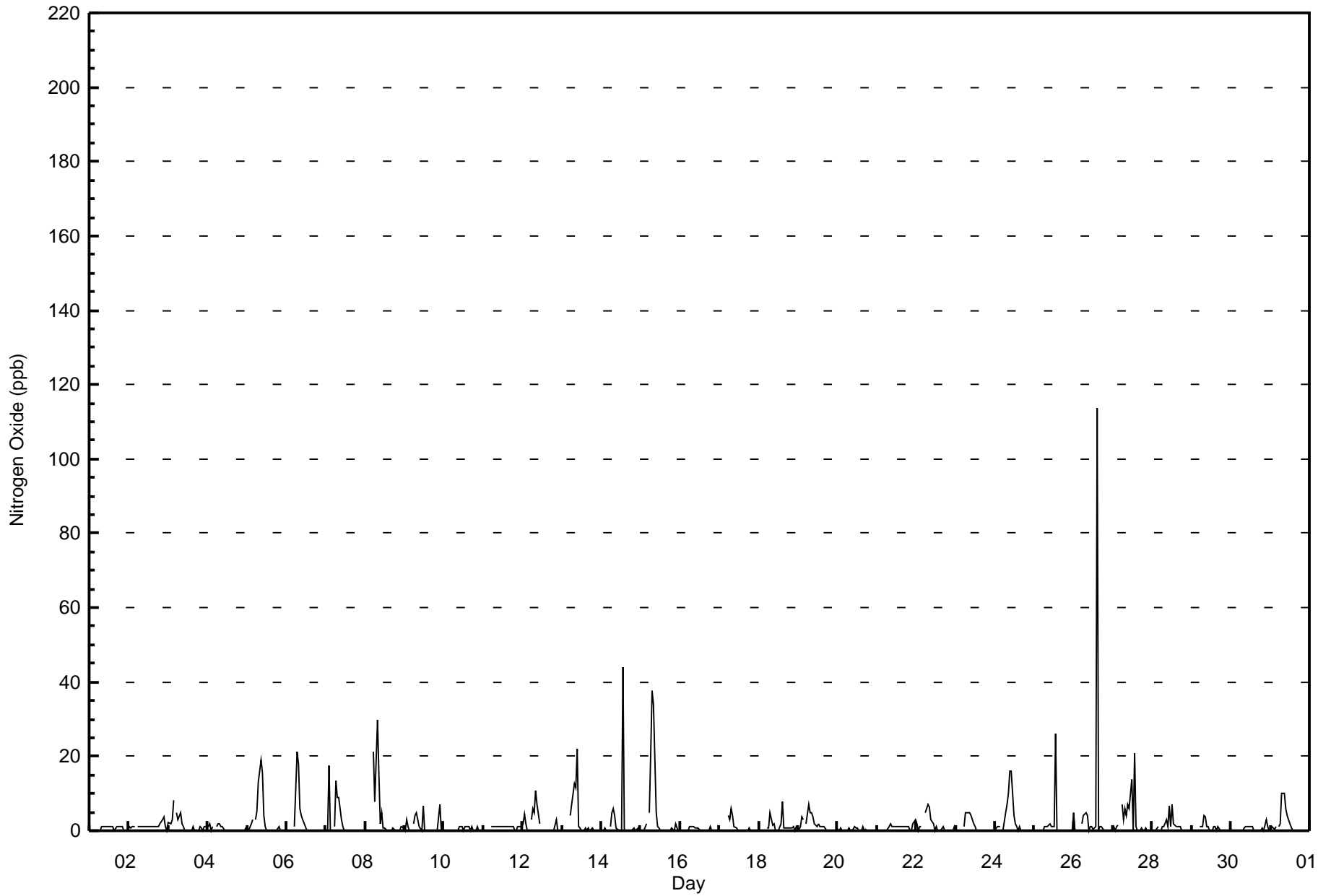
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	0	0	0	A	0	0	1	1	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0.6	1.0
2-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	0	1.2	3.7
3-Aug	2	2	3	8	A	5	3	5	2	1	0	0	0	0	1	0	0	0	0	1	1	0	1	1	1.6	8.3
4-Aug	1	2	0	1	A	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	2.0
5-Aug	0	0	2	3	A	3	5	13	19	16	4	1	0	0	0	0	0	0	0	1	0	0	0	0	2.9	19.0
6-Aug	0	0	0	0	A	1	21	18	6	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	2.3	21.3
7-Aug	0	0	17	0	A	1	13	9	9	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.3	17.5
8-Aug	0	0	0	0	A	21	8	30	15	2	5	1	1	0	0	0	0	1	0	0	0	0	1	1	3.7	30.0
9-Aug	0	3	1	0	A	2	4	5	3	1	0	7	0	0	0	0	0	0	0	0	0	7	0	0	1.4	7.1
10-Aug	0	0	0	0	A	0	0	0	0	1	1	1	0	1	1	1	0	1	0	0	1	0	0	0	0.3	1.0
11-Aug	0	0	0	0	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0.7	1.0
12-Aug	2	4	2	0	A	3	6	5	11	7	2	C	C	C	C	C	0	0	0	0	3	0	0	0	2.5	10.9
13-Aug	0	0	0	0	A	4	7	13	12	22	1	1	0	0	1	0	1	0	1	0	0	0	0	0	2.7	21.8
14-Aug	0	0	1	0	A	1	5	6	4	1	0	0	0	44	0	0	0	0	0	0	1	0	1	0	2.8	43.8
15-Aug	0	0	0	2	A	5	21	38	34	5	1	1	0	0	0	0	0	0	0	1	0	2	1	0	4.8	37.8
16-Aug	0	0	0	0	A	0	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0.3	1.0
17-Aug	0	0	0	0	A	4	3	6	4	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0.9	5.9
18-Aug	0	0	0	0	A	1	1	5	1	2	0	0	0	2	8	1	1	1	1	1	1	1	0	1	1.2	7.8
19-Aug	0	1	4	3	A	2	7	5	5	4	2	1	2	1	1	1	1	0	0	0	0	0	0	0	1.7	6.9
20-Aug	1	0	1	0	A	0	0	1	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.3	1.0
21-Aug	0	0	0	0	A	0	0	1	2	1	1	1	1	1	1	1	1	1	1	1	0	0	2	3	0.8	2.9
22-Aug	2	0	1	1	A	5	6	7	6	3	2	0	1	0	0	0	1	0	0	0	0	0	1	0	1.6	6.9
23-Aug	0	0	0	0	A	1	5	5	5	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	1.1	4.9
24-Aug	0	1	1	1	A	0	5	7	10	16	16	4	2	1	0	1	0	0	0	0	0	0	0	0	2.8	15.9
25-Aug	0	0	0	0	A	0	1	1	1	2	1	1	1	26	0	0	0	0	0	0	0	0	0	0	1.5	26.2
26-Aug	5	0	0	0	A	2	4	5	4	0	1	1	0	1	114	0	1	1	0	0	0	0	0	0	6.1	113.8
27-Aug	1	0	1	2	A	7	3	6	4	7	6	14	0	21	1	0	0	1	0	0	1	0	0	0	3.2	20.9
28-Aug	0	0	0	1	A	0	1	1	3	1	7	1	7	2	1	1	1	1	0	0	0	0	0	0	1.2	6.9
29-Aug	0	0	0	0	A	1	1	4	4	1	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0.6	3.9
30-Aug	0	0	0	0	A	0	0	0	1	1	1	1	1	1	0	0	0	0	0	1	0	3	1	0	0.5	3.0
31-Aug	0	1	0	1	A	1	2	10	10	6	4	3	2	0	0	0	0	0	0	0	0	0	0	0	1.8	9.9

0.5	0.5	1.1	0.8	--	2.3	4.4	6.8	5.7	3.7	2.2	1.5	0.8	3.5	4.4	0.3	0.4	0.3	0.2	0.3	0.4	0.6	0.3	0.3		Diurnal Average
4.9	4.3	17.5	8.3	--	21.1	21.3	37.8	33.9	21.8	15.9	13.9	6.9	43.8	113.8	1.0	1.0	1.0	1.0	1.9	3.0	7.1	2.0	2.9		Diurnal Maximum

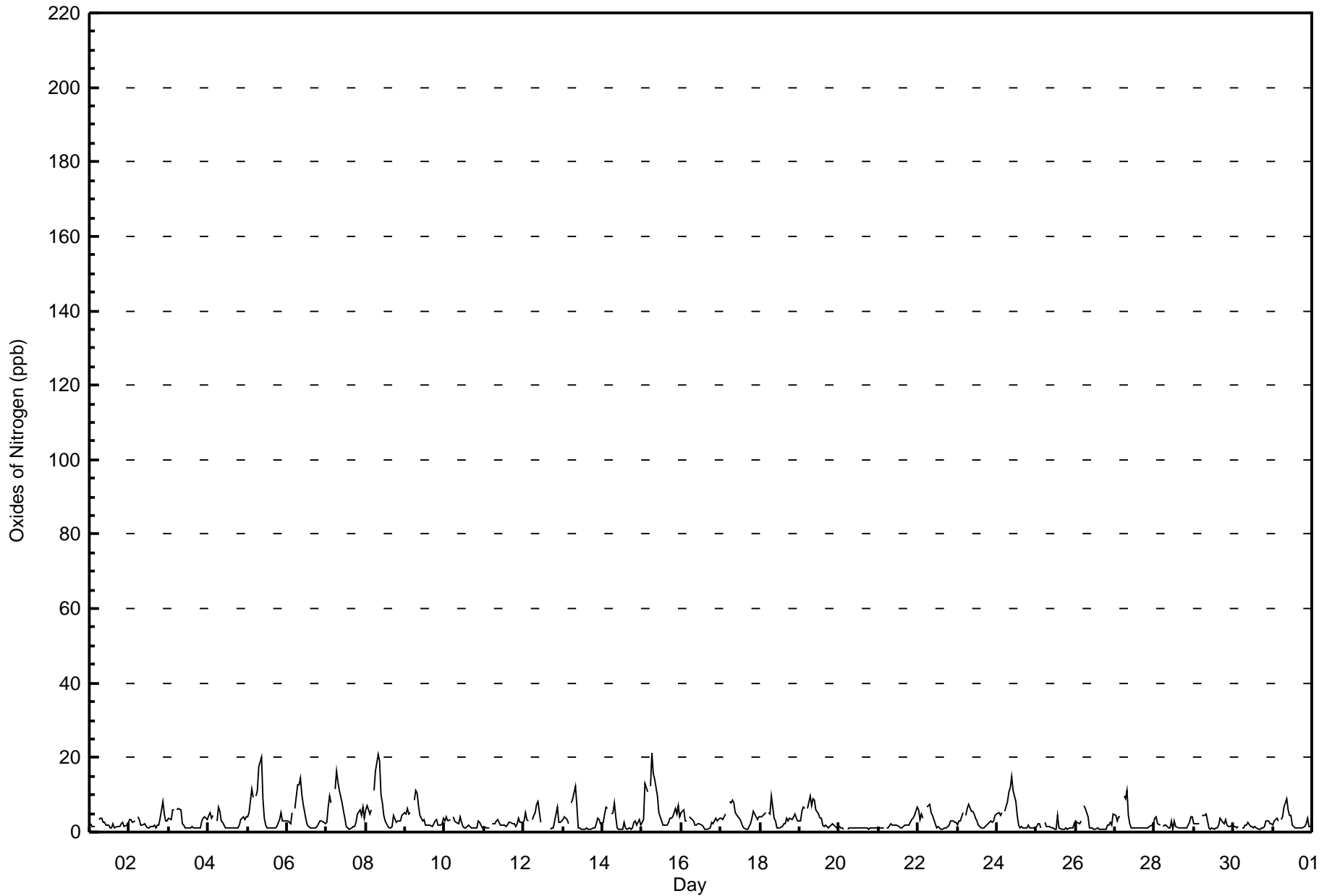
C - Calibration A - Automated Daily Zero Span

Hourly Maximums for NO at Beaverlodge

August 2008



Hourly Averages for NO_x at Beaverlodge August 2008



Peace Airshed Zone Association
Summary of Hourly Maximums

Beaverlodge - Oxides of Nitrogen (NO_x) - ppb
August 1, 2008 to September 1, 2008

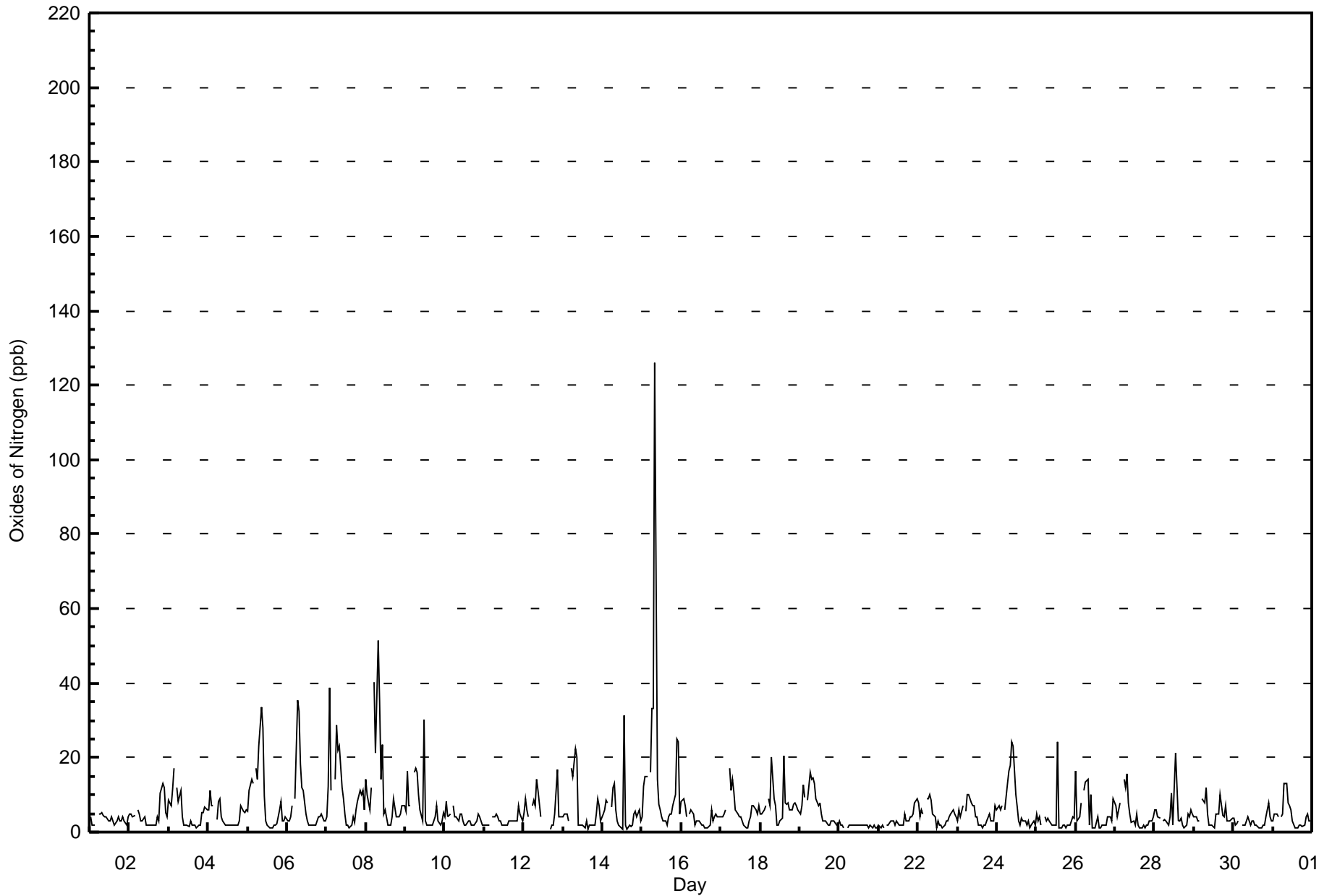
Maximum Value: 126.0 ppb on Aug 15 09:00	Maximum Daily Average: 16.5 ppb on Aug 15	Hours in Service: 744
Minimum Value: 1 ppb on Aug 12 17:00	Minimum Daily Average: 1.7 ppb on Aug 20	Hours of Data: 708
Maximum Diurnal Average: 13.6 ppb at hour 9	Minimum Diurnal Average: 2.1 ppb at hour 16	Hours of Missing Data: 36
Monthly Average: 5.90 ppb	Percentiles: P ₁ = 0.9 P ₁₀ = 1.9 Q ₁ = 2.0 Median = 4.0 Q ₃ = 7.0 P ₉₀ = 12.0 P ₉₉ = 32.4	Hours of Calibration: 36
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	4	2	2	2	A	5	5	5	5	4	4	3	3	4	3	2	3	4	3	3	4	3	2	4	3.4	5.0	
2-Aug	5	5	4	4	A	6	5	3	3	4	2	2	2	2	2	2	2	4	3	10	13	12	5	4	4.6	13.1	
3-Aug	8	7	11	17	A	12	8	11	4	2	2	2	3	2	2	2	1	2	2	2	5	5	7	6	5.4	17.1	
4-Aug	6	11	7	7	A	3	8	9	4	3	2	2	2	2	2	2	2	2	2	3	7	6	5	6	4.5	11.1	
5-Aug	6	11	14	13	A	17	14	23	33	28	10	3	2	1	1	1	2	2	2	6	8	3	3	4	9.0	33.4	
6-Aug	3	3	4	7	A	9	35	32	18	12	11	5	3	2	2	2	2	2	3	4	4	5	3	3	7.6	35.4	
7-Aug	4	12	39	11	A	14	29	22	23	12	9	5	2	2	1	2	4	3	6	8	11	10	11	6	10.7	38.6	
8-Aug	14	10	6	12	A	40	21	52	35	14	24	5	6	2	2	2	4	9	4	4	4	5	7	7	12.6	51.6	
9-Aug	6	17	7	7	A	16	17	16	10	6	3	30	3	2	2	2	2	3	4	7	3	2	3	5	7.5	30.4	
10-Aug	4	8	4	5	A	7	4	4	3	5	5	3	2	2	3	3	2	2	2	3	5	4	3	2	3.7	8.1	
11-Aug	2	2	2	2	A	4	4	5	4	3	3	2	2	2	3	3	3	3	3	3	3	7	5	3	3.1	7.1	
12-Aug	5	9	6	4	A	7	8	7	14	11	4	C	C	C	C	C	1	2	2	5	17	4	4	4	6.3	17.0	
13-Aug	4	5	5	3	A	17	15	22	20	2	2	2	1	3	1	2	2	2	2	2	5	9	7	3	5.9	22.3	
14-Aug	5	6	9	8	A	7	12	13	6	3	2	1	1	31	2	1	2	2	2	5	6	4	6	3	5.9	31.2	
15-Aug	4	12	15	15	A	16	33	33	126	14	7	6	4	3	3	2	4	5	5	7	10	25	24	5	16.5	126.0	
16-Aug	8	9	7	4	A	5	6	5	2	3	3	3	2	2	1	1	1	2	6	3	4	5	4	4	3.9	9.0	
17-Aug	4	4	5	6	A	17	11	14	11	6	5	4	4	3	2	1	1	3	4	7	7	6	5	7	5.9	17.1	
18-Aug	5	5	6	7	A	9	7	20	9	7	2	2	3	4	21	8	7	8	6	6	8	8	7	6	7.4	20.5	
19-Aug	5	7	13	9	A	9	16	14	15	13	9	7	8	5	3	3	3	2	2	3	3	3	2	2	6.7	16.1	
20-Aug	3	2	2	1	A	1	2	2	2	2	2	2	2	2	2	2	2	2	1	2	1	2	1	1	1.7	2.9	
21-Aug	2	1	2	1	A	2	2	3	3	3	2	3	2	2	2	2	5	3	3	4	4	5	8	9	3.1	9.0	
22-Aug	8	4	6	5	A	9	9	10	9	5	4	1	3	2	2	1	2	3	3	4	5	6	5	4	4.8	10.0	
23-Aug	3	6	4	7	A	6	10	10	8	7	7	4	4	2	2	1	2	2	3	5	3	3	3	7	4.7	10.0	
24-Aug	6	7	6	7	A	6	13	16	18	24	23	10	7	3	2	4	3	3	2	3	1	2	3	2	7.4	24.1	
25-Aug	5	3	4	2	A	4	3	4	3	2	2	2	2	24	1	1	2	2	1	2	2	3	4	4	3.5	24.1	
26-Aug	16	3	4	8	A	11	14	14	2	10	1	1	1	4	1	1	2	2	2	4	4	4	3	9	5.3	16.3	
27-Aug	7	4	6	8	A	14	12	16	8	5	3	3	2	5	2	1	1	2	1	2	2	3	3	4	4.9	15.8	
28-Aug	6	6	4	4	A	3	3	3	2	4	10	2	12	21	3	3	4	2	1	2	5	4	6	5	5.0	21.1	
29-Aug	4	4	3	3	A	9	8	12	5	2	2	2	1	5	5	5	10	4	4	7	3	3	3	4	4.7	12.0	
30-Aug	4	2	2	3	A	2	2	2	3	4	2	3	3	2	2	1	1	1	1	2	2	4	8	4	3	2.7	8.0
31-Aug	3	5	5	4	A	4	5	13	13	8	7	6	3	1	1	1	2	2	2	2	4	5	3	3	4.4	13.0	

5.5	6.2	6.9	6.4	--	9.4	11.0	13.4	13.6	7.4	5.6	4.2	3.1	4.9	2.7	2.1	2.7	2.8	2.8	4.2	5.3	5.6	5.1	4.5	Diurnal Average	
16.3	16.6	38.6	17.1	--	40.3	35.4	51.6	126.0	27.8	23.6	30.4	11.9	31.2	20.5	7.9	10.0	9.0	6.0	10.5	17.0	24.8	24.1	9.0	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for NO_x at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

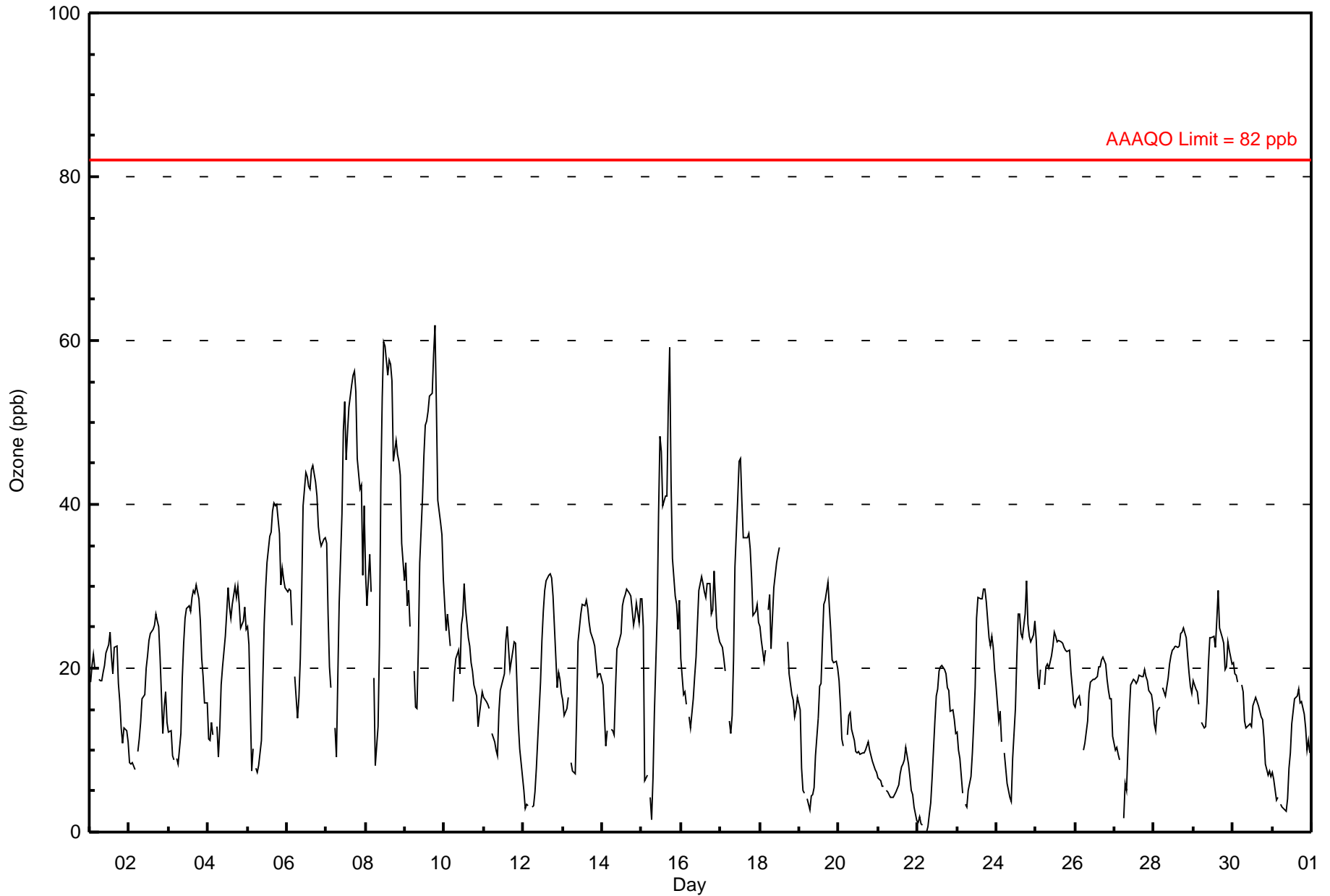
**Beaverlodge - Ozone (O₃) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 61.8 ppb on Aug 9 19:00 Maximum Daily Average: 40.0 ppb on Aug 8	Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0
Minimum Value: 0 ppb on Aug 22 06:00 Maximum Diurnal Average: 28.9 ppb at hour 17 Monthly Average: 21.05 ppb	Minimum Daily Average: 5.8 ppb on Aug 21 Minimum Diurnal Average: 10.6 ppb at hour 7 Percentiles: P ₁ = 1.6 P ₁₀ = 7.2 Q ₁ = 12.9 Median = 19.6 Q ₃ = 27.0 P ₉₀ = 35.9 P ₉₉ = 56.7

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-Aug	18	20	22	20	A	19	19	18	20	22	23	24	21	19	23	23	18	16	13	11	13	12	11	18.4	24.4																								
2-Aug	8	8	8	8	A	10	11	13	16	17	20	21	23	24	25	25	27	26	25	21	12	15	17	13	17.2	26.5																							
3-Aug	12	12	9	9	A	9	8	12	19	23	26	27	28	27	29	30	29	30	28	26	21	19	16	16	20.2	30.2																							
4-Aug	11	11	13	12	A	13	9	12	18	20	24	27	30	27	26	28	30	29	30	28	25	26	27	25	21.8	30.0																							
5-Aug	25	23	7	10	A	8	7	8	11	19	25	30	33	36	37	39	40	40	40	36	30	32	31	30	26.0	40.2																							
6-Aug	29	30	29	25	A	19	14	17	21	29	40	44	43	42	44	45	43	41	37	36	35	36	36	33.8	44.8																								
7-Aug	35	27	20	18	A	13	9	19	28	39	49	52	45	49	52	55	56	56	54	46	42	42	31	40	38.1	56.3																							
8-Aug	31	28	34	29	A	19	8	13	23	42	53	60	59	56	58	57	55	45	48	46	45	43	35	31	40.0	59.9																							
9-Aug	33	28	29	25	A	20	15	15	22	33	41	46	50	50	51	53	54	58	62	52	40	38	36	31	38.4	61.8																							
10-Aug	28	25	27	23	A	16	20	21	22	19	25	26	30	27	24	23	21	20	18	17	13	14	16	17	21.3	30.3																							
11-Aug	16	16	16	15	A	12	11	10	9	15	17	18	19	23	25	22	20	22	23	23	18	13	10	7	16.6	25.0																							
12-Aug	5	3	3	3	A	3	3	5	8	11	18	23	27	30	31	31	31	31	29	25	18	20	19	17	17.2	31.5																							
13-Aug	16	14	15	16	A	8	8	7	14	23	25	27	28	28	27	26	24	23	23	21	19	19	19	19	20.0	28.2																							
14-Aug	18	14	11	12	A	13	12	12	17	22	23	24	28	28	29	30	29	29	27	25	26	28	26	29	22.3	29.7																							
15-Aug	28	25	6	7	A	4	2	7	15	26	39	48	46	40	41	41	52	59	43	33	29	28	25	28	29.2	59.2																							
16-Aug	21	17	17	16	A	14	13	16	19	21	25	29	31	30	29	29	30	30	27	27	32	28	25	23	24.0	31.8																							
17-Aug	23	23	21	20	A	14	12	14	21	32	41	45	46	40	36	36	36	37	34	31	27	27	28	26	29.0	45.5																							
18-Aug	25	23	21	22	A	27	29	22	30	31	33	34	35	C	C	C	A	23	19	17	16	14	15	16	23.9	34.8																							
19-Aug	15	8	5	5	A	4	3	4	5	5	9	14	18	18	23	28	28	31	27	25	21	21	20	15.5	30.5																								
20-Aug	18	15	11	11	A	12	14	15	13	11	10	10	10	9	10	10	10	11	11	10	9	8	8	7	10.9	18.5																							
21-Aug	7	6	6	6	A	5	5	4	4	4	5	5	6	7	8	8	9	10	8	7	5	5	3	1	5.8	10.3																							
22-Aug	1	2	1	1	A	0	1	2	4	7	14	17	18	20	20	20	20	20	19	18	17	15	14	12	11.1	20.4																							
23-Aug	12	10	9	5	A	3	3	5	7	10	13	18	26	29	28	28	30	30	28	24	23	24	23	20	17.7	29.6																							
24-Aug	18	13	15	11	A	10	6	5	4	4	9	15	21	27	27	24	24	27	31	25	24	23	24	26	17.9	30.7																							
25-Aug	23	19	17	20	A	18	20	21	20	22	23	24	24	23	23	23	23	23	23	22	22	20	18	16	21.1	24.4																							
26-Aug	15	16	17	16	A	10	11	14	17	18	18	19	19	19	20	20	21	21	21	19	17	16	16	12	17.0	21.3																							
27-Aug	10	10	10	9	A	2	6	5	10	15	18	19	19	18	19	19	19	19	20	19	18	17	17	16	14.4	19.8																							
28-Aug	13	12	15	15	A	18	17	17	19	20	22	22	22	23	23	23	24	24	25	24	22	20	18	17	19.7	24.9																							
29-Aug	19	17	17	16	A	13	13	13	16	21	24	24	24	23	26	30	25	24	23	20	20	23	22	21	20.5	29.5																							
30-Aug	21	19	19	18	A	18	17	14	13	13	13	13	15	16	16	15	15	14	14	12	8	7	7	7	14.1	20.6																							
31-Aug	7	6	4	4	A	3	3	3	3	4	8	10	13	16	17	17	17	16	16	14	13	10	11	10	9.8	17.4																							
																								18.2	16.2	14.7	13.7	--	11.5	10.6	11.7	15.1	19.3	23.6	26.2	27.8	27.6	28.0	28.6	28.9	28.7	27.4	24.6	21.9	21.4	20.2	19.3	Diurnal Average	
																								35.3	29.6	33.9	29.4	--	27.0	28.9	22.4	29.9	42.4	53.1	59.9	59.3	55.8	57.7	57.1	55.8	59.2	61.8	52.0	45.3	43.5	36.3	39.9	Diurnal Maximum	

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

Hourly Averages for O₃ at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

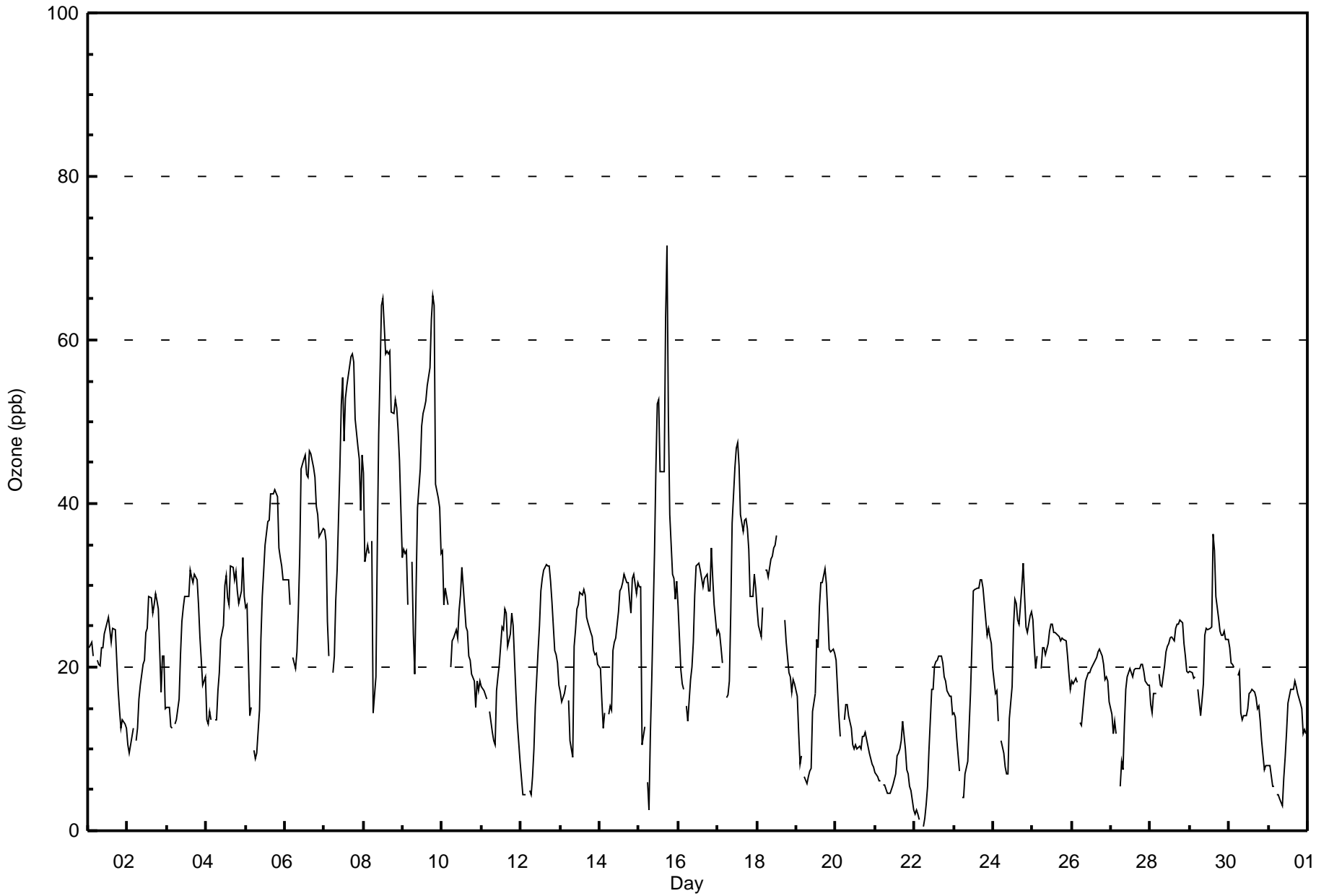
**Beaverlodge - Ozone (O₃) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 71.5 ppb on Aug 15 18:00	Maximum Daily Average: 45.7 ppb on Aug 8	Hours in Service: 744 Hours of Data: 709 Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0
Minimum Value: 0 ppb on Aug 22 06:00 Maximum Diurnal Average: 30.8 ppb at hour 18 Monthly Average: 23.49 ppb	Minimum Daily Average: 6.9 ppb on Aug 21 Minimum Diurnal Average: 13.5 ppb at hour 7 Percentiles: P ₁ = 2.3 P ₁₀ = 9.0 Q ₁ = 15.3 Median = 22.0 O ₃ = 29.6 P ₉₀ = 39.5 P ₉₉ = 62.4	

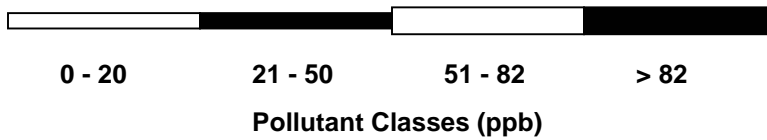
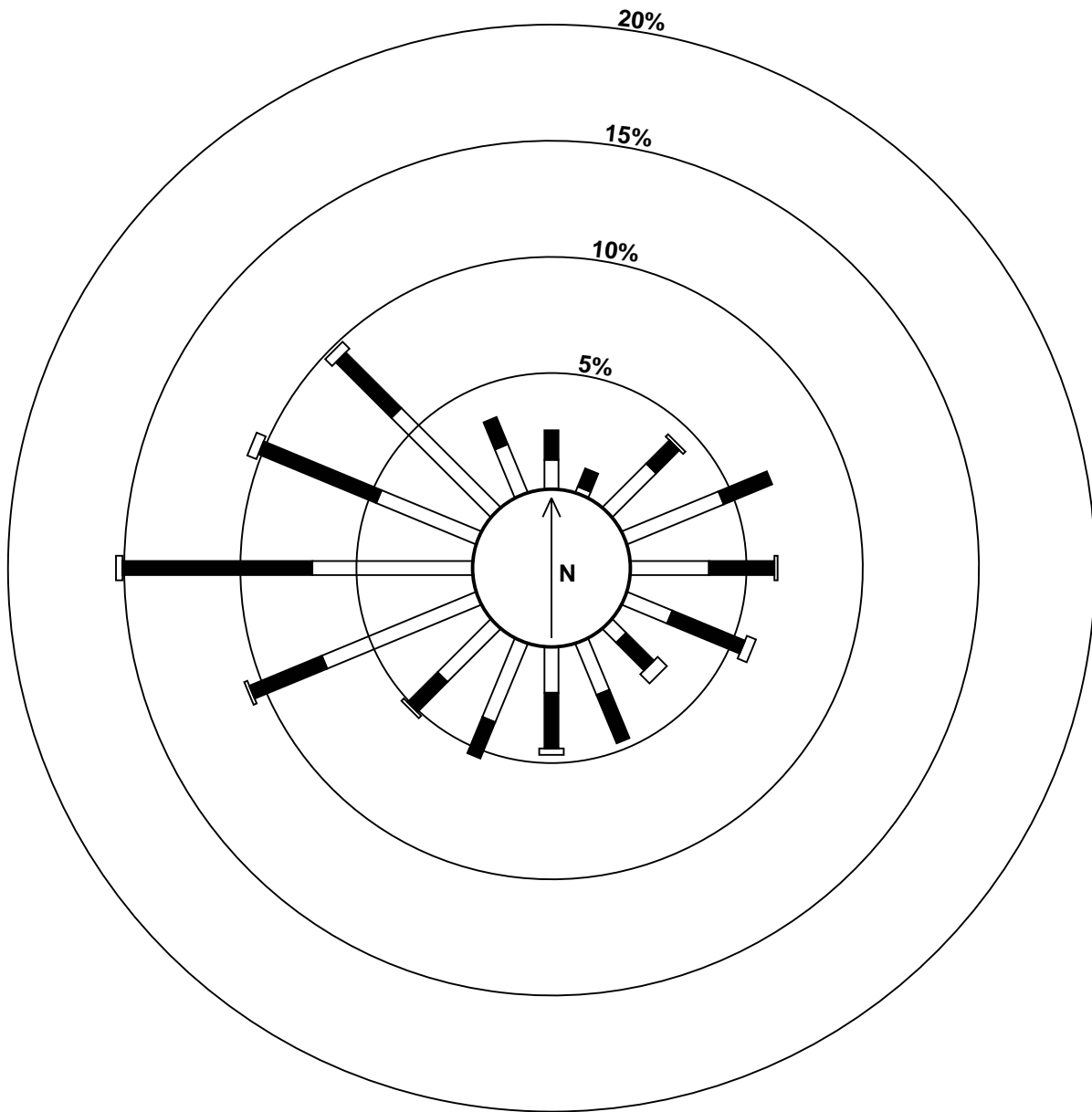
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	22	23	23	21	A	21	20	20	22	22	24	25	26	25	23	25	25	21	17	15	13	14	13	13	20.6	26.1	
2-Aug	11	9	10	13	A	11	13	16	18	20	21	24	25	29	28	27	28	29	28	27	17	21	21	15	20.0	29.0	
3-Aug	15	15	13	13	A	13	14	16	22	26	27	29	29	29	32	31	30	31	31	31	28	24	21	18	19	22.7	31.8
4-Aug	14	13	15	14	A	14	14	17	19	23	25	30	31	29	28	32	32	31	32	29	28	29	33	29	24.3	33.4	
5-Aug	27	28	14	15	A	10	9	10	15	23	29	32	35	38	38	41	41	41	42	41	35	33	32	31	28.6	41.7	
6-Aug	31	31	31	28	A	21	20	22	27	33	44	45	46	44	43	46	46	44	43	40	39	36	37	37	36.2	46.4	
7-Aug	37	35	26	21	A	19	21	28	32	44	52	55	48	53	54	57	58	58	57	50	47	45	39	46	42.8	58.3	
8-Aug	44	33	35	34	A	35	14	19	35	48	56	64	65	58	59	58	59	51	51	53	52	49	45	33	45.7	65.1	
9-Aug	34	34	34	28	A	33	24	19	30	39	44	50	51	52	53	54	57	63	65	64	42	41	40	34	42.8	65.5	
10-Aug	34	28	30	28	A	20	23	24	25	24	27	29	32	30	25	24	21	21	19	18	15	18	17	18	23.9	34.3	
11-Aug	18	17	17	16	A	15	12	11	10	17	19	20	25	25	27	27	22	24	27	25	21	17	13	8	18.8	27.2	
12-Aug	6	4	4	4	A	5	4	7	10	15	22	25	29	31	32	33	32	32	31	28	22	22	20	18	19.0	32.6	
13-Aug	17	16	17	18	A	16	11	9	23	25	27	28	29	29	29	29	26	25	24	24	22	21	22	20	22.0	29.5	
14-Aug	20	16	13	14	A	14	15	15	22	23	24	27	29	30	30	31	30	30	28	27	31	31	29	30	24.3	31.4	
15-Aug	30	30	11	13	A	6	3	12	18	34	44	52	53	44	44	44	63	72	51	39	31	31	28	31	34.0	71.5	
16-Aug	27	20	18	17	A	15	13	18	20	23	29	32	33	32	31	30	31	31	29	29	35	31	28	24	26.0	34.5	
17-Aug	24	24	22	20	A	16	17	18	27	38	44	47	47	45	39	37	38	38	37	34	29	29	31	30	31.8	47.5	
18-Aug	27	25	24	27	A	32	32	31	33	34	34	35	36	C	C	C	A	26	23	19	19	17	19	18	26.9	36.1	
19-Aug	16	12	8	9	A	7	6	7	7	8	15	17	23	22	27	30	30	32	30	26	22	22	22	22	18.3	32.0	
20-Aug	21	17	14	11	A	14	15	16	14	13	11	10	11	10	10	10	12	12	12	11	10	9	8	8	12.0	20.9	
21-Aug	7	7	6	6	A	6	6	5	5	5	5	6	7	9	9	10	11	13	10	7	7	5	5	2	6.9	13.5	
22-Aug	2	2	2	1	A	0	1	3	5	10	17	17	20	21	21	21	21	21	21	19	18	17	16	14	12.6	21.3	
23-Aug	14	14	11	7	A	4	4	7	8	13	17	23	29	29	30	30	31	31	30	26	24	25	24	23	19.7	30.7	
24-Aug	20	17	17	13	A	11	9	8	7	7	14	18	25	28	28	26	25	30	33	29	25	24	26	27	20.3	32.7	
25-Aug	26	22	20	21	A	20	22	22	21	23	24	25	25	24	24	24	24	23	24	23	23	21	19	17	22.6	25.7	
26-Aug	18	18	19	18	A	13	13	17	18	19	19	19	20	21	21	21	22	22	21	20	18	19	18	16	18.7	22.2	
27-Aug	14	12	13	12	A	5	8	7	13	17	19	20	19	19	20	20	20	20	20	20	19	18	18	18	16.2	20.3	
28-Aug	15	14	17	17	A	19	18	18	20	22	23	23	24	24	23	25	25	25	26	25	23	21	20	19	21.1	25.8	
29-Aug	20	19	19	19	A	17	14	16	18	24	25	25	25	25	36	34	29	26	24	24	24	24	23	23	23.2	36.2	
30-Aug	22	20	20	20	A	19	19	14	13	14	14	15	17	17	17	17	16	15	15	13	11	7	8	8	15.4	22.4	
31-Aug	8	8	5	5	A	4	4	4	3	6	9	12	16	17	17	17	18	18	17	16	15	12	12	12	11.2	18.3	

C - Calibration	A - Automated Daily Zero Span																							Diurnal Average	Diurnal Maximum																								
	20.7	18.8	17.0	16.3	--	14.7	13.5	14.7	18.1	22.3	25.9	28.3	30.0	29.5	30.0	30.4	30.8	30.8	29.6	27.4	24.4	23.6	22.8	21.4	20.7	43.8	35.5	34.9	33.9	--	35.5	31.8	31.1	34.9	48.5	56.3	64.2	65.1	58.2	58.7	58.4	62.6	71.5	65.5	64.3	51.6	48.9	45.3	45.9

Hourly Maximums for O₃ at Beaverlodge August 2008



Pollutant Rose for O₃ at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Eight Hour Running Averages**

**Beaverlodge - Ozone (O₃) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedences (AAAQO): 8-hr: 0	Hours in Service: 744
Maximum Value: 55.4 ppb on Aug 8 18:00	Hours of Data: 737
Minimum Value: 1.0 ppb on Aug 22 07:00	Hours of Missing Data: 7
	Hours of Calibration: 7
	Percent Operational Time: 100.0
Percentiles: P ₁ = 3.0 P ₁₀ = 8.2 Q ₁ = 14.2 Median = 19.8 Q ₃ = 25.5 P ₉₀ = 34.7 P ₉₉ = 52.3	

Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	23	22	21	21	20	20	20	19	20	20	20	20	21	21	21	22	22	22	21	20	18	17	16	15	22.8
2-Aug	13	12	11	10	10	9	9	10	11	12	14	16	17	18	20	22	23	24	25	25	23	22	21	20	24.6
3-Aug	18	16	14	13	13	12	11	10	11	13	15	18	19	21	24	26	27	28	28	28	27	26	25	23	28.5
4-Aug	21	19	17	15	14	13	12	12	13	14	15	18	19	21	23	25	27	28	28	28	28	28	28	27	28.4
5-Aug	27	26	23	21	20	18	15	13	11	10	13	15	18	21	25	29	32	35	37	38	37	37	36	35	37.7
6-Aug	34	32	31	30	30	28	25	23	22	22	24	26	28	31	35	38	41	43	43	42	41	40	40	39	43.0
7-Aug	37	35	33	30	29	26	23	20	19	21	25	30	32	36	42	46	50	52	52	52	51	50	48	46	52.4
8-Aug	43	39	37	35	34	30	27	23	22	24	27	31	35	39	45	51	55	55	55	53	51	50	47	44	55.4
9-Aug	41	39	36	34	32	29	26	24	22	23	24	27	30	34	39	43	47	50	53	54	53	51	49	46	53.8
10-Aug	43	39	35	31	30	26	24	23	22	21	21	21	23	24	24	25	24	24	24	22	20	19	18	17	43.2
11-Aug	16	16	16	15	16	15	15	14	13	13	13	13	14	15	17	19	20	21	22	22	22	21	19	17	22.3
12-Aug	15	13	10	8	6	5	4	4	4	5	7	10	12	16	19	22	25	28	29	29	28	27	25	24	29.4
13-Aug	22	20	18	17	17	15	14	12	12	13	15	16	17	20	22	25	26	27	26	26	25	24	23	22	26.6
14-Aug	21	20	18	17	16	15	14	13	13	14	16	18	19	21	23	25	27	27	28	28	28	28	27	27	28.2
15-Aug	27	27	24	22	21	18	14	11	9	9	14	20	23	28	33	37	42	46	46	44	42	41	39	37	46.3
16-Aug	33	28	25	23	22	20	18	16	16	17	18	20	21	23	25	27	28	29	30	29	29	29	29	28	33.2
17-Aug	27	26	25	24	23	21	19	18	18	19	22	26	28	31	34	37	39	40	39	37	35	33	32	31	39.5
18-Aug	29	28	26	25	25	25	25	24	25	26	28	29	30	31	31	N	N	N	N	N	N	N	17	17	30.9
19-Aug	17	15	13	12	11	10	8	6	5	4	5	6	8	10	12	15	18	21	23	25	25	25	25	24	25.4
20-Aug	23	21	19	17	17	16	15	14	13	12	12	12	12	11	11	10	10	10	10	10	10	10	9	9	22.9
21-Aug	9	8	8	7	7	6	6	5	5	5	5	5	5	5	5	6	6	7	8	8	8	8	7	6	8.7
22-Aug	5	4	3	2	2	1	1	1	1	2	4	6	8	10	12	15	17	18	19	19	19	18	17	16	18.9
23-Aug	15	14	13	11	11	9	8	7	6	6	7	8	11	14	17	20	23	25	27	28	27	27	26	25	27.8
24-Aug	24	22	20	18	18	16	13	11	9	8	7	8	9	11	14	16	19	22	24	26	26	26	25	25	26.0
25-Aug	25	24	23	22	22	21	21	20	19	20	20	21	21	22	22	23	23	23	23	23	23	22	22	21	25.4
26-Aug	20	19	18	17	17	15	14	14	14	15	15	15	16	17	18	19	19	20	20	20	20	19	19	18	19.9
27-Aug	17	15	14	13	12	10	8	7	7	8	9	11	12	14	15	17	18	19	19	19	19	19	19	18	18.9
28-Aug	17	17	16	15	15	15	15	15	16	17	18	19	20	20	21	22	22	23	23	23	23	23	22	22	23.4
29-Aug	21	20	19	18	18	17	16	15	15	15	16	18	18	20	21	23	24	25	25	24	24	24	23	22	24.7
30-Aug	22	21	21	20	21	20	19	18	17	16	15	14	14	14	14	14	15	15	15	15	14	13	12	10	21.7
31-Aug	10	9	7	6	6	6	5	4	4	3	4	5	6	7	9	11	13	14	15	16	16	15	14	13	15.8
	43.2	39.2	36.8	34.7	33.7	30.4	27.0	24.3	25.0	26.1	27.8	31.2	34.7	39.3	45.5	51.0	55.0	55.4	54.7	53.8	52.6	51.1	49.2	46.4	
	Diurnal Maximums																								

N - Not Valid
 Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb

Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
August 1, 2008 to September 1, 2008

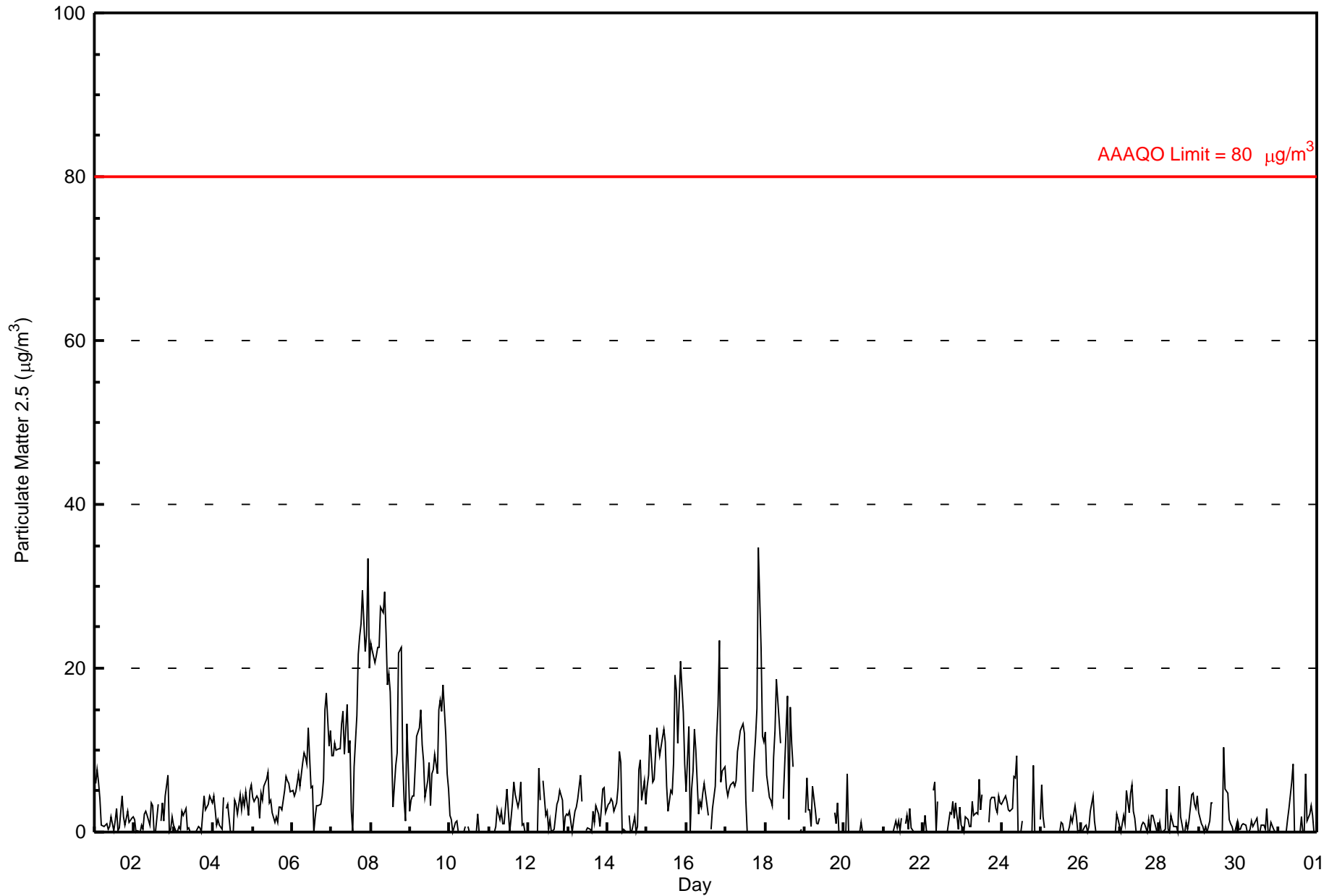
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 34.7 µg/m ³ on Aug 17 21:00	Maximum Daily Average: 16.5 µg/m ³ on Aug 8
Minimum Value: 0 µg/m ³ on Aug 2 02:00	Hours of Data: 698
Maximum Diurnal Average: 6.6 µg/m ³ at hour 21	Hours of Missing Data: 46
Monthly Average: 4.11 µg/m ³	Hours of Calibration: 0
Minimum Daily Average: 0.4 µg/m ³ on Aug 20	Percent Operational Time: 93.8
Minimum Diurnal Average: 1.9 µg/m ³ at hour 15	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 2.2 Q ₃ = 5.4 P ₉₀ = 11.1 P ₉₉ = 24.8	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	6	8	6	4	1	1	1	1	0	1	2	0	1	3	0	0	4	2	1	2	3	1	2	2	2.1	7.6
2-Aug	2	0	0	0	1	0	2	3	2	1	4	3	0	0	3	BD	1	3	1	4	7	0	0	2	1.8	7.0
3-Aug	1	0	0	1	0	3	2	3	0	1	0	0	0	0	0	1	0	0	4	3	3	3	4	4	1.4	4.5
4-Aug	4	3	1	2	1	0	4	P	3	3	0	0	0	4	3	2	5	3	4	3	5	2	5	6	2.7	5.7
5-Aug	4	4	4	4	2	5	4	6	6	7	4	4	2	1	2	1	3	3	3	5	7	6	6	5	4.1	7.4
6-Aug	5	4	5	6	7	6	8	10	9	8	13	5	6	0	2	3	3	3	4	6	15	17	11	12	7.1	17.0
7-Aug	9	9	11	10	10	10	13	15	9	16	10	11	3	0	8	14	22	24	25	29	22	24	33	20	14.9	33.4
8-Aug	23	22	21	21	23	23	27	27	29	24	18	19	17	3	6	8	10	22	23	9	4	1	13	2	16.5	29.3
9-Aug	4	4	4	8	12	13	15	11	9	4	6	8	3	7	8	9	7	15	16	15	18	12	7	5	9.2	18.0
10-Aug	2	2	0	1	1	0	BD	0	0	1	BD	1	0	BD	BD	0	0	2	0	0	0	BD	0	BD	0.5	2.3
11-Aug	0	0	0	0	1	3	2	2	1	1	3	5	0	2	3	6	5	3	4	6	1	1	0	BD	2.1	6.2
12-Aug	0	0	BD	0	BD	0	8	4	BD	6	2	2	0	2	0	0	2	3	4	5	4	0	2	2	2.2	7.9
13-Aug	2	2	0	1	3	3	4	7	4	BD	BD	0	1	0	0	3	1	3	2	1	3	5	5	2	2.4	7.0
14-Aug	3	4	4	4	3	4	5	10	8	0	0	0	BD	2	0	0	2	0	1	8	9	4	6	3	3.5	9.7
15-Aug	6	7	12	6	6	10	13	11	9	11	13	11	6	2	5	5	9	19	17	11	21	18	15	8	10.4	20.9
16-Aug	5	13	0	5	7	13	10	2	4	3	5	6	3	2	BD	0	3	6	11	15	23	6	7	8	6.9	23.5
17-Aug	6	4	5	6	6	6	6	10	11	12	13	12	4	0	0	BD	5	9	11	15	35	22	12	11	9.6	34.7
18-Aug	12	7	4	4	3	9	12	19	14	11	BD	4	8	17	2	15	11	8	P	P	0	0	0	BD	8.0	18.6
19-Aug	2	7	3	3	1	6	3	1	1	2	BD	0	BD	7	BD	BD	BD	P	P	2	1	4	0	0	2.3	7.5
20-Aug	0	0	7	0	0	0	BD	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	7.1
21-Aug	0	0	0	0	0	0	0	1	0	1	0	2	P	1	2	0	3	0	0	0	0	0	BD	0	0.5	2.8
22-Aug	0	2	0	0	0	BD	5	6	0	4	BD	0	BD	0	BD	0	2	2	4	2	4	0	3	1	1.7	6.1
23-Aug	1	0	2	2	1	1	4	2	2	2	6	3	5	BD	BD	BD	1	4	4	4	3	2	4	4	2.7	6.4
24-Aug	3	4	4	4	3	3	3	7	7	9	0	0	1	BD	0	0	0	0	0	8	0	0	BD	2	2.6	9.3
25-Aug	6	2	1	BD	BD	0	BD	0	0	0	BD	0	1	1	0	0	0	1	2	1	3	2	0	0	1.0	5.7
26-Aug	0	0	1	1	0	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0.6	4.4
27-Aug	0	1	2	1	5	2	5	6	3	2	0	0	0	1	1	1	0	1	0	2	2	1	0	0	1.5	5.7
28-Aug	1	0	0	0	5	0	0	2	1	1	1	0	6	2	0	0	1	0	1	4	5	3	3	4	1.7	5.6
29-Aug	2	1	1	0	1	0	1	4	4	BD	BD	0	BD	0	0	10	5	5	2	1	1	0	0	1	1.8	10.3
30-Aug	0	0	1	1	1	0	0	0	1	1	1	2	0	0	1	1	0	3	0	0	1	0	0	0	0.6	3.0
31-Aug	0	0	0	0	0	0	2	3	6	8	0	0	0	0	2	0	0	7	1	2	3	2	0	0	1.5	8.4

3.5	3.6	3.3	3.1	3.5	3.9	5.8	5.8	4.9	4.8	4.2	3.2	2.6	2.0	1.9	3.0	3.5	5.1	5.0	5.4	6.6	4.5	4.9	3.8	Diurnal Average	
23.1	22.3	20.6	21.5	22.6	22.6	27.4	26.8	29.3	24.2	17.9	19.4	17.0	16.6	8.0	15.3	21.7	23.9	25.4	29.5	34.7	24.1	33.4	20.1	Diurnal Maximum	

P - Power Failure BD - Baseline Drift
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 µg/m³ 24-hr 30 µg/m³

Hourly Averages for PM_{2.5} at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

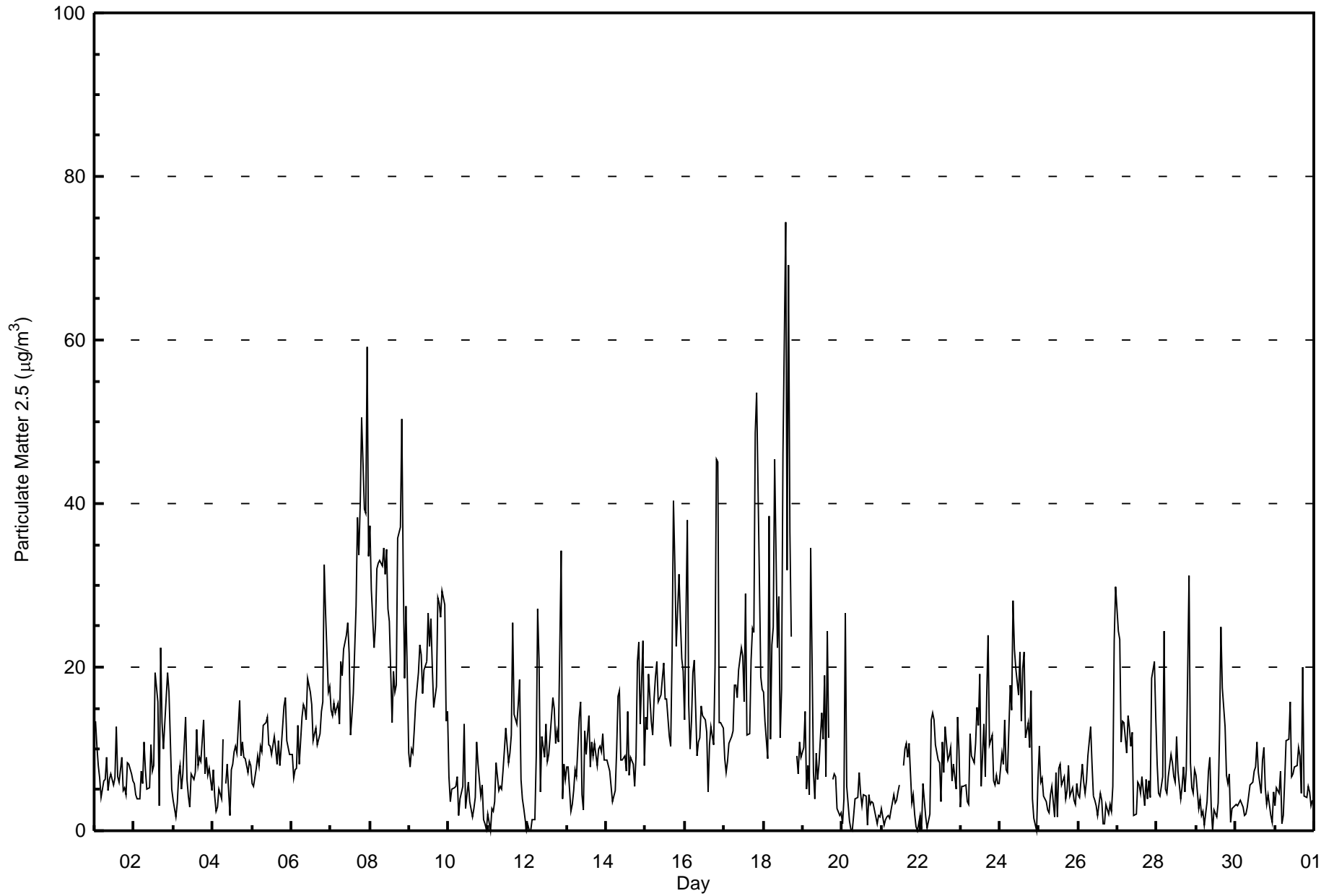
**Beaverlodge - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
August 1, 2008 to September 1, 2008**

Maximum Value: 74.4 µg/m ³ on Aug 18 14:00	Maximum Daily Average: 28.1 µg/m ³ on Aug 8	Hours in Service: 744
Minimum Value: 0 µg/m ³ on Aug 11 02:00	Minimum Daily Average: 3.9 µg/m ³ on Aug 20	Hours of Data: 739
Maximum Diurnal Average: 16.0 µg/m ³ at hour 20	Minimum Diurnal Average: 7.8 µg/m ³ at hour 3	Hours of Missing Data: 5
Monthly Average: 11.29 µg/m ³	Percentiles: P ₁ = 0.0 P ₁₀ = 2.8 Q ₁ = 4.9 Median = 8.6 Q ₃ = 14.3 P ₉₀ = 23.4 P ₉₉ = 47.2	Hours of Calibration: 0
		Percent Operational Time: 99.3

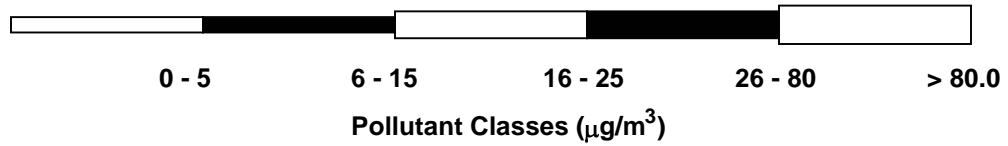
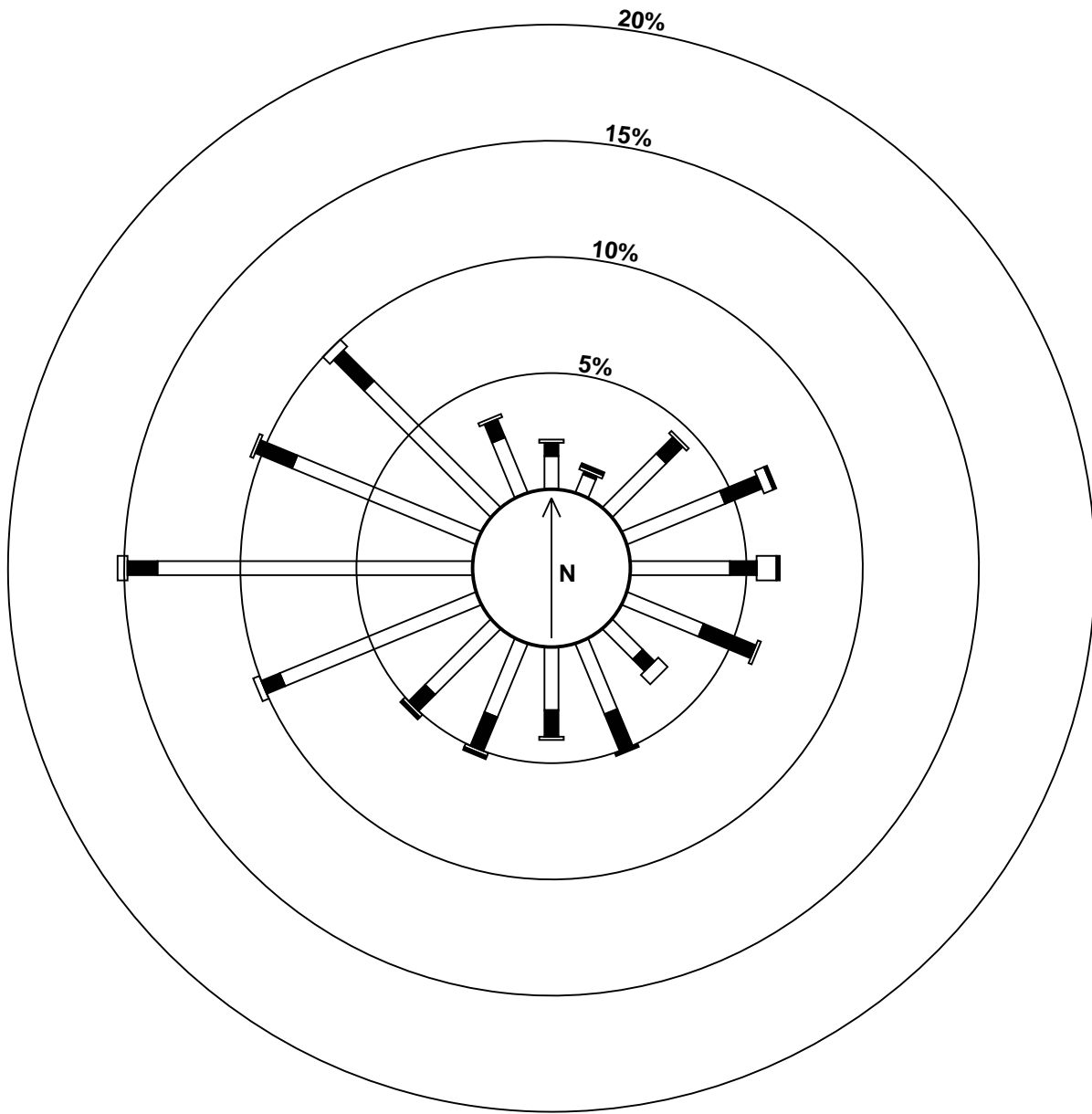
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Aug	13	10	8	6	4	6	6	9	5	6	7	6	6	13	7	6	9	5	5	4	8	8	7	6	7.2	13.5																							
2-Aug	6	4	4	4	7	6	11	8	5	5	11	7	8	19	16	3	22	13	10	13	19	17	11	5	9.8	22.4																							
3-Aug	4	2	3	7	8	5	7	14	6	4	3	7	6	7	12	8	9	8	14	7	9	7	8	5	7.1	13.9																							
4-Aug	7	4	2	3	5	4	11	P	6	8	2	8	8	10	10	9	16	9	11	9	9	7	8	8	7.6	15.9																							
5-Aug	6	5	8	9	8	10	10	13	13	14	10	10	9	11	10	8	11	8	10	15	16	11	10	9	10.3	16.2																							
6-Aug	9	7	7	8	13	8	14	15	15	13	19	17	15	11	12	13	10	12	15	16	33	27	17	18	14.3	32.6																							
7-Aug	15	14	16	14	16	13	21	19	22	24	25	22	12	14	17	27	38	34	40	51	39	39	59	34	26.0	59.1																							
8-Aug	37	29	22	25	32	33	33	32	35	31	34	27	26	13	20	17	18	36	37	50	32	19	28	9	28.1	50.4																							
9-Aug	8	10	10	12	16	19	23	22	17	20	21	27	23	26	20	15	18	28	28	26	29	28	13	15	19.6	29.2																							
10-Aug	7	4	5	5	5	7	2	4	5	13	3	4	6	4	2	3	4	11	8	4	6	1	1	0	4.7	13.0																							
11-Aug	2	0	3	2	4	8	5	5	5	7	10	12	8	9	12	25	14	13	15	18	6	4	3	0	8.0	25.5																							
12-Aug	1	0	0	1	1	9	27	21	5	11	9	13	8	9	11	16	15	11	12	11	34	4	8	6	10.2	34.3																							
13-Aug	8	8	2	3	5	7	7	14	16	4	2	12	9	14	8	11	9	11	8	10	10	10	12	9	8.7	15.7																							
14-Aug	9	8	7	5	4	5	10	16	17	9	9	9	7	15	7	9	8	5	9	21	23	13	23	8	10.7	23.1																							
15-Aug	14	12	19	13	12	16	19	21	16	17	19	20	16	16	12	10	22	40	33	23	31	26	21	20	19.4	40.4																							
16-Aug	14	38	15	10	13	19	21	9	11	11	15	14	14	12	5	11	13	11	20	45	45	13	13	13	16.9	45.4																							
17-Aug	9	7	9	11	12	12	18	18	16	20	22	21	16	29	12	12	21	25	24	49	54	31	19	17	20.1	53.6																							
18-Aug	17	13	9	38	11	23	25	45	22	29	11	17	46	74	32	69	37	24	P	P	9	7	11	9	26.3	74.4																							
19-Aug	10	15	5	8	4	35	7	4	9	6	8	14	11	19	7	24	11	P	6	7	7	3	2	2	9.8	34.5																							
20-Aug	1	4	27	5	1	0	0	2	4	4	7	5	3	4	4	1	4	3	4	3	2	1	2	2	3.9	26.7																							
21-Aug	3	1	1	2	2	1	3	4	3	4	5	6	P	8	10	11	9	11	3	4	2	0	0	2	4.1	10.7																							
22-Aug	0	6	4	2	0	2	14	14	14	10	9	8	4	11	7	13	9	9	10	6	8	5	14	10	7.8	14.4																							
23-Aug	3	5	6	6	4	3	12	9	8	11	15	13	19	5	13	7	16	24	10	12	6	6	7	6	9.4	23.9																							
24-Aug	6	10	8	14	8	7	18	15	28	22	20	17	22	13	20	22	11	13	10	17	4	2	0	6	13.0	28.1																							
25-Aug	10	6	6	4	4	3	2	4	5	2	7	2	8	8	6	7	4	5	8	4	5	4	3	6	5.1	10.3																							
26-Aug	4	4	8	6	5	6	9	13	8	4	4	3	2	4	4	1	1	3	2	3	2	5	23	30	6.5	29.9																							
27-Aug	24	23	11	13	13	10	14	13	10	12	2	2	6	6	5	7	3	6	4	6	4	19	21	14	10.3	24.4																							
28-Aug	8	5	4	7	24	5	5	7	9	8	7	6	11	7	4	5	8	5	7	31	8	5	5	8	8.3	31.2																							
29-Aug	7	3	4	2	2	1	4	7	9	3	0	3	2	3	12	25	18	13	7	6	7	1	3	3	5.9	24.9																							
30-Aug	3	3	3	4	3	2	2	3	4	6	6	7	8	11	7	5	9	10	5	3	4	2	1	5	4.8	10.8																							
31-Aug	3	5	5	7	1	2	6	11	11	16	7	7	8	8	10	9	5	20	4	4	5	5	3	4	6.9	20.0																							
																								8.6	8.6	7.8	8.3	7.9	9.3	11.7	13.0	11.7	11.5	10.6	11.2	11.6	13.4	10.6	13.2	12.9	14.2	12.7	16.0	15.4	10.6	11.4	9.2	Diurnal Average	
																								37.2	37.9	26.7	38.5	32.0	34.5	33.0	45.5	34.6	31.3	34.5	27.2	46.0	74.4	31.9	69.1	38.3	40.4	40.0	50.6	53.6	38.9	59.1	33.5	Diurnal Maximum	

P - Power Failure

Hourly Maximums for PM_{2.5} at Beaverlodge August 2008



Pollutant Rose for PM_{2.5} at Beaverlodge August 2008



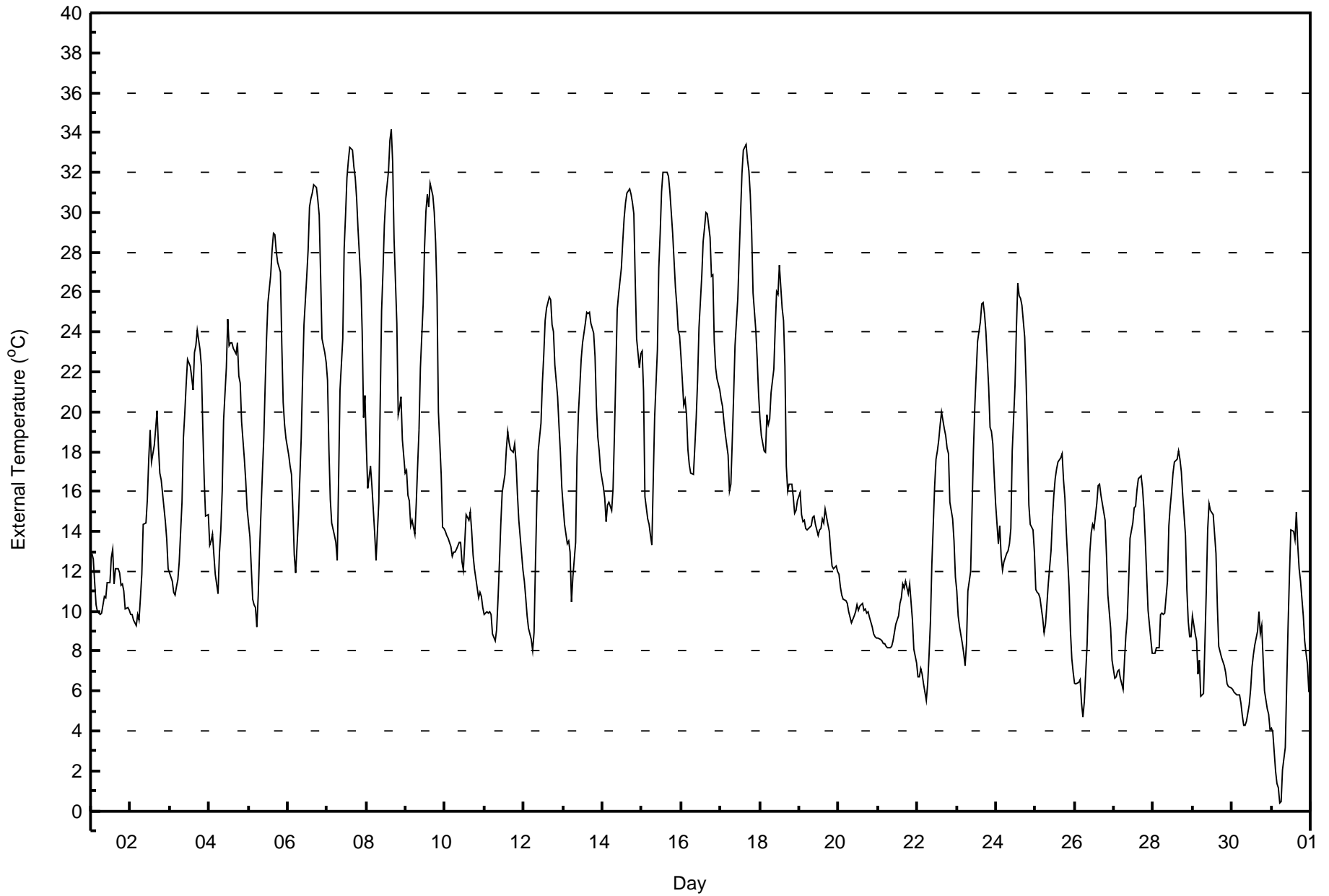
**Peace Airshed Zone Association
Summary of Hourly Averages**

**Beaverlodge - External Temperature (ET) - °C
August 1, 2008 to September 1, 2008**

Maximum Value: 34.1 °C on Aug 8 16:00		Maximum Daily Average: 24.7 °C on Aug 17		Hours in Service: 744																							
Minimum Value: 0 °C on Aug 31 06:00		Minimum Daily Average: 6.3 °C on Aug 30		Hours of Data: 744																							
Maximum Diurnal Average: 21.9 °C at hour 16		Minimum Diurnal Average: 10.5 °C at hour 6		Hours of Missing Data: 0																							
Monthly Average: 16.21 °C		Percentiles: P ₁ = 3.9 P ₁₀ = 8.0 Q ₁ = 10.6 Median = 14.8 Q ₃ = 21.1 P ₉₀ = 27.0 P ₉₉ = 32.2		Hours of Calibration: 0																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	13	13	11	10	10	10	10	10	11	11	11	11	13	13	11	12	12	12	11	11	11	10	10	10	11.2	13.1	
2-Aug	10	10	10	9	10	10	11	12	14	14	16	18	19	17	18	19	20	18	17	17	15	14	14	12	14.3	20.0	
3-Aug	12	12	11	11	11	12	13	15	19	20	21	23	22	22	21	23	23	24	23	22	19	17	15	15	17.7	24.1	
4-Aug	13	14	14	13	12	11	13	14	16	20	22	25	23	23	23	23	23	23	22	21	20	18	17	15	18.2	24.6	
5-Aug	14	14	11	10	10	9	11	13	17	19	21	24	25	27	28	29	29	28	27	27	23	20	19	19	19.8	29.0	
6-Aug	18	17	17	15	13	12	15	17	19	22	24	27	28	30	31	31	31	31	31	30	27	24	23	22	23.1	31.4	
7-Aug	22	18	16	14	14	13	13	17	21	24	28	30	32	33	33	33	32	32	31	29	27	24	20	21	23.9	33.2	
8-Aug	18	16	17	16	15	14	13	15	20	25	27	29	31	32	34	34	32	29	24	20	20	21	19	17	22.5	34.1	
9-Aug	17	16	16	14	15	14	15	17	19	22	25	28	30	31	30	31	31	30	28	26	20	17	14	14	21.7	31.4	
10-Aug	14	14	14	13	13	13	13	13	13	13	13	12	13	15	15	15	14	13	12	11	11	11	11	10	12.8	15.0	
11-Aug	10	10	10	10	10	9	9	9	11	12	14	16	17	18	19	18	18	18	18	18	16	15	14	12	13.7	19.0	
12-Aug	11	11	10	9	9	8	9	12	15	18	19	21	23	25	25	26	26	24	24	22	21	19	18	16	17.6	25.7	
13-Aug	15	14	13	13	13	10	12	13	18	20	21	23	23	24	25	25	25	24	24	23	20	19	18	17	18.9	25.0	
14-Aug	16	16	15	15	15	15	16	19	22	25	26	27	29	30	30	31	31	31	30	30	27	24	22	23	23.5	31.2	
15-Aug	23	21	16	15	14	14	13	17	20	23	27	29	31	32	32	32	32	31	30	29	26	25	24	24	24.2	32.0	
16-Aug	23	20	21	20	18	17	17	17	18	20	22	24	27	29	29	30	30	29	27	27	23	22	22	21	23.0	30.0	
17-Aug	21	20	19	19	18	16	16	19	21	23	26	28	30	32	33	33	33	32	31	29	26	24	23	21	24.7	33.4	
18-Aug	20	19	18	18	20	19	20	21	22	24	26	26	27	25	25	22	17	16	16	16	16	15	15	16	20.0	27.4	
19-Aug	16	15	14	15	14	14	14	14	15	15	14	14	14	14	15	14	15	14	14	13	12	12	12	12	14.0	15.9	
20-Aug	12	11	11	11	11	10	10	10	9	10	10	10	10	10	10	10	10	10	10	10	9	9	9	9	10.0	11.9	
21-Aug	9	9	8	8	8	8	8	8	8	9	9	9	10	10	11	11	11	12	11	11	10	10	8	7	9.4	11.5	
22-Aug	7	7	7	7	6	6	6	8	9	12	16	18	18	19	19	20	19	19	18	18	15	15	13	12	13.1	20.0	
23-Aug	11	10	9	8	8	7	8	11	12	15	18	20	22	24	25	25	26	25	24	21	19	19	18	17	16.8	25.5	
24-Aug	15	13	14	13	12	13	13	13	13	14	18	21	24	26	26	26	25	24	22	19	15	14	14	13	17.6	26.4	
25-Aug	11	11	11	11	10	9	9	10	11	13	15	16	17	17	17	18	18	17	16	14	11	9	8	7	12.7	17.9	
26-Aug	6	6	6	7	5	5	5	8	11	13	14	14	14	15	16	16	16	15	15	13	11	10	9	8	10.8	16.4	
27-Aug	7	7	7	7	7	6	8	9	10	12	14	14	15	15	16	17	17	16	15	14	12	10	9	8	11.2	16.8	
28-Aug	8	8	8	8	10	10	10	10	12	14	15	16	17	17	18	18	18	17	16	14	11	9	9	9	12.5	18.0	
29-Aug	10	9	9	7	8	6	6	8	11	14	15	15	15	14	13	10	8	8	7	7	7	6	6	6	9.4	15.4	
30-Aug	6	6	6	6	6	5	5	4	4	5	5	6	7	8	8	9	10	9	9	8	6	5	5	4	6.3	10.0	
31-Aug	4	4	2	1	1	0	0	2	3	6	9	12	14	14	14	15	13	12	11	10	9	8	7	6	7.5	15.0	
		13.3	12.5	11.9	11.4	11.1	10.5	11.0	12.5	14.4	16.3	18.2	19.6	20.7	21.4	21.6	21.9	21.5	20.7	19.9	18.7	16.6	15.3	14.3	13.6	Diurnal Average	
		23.0	21.0	20.6	19.8	19.8	19.4	19.7	20.9	22.1	25.1	28.2	29.9	31.7	32.6	33.6	34.1	32.7	32.1	30.9	29.9	26.8	25.3	24.1	23.8	Diurnal Maximum	

Hourly Averages for External Temperature at Beaverlodge

August 2008

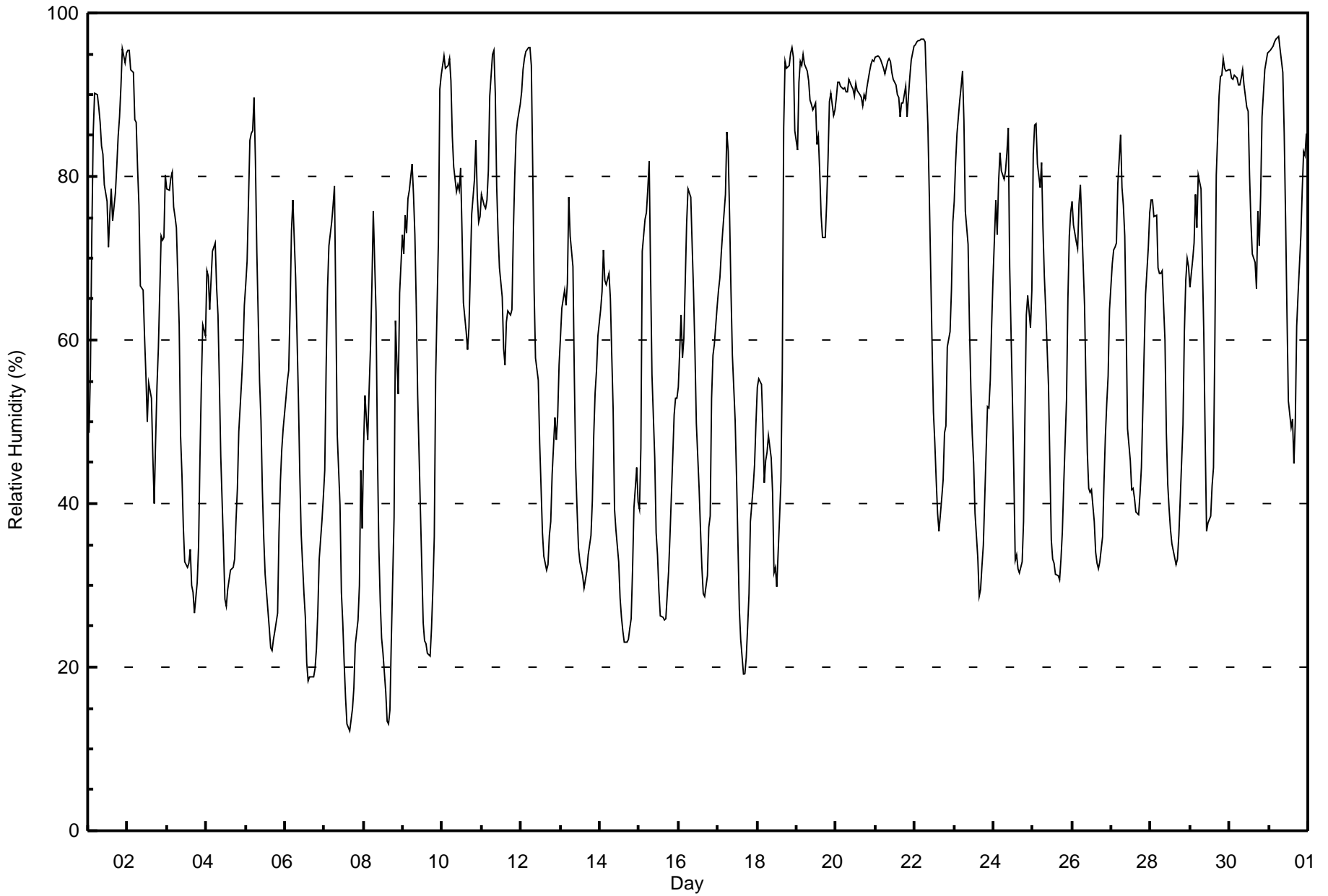


**Peace Airshed Zone Association
Summary of Hourly Averages**

**Beaverlodge - Relative Humidity (RH) - %
August 1, 2008 to September 1, 2008**

Maximum Value: 97.1 % on Aug 31 07:00																						Maximum Daily Average: 92.1 % on Aug 21																						Hours in Service: 744	
Minimum Value: 12 % on Aug 7 16:00																						Minimum Daily Average: 39.3 % on Aug 7																						Hours of Data: 744	
Maximum Diurnal Average: 82.3 % at hour 6																						Minimum Diurnal Average: 40.8 % at hour 16																						Hours of Missing Data: 0	
Monthly Average: 61.89 %																						Percentiles: P ₁ = 16.3 P ₁₀ = 29.8 Q ₁ = 41.7 Median = 64.5 Q ₃ = 81.6 P ₉₀ = 92.5 P ₉₉ = 96.5																						Hours of Calibration: 0	
																																												Percent Operational Time: 100.0	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																					
1-Aug	49	56	73	85	90	90	88	87	84	83	79	77	71	75	78	75	78	81	85	87	91	96	94	95	81.2	95.6																			
2-Aug	95	95	93	93	87	87	81	76	67	66	61	56	50	55	53	46	40	48	54	59	73	72	72	80	69.1	95.4																			
3-Aug	78	78	80	81	76	75	74	62	48	44	37	33	32	33	34	30	29	27	30	35	46	54	62	60	51.6	80.5																			
4-Aug	68	68	64	67	71	72	67	63	55	46	35	28	27	30	31	32	32	33	38	42	49	55	58	64	49.8	71.9																			
5-Aug	67	70	84	85	86	90	82	71	55	50	42	36	31	27	25	22	22	23	24	27	36	43	47	49	49.7	89.7																			
6-Aug	53	55	56	64	73	77	68	61	53	44	36	29	26	21	18	19	19	19	20	22	27	33	38	41	40.4	77.1																			
7-Aug	44	57	66	72	74	76	79	64	48	40	29	25	21	16	13	12	14	15	17	23	26	30	44	37	39.3	78.7																			
8-Aug	47	53	48	54	59	67	76	63	46	35	28	24	22	17	13	13	15	23	38	62	57	53	66	73	43.9	75.8																			
9-Aug	70	75	73	77	78	81	78	73	64	53	39	32	25	23	23	22	21	25	30	36	56	72	91	92	54.6	92.4																			
10-Aug	94	95	93	93	94	92	85	81	78	79	78	81	73	65	61	59	62	68	75	80	84	78	74	75	79.1	94.8																			
11-Aug	78	76	76	77	81	90	95	95	90	79	73	69	65	59	57	62	64	63	64	73	80	85	87	89	76.1	95.5																			
12-Aug	90	93	94	95	96	96	94	81	66	58	55	48	42	36	34	32	33	36	38	44	51	48	51	57	61.1	95.8																			
13-Aug	60	64	66	64	67	77	73	69	56	44	39	35	33	31	30	31	32	34	36	40	48	53	56	60	50.0	77.5																			
14-Aug	64	66	71	67	67	68	65	58	52	39	37	33	28	26	24	23	23	23	25	26	32	39	44	40	43.4	70.9																			
15-Aug	39	47	71	75	76	78	82	68	56	46	36	34	29	26	26	26	26	29	32	36	46	51	53	53	47.5	81.9																			
16-Aug	54	63	58	60	67	74	78	77	71	66	59	50	42	37	32	29	29	31	37	38	53	58	59	64	53.7	78.4																			
17-Aug	66	68	71	73	78	86	83	75	66	58	50	43	35	27	23	19	19	21	25	29	38	42	45	50	49.6	85.5																			
18-Aug	54	55	55	50	42	45	46	48	46	41	32	32	30	38	43	56	86	94	93	94	95	96	95	86	60.5	95.8																			
19-Aug	83	92	94	94	95	94	93	92	89	89	88	89	84	85	80	75	73	72	77	82	89	90	88	88	86.4	94.9																			
20-Aug	90	92	92	91	91	91	90	90	92	91	91	90	91	90	90	90	89	90	89	91	93	94	94	94	91.0	94.3																			
21-Aug	95	95	95	94	94	93	93	94	94	94	93	92	91	90	90	87	89	89	91	87	90	92	94	96	92.1	96.0																			
22-Aug	96	96	97	97	97	97	96	91	86	78	60	51	47	43	39	37	41	43	49	49	59	61	66	74	68.7	96.8																			
23-Aug	77	82	85	89	91	93	87	76	72	62	54	49	45	39	33	29	29	32	35	46	52	52	55	62	59.4	92.9																			
24-Aug	68	77	73	79	83	81	80	81	83	86	69	53	44	33	34	32	31	33	38	51	63	65	61	66	60.9	85.9																			
25-Aug	83	86	86	82	79	82	74	68	64	54	45	36	33	33	31	31	31	33	37	42	53	65	73	76	57.3	86.4																			
26-Aug	77	74	72	71	77	79	74	64	55	46	42	41	42	38	34	33	32	33	36	42	48	52	56	64	53.4	78.9																			
27-Aug	69	71	71	72	79	85	79	77	73	62	49	45	42	42	41	39	39	41	44	51	59	66	71	76	60.1	85.1																			
28-Aug	77	77	75	75	69	68	68	69	60	49	42	39	37	35	33	33	33	36	40	50	61	67	70	69	55.6	77.1																			
29-Aug	67	70	72	78	74	80	78	69	61	48	37	38	38	42	44	60	80	90	92	92	94	93	93	93	70.2	94.4																			
30-Aug	93	92	92	92	92	91	91	92	93	91	89	88	80	74	70	69	66	76	72	78	87	93	94	95	85.5	95.1																			
31-Aug	95	95	96	97	97	97	97	96	93	85	75	63	53	49	50	45	50	62	66	73	78	83	82	85	77.6	97.1																			
																								Diurnal Average																					
																								Diurnal Maximum																					

Hourly Averages for Relative Humidity at Beaverlodge August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

Beaverlodge
August 1, 2008 to September 1, 2008
WS (km/h), WD (deg)

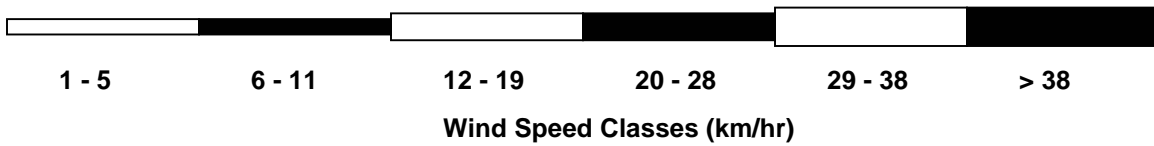
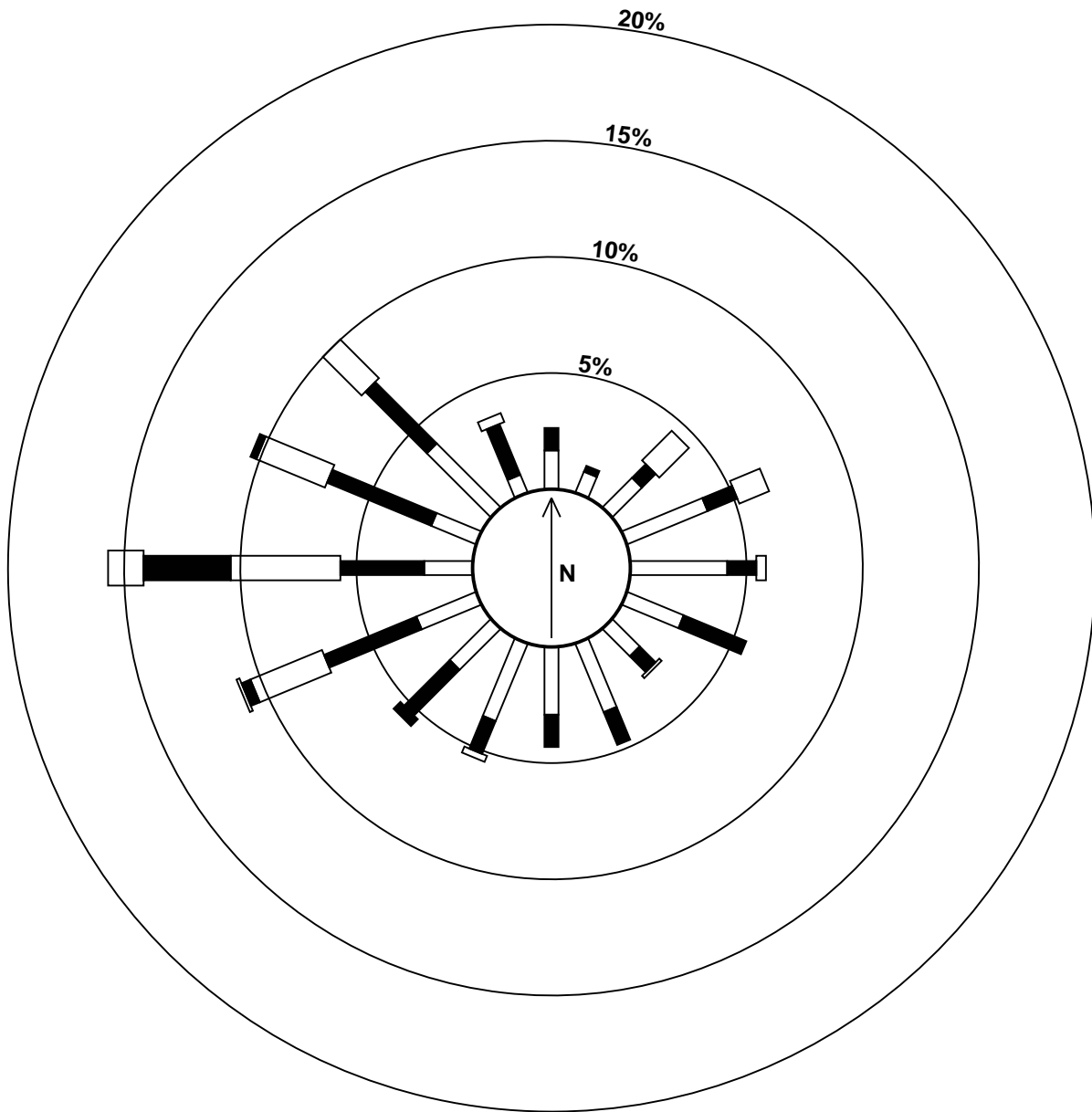
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	2	12	10	7	5	7	6	7	7	9	13	11	11	11	8	11	11	13	12	7	8	13	12	8	7.6	12.9
Dir	207	206	214	202	236	304	308	308	289	299	293	287	284	284	351	331	285	259	254	257	275	286	287	297	278.6	293.1
2 Spd	8	8	6	5	8	7	8	10	14	14	16	15	14	13	11	13	11	3	4	1	3	2	7	6	7.5	15.6
Dir	285	274	253	266	297	292	297	306	312	308	309	318	322	330	330	319	2	294	350	226	196	261	236	227	305.0	309.3
3 Spd	0	1	1	0	1	1	2	2	8	11	13	14	13	13	13	12	14	12	15	13	7	3	1	3	6.2	14.5
Dir	259	112	175	181	345	107	54	248	301	311	312	317	313	312	302	284	296	280	268	255	257	227	104	244	291.9	268.2
4 Spd	2	3	5	2	2	3	2	3	4	2	13	14	10	14	13	12	14	14	11	6	6	7	2	2	4.5	14.3
Dir	82	156	205	158	110	90	129	173	194	137	266	273	294	288	306	273	261	276	271	277	324	64	278	75	274.4	273.5
5 Spd	3	6	2	3	1	2	3	3	2	5	6	7	7	7	4	3	2	5	7	6	6	7	7	7	3.2	7.3
Dir	65	40	242	73	95	149	96	168	153	175	180	167	189	210	175	220	119	178	166	150	106	97	108	108	145.7	189.1
6 Spd	7	7	5	1	3	0	0	1	3	2	4	6	8	4	8	8	5	5	8	6	5	7	7	7	3.9	8.4
Dir	109	98	100	211	258	63	120	147	207	191	177	161	183	181	156	157	158	142	150	119	97	98	96	96	138.0	156.3
7 Spd	7	3	3	4	6	4	5	5	1	4	3	5	5	7	8	10	8	7	7	4	2	2	3	2	2.9	10.0
Dir	93	209	242	47	341	46	309	301	126	264	308	292	299	282	295	277	293	317	305	221	306	67	87	13	303.2	277.1
8 Spd	1	3	2	2	3	4	2	3	2	1	1	3	4	4	0	5	4	9	16	9	15	12	5	6	0.8	15.5
Dir	10	87	87	88	37	341	25	193	77	111	255	140	183	180	80	324	275	253	206	174	43	43	184	115	131.8	205.8
9 Spd	2	2	4	3	0	1	1	2	3	6	5	2	4	1	4	3	5	9	9	10	19	20	8	3	1.5	19.7
Dir	105	81	68	152	148	69	245	113	191	248	235	284	335	331	115	52	128	117	129	234	264	296	288	198	239.0	295.7
10 Spd	4	7	7	5	5	7	6	8	6	8	15	11	14	18	20	18	18	19	10	10	7	10	9	10	10.0	20.1
Dir	241	288	283	254	234	236	233	242	262	241	239	247	248	241	235	241	259	258	252	238	233	224	195	200	242.7	235.2
11 Spd	9	9	10	8	7	6	5	3	4	8	7	9	13	12	14	17	18	14	13	17	10	7	7	8	7.2	17.9
Dir	183	186	204	209	219	204	190	206	307	320	326	309	303	303	307	303	302	312	291	288	283	271	267	254	279.8	301.7
12 Spd	5	1	1	2	3	1	2	1	2	2	3	2	3	3	6	3	3	5	5	2	7	8	7	5	2.0	7.9
Dir	255	92	80	71	66	65	68	127	286	270	194	171	253	260	277	322	351	325	324	325	288	313	322	324	304.9	313.4
13 Spd	6	6	5	6	5	1	2	2	6	16	19	19	18	18	18	20	19	19	19	16	12	8	8	6	10.8	20.4
Dir	343	317	315	306	305	285	92	152	258	282	287	285	272	281	281	283	277	279	280	277	277	279	259	258	282.0	282.9
14 Spd	3	2	1	4	5	2	2	4	11	22	20	19	18	16	15	14	13	11	10	5	4	5	5	6	6.7	22.3
Dir	241	214	94	222	226	70	95	213	255	273	269	273	275	289	297	297	295	291	295	295	1	44	75	58	282.2	273.2
15 Spd	6	4	2	3	1	1	1	3	4	4	1	4	4	5	7	9	10	11	8	6	4	3	8	7	1.9	10.8
Dir	52	51	275	44	6	296	349	325	305	306	114	147	123	132	124	111	121	142	146	144	92	76	318	331	102.5	141.5
16 Spd	5	1	5	5	9	13	8	14	9	10	8	6	3	3	4	6	5	6	5	4	8	10	11	11	3.7	14.1
Dir	317	259	312	312	321	328	345	328	335	324	332	325	360	21	46	40	27	69	70	70	98	106	107	108	7.3	327.8
17 Spd	11	11	9	7	5	2	2	2	3	3	3	4	6	5	5	6	7	11	10	6	3	3	1	2	4.5	10.8
Dir	110	108	114	114	151	232	38	122	219	177	176	163	157	135	136	115	125	133	149	158	148	74	29	87	131.3	133.3
18 Spd	3	3	2	2	6	4	2	2	8	8	17	12	7	6	12	9	9	3	3	7	7	2	3	4	4.1	17.1
Dir	74	95	122	253	253	140	78	234	258	232	253	259	276	271	294	281	278	191	241	214	216	104	311	329	256.9	253.1
19 Spd	5	3	1	2	3	2	2	4	1	2	6	6	7	7	8	8	9	7	7	8	11	10	5	3	3.3	10.7
Dir	350	225	95	80	201	325	140	284	269	284	319	300	314	318	352	347	357	6	28	23	48	64	88	59	0.7	48.5
20 Spd	4	11	11	10	9	12	13	12	14	14	14	13	12	11	14	13	11	12	12	13	14	15	13	15	11.9	15.1
Dir	55	56	60	64	76	77	74	85	70	74	87	90	72	67	60	60	62	65	65	59	56	54	48	46	66.0	53.9
21 Spd	14	14	12	14	16	16	13	4	5	6	7	7	7	5	6	6	5	7	7	5	4	4	1	3	6.5	16.4
Dir	43	38	36	40	41	41	36	1	346	333	347	347	352	3	343	333	318	323	336	350	310	310	93	163	12.7	41.3
22 Spd	2	3	3	4	3	4	5	7	9	7	17	22	18	20	21	19	14	10	7	10	4	3	2	1	7.5	21.5
Dir	101	111	152	167	152	191	192	214	216	204	245	255	269	269	258	264	261	261	267	272	252	267	236	168	248.8	255.4

Peace Airshed Zone Association
Summary of Hourly Averages

Beaverlodge
 August 1, 2008 to September 1, 2008
 WS (km/h), WD (deg)

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	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	2	2	3	3	3	3	2	2	4	5	9	9	9	8	10	12	11	7	9	8	7	3	4.7	11.8
Dir	77	86	108	152	116	108	141	205	202	167	169	157	174	170	189	178	158	131	122	102	100	110	161	141.5	131.2	
24 Spd	3	2	2	1	1	0	2	3	2	4	3	4	5	7	10	14	16	20	20	11	15	15	13	14	5.1	20.2
Dir	94	85	99	103	18	183	172	286	335	3	67	178	194	206	211	241	240	225	221	288	318	293	268	271	250.0	221.0
25 Spd	8	8	11	12	9	9	17	13	12	16	25	29	30	29	25	20	20	24	21	19	16	12	9	8	16.4	30.4
Dir	253	227	262	258	237	242	257	257	244	244	259	261	257	273	278	267	271	263	275	277	262	257	263	240	261.2	257.0
26 Spd	11	6	5	4	7	7	5	6	13	23	30	28	27	27	29	29	30	25	21	13	7	8	3	2	14.7	29.5
Dir	258	236	245	206	227	231	241	246	254	262	260	266	260	264	268	266	261	270	268	271	307	299	301	177	262.4	259.8
27 Spd	1	4	1	1	2	0	4	2	3	8	17	17	21	22	22	27	29	25	24	17	17	10	8	3	11.1	28.7
Dir	188	84	107	67	252	94	289	197	233	254	259	263	274	271	273	269	270	270	268	261	259	255	243	221	264.8	269.6
28 Spd	3	4	10	12	20	17	16	15	18	23	28	27	30	30	29	30	25	25	15	11	9	4	5	5	17.6	30.3
Dir	201	196	239	244	244	249	255	255	267	273	281	278	277	269	272	268	271	275	267	257	262	256	238	229	264.9	270.7
29 Spd	6	3	7	6	9	5	4	2	7	14	13	6	1	8	6	5	3	6	7	4	9	8	4	4	4.2	13.7
Dir	280	228	243	252	276	258	82	157	233	264	285	290	263	44	336	119	199	221	234	260	284	300	284	270	267.5	264.3
30 Spd	5	5	6	7	10	12	12	12	8	9	8	6	4	5	6	8	7	4	5	7	2	2	2	3	5.1	12.1
Dir	281	282	294	300	308	319	319	319	327	310	302	296	301	305	300	271	273	47	203	245	187	77	81	67	302.2	319.2
31 Spd	3	2	1	2	1	1	2	1	5	6	6	4	4	6	8	5	5	6	7	4	1	2	6	2	1.4	8.1
Dir	61	68	107	65	89	62	50	326	324	322	353	316	309	304	278	314	32	73	110	95	144	212	256	248	343.2	277.9
Spd	0.3	0.7	1.0	0.8	1.9	1.3	1.2	2.4	3.9	6.1	8.1	7.7	7.5	7.8	7.6	7.8	7.4	6.1	5.7	4.6	3.0	2.0	1.4	0.7	Diurnal Average	
Dir	16.3	130.4	229.9	236.9	270.5	292.2	302.9	269.0	273.1	276.7	274.2	273.1	272.8	276.3	280.7	278.2	275.6	266.0	254.9	259.3	287.6	313.1	265.7	231.6	Diurnal Maximum	
Spd	14.2	13.8	11.8	13.7	19.7	17.4	16.7	14.6	18.3	23.5	29.5	28.9	30.4	29.7	30.3	29.4	30.3	25.4	25.4	19.4	19.1	19.7	12.8	14.5	Diurnal Maximum	
Dir	42.8	38.4	36.3	40.3	244.5	249.5	257.4	255.0	267.2	272.9	259.8	260.6	257.0	269.0	272.2	266.2	270.7	269.8	267.3	276.9	263.7	295.7	268.4	46.0	Diurnal Maximum	
Maximum Speed Value: 30 km/h on Aug 25 13:00																		Minimum Speed Value: 0 km/h on Aug 3 01:00						Hours in Service:		744
Maximum Daily Speed Average: 17.6 km/h on Aug 28																		Minimum Daily Speed Average: 0.8 km/h on Aug 12						Hours of Data:		744
Maximum Diurnal Speed Average: 8.1 km/h at hour 11																		Minimum Diurnal Speed Average: 0.3 km/h at hour 1						Hours of Missing Data:		0
Monthly Average Velocity: 3.89 km/h 273.18 deg																		Speed Percentiles: P ₁ = 0.5 P ₁₀ = 1.9 Q ₁ = 3.3 Median = 6.6 Q ₃ = 11.2 P ₉₀ = 16.6 P ₉₉ = 29.3						Percent Operational Time:		100.0
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Percentage 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	2.15	2.02	0.13	0.00	0.00	0.00	4.30																			
NorthEast	3.63	2.15	2.55	0.00	0.00	0.00	8.33																			
East	8.33	3.76	1.21	0.00	0.00	0.00	13.31																			
SouthEast	4.57	3.49	0.13	0.00	0.00	0.00	8.20																			
South	6.18	2.69	0.00	0.00	0.00	0.00	8.87																			
SouthWest	5.11	5.51	1.61	0.54	0.00	0.00	12.77																			
West	4.30	7.93	8.33	4.57	1.88	0.00	27.02																			
NorthWest	4.17	8.33	4.57	0.13	0.00	0.00	17.20																			
Total	38.44	35.89	18.55	5.24	1.88	0.00	100.00																			

Wind Rose for WS at Beaverlodge August 2008



Peace Airshed Zone Association
Summary of Hourly Averages - Wind Speed (Scalar)

Beaverlodge - Wind Speed (WS) - km/h
August 1, 2008 to September 1, 2008

Maximum Speed: 31 km/h on Aug 28 15:00	Maximum Daily Speed Average: 18.4 km/h on Aug 28	Hours in Service: 744
Minimum Speed: 1 km/h on Aug 31 05:00	Minimum Daily Speed Average: 4.1 km/h on Aug 12	Hours of Data: 744
Maximum Diurnal Speed Average: 12.8 km/h at hour 16	Minimum Diurnal Speed Average: 5.2 km/h at hour 4	Hours of Missing Data: 0
Monthly Average Speed: 8.61 km/h	Percentiles: P ₁ = 1.3 P ₁₀ = 2.8 Q ₁ = 4.2 Median = 6.9 Q ₃ = 11.4 P ₉₀ = 17.1 P ₉₉ = 29.7	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-Aug	3	12	10	7	6	7	6	7	7	9	13	11	11	12	9	12	11	13	12	7	8	13	12	8	9.5	13.0
2-Aug	8	8	7	5	8	7	9	10	14	14	16	15	14	14	11	14	15	8	6	2	3	3	7	6	9.4	15.7
3-Aug	4	2	1	1	3	2	2	3	8	11	14	15	13	13	13	12	14	13	15	13	7	3	1	4	7.8	14.9
4-Aug	2	3	5	2	2	3	2	3	4	3	13	15	11	14	13	14	14	14	11	6	7	8	4	3	7.4	14.8
5-Aug	3	7	2	3	2	2	4	3	3	6	7	7	8	7	6	6	5	6	7	6	6	7	7	7	5.3	8.0
6-Aug	7	7	6	1	3	1	1	2	3	3	4	7	8	5	9	9	6	6	8	6	5	7	7	7	5.3	9.3
7-Aug	7	5	5	6	7	4	7	5	2	4	4	6	7	9	10	11	9	7	7	4	3	3	4	4	5.9	10.8
8-Aug	5	4	3	2	3	8	5	3	3	3	4	4	6	5	5	6	5	10	17	13	16	12	8	6	6.5	16.6
9-Aug	2	4	5	4	3	4	2	3	4	6	5	5	5	5	7	5	7	10	9	16	20	20	9	4	6.7	20.1
10-Aug	5	7	8	6	5	7	7	8	6	8	15	11	14	18	20	18	18	19	10	11	7	10	9	10	10.7	20.3
11-Aug	9	9	10	8	7	6	5	4	4	8	8	10	13	13	15	17	18	15	13	18	10	7	8	8	10.0	18.2
12-Aug	5	1	1	2	3	1	2	1	3	3	4	5	5	5	7	6	5	6	5	3	7	8	7	5	4.1	8.0
13-Aug	6	6	6	6	5	4	2	3	8	16	20	19	18	19	19	21	20	19	19	16	12	8	8	6	11.9	20.7
14-Aug	3	3	2	4	5	2	4	4	11	22	20	19	18	17	15	14	13	11	10	5	4	6	6	6	9.4	22.5
15-Aug	6	4	4	3	2	2	3	3	4	4	3	5	5	5	7	10	11	11	8	6	5	4	8	7	5.4	10.9
16-Aug	6	4	5	5	9	13	8	14	10	10	9	7	5	5	6	7	6	6	5	4	8	10	11	11	7.7	14.2
17-Aug	11	11	9	7	5	3	5	4	3	4	4	5	7	6	6	7	8	11	10	6	3	3	3	3	6.0	11.1
18-Aug	3	4	3	5	6	4	2	3	8	10	17	12	7	6	12	10	11	4	4	7	7	3	4	5	6.5	17.3
19-Aug	6	3	4	3	3	3	3	4	3	2	6	7	7	7	8	8	9	8	7	8	11	10	5	3	5.8	10.7
20-Aug	4	11	11	10	9	12	13	12	15	14	14	13	13	11	14	13	11	12	13	13	14	15	13	15	12.3	15.1
21-Aug	14	14	12	14	16	16	13	4	5	6	7	7	7	6	7	6	6	7	7	5	4	4	2	3	8.1	16.4
22-Aug	2	3	3	4	3	4	5	7	9	8	17	22	18	20	21	20	15	10	7	10	4	3	4	2	9.2	21.8
23-Aug	3	3	3	3	3	3	3	3	3	3	5	6	9	10	9	9	10	12	11	7	9	8	8	4	6.1	12.1
24-Aug	4	4	4	3	3	2	2	3	4	7	5	5	5	8	10	14	16	20	20	16	15	15	13	14	8.8	20.3
25-Aug	8	8	11	12	9	9	17	13	12	16	26	29	31	29	26	20	20	24	21	19	16	12	9	8	17.0	30.6
26-Aug	11	6	5	4	7	7	5	6	13	23	30	28	27	27	29	30	30	26	22	13	7	8	5	4	15.6	29.8
27-Aug	4	4	2	1	2	2	4	2	4	8	17	17	21	22	22	27	29	26	24	17	17	10	8	3	12.3	28.8
28-Aug	3	4	10	12	20	17	16	15	18	24	28	28	28	30	31	30	31	25	26	15	11	9	4	5	18.4	30.7
29-Aug	6	3	7	7	10	8	4	4	7	14	13	7	3	8	8	7	5	6	8	5	9	8	4	5	6.8	14.0
30-Aug	5	5	6	7	10	12	12	12	9	9	9	6	5	6	7	8	8	5	6	7	2	2	2	3	6.8	12.2
31-Aug	3	2	1	2	1	1	2	2	5	6	7	5	5	7	9	8	6	7	7	4	3	2	6	2	4.2	8.7

5.4	5.5	5.4	5.2	5.8	5.7	5.6	5.5	6.8	9.3	11.7	11.5	11.4	11.9	12.6	12.8	12.6	12.2	11.4	9.3	8.4	7.8	6.6	5.8	Diurnal Average
14.2	13.8	11.9	13.7	19.8	17.5	16.9	14.7	18.3	23.7	29.8	29.0	30.6	30.0	30.7	29.7	30.6	25.6	25.6	19.5	19.5	20.1	12.9	14.5	Diurnal Maximum

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

**Peace Airshed Zone Association
Summary of Hourly Standard Deviations**

**Beaverlodge - Wind Direction (WD) - deg
August 1, 2008 to September 1, 2008**

Maximum Value: 94.1 deg on Aug 8 11:00																								Hours in Service:	744
Minimum Value: 2.9 deg on Aug 17 00:00																								Hours of Data:	744
Percentiles: P ₁ = 3.5 P ₁₀ = 5.9 Q ₁ = 9.1 Median = 16.0 Q ₃ = 38.9 P ₉₀ = 62.4 P ₉₉ = 90.1																								Hours of Missing Data:	0
																								Hours of Calibration:	0
																								Percent Operational Time:	100.0
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	48	10	7	11	32	6	9	6	9	9	5	6	10	16	31	8	10	7	4	9	7	4	3	10	48.1
2-Aug	8	13	12	14	6	5	6	6	5	5	7	12	16	23	10	12	39	68	54	58	43	75	40	10	75.3
3-Aug	85	54	46	76	69	58	47	57	14	12	10	15	14	12	17	13	12	16	8	4	6	17	69	52	85.4
4-Aug	42	41	9	26	16	22	29	25	15	58	9	16	18	11	11	25	15	8	6	9	37	17	81	75	81.5
5-Aug	11	36	52	13	70	32	40	24	41	18	20	27	29	41	65	74	85	39	19	11	9	4	3	3	85.4
6-Aug	5	4	39	33	13	84	57	55	32	49	32	22	19	47	30	34	45	46	22	6	9	6	6	6	84.0
7-Aug	11	62	63	60	36	84	61	32	76	39	53	26	44	46	40	23	28	17	9	32	66	34	33	52	83.8
8-Aug	85	44	21	31	52	64	63	20	29	84	94	64	48	46	92	36	49	13	29	75	11	6	56	24	94.1
9-Aug	52	55	32	42	76	90	80	52	24	18	34	68	48	93	54	65	46	32	12	55	12	11	27	47	93.2
10-Aug	28	10	19	20	12	9	10	8	11	19	6	8	9	7	7	9	6	9	10	18	23	7	10	5	28.4
11-Aug	6	9	11	11	12	7	15	27	26	15	17	18	11	14	11	12	11	11	16	7	7	6	9	5	27.3
12-Aug	10	54	38	29	11	48	57	54	46	70	52	67	64	67	45	80	68	40	23	19	9	9	10	21	79.6
13-Aug	19	12	27	20	12	91	32	37	47	11	10	11	14	13	12	9	9	12	7	7	5	6	9	9	90.7
14-Aug	28	16	37	27	18	27	63	29	10	6	8	8	14	15	14	15	12	16	9	10	39	11	13	8	63.1
15-Aug	6	47	57	28	77	85	59	38	14	20	84	42	50	41	27	23	17	8	5	11	27	39	8	9	85.0
16-Aug	19	93	23	9	5	7	16	6	14	19	22	34	65	74	65	36	45	22	10	11	10	4	4	3	93.5
17-Aug	5	4	6	5	18	55	67	65	33	36	41	53	29	42	59	39	28	13	6	16	32	28	64	34	67.0
18-Aug	18	39	39	88	17	49	44	80	10	33	10	10	23	23	11	19	33	69	24	16	15	49	48	26	87.9
19-Aug	40	39	89	62	21	68	76	31	80	49	12	15	10	11	12	9	14	13	10	9	7	12	20	14	89.1
20-Aug	10	7	4	6	9	7	7	10	9	11	10	10	7	7	7	6	11	7	6	7	5	4	4	3	11.3
21-Aug	4	4	5	4	4	3	5	27	13	9	8	11	17	19	13	21	29	16	11	16	12	8	92	20	92.3
22-Aug	29	20	15	16	13	11	48	14	11	28	15	9	9	9	10	12	10	8	7	8	32	19	64	62	64.4
23-Aug	40	44	27	30	27	22	28	29	37	49	26	35	16	18	18	22	18	12	5	11	4	5	9	49	49.1
24-Aug	56	78	59	63	70	79	36	25	62	51	61	24	17	24	15	10	15	8	6	49	8	6	8	13	79.4
25-Aug	20	20	9	14	11	8	9	8	7	11	10	6	6	11	9	9	11	9	7	5	6	5	7	9	20.4
26-Aug	3	25	39	41	30	5	12	7	8	8	7	9	7	7	8	8	7	9	7	6	13	7	70	69	69.7
27-Aug	80	15	64	47	47	84	14	27	23	17	11	12	11	8	8	8	6	7	4	6	5	3	10	18	83.8
28-Aug	25	32	6	7	5	5	4	5	4	8	7	6	7	8	9	9	8	8	7	4	5	8	51	19	51.5
29-Aug	19	33	21	43	41	79	20	58	13	10	16	30	75	15	44	50	55	22	16	11	10	5	12	12	79.1
30-Aug	18	10	11	5	5	7	5	5	10	7	11	17	38	23	25	13	30	32	31	12	41	9	14	13	41.1
31-Aug	8	33	73	11	49	22	26	71	14	12	28	59	47	27	22	51	28	40	11	7	60	32	8	68	72.6
85.4	93.5	89.1	87.9	76.8	90.7	80.4	80.2	80.1	83.9	94.1	68.3	74.8	93.2	91.9	79.6	85.4	69.3	54.2	75.0	65.9	75.3	92.3	74.6		

PASZA

Portable – Spirit River Station

Monthly Summary Tables, Graphs and
Roses

**Peace Airshed Zone Association
Summary of Hourly Averages**

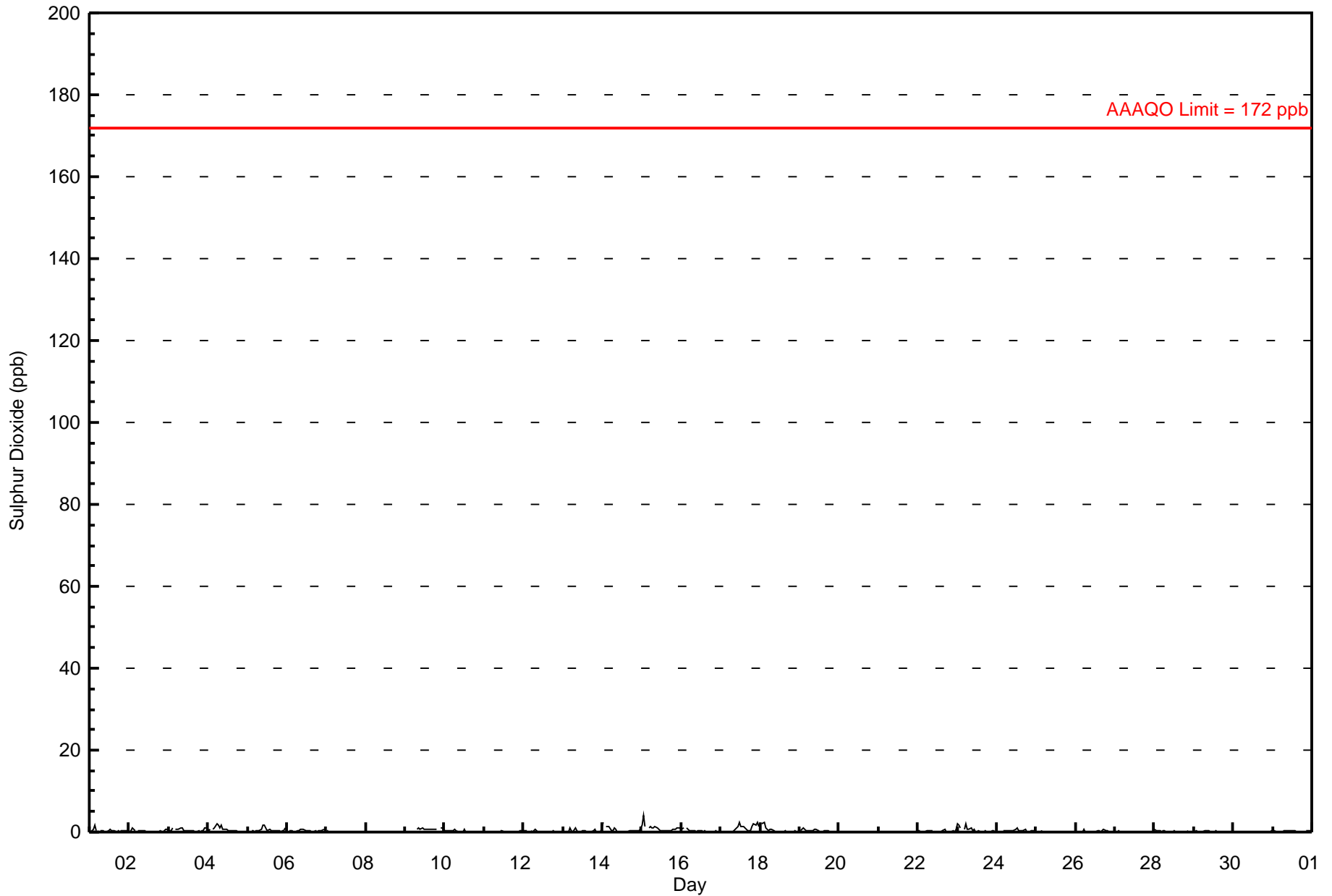
**Portable-Spirit River - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 3.9 ppb on Aug 15 02:00	Maximum Daily Average: 0.9 ppb on Aug 15
Minimum Value: 0 ppb on Aug 2 17:00	Hours of Data: 630
Maximum Diurnal Average: 0.6 ppb at hour 2	Hours of Missing Data: 114
Monthly Average: 0.32 ppb	Hours of Calibration: 42
Minimum Daily Average: 0.0 ppb on Aug 30	Percent Operational Time: 90.3
Minimum Diurnal Average: 0.2 ppb at hour 19	
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.2 Q ₃ = 0.4 P ₉₀ = 0.8 P ₉₉ = 1.9	

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	0	0	1	2	0	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8	
2-Aug	0	0	1	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.3	0.9
3-Aug	0	0	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.5	1.1
4-Aug	0	1	A	1	1	2	2	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.6	2.1
5-Aug	0	A	0	0	0	0	0	0	1	2	2	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0.5	1.7
6-Aug	A	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	A	0.3	0.8	
7-Aug	1	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.5	
8-Aug	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-Aug	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	--	1.0
10-Aug	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	N	N	N	N	N	N	N	N	N	--	0.6	
11-Aug	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	0.2	
12-Aug	0	0	0	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.6	
13-Aug	0	0	A	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0.2	1.2	
14-Aug	2	A	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0.5	2.3	
15-Aug	2	4	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	0.9	3.9	
16-Aug	1	1	A	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.9	
17-Aug	0	A	0	0	0	0	0	0	0	1	1	2	1	1	1	1	0	0	0	1	2	2	2	1	0.9	2.4	
18-Aug	A	2	2	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4	2.3	
19-Aug	0	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.3	0.9	
20-Aug	0	0	0	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	
21-Aug	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	
22-Aug	0	0	A	0	0	0	0	0	0	0	0	C	C	C	A	0	0	1	0	0	0	0	0	1	0.3	0.8	
23-Aug	2	2	1	A	1	2	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.0	
24-Aug	0	0	A	A	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0.3	1.0	
25-Aug	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	0.4	
26-Aug	A	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	A	0.2	0.8	
27-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0.0	0.2	
28-Aug	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.2	0.6	
29-Aug	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.1	0.5	
30-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0.0	0.2	
31-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0	0.2	0.5	

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

Hourly Averages for SO₂ at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

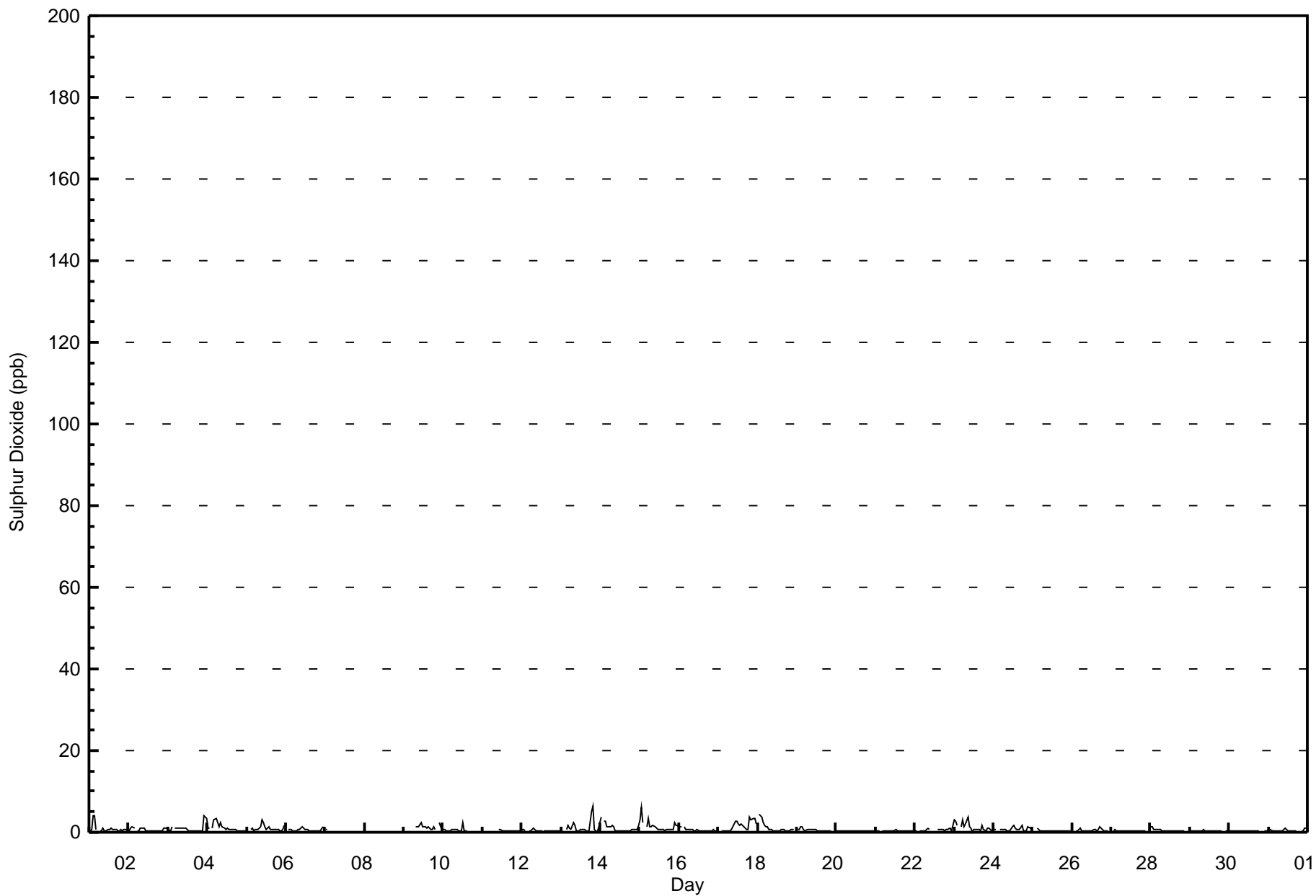
**Portable-Spirit River - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 6.6 ppb on Aug 13 20:00	Maximum Daily Average: 1.6 ppb on Aug 15	Hours in Service: 744
Minimum Value: 0 ppb on Aug 23 12:00	Minimum Daily Average: 0.2 ppb on Aug 30	Hours of Data: 630
Maximum Diurnal Average: 1.2 ppb at hour 3	Minimum Diurnal Average: 0.5 ppb at hour 17	Hours of Missing Data: 114
Monthly Average: 0.74 ppb	Percentiles: P ₁ = 0.2 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.5 Q ₃ = 0.8 P ₉₀ = 1.4 P ₉₉ = 3.9	Hours of Calibration: 42
		Percent Operational Time: 90.3

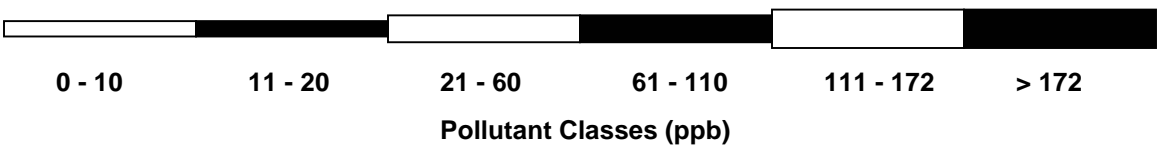
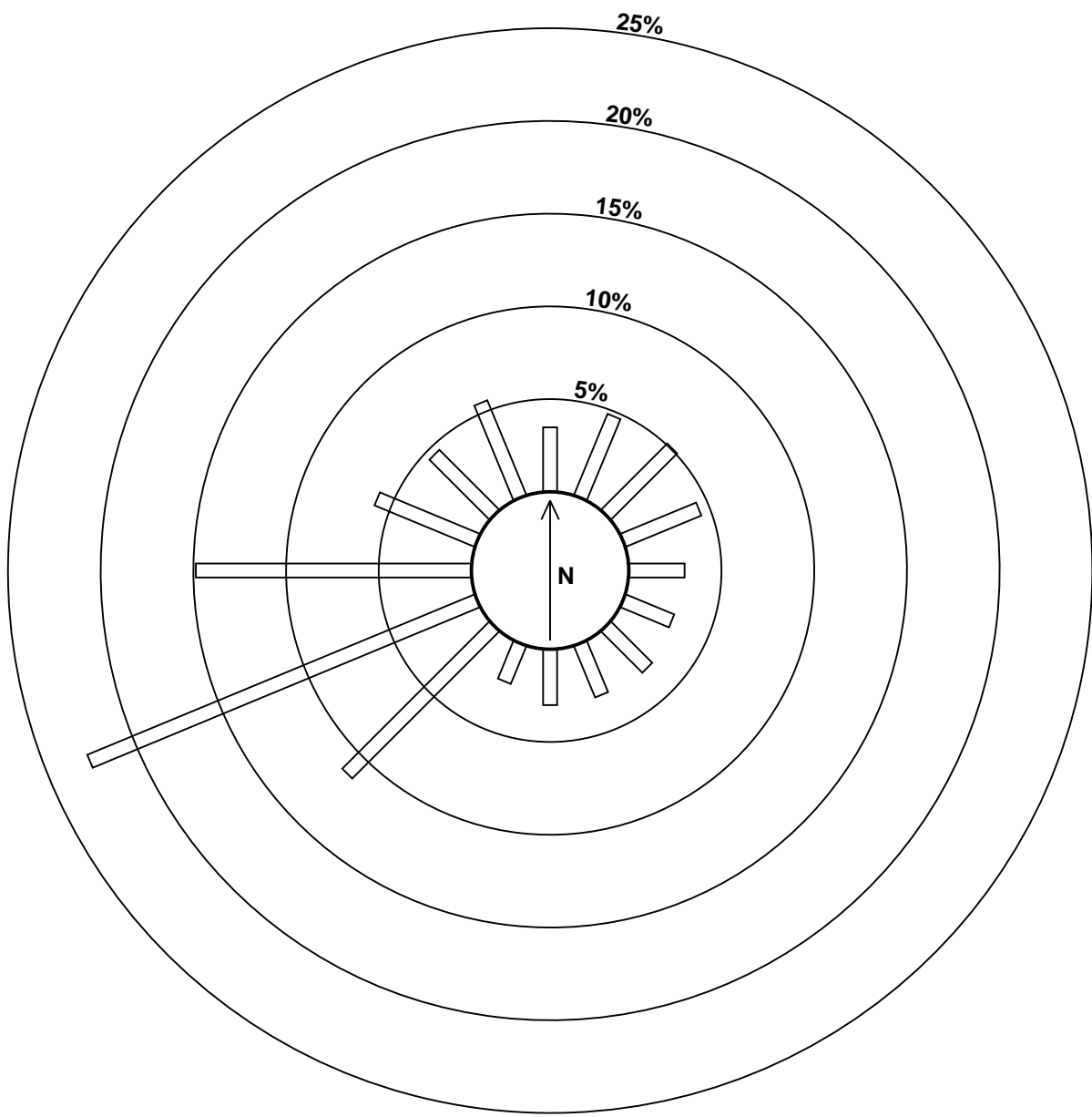
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	0	1	4	4	1	A	0	0	1	0	0	1	1	1	1	1	1	0	0	1	0	1	1	0	0.9	3.9
2-Aug	0	1	1	1	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.6	1.4
3-Aug	1	0	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4	3	0.9	3.9
4-Aug	1	1	A	1	3	3	2	1	2	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1.0	3.4
5-Aug	0	A	1	1	0	1	1	1	1	3	2	1	1	1	1	1	1	1	1	1	0	0	1	2	0.9	3.0
6-Aug	A	1	1	1	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	A	0.6	1.3
7-Aug	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.8
8-Aug	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-Aug	N	N	N	N	N	N	N	1	1	1	2	1	1	1	1	1	1	1	1	1	A	2	1	1	--	2.3
10-Aug	1	1	0	0	0	1	1	1	1	0	0	0	2	0	0	N	N	N	N	N	N	N	N	N	--	2.3
11-Aug	N	N	N	N	N	N	N	N	N	N	1	1	0	0	0	0	0	0	0	0	0	0	0	0	--	0.7
12-Aug	1	1	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	1.0
13-Aug	0	0	A	1	2	1	1	2	2	0	0	1	1	1	0	0	0	0	0	5	7	1	0	1	1.1	6.6
14-Aug	4	A	3	3	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	1.0	3.7
15-Aug	3	6	2	A	1	3	1	1	2	1	1	1	1	1	0	1	1	1	1	1	1	2	2	2	1.6	6.1
16-Aug	1	1	A	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0.5	1.3
17-Aug	0	A	0	0	0	0	0	0	1	1	3	3	2	2	2	1	1	1	1	4	3	3	3	2	1.5	3.7
18-Aug	A	4	4	2	2	1	1	1	1	0	0	0	0	0	1	1	1	0	0	0	1	1	1	A	1.0	4.3
19-Aug	1	1	1	1	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.6	1.3
20-Aug	0	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
21-Aug	0	0	0	A	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.5	0.5
22-Aug	0	0	A	0	0	0	0	1	1	0	0	C	C	C	A	1	1	1	1	0	1	1	0	2	0.6	1.7
23-Aug	3	3	2	A	2	3	1	2	4	1	1	0	1	1	1	1	0	2	1	0	1	1	1	0	1.3	3.7
24-Aug	1	1	A	A	1	1	1	1	0	0	0	1	2	1	1	1	1	2	0	0	0	1	1	0	0.8	1.8
25-Aug	0	A	A	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.9
26-Aug	A	A	0	0	1	1	0	0	0	0	0	0	1	1	0	1	1	1	1	0	0	0	0	A	0.5	1.3
27-Aug	A	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0.3	0.8
28-Aug	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.5	1.2
29-Aug	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0.3	0.8
30-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0	0	0.2	0.3
31-Aug	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	A	A	0	0	1	1	0.5	0.9

0.9	1.1	1.2	1.0	0.8	0.9	0.7	0.8	0.9	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.6	0.6	0.8	0.6	0.8	0.9	0.9		Diurnal Average		
3.7	6.1	3.9	3.9	2.9	3.4	2.4	2.2	3.7	3.0	2.6	2.7	2.3	1.7	2.0	1.4	1.2	1.8	5.0	6.6	3.2	3.2	3.9	3.4		Diurnal Maximum		
C - Calibration																								N - Not Valid		A - Automated Daily Zero Span	

Hourly Maximums for SO₂ at Portable-Spirit River August 2008



Pollutant Rose for SO₂ at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

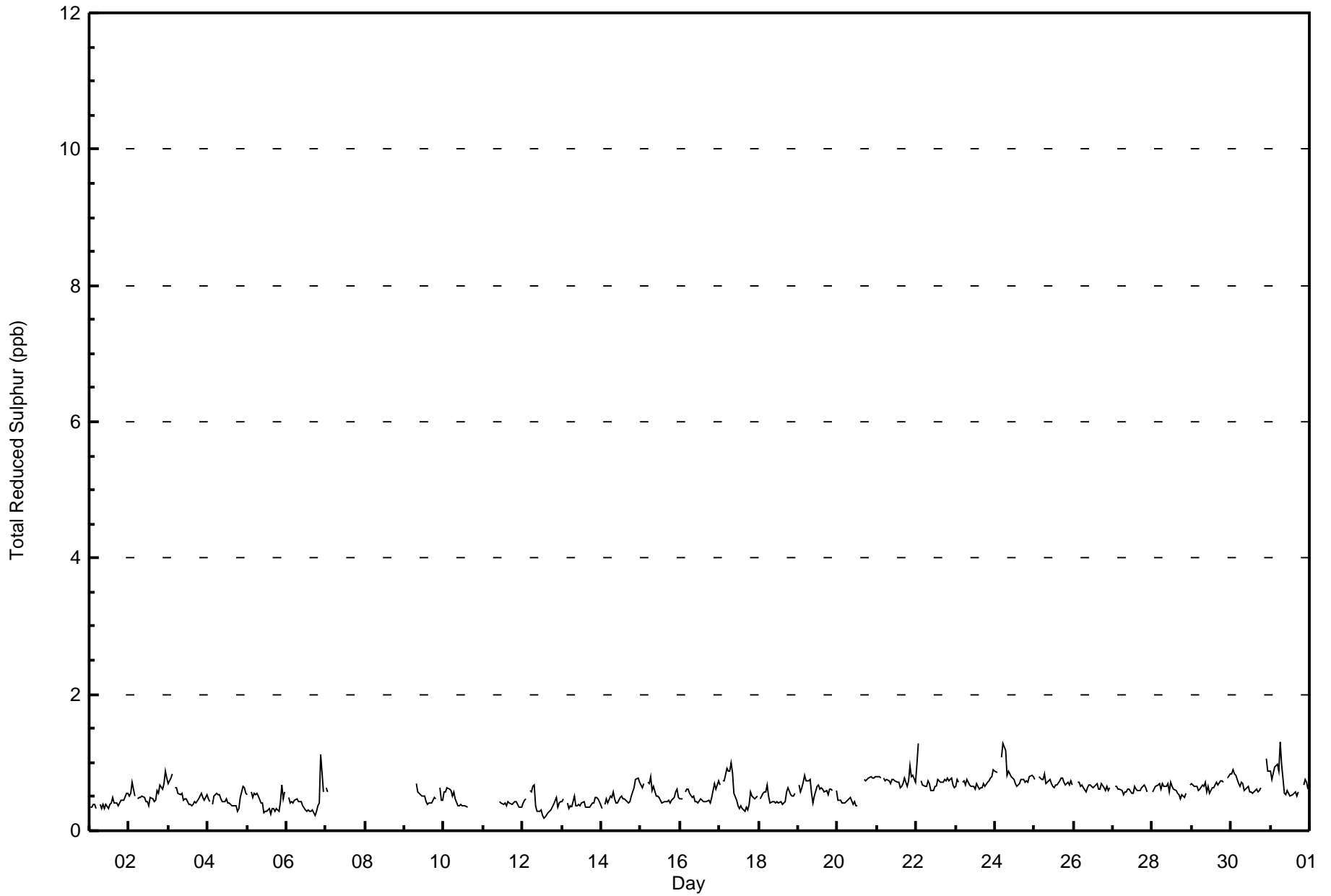
**Portable-Spirit River - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 1.3 ppb on Aug 31 07:00	Maximum Daily Average: 0.8 ppb on Aug 24
Minimum Value: 0 ppb on Aug 12 14:00	Hours of Data: 631
Maximum Diurnal Average: 0.7 ppb at hour 22	Hours of Missing Data: 113
Monthly Average: 0.57 ppb	Hours of Calibration: 41
Minimum Daily Average: 0.4 ppb on Aug 12	Percent Operational Time: 90.3
Minimum Diurnal Average: 0.5 ppb at hour 15	
Percentiles: P ₁ = 0.3 P ₁₀ = 0.4 Q ₁ = 0.4 Median = 0.6 Q ₃ = 0.7 P ₉₀ = 0.8 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-Aug	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.5
2-Aug	1	1	1	1	A	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0.5	0.9
3-Aug	1	1	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0.5	0.8
4-Aug	0	0	A	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0.5	0.6
5-Aug	1	A	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0.4	0.7
6-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	A	0.4	1.1
7-Aug	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.6
8-Aug	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-Aug	N	N	N	N	N	N	N	1	1	1	1	0	1	0	0	0	0	0	0	0	A	1	0	0	--	0.7
10-Aug	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	N	N	N	N	N	N	N	N	N	--	0.6
11-Aug	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	0.4
12-Aug	0	0	0	A	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7
13-Aug	0	0	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.5
14-Aug	0	A	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	1	1	1	1	1	1	0.5	0.8
15-Aug	1	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0.5	0.8
16-Aug	0	0	A	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.7
17-Aug	1	A	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0.6	1.0
18-Aug	A	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	A	0.5	0.7
19-Aug	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	A	1	0.6	0.8
20-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	1	1	1	1	1	1	1	1	0.6	0.8
21-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0
22-Aug	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	1.3
23-Aug	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
24-Aug	1	1	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
25-Aug	1	A	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
26-Aug	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	0.6	0.7
27-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	0.6	0.7
28-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	1	A	A	1	0.6	0.7
29-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	0.7	0.8
30-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	0.7	1.1
31-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1	1	0.7	1.3

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

Hourly Averages for TRS at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Total Reduced Sulphur (TRS) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 2.8 ppb on Aug 5 10:00	Maximum Daily Average: 1.1 ppb on Aug 24	Hours in Service: 744
Minimum Value: 0 ppb on Aug 12 14:00	Minimum Daily Average: 0.7 ppb on Aug 13	Hours of Data: 631
Maximum Diurnal Average: 1.0 ppb at hour 22	Minimum Diurnal Average: 0.8 ppb at hour 13	Hours of Missing Data: 113
Monthly Average: 0.88 ppb	Percentiles: P ₁ = 0.5 P ₁₀ = 0.6 Q ₁ = 0.7 Median = 0.9 Q ₃ = 1.0 P ₉₀ = 1.1 P ₉₉ = 1.6	Hours of Calibration: 41
		Percent Operational Time: 90.3

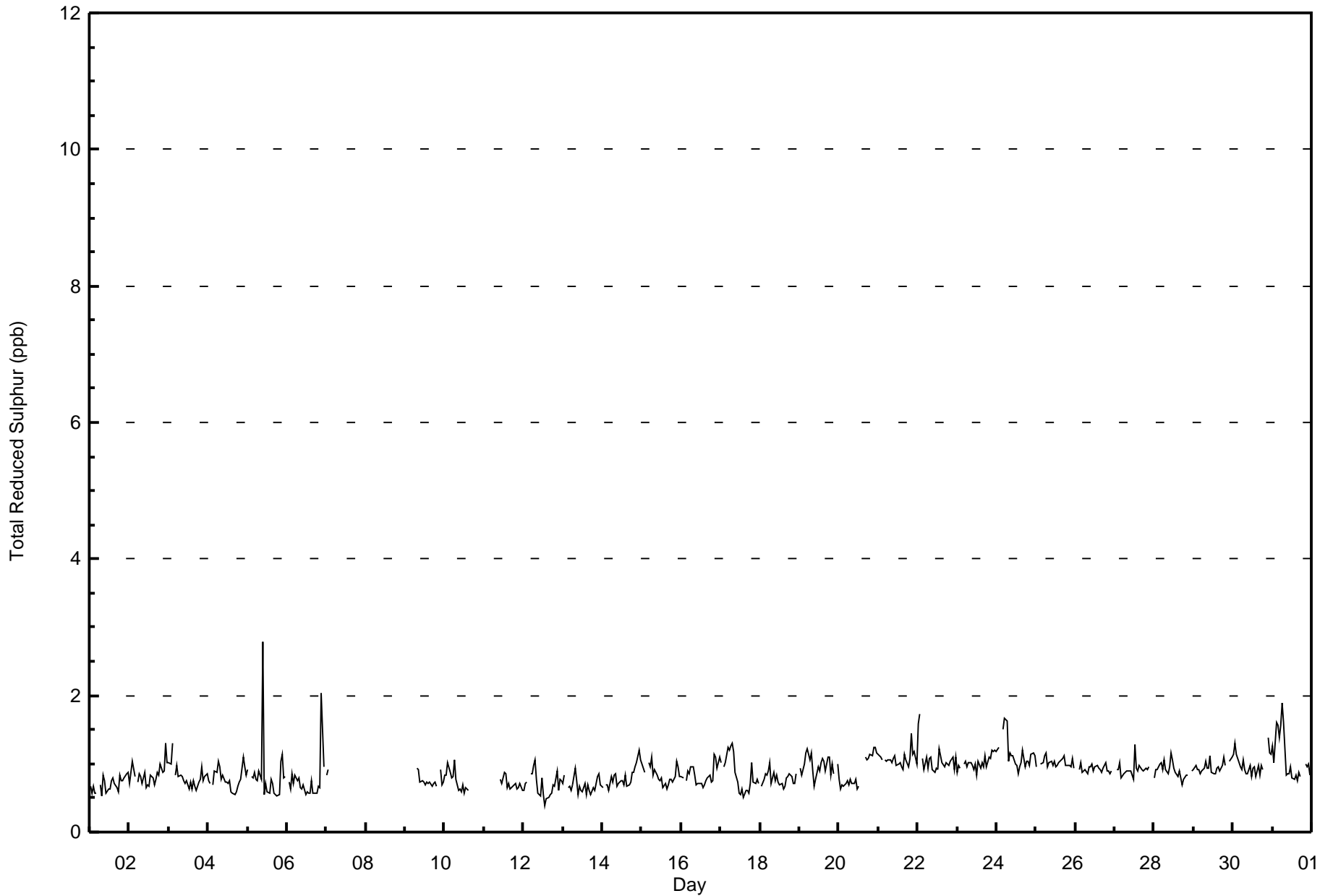
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9
2-Aug	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
3-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.3
4-Aug	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
5-Aug	1	A	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	2.8
6-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	A	0.7	2.0
7-Aug	1	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.9
8-Aug	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-Aug	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	--	0.9
10-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	N	N	N	N	N	N	N	N	--	1.0	
11-Aug	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	1	1	1	1	1	1	--	0.9
12-Aug	1	1	1	A	1	1	1	1	1	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	0.7	1.0
13-Aug	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
14-Aug	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2
15-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
16-Aug	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1
17-Aug	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	1.3
18-Aug	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
19-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1.0	1.2
20-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	C	C	C	1	1	1	1	1	1	1	1	0.9	1.2
21-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.4
22-Aug	2	2	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7
23-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.2
24-Aug	1	1	A	A	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.7
25-Aug	1	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	1.2
26-Aug	A	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.0
27-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	0.9	1.3
28-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	0.9	1.2
29-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1.0	1.1
30-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1.0	1.4
31-Aug	1	1	2	2	1	2	2	2	1	1	1	1	1	1	1	1	1	1	A	A	1	1	1	1	1.1	1.9

0.9	0.9	0.9	0.9	0.9	1.0	1.0	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	0.9	0.9	1.0	1.0	0.9	Diurnal Average
1.6	1.7	1.6	1.6	1.5	1.7	1.9	1.6	1.2	2.8	1.2	1.1	1.3	1.2	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.4	2.0	1.3	1.2	Diurnal Maximum

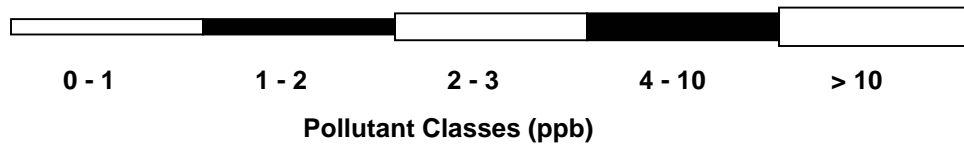
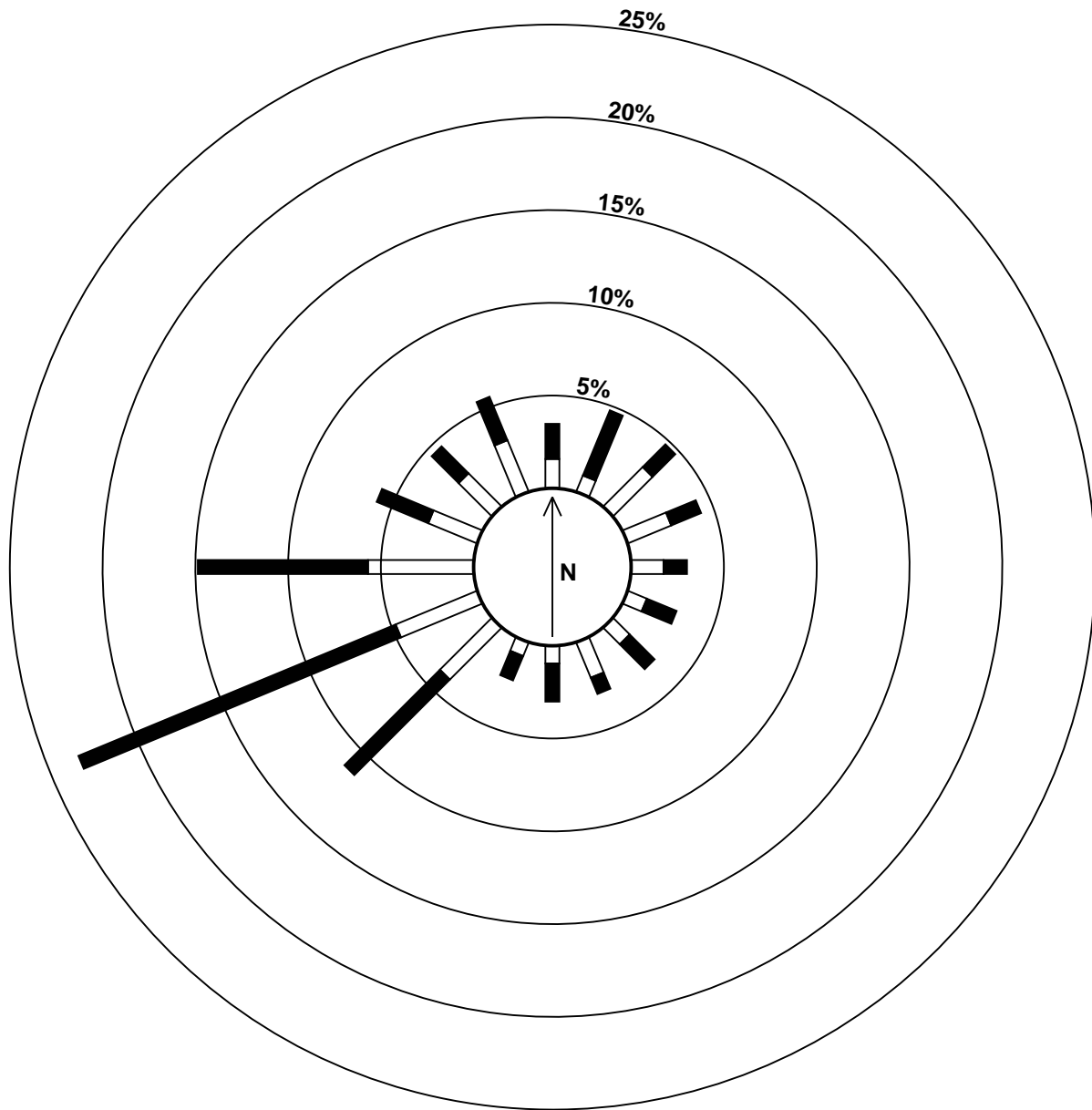
C - Calibration N - Not Valid A - Automated Daily Zero Span

Hourly Maximums for TRS at Portable-Spirit River

August 2008



Pollutant Rose for TRS at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Portable-Spirit River - Nitrogen Dioxide (NO₂) - ppb
August 1, 2008 to September 1, 2008**

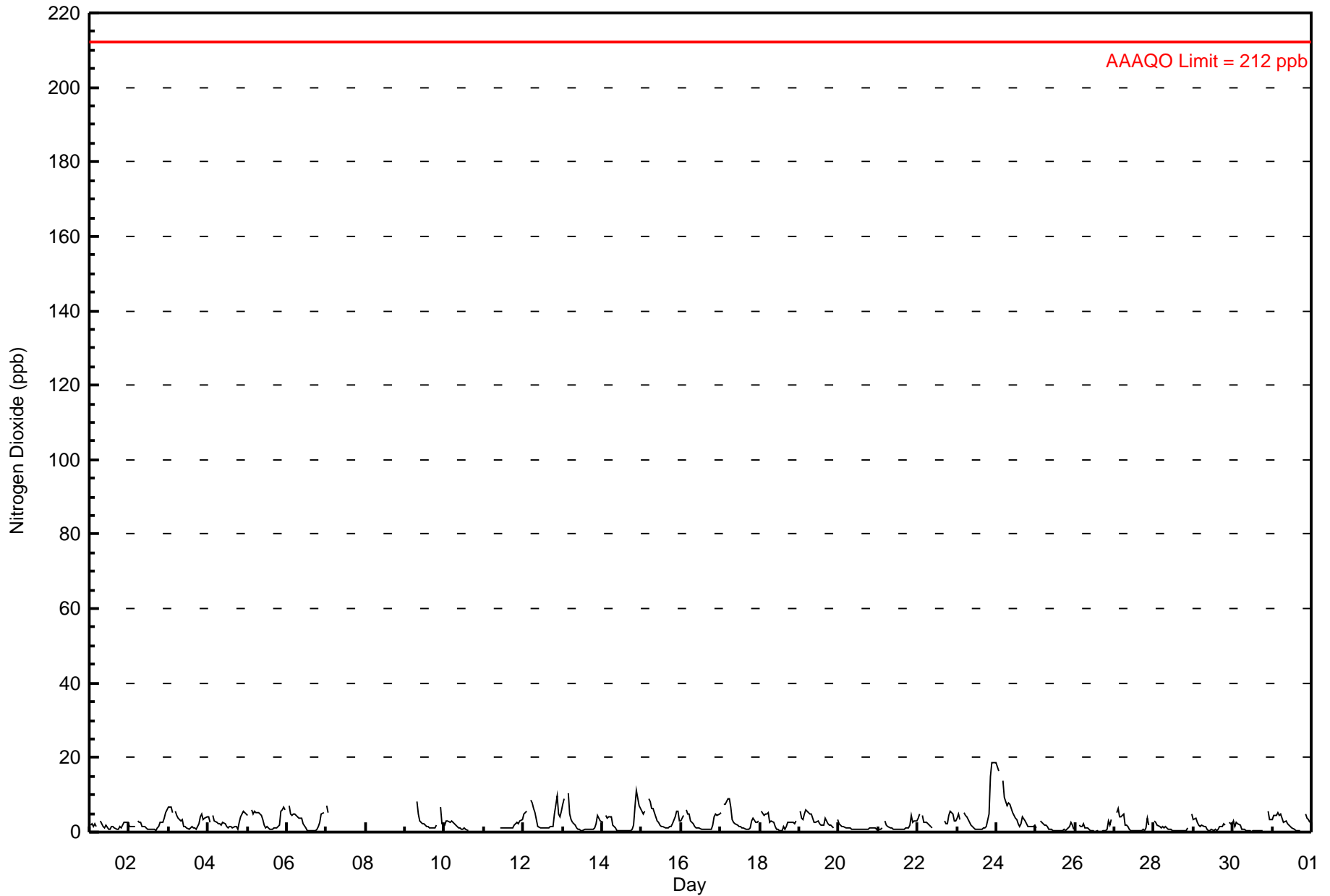
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 18.8 ppb on Aug 24 01:00	Maximum Daily Average: 5.6 ppb on Aug 24
Minimum Value: 0 ppb on Aug 26 16:00	Hours of Data: 628
Maximum Diurnal Average: 4.7 ppb at hour 2	Hours of Missing Data: 116
Monthly Average: 2.58 ppb	Hours of Calibration: 44
Minimum Daily Average: 1.0 ppb on Aug 26	Percent Operational Time: 90.3
Minimum Diurnal Average: 0.8 ppb at hour 16	
Percentiles: P ₁ = 0.2 P ₁₀ = 0.5 Q ₁ = 0.9 Median = 1.8 Q ₃ = 3.6 P ₉₀ = 5.4 P ₉₉ = 14.1	

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-Aug	2	2	2	2	1	A	3	2	2	1	2	1	1	2	2	1	1	1	1	1	2	2	3	3	1.7	3.0	
2-Aug	1	1	2	1	A	3	2	3	2	1	1	1	1	1	1	1	1	1	1	2	2	3	4	5	6	1.9	6.0
3-Aug	7	7	5	A	5	4	4	3	3	1	1	1	1	1	2	1	1	1	1	2	4	5	3	4	4	3.1	6.8
4-Aug	4	2	A	4	3	3	2	2	2	3	2	1	1	2	1	1	1	1	1	2	4	6	5	5	5	2.6	5.6
5-Aug	4	A	6	5	6	5	5	5	4	3	2	1	1	1	1	1	1	1	1	2	5	6	7	6	3.5	6.6	
6-Aug	A	7	5	4	5	5	4	4	4	4	2	1	1	0	0	0	0	1	1	1	3	5	5	A	2.8	7.1	
7-Aug	7	5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	7.1
8-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
9-Aug	N	N	N	N	N	N	N	8	5	3	2	2	2	2	1	1	1	1	1	2	A	7	2	2	--	8.3	
10-Aug	2	3	3	3	3	3	2	2	1	1	1	1	1	1	0	N	N	N	N	N	N	N	N	N	--	2.9	
11-Aug	N	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	2	2	3	2	3	3	--	3.4	
12-Aug	5	5	6	A	9	8	6	5	3	2	1	1	1	1	1	1	1	1	2	2	5	10	5	4	6	3.9	9.7
13-Aug	8	9	A	10	5	3	2	2	1	1	1	0	1	1	1	1	1	1	1	1	2	5	4	3	2.7	10.4	
14-Aug	3	A	4	4	4	4	2	1	1	1	1	0	0	0	0	0	0	1	1	2	7	11	7	6	2.7	11.1	
15-Aug	6	5	5	A	9	8	7	6	5	3	3	2	2	1	1	1	1	1	1	2	4	6	6	3	3.8	9.0	
16-Aug	3	4	A	6	5	5	3	2	2	1	1	1	1	1	1	1	1	1	1	2	4	5	5	5	2.5	6.0	
17-Aug	5	A	8	8	9	9	7	3	3	2	2	2	2	1	1	1	1	1	1	3	4	3	2	3	3.4	9.1	
18-Aug	A	6	4	5	5	5	3	3	3	1	1	1	1	0	1	1	1	3	3	3	3	2	3	A	2.5	5.6	
19-Aug	6	4	4	5	6	6	5	5	4	3	3	3	2	2	2	2	4	2	2	2	1	1	A	3	3.3	5.8	
20-Aug	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	2.1	
21-Aug	1	1	1	A	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	4	3	3	3	1.5	4.3	
22-Aug	4	5	A	5	3	3	2	2	2	1	C	C	C	C	C	A	3	2	2	5	5	5	3	3	--	5.5	
23-Aug	4	5	3	A	5	5	4	3	2	1	1	1	1	1	1	1	1	1	2	5	15	19	19	19	5.1	18.6	
24-Aug	19	16	A	A	14	9	7	8	7	6	5	4	3	2	2	2	4	3	2	1	2	2	1	2	5.6	18.8	
25-Aug	1	A	A	3	2	2	2	2	1	1	0	0	0	0	0	0	0	1	1	1	1	3	2	1	1.1	3.2	
26-Aug	A	A	2	2	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	1	3	2	3	A	1.0	3.5	
27-Aug	A	5	6	4	4	5	2	2	2	1	0	0	0	0	0	0	0	1	1	1	4	2	A	A	2.0	6.3	
28-Aug	3	2	2	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	A	A	5	1.1	4.9	
29-Aug	3	4	3	2	2	2	2	1	1	1	0	1	0	1	0	1	1	2	2	2	A	A	3	2	1.6	3.9	
30-Aug	3	2	3	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	A	6	3	3	1.3	5.6	
31-Aug	3	4	4	5	5	5	4	3	3	2	2	1	1	1	1	0	0	0	A	A	5	4	3	3	2.7	5.2	

4.4	4.7	3.8	3.9	4.5	4.2	3.2	3.0	2.3	1.7	1.4	1.1	0.9	0.9	0.8	0.8	1.1	1.1	1.3	2.2	4.0	4.5	4.2	4.1	Diurnal Average	
18.8	16.4	7.6	10.4	13.7	9.1	7.3	8.3	7.3	6.2	5.3	3.8	3.2	2.3	1.9	2.2	4.1	3.0	2.7	4.9	15.1	18.6	18.5	18.5	Diurnal Maximum	

C - Calibration N - Not Valid A - Automated Daily Zero Span
 Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb 24-hr 106 ppb

Hourly Averages for NO₂ at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Nitrogen Dioxide (NO₂) - ppb
August 1, 2008 to September 1, 2008**

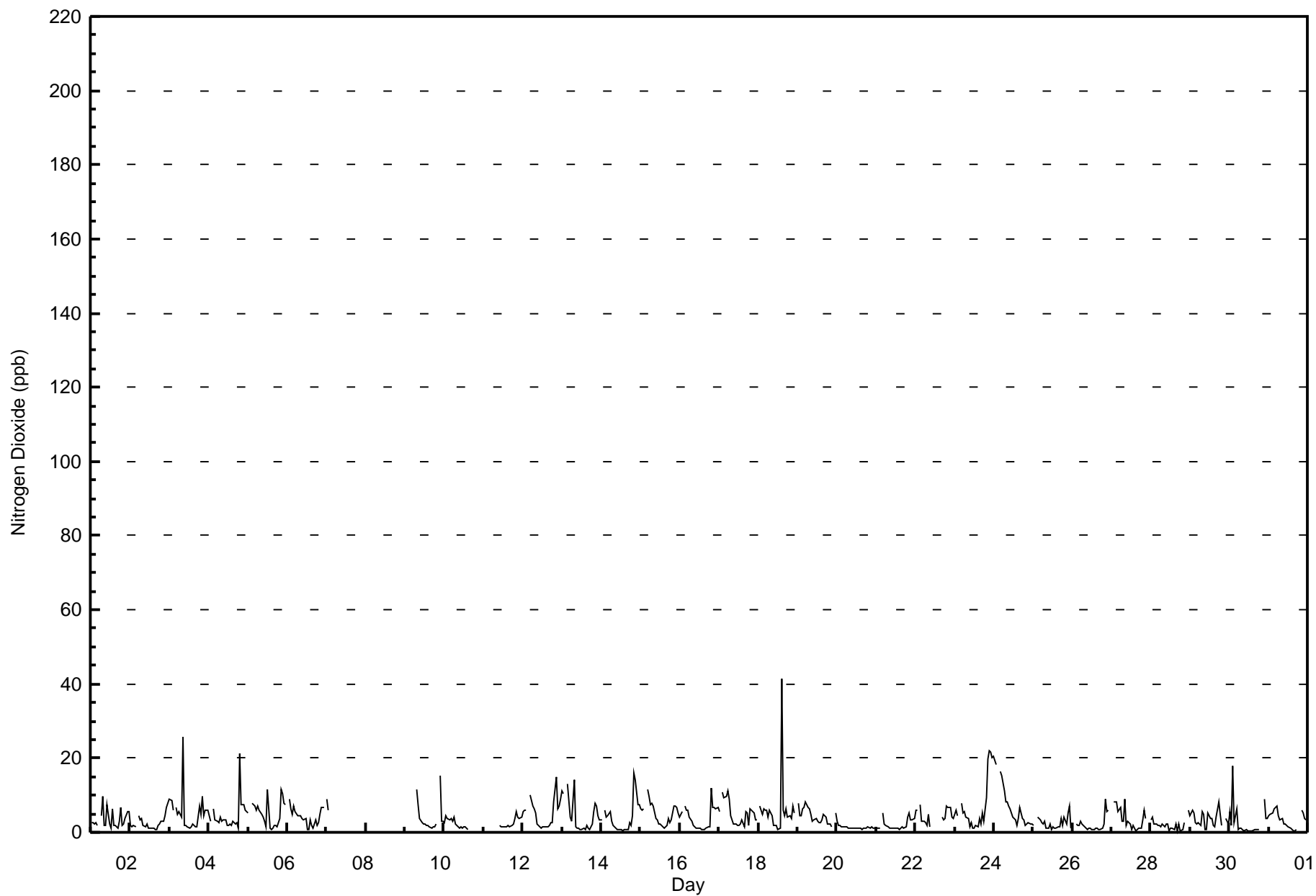
Maximum Value: 41.4 ppb on Aug 18 15:00	Maximum Daily Average: 7.0 ppb on Aug 24	Hours in Service: 744
Minimum Value: 0 ppb on Aug 30 15:00	Minimum Daily Average: 1.3 ppb on Aug 20	Hours of Data: 628
Maximum Diurnal Average: 6.8 ppb at hour 22	Minimum Diurnal Average: 1.7 ppb at hour 14	Hours of Missing Data: 116
Monthly Average: 3.98 ppb	Percentiles: P ₁ = 0.5 P ₁₀ = 1.0 Q ₁ = 1.5 Median = 2.9 Q ₃ = 5.5 P ₉₀ = 7.6 P ₉₉ = 20.0	Hours of Calibration: 44
		Percent Operational Time: 90.3

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-Aug	3	3	2	2	2	A	5	10	2	2	7	2	1	6	2	2	1	3	7	2	2	4	5	5	3.5	9.6	
2-Aug	2	2	2	2	A	5	3	4	2	2	2	1	1	1	1	1	1	2	2	3	3	4	7	8	2.6	7.7	
3-Aug	9	9	6	A	7	5	6	4	26	2	2	1	1	2	2	2	2	1	7	5	10	4	6	6	5.4	25.8	
4-Aug	5	3	A	6	3	3	3	4	3	3	3	2	2	2	2	3	2	2	1	21	8	8	6	6	4.4	21.4	
5-Aug	5	A	8	7	7	6	7	6	5	4	3	2	12	1	1	1	2	2	1	4	12	11	8	8	5.3	11.7	
6-Aug	A	9	6	5	7	5	4	4	4	4	3	4	1	1	3	2	1	3	2	3	5	7	7	A	4.1	8.8	
7-Aug	9	6	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	9.0	
8-Aug	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-Aug	N	N	N	N	N	N	N	12	8	4	3	2	2	2	2	1	1	1	2	2	A	15	3	3	--	15.4	
10-Aug	3	4	4	3	4	3	4	2	2	1	1	1	1	2	1	N	N	N	N	N	N	N	N	N	--	4.5	
11-Aug	N	N	N	N	N	N	N	N	N	N	2	2	1	2	1	2	1	2	2	4	6	4	4	4	--	5.6	
12-Aug	5	6	6	A	10	8	7	6	5	2	2	1	1	1	1	2	2	3	3	8	15	6	7	9	5.2	14.8	
13-Aug	11	11	A	13	8	4	3	14	2	1	1	1	1	1	1	2	1	1	2	6	8	7	4	4	4.6	14.2	
14-Aug	3	A	6	4	5	6	3	2	2	1	1	1	1	0	1	1	1	3	2	5	16	14	7	7	3.9	15.9	
15-Aug	6	6	6	A	12	10	7	8	7	4	3	2	2	2	1	1	2	4	3	3	7	7	7	5	5.0	11.6	
16-Aug	4	5	A	7	6	6	4	3	2	1	1	1	1	1	1	1	1	1	1	12	7	7	6	7	3.8	12.1	
17-Aug	6	A	11	9	10	11	9	4	3	2	2	2	2	2	3	2	6	5	2	6	6	5	4	3	5.0	11.2	
18-Aug	A	7	5	6	6	6	4	6	4	2	2	2	1	1	41	6	5	6	4	4	4	7	5	A	6.1	41.4	
19-Aug	8	4	5	6	7	8	7	6	5	3	3	4	3	3	3	3	5	4	2	2	2	1	A	5	4.4	8.2	
20-Aug	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	3.1	
21-Aug	1	1	1	A	5	2	2	1	1	1	1	1	1	1	1	1	1	1	2	4	5	3	3	4	2.0	5.2	
22-Aug	6	6	A	8	3	3	3	2	5	1	C	C	C	C	C	A	4	3	4	7	7	7	4	4	--	7.6	
23-Aug	5	6	5	A	8	5	6	4	4	2	3	1	1	2	2	4	2	5	3	9	20	22	22	20	6.9	21.9	
24-Aug	21	18	A	A	16	15	11	8	8	7	6	4	4	3	2	4	7	4	4	2	2	2	2	2	7.0	20.6	
25-Aug	2	A	A	4	3	3	2	3	1	1	2	1	1	1	1	1	2	4	2	4	2	5	7	1	2.5	6.9	
26-Aug	A	A	2	2	2	3	2	1	1	1	1	1	1	1	1	1	1	1	1	2	9	6	6	A	2.2	8.9	
27-Aug	A	8	8	8	6	7	3	3	9	2	3	2	1	2	1	1	1	1	1	3	6	4	A	A	3.8	8.9	
28-Aug	3	4	2	2	2	2	1	2	1	2	2	0	1	1	1	2	1	2	0	1	2	A	A	6	2.0	6.0	
29-Aug	4	6	5	2	2	3	2	5	5	1	1	5	4	4	2	1	4	8	5	2	A	A	4	2	3.5	8.1	
30-Aug	6	2	18	3	6	1	1	1	1	0	1	0	1	1	0	1	1	1	1	1	A	A	9	4	2.7	17.9	
31-Aug	4	5	5	6	7	7	5	3	4	2	2	2	1	1	1	1	1	1	1	A	A	6	5	4	3	3.4	7.2

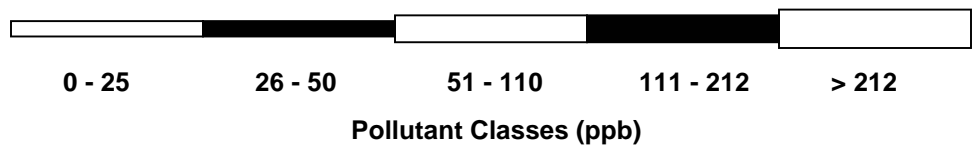
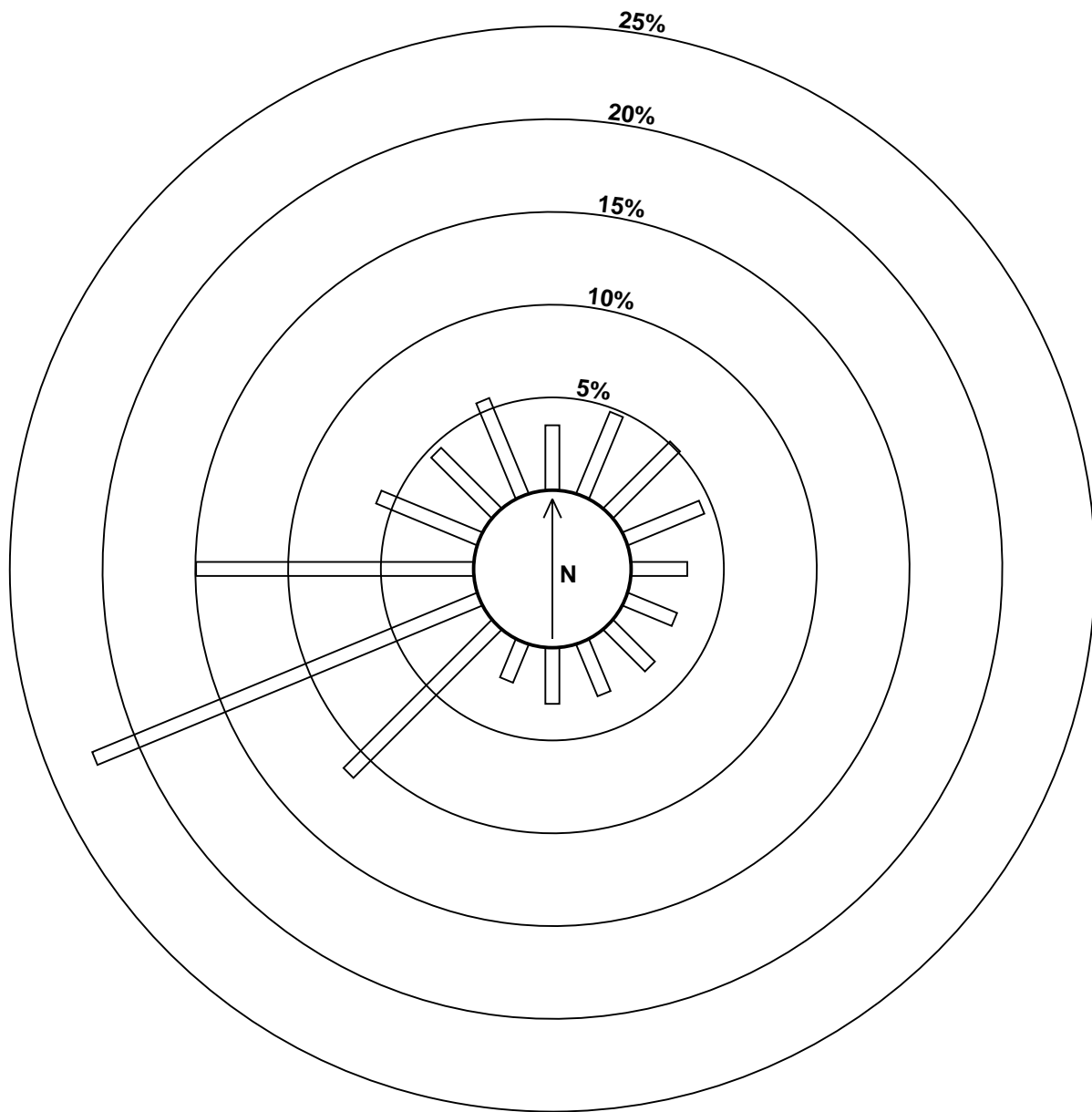
5.6	5.8	5.5	5.2	6.0	5.3	4.3	4.7	4.4	2.2	2.3	1.8	1.8	1.7	2.8	1.8	2.1	2.7	2.5	4.9	6.8	6.8	5.7	5.3	Diurnal Average	
20.6	18.2	17.9	12.9	16.5	15.4	11.0	14.2	25.8	7.0	7.5	5.4	11.7	6.3	41.4	5.9	6.8	8.1	7.1	21.4	19.8	21.9	21.6	20.2	Diurnal Maximum	

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

Hourly Maximums for NO₂ at Portable-Spirit River August 2008



Pollutant Rose for NO₂ at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

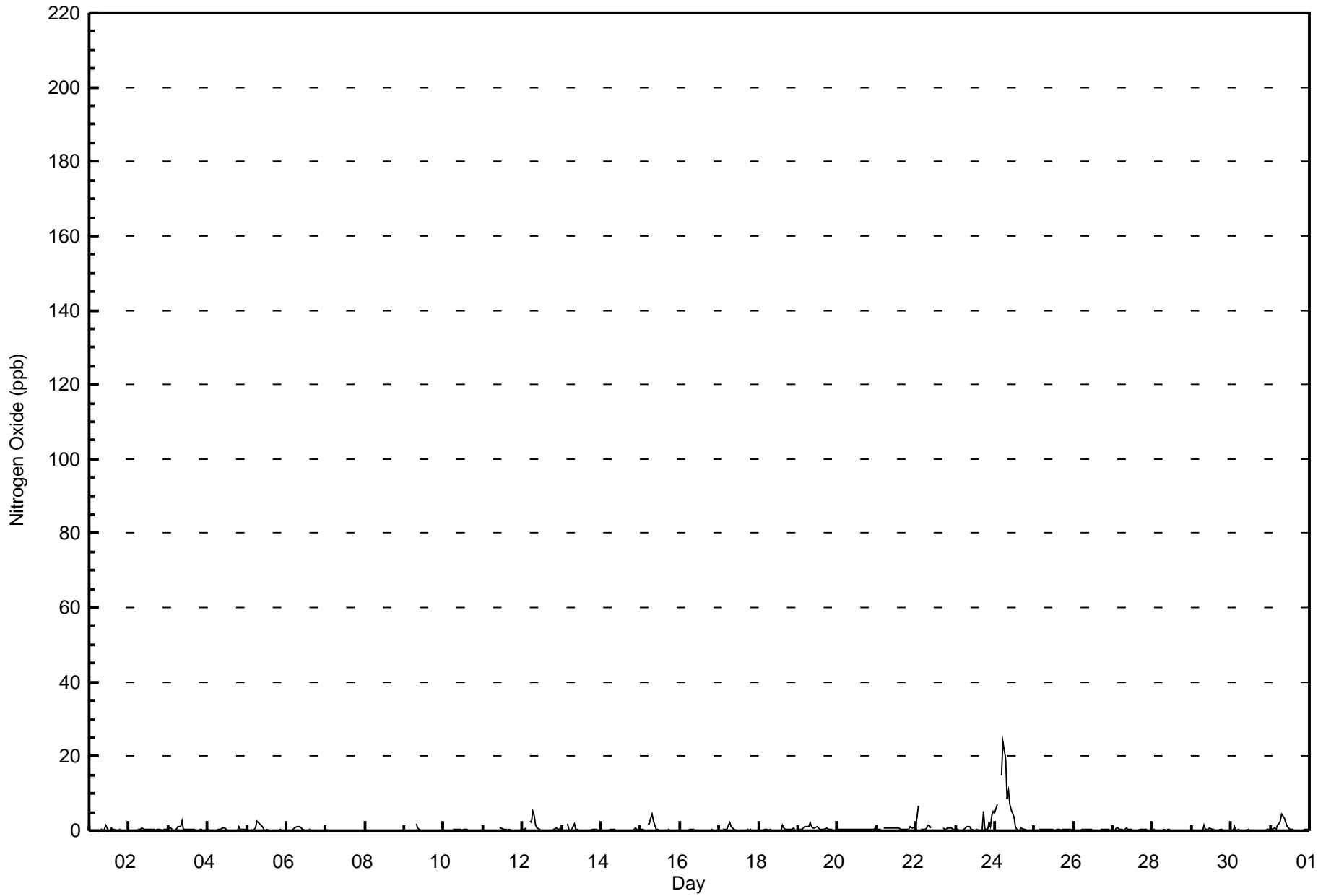
**Portable-Spirit River - Nitrogen Oxide (NO) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 23.8 ppb on Aug 24 06:00	Maximum Daily Average: 5.0 ppb on Aug 24	Hours in Service: 744
Minimum Value: 0 ppb on Aug 5 14:00	Minimum Daily Average: 0.1 ppb on Aug 28	Hours of Data: 628
Maximum Diurnal Average: 1.6 ppb at hour 7	Minimum Diurnal Average: 0.2 ppb at hour 16	Hours of Missing Data: 116
Monthly Average: 0.59 ppb	Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.2 Q ₃ = 0.5 P ₉₀ = 1.0 P ₉₉ = 5.9	Hours of Calibration: 44
		Percent Operational Time: 90.3

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-Aug	0	0	0	0	0	A	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0.2	1.6
2-Aug	0	0	0	0	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0.3	0.6
3-Aug	1	1	0	A	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	2.4
4-Aug	0	0	A	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0.3	1.0
5-Aug	0	A	0	0	0	1	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.6
6-Aug	A	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.3	1.0
7-Aug	0	0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.3
8-Aug	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-Aug	N	N	N	N	N	N	N	2	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	--	1.7
10-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N	N	N	N	N	N	N	N	N	--	0.3
11-Aug	N	N	N	N	N	N	N	N	N	N	1	1	0	0	0	0	0	0	0	0	0	0	0	0	--	0.8
12-Aug	0	1	1	A	3	2	5	4	2	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0.9	5.1
13-Aug	1	1	A	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.0
14-Aug	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0.2	0.8
15-Aug	0	0	0	A	2	2	3	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	4.6
16-Aug	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	0.5
17-Aug	0	A	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	2.2
18-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	1	0	0	1	0	A	0.3	1.6
19-Aug	0	0	0	1	1	1	1	2	1	1	1	1	1	1	1	0	1	1	0	0	0	0	A	0	0.7	2.2
20-Aug	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	1	0.4	0.6
21-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	0.6	1.0
22-Aug	3	7	A	0	0	0	1	1	1	1	C	C	C	C	C	A	1	0	0	1	1	1	0	0	--	6.6
23-Aug	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	0	0	5	0	0	2	1	4	5	1.1	5.3
24-Aug	5	7	A	A	15	24	20	9	11	7	5	4	1	0	0	0	1	0	0	0	0	0	0	0	5.0	23.8
25-Aug	0	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.2	0.5
26-Aug	A	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.2	0.4
27-Aug	A	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	A	A	0.3	0.9
28-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.1	0.4
29-Aug	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	A	A	0	0.2	1.3
30-Aug	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	1	0	0.2	1.0
31-Aug	0	0	1	1	2	2	2	4	3	2	1	1	0	0	0	0	0	0	0	A	A	0	1	0	1.0	4.4
	0.6	0.9	0.3	0.3	1.0	1.5	1.6	1.5	1.2	0.7	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.4	0.3	0.4	0.5	Diurnal Average
	4.7	7.1	1.0	2.0	14.9	23.8	19.5	8.7	10.7	7.0	5.4	3.6	1.3	0.8	1.6	0.6	0.6	5.2	0.5	1.0	2.2	1.1	3.9	5.3	Diurnal Maximum	

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

Hourly Averages for NO at Portable-Spirit River August 2008



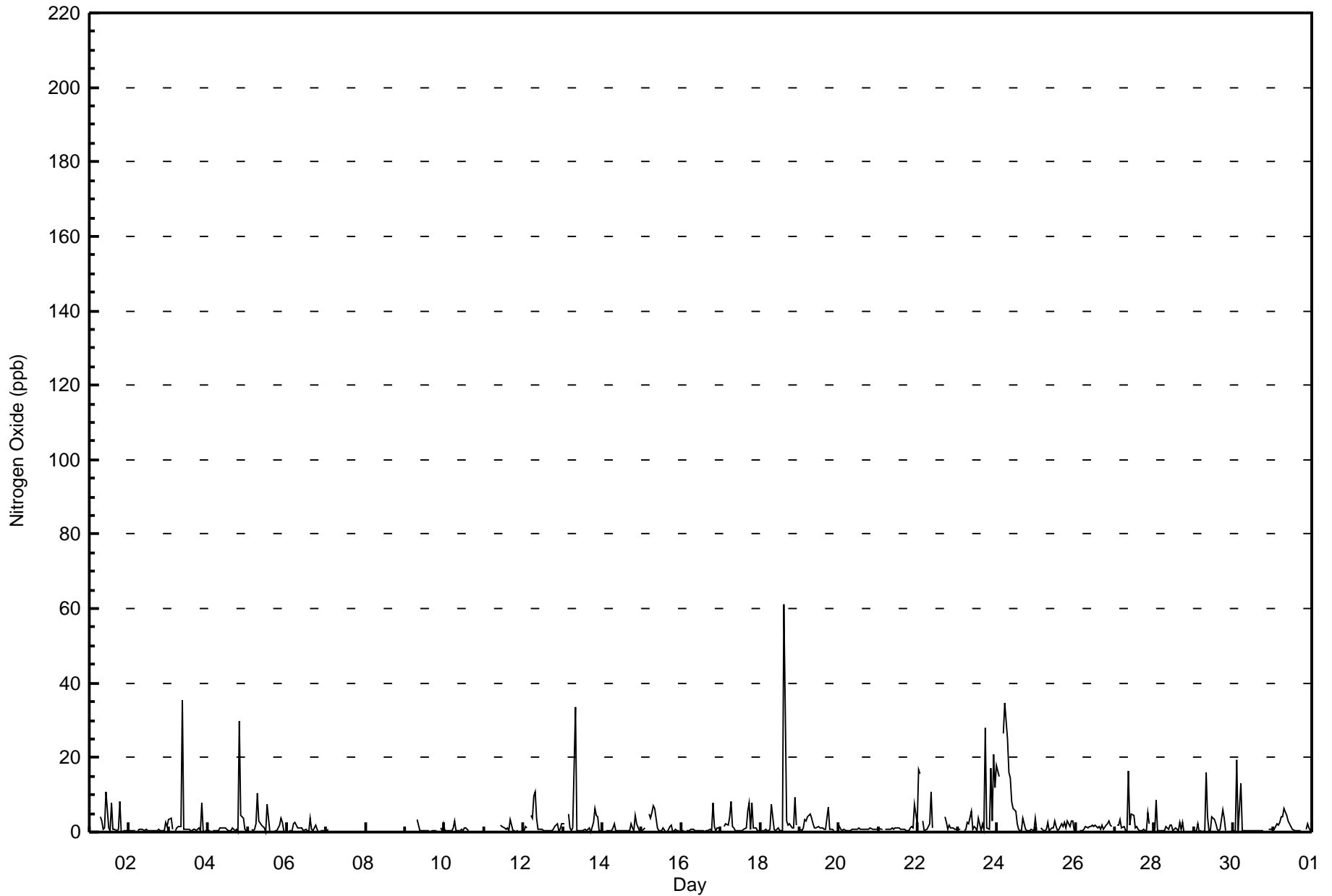
**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Nitrogen Oxide (NO) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 61.0 ppb on Aug 18 15:00	Maximum Daily Average: 8.3 ppb on Aug 24	Hours in Service: 744
Minimum Value: 0 ppb on Aug 5 14:00	Minimum Daily Average: 0.6 ppb on Aug 2	Hours of Data: 628
Maximum Diurnal Average: 4.7 ppb at hour 8	Minimum Diurnal Average: 1.0 ppb at hour 14	Hours of Missing Data: 116
Monthly Average: 2.13 ppb	Percentiles: P ₁ = 0.1 P ₁₀ = 0.2 Q ₁ = 0.3 Median = 0.7 Q ₃ = 1.7 P ₉₀ = 4.2 P ₉₉ = 27.1	Hours of Calibration: 44
		Percent Operational Time: 90.3

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-Aug	0	0	0	0	0	A	4	3	1	1	11	1	0	8	1	1	0	1	8	0	0	0	0	0	1.8	10.8	
2-Aug	0	0	0	0	A	0	1	1	1	1	1	0	0	1	1	0	0	1	1	0	0	0	2	2	0.6	2.5	
3-Aug	3	4	1	A	0	1	2	1	35	1	1	1	1	0	0	1	1	0	1	0	8	0	0	1	2.8	35.3	
4-Aug	0	0	A	0	0	0	0	1	1	1	1	1	0	0	0	1	0	1	0	30	5	4	1	0	2.1	29.9	
5-Aug	1	A	1	0	1	2	10	3	2	2	1	0	7	0	0	0	0	0	0	2	4	3	0	0	1.8	10.4	
6-Aug	A	0	0	0	2	3	1	1	1	1	1	1	1	0	4	1	1	2	1	0	0	0	0	A	1.0	3.8	
7-Aug	0	1	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	0.9	
8-Aug	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-Aug	N	N	N	N	N	N	N	3	2	1	0	0	0	0	0	0	0	0	0	0	A	1	0	2	--	3.3	
10-Aug	0	0	0	0	0	1	3	0	0	0	1	0	1	1	0	N	N	N	N	N	N	N	N	N	--	2.8	
11-Aug	N	N	N	N	N	N	N	N	N	N	2	1	1	1	1	0	3	0	0	0	0	0	0	0	--	3.3	
12-Aug	0	2	1	A	5	4	10	11	4	1	1	1	1	0	0	0	0	1	1	2	0	0	1	2	2.1	10.8	
13-Aug	2	2	A	5	1	0	1	34	1	0	0	0	0	1	0	1	1	0	2	6	5	4	0	0	2.9	33.7	
14-Aug	0	A	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	2	1	0	5	2	0	0	0.8	4.6	
15-Aug	0	1	1	A	5	4	5	7	6	1	0	0	0	1	0	0	1	1	2	0	1	0	0	0	1.7	7.1	
16-Aug	0	0	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	8	1	0	1	1	0.7	7.7	
17-Aug	0	A	2	2	2	4	8	2	1	0	0	0	0	0	1	1	5	8	1	8	1	1	0	0	2.1	8.1	
18-Aug	A	0	0	1	0	0	1	7	1	0	1	1	0	0	61	33	3	2	2	1	1	9	2	A	5.8	61.0	
19-Aug	1	0	1	4	3	4	5	4	2	1	1	2	1	1	1	1	1	7	1	1	1	1	A	1	1.9	6.7	
20-Aug	2	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.5	
21-Aug	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	7	2	1.3	7.5	
22-Aug	17	16	A	3	1	1	1	2	11	1	C	C	C	C	C	A	4	3	1	2	1	1	1	1	--	16.6	
23-Aug	1	1	1	A	1	1	2	2	6	1	2	1	0	4	1	2	1	28	1	1	17	3	21	12	4.7	28.0	
24-Aug	18	15	A	A	26	35	25	16	15	8	6	5	2	1	0	1	4	1	1	0	0	1	0	4	8.3	34.6	
25-Aug	0	A	A	1	0	0	1	3	0	1	1	3	1	0	1	2	2	2	1	3	2	3	3	0	1.4	2.9	
26-Aug	A	A	0	0	0	1	2	1	1	1	2	2	2	1	1	1	2	1	2	2	3	2	2	A	1.3	3.0	
27-Aug	A	2	2	3	1	2	0	1	17	2	5	4	1	2	1	0	1	1	1	0	5	2	A	A	2.5	16.5	
28-Aug	0	9	0	0	0	0	1	1	1	2	2	0	1	1	0	3	1	3	0	0	0	A	A	0	1.1	8.6	
29-Aug	0	1	2	0	0	0	0	16	4	0	0	4	3	2	1	0	1	6	4	0	A	A	0	0	2.1	15.9	
30-Aug	0	0	19	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	1	1	1.8	19.5	
31-Aug	1	1	2	2	3	4	4	6	4	3	2	1	1	1	0	0	1	0	A	A	1	2	1	1	1.9	6.4	
	2.1	2.4	1.7	1.2	2.6	2.7	3.4	4.7	4.3	1.2	1.6	1.2	1.1	1.0	2.8	1.9	1.2	2.6	1.2	2.7	2.6	1.7	1.8	1.3	Diurnal Average		
	17.8	15.8	19.5	5.0	26.3	34.6	25.1	33.7	35.3	8.2	10.8	5.4	7.5	7.7	61.0	33.4	5.5	28.0	8.4	29.9	17.3	9.3	20.9	11.9	Diurnal Maximum		
C - Calibration																								N - Not Valid		A - Automated Daily Zero Span	

Hourly Maximums for NO at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Portable-Spirit River - Oxides of Nitrogen (NO_x) - ppb
August 1, 2008 to September 1, 2008**

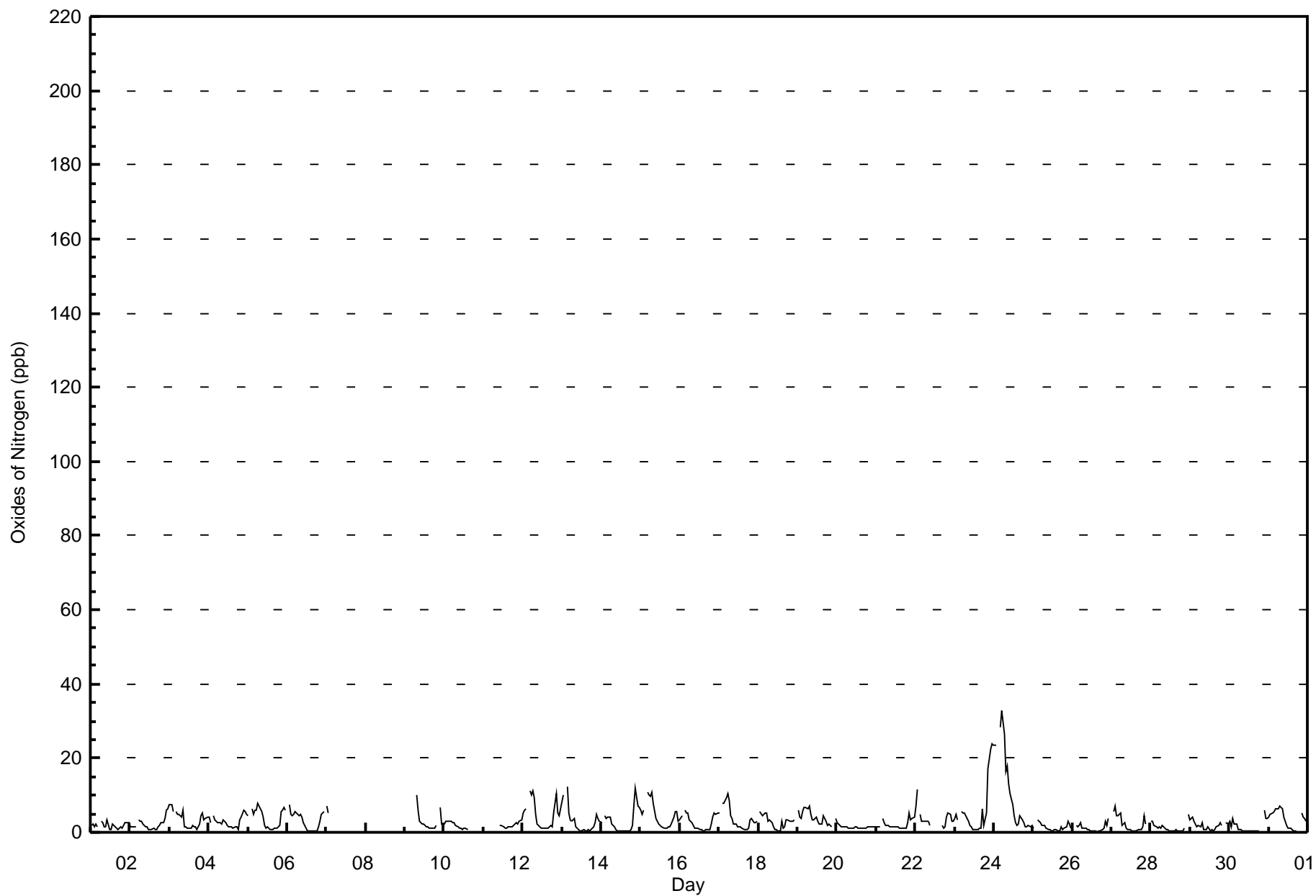
Maximum Value: 32.8 ppb on Aug 24 06:00	Maximum Daily Average: 10.4 ppb on Aug 24	Hours in Service: 744
Minimum Value: 0 ppb on Aug 26 16:00	Minimum Daily Average: 1.2 ppb on Aug 26	Hours of Data: 628
Maximum Diurnal Average: 5.6 ppb at hour 6	Minimum Diurnal Average: 0.9 ppb at hour 16	Hours of Missing Data: 116
Monthly Average: 3.12 ppb	Percentiles: P ₁ = 0.3 P ₁₀ = 0.6 Q ₁ = 1.1 Median = 2.0 Q ₃ = 4.1 P ₉₀ = 6.1 P ₉₉ = 23.4	Hours of Calibration: 44
		Percent Operational Time: 90.3

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-Aug	2	2	2	2	1	A	3	2	2	1	3	1	1	2	2	1	1	1	2	1	2	3	3	3	1.9	3.5
2-Aug	1	1	2	1	A	3	3	3	2	2	1	1	1	1	1	1	1	1	2	3	3	4	6	6	2.2	6.4
3-Aug	8	8	5	A	6	5	5	4	6	2	2	1	1	1	2	1	1	1	2	4	5	3	4	4	3.5	7.6
4-Aug	4	3	A	5	3	3	3	3	2	3	3	2	1	2	1	1	1	1	1	3	4	6	5	5	2.9	5.9
5-Aug	5	A	6	5	6	6	8	7	6	4	2	1	1	1	1	1	1	1	1	2	6	6	7	6	3.9	7.9
6-Aug	A	7	5	4	5	5	5	5	5	4	2	1	0	0	1	0	0	0	1	1	3	5	5	A	3.0	7.3
7-Aug	7	5	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	7.2
8-Aug	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-Aug	N	N	N	N	N	N	N	10	6	3	2	2	2	2	1	1	1	1	1	2	A	7	2	2	--	10.0
10-Aug	2	3	3	3	3	3	3	2	1	1	1	1	1	1	1	N	N	N	N	N	N	N	N	N	--	3.1
11-Aug	N	N	N	N	N	N	N	N	N	N	2	2	1	1	1	1	1	1	2	2	3	2	3	4	--	3.5
12-Aug	5	6	6	A	11	10	11	9	5	2	1	1	1	1	1	1	1	2	2	5	10	5	4	6	4.8	11.4
13-Aug	8	10	A	12	5	3	3	4	1	1	1	0	1	0	1	1	1	1	2	2	5	4	3	3	3.0	12.3
14-Aug	3	A	4	4	4	4	2	2	1	1	1	1	0	0	0	0	0	1	1	2	7	12	7	7	2.8	11.8
15-Aug	6	5	6	A	11	10	10	11	8	4	3	2	2	1	1	1	1	2	2	2	4	6	6	3	4.6	10.9
16-Aug	3	4	A	6	5	5	3	3	2	1	1	1	1	1	1	1	1	1	2	4	5	5	5	2.6	6.1	
17-Aug	5	A	8	8	9	10	9	5	4	2	2	2	2	1	1	1	1	1	3	4	3	3	3	3	3.8	10.5
18-Aug	A	6	4	5	5	5	3	3	3	1	1	1	1	0	3	1	2	3	3	3	3	3	3	A	2.8	5.7
19-Aug	6	4	4	5	7	7	6	7	5	3	3	4	3	2	2	2	4	3	2	2	2	1	A	4	3.9	7.0
20-Aug	3	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1.4	2.7
21-Aug	1	1	1	A	4	2	2	2	2	2	2	2	1	1	1	1	1	1	1	2	5	3	4	4	2.1	5.3
22-Aug	7	12	A	5	3	3	3	3	3	2	C	C	C	C	C	A	2	1	1	4	5	5	3	3	--	11.5
23-Aug	4	5	3	A	6	5	5	5	3	2	2	1	1	1	1	1	1	6	2	5	17	20	22	24	6.1	23.7
24-Aug	23	23	A	A	28	33	27	16	18	13	11	7	5	3	2	2	5	3	2	1	2	2	1	2	10.4	32.8
25-Aug	1	A	A	3	2	2	2	2	1	1	1	1	1	1	1	1	0	1	1	1	2	3	2	1	1.3	3.4
26-Aug	A	A	2	2	2	3	1	1	1	1	1	0	0	0	0	0	0	0	1	1	3	2	4	A	1.2	3.7
27-Aug	A	6	7	5	5	5	2	2	2	1	1	1	0	0	0	0	1	1	1	1	4	2	A	A	2.3	6.9
28-Aug	3	3	2	2	1	2	1	2	1	1	1	0	0	0	0	1	0	0	0	0	1	A	A	5	1.2	4.9
29-Aug	3	4	3	2	2	2	2	3	1	1	1	2	1	1	0	1	2	2	3	2	A	A	3	2	1.8	4.0
30-Aug	3	2	4	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	1	A	A	6	4	4	1.5	6.1
31-Aug	4	5	5	6	6	6	6	7	6	4	3	2	1	1	1	1	0	1	A	A	5	4	4	3	3.7	7.1

4.9	5.5	4.1	4.2	5.5	5.6	4.8	4.4	3.5	2.3	1.9	1.4	1.1	1.0	1.0	0.9	1.2	1.4	1.3	2.3	4.3	4.8	4.6	4.6	Diurnal Average	
23.4	23.4	7.9	12.3	28.5	32.8	26.7	16.4	17.9	13.2	10.6	7.4	4.5	2.6	2.9	2.4	4.6	6.3	3.2	5.3	17.3	19.7	22.4	23.7	Diurnal Maximum	

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

Hourly Averages for NO_x at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Portable-Spirit River - Oxides of Nitrogen (NO_x) - ppb
August 1, 2008 to September 1, 2008**

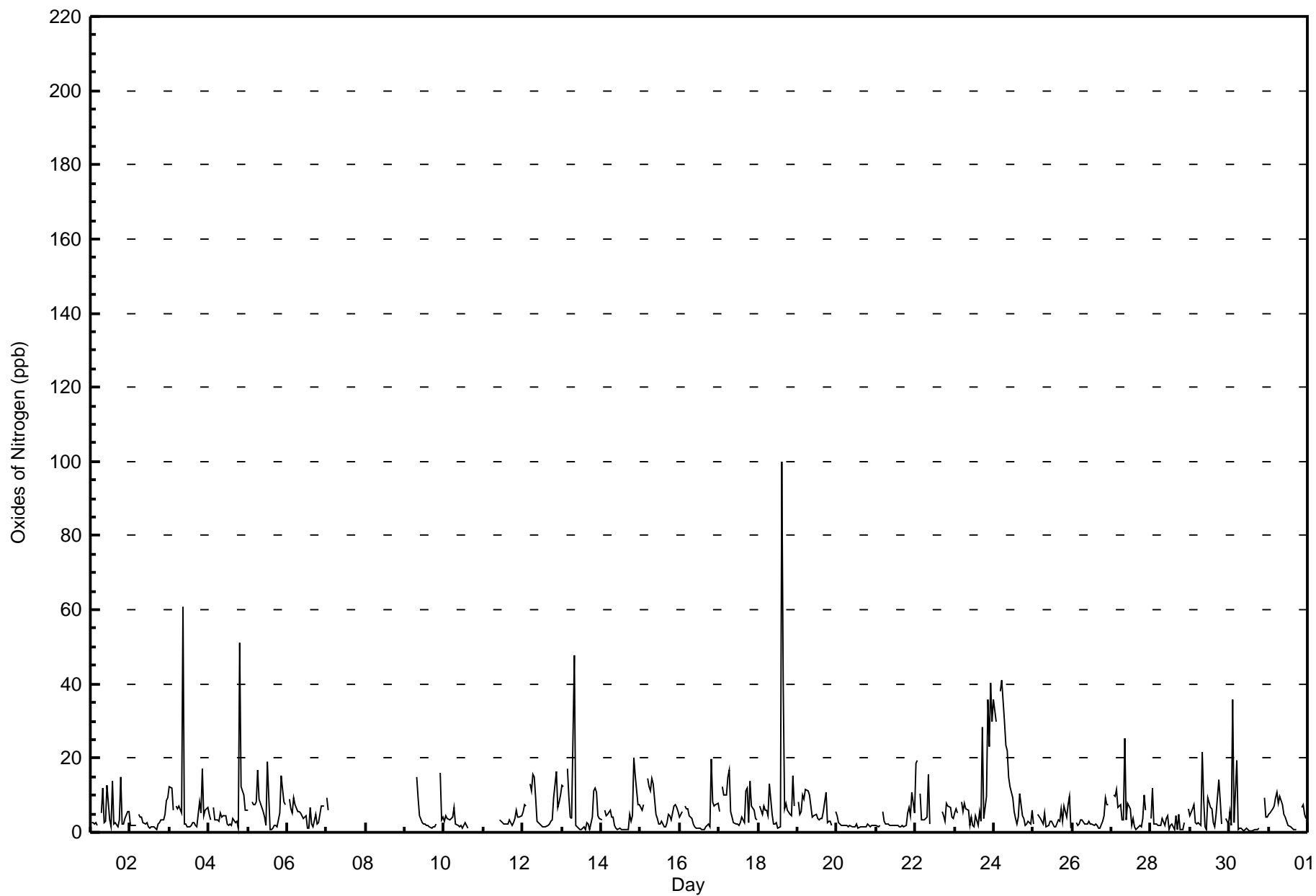
Maximum Value: 100.0 ppb on Aug 18 15:00	Maximum Daily Average: 13.9 ppb on Aug 24	Hours in Service: 744
Minimum Value: 0 ppb on Aug 30 10:00	Minimum Daily Average: 1.9 ppb on Aug 20	Hours of Data: 628
Maximum Diurnal Average: 9.1 ppb at hour 8	Minimum Diurnal Average: 2.5 ppb at hour 14	Hours of Missing Data: 116
Monthly Average: 5.78 ppb	Percentiles: P ₁ = 0.6 P ₁₀ = 1.3 Q ₁ = 1.9 Median = 3.7 Q ₃ = 6.8 P ₉₀ = 11.8 P ₉₉ = 39.6	Hours of Calibration: 44
		Percent Operational Time: 90.3

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-Aug	3	3	2	2	2	A	5	12	2	3	13	3	1	14	2	3	1	3	15	2	2	4	6	6	4.8	15.1
2-Aug	2	2	2	2	A	5	4	4	3	2	3	1	1	2	1	1	1	2	3	3	3	5	9	9	3.0	9.3
3-Aug	12	12	6	A	7	6	7	5	61	2	2	2	2	2	3	3	2	2	8	5	17	5	6	7	7.9	60.8
4-Aug	5	3	A	7	3	3	3	5	4	4	4	2	2	2	2	4	3	3	1	51	12	10	6	6	6.4	51.0
5-Aug	6	A	8	8	7	8	17	9	7	6	4	2	19	1	1	1	2	2	2	5	15	11	8	8	6.8	19.1
6-Aug	A	9	6	5	9	7	6	5	5	5	4	5	1	1	7	2	2	5	2	3	5	7	7	A	4.9	9.4
7-Aug	9	6	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	9.2
8-Aug	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-Aug	N	N	N	N	N	N	N	15	9	4	3	2	2	2	2	1	1	1	2	2	A	16	3	4	--	16.1
10-Aug	3	5	4	3	4	4	7	2	2	1	2	1	2	2	1	N	N	N	N	N	N	N	N	N	--	6.9
11-Aug	N	N	N	N	N	N	N	N	N	N	3	3	2	2	2	2	3	2	2	4	6	4	4	4	--	5.8
12-Aug	6	7	7	A	13	11	16	15	9	3	2	2	2	2	2	2	2	3	4	9	16	7	8	10	6.8	16.2
13-Aug	13	12	A	17	10	4	4	48	2	1	1	1	1	2	1	3	2	1	4	11	12	11	4	4	7.3	47.7
14-Aug	3	A	6	4	5	6	4	4	2	1	1	1	1	1	1	1	1	5	3	5	20	15	8	8	4.5	20.2
15-Aug	7	6	7	A	14	12	11	14	13	5	4	2	2	3	1	1	3	5	4	3	7	7	7	5	6.4	14.4
16-Aug	4	6	A	7	6	6	4	4	2	2	1	1	1	1	1	1	1	2	2	20	8	7	7	8	4.5	19.7
17-Aug	6	A	12	10	10	15	17	6	4	3	2	2	2	2	4	3	11	12	3	14	7	6	4	3	6.9	16.8
18-Aug	A	7	5	7	6	6	4	13	5	2	2	3	1	1	100	40	6	8	6	5	5	15	7	A	11.6	100.0
19-Aug	8	5	6	10	9	12	11	10	7	4	4	5	4	3	4	4	6	11	3	3	3	2	A	6	6.0	11.6
20-Aug	5	3	2	2	2	2	2	1	2	1	2	2	2	1	2	1	2	2	1	2	2	2	2	2	1.9	4.6
21-Aug	2	2	2	A	6	3	2	2	2	2	2	2	2	2	2	2	2	2	2	5	7	4	11	5	3.1	10.8
22-Aug	19	19	A	11	3	3	4	4	16	2	C	C	C	C	C	A	6	4	3	8	7	7	4	4	--	19.2
23-Aug	5	6	5	A	8	6	8	6	6	2	4	2	2	5	2	6	3	28	4	10	36	23	40	30	10.7	40.1
24-Aug	36	30	A	A	38	41	30	24	22	15	12	9	5	4	2	4	10	5	4	2	2	3	2	6	13.9	41.0
25-Aug	2	A	A	5	4	3	2	5	2	2	3	3	2	1	2	3	3	6	3	7	4	7	10	1	3.7	9.7
26-Aug	A	A	3	2	2	3	3	2	2	2	3	2	2	2	2	2	1	1	3	4	9	7	7	A	3.2	9.4
27-Aug	A	10	10	11	7	7	3	3	25	3	8	6	2	4	2	1	2	2	2	4	10	6	A	A	6.0	25.4
28-Aug	4	12	2	2	2	2	2	4	2	4	4	1	2	2	1	4	1	5	1	1	3	A	A	6	3.0	11.9
29-Aug	5	6	8	3	2	3	2	21	9	1	1	9	7	6	2	2	5	14	9	2	A	A	4	2	5.6	21.4
30-Aug	6	2	36	3	19	1	1	1	1	0	1	1	0	0	1	1	1	1	1	A	A	9	4	4	4.3	36.0
31-Aug	5	5	6	7	9	11	8	10	7	5	4	3	2	2	1	1	1	1	A	A	7	7	5	4	5.0	10.9

7.2	7.7	6.9	6.1	8.0	7.3	6.9	9.1	8.3	3.2	3.6	2.8	2.7	2.5	5.4	3.6	3.0	4.9	3.5	7.3	9.0	8.0	7.3	6.3	Diurnal Average	
35.7	29.9	36.0	17.3	38.1	41.0	29.9	47.7	60.8	14.7	12.8	9.4	19.1	13.9	100.0	40.2	11.1	28.3	15.1	51.0	36.0	23.2	40.1	29.8	Diurnal Maximum	

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

Hourly Maximums for NO_x at Portable-Spirit River August 2008



Peace Airshed Zone Association
Summary of Hourly Averages

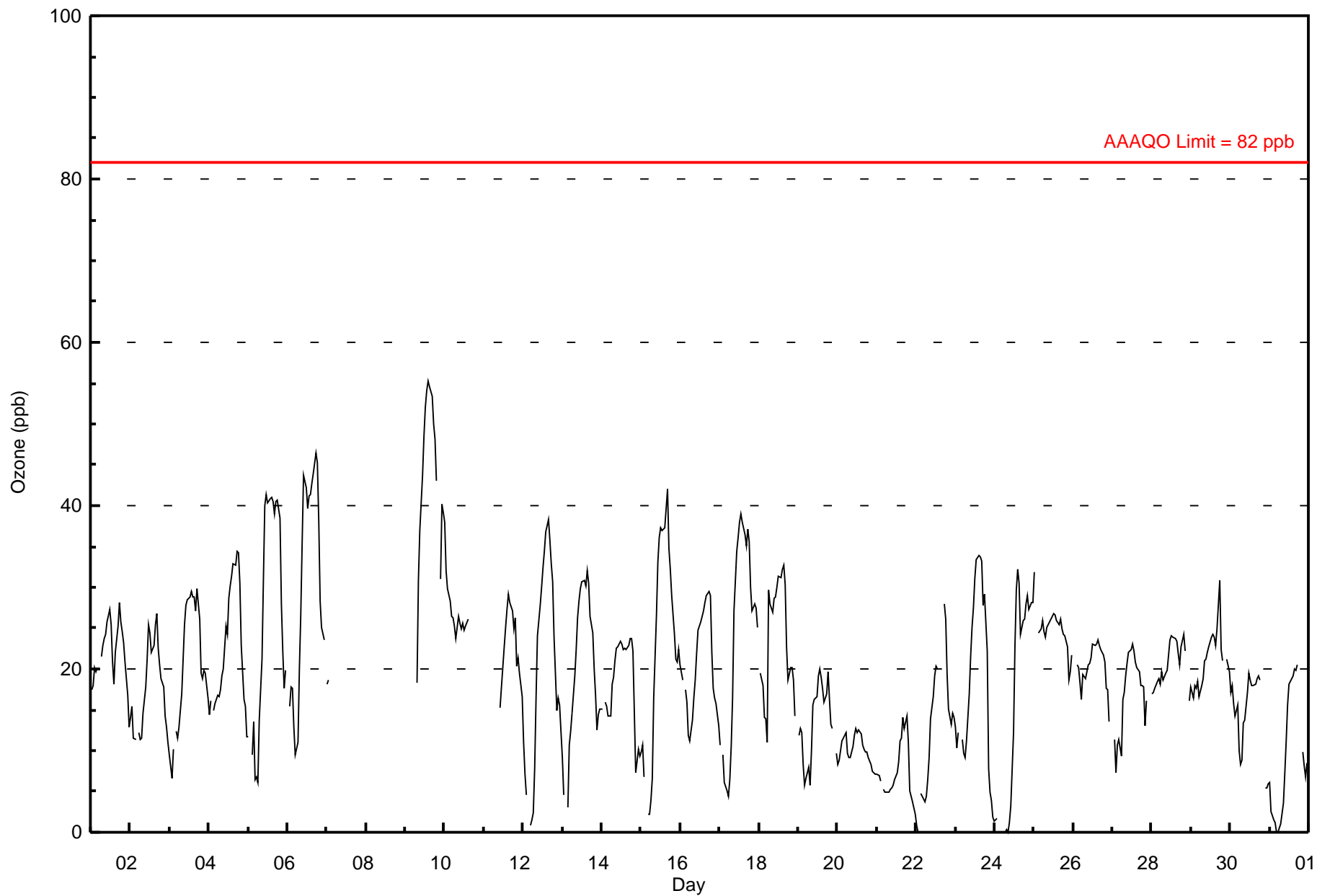
Portable-Spirit River - Ozone (O₃) - ppb
August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 55.3 ppb on Aug 9 15:00	Maximum Daily Average: 30.3 ppb on Aug 6
Minimum Value: 0 ppb on Aug 22 02:00	Hours of Data: 631
Minimum Daily Average: 7.4 ppb on Aug 21	Hours of Missing Data: 113
Maximum Diurnal Average: 28.3 ppb at hour 16	Hours of Calibration: 41
Monthly Average: 19.97 ppb	Percent Operational Time: 90.3
Percentiles: P ₁ = 0.0 P ₁₀ = 6.5 Q ₁ = 12.5 Median = 19.6 Q ₃ = 26.0 P ₉₀ = 32.8 P ₉₉ = 48.5	

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-Aug	17	18	20	20	20	A	22	23	24	24	26	27	25	21	18	22	25	28	26	25	23	21	17	13	22.0	28.1	
2-Aug	14	15	11	11	A	12	11	12	15	18	21	25	24	22	23	25	27	23	20	19	18	14	13	11	17.6	26.8	
3-Aug	10	7	10	A	12	12	13	17	21	25	28	29	29	29	29	29	27	30	26	20	19	20	19	16	20.7	29.8	
4-Aug	14	16	A	15	16	17	17	17	19	20	25	24	29	30	31	33	33	34	34	31	23	16	15	12	22.7	34.4	
5-Aug	12	A	9	14	6	7	6	14	21	31	40	41	40	41	41	40	39	41	41	38	28	22	18	20	26.5	41.4	
6-Aug	A	15	18	18	13	9	11	20	27	35	44	42	40	41	41	43	44	47	45	38	28	25	24	A	30.3	46.5	
7-Aug	18	19	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	18.6	
8-Aug	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-Aug	N	N	N	N	N	N	N	18	31	37	44	49	52	54	55	55	53	50	48	43	A	31	40	39	--	55.3	
10-Aug	38	32	30	28	26	26	25	24	26	26	25	26	25	25	26	N	N	N	N	N	N	N	N	N	--	37.9	
11-Aug	N	N	N	N	N	N	N	N	N	N	15	18	23	25	27	29	28	27	25	26	20	21	20	17	--	29.2	
12-Aug	11	7	5	A	1	2	2	8	16	24	28	30	32	34	37	38	36	33	31	24	15	16	16	12	19.9	38.3	
13-Aug	9	5	A	3	11	12	14	19	22	26	28	30	31	31	30	32	31	26	24	20	17	13	14	15	20.2	32.1	
14-Aug	15	A	16	15	14	14	18	19	21	22	23	23	23	22	22	22	23	24	24	22	15	7	10	9	18.5	23.7	
15-Aug	10	11	7	A	2	2	4	7	16	27	33	36	37	37	37	40	42	35	32	29	24	21	21	22	23.1	42.0	
16-Aug	20	19	A	17	16	12	11	14	16	19	22	25	26	27	27	28	29	29	29	22	18	16	16	13	20.5	29.5	
17-Aug	11	A	10	6	5	4	6	11	16	27	34	36	38	39	38	36	35	37	36	30	27	28	27	25	24.5	38.9	
18-Aug	A	20	18	14	14	11	30	28	27	29	29	30	31	31	32	33	30	23	19	20	20	19	14	A	23.7	32.6	
19-Aug	12	13	12	8	6	7	8	6	10	16	16	17	19	20	19	18	16	17	20	16	13	13	A	10	13.5	20.0	
20-Aug	8	9	10	11	12	12	10	9	9	10	12	13	12	13	12	11	10	10	10	9	8	8	7	7	10.1	12.8	
21-Aug	7	7	6	A	5	5	5	5	5	5	6	6	7	9	11	12	14	13	14	11	5	4	4	2	7.4	14.2	
22-Aug	1	0	A	5	4	4	4	6	9	14	17	19	20	20	N	C	C	C	28	26	19	15	13	15	14	12.7	28.0
23-Aug	13	10	12	A	11	10	9	11	17	22	25	27	31	33	34	34	33	28	29	22	8	5	4	2	18.7	33.8	
24-Aug	1	2	A	A	0	0	0	0	0	1	3	12	23	30	32	30	24	26	26	28	29	27	28	28	16.0	32.2	
25-Aug	32	A	A	24	25	26	25	24	25	26	26	26	27	27	26	25	26	25	24	24	23	19	20	22	24.8	31.8	
26-Aug	A	A	20	20	18	16	19	19	20	20	21	21	23	23	23	23	23	22	22	21	18	17	14	A	20.2	23.5	
27-Aug	A	11	7	11	11	9	16	17	19	21	22	22	23	22	21	20	20	18	18	18	13	16	A	A	17.0	23.1	
28-Aug	17	17	18	19	19	18	20	19	19	20	22	24	24	24	24	23	22	21	23	24	22	A	A	16	20.6	24.2	
29-Aug	18	16	18	18	19	17	18	19	21	21	22	23	24	24	24	23	25	31	22	21	A	A	21	20	21.1	30.8	
30-Aug	17	18	16	14	16	10	8	9	13	14	17	20	19	18	18	18	19	19	19	A	A	5	5	6	14.4	19.5	
31-Aug	6	2	1	1	0	0	0	1	4	7	11	16	18	19	19	20	20	20	A	A	10	8	7	9	9.1	20.4	

13.8	12.5	13.1	13.9	11.6	10.5	12.3	14.1	17.5	21.0	23.6	25.4	26.7	27.3	27.8	28.3	27.9	27.3	26.4	23.9	18.3	16.4	16.3	15.0	Diurnal Average	
37.9	32.0	29.9	28.3	26.5	26.3	29.7	27.9	30.9	36.9	43.8	48.5	52.0	54.1	55.3	54.5	53.4	50.1	48.1	43.1	29.0	31.0	40.1	39.2	Diurnal Maximum	
C - Calibration N - Not Valid A - Automated Daily Zero Span																									
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 82 ppb 24-hr na																									

Hourly Averages for O₃ at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

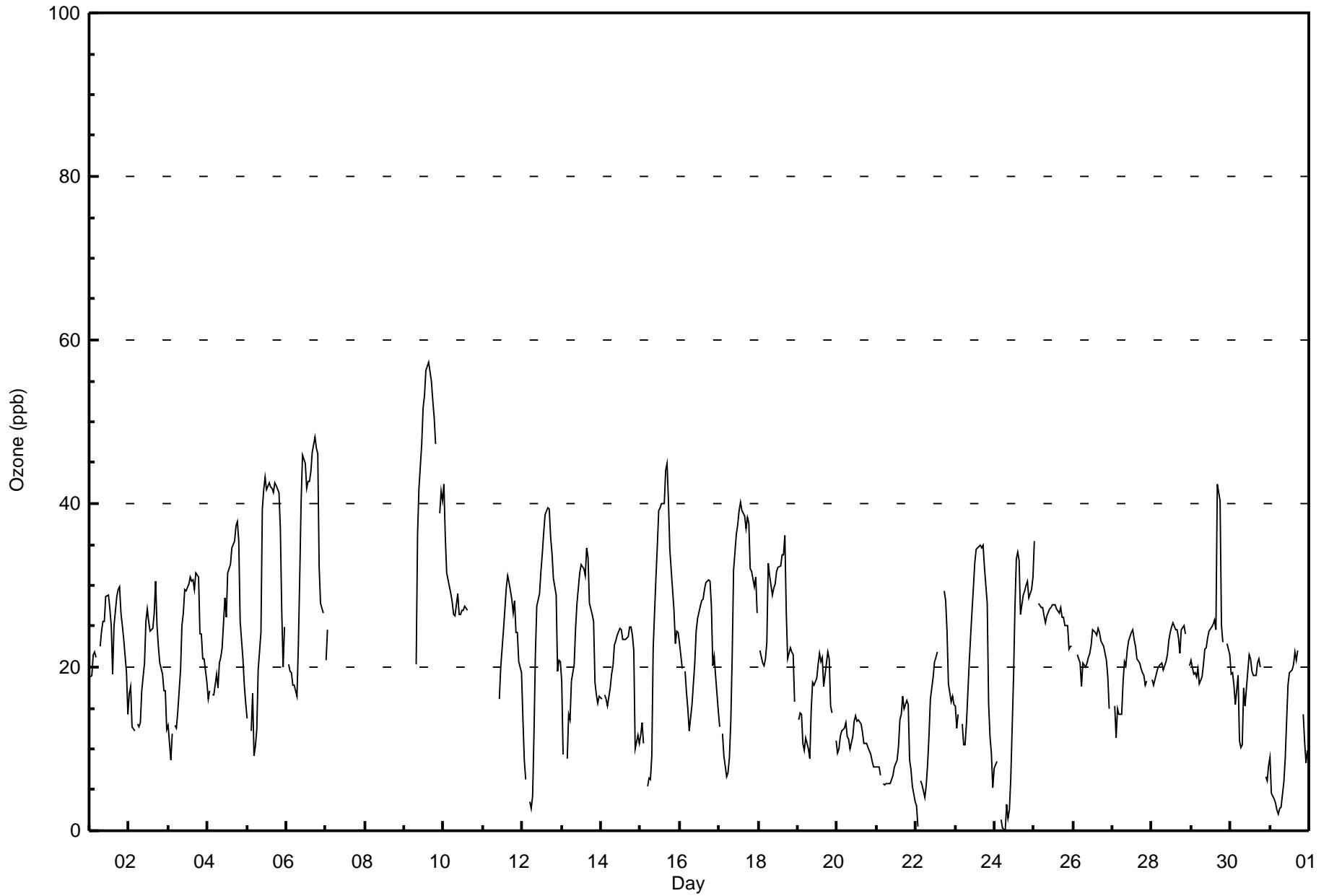
**Portable-Spirit River - Ozone (O₃) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 57.3 ppb on Aug 9 16:00	Maximum Daily Average: 33.7 ppb on Aug 6	Hours in Service: 744
Minimum Value: 0 ppb on Aug 24 07:00	Minimum Daily Average: 9.0 ppb on Aug 21	Hours of Data: 631
Maximum Diurnal Average: 30.6 ppb at hour 17	Minimum Diurnal Average: 13.1 ppb at hour 6	Hours of Missing Data: 113
Monthly Average: 22.30 ppb	Percentiles: P ₁ = 2.5 P ₁₀ = 9.0 Q ₁ = 15.2 Median = 21.5 Q ₃ = 28.0 P ₉₀ = 36.3 P ₉₉ = 52.1	Hours of Calibration: 41
		Percent Operational Time: 90.3

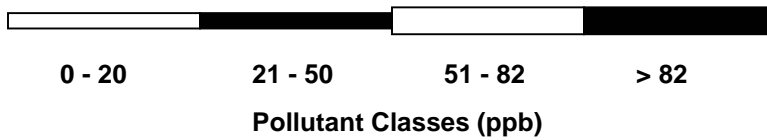
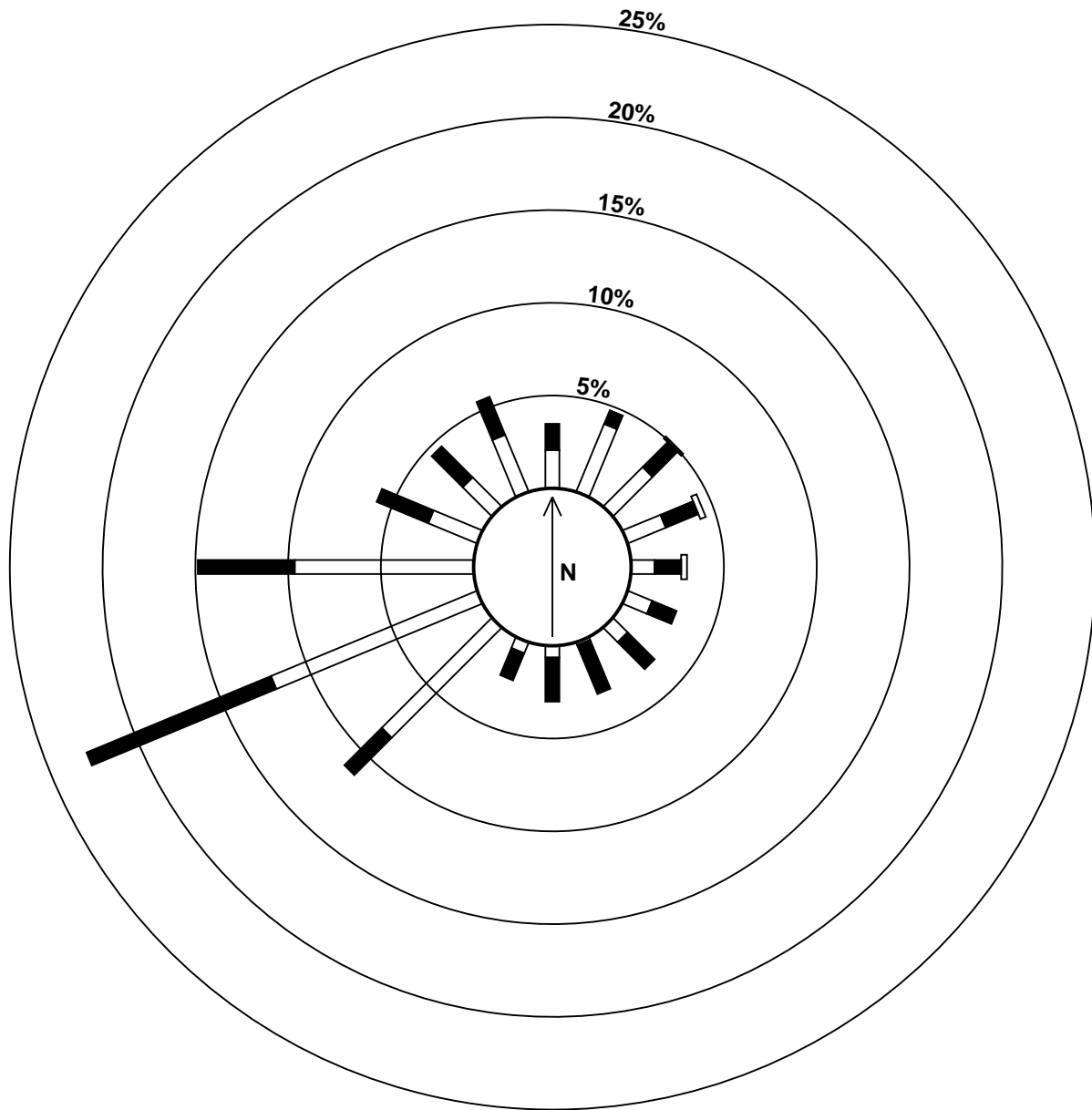
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	19	19	21	22	21	A	23	24	26	26	29	29	27	25	19	25	29	30	30	27	25	23	19	14	24.0	29.8																						
2-Aug	17	18	13	12	A	13	13	13	17	20	26	27	26	24	25	27	31	25	23	20	19	17	17	12	19.8	30.6																						
3-Aug	13	9	12	A	13	13	15	20	25	27	29	29	30	31	31	31	30	32	31	24	24	21	21	18	22.9	31.5																						
4-Aug	16	17	A	17	17	19	17	21	21	22	28	26	32	32	33	35	35	37	38	35	26	21	18	16	25.1	37.7																						
5-Aug	14	A	12	17	9	10	12	20	24	39	42	43	42	43	42	42	41	42	42	41	37	27	20	25	29.9	43.1																						
6-Aug	A	20	20	19	18	18	16	23	31	40	46	45	42	43	43	44	46	48	47	46	32	28	27	A	33.7	48.1																						
7-Aug	21	25	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	24.5																						
8-Aug	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-Aug	N	N	N	N	N	N	N	20	36	42	47	52	53	56	57	57	55	53	50	47	A	39	42	40	--	57.3																						
10-Aug	42	36	32	30	29	28	26	26	29	26	26	27	27	27	27	N	N	N	N	N	N	N	N	N	--	42.3																						
11-Aug	N	N	N	N	N	N	N	N	N	N	16	20	25	27	30	31	30	28	27	28	24	24	21	19	--	31.1																						
12-Aug	14	9	6	A	4	3	4	12	21	28	29	32	34	36	39	39	39	36	34	31	29	20	21	21	23.4	39.4																						
13-Aug	18	9	A	9	14	13	18	20	25	28	30	32	32	32	31	35	33	28	26	26	18	17	16	16	22.9	34.6																						
14-Aug	16	A	17	16	15	18	19	20	23	23	24	25	24	23	23	23	24	25	25	24	22	10	12	11	20.1	24.9																						
15-Aug	12	13	11	A	5	6	6	9	22	31	35	39	39	40	40	44	45	40	34	32	27	23	24	24	26.2	44.9																						
16-Aug	23	20	A	20	17	15	12	15	18	20	24	26	27	28	28	29	30	31	30	28	20	21	19	15	22.5	30.7																						
17-Aug	13	A	12	9	7	7	9	13	21	32	36	37	39	40	39	38	37	38	38	32	32	30	31	27	26.9	40.2																						
18-Aug	A	22	20	20	21	23	33	31	29	30	30	32	32	32	34	34	36	27	21	22	22	21	16	A	26.8	36.2																						
19-Aug	14	14	14	11	10	11	10	9	15	18	18	19	20	22	21	21	18	21	22	21	15	14	A	11	16.0	21.8																						
20-Aug	10	10	12	12	13	13	12	11	10	12	13	14	13	14	13	12	11	11	11	10	9	9	8	8	11.2	14.1																						
21-Aug	8	8	7	A	6	6	6	6	6	6	7	8	9	10	14	14	16	15	16	15	9	7	5	4	9.0	16.4																						
22-Aug	3	0	A	6	6	4	6	8	12	16	19	21	21	22	C	C	C	29	28	24	18	16	16	15	14.6	29.4																						
23-Aug	15	13	14	A	13	11	11	13	20	24	27	30	33	34	35	35	35	35	32	28	16	12	10	5	21.7	34.9																						
24-Aug	8	9	A	A	1	0	0	3	1	2	6	19	27	33	34	33	26	29	29	30	30	28	29	31	18.7	34.0																						
25-Aug	35	A	A	28	27	27	26	25	26	27	27	28	28	28	27	27	27	26	26	25	25	22	22	22	26.5	35.4																						
26-Aug	A	A	21	21	20	18	21	20	21	21	22	23	25	24	24	25	24	23	23	22	21	19	15	A	21.5	24.7																						
27-Aug	A	15	11	15	14	14	18	21	20	22	23	24	25	23	23	21	21	20	19	19	18	18	A	A	19.3	24.5																						
28-Aug	18	18	18	20	20	20	21	20	21	22	23	24	25	25	25	25	24	22	25	25	24	A	A	20	22.0	25.5																						
29-Aug	21	19	19	19	20	18	19	20	22	22	24	24	25	25	26	25	42	40	25	23	A	A	23	22	23.8	42.3																						
30-Aug	19	19	18	15	19	11	10	10	17	15	20	22	21	20	19	19	21	21	20	A	A	7	6	8	16.2	21.5																						
31-Aug	9	5	4	3	3	2	3	3	6	9	13	18	19	20	20	22	21	22	A	A	14	11	8	10	11.1	22.1																						
																								16.5	15.1	15.0	16.2	13.9	13.1	14.3	16.4	20.2	23.3	25.5	27.3	28.4	29.0	29.3	30.1	30.6	29.8	28.6	27.2	22.3	19.4	18.6	17.3	Diurnal Average
																								42.3	35.9	31.6	29.9	28.9	27.9	32.6	31.2	36.3	41.8	47.3	51.8	53.3	56.3	56.8	57.3	54.9	52.6	50.5	47.3	36.9	38.9	41.6	40.4	Diurnal Maximum

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

Hourly Maximums for O₃ at Portable-Spirit River August 2008



Pollutant Rose for O₃ at Portable-Spirit River August 2008



**Peace Airshed Zone Association
Summary of Eight Hour Running Averages**

**Portable-Spirit River - Ozone (O₃) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedences (AAAQO): 8-hr: 0 Maximum Value: 52.0 ppb on Aug 9 19:00	Hours in Service: 744 Hours of Data: 659 Hours of Missing Data: 85 Hours of Calibration: 10 Percent Operational Time: 89.9
Minimum Value: 0.0 ppb on Aug 24 08:00	
Percentiles: P ₁ = 1.4 P ₁₀ = 8.7 Q ₁ = 13.4 Median = 19.4 Q ₃ = 25.0 P ₉₀ = 30.7 P ₉₉ = 46.9	

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-Aug	21	20	19	19	18	18	19	20	21	22	23	24	24	24	24	23	24	24	24	24	24	24	23	22	24.4
2-Aug	21	19	17	16	15	13	13	12	13	13	14	16	17	19	20	22	23	24	24	23	22	21	20	18	23.9
3-Aug	16	14	13	12	11	11	11	11	13	16	18	20	22	24	26	27	28	29	28	27	26	25	24	22	28.6
4-Aug	21	19	18	17	17	16	16	16	17	17	18	19	21	23	24	26	28	30	31	32	31	29	27	25	31.8
5-Aug	22	20	17	14	12	11	9	10	11	14	17	21	25	29	34	37	39	40	41	40	39	36	33	31	40.5
6-Aug	30	26	23	20	18	16	15	15	16	19	22	25	28	32	36	39	41	43	43	42	41	39	37	36	42.8
7-Aug	32	28	25	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	32.1
8-Aug	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-Aug	N	N	N	N	N	N	N	N	N	N	N	N	38	41	42	47	50	51	52	51	51	48	46	44	52.0
10-Aug	41	39	36	34	33	33	31	29	27	26	26	26	25	25	25	26	25	N	N	N	N	N	N	N	41.4
11-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	23	24	24	25	26	26	26	25	23	26.3
12-Aug	21	18	16	14	12	9	6	5	6	8	12	14	18	22	26	30	32	34	34	33	31	29	26	23	33.9
13-Aug	19	16	14	11	10	10	10	10	12	15	17	20	23	25	27	29	30	30	29	28	26	24	22	20	29.9
14-Aug	18	17	16	15	15	15	15	16	17	18	18	19	20	21	22	22	23	23	23	23	22	20	18	17	23.0
15-Aug	15	13	11	10	8	7	6	6	7	9	13	16	20	25	29	33	36	37	37	36	35	33	30	28	37.1
16-Aug	26	24	22	21	20	18	17	16	15	15	16	17	18	20	22	24	25	27	27	27	26	25	23	22	27.5
17-Aug	19	18	15	13	11	9	8	8	8	11	14	18	22	26	30	33	36	37	37	36	35	33	32	31	36.9
18-Aug	30	28	25	23	21	18	19	19	20	21	23	25	27	29	30	30	31	30	29	27	26	24	22	21	30.6
19-Aug	18	17	16	14	12	10	9	9	9	9	10	11	12	14	15	17	18	18	18	17	16	16	15	15	18.1
20-Aug	14	13	11	11	10	10	10	10	10	10	11	11	11	11	11	11	12	11	11	11	10	10	9	9	13.8
21-Aug	8	8	7	7	7	6	6	6	5	5	5	5	6	6	7	8	9	10	11	11	11	11	10	8	11.4
22-Aug	7	5	4	3	3	3	3	3	5	7	8	10	12	14	15	17	N	N	N	N	N	N	19	19	19.4
23-Aug	18	16	14	13	13	12	11	11	12	13	15	17	19	22	25	28	30	31	31	31	28	24	20	16	31.2
24-Aug	12	9	6	4	2	1	0	0	0	0	0	2	5	9	13	16	19	23	25	27	28	28	27	27	28.2
25-Aug	28	28	29	28	27	27	27	26	25	25	25	25	26	26	26	26	26	26	26	25	25	24	23	23	28.7
26-Aug	22	22	21	21	20	19	19	19	19	19	19	19	20	21	21	22	22	23	23	23	22	21	20	20	22.6
27-Aug	19	17	15	13	12	11	11	12	13	14	16	17	19	20	21	21	21	21	21	20	19	18	18	17	21.4
28-Aug	17	16	16	17	18	18	18	18	18	19	19	20	21	21	22	22	23	23	23	23	23	23	22	21	23.1
29-Aug	21	20	19	18	17	17	17	18	18	19	19	20	20	21	22	23	23	24	24	24	24	24	24	23	24.5
30-Aug	22	20	19	18	17	16	15	13	13	12	13	13	14	15	16	17	18	18	19	18	18	16	14	12	22.0
31-Aug	10	7	4	4	4	3	2	2	1	2	3	5	7	10	12	14	16	18	19	19	18	16	14	12	19.4
	41.4	38.8	36.2	34.1	33.1	32.5	30.7	28.7	27.3	26.5	25.9	25.5	38.4	40.6	42.5	47.0	49.8	51.5	52.0	51.3	51.2	47.9	45.8	43.6	

N - Not Valid
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb

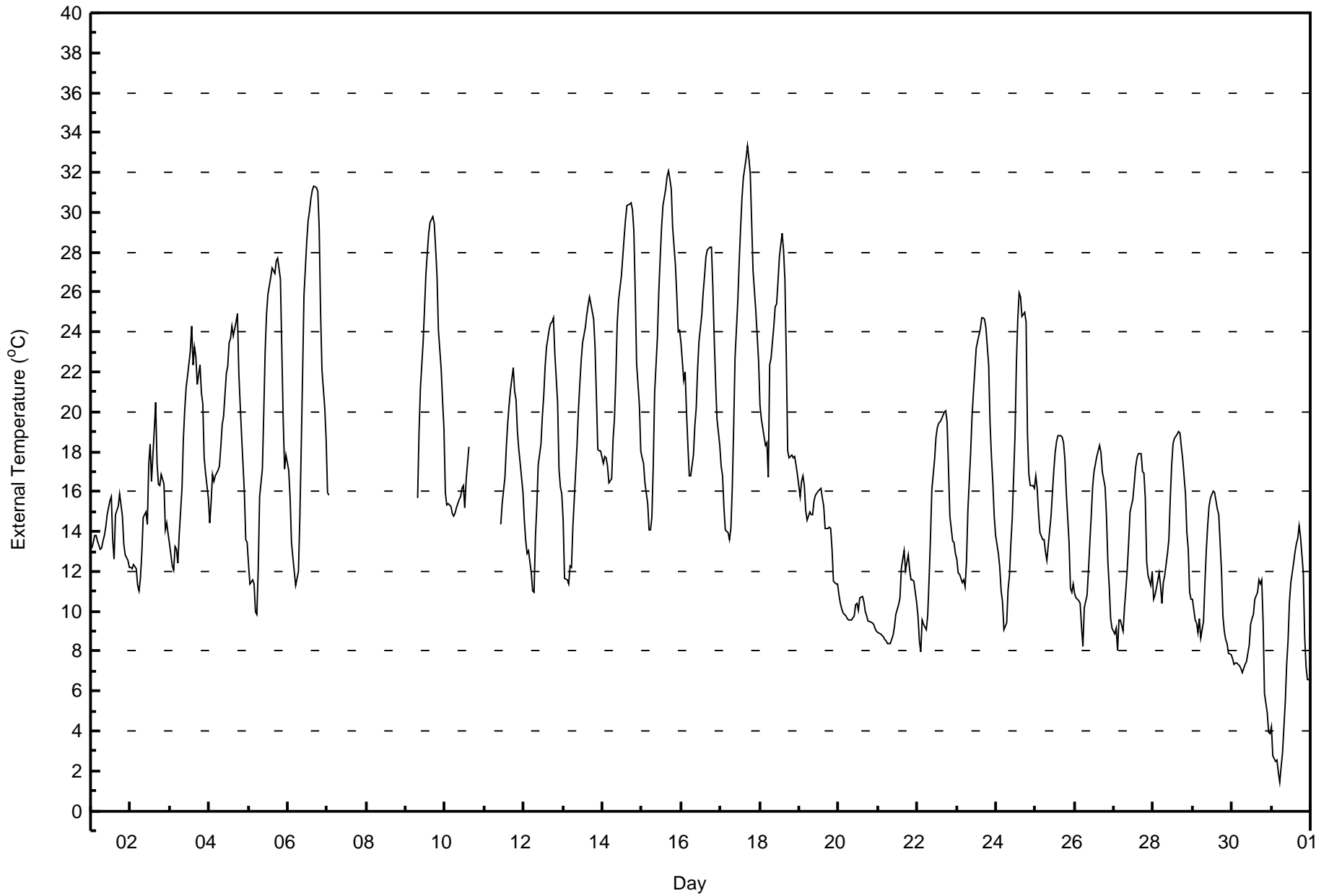
Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River - External Temperature (ET) - °C
August 1, 2008 to September 1, 2008

Maximum Value: 33.3 °C on Aug 17 17:00																						Maximum Daily Average: 23.9 °C on Aug 15				Hours in Service: 744																					
Minimum Value: 1 °C on Aug 31 06:00																						Minimum Daily Average: 7.7 °C on Aug 31				Hours of Data: 672																					
Maximum Diurnal Average: 21.8 °C at hour 16																						Minimum Diurnal Average: 11.5 °C at hour 6				Hours of Missing Data: 72																					
Monthly Average: 16.71 °C																						Percentiles: P ₁ = 3.9 P ₁₀ = 9.5 Q ₁ = 11.9 Median = 15.9 Q ₃ = 20.5 P ₉₀ = 25.9 P ₉₉ = 31.8				Hours of Calibration: 0																					
Percent Operational Time: 90.3																																															
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-Aug	13	13	14	14	14	13	13	14	14	14	15	16	16	14	13	15	15	16	15	15	13	13	13	12	14.0	15.9																					
2-Aug	12	12	12	12	11	11	12	13	15	15	14	17	18	17	19	20	17	16	16	17	16	14	14	14	14.9	20.4																					
3-Aug	13	12	12	13	13	12	14	16	19	20	21	22	23	24	22	23	23	21	22	21	20	18	17	16	18.3	24.3																					
4-Aug	14	15	17	16	17	17	17	18	19	20	22	22	23	24	24	24	25	25	22	20	19	16	14	13	19.4	25.0																					
5-Aug	12	11	12	11	10	10	12	16	17	20	23	25	26	27	27	27	27	28	28	27	23	20	17	18	19.7	27.7																					
6-Aug	17	16	13	13	12	11	12	15	18	22	26	29	30	30	31	31	31	31	31	29	25	22	20	19	22.2	31.3																					
7-Aug	16	16	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	16.0																					
8-Aug	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-Aug	N	N	N	N	N	N	N	16	19	21	24	25	27	28	29	30	30	29	28	27	24	22	21	19	--	29.8																					
10-Aug	16	15	15	15	15	15	15	15	16	16	16	16	15	17	18	N	N	N	N	N	N	N	N	N	--	18.2																					
11-Aug	N	N	N	N	N	N	N	N	N	N	14	15	17	18	19	20	21	22	21	21	19	18	17	16	--	22.2																					
12-Aug	15	14	13	13	12	11	11	14	15	17	18	20	21	22	23	24	24	25	25	23	20	17	16	16	17.9	24.7																					
13-Aug	15	12	12	11	12	12	14	17	18	20	21	23	23	24	25	25	26	25	25	23	21	18	18	18	19.1	25.7																					
14-Aug	17	18	18	17	16	17	19	20	22	24	26	27	28	29	30	30	30	30	30	29	26	22	20	18	23.5	30.5																					
15-Aug	18	17	16	15	14	14	15	17	21	24	26	28	29	30	31	32	32	32	31	29	27	26	24	24	23.9	32.1																					
16-Aug	23	22	22	20	18	17	17	18	19	20	22	24	25	26	27	28	28	28	28	26	24	21	20	18	22.6	28.3																					
17-Aug	17	17	15	14	14	14	14	16	19	23	26	28	29	31	32	33	33	33	32	30	27	25	24	23	23.6	33.3																					
18-Aug	20	20	19	18	18	17	22	23	24	25	25	27	28	29	28	27	23	18	18	18	18	18	17	17	21.5	28.9																					
19-Aug	16	17	17	16	15	15	15	15	15	16	16	16	16	16	15	14	14	14	14	13	12	11	11	11	14.8	16.8																					
20-Aug	11	10	10	10	10	10	10	10	10	10	10	10	10	11	11	10	10	10	10	9	9	9	9	9	9.9	10.8																					
21-Aug	9	9	9	9	9	9	8	8	9	9	9	10	10	11	12	13	13	12	13	12	12	11	10	10	10.3	13.1																					
22-Aug	10	9	8	10	9	9	10	12	14	16	18	19	19	19	20	20	20	20	20	17	15	14	13	13	14.6	20.0																					
23-Aug	13	12	12	11	12	11	13	15	18	20	21	22	23	24	24	25	25	25	24	22	19	18	16	15	18.3	24.7																					
24-Aug	14	13	12	11	10	9	9	11	12	13	15	19	22	25	26	26	25	25	24	19	17	16	16	16	16.9	25.9																					
25-Aug	17	16	15	14	14	14	13	13	13	15	16	17	18	19	19	19	19	18	18	16	13	11	11	11	15.3	18.8																					
26-Aug	11	11	11	10	9	8	10	11	12	13	15	16	17	18	18	18	18	17	16	15	13	11	10	9	13.2	18.3																					
27-Aug	9	9	8	10	10	9	10	11	12	13	15	16	16	17	18	18	18	17	17	16	13	12	11	12	13.2	17.9																					
28-Aug	11	11	11	12	11	10	11	12	13	14	16	17	18	19	19	19	19	18	18	16	14	13	11	11	14.3	19.0																					
29-Aug	11	10	9	9	10	9	9	11	13	14	15	16	16	16	15	15	12	10	9	9	8	8	8	8	11.5	16.0																					
30-Aug	8	7	7	7	7	7	7	7	7	8	8	9	10	10	11	11	12	11	12	9	6	5	4	4	8.1	11.6																					
31-Aug	4	3	2	3	2	1	2	3	5	7	9	10	11	12	13	13	14	14	14	12	9	7	7	7	7.7	14.3																					
																						13.6	13.1	12.7	12.4	12.0	11.5	12.4	13.7	15.3	16.8	18.0	19.3	20.2	20.8	21.4	21.8	21.6	21.2	20.7	19.3	17.3	15.6	14.7	14.2	Diurnal Average	
																						23.4	21.6	22.0	20.0	18.5	17.1	22.4	22.7	24.3	25.3	26.0	28.6	29.6	30.7	31.8	32.7	33.3	32.7	32.0	29.5	27.3	25.8	24.0	24.1	Diurnal Maximum	
N - Not Valid																																															

Hourly Averages for External Temperature at Portable-Spirit River

August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

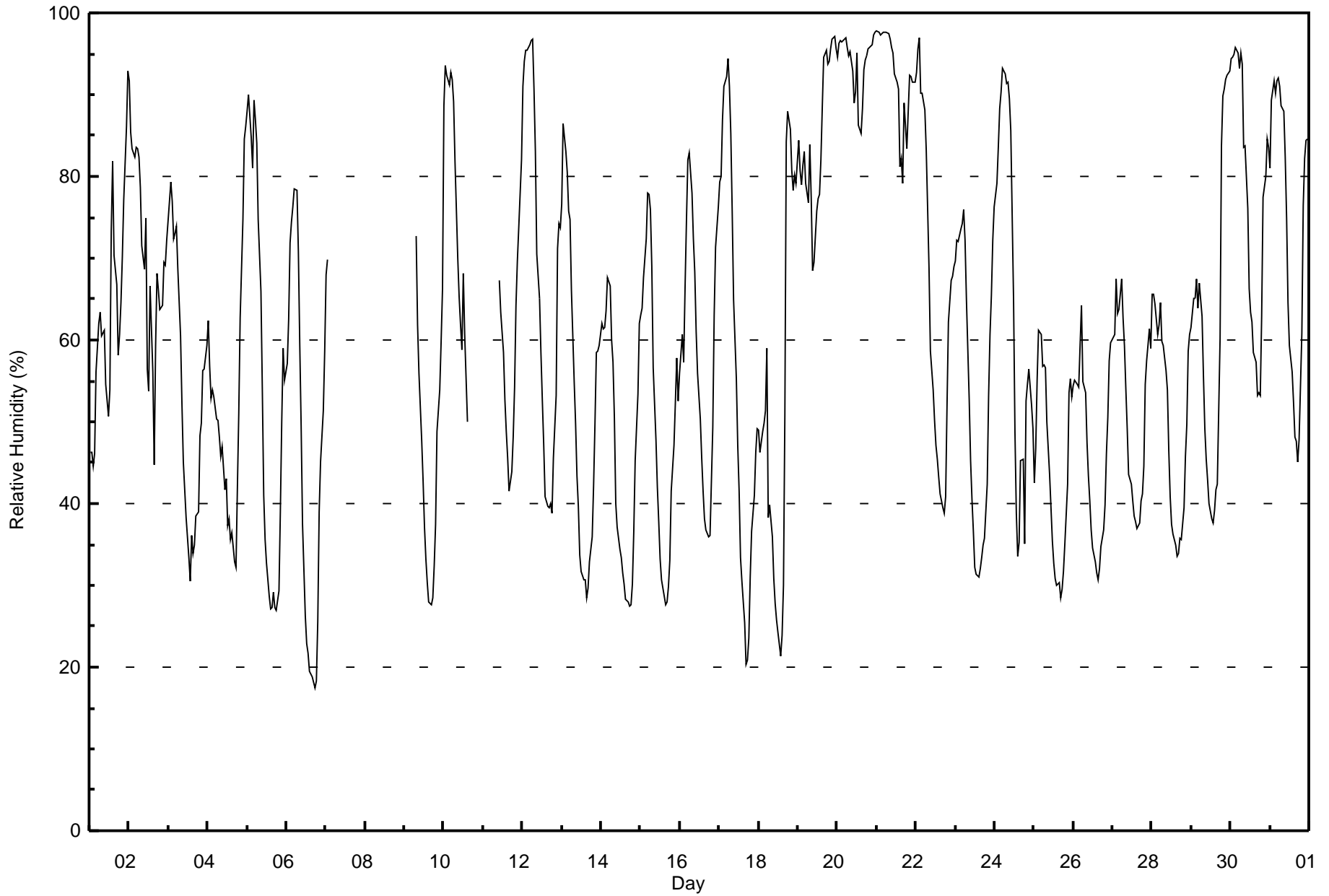
**Portable-Spirit River - Relative Humidity (RH) - %
August 1, 2008 to September 1, 2008**

Maximum Value: 97.8 % on Aug 21 01:00	Maximum Daily Average: 94.0 % on Aug 20	Hours in Service: 744
Minimum Value: 17 % on Aug 6 18:00	Minimum Daily Average: 44.1 % on Aug 25	Hours of Data: 672
Maximum Diurnal Average: 78.3 % at hour 6	Minimum Diurnal Average: 41.7 % at hour 16	Hours of Missing Data: 72
Monthly Average: 60.70 %	Percentiles: P ₁ = 21.1 P ₁₀ = 32.8 Q ₁ = 42.3 Median = 59.4 Q ₃ = 79.1 P ₉₀ = 92.2 P ₉₉ = 97.5	Hours of Calibration: 0
		Percent Operational Time: 90.3

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-Aug	46	46	45	46	56	62	63	60	61	61	55	51	54	73	82	70	67	58	61	65	70	77	86	93	62.8	93.0
2-Aug	92	86	83	82	84	83	82	79	72	69	75	56	54	67	56	45	59	68	66	64	64	70	69	72	70.7	91.6
3-Aug	74	79	77	72	73	74	69	61	52	45	42	38	33	30	36	34	35	39	39	48	50	56	56	59	53.0	79.3
4-Aug	62	57	53	54	53	50	50	48	46	47	42	43	37	38	36	36	33	32	42	51	63	75	85	86	50.8	86.1
5-Aug	88	90	85	81	89	87	84	75	66	54	41	36	33	29	27	27	29	27	27	29	39	50	59	55	54.4	90.0
6-Aug	57	62	72	74	76	79	78	71	59	49	37	26	23	22	20	19	19	17	18	26	39	45	51	59	45.8	78.5
7-Aug	68	70	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	69.8
8-Aug	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-Aug	N	N	N	N	N	N	N	73	62	56	48	43	37	33	30	28	28	28	32	37	49	54	60	66	--	72.8
10-Aug	89	94	92	91	93	92	89	82	70	65	62	59	68	61	50	N	N	N	N	N	N	N	N	N	--	93.5
11-Aug	N	N	N	N	N	N	N	N	N	N	67	63	59	53	49	46	42	44	48	54	64	70	74	82	--	82.1
12-Aug	91	94	95	96	96	97	97	91	83	71	65	58	53	47	41	40	40	40	39	46	53	71	74	74	68.7	96.7
13-Aug	77	86	83	81	76	75	66	55	50	43	40	34	32	31	31	29	30	33	36	42	50	59	59	59	52.2	86.4
14-Aug	62	61	62	64	68	67	60	57	51	40	37	34	33	31	30	28	28	27	28	30	37	45	53	62	45.7	67.6
15-Aug	63	64	68	72	78	78	76	69	57	48	42	38	33	31	29	28	28	30	33	42	47	52	58	53	50.6	78.0
16-Aug	56	61	57	66	75	82	83	78	72	68	61	56	50	46	42	38	37	36	36	43	49	63	71	76	58.4	82.9
17-Aug	79	80	87	91	92	94	91	85	76	65	55	47	41	33	30	25	20	21	24	31	37	41	46	49	56.0	94.5
18-Aug	49	46	49	50	51	59	38	40	36	31	28	26	24	21	24	30	51	84	88	86	81	78	80	79	51.2	88.0
19-Aug	84	81	79	81	83	79	77	84	77	68	69	76	77	78	82	88	95	95	94	94	96	97	97	96	84.5	97.2
20-Aug	95	96	97	96	97	97	96	95	95	93	89	90	95	86	85	88	93	94	95	96	96	96	97	98	94.0	97.6
21-Aug	98	98	97	97	98	98	98	98	97	96	95	93	92	91	81	82	79	89	83	88	92	92	92	92	92.2	97.8
22-Aug	93	96	97	90	90	88	83	76	69	59	54	50	47	45	43	41	40	39	41	52	62	67	68	69	65.0	97.0
23-Aug	70	72	72	73	74	76	72	65	53	45	41	37	32	31	31	32	33	35	36	42	53	61	65	72	53.1	76.0
24-Aug	76	79	84	88	90	93	93	91	92	90	86	65	49	39	34	35	45	45	35	53	54	56	52	49	65.6	93.2
25-Aug	42	47	55	61	61	57	57	57	50	43	40	35	33	31	30	30	29	30	32	35	42	54	55	53	44.1	61.2
26-Aug	54	55	55	54	59	64	55	53	48	43	40	37	35	33	31	31	32	35	37	40	46	50	57	60	46.1	64.3
27-Aug	60	61	68	63	64	67	63	59	54	49	44	42	40	38	38	37	38	40	41	45	55	58	61	59	51.8	67.5
28-Aug	66	66	64	61	62	65	60	59	56	54	46	41	37	36	35	34	34	36	36	39	46	50	59	61	50.1	65.7
29-Aug	62	65	65	68	64	67	63	56	49	45	43	40	38	38	39	42	42	60	84	90	91	92	92	93	62.0	93.0
30-Aug	94	95	95	96	95	93	95	94	84	84	76	66	63	62	59	57	53	54	53	63	77	80	85	84	77.3	95.8
31-Aug	81	89	92	90	92	92	91	89	88	82	75	65	59	56	52	48	48	45	48	61	76	82	84	85	73.8	92.1
	72.5	74.1	75.0	75.6	77.3	78.3	75.1	71.4	65.1	59.4	55.0	49.8	47.0	45.2	43.2	41.7	43.0	45.8	47.5	53.2	59.9	65.8	69.6	71.2	Diurnal Average	
	97.8	97.5	97.3	97.4	97.7	97.7	97.6	97.5	96.8	95.8	95.0	92.6	95.0	90.6	85.3	88.4	94.6	95.4	94.7	95.6	96.0	96.9	97.3	97.6	Diurnal Maximum	

N - Not Valid

Hourly Averages for Relative Humidity at Portable-Spirit River August 2008



Peace Airshed Zone Association Summary of Hourly Averages

Portable-Spirit River
August 1, 2008 to September 1, 2008
WS (km/h), WD (deg)

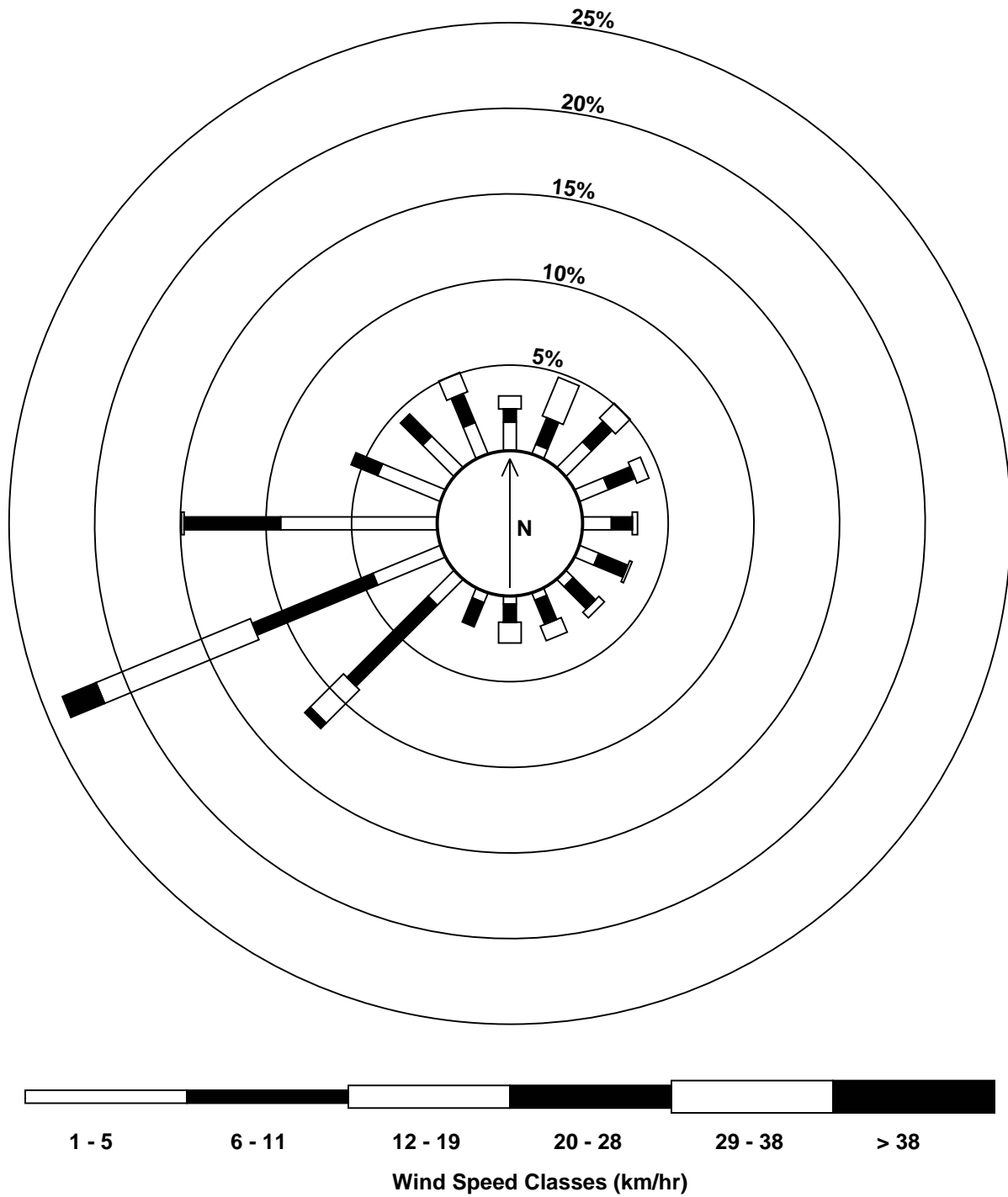
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	9	8	10	13	15	13	7	9	10	11	8	7	6	8	6	3	4	5	4	3	2	3	3	4	6.7	14.9
Dir	247	250	231	220	226	235	252	244	225	241	253	260	266	262	232	298	280	275	281	284	281	273	276	267	247.0	225.7
2 Spd	4	8	6	6	6	5	5	4	5	7	5	9	11	13	7	11	16	6	2	3	5	7	3	5	5.7	16.0
Dir	264	260	266	268	267	271	271	272	284	315	303	314	327	347	314	319	333	319	288	262	256	254	295	256	297.7	333.2
3 Spd	2	1	5	4	3	6	3	3	3	9	12	13	13	9	9	6	14	11	4	4	6	8	8	6	4.7	13.7
Dir	262	256	261	266	269	261	273	278	281	322	331	328	329	316	331	324	347	249	237	221	206	216	227	252	291.4	346.7
4 Spd	7	8	8	5	2	3	1	1	3	4	5	10	12	12	0	11	3	5	16	6	2	6	3	6	2.9	15.6
Dir	259	255	256	263	275	275	279	277	321	327	348	24	19	20	200	219	246	1	356	356	166	242	293	230	310.8	355.7
5 Spd	5	2	6	5	5	5	1	1	5	6	7	6	7	7	6	3	8	9	9	8	8	6	6	2	3.2	8.7
Dir	230	225	254	275	251	241	220	114	80	128	156	147	175	177	189	163	67	77	113	146	134	137	96	107	148.9	76.8
6 Spd	1	4	5	2	1	1	2	3	2	4	9	15	17	14	13	11	12	11	10	6	9	6	6	7	5.2	17.3
Dir	99	43	30	71	83	321	296	333	4	74	115	155	161	155	157	168	183	178	172	131	120	138	99	102	144.3	160.6
7 Spd	6	2	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	5.9
Dir	94	354	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	93.6
8 Spd	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	--
Dir	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 Spd	N	N	N	N	N	N	N	1	2	4	3	4	5	7	5	8	10	13	15	9	5	4	12	6	--	14.7
Dir	N	N	N	N	N	N	N	245	52	37	60	56	75	53	82	69	80	78	91	103	107	191	259	221	--	90.6
10 Spd	11	5	2	5	4	8	10	15	17	19	24	25	18	21	25	N	N	N	N	N	N	N	N	N	--	25.3
Dir	229	270	285	254	233	221	226	230	237	238	239	231	225	236	229	N	N	N	N	N	N	N	N	N	--	230.7
11 Spd	N	N	N	N	N	N	N	N	N	N	3	1	4	3	8	7	8	6	3	3	4	3	2	3	--	8.3
Dir	N	N	N	N	N	N	N	N	N	N	215	332	338	329	352	343	345	313	315	307	305	284	278	272	--	345.2
12 Spd	2	1	2	1	2	2	2	2	4	2	3	4	5	4	5	5	5	3	2	0	2	7	2	3	1.4	6.6
Dir	273	263	266	268	262	263	262	297	349	71	43	38	62	45	4	44	357	320	270	328	263	72	303	294	357.3	71.5
13 Spd	3	6	4	2	4	4	7	8	7	7	6	7	7	8	7	7	6	6	5	8	6	8	8	7	5.7	8.4
Dir	242	249	228	319	262	264	259	264	272	282	279	280	285	295	274	292	288	272	297	252	249	236	241	233	266.2	263.6
14 Spd	10	9	11	9	5	7	9	6	6	7	6	6	7	6	6	6	7	7	4	2	4	9	7	8	6.2	10.6
Dir	226	225	224	218	222	243	251	259	262	270	289	290	276	291	286	275	262	260	307	303	246	232	252	243	253.6	224.4
15 Spd	8	5	3	2	2	2	1	2	2	3	4	7	8	6	8	9	13	14	12	8	7	5	3	9	2.3	14.4
Dir	239	247	252	238	258	236	312	318	353	43	65	64	86	63	46	58	100	111	126	123	147	206	320	239	108.7	110.8
16 Spd	7	8	4	3	2	2	3	4	6	10	7	6	6	6	5	3	5	7	5	6	7	6	6	6	1.3	10.2
Dir	241	247	268	285	286	275	282	296	315	330	326	356	6	26	41	69	41	98	81	98	140	135	114	80	9.8	329.9
17 Spd	4	5	5	1	1	4	3	4	5	8	7	10	9	9	11	12	10	9	10	9	8	10	10	8	5.4	12.3
Dir	115	123	60	140	130	133	107	88	71	103	124	128	126	133	142	166	194	194	151	163	193	204	221	238	153.1	165.8
18 Spd	9	6	3	2	4	1	15	11	7	16	18	17	14	7	13	10	13	9	8	4	10	15	7	4	8.5	17.8
Dir	231	235	232	198	13	136	231	239	253	250	246	246	250	260	224	213	216	215	190	178	222	240	249	262	234.7	246.4
19 Spd	4	5	2	1	1	2	1	3	4	4	4	4	7	9	6	1	2	5	5	6	13	13	7	7	3.2	13.4
Dir	260	258	262	261	272	249	269	62	360	341	355	67	73	57	75	352	309	341	24	345	28	37	38	30	21.3	37.4
20 Spd	10	8	9	9	8	10	10	11	12	13	12	13	13	15	14	14	13	15	14	11	12	12	12	12	11.6	15.5
Dir	31	43	43	40	45	50	46	47	40	51	56	69	58	56	57	50	45	39	40	33	30	24	18	15	43.3	56.1
21 Spd	13	13	13	12	10	14	11	15	13	12	11	12	8	9	6	3	2	4	3	5	4	5	4	7	6.4	14.9
Dir	22	26	25	20	23	11	16	13	19	16	16	11	14	33	44	344	5	330	248	232	220	222	223	207	13.3	12.5
22 Spd	3	2	3	10	12	13	12	14	14	13	13	13	13	14	16	18	16	10	12	8	8	8	11	11	10.8	17.6
Dir	200	150	145	220	226	227	229	239	236	243	251	248	244	244	243	238	240	255	244	227	223	228	231	229	235.8	238.1

Peace Airshed Zone Association
Summary of Hourly Averages

Portable-Spirit River
 August 1, 2008 to September 1, 2008
 WS (km/h), WD (deg)

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	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	6	9	9	10	9	5	1	5	11	16	15	15	16	15	16	16	19	17	9	8	5	4	4	8.4	18.8
Dir	226	238	228	233	229	232	237	269	188	201	177	178	177	172	170	173	154	144	145	138	123	116	107	90	176.6	143.9
24 Spd	3	6	5	1	1	1	0	1	2	0	3	4	7	9	10	7	11	12	13	6	4	8	8	13	2.6	13.0
Dir	69	113	100	52	238	245	145	50	312	36	15	87	107	163	189	168	148	176	241	282	272	258	252	244	193.5	241.2
25 Spd	18	10	15	16	14	18	14	16	22	19	20	21	25	19	19	19	15	14	14	14	14	10	13	19	16.8	25.0
Dir	245	250	251	236	247	245	249	242	243	249	248	247	243	251	254	250	251	253	253	255	242	240	246	245	247.2	243.1
26 Spd	21	19	22	21	18	12	22	22	23	18	18	13	14	16	18	17	18	20	20	17	13	10	6	1	16.5	23.0
Dir	241	248	244	248	241	231	247	246	250	256	253	258	255	254	252	253	252	247	244	243	242	245	249	355	247.7	250.5
27 Spd	4	3	2	7	6	2	3	6	12	11	10	13	13	14	13	11	7	7	7	7	9	12	13	20	8.6	20.2
Dir	247	279	253	245	233	263	260	249	250	253	253	250	249	249	253	257	264	264	262	261	239	234	233	237	248.7	236.9
28 Spd	14	14	18	19	19	17	18	12	10	10	10	7	6	11	7	9	15	18	15	15	10	13	10	2	12.3	19.5
Dir	229	230	232	240	238	239	249	256	259	259	263	282	274	259	267	263	252	249	253	252	249	246	234	282	248.3	239.7
29 Spd	4	8	11	11	7	6	8	7	6	4	5	4	3	2	5	9	2	5	9	10	10	4	5	2	4.6	11.3
Dir	244	229	241	239	257	259	258	257	264	294	276	264	323	248	36	23	90	211	206	229	245	264	254	265	251.6	241.4
30 Spd	1	3	1	2	5	13	4	7	15	8	3	9	10	13	15	10	6	6	3	4	5	7	6	5	5.2	15.5
Dir	268	257	281	291	337	11	338	333	360	336	302	338	335	342	340	336	328	324	316	246	243	235	235	243	325.7	340.3
31 Spd	4	2	2	1	4	3	1	3	3	5	6	3	12	13	5	4	3	1	4	6	8	8	7	9	2.1	12.5
Dir	266	284	260	283	267	278	190	7	315	345	9	82	30	356	325	328	301	225	228	202	217	224	227	234	289.6	355.8
Spd	4.5	3.8	4.1	4.6	4.4	4.1	4.8	4.1	4.2	4.2	3.7	2.6	2.2	2.4	3.0	2.7	2.2	2.7	2.5	2.8	3.4	4.4	4.0	4.3	Diurnal Average	
Dir	242.1	248.3	248.7	246.8	249.8	253.3	254.1	264.8	273.3	275.3	264.4	262.6	269.5	276.3	250.2	254.8	257.2	230.4	220.1	224.3	217.9	228.5	243.6	243.3	Diurnal Maximum	
Spd	21.1	19.0	21.9	21.0	18.7	17.5	22.3	21.7	23.0	19.3	24.2	25.3	25.0	21.4	25.2	19.2	18.7	19.9	19.8	17.5	14.1	15.0	12.9	20.2	Diurnal Maximum	
Dir	240.8	247.5	244.3	247.5	237.9	245.1	246.6	246.2	250.5	249.2	239.5	230.7	243.1	236.1	228.6	249.7	250.5	246.6	244.0	242.8	242.2	239.7	233.0	236.9	Diurnal Maximum	
Maximum Speed Value: 25 km/h on Aug 10 12:00																			Minimum Speed Value: 0 km/h on Aug 12 20:00					Hours in Service:		744
Maximum Daily Speed Average: 16.8 km/h on Aug 25																			Minimum Daily Speed Average: 1.3 km/h on Aug 12					Hours of Data:		672
Maximum Diurnal Speed Average: 4.8 km/h at hour 7																			Minimum Diurnal Speed Average: 2.2 km/h at hour 13					Hours of Missing Data:		72
Monthly Average Velocity: 3.43 km/h 250.12 deg																			Speed Percentiles: P ₁ = 0.7 P ₁₀ = 2.3 Q ₁ = 4.0 Median = 7.0 Q ₃ = 11.4 P ₉₀ = 15.1 P ₉₉ = 22.2					Percent Operational Time:		90.3
All monthly, daily, and diurnal averages have been calculated using vector methods																										
N - Not Valid																										
Percentage 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	2.98	1.93	2.98	0.00	0.00	0.00	7.89																			
NorthEast	2.98	3.87	2.68	0.00	0.00	0.00	9.52																			
East	2.83	2.98	0.74	0.00	0.00	0.00	6.55																			
SouthEast	1.34	3.87	1.34	0.00	0.00	0.00	6.55																			
South	1.19	2.08	1.93	0.00	0.00	0.00	5.21																			
SouthWest	4.46	10.42	7.44	2.38	0.00	0.00	24.70																			
West	12.80	11.31	5.06	0.89	0.00	0.00	30.06																			
NorthWest	5.51	3.13	0.89	0.00	0.00	0.00	9.52																			
Total	34.08	39.58	23.07	3.27	0.00	0.00	100.00																			

Wind Rose for WS at Portable-Spirit River August 2008



Peace Airshed Zone Association
Summary of Hourly Averages - Wind Speed (Scalar)

Portable-Spirit River - Wind Speed (WS) - km/h
August 1, 2008 to September 1, 2008

Maximum Speed: 26 km/h on Aug 10 15:00	Maximum Daily Speed Average: 16.9 km/h on Aug 25	Hours in Service: 744
Minimum Speed: 1 km/h on Aug 12 04:00	Minimum Daily Speed Average: 3.9 km/h on Aug 12	Hours of Data: 672
Maximum Diurnal Speed Average: 11.1 km/h at hour 14	Minimum Diurnal Speed Average: 6.6 km/h at hour 2	Hours of Missing Data: 72
Monthly Average Speed: 8.47 km/h	Percentiles: P ₁ = 1.5 P ₁₀ = 2.8 Q ₁ = 4.6 Median = 7.5 Q ₃ = 11.6 P ₉₀ = 15.4 P ₉₉ = 22.3	Percent Operational Time: 90.3

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-Aug	9	8	10	13	15	13	8	9	11	11	9	7	6	8	6	6	4	5	4	3	3	3	4	4	7.4	15.0
2-Aug	5	8	6	6	7	5	5	4	5	7	5	9	12	13	7	11	17	6	3	3	5	7	3	5	6.9	16.5
3-Aug	2	1	5	4	4	6	3	3	4	9	12	13	13	9	9	6	14	12	4	4	6	8	8	6	6.9	14.0
4-Aug	7	8	8	5	2	3	2	2	4	4	6	11	13	12	4	11	4	7	16	7	5	6	4	7	6.6	16.0
5-Aug	6	3	6	7	6	6	2	3	5	8	8	7	8	9	8	7	8	9	10	8	9	7	6	2	6.5	9.9
6-Aug	4	4	5	3	1	2	2	3	2	4	10	16	18	15	14	13	12	12	10	7	9	6	7	7	7.7	17.7
7-Aug	6	3	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	6.0
8-Aug	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-Aug	N	N	N	N	N	N	N	1	3	4	4	5	6	8	7	9	10	13	15	9	5	8	12	11	--	14.9
10-Aug	14	5	2	5	5	8	10	15	17	19	24	25	18	22	26	N	N	N	N	N	N	N	N	N	--	25.5
11-Aug	N	N	N	N	N	N	N	N	N	N	4	4	6	5	9	8	9	6	4	3	4	3	2	3	--	9.3
12-Aug	2	2	2	1	2	2	2	2	4	3	5	6	6	6	7	7	6	3	3	4	6	7	3	4	3.9	6.9
13-Aug	5	6	4	2	4	4	8	9	7	7	6	7	8	8	8	7	7	6	5	8	6	8	8	7	6.5	8.5
14-Aug	10	9	11	9	5	7	9	6	6	8	7	7	8	7	7	7	8	7	4	2	4	9	7	8	7.2	10.6
15-Aug	8	5	4	3	2	3	2	2	2	3	5	8	8	7	9	10	14	15	12	8	8	6	3	9	6.5	14.7
16-Aug	7	9	4	3	3	2	4	4	6	10	8	7	7	8	6	5	7	7	5	7	8	8	7	6	6.1	10.4
17-Aug	4	6	5	2	2	4	3	5	5	9	8	11	10	10	12	14	10	10	11	9	8	10	10	8	7.8	13.7
18-Aug	9	7	3	4	5	4	15	11	7	16	18	17	14	8	13	10	13	10	8	4	11	15	7	4	9.7	17.9
19-Aug	4	5	2	2	2	3	2	3	4	4	5	7	9	7	6	2	3	6	5	6	14	13	7	8	5.3	14.0
20-Aug	10	8	9	9	8	10	10	11	12	13	12	13	14	16	14	14	13	15	14	11	12	12	13	13	12.0	15.6
21-Aug	13	13	13	12	10	14	12	15	13	12	11	13	8	9	6	4	3	5	3	5	4	5	4	7	8.9	15.0
22-Aug	4	2	4	10	12	13	12	14	14	13	13	13	13	14	16	18	16	10	12	8	8	8	11	11	11.3	17.8
23-Aug	9	6	9	9	10	9	5	3	6	12	16	15	15	17	15	17	17	19	17	9	8	6	5	4	10.8	19.1
24-Aug	3	7	6	4	3	3	2	2	2	1	3	5	7	11	11	7	11	13	13	7	4	8	9	13	6.4	13.3
25-Aug	18	11	15	16	14	18	14	16	23	19	20	21	25	19	19	19	19	15	14	14	14	10	13	19	16.9	25.1
26-Aug	21	19	22	21	18	13	22	22	23	18	18	13	14	16	18	17	18	20	20	18	13	10	6	2	16.8	23.1
27-Aug	4	3	2	7	6	2	3	6	12	11	10	13	13	15	13	11	7	7	7	7	9	12	13	20	9.0	20.3
28-Aug	15	14	18	20	19	17	18	12	10	10	11	7	7	12	8	9	15	19	15	15	10	13	10	4	12.8	19.5
29-Aug	5	8	11	11	7	6	8	8	7	5	6	6	4	3	5	9	5	10	10	10	11	4	5	3	6.8	11.4
30-Aug	2	3	2	2	6	13	4	7	16	8	4	10	11	13	16	10	6	6	3	4	5	7	6	5	7.1	15.8
31-Aug	5	3	2	2	4	3	1	4	3	5	7	5	16	17	7	5	4	3	4	6	8	8	8	9	5.6	16.5

7.5	6.6	7.0	7.1	6.7	7.2	7.0	7.2	8.4	9.1	9.4	10.4	11.0	11.1	10.6	9.8	10.0	9.8	9.0	7.4	7.7	8.2	7.2	7.4	Diurnal Average
21.1	19.0	21.9	21.0	18.8	17.5	22.3	21.8	23.1	19.4	24.3	25.4	25.1	21.5	25.5	19.4	18.9	20.1	19.9	17.5	14.2	15.1	12.9	20.3	Diurnal Maximum

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

**Peace Airshed Zone Association
Summary of Hourly Standard Deviations**

**Portable-Spirit River - Wind Direction (WD) - deg
August 1, 2008 to September 1, 2008**

Maximum Value: 97.4 deg on Aug 12 20:00																								Hours in Service:	744
Minimum Value: 2.4 deg on Aug 14 03:00																								Hours of Data:	672
Percentiles: P ₁ = 2.9 P ₁₀ = 5.5 Q ₁ = 8.4 Median = 18.1 Q ₃ = 34.1 P ₉₀ = 52.9 P ₉₉ = 89.2																								Hours of Missing Data:	72
																								Hours of Calibration:	0
																								Percent Operational Time:	90.3
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	4	4	8	5	7	5	26	9	14	10	13	19	23	25	16	56	40	20	34	38	32	26	35	24	56.1
2-Aug	25	10	13	16	20	20	23	24	25	14	27	19	19	19	19	13	17	17	40	11	6	5	39	6	40.3
3-Aug	50	53	5	10	12	6	29	33	39	14	18	11	20	26	24	23	13	28	39	15	7	5	4	20	52.5
4-Aug	4	3	4	7	44	36	50	57	41	15	35	24	17	17	89	13	56	63	13	59	61	14	52	33	89.5
5-Aug	52	69	18	46	31	62	81	69	19	37	24	40	39	47	52	86	14	16	29	8	21	33	7	25	85.5
6-Aug	69	15	8	30	53	44	31	13	53	30	25	22	13	23	21	30	23	21	15	32	13	19	11	6	69.4
7-Aug	15	37	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	37.1
8-Aug	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-Aug	N	N	N	N	N	N	N	51	77	38	58	47	51	35	57	30	24	14	9	10	12	56	17	48	76.5
10-Aug	34	29	40	10	36	6	5	6	4	6	6	4	9	6	9	N	N	N	N	N	N	N	N	N	40.3
11-Aug	N	N	N	N	N	N	N	N	N	N	66	92	66	66	42	29	23	26	35	39	29	35	36	16	92.0
12-Aug	40	44	23	59	13	7	5	38	35	57	50	74	42	63	70	54	51	40	52	97	72	14	60	63	97.4
13-Aug	62	15	23	33	31	8	8	10	26	27	25	22	23	25	37	26	26	37	29	21	10	8	4	15	61.5
14-Aug	3	3	2	4	6	14	6	12	22	28	32	25	28	30	35	30	25	28	27	32	27	7	9	9	35.0
15-Aug	9	17	27	58	36	40	70	39	40	35	42	23	31	41	21	28	19	13	7	9	27	16	35	21	69.6
16-Aug	17	10	17	35	42	39	40	30	20	12	20	45	41	44	54	64	41	26	17	16	18	41	32	24	63.6
17-Aug	10	29	22	37	52	9	14	20	18	20	24	21	33	31	31	34	18	23	13	12	9	7	20	5	51.6
18-Aug	4	11	43	71	46	87	10	17	17	7	6	9	16	32	12	9	11	15	10	58	19	8	11	25	86.8
19-Aug	30	23	51	40	55	41	51	59	26	13	32	13	10	23	11	74	35	23	27	10	28	4	8	12	74.2
20-Aug	6	9	7	6	6	10	7	10	6	7	9	7	8	8	7	9	7	5	6	6	5	6	7	6	10.0
21-Aug	6	6	6	6	8	6	7	7	7	8	8	17	14	13	21	48	56	16	26	8	10	7	12	5	56.5
22-Aug	34	43	77	33	3	3	3	4	4	11	8	9	15	11	8	8	13	10	8	10	7	7	4	4	76.8
23-Aug	15	15	3	7	3	4	27	84	51	12	11	12	16	19	16	15	19	10	6	9	9	18	32	13	83.7
24-Aug	33	24	19	78	91	95	71	69	57	91	34	27	14	32	24	23	13	17	16	27	43	10	19	7	94.7
25-Aug	5	24	5	6	5	4	7	5	6	8	9	11	7	11	7	11	8	10	6	5	7	4	6	3	24.1
26-Aug	3	3	4	3	5	4	5	5	5	7	10	13	19	17	9	9	8	7	7	5	4	5	6	67	66.7
27-Aug	21	41	62	51	7	43	32	20	6	11	22	24	15	14	21	12	20	18	16	15	11	8	6	5	62.2
28-Aug	4	3	3	4	6	8	4	7	8	10	21	29	32	32	30	24	8	10	6	5	6	4	6	60	60.1
29-Aug	25	12	9	8	5	7	6	13	17	38	38	54	47	69	45	12	94	73	13	8	13	24	26	39	94.4
30-Aug	57	18	53	47	43	6	28	11	13	17	34	29	33	13	12	11	18	22	43	10	9	7	5	17	56.8
31-Aug	22	15	25	77	27	44	69	42	35	23	36	56	43	57	45	24	38	84	30	15	4	6	6	6	84.0
69.4 69.1 76.8 78.4 90.6 94.7 80.8 83.7 76.5 91.1 66.2 92.0 66.2 69.3 89.5 85.5 94.4 84.0 51.6 97.4 72.1 56.2 60.4 66.7																									
N - Not Valid																									

PASZA

Valleyview Station

Monthly Summary Tables, Graphs and
Roses

**Peace Airshed Zone Association
Summary of Hourly Averages**

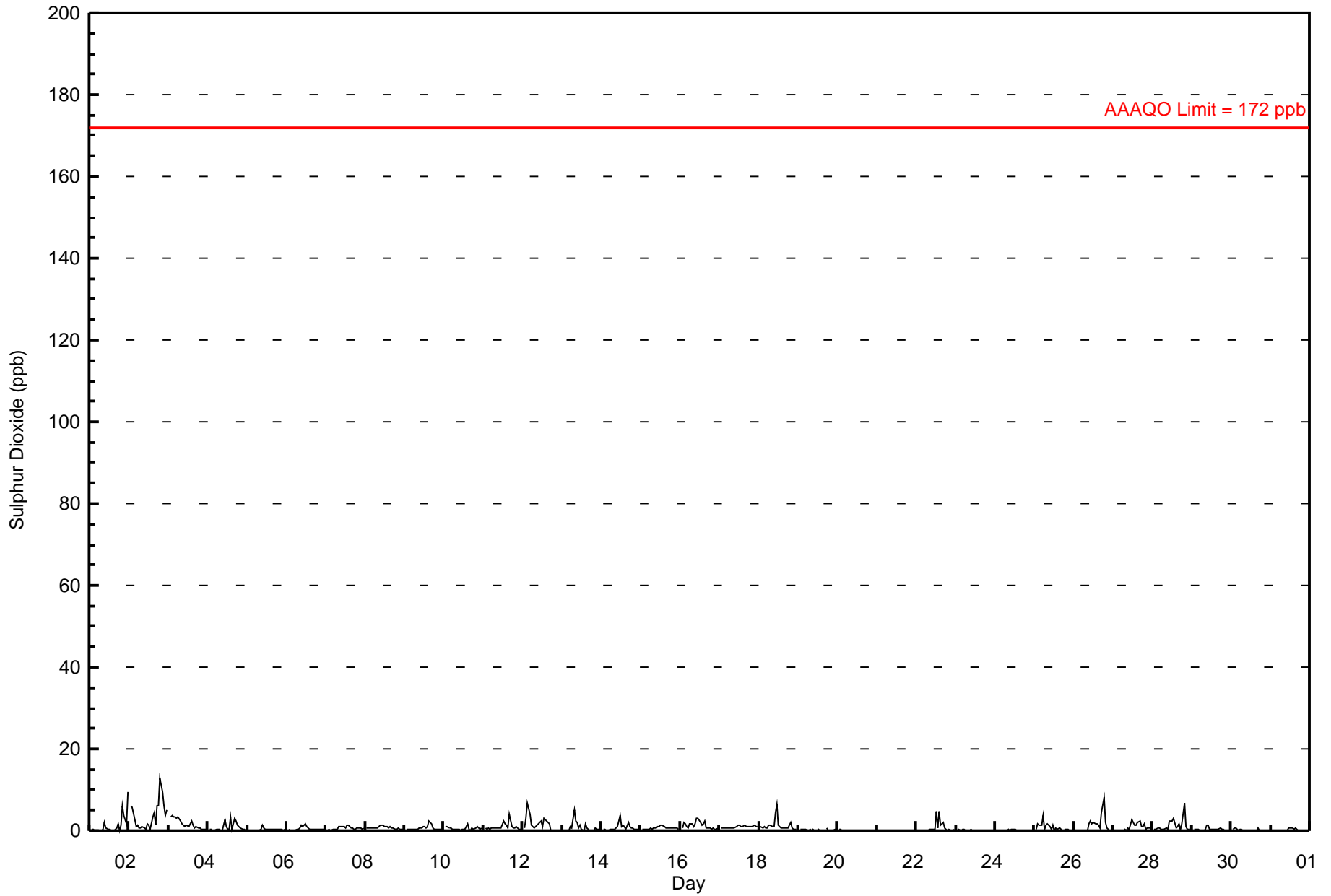
**Valleyview - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0	Hours in Service: 744
Maximum Value: 13.1 ppb on Aug 2 20:00	Maximum Daily Average: 3.6 ppb on Aug 2
Minimum Value: 0 ppb on Aug 1 15:00	Hours of Data: 710
Minimum Daily Average: 0.0 ppb on Aug 21	Hours of Missing Data: 34
Maximum Diurnal Average: 1.3 ppb at hour 12	Hours of Calibration: 34
Monthly Average: 0.80 ppb	Percent Operational Time: 100.0
Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.1 Median = 0.4 Q ₃ = 0.9 P ₉₀ = 1.9 P ₉₉ = 6.1	

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-Aug	A	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	1	2	0	1	6	4	2	9	1.3	9.5
2-Aug	A	6	6	3	1	1	1	1	1	1	0	2	1	0	3	4	1	6	6	13	10	6	4	5	3.6	13.1
3-Aug	A	3	4	3	3	3	3	2	2	1	1	1	1	2	2	1	1	1	1	1	0	0	0	0	1.7	3.7
4-Aug	A	0	0	0	0	0	0	0	0	0	3	1	0	0	3	0	3	2	1	1	1	0	0	0	0.8	3.3
5-Aug	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.2
6-Aug	A	0	0	0	0	0	0	1	1	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0.5	1.6
7-Aug	A	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	0	1	0.6	1.4
8-Aug	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0.7	1.3
9-Aug	A	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	1	0	0	0	0	0	0	0.6	2.4
10-Aug	A	1	1	1	1	0	0	0	0	0	0	0	0	0	2	0	0	1	0	1	1	1	0	1	0.6	1.7
11-Aug	A	1	1	1	1	1	1	1	1	1	1	1	2	2	1	1	4	1	1	1	1	1	0	0	0.9	4.2
12-Aug	A	1	3	7	4	1	1	1	1	1	2	2	1	3	3	2	2	0	0	0	0	0	0	0	1.5	6.8
13-Aug	A	0	0	0	0	1	1	5	2	2	1	1	0	0	2	1	0	0	0	0	0	0	0	0	0.8	5.1
14-Aug	A	0	0	0	0	0	0	0	0	1	1	4	1	1	1	0	2	1	1	1	0	0	0	0	0.7	3.9
15-Aug	A	0	0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.7	1.3
16-Aug	A	1	2	2	1	1	2	2	1	2	3	3	2	1	2	2	1	1	1	0	1	1	0	1	1.3	3.1
17-Aug	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	1.4
18-Aug	A	1	1	1	1	1	1	1	1	1	4	6	1	1	1	1	1	1	1	2	1	0	0	0	1.2	6.4
19-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	C	C	C	1	0	0	0	0	0	0	0.2	0.8
20-Aug	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	0.4
21-Aug	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
22-Aug	A	0	0	0	0	0	0	0	0	0	0	0	5	1	5	1	2	1	0	0	0	0	0	0	0.7	4.8
23-Aug	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-Aug	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
25-Aug	A	0	2	1	1	4	0	1	2	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0.8	3.7
26-Aug	A	0	0	0	0	0	0	0	0	2	2	2	2	2	2	1	1	4	8	2	1	0	0	0	1.3	8.3
27-Aug	A	0	0	0	0	0	0	0	0	1	0	3	2	1	1	2	2	1	1	2	0	1	1	1	0.9	2.8
28-Aug	A	0	1	1	1	0	1	0	1	0	3	2	2	3	1	1	2	0	2	7	1	0	0	0	1.3	6.9
29-Aug	A	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0.3	1.3
30-Aug	A	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0.2	0.7
31-Aug	A	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0.1	0.8
--	0.6	0.8	0.7	0.6	0.6	0.5	0.6	0.6	0.8	1.0	1.3	1.0	0.8	1.2	0.9	1.0	0.9	0.9	1.1	0.9	0.6	0.4	0.7		Diurnal Average	
--	6.3	5.9	6.8	4.1	3.7	3.4	5.1	2.3	2.2	4.4	6.4	4.8	3.0	4.7	4.3	4.2	6.2	8.3	13.1	9.6	6.2	3.7	9.5		Diurnal Maximum	

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

Hourly Averages for SO₂ at Valleyview August 2008



**Peace Airshed Zone Association
Summary of Hourly Maximums**

**Valleyview - Sulphur Dioxide (SO₂) - ppb
August 1, 2008 to September 1, 2008**

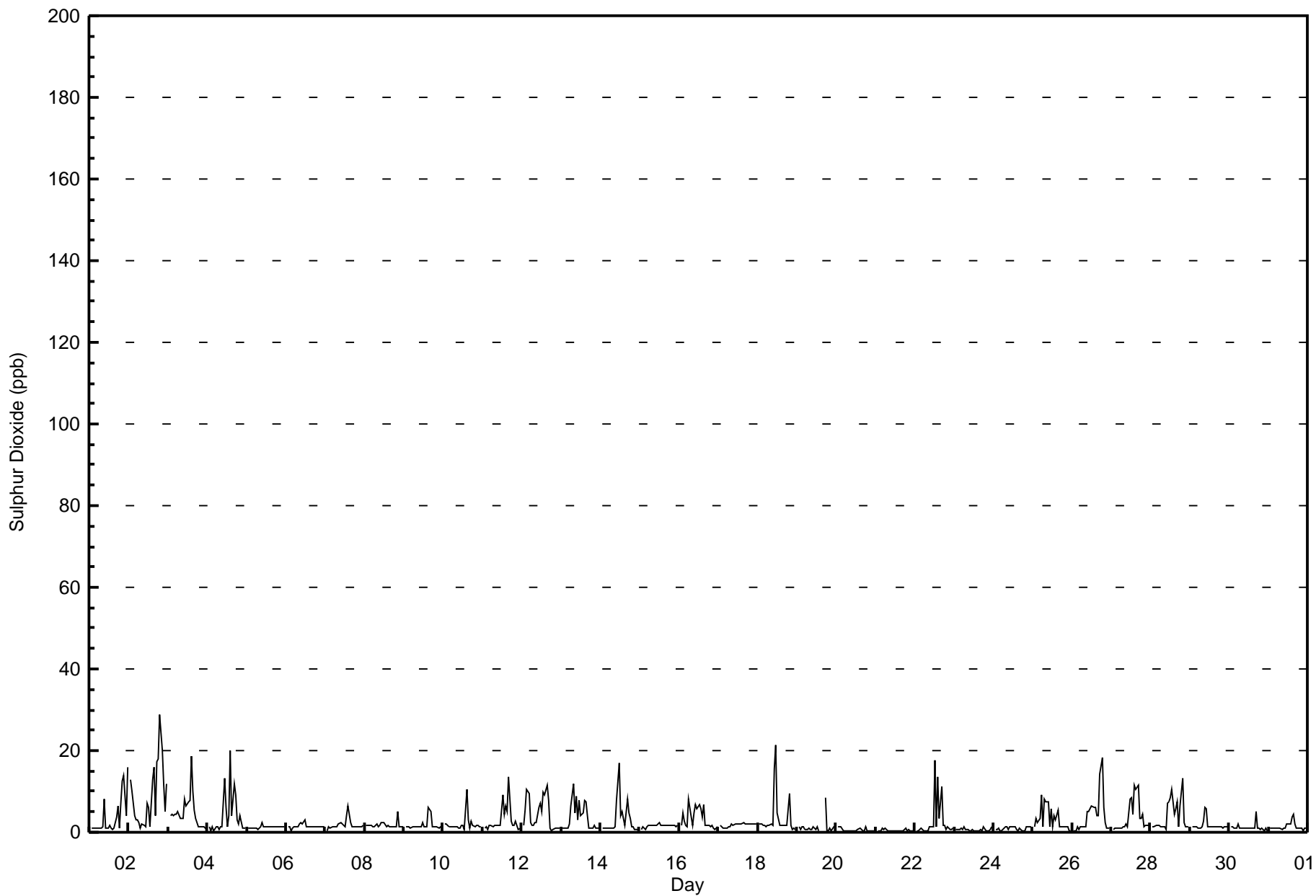
Maximum Value: 28.7 ppb on Aug 2 20:00	Maximum Daily Average: 8.8 ppb on Aug 2	Hours in Service: 744
Minimum Value: 0 ppb on Aug 12 19:00	Minimum Daily Average: 0.4 ppb on Aug 21	Hours of Data: 710
Maximum Diurnal Average: 5.2 ppb at hour 15	Minimum Diurnal Average: 1.3 ppb at hour 23	Hours of Missing Data: 34
Monthly Average: 2.62 ppb	Percentiles: P ₁ = 0.2 P ₁₀ = 0.5 Q ₁ = 1.0 Median = 1.3 Q ₃ = 2.2 P ₉₀ = 6.6 P ₉₉ = 17.8	Hours of Calibration: 34
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	A	1	1	1	1	1	1	1	1	8	1	1	2	1	1	1	4	6	1	7	13	14	4	16	3.8	15.9
2-Aug	A	13	10	4	3	3	2	1	2	2	1	7	6	1	13	16	4	17	18	29	20	12	5	12	8.8	28.7
3-Aug	A	4	4	4	4	4	5	3	3	3	8	7	8	8	19	10	5	3	1	1	1	1	1	1	4.9	18.6
4-Aug	A	1	0	1	0	1	1	1	1	1	13	6	1	4	20	4	12	9	3	2	4	1	1	1	4.0	19.9
5-Aug	A	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.3	2.2
6-Aug	A	1	1	0	1	1	1	1	2	2	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1.4	3.0
7-Aug	A	0	1	1	1	1	1	1	2	2	2	2	1	4	6	2	1	1	1	1	1	2	1	2	1.8	6.3
8-Aug	A	2	2	2	2	2	1	2	1	2	2	2	2	1	2	1	1	1	1	1	5	1	1	1	1.8	5.0
9-Aug	A	1	1	1	1	1	1	1	1	1	1	2	1	1	1	6	5	1	1	1	1	1	1	1	1.7	6.2
10-Aug	A	2	2	1	1	1	1	1	1	1	1	2	2	1	10	3	1	3	2	1	2	2	1	1	1.9	10.4
11-Aug	A	1	1	1	2	2	1	2	2	2	2	9	5	7	5	13	3	2	2	3	2	1	1	1	2.9	13.4
12-Aug	A	2	5	10	9	2	2	2	2	6	7	5	10	9	11	8	1	0	1	1	1	1	1	1	4.4	11.4
13-Aug	A	1	1	1	1	2	7	12	5	9	3	8	4	5	8	8	4	1	1	1	2	1	1	1	3.7	11.8
14-Aug	A	1	1	1	1	1	1	1	1	1	8	17	4	5	3	2	8	5	3	1	1	1	1	1	3.1	16.8
15-Aug	A	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	1.6	2.5
16-Aug	A	2	5	3	2	1	8	4	2	5	7	6	7	6	4	7	2	2	2	1	2	1	1	1	3.4	8.1
17-Aug	A	2	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1.7	2.2
18-Aug	A	2	2	2	2	1	2	2	2	2	16	21	5	2	2	2	2	2	2	9	2	1	1	1	3.5	21.4
19-Aug	A	1	1	1	2	1	1	1	1	1	1	1	1	1	C	C	C	8	0	0	1	0	1	1	1.2	8.5
20-Aug	A	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0.5	1.3
21-Aug	A	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0.4	1.0
22-Aug	A	0	0	1	1	0	0	0	0	1	1	17	2	14	3	11	2	2	2	1	1	1	1	1	2.7	17.5
23-Aug	A	1	1	1	1	1	1	1	1	1	0	1	0	0	0	0	1	0	1	0	0	0	1	1	0.6	1.5
24-Aug	A	1	1	1	0	0	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1	0.9	1.3
25-Aug	A	1	3	2	3	9	1	8	7	7	1	6	1	4	3	5	1	1	1	1	1	1	0	0	3.2	9.3
26-Aug	A	0	0	1	1	1	1	1	1	5	5	6	7	6	6	4	4	14	18	6	2	1	1	1	4.1	18.2
27-Aug	A	1	1	1	1	1	1	1	1	2	1	8	8	4	11	10	11	3	3	4	2	2	2	2	3.7	11.4
28-Aug	A	1	1	2	2	2	2	1	1	1	7	7	8	10	4	6	7	1	6	13	2	1	1	1	3.9	13.3
29-Aug	A	1	1	1	1	1	1	1	3	6	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1.7	6.2
30-Aug	A	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	0	1	0	1.2	5.0
31-Aug	A	1	1	1	1	1	1	1	1	1	1	2	2	2	4	4	2	1	1	1	1	0	1	1	1.3	4.3

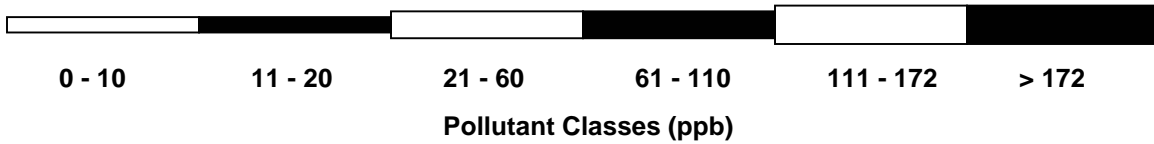
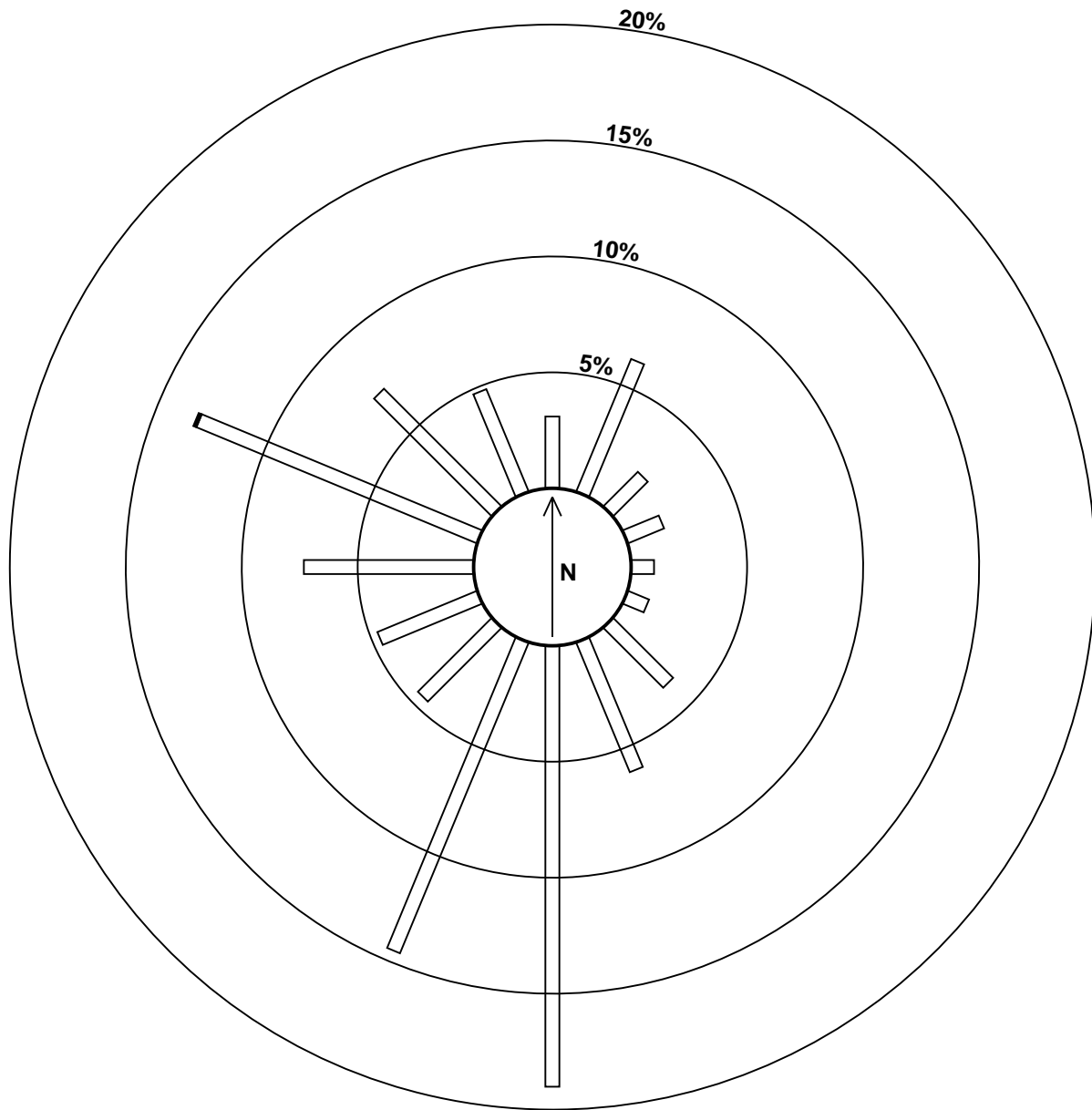
--	1.6	1.8	1.7	1.6	1.6	1.8	1.9	1.8	2.5	3.4	4.3	3.7	3.0	5.2	4.1	4.1	3.1	2.7	3.1	2.6	1.8	1.3	1.9	Diurnal Average	
--	12.9	10.0	10.5	9.4	9.3	8.1	11.8	7.3	8.8	15.5	21.4	17.5	10.4	19.9	15.8	13.4	17.3	18.2	28.7	19.9	13.9	5.2	15.9	Diurnal Maximum	

C - Calibration A - Automated Daily Zero Span

Hourly Maximums for SO₂ at Valleyview August 2008



Pollutant Rose for SO₂ at Valleyview August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

**Valleyview - Hydrogen Sulphide (H₂S) - ppb
August 1, 2008 to September 1, 2008**

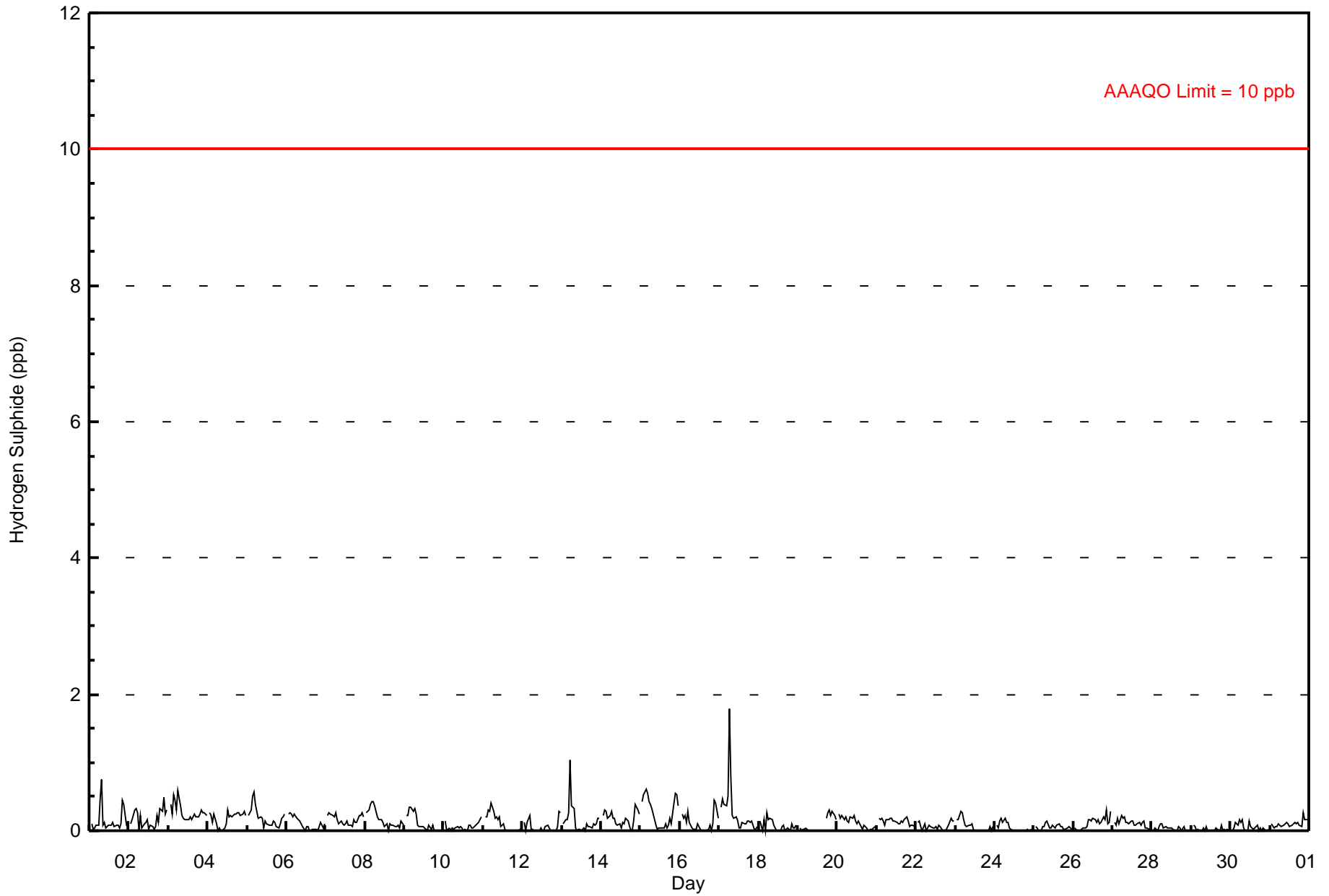
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.8 ppb on Aug 17 07:00 Maximum Daily Average: 0.3 ppb on Aug 17	Hours in Service: 744 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0
Minimum Value: 0 ppb on Aug 4 09:00 Maximum Diurnal Average: 0.2 ppb at hour 7 Monthly Average: 0.12 ppb	Minimum Daily Average: 0.0 ppb on Aug 29 Minimum Diurnal Average: 0.1 ppb at hour 15 Percentiles: P ₁ = 0.0 P ₁₀ = 0.0 Q ₁ = 0.0 Median = 0.1 Q ₃ = 0.2 P ₉₀ = 0.3 P ₉₉ = 0.5

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-Aug	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.8
2-Aug	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
3-Aug	A	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.6
4-Aug	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
5-Aug	A	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.6
6-Aug	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
7-Aug	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
8-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
9-Aug	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
10-Aug	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
11-Aug	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-Aug	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-Aug	A	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	1.0
14-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.4
15-Aug	A	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.3	0.6
16-Aug	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	0.5
17-Aug	A	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.8
18-Aug	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
19-Aug	A	0	0	0	0	0	0	0	0	0	0	C	C	C	C	C	0	0	0	0	0	0	0	0	0.1	0.3
20-Aug	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
21-Aug	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-Aug	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-Aug	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-Aug	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
25-Aug	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
26-Aug	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
27-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.2
28-Aug	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
29-Aug	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
30-Aug	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
31-Aug	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

--	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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Diurnal Average
--	0.4	0.5	0.6	0.6	1.0	1.8	0.8	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.4	0.5	0.5	0.4	Diurnal Maximum	

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

Hourly Averages for H₂S at Valleyview August 2008

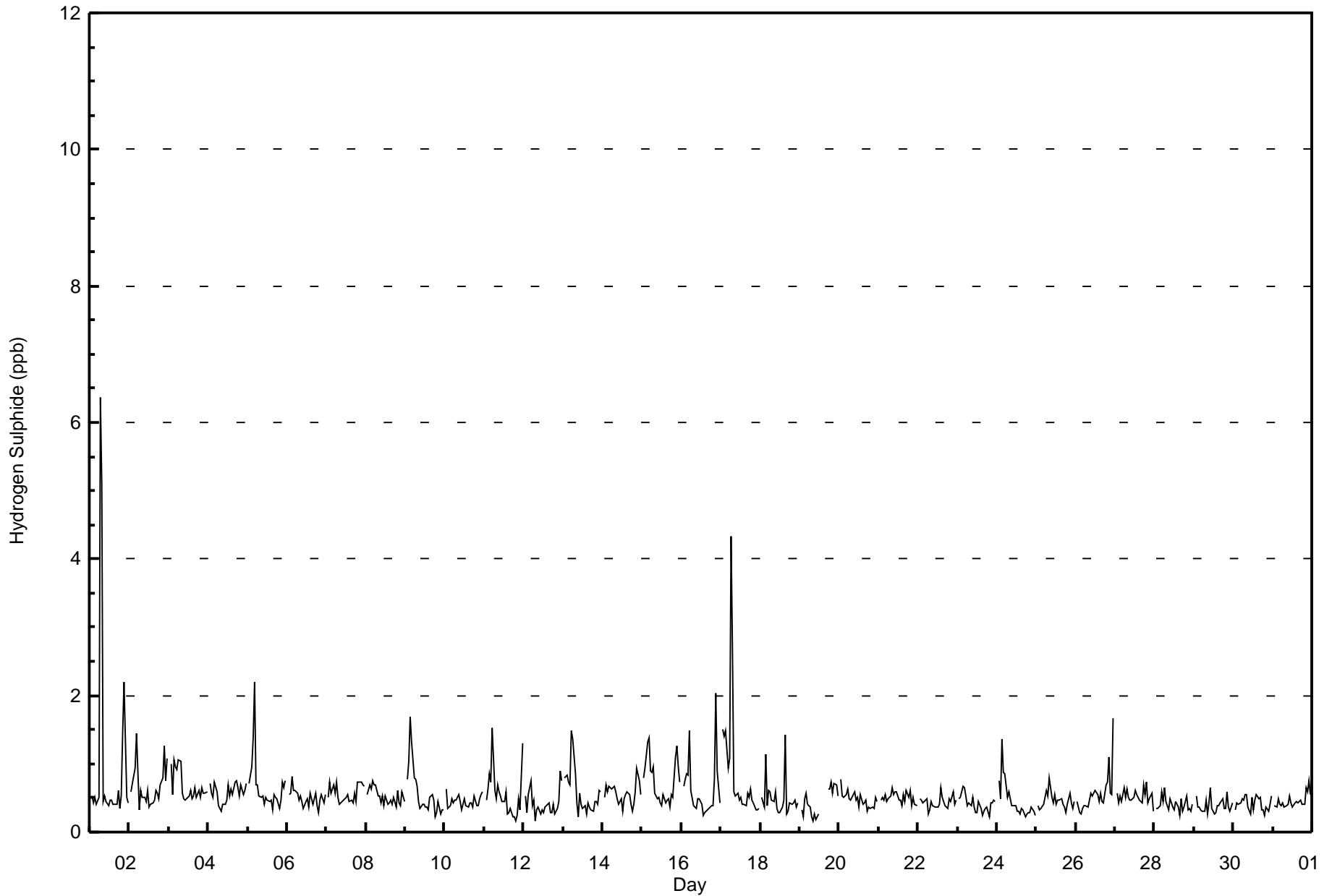


**Peace Airshed Zone Association
Summary of Hourly Maximums**

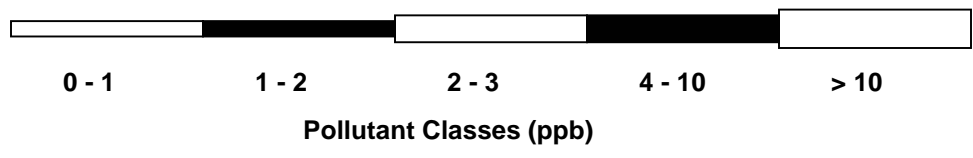
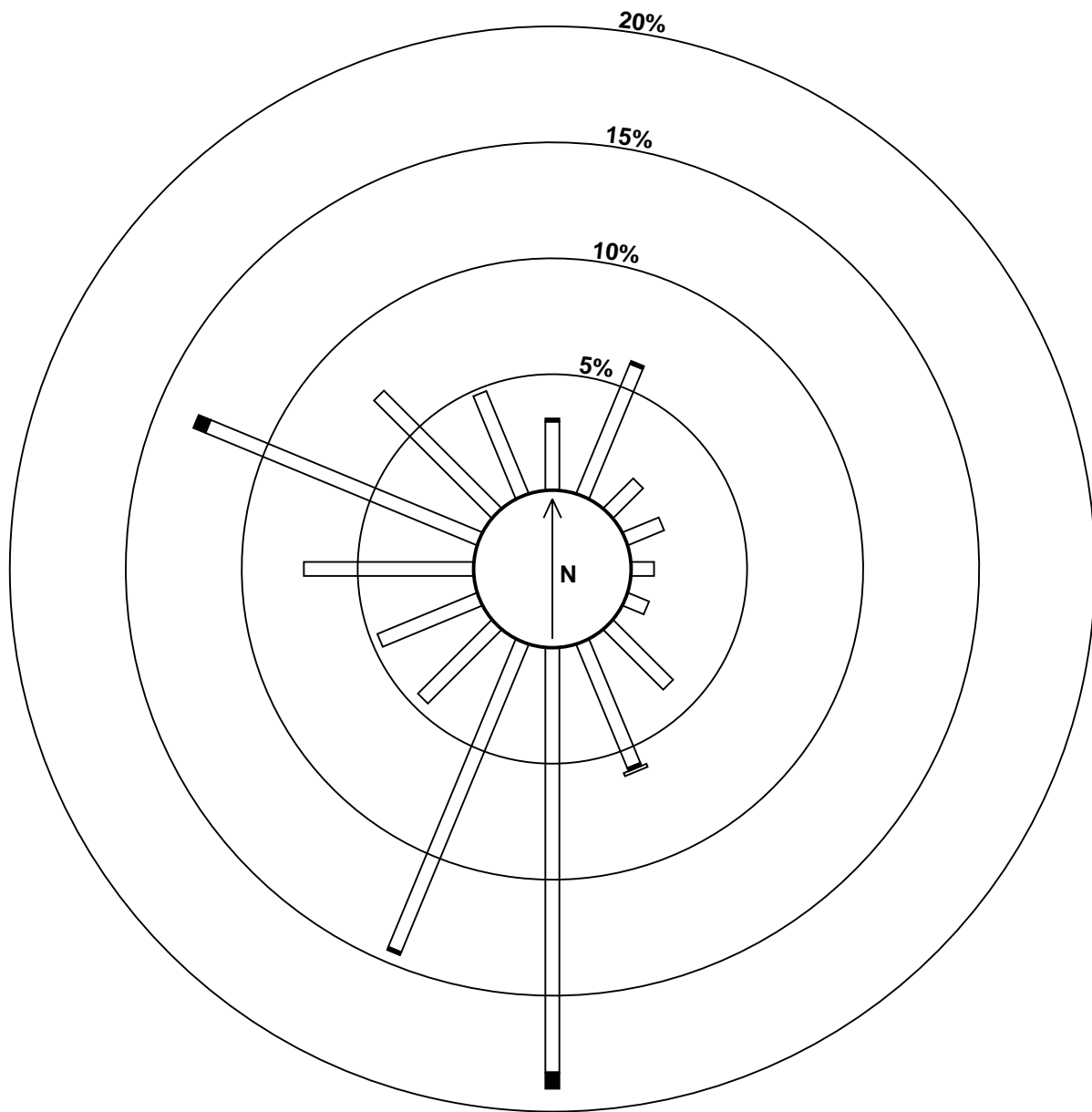
**Valleyview - Hydrogen Sulphide (H₂S) - ppb
August 1, 2008 to September 1, 2008**

Maximum Value: 6.4 ppb on Aug 1 07:00		Maximum Daily Average: 1.0 ppb on Aug 1		Hours in Service: 744																							
Minimum Value: 0 ppb on Aug 19 09:00		Minimum Daily Average: 0.4 ppb on Aug 29		Hours of Data: 708																							
Maximum Diurnal Average: 0.9 ppb at hour 7		Minimum Diurnal Average: 0.4 ppb at hour 13		Hours of Missing Data: 36																							
Monthly Average: 0.55 ppb		Percentiles: P ₁ = 0.2 P ₁₀ = 0.3 Q ₁ = 0.4 Median = 0.5 Q ₃ = 0.6 P ₉₀ = 0.8 P ₉₉ = 1.9		Hours of Calibration: 36																							
				Percent Operational Time: 100.0																							
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1-Aug	A	1	0	1	0	1	6	5	0	1	0	0	0	0	0	0	0	1	0	1	1	2	0	0	1.0	6.4	
2-Aug	A	1	1	1	1	1	0	1	1	1	0	1	0	0	0	0	1	1	0	1	1	1	1	1	1	0.7	1.5
3-Aug	A	1	1	1	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	1	1	1	1	1	1	0.7	1.1
4-Aug	A	1	1	1	1	1	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7
5-Aug	A	1	1	1	2	1	1	1	1	1	0	1	0	0	0	0	1	1	0	0	0	1	1	1	1	0.7	2.2
6-Aug	A	1	1	1	1	1	1	0	1	0	0	0	0	0	1	0	0	1	0	0	0	1	0	1	0.5	0.8	
7-Aug	A	1	1	1	1	1	1	1	0	0	0	0	0	1	0	0	0	1	0	1	1	1	1	1	0.6	0.7	
8-Aug	A	1	1	1	1	1	1	1	1	0	1	0	1	0	0	0	0	1	0	1	0	0	1	0	0.5	0.8	
9-Aug	A	1	1	2	1	1	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0.6	1.7	
10-Aug	A	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0.4	0.6	
11-Aug	A	0	1	1	1	2	1	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0.5	1.5	
12-Aug	A	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0.4	0.9	
13-Aug	A	1	1	1	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0.6	1.5	
14-Aug	A	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1	1	0	0	0	0	1	1	1	0.6	0.9	
15-Aug	A	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	0	1	1	1	1	1	1	0.7	1.4	
16-Aug	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0.6	2.0	
17-Aug	A	2	1	1	1	1	4	3	1	1	1	0	1	0	0	0	1	1	1	0	0	0	0	0	0.9	4.3	
18-Aug	A	1	0	1	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.5	1.4	
19-Aug	A	0	0	0	1	0	0	0	0	0	0	0	C	C	C	C	C	1	1	1	1	1	1	1	0.4	0.7	
20-Aug	A	1	1	1	1	1	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0.5	0.8
21-Aug	A	0	1	0	1	0	0	1	1	1	1	0	0	0	1	0	1	1	1	1	0	1	0	0	0.5	0.6	
22-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0.4	0.6
23-Aug	A	0	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7	
24-Aug	A	1	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	1.4	
25-Aug	A	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0.5	0.8	
26-Aug	A	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	1	1	1	1	1	2	0.6	1.7	
27-Aug	A	1	0	1	0	1	1	1	1	0	0	0	1	1	1	0	0	1	1	1	0	0	1	0	0.5	0.7	
28-Aug	A	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0.4	0.7	
29-Aug	A	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0.4	0.6	
30-Aug	A	0	0	0	0	0	0	1	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0.4	0.6	
31-Aug	A	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0.5	0.8	
--	0.6	0.6	0.7	0.7	0.7	0.7	0.9	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.6	0.5	0.6	Diurnal Average	
--	1.5	1.4	1.7	2.2	1.5	6.4	5.1	0.8	0.6	0.6	0.6	0.6	0.7	0.6	0.6	1.4	0.7	0.7	0.7	0.7	1.4	2.2	1.0	1.7	Diurnal Maximum		
C - Calibration		A - Automated Daily Zero Span																									

Hourly Maximums for H₂S at Valleyview August 2008



Pollutant Rose for H₂S at Valleyview August 2008

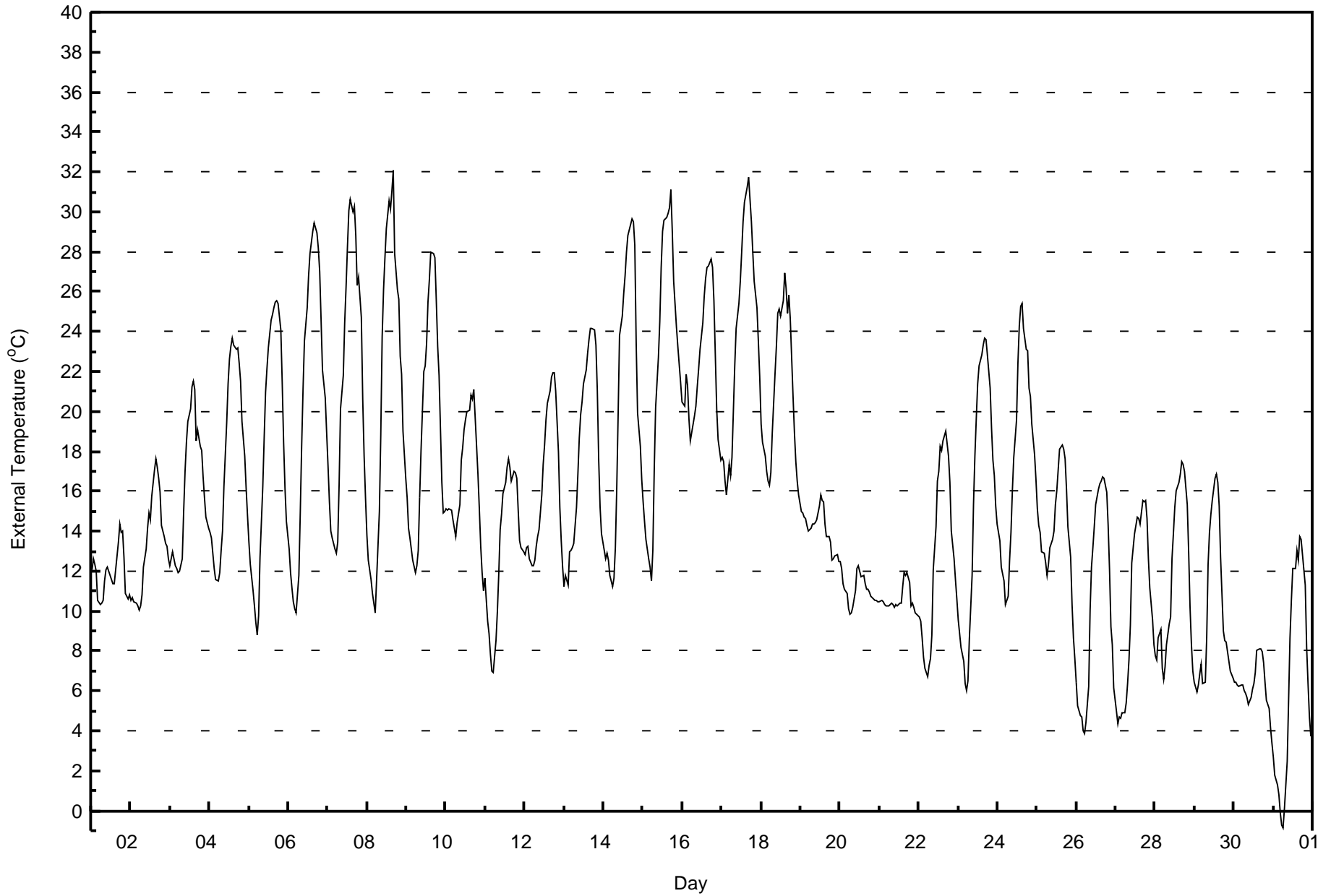


**Peace Airshed Zone Association
Summary of Hourly Averages**

**Valleyview - External Temperature (ET) - °C
August 1, 2008 to September 1, 2008**

Maximum Value: 32.0 °C on Aug 8 17:00																				Maximum Daily Average: 23.9 °C on Aug 17					Hours in Service: 744																							
Minimum Value: -1 °C on Aug 31 07:00																				Minimum Daily Average: 6.3 °C on Aug 30					Hours of Data: 744																							
Maximum Diurnal Average: 21.0 °C at hour 16																				Minimum Diurnal Average: 10.2 °C at hour 6					Hours of Missing Data: 0																							
Monthly Average: 15.64 °C																				Percentiles: P ₁ = 2.5 P ₁₀ = 7.5 Q ₁ = 11.2 Median = 14.5 Q ₃ = 20.0 P ₉₀ = 25.4 P ₉₉ = 30.6					Hours of Calibration: 0																							
																				Percent Operational Time: 100.0																												
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																								
1-Aug	12	13	12	12	11	10	10	11	12	12	12	12	12	11	11	12	13	14	14	14	13	11	11	11	11.9	14.3																						
2-Aug	11	11	10	10	10	10	10	11	12	13	14	15	15	16	17	18	17	17	16	14	14	13	13	13	13.3	17.6																						
3-Aug	12	13	13	12	12	12	12	13	15	17	18	19	20	21	22	21	19	19	18	18	17	16	15	14	16.2	21.5																						
4-Aug	14	14	13	12	12	12	12	13	14	16	19	21	23	23	24	23	23	23	22	22	20	18	16	15	17.6	23.7																						
5-Aug	13	12	11	10	9	9	10	13	16	19	21	22	23	25	25	25	25	26	25	24	21	18	16	14	18.1	25.6																						
6-Aug	13	12	11	10	10	10	12	15	18	21	24	25	27	28	28	29	29	29	28	27	25	22	21	19	20.6	29.4																						
7-Aug	17	16	14	14	13	13	13	16	20	22	24	26	28	30	31	30	30	29	26	27	25	21	18	16	21.6	30.6																						
8-Aug	14	13	12	11	10	10	12	15	19	24	26	28	29	31	30	31	32	28	26	26	23	22	19	17	21.0	32.0																						
9-Aug	16	14	14	13	13	12	12	13	16	18	22	22	23	25	27	28	28	28	26	23	22	16	15	15	19.2	28.0																						
10-Aug	15	15	15	15	15	14	14	14	15	18	18	19	20	20	20	21	21	21	20	17	15	13	12	11	16.6	21.1																						
11-Aug	12	10	9	8	7	7	9	10	12	14	15	16	16	17	18	17	17	17	17	17	15	14	13	13	13.2	17.6																						
12-Aug	13	13	13	13	12	12	13	13	14	14	16	17	18	20	20	21	22	22	22	22	21	18	15	14	12	16.2	22.0																					
13-Aug	11	12	11	13	13	13	13	15	17	19	20	20	21	22	23	24	24	24	24	23	21	18	15	14	18.0	24.2																						
14-Aug	13	13	13	13	12	11	12	13	16	20	24	25	26	27	28	29	29	30	30	28	23	20	18	17	20.3	29.7																						
15-Aug	15	14	14	13	12	12	13	17	20	23	24	27	29	30	30	30	30	31	29	26	24	23	22	21	22.1	31.1																						
16-Aug	20	20	22	21	20	19	19	20	20	21	22	23	24	26	27	27	27	28	27	26	23	20	19	18	22.4	27.6																						
17-Aug	18	17	17	16	17	17	18	20	22	24	25	27	28	30	30	31	32	31	29	28	27	25	24	22	23.9	31.7																						
18-Aug	19	18	18	17	17	16	17	19	22	23	25	25	25	26	27	26	25	26	25	21	19	18	17	16	21.0	27.0																						
19-Aug	15	15	15	15	14	14	14	14	14	14	15	15	16	16	15	14	14	14	13	13	13	13	13	12	14.2	15.8																						
20-Aug	13	12	11	11	11	10	10	10	10	11	12	12	12	12	12	11	11	11	11	11	11	11	11	10	11.1	12.5																						
21-Aug	10	11	10	10	10	10	10	10	10	10	10	10	10	10	11	12	12	12	11	10	10	10	10	10	10.6	11.9																						
22-Aug	10	9	9	8	7	7	7	8	9	12	14	17	17	18	18	19	19	18	18	16	14	13	12	11	12.8	19.0																						
23-Aug	10	9	8	7	6	6	7	9	12	15	18	20	21	22	23	23	24	24	23	21	19	18	17	15	15.7	23.7																						
24-Aug	14	14	12	12	11	10	11	13	14	16	18	20	22	24	25	25	24	23	23	21	21	19	18	17	17.8	25.4																						
25-Aug	15	14	14	13	13	12	12	12	13	14	14	15	16	17	18	18	18	18	16	14	13	10	9	8	14.0	18.3																						
26-Aug	6	5	5	5	4	4	4	6	10	12	13	14	15	16	16	16	17	17	16	14	12	9	8	6	10.5	16.8																						
27-Aug	5	4	5	5	5	5	5	6	8	9	12	14	14	15	15	14	16	15	16	15	13	11	10	8	10.2	15.5																						
28-Aug	8	8	9	9	7	7	7	8	9	10	13	14	15	16	16	17	18	17	17	15	13	10	8	7	11.6	17.5																						
29-Aug	6	6	6	7	7	6	6	9	12	14	15	16	17	17	16	15	13	9	8	8	8	8	7	7	10.2	16.8																						
30-Aug	6	6	6	6	6	6	6	6	6	5	6	6	6	6	7	8	8	8	8	7	6	6	5	4	3	6.3	8.1																					
31-Aug	3	2	1	1	0	-1	-1	0	2	6	9	11	12	12	13	13	14	14	13	11	8	6	5	4	6.5	13.7																						
																								12.3	11.8	11.4	11.0	10.6	10.2	10.6	12.0	13.9	15.7	17.4	18.5	19.4	20.3	20.8	21.0	21.0	20.7	19.9	18.7	16.9	15.0	13.8	12.7	Diurnal Average
																								20.5	20.3	21.9	21.3	19.7	18.6	19.0	20.0	22.2	24.2	26.1	27.7	29.1	30.6	30.6	31.2	32.0	31.1	29.5	28.3	26.5	25.2	23.5	21.7	Diurnal Maximum

Hourly Averages for External Temperature at Valleyview August 2008



**Peace Airshed Zone Association
Summary of Hourly Averages**

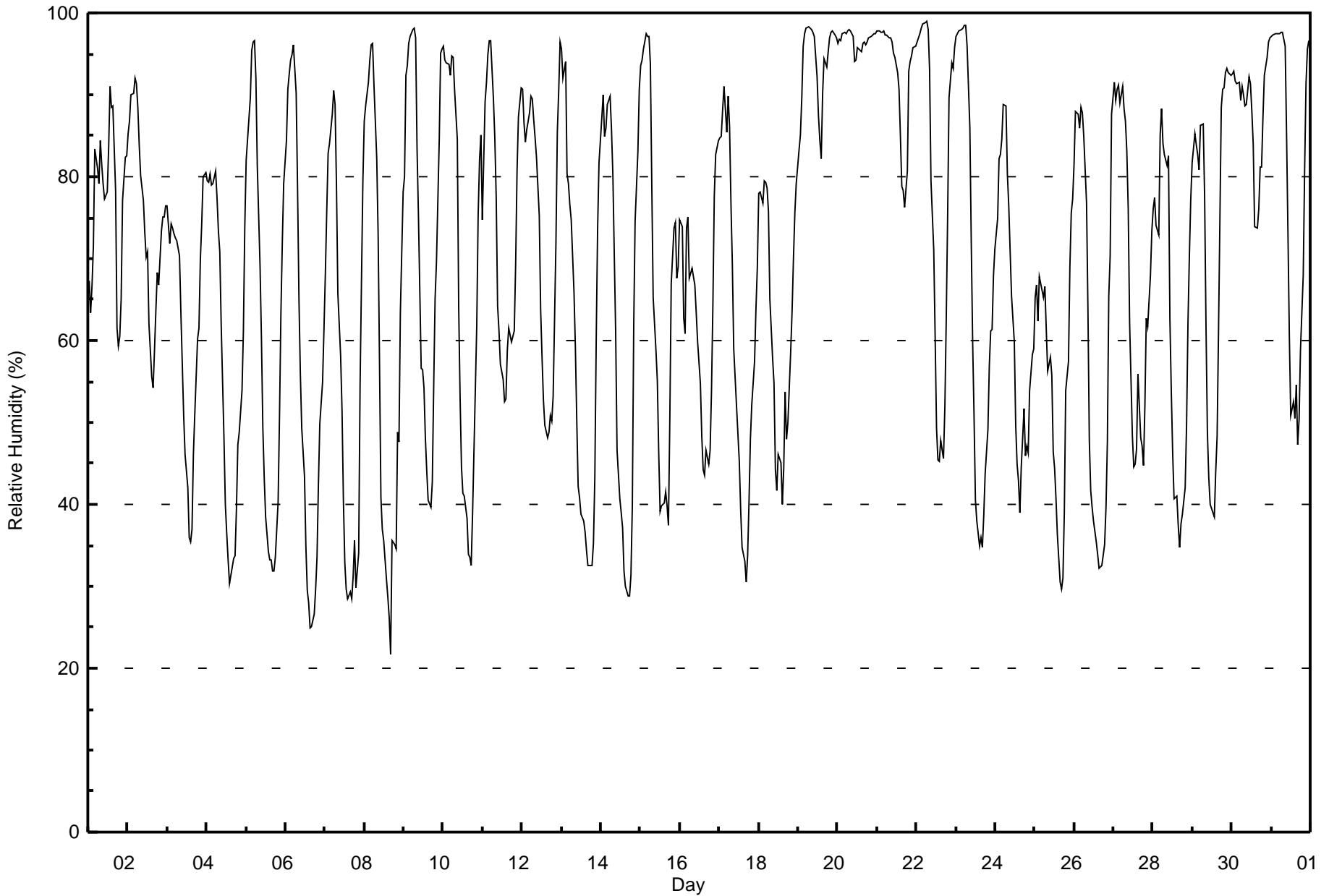
**Valleyview - Relative Humidity (RH) - %
August 1, 2008 to September 1, 2008**

Maximum Value: 99.0 % on Aug 22 07:00	Maximum Daily Average: 96.6 % on Aug 20	Hours in Service: 744
Minimum Value: 22 % on Aug 8 17:00	Minimum Daily Average: 55.1 % on Aug 25	Hours of Data: 744
Maximum Diurnal Average: 89.5 % at hour 6	Minimum Diurnal Average: 46.8 % at hour 15	Hours of Missing Data: 0
Monthly Average: 69.06 %	Percentiles: P ₁ = 28.5 P ₁₀ = 37.5 Q ₁ = 49.4 Median = 73.4 Q ₃ = 89.0 P ₉₀ = 96.4 P ₉₉ = 98.0	Hours of Calibration: 0
		Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																									
1-Aug	67	63	67	72	83	81	79	84	82	79	77	78	84	91	89	89	78	62	59	60	65	77	82	83	76.3	91.1																							
2-Aug	85	87	90	90	92	91	88	84	80	77	73	70	71	62	56	54	59	64	68	67	73	75	75	76	75.4	92.0																							
3-Aug	76	72	74	74	73	72	72	70	63	57	51	46	42	36	35	37	46	51	60	62	70	74	80	81	61.5	80.6																							
4-Aug	80	79	80	79	79	81	77	73	71	62	48	40	36	33	30	31	33	34	39	47	49	54	61	74	57.2	80.7																							
5-Aug	82	85	90	95	96	97	92	81	69	60	49	43	38	34	33	33	32	32	34	40	51	63	72	79	61.7	96.6																							
6-Aug	84	91	92	94	95	96	90	79	65	56	49	43	35	30	28	25	25	27	30	33	42	50	55	61	57.3	96.0																							
7-Aug	68	76	83	84	88	91	89	79	66	58	51	40	33	30	28	29	28	31	36	30	34	55	67	79	56.4	90.5																							
8-Aug	87	89	92	94	96	96	91	82	73	57	41	37	36	31	29	26	22	36	35	34	49	48	63	78	59.2	96.3																							
9-Aug	80	92	94	96	97	98	98	97	84	75	57	56	54	48	44	40	40	43	54	65	70	85	95	96	73.2	98.1																							
10-Aug	96	94	94	94	92	95	95	91	85	64	53	45	41	41	38	34	34	33	39	54	62	75	82	85	67.3	96.0																							
11-Aug	75	89	91	95	97	97	90	85	77	64	61	57	55	52	53	59	61	60	60	61	69	81	87	91	73.7	96.7																							
12-Aug	91	87	84	86	88	90	89	87	85	82	75	64	58	53	50	48	49	51	50	53	72	85	91	96	73.5	96.4																							
13-Aug	96	92	94	80	79	77	75	66	59	50	42	41	39	38	37	34	33	33	33	35	43	60	74	82	57.9	95.5																							
14-Aug	87	90	85	86	89	90	86	80	70	61	47	41	39	37	32	30	29	29	31	40	62	75	83	91	62.0	90.6																							
15-Aug	94	94	96	98	97	97	94	79	65	59	55	46	39	40	40	41	40	38	51	67	74	74	68	69	67.2	97.5																							
16-Aug	75	74	63	61	74	75	68	69	68	67	63	60	55	48	44	44	47	45	47	54	64	78	83	84	62.8	84.5																							
17-Aug	85	85	88	91	85	90	86	77	69	59	52	49	45	39	35	33	31	34	40	48	52	57	64	69	61.0	90.9																							
18-Aug	78	78	77	80	79	79	76	65	58	55	44	42	46	45	40	44	54	48	50	59	64	70	76	79	61.8	79.6																							
19-Aug	83	85	90	96	98	98	98	98	98	98	97	92	88	84	82	90	94	93	95	97	98	98	97	97	93.5	98.3																							
20-Aug	96	97	97	97	98	97	98	98	98	97	94	94	96	96	95	96	96	96	96	97	97	97	98	97	96.6	98.0																							
21-Aug	98	98	98	98	98	97	97	97	97	96	95	95	93	91	85	79	78	76	81	93	94	95	96	96	92.5	97.8																							
22-Aug	96	97	97	98	99	99	99	98	93	79	71	60	49	45	45	48	46	52	63	75	90	94	93	96	78.5	99.0																							
23-Aug	97	97	98	98	98	98	99	96	86	72	60	51	40	38	35	36	35	39	44	49	57	61	61	68	67.2	98.5																							
24-Aug	71	75	82	83	85	89	89	80	76	71	65	60	50	45	43	39	45	52	46	47	46	54	58	59	62.9	88.9																							
25-Aug	65	67	62	68	66	65	67	61	56	58	56	46	44	41	36	31	30	31	39	54	57	69	76	77	55.1	77.3																							
26-Aug	82	88	88	86	88	88	85	77	64	48	42	40	38	35	34	32	32	33	35	40	48	65	70	88	59.3	88.5																							
27-Aug	91	89	91	91	89	91	88	87	83	76	62	48	45	45	47	56	48	47	45	52	63	62	68	73	68.2	91.5																							
28-Aug	76	77	74	73	85	88	84	83	81	83	63	54	46	41	41	37	35	38	39	42	50	62	70	77	62.4	88.3																							
29-Aug	82	85	84	83	81	86	86	78	62	49	43	40	39	39	44	48	61	88	91	91	93	93	93	92	72.1	93.3																							
30-Aug	93	93	92	91	92	89	91	90	89	89	92	91	88	84	74	74	76	81	81	87	92	95	96	97	88.2	96.9																							
31-Aug	97	97	97	98	97	98	98	98	96	85	73	60	51	53	51	55	47	50	59	68	81	91	96	97	78.8	97.6																							
																								84.3	85.9	86.5	87.3	88.8	89.5	87.5	82.8	76.4	69.2	61.4	55.8	52.0	49.2	46.8	46.9	47.2	49.1	52.6	58.1	65.5	73.3	78.4	82.8	Diurnal Average	
																								97.8	97.7	97.8	98.2	98.7	98.8	99.0	98.1	97.9	97.7	97.1	94.6	95.7	95.6	95.2	96.3	96.5	96.1	96.4	97.0	97.6	97.8	97.5	97.5	Diurnal Maximum	

Hourly Averages for Relative Humidity at Valleyview

August 2008



Peace Airshed Zone Association
Summary of Hourly Averages

Valleyview
 August 1, 2008 to September 1, 2008
 WS (km/h), WD (deg)

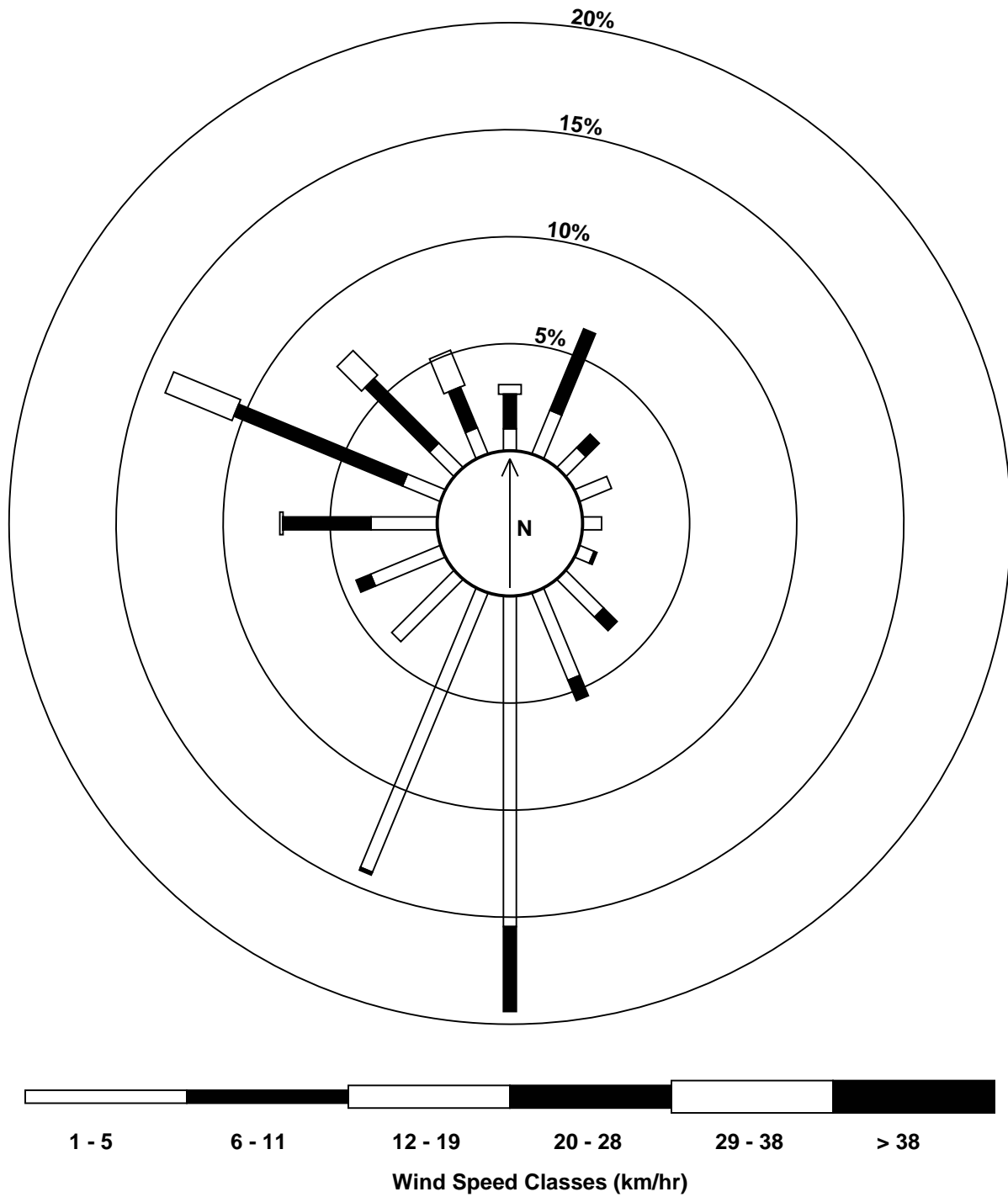
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1 Spd	3	2	0	1	2	2	2	2	4	6	6	7	3	4	4	5	4	11	8	10	12	5	6	10	3.5	12.0
Dir	184	226	145	181	178	211	244	287	321	339	323	331	258	190	184	180	272	297	307	292	286	269	268	273	278.8	286.4
2 Spd	7	7	8	9	10	11	10	12	11	11	12	13	11	14	17	14	12	11	10	14	9	7	2	4	9.4	17.0
Dir	273	270	278	294	291	291	272	290	301	309	315	341	328	332	346	341	294	285	276	287	281	280	268	280	301.9	345.9
3 Spd	7	10	11	10	8	8	6	5	8	10	12	16	17	17	15	8	1	1	2	2	2	2	3	6.6	17.0	
Dir	299	295	293	293	290	292	287	293	298	300	323	333	336	336	343	360	9	265	204	49	177	186	188	192	317.8	342.5
4 Spd	2	3	3	4	3	3	4	3	3	3	6	11	12	13	9	10	9	8	5	2	6	1	2	1	2.9	13.5
Dir	164	171	186	197	188	158	158	164	167	156	289	305	320	325	304	321	291	295	295	306	350	284	314	117	293.5	324.8
5 Spd	1	1	1	1	1	1	2	3	2	3	3	3	3	1	2	4	2	4	4	4	2	2	1	1	2.0	4.4
Dir	229	208	182	189	179	193	192	169	163	178	173	157	150	142	151	137	89	137	141	127	133	182	239	225	158.9	126.6
6 Spd	1	1	1	1	1	1	2	4	6	6	6	8	8	7	5	4	4	6	5	5	3	5	4	2	3.6	7.7
Dir	230	245	245	244	228	228	197	189	186	180	183	187	171	186	169	151	169	150	150	144	151	164	185	199	175.2	186.6
7 Spd	1	1	1	2	1	1	1	2	4	5	3	4	2	3	3	2	2	4	3	3	1	2	2	1	1.5	4.9
Dir	244	253	265	266	216	193	180	182	176	182	184	185	184	84	34	100	106	191	179	191	170	137	166	192	176.3	182.3
8 Spd	1	1	1	1	1	0	1	1	2	1	6	6	5	5	2	2	2	10	11	4	4	6	1	4	2.9	10.6
Dir	187	206	193	156	190	228	187	215	170	197	173	171	151	139	186	181	141	119	133	201	201	169	213	187	162.6	132.7
9 Spd	1	1	2	1	0	2	1	2	2	2	1	4	5	3	1	2	5	5	5	4	1	4	2	2	0.5	5.1
Dir	2	190	166	6	184	259	83	173	135	136	221	260	251	196	262	4	32	61	86	65	262	215	123	181	142.2	60.8
10 Spd	4	7	0	2	4	2	4	4	4	4	8	8	6	7	10	7	5	5	4	6	4	1	1	2	3.6	10.1
Dir	244	287	30	291	270	203	191	185	198	223	250	258	243	257	270	265	257	309	299	183	340	229	150	210	252.3	270.2
11 Spd	2	2	2	1	1	1	1	3	1	4	3	3	4	3	3	6	10	9	8	4	3	2	2	2	1.9	10.5
Dir	185	191	157	155	212	64	126	154	195	266	213	264	340	359	325	301	290	302	326	303	264	194	185	184	282.9	290.3
12 Spd	2	2	5	6	6	4	4	5	6	6	4	6	7	9	11	12	9	5	4	2	1	1	1	1	3.4	12.0
Dir	164	248	288	281	291	318	315	303	295	300	311	323	334	342	351	359	4	63	59	40	197	200	163	166	329.6	359.2
13 Spd	3	2	0	6	5	8	6	11	10	12	15	16	13	13	10	11	11	12	9	5	2	2	2	3	7.0	15.8
Dir	205	101	128	307	305	286	270	293	296	296	297	304	312	310	297	307	307	314	307	301	271	222	205	190	298.5	303.9
14 Spd	3	2	5	3	4	4	5	4	4	4	3	9	10	9	8	8	8	6	2	1	1	2	2	2	2.5	10.1
Dir	191	188	190	197	193	192	190	190	184	192	248	284	301	299	287	303	307	332	38	135	191	197	187	182	258.0	301.1
15 Spd	2	0	0	2	1	1	1	1	1	1	1	1	3	4	4	3	3	0	1	1	1	1	3	1	1.2	4.1
Dir	189	14	20	356	194	206	176	162	192	159	124	199	195	200	184	160	159	182	56	119	129	176	189	257	177.4	184.4
16 Spd	2	2	8	3	2	0	6	8	12	12	11	10	6	5	6	7	3	3	3	3	2	2	2	2	3.7	12.1
Dir	247	205	291	239	158	147	340	315	316	330	342	348	348	347	352	354	64	79	60	68	59	13	357	330	338.5	316.1
17 Spd	1	0	4	2	1	1	0	2	4	8	11	9	7	7	8	6	6	6	6	6	8	7	5	4	4.4	11.2
Dir	294	174	340	338	214	185	162	168	176	180	182	178	180	188	178	168	168	155	141	151	163	176	190	194	174.9	181.8
18 Spd	2	3	3	1	2	2	3	4	4	4	6	4	2	4	2	3	3	2	11	11	3	2	3	1	1.7	11.4
Dir	198	186	192	204	204	214	183	191	191	199	282	280	214	187	210	202	199	250	324	346	4	262	187	238	240.5	324.2
19 Spd	3	1	8	2	3	2	3	1	5	4	5	5	6	7	6	7	11	8	8	8	6	5	5	6	2.6	11.1
Dir	184	183	191	145	17	229	179	198	185	20	27	34	38	46	35	19	354	340	315	306	318	324	350	338	352.4	353.5
20 Spd	4	7	8	6	9	10	9	8	8	5	5	9	9	9	8	8	10	9	8	7	7	6	6	6	7.4	9.8
Dir	336	354	8	3	15	18	21	16	20	26	10	18	21	30	29	29	29	30	21	23	20	26	26	22	19.3	18.0
21 Spd	5	4	5	5	6	6	5	4	4	5	6	7	9	9	7	7	7	6	6	2	1	1	2	1	4.5	9.4
Dir	23	35	26	25	25	24	26	37	52	45	42	38	30	21	31	27	20	22	14	11	223	215	204	215	28.2	20.5
22 Spd	2	3	1	3	3	2	3	5	6	5	5	5	9	7	8	5	7	3	2	2	2	1	3	1	2.8	9.1
Dir	179	186	187	184	189	190	192	187	189	191	197	204	276	275	283	285	275	245	197	167	166	194	190	180	223.3	275.6

Peace Airshed Zone Association
Summary of Hourly Averages

Valleyview
 August 1, 2008 to September 1, 2008
 WS (km/h), WD (deg)

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
23 Spd	2	1	1	0	0	2	1	1	2	4	5	6	7	7	7	6	6	6	6	6	6	5	3	3	3.7	7.5
Dir	185	196	185	217	195	193	216	193	161	180	177	187	179	181	179	185	163	146	134	134	146	162	179	184	169.5	181.0
24 Spd	4	1	3	2	2	1	1	4	5	3	5	5	8	8	8	9	5	4	4	2	4	2	3	10	3.3	9.5
Dir	187	210	194	198	192	285	219	193	188	195	193	191	183	191	173	173	169	196	250	209	251	233	265	310	201.4	310.4
25 Spd	1	2	3	2	4	5	2	6	7	7	8	10	6	4	7	13	14	12	8	1	2	2	4	2	4.8	13.9
Dir	248	245	280	230	273	267	219	279	274	269	270	269	254	287	273	300	309	307	323	218	218	217	194	202	278.1	309.5
26 Spd	3	2	3	3	3	4	4	5	4	11	15	15	15	16	17	19	17	16	11	10	5	3	2	1	6.9	18.7
Dir	198	185	194	185	173	185	192	192	219	282	288	286	291	285	285	292	295	286	285	292	263	184	204	186	274.8	291.9
27 Spd	2	2	2	1	1	1	3	0	2	2	3	9	11	10	10	6	11	7	10	4	3	4	3	4	3.1	10.7
Dir	193	204	198	101	228	194	184	38	139	167	198	282	282	300	321	285	319	300	297	279	250	255	207	191	277.2	281.8
28 Spd	4	4	3	2	2	1	2	2	6	4	13	16	17	18	16	18	13	10	7	3	3	3	3	3	6.4	17.9
Dir	191	189	208	201	176	123	190	218	261	242	277	293	291	293	302	296	297	300	294	276	246	203	219	199	279.3	297.2
29 Spd	4	4	3	3	3	2	2	2	4	9	9	7	2	3	4	7	13	15	9	8	8	8	12	11	3.7	15.1
Dir	195	193	191	170	195	193	204	201	248	302	301	300	243	343	73	40	6	344	359	318	316	304	300	296	313.1	344.1
30 Spd	6	7	7	6	4	7	6	10	10	10	9	9	12	12	9	8	6	7	5	2	2	2	3	3	5.5	12.3
Dir	281	281	277	282	258	279	271	292	305	294	297	318	344	346	333	310	304	262	259	227	192	172	185	192	295.2	343.8
31 Spd	2	1	2	1	1	1	1	1	2	2	2	1	0	2	2	2	4	4	2	2	1	1	2	2	0.2	4.5
Dir	192	187	193	181	207	211	194	208	199	178	188	296	245	345	16	25	311	18	61	12	10	243	186	194	229.4	17.6
Spd	1.5	1.4	1.6	1.4	1.3	1.4	1.3	1.8	2.1	2.5	3.6	4.4	3.9	3.8	3.7	3.7	4.2	3.2	2.3	1.6	1.3	1.6	1.4	1.5	Diurnal Average	
Dir	225.8	242.9	251.5	269.9	261.7	267.1	239.6	251.9	252.6	272.1	279.9	294.3	299.4	308.0	311.1	318.4	315.5	310.9	315.9	293.8	270.4	221.3	223.9	242.7	Diurnal Maximum	
Spd	7.2	9.7	10.8	10.5	10.3	10.9	10.4	12.2	12.1	11.7	15.2	15.8	17.0	17.8	17.0	18.7	17.9	15.6	11.4	14.2	12.0	8.3	11.7	10.7	Diurnal Maximum	
Dir	272.7	294.9	293.4	293.0	290.6	290.5	272.2	290.0	316.1	330.4	288.0	303.9	291.1	292.8	345.9	291.9	297.2	285.7	324.2	287.0	286.4	303.9	300.4	296.4	Diurnal Maximum	
Maximum Speed Value: 19 km/h on Aug 26 16:00		Minimum Speed Value: 0 km/h on Aug 9 05:00														Hours in Service: 744										
Maximum Daily Speed Average: 9.4 km/h on Aug 2		Minimum Daily Speed Average: 0.2 km/h on Aug 15														Hours of Data: 744										
Maximum Diurnal Speed Average: 4.4 km/h at hour 12		Minimum Diurnal Speed Average: 1.3 km/h at hour 5														Hours of Missing Data: 0										
Monthly Average Velocity: 2.05 km/h 284.34 deg		Speed Percentiles: P ₁ = 0.3 P ₁₀ = 1.1 Q ₁ = 2.1 Median = 3.9 Q ₃ = 7.1 P ₉₀ = 10.4 P ₉₉ = 16.8														Percent Operational Time: 100.0										
All monthly, daily, and diurnal averages have been calculated using vector methods																										
Percentage Frequency Distribution																										
Direction	Speed Range (km/h)							Total																		
	0 to 5	5 to 11	11 to 19	19 to 28	28 to 38	> 38																				
North	3.36	4.44	1.75	0.00	0.00	0.00	9.54																			
NorthEast	3.23	3.23	0.00	0.00	0.00	0.00	6.45																			
East	1.48	0.00	0.00	0.00	0.00	0.00	1.48																			
SouthEast	4.97	1.48	0.00	0.00	0.00	0.00	6.45																			
South	28.90	4.84	0.13	0.00	0.00	0.00	33.87																			
SouthWest	10.75	0.27	0.00	0.00	0.00	0.00	11.02																			
West	6.18	8.06	1.75	0.00	0.00	0.00	15.99																			
NorthWest	2.42	8.74	4.03	0.00	0.00	0.00	15.19																			
Total	61.29	31.05	7.66	0.00	0.00	0.00	100.00																			

Wind Rose for WS at Valleyview August 2008



Peace Airshed Zone Association
Summary of Hourly Averages - Wind Speed (Scalar)

Valleyview - Wind Speed (WS) - km/h
August 1, 2008 to September 1, 2008

Maximum Speed: 19 km/h on Aug 26 16:00	Maximum Daily Speed Average: 10.6 km/h on Aug 2	Hours in Service: 744
Minimum Speed: 1 km/h on Aug 6 04:00	Minimum Daily Speed Average: 2.0 km/h on Aug 15	Hours of Data: 744
Maximum Diurnal Speed Average: 8.4 km/h at hour 12	Minimum Diurnal Speed Average: 3.1 km/h at hour 1	Hours of Missing Data: 0
Monthly Average Speed: 5.41 km/h	Percentiles: P ₁ = 0.9 P ₁₀ = 1.7 Q ₁ = 2.5 Median = 4.3 Q ₃ = 7.5 P ₉₀ = 10.8 P ₉₉ = 17.4	Percent Operational Time: 100.0

Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
1-Aug	3	2	2	2	2	2	3	3	4	6	7	7	4	4	4	5	7	11	8	10	12	6	6	10	5.5	12.3
2-Aug	7	7	9	9	10	11	10	13	11	11	12	14	11	14	17	15	12	11	10	14	9	8	3	4	10.6	17.4
3-Aug	7	10	11	11	8	8	6	5	8	10	13	16	17	17	17	16	8	2	2	3	2	2	2	3	8.6	17.5
4-Aug	3	3	3	4	4	3	4	3	3	3	7	12	12	14	10	10	10	8	5	2	6	2	2	2	5.7	14.5
5-Aug	2	2	2	2	2	1	2	3	3	3	4	4	4	3	3	4	4	4	4	4	3	2	1	1	2.8	4.4
6-Aug	1	1	1	1	1	1	2	4	6	6	6	8	8	7	6	5	4	6	6	5	4	5	4	2	4.0	7.9
7-Aug	1	1	1	2	2	1	1	2	4	5	4	4	3	4	4	3	2	4	3	3	2	3	3	1	2.7	5.1
8-Aug	1	1	1	1	1	1	1	1	2	1	7	7	5	5	3	3	3	11	11	5	4	8	4	4	3.9	10.9
9-Aug	2	1	2	1	1	3	2	3	3	3	2	4	5	3	3	4	6	6	5	4	5	4	3	3	3.3	6.0
10-Aug	5	8	2	2	4	2	4	4	4	5	8	9	7	8	10	8	5	6	5	7	5	2	2	3	5.3	10.4
11-Aug	2	2	2	1	1	1	2	3	3	5	4	5	5	4	4	7	11	10	9	5	3	3	2	2	4.0	10.7
12-Aug	2	2	5	6	6	4	4	5	6	6	5	7	8	9	11	12	9	5	4	2	2	2	1	2	5.3	12.4
13-Aug	3	2	2	7	5	8	6	11	10	12	15	17	14	14	11	11	12	12	9	5	2	2	2	3	8.2	16.8
14-Aug	3	2	5	3	4	4	5	4	4	4	4	10	11	10	9	9	9	7	3	1	2	2	2	2	4.9	10.8
15-Aug	2	1	1	2	1	1	1	1	2	2	2	2	4	4	4	3	3	1	1	1	2	2	3	1	2.0	4.2
16-Aug	3	3	8	5	2	2	7	9	12	12	12	11	7	7	7	7	4	3	3	3	2	2	3	3	5.8	12.3
17-Aug	1	3	4	3	2	2	1	2	4	8	11	10	8	7	8	7	6	6	6	7	8	7	5	4	5.4	11.5
18-Aug	3	3	3	2	2	2	4	4	5	4	8	5	3	5	2	3	3	3	12	11	4	3	4	2	4.1	11.9
19-Aug	3	2	8	2	5	2	3	2	5	5	5	5	6	7	6	9	11	8	8	8	7	5	5	6	5.6	11.2
20-Aug	4	7	9	7	9	10	9	8	8	6	6	9	9	9	8	8	10	9	8	7	7	6	6	6	7.7	9.9
21-Aug	5	5	5	5	6	6	5	4	4	5	7	7	9	10	7	7	8	6	6	3	1	1	2	2	5.2	9.6
22-Aug	2	3	2	3	3	2	3	5	6	5	5	6	9	7	8	5	7	3	2	2	2	1	3	1	4.1	9.4
23-Aug	2	1	1	1	2	2	2	1	2	4	5	7	7	8	7	7	6	6	6	6	6	5	3	3	4.2	7.7
24-Aug	4	2	3	2	2	1	2	4	5	3	5	5	9	8	8	9	6	4	5	3	5	3	4	10	4.6	9.7
25-Aug	3	3	4	2	5	5	3	7	7	7	8	10	7	7	9	14	14	13	8	3	3	2	4	3	6.2	14.4
26-Aug	3	3	3	3	3	4	4	5	5	11	15	15	16	16	17	19	17	16	11	10	5	3	3	1	8.8	19.1
27-Aug	2	2	2	2	2	3	3	2	2	2	4	9	11	11	11	7	12	7	10	4	3	5	3	4	5.1	11.7
28-Aug	4	4	3	2	2	2	3	3	6	4	14	16	17	18	16	16	18	13	10	7	3	3	3	3	8.0	18.5
29-Aug	4	4	3	3	3	3	2	3	4	10	9	8	4	4	4	7	13	17	10	8	8	8	12	11	6.7	16.5
30-Aug	7	7	7	6	4	7	7	10	10	10	9	10	12	12	10	9	7	7	5	3	2	2	3	3	7.0	12.5
31-Aug	2	2	2	2	1	1	1	2	2	3	2	3	3	3	4	3	4	6	2	2	1	1	2	2	2.4	6.2

3.1	3.2	3.8	3.4	3.4	3.4	3.5	4.4	5.2	5.9	7.2	8.4	8.3	8.4	8.1	8.1	8.2	7.4	6.4	5.2	4.3	3.6	3.4	3.5	Diurnal Average
7.3	9.8	10.9	10.6	10.4	11.1	10.5	12.6	12.3	12.1	15.5	16.8	17.4	18.4	17.4	19.1	18.5	16.5	11.9	14.3	12.3	8.5	11.8	10.8	Diurnal Maximum

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

**Peace Airshed Zone Association
Summary of Hourly Standard Deviations**

**Valleyview - Wind Direction (WD) - deg
August 1, 2008 to September 1, 2008**

Maximum Value: 93.8 deg on Aug 17 02:00																						Hours in Service:	744		
Minimum Value: 4.8 deg on Aug 23 20:00																						Hours of Data:	744		
Percentiles: P ₁ = 6.8 P ₁₀ = 9.7 Q ₁ = 13.1 Median = 21.6 Q ₃ = 40.7 P ₉₀ = 63.9 P ₉₉ = 90.7																						Hours of Missing Data:	0		
																						Hours of Calibration:	0		
																						Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Maximum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1-Aug	12	63	91	59	18	27	46	67	57	22	21	17	41	10	16	16	65	23	13	11	11	16	11	9	90.8
2-Aug	12	11	11	10	10	12	8	16	13	14	13	13	14	11	13	15	14	10	12	9	12	12	43	52	51.7
3-Aug	15	9	8	8	11	14	30	37	16	15	20	16	13	17	12	20	26	71	73	69	23	33	30	11	73.4
4-Aug	41	19	14	10	9	17	11	13	16	26	59	18	18	21	31	16	14	13	11	33	19	61	58	64	63.6
5-Aug	65	38	80	58	42	27	11	16	23	22	37	39	45	76	60	56	53	21	16	7	27	28	53	33	79.6
6-Aug	36	44	34	49	27	27	20	9	9	16	19	10	18	14	29	37	30	22	15	9	8	10	9	22	49.4
7-Aug	67	22	56	18	48	75	34	22	21	17	28	20	57	49	56	53	38	24	23	18	76	45	55	23	76.4
8-Aug	78	30	61	60	52	66	43	78	22	81	16	20	29	33	24	25	49	20	16	55	51	49	78	15	81.4
9-Aug	87	21	41	92	91	57	77	45	38	71	58	24	38	30	91	79	32	35	24	25	87	41	73	60	91.5
10-Aug	32	29	93	68	22	25	10	17	13	36	23	29	36	29	19	33	31	30	50	23	34	52	86	56	93.3
11-Aug	40	59	61	58	63	89	79	18	63	40	54	57	41	66	81	30	11	17	21	20	33	13	28	37	89.0
12-Aug	46	55	25	11	10	17	20	15	15	17	49	42	31	22	20	16	29	28	22	26	70	36	80	68	79.8
13-Aug	19	49	80	19	23	8	14	9	12	16	13	19	20	20	26	23	19	15	13	9	18	23	29	15	80.4
14-Aug	11	12	5	7	10	10	7	11	13	13	51	28	28	30	23	26	32	20	41	42	82	75	17	11	82.5
15-Aug	47	90	86	48	53	48	42	45	57	63	71	71	30	17	16	23	18	76	30	52	52	41	7	39	90.5
16-Aug	48	56	29	54	42	83	41	12	11	15	16	18	33	57	42	40	48	45	24	36	47	52	53	50	82.9
17-Aug	76	94	31	72	48	68	74	20	19	13	13	15	17	14	20	23	21	14	10	12	12	13	8	9	93.8
18-Aug	32	9	9	71	28	39	43	12	12	8	41	40	38	20	28	23	19	39	22	11	24	46	51	69	70.7
19-Aug	34	68	21	74	86	34	25	83	14	23	15	23	16	14	15	35	9	13	20	10	15	16	14	12	86.5
20-Aug	14	12	11	11	9	9	9	9	10	16	18	11	9	11	11	11	10	10	9	9	10	10	10	8	17.6
21-Aug	9	14	10	9	9	8	11	17	17	18	23	19	17	10	15	16	10	13	9	63	28	26	19	46	63.0
22-Aug	10	13	43	9	16	18	12	9	10	17	11	36	19	41	16	37	19	23	29	21	22	17	12	22	42.8
23-Aug	13	46	24	78	83	23	34	47	32	21	27	13	15	16	15	16	20	14	7	5	10	12	24	9	83.3
24-Aug	8	46	9	19	34	69	33	16	11	15	9	11	14	10	16	12	24	21	26	41	45	39	45	12	68.7
25-Aug	72	36	31	36	21	35	26	43	17	17	18	19	30	57	46	17	16	14	13	80	19	10	7	11	79.6
26-Aug	14	25	8	16	15	11	8	9	35	17	11	16	16	15	15	13	15	11	9	7	25	19	29	76	76.2
27-Aug	20	11	23	69	72	85	35	82	32	21	40	22	22	18	22	45	26	14	9	22	13	14	12	6	85.3
28-Aug	8	9	13	29	16	49	34	30	19	34	18	11	13	16	14	12	15	11	11	14	24	8	20	18	48.9
29-Aug	6	5	8	11	24	22	16	27	37	17	24	32	73	43	33	13	17	27	23	14	13	12	9	9	72.7
30-Aug	21	15	11	14	23	15	11	12	12	9	10	23	9	10	19	18	29	13	24	24	22	13	8	9	29.1
31-Aug	33	22	7	75	47	36	29	47	33	58	61	85	91	83	85	61	68	48	29	38	46	72	10	27	90.9
86.6	93.8	93.3	91.5	91.2	89.0	78.8	83.0	63.1	81.4	71.4	85.3	90.9	82.9	90.8	78.7	68.0	76.1	73.4	79.6	87.2	75.4	86.2	76.2		

PASZA

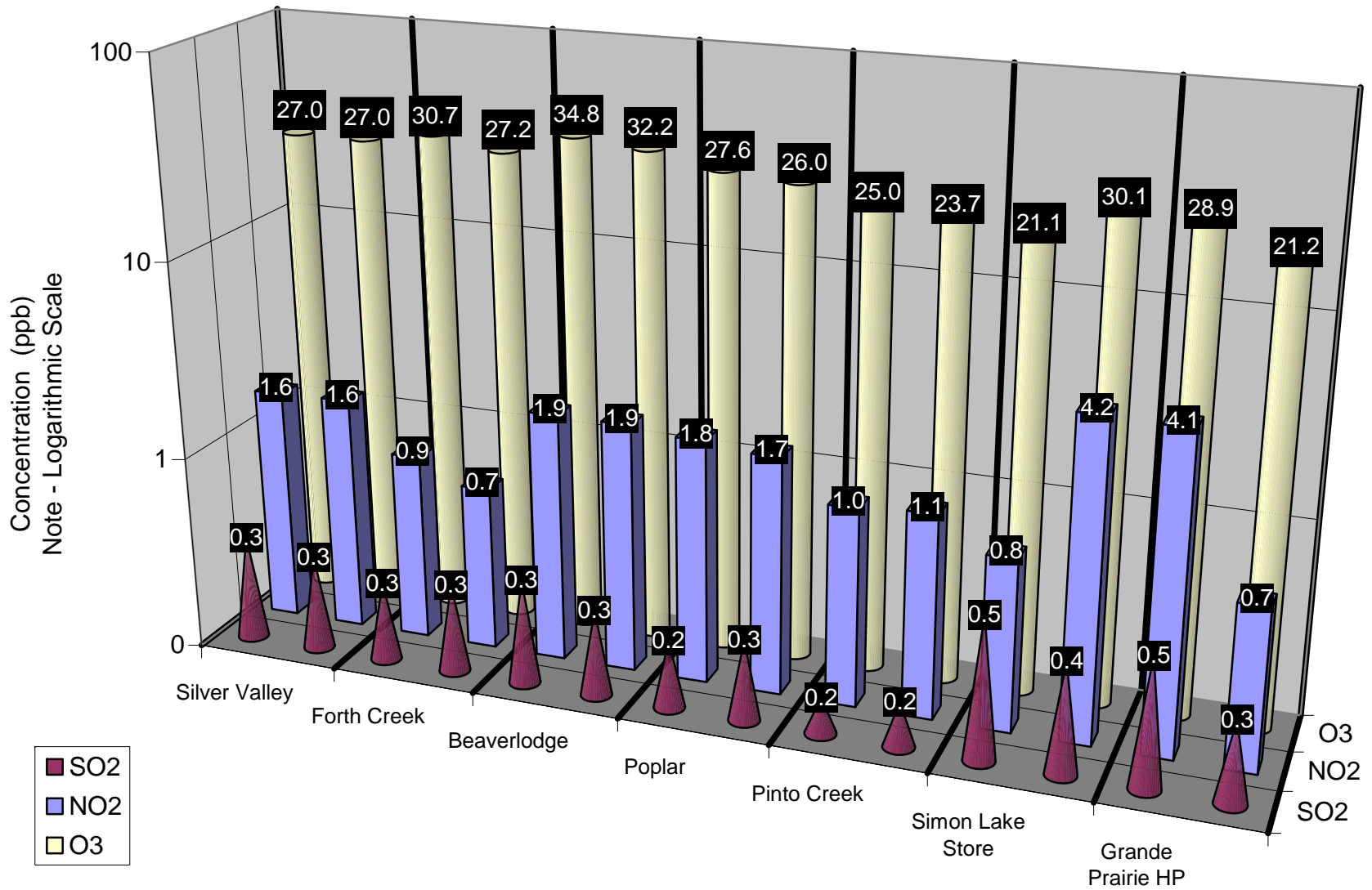
Monthly Passive Data Summary

PASZA Passive Results for August 2008

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
Duplicates					
1a	Silver Valley	0.3	27.0	1.6	
1b	Silver Valley	0.3	27.0	1.6	
3a	Forth Creek	0.3	30.7	0.9	
3b	Forth Creek	0.3	27.2	0.7	
16a	Beaverlodge	0.3	34.8	1.9	
16b	Beaverlodge	0.3	32.2	1.9	
17a	Poplar	0.2	27.6	1.8	
17b	Poplar	0.3	26.0	1.7	
25a	Pinto Creek	0.2	25.0	1.0	
25b	Pinto Creek	0.2	23.7	1.1	
56a	Simon Lake Store	0.5	21.1	0.8	
56b	Simon Lake Store	0.4	30.1	4.2	
49a	Grande Prairie HP	0.5	28.9	4.1	
49b	Grande Prairie HP	0.3	21.2	0.7	
1	Silver Valley	0.3	27.0	1.6	08-27-081-11 W6M
2	Bay Tree	0.2	25.7	0.7	13-16-078-13 W6M
3	Forth Creek	0.3	28.9	0.8	04-13-082-07 W6M
4	Gordondale	0.4	28.5	1.2	04-34-078-10 W6M
5	Boone Creek	0.3	26.2	2.0	01-23-076-11 W6M
7	Steeprock Creek	0.2	28.5	0.6	09-35-072-13 W6M
9	Spirit River	0.2	27.8	1.8	08-12-079-07 W6M
10	Woking	0.4	31.0	1.1	01-13-076-07 W6M
11	Webber Creek	0.3	29.4	2.0	09-36-074-09 W6M
12	Hythe	0.2	26.9	1.8	14-36-072-11 W6M
14	Sylvester	0.1	20.4	0.7	08-06-069-12 W6M
16	Beaverlodge	0.3	33.5	1.9	15-36-071-10 W6M
17	Poplar	0.2	26.8	1.7	13-06-073-08 W6M
18	Saddle Hills	0.4	29.2	1.0	04-25-074-07 W6M
19	Wanham	0.2	30.4	0.9	16-22-077-03 W6M
20	Shaftesbury	0.3	26.2	0.9	04-03-082-23 W5M
21	Eaglesham	0.3	21.4	1.2	16-21-079-25 W5M
23	Bear Lake	0.4	25.7	2.6	15-31-072-06 W6M

PASZA Passive Results for August 2008 (Continued)

Station Number	Station Name	SO2 ppb	O3 ppb	NO2 ppb	Site Legal
24	Wembley	0.1	24.7	2.2	12-31-070-08 W6M
25	Pinto Creek	0.2	24.4	1.1	04-24-069-11 W6M
26	Flyingshot	0.2	24.3	1.3	15-36-070-07 W6M
27	Grande Prairie I	0.4	27.7	3.9	08-15-071-06 W6M
28	Clairmont Lake	0.4	29.0	1.9	09-06-073-04 W6M
29	Smoky Heights	0.4	35.3	2.0	04-06-075-02 W6M
30	Fitzsimmons	0.3	23.2	1.4	15-36-072-03 W6M
32	Gold Creek	0.3	18.8	1.3	06-33-067-05 W6M
33	Wapiti	0.2	26.0	1.6	02-25-071-03 W6M
34	Puskwaskau	0.2	22.9	0.5	15-35-074-25 W5M
35	Jean Cote	0.5	24.8	1.4	12-35-079-21 W5M
36	Guy	0.4	24.3	1.5	03-04-076-22 W5M
37	Crooked Creek	0.3	27.1	0.9	16-01-071-26 W5M
39	Clouston Creek	0.3	27.0	0.9	12-01-073-22 W5M
40	McLennan	0.5	27.3	1.2	03-29-077-19 W5M
41	Valleyview	0.4	29.8	0.9	09-30-069-22 W5M
42	Sunset House	0.4	35.6	0.6	05-32-070-19 W5M
43	High Prairie	0.1	23.5	1.0	16-13-074-17 W5M
44	Peavine	0.4	22.3	0.3	03-05-079-15 W5M
45	Gift Lake	0.2	19.4	0.7	10-07-079-12 W5M
46	Little Smoky	0.4	20.6	1.6	12-01-065-21 W5M
47	Kinuso	0.2	19.6	0.5	12-10-073-10 W5M
48	Deer Mountain	0.2	20.5	0.6	15-22-068-09 W5M
49	Grande Prairie HP	0.4	25.0	2.4	17-26-071-06 W6M
50	Clear River	0.3	24.5	1.3	SE-03-084-12 W6M
51	Bear Canyon	0.4	24.2	0.6	SE-28-085-12 W6M
52	Worsley	0.2	23.4	1.5	NE-34-085-07 W6M
53	Hines Creek	0.2	23.2	1.1	SW-09-084-04 W6M
54	Ronan	0.2	N/A	2.3	SE-03-082-04 W6M
55	Cadotte Lake School	0.2	18.7	0.8	NE-23-086-16 W5M
56	Simon Lake Store	0.5	25.6	2.5	SE-32-086-17 W5M
57	Dixonville	0.2	23.5	0.8	SE-14-087-24 W5M
58	Queen Elizabeth Park	0.2	26.9	1.2	NW-19-083-23 W5M
59	Blue Sky	0.3	23.2	2.0	SW-35-081-02 W6M
60	Gerry Lake	0.2	25.6	0.6	SW-22-084-02 W6M
61	Musreau Lake	0.2	23.5	0.9	NE-22-064-05 W6M



Duplicate Summary Chart

Passive Summary for August 2008

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

Passive Summary for August 2008 (PASZA Zone)			
Mean	0.3	25.6	1.3
Standard Deviation	0.1	3.8	0.7
Minimum	0.1	18.7	0.3
Minimum At	Sylvester (#14)	Cadotte Lake School	Peavine (#44)
Maximum	0.5	35.6	3.9
Maximum At	McLennan (#40)	Sunset House (#42)	Grande Prairie I (#27)

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

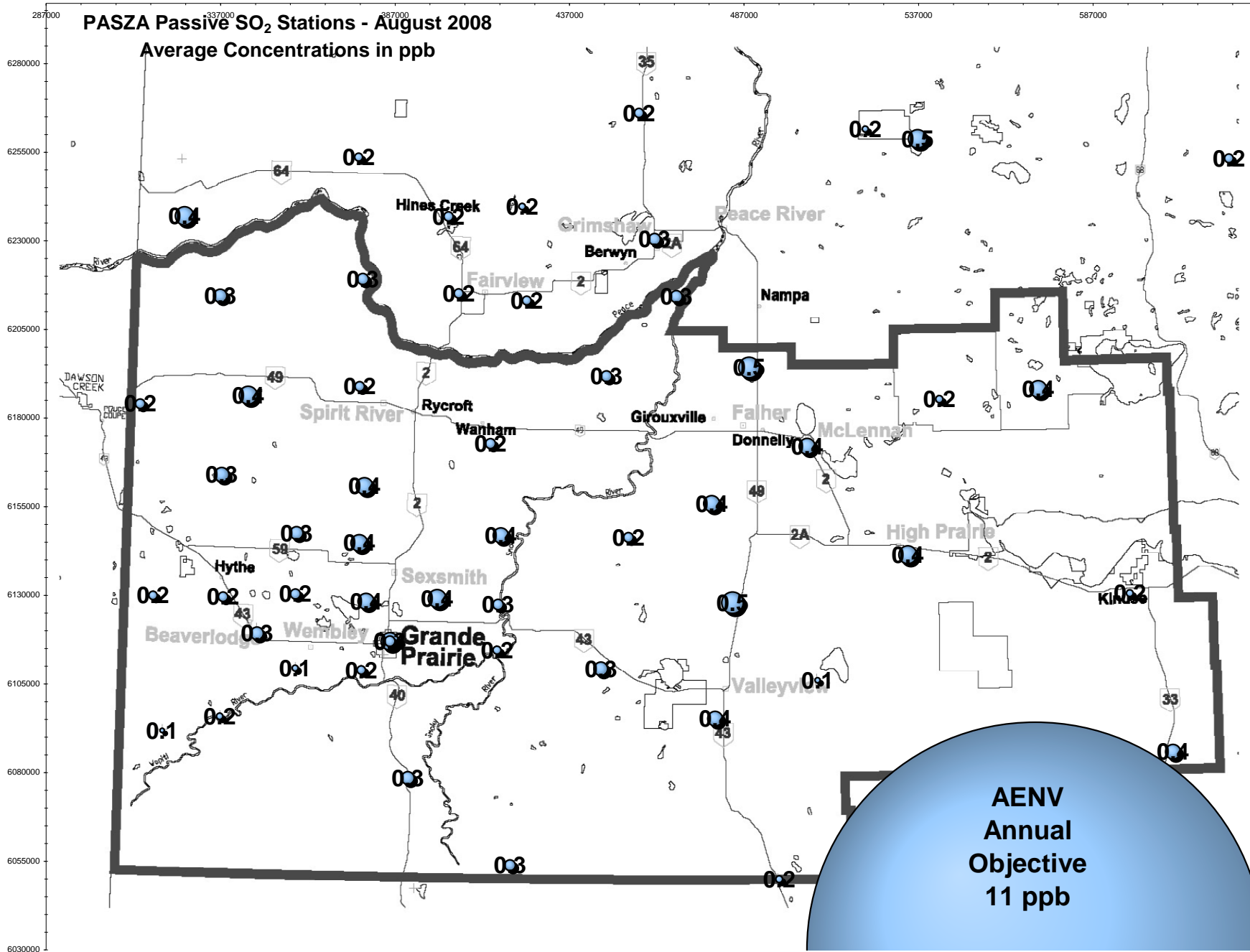
	SO ₂	O ₃	NO ₂
PASZA Beaverlodge station	0.4	21.1	2.7
PASZA Beaverlodge passive	0.3	33.5	1.9

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

	SO ₂	O ₃	NO ₂
PASZA Henry Pirker station	0.4	22.8	5.3
PASZA Grande Prairie passive	0.4	25.0	2.4

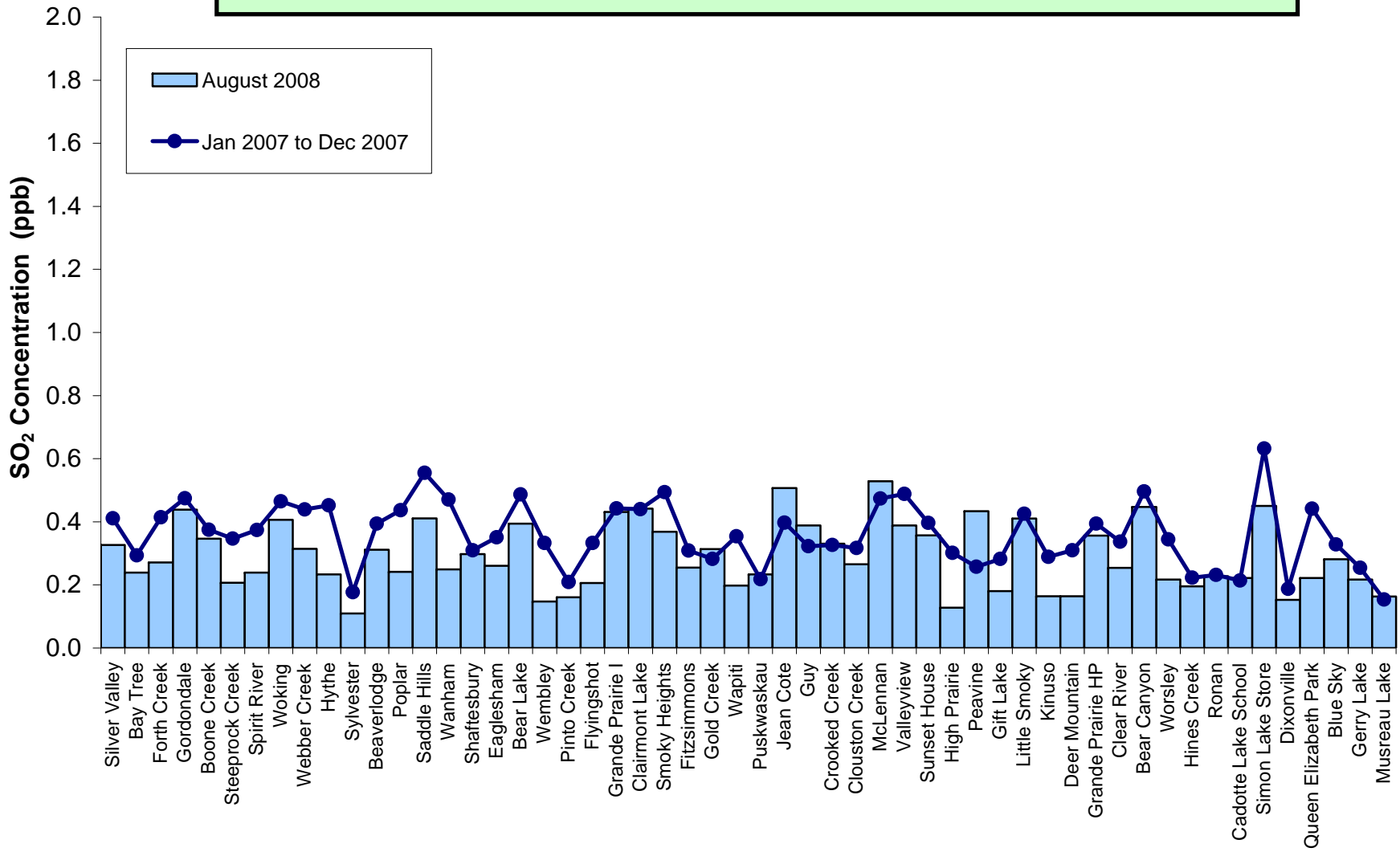
Comparison between Continuous and Passive monitoring at Spirit River (passive #9 Spirit River)

	SO ₂	O ₃	NO ₂
PASZA Portable Spirit River station	0.3	20.0	2.6
PASZA Spirit River passive	0.2	27.8	1.8

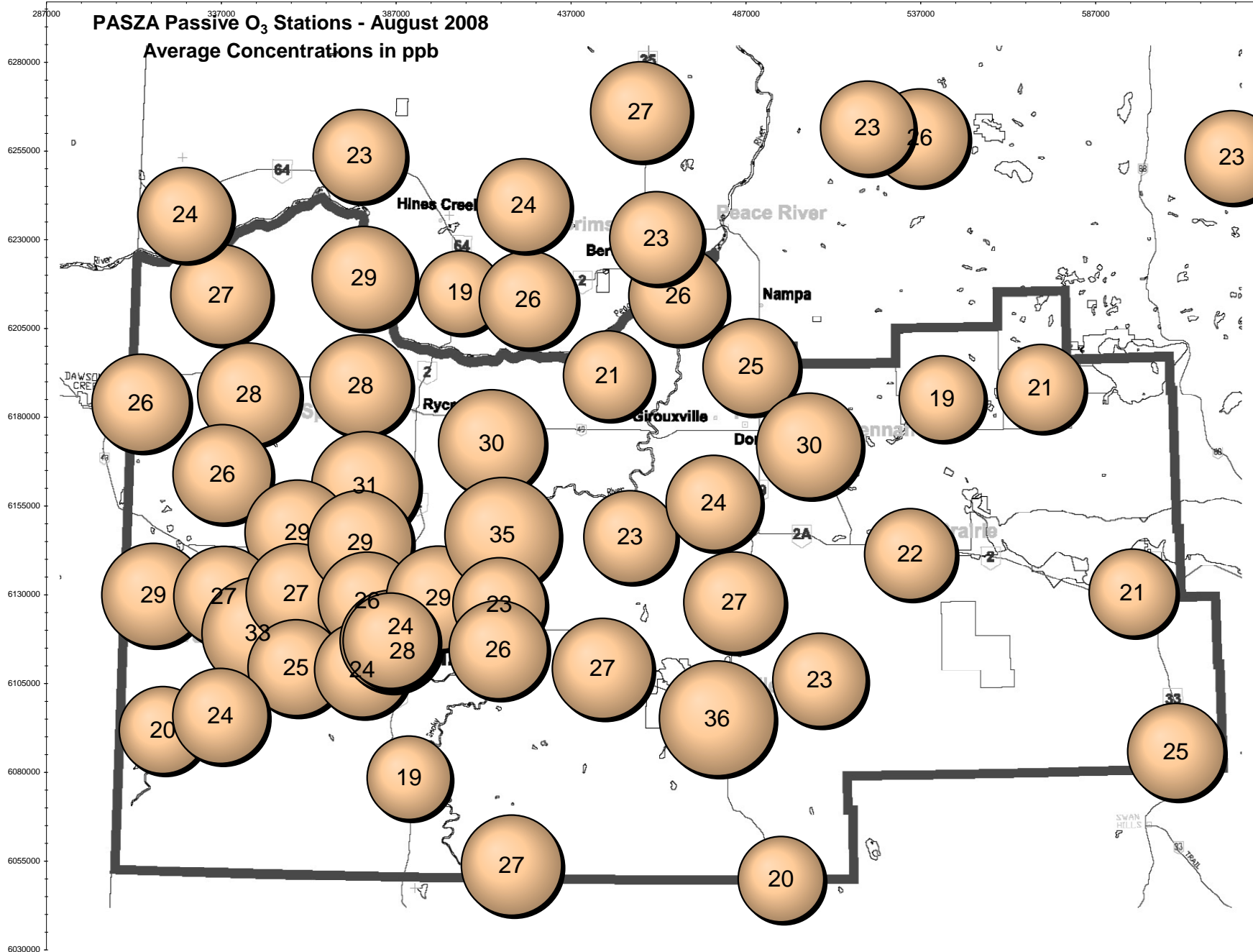


SO₂ Bubble Chart

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

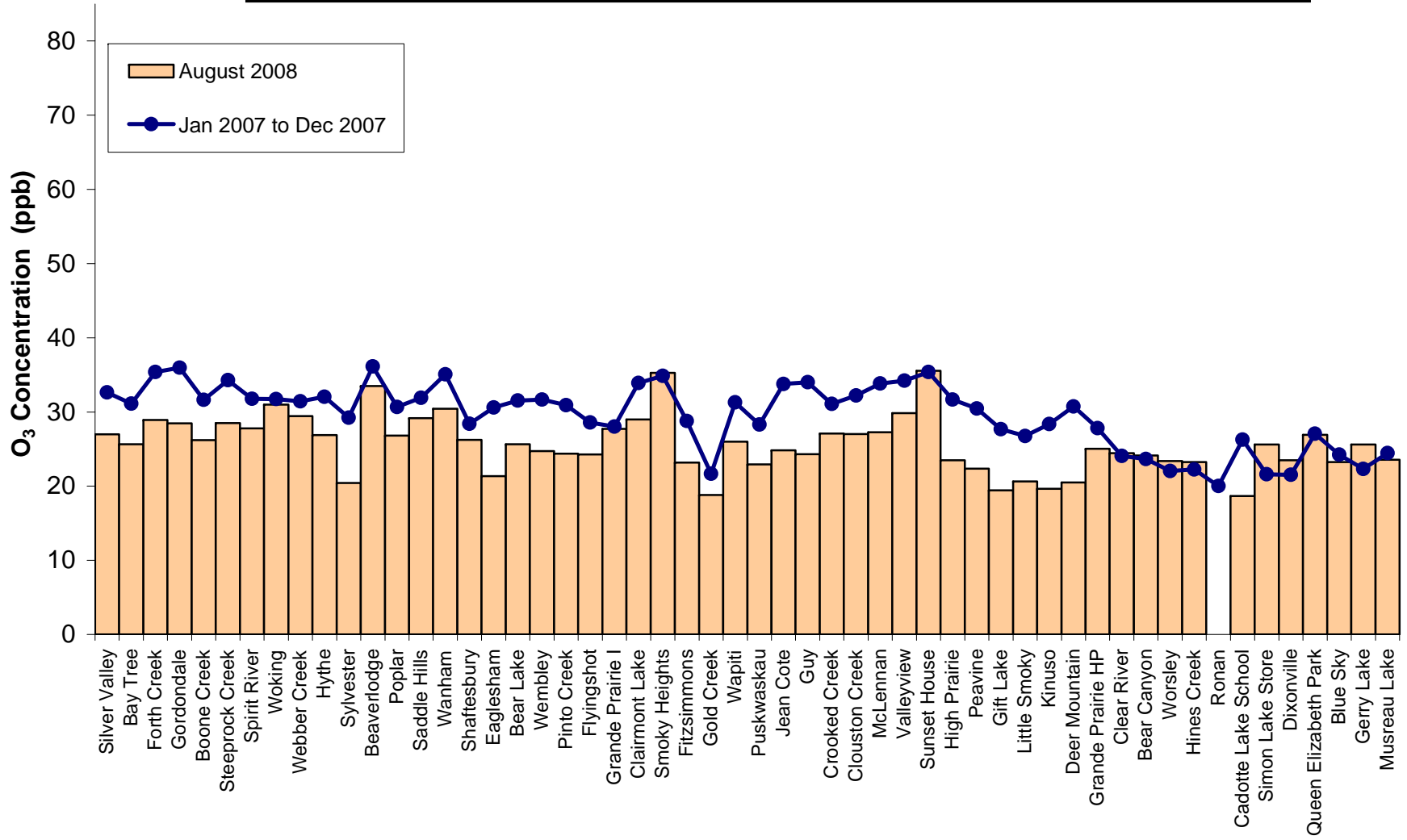


SO₂ Summary Chart



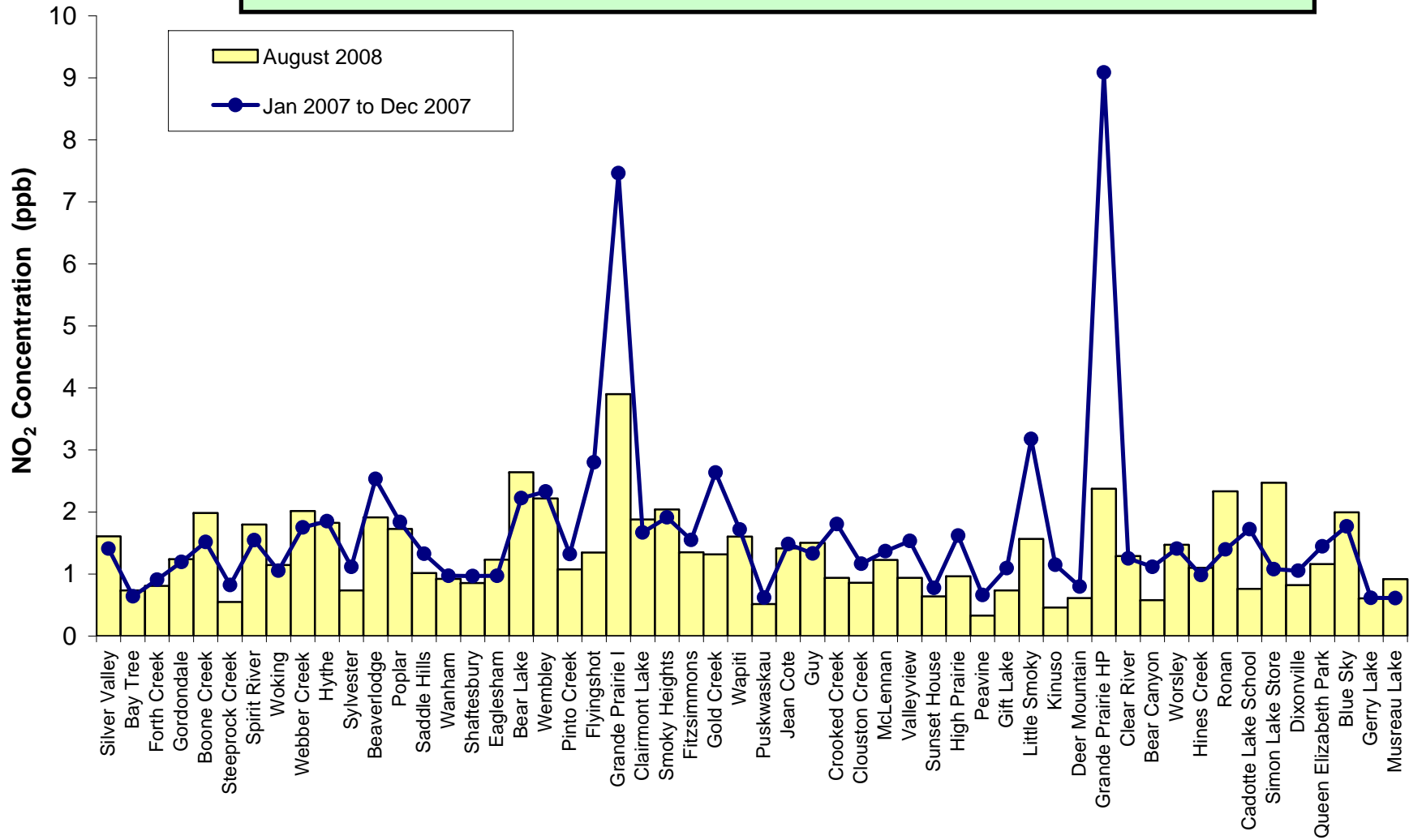
O₃ Bubble Chart

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

August 2008 Calibration Reports

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

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

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

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

**PASZA – Spirit River (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	August 7, 2008	Previous Calibration	July 9, 2008
Station Number	1	Station Location	Henry Pirker
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="text"/>

Start Time (MST)	11:55	End Time (MST)	15:20
Barometric Pressure	0.918 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	50.3 ppb	Cal Gas Expiry Date	1/2/2009
		Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	10
	Before		After
Calculated slope	0.996259	Calculated slope	1.000813
Calculated intercept	-1.974511	Calculated intercept	-1.746861

Analyzer make **TEI 43C** Analyzer serial # **610816292**

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background	7.5		7.6	
Coefficient	.800		.800	
Pressure	645.7	mm Hg	637.6	mm Hg
Flow	0.500	lpm	0.481	lpm
Lamp Voltage	44015	Hz	44657	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)
4988	0.00	0.0	0.0	N/A
4987	39.84	398.7	399.0	0.9992
4988	19.89	199.8	202.9	0.9848
4988	9.95	100.1	103.1	0.9711
4988	0.00	0.0	0.0	As Found Zero
4991	39.84	398.3	399.0	As Found Span
Average Correction Factor				0.9850

Calculated value of As Found Response: **395.5 ppb** Percent Change of As Found: **0.7%**

	before calibration		after calibration	
Auto zero	-1.5	ppb	-1.2	ppb
Auto span	332.7	ppb	333.6	ppb

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

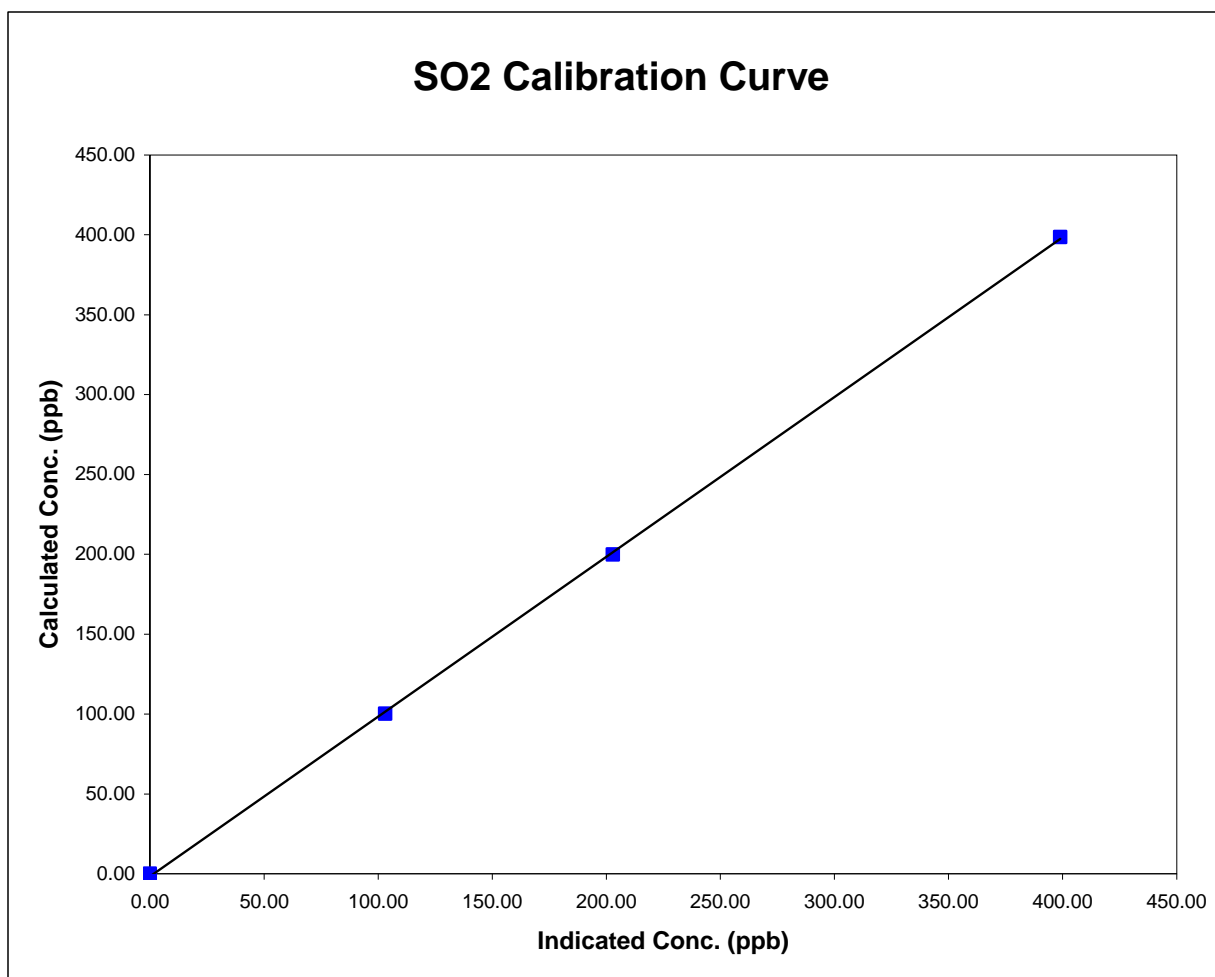


Station Information

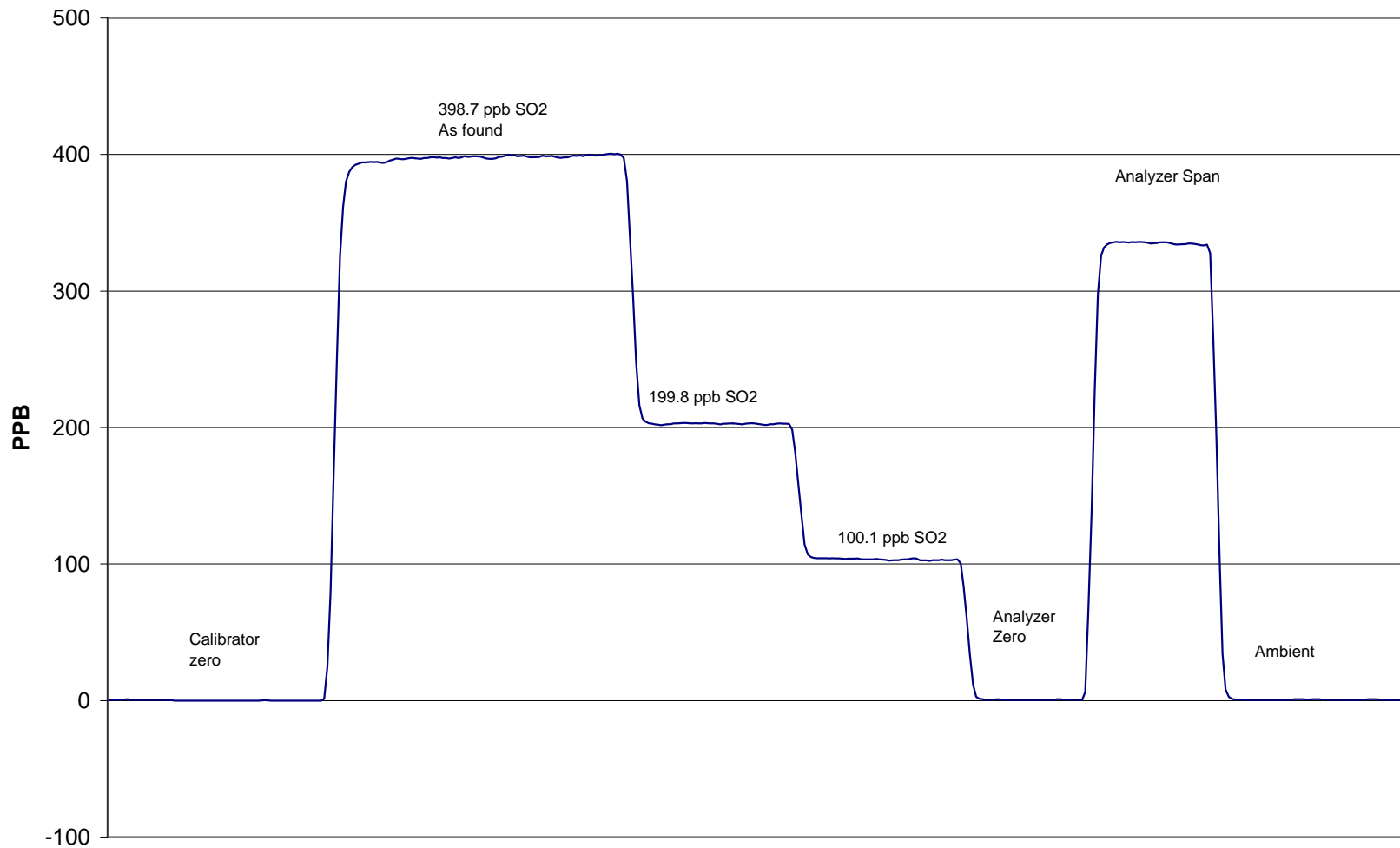
Calibration Date	August 7, 2008	Previous Calibration	July 9, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:55	End Time (MST)	15:20
Analyzer make/model	TEI 43C	Analyzer serial #	610816292

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
398.7	399.0	0.9992	Correlation Coefficient	0.999907
199.8	202.9	0.9848		
100.1	103.1	0.9711		
			Slope	1.000813
			Intercept	-1.746861



Henry Pirker SO₂ Calibration



August 7, 2008

Calibration Report

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



Station Information

Calibration Date **August 7, 2008** Previous Calibration **July 9, 2008**
Station Number **1** Station Location **Henry Pirker**

Reason: Routine Installation Removal Other: _____

Start Time (MST) **11:55** End Time (MST) **17:00**
Barometric Pressure **0.918** Atm Station Temperature **21.0** Deg C
Calibrator **EnviroNics 6100** Serial Number **3474**
NO Cal Gas Conc **48.9** ppm Cal Gas Expiry Date **1/2/2009**
NOx Cal Gas Conc **48.9** ppm Cal Gas Serial # **LL16161**

DACS Information

DACS make **FOCUS AP1000** DACS serial No. **45269**

Parameter		NO2	NOx	NO
Before	Data Slope	1.020236	1.022163	1.018904
	Data Offset	0.046222	-3.148134	-2.590341
After	Data Slope	0.999008	1.004453	1.005804
	Data Offset	0.382527	-2.580813	-2.536778
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model **Teco 42C** Analyzer serial # **508011073**

Test Point	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
NO background	7.9	ppb	7.9	mV
NOx background	8.3	ppb	8.3	mV
NO coefficient	0.694		0.684	
NOx coefficient	0.999		0.997	
Chamber Temp	49.9	Deg C	50.0	Deg C
Cooler Temp	-2.5	Deg C	-2.4	Deg C
Converter Temp	318.0	Deg C	318.0	Deg C
Vacuum	167.9	mm Hg	168.8	mm Hg

Notes: Nox adjustment made

Calibration Report



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

Station Information

Calibration Date: **August 7, 2008** Station Location: **Henry Pirker**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4990	0.00	0.0	0.0	0.0	0.6	0.5	0.0	N/A	N/A
1	4987	39.84	387.6	387.6	0.0	387.2	386.7	0.5	1.0008	1.0022
2	4990	19.89	194.1	194.1	0.0	197.2	196.8	0.4	0.9845	0.9866
3	4990	9.95	97.3	97.3	0.0	101.3	101.2	0.1	0.9611	0.9615
AFZ	4990	0.00	0.0	0.0	0.0	0.6	0.5	0.0	0.0000	0.0000
AFS	4990	39.85	387.4	387.4	0.0	375.6	376.8	-1.1	1.0315	1.0282
Average Correction Factor									0.9821	0.9834

As Found Concentrations: NO_x= 371.9 NO= 373.7 As Found Percent Change NO_x= -4.0% NO= -3.5%

GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.88 ccm

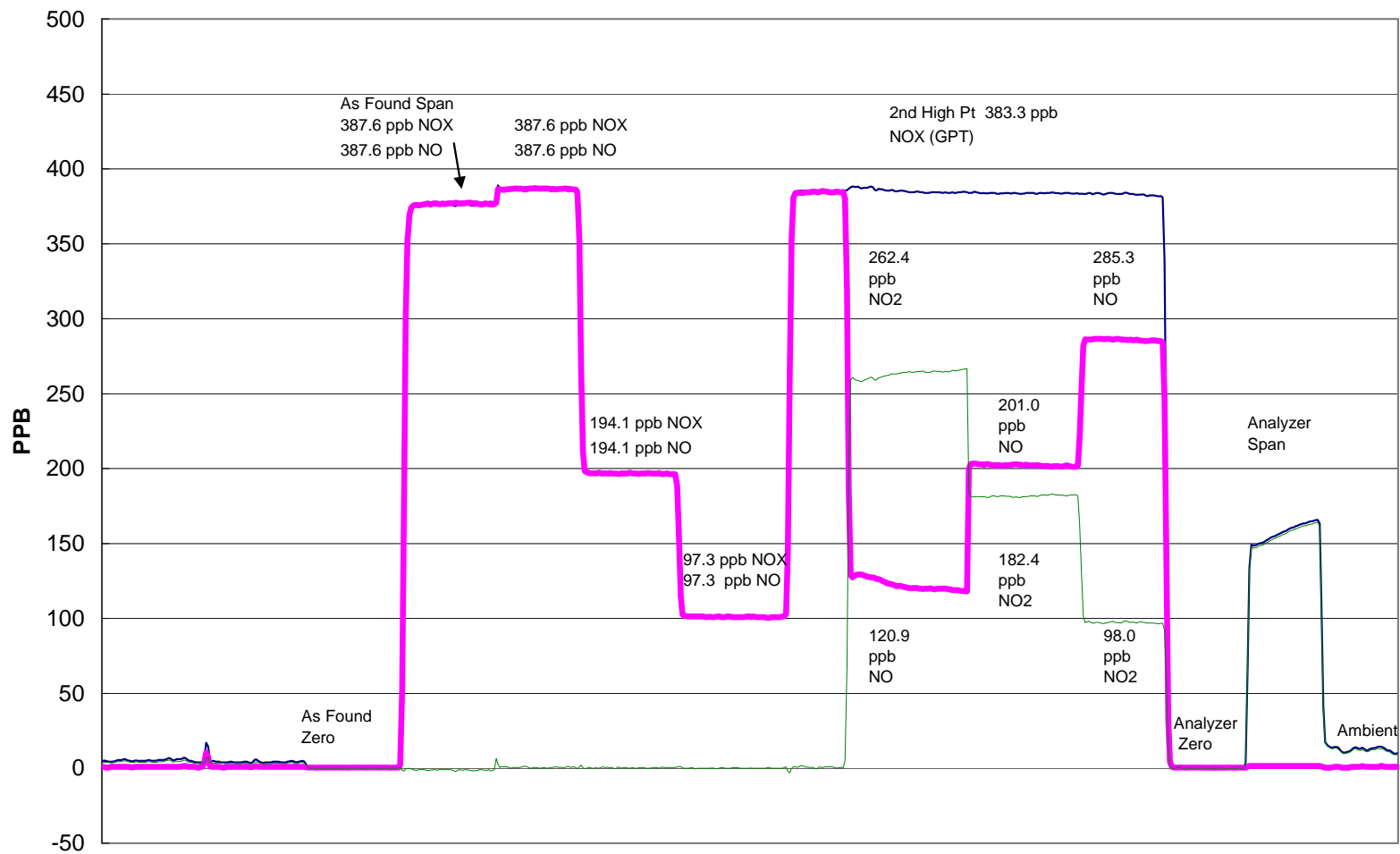
O3 Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	383.3	384.3	-1.0	385.2	384.6	0.6	0.9951	0.9992	N/A	N/A
300	383.3	120.9	262.4	385.5	122.7	262.9	0.9944	0.9851	0.9981	100.2%
200	383.3	201.0	182.4	383.7	202.4	181.4	0.9991	0.9933	1.0052	99.5%
100	383.3	285.3	98.0	383.4	286.2	97.4	0.9997	0.9969	1.0061	99.4%
Average Correction Factor							0.9977	0.9918	1.0031	99.7%

AIC Data

	Previous calibration				Current calibration			
Parameter	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	-2.3	1.0	-0.3	ppb	-0.6	1.0	-0.2	ppb
Auto span	155.1	156.5	-1.1	ppb	154.4	154.8	-1.0	ppb

Calibration Performed By: Conor Whiteley

Henry Pirker NOx Calibration



August 7, 2008

Calibration Summary

Parameter **NO₂**

Air Monitoring Network **PASZA**



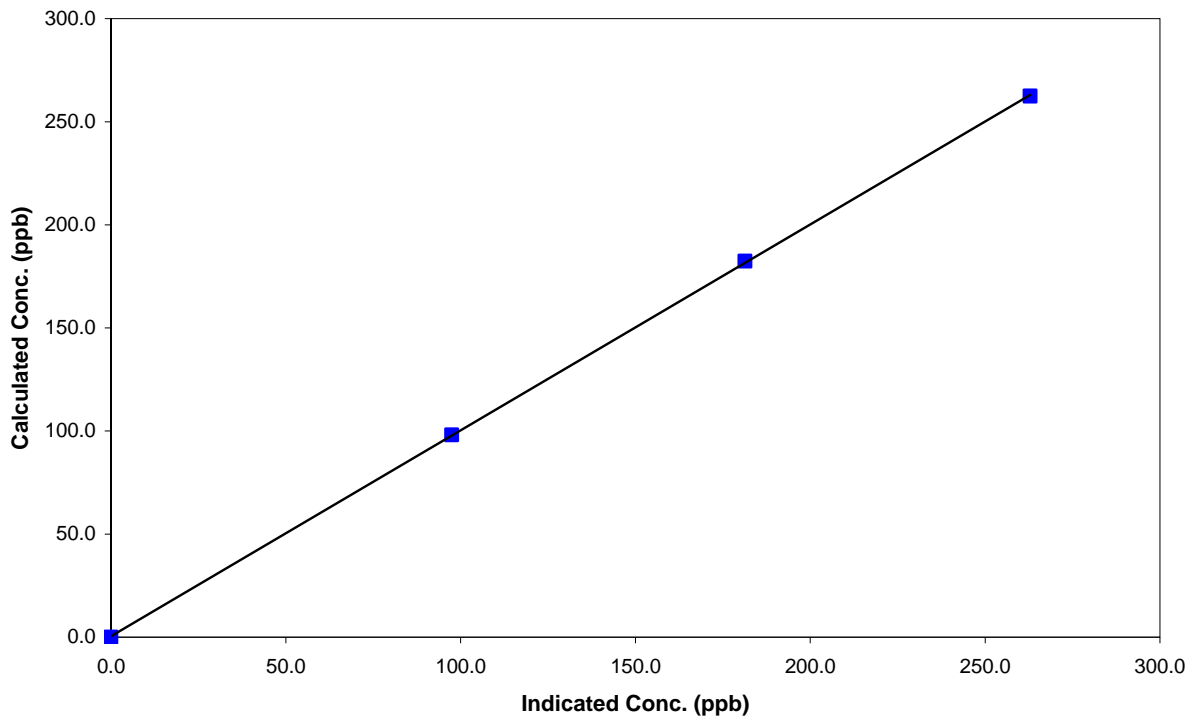
Station Information

Calibration Date	August 7, 2008	Previous Calibration	July 9, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:55	End Time (MST)	17:00
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	0.0000		
262.4	262.9	0.9981	Correlation Coefficient	0.999969
182.4	181.4	1.0052		
98.0	97.4	1.0061	Slope	0.999008
			Intercept	0.382527

NO₂ Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**



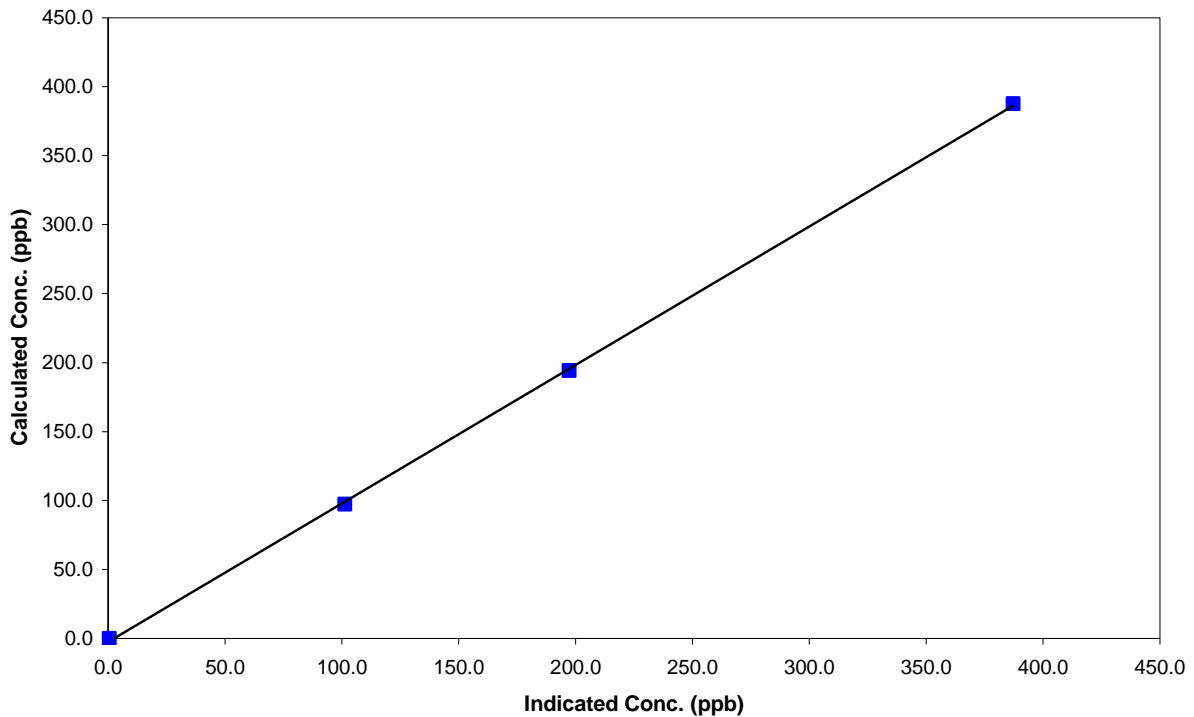
Station Information

Calibration Date	August 7, 2008	Previous Calibration	July 9, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:55	End Time (MST)	17:00
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.6	0.0000	Correlation Coefficient	0.999872
387.6	387.2	1.0008		
194.1	197.2	0.9845	Slope	1.004453
97.3	101.3	0.9611		
			Intercept	-2.580813

NO_x Calibration Curve



Calibration Summary

Parameter **NO**
 Air Monitoring Network **PASZA**



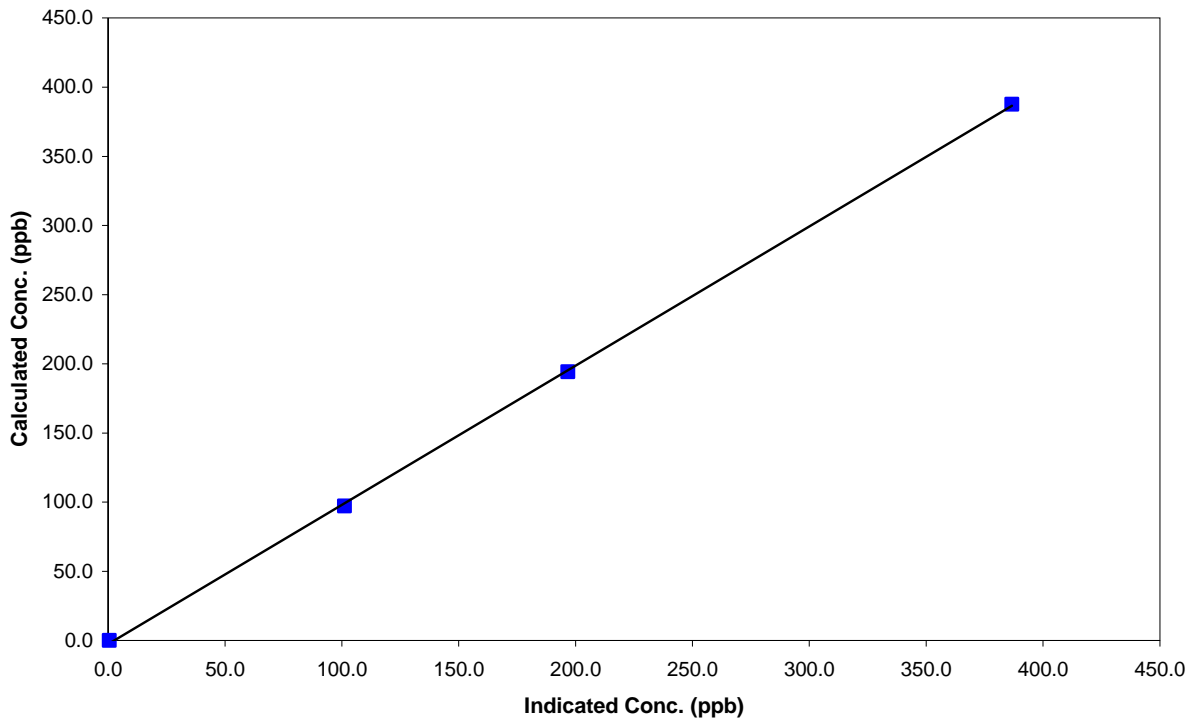
Station Information

Calibration Date	August 7, 2008	Previous Calibration	July 9, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:55	End Time (MST)	17:00
Analyzer make	Teco 42C	Analyzer serial #	508011073

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.5	N/A	Correlation Coefficient	0.999868
387.6	386.7	1.0022		
194.1	196.8	0.9866		
97.3	101.2	0.9615		
			Slope	1.005804
			Intercept	-2.536778

NO Calibration Curve



Calibration Report



Parameter **O3**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date **August 7, 2008** Previous Calibration **July 9, 2008**
 Station Number **1** Station Location **Henry Pirker**
 Reason: Routine Install Removal Other:

Start Time (MST) **16:25** End Time (MST) **18:45**
 Barometric Pressure **0.917 atm** Station Temperature **20.0 Deg C**
 Calibrator **EnviroNics 6103** Serial Number **2844**
 Cal Gas Concentration **NA** Cal Gas Expiry Date **NA**

DACS make **Focus AP1000** DACS serial No. **45269**
 DACS voltage range **0 - 1 volt** DACS channel # **5**
Before **After**

Calculated slope **1.012121** Calculated slope **0.975233**
 Calculated intercept **-0.481161** Calculated intercept **1.816523**

Analyzer make **TECO 49C** Analyzer serial # **607415761**

	before		after	
Concentration range	500	ppb	500	ppb
offset	-0.6	ppb	-0.6	ppb
slope	1.023		1.023	
O3 Lamp temp	71.1	Deg C	71	Deg C
Intensities	100377/80071	mV	100819/81123	mV
Pressure	709.1	inches Hg	708.9	inches Hg
Flow A	678	ccm	683	ccm
Flow B	696	Deg C	695	Deg C

Calibration Data

Referenced concentration (ppb)	Dilution air flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
0	4990	0.0	0.1	N/A
300	4990	262.4	269.5	0.9737
200	4990	182.4	182.7	0.9981
100	4990	98.0	96.9	1.0118
0	4990	0.0	0.1	As found zero
300	4990	262.4	269.5	As found span
Average Correction Factor				0.9945

Calculated value of As Found Response: **272.2 ppm** Percent Change of As Found: **3.7%**

	before calibration		after calibration	
Auto zero	-2.3	ppb	-0.3	ppb
Auto span	164.7	ppb	156.2	ppb

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**

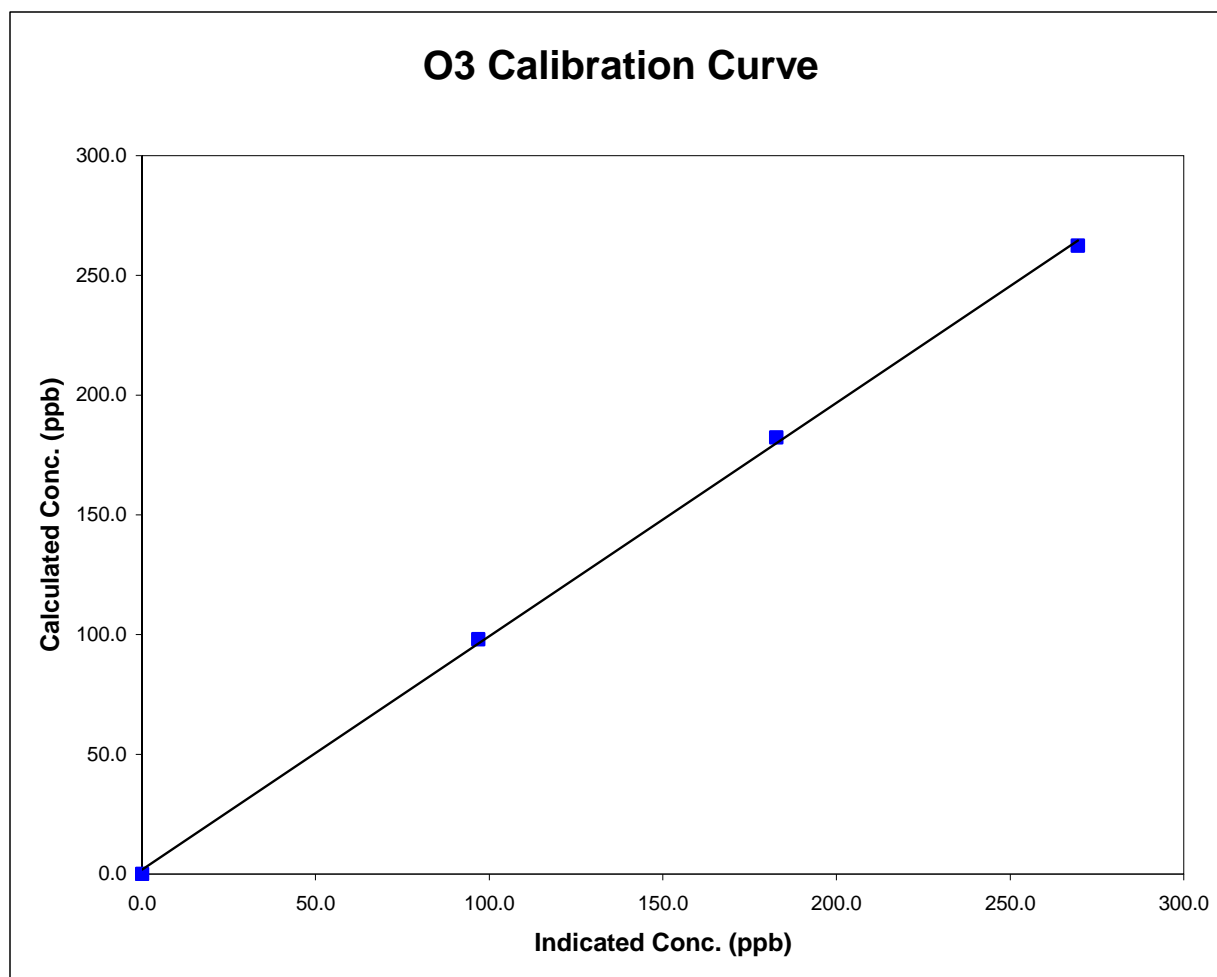


Station Information

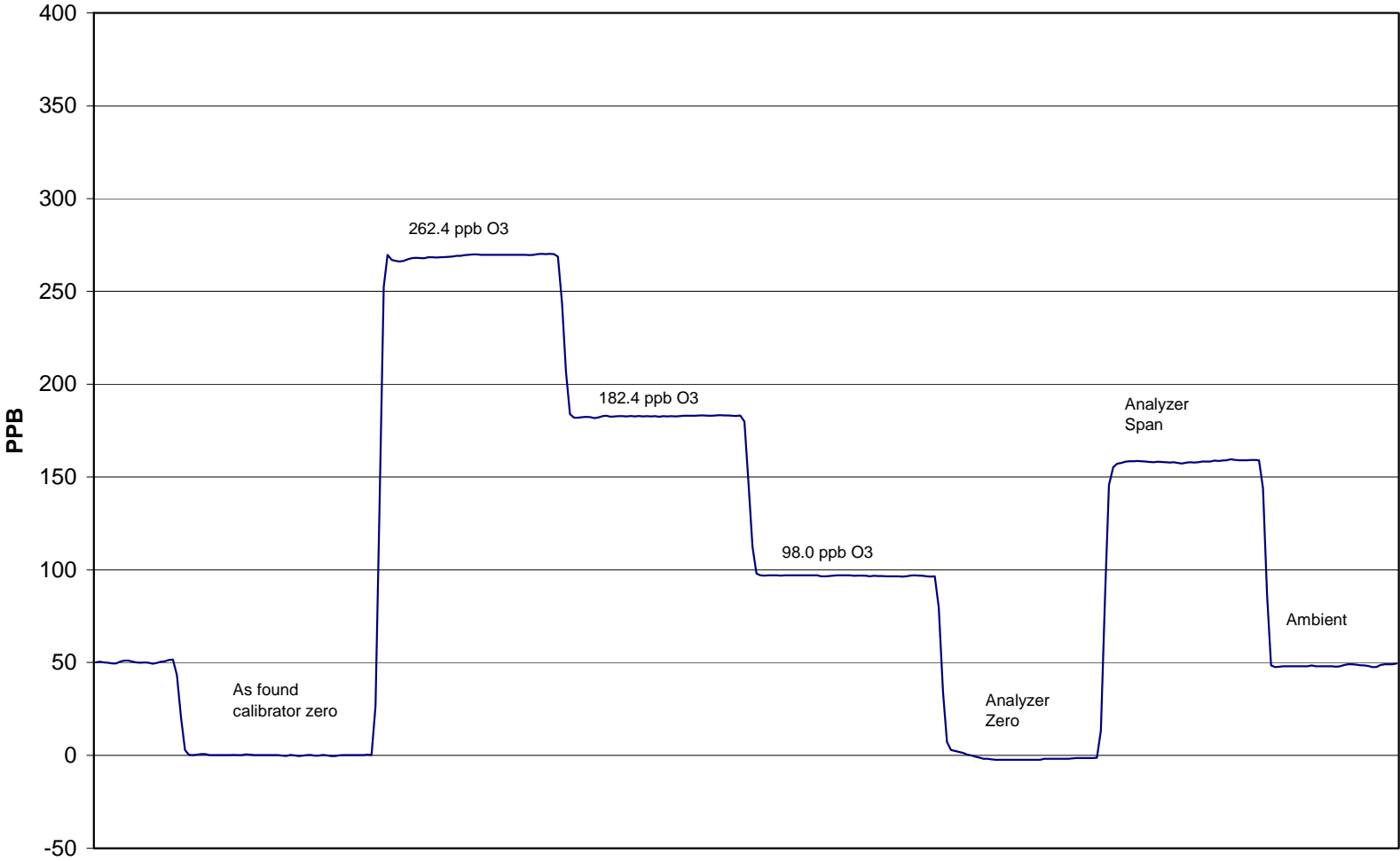
Calibration Date	August 7, 2008	Previous Calibration	July 9, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	16:25	End Time (MST)	18:45
Analyzer make/model	TECO 49C	Analyzer serial #	607415761

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
262.4	269.5	0.9737	Correlation Coefficient	0.999553
182.4	182.7	0.9981		
98.0	96.9	1.0118	Slope	0.975233
			Intercept	1.816523



Henry Pirker O₃ Calibration



August 7, 2008

Calibration Report



Parameter **CO**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 8, 2008	Previous Calibration	July 10, 2008
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)	14:45	End Time (MST)	18:00
Barometric Pressure	0.917 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 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
	Before		After

Calculated slope	1.006837	Calculated slope	1.014189
Calculated intercept	-0.350001	Calculated intercept	-0.103583

Analyzer make	TEI Model 48C	Analyzer serial #	508011062
---------------	---------------	-------------------	-----------

	before		after	
Concentration range	0 - 50	ppm	0 - 50	ppm
CO span setting	1.017		1.017	
CO zero setting	.808		.808	
Sample pressure	679.1	mm Hg	679.1	mm Hg
Sample Flow	1.12	LPM	1.12	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)
4989	0.00	0.00	0.02	N/A
4991	39.84	23.76	23.48	1.0119
4989	19.79	11.85	11.85	1.0002
4989	9.93	5.96	6.05	0.9855
4989	0.00	0.00	0.52	As Found Zero
4989	39.86	23.78	24.53	As Found Span
Average Correction Factor				0.9992

Calculated value of As Found Response: 23.821 ppm Percent Change of As Found: -0.2%

	before calibration		after calibration	
Auto zero	0.02	ppm	0.17	ppm
Auto span	17.73	ppm	17.62	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **CO**

Air Monitoring Network **PASZA**

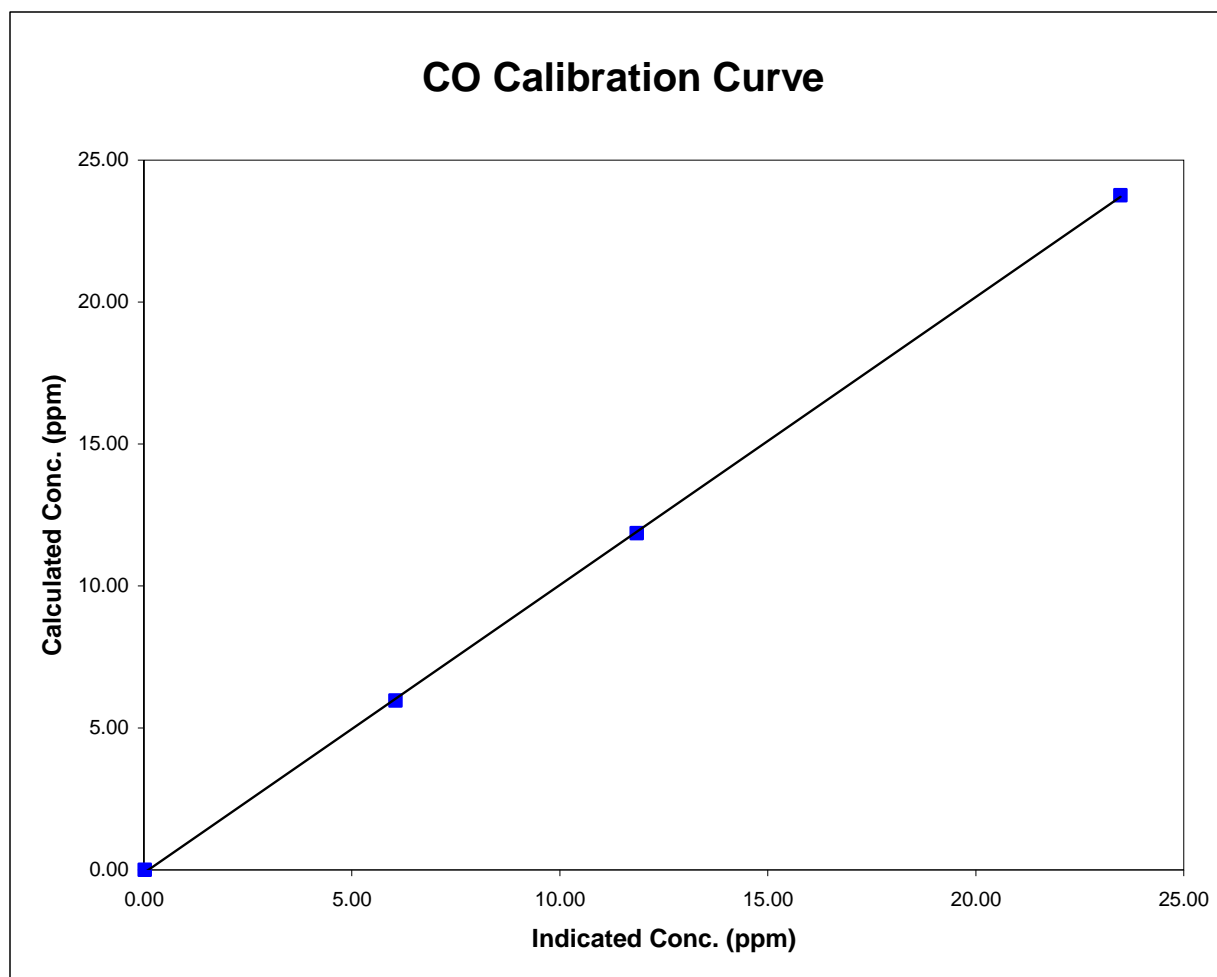


Station Information

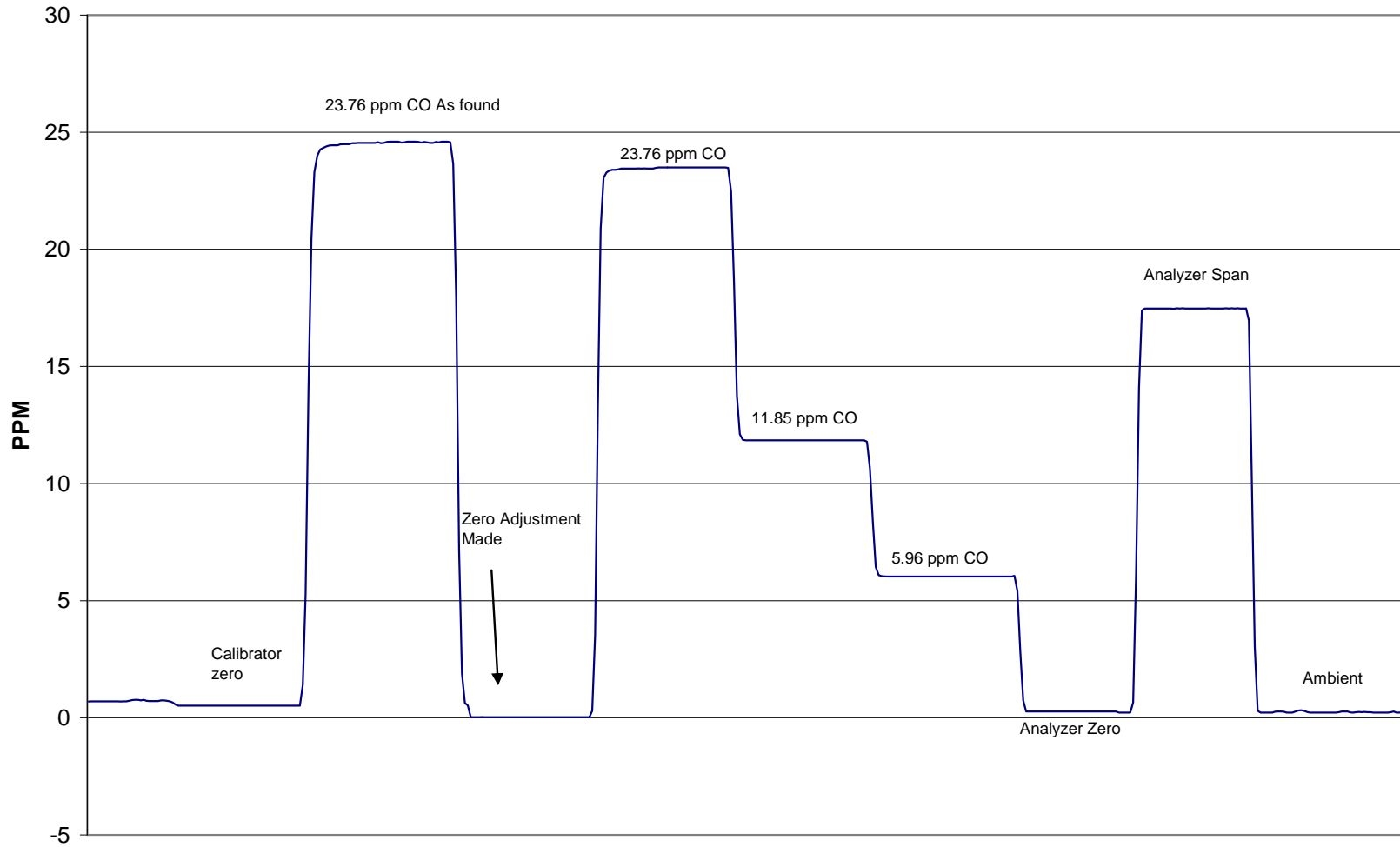
Calibration Date	August 8, 2008	Previous Calibration	July 10, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:45	End Time (MST)	18:00
Analyzer make/model	TEI Model 48C	Analyzer serial #	508011062

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.020	N/A		
23.757	23.479	1.0119	Correlation Coefficient	0.999941
11.853	11.851	1.0002		
5.959	6.047	0.9855	Slope	1.014189
			Intercept	-0.103583



Henry Pirker CO Calibration



August 8, 2008

Calibration Report



Parameter **THC**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 11, 2008	Previous Calibration	July 10, 2008
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)	14:30	End Time (MST)	17:00
Barometric Pressure	0.921 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	701 ppm CH4/ 299 ppm C3H8	Cal Gas Expiry Date	12/10/2005
Cal Gas CH4 equiv	1523.25 ppm	Cal Gas Cylinder #	ALM 005412
DACS make	Focus AP1000	DACS serial No.	1
DACS voltage range	0 - 1 volt	DACS channel #	9
	Before		After
Calculated slope	0.999068	Calculated slope	1.001410
Calculated intercept	0.025116	Calculated intercept	-0.046405
Analyzer make	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

	before		after	
Concentration range	0 - 25	ppm	0 - 25	ppm
THC sample pressure	6.11	psi	6.11	psi
THC span counts	7170	capture	7170	capture
THC zero counts	1121	capture	1121	capture

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.00	0.00	N/A
4988	69.81	21.02	21.04	0.9993
4988	29.87	9.07	9.09	0.9980
4988	9.92	3.02	3.13	0.9672
4988	0.00	0.00	0.00	As Found Zero
4988	69.82	21.03	21.04	As Found Span
Average Correction Factor				0.9882

Calculated value of As Found Response: 21.041 ppm Percent Change of As Found: -0.1%

	before calibration		after calibration	
Auto zero	-0.03	ppm	-0.03	ppm
Auto span	21.13	ppm	21.18	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **THC**

Air Monitoring Network **PASZA**

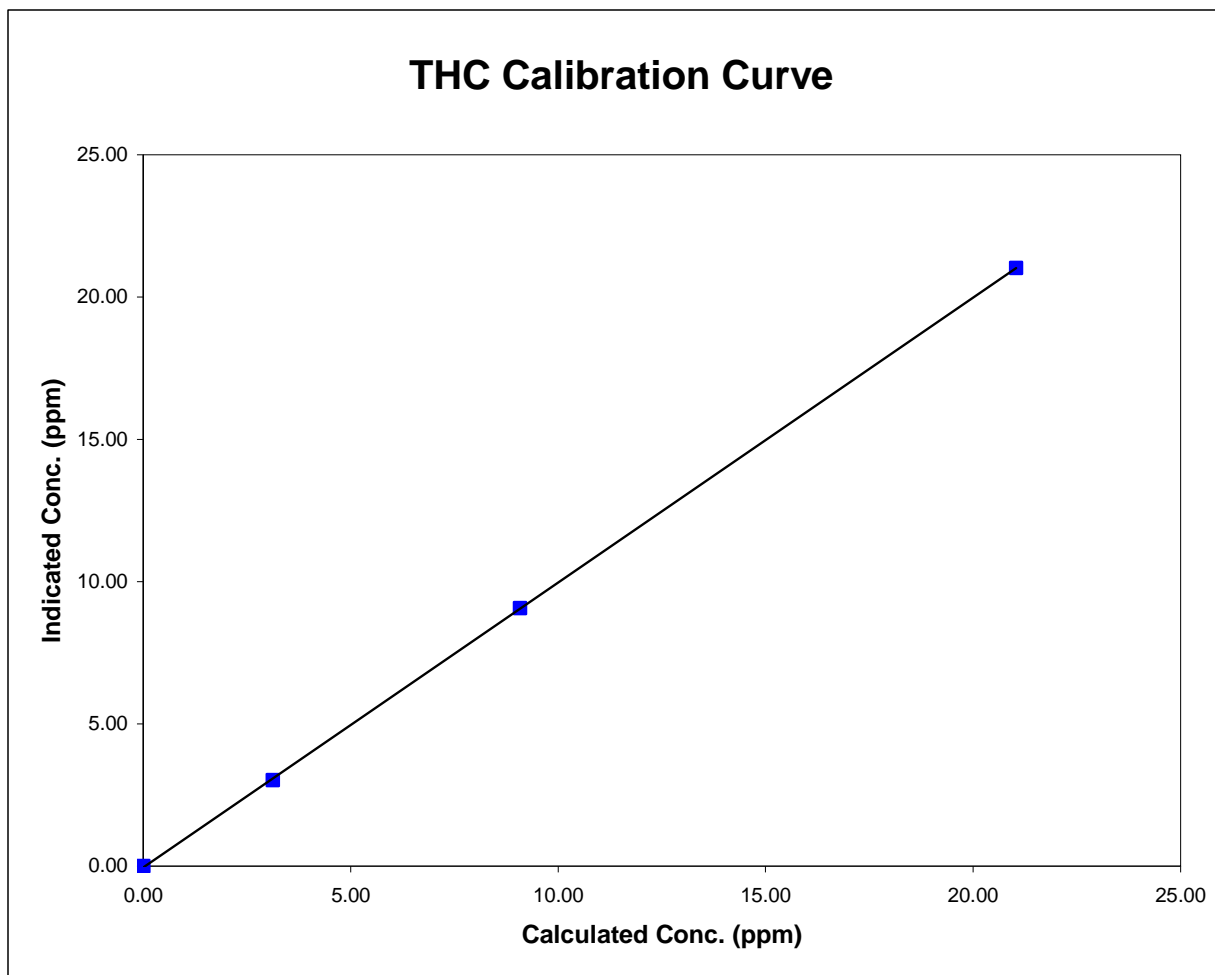


Station Information

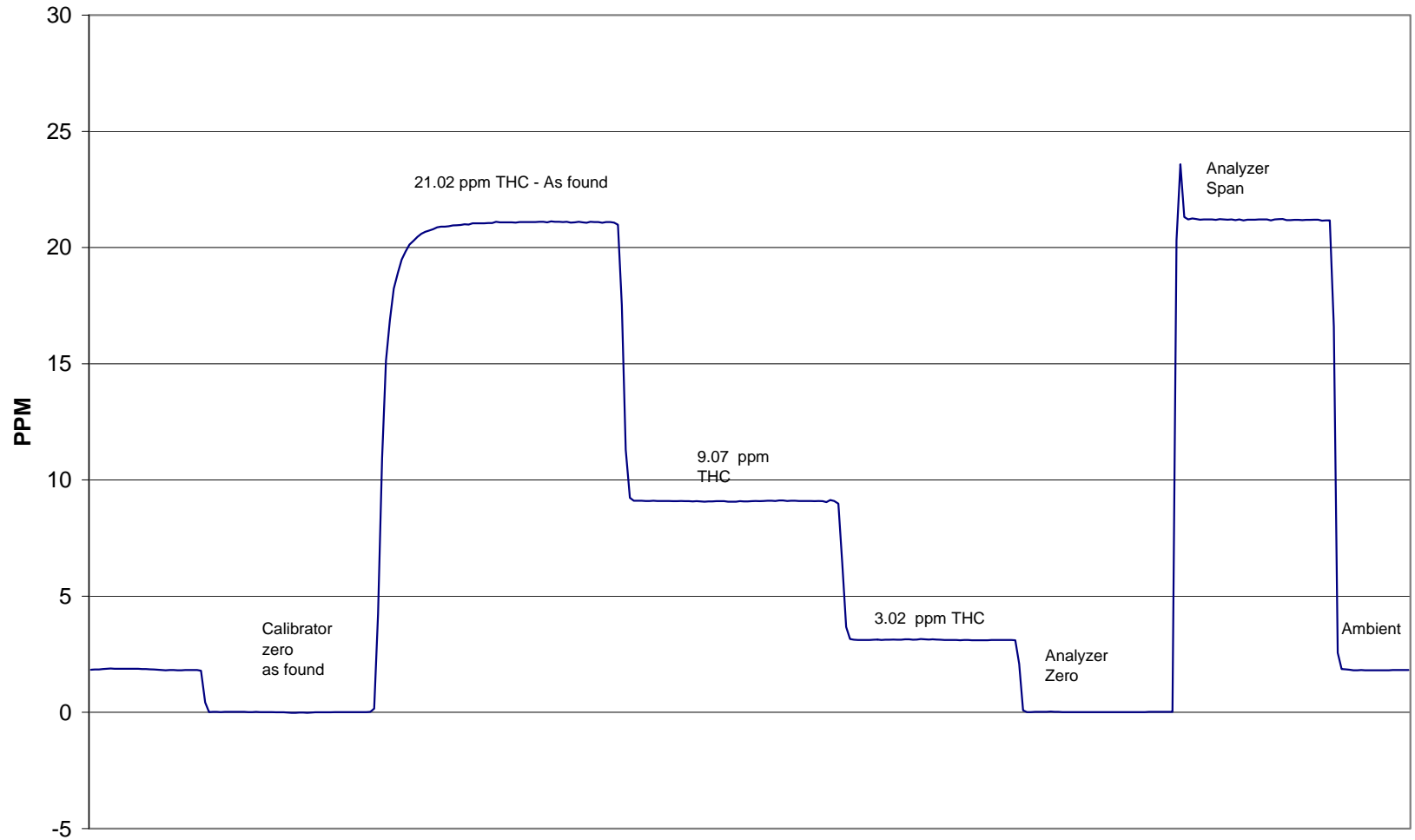
Calibration Date	August 11, 2008	Previous Calibration	July 10, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	14:30	End Time (MST)	17:00
Analyzer make/model	TEI Model 51C-LT	Analyzer serial #	51CLT-79009-390

Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	0.004	N/A		
21.025	21.039	0.9993	Correlation Coefficient	0.999978
9.067	9.085	0.9980		
3.023	3.126	0.9672	Slope	1.001410
			Intercept	-0.046405



Henry Pirker THC Calibration



August 11, 2008

Calibration Report



Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date **August 8, 2008** Previous Calibration **July 10, 2008**
 Station Number **1** Station Location **Henry Pirker**
 Reason: Routine Install Removal Other:

Start Time (MST) **11:05** End Time (MST) **15:00**
 Barometric Pressure **0.917** ATM Station Temperature **20.0** Deg C
 Calibrator **Envionics 6100** Serial Number **3474**
 Cal Gas Conc **5.1** ppb Cal Gas Expiry Date **7/31/2008**
 Cal Gas Cylinder # **ALM013295**
 DACS make **Focus AP1000** DACS serial No. **1**
 DACS voltage range **0 - 1 volt** DACS channel # **9**
Before **After**

Calculated slope **0.975807** Calculated slope **0.990564**
 Calculated intercept **0.822792** Calculated intercept **-0.170199**

Analyzer make **TEI 45C** Analyzer serial # **630718528**

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Coefficient	0.871		0.871	
Background	18.0		18.0	
Pressure	653	mm Hg	653	mm Hg
Flow	462	ccm	462	ccm
Lamp Voltage	848	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)
4990	0.00	0.00	-0.06	N/A
4991	79.79	80.25	81.09	0.9896
4990	39.91	40.47	41.17	0.9830
4990	9.91	10.11	10.57	0.9566
4990	0.00	0.00	-1.09	As Found Zero
4990	79.68	80.16	79.07	As Found Span
Average Correction Factor				0.9764

Calculated value of As Found Response: **79.0 ppb** Percent Change of As Found: **1.4%**

	before calibration		after calibration	
Auto zero	-0.17	ppb	-0.29	ppb
Auto span	35.39	ppb	35.13	ppb

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



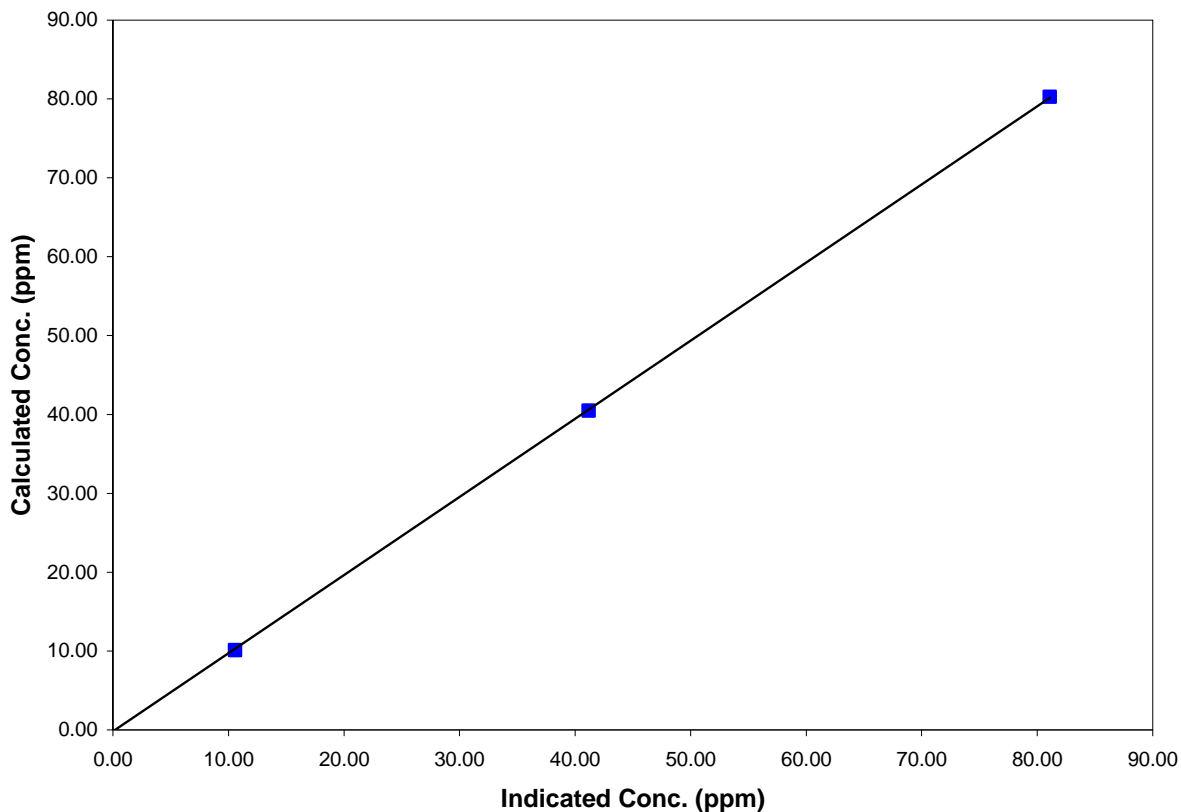
Station Information

Calibration Date	August 8, 2008	Previous Calibration	July 10, 2008
Station Number	1	Station Location	Henry Pirker
Start Time (MST)	11:05	End Time (MST)	15:00
Analyzer make/model	TEI 45C	Analyzer serial #	630718528

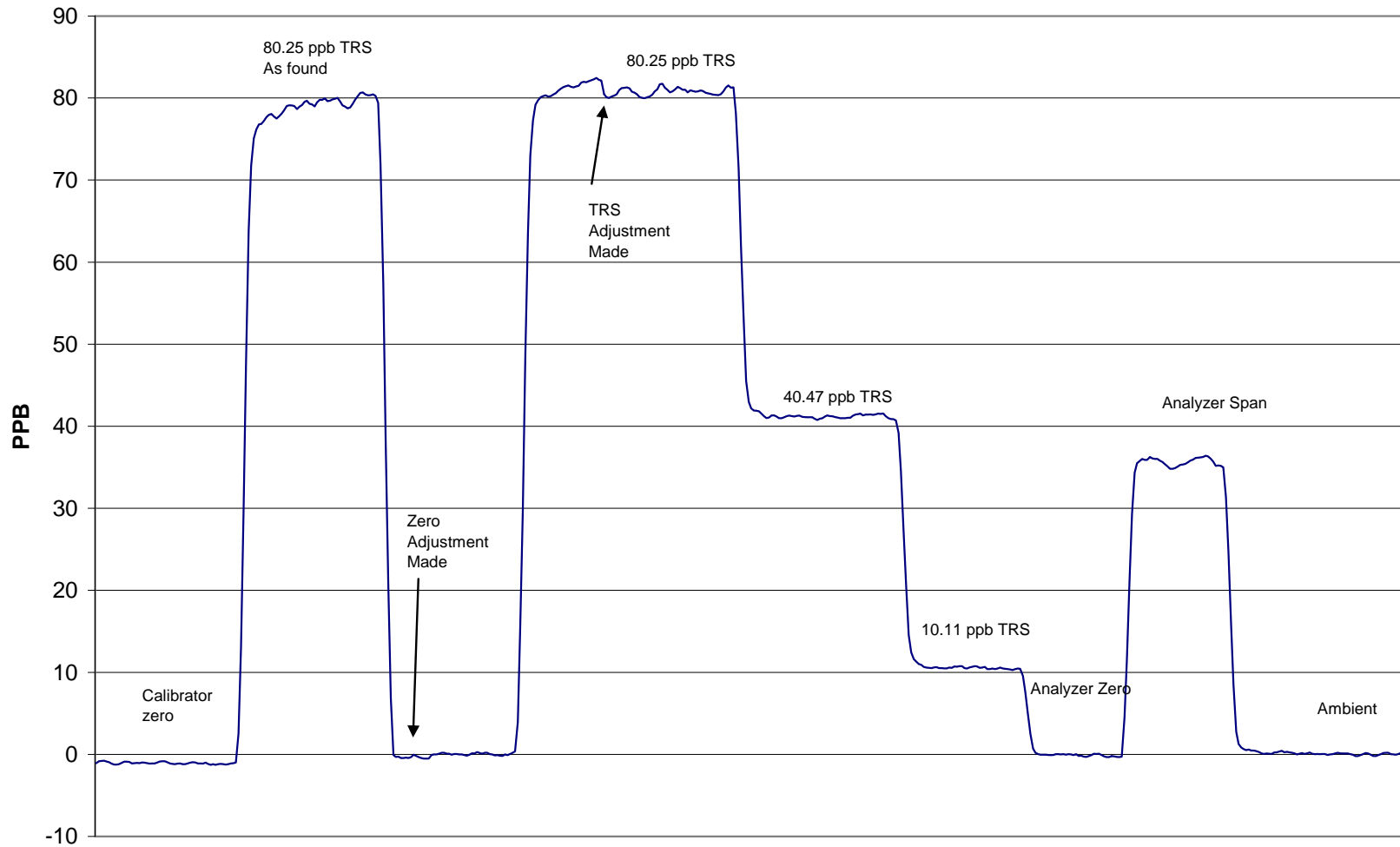
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.000	-0.064	N/A		
80.250	81.089	0.9896	Correlation Coefficient	0.999970
40.466	41.165	0.9830		
10.108	10.567	0.9566	Slope	0.990564
			Intercept	-0.170199

TRS Calibration Curve



Henry Pirker TRS Calibration



August 8, 2008

Calibration Report



Parameter **SO₂**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 28, 2008	Previous Calibration	July 22, 2008
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)	15:30	End Time (MST)	18:30
Barometric Pressure	0.925 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	1/2/2009
Correction factor	0.031443	Cal Gas Cylinder #	LL16161
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.035591	Calculated slope	1.011948
Calculated intercept	-1.889055	Calculated intercept	-1.515956
Analyzer make	Teco 43i	Analyzer serial #	701120008

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	9		9.3	
coefficient	0.928		0.945	
Lamp Voltage	837	volts	827	volts
Chamber Temp	45	Deg C	45.3	Deg C
Perm Gas Temp	44.25	Deg C	45	Deg C
Pressure	659.5	mm Hg	660	mm Hg
Sample Flow	440	ccm	441	ccm
Lamp Intensity	89	%	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	0.8	N/A
4990	39.81	398.12	394.5	1.0093
4990	19.83	199.10	198.9	1.0012
4990	9.94	100.00	100.9	0.9914
4990	0.0	0.00	0.8	As Found Zero
4990	39.81	398.12	394.5	As Found Span
Average Correction Factor				1.0006

Calculated value of As Found Response: 405.806 ppm Percent Change of As Found: -1.9%

	before calibration		after calibration	
Auto zero	-0.7	ppm	-0.5	ppm
Auto span	281.7	ppm	273.0	ppm

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

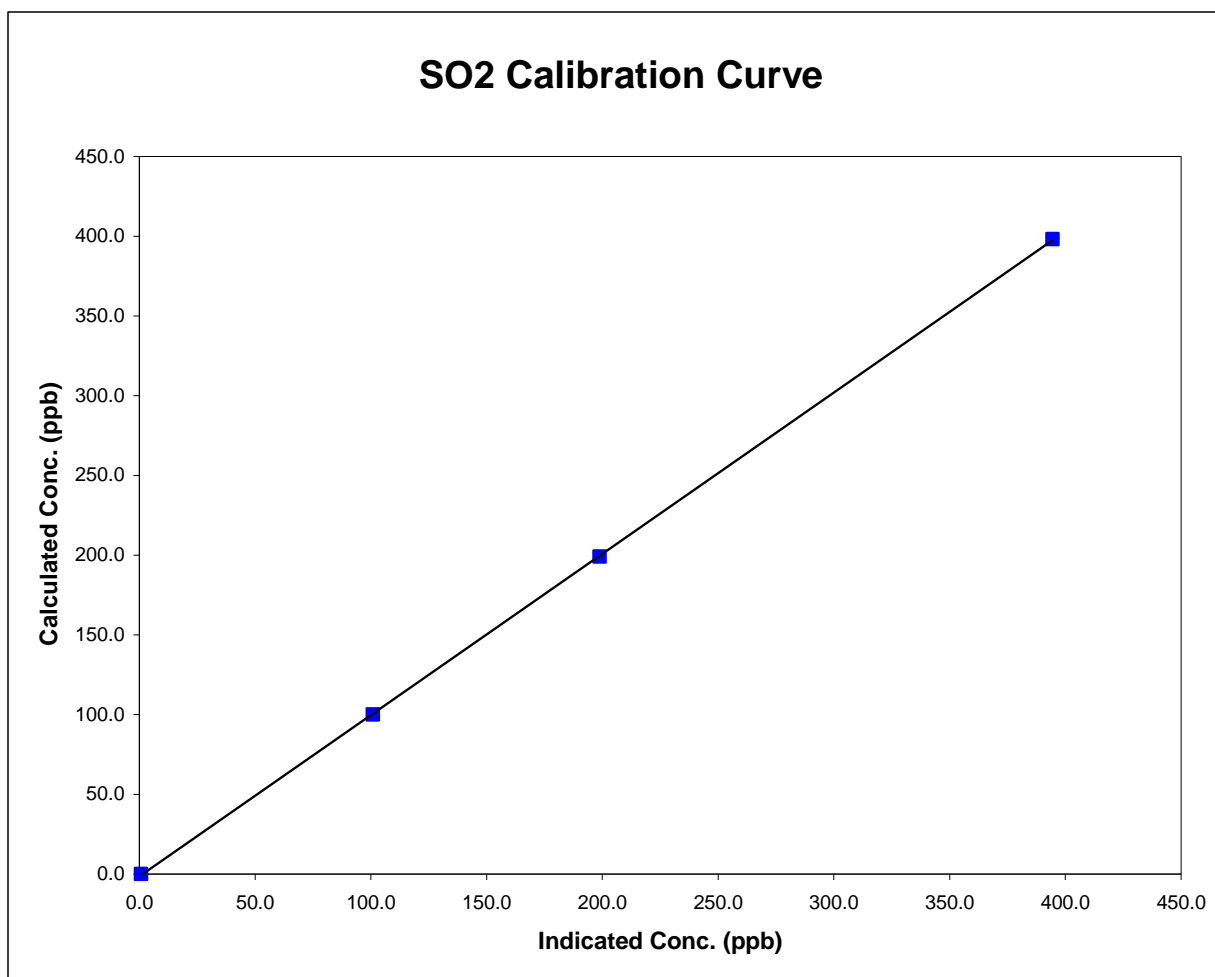


Station Information

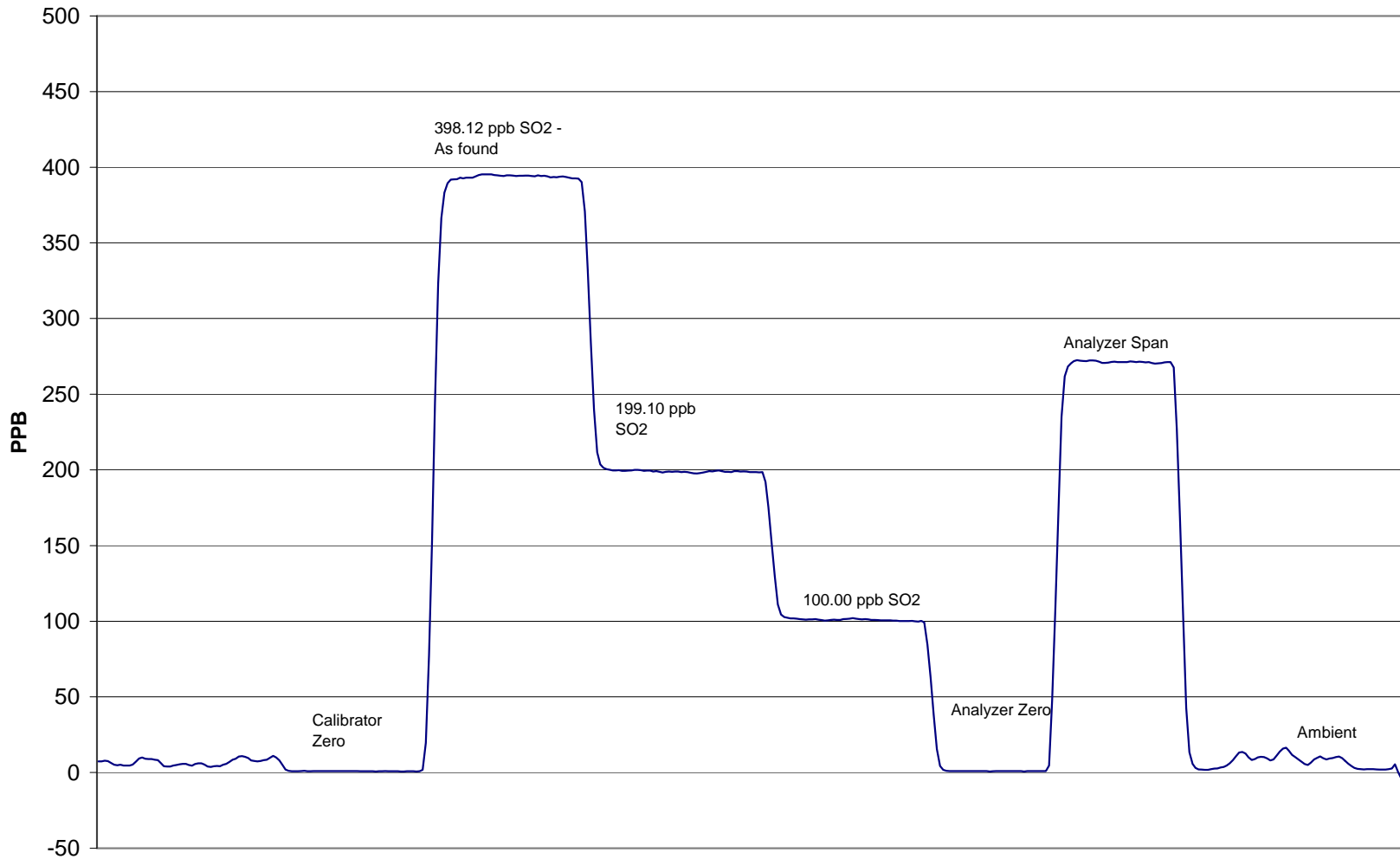
Calibration Date	August 28, 2008	Previous Calibration	July 22, 2008
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	15:30	End Time (MST)	18:30
Analyzer make/model	Teco 43i	Analyzer serial #	701120008

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.8	N/A		
398.1	394.5	1.0093	Correlation Coefficient	0.999983
199.1	198.9	1.0012		
100.0	100.9	0.9914	Slope	1.011948
			Intercept	-1.515956



Evergreen Park SO₂ Calibration



August 28, 2008

Calibration Report



Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 28, 2008	Previous Calibration	July 22, 2007
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)	13:05	End Time (MST)	16:05
Barometric Pressure	0.916 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	5.1 ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.031137	Cal Gas Cylinder #	ALM 013295
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	0.989074	Calculated slope	0.970104
Calculated intercept	1.002811	Calculated intercept	0.843362
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	15.2	ppb	15.8	ppb
coefficient	0.616		0.645	
Lamp Voltage	823	volts	821	volts
Chamber Temp	44.2	Deg C	44.1	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	626.4	mm Hg	631.5	mm Hg
Sample Flow	462	ccm	0.463	ccm
Lamp Intensity	45,127	mv	41,003	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	-1.6	N/A
4988	79.74	80.25	81.5	0.9852
4991	39.91	40.46	41.5	0.9752
4990	9.91	10.11	10.0	1.0124
4990	0.00	0.00	-1.6	As Found Zero
4988	79.72	80.23	74.2	As Found Span
Average Correction Factor				0.9909

Calculated value of As Found Response: 75.89 ppm Percent Change of As Found: 5.4%

	before calibration		after calibration	
Auto zero	-0.1	ppm	-0.1	ppm
Auto span	66.3	ppm	68.1	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



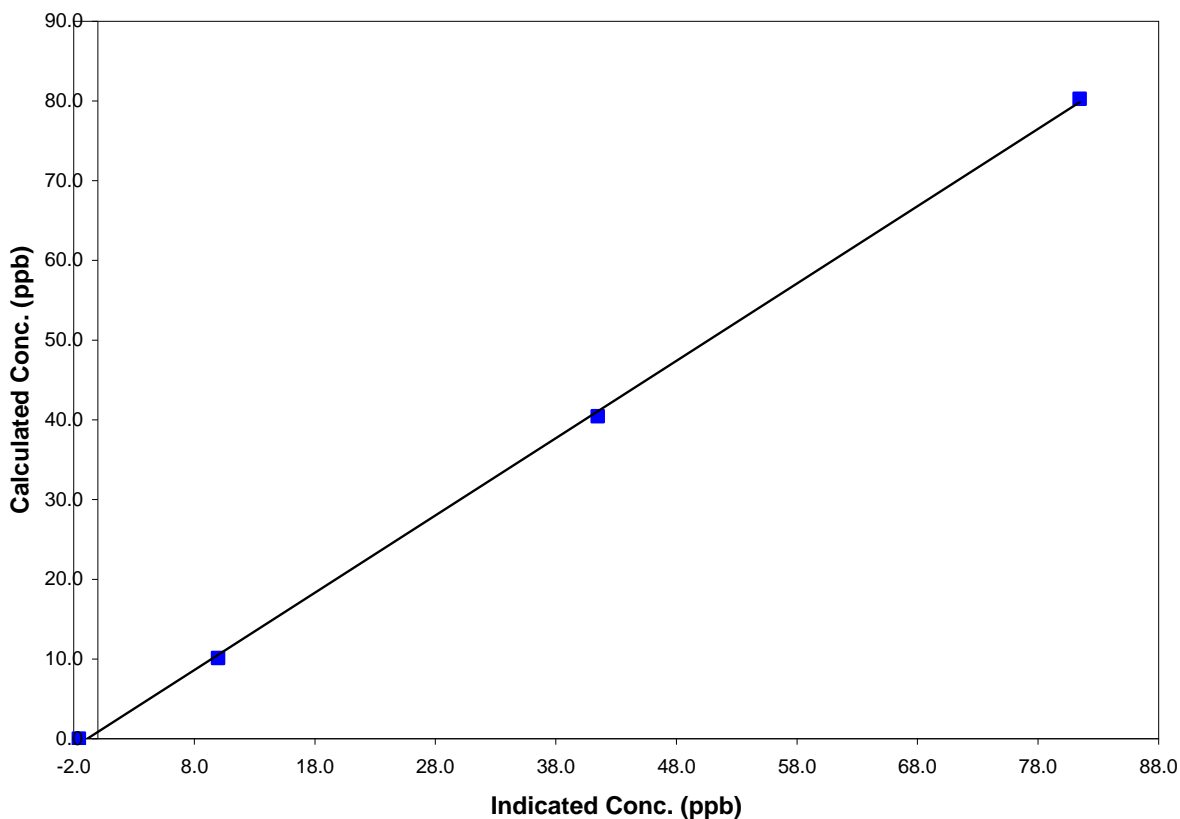
Station Information

Calibration Date	August 28, 2008	Previous Calibration	July 22, 2007
Station Number	2	Station Location	Evergreen Park
Start Time (MST)	13:05	End Time (MST)	16:05
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

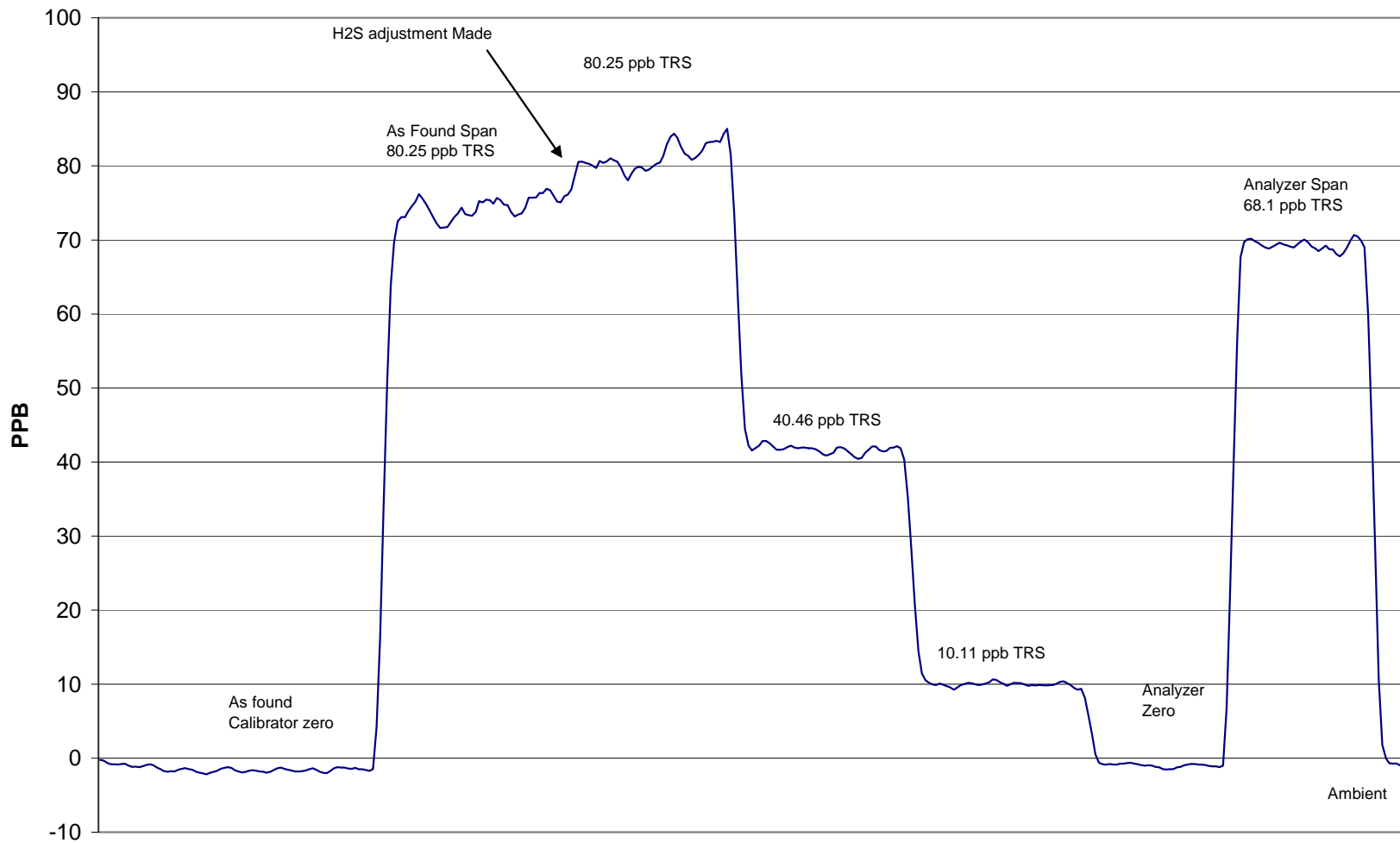
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-1.6	N/A		
80.2	81.5	0.9852	Correlation Coefficient	0.999699
40.5	41.5	0.9752		
10.1	10.0	1.0124	Slope	0.970104
			Intercept	0.843362

TRS Calibration Curve



Evergreen Park TRS Calibration



August 28, 2008

Calibration Report



Parameter **SO₂**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 28, 2008	Previous Calibration	July 16, 2008
Station Number	3	Station Location	Smoky Heights
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	9:10	End Time (MST)	11:45
Barometric Pressure	0.915 ATM	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.6 ppm	Cal Gas Cert Date	6/8/2008
Correction factor	0.031103	Cal Gas Cylinder #	AAL 15377
DACS make	Focus AP1000	DACS serial No.	45272
DACS voltage range	0 - 10 volt	DACS channel #	6
	Before		After
Calculated slope	1.000824	Calculated slope	1.008851
Calculated intercept	-2.508686	Calculated intercept	-1.144474
Analyzer make	Teco 43i	Analyzer serial #	701120009

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
Background coefficient	6.4		6.3	
Lamp Voltage	937	volts	921	volts
Chamber Temp	45.1	Deg C	44.9	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	678	mm Hg	664.8	mm Hg
Sample Flow	450	ccm	442	ccm
Lamp Intensity	87	%	87	%

Calibration Data

Dilution air flow rate (cc/min)	Corrected gas flow rate (cc/min)	Calculated concentration (ppb) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.0	0.00	0.7	N/A
4988	39.81	400.65	398.3	1.0059
4988	19.90	201.07	199.9	1.0059
4988	9.92	100.43	101.6	0.9887
4988	0.0	0.00	0.7	As Found Zero
4988	39.81	400.65	398.3	As Found Span
Average Correction Factor				1.0001

Calculated value of As Found Response: 395.399 ppm Percent Change of As Found: 1.3%

	before calibration		after calibration	
Auto zero	-1.9	ppm	-0.4	ppm
Auto span	309.8	ppm	317.7	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

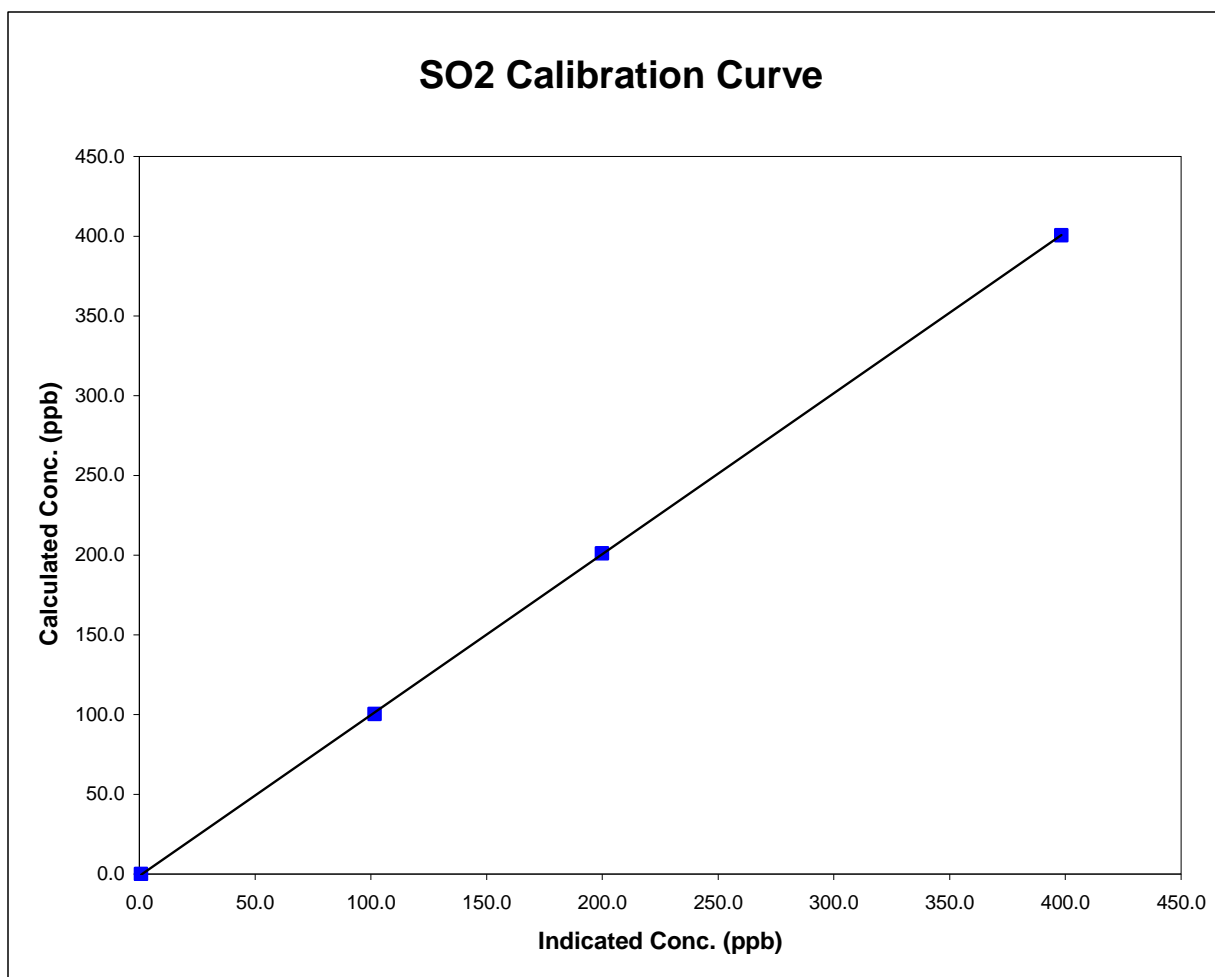


Station Information

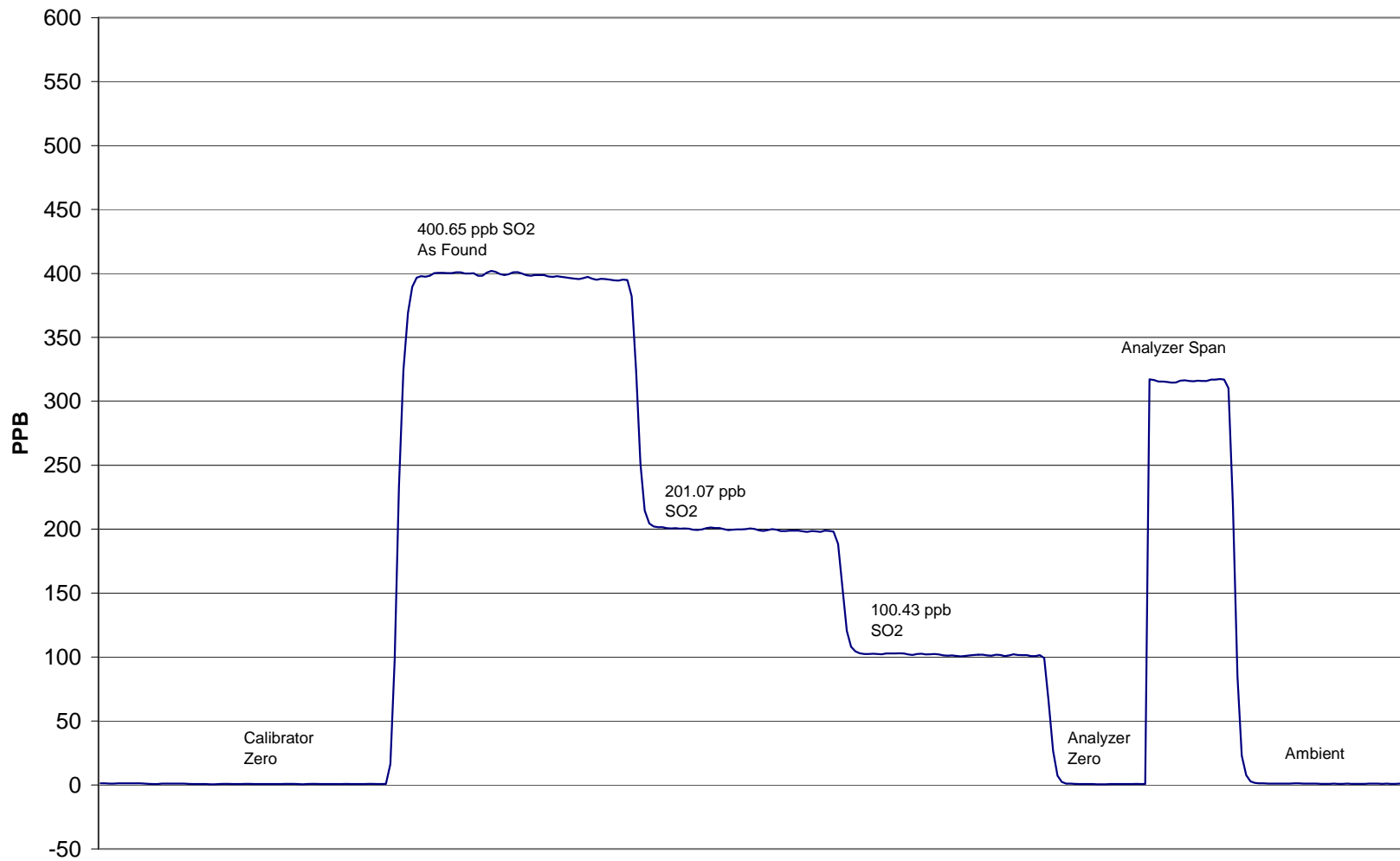
Calibration Date	August 28, 2008	Previous Calibration	July 16, 2008
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	9:10	End Time (MST)	11:45
Analyzer make/model	Teco 43i	Analyzer serial #	701120009

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.7	N/A		
400.6	398.3	1.0059	Correlation Coefficient	0.999985
201.1	199.9	1.0059		
100.4	101.6	0.9887	Slope	1.008851
			Intercept	-1.144474



Smoky Heights SO₂ Calibration



August 28, 2008

Calibration Report



Parameter **TRS**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 25, 2008	Previous Calibration	July 16, 2008
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)	11:30	End Time (MST)	15:25
Barometric Pressure	0.915 ATM	Station Temperature	20.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Conc	5.1 ppm	Cal Gas Expiry Date	4/2/2009
Correction factor	0.031103	Cal Gas Cylinder #	ALM013295
DACS make	Focus AP1000	DACS serial No.	52620
DACS voltage range	0 - 10 volt	DACS channel #	5
	Before		After
Calculated slope	1.005947	Calculated slope	0.992948
Calculated intercept	-1.269238	Calculated intercept	0.153784
Analyzer make	TEI Model 43C	Analyzer serial #	0436610005

	before		after	
Concentration range	100	ppb	100	ppb
Background	11.5	ppb	13	ppb
coefficient	1.006		1.004	
Lamp Voltage	772	volts	764	volts
Chamber Temp	43.9	Deg C	44.2	Deg C
Perm Gas Temp	45	Deg C	45	Deg C
Pressure	482.4	mm Hg	472.6	mm Hg
Sample Flow	750	ccm	739	ccm
Lamp Intensity	32,422	mv	32,430	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)
4988	0.0	0.00	-0.1	N/A
4988	79.69	80.20	80.7	0.9944
4988	39.79	40.36	40.4	0.9990
4988	9.92	10.12	10.1	1.0046
4988	0.0	0.00	1.1	As Found Zero
4988	79.69	80.20	80.5	As Found Span
Average Correction Factor				0.9993

Calculated value of As Found Response: 78.68 ppm Percent Change of As Found: 1.9%

	before calibration		after calibration	
Auto zero	-0.2	ppm	0.0	ppm
Auto span	42.8	ppm	43.1	ppm

Notes: Calibrated Zero, Calibrated TRS

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



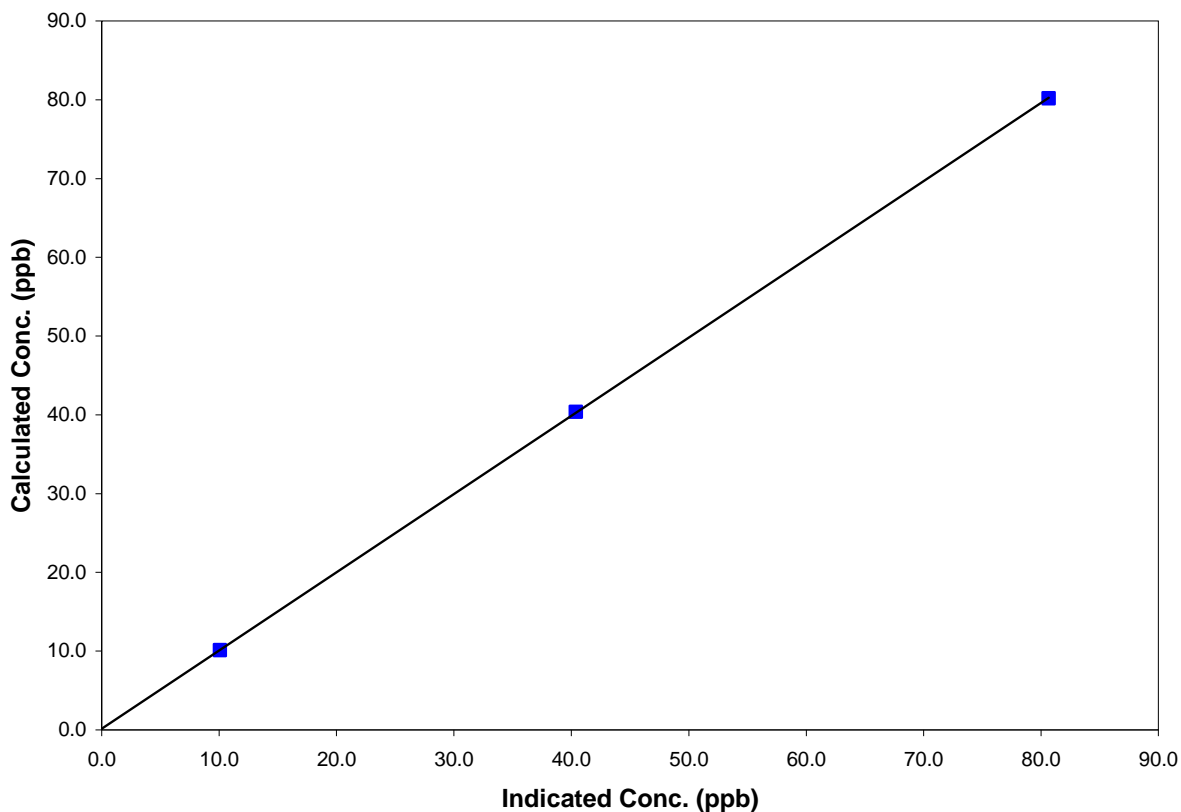
Station Information

Calibration Date	August 25, 2008	Previous Calibration	July 16, 2008
Station Number	3	Station Location	Smoky Heights
Start Time (MST)	11:30	End Time (MST)	15:25
Analyzer make/model	TEI Model 43C	Analyzer serial #	0436610005

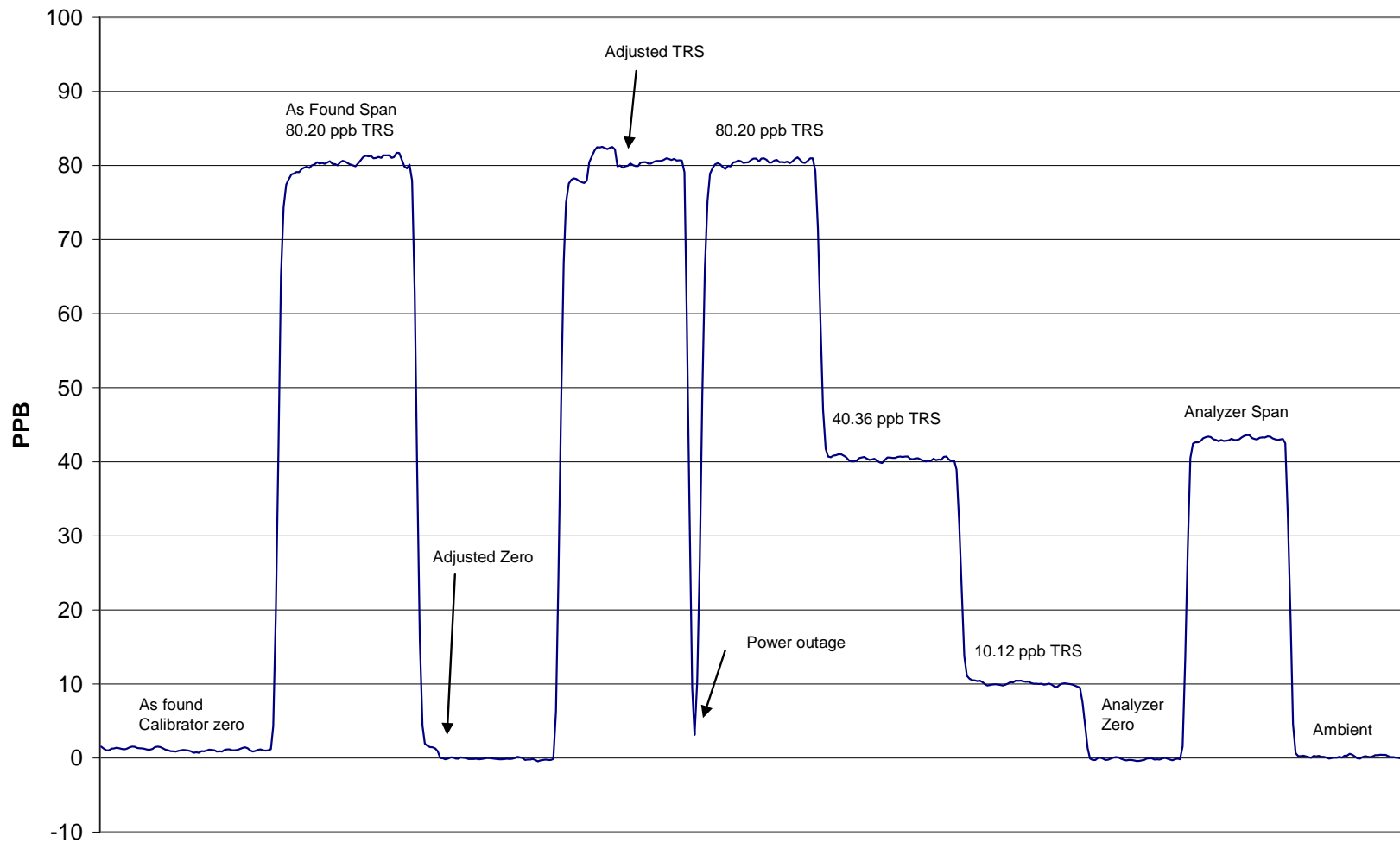
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	N/A		
80.2	80.7	0.9944	Correlation Coefficient	0.999997
40.4	40.4	0.9990		
10.1	10.1	1.0046	Slope	0.992948
			Intercept	0.153784

TRS Calibration Curve



Smoky Heights TRS Calibration



August 25, 2008

Calibration Report



Parameter **SO2**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date **August 12, 2008** Previous Calibration **July 17, 2008**
 Station Number **4** Station Location **Beaverlodge**
 Reason: Routine Install Removal Other:

Start Time (MST) **11:10** End Time (MST) **14:00**
 Barometric Pressure **0.912 atm** Station Temperature **20.0 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 # **4**
 DACS Scale High **Before 500 After 500**
 DACS Scale Low **0** DACS intercept **0**
 Calculated slope **0.986307** Calculated slope **0.986627**
 Calculated intercept **-0.208823** Calculated intercept **-0.286127**

Analyzer make **TEI Model 43CTL** Analyzer serial # **43CTL-74200-376**

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	2.53		2.55	
Coefficient	0.95		0.95	
PMT	-812	V	-813	V
UV Lamp Voltage	1042	V	1043	V
Chamber Temp	45	Deg C	45	Deg C
Pressure	664.7	mm Hg	660.4	mm Hg
Sample Flow	0.47	LPM	0.47	LPM
Lamp Intesity	85%	%	85%	%

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	-0.2	N/A
4988	39.91	79.9	80.9	0.9874
4988	19.89	40.0	41.3	0.9678
4988	9.91	19.9	20.9	0.9552
4988	0.00	0.0	-0.2	As found zero
4988	39.91	79.9	80.9	As found span
Average Correction Factor				0.9701

Calculated value of As Found Response: **79.784 ppm** Percent Change of As Found: **0.1%**

	before calibration		after calibration	
Auto zero	-0.4	ppm	-0.5	ppm
Auto span	55.3	ppm	55.5	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**



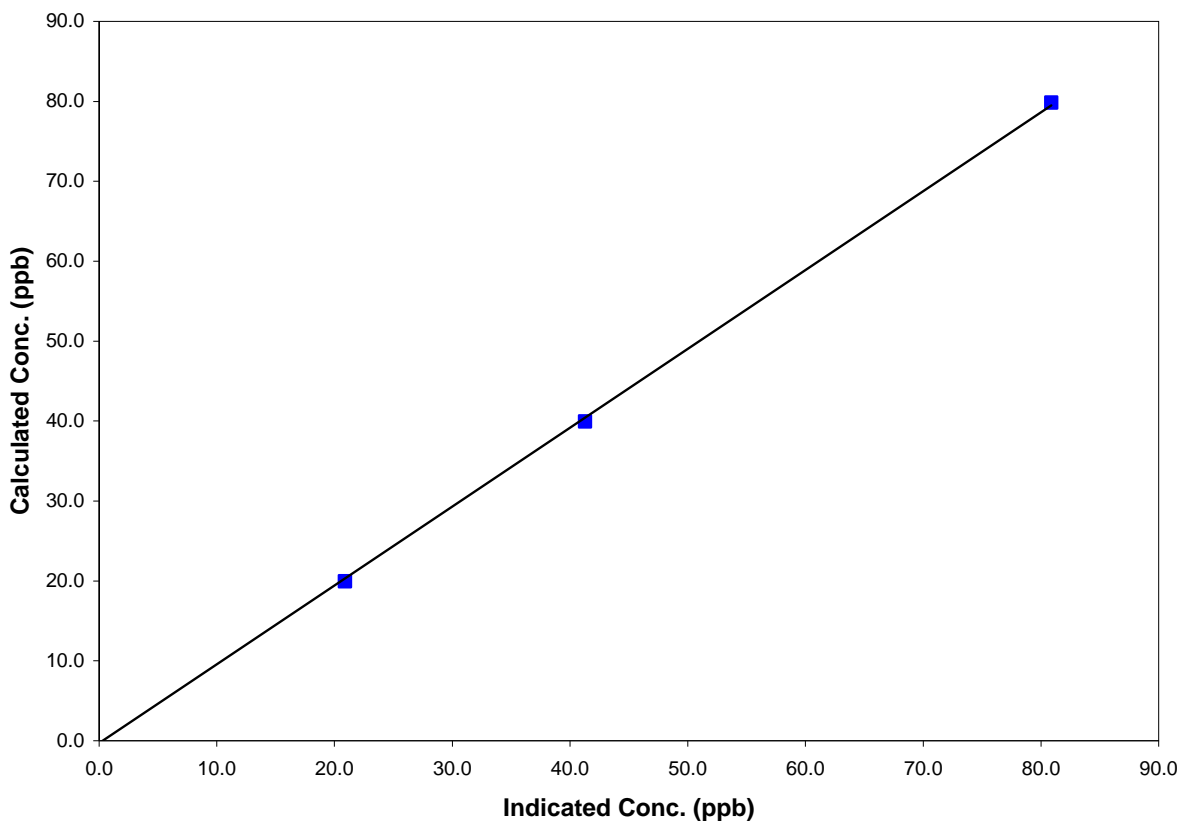
Station Information

Calibration Date	August 12, 2008	Previous Calibration	July 17, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	11:10	End Time (MST)	14:00
Analyzer make/model	TEI Model 43CTL	Analyzer serial #	43CTL-74200-376

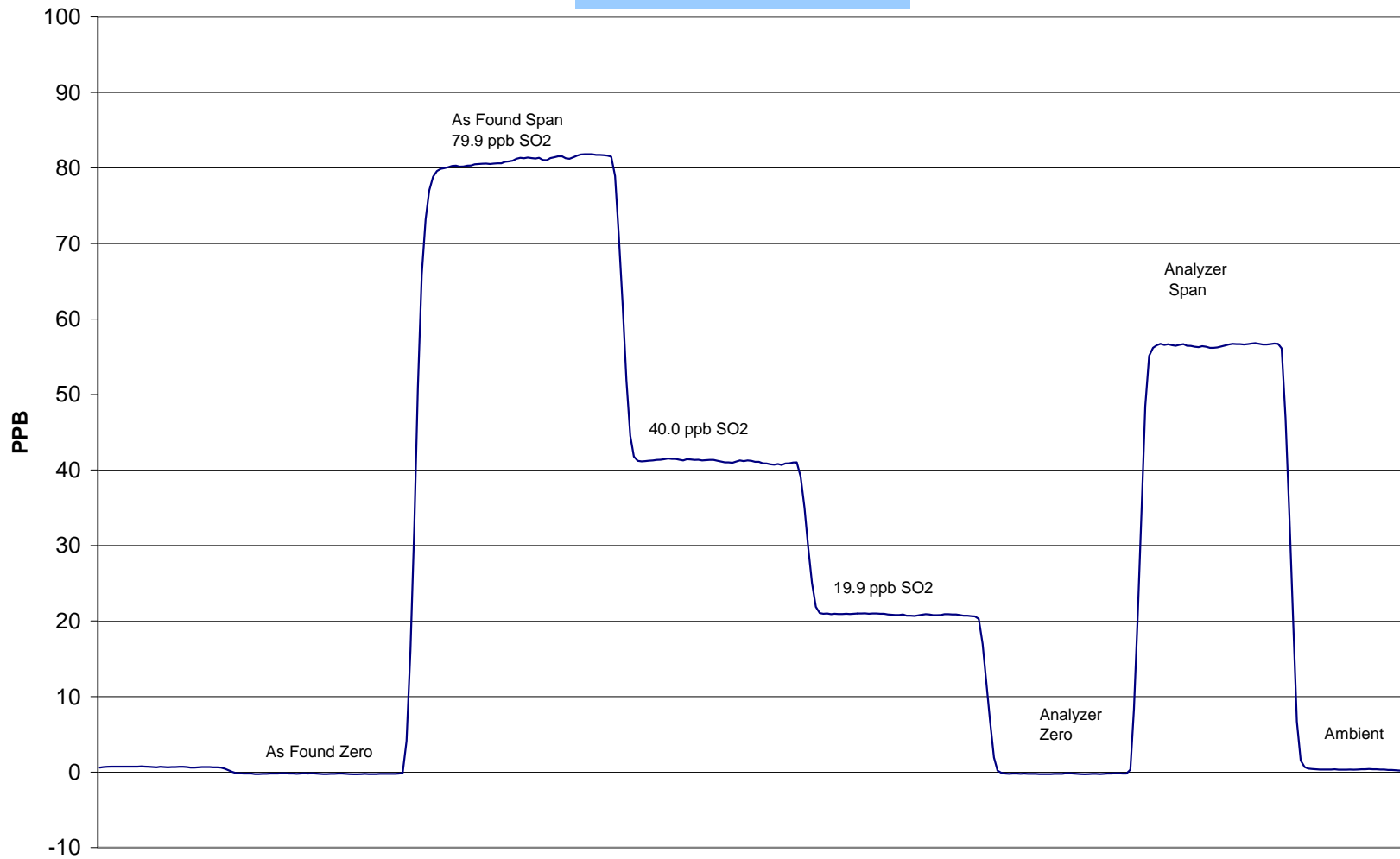
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A		
79.9	80.9	0.9874	Correlation Coefficient	0.999781
40.0	41.3	0.9678		
19.9	20.9	0.9552	Slope	0.986627
			Intercept	-0.286127

SO2 Calibration Curve



Beaverlodge SO₂ Calibration



August 12, 2008

Calibration Report

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



Station Information

Calibration Date August 12, 2008 Previous Calibration July 17, 2008
Station Number 4 Station Location Beaverlodge

Reason: Routine Installation Removal Other: _____

Start Time (MST) 12:25:00 End Time (MST) 15:20:00
Barometric Pressure 0.912 Atm Station Temperature 20.0 Deg C
Calibrator EnviroNics 6100 Serial Number 3474
NO Cal Gas Conc 50.1 ppm Cal Gas Cert. Date 2-Jan-07
NOx Cal Gas Conc 50.2 ppm Cal Gas Serial # CC 114395

DACS Information

DACS make FOCUS AP1000 DACS serial No. 45269

Parameter		NO2	NOx	NO
Before	Data Slope	1.016470	1.013384	1.002431
	Data Offset	1.620292	-1.832331	-1.521175
After	Data Slope	1.011232	1.007801	0.997820
	Data Offset	1.259161	-1.944636	-1.600050
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model TEI Model 42 Analyzer serial # 42-28486-231

Test Point	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
NO background	1.3	ppb	1.4	mV
NOx background	1.4	ppb	1.4	mV
NO coefficient	1.094		1.116	
NOx coefficient	0.999		0.999	
PMT Voltage	-636	v	-635	v
Chamber Temp	49.5	Deg C	49.4	Deg C
Cooler Temp	-2.1	Deg C	-2.1	Deg C
Converter Temp	322.0	Deg C	324.0	Deg C
Sample Flow	0.779	LPM	0.771	LPM
Ozonator Flow	0.085	LPM	0.083	LPM
Pressure	177.4	mm Hg	175.3	mm Hg

Notes: Analyzer did not span properly due to operator error

Calibration Report

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



Station Information

Calibration Date: **August 12, 2008**

Station Location: **Beaverlodge**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor
zero	4988	0.00	0.0	0.0	0.0	-0.1	-0.2	-0.2	N/A	N/A
1	4988	39.91	398.5	397.7	0.8	396.2	399.2	-3.2	1.0056	0.9962
2	4988	19.89	199.4	199.0	0.4	200.8	202.0	0.2	0.9928	0.9852
3	4988	9.91	99.5	99.3	0.2	102.8	103.0	-1.0	0.9686	0.9648
AFZ	4988	0.00	0.0	0.0	0.0	-0.1	-0.2	-0.2	0.0000	0.0000
AFS	4988	39.91	398.5	397.7	0.8	396.2	399.2	-3.2	1.0056	0.9962
Average Correction Factor									0.9890	0.9821

As Found Concentrations: NO_x= 394.5 NO= 397.9 As Found Percent Change NO_x= -1.0% NO= 0.1%

GPT Calibration Data

Dilution Flow 4990 ccm Source Gas Flow 39.82 ccm

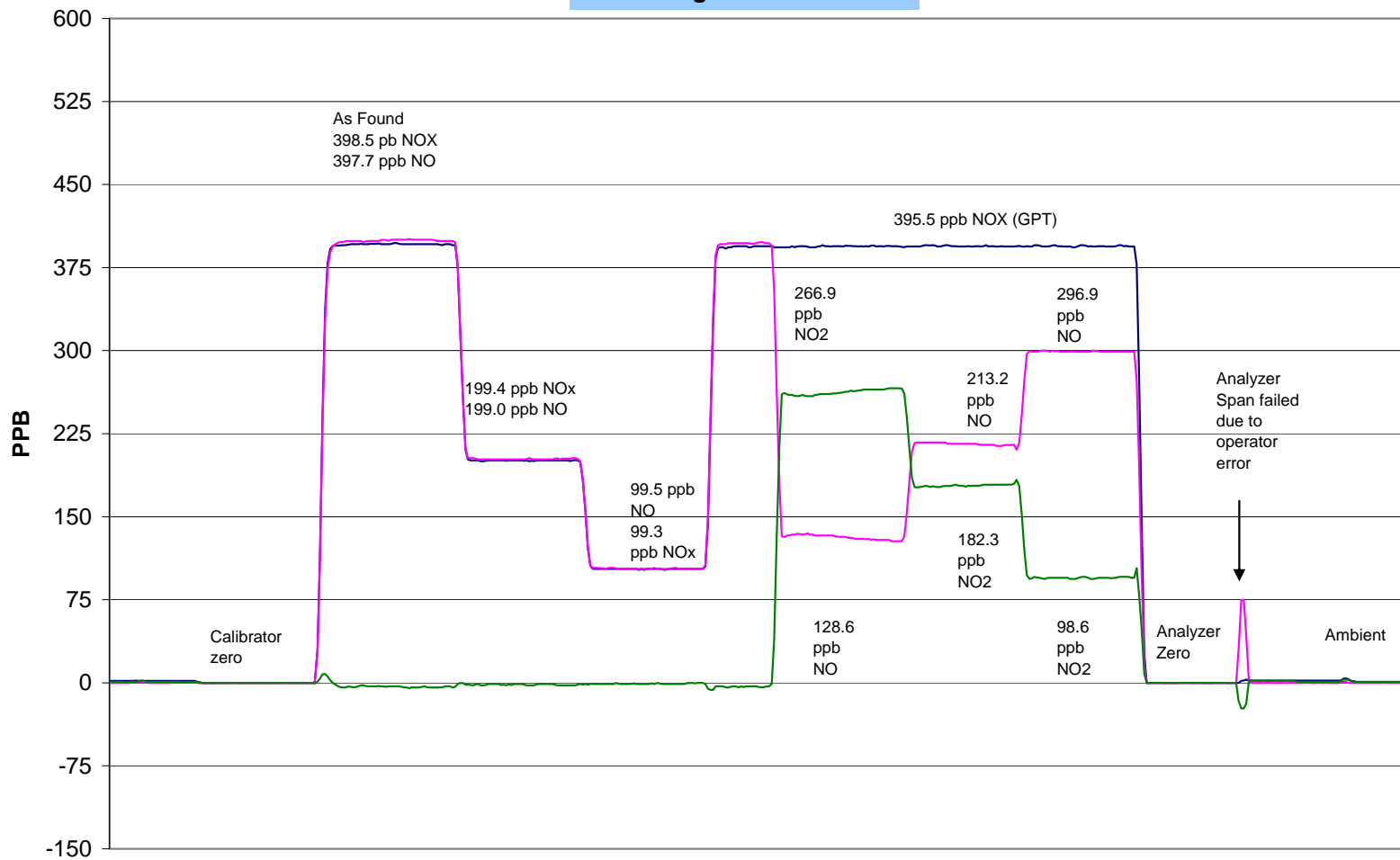
O ₃ Setpoint (ppb)	Calculated NO _x conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NO _x conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NO _x Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	395.5	394.6	0.9	393.9	397.0	-3.6	1.0041	0.9938	N/A	N/A
300	395.5	128.6	266.9	394.4	130.5	263.6	1.0029	0.9856	1.0124	98.8%
200	395.5	213.2	182.3	394.3	215.3	178.3	1.0031	0.9904	1.0221	97.8%
100	395.5	296.9	98.6	394.5	299.1	95.0	1.0026	0.9925	1.0385	96.3%
Average Correction Factor							1.0029	0.9895	1.0244	97.6%

AIC Data

Parameter	Previous calibration				Current calibration			
	NO _x	NO ₂	NO		NO _x	NO ₂	NO	
Auto zero	-1.8	1.4	-1.8	ppb	-2.0	181.0	214.2	ppb
Auto span	488.1	-0.2	484.5	ppb	0.4	-20.7	62.4	ppb

Calibration Performed By: Conor Whiteley

Beaverlodge NOx Calibration



August 12, 2008

Calibration Summary

Parameter **NO₂**

Air Monitoring Network **PASZA**



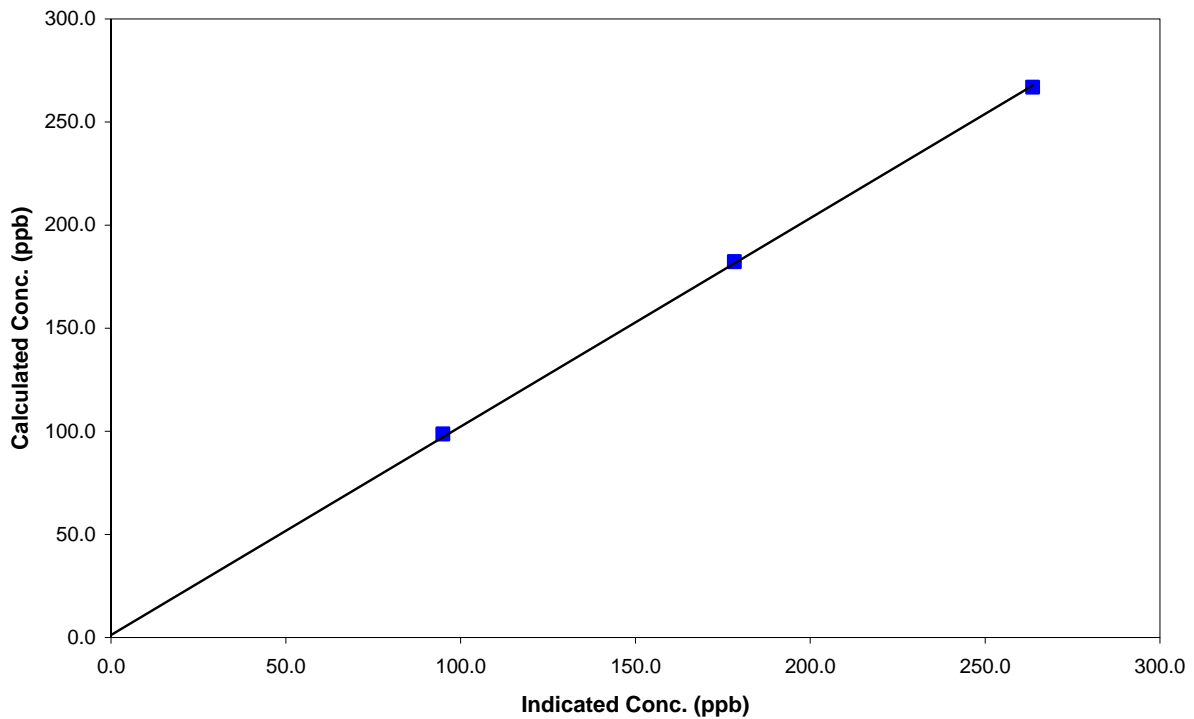
Station Information

Calibration Date	August 12, 2008	Previous Calibration	July 17, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:25	End Time (MST)	15:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	0.0000	Correlation Coefficient	0.999890
266.9	263.6	1.0124		
182.3	178.3	1.0221	Slope	1.011232
98.6	95.0	1.0385		
			Intercept	1.259161

NO₂ Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**



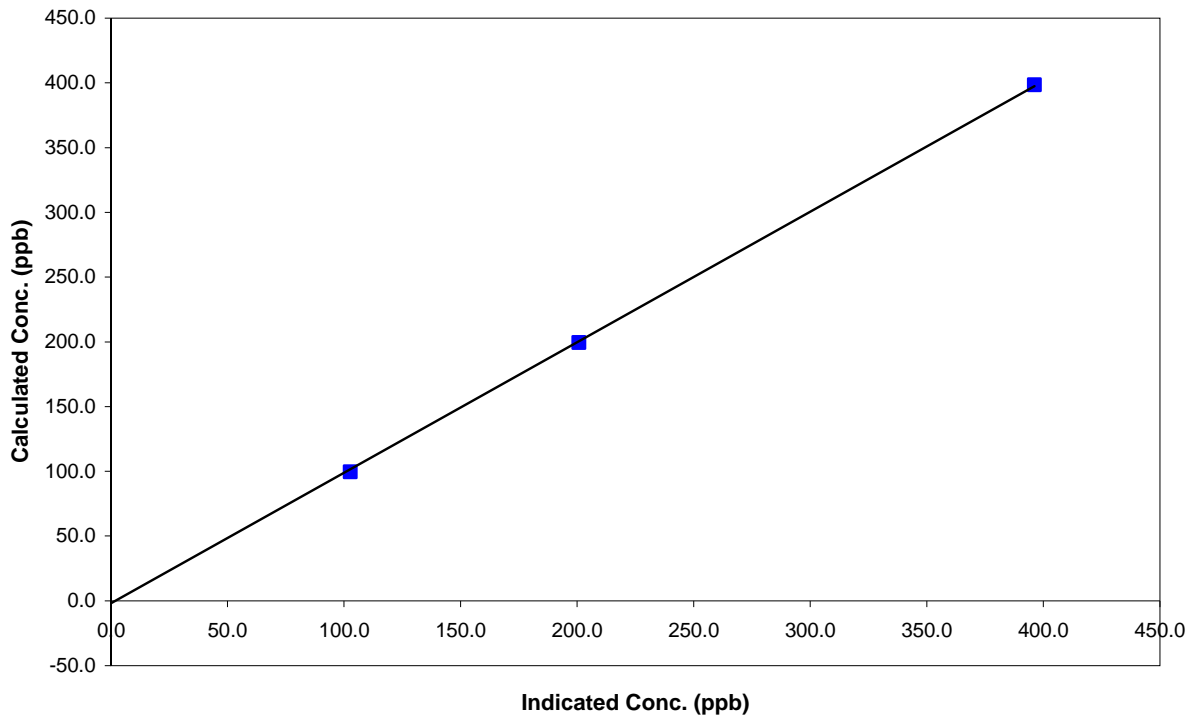
Station Information

Calibration Date	August 12, 2008	Previous Calibration	July 17, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:25	End Time (MST)	15:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.1	0.0000	Correlation Coefficient	0.999874
398.5	396.2	1.0056		
199.4	200.8	0.9928	Slope	1.007801
99.5	102.8	0.9686		
			Intercept	-1.944636

NO_x Calibration Curve



Calibration Summary

Parameter **NO**

Air Monitoring Network **PASZA**



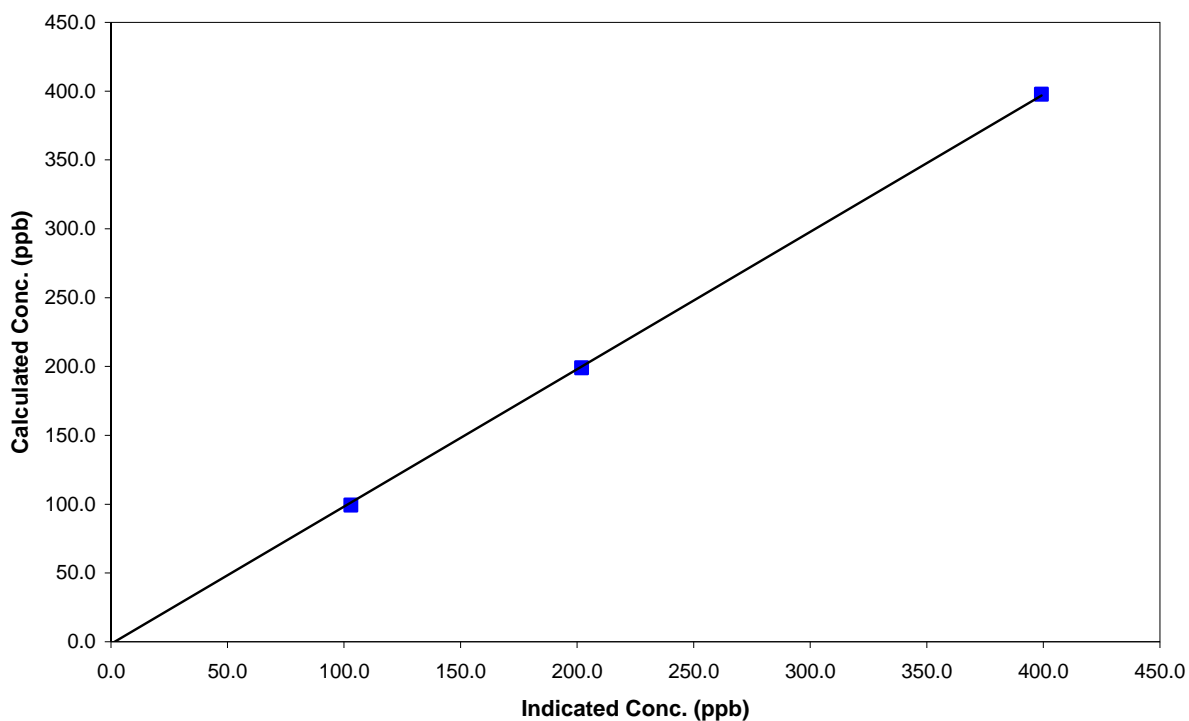
Station Information

Calibration Date	August 12, 2008	Previous Calibration	July 17, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	12:25	End Time (MST)	15:20
Analyzer make	TEI Model 42	Analyzer serial #	42-28486-231

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.2	N/A	Correlation Coefficient	0.999904
397.7	399.2	0.9962		
199.0	202.0	0.9852		
99.3	103.0	0.9648		
			Slope	0.997820
			Intercept	-1.600050

NO Calibration Curve



Calibration Report



Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 18, 2008	Previous Calibration	July 18, 2008
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)	13:15	End Time (MST)	16:20
Barometric Pressure	0.904 atm	Station Temperature	20.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	NA	Cal Gas Expiry Date	NA
DACS make	Focus AP1000	DACS serial No.	45269
DACS voltage range	0 - 1 volt	DACS channel #	5
	<u>Before</u>		<u>After</u>
Calculated slope	1.041493	Calculated slope	0.990669
Calculated intercept	-0.378293	Calculated intercept	3.507958
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383

	before		after	
Concentration range	0 - 500	ppb	0 - 500	ppb
offset	-0.20	ppb	-0.20	ppb
slope	0.963		0.831	
Lamp temp	56.5	mV	56.4	mV
Lamp Intensity A/B	80386/78298	mV	75724/73770	mV
Pressure	647.1	mm Hg	642.2	mm Hg
Flow A	726	ccm	723	ccm
Flow B	675	ccm	675	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	-0.3	N/A
4990	0.00	217.4	218.3	0.9962
4990	0.00	152.8	150.0	1.0192
4990	0.00	88.9	81.4	1.0923
4990	0.00	0.0	-0.3	As found zero
4990	0.00	217.4	246.9	As found span
Average Correction Factor				1.0359

Calculated value of As Found Response: 257.0 ppm Percent Change of As Found: 18.2%

	before calibration		after calibration	
Auto zero	-0.3	ppb	3.3	ppb
Auto span	120.8	ppb	90.9	ppb

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**



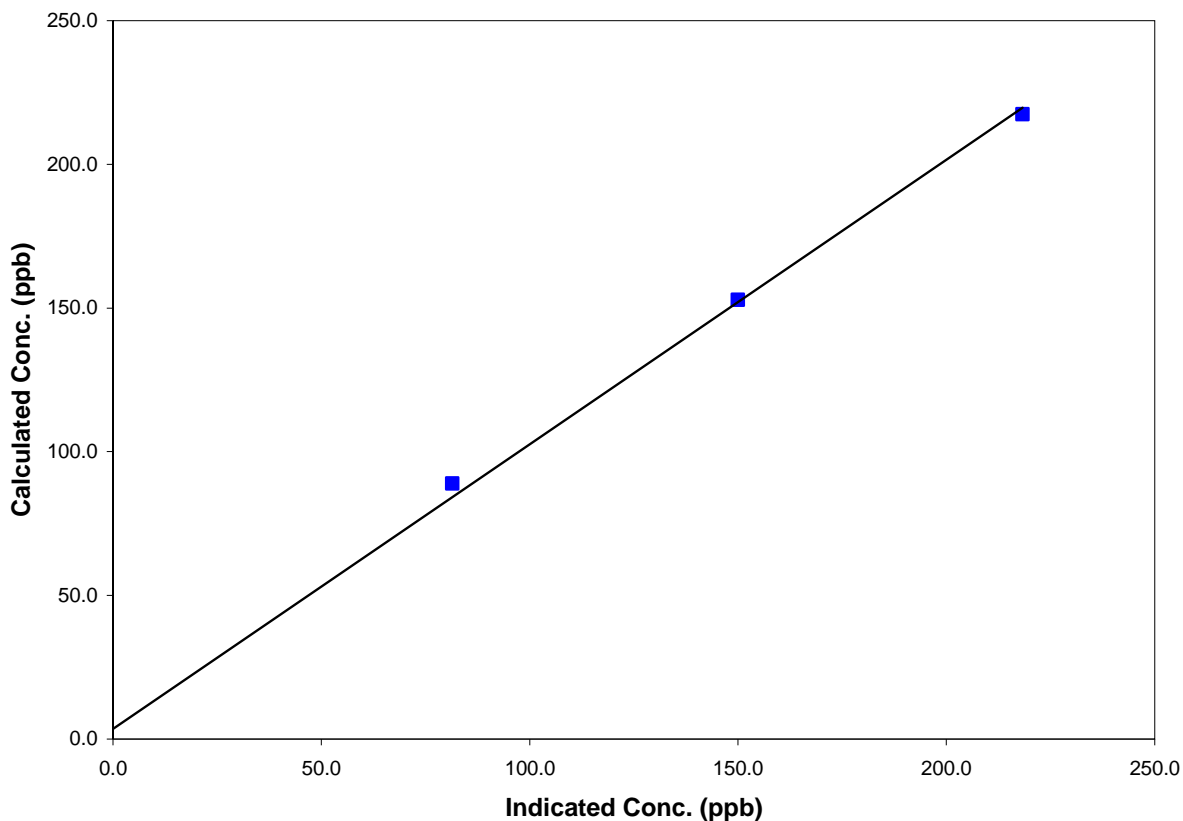
Station Information

Calibration Date	August 18, 2008	Previous Calibration	July 18, 2008
Station Number	4	Station Location	Beaverlodge
Start Time (MST)	13:15	End Time (MST)	16:20
Analyzer make/model	Teco 49C	Analyzer serial #	49C-76443-383

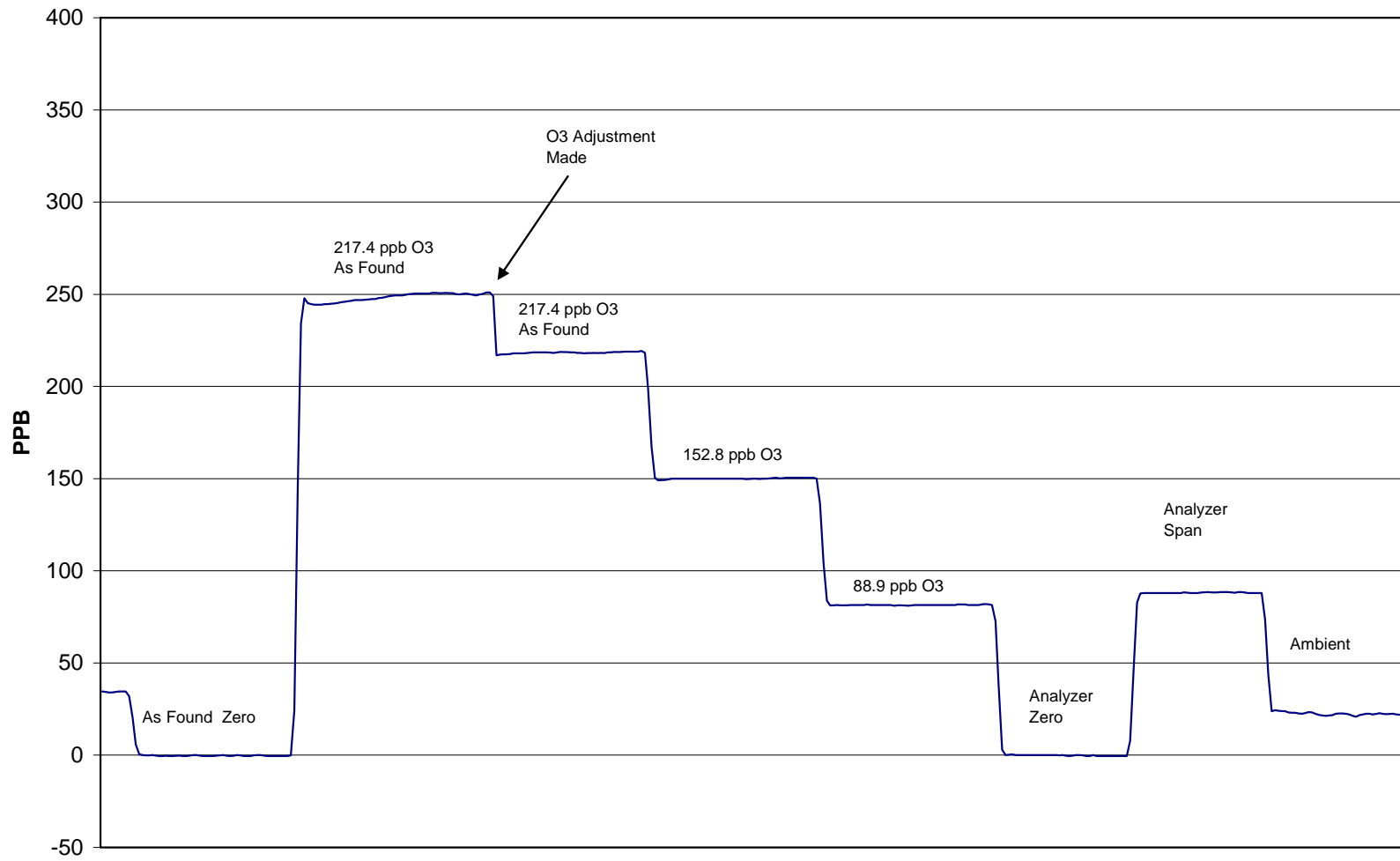
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	NA		
217.4	218.3	0.9962	Correlation Coefficient	0.998487
152.8	150.0	1.0192		
88.9	81.4	1.0923	Slope	0.990669
			Intercept	3.507958

O3 Calibration Curve



Beaverlodge O₃ Calibration



August 18, 2008

Calibration Report



Parameter **SO2**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 22, 2008	Previous Calibration	July 4, 2008
Station Number	8	Station Location	Rover - Spirit River
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)	13:50
Barometric Pressure	27.72 inches Hg	Station Temperature	22.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.3 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	1.022546	Calculated slope	1.001455
Calculated intercept	-1.308974	Calculated intercept	-2.882843
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Background	7.9		8.1	
Coefficient	1.137		1.168	
UV Lamp Voltage	733	V	723	V
Chamber Temp	44.6	C	44.6	C
Perm Gas Temp	44.99	C	45	C
Pressure	678	mm Hg	677	mm Hg
Sample Flow	488	LPM	488	LPM
Lamp Intesity	34390	Hz	34245	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.1	N/A
4988	39.91	399.3	399.8	0.9986
4988	19.82	199.1	203.9	0.9764
4988	9.91	99.7	104.7	0.9522
4988	0.00	0.0	0.1	As found zero
4988	39.91	399.3	387.7	As found span
Average Correction Factor				0.9757

Calculated value of As Found Response: 395.001 ppm Percent Change of As Found: 1.1%

	before calibration		after calibration	
Auto zero	-1.2	ppm	-2.4	ppm
Auto span	262.7	ppm	255.9	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

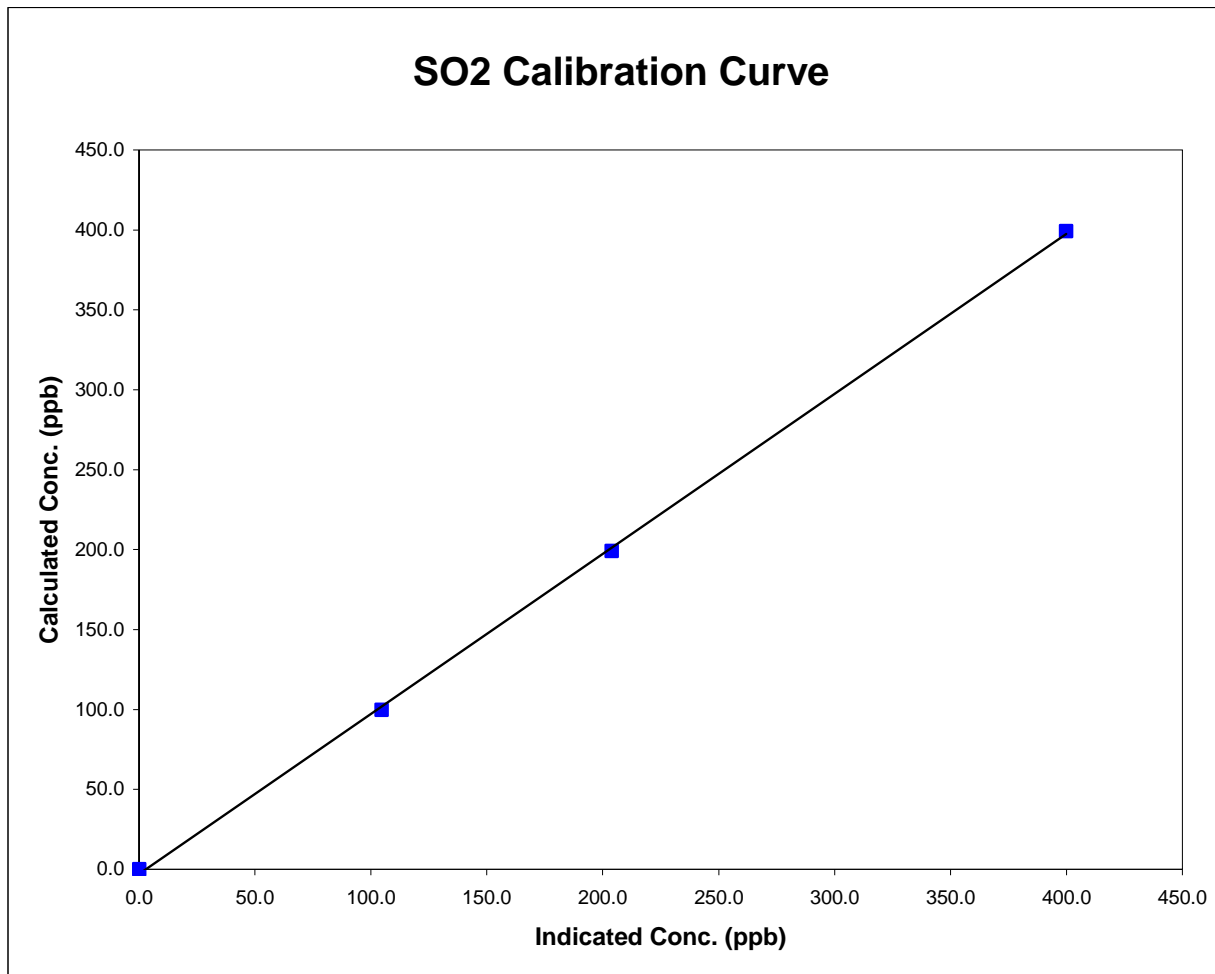


Station Information

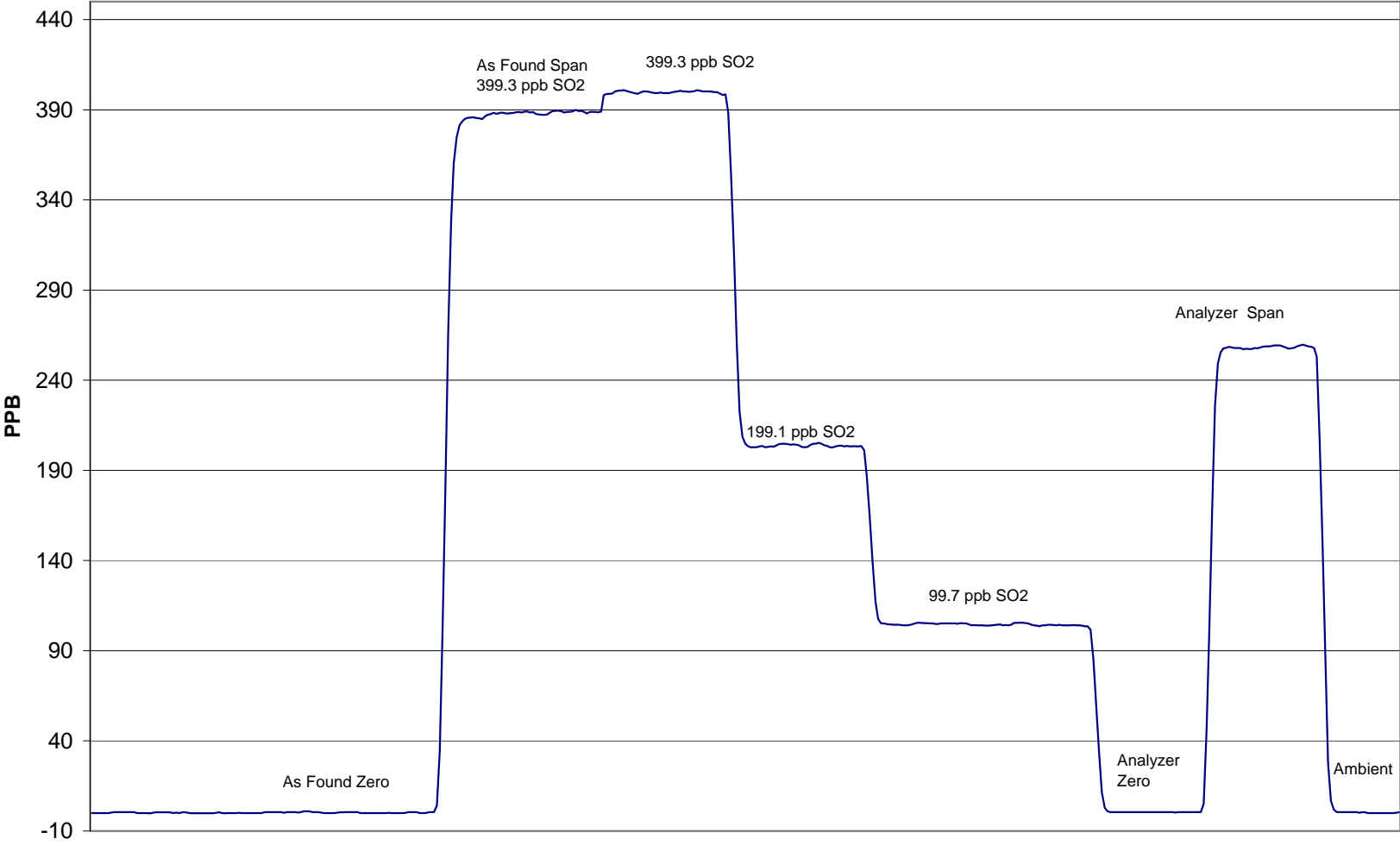
Calibration Date	August 22, 2008	Previous Calibration	July 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:40	End Time (MST)	13:50
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	N/A		
399.3	399.8	0.9986	Correlation Coefficient	0.999762
199.1	203.9	0.9764		
99.7	104.7	0.9522	Slope	1.001455
			Intercept	-2.882843



Spirit River SO₂ Calibration



August 22, 2008

Calibration Report



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

Station Information

Calibration Date	August 20, 2008	Previous Calibration	July 7, 2008
Station Number	6	Station Location	Rover - Spirit River
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			<input type="checkbox"/> Other:
Start Time (MST)	13:30	End Time (MST)	16:10
Barometric Pressure	27.5 inches Hg	Station Temperature	21.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	5.1 ppm	Cal Gas Expiry Date	11/15/2005
Gas Cert Reference	ALM013295		
DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0 - 5 volt	DACS channel #	8
	Before		After
DACS Scale High	100	DACS slope	100
DACS Scale Low	0	DACS intercept	0
Calculated slope	0.983700	Calculated slope	1.028413
Calculated intercept	-0.025756	Calculated intercept	0.288887
Analyzer make	TEI 43C	Analyzer serial #	609716238

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Background	9.0	ppb	9.0	ppb
Coefficient	1.454		1.454	
Lamp Voltage	804	V	804	V
Chamber Temp	43.8	C	43.8	C
Perm gas Temp	44.90	C	44.90	C
Pressure	667	mmHg	667	mmHg
Sample Flow	438	ccm	438	ccm
Lamp Intensity	38844.0	Hz	38844.0	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)
4988	0.0	0.0	-0.3	N/A
4988	79.76	80.3	77.8	1.0322
4988	39.80	40.4	39.0	1.0353
4988	9.93	10.1	9.5	1.0612
4988	0.00	0.0	-0.3	As found zero
4988	79.76	80.3	77.8	As found span
Average Correction Factor				1.0429

Calculated value of As Found Response: 76.73 ppm Percent Change of As Found: 4.4%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.3	ppm
Auto span	70.8	ppm	75.3	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **TRS**

Air Monitoring Network **PASZA**



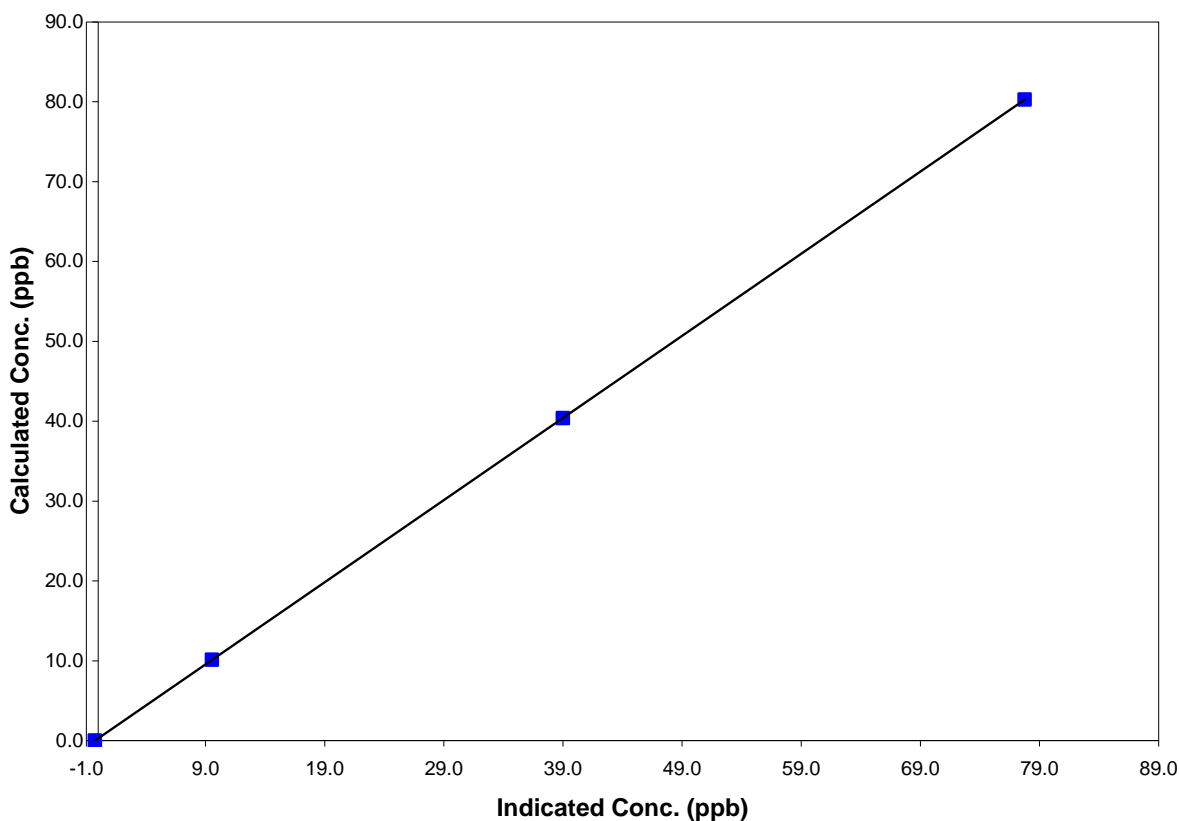
Station Information

Calibration Date	August 20, 2008	Previous Calibration	July 7, 2008
Station Number	6	Station Location	Rover - Spirit River
Start Time (MST)	13:30	End Time (MST)	16:10
Analyzer make/model	TEI 43C	Analyzer serial #	609716238

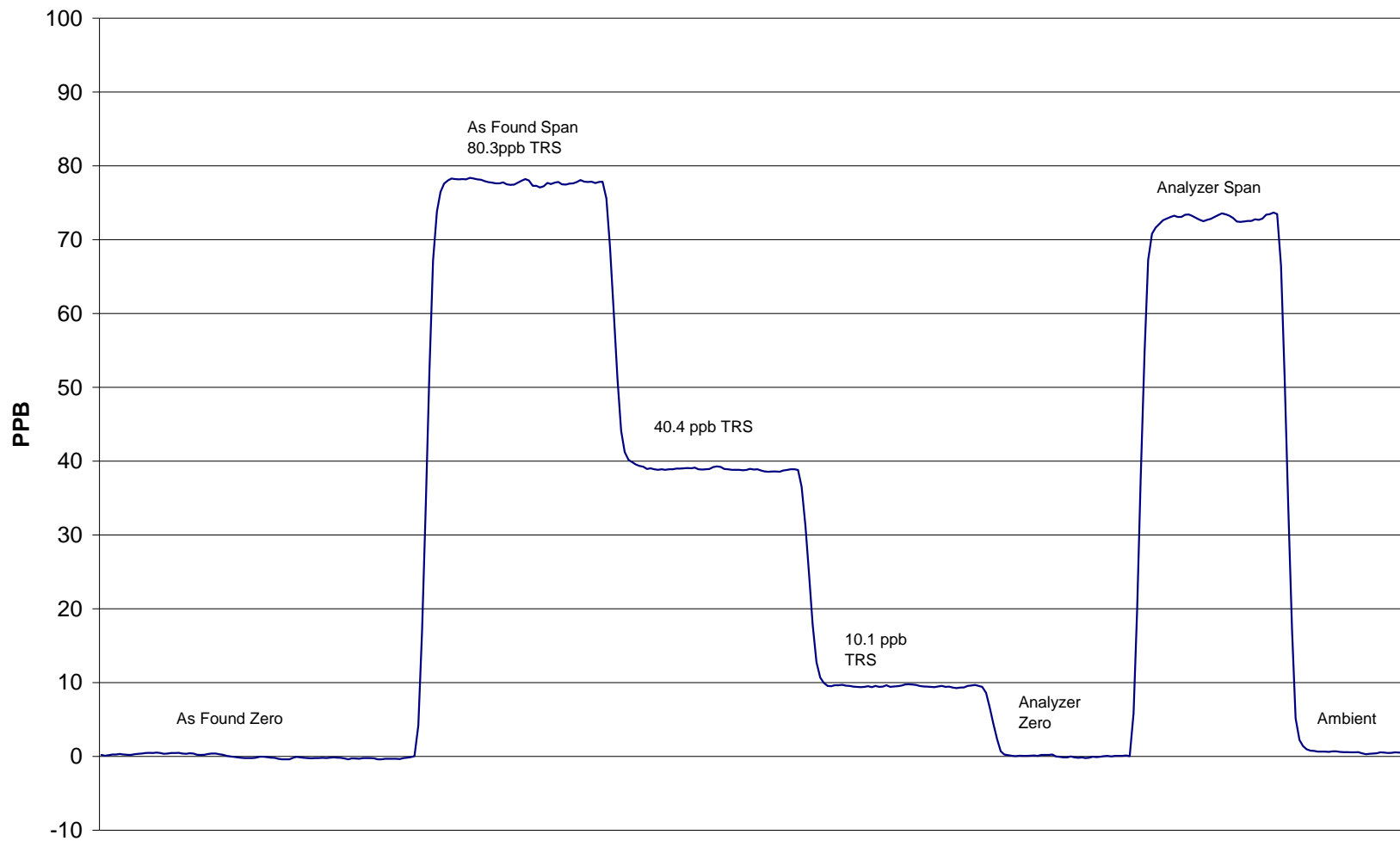
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A		
80.3	77.8	1.0322	Correlation Coefficient	1.000000
40.4	39.0	1.0353		
10.1	9.5	1.0612	Slope	1.028413
			Intercept	0.288887

TRS Calibration Curve



Spirit River TRS Calibration



August 20, 2008

Calibration Report



Parameter **O3**

Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 22, 2008	Previous Calibration	July 7, 2008
Station Number	8	Station Location	Rover - Spirit River
Reason:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Install	<input type="checkbox"/> Removal
			Other: <input type="checkbox"/>

Start Time (MST)	14:35	End Time (MST)	17:15
Barometric Pressure	0.926 atm	Station Temperature	21.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474

DACS make	Focus AP1000	DACS serial No.	52662
DACS voltage range	0-5	DACS channel #	7
	Before		After
Calculated slope	1.001530	Calculated slope	0.994278
Calculated intercept	1.597501	Calculated intercept	1.258050

Analyzer make	TEI Model 49C	Analyzer serial #	609-716240
---------------	---------------	-------------------	------------

	before		after	
Concentration range	0-500	ppb	0-500	ppb
Offset	0	ppb	0	ppb
Span	1.138		1.209	
Cell A	83140	Hz	75919	Hz
Cell B	79170	Hz	71953	Hz
Pressure	704	in Hg	691	in Hg
CellA Flow	676	ccm	668	ccm
Cell B Flow	675	cmm	668	cmm

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4990	0.00	0.0	0.1	N/A
4990	0.00	254.4	256.3	0.9928
4990	0.00	177.0	175.0	1.0115
4990	0.00	95.4	93.5	1.0208
4990	0.00	0.0	0.1	As found zero
4990	0.00	254.4	256.3	As found span
Average Correction Factor				1.0084

Calculated value of As Found Response: 258.2 ppm Percent Change of As Found: 1.5%

	before calibration		after calibration	
Auto zero	2.8	ppb	2.4	ppb
Auto span	208.7	ppb	207.5	ppb

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **O3**

Air Monitoring Network **PASZA**



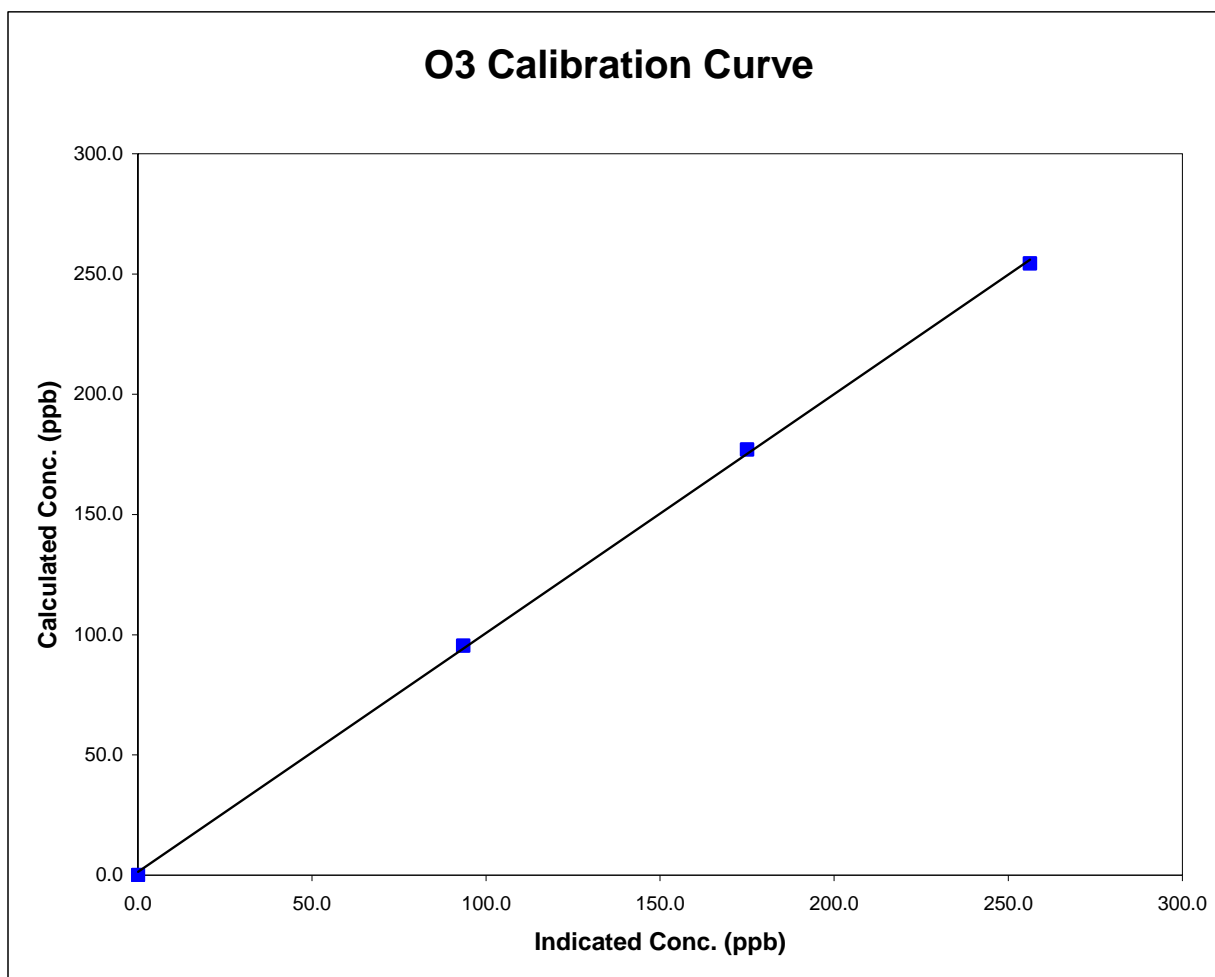
Station Information

Calibration Date	August 22, 2008	Previous Calibration	July 7, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	14:35	End Time (MST)	17:15
Analyzer make/model	TEI Model 49C	Analyzer serial #	609-716240

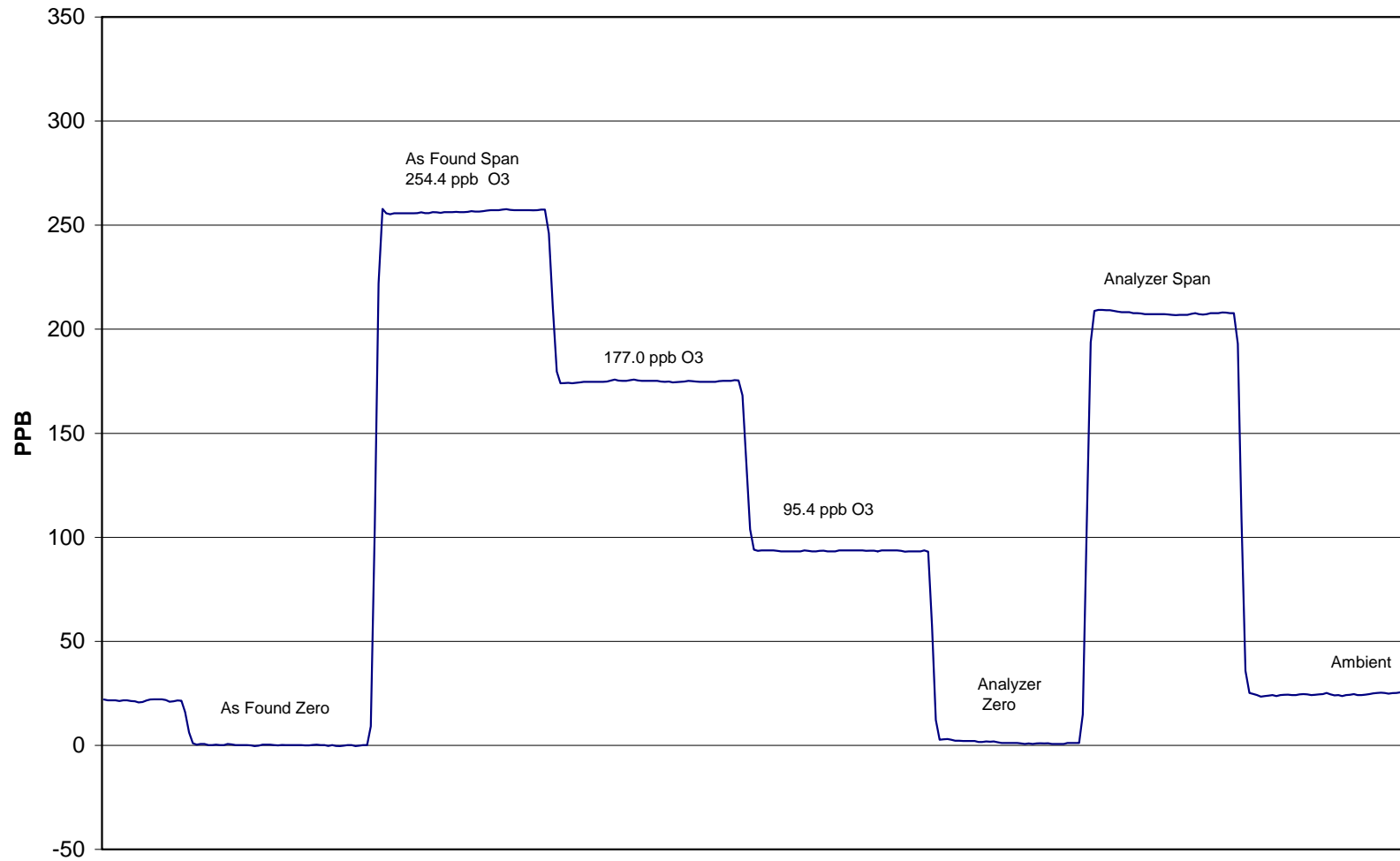
Calibration Data

Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.1	NA		
254.4	256.3	0.9928	Correlation Coefficient	0.999747
177.0	175.0	1.0115		
95.4	93.5	1.0208	Slope	0.994278
			Intercept	1.258050

O3 Calibration Curve



Spirit River O₃ Calibration



August 22, 2008

Calibration Report

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



Station Information

Calibration Date August 22, 2008 Previous Calibration July 4, 2008
Station Number 8 Station Location Rover - Spirit River
Reason: Routine Installation Removal Other: _____
Start Time (MST) 10:40 End Time (MST) 15:40
Barometric Pressure 27.72 Inches Hg Station Temperature 22.0 Deg C
Calibrator EnviroNics 6100 Serial Number 3474
NO Cal Gas Conc 48.9 ppm Cal Gas Expiry Date 2-Jan-09
NOx Cal Gas Conc 48.9 ppm Cal Gas Serial # LL-16161

DACS Information

DACS make FOCUS AP1000 DACS serial No. 52662

Parameter		NO2	NOx	NO
Before	Data Slope	1.028111	1.030307	1.031036
	Data Offset	-0.812043	-2.738523	-2.423432
After	Data Slope	1.017308	1.019240	1.019138
	Data Offset	-0.223788	-3.976515	-4.113110
Channel #		8	6	7
Voltage Range		0 - 10 VDC	0 - 10 VDC	0 - 10 VDC

Analyzer Information

Analyzer make/model TECO 42i Analyzer serial # 701120011

Test Point	before		after	
Concentration range	0-500	ppb	0-500	ppb
NO background	5.3	ppb	5.7	mV
NOx background	5.5	ppb	6.0	mV
NO coefficient	0.910		0.980	
NOx coefficient	1.001		1.001	
Chamber Temp	49.9	Deg C	49.8	Deg C
Cooler Temp	-2.9	Deg C	-2.7	Deg C
NO2 Converter Temp	325.0	Deg C	323.7	Deg C
Sample Flow	0.5	ccm	0.5	ccm
Ozonator Flow	OK	LPM	OK	LPM
Pressure	186.8	mm Hg	185.0	mm Hg

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Report



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

Station Information

Calibration Date: **August 22, 2008**

Station Location: **Rover - Spirit River**

Calibration Data

	Dilution flow rate (ccm)	Source gas flow rate (ccm)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NOx Correction factor	NO Correction factor
zero	4988	0.00	0.0	0.0	0.0	0.2	0.0	0.3	N/A	N/A
1	4988	39.91	388.2	388.2	0.0	382.5	382.4	1.0	1.0149	1.0150
2	4988	19.82	193.5	193.5	0.0	196.5	196.9	0.5	0.9849	0.9827
3	4988	9.91	97.0	97.0	0.0	102.3	102.7	0.5	0.9475	0.9446
AFZ	4988	0.00	0.0	0.0	0.0	0.2	0.0	0.3	0.0000	0.0000
AFS	4988	39.91	388.2	388.2	0.0	360.8	361.2	0.9	1.0759	1.0748
Average Correction Factor									0.9824	0.9807

As Found Concentrations: NO_x= 357.9 NO= 358.7 As Found Percent Change NO_x= -7.8% NO= -7.6%

GPT Calibration Data

Dilution Flow 4988 ccm Source Gas Flow 39.82 ccm

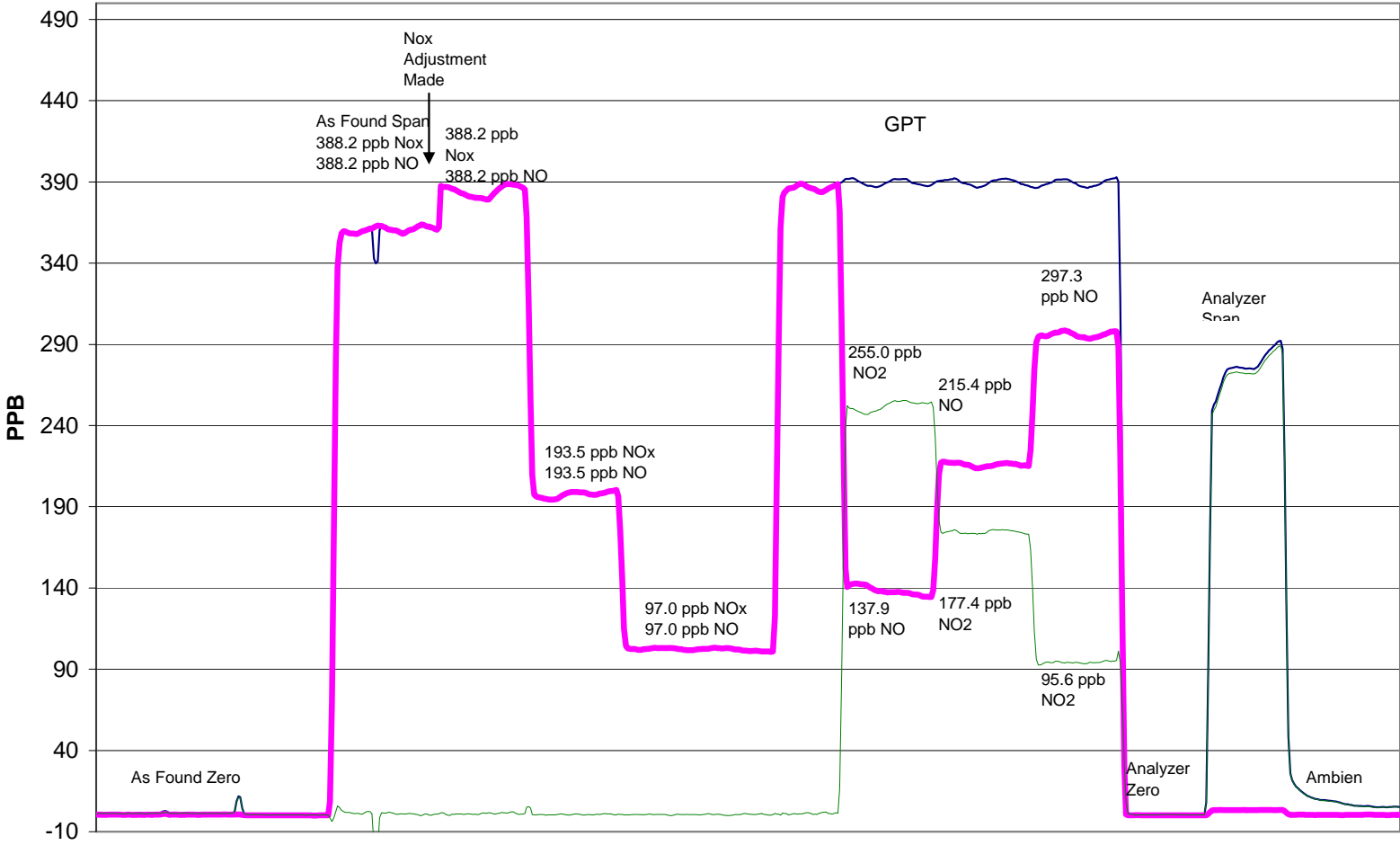
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO ₂ conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO ₂ conc (ppb)	NOx Correction factor	NO Correction factor	NO ₂ Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	392.9	389.8	3.1	386.9	386.5	1.2	1.0155	1.0085	N/A	N/A
300	392.9	137.9	255.0	389.6	139.4	250.9	1.0085	0.9896	1.0162	98.4%
200	392.9	215.4	177.4	389.4	215.4	174.6	1.0089	1.0000	1.0162	98.4%
100	392.9	297.3	95.6	389.1	295.7	94.1	1.0097	1.0052	1.0158	98.4%
Average Correction Factor							1.0090	0.9983	1.0161	98.4%

AIC Data

Parameter	Previous calibration				Current calibration			
	NOx	NO ₂	NO		NOx	NO ₂	NO	
Auto zero	-0.6	0.5	0.9	ppb	0.4	0.7	0.9	ppb
Auto span	259.1	257.5	0.6	ppb	281.8	281.8	-0.8	ppb

Calibration Performed By: Conor Whiteley

Spirit River NOx Calibration



August 22, 2008

Calibration Summary

Parameter **NO₂**

Air Monitoring Network **PASZA**



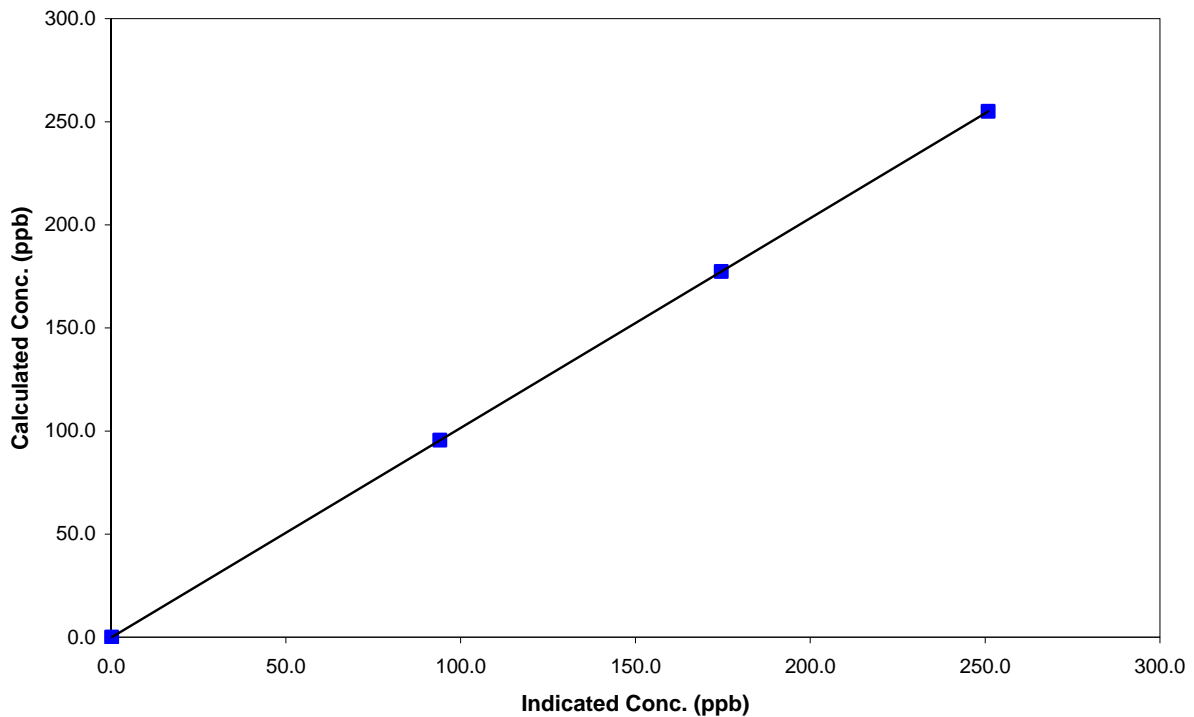
Station Information

Calibration Date	August 22, 2008	Previous Calibration	July 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:40	End Time (MST)	15:40
Analyzer make	TECO 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.3	0.0000	Correlation Coefficient	1.000000
255.0	250.9	1.0162		
177.4	174.6	1.0162	Slope	1.017308
95.6	94.1	1.0158		

NO₂ Calibration Curve



Calibration Summary

Parameter **NO_x**

Air Monitoring Network **PASZA**



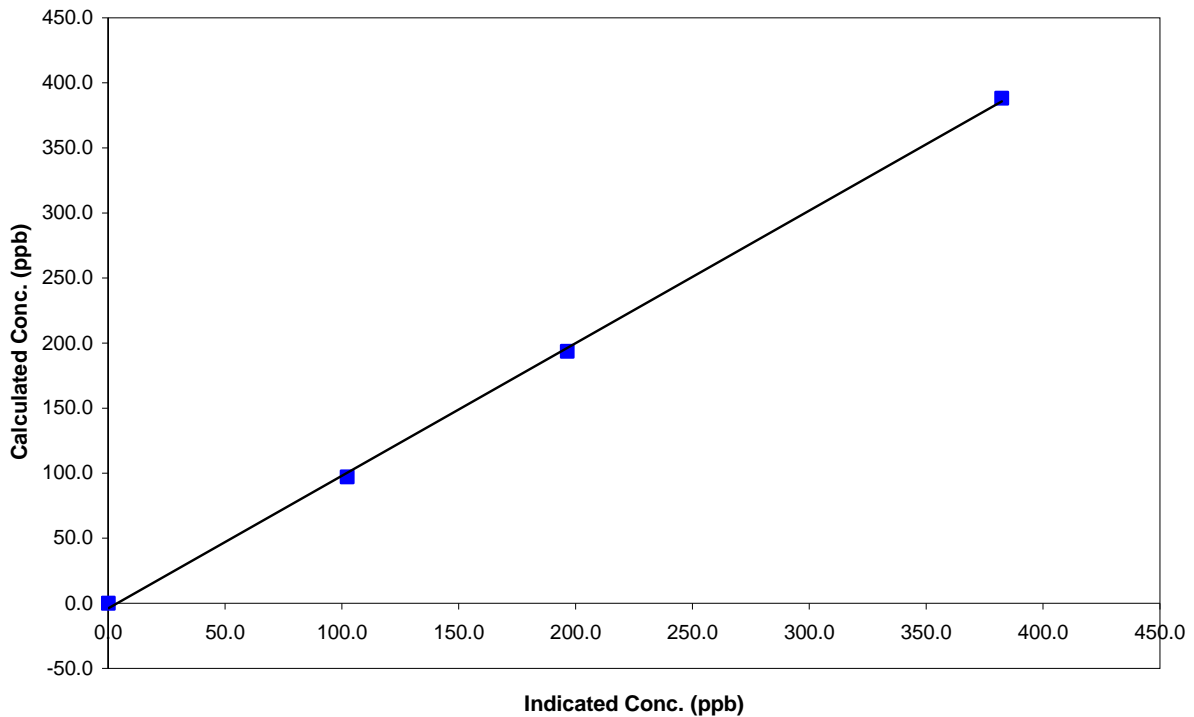
Station Information

Calibration Date	August 22, 2008	Previous Calibration	July 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:40	End Time (MST)	15:40
Analyzer make	TECO 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.2	0.0000	Correlation Coefficient	0.999528
388.2	382.5	1.0149		
193.5	196.5	0.9849	Slope	1.019240
97.0	102.3	0.9475		
			Intercept	-3.976515

NO_x Calibration Curve



Calibration Summary

Parameter **NO**
 Air Monitoring Network **PASZA**



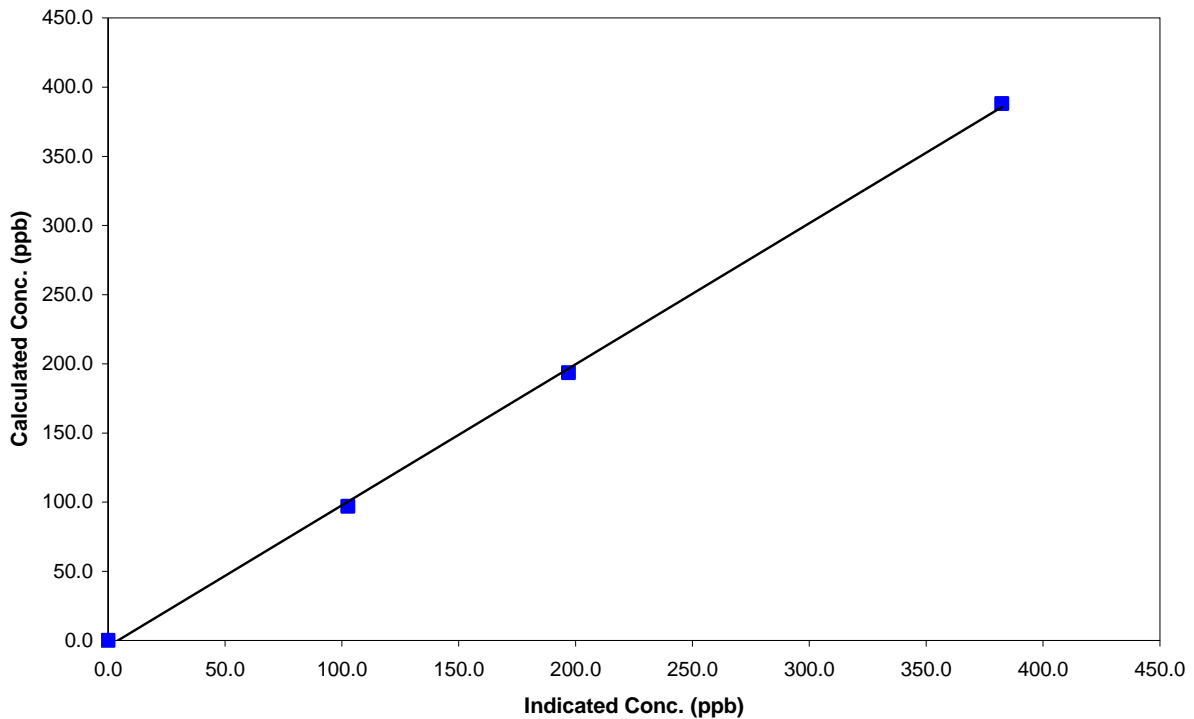
Station Information

Calibration Date	August 22, 2008	Previous Calibration	July 4, 2008
Station Number	8	Station Location	Rover - Spirit River
Start Time (MST)	10:40	End Time (MST)	15:40
Analyzer make	TECO 42i	Analyzer serial #	701120011

Calibration Data

Calculated conc (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A	Correlation Coefficient	0.999454
388.2	382.4	1.0150		
193.5	196.9	0.9827		
97.0	102.7	0.9446		
			Slope	1.019138
			Intercept	-4.113110

NO Calibration Curve



Calibration Report



Parameter **SO2**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 19, 2008	Previous Calibration	July 11, 2008
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)	14:25	End Time (MST)	17:15
Barometric Pressure	27.34 inches Hg	Station Temperature	23.0 Deg C
Calibrator	EnviroNics 6100	Serial Number	3474
Cal Gas Concentration	50.3 ppm	Cal Gas Expiry Date	7/27/2009
Gas Cert Reference	LL16161		
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	0.978740	Calculated slope	0.999058
Calculated intercept	-1.721490	Calculated intercept	-1.761548
Analyzer make	TEI 43i	Analyzer serial #	43C-57351-313

	before		after	
Concentration range	0 - 1000	ppb	0 - 1000	ppb
Background	28		28	
Coefficient	0.74		0.74	
UV Lamp Voltage	695	LPM	695	LPM
Chamber Temp	44.2	V	44.2	V
Perm Gas Temp	26.1	C	26.1	C
Pressure	626.3	in Hg	626.3	in Hg
Sample Flow	0.47	LPM	0.47	LPM
Lamp Intesity	45785	Hz	45785	Hz

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	-0.5	N/A
4988	39.83	398.5	399.2	0.9981
4988	19.91	200.0	203.7	0.9819
4988	9.92	99.8	103.6	0.9636
4988	0.00	0.0	-0.5	As found zero
4988	39.77	397.9	399.2	As found span
Average Correction Factor				0.9812

Calculated value of As Found Response: 389.509 ppm Percent Change of As Found: 2.1%

	before calibration		after calibration	
Auto zero	-1.7	ppm	-2.4	ppm
Auto span	161.4	ppm	168.0	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **SO2**

Air Monitoring Network **PASZA**

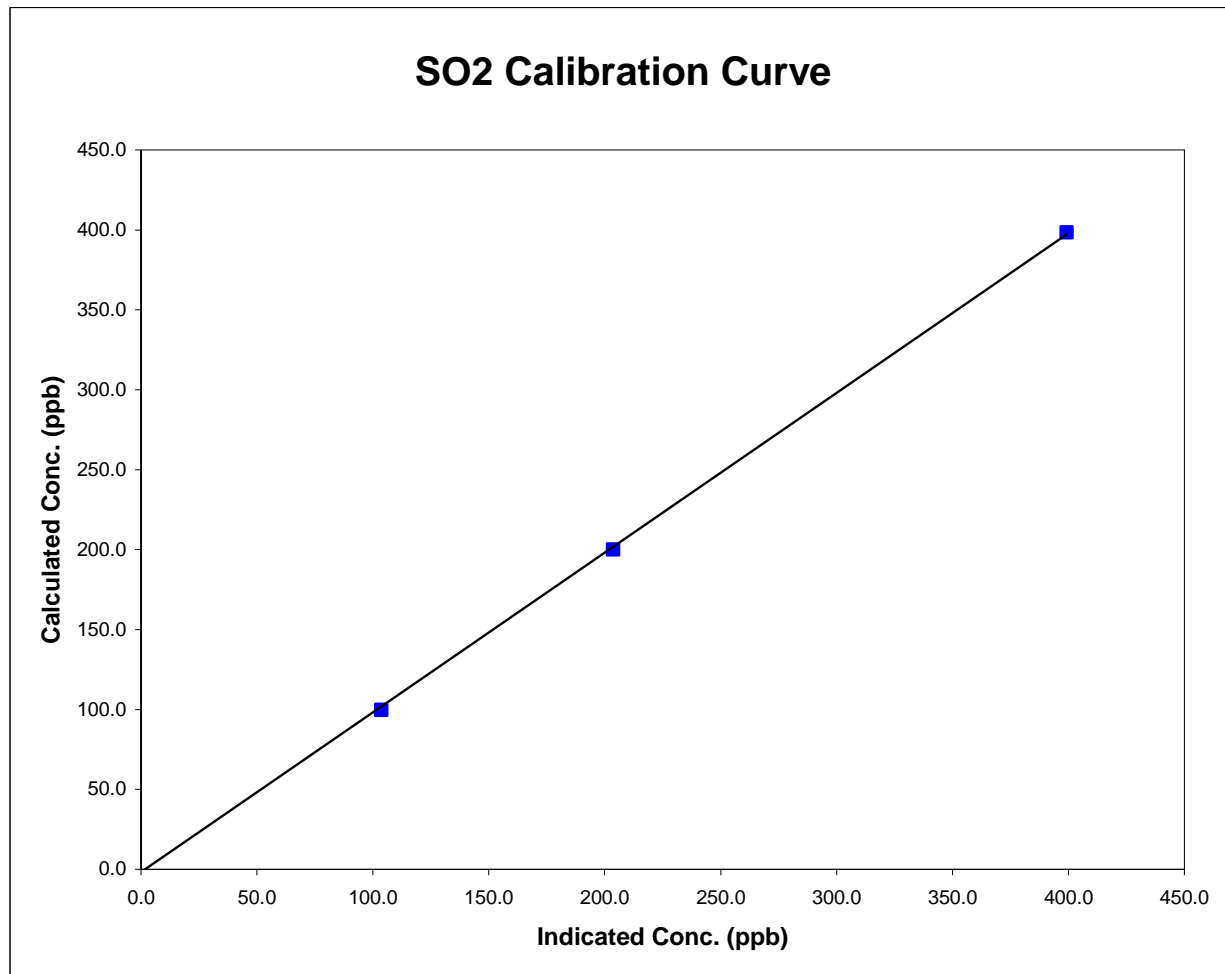


Station Information

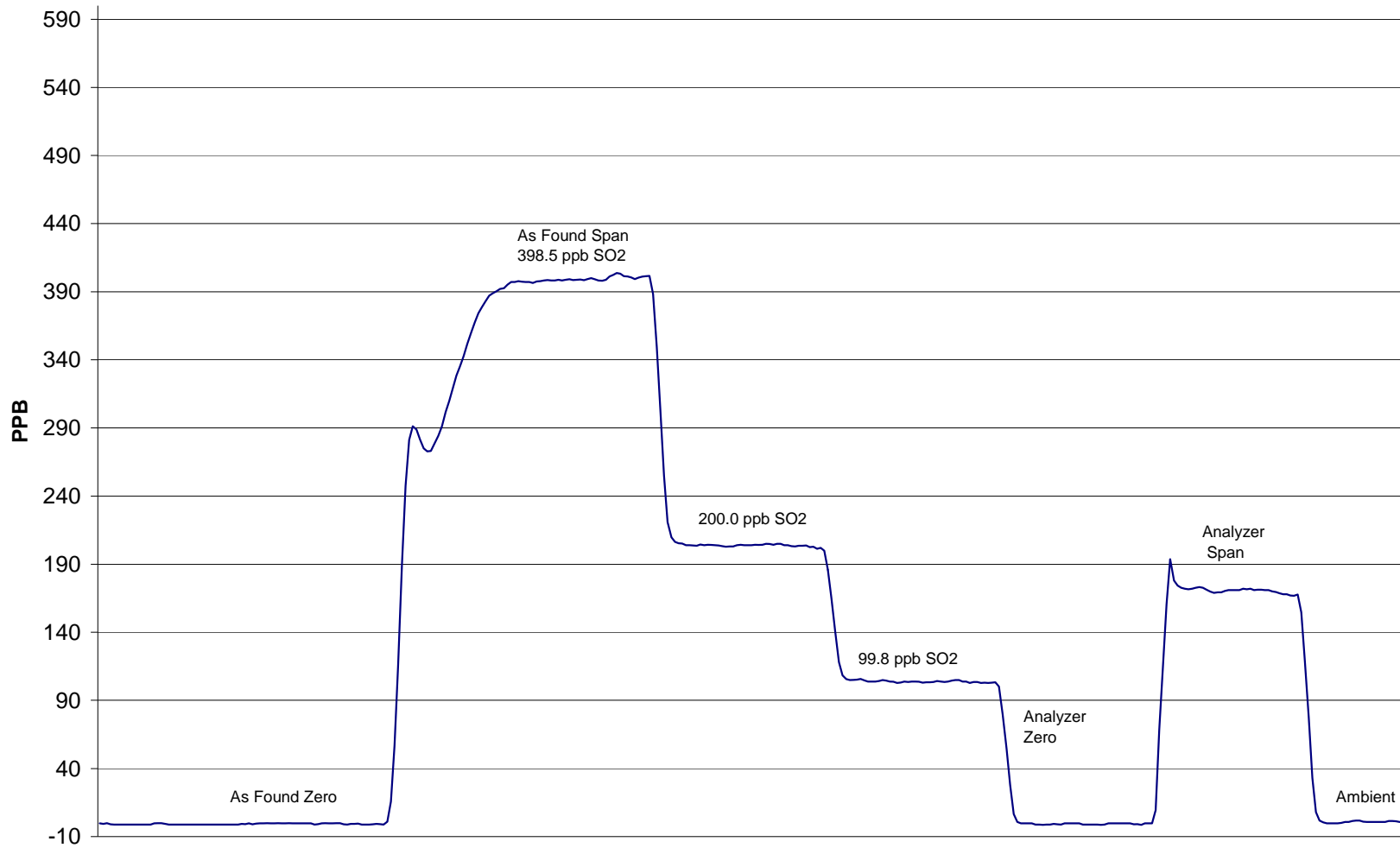
Calibration Date	August 19, 2008	Previous Calibration	July 11, 2008
Station Number	6	Station Location	Valleyview
Start Time (MST)	14:25	End Time (MST)	17:15
Analyzer make/model	TEI 43i	Analyzer serial #	43C-57351-313

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.5	N/A		
398.5	399.2	0.9981	Correlation Coefficient	0.999842
200.0	203.7	0.9819		
99.8	103.6	0.9636	Slope	0.999058
			Intercept	-1.761548



Valleyview SO₂ Calibration



August 19, 2008

Calibration Report



Parameter **H2S**
 Air Monitoring Network **PASZA**

Station Information

Calibration Date	August 19, 2008	Previous Calibration	July 11, 2008
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)	12:25	End Time (MST)	15:50
Barometric Pressure	27.34 inches Hg	Station Temperature	23.0 Deg C
Calibrator	Envionics 6100	Serial Number	3474
Cal Gas Concentration	5.1 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	1.020096	Calculated slope	1.030959
Calculated intercept	-0.350473	Calculated intercept	-0.014795
Analyzer make	TEI Model 43A	Analyzer serial #	43A-25575-221

	before		after	
Concentration range	0 - 100	ppb	0 - 100	ppb
Back Ground	4.6	ppb	4.6	ppb
Coefficient	1.026		1.026	
Lamp Voltage	798	v	798	v
Chamber Temp	45	c	45	c
Perm Oven Temp	45.01	c	45.01	c
Pressure	645	mm Hg	645	mm Hg
Sample Flow	429	ccm	429	ccm
Lamp Intensity	91.0	%	91.0	%

Calibration Data

Dilution air flow rate (cc/min)	Source gas flow rate (cc/min)	Calculated concentration (ppm) (Cc)	Indicated concentration (ppm) (Ic)	Correction factor (Cc/Ic)
4988	0.00	0.0	0.0	N/A
4988	79.76	80.3	77.9	1.0305
4988	39.85	40.4	39.2	1.0314
4988	9.92	10.1	9.8	1.0315
4988	0.00	0.0	0.0	As found zero
4988	79.79	80.3	77.9	As found span
Average Correction Factor				1.0311

Calculated value of As Found Response: 79.06 ppm Percent Change of As Found: 1.5%

	before calibration		after calibration	
Auto zero	0.1	ppm	0.2	ppm
Auto span	63.6	ppm	65.7	ppm

Notes: _____

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **H2S**

Air Monitoring Network

PASZA

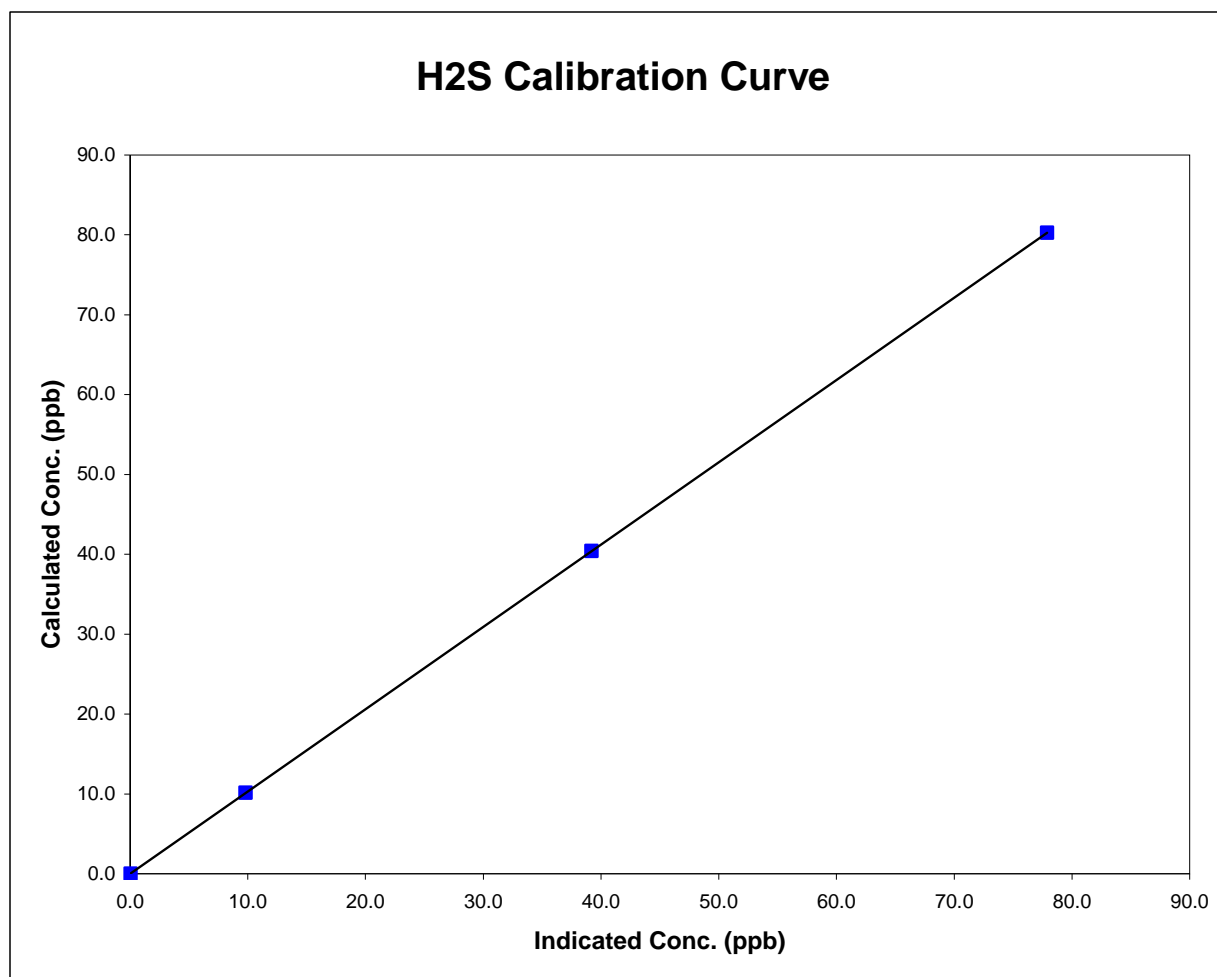


Station Information

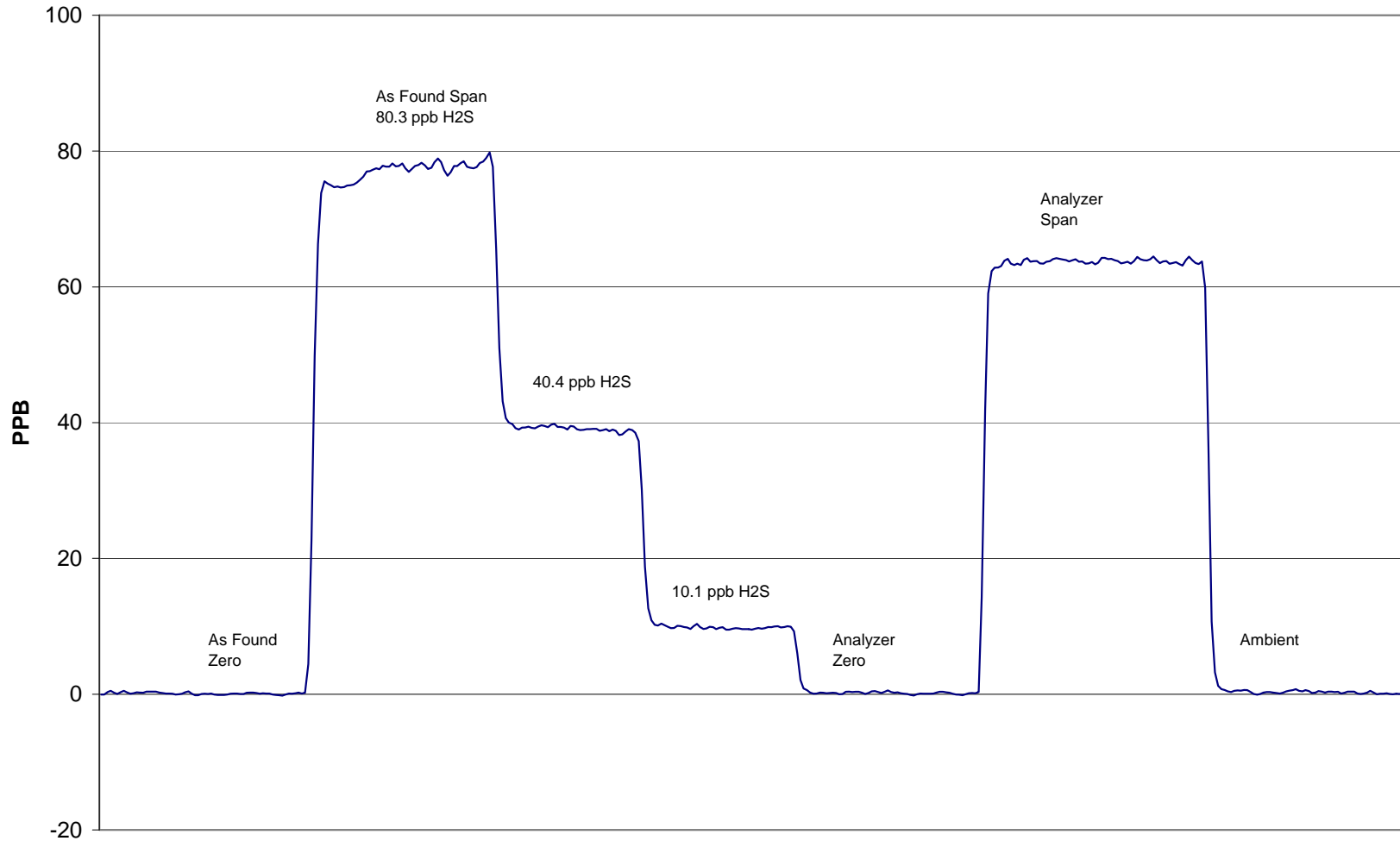
Calibration Date	August 19, 2008	Previous Calibration	July 11, 2008
Station Number	5	Station Location	Valleyview
Start Time (MST)	12:25	End Time (MST)	15:50
Analyzer make/model	TEI Model 43A	Analyzer serial #	43A-25575-221

Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	0.0	N/A		
80.3	77.9	1.0305	Correlation Coefficient	0.999999
40.4	39.2	1.0314		
10.1	9.8	1.0315	Slope	1.030959
			Intercept	-0.014795



Valleyview H₂S Calibration



August 19, 2008