



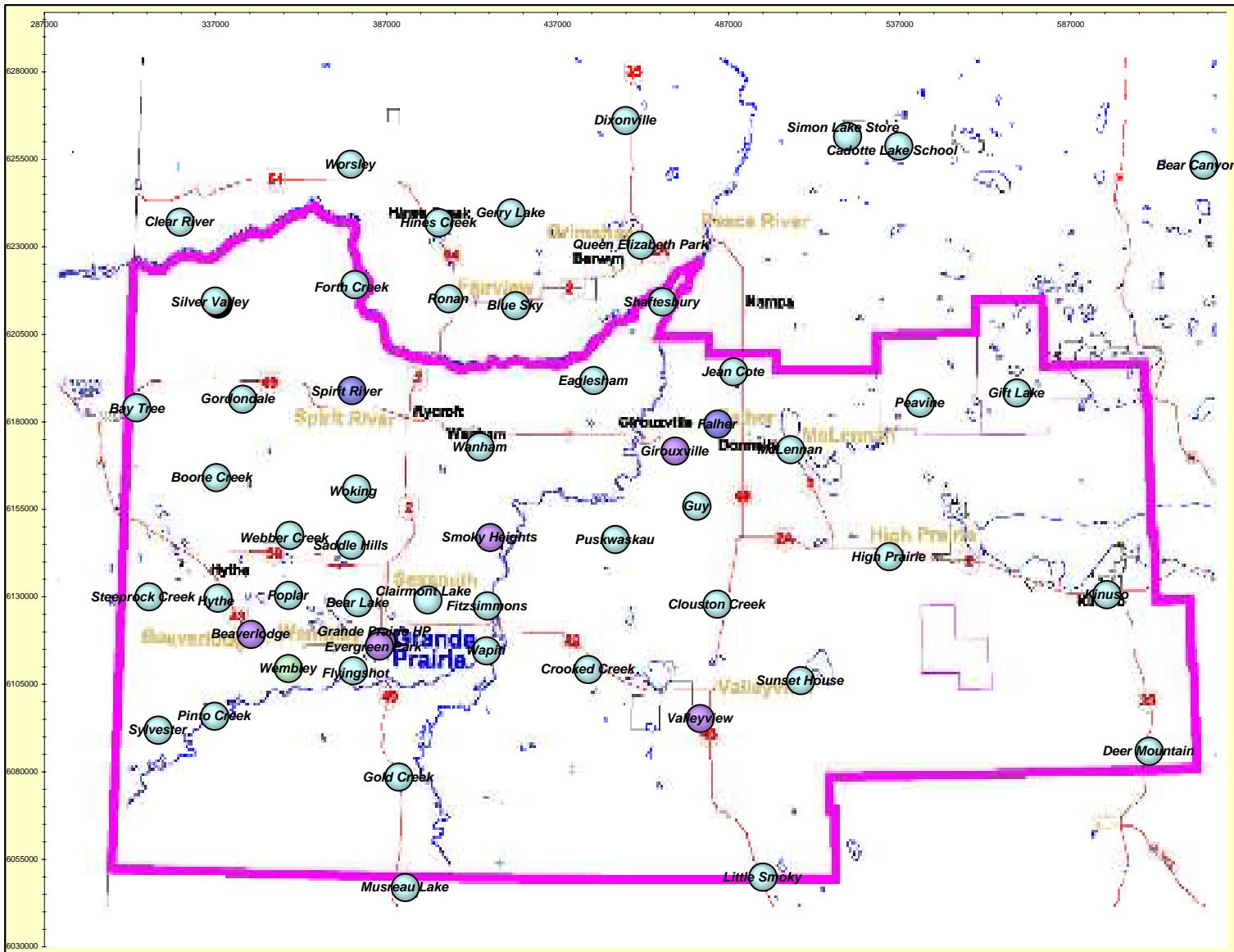
Peace AirShed Zone Association

Ambient Air Monitoring Network Summary

Continuous Ambient Air Quality Monitoring Program
Monthly Report
August 2008

Operations and Reporting
FOCUS
AIR QUALITY MONITORING

Location of PASZA Continuous and Passive Monitoring Stations





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September 30, 2008

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9820-106 Street
Edmonton Alberta T6B 2X3

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				
							1-hr		24-hr / 8-hr		
Pollutant (units)	Objectives		Station	Monthly Average	Exceedence		Conc	Day	Conc	Day	Operational Time (%)
	1-hr	24-hr			1-hr	24-hr					
SO ₂ (ppb)	172	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%

PASZA Monthly Continuous Data Summary - continued

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 .
NOx/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.
NOx/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

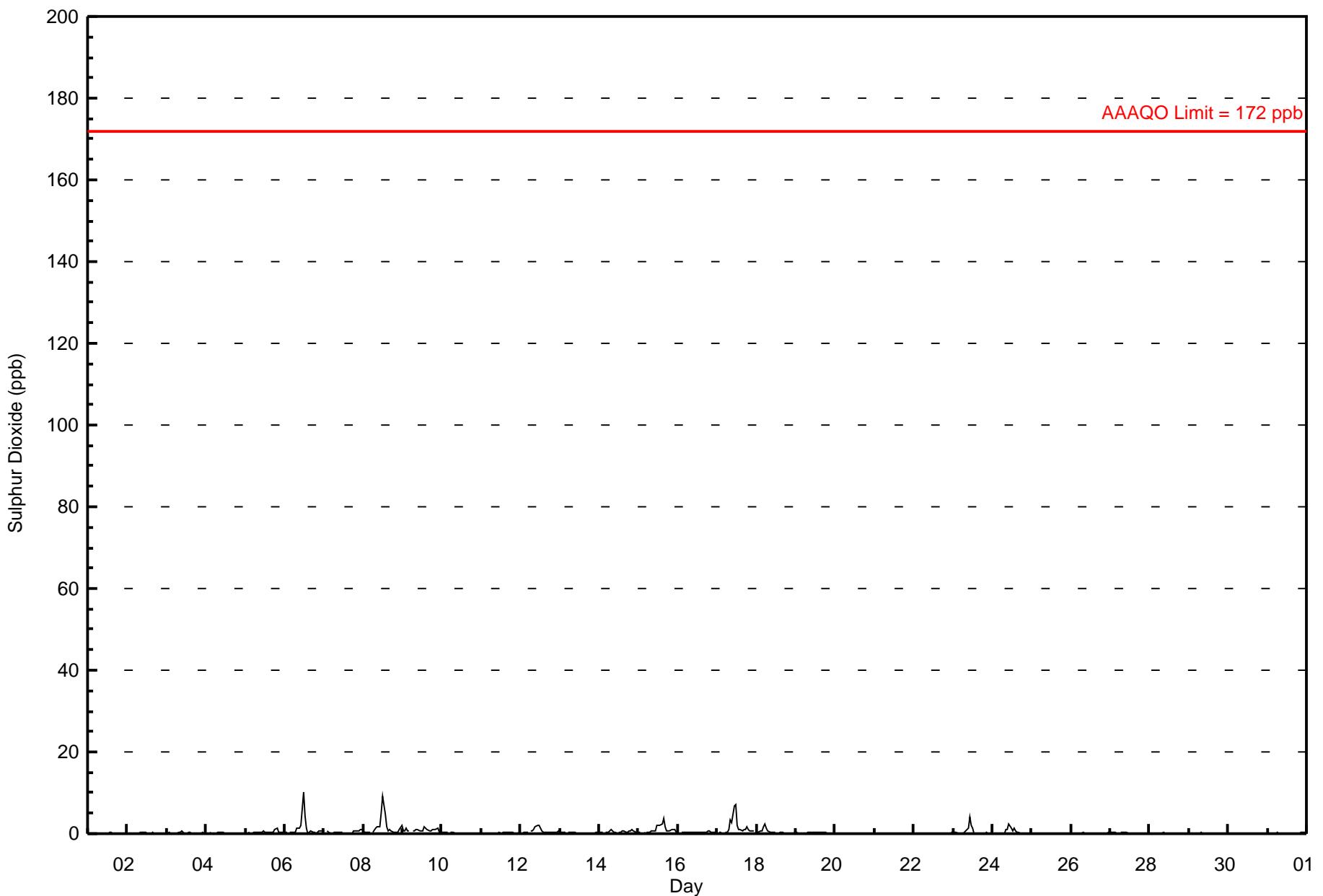
Peace Airshed Zone Association Summary of Hourly Averages

Henry Pirker - Sulphur Dioxide (SO_2) - ppb

August 1, 2008 to September 1, 2008

Hourly Averages for SO₂ at Henry Pirker

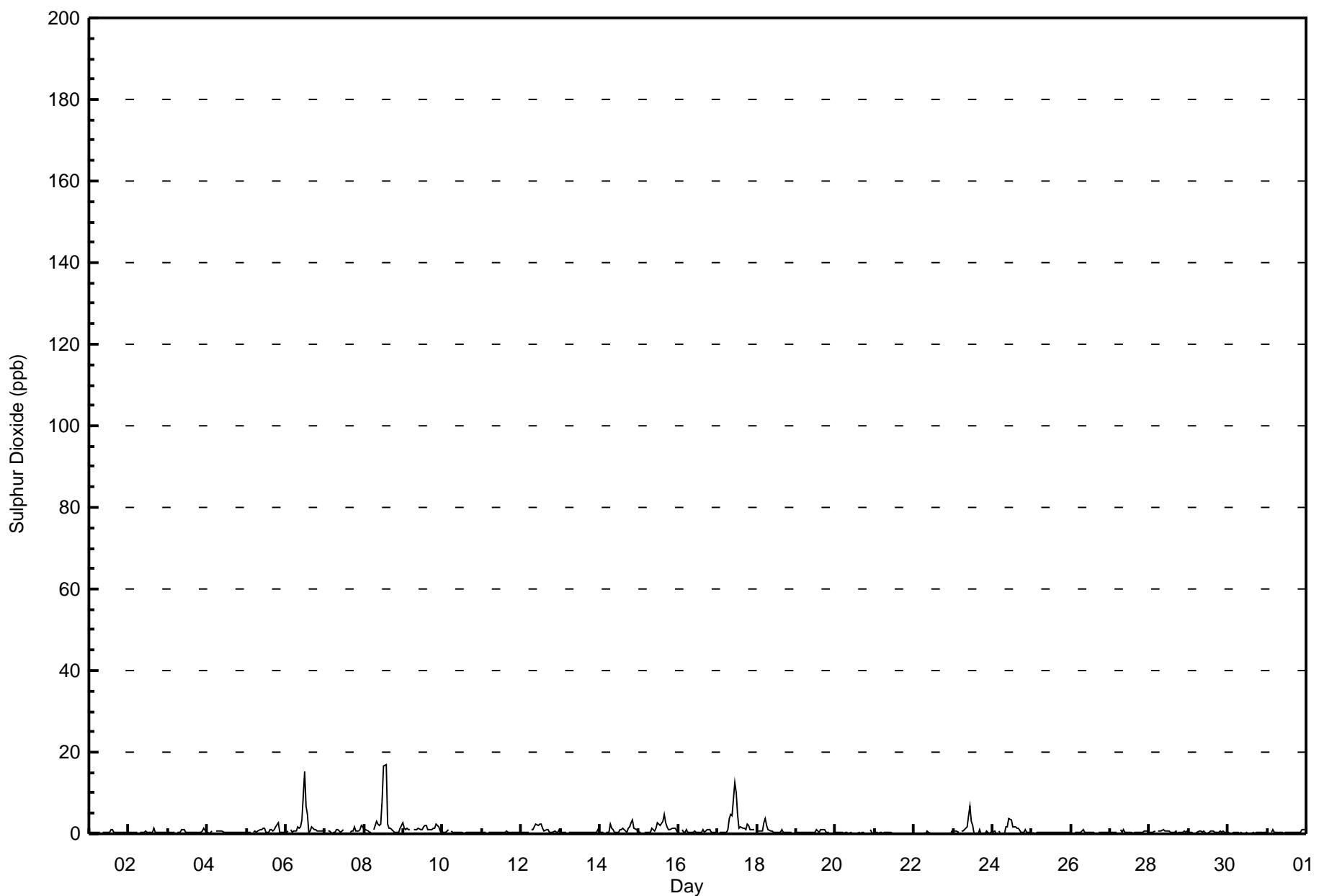
August 2008



Peace Airshed Zone Association Summary of Hourly Maximums

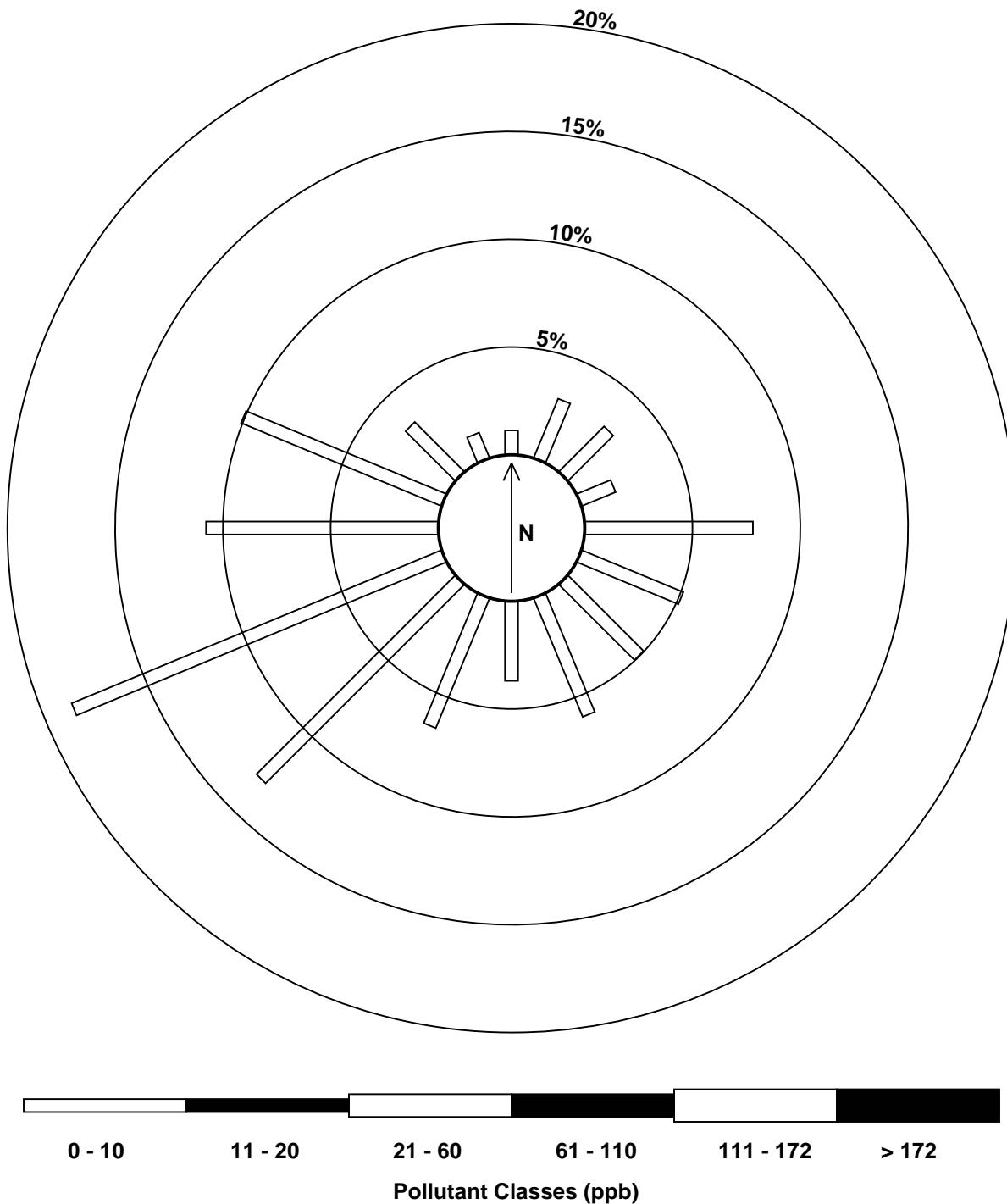
Henry Pirker - Sulphur Dioxide (SO_2) - ppb

Hourly Maximums for SO₂ at Henry Pirker
August 2008



Pollutant Rose for SO₂ at Henry Pirker

August 2008



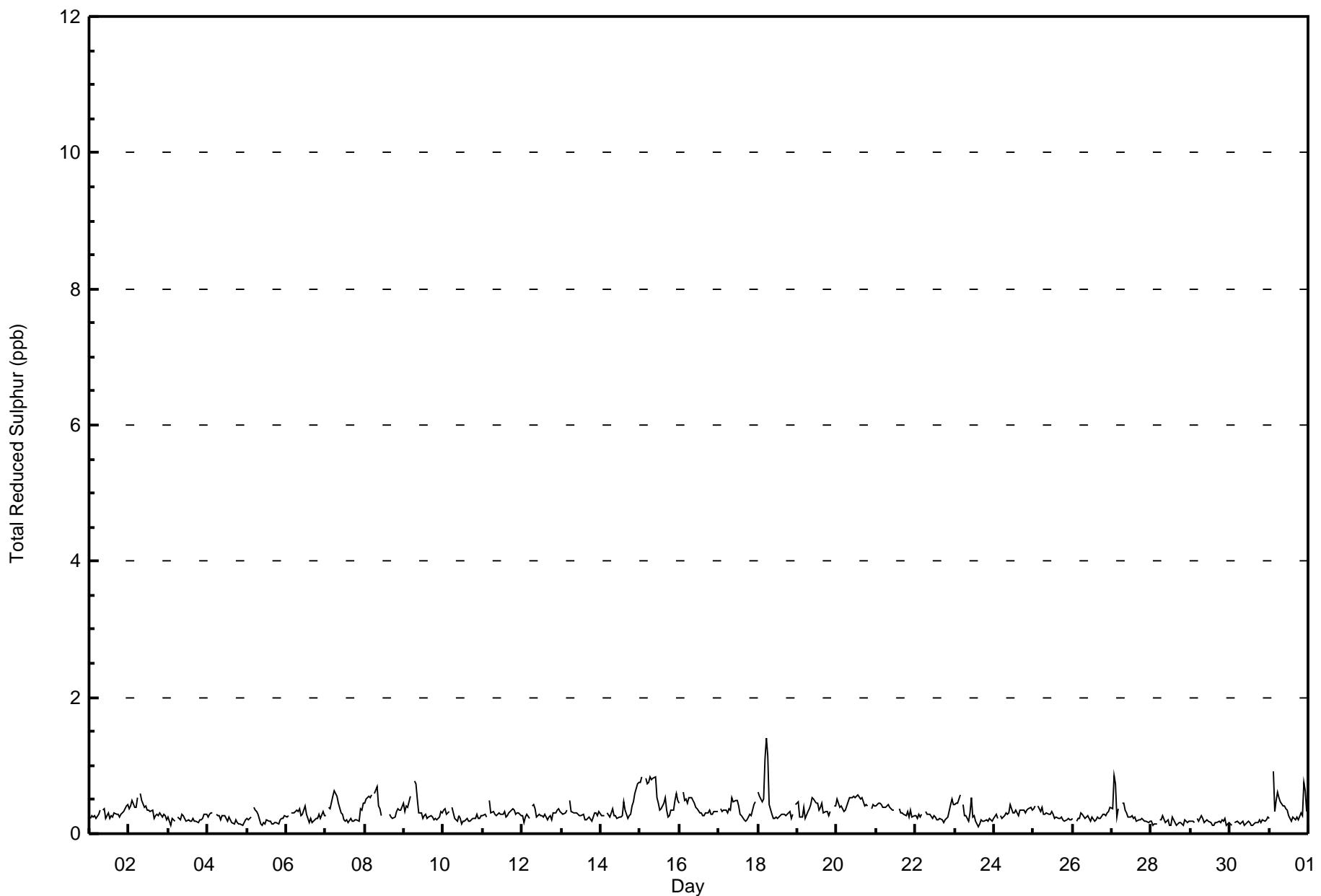
Peace Airshed Zone Association Summary of Hourly Averages

Henry Pirker - Total Reduced Sulphur (TRS) - ppb

August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 1.4 ppb on Aug 18 06:00 Maximum Daily Average: 0.6 ppb on Aug 15																		Hours in Service: 744 Hours of Data: 707 Hours of Missing Data: 37 Hours of Calibration: 35 Percent Operational Time: 99.7								
Minimum Value: 0 ppb on Aug 23 15:00 Minimum Daily Average: 0.2 ppb on Aug 30												Maximum Diurnal Average: 0.4 ppb at hour 6 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														
Monthly Average: 0.31 ppb																										
Day	Hourly Period Ending At (MST)																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
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	0.3	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	0.4	0.6	
3-Aug	0	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
4-Aug	0	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	0.3	
5-Aug	0	0	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2	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	0.3	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	0.3	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	0.4	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	0.3	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	0.2	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	0.3	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	0.3	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	0.3	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	0	0.3	0.7	
15-Aug	1	1	A	1	1	1	1	1	1	1	0	0	0	0	0	1	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	0.4	0.6	
17-Aug	A	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	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	0.4	1.4	
19-Aug	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0.4	0.5	
20-Aug	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	A	0	0	0	0	0.5	0.6	
21-Aug	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	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	0.3	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	0.3	0.4	
25-Aug	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4	
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	0.3	0.4	
27-Aug	0	1	1	0	0	0	A	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	0.2	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	0.2	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	0.2	0.2	
31-Aug	0	A	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0.4	0.9	
																							Diurnal Average			
																							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

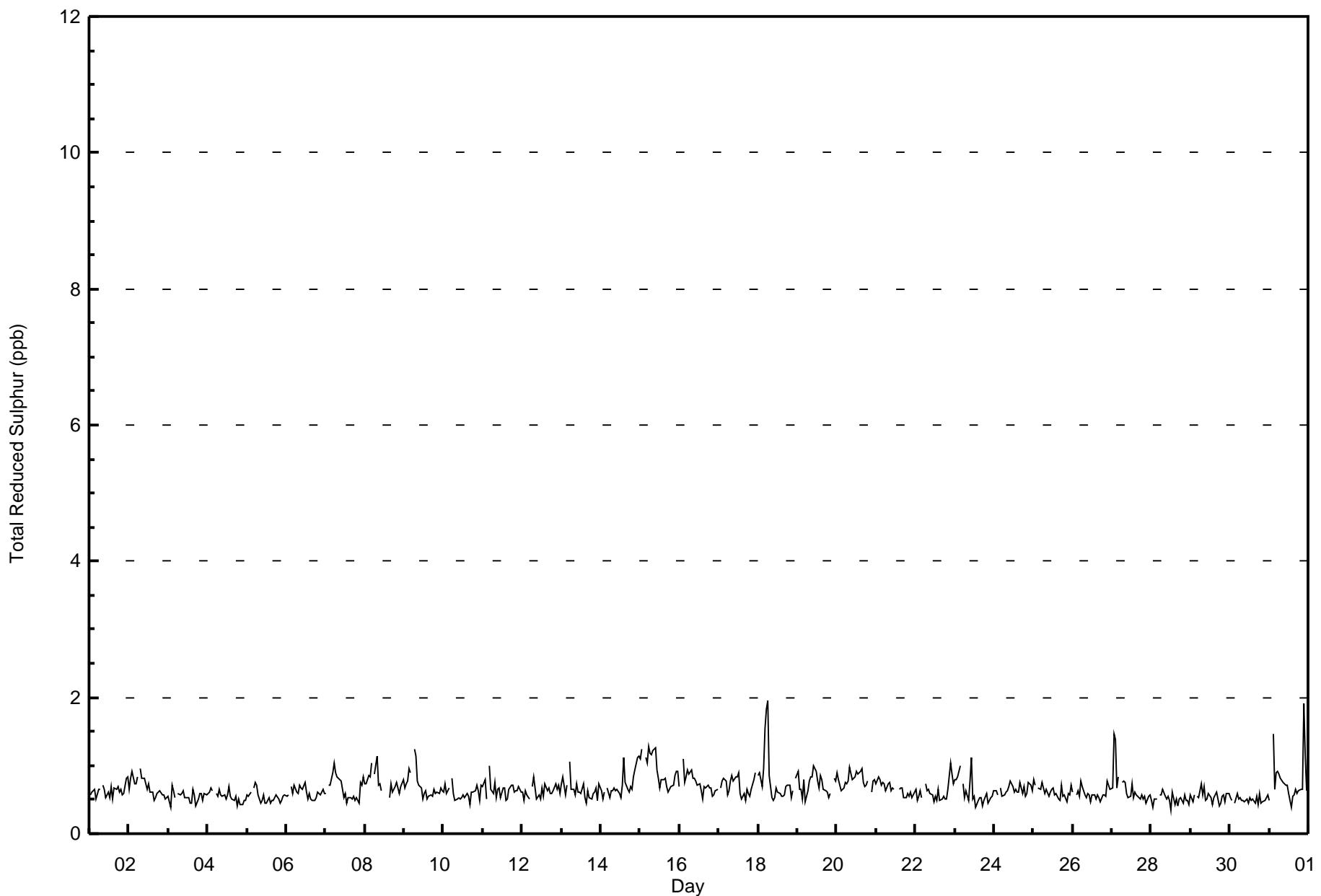


Peace Airshed Zone Association Summary of Hourly Maximums

Henry Pirker - Total Reduced Sulphur (TRS) - ppb

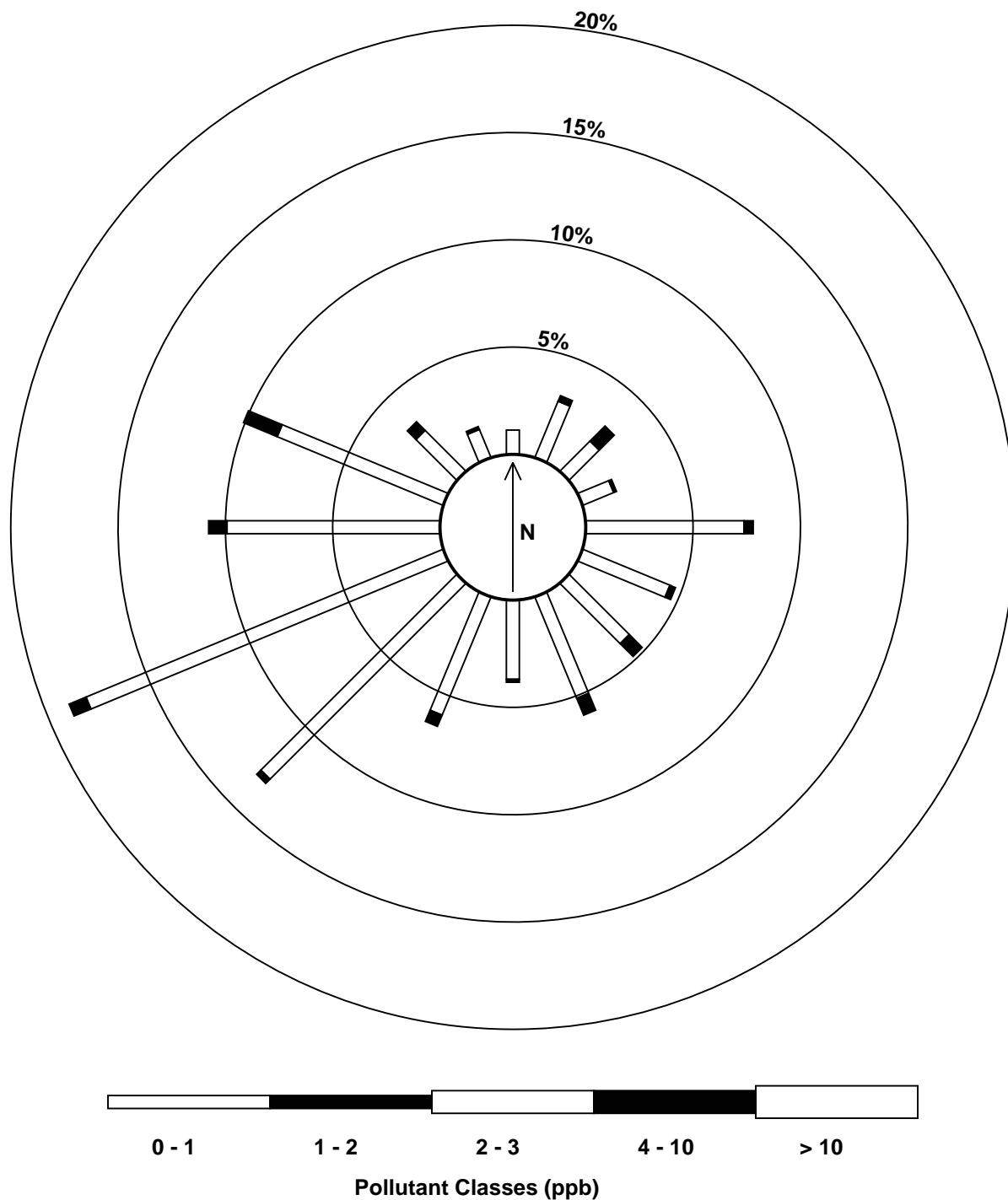
August 1, 2008 to September 1, 2008

Hourly Maximums for TRS at Henry Pirker
August 2008



Pollutant Rose for TRS at Henry Pirker

August 2008



Peace Airshed Zone Association

Summary of Hourly Averages

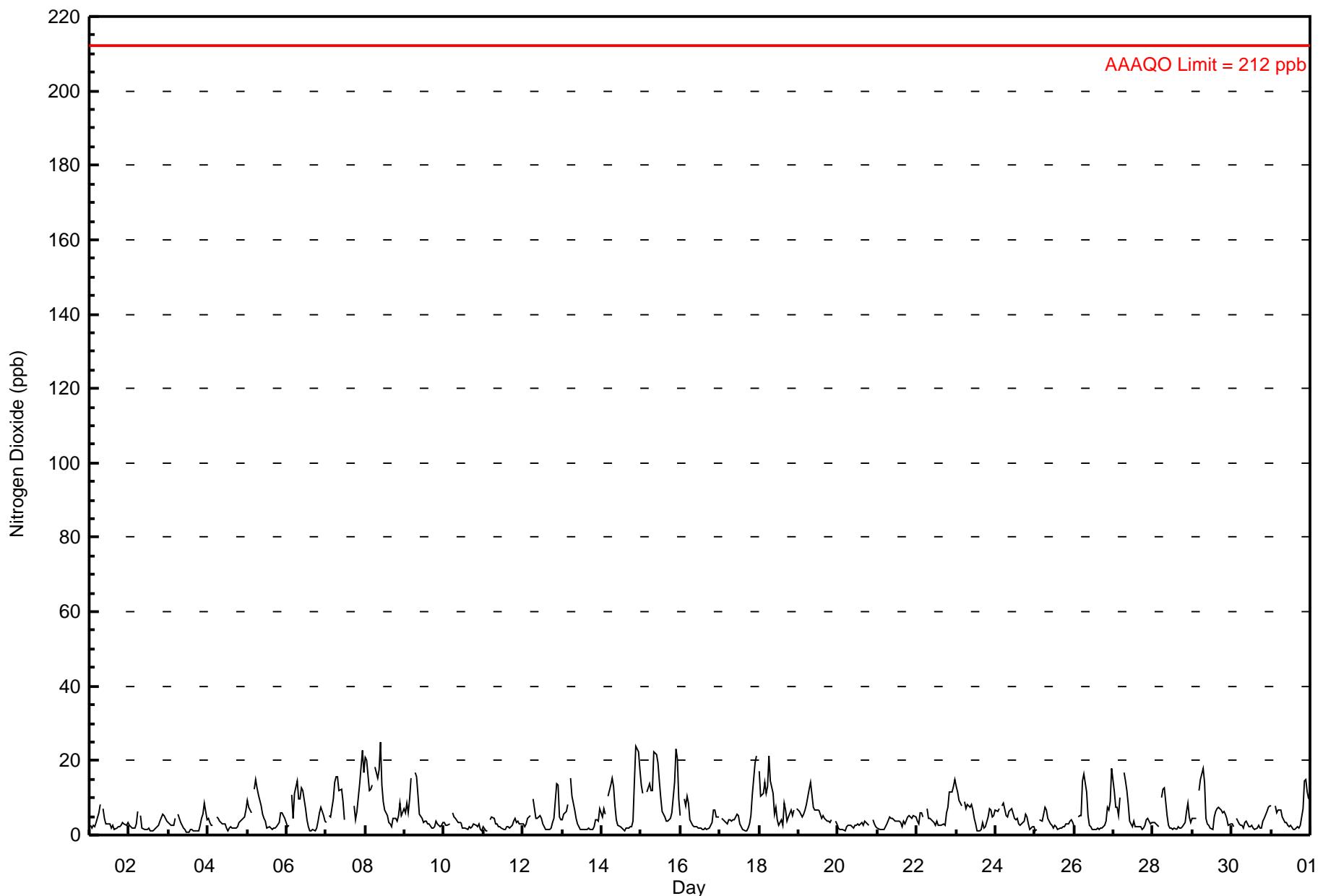
Henry Pirker - Nitrogen Dioxide (NO_2) - ppb

August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 24.9 ppb on Aug 8 10:00 Maximum Daily Average: 11.9 ppb on Aug 15																		Hours in Service: 744								
Minimum Value: 1 ppb on Aug 3 13:00 Minimum Daily Average: 2.5 ppb on Aug 20																		Hours of Data: 708								
Maximum Diurnal Average: 10.0 ppb at hour 7 Minimum Diurnal Average: 2.3 ppb at hour 15																		Hours of Missing Data: 36								
Monthly Average: 5.32 ppb Percentiles: P ₁ = 1.0 P ₁₀ = 1.7 Q ₁ = 2.3 Median = 3.8 Q ₃ = 6.6 P ₉₀ = 12.0 P ₉₉ = 21.1																		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	3	2	2	2	3	6	8	A	7	4	3	3	3	2	3	1	2	2	2	3	3	3	3	3.2	8.1	
2-Aug	3	2	2	2	3	6	A	5	2	2	1	1	2	1	1	1	2	2	3	4	6	5	5	4	2.8	6.4
3-Aug	3	3	2	3	4	A	6	3	3	2	1	1	1	1	1	1	1	1	1	3	4	6	8	4	2.8	8.5
4-Aug	5	3	3	2	A	5	5	4	3	3	3	2	1	2	2	2	2	2	2	3	4	4	5	7	3.2	6.8
5-Aug	9	7	6	A	12	15	13	11	8	6	4	4	2	2	2	2	2	2	2	4	6	6	5	5	5.8	15.0
6-Aug	2	2	A	11	5	11	15	10	10	13	12	7	4	2	1	1	1	1	2	4	6	7	5	4	5.9	14.7
7-Aug	3	A	5	5	10	14	16	16	12	12	9	4	C	C	C	C	A	8	4	6	14	18	23	17	10.9	22.7
8-Aug	21	20	12	12	13	A	18	15	18	25	13	9	7	5	3	3	2	5	5	4	5	9	5	7	10.3	24.9
9-Aug	6	8	6	10	15	A	17	16	11	6	5	3	4	4	3	3	2	2	2	4	3	2	3	3	6.0	16.9
10-Aug	3	3	3	3	A	6	5	4	3	3	3	2	2	2	2	2	2	2	3	2	2	3	1	1	2.7	5.8
11-Aug	2	1	1	A	4	5	5	3	3	2	2	2	1	2	2	2	2	3	4	5	3	4	3	3	2.8	4.7
12-Aug	3	2	3	4	5	A	10	7	4	5	5	3	2	2	2	2	2	2	3	5	14	13	5	4	4.8	13.9
13-Aug	4	6	6	8	A	15	11	7	4	3	2	2	1	2	2	2	2	2	4	4	4	4	7	4.3	15.1	
14-Aug	5	7	5	A	11	14	15	13	8	4	3	2	2	1	2	2	2	2	4	14	24	23	17	7.9	23.9	
15-Aug	13	11	A	12	13	14	12	12	22	22	19	14	10	6	5	4	4	4	6	14	23	20	10	11.9	23.3	
16-Aug	5	A	10	8	11	8	4	3	2	2	2	2	2	1	2	2	2	3	7	7	5	5	5	4.2	10.6	
17-Aug	A	5	4	4	3	4	4	4	4	4	6	5	3	2	2	1	2	3	5	11	19	21	A	5.3	21.2	
18-Aug	17	10	11	14	11	13	21	15	11	6	7	4	2	4	3	9	7	4	5	7	5	7	7	8.7	21.1	
19-Aug	6	6	5	6	7	8	12	14	11	7	7	7	5	5	5	5	4	4	3	4	A	4	3	6.2	14.3	
20-Aug	2	2	2	1	1	2	3	3	3	2	3	2	3	3	3	3	4	4	3	3	A	4	3	2.5	4.1	
21-Aug	2	2	2	1	2	2	3	5	4	5	4	4	4	3	2	4	3	5	5	5	5	5	5	3.5	5.2	
22-Aug	4	3	6	6	5	A	7	5	5	4	3	2	4	3	3	3	3	3	6	7	12	12	13	15	5.7	14.8
23-Aug	13	11	9	8	A	9	7	8	8	8	7	4	3	1	1	2	3	2	5	7	7	5	5	5	5.9	13.1
24-Aug	7	6	7	A	8	8	9	5	5	6	7	7	4	4	4	3	2	3	4	5	5	3	1	2	4.8	8.6
25-Aug	1	2	A	4	4	6	7	7	4	3	3	2	3	2	2	2	2	2	3	4	4	4	3	3.2	7.3	
26-Aug	2	A	5	5	5	15	16	11	5	3	2	1	2	2	2	2	2	3	4	7	7	9	18	5.6	18.0	
27-Aug	11	7	7	5	10	A	17	14	12	8	4	2	4	2	2	2	2	2	3	4	4	3	3	5.8	16.7	
28-Aug	3	3	3	2	A	10	12	13	5	3	2	2	2	2	2	2	2	2	3	6	8	5	3	4.3	12.8	
29-Aug	4	4	4	A	12	15	18	14	5	3	3	2	1	5	6	7	8	7	6	6	5	3	3	6.4	18.1	
30-Aug	3	2	A	4	3	2	3	2	3	4	2	2	2	1	2	3	2	2	4	5	6	8	8	3.3	7.8	
31-Aug	8	A	8	6	7	7	5	3	3	3	2	3	2	1	2	2	2	3	7	15	15	12	10	5.6	14.7	
																				Diurnal Average						
																				Diurnal Maximum						

Hourly Averages for NO₂ at Henry Pirker

August 2008



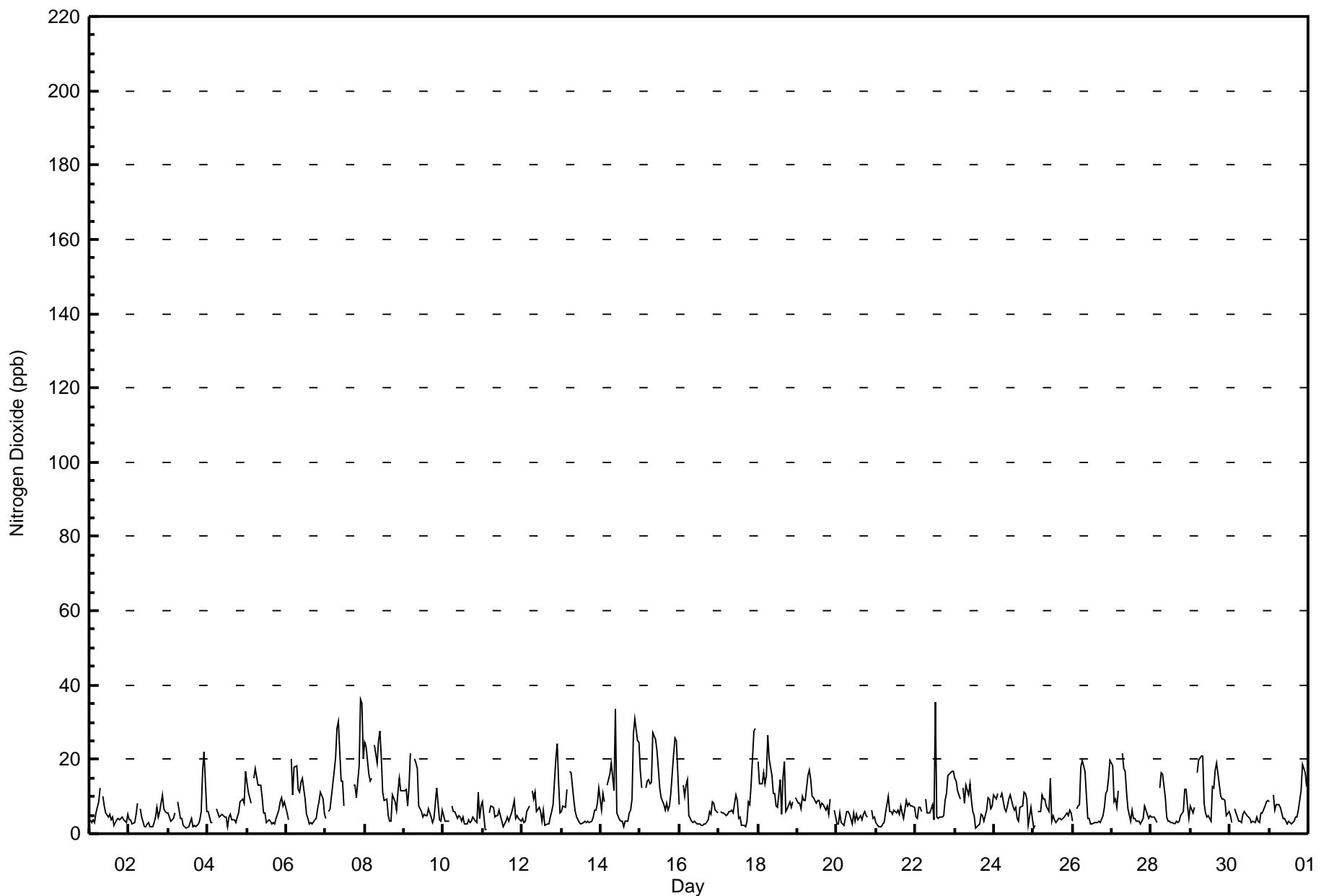
Peace Airshed Zone Association Summary of Hourly Maximums

Henry Pirker - Nitrogen Dioxide (NO₂) - ppb

Maximum Value: 36.1 ppb on Aug 7 22:00																				Maximum Daily Average: 17.1 ppb on Aug 7																				Hours in Service:		744			
Minimum Value: 1 ppb on Aug 11 02:00																				Minimum Daily Average: 4.5 ppb on Aug 20																				Hours of Data:		708			
Maximum Diurnal Average: 12.9 ppb at hour 7																				Minimum Diurnal Average: 4.0 ppb at hour 15																				Hours of Missing Data:		36			
Monthly Average: 8.01 ppb																				Percentiles: P ₁ = 2.0 P ₁₀ = 3.0 Q ₁ = 3.9 Median = 6.1 Q ₃ = 10.1 P ₉₀ = 16.5 P ₉₉ = 27.4																				Hours of Calibration:		36			
Day	Hourly Period Ending At (MST)																																					Daily Average	Daily Maximum						
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24																					
1-Aug	4	3	4	3	6	9	12	A	10	7	6	5	5	4	5	2	4	4	4	4	5	4	3	5																		5.0	12.2		
2-Aug	4	4	3	3	5	8	A	7	5	2	2	3	3	2	2	3	4	2	2	3	5	6	11	7	6	6															4.6	10.6			
3-Aug	6	3	4	4	6	A	9	4	4	2	2	2	3	4	2	2	3	2	2	3	4	6	17	22	6															5.1	21.9				
4-Aug	6	5	3	3	A	7	6	5	5	5	5	5	5	4	4	4	3	4	3	4	6	8	9	8	17															5.5	16.6				
5-Aug	14	11	8	A	15	18	15	13	13	10	5	6	3	4	3	3	3	3	4	6	9	10	7	9															8.3	17.7					
6-Aug	6	4	A	20	10	18	18	12	11	14	15	9	5	4	3	3	3	3	4	7	9	11	9	5															8.8	20.3					
7-Aug	4	A	6	7	13	17	20	28	30	14	14	7	C	C	C	C	A	13	13	10	18	36	35	20															17.1	36.1					
8-Aug	25	23	16	14	15	A	24	19	25	27	20	11	9	9	5	4	3	10	9	6	11	15	12	12															14.1	27.4					
9-Aug	12	12	8	13	22	A	20	19	18	8	6	5	5	5	5	7	4	3	4	8	12	4	3	6															9.0	21.5					
10-Aug	5	3	3	3	A	7	6	6	4	5	4	3	4	2	2	4	3	3	4	3	3	11	4	8															4.6	11.3					
11-Aug	8	1	1	A	5	7	7	4	5	5	6	5	2	2	3	4	3	5	7	9	4	5	4	3															4.8	8.8					
12-Aug	4	3	3	6	7	A	11	9	11	6	7	6	3	6	2	2	3	4	6	8	20	24	14	5															7.6	24.1					
13-Aug	6	7	7	12	A	17	16	9	6	4	4	3	2	3	3	3	3	3	4	6	6	8	12	12															6.6	16.9					
14-Aug	6	11	8	A	13	16	19	15	11	34	5	4	3	3	2	3	3	5	6	9	27	31	25	24															12.5	33.7					
15-Aug	17	12	A	12	14	14	13	14	27	26	22	17	12	10	8	6	8	6	7	11	21	26	25	17															15.1	27.3					
16-Aug	8	A	13	10	13	15	5	3	3	3	3	3	2	2	3	3	4	6	5	9	8	6	6															5.8	14.6						
17-Aug	A	6	6	6	5	5	6	6	6	6	10	9	4	4	2	2	3	9	8	13	28	28	A															7.9	28.3						
18-Aug	19	13	13	16	13	15	26	20	16	11	11	7	7	14	5	15	19	6	7	9	7	9	A	10														12.7	26.4						
19-Aug	8	8	7	10	9	9	16	17	14	10	10	8	9	9	7	8	8	6	7	5	9	A	6	5														9.0	17.3						
20-Aug	3	2	6	3	2	4	6	6	5	3	6	3	5	4	5	4	5	6	5	4	A	7	4	4															4.5	6.5					
21-Aug	3	2	2	2	3	3	6	10	6	6	5	6	5	6	5	5	8	5	4	7	8	7	7	7															5.6	10.1					
22-Aug	4	4	7	7	6	A	9	6	6	5	8	4	35	4	4	4	5	5	9	11	16	17	17	17															9.1	35.3					
23-Aug	15	14	12	9	A	12	8	13	10	13	9	6	5	1	2	3	5	5	3	6	10	9	7	7															8.1	14.9					
24-Aug	10	9	11	A	10	11	7	6	7	9	10	7	6	7	4	3	7	8	11	11	9	2	7	4															7.8	11.4					
25-Aug	1	2	A	6	6	10	9	9	7	6	15	3	5	4	3	4	4	4	4	5	5	6	5															5.7	14.9						
26-Aug	3	A	7	7	8	18	20	17	10	4	4	2	2	3	3	3	3	5	7	11	15	20															8.2	19.9							
27-Aug	18	8	9	7	11	A	22	17	17	11	7	3	6	4	4	3	3	2	3	4	7	6	4	5														8.1	21.8						
28-Aug	4	4	3	A	12	16	16	10	4	3	3	3	3	2	3	3	3	5	6	12	12	7	4														6.4	16.5							
29-Aug	7	5	7	A	16	20	21	21	8	6	4	5	3	13	12	17	19	13	10	9	9	5	6														10.8	21.0							
30-Aug	5	3	A	7	4	3	3	3	5	6	5	4	4	3	3	3	4	3	3	5	5	7	8	9														4.8	9.0						
31-Aug	8	A	10	6	8	8	7	4	4	4	3	2	3	2	3	3	5	5	6	12	19	17	16	13														7.6	18.5						
	8.2	6.9	7.0	7.7	9.5	11.4	12.9	11.4	10.4	8.9	7.7	5.4	5.7	4.9	4.0	4.6	5.1	5.1	6.0	7.0	10.7	12.3	11.1	9.2															Diurnal Average						
	24.6	23.4	16.1	20.3	21.5	19.7	26.4	28.4	30.2	33.7	22.4	17.4	35.3	14.5	12.2	17.3	19.4	13.1	13.0	11.7	26.9	36.1	35.1	24.4															Diurnal Maximum						

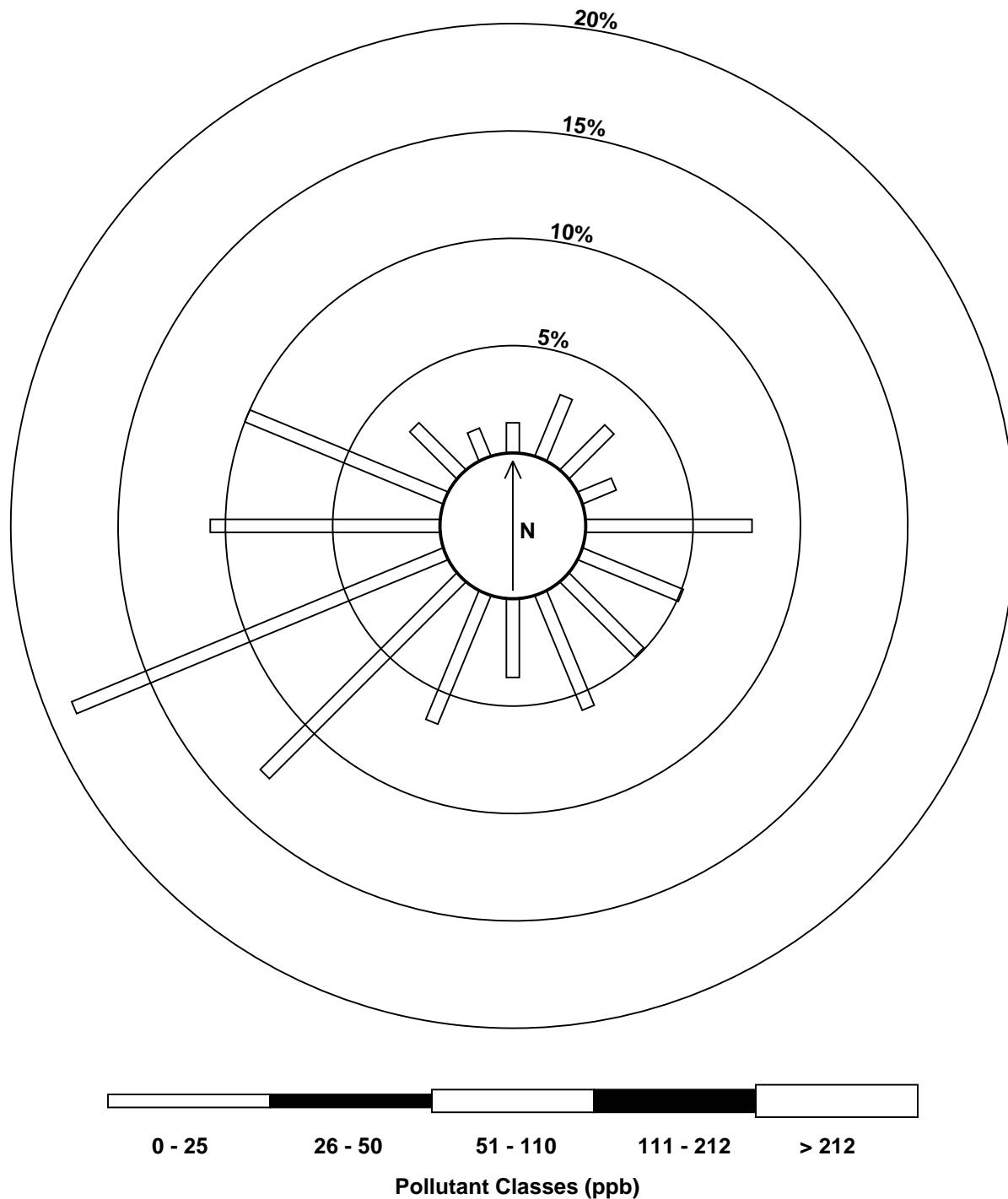
C - Calibration A - Automated Daily Zero Span

Hourly Maximums for NO₂ at Henry Pirker
August 2008



Pollutant Rose for NO₂ at Henry Pirker

August 2008

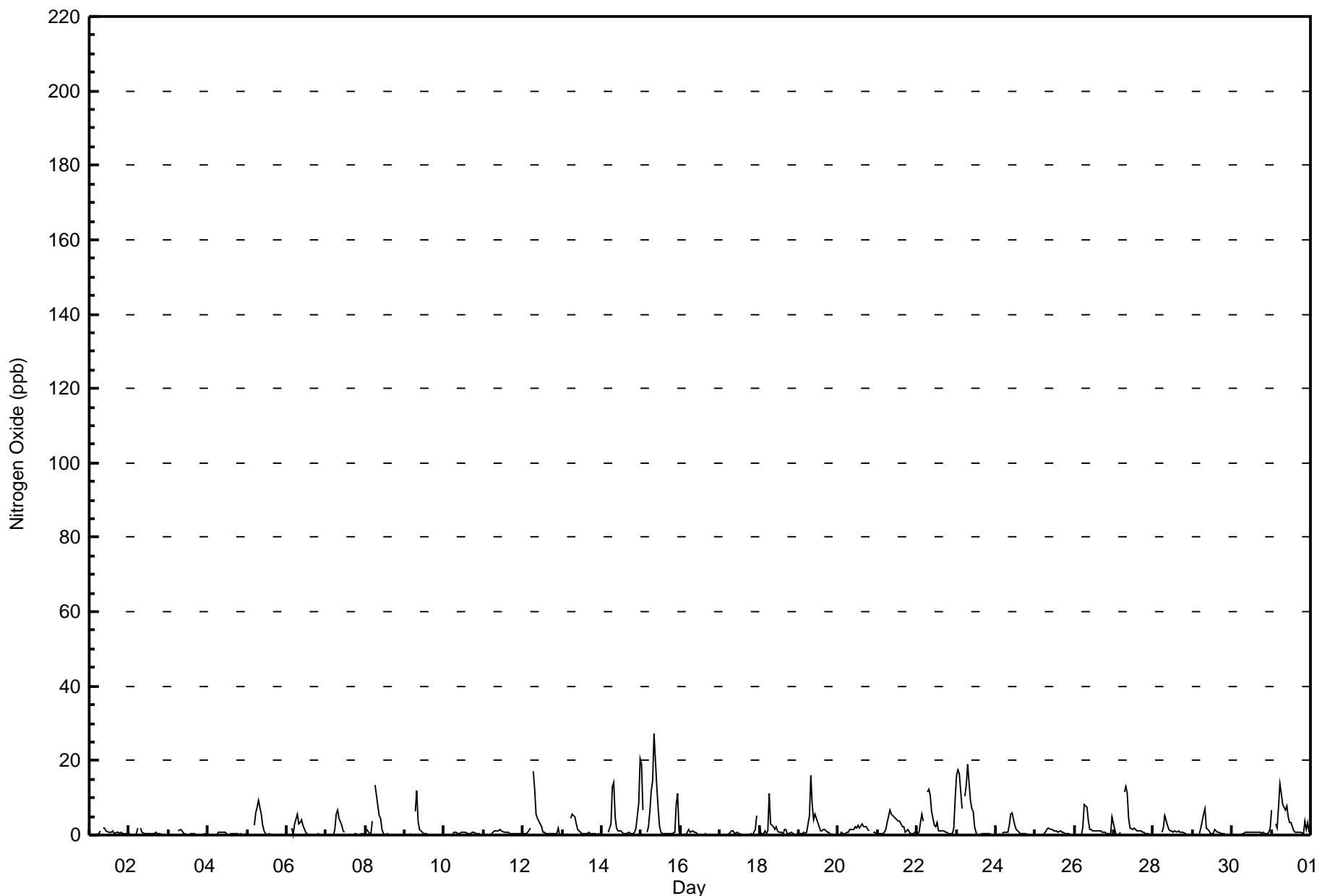


Peace Airshed Zone Association Summary of Hourly Averages

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
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																				Percent Operational Time:																				Percent Operational Time:		100.0
Day	Hourly Period Ending At (MST)																																								Daily Average	Daily Maximum
1-Aug	0	0	0	0	0	0	1	A	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.9				
2-Aug	0	0	0	0	0	2	A	2	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	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	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	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	0.3	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	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	0	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	0	0	0	0	0	0	0	0	0	0	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	0	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	0	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	1	1	1	1	1	0	0	0	0	0	0	0	0	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	1.4				
12-Aug	0	0	0	1	2	A	17	12	6	5	3	2	1	1	1	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	2.4	17.1				
13-Aug	0	0	0	0	A	5	6	5	3	1	1	1	1	0	1	0	1	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1.2	5.8				
14-Aug	0	0	0	A	1	3	13	14	5	2	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	2	8	20	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	0	0	0	1	8	11	1	5.9	27.2													
16-Aug	0	A	0	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	1.6				
17-Aug	A	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	5	A	0	0	0	0	0	0	0	0	0	0	0.6	5.0				
18-Aug	3	0	0	1	0	1	11	3	2	2	2	1	1	0	2	1	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	15.9				
20-Aug	0	0	1	0	0	1	1	1	1	2	2	2	2	2	3	2	2	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	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	0	1	0	0	0	0	0	0	0	0	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	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	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	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	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	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	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	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	1	1	1	0	0	0	0	0	0	0	0	0	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	1	1	1	1	1	0	0	0	0	0	0	0	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	1	1	1	1	1	1	0	0	0	0	0	0	0	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	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	1	1	1	0	4	1	3	1	4.0	13.7												
	1.6	1.1	1.0	0.8	1.1	2.5	6.5	4.6	3.0	2.2	1.3	1.0	0.8	0.7	0.7	0.7	0.7	0.7	0.5	0.5	0.4	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																

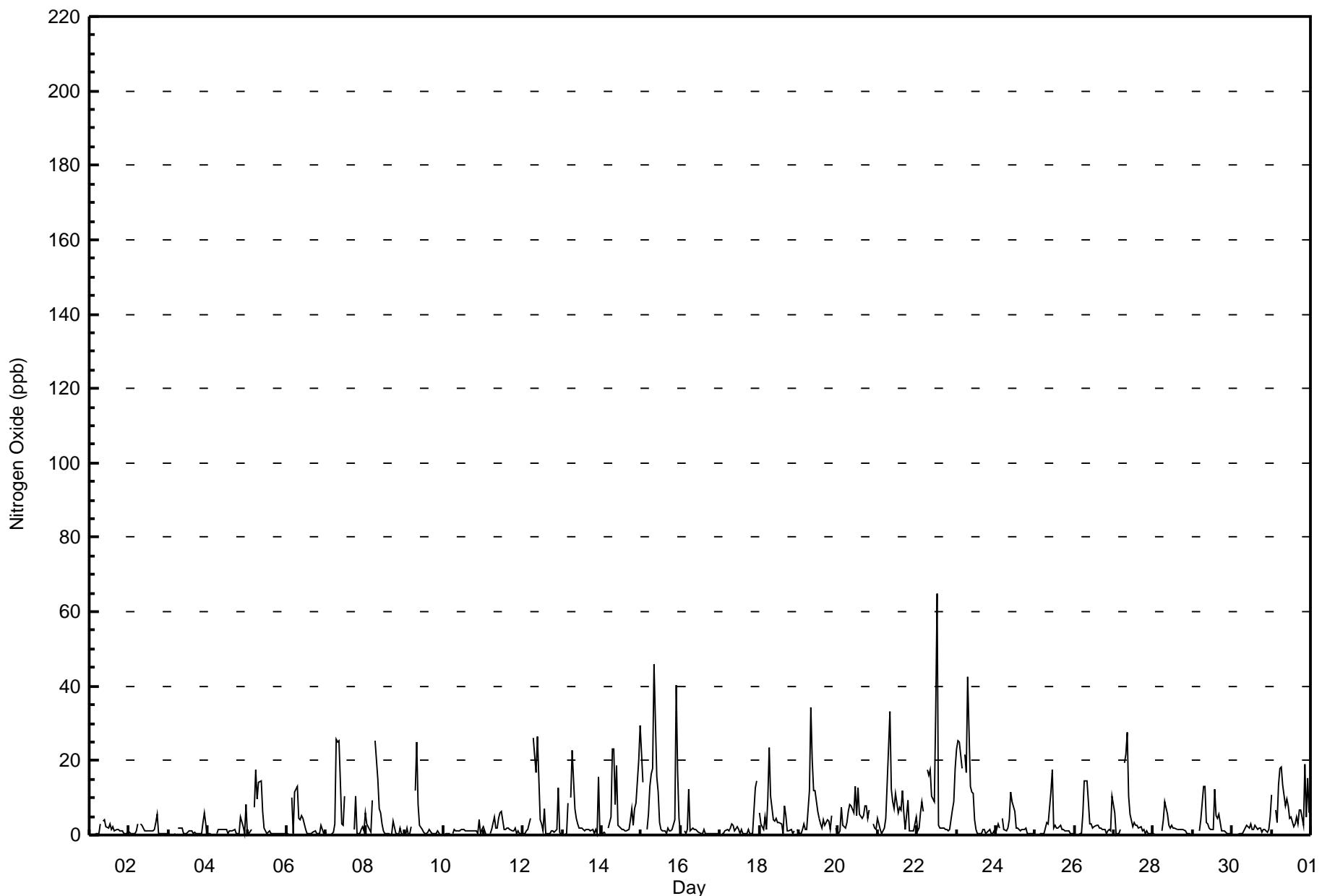
Hourly Averages for NO at Henry Pirker
August 2008



Peace Airshed Zone Association Summary of Hourly Maximums

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

Hourly Maximums for NO at Henry Pirker
August 2008



Peace Airshed Zone Association Summary of Hourly Averages

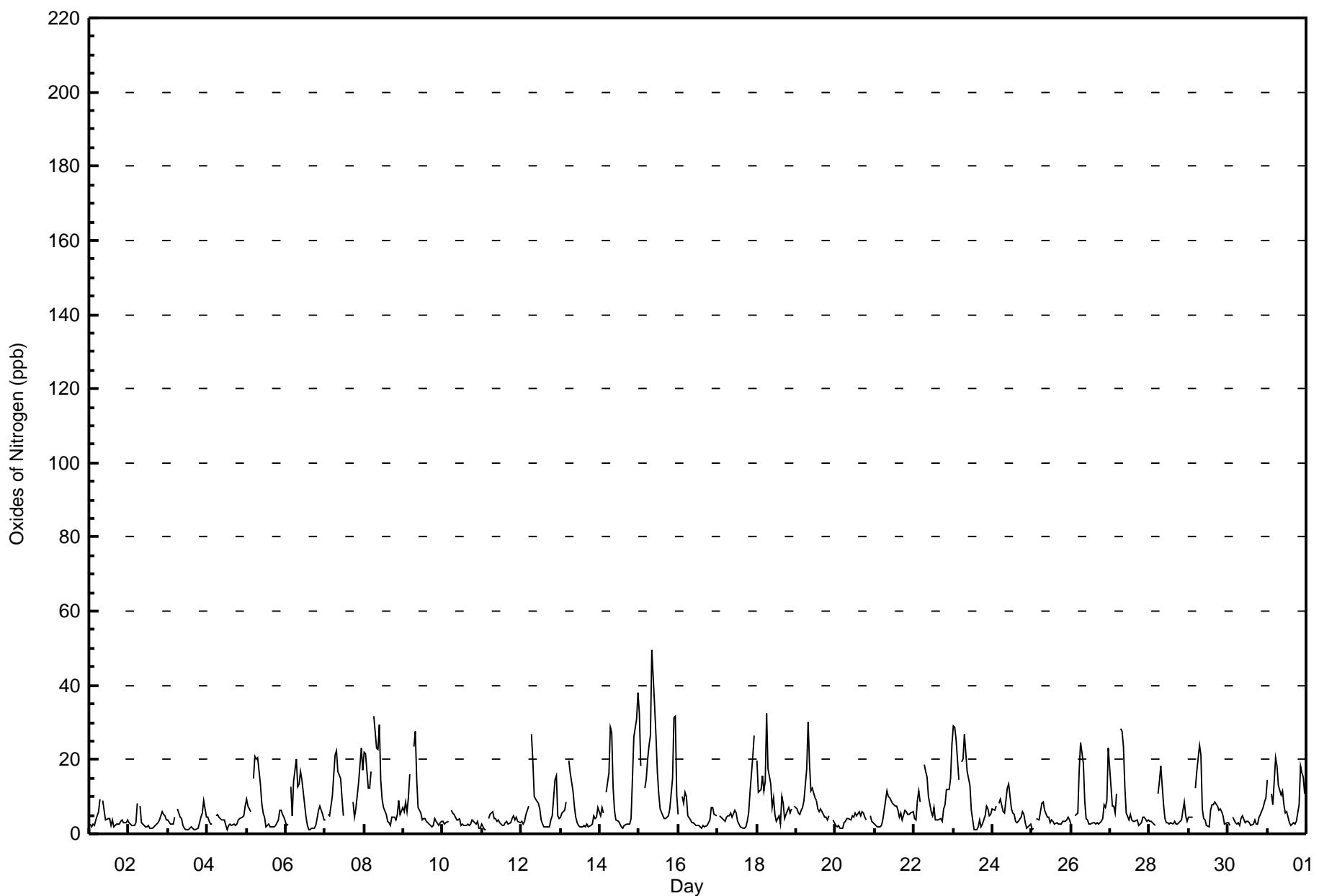
Henry Pirker - Oxides of Nitrogen (NO_X) - ppb

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-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	2	1	1	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	5	4	4	7	5	7	5.5	19.8									
14-Aug	5	7	6	A	11	17	29	27	13	6	4	3	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	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	3	4	7	7	5	5	4.6	11.3										
17-Aug	A	5	4	4	3	4	5	5	5	5	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	5	4	4	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	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	4	4	4	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	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	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	5	3	3	3	7.5	23.9										
30-Aug	3	2	A	5	3	3	2	4	5	3	3	3	2	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	4	8	18	16	15	11	9.8	20.4										
																									Diurnal Average										
																									Diurnal Maximum										

C - Calibration A - Automated Daily Zero Span

Hourly Averages for NO_X at Henry Pirker
August 2008

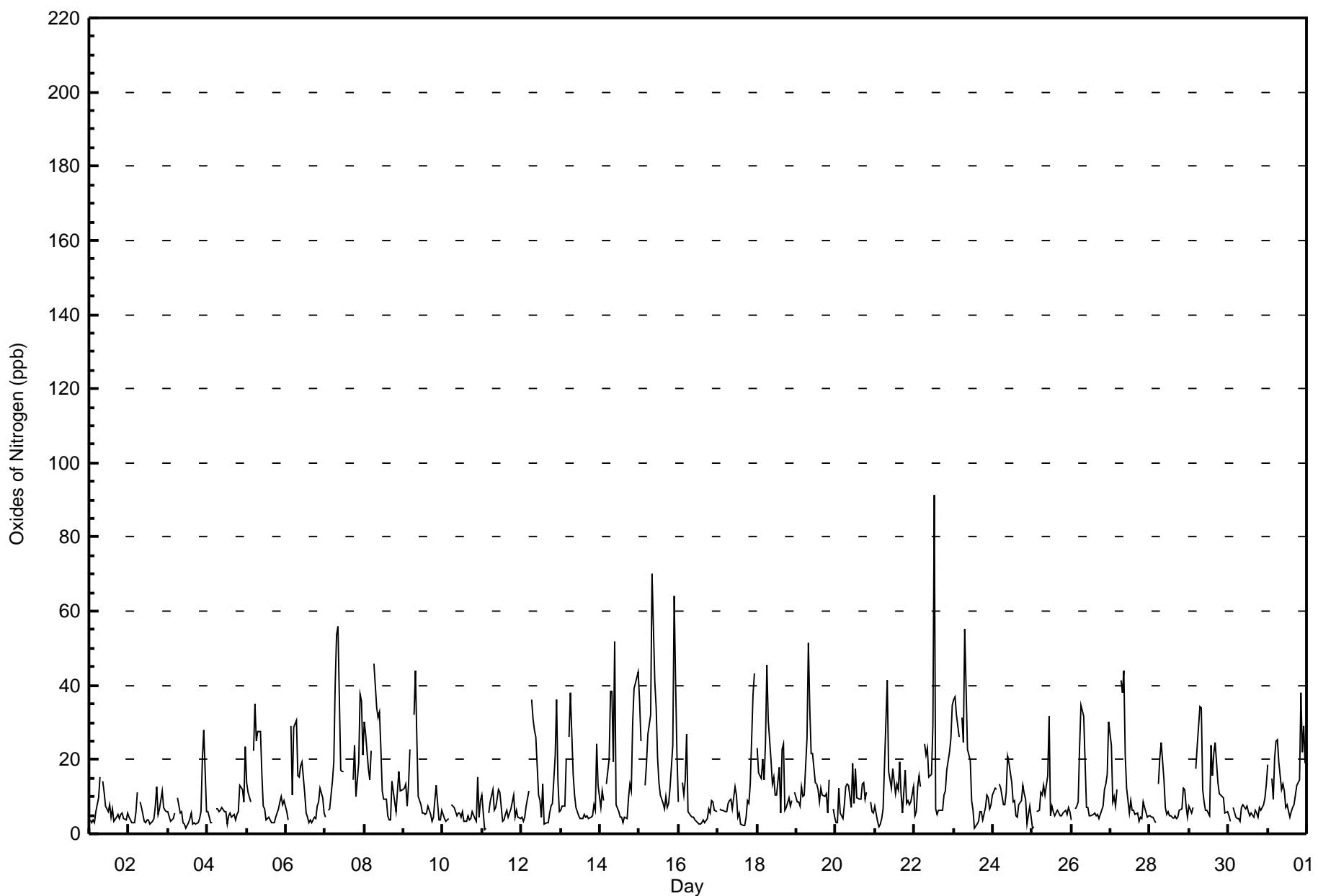


Peace Airshed Zone Association Summary of Hourly Maximums

Henry Pirker - Oxides of Nitrogen (NO_X) - ppb

August 1, 2008 to September 1, 2008

Hourly Maximums for NO_X at Henry Pirker
August 2008



Peace Airshed Zone Association

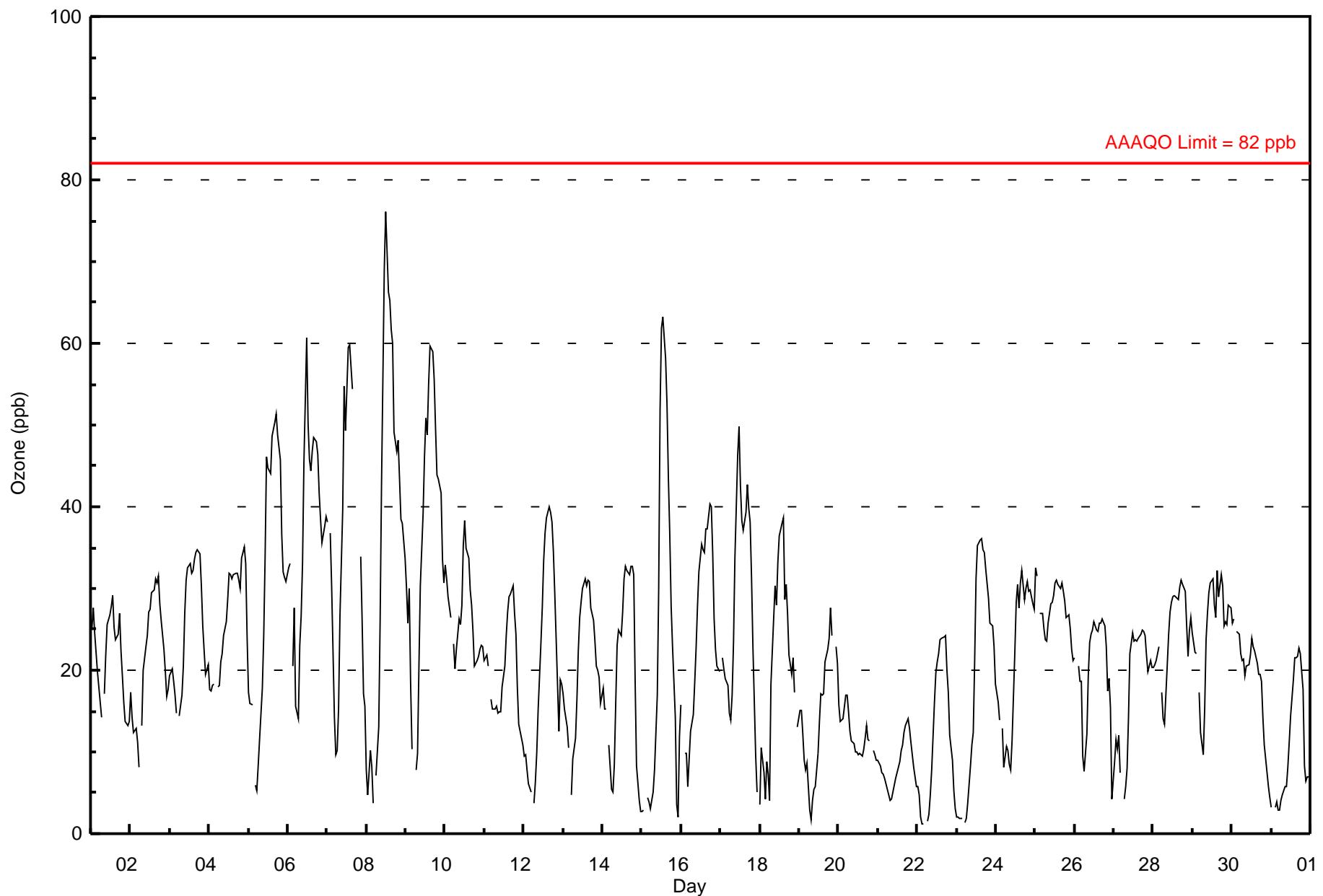
Summary of Hourly Averages

Henry Pirker - Ozone (O_3) - ppb

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																			Hours of Data: 709							
Minimum Value: 1 ppb on Aug 22 05:00 Minimum Daily Average: 8.4 ppb on Aug 21																			Hours of Missing Data: 35							
Maximum Diurnal Average: 33.0 ppb at hour 15 Minimum Diurnal Average: 10.1 ppb at hour 7																			Hours of Calibration: 35							
Monthly Average: 22.75 ppb 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-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	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	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	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	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	21	23	24	28	24	23	23	21	21	14.2	27.6
20-Aug	16	14	14	14	17	17	15	13	11	10	10	10	10	10	10	12	13	12	11	A	10	10	9	12	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	25	23	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	30	28	26	27	25	22	21	21	27.6	32.6
26-Aug	22	A	20	19	19	9	8	12	19	23	24	25	26	25	25	26	26	25	23	17	19	15	4	4	19.9	26.3
27-Aug	9	12	10	12	7	A	4	6	8	14	22	25	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	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	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	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	

Hourly Averages for O₃ at Henry Pirker

August 2008



Peace Airshed Zone Association Summary of Hourly Maximums

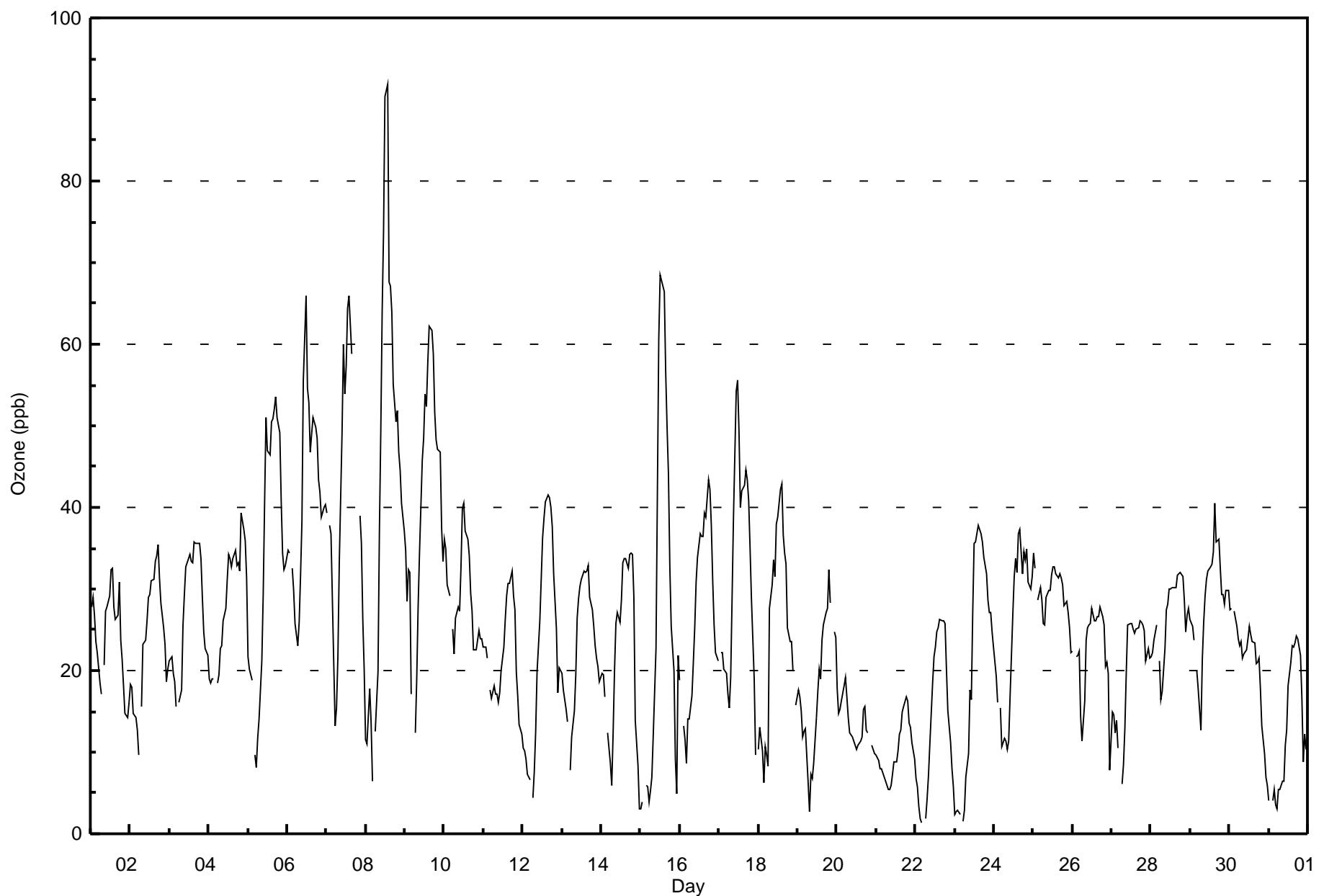
Henry Pirker - Ozone (O_3) - ppb
August 1, 2008 to September 1, 2008

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			
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											Percent Operational Time:											Percent Operational Time:		100.0			
Day	Hourly Period Ending At (MST)																									Daily Average	Daily Maximum
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	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	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	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	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	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	32	32	31	29	25	27	28	26	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	28	30	30	28.6	40.5		
30-Aug	27	28	A	27	25	24	23	23	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	
																									Diurnal Average		
																									Diurnal Maximum		

C - Calibration

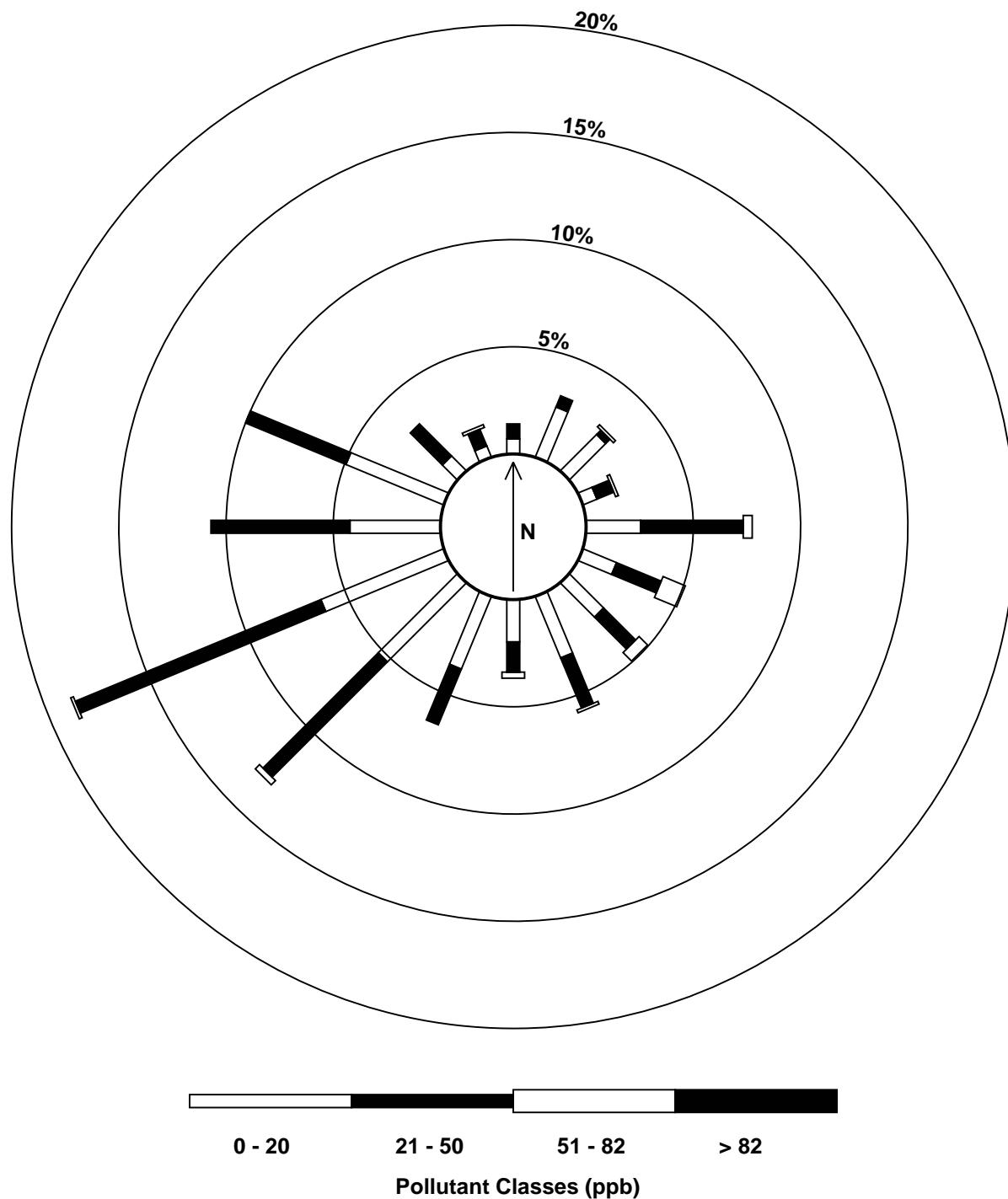
A - Automated Daily Zero Span

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 (O_3) - ppb

August 1, 2008 to September 1, 2008

Number of Exceedences (AAAQO): 8-hr: 0																			Hours in Service: 744						
Maximum Value: 62.9 ppb on Aug 8 18:00																			Hours of Data: 737						
Minimum Value: 2.0 ppb on Aug 23 07:00																			Hours of Missing Data: 7						
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																			Hours of Calibration: 7						
																			Percent Operational Time: 100.0						
Day	Hourly Period Ending At (MST)																				Daily Maximum				
1-Aug	24	23	23	22	22	21	21	20	19	20	20	21	23	25	25	25	26	26	26	25	23	21	20	19	26.2
2-Aug	18	16	15	14	14	13	13	13	14	16	18	20	23	24	27	28	29	29	29	29	29	27	26	24	29.4
3-Aug	23	21	20	19	18	18	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	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	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	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	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	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	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	21	21	21	21	20	19	19	19	20	21	22	23	25	27	28	29	29	30	29	28	28	28	28	29.6
29-Aug	27	26	25	24	23	21	19	18	18	19	21	22	24	26	29	30	30	30	29	29	28	29	28	28	29.9
30-Aug	28	27	26	26	26	25	24	23	22	22	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	
	Diurnal Maximums																								

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

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 Maximum Value: 0.37 ppm on Aug 14 23:00 Maximum Daily Average: 0.11 ppm on Aug 15																				Hours in Service: 744				
Minimum Value: 0.0 ppm on Aug 1 01:00 Minimum Daily Average: 0.02 ppm on Aug 1 Maximum Diurnal Average: 0.09 ppm at hour 22 Minimum Diurnal Average: 0.03 ppm at hour 15 Monthly Average: 0.048 ppm Percentiles: $P_1 = 0.00$ $P_{10} = 0.00$ $Q_1 = 0.02$ Median = 0.04 $Q_3 = 0.06$ $P_{90} = 0.09$ $P_{99} = 0.27$																				Hours of Data: 709				
Hours of Missing Data: 35 Hours of Calibration: 35 Percent Operational Time: 100.0																				Hours of Calibration: 35				
Percent Operational Time: 100.0																				Percent Operational Time: 100.0				
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Daily Average	Daily Maximum		
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	0.02	0.05		
2-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	0.03	0.07		
3-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	0.1	0.1	0.1	0.1	0.03	
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	0.03	0.08	
5-Aug	0.1	0.0	0.0	A	0.0	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	0.0	0.1	0.1	0.1	
6-Aug	0.1	0.1	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	0.1	0.0	
7-Aug	0.0	A	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	0.1	0.2	0.3	0.2	
8-Aug	0.2	0.2	0.1	0.1	0.1	A	0.1	0.1	0.2	0.1	0.1	0.0	0.0	C	C	C	C	0.0	0.0	0.0	0.0	0.0	0.08	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.06	
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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.06	0.14		
12-Aug	0.1	0.1	0.0	0.0	0.0	A	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.07	
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	0.05	
14-Aug	0.1	0.1	0.1	A	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	0.2	0.4	0.2	0.09	
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	0.2	0.3	0.3	0.11	
16-Aug	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	0.1	0.1	0.1	0.1	0.1	0.1	
17-Aug	A	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	0.1	0.2	0.2	A	0.05	
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	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.0	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	0.0	0.1	0.0	0.0	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	A	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.03	
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	0.1	0.2	0.02	
23-Aug	0.2	0.2	0.2	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	0.04	
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	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	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	0.05	
26-Aug	0.0	A	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	0.1	0.0	0.1	0.2	0.03	
27-Aug	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	0.11
28-Aug	0.1	0.1	0.1	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	0.1	0.1	0.1	0.1	0.05	
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	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.09	
30-Aug	0.0	0.1	A	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	0.05	
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	0.3	0.3	0.2	0.10	
	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	0.04	0.08	0.09	0.08	
	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	
																						Diurnal Maximum		

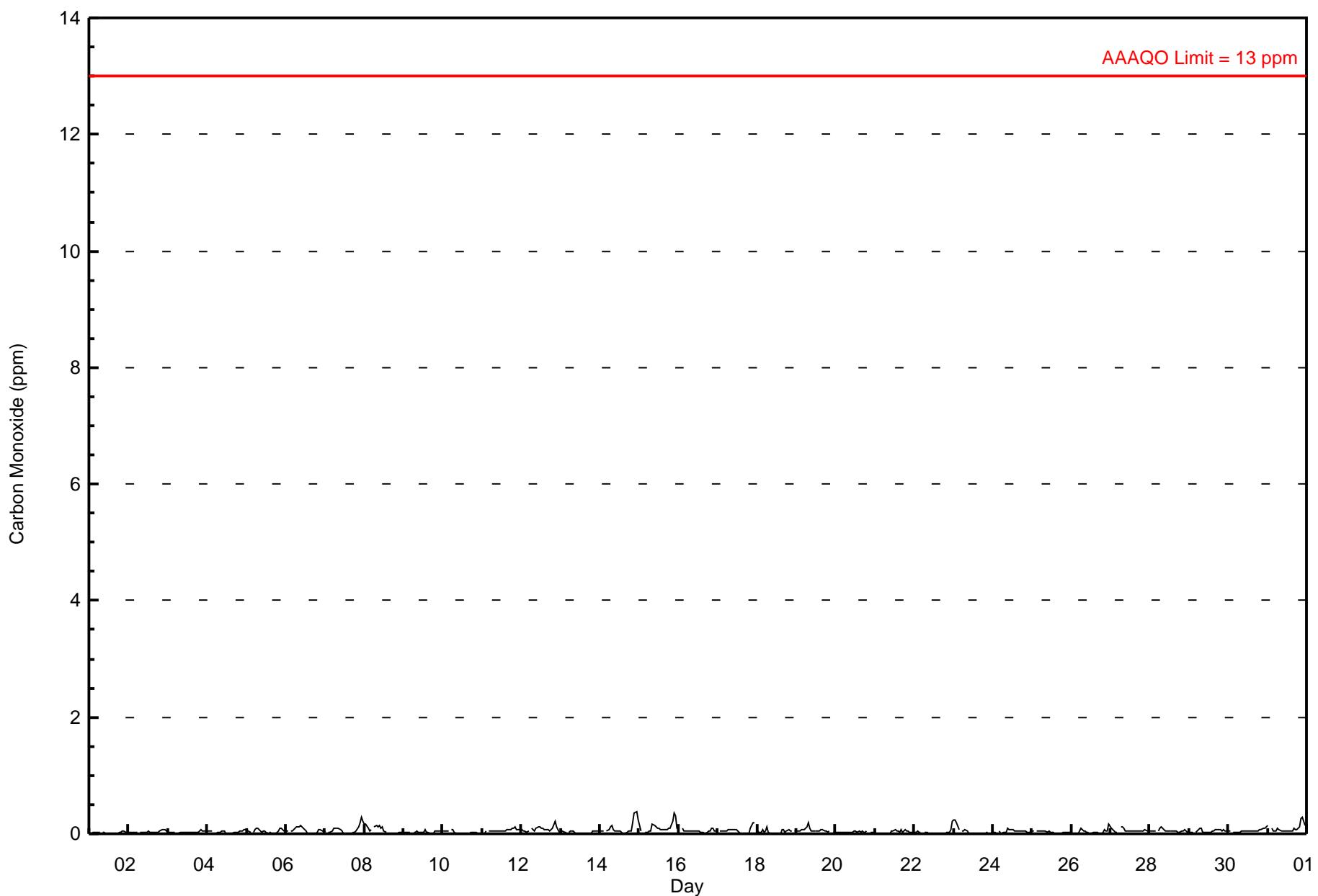
C - Calibration

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

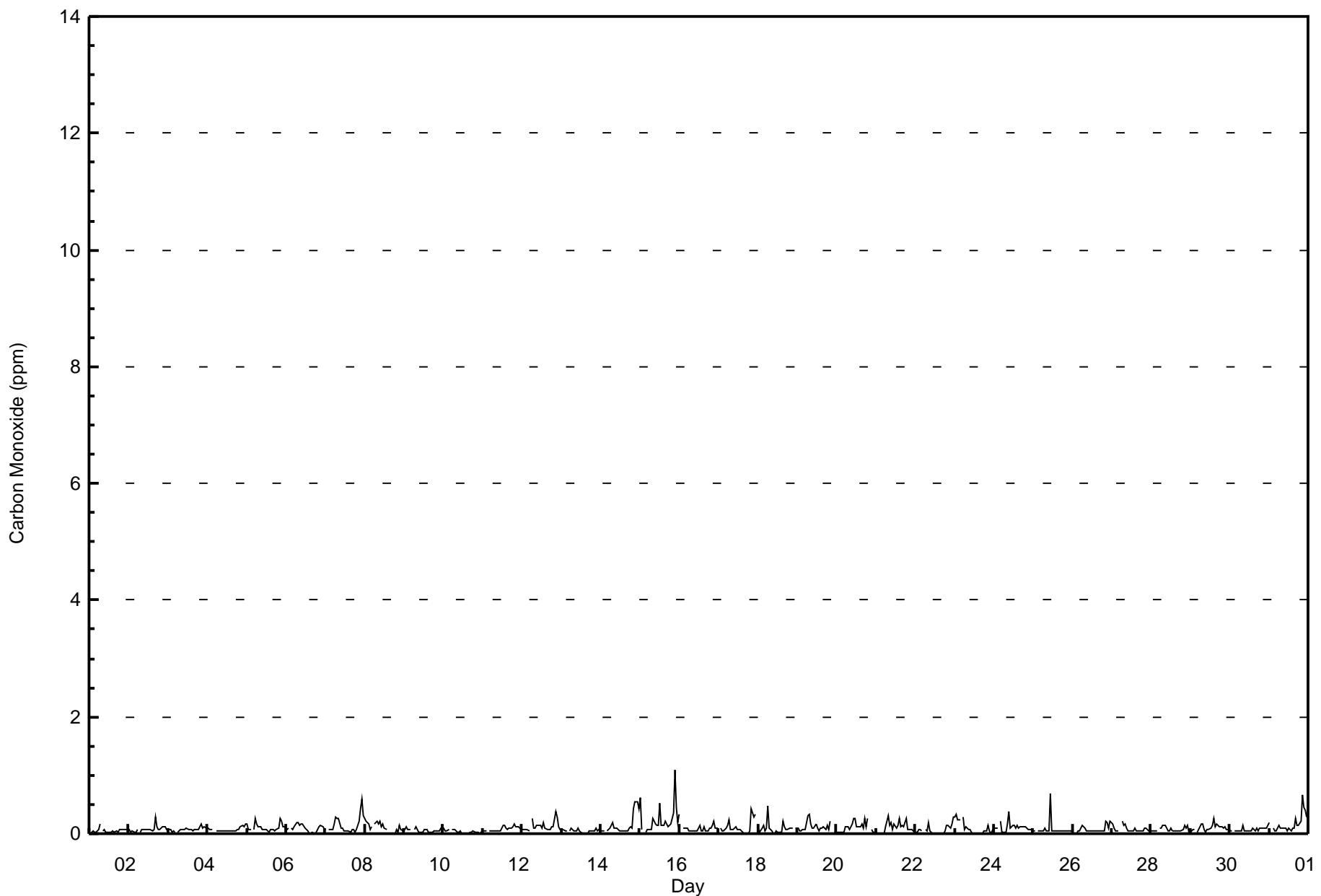
August 2008



Peace Airshed Zone Association Summary of Hourly Maximums

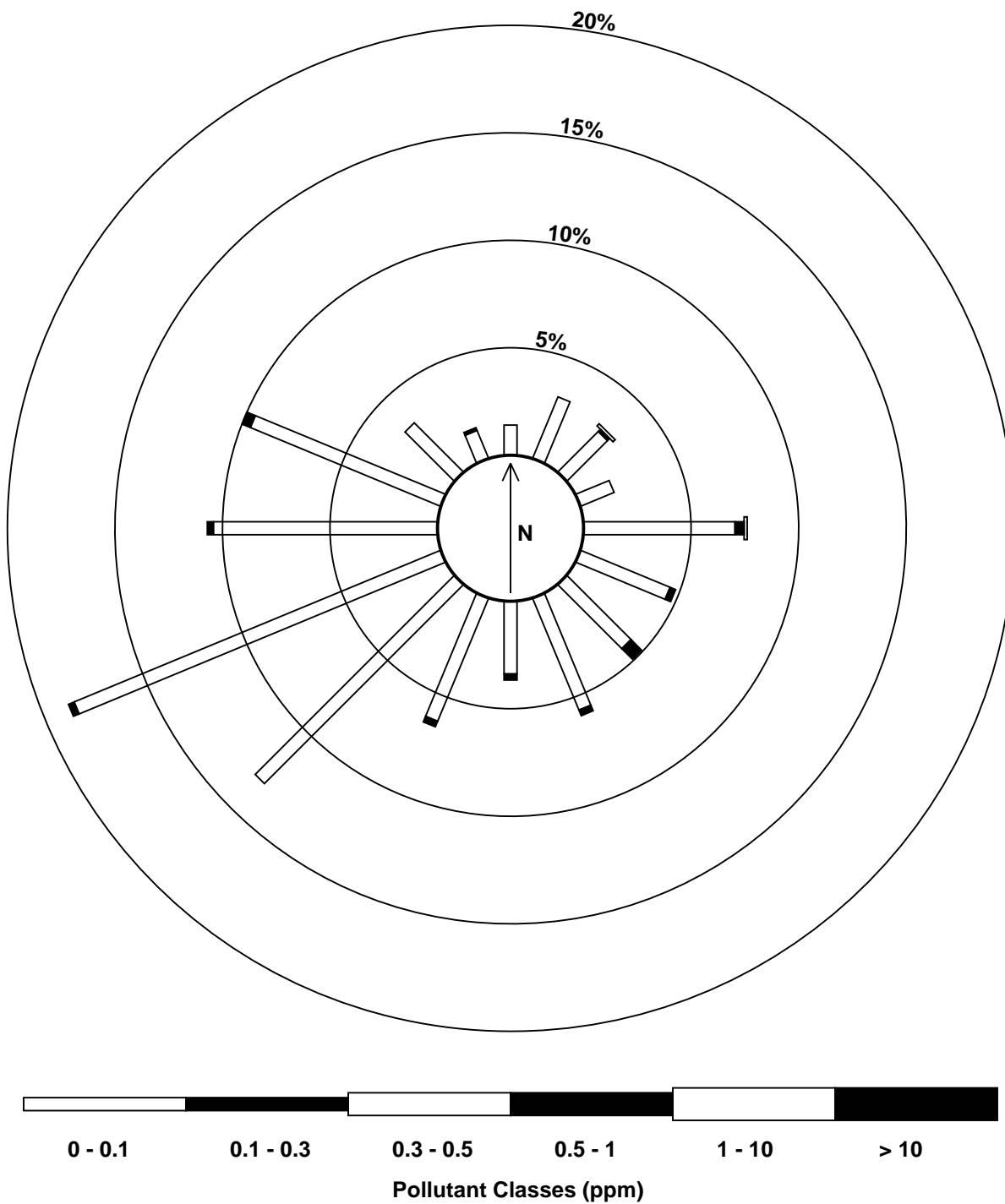
Henry Pirker - Carbon Monoxide (CO) - ppm

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

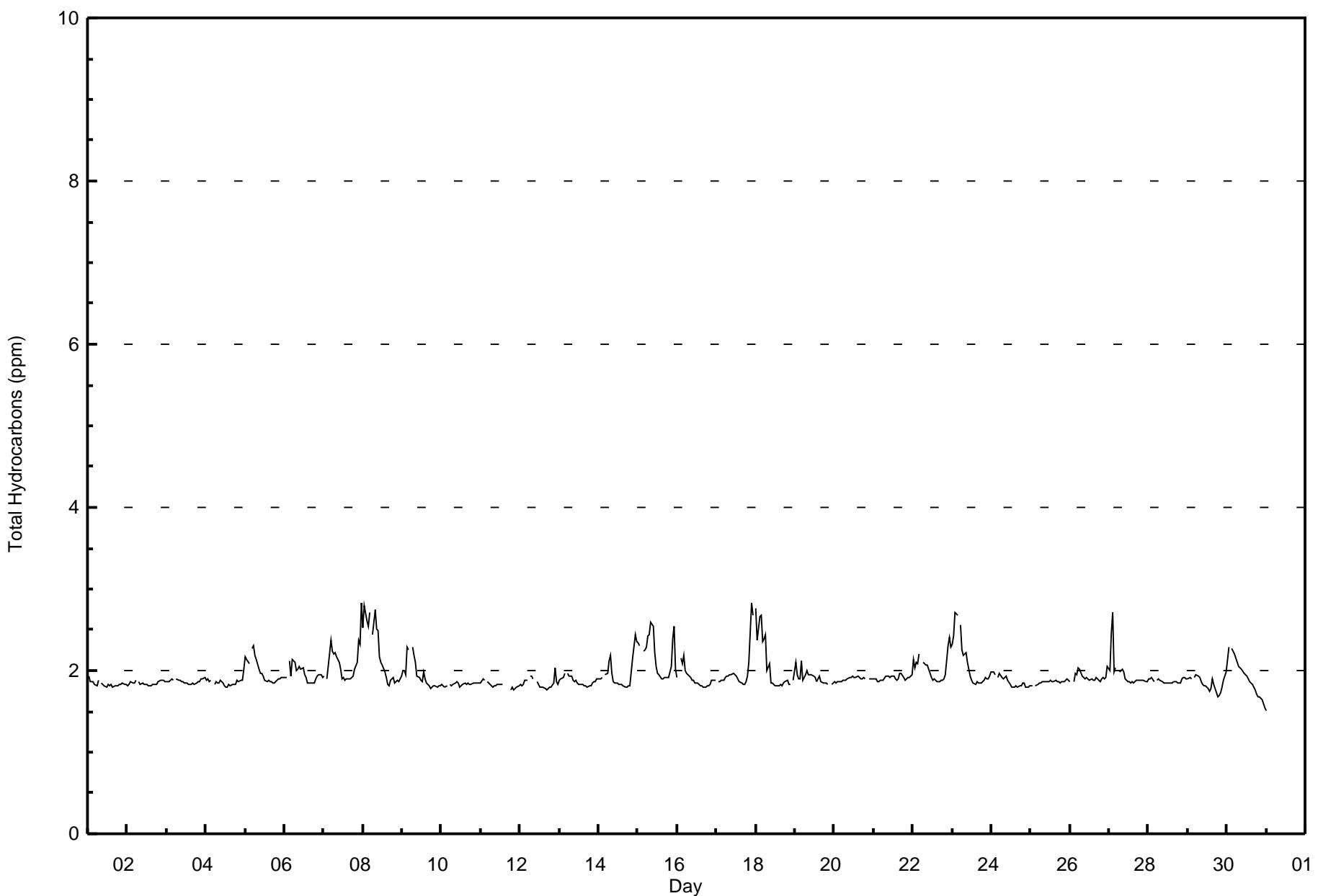
August 1, 2008 to September 1, 2008

Peace Airshed Zone Association
Summary of Hourly Averages

Henry Pirker - Total Hydrocarbons (THC) - ppm
August 1, 2008 to September 1, 2008

Maximum Value: 2.83 ppm on Aug 17 22:00 Maximum Daily Average: 2.19 ppm on Aug 8 Minimum Value: 1.5 ppm on Aug 31 01:00 Minimum Daily Average: 1.82 ppm on Aug 11 Maximum Diurnal Average: 2.06 ppm at hour 5 Minimum Diurnal Average: 1.84 ppm at hour 19 Monthly Average: 1.937 ppm Percentiles: $P_1 = 1.68$ $P_{10} = 1.81$ $Q_1 = 1.84$ Median = 1.88 $Q_3 = 1.94$ $P_{90} = 2.15$ $P_{99} = 2.71$																								Hours in Service:	744				
																								Hours of Data:	687				
																								Hours of Missing Data:	57				
																								Hours of Calibration:	35				
																								Percent Operational Time:	97.0				
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum			
1-Aug	1.9	1.9	1.9	1.9	1.8	1.8	1.9	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.84	1.93			
2-Aug	1.8	1.8	1.9	1.8	1.9	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.84	1.89			
3-Aug	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.87	1.92			
4-Aug	1.9	1.9	1.9	1.9	A	1.8	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2.0	1.86	2.02			
5-Aug	2.2	2.1	2.1	A	2.3	2.3	2.2	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.99	2.30			
6-Aug	1.9	1.9	A	2.1	1.9	2.1	2.1	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.9	1.8	1.9	1.9	2.0	2.0	1.9	1.96	2.13			
7-Aug	1.9	A	1.9	2.1	2.4	2.2	2.2	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.4	2.3	2.8	2.09	2.82			
8-Aug	2.5	2.8	2.6	2.5	2.7	A	2.4	2.7	2.5	2.5	2.2	2.1	2.1	2.0	1.9	1.8	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	2.19	2.80		
9-Aug	2.0	2.0	1.9	2.3	2.2	A	2.3	2.2	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.95	2.29			
10-Aug	1.8	1.8	1.8	1.8	A	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.83	1.86			
11-Aug	1.8	1.9	1.9	A	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	C	C	C	A	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.82	1.89			
12-Aug	1.8	1.8	1.8	1.9	1.9	A	1.9	1.9	1.9	P	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	1.9	1.8	1.85	2.03				
13-Aug	1.9	1.9	1.9	2.0	A	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.87	1.96			
14-Aug	1.9	1.9	1.9	A	1.9	2.0	2.1	2.1	2.2	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.2	2.4	2.4	1.95	2.44			
15-Aug	2.3	2.3	A	2.2	2.3	2.3	2.4	2.4	2.6	2.5	2.2	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.1	2.4	2.5	2.0	2.18	2.59			
16-Aug	1.9	A	2.2	2.1	2.2	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.90	2.19			
17-Aug	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.9	1.9	2.1	2.8	2.7	A	1.99	2.83				
18-Aug	2.8	2.4	2.7	2.7	2.4	2.4	2.4	2.0	2.1	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	A	1.9	2.07	2.76			
19-Aug	2.1	1.9	1.9	1.9	2.1	1.9	2.0	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.92	2.12			
20-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	A	1.8	1.8	1.9	1.90	1.93			
21-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.91	1.97			
22-Aug	2.1	2.0	2.1	2.1	2.2	A	2.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.3	2.4	2.3	2.03	2.40			
23-Aug	2.3	2.4	2.7	2.7	A	2.6	2.3	2.2	2.2	2.1	2.0	1.9	1.9	1.9	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.08	2.71		
24-Aug	2.0	2.0	2.0	A	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.87	1.98			
25-Aug	1.8	1.8	A	1.8	1.8	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.86	1.89			
26-Aug	1.9	A	1.9	2.0	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.92	2.05			
27-Aug	2.0	2.5	2.7	2.0	2.0	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.97	2.72			
28-Aug	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.87	1.92			
29-Aug	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.8	1.9	1.7	1.7	1.7	1.7	1.7	1.8	1.9	1.9	1.84	1.99			
30-Aug	2.1	2.3	A	2.3	2.2	2.2	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.6	1.5	1.92	2.29			
31-Aug	1.5	A	1.9	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	1.86				
1.99		2.03	2.02	2.05	2.06	2.02	2.04	2.02	1.99	1.96	1.92	1.89	1.87	1.86	1.85	1.85	1.85	1.84	1.84	1.85	1.88	1.96	1.97	1.95	Diurnal Average				
2.76		2.80	2.72	2.68	2.71	2.56	2.45	2.74	2.59	2.55	2.22	2.10	2.08	1.99	1.93	1.93	1.97	1.97	1.93	2.02	2.10	2.83	2.68	2.82	Diurnal Maximum				
C - Calibration												P - Power Failure												N - Not Valid					
																								A - Automated Daily Zero Span					

Hourly Averages for THC at Henry Pirker
August 2008

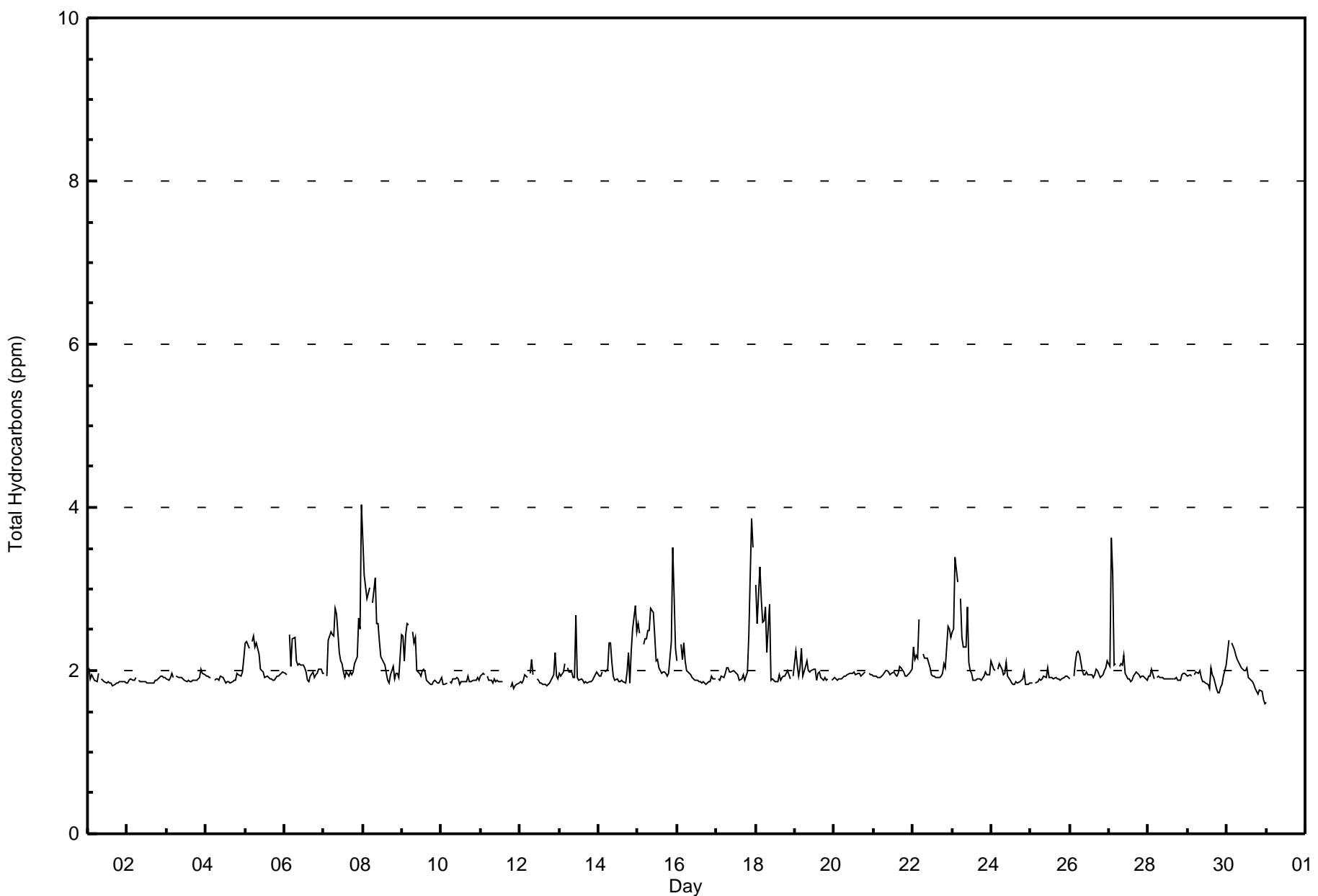


Peace Airshed Zone Association
Summary of Hourly Maximums

Henry Pirker - Total Hydrocarbons (THC) - ppm
August 1, 2008 to September 1, 2008

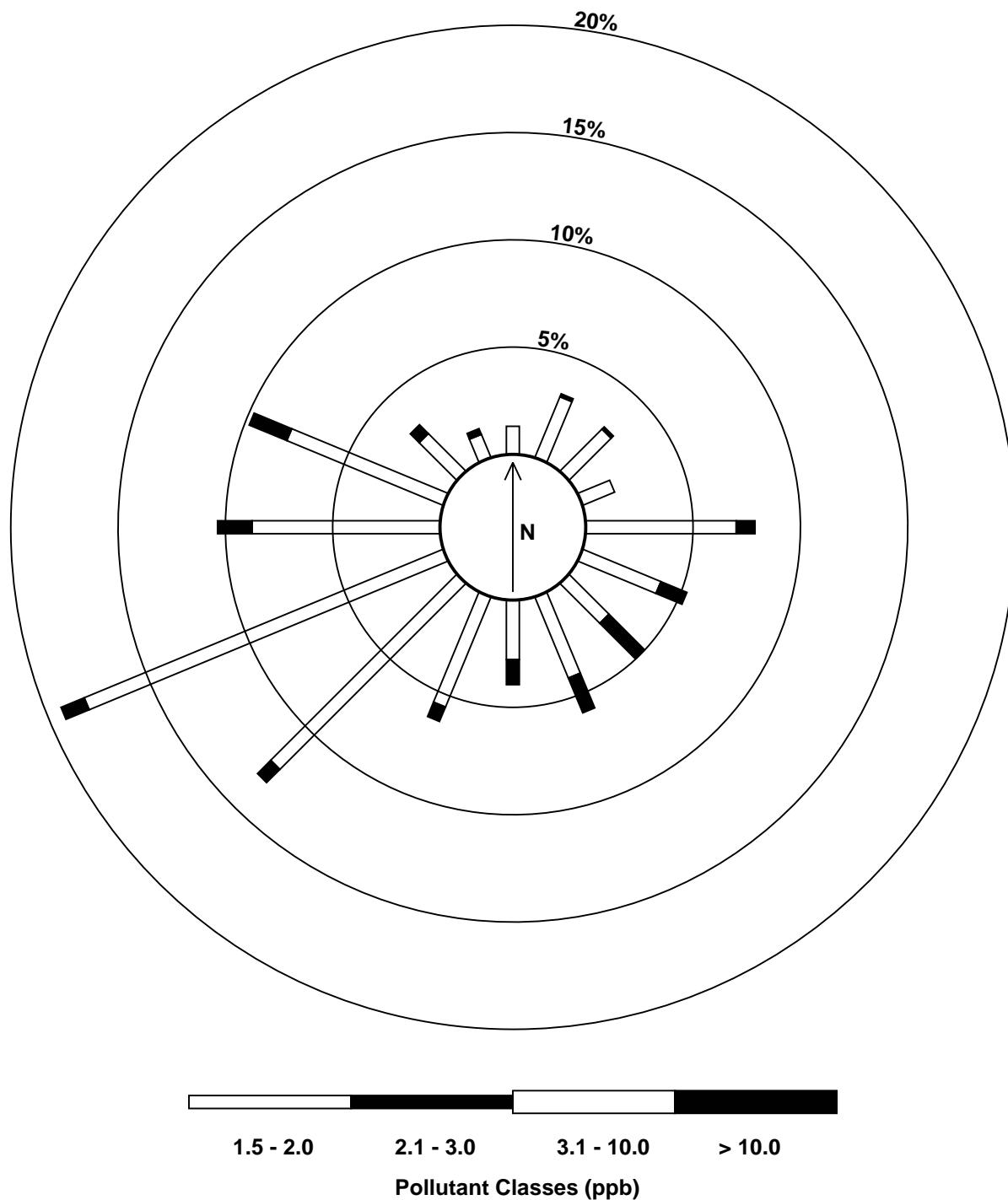
Maximum Value: 4.03 ppm on Aug 8 00:00 Maximum Daily Average: 2.41 ppm on Aug 8 Minimum Value: 1.6 ppm on Aug 31 00:00 Minimum Daily Average: 1.87 ppm on Aug 11 Maximum Diurnal Average: 2.18 ppm at hour 4 Minimum Diurnal Average: 1.89 ppm at hour 16 Monthly Average: 2.029 ppm Percentiles: $P_1 = 1.74$ $P_{10} = 1.86$ $Q_1 = 1.89$ Median = 1.93 $Q_3 = 2.02$ $P_{90} = 2.37$ $P_{99} = 3.34$																								Hours in Service:	744		
																								Hours of Data:	687		
																								Hours of Missing Data:	57		
																								Hours of Calibration:	35		
																								Percent Operational Time:	97.0		
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum	
1-Aug	2.0	1.9	1.9	1.9	1.9	1.9	2.0	A	1.9	1.9	1.9	1.8	1.9	1.8	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	2.04	
2-Aug	1.8	1.9	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.93	
3-Aug	1.9	1.9	1.9	2.0	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	1.91	2.01	
4-Aug	1.9	1.9	1.9	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.2	1.91	2.15	
5-Aug	2.3	2.3	2.3	A	2.4	2.4	2.3	2.3	2.2	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.07	2.42	
6-Aug	2.0	2.0	A	2.4	2.1	2.4	2.4	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.9	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.05	2.44	
7-Aug	2.0	A	1.9	2.4	2.5	2.4	2.4	2.8	2.7	2.2	2.1	2.1	2.0	1.9	2.0	1.9	2.0	2.0	2.1	2.2	2.6	2.5	4.0	2.29	4.03		
8-Aug	3.6	3.2	2.9	2.9	3.0	A	2.8	3.1	2.6	2.6	2.4	2.2	2.1	2.1	2.0	1.9	1.8	2.0	2.1	1.9	2.0	2.0	1.9	2.4	2.41	3.62	
9-Aug	2.4	2.1	2.4	2.6	2.6	A	2.5	2.3	2.4	2.0	1.9	2.0	2.0	1.9	2.0	1.9	1.9	1.8	1.9	1.9	1.8	1.9	1.9	1.9	2.08	2.57	
10-Aug	1.9	1.8	1.8	1.8	A	1.9	1.8	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.88	1.93	
11-Aug	1.9	2.0	2.0	A	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	C	C	C	A	1.8	1.9	1.8	1.8	1.8	1.8	1.87	1.96	
12-Aug	1.9	1.8	1.9	1.9	1.9	A	2.0	2.1	2.0	P	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.2	2.2	1.9	1.9	1.91	2.22	
13-Aug	2.0	1.9	2.0	2.1	A	2.0	2.0	2.0	1.9	1.9	2.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.96	2.68	
14-Aug	1.9	1.9	2.0	A	2.0	2.0	2.3	2.3	2.1	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	2.0	2.2	2.5	2.8	2.5	2.08	2.80		
15-Aug	2.6	2.5	A	2.3	2.4	2.4	2.5	2.5	2.8	2.7	2.4	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.4	3.5	2.9	2.3	2.36	3.50		
16-Aug	2.1	A	2.3	2.1	2.3	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.96	2.34		
17-Aug	A	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.4	3.9	3.5	A	2.13	3.86	
18-Aug	3.1	2.6	3.3	2.9	2.6	2.6	2.8	2.2	2.8	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	A	1.9	2.24	3.27	
19-Aug	2.2	2.1	1.9	2.0	2.3	1.9	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.99	2.28		
20-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.94	1.98		
21-Aug	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.96	2.05		
22-Aug	2.3	2.1	2.2	2.2	2.6	A	2.2	2.1	2.2	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.1	2.0	2.6	2.5	2.4	2.14	2.62	
23-Aug	2.5	2.5	3.4	3.1	A	2.9	2.4	2.3	2.3	2.8	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	2.0	2.23	3.39
24-Aug	2.1	2.0	2.0	A	2.0	2.1	2.0	1.9	2.0	2.1	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	2.0	1.8	1.8	1.8	1.93	2.11	
25-Aug	1.8	1.8	A	1.8	1.9	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.90	2.03	
26-Aug	1.9	A	1.9	2.1	2.2	2.2	2.2	2.0	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	2.0	2.0	2.1	2.0	2.00	2.24	
27-Aug	2.1	3.6	3.2	2.1	2.1	A	2.0	2.1	2.1	2.2	2.0	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	2.10	3.62	
28-Aug	1.9	1.9	2.0	1.9	A	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	1.9	1.9	1.92	2.01		
29-Aug	1.9	1.9	1.9	A	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	2.0	1.9	1.9	1.7	1.7	1.8	1.8	1.9	2.1	1.90	2.08	
30-Aug	2.2	2.4	A	2.3	2.3	2.2	2.1	2.1	2.1	2.0	2.0	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.7	1.8	1.7	1.6	1.6	1.6	1.97	2.38	
31-Aug	1.6	A	2.0	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	2.02		
	2.13	2.15	2.18	2.18	2.17	2.12	2.15	2.13	2.10	2.05	2.01	1.94	1.93	1.91	1.91	1.89	1.90	1.90	1.90	1.91	1.97	2.11	2.08	2.07	Diurnal Average		
	3.62	3.62	3.39	3.09	3.01	2.89	2.83	3.14	2.81	2.78	2.68	2.17	2.14	2.06	2.04	1.98	2.05	2.04	2.23	2.08	2.44	3.86	3.51	4.03	Diurnal Maximum		
C - Calibration				P - Power Failure				N - Not Valid				A - Automated Daily Zero Span															

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}) - 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: 40.4 µg/m³ on Aug 8 19:00 Maximum Daily Average: 15.2 µg/m³ on Aug 8																			Hours of Data: 707								
Minimum Value: 0 µg/m³ on Aug 1 10:00 Minimum Daily Average: 0.0 µg/m³ on Aug 20																			Hours of Missing Data: 37								
Maximum Diurnal Average: 6.3 µg/m³ at hour 22 Minimum Diurnal Average: 2.1 µg/m³ at hour 15																			Hours of Calibration: 0								
Monthly Average: 3.91 µg/m³ 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																			Percent Operational Time: 95.0								
Day	Hourly Period Ending At (MST)																			Daily Average	Daily Maximum						
1-Aug	4	6	3	4	1	1	3	2	0	0	0	0	0	4	4	0	0	2	2	2	1	1.8	6.5				
2-Aug	0	1	0	0	0	1	1	2	0	1	4	1	2	0	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	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	7	2.5	7.5	
5-Aug	7	3	4	3	1	7	6	4	6	5	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	2	4	6	4	4	7	0	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	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	4	0	4	3	0	6	2	1	0	1	0	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	1	1	1	1	1	1	0	2	0	0	0	1	4	0	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	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

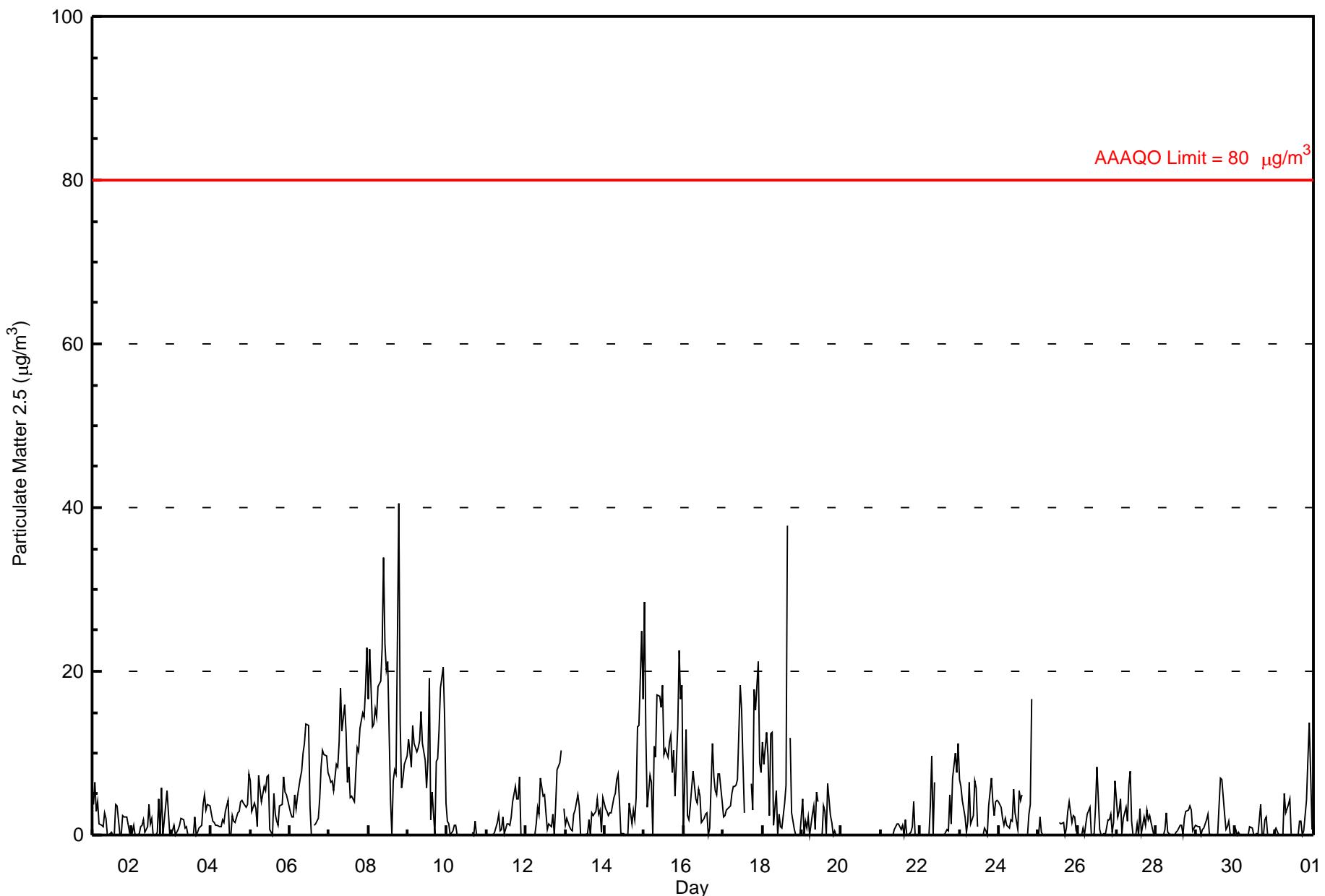
- Baseline Drift

A

lberta Ambient Air Quality Objectives (AAAQO): 1-hr 80 µg/m³

24-hr 30 µg/m³

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

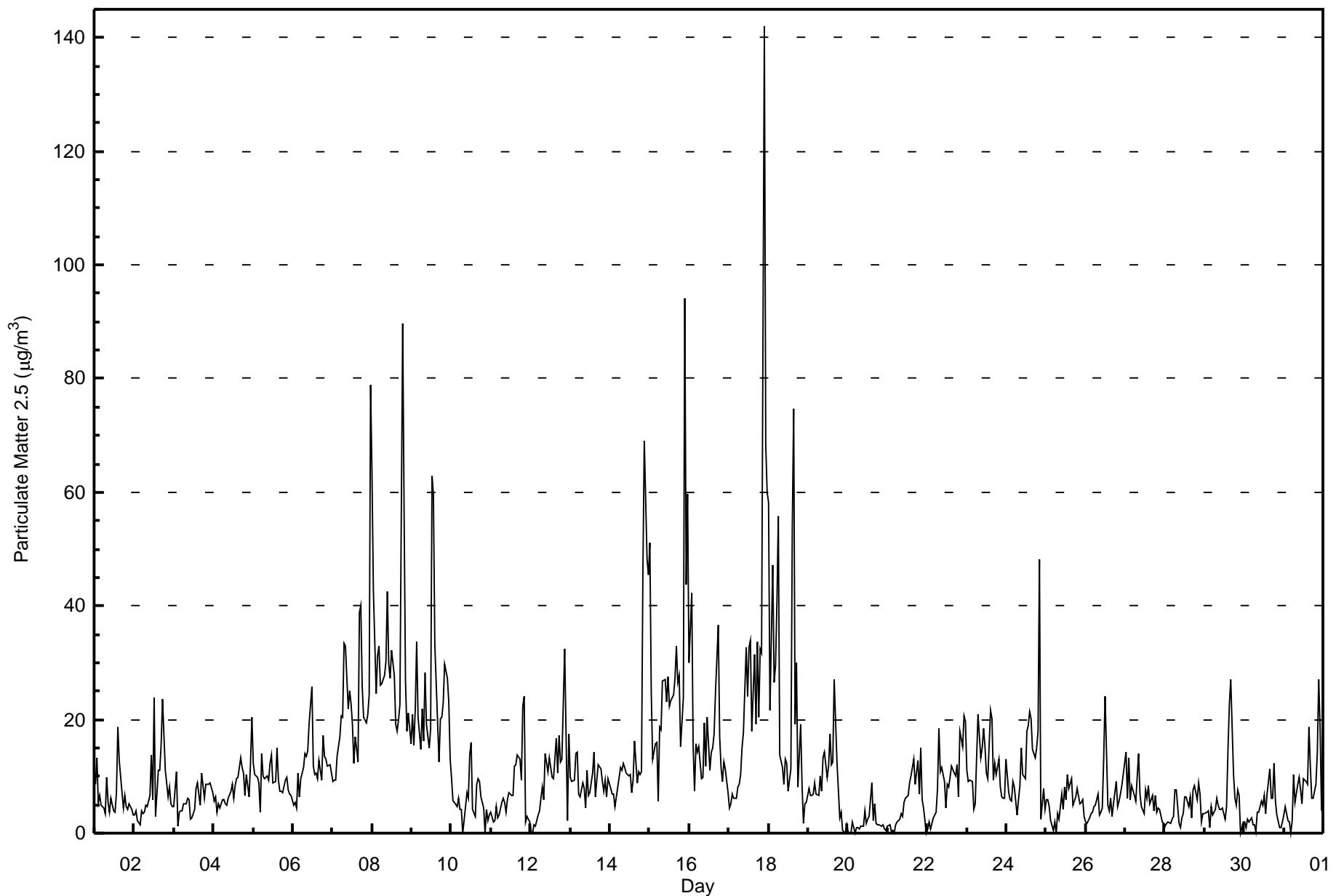


Peace Airshed Zone Association
Summary of Hourly Maximums

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

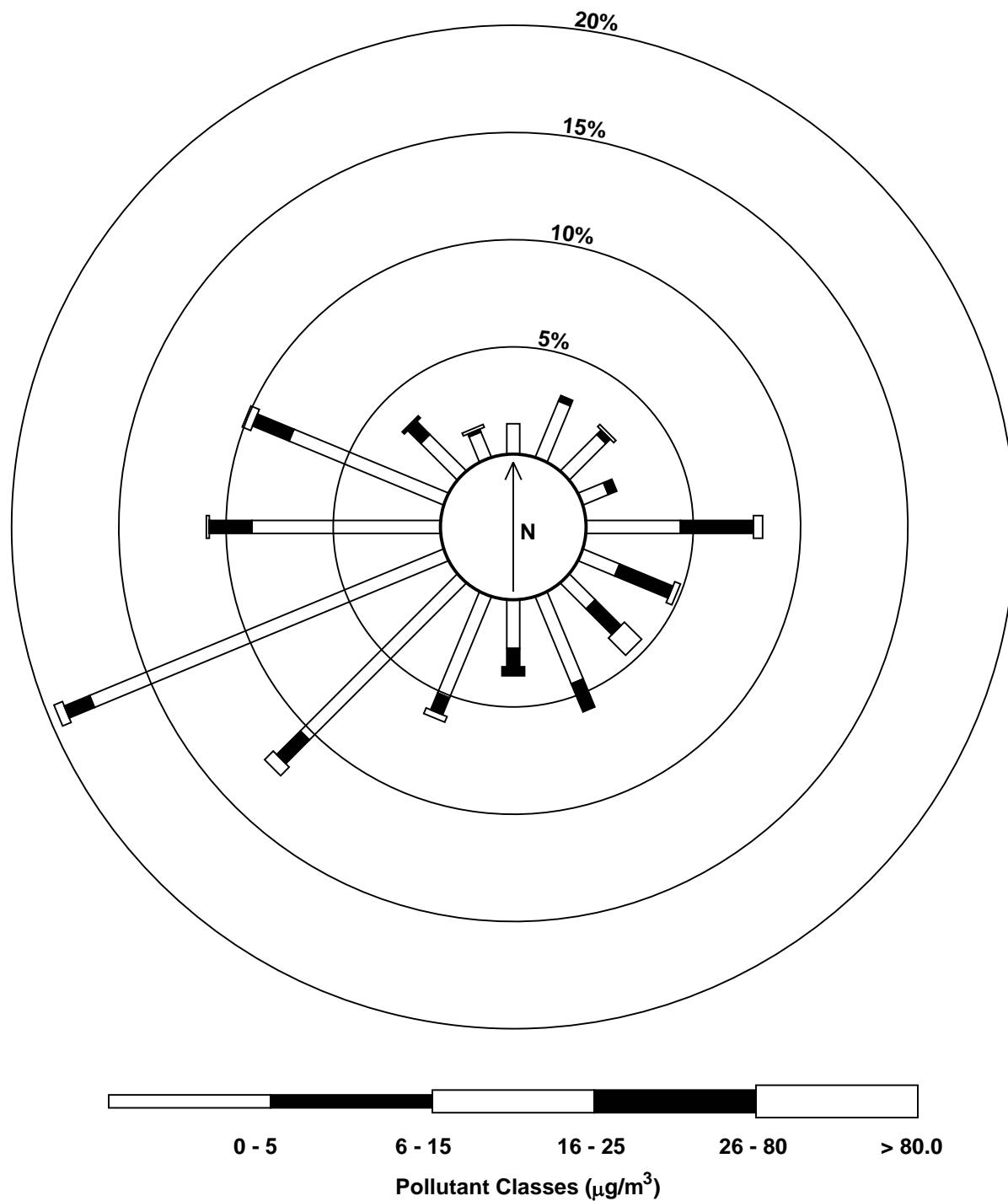
Maximum Value: 142.1 μg/m ³ on Aug 17 22:00																				Maximum Daily Average: 32.2 μg/m ³ on Aug 8				Hours in Service: 744					
Minimum Value: 0 μg/m ³ on Aug 10 08:00												Minimum Daily Average: 1.8 μg/m ³ on Aug 20												Hours of Data: 744					
Maximum Diurnal Average: 17.9 μg/m 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	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	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	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	1.8	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	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			
																									Diurnal Average				
																									Diurnal Maximum				

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



Pollutant Rose for PM_{2.5} at Henry Pirker

August 2008



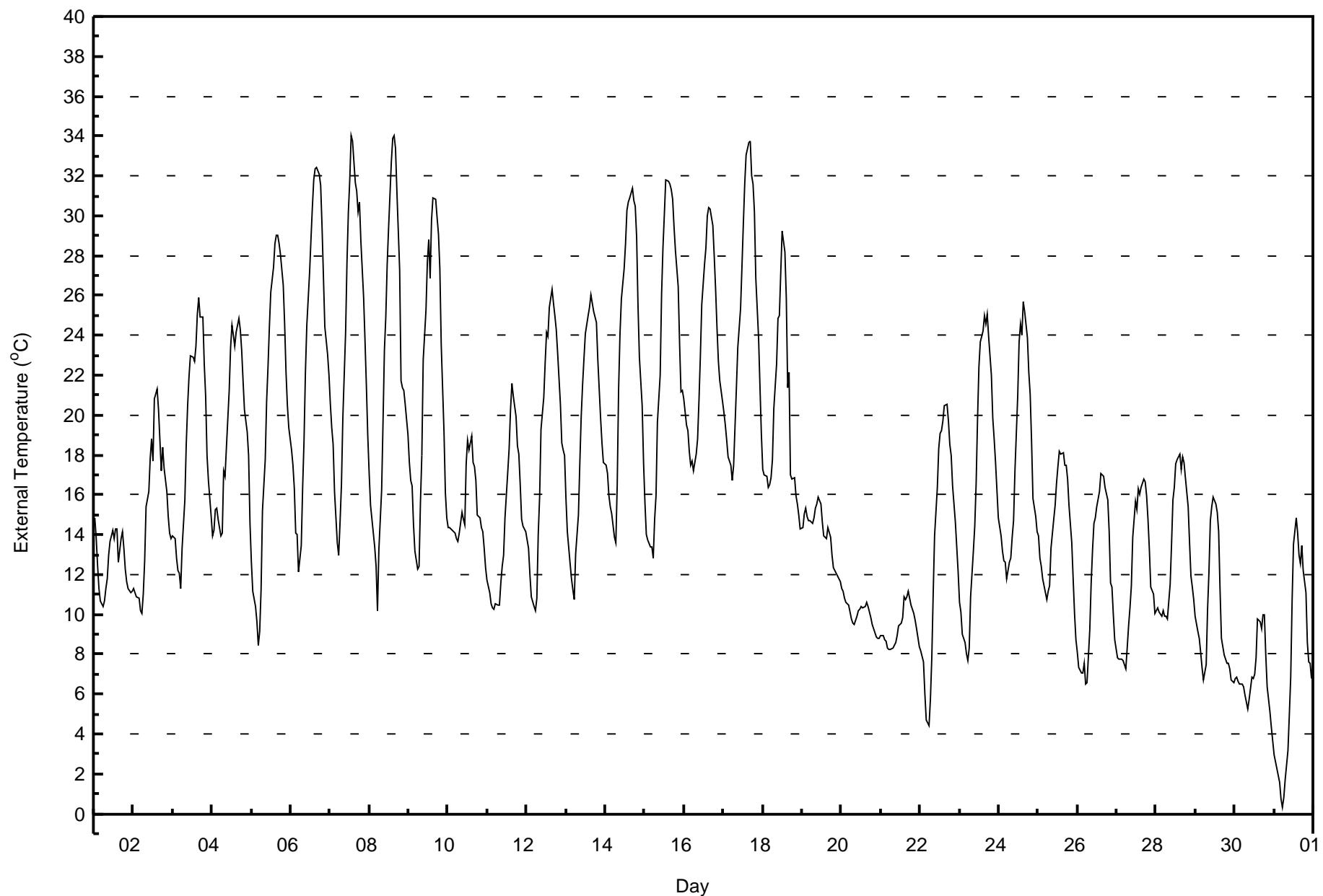
Peace Airshed Zone Association
Summary of Hourly Averages

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 Minimum Value: 0 °C on Aug 31 06:00 Minimum Daily Average: 6.9 °C on Aug 30 Maximum Diurnal Average: 22.3 °C at hour 15 Minimum Diurnal Average: 10.7 °C at hour 6 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 in Service:	744		
																								Hours of Data:	744		
																								Hours of Missing Data:	0		
																								Hours of Calibration:	0		
																								Percent Operational Time:	100.0		
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum	
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	10	10	11	13	15	16	18	19	18	21	21	20	19	17	18	17	16	15	14	14	14	15.3	21.3	
3-Aug	14	14	13	12	11	13	16	19	20	22	23	23	23	25	26	25	25	25	23	21	18	17	15	15	18.8	25.9	
4-Aug	14	14	15	15	14	14	17	17	18	21	23	25	24	23	24	25	24	23	22	20	19	18	15	15	19.2	24.9	
5-Aug	13	11	10	10	8	9	11	15	18	21	22	24	26	27	29	29	29	28	27	25	22	20	19	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	29	27	24	23	22	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	21	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	19	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	15	15	15	18	19	18	19	18	17	17	15	15	14	13	12	12	15.3	18.9		
11-Aug	12	11	11	10	10	11	10	10	12	13	15	17	18	20	22	21	20	18	17	15	14	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	30	29	25	23	20	18	18	23.0	31.4	
15-Aug	16	14	14	13	13	13	15	16	20	22	26	28	30	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	16	16	15	14	14	19.9	29.2	
19-Aug	14	15	15	15	15	15	15	15	16	16	16	15	14	14	14	14	14	13	12	12	12	12	12	12	14.1	15.9	
20-Aug	11	11	11	11	10	10	10	9	10	10	10	10	10	10	10	11	10	10	9	9	9	9	9	9	10.0	11.3	
21-Aug	9	9	9	9	8	8	8	8	9	9	9	10	10	11	11	11	10	10	10	10	9	8	9	9	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	16	15	13	12	12	13.5	20.5	
23-Aug	11	10	9	9	8	8	8	11	13	14	17	20	22	24	24	25	25	24	22	20	19	18	16	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	13	15	15	17	17	18	18	18	17	17	17	15	14	12	10	9	9	14.1	18.2	
26-Aug	8	7	7	7	8	7	7	9	12	13	15	15	15	16	17	17	16	16	14	12	11	10	9	9	11.8	17.1	
27-Aug	8	8	8	8	8	7	8	9	10	11	14	16	15	16	16	17	17	16	15	13	11	10	10	12.0	16.8		
28-Aug	10	10	10	10	10	10	10	12	14	16	16	18	18	18	17	18	17	15	14	12	11	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	7	7	7	10.1	15.9		
30-Aug	7	7	7	6	7	6	6	6	5	6	7	7	8	10	10	9	10	10	8	6	5	4	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	12	11	9	8	8	7	7.2	14.8		
																									Diurnal Average		
																									Diurnal Maximum		

Hourly Averages for External Temperature at Henry Pirker

August 2008



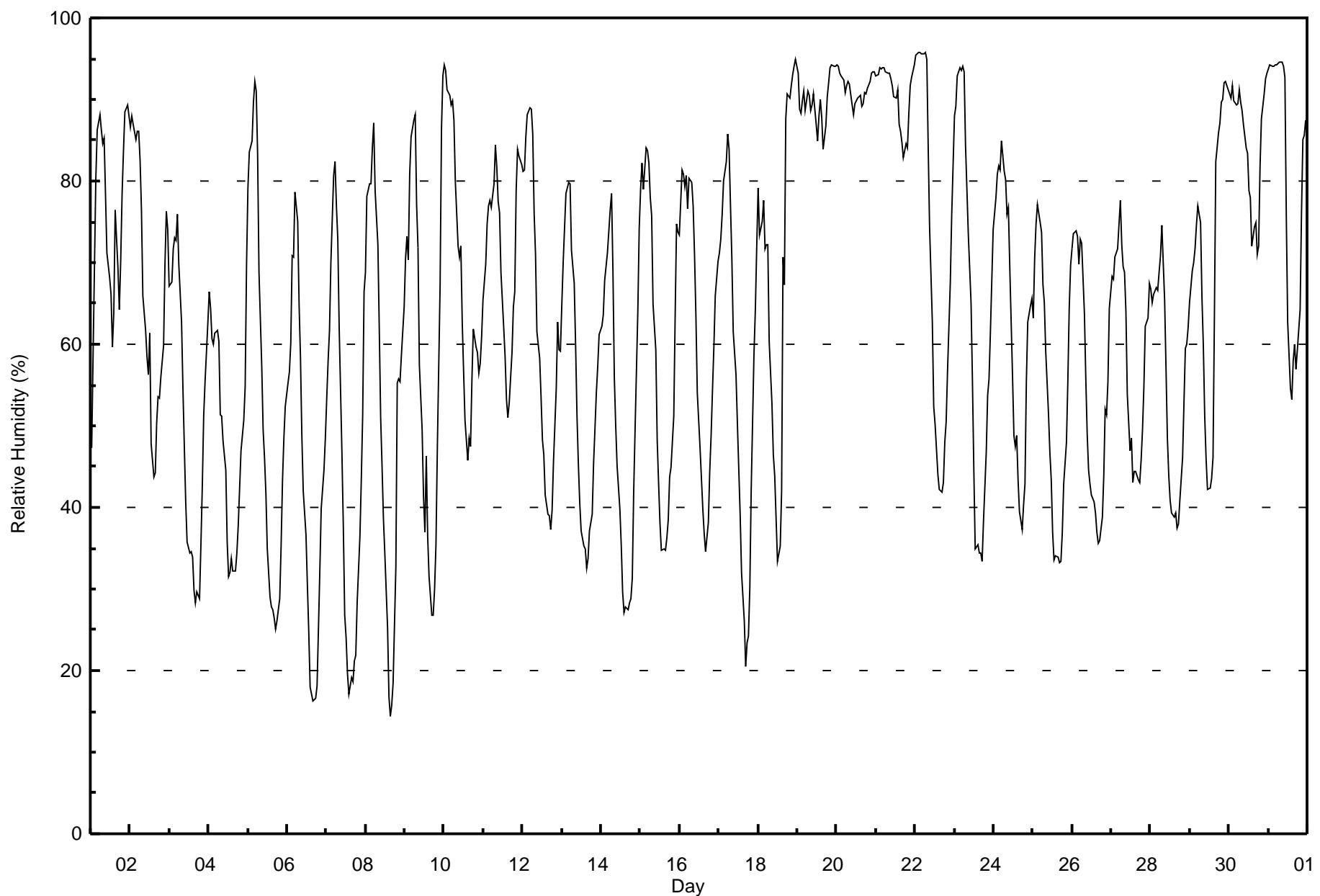
Peace Airshed Zone Association
Summary of Hourly Averages

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		
Minimum Value: 14 % on Aug 8 16:00 Minimum Daily Average: 43.7 % on Aug 6																								Hours of Data:	744		
Maximum Diurnal Average: 82.9 % at hour 6 Minimum Diurnal Average: 44.1 % at hour 15																								Hours of Missing Data:	0		
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 Calibration:	0		
																								Percent Operational Time:	100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Aug	47	59	69	80	86	88	86	85	85	78	71	68	66	60	64	76	69	64	70	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	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	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	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	89	88	90	90	91	89	89	91	91	91	92	93	93	93	93	91.4	94.3		
21-Aug	93	93	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	43	48	50	57	68	76	82	70.3	95.8		
23-Aug	88	89	93	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	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 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



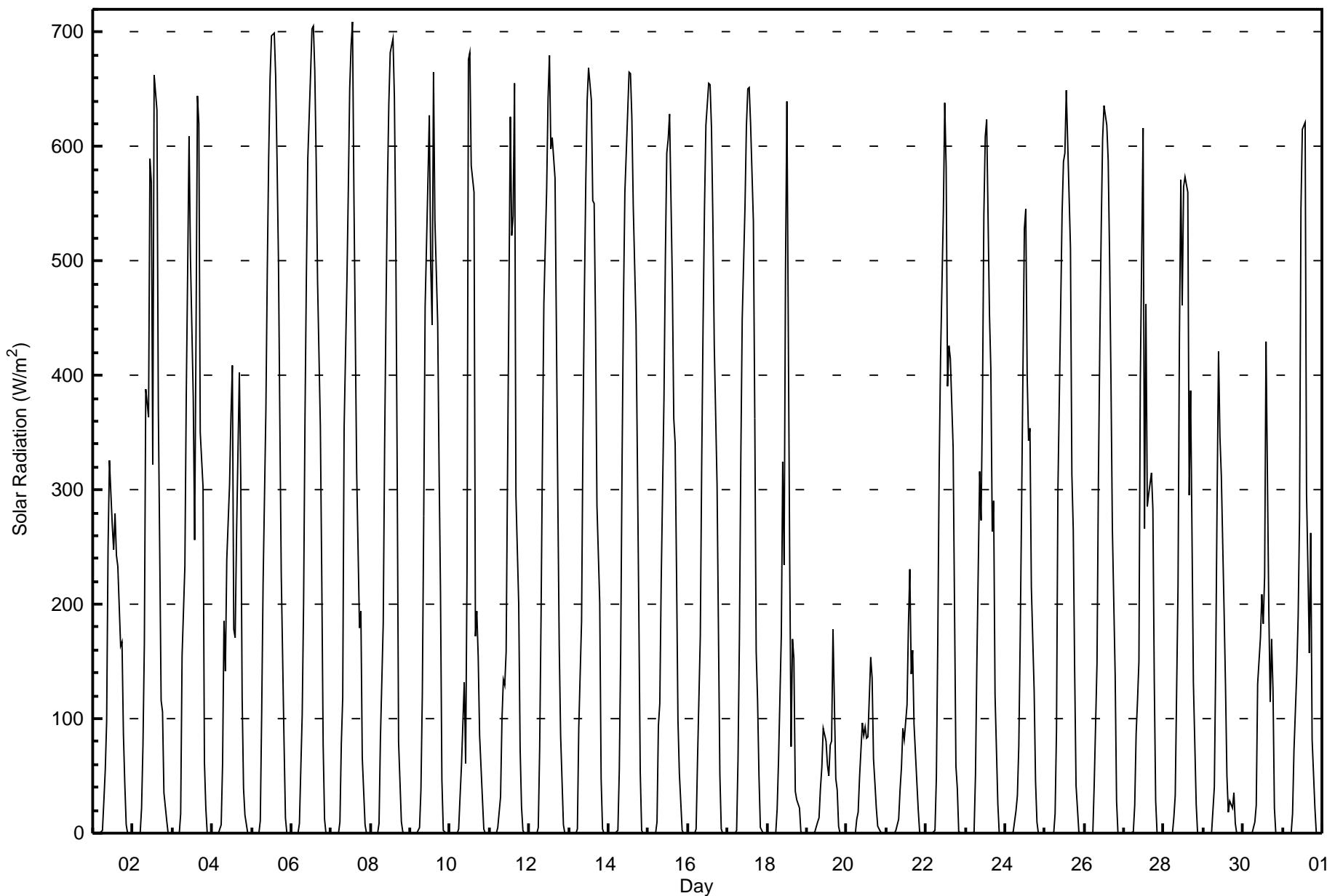
Peace Airshed Zone Association

Summary of Hourly Averages

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

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			
1 Spd	10	11	10	8	10	5	4	5	6	10	13	13	15	15	15	14	13	19	22	18	14	15	15	12	11.2	21.5	
	Dir	204	197	193	215	252	294	304	288	241	244	249	255	263	268	256	282	275	254	244	240	242	242	246	257	248.7	243.9
2 Spd	14	14	13	16	12	9	12	13	19	21	19	19	19	20	22	20	15	10	10	10	8	9	8	9	9	12.6	22.0
	Dir	261	244	249	243	248	249	240	245	281	290	288	294	295	295	294	318	318	315	239	251	238	228	230	240	272.9	294.2
3 Spd	9	11	10	8	8	7	9	11	10	12	17	18	17	14	18	19	18	15	17	11	6	5	6	8	10.9	19.4	
	Dir	253	243	235	254	250	238	244	245	271	285	305	292	291	297	272	262	265	273	270	243	218	202	213	228	264.4	262.5
4 Spd	8	9	11	11	12	10	9	12	15	15	11	17	15	10	9	12	12	16	13	12	10	6	2	4	9.7	17.0	
	Dir	261	267	249	253	255	273	274	253	237	245	235	268	292	293	269	240	229	246	265	264	332	352	17	294	262.5	268.0
5 Spd	2	4	2	4	2	4	6	3	7	5	7	7	8	9	6	5	5	5	8	9	10	9	9	9	8	3.9	10.0
	Dir	269	281	303	294	268	139	149	168	206	197	151	150	164	187	176	154	148	107	101	112	103	101	99	99	142.8	102.8
6 Spd	8	6	5	3	6	2	4	6	4	2	4	6	10	11	9	6	6	4	7	12	9	8	9	9	5.7	11.5	
	Dir	94	87	83	95	91	126	104	116	119	119	113	124	139	157	161	166	130	142	121	91	94	86	80	80	113.1	91.0
7 Spd	6	8	8	1	3	3	4	2	7	4	5	6	1	2	6	10	7	3	9	8	6	5	4	3	1.8	9.7	
	Dir	83	78	81	304	282	310	284	230	223	222	240	226	234	339	170	155	312	41	150	170	157	134	97	140	164.1	154.7
8 Spd	3	1	3	3	2	2	4	5	3	1	4	4	7	2	3	4	3	8	16	19	4	2	12	6	2.5	18.7	
	Dir	343	142	151	334	306	264	128	146	132	187	139	112	141	110	118	172	110	85	190	260	212	276	111	154	159.1	260.1
9 Spd	3	5	3	1	2	4	2	3	6	7	8	8	5	10	7	6	5	8	9	10	19	18	10	7	1.9	18.6	
	Dir	237	31	60	302	274	305	295	258	240	218	222	232	132	100	97	38	59	97	99	95	218	241	233	290	201.3	217.6
10 Spd	10	13	14	13	8	9	9	8	10	9	13	14	17	24	23	16	15	14	14	13	12	16	15	15	12.7	23.8	
	Dir	251	222	238	240	232	209	223	209	223	214	236	217	226	234	235	238	232	268	261	218	209	191	197	192	226.1	234.0
11 Spd	13	12	10	8	8	9	10	9	6	5	5	5	7	2	10	10	16	17	16	19	11	16	15	15	7.0	19.0	
	Dir	169	160	160	152	170	186	191	201	241	299	304	299	315	338	321	229	274	273	268	252	242	233	243	242	234.2	241.5
12 Spd	13	10	8	4	5	6	3	4	6	3	3	2	4	2	4	5	8	8	9	7	5	7	10	10	5.5	13.3	
	Dir	243	253	247	222	225	236	295	254	240	236	264	250	249	301	282	284	291	302	301	300	281	288	295	293	271.0	243.3
13 Spd	8	6	4	1	3	5	8	9	15	18	19	20	19	18	17	19	19	18	20	13	13	9	5	6	11.8	20.4	
	Dir	282	299	266	218	254	227	228	230	243	249	260	267	272	268	270	262	270	268	275	263	263	279	222	262.1	267.2	
14 Spd	7	6	8	8	8	5	4	6	6	14	20	21	19	17	16	15	14	12	9	6	2	4	1	3	6.6	20.7	
	Dir	218	198	209	206	213	183	154	172	200	237	244	248	254	274	296	303	298	308	319	341	45	96	54	286	256.4	247.9
15 Spd	4	5	4	3	3	4	4	3	3	3	2	3	4	7	8	10	10	8	7	5	2	4	6	0.8	10.3		
	Dir	308	281	305	278	287	292	285	267	200	198	251	218	104	107	110	98	96	95	94	94	82	83	299	288	96.8	96.4
16 Spd	4	3	4	4	5	11	13	16	18	12	9	5	4	3	3	4	6	12	10	8	9	10	9	9	2.2	17.7	
	Dir	282	221	222	204	258	262	285	296	295	296	283	267	321	323	23	1	89	91	77	76	78	85	86	315.6	295.1	
17 Spd	9	9	7	9	8	6	6	6	6	6	5	5	5	5	5	4	5	5	3	2	2	3	4.7	9.3			
	Dir	84	82	81	95	95	87	97	108	154	129	141	115	142	126	102	112	165	133	110	106	115	249	298	273	109.9	83.8
18 Spd	2	2	2	1	3	1	5	9	13	15	12	13	10	9	7	3	8	13	4	6	7	4	4	6	4.9	14.7	
	Dir	189	138	32	101	123	140	265	247	225	223	222	228	223	228	258	172	288	270	289	174	199	246	104	150	227.7	223.4
19 Spd	5	7	7	5	3	4	0	2	3	5	6	9	11	10	9	8	9	10	9	7	8	7	5	6	4.2	10.9	
	Dir	182	230	224	159	182	278	69	263	278	265	288	313	300	294	297	311	308	324	336	326	329	12	52	21	303.4	299.6
20 Spd	7	7	9	10	11	12	9	9	10	11	11	10	9	10	12	11	10	10	9	9	10	10	9	9	9.6	11.8	
	Dir	23	30	44	57	55	62	52	50	44	50	58	50	39	42	30	35	42	46	38	36	36	34	29	28	42.9	62.3
21 Spd	10	10	10	10	12	10	11	10	10	9	9	9	8	6	8	5	4	2	2	5	6	4	5	5.7	11.9		
	Dir	31	30	26	29	24	27	23	11	14	14	12	352	3	1	12	342	349	268	31	157	203	251	231	158	11.8	24.4
22 Spd	5	4	4	3	4	4	4	4	3	4	5	13	18	20	18	17	16	14	13	7	6	5	5	3	3	6.8	19.8
	Dir	170	151	112	132	156	148	203	175	147	146	198	230	235	235	230	234	220	235	225	200	204	152	140	242	211.4	235.2

Peace Airshed Zone Association

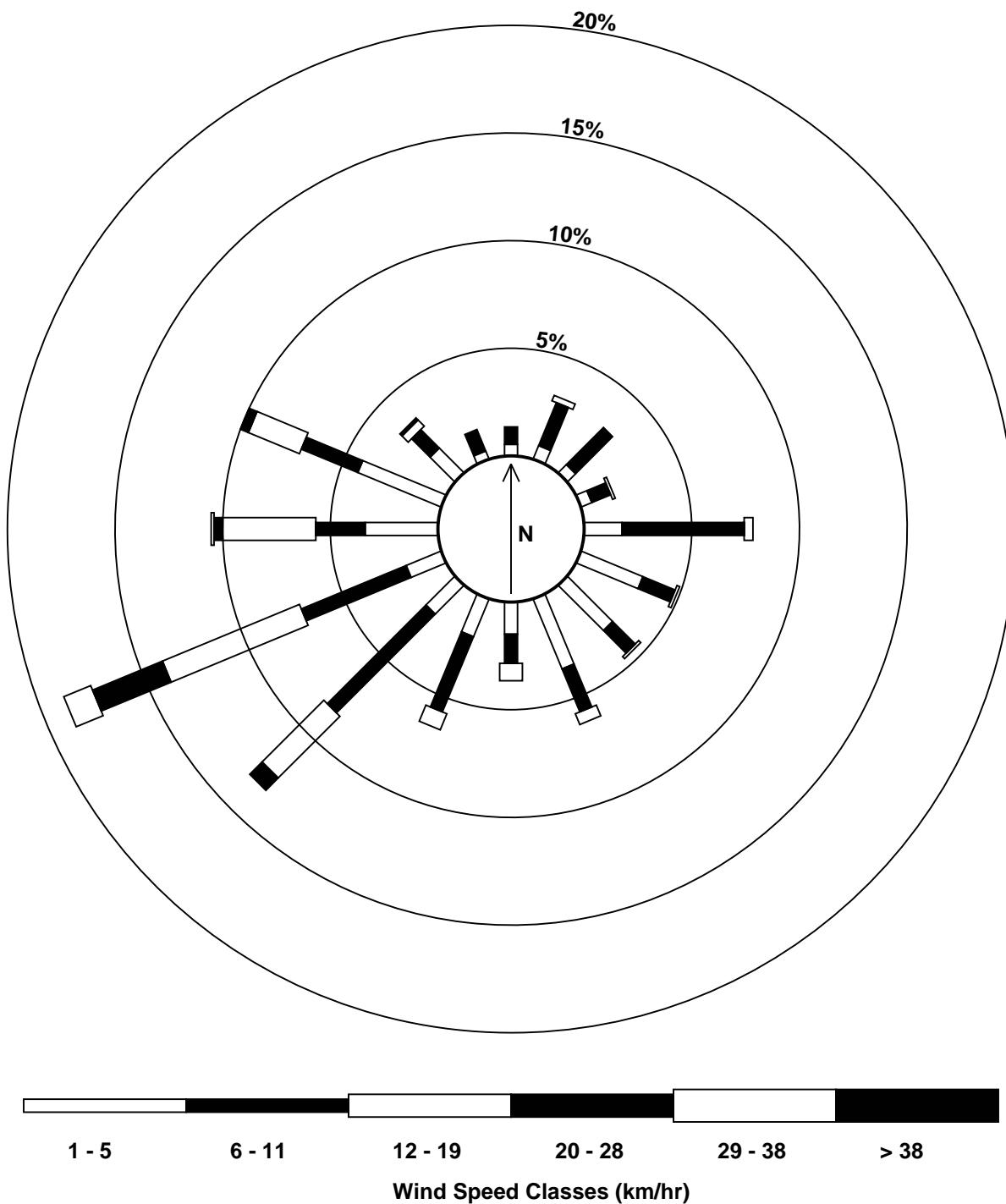
Summary of Hourly Averages

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	5	7	10	9	9	10	6	12	16	19	15	13	16	12	12	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	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											
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											
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				Hours of Data: 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 Missing Data: 0																			
Maximum Diurnal Speed Average: 8.3 km/h at hour 12				Minimum Diurnal Speed Average: 2.7 km/h at hour 23												Percent Operational Time: 100.0																			
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 $Q_3 = 12.2$ $P_{90} = 18.1$ $P_{99} = 29.4$																															
All monthly, daily, and diurnal averages have been calculated using vector methods																																			
Percentage Frequency Distribution																																			
Direction		0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total																					
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

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

PASZA
Evergreen Park Station
Monthly Summary Tables, Graphs and
Roses

Peace Airshed Zone Association

Summary of Hourly Averages

Evergreen Park - Sulphur Dioxide (SO_2) - ppb

August 1, 2008 to September 1, 2008

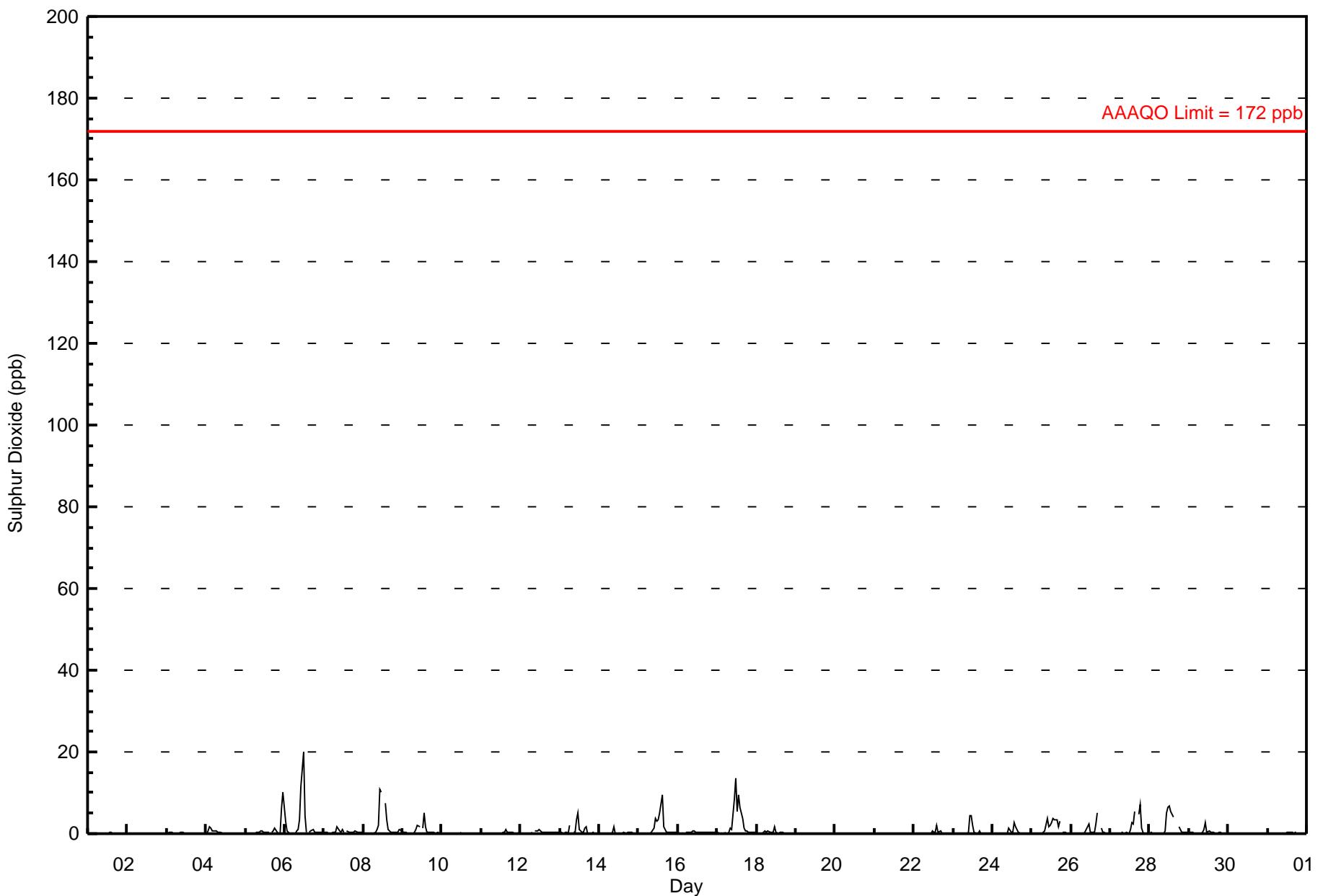
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 20.0 ppb on Aug 6 12:00 Maximum Daily Average: 2.4 ppb on Aug 17																			Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0							
Minimum Value: 0 ppb on Aug 1 05:00 Minimum Daily Average: 0.0 ppb on Aug 20																										
Maximum Diurnal Average: 2.5 ppb at hour 12 Minimum Diurnal Average: 0.1 ppb at hour 5																										
Monthly Average: 0.61 ppb 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	A	0	0	0	0		
2-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		
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		
4-Aug	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0		
5-Aug	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	A	0	1	2	0	0	0	6		
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		
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		
8-Aug	0	0	0	0	0	0	0	0	1	2	11	10	A	8	3	1	1	0	0	0	0	0	1	1		
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		
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		
11-Aug	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
12-Aug	0	0	0	0	0	0	0	0	0	A	1	1	1	0	0	0	0	0	0	0	0	0	0	0		
13-Aug	0	0	0	0	0	0	0	2	A	0	0	3	5	1	0	0	1	2	0	0	0	0	0	0		
14-Aug	0	0	0	0	0	0	0	A	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0		
15-Aug	0	0	0	0	0	0	A	0	0	0	1	4	3	3	5	10	2	1	1	0	0	0	0	1.4		
16-Aug	0	0	0	0	0	A	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.3		
17-Aug	0	0	0	0	A	0	0	0	1	1	8	13	5	10	6	4	1	1	1	0	0	0	0	13.5		
18-Aug	0	0	A	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0.3		
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	0.1		
20-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	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	A	0	0	0.0		
22-Aug	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	1	0	0	0	A	0	0	0.2		
23-Aug	0	0	0	0	0	0	0	0	0	0	4	4	2	0	0	1	0	0	0	0	A	0	0	0.6		
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	0.4		
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	1.2		
26-Aug	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		
27-Aug	0	0	0	0	0	0	0	0	0	0	0	1	3	3	5	5	A	5	7	1	0	0	0	1.2		
28-Aug	0	0	0	0	0	0	0	0	1	5	6	7	5	4	C	C	C	2	0	0	0	0	0	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	0.3		
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	0.1		
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	0.1		
	0.2	0.1	0.1	0.1	0.1	0.1	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



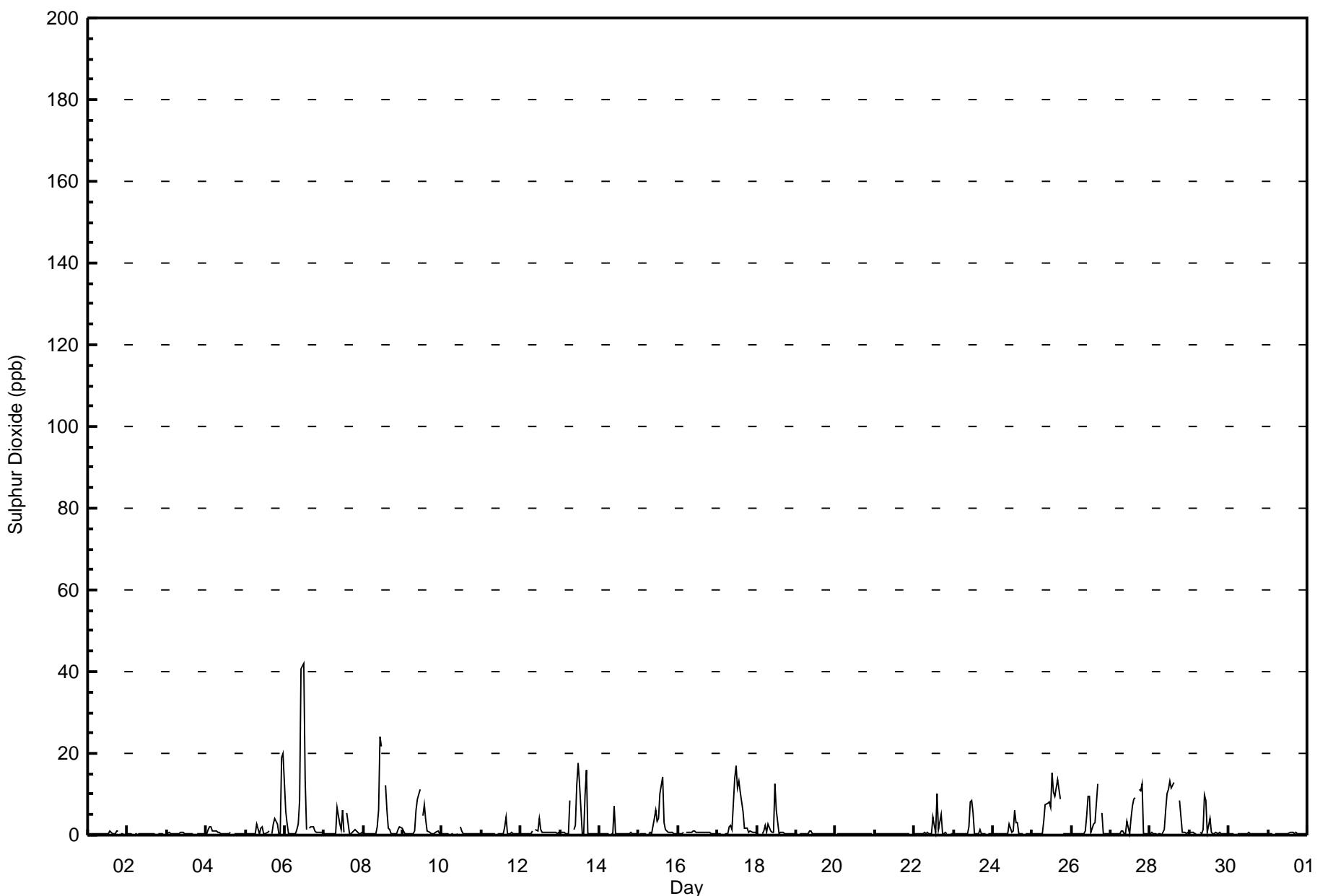
Peace Airshed Zone Association Summary of Hourly Maximums

Evergreen Park - Sulphur Dioxide (SO_2) - ppb

August 1, 2008 to September 1, 2008

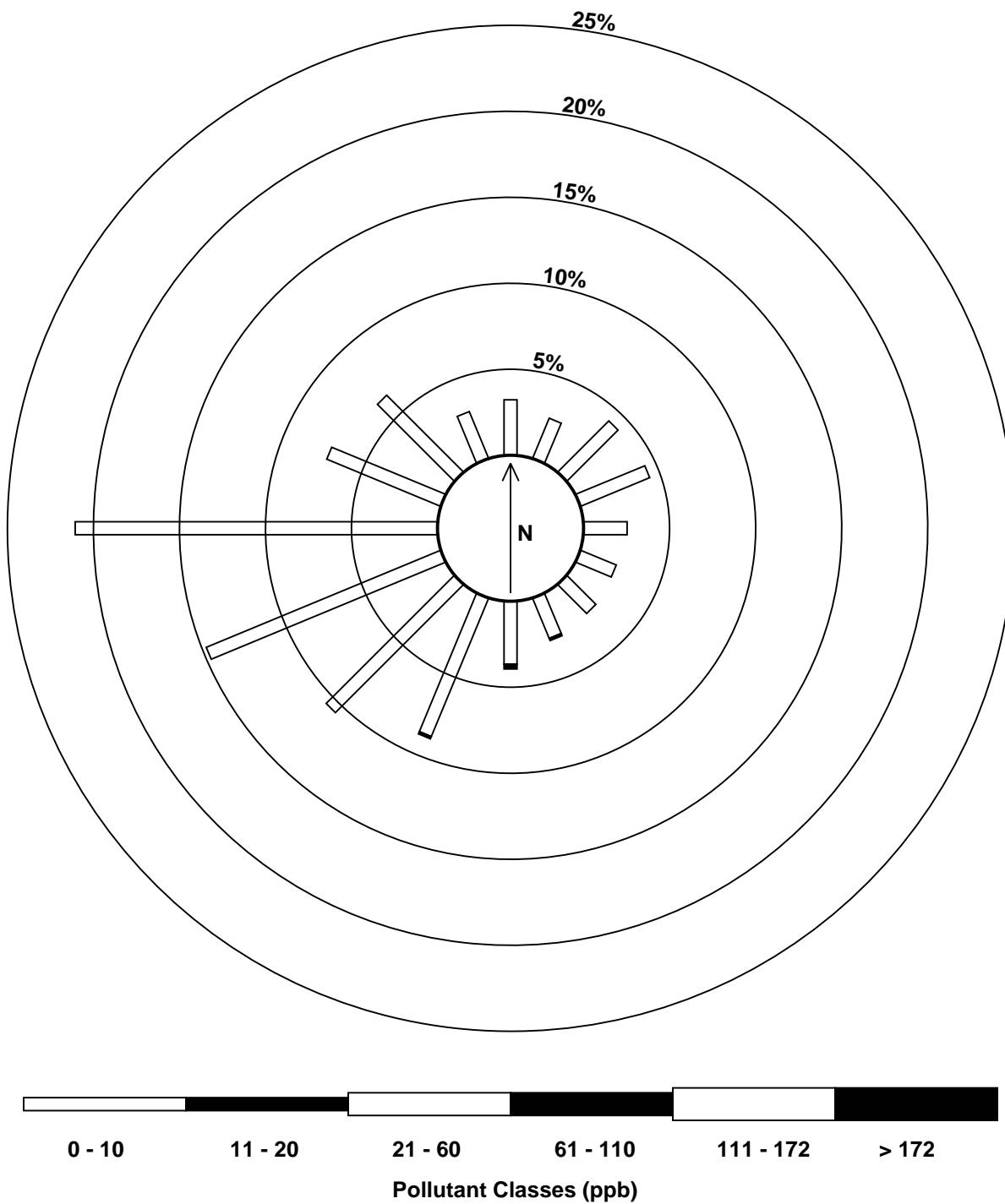
Maximum Value: 42.2 ppb on Aug 6 12:00																				Maximum Daily Average: 5.7 ppb on Aug 6																				Hours in Service: 744	
Minimum Value: 0 ppb on Aug 2 05:00																				Minimum Daily Average: 0.3 ppb on Aug 2																				Hours of Data: 710	
Maximum Diurnal Average: 5.8 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	
Day																				Hourly Period Ending At (MST)																				Daily Average	Daily Maximum
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	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	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	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.7		
4-Aug	0	1	2	2	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0	0	0	0	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	0	0	3	4	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	1	1	1	1	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	A	0	0	0	0	2	4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	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	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0.8	4.1			
13-Aug	1	1	1	0	0	0	0	8	A	1	2	12	18	13	0	0	10	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8	17.5			
14-Aug	0	0	0	0	0	0	0	A	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.7	7.2			
15-Aug	0	0	0	0	0	0	A	0	1	0	4	6	3	4	10	14	3	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.4	14.3		
16-Aug	0	0	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.9			
17-Aug	0	0	0	0	A	0	0	0	2	2	1	14	17	12	13	11	6	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3.9	16.8				
18-Aug	0	0	0	A	0	1	2	1	3	1	1	1	13	6	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0.4			
22-Aug	0	0	0	0	0	0	0	1	0	1	0	0	4	2	1	10	1	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.0	6.2		
25-Aug	0	0	0	0	0	0	0	0	4	7	8	8	7	15	11	10	14	11	9	A	1	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	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	11	A	11	11	13	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3.8	13.1		
29-Aug	1	1	1	0	0	0	A	1	0	1	10	9	1	4	1	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0.6			
Diurnal Average																				Diurnal Maximum																					
5.8																				2.8																					

Hourly Maximums for SO₂ at Evergreen Park August 2008



Pollutant Rose for SO₂ at Evergreen Park

August 2008



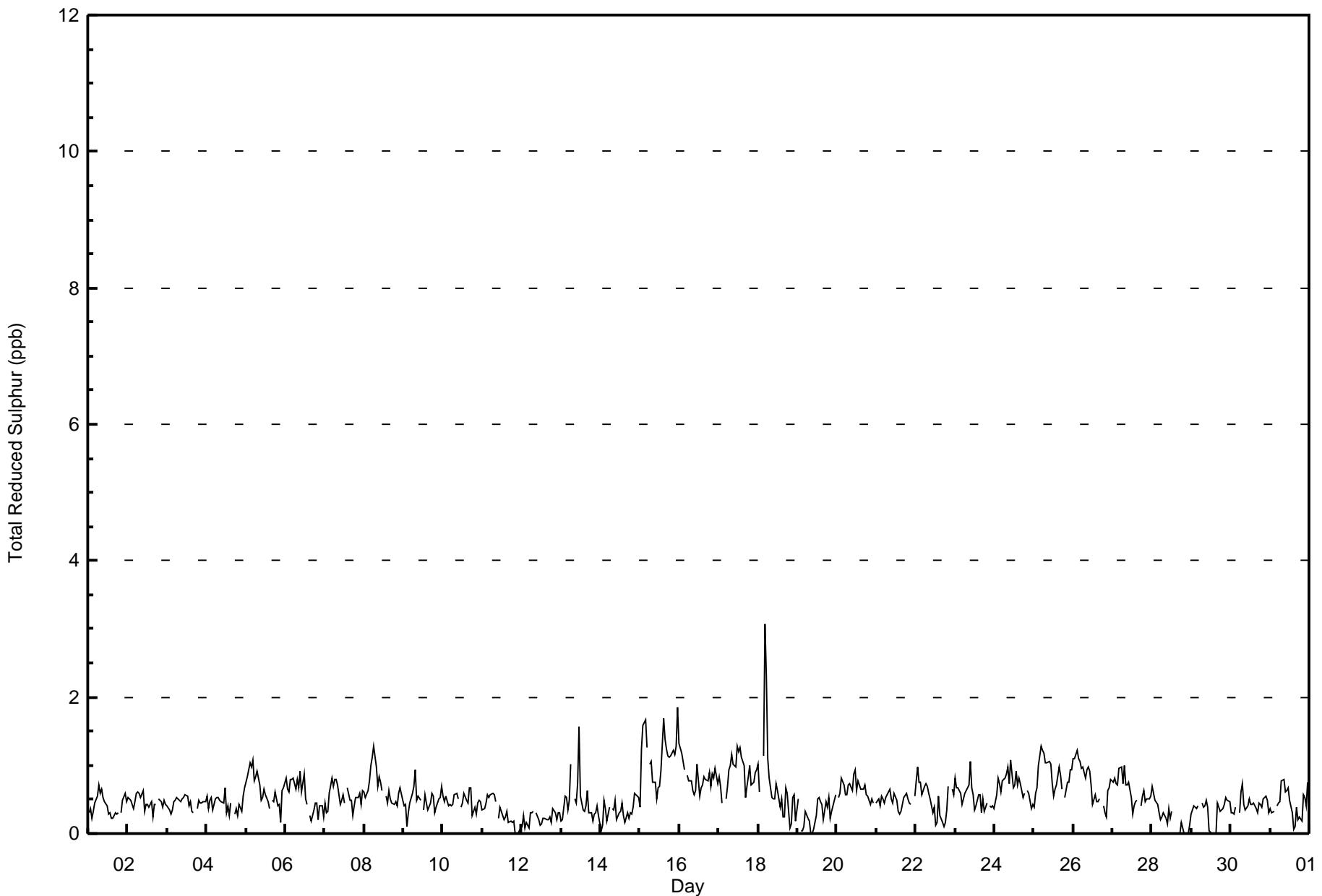
Peace Airshed Zone Association Summary of Hourly Averages

Evergreen Park - Total Reduced Sulphur (TRS) - ppb

August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.1 ppb on Aug 18 05:00 Maximum Daily Average: 1.1 ppb on Aug 15																		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 11 21:00 Minimum Daily Average: 0.2 ppb on Aug 12												Maximum Diurnal Average: 0.7 ppb at hour 7 Minimum Diurnal Average: 0.4 ppb at hour 20 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														
Monthly Average: 0.55 ppb																										
Day	Hourly Period Ending At (MST)																									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Aug	0	0	0	0	0	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	0	0	0	0	0	0	0	0	A	1	0	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	0.4	0.6	
4-Aug	1	0	0	1	0	1	1	1	0	0	0	1	0	0	0	0	0	A	0	0	0	0	1	1	0.4	0.7
5-Aug	1	1	1	1	1	1	1	1	1	0	1	1	0	0	0	0	0	A	0	0	1	0	0	1	0.6	1.1
6-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	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	0	0	0	0	A	1	0	0	1	1	0	0.5	0.8
8-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	1	0	1	1	0	0	0.7	1.3
9-Aug	0	0	0	0	0	1	1	1	0	1	0	0	0	0	0	0	0	A	0	1	0	0	1	1	0.5	0.9
10-Aug	1	0	1	0	0	0	0	1	1	1	0	0	0	1	0	0	0	A	0	0	0	0	0	0	0.5	0.7
11-Aug	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	A	0	0	0	0	0	0	0.3	0.6
12-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	0.2	0.4
13-Aug	0	0	1	1	0	0	1	0	0	1	2	1	0	0	0	0	0	A	1	0	0	0	0	0	0.5	1.6
14-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	0	0	1	1	0.3	0.6
15-Aug	0	1	2	2	1	0	0	1	1	1	1	1	1	1	2	1	1	A	1	1	1	1	1	2	1.1	1.8
16-Aug	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	0.8	1.3
17-Aug	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	0.9	1.3
18-Aug	1	1	1	0	3	2	1	1	1	0	1	1	1	0	0	0	0	A	1	1	1	1	0	0	0.7	3.1
19-Aug	1	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	0.6
20-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	1	1	1	1	0	0	0.6	0.9
21-Aug	0	1	0	1	1	0	1	1	1	0	1	0	0	0	0	0	0	A	1	1	1	0	0	0	0.5	0.7
22-Aug	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	A	1	1	1	1	1	1	0.5	1.0
23-Aug	1	1	1	1	0	1	1	1	1	1	0	0	0	1	1	0	0	A	0	1	0	0	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	A	1	1	1	0	0	0	0.7	1.1
25-Aug	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	0.8	1.3
26-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	1	1	1	1	1	1	0.8	1.2
27-Aug	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	A	0	1	1	0	1	1	0.6	1.0
28-Aug	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C	0	0	0	0	0	0	0.2	0.7
29-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	0.3	0.5
30-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	1	1	0	0	0	0.4	0.7
31-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0	0	1	1	0	1	0.4	0.8
	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	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	

Hourly Averages for TRS at Evergreen Park
August 2008



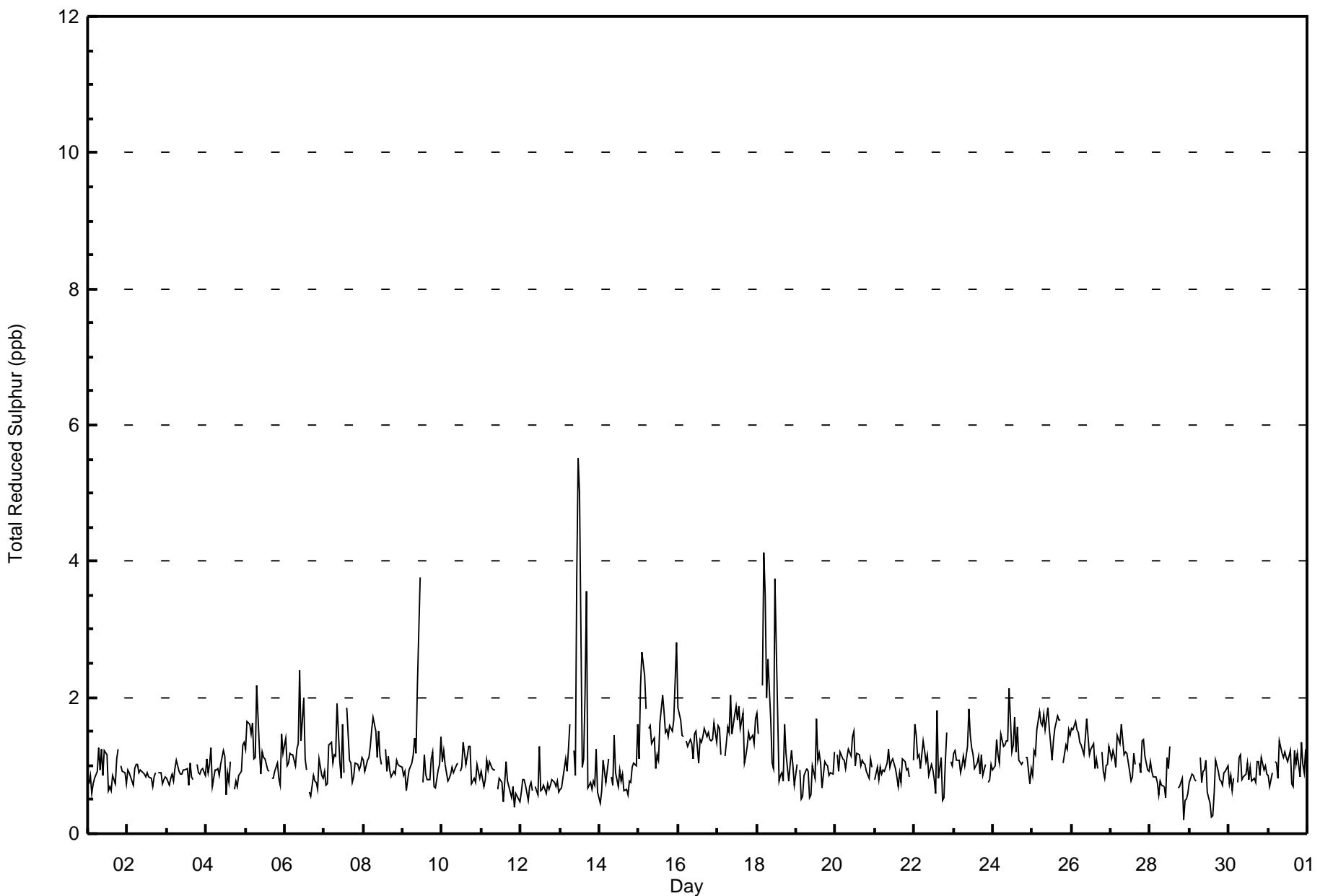
Peace Airshed Zone Association Summary of Hourly Maximums

Evergreen Park - Total Reduced Sulphur (TRS) - ppb

August 1, 2008 to September 1, 2008

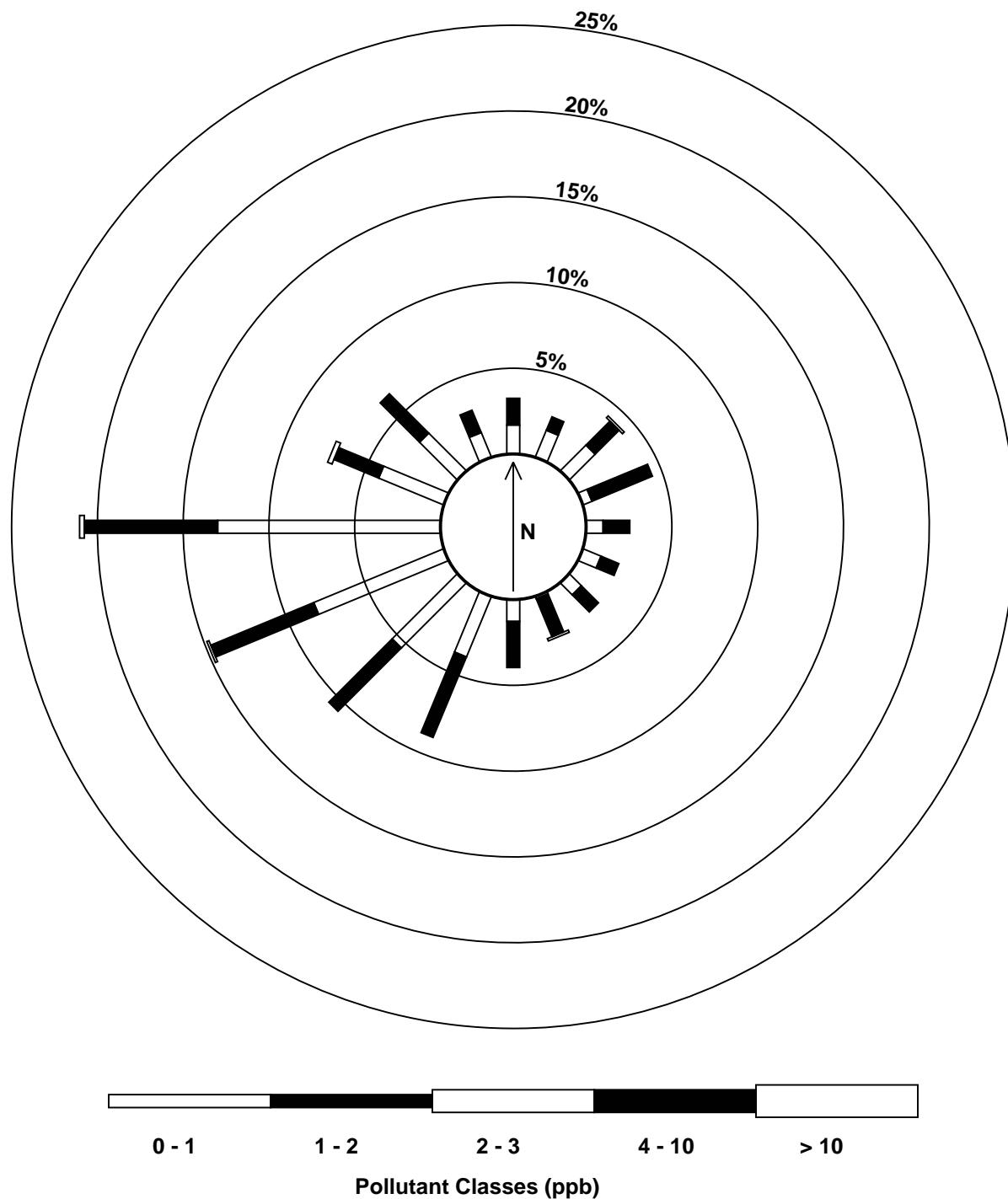
Maximum Value: 5.5 ppb on Aug 13 12:00																			Maximum Daily Average: 1.7 ppb on Aug 15																			Hours in Service: 744	
Minimum Value: 0 ppb on Aug 28 21:00																			Minimum Daily Average: 0.7 ppb on Aug 12																			Hours of Data: 709	
Maximum Diurnal Average: 1.4 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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum													
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	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	A	1	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	1	A	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	1	A	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	2	1	2	1	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	2	1	1	2	1	1	A	2	1	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	1.7												
9-Aug	1	1	1	1	1	1	1	1	2	4	1	A	1	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	A	1	1	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	A	1	1	1	0	1	1	1	1	1	1	0	1	1	0	0.8	1.1													
12-Aug	1	1	1	1	0	1	1	1	A	1	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	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	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	2	1	1	1	1	1	1	1	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	1	1.5	2.0													
18-Aug	2	1	2	A	2	4	3	2	3	2	1	1	4	3	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	1	1	2	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	1	1	2	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	A	1	0.9	1.2													
22-Aug	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	0	1	1	1	A	1	1	1.1	1.8													
23-Aug	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1.1	1.8													
24-Aug	1	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	1	1	A	1	1	1	1.2	2.1													
25-Aug	1	1	1	2	2	2	2	2	2	2	1	1	1	2	2	2	2	1	1	1	1	2	1	1.5	1.9														
26-Aug	2	2	2	2	1	1	1	1	2	1	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	2	1	1	1	1	1	1	1	1	1	1	1	A	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	1	0	0	0	0.7	1.3													
29-Aug	1	1	1	1	1	A	1	1	1	1	1	1	1	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													
																									Diurnal Average														
																									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

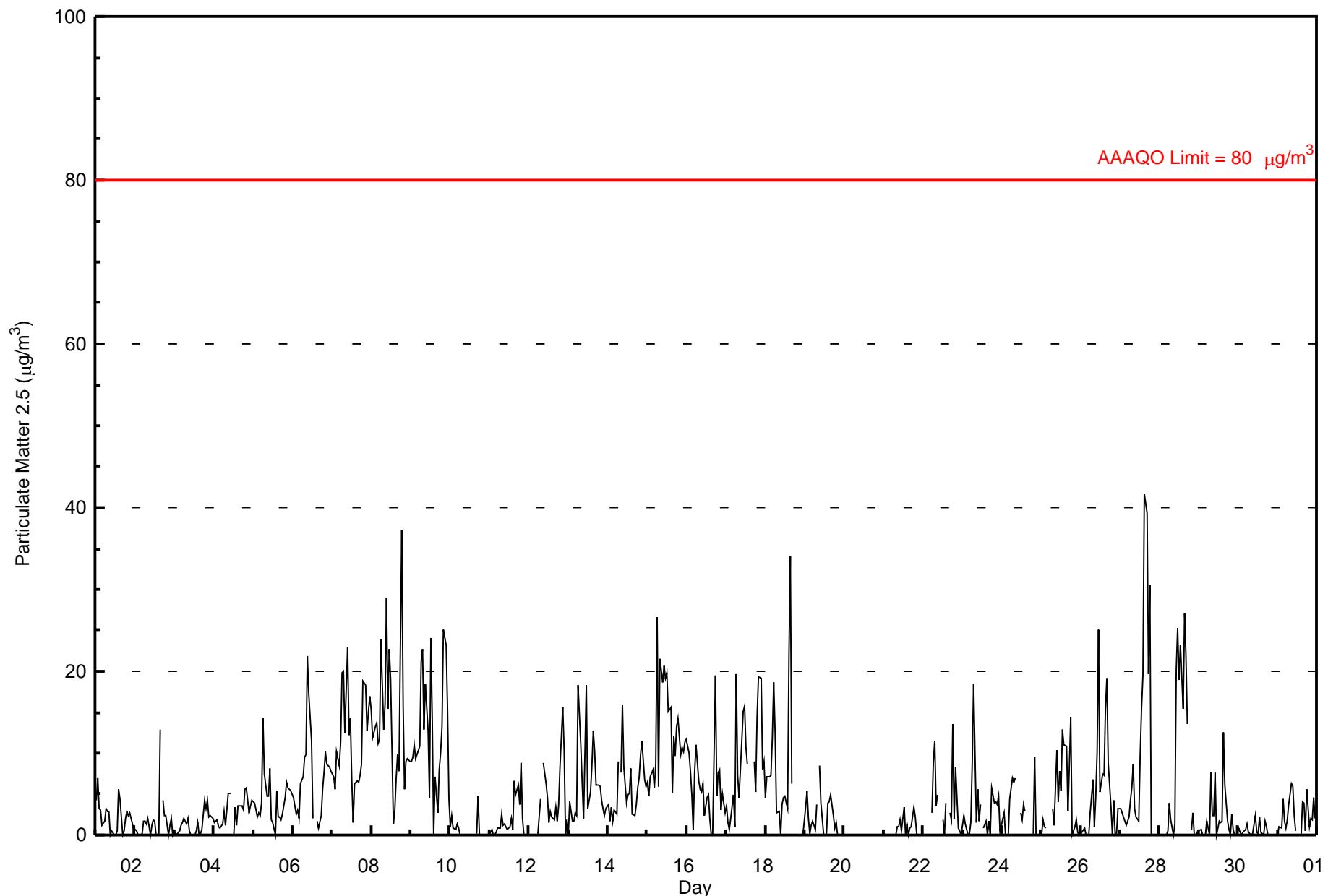


Peace Airshed Zone Association
Summary of Hourly Averages

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

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 41.7 μg/m ³ on Aug 27 16:00 Maximum Daily Average: 13.8 μg/m ³ on Aug 8																			Hours in Service: 744								
Minimum Value: 0 μg/m ³ on Aug 1 10:00 Minimum Daily Average: 0.0 μg/m ³ on Aug 20																			Hours of Data: 695								
Maximum Diurnal Average: 8.3 μg/m ³ at hour 16 Minimum Diurnal Average: 2.6 μg/m ³ at hour 3																			Hours of Missing Data: 49								
Monthly Average: 5.12 μg/m 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																			Hours of Calibration: 0								
																			Percent Operational Time: 93.4								
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Daily Average	Daily Maximum						
1-Aug	4	7	3	3	1	2	3	3	0	0	0	1	6	4	0	1	2	3	1	0	2.2	7.0					
2-Aug	1	1	0	0	0	2	2	1	2	0	1	2	0	0	13	BD	4	2	2	0	1	1.7	12.9				
3-Aug	0	0	0	1	1	2	2	1	2	1	0	0	1	1	0	0	1	4	3	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	3	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	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	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	2	1	7	5	6	4	9	2	0	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	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	1	1	2	1	3	0	1	0	1	1	3	2	0	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	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	9	0	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	1	4	2	0	1	20	25	19	23	15	27	22	14	P	1	3	0	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	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 μg/m ³ 24-hr 30 μg/m ³																											

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



Peace Airshed Zone Association Summary of Hourly Maximums

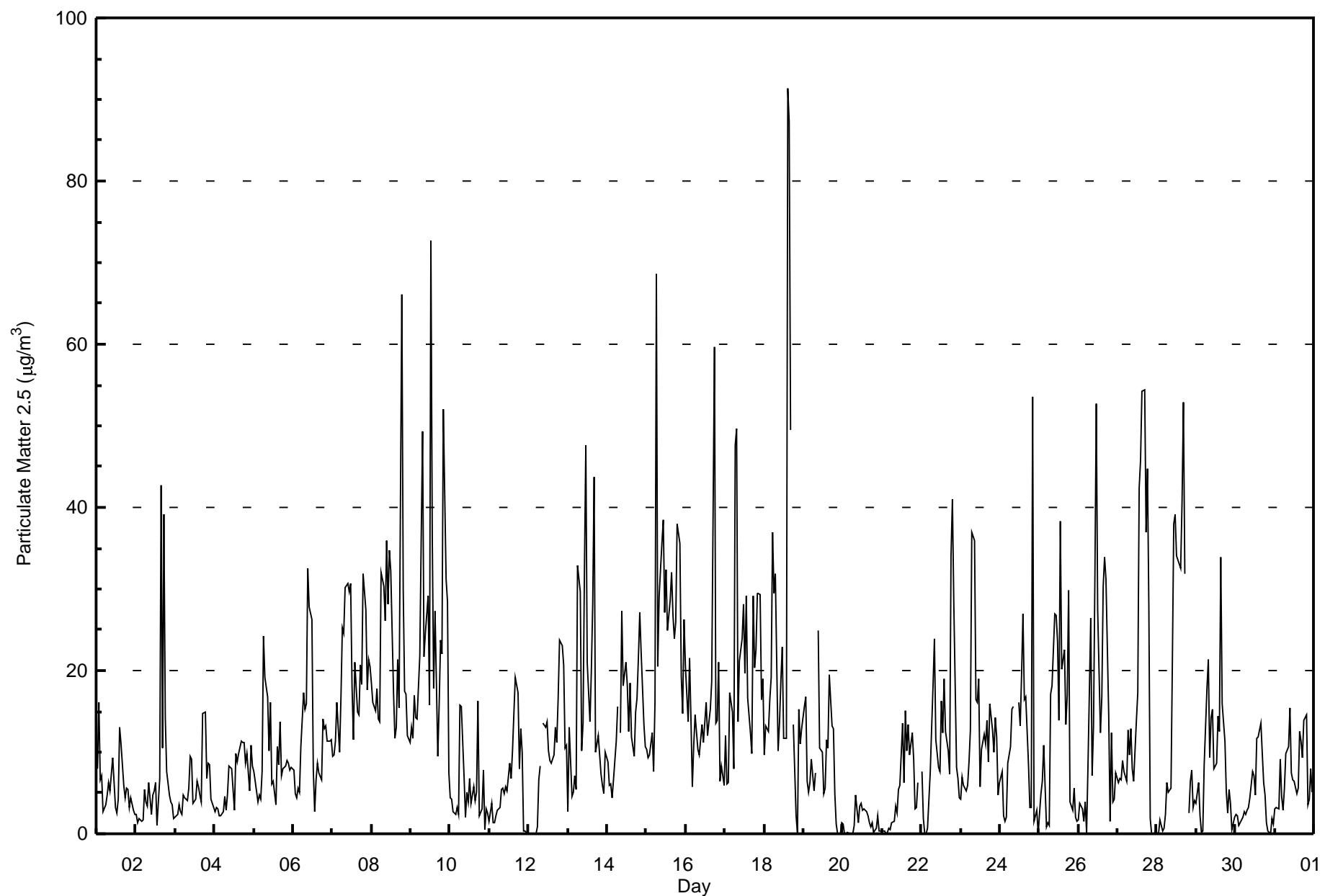
Evergreen Park - Particulate Matter 2.5 (PM_{2.5}) - µg/m³
August 1, 2008 to September 1, 2008

Maximum Daily Average: 25.6 µg/m³ on Aug 15																				Hours in Service: 744						
Minimum Value: 0 µg/m³ on Aug 12 00:00																				Hours of Data: 736						
Maximum Diurnal Average: 20.2 µg/m³ at hour 16																				Hours of Missing Data: 8						
Monthly Average: 12.54 µg/m³																				Hours of Calibration: 0						
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																				Percent Operational Time: 98.9						
Day	Hourly Period Ending At (MST)																				Daily Average	Daily Maximum				
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	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	5	9	7	10	15	19	17	8	13	10	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	17	18	27	27	24	14	38	20	23	13	17	30	4	3	6	2	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	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	

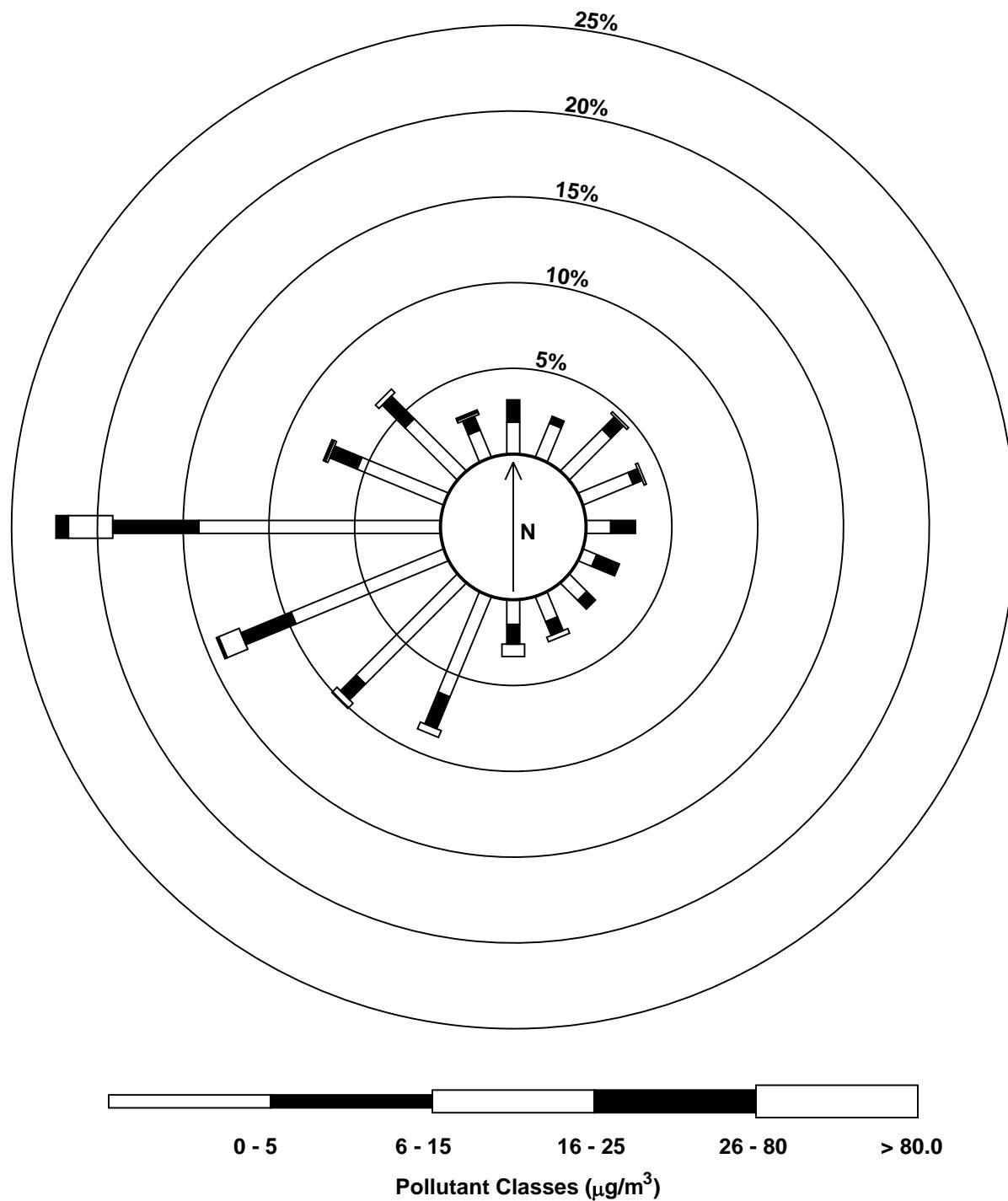
P - Power Failure

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



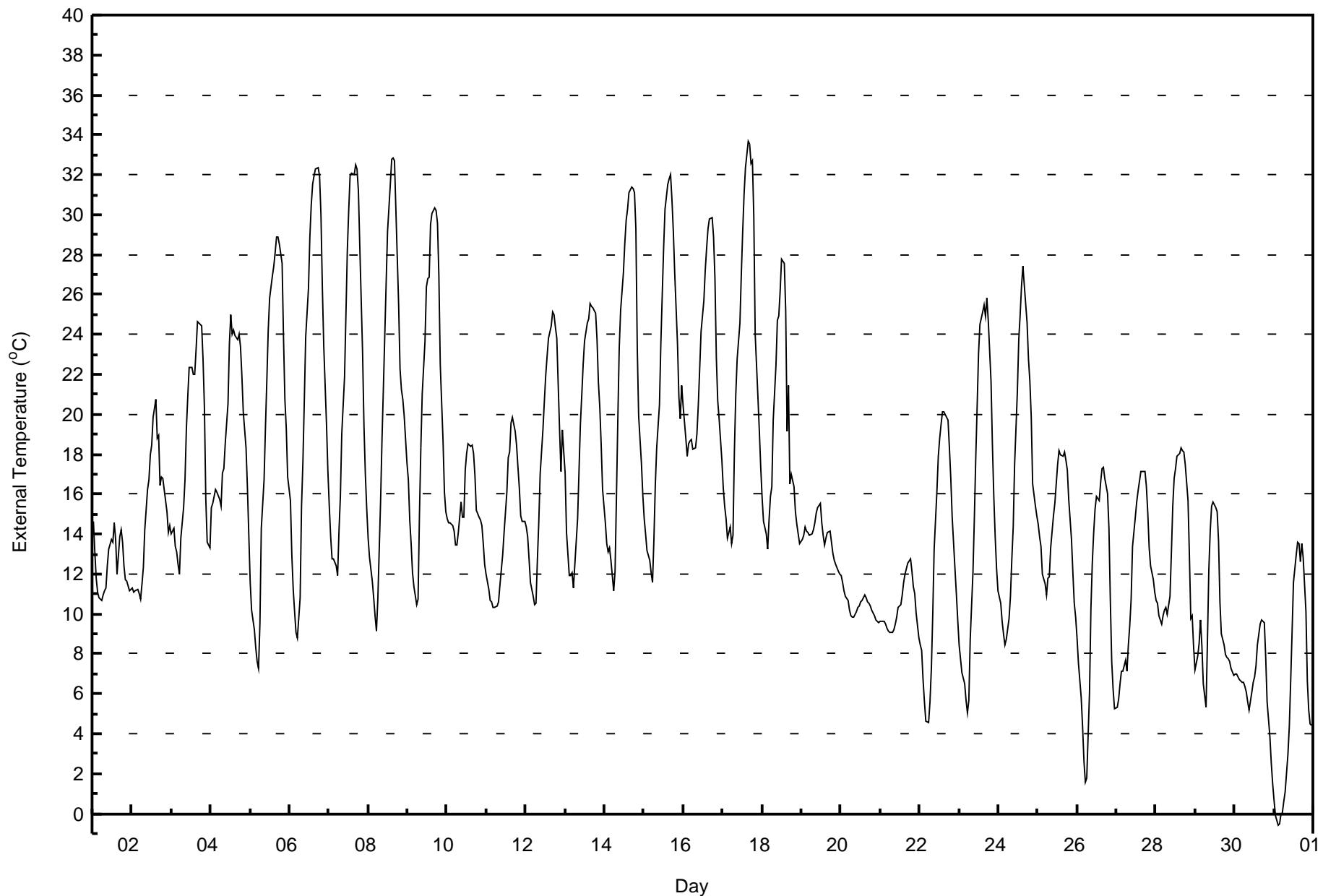
Peace Airshed Zone Association
Summary of Hourly Averages

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 Minimum Value: -1 °C on Aug 31 03:00 Minimum Daily Average: 6.1 °C on Aug 31 Maximum Diurnal Average: 22.1 °C at hour 17 Minimum Diurnal Average: 9.9 °C at hour 6 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 in Service: 744	744		
																								Hours of Data: 744	744		
																								Hours of Missing Data: 0	0		
																								Hours of Calibration: 0	0		
																								Percent Operational Time: 100.0	100.0		
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
1-Aug	15	13	12	11	11	11	11	11	12	13	14	14	15	14	12	14	14	14	12	12	12	11	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	14	15.1	20.8
3-Aug	14	14	13	13	13	12	12	14	15	17	19	21	22	22	23	25	25	24	23	20	16	14	14	13	13	18.2	24.6
4-Aug	15	16	16	16	16	16	15	17	17	19	21	24	25	24	24	24	24	23	22	20	18	16	14	14	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	28	24	21	19	17	17	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	17	21.6	32.4
7-Aug	15	14	13	13	12	12	14	16	19	22	25	28	30	32	32	32	32	31	28	23	19	17	15	15	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	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	27	22	19	16	15	15	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	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	18.1	25.2
13-Aug	17	14	12	12	12	11	12	15	17	20	21	22	24	25	25	26	25	25	24	22	20	18	16	16	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	29	23	20	18	16	16	16	21.7	31.4
15-Aug	15	14	13	13	12	12	14	16	18	20	24	26	28	30	32	32	31	29	27	24	21	20	21	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	30	24	21	19	17	17	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	14	18.8	27.8
19-Aug	14	14	14	14	14	14	14	14	15	15	15	16	15	14	14	13	14	14	13	13	12	12	12	12	12	13.9	15.6
20-Aug	12	12	11	11	11	10	10	10	10	10	10	11	11	11	11	11	11	10	10	10	10	10	10	10	10	10.4	12.0
21-Aug	10	10	10	9	9	9	9	9	9	10	10	10	11	12	12	13	13	12	11	10	9	10	9	10	10	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	10	12.9	20.1
23-Aug	8	8	7	7	6	5	6	9	12	15	18	20	23	24	25	25	26	25	22	18	16	14	12	12	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	15	17.0	27.4
25-Aug	15	14	13	12	11	11	12	12	13	15	16	17	17	18	18	18	18	17	16	14	12	11	10	10	14.4	18.2	
26-Aug	9	8	6	4	3	2	2	6	10	13	14	15	16	16	17	17	17	16	14	11	8	6	5	5	10.4	17.3	
27-Aug	5	6	7	7	8	7	8	9	11	13	15	16	16	17	17	17	17	16	15	13	12	12	11	11	11	11.8	17.2
28-Aug	11	11	10	10	10	10	10	11	13	15	17	17	18	18	18	18	18	17	16	13	10	10	8	8	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	7	7	7	7	9.9	15.6
30-Aug	7	7	7	7	7	7	6	6	6	5	6	7	7	8	10	10	10	10	8	6	4	3	1	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	10	7	5	5	4	4	6.1	13.6	
																									Diurnal Average		
																									Diurnal Maximum		

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		
1 Spd	9	6	7	6	5	4	6	7	8	9	10	12	13	12	11	9	7	13	18	17	11	13	11	10	9.1	18.2
	226	235	224	245	293	301	255	252	261	263	277	268	278	301	285	314	300	273	263	256	254	260	268	280	268.0	263.0
2 Spd	11	11	9	13	10	9	10	13	13	14	15	14	12	15	16	14	11	6	9	6	9	7	9	9.5	15.8	
	276	268	260	262	268	279	277	272	288	307	296	298	313	315	315	324	351	320	228	234	253	254	250	264	286.4	314.7
3 Spd	8	12	7	7	6	7	9	10	11	10	10	15	11	9	11	14	15	13	16	9	3	4	4	6	8.5	15.6
	268	266	262	274	285	277	274	267	278	275	275	336	324	308	285	277	275	300	267	265	217	202	205	228	278.1	267.4
4 Spd	7	8	7	9	10	12	8	13	11	8	8	12	11	9	11	11	9	12	11	8	6	4	1	2	8.0	12.6
	258	261	265	261	261	266	263	262	266	262	268	308	282	299	276	276	268	278	275	351	27	176	260	273.8	262.9	
5 Spd	1	2	2	1	3	2	1	2	6	4	7	6	6	6	8	2	2	3	5	5	5	4	4	3	2.6	7.8
	289	280	215	330	202	162	320	241	211	210	209	199	197	201	243	206	117	103	146	130	126	134	140	148	186.1	242.8
6 Spd	4	4	3	3	2	2	3	2	4	3	4	6	7	7	7	6	5	5	7	7	6	5	5	4	2.5	7.4
	136	67	59	307	100	298	357	156	227	277	189	157	173	170	199	200	143	157	118	93	105	104	81	53	141.7	169.7
7 Spd	2	2	1	2	1	1	3	4	8	5	7	6	3	3	4	7	7	2	7	5	2	1	1	2	1.8	8.3
	32	11	14	292	240	11	251	221	255	278	279	284	328	305	205	178	178	95	179	206	221	216	40	324	239.8	254.8
8 Spd	1	0	1	3	2	0	2	4	4	3	5	5	4	5	5	6	4	5	23	10	2	3	4	6	2.3	23.3
	9	143	235	345	249	157	277	201	189	278	204	166	184	217	340	332	75	87	237	253	216	175	140	206	224.1	237.1
9 Spd	2	4	1	2	1	2	2	3	8	7	8	7	2	6	2	5	4	6	6	5	22	17	5	6	2.5	21.7
	229	55	273	264	212	259	211	276	261	265	273	268	185	150	352	47	53	83	123	111	248	240	277	305	252.2	247.5
10 Spd	9	12	12	7	6	9	8	8	9	10	12	14	22	23	19	21	14	11	8	10	13	16	13	13	11.9	22.8
	288	239	257	273	238	225	227	230	229	230	248	245	249	258	252	247	262	291	297	231	240	232	231	227	247.2	258.1
11 Spd	9	9	9	7	7	6	7	9	8	4	2	5	6	4	2	7	8	15	13	14	14	11	11	10	6.3	15.1
	202	201	194	191	195	199	204	237	253	316	18	312	357	342	294	277	273	270	266	253	261	257	258	265	250.6	269.7
12 Spd	10	11	9	6	6	6	5	8	8	3	3	3	3	4	3	3	6	7	7	5	3	4	5	6	5.2	10.6
	272	278	282	291	281	280	291	275	272	273	271	288	291	294	300	350	282	340	326	314	239	265	270	251	285.0	278.5
13 Spd	7	3	5	5	6	5	7	12	13	14	17	16	14	15	14	16	15	16	8	6	7	5	3	9.8	16.7	
	269	274	236	257	263	307	262	260	265	273	281	273	283	284	287	270	283	272	268	284	278	281	238	215	273.1	281.1
14 Spd	4	3	4	5	5	3	4	5	8	13	14	13	16	14	11	8	8	7	5	4	2	2	3	3	4.6	15.6
	201	192	192	205	201	205	210	195	210	252	246	273	271	274	288	305	304	335	348	37	80	307	355	335	263.1	270.6
15 Spd	2	2	2	3	4	2	3	3	4	4	3	2	3	5	4	5	6	5	3	1	2	2	2	0.7	5.7	
	351	262	287	265	265	269	286	305	254	250	282	274	345	325	168	126	111	122	96	88	9	287	353	282	266.8	122.1
16 Spd	4	4	2	5	7	9	11	13	13	10	8	5	4	3	4	4	5	3	6	5	5	5	5	4	2.8	12.7
	212	224	260	252	267	275	314	325	325	327	324	338	290	309	19	359	16	71	101	86	83	85	93	72	329.8	325.2
17 Spd	4	4	2	4	5	3	2	1	5	5	6	3	4	4	3	3	4	3	3	5	2	4	4	2	1.6	6.5
	77	79	55	90	99	28	43	1	168	150	183	178	167	201	144	133	211	181	122	116	314	275	254	294	145.3	182.7
18 Spd	4	2	1	0	0	4	3	8	12	15	13	11	9	7	4	0	6	10	3	5	3	2	3	4	4.4	15.1
	199	186	50	237	43	248	248	250	247	248	246	260	265	315	236	331	310	307	246	206	212	217	69	190	253.0	248.2
19 Spd	1	3	4	2	3	3	1	5	3	5	4	7	9	7	6	6	8	6	4	5	4	4	4	2.7	8.5	
	244	256	208	188	210	338	103	212	243	312	318	320	327	318	302	311	332	1	7	0	13	50	46	35	326.1	326.7
20 Spd	5	7	7	7	9	8	7	8	7	7	8	7	7	9	9	9	8	6	8	9	8	7	8	7.6	9.2	
	51	58	62	68	64	66	65	71	62	65	72	66	59	55	57	55	66	66	63	50	54	54	53	54	60.7	56.6
21 Spd	8	8	8	9	9	9	8	7	7	6	5	5	6	6	6	4	5	2	0	3	5	5	5	3	3.9	9.3
	57	55	50	51	52	50	46	41	38	40	28	28	27	31	21	4	12	3	199	202	230	233	214	192	40.3	52.3
22 Spd	6	4	1	1	2	5	3	5	6	8	11	16	18	13	16	11	10	4	3	4	1	2	2	2	6.1	17.8
	206	190	182	320	221	220	208	204	202	207	225	254	255	272	272	256	256	251	248	207	207	223	242	214	241.6	255.0

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
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	10	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
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
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
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
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
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
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
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
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

Maximum Daily Speed Average: 15.4 km/h on Aug 25

Minimum Daily Speed Average: 0.7 km/h on Aug 15

Maximum Diurnal Speed Average: 7.4 km/h at hour 12

Minimum Diurnal Speed Average: 2.8 km/h at hour 23

Monthly Average Velocity: 4.64 km/h 260.98 dec

Speed Percentiles: $P_1 = 0.7$ $P_{10} = 1.9$ $Q_1 = 3.6$ Median = 6.3 $Q_3 = 9.8$ $P_{90} = 14.6$ $P_{99} = 24.0$

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

Hours in Service: 744

Hours of Data: 744

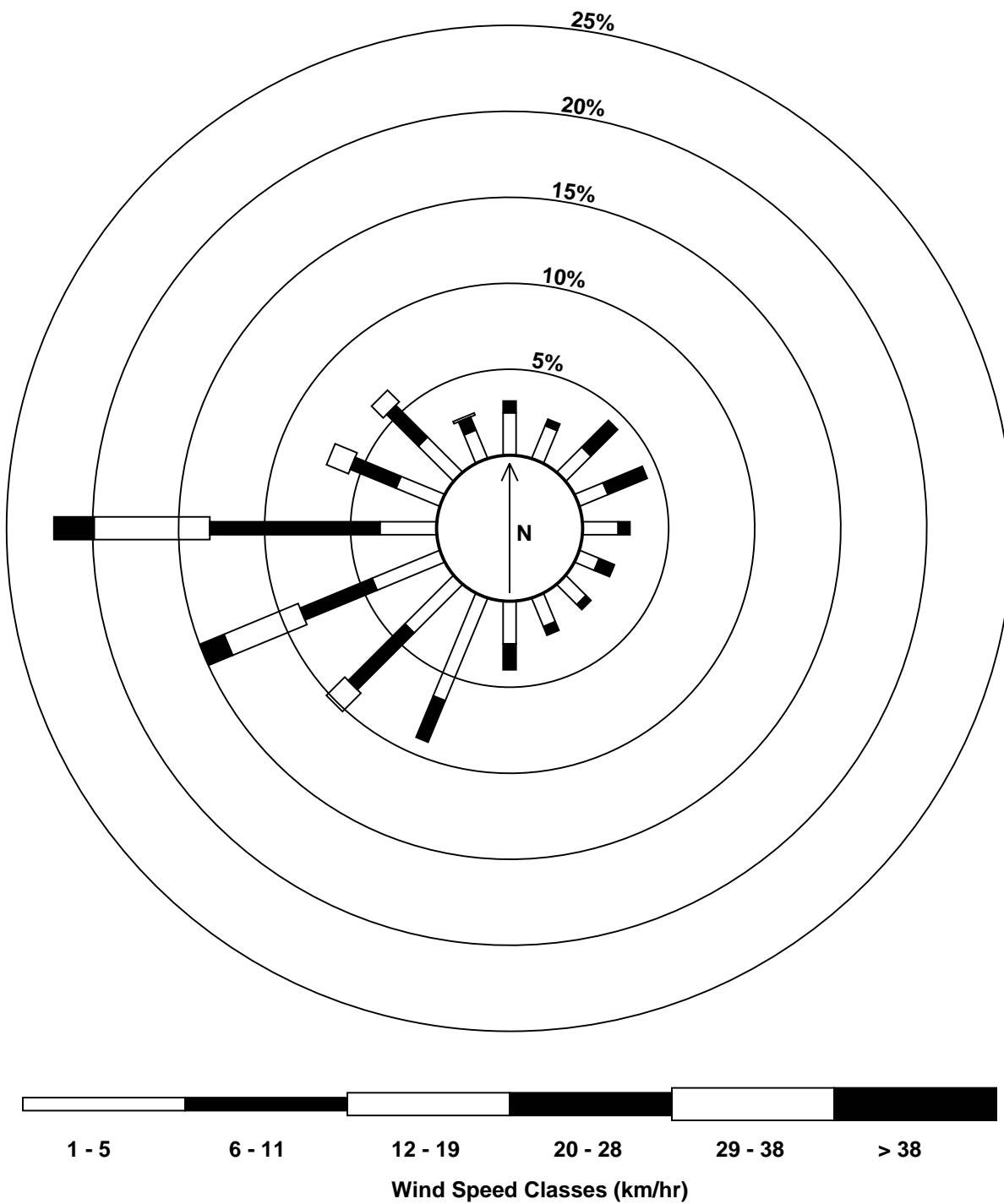
Hours of Missing Data:

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 (Scalable)

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-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	14	16	9	4	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	5	5	5	4	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	6	5	5	5	4	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	3	4.9	8.7															
8-Aug	4	3	3	4	3	2	3	4	4	5	6	6	7	7	7	6	6	26	14	6	7	5	6	6	6.2	25.8																
9-Aug	5	5	3	3	3	3	3	4	8	8	9	8	7	7	6	7	6	7	6	23	17	7	8	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	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	5	4	4	6	7	6	6.8	10.8																
13-Aug	7	4	5	5	6	5	7	12	13	14	18	17	16	14	17	16	15	16	8	6	7	6	4	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	6	7	6	7	5	5	6	5	4	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	7	8	9	9	8	8	8	7.9	9.5															
21-Aug	8	9	8	9	10	9	8	7	7	5	6	6	6	6	5	6	3	3	4	5	5	5	3	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	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	6	6	5	3	3	3	5.4	11.3																
24-Aug	3	3	3	2	4	3	4	3	3	4	5	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	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	26.8																
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																

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Maximum
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	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	

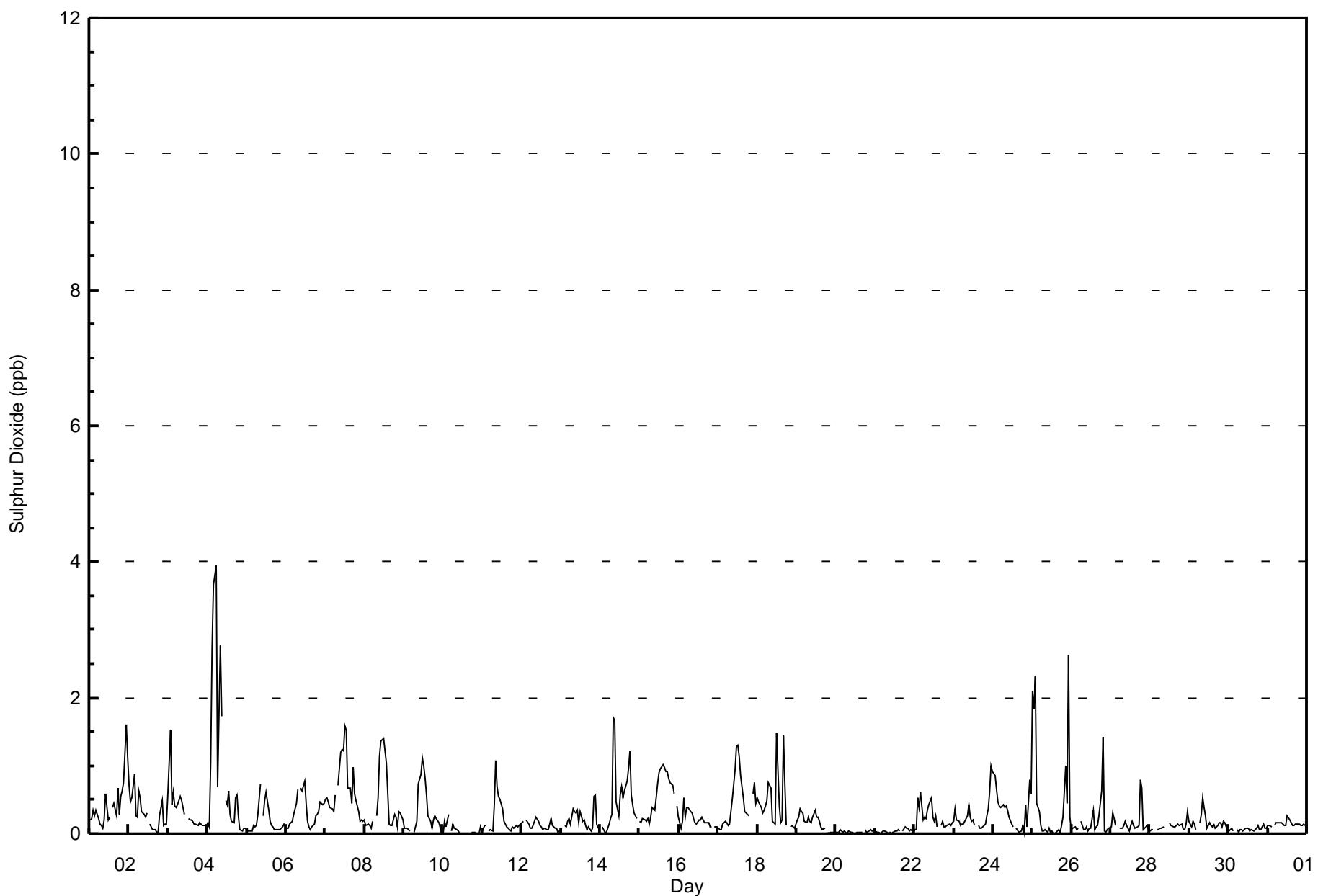
PASZA
Smoky Heights Station
Monthly Summary Tables, Graphs and
Roses

Peace Airshed Zone Association

Summary of Hourly Averages

Smoky Heights - Sulphur Dioxide (SO_2) - ppb
August 1, 2008 to September 1, 2008

Hourly Averages for SO₂ at Smoky Heights
August 2008

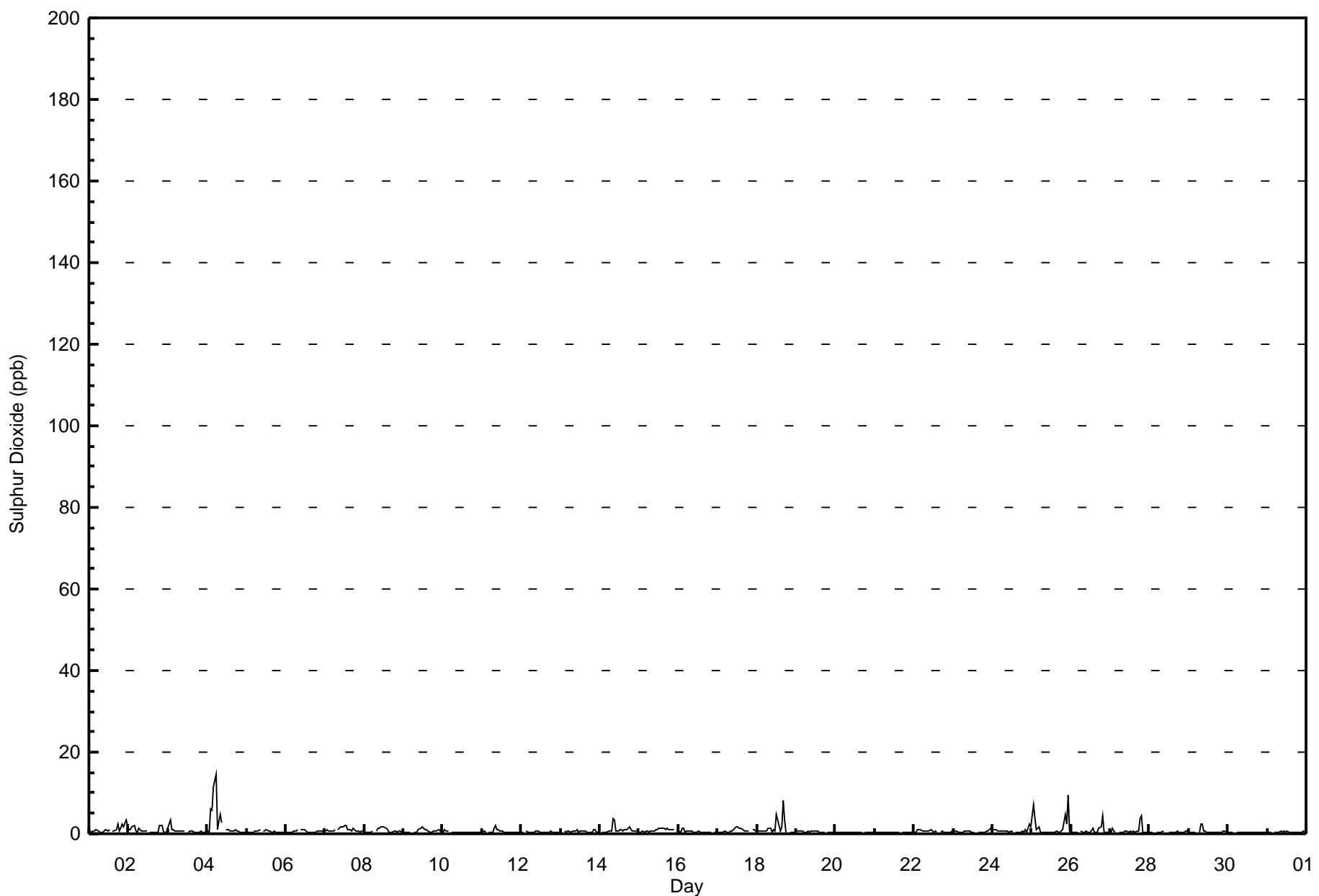


Peace Airshed Zone Association Summary of Hourly Maximums

Smoky Heights - Sulphur Dioxide (SO_2) - ppb

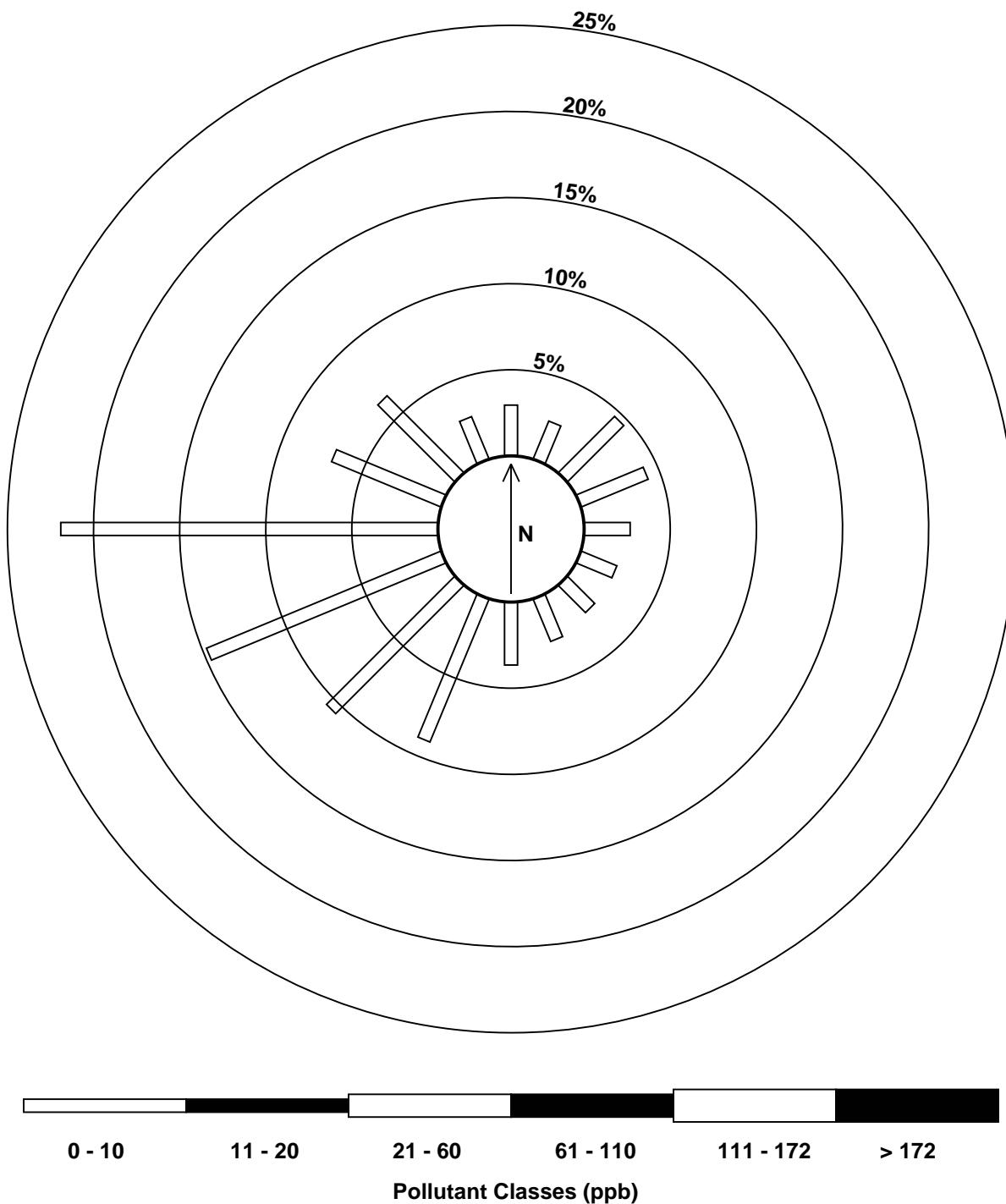
August 1, 2008 to September 1, 2008

Hourly Maximums for SO₂ at Smoky Heights August 2008



Pollutant Rose for SO₂ at Smoky Heights

August 2008



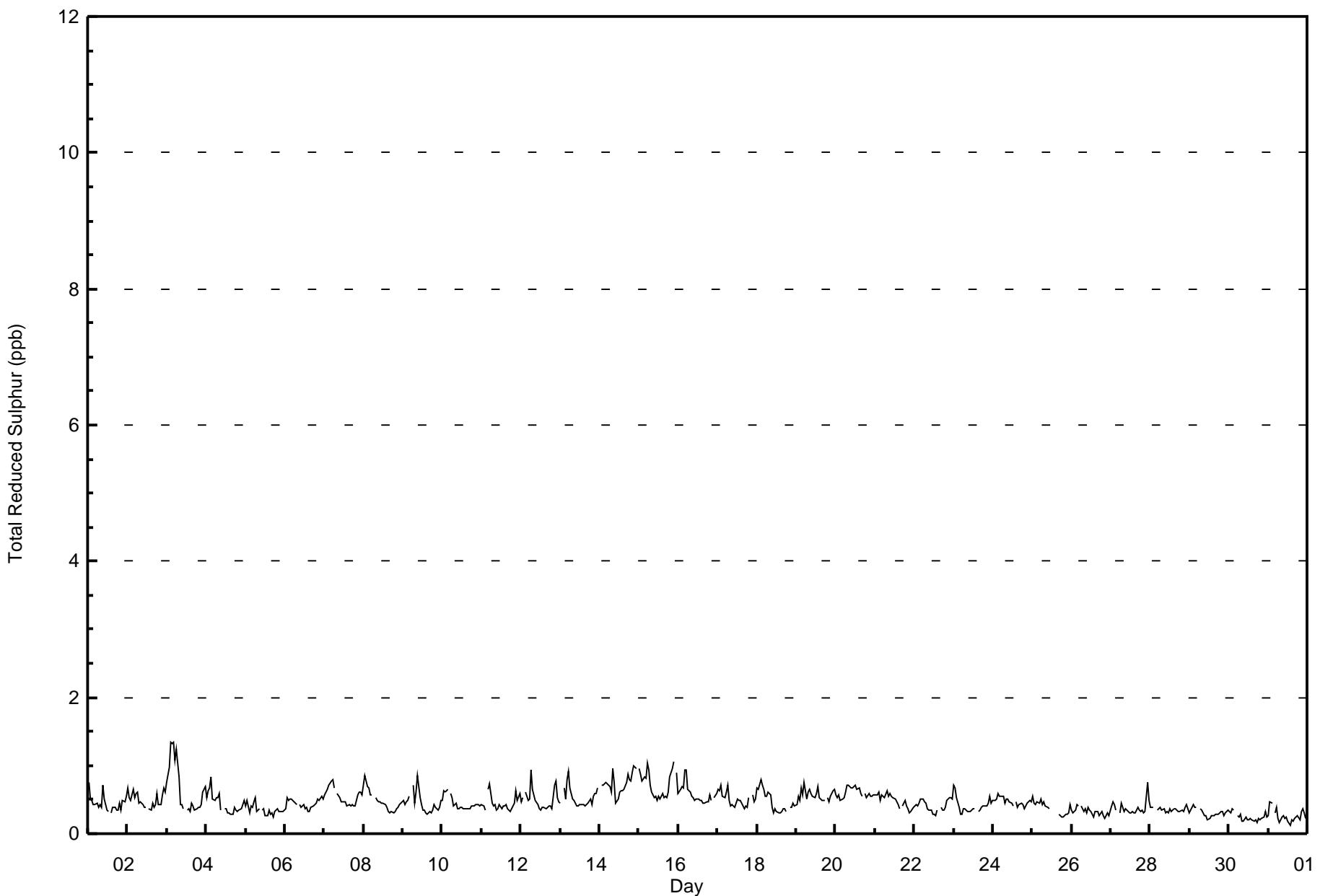
Peace Airshed Zone Association

Summary of Hourly Averages

Smoky Heights - Total Reduced Sulphur (TRS) - ppb

August 1, 2008 to September 1, 2008

Hourly Averages for TRS at Smoky Heights
August 2008



Peace Airshed Zone Association Summary of Hourly Maximums

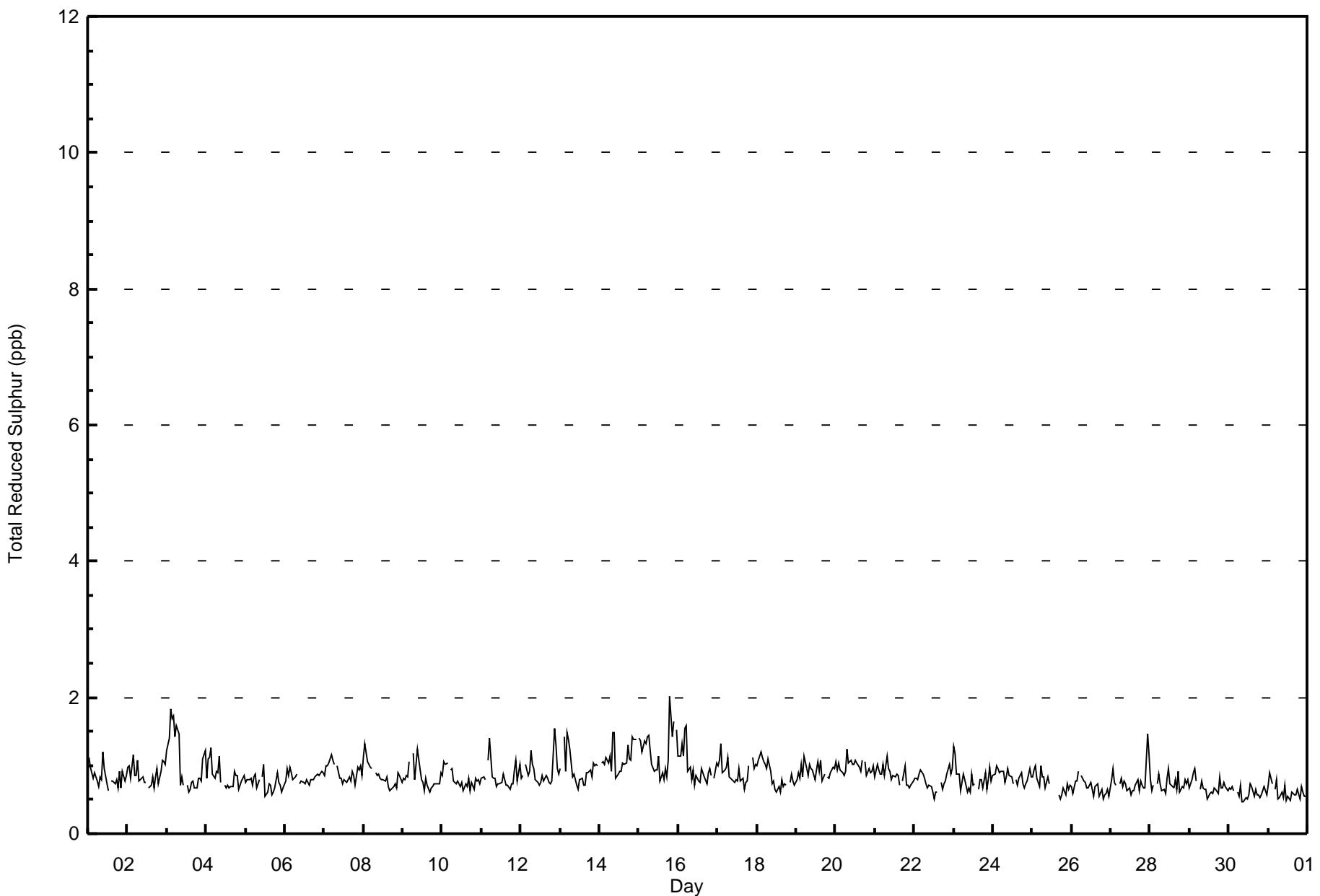
Smoky Heights - Total Reduced Sulphur (TRS) - ppb

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:																				Percent Operational Time:		100.0	
Day	Hourly Period Ending At (MST)																				Daily Average																				Daily Maximum		
1-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	1	1	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2					
3-Aug	1	1	2	2	2	1	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.8					
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	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	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0					
6-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	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0					
7-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	1	1	1	1	1	1	1	1	1	1	1	0.9	1.2					
8-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	1	1	1	1	1	1	1	1	1	1	1	0.9	1.3					
9-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	1	1	1	1	1	1	1	1	1	1	1	0.8	1.2					
10-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	1	1	1	1	1	1	1	1	1	1	1	0.8	1.1					
11-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	1	1	1	1	1	1	1	1	1	1	1	0.8	1.4					
12-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	1	1	1	1	1	1	1	1	1	1	1	0.9	1.6					
13-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	1	1	1	1	1	1	1	1	1	1	1	1.0	1.5					
14-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	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	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.2	2.0					
16-Aug	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1.0	1.6					
17-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	1	1	1	1	1	1	1	1	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	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	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	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	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	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	1	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	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	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0					
23-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	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	1	1	1	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.8	1.0					
25-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	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0					
26-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	1	1	1	1	1	1	1	1	1	1	1	0.7	0.9					
27-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	1	1	1	1	1	1	1	1	1	1	1	0.8	1.5					
28-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	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0					
29-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	1	1	1	1	1	1	1	1	1	1	1	0.7	1.0					
30-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	A	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0.6	0.7					
31-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	0	A	1	1	1	1	1	1	1	1	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	0.8	0.8	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.9	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	1.5	1.5	1.5	1.0	1.0	1.1	1.1	1.0	1.1	1.1	1.3	1.1	1.1	2.0	1.6	1.6	1.5	1.5	1.5	Diurnal Maximum												

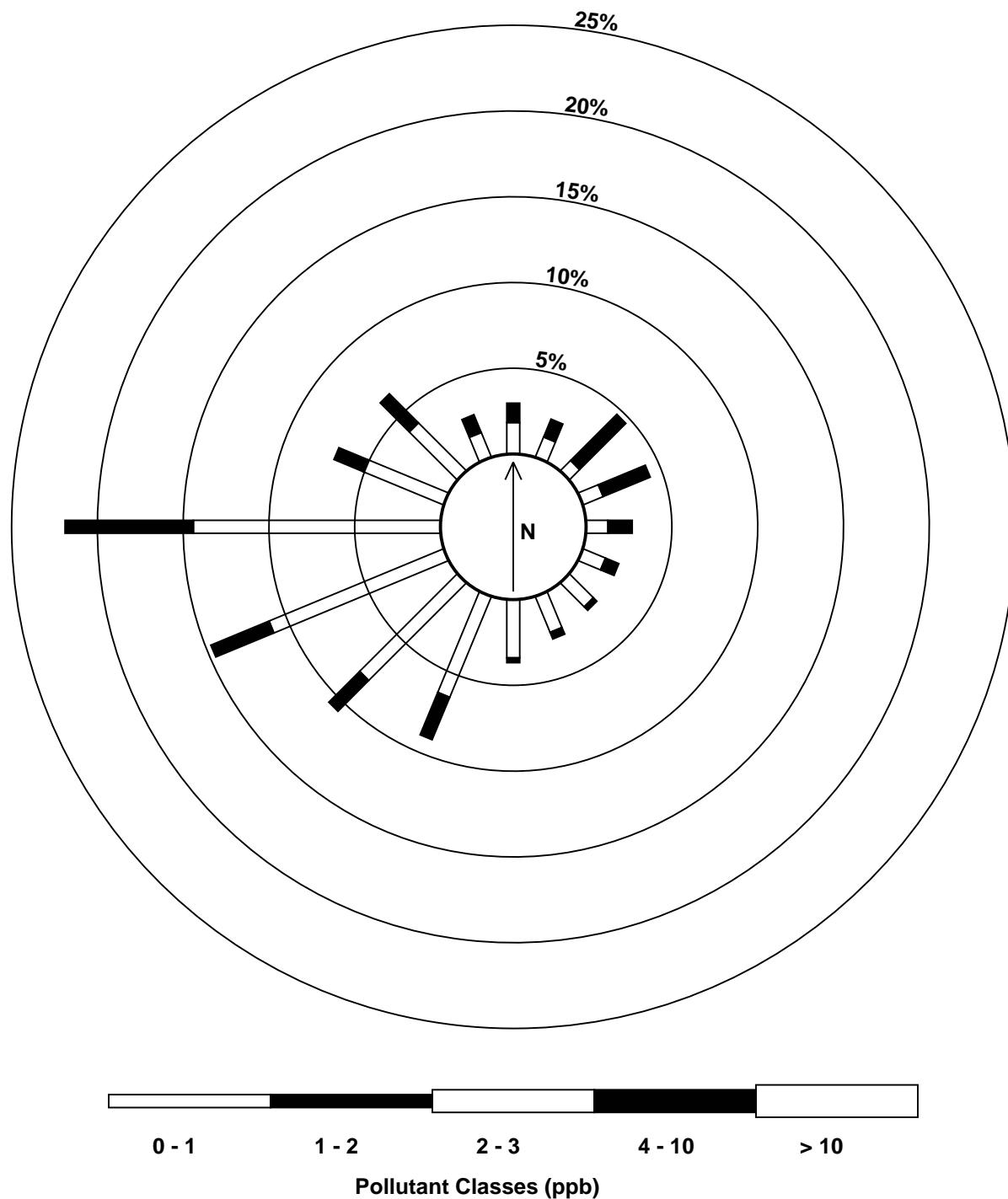
Hourly Maximums for TRS at Smoky Heights

August 2008



Pollutant Rose for TRS at Smoky Heights

August 2008



Peace Airshed Zone Association

Summary of Hourly Averages

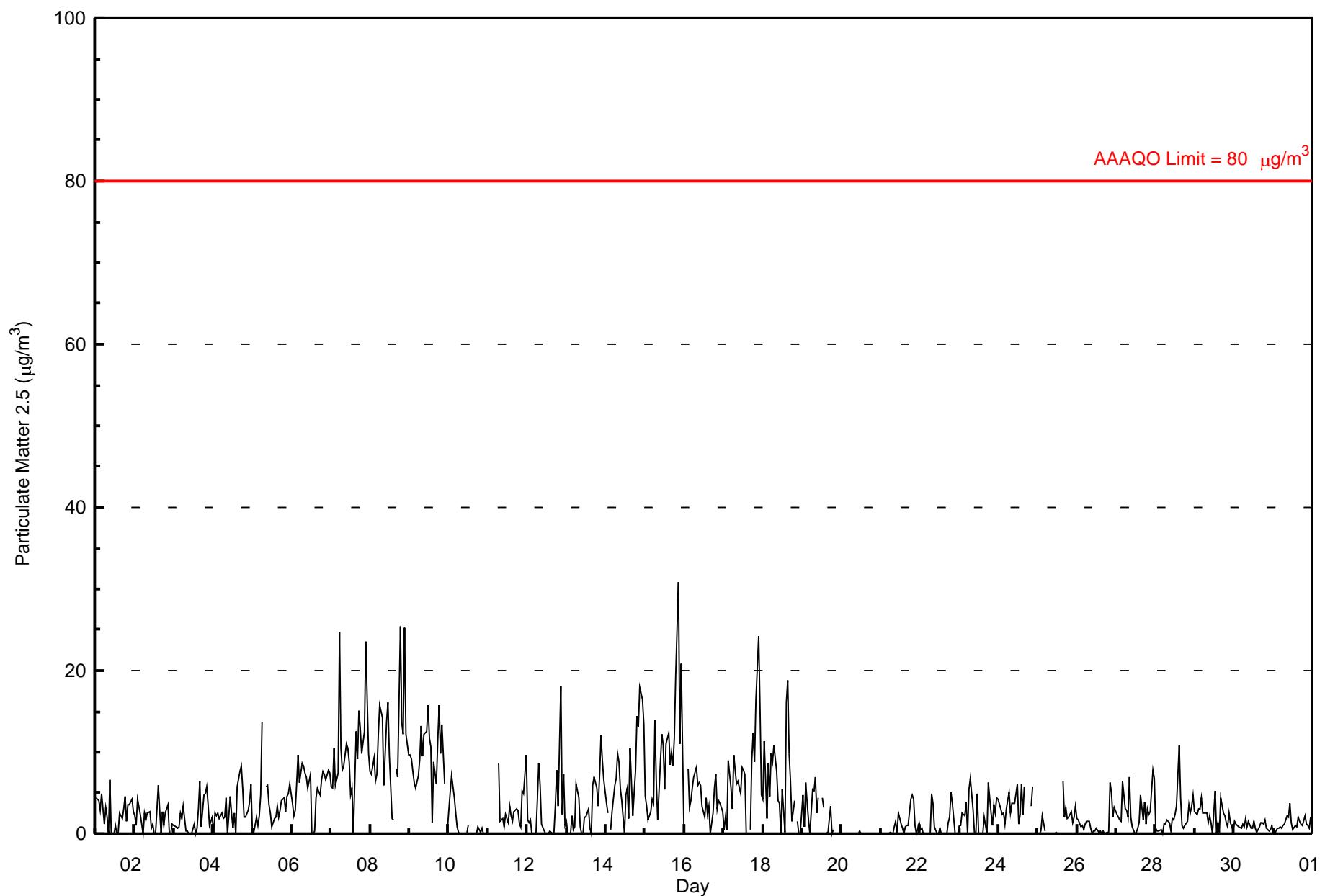
Smoky Heights - Particulate Matter 2.5 (PM_{2.5}) - μg/m³
August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0																			Hours in Service: 744					
Maximum Value: 30.9 µg/m³ on Aug 15 21:00 Maximum Daily Average: 11.0 µg/m³ on Aug 8																			Hours of Data: 713					
Minimum Value: 0 µg/m³ on Aug 1 09:00 Minimum Daily Average: 0.0 µg/m³ on Aug 20																			Hours of Missing Data: 31					
Maximum Diurnal Average: 6.3 µg/m³ at hour 21 Minimum Diurnal Average: 2.4 µg/m³ at hour 1																			Hours of Calibration: 2					
Monthly Average: 3.79 µg/m³ 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																			Percent Operational Time: 96.1					
Day	Hourly Period Ending At (MST)																				Daily Average	Daily Maximum		
1-Aug	4	4	4	3	5	1	3	2	0	7	0	0	1	0	0	3	2	3	5	2	4	4	3	
2-Aug	2	1	4	2	1	0	3	2	3	3	1	1	0	0	6	3	0	3	1	3	4	0	1	
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	
4-Aug	0	3	2	3	2	3	2	2	4	0	5	2	1	3	0	6	8	8	6	2	3	4	6	
5-Aug	0	0	2	1	2	5	14	P	6	6	3	2	1	2	2	3	2	3	4	4	3	5	6	
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-Aug	6	6	11	6	7	25	11	8	8	11	11	9	5	6	0	12	9	15	13	10	13	24	16	
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	
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	
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	
11-Aug	0	0	0	0	0	0	BD	9	2	2	1	2	1	3	2	2	3	3	3	1	1	5	5	
12-Aug	2	1	2	0	0	BD	0	4	9	6	1	0	0	0	0	0	3	8	3	18	2	7	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	
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	
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	
16-Aug	0	BD	8	3	4	6	7	8	6	6	6	3	2	4	2	3	0	3	6	7	3	4	3	
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	
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	
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	
20-Aug	0	0	0	0	0	0	BD	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	2	0	2	1	1	0	1	1	1	4	5	4	1	0	
22-Aug	1	1	0	0	0	BD	BD	0	5	4	1	0	1	0	BD	0	0	1	2	5	4	0	P	
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	
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	
25-Aug	0	0	0	2	0	BD	1	BD	0	0	0	0	C	C	6	2	3	2	2	3	1	2	3	
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	
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	
28-Aug	1	0	0	0	0	1	1	2	1	0	2	2	2	3	11	4	1	1	1	4	3	3	5	
29-Aug	3	2	3	3	4	3	3	1	2	1	0	5	0	1	0	4	2	2	1	1	3	1	0	
30-Aug	1	1	1	1	1	1	1	2	1	1	1	1	1	1	0	1	1	1	1	2	1	0	1	
31-Aug	0	0	1	1	1	1	1	1	2	2	4	1	1	1	2	2	1	1	1	2	1	1	2	
	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
	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 Average																				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

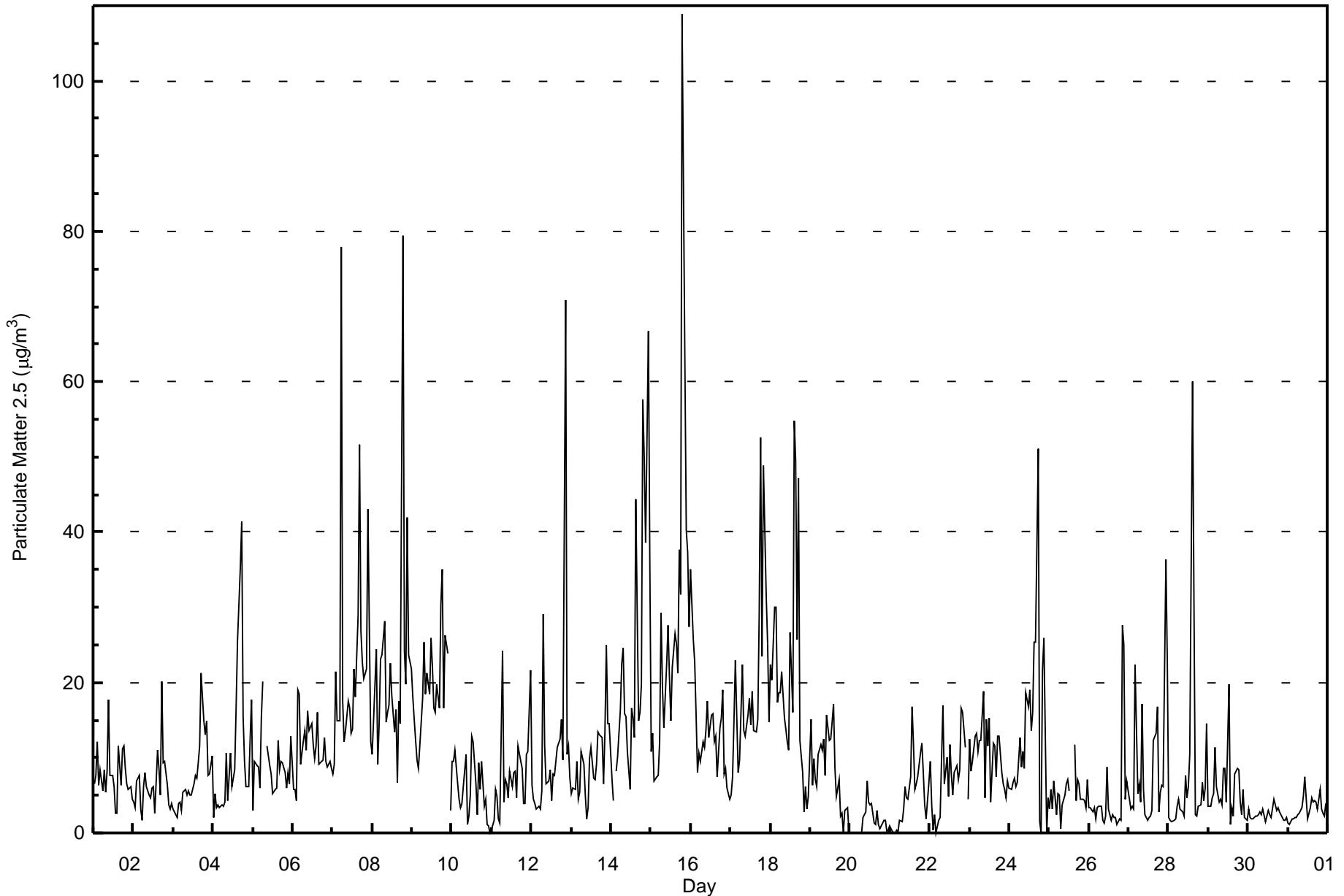


Peace Airshed Zone Association Summary of Hourly Maximums

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

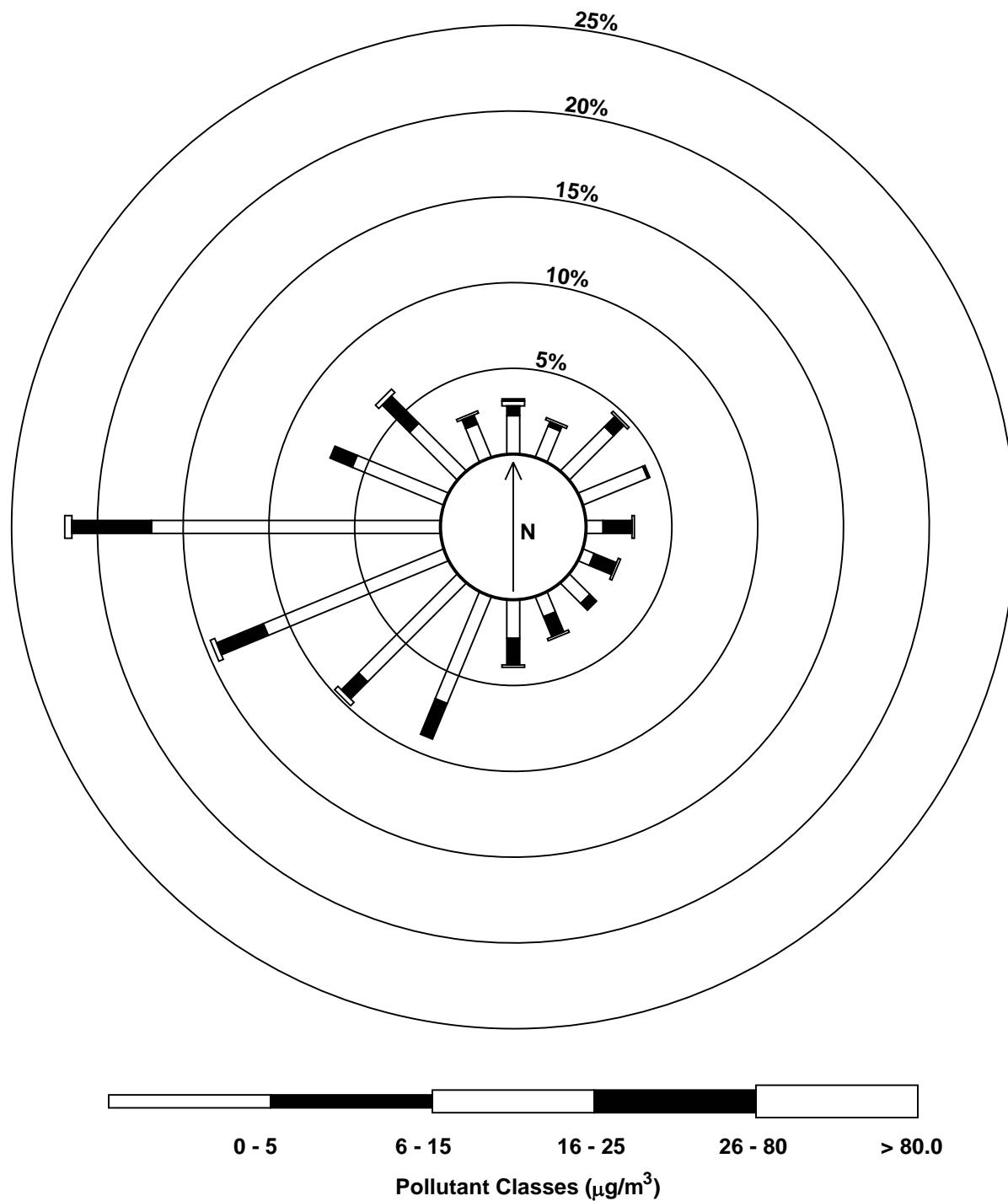
Maximum Value: 108.9 µg/m³ on Aug 15 20:00																				Maximum Daily Average: 27.0 µg/m³ on Aug 15																				Hours in Service:		744						
Minimum Value: 0 µg/m³ on Aug 11 00:00																				Minimum Daily Average: 1.5 µg/m³ on Aug 20																				Hours of Data:		738						
Maximum Diurnal Average: 16.1 µg/m³ at hour 18																				Minimum Diurnal Average: 6.8 µg/m³ at hour 2																			Hours of Missing Data:		6							
Monthly Average: 10.91 µg/m³																				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-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	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	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	51	2	0	22	26	0	5	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	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	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



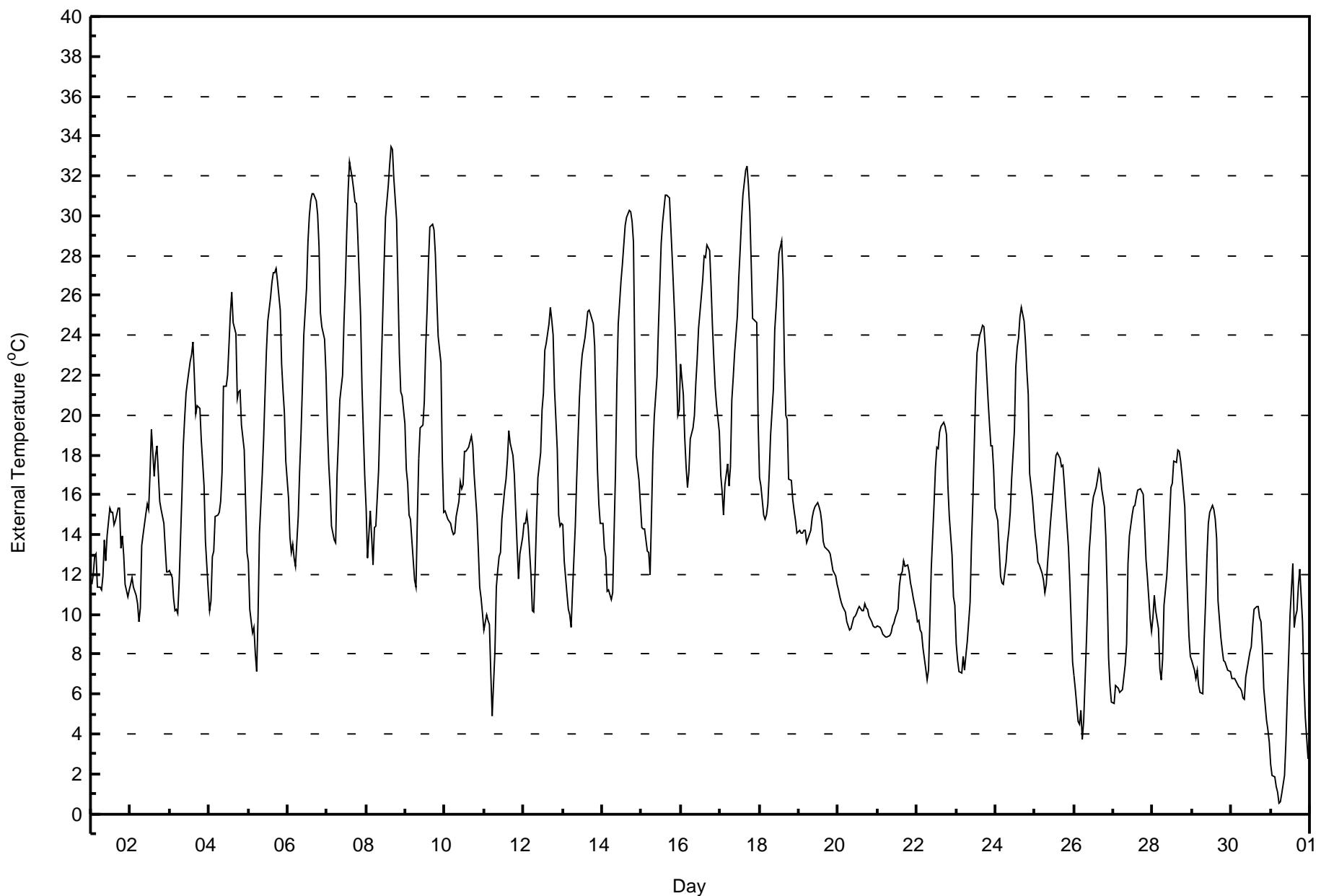
Peace Airshed Zone Association
Summary of Hourly Averages

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 Minimum Value: 1 °C on Aug 31 06:00 Minimum Daily Average: 5.6 °C on Aug 31 Maximum Diurnal Average: 21.7 °C at hour 16 Minimum Diurnal Average: 10.2 °C at hour 6 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 in Service:	744	
																								Hours of Data:	744	
																								Hours of Missing Data:	0	
																								Hours of Calibration:	0	
																								Percent Operational Time:	100.0	
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
1-Aug	11	12	13	13	11	11	11	12	14	13	14	15	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	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	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	22	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	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	15	15	16	17	16	17	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	24	21	18	15	14	15	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	23	20	17	16	15	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	29	23	20	17	16	16	20.7	30.2
15-Aug	14	14	13	13	12	15	18	20	22	24	26	29	30	31	31	31	31	29	28	25	22	20	20	22	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	12	12	12	12	12	13.9	15.6
20-Aug	11	11	11	10	10	10	9	9	9	10	10	10	10	10	10	11	10	10	10	9	9	9	9	9	10.0	11.2
21-Aug	9	9	9	9	9	9	9	9	9	10	10	10	11	12	12	13	12	12	12	11	11	10	10	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	23	21	20	18	17	17	17	15.8	24.5
24-Aug	15	15	13	12	12	12	13	14	14	15	17	19	22	23	24	25	25	24	22	21	17	16	15	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	15	13	12	10	8	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	7	7	8	13	14	15	15	16	16	16	16	16	16	14	13	12	10	9	9	11.3	16.3
28-Aug	10	11	10	9	7	7	8	10	12	13	15	16	17	18	18	18	18	17	15	13	11	9	8	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	7	7	7	7	7	9.7	15.5
30-Aug	7	7	7	7	6	6	6	6	7	8	8	8	9	10	10	10	10	10	8	6	5	4	4	4	7.3	10.4
31-Aug	2	2	2	1	1	1	1	2	4	6	8	10	13	9	10	10	11	12	10	7	5	4	3	5.6	12.6	
																									Diurnal Average	
																									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			
1 Spd	8	5	13	13	17	12	12	10	6	14	12	14	19	20	13	16	14	22	15	19	18	14	13	13	12.7	21.7	
	Dir	226	235	224	245	293	301	255	252	261	263	277	268	278	301	285	314	300	273	263	256	254	260	268	280	271.0	272.8
2 Spd	15	14	10	7	8	7	11	16	15	20	19	20	19	19	16	16	17	15	13	11	11	10	12	12	12	12.0	20.0
	Dir	276	268	260	262	268	279	277	272	288	307	296	298	313	315	315	324	351	320	228	234	253	254	250	264	287.9	298.2
3 Spd	11	13	14	15	16	14	14	12	18	17	18	17	18	17	17	15	4	5	5	7	7	6	4	6	10.8	18.1	
	Dir	268	266	262	274	285	277	274	267	278	275	275	336	324	308	285	277	275	300	267	265	217	202	205	228	279.0	274.9
4 Spd	8	9	19	18	19	17	17	18	17	23	23	23	20	10	8	13	15	10	7	8	11	7	4	5	12.5	23.2	
	Dir	258	261	265	261	261	261	266	263	262	266	262	268	308	282	299	276	276	268	278	275	351	27	176	260	272.2	266.4
5 Spd	6	3	8	5	3	1	4	6	7	9	11	9	10	9	10	7	11	13	15	14	12	11	10	9	5.2	14.7	
	Dir	289	280	215	330	202	162	320	241	211	210	209	199	197	201	243	206	117	103	146	130	126	134	140	148	174.4	146.3
6 Spd	5	5	8	7	7	8	7	8	10	10	10	11	14	16	10	10	11	13	14	12	11	16	17	13	5.1	16.5	
	Dir	136	67	59	307	100	298	357	156	227	277	189	157	173	170	199	200	143	157	118	93	105	104	81	53	136.6	81.2
7 Spd	6	5	5	5	6	8	6	3	6	7	6	6	5	5	3	12	11	12	10	7	9	3	5	4	1.9	12.2	
	Dir	32	11	14	292	240	11	251	221	255	278	279	284	328	305	205	178	178	95	179	206	221	216	40	324	245.4	178.3
8 Spd	4	2	4	9	6	8	6	5	7	10	12	11	11	12	10	6	6	10	10	17	17	7	3	6	4.0	17.4	
	Dir	9	143	235	345	249	157	277	201	189	278	204	166	184	217	340	332	75	87	237	253	216	175	140	206	219.9	253.0
9 Spd	5	5	5	5	6	1	8	6	7	9	8	12	9	10	7	5	10	9	12	9	11	19	26	24	3.8	26.0	
	Dir	229	55	273	264	212	259	211	276	261	265	273	268	185	150	352	47	53	83	123	111	248	240	277	305	256.6	276.9
10 Spd	23	20	13	9	11	13	16	20	18	24	24	30	24	23	30	30	25	24	24	16	9	8	10	12	17.7	30.1	
	Dir	288	239	257	273	238	225	227	230	229	230	248	245	249	258	252	247	262	291	297	231	240	232	231	227	250.0	244.7
11 Spd	10	13	10	8	3	3	8	9	10	7	8	5	4	4	6	5	7	8	12	9	3	7	12	12	5.3	13.0	
	Dir	202	201	194	191	195	199	204	237	253	316	18	312	357	342	294	277	273	270	266	253	261	257	258	265	251.4	201.1
12 Spd	11	9	7	5	4	5	9	5	3	5	2	2	4	2	5	0	4	6	6	7	2	3	6	7	4.6	11.1	
	Dir	272	278	282	291	281	280	291	275	272	273	271	288	291	294	300	350	282	340	326	314	239	265	270	251	285.0	271.9
13 Spd	6	7	6	13	14	14	14	15	22	28	25	21	19	23	24	23	22	22	20	21	10	7	6	8	15.8	28.2	
	Dir	269	274	236	257	263	307	262	260	265	273	281	273	283	284	287	270	283	272	268	284	278	281	238	215	273.3	273.5
14 Spd	5	5	7	11	8	6	5	6	9	13	19	29	26	23	25	19	16	12	4	4	4	4	3	4	8.2	29.5	
	Dir	201	192	192	205	201	205	210	195	210	252	246	273	271	274	288	305	304	335	348	37	80	307	355	335	271.9	273.1
15 Spd	4	2	5	4	5	3	2	2	4	4	5	6	7	8	7	8	7	8	7	4	3	7	8	5	1.3	8.5	
	Dir	351	262	287	265	265	269	286	305	254	250	282	274	345	325	168	126	111	122	96	88	9	287	353	282	296.7	353.1
16 Spd	14	7	10	10	13	7	14	15	13	8	8	8	5	3	3	6	6	7	7	9	7	5	4	3.0	14.6		
	Dir	212	224	260	252	267	275	314	325	325	327	324	338	290	309	19	359	16	71	101	86	83	85	93	72	317.0	325.2
17 Spd	4	3	5	3	5	2	2	5	8	10	13	13	12	9	9	10	11	8	6	5	6	6	12	9	3.4	13.0	
	Dir	77	79	55	90	99	28	43	1	168	150	183	178	167	201	144	133	211	181	122	116	314	275	254	294	170.6	177.7
18 Spd	5	8	7	9	7	9	11	12	15	23	25	22	18	15	14	14	9	21	7	5	8	13	10	7	8.2	24.9	
	Dir	199	186	50	237	43	248	248	250	247	248	246	260	265	315	236	331	310	307	246	206	212	217	69	190	257.2	246.1
19 Spd	8	8	9	5	5	5	7	6	2	3	7	7	6	6	4	10	12	6	10	9	12	9	11	11	3.4	12.2	
	Dir	244	256	208	188	210	338	103	212	243	312	318	320	327	318	302	311	332	1	7	0	13	50	46	35	336.4	331.7
20 Spd	11	11	13	11	12	12	14	13	14	12	13	15	15	14	14	14	16	15	15	14	14	13	14	15	13.4	16.4	
	Dir	51	58	62	68	64	66	65	71	62	65	72	66	59	55	57	55	66	66	63	50	54	54	53	54	60.7	65.5
21 Spd	16	16	16	16	15	14	13	14	14	13	14	12	13	11	12	8	8	5	2	5	6	5	7	10	7.9	16.3	
	Dir	57	55	50	51	52	50	46	41	38	40	28	28	27	31	21	4	12	3	199	202	230	233	214	192	40.3	50.3
22 Spd	8	13	13	12	12	8	12	12	14	16	18	23	23	16	27	22	21	18	16	9	7	6	5	4	12.1	26.6	
	Dir	206	190	182	320	221	220	208	204	202	207	225	254	255	272	272	256	256	251	248	207	207	223	242	214	236.8	272.0

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	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	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	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	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	13	22.1	35.1
	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	254.3	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			
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	297.5	295.1	264.7	265.2	274.4	223.4	249.2	250.9	252.9	249.7	256.7	271.8	271.2	250.5	279.0	279.2	271.3	254.9	274.1	271.2	268.3	258.9	276.9	205.6			

Maximum Speed Value: 42 km/h on Aug 26 13:00

Minimum Speed Value: 0 km/h on Aug 12 16:00

Maximum Daily Speed Average: 25.6 km/h on Aug 25

Minimum Daily Speed Average: 1.3 km/h on Aug 12

Maximum Diurnal Speed Average: 11.3 km/h at hour 12

Minimum Diurnal Speed Average: 3.7 km/h at hour 23

Monthly Average Velocity: 6.83 km/h 258.94 dec

Speed Percentiles: $P_1 = 1.7$ $P_{10} = 4.6$ $Q_1 = 6.5$ Median = 10.4 $Q_3 = 15.1$ $P_{90} = 23.0$ $P_{99} = 36.8$

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

Hours in Service: 744

Hours of Data: 744

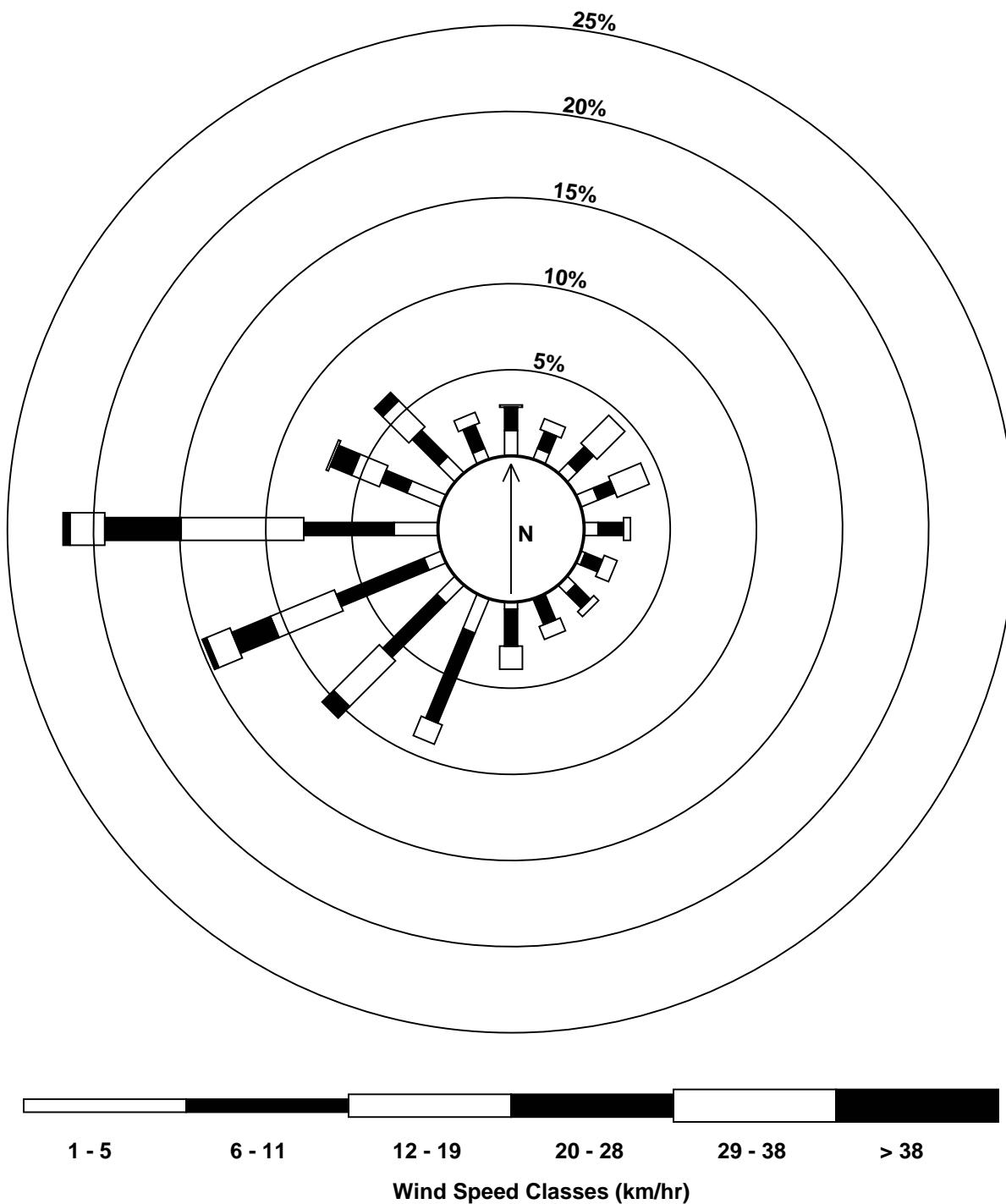
Hours of Missing Data: 0

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	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 (Scal

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

August 1, 2008 to September 1, 2008

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

PASZA
Beaverlodge Station
Monthly Summary Tables, Graphs and
Roses

Peace Airshed Zone Association

Summary of Hourly Averages

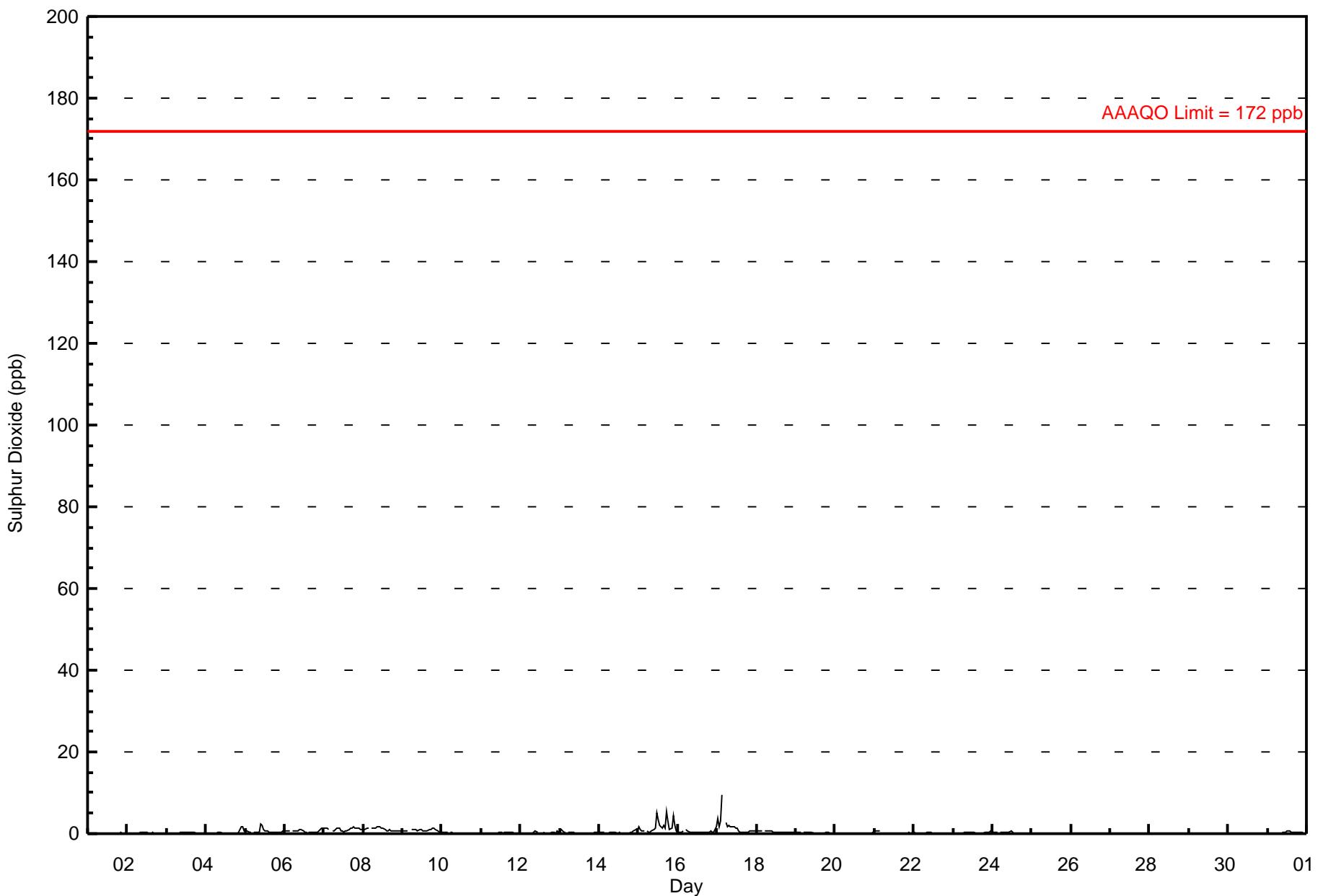
Beaverlodge - Sulphur Dioxide (SO_2) - ppb

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 9.6 ppb on Aug 17 04:00 Maximum Daily Average: 1.8 ppb on Aug 15																		Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0									
Minimum Value: 0 ppb on Aug 31 04:00 Minimum Daily Average: 0.0 ppb on Aug 25																											
Maximum Diurnal Average: 0.6 ppb at hour 4 Minimum Diurnal Average: 0.3 ppb at hour 15																											
Monthly Average: 0.38 ppb 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	0.1	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	0.2	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		
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	0.3	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	0.6	2.3		
6-Aug	1	1	1	1	A	1	1	1	1	1	0	0	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	1	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	0	0	1	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	0	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	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1.7	9.6
18-Aug	1	1	1	1	A	1	1	1	1	1	1	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	0	0.2	0.5	
24-Aug	1	0	0	0	A	0	0	0	0	0	0	0	1	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	0.4	0.3	0.3	0.3	0.3	0.4	0.4	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

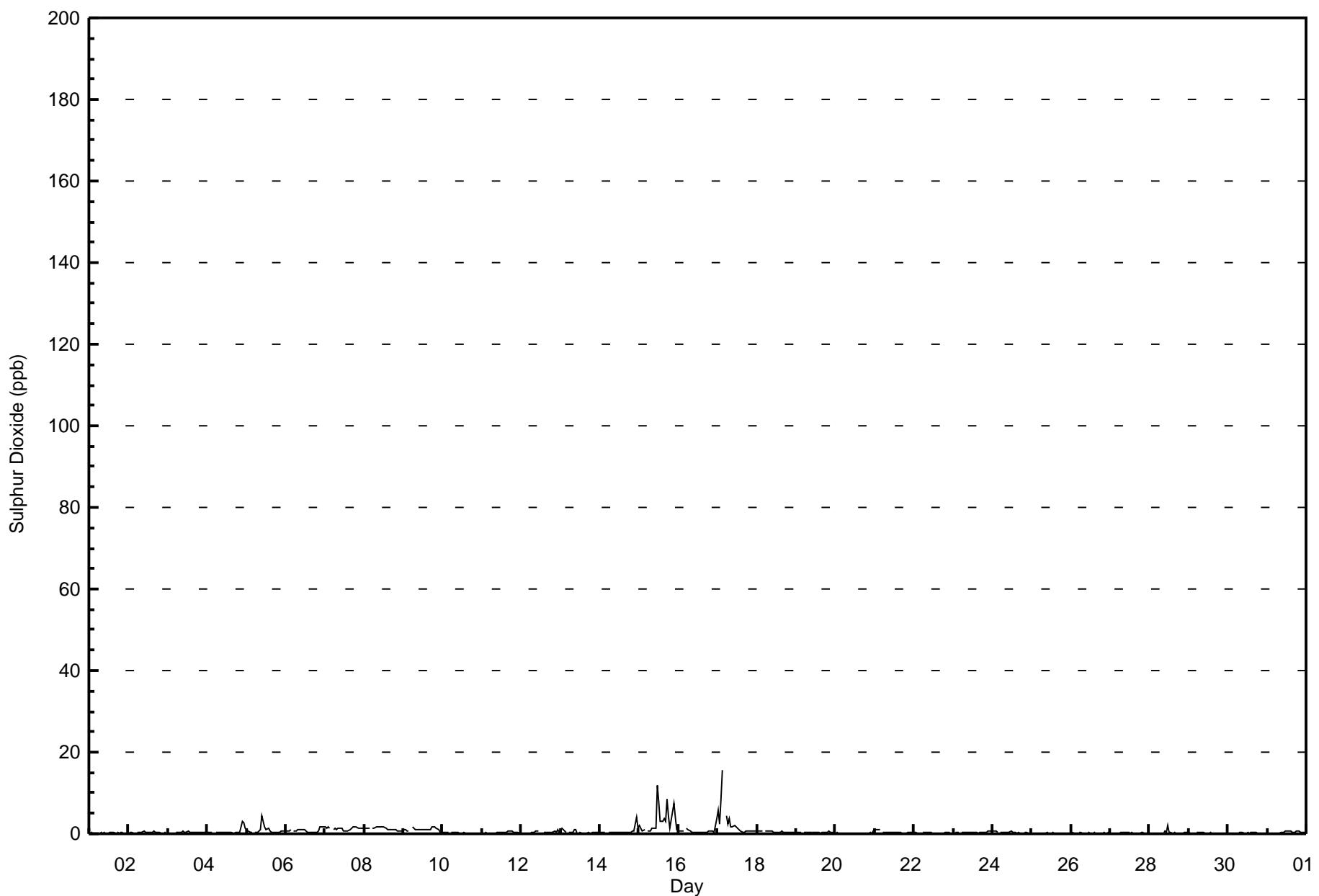


Peace Airshed Zone Association Summary of Hourly Maximums

Beaverlodge - Sulphur Dioxide (SO_2) - ppb

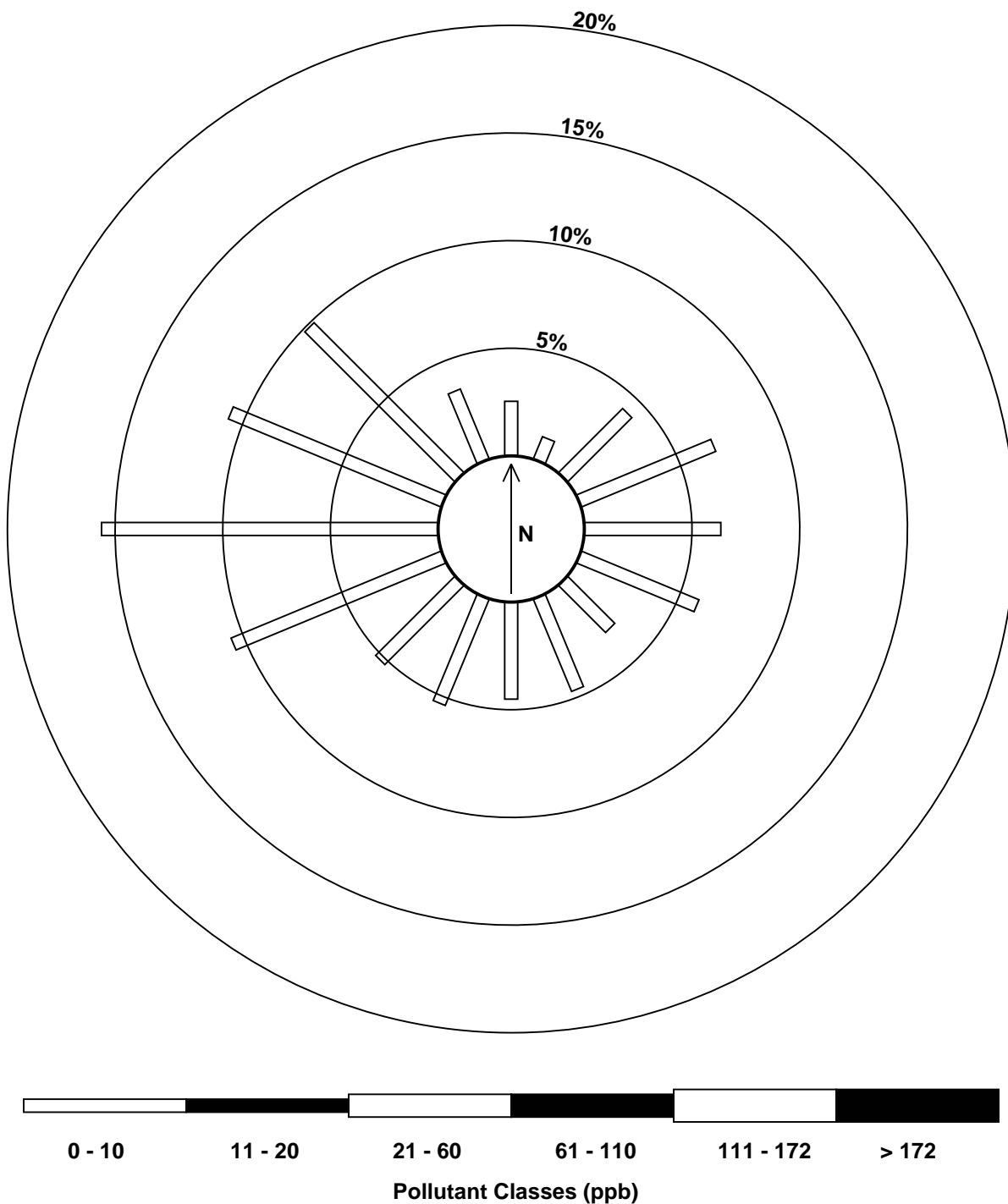
August 1, 2008 to September 1, 2008

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

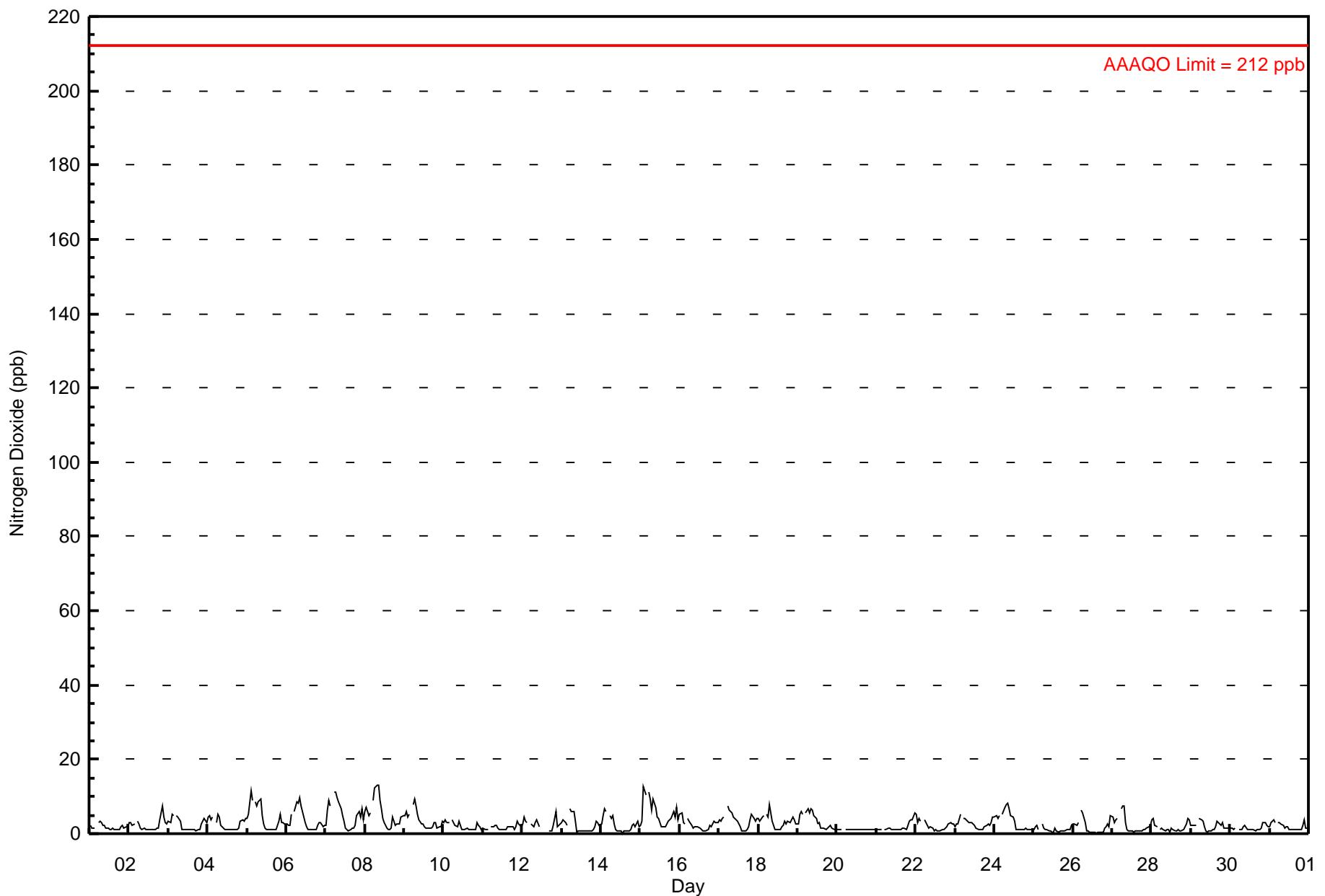
Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0															Hours in Service: 744			
Maximum Value: 13.1 ppb on Aug 8 09:00 Maximum Daily Average: 5.4 ppb on Aug 15															Hours of Data: 708			
Minimum Value: 0 ppb on Aug 14 14:00 Minimum Daily Average: 1.0 ppb on Aug 20															Hours of Missing Data: 36			
Maximum Diurnal Average: 4.9 ppb at hour 7 Minimum Diurnal Average: 1.0 ppb at hour 15															Hours of Calibration: 36			
Monthly Average: 2.69 ppb 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															Percent Operational Time: 100.0			
Day	Hourly Period Ending At (MST)															Daily Average	Daily Maximum	
1-Aug	2	2	2	1	A	3	3	3	2	2	2	1	1	2	1	1	1.8	3.3
2-Aug	3	3	2	3	A	3	2	1	1	2	1	1	1	1	1	2	2.3	7.5
3-Aug	3	3	5	5	A	5	4	3	1	1	1	1	1	1	1	1	2.4	5.3
4-Aug	4	5	4	4	A	3	5	4	2	2	1	1	1	1	1	1	2.5	5.1
5-Aug	4	5	12	9	A	9	8	9	9	5	3	2	1	1	1	1	4.2	11.5
6-Aug	3	2	2	5	A	6	9	8	10	7	6	3	2	1	1	1	3.5	9.7
7-Aug	2	6	9	8	A	11	11	10	9	7	5	3	1	1	1	1	5.0	11.1
8-Aug	6	7	5	6	A	9	12	13	13	9	7	4	3	2	1	1	5.3	13.1
9-Aug	5	6	5	5	A	8	9	8	5	4	2	3	2	2	1	1	3.6	9.2
10-Aug	3	4	3	3	A	4	3	2	2	4	2	1	1	1	1	1	2.0	3.9
11-Aug	1	1	1	1	A	2	2	2	2	1	1	1	1	2	2	2	1.7	3.5
12-Aug	3	4	3	3	A	3	2	2	3	4	2	C	C	C	C	1	2.5	6.0
13-Aug	3	4	3	2	A	7	6	6	3	0	1	1	1	1	1	1	2.3	6.6
14-Aug	3	5	7	6	A	5	4	5	3	1	1	1	0	1	1	1	2.5	6.6
15-Aug	2	3	13	10	A	11	9	6	9	7	4	4	3	2	2	3	4.4	12.8
16-Aug	5	6	3	3	A	4	3	2	1	2	2	2	2	1	1	1	2.4	5.6
17-Aug	4	3	4	5	A	8	6	6	6	4	4	3	3	2	1	1	3.6	7.6
18-Aug	4	3	5	5	A	5	5	8	3	2	1	1	1	2	2	3	3.3	8.0
19-Aug	3	5	6	5	A	6	7	6	7	5	4	3	3	2	1	2	3.5	6.7
20-Aug	1	1	1	1	A	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	2	1.7	5.5
22-Aug	5	3	4	3	A	4	3	2	2	2	1	1	1	1	1	1	2.2	5.1
23-Aug	2	3	3	5	A	4	4	4	3	3	3	2	2	1	1	2	2.6	5.1
24-Aug	5	5	4	5	A	5	7	8	8	7	5	5	3	1	1	1	3.5	8.1
25-Aug	1	2	2	1	A	3	1	1	1	1	0	0	1	1	0	1	1.1	2.6
26-Aug	3	2	2	3	A	6	6	3	1	1	1	0	1	0	0	1	1.9	6.5
27-Aug	4	3	4	4	A	7	7	7	3	1	1	1	0	1	1	1	2.4	7.4
28-Aug	4	4	2	2	A	1	1	1	1	1	0	1	1	1	1	1	1.7	4.0
29-Aug	2	2	2	2	A	4	4	3	2	1	1	1	1	1	2	3	2.0	4.3
30-Aug	1	1	1	2	A	1	1	1	2	2	1	1	1	1	1	1	1.4	3.0
31-Aug	2	3	4	3	A	3	3	2	2	2	2	1	1	1	1	2	4.4	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



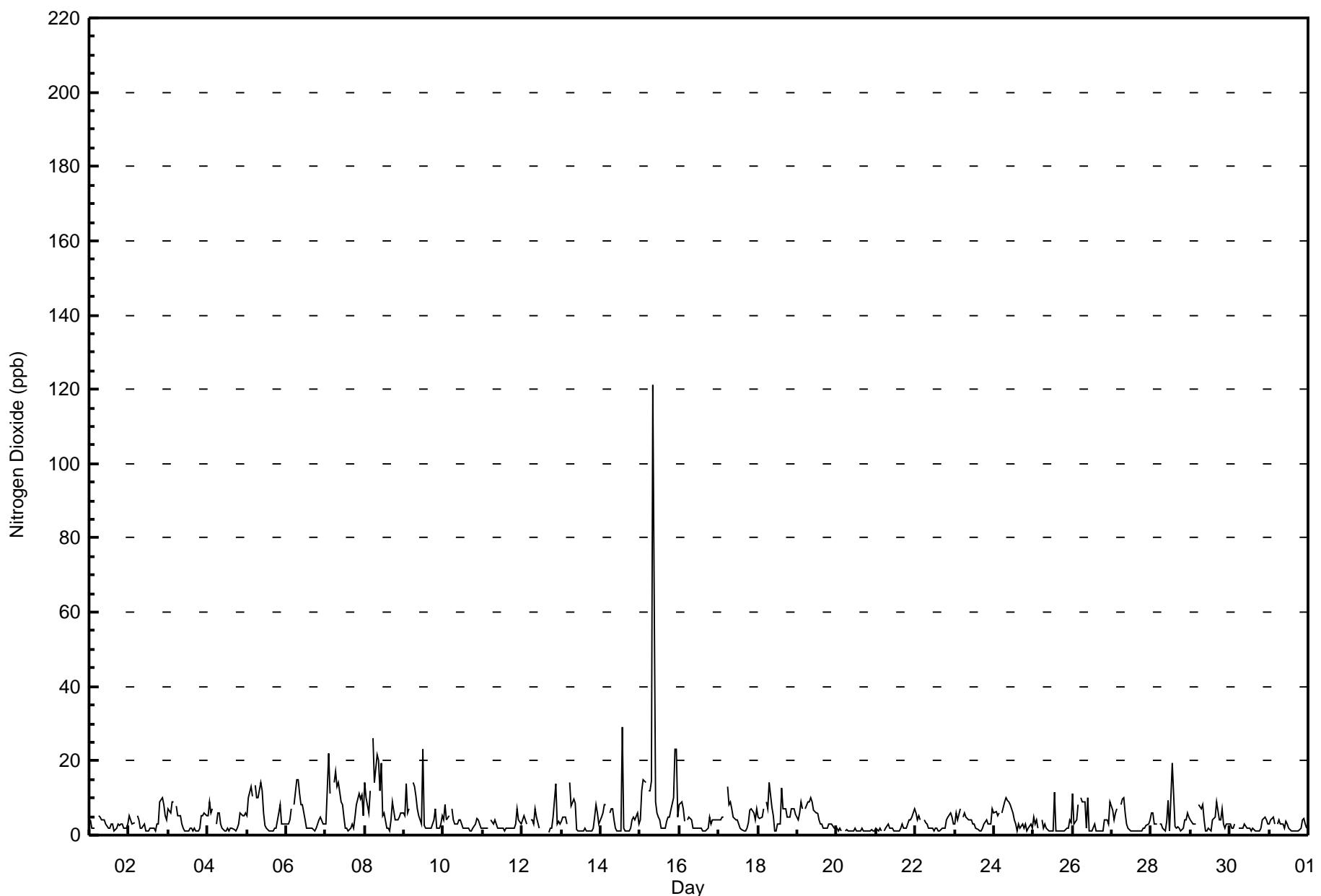
Peace Airshed Zone Association Summary of Hourly Maximums

Beaverlodge - Nitrogen Dioxide (NO₂) - ppb

August 1, 2008 to September 1, 2008

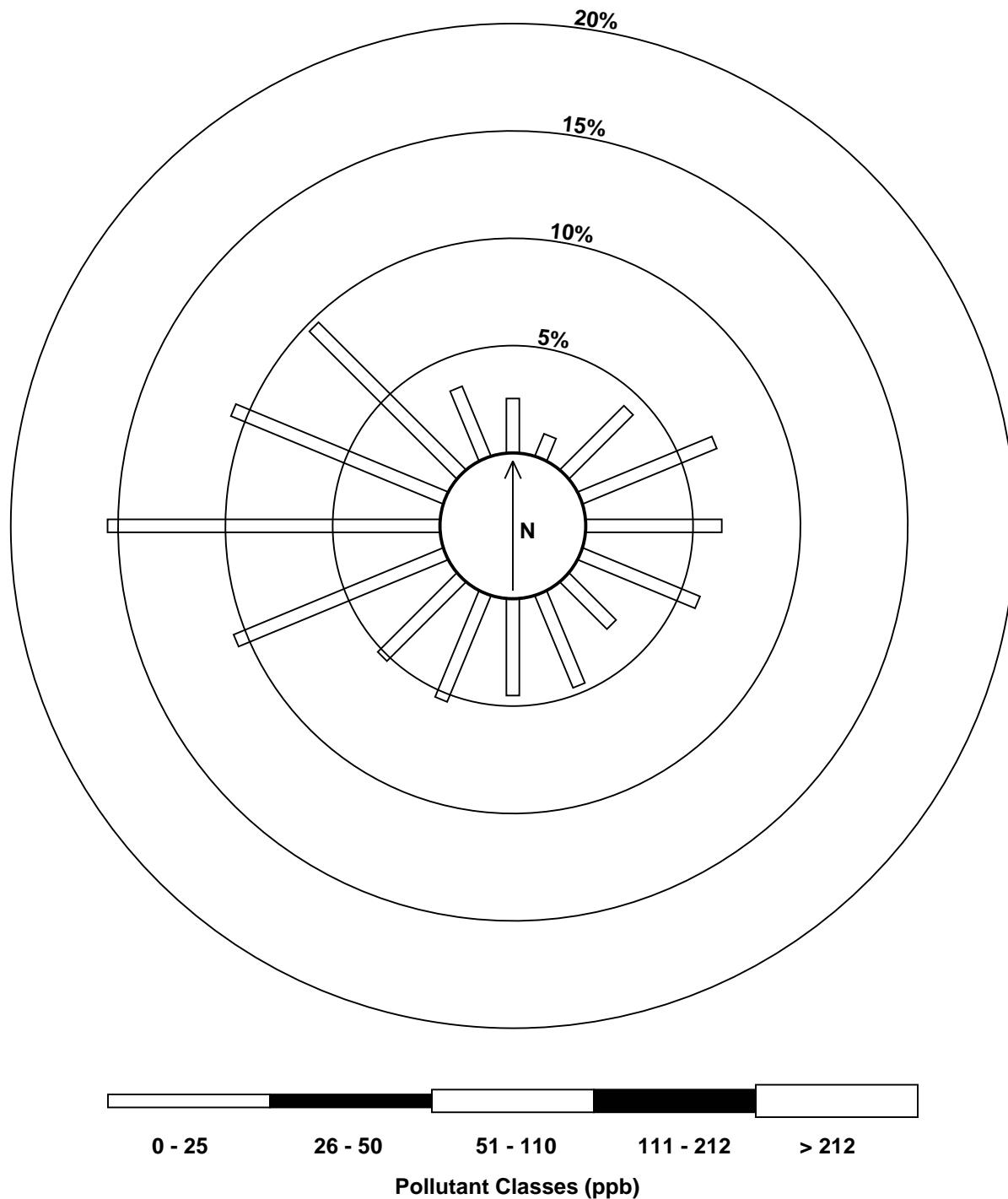
Maximum Value: 121.3 ppb on Aug 15 09:00																			Maximum Daily Average: 13.8 ppb on Aug 15																			Hours in Service:		744									
Minimum Value: 1 ppb on Aug 12 17:00																			Minimum Daily Average: 1.2 ppb on Aug 20																			Hours of Data:		708									
Maximum 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									
Day	Hourly Period Ending At (MST)																																				Daily Average	Daily Maximum											
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38											
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	2.9	5.0	2.9	5.0	2.9	5.0	2.9	5.0	2.9	5.0	2.9	5.0	2.9	5.0	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	3.7	10.1	3.7	10.1	3.7	10.1	3.7	10.1	3.7	10.1	3.7	10.1	3.7	10.1	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	1	2	5	5	6	5	3.9	9.1	3.9	9.1	3.9	9.1	3.9	9.1	3.9	9.1	3.9	9.1	3.9	9.1	3.9	9.1	3.9	9.1						
4-Aug	5	9	6	7	A	3	6	6	3	2	1	1	2	1	2	2	1	1	1	2	3	6	5	5	6	5	3.7	9.1	3.7	9.1	3.7	9.1	3.7	9.1	3.7	9.1	3.7	9.1	3.7	9.1	3.7	9.1	3.7	9.1					
5-Aug	5	10	13	10	A	14	10	10	14	12	6	2	2	1	1	1	1	1	1	2	6	8	3	3	3	6.1	14.2	6.1	14.2	6.1	14.2	6.1	14.2	6.1	14.2	6.1	14.2	6.1	14.2	6.1	14.2	6.1	14.2	6.1	14.2				
6-Aug	3	3	4	7	A	8	15	15	11	8	8	4	2	2	2	2	2	2	1	2	3	4	5	3	3	3	5.1	15.0	5.1	15.0	5.1	15.0	5.1	15.0	5.1	15.0	5.1	15.0	5.1	15.0	5.1	15.0	5.1	15.0	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	8.3	22.1	8.3	22.1	8.3	22.1	8.3	22.1	8.3	22.1	8.3	22.1	8.3	22.1	8.3	22.1	8.3	22.1	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	4	5	6	6	9.3	26.1	9.3	26.1	9.3	26.1	9.3	26.1	9.3	26.1	9.3	26.1	9.3	26.1	9.3	26.1	9.3	26.1	9.3	26.1				
9-Aug	5	14	6	7	A	14	13	10	7	5	3	23	3	2	2	2	2	2	3	4	7	2	2	3	5	5	6.3	23.3	6.3	23.3	6.3	23.3	6.3	23.3	6.3	23.3	6.3	23.3	6.3	23.3	6.3	23.3	6.3	23.3	6.3	23.3			
10-Aug	4	8	4	5	A	7	4	3	3	4	4	3	2	2	2	2	2	1	1	2	3	4	4	3	2	3.4	8.1	3.4	8.1	3.4	8.1	3.4	8.1	3.4	8.1	3.4	8.1	3.4	8.1	3.4	8.1	3.4	8.1	3.4	8.1				
11-Aug	2	2	2	2	A	4	3	4	3	2	2	2	2	1	2	2	2	2	2	2	2	3	7	4	3	2.6	7.1	2.6	7.1	2.6	7.1	2.6	7.1	2.6	7.1	2.6	7.1	2.6	7.1	2.6	7.1	2.6	7.1	2.6	7.1				
12-Aug	4	5	4	3	A	4	4	3	7	5	2	C	C	C	C	1	2	2	5	14	3	4	3	4.1	13.9	4.1	13.9	4.1	13.9	4.1	13.9	4.1	13.9	4.1	13.9	4.1	13.9	4.1	13.9	4.1	13.9	4.1	13.9						
13-Aug	4	5	5	3	A	14	8	10	9	2	1	1	1	2	1	1	1	1	1	2	5	8	6	3	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	4.0	14.0	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	4.9	29.2	4.9	29.2	4.9	29.2	4.9	29.2	4.9	29.2	4.9	29.2	4.9	29.2	4.9	29.2	4.9	29.2					
15-Aug	4	12	15	14	A	12	12	15	121	9	6	5	4	2	2	2	2	4	5	5	7	10	23	23	5	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3	13.8	121.3		
16-Aug	8	9	7	4	A	4	5	4	2	2	2	2	2	2	1	1	1	1	2	5	3	4	4	4	4	3.5	9.1	3.5	9.1	3.5	9.1	3.5	9.1	3.5	9.1	3.5	9.1	3.5	9.1	3.5	9.1	3.5	9.1	3.5	9.1				
17-Aug	4	4	5	5	A	13	8	9	7	5	4	4	3	2	2	1	1	1	2	3	7	7	6	4	7	4.9	13.1	4.9	13.1	4.9	13.1	4.9	13.1	4.9	13.1	4.9	13.1	4.9	13.1	4.9	13.1	4.9	13.1	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	6	6	6	6.2	14.1	6.2	14.1	6.2	14.1	6.2	14.1	6.2	14.1	6.2	14.1	6.2	14.1	6.2	14.1	6.2	14.1	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	2	2	3	3	2	2	2	5.1	10.0	5.1	10.0	5.1	10.0	5.1	10.0	5.1	10.0	5.1	10.0	5.1	10.0	5.1	10.0	5.1	10.0	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	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	1.2	2.0	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	2	2	3	2	2	2.3	7.0	2.3	7.0	2.3	7.0	2.3	7.0	2.3	7.0	2.3	7.0	2.3	7.0	2.3	7.0	2.3	7.0	2.3	7.0	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	2	2	4	5	6	5	3.1	6.0	3.1	6.0	3.1	6.0	3.1	6.0	3.1	6.0	3.1	6.0	3.1	6.0	3.1	6.0	3.1	6.0	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	3	3.7	7.1	3.7	7.1	3.7	7.1	3.7	7.1	3.7	7.1	3.7	7.1	3.7	7.1	3.7	7.1	3.7	7.1	3.7	7.1	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	2	3	2	3	2	3	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	2.8	10.0	
25-Aug	5	3	4	2	A	4	2	3	2	1	1	1	1	11	1	1	1	1	1	1	1	1	1	1	1	2.5	11.4	2.5	11.4	2.5	11.4	2.5	11.4	2.5	11.4	2.5	11.4	2.5	11.4	2.5	11.4	2.5	11.4	2.5	11.4	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	1	1	1	1	1	1	4.4	11.2	4.4	11.2	4.4	11.2	4.4	11.2	4.4	11.2	4.4	11.2	4.4	11.2	4.4	11.2	4.4	11.2	4.4	11.2	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	1	2	2	3	4	3.6	10.0	3.6	10.0	3.6	10.0	3.6	10.0	3.6	10.0	3.6	10.0	3.6	10.0	3.6	10.0	3.6	10.0	3.6	10.0	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	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	4.4	19.2	
29-Aug	4	3	3	3	A	8	7	8	4	1	1	2	1	4	5	5	5	9	4	4	7	3	2	3	3	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0	4.1	9.0
30-Aug	3	2	2																																														

Hourly Maximums for NO₂ at Beaverlodge
August 2008



Pollutant Rose for NO₂ at Beaverlodge

August 2008



Peace Airshed Zone Association

Summary of Hourly Averages

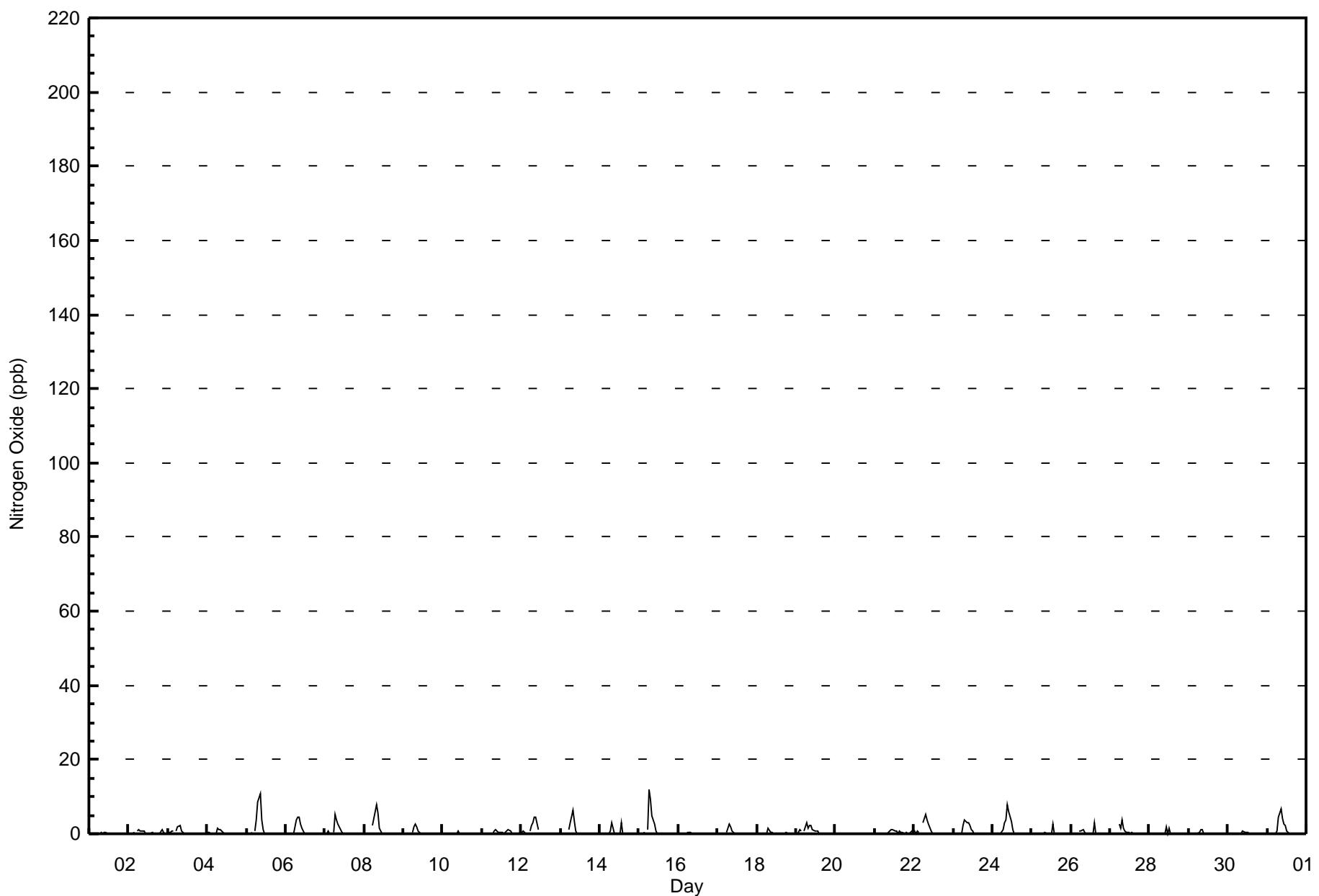
Beaverlodge - Nitrogen Oxide (NO) - ppb

Maximum Value: 12.0 ppb on Aug 15 07:00																			Maximum Daily Average: 1.3 ppb on Aug 15																			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 1 04:00																			Minimum Daily Average: 0.0 ppb on Aug 20																				
Maximum Diurnal Average: 2.7 ppb at hour 8																			Minimum Diurnal Average: 0.0 ppb at hour 19																				
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																				
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum													
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	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	0	1	0	0	0	0	0	0	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	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	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	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	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	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	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	0	0	0	0	0	0	0.3	2.8						
10-Aug	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	0.7						
11-Aug	0	0	0	0	A	0	0	1	1	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	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	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	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	0	0	0	0	0	0	0	0	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	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	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	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	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	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	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	0	0	0	0	0	0	0	0	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	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	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	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	0	0	0	3	0	0	0	0	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	0	0	3	0	0	0	0	0	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	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	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	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	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	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Diurnal Maximum					

C - Calibration

A - Automated Daily Zero Span

Hourly Averages for NO at Beaverlodge
August 2008

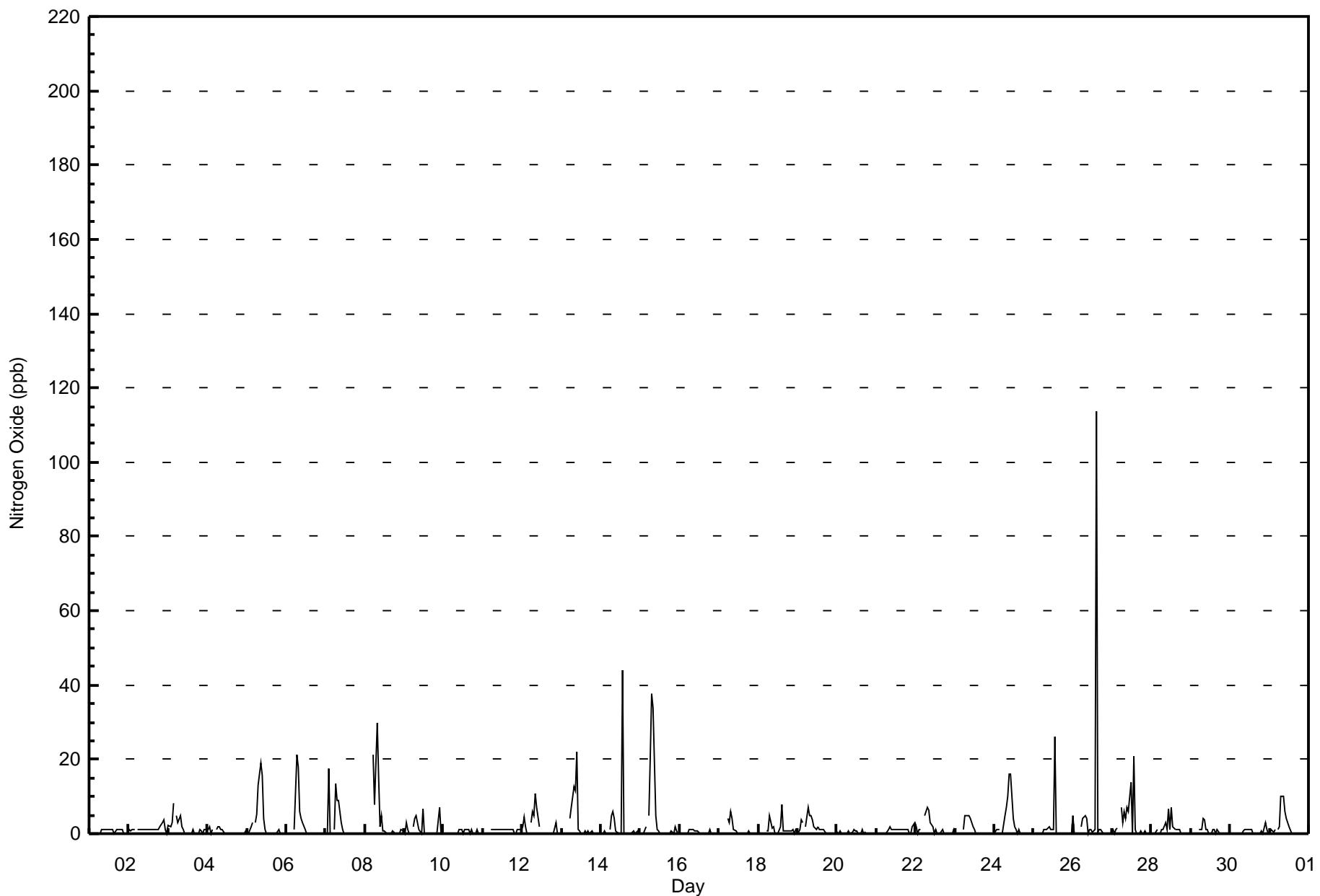


Peace Airshed Zone Association Summary of Hourly Maximums

Beaverlodge - Nitrogen Oxide (NO) - ppb

August 1, 2008 to September 1, 2008

Hourly Maximums for NO at Beaverlodge
August 2008

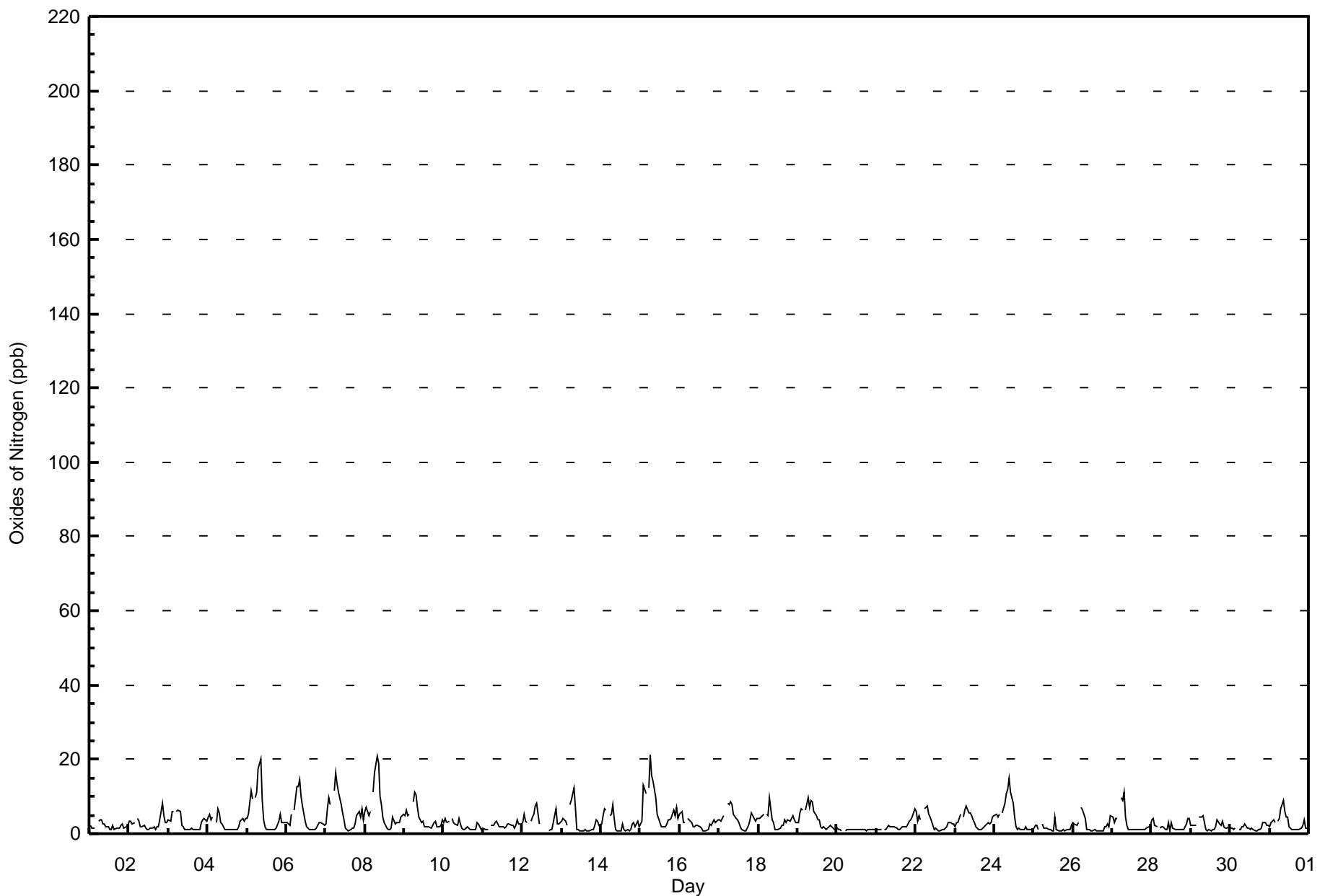


Peace Airshed Zone Association
Summary of Hourly Averages

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

Maximum Value: 21.3 ppb on Aug 15 07:00																				Maximum Daily Average: 6.9 ppb on Aug 15				Hours in Service: 744							
Minimum Value: 1 ppb on Aug 26 19:00												Minimum Daily Average: 1.0 ppb on Aug 20												Hours of Data: 708							
Maximum Diurnal Average: 7.3 ppb at hour 8												Minimum Diurnal Average: 1.2 ppb at hour 16												Hours of Missing Data: 36							
Monthly Average: 3.29 ppb												Percentiles: P ₁ = 0.8 P ₁₀ = 1.0 Q ₁ = 1.2 Median = 2.3 Q ₃ = 4.0 P ₉₀ = 6.7 P ₉₉ = 16.4												Hours of Calibration: 36							
																								Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum					
1-Aug	2	2	2	2	A	3	4	4	3	3	2	2	1	1	2	1	2	2	2	2	2	2	2	2	2.0	3.6					
2-Aug	3	3	2	3	A	4	3	2	2	1	1	1	1	1	2	2	1	2	2	4	8	5	3	3	2.7	8.3					
3-Aug	4	4	6	6	A	6	6	6	2	2	1	1	1	1	1	1	1	1	1	1	3	4	4	3	2.9	6.5					
4-Aug	5	5	4	5	A	3	7	6	3	3	1	1	1	1	1	1	1	1	1	1	2	3	4	4	2.8	6.6					
5-Aug	4	5	12	9	A	10	11	17	20	9	4	2	1	1	1	1	1	1	1	4	5	3	3	3	5.6	20.0					
6-Aug	3	2	2	5	A	6	12	13	14	10	7	3	2	1	1	1	1	1	1	2	3	3	2	2	4.4	14.4					
7-Aug	3	7	10	8	A	11	16	13	11	8	6	4	2	1	1	1	1	2	3	5	6	5	7	4	5.8	16.4					
8-Aug	6	7	5	6	A	11	17	21	19	10	8	4	3	2	1	1	1	5	2	3	3	5	5	5	6.4	21.0					
9-Aug	5	6	5	5	A	9	11	10	7	4	3	3	2	2	2	2	2	3	3	2	2	2	4	4.2	11.3						
10-Aug	3	4	3	3	A	4	3	2	2	4	3	1	1	1	2	1	1	1	1	3	3	2	1	2.2	4.0						
11-Aug	1	1	1	1	A	2	2	3	3	2	2	1	2	3	3	2	2	2	2	4	3	3	3	2.1	3.8						
12-Aug	3	5	4	3	A	4	5	5	7	8	3	C	C	C	C	1	1	1	1	3	7	3	3	3	3.7	8.1					
13-Aug	3	4	3	2	A	8	9	12	7	1	1	1	1	1	1	1	1	1	1	2	4	3	2	3	3.1	12.5					
14-Aug	3	5	7	6	A	5	5	8	4	1	1	1	3	1	1	1	1	1	3	3	3	2	3	2	2.9	7.7					
15-Aug	3	3	13	11	A	12	21	16	14	10	5	4	3	2	2	2	3	4	4	6	5	7	4	6.9	21.3						
16-Aug	5	6	3	3	A	4	4	3	2	2	2	2	2	1	1	1	1	1	3	2	3	4	3	4	2.7	5.9					
17-Aug	4	3	4	5	A	8	8	8	8	5	4	4	4	3	2	1	1	1	2	4	6	4	4	4	4.1	8.5					
18-Aug	4	4	5	5	A	5	5	10	4	3	1	1	1	2	2	2	4	3	4	4	5	4	3	3.6	9.5						
19-Aug	3	6	7	6	A	6	10	7	9	9	6	5	4	4	2	2	2	1	2	2	2	2	1	1	4.2	9.8					
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	1.4					
21-Aug	1	1	1	1	A	1	1	2	2	2	2	1	1	1	1	2	2	2	3	3	4	4	7	2.1	6.6						
22-Aug	6	3	5	4	A	7	7	8	5	4	2	1	1	1	1	1	1	2	2	3	3	3	3	3	3.2	7.5					
23-Aug	2	3	3	5	A	4	6	7	6	6	5	4	3	2	1	1	1	2	3	3	3	3	4	3.4	7.4						
24-Aug	5	5	4	5	A	5	8	11	12	15	11	8	5	2	1	2	1	1	2	1	1	1	1	1	4.7	14.8					
25-Aug	1	2	2	1	A	3	2	1	2	1	1	1	4	1	1	1	1	1	1	1	1	1	1	2	1.4	4.3					
26-Aug	3	2	2	3	A	7	6	4	1	1	1	1	1	1	1	1	1	1	2	2	2	5	2	2.2	7.0						
27-Aug	5	3	4	4	A	10	9	11	4	2	1	1	1	1	1	1	1	1	1	2	2	2	2	3.0	11.3						
28-Aug	4	4	2	2	A	2	2	1	1	3	1	3	1	1	1	1	1	1	1	2	3	4	4	2.0	4.1						
29-Aug	2	2	2	2	A	5	4	5	3	1	1	1	1	1	1	2	4	3	2	3	2	2	2	2.3	4.7						
30-Aug	1	2	1	2	A	1	1	2	2	3	1	1	1	1	1	1	1	1	2	3	3	2	2	1.6	3.1						
31-Aug	2	3	4	3	A	3	4	7	9	6	5	5	2	1	1	1	1	1	2	2	4	2	2	3.0	9.1						
																								Diurnal Average							
																									Diurnal Maximum						
C - Calibration																															
A - Automated Daily Zero Span																															

Hourly Averages for NO_X at Beaverlodge
August 2008



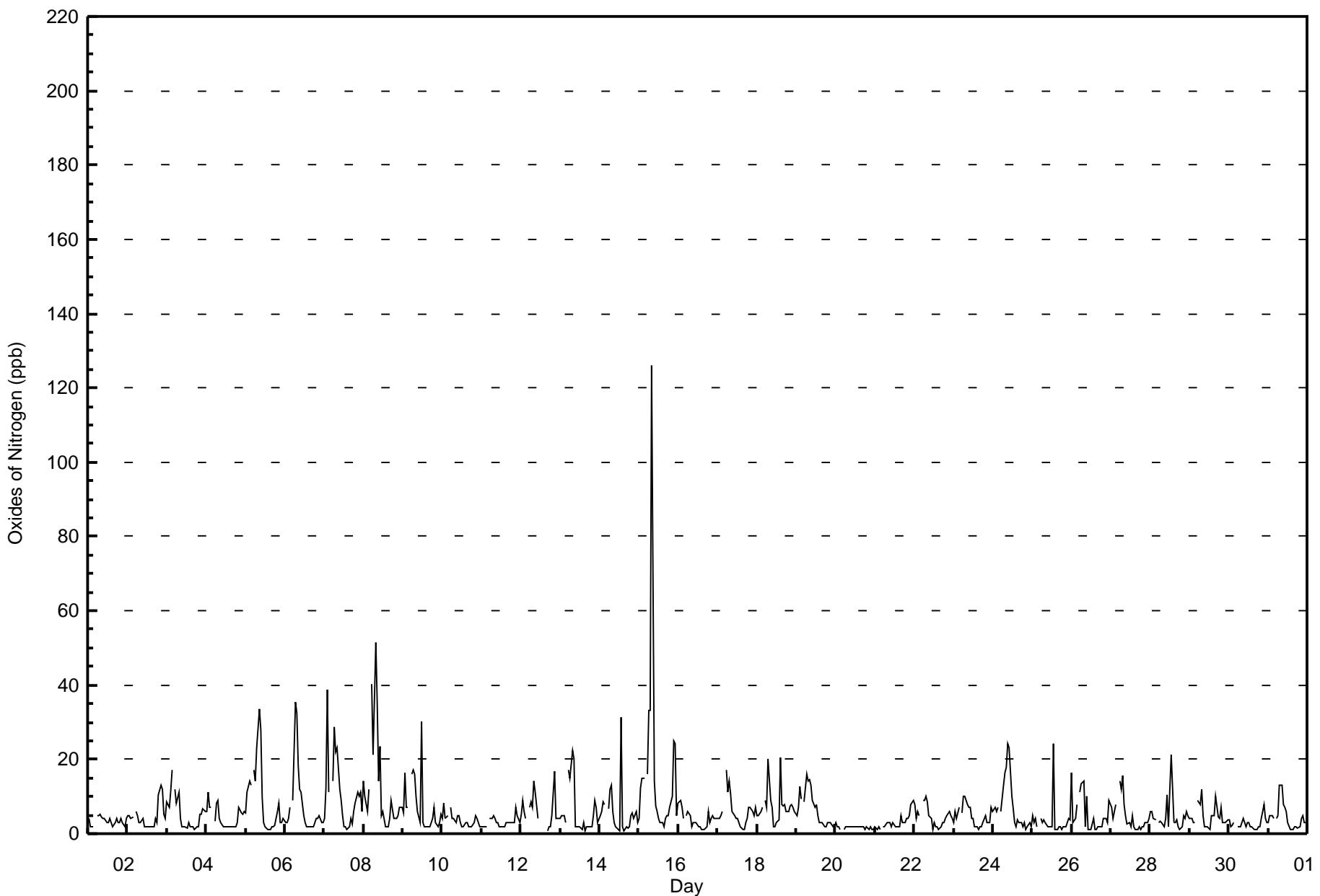
Peace Airshed Zone Association Summary of Hourly Maximums

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	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	2	1	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	2	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	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	2	1	31	2	1	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	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	3	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	2	3	2	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	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	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	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	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	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																					

Hourly Maximums for NO_X at Beaverlodge
August 2008



Peace Airshed Zone Association Summary of Hourly Averages

Beaverlodge - Ozone (O_3) - ppb

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0															Hours in Service: 744													
Maximum Value: 61.8 ppb on Aug 9 19:00 Maximum Daily Average: 40.0 ppb on Aug 8															Hours of Data: 709													
Minimum Value: 0 ppb on Aug 22 06:00 Minimum Daily Average: 5.8 ppb on Aug 21															Hours of Missing Data: 35													
Maximum Diurnal Average: 28.9 ppb at hour 17 Minimum Diurnal Average: 10.6 ppb at hour 7															Hours of Calibration: 35													
Monthly Average: 21.05 ppb 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															Percent Operational Time: 100.0													
Day	Hourly Period Ending At (MST)															Daily Average	Daily Maximum											
1-Aug	18	20	22	20	A	19	19	18	20	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	25	27	26	25	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	26	21	19	16	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	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	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	29	25	18	20	19	17	17	17.2	31.5		
13-Aug	16	14	15	16	A	8	8	7	14	23	25	27	28	28	28	27	26	24	23	23	21	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	21	20	15.5	30.5		
20-Aug	18	15	11	11	A	12	14	15	13	11	10	10	10	9	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	19	18	17	15	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	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	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	22	22	20	18	16	21.1	24.4				
26-Aug	15	16	17	16	A	10	11	14	17	18	18	19	19	20	20	21	21	19	17	16	16	12	12	17.0	21.3			
27-Aug	10	10	10	9	A	2	6	5	10	15	18	19	18	19	19	19	19	20	19	18	17	17	16	16	14.4	19.8		
28-Aug	13	12	15	15	A	18	17	17	19	20	22	22	23	23	23	24	24	25	24	22	20	18	17	17	19.7	24.9		
29-Aug	19	17	17	16	A	13	13	16	21	24	24	24	23	26	30	25	24	23	20	20	23	22	21	21	20.5	29.5		
30-Aug	21	19	19	18	A	18	17	14	13	13	13	13	15	16	15	15	14	14	12	8	7	7	7	14.1	20.6			
31-Aug	7	6	4	4	A	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			

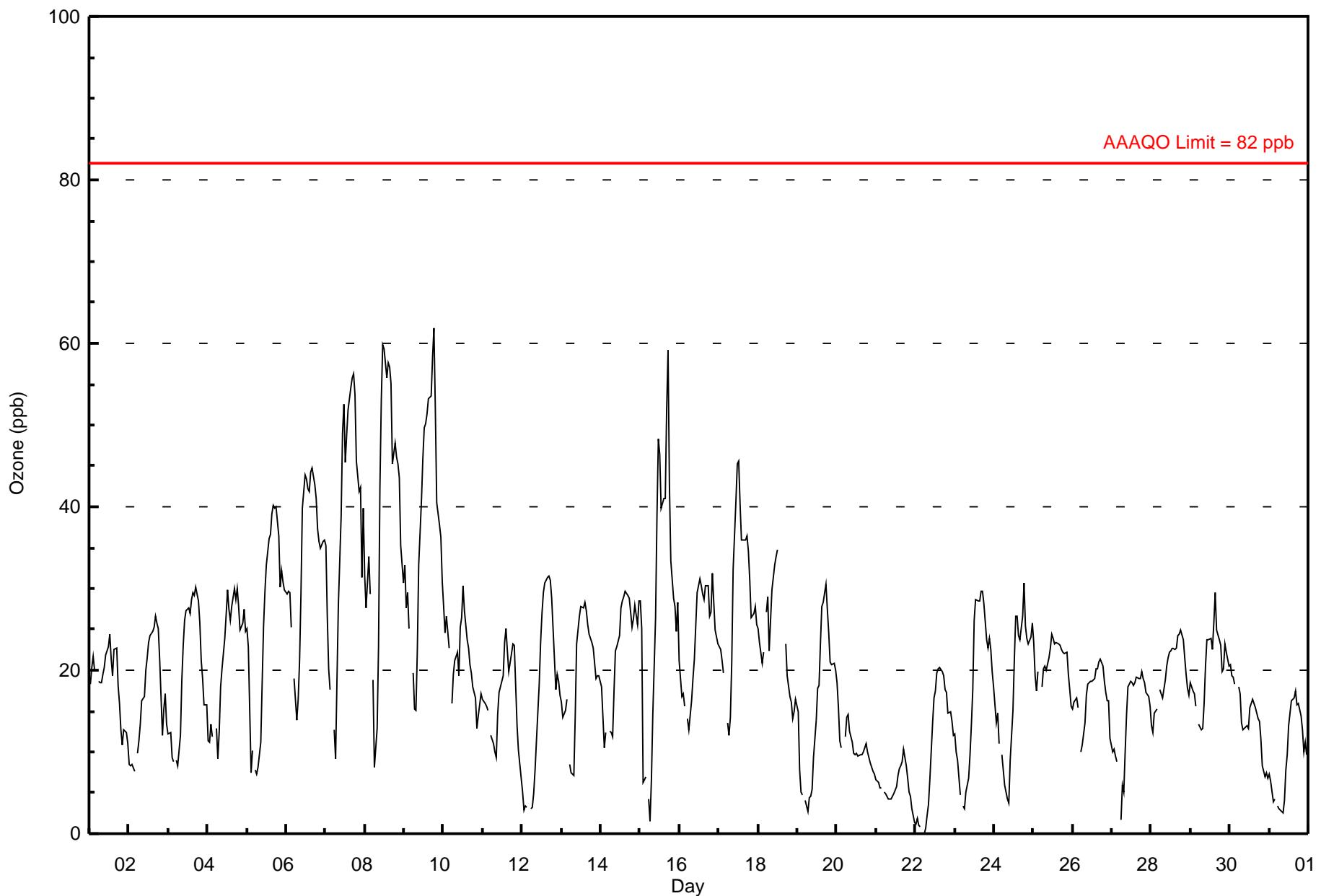
C - Calibration

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

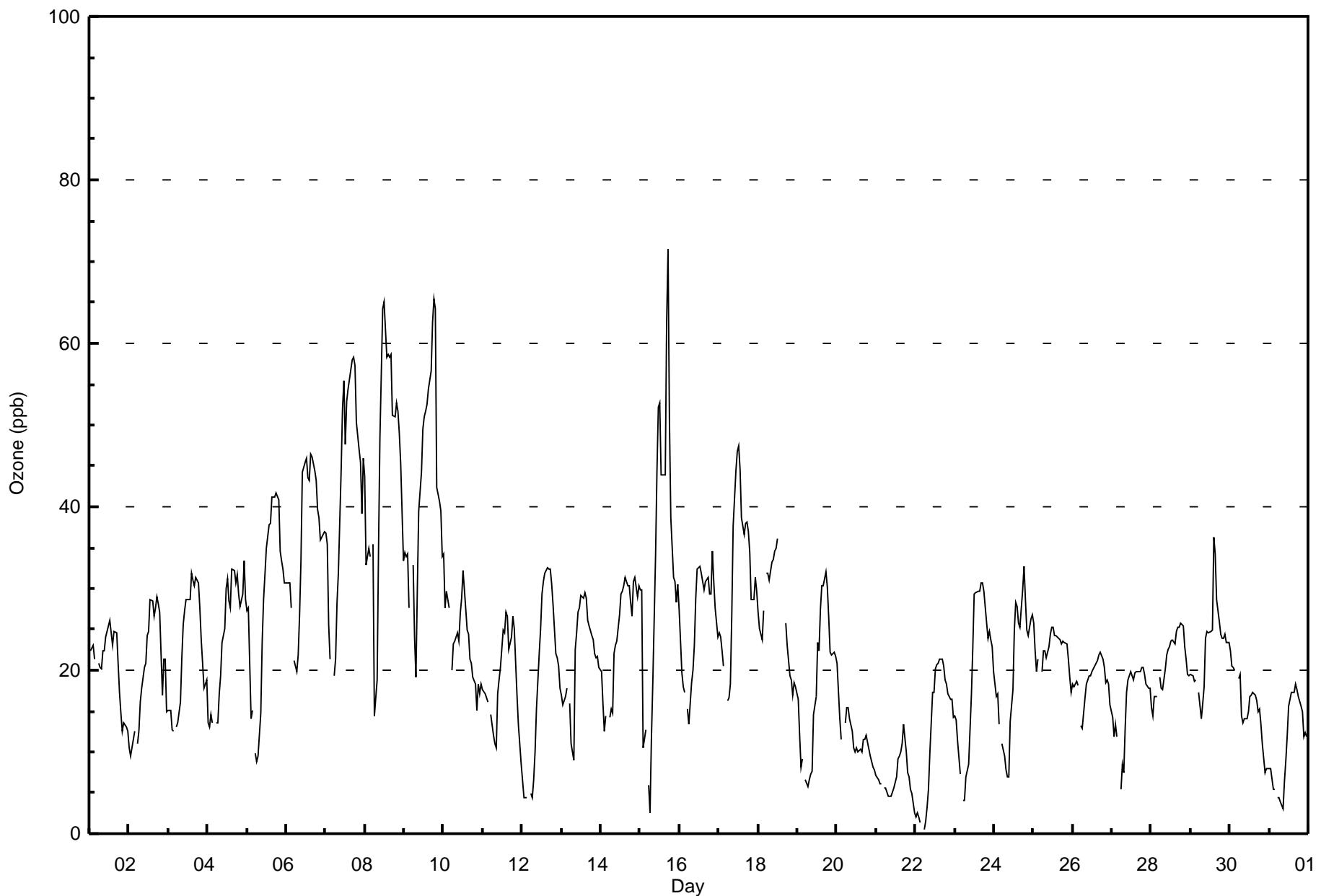
Beaverlodge - Ozone (O_3) - ppb

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
Minimum Value: 0 ppb on Aug 22 06:00																				Minimum Daily Average: 6.9 ppb on Aug 21																				Hours of Data:		709
Maximum Diurnal Average: 30.8 ppb at hour 18																				Minimum Diurnal Average: 13.5 ppb at hour 7																				Hours of Missing Data:		35
Monthly Average: 23.49 ppb																				Percentiles: P ₁ = 2.3 P ₁₀ = 9.0 Q ₁ = 15.3 Median = 22.0 Q ₃ = 29.6 P ₉₀ = 39.5 P ₉₉ = 62.4																				Hours of Calibration:		35
																																								Percent Operational Time:		100.0
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum																
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	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	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	20	18	19.0	32.6																	
13-Aug	17	16	17	18	A	16	11	9	23	25	27	28	29	29	29	26	25	24	22	21	22	20	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	35	31	28	24	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	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	12	12	11	10	9	8	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	19	18	17	16	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	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	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	19	18	18	18	16.2	20.3																	
28-Aug	15	14	17	17	A	19	18	18	20	22	23	24	24	23	25	25	26	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	23	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																
	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	Diurnal Average																	
	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	Diurnal Maximum																	

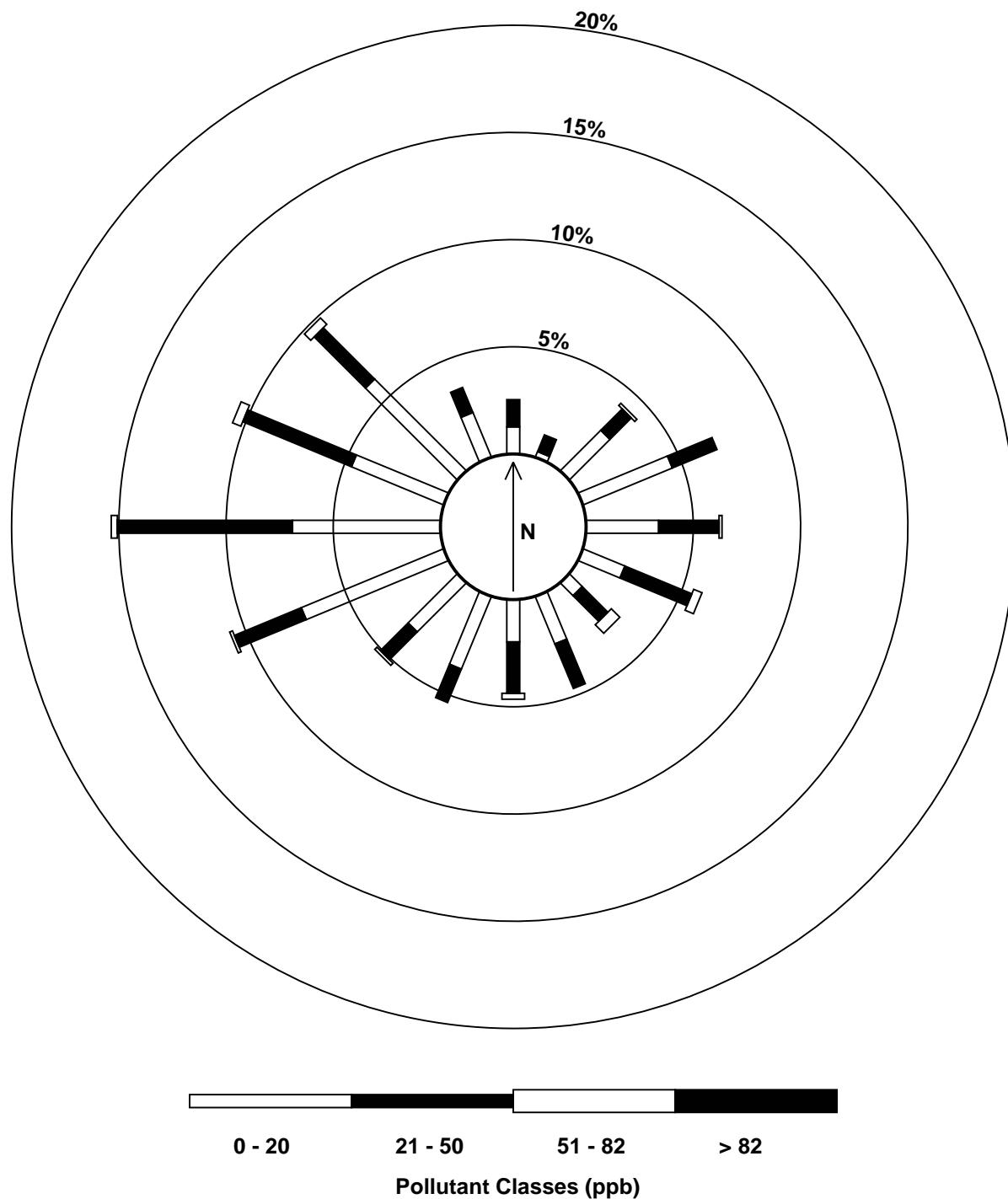
C - Calibration A - Automated Daily Zero Span

**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 (O_3) - 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							
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																			Hours of Calibration: 7							
																			Percent Operational Time: 100.0							
Day	Hourly Period Ending At (MST)																				Daily Maximum					
1-Aug	23	22	21	21	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	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	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	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	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	22	20	19	18	17	43.2		
11-Aug	16	16	16	15	16	15	15	14	13	13	13	14	15	17	19	20	21	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	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	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	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	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	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	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	22	22	21	25.4		
26-Aug	20	19	18	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	18	18.9		
28-Aug	17	17	16	15	15	15	15	16	17	18	19	20	20	21	22	23	23	23	23	23	22	22	22	23.4		
29-Aug	21	20	19	18	18	17	16	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	15	15	15	15	14	13	12	10	21.7		
31-Aug	10	9	7	6	6	6	5	4	4	4	3	4	5	6	7	9	11	13	14	15	16	15	14	13	15.8	

N - Not Valid

Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb

Peace Airshed Zone Association

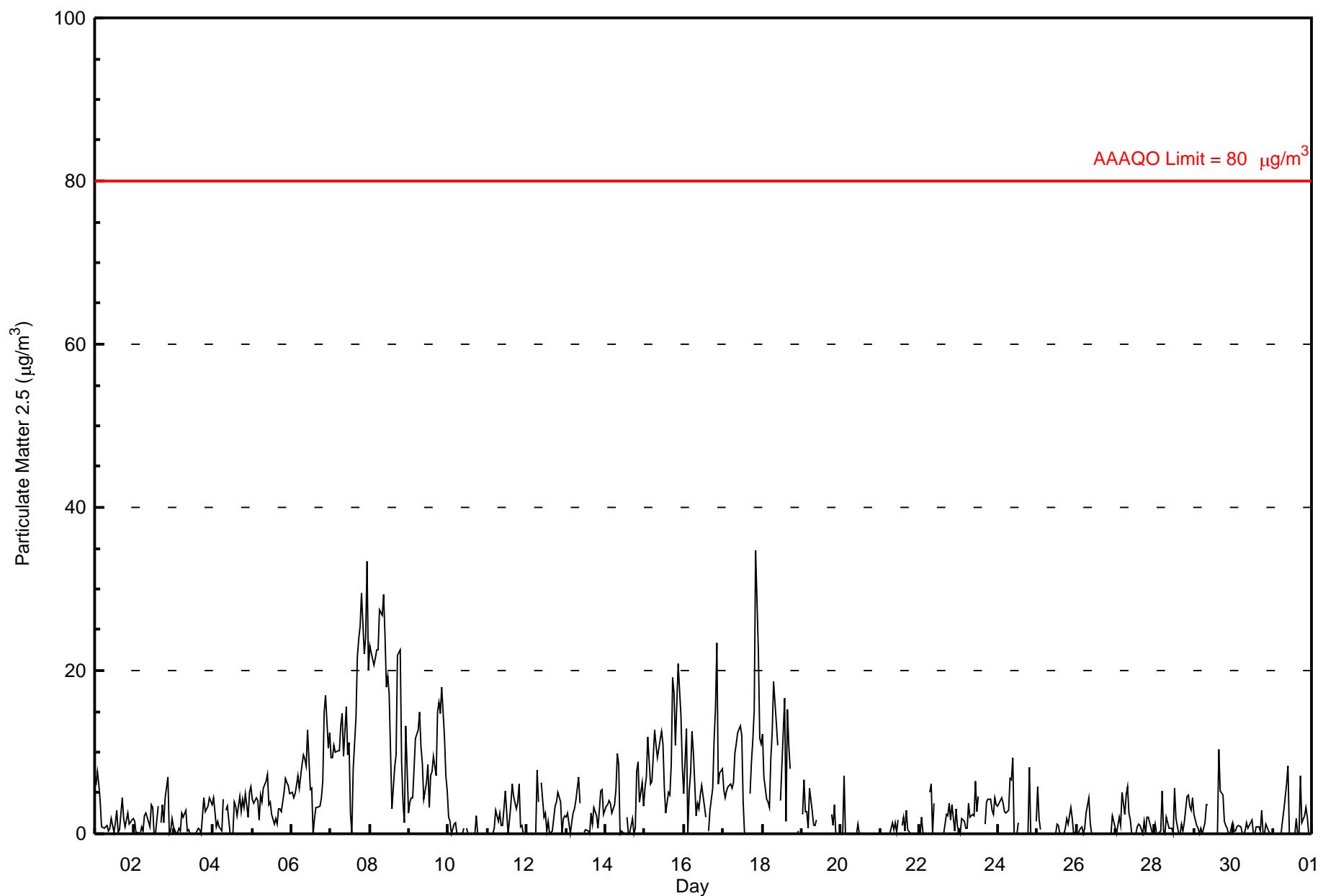
Summary of Hourly Averages

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 $\mu\text{g}/\text{m}^3$ on Aug 17 21:00																			Hours of Data: 698					
Minimum Value: 0 $\mu\text{g}/\text{m}^3$ on Aug 2 02:00																			Hours of Missing Data: 46					
Maximum Diurnal Average: 6.6 $\mu\text{g}/\text{m}^3$ at hour 21																			Hours of Calibration: 0					
Monthly Average: 4.11 $\mu\text{g}/\text{m}^3$																			Percent Operational Time: 93.8					
Day	Hourly Period Ending At (MST)																				Daily Average	Daily Maximum		
1-Aug	6	8	6	4	1	1	1	0	1	2	0	1	3	0	0	4	2	1	2	3	1	2	2	
2-Aug	2	0	0	0	1	0	2	3	2	1	4	3	0	0	3	BD	1	3	1	4	7	0	2	
3-Aug	1	0	0	1	0	3	2	3	0	1	0	0	0	0	0	1	0	0	4	3	3	4	4	
4-Aug	4	3	1	2	1	0	4	P	3	3	0	0	0	4	3	2	5	3	4	3	5	2	6	
5-Aug	4	4	4	4	2	5	4	6	6	7	4	4	2	1	2	1	3	3	3	5	7	6	5	
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	
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	
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	
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	
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	
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	
12-Aug	0	0	BD	0	BD	0	8	4	BD	6	2	2	0	2	0	2	3	4	5	4	0	2	2	
13-Aug	2	2	0	1	3	3	4	7	4	BD	0	1	0	0	3	1	3	2	1	3	5	5	2	
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	
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	
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	
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	
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	
19-Aug	2	7	3	3	1	6	3	1	1	2	BD	0	BD	7	BD	BD	P	2	1	4	0	0	0	
20-Aug	0	0	7	0	0	0	0	BD	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
21-Aug	0	0	0	0	0	0	0	1	0	1	0	2	P	1	2	0	3	0	0	0	0	BD	0	
22-Aug	0	2	0	0	0	0	BD	5	6	0	4	BD	0	BD	0	2	2	4	2	4	0	3	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	
24-Aug	3	4	4	4	3	3	3	7	7	9	0	0	1	0	0	0	0	0	8	0	0	BD	2	
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	
26-Aug	0	0	1	1	0	1	3	4	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0	
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	
28-Aug	1	0	0	0	5	0	0	2	1	1	1	0	6	2	0	0	1	0	1	4	5	3	4	
29-Aug	2	1	1	0	1	0	1	4	4	BD	BD	0	BD	0	0	10	5	5	2	1	1	0	1	
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	
31-Aug	0	0	0	0	0	0	2	3	6	8	0	0	0	2	0	0	7	1	2	3	2	0	0	
	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
	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 Average																				Diurnal Maximum			

Hourly Averages for PM_{2.5} at Beaverlodge

August 2008

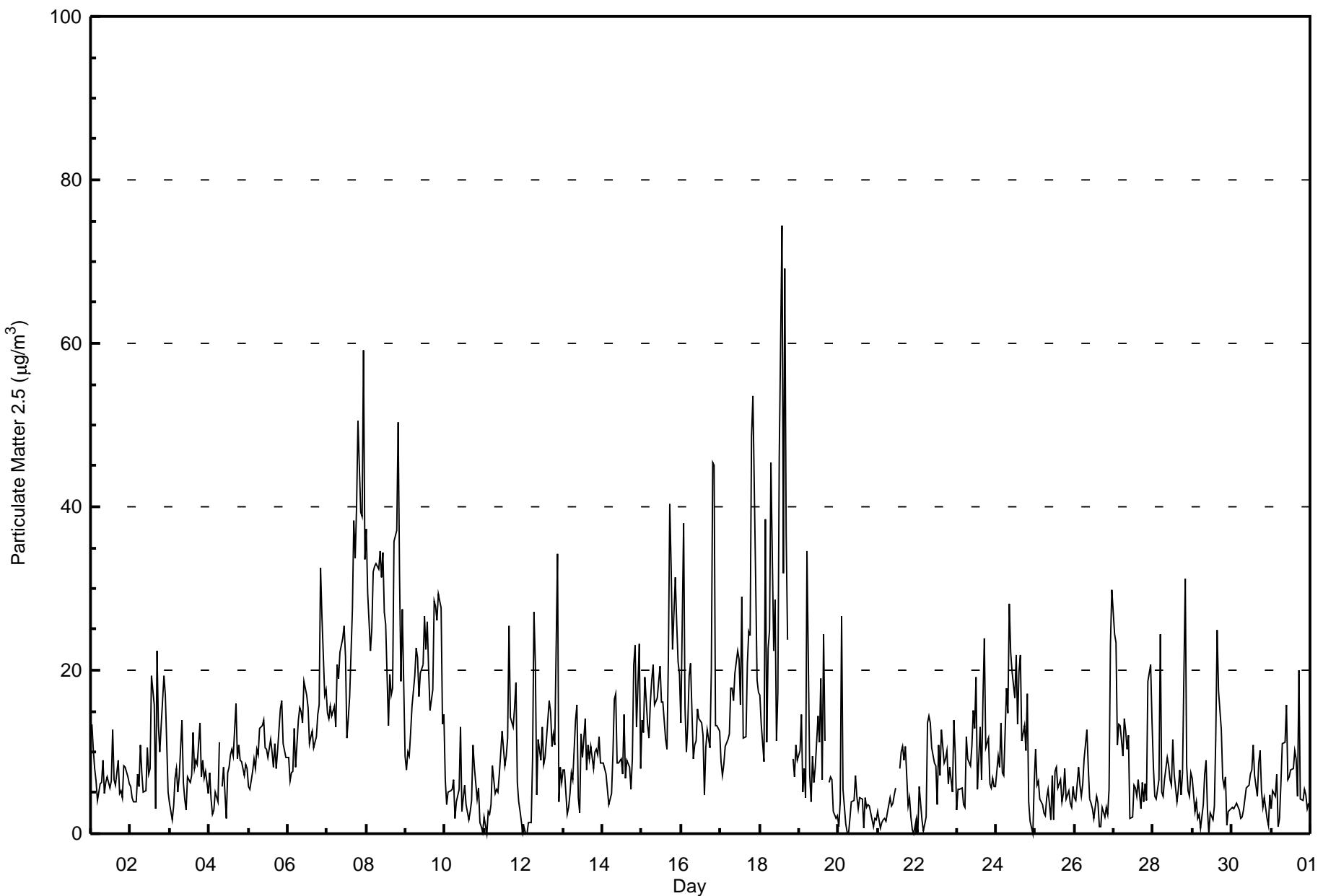


Peace Airshed Zone Association Summary of Hourly Maximums

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

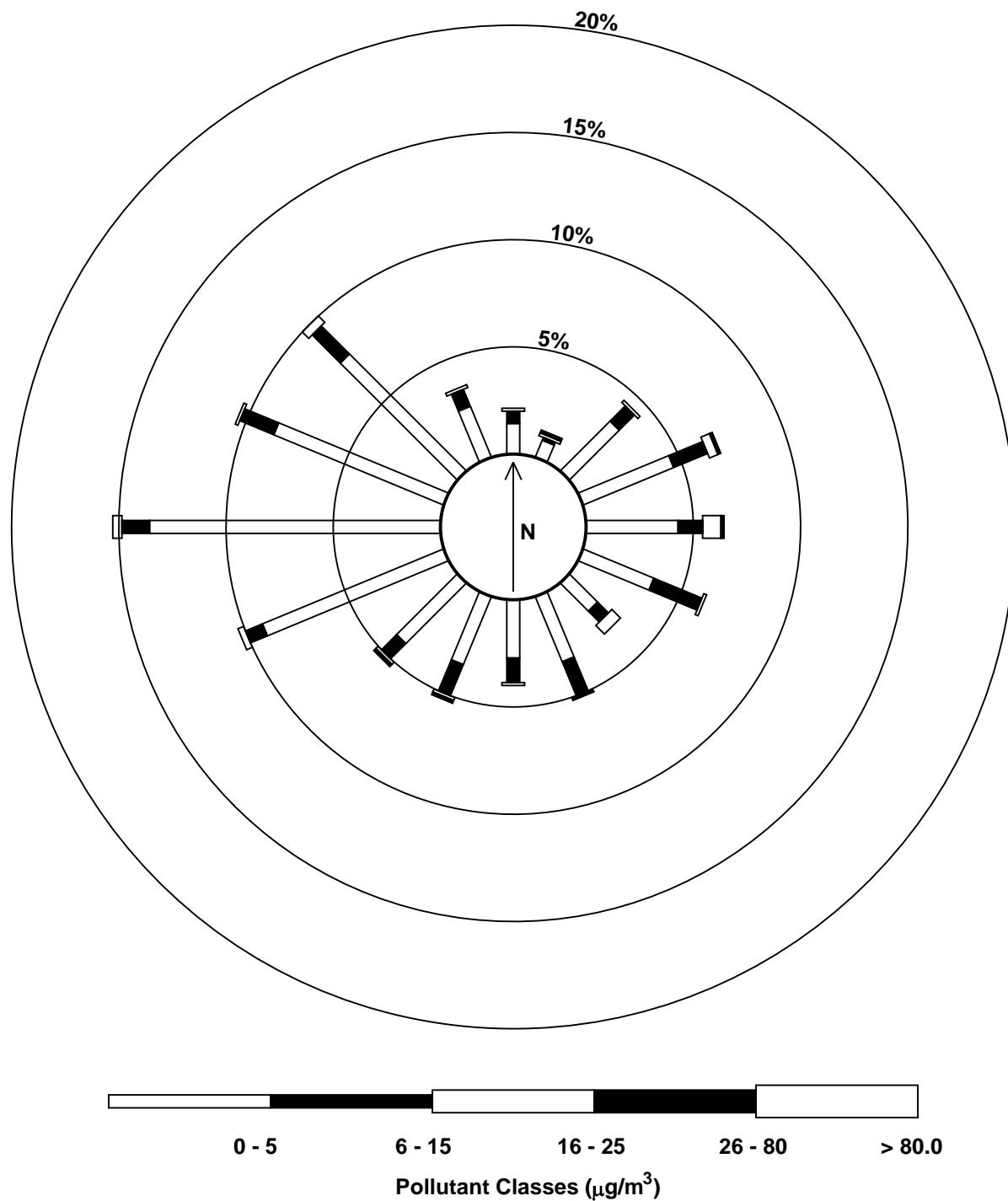
Maximum Value: 74.4 µg/m³ on Aug 18 14:00																				Maximum Daily Average: 28.1 µg/m³ on Aug 8																				Hours in Service: 744		
Minimum Value: 0 µg/m³ on Aug 11 02:00																				Minimum Daily Average: 3.9 µg/m³ on Aug 20																				Hours of Data: 739		
Maximum Diurnal Average: 16.0 µg/m³ at hour 20																				Minimum Diurnal Average: 7.8 µg/m³ at hour 3																			Hours of Missing Data: 5			
Monthly Average: 11.29 µg/m³																				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-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	12	9	8.7	15.7																	
14-Aug	9	8	7	5	4	5	10	16	17	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	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																	

Hourly Maximums for PM_{2.5} at Beaverlodge
August 2008



Pollutant Rose for PM_{2.5} at Beaverlodge

August 2008



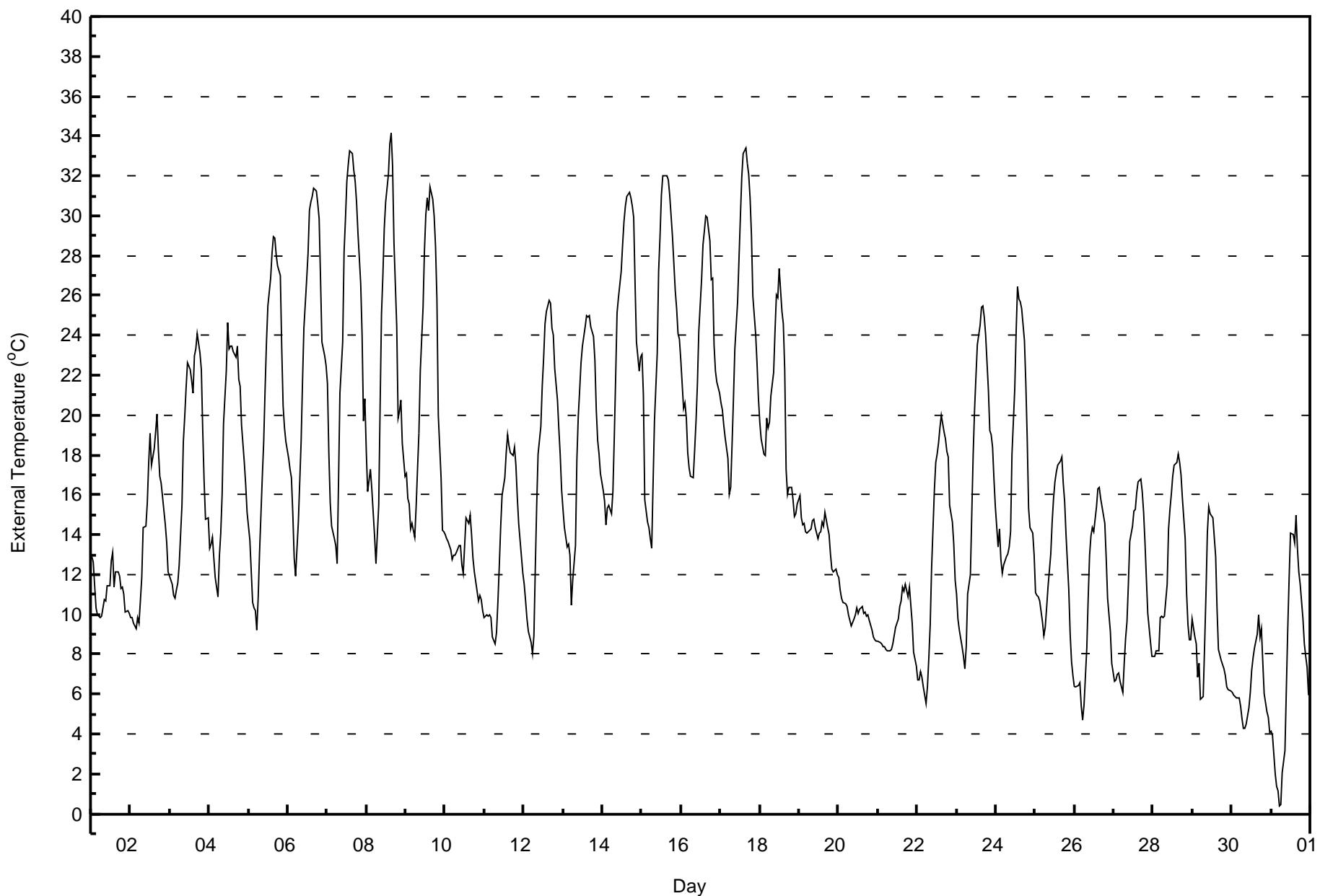
Peace Airshed Zone Association
Summary of Hourly Averages

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
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	12	13	15	15	15	14	13	12	11	11	11	11	10	12.8	15.0	
11-Aug	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	30	30	27	24	22	23	23.5	31.2	
15-Aug	23	21	16	15	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	18	20	22	24	27	29	29	30	30	29	27	27	23	22	21	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	15	15	16	20.0	27.4	
19-Aug	16	15	14	15	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	9	9	10	10	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	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	14	14	13	10	8	8	7	7	7	6	6	6	9.4	15.4
30-Aug	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
																								Diurnal Average		
																								Diurnal Maximum		

Hourly Averages for External Temperature at Beaverlodge

August 2008



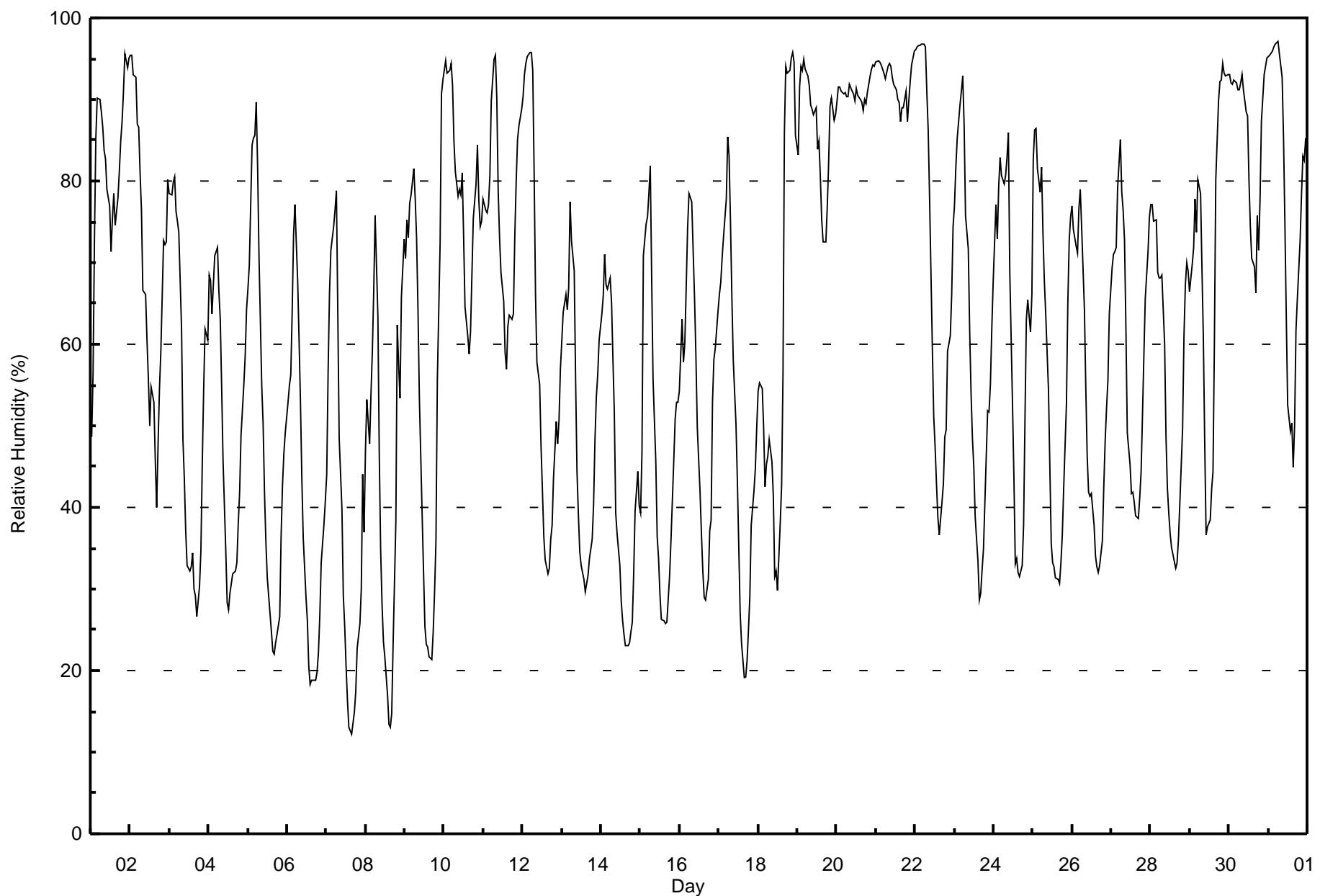
Peace Airshed Zone Association
Summary of Hourly Averages

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 Minimum Value: 12 % on Aug 7 16:00 Minimum Daily Average: 39.3 % on Aug 7 Maximum Diurnal Average: 82.3 % at hour 6 Minimum Diurnal Average: 40.8 % at hour 16 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 in Service:	744	
																								Hours of Data:	744	
																								Hours of Missing Data:	0	
																								Hours of Calibration:	0	
																								Percent Operational Time:	100.0	
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum
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	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	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	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	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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
	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	20	19	19	19	16	12	8	8	6	10.8	20.4	
	343	317	315	306	305	285	92	152	258	282	287	285	272	281	281	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
	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
	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
	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
	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	2	3	4	4.1	17.1	
	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
	350	225	95	80	201	325	140	284	269	284	319	300	314	318	352	347	347	357	6	28	23	48	64	88	59	0.7
20 Spd	4	11	11	10	9	12	13	12	14	14	13	12	11	14	13	11	12	12	13	14	15	13	15	11.9	15.1	
	55	56	60	64	76	77	74	85	70	74	87	90	72	67	60	60	62	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	5	4	4	1	3	6.5	16.4	
	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
	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)

Maximum Speed Value: 30 km/h on Aug 25 13:00

Minimum Speed Value: 0 km/h on Aug 3 01:00

Maximum Daily Speed Average: 17.6 km/h on Aug 28

Minimum Daily Speed Average: 0.8 km/h on Aug 12

Maximum Diurnal Speed Average: 8.1 km/h at hour 11

Minimum Diurnal Speed Average: 0.3 km/h at hour 1

Monthly Average Velocity: 3.89 km/h 273.18 deg

Speed Percentiles: $P_0 = 0.5$, $P_{10} = 1.9$, $Q_1 = 3.3$, Median = 6.6, $Q_3 = 11.2$, $P_{90} = 16.6$, $P_{99} = 29.3$

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

Hours in Service: 744

Hours of Data: 744

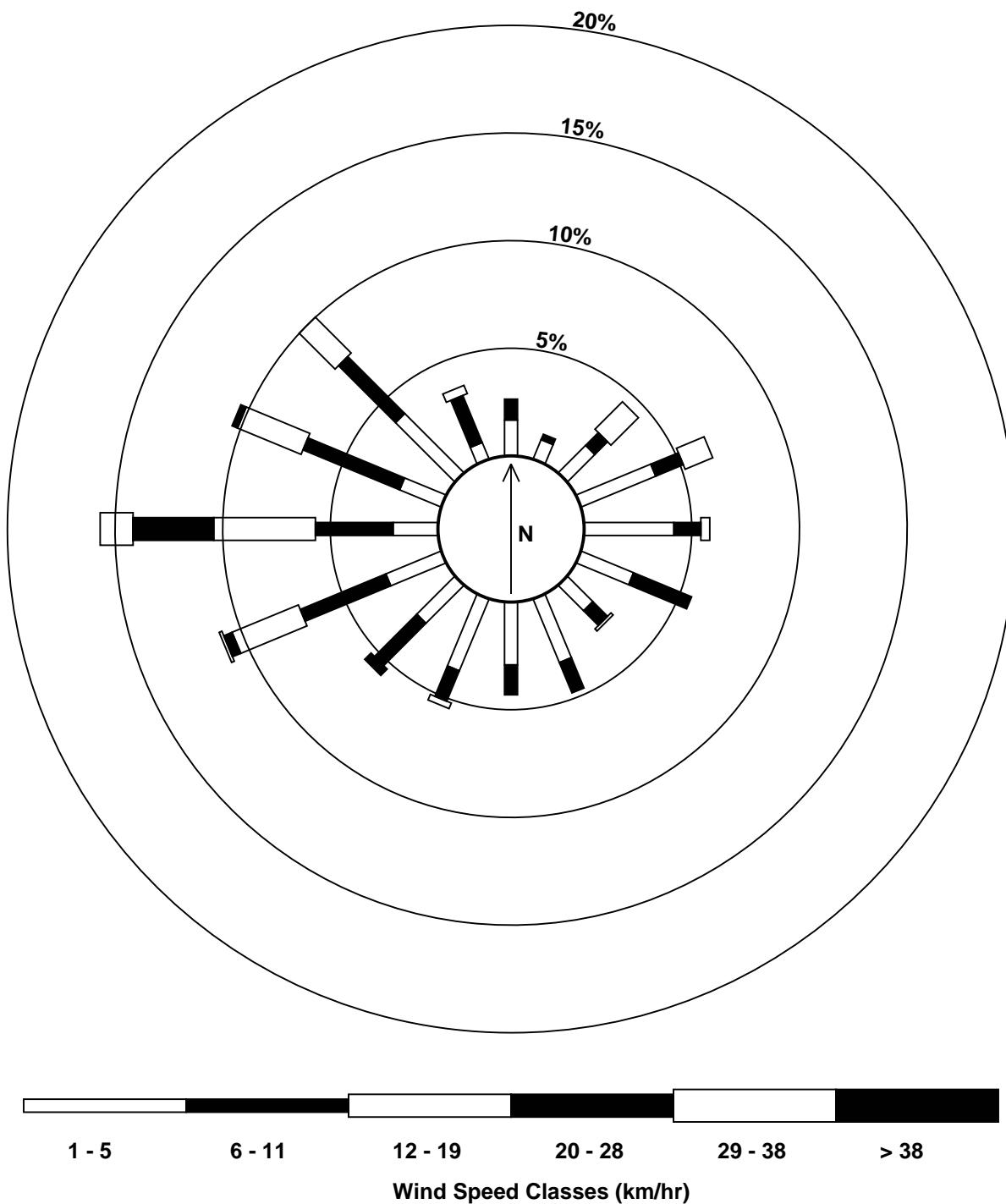
Hours of Missing Data: 0

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	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

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Maximum
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	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	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

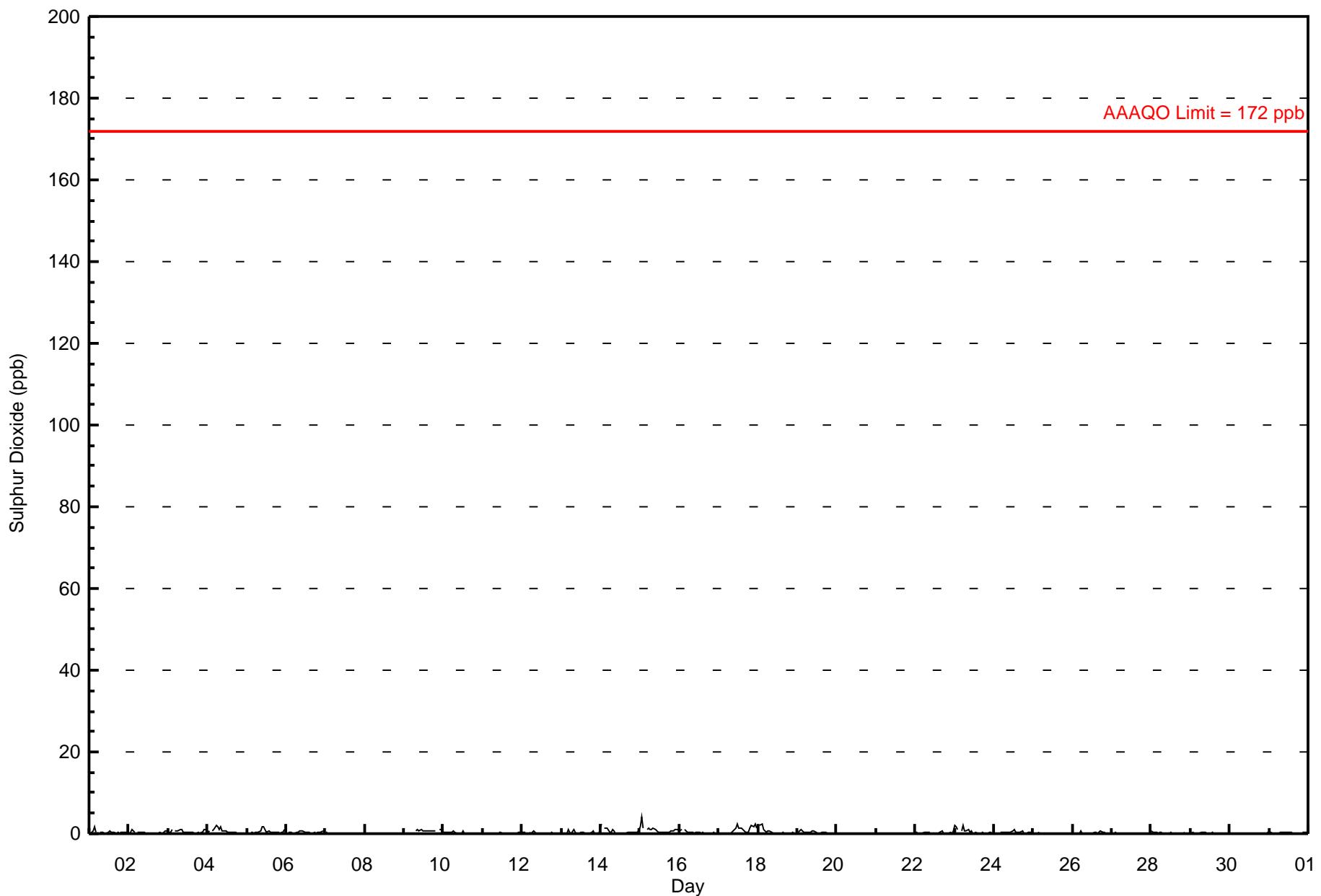
Portable-Spirit River - Sulphur Dioxide (SO_2) - ppb

August 1, 2008 to September 1, 2008

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 3.9 ppb on Aug 15 02:00 Maximum Daily Average: 0.9 ppb on Aug 15																		Hours in Service: 744 Hours of Data: 630 Hours of Missing Data: 114 Hours of Calibration: 42 Percent Operational Time: 90.3								
Minimum Value: 0 ppb on Aug 2 17:00 Minimum Daily Average: 0.0 ppb on Aug 30										Maximum Diurnal Average: 0.6 ppb at hour 2 Minimum Diurnal Average: 0.2 ppb at hour 19																
Monthly Average: 0.32 ppb 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	1	0	0	0	0	0	0	0	0	0	0	0	0		
2-Aug	0	0	1	0	0	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
3-Aug	0	0	1	A	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	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		
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	1		
6-Aug	A	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	A		
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	--		
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	--		
9-Aug	N	N	N	N	N	N	N	N	N	1	1	1	1	1	1	1	1	1	1	1	A	1	1	1		
10-Aug	0	0	0	0	0	0	0	1	1	0	0	0	0	0	N	N	N	N	N	N	N	N	N	--		
11-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	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	0.1		
13-Aug	0	0	A	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2		
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	0.5		
15-Aug	2	4	1	A	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1	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	0.3		
17-Aug	0	A	0	0	0	0	0	0	0	1	1	2	1	1	1	1	0	0	0	1	2	2	1	0.9		
18-Aug	A	2	2	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	0.4		
19-Aug	0	1	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0.3		
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		
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		
22-Aug	0	0	A	0	0	0	0	0	0	C	C	C	A	0	0	1	0	0	0	0	0	0	1	0.3		
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	0.5		
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	0.3		
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		
26-Aug	A	A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	A	0.2		
27-Aug	A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0.0		
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	0.2		
29-Aug	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	A	A	0	0.6		
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	0.1		
31-Aug	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5		
Diurnal Average Diurnal Maximum																										
C - Calibration N - Not Valid A - Automated Daily Zero Span																										
Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 172 ppb 24-hr 57 ppb																										

Hourly Averages for SO₂ at Portable-Spirit River

August 2008

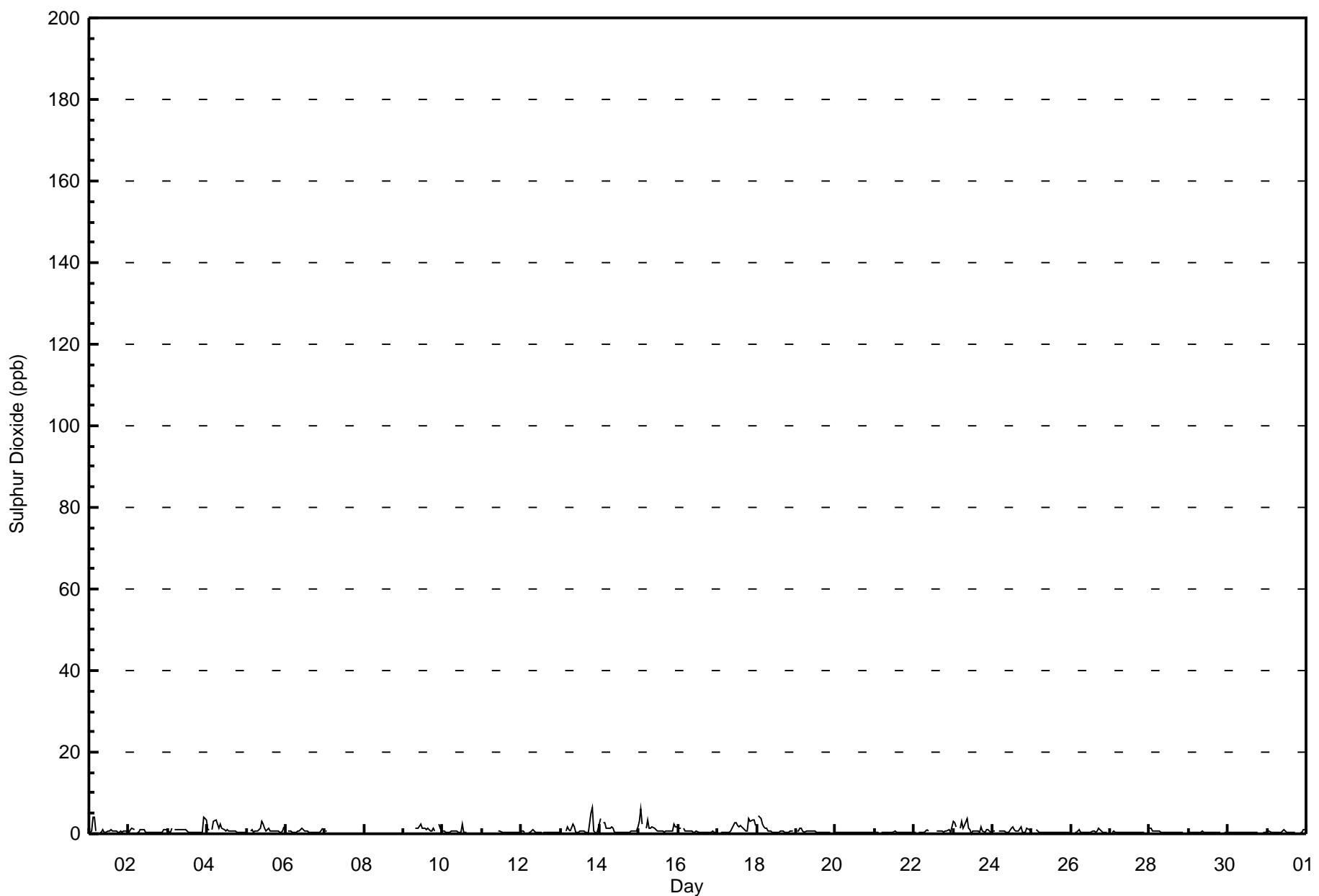


Peace Airshed Zone Association
Summary of Hourly Maximums

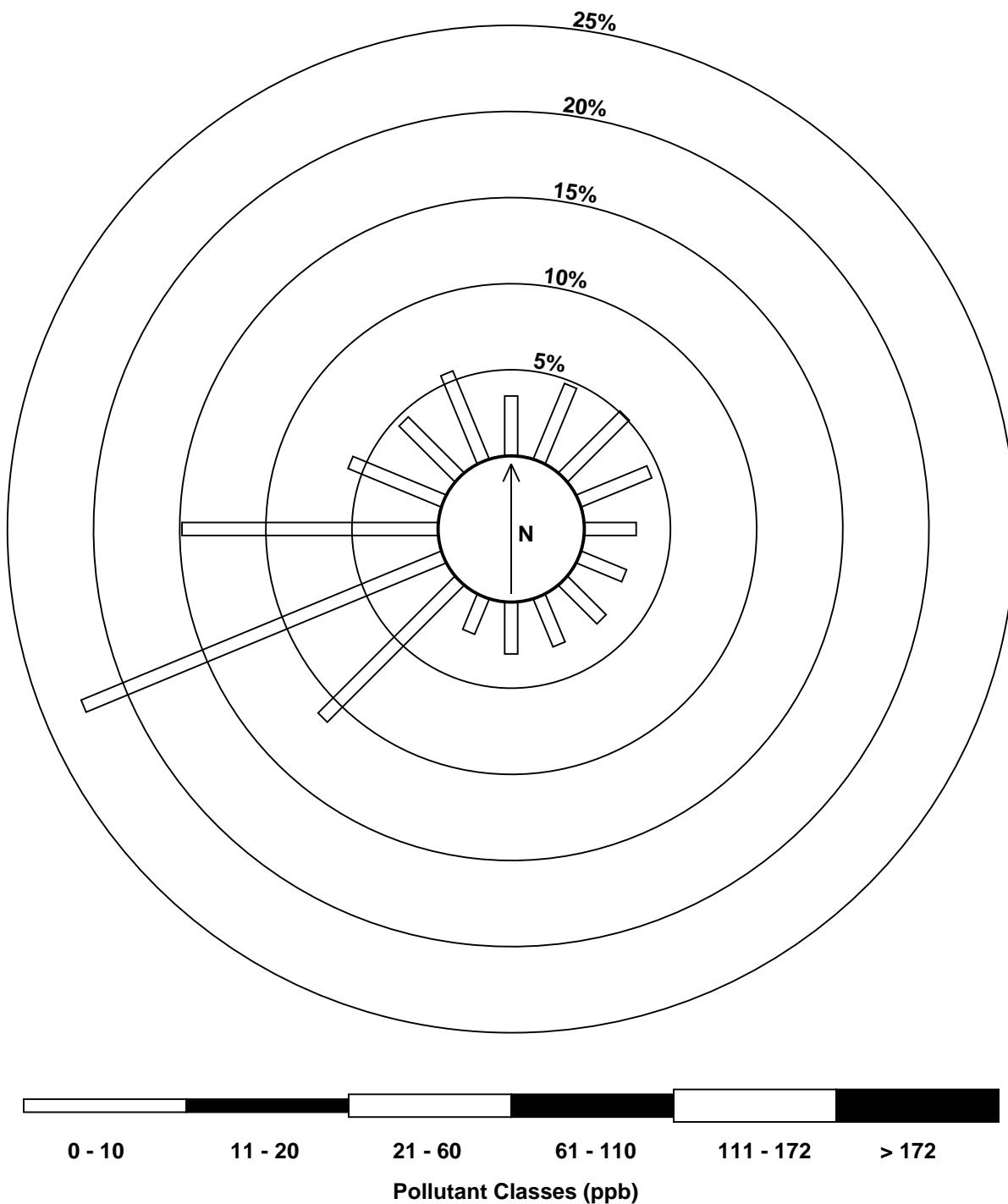
Portable-Spirit River - Sulphur Dioxide (SO_2) - ppb
August 1, 2008 to September 1, 2008

Maximum Value: 6.6 ppb on Aug 13 20:00 Maximum Daily Average: 1.6 ppb on Aug 15 Minimum Value: 0 ppb on Aug 23 12:00 Minimum Daily Average: 0.2 ppb on Aug 30 Maximum Diurnal Average: 1.2 ppb at hour 3 Minimum Diurnal Average: 0.5 ppb at hour 17 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 in Service: 744 Hours of Data: 630 Hours of Missing Data: 114 Hours of Calibration: 42 Percent Operational Time: 90.3			
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum	
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	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	0	1	1	1	0.6	1.4
3-Aug	1	0	1	A	1	1	1	1	1	1	0	0	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	3	2	1	1	1	1	1	1	1	1	1	1	0	1	2	0	0.9	3.0	
6-Aug	A	1	1	1	0	0	0	1	1	1	1	1	1	1	1	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	--	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	--	--		
9-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	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	N	N	N	N	N	N	N	N	N	N	N	N	N	--	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	0	1	1	1	0	0	0	5	7	1	0	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	1	0	1	1	1	1	1	1	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	1	0	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	4	3	3	2	A	1.5	3.7		
18-Aug	A	4	4	2	2	1	1	1	1	0	0	0	0	1	1	1	0	0	1	1	1	1	A	1.0	4.3		
19-Aug	1	1	1	1	1	0	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	1	C	C	C	A	1	1	1	1	0	1	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	0	2	1	0	1	1	1	0	0	1.3	3.7	
24-Aug	1	1	A	A	1	1	1	1	0	0	0	1	2	1	1	1	2	0	0	0	1	1	0	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	0	1	1	0	1	1	1	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	A	A	0.3	0.8		
28-Aug	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	0.7	0.6	0.6	0.5	0.5	0.6	0.6	0.8	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



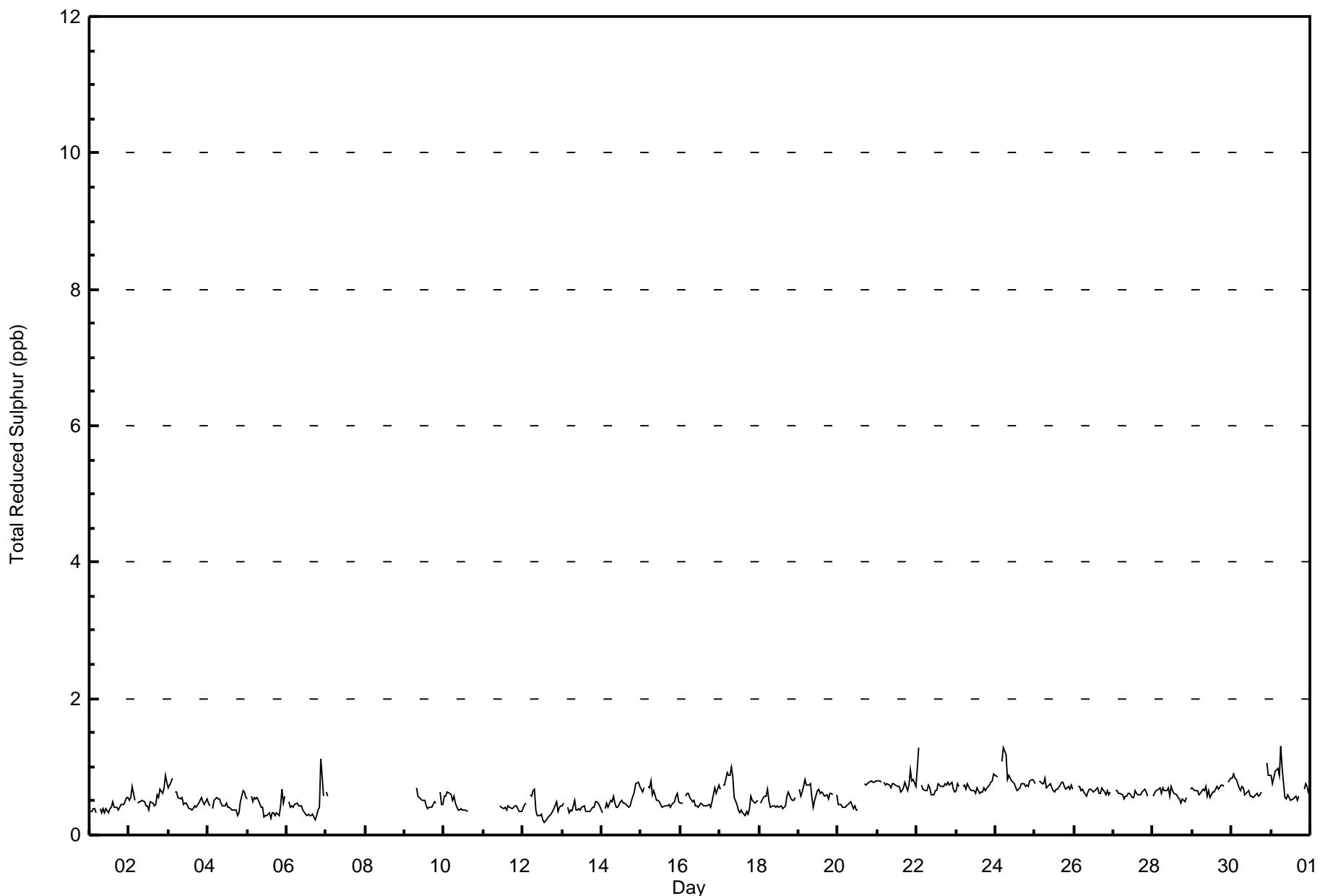
Peace Airshed Zone Association

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 Maximum Value: 1.3 ppb on Aug 31 07:00 Maximum Daily Average: 0.8 ppb on Aug 24																			Hours in Service: 744							
Minimum Value: 0 ppb on Aug 12 14:00 Minimum Daily Average: 0.4 ppb on Aug 12																			Hours of Data: 631							
Maximum Diurnal Average: 0.7 ppb at hour 22 Minimum Diurnal Average: 0.5 ppb at hour 15																			Hours of Missing Data: 113							
Monthly Average: 0.57 ppb Percentiles: $P_1 = 0.3$ $P_{10} = 0.4$ $Q_1 = 0.4$ Median = 0.6 $Q_3 = 0.7$ $P_{90} = 0.8$ $P_{99} = 1.0$																			Hours of Calibration: 41							
Percent Operational Time: 90.3																			Daily 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	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	0	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	1	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	1	0	1	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	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	--	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	--	--	
9-Aug	N	N	N	N	N	N	N	N	N	1	1	1	0	1	0	0	0	0	0	0	A	1	0	0	--	0.7
10-Aug	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	N	N	N	N	N	N	N	N	--	0.6
11-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0.4	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	0	0	0	0	0	0	0	1	1	1	1	1	0.5	0.8
15-Aug	1	1	1	A	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	0	0	1	1	1	1	1	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	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	1	A	0.6	0.7
28-Aug	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	A	A	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	1	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	A	A	1	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
	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6	Diurnal Average		
	1.0	1.3	0.9	1.0	1.1	1.3	1.0	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	1.0	1.1	0.9	0.9	0.9	Diurnal Maximum

Hourly Averages for TRS at Portable-Spirit River
August 2008

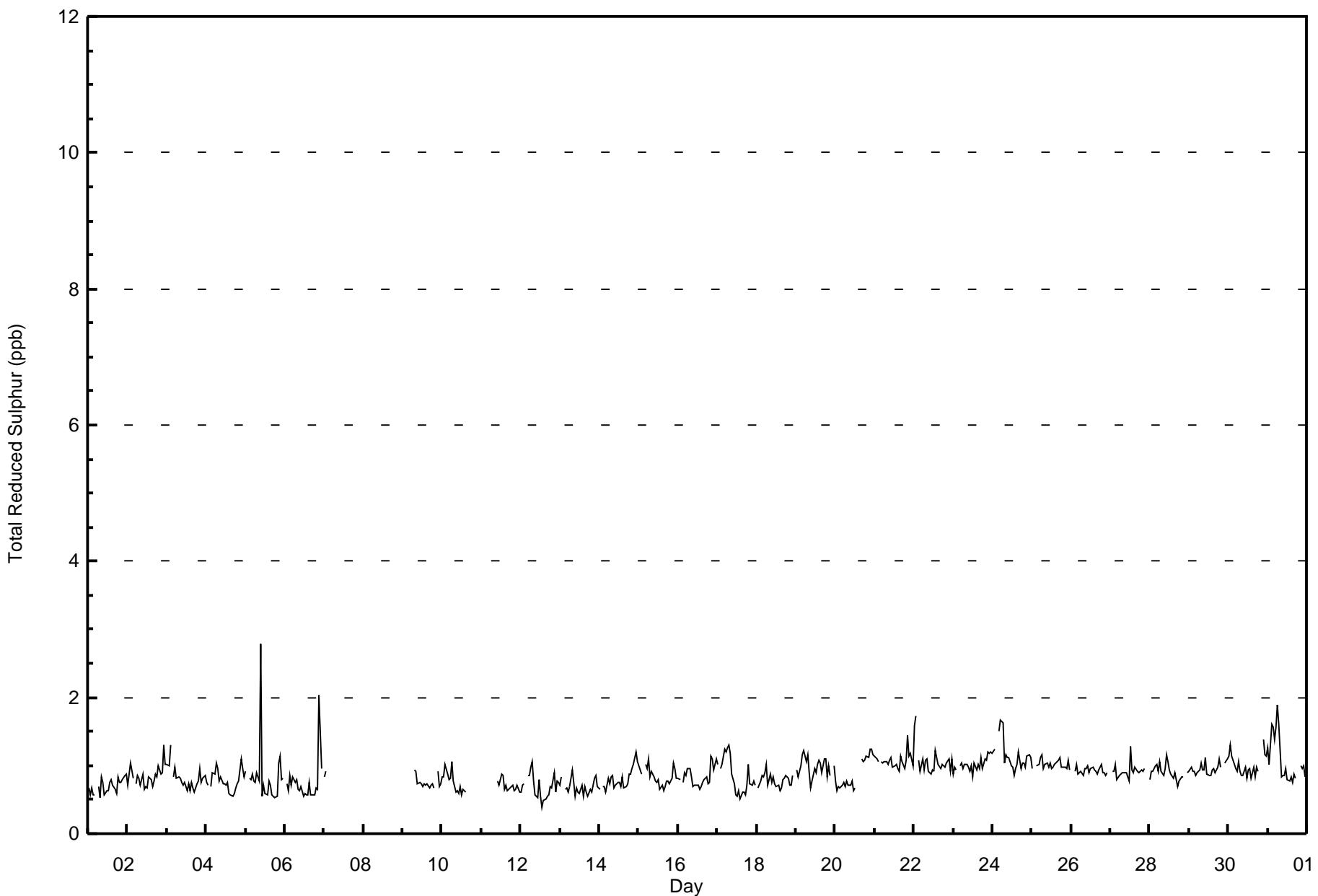


Peace Airshed Zone Association Summary of Hourly Maximums

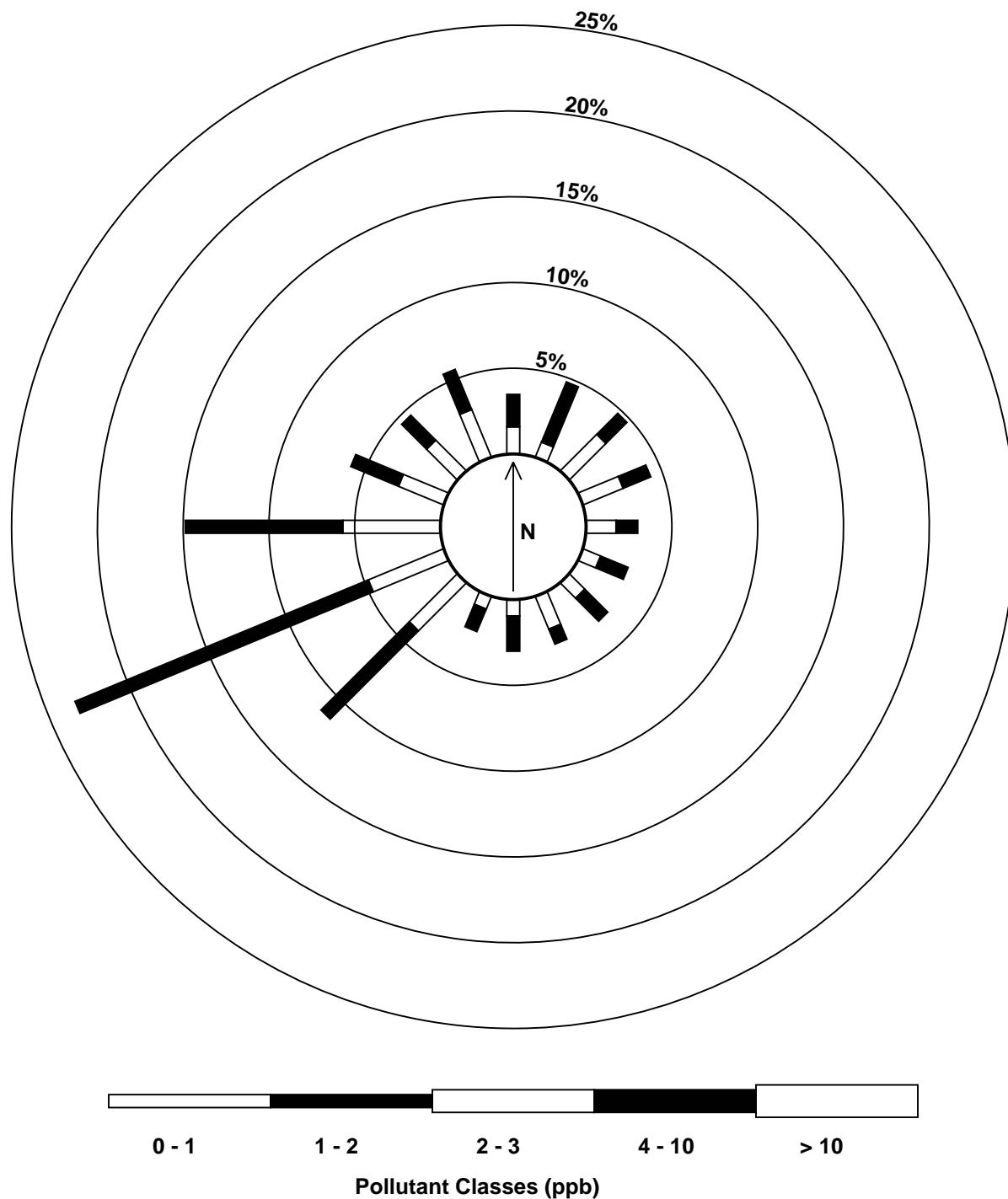
Portable-Spirit River - Total Reduced Sulphur (TRS) - ppb

August 1, 2008 to September 1, 2008

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 (NO_2) - 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				Hours of Data:		628																			
Minimum Value: 0 ppb on Aug 26 16:00		Minimum Daily Average: 1.0 ppb on Aug 26				Hours of Missing Data:		116																			
Maximum Diurnal Average: 4.7 ppb at hour 2		Minimum Diurnal Average: 0.8 ppb at hour 16				Hours of Calibration:		44																			
Monthly Average: 2.58 ppb		Percentiles: $P_1 = 0.2$ $P_{10} = 0.5$ $Q_1 = 0.9$ Median = 1.8 $Q_3 = 3.6$ $P_{90} = 5.4$ $P_{99} = 14.1$				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	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	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	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	--	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	--	--	
9-Aug	N	N	N	N	N	N	N	N	N	N	8	5	3	2	2	2	1	1	1	1	2	A	7	2	2	8.3	
10-Aug	2	3	3	3	3	3	3	2	2	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	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	2	5	4	3	2	2.7	10.4	
14-Aug	3	A	4	4	4	4	2	1	1	1	0	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	1	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	0	1	1	1	1	3	3	3	2	A	3	2.5	5.6		
19-Aug	6	4	4	5	6	6	5	5	4	3	3	2	2	2	2	4	2	2	2	1	1	A	3	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	1	1	0	0	0	0	0	0	0	0	1	1	1	3	2	1	1	1.1	3.2	
26-Aug	A	A	2	2	2	1	1	1	0	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	1	1	1	1	1	1	1	0	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	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	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

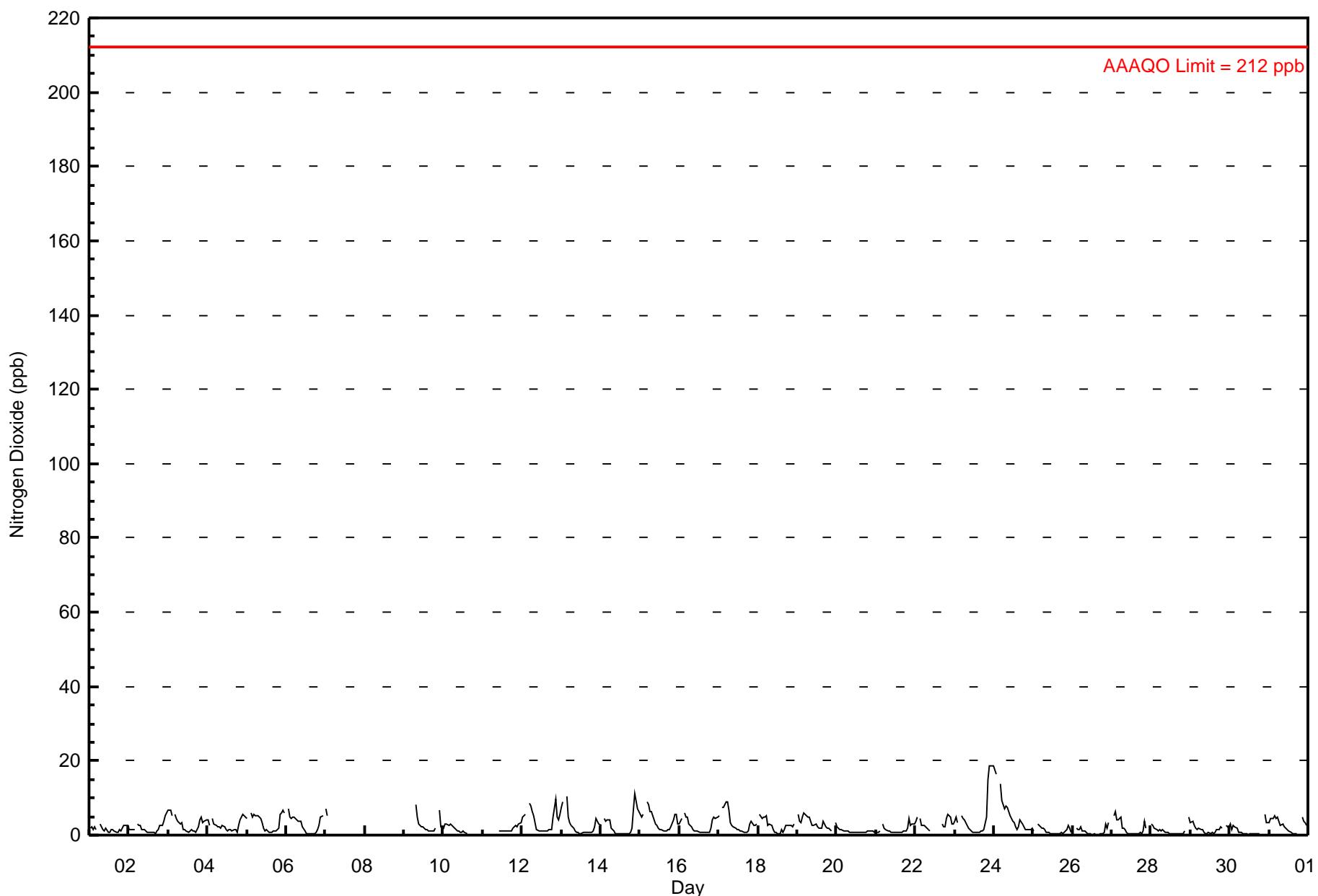
A - Automated Daily Zero Span

Alberta Ambient Air Quality Objectives (AAAQO): 1-hr 212 ppb

24-hr 106 ppb

Hourly Averages for NO₂ at Portable-Spirit River

August 2008



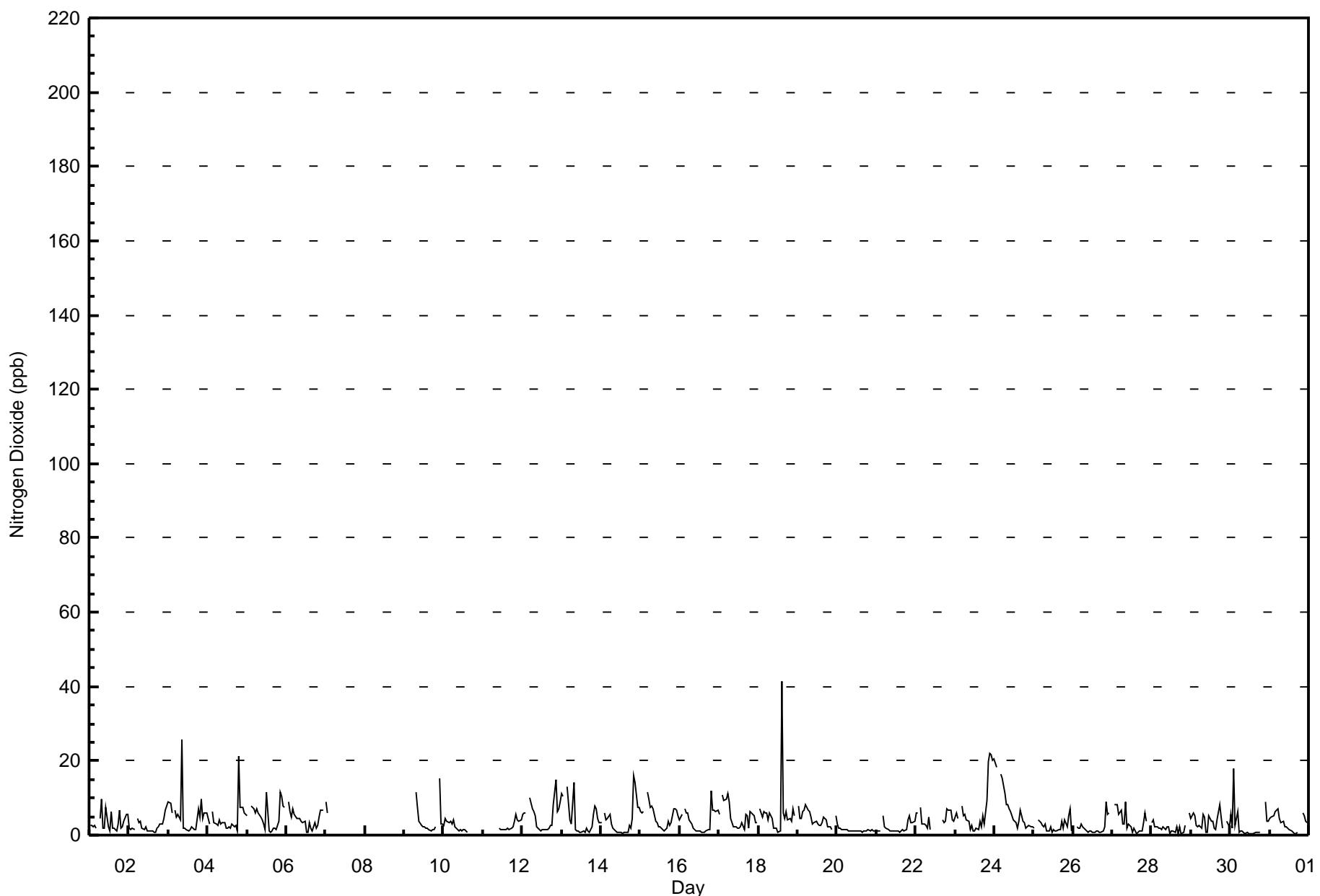
Peace Airshed Zone Association Summary of Hourly Maximums

Portable-Spirit River - Nitrogen Dioxide (NO₂) - ppb

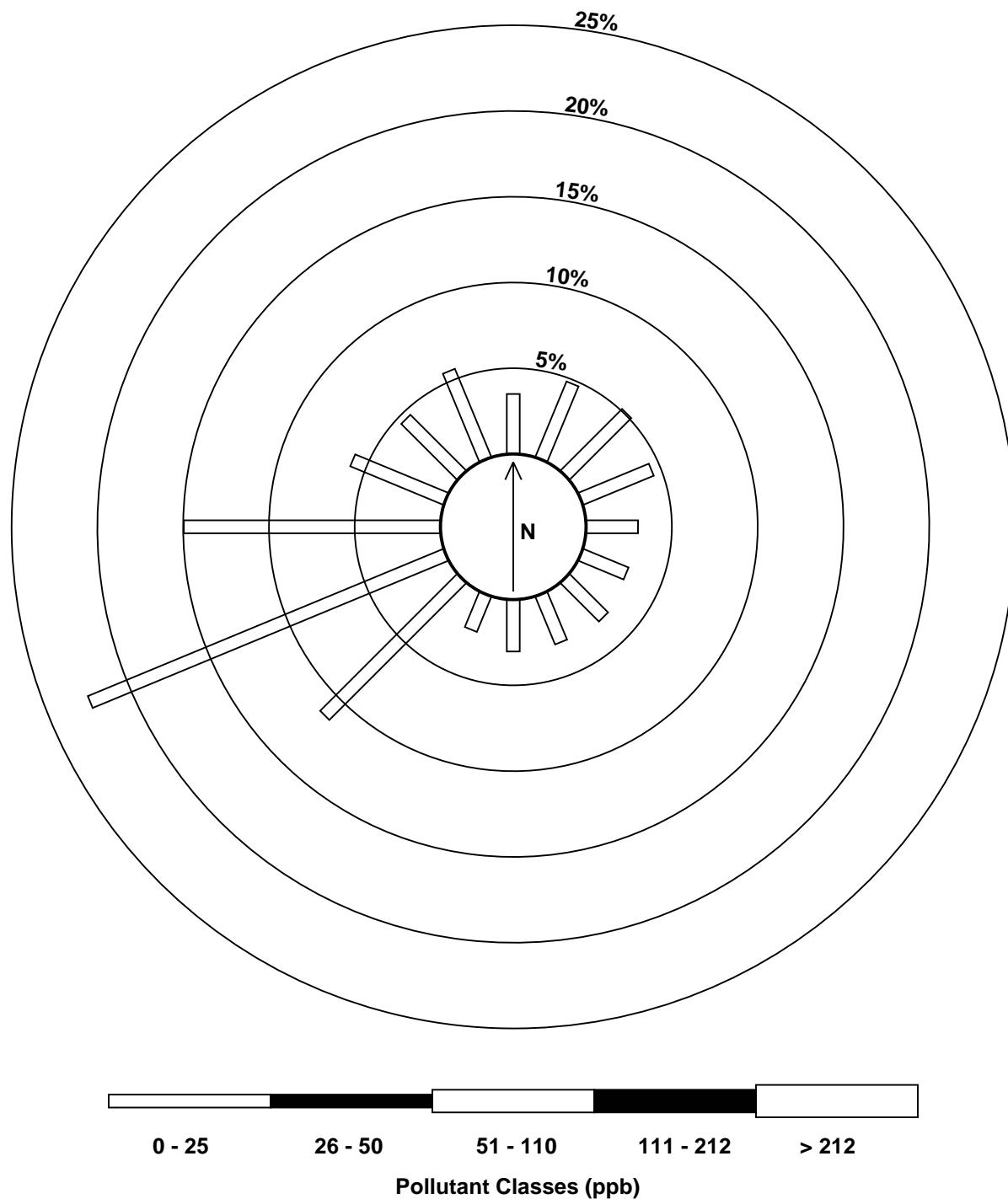
August 1, 2008 to September 1, 2008

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-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	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	N	12	8	4	3	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	N	N	N	N	N	N	N	N	N	N	N	N	N	N	--	5.6	
12-Aug	5	6	6	A	10	8	7	6	5	2	2	1	1	1	1	2	2	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	12	7	7	6	7	3.8	12.1		
17-Aug	6	A	11	9	10	11	9	4	3	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	7	5	A	6.1	41.4		
19-Aug	8	4	5	6	7	8	7	6	5	3	3	4	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	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	2	4	2	4	2	5	7	1	2.5	6.9		
26-Aug	A	A	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	3	6	4	A	A	3.8	8.9		
28-Aug	3	4	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	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	0	1	0	1	1	0	1	1	1	1	1	A	A	9	4	4	2.7	17.9	
31-Aug	4	5	5	6	7	5	3	4	2	2	2	1	1	1	1	1	1	1	A	A	6	5	4	3	3.4	7.2	
																									Diurnal Average		
																									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



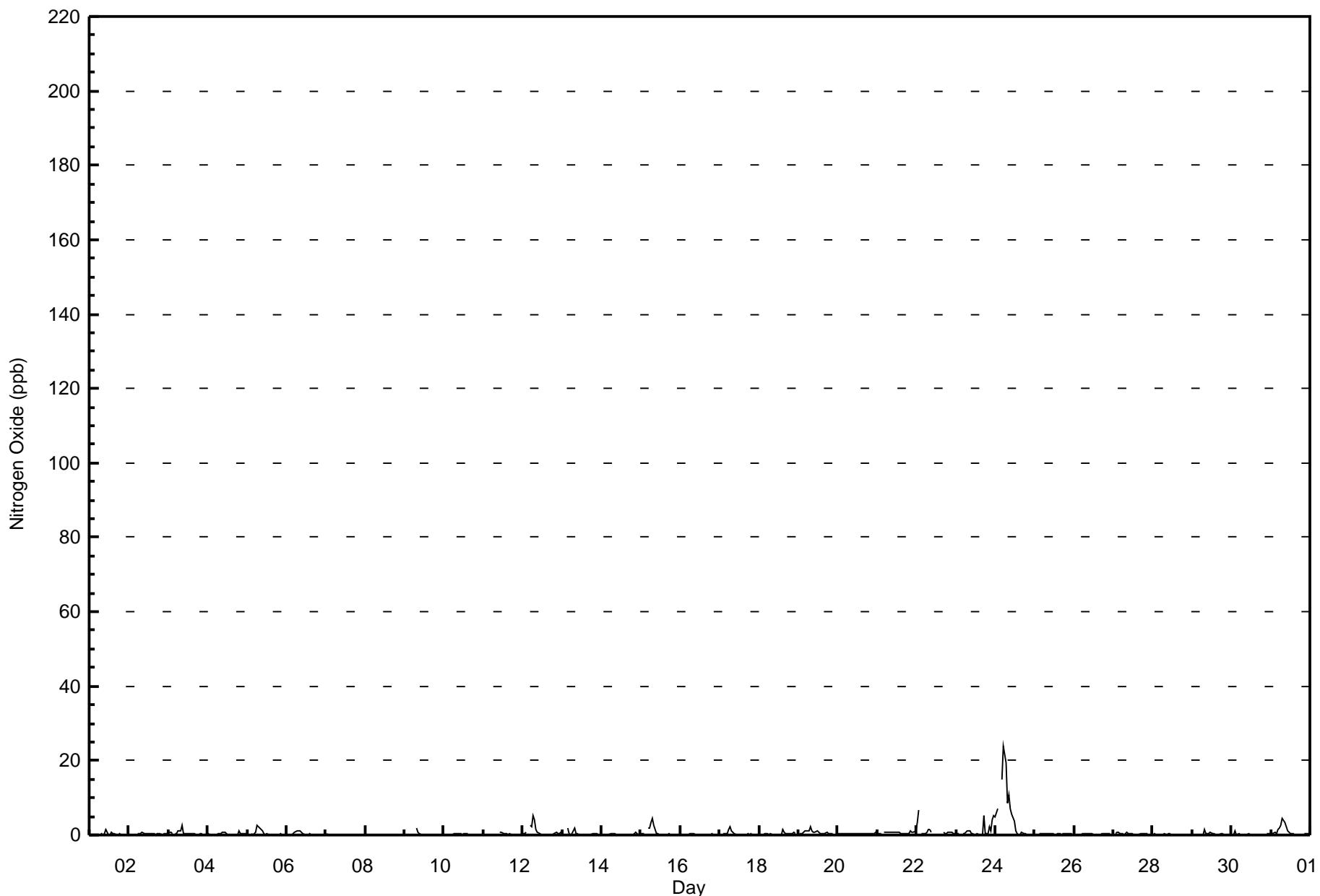
Peace Airshed Zone Association

Summary of Hourly Averages

Portable-Spirit River - Nitrogen Oxide (NO) - ppb

August 1, 2008 to September 1, 2008

Hourly Averages for NO at Portable-Spirit River
August 2008

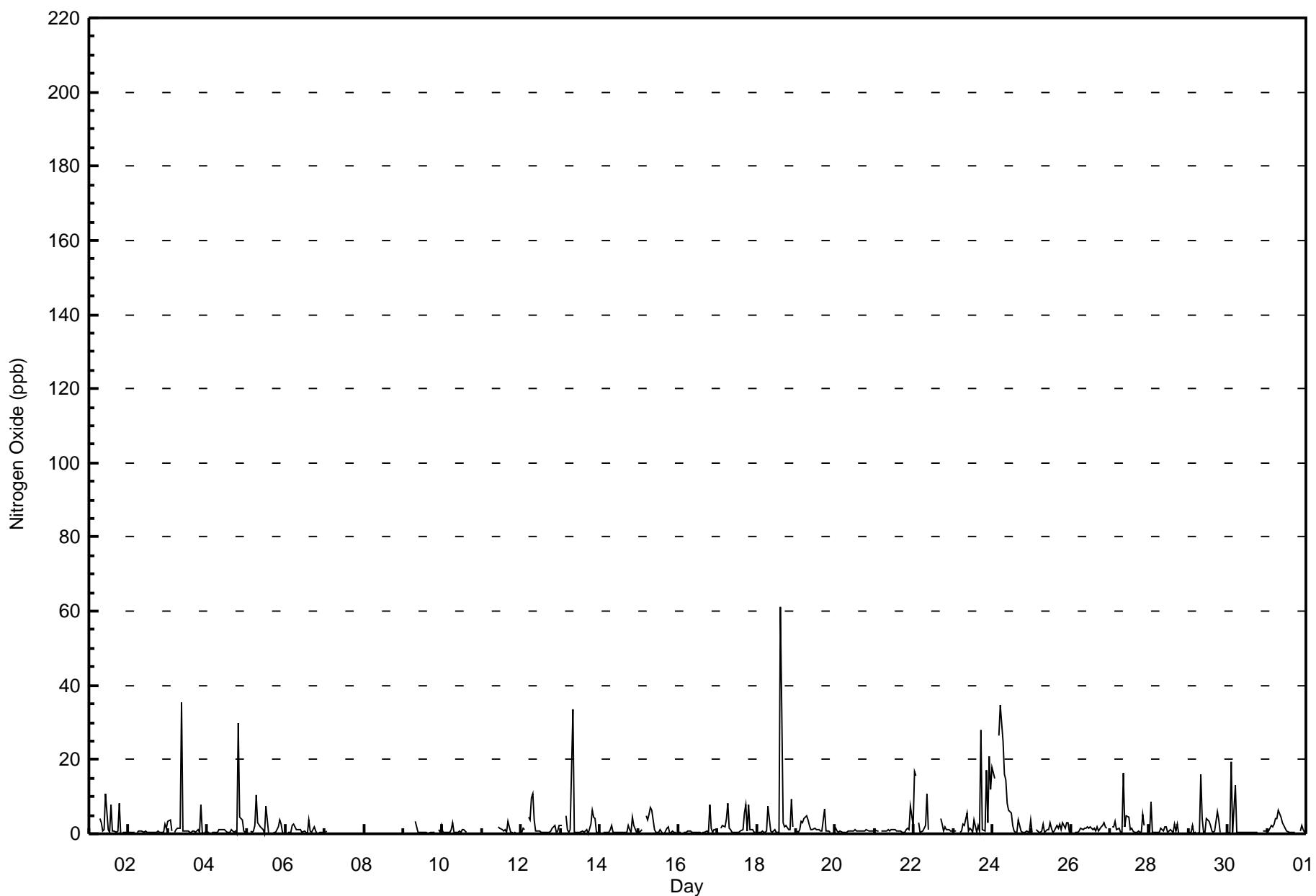


Peace Airshed Zone Association Summary of Hourly Maximums

Portable-Spirit River - Nitrogen Oxide (NO) - ppb

August 1, 2008 to September 1, 2008

Hourly Maximums for NO at Portable-Spirit River
August 2008

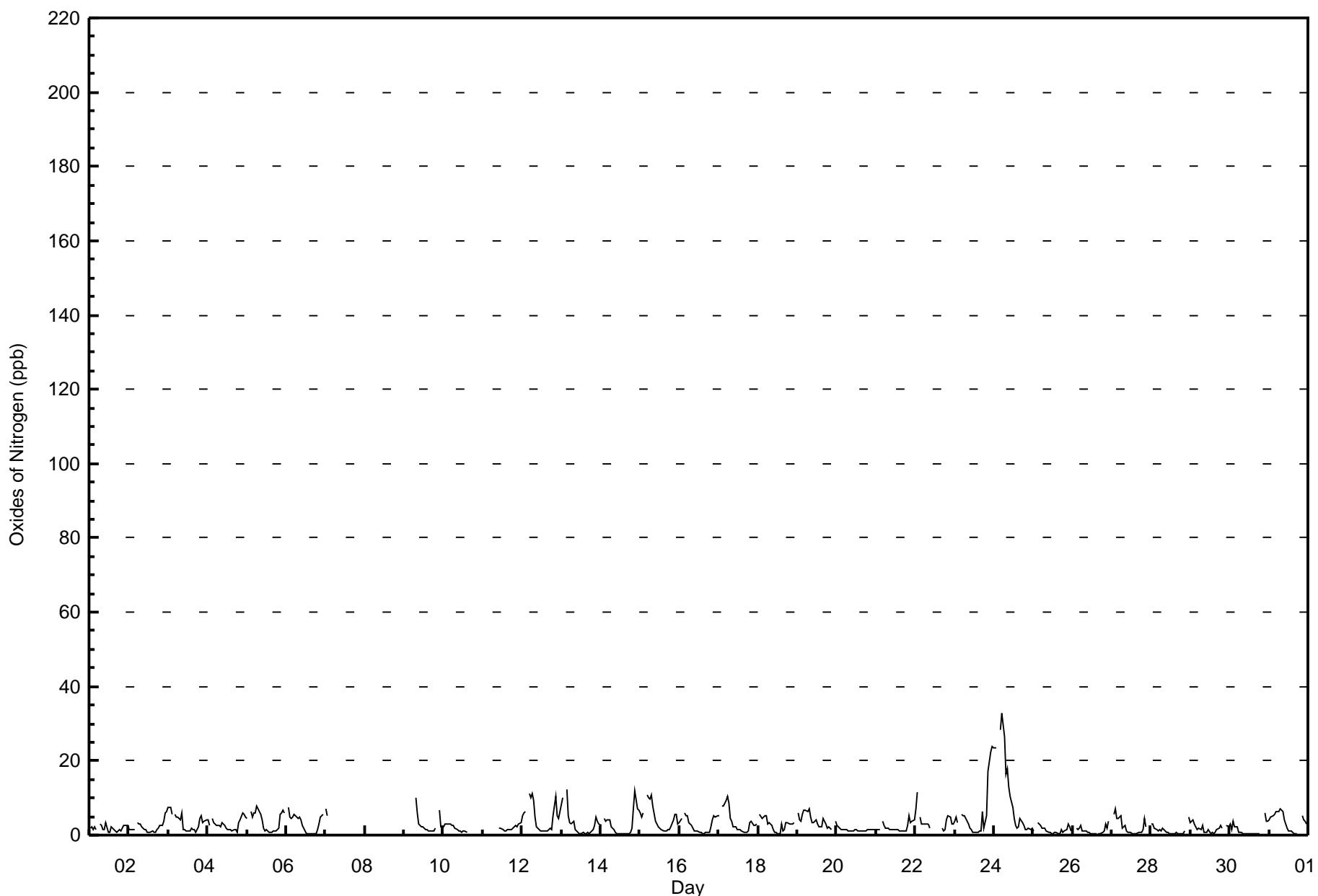


Peace Airshed Zone Association

Summary of Hourly Averages

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

Hourly Averages for NO_X at Portable-Spirit River
August 2008

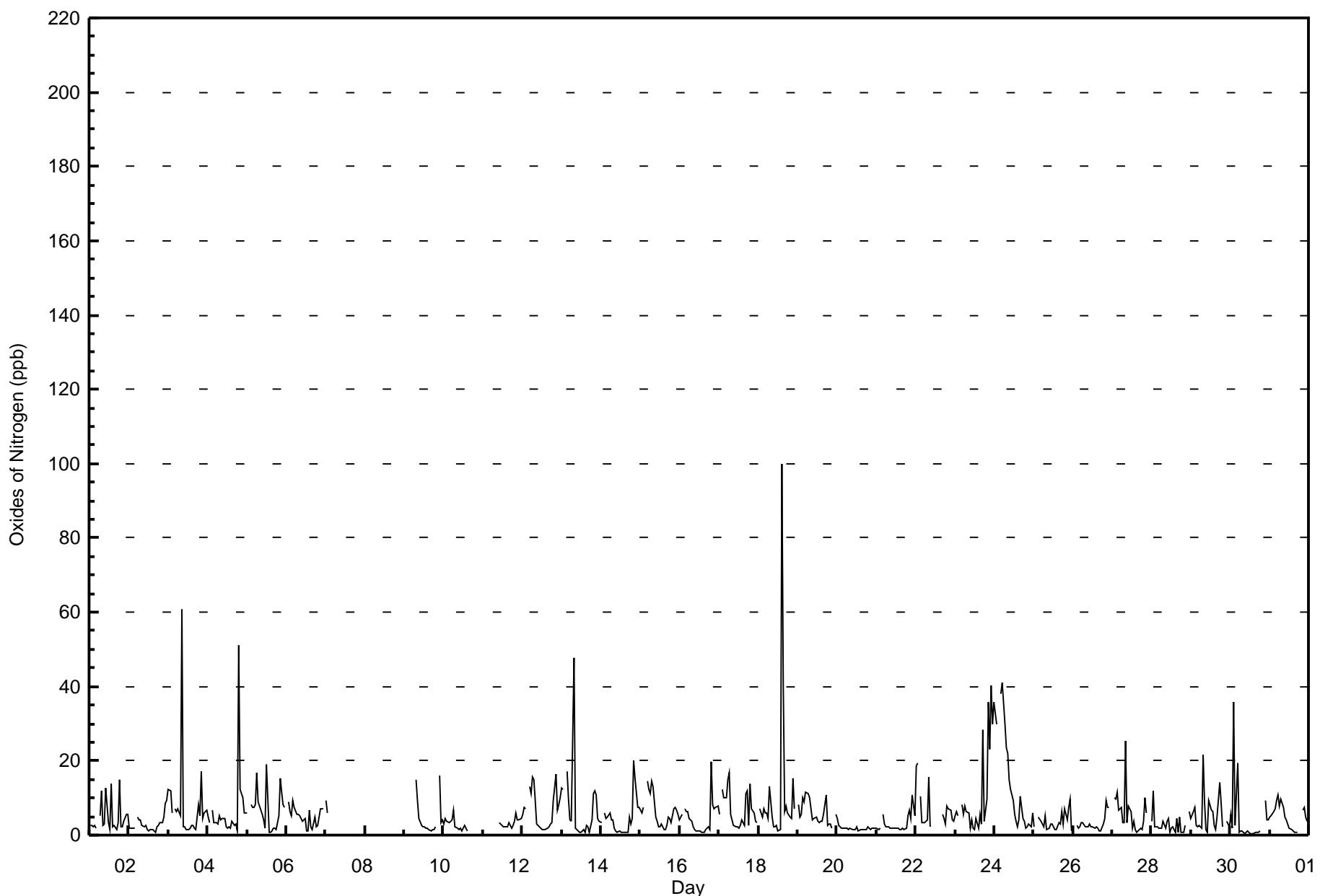


Peace Airshed Zone Association Summary of Hourly Maximums

Portable-Spirit River - Oxides of Nitrogen (NO_x) - ppb

August 1, 2008 to September 1, 2008

Hourly Maximums for NO_X at Portable-Spirit River
August 2008



Peace Airshed Zone Association Summary of Hourly Averages

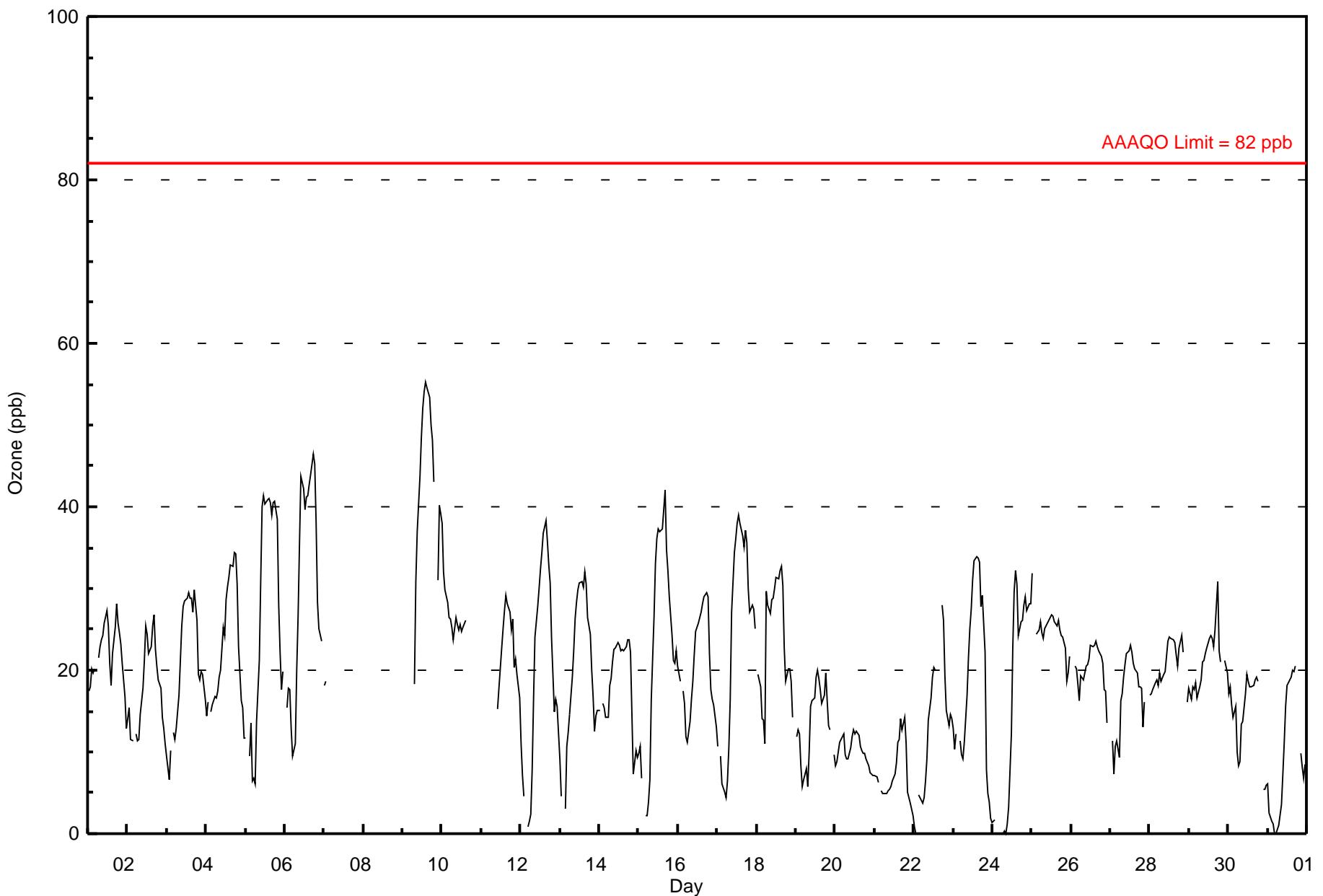
Portable-Spirit River - Ozone (O_3) - ppb

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 55.3 ppb on Aug 9 15:00 Maximum Daily Average: 30.3 ppb on Aug 6																			Hours in Service: 744 Hours of Data: 631 Hours of Missing Data: 113 Hours of Calibration: 41 Percent Operational Time: 90.3								
Minimum Value: 0 ppb on Aug 22 02:00 Minimum Daily Average: 7.4 ppb on Aug 21											Maximum Diurnal Average: 28.3 ppb at hour 16 Minimum Diurnal Average: 10.5 ppb at hour 6																
Monthly Average: 19.97 ppb 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)																										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum	
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	--	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	--	--		
9-Aug	N	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	--	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	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	19	13	14	10	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	13	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	9	8	8	7	7	7	10.1	12.8	
21-Aug	7	7	6	A	5	5	5	5	5	6	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	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	1	3	12	23	30	32	30	24	26	26	28	29	27	28	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	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	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	13	16	A	A	17.0	23.1		
28-Aug	17	17	18	19	19	18	20	19	19	20	22	24	24	24	23	22	21	23	24	22	A	A	A	16	20.6	24.2	
29-Aug	18	16	18	18	19	17	18	19	21	21	22	23	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	19	19	19	19	19	A	A	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

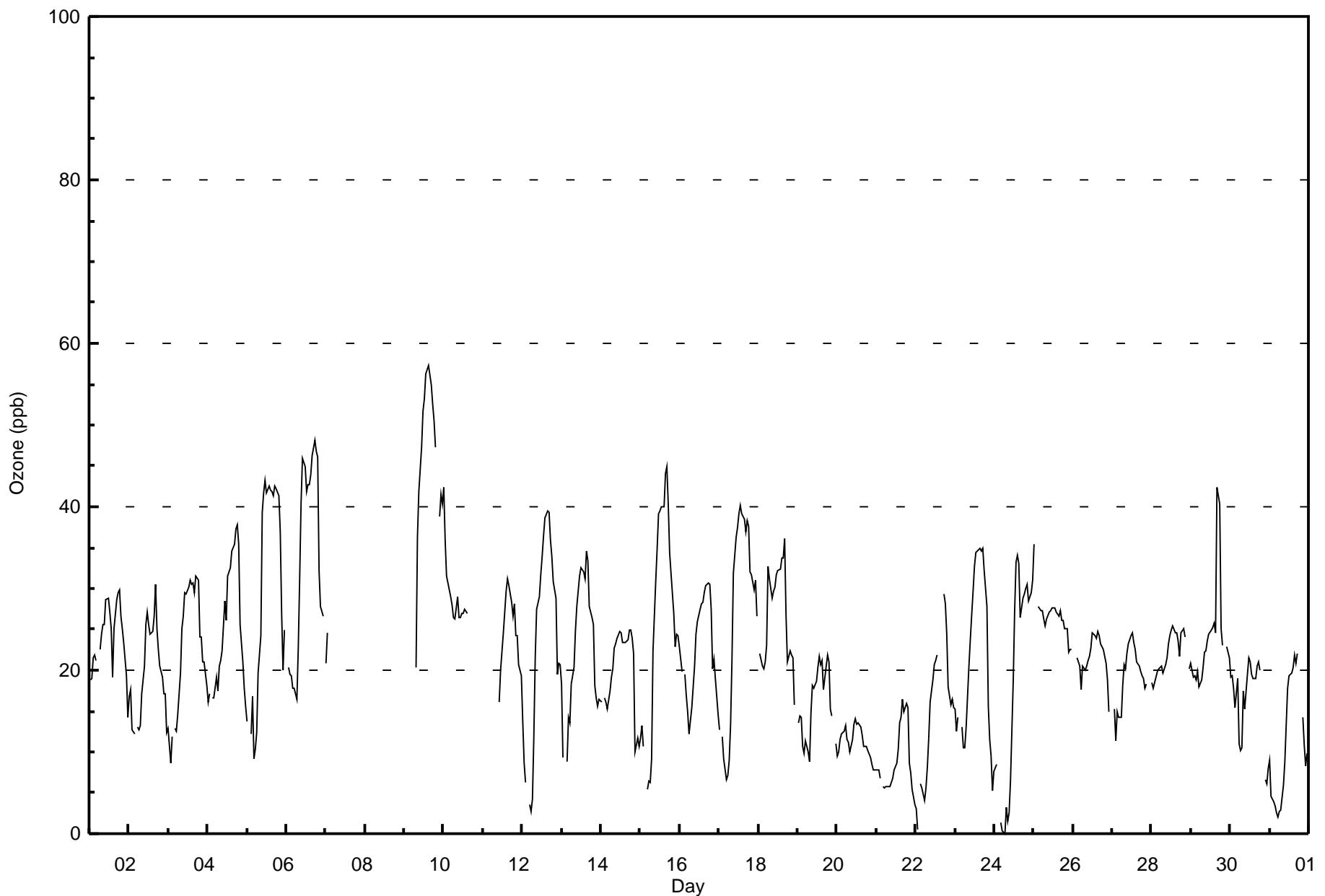


Peace Airshed Zone Association Summary of Hourly Maximums

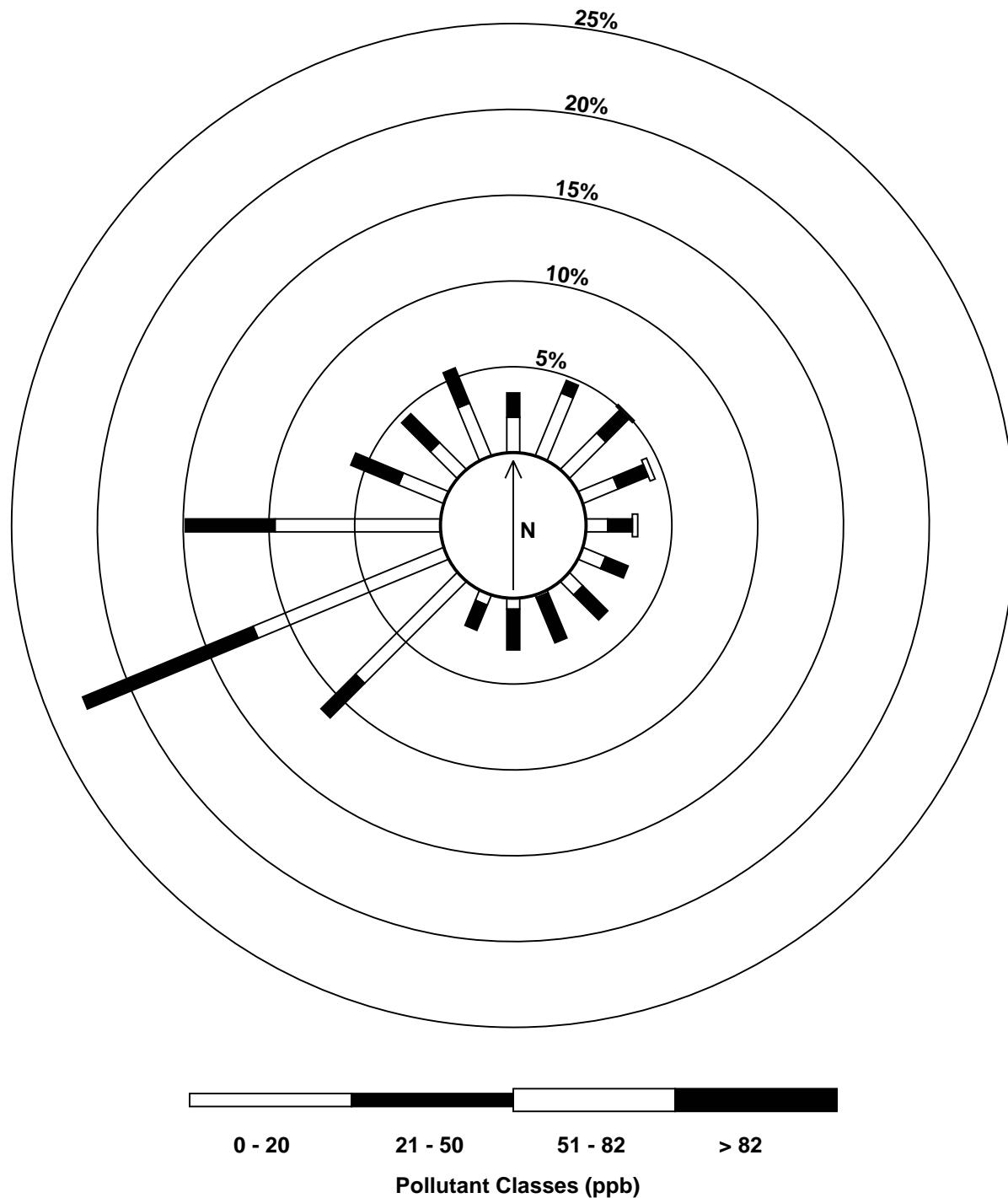
Portable-Spirit River - Ozone (O_3) - ppb

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
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																				Percent Operational Time:																				Percent Operational Time:		90.3
Day	Hourly Period Ending At (MST)																																								Daily Average	Daily Maximum
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	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	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	--	--	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	--	--	--																
9-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	N	N	N	N	N	57.3											
10-Aug	42	36	32	30	29	28	26	26	29	26	26	27	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	24	25	25	24	22	21	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	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	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	21	21	16	A	26.8	36.2																
19-Aug	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	12	11	11	11	10	9	9	8	8	8	11.2	14.1																
21-Aug	8	8	7	A	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	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	30	30	28	29	31	18.7	34.0																	
25-Aug	35	A	A	28	27	26	25	26	27	27	28	28	28	27	27	27	26	26	25	22	22	22	22	26.5	35.4																	
26-Aug	A	A	21	21	20	18	21	20	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	21	21	20	19	19	18	18	A	A	19.3	24.5																	
28-Aug	18	18	18	20	20	20	21	20	22	23	24	25	25	25	25	24	22	25	25	24	20	20	20	22	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 (O_3) - 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 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 $Q_3 = 25.0$ $P_{90} = 30.7$ $P_{99} = 46.9$																					Hours in Service: 744 Hours of Data: 659 Hours of Missing Data: 85 Hours of Calibration: 10 Percent Operational Time: 89.9			
																					Daily Maximum			
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1-Aug	21	20	19	19	18	18	19	20	21	22	23	24	24	24	23	24	24	24	24	24	24	23	22	22
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
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
4-Aug	21	19	18	17	17	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
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
7-Aug	32	28	25	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	--	
9-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	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	41.4	
11-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	23	24	25	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	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	20	29.9
14-Aug	18	17	16	15	15	15	16	17	18	18	19	20	21	22	22	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	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
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
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
19-Aug	18	17	16	14	12	10	9	9	9	10	11	12	14	15	17	18	18	18	17	16	15	15	18.1	
20-Aug	14	13	11	11	10	10	10	10	10	11	11	11	11	11	11	12	11	11	10	10	9	9	13.8	
21-Aug	8	8	7	7	6	6	6	5	5	5	5	6	6	7	8	9	10	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	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	28	24	20	16	31.2
24-Aug	12	9	6	4	2	1	0	0	0	0	2	5	9	13	16	19	23	25	27	28	27	27	28.2	
25-Aug	28	28	29	28	27	27	26	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	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	20	19	18	17	21.4	
28-Aug	17	16	16	17	18	18	18	18	19	19	20	21	21	22	22	23	23	23	23	22	21	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	23	24.5
30-Aug	22	20	19	18	17	16	15	13	13	12	13	13	14	15	16	17	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	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
Diurnal Maximums																								
N - Not Valid																								
Alberta Ambient Air Quality Objectives (AAAQO): 8-hr 65 ppb																								

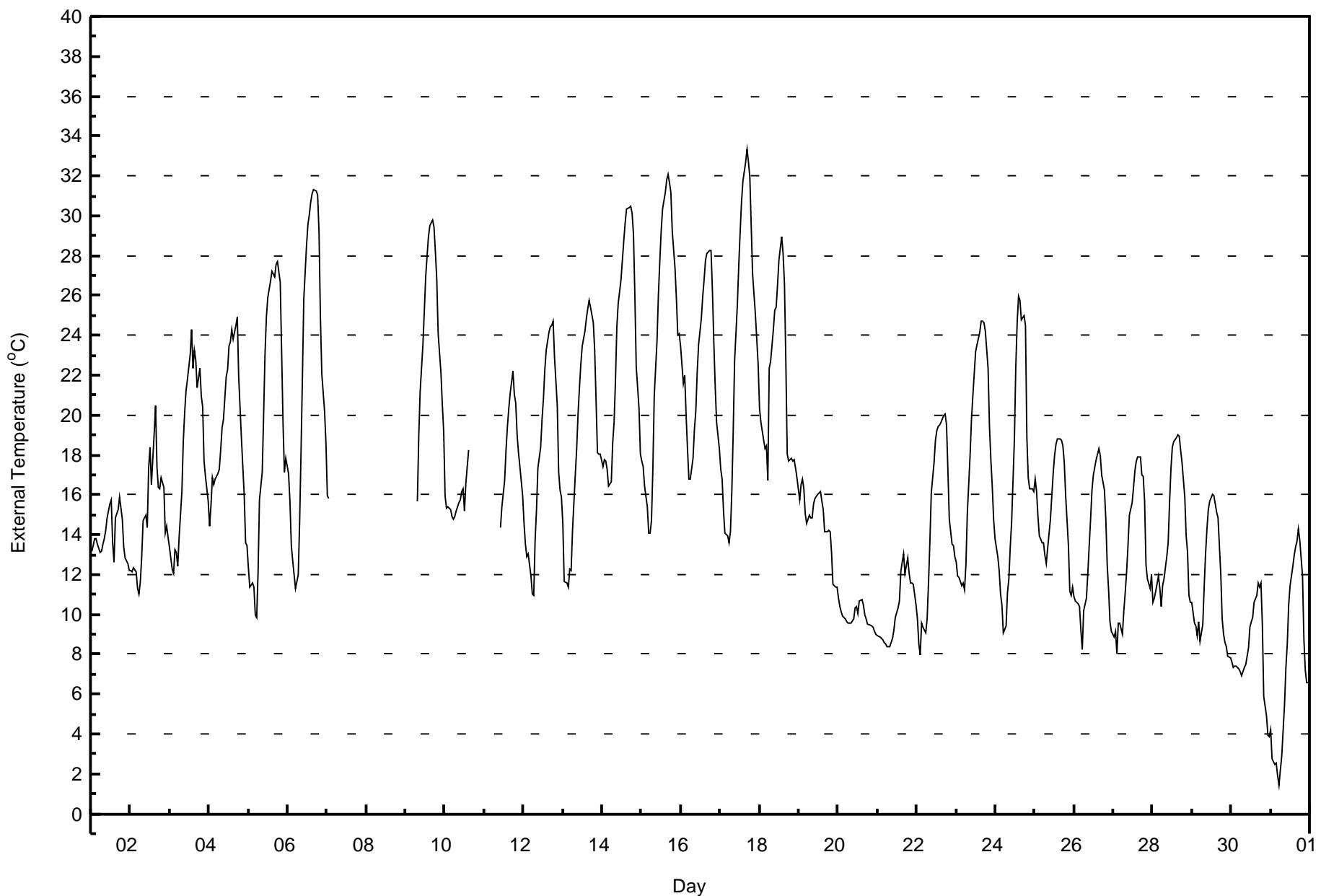
Peace Airshed Zone Association

Summary of Hourly Averages

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

Hourly Averages for External Temperature at Portable-Spirit River

August 2008



Peace Airshed Zone Association

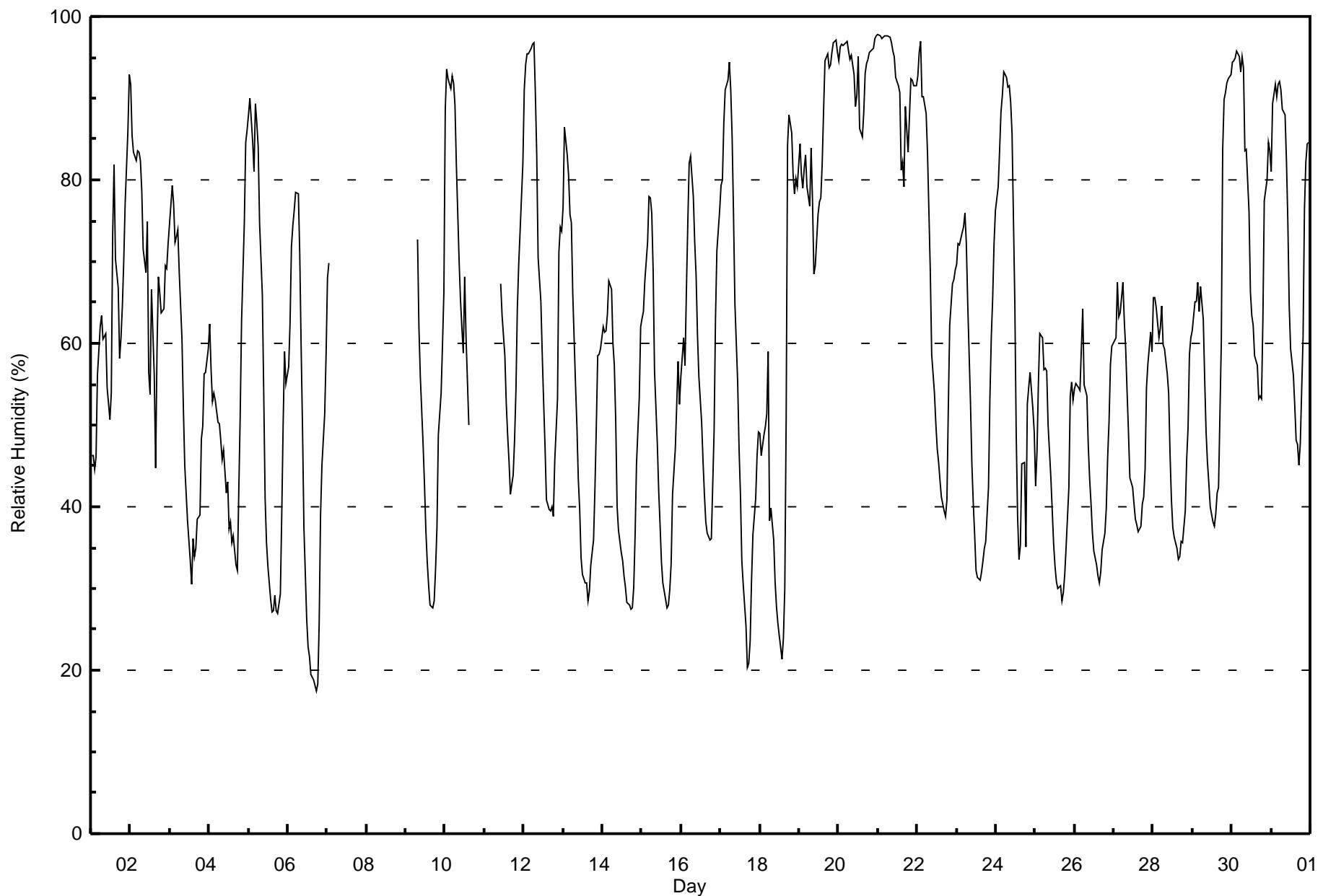
Summary of Hourly Averages

Portable-Spirit River - Relative Humidity (RH) - %

August 1, 2008 to September 1, 2008

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	
	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	
	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	
	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	
	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	
	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	
	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	
	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	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	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	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	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	7	9	6	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	14	16	18	16	10	12	8	8	8	11	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

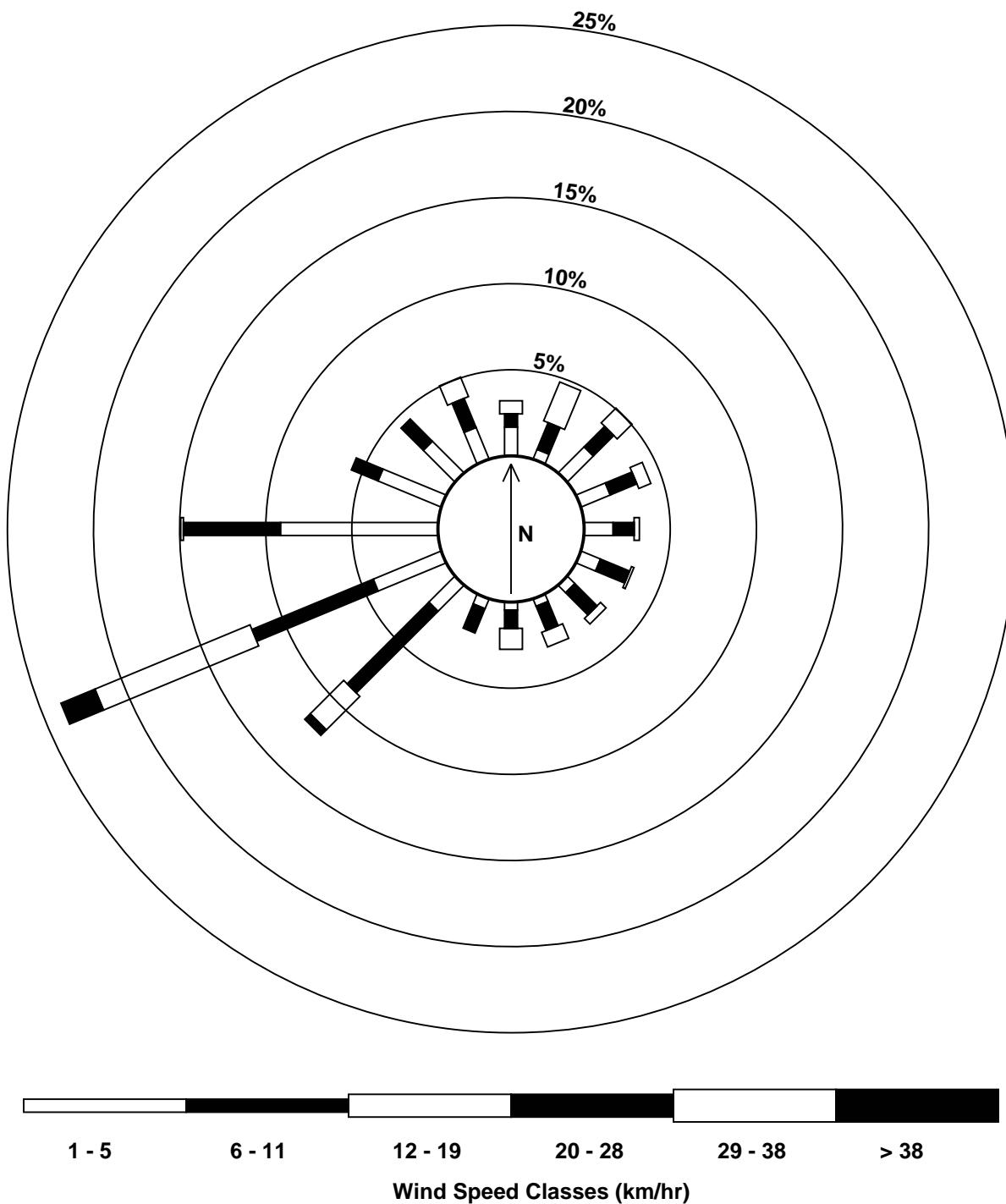
Peace Airshed Zone Association

Summary of Hourly Averages

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

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 Minimum Speed: 1 km/h on Aug 12 04:00 Minimum Daily Speed Average: 3.9 km/h on Aug 12 Maximum Diurnal Speed Average: 11.1 km/h at hour 14 Minimum Diurnal Speed Average: 6.6 km/h at hour 2 Monthly Average Speed: 8.47 km/h Percentiles: $P_1 = 1.5$ $P_{10} = 2.8$ $Q_1 = 4.6$ Median = 7.5 $Q_3 = 11.6$ $P_{90} = 15.4$ $P_{99} = 22.3$																								Hours in Service: 744		
																									Hours of Data: 672	
																									Hours of Missing Data: 72	
																									Percent Operational Time: 90.3	
Day	Hourly Period Ending At (MST)																								Daily Average	Daily Maximum
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	9	9	6	14	12	4	4	6	8	8	6	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	--	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	--	--	
9-Aug	N	N	N	N	N	N	N	1	3	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	--	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	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	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	13	13	13	13	14	16	18	16	10	12	8	8	8	11	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	7	4	8	9	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	10	13	19	16.9	25.1	
26-Aug	21	19	22	21	18	13	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	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	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	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	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	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	--	
9-Aug	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	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	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	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	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	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	30	24	8	10	6	5	6	4	6	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 (SO_2) - ppb

Number of Exceedances (AAAQO): 1-hr: 0 24-hr: 0 Maximum Value: 13.1 ppb on Aug 2 20:00 Maximum Daily Average: 3.6 ppb on Aug 2																			Hours in Service: 744 Hours of Data: 710 Hours of Missing Data: 34 Hours of Calibration: 34 Percent Operational Time: 100.0							
Minimum Value: 0 ppb on Aug 1 15:00 Minimum Daily Average: 0.0 ppb on Aug 21																										
Maximum Diurnal Average: 1.3 ppb at hour 12 Minimum Diurnal Average: 0.4 ppb at hour 23																										
Monthly Average: 0.80 ppb 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	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	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	2	2	1	1	1	2	2	1	1	1	1	1	0	0	0	0	0	1.7	3.7	
4-Aug	A	0	0	0	0	0	0	0	0	3	1	0	0	3	0	0	3	2	1	1	0	0	0	0.8	3.3	
5-Aug	A	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	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	1	1	1	1	1	1	2	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	2	2	1	1	4	1	1	1	1	1	1	0	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	1	0	0	0	0	0.8	5.1
14-Aug	A	0	0	0	0	0	0	0	1	1	4	1	1	1	0	2	1	1	1	0	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	2	2	2	2	2	2	1	1	4	8	2	1	0	0	0	0	1.3	8.3
27-Aug	A	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	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	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		

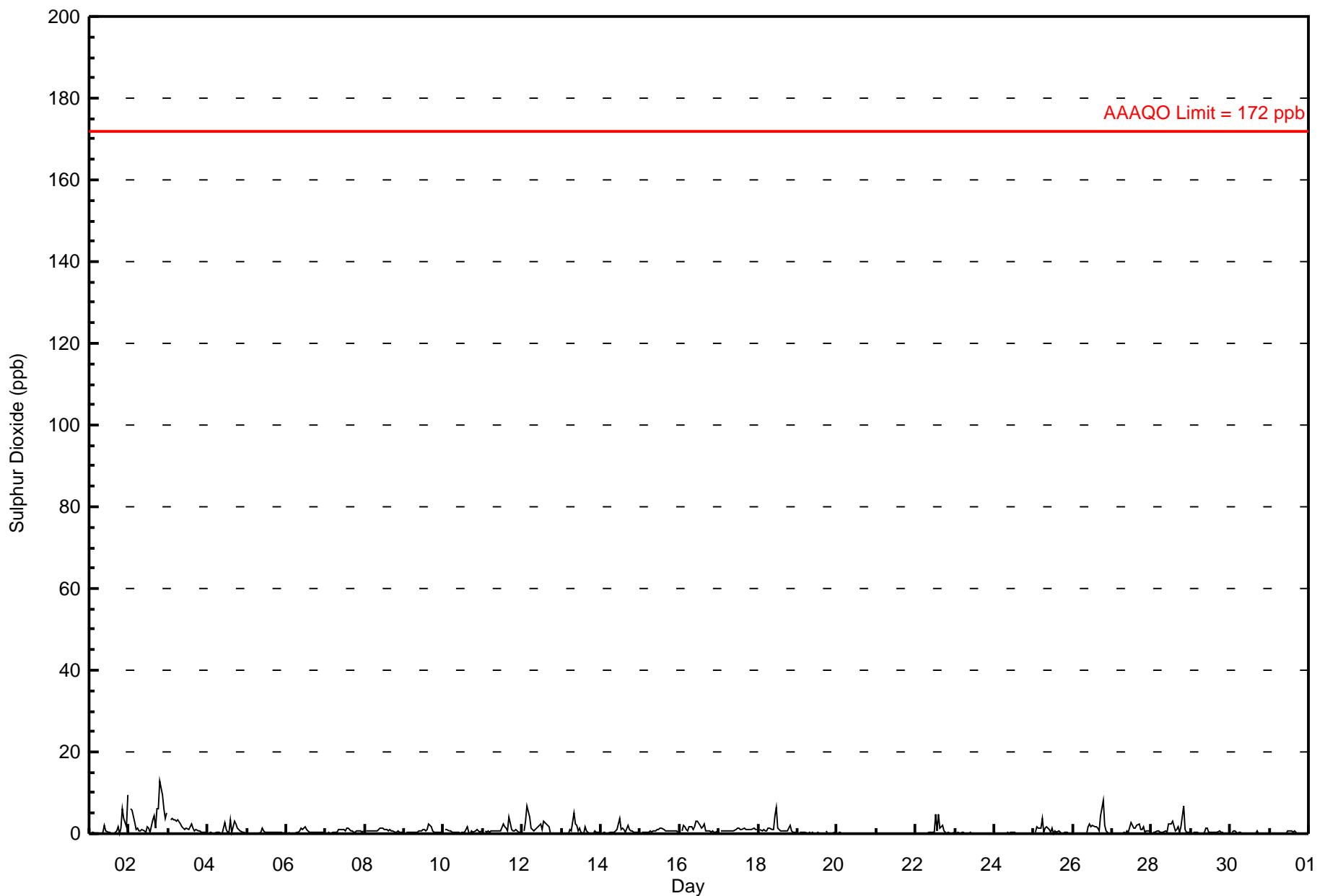
C - Calibration

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

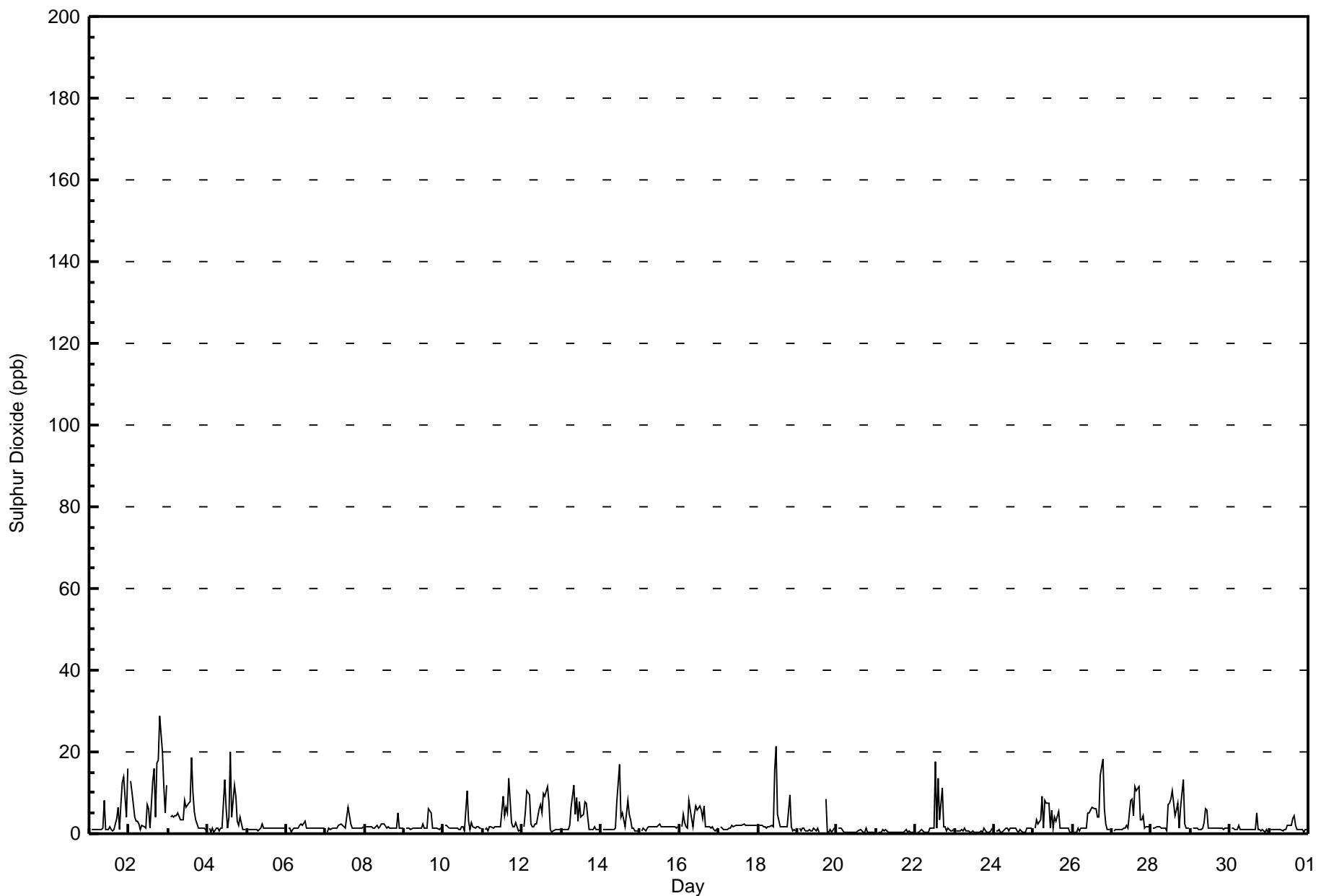


Peace Airshed Zone Association Summary of Hourly Maximums

Valleyview - Sulphur Dioxide (SO_2) - ppb

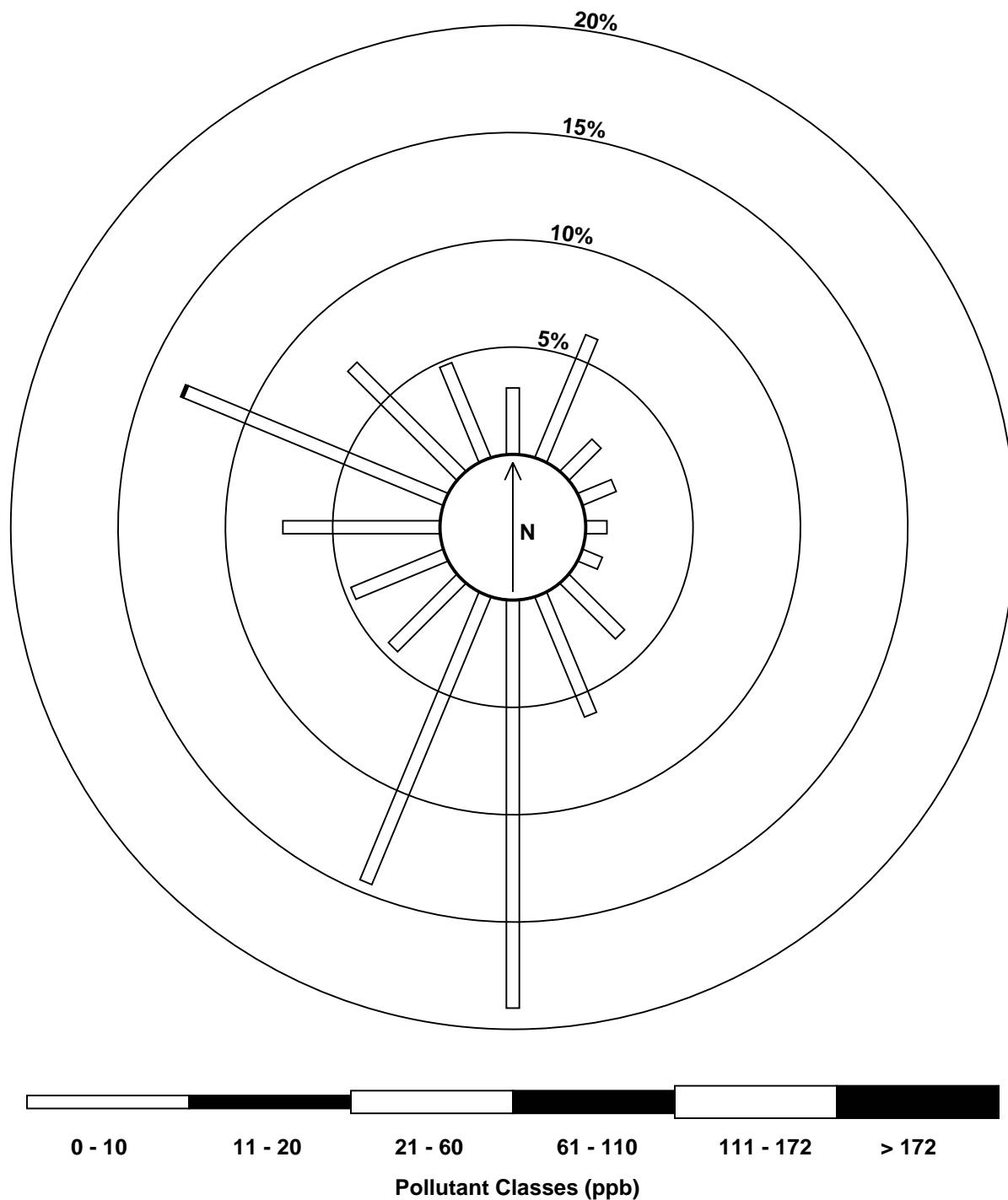
Hourly Maximums for SO₂ at Valleyview

August 2008



Pollutant Rose for SO₂ at Valleyview

August 2008



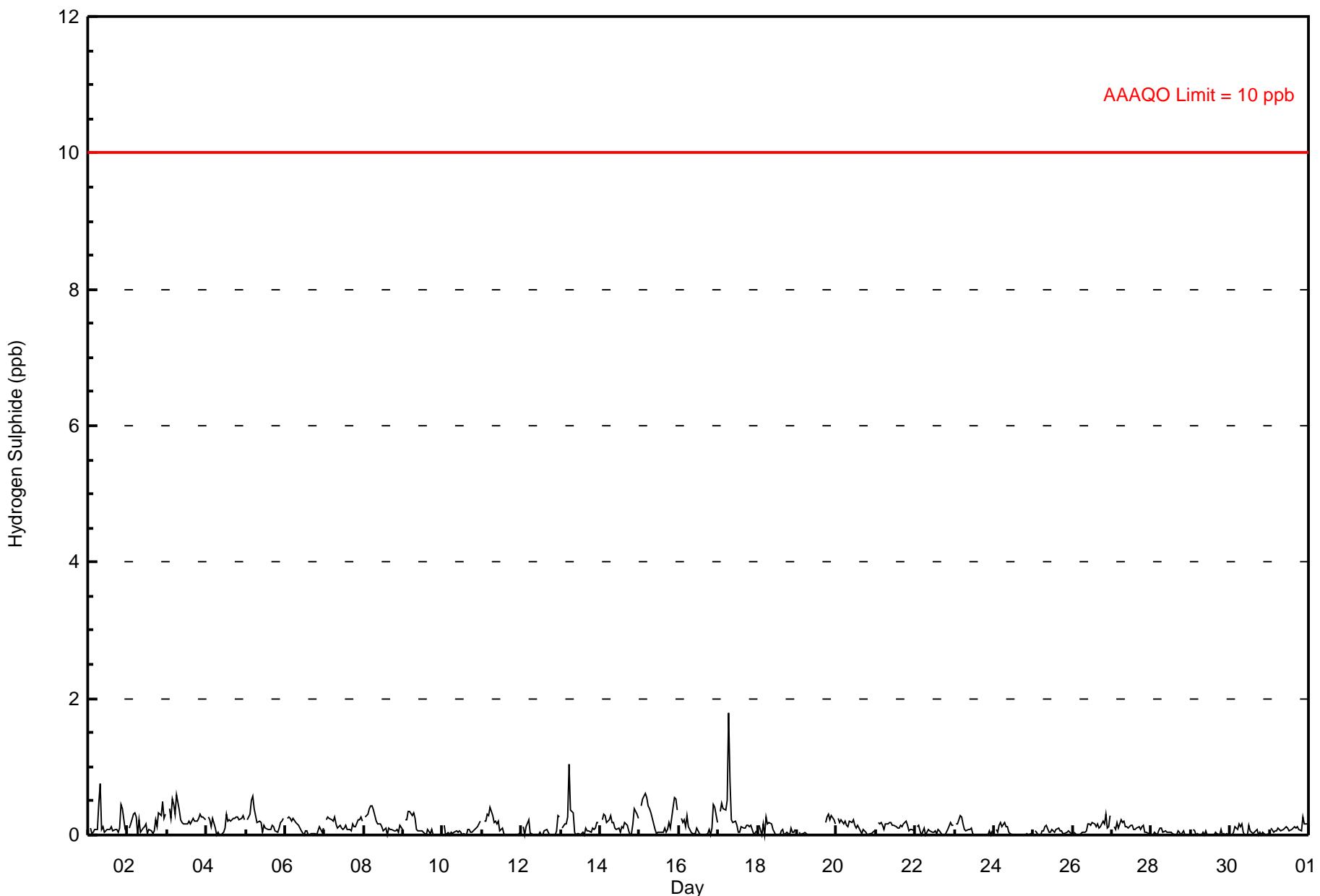
Peace Airshed Zone Association Summary of Hourly Averages

Valleyview - Hydrogen Sulphide (H_2S) - ppb

August 1, 2008 to September 1, 2008

Hourly Averages for H₂S at Valleyview

August 2008



Peace Airshed Zone Association Summary of Hourly Maximums

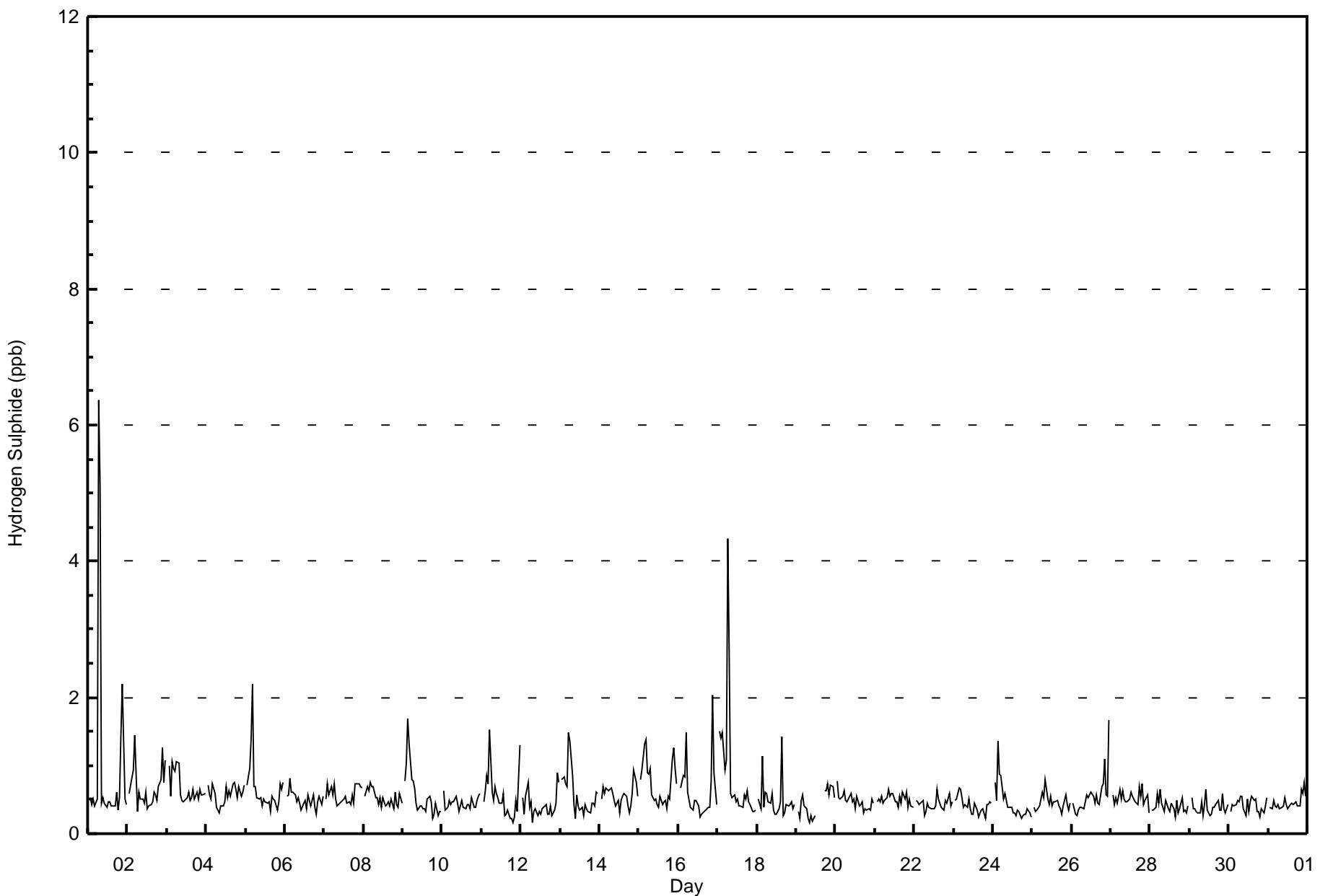
Valleyview - Hydrogen Sulphide (H_2S) - ppb

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 Hours of Data: 708 Hours of Missing Data: 36 Hours of Calibration: 36 Percent Operational Time: 100.0	
Minimum Value: 0 ppb on Aug 19 09:00																			Minimum Daily Average: 0.4 ppb on Aug 29																				
Maximum Diurnal Average: 0.9 ppb at hour 7																			Minimum Diurnal Average: 0.4 ppb at hour 13																				
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																				
Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum													
1-Aug	A	1	0	1	0	1	6	5	0	1	0	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	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	0.7	1.1													
4-Aug	A	1	1	1	1	1	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	0	1	0	0	0	0	0	1	1	0	0	0	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	0	1	0	0	0	1	0	0.5	0.8													
7-Aug	A	1	1	1	1	1	1	1	0	0	0	0	1	0	0	0	1	0	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	0	1	0	0	0	1	0.4	0.6													
11-Aug	A	0	1	1	1	2	1	0	1	1	0	0	0	1	0	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	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	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	1	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	1	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	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	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	0.5	1.4												
19-Aug	A	0	0	0	1	0	0	0	0	0	0	0	C	C	C	C	1	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	0	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	0	1	0	0	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	1	0	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	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	0.5	1.4												
25-Aug	A	0	0	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0.5	0.8												
26-Aug	A	0	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	1	1	1	1	1	2	0	0.6	1.7													
27-Aug	A	1	0	1	0	1	1	1	1	0	0	1	1	1	0	0	1	1	1	0	0	1	0	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	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	0	0	1	0	0	0.4	0.6												
30-Aug	A	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	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	0	1	1	1	0.5	0.8													
--	0.6	0.6	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	0.4	0.5	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.6	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	0.7	0.6	0.6	1.4	0.7	0.7	0.7	0.7	0.7	1.4	2.2	1.0	1.7	1.0	1.7	1.0	1.7	1.0	1.7	1.0	Diurnal Maximum							

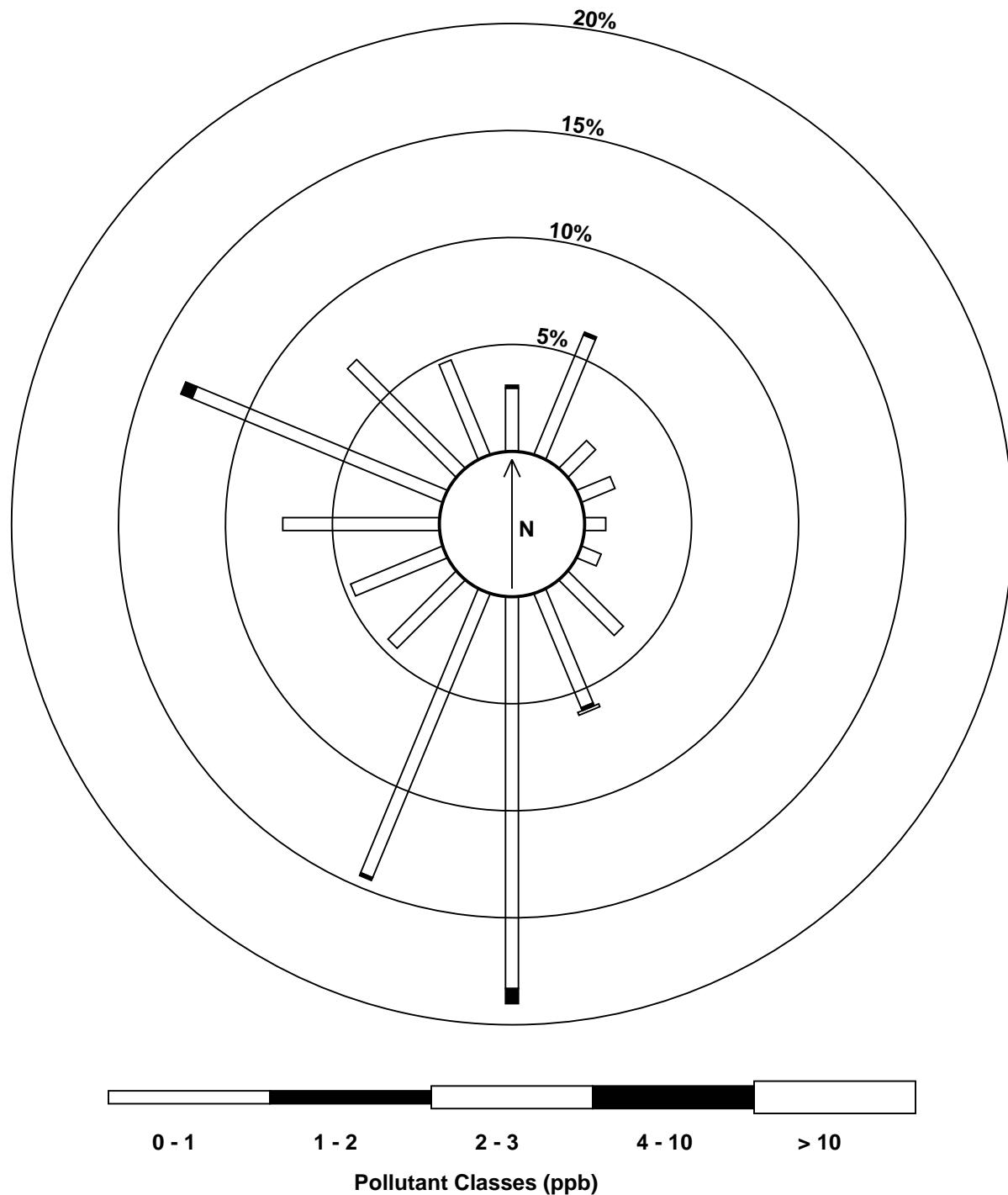
C - Calibration A - Automated Daily Zero Span

**Hourly Maximums for H₂S at Valleyview
August 2008**



Pollutant Rose for H₂S at Valleyview

August 2008

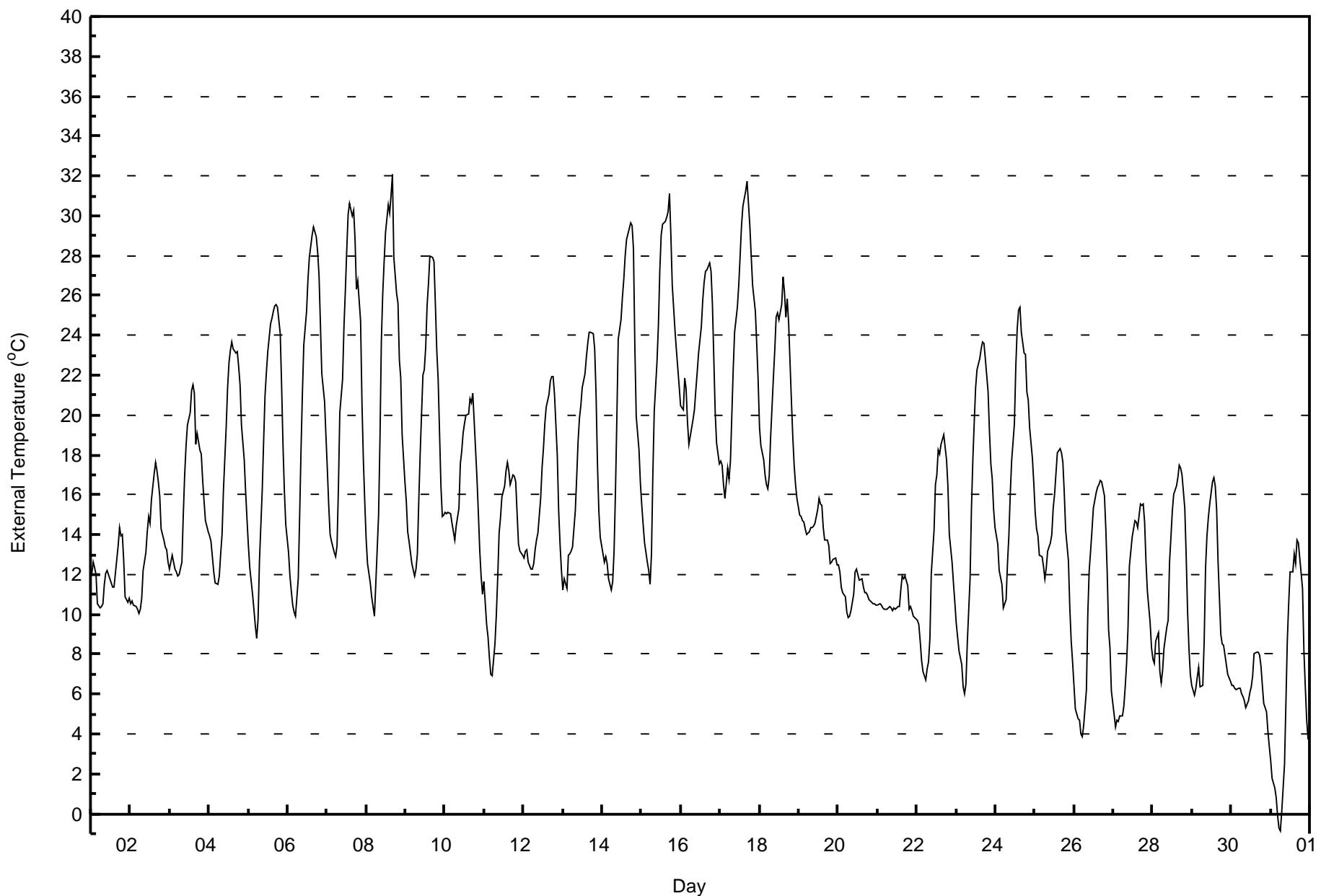


Peace Airshed Zone Association
Summary of Hourly Averages

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Average	Daily Maximum					
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	13	14	16	19	21	23	23	24	23	23	22	22	20	18	16	15	15	15	17.6	23.7					
5-Aug	13	12	11	10	9	9	10	13	16	19	21	22	23	25	25	25	26	25	24	21	18	16	14	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	29	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	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	15	14	13	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	21	18	15	14	12	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	23	21	18	15	14	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	31	29	26	24	23	22	21	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	15	14	14	14	13	13	13	13	13	12	12	14.2	15.8					
20-Aug	13	12	11	11	11	10	10	10	10	11	12	12	12	12	11	11	11	11	11	11	11	11	10	10	11.1	12.5					
21-Aug	10	11	10	10	10	10	10	10	10	10	10	10	10	10	11	12	12	11	10	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	19	18	17	17	17.8	25.4					
25-Aug	15	14	14	13	13	12	12	13	14	14	15	16	17	18	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	6	8	9	12	14	14	15	15	14	16	15	16	15	13	11	10	8	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	7	7	7	10.2	16.8					
30-Aug	6	6	6	6	6	6	6	6	5	6	6	6	7	8	8	8	7	6	6	5	4	3	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					
																									Diurnal Average						
																									Diurnal Maximum						

Hourly Averages for External Temperature at Valleyview August 2008



Peace Airshed Zone Association

Summary of Hourly Averages

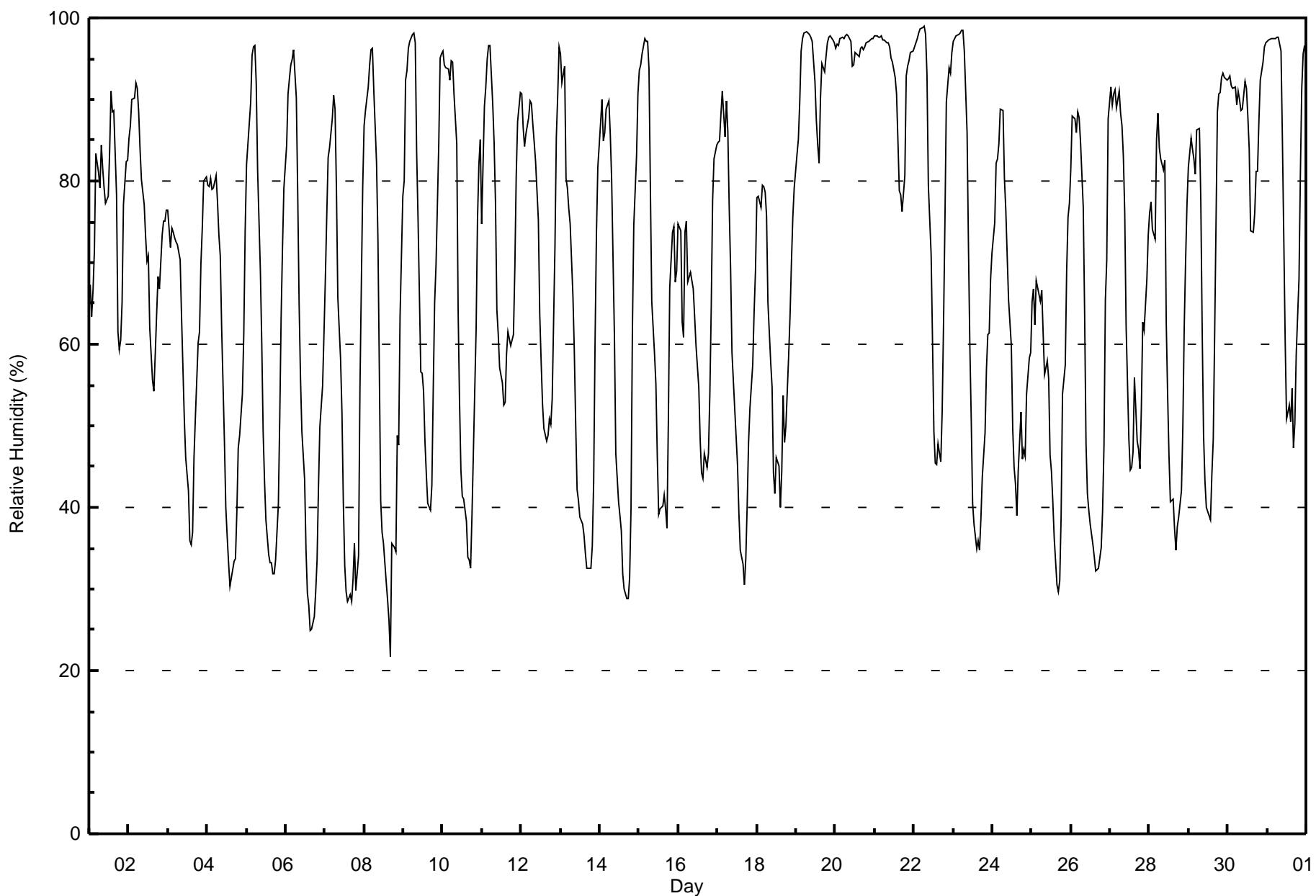
Valleyview - Relative Humidity (RH) - %

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-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	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	95	96	96	96	96	97	97	97	98	97	96	96.6	98.0													
21-Aug	98	98	98	98	98	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	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	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	92	72.1	93.3														
30-Aug	93	93	92	91	92	89	91	90	89	89	92	91	88	84	74	74	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
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
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	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
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
5 Spd	1	1	1	1	1	1	2	3	2	3	3	3	1	2	4	2	4	4	4	2	2	1	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
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
7 Spd	1	1	1	2	1	1	2	4	5	3	4	2	3	3	2	2	4	3	3	1	2	2	1	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
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
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
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
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
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
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	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	9	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
15 Spd	2	0	0	2	1	1	1	1	1	1	1	1	3	4	3	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
16 Spd	2	2	8	3	2	0	6	8	12	12	11	10	6	5	6	7	3	3	3	2	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
17 Spd	1	0	4	2	1	1	0	2	4	8	11	9	7	7	8	6	6	6	6	6	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
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
19 Spd	3	1	8	2	3	2	3	1	5	4	5	5	6	7	6	7	11	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
20 Spd	4	7	8	6	9	10	9	8	8	5	5	9	9	8	8	8	10	9	8	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	30	21	23	20	26	22	19.3	18.0	223.3
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
22 Spd	2	3	1	3	3	2	3	5	6	5	5	5	9	7	8	5	7	3	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

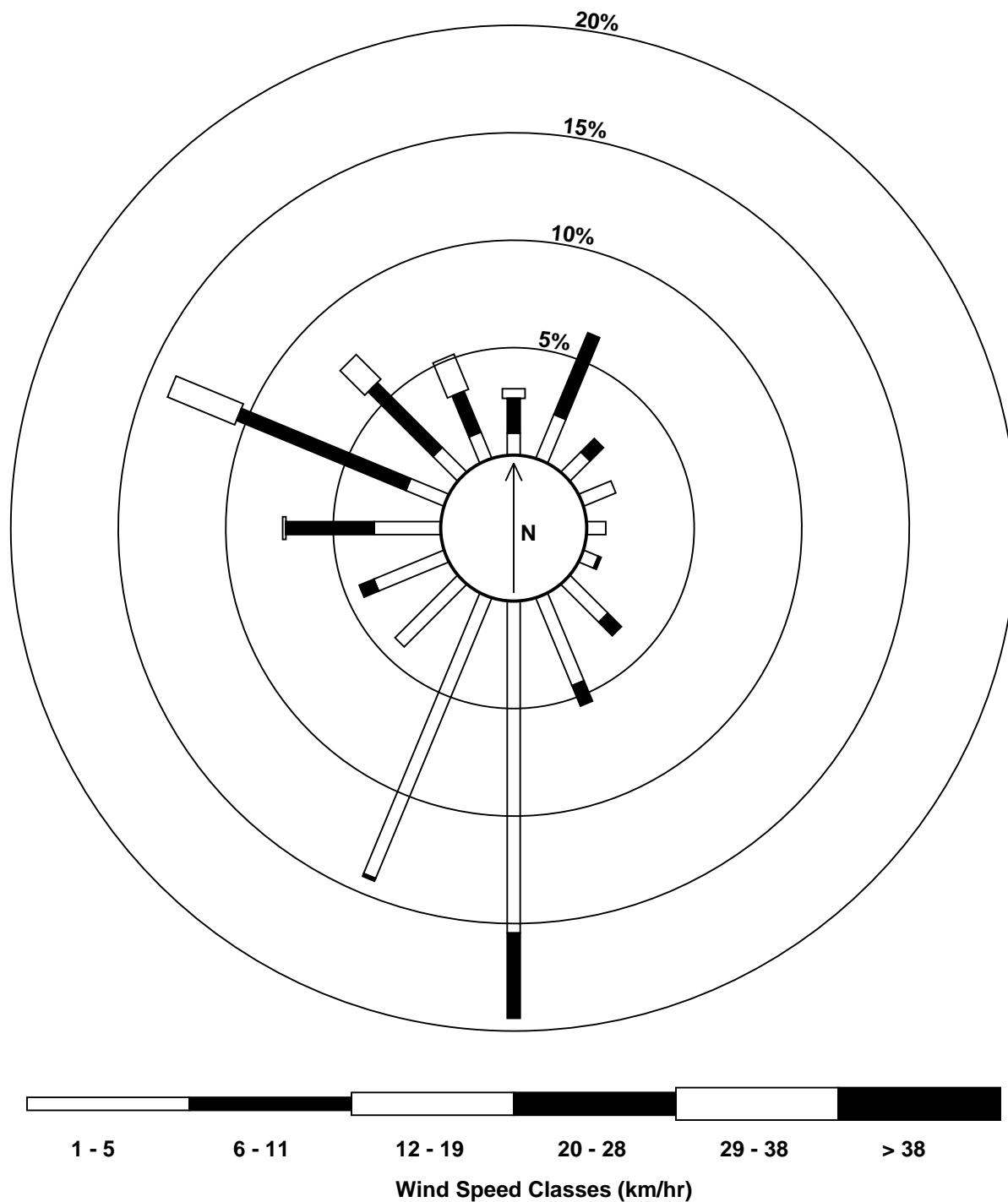
Peace Airshed Zone Association Summary of Hourly Averages

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	2	3	4	2	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	3	0	2	2	3	9	11	10	10	6	11	7	10	4	3	4	3	4	3	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	16	18	13	10	7	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	9	9	12	12	9	8	6	7	5	2	2	2	3	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	2	4	4	2	2	1	1	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											
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											
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		0 to 5		5 to 11		11 to 19		19 to 28		28 to 38		> 38		Total																					
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 (Scalable)

Valleyview - Wind Speed (WS) - km/h

August 1, 2008 to September 1, 2008

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	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Daily Maximum
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	22	13	8	9	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

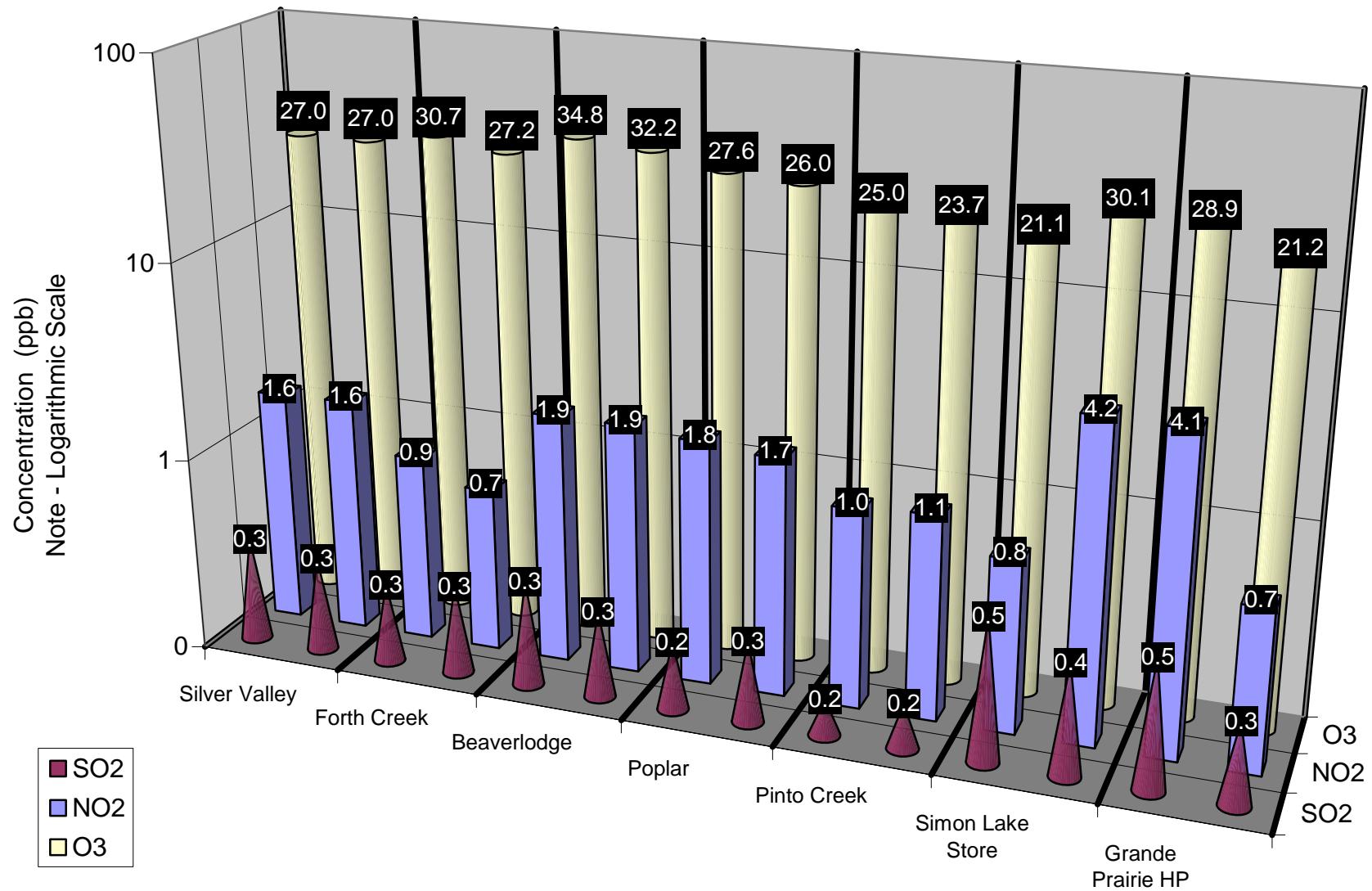
Monthly Passive Data Summary

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)

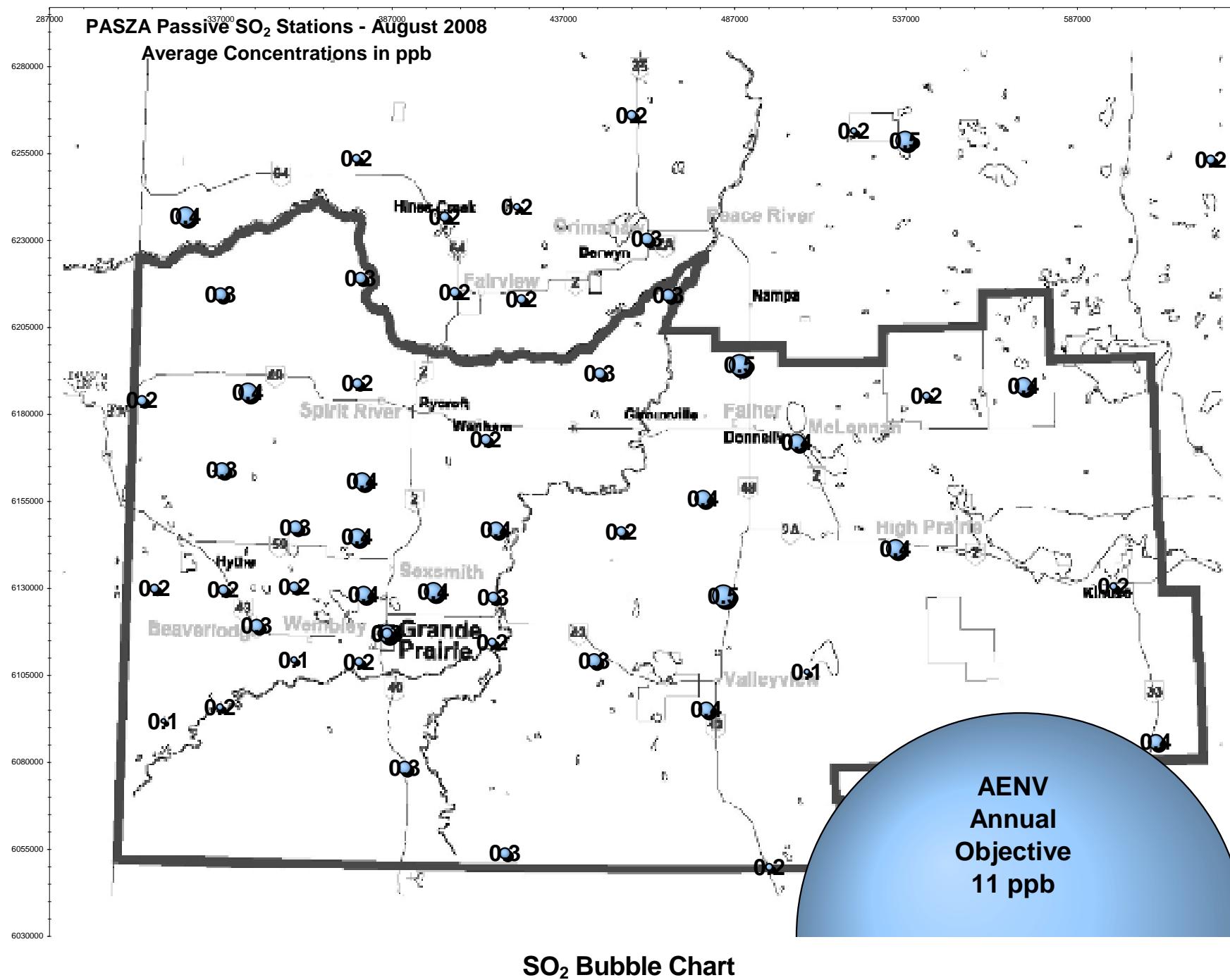
	SO ₂	O ₃	NO ₂
PASZA Beaverlodge station	0.4	21.1	2.7
PASZA Beaverlodge passive	0.3	33.5	1.9

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

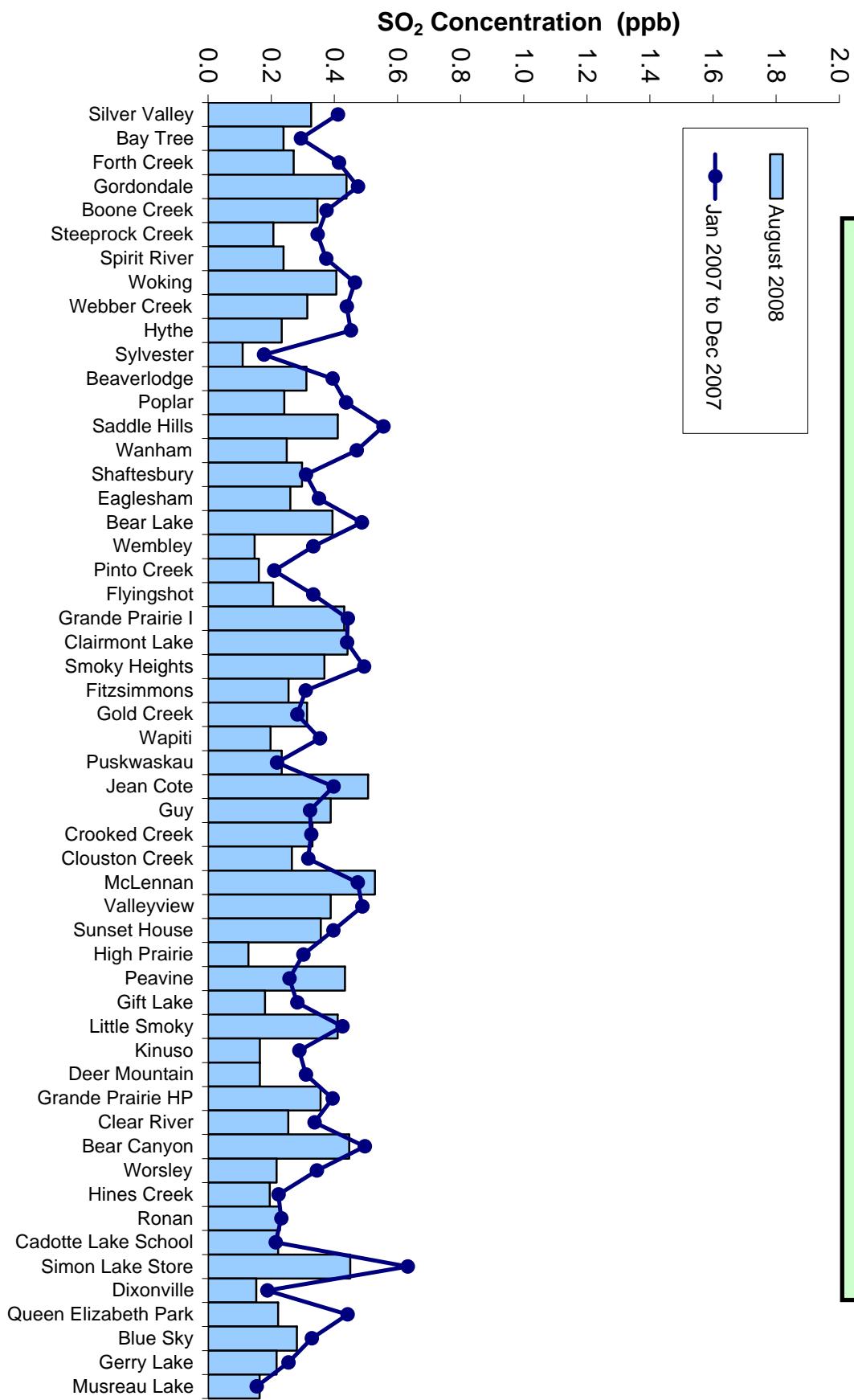
Comparison between Continuous and Passive monitoring at Spirit River (passive #9 Spirit River)

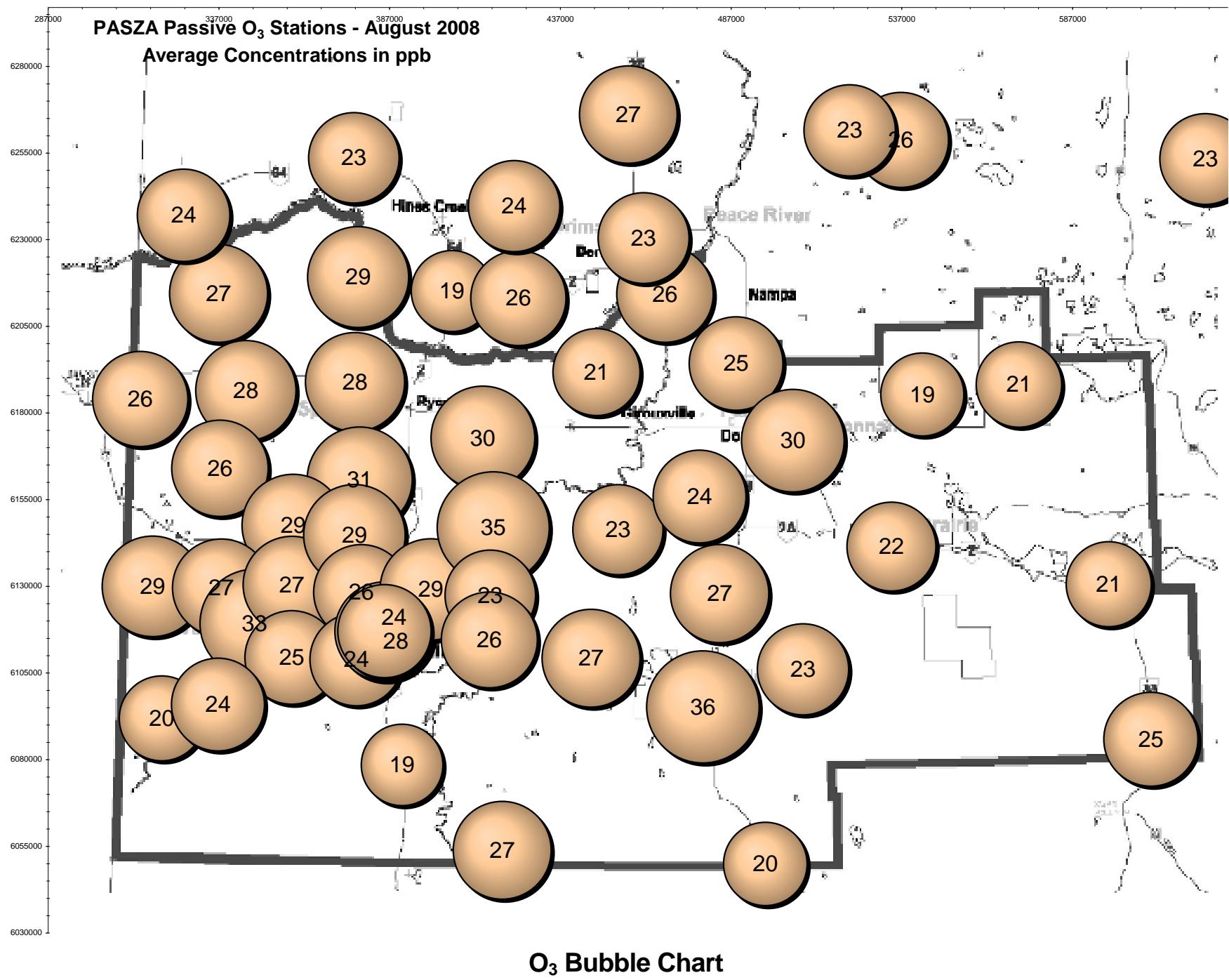
	SO ₂	O ₃	NO ₂
PASZA Portable Spirit River station	0.3	20.0	2.6
PASZA Spirit River passive	0.2	27.8	1.8



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

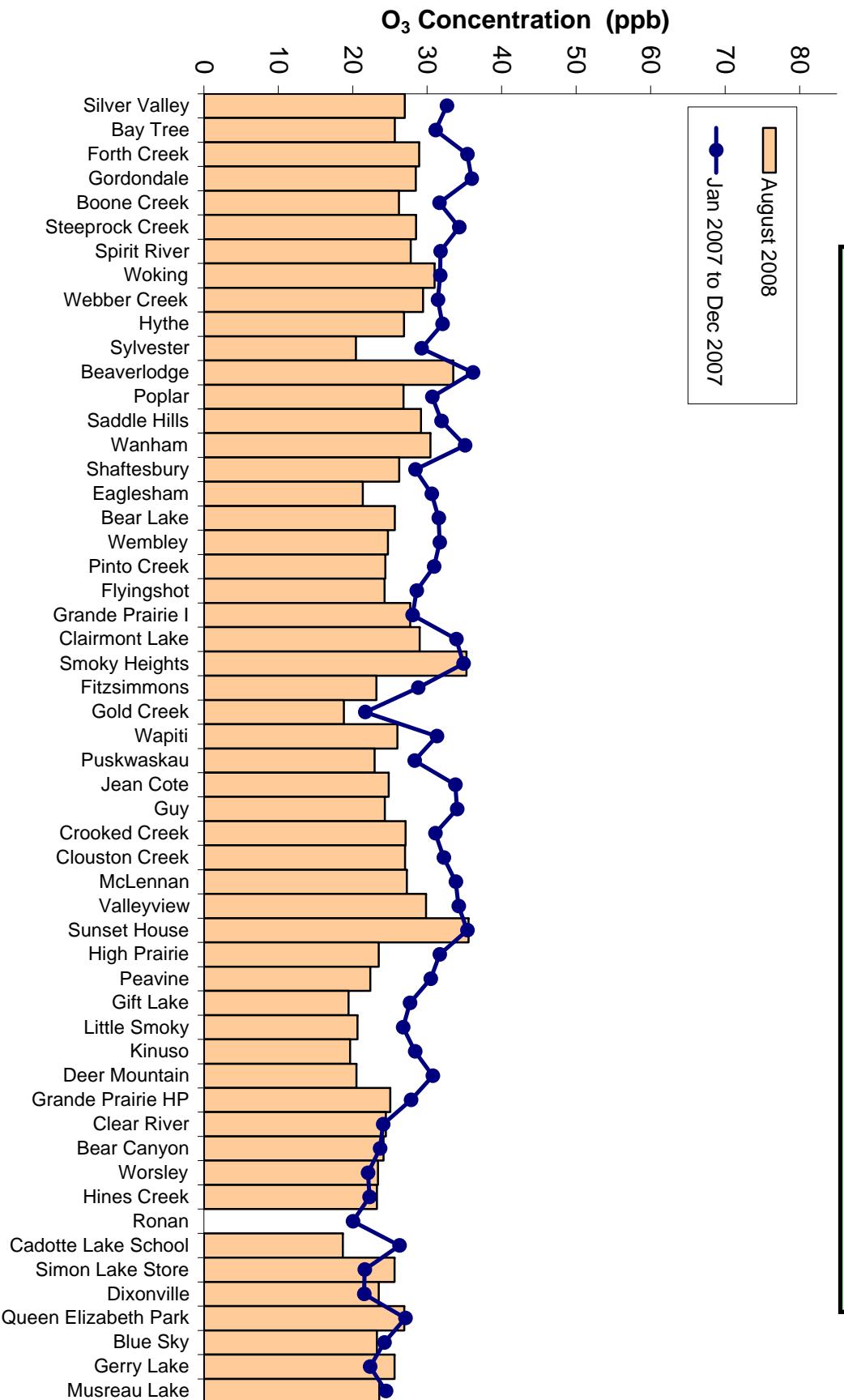
SO₂ Summary Chart

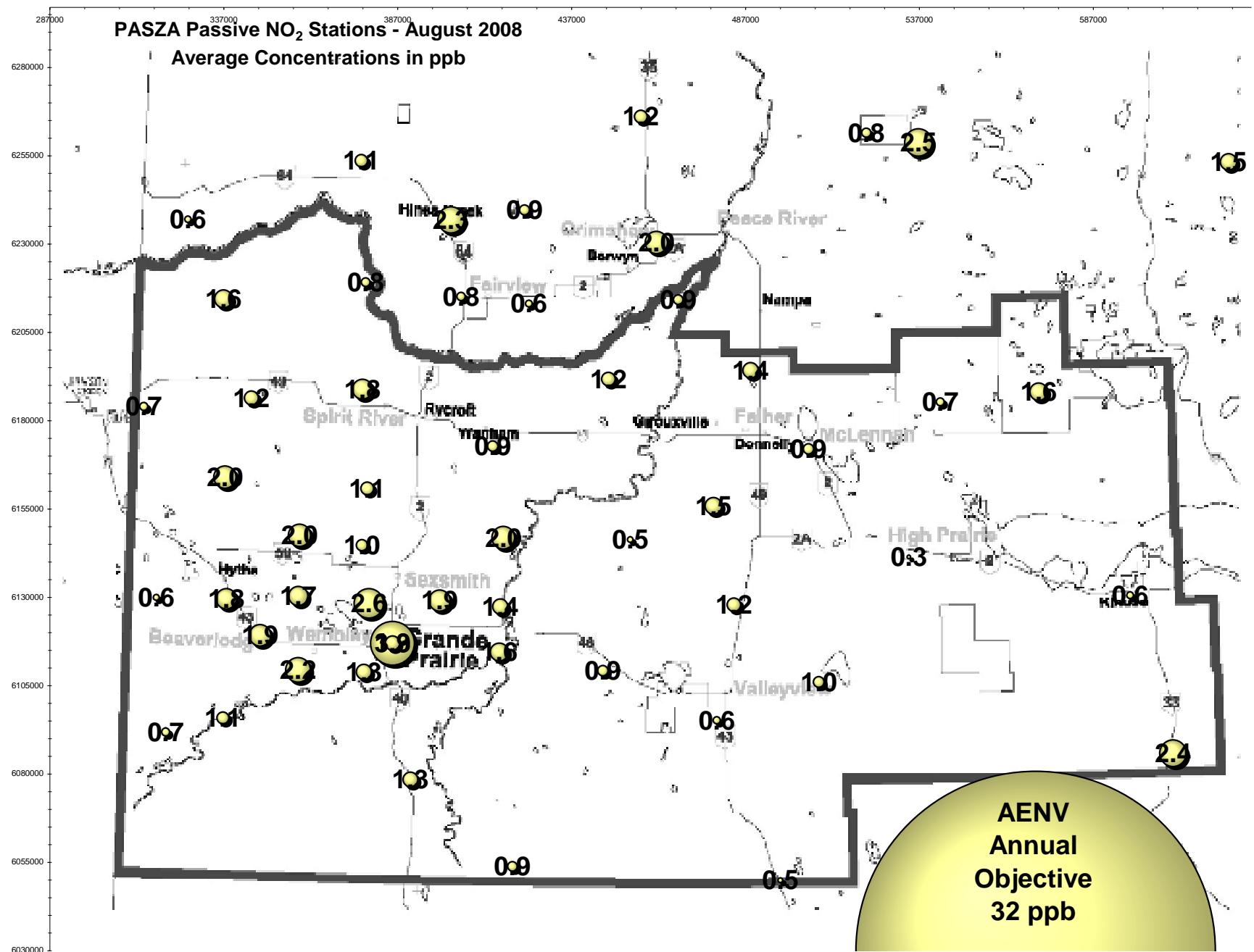




Alberta Ambient Air Quality Objective - No Annual O₃ Objective

O₃ Summary Chart

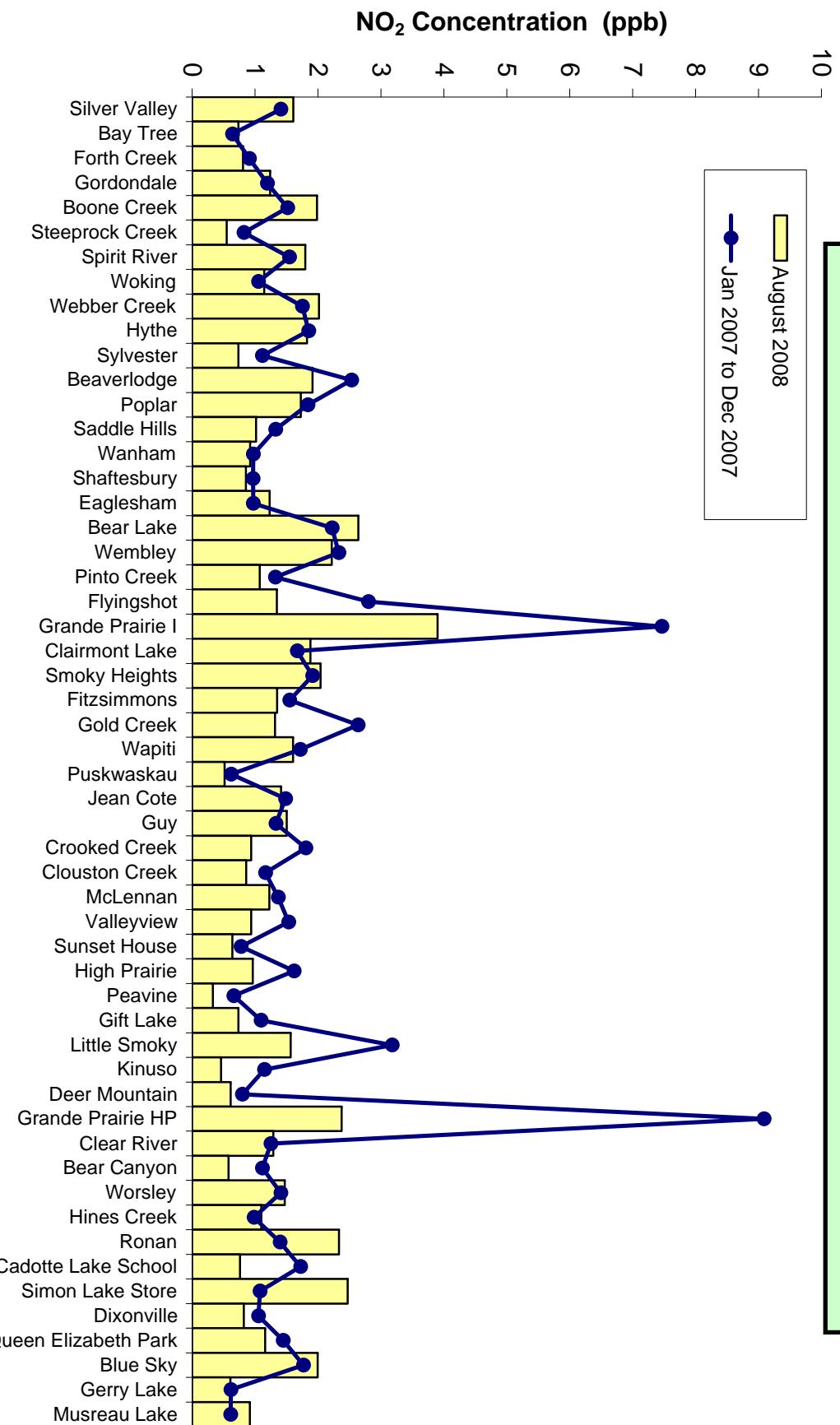




NO₂ Bubble Chart

Alberta Ambient Air Quality Objective - Annual NO₂ Objective is 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:	Routine	Install	Removal	Other:
Start Time (MST)	11:55		End Time (MST)	15:20
Barometric Pressure	0.918	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100		Serial Number	3474
Cal Gas Conc	50.3	ppb	Cal Gas Expiry Date	1/2/2009
DACS make	Focus AP1000		Cal Gas Cylinder #	LL16161
DACS voltage range	0 - 1 volt		DACS serial No.	1
	Before		DACS channel #	10
				After
Calculated slope	0.996259		Calculated slope	1.000813
Calculated intercept	-1.974511		Calculated intercept	-1.746861
Analyzer make	TEI 43C		Analyzer serial #	610816292
Concentration range	before		after	
	0 - 500	ppb	0 - 500	ppb
	7.5		7.6	
	.800		.800	
	645.7	mm Hg	637.6	mm Hg
	0.500	lpm	0.481	lpm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

SO2

Air Monitoring Network

PASZA



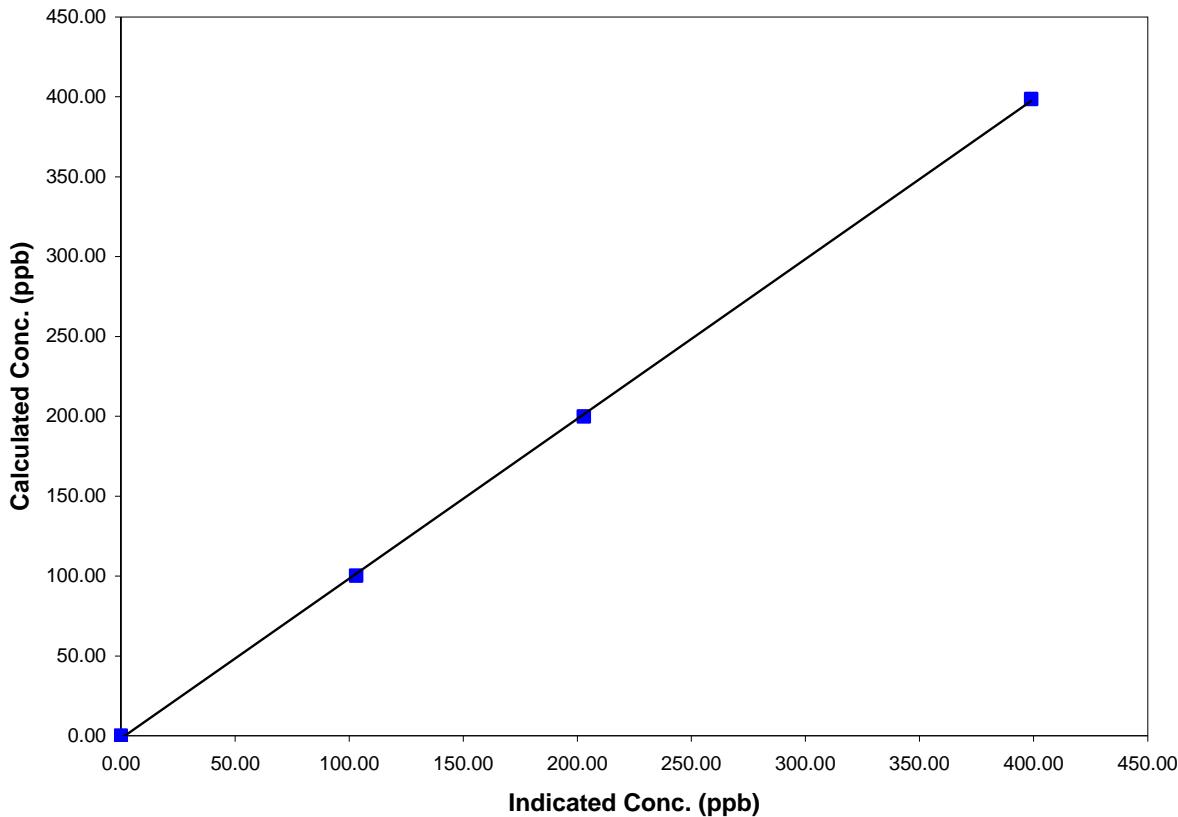
Station Information

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

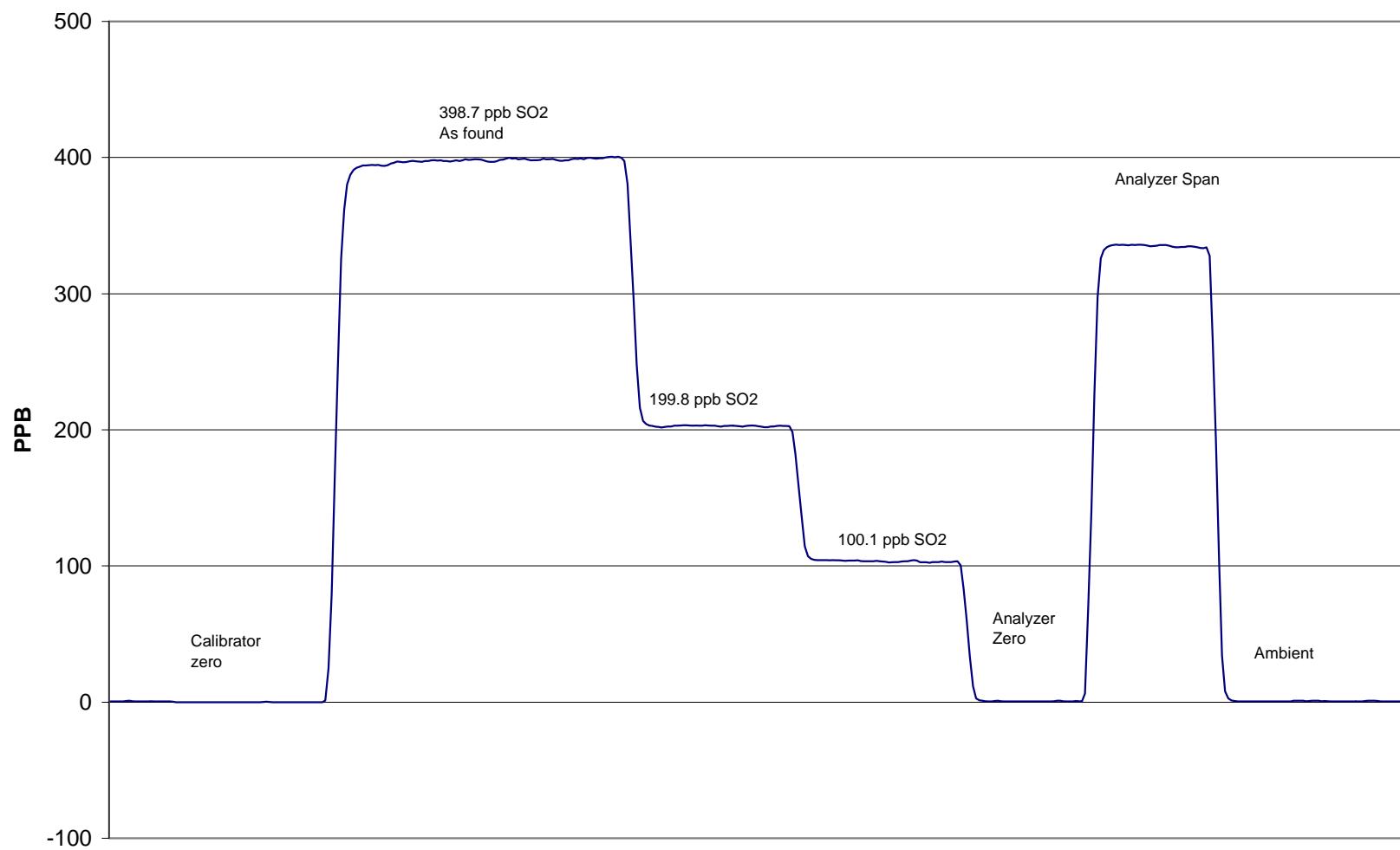
Calibration Data

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	Slope	1.000813
100.1	103.1	0.9711	Intercept	-1.746861

SO2 Calibration Curve



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		
	1.020236	1.022163	1.018904		
	0.046222	-3.148134	-2.590341		
	0.999008	1.004453	1.005804		
	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 NOx-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 NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4990	0.00	0.0	0.0	0.0	0.6	0.5	0.0	N/A	N/A
	4987	39.84	387.6	387.6	0.0	387.2	386.7	0.5	1.0008	1.0022
	4990	19.89	194.1	194.1	0.0	197.2	196.8	0.4	0.9845	0.9866
	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

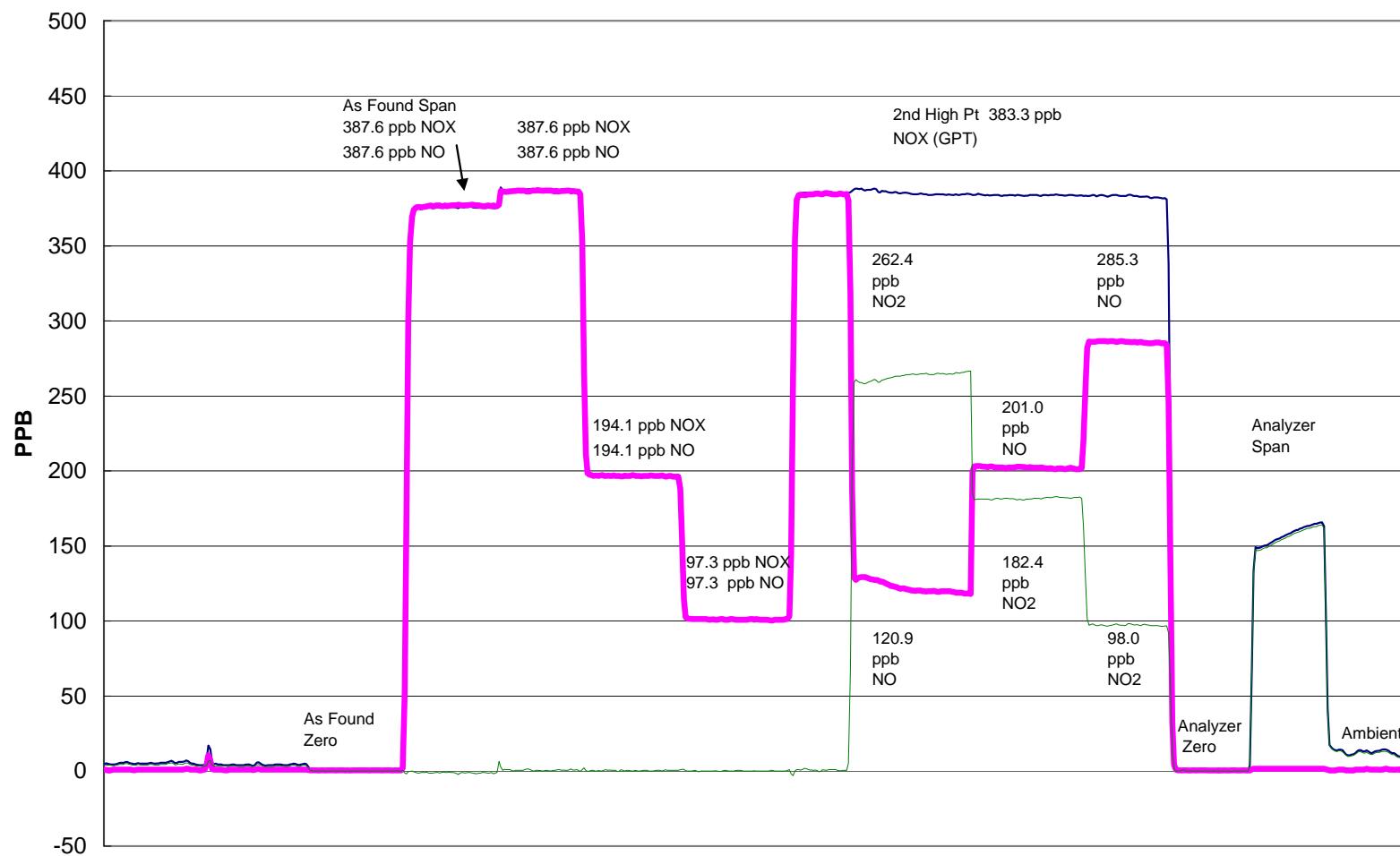
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	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

AIC Data

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO	ppb	NOx	NO2	NO	ppb
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

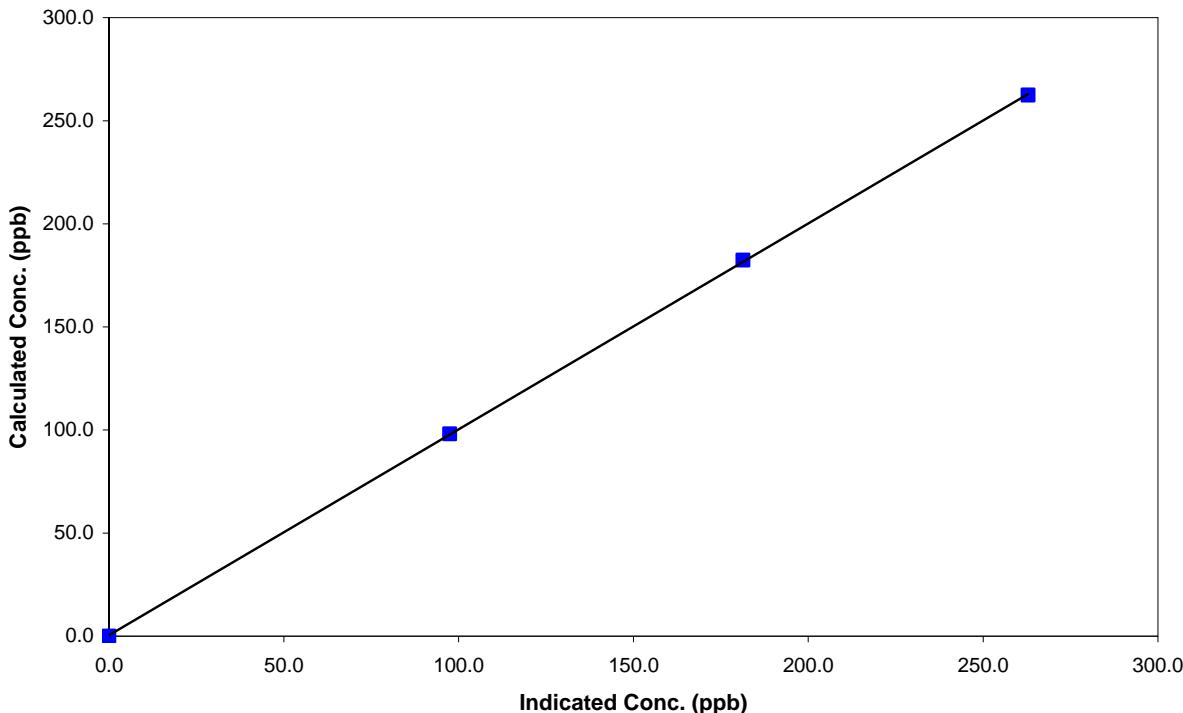
Station Information

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	Correlation Coefficient	0.999969
262.4	262.9	0.9981		
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

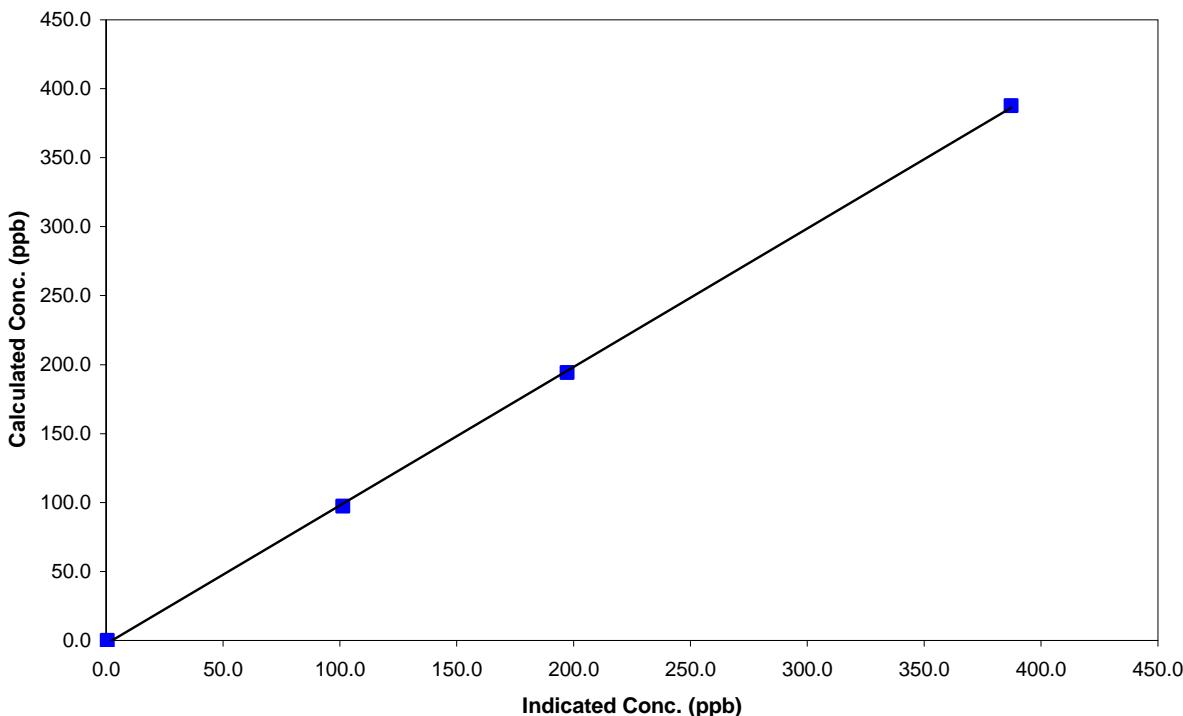
Station Information

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		
97.3	101.3	0.9611		
			Slope	1.004453
			Intercept	-2.580813

NOx Calibration Curve



Calibration Summary

Parameter NOAir Monitoring Network PASZA

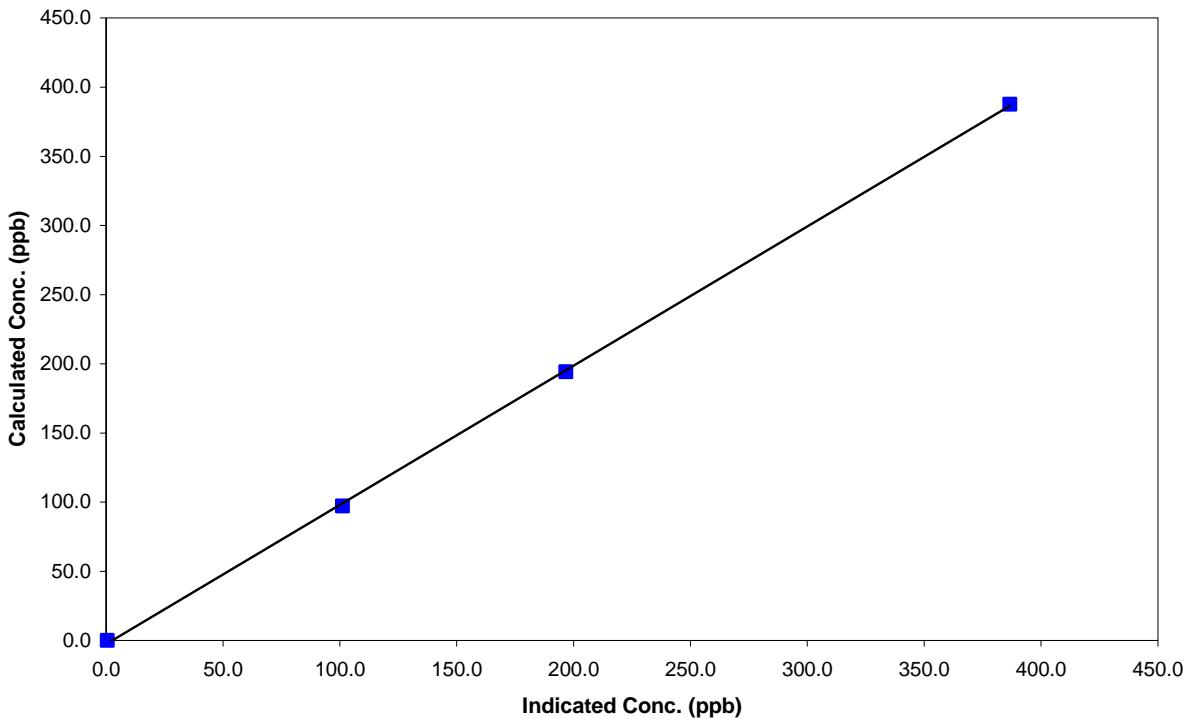
Station Information

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		
387.6	386.7	1.0022	Correlation Coefficient	
194.1	196.8	0.9866	0.999868	
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
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
Concentration range offset slope O3 Lamp temp Intensities Pressure Flow A Flow B	before	after	
	500	ppb	500 ppb
	-0.6	ppb	-0.6 ppb
	1.023		1.023
	71.1	Deg C	71 Deg C
	100377/80071	mV	100819/81123 mV
	709.1	inches Hg	708.9 inches Hg
	678	ccm	683 ccm
	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

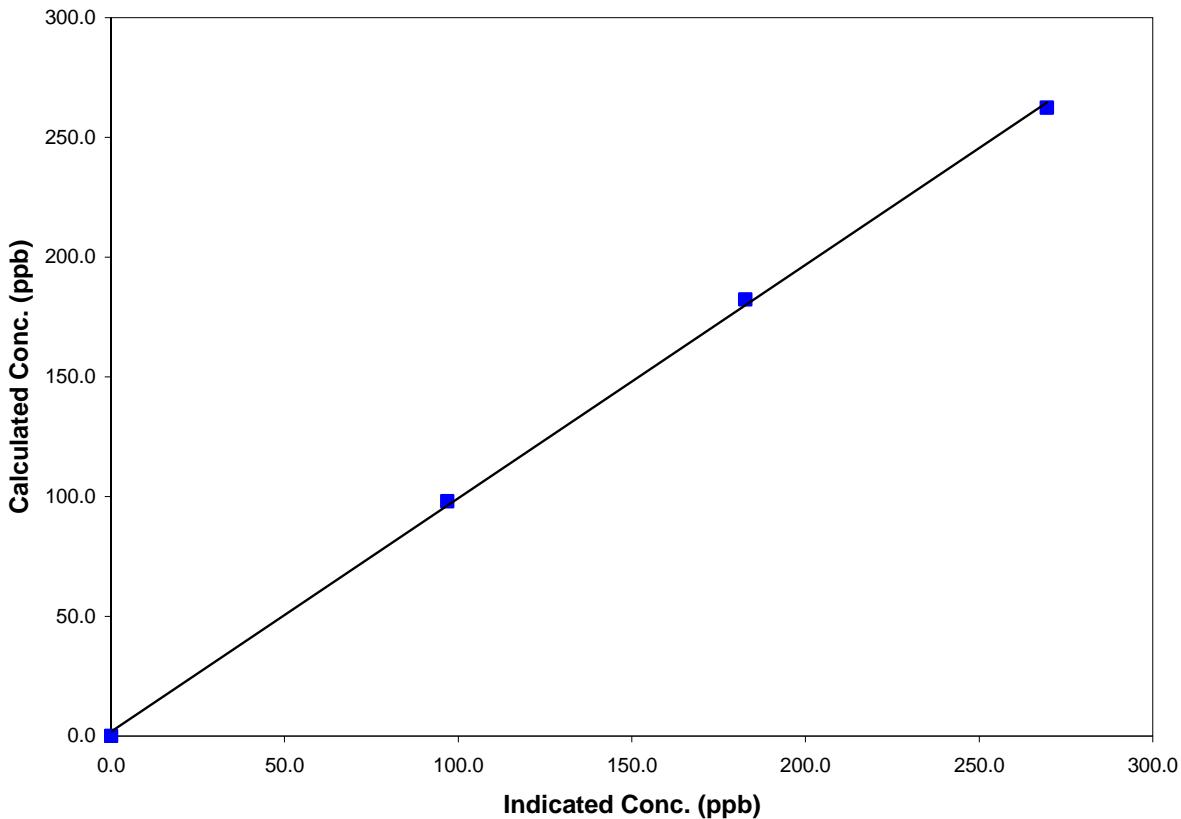
Station Information

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

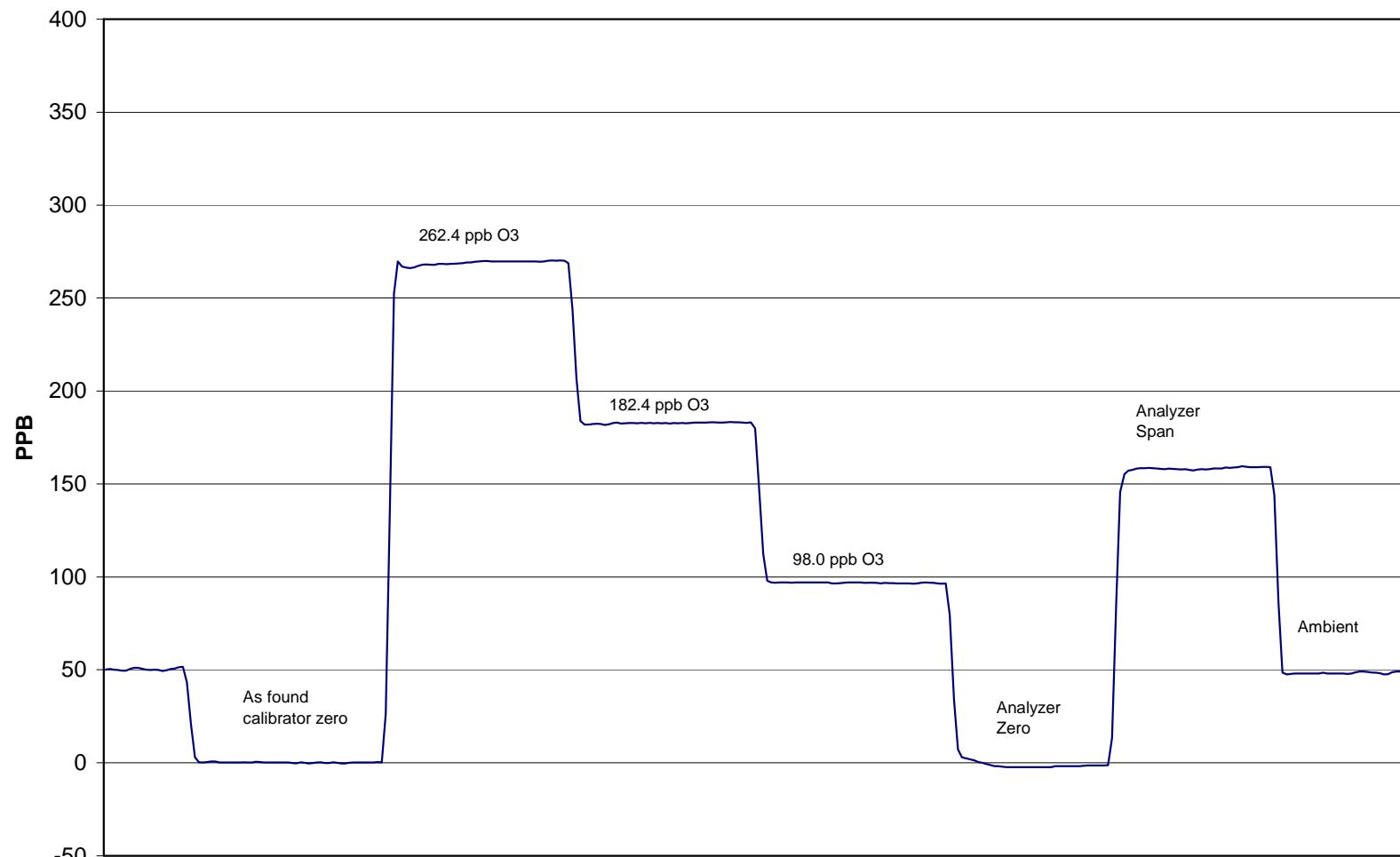
Calibration Data

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

O3 Calibration Curve



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:	Routine	Install	Removal	Other:
Start Time (MST)	14:45		End Time (MST)	18:00
Barometric Pressure	0.917	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 6100		Serial Number	3474
Cal Gas Conc	3000	ppm	Cal Gas Expiry Date	AUG 28/05
DACS make	Focus AP1000		Cal Gas Cylinder #	AAL20565
DACS voltage range	0 - 1 volt		DACS serial No.	1
	Before		DACS channel #	9
				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
Concentration range CO span setting CO zero setting Sample pressure Sample Flow	before		after	
	0 - 50	ppm	0 - 50	ppm
	1.017		1.017	
	.808		.808	
	679.1	mm Hg	679.1	mm Hg
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

CO

Air Monitoring Network

PASZA



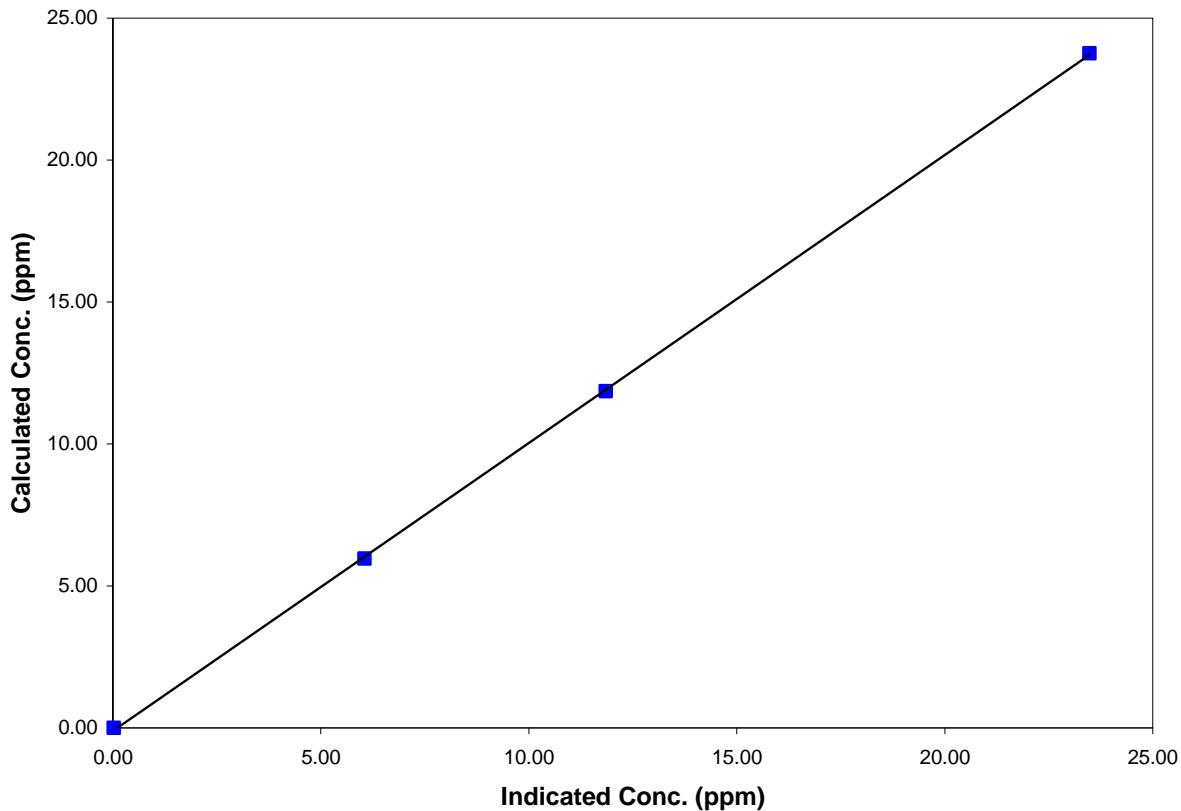
Station Information

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

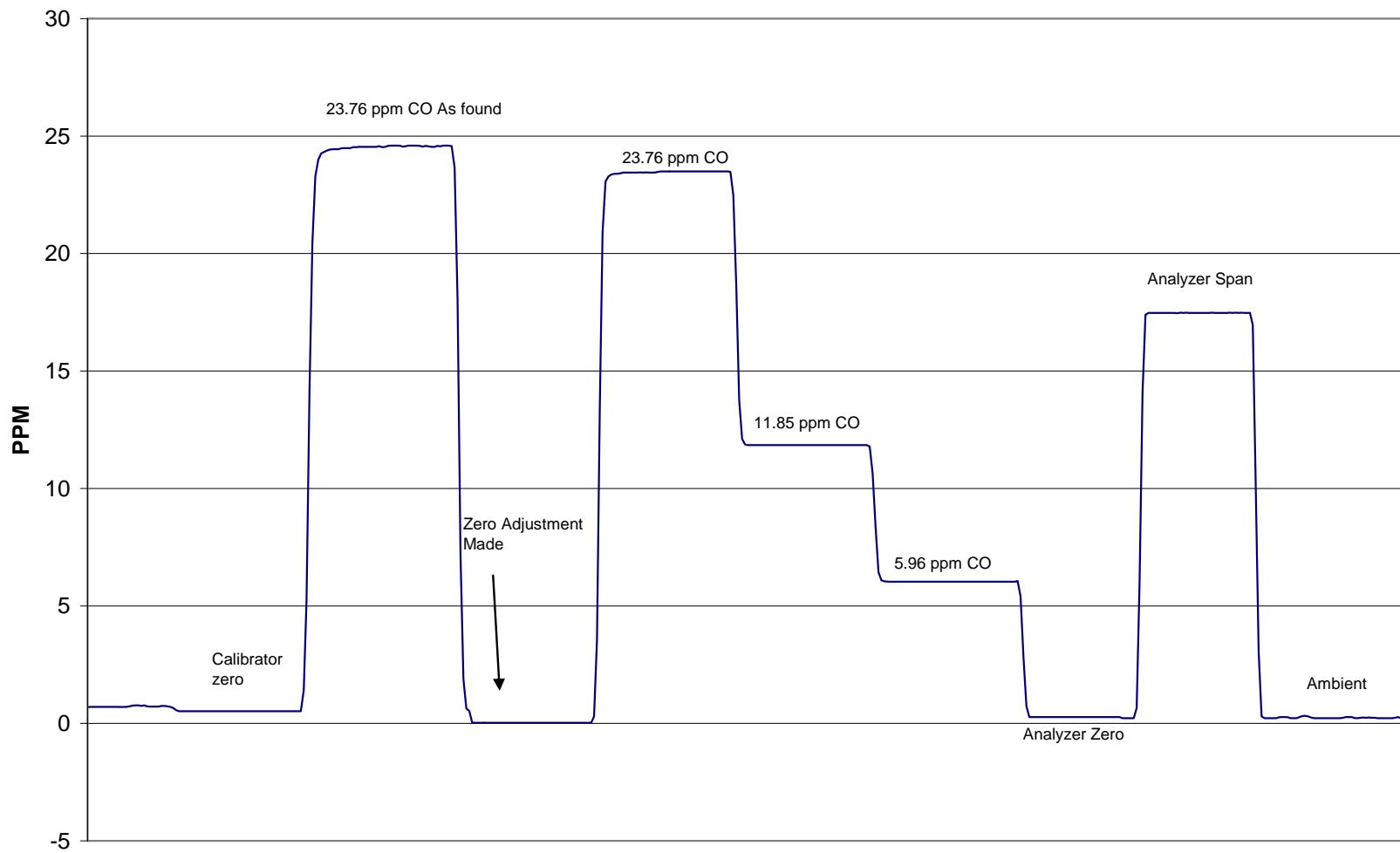
Calibration Data

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	Slope	1.014189
5.959	6.047	0.9855	Intercept	-0.103583

CO Calibration Curve



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:	Routine	Install	Removal	Other:
Start Time (MST)	14:30	End Time (MST)	17:00	
Barometric Pressure	0.921	ATM	20.0	Deg C
Calibrator	Environics 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	
Concentration range	before		after	
THC sample pressure	0 - 25	ppm	0 - 25	ppm
THC span counts	6.11	psi	6.11	psi
THC zero counts	7170	capture	7170	capture
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **THC**

Air Monitoring Network

PASZA

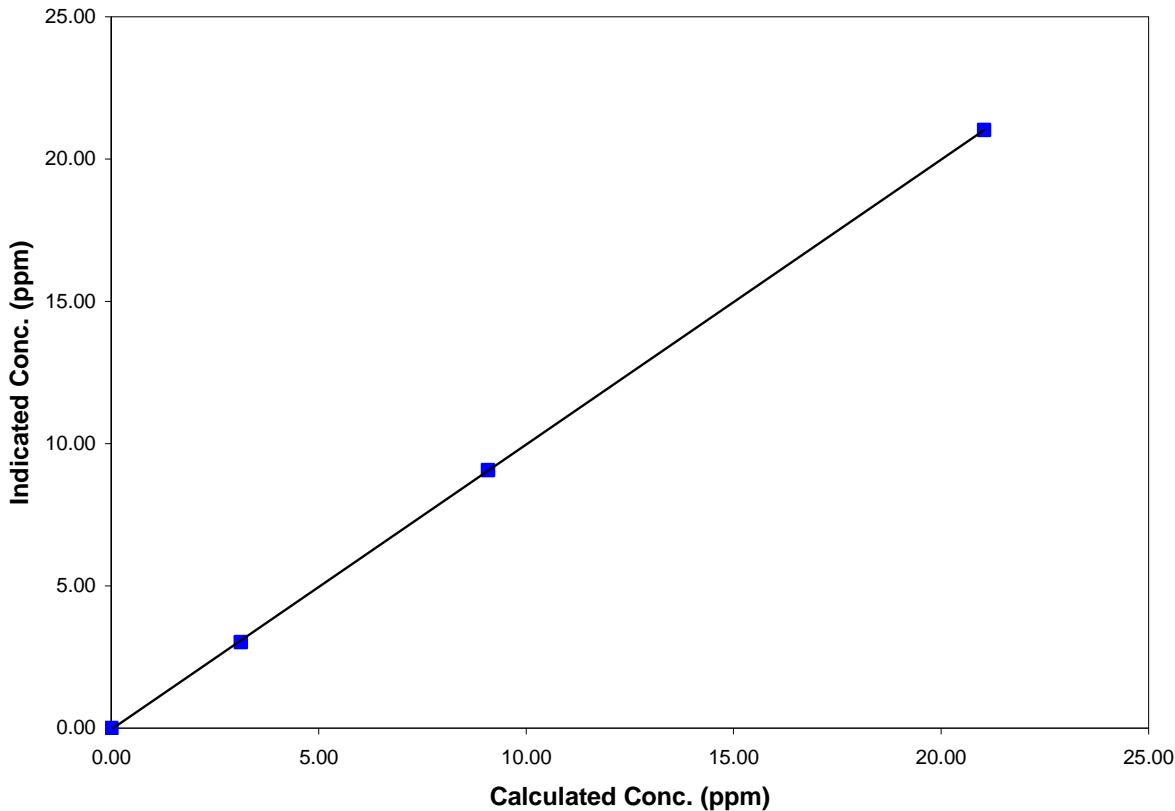
Station Information

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

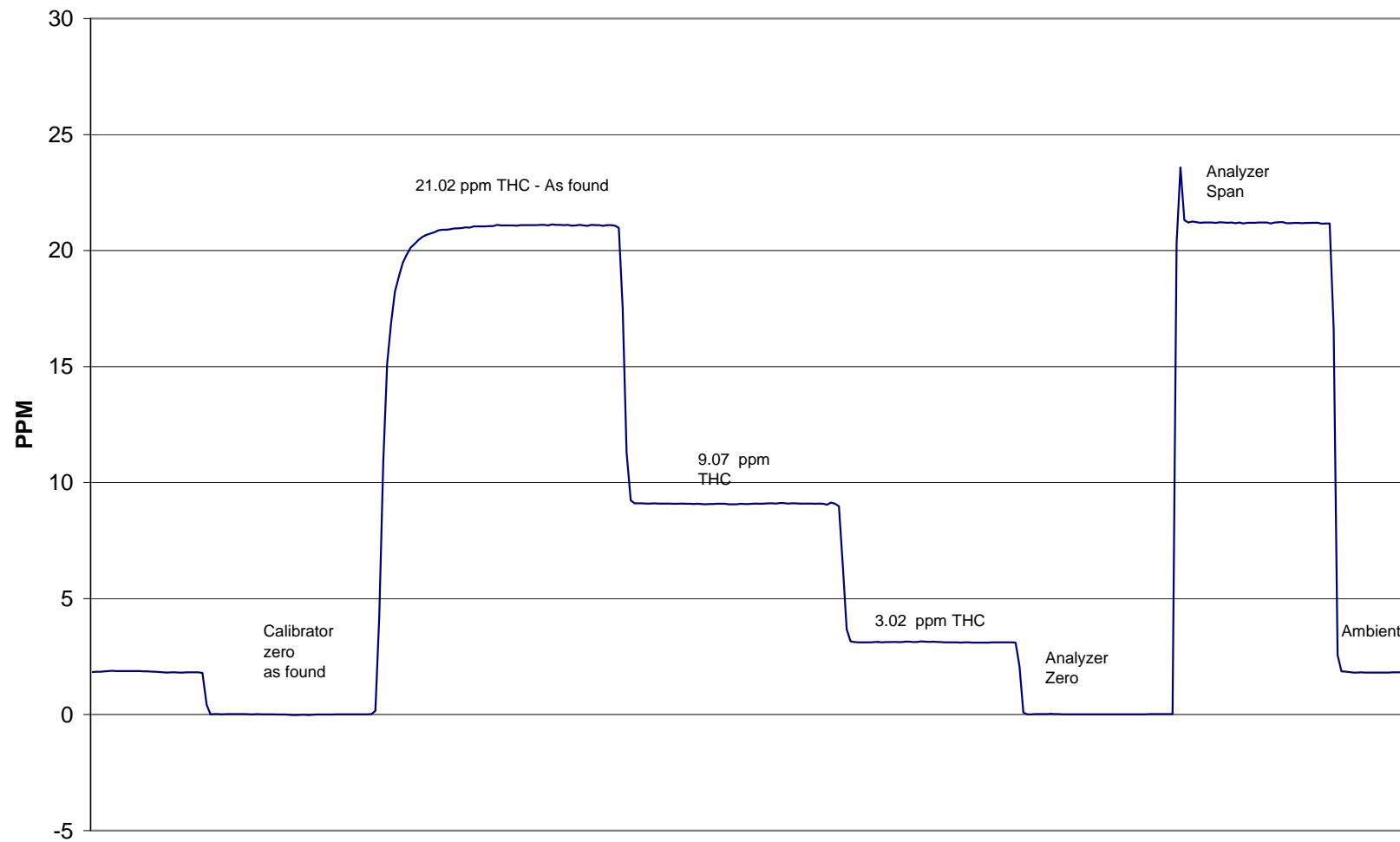
Calibration Data

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	Slope	1.001410
3.023	3.126	0.9672	Intercept	-0.046405

THC Calibration Curve



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	20.0	Deg C
Calibrator	Environics 6100		3474	
Cal Gas Conc	5.1	ppb	7/31/2008	
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	
Concentration range	before		after	
	0 - 100	ppb	0 - 100	ppb
	0.871		0.871	
	18.0		18.0	
	653	mm Hg	653	mm Hg
	462	ccm	462	ccm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

TRS

Air Monitoring Network

PASZA



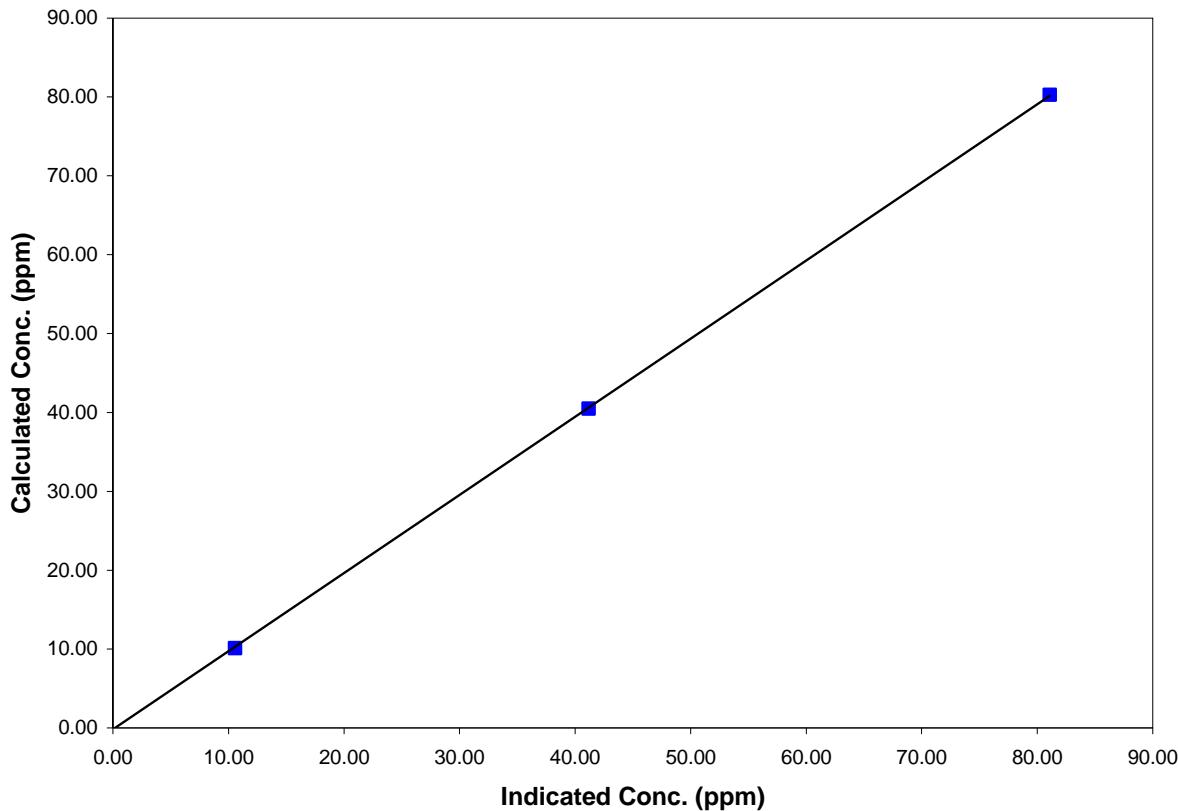
Station Information

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

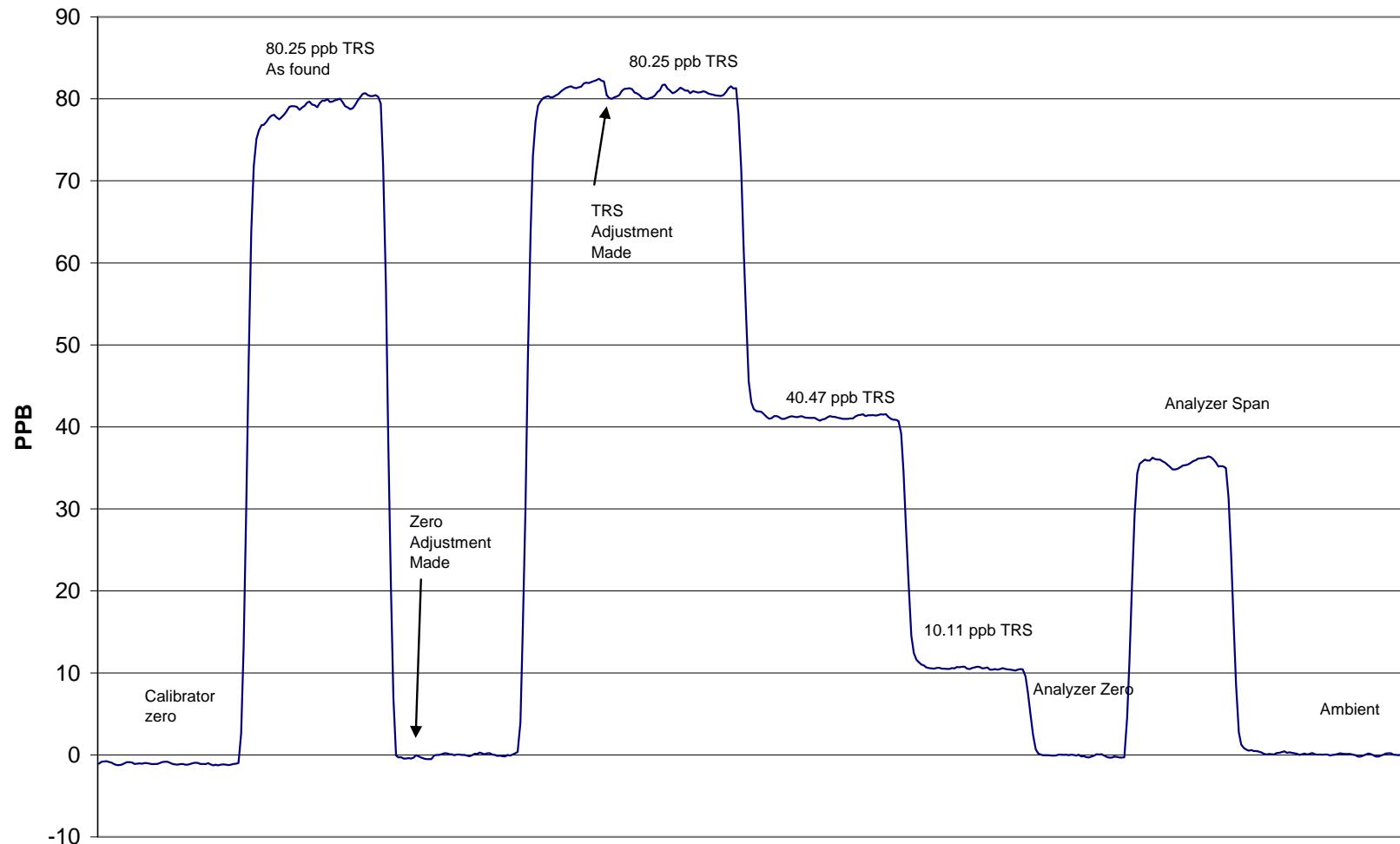
Calibration Data

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	Slope	0.990564
10.108	10.567	0.9566	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:	Routine	Install	Removal
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
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Concentration range	before		after	
	0 - 1000	ppb	0 - 1000	ppb
Background coefficient	9		9.3	
Lamp Voltage	0.928		0.945	
Chamber Temp	837	volts	827	volts
Perm Gas Temp	45	Deg C	45.3	Deg C
Pressure	44.25	Deg C	45	Deg C
Sample Flow	659.5	mm Hg	660	mm Hg
Lamp Intensity	440	ccm	441	ccm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

SO2

Air Monitoring Network

PASZA



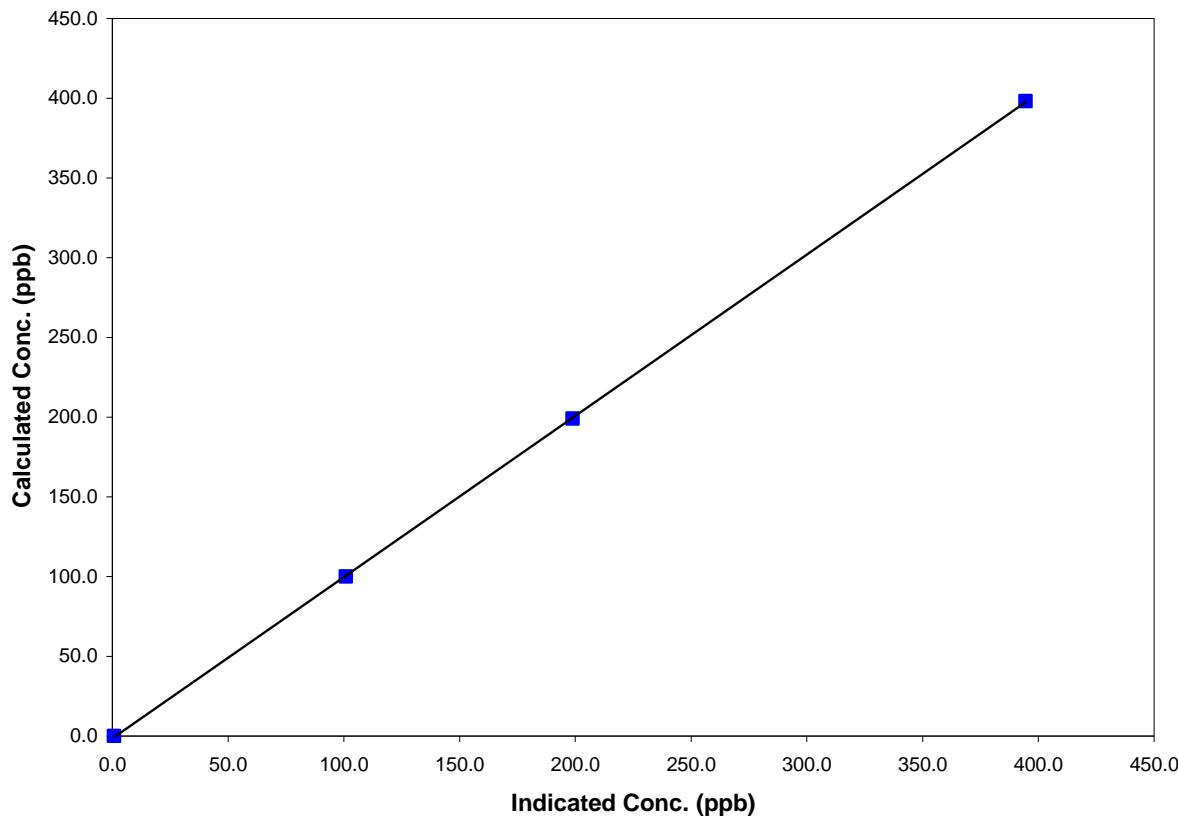
Station Information

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

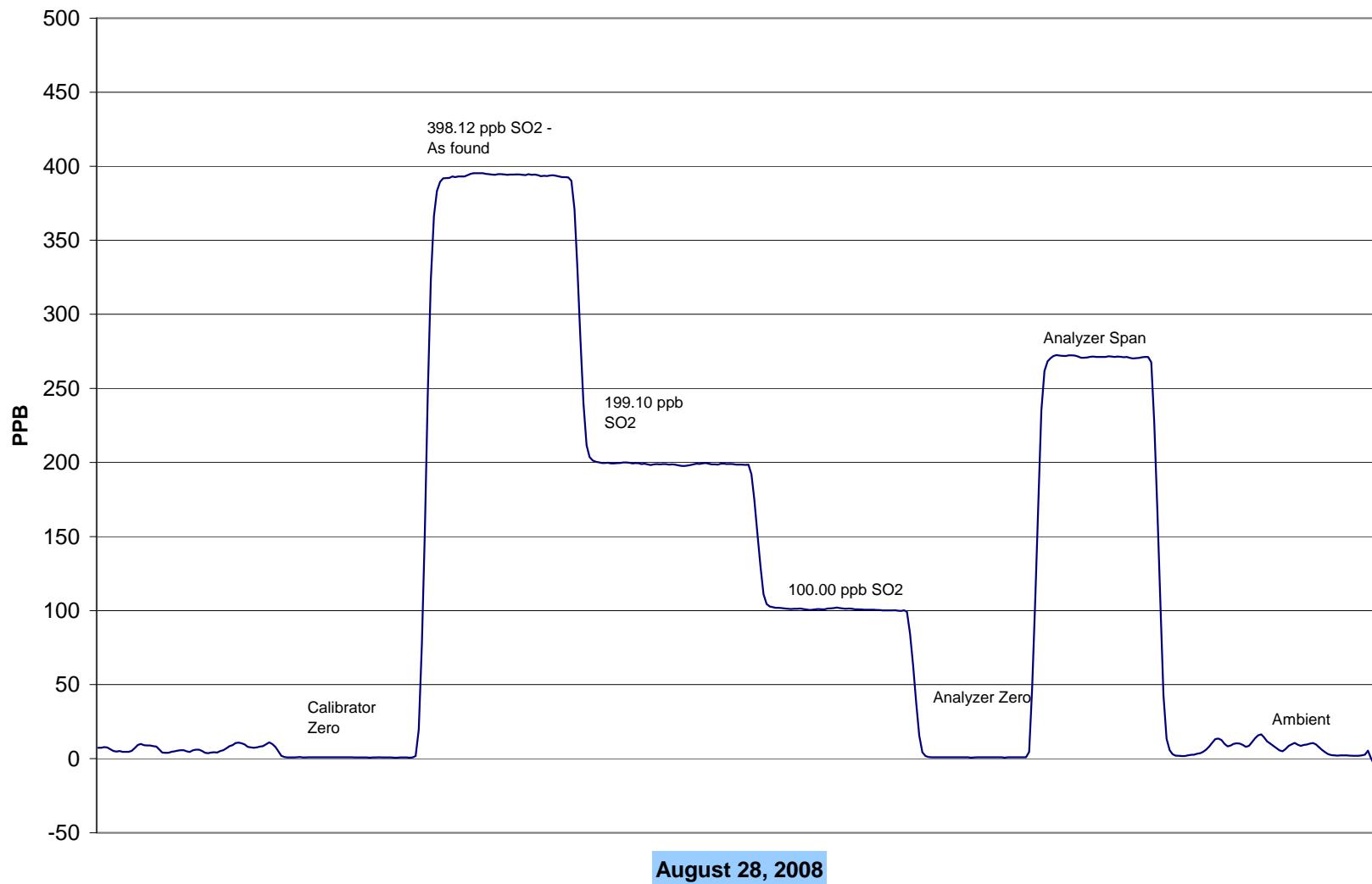
Calibration Data

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

SO2 Calibration Curve



Evergreen Park SO₂ Calibration



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:	Routine	Install	Removal	Other:	
Start Time (MST)	13:05		End Time (MST)	16:05	
Barometric Pressure	0.916	ATM	Station Temperature	20.0	Deg C
Calibrator	Environics 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	
Calculated slope	<u>Before</u>		Calculated slope	<u>After</u>	
Calculated intercept	0.989074		Calculated intercept	0.970104	
	1.002811		Calculated intercept	0.843362	

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005	
Concentration range	before		after	
Background	0 - 100	ppb	0 - 100	ppb
coefficient	15.2	ppb	15.8	ppb
Lamp Voltage	0.616		0.645	
Chamber Temp	823	volts	821	volts
Perm Gas Temp	44.2	Deg C	44.1	Deg C
Pressure	45	Deg C	45	Deg C
Sample Flow	626.4	mm Hg	631.5	mm Hg
Lamp Intensity	462	ccm	0.463	ccm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

TRS

Air Monitoring Network

PASZA



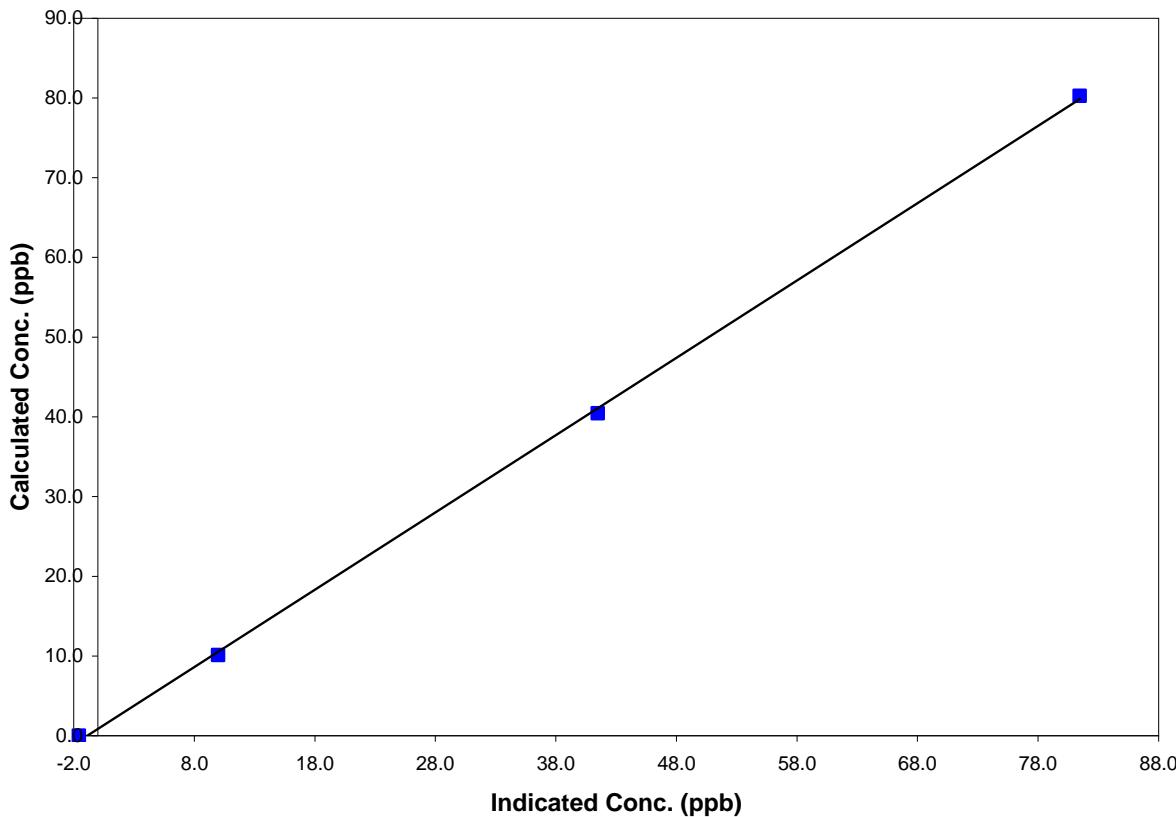
Station Information

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

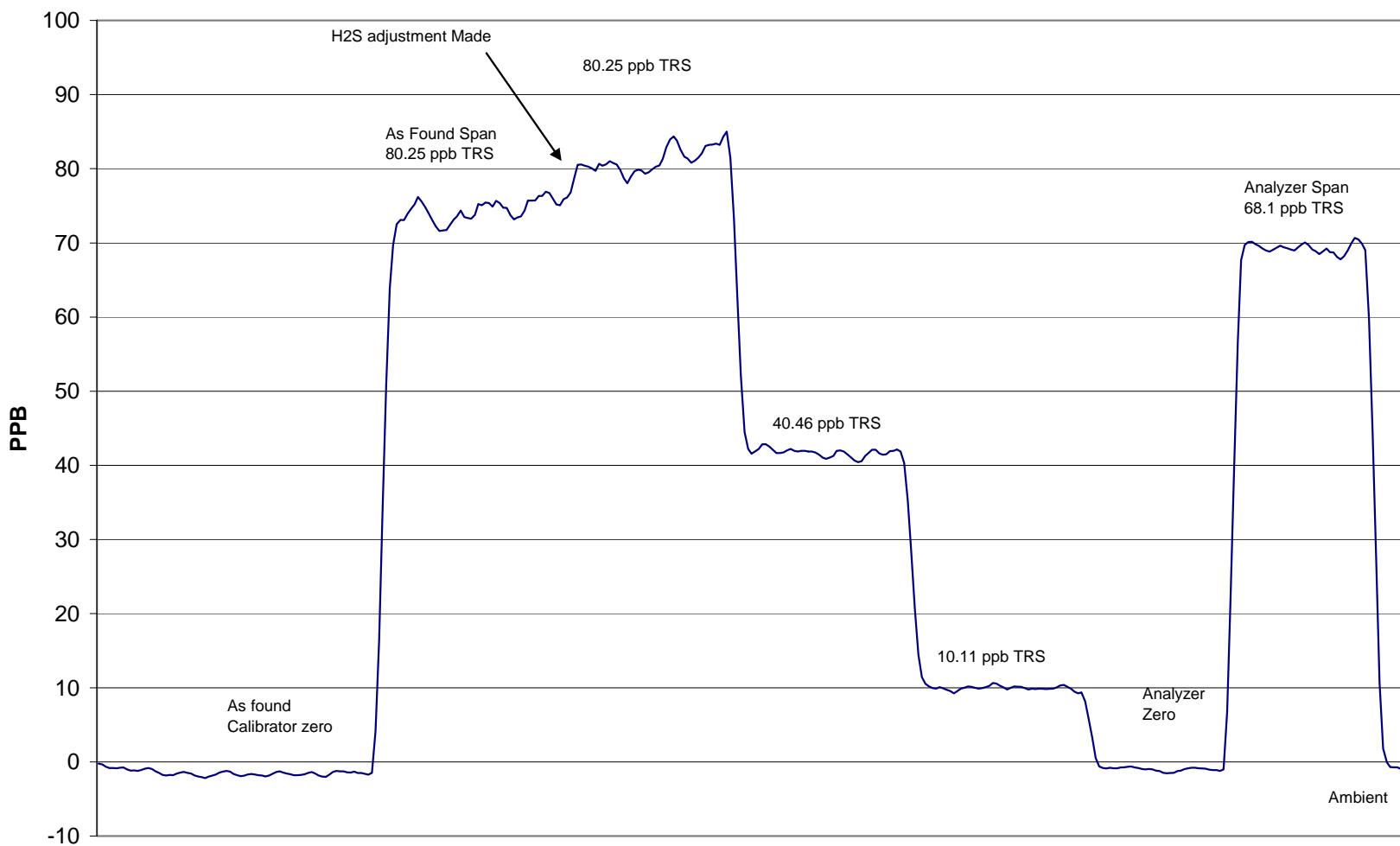
Calibration Data

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	Slope	0.970104
10.1	10.0	1.0124	Intercept	0.843362

TRS Calibration Curve



Evergreen Park TRS Calibration



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:	Routine	Install	Removal
Start Time (MST)	9:10	End Time (MST)	11:45
Barometric Pressure	0.915	ATM	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
Concentration range Background coefficient Lamp Voltage Chamber Temp Perm Gas Temp Pressure Sample Flow Lamp Intensity	before	after	
	0 - 500	ppb	0 - 500 ppb
	6.4		6.3
	0.722		0.712
	937	volts	921 volts
	45.1	Deg C	44.9 Deg C
	45	Deg C	45 Deg C
	678	mm Hg	664.8 mm Hg
	450	ccm	442 ccm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

SO₂

Air Monitoring Network

PASZA



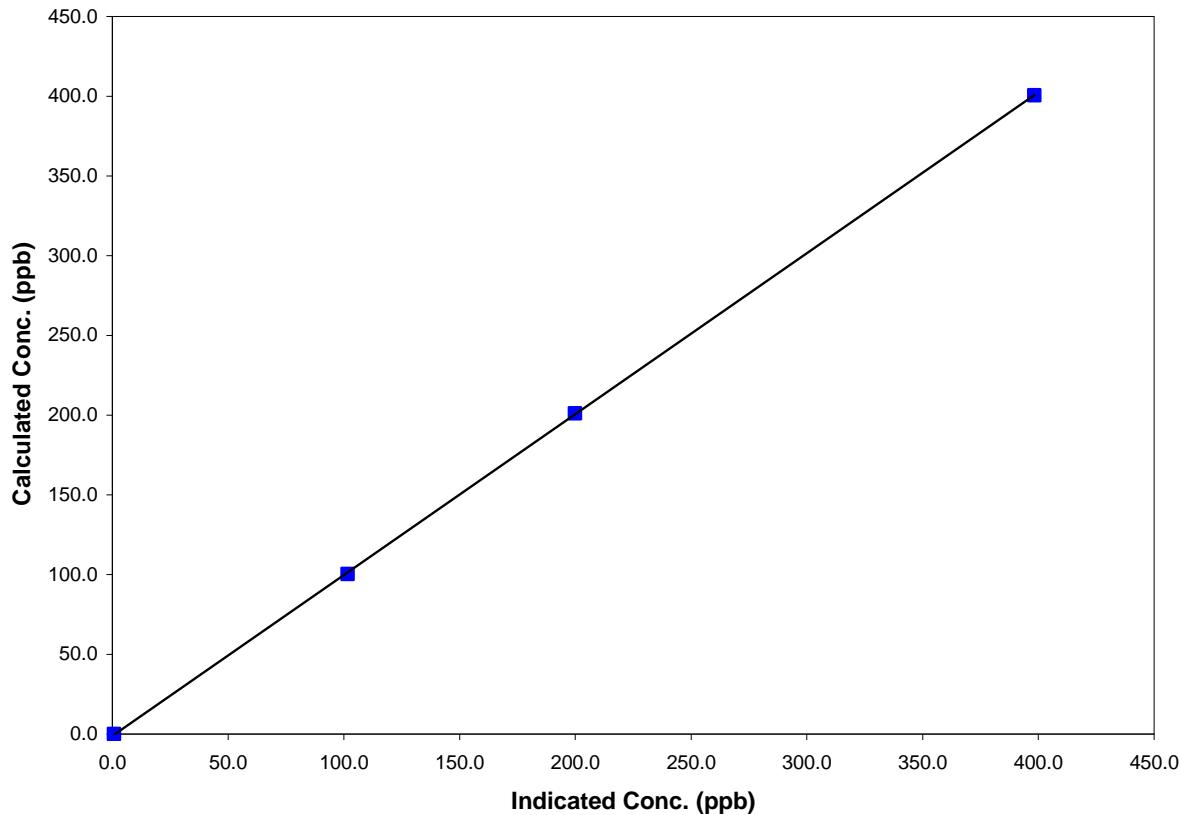
Station Information

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

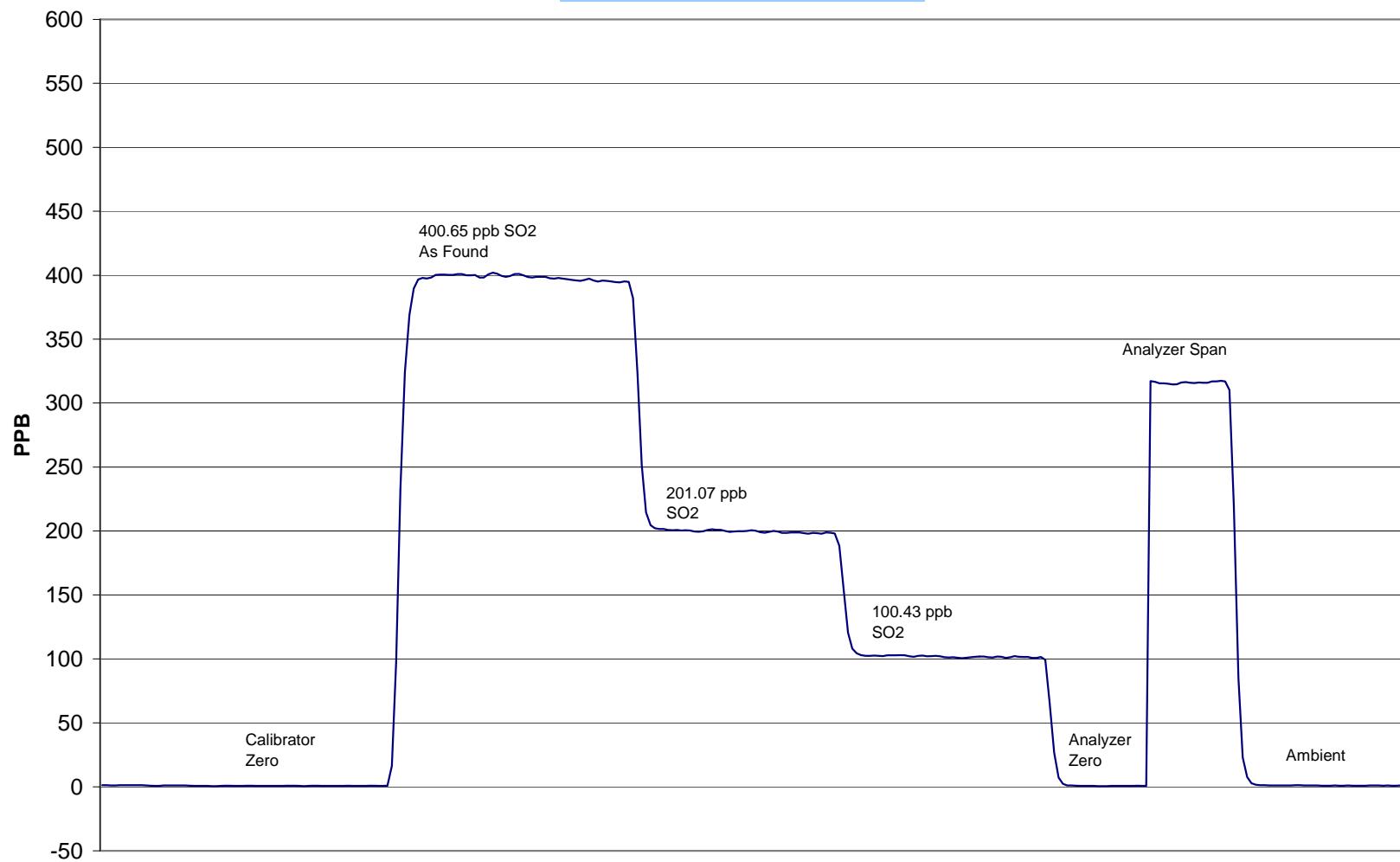
Calibration Data

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

SO₂ Calibration Curve



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:	Routine	Install	Removal	Other:
Start Time (MST)	11:30		End Time (MST)	15:25
Barometric Pressure	0.915	ATM	Station Temperature	20.0 Deg C
Calibrator	Environics 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
Calculated slope	<u>Before</u>		<u>After</u>	
Calculated intercept	1.005947		Calculated slope	0.992948
	-1.269238		Calculated intercept	0.153784

Analyzer make	TEI Model 43C	Analyzer serial #	0436610005
before		after	
Concentration range	100	ppb	100
Background	11.5	ppb	13
coefficient	1.006		1.004
Lamp Voltage	772	volts	764
Chamber Temp	43.9	Deg C	44.2
Perm Gas Temp	45	Deg C	45
Pressure	482.4	mm Hg	472.6
Sample Flow	750	ccm	739
Lamp Intensity	32,422	mv	32,430

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%

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

Notes: Calibrated Zero, Calibrated TRS

Calibration Performed By: Conor Whiteley

Calibration Summary



Parameter TRS

Air Monitoring Network

PASZA

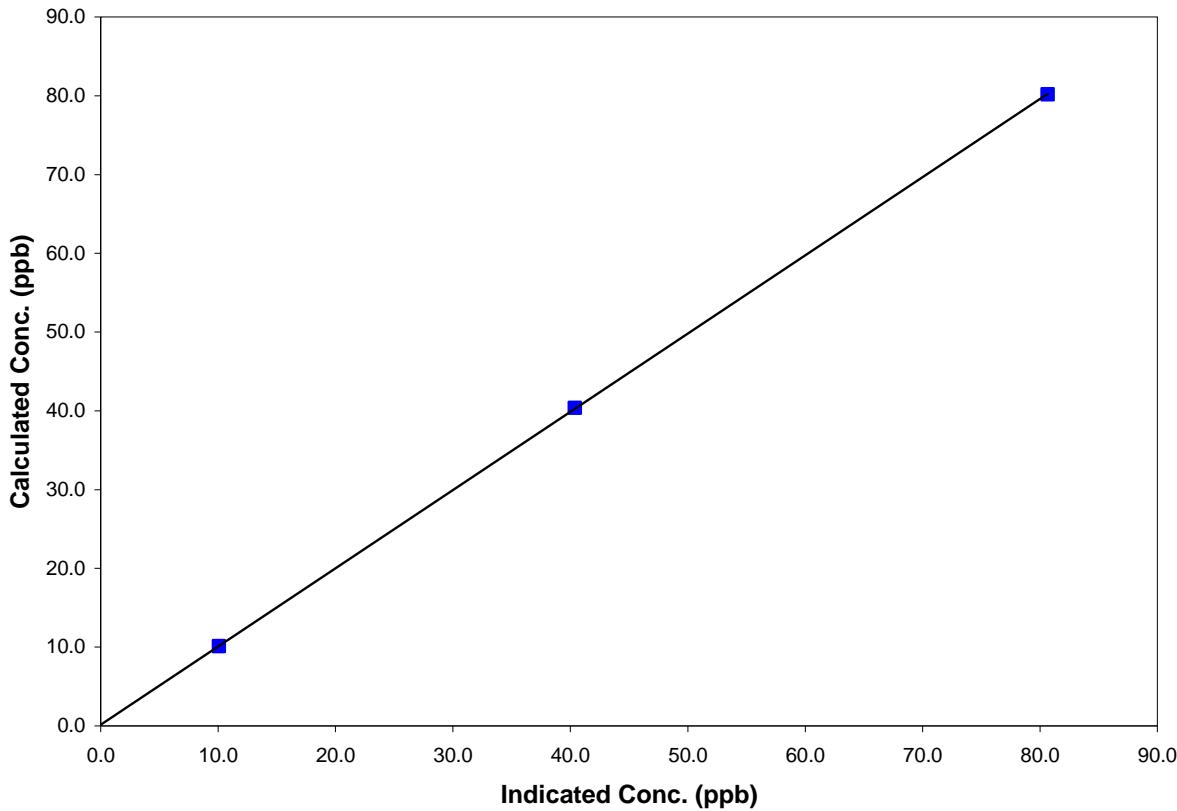
Station Information

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

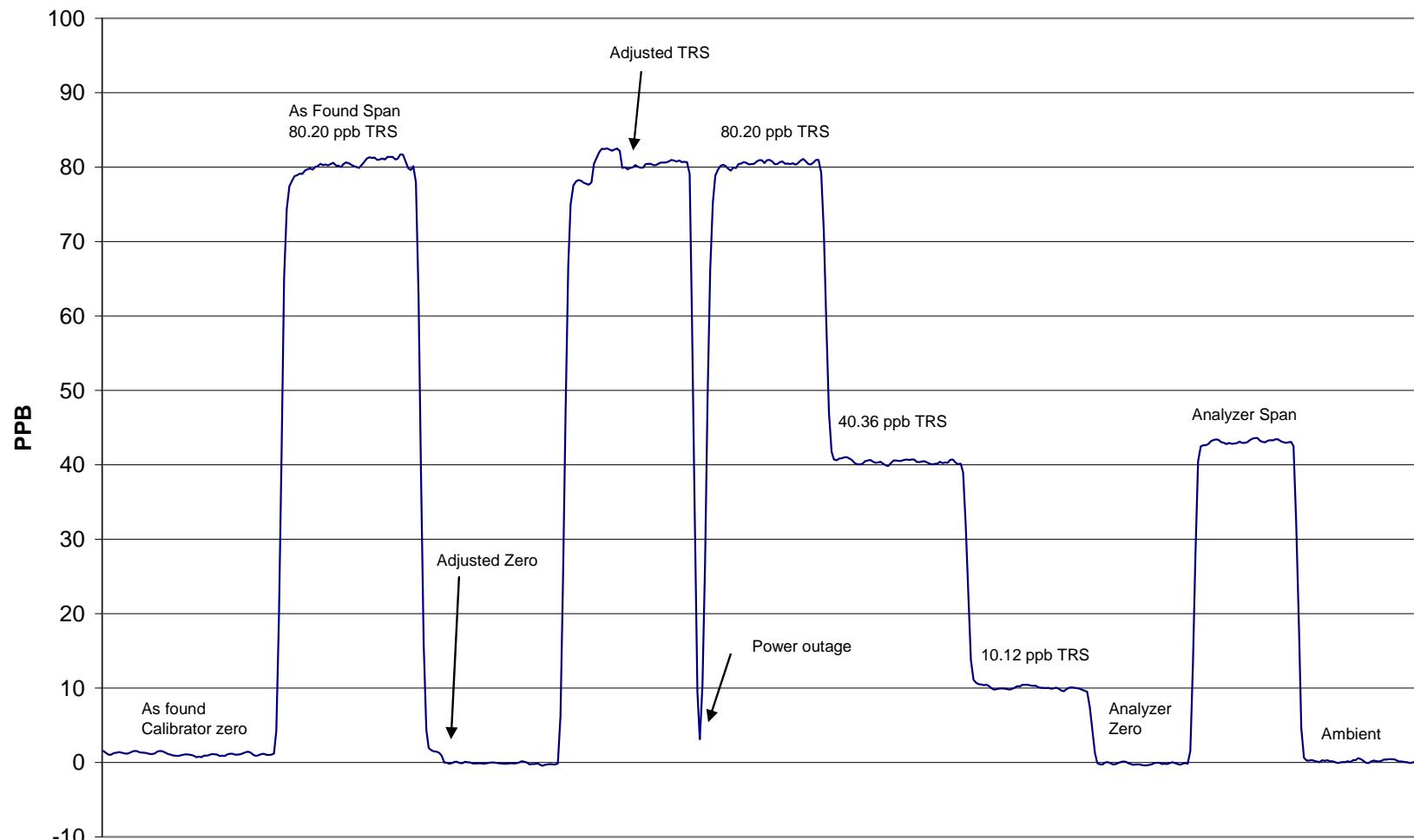
Calibration Data

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	Slope	0.992948
10.1	10.1	1.0046	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 serial No.	45269
DACS make	Focus AP1000	DACS channel #	4
DACS voltage range	0 - 10 volt		
	<u>Before</u>		<u>After</u>
DACS Scale High	500	DACS slope	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	V
UV Lamp Voltage	1042 V	1043 V	V
Chamber Temp	45 Deg C	45 Deg C	Deg C
Pressure	664.7 mm Hg	660.4 mm Hg	mm Hg
Sample Flow	0.47 LPM	0.47 LPM	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

SO₂

Air Monitoring Network

PASZA



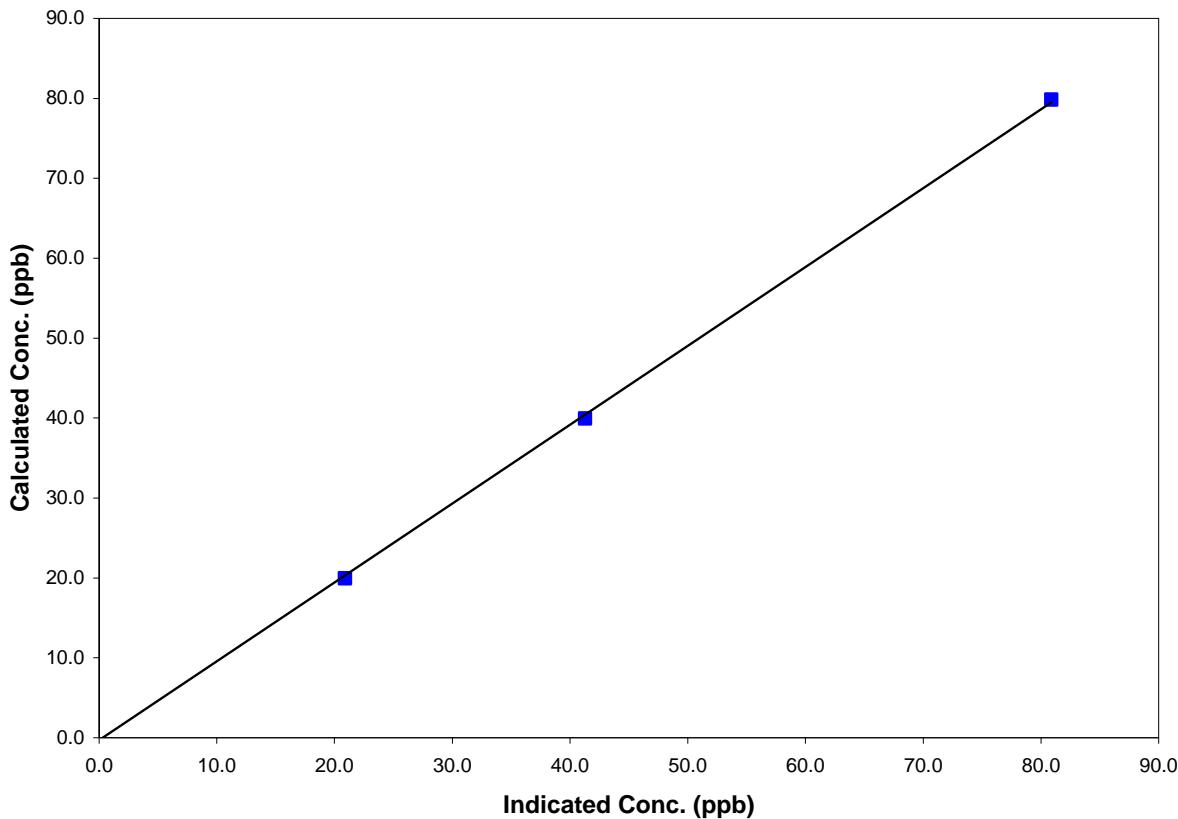
Station Information

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

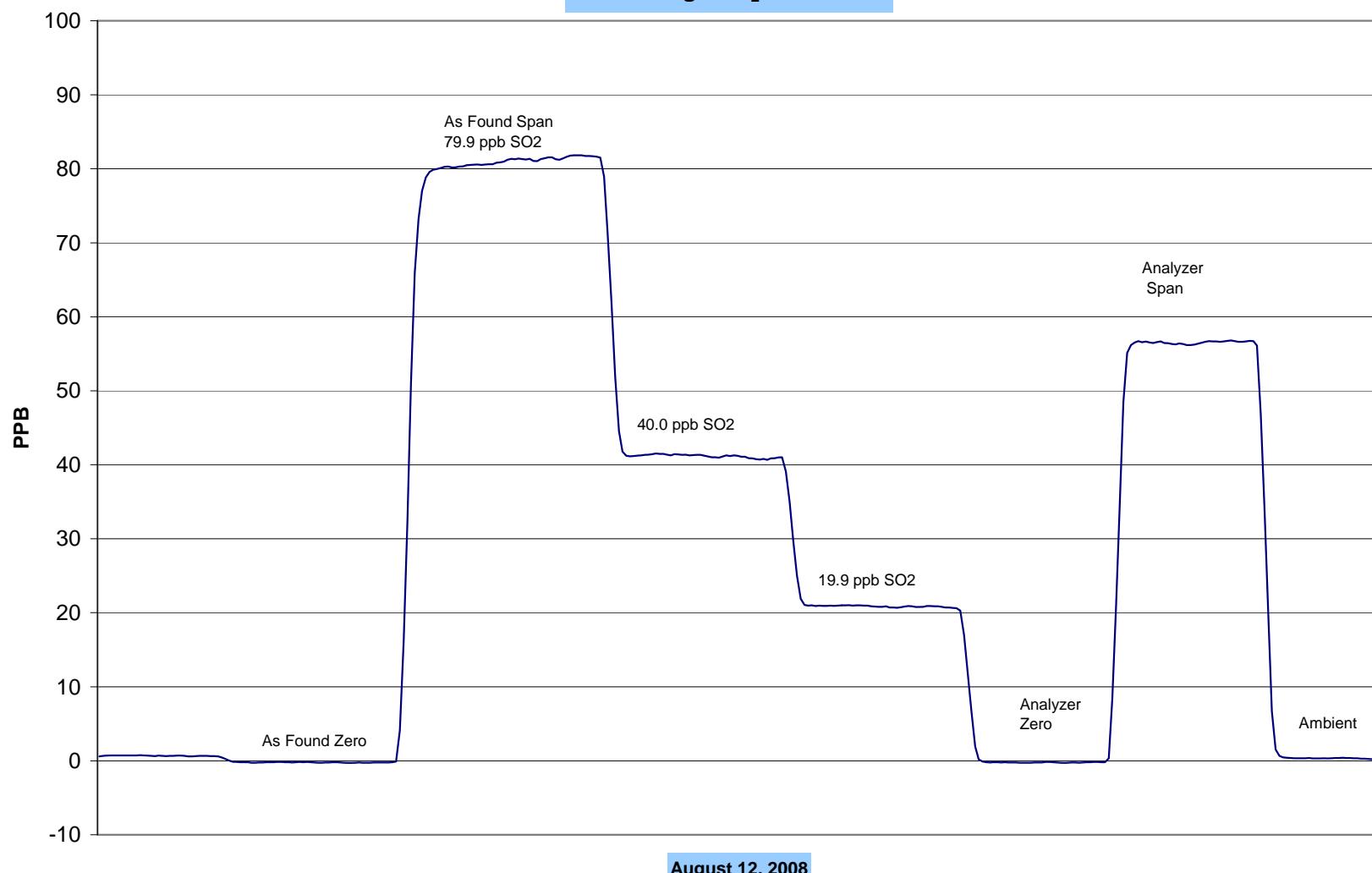
Calibration Data

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	Slope	0.986627
19.9	20.9	0.9552	Intercept	-0.286127

SO₂ Calibration Curve



Beaverlodge SO₂ Calibration



August 12, 2008

Calibration Report

Parameter
Air Monitoring Network

NOx-NO-NO₂
PASZA



Station Information

Calibration Date	August 12, 2008			Previous Calibration	July 17, 2008	
Station Number	4			Station Location	Beaverlodge	
Reason:	Routine			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 NOx-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 NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor
zero	4988	0.00	0.0	0.0	0.0	-0.1	-0.2	-0.2	N/A	N/A
	4988	39.91	398.5	397.7	0.8	396.2	399.2	-3.2	1.0056	0.9962
	4988	19.89	199.4	199.0	0.4	200.8	202.0	0.2	0.9928	0.9852
	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
	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

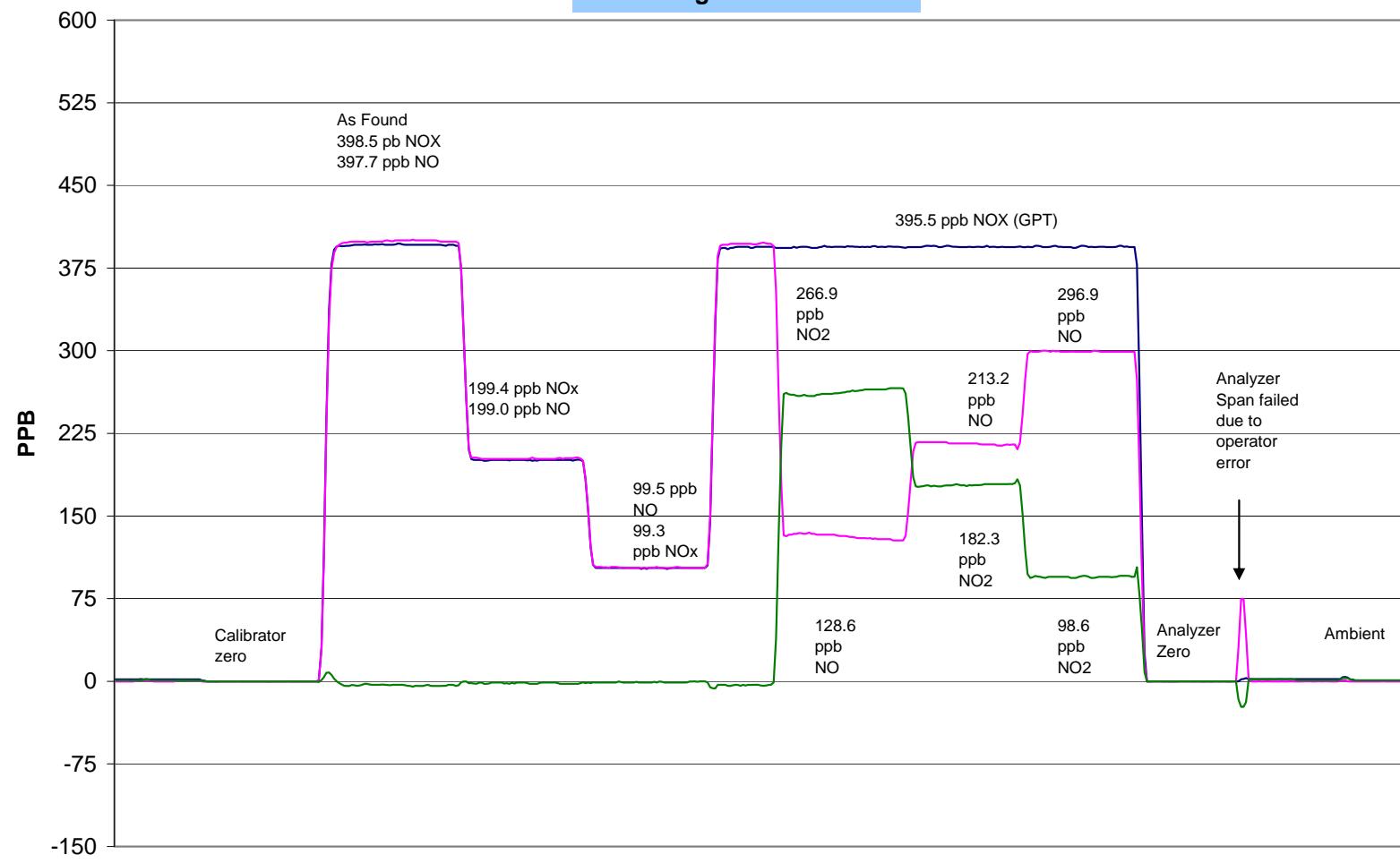
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A
NO point	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

AIC Data

	Previous calibration				Current calibration				
	Parameter	NOx	NO2	NO	ppb	NOx	NO2	NO	ppb
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



Calibration Summary

Parameter **NO₂**

Air Monitoring Network

PASZA



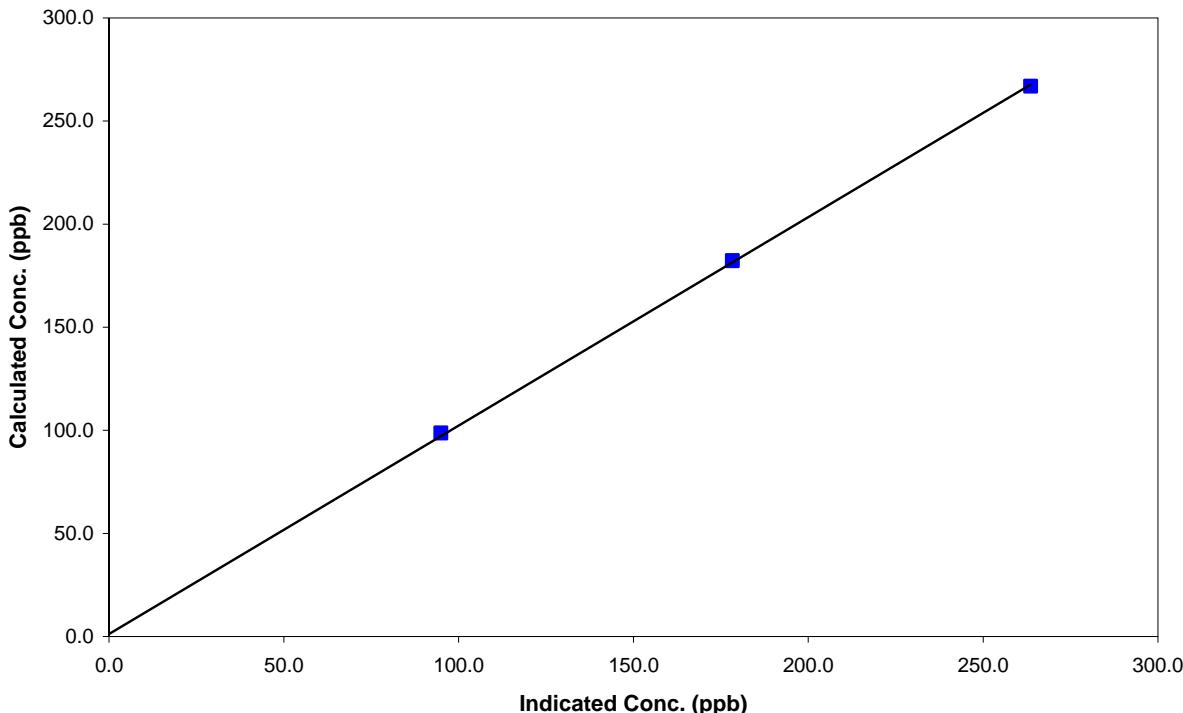
Station Information

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		
98.6	95.0	1.0385		
			Slope	1.011232
			Intercept	1.259161

NO₂ Calibration Curve



Calibration Summary

Parameter

NO_x

Air Monitoring Network

PASZA



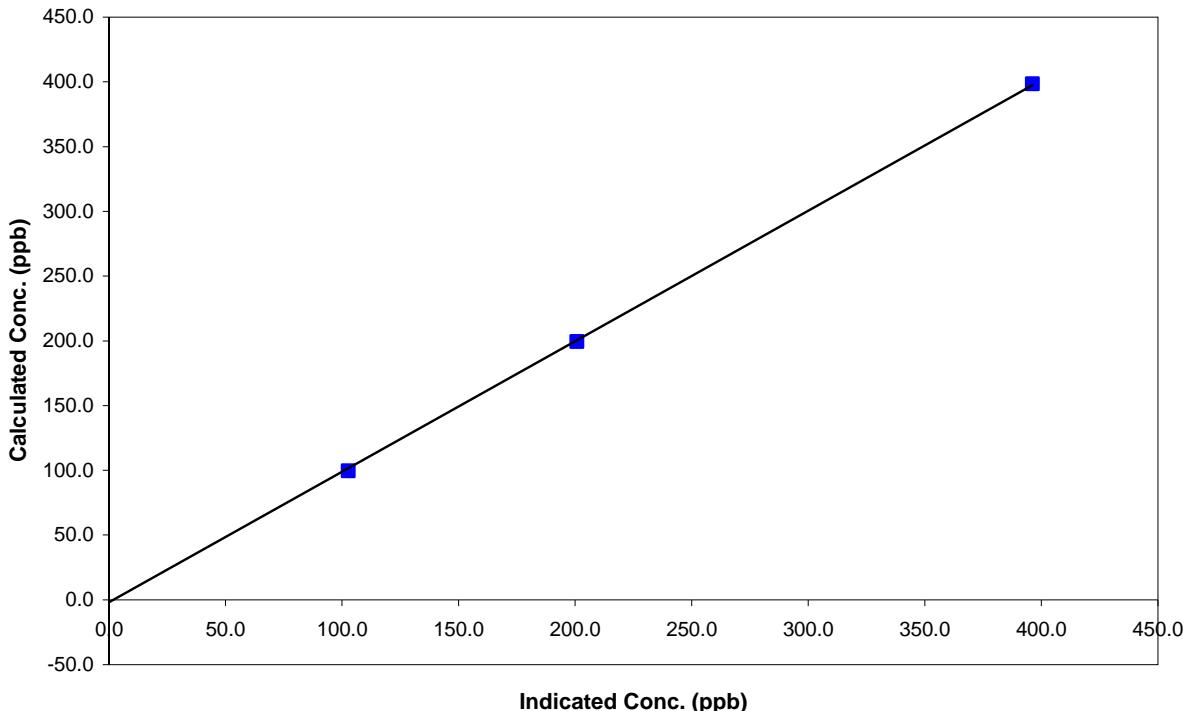
Station Information

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		
99.5	102.8	0.9686		
			Slope	1.007801
			Intercept	-1.944636

NO_x Calibration Curve



Calibration Summary

Parameter NOAir Monitoring Network PASZA

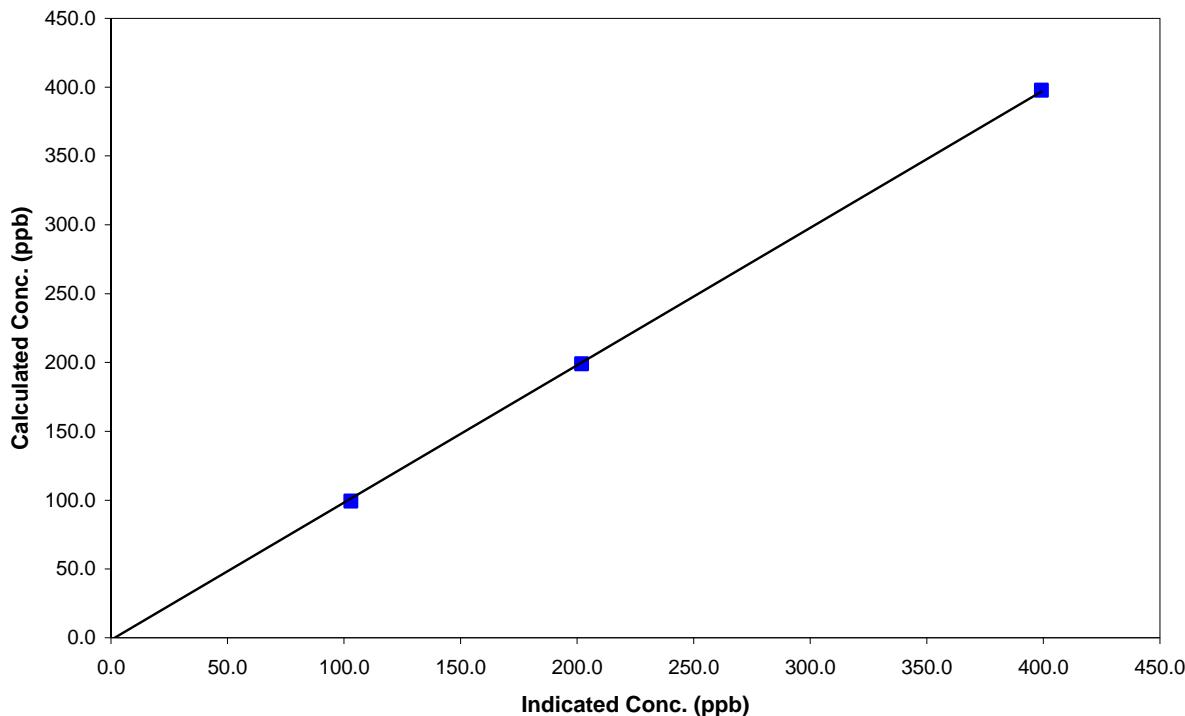
Station Information

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:	Routine	Install	Removal	
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	
Calculated slope	Before	Calculated slope	After	
	1.041493		0.990669	
Calculated intercept	-0.378293	Calculated intercept	3.507958	
Analyzer make	Teco 49C	Analyzer serial #	49C-76443-383	
Concentration range offset slope Lamp temp Lamp Intensity A/B Pressure Flow A Flow B	before		after	
	0 - 500	ppb	0 - 500	ppb
	-0.20	ppb	-0.20	ppb
	0.963		0.831	
	56.5	mV	56.4	mV
	80386/78298	mV	75724/73770	mV
	647.1	mm Hg	642.2	mm Hg
	726	ccm	723	ccm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter **O3**

Air Monitoring Network

PASZA

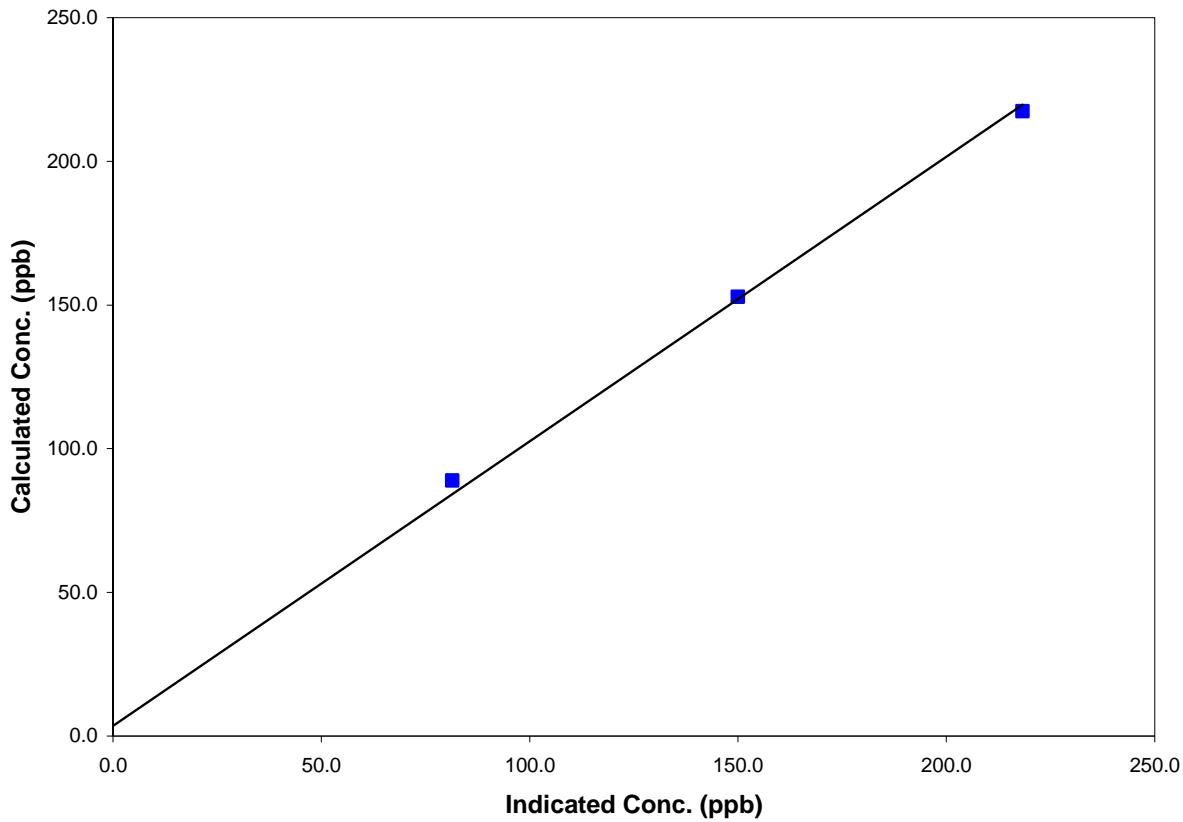
Station Information

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

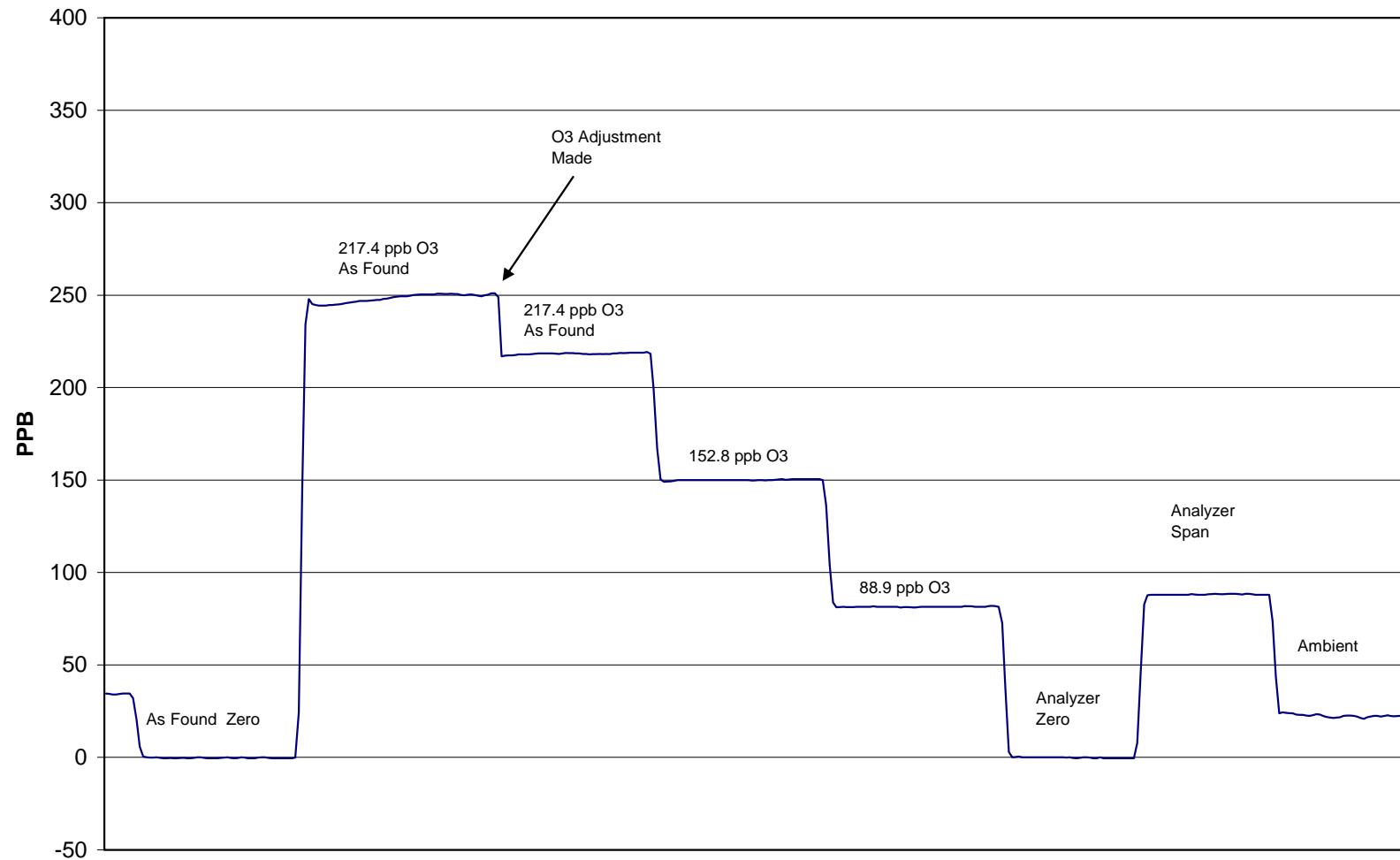
Calibration Data

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	Slope	0.990669
88.9	81.4	1.0923	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:	Routine	Install	Removal	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
DACS Scale High	500		DACS slope	After
DACS Scale Low	0		DACS intercept	500
Calculated slope	1.022546		Calculated slope	0
Calculated intercept	-1.308974		Calculated intercept	1.001455
Analyzer make	TEI 43C		Analyzer serial #	-2.882843
Concentration range	0-500	ppb	before	after
Background	7.9		0-500	ppb
Coefficient	1.137		8.1	
UV Lamp Voltage	733	V	1.168	
Chamber Temp	44.6	C	723	V
Perm Gas Temp	44.99	C	44.6	C
Pressure	678	mm Hg	45	
Sample Flow	488	LPM	677	mm Hg
Lamp Intesity	34390	Hz	488	LPM
			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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter SO2

Air Monitoring Network PASZA



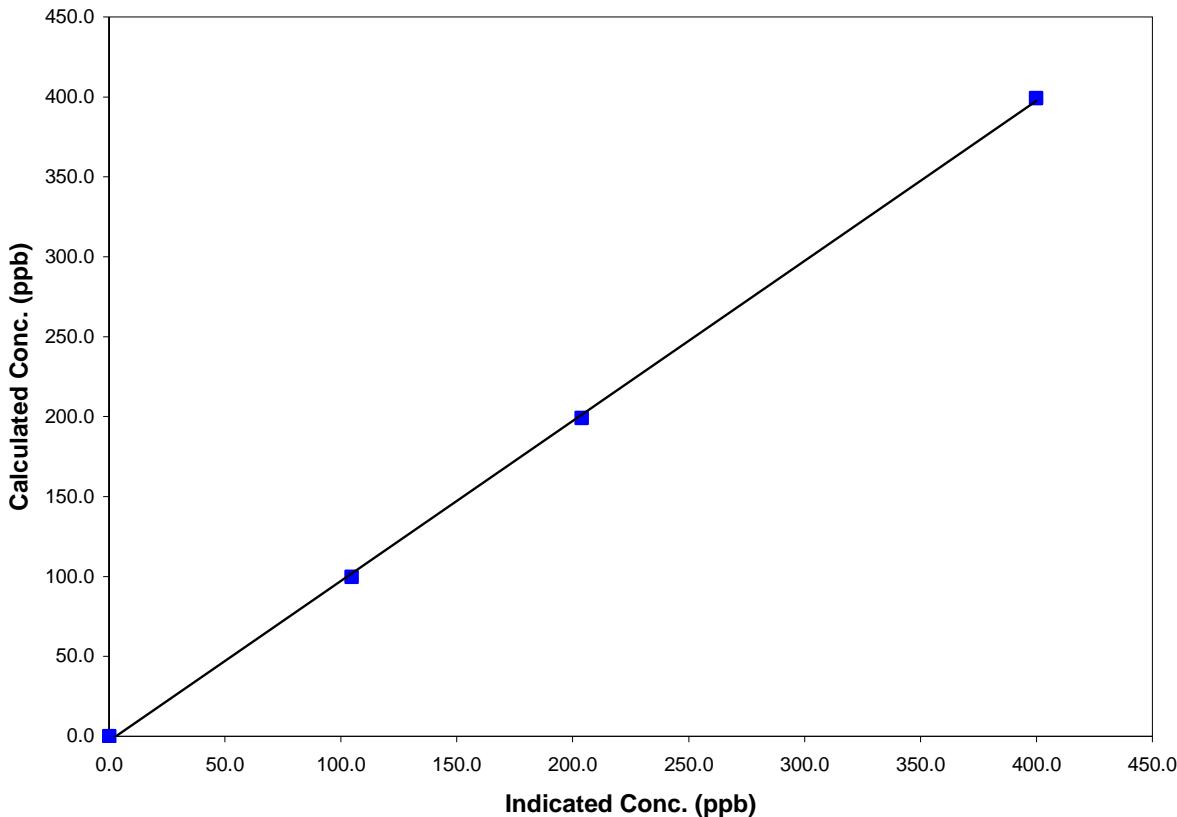
Station Information

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

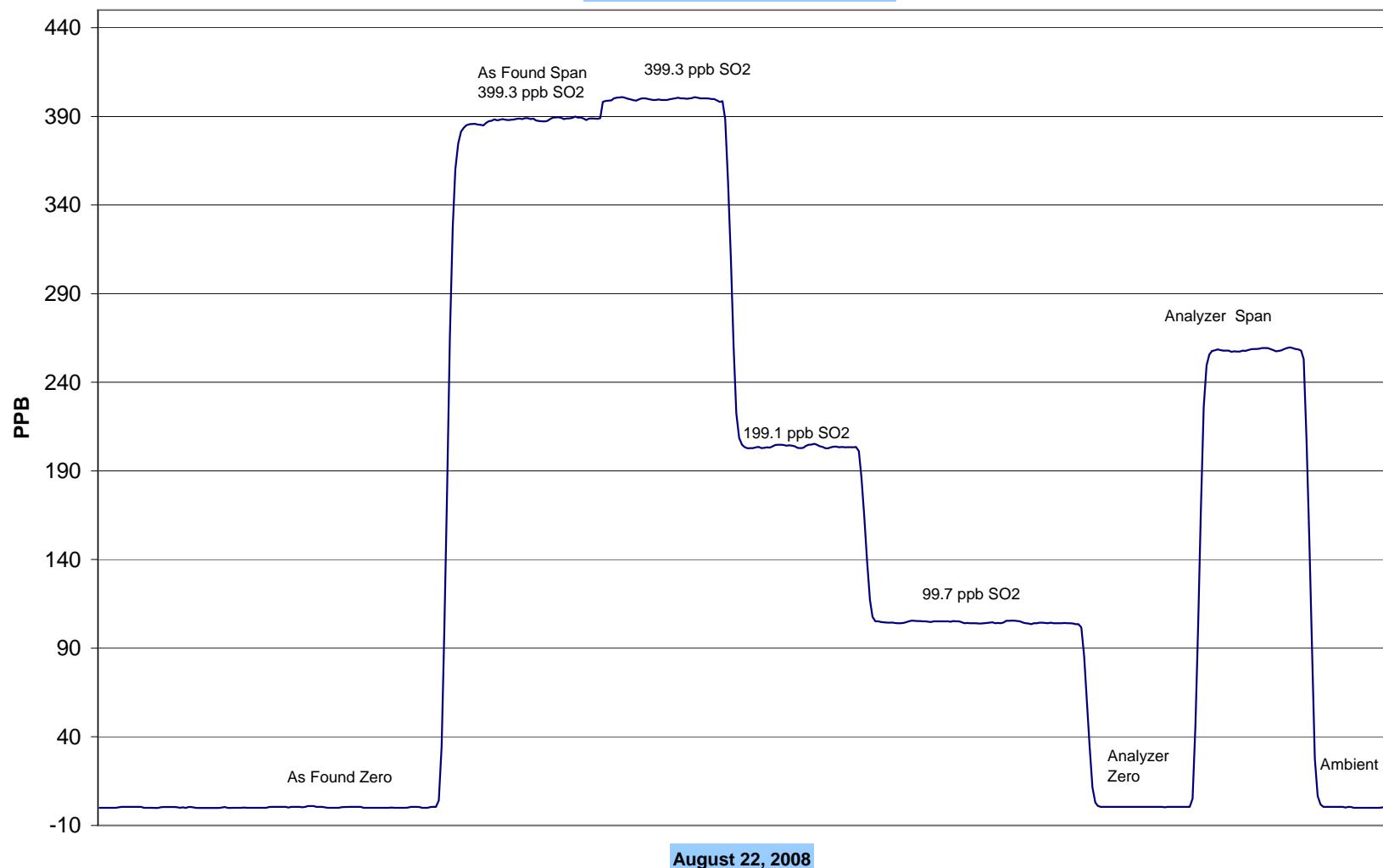
Calibration Data

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

SO2 Calibration Curve



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:	Routine	Install	Removal	Other:
Start Time (MST)	13:30		End Time (MST)	16:10
Barometric Pressure	27.5	inches Hg	Station Temperature	21.0 Deg C
Calibrator	Environics 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

Concentration range Background Coefficient Lamp Voltage Chamber Temp Perm gas Temp Pressure Sample Flow Lamp Intensity	before		after	
	0 - 100	ppb	0 - 100	ppb
	9.0	ppb	9.0	ppb
	1.454		1.454	
	804	V	804	V
	43.8	C	43.8	C
	44.90	C	44.90	C
	667	mmHg	667	mmHg
	438	ccm	438	ccm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

TRS

Air Monitoring Network

PASZA



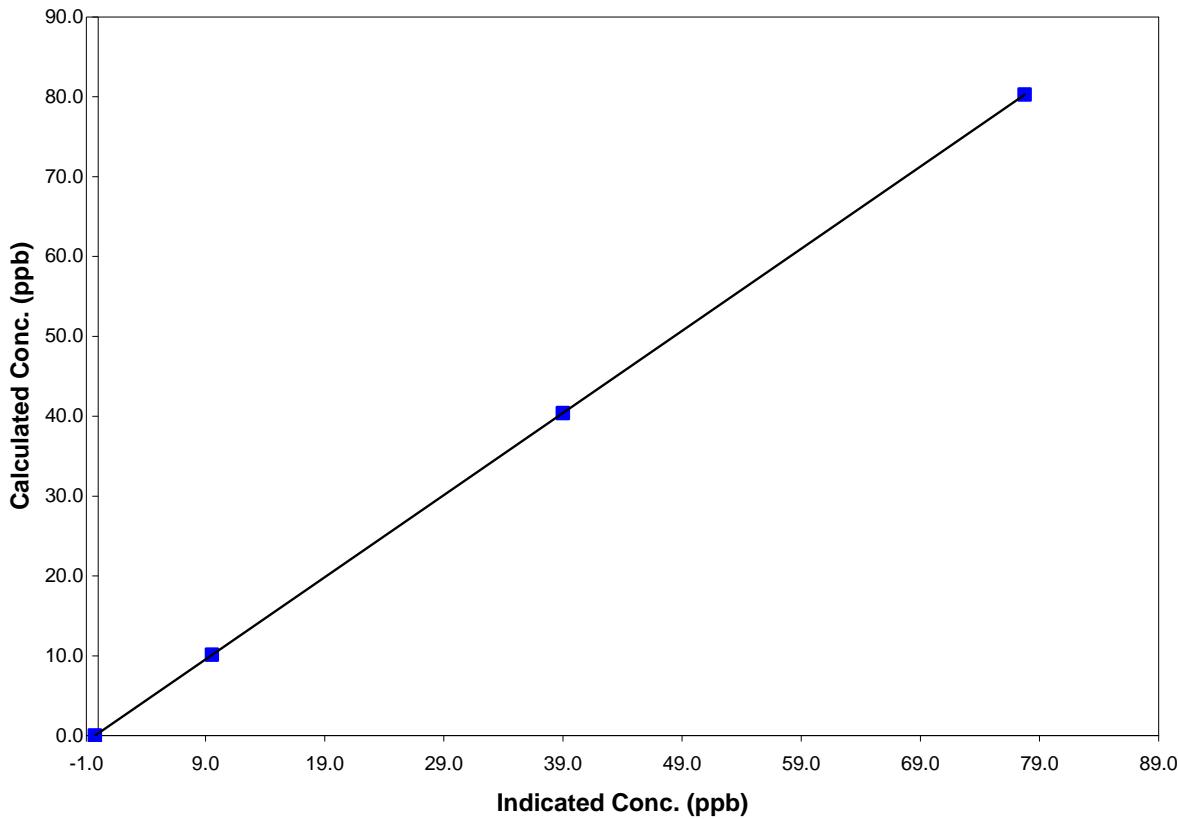
Station Information

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

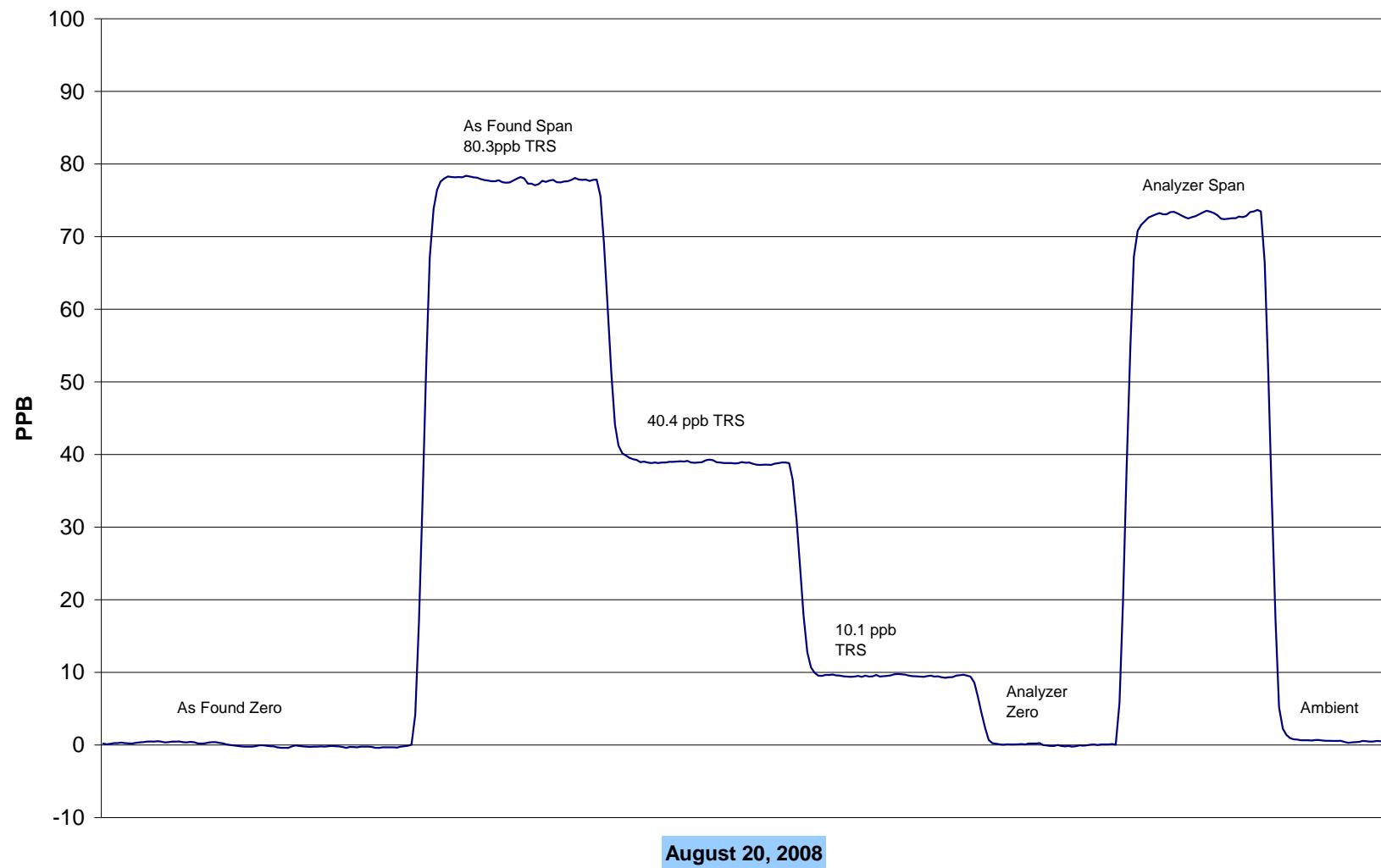
Calibration Data

Calculated concentration (ppb) (Cc)	Indicated concentration (ppb) (Ic)	Correction factor (Cc/Ic)	Statistical Evaluation	
0.0	-0.3	N/A	Correlation Coefficient	1.000000
80.3	77.8	1.0322		
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



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:	Routine	Install	Removal Other:
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
Calculated slope	Before	Calculated slope	After
Calculated intercept	1.001530	Calculated intercept	0.994278
Calculated intercept	1.597501	Calculated intercept	1.258050
Analyzer make	TEI Model 49C	Analyzer serial #	609-716240
Concentration range	0-500	before	after
Offset	0	ppb	ppb
Span	1.138		
Cell A	83140	Hz	Hz
Cell B	79170	Hz	Hz
Pressure	704	in Hg	in Hg
CellA Flow	676	ccm	ccm
Cell B Flow	675	cmm	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%

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

Notes:

Calibration Performed By:

Conor Whiteley

Calibration Summary

Parameter

O3

Air Monitoring Network

PASZA



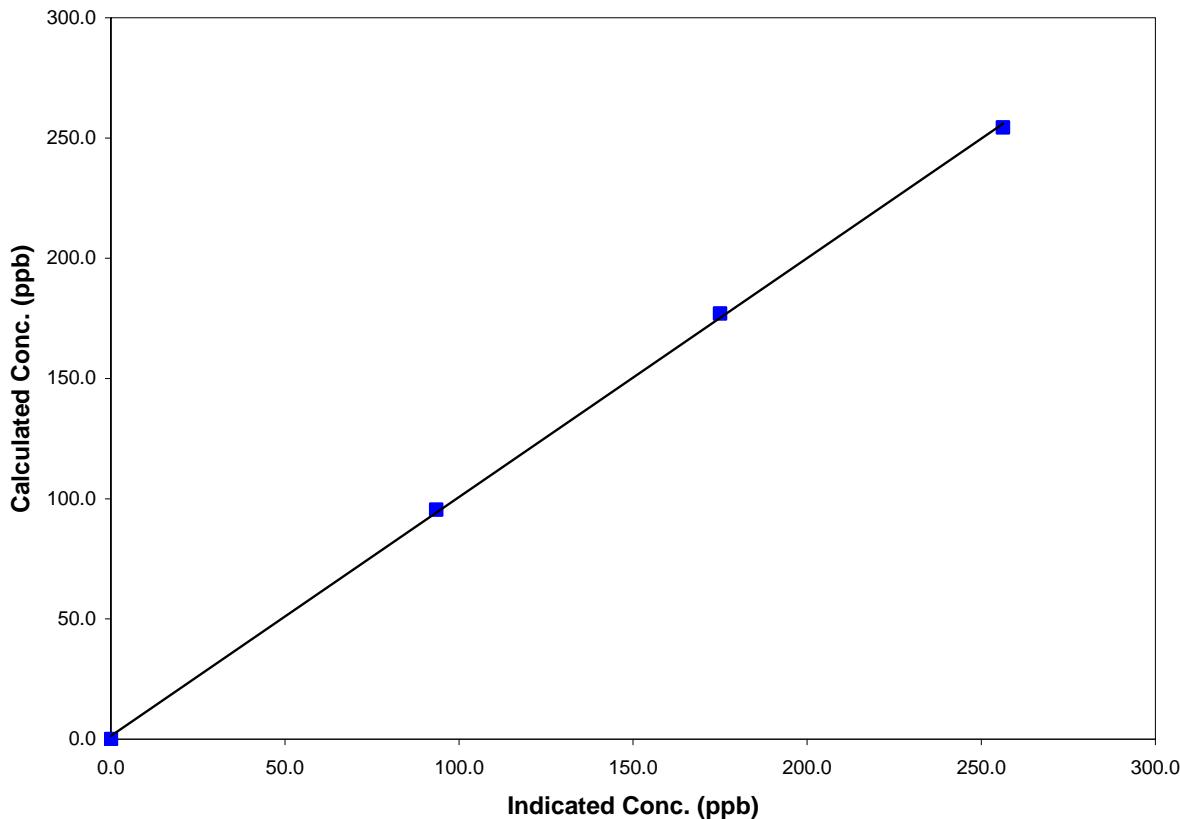
Station Information

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

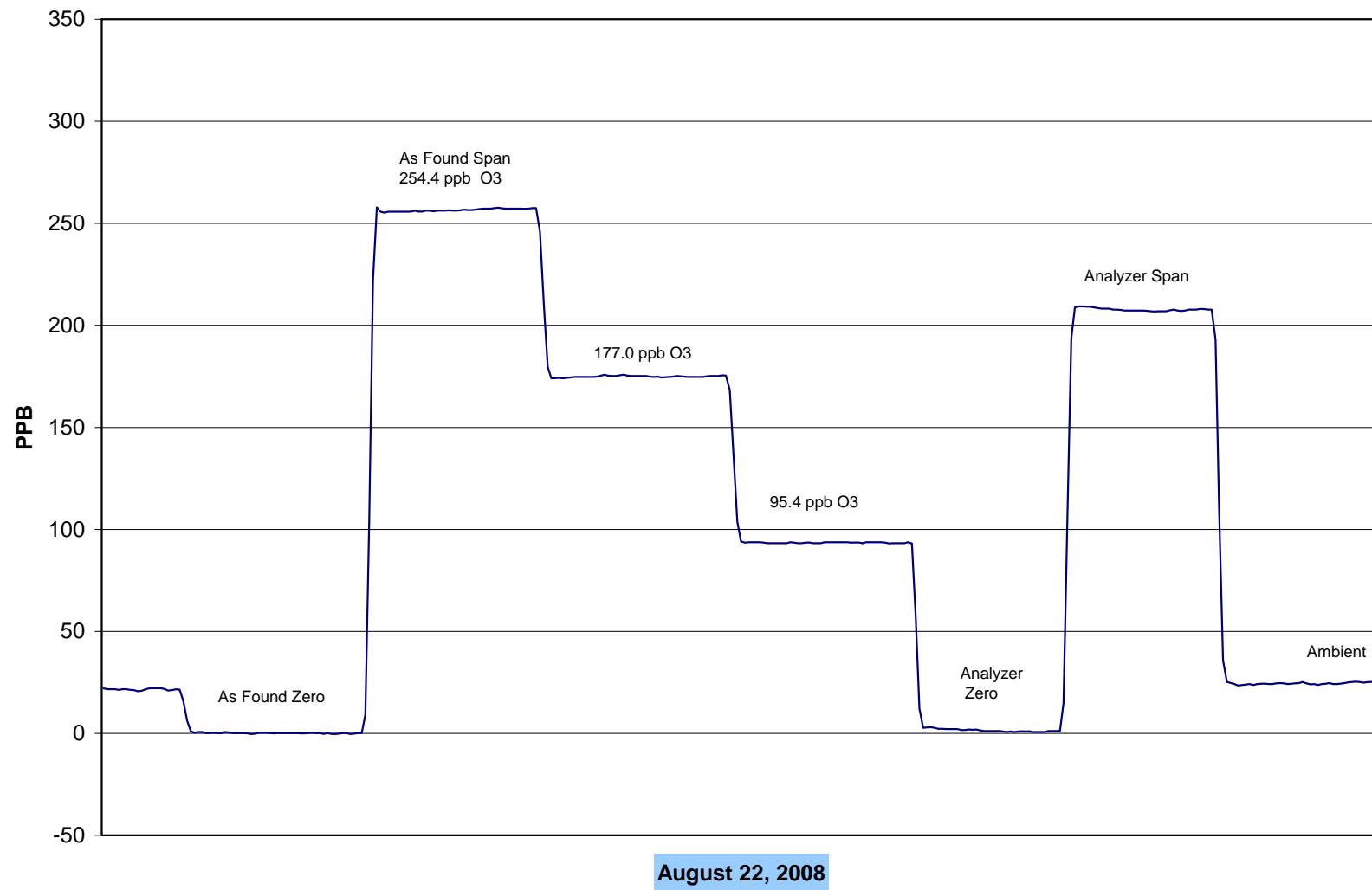
Calibration Data

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	Slope	0.994278
95.4	93.5	1.0208	Intercept	1.258050

O3 Calibration Curve



Spirit River O₃ Calibration



Calibration Report

Parameter
Air Monitoring Network

NOx-NO-NO₂
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
	Data Offset	-0.812043	-2.738523
After	Data Slope	1.017308	1.019240
	Data Offset	-0.223788	-3.976515
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 NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 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
	4988	39.91	388.2	388.2	0.0	382.5	382.4	1.0	1.0149	1.0150
	4988	19.82	193.5	193.5	0.0	196.5	196.9	0.5	0.9849	0.9827
	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
	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

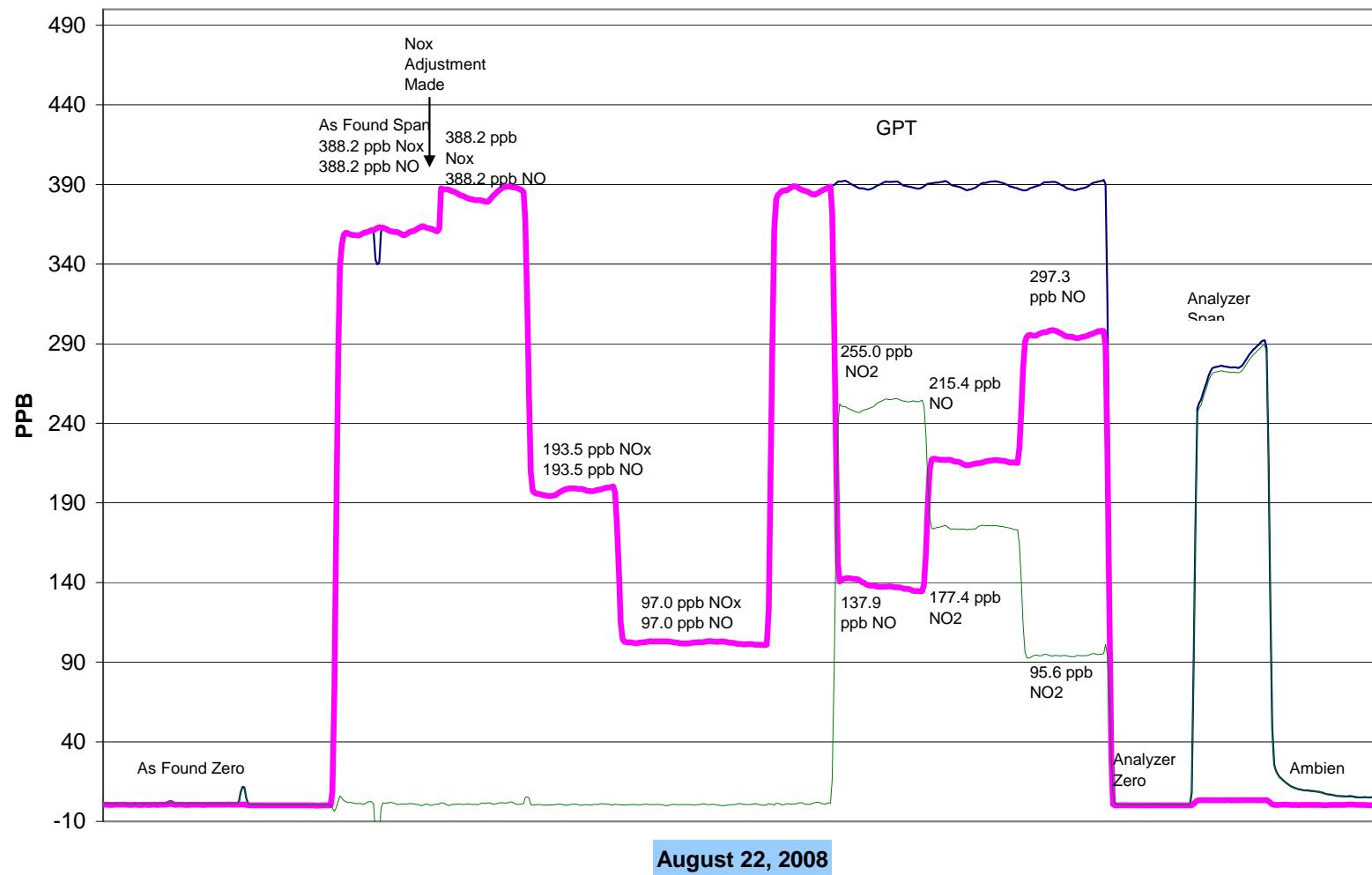
O3 Setpoint (ppb)	Calculated NOx conc (ppb)	Calculated NO conc (ppb)	Calculated NO2 conc (ppb)	Indicated NOx conc (ppb)	Indicated NO conc (ppb)	Indicated NO2 conc (ppb)	NOx Correction factor	NO Correction factor	NO2 Correction factor	Converter Efficiency	
0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	
NO 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

	Previous calibration				Current calibration			
Parameter	NOx	NO2	NO	ppb	NOx	NO2	NO	ppb
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



Calibration Summary

Parameter

NO₂

Air Monitoring Network

PASZA

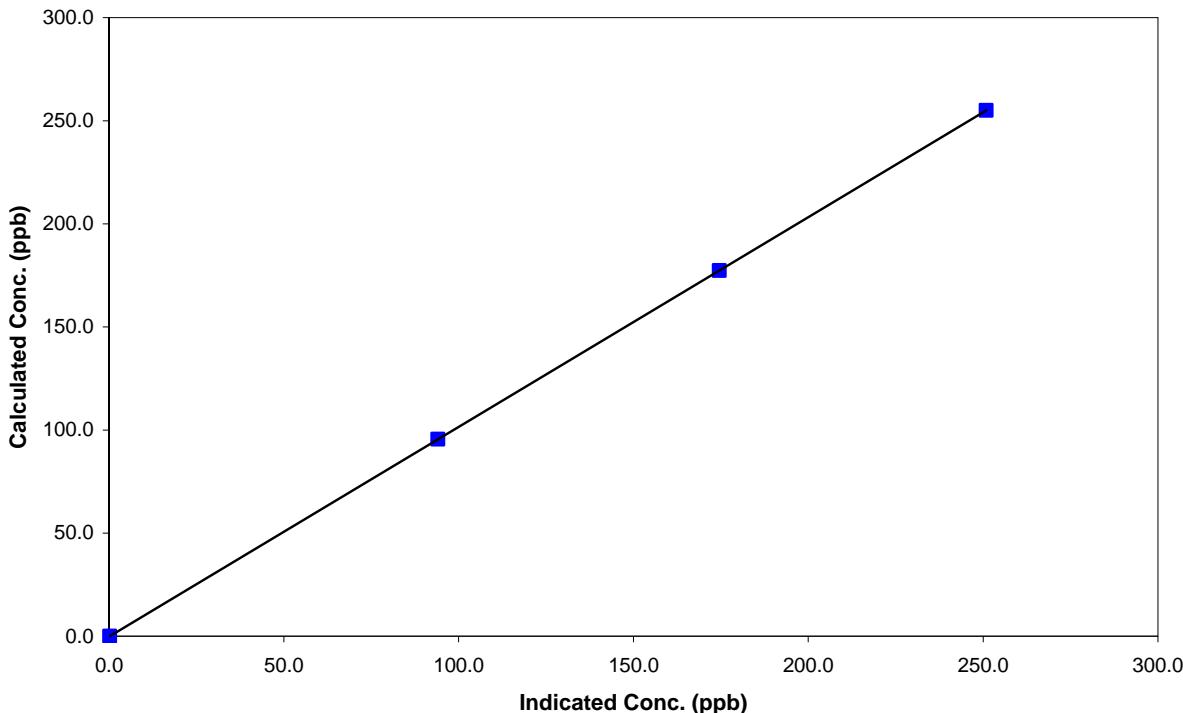
Station Information

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		
95.6	94.1	1.0158		
			Slope	1.017308
			Intercept	-0.223788

NO₂ Calibration Curve



Calibration Summary

Parameter

NO_x

Air Monitoring Network

PASZA



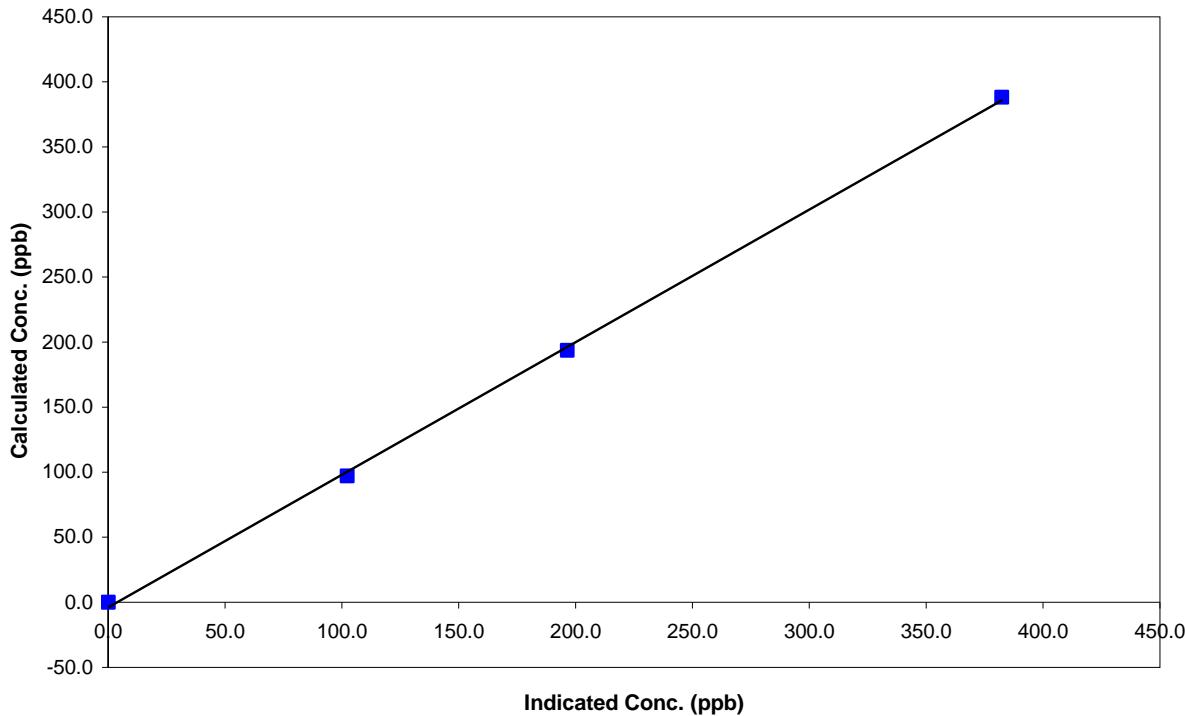
Station Information

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		
97.0	102.3	0.9475		
			Slope	1.019240
			Intercept	-3.976515

NOx Calibration Curve



Calibration Summary

Parameter NO

Air Monitoring Network PASZA



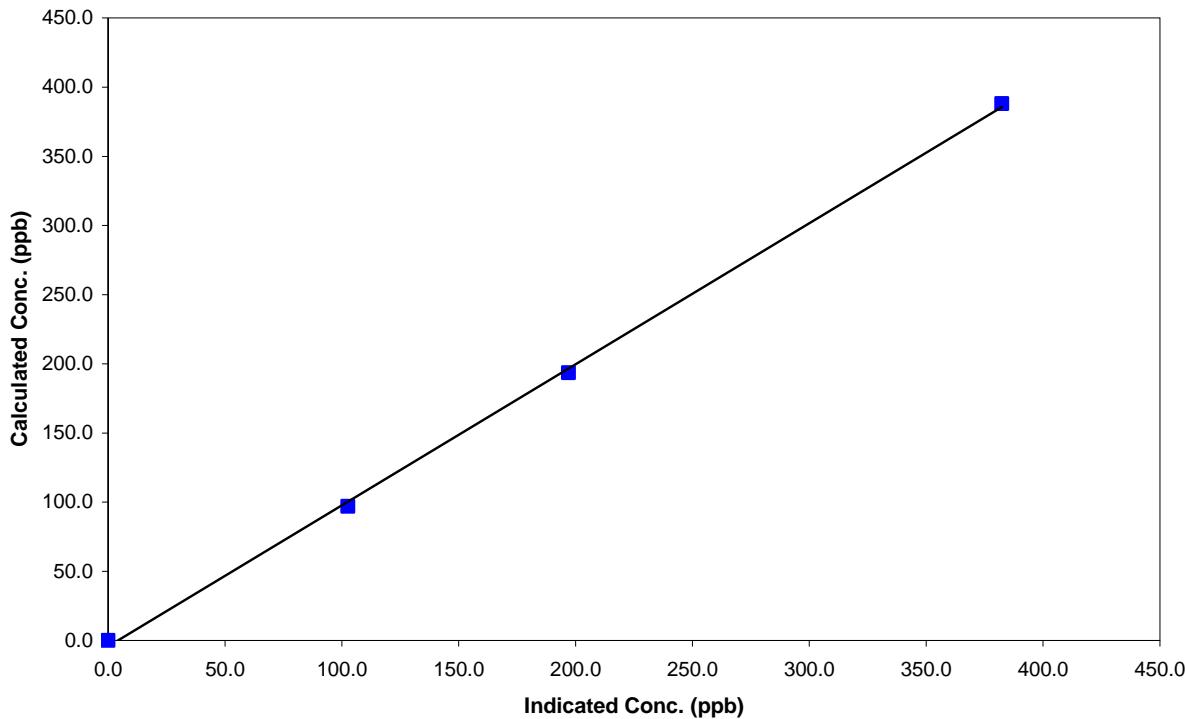
Station Information

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		
388.2	382.4	1.0150	Correlation Coefficient	
193.5	196.9	0.9827	0.999454	
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:	Routine	Install	Removal
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 serial No.	45274
DACS make	Focus AP1000	DACS channel #	4
DACS voltage range	0 - 10 volt		
	<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
Concentration range		before	after
Background	0 - 1000	ppb	0 - 1000
Coefficient	28		28
UV Lamp Voltage	0.74		0.74
Chamber Temp	695	LPM	695
Perm Gas Temp	44.2	V	44.2
Pressure	26.1	C	26.1
Sample Flow	626.3	in Hg	626.3
Lamp Intesity	0.47	LPM	0.47
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

SO2

Air Monitoring Network

PASZA



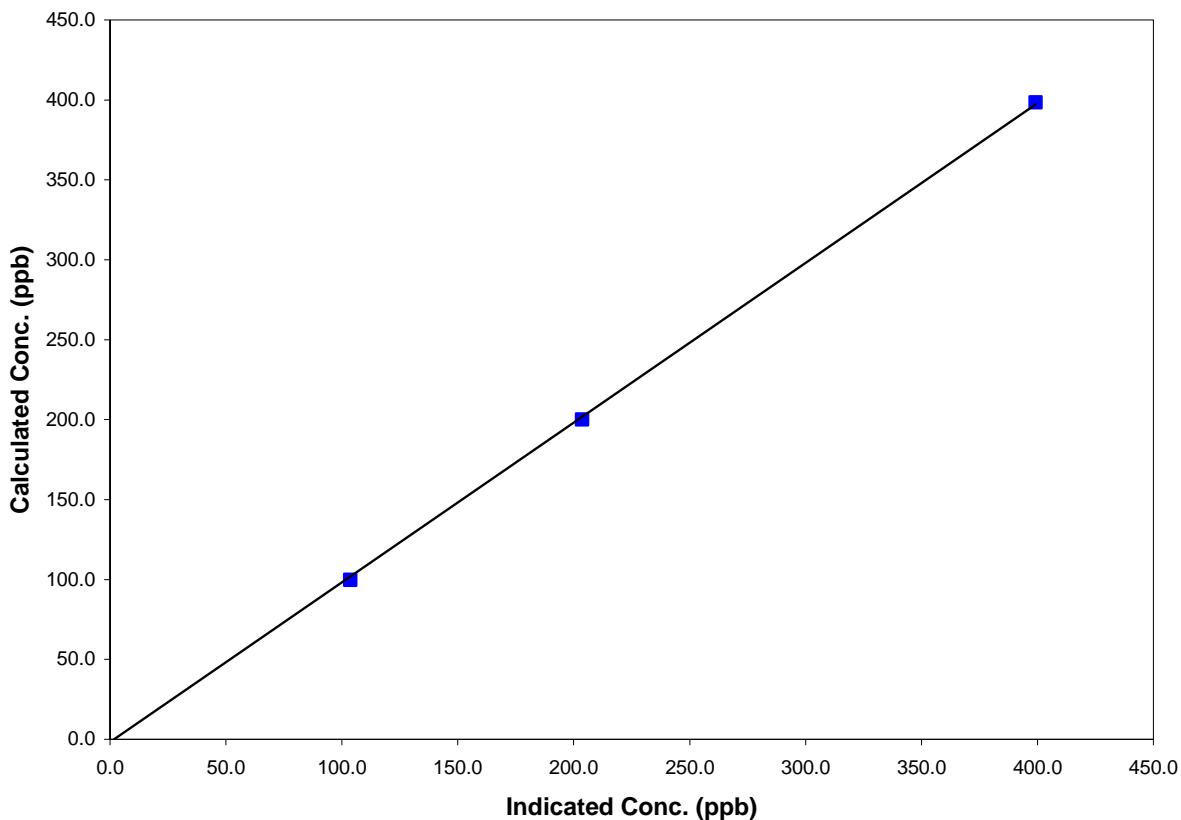
Station Information

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

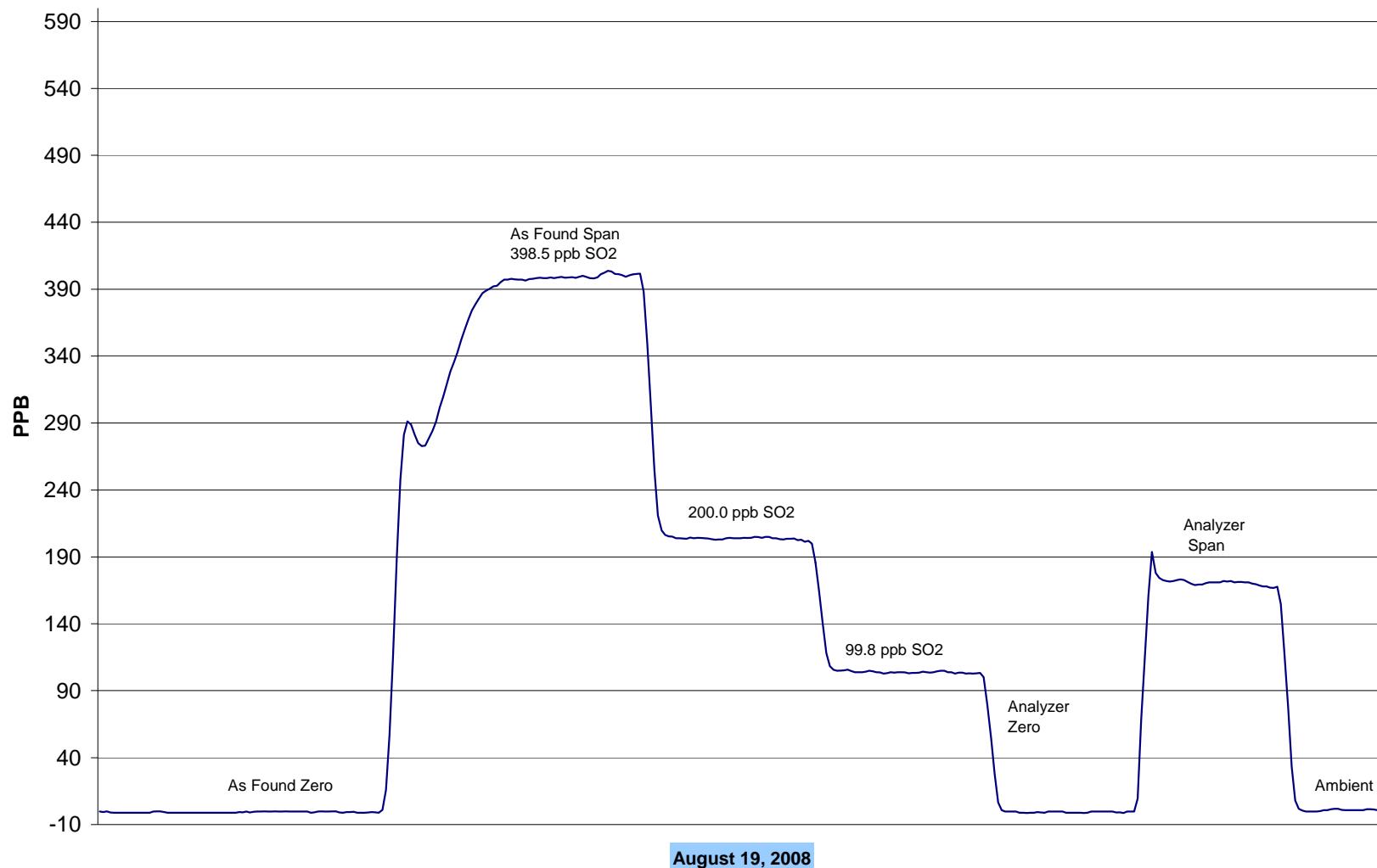
Calibration Data

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

SO2 Calibration Curve



Valleyview SO₂ Calibration



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:	Routine	Install	Removal	
Start Time (MST)	12:25	End Time (MST)	15:50	
Barometric Pressure	27.34 inches Hg	Station Temperature	23.0 Deg C	
Calibrator	Environics 6100	Serial Number	3474	
Cal Gas Concentration	5.1 ppm	Cal Gas Expiry Date	4/4/2009	
Gas Cert Reference	ALM013295	DACS serial No.	1	
DACS make	Focus AP1000	DACS channel #	9	
DACS voltage range	0 - 10 volt			
	<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	
Concentration range		before	after	
Back Ground	0 - 100	ppb	0 - 100	ppb
Coefficient	4.6	ppb	4.6	ppb
Lamp Voltage	1.026		1.026	
Chamber Temp	798	V	798	V
Perm Oven Temp	45	c	45	c
Pressure	45.01	c	45.01	c
Sample Flow	645	mm Hg	645	mm Hg
Lamp Intensity	429	ccm	429	ccm
	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%

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

Notes:

Calibration Performed By: Conor Whiteley

Calibration Summary

Parameter

H2S

Air Monitoring Network

PASZA



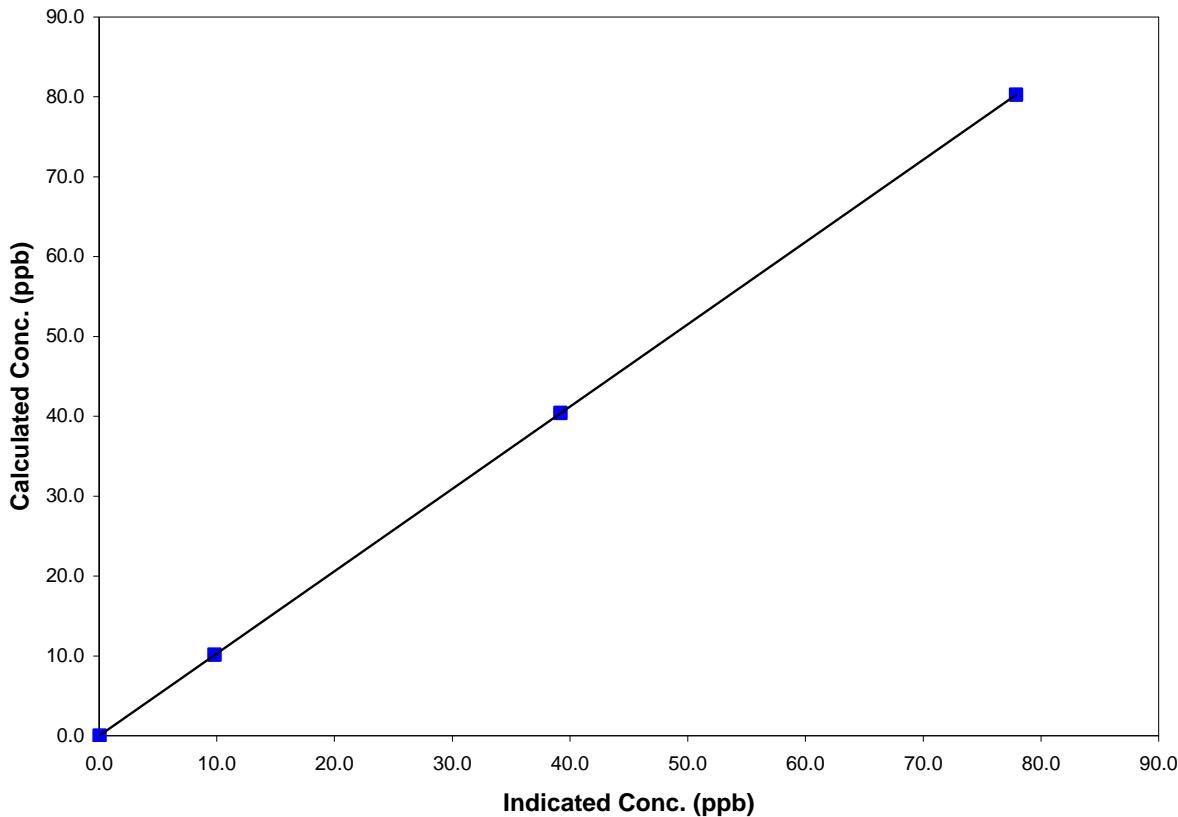
Station Information

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	Slope	1.030959
10.1	9.8	1.0315	Intercept	-0.014795

H2S Calibration Curve



Valleyview H₂S Calibration

